

Spawning habitat conditions: None Poor Fair Good Excellent

Describe spawning habitat: Sixty percent of the spawning habitat is located in the mainstem downstream of the Mountain Loop Highway. The gravel size ranges from 1" to 4" and there is a fair amount of instream cover as the creek flows along the road for a good portion of this section. The remaining forty percent is located upstream of the Mountain Loop Highway where there is better instream and overhead cover.

Rearing habitat conditions: None Poor Fair Good Excellent

Describe pond and other rearing habitat: Downstream of the Mountain Loop Highway, the stream has pool/riffle habitat with good cover and the gradient averages 3%. There is a trib on the left bank in this section that is riddled with beaver activity and provides some excellent rearing. Upstream of the Mountain Loop Highway, the stream splits into three tribs that steadily increase in gradient to 20%. The initial 500 meters of this section has pool/riffle habitat with a good amount of rearing. Upstream of this point, the gradient increases and it is mostly riffled with some cascades and cascade pools.

Describe inaccessible habitat:

Wetland type: Bog Marsh Scrub-shrub Forested

Describe:

Flooding potential: Low Medium High

Describe: The lower 87 meters of this site is vulnerable to flooding while upstream of this point the site is quite stable.

FISH INFORMATION

Site entry condition: Poor Fair Good

Describe: The stream enters into a small channel on the backside of a small gravel bar.

Coho access and use: Juvenile Unknown None Poor Fair Good
Adult Unknown None Poor Fair Good

Describe: There are spawner surveys and smolt trap data available for this site.

Other species access and use: Chum Pink Sockeye Chinook Trout

Describe: Trout can access and utilize this site as well.

ENHANCEMENT OPPORTUNITIES: The two side by side culverts under the Mountain Loop Highway needs to be replaced to enhance fish passage (05.0434B 0.40 in culvert inventory).

Project type:

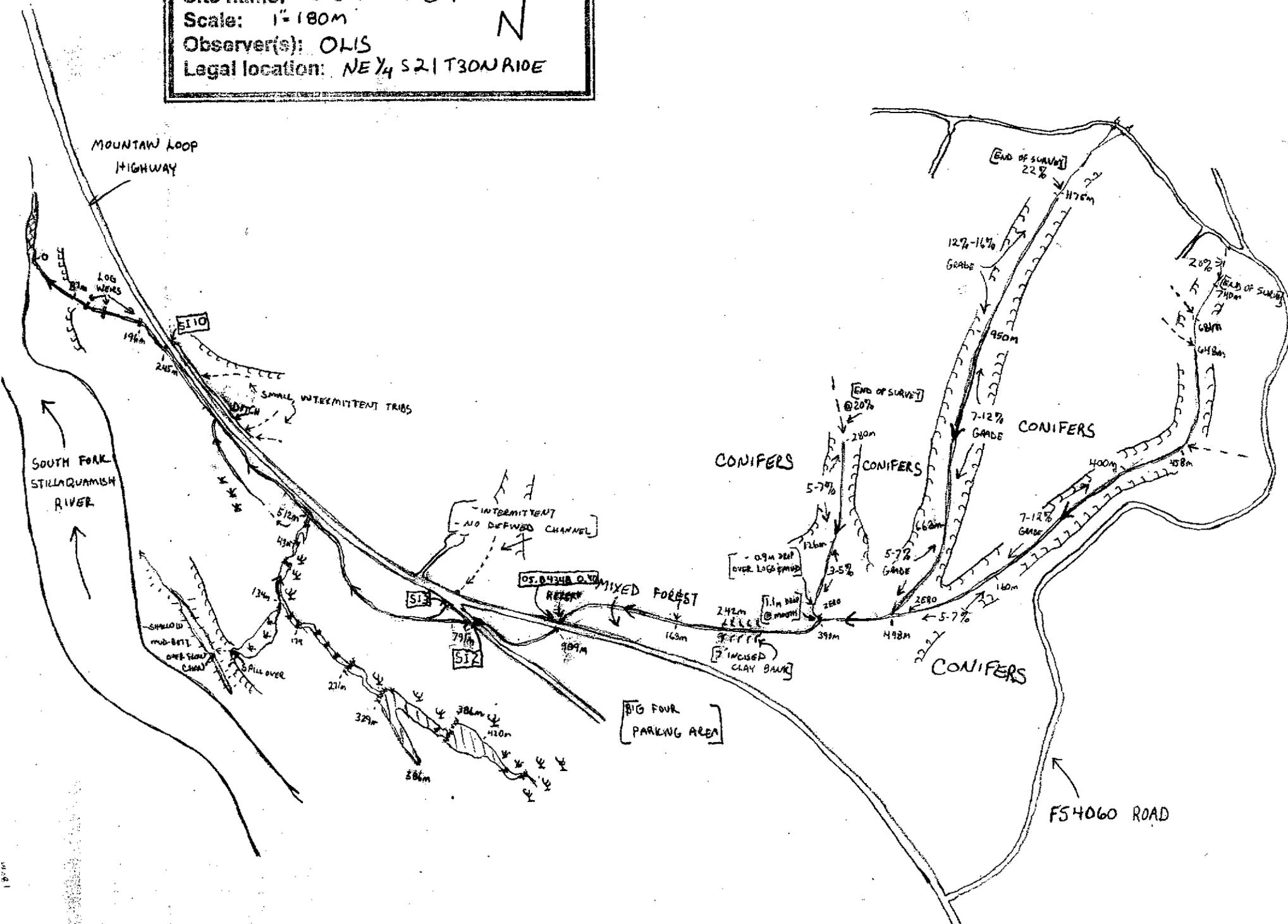
Equipment access:

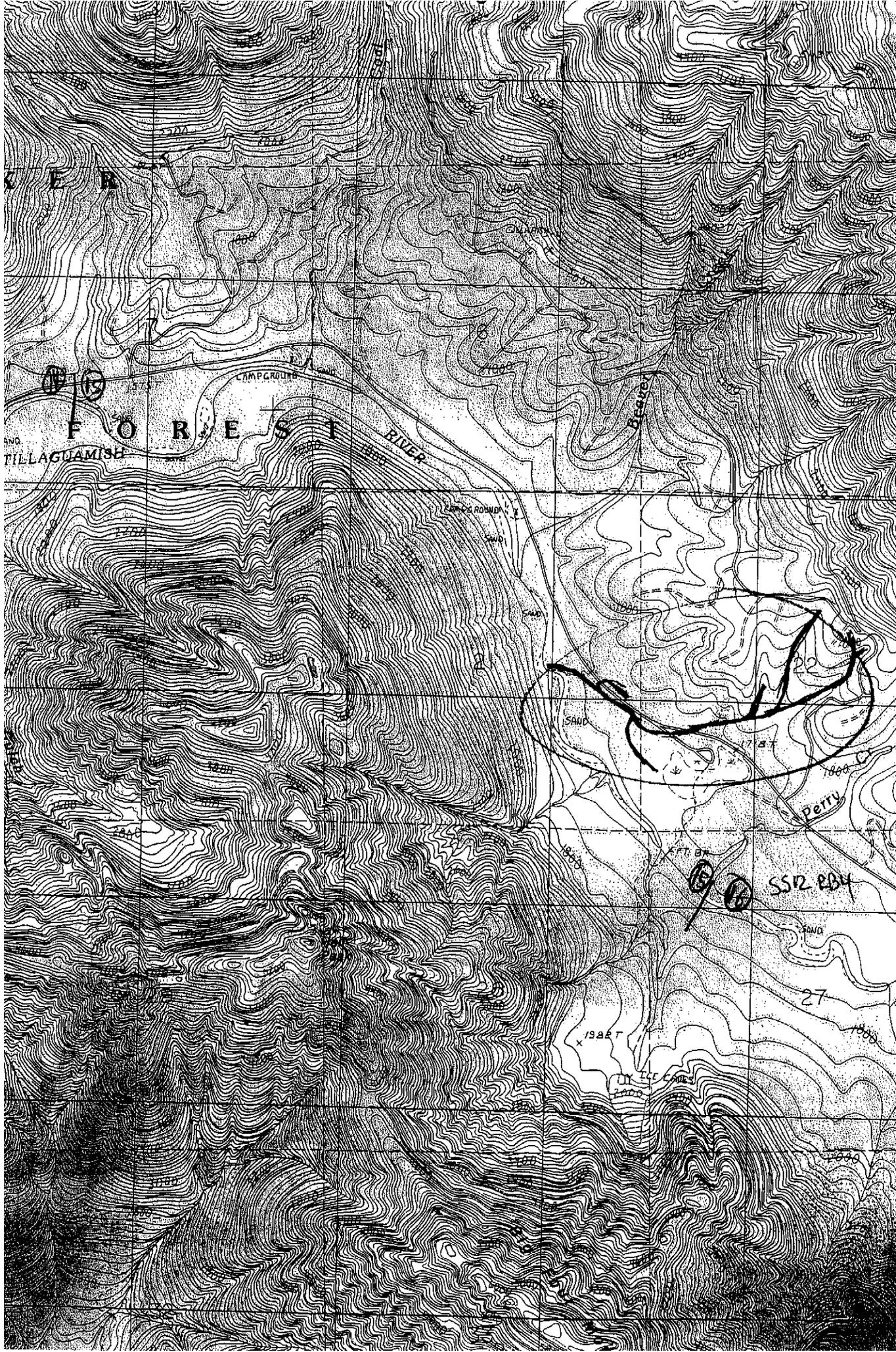
ADDITIONAL COMMENTS: From 200 meters to 500 meters the stream flows along the Mountain Loop Highway and coho spawners can be observed from the road.

ATTACHMENTS AVAILABLE

Aerials Sketch Maps Spawning Surveys Juvenile Trapping
 Other References

Site id. code: SS12ABH
 Site name: BIG FOUR CR
 Scale: 1" = 180M
 Observer(s): OLS
 Legal location: NE 1/4 S21 T30N R10E





5328
5327
5'
5326
5325
5324
5323

F O R E S T

TILLAGUMISH

RIVER

CAMPGROUND

BEAVER

Perru

SS12-204

27

X 1342

SS12 RB4

RM 63.6

N⁵W 521 T30N R10E

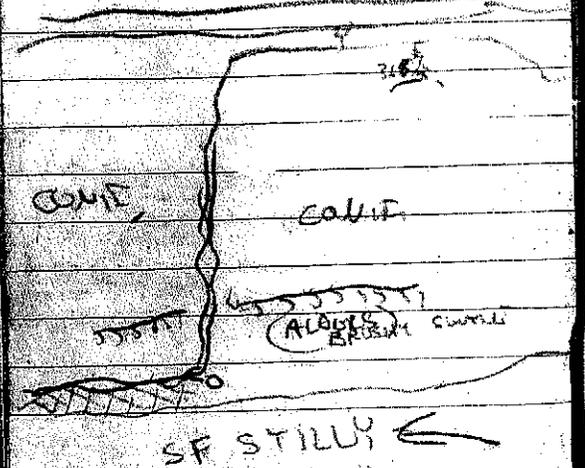
BIG FOUR CR

X- 1749682

Y- 1000985

11-18-02

BIG 4 CREEK



0.0 BARR

LOW OF
FLOW 3.5
WT. 42°
RWT - 41.5°
ACCESS - GOOD

87m WW 3.8m / 6m

- 3% GRADE
- POOL/KIFF
- 14m²
1.4" LOW CORAL
- 4 ADULTS - 3 BROODS
- 2 SMALL TBRACKS

706m was 5m RIFFLE
LOG. W/TH

133m WW 4m
RIFPLE/COBBLE
② LOG WSTR

196m WW 4m

- MOSTLY RIFPLE

10 ADULTS HEADS

② HT# LOG WSTR

(MISSED BED ONE) 1/2m

② SMALL STAR SITE

ALONG ROAD

222m WW 4m (870)

MOSTLY RIFPLE

7m²

4 ADULTS - 3 RIBBONS

② LOG WSTR



254m WW 4.2m

② CULV UNDER M.T.H.

- LOG WSTR ABOVE CULV

- 1 ADULT 2 RIBBONS

6m² - RB TRIB

{368} LB TRIB

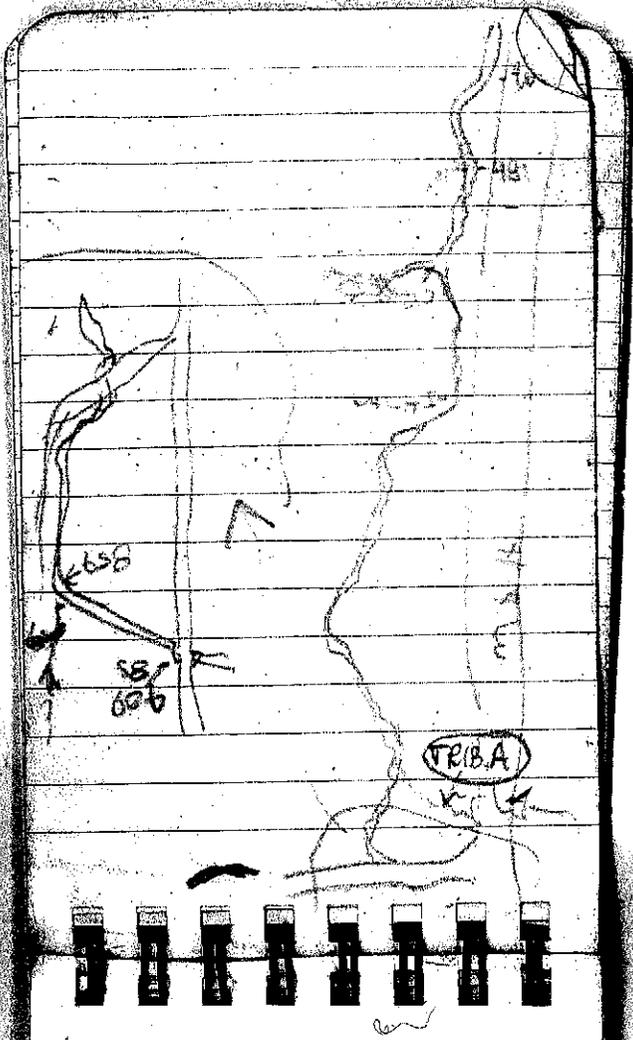
462m - WW 3.4m

19m²

20 AD 9 RIBBONS

- ALONG ROAD

② MOVES AWAY FROM RD



512m WW 3.7

- 2.2
- MOSTLY MUD BOTTOM
- @ LB TRB (BVR ALT)
- CONTINUING ALONG ROAD

547m WW 2.9m

- MOSTLY COBBLES RIFFLES
- MOVING AWAY FROM ROAD

732m WW 3m POOL/RIFF

- GOOD WOOD - 3.5%
- 18 m²
- 8 ADULTS (GRUBS)
- @ 5m RD TRB
- ADULT @ 15m

791m W 2.7m 2713

9m²

7 ADULTS 3 REDDS

- @ SQUASH D.P.T

- BIG-4 ENTRANCE

OUTFLOW FROM SWAMP
ON LB JUST BELOW
PIPE

805m UPSTREAM SWAMP
PIPE

859m W 2.6m

MOSTLY KIFFLE

- CORAL/SWAMP BOLDING

ALONG ROAD

DOING LEFT

- DRAINAGE DITCH ON
LB

909m W 2.5m

13m²

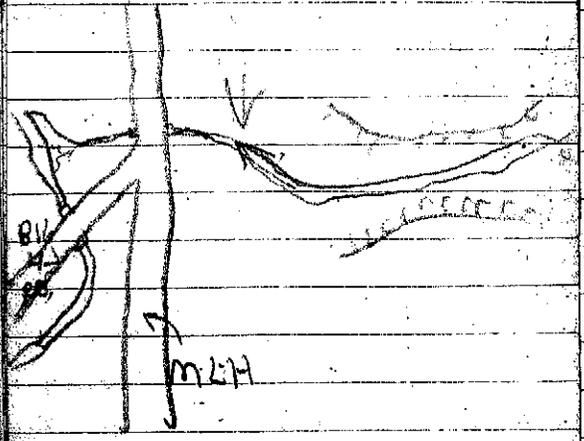
7 ADULTS - 4 REDDS

- @ M-LH AND

SIDE BY SIDE CULVERTS

11-19-02

TRIB A



- SHALLOW - SPREAD OUT
- NO DEFINED CHANNEL
- SMALL DEW OR VAPOR BAND 2-7m WIDE
- W. OLD CLEAR CUT
- UPPER BAND WATER IS SUBSURFACE
- SHALLOW SPREAD OUT FLOW THRU SMALL ALDERS, BUSH, LIT
- DOESN'T LOOK DISC @ ALL

0-56 - 10% 1.3
~~TRANS~~ IS SUBS

56-171 4.0 2.4
SHALLOW - SP. BLVD
- BUSH - BLDG

171-217m 4m
SHALLOW FLOW FLOW
BUSH & FLOWNS - FLOW
FLOW BLOWN
- @ CULTURE

ENTRY

15m - 1.8m SHALLOW
SPREAD OUT

29m SHALLOW
BLVD 3.5m

50m W 1.8m
RIPPLE RIFLE
Zink SP. BLVD
- @ MATH & CULTURE

65m UPDR. MATH &
CULTURE

112-2-02 - ABOVE WETA L HAWK - ZONE @ PIPS -

HIP	OHW	WET	DPTN	TYPE
0				
31.5				
5.6	2.8	1.6	0.07	RIF
37.1				
3.6	4.7	2.8	0.51	POOL
40.7				
0.8	3.9	3.4	0.05	CASCADE
41.5				
8.5	2.8	2.6	0.3	POOL
50.0				
6.0	3.8	3.3	0.07	RIF
51.0				
5.8	5.6	4.7	0.25	POOL
61.8				

4.3	3.2	2.7	0.06	RIF
66.1				
3.0	3.3	2.9	0.31	POOL
69.1				
3.5	3.6	2.0	0.21	RIF
72.6				
8.3	3.9	3.6	0.42	POOL
80.9				
8.2	3.3	3.1	0.06	RIF
89.6				
1.9	4.6	3.9	0.45	POOL
91.5	END OF SAMPLE			

1633 SMALL (27m) DRY CH. ON AD. NOVAE (HIGHER BANK)
 242 - BEG. OF 5' CLAY SANDS SUB
 247 - UPPER END OF CLAY

4275

HIP	ONW	WETTED	DEPTH	TYPE
390				END OF REACH
		1.3%		
		SAND 30 - GRAV 40 - CORR 20 - ROCK 20		
		SMALL STERN ON RB - CONT. MAIDS		
397.3				REACH 2
401.4	2.8	1.9	0.08	RIFPLE
	3.6	2.0	0.31	POOL
405.0				
	8.3	3.9	3.0	0.06 RIFPLE
413.3				
	2.2	3.9	3.2	0.35 POOL
416.6				
	19.6	3.0	1.9	0.07 RIF
436.2				
	3.2	4.6	3.3	0.37 POOL
439.5				
450.0				END OF SAMPLE
498.7				AT POOL
				RF LITTLE WATER
				END OF REACH 2
				3.8%
				SAND 15 - GRAV 30 - CORR 50 - ROCK 5
				CONTINUING UP RF
498.7				Big. of Reach 3
	2.5	2.6	2.1	0.05 RIF
501.2				
	1.6	3.6	2.7	0.49 POOL
502.8				
	2.9	2.3	1.5	0.08 RIF
505.7				
	1.5	2.1	3.1	0.20 POOL
507.2				

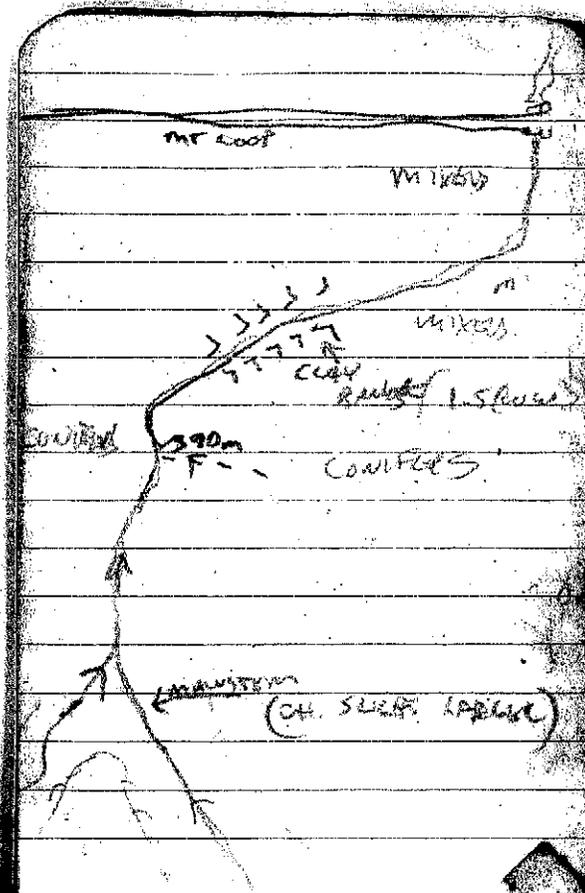
2 (5000) RSFS

TO AND FROM

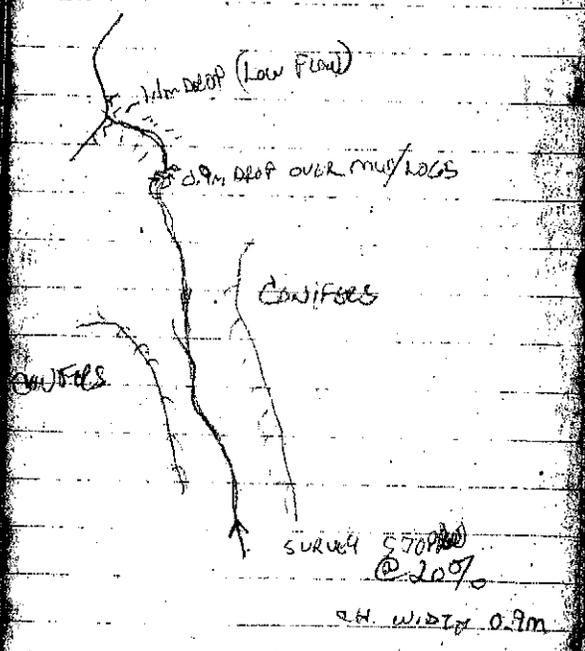
60m/reach

WSPR GOBA
 JUV. AB - low
 OLD GOBUX4
 NW'S

4366



RB TRIB @ 390m



HIP	OHU	WU	DPA	TV
507.2				
38	2.5	1.8	0.08	RIF
545.2				
3	2.1	2.5	0.22	POOL
548.2				
7.1	2.7	2.0	0.08	RIF
555.3				
1.1	2.3	1.4	0.05	RAPID
556.4				
2.3	2.6	1.9	0.25	POOL
558.7				
	END OF SAMPLE			
663.0	END OF REACT 3			
	57% GAD			
	SA-10 CR-30 COR-50 BUL-70			



	BOL. OF REACT 4			
663.0				
695.3				
688 ⁵⁹	2.2	1.2	0.07	RIF
711.2				
38	1.7	1.6	0.20	POOL
715.0				
35.6	1.8	1.1	0.15	OFF
750.6				
2.5	2.4	1.8	0.05	RAPID
753.1				
2.2	2.4	1.7	0.1	RIF
755.3				
	END OF SAMPLE			
950.0	END OF REACT 4			
	7-12%			
	SA-10 CR-30 COR-50 BUL-70			

HIP	OHW	W	D	TYPE
950				ROAD 5
968.5				
5.7	1.9	1.3	0.06	RIF
974.2				
1.5	2.9	2.5	0.46	POOL
975.7				
920	2.0	1.5	0.5	RAPID
977				
5.3	2.5	2.5	6.4	POOL
9830				
4.5	1.8	1.4	0.09	RIF
9825				
2.0	2.0	1.8	0.33	POOL
989.5				
11.1				RIF
1000.6	1.9	1.4	0.1	



2.2	2.4	1.9	0.25	POOL
1002.8				
2.3	1.5	1.0	0.06	RAPID
1005.1				
2.9	2.7	2.3	0.29	POOL
1008.0				
2.1	3.2	1.1	0.07	RAPID
1010.1				
18.4	3.6	2.7	0.06	RIF

1028.5 END OF SURVEY
 12-16% SRR 690-6890-820

1179.6 END OF SURVEY
 1175 22% LEAD
 1238 @ LOGGERS POINTS

5585

LB TRIB @ 498.7

HP	OHW	uw	D	TYPE
20.3				
8.5	1.9	1.4	0.07	RIFP
28.8				
2.4	2.4	2.2	0.22	POOL
31.2				
9	2.2	1.6	0.07	RIFP
40.2				
26	2.6	1.8	0.20	POOL
42.8				
11.9	3.0	2.7	0.06	RIFP
54.7				
2.3	5.0	2.0	0.35	POOL
57.0				

12.4	2.1	1.3	0.1	RIFP
69.4				
1.8	3.3	2.6	0.25	POOL
71.2				
9.1	2.4	2.0	0.06	RIFP
80.3				
57.7	5.40	6.30	0.25	POOL
160m	END OF REACH (12m)			

188.8				
1.6	3.0	2.2	0.9	RIFP
187.2				
12.8	2.4	1.4	0.15	RIFP
200.0				
2.6	2.2	2.0	0.34	POOL
202.6				
7.1	2.0	1.7	0.07	RIFP
209.7				

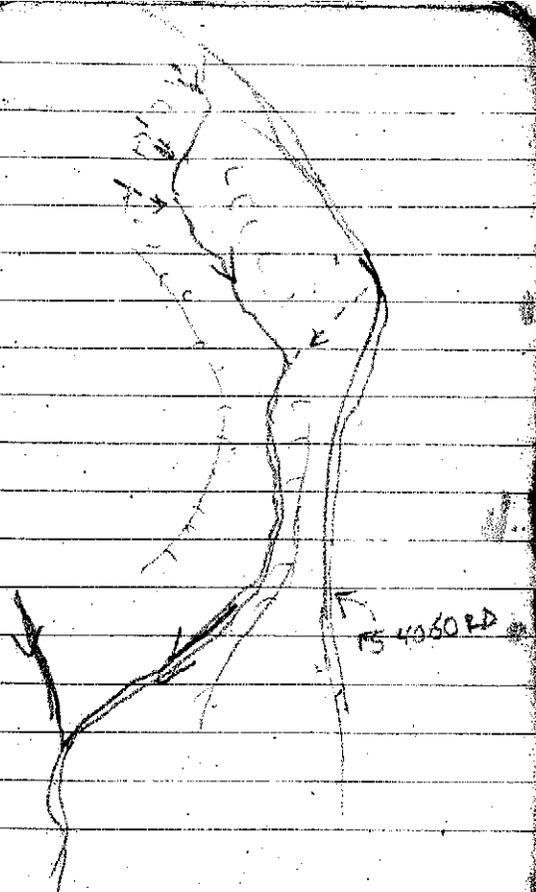
Time	OHW	WL	D	T
209.7				
210.7	2.0	1.9	0.3	POOL
211.7				
212.7	5.1	1.9	1.5	0.08 RIFF
216.8				
217.2	2.4	2.3	2.2	0.2 POOL
219.2				
220.2	9	1.8	1.7	0.07 RIFF
222.2	[222 0.55m DRIP]			
228.2				
229.2	4.4	2.4	2.0	0.22 POOL
232.6				
233.6	6.8	2.6	1.6	0.08 RIFF
239.4				
240.4	2.1	1.2	0.6	0.07 RIFF
241.4				
246.2	5.8	1.7	1.5	0.1 RIFF
246.2				
248.8	2.6	2.7	2.0	0.25 POOL
248.8	END OF SAMPLES			
280	→ SHARP TURN TO LEFT			
440 m	END OF REWORK			
	2-12%			
	535	615	0.25	B25
434.5				
435.5	6.6	2.4	1.3	0.1 RIFF
441.1				
442.7	1.6	2.6	2.5	0.25 POOL
442.7				
443.7	1	1.6	1.2	0.04 RIFF
443.7				

HP	OHW	W	D	T
443.7				
4.4	3.0	2.2	0.3	POOL
448.1				
8.9	2.0	1.7	0.9	RIF
457.0				
4.5	2.3	2.2	0.2	POOL
458.5				
[462.8	Small	NT	RB	LB]
5.9	1.7	1.5	0.1	RIF
464.4				
6.6	1.9	1.5	0.1	RAID
466.0				
6.3	1.9	1.8	0.15	RIF
472.3				
4.4	1.6	1.2	0.35	POOL

476.7				
9.8	1.4	1.1	0.9	RIF
486.5				
7.6	2.4	2.0	0.27	POOL
492.1				
6.4	1.2	1.2	0.09	RIF
494.5	1.9	1.8	0.25	POOL

END OF SAMPLE
 Small NT stem
 ON RB 2'
 69m Small NT stem
 RB 2'
 740m END OF SURVEY
 770m END OF SURVEY
 stem grad 20%
 12-16%
 S-50 G10 - C10 - BOUL. 30

7025



HP	ORW	WW	D	TYPE
				RB TRIB @ 390m -BIG FOUR CL-
0				@ mouth - 1.1m deep @ water
21m				@ 0.9m DROP THROUGH LOGS AND MUD
54.9				BEGINNING of SAMPLE
6.8	1.9	1.5	0.09	RIFF
56.7				
9.3	1.2	1.1	0.44	POOL
66.0				
1.4	1.2	1.1	0.07	RIFF
67.4				
5.0	1.8	1.3	0.35	POOL
72.4				

HIP	OHW	WW	D	TYPE
72.4				
22.7	1.4	1.3	0.17	RIFF
95.1				
7.8	1.4	1.1	0.22	POOL
102.9				
9.4	1.4	0.7	0.08	RIFF
112.3				
2.6	1.5	1.2	0.25	POOL
114.9				
				(END OF SAMPLE)
120				
220				BEG. OF SAMPLE
1.8	1.5	0.8	0.08	RIFF
221.8				
1.1	2.1	1.6	0.2	POOL
222.9				

5.1	1.1	0.8	0.07	RIFF
228				
3.1	2.1	1.8	0.3	POOL
231.1				
8.6	1.0	0.7	0.1	RIFF
239.7				
5.2	1.5	1.3	0.2	POOL
244.9				
12.3	1.5	0.9	0.06	RIFF
257.2				
1.9	1.8	1.4	0.4	POOL
259.1				
6.8	1.0	0.7	0.04	RIFF
265.9				
1.3	1.4	1.0	1.6	POOL
267.2				
8.1	1.0	0.8	0.05	RIFF
275.3				

HIP	OHV	W	D	TYPE
275.3				
1.6	1.1	1	0.1	POOL
276.9				
3.1	1.0	0.6	0.06	RUFF
280				

END OF SAMPLE
END OF SURVEY

S-60-62-30 COB-10 B-0
5-7%

@ 200 m stem grad.
INCREASES TO 20%

87m ww 4m

- @ 10m BUR DAM

99m ww 12m

119m ww 4m

134m ww 3m

- @ FOLL

- SEE SKETCH FOR LF WFO

157m ww 2.5m

@ 5m BUR DAM

174m ww 6m

@ 9m BUR DAM

189m ww 6m

@ 7m BUR DAM

197m ww 7m

@ 12m BUR DAM

217m ww 12m

236m ww 7m

@ 8m BUR DAM

271m ww 5m

@ 26m LAB BUR DAM

284m 15m ww

7144

329m WW 5m

① 30m long V-SHAPED
BUR DAM

370m

WW 8m on LA SIDE

8m on RB SIDE

380m WW 6m on LA SIDE

LA SIDE B-DIG

8m on RB SIDE

38m long BUR DAM ON

RB SIDE

H20m WW 40m (POND)



447m WW 10m

474m WW 4m

① 12m BUR DAM

493m WW 10m

② 10m BUR DAM

531m WW 6m

A ROW SOUTH

BUR DAMS ALONG

THE WAY

SURVEY GRID IN SURROUNDING

BUR COMPASS WITH A

916 PACE PARALLEL LOT

11,983

RB TRIP @ 254m

@ CULVERT UNDER

M.L.H

CULVERT SPAN - 0.63

WAT-AD SLOPE - 4% CL

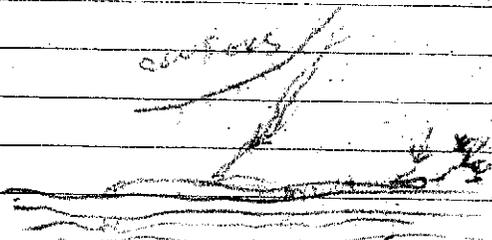
W.D.H.R. - 0.01 F.U.C. - 1.5

O. FALL RATE - 0

LENGTH - 15.2

HAS WOODEN SCRE PLATE

UPPER METAL W/IRON



15m UPSTEAD CULVERT

68m W.W. 0.9m

IN ROAD'S DITCH

SOME SEDGES, SUNK
CABB.

- LOTS OF WOOD IN DITCH

@ RB TRIP W.W. - 0.8

- 15.60 m LONG

SCRE TO ORIGINAL
IN WALL RATE AREA

MUD-BOTTOMING

STEELY PLATE TOP

FROM 25m → 33m ONLY

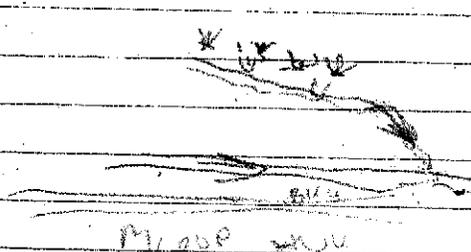
189m NW 1m

- IN ROADSIDE DITCH

- COYS OF BROWN ALGA

- SMALL FEEDER TRUB

@ END



82m - NW 1m

SEEMS TO DRAW

SMALL SURFACE

ALONG FILLIN W/ SURGES

13 TRUB

118m NW 0.8

HANDLES SOME SURFACE

FLOW BEHIND ALGA

- CONFLUENCE WESTERN

OCULV ≈ 70 m