

12-4-2009

Ex. 280-US-450

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R2 Resource Consultants

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SP-8



WETTER
LEVEL BOOK
No. 310

May 12, 2004
Survey

1442.01

SP-8

05/12/04

Unit Selection

Random # 3, 4
 riffle: 0.3 x 595 = 178.5'
 pool: 0.4 x 595 = 238.0'

measured o/s 178.5' is the first
 riffle was unit # 5, measured o/s
 238' from start and unit # 6 was
 selected for sampling

Transect Selection

Random # 5 Riffle: 5, 7, 9
 Pool: 5, 2, 9

Ripple Unit # 5 = 89'

89 x .5 = 44.5' > 19.8
 " x .7 = 62.3' > 17.8
 " x .9 = 80.1' > 23.8

Pool Unit # 6 = 48'

48 x .2 = 9.6' > 14.4
 " x .5 = 24.0' > 19.2
 " x .9 = 43.2'

SP-8 Habitat Mapping 05/12/04

Unit # Type Length X width

Unit #	Type	Length	X width
1	Riffle	34'	8.5'
2	pool	28'	11.0'
3	riffle	62'	12.0'
4	pool	27'	11.0'
* 5	riffle	89'	11.0'
* 6	pool/run	48'	12.0'
7	riffle	128'	13.0'
8	pool	24'	10.0'
9	run	25'	7.0'
10	riffle	55'	13.0'
11	pool	41'	12.0'
12	riffle	34'	11.0'
		595'	X = 11.0'

Habitat Types

# of units	Total length	% of Total
Riffle: 6	402'	67.6% = sample
Run: 1	25'	4.2% = falls out
Pool: 5	168'	28.2% = sample
		100.0%

SP-8 Sample Unit Map 05/12/04

SP-8 Photo Log 05/12/04

Photo # Description

- #14 looking LT → RT TR-1 R.P.
- #13 " " 1/2 from below RT → Lt
- 12 TR-2 Riff RT → Lt
- 11 TR-3 Riff RT → Dept
- 10 HC Lt → RT
- 9 TR-1 Pool RT → Lt
- 8 TR-2 Pool RT → Lt
- 7 TR-3 Pool RT → Lt
- 6 1/2 TR-3 looking d/s

Micro habitat observations

Depth	Vel.		
	Mean	Max	Sub.
Adult Rdb 1.6 Fishing	1.5	.59	.86
	1.35	.85	.90

* same fish holding in two diff. locations during separate observations
14°C water temp.

SP-8 * WSE * 05/12/04
 Riffle & Pool Unit Level Loop

STA	BS	HI	PS	Elev	Rod
BM-1		107.16	4.16	100.00	
42' 1/2 of TR-1		9.31	95.68	0.73	
BS TR-1					
RWS		8.36	96.18	0.38	
LWS		8.29	96.23	0.36	
RS TR-2					
RWS		7.91	96.70	0.45	
LWS		7.87	96.76	0.47	
RS TR-1					
LWS		6.96	97.71	0.51	
RWS		6.80	97.71	0.35	
Pool HC					
LWS		6.79	97.89	0.52	
RWS		6.87	97.85	0.86	
Pool TR-1					
LWS		7.79	97.90	1.53	
RWS		7.75	97.90	1.49	
Pool TR-2					
LWS		6.88	97.90	0.64	
RWS		6.65	97.90	0.39	
Pool TR-3					
LWS		6.95	97.93	0.72	
RWS		6.98	97.93	0.75	
BM-2		2.00	108.16		

SP-8
 Riffle & Pool Unit Level Loop 05/12/04

STA	BS	HI	ES	Elev	Rod
BM-1	4.36	104.36		100.00	
Pool HP TR-1			5.24	99.12	
Pool HP TR-2			4.23	100.13	
Pool HP TR-3			4.54	98.82	
Pool HP TR-1			3.92	100.44	
Pool HP TR-2			2.41	101.95	
Pool HP TR-3			2.87	101.49	
BM-2			2.20	102.16	
Pool BM-2	2.00	104.16		102.16	
Pool TR-3			2.67	101.49	
Pool TR-2			2.21	101.95	
Pool TR-1			3.72	100.44	
Pool TR-3			4.34	98.82	
Pool TR-2			4.04	100.12	
Pool TR-1			5.04	99.12	
Pool BM-1			4.16	100.00	

SP-8
Riffle TR-1
05/12/04

STA Depth Vel. Notes

RWP	STA	Depth	Vel.	Notes
RWE	4.1	0	0	
	5.5	.3	.05	vel est.
	6.0	.4	.37	
	6.5	.4	.61	
	7	.45	2.29	
	7.5	.35	2.82	
	8.0	.4	3.17	
	8.5	.4	.76	ups vel shelter
	9.0	.4	2.54	
	9.5	.37	3.37	
	10	.4	.32	ups vel shelter
	10.5	.4	1.16	
	11	.4	.90	
	11.5	.15	1.02	side rd
	12	out/.05		Top rd
	12.3	.25	1.32	side rd
	13	.2	1.68	
	13.5	.3	.87	
	14.0	.05	N/A	side rd
	14.5	0.0	0	
	15.0	out	6.35	Top Rd-35 out
	15.7	.4	.41	side rd

Rif TR-1
05/12/04

STA Depth Vel. Notes

STA	Depth	Vel	Notes
16.0	.35	.05	est w
16.7	0	0	
17.0	23.0		

Sta	Depth	Vel	Notes
18	.4	.03	Behind Bld
18.5	.4	.54	
19	.1	.1	estimated
WE 19.6	0	0	
UMP 24.3			

STA	Depth	Vel	Notes
1.0 Rmp			
RWE 5.1	0	0	
6	.05	0	
6.6	0	0	
8.6	out/.9	-	Top Bld
9.6	0	-	
10	.15	.25	est vel.
10.5	.27	.25	est vel
11	.4	.76	
11.5	.5	.78	
12	.4	.34	Behind Bld, vel Shelter
12.5	.05	.36	Top Bld
13.0	.5	.07	Behind Bld vel shelter
13.5	.47	.30	vel shelter
14	.5	.28	vel shelter
14.5	.5	.02	vel shelter
15	.5	.1	Top of 9th Shelter
15.5	.5	.94	
16	.45	2.5	
16.5	.5	2.4	
17	.45	1.54	
17.5	.5	1.79	

Sta	Depth	Vel	Notes
R. 696		TR-3	5/12/04
Emp 10			
RWE 210	0	0	
3	.35	.44	
3.5	.47	2.03	
4	.55	1.44	
4.5	.45	1.91	
5	.3	.1	uls vel shelter
5.5	.4	.27	"
6	.3	.76	
6.5	.35	.31	
7	.20	1.23	
7.5	.3	.82	
8	.3	1.05	
8.5	.3	1.63	
9	.3	.85	
9.5	.5	1.73	
10	.6	1.01	
10.5	.65	1.02	
11	.8	.56	
11.5	.7	.30	
12	.6	.26	
12.5	.5	.32	

Sta	Depth	Vel	Notes
R. 696		TR-3	5/12/04
13	.35	.08	
13.5	.3	.2	est vel - veg
14.5	.1	.1	est vel - veg
DWE 152	0	0	
LWR 211			

5/12/04
5/11/04

H.C. Pool

STA Depth #ft Notes

Rwp 1.0

Rwe 4.2 0

4.5 .35

5.2 .6

5.7 .75

6.5 .85

7 1.0

7.5 1.1

8 1.0

8.5 .6

9. .6

9.5 .7

10 .6

10.5 .4

11 .35

11.5 .35

12 .2

Lve 12.6 0

Lve 13.4

~~Blank~~

Pool TR-1
5/10/04
5/12/04

STA	Depth	Vel	Notes
RWP 1.0			
RWE 10.5	0	0	
11	1.22	.05	veg, est vel
11.5	1.6750	.05	est vel
12	1.77	.06	
12.5	1.85	.04	
13	1.85	.08	
13.5	1.65	.45	
14	1.6	.73	
14.5	1.6	.66	
15	1.7	.42	windy debris
15.5	1.88 1.35	.15	"
16	1.7	.23	"
16.5	1.65	.17	beside LWD
17.0	RWE 1.5	0	under LWD
LWP 20.4	1.5	0	VCB

Pool TR-2
5/05/11/04
5/12/04

STA	Depth	Vel	Notes
RWP 1.0			
RWE 12.9	0	0	
13.5	.4	.1	est vel → veg
14.0	.05	.1	"
15.145	.5	.15	"
15	.5	.2	"
15.5	.8	.2	"
16	1.0	.84	
16.5	1.1	1.08	
17	1.2	1.22	
17.5	1.2	1.20	
18	.95	.89	
18.5	1.1	.65	
19	.8	0	on Bill, vel shelter
19.5	.4	.39	on cobble, vel shelter
20	.4	.69	
20.5	.5	.07	
21.0	.05	.05	on Bill, est vel, A7 veg
21.5	.2	.05	A7 Veg
LWE 21.9	0	0	
LWP 21.10			

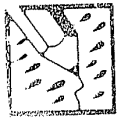
Pool TR-3

5/11/04
5/12/04

3 STA Depth Notes

Sta	Depth	Notes
RWE	1.0	
LWE	22.7	
RWE	10.5	
	11.5	.2 0 Air Veg
	12.5	.2 0 "
	13	.42 .05 est vel Veg
	13.5	.85 .26 Veg
	14	.97 .55
	14.5	1.0 .89
	15	1.15 1.01
	15.5	1.2 1.05
	16	.9 1.15 or a cobble
	16.5	1.0 .87
	17	1.05 .55
	17.5	1.20 .26 vel shallow
	17.8	1.3 .08 side bed
	18.5	.1 .03 Top Blk
	19.0	.8 .08 side bed
	19.5	.5 -01
	20	14 0
LWE	21	.2 0
	sub. 4	0 0
LWE	22.7	

SP-8



"Act in the Rain."

ALL-WEATHER
LEVEL BOOK

No. 310

6/25/04

MEASUREMENT CONVERSIONS

IF YOU KNOW	MULTIPLY BY	TO FIND
LENGTH		
inches	2.540	centimeters
feet	30.480	centimeters
yards	0.914	meters
miles	1.609	kilometers
millimeters	0.039	inches
centimeters	0.393	inches
inches	3.280	feet
meters	1.093	yards
kilometers	0.621	miles

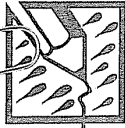
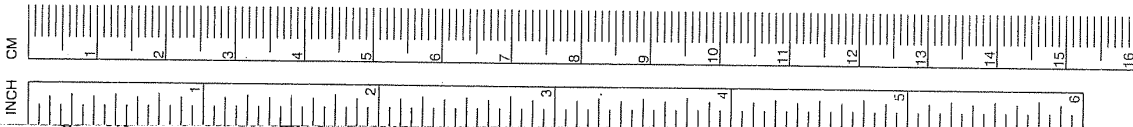
WEIGHT		
ounces	28.350	grams
pounds	0.453	kilograms
grams	0.035	ounces
kilograms	2.204	pounds

VOLUME		
fluid ounces	29.573	milliliters
pints	0.473	liters
quarts	0.946	liters
gallons (U.S.)	3.785	liters
milliliters	0.033	fluid ounces
liters	1.056	quarts
	0.264	gallons (U.S.)

TEMPERATURE

$^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times .555$
 $^{\circ}\text{F} = (^{\circ}\text{C} \times 1.8) + 32$

Inches	Decimals	Milli-meters
1/16	.0625	1.5875
1/8	.1250	3.1750
3/16	.1875	4.7625
1/4	.2500	6.3500
5/16	.3125	7.9375
3/8	.3750	9.5250
1/2	.5000	12.7000
5/8	.6250	15.8750
3/4	.7500	19.0500
7/8	.8750	22.2250
1"	1.0000	25.4000
2"	2.0000	50.8000
3"	3.0000	76.2000
4"	4.0000	101.6000
5"	5.0000	127.0000
6"	6.0000	152.4000
7"	7.0000	177.8000
8"	8.0000	203.2000
9"	9.0000	228.6000
10"	10.0000	254.0000
11"	11.0000	279.4000
1 foot	1.0000	304.8000



"Fite in the Rain"®
ALL-WEATHER WRITING PAPER

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 Project 1442, 01 PHABSIM Data

"Fite in the Rain" - a unique all-weather writing surface created to shed water and to enhance the written image. Makes it possible to write sharp, legible field data in any kind of weather.

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SP-8

Trout Cr

6/25/04

	In	Out
Time	8:30	12:10
S.G	0.31	.30

Crew: M. Gagner
C. Morella

equipment: Lietz B1
8718

swollen: 5750
prop: 2A
col: 186

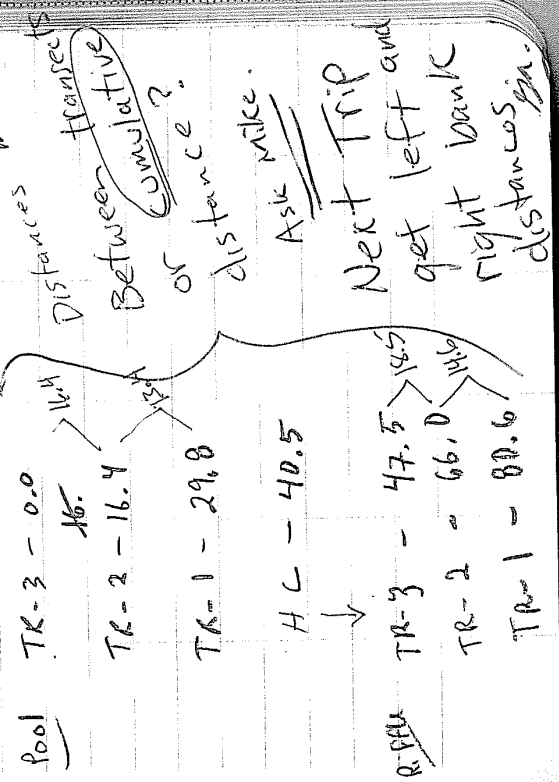
	LWE	RWE	LWS	RWS
TR-1	16.7	5.0	96.03	96.01
TR-2	19.0	7.6	96.64	96.59
TR-3	14.9	2.6	97.64	97.63
HC	12.1	4.5	97.71	97.70
TR-1	18.1	10.4	97.73	97.74
TR-2	21.4	13.2	97.72	97.73
TR-3	20.3	12.5	97.75	97.74

Photo Log

SP-8

Photo #	Description
10	TR-1 R-L
11	u/s THRU RIFFLE
12	TR-2 R-L
13	TR-3 R-L
14	u/s THRU RIFFLE
15	TR-1 POOL
16	TR-2 L-R POOL
17	TR-3 POOL
18	u/s THRU POOL

Transect stationing



Riffle

SP-8 Central loop 06/25/04

STA BS HI FS Elevation

BM-1 5.14 105.14 100.00

TR-1 6.00 99.14

TR-2 8.50 100.14

TR-3 5.30 99.84

TR-3 5.19 99.84

TR-2 4.89 100.14

TR-1 5.89 99.14

BM-1 5.03 100.00

cont 1/10/05

Riffle

SP-8 TR-1 & 2 Bank survey 06/25/04

STA HI FS Silt/clay % Down

+3.0 105.03 5.83 duff/bld 70

23.0 wp 6.70 duff/bld 60

19.5 8.00 veg/bld 60

17.0 8.86 " 60

16.7 LWS/LWE (96.03)

5.0 RWS/RWE (96.01)

3.5 8.38 veg/duff 70

2.0 6.03 " 70

1.0 wp 6.12 " "

TR-2 bank survey 06/25/04

1.0 wp 6.16 1 veg/duff 70

4.0 7.40 veg/silt 70

6.5 8.39 silt/veg 60

8.5 7.57 (96.59) bld/veg 60

9.6 RWE/RWS (96.51) silt/veg 60

19.0 LWE/LWS (96.51) silt/cob 70

20.0 8.10 bld/silt 60

21.5 6.52 dirt/veg 60

24.3 wp 5.36 duff/bld 55

SP-8 HC Pool design

STA	Δ	NOTES
4.3	∅	
4.5	0.18	
5.2	0.55	
5.7	0.72	
6.5	0.82	
7.0	0.94	
7.5	1.09	
8.0	1.00	
8.5	0.43	
9.0	0.50	
9.5	0.42	
10.0	0.42	
10.5	0.23	
11.0	0.17	
11.5	0.18	
12.0	0.05	
12.1	∅	

TR-3 RIFFLE & Pool HC

SP-8 STA	H.I	FS	Substrate	% Down
21.1	105.03	5.84	TR-3 RIFFLE	70
16.0		6.69	veg / duff	60
14.8		7.39	veg / silt	70
8.2		7.57	veg / silt (16 rod)	70
2.5		6.80	veg / duff	80
1.0		6.28	"	

105.03

HC Pool Bank Survey

1.0	6.48	veg / duff	80
4.0	6.75	veg / silt	80
4.5	7.51	veg / silt (18 rod)	80
12.1	7.39	veg / silt (16 rod)	"
12.9	6.53	veg / silt	80
13.4	6.26	veg / duff	70
+5.0	6.10	"	70

Pool
Level loop
06/25/04

STA	BS	HI	FS	Elev
BM-2	4.13	106.29	4.80	101.49
TR-3			4.34	101.95
TR-2			5.86	100.43
TR-1				100.43
TR-1	5.95	106.38	4.43	101.43
TR-2			4.89	101.49
TR-3			4.22	102.16

~~BM-2~~
BM-2
cont 1/2/05

Pool
TR-2 Bank Survey
06/25/04

SP-8	STA	HI	FS	Substrate
	106.38			
	24.6 top	5.09		veg/duff 70
	23.8	5.38		veg/duff "
	22.5	7.84		cob/dirt 60
	21.4 LWE/LWS	8.66 (97.72)	5.11 / cob	60
	13.4 RWE/RWS	8.75 (97.73)	veg	60 (road)
	12.5	8.08		veg/duff 80
	3.0	6.68		" 60
	1.0 ramp	5.95		

TR-3 Bank Survey

	106.38			
	1.0 ramp	5.60		veg/duff 60
	3.0	6.98		" 60
	9.7	8.14		" "
	10.8	7.59		veg/srft (road) (10)
	12.6 RWS	8.73		(97.74) (97.74) (0.05)
	20.2 LWS	8.69		70
	20.4	8.63		silt/veg 80
	21.1	5.41		veg/duff 60
	22.7 top	5.15		
	49' o/s of TR-3	7.50		(0.48 rd)

SP-8	POOL TR-1	6/25/04			
STA	D	V	SUB	COVER	% DOM
10.7	0.36	∅	ST/VEG	0.2 UCS	80
11.0	1.10	∅	ST/VEG		80
11.5	1.52	~0.05	ST/SB		90
12.0	1.64	~0.05	"		70
12.5	1.62	~0.05	ST/SB		"
13.0	1.66	0.01	"		70
13.5	1.49	0.30	ST/SB		"
14.0	1.42	0.43	"	LWB	80
14.5	1.40	0.43	ST/SB	LWB	"
15.0	1.50	0.40	"	"	"
15.5	1.55	0.29	"	"	"
16.0	1.50	0.19	"	"	90
16.5	1.37	0.05	"	"	"
17.0	1.15	0.00	"	UNDER LWB BANK EDGE	"
17.1	1.05	0.00	"	UCS	"
LWE 18.1	∅		"		"

↑
ALL SUB-DOM
IS SAND

SP-9	POOL TR-2	6/25/04			
STA	D	V	SUB	COVER	% DOM
13.2	∅	∅	VEG/ST		70
13.4	0.10	∅	"		"
13.5	0.10	∅	"		"
14.0	0.20	~0.05	VEG/ST		"
14.5	0.40	~0.05	"		"
15.0	0.40	"	"		"
15.5	0.51	"	"		"
16.0	0.82	-0.10	ST/LG		80
16.5	0.92	0.56	SP/LG		80
17.0	1.01	0.90	SG/SB		60
17.5	0.90	0.97	BWD/SB		60
18.0	0.82	0.28	"		"
18.5	0.88	0.36	BWD/SB		80
19.0	0.30	0.02	BWD/ST	BWD	90
19.5	0.20	0.25	"	BWD	"
20.0	0.25	~0.05	"	BWD	80
20.5	0.21	0.39	ST/BW		70
21.0	0.05	0.00	"		90
21.4	LWE ∅	∅	ST/CB		80

6/25/04

POOL TR-3

STA	D	V	SOG	COVER	% NOM
12.5	φ	φ	ST/VEG		60
13.0	0.38	φ	VG/SF		60
13.5	0.70	0.21	CB/SF	VEG	60
14.0	0.80	0.44	VG/CB		70
14.5	0.80	0.50	"		"
15.0	0.96	0.48	"		"
15.5	1.00	0.56	SD/SG		70
16.0	0.71	0.60	SLP/SD		90
16.5	0.71	0.48	"		"
17.0	0.82	0.34	BD/SF		80
17.5	1.0	0.70	"		"
17.8	0.60	0.08	"	SIDE BUD	"
18.5	+0.10	-	"	TOP BUD	70
19.0	0.20	0.00	"	SIDE BUD	60
19.5	0.42	0.00	ST/BUD		90
20.0	0.22	0.00	ST/VEG		80
UNE 20.3	φ	φ	"		"

SP-8



"Sit in the Rain"

ALL-WEATHER
LEVEL BOOK

No. 310

8/18/04

1442.01

SP-B Trout Creek

8/13/04

	IN	OUT
TIME	9 am	12:15 pm
SG	0.19	0.19

CREW: C. Yoder
A. Weybright

WEATHER: Sunny, few clouds, light wind

EQUIPMENT

Swiffer 4099 Prop 1A (riffle)
Prop 1B (pool)

PHOTO LOG: CY Roll #2

- 19 Trout Creek Staff Gauge
- 18 SP-B TR1 Riffle RB to LB
- 17 SP-B TR1 Riffle Downstream
- 16 SP-B TR1 Riffle upstream
- 15 SP-B TR2 Riffle LB to RB
- 14 SP-B TR2 Riffle upstream
- 13 SP-B TR3 Riffle RB to LB
- 12 SP-B TR3 Riffle downstream
- 11 Hydraulic Control LB to RB
- 10 HC - upstream
- 9 Overall site photo - burn
- 8 SP-B TR1 Pool RB to LB
- 7 SP-B TR1 Pool Upstream
- 6 SP-B TR2 Pool Downstream
- 5 SP-B TR2 Pool RB to LB
- 4 SP-B TR3 Pool RB to LB
- 3 SP-B TR3 Pool Upstream

LEVEL LOOP		9/18/04		STA	BS	HI	FS	ELV	120D	
BM1	-rif	4.69	104.69	100.00	TR2-Pool	104.86	2.91	101.95	120D	
TR2	-rif	5.56	99.13	99.13	TR2-Pool		4.12	100.44		
TR2	-rif	4.57	100.12	100.12	TR3-rif		5.04	99.82		
TR3	-rif	4.87	99.82	99.82	TR2-rif		4.74	100.12		
TR1	-Pool	4.25	100.44	100.44	TR1-rif		5.73	99.13		
TR2	-Pool	2.74	101.95	101.95	BM1-rif		4.86	100.00		
TR3	-Pool	3.20	101.49	101.49						
BM2	-Pool	2.53	102.16	102.16						
(TP)										
BM	-2-Pool	2.70	104.86	102.16						
TR	-3-Pool	3.37	101.49	101.49						

WSE SURVEY

8/18/04

STA	BS	HI	FS	ELV	ROD
TR2-Rif (L)		106.86	8.98	97.90	
TR2-Rif (R)		104.86	8.98	97.90	
TR2-Rif (L)			8.38	98.48	
TR2-Rif (R)			8.40	98.46	
TR3-Rif (L)			8.98 8.27	98.48 99.49	OK
TR3-Rif (R)			7.48	99.38	OK
TR2-Pool (L)			7.36	99.50	
TR2-Pool (R)			7.35	99.51	
TR3-Pool (L)			7.35	99.51	
TR2-Pool (R)			7.35	99.51	

side-channel that is lower

WSE SURVEY

8/18/04

STA	BS	HI	FS	ELV	ROD
TR3-Pool (L)			7.35	99.51	
TR3-Pool (R)			7.35	99.51	
downstream TR1-R ~ 75'			5.55	101.79	0.48
upstream TR3-P ~ 75'			10.38	94.86	0.38
HC-R			7.36	99.50	
HC-L			7.36	99.50	

PROP 1A
RIFLE TR1 DISCHARGE 8/16/04

STA	DEPTH	VEL	COMMENTS
5.0	0	0	RWE
5.5	0.18	* -0.05	* EST
6.0	0.20	-0.01	
6.5	0.22	0.33	
7.0	0.22	1.24	
7.5	0.22	0.74	
8.0	0.22	0.76	
8.5	0.27	0.04	behind lg gravel
9.0	0.22	1.32	
9.5	0.30	0.63	
10.0	0.3	-0.03	
10.5	0.2	0.39	back eddy
11.0	0.3	0.94	
11.5	0	0	
12.0	+0.2	0	side of boulder
12.3	0.05	0.01	top of boulder
13.0	0.05	0.01	
13.5	0.17	0.03	
14.0	0.9	0	side of rock
15.6	0	0	H = 0.2
15.7	0.05	0.01	
16.2	0	0	LNE

PROP 1A
RIFLE TR2 DISCHARGE 9/16/04

STA	DEPTH	VEL	COMMENTS
10.7	0	0	RWE
11.0	0.05	* 0.03	* EST
11.5	0.17	0.45	
12.0	0.17	* -0.01	Rock at 12.1 4=0.2'
12.5	+0.2	—	to 13.1
13.0	—	—	
13.5	0.3	* -0.02	
14.0	0.3	0.35	
14.5	0.25	0.34	
15.0	0.27	0.52	415°
15.5	0.37	0.59	
16.0	0.28	0.24	
16.5	0.3	1.21	
17.0	0.32	1.13	
17.5	0.25	0.10	
18.0	0.15	* -0.01	
18.5	0.12	0	
18.9	0	0	LNE

NOT GOOD DISCHARGE PROP 1A

RIFFLE TR3 DISCHARGE 8/18/04

STA DEPTH VEL COMMENTS

RWE

2.9	0	0	
3.5	0.15	*0.05	
4.0	0.23	0.75	
4.5	0.20	*0.05	
5.0	0.02	*0.05	
5.5	0.17	0.23	
6.0	0.05	*0.15	
6.5	0.12	*0.2	
7.0	0.1	*0.2	
7.5	0.1	0.56	
8.0	0.08	*0.2	
8.5	0.1	0.43	
9.0	0.05	*0.1	
9.5	0.25	0.06	
10.0	0.4	0.22	
10.5	0.42	0.22	
11.0	0.57	0.43	
11.5	0.47	0.36	
12.0	0.4	0.28	
12.5	0.32	0.21	
13.0	0.15	*0.05	Grass
13.5	0.05	*0.03	
14.1	0	0	LWE

~~45°~~ 60°
 flow is 11 to transect
 45°
 45°
 30°

(Not a good discharge)

HYDRAULIC CONTROL POOL 8/18/04

STA DEPTH COMMENTS

RWE

4.3	0	
4.5	0.02	
5.2	0.25 0.25	
5.7	0.48 0.48	
6.5	0.62	
7.0	0.73	
7.5	0.87	
8.0	1.0	
8.5	0.68	
9.0	0.27	
9.5	0.25	
10.0	0.35	
10.5	0	LWE
11.0		
11.5		
12.0		

Ungeper Prop.

PROP JB

POOL TR I DISCHARGE 0110104

STA DEPTH VEL COMMENTS

STA	DEPTH	VEL	COMMENTS
10.6	0.2	0	RWE
10.7	0.3	* -0.01	* EST.
11.0	0.98 0.5	* -0.01	
11.5	1.23	* 0.01	
12.0	1.45	* 0.08	
12.5	1.40	* 0.08	
13.0	1.50	* 0.08	
13.5	1.35	* 0.08	
14.0	1.3	* 0.08	
14.5	1.22	0.1	
15.0	1.22	* 0.1	
15.5	1.35	0.05 0.07	
16.0			LWD
16.5	1.3	* 0.03	15.6' to 16.4' LWD
17.0	0.93	* 0.03	
17.1	0.93	* 0.03	Bank edge VCS H=1.9'
18.0	0	0	LWE

Prop. JB

POOL TR 2 DISCHARGE 0110104

STA DEPTH VEL COMMENTS

STA	DEPTH	VEL	COMMENTS
14.4	0	0	RWE
15.0	0.2	0	
15.5	0.4	* -0.01	* EST.
16.0	0.52	* 0.01	
16.5	0.75	0.9	
17.0	0.39	0.49	
17.5	0.87	0.49	
18.0	0.55	0.12	
18.5	0.75	0	
19.0	0.6 0.6	* 0.01	
19.5	0.25	* 0.01	Boulder 19.6' to 19.9 H=0.05
20.0	0.05	0	
20.5	0.1	0	
20.9	0	0	LWE

Prop. 1B

POOL TR3 DISCHARGE 01/10/04

STA	DEPTH	VEL	COMMENTS
12.9	∅	∅	RWE
13.0	0.05	0	
13.5	0.45	*0.03	*EST.
14.0	0.53	*0.07	
14.5	0.6	0.22	
15.0	0.75	0.34	
15.5	0.8	0.29	
16.0	0.52	0.2	
16.5	0.62	0.13	
17.0	0.72	0.14	
17.5	0.8	*0.07	
18.0	∅	∅	ROCK 17.9' to 18.9' HEAD 19.0'
18.5	∅	∅	
19.0	0.38	*0.03	EDGE OF BOULDER
19.5	0.22	*0.03	
20.0	∅	∅	LWE

ASK field crew - if ∅ depth,

can't have vel.

Is depth ∅?