State of Idaho
Department of Water Resources
Water District ___

Meas. No. .....
Comp. by. .....

Sta. No. ..... **DISCHARGE MEASUREMENT NOTES** Checked by .....

Portneuf River - Res outlet About 200' Blw Flume.

Date Aug 10 ., 19 95 . . . Party T. LUKE

Width ..... Area ..... Vel. ..... G. H. ..... Disch. 83.4 cfs

Method ..... No. secs. ..... G. H. change. ..... in ..... hrs. Susp. .....

Method coef. ..... Hor. angle coef. ..... Susp. coef. ..... Meter No. .....

Type of meter ~~Swoffer~~ 2100 Date rated ..... Tag checked .....

Meter ..... ft. above bottom of wt. Spin before meas. OK ... after OK ...

Meas. plots. ..... % diff. from. ..... rating. Levels obtained .....

GAGE READINGS

Time		Inside	HM	Chart	Outside
7 30					1.70
8 30					1.70
Weighted M.G.H.					
G. H. correction					
Correct M.G.H.					

WATER QUALITY MEASUREMENTS

No ..... Yes. ..... Time .....

Samples Collected

No ..... Yes. ..... Time .....

Method Used

EDI ..... EWI ..... Other. .....

SEDIMENT SAMPLES

No ..... Yes. ..... Time .....

Method Used

EDI ..... EWI ..... Other. .....

BIOLOGICAL SAMPLES

Yes. ..... Time .....

No ..... Type .....

Check bar. chain found ..... changed to ..... at .....

Wading, cable, ice, boat, upstr., downstr., side bridge. ..... feet, mile, above, below gage.

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%); based on the following cond:

Flow .....

Cross section .....

Control . Flume .....

Gage operating ..... Weather .....

Intake/Orifice cleaned ..... Air ..... °C@ ..... Water ..... °C@ .....

Record removed ..... Extreme Indicator: Max. ..... Min. .....

Manometer N_2 Pressure Tank ..... Feed ..... Bbl rate ..... per min.

CSG checked ..... Stick reading .....

Observer .....

HWM ..... outside, in well

Remarks . G.H. of 1.70 Ft = G.H. @ Parshall Flume, w/ Q = 92 cfs

GPS LAT\LONG .....

G.H. of zero flow ..... ft. Sheet No. ..... of ..... sheets

State of Idaho
Department of Water Resources
Water District ___

Meas. No. .....
Comp. by. .....

Sta. No. ..... **DISCHARGE MEASUREMENT NOTES** Checked by .....

McCammon Ditch

Date Aug 11 ., 19 95 . . . Party T. LUKE, A. OLSON

Width ..... Area ..... Vel. ..... G. H. ..... Disch. 41.8 cfs

Method ..... No. secs. ..... G. H. change. ..... in ..... hrs. Susp. .....

Method coef. ..... Hor. angle coef. ..... Susp. coef. ..... Meter No. .....

Type of meter ~~Swoffer~~ 2100 Date rated 4/94 ..... Tag checked .....

Meter ..... ft. above bottom of wt. Spin before meas. OK ... after OK ...

Meas. plots. ..... % diff. from. ..... rating. Levels obtained .....

GAGE READINGS

Time		Inside	HM	Chart	Outside
12 15					1.07
1 15 pm					1.07
Weighted M.G.H.					
G. H. correction					
Correct M.G.H.					

WATER QUALITY MEASUREMENTS

No ..... Yes. ..... Time .....

Samples Collected

No ..... Yes. ..... Time .....

Method Used

EDI ..... EWI ..... Other. .....

SEDIMENT SAMPLES

No ..... Yes. ..... Time .....

Method Used

EDI ..... EWI ..... Other. .....

BIOLOGICAL SAMPLES

Yes. ..... Time .....

No ..... Type .....

Check bar. chain found ..... changed to ..... at .....

Wading, cable, ice, boat, upstr., downstr., side bridge. ..... feet, mile, above, below gage.

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%); based on the following cond:

Flow .....

Cross section .....

Control .....

Gage operating ..... Weather .....

Intake/Orifice cleaned ..... Air ..... °C@ ..... Water ..... °C@ .....

Record removed ..... Extreme Indicator: Max. ..... Min. .....

Manometer N_2 Pressure Tank ..... Feed ..... Bbl rate ..... per min.

CSG checked ..... Stick reading .....

Observer .....

HWM ..... outside, in well

Remarks . G.H. of 1.07 ft = Flume G.H. C/O Foot Parshall Flume w/ Q = 43.9 cfs.

GPS LAT\LONG .....

G.H. of zero flow ..... ft. Sheet No. ..... of ..... sheets

River at—

Angle coefficient	Dist. from initial point	Width	Depth	Observation depth	Revolutions	Time in seconds	VELOCITY: At point	VELOCITY: Mean in vertical	Adjusted for hor. angle or ———	Area	Discharge
REW	1.6										
	2.0	0.7	1.1			40	1.68			0.77	1.29
	3.0	1.0	1.2			1	2.70			1.2	3.24
	4.0	1.0	1.35				2.55			1.35	3.44
	5.0	1.0	1.5				2.72			1.5	4.08
	6.0		1.5				2.73			1.5	4.10
	7.0		1.55				2.73			1.55	4.23
	8.0		1.62				2.64			1.62	4.28
	9.0		1.60				2.24			1.60	3.58
	10.0		1.65				2.79			1.65	4.60
	11.0		1.50				2.99			1.50	4.49
	12.0		1.65				2.89			1.65	4.77
	13.0		1.65				2.89			1.65	4.77
	14.0		1.7				2.86			1.7	4.86
⊙	15.0		1.6				2.30			1.6	3.68
	16.0		1.65				2.77			1.65	4.57
	17.0		1.75				2.73			1.75	4.78
	18.0		1.75				2.19			1.75	3.83
	19.0		1.80				1.54			1.80	2.77
	20.0		1.75				1.16			1.75	2.03
	21.0		1.75				0.70			1.75	1.23
	22.0		1.75				1.67			1.75	2.92
	23.0		1.7				1.28			1.70	2.18
	24.0		1.55				1.18			1.55	1.83
	25.0		1.40				0.68			1.40	0.95
	26.0	0.9	1.20				0.85			1.08	0.92
LEW	26.8										
											83.42

River at—

Angle coefficient	Dist. from initial point	Width	Depth	Observation depth	Revolutions	Time in seconds	VELOCITY: At point	VELOCITY: Mean in vertical	Adjusted for hor. angle or ———	Area	Discharge
		12:25 pm									
REW	3.3										
	3.7	.45	.4				0.26			.18	0.05
	4.2	.55	.6				0.92			.33	0.30
	4.8	.65	1.20				1.17			0.78	0.91
	5.5	.60	1.60				1.80			0.96	1.73
	6.0	.5	1.70				1.96			0.85	1.67
	6.5	.65	1.80				2.04			1.17	2.39
	7.3	.80	2.00				2.91			1.60	4.66
	8.1	.80	2.00				2.19			1.6	3.50
	8.9	.80	2.00				2.30			1.6	3.68
	9.7	.80	2.35				2.32			1.88	4.36
	10.5	.75	2.45				2.24			1.84	4.12
	11.2	.75	2.40				2.24			1.80	4.03
	12.0	.70	2.25				2.29			1.58	3.61
⊙	12.6	.60	2.00				2.12			1.20	2.54
	13.2	.60	1.80				1.95			1.08	2.11
	13.8	.6	1.20				1.96			0.72	1.41
	14.4	.6	.80				1.46			0.48	0.70
	15.0	.55	.55				0.21			0.30	0.06
1:10 pm LEW	15.5										
											Q = 41.83 cfs
	GH =	1.07' =	43.9	cfs							

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

Water District 01

DISCHARGE MEASUREMENT NOTES

Meas. No. ____

Comp. by ____

Checked by ____

Sta. No. ____

Portneuf-Marsh Valley Canal NR Heading @ RR. Bridge

Date 8/17, 1995 Party T. Olenichak, T. Luke

Width ____ Area ____ Vel. ____ G. H. ____ Disch. ____

Method ____ No. secs. ____ G. H. change ____ in ____ hrs. Susp. ____

Method coef. ____ Hor. angle coef. ____ Susp. coef. ____ Meter No. A91025

GAGE READINGS				
Time		Recorder	Inside	Outside
9:20 AM				
10:15 AM				1.79'
Weighted M. G. H.				
G. H. correction				
Correct M. G. H.				

Type of meter AA Price

Date rated ____ for rod, other.

Meter ____ ft. above bottom of weight.

Spin before meas. ____ after ____

Meas. plots ____ % diff. from rating ____

Wading, (cable), ice, boat, (upstr.), downstr., side (bridge) ____ feet, mile, above, below gage, and ____

Check-bar, found ____ changed to ____ at ____

Correct ____

Levels obtained ____

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%), based on following conditions: Cross section ____

Flow ____ Weather ____

Other ____ Air ____°F@ ____

Gage ____ Water ____°F@ ____

____ Record removed ____ Intake flushed U

Observer ____

____

Control ____

____

Remarks Parshall Flume 15' GH=1.79 Ft., Q=146.7cfs

____

____

G. H. of zero flow ____ ft.

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

Water District 01

DISCHARGE MEASUREMENT NOTES

Meas. No. ____

Comp. by ____

Checked by ____

Sta. No. ____ (200' Ø about Flume)

Portneuf River - Chesterfield Reservoir outlet

Date 8/17, 1995 Party T. Olenichak, T. Luke

Width ____ Area ____ Vel. ____ G. H. ____ Disch. 84.3 cfs

Method ____ No. secs. ____ G. H. change ____ in ____ hrs. Susp. ____

Method coef. ____ Hor. angle coef. ____ Susp. coef. ____ Meter No. A91025

GAGE READINGS				
Time		Recorder	Inside	Outside
11:18 AM				1.70'
12:02 PM				1.57
Weighted M. G. H.				
G. H. correction				
Correct M. G. H.				

Type of meter AA Price

Date rated ____ for rod, other.

Meter ____ ft. above bottom of weight.

Spin before meas. ____ after 8/17 3 min 52 sec

Meas. plots ____ % diff. from rating ____

Wading, cable, ice, boat, upstr., downstr., side bridge ____ feet, mile, above, below gage, and ____

Check-bar, found ____ changed to ____ at ____

Correct ____

Levels obtained ____

Measurement rated excellent (2%), (good (5%)), fair (8%), poor (over 8%), based on following conditions: Cross section Regular, cobble bottom

Flow Fairly Laminar & Regular Weather ____

Other ____ Air ____°F@ ____

Gage ____ Water ____°F@ ____

____ Record removed ____ Intake flushed U

Observer ____

____

Control ____

____

Remarks Reservoir outlet gate Adjusted during last several stations.

____

G. H. of zero flow ____ ft.

River at—

Angle coefficient	Dist. from initial point	Width	Depth	Observation depth	Revolutions	Time in seconds	VELOCITY: At point	VELOCITY: Mean in vertical	Adjusted for hor. angle or ----	Area	Discharge
REW	1.0										
	1.5	.5	1.24	.6	20	49	.909			.62	0.56
	2.0	1.0	1.28	.6	25	45	1.23			1.28	1.57
	3.5	1.5	1.4	.6	25	41	1.35			2.10	2.84
	5.0	1.5	1.3	.6	30	45	1.47			1.95	2.87
	6.5	1.5	1.22	.6	40	43	2.04			1.83	3.73
	8.0	1.5	1.18	.6	40	49	1.80			1.77	3.19
	9.5	1.5	1.20	.6	40	48	1.83			1.80	3.29
	11.0	1.5	1.24	.6	40	45	1.95			1.86	3.63
	12.5	1.5	1.22	.6	40	45	1.95			1.83	3.57
	14.0	1.5	1.28	.6	40	45	1.95			1.92	3.74
	15.5	1.5	1.32	.6	40	41	2.14			1.98	4.24
	17.0	1.5	1.40	.6	40	50	1.76			2.10	3.70
	18.5	1.5	1.40	.6	40	40	2.19			2.10	4.60
⊙	20.0	1.5	1.40	.6	40	42	2.09			2.10	4.39
	21.5	1.5	1.46	.6	40	45	1.95			2.19	4.27
	23.0	1.5	1.48	.6	40	48	1.83			2.22	4.06
	24.5	1.5	1.58	.6	50	48	2.28			2.37	5.40
	26.0	1.5	1.68	.6	40	45	1.95			2.52	4.91
	27.5	1.5	1.64	.6	40	46	1.91			2.46	4.70
	29.0	1.5	1.56	.6	40	47	1.87			2.34	4.38
	30.5	1.5	1.62	.6	40	46	1.91			2.43	4.64
	32.0	1.5	1.60	.6	40	53	1.66			2.40	3.98
	33.5	1.25	1.40	.6	20	41	1.08			1.75	1.89
	34.5	.65	1.22	.6	3	51	0.15			0.79	0.12
LEW	34.8										
										Q =	84.27 cfs
		PARSHALL flume @ 1.70' =								92.0 cfs	
		% Error =				9.13%					

River at—

Angle coefficient	Dist. from initial point	Width	Depth	Observation depth	Revolutions	Time in seconds	VELOCITY: At point	VELOCITY: Mean in vertical	Adjusted for hor. angle or ----	Area	Discharge
REW	5.1										
	5.5	.45	2.45	.6	30	40	1.65			1.10	1.82
	6.0	.75	2.5	.6	40	47	1.87			1.875	3.51
	7.0	1.0	3.1	.8	40	40	2.19	2.235		3.10	6.93
				.2	50	48	2.28				
	8.0	1.0	3.55	.8	50	44	2.49	2.58		3.55	9.16
				.2	50	41	2.67				
	9.0	1.0	3.8	.8	60	45	2.91	3.13		3.8	11.89
				.2	80	52	3.35				
	10.0	1.0	3.8	.8	80	51	3.42	3.69		3.8	14.02
				.2	80	44	3.96				
	11.0	1.0	3.6	.8	80	46	3.79	3.965		3.6	14.27
				.2	80	42	4.14				
	12.0	1.0	3.65	.8	50	44	2.49	3.32		3.65	12.10
⊙				.2	80	42	4.14				
	13.0	1.0	3.55	.8	60	40	3.27	3.71		3.55	13.15
				.2	80	42	4.14				
	14.0	1.0	3.95	.8	50	41	2.67	3.27		3.95	12.92
				.2	80	45	3.87				
	15.0	1.0	3.90	.8	60	45	2.91	3.165		3.90	12.34
				.2	80	51	3.42				
	16.0	1.0	3.6	.8	60	41	3.19	2.99		3.60	10.76
				.2	60	47	2.79				
	17.0	1.0	3.4	.8	60	47	2.79	2.49		3.40	8.47
				.2	50	50	2.19				
	18.0	0.7	3.2	.8	40	53	1.66	1.695		2.24	3.80
				.2	40	51	1.73				
LEW	18.4										
										Q =	135.14 cfs