

9-275-F
(Apr. 93)

U.S. Department of the Interior
U.S. Geological Survey

Meas. No. 50

Comp. by _____

Water Resources Division

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

Santa Fe Creek @ B2

Date 1/9/99 Party MG, AB

Width 11.1 ft Area 3.34 ft² Vel. 2.10 ft/s G.H. 2.06 Disch. 7.03 cfs

Method 0.6 No. Sec. 24 G.H. Change -0.09 in 0.6 hrs. Susp. _____

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

Type of meter Pygmy Date rated _____ Tag checked _____

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

Meas. Plots _____ % diff from _____ rating. Levels obtained _____

GAGE READINGS					WATER QUALITY MEASUREMENTS	
Time	Inside	WT	SC	Outside	No.	Yes... <input checked="" type="checkbox"/> ... Time.....
1424	1.88	3.13	434	1.00	<u>Samples Collected</u>	
1500	1.94			0.91	No. <input checked="" type="checkbox"/>	Yes..... Time.....
					<u>Method Used</u>	
					EDI.....	EWI..... Other.....
					<u>SEDIMENT SAMPLES</u>	
					No. <input checked="" type="checkbox"/>	Yes..... Time.....
					<u>Method Used</u>	
					EDI.....	EWI..... Other.....
					<u>BIOLOGICAL SAMPLES</u>	
Weighted MGH					Yes.....	Time.....
GH correction				1.00	No. <input checked="" type="checkbox"/>	Type.....
Correct MGH						

Check bar, chain found _____ changed to _____ at _____

Wading, cable, ice, boat, upstr., downstr., side bridge 20 feet, mile, above, below, gage.

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

Flow _____

Cross section _____

Control _____

Gage operating _____ Weather warm, sunny

Intake/Orifice cleaned NO Air _____ °C@ _____ Water _____ °C@ _____

Record removed _____ Extreme Indicator: Max _____ Min _____

N₂ Pressure Tank _____ Feed _____ Bbl rate _____ per min. Batt volt 13.9

CSG checked _____ Stick reading _____

Observer _____

HWM _____ outside, in well _____

Remarks field SC=350 WT=1.25

Angle coef- ficient	Dist. from initial point	Width	Depth	Observa- tion depth	Rev- olu-tions	Time in seconds	VELOCITY		Adjusted for hor- angle or ---	Area	Discharge	
							At point	Mean in ver- tical				
	5.9	0.25	LEW @ 1432									
	6.4	0.50	0.40	.6	50	42		1.19		0.200	0.238	
	6.9	0.50	0.45	↓	60	45		1.33		0.225	0.299	
	7.4	0.50	0.45		100	43		2.30		0.225	0.518	
	7.9	0.50	0.45		150	57		2.60		0.225	0.585	
	8.4	0.50	0.45		100	40		2.47		0.225	0.556	
	8.9	0.50	0.45		100	41		2.41		0.225	0.542	
	9.4	0.50	0.45		80	42		1.89		0.225	0.425	
	9.9	0.50	0.30		↓	50	40		1.25		0.15	0.188
	10.4	0.50	0.22	↓	40	47		0.859		0.110	0.094	
	10.9	0.55	0.15	↓	10	43		0.255		0.083	0.021	
	11.5	0.30	REW @ 1445 of R H channel								(3.47)	
0	4.1	0.25	REW @ 1446 of LH channel									
	4.6	0.50	0.20	.6	60	40		1.49		0.10	0.149	
	5.1	0.50	0.25	↓	80	50		1.59		0.125	0.199	
	5.6	0.50	0.28		80	41		1.93		0.140	0.270	
	6.1	0.50	0.28		100	43		2.30		0.140	0.322	
	6.6	0.50	0.20		80	42		1.89		0.100	0.189	
	7.1	0.50	0.25		100	41		2.41		0.125	0.301	
	7.6	0.50	0.40		↓	150	55		2.69		0.20	0.538
	8.1	0.50	0.40		150	49		3.02		0.20	0.604	
0.98	8.6	0.50	0.28	150	44		3.36	3.29	0.14	0.461		
0.98	9.1	0.50	0.35	150	48		3.08	3.02	0.175	0.529		
	9.6	0.25	LEW @ 1500									
											$\Sigma Q = 7.03 \text{ cfs}$	
5.5 + 5.6											$\Sigma A_i = 3.34 \text{ ft}^2$	

.85

.90

.94

.97

.98

.99

1.0

.99

.98

.97

.90

.85

.80