

9-275-F
(Apr. 93)

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

Meas. No. 23

Water Resources Division

Comp. by _____

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

Aiken Creek @ F5

Date 12/31/98 Party MG, AB

Width 19.4 Area 6.31 Vel. 0.293 G.H. _____ Disch. 1.85

Method wading No. Sec. _____ G.H. Change _____ in _____ 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
<u>1145</u>	<u>1.58</u>	<u>7.30</u>	<u>151.8</u>	<u>0.57</u>
<u>1200</u>	<u>1.58</u>			
<u>1210</u>				<u>0.57</u>

No. Yes. ☒ Time.

Samples Collected

No. ☒ Yes. Time.

Method Used

EDI. EWI. Other.

SEDIMENT SAMPLES

No. ☒ Yes. Time.

Method Used

EDI. EWI. Other.

Weighted MGH

GH correction

Correct MGH

BIOLOGICAL SAMPLES

Yes. Time.

No. ☒ Type.

Check bar, chain found _____ changed to _____ at _____

Wading, cable, ice, boat, upstr., downstr., side bridge 50 feet, mile, above, below gage.

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

Cross section rel. uniform

Control Clear, flow over weir

Gage operating OK Weather Breezy, ptly cloudy

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

Record removed _____ Extreme Indicator: Max _____ Min _____

N₂ Pressure Tank 1400 Feed 10 Bbl rate 90 per min. Batt volt _____

CSG checked _____ Stick reading _____

Observer _____

HWM _____ outside, in well _____

Remarks field SC = 116.4 WT = 7°C

G.H. of zero flow _____ ft.

Sheet No. _____ of _____ sheets.

River at-

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			
	7.8	0.75	LEW	2.1154	0	60					
	9.3	1.25	0.28	0.6	0	60		0		0.288	0
	10.3	1.25	0.30		0	60		0		0.375	0
	11.8	1.25	0.30		0	60		0		0.375	0
	12.8	1.00	0.38		0	60		0		0.38	0
	13.8	1.00	0.39		10	61		0.188		0.39	0.073
	14.8	1.00	0.41		15	48		0.333		0.41	0.137
	15.8	0.85	0.44		25	43		0.596		0.374	0.133
	16.5	0.70	0.39		40	51		0.794		0.273	0.217
	17.2	0.70	0.44		20	41		0.505		0.308	0.156
	17.9	0.70	0.45		40	50		0.810		0.315	0.255
	18.6	0.70	0.40		50	41		1.22		0.280	0.342
	19.3	0.70	0.40		40	54		0.752		0.280	0.211
0	20.0	0.85	0.39		30	40		0.761		0.332	0.253
	21.0	1.00	0.38		7	45		0.180		0.38	0.068
	22.0	1.25	0.39		0	60		0		0.489	0
	23.5	1.50	0.28		0	60		0		0.42	0
	25.0	1.50	0.21		0	60		0		0.315	0
	26.5	1.10	0.30		0	60		0		0.33	0
	27.2	0.35	REW		1210					ΣQ = 1.85	
									ΣA = 6.31		
	Σw = 19.4		06 = 0.57		1210						