

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

Meas. No. 48

Comp. by \_\_\_\_\_

Sta. No. \_\_\_\_\_ **DISCHARGE MEASUREMENT NOTES**

Checked by CHW

Aiken Creek @ FT

Date 1/10/07, 19\_\_\_\_ Party FAC  
 Width 11.8 Area 3.74 Vel. 0.54 G.H. \_\_\_\_\_ Disch. 2.04  
 Method \_\_\_\_\_ No. secs. \_\_\_\_\_ G.H. change \_\_\_\_\_ in \_\_\_\_\_ hrs. Susp. \_\_\_\_\_  
 Method coef. \_\_\_\_\_ Hor. angle coef. \_\_\_\_\_ Susp. coef. \_\_\_\_\_ Meter No. \_\_\_\_\_  
 Date rated \_\_\_\_\_ Used rating for rod \_\_\_\_\_ susp. Meter \_\_\_\_\_ ft  
 above bottom of wt. Tags checked \_\_\_\_\_ Spin before meas. \_\_\_\_\_ after \_\_\_\_\_  
 Meas. plots \_\_\_\_\_ % diff. from \_\_\_\_\_ rating. Wading, cable, ice, boat, upstr., downstr., side  
 bridge \_\_\_\_\_ feet, mile, above, below gage. Levels obtained \_\_\_\_\_

BASE GAGE READINGS

Time	Recorder	Inside	Outside
2020		1.671	0.66
2059		1.643	0.65
AT 7.91	e 2059		
SC 188.6			
BV 14.7			
Weighted M.G.H. _____			
G.H. correction _____			
Correct M.G.H. _____			

AUX. GAGE READINGS

Time	Recorder	Inside	Outside
Weighted M.G.H. _____			
G.H. correction _____			
Correct M.G.H. _____			

Check-bar, chain found \_\_\_\_\_ changed to \_\_\_\_\_ at \_\_\_\_\_  
 Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%), based on following  
 conditions: Cross section uniform

Flow slow, top of pool Weather \_\_\_\_\_  
 Other 150' below gage Air \_\_\_\_\_ ° F. @ \_\_\_\_\_  
 Gage flowing overflow weir Water \_\_\_\_\_ ° F. @ \_\_\_\_\_  
 Record removed \_\_\_\_\_ Intake flushed U

Observer \_\_\_\_\_  
 Control \_\_\_\_\_

Remarks collected water samples @ 2105  
pH + cond measured in lab pH = 7.66  
S.C. = 91.4 μm

River at—

Angle coef- ficient	Dist. from initial point	Width	Depth	Observa- tion depth	Rev- olu- tions	Time in sec- onds	VELOCITY		Adjusted for hor. angle or -----	Area	Discharge
							At point	Mean in ver- tical			
	2.5	REU	@	203	2						
	3.5	.75	.25		30	54	.565			.1875	.106
	4	.75	.03		40	50	.800			.225	.180
	5	1	.32		30	45	.671			.32	.215
	6	.75	.42		50	46	1.08			.315	.340
	6.5	.5	.43		40	41	.968			.215	.208
	7	.5	.40		30	40	.752			.2	.150
	7.5	.5	.41		20	46	.449			.205	.092
	8	.5	.41		20	43	.478			.205	.098
	8.5	.5	.40		15	45	.351			.2	.070
	9	.75	.40		3	40	.103			.3	.031
	10	.75	.38		15	45	.351			.285	.100
	10.5	.5	.30		40	50	1.23	→ CHW .8		.15	.185
	11	.75	.28		25	40	.631			.21	.133
o	12	1	.25		15	40	.391			.25	.098
	13	1	.28		3	40	.103			.28	.029
	14	.65	.30		0	40	0			.195	0
	14.3	REU @	2055				0.54			3.74	2.04
	11.8										↓ 1.97 CHW