9-275-F
(Apr. 93)

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Meas. No. 40

Comp. by

WATER RESOURCES DIVISION

Sta. No. Commonwealth Strm @ C1

DISCHARGE MEASUREMENT NOTES

Checked by

Date 12/22, 19 99 Party EC, TM, MG

Width 5.4 Area 1.83 Vel. 0.255 G.H. Disch. 0.467 cfs

Method No. secs. 19 G.H. change +0.05 in 0.75 hrs. Susp.

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

Type of meter P(5m) Date rated Tag checked

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

Meas. Plots % diff. from rating. Levels obtained

GAGE READINGS

Time	Inside				Outside
0930	8.53			TD=	2.54
				↳	8.71
1015	8.53			TD=	2.49
				↳	8.76
				↳ CJ	8.47
				↳ CJ	8.52
Weighted M.G.H.					
G.H. correction					
Correct M.G.H.					

WATER QUALITY MEASUREMENTS

No Yes ✓ Time 0930

Samples Collected

No Yes ✓ Time 0930

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 70 feet, mile, above, below gage.

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

Flow Nice uniform 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 ~1800 Feed 10 Bbl rate per min.

CSG checked Stick reading

Observer

HWM outside, in well

Remarks SC_m = 169 µS WT_m = 4.0 °C

@ 0920, found N_2 regulator feed = 0psi! readjusted to 10psi.

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

.0 .10 .20 .30 .40 .50 .60 .70 .75

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
	5.0ft	6.15	.28		0	REW @ 9:45				0.042	0
	5.3	0.30	.32	.6	0	—	0	0		0.096	0
	5.6ft	0.30	.32	|	0	—	0	0		0.096	0
	5.9	0.30	.28	|	15	61	0.267	0.267		0.084	0.022
	6.2	0.30	.28	|	15	44	0.359	0.359		0.084	0.030
	6.5	0.30	.32	|	15	56		0.288		0.096	0.028
	6.8	0.30	.32	|	15	45		0.351		0.096	0.034
	7.1	0.30	.32	|	15	40		0.391		0.096	0.038
	7.4	0.30	.31	|	15	46		0.344		0.093	0.032
	7.7	0.30	.31	|	15	48		0.331		0.093	0.031
	8.0	0.30	.31	|	15	59		0.275		0.093	0.026
	8.3	0.30	.32	|	15	40		0.391		0.096	0.038
	8.6	0.30	.36	|	20	47		0.440		0.108	0.048
	8.9	0.30	.35	|	20	44		0.468		0.105	0.049
⊙	9.2	0.30	.33	|	15	53		0.303		0.099	0.030
	9.5	0.30	.29	|	10	73		0.163		0.287	0.047
	9.8	0.35	.25	|	3	40		0.103		0.088	0.009
	10.2	0.30	.20	|	2	46		0.079		0.060	0.005
	10.4	0.10	0	↓		LEW 10:10				0	0
	Σ=	5.4	✓							Σ=	0.467 cfs
									ΣA=	1.832	ft²

0 .10 .20 .30 .40 .50 .60 .70 .75