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	2.6	.2	0					0		0	0
	3.0	.4	1.2					1.25		.48	.600
	3.4	.4	1.2					1.27		.48	.610
	3.8		1.1					1.22		.44	.537
	4.2		1.1					1.24		.44	.546
	4.6		1.1					1.54		.44	.678
	5.0		1.0					1.69		.40	.676
	5.4		1.0					1.70		.40	.680
	5.8		1.0					1.83		.40	.732
	6.2		1.0					1.86		.40	.744
	6.6		1.0					1.72		.40	.688
	7.0		1.0					1.32		.40	.528
	7.4	.4	0.9					.99		.36	.356
	7.8	.3	.9					.82		.27	.221
REW	8.0	.1	0					0		0	0
	=	=								=	=
	5.4	5.4								5.31	7.60

.80 .85 .90 .92 .94 .96 .97 .98 .99 1.00 .98 .96 .97 .96 .94 .92 .90 .85 .80

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

9-275G
(Mar. 1972)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

DISCHARGE MEASUREMENT NOTES

Meas. No. _____
Comp. by _____
Checked by _____

Sta. No. _____
FWS Detail @ Main Outlet

Date 6-14 2000 19____ Party PS Fiedler

Width 5.4 Area 5.31 Vel. 1.43 G. H. 1.80 Disch. 7.6

Method .6 No. secs. 15 G. H. change 0 in 2 hrs. Susp. rod

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

GAGE READINGS

Time		Recorder	Inside	Outside
4 17				1.80
4 30				1.80
Weighted M. G. H.				
G. H. correction				
Correct M. G. H.				

Type of meter MM

Date rated new 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 Seet

Flow slightly turbulent Weather Sunny

Other _____ Air _____ °F@ _____

Gage _____ Water _____ °F@ _____

_____ Record removed _____ Intake flushed U L _____

Observer _____

Control _____

Remarks narrow section ~10' ds crook in reach
Meas ~ ~~20~~ 15' ds gage

~~G. H. of zero flow~~ much slumping ~~ft.~~

16—82985a-1 GPO

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	2.0	.20	0					0		0	0
	2.4	.45	.7					.05		.32	.016
	2.9	.5	1.1					.27		.55	.149
	3.4	.5	1.2					.46		.60	.276
	3.9		1.4					.54		.70	.378
	4.4		1.5					.36		.75	.270
	4.9		1.4					.44		.70	.308
	5.4		1.3					.67		.65	.436
	5.9		1.3					.81		.65	.526
	6.4		1.3					.84		.65	.546
	6.9		1.3					.89		.65	.578
	7.4		1.3					.82		.65	.533
	7.9		1.3					.78		.65	.507
	8.4		1.3					.83		.65	.540
⊙	8.9		1.3					.77		.65	.501
	9.4		1.3					.76		.65	.494
	9.9		1.3					.74		.65	.481
	10.4		1.4					.66		.70	.462
	10.9		1.4					.77		.70	.539
	11.4		1.3					.74		.65	.481
	11.9		1.3					.69		.65	.448
	12.4	.5	1.3					.71		.65	.462
	12.9	.55	1.4					.66		.77	.508
	13.5	.6	1.3					.61		.78	.476
	14.1	.6	1.4					.69		.84	.580
	14.7	.6	1.4					.62		.84	.521
	15.3	.6	1.3					.52		.78	.406
	15.9	.6	1.1					.43		.66	.284
	16.5	.4	.7					.09		.28	.025
LEW	16.7	.1	0					0		0	0
	14.7	14.7								18.4	11.7

.0 .10 .20 .30 .40 .50 .60 .70 .75 .80 .85 .90 .92 .94 .96 .97 .98 .99 1.00 .99 .98 .97 .96 .94 .92 .90 .85 .80

9-275G (Mar. 1972)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

DISCHARGE MEASUREMENT NOTES

Meas. No. _____
Comp. by _____
Checked by _____

Sta. No. _____
Evans Ditch out Mac Res

Date 6-14 2000 Party PJ Fiedler

Width 14.7 Area 18.4 Vel. .64 G. H. 1.78 Disch. 11.7

Method .6 No. secs. 30 G. H. change 0 in .4 hrs. Susp. rod

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

GAGE READINGS

Time		Recorder	Inside	Outside
345				1.78
407				1.78
Weighted M. G. H.				
G. H. correction				
Correct M. G. H.				

Type of meter MM

Date rated new 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 Silt

Flow laminar Weather Sunny

Other _____ Air _____ °F@ _____

Gage _____ Water _____ °F@ _____

_____ Record removed _____ Intake flushed U L _____

Observer _____

Control _____

Remarks Mean - 30 US gage

G. H. of zero flow _____ ft.

16—82085a-1 GPO

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	
Kew	3.3	.1	0					0		0	0	backwater
	3.5	.6	.2					-.03		.12	-.004	
	4.5	1	.3					0		.3	0	
	5.5	1	.4					-.01		.4	-.004	
	6.5	1	.4					-.03		.4	-.012	
	7.5	1	.4					.04		.4	.016	
	8.5	1	.4					.14		.4	.056	
	9.5	1	.4					.01		.4	.004	rock
	10.5	1	.5					.12		.5	.060	
	11.5	1	.5					.03		.5	.015	rock
	12.5	1	.5					.04		.5	.020	pooling
	13.5	1	.5					.05		.5	.025	
	14.5	1	.6					.05		.6	.030	
	15.5	1	.7					0		.7	0	backwater
⊙	16.5	1	.5					-.02		.5	-.010	
	17.5	1	.2					-.04		.2	-.008	
	18.5	1	.5					-.02		.5	-.010	
	19.5	.95	.4					-.03		.38	-.011	
	20.4	.45	0					0		0	0	
	17.1	17.1								7.3		

+.226 -.059 = .167

or 76.3 gpm

9-275G (Mar. 1972)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

DISCHARGE MEASUREMENT NOTES

Meas. No. _____
Comp. by _____
Checked by _____

Sta. No. _____
(Case) Fish Hatchery Spring (Walden)
Date 6-15 2000 19 Party PJFiedler
Width 17.1 Area 7.3 Vel. .02 G. H. ——— Disch. 0.17
Method 6 No. secs. 19 G. H. change _____ in _____ hrs. Susp. rod
Method coef. _____ Hor. angle coef. _____ Susp. coef. _____ Meter No. _____

GAGE READINGS				
Time		Recorder	Inside	Outside
N/A				
Weighted M. G. H.				
G. H. correction				
Correct M. G. H.				

Type of meter MM
Date rated new for rod, ot
Meter _____ ft. above bottom of weig
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 Silt, cobbles
Flow steady, eddies on sides Weather sunny
Other _____ Air _____ °F@ _____
Gage _____ Water _____ °F@ _____
_____ Record removed _____ Intake flushed _____
Observer _____
Control Measured ~15' ds trough end.
Remarks Poor due to significant eddying & flow velocities
A better way to measure would be with a calibrated bucket & stopwatch.
G. H. of zero flow _____ ft.

16—82985a-1 GPO