

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
WATER RESOURCES DIVISION
DISCHARGE MEASUREMENT AND
GAGE INSPECTION NOTES

Meas. No. _____

Comp. by JTL

Checked by _____

Sta. No. _____

Sta. Name Outflow

Date 6/6, 20 11 Party JTL ZMW

Width 171 Area 2870 Vel. 3.59 G. H. _____ Disch. 10,300

Method ADC No. secs. _____ G. H. change _____ in _____ hrs.

Method coef. _____ Horiz. angle coef. _____ Susp. _____ Tags checked _____

Meter Type M-9 Meter No. 1411 Meter _____ ft. above bottom of wt.

Rating used _____ Spin test before meas. _____ ; after _____

Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

GAGE READINGS

Time					Inside	Outside
0910	ST					
	Start					
0917	FIN					
	Finish					
Weighted MGH						
GH correction						
Correct MGH						

Samples collected: water quality, sediment, biological, other _____

NO

Measurements documented on separate sheets: water quality, aux./base gage, other _____

NO

Rain gage serviced/calibrated _____

NO

Weather: CLR/WARM

Air Temp. _____ °C at _____

Water Temp. _____ °C at _____

Check bar/chain found _____

Changed to _____ at _____

Correct _____

Wading, cable, ice, boat, upstr., downstr., side bridge, LOW HURRY ft., mi. upstr., downstr. of gage.

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

conditions: Flow: Steady, uniform

Cross section: Rip-Rap, mostly even

Gage operating: N/A Record Removed _____

Battery voltage: _____ Intake/Orifice cleaned/purged: _____

Bubble-gage pressure, psi: Tank _____, Line _____; Bubble-rate _____ /min.

Extreme-GH indicators: max _____, min _____

CSG checked: N/A HWM height on stick _____ Ref. elev. _____ HWM elev. _____

HWM inside/outside: _____

Control: Channel

Remarks: _____

GH of zero flow = GH _____ - depth at control _____ = _____ ft., rated _____

Sheet No. 1 of 1 sheets

Discharge Measurement Summary

Date Measured: Monday, June 06, 2011

Site Information		Measurement Information	
Site Name	Outflow	Party	ZWM/JTL
Station Number		Boat/Motor	Hydroboard
Location	DS side of WW bridge	Meas. Number	

System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.30	Distance	ft
Serial Number	1411	Salinity (ppt)	0.0	Velocity	ft/s
Firmware Version	1.50	Magnetic Declination (deg)	-1.3	Area	ft2
Software Version	2.50			Discharge	cfs
				Temperature	degF

Discharge Calculation Settings				Discharge Results	
Track Reference	Bottom-Track	Left Method	Sloped Bank	Width (ft)	171.46
Depth Reference	Vertical Beam	Right Method	Sloped Bank	Area (ft2)	2,869.7
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	3.588
		Bottom Fit Type	Power Fit	Total Q (cfs)	10,295.091

Measurement Results																	
Tr	Time		Distance				Mean Vel			Discharge						%	
#	Time	Duration	Temp.	Track	DMG	Width	Area	Boat	Water	Left	Right	Top	Middle	Bottom	Total	LCTotal	Measured
1 L	9:09:54 AM	0:01:57	82.6	162.54	150.27	170.27	2,900.4	1.389	3.530	14.68	13.12	701.99	7,356.41	2,152.52	10,238.716	--	71.8
2 R	9:12:05 AM	0:02:07	82.3	166.21	151.20	171.20	2,869.8	1.309	3.685	21.99	14.79	745.20	7,610.17	2,182.57	10,574.726	--	72.0
3 L	9:14:29 AM	0:02:13	82.4	166.51	154.44	174.44	2,867.8	1.252	3.507	6.68	14.52	681.72	7,353.06	2,001.48	10,057.457	--	73.1
4 R	9:17:00 AM	0:02:10	82.0	161.67	149.91	169.91	2,840.7	1.244	3.629	14.57	10.68	712.46	7,415.79	2,155.96	10,309.463	--	71.9
		Mean	82.3	164.23	151.46	171.46	2,869.7	1.298	3.588	14.48	13.28	710.34	7,433.86	2,123.13	10,295.091	0.000	72.2
		Std Dev	0.2	2.15	1.78	1.78	21.1	0.058	0.072	5.42	1.63	22.96	104.81	71.19	185.776	0.000	0.5
		COV	0.0	0.013	0.012	0.010	0.007	0.045	0.020	0.374	0.123	0.032	0.014	0.034	0.018	0.000	0.007

Exposure Time: 0:08:27

Tr1=20110606090952.riv; Tr2=20110606091205.riv; Tr3=20110606091427.riv; Tr4=20110606091659.riv;

Comments

Tr1=20110606090952.riv - ; Tr2=20110606091205.riv - ; Tr3=20110606091427.riv - ; Tr4=20110606091659.riv - ;

Compass Calibration

File Name: CompassCal20110606090143.txt

Results: PASS

Score is excellent.

Magnetic interference is very low.

Calibration score: M3.00Q9

System Test

File Name: SystemTest20110606085952.txt

System Test: PASS

Parameters and settings marked with a * are not constant for all files.

Report generated using SonTek RiverSurveyor Live v2.50

