

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	
Station Number		ADCP Discharge Measurement Notes				Processed by	
						Checked by	
Station Name		Inflow / Outflow 1					
Date	05-27, 2011	Party		BR/ZM			
Width	Area / Rated Area	Velocity	Index Vel.	Gage Height	Discharge		
686	14,368	0.948	—	—	13,567		
Gage Height Change		Meas. plots	From rating	Shift	ADCP Sync'd to WT		
in hrs.		% diff	No.:		Y at _____ or N		
ADCP Mfr / Model / Frequency			Serial No.	Firmware	Software		
PS M9			2010	1.50	2.50		
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?			
		NO	0.3	<input checked="" type="checkbox"/> Y or <input type="checkbox"/> N			
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?		
(Y or N) M2.09		-1.5	On-site (Model) Previous		Y or (N)		
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
68 °F / C at		67 °F / C at			°F / C		
Gage Readings						Site Conditions	
Time				Inside	Outside	Max Water Depth	
						Max Water Speed	
S 1600						Max Boat Speed	
						Water Mode	
F 1617						Bottom Mode	
						Streambed material	
						Salinity	
						ppt at	
Weighted MGH						Checkbar found	
GH corrections						Checkbar changed to:	
Correct MGH						at	
Wading, cable, ice, (boat) upstr., downstr., side bridge				ft., mi. upstr., downstr. of gage			
Measurement rated:		excellent (2%), good (5%), (fair (8%)), poor (>8%)				based on following conditions	
Flow							
Cross section:							
Control:							
Gage operating:		Y or N	Record removed:	Y or N	Filename:		
Battery voltage		V	Intakes/Orifice cleaned/purged:				
Bubble-gage psi:		Tank	Line	Bubble rate		/ min	
Extreme-GH indicators:		Max	Min	CSG Checked		Y or N	
HWM on stick		Ref. elev.		HWM elevation			
GH of zero flow = GH		- depth at control		=	ft.	Rated =	
Sheet No.				of	sheets		

Discharge Measurement Summary

Date Measured: Friday, May 27, 2011

Site Information		Measurement Information	
Site Name	Inflow/Outflow 1	Party	bcr/zwm
Station Number		Boat/Motor	
Location		Meas. Number	

System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.30	Distance	ft
Serial Number	2010	Salinity (ppt)	0.0	Velocity	ft/s
Firmware Version	1.50	Magnetic Declination (deg)	-1.5	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)	686.07
Depth Reference	Vertical Beam	Right Method	Sloped Bank	Area (ft2)	14,368.0
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.948
		Bottom Fit Type	Power Fit	Total Q (cfs)	13,566.810

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	
2	R	4:00:11 PM	0:03:52	67.4	656.66	597.25	655.25	14,812.0	2.830	0.949	-132.49	-7.51	906.49	10,747.63	2,540.73	14,054.847	--	76.5
3	L	4:04:19 PM	0:04:12	67.5	655.80	606.90	686.90	15,113.2	2.602	0.872	-174.09	-2.47	868.21	10,239.81	2,241.83	13,173.282	--	77.7
4	R	4:08:56 PM	0:03:53	67.7	665.43	641.13	671.13	14,431.7	2.856	0.907	0.53	-1.28	867.89	9,830.07	2,388.12	13,085.328	--	75.1
5	L	4:13:29 PM	0:03:48	67.7	656.10	635.97	730.97	13,115.1	2.878	1.064	10.78	15.06	1,007.13	10,394.65	2,556.28	13,953.786	--	74.5
			Mean	67.6	658.50	620.32	686.07	14,368.0	2.792	0.948	-73.82	-6.58	912.43	10,303.04	2,431.74	13,566.810	0.000	76.0
			Std Dev	0.1	4.02	18.64	28.24	762.6	0.111	0.072	80.90	5.42	56.88	329.30	127.83	440.063	0.000	1.2
			COV	0.0	0.006	0.030	0.041	0.053	0.040	0.076	-1.096	0.824	0.062	0.032	0.053	0.032	0.000	0.016

Exposure Time: 0:15:45

Tr2=20110527160010.riv; Tr3=20110527160418.riv; Tr4=20110527160855.riv; Tr5=20110527161328.riv;

Comments	
Tr2=20110527160010.riv - ; Tr3=20110527160418.riv - ; Tr4=20110527160855.riv - ; Tr5=20110527161328.riv - ;	

Loop Method					
DMG	Loop Time	Moving Bed Velocity	Moving Bed Direction	Flow Direction	Estimated Percent Correction
65.21	384	0.17	66.21	56.23	15.85
File Name: Loop_20110527155250.riv					
Percent Bad Bottom Track: 0.8.					
Difference in flow direction between out and back sections: 3.9 deg.					
Loop Closure Error not in Upstream Direction -- No Correction Recommended.					

Compass Calibration	
File Name: CompassCal20110527153908.txt	
Results: PASS	
Score is excellent.	
Magnetic interference is very low.	
Calibration score: M2.00Q9	

System Test	
Not Loaded	