

9-275-I	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	
Station Number						Processed by	
ADCP Discharge Measurement Notes						Checked by	
Station Name		Birds Point Inflow					
Date	05-28, 2011	Party		BR/ZM			
Width	Area / Rated Area	Velocity	Index Vel.	Gage Height	Discharge		
447	7476	0.057	—	—	461		
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		
RS 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?		
<input type="radio"/> Y or <input checked="" type="radio"/> N		M2Q9	-1.6	On-site <input checked="" type="radio"/> Model <input type="radio"/> Previous	Y or <input checked="" type="radio"/> N/ <input type="radio"/> 4		
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
75 °F / C at		75 °F / C at			°F / C		
Gage Readings				Site Conditions			
Time			Inside	Outside	Max Water Depth		
					Max Water Speed		
16 27					Max Boat Speed		
					Water Mode		
					Bottom Mode		
16 34					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:	<input checked="" type="radio"/> Y or <input type="radio"/> N	Record removed:	<input type="radio"/> Y or <input checked="" type="radio"/> N	Filename:			
Battery voltage	V	Intakes/Orifice cleaned/purged:					
Bubble-gage psi:	Tank	Line		Bubble rate	/ min		
Extreme-GH indicators:	Max	Min		CSG Checked	<input type="radio"/> Y or <input checked="" type="radio"/> 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: Saturday, May 28, 2011

Site Information		Measurement Information	
Site Name	birdspoint	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)	-1.6	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)	447.04
Depth Reference	Vertical Beam	Right Method	Sloped Bank	Area (ft2)	7,476.2
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.057
		Bottom Fit Type	Power Fit	Total Q (cfs)	421.404

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	L	4:27:44 PM	0:02:29	75.7	437.26	423.96	437.08	6,445.8	2.935	0.065	-0.85	-0.06	34.38	304.01	83.62	421.105	--	72.2
3	R	4:30:34 PM	0:03:45	75.0	486.66	443.89	457.01	8,506.7	2.163	0.050	1.65	-0.58	30.00	322.36	68.26	421.703	--	76.4
			Mean	75.4	461.96	433.92	447.04	7,476.2	2.549	0.057	0.40	-0.32	32.19	313.19	75.94	421.404	0.000	74.3
			Std Dev	0.4	24.70	9.97	9.97	1,030.4	0.386	0.008	1.25	0.26	2.19	9.18	7.68	0.299	0.000	2.1
			COV	0.0	0.053	0.023	0.022	0.138	0.151	0.137	3.108	0.813	0.068	0.029	0.101	0.001	0.000	0.029

Exposure Time: 0:06:14

Tr2=20110528162744.riv; Tr3=20110528163033.riv;

Comments																	
Tr2=20110528162744.riv - ; Tr3=20110528163033.riv - ;																	

Loop Method					
DMG	Loop Time	Moving Bed Velocity	Moving Bed Direction	Flow Direction	Estimated Percent Correction
62.51	242	0.26	60.32	260.59	325.59
File Name: Loop_20110528162155.riv					
Percent Bad Bottom Track: 4.1.					
Difference in flow direction between out and back sections: 65.8 deg.					
WARNING: Difference in flow direction between out and back sections of loop exceeds 5 degrees. This may indicate an inaccurate compass and the loop may not be accurate. Please review data.					
Loop Indicates a Moving Bed					

Compass Calibration																	
File Name: CompassCal20110528161848.txt																	
Results: PASS																	
Score is excellent.																	
Magnetic interference is very low.																	
Calibration score: M2.00Q9																	

System Test																	
Not Loaded																	

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

Report generated using SonTek RiverSurveyor Live v2.50