

9-275-I	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		Birds Point Inflow					
Date		06-02, 20 11		Party		BR/ZM	
Width	Area / Rated Area	Velocity	Index Vel.	Gage Height	Discharge		
520	4,442	0.142	—	—	916		
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?		
<input type="radio"/> Y or <input type="radio"/> N		m209	-1.6		On-site <input type="radio"/> Model <input type="radio"/> Previous		Y or <input type="radio"/> N
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
85 °F / C at		84 °F / C at			°F / C		
Gage Readings					Site Conditions		
Time				Inside	Outside	Max Water Depth	
						Max Water Speed	
S 1530						Max Boat Speed	
						Water Mode	
						Bottom Mode	
F 1601						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	

# Acoustic Profiler Discharge Measurement Notes

Filename Prefix:

Left Bank: Sloping Vertical Other: \_\_\_\_\_

Right Bank: Sloping Vertical Other: \_\_\_\_\_

Transect No.

Starting

Ending

Total  
Discharge

Notes

Bank

Time

Distance

Distance

Time

1

L R

2

L R

3

L R

4

L R

5

L R

6

L R

7

L R

8

L R

L R

L R

L R

L R

L R

42.8

46.7

44.6

814

829

Not Used, Poor boat driving

Not Used, tried different section, bad

Northern Most Inflow

Q = 44.7

Southern hole  
Q = 821

Notes

Combined total Inflow = 866 + 50 est for flow which could not be measured w/ equipment.

# Discharge Measurement Summary

Date Measured: Thursday, June 02, 2011

Site Information		Measurement Information	
Site Name	Birds Point	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)	67.65
Depth Reference	Vertical Beam	Right Method	Sloped Bank	Area (ft2)	663.0
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.067
		Bottom Fit Type	Power Fit	Total Q (cfs)	44.712

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	3:30:28 PM	0:01:27	85.5	50.30	45.37	67.37	653.8	0.578	0.065	-3.79	0.75	2.93	31.14	11.72	42.758	--	72.8
5 R	3:37:51 PM	0:02:03	84.7	40.95	36.76	66.76	683.3	0.333	0.068	0.88	-1.66	2.87	33.93	10.71	46.730	--	72.6
6 L	3:40:35 PM	0:01:59	84.2	42.78	38.81	68.81	651.8	0.360	0.068	1.38	-1.32	2.79	31.37	10.42	44.647	--	70.3
		<b>Mean</b>	84.8	44.68	40.31	67.65	663.0	0.424	0.067	-0.51	-0.74	2.87	32.14	10.95	44.712	0.000	71.9
		<b>Std Dev</b>	0.5	4.05	3.67	0.86	14.4	0.110	0.001	2.33	1.07	0.06	1.26	0.56	1.623	0.000	1.2
		<b>COV</b>	0.0	0.091	0.091	0.013	0.022	0.259	0.021	4.589	1.440	0.020	0.039	0.051	0.036	0.000	0.016

Exposure Time: 0:05:29

Tr2=20110602153028.riv; Tr5=20110602153752.riv; Tr6=20110602154035.riv;

Comments
Tr2=20110602153028.riv - ; Tr5=20110602153752.riv - ; Tr6=20110602154035.riv - ;

Compass Calibration
File Name: CompassCal20110602152143.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

# Discharge Measurement Summary

Date Measured: Thursday, June 02, 2011

Site Information		Measurement Information	
Site Name	Birds Point	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)	451.76
Depth Reference	Vertical Beam	Right Method	Sloped Bank	Area (ft2)	3,779.3
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.217
		Bottom Fit Type	Power Fit	Total Q (cfs)	821.381

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	
7	R	3:54:36 PM	0:02:51	84.5	418.35	399.43	449.43	3,739.7	2.446	0.218	-7.35	-0.52	70.83	498.57	252.61	814.143	--	61.2
8	L	3:58:30 PM	0:03:14	84.2	427.10	404.09	454.09	3,818.9	2.202	0.217	7.19	-0.44	74.50	538.23	209.14	828.618	--	65.0
			Mean	84.3	422.72	401.76	451.76	3,779.3	2.324	0.217	-0.08	-0.48	72.66	518.40	230.88	821.381	0.000	63.1
			Std Dev	0.2	4.37	2.33	2.33	39.6	0.122	0.000	7.27	0.04	1.83	19.83	21.73	7.237	0.000	1.9
			COV	0.0	0.010	0.006	0.005	0.010	0.053	0.002	94.361	0.084	0.025	0.038	0.094	0.009	0.000	0.029

Exposure Time: 0:06:05

Tr7=20110602155436.riv; Tr8=20110602155830.riv;

Comments	
Tr7=20110602155436.riv - ; Tr8=20110602155830.riv - ;	

Compass Calibration	
File Name: CompassCal20110602152143.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