9-275-I	10/24/08	U.S. DEPARTMENT OF THE INTERIOR	Meas. No.	
Station Number		*U.S. Geological Survey*	Processed by	
		ADCP Discharge Measurement Notes	Checked by	

Station Name	1500 ft Gap Outflow				
Date	05-30 , 20 11	Party	BR/ZM		

Width	Area / Rated Area	Velocity	Index Vel.	Gage Height	Discharge
1542	11,268	1.66	———	———	22,375

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	☑ Y or (N)

Compass Calib. & Total Error		Mag. Var	MagVar Method	Moving Bed?
(Y) or N	M 1Q9	-1.3	On-site (Model) Previous	(Y) or N

Meas. Water Temp	ADCP Water Temp	Weather / Air Temp	Wind Speed / Dir.
75 °F / C at	76 °F / C at	°F / C	

Gage Readings							**Site Conditions**
Time					Inside	Outside	Max Water Depth
							Max Water Speed
S 0901							Max Boat Speed
							Water Mode
F 0932							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: Monday, May 30, 2011

Site Information		Measurement Information	
Site Name	1500ftgap	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)	-1.3	Area	ft2
Software Version	2.50			Discharge	cfs
				Temperature	degF

Discharge Calculation Settings				Discharge Results	
Track Reference	Bottom-Track with LC	Left Method	Sloped Bank	Width (ft)	1,542.18
Depth Reference	Bottom-Track	Right Method	Sloped Bank	Area (ft2)	11,268.2
Coordinate System	ENU	Top Fit Type	Power Fit	Total Q (cfs)	22,375.412
		Bottom Fit Type	Power Fit		

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	9:01:50 AM	0:06:31	75.2	1,566.65	1,524.40	1,543.40	11,147.0	4.007	1.675	1.92	0.73	1,759.24	13,770.68	3,142.42	18,674.996	22,183.379	73.7
3	R	9:08:47 AM	0:07:36	75.8	1,567.38	1,524.99	1,543.99	11,508.2	3.437	1.569	1.73	0.34	1,648.98	13,451.47	2,955.78	18,058.295	21,698.596	74.5
4	L	9:16:39 AM	0:07:20	75.2	1,618.04	1,521.98	1,540.98	11,001.7	3.677	1.752	1.75	1.03	1,811.93	14,317.21	3,142.78	19,274.706	22,908.577	74.3
5	R	9:24:22 AM	0:07:59	75.9	1,574.53	1,521.35	1,540.35	11,415.8	3.287	1.656	1.59	0.34	1,715.59	14,070.42	3,116.14	18,904.085	22,711.096	74.4
			Mean	75.5	1,581.65	1,523.18	1,542.18	11,268.2	3.602	1.663	1.75	0.61	1,733.93	13,902.44	3,089.28	18,728.020	22,375.412	74.2
			Std Dev	0.3	21.23	1.55	1.55	203.2	0.272	0.065	0.12	0.29	59.75	324.42	77.83	441.930	472.204	0.3
			COV	0.0	0.013	0.001	0.001	0.018	0.075	0.039	0.067	0.472	0.034	0.023	0.025	0.024	0.021	0.004

Exposure Time: 0:29:26

Tr2=20110530090150.riv; Tr3=20110530090846.riv; Tr4=20110530091639.riv; Tr5=20110530092422.riv;

Comments

Tr2=20110530090150.riv - ; Tr3=20110530090846.riv - ; Tr4=20110530091639.riv - ; Tr5=20110530092422.riv - ;

Loop Method

DMG	Loop Time	Moving Bed Velocity	Moving Bed Direction	Flow Direction	Estimated Percent Correction
145.92	671	0.22	72.81	268.10	14.14

File Name: Loop_20110530085001.riv

Percent Bad Bottom Track: 0.3.

Difference in flow direction between out and back sections: 3.8 deg.

Loop Indicates a Moving Bed

Compass Calibration

File Name: CompassCal20110530084601.txt

Results: PASS
Score is excellent.
Magnetic interference is very low.

Calibration score: M1.00Q9

System Test

File Name: SystemTest20110530084504.txt

System Test: PASS

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