

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	
370000089122601						Checked by	
Station Name		MISSISSIPPI R. AB. CONFLUENCE (MCONY)					
Date		4-29-2011		Party		ESS/JRM	
Width		Area / Rated Area		Velocity		Index Vel. Gage Height	
2930		151,000		4.38		- 660,000	
Gage Height Change		Meas. plots		From rating		Shift	
in		hrs.		% diff		No.:	
ADCP Mfr / Model / Frequency		Serial No.		Firmware		Software	
RD1/R10/600		1127		1016		2.07	
Boat/Motors Used		GPS Used		ADCP Depth		Diag. Test / Errors?	
MO WSC QW		TRIMB A6		3.0		Y or N	
Compass Calib. & Total Error		Mag. Var		Mag Var Method		Moving Bed?	
8 or N		-1.4		On-site (Model) Previous		Y or N	
Meas. Water Temp		ADCP Water Temp		Weather / Air Temp		Wind Speed / Dir.	
91 / C at		14.6 F (Cpt)		CLR WARM		9 / C 0-5 SSE	
Gage Readings				Site Conditions			
Time		Inside		Outside		Max Water Depth	
1510						Max Water Speed	
1530						Max Boat Speed	
						Water Mode	
						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							
Measurement rated: excellent (2%), good (5%) fair (8%) poor (>8%) based on following conditions							
Flow		FUEP					
Cross section:		EUEP					
Control:		CHANDLER					
Gage operating:		Y or N		Record removed:		Y or N	
Battery voltage		V		Intakes/Orifice cleaned/purged:		Bubble rate	
Bubble-gage psi:		Tank		Line		Min	
Extreme-GH indicators:		Max		Ref elev:		HWM elevation	
HWM on stick				- depth at control		ft. Rated=	
GH of zero flow = GH						Sheet No.	
						of sheets	

Station Number:

Meas. No:

Station Name: Mississippi Rv above Confluence Main Channel

Date: 04/30/2011

4/29

Party: Width: 2,930 ft Processed by:

Boat/Motor: Area: 151,000 ft² Mean Velocity: 4.38 ft/sGage Height: 0.00 ft G.H.Change: 0.000 ft Discharge: 660,000 ft³/s

Area Method: Avg. Course

ADCP Depth: 3.000 ft

Index Vel.: 0.00 ft/s

Rating No.: 1

Nav. Method: DGPS

Shore Ens.: 10

Adj. Mean Vel: 0.00 ft/s

Qm Rating: F

MagVar Method: Model (-1.6°)

Bottom Est: Power (0.1667)

Rated Area: 0.000 ft²

Diff.: 0.000%

Depth Sounder: Not Used

Top Est: Power (0.1667)

Control1: Unspecified

Control2: Unspecified

Control3: Unspecified

Screening Thresholds:

BT 3-Beam Solution: YES

Max. Vel.: 11.1 ft/s

ADCP: Type/Freq.: Rio Grande/600 kHz

WT 3-Beam Solution: NO

Max. Depth: 97.0 ft

Serial #: 1127

Firmware: 10.16

BT Error Vel.: 0.33 ft/s

Mean Depth: 51.4 ft

Bin Size: 50 cm

Blank: 25 cm

WT Error Vel.: 3.50 ft/s

% Meas.: 79.96

BT Mode: 5

BT Pings: 1

BT Up Vel.: 1.00 ft/s

Water Temp.: None

WT Mode: 12

WT Pings: 1

WT Up Vel.: 12.00 ft/s

ADCP Temp.: 14.6 °C

WV : 254

WO : 1, 17

Use Weighted Mean Depth: YES

Performed Diag. Test: NO

Project Name: Mississippi Above Confluence

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: NO

Meas. Location:

Tr.#	Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad	
	L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins
003 R	880	32	963	57067	518591	54663	16997	4321	651639	2930	150678	15:10	15:20	3.32	4.32	0	0
004 L	870	22	968	59183	536521	58465	10157	3511	667837	2930	150520	15:20	15:30	3.54	4.44	0	0
Mean	875	27	965	58125	527556	56564	13577	3916	659738	2930	150599	Total	00:20	3.43	4.38	0	0
SDev	7	7	4	1496	12678	2688	4836	573	11453	0.2	111.4			0.16	0.08		
SD/M	0.01	0.26	0.00	0.03	0.02	0.05	0.36	0.15	0.02	0.00	0.00			0.05	0.02		

Remarks:

EXCEPT PER
COE - TIME
TRAFFIC

37° 0.6564
89° 12.0761
Rt edge

37° 0.6930
89° 11.6602
Left edge

LC Version 3.20, July 8, 2010

Processed on: 15-Jun-2011

Loop File: Mississippi Above Confluence__005_ASC.TXT

Distance Made Good (ft)	Loop Time (sec)	Moving Bed Velocity (ft/s)	Moving Bed Direction (degrees)	Flow Direction (degrees)	Estimated Percent Correction (percent)
1234.91	2171.89	0.57	354.72	162.09	27.97

Percent Bad Bottom Track: 1.3

Difference in flow direction between out and back sections: 11.8 deg

WARNING: Difference in flow direction between out and back sections of loop exceeds 5 degrees. This may indicated an inaccurate compass and the loop may not be accurate. Please review data.

Loop Indicates a Moving Bed -- Select transects to be corrected

GTS USED

