

9-275-I	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey		Meas. No.	2
Station Number		ADCP Discharge Measurement Notes		Processed by	SS
365732089063001				Checked by	TJ
Station Name		MISSISSIPPI R. BELOW CONFLUENCE			
Date	4-30-2011	Party ESS/JRM			
Width	Area / Rated Area	Velocity	Index Vel.	Gage Height	Discharge
8470	306000	5.97	-	-	1,830,000
Gage Height Change		Meas. plots	From rating	Shift	ADCP Sync'd to WT
in hrs.		% diff	No.:		Out or N
ADCP Mfr / Model / Frequency		Serial No.	Firmware	Software	
RDI / R10 / 600		1127	10.16	2.07	
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?	
MOWSC GW		TRIMB AC	2.40	<input checked="" type="checkbox"/> Y or <input type="checkbox"/> N	
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?
<input type="radio"/> or N 0.8		-1.6	On-site (Model) Previous		<input type="radio"/> or N
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.
14.7 F Cat		14.7 F Cat	MC WARM F/C		10-20 S
Gage Readings			Site Conditions		
Time			Inside	Outside	Max Water Depth 120
					Max Water Speed
1013 (S)					Max Boat Speed
					Water Mode 12
1135 (F)					Bottom Mode 5
					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	FAIRLY EVEN				
Cross section:					
Control:	CHANNEL				
Gage operating:	Y or N	Record removed:	Y or N	Filortame:	
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		

Station Number:

Meas. No: 0

Station Name: Mississippi Rv below Confluence

Date: 04/30/2011

Party:

Width: 8,470 ft

Processed by:

Boat/Motor:

Area: 306,000 ft²

Mean Velocity: 5.97 ft/s

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: 1,830,000 ft³/s

Area Method: Avg. Course

ADCP Depth: 2.400 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.: 14.8 ft/s

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

WT 3-Beam Solution: NO

Max. Depth: 120 ft

Serial #: 1127

Firmware: 10.16

BT Error Vel.: 0.33 ft/s

Mean Depth: 36.1 ft

Bin Size: 50 cm

Blank: 25 cm

WT Error Vel.: 3.50 ft/s

% Meas.: 80.29

BT Mode: 5

BT Pings: 1

BT Up Vel.: 1.00 ft/s

Water Temp.: 14.7 °C

WT Mode: 12

WT Pings: 1

WT Up Vel.: 12.00 ft/s

ADCP Temp.: 14.7 °C

WV : 254

WO : 1, 21

Use Weighted Mean Depth: YES

Performed Diag. Test: YES

Project Name: missbelowcon043011_0.mmt

Performed Moving Bed Test: YES

Software: 2.07

Performed Compass Test: YES

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
000 R	220	128	2102	165426	1447480	165876	19327	3353	1801462	8447	306635	10:13	10:39	5.42	5.88	0	3
001 L	75	127	2951	173210	1483121	186699	3293	2218	1848540	8491	304971	10:59	11:35	4.21	6.06	0	3
Mean	148	128	2526	169318	1465300	176287	11310	2785	1825001	8469	305803	Total	01:22	4.82	5.97	0	3
SDev	103	1	600	5505	25202	14724	11338	803	33289	31.3	1176.3			0.86	0.13		
SD/M	0.70	0.01	0.24	0.03	0.02	0.08	1.00	0.29	0.02	0.00	0.00			0.18	0.02		

Remarks:

2 MEETS PER
COF - LARGE
TERRAIN

LC Version 3.20, July 8, 2010

Processed on: 15-Jun-2011

Loop File: missbelowcon043011_0_002_LBT_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)
1650.17	2828.69	0.58	1.09	167.93	17.26

Percent Bad Bottom Track: 22.8

WARNING: Percentage of bad bottom track values exceeds 5.
Loop may not be accurate. Please review data.

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

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

0
0
M
S
S

Re