

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey		Meas. No.	3
Station Number		ADCP Discharge Measurement Notes		Processed by	SS
365720089063001				Checked by	E
Station Name MISSISSIPPI R. BELOW CONFLUENCE					
Date 5-1, 2011		Party ESS / JRM			
Width	Area	Rated Area	Velocity	Index Vel.	Gage Height
8440	310,000		6.02	-	1870.000
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	
RDI / R10 / 600		1127	10.16	2.07	
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?	
MOUSE QU		TRIMR. AG	2.4	<input checked="" type="checkbox"/> Y or <input type="checkbox"/> N	
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?
<input checked="" type="checkbox"/> Y or N		.8	On-site <input checked="" type="checkbox"/> Model Previous		<input checked="" type="checkbox"/> Y or N
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.
14.6 °F @		14.3 °F @	LT RAIN °F/C		EALM
Gage Readings			Site Conditions		
Time			Inside	Outside	Max Water Depth
					Max Water Speed
1201	(S)				Max Boat Speed
					Water Mode
1309	(F)				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	EVEN				
Cross section:					
Control:	CHANNEL				
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	

Station Number:

Meas. No:

Station Name: Mississippi below Confluence

Date: 05/01/2011

Party: ESS/JRM

Width: 8,440 ft

Processed by: ESS

Boat/Motor: MO WSC QW

Area: 310,000 ft²

Mean Velocity: 6.02 ft/s

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: 1,870,000 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

WT 3-Beam Solution: NO

BT Error Vel.: 0.33 ft/s

WT Error Vel.: 3.50 ft/s

BT Up Vel.: 1.00 ft/s

WT Up Vel.: 12.00 ft/s

Use Weighted Mean Depth: YES

Max. Vel.: 16.5 ft/s

Max. Depth: 121 ft

Mean Depth: 36.7 ft

% Meas.: 78.86

Water Temp.: 14.6 °C

ADCP Temp.: 14.3 °C

ADCP:

Type/Freq.: Rio Grande/600 kHz

Serial #: 1127

Firmware: 10.16

Bin Size: 50 cm

Blank: 25 cm

BT Mode: 5

BT Pings: 1

WT Mode: 12

WT Pings: 1

WV : 254

WO : 1, 21

Performed Diag. Test: YES

Performed Moving Bed Test: NO

Performed Compass Test: YES

Meas. Location:

Project Name: MissBelowConf050111_0.mm

Software: 2.07

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	270	120	2177	160363	1457346	163496	56358	1835	1839399	8442	311774	12:01	12:27	5.39	5.90	0	3
001 L	264	90	3362	168729	1486771	184231	52952	1157	1893840	8447	308515	12:28	13:09	3.61	6.14	0	2
Mean	267	105	2769	164546	1472059	173864	54655	1496	1866619	8444	310144	Total	01:07	4.50	6.02	0	3
SDev	4	21	838	5916	20806	14661	2408	479	38496	4.1	2304.0			1.26	0.17		
SD/M	0.02	0.20	0.30	0.04	0.01	0.08	0.04	0.32	0.02	0.00	0.01			0.28	0.03		

Remarks:

LC Version 3.20, July 8, 2010

Processed on: 30-Apr-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

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