

9-275-1	07/08/09	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	
Station Number		ADCP Discharge Measurement Notes				Processed by	FER
						Checked by	
Station Name		Mississippi R. above Cairo					
Date	May 23, 2011	Party	REBecula G Elwoodin				
Width	Area / Rated Area	Velocity	Index	Gage Height	Discharge		
1970	99,100	4.74			469,000		
Gage Height Change		Meas. plots	From rating	Indicated Shift	ADCP Sync'd to WT		
in hrs.		% diff	No.:		(Y) at _____ or N		
ADCP Mfr / Model / Frequency			Serial No.	Firmware	Software		
600 KHz R10			8708	10.16	2.03		
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?			
Samaritan		Yes	1.50	<input checked="" type="checkbox"/> Y or N			
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?		
(Y) or N			On-site Model Previous		Y or N		
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
67 (F) C at		°F / C at	°F / C				
Gage Readings						Site Conditions	
Time	Start End	Primary reference				Max Water Depth	
						Max Water Speed	
0943	(s)					Max Boat Speed	
						Water Mode	
						Bottom Mode	
						Streambed material	
0920	(e)					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, Uncertainty	±
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			
600	① R	0843	80	43	0854	471580		
001	L ①	0854	43	57	0904	457988		
002	① R	0904	50	60	0912	477746		
002	L ①	0912	60	45	0920	463362		
	L R					468,000	(66A)	
	L R					469,000	(JTB)	
	L R							
	L R							
	L R							
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	L R							
Notes								

Party: REB/GEG	Width: 1,980 ft	Processed by:
Boat/Motor:	Area: 99,100 ft²	Mean Velocity: 4.74 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 469,000 ft³/s

Area Method: Avg. Course	ADCP Depth: 1.500 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: U
MagVar Method: None (-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:		ADCP:	
BT 3-Beam Solution: YES	Max. Vel.: 9.90 ft/s	Type/Freq.: Rio Grande / 600 kHz	
WT 3-Beam Solution: NO	Max. Depth: 62.1 ft	Serial #: 8708	Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 50.2 ft	Bin Size: 50 cm	Blank: 25 cm
WT Error Vel.: 3.50 ft/s	% Meas.: 82.30	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.: 5.00 ft/s	ADCP Temp.: 19.2 °C	WV : 175	WO : 1, 13
Use Weighted Mean Depth: YES			

Performed Diag. Test: YES
 Performed Moving Bed Test: YES
 Performed Compass Test: YES
 Meas. Location:

Project Name: MS_R_above_Cario_Main chan
 Software: 2.08

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	L	80	45	1291	39166	387078	42888	1853	369	471355	1981	99433	08:43	08:54	2.70	4.74	0	0
001	R	57	45	1053	38486	379812	41774	573	348	460992	1976	99263	08:54	09:04	3.31	4.65	0	0
002	L	50	60	860	39831	392488	43852	534	590	477295	1966	98583	09:04	09:12	4.01	4.84	0	0
003	R	45	60	900	39010	385622	41917	508	533	467589	1975	99126	09:12	09:20	3.87	4.72	0	0
Mean		58	53	1026	39123	386250	42608	867	460	469308	1975	99101	Total	00:37	3.47	4.74	0	0
SDev		15	9	195	554	5211	966	658	120	6834	6.0	367.8			0.59	0.08		
SD/M		0.27	0.16	0.19	0.01	0.01	0.02	0.76	0.26	0.01	0.00	0.00			0.17	0.02		

Remarks: