

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	REB
						Checked by	
Station Name		Mississippi R. above Cairo (Main Channel)					
Date	July 18, 2011	Party	RE Beaulin SE Goodwin				
Width	Area / Rated Area	Velocity	Index	Gage Height	Discharge		
2500	106,000	4.23			464,000		
Gage Height Change		Meas. plots	From rating	Indicated Shift	ADCP Sync'd to WT		
in hrs.		% diff	No.:		(Y at 1308 ⁰⁰ or N		
ADCP Mfr / Model / Frequency			Serial No.	Firmware	Software		
KOD R. 600 kHz			8708	10.16	2.05		
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?			
M/V Inguis		Yes	1.00	<input checked="" type="checkbox"/> Y or (N)			
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?		
(Y) or N		1.8	On-site (Model) Previous		(Y) or N		
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
°F / C at		°F / C at	°F / C				
Gage Readings					Site Conditions		
Time	Start End	Primary reference			Max Water Depth		
1408	(S)				Max Water Speed		
					Max Boat Speed		
					Water Mode		
1445	(E)				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		measured main channel only - up to 1st bar line on right edge					
Cross section:		One made on 1/2 m. DS of 27 bridge					
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: mississippi - final .mnt		
Left Bank:		Sloping Vertical Other:			Right Bank:		Sloping Vertical Other:	
Transect No.	Starting		Ending		Total Discharge	Notes		
	Bank	Time	Distance	Time				
002	L R	1408	20	1417	463000	} created from subsectioning loop		
003	L R	1417	20	1425	468000			
000	L R	1425	140	1434	465,000			
001	L R	1434	20	1445	462000			
	L R							
	L R	* use	mississippi - final .mnt for Qm					
	L R	* use	mississippi - 1 .mnt for original files (loop, comp cal, etc.)					
	L R							
	L R					For Subsectioning		
	L R					000 - (S) 907 - 100 (f) 1755 - 20		
	L R					001 - (S) 1755 - 20 (f) 2476 - 100		
	L R							
	L R							
Notes	Rain stem only - called Right edge the 1st tree line							

Party: REB/GEG	Width: 2,010 ft	Processed by: REB
Boat/Motor:	Area: 106,000 ft ²	Mean Velocity: 4.38 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 464,000 ft ³ /s

Area Method: Avg. Course	ADCP Depth: 1.000 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: U
MagVar Method: None (-1.6°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft ²	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.: 8.58 ft/s	Type/Freq.: Rio Grande/600 kHz
WT 3-Beam Solution: NO	Max. Depth: 66.0 ft	Serial #: Firmware: 0.00
BT Error Vel.: 0.33 ft/s	Mean Depth: 52.9 ft	Bin Size: 50 cm Blank: 50 cm
WT Error Vel.: 32.81 ft/s	% Meas.: 83.80	BT Mode: 0 BT Pings: 1
BT Up Vel.: 32.81 ft/s	Water Temp.: None	WT Mode: 1 WT Pings: 1
WT Up Vel.: 32.81 ft/s	ADCP Temp.: 18.6 °C	WV : 170
Use Weighted Mean Depth: NO		

Performed Diag. Test: NO

Project Name: mississippimainstem_final.mmt

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: NO

Meas. Location: about .5 miles ds of 57 bridge

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	100	20	873	30886	390920	38909	4552	131	465399	1905	105184	14:25	14:34	3.42	4.43	0	0
001	R	100	20	1075	31524	387070	39559	3330	146	461629	1937	104434	14:34	14:45	3.03	4.42	0	0
002	L	140	20	849	30924	386448	38838	6825	46.0	463081	2126	108369	14:08	14:17	3.70	4.27	0	0
003	R	90	20	720	31357	392377	39011	4930	67.3	467741	2063	106502	14:17	14:25	4.32	4.39	1	0
Mean		108	20	879	31173	389204	39079	4909	97.6	464462	2008	106122	Total	13:43	3.62	4.38	0	0
SDev		22	0	147	317	2896	328	1448	48.4	2681	104.1	1724.7			0.54	0.07		
SD/M		0.21	0.00	0.17	0.01	0.01	0.01	0.29	0.50	0.01	0.05	0.02			0.15	0.02		

Remarks: