

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No. 14
Station Number 362618089251201		ADCP Discharge Measurement Notes				Processed by SS
Station Name OUT FLOW NR NEW MADRID						Checked by RE
Date 5-20-2011	Party ESS / TL					
Width 1550	Area / Rated Area 199000	Velocity .74	Index Vel. -	Gage Height -	Discharge 147000	
Gage Height Change - in	Meas. plots hrs.	From rating % diff	Shift No.	ADCP Sync'd to WT Y or N		
ADCP Mfr / Model / Frequency RD1 / R10 / 1200		Serial No. 2339	Firmware 10.16	Software 2.07		
Boat/Motors Used NO WSC WOODS RIVER TRAMP		GPS Used AG	ADCP Depth 1.0	Diag. Test / Errors? Y or N		
Compass Calib. & Total Error Y or N		Mag. Var -1.4	On-site Method Weather / Air Temp	Moving Bed? Y or N		
Meas. Water Temp 18.7		ADCP Water Temp F/C	Wind Speed / Dir. LT - UPR			
Gage Readings						
Time	Inside	Outside	Max Water Depth 35.5	Max Water Speed		
1640			Max Boat Speed			
1755			Water Mode	Bottom Mode		
			Streambed material			
			Salinity			
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:	EVEN					
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			
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		

Party: ESS/TL	Width: 15,500 ft	Processed by: ESS
Boat/Motor: MO WSC Wldrdg	Area: 199,000 ft ²	Mean Velocity: 0.741 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 147,000 ft ³ /s

Area Method: Avg. Course	ADCP Depth: 1.000 ft	Index Vel.: 0.00 ft/s	Rating No.: 1
Nav. Method: Bottom Track	Shore Ens.:10	Adj.Mean Vel: 0.00 ft/s	Qm Rating: P
MagVar Method: Model (-1.3°)	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.: 2.91 ft/s	Type/Freq.: Rio Grande / 1200 kHz
WT 3-Beam Solution: NO	Max. Depth: 35.5 ft	Serial #: Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 12.8 ft	Bin Size: 25 cm Blank: 25 cm
WT Error Vel.: 32.81 ft/s	% Meas.: 62.11	BT Mode: 5 BT Pings: 1
BT Up Vel.: 32.81 ft/s	Water Temp.: 18.7 °C	WT Mode: 12 WT Pings: 1
WT Up Vel.: 32.81 ft/s	ADCP Temp.: 19.8 °C	WV : 170 WO : 1, 4
Use Weighted Mean Depth: YES*		

Performed Diag. Test: NO
 Performed Moving Bed Test: NO
 Performed Compass Test: NO
 Meas. Location:

Project Name: Outflow nr New Madrid 05_20_11
 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	R	126	76	3876	34844	93531	21686	278	341	150681	15547	200784	16:40	17:20	6.68	0.75	2	0
001	L	123	103	3400	33733	89576	20243	188	372	144111	15492	196843	17:20	17:55	7.53	0.73	3	0
Mean		124	89	3638	34289	91554	20964	233	356	147396	15520	198813	Total	01:15	7.10	0.74	2	0
SDev		2	19	337	785	2797	1021	64.0	21.9	4645	38.6	2787.2			0.60	0.01		
SD/M		0.02	0.21	0.09	0.02	0.03	0.05	0.27	0.06	0.03	0.00	0.01			0.08	0.02		

Remarks:

- transect has been subsectioned

* - value not consistent for all transects