

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 <b>SMM</b>	
						Checked by	
Station Name		<b>Mud Ditch nr. New Madrid, MO</b>					
Date		<b>6/12, 2011</b>		Party		<b>SMM JMH</b>	
Width	Area / Rated Area	Velocity	Index	Gage Height	Discharge		
<b>139</b>	<b>2,021</b>	<b>2.33</b>			<b>4,700</b>		
Gage Height Change		Meas. plots	From rating	Indicated Shift	ADCP Sync'd to WT		
in hrs.		% diff	No.:		<b>(Y)</b> at _____ or <b>N</b>		
ADCP Mfr / Model / Frequency			Serial No.	Firmware	Software		
<b>RS-M9 1036</b>				<b>1.50</b>	<b>2.50</b>		
Boat/Motors Used			GPS Used	ADCP Depth	Diag. Test / Errors?		
<b>T-Boat</b>			<b>Yes/Hemispheric</b>	<b>0.3</b>	<b>(Y)</b> or <b>(N)</b>		
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?		
<b>(Y)</b> or <b>N</b>		<b>-1.3</b>	On-site Model Previous		<b>(Y)</b> or <b>(N)</b>		
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
<b>78.7 °F / C at</b>		<b>80.4 (9) °F / C at</b>	<b>Cloudy, Humid</b>		<b>°F / C</b>		
Gage Readings					Site Conditions		
Time	Start End	Primary reference			Max Water Depth	<b>24.7</b>	
<b>0900</b>	<b>3</b>				Max Water Speed		
					Max Boat Speed		
					Water Mode		
<b>0904</b>					Bottom Mode		
					Streambed material	<b>Mud</b>	
					Salinity		
<b>0908</b>	<b>E</b>				ppt at		
Weighted MGH					Checkbar found		
GH corrections					Checkbar changed to:		
Correct MGH					at		
Wading, cable, ice, boat, upstr., <b>(downstr.)</b> side bridge <b>HWXWW</b> ft., mi. upstr., downstr. of gage							
Measurement rated:		excellent (2%), good (5%), fair (8%), poor (>8%)				based on following conditions	
Flow	<b>Even</b>						
Cross section:							
Control:	<b>Channel; Clear</b>						
Gage operating:	<b>Y</b> or <b>N</b>	Record removed:	<b>Y</b> or <b>N</b>	Filename:			
Battery voltage		V	Intakes/Orifice cleaned/purged:				
Bubble-gage psi:	Tank		Line		Bubble rate	/ min	
Extreme-GH indicators:	Max		Min		CSG Checked	<b>Y</b> or <b>N</b>	
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			
001	L R	0900	6.4	6.4		4,890		
002	L R	0902	6.6	6.6		4,640		
003	L R	0905	6.6	6.6		4,770		
004	L R	0906	6.6	6.6		4,510		
	L R							
	L R	Loop Test - No Moving Bed						
	L R							
	L R							
	L R							
	L R							
	L R							
	L R							
	L R							
	L R							
Notes								

# Discharge Measurement Summary

Date Measured: Sunday, June 12, 2011

Site Information				Measurement Information			
Site Name		INFLOW OUTFLOW 2		Party		SMM JMH	
Station Number				Boat/Motor		1115020	
Location		D.S.S.B. HWY WW		Meas. Number			
System Information		System Setup				Units	
System Type	RS-M9	Transducer Depth (ft)		0.30		Distance	ft
Serial Number	1036	Salinity (ppt)		0.0		Velocity	ft/s
Firmware Version	1.50	Magnetic Declination (deg)		-1.3		Area	ft2
Software Version	2.50					Discharge	cfs
				Temperature degF			
Discharge Calculation Settings						Discharge Results	
Track Reference	Bottom-Track	Left Method	Sloped Bank	Width (ft)		139.29	
Depth Reference	Bottom-Track	Right Method	Sloped Bank	Area (ft2)		2,021.4	
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)		2.328	
		Bottom Fit Type	Power Fit	Total Q (cfs)		4,707.121	

Measurement Results																	
Tr	Time		Distance				Mean Vel		Discharge								
#	Time	Duration	Temp	Track	DMG	Width	Area	Boat	Water	Left	Right	Top	Middle	Bottom	Total	LCTotal	Measured
1	L 09:00:34 AM	0:01:57	80.3	142.04	124.99	137.99	2,023.2	1.214	2.415	20.26	3.95	354.26	3,378.64	1,129.74	4,886.854	--	69.1
2	R 09:02:51 AM	0:01:45	80.4	134.76	126.87	139.87	2,003.4	1.283	2.327	21.87	5.25	356.61	3,249.53	1,029.47	4,662.725	--	69.7
3	L 09:05:01 AM	0:01:32	80.5	136.53	127.94	140.94	2,049.7	1.484	2.325	17.18	3.72	350.28	3,312.82	1,081.86	4,765.874	--	69.5
4	R 09:06:51 AM	0:01:35	80.6	130.70	125.36	138.36	2,009.5	1.376	2.246	17.43	4.00	346.71	3,105.31	1,039.58	4,513.030	--	68.8
		Mean	80.5	136.01	126.29	139.29	2,021.4	1.339	2.328	19.19	4.23	351.96	3,261.58	1,070.16	4,707.121	0.000	69.3
		Std Dev	0.1	4.08	1.19	1.19	17.8	0.101	0.060	1.96	0.60	3.79	101.11	39.61	137.294	0.000	0.3
		COV	0.0	0.030	0.009	0.009	0.009	0.076	0.026	0.102	0.141	0.011	0.031	0.037	0.029	0.000	0.005

Exposure Time: 0:06:49

Tr1=20110612090034.riv; Tr2=20110612090250.riv; Tr3=20110612090500.riv; Tr4=20110612090649.riv-Locked;

Comments
Tr1=20110612090034.riv - ; Tr2=20110612090250.riv - ; Tr3=20110612090500.riv - ; Tr4=20110612090649.riv - ;

Compass Calibration
File Name: CompassCal20110612085041.txt
Results: PASS Score is excellent. Magnetic interference is very low.
Calibration score: M4.00Q9

System Test
File Name: SystemTest20110612085341.txt
System Test: PASS

Parameters and settings marked with a \* are not constant for all files.

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