

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No. 69
Station Number 363618089 251 701		ADCP Discharge Measurement Notes				Processed by SS
Station Name FLOODWAY OUTFLOW NIK NEW MADRID						Checked by P
Date 5-25-11	Party BESS / TL					
Width 15400	Area / Rated Area 108000	Velocity .42	Index Vel. ---	Gage Height ---	Discharge 45400	
Gage Height Change in hrs.	Meas. p/pts ---	From rating ---	Shift ---	ADCP Sync'd to WT Y at	or N	
ADCP Mfr / Model / Frequency SONTEK / NA / 3 MHz, 1 MHz		Serial No. 1155	Firmware 1.50	Software 2.50		
Boat/Motors Used MOOSE SLAZER		GPS Used SONTEK NA	ADCP Depth .75	Diag. Test / Errors? Y or N		
Compass Calib. & Total Error Or N M200	Mag. Var -1.4	MagVar Method On-site Model	Previous ---	Moving Bed? Y or N		
Meas. Water Temp 24.6 °C	ADCP Water Temp 24.2 °F	Weather / Air Temp PC HOT	Wind Speed / Dir. F/C	15-30 S		
Gage Readings				Site Conditions		
Time	Inside	Outside	Max Water Depth			
1527 (S)			Max Water Speed			
1557 (P)			Max Boat Speed			
			Water Mode			
			Bottom Mode			
			Stragmbled 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: VERY STRONG SOUTH WIND, VERY CHOPPY CONDITIONS						
Cross section: CHOPPY CONDITIONS						
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. Rated =			
Sheet No.				of sheets		

# Discharge Measurement Summary

Date Measured: Wednesday, May 25, 2011

Site Information		Measurement Information	
Site Name	Outflow	Party	ESS/TL
Station Number		Boat/Motor	MO WSC Blazer
Location	Nr New Madrid	Meas. Number	

System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.25	Distance	ft
Serial Number	1155	Salinity (ppt)	0.0	Velocity	ft/s
Firmware Version	1.50	Magnetic Declination (deg)	-1.4	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)	15,446.64
Depth Reference	Vertical Beam	Right Method	Sloped Bank	Area (ft2)	108,273.3
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.419
		Bottom Fit Type	Power Fit	Total Q (cfs)	45,415.929

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	R	3:27:09 PM	0:30:11	75.0	16,078.53	14,975.87	15,152.87	106,909.2	8.878	0.404	7.25	57.76	4,444.37	31,770.92	6,914.22	43,194.519	--	73.6
2	L	3:57:49 PM	0:30:54	76.5	16,228.02	15,532.40	15,740.41	109,637.5	8.753	0.434	35.43	114.44	4,972.36	35,317.62	7,197.49	47,637.339	--	74.1
		Mean	75.7	16,153.27	15,254.14	15,446.64	108,273.3	8.816	0.419	21.34	86.10	4,708.37	33,544.27	7,055.85	45,415.929	0.000	73.8	
		Std Dev	0.7	74.74	278.27	293.77	1,364.1	0.063	0.015	14.09	28.34	263.99	1,773.35	141.64	2,221.410	0.000	0.3	
		COV	0.0	0.005	0.018	0.019	0.013	0.007	0.036	0.660	0.329	0.056	0.053	0.020	0.049	0.000	0.004	

Exposure Time: 1:01:05

Tr1=20110525152708r.rivr; Tr2=20110525155746r.rivr;

## Comments

Tr1=20110525152708r.rivr - ; Tr2=20110525155746r.rivr - ;

## Compass Calibration

File Name: CompassCal20110525095005.txt

Results: PASS

Score is excellent.

Magnetic interference is very low.

Calibration score: M2.00Q9

## System Test

File Name: SystemTest20110525095305.txt

System Test: PASS

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

Report generated using SonTek RiverSurveyor Live v2.50

2.1509/15.11.15