

Meas. No. _____

Geological Survey
Water Resources Division

Processed by KB

Acoustic Profiler Discharge Measurement Notes

Ck'd by_____

Sta. Name NEW MARAUD FLOODWAY OUTFLOW

Date 5/11 20 11 Party BB, SS

Width 16,300 Area 342,000 Vel. .979 G.H. — Disch. 334,000

Profiler Water Temp. 18.2 °C at 0900 Rated area: _____ Index Velocity _____

Profiler S/N: 2339 Mfg: R01 Freq: 1200 Firmware: 10.16 Software Ver: 2.07

Depth Cell Size	25	Other commands:	Profiler Depth 1.20
No. of Cells			Config. file
Blanking Distance	25		Deployment <u>MANUALLY BOAT</u>
Water Mode	12		Moving Bed <u>NO TEST</u>
Ambiguity Vel.	175		Moving Bed Present: Y N
Water pings	1		Diag. Test <u>YES</u>
Bottom pings	1		Diag. Test Errors: Y N

Boat/Motor Used W00DR196E ADCP Time to WT ☐ @ _____ GPS: ☒
Mag. Var. 1) MODEL 2) _____ 3) _____ 4) _____ Avg: -1.3 Comp. Cal.: ☒

GAGE READINGS					
Time				Inside	Outside
Weighed MGH					
GH correction					
Correct MGH					

Samples collected: water quality, sediment,
biological, other:

Measurements documented on other sheets:
water quality, aux/base gage, other:

Rain gage serviced/calibrated _____

Weather SUNNY, WARM

Wind Spd 5-15 Dir. VAR

Air Temp. _____ °C at _____

Water Temp. _____ °C at _____

Specific Cond: _____

Checkbar/chain found _____

Changed to _____ at _____

Correct _____

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: MOSTLY EVEN

Cross section: FARMLAND, TREES, BRUSH, UNEVEN

Control: _____

Gage operating: _____ Record removed: Y or N Filename: _____

Battery voltage: _____ Intakes/Orifice cleaned/purged: _____

Bubble-gage psi: Tank _____, Line _____; Bubble rate _____/min.

Extreme-GH indicators: max _____, min _____.

CSG checked: _____ HWM height on stick _____ Ref elev _____ HWM elev _____

Remarks: NO LOOP COMPLETED HOWEVER LATER MEASUREMENTS CONFIRMED

NO MOVING BED GPS DATA INCONSISTENT-DIRECTIONAL ISSUES

GH of zero flow = GH _____ - depth at control _____ = _____ ft, rated _____

Sheet No. 1 of 2 sheets

Station Number:

Meas. No:

Station Name: New Madrid Floodway Outflow

Date: 05/11/2011

Party: BB,SS

Width: 16,300 ft

Processed by: BB

Boat/Motor: wooldridge

Area: 342,000 ft²

Mean Velocity: 0.979 ft/s

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: 334,000 ft³/s

Area Method: Avg. Course

ADCP Depth: 1.200 ft

Index Vel.: 0.00 ft/s

Rating No.: 1

Nav. Method: Bottom Track *No Loop*

Shore Ens.:10

Adj.Mean Vel: 0.00 ft/s

Qm Rating: P

MagVar Method: None (-1.3°) *COMPLETED*

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:

BT 3-Beam Solution: YES

Max. Vel.: 3.12 ft/s

ADCP:

WT 3-Beam Solution: NO

Max. Depth: 44.9 ft

Type/Freq.: Rio Grande/1200 kHz

BT Error Vel.: 0.33 ft/s*

Mean Depth: 20.9 ft

Serial #: 2339

Firmware: 10.16

WT Error Vel.: 3.50 ft/s

% Meas.: 73.43

Bin Size: 25 cm

Blank: 25 cm

BT Up Vel.: 1.00 ft/s

Water Temp.: None

BT Mode: 5

BT Pings: 1

WT Up Vel.: 4.00 ft/s

ADCP Temp.: 18.2 °C

WT Mode: 12

WT Pings: 1

Use Weighted Mean Depth: YES

WV : 175

WO : 5, 5

Performed Diag. Test: YES

Project Name: nmfloodway2.mmt

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: YES

Meas. Location: near new Madrid

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	190	105	4317	50817	247636	38658	425	328	337863	16375	357196	08:43	09:28	6.42	0.94	0	0
001	L	192	84	3576	52116	243238	34611	263	424	330652	16274	326375	09:29	10:06	7.48	1.01	0	0
Mean		191	94	3946	51466	245437	36634	344	376	334258	16325	341785	Total	01:23	6.95	0.98	0	0
SDev		1	15	524	919	3110	2862	115	67.5	5099	71.8	21793.7			0.75	0.05		
SD/M		0.01	0.16	0.13	0.02	0.01	0.08	0.33	0.18	0.02	0.00	0.06			0.11	0.05		

Remarks:

* - value not consistent for all transects