

9-275-I
REV (10-01)

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

Meas. No. _____

Processed by BB

Acoustic Profiler Discharge Measurement Notes

Sta. No. _____ Ck'd by _____

Sta. Name OHIO RIVER OVERFLOW NEAR CARLO (about 62 EAST)

Date 5/10/11 20 11 Party BB, SS

Width 19100 Area 383000 Vel. .663 G.H. _____ Disch. 254,000

Profiler Water Temp 19.5 °C at 1800 Rated area: _____ Index Velocity _____

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

Depth Cell Size	<u>25</u>	Other commands:	
No. of Cells			
Blanking Distance	<u>25</u>		
Water Mode	<u>12</u>		
Ambiguity Vel.	<u>175</u>		
Water pings	<u>1</u>		
Bottom pings	<u>1</u>		

Profiler Depth 1.00

Config. file _____

Deployment MANNED BOAT

Moving Bed NO TEST

Moving Bed Present: Y N

Diag. Test YES

Diag. Test Errors: Y N

Boat/Motor Used WOODRIDGE ADCP Time to WT ☐ @ _____ GPS: ☒

Mag. Var. 1) _____ 2) _____ 3) _____ 4) _____ Avg: _____ 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 _____

Wind Spd. _____ Dir. _____

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: RIVER BOTTOM, TREES, ETC

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 _____ Refe lev _____ HWM elev _____

Remarks: GPS DATA BAD DUE TO TREE COVER

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

Station Number:

Meas. No:

Station Name: Ohio River Overflow near Cairo(above rr bridges)

Date: 05/10/2011

Party: BB,SS

Width: 19,100 ft

Processed by: BB

Boat/Motor: wooldridge

Area: 383,000 ft²

Mean Velocity: 0.663 ft/s

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: 254,000 ft³/s

Area Method: Avg. Course

ADCP Depth: 1.000 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: F

MagVar Method: None (-1.6°) *TEST PERFORMED*

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

WT 3-Beam Solution: NO

BT Error Vel.: 0.33 ft/s

WT Error Vel.: 3.50 ft/s

BT Up Vel.: 1.00 ft/s

WT Up Vel.: 3.00 ft/s

Use Weighted Mean Depth: YES

Max. Vel.: 4.48 ft/s

Max. Depth: 32.4 ft

Mean Depth: 20.0 ft

% Meas.: 73.51

Water Temp.: None

ADCP Temp.: 19.5 °C

ADCP:

Type/Freq.: Rio Grande/1200 kHz

Serial #: 2339

Firmware: 10.16

Bin Size: 25 cm

Blank: 25 cm

BT Mode: 5

BT Pings: 1

WT Mode: 12

WT Pings: 1

WV : 175

WO : 3, 7

Performed Diag. Test: YES

Project Name: ohiooverflow.mmt

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: YES

Meas. Location: near Cairo

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	345	92	4321	37429	187690	28605	134	1285	255142	19171	381596	17:39	18:24	7.81	0.67	0	1
001	L	355	190	3669	36447	185287	27921	218	2393	252265	19110	383505	18:24	19:03	8.97	0.66	1	1
Mean		350	141	3995	36938	186488	28263	176	1839	253703	19141	382551	Total	01:24	8.39	0.66	0	1
SDev		7	69	461	694	1699	483	59.0	783	2034	42.9	1350.3			0.81	0.01		
SD/M		0.02	0.49	0.12	0.02	0.01	0.02	0.34	0.43	0.01	0.00	0.00			0.10	0.01		

Remarks: