

9-275-1
REV (10-01)

Geological Survey
Water Resources Division

Processed by RA

Sta. No. 325939089084601 Acoustic Profiler Discharge Measurement Notes

Ckd by RA

Sta. Name OKIO Rv ABOVE CAIRO

Date 5/22/2011 Party RA/TL

Width 4.580 Area 233.000 Vel. 3.75 GH --- Disch. 873.000

Profiler Water Temp 16.2 °C at --- Rated area --- Index Velocity ---

Profiler S/N 8708 Mfg. RD1 Firmware 10.112 Software Ver 2.04

Depth Cell Size	50 cm	Other commands:
No. of Cells	73	
Blanking Distance	25 m	
Water Mode	12	
Ambiguity Vel.	196	
Water pings	1	
Bottom pings	1	

Boat/Motor Used INDIAN KAYAK ADCP Time to WT --- @ ---

Mag. Var. 1) --- 2) --- 3) --- 4) --- Avg. --- GPS ---

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

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

Rain gage serviced/calibrated ---

Weather RAIN

Wind Spd --- Dir ---

Air Temp --- °C at ---

Water Temp 16.2 °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 UNEVEN, SOME TORB.

Cross section UNEVEN SAND CHANNEL

Control CHANNEL

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

Battery voltage --- Intakes/Orifice cleaned/purged ---

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

Extreme-GH indicators: max ---, min ---

CSG checked: --- HWM height on stick --- Reflev --- HWM elev ---

Remarks NO MOVING BED TEST DUE TO TIME

GH of zero flow = GH --- - depth at control --- = --- ft. rated ---

Sheet No. --- of --- sheets

Performed Moving Bed Test: NO

Performed Compass Test: YES

tion Number:

tion Name: Ohio Main

Meas. No:

Date: 05/02/2011

Party: RA/TL

Boat/Motor: Illinois

Gage Height: 0.00 ft

Width: 4,580 ft

Area: 233,000 ft²

G.H.Change: 0.000 ft

Processed by: RA

Mean Velocity: 3.75 ft/s

Discharge: 873,000 ft³/s

Area Method: Avg. Course

Nav. Method: Bottom Track

MagVar Method: Model (-1.6°)

Depth Sounder: Not Used

ADCP Depth: 1.350 ft

Shore Ens.: 10

Bottom Est: Power (0.1667)

Top Est: Power (0.1667)

Index Vel.: 0.00 ft/s

Adj. Mean Vel: 0.00 ft/s

Rated Area: 0.000 ft²

Control1: Unspecified

Control2: Unspecified

Control3: Unspecified

Rating No.: 1

Qm Rating: U

Diff.: 0.000%

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.: 8.00 ft/s

Use Weighted Mean Depth: YES

Max. Vel.: 8.07 ft/s

Max. Depth: 98.5 ft

Mean Depth: 50.8 ft

% Meas.: 85.63

Water Temp.: None

ADCP Temp.: 16.2 °C

ADCP:

Type/Freq.: Rio Grande/600 kHz

Serial #: 8708

Firmware: 10.10

Bin Size: 50 cm

Blank: 25 cm

BT Mode: 5

BT Pings: 1

WT Mode: 12

WT Pings: 1

WV: 196

WO: 1, 18

Performed Diag. Test: YES

Performed Moving Bed Test: NO

Performed Compass Test: YES

Meas. Location: nr Ohio bridge

Project Name: ohio main_.mmt

Software: 2.04

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 L	82	203	1188	51091	747949	68202	2897	2222	872361	4598	233905	09:04	09:17	5.72	3.73	0	1
003 R	84	203	1533	52008	754251	67299	3629	2767	879955	4570	230997	09:21	09:37	4.43	3.81	0	1
004 L	84	203	1287	52029	747507	66371	5603	1830	873339	4565	234810	09:37	09:51	5.25	3.72	0	1
005 R	77	203	1594	52253	741467	67068	3643	2988	867420	4582	231082	09:53	10:10	4.39	3.75	0	1
Mean	82	203	1400	51845	747793	67235	3943	2452	873269	4579	232699	Total	01:06	4.95	3.75	0	1
SDev	3	0	194	515	5223	756	1160	525	5156	14.7	1951.3			0.65	0.04		
SD/M	0.04	0.00	0.14	0.01	0.01	0.01	0.29	0.21	0.01	0.00	0.01			0.13	0.01		

Remarks: