Performed Moving Bed Test: NO
Performed Compass Test: YES
Meas. Location:

9-275-I
REV (10-01)

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division
Acoustic Profiler Discharge Measurement Notes

Meas. No. 8
Processed by RA
Ck'd by

Sta No 365939089084601
Sta Name OHIO RV ABOVE CAIRO
Date 5/16/2014 Party RA/CR
Width 4750 Area 230,000 Vel. 4.61 G.H. _____ Disch. 1,060,000
Profiler Water Temp. 16.5 °C at _____ Rated area: _____ Index Velocity _____
Profiler S/N: 11170 Mfgr: RDI Freq. 600 Firmware: 10.16 Software Ver. 2.04

Depth Cell Size	50cm	Other commands:	
No. of Cells	64		
Blanking Distance	25 cm		
Water Mode	1		
Ambiguity Vel.	240		
Water pings	1		
Bottom pings	1		

Profiler Depth 1.25
Config. file _____
Deployment MANNED
Moving Bed _____
Moving Bed Present: Y N
Diag. Test ✓
Diag. Test Errors: Y (N)

Boat/Motor Used WORKSKIFF ADCP Time to WT ☐ @ _____ GPS: ✓
Mag. Var. 1)_____ 2)_____ 3)_____ 4) MODEL Avg: -1.6 Comp. Cal.: ✓

GAGE READINGS						
Time					Inside	Outside
(S) 11:45						
(F) 12:03						
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. 16.5 °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, TURB.
Cross section: SAND CHANNEL, TREES AT RIVERBANK
Control: CHANNEL
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 M.B. & 2 TRANSECTS DUE TO TIME CONSTRAINTS
GH of zero flow = GH _____ - depth at control _____ = _____ ft, rated _____

Sheet No. _____ of _____ sheets

Software: 2.04

tion Number:
tion Name: Ohio above Fri

Meas. No:
Date: 05/06/2011

Party: RA/CR
Boat/Motor: workskiff
Gage Height: 0.00 ft

Width: 4,750 ft
Area: 230,000 ft²
G.H.Change: 0.000 ft

Processed by: RA
Mean Velocity: 4.61 ft/s
Discharge: 1,060,000 ft³/s

Area Method: Avg. Course
Nav. Method: DGPS
MagVar Method: Model (-1.6°)
Depth Sounder: Not Used

ADCP Depth: 1.250 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.: 11.00 ft/s
Use Weighted Mean Depth: YES

Max. Vel.: 11.2 ft/s
Max. Depth: 97.0 ft
Mean Depth: 48.3 ft
% Meas.: 80.91
Water Temp.: None ?
ADCP Temp.: 16.5 °C

ADCP:
Type/Freq.: Rio Grande/600 kHz
Serial #: 11170
Firmware: 10.16
Bin Size: 50 cm
Blank: 25 cm
BT Mode: 5
BT Pings: 1
WT Mode: 1
WT Pings: 1
WV : 260

Performed Diag. Test: YES
Performed Moving Bed Test: NO
Performed Compass Test: YES
Meas. Location:

Project Name: Ohio above Fri_.mmt
Software: 2.04

Tr.#		Edge Distance L	Edge Distance R	#Ens.	Discharge Top	Discharge Middle	Discharge Bottom	Discharge Left	Discharge Right	Discharge Total	Width	Area	Time Start	Time End	Mean Vel. Boat	Mean Vel. Water	% Bad Ens.	% Bad Bins
000	L	345	606	1001	59201	882574	105591	29211	19806	1096383	4754	229802	11:45	11:54	7.05	4.77	0	1
001	R	318	606	912	53773	831346	96556	23193	16970	1021839	4747	229479	11:55	12:03	7.75	4.45	0	1
Mean		331	606	956	56487	856960	101073	26202	18388	1059111	4750	229640	**Total**	00:17	7.40	4.61	0	1
SDev		19	0	63	3838	36224	6388	4255	2005	52711	5.0	228.2			0.49	0.23		
SD/M		0.06	0.00	0.07	0.07	0.04	0.06	0.16	0.11	0.05	0.00	0.00			0.07	0.05		

Remarks:

2 Estimated Edge

* - value not consistent for all transects