

Meas. No. _____

9-275-I
REV (10-01)

Geological Survey
Water Resources Division

Processed by BB

Acoustic Profiler Discharge Measurement Notes

Sta. No. _____ Acoustic Pionier Discharge Measurement Notes Ck'd by _____

Sta. Name INFLOW/OUTFLOW 1

Date 5/13, 2011 Party BB, SS

Width 791 Area 12000 Vel. 6.41 G.H. — Disch. 75,600

Profiler Water Temp. 18.5 °C at 0930 Rated area: _____ Index Velocity _____

Profiler S/N: 2339 Mfg: RD1 Freq: 1200 Firmware: 10.16 Software Ver: 2.07

Depth Cell Size	25	Other commands:	Profiler Depth <u>1.30</u>
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No. of Cells	Config. file
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Blanking Distance	25				Deployment	mm B
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Water Mode	12			Moving Bed	NO TEST
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Ambiguity Vel.	254			Moving Bed Present:	Y	N
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Water pings	1				Diag. Test <u>YES</u>
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Bottom pings 1 Diag. Test Errors: Y (N)

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

Mag. Var. 1) MODEL 2) _____ 3) _____ 4) _____ Avg: -1.4 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: UNEVEN, SWIRLING, MULTI-DIRECTIONAL FLOW

Cross section: CROP FIELD, MOSTLY EVEN

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: _____

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

Station Number:

Meas. No: 3

Station Name: Inflow/Outflow 1

Date: 05/13/2011

Party: BB,SS

Width: 791 ft

Processed by: BB

Boat/Motor: wooldridge/honda 130

Area: 12,000 ft²

Mean Velocity: 6.41 ft/s

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: 75,600 ft³/s

Area Method: Avg. Course

ADCP Depth: 1.500 ft

Index Vel.: 0.00 ft/s

Rating No.: 1

Nav. Method: DGPS

Shore Ens.:10

Adj.Mean Vel: 0.00 ft/s

Qm Rating: P

MagVar Method: Model (-1.4°)

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.: 16.3 ft/s

ADCP:

WT 3-Beam Solution: NO

Max. Depth: 41.3 ft

Type/Freq.: Rio Grande/1200 kHz

BT Error Vel.: 0.33 ft/s*

Mean Depth: 16.2 ft

Serial #: 2339

Firmware: 10.16

WT Error Vel.: 3.50 ft/s

% Meas.: 67.77

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.: 10.00 ft/s

ADCP Temp.: 18.5 °C

WT Mode: 12

WT Pings: 1

Use Weighted Mean Depth: YES

WV : 254

WO : 1, 7

Performed Diag. Test: YES

Project Name: midbreachinflow3.mmt

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: YES

Meas. Location: near new Madrid @ breach

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
001	R	0	0	569	22654	42748	10441	0.000	0.000	75843	1140	13084	09:18	09:23	3.95	5.80	1	0
002	L	0	0	550	22143	43480	10114	0.000	0.000	75737	1194	14249	09:23	09:28	5.10	5.31	10	0
003	R	0	0	340	10911	53349	7666	0.000	0.000	71926	698	12418	09:29	09:32	4.46	5.79	20	2
004	L	0	0	281	12236	60046	8337	0.000	0.000	80619	543	10234	09:33	09:36	4.16	7.88	17	0
005	R	0	0	384	13255	52861	7958	0.000	0.000	74074	583	10380	09:36	09:40	3.44	7.14	14	1
006	L	0	0	316	11147	54977	9351	0.000	0.000	75474	587	11495	09:40	09:43	3.58	6.56	15	2
Mean		0	0	406	15391	51244	8978	0.000	0.000	75612	791	11977	Total	00:25	4.12	6.41	13	1
SDev		0	0	123	5494	6796	1161	0.000	0.000	2867	296.4	1574.7			0.61	0.97		
SD/M		0.00	0.00	0.30	0.36	0.13	0.13	0.00	0.00	0.04	0.37	0.13			0.15	0.15		

Remarks:

* - value not consistent for all transects

Discharge for transects in *italics* have a total Q more than 5% from the mean