

9-275-I  
REV (10-01)

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

Meas. No. 2  
Processed by CBR  
Ck'd by KMK

Sta. No. -  
Sta. Name Inflow - Bird pt levee  
Date 05/10 20 11 Party CBR/KMK 271492  
Width 8720 Area 74,200 Vel. 3.77 G.H. - Disch. 279806  
Profiler Water Temp. 16.56 °C at 1000 Rated area: \_\_\_\_\_ Index Velocity \_\_\_\_\_  
Profiler S/N: 11170 Mfr: RDI Freq. 600 Firmware: 1016 Software Ver. 2.07

Depth Cell Size	<u>0.42</u>	Other commands:	
No. of Cells	<u>57</u>		
Blanking Distance	<u>0.82</u>	<u>Set bin</u>	
Water Mode	<u>12C</u>	<u>size to</u>	
Ambiguity Vel.	<u>9.38</u>	<u>0.42'</u>	
Water pings	<u>1</u>		
Bottom pings	<u>1</u>		

Profiler Depth 0.42  
Config. file \_\_\_\_\_  
Deployment tethered  
Moving Bed \_\_\_\_\_  
Moving Bed Present: Y N  
Diag. Test ADCP TEST  
Diag. Test Errors: (Y) N

Boat/Motor Used 513 ADCP Time to WT ☐ @ \_\_\_\_\_ GPS: VTG  
Mag. Var. 1) -1.4 2) \_\_\_\_\_ 3) \_\_\_\_\_ 4) \_\_\_\_\_ Avg: \_\_\_\_\_ Comp. Cal.: 1.0°

GAGE READINGS					
Time				Inside	Outside
<u>1020</u>	<u>START</u>				
<u>1120</u>	<u>END</u>				
	<u>MAX V = 12.7 f/s</u>				
	<u>MAX D = 22.6'</u>				
Weighted 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 clear, hot

Wind Spd. 35 Dir. \_\_\_\_\_

Air Temp. \_\_\_\_\_ °C at \_\_\_\_\_

Water Temp. 16.7 °C at 1000

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, turbulent, channelized

Cross section: LOW; REW slack water at levee breach

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: mnt 30' - 200' DS of levee, reference VTG

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

[illegible]

**Notes:**

Station Number: Inflow  
Station Name: Bird\_Pt\_Levee

Meas. No: 2  
Date: 05/09/2011

Party: CBR/KMH	Width: 8,580 ft	Processed by: CBR
Boat/Motor: 513	Area: 73,000 ft <sup>2</sup>	Mean Velocity: 3.72 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 271,000 ft <sup>3</sup> /s

Area Method: Avg. Course	ADCP Depth: 0.420 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: F
MagVar Method: Model (-1.4°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft <sup>2</sup>	Diff.: 0.000%
Depth Sounder: 0.000 ft	Top Est: Power (0.1667)	Control1: Unspecified	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:	ADCP:	
BT 3-Beam Solution: YES	Type/Freq.: Rio Grande/600 kHz	
WT 3-Beam Solution: NO	Serial #: 11170	Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Bin Size: 12 cm	Blank: 25 cm
WT Error Vel.: 3.50 ft/s	BT Mode: 5	BT Pings: 1
BT Up Vel.: 1.00 ft/s	WT Mode: 12	WT Pings: 1
WT Up Vel.: 10.00 ft/s	WV : 286	WO : 5, 5
Use Weighted Mean Depth: YES		
Max. Vel.: 14.3 ft/s		
Max. Depth: 22.6 ft		
Mean Depth: 8.51 ft		
% Meas.: 64.09		
Water Temp.: 16.7 °C		
ADCP Temp.: 16.7 °C		

Performed Diag. Test: YES  
Performed Moving Bed Test: NO  
Performed Compass Test: YES  
Meas. Location: DS of levee 30'-200'

Project Name: Inflow\_2.mmt  
Software: 2.07

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	1687	61761	163586	30783	0.000	0.000	256130	8449	73063	10:21	10:42	7.53	3.51	1	10	
002	L	0	0	1629	70429	184398	32029	0.000	0.000	286855	8708	72982	11:02	11:22	7.70	3.93	1	3	
Mean		0	0	1658	66095	173992	31406	0.000	0.000	271493	8578	73023	Total	01:01	7.62	3.72	1	6	
SDev		0	0	41	6129	14716	881	0.000	0.000	21726	183.3	57.1				0.12	0.30		
SD/M		0.00	0.00	0.02	0.09	0.08	0.03	0.00	0.00	0.08	0.02	0.00				0.02	0.08		

Remarks: VTG Reference

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