

Wami Report

Performed Moving Bed Test: YES

Site Visit Date: 2011-05-10

SWAMI ver. 4.10.0R5

Stylesheet ver. 4.10.0R8

U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey WATER RESOURCES DIVISION DISCHARGE MEASUREMENT AND GAGE INSPECTION NOTES

2923

Meas #: 2923

Processed by Kn

Checked by _____

Site Visit Summary

Site Number: 07022000 Site Name: Mississippi River at Thebes, IL
Start Time: 09:29:00 End Time: 15:24:15
Party: SSW Battery:
Weather: partly cloudy, warm, no precip, light wind
Comment:
Other Actions:

Discharge Measurement

Meas #: 2923 Meas Flow: 550919.48 cfs
Meas Start Time: 09:48:45 Meas End Time: 10:22:43
Stage: 38.42 ft ? High? Stage Change: ft
Change Duration: hrs marked Qm Rated: Fair (8%)
Base Flow: Non-base flow W/Draw down
Comment:
Meas. plots: _____ % Diff. from rating no. _____ Indicated shift: _____

Channel 1 Summary

Meas Flow: 550919.48 cfs () Qm Type: Manned moving boat Qm Method: ADCP
Vel Method: ADCP Horiz Flow: Unspecified Vel Desc: Steady
Vert Vel Desc: Unknown Ch Evenness: Uneven Ch Stability: Soft
Ch Material: Sand Sect Loc.: Upstream - 1500 ft. to gage

ADCP Discharge Measurement

Mtr S/N: 1127 ADCP Frequency: 600 kHz Water Mode: 1
Bottom Mode: BT5 Total Area: 103840.32 Total Width: 3026.56
Mean Vel: 5.31 Max Depth: 63.442 Max Vel: 12.863

Gage Readings

TIME	Non-Subm Pres Tran (#7022000) Name: 07022000	Reference Point (07022000) Name: 07022000
09:30:00	38.42 ft	38.25 (-/-, 10)
10:00:00	38.42 ft	
12:00:00	38.42 ft	37.93 (-/-, 10)

Key: Primary Reference; Primary Recorder

Sensor Inspections

Non-Subm Pres Tran (07022000) Name: 07022000

Gas Type: Other Orif Serviced: Not serviced Service Time:

Reference Point (07022000) Name: 07022000

Comment: OK

Software: 2.07

Wt ?
At ?

Party: KB SW DF	Width: 3,030 ft	Processed by: KB
Boat/Motor: QW-1	Area: 104,000 ft²	Mean Velocity: 5.31 ft/s
Gage Height: 38.42 ft	G.H.Change: 0.000 ft	Discharge: 551,000 ft³/s

Area Method: Avg. Course	ADCP Depth: 2.000 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 ft²	Diff.: 0.000%
Depth Sounder: Not Used	Top Est: Constant	Control1: 15-Submerged	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:		ADCP:	
BT 3-Beam Solution: YES	Max. Vel.: 12.9 ft/s	Type/Freq.: Rio Grande / 600 kHz	
WT 3-Beam Solution: NO	Max. Depth: 63.4 ft	Serial #: 1127	Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 34.3 ft	Bin Size: 50 cm	Blank: 25 cm
WT Error Vel.: 3.50 ft/s	% Meas.: 78.23	BT Mode: 5	BT Pings: 2
BT Up Vel.: 1.00 ft/s	Water Temp.: 17.2 °C	WT Mode: 1	WT Pings: 1
WT Up Vel.: 7.00 ft/s	ADCP Temp.: 17.0 °C	WV : 175	
Use Weighted Mean Depth: YES			

Performed Diag. Test: YES
 Performed Moving Bed Test: YES
 Performed Compass Test: YES
 Meas. Location: 1500' above gage

Project Name: THEB_0.mmt
 Software: 2.08

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	360	360	503	55566	422513	63978	1034	4786	547876	2950	108916	09:48	09:54	7.26	5.03	3	0
001	R	450	360	554	56949	428571	54334	7068	2883	549805	3000	102599	09:54	10:00	6.19	5.36	1	0
002	L	390	420	649	55489	432085	54737	1951	2184	546447	2993	100883	10:15	10:22	5.89	5.42	10	0
003	R	480	390	621	57070	440801	54481	5283	1916	559551	3163	102964	10:22	10:29	5.80	5.43	4	0
Mean		420	383	581	56269	430993	56882	3834	2942	550919	3027	103840	Total	00:40	6.29	5.31	4	0
SDev		55	29	66	858	7641	4733	2825	1295	5916	93.6	3503.3			0.67	0.19		
SD/M		0.13	0.08	0.11	0.02	0.02	0.08	0.74	0.44	0.01	0.03	0.03			0.11	0.04		

Remarks: Transect 1- tree branch hung on ADCP head, cleared OK. T4 and T5 were sampling transects aborted due to barge traffic.