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Site Visit Date: 2011-04-29

SWAMI ver. 4.10.0R5

Stylesheet ver. 4.10.0R4

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

Meas #: ~~AUTSEQ~~

Processed by HOE

Checked by _____

Site Visit Summary

Site Number:	07022000	**Site Name:**	Mississippi River at Thebes, IL
Start Time:	07:26:00	**End Time:**	10:00:10
Party:	HOE	**Battery:**	

Weather: clear,cool,no precip.light wind
Comment: td from screw @ 0815 =2.75 +/- .05 td to top of staff board ? =1.54 jg @ 0830 44.43
Other Actions: CoE

Discharge Measurement

Meas #:	AUTSEQ	**Meas Flow:**	766000 cfs
Meas Start Time:	08:43:33	**Meas End Time:**	09:15:16
Stage:	44.38 ft. use	**Stage Change:**	ft.
Change Duration:	hrs. computed	**Qm Rated:**	Fair (8%)
Base Flow:	Unknown		

Comment:
Meas. plots: -5.79 % **Diff. from rating no.** 17.0 **Indicated shift:** _____ Bw adjusted

Channel 1 Summary

Meas Flow:	766000 cfs ( )	**Qm Type:**	Manned moving boat	**Qm Method:**	ADCP
Vel Method:	ADCP	**Horiz Flow:**	Uneven	**Vel Desc:**	Steady
Vert Vel Desc:	Unknown	**Ch Evenness:**	Uneven	**Ch Stability:**	Firm
Ch Material:	Sand	**Sect Loc.:**	Upstream - 2600 ft. to gage		

ADCP Discharge Measurement

Mtr S/N:	generic - 600 kHz	**ADCP Frequency:**	600 kHz	**Water Mode:**	1
Bottom Mode:	BT5	**Total Area:**	122000	**Total Width:**	3400
Mean Vel:	6.27	**Max Depth:**	68.396	**Max Vel:**	14.38

Gage Readings

TIME	Non-Subm Pres Tran (07022000)
08:00:00	~~44.29~~
08:30:00	~~44.43~~
09:00:00	43.80
10:00:00	~~44.48~~

Key: Primary Reference; Primary Recorder

Sensor Inspections

Non-Subm Pres Tran (07022000)

Gas Type:	Nitrogen	**Orif Serviced:**	Not serviced	**Service Time:**	
Tank Chngd:	false	**Tank PSI:**	(Before) (After)		
Line PSI:	(Before) (After)	**Bub Rt:**	(Before) (After)		

Comment:

Streamflow Control Inspection

Type	Dist to Gage (ft)	Cleaned?	Time Cleaned	Condition
Channel		Unspecified		Fill control changed

Comment: channel very smooth maybe slower than yesterday? Backwater setting in?

Environmental Measurements

Time	Parameter	Method	Measure
09:00:00	Water Temperature	Thermister	13

Station Number: 07022000 Meas. No:

Station Name: Mississippi River @ Thebes, IL Date: 04/29/2011

Party: HOE/MJK	Width: 3,410 ft	Processed by: HOE
Boat/Motor: Workskiff/60's	Area: 122,000 ft²	Mean Velocity: 6.27 ft/s
Gage Height: 44.38 ft	G.H.Change: 0.000 ft	Discharge: 766,000 ft³/s

Area Method: Avg. Course	ADCP Depth: 1.350 ft	Index Vel.: 0.00 ft/s	Rating No.: 17.0
Nav. Method: DGPS	Shore Ens.:10	Adj.Mean Vel: 0.00 ft/s	Qm Rating: F
MagVar Method: Previous On Site (-1.3°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft²	Diff.: -14.9%
Depth Sounder: Not Used	Top Est: Constant	Control1: 4-Clear	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:

BT 3-Beam Solution: YES	Max. Vel.: 14.4 ft/s	Type/Freq.: Rio Grande / 600 kHz
WT 3-Beam Solution: NO	Max. Depth: 68.4 ft	Serial #: 551 Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 35.9 ft	Bin Size: 50 cm Blank: 25 cm
WT Error Vel.: 3.50 ft/s	% Meas.: 82.18	BT Mode: 5 BT Pings: 2
BT Up Vel.: 1.00 ft/s	Water Temp.: 12.8 °C	WT Mode: 1 WT Pings: 1
WT Up Vel.: 12.00 ft/s	ADCP Temp.: 13.8 °C	WV : 272
Use Weighted Mean Depth: YES		

ADCP:

Performed Diag. Test: YES Project Name: theb04292011.mmt

Performed Moving Bed Test: YES Software: 2.08

Performed Compass Test: NO

Meas. Location: 1/4 - 1/2 mile upstr

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	345	342	844	56141	641299	75656	14.4	251	773361	3396	128168	08:43	08:53	4.98	6.03	0	0
001	R	390	342	1098	56285	628374	82323	531	530	768043	3409	119730	08:53	09:05	3.98	6.41	0	0
002	L	390	336	780	57787	646196	82403	585	807	787777	3414	124113	09:06	09:14	5.52	6.35	0	0
003	R	360	336	1231	55009	601269	77441	-502	730	733947	3408	117055	09:15	09:29	3.78	6.27	0	0
Mean		371	339	988	56305	629284	79456	157	580	765782	3407	122267	**Total**	00:45	4.56	6.27	0	0
SDev		23	3	212	1141	20133	3435	509	248	22802	7.4	4893.0			0.83	0.17		
SD/M		0.06	0.01	0.21	0.02	0.03	0.04	3.24	0.43	0.03	0.00	0.04			0.18	0.03		

Remarks: Flood/Backwater meas?