

SWAMI_PC ver. 4.10.0R11

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey

Meas #: 1002

Stylesheet ver. 1.3.0W

DISCHARGE MEASUREMENT AND
GAGE INSPECTION NOTES

Processed by _____

Checked by _____

Site Visit Summary**03611500 - OHIO RIVER AT METROPOLIS, IL**

Date: 2011-05-17 Start Time: 11:29:00 End Time: 14:33:18
Party: HDR/RSD Battery: 14.4
Weather: partly cloudy,warm,no precip,light wind
QW sample collected.

Comment:

Performed Nasqan Sample

Discharge Measurement Summary**Meas No: 1002**

Gage Ht: 53.12 ft. **Total Meas Flow: 931478.258 cfs**
Meas Start Time: 11:43:52 Meas End Time: 12:42:00
Gage Ht Change: -0.04 ft. Meas Duration: 1.0 hrs.
Meas Rated: Good (5%) Base Flow? Non-base flow
Meas. plots: _____ % Different from rating no. _____ Indicated shift: _____

Channel 1 (Ohio River) Summary - ADCP Measurement**Manned moving boat Measurement**

Meas Flow: 903513.368 cfs Vel Method: ADCP
Horiz Flow: Even Vel Desc: steady
Vert Vel Desc: standard Channel Conditions: even , soft , silt-mud
Sect Loc.: Downstream - 1000 ft. to gage

ADCP Instrument and Configuration Details

Manufacturer/Model: RDI / Workhorse Monitor ADCP Serial No: 0408 - 600 kHz mtr
ADCP Frequency: 600 kHz Firmware: 10.16
Software: WinRiver II v2.04 **Time Not Synced**
Diag Test Not Completed **Compass Not Calibrated**
Moving Bed Not Present
Water Mode: 12 Bottom Mode: 5
Depth Cell Size: 1.64 ft No. Ensembles: 1188
Blanking Dist: 0.82 ft Water Pings: 1
Bottom Pings: 1 COV: 0
Navigation: Bottom tracking Area Comp: Parallel to boat course
Boat/Motor: Suspension: Rigid boat mount

Measurement Details

Total Area: 232042.83 ft² Total Width: 5249.94 ft
Mean Vel: 3.894 ft/s Max Depth: 63.758 ft
Max Vel: 7.901 ft/s

Transect Summary (only transects used in final Q are shown)**Start Time:**

11:43:53

11:57:31

12:14:00

12:29:33

Discharge:

906831.276 cfs

904630.194 cfs

901167.867 cfs

901424.136 cfs

Compass Calibration Results

Compass Calibration: Instrument S/N: 408 2011-05-17T11:20:32 Overall Error: 2.48ø
 Compass Evaluation: 2011-05-17T11:21:48 Overall Error: 2.48ø
 2011-05-17T11:22:51 Overall Error: 2.48ø

Diagnostic Test Results

Instrument S/N: 408 2011-05-17T11:17:11 Tests Passed: 23 Tests Failed: 0

Gage Readings

Time	Non-Contact Radar (generic) Name: generic
11:30:00	53.23
11:43:00	53.21
11:45:00	53.21
12:00:00	53.21
12:15:00	53.22
12:30:00	53.18
12:42:00	53.17
12:45:00	53.17
Key:	Blue=Primary Reference; Green=Primary Recorder

Sensor Inspection**Non-Contact Radar**

Serial No: generic

Name: generic

Streamflow Control Inspection

Type	Dist to Gage (ft)	Cleaned?	Time Cleaned	Condition
Channel	0	NO		Clear

Environmental Measurements

Time	Parameter	Method	Measure
13:30:00	Air Temperature	Thermister	17.7
13:30:00	Water Temperature	Thermister	18.0