

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:	Discharge:
11:43:53	906831.276 cfs
11:57:31	904630.194 cfs
12:14:00	901167.867 cfs
12:29:33	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