SWAMI_PC ver. 4.10.1.18

Stylesheet ver. 1.3.0W

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

DISCHARGE MEASUREMENT AND GAGE INSPECTION NOTES

Meas #: 1003

Processed by _____

Checked by _____

Site Visit Summary

03611500 - OHIO RIVER AT METROPOLIS, IL

Date: 2011-05-31 Start Time: 11:45:00 End Time: 15:31:23

Party: DWK/HDR

Weather: cloudy, warm, no precip, moderate-upstream wind

QW sample collected. Sediment sample collected. Other sample collected.

Comment:

Performed Nasqan Sample, see discharge comments, gages were not inspected

Discharge Measurement Summary

Meas No: 1003

Gage Ht: 43.54 ft.

Total Meas Flow: 552552.857 cfs

Meas Start Time: 12:26:46

Meas End Time: 13:37:00

Gage Ht Change: 0.15 ft.

Meas Duration: 1.2 hrs.

Meas Rated: Fair (8%)

Base Flow? Non-base flow

Comment:

Moving bed test not used, instead used VTG as reference. MMT - Peformed Nasqan Sample, moving bed transect corrupt, used VTG data for reference.

Meas. plots: _____% Different from rating no. _____ Indicated shift: _____

Channel 1 (Main) Summary - ADCP Measurement

Manned moving boat Measurement

Meas Flow: 552552.857 cfs

Vel Method: ADCP

Horiz Flow: Even

Vel Desc: steady

Vert Vel Desc: standard

Channel Conditions: even , soft , sand

Sect Loc.: Downstream - 10000 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: 2.04.0000.0000

Time Not Synced

Diag Test Completed

Compass Calibrated

Moving Bed Not Present

GPS: trimble

Water Mode: 12

Bottom Mode: 5

Depth Cell Size: 1.64 ft

No. Ensembles: 1619

Blanking Dist: 0.82 ft

Water Pings: 1

Bottom Pings: 1

COV: 0.017

Navigation: DGPS using velocity

Area Comp: Parallel to boat course

Boat/Motor: kann 2 90's

Suspension: Rigid boat mount

Measurement Details

Total Area: 185152.194 ft^2 | Total Width: 4560.31 ft

Mean Vel: 2.984 ft/s | Max Depth: 60.512 ft

Max Vel: 5.978 ft/s

Transect Summary (only transects used in final Q are shown)

Start Time:	Discharge:
12:26:47	558271.979 cfs
12:43:21	542114.778 cfs
13:01:48	562282.56 cfs
13:19:21	547542.112 cfs

Compass Calibration Results

Compass Calibration: Instrument S/N: 408 2011-05-31T12:00:44 Overall Error:.57 Compass Evaluation: 2011-05-31T12:03:00 Overall Error:.51

Diagnostic Test Results

Instrument S/N: 408 2011-05-31T11:59:32 Tests Passed: 22 Tests Failed: 1

Comments:

Time	Title	Comment
15:31:15	MMT	Peformed Nasqan Sample, moving bed transect corrupt, used VTG data for reference.

Verification of Instrument Thermister Accuracy:

Date/Time	Salinity	ADCP WTemp	Meas WTemp	WTemp Diff
2011-05-31 / 13:37:00		21.4	21.4	.0

Gage Readings

Time	Non-Contact Radar (generic) Name: generic
11:45:00	43.46
12:00:00	43.50
12:15:00	43.47
12:30:00	43.53
12:45:00	43.54
13:00:00	43.59
13:15:00	43.60
13:30:00	43.61
13:45:00	43.60

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
13:37:00	Water Temperature	Thermister	21.4