

| | | | | | | | |
|--|--|---|--------------------|--|--|-------------------------------|--------|
| 9-275-1 | 10/24/08 | U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey | | | | Meas. No. | |
| Station Number | | ADCP Discharge Measurement Notes | | | | Processed by | |
| | | | | | | Checked by | |
| Station Name | | Inflow/Outflow 2 | | | | | |
| Date | 06-05 | 20 | 11 | Party | BR/ZM | | |
| Width | Area / Rated Area | Velocity | Index Vel. | Gage Height | Discharge | | |
| 50.70 | 192 | 1.88 | — | — | 357 | | |
| Gage Height Change | | Meas. plots | From rating | Shift | ADCP Sync'd to WT | | |
| in hrs. | | % diff | No.: | | Y at _____ or N | | |
| ADCP Mfr / Model / Frequency | | | Serial No. | Firmware | Software | | |
| RS M9 | | | 2010 | 1.50 | 2.50 | | |
| Boat/Motors Used | | | GPS Used | ADCP Depth | Diag. Test / Errors? | | |
| | | | NO | 0.3 | <input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N | | |
| Compass Calib. & Total Error | | Mag. Var | MagVar Method | | Moving Bed? | | |
| <input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N | | M0 Q9 | -1.3 | On-site <input checked="" type="checkbox"/> Model <input checked="" type="checkbox"/> Previous | Y or <input checked="" type="checkbox"/> N | | |
| Meas. Water Temp | | ADCP Water Temp | Weather / Air Temp | | Wind Speed / Dir. | | |
| 60 °F / C at | | 63 °F / C at | °F / C | | | | |
| Gage Readings | | | | Site Conditions | | | |
| Time | | | | Inside | Outside | Max Water Depth | |
| 0937 | | | | | | Max Water Speed | |
| | | | | | | Max Boat Speed | |
| | | | | | | Water Mode | |
| 0939 | | | | | | Bottom Mode | |
| | | | | | | Streambed material | |
| | | | | | | Salinity | |
| | | | | | | ppt at | |
| Weighted MGH | | | | | | Checkbar found | |
| GH corrections | | | | | | Checkbar changed to: | |
| Correct MGH | | | | | | at | |
| Wading, cable, ice, boat, upstr., downstr., side bridge | | | | ft., mi. upstr., downstr. of gage | | | |
| Measurement rated: | excellent (2%), good (5%), fair (8%), poor (>8%) | | | | | based on following conditions | |
| Flow | | | | | | | |
| Cross section: | | | | | | | |
| Control: | | | | | | | |
| Gage operating: | Y or N | Record removed: | Y or N | Filename: | | | |
| Battery voltage | V | Intakes/Orifice cleaned/purged: | | | | | |
| Bubble-gage psi: | Tank | Line | | Bubble rate | / min | | |
| Extreme-GH indicators: | Max | Min | | CSG Checked | Y or N | | |
| HWM on stick | | Ref. elev. | | HWM elevation | | | |
| GH of zero flow = GH | | - depth at control | | = | ft. | Rated= | |
| Sheet No. | | | | | of | | sheets |

Discharge Measurement Summary

Date Measured: Sunday, June 05, 2011

| Site Information | | Measurement Information | |
|------------------|------------------|-------------------------|---------|
| Site Name | inflow/outflow 2 | Party | bcr/zwm |
| Station Number | | Boat/Motor | |
| Location | | Meas. Number | |

| System Information | | System Setup | | Units | |
|--------------------|-------|----------------------------|------|-------------|------|
| System Type | RS-M9 | Transducer Depth (ft) | 0.30 | Distance | ft |
| Serial Number | 2010 | Salinity (ppt) | 0.0 | Velocity | ft/s |
| Firmware Version | 1.50 | Magnetic Declination (deg) | -1.3 | Area | ft2 |
| Software Version | 2.50 | | | Discharge | cfs |
| | | | | Temperature | degF |

| Discharge Calculation Settings | | | | Discharge Results | |
|--------------------------------|--------------|-----------------|-------------|-------------------|---------|
| Track Reference | Bottom-Track | Left Method | Sloped Bank | Width (ft) | 50.70 |
| Depth Reference | Bottom-Track | Right Method | Sloped Bank | Area (ft2) | 191.8 |
| Coordinate System | ENU | Top Fit Type | Power Fit | Mean Speed (ft/s) | 1.883 |
| | | Bottom Fit Type | Power Fit | Total Q (cfs) | 357.002 |

| Measurement Results | | | | | | | | | | | | | | | | | | |
|---------------------|------|------------|---------|----------|-------|-------|-------|-------|----------|-------|-----------|-------|--------|--------|-------|---------|----------|-------|
| Tr | Time | | | Distance | | | | | Mean Vel | | Discharge | | | | | | | % |
| # | Time | Duration | Temp. | Track | DMG | Width | Area | Boat | Water | Left | Right | Top | Middle | Bottom | Total | LCTotal | Measured | |
| 1 | L | 9:37:10 AM | 0:00:45 | 83.6 | 51.61 | 35.15 | 48.27 | 173.5 | 1.147 | 2.103 | -2.48 | 1.49 | 53.64 | 259.37 | 52.88 | 364.885 | -- | 71.1 |
| 2 | R | 9:38:17 AM | 0:00:51 | 84.1 | 55.62 | 40.02 | 53.14 | 210.1 | 1.091 | 1.662 | -4.79 | 0.31 | 43.64 | 247.29 | 62.67 | 349.119 | -- | 70.8 |
| | | | Mean | 83.8 | 53.61 | 37.58 | 50.70 | 191.8 | 1.119 | 1.883 | -3.64 | 0.90 | 48.64 | 253.33 | 57.77 | 357.002 | 0.000 | 71.0 |
| | | | Std Dev | 0.2 | 2.01 | 2.44 | 2.44 | 18.3 | 0.028 | 0.221 | 1.15 | 0.59 | 5.00 | 6.04 | 4.90 | 7.883 | 0.000 | 0.1 |
| | | | COV | 0.0 | 0.037 | 0.065 | 0.048 | 0.095 | 0.025 | 0.117 | 0.317 | 0.651 | 0.103 | 0.024 | 0.085 | 0.022 | 0.000 | 0.002 |

Exposure Time: 0:01:36

Tr1=20110605093709.riv; Tr2=20110605093816.riv;

| Comments |
|---|
| Tr1=20110605093709.riv - ; Tr2=20110605093816.riv - ; |

| Compass Calibration |
|--|
| File Name: CompassCal20110605084700.txt |
| Results: PASS Score is excellent. Magnetic interference is very low. |
| Calibration score: M0.00Q9 |

| System Test |
|-------------|
| Not Loaded |

Parameters and settings marked with a * are not constant for all files.

Report generated using SonTek RiverSurveyor Live v2.50