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|---|--|---|----------------------------|--|-------------------------------|--------------|-----|
| 9-275-1 | 07/08/09 | U.S. DEPARTMENT OF THE INTERIOR | | | | Meas. No. | |
| Station Number | | U.S. Geological Survey | | | | Processed by | RJR |
| | | ADCP Discharge Measurement Notes | | | | Checked by | |
| Station Name | | Mississippi Below Lower Branch | | | | | |
| Date | May 20, 2011 | Party | | REBranlin Leland | | | |
| Width | Area / Rated Area | Velocity | Index | Gage Height | Discharge | | |
| 5700 | 283,000 | 4.40 | | | 1,240,000 | | |
| Gage Height Change | | Meas. plots | From rating | Indicated Shift | ADCP Sync'd to WT | | |
| in hrs. | | % diff | No.: | | (Y) at _____ or N | | |
| ADCP Mfr / Model / Frequency | | | Serial No. | Firmware | Software | | |
| 600 kHz Rio | | | 8708 | 10.16 | 7.05 | | |
| Boat/Motors Used | | GPS Used | ADCP Depth | Diag. Test / Errors? | | | |
| Sonotrack | | yes | 1.50 | <input checked="" type="checkbox"/> Y or (N) | | | |
| Compass Calib. & Total Error | | Mag. Var | MagVar Method | | Moving Bed? | | |
| (Y) or N | | -1.60 | On-site / Model / Previous | | Y or N | | |
| Meas. Water Temp | | ADCP Water Temp | Weather / Air Temp | | Wind Speed / Dir. | | |
| °F / C at | | °F / C at | °F / C | | | | |
| Gage Readings | | | | | Site Conditions | | |
| Time | Start End | Primary reference | | | Max Water Depth | | |
| | | | | | Max Water Speed | | |
| 1038 | (s) | | | | Max Boat Speed | | |
| | | | | | Water Mode | | |
| | | | | | Bottom Mode | | |
| 1130 | (e) | | | | 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 | Measured below lower end of lower branch | | | | | | |
| 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. | Uncertainty | ± | | |
| Sheet No. | | of | sheets | | | | |

| Acoustic Profiler Discharge Measurement Notes | | | | | | | Filename Prefix: |
|---|-------------------------------|---------------|--|----------|-----------|-----------------|---------------------------------------|
| Left Bank: | Sloping Vertical Other: _____ | | | | | Right Bank: | Sloping Vertical Other: _____ |
| Transect No. | Starting | | | Ending | | Total Discharge | Notes |
| | Bank | Time | Distance | Distance | Time | | |
| Loop: | L R | Left Bank(s) | Ens: | | Dist: 190 | | Right Bank(e) Ens = 1240 Dist = 980 |
| (subsectioned) | L R | Right Bank(s) | Ens = 1240 | | Dist: 980 | | Left Bank(e) Ens = Dist = 190 |
| | L R | | | | | | |
| 002 | Ⓛ R | 1038 | 190 | 980 | 1130 | 1280000 | } subsectioned loop to create 002+003 |
| 003 | Ⓛ R | 1051 | 980 | 190 | 1110 | 1240000 | |
| 000 | Ⓛ R | 1115 | 150 | 440 | 1130 | 1240000 | |
| 001 | Ⓛ R | 1130 | 440 | 185 | 1153 | 1210000 | |
| | L R | | | | | | |
| | L R | | | | | | |
| | L R | * use | mississippi - below - confluence - final.mnt for Q's | | | | |
| | L R | use | mississippi - below - confluence.mnt for orig files | | | | |
| | L R | | | | | | loop, comp cal, etc |
| | L R | | | | | | |
| Notes | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| | | |
|----------------------|-------------------------------|---|
| Party: REB/GEG | Width: 5,710 ft | Processed by: REB |
| Boat/Motor: | Area: 283,000 ft ² | Mean Velocity: 4.40 ft/s |
| Gage Height: 0.00 ft | G.H.Change: 0.000 ft | Discharge: 1,240,000 ft ³ /s |

| | | | |
|-----------------------------|----------------------------|-----------------------------------|---------------|
| Area Method: Avg. Course | ADCP Depth: 1.500 ft | Index Vel.: 0.00 ft/s | Rating No.: 1 |
| Nav. Method: DGPS | Shore Ens.:10 | Adj.Mean Vel: 0.00 ft/s | Qm Rating: U |
| MagVar Method: None (-1.6°) | Bottom Est: Power (0.1667) | Rated Area: 0.000 ft ² | Diff.: 0.000% |
| Depth Sounder: Not Used | Top Est: Power (0.1667) | Control1: Unspecified | |
| | | Control2: Unspecified | |
| | | Control3: Unspecified | |

| | | |
|-----------------------------|----------------------|---|
| Screening Thresholds: | | ADCP: |
| BT 3-Beam Solution: YES | Max. Vel.: 12.4 ft/s | Type/Freq.: Rio Grande / 600 kHz |
| WT 3-Beam Solution: NO | Max. Depth: 78.8 ft | Serial #: Firmware: 0.00 |
| BT Error Vel.: 0.33 ft/s | Mean Depth: 49.6 ft | Bin Size: 50 cm Blank: 50 cm |
| WT Error Vel.: 32.81 ft/s | % Meas.: 82.10 | BT Mode: 0 BT Pings: 1 |
| BT Up Vel.: 32.81 ft/s | Water Temp.: None | WT Mode: 1 WT Pings: 1 |
| WT Up Vel.: 32.81 ft/s | ADCP Temp.: 18.3 °C | WV : 170 |
| Use Weighted Mean Depth: NO | | |

Performed Diag. Test: NO
 Performed Moving Bed Test: NO
 Performed Compass Test: NO
 Meas. Location: DS of levee breach

Project Name: mississippi_below_confluence_
 Software: 2.08

| 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 | 150 | 440 | 1243 | 94068 | 1034255 | 104582 | 2075 | 1092 | 1236071 | 5994 | 307586 | 11:15 | 11:30 | 6.31 | 4.02 | 0 | 0 |
| 001 | R | 185 | 440 | 1861 | 93755 | 1003982 | 103713 | 4404 | 1818 | 1207672 | 5463 | 267162 | 11:30 | 11:53 | 3.74 | 4.52 | 0 | 0 |
| 002 | L | 190 | 980 | 1178 | 92628 | 1041202 | 102677 | 1508 | 45646 | 1283661 | 5700 | 279533 | 10:38 | 10:51 | 5.84 | 4.59 | 0 | 0 |
| 003 | R | 190 | 980 | 1749 | 91433 | 1005495 | 102454 | 2755 | 46308 | 1248445 | 5673 | 279253 | 10:51 | 11:10 | 4.01 | 4.47 | 1 | 0 |
| Mean | | 179 | 710 | 1507 | 92971 | 1021233 | 103356 | 2686 | 23716 | 1243962 | 5708 | 283384 | Total | 19:50 | 4.98 | 4.40 | 0 | 0 |
| SDev | | 19 | 312 | 347 | 1198 | 19267 | 984 | 1254 | 25708 | 31492 | 218.5 | 17134.6 | | | 1.29 | 0.26 | | |
| SD/M | | 0.11 | 0.44 | 0.23 | 0.01 | 0.02 | 0.01 | 0.47 | 1.08 | 0.03 | 0.04 | 0.06 | | | 0.26 | 0.06 | | |

Remarks: