

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
WATER RESOURCES DIVISION
DISCHARGE MEASUREMENT AND
GAGE INSPECTION NOTES

Meas. No. 49
Comp. by MSB
Checked by _____

Sta. No. Fg
Sta. Name Crescent
Date 1/14, 20 10 Party RAM EJB, MSB
Width 2.6 Area 0.26 Vel. .577 G. H. _____ Disch. 0.15
Method .6 No. secs. 7 G. H. change 0 in .1 hrs.
Method coef. 1.0 Horiz. angle coef. 1.0 Susp. Rod Tags checked _____
Meter Type Pygmy Meter No. 0084023 Meter _____ ft. above bottom of wt.
Rating used 6/99 Spin test before meas. 1:30; after OK
Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

| GAGE READINGS | | | | | | |
|---------------|---------------|------|-----|------|--------|---------|
| Time | BV | AT | SC | WT | Inside | Outside |
| 13:22 | | 1.36 | 154 | 7.77 | 2.90 | 1.42 |
| 14:05 | Start | | | | | 1.42 |
| | | | | | | 2.864 |
| | | | | | | |
| | | | | | | |
| | Finish | | | | | |
| 14:15 | | 1.26 | 154 | 8.60 | 2.93 | 1.42 |
| | Weighted MGH | | | | | 2.864 |
| | GH correction | | | | | |
| | Correct MGH | | | | | |

Samples collected: water quality, sediment, biological, other _____
Measurements documented on separate sheets: water quality, aux./base gage, other _____
Rain gage serviced/calibrated _____
Weather: Sun, lt breeze
Air Temp. 1.5 °C at 13:30
Water Temp: 9 °C at 13:25
Check bar/chain found _____
Changed to _____ at _____
Correct _____

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: Very Low
Cross section: Gravel/Cobble → Firm/Even

Gage operating: yes Record Removed No
Battery voltage: 13.7 Intake/Orifice cleaned/purged: _____
Bubble-gage pressure, psi: Tank 1000, Line 14; Bubble-rate _____ /min.
Extreme-GH indicators: max _____, min _____
CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____
HWM inside/outside: _____
Control: _____

Remarks: time = OK date = OK pH = 8.126
SC = 172.5 @ 7.9°C, Ran Levels
GH of zero flow = GH _____ - depth at control _____ = _____ ft., rated _____

.0 .10 .20 .30 .40 .50 .60 .70 .75

River at -

| ANGLE COEF- FICIENT | DIST. FROM INITIAL POINT | WIDTH | DEPTH | OBSERVA- TION DEPTH | REVO- LUTIONS | TIME IN SEC- ONDS | VELOCITY | | ADJUSTED FOR HOR. ANGLE OR | AREA | DISCHARGE .80 |
|---------------------------|-----------------------------------|-------|-------|------------------------|------------------|-------------------------|-------------|-------------------------|---|----------|------------------------|
| | | | | | | | AT POINT | MEAN INVER- TICAL | | | |
| | 0.7 | 0.15 | | LE | OF | WATER | | | 14:05 | 0 | 0 |
| | 1.0 | 0.30 | 0.14 | | 25 | 40 | 0.631 | | | 0.042 | 0.0265 ^{.85} |
| | 1.3 | 0.30 | 0.14 | | 40 | 41 | 0.968 | | | 0.042 | 0.0407 |
| | 1.6 | 0.30 | 0.18 | | 30 | 46 | 0.658 | | | 0.054 | 0.0355 |
| | 1.9 | 0.30 | 0.20 | | 25 | 46 | 0.553 | | | 0.06 | 0.0332 ^{.90} |
| | 2.2 | 0.40 | 0.16 | | 10 | 41 | 0.265 | | | 0.064 | 0.01696 ^{.92} |
| | 2.7 | 0.30 | | RE | OF | WATER | | | 14:10 | 0 | 0 |
| | | | | | | | | | | | .94 |
| | 2.0 | 2.0 | | | | | | | | .262 | 0.153 ^{.96} |
| | | | | | | | Total | | | = 0.1529 | .97 |
| | | | | | | | | | | | .98 |
| | | | | | | | | | | | .99 |
| | | | | | | | | | | | 1.00 |
| | | | | | | | | | | | .99 |
| | | | | | | | | | | | .98 |
| | | | | | | | | | | | .97 |
| | | | | | | | | | | | .96 |
| | | | | | | | | | | | .94 |
| | | | | | | | | | | | .92 |
| | | | | | | | | | | | .90 |
| | | | | | | | | | | | .85 |
| | | | | | | | | | | | .80 |

.0 .10 .20 .30 .40 .50 .60 .70 .75