1st Meas. 1947
Water Year

9-275 c
(July 1935)

RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

# DISCHARGE MEASUREMENT NOTES

Meas. No. 297
Checked by EWD
Date 12/4/46

Brazos River at Richmond, Tex.

Date Oct 15, 1946 Party W.H. Gomes
Width 360 Area 2470 Vel. 1.58 G. H. 6.25 Disch. 3.890
Method .6-.8 No. secs. 25 G. H. change 0.00 in 0.9 hrs. Susp. 300.5
Method coef. 1.00 Hor. angle coef. ——— As Noted Meter No. 1791 Susp. coef. 1.005

GAGE READINGS (Tape)

| Time | Gage | Recorder | Inside | Outside |
|---|---|---|---|---|
| 8:40 a.m. | | | 6.26 | 6.25+ot |
| 8:55 | ~~Start~~ | | 6.25+ | |
| 9:45 | Start | | | |
| 10:40 | Finish | | | |
| 11:15 a.m. | | | 6.25 | |
| | U.S.W.B. W.W. Gage | | | |
| 8:25 a.m. | | | | 6.22 |
| 8:30 | ~~Finish~~ | | | 6.25 |
| 11:15 a.m. | | | | 6.25 |
| ~~Weighted~~ M. G. H. | | | 6.25 | |
| G. H. correction | | | | |
| Correct M. G. H. | | | | |

Date rated June 4 1943 Used rating for rod Red susp. Meter 0.5 ft. above bottom of wt. Tags checked —
Spin before meas. ok after ok
Meas. plots — % diff. from — rating
~~Wading~~, cable, ~~ice, boat, upstr., downstr.~~, side bridge 270 feet, ~~mile, above~~, below gage, and —
~~Chain~~, wire, found 58.59,
changed to 58.62 at 8:27 a.m.
Correct length 58.62
Levels obtained No

Measurement rated ~~excellent (2%)~~, good (5%), ~~fair (8%), poor (over 8%)~~, based on following conditions: Cross section Uniform
Flow Smooth Weather Light rain
Other —
Gage ok
——— Record removed Yes Intake flushed No
Observer —
Control channel.
Remarks RATE OF CHANGE IN STAGE: 0.00 ft./HR.

Sheet No. 1 of 4 sheets. G. H. of zero flow — ft.

U. S. GOVERNMENT PRINTING OFFICE 6—7449

9-275
September 1943

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 10-15-46, 19__ **DISCHARGE MEASUREMENT NOTES**

Brazos River at Richmond, Tex.

| Dist. from initial point | Depth | Observation depth | Revolutions | Time in seconds | VELOCITY: At point | VELOCITY: Mean in vertical | VELOCITY: Mean in section | Corr. Area | Mean depth (Area) | Width | Discharge | Angle coefficient |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LEW 435 | 0 | | | | | | 0 | 0 | | 7½ | 0 | |
| 420 | .7 | | V= | 0 | | | 0 | 12 | | 17½ | 0 | |
| 400 | 1.4 | .8 | 20 | 46 | | | 1.01 | 26 | 28 | 20 | 26 | .94 |
| 380 | 2.8 | .6 | 30 | 51 | 1.36 | | 1.14 | 53 | 56 | 20 | 60 | .94 |
| | | 2.2 | 20 | 50 | .93 | | | | | | | |
| 360 | 3.9 | .8 | 30 | 46 | 1.50 | | 1.32 | 76 | 78 | 20 | 100 | .97 |
| | | 3.1 | 25 | 50 | 1.15 | | | | | | | |
| 340 | 4.5 | .9 | 30 | 42 | 1.65 | | 1.28 | 76 | 79 | 17½ | 112 | .96 |
| | | 3.6 | 25 | 44 | 1.31 | | | | | | | |
| 325 | 5.3 | 1.1 | 40 | 54 | 1.71 | | 1.48 | 78 | 80 | 15 | 115 | .98 |
| | | 4.2 | 25 | 46 | 1.25 | | | | | | | |
| 310 | 5.6 | 1.1 | 40 | 50 | 1.84 | | 1.66 | 82 | 84 | 15 | 136 | .98 |
| | | 4.5 | 30 | 47 | 1.47 | | | | | | | |
| 295 | 6.6 | 1.3 | 40 | 57 | 1.62 | | 1.54 | 97 | 99 | 15 | 149 | .98 |
| | | 5.3 | 30 | 47 | 1.47 | | | | | | | |
| 280 | 7.3 | 1.5 | 40 | 47 | 1.96 | | 1.73 | 108 | 110 | 15 | 187 | .98 |
| | | 5.8 | 30 | 46 | 1.50 | | | | | | | |
| 265 | 7.6 | 1.5 | 40 | 46 | 2.00 | | 1.72 | 112 | 114 | 15 | 193 | .98 |
| | | 6.1 | 30 | 48 | 1.44 | | | | | | | |
| 250 | 7.7 | 1.5 | 40 | 47 | 1.96 | | 1.82 | 114 | 116 | 15 | 208 | .98 |
| | | 6.2 | 30 | 41 | 1.69 | | | | | | | |

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 10/15/46, 19__ **DISCHARGE MEASUREMENT NOTES**

Brazos River at Richmond, Tex.

| Angle coefficient | Dist. from initial point | Depth | Observation depth | Revolutions | Time in seconds | VELOCITY At point | VELOCITY Mean in vertical | VELOCITY Mean in section | Corr. Area | Mean depth Area | Width | Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| .99 | 235 | 8.5 | 1.7 | 40 | 45 | 2.05 | | 1.83 | 127 | 128 | 15 | 232 |
| | | | 6.8 | 30 | 43 | 1.61 | | | | | | |
| .99 | 220 | 9.0 | 1.8 | 40 | 45 | 2.05 | | 1.83 | 134 | 135 | 15 | 245 |
| | | | 7.2 | 30 | 43 | 1.61 | | | | | | |
| ⊥ | 205 | 9.5 | 1.9 | 40 | 44 | 2.09 | | 1.87 | 142 | 142 | 15 | 266 |
| | | | 7.6 | 30 | 42 | 1.65 | | | | | | |
| ⊥ | 190 | 10.0 | 2.0 | 40 | 45 | 2.05 | | 1.78 | 150 | | 15 | 267 |
| | | | 8.0 | 30 | 46 | 1.50 | | | | | | |
| ⊥ ⊙ | 175 | 10.2 | 2.0 | 40 | 53 | 1.74 | | 1.62 | 153 | | 15 | 248 |
| | | | 8.2 | 30 | 46 | 1.50 | | | | | | |
| ⊥ | 160 | 10.2 | 2.0 | 40 | 52 | 1.77 | | 1.67 | 153 | | 15 | 256 |
| | | | 8.2 | 30 | 44 | 1.57 | | | | | | |
| ⊥ | 145 | 10.0 | 2.0 | 40 | 60 | 1.54 | | 1.49 | 150 | | 15 | 224 |
| | | | 8.0 | 30 | 48 | 1.44 | | | | | | |
| | 130 | 11.0 | 2.2 | 30 | 45 | 1.54 | | 1.46 | 165 | | 15 | 241 |
| | | | 8.8 | 25 | 42 | 1.37 | | | | | | |
| ⊥ | 115 | 14.1 | 2.8 | 40 | 62 | 1.49 | | 1.42 | 212 | | 15 | 301 |
| | | | 11.3 | 25 | 43 | 1.34 | | | | | | |
| | 100 | 11.2 | 2.2 | 30 | 43 | 1.61 | | 1.48 | 140 | | 12½ | 207 |
| | | | 9.0 | 25 | 43 | 1.34 | | | | | | |
| ⊥ | 90 | 7.8 | 1.6 | 25 | 47 | 1.23 | | 1.08 | 78 | | 10 | 84 |
| | | | 6.2 | 20 | 50 | .93 | ×1.6 | | | | | |
| | 80 | 4.0 | .8 | 15 | 57 | .61 | | .56 | 30 | - | 7½ | 17 |
| 10:40 | | | 3.2 | 15 | 68 | .52 | | | | | | |
| | REW 75 | 0 | | | | | | 0 | 0 | | 2½ | 0 |
| | | | | | | | | | 2468 | | 360 | 3874 |

3890 × 1.005 =

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9-275 d
(Sept., 1927)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 10-15-46, 19____ No. of Meas.____

## SUPPLEMENTARY DISCHARGE MEASUREMENT NOTES

Brazos R. at Richmond Tex.

Enter on this form ample notes in regard to the following:

1. Accuracy of measurement; 2, gage; 3, observer; 4, bench marks; 5, gage-height corrections; 6, adjustments to total discharge; 7, station equipment; 8, channel, control, and point of zero flow; 9, rating, backwater; 10, diversions, regulation; 11, records; 12, cooperation.

### Recorder Inspection

| | | | |
|---|---|---|---|
| Pencil | Turn 3B | Record | clear |
| Wt. Adj. | no | Chart time | 15m Sl. |
| Paper | dry | Clock Reg. | no |

Water over lower platform, well not inspected for silt. Float-tape ok on counter wt. end.

No. 1 of 1 sheets

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