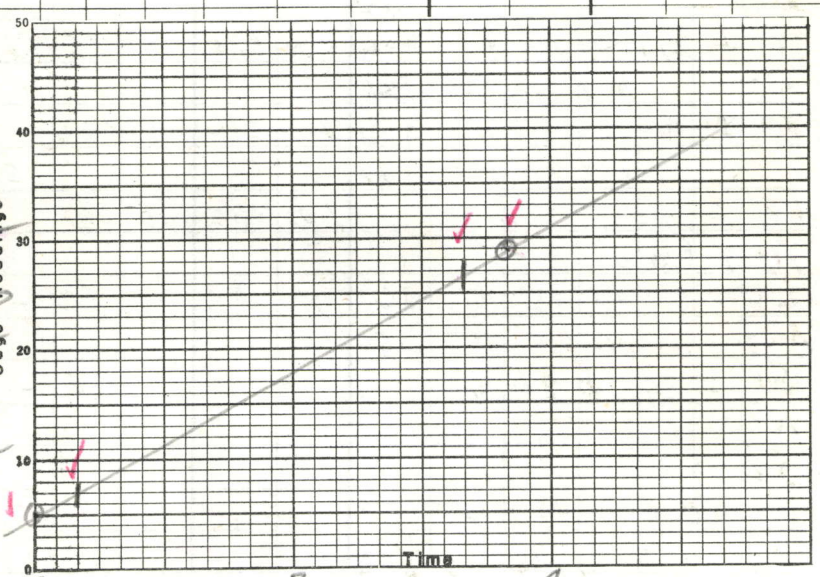
Brazos River at Richmond, Tex.

| Dist. from initial point | Angle Coefficient | Depth | Depth of observation | Revolutions | Time in seconds | VELOCITY At point | VELOCITY Mean in section | Corr. Area | Area | Width | Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

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A-34 RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Water Resources Branch

DISCHARGE MEASUREMENT NOTES

Water temp. _____ °F
Air temp. _____ °F
Time _____

Meas. No. 428
Checked by CTW
Date 4-8-54
Byers

Brazos River at Richmond, Tex. 22,100

Date Oct. 29, 1953 Party Sansom & Dolman
Width 404 Area 5640 Vel. 4.45 G.H. 14.32 Disch. 25,100
Method 2-8 No. Secs. 30 G. H. Chng. +.13 ft. per hr. Time meas. 1.5 hrs.
Meter No. 2827 Date Rated 3-22-49 Susp. 100 Cl.0 Susp. Coef. 1.00
Method Coef. 1.00 Hor. angle Coef. Noted Used rating for, rod Rod Susp.
Meter 1.00 ft. above bottom of weight
Spin before meas. OK after OK
Wading, cable, ice, boat, upstr., downstr., side bridge _____ feet, mile, above, below gage, and _____
Chain, wire, found 58.70 at _____ G-Sta.
Changed to — at _____
Correct length 58.68
Levels Obtained No
Measurement rated, excellent (2%), good (5%) fair (8%), poor (over 8%) based on following
Cross section fairly uniform - sand
Flow fairly smooth Weather clear - cool
Other —
Gage OK
Record removed No Intakes flushed No
Pencil 3B-OK Wt. Adj. No Paper Dry
Record clear Chart time OK Clock Reg. No
Observer not seen
Control channel

GAGE READINGS

| Time | Meas | Recorder | Tape | Inside | Outside |
|---|---|---|---|---|---|
| 2:00pm | | | 14.20 | | 14.20 |
| 2:10pm | Start | | (14.22) | | |
| 3:40pm | End | | (14.41) | | |
| 3:50pm | | | 14.44 | | 14.44 |
| 3:52pm | | WW = | 14.55 | | |
| ~~Weighted~~ MGH | | | 14.32 | | |
| GH Corr. | | | | | |
| Correct MGH | | | | | |

Remarks Considerable drift encountered - X-sect on left bank needs cleaning - WW = 14.55 @ 3:52 pm

Page 1 of 4 G.H. of zero flow — ft.

Brazos River at Richmond

| Dist. from initial point | Angle Coefficient | Depth | Depth of observation | Revolutions | Time in seconds | VELOCITY At point | VELOCITY Mean in section | Corr. Area | Area | Width | Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LEW | | | 2:10 PM | | | Cable 100 C1.0 | | #2827 | | | |
| 456 | | 0 | | V=0 | | | | 0 | | 4 | 0 |
| | | Trees | 2 | | | | | | | | |
| 448 | | 12 | | V=0 | | | | ~~30~~ 18 | | 15 | 0 |
| | | Trees | 2 | | | | | | | | |
| 426 | | 3.6 | Est V= | | | 0.10 | | .68 | | 19 | ~~10~~ 6.8 |
| 410 | 1 | 6.1 | 12 | 10 | 55 | .42 | .34 | .94 | | 15½ | 32.0 |
| | | | 49 | 5 | 45 | .26 | | | | | |
| 395 | 1 | 13.6 | 27 | 50 | 40 | 2.75 | 2.60 | 204 | | 15 | 530 |
| | | | 109 | 50 | 45 | 2.45 | | | | | |
| 380 | 1 | 15.9 | 32 | 80 | 47 | 3.73 | 3.24 | 238 | | 15 | 774 |
| | | | 127 | 50 | 40 | 2.75 | | | | | |
| 365 | 1 | 16.4 | 3.4 | 80 | 41 | 4.27 | 3.96 | 246 | | 15 | 974 |
| | | | 13.0 | 80 | 48 | 3.66 | | | | | |
| 350 | 1 | 16.6 | 33 | 100 | 47 | 4.66 | 4.42 | 249 | | 15 | 1100 |
| | | | 133 | 80 | 42 | 4.17 | | | | | |
| 335 | 1 | 17.5 | 35 | 100 | 44 | 4.97 | 4.48 | 262 | | 15 | 1170 |
| | | | 14.0 | 80 | 44 | 3.99 | | | | | |
| 320 | 1 | 16.2 | 32 | 100 | 40 | 5.46 | 5.11 | 243 | | 15 | 1240 |
| | | | 13.0 | 100 | 46 | 4.76 | | | | | |
| 305 | 1 | 15.8 | 32 | 150 | 59 | 5.56 | 5.16 | 237 | | 15 | 1220 |
| 4° | | | 12.6 | 100 | 46 | 4.76 | | | | | |
| 290 | 1 | 15.5 | 31 | 100 | 40 | 5.46 | 5.11 | 232 | | 15 | 1190 |
| 4° | | | 12.4 | 100 | 46 | 4.76 | | | | | |
| 275 | 1 | 15.4 | 31 | 100 | 42 | 5.21 | 4.74 | 231 | | 15 | 1090 |
| 4° | | | 12.3 | 80 | 41 | 4.27 | | | | | |
| 260 | 1 | 15.4 | 31 | 100 | 40 | 5.46 | 4.82 | 231 | | 15 | 1110 |
| 5° | | | 12.3 | 80 | 42 | 4.17 | | | | | |
| 245 | 1 | 14.4 | 29 | 150 | 54 | 6.07 | 5.58 | ~~227~~ 215 | | 15 | 1210 |
| 5° | | | 11.5 | 100 | 43 | 5.09 | | | | | |

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| Dist. from initial point | Angle Coefficient | Depth | Depth of observation | Revolutions | Time in seconds | VELOCITY At point | VELOCITY Mean in section | Corr. Area | Area | Width | Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 1210 |
| 230 | 1 | 14.1 | 2.8 | 150 | 54 | 6.07 | 5.70 | 212 | | 15 | ~~1180~~ |
| 5° | 3:04 PM | | 11.3 | 100 | 41 | 5.33 | | | | | |
| 215 | 1 | 14.0 | 2.8 | 150 | 55 | 5.96 | 5.71 | 210 | | 15 | 1200 |
| 5° | | | 11.2 | 100 | 40 | 5.46 | | | | | |
| 200 | 1 | 14.7 | 29 | 150 | 56 | 5.85 | 5.30 | 220 | | 15 | 1170 |
| 5° | | | 11.8 | 100 | 46 | 4.76 | | | | | |
| 185 | 1 | 15.3 | 31 | 100 | 42 | 5.21 | 5.27 | 230 | | 15 | 1240 |
| 5° | | | 12.2 | 100 | 41 | 5.33 | | | | | |
| 170 | 1 | 16.1 | 32 | 100 | 42 | 5.21 | 4.71 | 242 | | 15 | 1140 |
| 5° | | | 12.9 | 100 | 52 | 4.21 | | | | | |
| 155 | 1 | 17.7 | 35 | 100 | 46 | 4.76 | 4.38 | 266 | | 15 | 1170 |
| 5° | | | 14.2 | 80 | 44 | 3.99 | | | | | |
| 140 | 1 | 18.8 | 3.8 | 100 | 46 | 4.76 | 4.66 | 282 | | 15 | 1310 |
| 4° | | | 15.0 | 100 | 48 | 4.56 | | | | | |
| 125 | 1 | 20.4 | 41 | 150 | 60 | 5.46 | 5.01 | 306 | | 15 | 1530 |
| 5° | | | 16.3 | 100 | 48 | 4.56 | | | | | |
| 110 | 1 | 21.6 | 4.3 | 100 | 44 | 4.97 | 4.28 | 324 | | 15 | 1390 |
| 5° | | | 17.3 | 80 | 49 | 3.58 | | | | | |
| 95 | 1 | 21.1 | 42 | 100 | 48 | 4.56 | 4.38 | 316 | | 15 | 1380 |
| 6° | | | 16.9 | 100 | 52 | 4.21 | | | | | |
| 80 | 1 | 16.0 | 32 | 80 | 46 | 3.81 | 3.62 | 216 | | 13½ | 782 |
| | | | 12.8 | 80 | 51 | 3.44 | | | | | 25190 |
| 68 | 0 | 10.0 | (V = 1.00) | | | 1.00 | 0 | 100 | | 10 | 13.8 |
| Neg flow | | | | | | | | | | | - 37.7 |
| | | | | | | | | | | | 25,078.1 |
| 60 | 1 | 6.0 | 1.2 | 15 | 41 | .82 | .70 | 39 | | 6½ | - 27.3 |
| Neg | | | 4.8 | 10 | 40 | .57 | | | | | |
| 55 | 1 | 2.4 | 1.4 | 20 | 43 | | 1.04 | 10 | | 4 | - 10.4 |
| Neg | | | | | | | | | | | 37.7 |
| 52 | | 0 | | | | | 0 | 0 | | 1½ | 0 |
| 456 | REW | | 3:40 PM | | | | | ~~565~~ 42 | | | 25070 |
| | | | | | | | | | | | - 30 |
| | TG | 14.44 @ 3:50 pm | | | | | | | | | 25060 |
| | OG | SWW = 14.55 @ 3:52 pm CB = 58.70 | | | | | | | | | |

Page 3 of 4 Comp. by: RWD Checked by: _____