CS

9-275-c
(July 1935)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES BRANCH

# DISCHARGE MEASUREMENT NOTES

Meas. No. 524

Checked by SHH

Date 1-6-58

Reviewed
[signature]
Engr. in chg.

BRAZOS RIVER at RICHMOND, TEXAS

Date Oct. 28, 1957 Party LAMAR & SAUER

Width 422 Area 7570 Vel. 3.63 G. H. _____ Disch. 27,500

Method .2-.6-.8 No. secs. 23 G. H. change -.11 in 1.4 hrs. Susp. 100 C 1.0

Method coef. 1.00 Hor. angle coef. noted Meter No. 2815 Susp. coef. 1.00

GAGE READINGS

| Time | | ~~Recorder~~ TAPE | ~~Inside~~ W.W | Outside |
|---|---|---|---|---|
| 10:21 AM | | 16.75 | 16.80 | 16.72± |
| 10:39 AM | Start | | (16.78) | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 12:02 PM | Finish | | (16.67) | |
| 12:33 PM | | 16.60 | 16.63 | |
| ~~Weighted~~ M. G. H. | | | *16.72 | |
| G. H. correction | | | | |
| Correct M. G. H. | | | | |

Date rated Feb 16, 1949 Used rating for rod — susp. Meter 1.0 ft. above bottom of wt. Tags checked —

Spin before meas. — after —

Meas. plots — % diff. from — rating

Wading, cable, ice, boat, upstr., downstr., side bridge at feet, mile, above, below gage, and _____

Chain, wire, found 58.70, changed to _____ at _____

Correct length 58.68

Levels obtained _____

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%), based on following conditions: Cross section UNIFORM

Flow swift in center Weather Cool & Cloudy

Other No appreciable Vertical Angles.

Gage * See below

Record removed NO Intake flushed NO

Observer Not seen

R/e -08/hr

Control BED & BANKS

Remarks * FOUND FLOAT WHEEL LOOSE — RESET CHART FALLING -0.08 ft/hr. * Use w wt.

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

U. S. GOVERNMENT PRINTING OFFICE 6—7440

9-275
September 1943

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date Oct. 28, 1957 **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 | AREA ~~Mean depth~~ | Width | Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 560 | LEW | | @ | 10:39 A.M | | | | | | 10 | 0 |
| .98 | 580 | 2.1 | 1.1 | 25 | 47 | 1.19 | | 1.19 | 51 | 52 | 25 | 60 |
| .80 | 610 | 6.6 | 1.3 | 30 | 40 | 1.67 | | 1.24 | 158 | 198 | 30 | 200 |
| | | | 5.3 | 15 | 43 | .80 | | | | | | |
| .96 | 640 | 9.4 | 1.9 | 40 | 43 | 2.06 | | 1.86 | 224 | 235 | 25 | 420 |
| | | | 7.5 | 30 | 40 | 1.67 | | | | | | |
| .97 | 660 | 13.8 | 2.8 | 40 | 47 | 1.89 | | 2.12 | 268 | 276 | 20 | 570 |
| | | | 11.0 | 50 | 47 | 2.35 | | | | | | |
| .99 | 680 | 18.1 | 3.6 | 50 | 42 | 2.63 | | 2.89 | 358 | 362 | 20 | 1000 |
| | | | 14.5 | 60 | 42 | 3.15 | | | | | | |
| .99 | 700 | 20.2 | 4.0 | 60 | 41 | 3.22 | | 3.22 | 400 | 404 | 20 | 1290 |
| | | | 16.2 | 60 | 41 | 3.22 | | | | | | |
| .99 | 720 | 20.4 | 4.1 | 80 | 50 | 3.52 | | 3.56 | 404 | 408 | 20 | 1440 |
| | | | 16.3 | 80 | 49 | 3.59 | | | | | | |
| .99 | 740 | 21.3 | 4.3 | 80 | 45 | 3.91 | | 3.76 | 422 | 426 | 20 | 1580 |
| | | | 17.0 | 80 | 50 | 3.52 | | | | | | |
| .99 | 760 | 22.0 | 4.4 | 80 | 44 | 4.00 | | 3.76 | 436 | 440 | 20 | 1640 |
| | | | 17.6 | 80 | 50 | 3.52 | | | | | | |
| .99 | 780 | 22.5 | 4.5 | 100 | 49 | 4.67 | | 4.45 | 446 | 450 | 20 | 1980 |
| | 11:22 AM | | 18.0 | 100 | 52 | 4.23 | | | | | | |
| .99 | 800 | 23.5 | 4.7 | 80 | 40 | 4.39 | | 4.39 | 470 | 475 | 20 | 2060 |
| | | | 18.8 | 80 | 40 | 4.39 | | | | | | |

No. 2 of 4 Sheets. Comp. by VBS & LLL Chk. by

9-275
September 1943

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

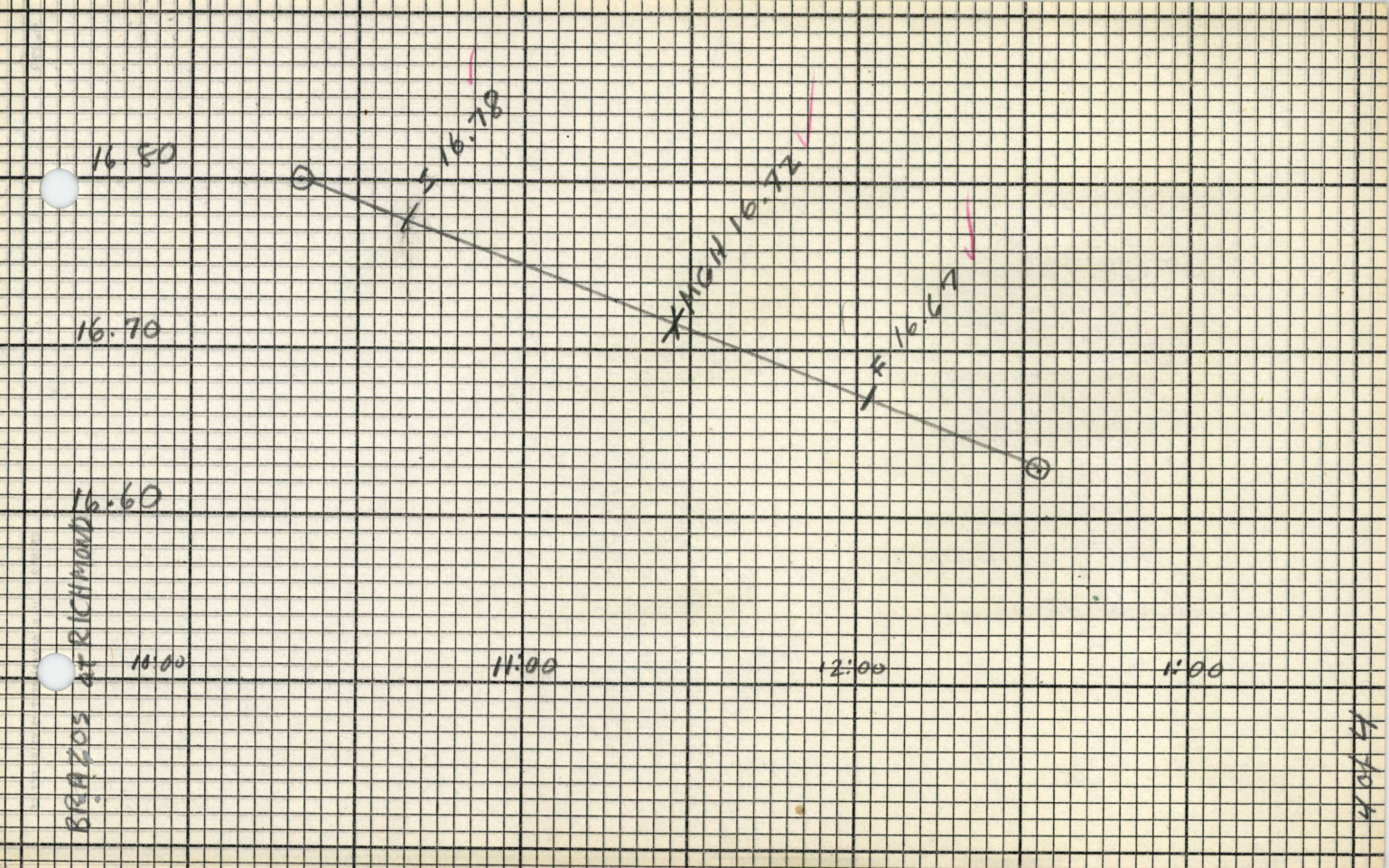
Date Oct. 28, 1957 **DISCHARGE MEASUREMENT NOTES**

BRAZOS River at RICHMOND

| 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 | AREA Mean ~~depth~~ | Width | Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 12240 |
| .99 | 820 | 24.5 | 4.9 | 100 | 47 | 4.67 | | 4.53 | 485 | 490 | 20 | 2200 |
| | | | 19.6 | 80 | 40 | 4.39 | | | | | | |
| .99 | 840 | 26.6 | 5.3 | 100 | 46 | 4.77 | | 4.58 | 525 | 530 | 20 | 2410 |
| | | | 21.2 | 80 | 40 | 4.39 | | | | | | |
| | 860 | 28.7 | 5.7 | 100 | 45 | 4.88 | | 4.82 | 502 | 502 | 17.5 | 2420 |
| | 11:33 A.M | | 23.0 | 100 | 46 | 4.77 | | | | | | |
| REP .80 | 875 | 30.0 | 6.0 | 100 | 47 | 4.67 | | 4.34 | 180 | 225 | 7.5 | ~~780~~ 800 |
| | | | 24.0 | 80 | 42 | 4.19 | | | | | | |
| ©LEP .96 | 883 | 33.5 | 6.8 | 80 | 52 | 3.39 | | 4.32 | 274 | 285 | 8.5 | 1180 |
| | | | 26.7 | 100 | 42 | 5.23 | | | | | | |
| ⊥ | 900 | 32.4 | 6.5 | 80 | 42 | 4.19 | | 2.98 | 600 | 600 | 18.5 | 1790 |
| | | | 25.9 | 40 | 50 | 1.78 | | | | | | |
| ⊥ | 920 | 24.9 | 5.0 | 80 | 41 | 4.29 | | 3.16 | 498 | 498 | 20 | 1570 |
| | 11:54 A.M | | 19.9 | 40 | 44 | 2.02 | | | | | | |
| ⊥ | 940 | 21.5 | 4.3 | 80 | 42 | 4.19 | | 3.79 | 430 | 430 | 20 | 1630 |
| | | | 17.2 | 80 | 52 | 3.39 | | | | | | |
| .99 | 960 | 17.0 | 3.4 | 60 | 43 | 3.08 | | 2.86 | 337 | 340 | 20 | 960 |
| | | | 13.6 | 50 | 42 | 2.63 | | | | | | |
| .99 | 980 | 6.8 | 1.4 | 60 | 45 | 2.94 | | 2.91 | 101 | 102 | 15 | 290 |
| | | | 5.4 | 60 | 46 | 2.88 | | | | | | |
| | 990 | 0 | | | | 0 | | | | | 5 | — |
| | | REW @ 12:02 P.M. | | | | | | | 9569 | | 422 | 27480 |
| | | | | | | | | | 6 | | | 6 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

~~430~~ 428

No. 3 of 4 Sheets. Comp. by VBS & LLL Chk. by


16.80
16.70
16.60
S 16.78
MGH 16.72
F 16.67
10:00
11:00
12:00
1:00
BRAZOS at RICHMOND
4 of 4