9-275 c
(July 1935)

RECORDED
RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

Meas. No. 242
Checked by NAP
Date 7-21-44

Brazos River at Richmond, Tex.

Date May 4, 1944 Party Goines and Longacre

Width 443 Area 13,300 Vel. 6.52 G. H. _____ Disch. 87,000

Method 12 No. secs. 23 G. H. change +0.13 in 0.9 hrs. Susp. 100C/0

Method coef. .98 Hor. angle coef. 1.00 Meter No. 1705 Susp. coef. 1.00

GAGE READINGS Tape

Time	G. W. T.	Recorder	Inside	Outside
6:35	p.m.	27.70	27.70	27.8± 0.4
6:55	Start		(27.74)	
7:50	Finish		(27.87)	
8:25	p.m.	27.95	27.95	28.1± 0.4
	Finish			
Weighted M. G. H.			27.80	
G. H. correction				
Correct M. G. H.				

Date rated Apr. 9, 1942 Used rating for rod Rod susp. Meter 1.0 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 —, changed to — at —
Correct length —
Levels obtained no

Measurement rated ~~excellent (2%)~~, good (5%), fair (8%), ~~poor (over 8%)~~, based on following conditions: Cross section See X-Sect. attached to meas. 5/3/44
Flow Smooth Weather Favorable
Other —
Gage ok
Record removed No Intake flushed No
Observer —
Control Channel
Remarks Rising 0.13 ft./hr.

Sheet No. 1 of 2 sheets. G. H. of zero flow _____ ft.

U. S. GOVERNMENT PRINTING OFFICE 6—7440

80 • 75 •

T
P > 27.70
o 27.8 ± 0.4 6:35 pm

17.8
35.6

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

9-275
January 1935

85 •

Date 5/4/44, 19___ **DISCHARGE MEASUREMENT NOTES**

Brazos River, at Richmond, Tex.

90 •

6:55

Dist. from initial point	Angle Coefficient	Depth	Depth of observation	Revolutions	Time in seconds	VELOCITY At point	VELOCITY Mean in vertical	VELOCITY Mean in section	Area	Mean depth	Width	Discharge
LEW 496		0						0	0		18	0
460	⊥	16.2	3.2	60	44			3.06	535		33	1640
430		27.9	4.6	100	47			4.76	837		30	3980
400		33.5	6.7	80	40			4.48	837		25	3760
7:05 to 7:15 out												
380	*	33.7	5.1	150	56			5.99	674		20	4030
360		34.4	5.1	100	31			7.21	688		20	4960
340		35.0	5.4	75	21			7.98	700		20	5590
320		34.7	5.7	75	21			7.98	694		20	5540
7:20												
300		35.6	5.8	75	21½			7.80	712		20	5560
280		36.0	5.9	75	21			7.98	720		20	5750
260		35.1	6.1	100 ~~75~~	27½ ~~21~~			8.13	702		20	5700
240		35.3	6.2	100 ~~100~~	28 ~~27½~~			7.98	706		20	5640

No. 2 of 3 Sheets. Comp. by WHG JKL Chk. by

75 •

U. S. GOVERNMENT PRINTING OFFICE 16—26076-1

* See X-Sect attached to meas. of 5/3/44

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

9-275
January 1935

Date 5/4/44, 19__ **DISCHARGE MEASUREMENT NOTES**

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 vertical	VELOCITY: Mean in section	Area	Mean depth	Width	Discharge
220		34.9	6.2	~~75~~ 100	~~20~~ 28			8.38	698		20	5850
200		35.4	6.3	~~100~~ 75	~~27~~ 20			8.28	708		20	5860
~~2~~		7.30										
180		36.9	6.4	~~150~~ 100	~~41~~ 27			8.18	738		20	6040
160		35.3	6.5	160	44			7.62	706		20	5380
140		35.1	6.4	75	22			7.62	702		20	5350
120		35.7	6.7	100	30½			7.33	625		17½	4580
105		34.3	6.2	75	22¼			~~7.54~~ 7.45	429		12½	~~3240~~
95		29.8	5.3	150	44			7.62	372		12½	2840
80		21.4	4.3	150	49			6.85	268		12½	1840
70		16.2	3.2	80	42			4.27	218		13½	930
53 REW		0						0	0		8½	0
									1326.9			94,010
	From discharge relation curve											× 93
	Coeff. to convert $Q_{.2}$ to Q = 0.93 ($Q_{.2}$ to $Q_{.8}$)											87429

No. 3 of 3 Sheets. Comp. by WHG JKL Chk. by MKP

U. S. GOVERNMENT PRINTING OFFICE 16—26076-1