9-275 c
(July 1935)

RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

Meas. No. 279
Checked by MAF
Date 3-7-46

Brazos River at Richmond Tex.

Date Feb. 21, 1946 Party W. H. Gaines

Width 419 Area 7700 Vel. 5.29 G. H. ____ Disch. 40700

Method 2 No. secs. 24 G. H. change +0.06 in 1.0 hrs. Susp. 100%

Method coef. 0.93 Hor. angle coef. Rated Meter No. 1791 Susp. coef. 1.00

GAGE READINGS (Tape)

Time		Recorder	~~Inside~~	Outside
9:50 a.m.		18.80	18.78	18.8±.3
10:30	Start		(18.85)	
11:30	Finish		(18.89)	
12:10 p.m.		18.95	18.94	—
1:07 p.m.		19.00	18.98+	19.2±.3
9:45 a.m.	~~Finish~~	USWB	w-wt.	18.98
12:05 p.m.		do		19.07
~~Weighted~~ M. G. H.			18.86	
G. H. correction				
Correct M. G. H.				

Date rated June 1 1943 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 220 feet, ~~mile~~, ~~above~~, below
gage, and —
~~Chain~~, wire, found 58.59,
changed to no at
Correct length 58.57
Levels obtained no

Measurement rated ~~excellent~~ (2%), good (5%), ~~fair~~ (8%), ~~poor~~ (over 8%), based on following conditions: Cross section Uniform
Flow Smooth Weather Favorable
Other Some drift flowing
Gage ok
Record removed No Intake flushed No
Observer —
Control Channel
Remarks Set slope stakes on left bank

RATE OF CHANGE IN STAGE: +0.06 ft./hr.

Sheet No. 1 of 3 sheets. G. H. of zero flow ____ ft.

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12:05
ww 19.07

T 18.94
D 18.95
12:10pm

9-275
January 1935

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 2/21/46, 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	Corr. Area	Mean depth / Area	Width	Discharge
210	99	20.9 21.0	4.2	150	52			6.58	414	418	20	2730
190	⊥	22.3 22.5	4.5	150	49			6.98	446		20	3110
170	99	23.3 23.4	4.7	150	55			6.22	461	466	20	2870
→		11:15 a.m.										
150	⊥	24.2 24.3	4.9	100	43			5.31	484		20	2580
130		25.8	5.2	100	42			5.43	516		20	2800
110	⊥	27.2	5.4	100	46			4.96	408		15	2030
100	⊥	25.1	5.0	100	43			5.31	251		10	1330
90	⊥	20.1	4.0	100	44			5.19	201		10	1040
80		15.1	3.0	80	42			4.35	151		10	660
												43830
70		8.7	1.7	V=0				0	70		8	0
				Neg. Flow								
64		7.1	1.4	15	54			.65	50		7	-30
										769		
56		0						0	0		4	0
REW	From 1943 curve coeff to convert										4	43,800
	Q_2 to Q_{2-8} is 0.93											x.93
												40,700

11:30

No. 3 of 3 Sheets. Comp. by W.H.G. Chk. by MAF

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80 • 75 • .2

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

9-275
January 1935

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Date 2/21/46, 19 ___ DISCHARGE MEASUREMENT NOTES

Brazos River, at Richmond, Tex.

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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	Corr. Area	~~Mean depth~~ Area	Width	Discharge
10:30												
	WR 1791			100 C 1.0								
LEW 475		0						0	0		7½	0
460	⊥	10.1	2.0	50	43			2.67	202		20	540
435	⊥	13.6	2.7	80	46			3.98	340		25	1360
410	⊥	15.8	3.2	100	48			4.76	395		25	1880
385	⊥	16.9	3.4	150	59			5.80	422		25	2450
360	.99	17.2	3.4	150	55			6.22	426	430	25	2650
4° vert ∡		17.6		Drift								
335	99	~~17.7~~	3.5	100	36			6.34	436	440	25	2760
4° 32'		18.3										
310	99	~~18.4~~	3.7	150	56			6.11	408	412	22½	2500
→ 10:50 am				Drift								
4° 32'		19.1										
290	99	~~19.2~~	3.8	100	36			6.34	378	382	20	2400
6° 32'		20.1										
270	.99	~~20.3~~	4.1	150	55			6.22	398	402	20	2480
6° 32'		21.0										
250	99	~~21.2~~	4.2	150	52			6.58	416	420	20	2740
6° 32'		21.5										
230	99	~~21.7~~	4.3	150	50			6.84	426	430	20	2920

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