9-275 c
(July 1935)

RECORDED

Water temp. 60 °F

Air temp. 66 °F

Time 3:30 p.m.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

Meas. No. 371

Checked by RHD

Date 3-21-51

Brazos River at Richmond, Tex.

Date Mar. 20, 1951 Party W. H. Goines

Width 327 Area 422 Vel. 1.83 G. H. — Disch. 774

Method 2-8 No. secs. 35 G. H. change +0.01 in 8 hrs. Susp. Rod

Method coef. 1.00 Hor. angle coef. As noted Meter No. 1153 Susp. coef. 1.00

GAGE READINGS (Tape)				
Time		Recorder	~~Inside~~	Outside
1:15 p.m.	U.S. WB-W-Wt.			1.70± 0.05
1:20	~~Start~~		1.72	
1:35			1.72	
2:35	Start		(1.72+)	
3:25	Finish		(1.73)	
4:10 p.m.			1.73	1.74± 0.02
	~~Finish~~			
~~Weighted~~ M. G. H.			1.73	
G. H. correction				
Correct M. G. H.				

Date rated 11/16/44 Used rating for rod Rod susp. Meter — 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 2 ~~feet~~, mile, ~~above~~, below gage, and near low water control

~~Chain~~, wire, found 58.69, changed to no at

Correct length 58.68

Levels obtained —

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

Flow Smooth Weather favorable

Other

Gage ok, well is clean

Record removed Yes Intake flushed Yes

Observer —

Control clean - sand & gravel bars

Remarks Pk. stage indicator on float tape found at 3.00 Reset at 1.7

Rising 0.01 ft/hr

Sheet No. 1 of 5 sheets. G. H. of zero flow — ft.

U. S. GOVERNMENT PRINTING OFFICE 6—7440

9-275
January 1935

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 3/20/51, 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
2:35 p.m. REW												
7		0						0	0		1½	0
10		.3	.12	3	40			.19	2.0		6½	.4
20	⊥	.8	.48	15	47			.72	8.0		10	5.8
30		1.1	.66	20	42			1.07	11.0		10	11.8
40		1.3	.78	20	43			1.04	13.0		10	13.5
50	⊥	1.6	.32	25	44	1.27		1.12	16.0		10	17.9
			1.28	20	46	.98						
60	⊥	1.5	.90	30	50			1.34	15.0		10	20.1
70		1.4	.84	30	42			1.59	14.0		10	22.2
80		1.3	.78	40	52			1.71	13.0		10	22.2
90		1.3	.78	30	40			1.67	13.0		10	21.7
100	⊥	1.1	.66	30	42			1.59	11.0		10	17.5
110	99	1.1	.66	40	53			1.68	10.9	11.0	10	18.3

No. 2 of 5 Sheets. Comp. by WHG Chk. by RHD

9-275
January 1935

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 3/20/51, 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
120	97	1.3	.78	40	46			1.93	12.6	13°	10	24.3
130	.96	1.4	.84	50	53			2.09	13.4	14°	10	28.0
140	.96	1.4	.84	50	52			2.13	13.4	14°	10	28.6
150	93	1.4	.84	50	49			2.26	13.0	14°	10	29.4
160	.90	1.4	.84	50	44			2.51	12.6	14°	10	31.6
170	85	1.7	.34	50	43	2.57		2.12	14.4	17°	10	30.5
			1.36	30	40	1.67						
180	86	1.6	.96	40	44			2.02	13.8	16°	10	27.9
190	87	1.8	.36	50	43	2.57		2.12	15.5	18°	10	32.8
			1.44	30	40	1.67						
200	86	1.6	.96	50	49			2.26	13.8	16°	10	31.2
210	90	2.0	.40	50	48	2.31		1.92	18.0	20°	10	34.6
			1.60	30	44	1.52						
220	90	1.8	.36	50	48	2.31		2.01	16.2	18°	10	32.5
			1.44	40	52	1.71						
230	93	1.8	.36	50	49	2.24		2.04	16.8	18°	10	34.3
			1.44	40	49	1.81						

No. 3 of 5 Sheets. Comp. by W. H. G. Chk. by RHD

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COW 3/

9-275
September 1943

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

Date 3/20/51, 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	Area (Corr)	Mean depth (Area)	Width	Discharge
.94	240	1.5	.90	40	43			2.06	14.1	1.5	10	29.0
.96	250	1.6	.96	40	46			1.93	15.4	1.6	10	29.7
.96	260	1.8	.36	40	42	2.11		1.76	17.3	1.8	10	30.6
			1.44	30	47	1.42						
.97	270	1.3	.78	40	40			2.22	12.6	1.3	10	28.0
.97	280	1.4	.84	40	48			1.85	13.6	1.4	10	25.2
.92	290	.8	.48	40	42			2.11	7.4	.8	10	15.6
.96	300	1.2	.72	40	40			2.22	11.5	1.2	10	25.6
.99	310	1.3	.78	40	40			2.22	12.9	1.3	10	28.6
1	320	1.2	.72	30	46			1.45	12.0	1.2	10	17.4
1	330	.7	.42	30	48			1.39	4.9		7	6.8
	334	0						0	0		2	0
	LEW											
3.26									422.1		327	273.6

No. 4 of 4 Sheets. Comp. by WHG Chk. by RHD

9-275 d
(Sept., 1927)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 3/20/51, 19____ No. of Meas.____

SUPPLEMENTARY DISCHARGE MEASUREMENT NOTES

Brazos River 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	Turq. 3B	Record	clear
Wt. Adj.	no	Chart time	2 hr sl.
Paper	dry	Clock Reg.	1 div F

No. 5 of 5 sheets