9-275 c
(July 1935)

RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

Meas. No. 141

Checked by

Date

Brazos River at Richmond, Tex.

Date July 6, 1939 Party Gaines and Fry

Width 35.1 Area 239.0 Vel. 1.67 G. H. 6.44 Disch. 399.0

Method 0.6-8 No. secs. 24 G. H. change -0.03 in 1.2 hrs. Susp. 506.9

Method coef. 1.00 Hor. angle coef. 1.00 Meter No. 970 Susp. coef. 1.00

GAGE READINGS				
Time		Recorder	Inside	Outside
8:50 a.m.		Wire wt.		6.56
8:56	Start		Tape	
1:00 p.m.		6.46+	6.46+	6.47+
2:30	Start	6.45-		
3:39	Finish	6.42+		
4:10		6.42	6.42	
4:10		Wire wt.		6.44
	Finish			
Weighted M. G. H.		6.44		
G. H. correction				
Correct M. G. H.				

Date rated 8/10/38 Used rating for rod Red susp. Meter 0.9 ft. above bottom of wt. Tags checked

Spin before meas. St after St

Meas. plots — % diff. from — rating

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

Chain, wire, found 58.57, changed to No at

Correct length 58.57

Levels obtained

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

Flow Smooth Weather Favorable

Other —

Gage 1k see sheet 5

Record removed Yes Intake flushed See Sheet 5

Observer —

Control —

Remarks Rate of change in stage -0.02 ft/hr.

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

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9-275
January 1935

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 7/6/39, 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
	Start		2:30 pm									
REW 96		0					0					
								.20	4.0		4	1
100	⊥	2.0	1.1	10	56		.41					
								.62	46.5	93	10	29
110	⊥	7.3	1.5	15	41½	.81	.82					
			5.8	15	41	.82						
								1.12	150		15	168
125	⊥	12.7	2.5	30	45½	1.46	1.41					
			10.2	30	49	1.36						
								1.56	185	1235	15	288
140		12.0	2.4	40	46½	1.90	1.71		93		352	
			9.6	30	43½	1.52						
								1.86	176	11.7	15	328
155		11.4	2.3	50	50½	2.19	2.00					
			9.1	40	48⅓	1.82						
								1.97	166		15	327
170		10.7	2.1	40	41½	2.14	1.94					
			8.6	40	50½	1.75						
								1.90	157	1047	15	298
186		10.2	2.0	50	51½	2.15	1.86					
			8.2	30	42½	1.56						
								1.88 ~~1.83~~	148	98	15	276 ~~271~~
200		9.5	1.9	50	49½	2.23	1.80					
			7.6	30	42	1.58						

No. 2 of 5 Sheets. Comp. by W.H.G. Chk. by [illegible]

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Date 7/6/39, 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
							1.90	1.94	137	9.15	15	266 ~~260~~
215		8.8	1.8	50	49	2.25	1.99		27.8			
			7.0	40	51	1.73						
								1.94	130	8.7	15	252
230		8.6	1.7	50	49½	2.23	1.90					
			6.9	40	56	1.58						
								1.87	123		15	230
245		7.8	1.6	40	41	2.16	1.84					
			6.2	30	43½	1.52						
	3:10 p.m.							1.86	112	7.5	15	209
260		7.2	1.4	60	62	2.13	1.88					
			5.8	40	54	1.64						
								1.87	108		15	202
275		7.2	1.4	40	44	2.01	1.86					
			5.8	40	52	1.70						
								1.80	107		15	193
290		7.1	1.4	40	46½	1.90	1.73					
			5.7	30	42½	1.56						
								1.77	99.7	6.65	15	177
305		6.2	1.2	40	42½	2.08	1.81					
			5.0	30	43	1.54						
								1.74	96.8	6.45	15	168
320		6.7	1.3	40	47	1.88	1.66					
			5.4	30	46½	1.44						
								1.64	95.2	6.35	15	156

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

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UNITED STATES
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WATER RESOURCES BRANCH

Date 7/6/39, 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
335		6.0	1.2	40	50	1.77	1.61					
			4.8	30	46	1.45						
								1.56	91.5	6.1	15	143
350		6.2	1.2	40	52	1.70	1.52					
			5.0	30	49½	1.34						
								1.32	85.5	5.7	15	113
365		5.2	1.0	30	56½	1.18	1.13					
			4.2	20	41	1.08						
								1.16	67.5	4.5	15	78
380		3.8	2.3	30	56½		1.18					
								1.03	44.2	2.9	15	46
395		2.1	1.3	20	51		.88					
								.82	28.5	1.9	15	23
410		1.7	.8	15	45		.75					
								.56	26.0		20	15
430		.9	V = ½ ∫	410			.38					
								.19	7.6		17	1
447		0					0					
Rt EW												3989
		3:29 pm							2391.0			~~3973~~

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9-275 d
(Sept., 1927)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 7/6/39, 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 Installed Turg. B Set 6 lbs 0.01 Low : Record —

Wt. Adj. — : Chart time —

Paper — : Clock Reg. —

Removed Au Recorder Modle CS-BT, No 839-30
do Au Clock No 32
Installed Stevens Recorder Type A-35 No 6052 39
do Combination Clock No 24 6653 New 4/19/39

Found and cleaned 6.0 ft mud from well
Lowest intake not flushed - other 3 flushed
Intakes below 29 left closed.

Tape gage set by w.s. to read same as l.g.

No. 5 of 5 sheets

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