9-275 c
(July 1935)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES BRANCH

RECORDED

DISCHARGE MEASUREMENT NOTES

Meas. No. 142

Checked by M.A.F.

Date 8/4/39

Brazos River at Richmond, Tex.

Date July 20, 1939 Party W.H. Goines

Width ~~187~~ 287 Area 1520 Vel. 0.84 G. H. _____ Disch. 1,270

Method 2-8 No. secs. 20 G. H. change -.01 in 1.0 hrs. Susp. 306.5

Method coef. 1.00 Hor. angle coef. 1.00 Meter No. 1319 Susp. coef. 1.005

GAGE READINGS

Time		Recorder	Inside	Outside
12:25 pm		3.82	3.82	3.82
5:23	~~Start~~	3.77	3.78-	Tape
6:00	Start	3.77-		
6:58	Finish	3.76		
7:18 pm		3.76-	3.76-	Tape
	Finish			
7:25 pm	O.S.W.B. Wire wt			3.77± 0.02
Weighted M. G. H.		3.76		
G. H. correction				
Correct M. G. H.				

Date rated Oct. 31, 1938 Used rating for rod Rod susp. Meter 0.5 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 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 Light showers

Other —

Gage ok

Record removed ~~Yes~~ No Intake flushed Yes

Observer —

Control —

Remarks Found 2.3' mud cleaned 2.0'
Falling 0.01 ft/hr.

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

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Date 7/20/39, 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
	54	6:00 pm										
LEW ~~411~~ 389		0					0					
								.29	6.3		9	2
~~420~~		1.4	.8	15	58		.58					
380								.56	27.0		15	15
365 ~~435~~		2.2	1.3	10	43		.53					
								.50	42.0		15	21
350		3.4	.7	10	42	54	.48					
			2.7	10	54	.42						
								.49	52.5		15	26
335		3.8	.7	15	56½	.60	.50					
			2.9	7	40	.40						
								.57	58.5		15	33
320		4.2	.8	15	47	.72	.64					
			3.4	10	41½	.55						
								.65	63.0		15	41
305		4.2	.8	15	43½	.77	.66					
			3.4	10	47	.55						
								.62	63.0		15	39
290		4.2	.8	15	43½	.77	.58					
			3.4	10	57	.40						
								.69	58.5		15	40
275		3.6	.7	20	46½	.96	.80					
			2.9	15	52	.65						
								.85	58.5		15	50

No. 2 of 4 Sheets. Comp. by MRB. Chk. by H.H.F.

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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	Area	Mean depth	Width	Discharge
260 / 360		4.2	.8	25	46	1.20	.90					
			3.4	15	56½	.60						
								.87	66.0		15	58
245 / 345		4.6	.9	20	43	1.03	.84					
			3.7	15	53	.64						
								.89	73.5		15	65 / ~~72~~
220 / 330		5.2	1.0	25	49½	1.12	.94					
			4.2	15	45	.75						
								.98	81.8		15	80
215 / 315		5.1	1.1	25	47	1.18	1.02					
			4.6	20	52	.86						
								1.02	90.0		15	92
200 / 300		6.3	1.3	25	47½	1.17	1.02					
			5.0	20	51	.88						
								1.00	105		15	105
185 / 285		7.7	1.5	25	49	1.13	.98					
			6.2	15	40	.84						
								1.02	122		15	124
170 / 270		8.5 / ~~8.6~~	1.7	25	48½	1.14	1.06					
			6.8	20	45	.99						
								1.06	132		15	140
155 / 255		9.1	1.8	20	41	1.08	1.07					
			7.3	20	42	1.06						
								1.04	138		15	144

No. 3 of 4 Sheets. Comp. by WAG Chk. by M.A.F.

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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
~~140~~ 240		9.3	1.9	20	43½	1.02	1.04					
			7.4	20	44½	1.00						
~~125~~ 225								.86	145		15	125
		10.0	2.0	15	42½	~~.80~~ .79	~~.71~~ .70					
			8.0	15	54½	.62						
~~110~~ 210		5.1	1.0	10	55	~~.42~~ .62	~~.34~~ .44	~~.52~~ .57	113		15	~~59~~ 64
			4.1	5	46	26						
~~102~~ 202		0					0	~~.17~~ .22	20.4		8	~~2~~ 4
REW												1261
												~~1267~~

~~Subtract 100 from all abs. Nos.~~

6:58 pm

1.005 × 1267 = 1273

1.005 × 1261 = 1267

1516.0

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