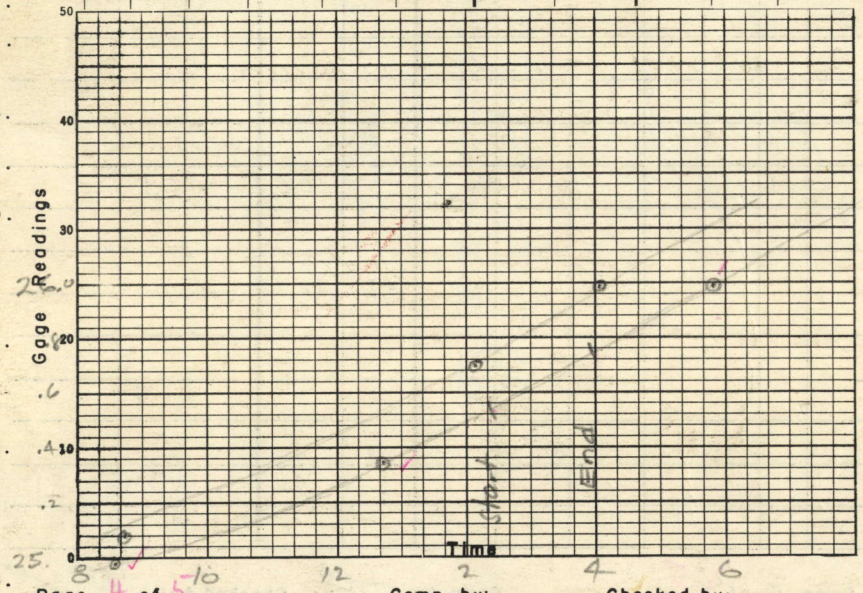
80. _____ River at _____

Dist. from initial point	Angle Coefficient	Depth	Depth of observation	Revolutions	Time in seconds	VELOCITY At point	VELOCITY Mean in section	Corr. Area	Area	Width	Discharge

85.
90.
92.
94.
96.
97.
98.
99.
99.
98.
97.
96.
94.
92.
90.
85.
80.
75.



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A-34 RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Water Resources Branch

DISCHARGE MEASUREMENT NOTES

Water temp. _____ °F

Air temp. _____ °F

Time _____

Meas. No. 514

Checked by [illegible]

Date _____

Brazos River at Richmond, Tex.

Date May 14, 1957 Party Porterfield, Welborn, Sansom & Porterfield HH.

Width 474 Area 12,700 Vel. 4.79 G.H. _____ Disch. ~~60,800~~ 59,900 | 53,800

Method .2.8 No. Secs. 23 G.H. Chng. +.13 ft. per hr. Time meas. 1.5 hrs.

Meter No. 1847 Date Rated Apr. 18, 56 Susp. 100 c/o Susp. Coef. 1.00

Method Coef. 1.00 Hor. angle Coef. Noted Used rating for, rod Rod Susp.

GAGE READINGS

Time	Meas	Recorder	Tape	Inside	Outside
8:35 am		24.95	24.95		
8:45				ww	25.08
12:45 pm			25.35±.3		
2:07 pm				w.w	25.73
2:12 pm		25.60±.4	25.6		25.6±.4
2:25 pm Start			(25.54)		
3:55 pm End			(25.74)		
4:05 pm				ww	25.98
5:50 pm		25.95	25.95		
~~Weighted~~ MGH			25.64		
GH Corr.					
Correct MGH					

Meter 1.0 ft. above bottom of weight

Spin before meas. OK after OK

Wading, cable, ice, boat, upstr., downstr., side bridge at feet, mile, above, below gage, and using 4 wheel Columbus hand crane

Chain, wire, found 58.70 at 298 G-Sta.

Changed to _____ at _____

Correct length 58.68

Levels Obtained _____

Measurement rated, excellent (2%), good (5%) fair (8%), poor (over 8%) based on following

Cross section uniform - sand

Flow Fairly smooth - turb. at piers Weather clear

Other —

Gage *OK

Record removed No Intakes flushed No

Pencil None Wt. Adj. No Paper Dry

Record surging - blotted ink surge Chart time [illegible] Clock Reg. [illegible]

Observer USWB - not seen

See p. 5 for .2 depth coefficient

Control is channel.

Remarks *Pen coeriage found disconnected from pin on drive chain. Replaced. Surge in well may cause pin to become disengaged again. Upstream handrail marked off with kiel from right to left. Velocity obs. may be in error from Sta. 380 to 460

Page 1 of ~~4~~ 5 G.H. of zero flow _____ ft.

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 section	Corr. Area	Area	Width	Discharge
94		O REW @ 2:25 pm				0	0	0		8	0
110	99	15.5	3.1	60	46	2.89	2.70	276	279	18	740
			12.5	50	44	2.52					
130	⊥	25.1	5.0	100	47	4.71	4.24	502		20	2130
			20.	80	47	3.77					
150	⊥	30.0	6.0	150	58	5.71	5.02	590		20	2,960
35' to W.S.		-.5	24	100	51	4.34					
170	⊥	32.1	6.3	150	57	5.81	5.54	626		20	3,470
		-.8	25.8	100	42	5.26					
190	⊥	37.8	7.3	100	41	5.39	5.15	551		15	2,840
		-1.1	30.5	100	45	4.91					
200	⊥	43.8	8.5	150	57	5.81	5.42	384		9	2,080
		-1.1	35.3	100	44	5.02					
208	⊥	(44)	Est'd = 3				(5.42)	352		8	1,910
Pier not out											
216	⊥	(44)	Est'd = 2				(6.21)	484		11	3,010
230	96	45.1	8.9	150	48	6.90	6.21	723	753	17	4,490
3:00 pm		-.8	36.2	150	60	5.52					
250	96	43.4	8.4	150	53	6.25	6.03	833	868	20	5,020
		-1.4	35.0	150	57	5.81					
270	96	42.5	8.4	150	54	6.14	5.92	818	850	20	4,830
		-.3	34.1	150	58	5.71					
290	97	41.7	8.0	100	40	5.52	5.33	972	1002	25	5,180
WW = 25.88 @		-1.1	31.7	100	43	5.14					
320	96	37.6	7.5	100	40	5.52	5.52	1074	1119	30	5,930
		-.3	30.1	100	40	5.52					
350	96	36.6	7.2	100	43	5.14	5.02	1051 / 1045	1089	30	5,250
		-.3	29.4	100	45	4.96					
380	96	32.6	6.5	100	45	4.90	4.56	930	969	30	4,610
		-.3	26.1	80	42	4.22					

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Dist. from initial point	Angle Coefficient	Depth	Depth of observation	Revolutions	Time in seconds	VELOCITY At point	VELOCITY Mean in section	Corr. Area	Area	Width	Discharge
								858	3	301	54 87
410	95	30.2	6.0	60	43	3.09	3.16	861	904	30	2,720
	(.10)		24.2	80	55	3.22					
440	95	23.2	4.6	50	45	2.47	2.56	551	580	25	1,410
			18.6	50	42	2.64	1.62				593
460	95	15.4	3.1	~~40~~ 25	~~42~~ 41	1.90 / 1.36	1.90	366	385	25	700
Pier not out			12.3	~~25~~ 25	~~42~~ 27	1.33 / 1.40					45
490	95	15.2	3.0	40	40	2.23	1.72	433	456	30	750
			12.2	25	46	1.22					36
520	95	8.5	1.7	30	41	1.63	1.54	218	230	27	340
			6.8	30	46	1.46					19
544	95	3.7	2.2	5	54	.22	.22	85	89	24	20
568		0				0	0	0		12	0
2nd LEW @ 3:55 pm								12740		674	60,800
WW = 25.98 @ 4:05 pm CB = 58169											
Reset thermograph pen to 60 @ 5:50 pm											59,923
TG Pen } 25.95 @ 5:50 pm								12,669			

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