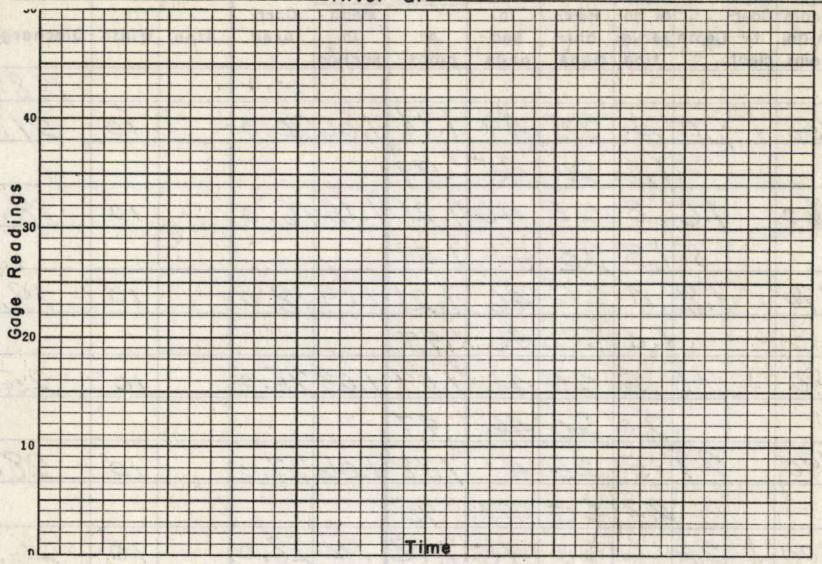
River at



Page ____ of ____

A-34

W=54
A=57
@12:45 pm
RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Water Resources Branch

DISCHARGE MEASUREMENT NOTES

Meas. No. 381
Checked by SHH
Date 3-13-52

Brazos River at Richmond, Tex.

Date Jan. 4, 1952 Party James N. Sansom

Width 272 Area 537 Vel. .98 G.H. ____ Disch. 526

Method .2.6.8 No. Secs. 30 G.H. Chng. 0 ft. per hr. Time meas. 1.00 hrs.

Meter No. 3055 Date Rated 8-12-49 Susp. Rod Susp. Coef. 1.00

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

GAGE READINGS

Time	Meas	Recorder	Tape	Inside	Outside (wnt.)
10:10 am		1.04	1.04	*	1.06
10:40		1.04	1.04	staff	1.04
				OG	
11:40 start		(1.04)			
12:40 End		(1.04)			
1:30 pm		1.04	1.04		1.06
Weighted MGH			1.04		
GH Corr.					
Correct MGH					

Meter — ft. above bottom of weight

Spin before meas. OK after OK

Wading, cable, ice, boat, upstr., downstr., side bridge 2 feet, mile, above, below gage, and 300' above gravel pit.

Chain, wire, found 58.70 at — G-Sta.

Changed to — at

Correct length 58.68

Levels Obtained No

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

Cross section Uniform - sand & Gravel

Flow Smooth Weather Clear

Other No wind effect.

Gage Apparently OK

Record removed Yes Intakes flushed No

Pencil 3B Wt. Adj. No Paper Dry

Record Clear Chart time 2½ hr. Sl. Clock Reg. No

Observer Not visited

Control appears to be sand bars 500' below gage - or gravel riffle 2 miles below where gravel is excavated

Remarks * Inside gage should be extended to zero
Found peak stage ind. at 1.79 Reset @ 1.04
Bottom of instr. shelf needs to be fixed for max. & min. stage ind. -
Gravel pit not operating -

Page 1 of 3 G.H. of zero flow Not det. 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
LEW @ 11:40 am						30 ft	400	4½ from road - 200			
8		0	Est V=0				0	0		1	0
10	⊥	.2	.1	5	50		.24	1.2		6	.3
20	⊥	1.0	.60	15	49		.69	10.0		10	6.9
30	⊥	1.1	.66	20	55		.82	11.0		10	9.0
40	⊥	1.3	.78	20	47		.95	13.0		10	12.3
50	⊥	1.5	.90	20	46		.97	15.0		10	14.5
60	⊥	1.7	.3	20	48	.93	.77	17.0		10	13.1
			1.4	15	56	.61					
70		1.7	.3	20	46	.97	.86	17.0		10	14.6
			1.4	15	45	.75					
80		1.8	.4	20	44	1.02	.88	18.0		10	15.8
			1.4	15	45	.75					
90		1.9	.4	20	45	.99	.80	19.0		10	15.2
			1.5	15	55	.62					
100		1.9	.4	20	45	.99	.88	19.0		10	16.7
			1.5	15	43	.78					
110		2.1	.4	20	48	.93	.80	21.0		10	16.8
			1.7	15	50	.68					
120		1.9	.4	20	43	1.04	.88	19.0		10	16.7
			1.5	15	47	.72					
130		2.0	.4	20	43	1.04	1.00	20.0		10	20.0
			1.6	20	47	.95					
140		1.7	.3	20	41	1.09	1.00	17.0		10	17.0
			1.4	20	60	.90		217.2			188.9

Page 2 of 3 Comp. by: JNS Checked by: _____

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
								217.2			188.9
150	⊥	2.0	.4	25	49	1.14	1.06	20.0		10	21.2
			1.6	20	45	.99					
160	⊥	1.6	.3	25	46	1.21	1.15	16.0		10	18.4
			1.3	20	41	1.09					
170	⊥	1.8	.4	25	46	1.21	1.09	18.0		10	19.6
			1.4	20	46	.97					
180	⊥	2.5	.5	20	41	1.09	1.03	25.0		10	25.8
			2.0	20	46	.97					
190	⊥	2.7	.5	25	47	1.18	1.06	27.0		10	28.6
			2.2	20	47	.95					
200	⊥	2.8	.6	20	43	1.04	.94	28.0		10	26.3
			2.2	15	40	.84					
210	⊥	3.0	.6	20	40	1.12	.96	30.0		10	28.8
			2.4	15	42	.80					
220	⊥	2.9	.6	25	45	1.25	1.09	29.0		10	31.6
			2.3	20	48	.93					
230		2.9	.6	25	42	1.32	1.16	29.0		10	33.7
			2.3	20	45	.99					
240		2.8	.6	25	43	1.29	1.20	28.0		10	33.6
			2.2	20	40	1.12					
250		2.9	.6	25	46	1.21	1.16	29.0		10	33.7
			2.3	20	40	1.12					
260		2.2	.4	20	43	1.04	.98	22.0		10	21.6
			1.8	15	41	.82					
270		1.7	.3	20	49	.92	.87	~~14.6~~ 15.3		9	~~12.7~~ 13.3
			1.4	15	41	.82					
278		.6	.36	10	50		.46	3.0		5	1.4
280		.2	Est V=0				0	.2		1	0
REW @ 12:40 pm								~~336.9~~		~~272~~	~~592.8~~
A 57 W 54				TG	OG=1.04		WW=1.06 @ 1:30 pm				6.5

Page 3 of 3 Comp. by: JNS Checked by: _____