RECORDED

9-275 c
(August 1949)

W = 81°

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

DISCHARGE MEASUREMENT NOTES

Meas. No. 575

Comp. by [illegible]

Checked by 7/16/57

Brazos River at Richmond, Tex.

Date June 26, 1957 Party J N Sansom 53,800

Width 458 Area 10,100 Vel. 5.35 G. H. _____ Disch. *54,000

Method 2.8 No. secs. 27 G. H. change +.01 in 1.6 hrs. Susp. 100 cl. o

Method coef. 1.00 Hor. angle coef. Noted Susp. coef. 1.00 Meter No. 1153

Date rated 7-21-54 Used rating for rod Rod susp. Meter 1.0 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 5.6 feet, mile, above, below gage, and at Rosenberg

Check-bar, chain found 58.69 changed to — at _____

Correct 58.68

Levels obtained No

GAGE READINGS				
Time		~~Recorder~~ Tape	~~Inside~~ Pen	~~Outside~~ w wt.
7:40 am		23.20±	23.20±	23.47±
9:05 am	Start	(23.19)		
10:40 am	End	(23.18)		
11:15 am		23.18	23.18±	23.47±
~~Weighted~~ M. G. H.		23.18		
G. H. correction				
Correct M. G. H.				

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

Flow Not uniform - boils & neg. flow on sides Weather Clear - hot

Other — Air ____ ° F. @ ____

Gage OK Water ____ ° F. @ ____

water being pumped into Richmond Canal is probably less than 1%. Max. rate permitted is 355 cfs

Record removed ____ Intake flushed U. ____ L. ____

Observer Not seen

* Rate of change in stage = .0 in 1/hr.

Control is channel

Remarks Rosenberg bridge is not very good meas. sect. at this stage.

* Includes pumpage of Richmond Irrig. Co. Canal.

G. H. of zero flow _____ ft. Sheet No. 1 of 3 sheets.

16—59921-1 U. S. GOVERNMENT PRINTING OFFICE

9-275-b
(February 1940)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

TWO-TABLE METHOD

U. S. GOVERNMENT PRINTING OFFICE 16—13835

Brazos R. at Richmond, Tex.

Date June 26, 1957 No. of Meas.

Meter No. 1153 Reel Coefficient

Type of suspension 100 cl. o

Size of line 1/10" Notes by JNS.

	Distance from initial point	Distance above water surface	Vertical angle	Observed depth	Air correction	Wet-line depth	Water correction	Vertical depth	Depth of observation	Revolutions	Time in seconds	Velocity: At point	Velocity: Mean in vertical	Velocity: Mean in section	Area	Mean depth	Width	Discharge
																	308	39750
86	460		10°	23.5	.6	22.9	.2	22.7	4.5	150	43	7.68		6.53	39	45	20	2,550
									18.2	100	41	5.38						
88	480		8°	20.2	.4	19.8	.1	19.7	3.9	150	46	7.18		6.35	313	355	18	1,990
									15.8	100	40	5.52						
88	496		10	25.6	.6	25.0	.1	24.9	5.0	150	48	6.88		6.00	219	249	10	1,310
									19.9	100	43	5.13						
88	500		10	25.5	.6	24.9	.1	24.8	5.0	150	50	6.61		5.52	87	99	4	480
									19.8	80	40	4.42						
88	504		10	32.0	.6	31.4	.1	31.3	6.3	150	48	6.88		6.20	275	318	10	1,700
									25.0	100	40	5.52						
80	520		10	31.0	.6	30.4	.1	30.3	6.1	150	48	6.88		5.65	437	546	18	2,470
									24.2	80	40	4.42						
84	540		8	34.4	.4	34.0	.1	33.9	6.8	150	55	6.01		5.22	568	678	20	2,980
	S turbulent								27.1	80	40	4.42						
75	560		6°	28.4	.2	28.2	.1	28.1	5.6	80	41	4.31		3.42	316	422	15	1,080
	S Boil - pt of 0 flow								22.5	50	44	2.53						
0	570		0	22.6				22.6	4.5	30	45	1.49		1.30	0	226	10	0 ?
	S Neg flow								18.1	20	40	1.12						
1	580		0	19.1				19.1	3.8	25	45	1.25		1.18	191	191	10	- 230
	S Neg								15.3	25	51	1.10						
1	590			10.0				10.0	2.0	20	41	1.10		1.08	100	100	10	- 110
									8.0	20	42	1.07						
	600			0										0	0		5	
	14 48	Row @ 10:40 am					W=	81							10,101		458	53,850

Computed by Checked by No. 3 of 3 Sheets.

9-275-b
(February 1940)

IP. for soundings is left abutment of bridge

UNITED STATES
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WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES
TWO-TABLE METHOD

U. S. GOVERNMENT PRINTING OFFICE 16—13835

Brazos R. at Richmond, Tex.

Date June 26, 1957 No. of Meas.

Meter No. 1153 Reel Coefficient

Type of suspension 100 Cl. 0

Size of line 1/10" Notes by JNS.

	Distance from initial point	Distance above water surface	Vertical angle	Observed depth	Air correction	Wet-line depth	Water correction	Vertical depth	Depth of observation	Revolutions	Time in seconds	VELOCITY At point	VELOCITY Mean in vertical	VELOCITY Mean in section	Corr Area	Area Mean depth	Width	Discharge
		LEW @ 9:05 am US Rosenberg bridge 100 Cl. 0 #1153																
	142			0				0						0	0	0	9	0
	Neg flow																	
50	160		0	8.7				8.7	1.7	20	50	.90		.81	82	165	19	-70
	Parallel								7.0	15	47	.72						
0	180	=	0	14.2				14.2	2.8	20	45	1.00		.88	0	284	20	0
	Pos								11.4	15	45	.76						
15	200		0	26.0				26.0	5.2	40	42	2.12		1.74	98	650	25	170
									20.8	25	41	1.37						
80	230	40	4°	29.2	14.1 0		0	29.2 1	5.8	40	42	2.12		2.83	584 2	728 730	25	1650
									23.4	80	50	3.54						
92	250	40	6°	29.4	.1	29.3 2	0	29.3 2	5.9	80	47	3.77		3.97	678 1	732 0	25	2680 6
									23.4	100	53	4.17						
90	280	40	8°	31.8	.4	31.4	.1	31.3	6.3	100	42	5.25		5.02	704	782	25	3530
									25.0	100	46	4.80						
91	300	40	8°	33.1	.4	32.7	.1	32.6	6.5	150	59	5.61		5.43	593	652	20	3220
									26.1	100	42	5.25						
94	320	40	10°	34.6	.6	34.0	.2	33.8	6.8	150	56	5.91		5.76	635	676	20	3660
									27.0	150	59	5.61						
94	340	40	12°	36.6	.9	35.7	.3	35.4	7.1	150	51	6.48		6.48	665	708	20	4310
									28.3	150	51	6.48			693			4870
90	360	40	14°	40.1	1.2	38.9	.4	38.5	7.7	150	48	6.88		7.03	708	770	20	4980
									27.8	150	46	7.18						
92	380	40	10°	36.5	.6	35.9	.2	35.7	7.1	100	42	5.25		5.08	657	714	20	3340
									28.6	100	45	4.91						
92	400	40	12°	41.4	.9	40.5	.3	40.2	8.0	150	50	6.61		6.74	740	804	20	4990
									32.2	150	48	6.88						
88	420	40	12°	34.6	.9	33.7	.2	33.5	6.7	150	45	7.34		6.62	590	670	20	3910
									26.8	150	56	5.91						
88	440	40	12°	28.0	.9	27.1 1	.2	26.9 27.0	5.4	150	41	8.05		7.14	47 2	528 38	20	3380 8
	10:05								21.6	150	53	6.24						
				21.3													208	39750

Computed by JNS Checked by No. 2 of 3 Sheets.