9-275 c
(July 1935)

RECORDED

Water temp. 62° °F

Air temp. 68° °F

Time 3:15 pm

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

Meas. No. 334

Checked by JPB

Date 4-1-49

Brazos River at Richmond, Tex.

Date Feb. 27, 1949 Party Goines and Dowis 27,600

Width 408 Area ~~5,010~~ 4,980 Vel. 5.53 G. H. _____ Disch. ~~27,700~~

Method .2 No. secs. 23 G. H. change 0.00 in .8 hrs. Susp. 100 cl. 0

Method coef. .93 Hor. angle coef. As noted Meter No. 1950 Susp. coef. 1.00

GAGE READINGS

Time		Recorder	~~Inside~~ Tape	Outside
1:25 p.m.			14.50	14.55 ±0.05
2:00	Start		(14.49)	
2:45	Finish		(14.49)	
3:30 p.m.			14.48	14.55 ±0.05
U.S.W.B.	Finish w-wt.			
3:25 p.m.				14.70
~~Weighted~~ M. G. H.			14.49	
G. H. correction				
Correct M. G. H.				

Date rated 10-3-44 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 270 feet, ~~mile~~, ~~above~~, below gage, ~~and~~ –

~~Chain~~, wire, found 58.69°, changed to no at _____

Correct length 58.68

Levels obtained no

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

Flow Smooth Weather Favorable

Other Very little drift.

Gage ok J. T. La Cook painted gage house and upper platform 1 coat asphalt base aluminum paint. Metal was cleaned with wire brush before being painted. Record removed No Intake flushed No

Observer –

Falling 0.01 ft/hr.

Control Channel

Remarks Saddle on cable car should be lowered or rail on cable car moved out. Counter on Ellsworth reel will not work properly with present arrangement.

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

U. S. GOVERNMENT PRINTING OFFICE 6—7440

9-275-b

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES
TWO-TABLE METHOD

U. S. GOVERNMENT PRINTING OFFICE: 1931 6—8136

Brazos River at Richmond, Tex.

Date Feb. 27, 1949 No. of Meas.

Meter No. Reel Coefficient

Type of suspension

Size of line 1/8" Notes by

	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	~~Mean depth~~ Area	Width	Discharge
	LEW @ 2:00 pm																	
	468			0								V=0		0	0		9	0
	450			7.1					1.4	60	48			2.74	~~144~~ 135		19	~~390~~ 370
	430			7.4					1.5	80	51			3.43	148		20	510
	410			8.5					1.7	100	49			4.46	170		20	760
	390			9.4					1.9	150	57			5.75	188		20	1080
.99	370			12.1					2.4	150	54			6.07	240	242	20	1460
.99	350			13.0					2.6	150	52			6.30	257	260	20	1620
.99	330			12.4					2.5	150	50			6.55	246	248	20	1610
.99	310			12.3					2.5	150	51			6.43	244	246	20	1570
.99	290	39±	4°	12.6	.1			12.5	2.5	150	51			6.43	~~249~~ 248	~~252~~ 250	20	1,600
.99	270	39.	4°	12.4	.1			12.3	2.5	150	52			6.30	~~246~~ 244	~~248~~ 246		~~1550~~ 40
.99	250	39	4°	12.9	.1			12.8	2.6	150	49			6.69	~~255~~ 254	~~258~~ 256	20	~~1,700~~ 00
→	2:25 pm																	
.99	230	39.8	6°	13.2	.2			13.0	2.6	100	33			6.62	~~261~~ 258	~~264~~ 260	20	~~1,730~~ 10
⊥	210	40.3	6	13.9	.2			13.7	2.8	150	49			6.69	~~278~~ 272	~~278~~ 274	20	~~1,860~~ 20
⊥	190	40.8	5°	14.6	.2			14.4	2.9	150	48			6.83	~~292~~ 285	~~292~~ 288	20	~~2,000~~ 1950

Computed by WHG Checked by JRB No. 2 of 3 Sheets.

9-275-b

Reel mount

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

TWO-TABLE METHOD

U. S. GOVERNMENT PRINTING OFFICE 6—8166

Brazos R. at Richmond, Tex.

Date Feb. 27, 1949 No. of Meas.

Meter No. Reel Coefficient

Type of suspension

Size of line Notes by

	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
⊥	170	41.4 (.7)	6°	15.1	.2		–	14.9	3.0	150	53			6.18	298		20	1,840
⊥	150	42.1 (.8)	6°	16.0	.2		–	15.8	3.2	150	58			5.65	316		20	1,780
	130	42.9 (1.0)	6°	17.3	.2		–	17.1	3.5	100	41			5.33	342		20	1,820
⊥	110	43.9 (1.0)	6°	19.2	.2		–	19.0	3.8	150	52			6.30	332		17½	2,090
⊥	95	44.9 (.9)	6°	18.5	.2		–	18.3	3.7	150	52			6.30	274		15	1,730
	80	45.8 (1.2)	4°	12.9	.1		–	12.8	2.6	100	40			5.47	160		12½	880
	70	47.0 (1.5)		7.1				7.1	1.4	60	47			2.80	71		10	200
	60			0				0	V=0					0	0		5	0
	REW														~~504~~ 4982		408	29640 29,790
								Coeff to convert $Q_{.2}$ to $Q_{.2-.8}$ from Disch. relation curve dated 1943 is .93										×.93 ~~27,700~~ 27,600
		Finish 2:45pm																

Meas. made by 0.2 depth method
Vel. observed at 0.2 of observed depth

468
60
408

Computed by WHG Checked by JRB No. 3 of 3 Sheets.