9-275 c
(July 1935)

RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES BRANCH

DISCHARGE MEASUREMENT NOTES

Meas. No. 274

Checked by CRG

Date 2/14/46

Brazos River at Richmond, Tex.

Date Jan. 18, 1946 Party W.H.Goines

Width 412 Area 6730 Vel. 4.61 G. H. _____ Disch. 31,000

Method .2 No. secs. 24 G. H. change +0.01 in 0.9 hrs. Susp. 100C1.0

Method coef. 0.93 Hor. angle coef. As Noted Meter No. 1791 Susp. coef. 1.00

GAGE READINGS

Time	W. T.	Recorder	Inside Tape	Outside
9:55 a.m		16.55	16.55	16.7±0.1
10:35	Start		(16.55)	
11:30	Finish		(16.54)	
12:10 p.m		16.56	16.56	16.6± 0.1
	Finish	USWB	W.Wt.	
9:50				16.71
Weighted M. G. H.			16.56	
G. H. correction				
Correct M. G. H.				

Date rated June 4, 1943 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 58.59, changed to no at

Correct length 58.57

Levels obtained no

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

Flow Smooth same as 1/17/46 Weather Favorable

Other Some drift Good soundings, max. vert. ∠ 3°

Gage ok no corrections to depths

Record removed No Intake flushed No

~~Observer~~ H.J Hall has replaced all wood in cable car.

Control channel

Remarks Set stakes on left bank at w.s. for slope data. Levels to be run later.

RATE OF CHANGE IN STAGE: +0.01 ft./HR.

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

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9-275
January 1935

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Date 1-18-46, 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
Meas. by 0.2 depth method.												
LEW 471		0						.0	0		5½	0
460	⊥	7.5	1.5	20	41			1.13	116		15½	130
440	⊥	11.0	2.2	60	44			3.13	220		20	690
420	⊥	11.9	2.4	80	57			3.22	238		20	770
400	⊥	14.5	2.9	80	46			3.98	290		20	1160
380	⊥	17.7	3.5	100	46			4.96	354		20	1760
360	99	15.0	3.0	150	61			5.61	297 ~~300~~	300	20	1670 ~~1610~~
340	98	13.9	2.8	150	59			5.80	272	278	20	1580
320	98	13.5	2.7	150	57			6.00	265	270	20	1590
300	98	14.9	3.0	150	60			5.71	292	298	20	1670
280	98	16.4	3.3	100	40			5.71	324	328	20	1840
260	99	19.5	3.9	150	59			5.80	386	390	20	2240
		11:00 am										

No. 2 of 3 Sheets. Comp. by WHG Chk. by CRG

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80 • 75 •

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

9-275
January 1935

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Date 1/18/46, 19___ **DISCHARGE MEASUREMENT NOTES**

Brazos River, at Richmond, Tex.

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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	Corr Area	~~Mean depth~~ Area	Width	Discharge
240	.99	18.0	3.6	100	40			5.71	356	360	20	2040
220	.99	19.1	3.8	150	57			6.00	378	382	20	2270
200	⊥	19.6	3.9	100	40			5.71	392		20	2240
~~180~~ ~~[illegible]~~	⊥	21.2	4.2	100	42			5.43	424		20	2300
160	⊥	22.5	4.5	100	45			5.07	450		20	2280
140	⊥	23.0	4.6	100	52			4.40	460		20	2020
120	⊥	24.3	4.9	80	42			4.35	425		17½	1850
105		23.5	4.7	100	48			4.76	294		12½	1400
95	⊥	19.8	4.0	100	47			4.86	198		10	960
85		15.1	3.0	80	43			4.25	151		10	640
75	⊥	11.8	2.4	40	51			1.81	153		13	280
59 REW		0						0	0	6732	8	0

11:30 am

From curve $Q_{.2}$ vs $Q_{.2-.8}$ dated 1943

Coeff to convert $Q_{.2}$ to $Q_{.2-.8}$ is 0.93

33,320 × .93 = 31,000

No. 3 of 3 Sheets. Comp. by WHG. Chk. by CRG

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