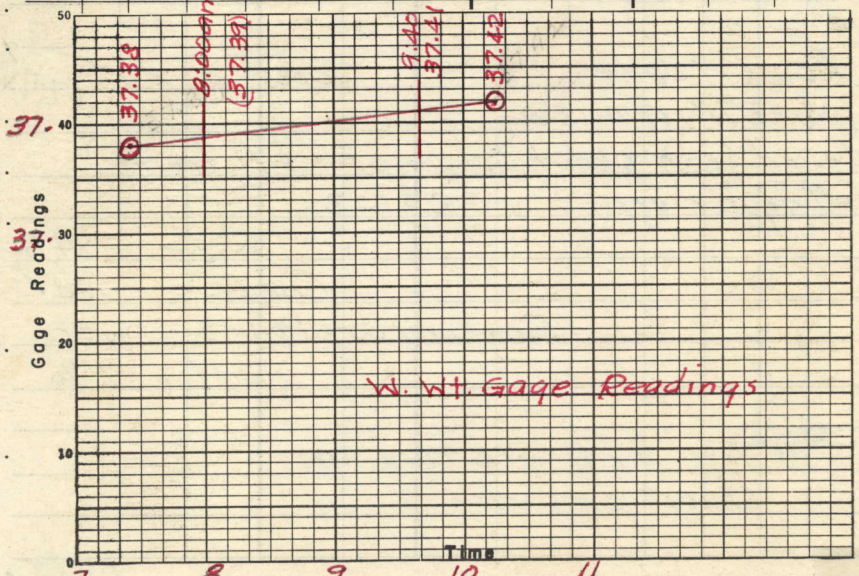
River at _____

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



Page 4 of 4 Comp. by: _____ Checked by: JLC.

A-34 RECORDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Branch

Meas. No. 513
Checked by _____
Date 7/12/57

Water temp. _____ °F
Air temp. _____ °F
Time _____

DISCHARGE MEASUREMENT NOTES

Brazos River at Richmond Tex.

Date May 5, 1957 Party JN Sansom

Width 556 Area 16,100 Vel. 7.33 G.H. _____ Disch. 118,000

Method 2.6.8 No. Secs. 25 G. H. Chng. +.01 ft. per hr. Time meas. 1.17 hrs.

Meter No. 2815 Date Rated 2-16-49 Susp. 100 lb. Susp. Coef. 1.00

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

GAGE READINGS W.W.

Time	Meas	Recorder	Tape	Inside	Outside
7:25	am		37.05		37.38
8:00	am	Start	(37.06)		(37.39)
9:40	am	end	(37.08)		(37.41)
10:15	am				37.42
Weighted MGH			37.07		
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 270 feet, mile, above, below gage, and _____
Chain, wire, found 59.69 at _____ G-Sta.
Changed to _____ at _____
Correct length 59.68
Levels Obtained No
Measurement rated, excellent (2%), good (5%) fair (8%), poor (over 8%) based on following
Cross section Uniform-firm
Flow Smooth Weather Clear
Other _____
Gage OK
Record removed No Intakes flushed No
Pencil None Wt. Adj. No Paper Dry
Record Clear Chart time OK Clock Reg. NR
Observer Not seen - USWB
Computed Coeff. for 0.2 method = 0.94
Control Is Channel
Remarks Right A-frame is being eroded away - called Austin. No flow in any overflow channel to left of gage - not even in Oyster Creek at Sugarland. Total air and water corrections shown encircled beneath observed depths. - areas corrected.

Page 1 of 4 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
LEW @ 8:00 am Cable 100 C1.0 #2815 Penta counter											
570		0					0	0		10	0
550	⊥	1.4	.5	15	44		.78	42		30	30
510	⊥	2.0	1.0	10	50		.47	70		35	38
480		15.2	3.0	50	41	2.69	2.63	456		30	1,200
			12.2	50	43	2.57					
450		23.2	4.6	80	45	3.91	3.79	696		30	2,640
			18.6	80	48	3.67					
420		25.5	5.1	100	46	4.77	4.68	762		30	3,570
20' to w.s.			20.4	100	48	4.58					
390		33.9	6.8	150	55	5.96	5.48	1002		30	5,490
20		(-.5)	27.1	100	44	4.99					
360		42.0	8.4	150	47	6.99	6.66	1221		30	8,180
19		(-1.3)	33.6	150	52	6.32					
330		44.0	8.8	150	43	7.64	6.98	1058		25	7,380
19'		(-1.7)	35.2	150	52	6.32					
310		43.0	8.6	150	40	8.21	7.53	810		20	6,100
18		(-2.5)	34.4	150	48	6.85					
290		44.2	8.8	200	52	8.42	8.03	834		20	6,700
18' to w.s.		(-2.5)	35.4	150	43	7.64					
270		40.0	8.0	200	54	8.11	7.79	760		20	5,920
18		(-2.0)	32.0	150	44	7.47					
250		43.3	8.7	200	49	8.93	8.04	818		20	6,580
19'		(-2.4)	34.6	150	46	7.14					
230		40.5	8.1	200	50	8.75	8.66	760		20	6,580
20' to w.s.		(-2.5)	32.4	200	51	8.58					
210		39.5	8.0	200	46	9.51	8.66	740		20	6,410
9:05 am		(-2.5)	31.5	150	42	7.82					66,760

Vertical angle

Page 2 of 4 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
20½											66,760
190	⊥	38.0	7.6	200	46	9.51	9.22	710		20	6,550
20½		(-2.6)	30.4	200	49	8.93					
170	⊥	39.0	7.8	200	47	9.31	8.94	720		20	6,440
21' to w.s.		(-3.0)	31.2	200	51	8.58					
150	⊥	40.5	8.1	200	49	8.93	2.02	768		20	6,930
22		(-2.1)	32.4	200	48	9.12					
130	⊥	42.5	8.5	200	51	8.58	8.50	806		20	6,850
23½		(-2.2)	34.0	200	52	8.42					
110	⊥	44.2	8.8	200	49	8.93	8.84	816		20	7,210
25		(-3.4)	33.4	200	50	8.75					
90	⊥	43.8	8.8	200	46	9.51	8.49	814		20	6,910
26½		(-3.0)	3	150	44	7.47					
70	⊥	38.5	7.7	150	40	8.21	7.20	722		20	5,200
28'		(-2.4)		150	53	6.20					
50	⊥	29.0	5.8	200	49	8.93	7.69	554		20	4,260
		(-1.2)		150	51	6.45					
30	⊥	8.2	4.9	100	51		4.31	148		18	640
14	⊥	0					0	0		8	0
REW @ 9:40 am								16,089			117,760
WW = 37.42 @ 10:15 am											
Called Seth about danger of Rt. A-frame falling in river. GR 25230											
											Q.2 = 124,800
											Coeff. = .94
											From Curve dated 10-1-43 = .93
											diff = 1%
(3.0) Total air & water correction shown encircled											

Page 3 of 4 Comp. by: JNS Checked by: RWH

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 May 5, 1957 No. of Meas.

Meter No. Reel Coefficient

Type of suspension

Size of line Notes by

Measurement re-computed by 0.2-depth method

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
LEW 570							0	True depth			0			0		10	0
550							1.4				.78			42		30	30
510							2.0				.47			70		35	30
480							15.2				2.69			456		30	1230
450							23.2				3.91			696		30	2720
420	20	5	25.5	.1	25.4	—	25.4				4.77			762		30	3630
390		10	33.9	.3	33.6	.2	33.4				5.96			1002		30	5970
360		16	42.0	.8	41.2	.5	40.7				6.99			1221		30	8530
330	19	18	44.0	1.0	43.0	.7	42.3				7.64			1058		25	8080
310		22	43.0	1.5	41.5	1.0	40.5				8.21			810		20	6650
290		22	44.2	1.5	42.7	1.0	41.7				8.42			834		20	7020
270	18	20	40.0	1.2	38.8	.8	38.0				8.11			760		20	6160
250		22	43.3	1.4	41.9	1.0	40.9				8.93			818		20	7300
230		22	40.5	1.5	39.0	1.0	38.0				8.75			760		20	6650
210	20	22	39.5	1.6	37.9	.9	37.0				9.51			740		20	7040
190		22	38.0	1.6	36.4	.9	35.5				9.51			710		20	6750
170		24	39.0	1.9	37.1	1.1	36.0				9.31			720		20	6700
150	21	20	40.5	1.3	39.2	.8	38.4				8.93			768		20	6860
130	22	20	42.5	1.4	41.1	.8	40.3				8.58			806		20	6920
110	24	24°	44.2	2.3	41.9	1.2	40.7				8.93			814		20	7270
90	25	22	43.8	2.0	41.8	1.0	40.8				9.51			816		20	7760
70	26	20	38.5	1.7	36.8	.8	36.0				8.21			720		20	5910
50	28	14	29.0	.9	28.1	.3	27.8				8.93			556		20	4960
30							8.2				4.31			148		18	640
14							0				0			0		8	0
REW																	
														16087			124,810
Coeff to convert $Q_{.2}$ to $Q_{.2-8}$ from curve dated 1943																=	x.93
																	116,000

Computed by W.H.G 6-15-57 Checked by JNS No. of Sheets.