

STATE OF HAWAII
WATER DISTRICT, No. 01
DISCHARGE MEASUREMENT SUMMARY SHEET

Station No. 13048025

Discharge Measurements made of Squinnel Creek Canal at Head

during

No.	Date	Made by—	Width	Area	Mean velocity	Gage height	Discharge	Rating #02		Method	Num. ber meas. sections	Weir's Gage height change	Discharge Time	Meas. rated	REMARKS
								Full	Shift adj.						
210	1979 (cont.) July 20	Val Richards	11.0	12.6	1.71	6.30	21.6	-64	125%		1	.77	17.7		
211	Aug 2 1980	" "	10.0	9.60	1.30	6.08	12.5	-65	115%			.56	11.0		Weir is 8 ft. Rectangular
212	July 3 1981	" "	9	9.0	1.22	5.58	8.5	-62	118%			.42	7.2		Weir - 11 ft. Rectangular
213	June 1 1981	" "	11	12.4	1.48	7.4	18.4		111%			.74	16.6		Original gage same
214	July 17 1982	" "	10	7.0	1.04	3.8	7.3		118%			.38	6.18		
215	July 6 1983	" "	" "	12.9	1.21	6.4	15.6		116%			.64	13.4		Meado modifications table
216	June 27 1984 - Note	" "	" "	11.3	1.17	.52	13.2		134%			.52	10.0		Mean Rating table with 10 cfs @ 58 gage (smaller gage changed)
219	June 12 1985 6-13 1986	" "	" "	10.45	1.55	.58	16.2		140%			.58	12		
219	June 12 1986	" "	11	9.30	1.54	.60	14.3		117%			.60	12.2		

Computed by Checked by

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY (WATER RESOURCES DIVISION)
DISCHARGE MEASUREMENT SUMMARY SHEET

Station No. 13048025

Discharge measurements of SQUIREL CREEK CANAL AT HEAD.

during the year ending Sept. 30, 19

No.	Date (Cont)	Made by—	Width	Area	Mean velocity	Gage height	Discharge	Rating		Method	Num- ber meas. sec- long	Gage height change	Time	Meas. rated	REMARKS
								Shift adj.	Percent diff.						
198	JULY 5	VAL RICHARDS	9	10.4	1.56	5.45	16.1	1.7		Orme Ditch		Squirrel Crk Below Boom			
199	13	do	✓	8.4	1.18	5.18	9.96	.22							
200	18	do	8	8.05	1.12	5.17	9.07	.16				7/21 1.28	10.1		Bergman down .2
201	Aug 19	do	9	5.35	.60	4.80	3.18	-.27				.90	3.2	est.	Indian L. 3.64
	Aug 31										.82				
	Sept 28 1978										0			est.	
201-A	June 28	Val Richards	8	7.00	2.05	0.96	14.37								
202	29	do	9	13.95	2.07	5.80	28.9	.00							
203	30	do	9	13.1	1.82	5.70	23.8	.00							
204	July 10	do	✓	13.7	1.70	5.74	23.3	.00	-.78			1.44	20.0		
205	27	do	✓	12.0	1.32	5.54	15.9	.00	-.25			1.30	12.2		
206	Aug 9	do	✓	11.4	1.23	5.48	14.1	.00				1.24	11.5		
207	18	do	✓	12.5	1.52	5.60	19.0	.00				1.34	13.6		
	29	do										1.29	11.4		
	Sept 7 1979	do										1.28	13.2		
208	June 12	do	10.0	9.19	1.45	6.12	13.3	-.66		Weir				Weir flow	
209	July 11 25	do	✓	11.2	1.68	6.26	18.8	-.66		Weir				76.173	

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GEOLOGICAL SURVEY (WATER RESOURCES DIVISION)
DISCHARGE MEASUREMENT SUMMARY SHEET

Station No.

Discharge measurements of *Squirrel Creek Canal at Head*, during the year ending Sept. 30, 1925

No.	Date	Made by—	Width	Area	Mean velocity	Gage height	Discharge	Rating		Method	Num. ber meas.	Gage height	Time	Meas. rated	REMARKS
								Shift	Percent						
								adj.	diff.						
184	June 27	Val. Richards	11	10.6	1.22	5.52	1.30	- .29		ORMC					Squirrel Crk. below sq. canal
195	July 10	do	11	13.2	1.65	5.74	2.19	- .17							
186	25	do	✓	11.6	1.51	5.60	1.74	- .26							
	Aug 5	do													
187	19	do	✓	12.5	.95	5.78	1.8	- .76							
188	Sept 5	do	✓	14.0	.53	5.88	7.38	- 1.01							
	21														
189	June 16	do	10	9.15	1.33	5.36	12.2	- .28							
190	28	do	✓	10.2	1.29	5.38	13.2	- .25							
191	July 15	do	✓	11.8	1.34	5.52	15.7	- .26							
192	29	do	11	12.2	1.34	5.50	16.3	- .21							
193	Aug 11	do	10	10.4	0.90	5.36	9.29	- .44							
194	28	do	10	10.4	1.20	5.36	12.6	- .26							
195	Sept 21	do	9	5.5	0.70	4.86	3.86	- .29							
	May 24	do					0								
196	Jun 20	do	10	8.95	0.98	5.20	8.29	- .34							
197	22	do	9	6.00	0.80	5.02	4.77	- .39							

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**GEOLOGICAL SURVEY (WATER RESOURCES DIVISION)
DISCHARGE MEASUREMENT SUMMARY SHEET**

Discharge measurements of Squirrel Creek Canal at Head

during the year ending Sept. 30, 19..

No.	Date	Made by—	Width	Area	Mean velocity	Gage height	Discharge	Rating Shift adj.	Percent diff.	Method	Num-ber meas. sec.	Gage height change	Time	Meas. rated	(USGS site) N.F. Squirrel	REMARKS
167	Sep 20 1973	Va Richards	9	6.00	1.47	5.26	8.82	-3.7		G	Q	HQ	17.7			
168	June 12 1973	do	10	10.2	1.08	5.70	11.0	-6.8								Recently cleaned
169	27	do	10	9.45	1.04	5.66	9.84	-7.1		1.40	4.10	1.44	23.1			35" in lat - sq cr.
170	July 10	do	10	10.75	1.19	5.72	12.75	-6.1		1.06	3.10	1.40	14.4			lets in lat
171	20	do	11	12.3	1.30	5.82	16.0	-5.5		1.18	4.37	1.52	22.2			lets in lat included in sp. cr. plus total
172	Aug 1	do	10	8.80	.88	5.58	7.77	-7.5		1.18	3.71	1.38	12.6			do - 25"
173	14	do	10	9.25	1.16	5.64	10.7	-6.4		1.14	4.22	1.34	12.6			do - 25"
174	25	do	✓	9.55	1.14	5.63	10.9	-6.2		1.18	4.92	1.34	13.7			40"
175	Sept 4 1974	do	9	4.55	.95	5.14	4.32	-5.3		1.16	3.67	1.18	6.87			3 cfs incl. in Sq. G.H.
176	Jun 11	do	8	8.45	1.26	5.68	10.7	-6.8		1.32	3.12	2.04	48.5			do 30"
177	29	do	10	13.0	1.64	5.96	21.2	-4.3		1.68	4.39	1.62	25.3			
178	July 12	do	10	12.7	1.55	5.88	19.7	-4.2				1.50	19.0			
179	25	do	10	11.6	1.31	5.80	15.2	-5.6				1.34	14.4			
180	Aug 8	do	8	6.5	.30	5.30	1.93	-8.7		1.72	4.60	1.50	19.7			
181	19	do	10	14.2	.66	6.06	9.32	-1.14		9.4	.97	1.24	10.3			
182	29	do	10	16.8	.61	6.36	10.2	-1.39		1.54	4.25	1.12	9.44			4 cfs in side channel

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY (WATER RESOURCES DIVISION)

Station No.

Large measurements of Squirrel Creek Canal at Head, during the year ending Sept. 30, 19.....

No.	Date	Made by—	Width Feet	Area Sq ft	Mean velocity Fps	Gage height		Discharge Cfs	Rating		Percent diff. Oxym G.	Method Ditch g.	Num- ber meas- ure- ments Squ G.	Gage height change Crk. Bergman g.	Time Bergman hr	Meas- ured at	Remarks
						Feet	Fps		Shift adj.	Feet							
151	July 1	Val Richards	8	4.25	1.22	5.20	1.22	5.18	-43				1.52	12.3			Indian Lake
152	July 13	do	8	6.15	1.07	5.42	1.07	6.56	-66				1.48	11.2			Gage Cont. outlet Gage Cont.
153	27	do	10	12.3	.84	5.94	.84	10.4	-145				1.48	18.2			
154	Aug 11	do	9	10.4	1.11	5.82	1.11	11.6	-71		.66	.97	1.52	12.3		11.0	
155	24	do	9	10.6	1.01	5.84	1.01	10.7	-81				1.48	11.2		10.6	
156	July 15	do	✓	8.5	1.53	5.72	1.53	13.0	-60				1.48	18.2			
157	Aug 3	do	✓	7.7	1.38	5.58	1.38	10.6	-60		.146	4.57	1.32	10.8			
158	25	do	✓	8.0	1.10	5.64	1.10	8.78	-75		.94	1.44	1.22	8.03			
159	Sept 21	do	✓	4.35	.29	5.18	.29	1.26	-84		New Gage 1.12		1.20	6.86			
160	24	do	10	9.25	1.53	5.66	1.53	14.2	-49				1.54	20.3			
161	July 1	do	9	6.50	1.19	5.38	1.19	7.73	-55		.150	4.68	1.44	17.2			
162	15	do	10	8.75	1.51	5.58	1.51	13.2	-45				1.38	14.8			
163	28	do	✓	8.20	1.25	5.56	1.25	10.2	-59		.80	1.01	1.34	12.4			2.06 in lateral
164	Aug 9	do	✓	8.40	1.28	5.54	1.28	10.8	-53		.86	1.29	1.28	11.0			
165	23	do	9	5.30	1.41	5.28	1.41	7.48	-46		.146	5.11	1.26	10.8			
166	Sept 7	do	✓	5.95	1.34	5.26	1.34	7.96	-41		.142	3.83	1.28	9.84			

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