



770.664.6513 (V) 770.664.6565 (F)

Discharge Table For 48" W x 108" L Cutthroat Flume

Document: C-48-108-D-T Rev.: 0 Date: 3-24-00 By: Matt Kazmier

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
0.01	0.12			
0.02	0.24			
0.03	0.36			
0.04	0.48			
0.05	0.60			
0.06	0.72			
0.07	0.84			
0.08	0.96			
0.09	1.08			
0.10	1.20			
0.11	1.32			
0.12	1.44			
0.13	1.56			
0.14	1.68			
0.15	1.80			
0.16	1.92			
0.17	2.04			
0.18	2.16			
0.19	2.28			
0.20	2.40	1.177	528.1	0.7605
0.21	2.52	1.270	569.9	0.8207
0.22	2.64	1.365	612.8	0.8824
0.23	2.76	1.463	656.8	0.9458
0.24	2.88	1.564	701.9	1.011
0.25	3.00	1.667	748.0	1.077
0.26	3.12	1.772	795.2	1.145
0.27	3.24	1.879	843.4	1.215
0.28	3.36	1.989	892.7	1.285
0.29	3.48	2.101	942.9	1.358
0.30	3.60	2.215	994.1	1.432
0.31	3.72	2.331	1046	1.507
0.32	3.84	2.450	1099	1.583
0.33	3.96	2.570	1153	1.661
0.34	4.08	2.693	1208	1.740
0.35	4.20	2.817	1264	1.821
0.36	4.32	2.944	1321	1.903
0.37	4.44	3.072	1379	1.986
0.38	4.56	3.203	1437	2.070
0.39	4.68	3.335	1497	2.156
0.40	4.80	3.470	1557	2.242
0.41	4.92	3.606	1618	2.330
0.42	5.04	3.744	1680	2.420
0.43	5.16	3.884	1743	2.510
0.44	5.28	4.026	1807	2.602
0.45	5.40	4.169	1871	2.695
0.46	5.52	4.315	1937	2.789
0.47	5.64	4.462	2003	2.884
0.48	5.76	4.611	2069	2.980
0.49	5.88	4.762	2137	3.078
0.50	6.00	4.914	2206	3.176

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
0.51	6.12	5.068	2275	3.276
0.52	6.24	5.224	2345	3.377
0.53	6.36	5.382	2415	3.478
0.54	6.48	5.541	2487	3.581
0.55	6.60	5.702	2559	3.685
0.56	6.72	5.865	2632	3.790
0.57	6.84	6.029	2706	3.896
0.58	6.96	6.195	2780	4.004
0.59	7.08	6.362	2855	4.112
0.60	7.20	6.531	2931	4.221
0.61	7.32	6.702	3008	4.331
0.62	7.44	6.874	3085	4.443
0.63	7.56	7.048	3163	4.555
0.64	7.68	7.223	3242	4.668
0.65	7.80	7.400	3321	4.782
0.66	7.92	7.578	3401	4.898
0.67	8.04	7.758	3482	5.014
0.68	8.16	7.939	3563	5.131
0.69	8.28	8.122	3645	5.249
0.70	8.40	8.307	3728	5.369
0.71	8.52	8.492	3811	5.489
0.72	8.64	8.680	3895	5.610
0.73	8.76	8.869	3980	5.732
0.74	8.88	9.059	4066	5.855
0.75	9.00	9.250	4152	5.979
0.76	9.12	9.444	4238	6.103
0.77	9.24	9.638	4326	6.229
0.78	9.36	9.834	4414	6.356
0.79	9.48	10.03	4502	6.483
0.80	9.60	10.23	4591	6.612
0.81	9.72	10.43	4681	6.741
0.82	9.84	10.63	4772	6.872
0.83	9.96	10.84	4863	7.003
0.84	10.08	11.04	4954	7.135
0.85	10.20	11.25	5047	7.268
0.86	10.32	11.45	5140	7.402
0.87	10.44	11.66	5233	7.536
0.88	10.56	11.87	5327	7.672
0.89	10.68	12.08	5422	7.808
0.90	10.80	12.29	5517	7.945
0.91	10.92	12.51	5613	8.084
0.92	11.04	12.72	5710	8.223
0.93	11.16	12.94	5807	8.362
0.94	11.28	13.16	5905	8.503
0.95	11.40	13.38	6003	8.645
0.96	11.52	13.60	6102	8.787
0.97	11.64	13.82	6201	8.930
0.98	11.76	14.04	6301	9.074
0.99	11.88	14.26	6402	9.219
1.00	12.00	14.49	6503	9.365



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**Discharge Table
For
48" W x 108" L Cutthroat Flume**

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
1.01	12.12	14.72	6605	9.511
1.02	12.24	14.94	6707	9.659
1.03	12.36	15.17	6810	9.807
1.04	12.48	15.40	6913	9.956
1.05	12.60	15.64	7017	10.11
1.06	12.72	15.87	7122	10.26
1.07	12.84	16.10	7227	10.41
1.08	12.96	16.34	7333	10.56
1.09	13.08	16.58	7439	10.71
1.10	13.20	16.81	7546	10.87
1.11	13.32	17.05	7653	11.02
1.12	13.44	17.29	7761	11.18
1.13	13.56	17.53	7869	11.33
1.14	13.68	17.78	7978	11.49
1.15	13.80	18.02	8087	11.65
1.16	13.92	18.27	8197	11.80
1.17	14.04	18.51	8308	11.96
1.18	14.16	18.76	8419	12.12
1.19	14.28	19.01	8531	12.28
1.20	14.40	19.26	8643	12.45
1.21	14.52	19.51	8755	12.61
1.22	14.64	19.76	8868	12.77
1.23	14.76	20.01	8982	12.93
1.24	14.88	20.27	9096	13.10
1.25	15.00	20.52	9211	13.26
1.26	15.12	20.78	9326	13.43
1.27	15.24	21.04	9442	13.60
1.28	15.36	21.30	9558	13.76
1.29	15.48	21.56	9675	13.93
1.30	15.60	21.82	9792	14.10
1.31	15.72	22.08	9910	14.27
1.32	15.84	22.34	10028	14.44
1.33	15.96	22.61	10147	14.61
1.34	16.08	22.87	10266	14.78
1.35	16.20	23.14	10386	14.96
1.36	16.32	23.41	10506	15.13
1.37	16.44	23.68	10627	15.30
1.38	16.56	23.95	10748	15.48
1.39	16.68	24.22	10870	15.65
1.40	16.80	24.49	10992	15.83
1.41	16.92	24.77	11115	16.01
1.42	17.04	25.04	11238	16.18
1.43	17.16	25.32	11362	16.36
1.44	17.28	25.59	11486	16.54
1.45	17.40	25.87	11611	16.72
1.46	17.52	26.15	11736	16.90
1.47	17.64	26.43	11861	17.08
1.48	17.76	26.71	11988	17.26
1.49	17.88	26.99	12114	17.45
1.50	18.00	27.28	12241	17.63

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
1.51	18.12	27.56	12369	17.81
1.52	18.24	27.84	12497	18.00
1.53	18.36	28.13	12625	18.18
1.54	18.48	28.42	12754	18.37
1.55	18.60	28.71	12884	18.55
1.56	18.72	29.00	13014	18.74
1.57	18.84	29.29	13144	18.93
1.58	18.96	29.58	13275	19.12
1.59	19.08	29.87	13406	19.31
1.60	19.20	30.16	13538	19.50
1.61	19.32	30.46	13670	19.69
1.62	19.44	30.75	13803	19.88
1.63	19.56	31.05	13936	20.07
1.64	19.68	31.35	14069	20.26
1.65	19.80	31.65	14204	20.45
1.66	19.92	31.95	14338	20.65
1.67	20.04	32.25	14473	20.84
1.68	20.16	32.55	14608	21.04
1.69	20.28	32.85	14744	21.23
1.70	20.40	33.16	14881	21.43
1.71	20.52	33.46	15017	21.63
1.72	20.64	33.77	15155	21.82
1.73	20.76	34.07	15292	22.02
1.74	20.88	34.38	15430	22.22
1.75	21.00	34.69	15569	22.42
1.76	21.12	35.00	15708	22.62
1.77	21.24	35.31	15847	22.82
1.78	21.36	35.62	15987	23.02
1.79	21.48	35.94	16128	23.22
1.80	21.60	36.25	16268	23.43
1.81	21.72	36.56	16410	23.63
1.82	21.84	36.88	16551	23.83
1.83	21.96	37.20	16693	24.04
1.84	22.08	37.51	16836	24.24
1.85	22.20	37.83	16979	24.45
1.86	22.32	38.15	17122	24.66
1.87	22.44	38.47	17266	24.86
1.88	22.56	38.79	17410	25.07
1.89	22.68	39.12	17555	25.28
1.90	22.80	39.44	17700	25.49
1.91	22.92	39.76	17846	25.70
1.92	23.04	40.09	17992	25.91
1.93	23.16	40.41	18138	26.12
1.94	23.28	40.74	18285	26.33
1.95	23.40	41.07	18432	26.54
1.96	23.52	41.40	18580	26.76
1.97	23.64	41.73	18728	26.97
1.98	23.76	42.06	18876	27.18
1.99	23.88	42.39	19025	27.40
2.00	24.00	42.72	19175	27.61

Source: Design and Calibration of Submerged Open Channel Flow Measurement Structures, Part 3: Cutthroat Flumes, Utah Water Research Laboratory, April 1967.



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**Discharge Table
For
48" W x 108" L Cutthroat Flume**

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
2.01	24.12	43.06	19324	27.83
2.02	24.24	43.39	19475	28.04
2.03	24.36	43.73	19625	28.26
2.04	24.48	44.06	19776	28.48
2.05	24.60	44.40	19928	28.70
2.06	24.72	44.74	20080	28.92
2.07	24.84	45.08	20232	29.14
2.08	24.96	45.42	20384	29.35
2.09	25.08	45.76	20538	29.58
2.10	25.20	46.10	20691	29.80
2.11	25.32	46.45	20845	30.02
2.12	25.44	46.79	20999	30.24
2.13	25.56	47.13	21154	30.46
2.14	25.68	47.48	21309	30.69
2.15	25.80	47.83	21465	30.91
2.16	25.92	48.17	21621	31.14
2.17	26.04	48.52	21777	31.36
2.18	26.16	48.87	21934	31.59
2.19	26.28	49.22	22091	31.81
2.20	26.40	49.57	22248	32.04
2.21	26.52	49.93	22406	32.27
2.22	26.64	50.28	22565	32.49
2.23	26.76	50.63	22724	32.72
2.24	26.88	50.99	22883	32.95
2.25	27.00	51.34	23042	33.18
2.26	27.12	51.70	23202	33.41
2.27	27.24	52.06	23363	33.64
2.28	27.36	52.41	23523	33.88
2.29	27.48	52.77	23685	34.11
2.30	27.60	53.13	23846	34.34
2.31	27.72	53.49	24008	34.57
2.32	27.84	53.86	24170	34.81
2.33	27.96	54.22	24333	35.04
2.34	28.08	54.58	24496	35.28
2.35	28.20	54.95	24660	35.51
2.36	28.32	55.31	24824	35.75
2.37	28.44	55.68	24988	35.98
2.38	28.56	56.04	25153	36.22
2.39	28.68	56.41	25318	36.46
2.40	28.80	56.78	25483	36.70
2.41	28.92	57.15	25649	36.94
2.42	29.04	57.52	25815	37.18
2.43	29.16	57.89	25982	37.42
2.44	29.28	58.26	26149	37.66
2.45	29.40	58.64	26316	37.90
2.46	29.52	59.01	26484	38.14
2.47	29.64	59.38	26652	38.38
2.48	29.76	59.76	26820	38.62
2.49	29.88	60.14	26989	38.87
2.50	30.00	60.51	27159	39.11

LEVEL		FLOW		
FEET	INCHES	CFS	GPM	MGD
2.51	30.12	60.89	27328	39.35
2.52	30.24	61.27	27498	39.60
2.53	30.36	61.65	27669	39.84
2.54	30.48	62.03	27840	40.09
2.55	30.60	62.41	28011	40.34
2.56	30.72	62.79	28182	40.58
2.57	30.84	63.18	28354	40.83
2.58	30.96	63.56	28526	41.08
2.59	31.08	63.95	28699	41.33