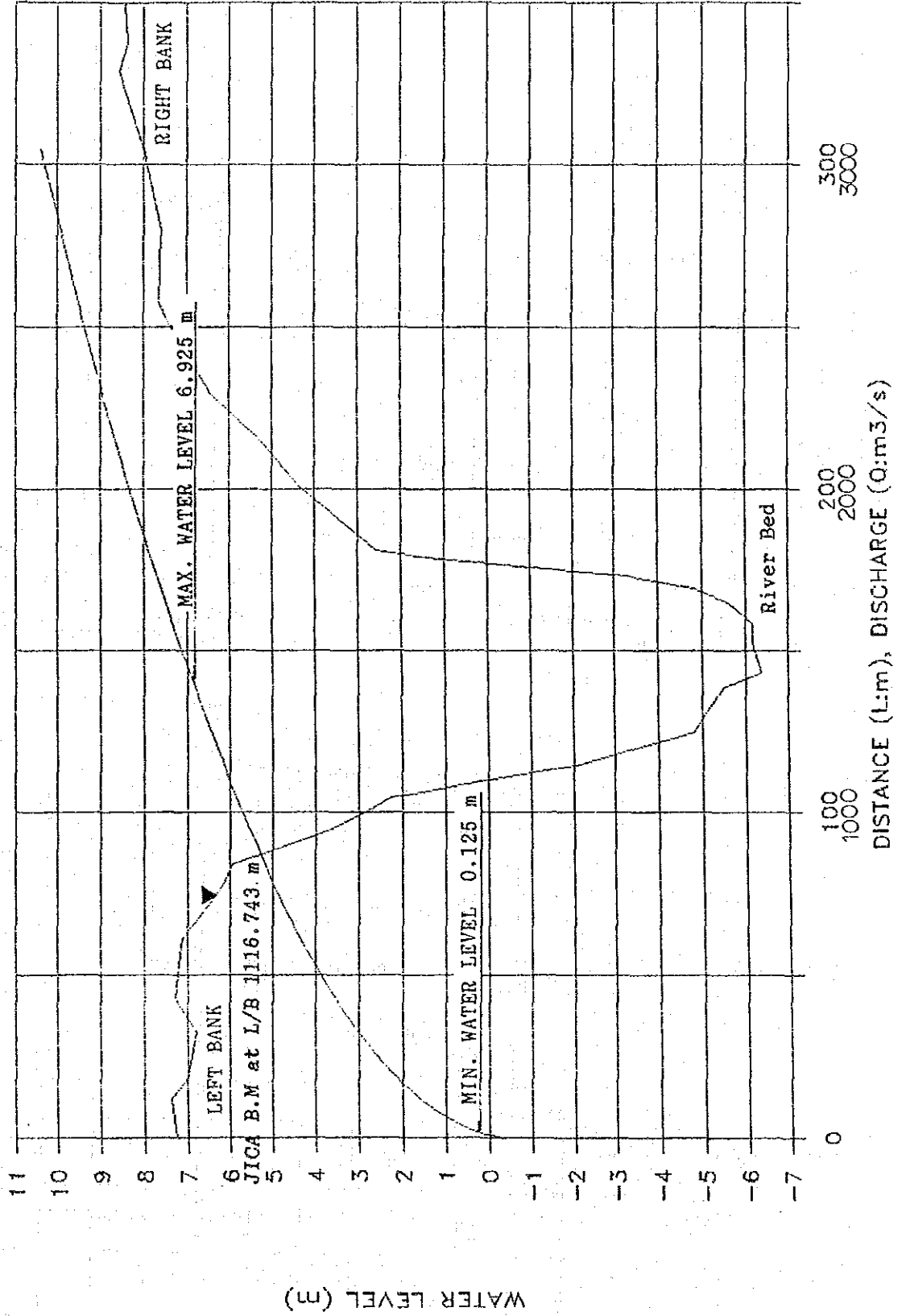


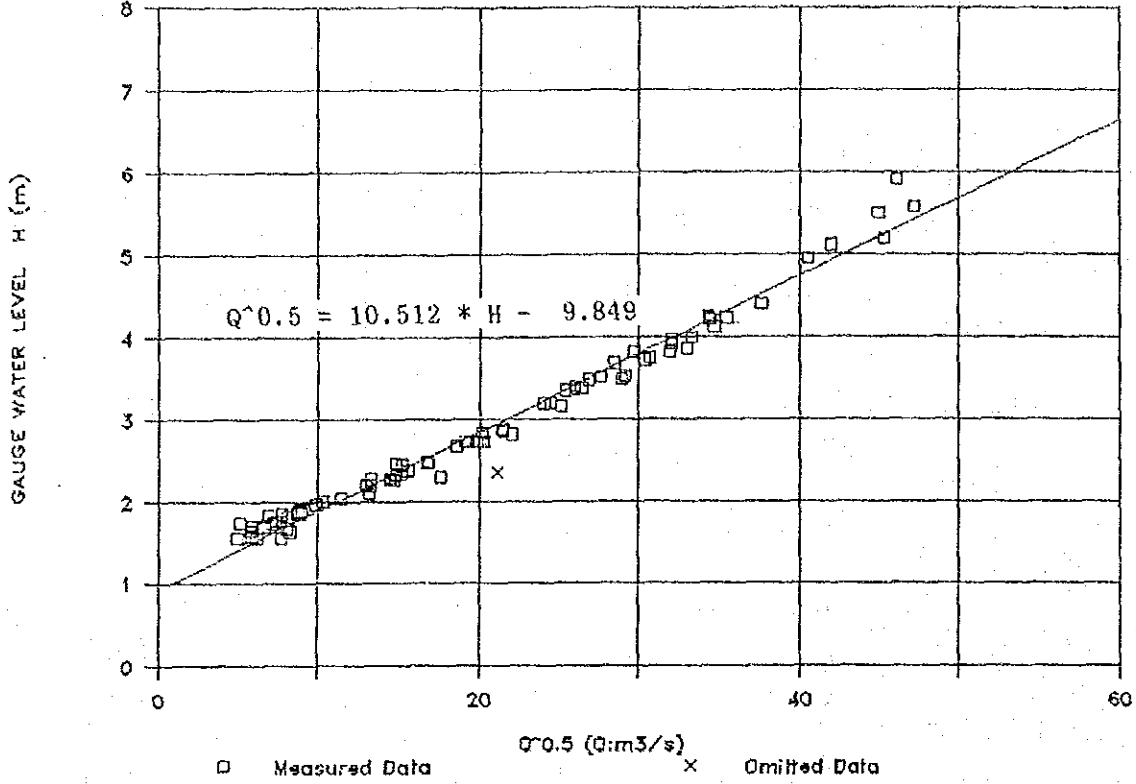
DISCHARGE RATING CURVE WITH SECTION

4-560 CHIFUMPA PONTOON



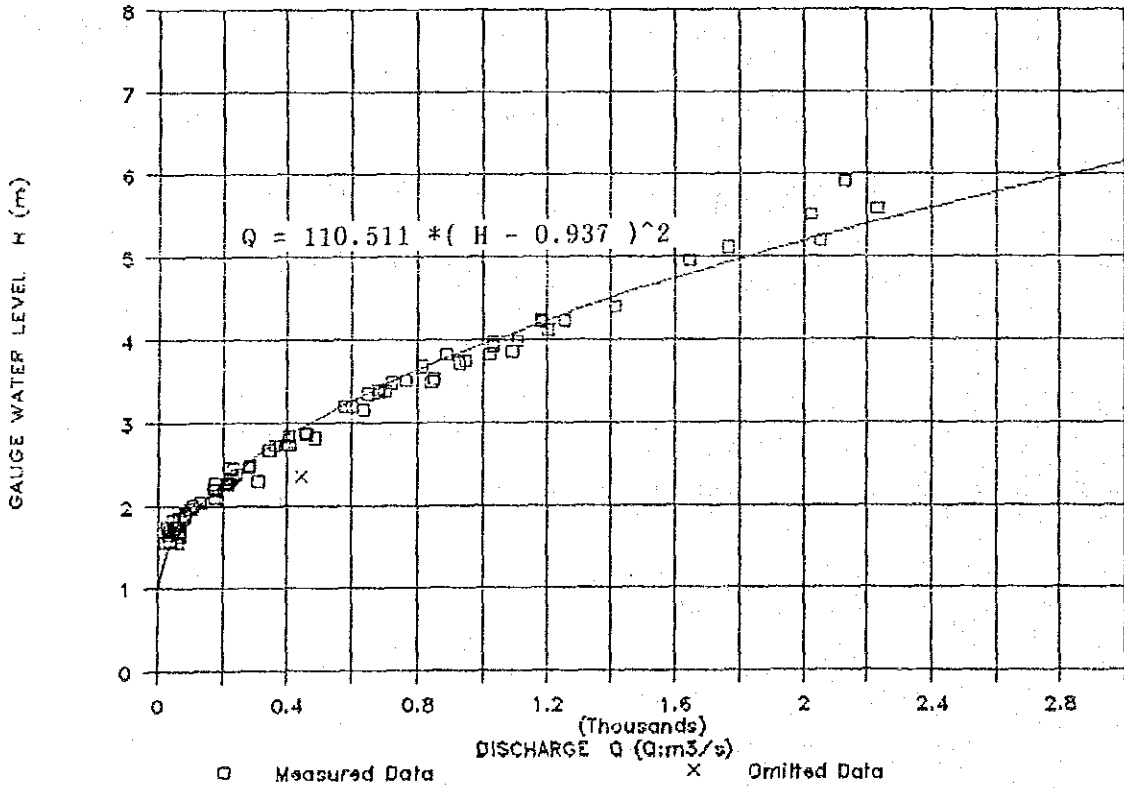
H - Q^{0.5} CURVE

4-669 KAFUE HOOK BRIDGE



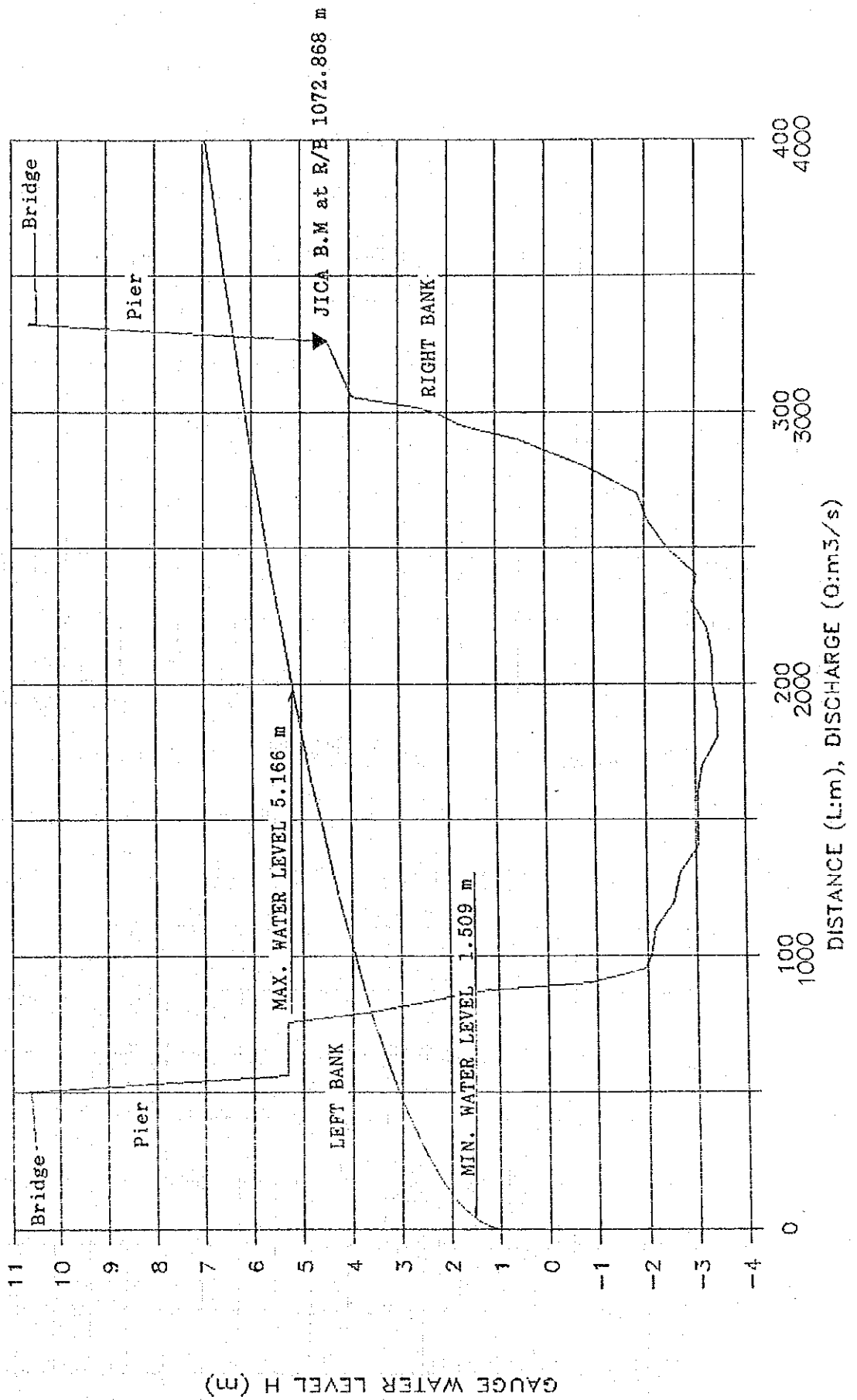
DISCHARGE RATING CURVE

4-669 KAFUE HOOK BRIDGE



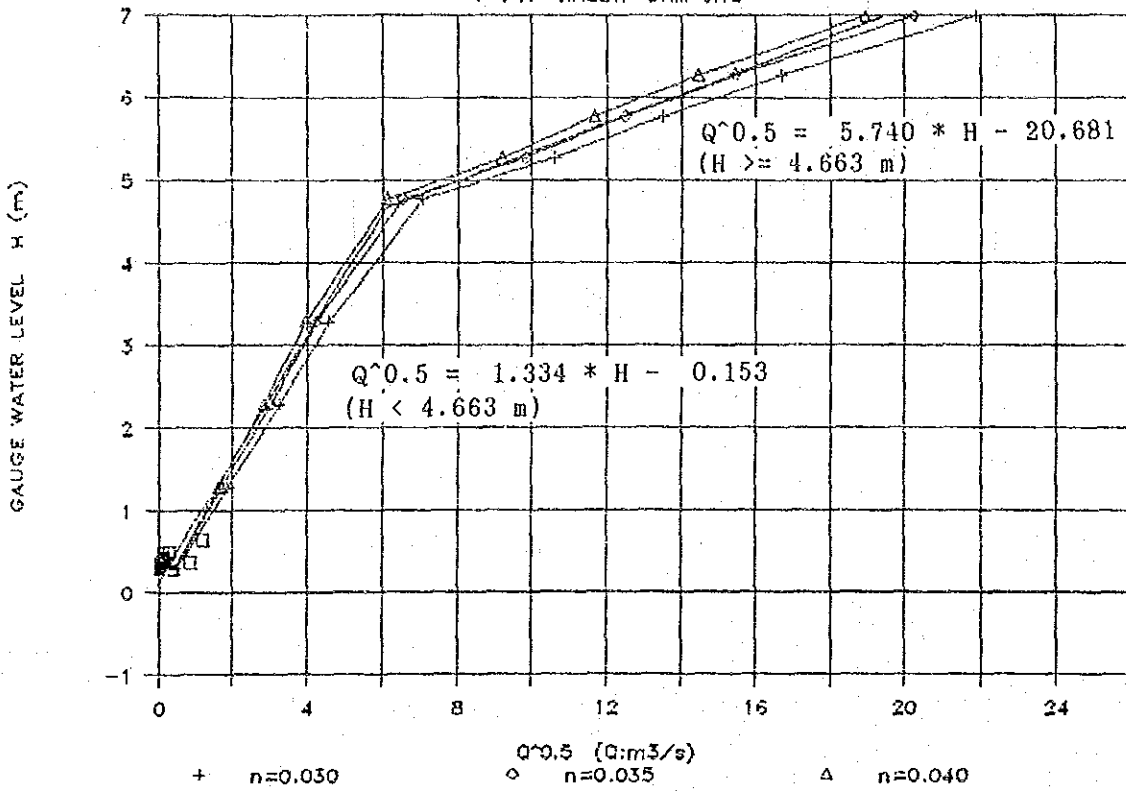
DISCHARGE RAITING CURVE WITH SECTION

4-669 KAFUE HOOK BRIDGE



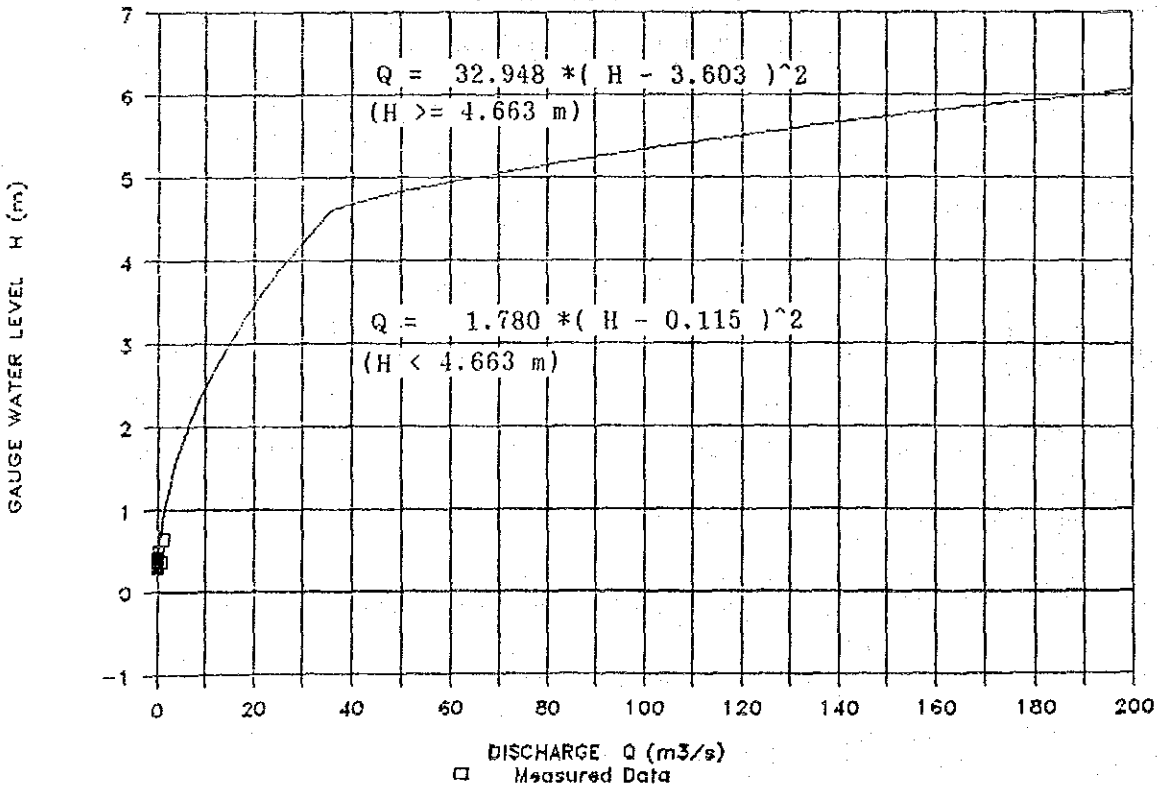
H - Q^{0.5} CURVE

4-941 KALEYA DAM SITE



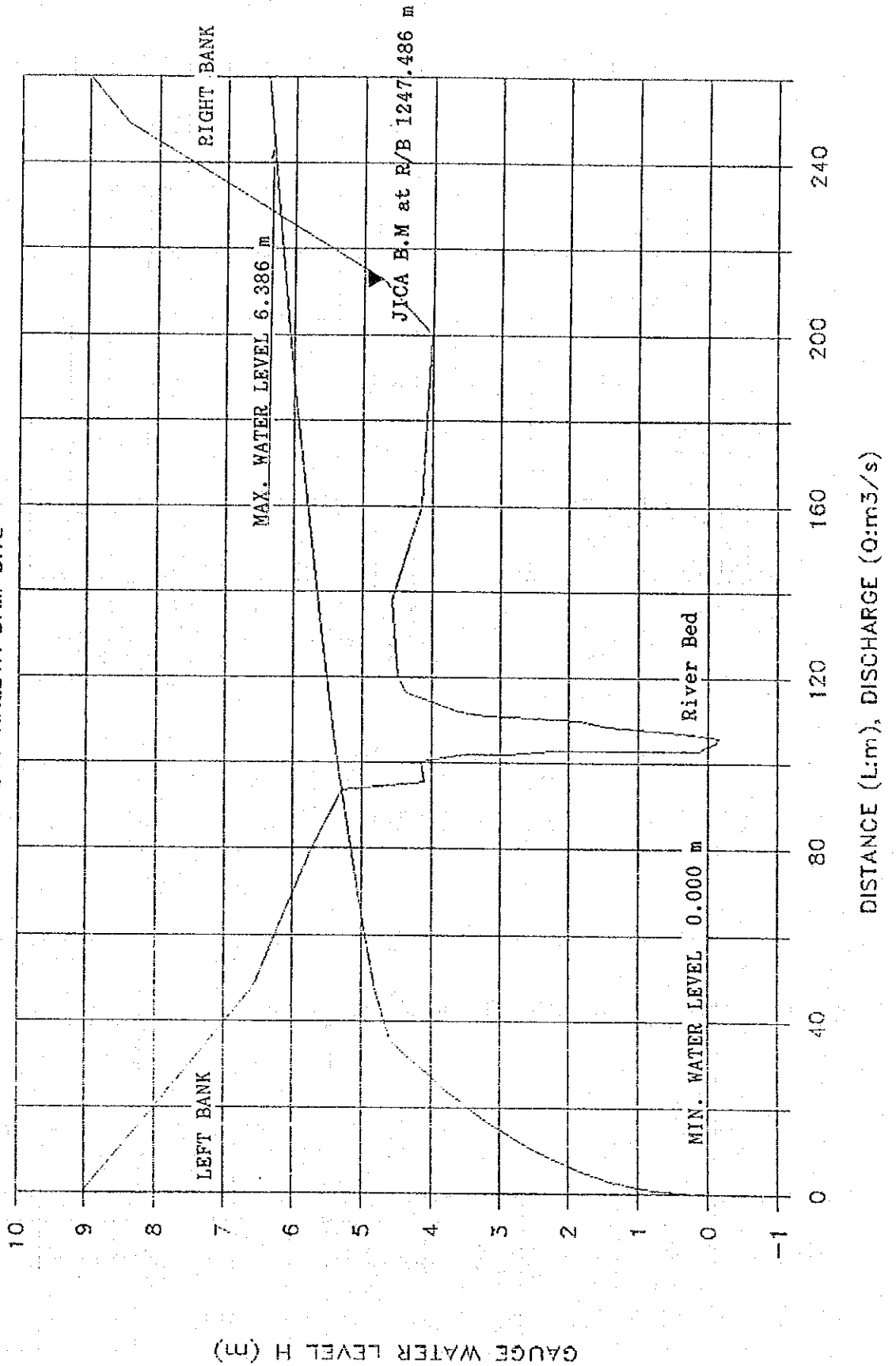
DISCHARGE RATING CURVE

4-941 KALEYA DAM SITE



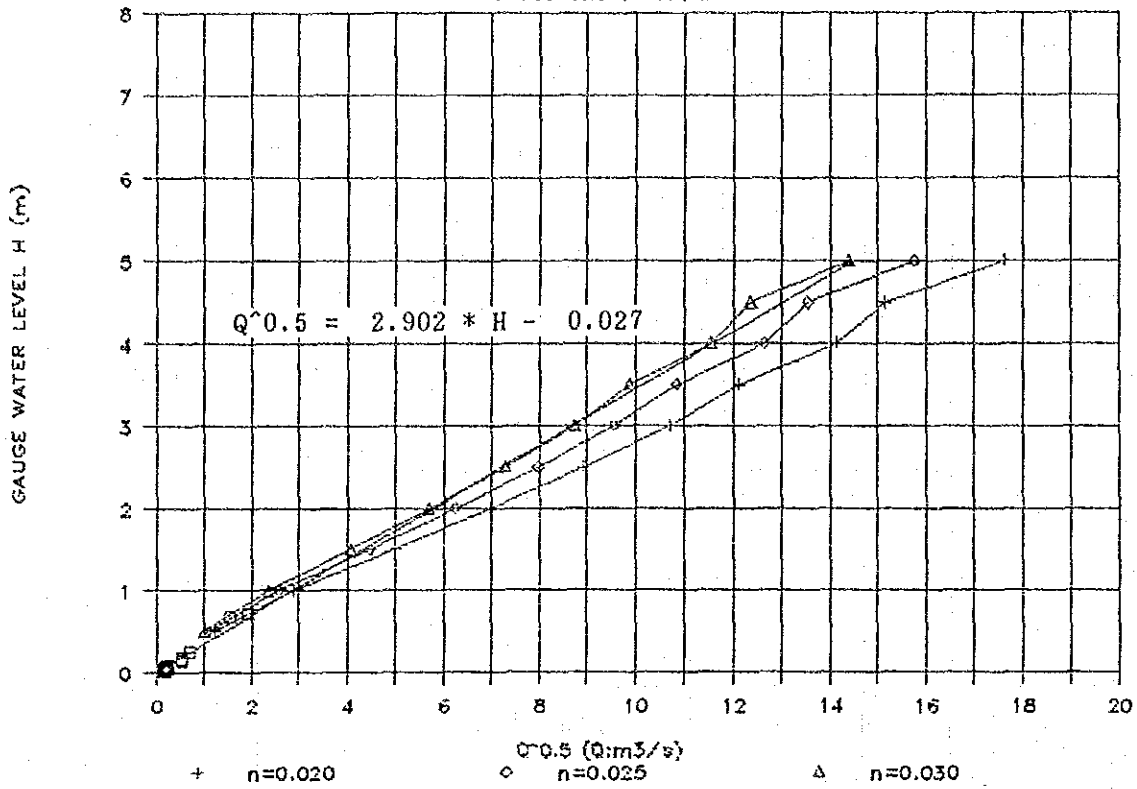
DISCHARGE RATING CURVE WITH SECTION

4-941 KALEYA DAM SITE



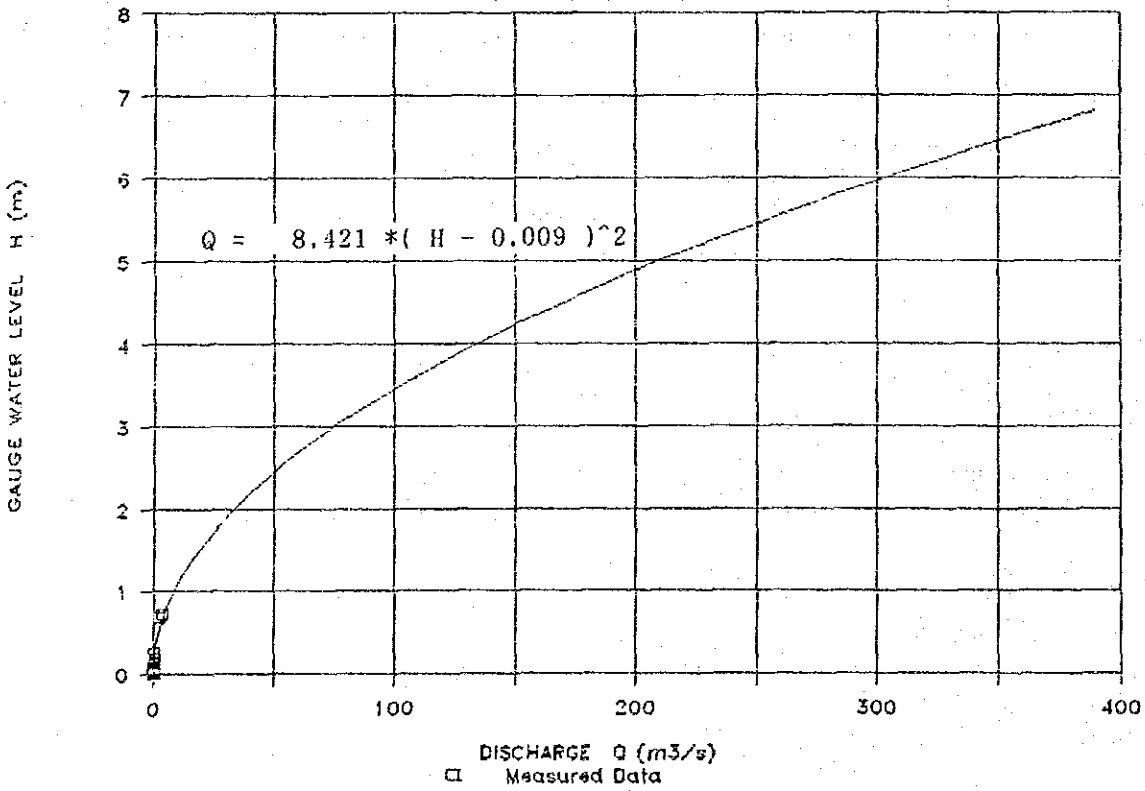
H - Q^{0.5} CURVE

4-958 URUAFF FARM



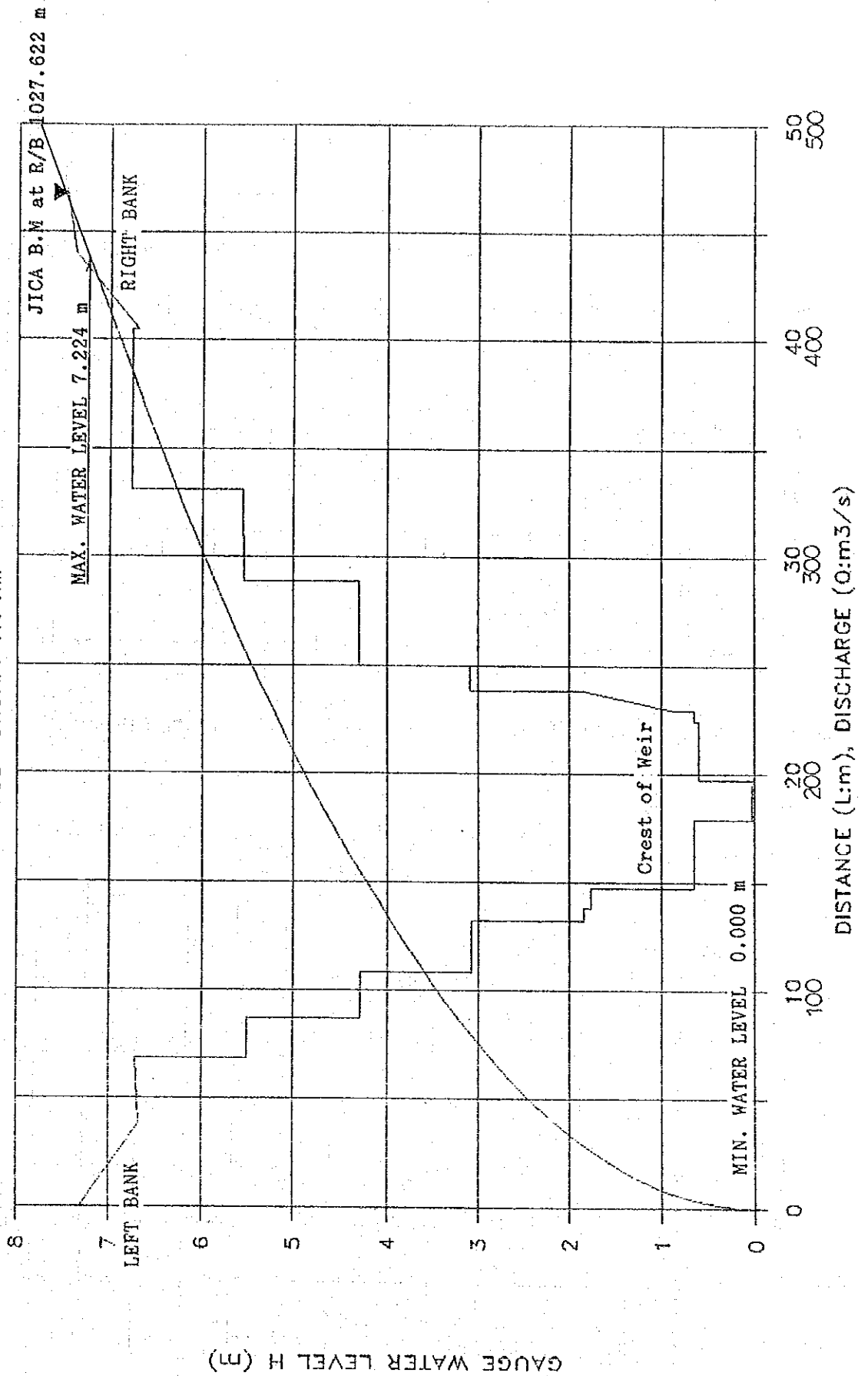
DISCHARGE RATING CURVE

4-958 URUAFF FARM



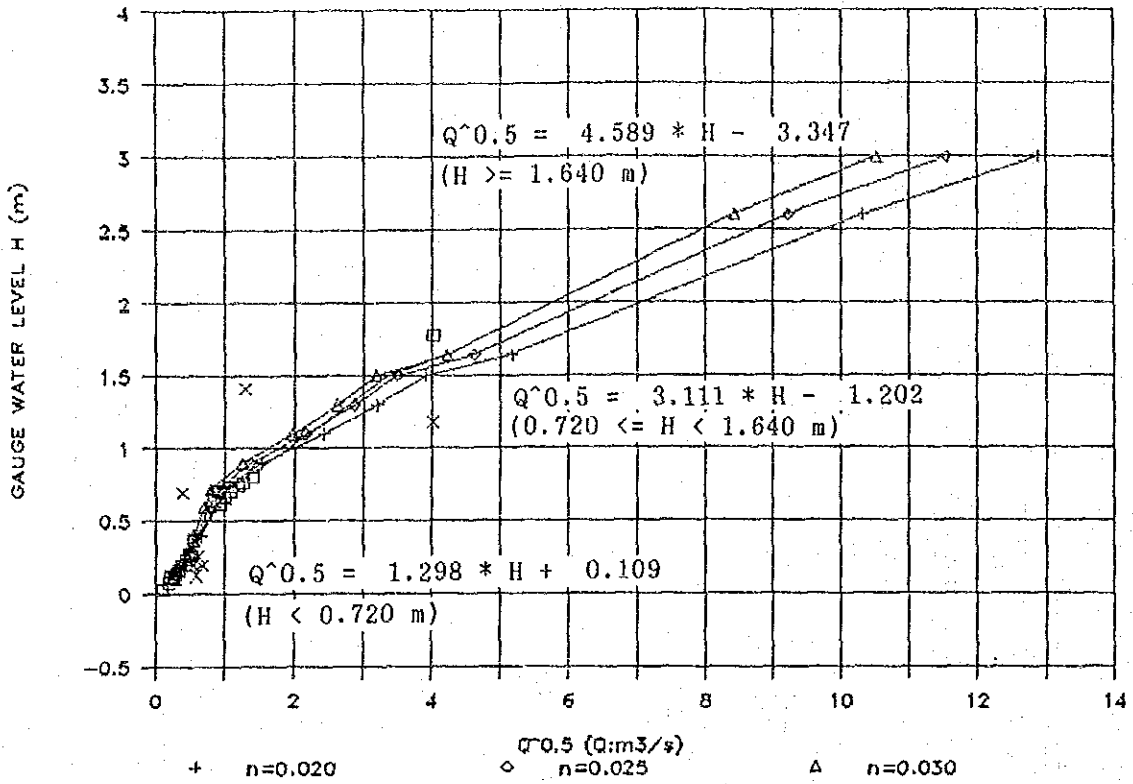
DISCHARGE RATING CURVE WITH SECTION

4-958 URJAFF FA RM



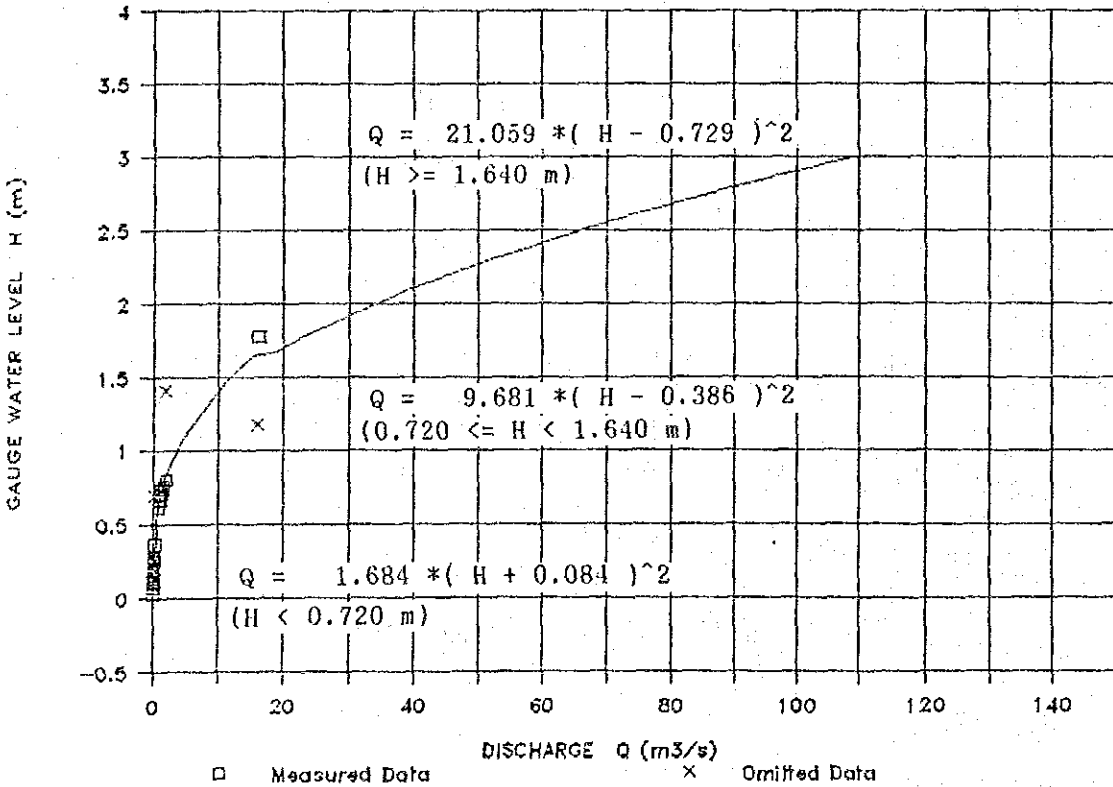
H^{0.5} CURVE

5-030 EXCHANGE FARM



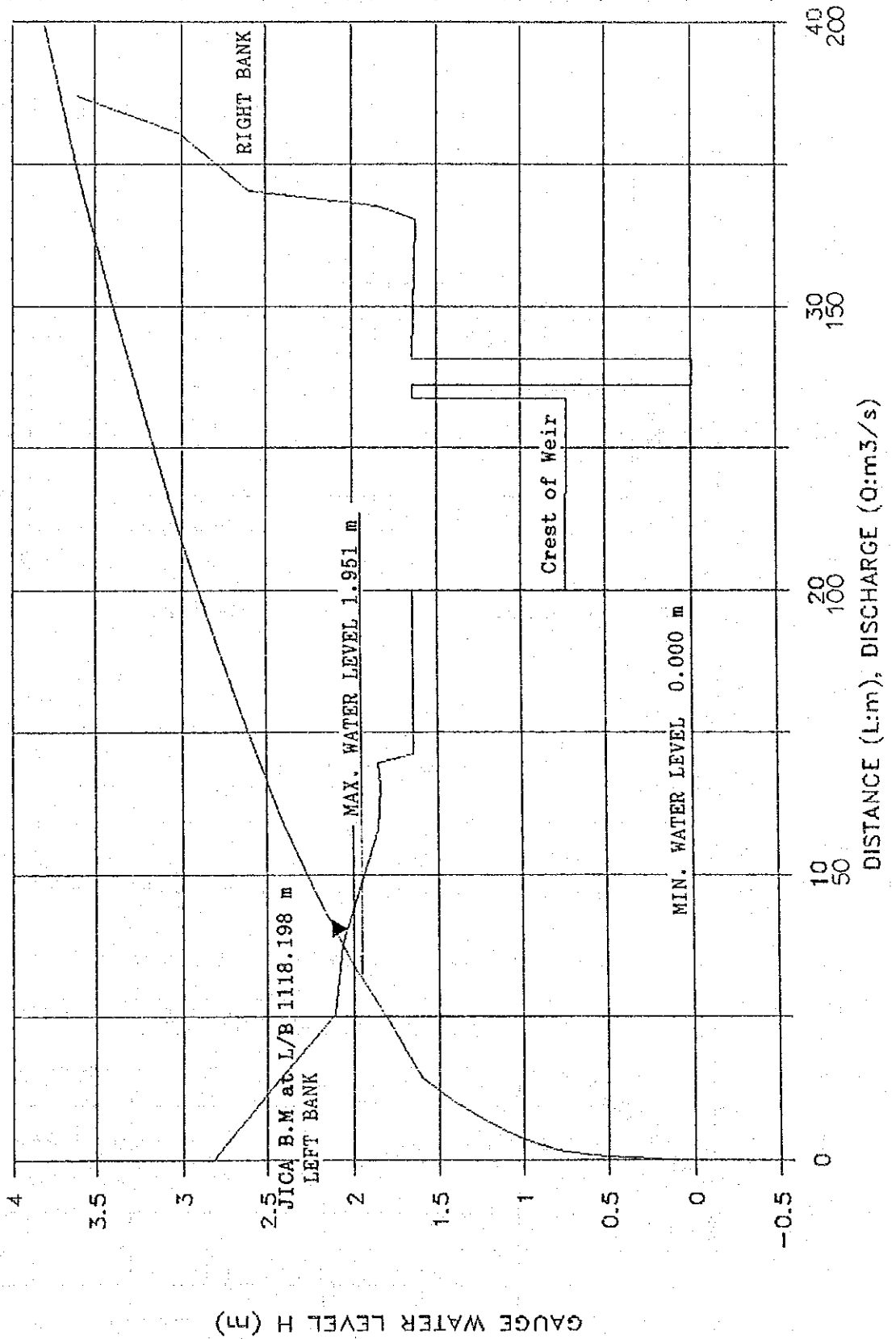
DISCHARGE RATING CURVE

5-030 EXCHANGE FARM



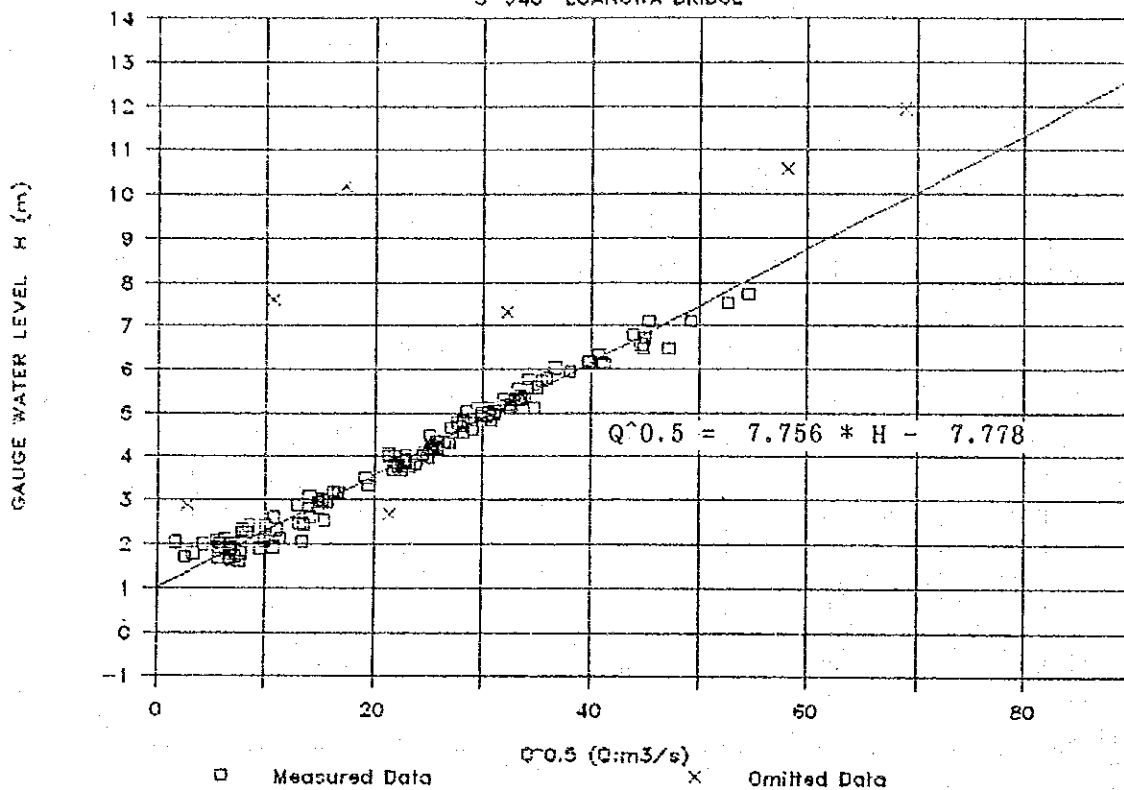
DISCHARGE RATING CURVE WITH SECTION

S-030 EXCHANGE FARM



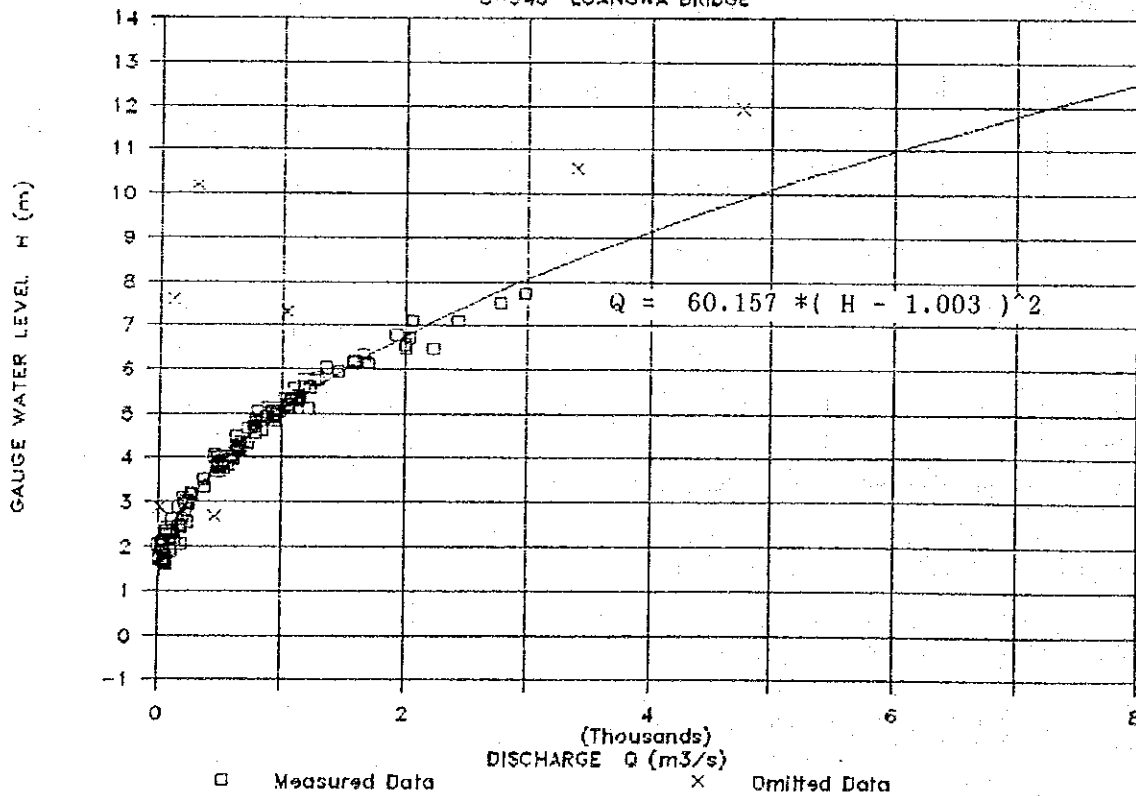
H - Q^{0.5} CURVE

5-940 LUANGWA BRIDGE



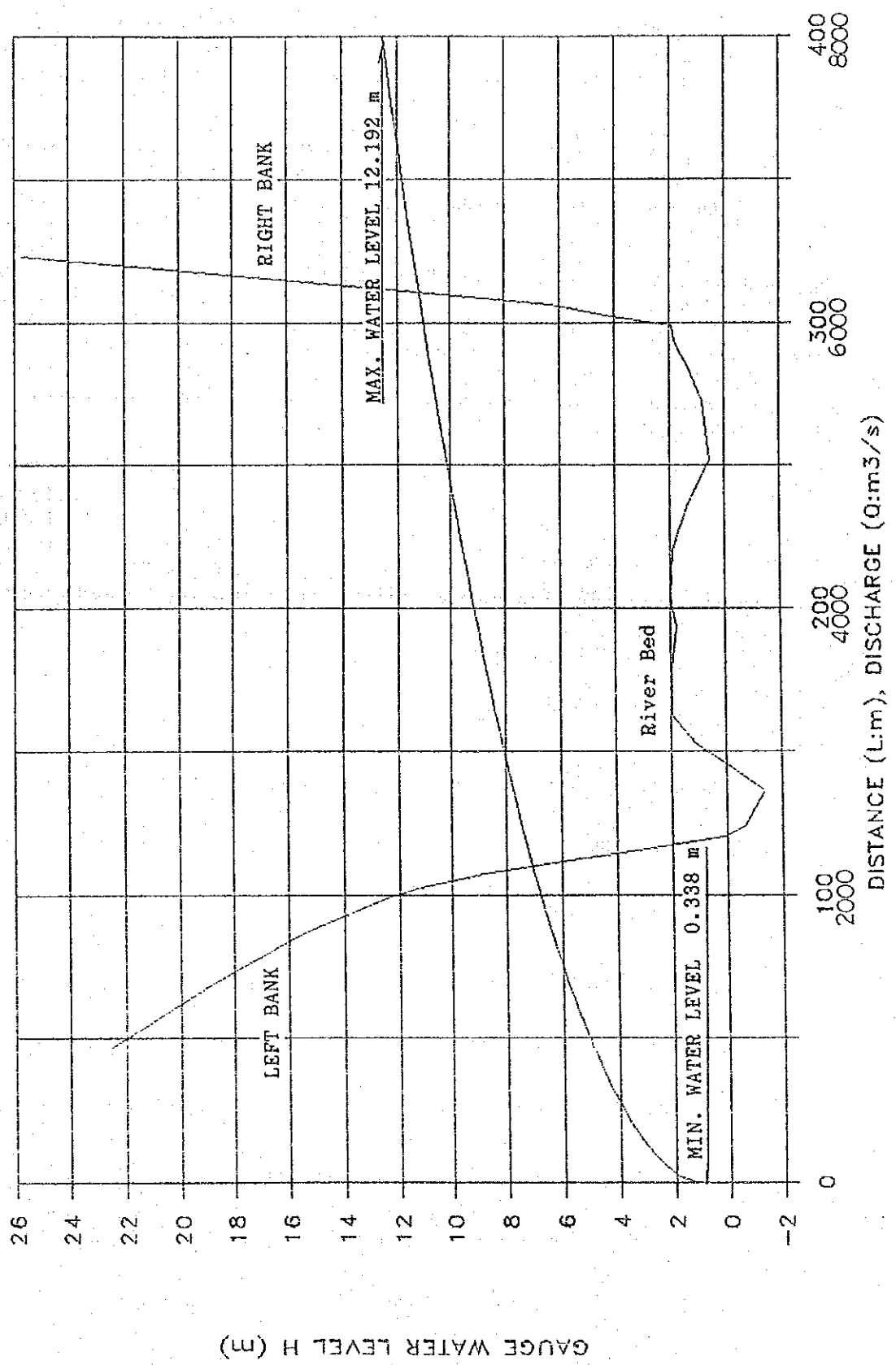
DISCHARGE RATING CURVE

5-940 LUANGWA BRIDGE



DISCHARGE RATING CURVE WITH SECTION

5-940 LUANGWA BRIDGE



DISCHARGE RATING CURVE

STATION: 1-150 ZAMBEZI PUMP HOUSE

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	1 07-Mar-90	3.08	495.9	9.4770	22.2697	68.5569
2	2 27-Jun-90	1.74	204.4	3.0396	14.2979	24.9278
3	3 30-Jul-90	1.23	123.2	1.5129	11.0982	13.6508
4	4 23-Aug-90	0.98	105.3	0.9604	10.2591	10.0540
5	5 27-Sep-90	0.61	65.1	0.3721	8.0660	4.9202
6	6 26-Oct-90	0.55	59.5	0.3025	7.7162	4.2439
7	7 07-Dec-90	0.97	128.8	0.9409	11.3468	11.0064
8	8 04-Feb-91	6.54	1311.5	42.7716	36.2142	236.8410
9	9 15-Mar-91	5.88	1398.5	34.5744	37.3967	219.8923
T O T A L		21.58	3892.12	93.95	158.66	594.09

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 5.062216

b' = 5.490267

a = 25.626034

b = 1.084558

Correlation Coefficient 0.994

DISCHARGE RATING CURVE

STATION: 1-650 KABOMPO BOMA

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	06-Mar-90	2.61	243.6	6.8121	15.6080	40.7369
2	28-Jun-90	1.92	95.5	3.6990	9.7709	18.7922
3	31-Jul-90	1.79	69.2	3.2041	8.3193	14.8915
4	24-Aug-90	1.73	67.6	2.9929	8.2195	14.2197
5	28-Sep-90	1.60	51.2	2.5600	7.1526	11.4442
6	26-Oct-90	1.57	49.4	2.4649	7.0299	11.0370
7	07-Dec-90	1.76	79.8	3.0976	8.9303	15.7173
8	12-Jan-91	2.61	241.9	6.8121	15.5538	40.5954
9	03-Feb-91	3.13	380.6	9.7969	19.5100	61.0663
T O T A L		18.72	1278.74	41.44	100.09	228.50

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 8.145068

b' = -5.823132

a = 66.342127

b = -0.714927

Correlation Coefficient 0.999

DISCHARGE RATING CURVE

STATION: 1-950 WATOPA PONTOON

NO.		DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	1	58/ 5/26	1.98	84.1	3.9252	9.1707	18.1689
2	2	8/ 8	1.80	66.8	3.2340	8.1714	14.6947
3	3	9/13	1.68	58.0	2.8308	7.6134	12.8096
4	4	11/ 8	1.83	73.7	3.3445	8.5870	15.7040
5	5	11/22	2.00	79.3	4.0102	8.9059	17.8344
6	6	59/ 1/ 3	2.88	227.5	8.2965	15.0830	43.4445
7	7	1/ 8	3.16	295.5	10.0098	17.1889	54.3826
8	8	2/11	3.66	394.4	13.4227	19.8601	72.7615
9	9	2/19	3.96	448.5	15.6523	21.1787	83.7895
10	10	2/27	4.31	515.1	18.5750	22.6961	97.8172
11	11	3/24	4.34	525.1	18.8651	22.9152	99.5300
12	12	3/26	4.15	479.2	17.2592	21.8908	90.9436
13	13	3/27	4.07	464.8	16.5574	21.5584	87.7228
14	14	4/11	3.27	293.8	10.6962	17.1394	56.0545
15	15	4/16	3.11	263.4	9.6467	16.2306	50.4107
16	16	4/18	3.02	246.8	9.1054	15.7102	47.4058
17	17	5/14	2.33	133.7	5.4085	11.5609	26.8864
18	18	5/30	2.09	95.4	4.3592	9.7658	20.3898
19	19	6/19	1.94	82.7	3.7816	9.0931	17.6827
20	20	6/30	1.91	80.4	3.6523	8.9677	17.1382
21	21	7/10	1.96	76.6	3.8411	8.7520	17.1527
22	22	7/22	1.83	68.7	3.3668	8.2866	15.2051
23	23	7/25	1.83	68.4	3.3445	8.2695	15.1233
24	24	9/29	1.61	46.5	2.5802	6.8209	10.9564
25	25	10/15	1.55	44.7	2.4164	6.6888	10.3977
26	26	10/17	1.55	37.1	2.4069	6.0906	9.4491
27	27	11/20	1.63	47.9	2.6691	6.9178	11.3017
28	28	11/28	1.76	58.9	3.0823	7.6746	13.4738
29	29	12/20	2.08	97.3	4.3338	9.8639	20.5345
30	30	60/ 1/22	2.55	161.4	6.4774	12.7035	32.3313
31	31	1/27	2.46	143.9	6.0503	11.9949	29.5043
32	32	2/16	3.02	233.7	9.1054	15.2881	46.1323
33	33	2/24	3.57	341.0	12.7392	18.4660	65.9088
34	34	2/29	3.72	372.0	13.8277	19.2865	71.7181
35	35	3/ 9	4.40	513.4	19.3984	22.6580	99.7939
36	36	3/18	4.94	632.9	24.3815	25.1571	124.2199
37	37	3/31	5.74	758.9	32.9405	27.5480	158.1085
38	38	4/22	3.32	290.5	11.0378	17.0450	56.6288
39	39	4/29	3.00	231.3	9.0137	15.2101	45.6651
40	40	5/12	2.70	181.0	7.2929	13.4526	36.3292
41	41	5/21	2.50	147.9	6.2468	12.1602	30.3927
42	42	7/ 2	2.07	90.2	4.2958	9.4968	19.6834
43	43	7/15	2.01	83.6	4.0469	9.1428	18.3924
44	44	7/27	1.95	71.8	3.8053	8.4742	16.5307
45	45	7/29	1.94	72.2	3.7579	8.4942	16.4662
46	46	8/19	1.86	65.0	3.4569	8.0615	14.9885
47	47	8/24	1.84	65.8	3.4005	8.1087	14.9528
48	48	8/21	1.80	61.8	3.2340	7.8587	14.1324
49	49	9/14	1.74	55.2	3.0184	7.4328	12.9134
50	50	9/23	1.70	51.7	2.8823	7.1927	12.2113

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
51	51	9/28	1.68	49.0	2.8103	7.0032	11.7402
52	52	10/12	1.63	46.1	2.6591	6.7918	11.0752
53	53	10/20	1.62	45.9	2.6195	6.7772	10.9688
54	54	10/22	1.62	45.8	2.6195	6.7688	10.9552
55	55	10/31	1.64	45.5	2.6790	6.7458	11.0413
56	56	12/ 6	1.95	81.1	3.8053	9.0040	17.5642
57	57	12/13	2.00	86.8	3.9858	9.3192	18.6053
58	58	12/22	2.04	89.8	4.1704	9.4744	19.3483
59	59	61/ 1/10	2.73	185.1	7.4584	13.6054	37.1565
60	60	5/17	3.14	252.2	9.8370	15.8814	49.8102
61	61	6/ 7	2.56	165.1	6.5552	12.8497	32.8994
62	62	7/26	2.19	103.7	4.8161	10.1845	22.3506
63	63	8/ 1	2.15	97.8	4.6175	9.8883	21.2483
64	64	9/13	1.92	67.7	3.6873	8.2301	15.8037
65	65	9/22	1.96	64.0	3.8291	7.9980	15.6506
66	66	11/ 3	1.86	61.2	3.4569	7.8226	14.5444
67	67	12/ 9	2.32	116.7	5.3944	10.8025	25.0896
68	68	62/ 1/10	3.86	404.6	14.8901	20.1152	77.6197
69	69	1/16	4.22	459.0	17.8209	21.4240	90.4410
70	70	1/23	3.87	413.0	15.0079	20.3224	78.7293
71	71	2/ 1	3.90	406.3	15.2450	20.1559	78.6986
72	72	2/13	5.01	655.8	25.0787	25.6089	128.2461
73	73	2/27	5.51	731.2	30.3687	27.0407	149.0153
74	74	3/ 6	5.63	756.4	31.6587	27.5022	154.7441
75	75	3/ 9	5.70	798.8	32.5220	28.2639	161.1834
76	76	3/14	5.79	832.8	33.4674	28.8582	166.9480
77	77	3/20	5.85	801.2	34.2478	28.3049	165.6449
78	78	4/ 4	6.85	1038.6	46.9486	32.2270	220.8160
79	79	6/26	2.72	185.7	7.3920	13.6283	37.0528
80	80	7/16	2.54	154.7	6.4464	12.4376	31.5790
81	81	8/22	2.30	118.8	5.2957	10.9003	25.0843
82	82	10/ 2	2.00	85.3	3.9858	9.2368	18.4407
83	83	63/ 3/ 6	6.03	886.2	36.3482	29.7692	179.4767
84	84	64/ 1/ 2	3.61	386.1	13.0017	19.6494	70.8516
85	85	1/14	4.00	453.4	16.0162	21.2921	85.2114
86	86	2/11	4.63	585.0	21.4361	24.1867	111.9824
87	87	2/18	5.57	837.4	31.0783	28.9381	161.3239
88	88	4/ 2	4.86	661.8	23.6051	25.7253	124.9869
89	89	4/ 8	4.54	521.8	20.6254	22.8434	103.7439
90	90	4/10	4.19	486.6	17.5645	22.0583	92.4463
91	91	5/ 6	2.93	227.7	8.5619	15.0905	44.1561
92	92	65/ 2/25	5.07	650.1	25.6930	25.4976	129.2427
93	93	3/16	4.66	597.9	21.7193	24.4522	113.9568
94	94	4/ 7	4.06	464.4	16.5078	21.5499	87.5567
95	95	4/22	3.46	344.0	11.9680	18.5478	64.1658
96	96	6/ 1	2.44	156.6	5.9458	12.5148	30.5161
97	97	70/ 8/ 2	2.45	139.0	6.0054	11.7913	28.8958
98	98	9/22	2.04	90.6	4.1704	9.5162	19.4335
99	99	11/ 6	2.04	90.9	4.1456	9.5325	19.4088
100	100	71/ 1/14	4.33	546.0	18.7330	23.3674	101.1377

=M=====							
	NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
=M=====							
101	101	2/ 4	5.17	760.9	26.7228	27.5839	142.5926
102	102	4/ 4	4.20	464.3	17.6412	21.5485	90.5070
103	103	6/ 6	2.66	168.2	7.0966	12.9704	34.5524
104	104	7/21	2.38	121.5	5.6667	11.0205	26.2341
105	105	9/ 9	2.10	98.4	4.4231	9.9212	20.8654
106	106	10/ 9	1.94	76.6	3.7816	8.7504	17.0162
107	107	72/ 1/23	3.03	236.6	9.1976	15.3823	46.6509
108	108	2/20	2.69	178.1	7.2600	13.3448	35.9568
109	109	5/18	2.71	197.3	7.3588	14.0478	38.1077
110	110	8/16	2.10	85.5	4.4103	9.2475	19.4205
111	111	11/ 3	1.87	76.6	3.5138	8.7520	16.4058
112	112	73/ 1/25	2.66	178.3	7.0642	13.3512	35.4856
113	113	2/ 6	2.46	143.3	6.0353	11.9725	29.4126
114	114	3/ 1	3.25	294.3	10.5373	17.1551	55.6875
115	115	4/12	2.80	196.1	7.8633	14.0034	39.2677
116	116	4/13	2.78	191.9	7.7441	13.8529	38.5502
117	117	5/ 7	2.33	124.3	5.4085	11.1508	25.9325
118	118	5/ 8	2.30	116.8	5.2677	10.8077	24.8053
119	119	9/30	1.66	43.1	2.7595	6.5671	10.9090
120	120	11/ 2	1.69	51.1	2.8616	7.1453	12.0873
121	121	12/12	2.03	86.4	4.1084	9.2934	18.8369
122	122	74/ 2/ 6	2.97	234.3	8.8497	15.3076	45.5377
123	123	4/ 5	3.29	299.9	10.8362	17.3169	57.0045
124	124	5/15	2.41	135.6	5.7981	11.6439	28.0376
125	125	7/ 7	1.95	78.4	3.8053	8.3565	17.2766
126	126	8/20	1.83	60.0	3.3445	7.7480	14.1696
127	127	11/25	1.65	47.3	2.7091	6.8808	11.3253
128	128	12/19	2.32	132.4	5.3661	11.5057	26.6527
129	129	75/ 1/ 8	3.60	311.1	12.9358	17.6369	63.4336
130	130	2/10	4.43	492.6	19.6678	22.1946	98.4295
131	131	3/24	5.49	694.8	30.1006	26.3593	144.6174
132	132	7/ 2	2.14	109.2	4.5783	10.4521	22.3643
133	133	8/22	1.92	65.0	3.6873	8.0650	15.4867
134	134	9/19	1.80	56.1	3.2340	7.4878	13.4655
135	135	10/ 9	1.74	53.2	3.0396	7.2963	12.7207
136	136	11/17	1.71	48.6	2.9239	6.9728	11.9230
137	137	76/ 1/14	2.64	171.6	6.9512	13.1007	34.5403
138	138	2/24	4.15	443.5	17.1833	21.0587	87.2943
139	139	3/22	5.99	781.4	35.8720	27.9536	167.4230
140	140	5/24	3.72	385.2	13.8277	19.6264	72.9818
141	141	6/10	2.96	217.7	8.7412	14.7537	43.6202
142	142	6/11	2.93	217.5	8.5977	14.7470	43.2407
143	143	8/19	2.27	112.4	5.1702	10.6001	24.1025
144	144	9/12	2.09	85.4	4.3592	9.2399	19.2918
145	145	10/17	2.19	111.5	4.8161	10.5599	23.1744
146	146	11/16	2.13	91.1	4.5522	9.5444	20.3639
147	147	77/ 1/13	3.38	292.5	11.4466	17.1014	57.8587
148	148	2/14	4.37	452.6	19.0775	21.2748	92.9237
149	149	3/10	5.01	588.6	25.1398	24.2604	121.6405
150	150	6/18	2.59	139.3	6.7122	11.8045	30.5832

=M=====							
NO.	DATE	H(m)	Q(m3/s)	H^2.0	Q^0.5	H*Q^0.5	
=M=====							
151	151	7/14	2.41	133.5	5.7981	11.5548	27.8231
152	152	8/11	2.24	114.9	5.0189	10.7196	24.0149
153	153	9/ 9	2.04	57.0	4.1704	7.5500	15.4182
154	154	78/ 3/10	5.43	714.4	29.4354	26.7289	145.0160
155	155	5/ 7	5.80	764.9	33.6440	27.6572	160.4215
156	156	6/12	3.17	279.4	10.0484	16.7145	52.9836
157	159	12/10	2.83	180.0	8.0179	13.4168	37.9909
158	160	81/ 2/13	4.04	337.1	16.3596	18.3591	74.2569
159	161	5/ 3	3.70	218.0	13.6695	14.7652	54.5903
160	162	82/10/22	1.98	73.0	3.9252	8.5441	16.9275
161	163	12/13	2.96	223.0	8.7412	14.9340	44.1532
162	164	83/ 3/21	3.85	393.0	14.7961	19.8252	76.2591
163	165	3/22	3.93	410.1	15.4840	20.2498	79.6825
164	167	84/ 2/26	3.27	286.0	10.7161	16.9124	55.3635
165	168	3/ 2	3.44	298.0	11.7999	17.2637	59.3024
166	170	85/ 3/12	3.92	424.0	15.3643	20.5923	80.7164
167	171	4/23	3.96	466.1	15.7006	21.5886	85.5426
168	172	86/ 8/ 8	2.18	107.0	4.7494	10.3445	22.5440
169	173	9/ 8	1.95	78.0	3.8053	8.8325	17.2297
170	174	89/10/ 6	0.51	1.3	0.2622	1.1396	0.5835
171	175	90/ 2/ 9	3.03	257.3	9.1809	16.0406	48.6029
172	176	3/ 8	3.26	251.3	10.6276	15.8531	51.6810
173	177	5/ 8	3.03	257.3	9.1809	16.0406	48.6029
174	178	6/26	2.13	87.0	4.5369	9.3247	19.8616
175	179	7/29	2.01	65.6	4.0401	8.1019	16.2847
176	180	8/22	1.92	55.3	3.6864	7.4351	14.2753
177	181	9/26	1.71	46.0	2.9241	6.7853	11.6028
178	182	10/25	1.70	49.9	2.8900	7.0626	12.0064
179	183	12/ 6	1.88	66.9	3.5344	8.1786	15.3758
180	184	91/ 1/12	3.08	211.7	9.4864	14.5509	44.8169
181	185	2/ 4	4.29	514.1	18.4041	22.6740	97.2714
OMIT157	79/11/12	2.27	37.9	5.1564	6.1553	13.9773	
OMIT158	80/ 5/23	3.18	50.0	10.1064	7.0696	22.4747	
OMIT169	6/ 7	2.59	46.4	6.7122	6.8084	17.6393	
OMIT166	4/ 9	1.73	145.0	2.9973	12.0420	20.8479	

=M=====

T O T A L	548.97	46401	1895.2297	2666.2666	9343.3469
-----------	--------	-------	-----------	-----------	-----------

=M=====

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

(where, OMIT : Omitted data)

a' = 5.458147
b' = -1.823601
a = 29.791368
b = -0.261824

Correlation Coefficient 0.981

=M=====

DISCHARGE RATING CURVE

STATION: 2-030 LUKULU

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	09-Mar-90	2.77	888.0	7.6729	29.7987	82.5423
2	16-Jun-90	1.45	565.8	2.1025	23.7868	34.4908
3	01-Sep-90	0.93	314	0.8649	17.7141	16.4741
4	25-Sep-90	0.75	311	0.5625	17.6213	13.2160
5	29-Sep-90	0.57	270	0.3249	16.4228	9.3610
6	25-Oct-90	0.58	239	0.3364	15.4541	8.9634
7	06-Dec-90	0.80	327	0.6400	18.0956	14.4765
8	05-Feb-91	4.27	1330	18.2329	36.4697	155.7256
9	09-Mar-91	4.56	1357	20.7936	36.8429	168.0037
T O T A L		16.68	5601.50	51.53	212.21	503.25

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 5.333699

b' = 13.693320

a = 28.448346

b = 2.567321

Correlation Coefficient 0.990

DISCHARGE RATING CURVE (1)
(where, H < 3.179 m)

STATION: 2-250 KALABO

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	5 13-Jun-61	2.78	102.9	7.7102	10.1427	28.1636
2	6 25-Aug-61	1.27	36.6	1.6155	6.0533	7.6938
3	7 14-Sep-61	0.96	29.3	0.9277	5.4084	5.2092
4	8 15-Oct-61	0.64	3.7	0.4097	1.9186	1.2281
5	9 17-Oct-61	0.62	13.8	0.3904	3.7097	2.3180
6	10 05-Nov-61	0.52	11.0	0.2685	3.3104	1.7153
7	11 17-Nov-61	0.55	10.9	0.3010	3.3018	1.8115
8	12 30-Nov-61	0.55	12.6	0.2977	3.5458	1.9346
9	13 06-Jan-62	0.73	14.6	0.5262	3.8225	2.7729
10	14 18-Jan-62	1.06	22.8	1.1251	4.7715	5.0611
11	15 06-Feb-62	1.98	32.3	3.9010	5.6817	11.2219
12	23 04-Jun-62	2.89	92.0	8.3492	9.5903	27.7111
13	24 23-Jun-62	2.55	85.4	6.4774	9.2429	23.5240
14	25 29-Jun-62	2.41	46.8	5.7981	6.8375	16.4641
15	26 12-Jul-62	2.19	57.9	4.7894	7.6060	16.6455
16	27 18-Jul-62	2.04	34.8	4.1580	5.8969	12.0244
17	28 25-Jul-62	1.88	38.5	3.5482	6.2034	11.6852
18	29 07-Aug-62	1.61	27.5	2.5900	5.2409	8.4345
19	30 21-Aug-62	1.33	25.3	1.7580	5.0314	6.6711
20	31 21-Sep-62	0.91	20.6	0.8361	4.5341	4.1460
21	32 09-Oct-62	0.73	15.6	0.5307	3.9500	2.8775
22	36 29-May-63	2.85	93.9	8.1218	9.6887	27.6115
23	37 17-Dec-63	1.98	80.0	3.9252	8.9456	17.7230
24	38 28-Jan-64	2.55	89.4	6.4774	9.4535	24.0598
25	40 24-Mar-64	2.93	106.0	8.5619	10.2938	30.1204
26	41 29-Dec-64	0.55	13.3	0.3010	3.6520	2.0036
27	42 26-Mar-65	2.80	98.3	7.8633	9.9140	27.8005
28	43 05-May-65	2.64	70.6	6.9512	8.4020	22.1521
29	44 18-Sep-76	0.85	29.0	0.7232	5.3822	4.5770
30	45 27-Jun-85	2.33	113.0	5.4227	10.6307	24.7555
31	46 02-Mar-90	1.86	28.7	3.4596	5.3526	9.9558
32	47 14-Jun-90	1.83	29.1	3.3489	5.3907	9.8650
33	48 27-Jul-90	1.25	15.43	1.5625	3.9281	4.9101
34	49 28-Aug-90	0.91	14.49	0.8281	3.8066	3.4640
35	50 30-Sep-90	0.67	11.79	0.4489	3.4337	2.3006
36	51 29-Oct-90	0.48	16.96	0.2304	4.1183	1.9768
37	52 10-Dec-90	0.37	12.00	0.1369	3.4641	1.2817
38	53 20-Jan-91	0.55	6.96	0.3025	2.6382	1.4510
T O T A L		57.57	1563.27	114.97	224.29	415.32

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 2.720938
 b' = 1.780129
 a = 7.403501
 b = 0.654234
 Correlation Coefficient = 0.926

DISCHARGE RATING CURVE (2)
 (where, $H \geq 3.179$ m)

STATION: 2-250 KALABO

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	12-Apr-61	3.54	184.9	12.5010	13.5960	48.0713
2	26-Apr-61	3.47	167.6	12.0737	12.9463	44.9849
3	09-May-61	3.29	161.5	10.8362	12.7101	41.8397
4	25-May-61	3.08	130.2	9.4770	11.4093	35.1234
5	16-Mar-62	4.24	613.3	17.9498	24.7658	104.9256
6	17-Mar-62	3.83	328.5	14.6325	18.1239	69.3282
7	29-Mar-62	3.83	286.7	14.6325	16.9308	64.7643
8	12-Apr-62	3.73	223.3	13.8958	14.9434	55.7048
9	25-Apr-62	3.57	176.2	12.7175	13.2725	47.3318
10	09-May-62	3.34	132.4	11.1393	11.5045	38.3969
11	23-May-62	3.09	116.4	9.5523	10.7881	33.3424
12	33-Jan-63	3.87	328.7	14.9843	18.1294	70.1780
13	34-Feb-63	3.98	358.6	15.8702	18.9369	75.4394
14	12-Mar-63	4.68	839.7	21.8900	28.9772	135.5752
15	39-Mar-64	3.16	117.4	10.0098	10.8339	34.2765
T O T A L		54.69	4165	202.1618	237.8681	899.2823

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 11.522290
 b' = -26.150261
 a = 132.763177
 b = -2.269537

Correlation Coefficient 0.969

DISCHARGE RATING CURVE

STATION: 2-400 SENANGA

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	11-Jun-88	3.12	1416.00	9.7344	37.6298	117.4049
2	15-Jul-88	1.63	789.00	2.6569	28.0891	45.7853
3	03-Mar-90	2.51	930.81	6.3001	30.5092	76.5780
4	13-Jun-90	2.64	949.77	6.9696	30.8183	81.3604
5	28-Jul-90	1.27	453.84	1.6129	21.3035	27.0555
6	26-Aug-90	0.91	353.93	0.8281	18.8130	17.1199
7	01-Oct-90	0.67	254.00	0.4489	15.9374	10.6780
8	28-Oct-90	0.64	247.73	0.4096	15.7394	10.0732
9	09-Dec-90	0.81	319.42	0.6561	17.8723	14.4766
10	01-Feb-91	2.20	734.14	4.8400	27.0950	59.6090
11	07-Mar-91	4.31	1662.38	18.5761	40.7723	175.7286
T O T A L		20.71	8111.02	53.03	284.58	635.87

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 7.127770

b' = 12.451210

a = 50.805112

b = 1.746859

Correlation Coefficient 0.976

DISCHARGE RATING CURVE

STATION: 4-050 RAGLAM FARM

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	24-Sep-59	0.46	1.5	0.2090	1.2228	0.5590
2	25-Sep-59	0.46	1.1	0.2090	1.0536	0.4817
3	07-Oct-59	0.35	1.3	0.1250	1.1487	0.4062
4	07-Oct-59	0.45	0.3	0.2035	0.5321	0.2400
5	28-Oct-59	0.40	1.1	0.1594	1.0263	0.4098
6	10-Nov-59	0.40	1.1	0.1619	1.0549	0.4244
7	07-Dec-59	0.45	1.5	0.2063	1.2423	0.5642
8	21-Dec-59	0.62	2.9	0.3828	1.6912	1.0464
9	04-Jan-60	1.01	6.6	1.0117	2.5631	2.5781
10	03-Feb-60	1.33	10.8	1.7660	3.2932	4.3765
11	26-May-60	1.58	17.2	2.5121	4.1459	6.5711
12	13-Jun-60	1.26	10.2	1.6000	3.1972	4.0443
13	14-Jul-60	0.97	6.0	0.9395	2.4559	2.3804
14	25-Jul-60	0.90	5.8	0.8140	2.4093	2.1737
15	22-Aug-60	0.70	3.1	0.4915	1.7488	1.2260
16	11-Oct-60	0.41	1.2	0.1718	1.0983	0.4553
17	16-Dec-60	0.44	1.1	0.1926	1.0509	0.4612
18	20-Dec-60	0.72	3.7	0.5174	1.9333	1.3907
19	23-Dec-60	1.01	8.0	1.0179	2.8208	2.8459
20	04-Jan-61	1.82	22.8	3.3111	4.7774	8.6932
21	18-Jan-61	1.81	21.3	3.2780	4.6176	8.3603
22	25-Jan-61	1.94	25.2	3.7697	5.0202	9.7470
23	30-Jan-61	2.42	36.5	5.8569	6.0439	14.6269
24	06-Feb-61	2.94	56.9	8.6693	7.5443	22.2133
25	02-May-61	3.34	71.9	11.1800	8.4808	28.3570
26	10-May-61	2.98	61.4	8.8860	7.8388	23.3672
27	16-May-61	2.79	54.4	7.7951	7.3735	20.5865
28	25-May-61	2.39	41.9	5.7103	6.4737	15.4698
29	30-May-61	2.19	35.1	4.7894	5.9256	12.9680
30	05-Jun-61	1.98	27.6	3.9252	5.2544	10.4101
31	12-Jun-61	1.79	22.7	3.1903	4.7685	8.5171
32	19-Jun-61	1.64	19.3	2.6890	4.3881	7.1957
33	27-Jun-61	1.50	16.7	2.2397	4.0839	6.1119
34	04-Jul-61	1.39	14.8	1.9403	3.8520	5.3656
35	12-Jul-61	1.30	12.9	1.7018	3.5934	4.6877
36	18-Jul-61	1.24	11.9	1.5465	3.4568	4.2989
37	26-Jul-61	1.17	10.5	1.3699	3.2456	3.7987
38	01-Aug-61	1.12	9.5	1.2581	3.0846	3.4598
39	11-Aug-61	1.01	8.3	1.0117	2.8804	2.8972
40	21-Aug-61	0.93	6.7	0.8586	2.5906	2.4004
41	28-Aug-61	0.87	6.2	0.7599	2.4903	2.1708
42	11-Sep-61	0.72	3.9	0.5218	1.9696	1.4228
43	25-Sep-61	0.58	3.0	0.3319	1.7243	0.9933
44	03-Oct-61	0.52	2.2	0.2685	1.4785	0.7661
45	09-Oct-61	0.48	1.7	0.2349	1.3186	0.6390
46	16-Oct-61	0.45	1.6	0.2063	1.2548	0.5699
47	07-Nov-61	0.49	1.9	0.2438	1.3733	0.6781
48	14-Nov-61	0.67	3.5	0.4497	1.8587	1.2463
49	16-Nov-61	0.75	4.3	0.5577	2.0815	1.5544
50	20-Nov-61	1.00	8.4	0.9995	2.8951	2.8944

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
51	52 27-Nov-61	0.93	5.7	0.8642	2.3917	2.2234
52	53 18-Dec-61	1.48	16.5	2.1943	4.0596	6.0136
53	54 27-Dec-61	1.83	24.0	3.3445	4.9032	8.9669
54	55 10-Jan-62	2.99	56.6	8.9224	7.5255	22.4791
55	56 15-Jan-62	3.19	62.6	10.1452	7.9108	25.1971
56	57 22-Jan-62	3.32	64.0	11.0176	7.9998	26.5534
57	58 13-Jun-62	2.60	53.2	6.7756	7.2963	18.9922
58	59 22-Jun-62	2.33	42.5	5.4511	6.5173	15.2164
59	60 28-Jan-64	2.71	54.7	7.3258	7.3927	20.0092
60	61 18-Feb-64	3.36	74.2	11.2822	8.6134	28.9314
61	62 28-Feb-64	3.66	85.8	13.3780	9.2628	33.8797
62	63 16-Mar-64	3.91	100.5	15.2688	10.0262	39.1778
63	64 03-Apr-64	3.57	87.2	12.7175	9.3389	33.3042
64	65 08-Apr-64	3.33	82.7	11.1190	9.0931	30.3212
65	66 24-Apr-64	2.53	50.7	6.4001	7.1195	18.0112
66	67 30-Apr-64	2.25	42.5	5.0599	6.5173	14.6602
67	68 08-May-64	1.90	31.7	3.5943	5.6316	10.6767
68	69 28-May-64	1.44	17.7	2.0697	4.2069	6.0523
69	70 08-Jun-64	1.27	14.2	1.6232	3.7703	4.8036
70	71 29-Jun-64	1.16	11.4	1.3415	3.3781	3.9127
71	72 28-Jul-64	1.04	2.5	1.0740	1.5732	1.6303
72	73 28-Aug-64	0.83	6.5	0.6823	2.5520	2.1080
73	74 03-Dec-71	2.14	34.7	4.5783	5.8921	12.6072
74	75 26-Jan-72	2.79	52.1	7.7611	7.2171	20.1058
75	76 20-Apr-72	4.39	105.5	19.2911	10.2717	45.1152
76	77 24-Nov-72	0.72	5.4	0.5131	2.3256	1.6658
77	78 23-Dec-72	0.90	6.6	0.8085	2.5741	2.3146
78	79 19-Jan-73	1.42	16.9	2.0088	4.1081	5.8226
79	80 09-Feb-73	1.54	17.8	2.3599	4.2136	6.4729
80	81 15-Mar-73	2.04	31.8	4.1580	5.6416	11.5039
81	82 06-Apr-73	1.87	13.3	3.4910	3.6404	6.8018
82	83 28-Apr-73	1.65	22.0	2.7091	4.6876	7.7155
83	84 10-May-73	1.34	14.2	1.7823	3.7703	5.0334
84	85 07-Jun-73	0.91	7.5	0.8361	2.7445	2.5096
85	86 11-Jul-73	0.72	4.3	0.5218	2.0746	1.4987
86	87 12-Jul-73	0.72	4.1	0.5131	2.0193	1.4464
87	88 27-Jul-73	0.67	3.8	0.4537	1.9407	1.3072
88	89 06-Sep-73	0.52	2.5	0.2685	1.5786	0.8180
89	90 27-Sep-73	0.50	2.2	0.2529	1.4862	0.7474
90	91 28-Sep-73	0.50	2.2	0.2468	1.4766	0.7336
91	92 08-Nov-73	0.50	1.7	0.2499	1.2926	0.6461
92	93 13-Dec-73	0.59	4.0	0.3425	1.9911	1.1652
93	94 11-Jan-74	1.31	13.5	1.7178	3.6675	4.8068
94	95 14-Feb-74	1.71	16.1	2.9134	4.0105	6.8454
95	96 26-Feb-74	2.14	22.5	4.5914	4.7417	10.1602
96	97 20-Mar-74	2.87	42.7	8.2089	6.5325	18.7164
97	98 16-May-74	1.93	35.6	3.7343	5.9661	11.5291
98	99 29-Nov-74	0.52	0.8	0.2653	0.9062	0.4668
99	100 26-Feb-75	1.92	26.5	3.6756	5.1483	9.8702
100	101 26-Aug-75	0.92	6.0	0.8417	2.4501	2.2479

=M=====							
NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
101	102	27-Oct-75	0.46	2.1	0.2090	1.4476	0.6618
102	103	07-Jan-76	2.37	31.6	5.6377	5.6215	13.3477
103	104	27-Apr-76	5.10	126.9	26.0029	11.2632	57.4344
104	105	07-Dec-76	0.61	3.6	0.3753	1.9038	1.1664
105	106	07-Mar-77	4.22	89.8	17.8209	9.4744	39.9960
106	107	04-Apr-77	5.12	152.1	26.2210	12.3313	63.1443
107	108	13-Jul-77	1.39	13.6	1.9318	3.6829	5.1188
108	109	22-Nov-77	0.46	2.5	0.2090	1.5786	0.7217
109	110	24-May-78	4.10	94.4	16.8064	9.7164	39.8330
110	111	04-Jul-80	2.13	23.1	4.5263	4.8040	10.2205
111	112	15-Oct-80	0.79	6.1	0.6280	2.4674	1.9554
112	113	10-Nov-80	0.77	6.9	0.5947	2.6339	2.0311
113	114	17-Dec-80	1.08	12.6	1.1708	3.5538	3.8453
114	115	17-Apr-81	4.27	99.2	18.2350	9.9582	42.5240
115	116	08-May-81	2.84	54.7	8.0698	7.3927	21.0006
116	117	27-Jun-81	1.68	18.5	2.8103	4.3067	7.2197
117	118	21-Aug-81	1.09	17.7	1.1907	4.2069	4.5905
118	119	21-Feb-82	3.38	81.6	11.4466	9.0306	30.5532
119	120	21-May-82	1.99	30.6	3.9493	5.5276	10.9849
120	121	13-Oct-82	0.49	4.3	0.2438	2.0746	1.0244
121	122	11-Apr-83	2.84	57.7	8.0698	7.5948	21.5749
122	123	10-Oct-83	0.44	3.4	0.1900	1.8434	0.8035
123	124	07-May-84	1.62	25.5	2.6096	5.0455	8.1507
124	125	08-Aug-84	0.73	4.4	0.5396	2.0883	1.5340
125	126	24-Apr-87	2.98	54.5	8.9042	7.3831	22.0311
126	127	23-Sep-89	0.58	2.4	0.3319	1.5605	0.8990
127	128	17-Jul-90	0.87	6.4	0.7569	2.5199	2.1923
128	129	21-Sep-90	0.67	3.6	0.4489	1.8974	1.2712
129	130	13-Oct-90	0.43	1.3	0.1849	1.1489	0.4940
130	131	06-Nov-90	0.38	1.3	0.1444	1.1180	0.4249
131	132	24-Dec-90	0.55	3.8	0.3025	1.9596	1.0778
132	133	14-Jan-91	1.26	13.7	1.5876	3.7054	4.6688
133	134	14-Feb-91	3.19	60.7	10.1761	7.7923	24.8574
134	135	08-Mar-91	3.20	56.3	10.2400	7.5040	24.0128

=M=====

T O T A L	215.58	3379.82	515.55	567.01	1314.26
-----------	--------	---------	--------	--------	---------

=M=====

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 2.382744
b' = 0.398134
a = 5.677468
b = 0.167091

Correlation Coefficient 0.988

=M=====

DISCHARGE RATING CURVE(1)

(where, $H < 2.920$ m)

STATION: 4-120 MWAMBASHT

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	29-Oct-59	0.65	0.6	0.4255	0.7526	0.4909
2	11-Nov-59	0.66	0.6	0.4415	0.7711	0.5124
3	25-Nov-59	0.68	0.7	0.4620	0.8070	0.5485
4	5-Dec-59	0.75	0.5	0.5577	0.7335	0.5477
5	14-Dec-59	0.79	1.1	0.6232	1.0509	0.8296
6	16-Dec-59	0.87	1.4	0.7546	1.1659	1.0128
7	22-Dec-59	0.98	1.8	0.9573	1.3567	1.3274
8	30-Dec-59	1.34	3.6	1.7904	1.9038	2.5475
9	05-Jan-60	1.65	5.3	2.7091	2.2950	3.7774
10	21-Jan-60	0.91	1.6	0.8361	1.2480	1.1411
11	04-Feb-60	1.82	7.2	3.3222	2.6819	4.8883
12	15-Feb-60	2.91	15.8	8.4730	3.9786	11.5810
13	29-Mar-60	2.75	14.8	7.5586	3.8520	10.5903
14	06-May-60	1.61	6.0	2.5900	2.4559	3.9524
15	27-May-60	1.33	3.8	1.7580	1.9552	2.5923
16	14-Jun-60	1.25	3.3	1.5693	1.8202	2.2802
17	27-Jun-60	1.17	2.9	1.3699	1.6995	1.9892
18	13-Jul-60	1.11	2.6	1.2377	1.6228	1.8054
19	21-Jul-60	1.09	2.4	1.1774	1.5331	1.6635
20	28-Jul-60	1.04	2.0	1.0803	1.4079	1.4633
21	16-Aug-60	0.99	1.8	0.9753	1.3250	1.3085
22	24-Aug-60	0.95	1.7	0.9102	1.3035	1.2435
23	10-Oct-60	0.76	0.7	0.5806	0.8244	0.6282
24	10-Nov-60	0.69	0.8	0.4829	0.8744	0.6077
25	06-Dec-60	0.76	0.7	0.5714	0.8414	0.6360
26	21-Dec-60	1.46	4.6	2.1227	2.1550	3.1397
27	05-Jan-61	1.66	6.4	2.7493	2.5241	4.1853
28	11-Jan-61	1.62	6.1	2.6195	2.4617	3.9842
29	19-Jan-61	1.51	5.2	2.2856	2.2764	3.4415
30	26-Jan-61	1.87	7.7	3.5138	2.7753	5.2023
31	15-Feb-61	2.71	13.3	7.3258	3.6481	9.8741
32	11-Apr-61	2.64	14.7	6.9834	3.8341	10.1319
33	19-Apr-61	2.73	14.7	7.4584	3.8341	10.4708
34	26-Apr-61	2.27	11.3	5.1564	3.3571	7.6232
35	10-May-61	1.86	7.8	3.4456	2.7956	5.1893
36	16-May-61	1.77	7.0	3.1468	2.6500	4.7010
37	29-May-61	1.57	6.2	2.4736	2.4903	3.9166
38	07-Jun-61	1.47	5.2	2.1673	2.2888	3.3695
39	20-Jun-61	1.40	4.6	1.9658	2.1484	3.0122
40	26-Jun-61	1.37	4.6	1.8813	2.1550	2.9558
41	12-Jul-61	1.29	4.1	1.6545	2.0263	2.6064
42	18-Jul-61	1.24	3.7	1.5465	1.9260	2.3952
43	24-Jul-61	1.22	3.5	1.4864	1.8814	2.2938
44	09-Aug-61	1.13	2.8	1.2718	1.6743	1.8882
45	14-Aug-61	1.11	2.8	1.2309	1.6828	1.8670
46	22-Aug-61	1.09	2.8	1.1907	1.6743	1.8270
47	12-Sep-61	0.97	2.1	0.9395	1.4378	1.3936
48	26-Sep-61	0.89	1.7	0.7867	1.2926	1.1465
49	05-Oct-61	0.85	1.5	0.7180	1.2251	1.0381
50	10-Oct-61	0.83	1.3	0.6873	1.1413	0.9462

=M=====						
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
=M=====						
51	57 17-Oct-61	0.80	1.1	0.6377	1.0509	0.8392
52	58 31-Oct-61	0.79	1.0	0.6280	1.0236	0.8112
53	59 08-Nov-61	0.87	1.5	0.7546	1.2135	1.0541
54	60 15-Nov-61	1.50	5.2	2.2488	2.2702	3.4044
55	61 21-Nov-61	1.76	6.7	3.0930	2.5851	4.5464
56	62 08-Dec-61	1.73	6.9	2.9973	2.6178	4.5320
57	63 18-Dec-61	2.11	9.6	4.4359	3.0937	6.5159
58	64 28-Dec-61	2.47	12.6	6.0803	3.5458	8.7433
59	65 03-Jan-62	2.56	13.5	6.5552	3.6752	9.4097
60	66 11-Jan-62	2.76	15.8	7.6258	3.9786	10.9868
61	67 22-Jan-62	2.25	10.3	5.0736	3.2105	7.2316
62	68 31-Jan-62	2.62	13.7	6.8392	3.7059	9.6916
63	77 15-May-62	2.80	15.8	7.8462	3.9786	11.1445
64	78 29-May-62	2.48	13.6	6.1557	3.6829	9.1375
65	79 07-Jun-62	2.33	11.7	5.4227	3.4156	7.9539
66	89 31-Aug-71	1.13	2.6	1.2856	1.6140	1.8301
67	90 15-Nov-71	1.14	2.9	1.2995	1.7078	1.9468
68	91 03-Dec-71	1.13	3.5	1.2718	1.8738	2.1132
69	93 27-Jan-72	2.68	12.0	7.1944	3.4650	9.2940
70	94 16-Feb-72	2.58	12.1	6.6649	3.4773	8.9771
71	95 02-Mar-72	2.87	15.1	8.2264	3.8850	11.1427
72	96 11-Apr-72	2.72	12.1	7.3920	3.4854	9.4761
73	97 12-May-72	2.03	8.4	4.1084	2.9000	5.8781
74	98 12-Jun-72	1.62	5.8	2.6096	2.4093	3.8922
75	99 01-Sep-72	1.21	2.8	1.4569	1.6743	2.0209
76	100 06-Oct-72	0.98	1.8	0.9633	1.3357	1.3109
77	101 13-Nov-72	0.95	2.0	0.8986	1.3978	1.3250
78	102 26-Jan-73	1.25	2.9	1.5693	1.7078	2.1394
79	103 22-May-73	1.09	2.3	1.1840	1.5145	1.6480
80	104 12-Jun-73	1.01	2.1	1.0179	1.4573	1.4703
81	105 25-Jun-73	1.00	1.6	1.0056	1.2480	1.2515
82	106 05-Jul-73	0.98	1.6	0.9692	1.2480	1.2286
83	107 20-Jul-73	0.97	1.6	0.9395	1.2480	1.2096
84	108 01-Aug-73	0.95	1.8	0.8986	1.3357	1.2661
85	109 27-Aug-73	0.88	0.9	0.7759	0.9369	0.8253
86	110 13-Sep-73	0.80	1.1	0.6329	1.0509	0.8360
87	111 17-Sep-73	0.79	1.0	0.6232	0.9955	0.7859
88	112 24-Sep-73	0.76	0.9	0.5806	0.9519	0.7254
89	113 01-Oct-73	0.76	1.1	0.5806	1.0509	0.8008
90	114 09-Oct-73	0.77	1.0	0.5900	1.0236	0.7862
91	115 15-Oct-73	0.73	0.9	0.5396	0.9667	0.7101
92	116 22-Oct-73	0.72	0.9	0.5174	0.9667	0.6954
93	117 29-Oct-73	0.69	0.6	0.4829	0.7526	0.5230
94	118 12-Nov-73	0.91	1.4	0.8361	1.1659	1.0661
95	119 19-Nov-73	0.87	1.2	0.7493	1.1035	0.9552
96	120 26-Nov-73	0.80	1.2	0.6329	1.1162	0.8880
97	121 03-Dec-73	0.81	1.0	0.6573	1.0236	0.8299
98	122 12-Dec-73	1.13	2.5	1.2718	1.5696	1.7701
99	123 19-Dec-73	0.98	2.1	0.9573	1.4573	1.4258
100	124 16-Jan-74	2.01	7.1	4.0469	2.6660	5.3631

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
101	125	30-Jan-74	2.38	11.4	5.6522	3.3781	8.0313
102	126	07-Feb-74	2.77	13.8	7.6933	3.7211	10.3213
103	127	11-Feb-74	2.26	10.2	5.1011	3.1972	7.2212
104	128	05-Mar-74	2.72	14.7	7.3754	3.8336	10.4112
105	129	11-Mar-74	2.74	14.6	7.5251	3.8262	10.4960
106	130	18-Apr-74	2.04	8.2	4.1704	2.8607	5.8420
107	131	09-May-74	1.59	4.8	2.5412	2.2005	3.5078
108	132	27-May-74	1.55	5.9	2.4164	2.4327	3.7816
109	133	10-Jun-74	1.37	3.7	1.8897	1.9260	2.6476
110	134	17-Jun-74	1.34	3.2	1.7904	1.7809	2.3829
111	135	15-Jul-74	1.28	3.4	1.6388	1.8434	2.3598
112	136	22-Aug-74	1.10	2.5	1.2040	1.5964	1.7517
113	137	02-Dec-74	1.25	2.8	1.5693	1.6743	2.0975
114	138	19-Dec-74	1.51	3.4	2.2672	1.8510	2.7871
115	140	19-Jun-75	1.64	6.1	2.6790	2.4617	4.0292
116	141	25-Jul-75	1.40	3.6	1.9658	1.8964	2.6589
117	142	20-Aug-75	1.31	3.5	1.7178	1.8587	2.4360
118	143	25-Sep-75	1.06	2.3	1.1186	1.5145	1.6018
119	144	23-Oct-75	0.89	1.6	0.7867	1.2705	1.1269
120	145	01-Dec-75	1.12	1.7	1.2445	1.2926	1.4419
121	146	21-Jan-76	2.65	12.5	7.0480	3.5378	9.3922
122	155	24-May-76	2.73	14.6	7.4418	3.8151	10.4074
123	156	28-Jun-76	2.15	8.8	4.6437	2.9723	6.4052
124	157	26-Jul-76	1.91	5.9	3.6290	2.4211	4.6121
125	158	22-Sep-76	1.38	4.0	1.9149	2.0052	2.7748
126	159	26-Oct-76	1.20	2.9	1.4349	1.7161	2.0556
127	160	22-Nov-76	1.36	3.7	1.8480	1.9112	2.5982
128	161	27-Dec-76	2.21	8.8	4.8967	2.9628	6.5562
129	162	04-Jan-77	2.26	9.7	5.1149	3.1120	7.0381
130	163	20-Jan-77	2.38	9.2	5.6522	3.0290	7.2012
131	164	10-Feb-77	2.87	15.0	8.2264	3.8777	11.1218
132	167	21-Apr-77	2.38	7.6	5.6522	2.7651	6.5738
133	168	09-May-77	1.90	6.5	3.6058	2.5576	4.8566
134	169	14-Jun-77	1.54	4.8	2.3693	2.1941	3.3772
135	170	08-Sep-77	1.21	1.9	1.4716	1.3774	1.6709
136	171	20-Sep-77	0.92	1.6	0.8417	1.2705	1.1656
137	172	13-Oct-77	1.11	1.7	1.2309	1.3143	1.4582
138	173	01-Nov-77	0.78	0.9	0.6136	0.9369	0.7339
139	174	14-Jul-78	1.93	7.1	3.7225	2.6554	5.1232
140	175	14-Oct-80	0.88	1.2	0.7706	1.1162	0.9798
141	176	17-Nov-80	1.03	1.5	1.0677	1.2135	1.2538
142	177	05-Dec-80	1.25	1.9	1.5693	1.3876	1.7383
143	181	22-Oct-81	0.79	1.4	0.6280	1.1779	0.9335
144	182	12-Nov-81	0.84	1.6	0.7077	1.2705	1.0688
145	183	18-Dec-81	1.43	3.9	2.0522	1.9696	2.8216
146	184	11-Oct-82	0.73	1.2	0.5351	1.1035	0.8072
147	185	24-Nov-82	1.23	2.3	1.5014	1.5051	1.8442
148	186	10-Aug-83	0.98	1.8	0.9633	1.3357	1.3109
149	187	08-Sep-83	0.82	1.6	0.6773	1.2705	1.0455
150	188	21-Jun-84	0.92	1.8	0.8529	1.3567	1.2530

```

=====
NO.    DATE      H(m)  Q(m3/s)    H^2.0      Q^0.5      H*Q^0.5
=====
151 189 09-Nov-84    0.76    0.8    0.5806    0.8744    0.6663
152 191 22-Apr-85    2.23    8.3    4.9508    2.8804    6.4091
153 192 19-Jun-85    1.49    3.2    2.2124    1.7809    2.6489
154 194 26-Jan-88    2.56   13.6    6.5552    3.6944    9.4589
155 195 13-Dec-88    1.35    4.2    1.8232    2.0402    2.7549
156 196 22-Feb-90    2.40   11.8    5.7600    3.4395    8.2547
157 197 22-Feb-90    1.05    3.1    1.1025    1.7692    1.8576
158 198 13-Jun-90    0.91    1.8    0.8281    1.3229    1.2038
159 199 12-Jul-90    0.87    1.3    0.7569    1.1446    0.9958
160 200 16-Aug-90    0.70    0.6    0.4900    0.8000    0.5600
161 201 09-Oct-90    0.65    0.6    0.4225    0.7746    0.5035
162 202 03-Nov-90    1.02    2.7    1.0404    1.6553    1.6884
163 203 21-Dec-90    1.89    6.1    3.5721    2.4718    4.6718
164 204 11-Jan-91    2.83   15.1    8.0089    3.8794   10.9788
165 205 07-Mar-91    2.59   13.7    6.7081    3.6986    9.5795
OMIT 92 19-Jan-72    2.59    7.4    6.7122    2.7238    7.0568
OMIT178 07-Jan-81    1.59    2.5    2.5315    1.5875    2.5258
OMIT179 19-Feb-81    2.85    9.5    8.1045    3.0846    8.7812
OMIT193 30-Apr-87    1.77    3.1    3.1253    1.7488    3.0916
=====
T O T A L    242.96   844.11   431.69   338.23   602.32
=====
DISCHARGE - RATING CURVE : Q = a * (H + b)^2
      (where, OMIT : Omitted Data)
                                     a' = 1.410452
                                     b' = -0.026996
                                     a  = 1.989374
                                     b  = -0.019140
                                     Correlation Coefficient 0.988
=====

```

DISCHARGE RATING CURVE(2)

(where, $H \geq 2.920$ m)

STATION: 4-120 MWAMBASHI

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	14 24-Feb-60	3.30	23.8	10.9166	4.8829	16.1333
2	15 18-Mar-60	3.49	32.0	12.2011	5.6567	19.7588
3	35 22-Feb-61	3.39	29.4	11.4672	5.4222	18.3613
4	36 01-Mar-61	3.16	22.3	9.9712	4.7223	14.9117
5	37 22-Mar-61	3.19	23.6	10.1647	4.8580	15.4883
6	69 06-Feb-62	3.43	32.0	11.7790	5.6567	19.4140
7	70 20-Feb-62	3.02	19.7	9.1238	4.4362	13.4000
8	71 02-Mar-62	3.61	41.1	13.0017	6.4078	23.1050
9	72 15-Mar-62	3.38	27.8	11.4260	5.2706	17.8157
10	73 18-Mar-62	3.77	32.8	14.1928	5.7313	21.5916
11	74 11-Apr-62	3.83	32.0	14.6791	5.6567	21.6726
12	75 17-Apr-62	3.25	22.5	10.5571	4.7477	15.4259
13	76 04-May-62	3.14	22.5	9.8561	4.7417	14.8862
14	80 14-Jan-63	3.19	22.7	10.2036	4.7596	15.2035
15	81 05-Feb-63	3.37	32.0	11.3848	5.6567	19.0864
16	82 11-Feb-63	3.38	32.0	11.4466	5.6567	19.1381
17	83 21-Feb-63	3.39	34.3	11.5085	5.8535	19.8575
18	84 01-Mar-63	3.33	29.2	11.0581	5.4006	17.9589
19	85 11-Mar-63	3.33	30.0	11.1190	5.4787	18.2687
20	86 16-Mar-63	3.30	28.1	10.8764	5.3054	17.4968
21	87 27-Mar-63	3.22	24.2	10.3796	4.9176	15.8431
22	88 29-Mar-63	3.12	22.1	9.7036	4.7027	14.6492
23	139 17-Feb-75	2.97	15.1	8.8497	3.8886	11.5680
24	147 02-Feb-76	3.05	15.8	9.3275	3.9715	12.1292
25	148 19-Feb-76	3.22	15.2	10.3600	3.8995	12.5513
26	149 01-Mar-76	3.33	25.2	11.0987	5.0230	16.7339
27	150 22-Mar-76	3.67	30.0	13.4898	5.4813	20.1318
28	151 23-Mar-76	3.65	33.7	13.3335	5.8049	21.1967
29	152 02-Apr-76	3.52	33.5	12.3935	5.7878	20.3757
30	153 13-Apr-76	3.96	45.0	15.7006	6.7100	26.5876
31	154 04-May-76	3.19	23.8	10.1452	4.8800	15.5436
32	165 09-Mar-77	3.26	20.9	10.6365	4.5714	14.9090
33	166 14-Mar-77	3.35	27.2	11.2413	5.2138	17.4810
34	180 13-Mar-81	3.43	22.0	11.7371	4.6876	16.0596
35	190 18-Jan-85	2.94	14.5	8.6334	3.8039	11.1770
T O T A L		117.14	938.00	393.96	179.65	605.91

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 2.461370

b' = -3.105398

a = 6.058342

b = -1.261654

Correlation Coefficient 0.847

DISCHARGE RATING CURVE

STATION: 4-130 SMITH'S BRIDGE

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	1 27-Aug-59	0.82	7.6	0.6773	2.7599	2.2713
2	2 16-Sep-59	0.58	6.3	0.3319	2.5185	1.4509
3	3 21-Oct-59	0.47	4.5	0.2203	2.1219	0.9960
4	4 12-Nov-59	0.51	5.2	0.2560	2.2702	1.1486
5	5 26-Nov-59	0.61	6.2	0.3716	2.4959	1.5215
6	6 09-Dec-59	0.76	8.2	0.5760	2.8557	2.1674
7	7 17-Dec-59	0.98	11.3	0.9692	3.3655	3.3134
8	8 23-Dec-59	1.00	12.2	0.9934	3.4976	3.4860
9	9 31-Dec-59	1.69	25.7	2.8513	5.0735	8.5670
10	10 06-Jan-60	1.53	23.7	2.3412	4.8655	7.4446
11	11 19-Jan-60	1.21	16.5	1.4716	4.0561	4.9205
12	12 05-Feb-60	2.22	44.5	4.9372	6.6676	14.8154
13	13 16-Feb-60	3.30	86.1	10.8764	9.2781	30.5986
14	14 25-Feb-60	3.79	112.4	14.3771	10.6027	40.2025
15	15 22-Mar-60	5.04	190.6	25.4464	13.8048	69.6375
16	16 30-Mar-60	4.43	156.0	19.6408	12.4910	55.3576
17	17 09-May-60	2.57	54.9	6.5865	7.4118	19.0217
18	18 09-May-60	2.56	59.7	6.5552	7.7297	19.7906
19	19 30-May-60	1.86	32.8	3.4569	5.7313	10.6560
20	20 15-Jun-60	1.58	25.1	2.5121	5.0117	7.9433
21	21 28-Jun-60	1.40	19.4	1.9488	4.4042	6.1482
22	22 19-Jul-60	1.23	16.7	1.5088	4.0874	5.0207
23	23 26-Jul-60	1.16	16.5	1.3415	4.0596	4.7020
24	24 18-Aug-60	0.99	12.1	0.9873	3.4813	3.4592
25	25 26-Aug-60	0.92	10.4	0.8473	3.2237	2.9674
26	26 14-Oct-60	0.62	6.1	0.3791	2.4674	1.5192
27	27 08-Nov-60	0.54	5.0	0.2878	2.2388	1.2010
28	28 07-Dec-60	0.70	6.9	0.4957	2.6178	1.8431
29	29 22-Dec-60	1.81	29.7	3.2780	5.4528	9.8723
30	30 13-Jan-61	2.10	36.5	4.3975	6.0439	12.6742
31	31 20-Jan-61	2.43	49.0	5.9013	6.9992	17.0027
32	32 27-Jan-61	3.11	77.0	9.6656	8.7762	27.2849
33	33 16-Feb-61	4.59	145.3	21.0707	12.0526	55.3250
34	34 23-Feb-61	4.89	162.5	23.9321	12.7491	62.3689
35	35 16-Mar-61	4.72	152.9	22.3200	12.3657	58.4206
36	36 12-Apr-61	4.69	161.1	22.0329	12.6934	59.5819
37	37 19-Apr-61	4.57	151.2	20.8475	12.2968	56.1461
38	38 27-Apr-61	4.12	125.4	17.0069	11.2002	46.1888
39	39 11-May-61	3.51	96.3	12.2864	9.8121	34.3934
40	40 17-May-61	3.35	88.6	11.2413	9.4144	31.5647
41	41 30-May-61	2.79	62.0	7.7951	7.8749	21.9864
42	42 27-Jun-61	2.07	37.9	4.2958	6.1599	12.7673
43	43 17-Jul-61	1.75	28.9	3.0609	5.3743	9.4026
44	44 25-Jul-61	1.66	27.8	2.7595	5.2706	8.7552
45	45 15-Aug-61	1.40	20.6	1.9658	4.5435	6.3703
46	46 23-Aug-61	1.32	18.9	1.7499	4.3492	5.7533
47	47 13-Sep-61	1.07	14.4	1.1446	3.8002	4.0656
48	48 27-Sep-61	0.91	10.5	0.8361	3.2412	2.9638
49	49 06-Oct-61	0.83	9.4	0.6823	3.0615	2.5288
50	50 11-Oct-61	0.78	8.5	0.6136	2.9098	2.2793

=M=====						
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
=M=====						
51	51 18-Oct-61	0.73	7.8	0.5307	2.8007	2.0402
52	52 01-Nov-61	0.84	9.4	0.6975	3.0615	2.5568
53	53 09-Nov-61	1.23	15.0	1.5014	3.8740	4.7468
54	54 22-Nov-61	1.98	33.7	3.9131	5.8049	11.4830
55	55 12-Dec-61	2.55	48.4	6.4774	6.9586	17.7101
56	56 19-Dec-61	3.38	81.0	11.4054	8.9992	30.3921
57	57 04-Jan-62	3.69	95.1	13.6019	9.7542	35.9743
58	58 12-Jan-62	4.57	141.0	20.9032	11.8751	54.2929
59	59 23-Jan-62	4.47	139.3	19.9663	11.8033	52.7417
60	60 01-Feb-62	5.15	185.5	26.5026	13.6189	70.1112
61	61 05-Feb-62	5.60	214.9	31.3849	14.6603	82.1304
62	62 09-Feb-62	6.10	263.3	37.1984	16.2280	98.9751
63	63 19-Feb-62	5.47	209.5	29.9336	14.4757	79.1986
64	64 13-Mar-62	6.63	334.1	43.9894	18.2795	121.2376
65	65 08-May-62	5.30	206.4	28.0950	14.3677	76.1554
66	66 16-May-62	4.95	183.2	24.4719	13.5355	66.9589
67	67 30-May-62	4.29	138.5	18.4177	11.7673	50.5004
68	68 19-Jun-62	3.46	92.6	11.9891	9.6227	33.3188
69	69 19-Mar-63	6.06	245.2	36.7536	15.6596	94.9360
70	70 10-Aug-66	1.22	16.1	1.4864	4.0105	4.8896
71	71 15-Jan-71	5.38	186.9	28.9742	13.6708	73.5868
72	72 29-Jan-71	5.95	222.3	35.4352	14.9093	88.7512
73	73 14-Feb-71	5.99	227.4	35.9085	15.0793	90.3605
74	74 13-Sep-71	1.79	25.1	3.2121	5.0145	8.9871
75	75 08-Oct-71	1.44	17.1	2.0697	4.1322	5.9448
76	76 15-Oct-71	1.35	14.6	1.8232	3.8151	5.1514
77	77 22-Nov-71	2.05	28.5	4.1954	5.3373	10.9322
78	78 16-Dec-71	2.33	23.9	5.4369	4.8916	11.4058
79	79 07-Apr-72	5.65	207.5	31.9682	14.4051	81.4468
80	80 09-May-72	4.26	130.6	18.1830	11.4267	48.7251
81	81 06-Sep-72	1.83	26.8	3.3445	5.1784	9.4703
82	82 04-May-73	2.38	33.7	5.6522	5.8074	13.8066
83	83 15-May-73	1.96	26.8	3.8411	5.1784	10.1490
84	84 22-May-73	1.79	21.2	3.1903	4.6023	8.2203
85	85 29-May-73	1.67	20.5	2.7899	4.5278	7.5629
86	86 04-Jun-73	1.60	19.0	2.5606	4.3557	6.9700
87	87 13-Jun-73	1.50	16.4	2.2397	4.0491	6.0598
88	88 21-Jun-73	1.45	14.8	2.1138	3.8520	5.6004
89	89 29-Jun-73	1.37	16.3	1.8729	4.0316	5.5175
90	90 05-Jul-73	1.34	13.3	1.7986	3.6520	4.8978
91	91 12-Jul-73	1.31	12.5	1.7258	3.5378	4.6476
92	92 17-Jul-73	1.28	11.2	1.6388	3.3402	4.2760
93	93 24-Jul-73	1.26	10.9	1.6000	3.3061	4.1820
94	94 31-Jul-73	1.22	11.6	1.4939	3.4073	4.1646
95	95 15-Aug-73	1.15	7.0	1.3204	2.6447	3.0390
96	96 20-Aug-73	1.12	12.5	1.2581	3.5378	3.9682
97	97 27-Aug-73	1.09	9.7	1.1774	3.1120	3.3768
98	98 13-Sep-73	0.97	7.7	0.9454	2.7753	2.6984
99	99 17-Sep-73	0.99	7.7	0.9873	2.7804	2.7627
100	100 24-Sep-73	0.95	7.0	0.8986	2.6447	2.5070

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
101	101	01-Oct-73	0.92	6.7	0.8417	2.5851	2.3717
102	102	09-Oct-73	0.93	7.2	0.8586	2.6872	2.4899
103	103	15-Oct-73	0.86	6.5	0.7388	2.5465	2.1888
104	104	29-Oct-73	0.79	6.0	0.6280	2.4559	1.9463
105	105	02-Nov-73	1.03	8.3	1.0614	2.8804	2.9675
106	106	12-Nov-73	1.39	12.0	1.9403	3.4650	4.8265
107	107	19-Nov-73	1.31	9.8	1.7178	3.1346	4.1084
108	108	26-Nov-73	1.22	11.2	1.4790	3.3487	4.0725
109	109	03-Dec-73	1.17	8.9	1.3771	2.9771	3.4936
110	110	10-Dec-73	1.41	12.0	1.9744	3.4650	4.8688
111	111	19-Dec-73	1.44	14.6	2.0610	3.8225	5.4876
112	112	31-Dec-73	1.77	23.3	3.1253	4.8246	8.5291
113	113	15-Jan-74	2.80	41.0	7.8121	6.4033	17.8974
114	114	21-Jan-74	2.52	34.9	6.3386	5.9089	14.8764
115	115	30-Jan-74	3.04	46.1	9.2346	6.7876	20.6265
116	116	08-Feb-74	3.47	65.0	12.0102	8.0650	27.9498
117	117	13-Feb-74	3.21	55.9	10.2816	7.4765	23.9732
118	118	26-Feb-74	3.94	76.6	15.5080	8.7520	34.4654
119	119	11-Mar-74	4.59	126.5	21.0428	11.2468	51.5919
120	120	29-Mar-74	4.24	95.1	18.0015	9.7513	41.3730
121	121	17-Apr-74	4.24	111.1	17.9756	10.5384	44.6805
122	122	26-Apr-74	3.89	73.4	15.1026	8.5672	33.2939
123	123	06-May-74	3.34	65.7	11.1393	8.1035	27.0459
124	124	25-May-74	2.98	50.9	8.8860	7.1334	21.2643
125	125	13-Jun-74	2.44	36.5	5.9458	6.0439	14.7374
126	126	09-Jul-74	1.98	22.8	3.9372	4.7715	9.4677
127	127	07-Aug-74	1.65	19.3	2.7091	4.3913	7.2278
128	128	05-Nov-74	0.85	6.1	0.7232	2.4731	2.1031
129	129	18-Nov-74	0.76	5.7	0.5714	2.3857	1.8034
130	130	31-Jan-75	3.72	62.0	13.8277	7.8749	29.2833
131	131	03-Feb-75	3.55	62.5	12.5874	7.9072	28.0537
132	132	07-Feb-75	4.67	122.2	21.8046	11.0538	51.6163
133	133	12-Feb-75	4.54	109.9	20.6531	10.4846	47.6478
134	134	19-Feb-75	3.83	77.5	14.6325	8.8052	33.6820
135	135	28-Feb-75	3.96	90.4	15.7006	9.5057	37.6655
136	136	17-Mar-75	6.54	274.8	42.7449	16.5767	108.3777
137	137	01-Apr-75	5.59	188.6	31.2825	13.7338	76.8145
138	138	21-Apr-75	5.19	140.7	26.9122	11.8608	61.5301
139	139	11-Jun-75	2.87	48.9	8.2089	6.9931	20.0360
140	140	11-Jul-75	2.28	33.2	5.2119	5.7633	13.1573
141	141	25-Jul-75	2.05	30.9	4.2078	5.5582	11.4016
142	142	25-Aug-75	1.74	20.8	3.0184	4.5590	7.9206
143	143	26-Sep-75	1.34	13.5	1.7823	3.6675	4.8962
144	144	23-Oct-75	1.19	11.2	1.4131	3.3402	3.9705
145	145	10-Nov-75	0.97	6.9	0.9395	2.6232	2.5425
146	146	19-Nov-75	1.16	9.7	1.3486	3.1074	3.6086
147	147	04-Dec-75	1.37	13.4	1.8646	3.6598	4.9974
148	148	29-Dec-75	3.09	53.2	9.5523	7.2963	22.5504
149	149	16-Jan-76	4.89	108.2	23.8724	10.4005	50.8162
150	150	29-Jan-76	5.22	152.3	27.2930	12.3428	64.4821

=M=====							
NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
151	151	19-Feb-76	5.58	179.0	31.1123	13.3777	74.6186
152	152	16-Mar-76	6.01	216.3	36.1280	14.7085	88.4079
153	153	22-Mar-76	6.34	256.6	40.1549	16.0172	101.4977
154	154	02-Apr-76	6.34	259.2	40.1549	16.1001	102.0228
155	155	12-Apr-76	7.07	373.8	49.9180	19.3335	136.5959
156	156	21-Apr-76	6.25	259.9	39.1187	16.1229	100.8408
157	157	14-May-76	5.49	198.0	30.1675	14.0730	77.2956
158	158	01-Jun-76	4.57	127.1	20.8475	11.2758	51.4840
159	159	26-Jul-76	2.94	56.7	8.6514	7.5293	22.1461
160	160	02-Aug-76	2.80	49.8	7.8633	7.0556	19.7849
161	161	07-Sep-76	2.26	32.3	5.0874	5.6866	12.8263
162	162	07-Oct-76	1.77	21.9	3.1253	4.6846	8.2816
163	163	11-Nov-76	1.90	24.8	3.5943	4.9805	9.4423
164	164	28-Dec-76	3.38	62.2	11.4466	7.8857	26.6794
165	165	19-Jan-77	3.85	86.6	14.7961	9.3086	35.8061
166	166	11-Feb-77	4.75	132.0	22.6089	11.4897	54.6321
167	167	18-Feb-77	4.79	131.1	22.9873	11.4502	54.8980
168	168	03-Mar-77	6.38	265.3	40.6976	16.2889	103.9146
169	169	13-Apr-77	5.70	211.0	32.4873	14.5264	82.7972
170	170	03-May-77	4.69	238.1	21.9757	15.4319	72.3422
171	171	06-Jun-77	3.24	64.3	10.4978	8.0174	25.9767
172	172	06-Jul-77	2.64	49.8	6.9834	7.0556	18.6452
173	173	11-Aug-77	2.16	29.7	4.6832	5.4476	11.7890
174	174	20-Sep-77	1.66	21.1	2.7493	4.5930	7.6158
175	175	26-Oct-77	1.52	11.2	2.3226	3.3444	5.0969
176	176	01-Nov-77	2.05	10.3	4.1829	3.2105	6.5661
177	177	21-Dec-77	3.68	73.3	13.5122	8.5639	31.4800
178	178	23-Feb-78	6.56	339.3	42.9844	18.4214	120.7755
179	179	06-Mar-78	6.57	349.5	43.1444	18.6946	122.7941
180	180	10-May-78	5.56	221.6	30.9086	14.8846	82.7516
181	181	13-Jul-78	3.37	69.5	11.3437	8.3394	28.0876
182	182	04-Jun-80	3.71	90.7	13.7598	9.5236	35.3270
183	183	15-Sep-80	1.92	22.2	3.6873	4.7147	9.0534
184	184	08-Oct-80	1.58	16.0	2.4928	4.0034	6.3208
185	185	13-Nov-80	1.41	14.6	1.9916	3.8225	5.3944
186	186	05-Dec-80	1.91	21.6	3.6290	4.6452	8.8490
187	187	06-Jan-81	2.78	46.1	7.7102	6.7918	18.8589
188	188	02-Feb-81	3.76	94.7	14.1239	9.7295	36.5653
189	189	10-Mar-81	5.93	228.4	35.2178	15.1130	89.6876
190	190	06-Apr-81	5.40	195.4	29.1385	13.9770	75.4482
191	191	04-May-81	4.42	121.3	19.5598	11.0153	48.7170
192	192	12-Jul-81	2.02	28.1	4.0714	5.3000	10.6943
193	193	16-Jul-81	2.27	34.2	5.1564	5.8511	13.2864
194	194	08-Sep-81	1.68	20.8	2.8103	4.5621	7.6479
195	195	16-Oct-81	1.25	20.5	1.5541	4.5278	5.6446
196	196	13-Nov-81	1.09	9.6	1.1907	3.1029	3.3858
197	197	18-Dec-81	1.78	21.2	3.1685	4.6023	8.1922
198	198	07-Jan-82	1.80	20.7	3.2340	4.5466	8.1762
199	199	03-Mar-82	4.73	139.1	22.3488	11.7925	55.7486
200	200	11-Jun-82	2.19	36.0	4.8161	6.0039	13.1760

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
201	201	09-Jul-82	1.74	21.9	3.0184	4.6846	8.1389
202	202	30-Aug-82	1.35	14.6	1.8315	3.8225	5.1730
203	203	22-Oct-82	1.70	19.9	2.9030	4.4649	7.6074
204	204	15-Nov-82	1.32	12.9	1.7418	3.5895	4.7373
205	205	08-Dec-82	2.92	51.9	8.5085	7.2025	21.0093
206	206	20-Jan-83	3.66	76.1	13.3780	8.7261	31.9164
207	207	08-Apr-83	5.00	174.4	25.0177	13.2073	66.0597
208	208	07-Jun-83	2.13	35.3	4.5522	5.9375	12.6684
209	209	14-Jul-83	1.78	25.3	3.1794	5.0342	8.9765
210	210	09-Aug-83	1.58	17.1	2.4928	4.1356	6.5296
211	211	07-Sep-83	1.31	12.4	1.7098	3.5218	4.6050
212	212	07-Oct-83	1.05	6.9	1.1058	2.6232	2.7584
213	213	02-Dec-83	1.46	9.8	2.1227	3.1346	4.5670
214	214	21-Jun-84	1.64	19.5	2.6890	4.4138	7.2379
215	215	10-May-85	3.99	81.6	15.9431	9.0306	36.0583
216	216	23-Apr-86	6.70	284.7	44.9242	16.8738	113.0977
217	217	30-Apr-87	4.08	95.9	16.6817	9.7948	40.0050
218	218	19-Jun-90	2.01	28.2	4.0401	5.3104	10.6738
219	219	16-Jul-90	1.49	15.6	2.2201	3.9535	5.8907
220	220	21-Aug-90	1.20	11.0	1.4400	3.3136	3.9763
221	221	13-Oct-90	0.88	6.5	0.7744	2.5417	2.2367
222	222	06-Nov-90	0.81	4.8	0.6561	2.1794	1.7654
223	223	21-Dec-90	1.29	9.1	1.6641	3.0100	3.8829
224	224	15-Jan-91	3.89	70.8	15.1321	8.4161	32.7385
225	225	13-Feb-91	5.28	165.7	27.8784	12.8740	67.9747
226	226	08-Mar-91	5.45	164.2	29.7025	12.8144	69.8387
=M=====							
T O T A L		628.73	16276.86	2436.09	1648.03	6274.35	
=M=====							
DISCHARGE - RATING CURVE : Q = a * (H + b)^2							
					a' =	2.459400	
					b' =	0.450177	
					a =	6.077933	
					b =	0.184242	
Correlation Coefficient						0.988	
=M=====							

DISCHARGE RATING CURVE

STATION: 4-200 MPATAMATO

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	2 06-Mar-52	7.86	558.0	61.8400	23.6211	185.7523
2	3 18-Mar-52	7.21	481.7	52.0067	21.9483	158.2814
3	4 23-Mar-52	6.61	378.9	43.7471	19.4648	128.7435
4	5 29-Apr-52	3.54	140.6	12.5010	11.8584	41.9275
5	6 21-May-52	2.59	85.7	6.7122	9.2598	23.9902
6	7 24-Jun-52	2.68	106.2	7.1944	10.3075	27.6472
7	8 02-Jul-52	2.38	81.0	5.6522	8.9977	21.3914
8	9 08-Jun-52	2.07	56.4	4.2958	7.5124	15.5704
9	10 08-Jul-52	1.80	48.1	3.2340	6.9362	12.4734
10	11 23-Jul-52	1.69	42.8	2.8616	6.5412	11.0653
11	12 15-Aug-52	1.39	31.3	1.9233	5.5912	7.7541
12	13 29-Aug-52	1.20	27.0	1.4495	5.1948	6.2543
13	14 24-Oct-52	0.67	13.8	0.4497	3.7173	2.4927
14	15 21-Nov-52	1.15	17.8	1.3274	4.2170	4.8586
15	16 31-Dec-52	1.98	50.9	3.9252	7.1334	14.1327
16	17 23-Jan-53	2.44	77.0	5.9458	8.7730	21.3920
17	18 24-Feb-53	3.17	102.3	10.0484	10.1148	32.0630
18	19 21-Apr-53	3.90	160.9	15.2212	12.6856	49.4921
19	20 12-May-53	2.77	100.2	7.6933	10.0121	27.7703
20	21 04-Jun-53	2.07	59.3	4.2958	7.7004	15.9601
21	22 29-Jun-53	2.07	47.5	4.2958	6.8891	14.2785
22	23 28-Jul-53	1.37	32.5	1.8646	5.7016	7.7855
23	24 17-Aug-53	1.14	24.9	1.2926	4.9890	5.6721
24	25 02-Sep-53	0.94	20.5	0.8928	4.5310	4.2812
25	26 24-Sep-53	0.79	14.7	0.6280	3.8373	3.0410
26	27 21-Oct-53	0.55	9.0	0.3010	3.0055	1.6489
27	28 05-Nov-53	0.46	7.4	0.2090	2.7290	1.2477
28	29 25-Nov-53	0.85	8.7	0.7284	2.9436	2.5122
29	30 04-Dec-53	1.55	21.9	2.4164	4.6786	7.2727
30	31 22-Dec-53	2.83	83.7	8.0352	9.1490	25.9342
31	32 05-Jan-54	2.83	99.1	8.0352	9.9553	28.2198
32	33 28-Jan-54	3.99	169.9	15.9431	13.0335	52.0413
33	34 15-Feb-54	5.10	233.6	26.0340	15.2844	77.9866
34	35 05-Mar-54	4.71	227.3	22.1475	15.0774	70.9559
35	36 23-Mar-54	4.60	213.6	21.1828	14.6158	67.2690
36	37 06-Apr-54	3.85	158.0	14.8431	12.5712	48.4329
37	38 03-May-54	2.50	79.8	6.2468	8.9345	22.3305
38	39 02-Jul-54	1.36	25.7	1.8397	5.0707	6.8777
39	40 04-Aug-54	1.10	20.9	1.2040	4.5745	5.0195
40	41 02-Sep-54	0.82	15.3	0.6773	3.9104	3.2181
41	42 30-Sep-54	0.49	8.6	0.2378	2.9243	1.4261
42	43 15-Nov-54	0.73	4.8	0.5351	2.1876	1.6003
43	44 09-Dec-54	1.13	20.5	1.2718	4.5247	5.1028
44	45 11-Jan-55	1.77	45.6	3.1253	6.7520	11.9365
45	46 11-Feb-55	3.52	135.0	12.3935	11.6171	40.8975
46	47 09-Mar-55	5.82	288.5	33.8920	16.9851	98.8815
47	48 18-Apr-55	3.79	167.2	14.4002	12.9288	49.0618
48	49 02-Jun-55	2.19	63.5	4.8161	7.9714	17.4937
49	50 21-Jul-55	1.36	31.3	1.8397	5.5988	7.5940
50	51 29-Aug-55	0.91	19.1	0.8361	4.3655	3.9918

=M=====								
	NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====								
	51	52	11-Oct-55	0.65	13.2	0.4215	3.6365	2.3609
	52	53	17-Nov-55	0.55	9.4	0.3010	3.0661	1.6822
	53	54	13-Nov-56	0.83	18.7	0.6924	4.3264	3.6000
	54	55	16-Apr-59	1.70	62.1	2.8927	7.8821	13.4057
	55	56	28-Apr-59	1.22	41.1	1.4864	6.4100	7.8150
	56	57	28-Jun-59	0.45	14.6	0.2035	3.8188	1.7227
	57	58	25-Jun-59	0.40	13.8	0.1570	3.7173	1.4730
	58	59	09-Jul-59	0.34	12.0	0.1165	3.4609	1.1815
	59	60	23-Jul-59	0.27	9.8	0.0753	3.1256	0.8574
	60	61	03-Aug-59	0.24	10.3	0.0595	3.2061	0.7818
	61	62	13-Aug-59	0.20	9.0	0.0417	3.0008	0.6128
	62	63	17-Sep-59	0.37	6.7	0.1338	2.5851	0.9455
	63	64	06-Oct-59	0.33	5.9	0.1084	2.4386	0.8027
	64	65	30-Oct-59	0.27	4.5	0.0736	2.1152	0.5738
	65	66	19-Nov-59	0.28	4.7	0.0804	2.1615	0.6127
	66	67	28-Nov-59	0.52	6.6	0.2685	2.5631	1.3281
	67	68	05-Dec-59	0.52	6.4	0.2717	2.5241	1.3156
	68	69	18-Dec-59	1.26	20.0	1.5846	4.4680	5.6245
	69	70	24-Dec-59	1.35	21.7	1.8232	4.6573	6.2886
	70	71	07-Jan-60	2.29	46.9	5.2537	6.8520	15.7053
	71	72	20-Jan-60	1.17	21.6	1.3628	4.6452	5.4227
	72	73	08-Feb-60	2.30	66.4	5.3097	8.1505	18.7812
	73	74	22-Feb-60	5.60	253.9	31.3166	15.9357	89.1780
	74	75	21-Mar-60	5.35	259.9	28.6144	16.1212	86.2360
	75	76	04-Apr-60	3.82	169.6	14.5859	13.0237	49.7396
	76	77	11-May-60	1.98	60.3	3.9372	7.7626	15.4030
	77	78	31-May-60	1.43	35.7	2.0522	5.9732	8.5570
	78	79	20-Jun-60	1.17	25.2	1.3771	5.0173	5.8877
	79	80	20-Jul-60	0.92	18.5	0.8417	4.2968	3.9421
	80	81	05-Aug-60	0.81	15.4	0.6573	3.9284	3.1851
	81	82	19-Aug-60	0.71	13.5	0.5000	3.6791	2.6016
	82	83	21-Oct-60	0.42	5.9	0.1744	2.4269	1.0134
	83	84	07-Nov-60	0.32	4.4	0.1044	2.1085	0.6812
	84	85	08-Dec-60	0.65	7.9	0.4215	2.8057	1.8215
	85	86	23-Dec-60	1.61	34.2	2.5802	5.8462	9.3908
	86	87	05-Jan-61	2.25	60.3	5.0462	7.7626	17.4378
	87	88	13-Jan-61	1.89	43.9	3.5597	6.6272	12.5036
	88	89	20-Jan-61	2.20	60.2	4.8295	7.7608	17.0552
	89	90	27-Jan-61	3.15	116.4	9.8944	10.7907	33.9425
	90	91	03-Feb-61	3.44	128.2	11.8208	11.3221	38.9271
	91	92	10-Feb-61	3.89	163.9	15.1026	12.8023	49.7521
	92	93	17-Feb-61	4.27	190.7	18.2090	13.8099	58.9297
	93	94	01-Mar-61	5.51	263.0	30.4023	16.2157	89.4109
	94	95	10-Mar-61	4.86	214.5	23.6348	14.6468	71.2062
	95	96	17-Mar-61	5.09	207.6	25.9097	14.4070	73.3341
	96	97	24-Mar-61	5.81	285.2	33.7856	16.8864	98.1528
	97	98	29-Mar-61	5.83	269.7	33.9985	16.4222	95.7551
	98	99	30-Mar-61	5.63	275.3	31.7274	16.5929	93.4630
	99	100	04-Apr-61	5.32	236.8	28.2892	15.3869	81.8393
	100	101	06-Apr-61	5.02	231.7	25.2316	15.2213	76.4582

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
101	102	10-Apr-61	4.63	214.4	21.4643	14.6410	67.8311
102	103	11-Apr-61	4.53	195.8	20.4872	13.9912	63.3282
103	104	12-Apr-61	4.43	181.7	19.6678	13.4789	59.7768
104	105	14-Apr-61	4.47	197.5	19.9936	14.0548	62.8450
105	106	17-Apr-61	4.23	182.5	17.8982	13.5093	57.1529
106	107	18-Apr-61	4.29	194.4	18.3654	13.9426	59.7507
107	108	20-Apr-61	4.19	188.3	17.5645	13.7215	57.5067
108	109	21-Apr-61	4.09	186.2	16.7066	13.6470	55.7802
109	110	22-Apr-61	4.00	176.3	16.0162	13.2778	53.1382
110	111	24-Apr-61	3.88	169.4	15.0552	13.0140	50.4955
111	112	25-Apr-61	3.82	162.4	14.5859	12.7424	48.6651
112	113	27-Apr-61	3.70	160.3	13.6695	12.6621	46.8148
113	114	28-Apr-61	3.62	152.0	13.1339	12.3302	44.6854
114	115	01-May-61	3.44	142.4	11.8208	11.9346	41.0327
115	116	02-May-61	3.38	142.1	11.4466	11.9203	40.3298
116	117	05-May-61	3.22	133.4	10.3403	11.5487	37.1364
117	118	08-May-61	3.06	126.2	9.3648	11.2342	34.3789
118	119	09-May-61	3.02	112.2	9.1054	10.5920	31.9617
119	120	10-May-61	2.97	110.8	8.7954	10.5263	31.2180
120	121	11-May-61	2.91	115.4	8.4730	10.7433	31.2722
121	122	12-May-61	2.87	107.2	8.2089	10.3527	29.6618
122	123	19-May-61	2.69	101.3	7.2600	10.0671	27.1250
123	124	26-May-61	2.40	81.2	5.7688	9.0118	21.6448
124	125	02-Jun-61	2.15	68.5	4.6175	8.2764	17.7846
125	126	08-Jun-61	1.98	59.4	3.9252	7.7095	15.2741
126	127	15-Jun-61	1.83	49.4	3.3334	7.0294	12.8340
127	128	22-Jun-61	1.72	48.3	2.9552	6.9484	11.9448
128	129	29-Jun-61	1.61	41.9	2.5802	6.4693	10.3917
129	130	06-Jul-61	1.51	39.1	2.2856	6.2512	9.4506
130	131	13-Jul-61	1.43	35.2	2.0435	5.9304	8.4776
131	132	20-Jul-61	1.33	31.5	1.7742	5.6165	7.4810
132	133	27-Jul-61	1.27	30.0	1.6155	5.4761	6.9602
133	134	03-Aug-61	1.19	27.4	1.4203	5.2328	6.2363
134	135	04-Aug-61	1.19	25.1	1.4058	5.0117	5.9422
135	136	07-Aug-61	1.15	25.9	1.3134	5.0930	5.8368
136	137	09-Aug-61	1.12	24.0	1.2581	4.9032	5.4997
137	138	11-Aug-61	1.09	23.2	1.1973	4.8158	5.2696
138	139	14-Aug-61	1.06	23.0	1.1316	4.7981	5.1040
139	140	16-Aug-61	1.05	22.7	1.0994	4.7685	4.9998
140	141	18-Aug-61	1.04	21.2	1.0740	4.6054	4.7726
141	142	21-Aug-61	1.01	21.2	1.0117	4.6084	4.6353
142	143	23-Aug-61	1.00	20.5	0.9934	4.5310	4.5160
143	144	25-Aug-61	0.98	20.4	0.9513	4.5153	4.4041
144	145	28-Aug-61	0.95	19.9	0.9102	4.4553	4.2505
145	146	30-Aug-61	0.94	18.8	0.8813	4.3329	4.0677
146	147	01-Sep-61	0.91	18.7	0.8361	4.3296	3.9590
147	148	04-Sep-61	0.87	17.7	0.7652	4.2069	3.6801
148	149	06-Sep-61	0.85	17.0	0.7232	4.1219	3.5052
149	150	08-Sep-61	0.83	16.6	0.6873	4.0735	3.3772
150	151	11-Sep-61	0.80	15.8	0.6329	3.9715	3.1594

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
151	152	13-Sep-61	0.78	15.0	0.6136	3.8740	3.0346
152	153	15-Sep-61	0.76	14.5	0.5760	3.8114	2.8926
153	154	18-Sep-61	0.72	13.7	0.5174	3.7021	2.6630
154	155	20-Sep-61	0.70	13.1	0.4957	3.6130	2.5439
155	156	22-Sep-61	0.69	13.0	0.4703	3.6013	2.4697
156	157	25-Sep-61	0.66	11.9	0.4415	3.4445	2.2888
157	158	27-Sep-61	0.64	11.8	0.4136	3.4404	2.2126
158	159	29-Sep-61	0.62	11.1	0.3866	3.3359	2.0743
159	160	01-Dec-61	1.63	38.6	2.6492	6.2103	10.1080
160	161	06-Dec-61	1.83	45.8	3.3557	6.7688	12.3994
161	162	08-Dec-61	1.93	53.1	3.7108	7.2846	14.0326
162	163	15-Dec-61	2.36	70.5	5.5512	8.3953	19.7801
163	164	18-Dec-61	2.89	97.1	8.3492	9.8524	28.4686
164	165	20-Dec-61	3.35	120.2	11.2004	10.9638	36.6926
165	166	22-Dec-61	3.66	128.2	13.4227	11.3221	41.4808
166	167	27-Dec-61	3.71	141.0	13.7598	11.8751	44.0497
167	168	29-Dec-61	4.07	166.5	16.5574	12.9036	52.5058
168	169	03-Jan-62	3.42	119.4	11.7163	10.9263	37.3996
169	170	05-Jan-62	3.59	143.1	12.8920	11.9630	42.9537
170	171	08-Jan-62	4.08	181.1	16.6071	13.4568	54.8389
171	172	10-Jan-62	4.32	191.7	18.6276	13.8468	59.7623
172	173	12-Jan-62	4.19	186.0	17.5645	13.6397	57.1640
173	174	14-Jan-62	4.40	203.2	19.3984	14.2549	62.7836
174	175	15-Jan-62	4.44	189.4	19.7490	13.7627	61.1611
175	176	17-Jan-62	4.31	179.9	18.6013	13.4115	57.8428
176	177	19-Jan-62	4.20	163.8	17.6412	12.7967	53.7481
177	178	22-Jan-62	4.12	164.2	17.0069	12.8155	52.8505
178	179	24-Jan-62	4.41	191.1	19.4521	13.8243	60.9713
179	180	26-Jan-62	4.68	198.3	21.8615	14.0830	65.8470
180	181	29-Jan-62	4.53	193.0	20.4872	13.8907	62.8731
181	182	31-Jan-62	4.54	194.5	20.6254	13.9466	63.3389
182	183	02-Feb-62	4.86	229.1	23.6348	15.1346	73.5776
183	184	05-Feb-62	5.99	320.2	35.8720	17.8935	107.1701
184	185	07-Feb-62	6.20	324.0	38.4732	18.0000	111.6485
185	186	12-Feb-62	6.25	342.9	39.0425	18.5188	115.7128
186	187	12-Feb-62	6.23	291.5	38.8523	17.0732	106.4199
187	188	14-Feb-62	6.13	304.7	37.5338	17.4545	106.9349
188	189	16-Feb-62	6.00	283.6	36.0547	16.8402	101.1181
189	190	19-Feb-62	6.04	272.9	36.4217	16.5185	99.6899
190	191	21-Feb-62	6.19	300.0	38.2844	17.3218	107.1777
191	192	26-Feb-62	6.95	393.4	48.3371	19.8345	137.8989
192	193	28-Feb-62	6.77	382.2	45.7863	19.5512	132.2943
193	194	02-Mar-62	6.87	387.7	47.2414	19.6905	135.3373
194	195	05-Mar-62	6.57	367.4	43.1444	19.1680	125.9037
195	196	07-Mar-62	6.23	338.2	38.8523	18.3891	114.6223
196	197	09-Mar-62	6.16	337.3	37.9082	18.3668	113.0835
197	198	12-Mar-62	6.63	428.9	43.9489	20.7096	137.2921
198	199	14-Mar-62	6.80	418.2	46.1998	20.4488	138.9916
199	200	16-Mar-62	6.60	392.0	43.5457	19.8002	130.6597
200	201	19-Mar-62	6.57	391.6	43.1444	19.7894	129.9858

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
201	202	21-Mar-62	7.06	484.5	49.7888	22.0107	155.3105
202	203	24-Mar-62	7.99	518.2	63.7724	22.7640	181.7876
203	204	26-Mar-62	7.59	523.9	57.6008	22.8880	173.7091
204	205	28-Mar-62	7.44	498.4	55.3108	22.3243	166.0289
205	206	30-Mar-62	7.53	513.2	56.6792	22.6536	170.5491
206	207	02-Apr-62	7.38	484.5	54.4977	22.0120	162.4985
207	208	04-Apr-62	7.83	506.1	61.3138	22.4968	176.1571
208	209	06-Apr-62	7.50	491.6	56.2669	22.1723	166.3169
209	210	09-Apr-62	6.89	410.3	47.4932	20.2561	139.5957
210	211	11-Apr-62	6.79	408.9	46.1583	20.2212	137.3824
211	212	13-Apr-62	7.09	453.0	50.3063	21.2841	150.9617
212	213	16-Apr-62	6.68	396.3	44.5979	19.9064	132.9385
213	214	18-Apr-62	6.40	338.0	41.0093	18.3853	117.7365
214	215	24-Apr-62	5.91	309.7	34.8929	17.5983	103.9538
215	216	25-Apr-62	5.85	307.1	34.2478	17.5250	102.5589
216	217	27-Apr-62	5.90	316.6	34.8569	17.7936	105.0527
217	218	30-Apr-62	5.98	327.0	35.7261	18.0824	108.0811
218	219	02-May-62	5.89	308.3	34.6772	17.5597	103.4043
219	220	04-May-62	5.79	305.1	33.5027	17.4667	101.0999
220	221	07-May-62	5.42	270.0	29.4023	16.4317	89.0992
221	222	10-May-62	5.09	234.5	25.9408	15.3131	77.9929
222	223	14-May-62	4.78	229.1	22.8705	15.1346	72.3782
223	224	21-May-62	4.32	199.7	18.6802	14.1322	61.0802
224	225	28-May-62	3.94	168.2	15.5320	12.9693	51.1127
225	226	05-Jun-62	3.51	139.1	12.3078	11.7961	41.3838
226	227	11-Jun-62	3.26	127.8	10.6365	11.3059	36.8724
227	228	18-Jun-62	2.99	114.3	8.9589	10.6918	32.0021
228	229	20-Jun-62	2.95	109.5	8.6873	10.4656	30.8466
229	230	25-Jun-62	2.80	96.6	7.8292	9.8294	27.5033
230	231	02-Jul-62	2.66	91.6	7.0804	9.5711	25.4676
231	232	11-Jul-62	2.51	82.8	6.3232	9.0994	22.8813
232	233	16-Jul-62	2.44	77.0	5.9607	8.7746	21.4227
233	234	23-Jul-62	2.34	69.9	5.4939	8.3615	19.5986
234	235	30-Jul-62	2.22	66.9	4.9372	8.1800	18.1759
235	236	06-Aug-62	2.13	60.6	4.5522	7.7863	16.6128
236	237	13-Aug-62	2.03	56.4	4.1332	7.5105	15.2689
237	238	20-Aug-62	1.92	53.4	3.6873	7.3060	14.0292
238	239	27-Aug-62	1.83	43.3	3.3445	6.5822	12.0374
239	240	03-Sep-62	1.69	41.7	2.8411	6.4562	10.8822
240	241	31-Dec-63	2.45	75.2	6.0203	8.6740	21.2828
241	242	16-Jan-64	3.48	116.9	12.1161	10.8143	37.6425
242	243	30-Jan-64	4.74	226.4	22.4642	15.0454	71.3099
243	244	07-Feb-64	4.90	231.7	23.9917	15.2213	74.5561
244	245	28-Feb-64	5.22	220.8	27.2612	14.8608	77.5915
245	246	06-Mar-64	4.42	185.2	19.5059	13.6085	60.1028
246	247	13-Mar-64	4.43	189.2	19.6678	13.7544	60.9988
247	248	20-Mar-64	4.53	199.2	20.5148	14.1151	63.9321
248	249	01-Apr-64	3.61	139.4	13.0457	11.8057	42.6409
249	250	10-Apr-64	3.18	119.9	10.1064	10.9483	34.8053
250	251	17-Apr-64	2.89	107.7	8.3316	10.3801	29.9616

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
251	252	23-Apr-64	2.63	92.0	6.9352	9.5917	25.2596
252	253	01-May-64	2.37	75.8	5.6233	8.7066	20.6463
253	254	07-May-64	2.18	65.2	4.7494	8.0773	17.6029
254	255	15-May-64	1.96	52.6	3.8411	7.2554	14.2196
255	256	22-May-64	1.80	48.4	3.2449	6.9565	12.5313
256	257	29-May-64	1.69	41.5	2.8616	6.4430	10.8993
257	258	05-Jun-64	1.61	40.3	2.5998	6.3501	10.2388
258	259	12-Jun-64	1.52	35.5	2.3040	5.9613	9.0488
259	260	19-Jun-64	1.46	34.2	2.1316	5.8462	8.5355
260	261	27-Jun-64	1.42	31.0	2.0088	5.5709	7.8958
261	262	03-Jul-64	1.37	31.3	1.8813	5.5988	7.6793
262	263	10-Jul-64	1.34	29.3	1.7823	5.4137	7.2274
263	264	24-Jul-64	1.26	26.0	1.5770	5.0985	6.4026
264	265	31-Jul-64	1.20	24.5	1.4422	4.9520	5.9469
265	266	07-Aug-64	1.15	23.0	1.3134	4.8010	5.5022
266	267	21-Aug-64	1.04	20.7	1.0866	4.5528	4.7459
267	268	28-Aug-64	0.98	19.6	0.9613	4.4235	4.3145
268	269	12-Oct-64	0.69	10.5	0.4703	3.2369	2.2198
269	270	27-Oct-64	0.66	8.4	0.4334	2.8902	1.9028
270	271	03-Nov-64	0.77	9.0	0.5853	3.0008	2.2958
271	272	10-Nov-64	0.99	13.5	0.9873	3.6714	3.6480
272	273	20-Nov-64	0.91	11.8	0.8361	3.4280	3.1346
273	274	27-Nov-64	1.44	26.1	2.0610	5.1041	7.3274
274	275	04-Dec-64	1.30	21.4	1.6860	4.6299	6.0117
275	276	08-Dec-64	1.37	22.5	1.8729	4.7447	6.4933
276	277	17-Dec-64	1.28	19.0	1.6388	4.3590	5.5802
277	278	30-Dec-64	1.95	47.3	3.7934	6.8788	13.3976
278	279	14-Jan-65	3.64	117.2	13.2224	10.8261	39.3664
279	280	12-Feb-65	4.04	165.5	16.3103	12.8651	51.9572
280	281	19-Feb-65	4.52	176.7	20.4045	13.2938	60.0500
281	282	17-Mar-65	4.23	158.5	17.9240	12.5893	53.2988
282	283	25-Mar-65	3.63	143.2	13.1781	11.9665	43.4406
283	284	02-Apr-65	3.70	156.0	13.6920	12.4888	46.2118
284	285	09-Apr-65	3.24	129.9	10.4780	11.3969	36.8915
285	286	15-Apr-65	2.92	106.4	8.5263	10.3171	30.1258
286	287	23-Apr-65	2.56	86.2	6.5552	9.2842	23.7705
287	288	07-May-65	2.08	63.4	4.3211	7.9643	16.5556
288	289	28-May-65	1.61	42.7	2.5998	6.5347	10.5364
289	290	04-Jun-65	1.51	37.9	2.2948	6.1576	9.3279
290	291	11-Jun-65	1.44	34.7	2.0697	5.8921	8.4767
291	292	18-Jun-65	1.37	31.9	1.8729	5.6517	7.7346
292	293	25-Jun-65	1.30	29.8	1.6860	5.4580	7.0869
293	294	16-Jul-65	1.23	26.6	1.5014	5.1592	6.3216
294	295	30-Jul-65	1.12	23.7	1.2650	4.8684	5.4755
295	296	06-Aug-65	1.07	22.3	1.1381	4.7177	5.0329
296	297	13-Aug-65	1.00	20.2	0.9934	4.4965	4.4816
297	298	20-Aug-65	0.94	17.9	0.8928	4.2270	3.9941
298	299	27-Aug-65	0.91	17.4	0.8306	4.1663	3.7970
299	300	17-Sep-65	0.77	13.5	0.5900	3.6791	2.8259
300	301	08-Oct-65	0.70	11.0	0.4872	3.3104	2.3106

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
301	302	15-Oct-65	0.69	10.1	0.4829	3.1706	2.2034
302	303	22-Oct-65	0.66	9.4	0.4334	3.0615	2.0156
303	304	12-Nov-65	0.84	11.6	0.6975	3.4115	2.8491
304	305	26-Nov-65	1.01	11.4	1.0302	3.3739	3.4245
305	306	03-Dec-65	1.18	16.1	1.3986	4.0070	4.7387
306	307	10-Dec-65	1.54	25.6	2.3693	5.0623	7.7921
307	308	17-Dec-65	1.91	46.2	3.6523	6.7939	12.9837
308	309	24-Dec-65	1.69	38.0	2.8411	6.1668	10.3944
309	310	24-Jan-66	1.83	40.9	3.3557	6.3967	11.7178
310	311	08-Feb-66	3.51	132.8	12.2864	11.5254	40.3988
311	312	07-Mar-66	5.63	235.2	31.6930	15.3362	86.3377
312	313	06-Apr-66	3.32	123.6	10.9973	11.1164	36.8645
313	314	21-Apr-66	2.73	89.7	7.4584	9.4699	25.8624
314	315	06-May-66	2.01	55.7	4.0591	7.4632	15.0363
315	316	02-Jun-66	1.54	35.8	2.3693	5.9874	9.2161
316	317	24-Jun-66	1.26	26.9	1.5923	5.1866	6.5448
317	318	11-Jul-66	1.12	23.2	1.2581	4.8216	5.4083
318	319	08-Aug-66	0.93	17.4	0.8642	4.1765	3.8826
319	320	19-Aug-66	0.85	14.6	0.7232	3.8151	3.2443
320	321	12-Sep-66	0.71	11.6	0.5044	3.4073	2.4198
321	322	06-Oct-66	0.59	8.2	0.3461	2.8557	1.6799
322	323	01-Nov-66	0.54	6.1	0.2911	2.4789	1.3373
323	324	16-Nov-66	0.62	7.2	0.3828	2.6872	1.6627
324	325	08-Apr-67	5.03	217.4	25.3235	14.7431	74.1911
325	326	26-Nov-71	1.43	32.3	2.0348	5.6792	8.1011
326	327	01-Jan-72	2.75	103.6	7.5419	10.1762	27.9463
327	328	10-Mar-72	5.23	231.5	27.3249	15.2157	79.5375
328	329	22-Apr-72	4.05	169.9	16.4336	13.0346	52.8402
329	330	02-Jun-72	2.10	61.3	4.4231	7.8316	16.4708
330	331	19-Jul-72	1.74	54.2	3.0184	7.3620	12.7904
331	332	24-Aug-72	1.36	27.0	1.8397	5.2002	7.0534
332	333	22-Aug-73	0.70	8.2	0.4957	2.8656	2.0177
333	334	13-Sep-73	0.62	8.4	0.3828	2.9049	1.7974
334	335	22-Oct-73	0.60	9.3	0.3642	3.0569	1.8448
335	336	25-Jan-74	2.99	92.7	8.9406	9.6300	28.7947
336	337	27-May-74	2.28	54.1	5.2119	7.3543	16.7894
337	338	02-Dec-74	1.77	42.2	3.1468	6.4999	11.5304
338	340	21-Jan-75	1.13	24.2	1.2856	4.9176	5.5758
339	341	11-Nov-75	0.63	7.8	0.4019	2.7855	1.7659
340	342	21-May-76	4.36	223.7	18.9712	14.9567	65.1453
341	343	12-Jun-76	3.19	108.9	10.1452	10.4345	33.2355
342	344	23-Jul-76	2.27	70.4	5.1702	8.3919	19.0816
343	345	18-Sep-76	1.51	39.3	2.2764	6.2670	9.4554
344	346	20-Nov-76	1.46	37.1	2.1405	6.0906	8.9108
345	347	13-Dec-76	1.95	59.2	3.8053	7.6930	15.0069
346	348	27-Jan-77	4.11	161.1	16.8814	12.6934	52.1535
347	349	14-Feb-77	3.88	147.5	15.0316	12.1462	47.0916
348	350	06-Mar-77	6.43	295.0	41.3614	17.1765	110.4671
349	351	18-May-77	3.02	104.0	9.1238	10.1984	30.8050
350	352	23-Jul-77	1.72	38.3	2.9552	6.1897	10.6406

=====							
=M=====							
NO.	DATE	H(m)	Q(m3/s)	H^2.0	Q^0.5	H*Q^0.5	
=====							
351	353	26-Aug-77	1.43	37.0	2.0522	6.0789	8.7084
352	354	25-Oct-77	0.73	12.2	0.5351	3.4976	2.5585
353	355	13-Mar-78	7.20	551.7	51.8310	23.4882	169.1006
354	356	16-Dec-79	4.56	157.1	20.7641	12.5340	57.1146
355	357	16-Jun-80	2.65	80.2	7.0318	8.9567	23.7509
356	358	26-Sep-80	1.18	19.5	1.3842	4.4203	5.2005
357	359	20-Nov-80	1.08	17.5	1.1577	4.1867	4.5046
358	360	18-Mar-81	5.99	244.0	35.8720	15.6216	93.5628
359	361	29-Jul-81	1.79	41.3	3.2121	6.4298	11.5237
360	362	03-Sep-81	1.40	29.4	1.9488	5.4215	7.5684
361	363	18-Nov-81	0.80	9.3	0.6329	3.0569	2.4318
362	364	10-Mar-82	4.03	155.0	16.2365	12.4513	50.1719
363	365	20-Sep-83	0.82	14.5	0.6773	3.8114	3.1366
364	366	10-Apr-84	3.35	124.1	11.2004	11.1380	37.2757
365	367	10-Jul-84	1.18	22.2	1.3914	4.7117	5.5578
366	368	18-Feb-85	6.61	271.9	43.7471	16.4893	109.0631
367	369	18-Jun-90	1.44	46.3	2.0736	6.8029	9.7962
368	370	16-Jul-90	0.98	17.6	0.9604	4.1893	4.1055
369	371	20-Aug-90	0.73	12.5	0.5329	3.5313	2.5778
370	372	10-Oct-90	0.54	3.2	0.2916	1.8000	0.9720
371	373	03-Nov-90	0.46	5.7	0.2116	2.3937	1.1011
372	374	21-Dec-90	1.13	13.7	1.2769	3.7068	4.1886
373	375	11-Jan-91	2.62	66.5	6.8644	8.1517	21.3574
374	376	11-Feb-91	5.49	176.5	30.1401	13.2865	72.9427
375	377	07-Mar-91	4.08	145.8	16.6464	12.0727	49.2566
OMIT339	21-Jun-74	1.28	166.2	1.6466	12.8915	16.5425	
		1047.07 43539.57		4405.65	3498.54	13760.78	
=====							
=M=====							
DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$							
(where, OMIT : Omitted Data)							
				a' =	2.693725		
				b' =	1.808054		
				a =	7.268806		
				b =	0.675672		
				Correlation Coefficient	0.993		
=====							
=M=====							

DISCHARGE RATING CURVE

STATION: 4-280 MACHIYA FERRY

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	13-Aug-62	3.71	88.6	13.7372	9.4144	34.8934
2	15-Sep-62	3.17	50.7	10.0484	7.1195	22.5682
3	14-Jun-63	4.27	126.9	18.2611	11.2632	48.1309
4	26-Jun-63	4.10	107.0	16.8314	10.3459	42.4452
5	24-Aug-63	3.33	62.6	11.0784	7.9108	26.3303
6	30-Aug-63	3.25	58.3	10.5571	7.6376	24.8158
7	06-Sep-63	3.16	50.1	9.9712	7.0796	22.3555
8	13-Sep-63	3.08	42.8	9.4770	6.5390	20.1302
9	20-Sep-63	2.97	43.0	8.8497	6.5606	19.5168
10	27-Sep-63	2.89	38.8	8.3492	6.2285	17.9972
11	04-Oct-63	2.80	32.8	7.8633	5.7313	16.0714
12	11-Oct-63	2.75	30.0	7.5586	5.4787	15.0625
13	18-Oct-63	2.69	29.4	7.2272	5.4267	14.5889
14	25-Oct-63	2.60	26.2	6.7439	5.1179	13.2907
15	01-Nov-63	2.72	29.7	7.4251	5.4528	14.8583
16	08-Nov-63	2.93	40.8	8.5619	6.3856	18.6849
17	15-Nov-63	3.14	54.1	9.8561	7.3543	23.0883
18	22-Nov-63	3.09	49.3	9.5523	7.0194	21.6945
19	29-Nov-63	3.46	70.2	11.9469	8.3801	28.9652
20	06-Dec-63	3.53	83.0	12.4580	9.1087	32.1499
21	13-Dec-63	4.30	133.7	18.4701	11.5609	49.6853
22	20-Dec-63	4.38	138.2	19.2109	11.7553	51.5236
23	27-Dec-63	4.26	130.5	18.1310	11.4254	48.6502
24	03-Jan-64	4.26	129.4	18.1310	11.3758	48.4386
25	10-Jan-64	4.58	159.4	20.9311	12.6263	57.7660
26	17-Jan-64	5.51	251.5	30.4023	15.8573	87.4344
27	25-Jan-64	5.30	213.2	28.1273	14.6023	77.4434
28	31-Jan-64	5.63	261.1	31.7274	16.1580	91.0133
29	07-Feb-64	6.36	362.5	40.4258	19.0383	121.0477
30	12-Feb-64	6.93	433.2	47.9564	20.8146	144.1423
31	11-Mar-64	6.86	416.3	47.1158	20.4024	140.0440
32	19-Mar-64	6.40	320.0	41.0093	17.8880	114.5520
33	25-Mar-64	6.23	294.5	38.7763	17.1609	106.8618
34	01-Apr-64	5.77	247.5	33.2562	15.7318	90.7223
35	08-Apr-64	5.23	187.7	27.3567	13.7018	71.6657
36	15-Apr-64	4.80	153.8	23.0165	12.4000	59.4897
37	22-Apr-64	4.41	125.4	19.4252	11.2002	49.3637
38	29-Apr-64	4.11	112.7	16.8814	10.6161	43.6183
39	06-May-64	3.87	96.6	14.9843	9.8265	38.0381
40	13-May-64	3.66	84.7	13.3780	9.2015	33.6554
41	20-May-64	3.50	72.5	12.2437	8.5142	29.7920
42	27-May-64	3.39	65.1	11.4879	8.0702	27.3531
43	03-Jun-64	3.30	61.7	10.8764	7.8569	25.9115
44	10-Jun-64	3.25	55.2	10.5373	7.4309	24.1215
45	17-Jun-64	3.16	51.5	10.0098	7.1789	22.7128
46	24-Jun-64	3.14	41.6	9.8561	6.4518	20.2550
47	01-Jul-64	3.09	47.9	9.5523	6.9178	21.3805
48	08-Jul-64	3.05	46.2	9.3275	6.7939	20.7491
49	15-Jul-64	3.02	43.6	9.1238	6.6036	19.9467
50	22-Jul-64	2.99	41.3	8.9406	6.4298	19.2257

=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=====							
51	51	29-Jul-64	2.95	39.1	8.7052	6.2512	18.4439
52	52	12-Aug-64	2.87	36.0	8.2089	5.9969	17.1817
53	53	26-Aug-64	2.77	30.9	7.6595	5.5557	15.3758
54	54	10-Sep-64	2.64	27.4	6.9673	5.2355	13.8195
55	55	28-Sep-64	2.49	24.6	6.2012	4.9606	12.3529
56	56	14-Oct-64	2.35	20.0	5.5225	4.4712	10.5074
57	57	28-Oct-64	2.27	15.4	5.1702	3.9248	8.9243
58	58	07-Nov-64	2.32	16.5	5.3944	4.0596	9.4287
59	59	11-Nov-64	2.41	19.2	5.8275	4.3849	10.5852
60	60	18-Nov-64	2.51	25.3	6.2773	5.0286	12.5990
61	61	25-Nov-64	2.55	26.1	6.4930	5.1096	13.0199
62	62	02-Dec-64	2.90	35.4	8.3845	5.9495	17.2273
63	63	09-Dec-64	2.90	36.5	8.4198	6.0439	17.5376
64	64	16-Dec-64	2.94	39.4	8.6334	6.2738	18.4341
65	65	30-Dec-64	3.50	73.1	12.2437	8.5474	29.9081
66	66	06-Jan-65	4.19	116.7	17.5645	10.8012	45.2677
67	67	13-Jan-65	5.08	197.4	25.8167	14.0488	71.3821
68	68	20-Jan-65	6.25	342.6	39.0425	18.5104	115.6602
69	69	27-Jan-65	6.36	362.5	40.5033	19.0383	121.1638
70	70	03-Feb-65	6.17	311.5	38.0584	17.6489	108.8790
71	71	10-Feb-65	5.86	265.9	34.3906	16.3063	95.6258
72	72	17-Feb-65	6.04	294.5	36.5322	17.1609	103.7234
73	73	24-Feb-65	6.29	339.8	39.5776	18.4337	115.9679
74	74	03-Mar-65	6.18	303.0	38.2467	17.4066	107.6493
75	75	10-Mar-65	5.96	276.1	35.4715	16.6159	98.9610
76	76	17-Mar-65	6.01	286.0	36.1646	16.9115	101.7010
77	77	24-Mar-65	5.70	247.5	32.4873	15.7318	89.6674
78	78	31-Mar-65	5.23	197.7	27.3567	14.0589	73.5330
79	79	14-Apr-65	4.75	157.4	22.5509	12.5476	59.5857
80	80	21-Apr-65	4.38	127.1	19.2109	11.2758	49.4219
81	81	28-Apr-65	4.03	102.2	16.2120	10.1106	40.7093
82	82	05-May-65	3.76	90.0	14.1469	9.4893	35.6916
83	83	12-May-65	3.54	74.5	12.5658	8.6298	30.5911
84	84	19-May-65	3.40	64.0	11.5292	7.9998	27.1629
85	85	26-May-65	3.27	54.9	10.7161	7.4118	24.2629
86	86	02-Jun-65	3.19	49.0	10.1452	6.9992	22.2934
87	87	09-Jun-65	3.12	44.5	9.7226	6.6676	20.7904
88	88	16-Jun-65	3.07	41.3	9.4208	6.4298	19.7353
89	89	23-Jun-65	3.01	38.8	9.0320	6.2285	18.7187
90	90	30-Jun-65	2.94	34.5	8.6693	5.8776	17.3059
91	91	07-Jul-65	2.91	33.7	8.4730	5.8049	16.8972
92	92	14-Jul-65	2.90	32.8	8.4198	5.7313	16.6304
93	93	22-Jul-65	2.88	31.4	8.3140	5.6064	16.1655
94	94	28-Jul-65	2.84	30.9	8.0698	5.5557	15.7822
95	95	04-Aug-65	2.81	30.3	7.8975	5.5045	15.4689
96	96	18-Aug-65	2.68	27.2	7.1781	5.2138	13.9689
97	97	01-Sep-65	2.58	25.3	6.6807	5.0286	12.9975
98	98	15-Sep-65	2.55	24.3	6.5085	4.9291	12.5750
99	99	13-Oct-65	2.35	20.2	5.5082	4.4933	10.5456
100	100	27-Oct-65	2.29	18.0	5.2258	4.2404	9.6936

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
101	101	10-Nov-65	2.24	16.1	5.0325	4.0175	9.0127
102	102	24-Nov-65	2.47	19.5	6.1255	4.4170	10.9321
103	103	08-Dec-65	2.73	29.2	7.4584	5.4006	14.7490
104	104	15-Dec-65	3.04	43.3	9.2532	6.5822	20.0223
105	105	05-Jan-66	3.29	55.8	10.8362	7.4689	24.5864
106	106	12-Jan-66	3.33	60.9	11.0784	7.8026	25.9704
107	107	19-Jan-66	3.26	54.9	10.6564	7.4118	24.1951
108	108	26-Jan-66	3.39	67.4	11.5085	8.2094	27.8497
109	109	02-Feb-66	3.73	91.5	13.9185	9.5637	35.6796
110	110	09-Feb-66	4.71	168.5	22.1762	12.9802	61.1258
111	111	16-Feb-66	5.22	209.8	27.2294	14.4854	75.5876
112	112	23-Feb-66	5.32	226.5	28.2568	15.0511	80.0072
113	113	24-Aug-66	2.54	23.9	6.4310	4.8858	12.3901
114	114	13-Oct-66	2.22	18.0	4.9102	4.2371	9.3889
115	115	02-Nov-66	2.13	16.1	4.5522	4.0140	8.5643
116	116	23-Nov-66	2.16	14.7	4.6569	3.8336	8.2728
117	117	20-Dec-66	2.57	23.8	6.6178	4.8800	12.5539
118	118	04-Jan-67	2.80	33.4	7.8633	5.7805	16.2094
119	119	25-Jan-67	3.67	81.0	13.4674	8.9992	33.0253
120	120	23-Feb-67	4.63	154.9	21.4079	12.4456	57.5841
121	121	07-Mar-67	6.09	297.3	37.0498	17.2432	104.9567
122	122	21-Mar-67	5.90	267.6	34.8569	16.3583	96.5791
123	123	06-Apr-67	6.51	328.5	42.3870	18.1239	117.9961
124	124	19-Apr-67	6.25	300.2	39.1187	17.3251	108.3597
125	125	11-May-67	4.80	159.4	23.0750	12.6263	60.6524
126	126	06-Jun-67	3.79	85.5	14.3309	9.2475	35.0076
127	127	08-Jun-67	3.41	68.0	11.6538	8.2438	28.1424
128	128	22-Jun-67	3.23	56.1	10.4189	7.4878	24.1694
129	129	26-Jul-67	2.88	41.3	8.3140	6.4298	18.5398
130	130	18-Aug-67	2.76	33.4	7.6090	5.7805	15.9451
131	131	06-Sep-67	2.63	30.3	6.9191	5.5045	14.4791
132	132	20-Sep-67	2.49	28.1	6.1860	5.3027	13.1887
133	133	18-Oct-67	2.33	20.8	5.4369	4.5590	10.6303
134	134	07-Nov-67	2.61	29.7	6.8233	5.4528	14.2434
135	135	15-Dec-67	3.34	67.4	11.1393	8.2094	27.3993
136	136	04-Jan-68	3.59	76.7	12.9139	8.7601	31.4801
137	137	19-Jan-68	4.82	160.3	23.2217	12.6599	61.0067
138	138	04-Apr-68	5.02	166.5	25.1704	12.9036	64.7375
139	139	03-May-68	3.92	90.6	15.3404	9.5191	37.2834
140	140	15-May-68	3.48	69.4	12.1161	8.3292	28.9926
141	141	06-Jun-68	3.15	50.1	9.8944	7.0796	22.2692
142	142	14-Jun-68	3.07	48.4	9.4395	6.9586	21.3794
143	143	04-Jul-68	2.95	42.8	8.6873	6.5390	19.2731
144	144	20-Jul-68	2.87	33.1	8.2089	5.7559	16.4914
145	145	08-Aug-68	2.77	31.7	7.6764	5.6316	15.6031
146	146	04-Sep-68	2.57	25.6	6.6021	5.0595	13.0002
147	147	09-Oct-68	2.32	17.5	5.3802	4.1867	9.7111
148	148	05-Nov-68	2.15	13.6	4.6044	3.6867	7.9110
149	149	11-Dec-68	2.87	36.2	8.2264	6.0204	17.2676
150	150	08-Jan-69	5.98	276.4	35.7261	16.6245	99.3665

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
151	151	22-Jan-69	6.13	278.1	37.5338	16.6755	102.1620
152	152	04-Feb-69	7.25	433.2	52.5356	20.8146	150.8672
153	153	21-May-69	6.15	273.5	37.8331	16.5391	101.7296
154	154	07-Jun-69	7.02	387.7	49.2740	19.6905	138.2181
155	155	11-Jun-69	4.70	161.3	22.1188	12.7023	59.7399
156	156	25-Jun-69	4.25	132.9	18.0792	11.5303	49.0263
157	157	02-Jul-69	4.14	121.7	17.1076	11.0308	45.6247
158	158	02-Jul-69	3.85	100.0	14.7961	9.9993	38.4632
159	159	19-Jul-69	3.79	95.9	14.3309	9.7933	37.0738
160	160	23-Jul-69	3.69	87.8	13.6019	9.3722	34.5656
161	161	31-Jul-69	3.61	79.3	13.0017	8.9027	32.1014
162	162	13-Aug-69	3.54	74.5	12.5442	8.6298	30.5648
163	163	20-Aug-69	3.46	65.3	11.9469	8.0808	27.9306
164	164	28-Aug-69	3.37	64.4	11.3437	8.0263	27.0328
165	165	04-Sep-69	3.24	55.5	10.4780	7.4499	24.1151
166	166	11-Sep-69	3.12	47.5	9.7226	6.8891	21.4808
167	167	18-Sep-69	2.94	44.6	8.6693	6.6761	19.6570
168	168	25-Sep-69	3.16	58.0	9.9905	7.6172	24.0762
169	169	02-Oct-69	2.86	42.4	8.1915	6.5086	18.6281
170	170	09-Oct-69	2.79	38.1	7.7611	6.1737	17.1991
171	171	16-Oct-69	2.73	33.6	7.4418	5.7927	15.8023
172	172	23-Oct-69	2.77	37.3	7.6595	6.1068	16.9011
173	173	06-Nov-69	3.10	54.1	9.6089	7.3562	22.8028
174	174	07-Jan-70	6.12	281.7	37.4964	16.7846	102.7796
175	175	04-Feb-70	6.33	296.1	40.0391	17.2070	108.8799
176	177	03-Apr-70	5.47	209.8	29.9336	14.4854	79.2521
177	178	22-Apr-70	4.58	149.2	21.0148	12.2160	56.0003
178	179	05-May-70	4.05	73.9	16.3842	8.5969	34.7981
179	180	22-May-70	3.58	82.7	12.8046	9.0931	32.5385
180	181	05-Jun-70	3.36	68.2	11.2822	8.2610	27.7477
181	182	25-Jun-70	3.16	58.0	9.9905	7.6190	24.0820
182	183	10-Jul-70	3.03	48.7	9.1976	6.9789	21.1653
183	184	22-Jul-70	2.96	46.2	8.7773	6.7939	20.1279
184	185	25-Aug-70	2.81	30.3	7.9147	5.5045	15.4857
185	186	03-Sep-70	2.71	28.6	7.3588	5.3479	14.5074
186	187	07-Nov-70	2.34	16.0	5.4939	4.0034	9.3837
187	188	20-Nov-70	2.87	38.9	8.2264	6.2398	17.8969
188	189	30-Dec-70	4.53	145.9	20.4872	12.0773	54.6650
189	190	07-Jan-71	6.12	281.2	37.4218	16.7678	102.5741
190	191	17-Feb-71	7.88	488.3	62.0799	22.0981	174.1123
191	192	01-Mar-71	7.84	509.4	61.4571	22.5703	176.9392
192	193	15-Apr-71	6.71	309.7	45.0060	17.5975	118.0556
193	194	21-May-71	4.45	122.3	19.7761	11.0577	49.1738
194	195	14-Jun-71	3.80	90.0	14.4465	9.4893	36.0676
195	196	22-Jul-71	3.40	68.0	11.5914	8.2490	28.0845
196	197	14-Aug-71	3.16	57.6	9.9905	7.5874	23.9820
197	198	17-Sep-71	2.87	38.8	8.2614	6.2308	17.9089
198	199	14-Oct-71	2.61	26.6	6.7914	5.1538	13.4309
199	200	11-Nov-71	2.50	18.7	6.2468	4.3296	10.8213
200	201	12-Dec-71	3.18	55.5	10.1258	7.4480	23.7004

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
201	202	13-Jan-72	5.30	224.6	28.1273	14.9851	79.4737
202	203	11-Feb-72	5.19	208.4	26.9438	14.4365	74.9361
203	204	27-Mar-72	6.40	327.3	41.0093	18.0911	115.8523
204	205	24-Apr-72	5.90	243.1	34.8569	15.5926	92.0582
205	206	20-May-72	4.56	133.9	20.7641	11.5707	52.7251
206	207	01-Jul-72	3.49	50.2	12.1586	7.0856	24.7069
207	208	01-Aug-72	3.18	54.9	10.1258	7.4099	23.5791
208	209	21-Sep-72	2.73	35.4	7.4751	5.9518	16.2727
209	210	27-Nov-72	2.41	22.7	5.8275	4.7685	11.5112
210	211	16-Dec-72	2.64	27.1	6.9834	5.2084	13.7638
211	212	17-Mar-73	4.76	147.4	22.6669	12.1392	57.7946
212	213	18-Apr-73	3.61	70.2	13.0677	8.3801	30.2934
213	214	07-Jun-73	2.65	28.9	7.0318	5.3717	14.2444
214	215	09-Aug-73	2.41	22.8	5.7981	4.7774	11.5036
215	216	06-Sep-73	2.31	28.6	5.3238	5.3479	12.3394
216	217	08-Nov-73	2.25	17.4	5.0462	4.1731	9.3744
217	218	19-Dec-73	2.76	32.9	7.5922	5.7337	15.7987
218	219	07-Mar-74	6.72	273.6	45.1287	16.5416	111.1233
219	220	09-Jul-74	3.20	49.5	10.2426	7.0375	22.5228
220	221	05-Dec-74	2.87	41.7	8.2264	6.4540	18.5111
221	222	10-Mar-75	6.50	300.0	42.2284	17.3202	112.5524
222	223	14-Aug-75	3.03	43.3	9.1607	6.5800	19.9155
223	224	04-Sep-75	2.86	31.4	8.1740	5.6064	16.0288
224	225	04-Oct-75	2.56	25.5	6.5709	5.0455	12.9334
225	226	07-Nov-75	2.32	24.0	5.3802	4.8945	11.3529
226	227	23-Dec-75	3.05	66.3	9.3275	8.1401	24.8607
227	228	14-Jan-76	4.78	154.0	22.8122	12.4114	59.2797
228	229	05-Feb-76	5.85	248.9	34.2478	15.7767	92.3279
229	230	13-Feb-76	6.01	247.2	36.0914	15.7228	94.4563
230	231	13-Mar-76	7.16	399.3	51.2184	19.9817	143.0030
231	232	28-Jul-76	3.79	79.3	14.3771	8.9043	33.7627
232	233	13-Aug-76	3.58	95.0	12.7828	9.7455	34.8431
233	234	17-Sep-76	3.14	56.1	9.8561	7.4878	23.5075
234	235	20-Oct-76	2.80	37.1	7.8462	6.0929	17.0669
235	236	10-Nov-76	2.73	30.6	7.4584	5.5301	15.1028
236	237	15-Dec-76	3.51	42.5	12.3506	6.5173	22.9041
237	238	30-Jan-77	5.35	164.8	28.5818	12.8365	68.6264
238	239	12-Feb-77	5.75	200.7	33.0806	14.1652	81.4723
239	240	05-Mar-77	6.91	338.0	47.7877	18.3860	127.1002
240	241	13-Apr-77	7.24	401.1	52.4031	20.0263	144.9702
241	242	06-May-77	5.49	144.0	30.1006	12.0008	65.8413
242	243	25-Jul-77	3.32	38.9	11.0176	6.2376	20.7042
243	244	27-Oct-77	2.47	17.8	6.1255	4.2203	10.4452
244	245	03-Dec-77	3.01	33.2	9.0503	5.7584	17.3234
245	247	13-Dec-79	5.00	165.7	24.9567	12.8717	64.3030
246	248	19-Jun-80	4.29	145.9	18.4177	12.0808	51.8456
247	249	30-Sep-80	2.93	29.8	8.5619	5.4554	15.9628
248	250	23-Nov-80	2.84	81.6	8.0871	9.0306	25.6812
249	251	20-Mar-81	8.53	612.8	72.6800	24.7543	211.0369
250	252	31-Jul-81	3.51	75.8	12.2864	8.7066	30.5182

```

=====
NO.    DATE      H(m)  Q(m3/s)    H^2.0    Q^0.5    H*Q^0.5
=====
251 253 05-Sep-81    3.12    47.9     9.7226    6.9178    21.5703
252 254 20-Nov-81    2.53    20.4     6.3847    4.5185    11.4172
253 255 12-Mar-82    6.16   258.5    37.9082   16.0772   98.9866
254 256 20-Jun-82    3.20    47.3    10.2426    6.8747    22.0016
255 257 12-Jul-84    2.68    26.4     7.1944    5.1428    13.7941
256 258 05-Aug-86    3.59    76.7    12.8920    8.7601    31.4534
257 259 10-May-87    4.04    91.6    16.2857    9.5711    38.6245
258 260 17-Sep-87    2.60    20.4     6.7756    4.5185    11.7615
259 261 18-Sep-89    2.61    34.1     6.8073    5.8365    15.2280
260 262 17-Jun-90    3.02    43.4     9.1204    6.5894    19.8999
261 263 15-Jul-90    2.69    24.1     7.2361    4.9092    13.2057
262 264 19-Aug-90    2.55    16.8     6.5025    4.0988    10.4519
263 265 12-Oct-90    2.46     9.2     6.0516    3.0364     7.4697
264 266 05-Nov-90    2.17     9.1     4.7089    3.0199     6.5533
265 267 23-Dec-90    2.57    14.5     6.6049    3.8013     9.7694
266 268 13-Jan-91    4.13    87.1    17.0569    9.3317    38.5398
267 269 03-Mar-91    6.07   206.6   36.8449   14.3739   87.2498
OMIT176 04-Mar-70    7.10   251.9   50.4794   15.8716  112.7657
OMIT246 07-Jan-78    5.50   111.2   30.2680   10.5452   58.0156
=====
T O T A L 1025.20 29225.06 4457.43 2500.33 11325.54
=====
DISCHARGE - RATING CURVE : Q = a * (H + b)^2
      (where, OMIT: Omitted Data)
                                a' = 3.311206
                                b' = -3.349503
                                a  = 10.964082
                                b  = -1.011566
                                Correlation Coefficient 0.991
=====

```


DISCHARGE RATING CURVE (1)

(where, $H < 5.134$ m)

STATION: 4-350 CHILENGA

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	24-Jul-62	3.85	150.4	14.8431	12.2622	47.2424
2	21-Aug-62	3.22	104.5	10.3992	10.2220	32.9637
3	06-Nov-62	1.48	28.9	2.2034	5.3743	7.9775
4	18-Nov-62	1.85	54.9	3.4343	7.4118	13.7354
5	26-Nov-62	2.24	71.9	5.0325	8.4808	19.0253
6	01-Dec-62	2.49	81.6	6.2012	9.0306	22.4883
7	08-Dec-62	2.88	108.2	8.3140	10.4005	29.9889
8	11-Dec-62	3.38	143.3	11.4466	11.9701	40.4982
9	14-Dec-62	3.95	183.5	15.5801	13.5460	53.4681
10	18-Dec-62	4.34	189.2	18.8387	13.7534	59.6947
11	22-Dec-62	4.68	248.3	21.8615	15.7588	73.6822
12	20-Jan-63	4.78	261.4	22.8122	16.1668	77.2160
13	27-May-63	4.91	244.1	24.1113	15.6234	76.7161
14	06-Jun-63	4.57	211.2	20.8475	14.5342	66.3619
15	10-Jun-63	4.28	189.2	18.3132	13.7534	58.8563
16	17-Jun-63	4.08	166.8	16.6319	12.9146	52.6685
17	24-Jun-63	3.93	163.1	15.4121	12.7713	50.1377
18	01-Jul-63	3.79	149.5	14.3771	12.2275	46.3633
19	10-Jul-63	3.64	136.5	13.2446	11.6828	42.5173
20	15-Jul-63	3.57	130.8	12.7175	11.4378	40.7891
21	22-Jul-63	3.46	122.0	11.9891	11.0474	38.2520
22	29-Jul-63	3.33	114.1	11.0784	10.6826	35.5560
23	06-Aug-63	3.17	103.4	10.0484	10.1664	32.2268
24	12-Aug-63	3.06	98.0	9.3461	9.8983	30.2605
25	19-Aug-63	2.91	91.5	8.4730	9.5637	27.8383
26	26-Aug-63	2.75	81.0	7.5586	8.9992	24.7416
27	02-Sep-63	2.59	73.3	6.7122	8.5639	22.1874
28	09-Sep-63	2.44	68.5	5.9458	8.2781	20.1853
29	16-Sep-63	2.29	62.6	5.2397	7.9108	18.1081
30	23-Sep-63	2.13	57.8	4.5522	7.6004	16.2163
31	01-Oct-63	1.96	50.7	3.8530	7.1195	13.9749
32	07-Oct-63	1.84	43.0	3.4005	6.5606	12.0980
33	14-Oct-63	1.82	36.0	3.3222	5.9969	10.9305
34	21-Oct-63	1.68	35.7	2.8103	5.9732	10.0135
35	28-Oct-63	1.65	35.7	2.7091	5.9732	9.8314
36	04-Nov-63	1.71	40.8	2.9239	6.3856	10.9190
37	11-Nov-63	1.99	49.3	3.9736	7.0194	13.9923
38	18-Nov-63	2.22	69.7	4.9102	8.3462	18.4944
39	25-Nov-63	2.22	74.8	4.9102	8.6462	19.1590
40	02-Dec-63	2.70	85.5	7.2764	9.2475	24.9450
41	09-Dec-63	3.11	122.9	9.6656	11.0858	34.4653
42	16-Dec-63	3.70	161.4	13.6695	12.7046	46.9716
43	23-Dec-63	3.92	168.5	15.3404	12.9802	50.8392
44	30-Dec-63	3.86	155.5	14.9372	12.4683	48.1884
45	06-Jan-64	3.89	166.5	15.1500	12.9036	50.2247
46	13-Jan-64	4.34	226.5	18.8387	15.0511	65.3270
47	22-Jan-64	4.94	275.5	24.4417	16.5989	82.0625
48	22-Apr-64	4.70	226.8	22.0615	15.0605	70.7386
49	29-Apr-64	4.20	183.8	17.6156	13.5564	56.8976
50	05-May-64	3.80	149.5	14.4233	12.2275	46.4379

=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=====							
51	81	13-May-64	3.36	129.4	11.2822	11.3758	38.2100
52	82	20-May-64	3.07	106.8	9.4208	10.3322	31.7130
53	83	27-May-64	2.84	98.0	8.0698	9.8983	28.1184
54	84	03-Jun-64	2.67	86.6	7.1454	9.3086	24.8827
55	85	10-Jun-64	2.56	83.0	6.5552	9.1087	23.3212
56	86	17-Jun-64	2.47	75.6	6.0954	8.6952	21.4673
57	87	24-Jun-64	2.37	68.8	5.5944	8.2952	19.6201
58	88	01-Jul-64	2.30	67.1	5.2817	8.1921	18.8271
59	89	08-Jul-64	2.23	66.3	4.9780	8.1401	18.1617
60	90	17-Jul-64	2.18	63.4	4.7362	7.9643	17.3324
61	91	22-Jul-64	2.14	51.3	4.5783	7.1592	15.3184
62	92	29-Jul-64	2.07	60.0	4.2706	7.7480	16.0116
63	93	14-Aug-64	1.90	48.1	3.6174	6.9382	13.1961
64	94	28-Aug-64	1.75	43.6	3.0503	6.6036	11.5333
65	95	09-Sep-64	1.61	37.7	2.5998	6.1369	9.8951
66	96	23-Sep-64	1.47	24.1	2.1494	4.9060	7.1927
67	97	07-Oct-64	1.33	24.9	1.7580	4.9890	6.6149
68	98	21-Oct-64	1.22	20.4	1.4939	4.5153	5.5188
69	99	04-Nov-64	1.17	15.6	1.3771	3.9464	4.6311
70	100	18-Nov-64	1.35	27.9	1.8315	5.2786	7.1436
71	101	02-Dec-64	1.68	47.9	2.8308	6.9178	11.6391
72	102	09-Dec-64	1.85	53.8	3.4343	7.3350	13.5931
73	103	23-Dec-64	1.83	54.1	3.3445	7.3543	13.4495
74	104	30-Dec-64	2.33	87.2	5.4227	9.3389	21.7473
75	105	06-Jan-65	3.30	134.2	10.9166	11.5854	38.2786
76	116	14-Apr-65	4.92	265.3	24.2012	16.2889	80.1329
77	117	21-Apr-65	4.54	224.3	20.5701	14.9756	67.9208
78	118	28-Apr-65	4.09	175.0	16.7315	13.2287	54.1108
79	119	05-May-65	3.60	131.7	12.9578	11.4749	41.3061
80	120	12-May-65	3.18	143.8	10.0871	11.9937	38.0923
81	121	19-May-65	2.84	98.8	8.0698	9.9411	28.2401
82	122	26-May-65	2.62	85.0	6.8392	9.2169	24.1038
83	123	02-Jun-65	2.44	74.5	5.9756	8.6298	21.0955
84	124	09-Jun-65	2.30	71.6	5.3097	8.4641	19.5038
85	125	16-Jun-65	2.21	70.2	4.8967	8.3801	18.5438
86	126	23-Jun-65	2.12	62.0	4.4745	7.8749	16.6578
87	127	30-Jun-65	2.02	60.9	4.0714	7.8026	15.7440
88	128	07-Jul-65	1.94	55.2	3.7579	7.4309	14.4050
89	129	14-Jul-65	1.91	55.2	3.6639	7.4309	14.2238
90	130	21-Jul-65	1.88	51.8	3.5253	7.1986	13.5159
91	131	28-Jul-65	1.83	51.3	3.3445	7.1592	13.0927
92	132	04-Aug-65	1.77	45.6	3.1253	6.7520	11.9365
93	133	11-Aug-65	1.69	43.6	2.8720	6.6036	11.1911
94	134	18-Aug-65	1.62	40.8	2.6195	6.3856	10.3351
95	135	25-Aug-65	1.56	34.3	2.4354	5.8535	9.1348
96	136	01-Sep-65	1.49	34.0	2.2306	5.8293	8.7061
97	137	08-Sep-65	1.44	28.1	2.0785	5.3027	7.6449
98	138	15-Sep-65	1.43	32.6	2.0348	5.7065	8.1401
99	139	22-Sep-65	1.36	25.6	1.8480	5.0623	6.8817
100	140	29-Sep-65	1.24	22.4	1.5389	4.7327	5.8711

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
101	141	06-Oct-65	1.23	22.1	1.5014	4.7057	5.7659
102	142	23-Oct-65	1.18	20.0	1.3986	4.4744	5.2915
103	143	03-Nov-65	1.11	15.4	1.2242	3.9284	4.3465
104	144	28-Aug-66	1.41	27.8	1.9830	5.2679	7.4181
105	145	14-Oct-66	1.07	13.9	1.1511	3.7325	4.0046
106	146	03-Nov-66	0.98	12.1	0.9573	3.4732	3.3982
107	148	05-Jan-68	2.76	90.6	7.6258	9.5191	26.2870
108	149	04-May-68	3.72	142.4	13.8504	11.9346	44.4158
109	150	16-May-68	3.04	94.0	9.2717	9.6960	29.5238
110	151	07-Jun-68	2.25	64.0	5.0599	7.9998	17.9948
111	152	05-Jul-68	1.91	45.3	3.6523	6.7310	12.8637
112	153	23-Jul-68	1.78	44.2	3.1577	6.6464	11.8105
113	154	09-Aug-68	1.65	39.4	2.7191	6.2738	10.3453
114	155	05-Sep-68	1.42	30.3	2.0174	5.5045	7.8184
115	156	10-Oct-68	1.14	19.6	1.3064	4.4267	5.0597
116	157	06-Nov-68	1.00	13.1	0.9995	3.6209	3.6199
117	158	12-Dec-68	1.82	53.9	3.3111	7.3408	13.3577
118	160	06-Aug-69	3.14	108.3	9.8561	10.4087	32.6774
119	161	04-Sep-69	2.60	77.9	6.7756	8.8277	22.9784
120	162	08-Oct-69	1.82	49.9	3.3001	7.0656	12.8354
121	163	06-Nov-69	2.11	62.8	4.4359	7.9269	16.6953
122	164	04-Dec-69	2.21	68.4	4.8967	8.2678	18.2954
123	166	23-Apr-70	4.54	199.1	20.6254	14.1091	64.0769
124	167	07-May-70	3.83	152.3	14.6791	12.3428	47.2894
125	168	23-May-70	3.12	101.4	9.7416	10.0685	31.4253
126	169	06-Jun-70	2.71	81.8	7.3258	9.0463	24.4850
127	170	26-Jun-70	2.39	69.4	5.7249	8.3292	19.9292
128	171	11-Jul-70	2.17	58.6	4.7229	7.6561	16.6384
129	172	23-Jul-70	2.04	52.4	4.1580	7.2378	14.7587
130	173	26-Aug-70	1.69	41.3	2.8616	6.4298	10.8769
131	174	19-Nov-70	1.58	38.1	2.5121	6.1691	9.7778
132	175	14-Dec-70	3.65	159.3	13.2890	12.6196	46.0035
133	176	23-May-71	4.19	190.3	17.5389	13.7935	57.7666
134	177	16-Jun-71	3.27	113.1	10.6962	10.6334	34.7766
135	178	13-Aug-71	2.31	58.7	5.3238	7.6635	17.6823
136	179	15-Sep-71	1.81	48.9	3.2890	6.9931	12.6824
137	180	12-Oct-71	1.49	39.2	2.2215	6.2580	9.3273
138	181	13-Nov-71	1.40	26.4	1.9658	5.1400	7.2067
139	182	14-Dec-71	2.19	70.9	4.8027	8.4189	18.4500
140	183	14-Feb-72	4.89	269.2	23.8724	16.4076	80.1665
141	186	23-May-72	4.43	178.4	19.6408	13.3554	59.1885
142	187	02-Aug-72	2.34	86.9	5.4654	9.3207	21.7902
143	188	12-Nov-72	1.36	29.3	1.8397	5.4084	7.3358
144	189	14-Dec-72	1.37	34.1	1.8813	5.8365	8.0054
145	190	04-Jan-73	1.84	52.0	3.3893	7.2143	13.2815
146	191	19-Apr-73	2.97	108.4	8.8316	10.4114	30.9405
147	192	06-Jun-73	1.54	35.7	2.3599	5.9708	9.1724
148	193	08-Aug-73	1.23	23.4	1.5088	4.8334	5.9370
149	194	07-Sep-73	1.13	12.4	1.2718	3.5177	3.9672
150	195	08-Nov-73	1.03	15.5	1.0614	3.9392	4.0583

```

=====
NO.   DATE      H(m)  Q(m3/s)   H^2.0   Q^0.5   H*Q^0.5
=====
151 196 20-Dec-73   1.65   37.4    2.7292   6.1138   10.1001
152 197 23-Dec-75   1.76   62.0    3.0930   7.8749   13.8495
153 198 15-Jan-76   3.57  165.9   12.7610  12.8816  46.0165
154 199 06-Feb-76   4.74  240.7   22.4353  15.5143  73.4849
155 200 15-Dec-76   2.08   63.7    4.3085   7.9820   16.5682
156 201 30-Jan-77   4.27  151.7   18.2090  12.3164  52.5565
157 202 13-Feb-77   4.97  277.3   24.6834  16.6525  82.7338
158 207 20-Jun-80   4.11  176.1   16.9065  13.2704  54.5644
159 208 01-Oct-80   2.04   46.4    4.1704   6.8105   13.9081
160 209 23-Nov-80   1.83   39.9    3.3445   6.3188   11.5558
161 210 01-Aug-81   2.88   70.1    8.2965   8.3750   24.1231
162 211 05-Sep-81   2.29   64.9    5.2537   8.0579   18.4696
163 212 21-Nov-81   1.44   19.7    2.0610   4.4330    8.3641
164 213 21-Jun-82   2.44   68.4    5.9458   8.2695   20.1644
165 217 07-Aug-86   2.82   93.7    7.9490   9.6799   27.2915
166 218 11-May-87   3.79  113.4   14.3771  10.6494  40.3793
167 219 17-Sep-87   1.47   36.8    2.1584   6.0649    8.9102
168 220 02-May-89   1.53   47.6    2.3412   6.9014   10.5598
169 221 13-Jul-90   1.65   25.2    2.7225   5.0220    8.2862
170 222 17-Aug-90   1.35   27.2    1.8225   5.2192    7.0459
171 223 11-Oct-90   1.06   17.4    1.1236   4.1749    4.4254
172 224 04-Nov-90   0.97   15.9    0.9409   3.9825    3.8630
173 225 22-Dec-90   1.42   19.6    2.0164   4.4317    6.2930
174 226 13-Jan-91   3.20   94.6   10.2400   9.7268   31.1257
OMIT206 08-Jan-78   4.93  119.4   24.2913  10.9289  53.8643
OMIT215 13-Jul-83   1.69    1.0    2.8720   0.9955    1.6871
OMIT216 25-Sep-83   4.31    7.5   18.5750   2.7445   11.8284
=====
T O T A L   440.54 15243.95   1317.83   1527.34   4468.86
=====
DISCHARGE - RATING CURVE : Q = a * (H + b)^2

(where, OMIT : Omitted Data)
a' = 2.972966
b' = 1.250701
a = 8.770884
b = 0.439490
Correlation Coefficient 0.987
=====

```

DISCHARGE RATING CURVE (2)

(where, $H \geq 5.134$ m)

STATION: 4-350 CHILENGA

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	1 20-Jun-62	5.07	233.3	25.7548	15.2752	77.5203
2	13 27-Dec-62	5.35	348.3	28.5818	18.6627	99.7745
3	14 31-Dec-62	5.82	444.6	33.8920	21.0849	122.7497
4	15 04-Jan-63	6.08	526.7	37.0127	22.9498	139.6222
5	16 11-Jan-63	6.44	657.0	41.4398	25.6311	164.9967
6	17 18-Jan-63	6.69	741.9	44.7201	27.2379	182.1481
7	19 20-Jan-63	7.01	852.3	49.1030	29.1948	204.5783
8	20 19-Feb-63	7.25	1016.6	52.6240	31.8838	231.2925
9	21 28-Feb-63	7.33	982.6	53.6907	31.3464	229.6871
10	22 19-Mar-63	7.25	934.5	52.5356	30.5689	221.5676
11	23 29-Mar-63	7.03	798.5	49.4882	28.2584	198.7915
12	24 07-Apr-63	6.71	651.3	45.0060	25.5203	171.2069
13	25 16-Apr-63	6.46	569.2	41.7937	23.8573	154.2326
14	26 22-Apr-63	6.28	515.4	39.5009	22.7017	142.6796
15	27 26-Apr-63	6.12	447.4	37.4591	21.1520	129.4582
16	28 30-Apr-63	5.90	407.8	34.7850	20.1931	119.0967
17	29 06-May-63	5.62	334.1	31.6244	18.2795	102.7957
18	30 13-May-63	5.28	286.0	27.9015	16.9115	89.3299
19	66 20-May-63	5.29	337.0	27.9982	18.3568	97.1316
20	67 10-Feb-64	5.64	393.6	31.8304	19.8395	111.9312
21	68 13-Feb-64	5.85	447.4	34.2121	21.1520	123.7203
22	69 19-Feb-64	6.31	623.0	39.7696	24.9594	157.4016
23	70 26-Feb-64	6.63	739.1	43.9489	27.1858	180.2258
24	71 04-Mar-64	6.58	662.6	43.3448	25.7413	169.4724
25	72 11-Mar-64	6.47	608.8	41.8332	24.6741	159.5887
26	73 18-Mar-64	6.26	509.7	39.1950	22.5766	141.3429
27	74 25-Mar-64	6.03	455.9	36.3114	21.3518	128.6640
28	75 01-Apr-64	5.82	402.1	33.8210	20.0524	116.6165
29	76 08-Apr-64	5.52	351.1	30.5033	18.7384	103.4919
30	77 15-Apr-64	5.14	281.8	26.4086	16.7855	86.2594
31	106 27-Jan-65	5.48	385.1	30.0337	19.6242	107.5466
32	107 03-Feb-65	5.73	413.4	32.8007	20.3329	116.4503
33	108 10-Feb-65	5.74	433.2	32.9056	20.8146	119.3996
34	109 17-Feb-65	5.70	402.1	32.4873	20.0524	114.2939
35	110 24-Feb-65	5.82	455.9	33.9275	21.3518	124.3687
36	111 03-Mar-65	5.91	481.4	34.8929	21.9405	129.6032
37	112 17-Mar-65	5.71	427.6	32.5568	20.6781	117.9863
38	113 24-Mar-65	5.60	410.6	31.3849	20.2631	113.5186
39	114 31-Mar-65	5.38	331.3	28.9414	18.2018	97.9208
40	115 07-Apr-65	5.15	314.3	26.5654	17.7290	91.3782

NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
41	147 20-Apr-67	5.86	427.6	34.3549	20.6781	121.2007
42	159 09-Jan-69	5.04	312.3	25.4156	17.6730	89.0965
43	165 08-Jan-70	5.11	332.5	26.0962	18.2337	93.1459
44	184 28-Mar-72	5.74	385.1	32.9755	19.6235	112.6865
45	185 27-Apr-72	5.67	309.8	32.1062	17.6007	99.7299
46	203 04-Mar-77	5.73	357.1	32.8357	18.8964	108.2811
47	204 14-Apr-77	6.51	489.9	42.3870	22.1339	144.1034
OMIT205	07-May-77	5.66	219.0	32.0371	14.7997	83.7683
OMIT214	13-Apr-83	5.12	10.9	26.1897	3.3018	16.8973
T O T A L		281.12	23228.62	1698.76	1027.95	6258.08
DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$						
(where, OMIT : Omitted Data)				a' =	6.327424	
				b' =	-15.974382	
				a =	40.036290	
				b =	-2.524627	
				Correlation Coefficient	0.965	

DISCHARGE RATING CURVE

STATION: 4-450 LUBUNGU

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	08-Oct-59	1.16	13.1	1.3415	3.6248	4.1984
2	15-Oct-59	1.13	12.9	1.2718	3.5973	4.0569
3	22-Oct-59	1.07	11.9	1.1381	3.4568	3.6878
4	29-Oct-59	1.04	10.1	1.0740	3.1795	3.2950
5	12-Nov-59	1.07	9.6	1.1381	3.0937	3.3004
6	24-Nov-59	1.13	13.1	1.2718	3.6130	4.0746
7	17-Dec-59	1.25	15.2	1.5617	3.8959	4.8686
8	07-Jan-60	2.23	130.0	4.9508	11.4006	25.3669
9	14-Jan-60	2.38	101.4	5.6522	10.0685	23.9372
10	21-Jan-60	2.29	111.3	5.2258	10.5492	24.1154
11	28-Jan-60	2.04	98.8	4.1704	9.9411	20.3014
12	04-Feb-60	2.01	98.3	4.0469	9.9126	19.9410
13	11-Feb-60	2.29	110.2	5.2258	10.4954	23.9924
14	18-Feb-60	2.90	183.5	8.3845	13.5460	39.2237
15	25-Feb-60	3.44	247.8	11.8628	15.7408	54.2151
16	17-Mar-60	3.90	334.1	15.2212	18.2795	71.3162
17	29-Mar-60	3.96	348.3	15.7006	18.6627	73.9492
18	07-Apr-60	3.93	348.3	15.4600	18.6627	73.3803
19	13-Apr-60	3.93	379.4	15.4600	19.4794	76.5913
20	05-May-60	3.26	200.5	10.6365	14.1592	46.1783
21	12-May-60	2.87	152.3	8.2089	12.3428	35.3636
22	19-May-60	2.47	128.6	6.0954	11.3384	27.9931
23	26-May-60	2.19	105.1	4.8161	10.2497	22.4935
24	09-Jun-60	1.89	54.1	3.5712	7.3543	13.8978
25	15-Jun-60	1.80	55.2	3.2340	7.4309	13.3631
26	23-Jun-60	1.77	53.2	3.1253	7.2963	12.8987
27	07-Jul-60	1.65	39.9	2.7091	6.3188	10.4002
28	14-Jul-60	1.62	38.2	2.6096	6.1829	9.9880
29	21-Jul-60	1.58	36.8	2.5121	6.0673	9.6164
30	05-Aug-60	1.52	32.3	2.3226	5.6817	8.6588
31	11-Aug-60	1.49	30.9	2.2306	5.5557	8.2975
32	18-Aug-60	1.46	30.6	2.1405	5.5301	8.0908
33	25-Aug-60	1.40	28.9	1.9658	5.3743	7.5352
34	08-Sep-60	1.34	21.7	1.7986	4.6634	6.2542
35	15-Sep-60	1.34	21.3	1.7986	4.6146	6.1887
36	22-Sep-60	1.25	18.3	1.5617	4.2737	5.3407
37	27-Sep-60	1.22	14.8	1.4864	3.8447	4.6874
38	10-Nov-60	1.06	6.5	1.1186	2.5465	2.6933
39	29-Nov-60	1.31	14.0	1.7178	3.7363	4.8970
40	22-Dec-60	1.25	13.0	1.5617	3.6013	4.5004
41	02-Feb-61	2.44	118.9	5.9458	10.9055	26.5921
42	16-Feb-61	3.29	261.6	10.8362	16.1755	53.2472
43	02-Mar-61	3.99	351.1	15.9431	18.7384	74.8203
44	11-Apr-61	4.91	583.3	24.0814	24.1522	118.5214
45	24-Apr-61	4.60	574.8	21.1828	23.9757	110.3475
46	11-May-61	4.20	461.6	17.6412	21.4841	90.2361
47	29-May-61	3.38	291.7	11.4466	17.0782	57.7802
48	07-Jul-61	2.19	94.6	4.8161	9.7251	21.3424
49	26-Jul-61	2.03	71.4	4.1084	8.4474	17.1222
50	23-Aug-61	1.77	48.4	3.1253	6.9586	12.3017

=M=====						
NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
=M=====						
51	51 01-Sep-61	1.71	40.8	2.9134	6.3856	10.8995
52	52 14-Sep-61	1.62	30.3	2.6096	5.5045	8.8921
53	53 28-Sep-61	1.49	23.9	2.2124	4.8916	7.2759
54	54 11-Oct-61	1.40	21.4	1.9658	4.6299	6.4915
55	55 15-Dec-61	2.22	82.7	4.9237	9.0931	20.1772
56	56 09-Jan-62	3.17	235.9	10.0291	15.3584	48.6380
57	57 25-Jan-62	3.50	308.7	12.2224	17.5685	61.4206
58	58 07-Feb-62	5.44	654.1	29.5678	25.5758	139.0715
59	59 08-Feb-62	4.34	453.1	18.8651	21.2854	92.4511
60	60 16-Feb-62	4.61	475.7	21.2952	21.8111	100.6510
61	61 05-Mar-62	4.86	534.6	23.6348	23.1219	112.4085
62	62 14-Mar-62	5.07	625.8	25.6621	25.0160	126.7257
63	63 21-Mar-62	5.45	696.6	29.7006	26.3931	143.8376
64	64 30-Mar-62	5.56	733.4	30.8747	27.0815	150.4783
65	65 06-Apr-62	5.71	736.2	32.5568	27.1337	154.8210
66	66 16-May-62	5.12	693.8	26.1897	26.3394	134.7942
67	67 07-Jun-62	4.50	543.7	20.2396	23.3170	104.8997
68	68 29-Jun-62	3.57	322.8	12.7610	17.9670	64.1826
69	69 06-Jul-62	3.29	269.3	10.8362	16.4102	54.0196
70	70 02-Aug-62	2.74	174.1	7.5251	13.1965	36.2007
71	71 17-Aug-62	2.56	147.2	6.5552	12.1346	31.0684
72	72 24-Aug-62	2.47	128.0	6.1255	11.3134	28.0003
73	73 06-Sep-62	2.33	112.7	5.4511	10.6161	24.7861
74	74 12-Oct-62	1.90	58.9	3.5943	7.6746	14.5499
75	75 02-Nov-62	1.69	42.5	2.8411	6.5173	10.9852
76	76 30-Nov-62	2.02	72.2	4.0961	8.4975	17.1979
77	77 07-Dec-62	2.43	105.6	5.9161	10.2772	24.9974
78	78 13-Dec-62	2.87	162.3	8.2089	12.7380	36.4958
79	79 08-Jan-63	4.80	538.0	23.0165	23.1953	111.2805
80	80 18-Jan-63	4.92	557.8	24.2012	23.6187	116.1914
81	81 05-Sep-63	2.28	105.3	5.1841	10.2635	23.3684
82	82 07-Jan-64	2.87	193.7	8.2614	13.9172	40.0016
83	83 05-Mar-64	4.80	597.5	23.0165	24.4435	117.2690
84	84 25-Mar-64	4.69	606.0	21.9757	24.6167	115.3986
85	85 22-Apr-64	3.61	345.5	13.0677	18.5867	67.1896
86	86 06-May-64	2.92	195.4	8.5263	13.9781	40.8157
87	87 16-Jun-64	2.19	93.2	4.7760	9.6521	21.0938
88	88 29-Jun-64	2.10	83.5	4.4231	9.1397	19.2220
89	89 22-Jul-64	2.01	81.8	4.0224	9.0463	18.1431
90	90 24-Aug-64	1.84	66.8	3.4005	8.1748	15.0747
91	91 11-Sep-64	1.72	53.2	2.9447	7.2963	12.5206
92	92 30-Sep-64	1.58	38.8	2.4928	6.2285	9.8339
93	93 30-Oct-64	1.40	25.3	1.9488	5.0342	7.0277
94	94 13-Nov-64	1.43	27.8	2.0348	5.2679	7.5144
95	95 20-Nov-64	1.48	34.5	2.1943	5.8776	8.7067
96	96 25-Nov-64	1.82	65.4	3.3111	8.0878	14.7169
97	97 24-Dec-64	1.87	69.7	3.4910	8.3462	15.5943
98	98 11-Jan-65	2.80	211.0	7.8121	14.5245	40.5962
99	99 20-Jan-65	3.46	303.0	11.9891	17.4066	60.2709
100	100 05-Feb-65	4.03	450.2	16.2365	21.2188	85.5003

=M=====							
NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
101	101	09-Feb-65	4.26	470.1	18.1830	21.6809	92.4505
102	102	25-Feb-65	4.15	441.7	17.1833	21.0177	87.1242
103	103	16-Mar-65	4.08	441.7	16.6568	21.0177	85.7789
104	104	23-Mar-65	3.98	421.9	15.8702	20.5407	81.8288
105	105	08-Apr-65	3.63	359.6	13.1781	18.9638	68.8416
106	106	15-Apr-65	3.44	334.1	11.8628	18.2795	62.9589
107	107	22-Apr-65	3.21	280.9	10.3012	16.7602	53.7925
108	108	29-Apr-65	2.94	230.2	8.6693	15.1729	44.6745
109	109	13-May-65	2.44	143.3	5.9458	11.9701	29.1879
110	110	20-May-65	2.27	115.2	5.1702	10.7354	24.4103
111	111	27-May-65	2.16	94.9	4.6832	9.7397	21.0775
112	112	03-Jun-65	2.08	89.8	4.3465	9.4744	19.7525
113	113	09-Jun-65	2.01	74.8	4.0591	8.6462	17.4197
114	114	10-Jun-65	2.00	80.1	3.9980	8.9519	17.8992
115	115	17-Jun-65	1.97	76.2	3.8650	8.7277	17.1583
116	116	24-Jun-65	1.93	71.4	3.7225	8.4474	16.2983
117	117	15-Jul-65	1.82	51.0	3.3001	7.1394	12.9694
118	118	20-Jul-65	1.80	56.9	3.2449	7.5443	13.5901
119	119	27-Jul-65	1.78	53.5	3.1685	7.3157	13.0221
120	120	03-Aug-65	1.75	50.7	3.0716	7.1195	12.4776
121	121	10-Aug-65	1.73	47.9	2.9762	6.9178	11.9343
122	122	17-Aug-65	1.69	45.3	2.8513	6.7310	11.3660
123	123	24-Aug-65	1.65	41.9	2.7091	6.4737	10.6552
124	124	07-Sep-65	1.58	36.0	2.5024	5.9969	9.4865
125	125	16-Sep-65	1.52	33.4	2.3133	5.7805	8.7918
126	126	28-Sep-65	1.46	29.7	2.1405	5.4528	7.9776
127	127	19-Oct-65	1.34	20.6	1.8068	4.5341	6.0946
128	128	26-Oct-65	1.31	19.0	1.7178	4.3590	5.7130
129	129	11-Nov-65	1.29	18.0	1.6545	4.2404	5.4543
130	130	19-Nov-65	1.40	21.3	1.9658	4.6115	6.4657
131	131	09-Dec-65	1.62	40.2	2.6195	6.3411	10.2630
132	132	16-Dec-65	1.87	59.7	3.5138	7.7297	14.4895
133	133	21-Dec-65	1.91	77.3	3.6290	8.7923	16.7494
134	134	02-Feb-66	2.31	115.5	5.3520	10.7486	24.8662
135	135	02-Mar-66	3.58	294.5	12.8264	17.1609	61.4599
136	136	16-Mar-66	3.97	351.1	15.7248	18.7384	74.3063
137	137	29-Mar-66	3.83	376.6	14.7025	19.4065	74.4122
138	138	16-Jun-66	1.93	63.4	3.7343	7.9643	15.3904
139	139	30-Jun-66	1.83	54.1	3.3557	7.3543	13.4719
140	140	02-Feb-67	2.35	107.0	5.5225	10.3459	24.3130
141	141	24-Apr-67	3.95	386.5	15.5801	19.6588	77.5964
142	142	19-Jun-67	2.10	83.7	4.4231	9.1506	19.2447
143	143	26-Jun-67	2.03	79.3	4.1208	8.9059	18.0787
144	144	02-Oct-67	1.42	25.9	2.0261	5.0846	7.2375
145	145	09-Jan-68	2.16	96.8	4.6832	9.8409	21.2965
146	146	16-Jan-68	2.34	111.5	5.4654	10.5572	24.6809
147	147	26-Jan-68	2.80	173.4	7.8462	13.1697	36.8898
148	148	16-Feb-68	3.51	327.5	12.3292	18.0957	63.5395
149	149	29-Mar-68	3.43	288.4	11.7790	16.9834	58.2878
150	150	26-Apr-68	2.94	206.3	8.6155	14.3618	42.1550

=M=====							
NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}	
=M=====							
151	151	25-Jul-68	1.71	45.7	2.9134	6.7604	11.5392
152	152	28-Aug-68	1.57	30.6	2.4640	5.5301	8.6807
153	153	23-May-70	2.52	131.1	6.3386	11.4502	28.8276
154	154	17-Jul-70	1.98	71.7	3.9131	8.4692	16.7533
155	155	19-Aug-70	1.80	53.1	3.2449	7.2866	13.1258
156	156	19-Jan-71	4.08	375.4	16.6319	19.3744	79.0132
157	157	17-Feb-71	4.65	577.1	21.6625	24.0229	111.8095
158	158	22-Mar-71	4.79	540.8	22.9873	23.2544	111.4933
159	159	29-Apr-71	4.39	537.4	19.2644	23.1812	101.7451
160	160	17-May-73	1.88	60.4	3.5482	7.7717	14.6393
161	161	25-Jun-73	1.52	30.8	2.3226	5.5455	8.4513
162	162	21-Jul-73	1.45	26.7	2.1138	5.1702	7.5170
163	163	18-Aug-73	1.38	21.3	1.8980	4.6146	6.3575
164	164	05-Oct-73	1.21	14.0	1.4642	3.7439	4.5303
165	165	22-Oct-73	1.14	12.1	1.3064	3.4732	3.9698
166	166	08-Nov-73	1.16	12.1	1.3486	3.4773	4.0381
167	167	27-Nov-73	1.43	26.6	2.0348	5.1538	7.3516
168	168	10-Dec-73	1.47	28.1	2.1584	5.3000	7.7865
169	169	11-Jan-74	2.47	119.7	6.0954	10.9392	27.0077
170	170	08-Feb-74	3.90	339.6	15.1737	18.4276	71.7818
171	171	17-Mar-74	4.41	530.7	19.4521	23.0372	101.6047
172	172	28-Mar-74	4.33	512.6	18.7594	22.6399	98.0579
173	173	18-Apr-74	4.10	476.2	16.8314	21.8228	89.5302
174	174	13-May-74	3.17	258.8	10.0677	16.0878	51.0459
175	175	06-Jun-74	2.62	166.7	6.8392	12.9124	33.7683
176	176	12-Jun-74	2.44	136.6	5.9458	11.6888	28.5020
177	177	08-Aug-74	1.87	65.8	3.4796	8.1087	15.1259
178	178	12-Sep-74	1.62	38.3	2.6393	6.1874	10.0520
179	179	14-Oct-74	1.37	23.9	1.8813	4.8916	6.7093
180	180	17-Feb-75	4.04	324.5	16.3103	18.0126	72.7458
181	181	03-May-75	4.19	434.0	17.5389	20.8323	87.2446
182	182	06-Jun-75	2.66	163.3	7.0642	12.7779	33.9618
183	183	24-Aug-75	1.84	60.9	3.4005	7.8063	14.3951
184	184	?	1.91	65.4	3.6406	8.0878	15.4318
185	185	16-Mar-76	4.40	429.2	19.3179	20.7164	91.0531
186	186	20-Aug-76	2.31	118.3	5.3379	10.8769	25.1299
187	187	07-Sep-76	2.13	88.0	4.5522	9.3828	20.0192
188	188	10-Oct-76	1.87	54.9	3.5138	7.4099	13.8900
189	189	23-Nov-76	1.71	32.3	2.9343	5.6841	9.7368
190	193	10-Jun-77	2.70	166.4	7.2929	12.9003	34.8377
191	194	04-Sep-77	1.91	47.5	3.6290	6.8911	13.1276
192	195	19-Oct-77	1.50	36.2	2.2397	6.0157	9.0029
193	196	10-Nov-77	1.41	21.1	2.0002	4.5961	6.5002
194	197	14-Jan-78	3.87	490.1	14.9843	22.1384	85.6968
195	198	08-Jan-79	3.90	366.5	15.2212	19.1451	74.6933
196	199	15-Feb-79	4.27	495.9	18.2350	22.2697	95.0973
197	200	19-Mar-79	5.00	671.5	24.9872	25.9140	129.5367
198	201	17-Sep-77	2.22	119.0	4.9237	10.9081	24.2045
199	202	11-Feb-80	4.14	455.1	17.1328	21.3326	88.2996
200	204	04-Jun-80	3.79	422.8	14.4002	20.5621	78.0281

```

=====
NO.    DATE      H(m)  Q(m3/s)    H^2.0    Q^0.5    H*Q^0.5
=====
201 205 31-Jul-80    2.50   167.2     6.2468   12.9299   32.3165
202 206 12-Sep-80    2.09    93.9     4.3592    9.6901   20.2318
203 207 18-Dec-80    1.95    72.2     3.8053    8.4975   16.5763
204 208 19-May-81    4.14   488.1    17.1328   22.0923   91.4440
205 209 30-Nov-81    1.55    42.0     2.4069    6.4803   10.0537
206 211 20-Dec-83    1.62    35.2     2.6096    5.9352    9.5879
207 212 07-Jun-84    1.92    48.3     3.6990    6.9484   13.3638
208 213 25-Jan-85    3.62   331.9    13.1118   18.2182   65.9684
209 214 10-May-87    2.82   188.0     7.9490   13.7122   38.6601
210 216 21-Jul-88    1.78    58.0     3.1794    7.6172   13.5820
211 217 13-Jul-90    1.64    38.25    2.6896    6.1847   10.1428
212 218 09-Aug-90    1.52    26.15    2.3104    5.1137    7.7728
213 219 13-Aug-90    1.34    18.27    1.7956    4.2743    5.7276
214 220 11-Oct-90    0.80    15.62    0.6400    3.9522    3.1618
215 221 27-Nov-90    1.14    11.75    1.2996    3.4278    3.9077
216 222 15-Dec-90    1.35    13.94    1.8225    3.7336    5.0404
217 223 20-Jan-91    2.38   127.05    5.6644   11.2716   26.8265
218 224 07-Feb-91    3.19   235.04   10.1761   15.3310   48.9059
OMIT190 16-Feb-77    3.32   156.0    11.0176   12.4888   41.4536
OMIT191 19-Feb-77    3.41   171.3    11.6330   13.0877   44.6385
OMIT192 12-Apr-77    4.64   313.1    21.5208   17.6946   82.0863
OMIT203 08-Mar-80    4.66   291.9    21.6909   17.0840   79.5659
OMIT210 05-Dec-82    1.92   215.5    3.6756   14.6806   28.1455
OMIT215 22-Mar-88    1.38   182.0    1.9065   13.4915   18.6283
=====
T O T A L    558.05 39668.03   1729.51  2557.50   8241.31
=====
DISCHARGE - RATING CURVE : Q = a * (H + b)^2
      (where, OMIT : Omitted Data)
                                     a' = 5.629850
                                     b' = -2.679992
                                     a  = 31.695216
                                     b  = -0.476033
                                     Correlation Coefficient 0.994
=====

```

DISCHARGE RATING CURVE

STATION: 4-560 CHIFUMPA PONTOON

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	16-Oct-52	0.91	22.3	0.8361	4.7267	4.3221
2	21-Aug-59	0.44	27.6	0.1953	5.2517	2.3211
3	19-Sep-59	0.34	22.3	0.1124	4.7177	1.5818
4	29-Sep-59	0.34	23.0	0.1124	4.8010	1.6097
5	09-Oct-59	0.33	23.4	0.1084	4.8392	1.5930
6	16-Oct-59	0.32	26.4	0.1024	5.1345	1.6432
7	23-Oct-59	0.30	24.4	0.0892	4.9348	1.4741
8	30-Oct-59	0.27	19.7	0.0753	4.4362	1.2169
9	13-Nov-59	0.33	19.0	0.1084	4.3622	1.4360
10	25-Nov-59	0.34	19.7	0.1124	4.4362	1.4874
11	17-Dec-59	0.52	22.4	0.2685	4.7297	2.4508
12	08-Jan-60	0.79	73.6	0.6280	8.5804	6.7998
13	15-Jan-60	1.16	80.7	1.3415	8.9835	10.4050
14	29-Jan-60	0.64	41.1	0.4097	6.4078	4.1015
15	05-Feb-60	0.82	51.5	0.6773	7.1789	5.9080
16	12-Feb-60	1.28	56.6	1.6388	7.5255	9.6339
17	19-Feb-60	1.68	202.7	2.8103	14.2390	23.8702
18	26-Feb-60	2.51	224.3	6.3232	14.9756	37.6577
19	18-Mar-60	2.45	240.4	6.0203	15.5052	38.0441
20	30-Mar-60	2.70	245.5	7.2764	15.6687	42.2659
21	08-Apr-60	1.68	194.5	2.8103	13.9476	23.3818
22	14-Apr-60	1.22	82.1	1.4864	9.0619	11.0483
23	06-May-60	0.88	50.1	0.7813	7.0796	6.2578
24	13-May-60	0.85	48.7	0.7284	6.9789	5.9561
25	20-May-60	0.76	50.1	0.5806	7.0796	5.3947
26	27-May-60	0.73	49.0	0.5351	6.9992	5.1200
27	16-Jun-60	0.64	44.5	0.4097	6.6676	4.2678
28	24-Jun-60	0.64	43.3	0.4097	6.5822	4.2131
29	08-Jul-60	0.61	34.3	0.3716	5.8535	3.5683
30	15-Jul-60	0.58	35.4	0.3354	5.9495	3.4455
31	22-Jul-60	0.58	35.1	0.3354	5.9256	3.4316
32	06-Aug-60	0.55	34.5	0.3010	5.8776	3.2247
33	12-Aug-60	0.52	33.4	0.2685	5.7805	2.9952
34	19-Aug-60	0.49	32.8	0.2378	5.7313	2.7950
35	26-Aug-60	0.49	31.4	0.2378	5.6064	2.7341
36	09-Sep-60	0.46	37.4	0.2090	6.1138	2.7952
37	16-Sep-60	0.43	37.9	0.1821	6.1599	2.6286
38	23-Sep-60	0.43	36.8	0.1821	6.0673	2.5890
39	27-Sep-60	0.40	21.4	0.1570	4.6268	1.8333
40	03-Nov-60	0.32	16.9	0.1024	4.1081	1.3148
41	30-Nov-60	0.52	9.9	0.2685	3.1437	1.6289
42	23-Dec-60	0.58	15.0	0.3354	3.8704	2.2414
43	03-Feb-61	1.42	97.4	2.0088	9.8696	13.9884
44	17-Feb-61	2.00	172.4	3.9858	13.1320	26.2173
45	08-Mar-61	3.66	393.6	13.3780	19.8395	72.5648
46	11-Apr-61	3.17	339.8	10.0484	18.4337	58.4334
47	24-Apr-61	2.04	278.9	4.1704	16.7009	34.1060
48	10-May-61	1.39	113.3	1.9233	10.6427	14.7597
49	29-May-61	1.10	80.7	1.2040	8.9835	9.8574
50	17-Jul-61	0.81	44.7	0.6524	6.6888	5.4027

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
51	51 28-Jul-61	0.78	46.2	0.6041	6.7939	5.2805
52	52 25-Aug-61	0.66	30.9	0.4294	5.5557	3.6407
53	53 29-Sep-61	0.49	22.1	0.2378	4.7027	2.2934
54	54 10-Nov-61	0.47	13.5	0.2232	3.6714	1.7345
55	55 24-May-70	1.10	78.3	1.2040	8.8485	9.7093
56	56 14-Jul-90	0.62	24.6	0.3844	4.9639	3.0776
57	57 11-Aug-90	0.61	17.7	0.3721	4.2059	2.5656
58	58 12-Aug-90	0.46	17.3	0.2116	4.1569	1.9122
59	59 10-Oct-90	0.45	18.9	0.2025	4.3463	1.9558
60	60 16-Dec-90	0.43	15.0	0.1849	3.8717	1.6648
61	61 07-Feb-91	2.35	151.7	5.5225	12.3175	28.9460
T O T A L		56.79	4398.30	87.46	458.37	600.80

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 5.032464
b' = 2.828810
a = 25.325690
b = 0.562112
Correlation Coefficient 0.958

DISCHARGE RATING CURVE

STATION: 4-669 KAFUE HOOK BRIDGE

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	13-Mar-73	2.46	278.9	6.0653	16.6992	41.1266
2	21-Jun-73	1.76	61.0	3.1037	7.8081	13.7558
3	18-Jul-73	1.69	44.8	2.8720	6.6931	11.3427
4	18-Oct-73	1.55	38.6	2.4069	6.2126	9.6384
5	14-Nov-73	1.64	33.6	2.6990	5.8000	9.5287
6	28-Nov-73	1.68	65.9	2.8103	8.1157	13.6052
7	07-Dec-73	1.69	44.7	2.8616	6.6867	11.3115
8	29-Dec-73	2.27	176.8	5.1425	13.2981	30.1562
9	10-Jan-74	2.44	232.2	5.9458	15.2390	37.1587
10	07-Feb-74	3.96	1030.6	15.7006	32.1028	127.2042
11	14-Mar-74	3.68	813.3	13.5570	28.5192	105.0072
12	26-Mar-74	3.39	679.5	11.4879	26.0676	88.3529
13	17-Apr-74	3.19	603.9	10.1647	24.5746	78.3491
14	08-May-74	2.73	363.9	7.4418	19.0762	52.0390
15	04-Jun-74	2.33	219.5	5.4511	14.8140	34.5873
16	13-Jun-74	2.20	169.6	4.8429	13.0227	28.6584
17	18-Jul-74	1.99	106.6	3.9736	10.3226	20.5770
18	13-Aug-74	1.90	81.6	3.6174	9.0322	17.1788
19	03-Sep-74	1.81	66.4	3.2890	8.1505	14.7815
20	02-Apr-75	3.72	926.3	13.8277	30.4352	113.1751
21	04-May-75	3.19	581.5	10.1452	24.1134	76.8052
22	23-Jun-75	2.19	169.5	4.7760	13.0183	28.4504
23	17-Jul-75	2.04	132.7	4.1580	11.5180	23.4865
24	20-Dec-75	1.96	98.5	3.8411	9.9254	19.4525
25	01-Aug-76	2.26	209.1	5.0874	14.4606	32.6163
26	20-Aug-76	2.88	461.0	8.2789	21.4718	61.7812
27	17-Feb-76	3.35	681.6	11.2413	26.1080	87.5351
28	11-Mar-76	4.21	1185.1	17.7181	34.4259	144.9087
29	21-Apr-76	4.24	1180.8	17.9756	34.3630	145.6909
30	12-May-76	3.82	888.5	14.5626	29.8072	113.7471
31	13-Jul-76	2.45	219.7	6.0203	14.8217	36.3671
32	16-Nov-76	1.84	60.6	3.3893	7.7867	14.3352
33	14-Jun-77	2.32	220.3	5.3661	14.8417	34.3806
34	17-Oct-77	1.74	25.8	3.0290	5.0796	8.8406
35	08-Mar-78	4.95	1646.4	24.5020	40.5756	200.8473
36	22-Mar-78	5.51	2023.0	30.3601	44.9778	247.8275
37	30-Mar-78	5.19	2053.0	26.9361	45.3100	235.1591
38	05-Apr-78	5.92	2126.0	35.0464	46.1086	272.9627
39	12-Apr-78	5.58	2230.0	31.1364	47.2229	263.5036
40	17-May-78	4.40	1418.0	19.3600	37.6563	165.6879
41	24-May-78	4.22	1182.0	17.8084	34.3802	145.0846
42	31-May-78	4.12	1203.0	16.9744	34.6843	142.8993
43	15-Jun-78	3.75	945.0	14.0625	30.7409	115.2782
44	22-Jun-78	3.38	702.0	11.4244	26.4953	89.5541
45	30-Jun-78	3.35	650.0	11.2225	25.4951	85.4086
46	21-Jul-78	2.85	463.0	8.1225	21.5174	61.3247
47	10-Aug-78	2.67	348.0	7.1289	18.6548	49.8082
48	24-Aug-78	2.30	310.0	5.2900	17.6068	40.4957
49	31-Aug-78	2.48	284.0	6.1504	16.8523	41.7937
50	02-Sep-78	2.73	401.0	7.4529	20.0250	54.6682

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
51	51 13-Sep-78	2.37	241.0	5.6169	15.5242	36.7923
52	52 27-Sep-78	2.26	216.0	5.1076	14.6969	33.2151
53	53 01-Nov-78	2.10	175.0	4.4100	13.2288	27.7804
54	54 15-Dec-78	2.67	344.0	7.1289	18.5472	49.5211
55	55 19-Jan-79	3.15	636.0	9.9225	25.2190	79.4400
56	56 08-Feb-79	3.49	844.0	12.1801	29.0517	101.3904
57	57 06-Mar-79	3.92	1031.0	15.3664	32.1092	125.8680
58	58 23-Mar-79	4.23	1257.0	17.8929	35.4542	149.9712
59	59 03-Apr-79	5.11	1764.0	26.1121	42.0000	214.6200
60	60 30-May-79	3.52	852.0	12.3904	29.1890	102.7454
61	61 31-May-79	3.50	766.0	12.2500	27.6767	96.8685
62	62 01-Jun-79	3.48	724.0	12.1104	26.9072	93.6372
63	63 06-Jul-79	2.72	394.0	7.3984	19.8494	53.9905
64	64 06-Mar-80	3.86	1092.0	14.8996	33.0454	127.5553
65	65 18-Mar-80	3.82	1021.0	14.5924	31.9531	122.0608
66	66 11-Jun-80	2.81	488.0	7.8961	22.0907	62.0749
67	67 23-Feb-81	3.98	1110.0	15.8404	33.3167	132.6003
68	68 29-Jul-81	2.28	211.0	5.1984	14.5258	33.1189
69	69 16-May-84	2.20	176.0	4.8400	13.2665	29.1863
70	70 21-Jun-84	1.88	78.0	3.5344	8.8318	16.6037
71	71 28-Jun-84	1.86	77.0	3.4596	8.7750	16.3214
72	72 11-Dec-84	1.73	52.0	2.9929	7.2111	12.4752
73	73 21-May-85	2.72	411.0	7.3984	20.2731	55.1429
74	75 12-Dec-88	1.76	54.1	3.0976	7.3566	12.9477
75	76 12-Jul-90	1.83	48.1	3.3489	6.9347	12.6905
76	77 09-Aug-90	1.71	34.3	2.9241	5.8575	10.0163
77	78 11-Sep-90	1.64	69.1	2.6896	8.3108	13.6298
78	79 09-Oct-90	1.56	60.1	2.4336	7.7524	12.0938
79	80 26-Nov-90	1.55	24.6	2.4025	4.9639	7.6940
80	81 14-Dec-90	1.58	35.1	2.4964	5.9203	9.3541
81	82 19-Jan-91	2.34	232.0	5.4756	15.2306	35.6395
82	83 08-Feb-91	2.84	406.9	8.0656	20.1710	57.2857
OMIT	74 22-May-88	2.36	447.0	5.5696	21.1424	49.8960

T O T A L 236.44 45061.00 777.30 1677.96 5842.57

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

(where, OMIT : Omitted Data)

a' = 10.512400

b' = -9.849029

a = 110.510547

b = -0.936896

Correlation Coefficient 0.992

4-941 KALEYA DAM SITE

<<< H - A - V - Q CALCULATION >>>

n = 0.03000

i = 1/2500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	Q ^{0.5}
1,243.00	0.28	0.94	4.06	0.23	0.25	0.24	0.49
1,244.00	1.28	5.76	6.85	0.84	0.59	3.42	1.85
1,245.00	2.28	13.35	10.24	1.30	0.80	10.62	3.26
1,246.00	3.28	22.06	12.94	1.70	0.95	20.99	4.58
1,247.50	4.78	91.30	123.35	0.74	0.55	49.80	7.06
1,248.00	5.28	152.14	129.26	1.18	0.74	113.07	10.63
1,248.50	5.78	215.20	149.61	1.44	0.85	182.82	13.52
1,249.00	6.28	293.57	173.36	1.69	0.95	278.05	16.67
1,249.72	7.00	430.46	199.81	2.15	1.11	478.68	21.88

n = 0.03500

i = 1/2500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	Q ^{0.5}
1,243.00	0.28	0.94	4.06	0.23	0.22	0.20	0.45
1,244.00	1.28	5.76	6.85	0.84	0.51	2.93	1.71
1,245.00	2.28	13.35	10.24	1.30	0.68	9.10	3.02
1,246.00	3.28	22.06	12.94	1.70	0.82	17.99	4.24
1,247.50	4.78	91.30	123.35	0.74	0.47	42.69	6.53
1,248.00	5.28	152.14	129.26	1.18	0.64	96.92	9.84
1,248.50	5.78	215.20	149.61	1.44	0.73	156.70	12.52
1,249.00	6.28	293.57	173.36	1.69	0.81	238.33	15.44
1,249.72	7.00	430.46	199.81	2.15	0.95	410.29	20.26

n = 0.04000

i = 1/2500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	Q ^{0.5}
1,243.00	0.28	0.94	4.06	0.23	0.19	0.18	0.42
1,244.00	1.28	5.76	6.85	0.84	0.45	2.56	1.60
1,245.00	2.28	13.35	10.24	1.30	0.60	7.97	2.82
1,246.00	3.28	22.06	12.94	1.70	0.71	15.74	3.97
1,247.50	4.78	91.30	123.35	0.74	0.41	37.35	6.11
1,248.00	5.28	152.14	129.26	1.18	0.56	84.80	9.21
1,248.50	5.78	215.20	149.61	1.44	0.64	137.11	11.71
1,249.00	6.28	293.57	173.36	1.69	0.71	208.54	14.44
1,249.72	7.00	430.46	199.81	2.15	0.83	359.01	18.95

DISCHARGE RATING CURVE (1)
(where, H < 4.663 m)

STATION: 4-941 KALEYA DAM SITE

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	12-Mar-70	0.37	0.1	0.1338	0.2535	0.0927
2	01-Jan-71	0.30	0.0	0.0929	0.1270	0.0387
3	19-Feb-71	0.50	0.3	0.2468	0.5343	0.2654
4	21-Apr-71	0.34	0.0	0.1186	0.2026	0.0698
5	05-Jan-72	0.39	0.1	0.1498	0.2905	0.1124
6	19-Jan-72	0.37	0.1	0.1338	0.2708	0.0991
7	17-Feb-72	0.40	0.1	0.1570	0.3206	0.1270
8	21-Mar-72	0.43	0.1	0.1847	0.3796	0.1632
9	19-Jun-73	0.31	0.0	0.0967	0.1303	0.0405
10	26-Mar-79	0.47	0.3	0.2232	0.5227	0.2470
11	09-Jun-79	0.41	0.1	0.1668	0.3457	0.1412
12	05-Feb-80	0.40	0.1	0.1619	0.3289	0.1323
13	17-Apr-80	0.38	0.1	0.1475	0.2991	0.1149
14	? - ? -81	0.39	0.1	0.1546	0.2915	0.1146
15	23-Mar-85	0.38	0.1	0.1475	0.3852	0.1479
16	29-Mar-90	0.48	0.1	0.2304	0.3464	0.1663
17	18-Jul-90	0.36	0.1	0.1296	0.2646	0.0952
18	31-Dec-90	0.36	0.8	0.1296	0.9165	0.3299
19	21-Jan-91	0.64	1.2	0.4096	1.0909	0.6982
20	20-Feb-91	0.37	0.2	0.1369	0.4243	0.1570
21	21	1.00	1.4	1.0000	1.2000	1.2000
22	22	2.00	6.3	4.0000	2.5000	5.0000
23	23	3.00	14.4	9.0000	3.8000	11.4000
24	24	4.00	27.0	16.0000	5.1962	20.7846
T O T A L		18.06	53.18	33.35	20.42	41.74

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 1.334229
b' = -0.152902
a = 1.780167
b = -0.114599

Correlation Coefficient 0.991

DISCHARGE RATING CURVE (2)

(where, $H \geq 4.663$ m)

STATION: 4-941 KALEYA DAM SITE

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	1	5.00	64.0	25.0000	8.0000	40.0000
2	2	5.50	118.8	30.2500	10.9000	59.9500
3	3	6.00	190.4	36.0000	13.8000	82.8000
4	4	6.50	275.6	42.2500	16.6000	107.9000
5	5	7.00	380.3	49.0000	19.5000	136.5000
T O T A L		30.00	1029.06	182.50	68.80	427.15

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 5.740000

b' = -20.680000

a = 32.947600

b = -3.602787

Correlation Coefficient 1.000

4-958 URUAFF FARM

<<< H - A - V - Q CALCULATION >>>

n = 0.020 i = 0.00500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	REMARKS
1,020.65	0.50	0.89	2.81	0.32	1.64	1.46	1.21
1,021.15	1.00	4.26	10.26	0.42	1.97	8.39	2.90
1,021.65	1.50	8.56	11.43	0.75	2.92	24.96	5.00
1,022.15	2.00	13.83	14.06	0.98	3.50	48.39	6.96
1,022.65	2.50	19.16	15.06	1.27	4.15	79.53	8.92
1,023.15	3.00	24.48	16.06	1.52	4.68	114.67	10.71
1,023.65	3.50	31.32	20.61	1.52	4.67	146.41	12.10
1,024.15	4.00	38.42	21.61	1.78	5.19	199.40	14.12
1,024.65	4.50	46.74	28.61	1.63	4.90	229.28	15.14
1,025.15	5.00	56.84	29.61	1.92	5.46	310.46	17.62
1,025.65	5.50	66.94	29.40	2.28	6.12	409.68	20.24
1,026.15	6.00	79.90	37.65	2.12	5.84	466.55	21.60

n = 0.025 i = 0.00500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	REMARKS
1,020.65	0.50	0.89	2.81	0.32	1.31	1.17	1.08
1,021.15	1.00	4.26	10.26	0.42	1.57	6.71	2.59
1,021.65	1.50	8.56	11.43	0.75	2.33	19.97	4.47
1,022.15	2.00	13.83	14.06	0.98	2.80	38.71	6.22
1,022.65	2.50	19.16	15.06	1.27	3.32	63.63	7.98
1,023.15	3.00	24.48	16.06	1.52	3.75	91.74	9.58
1,023.65	3.50	31.32	20.61	1.52	3.74	117.13	10.82
1,024.15	4.00	38.42	21.61	1.78	4.15	159.52	12.63
1,024.65	4.50	46.74	28.61	1.63	3.92	183.42	13.54
1,025.15	5.00	56.84	29.61	1.92	4.37	248.37	15.76

n = 0.030 i = 0.00500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	REMARKS
1,020.65	0.50	0.89	2.81	0.32	1.09	0.97	0.99
1,021.15	1.00	4.26	10.26	0.42	1.31	5.59	2.36
1,021.65	1.50	8.56	11.43	0.75	1.94	16.64	4.08
1,022.15	2.00	13.83	14.06	0.98	2.33	32.26	5.68
1,022.65	2.50	19.16	15.06	1.27	2.77	53.02	7.28
1,023.15	3.00	24.48	16.06	1.52	3.12	76.45	8.74
1,023.65	3.50	31.32	20.61	1.52	3.12	97.60	9.88
1,024.15	4.00	38.42	21.61	1.78	3.46	132.93	11.53
1,024.65	4.50	46.74	28.61	1.63	3.27	152.85	12.36
1,025.15	5.00	56.84	29.61	1.92	3.64	206.97	14.39

DISCHARGE RATING CURVE

STATION: 1-958 URCAFE FARM

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	11-Dec-70	0.08	0.0	0.0068	0.2207	0.0182
2	11-Dec-70	0.08	0.0	0.0068	0.2232	0.0184
3	16-Jan-71	0.05	0.0	0.0024	0.1970	0.0096
4	09-Feb-75	0.06	0.1	0.0034	0.2380	0.0138
5	07-Mar-75	0.06	0.0	0.0037	0.1683	0.0103
6	18-Mar-75	0.05	0.0	0.0024	0.1683	0.0082
7	23-Feb-76	0.72	3.7	0.5218	1.9260	1.3913
8	26-Mar-76	0.68	2.4	0.4662	1.5361	1.0488
9	13-Apr-76	0.17	0.3	0.0302	0.5335	0.0927
10	02-Apr-78	0.15	0.3	0.0214	0.5335	0.0780
11	17-Feb-81	0.26	0.5	0.0687	0.6938	0.1819
12	18-Jul-90	0.02	0.0	0.0004	0.1414	0.0028
13	31-Dec-90	0.03	0.0	0.0009	0.1414	0.0042
14	14	0.50	1.8	0.2500	1.3304	0.6652
15	15	1.00	8.4	1.0000	2.8896	2.8896
16	16	1.50	19.7	2.2500	4.4396	6.6594
17	17	2.00	36.0	4.0000	6.0000	12.0000
18	18	2.50	44.9	6.2500	6.7000	16.7500
19	19	3.00	81.0	9.0000	9.0000	27.0000
20	20	3.50	86.5	12.2500	9.3000	32.5500
21	21	4.00	144.0	16.0000	12.0000	48.0000
22	22	4.50	177.7	20.2500	13.3300	59.9852
T O T A L		24.92	607.31	72.38	71.71	209.38

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

a' = 2.901963

b' = -0.027325

a = 8.421390

b = -0.009416

Correlation Coefficient 0.998

5-030 EXCHANGE FARM

<<< H - A - V - Q CALCULATION >>>

n = 0.020 i = 0.00500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	Q ^{0.5}
1,116.36	0.20	0.18	1.30	0.14	0.95	0.17	0.41
1,116.56	0.40	0.36	1.70	0.21	1.26	0.45	0.67
1,116.76	0.60	0.54	2.10	0.26	1.43	0.77	0.88
1,116.88	0.72	0.65	2.34	0.28	1.50	0.97	0.99
1,117.06	0.90	1.96	9.80	0.20	1.21	2.37	1.54
1,117.26	1.10	3.49	10.60	0.33	1.69	5.88	2.42
1,117.46	1.30	5.02	11.40	0.44	2.05	10.27	3.20
1,117.66	1.50	6.55	12.20	0.54	2.34	15.29	3.91
1,117.80	1.64	7.62	7.70	0.99	3.51	26.75	5.17
1,118.76	2.60	32.83	37.25	0.88	3.25	106.69	10.33
1,119.16	3.00	44.84	41.76	1.07	3.71	166.23	12.89

n = 0.025 i = 0.00500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	Q ^{0.5}
1,116.36	0.20	0.18	1.30	0.14	0.76	0.14	0.37
1,116.56	0.40	0.36	1.70	0.21	1.01	0.36	0.60
1,116.76	0.60	0.54	2.10	0.26	1.15	0.62	0.79
1,116.88	0.72	0.65	2.34	0.28	1.20	0.78	0.88
1,117.06	0.90	1.96	9.80	0.20	0.97	1.89	1.38
1,117.26	1.10	3.49	10.60	0.33	1.35	4.70	2.17
1,117.46	1.30	5.02	11.40	0.44	1.64	8.21	2.87
1,117.66	1.50	6.55	12.20	0.54	1.87	12.23	3.50
1,117.80	1.64	7.62	7.70	0.99	2.81	21.40	4.63
1,118.76	2.60	32.83	37.25	0.88	2.60	85.35	9.24
1,119.16	3.00	44.84	41.76	1.07	2.97	132.98	11.53

n = 0.030 i = 0.00500

h(m)	H(m)	A(m ²)	S(m)	R(m)	V(m/s)	Q(m ³ /s)	Q ^{0.5}
1,116.36	0.20	0.18	1.30	0.14	0.63	0.11	0.34
1,116.56	0.40	0.36	1.70	0.21	0.84	0.30	0.55
1,116.76	0.60	0.54	2.10	0.26	0.95	0.52	0.72
1,116.88	0.72	0.65	2.34	0.28	1.00	0.65	0.81
1,117.06	0.90	1.96	9.80	0.20	0.81	1.58	1.26
1,117.26	1.10	3.49	10.60	0.33	1.12	3.92	1.98
1,117.46	1.30	5.02	11.40	0.44	1.36	6.84	2.62
1,117.66	1.50	6.55	12.20	0.54	1.56	10.19	3.19
1,117.80	1.64	7.62	7.70	0.99	2.34	17.84	4.22
1,118.76	2.60	32.83	37.25	0.88	2.17	71.12	8.43
1,119.16	3.00	44.84	41.76	1.07	2.47	110.82	10.53

DISCHARGE RATING CURVE (1)

(where, $H < 0.72$ m)

STATION: 5-030 EXCHANGE FARM

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	19-Jan-70	0.24	0.2	0.0576	0.4359	0.1046
2	15-Dec-70	0.03	0.0	0.0009	0.1000	0.0030
3	04-Jan-71	0.14	0.1	0.0196	0.3000	0.0420
4	26-Jan-71	0.71	0.8	0.5041	0.9000	0.6390
5	28-Mar-71	0.11	0.1	0.0121	0.2646	0.0291
6	06-Jan-72	0.08	0.0	0.0064	0.2000	0.0160
7	28-Jan-72	0.26	0.3	0.0676	0.5099	0.1326
8	08-Mar-72	0.17	0.1	0.0289	0.3317	0.0564
9	18-Feb-81	0.67	1.0	0.4489	1.0000	0.6700
10	17-Aug-81	0.11	0.1	0.0121	0.2828	0.0311
11	23-Apr-86	0.71	1.2	0.5041	1.1000	0.7810
12	17-Jul-90	0.20	0.1	0.0400	0.3674	0.0735
13	31-Dec-90	0.12	0.1	0.0144	0.2236	0.0268
14	22-Jan-91	0.62	0.9	0.3844	0.9434	0.5849
15	02-Feb-91	0.37	0.3	0.1369	0.5568	0.2060
16	21-Feb-91	0.28	0.2	0.0784	0.4796	0.1343
OMIT	05-Mar-72	0.70	0.2	0.4900	0.3873	0.2711
OMIT	21-Feb-85	0.20	0.3	0.0400	0.5477	0.1095
OMIT	22-Feb-85	0.20	0.4	0.0400	0.6671	0.1334
OMIT	04-Apr-85	0.26	0.4	0.0676	0.6164	0.1603
OMIT	22-Jan-86	0.13	0.4	0.0169	0.5916	0.0769
T O T A L		4.82	5.49	2.32	8.00	3.53

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

(where, OMIT : Omitted Data)

a' = 1.297595

b' = 0.108828

a = 1.683754

b = 0.083869

Correlation Coefficient 0.989

DISCHARGE RATING CURVE (2)

(where, $0.72 < H \leq 1.64$ m)

STATION: 5-030 EXCHANGE FARM

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	11 27-Feb-79	1.77	16.2	3.1329	4.0262	7.1263
2	12 12-Jan-81	0.80	2.0	0.6400	1.4142	1.1314
3	20 11-Feb-86	0.76	1.6	0.5776	1.2728	0.9673
4	22 08-Mar-89	0.74	1.1	0.5476	1.0677	0.7901
5	23 09-Feb-90	0.74	1.5	0.5476	1.2247	0.9063
6	32	0.72	0.78	0.5184	0.8831	0.6358
7	33	0.90	1.89	0.8100	1.3757	1.2381
8	34	1.10	4.70	1.2100	2.1685	2.3854
9	35	1.30	8.21	1.6900	2.8660	3.7258
10	36	1.50	12.23	2.2500	3.4976	5.2465
11	37	1.64	17.84	2.6896	4.2237	6.9269
OMIT 10	26-Feb-79	1.18	16.1	1.3924	4.0112	4.7333
OMIT 15	27-Jan-82	1.41	1.7	1.9881	1.3077	1.8438
T O T A L		11.97	68.13	14.61	24.02	31.08

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

(where, OMIT : Omitted Data)

a' = 3.111443

b' = -1.202155

a = 9.681079

b = -0.386366

Correlation Coefficient 0.990

DISCHARGE RATING CURVE (3)

(where, H > 1.64 m)

STATION: 5-030 EXCHANGE FARM

```

=====
NO.   DATE      H(m)  Q(m3/s)   H^2.0    Q^0.5    H*Q^0.5
=====
1  37          1.64   17.84    2.6896    4.2237    6.9269
2  38          2.60   71.12    6.7600    8.4333   21.9265
3  39          3.00  110.82    9.0000   10.5271   31.5813
=====
T O T A L      7.24  199.78   18.45    23.18    60.43
=====

```

DISCHARGE - RATING CURVE : $Q = a * (H + b)^2$

(where, OMIT : Omitted Data)

a' = 4.588993
 b' = -3.346731
 a = 21.058860
 b = -0.729295

Correlation Coefficient 0.999

=====

DISCHARGE RATING CURVE

STATION: 5-940 LUANGWA BRIDGE

NO.	DATE	H(m)	Q(m ³ /s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
1	1 21-Oct-48	2.26	69.1	5.0874	8.3105	18.7446
2	2 29-Jun-49	1.92	32.5	3.6873	5.6966	10.9388
3	3 19-Aug-49	1.80	11.0	3.2340	3.3104	5.9531
4	4 25-Oct-49	1.71	6.5	2.9134	2.5409	4.3370
5	5 10-May-50	3.52	367.6	12.3935	19.1731	67.4979
6	6 15-Feb-51	5.01	901.4	25.1398	30.0226	150.5319
7	7 10-Apr-51	4.01	451.7	16.0650	21.2535	85.1865
8	8 30-May-51	2.42	102.6	5.8717	10.1302	24.5470
9	9 11-Jul-51	2.26	64.1	5.0874	8.0068	18.0596
10	10 19-Sep-51	2.09	31.6	4.3592	5.6190	11.7318
11	11 24-Oct-51	2.01	18.1	4.0469	4.2538	8.5572
12	12 16-Sep-55	1.86	47.1	3.4569	6.8643	12.7627
13	13 18-Oct-55	1.68	46.6	2.8103	6.8271	11.4450
14	14 12-Sep-56	2.32	62.3	5.3661	7.8928	18.2836
15	15 06-Sep-57	2.32	121.6	5.3661	11.0269	25.5436
16	16 15-Nov-57	1.78	43.9	3.1794	6.6272	11.8168
17	17 12-Dec-57	1.60	58.6	2.5606	7.6561	12.2513
18	20 14-Mar-58	5.59	1229.0	31.2144	35.0564	195.8595
19	21 18-Mar-58	4.92	951.4	24.2312	30.8455	151.8377
20	22 11-Feb-59	6.49	2006.0	42.1492	44.7880	290.7745
21	23 26-Jan-60	2.53	235.6	6.4001	15.3491	38.8309
22	25 27-Aug-63	2.44	182.3	5.9458	13.5030	32.9258
23	26 01-Oct-63	2.12	130.7	4.4874	11.4316	24.2163
24	27 04-Oct-63	1.94	115.2	3.7461	10.7328	20.7731
25	30 27-Feb-69	7.09	2053.0	50.2199	45.3097	321.0919
26	31 26-Mar-69	6.12	1696.2	37.4964	41.1847	252.1917
27	32 02-Apr-69	6.20	1591.4	38.4354	39.8924	247.3184
28	33 03-Aug-80	2.47	172.6	6.0803	13.1395	32.3999
29	34 11-May-80	2.05	2.8	4.1829	1.6870	3.4502
30	35 28-Nov-80	2.08	98.8	4.3085	9.9404	20.6332
31	36 09-Feb-81	1.79	40.1	3.1903	6.3353	11.3157
32	37 06-Apr-81	4.32	728.3	18.6624	26.9861	116.5800
33	38 13-Jun-81	2.62	197.9	6.8644	14.0673	36.8564
34	40 20-Oct-81	1.80	61.2	3.2400	7.8233	14.0819
35	41 21-Nov-81	1.72	51.7	2.9584	7.1917	12.3697
36	42 10-Dec-81	1.90	90.0	3.6100	9.4868	18.0250
37	43 26-Dec-81	1.87	49.1	3.4969	7.0079	13.1047
38	44 12-Feb-82	6.56	1992.0	43.0336	44.6318	292.7848
39	45 13-Feb-82	6.16	1672.5	37.9456	40.8963	251.9214
40	46 14-Feb-82	7.11	2428.1	50.5521	49.2757	350.3499
41	47 24-Feb-82	7.72	2982.8	59.5984	54.6154	421.6308
42	48 25-Feb-82	7.52	2778.8	56.5504	52.7143	396.4117
43	49 26-Feb-82	6.79	1920.3	46.1041	43.8208	297.5430
44	50 27-Feb-82	6.34	1655.4	40.1956	40.6870	257.9554
45	51 28-Feb-82	6.16	1576.6	37.9456	39.7067	244.5931
46	52 08-Mar-82	5.36	1150.9	28.7296	33.9255	181.8407
47	53 09-Mar-82	5.33	1071.0	28.4089	32.7255	174.4270
48	54 10-Mar-82	5.12	1056.3	26.2144	32.5012	166.4063
49	55 11-Mar-82	5.38	1122.8	28.9444	33.5085	180.2758
50	56 12-Mar-82	5.12	1211.0	26.2144	34.7994	178.1731

=M=====							
	NO.	DATE	H(m)	Q(m3/s)	H ^{2.0}	Q ^{0.5}	H*Q ^{0.5}
=M=====							
51	57	13-Mar-82	5.30	1089.0	28.0900	33.0000	174.9000
52	58	14-Mar-82	5.30	1116.0	28.0900	33.4066	177.0549
53	59	15-Mar-82	5.19	1066.0	26.9361	32.6497	169.4517
54	60	16-Mar-82	5.05	977.0	25.5025	31.2570	157.8478
55	61	17-Mar-82	4.94	932.0	24.4036	30.5287	150.8117
56	62	18-Mar-82	4.84	951.0	23.4256	30.8383	149.2573
57	63	19-Mar-82	4.65	846.0	21.6225	29.0861	135.2503
58	64	21-Mar-82	4.26	664.0	18.1476	25.7682	109.7725
59	65	22-Mar-82	4.17	668.0	17.3889	25.8457	107.7766
60	66	23-Mar-82	4.23	655.0	17.8929	25.5930	108.2583
61	67	24-Mar-82	4.00	598.0	16.0000	24.4540	97.8162
62	68	25-Mar-82	3.84	566.0	14.7456	23.7908	91.3565
63	69	26-Mar-82	3.77	488.0	14.2129	22.0907	83.2820
64	70	27-Mar-82	3.70	507.0	13.6900	22.5167	83.3116
65	71	06-May-82	2.89	167.0	8.3521	12.9228	37.3470
66	72	17-Aug-82	1.90	48.0	3.6100	6.9282	13.1636
67	73	14-Oct-82	1.65	44.0	2.7225	6.6332	10.9449
68	74	09-Nov-82	1.67	47.0	2.7889	6.8557	11.4489
69	75	09-Jan-84	2.84	218.0	8.0656	14.7648	41.9321
70	76	10-Jan-84	3.18	277.0	10.1124	16.6433	52.9257
71	77	11-Jan-84	2.98	245.0	8.8804	15.6525	46.6444
72	78	12-Jan-84	2.96	218.0	8.7616	14.7648	43.7039
73	79	13-Jan-84	3.20	264.0	10.2400	16.2481	51.9938
74	80	14-Jan-84	3.09	197.0	9.5481	14.0357	43.3702
75	81	15-Jan-84	3.01	232.0	9.0601	15.2315	45.8470
76	82	17-Jan-84	2.95	223.0	8.7025	14.9332	44.0529
77	83	18-Jan-84	3.21	266.0	10.3041	16.3095	52.3535
78	84	19-Jan-84	3.33	378.0	11.0889	19.4422	64.7426
79	85	23-Jan-84	4.86	837.0	23.6196	28.9310	140.6044
80	86	24-Jan-84	4.79	767.0	22.9441	27.6948	132.6579
81	87	25-Jan-84	5.13	870.0	26.3169	29.4958	151.3133
82	88	26-Jan-84	5.04	930.0	25.4016	30.4959	153.6993
83	89	27-Jan-84	5.13	934.0	26.3169	30.5614	156.7801
84	90	28-Jan-84	6.47	2226.0	41.8609	47.1805	305.2579
85	91	29-Jan-84	5.96	1455.0	35.5216	38.1445	227.3410
86	92	30-Jan-84	5.73	1262.0	32.8329	35.5246	203.5562
87	93	31-Jan-84	5.34	1025.0	28.5156	32.0156	170.9634
88	94	01-Feb-84	5.19	1043.0	26.9361	32.2955	167.6137
89	95	03-Feb-84	4.95	893.0	24.5025	29.8831	147.9214
90	96	04-Feb-84	4.83	799.0	23.3289	28.2666	136.5276
91	97	05-Feb-84	5.03	813.0	25.3009	28.5132	143.4212
92	98	07-Feb-84	4.70	779.0	22.0900	27.9106	131.1797
93	99	09-Feb-84	5.33	1131.0	28.4089	33.6303	179.2497
94	100	10-Feb-84	5.78	1171.0	33.4084	34.2199	197.7909
95	101	11-Feb-84	5.60	1172.0	31.3600	34.2345	191.7131
96	102	12-Feb-84	6.04	1352.0	36.4816	36.7696	222.0881
97	103	13-Feb-84	5.80	1296.0	33.6400	36.0000	208.8000
98	104	14-Feb-84	6.73	2024.0	45.2929	44.9889	302.7752
99	105	28-Feb-84	4.66	732.0	21.7156	27.0555	126.0786
100	106	01-Mar-84	4.50	631.0	20.2500	25.1197	113.0387

```

=====
NO.    DATE      H(m)  Q(m3/s)    H^2.0    Q^0.5    H*Q^0.5
=====
101 107 02-Mar-84    4.35    664.0    18.9225    25.7682    112.0917
102 108 03-Mar-84    4.16    634.0    17.3056    25.1794    104.7461
103 109 04-Mar-84    4.02    520.0    16.1604    22.8035     91.6701
104 110 05-Mar-84    3.89    525.0    15.1321    22.9129     89.1311
105 111 06-Mar-84    3.80    489.0    14.4400    22.1133     84.0307
106 112 07-Mar-84    3.76    539.0    14.1376    23.2164     87.2936
107 113 08-Mar-84    3.87    475.0    14.9769    21.7945     84.3447
108 114 09-Mar-84    4.00    479.0    16.0000    21.8861     87.5443
109 115 11-Mar-84    4.18    640.0    17.4724    25.2982    105.7466
110 116 11-Mar-84    4.55    796.0    20.7025    28.2135    128.3713
111 117 12-Mar-84    4.98    964.0    24.8004    31.0483    154.6208
112 118 19-Mar-84    4.36    702.0    19.0096    26.4953    115.5194
113 119 20-Mar-84    4.15    653.0    17.2225    25.5539    106.0485
114 120 21-Mar-84    4.03    598.0    16.2409    24.4540     98.5498
115 121 22-Mar-84    3.97    619.0    15.7609    24.8797     98.7725
116 122 23-Mar-84    3.83    516.0    14.6689    22.7156     87.0009
117 123 24-Mar-84    4.20    646.0    17.6400    25.4165    106.7494
118 124 25-Mar-84    4.18    643.0    17.4724    25.3574    105.9941
119 125 26-Mar-84    4.35    665.0    18.9225    25.7876    112.1760
120 126 27-Mar-84    4.28    633.0    18.3184    25.1595    107.6826
121 127 28-Mar-84    4.09    604.0    16.7281    24.5764    100.5175
122 128 29-Mar-84    3.95    520.0    15.6025    22.8035     90.0739
123 129 30-Mar-84    3.81    489.0    14.5161    22.1133     84.2518
124 130 20-Apr-85    3.69    472.0    13.6161    21.7256     80.1673
125 131 11-Jan-86    2.05    180.0     4.2025    13.4164     27.5036
126 132 12-Aug-86    1.66    33.0      2.7556     5.7446      9.5360
127 134 09-Jul-90    2.62    117.7     6.8644    10.8499     28.4267
128 135 08-Aug-90    2.42    72.7     5.8564     8.5276     20.6368
129 136 18-Sep-90    2.12    38.8     4.4944     6.2249     13.1969
130 137 12-Oct-90    2.03    34.3     4.1209     5.8566     11.8889
131 138 30-Nov-90    2.01    47.8     4.0401     6.9145     13.8981
132 139 18-Jan-91    5.57    1105.4    31.0249    33.2474    185.1881
133 140 28-Feb-91    4.05    452.5    16.4349    21.2713     86.2340
OMIT 18 27-Feb-58    11.95    4754.4    142.9042    68.9521    824.2716
OMIT 19 03-Mar-58    10.57    3398.0    111.6703    58.2926    616.0016
OMIT 24 11-Jul-63    10.21    295.5    104.2604    17.1905    175.5291
OMIT 28 14-Jan-64     7.30    1037.9    53.3339    32.2169    235.2799
OMIT 29 16-Feb-69     2.88     7.4      8.3140     2.7186     7.8388
OMIT 39 25-Aug-81     7.58    114.4    57.4564    10.6935     81.0564
OMIT133 21-Aug-87     2.67    458.0     7.1289    21.4009     57.1405
=====
T O T A L    531.93 91394.25    2445.98    3091.23    14833.73
=====
DISCHARGE - RATING CURVE : Q = a * (H + b)^2

(where, OMIT : Omitted Data)

a' = 7.756107
b' = -7.778272
a  = 60.157199
b  = -1.002858

Correlation Coefficient    0.990
=====

```

