TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (1/7)

Month: September 28, 1989 - August 24, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (2/7)

Month: October, 1989 (Unit: m.)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (3/7)

Month: November, 1989 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (4/7)

Month: December, 1989 - August 24, 1990 (Unit: m.)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			NOTE:												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			WATER LEVEL READING ON THE RECORDING PAPER ZERO (0)												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			THIS SHOWS THAT NO FLOOD WATER AND THE W.L GAUGE FLOAT												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			IS RESTING ON THE CONCRET SLAB INSIDE THE MEASURING WELL												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			AT ELEV. 18.325M												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00															0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (5/7)

Month: August, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
2:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
3:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
4:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
5:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
6:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
7:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
8:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
9:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.17	0.17	0.17	0.17	0.17
10:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
11:00	-	-	-	NOTE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
12:00	-	-	-	-	THE WATER LEVEL RECORDED FROM AUGUST 24 TO													-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
13:00	-	-	-	-	SEPTEMBER 25, 1990 WAS CAUSED BY THE HEAVY RAINFALLS													-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
14:00	-	-	-	-	BROUGHT BY THE PREVIOUS "TYPHOONS". RAIN WATER THAT ACCUMULATED														-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
15:00	-	-	-	-	ON THE FIELDS FILLED THE W.L.G. MEASURING WELL, BUT THERE'S NO														-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
16:00	-	-	-	-	FLOOD AT THE VICINITY OF THE W.L.G. STATION.															-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
17:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
18:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
19:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
20:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
21:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
22:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
23:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
24:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
Average	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17

TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (6/7)

Month: September, 1990 (Unit: m.)

Time	Day																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	0.17	0.42	0.36	0.30	0.26	0.22	0.19	0.20	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
2:00	0.17	0.42	0.36	0.29	0.25	0.22	0.19	0.20	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
3:00	0.17	0.42	0.35	0.29	0.25	0.22	0.19	0.21	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
4:00	0.17	0.42	0.35	0.29	0.25	0.21	0.19	0.21	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
5:00	0.17	0.42	0.35	0.29	0.25	0.21	0.19	0.22	0.23	0.23	0.21	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
6:00	0.17	0.42	0.34	0.29	0.25	0.21	0.19	0.22	0.23	0.23	0.21	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
7:00	0.22	0.42	0.34	0.29	0.25	0.21	0.19	0.22	0.23	0.22	0.21	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
8:00	0.37	0.42	0.34	0.28	0.25	0.21	0.19	0.22	0.23	0.22	0.21	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
9:00	0.38	0.41	0.33	0.28	0.24	0.21	0.19	0.22	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
10:00	0.41	0.41	0.33	0.28	0.24	0.21	0.19	0.22	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-
11:00	0.43	0.41	0.33	0.28	0.24	0.21	0.19	0.22	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
12:00	0.41	0.41	0.32	0.28	0.24	0.20	0.19	0.22	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
13:00	0.41	0.40	0.32	0.28	0.24	0.20	0.19	0.23	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
14:00	0.41	0.40	0.32	0.27	0.24	0.20	0.19	0.23	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
15:00	0.41	0.39	0.32	0.27	0.23	0.20	0.19	0.23	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
16:00	0.41	0.39	0.31	0.27	0.23	0.20	0.19	0.23	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
17:00	0.41	0.39	0.31	0.27	0.23	0.20	0.19	0.23	0.23	0.22	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
18:00	0.43	0.39	0.31	0.27	0.23	0.20	0.19	0.23	0.23	0.22	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
19:00	0.52	0.38	0.31	0.27	0.23	0.20	0.19	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
20:00	0.53	0.38	0.31	0.27	0.23	0.20	0.19	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
21:00	0.53	0.37	0.30	0.26	0.22	0.19	0.19	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
22:00	0.51	0.37	0.30	0.26	0.22	0.19	0.19	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
23:00	0.46	0.57	0.30	0.26	0.22	0.19	0.23	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
24:00	0.42	0.36	0.30	0.26	0.22	0.19	0.23	0.23	0.23	0.21	0.19	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-	-
Average	0.36	0.41	0.33	0.28	0.24	0.20	0.19	0.22	0.23	0.22	0.20	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-	-	-	-	-

TABLE 11 HOURLY WATER LEVEL RECORD AT POPONTO LEFT DIKE (7/7)

Month: September 25, - December, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NOTE:						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	WATER LEVEL IS ZERO (0)						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (1/9)

Month: October, 1989 (Unit: m)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00		-	-	-	-	0.0	0.08	0.1	0.17	0.24	0.29	0.35	0.41	0.48	0.5	0.52	0.53	0.53	0.05	0.5	2.67	2.61	0.26	0.25	0.25	0.24	0.23	0.22	0.21	0.19	0.18
2:00		-	-	-	-	0.0	0.08	0.11	0.17	0.25	0.3	0.35	0.41	0.48	0.5	0.52	0.53	0.53	0.5	0.5	2.66	2.61	0.26	0.25	0.25	0.24	0.23	0.22	0.21	0.19	0.18
3:00		-	-	-	-	0.0	0.08	0.11	0.18	0.25	0.3	0.35	0.41	0.48	0.5	0.52	0.53	0.53	0.5	0.5	2.66	2.61	0.26	0.25	0.25	0.24	0.23	0.22	0.21	0.19	0.18
4:00		-	-	-	-	0.0	0.08	0.11	0.18	0.25	0.3	0.35	0.42	0.48	0.5	0.52	0.53	0.53	0.5	0.51	2.65	2.61	0.26	0.25	0.25	0.24	0.23	0.21	0.2	0.19	0.18
5:00		-	-	-	-	0.01	0.08	0.12	0.19	0.25	0.3	0.36	0.42	0.48	0.5	0.52	0.53	0.53	0.5	0.51	2.65	2.61	0.26	0.25	0.25	0.23	0.22	0.21	0.2	0.19	0.18
6:00		-	-	-	-	0.01	0.08	0.12	0.19	0.25	0.3	0.36	0.42	0.48	0.5	0.52	0.53	0.53	0.5	0.52	2.64	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
7:00		-	-	-	-	0.02	0.08	0.12	0.19	0.25	0.3	0.36	0.43	0.48	0.5	0.52	0.53	0.53	0.5	0.5	2.63	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
8:00		-	-	-	-	0.02	0.08	0.13	0.19	0.26	0.31	0.37	0.43	0.48	0.5	0.52	0.53	0.53	0.5	0.54	2.62	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
9:00		-	-	-	-	0.02	0.08	0.13	0.19	0.26	0.31	0.37	0.43	0.48	0.5	0.52	0.53	0.53	0.5	0.55	2.62	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
10:00		-	-	-	-	0.03	0.08	0.13	0.20	0.26	0.32	0.37	0.43	0.49	0.5	0.52	0.53	0.53	0.5	0.56	2.61	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
11:00		-	-	-	-	0.03	0.08	0.14	0.20	0.27	0.32	0.38	0.44	0.49	0.5	0.52	0.53	0.53	0.5	0.58	2.61	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
12:00		-	-	-	-	0.04	0.08	0.14	0.20	0.27	0.32	0.38	0.44	0.50	0.5	0.52	0.53	0.53	0.5	1.05	2.61	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
13:00		-	-	-	-	0.04	0.09	0.14	0.21	0.28	0.32	0.38	0.44	0.50	0.5	0.52	0.53	0.53	0.5	3.28	2.61	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
14:00		-	-	-	-	0.04	0.09	0.15	0.21	0.28	0.32	0.38	0.45	0.5	0.5	0.52	0.53	0.53	0.5	3.42	2.61	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.19	0.17
15:00		-	-	-	0.0	0.05	0.09	0.15	0.22	0.29	0.33	0.39	0.45	0.5	0.5	0.52	0.53	0.53	0.5	3.48	2.61	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
16:00		-	-	-	0.0	0.05	0.09	0.15	0.22	0.29	0.33	0.39	0.45	0.5	0.5	0.52	0.53	0.53	0.5	3.48	2.6	2.6	0.26	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
17:00		-	-	-	0.0	0.05	0.10	0.15	0.23	0.29	0.33	0.4	0.45	0.5	0.5	0.52	0.53	0.53	0.5	3.46	2.6	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
18:00		-	-	-	0.0	0.06	0.10	0.15	0.23	0.29	0.33	0.4	0.45	0.5	0.5	0.52	0.53	0.52	0.5	3.38	2.6	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
19:00		-	-	-	0.0	0.06	0.10	0.15	0.23	0.29	0.33	0.4	0.46	0.5	0.5	0.52	0.53	0.52	0.5	3.26	2.6	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
20:00		-	-	-	0.0	0.07	0.10	0.15	0.24	0.29	0.34	0.4	0.46	0.5	0.5	0.52	0.53	0.52	0.5	3.17	2.6	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
21:00		-	-	-	0.0	0.07	0.10	0.15	0.24	0.29	0.34	0.4	0.47	0.5	0.5	0.52	0.53	0.51	0.5	3.02	2.6	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
22:00		-	-	-	0.0	0.08	0.10	0.16	0.24	0.29	0.34	0.4	0.47	0.5	0.5	0.52	0.53	0.51	0.5	2.92	2.61	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.2	0.18	0.17
23:00		-	-	-	0.0	0.08	0.10	0.16	0.24	0.29	0.34	0.4	0.47	0.5	0.5	0.53	0.53	0.51	0.5	2.81	2.61	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.19	0.18	0.17
24:00		-	-	-	0.0	0.08	0.10	0.16	0.24	0.29	0.34	0.4	0.47	0.5	0.5	0.53	0.53	0.5	0.5	2.70	2.61	2.6	0.25	0.25	0.24	0.23	0.22	0.21	0.19	0.18	0.17
Average	-	-	-	-	0.00	0.04	0.09	0.14	0.21	0.27	0.32	0.38	0.44	0.49	0.51	0.52	0.53	0.53	0.48	1.88	2.62	2.60	0.26	0.25	0.24	0.23	0.22	0.21	0.20	0.19	0.17

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (2/9)

Month: November, 1989 (Unit: m)

Time	Day																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	0.17	0.15	0.14	0.13	0.12	0.11	0.11	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00	0.17	0.15	0.14	0.13	0.12	0.11	0.11	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00	0.17	0.15	0.14	0.13	0.12	0.11	0.11	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.20	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.20	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.50	0.40	0.30	0.20	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.06	0.50	0.40	0.40	0.30	0.20	0.20	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.07	0.05	0.06	0.50	0.40	0.40	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15:00	0.16	0.15	0.14	0.13	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.40	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16:00	0.16	0.15	0.13	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.40	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17:00	0.16	0.15	0.13	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.40	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18:00	0.16	0.15	0.13	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.40	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19:00	0.16	0.14	0.13	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20:00	0.16	0.14	0.13	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21:00	0.16	0.14	0.13	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07	0.06	0.06	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22:00	0.15	0.14	0.13	0.12	0.12	0.11	0.1	0.09	0.08	0.08	0.07	0.06	0.06	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23:00	0.15	0.14	0.13	0.12	0.12	0.11	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24:00	0.15	0.14	0.13	0.12	0.12	0.11	0.1	0.09	0.08	0.08	0.07	0.06	0.50	0.50	0.40	0.30	0.30	0.20	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.10	0.09	0.08	0.07	0.07	0.10	0.50	0.43	0.38	0.30	0.21	0.15	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (3/9)

Month: December, 1989 (Unit: m)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average																															

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (4/9)

Month: January - June, 1990 (Unit: m)

Time \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NOTE WATER LEVEL READING IS ZERO (0)
IN THE PERIOD FROM JANUARY TO JUNE,1990.
THIS SHOWS THAT THE FLOAT OF WATER LEVEL
GAUGE IS RESTING ON THE CONCRETE SLAB INSIDE
THE WELL. AT ELEVATION OF12.669M.

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (5/9)

Month: July, 1990 (Unit: m)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.09	0.15	0.19	0.21	0.21	0.20	0.20	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.33	0.32	0.35	0.35	0.39	-	-
2:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.09	0.15	0.19	0.21	0.21	0.20	0.20	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
3:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.10	0.16	0.19	0.21	0.21	0.20	0.20	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
4:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.10	0.16	0.19	0.21	0.21	0.20	0.20	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
5:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.11	0.16	0.19	0.21	0.21	0.20	0.20	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
6:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.11	0.16	0.19	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
7:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.07	0.11	0.16	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
8:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.07	0.11	0.16	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
9:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.07	0.12	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
10:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.07	0.12	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.30	0.28	0.29	0.32	0.32	0.35	0.34	0.40	-	-
11:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.07	0.12	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.29	0.28	0.29	0.32	0.32	0.35	0.33	0.40	-	-
12:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.07	0.13	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.29	0.28	0.29	0.32	0.32	0.35	0.33	0.40	-	-
13:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.07	0.13	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.31	0.29	0.28	0.29	0.32	0.32	0.35	0.35	0.40	-	-
14:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.07	0.13	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.30	0.29	0.28	0.29	0.32	0.32	0.35	0.35	0.40	-	-
15:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.07	0.13	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.30	0.29	0.28	0.29	0.32	0.32	0.34	0.35	0.40	-	-
16:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.07	0.14	0.17	0.21	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.32	0.30	0.29	0.28	0.30	0.32	0.32	0.34	0.36	0.40	-	-
17:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.07	0.14	0.18	0.21	0.21	0.21	0.20	0.21	0.23	0.23	0.23	0.31	0.30	0.29	0.28	0.31	0.32	0.32	0.34	0.36	0.40	-	-
18:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.07	0.14	0.18	0.21	0.21	0.21	0.20	0.21	0.23	0.23	0.27	0.31	0.30	0.29	0.28	0.32	0.32	0.33	0.34	0.36	0.40	-	-
19:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.08	0.14	0.18	0.21	0.21	0.21	0.20	0.21	0.23	0.23	0.29	0.31	0.30	0.29	0.29	0.33	0.32	0.35	0.34	0.38	0.40	-	-
20:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.08	0.14	0.18	0.21	0.21	0.21	0.20	0.22	0.23	0.23	0.30	0.31	0.30	0.29	0.29	0.33	0.32	0.35	0.35	0.39	0.40	-	-
21:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.08	0.15	0.18	0.21	0.21	0.21	0.20	0.22	0.23	0.23	0.31	0.31	0.30	0.29	0.29	0.33	0.32	0.35	0.35	0.39	0.40	-	-
22:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.08	0.15	0.18	0.21	0.21	0.20	0.20	0.22	0.23	0.23	0.32	0.31	0.30	0.29	0.29	0.33	0.32	0.35	0.35	0.39	0.40	-	-
23:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.08	0.15	0.18	0.21	0.21	0.20	0.20	0.22	0.23	0.23	0.32	0.31	0.30	0.29	0.29	0.33	0.32	0.35	0.35	0.39	0.40	-	-
24:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.09	0.15	0.18	0.21	0.21	0.20	0.20	0.22	0.23	0.23	0.32	0.31	0.30	0.29	0.29	0.33	0.32	0.35	0.35	0.39	0.40	-	-
Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.13	0.17	0.20	0.21	0.21	0.20	0.21	0.23	0.23	0.25	0.32	0.31	0.29	0.28	0.30	0.32	0.33	0.35	0.36	0.40		

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (6/9)

Month: August, 1990 (Unit: m)

Time \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.41	0.38	0.41	0.51	0.49	0.43	0.37
2:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.41	0.38	0.42	0.51	0.49	0.43	0.37
3:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.41	0.38	0.42	0.52	0.49	0.42	0.36
4:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.41	0.38	0.43	0.52	0.48	0.42	0.36
5:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.48	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.40	0.38	0.44	0.52	0.48	0.42	0.36
6:00	0.38	0.38	0.38	0.39	0.38	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.48	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.49	0.40	0.38	0.44	0.53	0.48	0.42	0.36
7:00	0.38	0.38	0.38	0.39	0.38	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.48	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.49	0.40	0.38	0.44	0.53	0.47	0.41	0.36
8:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.49	0.40	0.38	0.44	0.53	0.47	0.41	0.36
9:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.48	0.40	0.38	0.45	0.53	0.47	0.41	0.36
10:00	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.48	0.40	0.38	0.45	0.53	0.47	0.41	0.35
11:00	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.47	0.40	0.38	0.45	0.52	0.46	0.40	0.35
12:00	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.47	0.39	0.38	0.45	0.52	0.46	0.39	0.35
13:00	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.46	0.39	0.38	0.46	0.52	0.46	0.39	0.35
14:00	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.46	0.39	0.38	0.46	0.52	0.46	0.39	0.34
15:00	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.45	0.39	0.38	0.46	0.52	0.45	0.39	0.34
16:00	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.54	0.51	0.51	0.45	0.39	0.38	0.46	0.52	0.45	0.39	0.34
17:00	0.38	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.44	0.39	0.38	0.46	51.0	0.45	0.38	0.34
18:00	0.38	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.44	0.39	0.37	0.46	51.0	0.45	0.38	0.33
19:00	0.38	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.43	0.39	0.36	0.47	51.0	0.44	0.38	0.33
20:00	0.38	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.43	0.39	0.36	0.48	51.0	0.44	0.38	0.33
21:00	0.38	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.38	0.36	0.49	0.50	0.44	0.38	0.33
22:00	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.38	0.36	0.50	0.50	0.44	0.37	0.33
23:00	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.38	0.37	0.50	0.50	0.43	0.37	0.33
24:00	0.38	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.41	0.38	0.38	0.50	0.50	0.43	0.37	0.33
Average	0.38	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.46	0.39	0.38	0.46	8.93	0.46	0.40	0.35

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (7/9)

Month: September, 1990 (Unit: m)

Time \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	0.33	1.11	0.92	0.59	0.42	0.35	0.33	0.46	0.51	0.48	0.40	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21
2:00	0.33	1.13	0.90	0.58	0.42	0.35	0.33	0.47	0.52	0.48	0.40	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.29	0.28	0.26	0.26	0.25	0.24	0.23	0.22	0.21
3:00	0.33	1.14	0.88	0.57	0.41	0.35	0.33	0.47	0.52	0.48	0.40	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.29	0.27	0.26	0.26	0.25	0.24	0.23	0.22	0.21
4:00	0.33	1.15	0.86	0.57	0.41	0.35	0.32	0.47	0.52	0.47	0.39	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.29	0.27	0.26	0.26	0.25	0.24	0.23	0.22	0.21
5:00	0.33	1.15	0.84	0.56	0.41	0.35	0.32	0.48	0.52	0.47	0.39	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.29	0.27	0.26	0.26	0.25	0.24	0.23	0.22	0.21
6:00	0.33	1.15	0.83	0.55	0.40	0.35	0.32	0.48	0.52	0.46	0.39	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.26	0.25	0.24	0.23	0.22	0.21
7:00	0.34	1.15	0.81	0.55	0.40	0.34	0.32	0.48	0.52	0.46	0.39	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.26	0.25	0.24	0.23	0.22	0.21
8:00	0.38	1.15	0.79	0.54	0.40	0.34	0.32	0.48	0.52	0.46	0.38	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.26	0.25	0.24	0.23	0.22	0.21
9:00	0.41	1.15	0.77	0.53	0.40	0.34	0.33	0.49	0.52	0.45	0.38	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.23	0.22	0.21
10:00	0.43	1.14	0.76	0.53	0.39	0.34	0.36	0.49	0.52	0.45	0.38	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.23	0.22	0.21
11:00	0.48	1.13	0.74	0.52	0.39	0.33	0.36	0.48	0.52	0.44	0.38	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.23	0.22	0.21
12:00	0.51	1.12	0.73	0.51	0.39	0.33	0.37	0.49	0.52	0.44	0.38	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21
13:00	0.54	1.11	0.71	0.50	0.38	0.33	0.38	0.50	0.52	0.44	0.37	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21
14:00	0.56	1.10	0.70	0.48	0.38	0.33	0.38	0.50	0.51	0.43	0.36	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21
15:00	0.57	1.08	0.68	0.47	0.38	0.33	0.39	0.50	0.51	0.43	0.35	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21
16:00	0.58	1.07	0.67	0.46	0.37	0.33	0.40	0.50	0.51	0.43	0.35	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21
17:00	0.59	1.05	0.66	0.46	0.37	0.33	0.40	0.50	0.51	0.43	0.35	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21
18:00	0.60	1.03	0.65	0.45	0.37	0.33	0.40	0.51	0.51	0.42	0.34	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.23	0.22	0.21	0.21
19:00	0.63	1.01	0.64	0.45	0.37	0.33	0.41	0.51	0.52	0.42	0.34	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.21
20:00	0.70	1.00	0.63	0.44	0.36	0.33	0.41	0.51	0.51	0.42	0.34	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.21
21:00	0.86	0.98	0.62	0.44	0.36	0.33	0.43	0.51	0.50	0.41	0.34	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.21
22:00	0.98	0.96	0.61	0.43	0.36	0.33	0.44	0.51	0.50	0.41	0.34	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.21
23:00	1.04	0.95	0.60	0.43	0.36	0.33	0.44	0.51	0.49	0.41	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.21
24:00	1.08	0.93	0.60	0.43	0.36	0.33	0.45	0.51	0.49	0.40	0.33	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.21
Average	0.55	1.08	0.73	0.50	0.39	0.34	0.37	0.49	0.51	0.44	0.37	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.22	0.21	0.21

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (8/9)

Month: October, 1990 (Unit: m)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
2:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
3:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
4:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
5:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
6:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
7:00	0.20	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
8:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
9:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
10:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
11:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-
12:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.18	0.18	0.18	-	-	-	-	-	-	-
13:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.18	0.18	0.18	-	-	-	-	-	-	-
14:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.18	0.18	0.18	-	-	-	-	-	-	-
15:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.18	0.18	-	-	-	-	-	-	-	-
16:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.17	0.18	0.18	-	-	-	-	-	-	-	-
17:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.17	0.18	0.18	-	-	-	-	-	-	-	-
18:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.16	0.17	0.18	0.18	-	-	-	-	-	-	-	-
19:00	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.16	0.17	0.18	0.18	-	-	-	-	-	-	-	-
20:00	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-	-
21:00	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-	-
22:00	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-	-
23:00	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-	-
24:00	0.20	0.19	0.19	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.17	0.17	0.18	0.18	-	-	-	-	-	-	-	-
Average	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.16	0.17	0.18	0.18	0.18	-	-	-	-	-	-	-

TABLE 12 HOURLY WATER LEVEL RECORD AT POPONTO RIGHT DIKE (9/9)

Month: November - December, 1990 (Unit: m)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			NOTE: WATER LEVEL READING IS ZERO (0)										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			IN THE PERIOD FROM JANUARY TO JUNE,1990.										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			THIS SHOWS THAT THE FLOAT OF WATER LEVEL										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			GAUGEIS RESTING ON THE CONCRETE SLAB INSIDE										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			THE WELL. AT ELEVATION OF 12.669 M.										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (1/10)

Month: December, 1989 (Unit: m.)

Time	Day																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
2:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
3:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
4:00								NOTE:											4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
5:00									READING ON THE RECORDING PAPER WHEN FLOAT										4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
6:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
7:00									IS RESTING ON THE CONCRETES FOUNDATION OF THE										4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
8:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
9:00									PIPE IS 4.21M. HOWEVER,										4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
10:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
11:00									ACTUAL WATER LEVEL 2.173M ON DEC. 18,1989.										4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
12:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
13:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
14:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
15:00																			4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
16:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
17:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
18:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
19:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
20:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
21:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
22:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
23:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
24:00																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
Avearge																		4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (2/10)

Month: January, 1990 (Unit: m.)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
2:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
3:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
4:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
5:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
6:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
7:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
8:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
9:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
10:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
11:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
12:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
13:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
14:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
15:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
16:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
17:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
18:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
19:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
20:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
21:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
22:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
23:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
24:00	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21
Average	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (3/10)

Month: February - May, 1990 (Unit: m.)

Time	Day																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00						NOTE																									
2:00							FLOAT IS RESTING ON THE CONCRETE FOUNDATION OF THE PIPE.																								
3:00																															
4:00							NO FLOW OF RIVER WATER.																								
5:00																															
6:00																															
7:00																															
8:00																															
9:00																															
10:00																															
11:00																															
12:00																															
13:00																															
14:00																															
15:00																															
16:00																															
17:00																															
18:00																															
19:00																															
20:00																															
21:00																															
22:00																															
23:00																															
24:00																															
Average																															

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (4/10)

Month: June, 1990 (Unit: m.)

Time	Day																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.0	6.50	5.76	5.70	5.53	5.59	6.12	6.00	5.08
2:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.53	6.48	5.74	5.70	5.57	5.56	6.18	5.97	5.05
3:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.85	6.45	5.72	5.70	5.60	5.53	6.22	5.93	5.02
4:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.0	6.43	5.70	5.69	5.63	5.49	6.25	5.89	4.99
5:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.11	6.40	5.70	5.68	5.67	5.46	6.27	5.85	4.96
6:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.19	6.37	5.68	5.67	5.69	5.42	6.28	5.81	4.93
7:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.26	6.34	5.68	5.66	5.72	5.39	6.28	5.77	4.90
8:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.31	6.31	5.67	5.65	5.74	5.35	6.28	5.73	4.87
9:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.36	6.27	5.66	5.64	5.75	5.31	6.28	5.69	4.84
10:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.40	6.24	5.65	5.63	5.77	5.28	6.28	5.66	4.81
11:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.43	6.20	5.65	5.62	5.78	5.24	6.27	5.62	4.77
12:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.46	6.17	5.65	5.60	5.82	5.21	6.26	5.58	4.74
13:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.48	6.13	5.66	5.59	5.82	5.18	6.25	5.54	4.71
14:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.50	6.09	5.66	5.57	5.82	5.15	6.24	5.50	4.68
15:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.51	6.07	5.67	5.55	5.82	5.12	6.22	5.46	4.65
16:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.52	6.02	5.68	5.54	5.81	5.09	6.21	5.42	4.62
17:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.53	6.00	5.69	5.52	5.79	5.09	6.19	5.38	4.59
18:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.54	5.96	5.69	5.51	5.77	5.12	6.18	5.34	4.56
19:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.54	5.93	5.69	5.49	5.75	5.15	6.16	5.31	4.54
20:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.54	5.90	5.70	5.47	5.73	5.18	6.14	5.27	4.50
21:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.54	5.87	5.70	5.47	5.71	5.32	6.11	5.23	4.46
22:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.54	5.84	5.70	5.47	5.68	5.52	6.09	5.19	4.44
23:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	6.53	5.83	5.70	5.48	5.65	5.88	6.06	5.15	4.40
24:00	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.28	6.52	5.79	5.70	5.51	5.62	6.00	6.02	5.12	4.37
Average	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	4.20	6.30	6.15	5.69	5.59	5.72	5.36	6.20	5.56	4.73

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (5/10)

Month: July, 1990 (Unit: m.)

Time \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	4.34	4.24	4.24	5.46	4.25	5.86	4.79	4.33	4.27	4.71	4.35	4.29	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.68	5.97	5.80	6.28	6.27	5.65
2:00	4.31	4.24	4.24	5.45	4.25	5.88	4.75	4.39	4.27	4.76	4.34	4.32	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.67	6.02	5.79	6.32	6.24	5.63
3:00	4.28	4.24	4.24	5.41	4.25	5.90	4.70	4.46	4.27	4.80	4.33	4.33	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.67	6.05	5.78	6.35	6.21	5.61
4:00	4.26	4.24	4.24	5.37	4.25	5.89	4.67	4.47	4.27	4.82	4.33	4.37	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.66	6.07	5.77	6.38	6.18	5.60
5:00	4.24	4.24	4.24	5.33	4.25	5.87	4.61	4.47	4.27	4.84	4.32	4.38	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.65	6.08	5.76	6.40	6.15	5.58
6:00	4.24	4.24	4.24	5.28	4.25	5.83	4.56	4.47	4.27	4.84	4.31	4.40	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.63	6.08	5.75	6.42	6.12	5.56
7:00	4.24	4.24	4.24	5.22	4.25	5.79	4.51	4.45	4.27	4.84	4.31	4.42	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.62	6.08	5.75	6.44	6.09	5.55
8:00	4.24	4.24	4.24	5.16	4.25	5.74	4.46	4.43	4.27	4.82	4.30	4.43	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.62	6.07	5.74	6.45	6.06	5.53
9:00	4.24	4.24	4.24	5.10	4.25	5.68	4.41	4.39	4.27	4.80	4.29	4.43	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.61	6.05	5.73	6.46	6.03	5.52
10:00	4.24	4.24	4.24	5.04	4.25	5.62	4.36	4.36	4.27	4.77	4.29	4.43	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.60	6.04	5.72	6.46	6.00	5.50
11:00	4.24	4.24	4.24	4.97	4.25	5.56	4.30	4.33	4.27	4.74	4.28	4.43	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.60	6.02	5.71	6.46	5.97	5.49
12:00	4.24	4.24	4.24	4.92	4.25	5.50	4.28	4.30	4.27	4.71	4.28	4.43	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.58	5.99	5.69	6.46	5.94	5.47
13:00	4.24	4.24	4.24	4.84	4.25	5.43	4.27	4.27	4.27	4.67	4.28	4.42	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	4.41	4.60	5.96	5.70	6.45	5.91	5.46
14:00	4.24	4.24	4.24	4.80	4.25	5.37	4.27	4.27	4.27	4.64	4.28	4.41	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	4.42	4.62	5.94	5.70	6.44	5.89	5.44
15:00	4.24	4.24	4.24	4.72	4.25	5.30	4.27	4.27	4.27	4.60	4.28	4.39	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	4.45	4.68	5.92	5.71	6.43	5.86	5.43
16:00	4.24	4.24	4.24	4.67	4.25	5.23	4.27	4.27	4.27	4.56	4.28	4.37	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	4.48	4.80	5.88	5.74	6.43	5.84	5.41
17:00	4.24	4.24	4.24	4.59	4.25	5.16	4.27	4.27	4.27	4.52	4.28	4.35	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.52	4.98	5.90	5.79	6.42	5.80	5.40
18:00	4.24	4.24	4.65	4.52	4.25	5.10	4.27	4.27	4.27	4.49	4.28	4.33	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.55	5.15	5.89	5.84	6.41	5.78	5.38
19:00	4.24	4.24	5.16	4.45	4.25	5.04	4.27	4.27	4.27	4.46	4.28	4.31	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.58	5.35	5.88	5.90	6.40	5.76	5.38
20:00	4.24	4.24	5.31	4.37	4.39	5.00	4.27	4.27	4.27	4.44	4.28	4.29	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.61	5.48	5.86	5.97	6.38	5.75	5.36
21:00	4.24	4.24	5.38	4.31	5.34	4.95	4.27	4.27	4.28	4.42	4.28	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.64	5.60	5.85	6.05	6.36	5.73	5.35
22:00	4.24	4.24	5.42	4.26	5.62	4.92	4.27	4.27	4.42	4.39	4.28	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.66	5.70	5.83	6.13	6.34	5.71	5.33
23:00	4.24	4.24	5.45	4.25	5.73	4.88	4.27	4.27	4.54	4.38	4.28	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.67	5.81	5.82	6.19	6.32	5.69	5.31
24:00	4.24	4.24	5.46	4.25	5.81	4.83	4.27	4.27	4.64	4.37	4.28	4.28	4.27	4.27	4.27	_	_	_	_	_	_	_	_	_	4.68	5.90	5.81	6.24	6.29	5.67	5.29
Average	4.25	4.24	4.54	4.86	4.49	5.43	4.40	4.34	4.30	4.64	4.30	4.36	4.27	4.27	4.27	4.27	_	_	_	_	_	_	_	_	4.56	4.93	5.96	5.83	6.40	5.94	5.47

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (6/10)

Month: August, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	5.27	5.07	5.23	4.99	4.63	4.34	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.38	4.93	5.19	5.05	4.70	4.64	5.28	5.38	6.33	6.83	6.58	5.98	5.89
2:00	5.26	5.08	5.22	4.98	4.61	4.33	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.43	4.94	5.19	5.04	4.69	4.70	5.29	5.37	6.48	6.82	6.55	5.97	5.89
3:00	5.24	5.09	5.22	4.97	4.60	4.32	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.46	4.95	5.18	5.02	4.68	4.76	5.30	5.36	6.61	6.80	6.52	5.95	5.88
4:00	5.22	5.01	5.21	4.95	4.59	4.30	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.51	4.96	5.18	5.01	4.66	4.82	5.32	5.35	6.71	6.78	6.49	5.94	5.88
5:00	5.21	5.12	5.20	4.94	4.58	4.29	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.55	4.98	5.18	5.00	4.65	4.86	5.33	5.33	6.77	6.77	6.46	5.92	5.88
6:00	5.20	5.13	5.17	4.92	4.57	4.28	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.58	5.00	5.18	4.98	4.66	4.89	5.34	5.32	6.80	6.76	6.42	5.91	5.88
7:00	5.19	5.15	5.16	4.91	4.56	4.28	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.61	5.01	5.17	4.97	4.62	4.90	5.35	5.32	6.81	6.77	6.40	5.89	5.88
8:00	5.17	5.17	5.15	4.90	4.55	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.63	5.03	5.17	4.95	4.61	4.91	5.37	5.30	6.81	6.78	6.37	5.88	5.88
9:00	5.16	5.18	5.13	4.89	4.54	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.65	5.06	5.17	4.94	4.60	4.95	5.39	5.29	6.82	6.79	6.34	5.87	5.87
10:00	5.15	5.20	5.12	4.87	4.53	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.68	5.08	5.17	4.92	4.59	4.98	5.41	5.28	6.82	6.81	6.31	5.85	5.87
11:00	5.14	5.21	5.10	4.85	4.52	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.70	5.10	5.16	4.91	4.59	5.08	5.42	5.27	6.83	6.81	6.29	5.84	5.86
12:00	5.13	5.22	5.09	4.84	4.51	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.72	5.13	5.16	4.90	4.58	5.09	5.44	5.27	6.86	6.81	6.26	5.82	5.84
13:00	5.12	5.23	5.08	4.82	4.50	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.75	5.16	5.15	4.89	4.58	5.11	5.44	5.26	6.88	6.81	6.23	5.81	5.83
14:00	5.10	5.24	5.06	4.81	4.49	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.77	5.18	5.15	4.87	4.57	5.13	5.45	5.25	6.90	6.81	6.20	5.79	5.82
15:00	5.07	5.25	5.04	4.79	4.48	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.79	5.19	5.15	4.86	4.56	5.15	5.45	5.26	6.91	6.81	6.18	5.83	5.82
16:00	5.06	5.25	5.03	4.78	4.47	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.80	5.20	5.14	4.84	4.56	5.17	5.45	5.28	6.91	6.79	6.15	5.83	5.82
17:00	5.05	5.26	5.01	4.77	4.45	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.82	5.21	5.14	4.83	4.56	5.18	5.45	5.32	6.91	6.78	6.13	5.85	5.81
18:00	5.05	5.26	5.00	4.75	4.43	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.84	5.21	5.13	4.82	4.55	5.19	5.44	5.41	6.91	6.76	6.10	5.88	5.79
19:00	5.05	5.26	5.00	4.74	4.42	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.86	5.21	5.12	4.80	4.54	5.21	5.44	5.50	6.90	6.74	6.08	5.90	5.78
20:00	5.05	5.26	5.00	4.72	4.41	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.87	5.21	5.11	4.79	4.54	5.22	5.43	5.62	6.90	6.72	6.06	5.90	5.76
21:00	5.05	5.25	5.00	4.70	4.39	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.88	5.21	5.10	4.77	4.54	5.23	5.42	5.77	6.88	6.69	6.04	5.91	5.76
22:00	5.05	5.25	5.01	4.68	4.38	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.90	5.20	5.09	4.75	4.54	5.24	5.41	5.92	6.87	6.67	6.02	5.90	5.75
23:00	5.05	5.24	5.01	4.66	4.36	4.28	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.29	4.91	5.20	5.08	4.74	4.56	5.25	5.40	6.10	6.86	6.64	6.00	5.90	5.75
24:00	5.06	5.24	5.00	4.65	4.35	4.27	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.34	4.92	5.20	5.06	4.72	4.59	5.26	5.39	6.19	6.84	6.61	6.00	5.90	5.74
Average	5.13	5.19	5.09	4.83	4.50	4.29	4.27	4.27	4.27	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.71	5.11	5.15	4.89	4.60	5.04	5.39	5.45	6.81	6.77	6.26	5.88	5.83

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (7/10)

Month: September, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	5.73	8.78	7.97	6.87	6.25	5.60	5.58	7.11	7.70	6.81	6.02	5.39	4.82	4.35	4.35	4.36	4.43	4.38	4.41	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.46
2:00	5.74	8.77	7.92	6.84	6.22	5.58	5.58	7.34	7.66	6.78	5.99	5.37	4.79	4.35	4.35	4.36	4.43	4.38	4.40	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.50
3:00	5.75	8.75	7.86	6.82	6.20	5.56	5.58	7.53	7.62	6.74	5.96	5.35	4.76	4.35	4.35	4.36	4.43	4.38	4.39	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.53
4:00	5.78	8.72	7.81	6.81	6.16	5.54	5.58	7.65	7.59	6.70	5.93	5.32	4.73	4.35	4.35	4.36	4.43	4.38	4.39	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.56
5:00	5.82	8.69	7.75	6.78	6.13	5.52	5.58	7.75	7.54	6.68	5.90	5.30	4.71	4.35	4.35	4.36	4.43	4.37	4.39	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.58
6:00	5.89	8.65	7.70	6.75	6.10	5.50	5.58	7.83	7.50	6.64	5.87	5.28	4.68	4.35	4.35	4.36	4.43	4.37	4.39	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.60
7:00	5.97	8.62	7.64	6.72	6.07	5.48	5.59	7.88	7.47	6.61	5.84	5.26	7.66	4.35	4.35	4.36	4.43	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.61
8:00	6.15	8.59	7.59	6.70	6.04	5.46	5.65	7.92	7.43	6.57	5.82	5.23	4.63	4.35	4.35	4.36	4.43	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.63
9:00	6.40	8.55	7.54	6.67	6.01	5.44	5.72	7.95	7.40	6.54	5.79	5.20	4.60	4.35	4.35	4.36	4.42	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.65
10:00	6.60	8.52	7.49	6.64	5.99	5.42	5.80	7.97	7.36	6.50	5.76	5.18	4.58	4.35	4.35	4.37	4.42	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.67
11:00	6.74	8.49	7.44	6.62	5.96	5.42	5.90	7.99	7.32	6.47	5.73	5.16	4.64	4.35	4.35	4.37	4.42	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.70
12:00	6.82	8.46	7.39	6.59	5.93	5.42	6.00	8.00	7.28	6.43	5.70	5.13	4.54	4.35	4.35	4.38	4.42	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.71
13:00	6.89	8.43	7.34	6.57	5.89	5.47	6.11	8.00	7.25	6.40	5.68	5.10	4.51	4.35	4.35	4.39	4.41	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.72
14:00	6.95	8.40	7.30	6.54	5.87	5.48	6.20	8.00	7.21	6.37	5.65	5.07	4.47	4.35	4.36	4.39	4.41	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.72
15:00	7.00	8.37	7.21	6.52	5.84	5.50	6.30	8.00	7.17	6.33	5.62	5.05	4.44	4.35	4.37	4.40	4.40	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.72
16:00	7.08	8.33	7.22	6.50	5.81	5.51	6.37	7.99	7.14	6.30	5.60	5.02	4.42	4.35	4.37	4.41	4.40	4.37	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.73
17:00	7.15	8.30	7.18	6.47	5.78	5.52	6.42	7.97	7.10	6.26	5.57	4.99	4.41	4.35	4.37	4.41	4.39	4.38	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.73
18:00	7.21	8.27	7.14	6.45	5.76	5.53	6.47	7.95	7.06	6.23	5.55	4.96	4.39	4.35	4.37	4.42	4.39	4.38	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.73
19:00	7.27	8.23	7.10	6.42	5.73	5.54	6.51	7.92	7.02	6.19	5.53	4.94	4.38	4.35	4.37	4.42	4.39	4.40	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.74
20:00	7.67	8.19	7.06	6.40	5.71	5.54	6.55	7.89	6.97	6.16	5.50	4.96	4.36	4.35	4.37	4.42	4.39	4.40	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.74
21:00	7.92	8.15	7.01	6.37	5.69	5.55	6.61	7.86	6.94	6.13	5.48	4.94	4.36	4.35	4.37	4.42	4.38	4.41	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.75
22:00	8.34	8.11	6.97	6.34	5.66	5.56	6.65	7.82	6.90	6.11	5.46	4.91	4.36	4.35	4.37	4.43	4.38	4.41	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.39	4.76
23:00	8.65	8.06	6.93	6.31	5.64	5.57	6.71	7.79	6.86	6.08	5.43	4.88	4.36	4.35	4.37	4.43	4.38	4.41	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.41	4.77
24:00	8.76	8.00	6.90	6.28	5.62	5.57	6.85	7.74	6.84	6.05	5.41	4.85	4.35	4.35	4.36	4.43	4.38	4.41	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.44	4.78
Average	5.73	8.78	7.97	6.87	6.25	5.60	5.58	7.11	7.70	6.81	6.02	5.39	4.82	4.35	4.35	4.36	4.43	4.38	4.41	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.46

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (8/10)

Month: October, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00	4.79	4.75	4.56	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.09	5.19	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
2:00	4.79	4.74	4.55	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.13	5.16	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
3:00	4.80	4.73	4.54	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.16	5.13	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
4:00	4.80	4.73	4.53	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.19	5.10	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
5:00	4.80	4.72	4.52	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.22	5.06	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
6:00	4.81	4.71	4.51	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.24	5.02	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
7:00	4.81	4.70	4.50	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.26	4.99	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
8:00	4.82	4.70	4.49	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.28	4.95	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
9:00	4.82	4.69	4.48	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.29	4.92	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
10:00	4.82	4.68	4.47	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.31	4.88	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
11:00	4.82	4.67	4.46	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.32	4.84	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
12:00	4.82	4.67	4.45	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.33	4.78	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
13:00	4.82	4.66	4.43	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.34	4.72	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
14:00	4.82	4.66	4.42	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.34	4.67	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
15:00	4.81	4.65	4.41	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.34	4.62	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
16:00	4.81	4.64	4.39	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.34	4.58	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
17:00	4.81	4.63	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.34	4.55	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
18:00	4.81	4.63	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.34	4.51	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
19:00	4.80	4.62	4.38	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.33	4.48	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
20:00	4.79	4.61	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.50	5.31	4.44	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
21:00	4.78	4.60	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.68	5.29	4.41	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
22:00	4.77	4.59	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.84	5.27	4.38	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
23:00	4.76	4.58	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.96	5.26	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
24:00	4.76	4.57	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	5.04	5.22	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36
Average	4.80	4.66	4.45	4.37	4.37	4.37	4.37	4.37	4.37	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.45	5.27	4.76	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (9/10)

Month: November, 1990 (Unit: m.)

Time	Day																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
2:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
3:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
4:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
5:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
6:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
7:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
8:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
9:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
10:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
11:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
12:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
13:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
14:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
15:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
16:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
17:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
18:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
19:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
20:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
21:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
22:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
23:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
24:00	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Average	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35

TABLE 13 HOURLY WATER LEVEL RECORD AT INGALERA (10/10)

Month: December, 1990 (Unit: m.)

Time	Day																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1:00																															
2:00																															
3:00																															
4:00							NOTE																								
5:00							ACTUAL WATER LEVEL IS UNCERTAIN THE FLOAT IS RESTING																									
6:00																															
7:00							ON THE CONCRETE FOUNDATION OF THE MEASURING PIPE.																									
8:00																															
9:00																															
10:00																															
11:00																															
12:00																															
13:00																															
14:00																															
15:00																															
16:00																															
17:00																															
18:00																															
19:00																															
20:00																															
21:00																															
22:00																															
23:00																															
24:00																															
Average																															

Table 14 DISCHARGE MEASUREMENT RECORD AT SINOCALAN

Date	Time	Water Depth (m.)	Water Level (EL.m)	Discharge (m3/sec)
Sept. 10, 1989	13:00	5.88	15.08	419
Sept. 10, 1989	14:00	5.96	15.16	427
Sept. 10, 1989	17:00	6.10	15.30	470
Sept. 10, 1989	23:00	5.76	14.96	410
Sept. 11, 1989	01:00	5.66	14.86	336
Sept. 11, 1989	03:00	5.56	14.76	332
Sept. 11, 1989	08:00	5.33	14.53	295
Sept. 11, 1989	10:00	5.25	14.45	286
Sept. 11, 1989	12:00	5.12	14.32	276
Sept. 11, 1989	15:00	4.93	14.13	254
Sept. 11, 1989	16:00	4.81	14.01	264
Sept. 11, 1989	18:00	4.70	13.90	231
Sept. 11, 1989	20:00	4.59	13.79	270
Sept. 11, 1989	22:00	4.50	13.70	228
Sept. 12, 1989	00:00	4.44	13.64	199
Sept. 12, 1989	02:00	4.38	13.58	182
Sept. 12, 1989	04:00	4.32	13.52	156
Sept. 12, 1989	06:00	4.26	13.46	141
Sept. 12, 1989	15:00	4.20	13.40	161
Sept. 12, 1989	17:00	4.06	13.26	159
Sept. 12, 1989	19:00	3.92	13.12	145
Sept. 13, 1989	10:00	3.48	12.68	177
Sept. 13, 1989	12:00	3.40	12.60	120
Sept. 13, 1989	15:00	3.35	12.55	164
Oct. 10, 1989	13:17	0.82	10.02	11
Oct. 18, 1989	-	0.90	10.10	9
Nov. 9, 1989	-	0.81	10.01	12
Nov. 23, 1989	11:00	1.83	11.03	43
Nov. 23, 1989	13:00	1.78	10.98	39
Nov. 23, 1989	15:00	1.73	10.93	40
Nov. 23, 1989	17:00	1.71	10.91	41
June 29, 1990	13.35	2.36	11.56	72
Aug. 27, 1990	12:00	5.10	14.30	226
Aug. 27, 1990	13:00	5.12	14.30	246
Aug. 27, 1990	14:00	5:00	14.20	213
Aug. 27, 1990	15:00	4.87	14.07	208
Aug. 27, 1990	16:00	4.74	13.94	192
Aug. 27, 1990	17:00	4.65	13.85	179
Aug. 27, 1990	18:00	4.57	13.77	166
Sept. 1, 1990	13:00	4.49	13.69	218
Sept. 1, 1990	14:00	4.62	13.82	234
Sept. 1, 1990	15.00	4.75	13.95	253
Sept. 1, 1990	16:00	4.83	14.03	221
Sept. 1, 1990	17:00	4.87	14.07	256
Sept. 1, 1990	18:00	4.93	14.13	262

Remarks: Zero of Gauge = EL. 9.200

Table 15 DISCHARGE MEASUREMENT RECORD AT TAGAMUSING

Date	Time	Water Depth (m.)	Water Level (EL.m)	Discharge (m3/sec)
Sept. 10, 1989	16:00	4.60	36.40	188
Sept. 10, 1989	17:00	4.85	36.65	216
Sept. 10, 1989	23:30	3.90	35.70	165
Sept. 10, 1989	24:30	3.77	35.57	160
Sept. 11, 1989	02:20	3.70	35.50	148
Sept. 11, 1989	03:20	3.60	35.40	141
Sept. 11, 1989	04:30	3.55	35.35	138
Sept. 11, 1989	05:30	3.50	35.30	137
Sept. 11, 1989	06:30	3.55	35.35	150
Sept. 11, 1989	07:30	3.50	35.30	154
Sept. 11, 1989	08:30	3.40	35.20	129
Sept. 11, 1989	09:30	3.34	35.14	120
Sept. 11, 1989	10:30	3.20	35.00	106
Sept. 11, 1989	11:30	3.10	34.90	99
Sept. 11, 1989	12:30	3.05	34.85	98
Sept. 11, 1989	13:30	3.01	34.81	99
Sept. 11, 1989	14:30	3.00	34.80	93
Sept. 11, 1989	15:30	2.99	34.79	96
Sept. 11, 1989	16:30	2.96	34.76	99
Sept. 11, 1989	17:30	2.92	34.72	100
Sept. 11, 1989	18:40	3.04	34.84	116
Sept. 11, 1989	19:35	3.28	35.08	125
Sept. 11, 1989	21:40	3.10	34.90	93
Sept. 11, 1989	22:30	2.96	34.76	100
Sept. 11, 1989	23:31	2.86	34.66	93
Sept. 11, 1989	24:30	2.80	34.60	87
Sept. 12, 1989	01:30	2.72	34.52	82
Sept. 12, 1989	02:30	2.65	34.45	77
Sept. 12, 1989	06:30	2.76	34.56	74
Sept. 12, 1989	08:30	2.88	34.68	94
Sept. 12, 1989	10:30	2.80	34.60	86
Sept. 12, 1989	11:30	2.70	34.50	74
Sept. 12, 1989	12:30	2.58	34.38	64
Sept. 12, 1989	15:15	2.42	34.22	58
Sept. 12, 1989	18:30	2.30	34.10	56
Sept. 12, 1989	19:30	2.22	34.02	49
Oct. 10, 1989	10:40	0.67	32.47	4
Oct. 17, 1989	14:40	0.75	32.55	4
Oct. 20, 1989	11:00	1.80	33.60	48
Nov. 7, 1989	-	0.40	32.20	3
Nov. 23, 1989	11:00	0.73	32.53	6
Nov. 23, 1989	12:00	0.72	32.52	6
Nov. 23, 1989	13:00	0.60	32.40	6
Nov. 23, 1989	14:00	0.68	32.48	5
Nov. 23, 1989	15:00	0.67	32.47	4
Nov. 23, 1989	16:00	0.66	32.46	5
Nov. 23, 1989	17:00	0.65	32.45	5
June 29, 1990	10:10	1.55	33.35	41
Aug. 27, 1990	15:12	2.65	34.45	93
Aug. 27, 1990	16:10	2.50	34.30	82
Aug. 27, 1990	17:00	2.38	34.18	75
Aug. 27, 1990	13:40	1.80	33.60	51
Aug. 27, 1990	14:30	1.79	33.59	48
Aug. 27, 1990	15:30	1.76	33.56	46
Aug. 27, 1990	16:30	1.73	33.53	41

Remarks: Zero of Gauge = EL. 31.800

Table 16 DISCHARGE MEASUREMENT RECORD AT ALORAGAT

Date	Time	Water Depth (m.)	Water Level (EL.m)	Discharge (m3/sec)
Oct. 10, 1989	11:20	0.95	12.35	19
Oct. 17, 1989	13:05	1.17	12.57	16
Oct. 20, 1989	11:00	2.20	13.60	150
Oct. 20, 1989	12:05	2.05	13.45	141
Oct. 20, 1989	13:00	1.75	13.15	132
Oct. 20, 1989	14:00	1.90	13.30	128
Oct. 20, 1989	15:00	1.85	13.25	126
Oct. 20, 1989	16:50	1.75	13.15	116
Nov. 7, 1989	-	0.65	12.05	2
Nov. 23, 1989	10:00	1.63	13.03	5
Nov. 23, 1989	14:00	1.60	13.00	5
June 29, 1990	11:18	1.62	13.02	10
Aug. 27, 1990	14:00	1.91	13.31	8
Aug. 27, 1990	15:00	2.26	13.66	10
Aug. 27, 1990	16:00	2.11	13.51	9

Remarks: Zero of Guage = EL. 11.400

Table 17 DISCHARGE MEASUREMENT RECORD AT ANGALACAN

Date	Time	Water Depth (m.)	Water Level (EL.m)	Discharge (m3/sec)
Oct. 10, 1989	12:34	0.90	11.20	4
Oct. 13, 1989	15:53	0.85	11.15	2
Oct. 20, 1989	11:00	2.60	12.90	88
Oct. 20, 1989	12:00	2.50	12.80	79
Oct. 20, 1989	13:00	2.44	12.74	57
Oct. 20, 1989	14:00	2.38	12.68	43
Oct. 20, 1989	15:00	2.30	12.60	40
Oct. 20, 1989	16:00	2.25	12.55	52
Oct. 20, 1989	17:00	2.20	12.50	49
Nov. 7, 1989	13:35	0.82	11.12	6
Nov. 11, 1989	10:00	1.07	11.37	20
Nov. 11, 1989	12:00	1.04	11.34	20
Nov. 11, 1989	14:00	1.03	11.33	19
June 29, 1990	11:18	1.62	11.92	34
Aug. 27, 1990	13:00	3.81	14.11	201
Aug. 27, 1990	14:00	4.46	14.76	203
Aug. 27, 1990	15:34	4.52	14.82	156

Remarks: Zero of Guage = EL. 10.300

Table 18 DISCHARGE MEASUREMENT RECORD AT COJUANGCO BRIDGE

Date	Time	Water Depth (m.)	Water Level (EL.m)	Discharge (m3/sec)
Sept. 10, 1989	14:05	2.93	17.43	178
Sept. 11, 1989	10:00	2.83	17.33	203
Sept. 11, 1989	13:00	3.03	17.53	283
Sept. 11, 1989	15:00	3.23	17.73	329
Sept. 11, 1989	16:00	3.43	17.93	365
Sept. 11, 1989	17:05	3.53	18.03	484
Sept. 12, 1989	09:15	3.75	18.25	550
Sept. 12, 1989	17:00	4.03	18.53	665
Oct. 10, 1989	04:00	1.95	16.45	74
Oct. 24, 1989	10:40	1.40	15.90	31
Nov. 7, 1989	-	1.22	15.72	8
Nov. 23, 1989	11:00	1.76	16.26	59
Nov. 23, 1989	14:00	1.66	16.16	38
Nov. 23, 1989	16:30	1.61	16.11	32
Nov. 24, 1989	8:00	1.56	16.06	30
Nov. 24, 1989	10:00	1.51	16.01	26

Remarks: Zero of Gauge = EL. 14.500

Table 19 DISCHARGE MEASUREMENT RECORD AT INGALERA

Date	Time	Water Depth (m.)	Water Level (EL.m)	Discharge (m3/sec)
Sept. 11, 1989	04:00	5.20	7.90	60
Sept. 11, 1989	06:00	5.35	8.05	46
Sept. 11, 1989	09:00	5.28	7.98	26
Sept. 11, 1989	12:00	5.36	8.06	30
Sept. 11, 1989	18:00	5.30	8.00	32
Sept. 11, 1989	20:00	5.32	8.02	30
Sept. 11, 1989	24:00	5.30	8.00	23
Sept. 12, 1989	03:00	5.24	7.94	29
June 26, 1990	11:00	5.78	8.84	53

Remarks: Zero of Gauge = EL. 2.700

Table 20 SELECTED STATIONS FOR WATER SAMPLING

River	Station No.	Distance from Rivermouth(km)	Remarks
Agno			
	A1	3.3	Dumalandan Bridge, Lingayen
	A2	5.7	Banaga Bridge, Lingayen
	A3	14.7	Brgy. Cabayaoasan, Bugallon
	A4	21.5	Brgy. Salinap, San Carlos
	A5	24.5	Brgy. San Jose, Aguilar
	A6	34.3	Urbiztondo Bridge, Urbiztondo
	A7	41.3	Brgy. Galarin, Urbiztondo
Pantal-Sinocalan			
	P1	4.3	Magsaysay Bridge, Dagupan City
	P2	14.4	Calasiao Bridge, Calasiao
	P3	19.1	Malabago Bridge, Calasiao
	P4	22.2	Maramba Bridge, Sta. Barbara
	P5	26.4	Banaoang Bridge, Sta. Barbara
Cayanga-Patalan			
	C1	2.0	Cayanga Bridge, San Fabian
	C2	8.2	Embarcadero Bridge, Mangaldan
	C3	13.4	Brgy. Casibong, San Jacinto
	C4	16.8	Pias Bridge, Mapandan
	C5	19.9	Mermer Bridge,. Mapandan
	C6	22.5	Manaoag Bridge, Manaoag

Table 21 RESULT OF SALINITY TEST OF AGNO RIVER

Date : March 6, 1990

Sampling Location	Time	Sampling Position: Upper Temp. (c)	Upper B.C. (ms/cm)	Upper C.C (ppm)	Middle Temp. (c)	Middle B.C. (ms/cm)	Middle C.C (ppm)	Bottom Temp. (c)	Bottom B.C. (ms/cm)	Bottom C.C (ppm)
A1	5:55	27.80	30.40	18,000	28.40	35.90	22,000	24.80	47.00	28,000
	7:01	26.50	32.50	19,000	27.50	35.90	22,000	27.00	44.10	27,000
	8:05	27.60	33.40	19,500	27.60	36.10	22,000	28.10	45.80	28,000
	9:00	27.70	34.40	20,000	27.40	37.40	23,000	27.80	42.60	25,000
	10:00	27.60	37.10	22,500	27.70	42.30	25,000	27.90	48.30	29,000
	11:00	28.20	36.60	22,000	27.80	45.60	27,500	27.70	46.00	28,000
	12:00	28.10	37.50	22,500	27.90	49.50	29,500	27.90	49.70	29,500
	13:00	29.10	37.20	22,500	28.40	50.00	30,000	28.50	50.20	30,000
	14:00	29.10	40.50	24,000	28.50	49.30	29,000	28.40	52.00	31,000
	15:00	28.70	45.20	27,200	28.60	51.90	30,000	28.60	51.80	30,000
	16:00	28.40	52.40	31,000	28.40	52.40	31,000	28.50	52.60	31,000
	17:00	28.40	52.10	30,000	28.60	52.50	31,000	28.60	53.00	32,000
	18:00	28.40	51.80	30,000	28.40	52.80	31,500	28.40	52.90	32,000
A2	6:15	27.90	19.96	11,500	28.40	26.40	15,500	28.40	32.80	19,500
	7:15	27.00	20.12	11,500	28.30	29.80	18,000	28.30	31.60	19,000
	8:15	27.90	20.69	11,500	28.00	32.60	19,500	28.20	36.70	22,000
	9:15	27.00	21.21	12,000	28.00	29.20	17,000	28.10	36.50	21,500
	10:15	28.29	23.90	12,500	28.10	30.90	18,500	28.40	38.70	23,500
	11:15	29.00	23.40	12,500	28.20	38.90	23,500	28.40	41.40	24,500
	12:15	28.00	32.60	19,000	29.00	42.90	26,000	29.10	45.60	27,500
	13:15	29.50	32.30	19,000	28.30	44.50	27,500	28.30	44.70	27,000
	14:15	29.00	37.90	23,000	28.30	44.70	28,000	28.20	47.80	28,500
	15:15	28.50	39.60	24,000	28.40	48.00	29,000	28.60	48.40	29,000
	16:15	28.80	46.90	28,500	28.60	46.10	28,500	28.70	49.20	29,500
	17:15	28.10	45.50	27,500	28.10	46.20	28,500	28.10	50.90	30,000
	18:15	28.10	49.10	29,500	28.10	50.10	30,000	28.10	50.20	30,000
A3	7:10	20.80	3.02	1,550	27.20	3.47	1,900	27.95	4.26	2,250
	8:10	27.80	4.01	2,100	27.85	4.20	2,200	27.96	5.64	3,000
	9:10	28.10	4.93	2,600	27.80	5.56	3,000	27.75	6.43	3,400
	10:10	28.40	6.27	3,250	28.10	7.67	4,200	28.10	10.61	5,800
	11:11	29.40	7.35	4,000	28.80	7.61	4,200	28.50	11.63	6,400
	12:10	29.00	6.53	3,500	28.90	8.91	4,800	28.65	12.92	7,200
	13:11	29.20	8.93	4,800	28.90	10.84	5,800	28.90	17.61	10,000
	14:10	29.00	14.29	8,000	28.90	15.90	8,800	29.10	23.60	14,000
	15:10	28.80	22.10	13,000	29.30	23.90	14,000	29.10	26.30	16,000
	16:10	28.70	27.50	16,500	29.20	28.90	17,000	28.90	29.00	17,500
	17:10	28.50	27.80	16,500	29.00	28.90	17,500	28.80	30.30	18,000
	18:10	28.50	26.70	15,500	29.00	28.80	17,500	28.90	30.20	18,000
	19:10	28.40	27.10	16,000	29.00	28.60	17,500	29.10	30.15	18,000
A4	7:30	28.10	0.50	230	28.10	0.51	240	28.00	0.52	240
	8:30	28.10	0.52	240	28.10	0.52	240	28.10	0.52	240
	9:30	28.25	0.52	240	28.25	0.52	245	28.20	0.52	240
	10:30	28.60	0.52	245	28.50	0.52	240	28.50	0.52	240
	11:30	28.70	0.52	240	28.40	0.52	240	28.40	0.52	240
	12:30	29.10	0.52	245	28.50	0.52	245	28.40	0.52	245
	13:30	29.00	0.52	245	28.90	0.52	245	28.60	0.52	245
	14:30	29.10	0.53	250	29.00	0.53	250	28.80	0.53	250
	15:30	29.00	0.54	250	29.00	0.54	250	29.00	0.55	260
	16:30	29.00	0.56	265	29.00	0.57	270	29.00	0.58	270
	17:30	29.00	0.59	280	29.00	0.59	280	29.00	0.50	230
A5	8:18	28.60	0.48	225	28.60	0.48	225	28.50	0.48	225
	9:07	28.60	0.48	225	28.60	0.49	225	28.60	0.49	225
	10:06	29.40	0.48	225	29.10	0.49	225	28.60	0.49	225
	11:04	30.50	0.50	230	29.30	0.50	230	28.88	0.50	230
	12:05	29.80	0.51	230	29.40	0.51	230	29.00	0.51	230
	13:00	30.30	0.51	230	29.60	0.51	240	29.30	0.52	240
	14:00	29.50	0.52	240	29.60	0.52	240	29.50	0.52	240
	15:06	29.90	0.52	240	29.90	0.52	240	29.80	0.53	245
	16:04	29.50	0.53	250	29.60	0.53	245	29.50	0.52	240
	17:00	29.00	0.53	250	29.30	0.54	250	29.30	0.53	245
	18:00	29.00	0.53	250	29.40	0.53	250	29.40	0.53	250
A6	6:30	-	0.48	225	-	0.49	230	-	0.50	230
	7:15	-	0.49	230	-	0.50	230	-	0.50	230
	8:00	-	0.49	230	-	0.50	230	-	0.51	240
	8:45	-	0.49	230	-	0.50	230	-	0.50	230
	9:30	-	0.50	230	-	0.50	230	-	0.50	230
	11:00	-	0.50	230	-	0.51	230	-	0.50	230
	12:00	-	0.50	230	-	0.50	230	-	0.51	230
	13:00	-	0.50	230	-	0.50	230	-	0.51	230
	14:00	29.50	0.50	230	26.50	0.51	230	26.75	0.51	230
	15:00	29.50	0.50	230	26.70	0.50	230	27.50	0.50	230
	16:00	30.10	0.50	230	27.30	0.50	230	27.00	0.51	230
	17:00	28.40	0.50	230	27.50	0.50	230	26.40	0.51	230
	17:45	27.30	0.51	230	26.20	0.50	230	27.10	0.50	230
A7	6:30	-	-	-	25.75	0.49	220	-	-	-
	7:30	-	-	-	25.80	0.50	230	-	-	-
	8:30	-	-	-	26.20	0.50	230	-	-	-
	9:30	-	-	-	27.00	0.51	230	-	-	-
	10:30	-	-	-	28.10	0.50	230	-	-	-
	11:30	-	-	-	28.75	0.50	230	-	-	-
	12:30	-	-	-	30.25	0.49	230	-	-	-
	1:30	-	-	-	-	0.49	225	-	-	-
	2:30	-	-	-	-	0.48	225	-	-	-
	4:30	-	-	-	-	0.48	225	-	-	-
	5:30	-	-	-	-	0.48	225	-	-	-
	6:00	-	-	-	-	0.48	225	-	-	-

Remarks: E.C. : Electric Conductivity under controlled temperature of 25 c.
C.C. : Chloride Concentration (mg per liter).

Table 22 RESULT OF SALINITY TEST IN PANTAL-SINOLACAN RIVER

Date : March 6, 1990

Sampling Location	Time	Sampling Position: Upper Temp. (c)	Upper B.C. (ms/cm)	Upper C.C. (ppm)	Middle Temp. (c)	Middle B.C. (ms/cm)	Middle C.C. (ppm)	Bottom Temp. (c)	Bottom B.C. (ms/cm)	Bottom C.C. (ppm)
P1	7:10	27.70	8.37	4,500	27.80	19.72	11,500	28.90	39.70	24,000
	8:10	27.70	8.76	4,800	27.80	18.90	13,800	28.40	40.40	24,000
	9:09	28.00	8.54	4,700	28.10	23.60	19,000	28.40	40.20	24,500
	10:11	28.40	8.38	4,400	28.25	32.30	19,000	28.40	45.00	27,000
	11:12	28.80	9.56	5,400	28.40	33.20	19,500	28.42	44.90	27,000
	12:12	29.00	17.56	10,100	28.30	36.80	22,000	28.30	45.40	27,500
	13:13	29.10	15.60	8,800	28.20	37.90	23,500	28.40	45.20	27,200
	14:14	29.40	17.26	9,800	28.20	39.50	23,800	28.40	45.70	28,000
	15:06	29.30	26.90	15,000	28.70	40.30	24,000	28.40	46.10	28,000
	16:08	29.30	29.80	17,500	28.90	44.20	26,500	28.80	45.40	27,500
	17:04	29.10	33.70	23,000	28.95	45.20	27,200	29.00	47.90	28,500
	18:04	29.50	27.30	16,000	28.90	48.50	29,000	29.00	50.10	30,000
	19:02	28.70	39.50	23,800	29.00	43.40	26,000	29.00	49.70	29,500
P2	6:30	27.50	0.54	250	27.45	0.55	255	27.50	0.55	260
	7:00	27.40	0.54	250	27.35	0.54	250	27.30	0.54	250
	8:00	27.30	0.05	255	27.30	0.55	260	27.20	0.54	250
	9:00	27.40	0.54	250	27.40	0.55	255	27.20	0.05	260
	10:00	27.60	0.55	260	27.60	0.55	260	27.40	0.55	260
	11:00	28.00	0.55	260	28.00	0.54	250	27.50	0.54	250
	12:00	28.50	0.55	255	28.50	0.55	255	28.00	0.55	255
	13:05	29.00	0.54	250	29.00	0.55	260	28.50	0.55	260
	14:00	29.00	0.55	260	29.00	0.55	260	29.00	0.55	260
	15:00	29.00	0.55	255	29.25	0.55	260	29.25	0.55	260
	16:00	29.20	0.55	255	29.20	0.55	260	-	0.55	260
	17:00	29.10	0.55	260	29.10	0.56	265	29.10	0.55	260
	18:00	29.00	0.55	260	29.00	0.55	260	29.00	0.55	260
P3	6:35	-	-	-	28.20	0.60	280	-	-	-
	7:30	-	-	-	28.00	0.59	275	-	-	-
	8:30	-	-	-	27.90	0.60	275	-	-	-
	9:30	-	-	-	28.40	0.59	275	-	-	-
	10:30	-	-	-	28.40	0.60	285	-	-	-
	11:29	-	-	-	28.70	0.60	285	-	-	-
	12:40	-	-	-	29.50	0.60	285	-	-	-
	13:30	-	-	-	29.90	0.60	285	-	-	-
	14:30	-	-	-	29.40	0.60	285	-	-	-
	15:30	-	-	-	30.10	0.60	285	-	-	-
	16:25	-	-	-	30.05	0.60	285	-	-	-
	17:07	-	-	-	29.50	0.60	285	-	-	-
	17:45	-	-	-	29.20	0.60	285	-	-	-
P4	6:00	-	-	-	26.75	0.67	285	-	-	-
	7:00	-	-	-	26.60	0.56	270	-	-	-
	8:00	-	-	-	26.70	0.55	260	-	-	-
	9:00	-	-	-	27.00	0.55	260	-	-	-
	10:00	-	-	-	27.40	0.55	260	-	-	-
	11:00	-	-	-	28.00	0.55	260	-	-	-
	12:00	-	-	-	28.20	0.55	265	-	-	-
	13:00	-	-	-	28.60	0.56	265	-	-	-
	14:00	-	-	-	28.60	0.56	265	-	-	-
	15:00	-	-	-	28.70	0.56	270	-	-	-
	16:00	-	-	-	28.60	0.56	270	-	-	-
	17:00	-	-	-	28.60	0.56	270	-	-	-
	17:54	-	-	-	28.50	0.56	270	-	-	-
P5	6:00	-	0.55	260	-	0.55	260	-	0.55	260
	7:00	-	0.55	260	-	0.55	260	-	0.55	260
	8:00	-	0.55	260	-	0.55	260	-	0.56	270
	9:00	-	0.56	265	-	0.56	265	-	0.56	265
	10:00	-	0.56	265	-	0.56	265	-	0.56	270
	12:00	-	0.56	270	-	0.56	270	-	0.56	270
	13:00	29.00	0.57	275	29.00	0.57	275	29.30	0.57	270
	14:00	30.40	0.57	270	30.40	0.57	270	29.90	0.56	270
	15:00	30.80	0.56	270	30.80	0.56	270	30.30	0.56	270
	16:00	30.30	0.57	270	30.30	0.57	270	30.20	0.56	270
	17:00	30.00	0.56	270	30.00	0.56	270	30.00	0.56	270
	18:00	29.80	0.56	270	29.80	0.56	270	29.80	0.56	265

Remarks: E.C. : Electric Conductivity under controlled temperature of 25 c.
C.C. : Chloride Concentration (mg per liter).

Table 23 RESULT OF SALINITY TEST IN CAYANGA-PATALAN RIVER

Date : March 7, 1990

Sampling Location	Time	Sampling Position: Upper Temp. (c)	Upper B.C (ms/cm)	Upper C.C (ppm)	Middle Temp. (c)	Middle B.C. (ms/cm)	Middle C.C (ppm)	Bottom Temp. (c)	Bottom B.C. (ms/cm)	Bottom C.C. (ppm)
C1	6:35	26.50	11.45	6,400	28.90	45.10	27,000	28.92	48.80	29,500
	7:30	27.00	12.15	6,900	28.50	36.10	21,500	28.90	47.80	28,500
	8:30	27.00	12.59	7,000	28.20	36.40	21,500	28.90	47.90	28,500
	9:25	27.10	12.65	7,100	28.20	40.10	24,000	28.90	49.00	29,500
	10:25	7.00	13.52	7,500	28.70	44.40	27,000	28.90	48.80	29,500
	11:25	28.40	14.79	8,500	28.50	42.20	25,000	28.70	48.70	29,500
	12:25	29.30	19.80	11,500	28.00	40.80	24,500	28.10	46.70	28,500
	13:25	29.40	30.10	18,000	28.40	42.50	25,000	28.30	48.90	29,500
	14:25	30.10	30.60	18,400	28.25	43.50	26,000	28.50	48.60	29,000
	15:26	30.40	35.70	21,000	29.20	44.30	26,500	28.80	49.00	29,500
	16:28	30.00	40.90	24,000	29.30	47.30	28,000	29.10	48.50	29,000
	17:29	29.20	41.20	24,500	29.40	44.50	27,000	29.00	49.30	29,500
	18:30	29.00	43.00	25,500	29.20	48.50	29,000	29.10	49.10	29,500
C2	6:15	-	-	-	24.50	0.91	460	-	-	-
	7:00	-	-	-	24.70	0.66	320	-	-	-
	8:00	-	-	-	25.30	0.65	320	-	-	-
	9:00	-	-	-	27.50	0.65	310	-	-	-
	10:00	-	-	-	28.50	0.65	310	-	-	-
	11:00	-	-	-	30.50	0.65	320	-	-	-
	12:00	-	-	-	31.80	0.65	310	-	-	-
	13:00	-	-	-	33.10	0.66	310	-	-	-
	14:00	-	-	-	32.70	0.65	310	-	-	-
	15:00	-	-	-	32.30	0.65	310	-	-	-
	16:00	-	-	-	32.30	0.64	310	-	-	-
	17:00	-	-	-	31.30	0.64	310	-	-	-
	18:00	-	-	-	29.70	0.65	310	-	-	-
C3	6:20	-	-	-	25.50	0.71	340	-	-	-
	7:16	-	-	-	24.70	0.65	310	-	-	-
	8:05	-	-	-	25.30	0.64	310	-	-	-
	9:07	-	-	-	27.50	0.65	310	-	-	-
	10:15	-	-	-	28.50	0.64	310	-	-	-
	11:10	-	-	-	30.50	0.64	310	-	-	-
	12:00	-	-	-	31.80	0.64	310	-	-	-
	13:05	-	-	-	33.10	0.64	310	-	-	-
	14:05	-	-	-	32.70	0.64	310	-	-	-
	15:05	-	-	-	32.30	0.64	310	-	-	-
	16:03	-	-	-	32.30	0.64	310	-	-	-
	17:00	-	-	-	31.30	0.63	310	-	-	-
	18:00	-	-	-	29.70	0.63	310	-	-	-
C4	6:30	-	-	-	25.60	0.59	280	-	-	-
	7:30	-	-	-	25.50	0.63	300	-	-	-
	8:30	-	-	-	26.00	0.61	300	-	-	-
	9:30	-	-	-	27.00	0.61	290	-	-	-
	10:30	-	-	-	27.50	0.62	300	-	-	-
	11:30	-	-	-	28.00	0.61	300	-	-	-
	12:30	-	-	-	32.00	0.61	300	-	-	-
	13:30	-	-	-	31.50	0.61	300	-	-	-
	14:30	-	-	-	31.90	0.61	300	-	-	-
	15:30	-	-	-	31.70	0.61	290	-	-	-
	16:30	-	-	-	31.00	0.60	290	-	-	-
	17:30	-	-	-	29.00	0.61	290	-	-	-
C5	6:00	-	-	-	24.20	0.57	270	-	-	-
	7:00	-	-	-	24.75	0.57	270	-	-	-
	8:00	-	-	-	24.70	0.57	270	-	-	-
	9:00	-	-	-	25.10	0.57	270	-	-	-
	10:00	-	-	-	26.00	0.57	270	-	-	-
	11:00	-	-	-	-	0.57	270	-	-	-
	12:00	-	-	-	-	0.57	270	-	-	-
	13:00	-	-	-	-	0.57	270	-	-	-
	14:00	-	-	-	-	0.58	280	-	-	-
	15:00	-	-	-	-	0.57	280	-	-	-
	16:00	-	-	-	-	0.57	270	-	-	-
	17:00	-	-	-	-	0.57	270	-	-	-
	18:00	-	-	-	-	0.57	270	-	-	-
C6	6:00	-	-	-	24.60	0.66	320	-	-	-
	7:00	-	-	-	25.00	0.64	310	-	-	-
	8:00	-	-	-	25.80	0.63	310	-	-	-
	9:00	-	-	-	26.90	0.63	310	-	-	-
	10:00	-	-	-	28.40	0.63	310	-	-	-
	11:00	-	-	-	29.60	0.63	310	-	-	-
	12:00	-	-	-	30.40	0.63	310	-	-	-
	13:00	-	-	-	32.40	0.63	300	-	-	-
	14:00	-	-	-	32.50	0.63	300	-	-	-
	15:00	-	-	-	33.30	0.62	300	-	-	-
	16:00	-	-	-	32.90	0.62	300	-	-	-
	17:00	-	-	-	31.60	0.62	300	-	-	-
	18:00	-	-	-	31.30	0.61	300	-	-	-

Remarks: B.C. : Electric Conductivity under r controlled temperature of 25 c.
C.C. : Chloride Concentration (mg per liter).

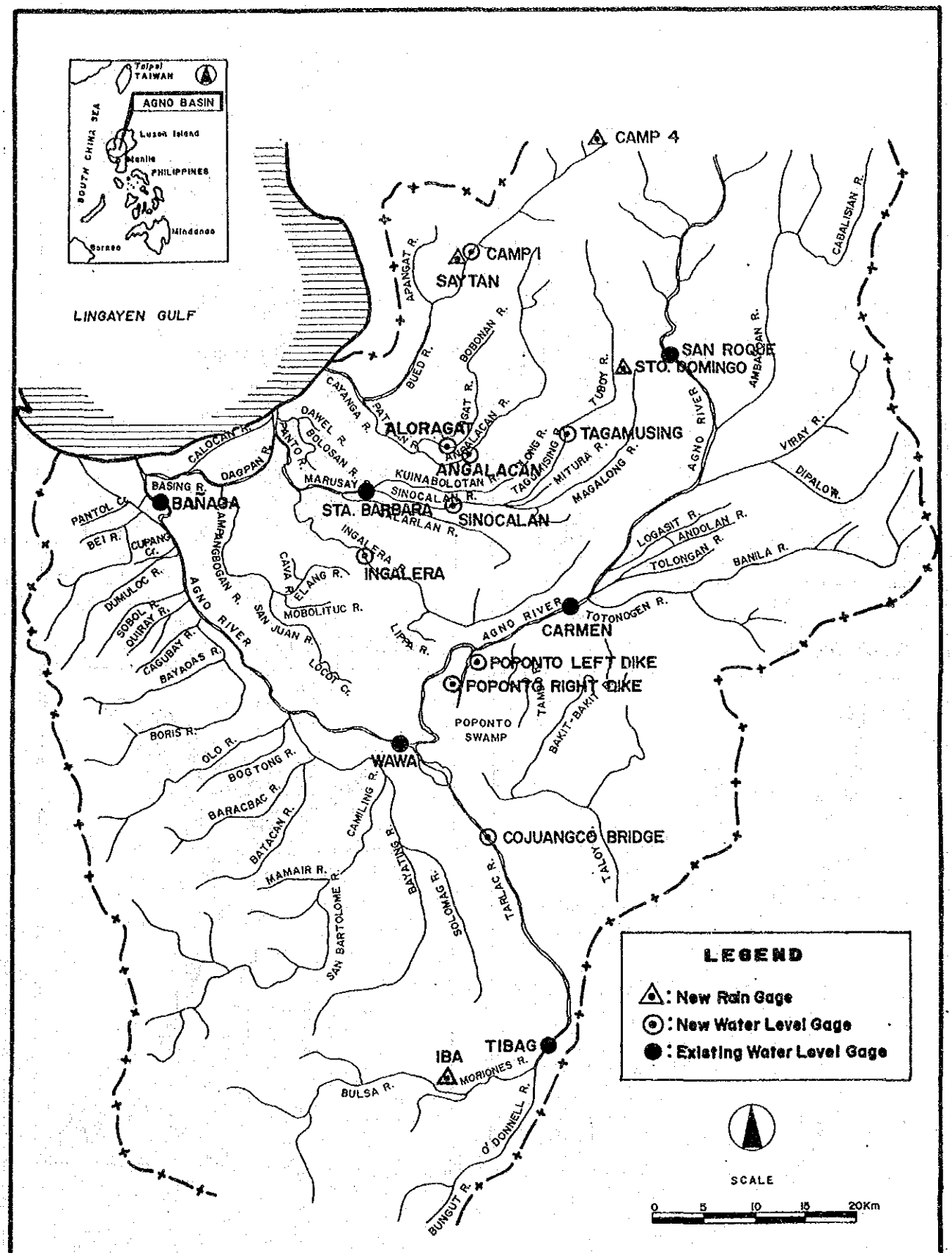
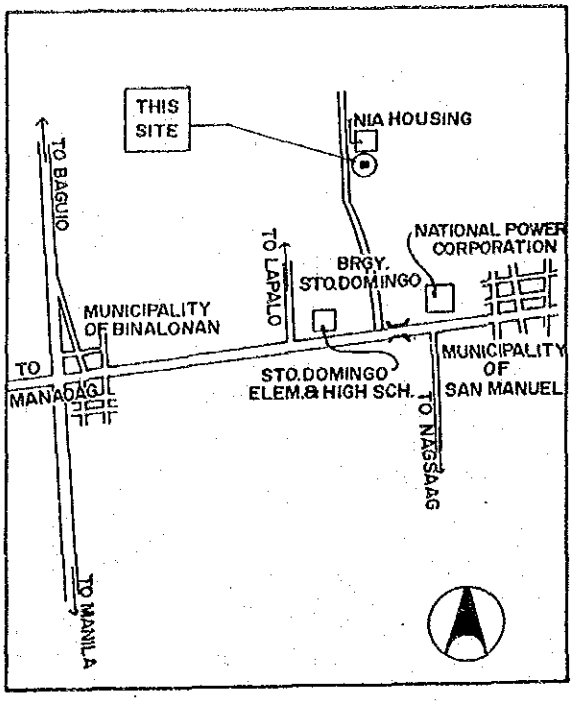
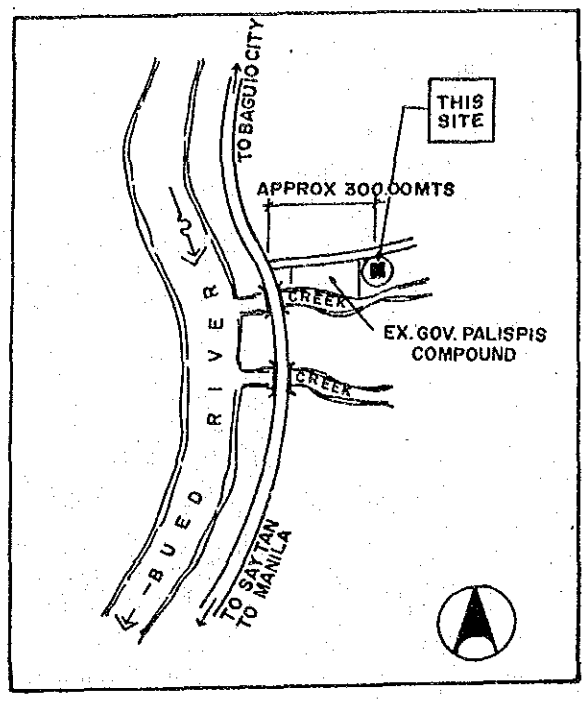


Fig. 1 LOCATION MAP OF NEW RAIN GAUGES AND WATER LEVEL GAUGES

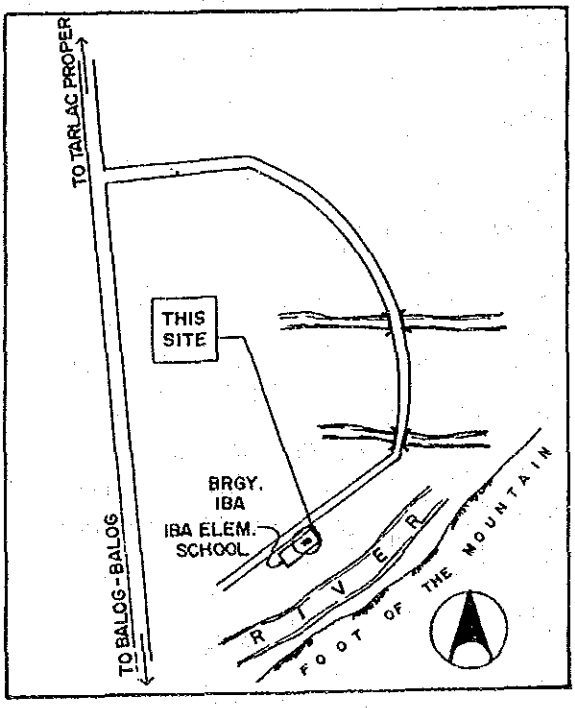
STATION : STO. DOMINGO



STATION : CAMP 4



STATION : IBA



STATION : SAYTAN

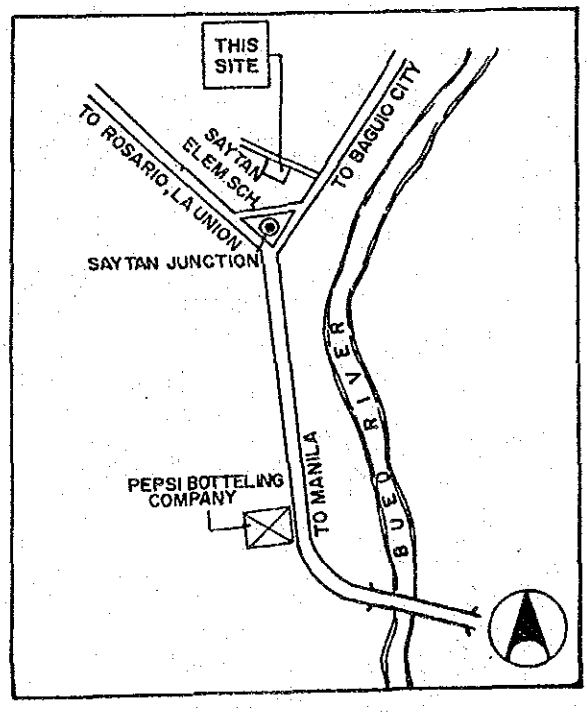
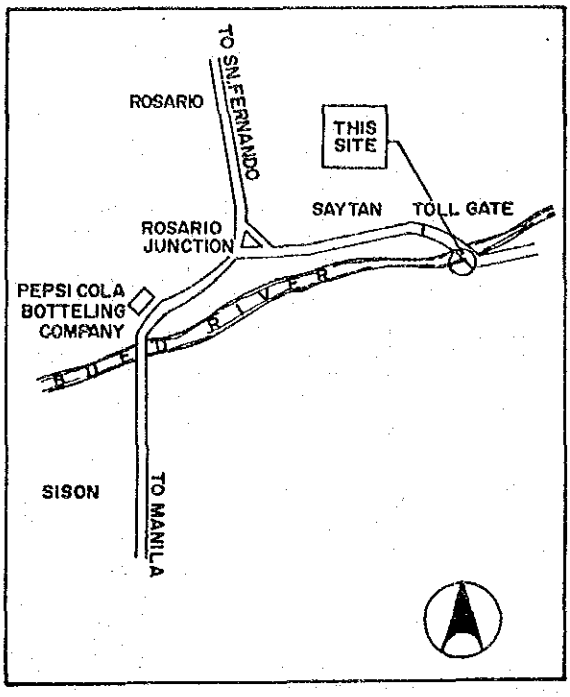
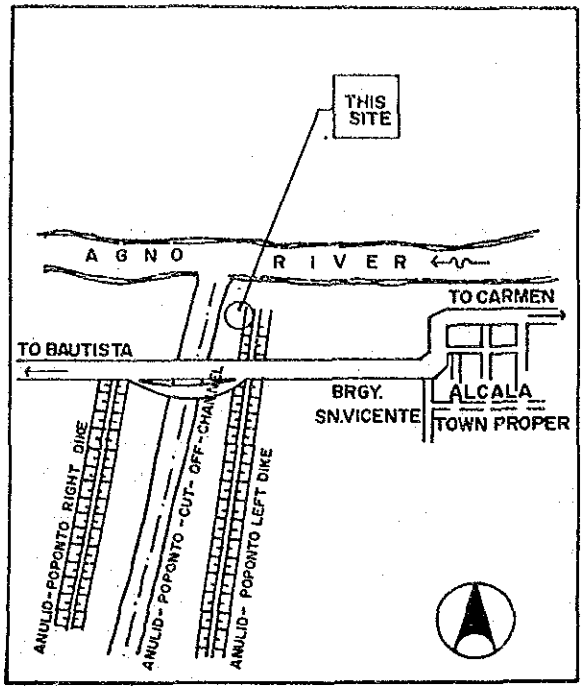


Fig. 2 LOCATION MAP OF NEW RAINFALL GAUGING STATIONS

STATION : CAMP 1



STATION : POPONT LEFT DIKE



STATION : TAGUMUSING

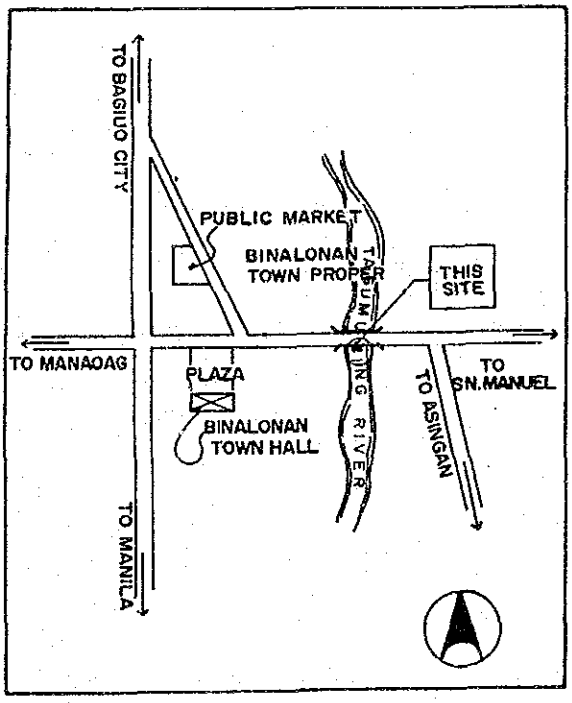
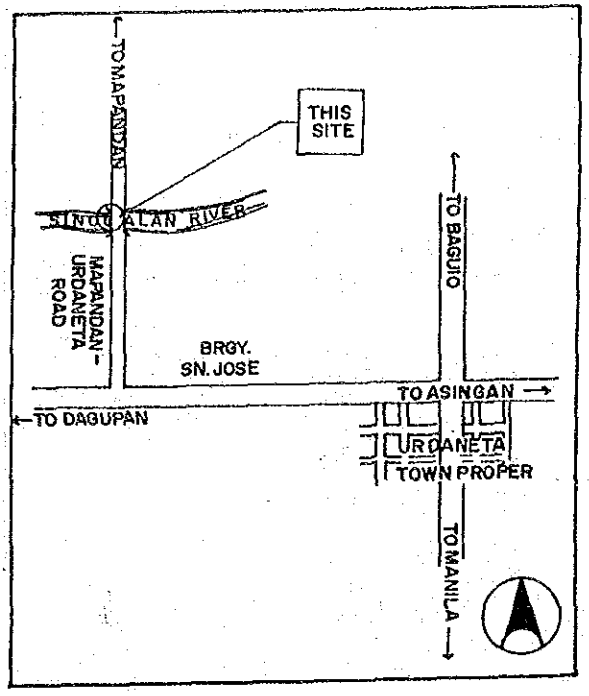
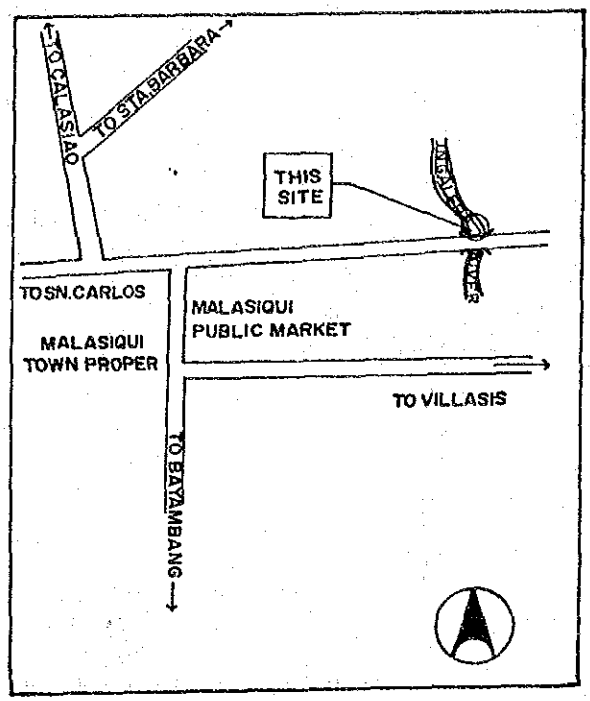


Fig. 3 LOCATION MAP OF NEW WATER LEVEL GAUGING STATIONS (1/3)

STATION : SINOCALAN



STATION : INGALERA



STATION : POPONT RIGHT DIKE

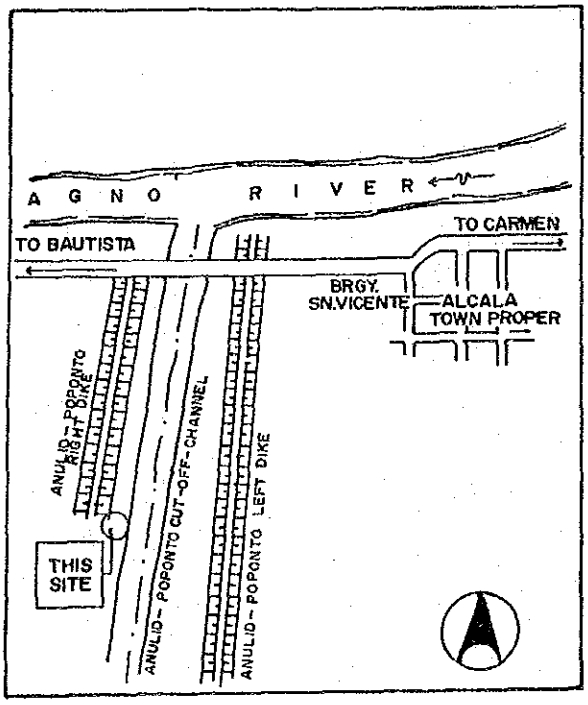
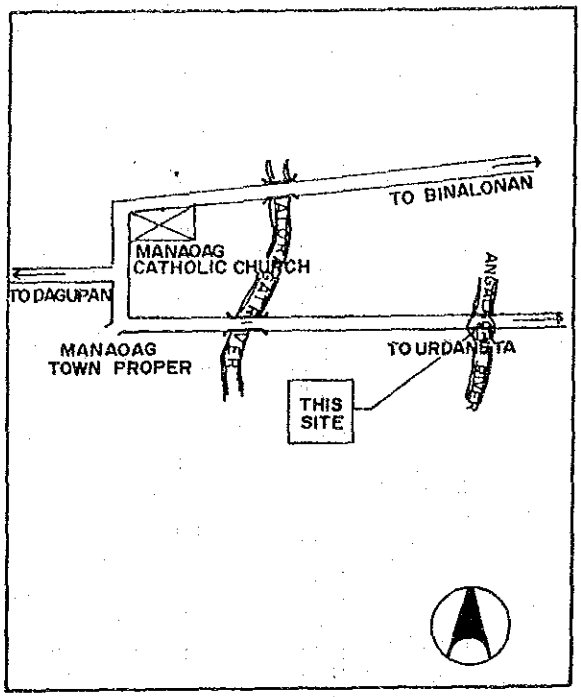
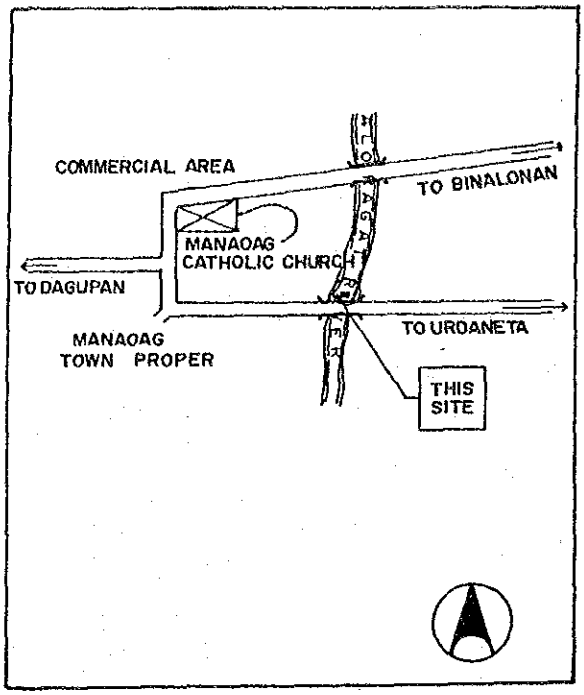


Fig. 3 LOCATION MAP OF NEW WATER LEVEL GAUGING STATIONS (2/3)

STATION : ANGALACAN



STATION : ALORAGAT



STATION : COJUANGCO BRIDGE

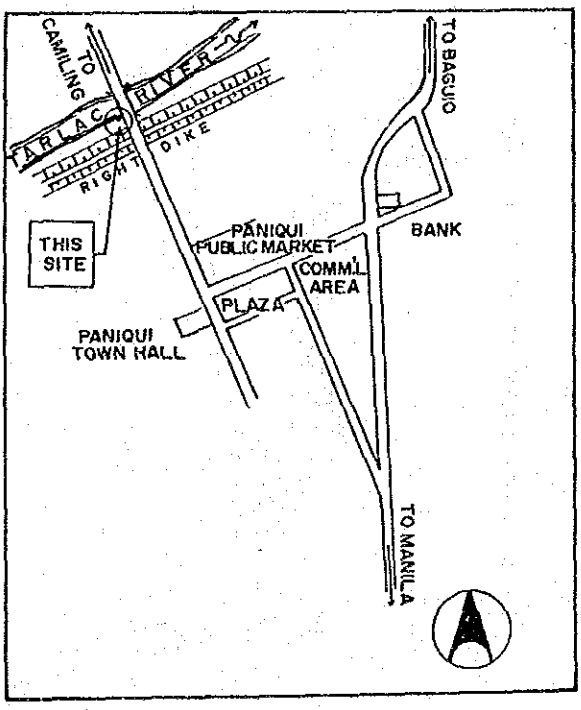


Fig. 3 LOCATION MAP OF NEW WATER LEVEL GAUGING STATIONS (3/3)

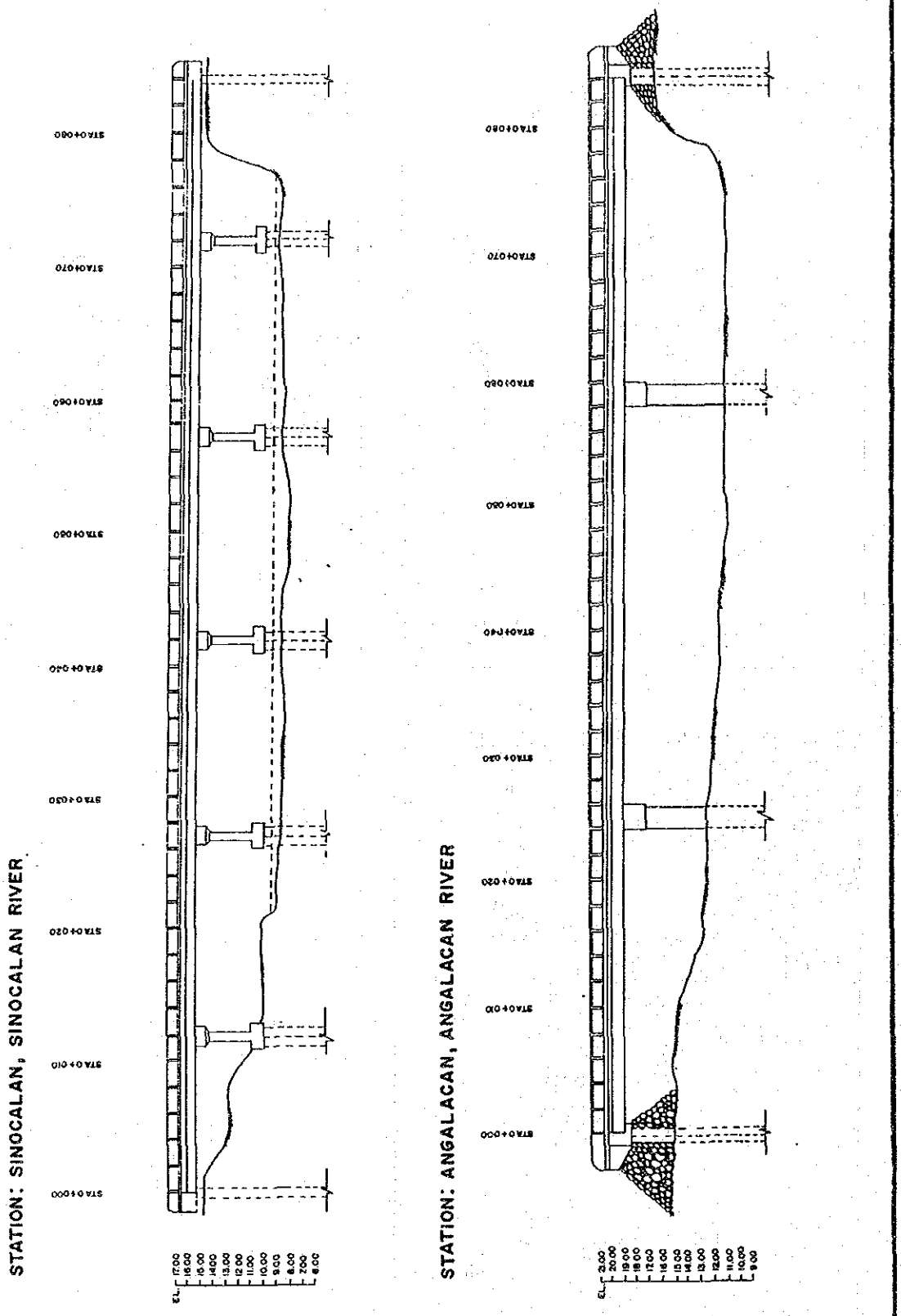


Fig. 4 RIVER CROSS-SECTION AT WATER LEVEL GAUGING STATIONS (1/4)

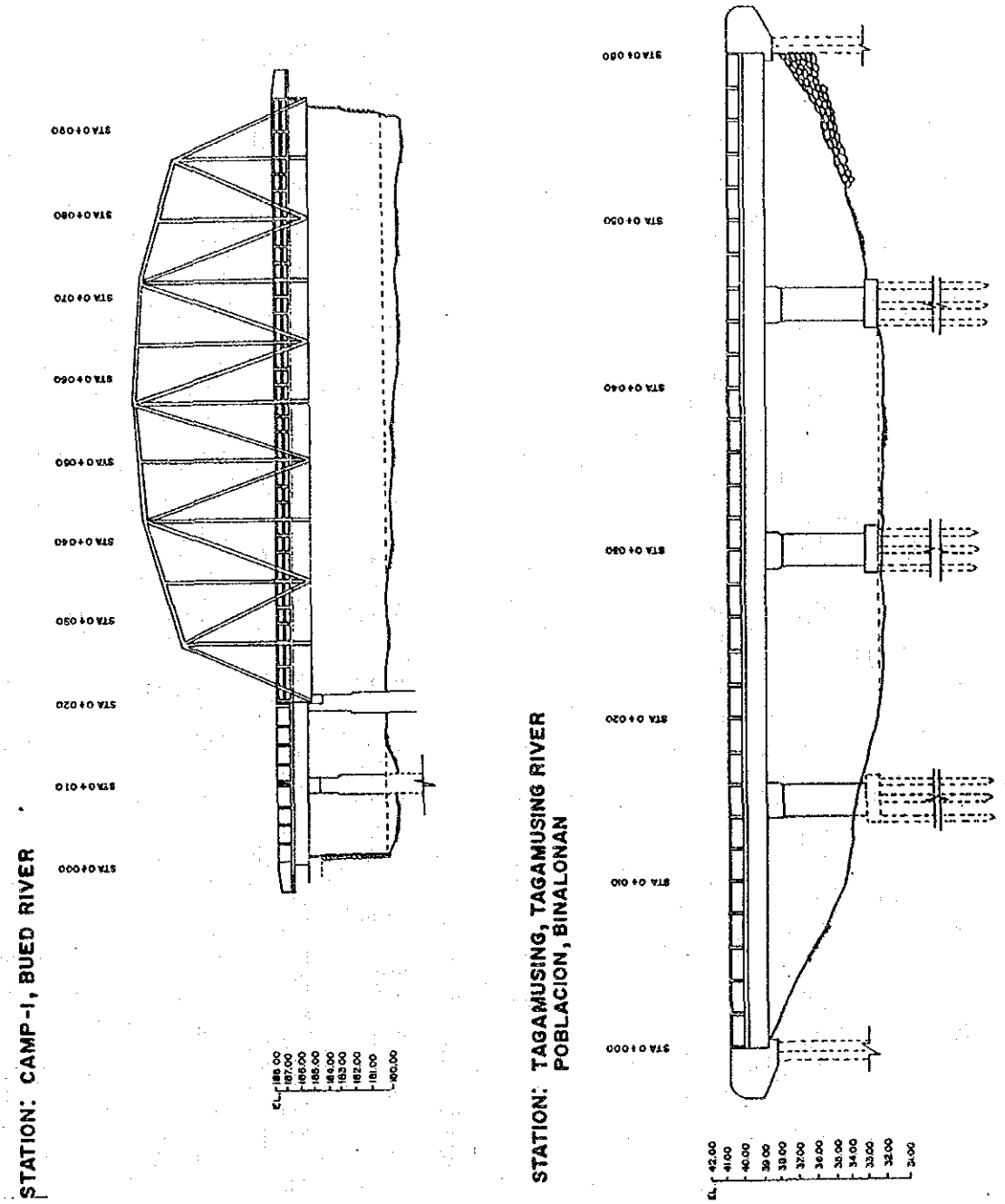


Fig. 4 RIVER CROSS-SECTION AT WATER LEVEL GAUGING STATIONS (2/4)

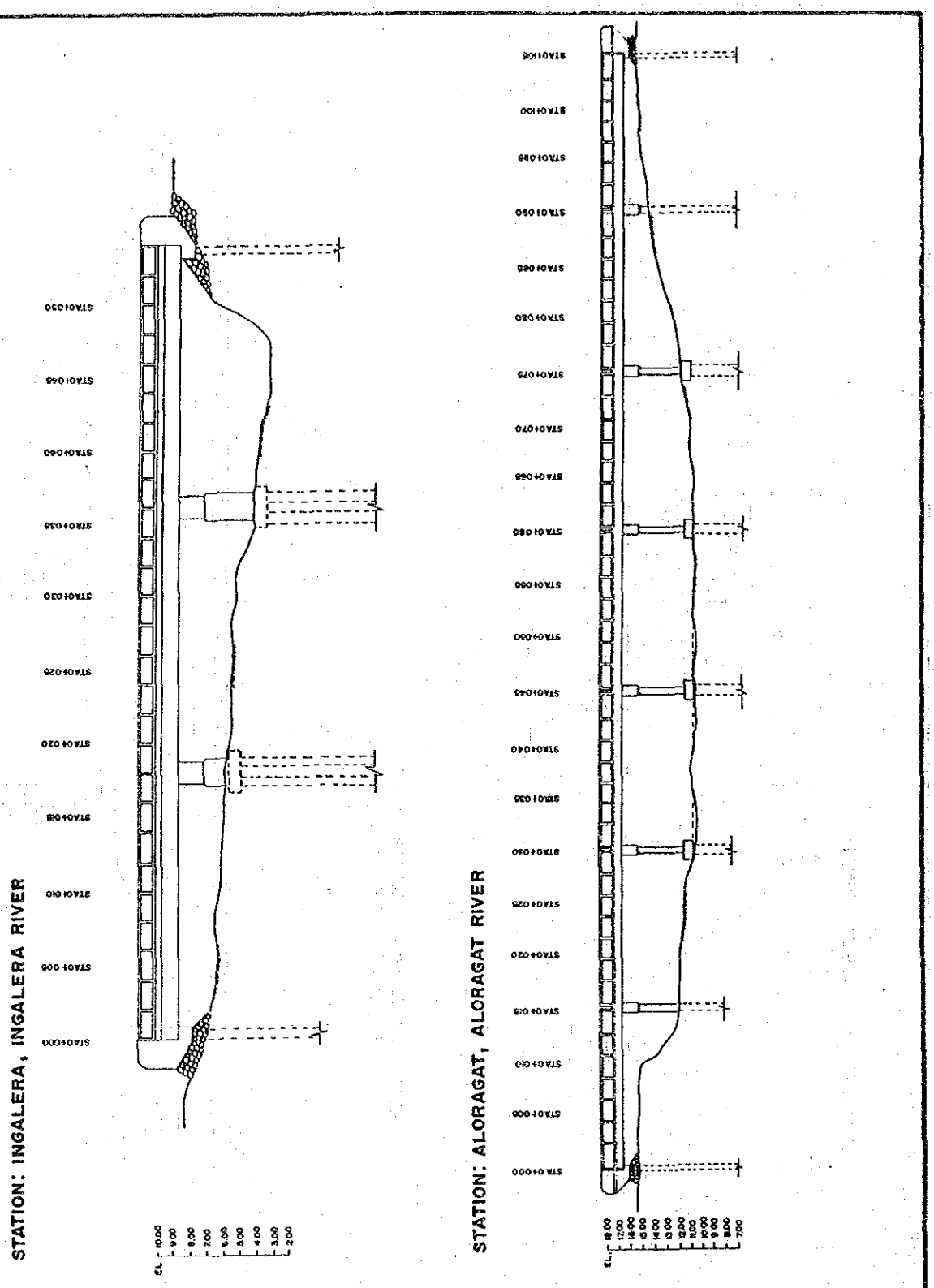


Fig. 4 RIVER CROSS-SECTION AT WATER LEVEL GAUGING STATIONS (3/4)

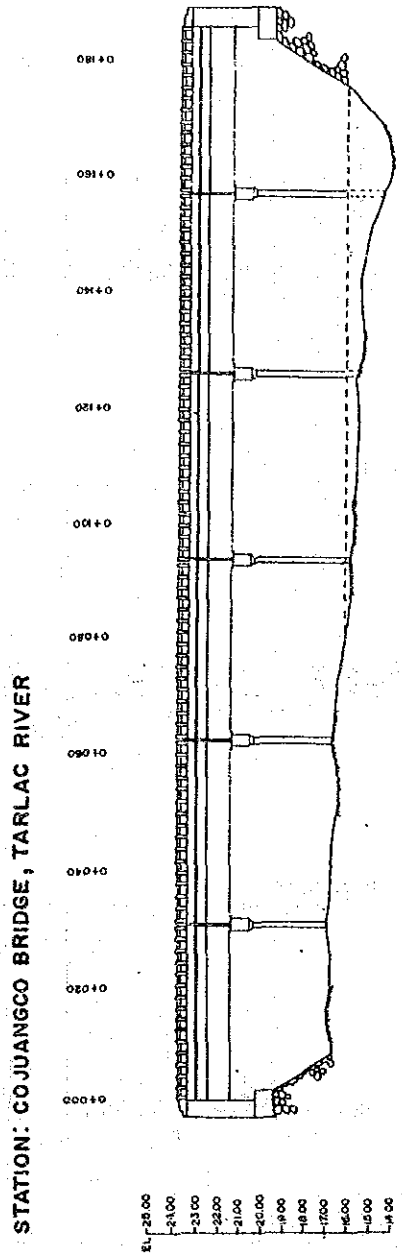


Fig. 4 RIVER CROSS-SECTION AT WATER LEVEL GAUGING STATIONS (4/4)

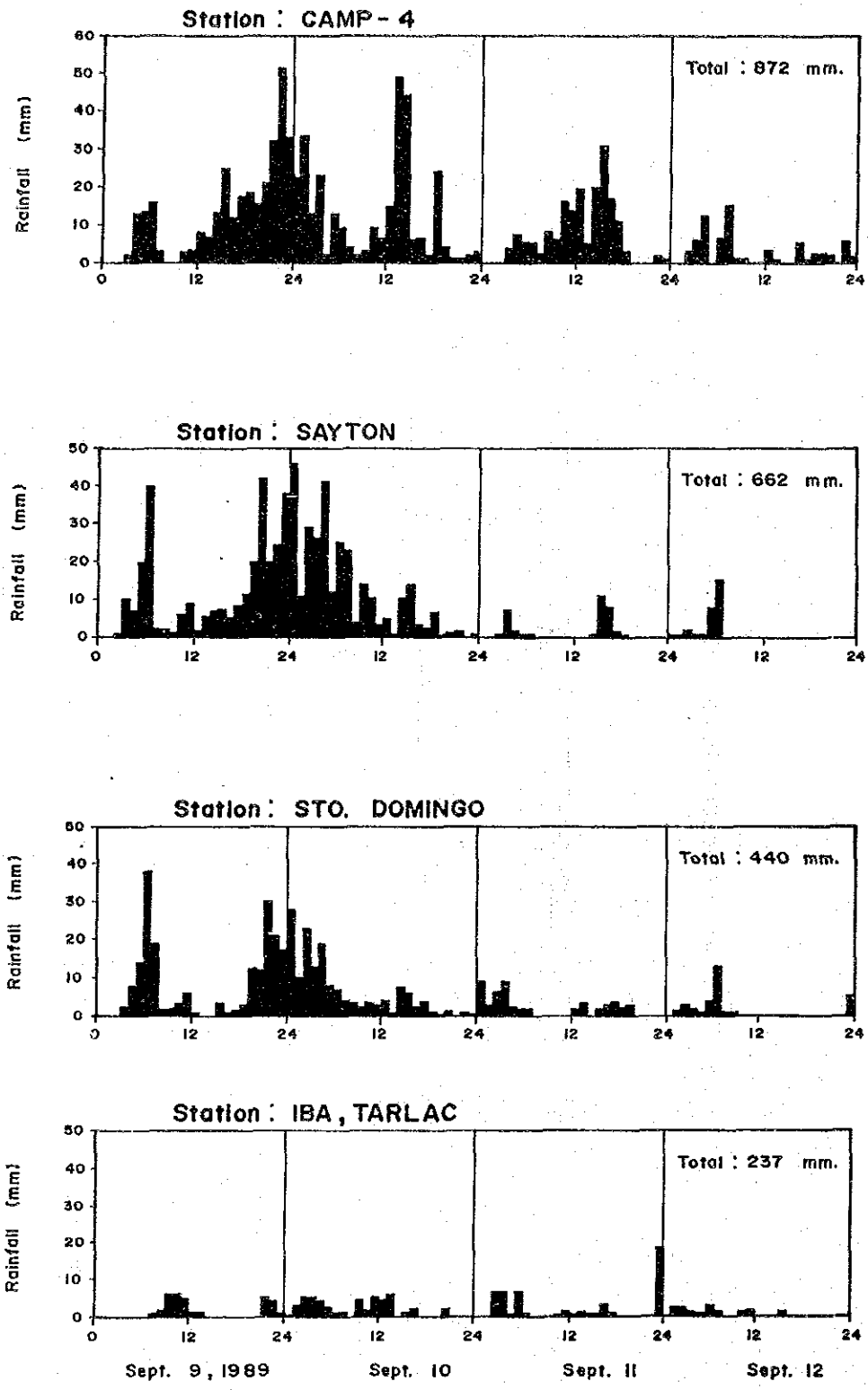


Fig. 5 OBSERVED RAINFALL HYETOGRAPHS DURING TYPHOON OPENG

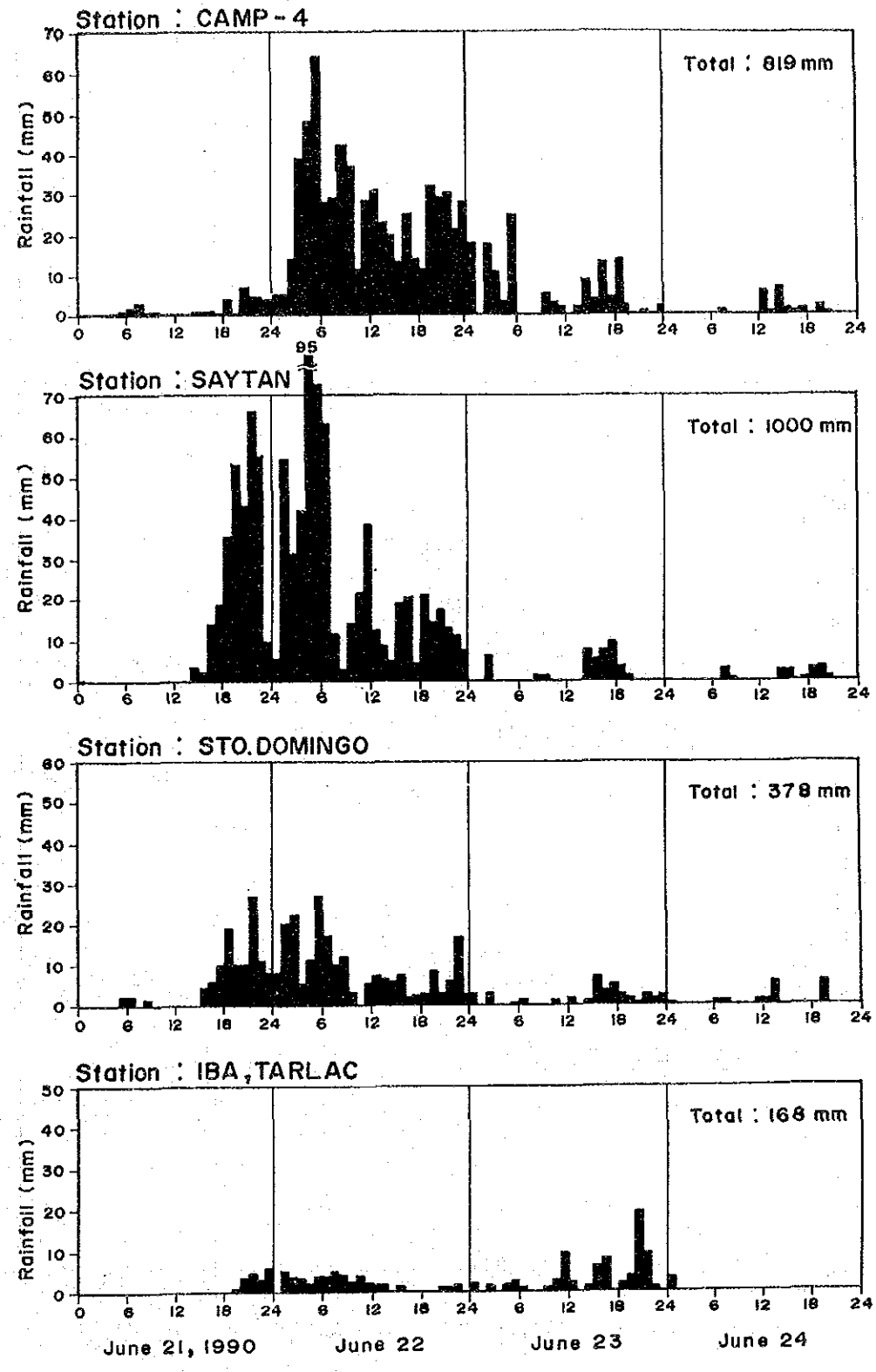


Fig. 6 OBSERVED RAINFALL HYETOGRAPHS DURING TYPHOON BISING

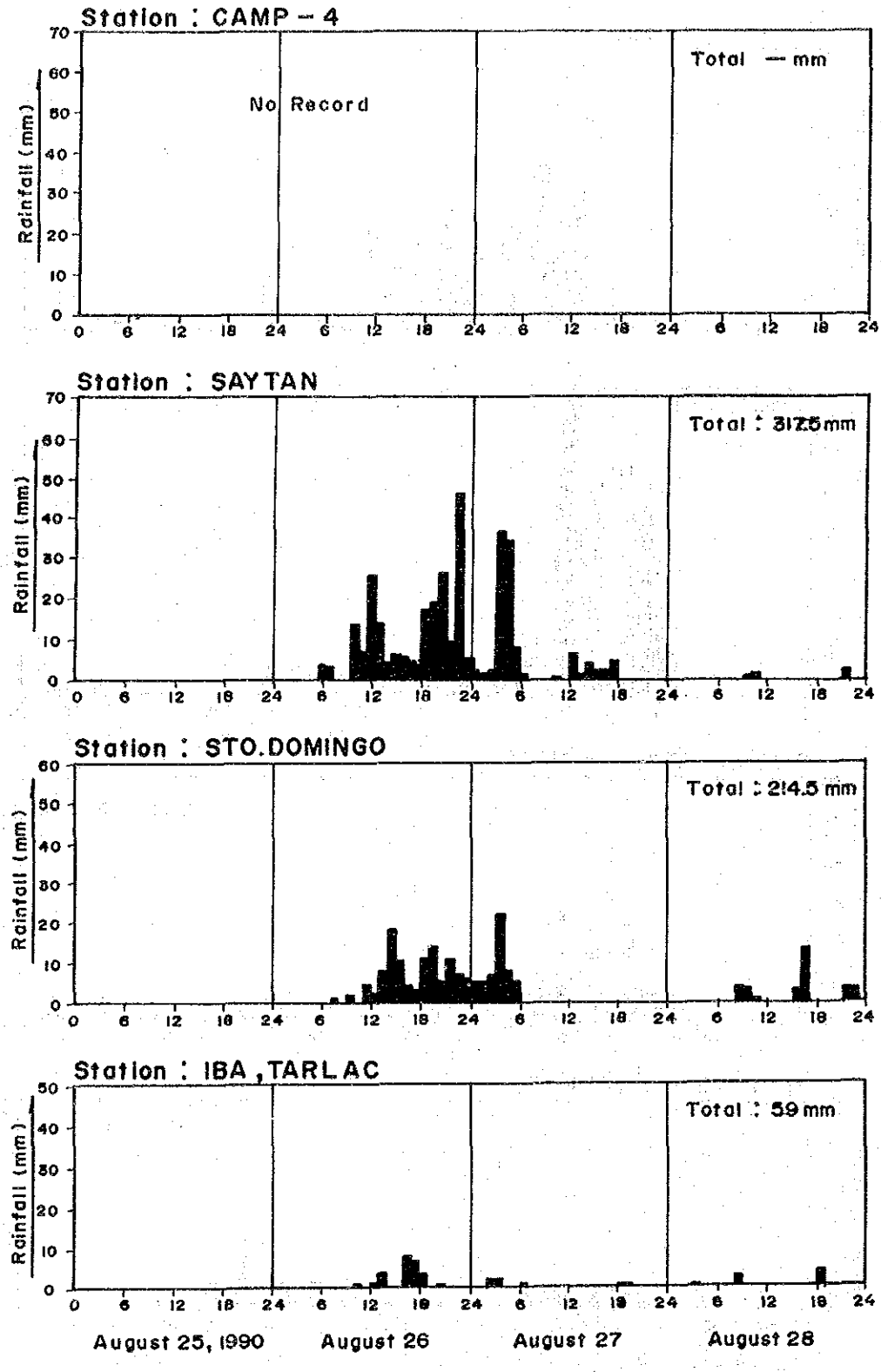


Fig. 7 OBSERVED RAINFALL HYETOGRAPHS DURING TYPHOON HELING

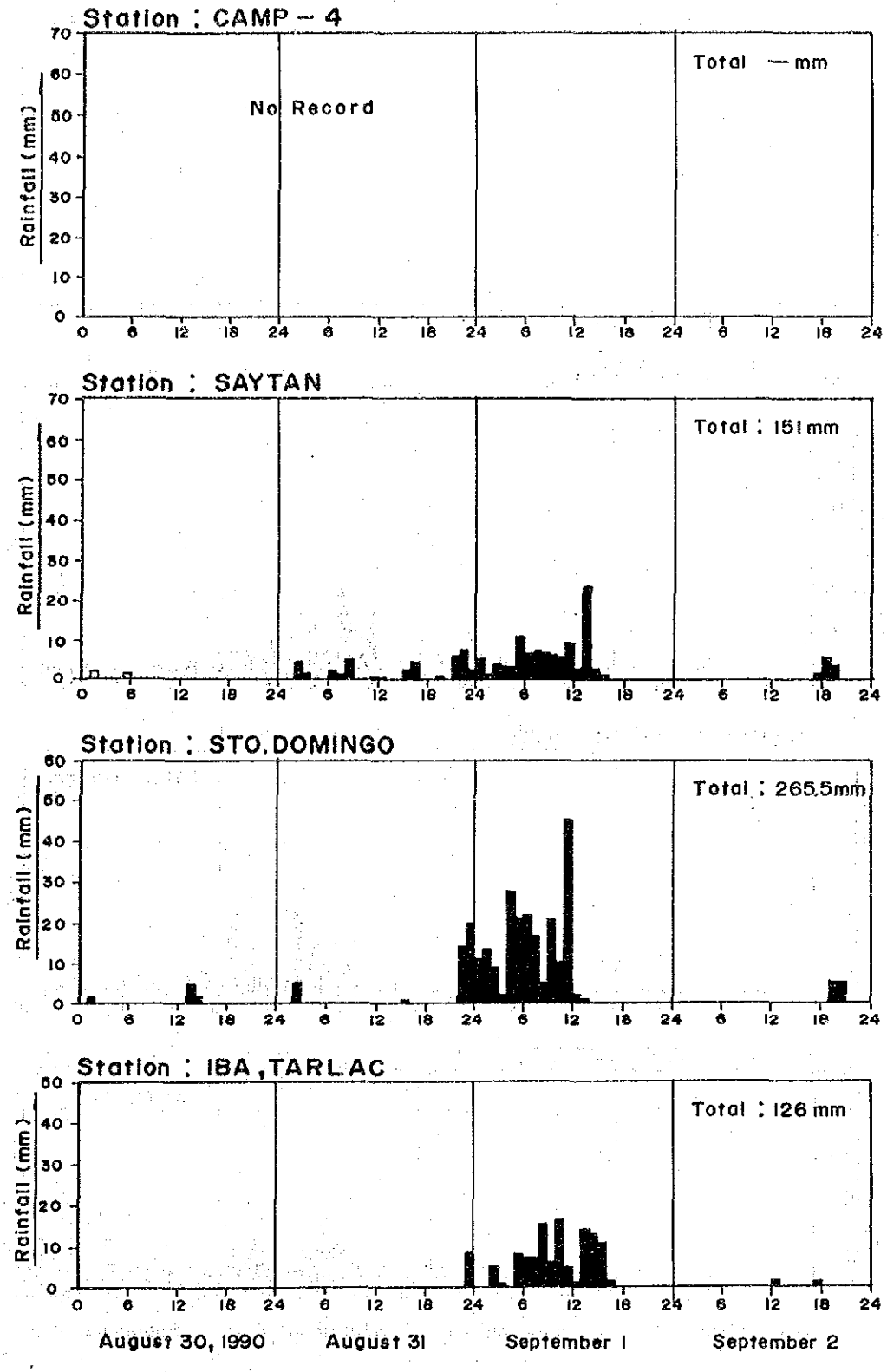


Fig. 8 OBSERVED RAINFALL HYETOGRAPHS DURING TYPHOON ILIANG

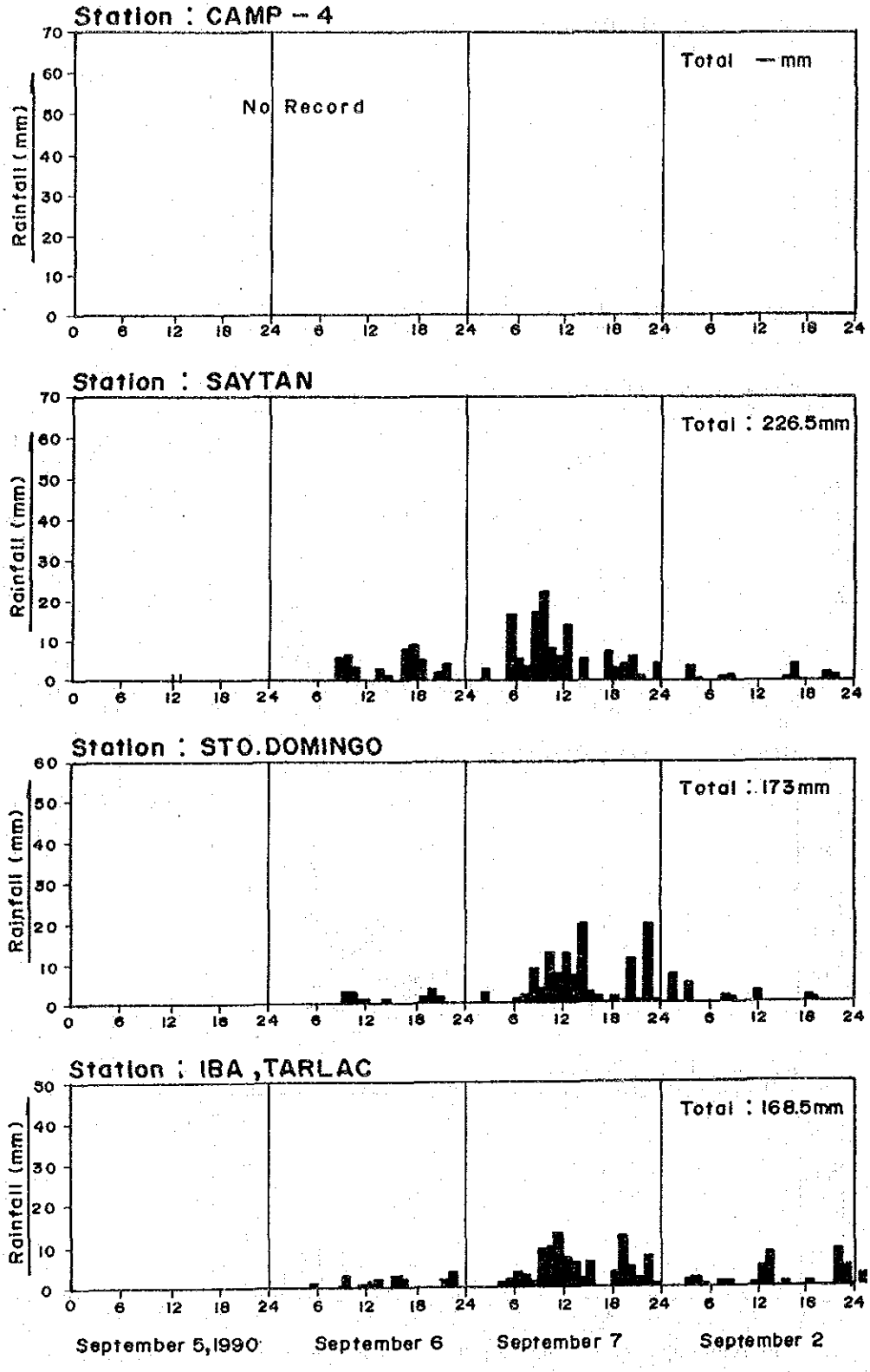


Fig. 9 OBSERVED RAINFALL HYETOGRAPHS DURING TYPHOON LOLENG

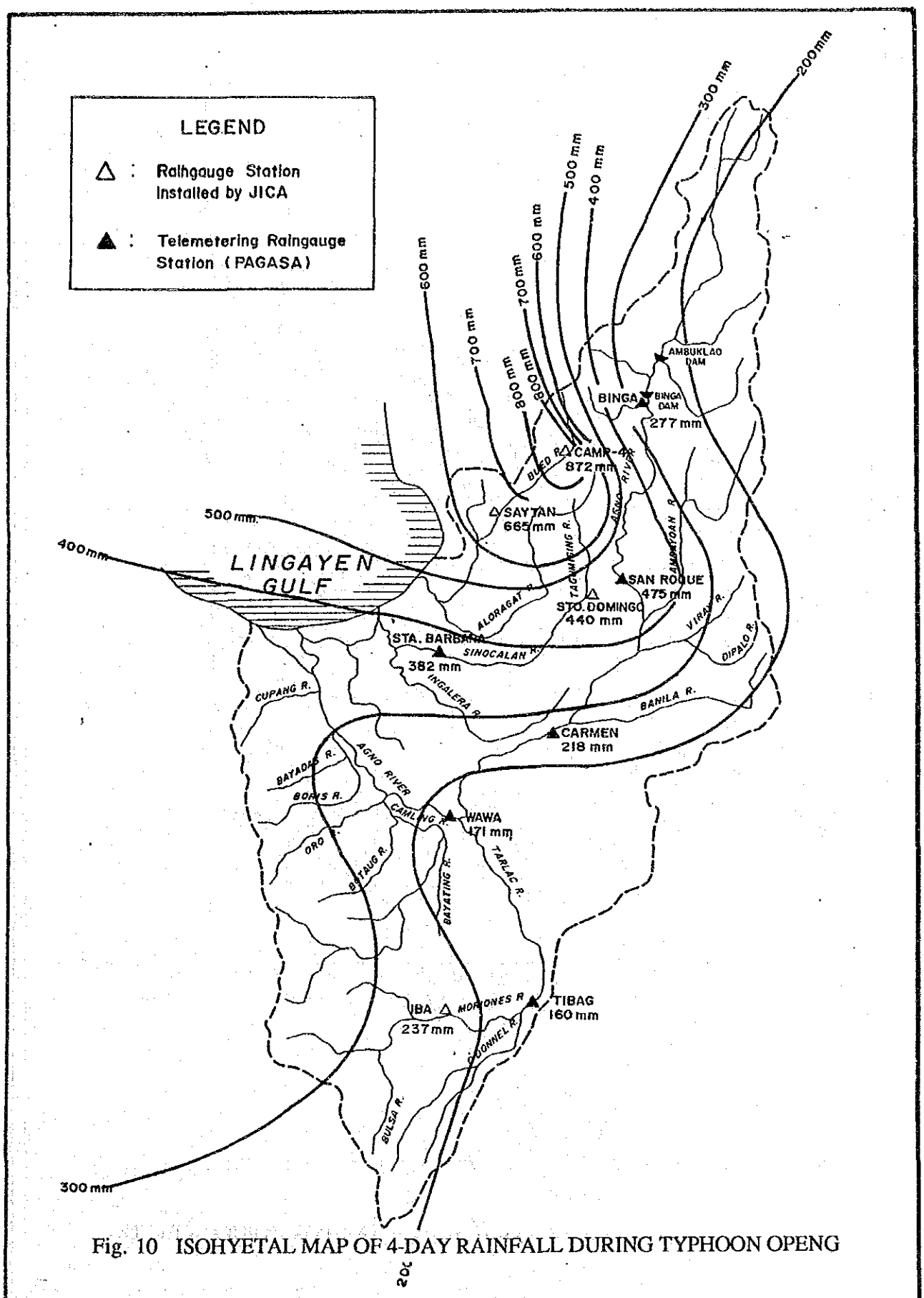


Fig. 10 ISOHYETAL MAP OF 4-DAY RAINFALL DURING TYPHOON OPENG

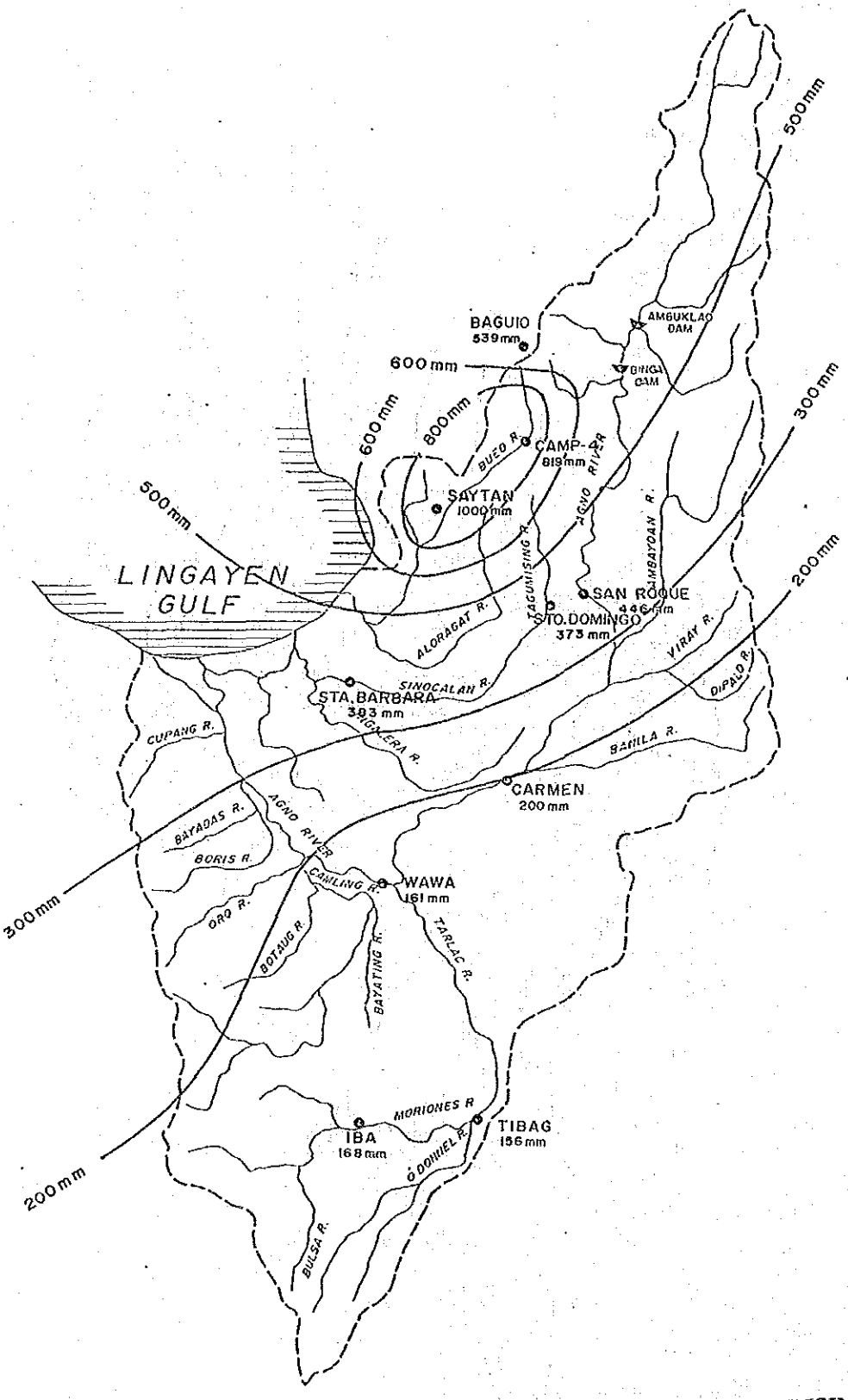


Fig. 11 ISOHYRTAL MAP OF 4-DAY RAINFALL DURING TYPHOON BISING

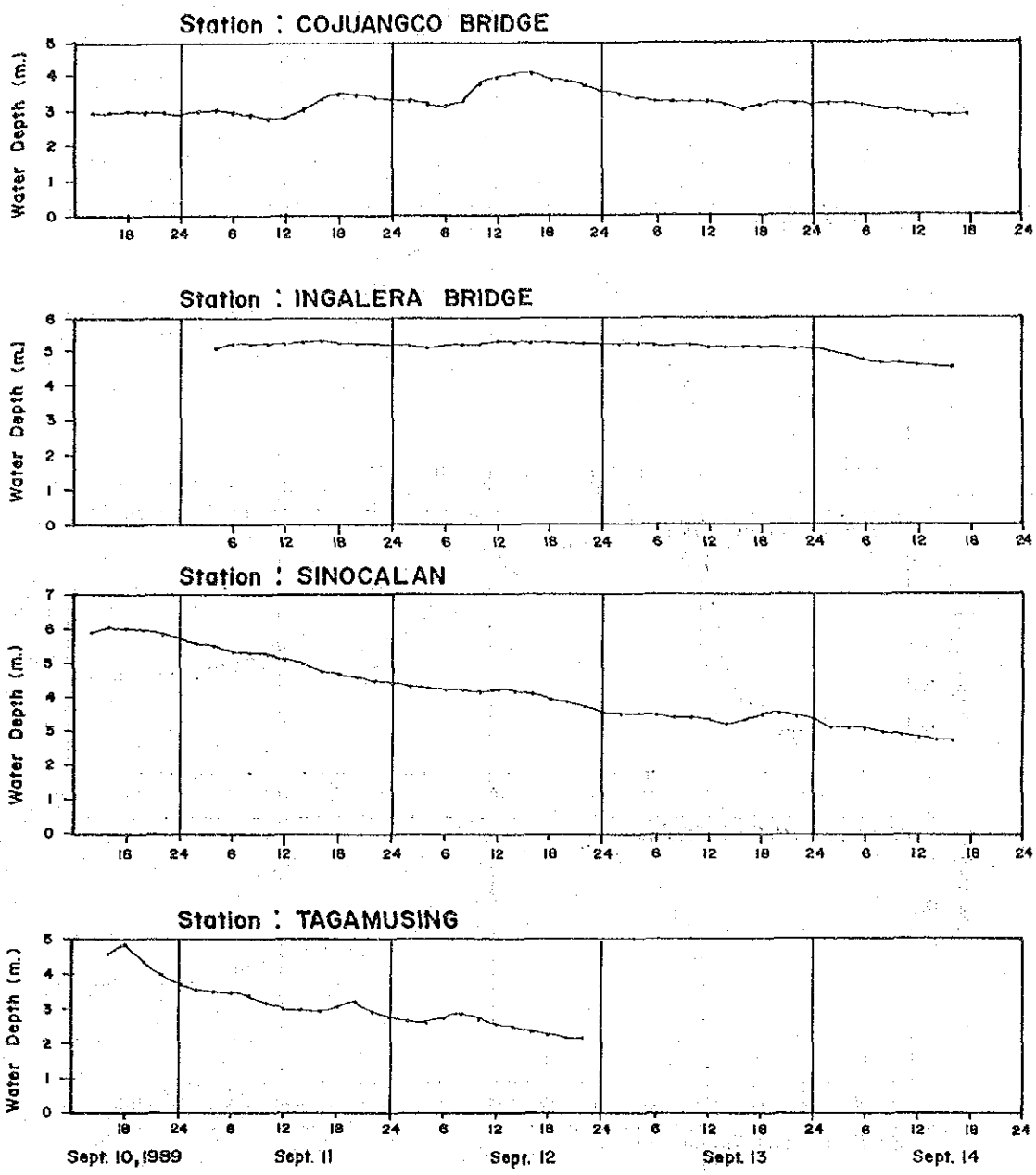


Fig. 12 OBSERVED WATER LEVEL HYDROGRAPHS DURING TYPHOON OPENG

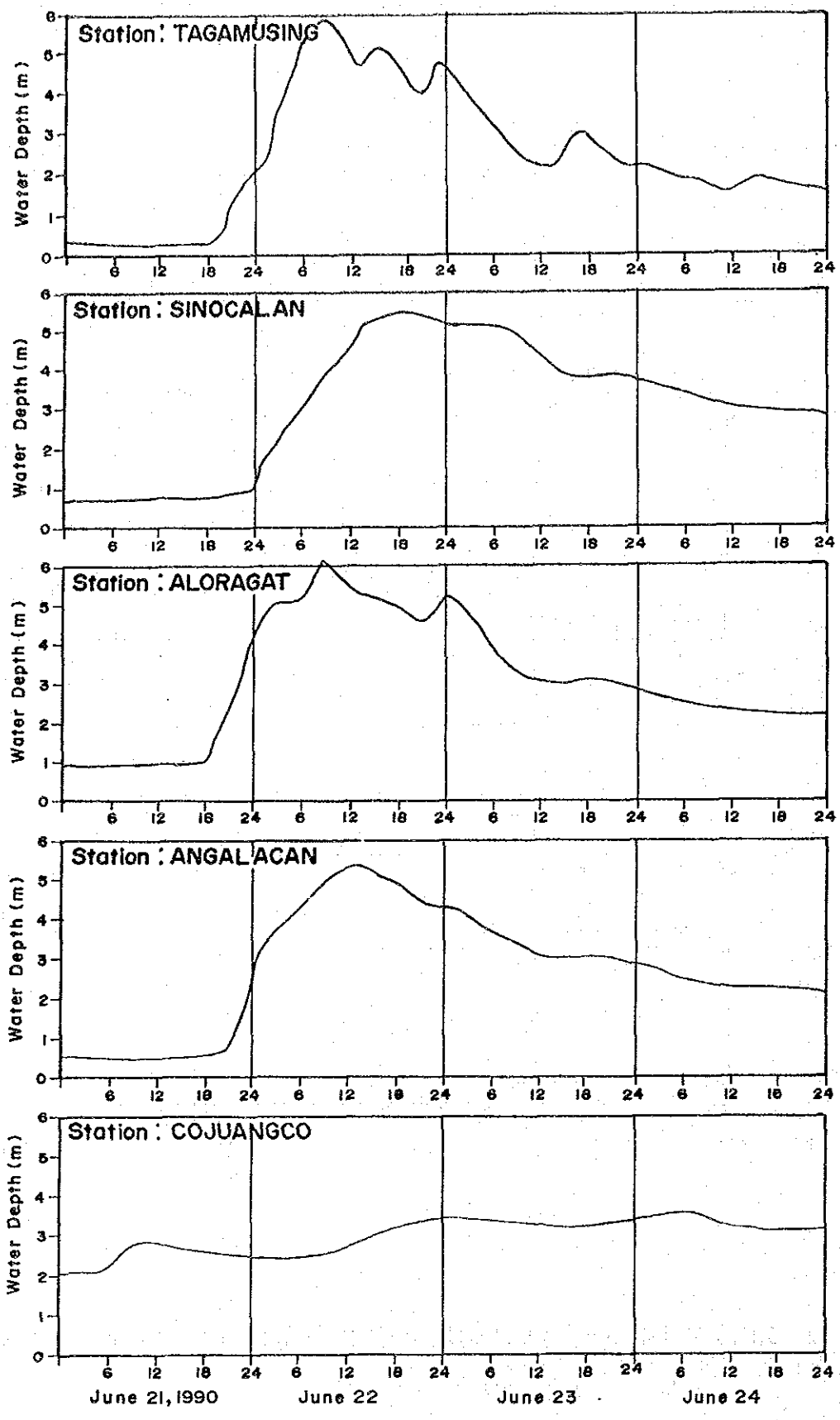


Fig. 13 OBSERVED WATER LEVEL HYDROGRAPHS DURING TYPHOON BISING

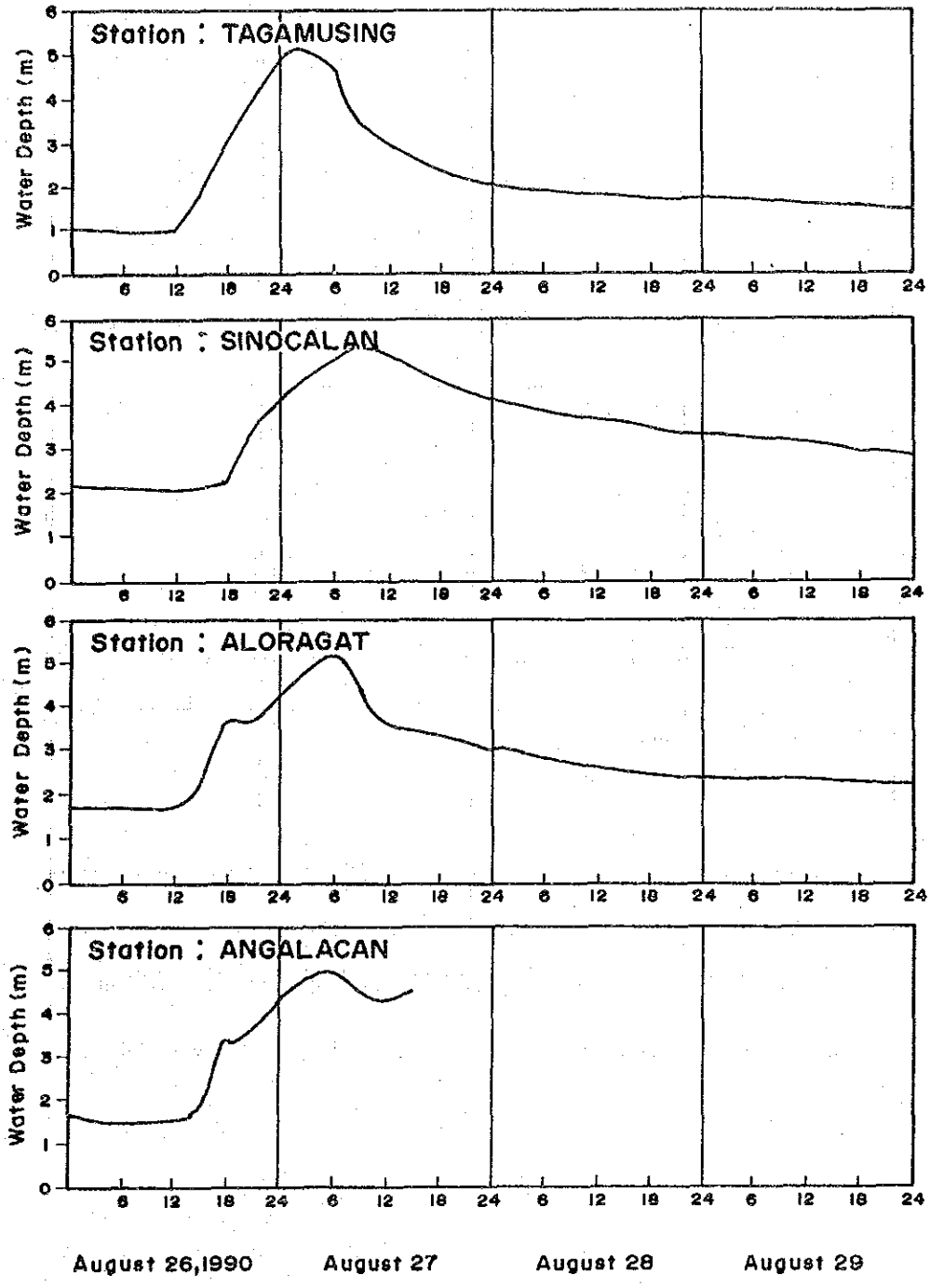


Fig. 14 OBSERVED WATER LEVEL HYDROGRAPHS DURING TYPHOON HELING

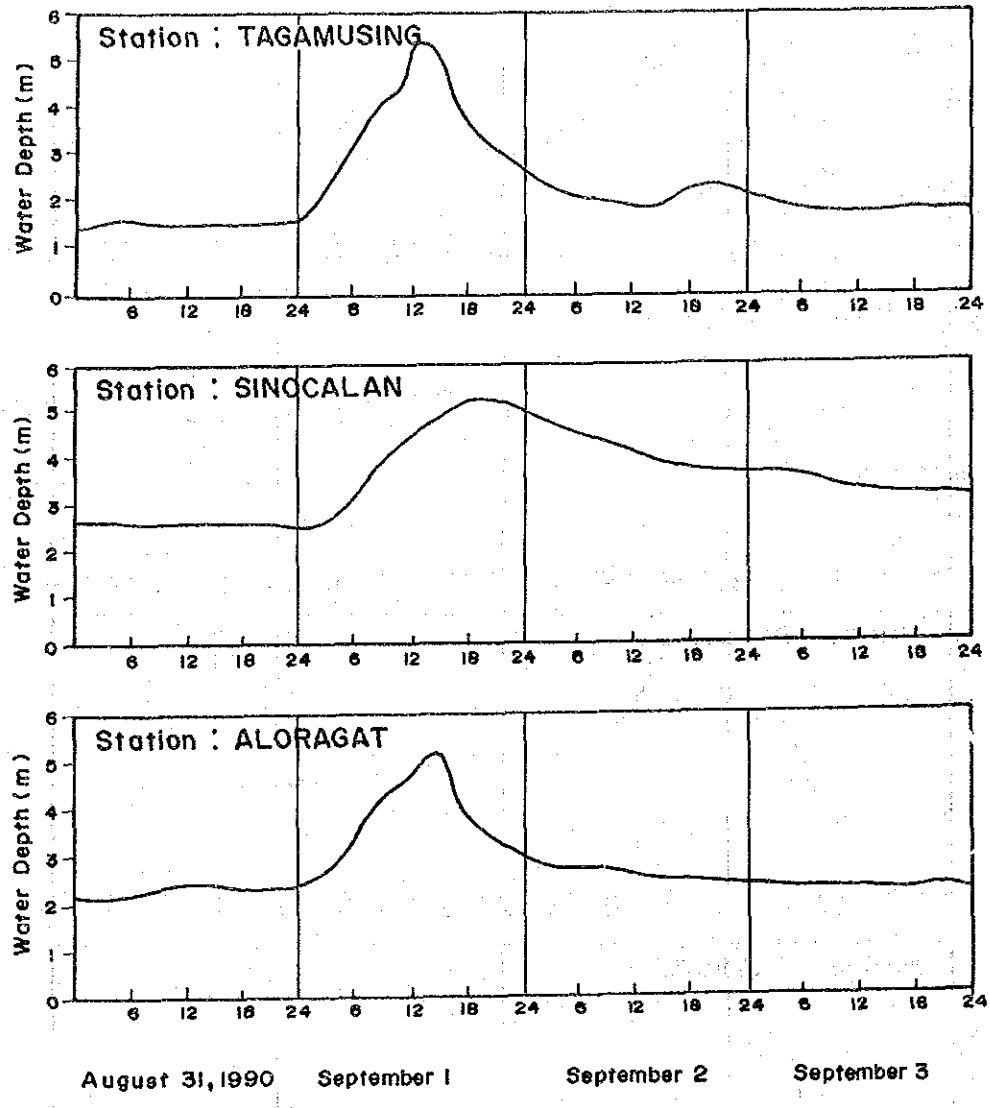


Fig. 15 OBSERVED WATER LEVEL HYDROGRAPHS DURING TYPHOON ILIANG

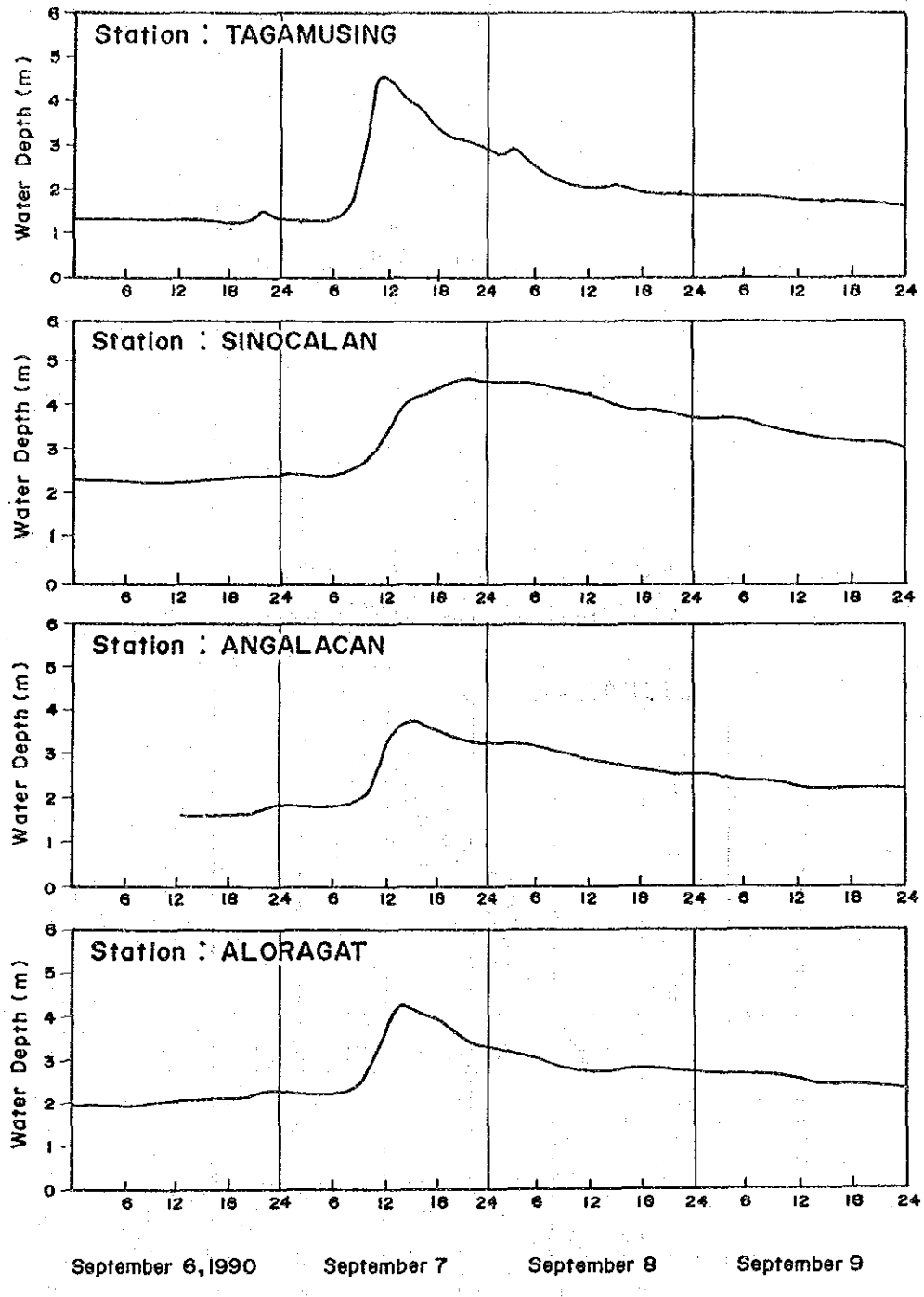


Fig. 16 OBSERVED WATER LEVEL HYDROGRAPHS DURING TYPHOON LOLENG

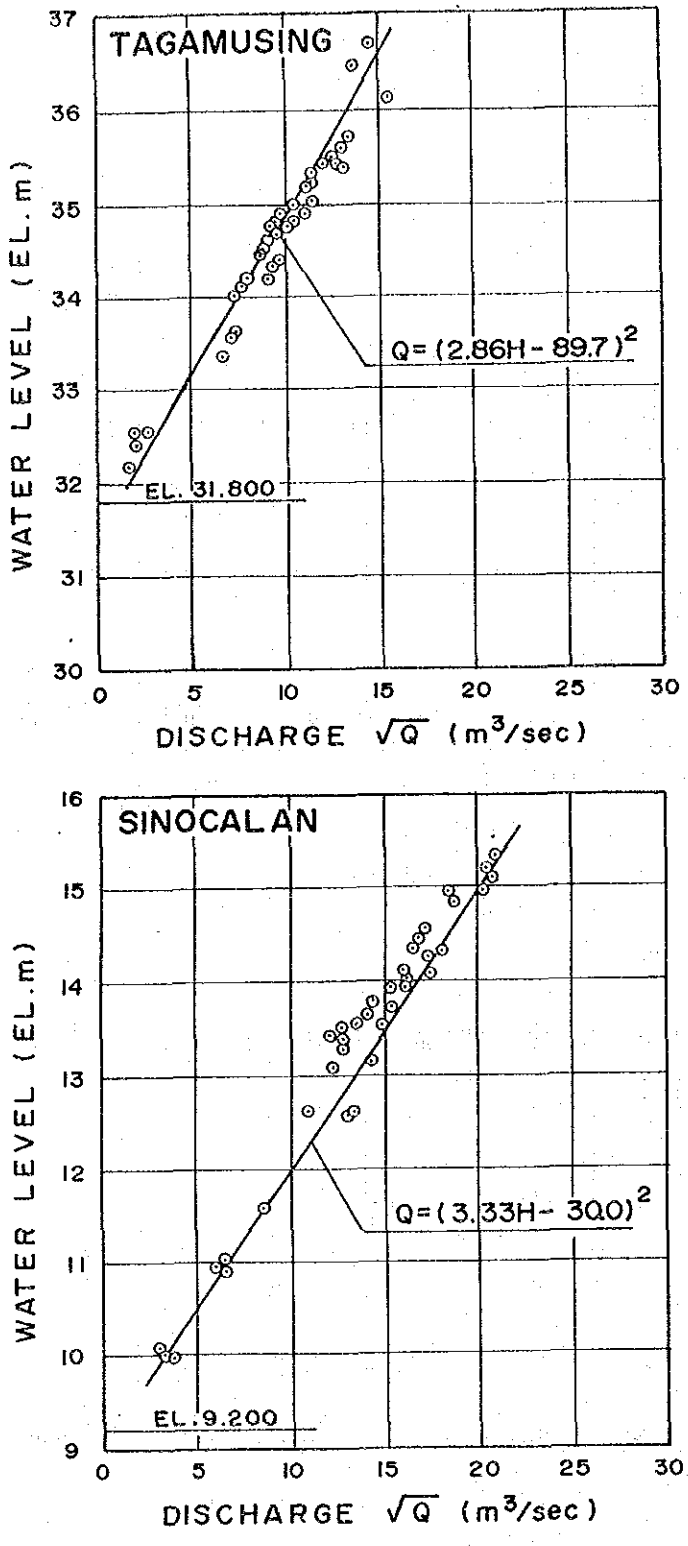
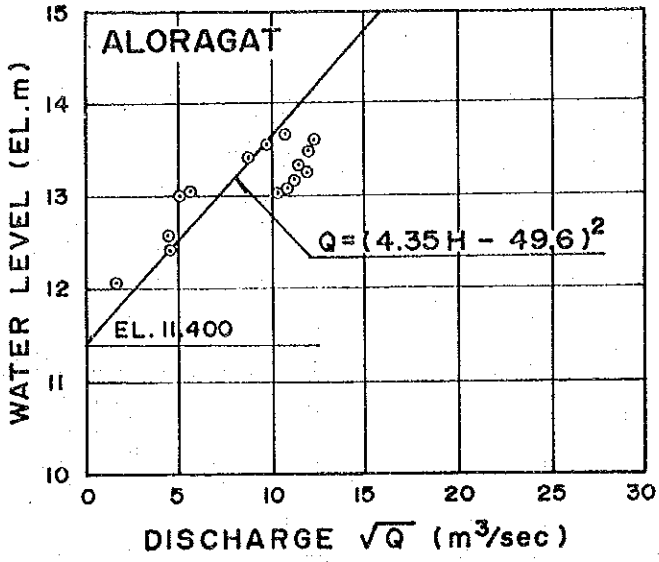


Fig. 17 DISCHARGE RATING CURVES AT NEW GAUGING STATIONS (1/3)



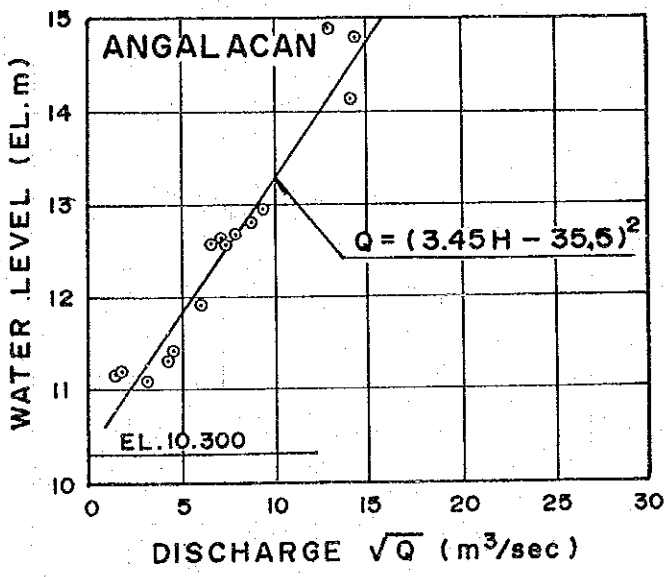


Fig. 17 DISCHARGE RATING CURVES AT NEW GAUGING STATIONS (2/3)

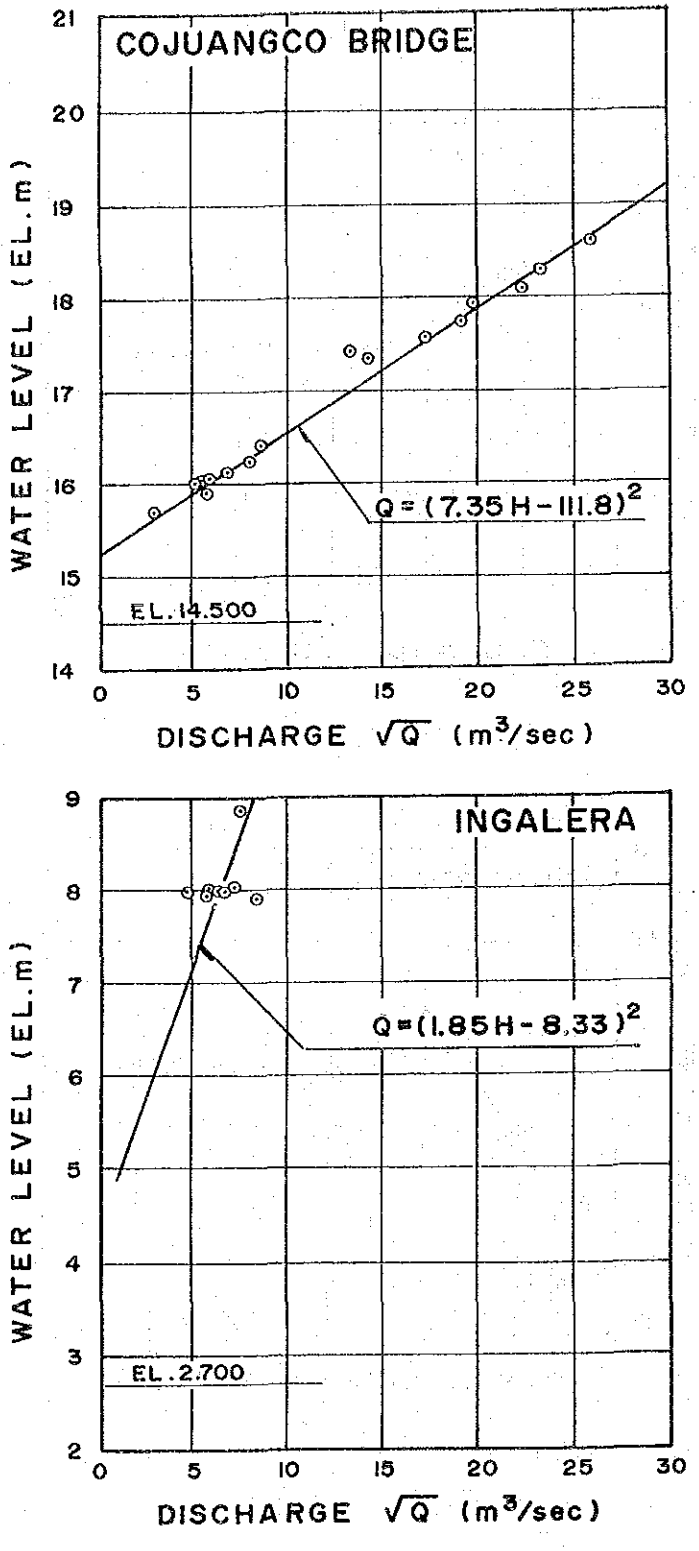


Fig. 17 DISCHARGE RATING CURVES AT NEW GAUGING STATIONS (3/3)

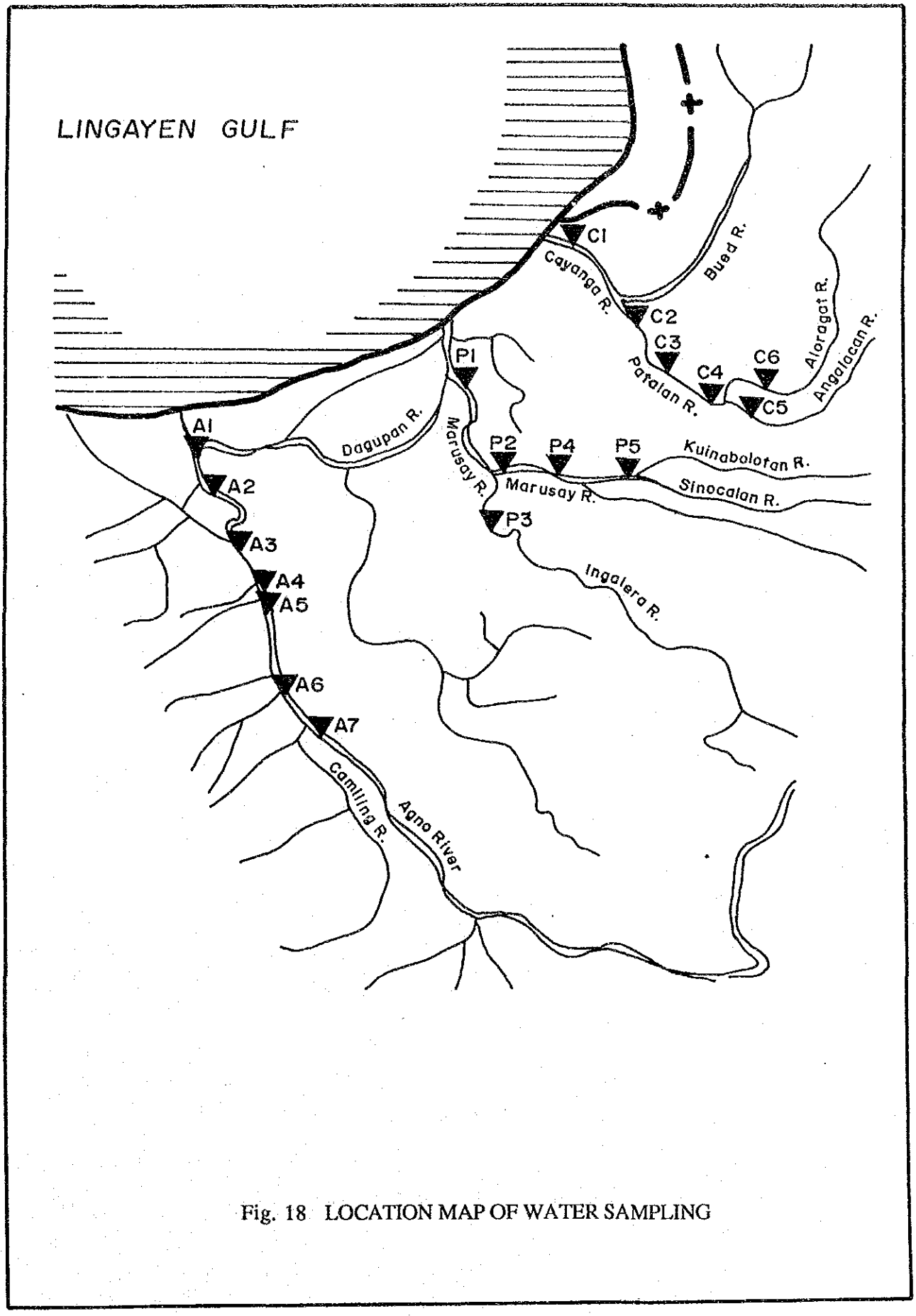
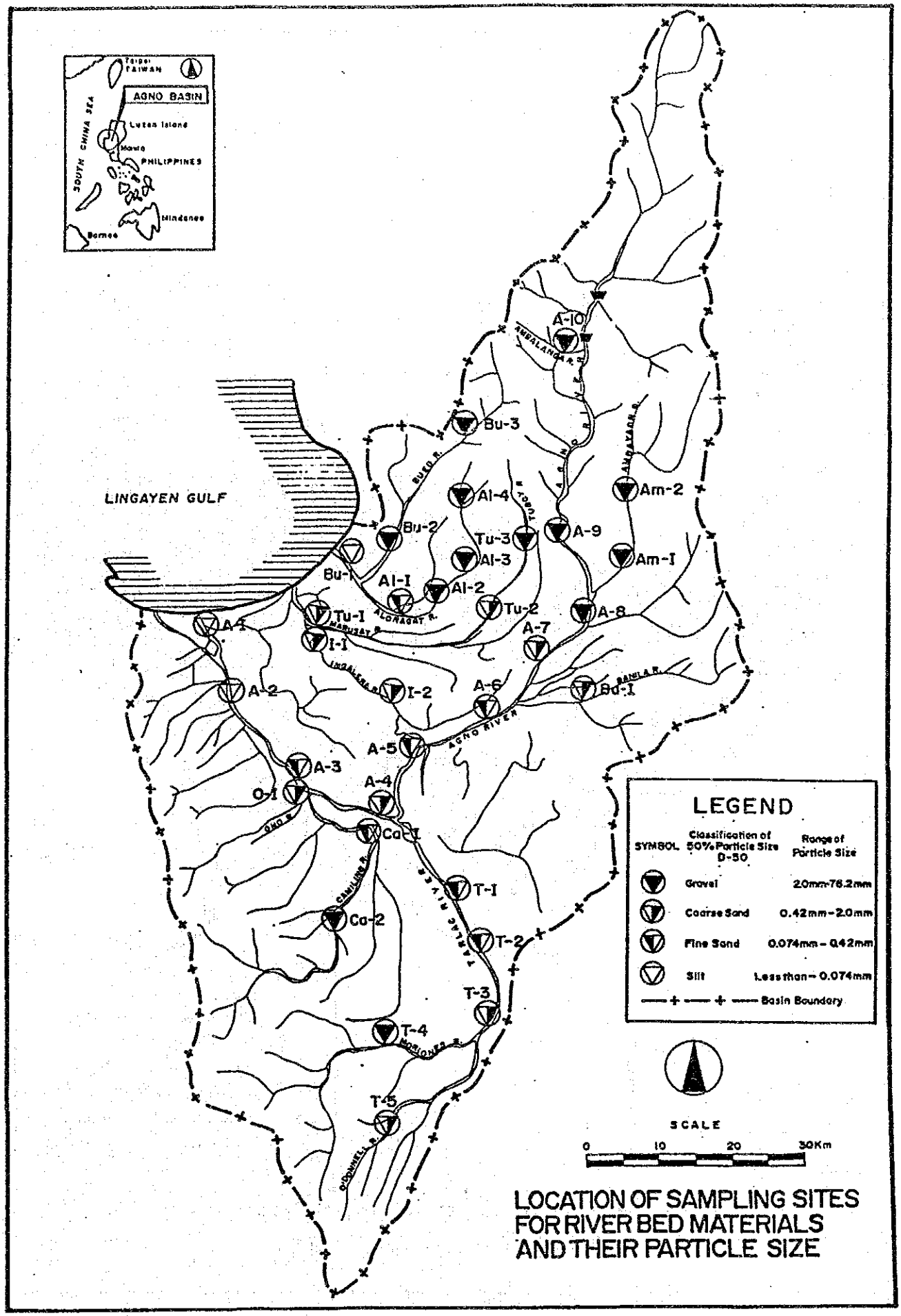
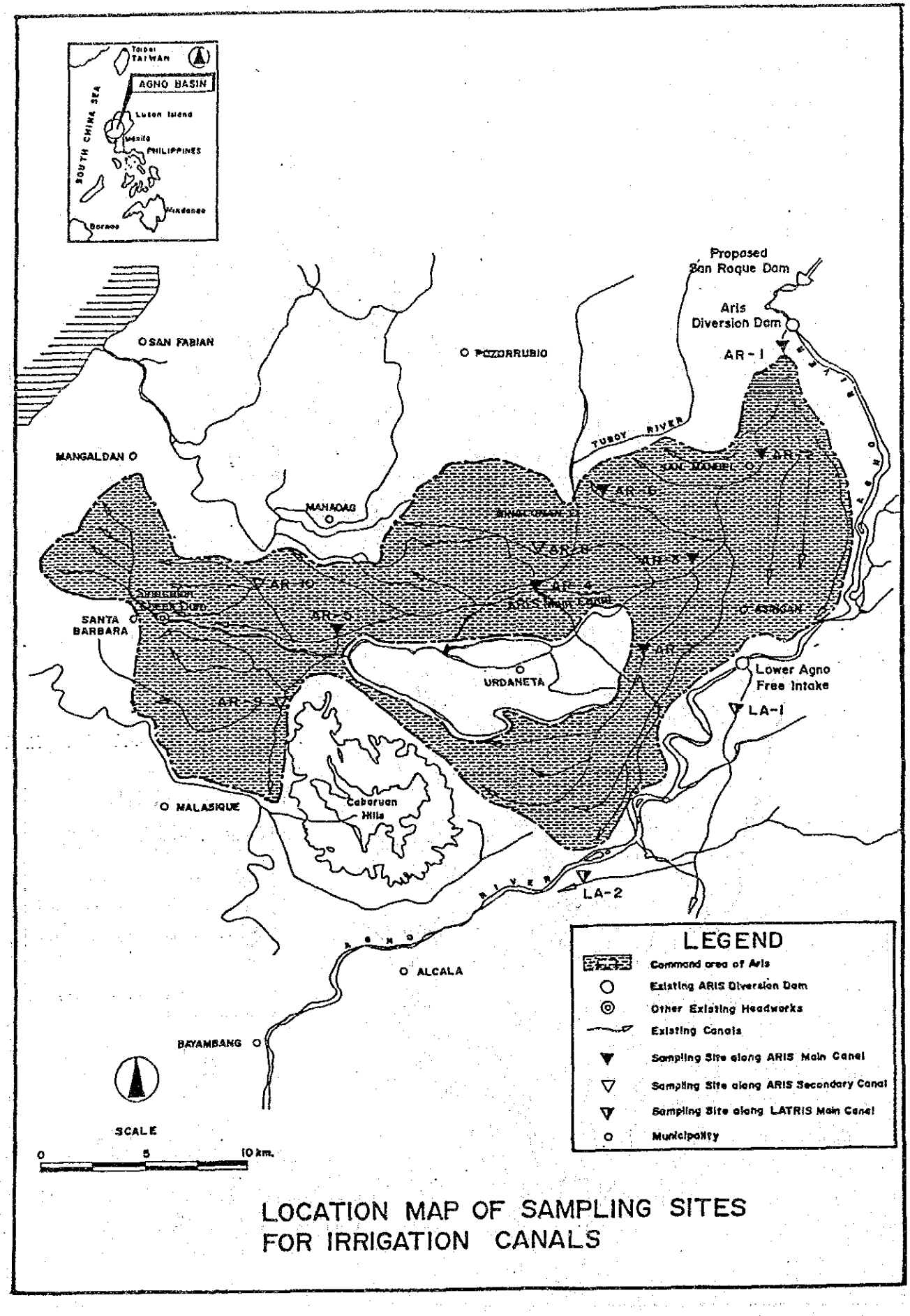


Fig. 18 LOCATION MAP OF WATER SAMPLING

2.
GRADATION AND SPECIFIC GRAVITY TEST

LIST OF GRADATION AND SPECIFIC GRAVITY TEST


AGNO BASIN
SOUTH CHINA SEA
PHILIPPINES
Luzon Island
Mindanao
Borneo
LINGAYEN GULF
A-10
Bu-3
Bu-2
Bu-1
Al-4
Al-3
Al-2
Al-1
Tu-3
Tu-2
Tu-1
A-9
A-8
A-7
A-6
A-5
A-4
A-3
A-2
A-1
Am-2
Am-1
I-1
I-2
Bd-1
O-1
Ca-1
Ca-2
T-1
T-2
T-3
T-4
T-5
AGNO RIVER
TARLAC RIVER
LEGEND
SYMBOL
Classification of 50% Particle Size D-50
Range of Particle Size
Gravel
2.0mm-76.2mm
Coarse Sand
0.42mm-2.0mm
Fine Sand
0.074mm-0.42mm
Silt
Less than-0.074mm
Basin Boundary
SCALE
0
10
20
30Km
LOCATION OF SAMPLING SITES FOR RIVER BED MATERIALS AND THEIR PARTICLE SIZE



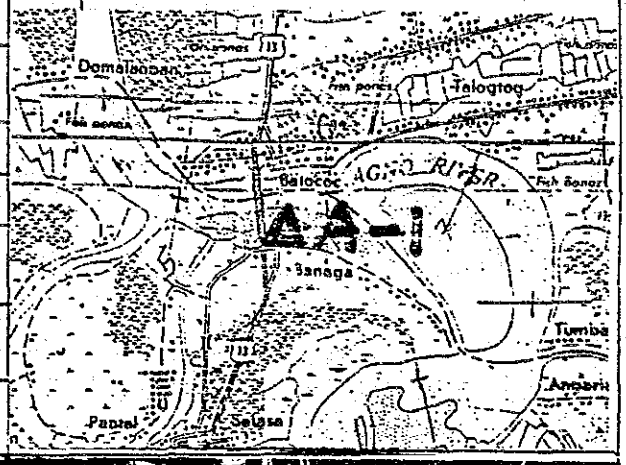
LOCATION MAP OF SAMPLING SITES
FOR IRRIGATION CANALS

DATA SHEET (1/4) FOR RIVER BED MATERIALS SURVEY

1. SAMPLING

Sample No.	A-1	
River / Irrigation Canal	AGNO RIVER	
Location	Banaga, Bugallon Pangasinan	
Date of Sampling	June 1, 1989	
Sampled by	M. KATAYAMA	
Condition of Sampling of Site	Breadth (Bank to Bank)	500 m
	Bed Materials	Silt, Clay
	Others	

Site Location Map
(Scale 1/50,000)



Discription of Sample

Average Size of Armour Coats	mm

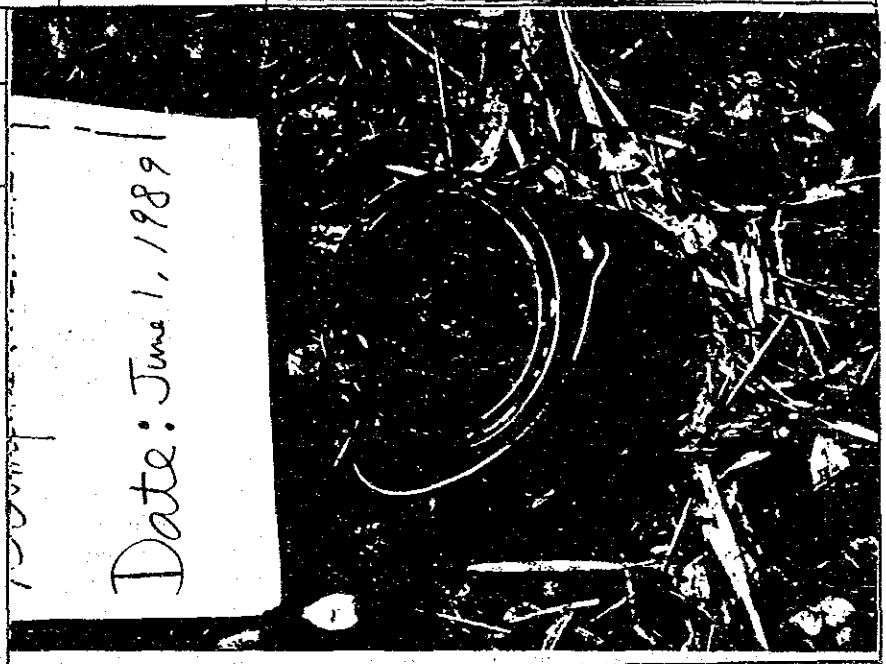
Characteristics Observed by the Eyes

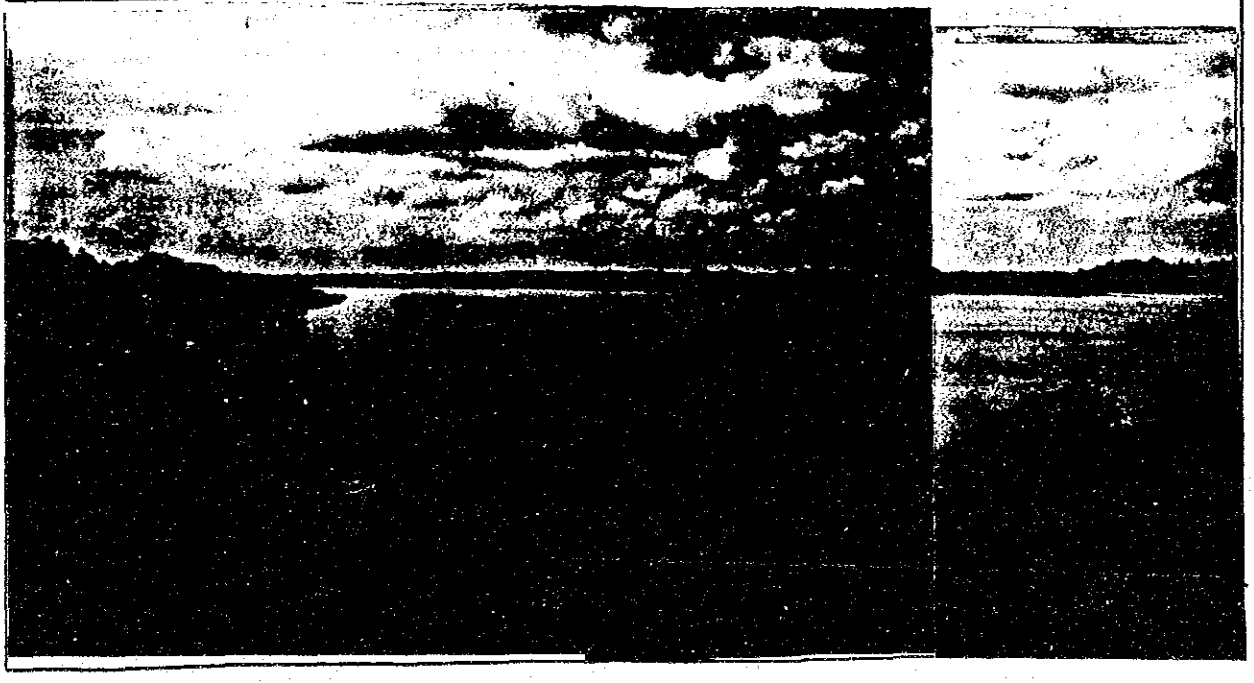
1) Materials : Silt, Clay

2) Shape :

3) Colour : Black

4) Others :





Republic of the Philippines
Department of Public Works and Highways
BUREAU OF RESEARCH AND STANDARDS
Sta. Lucia St., Intramuros, Metro Manila

BRS Form No. 12
Nov. 1982
Lab. Report No. 8-41-89

TEST REPORT ON SOIL — 23 August 1989

Project Agno River Basin Flood Control Study (Number) — Pangasinan (City/Province)

Kind of material River Bed Sample

Sample identification A-1 — Quantity represented —

Sampled at —

Original source Ano River

Supplied by JICA/DPWH Study Team

Proposed use Sedimentation Analysis — Spec's. Item No. —

Sampled by Mr. Katayama, Sediment Analyst (Name and designation) — Not stated (Office) — not stated (Date)

Submitted by E. Fano, not stated (Name and designation) — PMO-Major Flood Control Proj. (Office) — 8-2-89 (Date received)

Lab. No. 5936-89 (Paid under OR # 8733139)

TEST RESULTS

Particle Size Analysis:

Sieve Analysis (% Passing)

Sieve Size	
4.75 mm	100
2.00 mm	99
0.425 mm	99
0.075 mm	91

Hydrometer Analysis (%)

Smaller than	
0.05 mm	66
0.02 mm	24
0.005 mm	6
0.002 mm	3
0.001 mm	2
Liquid Limit	34
Plasticity Index	4
Specific Gravity	2.69

Checked by:

PURA V. REVILLAME
Chief, Materials Testing Division

ATTESTED:

JOSE H. ESPIRITU
Director

Tested by:
N. Abarca
A. Ponce de Leon
L. de Jesus
C. Pinto
B. Villanueva

Witnessed by:
M. Marquez

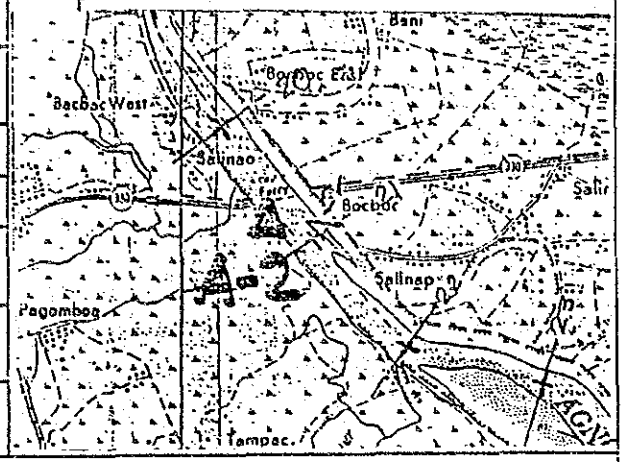
/lma

DATA SHEET (1/4) FOR RIVER BED MATERIALS SURVEY

1. SAMPLING

Sample No.	A-2		
River / Irrigation Canal	AGNO RIVER		
Location	Salinap - Bocboc Aguilar, Pangasinan		
Date of Sampling	June 1, 1989		
Sampled by	M. KATAYAMA		
Condition of Sampling of Site	Breadth (Bank to Bank)	500	m
	Bed Materials	Silt	
	Others		

Site Location Map
(S=1/50,000)



Discription of Sample

Average Size of Armour Coats	mm

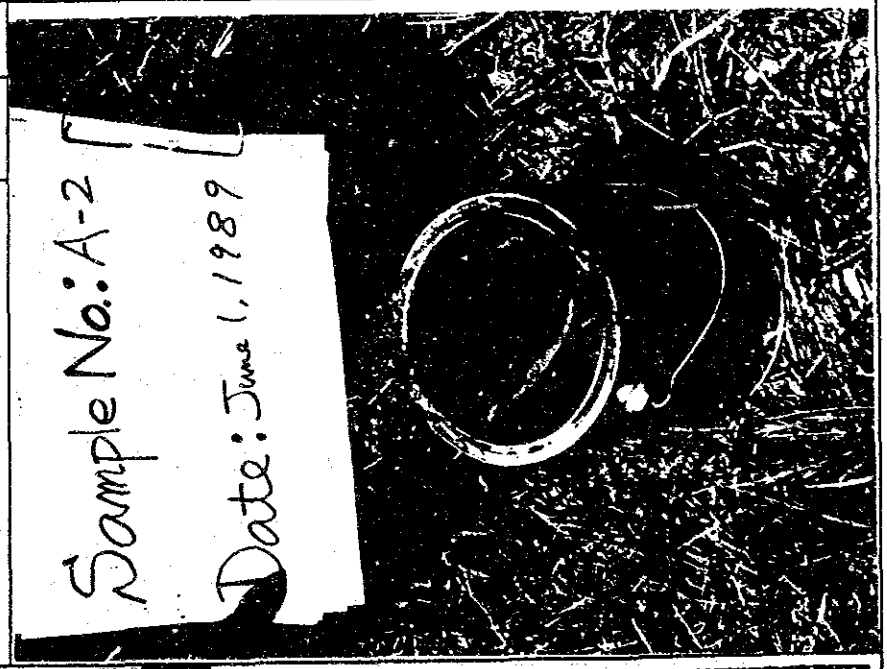
Characteristics Observed by the Eyes

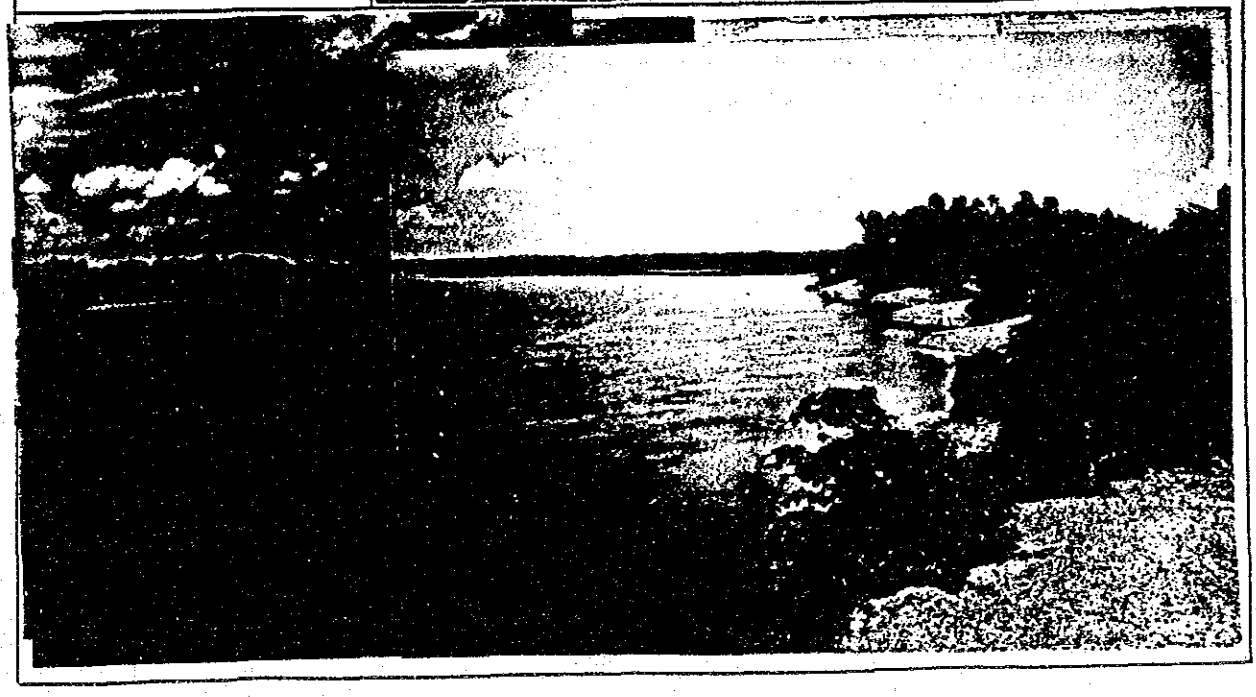
1) Materials : Silt

2) Shape :

3) Colour : Brown

4) Others :





Republic of the Philippines
Department of Public Works and Highways
BUREAU OF RESEARCH AND STANDARDS
Sta. Lucia St., Intramuros, Metro Manila

BRS Form No. 12
Rev. 1982

Lab. Report No. 8-42-89

TEST REPORT ON SOIL

23 August 1989

Project Agno River Basin Flood Control Study (Number) (Name) Pangasinan (City/Province)

Kind of material River Bed sample

Sample identification A-2 Quantity represented -

Sampled at -

Original source Agno River

Supplied by JICA/DPWH Study Team

Proposed use Sedimentation Analysis Spec's. Item No. -

Sampled by Mr. Katayama, Sediment Analyst (Name and designation) not stated (Office) not stated (Date)

Submitted by E. Fano, not stated (Name and designation) PMO-Major Flood Control Projects (Office) 8-2-89 (Date received)

Lab. No. 5937-89 (Paid under OR # 8733139)

Particle Size Analysis:	TEST RESULTS
Sieve Analysis (% Passing)	
Sieve Size	
4.75 mm	100
2.00 mm	100
0.425 mm	100
0.075 mm	67
Hydrometer Analysis (%)	
Smaller than	
0.05 mm	46
0.02 mm	11
0.005 mm	0.5
0.002 mm	0
0.001 mm	0
Liquid Limit	NP
Plasticity Index	NP
Specific Gravity	2.86

Checked by:

PURA V. REVILLAME
Chief, Materials Testing Division

ATTESTED:

JOSE H. ESPIRITU
Director

Tested by:
N. Abarca
L. de Jesus
C. Pinto
A. Ponce de Leon
B. Villanueva

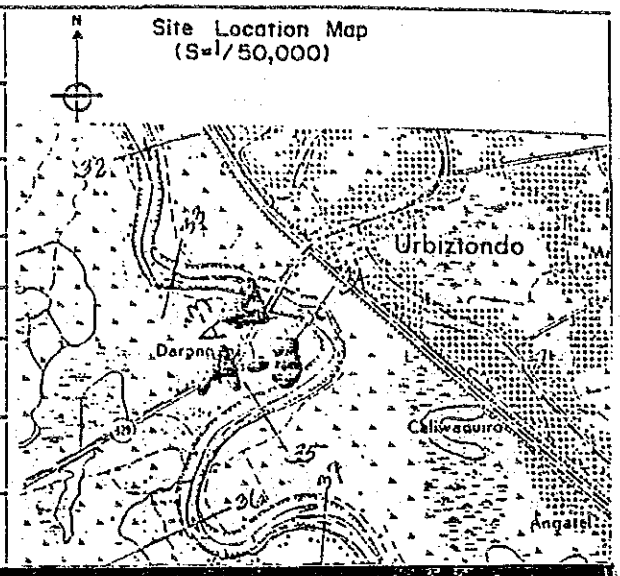
Witnessed by:
M. Marquez

DATA SHEET (1/4) FOR RIVER BED MATERIALS SURVEY

1. SAMPLING

Sample No.	A-3		
River / Irrigation Canal	AGNO RIVER		
Location	Urbiztondo, Pangasinan		
Date of Sampling	June 1, 1989		
Sampled by	M. KATAYAMA		
Condition of Sampling of Site	Breadth (Bank to Bank)	300	m
	Bed Materials	Fine Sand	
	Others		

Site Location Map (S=1/50,000)



Discription of Sample	
Average Size of Armour Coats	mm

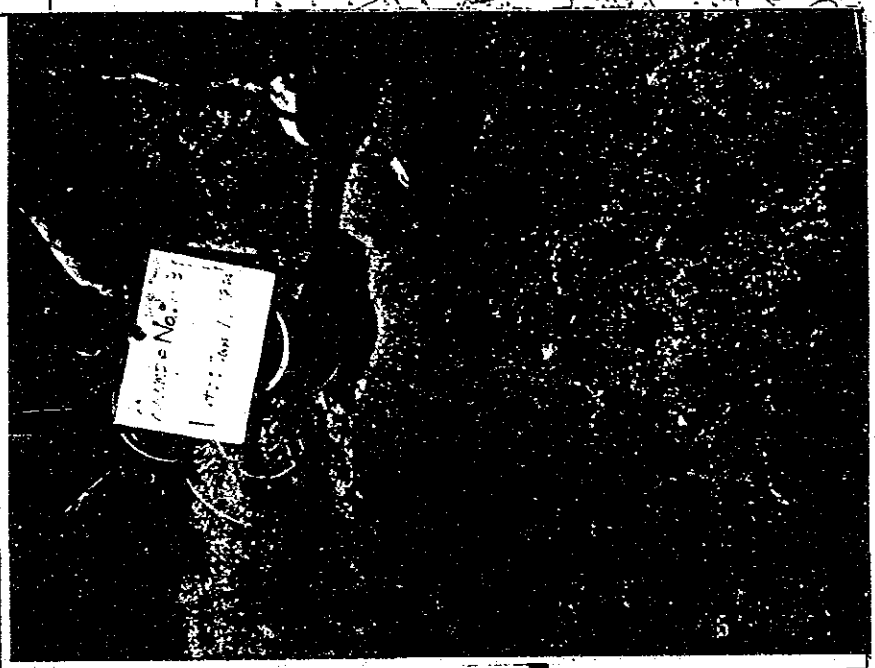
Characteristics Observed by the Eyes

1) Materials : Fine Sand

2) Shape :

3) Colour : Gray

4) Others :



Republic of the Philippines
Department of Public Works and Highways
BUREAU OF RESEARCH AND STANDARDS
Sta. Lucia St., Intramuros, Metro Manila

BRS Form No. 12
Nov. 1982

Lab. Report No. 8-43-89

TEST REPORT ON SOIL — 23 August 1989

Project Agno River Basin Flood Control Study (Number) (Name) — Pangasinan (City/Province)

Kind of material River Bed Sample

Sample identification A-3 — Quantity represented -

Sampled at -

Original source Agno River

Supplied by JICA/DPWH Study Team

Proposed use Sedimentation Analysis — Spec's.Item No. -

Sampled by Mr. Katayama, Sediment Analyst (Name and designation) — not stated (Office) — not stated (Date)

Submitted by E. Fano, not stated (Name and designation) — -do- (Office) — 8-2-89 (Date received)

Lab. No. 5938-89 (Paid under OR # 8733139)

Particle Size Analysis	TEST RESULTS
Sieve Analysis (% Passing)	
Sieve Size	
4.75 mm	100
2.00 mm	100
0.425 mm	100
0.075 mm	19
Hydrometer Analysis (%)	
Smaller than	
0.05 mm	9
0.02 mm	0
0.005 mm	0
0.002 mm	0
0.001 mm	0
Liquid Limit	NP
Plasticity Index	NP
Specific Gravity	2.71

Checked by:

PURA V. REVILLAME
Chief, Materials Testing Division

ATTESTED:

JOSE H. ESPIRITU
Director

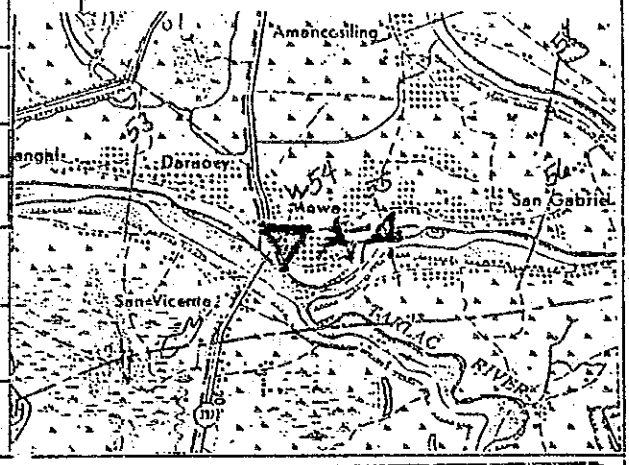
Tested by:
N. Abarca
A. Ponce de Leon
L. de Jesus
C. Pinto
B. Villanueva
Witnessed by:
M. Marquez
/lma

DATA SHEET (1/4) FOR RIVER BED MATERIALS SURVEY

1. SAMPLING

Sample No.	A-4		
River / Irrigation Canal	AGNO RIVER		
Location	Wawa, Bayambang Pangasinan		
Date of Sampling	June 1, 1989		
Sampled by	M. KATAYAMA		
Condition of Sampling of Site	Breadth (Bank to Bank)	200 m	
	Bed Materials	Sand	
	Others		

Site Location Map
(S=1/50,000)



Discription of Sample	
Average Size of Armour Coats	mm

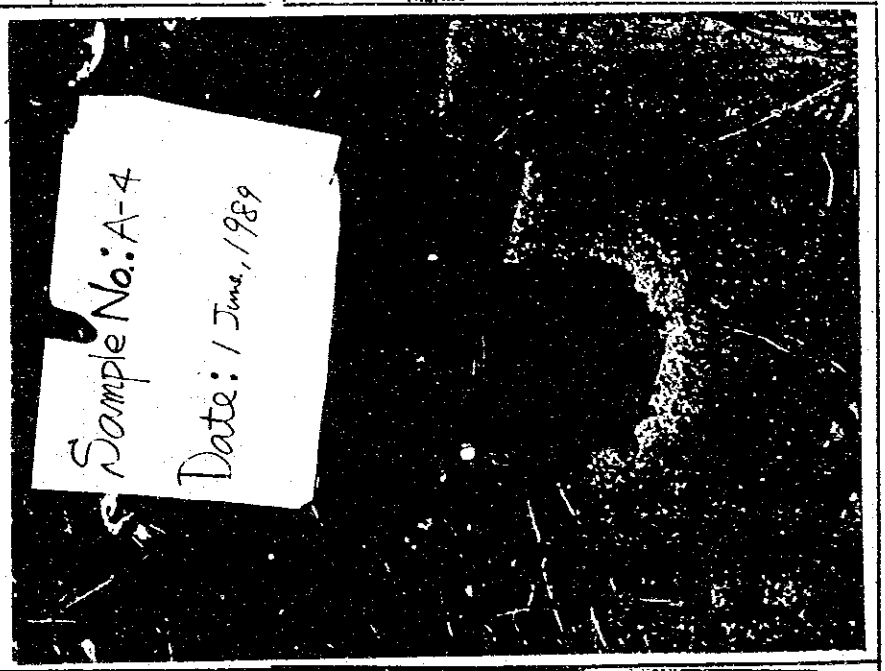
Characteristics Observed by the Eyes

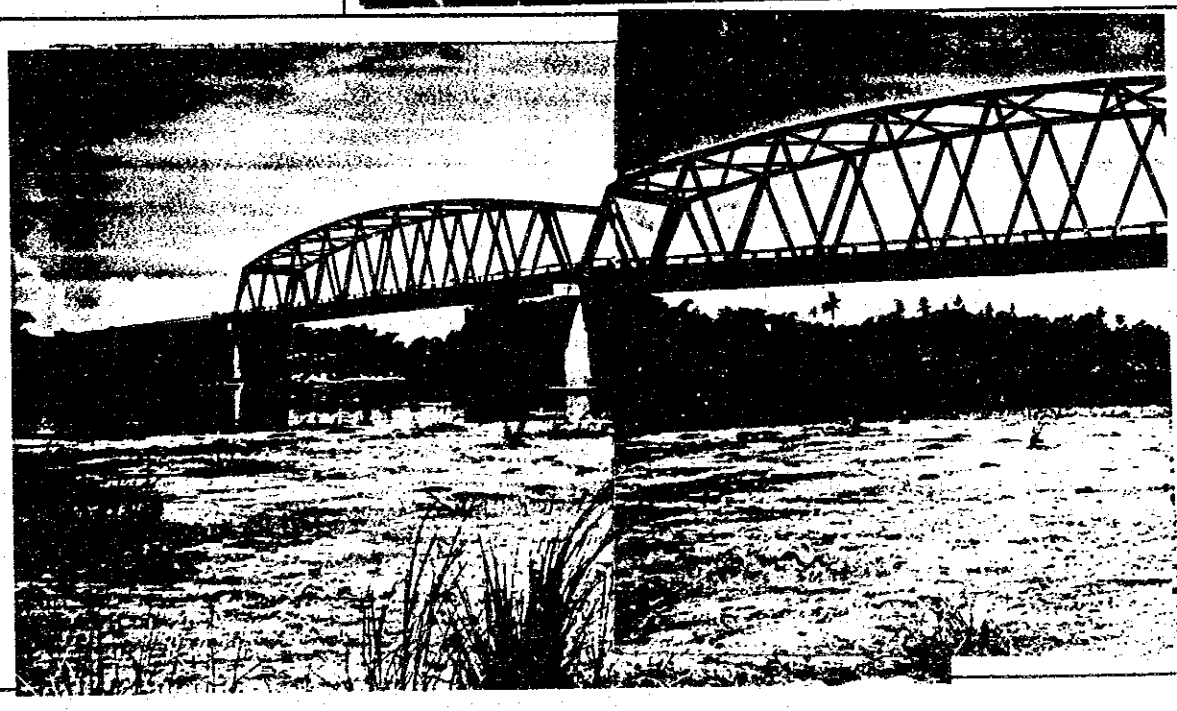
1) Materials : Sand

2) Shape :

3) Colour : Gray

4) Others :





DATA SHEET (2/4) FOR RIVER BED MATERIALS SURVEY

2. GRADATION ANALYSIS

Sample No. : A-4

Date of Test: June 9, 1989

Tested by : _____

2-1 Particles Greater than 100 mm.

Total Weight of Materials Smaller than 100 mm. WS = _____kg.

Total Weight of Materials Greater than 100 mm. Wg = 0 kg.

(1) Particle Size (Diameter) d	(2) Particle Weight w (d)	(3) Total Weight of Particles Smaller than d wt(d)	(4) Percentage of Particles Smaller than d Pt(d)	Dimensions (mm.) Length	Width	Thickness
mm.	kg.	kg.	%			

(4) = Wt(d)/(Ws + Wg) x 100

2-2 Sieve Test

Total Weight of Sample for Sieve Test Wt = 1,000 gr.

(1) Sieve Size Ds	(2) Weight of Particles Retained on Sieve W(Ds)	(3) Percentage of Particles Retained on Sieve Ds Pr(Ds)	(4) Percentage of Particles Passing Sieve Ds Pp(Ds)	(5) Percentage of Total Particles Passing Sieve Ds Pt(Ds)	Remarks
76.2 mm.(3")	gr.	%	%	%	
50.8 (2")	0	0	100	100	
38.1 (1 1/2")	0	0	100	100	
25.4 (1")	0	0	100	100	
19.1 (3/4")	0	0	100	100	
9.52 (3/8")	0	0	100	100	
4.76 (No.4)	0	0	100	100	
2.00 (No.10)	0	0	100	100	
1.18 (No.16)	1.2	.12	99.88	99.88	
0.42 (No.40)	693.0	69.30	30.58	30.58	
0.297 (No.50)	209.0	20.90	9.68	9.68	
0.150(No.100)	74.4	7.44	2.24	2.24	
0.074(No.200)	6.6	.66	1.58	1.58	

(5) = (4) x Ws/(Ws+Wg)

DATA SHEET (3/4) FOR RIVER BED MATERIALS SURVEY

Sample No. : A-4
Date of Test: June 10, 1989
Tested by :

2-3 Hydrometer Test

Weight of Sample for Hydrometer test : Wh = _____ gr.
Specific Gravity : Gs = _____
Percentage of Total Particles Passing 0.074 mm. Sieve: Pt (0.074) = ____%

(1) Period of Sedimentation	(2) Maximum Diameter of Particles in Suspension	(3) Percentage of Particles in Suspension	(4) Percentage of Particles Suspension out of Total Sample	Remarks
2 min.	mm.	%	%	
5				
15				
30				
60				
240				
1440				

(4) = (3) x Pt (0.074)/100

3. SPECIFIC GRAVITY TEST

3-1 Particles Smaller than 0.074 mm.

(1)	Weight of Bottle Filled with Water	gr.
(2)	Weight of Oven-dry Particles	gr.
(3)	Weight of Bottle Filled with Particles and Water	gr.
(4)	Specific Gravity	

$$(4) = \frac{(3)}{(1) + (2) - (3)}$$

3-2 Particles Greater than 0.074 mm. and Smaller than 9.52 mm.

Case No.	1	2	Average
(1) Weight of Water Added to Flask	314 gr.	313 gr.	-
(2) Volume of Flask	500 ml.	500 ml.	-
(3) Specific Gravity (Saturated Surface-dry Basis)	2.69	2.67	2.68

$$(3) = \frac{500}{(2) - (1)}$$

3-3 Particles Greater than 9.52 mm.

Case No.	1	2	Average
(1) Weight of Saturated Surface-Dry Sample in Air	gr.	gr.	-
(2) Weight of Saturated Sample in Water	gr.		-
(3) Specific Gravity (Saturated Surface-dry Basis)			

(3) = (1)/((1) - (2))

DATA SHEET (4/4) FOR RIVER BED MATERIALS SURVEY

1. REPORT

Sample No.	: A-4	River/Canal	: Agno	Location	Wawa, Bayambang
Date of Sampling	: June 9, 1989	Date of Gradation Analysis	: June 9, 1989	Date of Specific Gravity test	: June 10, 1989

1-1 Specific Gravity

Range of Particle Size	Less than 0.074	0.074 mm.-4.76 mm.	Greater than 4.76 mm.
Specific Gravity		2.68	

1-2 Gradation

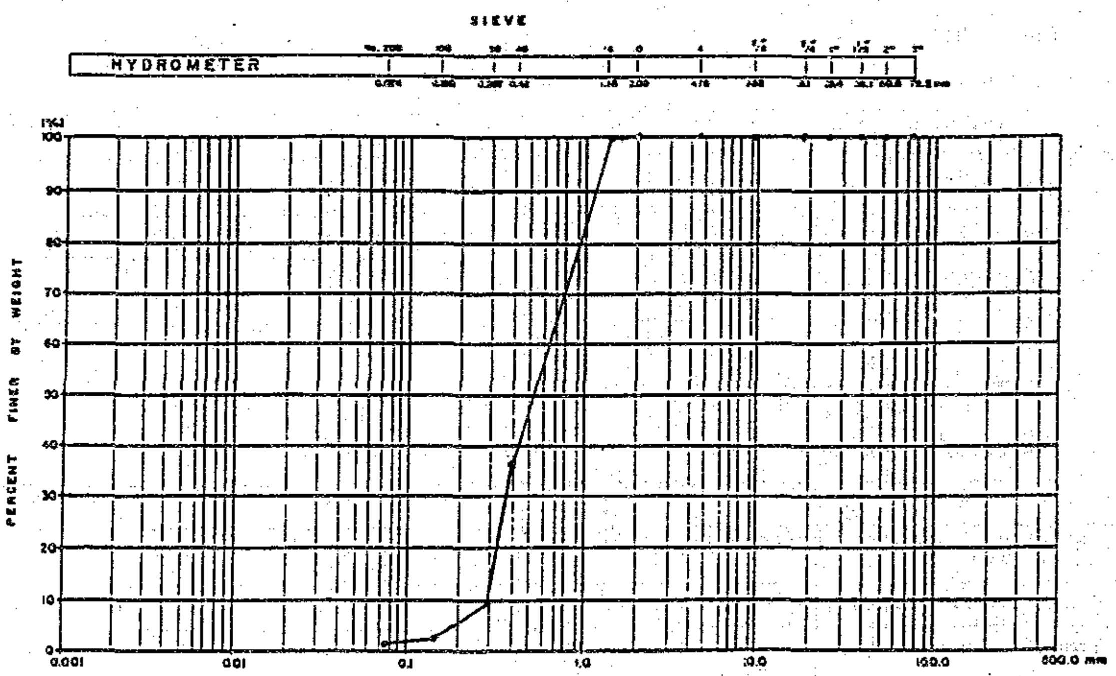
Particle Size (mm)	Percentage of Passing (%)	Particle Size (mm.)	Percentage of Passing (%)	Particle Size (mm.)	Percentage of Passing (%)	Particle Size (mm.)	Percentage of Passing (%)
		76.2	100	2.00	100		
		50.8	100	1.18	99.88		
		38.1	100	0.42	30.58		
		25.4	100	0.250	9.68		
		19.1	100	0.150	2.24		
		9.52	100	0.074	1.58		
		4.76	100	-			

Percentage According to Classification of Materials

Classification	Range of Particle Size	Percentage	Classification	Range of Particle Size	Percentage
Boulder	Greater than 300 mm	%	Fine sand	0.074 - 0.42 mm.	29.0 %
Cobbles	76.2 ~ 300 mm	0	silt	0.005 - 0.074 mm.	
Gravel	2.0 - 76.2 mm	0	clay	0.001 - 0.005 mm.	
Coarse Sand	0.42 - 2.0 mm.	69.42	colloids	Smaller than 0.001mm.	

10% Particle Size D10 = 0.30 mm. 50% Particle Size D50 = 0.60 mm.

60% Particle Size D60 0.70 mm. Uniformity Coefficient Uc = D60/D10 = 2.33



CLAY	SILT	FINE / COARSE SAND	GRAVEL	COBBLES	BOULDER