Table 3-74 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , December '92 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—		2.3	
2	- 5.576	- 0.748	- 0.68	3.2		2.4	
3	—	—	—	—		2.4	
4	—	—	—	—		1.2	
5	—	—	—	—		2.8	
6	—	—	—	—		2.1	
7	—	—	—	—		2.5	
8	0.00	0.00	0.00	9.0		2.5	
9	0.00	0.00	0.00	8.0		2.5	
10	0.00	0.00	- 0.136	4.0		0.8	
11	0.00	0.00	- 0.136	4.5		1.0	
12	0.00	0.00	- 0.136	2.4		3.0	
13	0.00	0.00	- 0.136	0		3.0	
14	0.00	0.00	- 0.272	0		3.9	
15	0.00	0.00	- 0.272	0		4.3	
16	0.00	0.00	- 0.272	0		4.6	
17	0.00	- 0.272	- 0.544	0.8		4.1	
18	- 1.088	- 0.544	- 0.68	0		4.4	
19	- 2.72	- 0.68	- 0.816	0		3.6	
20	- 5.168	- 0.952	- 0.68	0.3		2.2	
21	- 6.936	- 1.088	- 0.544	0		4.4	
22	- 3.944	- 0.408	- 0.408	7.9		2.2	
23	0.00	- 0.272	- 0.544	30.0		2.9	
24	0.00	- 0.408	- 0.544	10.5		1.1	
25	0.00	- 0.272	- 0.408	7.1		0.1	
26	—	—	—	71.5		4.2	
27	—	—	—	2.1		0.7	
28	0.00	0.00	0.00	1.0		2.5	
29	0.00	0.00	- 0.136	2.0		3.1	
30	0.00	0.00	0.00	9.0		3.3	
31	- 1.768	- 0.408	- 0.544	0		3.7	

Table 3-75 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , January '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation	Irrigation	Evaporation	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m	mm/day	mm/day	Muno mm/day	
1	0.00	- 0.272	- 0.408	0.5		4.0	
2	- 1.768	- 0.408	- 0.544	0		6.0	
3	- 4.216	- 0.68	- 0.544	0		3.5	
4	- 5.576	- 0.68	- 0.544	0.6		2.5	
5				10.8		1.5	
6				0		3.9	
7				—		3.8	
8				6.4		5.1	
9				0		3.6	
10				0		3.4	
11				0		4.3	
12				0		4.0	
13				1.1		4.5	
14				3.6		2.0	
15				0.3		0.7	
16				0		3.8	
17				1.2		4.4	
18				11.3		5.4	
19				9.1		3.0	
20				5.8		5.0	
21				0		2.0	
22				3.8		4.9	
23				19.0		3.8	
24				0		2.7	
25				0		3.5	
26				0		3.5	
27				0		4.8	
28				2.4		4.4	
29				19.4		1.1	
30				9.8		2.1	
31				0		2.7	

Table 3-76 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , February '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 2.04	- 0.816	- 0.408	0		4.0	
2	- 2.04	- 0.408	- 0.544	18.1		4.0	
3	- 1.904	- 0.136	- 0.408	3.6		3.2	
4	- 1.768	- 0.136	- 0.272	0		1.7	
5	- 1.632	- 0.136	- 0.272	0		4.3	
6	—	—	—	—		5.5	
7	—	—	—	—		5.4	
8	- 1.224	- 0.136	- 0.272	0		5.9	
9	- 1.224	- 0.136	- 0.408	0		5.6	
10	- 7.208	- 0.408	- 0.68	0.2		6.4	
11	- 7.616	- 0.816	- 0.68	1.1		4.7	
12	- 7.752	- 1.088	- 0.544	0.1		4.7	
13	—	—	—	—		4.6	
14	—	—	—	—		4.3	
15	- 5.712	- 2.312	- 0.544	0		6.0	
16	- 5.168	- 2.584	- 0.544	0		4.6	
17	- 5.304	- 2.584	- 0.544	0		5.0	
18	- 8.024	- 3.672	- 0.68	0		5.4	
19	- 8.16	- 4.352	- 0.68	0		6.0	
20	—	—	—	—		4.9	
21	—	—	—	—		4.5	
22	- 7.888	- 5.304	- 0.544	0		4.7	
23	- 7.752	- 5.576	- 0.68	0		4.8	
24	- 7.344	- 5.984	- 0.68	0		7.2	
25	- 7.888	- 6.12	- 0.68	3.1		5.0	
26	- 7.752	- 5.712	- 0.476	0		3.9	
27	—	—	—	—		3.5	
28	—	—	—	—		5.1	
29							
30							
31							

Table 3-77 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , March '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 7.480	- 3.400	- 0.408	0.0			
2	- 7.616	- 2.856	- 0.408	0.6			
3	- 7.616	- 2.584	- 0.408	0.0			
4	- 7.752	- 3.264	- 0.544	0.0			
5	- 7.752	- 3.740	- 0.544	0.0			
6	—	—	—	—			
7	—	—	—	—			
8	- 5.984	- 1.496	- 0.680	7.3			
9	- 5.984	- 1.904	- 0.680	0.6			
10	- 6.392	- 2.176	- 0.544	0.6			
11	- 6.528	- 2.720	- 0.544	1.5			
12	- 7.616	- 2.448	- 0.680	5.2			
13	—	—	—	—			
14	—	—	—	—			
15	- 2.312	- 0.272	- 0.544	2.1			
16	0.0	- 0.272	- 0.408	36.4			
17	- 2.176	- 0.408	- 0.544	0.0			
18	- 3.40	- 0.544	- 0.544	7.8			
19	- 4.216	- 0.408	- 0.408	3.9			
20	—	—	—	—			
21	—	—	—	—			
22	- 3.128	- 0.272	- 0.272	0.0			
23	- 2.040	- 0.136	- 0.272	5.2			
24	- 2.584	- 0.136	- 0.272	0.0			
25	- 2.856	- 0.136	- 0.272	0.0			
26	- 2.992	- 0.136	- 0.272	0.0			
27	—	—	—	—			
28	—	—	—	—			
29	- 3.672	- 0.136	- 0.272	0.0			
30	- 3.672	- 0.136	- 0.272	0.0			
31	- 3.808	- 0.136	- 0.408	0.0			

Table 3-78 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , April '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 4.148	- 0.136	- 0.408	0.0			
2	- 4.556	- 0.272	- 0.408	0.0			
3	—	—	—	—			
4	—	—	—	—			
5	- 5.304	- 0.408	- 0.408	0.0			
6	- 6.120	- 0.408	- 0.544	0.0			
7	- 6.528	- 0.680	- 0.544	0.0			
8	- 6.392	- 0.952	- 0.544	0.0			
9	- 7.208	- 1.088	- 0.544	0.0			
10	—	—	—	—			
11	—	—	—	—			
12	- 4.760	- 0.544	- 0.544	0.0			
13	- 4.080	- 0.544	- 0.544	3.5			
14	- 2.176	- 0.408	- 0.408	28.7			
15	- 1.088	- 0.272	- 0.408	0.0			
16	- 1.632	- 0.136	- 0.272	17.2			
17	—	—	—	—			
18	—	—	—	—			
19	- 3.400	- 0.272	- 0.408	0.0			
20	- 4.488	- 0.272	- 0.544	0.0			
21	- 5.576	- 0.612	- 0.544	0.0			
22	- 6.664	- 1.088	- 0.680	0.0			
23	- 6.596	- 1.496	- 0.680	0.0			
24	—	—	—	—			
25	—	—	—	—			
26	- 6.936	- 2.720	- 0.680	0.0			
27	- 7.344	- 3.264	- 0.816	0.0			
28	- 7.208	- 3.672	- 0.816	0.1			
29	- 7.616	- 3.944	- 0.816	0.0			
30	- 7.616	- 4.352	- 0.816	0.0			
31							

Table 3-79 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , May '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—			
2	—	—	—	—			
3	- 7.208	- 5.712	- 0.816	0.0			
4	- 7.480	- 6.120	- 0.816	0.0			
5	- 7.616	- 6.528	- 0.952	0.0			
6	- 7.752	- 6.936	- 0.952	0.0			
7	- 7.752	- 7.208	- 0.952	0.0			
8	—	—	—	—			
9	—	—	—	—			
10	- 7.888	- 8.160	- 0.952	0.0			
11	- 7.072	- 6.860	- 0.952	0.0			
12	- 7.208	- 7.752	- 0.816	0.0			
13	- 7.344	- 7.344	- 0.680	0.0			
14	- 7.480	- 7.072	- 0.680	0.0			
15	—	—	—	—			
16	—	—	—	—			
17	- 6.528	- 3.808	- 0.544	1.6			
18	- 2.448	- 0.272	- 0.408	45.4			
19	- 5.168	- 0.272	- 0.408	4.7			
20	- 4.216	- 0.408	- 0.408	4.3			
21	- 5.440	- 0.272	- 0.408	0.0			
22	—	—	—	—			
23	—	—	—	—			
24	- 7.752	- 1.224	- 0.544	0.0			
25	- 6.256	- 1.360	- 0.544	0.0			
26	- 6.528	- 1.496	- 0.544	0.0			
27	- 7.616	- 1.632	- 0.544	0.0			
28	- 7.616	- 1.768	- 0.544	0.1			
29	—	—	—	—			
30	—	—	—	—			
31	- 6.392	- 2.720	- 0.680	0.0			

Table 3-80 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , June '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 6.936	- 2.700	- 0.544	0.0			
2	- 6.392	- 2.176	- 0.544	0.0			
3	- 6.664	- 2.176	- 0.544	0.85			
4	- 6.936	- 1.496	- 0.544	0.0			
5	—	—	—	—			
6	—	—	—	—			
7	- 6.936	- 0.272	- 0.408	2.2			
8	- 1.632	- 0.272	- 0.408	18.1			
9	- 4.216	- 0.272	- 0.408	0.0			
10	- 2.584	- 0.272	- 0.408	9.3			
11	- 4.760	- 0.272	- 0.408	1.4			
12	—	—	—	—			
13	—	—	—	—			
14	- 0.952	0.0	- 0.272	14.5			
15	- 2.176	0.0	- 0.272	0.1			
16	- 2.856	- 0.136	- 0.272	0.0			
17	- 3.672	- 0.272	- 0.408	0.0			
18	- 5.168	- 0.544	- 0.544	0.0			
19	—	—	—	—			
20	—	—	—	—			
21	- 4.896	- 1.000	- 0.680	0.0			
22	- 6.392	- 1.088	- 0.680	0.0			
23	- 7.344	- 1.496	- 0.680	0.0			
24	- 6.256	- 2.04	- 0.816	0.5			
25	- 5.440	- 1.224	- 0.544	13.9			
26	—	—	—	—			
27	—	—	—	—			
28	- 5.440	- 2.312	- 0.544	3.4			
29	- 5.032	- 1.768	- 0.544	5.0			
30	- 4.896	- 1.496	- 0.544	2.1			

Table 3-81 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , July '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 5.304	- 1.768	- 0.544	2.5			
2	- 5.168	- 1.768	- 0.680	7.5			
3	—	—	—	—			
4	—	—	—	—			
5	- 6.256	- 2.584	- 0.680	0.0			
6	- 4.896	- 2.040	- 0.680	6.0			
7	- 4.352	- 1.904	- 0.680	0.0			
8	—	—	—	11.0			
9	- 1.360	- 0.952	- 0.544	8.3			
10	—	—	—	—			
11	—	—	—	—			
12	- 7.480	- 1.360	- 0.544	0.8			
13	- 6.528	- 1.632	- 0.544	0.8			
14	- 6.392	- 2.312	- 0.680	0.0			
15	- 7.208	- 2.584	- 0.680	0.0			
16	- 5.440	- 3.672	- 0.680	3.3			
17	—	—	—	—			
18	—	—	—	—			
19	- 5.712	- 2.856	- 0.544	0.0			
20	- 6.256	0.0	- 0.544	0.0			
21	- 6.120	- 1.496	- 0.544	13.9			
22	- 3.536	- 0.680	- 0.408	3.6			
23	- 5.440	- 0.816	- 0.408	0.0			
24	—	—	—	—			
25	—	—	—	—			
26	- 5.848	0.0	- 0.408	114.8			
27	- 4.488	- 0.136	- 0.408	0.0			
28	- 5.848	- 0.136	- 0.272	0.0			
29	- 5.440	- 0.136	- 0.272	0.0			
30	- 5.440	- 0.136	- 0.272	0.0			
31				—			

Table 3-82 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location B at the Portion B of the U1 plot

Khok Nai Leaching Test Plot , August '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—			
2	- 7.072	- 0.136	- 0.272	0.0			
3	- 4.216	- 0.136	- 0.272	18.8			
4	- 3.128	- 0.136	- 0.272	5.3			
5	- 4.216	- 0.136	- 0.272	0.0			
6	- 3.944	- 0.272	- 0.408	5.9			
7	—	—	—	—			
8	—	—	—	—			
9	- 4.352	- 1.088	- 0.816	0.5			
10	- 5.712	- 1.360	- 0.816	2.3			
11	- 5.984	- 1.632	- 0.816	0.0			
12	- 6.392	- 1.904	- 0.952	0.0			
13	- 6.936	- 2.04	- 0.952	0.0			
14	—	—	—	—			
15	—	—	—	—			
16	- 5.304	- 1.632	- 0.952	0.0			
17	- 6.936	0.0	- 0.816	0.0			
18	- 6.664	- 4.08	- 0.952	1.8			
19	- 6.392	- 4.216	- 0.816	0.5			
20		- 3.234	- 0.952	11.0			
21	—	—	—	—			
22	—	—	—	—			
23	- 2.992	- 2.04	- 0.680	3.2			
24	- 3.808	- 1.632	- 0.680	0.0			
25	- 5.304	- 1.904	- 0.680	0.0			
26	- 6.120	- 1.088	- 0.680	0.8			
27	- 6.256	- 2.584	- 0.680	5.5			
28	—	—	—	—			
29	—	—	—	—			
30	- 4.624	- 0.680	- 0.408	0.0			
31	- 5.984	- 0.136	- 0.272	2.3			

Table 3-83 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , November '92 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 2.72	0.00	0.00	—			
2	- 1.02	0.00	0.00	—		3.3	
3	0.00	0.00	0.00	—		1.9	
4	- 0.408	- 0.408	0.00	19.0		3.1	
5	0.00	0.00	0.00	13.2		0.9	
6	0.00	0.00	0.00	35.1		1.0	
7	0.00	0.00	0.00	20.4		1.0	
8	0.00	0.00	0.00	0		2.1	
9	0.00	- 0.272	0.00	29.0		4.9	
10	0.00	0.00	0.00	15.4		2.0	
11	0.00	0.00	0.00	3.7		3.7	
12	0.00	0.00	0.00	96.5		0.6	
13	0.00	0.00	0.00	22.0		0.3	
14	0.00	0.00	0.00	0		3.2	
15	—	—	—	—		3.8	
16	0.00	0.00	0.00	0		1.5	
17	0.00	0.00	- 0.136	0		0.2	
18	—	—	—	—		2.5	
19	0.00	0.00	0.00	16.4		1.8	
20	0.00	0.00	0.00	0		1.6	
21	0.00	0.00	0.00	0		2.1	
22	—	—	—	—		2.9	
23	—	—	—	—		0.2	
24	0.00	0.00	0.00	6.5		1.4	
25	—	—	—	—		3.1	
26	—	—	—	—		2.4	
27	—	—	—	—		3.4	
28	—	—	—	—		3.8	
29	—	—	—	—		3.6	
30	—	—	—	—		3.5	
31							

Table 3-84 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , December '92

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—		2.3	
2	- 0.408	- 0.272	0.00	3.2		2.4	
3	—	—	—	—		2.4	
4	—	—	—	—		1.2	
5	—	—	—	—		2.8	
6	—	—	—	—		2.1	
7	—	—	—	—		2.5	
8	0.00	0.00	0.00	9.0		2.5	
9	0.00	0.00	0.00	8.0		2.5	
10	0.00	0.00	0.00	4.0		0.8	
11	0.00	0.00	0.00	4.5		1.0	
12	0.00	0.00	0.00	2.4		3.0	
13	0.00	0.00	0.00	0		3.0	
14	0.00	0.00	0.00	0		3.9	
15	0.00	0.00	0.00	0		4.3	
16	0.00	0.00	0.00	0		4.6	
17	0.00	0.00	0.00	0.8		4.1	
18	- 0.272	- 0.272	0.00	0		4.4	
19	- 0.544	- 0.408	0.00	0		3.6	
20	- 1.088	- 0.544	0.00	0.3		2.2	
21	- 1.768	- 0.544	0.00	0		4.4	
22	- 0.272	0.00	0.00	7.9		2.2	
23	0.00	0.00	0.00	30.0		2.9	
24	0.00	0.00	0.00	10.5		1.1	
25	0.00	0.00	0.00	7.1		0.1	
26	—	—	—	71.5		4.2	
27	—	—	—	2.1		0.7	
28	0.00	0.00	0.00	1.0		2.5	
29	0.00	0.00	0.00	2.0		3.1	
30	0.00	0.00	0.00	9.0		3.3	
31	- 0.136	0.00	0.00	0		3.7	

Table 3-85 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , January '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	0.00	0.00	0.00	0.5		4.0	
2	- 0.136	0.00	0.00	0		6.0	
3	- 0.544	0.00	0.00	0		3.5	
4	- 0.68	0.00	0.00	0.6		2.5	
5				10.8		1.5	
6				0		3.9	
7				—		3.8	
8				6.4		5.1	
9				0		3.6	
10				0		3.4	
11				0		4.3	
12				0		4.0	
13				1.1		4.5	
14				3.6		2.0	
15				0.3		0.7	
16				0		3.8	
17				1.2		4.4	
18				11.3		5.4	
19				9.1		3.0	
20				5.8		5.0	
21				0		2.0	
22				3.8		4.9	
23				19.0		3.8	
24				0		2.7	
25				0		3.5	
26				0		3.5	
27				0		4.8	
28				2.4		4.4	
29				19.4		1.1	
30				9.8		2.1	
31				0		2.7	

Table 3-86 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , February ´93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 2.856	- 0.544	0.00	0		4.0	
2	- 1.632	0.00	0.00	18.1		4.0	
3	0.00	0.00	0.00	3.6		3.2	
4	0.00	0.00	0.00	0		1.7	
5	- 0.408	0.00	0.00	0		4.3	
6	—	—	—	—		5.5	
7	—	—	—	—		5.4	
8	0.00	0.00	0.00	0		5.9	
9	0.00	0.00	0.00	0		5.6	
10	- 0.272	0.00	0.00	0.2		6.4	
11	- 1.088	- 0.408	0.00	1.1		4.7	
12	- 2.448	- 0.544	0.00	0.1		4.7	
13	—	—	—	—		4.6	
14	—	—	—	—		4.3	
15	- 7.616	- 1.088	0.00	0		6.0	
16	- 7.888	- 1.36	0.00	0		4.6	
17	- 7.888	- 1.36	0.00	0		5.0	
18	- 7.888	- 2.04	0.00	0		5.4	
19	- 7.616	- 2.176	0.00	0		6.0	
20	—	—	—	—		4.9	
21	—	—	—	—		4.5	
22	- 7.888	- 2.176	0.00	0		4.7	
23	- 7.888	- 2.448	0.00	0		4.8	
24	- 7.888	- 2.448	0.00	0		7.2	
25	- 7.752	- 2.312	0.00	3.1		5.0	
26	- 7.888	- 2.176	0.00	0		3.9	
27	—	—	—	—		3.5	
28	—	—	—	—		5.1	
29							
30							
31							

Table 3-87 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , March '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 7.072	- 1.632	0	0.0			
2	- 7.208	- 1.496	0	0.6			
3	- 7.888	- 1.360	0	0.0			
4	- 7.888	- 2.040	0	0.0			
5	- 7.888	- 2.312	0	0.0			
6	—	—	—	—			
7	—	—	—	—			
8	- 3.264	- 0.952	0	7.3			
9	- 5.168	- 0.952	0	0.6			
10	- 7.072	- 1.224	0	0.6			
11	- 7.888	- 1.632	0	1.5			
12	- 7.88	- 1.224	0	5.2			
13	—	—	—	—			
14	—	—	—	—			
15	0	- 0.204	0	2.1			
16	0	0	0	36.4			
17	- 1.496	0	0	0.0			
18	- 1.768	- 0.272	0	7.8			
19	- 2.312	0	0	3.9			
20	—	—	—	—			
21	—	—	—	—			
22	0	0	0	0			
23	0	0	0	5.2			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	—	—	—	—			
28	—	—	—	—			
29	0	0	0	0			
30	0	0	0	0			
31	0	0	0	0			

Table 3-88 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , April '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	0.0	0.0	0.0	0.0			
2	- 0.136	0.0	0.0	0.0			
3	—	—	—	—			
4	—	—	—	—			
5	- 1.224	0.0	0.0	0.0			
6	- 2.176	- 0.136	0.0	0.0			
7	- 2.720	- 0.272	0.0	0.0			
8	- 3.944	- 0.544	0.0	0.0			
9	- 4.760	- 0.816	0.0	0.0			
10	—	—	—	—			
11	—	—	—	—			
12	- 2.652	- 0.272	0.0	0.0			
13	- 1.360	- 0.136	0.0	3.5			
14	0.0	- 0.0	0.0	28.7			
15	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	17.2			
17	—	—	—	—			
18	—	—	—	—			
19	- 0.272	0.0	0.0	0.0			
20	- 0.816	0.0	0.0	0.0			
21	- 2.312	- 0.272	0.0	0.0			
22	- 4.488	- 0.952	0.0	0.0			
23	- 6.936	- 1.360	0.0	0.0			
24	—	—	—	—			
25	—	—	—	—			
26	- 8.704	- 2.176	0.0	0.0			
27	- 7.888	- 2.448	0.0	0.0			
28	- 7.616	- 2.584	0.0	0.1			
29	- 7.888	- 2.720	0.0	0.0			
30	- 7.888	- 2.856	0.0	0.0			
31							

Table 3-89 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , May '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—			
2	—	—	—	—			
3	- 6.664	- 3.808	- 0.272	0.0			
4	- 7.888	- 4.216	- 0.272	0.0			
5	- 7.888	- 4.488	- 0.408	0.0			
6	- 7.888	- 5.304	- 0.408	0.0			
7	- 8.024	- 5.712	- 0.408	0.0			
8	—	—	—	—			
9	—	—	—	—			
10	- 8.024	- 7.752	- 0.408	0.0			
11	- 7.888	- 6.936	- 0.408	0.0			
12	- 7.888	- 7.752	- 0.136	0.0			
13	- 4.624	- 8.160	0	0.0			
14	- 5.576	- 7.072	0				
15	—	—	—	—			
16	—	—	—	—			
17	- 4.760	- 3.808	0	1.6			
18	- 1.360	0	0	45.4			
19	- 1.496	0	0	4.7			
20	- 0.952	0	0	4.3			
21	- 2.720	0	0	0.0			
22	—	—	—	—			
23	—	—	—	—			
24	- 7.208	- 1.224	0	0.0			
25	- 7.344	- 1.632	0	0.0			
26	- 7.616	- 1.904	0	0.0			
27	- 7.888	- 1.904	0	0.0			
28	- 7.888	- 1.904	0	0.1			
29	—	—	—	—			
30	—	—	—	—			
31	- 7.480	- 2.584	0	0.0			

Table 3-90 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , June '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 7.888	- 2.448	0.0	0.0			
2	- 7.752	- 2.176	0.0	0.0			
3	- 7.752	- 1.904	0.0	0.85			
4	- 7.616	- 1.369	0.0	0.0			
5	—	—	—	—			
6	—	—	—	—			
7	- 5.168	0.0	0.0	2.2			
8	- 1.224	0.0	0.0	18.1			
9	- 1.904	0.0	0.0	0.0			
10	- 0.544	0.0	0.0	9.3			
11	- 1.224	0.0	0.0	1.4			
12	—	—	—	—			
13	—	—	—	—			
14	0.0	0.0	0.0	14.5			
15	0.0	0.0	0.0	0.1			
16	0.0	0.0	0.0	0.0			
17	- 0.272	0.0	0.0	0.0			
18	- 1.496	- 0.272	0.0	0.0			
19	—	—	—	—			
20	—	—	—	—			
21	- 3.264	- 0.680	0.0	0.0			
22	- 5.032	- 0.952	0.0	0.0			
23	- 6.664	- 1.496	0.0	0.0			
24	- 6.800	- 1.768	0.0	0.0			
25	- 4.896	- 0.952	0.0	0.5			
26	—	—	—	13.9			
27	—	—	—	—			
28	- 6.180	- 1.496	0.0	—			
29	- 5.100	- 1.088	0.0	3.4			
30	- 4.896	- 1.088	0.0	5.0			
31				2.1			

Table 3-91 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , July '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 5.848	- 1.360	0.0	2.5			
2	- 4.488	- 1.224	0.0	7.5			
3	—	—	—	—			
4	—	—	—	—			
5	- 7.888	- 2.584	0.0	0.0			
6	- 6.392	- 1.360	0.0	6.0			
7	- 4.488	- 1.360	0.0	0.0			
8	—	—	—	11.0			
9	- 3.400	- 0.544	0.0	8.3			
10	—	—	—	—			
11	—	—	—	—			
12	- 7.888	- 1.768	0.0	0.8			
13	- 7.344	- 1.632	0.0	0.8			
14	- 6.664	- 1.496	0.0	0.0			
15	- 6.664	- 1.632	0.0	0.0			
16	- 5.440	- 1.360	0.0	3.3			
17	—	—	—	—			
18	—	—	—	—			
19	- 6.256	- 1.768	0.0	0.0			
20	- 6.256	- 1.632	0.0	0.0			
21	- 4.352	- 0.544	0.0	13.9			
22	- 1.360	0.0	0.0	3.6			
23	- 4.896	0.0	0.0	0.0			
24	—	—	—	—			
25	—	—	—	—			
26	- 1.496	0.0	0.0	114.8			
27	- 3.672	0.0	0.0	0.0			
28	- 2.312	0.0	0.0	0.0			
29	- 1.768	0.0	0.0	0.0			
30	- 1.360	0.0	0.0	0.0			
31	—	—	—	—			

Table 3-92 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location C at the Portion C of the U1 plot

Khok Nai Leaching Test Plot , August '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—			
2	- 0.680	0.0	0.0	0.0			
3	- 0.408	0.0	0.0	18.8			
4	- 0.136	0.0	0.0	5.3			
5	- 0.680	0.0	0.0	0.0			
6	- 0.272	0.0	0.0	5.9			
7	—	—	—	—			
8	—	—	—	—			
9	- 3.128	- 0.816	0.0	0.0			
10	- 3.808	- 1.088	0.0	0.0			
11	- 3.264	- 1.360	- 0.136	0.5			
12	- 3.264	- 1.224	- 0.136	2.3			
13	- 3.944	- 1.632	- 0.544	0.0			
14	—	—	—	—			
15	—	—	—	—			
16	- 7.888	- 3.128	- 0.272	0.0			
17	- 7.480	- 3.400	0.0	0.0			
18	- 7.752	- 3.808	- 0.272	1.8			
19	- 7.208	- 3.808	- 0.272	0.5			
20	- 6.528	- 3.264		11.0			
21	—	—	—	—			
22	—	—	—	—			
23	- 3.536	0.00	0.0	3.2			
24	- 2.040	- 0.544	0.0	0.0			
25	- 5.576	- 1.088	0.0	0.0			
26	- 5.576	- 1.496	0.0	0.8			
27	- 4.760	- 1.496	0.0	5.5			
28	—	—	—	—			
29	—	—	—	—			
30	- 2.312	0.0	0.0	0.0			
31	- 2.176	0.0	0.0	2.3			

Table 3-93 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , February '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation	Irrigation	Evaporation	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m	mm/day	mm/day	Muno mm/day	
1				0	0	4.0	
2				18.1	0	4.0	
3				3.6	0	3.2	
4				0	0	1.7	
5				0	0	4.3	
6				—	0	5.5	
7				—	0	5.4	
8				0	0	5.9	
9				0	0	5.6	
10				0.2	0	6.4	
11				1.1	0	4.7	
12				0.1	0	4.7	
13				—	0	4.6	
14				—	0	4.3	
15				0	0	6.0	
16				0	0	4.6	
17				0	0	5.0	
18				0	0	5.4	
19				0	0	6.0	
20				—	0	4.9	
21				—	0	4.5	
22	- 7.752	- 0.952	- 0.408	0	0	4.7	
23	- 7.48	- 1.088	- 0.544	0	2.1	4.8	
24	- 6.8	- 1.224	- 0.544	0	0	7.2	
25	- 8.024	- 1.156	- 0.408	3.1	0	5.0	
26	- 7.072	- 1.224	- 0.408	0	0	3.9	
27	—	—	—	—	0	3.5	
28	—	—	—	—	0	5.1	
29							
30							
31							

Table 3-94 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , March '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 7.072	- 0.272	- 0.272	0.0			
2	- 5.712	- 0.272	- 0.272	0.6			
3	- 5.984	0	- 0.272	0.0			
4	- 6.664	- 0.272	- 0.272	0.0			
5	- 6.664	- 0.408	- 0.408	0.0			
6	—	—	—	—			
7	—	—	—	—			
8	- 2.448	- 0.408	- 0.544	7.3			
9	- 3.400	- 0.408	- 0.408	0.6			
10	- 4.624	- 0.544	- 0.408	0.6			
11	- 5.984	- 0.680	- 0.408	1.5			
12	- 4.760	- 0.544	- 0.544	5.2			
13	—	—	—	—			
14	—	—	—	—			
15	- 0.408	- 0.272	- 0.408	2.1			
16	0	0	- 0.272	36.4			
17	- 0.952	- 0.136	- 0.408	0.0			
18	- 1.224	- 0.272	- 0.408	7.8			
19	- 1.360	0	- 0.272	3.9			
20	—	—	—	—			
21	—	—	—	—			
22	- 0.272	0	0	0			
23	- 0.136	0	0	5.2			
24	- 0.136	0	0	0			
25	- 0.272	0	0	0			
26	- 0.272	0	0	0			
27	—	—	—	—			
28	—	—	—	—			
29	- 0.408	0	- 0.136	0			
30	- 0.408	0	- 0.136	0			
31	- 0.408	0	- 0.136	0			

Table 3-95 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , April '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation	Irrigation	Evaporation	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m	mm/day	mm/day	Muno mm/day	
1	- 0.544	0.0	- 0.272	0.0			
2	- 0.816	0.0	- 0.272	0.0			
3	—	—	—	—			
4	—	—	—	—			
5	- 0.952	0.0	- 0.272	0.0			
6	- 1.088	- 0.136	- 0.272	0.0			
7	- 1.224	- 0.136	- 0.408	0.0			
8	- 1.360	- 0.136	- 0.408	0.0			
9	- 1.496	- 0.272	- 0.408	0.0			
10	—	—	—	—			
11	—	—	—	—			
12	- 0.952	- 0.136	- 0.408	0.0			
13	- 0.544	- 0.136	- 0.272	3.5			
14	0.0	0.0	- 0.272	28.7			
15	- 0.136	0.0	- 0.272	0.0			
16	0.0	0.0	- 0.136	17.2			
17	—	—	—	—			
18	—	—	—	—			
19	- 0.544	0.0	- 0.136	0.0			
20	- 0.952	- 0.136	- 0.408	0.0			
21	- 1.496	- 0.136	- 0.408	0.0			
22	- 2.176	- 0.408	- 0.408	0.0			
23	- 2.448	- 0.408	- 0.544	0.0			
24	—	—	—	—			
25	—	—	—	—			
26	- 2.992	- 0.408	- 0.408	0.0			
27	- 3.536	- 0.544	- 0.544	0.0			
28	- 3.672	- 0.544	- 0.408	0.1			
29	- 3.944	- 0.544	- 0.408	0.0			
30	- 4.080	- 0.544	- 0.544	0.0			
31							

Table 3-96 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , May '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—			
2	—	—	—	—			
3	- 5.712	- 1.020	- 0.544	0.0			
4	- 6.120	- 1.360	- 0.544	0.0			
5	- 6.120	- 1.632	- 0.680	0.0			
6	- 7.344	- 1.768	- 0.680	0.0			
7	- 7.072	- 2.040	- 0.680	0.0			
8	—	—	—	—			
9	—	—	—	—			
10	- 8.024	- 3.400	- 0.680	0.0			
11	- 8.432	- 3.536	- 0.544	0.0			
12	- 8.296	- 4.012	- 0.544	0.0			
13	- 8.568	- 3.876	- 0.408	0.0			
14	- 8.432	- 2.312	- 0.408	0.0			
15	—	—	—	—			
16	—	—	—	—			
17	- 4.964	- 0.408	- 0.272	1.6			
18	- 0.544	0.0	- 0.272	45.4			
19	- 1.088	0.0	- 0.272	4.7			
20	- 0.816	0.0	- 0.272	4.3			
21	- 1.768	0.0	- 0.272	0.0			
22	—	—	—	—			
23	—	—	—	—			
24	- 3.128	- 0.272	- 0.408	0.0			
25	- 3.400	- 0.408	- 0.408	0.0			
26	- 3.128	- 0.272	- 0.408	0.0			
27	- 2.854	- 0.272	- 0.408	0.0			
28	- 2.856	- 0.272	- 0.408	0.1			
29	—	—	—	—			
30	—	—	—	—			
31	- 2.992	- 0.408	- 0.408				

Table 3-97 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , June '93 Ground-Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	- 2.856	- 0.272	- 0.408	0.0			
2	- 2.584	- 0.272	- 0.408	0.0			
3	- 2.176	- 0.272	- 0.408	0.85			
4	- 1.904	0.0	- 0.272	0.0			
5	—	—	—	—			
6	—	—	—	—			
7	- 1.224	0.0	- 0.136	2.2			
8	- 0.544	0.0	- 0.136	18.1			
9	- 0.680	0.0	- 0.136	0.0			
10	- 0.408	0.0	- 0.136	9.3			
11	- 0.680	0.0	- 0.136	1.4			
12	—	—	—	—			
13	—	—	—	—			
14	0.0	0.0	0.0	14.5			
15	0.0	0.0	0.0	0.1			
16	- 0.136	0.0	- 0.136	0.0			
17	- 0.544	0.0	- 0.272	0.0			
18	- 1.360	- 0.408	- 0.408	0.0			
19	—	—	—	—			
20	—	—	—	—			
21	- 1.360	- 0.272	- 0.408	0.0			
22	- 1.632	- 0.272	- 0.408	0.0			
23	- 3.264	- 0.544	- 0.544	0.0			
24	- 1.768	- 0.544	- 0.544	0.5			
25	- 1.224	- 0.272	- 0.408	13.9			
26	—	—	—	—			
27	—	—	—	—			
28	- 1.360	- 0.272	- 0.408	3.4			
29	- 1.088	- 0.272	- 0.408	5.0			
30	- 1.224	- 0.272	- 0.408	2.1			
31							

Table 3-98 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , July '93 Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation	Irrigation	Evaporation	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m	mm/day	mm/day	Muno mm/day	
1	- 1.496	- 0.408	- 0.408	2.5			
2	- 3.536	- 0.544	- 0.544	7.5			
3	—	—	—	—			
4	—	—	—	—			
5	- 5.168	- 1.088	- 0.544	0.0			
6	- 1.360	- 0.408	- 0.408	6.0			
7	- 2.448	- 0.544	- 0.544	0.0			
8	—	—	—	11.0			
9	- 1.360	- 0.272	- 0.272	8.3			
10	—	—	—	—			
11	—	—	—	—			
12	- 2.040	- 0.272	- 0.272	0.8			
13	- 2.448	- 0.408	- 0.272	0.8			
14	- 2.176	- 0.408	- 0.408	0.0			
15	- 2.720	- 0.680	- 0.408	0.0			
16	- 3.264	- 0.408	- 0.408	3.3			
17	—	—	—	—			
18	—	—	—	—			
19	- 4.216	- 0.408	- 0.272	0.0			
20	- 2.856	- 0.408	- 0.136	0.0			
21	- 1.496	- 0.136	- 0.272	13.9			
22	- 1.088	0.0	- 0.272	3.6			
23	- 2.176	0.0	- 0.272	0.0			
24	—	—	—	—			
25	—	—	—	—			
26	- 0.544	0.0	- 0.136	114.8			
27	- 1.088	0.0	- 0.136	0.0			
28	0.0	0.0	- 0.136	0.0			
29	- 0.544	0.0	- 0.136	0.0			
30	- 0.816	0.0	- 0.136	0.0			
31	—	—	—	—			

Table 3-99 Tensiometer Head Variation in Relation to Precipitation, Irrigation and Evaporation

Location D at the Portion A of the U1 plot

Khok Nai Leaching Test Plot , August '93

Ground Surface Level : z=1.460m

Date	Pressure Head			Precipitation mm/day	Irrigation mm/day	Evaporation Muno mm/day	Remarks
	Depth : 10cm z= 1.510m	Depth : 30cm z= 1.310m	Depth : 60cm z= 1.010m				
1	—	—	—	—			
2	- 0.680	0.0	0.0	0.0			
3	- 0.408	0.0	0.0	18.8			
4	- 0.272	0.0	0.0	5.3			
5	- 0.680	0.0	- 0.136	0.0			
6	- 0.680	- 0.136	- 0.272	5.9			
7	—	—	—	—			
8	—	—	—	—			
9	- 2.176	- 0.680	- 0.544	0.5			
10	- 2.312	- 0.816	- 0.680	2.3			
11	- 2.040	- 0.816	- 0.680	0.0			
12	- 1.768	- 0.680	- 0.680	0.0			
13	- 2.856	- 0.952	- 0.680	0.0			
14	—	—	—	—			
15	—	—	—	—			
16	- 4.760	- 1.360	- 0.680	0.0			
17	- 4.080	- 1.360	- 0.680	0.0			
18	- 4.488	- 1.496	- 0.680	1.8			
19	- 3.944	- 0.360	- 0.680	0.5			
20	- 2.040	- 0.544	- 0.544	11.0			
21	—	—	—	—			
22	—	—	—	—			
23	- 1.088	- 0.408	- 0.408	3.2			
24	- 2.176	- 0.544	- 0.544	0.0			
25	- 2.584	- 0.544	- 0.408	0.0			
26	- 3.400	0.952	- 0.544	0.8			
27	- 1.632	0.0	- 0.544	5.5			
28	—	—	—	—			
29	—	—	—	—			
30	- 1.768	0.0	- 0.272	0.0			
31	- 2.856	0.0	- 0.136	2.3			

Table 4-2 Hydraulic Head Variation during the Subsidence Test in Relation to Canal Stage

Location A

Bacho Swamp Test Plot, 1 December '92 Ground Surface Level : z=1.730m

Time	Pressure Head Observed by Tensiometers			Total Head obs. by Piezometers		Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	P. NO.1 z= 0.730m	P. NO.2 z= 0.230m			
10:50	0.00	0.00	0.00			1.73		pumping start
11:10	0.00	0.00	0.00	1.73	1.649	1.70		
11:30	0.00	0.00	0.00	1.695	1.74	1.67		
11:50	0.00	0.00	0.00	1.695	1.725	1.64		
12:10	0.00	0.00	0.00	1.65	1.688	1.59		
12:50	0.00	0.00	- 0.272	1.55	1.61	1.58		
13:30	0.00	0.00	- 0.408	1.44	1.52	1.34		
14:00	0.00	0.00	- 0.544	1.35	1.415	1.32		
14:30	0.00	0.00	- 0.544	1.247	1.315	1.21		
15:00	0.00	0.00	- 0.544	1.165	1.225	0.98		
15:30	0.00	0.00	- 0.68	1.075	1.135	0.86		
16:00	0.00	0.00	- 0.816	0.995	1.05	0.76		
16:30	0.00	0.00	- 0.952			0.555		pumping stop
2/12								
15:00	0.00	0.00	- 1.02	0.896	0.90	0.81		

Table 4-3 Hydraulic Head Variation and Subsidence during the Subsidence Test in Relation to Canal Stage

Location B

Bacho Swamp Test Plot, 1 December '92 Ground Surface Level : z=1.730m

Time	Pressure Head Observed by Tensiometers			Total Head obs. by Piezometers		Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	P. NO.3 z= 0.730m	P. NO.4 z= 0.230m		mm	
10:50	0.00	0.00	0.00			1.73	0	pumping start
11:10	0.00	0.00	0.00	1.765	1.759	1.70	0	
11:30	0.00	0.00	0.00	1.73	1.76	1.67	0	
11:50	0.00	0.00	0.00	1.698	1.732	1.64	0	
12:10	0.00	0.00	0.00	1.665	1.687	1.59	2	
12:50	0.00	0.00	0.00	1.588	1.605	1.58	4	
13:30	0.00	0.00	- 0.272	1.48	1.485	1.34	7	
14:00	0.00	0.00	- 0.272	1.38	1.375	1.32	9	
14:30	0.00	0.00	- 0.272	1.28	1.27	1.21	10	
15:00	0.00	0.00	- 0.408	1.19	1.16	0.98	13	
15:30	0.00	0.00	- 0.408	1.103	1.095	0.86	15	
16:00	0.00	0.00	- 0.544	1.055	1.028	0.76	16	
16:30	0.00	0.00	- 0.68			0.555		pumping stop
2/12								
15:00	0.00	0.00	- 0.7888	0.914	0.924	0.81	23	

Table **4-4** Hydraulic Head Variation during the Subsidence Test in Relation to Canal Stage

Location C

Bacho Swamp Test Plot, 1 December '92 Ground Surface Level : z=1.730m

Time	Pressure Head Observed by Tensiometers			Total Head obs. by Piezometers		Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	P. NO.5 z= 0.730m	P. NO.6 z= 0.230m			
10:50	0.00	0.00	0.00			1.73		pumping start
11:10	0.00	0.00	0.00	1.751	1.757	1.70		
11:30	0.00	0.00	0.00	1.718	1.725	1.67		
11:50	0.00	0.00	0.00	1.687	1.695	1.64		
12:10	0.00	0.00	0.00	1.65	1.67	1.59		
12:50	0.00	0.00	0.00	1.575	1.565	1.58		
13:30	0.00	0.00	0.00	1.47	1.45	1.34		
14:00	0.00	0.00	0.00	1.365	1.35	1.32		
14:30	0.00	0.00	0.00	1.255	1.25	1.21		
15:00	0.00	0.00	0.00	1.17	1.16	0.98		
15:30	0.00	0.00	0.00	1.09	1.065	0.86		
16:00	0.00	0.00	0.00	1.025	0.98	0.76		
16:30	0.00	0.00	0.00			0.555		pumping stop
2/12								
15:00	0.00	0.00	0.00	0.896	0.864	0.81		

Table 4-5 Hydraulic Head Variation during the Subsidence Test in Relation to Canal Stage

Location D

Bacho Swamp Test Plot, 1 December '92 Ground Surface Level : z=1.730m

Time	Pressure Head Observed by Tensiometers			Total Head	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	Piezometer NO. 7 z= 0.230m			
10:50	0.00	0.00	0.00		1.73		pumping start
11:10	0.00	0.00	0.00	1.798	1.70		
11:30	0.00	0.00	0.00	1.79	1.67		
11:50	0.00	0.00	0.00	1.778	1.64		
12:10	0.00	0.00	0.00	1.755	1.59		
12:50	0.00	0.00	0.00	1.705	1.58		
13:30	0.00	0.00	- 0.272	1.615	1.34		
14:00	0.00	0.00	- 0.408	1.465	1.32		
14:30	0.00	0.00	- 0.544	1.342	1.21		
15:00	0.00	0.00	- 0.544	1.23	0.98		
15:30	0.00	0.00	- 0.68	1.14	0.86		
16:00	0.00	0.00	- 0.816	1.045	0.76		
16:30	0.00	0.00	- 0.816		0.555		pumping stop
2/12							
15:00	0.00	0.00	- 0.816	0.897	0.81		

Table 4-6 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, November '92 Ground Surface Level : z=1.730m

Date	Locatin A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B mm	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m			
1	–	–	–	–	–	–	–	–	–	
2	–	–	–	–	–	–	–	–	–	
3	–	–	–	–	–	–	–	–	–	
4	–	–	–	–	–	–	–	–	–	
5	–	–	–	–	–	–	–	–	0	
6	–	–	–	–	–	–	–	–	–	
7	1.035	0.48	1.085	1.09	0.68	0.68	1.005	–	0	
8	–	–	–	–	–	–	–	–	–	
9	1.19	0.69	1.22	1.22	0.74	0.85	1.11	–	0	
10	1.30	1.31	1.335	1.315	0.87	0.92	1.185	–	+ 5	
11	1.345	1.355	1.365	1.36	0.99	0.995	1.255	–	+ 5	
12	1.595	1.585	1.595	1.64	1.115	1.10	1.375	1.61	+10	
13	1.34	1.305	1.46	1.325	1.27	1.27	1.34	1.55	+15	
14	–	–	–	–	–	–	–	1.47	+13	
15	–	–	–	–	–	–	–	–	–	
16	1.62	1.64	1.59	1.66	1.60	1.51	1.61	1.56	+15	
17	1.665	1.68	1.655	1.708	1.655	1.59	1.67	1.62	+20	
18	1.68	1.695	1.655	1.723	1.644	1.637	1.693	1.64	+21	
19	1.675	1.715	1.71	1.738	1.689	1.662	1.706	1.66	+23	
20	1.695	1.72	1.715	1.745	1.695	1.68	1.718	1.65	+24	
21	–	–	–	–	–	–	–	–	–	
22	–	–	–	–	–	–	–	–	–	
23	1.72	1.745	1.70	1.775	1.71	1.71	1.75	1.69	+26	
24	1.725	1.755	1.75	1.78	1.73	1.715	1.75	1.69	+22	
25	1.74	1.765	1.76	1.79	1.745	1.74	1.76	1.70	+28	
26	–	–	–	–	–	–	–	–	–	
27	–	–	–	–	–	–	–	–	–	
28	–	–	–	–	–	–	–	–	–	
29	–	–	–	–	–	–	–	–	–	
30	–	–	–	–	–	–	–	–	–	
31										

Note : + with the subsidence figures meams swelling

Table 4-7 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, December '92 Ground Surface Level : z=1.730m

Date	Locatin A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B mm	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m			
1	–	–	–	–	–	–	–	1.73	+30	
2	0.896	0.90	0.914	0.922	0.896	0.864	0.897	0.81	+ 7	
3	–	–	–	–	–	–	–	–	–	
4	–	–	–	–	–	–	–	–	–	
5	–	–	–	–	–	–	–	–	–	
6	–	–	–	–	–	–	–	–	–	
7	–	–	–	–	–	–	–	–	–	
8	1.32	1.322	1.322	1.37	1.395	1.325	1.405	1.32	+ 3	
9	1.46	1.415	1.47	1.486	1.473	1.417	1.491	1.42	+ 4	
10	1.585	1.555	1.54	1.63	1.615	1.537	1.625	1.55	+ 4	
11	1.62	1.616	1.655	1.66	1.64	1.63	1.666	1.58	+ 5	
12	–	–	–	–	–	–	–	–	–	
13	1.66	1.675	1.668	1.70	1.663	1.655	1.69	1.61	+ 7	
14	1.664	1.66	1.675	1.705	1.667	1.627	1.664	1.61	+10	
15	1.453	1.53	1.52	1.525	1.43	1.513	1.554	1.49	+12	
16	1.371	1.377	1.385	1.40	1.373	1.355	1.39	1.30	+15	
17	1.24	1.243	1.25	1.263	1.24	1.215	1.256	1.16	+13	
18	1.10	1.10	1.11	1.12	1.09	1.072	1.11	1.01	+20	
19	1.065	1.065	1.06	1.057	1.06	1.038	1.065	0.98	+20	
20	1.08	1.05	1.075	1.08	1.07	1.06	1.10	1.05	+20	
21	1.16	1.155	1.17	1.17	1.152	1.137	1.17	1.08	+20	
22	1.067	1.077	1.115	1.11	1.07	1.05	1.085	0.99	+20	
23	1.25	1.245	1.205	1.235	1.225	1.205	1.22	1.18	+20	
24	1.03	1.055	1.05	1.095	1.05	1.115	1.06	0.97	+15	
25	0.93	0.945	0.99	0.95	0.93	0.95	0.905	0.88	+15	
26	1.40	1.02	1.32	1.17	1.19	1.12	1.16	1.15	+20	
27	1.41	1.26	1.40	1.27	1.27	1.18	1.17	–	+20	
28	1.395	1.29	1.20	1.29	1.305	1.265	1.30	1.21	+20	
29	1.175	1.14	1.155	1.16	1.145	1.105	1.15	1.06	+20	
30	1.047	1.02	1.03	1.05	1.03	0.985	1.03	0.93	+17	
31	–	–	–	–	–	–	–	–	–	

Note : + with the subsidence figures meams swelling

Table 4-8 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, January '93 Ground Surface Level : z=1.730m

Date	Locatin A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B mm	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m			
1	–	–	–	–	–	–	–	–	–	
2	–	–	–	–	–	–	–	–	–	
3	–	–	–	–	–	–	–	–	–	
4	1.185	1.155	1.43	1.19	1.19	1.11	1.183	–	+20	
5	1.225	1.21	1.175	1.22	1.22	1.175	1.22	1.12	+20	
6	1.255	1.24	1.236	1.252	1.255	1.21	1.235	1.16	+20	
7	1.285	1.255	1.28	1.275	1.285	1.23	1.27	1.18	+22	
8	1.305	1.28	1.28	1.29	1.305	1.26	1.285	1.20	+22	
9	1.365	1.30	1.375	1.33	1.385	1.28	1.33	1.38	+25	
10	1.34	1.30	1.35	1.32	1.36	1.27	1.32	1.26	–	
11	1.365	1.336	1.277	1.36	1.354	1.37	1.343	1.26	+22	
12	1.37	1.355	1.36	1.375	1.37	1.33	1.363	1.27	+23	
13	1.363	1.332	1.375	1.372	1.32	1.305	1.377	1.29	+23	
14	1.38	1.355	1.395	1.39	1.365	1.346	1.371	1.30	+25	
15	1.415	1.395	1.355	1.41	1.41	1.37	1.405	1.32	+25	
16	1.38	1.36	1.37	1.38	1.42	1.335	1.375	1.32	+26	
17	1.365	1.33	1.38	1.37	1.40	1.315	1.375	1.30	+30	
18	1.385	1.36	1.375	1.393	1.41	1.345	1.405	1.32	+25	
19	1.11	1.085	1.17	1.06	1.11	1.05	1.09	0.90	+20	
20	0.88	0.903	1.085	0.92	0.93	0.86	0.91	0.82	+18.5	
21	0.82	0.785	0.80	0.79	0.815	0.75	0.79	0.70	+14	
22	0.876	0.836	0.88	0.86	0.86	0.82	0.86	0.76	+14	
23	0.974	0.89	1.09	0.99	0.94	0.97	0.94	0.81	+10	
24	1.02	0.93	0.96	0.975	0.965	0.92	1.03	0.85	+10	
25	1.035	0.96	0.975	0.975	0.94	0.94	0.97	0.82	+15	
26	1.06	0.935	1.00	1.02	1.52	0.965	1.01	0.90	+15	
27	–	–	–	–	–	–	–	–	–	
28	–	–	–	–	–	–	–	–	–	
29	1.19	1.15	1.05	1.10	1.22	1.04	1.09	1.06	+15	
30	1.25	1.05	1.09	0.59	1.26	0.76	1.18	1.10	+10	
31	1.38	1.28	1.295	1.305	1.30	1.20	1.285	1.20	+15	

Note : + with the subsidence figures meams swelling

Table 4-9 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, February '93 Ground Surface Level : z=1.730m

Date	Locatin A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m		mm	
1	1.46	1.275	1.41	1.36	1.39	1.24	1.33	1.29	+15	
2	1.55	1.45	1.475	1.49	1.575	1.43	1.45	1.39	+20	
3	1.56	1.425	1.48	1.46	1.58	1.41	1.48	1.39	+30	
4	1.52	1.42	1.505	1.47	1.465	1.445	1.48	1.39	+30	
5	1.605	1.56	1.60	1.58	1.69	1.54	1.575	1.48	+30	
6	—	—	—	—	—	—	—	—	—	
7	—	—	—	—	—	—	—	—	—	
8	1.64	1.60	1.55	1.60	1.60	1.58	1.615	1.53	+36	
9	1.645	1.636	1.59	1.66	1.655	1.61	1.65	1.57	+40	
10	1.49	1.46	1.43	1.47	1.49	1.43	1.598	1.405	+35	
11	1.37	1.33	1.39	1.365	1.36	1.38	1.355	1.26	+30	
12	1.25	1.245	1.32	1.245	1.254	1.21	1.255	1.15	+25	
13	—	—	—	—	—	—	—	—	—	
14	—	—	—	—	—	—	—	—	—	
15	1.315	1.30	1.305	1.28	1.31	1.275	1.31	1.22	+25	
16	1.16	1.135	1.215	1.185	1.16	1.205	1.14	1.06	+23	
17	1.095	1.07	1.02	1.09	1.09	0.99	1.07	0.99	+20	
18	0.955	0.92	0.96	0.953	0.95	0.895	0.93	0.835	+18	
19	0.87	0.845	0.88	0.87	0.865	0.81	0.855	0.75	—	
20	—	—	—	—	—	—	—	—	—	
21	—	—	—	—	—	—	—	—	—	
22	1.055	1.035	1.06	1.05	1.065	0.935	1.405	0.96	+18	
23	0.915	0.885	0.92	0.92	0.92	0.87	0.90	0.815	+16	
24	1.00	0.965	0.98	0.985	1.00	0.94	0.97	0.88	+17	
25	1.05	1.02	1.025	1.00	1.04	0.99	1.03	0.935	+18	
26	1.14	1.13	1.11	1.10	1.13	1.08	1.11	0.99	+16	
27	—	—	—	—	—	—	—	—	—	
28	—	—	—	—	—	—	—	—	—	
29										
30										
31										

Note : + with the subsidence figures meams swelling

Table 4-10 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, March '93 Ground Surface Level : z=1.730m

Date	Location A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B mm	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m			
1	1.19	1.16	1.19	1.19	1.19	1.16	1.19	0.91	-10	
2	1.23	1.20	1.22	1.23	1.22	1.18	1.21	0.88	-11	
3	0.94	0.9	1.07	0.92	0.97	0.855	0.93	1.21	- 6	
4	0.81	0.79	0.83	0.81	0.83	0.76	0.78	1.31	- 5	
5	0.89	0.85	0.84	0.86	0.9	0.825	0.86	1.24	- 5	
6									—	
7									—	
8	1.015	1.00	0.97	1.02	1.03	0.96	1.01	1.32	- 7	
9	0.87	0.81	0.82	0.79	0.85	0.77	0.81	1.29	- 5	
10	0.76	0.71	0.73	0.79	0.73	0.72	0.78	1.40	- 3	
11		0.67		0.67		0.53	0.60	1.50	+ 1	
12	0.73	0.67		0.64	0.73	0.54	0.64	1.96	+ 2	
13									—	
14									—	
15	1.33	1.20	1.26	1.27	1.27	1.24	1.27	1.01	-10	
16	1.31	1.17	1.26	1.17	1.26	1.19	1.24	1.05	- 8	
17	1.23	1.17	1.17	1.17	1.17	1.13	1.13	1.12	- 7	
18	1.18	0.99	1.1	1.12	1.13	1.02	1.11	1.16	- 6	
19	1.29	1.17	1.21	1.21	1.22	1.14	1.20	1.90	- 7	
20	—	—	—	—	—	—	—			
21	—	—	—	—	—	—	—			
22	—	—	—	—	—	—	—			
23	—	—	—	—	—	—	—			
24	—	—	—	—	—	—	—			
25	—	—	—	—	—	—	—			
26	—	—	—	—	—	—	—			
27	—	—	—	—	—	—	—			
28	—	—	—	—	—	—	—			
29	—	—	—	—	—	—	—			
30	—	—	—	—	—	—	—			
31	—	—	—	—	—	—	—			

Note : + with the subsidence figures means swelling

Table 4-11 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, April '93 Ground Surface Level : z=1.730m

Date	Location A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m		mm	
1	1.14	1.05	1.09	1.08	1.09	1.06	1.13	1.00	+20	
2	1.03	0.94	0.98	0.99	0.99	0.93	0.97	1.12	+18	
3	–	–	–	–	–	–	–	–	–	
4	–	–	–	–	–	–	–	–	–	
5	1.07	1.04	1.02	1.02	1.04	1.00	1.04	1.07	+18	
6	1.07	1.04	1.01	1.03	1.04	1.00	1.03	1.11	+18	
7	1.07	1.02	1.00	1.02	1.05	0.99	1.02	–	+18	
8	1.11	1.05	1.04	1.06	1.09	1.02	1.07	1.03	+20	
9	1.14	1.05	1.08	1.07	1.09	1.05	1.13	1.00	+19	
10	–	–	–	–	–	–	–	–	–	
11	–	–	–	–	–	–	–	–	–	
12	1.26	1.17	1.16	1.18	1.17	1.11	1.15	0.88	+22	
13	–	–	–	–	–	–	–	–	–	
14	–	–	–	–	–	–	–	–	–	
15	1.68	1.64	1.63	1.64	1.64	1.59	1.65	0.52	+43	
16	1.72	1.67	1.66	1.65	1.68	1.65	1.68	0.46	+43	
17	–	–	–	–	–	–	–	–	–	
18	–	–	–	–	–	–	–	–	–	
19	1.73	1.69	1.68	1.71	1.69	1.66	1.69	0.53	+48	
20	1.54	1.51	1.50	1.51	1.51	1.48	1.51	0.57	+40	
21	1.52	1.48	1.47	1.49	1.48	1.45	1.49	0.79	+39	
22	1.30	1.25	1.23	1.27	1.26	1.22	1.26	0.83	+28	
23	1.21	1.16	1.17	1.16	1.17	1.13	1.16	1.16	+25	
24	–	–	–	–	–	–	–	–	–	
25	–	–	–	–	–	–	–	–	–	
26	1.05	1.00	0.94	1.00	1.03	1.07	1.00	1.39	+16	
27	0.74	0.64	0.70	0.70	0.70	0.64	0.67	1.43	+10	
28	0.81	0.74	0.77	0.85	0.78	0.72	0.75	1.35	+10	
29	0.73	0.64	0.72	0.67	0.66	0.62	0.65	1.51	+10	
30	0.77	0.70	0.72	0.72	0.73	0.67	0.70	1.40	+ 9	
31	–	–	–	–	–	–	–	–	–	

Note : + with the subsidence figures means swelling

Table 4-12 Piezometric Head Variation and Subsidence with Time in Relation to Canal Stage

Bacho Swamp Test Plot, May '93 Ground Surface Level : z=1.730m

Date	Locatin A		Location B		Location C		Location D	Canal Stage	Subsidence at Location B mm	Remarks
	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.730m	Total Head z= 0.230m	Total Head z= 0.230m			
1	–	–	–	–	–	–	–	–	–	
2	–	–	–	–	–	–	–	–	–	
3	0.80	0.745	0.76	0.755	0.77	0.71	0.745	1.36	+ 7	
4	0.73	0.61	0.73	0.635	0.73	0.58	0.615	1.49	+ 5	
5	–	–	–	–	–	–	–	1.44	+ 5	
6	0.73	0.66	0.73	0.69	0.73	0.64	0.67	1.51	+ 5	
7	0.73	0.57	0.73	0.565	0.73	0.54	0.595	–	–	
8	–	–	–	–	–	–	–	–	–	
9	–	–	–	–	–	–	–	1.34	+ 5	
10	0.81	0.75	0.73	0.76	0.79	0.72	0.76	1.44	+ 5	
11	0.73	0.66	0.73	0.67	0.73	0.62	0.66	1.50	+ 3	
12	0.74	0.61	0.73	0.63	0.73	0.57	0.61	1.51	+ 2	
13	0.745	0.60	0.73	0.62	0.73	0.56	0.60	1.51	0	
14	0.73	0.595	0.73	0.615	0.73	0.555	0.605	–	–	
15	–	–	–	–	–	–	–	–	–	
16	–	–	–	–	–	–	–	–	–	
17	–	–	–	–	–	–	–	1.32	+ 5	
18	0.86	0.62	0.81	0.76	0.80	0.64	0.775	1.44	+ 1	
19	0.77	0.665	0.73	0.68	0.73	0.59	0.665	1.48	0	
20	0.73	0.635	0.73	0.65	0.73	0.62	0.63	1.50	0	
21	0.73	0.61	0.73	0.63	0.73	0.57	0.61	–	–	
22	–	–	–	–	–	–	–	–	–	
23	–	–	–	–	–	–	–	1.38	0	
24	0.815	0.72	0.74	0.735	0.74	0.70	0.72	1.50	- 1	
25	0.73	0.605	0.73	0.620	0.73	0.58	0.605	1.53	- 1	
26	0.73	0.60	0.73	0.61	0.73	0.57	0.60	1.40	- 1	
27	0.81	0.70	0.73	0.70	0.73	0.66	0.70	–	–	
28	–	–	–	–	–	–	–	–	–	
29	–	–	–	–	–	–	–	–	–	
30	–	–	–	–	–	–	–	–	–	
31	–	–	–	–	–	–	–	–	–	

Note : + with the subsidence figures means swelling

Table 4-13 Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, November '92 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	- 0.136	—	—	—		—	—	
3	0.00	0.00	- 1.088	—		—	—	
4	0.00	0.00	- 0.816	—		—	—	
5	—	0.00	- 0.816	—		—	0	
6	—	—	—	—		—	—	
7	—	0.00	0.00	—		—	0	
8	—	—	—	—		—	—	
9	—	0.00	- 0.408	—		—	0	
10	0.00	0.00	- 0.544	—		—	+ 5	
11	0.00	0.00	- 0.408	—		—	+ 5	
12	0.00	0.00	0.00	—		1.61	+10	
13	0.00	0.00	- 0.544	—		1.55	+15	
14	0.00	0.00	- 0.408	—		1.47	+13	
15	—	—	—	—		—	—	
16	0.00	0.00	- 0.136	—		1.56	+15	
17	0.00	0.00	- 0.136	—		1.62	+20	
18	0.00	0.00	- 0.136	—		1.64	+21	
19	0.00	0.00	- 0.136	—		1.66	+23	
20	0.00	0.00	- 0.136	—		1.65	+24	
21	—	—	—	—		—	—	
22	—	—	—	—		—	—	
23	0.00	0.00	0.00	—		1.69	+26	
24	0.00	0.00	0.00	—		1.69	+22	
25	0.00	0.00	0.00	—		1.70	+28	
26	—	—	—	—		—	—	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31								

Note: + with the subsidence figures means swelling.

Table 4-14 Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, December '92 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	0.00	0.00	0.00	—		1.73	+30	pumping
2	0.00	0.00	- 1.02	0		0.81	+ 7	
3	—	—	—	—		—	—	
4	—	—	—	—		—	—	
5	—	—	—	—		—	—	
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	0.00	0.00	- 0.544	—		1.32	+ 3	
9	0.00	0.00	- 0.544	19.8		1.42	+ 4	
10	0.00	0.00	- 0.408	44.5		1.55	+ 4	
11	0.00	0.00	- 0.136	1.9		1.58	+ 5	
12	—	—	—	—		—	—	
13	0.00	0.00	- 0.272	0.7		1.61	+ 7	
14	0.00	0.00	- 0.272	0		1.61	+10	pumping
15	0.00	0.00	- 0.408	0		1.49	+12	pumping
16	0.00	0.00	- 0.544	0		1.30	+15	pumping
17	- 0.408	0.00	- 0.748	0		1.16	+13	pumping
18	- 0.408	0.00	- 0.816	0.1		1.01	+20	pumping
19	- 0.544	0.00	- 0.952	0		0.98	+20	
20	- 0.68	0.00	- 1.088	3.0		1.05	+20	
21	- 0.408	0.00	- 0.816	3.5		1.08	+20	pumping
22	- 0.408	0.00	- 0.816	3.1		0.99	+20	pumping
23	0.00	0.00	- 0.68	117.0		1.18	+20	pumping
24	0.00	0.00	- 0.816	6.6		0.97	+15	pumping
25	0.00	0.00	- 0.952	27.5		0.88	+15	pumping
26	0.00	0.00	- 0.816	115.0		1.15	+20	pumping
27	0.00	0.00	- 0.748	0		—	+20	
28	- 0.272	0.00	- 0.68	1.0		1.21	+20	pumping
29	- 0.272	0.00	- 0.68	0		1.06	+20	pumping
30	- 0.408	0.00	- 0.952	2.0		—	+17	
31								

Note: + with the subsidence figures means swelling.

Table 4-15 Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, January '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		at location B mm	
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	—	—	—	—		—	—	
4	- 0.816	0.00	- 0.816	2.6		—	+20	pumping
5	- 0.816	0.00	- 0.68	0.5		1.12	+20	pumping
6	- 0.816	0.00	- 0.68	0		1.16	+20	pumping
7	- 0.68	0.00	- 0.544	0		1.18	+22	pumping
8	- 0.816	0.00	- 0.68	0.4		1.20	+22	pumping
9	- 0.68	- 0.136	- 0.544	0		1.38	+25	
10	- 1.088	—	- 0.68	1.7		1.26	—	
11	- 0.816	0.00	- 0.68	0		1.26	+22	pumping
12	- 0.816	0.00	- 0.68	0		1.27	+23	pumping
13	- 0.68	0.00	- 0.68	37.0		1.29	+23	pumping
14	- 0.68	0.00	- 0.544	4.7		1.30	+25	pumping
15	- 0.408	0.00	- 0.544	0		1.32	+25	pumping
16	- 0.408	—	- 0.544	0		1.32	+26	pumping
17	- 0.544	—	- 0.544	2.0		1.30	+30	pumping
18	- 0.544	0.00	- 0.544	3.1		1.32	+25	pumping
19	- 0.408	0.00	- 0.68	2.6		0.90	+20	pumping
20	- 0.68	0.00	- 0.952	1.0		0.82	+18.5	pumping
21	- 0.816	0.00	- 1.088	0		0.70	+14	pumping
22	- 0.952	- 0.272	- 1.088	0		0.76	+14	pumping
23	- 0.952	- 0.272	- 1.088	0		0.81	+10	pumping
24	- 1.088	- 0.408	- 1.088	0		0.85	+10	pumping
25	- 1.088	- 0.272	- 0.952	0		0.82	+15	pumping
26	- 0.544	- 0.272	- 0.952	0		0.90	+15	pumping
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	- 0.136	- 0.136	- 0.408	71.5		1.06	+15	pumping
30	- 0.136	- 0.136	- 0.952	2.2		1.10	+10	pumping
31	- 0.136	—	- 0.816	1.0		1.20	+15	pumping

Note: + with the subsidence figures means swelling.

Table **4-16** Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, February '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 0.272	0.00	- 0.68	0		1.29	+15	
2	- 0.272	0.00	- 0.408	13.0		1.39	+20	pumping
3	- 0.408	0.00	- 0.544	2.4		1.39	+30	pumping
4	- 0.408	- 0.136	- 0.544	0		1.39	+30	
5	- 0.276	0.00	- 0.408	0		1.48	+30	pumping
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	- 0.136	0.00	- 0.408	0		1.53	+36	
9	0.00	0.00	- 0.408	0		1.57	+40	pumping
10	- 0.272	0.00	- 0.544	0		1.405	+35	pumping
11	- 0.272	0.00	- 0.68	0		1.26	+30	pumping
12	- 0.34	0.00	- 0.68	0.6		1.15	+25	pumping
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	- 0.544	0.00	- 0.68	0		1.22	+25	pumping
16	- 0.544	0.00	- 0.816	0		1.06	+23	pumping
17	- 0.68	0.00	- 0.816	0		0.99	+20	pumping
18	- 0.952	- 0.272	- 1.088	0		0.835	+18	pumping
19	- 0.952	- 0.272	- 1.088	0		0.75	—	
20	—	—	—	—		—	—	
21	—	—	—	—		—	—	
22	- 1.496	- 0.408	- 0.952	0		0.96	+18	pumping
23	- 1.632	- 0.544	- 1.088	0		0.815	+16	
24	- 1.836	- 0.544	- 0.952	0		0.88	+17	
25	- 2.584	- 0.680	- 0.952	1.1		0.935	+18	
26	- 2.176	- 0.544	- 0.816	0		0.99	+16	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29								
30								
31								

Note: + with the subsidence figures means swelling.

Table 4-17 Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, March '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 1.292	- 0.408	- 0.816	4		0.91	-10	
2	- 1.632	- 0.544	- 0.816	—		0.88	-11	
3	- 1.224	- 0.544	- 0.952	—		1.21	- 6	
4	- 1.496	- 0.816	- 1.224	—		1.31	- 5	
5	- 1.632	- 0.816	- 1.224	—		1.24	- 5	
6	—	—	—	—		—		
7	—	—	—	—		—		
8	- 2.040	- 0.272	- 1.088	12.9		1.32	- 7	
9	- 2.448	- 0.544	- 1.088	—		1.29	- 5	
10	- 2.584	- 0.952	- 1.292	—		1.40	- 3	
11	- 3.128	- 1.088	- 1.360	1.5		1.50	+ 1	
12	- 1.496	- 0.272	- 1.224	18.7		1.96	+ 2	
13		—		—		—	—	
14		—		—		—	—	
15	- 0.272	0	- 0.816	154.3		1.01	-10	
16	- 0.136	0	- 0.816	13.8		1.05	- 8	
17	- 0.272	0	- 0.816	—		1.12	- 7	
18	- 0.408	0	- 0.816	5.1		1.16	- 6	
19	- 0.272	0	- 0.816	31.7		1.90	- 7	
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Note: + with the subsidence figures means swelling.
- means subsidence.

Table 4-18 Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, April '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 0.544	0	- 0.952	—		1.00	+20	
2	- 0.680	- 0.272	- 0.952	—		1.13	+18	
3	—	—	—	—		—	—	
4	—	—	—	—			—	
5	- 1.496	- 0.544	- 0.952	—		1.12	+18	
6	- 1.360	- 0.544	- 0.952	—		1.11	+18	
7	- 1.632	- 0.544	- 0.952	—		—	+18	
8	- 2.584	- 0.816	- 0.952	—		—	+20	
9	- 2.448	- 0.680	- 0.816	—		1.00	+19	
10	—	—	—	—			—	
11	—	—	—	—			—	
12	- 1.360	0	- 0.816	—		0.88	+22	
13	—	—	—	—			—	
14	—	—	—	—			—	
15	0	0	- 0.408	46		0.52	+43	
16	0	0	- 0.408	50.5		0.46	+46	
17	—	—	—	—			—	
18	—	—	—	—			—	
19	0	0	- 0.408	5.0		0.53	+48	
20	- 0.136	0	- 0.544	0.0		0.58	+40	
21	- 0.136	0	- 0.544	—		0.79	+39	
22	- 0.272	0	- 0.680	—		0.83	+28	
23	- 0.408	0	- 0.816	—		1.16	+25	
24	—	—	—	—			—	
25	—	—	—	—			—	
26	- 0.816	- 0.408	- 0.952	0.0		1.39	+16	
27	- 1.088	- 0.544	- 1.088	0.0		1.43	+10	
28	- 1.224	- 0.680	- 1.088	—		1.35	+10	
29	- 1.632	- 1.088	- 1.020	0.0		1.51	+10	
30	- 1.904	- 1.292	- 1.292	0.0		1.40	+ 9	
31	—	—	—	—				

Note: + with the subsidence figures means swelling.

Table 4-19 Tensiometer Head Variation in Relation to Rainfall, Evaporation from Ground and the Canal Stage

Location A

Bacho Swamp Test Plot, May '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	- 3.128	- 2.176	- 1.496	—		1.36	+ 7	
4	- 2.992	- 2.176	- 1.496	—		1.49	+ 5	
5	- 3.536	- 2.448	- 1.496	—		1.44	+ 5	
6	- 3.536	- 2.720	- 1.496	—		1.44	+ 5	
7	- 3.536	- 2.720	- 1.496	—		1.51	+ 5	
8	—	—	—	—	—	—	—	
9	—	—	—	—	—	—	—	
10	- 3.672	- 3.264	- 1.632	—		1.34	+ 5	
11	- 1.360	- 0.544	- 1.224	28.3		1.44	+ 5	
12	- 2.652	- 1.224	- 1.360	—		1.50	+ 3	
13	- 3.604	- 2.040	- 1.496	—		1.51	+ 2	
14	- 3.536	- 2.312	- 1.632	—		1.51	0	
15	—	—	—	—		—	—	
16	—	—	—	—		—	—	
17	—	—	—	—		—	—	
18	- 1.224	- 1.088	- 1.292	26.7		1.32	+ 5	
19	- 0.680	- 0.136	- 1.088	22.7		1.44	+ 1	
20	- 0.816	- 0.272	- 1.224	6.5		1.48	0	
21	- 1.088	- 0.544	- 1.224	—		1.50	0	
22	—	—	—	—	—	—	—	
23	—	—	—	—	—	—	—	
24	- 2.176	- 2.040	—	—	—	1.38	0	
25	- 2.448	- 2.176	- 1.428	—		1.50	- 1	
26	- 2.516	- 2.312	- 1.496	—		1.53	- 1	
27	- 1.088	- 0.272	- 1.224	23.4		1.40	- 1	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31	—	—	—	—		—	—	

Note: + with the subsidence figures means swelling.

Table 4-20 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, November '92 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	0.00	- 0.272	- 0.816	—		—	—	
4	0.00	0.00	- 0.408	—		—	—	
5	0.00	0.00	- 0.68	—		—	0	
6	—	—	—	—		—	—	
7	0.00	0.00	- 0.408	—		—	0	
8	—	—	—	—		—	—	
9	—	0.00	- 0.272	—		—	0	
10	0.00	0.00	- 0.272	—		—	+ 5	
11	0.00	0.00	- 0.272	—		—	+ 5	
12	0.00	0.00	0.00	—		1.61	+10	
13	0.00	0.00	- 0.272	—		1.55	+15	
14	0.00	0.00	- 0.136	—		1.47	+13	
15	—	—	—	—		—	—	
16	0.00	0.00	0.00	—		1.56	+15	
17	0.00	0.00	0.00	—		1.62	+20	
18	0.00	0.00	0.00	—		1.64	+21	
19	0.00	0.00	0.00	—		1.66	+23	
20	0.00	0.00	0.00	—		1.65	+24	
21	—	—	—	—		—	—	
22	—	—	—	—		—	—	
23	0.00	0.00	0.00	—		1.69	+26	
24	0.00	0.00	0.00	—		1.69	+22	
25	0.00	0.00	0.00	—		1.70	+28	
26	—	—	—	—		—	—	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31								

Note : + with the subsidence figures means swelling.

Table 4-21 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, December '92

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	0.00	0.00	0.00	—		1.73	+30	pumping
2	0.00	0.00	- 0.7888	0		0.81	+ 7	
3	—	—	—	—		—	—	
4	—	—	—	—		—	—	
5	—	—	—	—		—	—	
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	0.00	—	- 0.272	—		1.32	+ 3	
9	0.00	0.00	- 0.272	19.8		1.42	+ 4	
10	0.00	0.00	- 0.136	44.5		1.55	+ 4	
11	0.00	0.00	0.00	1.9		1.58	+ 5	
12	—	—	—	—		—	—	
13	0.00	0.00	0.00	0.7		1.61	+ 7	
14	0.00	0.00	0.00	0		1.61	+10	pumping
15	0.00	0.00	- 0.272	0		1.49	+12	pumping
16	0.00	0.00	- 0.408	0		1.30	+15	pumping
17	0.00	0.00	- 0.544	0		1.16	+13	pumping
18	0.00	0.00	- 0.68	0.1		1.01	+20	pumping
19	0.00	- 0.272	- 0.68	0		0.98	+20	
20	0.00	- 0.544	- 0.816	3.0		1.05	+20	
21	0.00	- 0.272	- 0.544	3.5		1.08	+20	pumping
22	0.00	- 0.272	- 0.68	3.1		0.99	+20	pumping
23	0.00	0.00	- 0.544	117.0		1.18	+20	pumping
24	0.00	0.00	- 0.68	6.6		0.97	+15	pumping
25	0.00	0.00	- 0.68	27.5		0.88	+15	pumping
26	0.00	0.00	- 0.544	115.0		1.15	+20	pumping
27	0.00	0.00	- 0.544	0		—	+20	
28	0.00	0.00	- 0.408	1.0		1.21	+20	pumping
29	0.00	0.00	- 0.544	0		1.06	+20	pumping
30	0.00	- 0.272	- 0.68	2.0		0.93	+17	pumping
31	—	—	—	—		—	—	

Note : + with the subsidence figures means swelling

Table 4-22 Tensiometer Head Variation in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, January '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	—	—	—	—		—	—	
4	- 0.272	- 0.272	- 0.544	2.6		—	+20	pumping
5	- 0.272	- 0.272	- 0.544	0.5		1.12	+20	pumping
6	- 0.408	- 0.136	- 0.408	0		1.16	+20	pumping
7	- 0.408	- 0.136	- 0.544	0		1.18	+22	pumping
8	- 0.408	- 0.136	- 0.408	0.4		1.20	+22	pumping
9	- 0.408	- 0.136	- 0.272	0		1.38	+25	
10	- 0.544	- 0.136	- 0.272	1.7		1.26	—	
11	- 0.408	0.00	- 0.408	0		1.26	+22	pumping
12	- 0.272	0.00	- 0.408	0		1.27	+23	pumping
13	- 0.272	0.00	- 0.408	3.7		1.29	+23	pumping
14	0.00	0.00	- 0.408	4.7		1.30	+25	pumping
15	0.00	0.00	- 0.272	0		1.32	+25	pumping
16	- 0.408	—	- 0.544	0		1.32	+26	pumping
17	- 0.544	—	- 0.544	2.0		1.30	+30	pumping
18	0.00	0.00	- 0.272	3.1		1.32	+25	pumping
19	0.00	0.00	- 0.68	2.6		0.90	+20	pumping
20	- 0.272	- 0.272	- 0.816	1.0		0.82	+18.5	pumping
21	- 0.408	- 0.408	- 0.816	0		0.70	+14	pumping
22	- 0.544	- 0.408	- 0.952	0		0.76	+14	pumping
23	- 0.66	- 0.408	—	0		0.81	+10	pumping
24	- 0.952	- 0.544	- 0.68	0		0.85	+10	pumping
25	- 0.952	- 0.584	- 0.816	0		0.82	+15	pumping
26	- 0.816	- 0.408	- 0.68	0		0.90	+15	pumping
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	- 0.136	- 0.136	- 0.68	71.5		1.06	+15	pumping
30	- 0.136	- 0.136	- 0.544	2.2		1.10	+10	pumping
31	- 0.136	- 0.136	- 0.544	1.0		1.20	+15	pumping

Note : + with the subsidence figures means swelling.

Table 4-23 Tensiometer Head Variation in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, February '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	- 0.136	- 0.136	- 0.408	0		1.29	+15	
2	- 0.136	0.00	- 0.272	13.0		1.39	+20	pumping
3	- 0.136	0.00	- 0.272	2.4		1.39	+30	pumping
4	- 0.136	0.00	- 0.272	0		1.39	+30	
5	- 0.136	0.00	- 0.272	0		1.48	+30	pumping
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	0.00	0.00	- 0.136	0		1.58	+36	
9	0.00	0.00	- 0.136	0		1.57	+40	pumping
10	0.00	0.00	- 0.272	0		1.405	+35	pumping
11	0.00	0.00	- 0.408	0		1.26	+30	pumping
12	0.00	0.00	- 0.476	0.6		1.15	+25	pumping
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	- 0.272	0.00	- 0.408	0		1.22	+25	pumping
16	- 0.408	- 0.272	- 0.544	0		1.06	+23	pumping
17	- 0.408	- 0.272	- 0.544	0		0.99	+20	pumping
18	- 0.68	- 0.408	- 0.816	0		0.835	+18	pumping
19	- 0.952	- 0.544	- 0.816	0		0.75	—	
20	—	—	—	—		—	—	
21	—	—	—	—		—	—	
22	- 1.292	- 0.544	- 0.68	0		0.96	+18	pumping
23	- 1.36	- 0.68	- 0.816	0		0.815	+16	
24	- 1.632	- 0.68	- 0.68	0		0.88	+17	
25	- 1.632	- 1.632	- 0.68	1.1		0.935	+18	
26	- 1.632	- 1.496	- 0.68	0		0.99	+16	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29								
30								
31								

Note : + with the subsidence figures means swelling.

Table 4-24 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, March '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	- 1.496	- 0.544	- 0.544	4		0.91	-10	
2	- 1.632	- 0.544	- 0.544	—		0.88	-11	
3	- 1.632	- 0.544	- 0.680	—		1.21	- 6	
4	- 2.176	- 0.816	- 0.952	—		1.31	- 5	
5	- 2.040	- 0.952	- 0.816	—		1.24	- 5	
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	- 1.496	- 0.544	- 0.680	12.9		1.32	- 7	
9	- 1.768	- 0.680	- 0.816	—		1.29	- 5	
10	- 2.176	- 0.952	- 0.952	—		1.40	- 3	
11	- 2.380	- 0.952	- 1.088	1.5		1.50	+ 1	
12	- 1.292	- 0.544	- 0.952	18.7		1.96	+ 2	
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	0	0	- 0.408	154.3		1.01	-10	
16	0	0	- 0.408	13.8		1.05	- 8	
17	0	0	- 0.544	—		1.12	- 7	
18	- 0.136	- 0.136	- 0.544	5.1		1.16	- 6	
19	0	0	- 0.544	31.7		0.90	- 7	
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Note : + with the subsidence figures means swelling.

Table 4-25 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, April '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 0.408	- 0.272	- 0.544	—		1.00	+20	
2	- 0.544	- 0.408	- 0.952	0.0		1.13	+18	
3	—	—	—	—		—	—	
4	—	—	—	—		—	—	
5	- 1.632	- 0.544	- 0.544	0		1.12	+18	
6	- 1.564	- 0.544	- 0.544	0		1.11	+18	
7	- 2.040	- 0.680	- 0.544	0			+18	
8	- 2.720	- 0.816	- 0.544	0			+20	
9	- 2.720	- 0.816	- 0.408	0		1.00	+19	
10	—	—	—	—	—	—	—	
11	—	—	—	—	—	—	—	
12	- 0.476	0	- 0.544	0		0.88	+22	
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	0	0	0	46		0.52	+43	
16	0	0	0	50.5		0.46	+46	
17	—	—	—	—		—	—	
18	—	—	—	—		—	—	
19	0	0	0	5.0		0.53	+48	
20	0	0	- 0.272	0.0		0.58	+40	
21	0	0	- 0.272	0.0		0.79	+39	
22	0	0	- 0.408	0.0		0.83	+28	
23	0	0	- 0.544	0.0		1.16	+25	
24	—	—	—	—		—	—	
25	—	—	—	—		—	—	
26	- 0.816	- 0.544	- 0.680	0.0		1.39	+16	
27	- 1.224	- 0.680	- 0.816	0.0		1.43	+10	
28	- 1.496	- 0.816	- 0.952	0.0		1.35	+10	
29	- 2.312	- 0.816	- 0.680	0.0		1.51	+10	
30	- 2.584	- 1.088	- 1.088	0.0		1.40	+ 9	
31								

Note : + with the subsidence figures means swelling.

Table 4-26 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location B

Bacho Swamp Test Plot, May '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	—	—	—	—	—	—	—	
2	—	—	—	—		—		
3	- 3.536	- 1.360	- 1.224	—		1.36	+ 7	
4	- 3.672	- 1.496	- 1.224	—		1.49	+ 5	
5	—	—	—	—		1.44	+ 5	
6	- 4.080	- 1.632	- 1.224	—		1.51	+ 5	
7	- 4.080	- 1.632	- 1.224	—		—	—	
8	—	—	—	—	—	—	—	
9	—	—	—	—	—	1.34	+ 5	
10	- 3.944	- 1.768	- 1.224	—		1.44	+ 5	
11	- 1.904	- 0.680	- 0.952	28.3		1.50	+ 3	
12	- 2.856	- 1.088	- 1.088	—		1.51	+ 2	
13	- 3.944	- 1.360	- 1.224	—		1.51	0	
14	- 4.080	- 1.632	- 1.224	—		—	—	
15	—	—	—	—		—	—	
16	—	—	—	—		—	—	
17	—	—	—	—		1.32	+ 5	
18	- 1.632	- 0.816	- 1.088	26.7		1.44	+ 1	
19	- 0.544	- 0.408	- 0.952	22.7		1.48	0	
20	- 0.680	- 0.544	- 0.952	6.5		1.50	0	
21	- 1.224	- 0.680	- 1.088	—		—	—	
22	—	—	—	—		—	—	
23	—	—	—	—		1.38	0	
24	- 1.768	—	—	—		1.50	- 1	
25	- 3.808	- 1.496	- 1.224	—		1.53	- 1	
26	- 3.808	- 1.632	- 1.360	—		1.40	- 1	
27	- 1.088	- 0.680	- 1.088	23.4		—	—	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31	—	—	—	—		—	—	

Note : + with the subsidence figures means swelling

Table 4-27 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location C

Bacho Swamp Test Plot, November '92

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	- 0.136	- 0.204	0.00	—		—	—	
4	0.00	0.00	0.00	—		—	—	
5	0.00	0.00	0.00	—		—	0	
6	—	—	—	—		—	—	
7	0.00	0.00	0.00	—		—	0	
8	—	—	—	—		—	—	
9	0.00	0.00	0.00	—		—	0	
10	0.00	0.00	0.00	—		—	+ 5	
11	0.00	0.00	0.00	—		—	+ 5	
12	0.00	0.00	0.00	—		1.61	+10	
13	0.00	0.00	0.00	—		1.55	+15	
14	0.00	0.00	0.00	—		1.47	+13	
15	—	—	—	—		—	—	
16	0.00	0.00	0.00	—		1.56	+15	
17	0.00	0.00	0.00	—		1.62	+20	
18	0.00	0.00	0.00	—		1.64	+21	
19	0.00	0.00	0.00	—		1.66	+23	
20	0.00	0.00	0.00	—		1.65	+24	
21	—	—	—	—		—	—	
22	—	—	—	—		—	—	
23	0.00	0.00	0.00	—		1.69	+26	
24	0.00	0.00	0.00	—		1.69	+22	
25	0.00	0.00	0.00	—		1.70	+28	
26	—	—	—	—		—	—	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31								

Note: + with the subsidence figures means swelling.

Table 4-28 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location C

Bacho Swamp Test Plot, December '92

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	0.00	0.00	0.00	–		1.73	+30	pumping
2	0.00	0.00	0.00	0		0.81	+ 7	
3	–	–	–	–		–	–	
4	–	–	–	–		–	–	
5	–	–	–	–		–	–	
6	–	–	–	–		–	–	
7	–	–	–	–		–	–	
8	0.00	0.00	0.00	–		1.32	+ 3	
9	0.00	0.00	0.00	19.8		1.42	+ 4	
10	0.00	0.00	0.00	44.5		1.55	+ 4	
11	0.00	0.00	0.00	1.9		1.58	+ 5	
12	–	–	–	–		–	–	
13	0.00	0.00	0.00	0.7		1.61	+ 7	
14	0.00	0.00	0.00	0		1.61	+10	pumping
15	0.00	0.00	0.00	0		1.49	+12	pumping
16	0.00	0.00	- 0.408	0		1.30	+15	pumping
17	- 0.136	- 0.136	0.00	0		1.16	+13	pumping
18	- 0.136	- 0.272	0.00	0.1		1.01	+20	pumping
19	- 0.272	- 0.272	- 0.136	0		0.98	+20	
20	- 0.408	- 0.408	- 0.136	3.0		1.05	+20	
21	- 0.136	- 0.272	0.00	3.5		1.08	+20	pumping
22	- 0.136	- 0.272	0.00	3.1		0.99	+20	pumping
23	0.00	0.00	0.00	117.0		1.18	+20	pumping
24	0.00	0.00	0.00	6.6		0.97	+15	pumping
25	0.00	0.00	0.00	27.5		0.88	+15	pumping
26	0.00	0.00	0.00	115.0		1.15	+20	pumping
27	0.00	0.00	0.00	0		–	+20	
28	0.00	0.00	0.00	1.0		1.21	+20	pumping
29	- 0.136	0.00	–	0		1.06	+20	pumping
30	- 0.136	- 0.272	0.00	2.0		0.93	+17	
31	–	–	–	–		–	–	

Note: + with the subsidence figures means swelling.

Table 4-29 Tensiometer Head Variation in Relation to Precipitation, Evaporation and the Canal Stage

Location C

Bacho Swamp Test Plot, January '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	—	—	—	—		—	—	
4	- 0.408	- 0.272	0.00	2.6		—	+20	pumping
5	- 0.408	- 0.272	0.00	0.5		1.12	+20	pumping
6	- 0.408	- 0.272	0.00	0		1.16	+20	pumping
7	- 0.408	- 0.272	0.00	0		1.18	+22	pumping
8	- 0.544	- 0.272	0.00	0.4		1.20	+22	pumping
9	- 0.408	- 0.136	- 0.136	0		1.38	+25	
10	- 0.544	- 0.136	- 0.136	1.7		1.26	—	
11	- 0.544	0.00	0.00	0		1.26	+22	pumping
12	- 0.544	0.00	0.00	0		1.27	+23	pumping
13	- 0.408	0.00	0.00	3.7		1.29	+23	pumping
14	- 0.408	0.00	0.00	4.7		1.30	+25	pumping
15	- 0.136	0.00	0.00	0		1.32	+25	pumping
16	- 0.136	—	—	0		1.32	+26	pumping
17	- 0.136	—	—	2.0		1.30	+30	pumping
18	0.00	0.00	0.00	3.1		1.32	+25	pumping
19	- 0.136	0.00	0.00	2.6		0.90	+20	pumping
20	- 0.272	- 0.272	0.00	1.0		0.82	+18.5	pumping
21	- 0.408	- 0.408	0.00	0		0.70	+14	pumping
22	- 0.544	- 0.408	0.00	0		0.76	+14	pumping
23	- 0.68	- 0.408	—	0		0.81	+10	pumping
24	- 0.816	- 0.68	—	0		0.85	+10	pumping
25	- 0.952	- 0.544	—	0		0.82	+15	pumping
26	- 0.68	- 0.408	0.00	0		0.90	+15	pumping
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	- 0.136	- 0.136	- 0.136	71.5		1.06	+15	pumping
30	- 0.136	- 0.136	—	2.3		1.10	+10	pumping
31	—	—	—	1.0		1.20	+15	pumping

Note: + with the subsidence figures means swelling.

Table 4-30 Tensiometer Head Variation in Relation to Precipitation, Evaporation and the Canal Stage

Location C

Bacho Swamp Test Plot, February '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		at location B mm	
1	0.00	0.00	0.00	0		1.29	+15	
2	0.00	0.00	0.00	18.0		1.39	+20	pumping
3	0.00	0.00	0.00	2.4		1.39	+30	pumping
4	- 0.136	- 0.136	0.00	0		1.39	+30	
5	- 0.136	- 0.00	0.00	0		1.48	+30	pumping
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	0.00	0.00	0.00	0		1.53	+36	
9	0.00	0.00	0.00	0		1.57	+40	pumping
10	0.00	0.00	0.00	0		1.405	+35	pumping
11	0.00	0.00	0.00	0		1.26	+30	pumping
12	0.00	0.00	0.00	0.6		1.15	+25	pumping
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	- 0.272	0.00	0.00	0		1.22	+25	pumping
16	- 0.408	- 0.272	0.00	0		1.06	+23	pumping
17	- 0.544	- 0.272	0.00	0		0.99	+20	pumping
18	- 0.816	- 0.408	0.00	0		0.835	+18	pumping
19	- 0.952	- 0.408	0.00	0		0.75	—	
20	—	—	—	—		—	—	
21	—	—	—	—		—	—	
22	- 2.312	- 0.68	0.00	0		0.96	+18	pumping
23	- 2.72	- 0.816	0.00	0		0.815	+16	
24	- 3.40	- 0.816	0.00	0		0.88	+17	
25	- 3.944	- 0.952	0.00	1.1		0.935	+18	
26	- 3.672	- 0.952	0.00	0		0.99	+16	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29								
30								
31								

Note: + with the subsidence figures means swelling.

Table 4-31 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location c

Bacho Swamp Test Plot, March '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	- 3.536	- 0.680	0	4		0.91	-10	
2	- 4.488	- 0.680	0	—		0.88	-11	
3	- 4.352	- 0.680	0	—		1.21	- 6	
4	- 4.760	- 0.952	0	—		1.31	- 5	
5	- 4.896	- 0.952	0	—		1.24	- 5	
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	- 1.360	- 0.408	0	12.9		1.32	- 7	
9	- 3.400	- 0.952	0	—		1.29	- 5	
10	- 4.080	- 1.088	0	—		1.40	- 3	
11	- 5.032	- 1.224	0	1.5		1.50	+ 1	
12	- 3.944	- 0.272	0	18.7		1.96	+ 2	
13		—	—	—		—	—	
14		—	—	—		—	—	
15	0	0	0	154.3		1.01	-10	
16	0	0	0	13.8		1.05	- 8	
17	0	- 0.136	0	—		1.12	- 7	
18	- 0.136	- 0.136	0	5.1		1.16	- 6	
19	0	0	0	31.7		0.90	- 7	
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Note : + with the subsidence figures means swelling.

Table 4-32 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location c

Bacho Swamp Test Plot, April '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	- 0.408	- 0.408	0.0	0.0		1.00	+20	
2	- 0.408	- 0.408	0.0	0.0		1.13	+18	
3	—	—	—	—		—	—	
4	—	—	—	—		—	—	
5	- 1.768	- 0.544	0.0	0		1.12	+18	
6	- 1.632	- 0.408	0.0	0		1.11	+18	
7	- 2.176	- 0.680	0.0	0			+18	
8	- 3.536	- 0.816	0.0	0			+20	
9	- 3.264	- 0.680	0.0	0		1.00	+19	
10	—	—	—	—		—	—	
11	—	—	—	—		—	—	
12	0	0	0	0		0.88	+22	
13	0	0	0	—		—	—	
14	0	0	0	—		—	—	
15	0	0	0	46		0.52	+43	
16	0	0	0	50.5		0.46	+46	
17	—	—	—	—		—	—	
18	—	—	—	—		—	—	
19	0	0	0	5.0		0.53	+48	
20	0	0	0	0		0.58	+40	
21	0	0	0	0		0.79	+39	
22	0	0	0	0		0.83	+28	
23	- 0.136	- 0.136	0	0		1.16	+25	
24	—	—	—	—		—	—	
25	—	—	—	—		—	—	
26	- 0.816	- 0.544	0	0		1.39	+16	
27	- 1.088	- 0.816	0	0		1.43	+10	
28	- 1.768	- 0.816	0	0		1.35	+10	
29	- 2.448	- 0.952	0	0		1.51	+10	
30	- 2.720	- 1.224	0	0		1.40	+ 9	
31								

Note : + with the subsidence figures means swelling.

Table 4-33 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location c

Bacho Swamp Test Plot, May '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation	Evaporation	Canal Stage	Subsidence	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m	mm/day	mm/day		mm	
1	—	—	—	—		—		
2	—	—	—	—		—		
3	- 5.032	- 2.040	0.0	—		1.36	+7	
4	- 5.168	- 2.176	0.0	—		1.49	+5	
5	—	—	—	—		1.44	+5	
6	- 5.984	- 2.176	0.0	—		1.51	+5	
7	- 6.120	- 2.584	0.0	—		—	—	
8	—	—	—	—		—	—	
9	—	—	—	—		1.34	+5	
10	- 6.664	- 2.720	0.0	—		1.44	+5	
11	- 0.544	- 0.544	0.0	28.3		1.50	+3	
12	- 0.680	- 1.088	0.0	—		1.51	+2	
13	- 3.536	- 1.632	0.0	—		1.51	0	
14	- 4.080	- 2.176	0.0	—		—	—	
15	—	—	—	—		—	—	
16	—	—	—	—		—	—	
17	—	—	—	—		1.32	+5	
18	- 0.272	- 0.952	0.0	26.7		1.44	+1	
19	- 0.136	0	0	22.7		1.48	0	
20	- 0.136	- 0.272	0.0	6.5		1.50	0	
21	- 0.272	- 0.544	0.0	—		—	—	
22	—	—	—	—		—	—	
23	—	—	—	—		1.38	0	
24	- 2.312	—	—	—		1.50	-1	
25	- 3.400	- 1.904	0.0	—		1.53	-1	
26	- 3.468	- 2.040	0.0			1.40	-1	
27	- 0.272	- 0.952	0.0	23.4		—	—	
28						—		
29				—		—	—	
30				—		—	—	
31				—		—		

Note : + with the subsidence figures means swelling
- with the subsidence figures means subsidence.

Table 4-34 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, November '92

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	0.00	- 0.408	- 0.952	—		—	—	
4	0.00	0.00	- 0.816	—		—	—	
5	0.00	- 0.136	- 0.816	—		—	0	
6	—	—	—	—		—	—	
7	0.00	0.00	- 0.408	—		—	0	
8	—	—	—	—		—	—	
9	0.00	0.00	- 0.408	—		—	0	
10	0.00	- 0.136	- 0.408	—		—	+ 5	
11	0.00	- 0.136	- 0.408	—		—	+ 5	
12	0.00	0.00	0.00	—		1.61	+10	
13	0.00	- 0.136	- 0.408	—		1.55	+15	
14	0.00	- 0.136	- 0.408	—		1.47	+13	
15	—	—	—	—		—	—	
16	0.00	0.00	- 0.136	—		1.56	+15	
17	0.00	0.00	0.00	—		1.62	+20	
18	0.00	0.00	0.00	—		1.64	+21	
19	0.00	0.00	0.00	—		1.66	+23	
20	0.00	0.00	0.00	—		1.65	+24	
21	—	—	—	—		—	—	
22	—	—	—	—		—	—	
23	0.00	0.00	0.00	—		1.69	+26	
24	0.00	0.00	0.00	—		1.69	+22	
25	0.00	0.00	0.00	—		1.70	+28	
26	—	—	—	—		—	—	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31								

Note: + with subsidence figures means swelling.

Table 4-35 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, December '92

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	0.00	0.00	0.00	—		1.73	+30	pumping
2	0.00	0.00	- 0.816	0		0.81	+ 7	
3	—	—	—	—		—	—	
4	—	—	—	—		—	—	
5	—	—	—	—		—	—	
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	0.00	0.00	- 0.408	0		1.32	+ 3	
9	0.00	0.00	- 0.408	19.8		1.42	+ 4	
10	0.00	0.00	- 0.136	44.5		1.55	+ 4	
11	0.00	0.00	- 0.136	1.9		1.58	+ 5	
12	—	—	—	—		—	—	
13	0.00	0.00	- 0.272	0.7		1.61	+ 7	
14	0.00	0.00	- 0.272	0		1.61	+10	pumping
15	0.00	0.00	- 0.272	0		1.49	+12	pumping
16	0.00	- 0.272	- 0.408	0		1.30	+15	pumping
17	0.00	- 0.408	- 0.68	0		1.16	+13	pumping
18	- 0.272	- 0.408	- 0.816	0.1		1.01	+20	pumping
19	- 0.272	- 0.544	- 0.816	0		0.98	+20	
20	- 0.408	0.68	- 0.816	3.0		1.05	+20	
21	- 0.272	- 0.544	- 0.68	3.5		1.08	+20	pumping
22	- 0.272	- 0.544	- 0.816	3.1		0.99	+20	pumping
23	0.00	- 0.272	- 0.68	117.0		1.18	+20	pumping
24	0.00	- 0.272	- 0.816	6.6		0.97	+15	pumping
25	0.00	- 0.272	- 0.68	27.5		0.88	+15	pumping
26	0.00	0.00	- 0.544	115.0		1.15	+20	pumping
27	0.00	0.00	0.00	0		—	+20	
28	0.00	- 0.272	- 0.68	1.0		1.21	+20	pumping
29	- 0.136	- 0.408	—	0		1.06	+20	pumping
30	- 0.408	- 0.408	- 0.816	2.0		0.93	+17	
31	—	—	—	—		—	—	

Note: + with subsidence figures means swelling.

Table 4-36 Tensiometer Head Variation in Relation to precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, January '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	—	—	—	—		—	—	
4	- 0.68	- 0.68	- 0.68	2.6		—	+20	pumping
5	- 0.544	- 0.68	- 0.68	0.5		1.12	+20	pumping
6	- 0.68	- 0.68	- 0.544	0		1.16	+20	pumping
7	- 0.544	- 0.68	- 0.544	0		1.18	+22	pumping
8	- 0.408	- 0.68	- 0.544	0.4		1.20	+22	pumping
9	- 0.408	- 0.544	- 0.544	0		1.38	+25	
10	- 0.816	- 0.68	- 0.544	1.7		1.26	—	
11	- 0.272	- 0.408	- 0.544	0		1.26	+22	pumping
12	- 0.544	- 0.408	- 0.544	0		1.27	+23	pumping
13	0.00	- 0.272	- 0.544	3.7		1.29	+23	pumping
14	- 0.136	- 0.272	- 0.544	4.7		1.30	+25	pumping
15	- 0.136	- 0.272	- 0.408	0		1.32	+25	pumping
16	- 0.272	- 0.272	- 0.408	0		1.32	+26	pumping
17	- 0.136	- 0.272	- 0.408	2.0		1.30	+30	pumping
18	- 0.136	- 0.272	- 0.408	3.1		1.32	+25	pumping
19	- 0.136	- 0.408	- 0.68	2.6		0.90	+20	pumping
20	- 0.544	- 0.544	- 0.816	1.0		0.82	+18.5	pumping
21	- 0.68	- 0.68	- 0.816	0		0.70	+14	pumping
22	- 0.816	- 0.68	- 0.952	0		0.76	+14	pumping
23	- 0.816	- 0.816	- 1.688	0		0.81	+10	pumping
24	- 0.816	- 0.816	- 1.688	0		0.85	+10	pumping
25	- 0.68	- 0.816	- 0.952	0		0.82	+15	pumping
26	- 0.272	- 0.952	- 0.952	0		0.90	+15	pumping
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29	- 0.136	- 0.272	- 0.68	71.5		1.06	+15	pumping
30	- 0.136	- 0.408	- 0.816	2.2		1.10	+10	pumping
31	- 0.136	- 0.408	- 0.68	1.0		1.20	+15	pumping

Note: + with subsidence figures means swelling.

Table 4-37 Tensiometer Head Variation in Relation to precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, February '98

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 0.136	- 0.408	- 0.544	0		1.29	+15	
2	0.00	- 0.272	- 0.408	13.0		1.39	+20	pumping
3	- 0.136	- 0.272	- 0.408	2.4		1.39	+30	pumping
4	0.00	- 0.272	- 0.272	0		1.39	+30	
5	- 0.136	- 0.136	- 0.272	0		1.48	+30	pumping
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	- 0.00	- 0.00	- 0.136	0		1.53	+36	
9	- 0.00	- 0.00	- 0.272	0		1.57	+40	pumping
10	- 0.00	- 0.136	- 0.408	0		1.405	+35	pumping
11	- 0.00	- 0.272	- 0.476	0		1.26	+30	pumping
12	- 0.136	- 0.272	- 0.544	0.6		1.15	+25	pumping
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	- 0.136	- 0.272	- 0.544	0		1.22	+25	pumping
16	- 0.544	- 0.544	- 0.68	0		1.06	+23	pumping
17	- 0.544	- 0.544	- 0.68	0		0.99	+20	pumping
18	- 0.816	- 0.68	- 0.816	0		0.835	+18	pumping
19	- 0.68	- 0.68	- 0.816	0		0.75	—	
20	—	—	—	—		—	—	
21	—	—	—	—		—	—	
22	- 0.68	- 1.088	- 0.68	0		0.96	+18	pumping
23	- 0.952	- 1.224	- 0.816	0		0.815	+16	
24	- 1.224	- 1.36	- 0.816	0		0.88	+17	
25	- 2.04	- 1.632	- 0.816	1.1		0.935	+18	
26	- 1.768	- 1.632	- 0.952	0		0.99	+16	
27	—	—	—	—		—	—	
28	—	—	—	—		—	—	
29								
30								
31								

Note: + with subsidence figures means swelling.

Table 4-38 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, March '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 0.680	- 1.768	- 0.680	4		0.91	-10	
2	- 1.360	- 1.904	- 0.680	—		0.88	-11	
3	- 0.952	- 2.040	- 0.680	—		1.21	- 6	
4	- 1.360	- 2.312	- 0.952	—		1.31	- 5	
5	- 1.496	- 2.516	- 0.952	—		1.24	- 5	
6	—	—	—	—		—	—	
7	—	—	—	—		—	—	
8	- 1.224	- 1.768	- 0.952	12.9		1.32	- 7	
9	- 1.360	- 2.312	- 0.952	—		1.29	- 5	
10	- 2.040	- 2.584	- 1.088	—		1.40	- 3	
11	- 2.312	- 2.856	- 1.224	1.5		1.50	+ 1	
12	- 0.272	- 1.904	- 0.952	18.7		1.96	+ 2	
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	0	- 0.408	- 0.680	154.3		1.01	-10	
16	0	- 0.272	- 0.680	13.8		1.05	- 8	
17	- 0.136	- 0.408	- 0.680	—		1.12	- 7	
18	0	- 0.408	- 0.680	5.1		1.16	- 6	
19	0	- 0.272	- 0.680	31.7		0.90	- 7	
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Note: + with subsidence figures means swelling.

Table 4-39 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, April '93

Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	- 0.544	- 0.544	- 0.680	0.0		1.00	+20	
2	- 0.408	- 0.680	- 0.816	0.0		1.13	+18	
3	—	—	—	—		—	—	
4	—	—	—	—		—	—	
5	- 1.088	- 0.816	- 0.816	0		1.12	+18	
6	- 0.952	- 0.816	- 0.952	0		1.11	+18	
7	- 0.816	- 0.680	- 0.816	0			+18	
8	- 1.768	- 1.496	- 0.816	0			+20	
9	- 1.496	- 1.224	- 0.680	0		1.00	+19	
10	—	—	—	—		—	—	
11	—	—	—	—		—	—	
12	0	- 0.816	- 0.680	0		0.88	+22	
13	—	—	—	—		—	—	
14	—	—	—	—		—	—	
15	0	0	- 0.272	46		0.52	+43	
16	0	0	- 0.136	50.5		0.46	+46	
17	—	—	—	—		—	—	
18	—	—	—	—		—	—	
19	0	0	- 0.136	5.0		0.53	+48	
20	0	0	- 0.408	0		0.58	+40	
21	0	- 0.272	- 0.408	0		0.79	+39	
22	- 0.136	- 0.272	- 0.544	0		0.83	+28	
23	- 0.272	- 0.408	- 0.680	0		1.16	+25	
24	—	—	—	—		—	—	
25	—	—	—	—		—	—	
26	- 0.680	- 0.544	- 0.816	0		1.39	+16	
27	- 0.816	- 0.952	- 0.952	0		1.43	+10	
28	- 0.952	- 0.816	- 1.088	0		1.35	+10	
29	- 1.292	- 1.088	- 0.816	0		1.51	+10	
30	- 1.360	- 1.292	- 1.224	0		1.40	+ 9	
31	—							

Note: + with subsidence figures means swelling.

Table 4-40 Tensiometer Head Variation with Time in Relation to Precipitation, Evaporation and the Canal Stage

Location D

Bacho Swamp Test Plot, May '93 Ground Surface Level : z=1.730m

Date	Pressure Head			Precipitation mm/day	Evaporation mm/day	Canal Stage	Subsidence at location B mm	Remarks
	Depth : 10cm z= 1.630m	Depth : 25cm z= 1.480m	Depth : 60cm z= 1.130m					
1	—	—	—	—		—	—	
2	—	—	—	—		—	—	
3	- 2.176	- 2.040	- 1.360	—		1.36	+ 7	
4	- 2.448	- 2.040	- 1.360	—		1.49	+ 5	
5	—	—	—	—		1.44	+ 5	
6	- 2.584	- 2.992	- 1.496	—		1.51	+ 5	
7	- 2.584	- 2.856	- 1.496	—		—	—	
8	—	—	—	—		—	—	
9	—	—	—	—		1.34	+ 5	
10	- 2.448	- 3.944	- 1.632	—		1.44	+ 5	
11	0.0	- 0.952	- 0.952	28.3		1.50	+ 3	
12	- 0.952	- 1.360	- 1.224	—		1.51	+ 2	
13	- 1.904	- 1.768	- 1.360	—		1.51	0	
14	- 2.584	- 2.312	- 1.496	—		—	—	
15	—	—	—	—		—	—	
16	—	—	—	—		—	—	
17	—	—	—	—		1.32	+ 5	
18	- 0.136	- 0.680	- 1.088	26.7		1.44	+ 1	
19	0.0	- 0.408	- 0.816	22.7		1.48	0	
20	0.0	- 0.408	- 0.952	6.5		1.50	0	
21	- 0.136	- 0.544	- 1.088	—		—	—	
22	—	—	—	—		—	—	
23	—	—	—	—		1.38	0	
24	- 1.088	—	—	—		1.50	- 1	
25	- 1.292	- 1.292	- 1.496	—		1.53	- 1	
26	- 1.360	- 1.360	- 1.768	—		1.40	- 1	
27	- 0.272	- 0.544	- 1.088	23.4		—	—	
28	—	—	—	—		—	—	
29	—	—	—	—		—	—	
30	—	—	—	—		—	—	
31	—	—	—	—		—	—	

Note: + with the subsidence figures means swelling.
- with the subsidence means subsidence.

APPENDIX K. COST ESTIMATE

APPENDIX K. COST ESTIMATE

LIST OF TABLES

LIST OF FIGURES

Table K-1 Project Cost of Bacho Area

Unit : 1,000 Baht

Description	(1st Year)		(2nd Year)		(3rd Year)		(4th Year)		(5th Year)		(6th Year)		Total		
	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	Total
Bacho F/S Area															
1. Construction Cost															
- Land Reclamation			1,286	1,487	2,144	2,479	857	991					4,287	4,957	9,244
- Agricultural Infrastructure			2,510	8,549	4,184	14,249	1,674	5,699					8,368	28,497	36,865
- Agricultural Supporting Facility			8,440										8,440		8,440
Sub Total			12,236	10,036	6,328	16,728	2,531	6,690					21,095	33,454	54,549
2. Project Administration	936	630	39	630	39	630	38	630					1,052	2,520	3,572
3. Consulting Services															
- Detailed Design	2,995												2,995		2,995
- Supervision			1,498		1,498		1,498						4,494		4,494
Sub Total	2,995		1,498		1,498		1,498						7,489		7,489
4. Agricultural Supporting Activity					4,031	162	4,031	162	4,031	162	4,032	162	16,125	648	16,773
Total (1-4)	3,931	630	13,773	10,666	11,896	17,520	8,098	7,482	4,031	162	4,032	162	45,761	36,622	82,383
5. Physical Contingency (1-4)×10%	393	63	1,377	1,067	1,190	1,752	810	748	403	16	403	16	4,576	3,662	8,238
Total (1-5)	4,324	693	15,150	11,733	13,086	19,272	8,908	8,230	4,434	178	4,435	178	50,337	40,284	90,621
6. Price Escalation	43	35	305	1,203	397	3,038	362	1,774	226	49	273	61	1,606	6,160	7,766
Grand Total	4,367	728	15,455	12,936	13,483	22,310	9,270	10,004	4,660	227	4,708	239	51,943	46,444	98,387

Table K-2 Project Cost of Kab Daeng Area

Unit : 1,000 Baht

Description	(1st Year)		(2nd Year)		(3rd Year)		(4th Year)		(5th Year)		(6th Year)		Total		
	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	Total
kab Daeng F/S Area															
1. Construction Cost															
- Land Reclamation			3,347	3,835	5,020	5,752							8,367	9,587	17,954
- Agricultural Infrastructure			3,683	10,984	5,525	16,477							9,208	27,461	36,669
- Agricultural Supporting Facility			5,770										5,770		5,770
Sub Total			12,800	14,819	10,545	22,229							23,345	37,048	60,393
2. Project Administration	709	537	38	536	37	536							784	1,609	2,393
3. Consulting Services															
- Detailed Design	3,030												3,030		3,030
- Supervision			1,514		1,514		1,514						4,542		4,542
Sub Total	3,030		1,514		1,514		1,514						7,572		7,572
4. Agricultural Supporting Activity					4,213	97	4,213	97	4,213	98			12,639	292	12,931
Total (1-4)	3,739	537	14,352	15,355	16,309	22,862	5,727	97	4,213	98			44,340	38,949	83,289
5. Physical Contingency (1-4)×10%	374	54	1,435	1,536	1,631	2,286	573	10	421	10			4,434	3,896	8,330
Total (1-5)	4,113	591	15,787	16,891	17,940	25,148	6,300	107	4,634	108			48,774	42,845	91,619
6. Price Escalation	41	30	317	1,731	544	3,964	256	23	236	30			1,394	5,778	7,172
Grand Total	4,154	621	16,104	18,622	18,484	29,112	6,556	130	4,870	138			50,168	48,623	98,791

Table K-3 Project Cost of Muno-Koknai Area

Unit : 1,000 Baht

Description	(1st Year)		(2nd Year)		(3rd Year)		(4th Year)		(5th Year)		(6th Year)		Total		
	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	F.C.	L.C.	Total
Muno-Koknai F/S Area															
1. Construction Cost															
- Land Reclamation			3,423	2,739	5,706	4,564	2,282	1,826					11,411	9,129	20,540
- Agricultural Infrastructure			3,740	13,923	6,234	23,204	2,493	9,282					12,467	46,409	58,876
- Agricultural Supporting Facility			9,010										9,010		9,010
Sub Total			16,173	16,662	11,940	27,768	4,775	11,108					32,888	55,538	88,426
2. Project Administration	920	636	39	636	39	636	38	636					1,036	2,544	3,580
3. Consulting Services															
- Detailed Design	4,354												4,354		4,354
- Supervision			2,177		2,177		2,177						6,531		6,531
Sub Total	4,354		2,177		2,177		2,177						10,885		10,885
4. Agricultural Supporting Activity					4,031	180	4,031	180	4,031	180	4,031	180	16,124	720	16,844
Total (1-4)	5,274	636	18,389	17,298	18,187	28,584	11,021	11,924	4,031	180	4,031	180	60,933	58,802	119,735
5. Physical Contingency (1-4)×10%	527	64	1,839	1,730	1,819	2,858	1,102	1,192	403	18	403	18	6,093	5,880	11,973
Total (1-5)	5,801	700	20,228	19,028	20,006	31,442	12,123	13,116	4,434	198	4,434	198	67,026	64,682	131,708
6. Price Escalation	58	35	407	1,950	606	4,956	492	2,827	226	55	273	67	2,062	9,890	11,952
Grand Total	5,859	735	20,635	20,978	20,612	36,398	12,615	15,943	4,660	253	4,707	265	69,088	74,572	143,660

K-2 Construction Cost of Case Study

Table K-4 Construction Cost of Bacho Area (Case 1)

Unit : Baht

Description	Unit	Quantity	Labour and Materials				Machine Cost			Total		
			Unit Cost		Amount		Depre.					
			F.C.	L.C.	F.C.	L.C.	(F.C.)	F.C.	L.C.	F.C.	L.C.	Total
Bacho F/S Area : Case 1												
Land Reclamation												
Mowing	ha	225.0					76,725	134,550	1,048,500	211,275	1,048,500	1,259,775
Stumping	//	180.0					513,360	588,960	377,100	1,102,320	377,100	1,479,420
Stumps Exclusion	//	180.0					401,760	460,980	295,020	862,740	295,020	1,157,760
Removal of Sundries	//	225.0		4,400		990,000					990,000	990,000
Burning	//	225.0		2,200		495,000					495,000	495,000
Readjust the Land	//	200.0		1,100		220,000	740,000	860,000	540,000	1,600,000	760,000	2,360,000
Sub Total						1,705,000	1,731,845	2,044,490	2,260,620	3,776,335	3,965,620	7,741,955
Overhead 25%										511,123	991,405	1,502,528
Total										4,287,458	4,957,025	9,244,483
Agricultural Infrastructure												
Canal Improvement	m	7,510.0		98		738,233	118,658	125,417	83,361	244,075	821,594	1,065,669
Culvert ϕ1000	//	48.0	900	952	43,200	45,696	1,200	1,248	1,536	45,648	47,232	92,880
Dike TypeIII	//	2,750.0		2,023		5,563,250	470,250	506,000	396,000	976,250	5,959,250	6,935,500
Road Improvement	//	4,300.0		607		2,610,100	219,300	236,500	184,900	455,800	2,795,000	3,250,800
Ditch 30m Pitch	ha	200.0		9,670		1,934,000	300,800	318,400	212,600	619,200	2,146,600	2,765,800
Farm Road	m	6,560.0		517		3,391,520	164,000	196,800	131,200	360,800	3,522,720	3,883,520
Intake Culvert ϕ1000	place	3.0	50,040	76,058	150,120	228,174	11,574	14,736	14,562	176,430	242,736	419,166
Check Gate 4*2*2	//	1.0	1,085,612	1,185,202	1,085,612	1,185,202	14,408	19,473	22,136	1,119,493	1,207,338	2,326,831
Fishery Pond Type I	//	1.0	59,040	2,387,346	59,040	2,387,346	1,486,163	1,709,042	1,096,286	3,254,245	3,483,632	6,737,877
Liming	t	6,242.0		412		2,571,704					2,571,704	2,571,704
Sub Total					1,337,972	20,655,225	2,786,353	3,127,616	2,142,581	7,251,941	22,797,806	30,049,747
Overhead 25%										1,116,397	5,699,452	6,815,849
Total										8,368,338	28,497,258	36,865,596
Grand Total										12,655,796	33,454,283	46,110,079

Table K-5 Construction Cost of Bacho Area (Case 2)

Unit : Baht

Description	Unit	Quantity	Labour and Materials				Machine Cost			Total		
			Unit Cost		Amount		Depre.					
			F.C.	L.C.	F.C.	L.C.	(F.C.)	F.C.	L.C.	F.C.	L.C.	Total
Bacho F/S Area : Case 2												
Land Reclamation												
Mowing	ha	618.0					210,738	369,564	2,879,880	580,302	2,879,880	3,460,182
Stumping	//	494.4					1,410,029	1,617,677	1,035,768	3,027,706	1,035,768	4,063,474
Stumps Exclusion	//	494.4					1,103,501	1,266,158	810,322	2,369,659	810,322	3,179,981
Removal of Sundries	//	618.0		4,400		2,719,200					2,719,200	2,719,200
Burning	//	618.0		2,200		1,359,600					1,359,600	1,359,600
Readjust the Land	//	556.0		1,100		611,600	2,057,200	2,390,800	1,501,200	4,448,000	2,112,800	6,560,800
Sub Total						4,690,400	4,781,468	5,644,199	6,227,170	10,425,667	10,917,570	21,343,236
Overhead 25%										1,411,050	2,729,392	4,140,442
Total										11,836,717	13,646,962	25,483,678
Agricultural Infrastructure												
Drainage Canal Type I	m	11,080.0		197		2,182,760	349,020	370,072	247,084	719,092	2,429,844	3,148,936
Canal Improvement	//	8,750.0		98		860,125	138,250	146,125	97,125	284,375	957,250	1,241,625
Culvert ϕ1000	//	120.0	900	952	108,000	114,240	3,000	3,120	3,840	114,120	118,080	232,200
Culvert ϕ1500	//	24.0	1,320	1,399	31,680	33,576	960	984	1,248	33,624	34,824	68,448
Dike TypeIII	//	6,200.0		2,023		12,542,600	1,060,200	1,140,800	892,800	2,201,000	13,435,400	15,636,400
Road Improvement	//	4,350.0		607		2,640,450	221,850	239,250	187,050	461,100	2,827,500	3,288,600
Ditch 30m Pitch	ha	556.0		9,670		5,376,520	836,224	885,152	591,028	1,721,376	5,967,548	7,688,924
Farm Road	m	14,950.0		517		7,729,150	373,750	448,500	299,000	822,250	8,028,150	8,850,400
Intake Culvert ϕ1000	place	6.0	50,040	76,058	300,240	456,348	23,148	29,472	29,124	352,860	485,472	838,332
Check Gate 4*2*2	//	1.0	1,085,612	1,185,202	1,085,612	1,185,202	14,408	19,473	22,136	1,119,493	1,207,338	2,326,831
Fishery Pond Type I	//	3.0	59,040	2,387,346	177,120	7,162,038	4,458,489	5,127,126	3,288,858	9,762,735	10,450,896	20,213,631
Liming	t	17,014.0		412		7,009,768					7,009,768	7,009,768
Sub Total					1,702,652	47,292,777	7,479,299	8,410,074	5,659,293	17,592,025	52,952,070	70,544,095
Overhead 25%										2,528,182	13,238,018	15,766,200
Total										20,120,207	66,190,088	86,310,295
Grand Total										31,956,924	79,837,050	111,793,973

Table K-6 Construction Cost of Bacho Area (Case 3)

Unit : Baht

Description	Unit	Quantity	Labour and Materials				Machine Cost			Total		
			Unit Cost		Amount		Depre.					
			F.C.	L.C.	F.C.	L.C.	(F.C.)	F.C.	L.C.	F.C.	L.C.	Total
Bacho F/S Area : Case 3												
Land Reclamation												
Mowing	ha	908.7					309,867	543,403	4,234,542	853,269	4,234,542	5,087,811
Stumping	//	727.0					2,073,290	2,378,613	1,522,981	4,451,903	1,522,981	5,974,884
Stumps Exclusion	//	727.0					1,622,575	1,861,745	1,191,487	3,484,319	1,191,487	4,675,807
Removal of Sundries	//	908.7		4,400		3,998,280					3,998,280	3,998,280
Burning	//	908.7		2,200		1,999,140					1,999,140	1,999,140
Readjust the Land	//	800.0		1,100		880,000	2,960,000	3,440,000	2,160,000	6,400,000	3,040,000	9,440,000
Sub Total						6,877,420	6,965,731	8,223,760	9,109,011	15,189,492	15,986,431	31,175,922
Overhead 25%										2,055,940	3,996,608	6,052,548
Total										17,245,432	19,983,039	37,228,470
Agricultural Infrastructure												
Drainage Canal Type I	m	24,700.0		197		4,865,900	778,050	824,980	550,810	1,603,030	5,416,710	7,019,740
Canal Improvement	//	8,750.0		98		860,125	138,250	146,125	97,125	284,375	957,250	1,241,625
Culvert ϕ1000	//	220.0	900	952	198,000	209,440	5,500	5,720	7,040	209,220	216,480	425,700
Culvert ϕ1500	//	24.0	1,320	1,399	31,680	33,576	960	984	1,248	33,624	34,824	68,448
Dike TypeIII	//	18,500.0		2,023		37,425,500	3,163,500	3,404,000	2,664,000	6,567,500	40,089,500	46,657,000
Road Improvement	//	6,450.0		607		3,915,150	328,950	354,750	277,350	683,700	4,192,500	4,876,200
Ditch 30m Pitch	ha	800.0		9,670		7,736,000	1,203,200	1,273,600	850,400	2,476,800	8,586,400	11,063,200
Farm Road	m	18,100.0		517		9,357,700	452,500	543,000	362,000	995,500	9,719,700	10,715,200
Intake Culvert ϕ1000	place	11.0	50,040	76,058	550,440	836,638	42,438	54,032	53,394	646,910	890,032	1,536,942
Check Gate 4*2*2	//	1.0	1,085,612	1,185,202	1,085,612	1,185,202	14,408	19,473	22,136	1,119,493	1,207,338	2,326,831
Fishery Pond Type I	//	4.0	59,040	2,387,346	236,160	9,549,384	5,944,652	6,836,168	4,385,144	13,016,980	13,934,528	26,951,508
Liming	t	25,030.0		412		10,312,360					10,312,360	10,312,360
Sub Total					2,101,892	86,286,975	12,072,408	13,462,832	9,270,647	27,637,132	95,557,622	123,194,754
Overhead 25%										3,891,181	23,889,406	27,780,587
Total										31,528,313	119,447,028	150,975,341
Grand Total										48,773,745	139,430,067	188,203,811