APPENDIX C

WATER PRESSURE TEST

LIST OF TABLES

C-1.	Result of Water F	Pressure Test,	Main Damsite BS1	GC-1
C-2.	Result of Water P	Pressure Test,	Main Damsite BS2	GC-2
C−3.	Result of Water P	Pressure Test,	Main Damsite BS3	GC-3
C-4.	Result of Water P	Pressure Test,	Main Damsite BM4	GC-4
C-5.	Result of Water P	Pressure Test,	Main Damsite BM5	GC-5
с-6.	Result of Water P	Pressure Test,	Main Damsite BM6	GC-6
C-7.	Result of Water F	Pressure Test,	Main Damsite BM7	GC-7
C-8.	Result of Water P	Pressure Test,	Main Damsite BM8 (1/2)	GC-8
C-9.	Result of Water F	Pressure Test,	Main Damsite BM8 (2/2)	GC-9
C-10.	Result of Water P	Pressure Test,	Main Damsite BM9	GC-10
C-11.	Result of Water P	Pressure Test,	Main Damsite BM10	GC-11
C-12.	Result of Water P	Pressure Test,	Main Damsite BMll	GC-12
C-13.	Result of Water F	Pressure Test,	Main Damsite BM12	GC-13
C-14.	Result of Water P	Pressure Test,	Saddle Damsite BRS1	GC-14
C-15.	Result of Water P	Pressure Test,	Saddle Damsite BSS3	GC-15
C-16.	Result of Water P	Pressure Test,	Saddle Damsite BSS4	GC-15

C-i

.

LIST OF FIGURES

C-1.	Result	of	Water	Pressure	Test,	Main	Damsite	BS1	(1/2)	
C-2.	Result	of	Water	Pressure	Test,	Main	Damsite	BS1	(2/2)	
C-3.	Result	of	Water	Pressure	Test,	Main	Damsite	BS2	(1/2)	
C-4.	Result	of	Water	Pressure	Test,	Main	Damsite	BS2	(2/2)	
Č-5.	Result	of	Water	Pressure	Test,	Main	Damsite	BS3	(1/2)	
C-6.	Result	of	Water	Pressure	Test,	Main	Damsite	BS3	(2/2)	:
C-7.	Result	of	Water	Pressure	Test,	Main	Damsite	BM4		
C-8.	Result	of	Water	Pressure	Test,	Main	Damsite	BM5	(1/2)	
C-9.	Result	of	Water	Pressure	Test,	Main	Damsite	BM5	(2/2)	
C-10.	Result	of	Water	Pressure	Test,	Main	Damsite	BM6	an an an The grades	
c-11.	Result	of	Water	Pressure	Test,	Main	Damsite	BM7	(1/2)	1
C-12.	Result	of	Water	Pressure	Test,	Main	Damsite	BM7	(2/2)	
C-13.	Result	of	Water	Pressure	Test,	Main	Damsite	BM8	(1/4)	
C-14.	Result	of	Water	Pressure	Test,	Main	Damsite	BM8	(2/4)	
C-15.	Result	of	Water	Pressure	Test,	Main	Damsite	BM8	(3/4)	1
C-16.	Result	of	Water	Pressure	Test,	Main	Damsite	BM8	(4/4)	
C-17.	Result	of	Water	Pressure	Test,	Main	Damsite	BM9	(1/2)	• .
C-18.	Result	of	Water	Pressure	Test,	Main	Damsite	BM9	(2/2)	
C-19.	Result	of	Water	Pressure	Test,	Main	Damsite	BM10	(1/2)).
C-20.	Result	of	Water	Pressure	Test,	Main	Damsite	BM10	(2/2)) · ·
C-21.	Result	of	Water	Pressure	Test,	Main	Damsite	BM11	(1/2))
C-22.	Result	of	Water	Pressure	Test,	Main	Damsite	BM11	(2/2))
C-23.	Result	of	Water	Pressure	Test,	Main	Damsite	BM12	(1/2)	
C-24.	Result	of	Water	Pressure	Test,	Main	Damsite	BM12	(2/2))
C-25.	Result	of	Water	Pressure	Test,	Sadd	le Damsi	te BR	S1	
C-26.	Result	of	Water	Pressure	Test,	Sadd	le Damsi	te BS	S3	
C-27.	Result	of	Water	Pressure	Test,	Sadd	le Damsi	te BS	S4	-

C-ii

RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BS1

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY PART 1

Table C-1

BORE HOLE NUMBER: Main damsite BS1, PART-1

				PRESSURE READING		GAUGE Height		IN TOTAL Head		COEFFICIENT OF PERKEABILITY		STEP
: S	ធ	ß	CA	Kg/cm2	ß	13	ពិ	. A	1/min	cm/sec	~	an

2.5	0 5.00	2.50	6.6	1.0	3.00	1,20	0.00	14.20	101.4	3.3E-03	285.6	I
5.0	0 10.00	5.00	6.6	1.0	3.00	1.20	0,00	14,20	1.6	3.0E-05	2.3	1
5.0	0 10.00	5.00	6.6	4.0	3,00	1.20	0.00	44.20	3,8	2.3E-05	1.7	2
5.0	0 10.00	5.00	6.6	7.0	3.00	1.20	0.00	74.20	6.4	0 7 ° 0 C	1.7	3
5.0	0 10.00	5.00	6.6	10.0	3.00	1.20	0.00	104.20	7.3	1.9E-05	1.4	4
5.0	0 10.00	5.00	6.6	7 0	3:00	1.20	Ū 00	74.20	6.5	2.3E-05	1.8	5
5.0	0 10.00	5,00	6.5	4.0	3.00	1.20	0,00	44.20	3.9	2.4E-05	1.8	6
5.0	0 10.00	5.00	6.6	1.0	3.00	1.20	0.00	14.20	1.7	3.2E-05	2.4	7
10.0	0 15.00	5.00	6.6	1.0	3.50	1.20	0.00	14.70	0.4	7.2E-06	0.5	1
10.0	0 15.00	5.00	6.6	4.0	3,50	1,20	0,00	44.70	1.0	6.0E-06	0,4	2
10.0	0 15.00	5,00	6.6	7.0	3.50	1,20	0.00	74.70	1.8	6.4E-06	0.5	3
10.0	0 15.00	5,00	6.6	10.0	3.50	1.20	0.00	104.70	2.6	6.68-06	0.5	4
10.0	0 15.00	5.00	6.6	7.0	3,50	1.20	0.00	74.70	1.9	6.8E-06	0.5	5
10.0	0 15.00	5,00	6.6	4.Ŭ	3,50	1.20	0.00	44.70	1.2	7.2E-06	0.5	6
10.0	0 15.00	5.00	6.6	1.0	3.50	1.20	0.00	14.70	0.5	9.18-06	0.7	7
15.0	0 20.00		6.6		3,50	1.20	0.00	14,70	2.7	4.9E-05	3,7	i
15.0		5,00	6.6		3,50		0,00	44,70	4.8	2.9E-05	2.1	2
15.0	0 20.00	5.00	6.6	7.0	3.50	1.20	0.00	74.70	8.3	3.0E-05	2.2	3
15.0	0 20.00	5,00	6.6	10.0	3,50	1.20	0.00	104.70	11.8	3.0E-05	2.3	4
15.0	0 20.00		6.6	7.0	3:50	1.20	0.00	74,70	8,8	3.1E-05	2.4	5
15.0	0 20.00	5.00	6.6	4.0	3.50	1.20	0,00	44.70	5.1	3.0E-05	2.3	6
15.0	0 20.00	5.00	6.6	1.0	3,50	1,20	0,00	14,70	2.8	5.1E-05	3.8	7
	0 25,00	5,00	6.6	1.0		1.20	0.00	14.70	1.1	2.0E-05	1.5	i
20,0	0 25.00	5,00	6.6	4.0	3.50	1.20	0,00	44,70	3.2	1.9E-05	1,4	2
20.0	0 25.00	5.00	6.6	7.0	3.50	1.20	0.00	74.70	4.7	1,7E-05	1.3	- 3
20.0	0 25.00	5.00	6.6	10.0	3.50	1.20	0,00	104.70	5.6	1.4E-05	1.1	ą
20.0	0 25.00	5,00	6.6	7.0	3,50	1.20	0,00	74,70	4.4	1.6E-05	1.2	5
20.0	0 25.00	5.00	6.6	4.0	3.50	1.20	0,00	44.70	2.9	1.7E-05	1.3	6
20.0	0 25.00	5.00	6.6	1.0	3,50	1.20	0.00	14.70	0.9	1,68-05	1.2	7
25.0	0 30.00	5.00	6.6	1.0	3.50	1,20	0.00	14.70	0.8	1.4E-05	1.1	1
25.0	0. 30.00	5.00	6.6	4.0	3.50	1.20	0.00	44,70	1.5	8,9E-06	0,7	2
25.0	0 30.00	5.00	6.6	7.0	3.50	1.20	0.00	74.70	3.5	1.2E-05	0.9	3
25.0	0 30.00	5.00	6.6	10.0	3,50	1.20	0.00	104.70	4.4	1,1E-05	0.8	4
25.0	0 30.00	5.00	6.6	7.0	3.50	1.20	0.00	74.70	3.4	1.2E-05	0.9	5
25.0		5.00	6.6	4.0		1.20	0,00	44.70	1.3	7.7E-06	0.6	6
25.0	1	5.00	6.6	1.0	3.50	1.20	0.00	14.70	0.7	1.3E-05	1.0	7
10 10 1		1.1										

Table C-2 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BS2

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY PART 1 BORE HOLE NUMBER: Main damsite BS2, PART-1

DEPTH DEPTH LENGTH HOLE PRESSURE STATIC GAUGE FRICTION TOTAL WATER COEFFICIENT OF LUGEON STEE FROM TO TESTED DIA. READING HEAD HEIGHT LOSS HEAD INJECTED PERNEABILITY UNIT C&/SEC 2 <u>-</u> 1 A. ca Ko/ca2 a . <u>ñ</u> ģ, l/min កក 2 8 1 _____ 6.6 1.0 0.00 2.50 0.00 12.50 3.2 1.0E-04 8.5 2,00 5.00 3,00 1
 9.6
 9.0E-05

 15.7
 8.6E-05
 3.00 6.6 4.0 0.00 2.50 0.00 42.50 7.5 2 2.00 5.00 0.00 2.50 7.2 6.6 7.0 0.00 72.50 3 2,00 5.00 3.00 7.0 6.6 10.0 0.00 2.50 0.00 102.50 21.4 8.3E-05 ۸ 2.00 5.00 3.00 7.3 5 0.00 2.50 15.8 8.7E-05 2.00 5.00 3,00 6.6 7.0 0.00 72.50 6.6 4.0 7.8 2.00 5.00 3.00 0.00 2.50 0.00 42.50 9.9 9.3E-05 6 6.6 1.0 2,00 5.00 3,00 -0.00 2.50 0.00 12.50 3.4 1.1E-04 9.1 7 13.1 2.3E-04 5,00 10.00 5.00 6.6 1.0 2.50 2.50 0.00 15.00 17.5 ŧ 6.5 4.0 2.50 2.50 0.00 45.00 2.6E-04 19.3 5,00 10.00 5.00 43.4 2 0.00 75.00 6.6 7.0 2,50 2,50 5.00 10.00 5,00 78.8 2.8E-04 21.0 3 5.00 10.00 5.00 6.5 10.0 2.50 2.50 0.00 105.00 2.6E-04 103.8 19.8 4 0.00 75.00 5.00 10.00 5.00 6.6 7.0 2.50 2.50 78.9 2.8E-04 21.0 5 2.5E-04 0.00 45,00 5.00 10.00 5.00 6.6 4.0 2.50 2.50 42.8 19.0 ĥ 5,00 10,00 5,00 6.6 1.0 2.50 2.50 0.00 15.00 2.3E-04 13.0 17.3 7 15.00 20.00 5.00 6.6 1.0 1.00 2.50 0.00 13.50 7.3 1.4E-04 10.8 1 15.00 20.00 5.00 1.00 2.50 6.5 4.0 0.00 43.50 25.8 1.6E-04 11.7 2 11.8 6.6 7.0 1.00 2.50 1.6E-04 15.00 20.00 5.00 0.00 73.50 43:5 3 11.4 15.00 20.00 5,00 1.00 2.50 6.6 10.0 0.00 103,50 1.5E-04 59.2 4 1.00 2.50 15.00 20.00 1.5E-04 5.006.6 7.0 0.00 73.50 41.1 11.2 5 11.5 1.5E-04 15.00 20.00 6.6 4.0 1.00 2.50 5.000.00 43.50 25.1 6 15.00 20.00 5,00 6.6 1.0 1.00 2.50 0.00 13.50 6:9 1.4E-04 10.2 7 20.00 25.00 5.00 6.6 1.0 1.00 2.50 0.00 13.50 2.8 5.5E-05 4.1 1 1.00 2.50 20.00 25.00 5.00 6.6 4.0 0.00 43.50 4.8 4.5 10.4 6.4E-05 2 20.00 25.00 5.00 6.6 7.0 1.00 2.50 0.00 73,50 6.0E-05 16.5 3 20.00 25.00 5.006.6 10.0 1.00 2.50 0.00 103.50 23.3 6.0E-05 4.5 4 1.00 2.50 20.00 25.00 5.00 6.6 7.0 0.00 73.50 5.9E-05 16.3 4.4 5 20.00 25.00 5.00 6.6 4.0 1.00 2.50 0.00 43.50 10.1 6.2E-05 4.6 6 0.00 13.50 20.00 25.00 5.00 6.6 1.0 1.00 2.50 2.7 5.3E-05 4.0 7 25,00 30,00 5.00 6.6 1.0 1.00 2.50 0.00 13.50 2.1 4.12-05 3.1 1 5.00 6.6 4.0 2.4 1.00 2.50 25.00 30.00 0.00 43.50 5.3 3.2E-05 2 5.00 6.6 7.0 25.00 30.00 1.00 2.50 0.00 73.50 10.1 3.7E-05 2.7 3 25.00 30.00 5.00 6.6 10.0 1.00 2.50 0.00 103.50 18.4 3.6 4.7E-05 4

GC-2

0.00 73.50

0.00 43.50

0.00 13.50

9.8 3.6E-05

3.0E-05

3.4E-05

4.9

1.7

2.7

2.3 6

2.5 7

5.

1.00 2.50

1.00 2.50

1.00 2.50

6.6 7.0

6.6 1.0

5.00 6.6 4.0

5,00

5.00

25.00 30.00

25.00 30.00

25.00 30.00

Table C-3 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BS3

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY PART 1 BORE HOLE NUMBER: Main damsite BS3, PART-1

DEPTH From		LENGTH. Tested		PRESSURE READING		GAUGE Height				COEFFICIENT OF PERMEABILITY		STEP
n .	N	§)	CN	Kg/cn2	9	A	A	# 	1/#in	cø/sec	-	80
3.00	5.00	2.00	6.6	1.0	4.00	1.20	0.00	15.20	4.8	1.7E-04	15.8	i
3.00	5.00		5.6		4.00		0.00	45.20	11.5	1.4E-04	12.8	2
5.00	10.00	5.00	6.5	i 0	4.00	1.20	0.00	15:20	1.5	2.6E-05	2.0	1
5.00	10.00	5.00	6.6	4,0	4.00	1.20	0.00	45.20	3.2	1.9E-05	1.4	2
5.00	10.00	5,00	6.6	7.0	4.00	1.20	0.00	75.20	5.7	2.0E-05	1.5	3
5.00	10.00	5.00	6.6	10.0	4.00	1.20	0.00	105.20	8.3	2,15-05	1.6	- 4
	10.00	5.00	6.6			1.20	0.00	75.20	5.4	1.9E-05	1.4	5
	10.00	5.00	6.6		4.00		0.00	45,20	2.9	1.78-05	1.3	6
	10,00		6.6			1.20	0.00	15.20	1.3	2.3E-05	1.7	7
10.00	15.00	5,00	6.6	1.0	9.00	1.20	0.00	29,20	2.6	3.4E-05	2.6	1
10.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.00	6.6	4.0	9.00	1.20	0.00	50.20	5.1	2.7E-05	2.0	2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15.00	5.00	6.6		9,00	1.20	0.00	80.20	8.8	2.9E-05	2.2	3
	15.00	5.00	6.6		9.00	1.20	0.00	110.20	13.0	3.1E-05	2.4	4
10.00		5.00	6.5			1,20	0.00	80.20	8.5	2.8E-05	2.1	5
10,00		5.00	6.6			1.20	0.00	50.20	4.9	2.6E-05	2.0	6
10.00		5.00	6.6			1.20	0.00	20.20	2.6	3.4E-05	2.6	7,
15.00	20.00	5.00	6.6	1.0	9.00	1.20	0.00	20.20	1.8	2.48-05	1.8	1
15,00	20.00	5.00	6.6	4,0	9.00	1.20	0.00	50,20	4.3	2.3E-05	1.7	2
15.00	20.00	5.00	5.5	7.0	9.00	1.20	0.00	80.20	6.9	2.3E-05	1.7	3
15.00	20.00	5.00	6.6	10.0	9.00	1.20	0.00	110.20	9.6	2.3E-05	1.7	- 4
	20.00	5.00	6.6		9:00	1:20	0,00	80.20	7.2	2.46-05	1.8	5
	20.00	5.00	6.6		9.00	1.20	0,00	50,20	4.7	2.58-05	1.9	5
	20.00	5,00	6.6			1.20	0.00	20.20	2.4	3.2E-05	2.4	7
20.00	25,00	5.00	6.6	1.0	10.00	1.20	0.00	21.20	0.7	8.8E-06	0.7	1
	25.00	5.00	6.6			1.20	0.00	51.20	1.5	7.8E-05	Ŷ.6	2
	25.00		6.6			1.20	0.00	81.20	2.5	8.2E-06	0.6	3
20.00		5.00	6.6		10.00	1.20	0.00	111.20	3.7	8.9E-06	0.7	4
20,00		5.00	6.6		10.00	1.20	0.00	81.20	2.6	8.5E-06	0.6	5
20.00		5.00	6.6		10.00	1.20	0.00	51,20	1.7	8.8E-06	0.7	6
20.00		5,00	6.6		10.00	1.20	0,00	21.20	0,9	1.1E-05	0.8	7
25.00	30.00	5.00	6.6	1.0	13.00	1.20	0.00	24.20	0.5	5.5E-06	0.4	1
25.00		5.00	6.6	-	13.00		0.00	54.20	1.3	6.4E-06	0.5	2
25.00		5.00	6.6		13.00		0.00	84.20	1.8	5.7E-06	0.4	3
	30.00	5.00	6.5		13.00		0.00	114.20	2.3	5.4E-06	0.4	4
	30.00	5.00	6.6		13.00		0.00	84.20	1.8	5.7E-06	0.4	5
	30.00	5.00	6.6		13.00		0.00	54.20	1.2	5.9E-06	0.4	6
	30.00	5.00	6.6		13.00		0.00	24.20	0.5	5.5E-06	0.4	7

Table C-4 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BM4

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM4

								·			سا سا هر به که بر بر بر .	
DEPTH Fron										COEFFICIENT OF PERMEABILITY		STEP
. œ	Ê.	. 15	ĊĄ	Kg/cn2	5	ĥ	ß	Ĥ	l/sin	C#/sec	-	10
5.00	10.00	5.00	6.6	1.0	7.80	0.50	0.00	18.30	1.9	2.8E-05	2.1	1
5.00	10.00	5.00	6.5	4.0		0.50				2.7E-05		2
5.00	10,00	5.00	6.6	7.0	7,80	0.50		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8.3			3
5,00	10.00	5,00	6,6	10.0	7.80	0.50	0.05		12.5	the second se	2.3	4
5.00	10.00	5.00	5.6	7.0	7.80	0.50	0.02	78.28	7.2	2.5E-05	1.9	: 5 .
5.00	10.00	5.00	6.6	4.0	7.80	0.50	0.00	48.30	3.8	2.1E-05	1.6	6
5,00	10,00	5.00	6.6	1.0	7.80	0.50	0,00	18.30	1,5	2.2E-05	1.7	7
10.00	15.00	5.00	6.6	1.0	9.10	0.55	0.00	19,65	1.6	2.28-05	1.7	1
10.00	15.00	5,00	6.6			0.55	0.01	49.64	4.3	· · · · · · · · · · · · · · · · · · ·		2
10.00	15.00	5.00	6.6			0.55	0.04	79.61	7.9	2,7E-05	2.0	3
10.00	15.00	5.00	5.6		9.10		0.08	109.57	11.0			4
10.00	15.00	5.00	6.6			0.55	0.04	79.61	8.1	2.78-05	2.0	5
10.00	15.00	5.00		4.0	9.10		0.01	49.64	3.8			· 6
	15.00	5.00		1.0	9.10		0.00	19.65	1.4			. 7

Table C-5

RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BM5

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY BORE HOLE NUMBER: Main damsite BM5

DEPTH DEPTH LENGTH HOLE PRESSURE STATIC GAUGE FRICTION TOTAL WATER COEFFICIENT OF LUGEON STEP TO TESTED DIA, READING HEAD HEIGHT LOSS HEAD INJECTED PERMEABILITY UNIT FROM £. CO Ka/ca2 6 ß 20 劉 l/sin ce/sec no . . ß 4.21 0.78 0.00 14.99 0.8 1.5E-05 1.1 1 1.0 5.00 10.00 5.00 6.6 1.4E-05 1.1 2 4.21 0.78 0.0024.99 1.4 5.00 10.00 5.00 6.6 2.0 3.0 4.0E-05 3 4.21 0.78 5.00 10.00 5.00 6.6 4.0 0.02 44.97 6.8 6.4 4 5.00 10.00 4.21 0.78 8,5E-05 5.00 6.6 6.0 0.14 64.85 20.7 3.2 44.97 7.2 4.2E-05 5 5.00 6.6 4.0 4.21 0.78 0:02 5.00 10.00 2.2 3.02-05 6 4.21 0.78 0.00 24,99 2.8 5,00 10.00 5:00 6.6 2.0 2.86-05 2.1 7 0,00 14.99 1.6 5.00 6.6 1.0 4.21 0.78 5.00 10.00 1.2E-04 9.1 1 5.10 0.39 0.03 15.46 7.1 10.00 15.00 5,00 6.6 1.0 5.1 2 6.8E-05 5.10 0:39 0.09 45,40 11.5 10.00 15.00 5.00 6.6 4.0 5.8 7,75-05 7 5.10 0.39 0.32 75.17 21.8 6.6 7.0 10.00 15.00 5.0012.7 4 1.7E-04 10.0 5.10 0.39 2.88 102.61 65.1 10.00 15.00 5,00 6.6 12.4 5 74.05 46.0 -1.78-04 5.10 0.39 1.44 7.0 10,00 15.00 5.00 6.6 11.3 25.4 1.5E-04 6 45.05 5,10 0.39 0.44 10.00 15.00 5,00 6.6 4.0 1.5E-04 12.2 7 9.4 0,06 15.43 19.00 15.00 5.00 6,6 1.0 5,10 0.39 0.50.5 6.6E-06 8.00 0.86 0.00 18,85 1 15.00 20.00 5,00 6.6 1.0 0.5ĩ 48.85 1.3 7.32-06 15.00 20.00 5.006.6 4.0 8.00 0.85 0,00 3.08-05 2.3 3 78,78 9.0 7.0 8.00 0.86 80.0 15.00 20.00 5,00 6.6 2.1 4 11.2 2.8E-05 8.00 0.86 0.13108.73 15.00 20.00 5.00 6.6 10.0 2.3 3.1E-05 5 6.6 7.0 78.77 Ÿ.Ż 8,00 0.85 0.09 15.00 20.00 5.00 1.0 2.3 1.3E-05 6 8.00 0.86 0.01 48.85 15.00 20.00 5.00 6.6 4.0 1.48-05 1.1 7 8.00 0.86 0,00 18,86 1.0 1.0 15.00 20.00 5.00 6.6 2.38-05 1.7 1 0.00 18.59 1.6 7,80 0.79 20.00 25.00 5:00 6.6 1.0 2.78-05 2.0 2 48,56 5.07,80 0.79 0.03 20.00 25.00 5,00 6.6 4.0 78.52 7.3 2.58-05 1.9 3 0,07 20.00 25.00 6.6 7.Ú 7.80 0.79 5.003.08-05 2.2 4 12.1 6.6 10.0 7.80 0.79 0.20 108.39 20.00 25.00 5.00 1.5 ŝ 2.0E-0S 7.80 0.79 0.05 78,54 6.0 7.0 20.00 25.00 5.00 6.6 1.5 48.57 3.7 2.0E-05 5 7.80 0.79 0.025.00 6.6 4.0 20.00 25.00 1.9 2.7E-05 2.0 7 18.59 0.007,80 0.79 20.00 25.00 5,00 6.6 1.0 1,98-05 1.4 1,5 ŧ 9.61 0.78 0.00 .20.39 25.00 30.00 5.006.5 1.0 1.5 3.9 2 0,03 50,36 2.1E-05 9.61 0.78 5.60 4.0 25.00 30.00 6.6 1.6 Ż 80.32 6.2 2.1E-05 0.07 9.61 0.78 5,00 6.6 -7.0 25.00 30.00 11.6 2.8E-05 2.1 ę, 0.23 110.16 9.61 0.78 5,00 6.6 10.0 25,00 30.00 2,32-05 1.7 5 6.8 0.08 30.31 9.51 0.78 7.0 25,00 30.00 5.00 6.6 1.7 Ł 4.3 2,3E-05 50,36 0.03 9.61 0.78 4.0 25.00 30.00 5.006.6 2.4E-05 1.8 7 1.9 9.61 0.78 0.01 20.36 1.0 25.00 30.00 5.006.6

Table C-6RESULT OF WATER PRESSURE TEST,MAIN DAMSITE BM6

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM6

DEPTK Fron	DEPTH To								WATER INJECTED	COEFFICIENT OF PERMEABILITY	LUGEON Unit	STEP
R	ß	ß	Cត	Kg/cm2	Â	đ	ß	a	l/ein	ca/sec	-	80
	,			:					· · · ·			
5.00	10:00	5.00	5,6	1.0	4.00	0.74	0.02	14.72	8.5	1.5E-04	11.5	1
5.00	10,00	5,00	6.6				0.06			1.4E-04	10.7	2
5.00	10.00	5.00	6.6	4.0					20.0	1.2E-04	9.0	3
i.00	10.00	5.00	6.6	7.0	4.00	0.74	0.21	74.53	25.0	8,9E-05	6.7	4
5.00	10,00	5.00	6.6	4.0	4.00	0.74	0.10	44.64	17.3	1.0E-04	7.8	5
.00	10.00	5.00	6.6	2.0	4.00	0.74	0.04	24.70	10.2	1.1E-04	8.3	6
5.00	10.00	5,00	6.6	1.0	4.00	0.74	0.01	14.73	5.2	9.4E-05	7.1	: 7
			11									1.1
).00	15.00	5.00	6.6	1.0	3.80	0.70	0.07	14.43	10.4	1,9E-04	14.4	- e., t -
00.0	15.00	5.00	6.6	2.0	3.80	0.70	0.17	24.33	15.8	1.7E-04	13.0	
00	15.00	5.00	65	4.0	3,80	0.70	0,34	44.16	22.2	1.3E-04	10.1	3
.00	15.00	5.00	6.6	7.0	3.80	0.70	0.50	74.00	27.2	9.8E-05	7.4	4
.00	15.00	5.00	6.5	4.0	3,80	0.70	0.26	44.24	19.5	1.2E-04	8.8	5
.00	15.00	5.00	6.6	2.0	3.80	0.70	0.09	24.41	11.8	1.3E-04	9.7	6
00.0	15.00	5.00	6.6	1.0	3,80	0.70	0.04	14:46	8.0	1.5E-04	11.1	7

7 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BM7

Table C-7

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM7

DEPT From				PRESSURE READINS				i total Head	WATER Injected		LUGEON	STEI
2	A	ß	CA	Kg/cn2	8	¢1	僋	8	l/min	ca/sec		no
												·
1.60		3.40	6.6	1.0	0.00	1.50	0.00	11.50	1.6	4.9E-05	4.0	1
1.60		3.40	6.6	2.0		1,50	0.00	21.50	5.9	9.9E-05	8.0	: 2
1.60	5.00	3.40	6.6	3.0	0.00	1.50	0.01	31.49	10.4	1.2E-04	9.7	3
1.60	5.00	3.40	6.6	2.0	0.00	1.50	0.00	21.50	5.3	8.9E-05	7.3	4
1.60	5,00	3.40	6.6	1.0	0,00	1,50	0.00	11.50	1.6	5.1E-05	4.1	5
5.00	10.00	5.00	6.6	1.0	0.00	1.20	0.01	11.19	4.5	1.1E-04	8.0	1
5.00	10.00	5.00	6.6	2.0	0.00	1.20	0.02	21,18	7,8	9.8E-05	7.4	2
5.00	10.00	5,00	6.6	4.0	0.00	1.20	0.05	41.15	12.3	7.9E-05	6.0	3
5.00	10.00	5.00	6.6	2.0	0.00	1.20	0.03	21.17	8.6	1.1E-04	8.1	4
5.00	10.00	5.00	6.6	1.0	0.00	1.20	0.01	11.19	5.3	1.3E-04	9.5	5
10.00	15.00	5.00	6.6	1.0	0.00	1.25	0.30	10.95	20,9	5.1E-04	38.2	
10.00	15.00	5.00	6.6	2.0	0.00	1.25	0.70	20.55	32.1	4.2E-04	31.2	- 2
10.00	15.00	5.00	6.6	4.0	0.00	1.25	1.22	40.03	42.4	2.8E-04	21.2	3
10.00	15.00	5.00	6.6	2.0	0,00	1.25	0.39	20,86	24.0	3.1E-04	23.0	4
10.00	15.00	5.00	6.6	1.0	0.00	1.25	0.20	11.05	17.1	4.1E-04	31.0	ŝ
15.00	20.00	5.00	6.6	1.0	0.00	1.25	0.04	11.21	5.6	1.6E-04	11.8	1
15.00		5,00	6.6		0.00	1.25	0.22	21.03	14.7	1.9E-04	14.0	1
	20.00	5,00	6.6		0,00	1.25	0.83	40.42	28.5	1.9E-04	14.1	13
15.00		5.00	6.6	1.	0.00	1.25	2.27	58.98	47.1	2.18-04	16.0	4
15.00		5,00	6.6		0.00	1.25	0.91	40.34	29.9	2.0E-04	14.8	5
15.00		5.00			0.00	1.25	0.24	21.01	15.5	2.0E-04	14.7	6
· · ·	20.00	5,00	6.6		0,00	1.25	0.05	11.20	7.0	1.7E-04	12.5	7

Table C-8 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BM8 (1/2)

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM8

DEPTH DEPTH LENGTH HOLE PRESSURE STATIC GAUGE FRICTION TOTAL WATER COEFFICIENT OF LUGEON STEP FROM TO TESTED DIA. READING HEAD HEIGHT LOSS HEAD INJECTED PERMEABILITY UNIT . CO/SEC -1/min 80 A. ើស Kg/ce2 e 發 鹛 붊 7.1 1.7E-04 12.3 1 0.01 11.19 6.6 1.0 0.00 1.20 3.35 8.50 5.15 6.7 8.2E-05 6.1 2 0.00 1.20 0.01 21.19 6.6 2.0 5.15 3,35 8.50 9.92-05 7.4 3 0.06 41,14 15.6 5.6 4.0 0.00 1.20 5.15 3,35 8,50 6.1 4 8.2E-05 0.01 21.19 6.7 5.15 6.6 2.0 0.00 1.20 3,35 8,50 6.5 5 8.76-05 3.8 0.00 1.20 0.00 11.20 6.6 1.0 3.35 8.50 5.15 32.3 1 14.7 2 4.3E-04 1.9E-04 0.20 12.00 19.4 0.00 2.20 8.00 13.00 5.00 6.6 1.0 14.2 2 29.6 5.00 6.6 4.0 0.00 2.20 0.48 41.72 8,00 13,00 13,1 6.6 6.0 1.7E-04 3 0.87 61.33 40.1 8.00 13.00 0.00 2.20 5.00 30.2 1.9E-04 14.5 å 6.6 4.0 0.00 2.20 0.50 41.70 8.00 13.00 5,006.5 1.0 0.06 12.14 2.2E-04 16.6 5 8,00 13,00 0.00 2.20 10.1 5.007.9E-05 1.1E-04 0.01 12.19 3.0 7,9E-05 6.2 1 4.00 6.6 1.0 0.00 2.20 13.00 17.00 8.5 2 0.18 42.02 14.2 0.00 2.20 13.00 17.00 4,00 6.6 4.0 1.9E-04 14.8 3 13.00 17.00 4.00 0.00 2.20 0.82 51.38 30.5 6.6 5.0 2.2E-04 17.2 0.00 2.20 1.54 60.66 41.8 4 13.00 17.00 4.00 6.6 6.0 15.2 5 31.2 1.9E-04 0.00 2.20 0.86 51.34 13,00 17,00 4.00 6.6 5.0 15.4 1.2E-04 3.0 7.8E-05 9.2 6 0.21 41.99 13.00 17.00 6.6 4.0 0.00 2.20 4,00 6.2 7 6.6 1.0 0.00 2.20 0.01 12.19 3.0 13.00 17.00 4.00 5.5E-04 0.47 11.63 43.4 0.00 2.10 20.2 1 17.00 21.00 6.6 1.0 4.00
 6.8
 4.0

 6.8
 5.0

 6.6
 4.0
1.05 41.04 18.5 2 30.3 2.3E-04 0.00 2.10 17.00 21.00 4.00 3,3E-04 2.2E-04 4.8E-04 2.98 49.12 25.9 17.00 21.00 0.00 2.10 50.8 3 4.00 16.9 0.00 2.10 0.90 41.20 27.9 4 17.00 21.00 4,00 37.7 5 17.00 21.00 4.00 6.6 1.0 0.00 2.10 0.36 11.74 17.7 1 0.00 1.90 0.97 10.93 26.0 7.6E-04 59.4 21.00 25.00 5.6 1.0 4.00 42.0 6.6 2.0 1.65 20.25 34.0 5.3E-04 :7 0.00 1.90 21.00 25.00 4.00 41.5 25.0 3.2E-04 3 6.6 4.2 0.00 1.90 2.46 41.44 21.00 25.00 4.00 6.6 2.0 0.76 21.14 3.5E~04 27.2 4 21.00 25.00 4.00 0.00 1.90 23.0 27.9 21.00 25.00 6.6 1.0 0.00 1.90 0.24 11.66 13.0 3.5E-04 5. 4,00 8.2 2.1E-04 6.6 1.0 15.5 10.59 25.00 30.00 5.00 0.00 0.70 0.11 1 16.0 2 0.45 20.25 2.18-04 6.6 2.0 25.00 30.00 5.00 0.00 0.70 16.2 16.0 6.6 4.0 1.9E-04 25.00 30.00 5.00 0.00 0.70 1,29 39.41 27.6 3 0.00 0.70 25.00 30.00 6.6 6.0 14.7 4 5.00 3.06 57.64 42.4 2.0E-04 25.00 30.00 5.00 6.6 4.0 0.00 0.70 1.19 39.51 26.5 1.8E-04 13.4 5 6.6 2.0 0.00 0.70 25.00 30.00 5.00 0.38 20.32 14,9 14.7 Ъ 2.0E-04 25.00 30.00 5.00 6.6 1.0 0.00 0.70 0.08 10.62 7.0 1.8E-04 13.2 7

Table C-9RESULT OF WATER PRESSURE TEST,
MAIN DAMSITE BM8 (2/2)

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY BORE HOLE NUMBER: Main damsite BM8

SOME HODE NORDER. MAIN LARSI LE BRO

DEPTH From	DEPTH To	LENGTH TESTED		PRESSURE READING			FRICTION	TOTAL Head	WATER INJECTED	COEFFICIENT OF PERMEABILITY	LUGEDN Unit	STEP
: j ş	A	Ð	Cn	Kg/cm2	Å	ß	9	សិ	l/min	cn/sec		NO
30.00	35.00	5.00	6.6	1.0	0.00	1.81	1.11	10.70	23.3	5.82-04	43.5	.1
30.00	35.00	5.00	6.6	2.0	0.00	1.81	2.08	19.73	31.9	4.3E-04	32.3	2
	35.00	5.00	6.6	4.0	0.00	1.81		38.74	38.8	2.7E-04	20.0	3
30,00	35.00	5.00	6.6	2.0	0.00	1.8i	0.91	20.90	21.2	2.7E-04	20.2	- 4
	35.00	5.00	6.6	1.0	0.00	1.81	0.50	11.31	15.6	3.7E-04	27.6	5
14. K		ан сайта. Арто сайта		· .	· · · ·							
35.00	40.00	5.00	6.6	1.0	0.00	1.94	0.11	11.83	6.7	1.58-04	11.2	1
35.00		5.00	6.6		0.00			21.47	14.0	1.7E-04	13.0	2
35.00		5.00	6.6	· · ·	0.00			40.86	21.3	1.4E-04	10.4	3
35.00		5.00	6.6	7.0	0.00	1.94		69.59	31 4	1.2E-04	9.0	4
	40.00	5.00	6.6		0,00	1.94		41.25	17.0	1.1E-04	8.2	5
	40,00	5.00	6.6		0.00	1.94	0.83	21.11	18.7	2.4E-04	17.7	6
	40.00	5.00	6.6		0.00			11.90	4.2	9.4E-05	7.0	7
					· .					1997 - 19	· .	
40.00	45.00	5.00	6.6	1.0	0.00	0.74	0.07	10.67	4.9	1.2E-04	9.2	1
1. N.	45,00	5.00	5.6		0.00	0.74	0,60	20.14	14.8	2.0E-04	14.7	2
40.00	45.00	5.00	6.6	4.0	0.00	0.74	1.01	39.73	19.3	1.3E-04	9.7	3
	45.00	5,00	6.6		0,00	0.74	2.10	69.64	27.8	1.1E-04	8.1	4
	45.00	5.00	: 6:6		0.00	0.74	0.59	40.15	14.7	9.86-05	7.3	5
	45.00	5,00	6:6		0.00	0.74	0.42	20.32	12.4	1.5E-04	12.2	6
	45.00	5,00	6.6		0.00	0.74	0.05	10.69	4.1	1.0E-04	7.7	7
· · · · ·									•	. :		
45.00	50.00	5.00	6.5	1:0	0.00	0.64	0.03	10.61	3.1	7.9E-05	5.8	1
	50.00	5.00	6.6		0,00	0.64	0.19	20.45	7.9	1.0E-04	7.7	2
	50.00	5.00	6.6		0,00	0.64	0.55	40.09	13.4	8,98-05	6.7	. 3
45.00	50.00	5.00	6.6		0,00	0.64	1.12	69.52	19.1	7.3E-05	5.5	4
45,00	50,00	5,00	6,5		0,00	0.64	0.33	40.31	10.4	6.9E-05	5.2	- 5
45.00	50.00	5.00	6.5		0,00	Q.64	0.10	20.54	5.6	7.38-05	5.5	6
45.00	50.00	5.00	5.6		0,00	0.64	0.02	10.62	2.3	5.8E-05	4.3	7

Table C-10 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BM9

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM9

DEPTH DEPTH LENGTH HOLE PRESSURE STATIC GAUGE FRICTION TOTAL WATER COEFFICIENT OF LUGEON STEP TO TESTED DIA. READING HEAD HEIGHT LOSS HEAD INJECTED PERMEABILITY UNIT FRAM - 00 l/sin cm/sec Kq/cm2 8 ß ē. CO a 爵 9 N 0.00 11.01 1.2 2.50 5.00 2.50 6.5 1.0 0.23 0.78 5.0E-05 4.4 . 1 21.01 2.7 5.2 2 2.50 5.00 2.50 6.6 2.0 0.23 0.78 0.00 6.0E-05 3.7 3 41.01 3.8 0.23 0.78 4.3E-05 2.50 5.00 2.50 6.5 4.0 0.00 5,6 4 6.6 2.0 0.23 0.78 2.9 6.4E-05 -2.505,00 2.50 0.00 21.01 0.23 0.78 1.4 4.9 2.50 6.6 1.0 0.00 11.01 5.7E-05 5 2.50 5.00 8.6E-05 6.4 1 0.15 0.38 5.00 10.00 5.00 10.53 6.6 1.0 0.00 3.4 2.9 2 5.00 10.00 5.00 6.6 4.0 0.15 0.38 0:01 -40.52 5.8 3.8E-05 5.00 10.00 5.00 0.15 0.38 6.6 7.0 0.02 70.51 7.1 2.7E-05 2.0 3 5.00 10.00 5.00 6.6 4.0 0.15 0.38 0,01 40.52 6.0 3.9E-05 2.9 4 5.00 6.6 1.0 5.00 10.00 0.15 0.38 10.53 9.2E-05 6.9 5 0.00 3.6 10.00 15.00 6.6 . 1.0 4.1 1 5.00 0.00 0.44 0.00 10.44 . 2.2 5.5E-05 0.00 0.44 10.00 15.00 5.00 4,0 0.02 40.42 3.3E-05 6.6 5.0 2:5 2 10.00 15.00 5.00 6.6 7.0 0.00 0.44 0.05 70.39 8.2 3.1E-05 2.3 3 10.00 15.00 5.00 6.6 4.0 0.00 0.44 0.02 40.42 5.5 3.6E-05 2.7 4 10.00 15.00 5.00 6.6 1.0 0.00 0.44 6.9E-05 0.00 10.44 2.7 5.2 5 15.00 20.00 5,00 6.6 1.0 0.00 0.32 9.01 35.9 1.31 1.1E-03 79.7 1 15.00 20.00 5.00 6.6 2.5 0.00 0.32 12.98 12.34 2.4E-03 182.8 2 112.8 15.00 20.00 5.00 6.6 1.0 0.00 0.32 1.31 79.7 9.01 35.9 3 1.1E-03 20.00 25.00 5.00 6.6 1.0 0.00 0.72 0.41 10.31 17.3 4.5E-04 33.6 1 20.00 25.00 0.00 0.72 5.00 6.6 2.0 0.94 3.6E-04 2. 19.78 26.4 26.7 20.00 25.00 5.00 0.00 0.72 6.6 4.0 2.79 37.93 45.3 3.2E-04 23.9 3 20.00 25.00 5.00 6.6 2.0 0.00 0.72 1.31 19.41 31.1 32.0 4.3E-04 4 20.00 25.00 5.00 6.6 1.0 0.00 0.72 0.64 10.08 21.7 5.7E-04 43.1 5 25.00 30.00 1.0 0.00 0.78 2.1E-04 15.8 1 5.00 6.6 0.12 10.66 8.4 25.00 30.00 5.00 6.6 2.0 0.00 0.78 20.42 0.36 14.5 1.9E-04 14.2 2 25.00 30.00 5.00 6.6 4.0 0.00 0.78 0,95 39.83 23.6 1.6E-04 11.8 3 17.1 ····· 25.00 30.00 5.00 6.6 2.0 0.00 0.78 0.51 20.27 17.3 2.3E-04 4 6.6 1.0 25.00 30.00 5.00 19.0 0.00 0.78 0.17 10.61 10.1 2.5E-04 5

Table C-11 RESULT OF WATER PRESSURE TEST, MAIN DAMSITE BM10

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM10

DEPTH From		LENGTH Tested	HOLE DIA.	PRESSURE READING	STATIC HEAD	GAUGE Height				COEFFICIENT OF PERMEABILITY	LUGEDN Unit	STEP
â	8	8 	C6	Kg/cm2	1	8	0	8	l/sín	cn/sec	· -	no
												:
1.00	5.00	4.00	6.6	0.0	5.00		0.00	5.20	110.0	6.7E-03	528.8	i
1.00	5.00	4.00	6.6	0.0	5.00	0.20	0.00	5,20	105.0	6.4E-03	504.8	. 2
5.00	10.00	5.00	6.6	0.0	5,50	0.40	0.00	5.90	117.9	5.3E-03	399.7	1
0.00	15.00	5.00	6.6	1.0	5.80	0.61	0.01	16.40	4.0	6.5E-05	4.9	1
0.00	15.00	5.00	6.6	2.0	5,80		0.02	26.39	5.0	5.0E-05	3.8	2
0.00	15.00	5.00	6.6	4.0	5.80	0.61	0.07	46.34	10.1	5.8E-05	4,4	3
0.00	15.00	5.00	6.6	7.0	5.80	0.61	0.83	75,58	35.0	1.2E-04	9.3	4
0.00	15.00	5.00	6.6	4 ()	5,80	0.61	0.04	46.37	7.2	4.1E-05	3.1	ភ្ញ
0.00	15.00	5.00	6.6	2.0	5,80	0.61	0.01	26.40	4.0	4.05-05	3.0	6
0.00	15.00	5.00	6.6	1.0	5.80	0.61	0.01	16.40	3.1	5.0E-05	2.8	7
5.00	20,00	5.00	6.8	1.0	5,32	0.58	0.01	15.89	3.2	5.3E-05	4.0	1
	20.00	5.00	6.6	2.0	5.32		0.02	25.88	4.1	4.28-05	3.2	2
5.00		5.00	6.6		5.32		0,12	45.78	10.9	6.32-05	4.8	3
	20.00	5.00	6.6	7.0	5.32		1.10	74.80	32.9	1.28-04	8.8	4
5.00		5.00	6.6		5.32		0.07	45.83	8.3	4,8E-05	3.6	5
	20,00	5.00	6.6		5,32		0.01	25.89	3.1	3.2E-05	2.4	6
5.00		5.00	5.6	1.0	5.32		0,00	15.90	2.2	3.7E-05	2.8	- 7
0.00	75.00	5.00	6.6	1.0	4.80	0.70	0.01	15.49	2.2	3.8E-05	2.9	· ·
0,00		5,00	6.6		4.80		0.01	25.49			2.4	2
	25.00	5,00	6.6	4.0		0.70	0.07	45.41	8.1	4.8E-05	3.6	3
0,00		5,00	6.6	7.0	4.90			74.43	28.1	1.0E-04	7.6	4
0.00		5,00	6.6	4 (1		0.70	0.07	45,43	7.4	4.3E-05	3.3	- 5
0.00		5,00	6.6	2.0	4.80	0,70	0.01	25:49	3,0	3.1E-05	2.4	6
	25.00	5.00	6.5		4.80		0.01	15,49	2,1	3.6E-05	2.7	7
5.00	30.00	5.00	6.6	1.0	4,80	0.65	0.04	15.41	5,0	8.68-05	6.5	i
5.00	5 a - 1	5.00	6.6		4.80		0.11	25.34	8.1	8.5E-05	6.4	2
5.00	· · · · · · · · · · · · · · · · · · ·	5.00		4.0	4.80		0.34	45,11	14,1	8.3E-05	6.3	3
	30.00		6.6	7.0	4.80			72,85	39,1	1.4E-04	10.7	4
	30.00	5.00	6.6		4.80		0.21	45.24	11.0	6.5E-05	4,9	Ş
5.00	5	5.00	6.6		4.80		0.09	25.36	7.2	7.6E-05	5.7	5
5.00		5.00	:6.6	1 0	4.80		0.01	15.44	2.1	3.6E-05	2.7	7

RESULT OF WATER PRESSURE TEST, Table C-12 MAIN DAMSITE BM11

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM11

DEPTH From	DEPTH To	LENGTH TESTED		PRESSURE READING		GAUGE Height		N TOTAL Head	WATER Injected	COEFFICIENT OF PERMEABILITY	LUGEON Unit	STEF
8	a	ţ.	Ċð	Kg/cm2	6	• B	a	Ŵ	1/min	c#/sec	-	no
1.50	5.00	3.50	6.6	10	ñ - 74	0.50	0.00	10.84	1.5	4.8E-05	3.9	. 1
1.50 1.50	5,00	3,50	6.5		0.34		0.00	20,84	4.8			
1.50	5,00	3,50	6.6		0.34		0.01	30.83		1.28-04		. 3
1.50	5.00	3,50	.6.6			0.50		20.84				4
1,50	5.00	3,50		1.0		0.50	0,00			4.5E-05	3.6	
1.00	2.00	9196	0,0	2.0	1111	0100	0.00	10107	••••			-
5 00	10.00	5,00	6.6	1.0	0 40	0.60	0.01	10,99	3.9	9.4E-05	7.1	1
	10.00	5,00	5.6		0.40			40.89	17.8		8.7	2
	10.00	5,00	6.6			0.60	0.27	70.73	28.4		8.0	3
	10.00	5,00		10.0	0.40			100.58		9.3E-05		4
	10.00	5,00	6.6		0.40		0.11	70.89				5
	10.00	5.00	6.6		0.40			40.91	18.3 16.7	5.9E-05 1.1E-04	8.2	ŧ
	10.00	5.00	6.6		0.40		0.00	11.00		7,92-05	5.9	7
3,00	10100	0.00	0,0	1	0110							-
0 00	15.00	5,00		1.0	0.45	0.45	0.00	11.10	1.8	4.3E-05	3.2	1
	15.00	5,00	6.6			0.65			6.0			2
	15.00	5.00	6.6			0.65	0,12	70.98		5.0E-05		
	15.00	5,00	6.6		0.45		0.30		21.1			4
	15.00	5,00	5.5			0,65		70.97	13.8			ç
	15.00	5,00	6.6		0.45			41.08	5.3			ė
	15.00	5.00	6.6		0.45			11.10	1.6			7
V1 V V	10:00	0100	010			1102						
5.00	20.00	5.00	6.6	1.0	0 2 5	0.50	0.30	10.45	17.2	4.4E-04	32.8	1
	20.00	5,00	6.6		0.25		0.73		26.8		26.8	
	20.00	5.00	6.6			0.50	1.99	38.76		3.0E-04		3
	20.00	5.00	6.6			0.50		19.74			31.9	. 4
	20.00	5.00	6.6			0.50	0.61	10.14				5
3100	20.00	9.00	0.0	1.0	V.L.)		0.01	10117	1717	0.7L V7	1011	
0.00	25.00	5,00	6,6	1.0	0.25	0.50	0.01	10.74	3.1	7.6E-05	5.7	
	25.00	5,00	6.6		0,25		0.14					2
	25.00	5.00	6.6			0.50		70.34		6.6E-05	4.9	
	25.00	5.00	6.6		0.25		1	100.05			4.5	Ą
	25.00	5,00	6.6			0.50		70.36	16.9	6.4E-05	4.8	
	25.00	5.00	6.6			0.50		40.63	9.4	6.2E-05	4.6	l
	25.00	5.00	6.6			0.50		10.74	2.8	6.9E-05	5.2	
V1 VV	74100	3.00	0.0	114	V.13	V1-JV		10.74	2.0	0,72-03	7.45	
5.00	30.00	5.00	6.6	1.0	0 00	0.40	0.01	10.39	2.5	6.3E-05	4:8	1
	30,00	5.00	6.6			0.40		40.29	8.1	5.3E-05	4.0	ار بر بر ۲۰
	30.00	5,00	- 6.6			0.40	0.26	70,14	12.3		3.5	
	30.00	5.00	6.6			0.40		199 . 72	20.1	5.42-05	4.0	
	30.00	5.00	0.0 6.6			0.40 (),4()		70.12		and the second	3.7	1
	30.00	5,00	6.6			0,40	0.11	40.29	12.9 7.9	4:9E-05	3.9	
	30.00									5.2E-05		(
2.00	20.00	5,00	6.6	1.0	0100	0.40	0.01	10.39	1.9	4.9E-05	3.7	

Table C-13RESULT OF WATER PRESSURE TEST,
MAIN DAMSITE BM12

- -

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Main damsite BM12

DEPTH From				PRESSURE READING						COEFFICIENT OF PERMEABILITY		STEP
9	# 	§1	CR	Kg/cm2	9	1	ß	ß	1/min	cm/sec		80
3.00	5.00	2.00	6.6	1.0	9.00	1.29	0.00	11.29	1.9	8.85-05	8.1	1
3.00	5.00	2.00	6.6		0.00		0.00		3.3	4.3E-05		
3,00	5,00	2.00	6.6		0.00			71.28		4.58-05		3
3.00	5.00	2.00			0.00			101.25				4
3.00	5.00	2.00	6.6		0.00	1.29		71.28		4.2E-05	3.8	5
3,00	5.00	2.00			0.00	1.29		41.29	2.9	3.8E-05	3.5	6
3,00	5.00	2,00	6.6	1.0	0,00	1.29	0,00	11,29	1.5	7.0E-05	6.5	7
5.00	10.00	5,00	6.6	1.0	0.00	1.62	0.00	11.62	1.8	4.28-05	3.1	i
5.00	10.00	5,00	6.5	4.0	0.00		0.01	41.61	4.0	2.6E-05	1.9	2
5.00		5.00	6.6		0.00			71.61	6.2	2.3E-05	1.7	2
	10.00	5,00	6.5		0.00			101.57	12.0	3.2E-05	2.4	4
	10,00	5.00		7.0	0.00		0.01	71.61	5.7	2.16-05	1.6	5
	10.00	5,00	5.5		0.00		0.00	41.62	3.5	2.3E-05	1.7	6
5.00	10.00	5.00	6.6	1.0	0,00	1.62	0.00	11.62	0,0	0.0E+00	0.0	7
	15,00	5,00	6.6			1,34	0.00	11.34	1.2	2.7E-05	2.0	1
	15.00		6.6		0.00		0.02	41,32	5.6		2.7	2
e e construction de la construction	15.00	5,00	6.6			1.34		71.30	8.1		2.3	3
	15.00	5.00	6.6		0.00			101.18		4.0E-05	3.0	4
	15.00	5.00	6.6			1.34	0.03	71.31	6.9	2.6E-05	1.9	5
	15.00	5.00	6.6			1.34	0.01			2.4E-05	1.8	6
10.00	15.00	5,00	6.6	1.0	0.00	1.34	0.00	11,34	0.0	0.02+00	0.0	7
15.00	20.00	5,00	616	1.0	0,00	1.38	0.60	10.78	24.3	6.08-04	45.1	1
	20:00	5.00	5.5			i.38	1.37	20.01	36.6	4.9E-04	36.6	2
15.00		5.00	6.6		0.00	1.38	2.41	38.97	48.6	3.3E-04	24.9	3
	20.00	5.00	6.6		0.00	1,38	0,96	20.42	30.9	4.08-04	30.1	4
	20.00	5,00	6.6		0.00	1.38	9,33	11,05	18.0	4.3E-04	32.5	5
20,09	25,00	5,00	6.6	1.0	0.00	1.54	2.87	8.57			105.8	1
20.00	25.00	5.00	6.0	2.0	0,00	1.54	8.84			1.7E-03	126.9	2
	25.00	5,00	6.6	4.0	0.00	1.54	20.34	21.20	122.3	1.5E-03	115.4	3
	25.00	5.00	6.6		0.00	1.54	5,21	16.33	61.9	1.0E-03	75.8	4
	25.00	5.00	5.6	1.0	0.00	1.54	2,42	9.12	42.2	1.2E-03	92.5	5
25.00	30,00	5.00	6.4	1.0	0.00	1.42	3.11	8.31	42.8	1.4E-03	102.9	1
	30,00	5,00	5.6		0.00		8,79	12,63	71.9	1.5E-03	113.8	2
25.00	30.00	5.00	- 6.6		0.00	1.42	20.46	20.95	109.7	1.4E-03	104.7	3
	30.00	5.00	6.6		0,00		5,80	15.62	58.4	10.0E-04	74.8	4 .
25.00	30.00	5.00	6,6			1.42	1.91	9.51	33.5	9.4E-04	70.4	5

Table C-14 RESULT OF WATER PRESSURE TEST, SADDLE DAMSITE BRS1

RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY PART 1 BORE HOLE NUMBER: Saddle damsite BRS1

DEPTH From	DEPTH To	LENGTH TESTED		PRESSURE READING		GAUGE Height		N TOTAL Head	WATER INJECTED	COEFFICIENT OF PERMEABILITY	LUGEON UNIT	STEP
ß	5	8	CO	Kg/ca2	ß	Ø	6	ß 	l/min	ca/sec		n0
							· · · ·		1			· · · .
5.00	10.00	5.00	6.6	1.0	3.50	1.20	0.00	14.70			3.7	1
5.00	10.00	5,00	6.5	4.0	3.50	1.20	0.02	44.68	6.9		3.1	2
5,00	10.00	5.00	6.6	7:0	3.50	1.20	0.05	74.65	12.4		3.3	3
5.00	10.00	5.00	6.6	7.0	3,50	1.20	0.11	74.59	18.3	A second s	4.9	4
5.00	10.00	5.00	6.6	10.0	3.50	1.20	0.05	104.65	12.2	3.1E-05	2.3	5
5.00	10.00	5.00	6.6	7.0	3.50	1.20	0.01	74.69	6.6	2.4E-05	1.8	6
5.00	10.00	5.00	6.6	4.0	3.50	1, 20	0.00	44.70	2.5	1.5E-05	1.1	1
10.00	15.00	5.00	6.6	1.0	3.50	1,20	0.00	14.70	3.8	6.9E-05	5.2	1
0.00	15.00	5.00	6.6	4.0	3.50	1.20	0.00	44.70	9.4	5.6E-05	4.2	2
10.00	15.00	5.00	6.6	7.0	3.50	1.20	0.00	74.70	15.0	5.3E-05	4.0	· 3
0.00	15.00	5.00	6.6	10.0	3.50	1.20	0.00	104.70	18.7	4.8E-05	3.6	4
10,00	15.00	5.00	6.6	7.0	3.50	1.20	0.00	74.70	15.2	5.4E-05	4.1	5
0,00	15.00	5.00	6.6	4.0	3.50	1.20	0.00	44.70	9.7	5.8E-05	4.3	6
10.00	15.00	5.00	6.6	1.0	3,50	1.20	0.00	14.70	3.9	7.1E-05	5.3	7
• .•		<u> </u>		•						7 07 45	8.0	
15.00	20.00	5.00	6.6			(1) A. (20)	0.00	14.70		7.8E-05	5.9	1
15.00	20.00	5.00	6.6		3.50	1.20	0.00		-	6.6E-05	5.0	2 3
15.00	20.00	5.00	6.6	7.0	3.50	1,20	0.00	74.70	17.9	6.4E-05	4.8	3

RESULT OF WATER PRESSURE TEST, SADDLE DAMSITE BSS3

RESULT OF WATER PRESSURE TEST

BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Saddle damsite BSS3

Table C-15

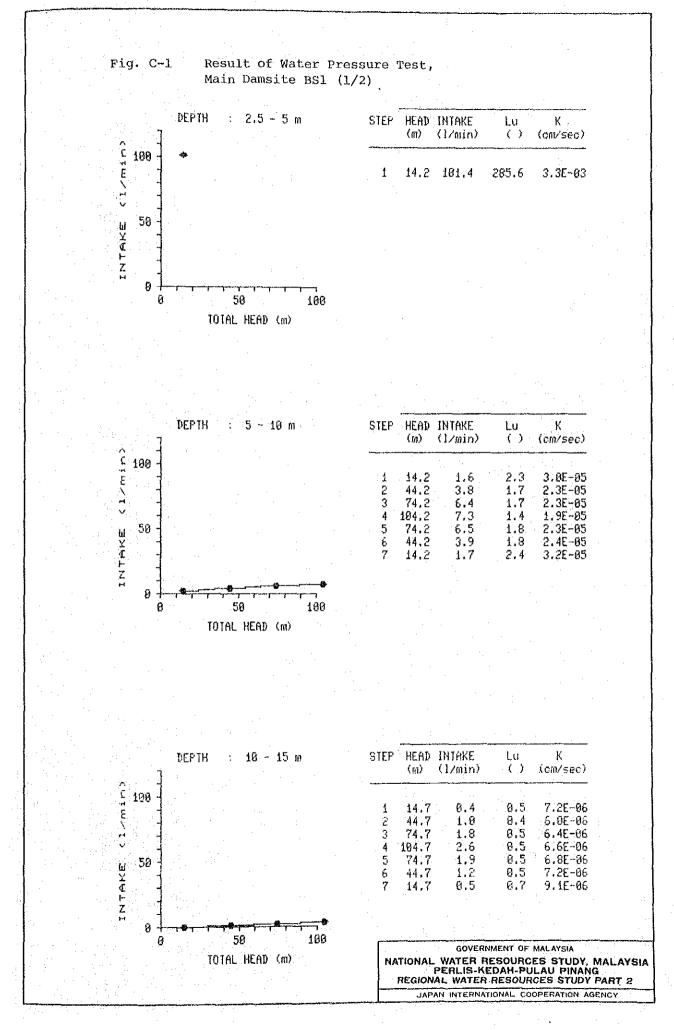
DEPTH From	DEPTH TO	LENGTH Tested	HDLE DIA.	PRESSURE Reading	STATIC HEAD	GAUGE Height	FRICTION Loss			COEFFICIENT OF PERMEABILITY	LUGEON Unit	STEP
a	A	£	CØ	Kg/cm2	Ē	A	ß	ð	l/ain	Ca/Sec	-	00
	÷						· · · · · · · · · · · · · · · · · · ·					
20.00	25.00	5.00	6.6	1.0	4.10	1.00	0.03	15.07	5.0	8.8E-05	6.6	1
20.00	25,00	5.00	6.6	3.0	4.10	1.00	0,45	34,65	18.1	1.4E-04	10.4	2
25,00	30,00	5.00	6.6	1.0	4.10	0.50	0.05	14.55	5.6	1.0E-04	7.7	1

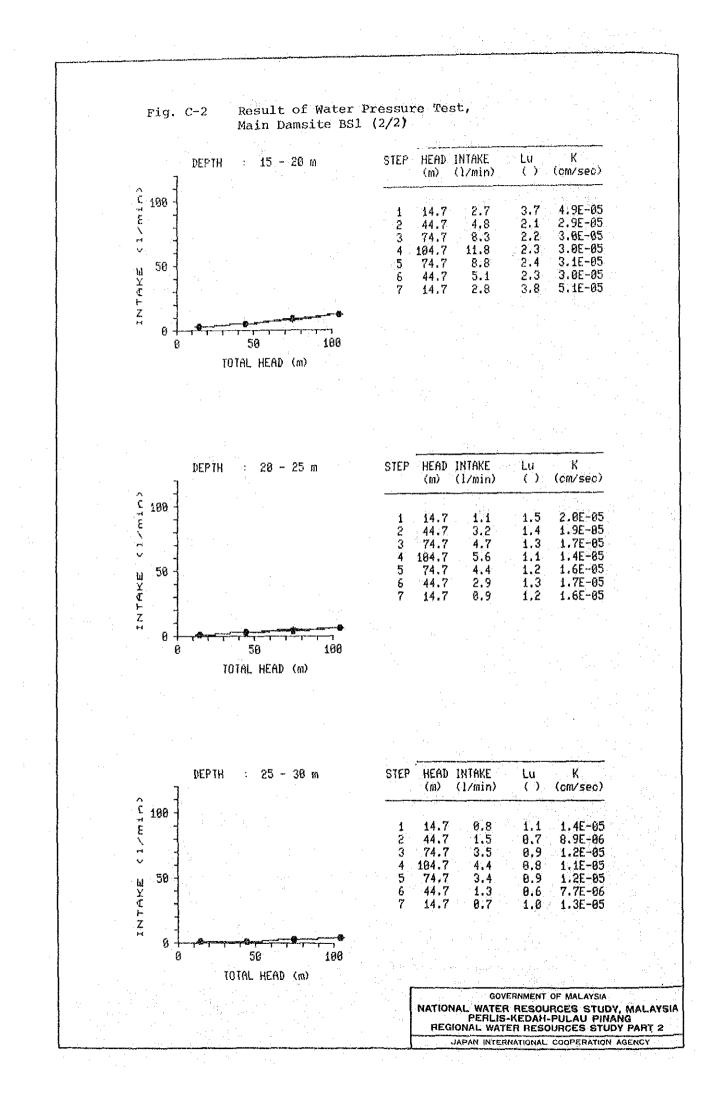
Table C-16RESULT OF WATER PRESSURE TEST,
SADDLE DAMSITE BSS4

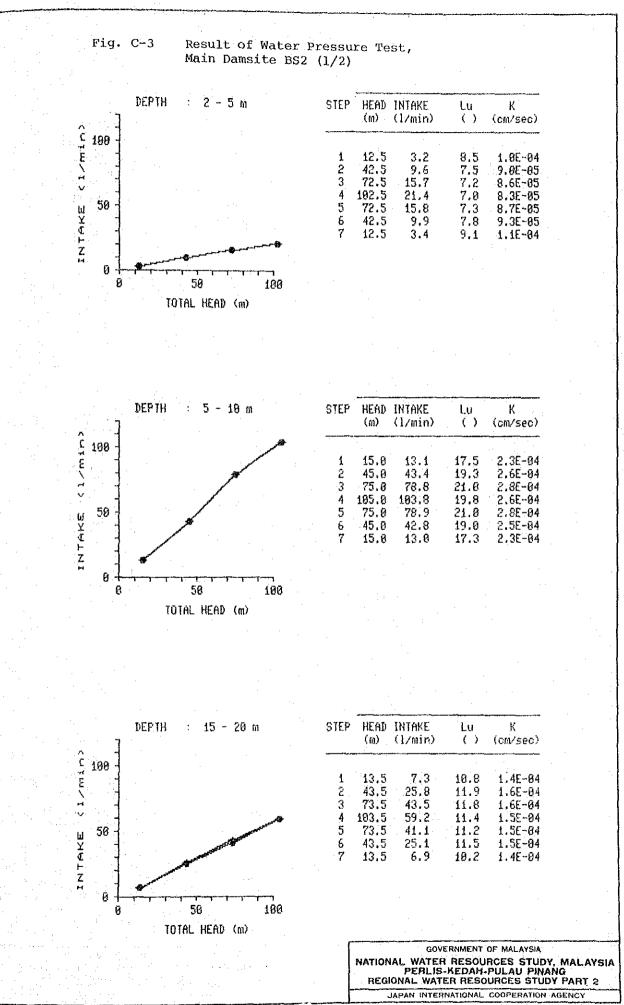
RESULT OF WATER PRESSURE TEST BERIS RIVER FESIBILITY STUDY

BORE HOLE NUMBER: Saddle damsite BSS4

DEPTI	H NÉPTH	LENGTH	HOLF	PRESSURE	STATIC	GAUGE	FRICTION	TREAL	NATER	COEFFICIENT OF	LUGEON	STE
FROM	TO	TESTED		READING	· · ·	HEIGHT			INJECTED		UNIT	9111
B	ß	ß.	. CA	Kg/ca2	í)	ā	ß	₿	1/ain	cm/sec		no
	· · · · · · · · · · · · · · · · · · ·											
15.00	20.00	5.00	6.6	1.0	8.30	1.50	0.03	19:77	5.7	7.7E-05	5.8	- 1
15.00	20.00	5.00	5.6	4.0	8.30	1.50	0.29	19.51	17.0	9.1E-05	6.9	2
15.00	20.00	5.00	6.6	7.0	8.30	1.50	9.50	70,30	96.5	3.7E-04	27.5	3
20.00	25.00	5.00	6.6	1.0	17.50	1.00	0.14	28,36	10.3	9.7E-05	7.3	i
20.00	25.00	5.00	6.6	4.0	(7.50	1,00	0.63	57.87	21.5	9.96-05	7.4	2
25. 00	30.00	5.00	6.6	1.0	18.80	0.50	0.45	28,85	16.2	1.5E-04	11.2	. 1
25.00	30.00	5.00	6.6	4.0	18.80	0.50	2.33	56.97	37.0	1.7E-04	13.0	2

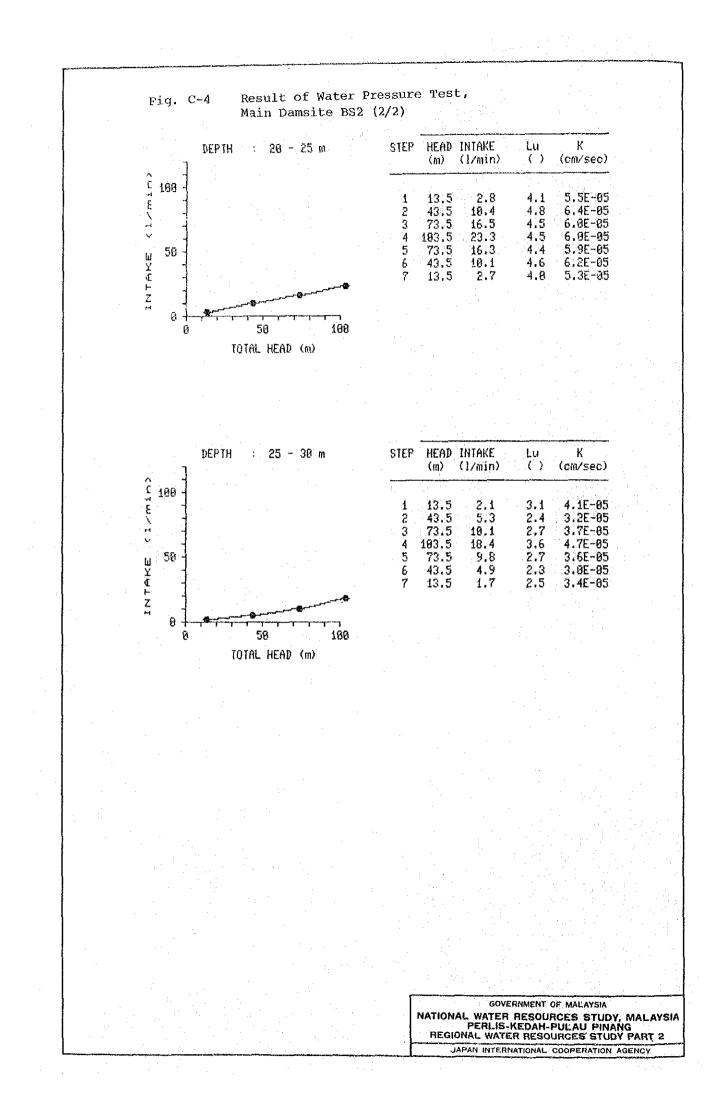


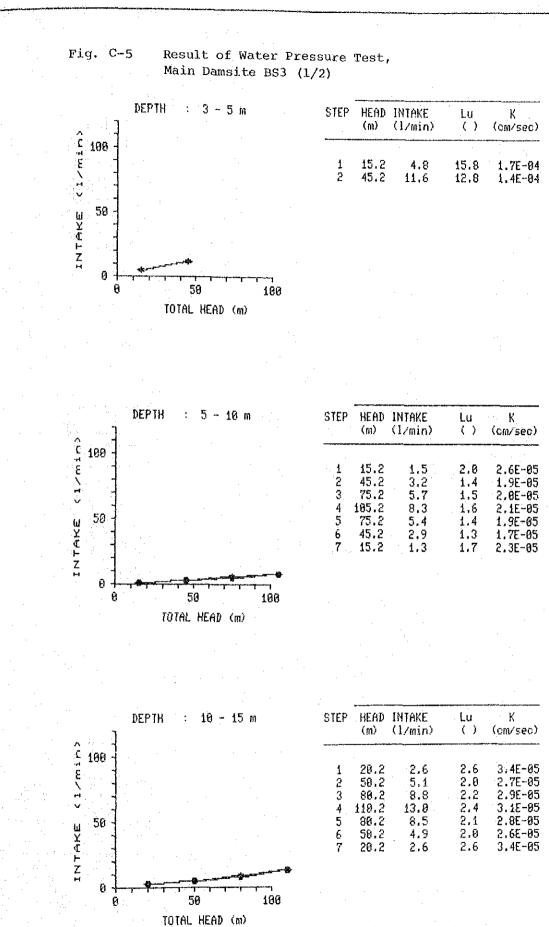




.

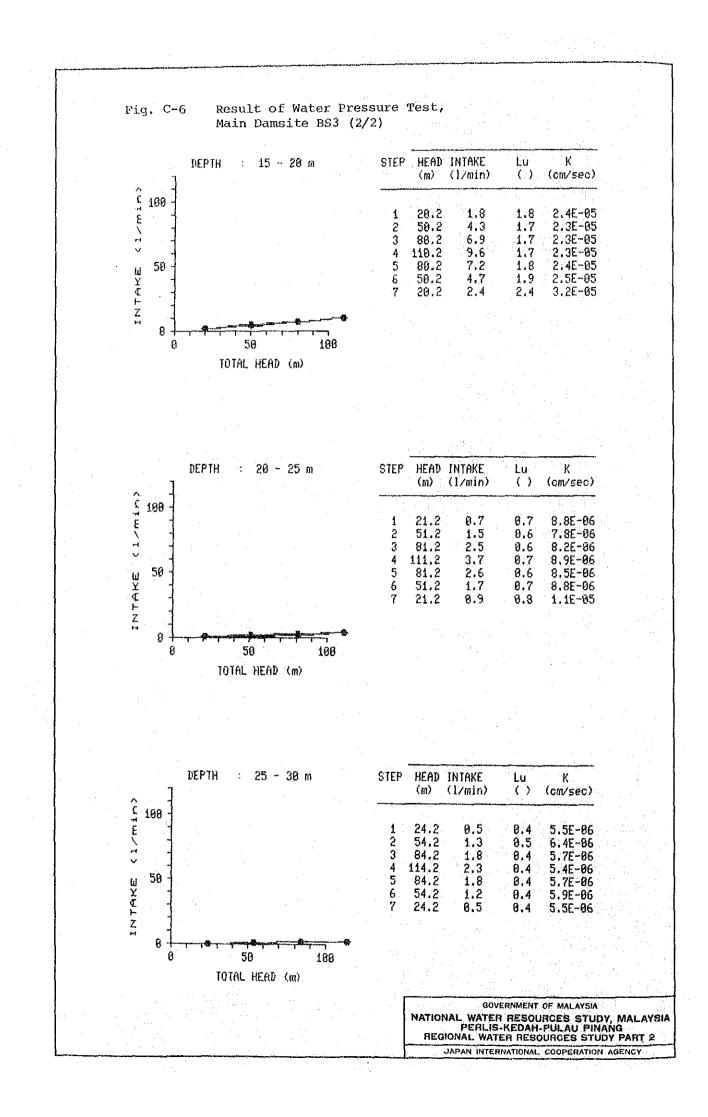
.





GOVERNMENT OF MALAYSIA NATIONAL WATER RESOURCES STUDY, MALAYSIA PERLIS-KEDAH-PULAU PINANG REGIONAL WATER RESOURCES STUDY PART 2

JAPAN INTERNATIONAL COOPERATION AGENCY



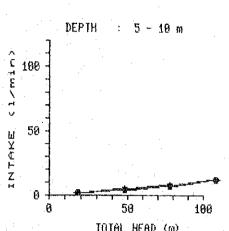


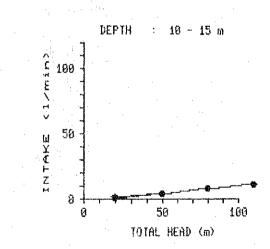
Fig. C-7

STEP	HEAD (m)	INTAKE (17min)	Lu ()	K (cm/sec)
1	18.3	1.9	2.1	2.8E-05
2.3	48.3	4.9 8.3	2.0 2.1	2.7E-05 2.8E-85
4 5	108.2 78.3	12.5	$2.3 \\ 1.8$	3.1E-05 2.5E-05
6 7	48.3 18.3	3.8 1.5	$1.6 \\ 1.7$	2.1E-05 2.2E-05

TOTAL HEAD (m)

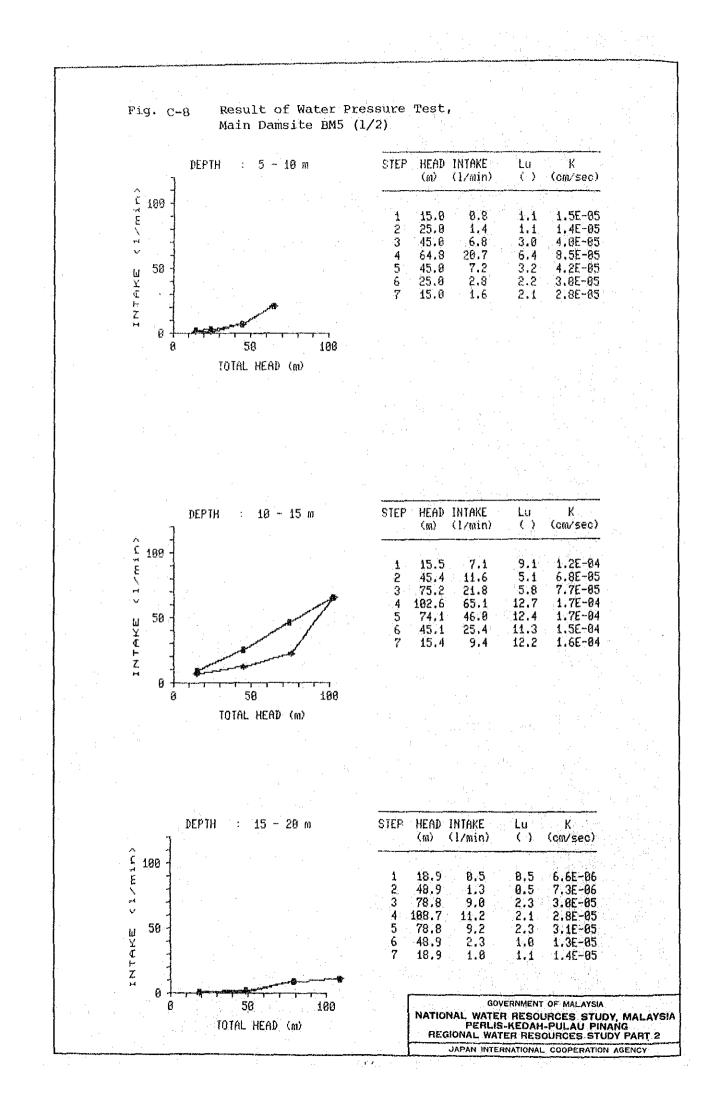
Main Damsite BM4

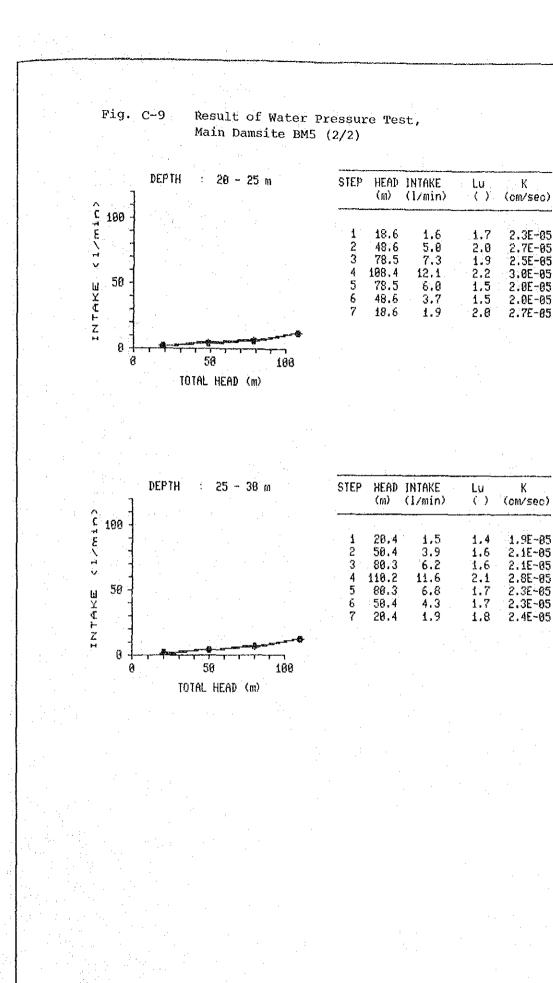
Result of Water Pressure Test,



STEP	HEAD	INTAKE	Lu	K
	(m)	(1/min)	()	(cm/sec)
1234567	19.6 49.6 79.6 109.6 79.6 49.6 19.6	1.6 4.3 7.9 11.9 8.1 3.8 1.4	1.7 1.7 2.8 2.8 1.5 1.5	2.2E-05 2.3E-05 2.7E-05 2.7E-05 2.7E-05 2.7E-05 2.0E-05 1.9E-05

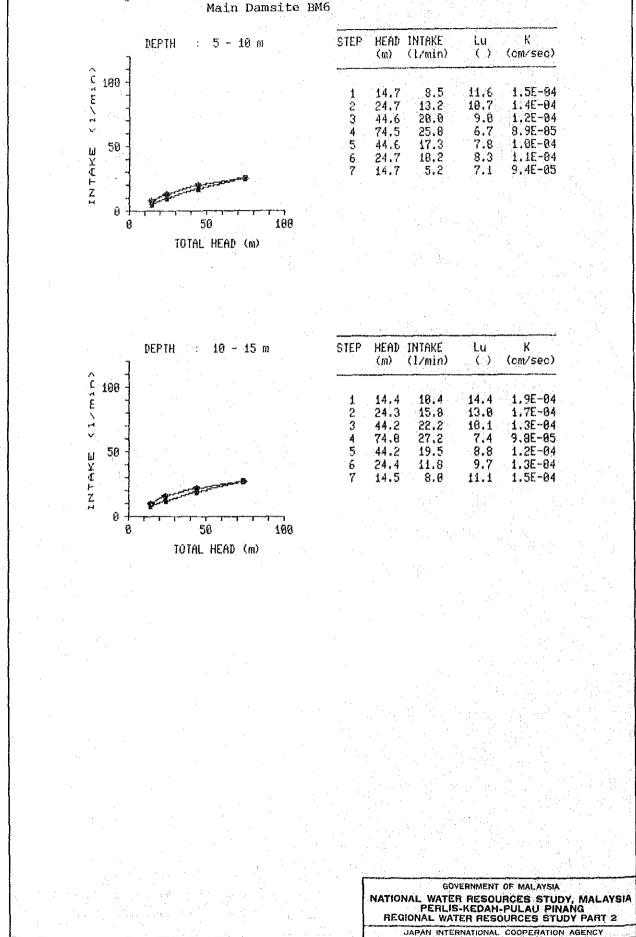
GOVERNMENT OF MALAYSIA NATIONAL WATER RESOURCES STUDY, MALAYSIA PERLIS-KEDAH-PULAU PINANG REGIONAL WATER RESOURCES STUDY PART 2 JAPAN INTERNATIONAL COOPERATION AGENCY



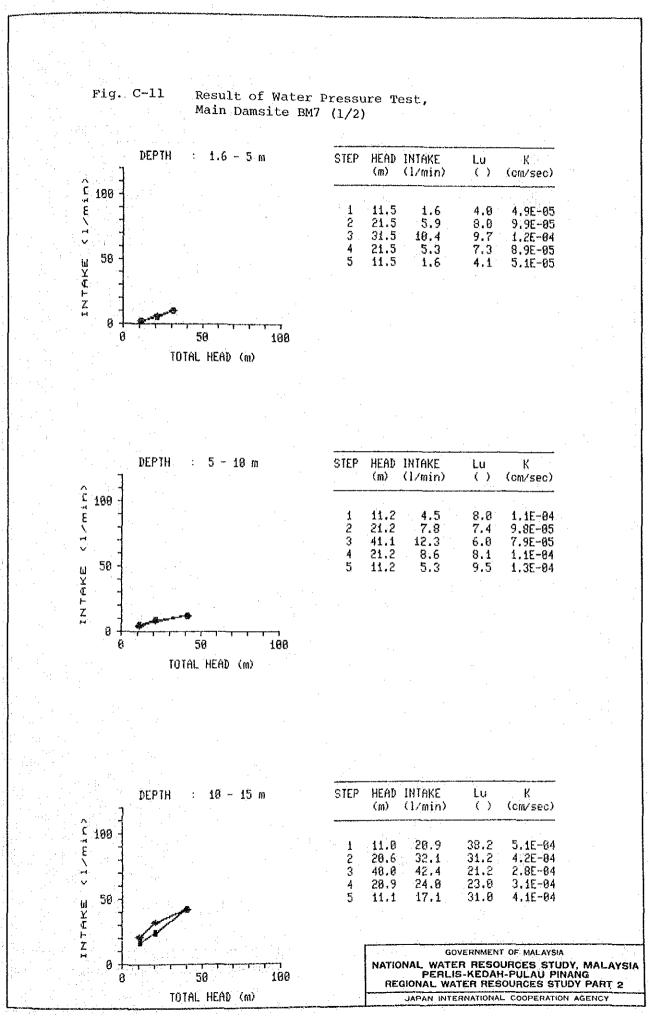


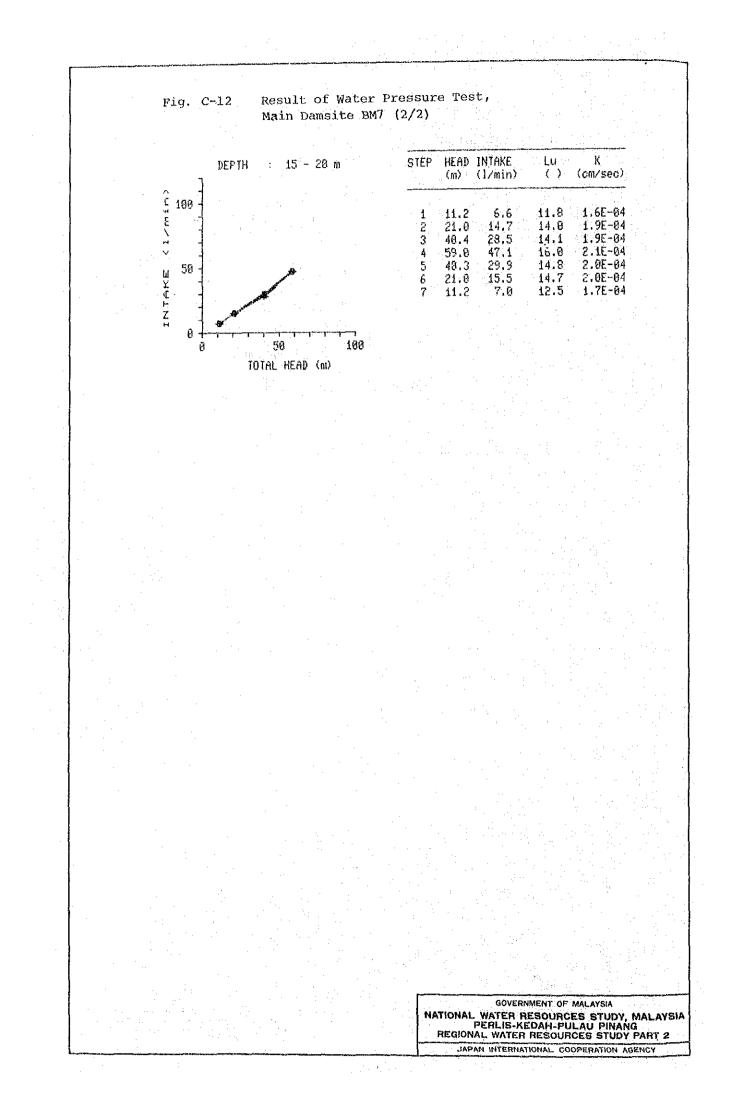
GOVERNMENT OF MALAYSIA NATIONAL WATER RESOURCES STUDY, MALAYSIA PERLIS-KEDAH-PULAU PINANG REGIONAL WATER RESOURCES STUDY PART 2

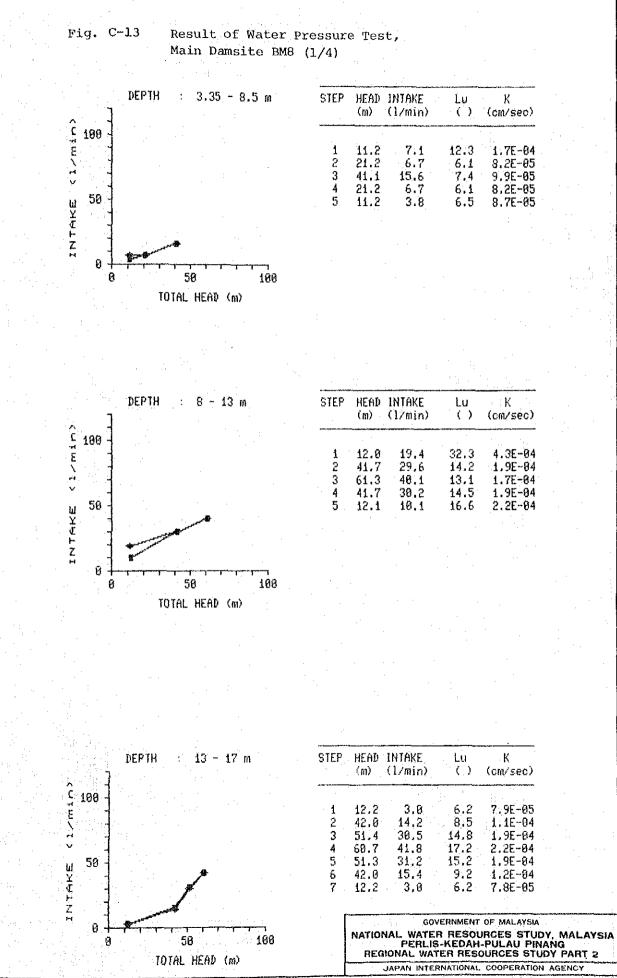
JAPAN INTERNATIONAL COOPERATION AGENCY



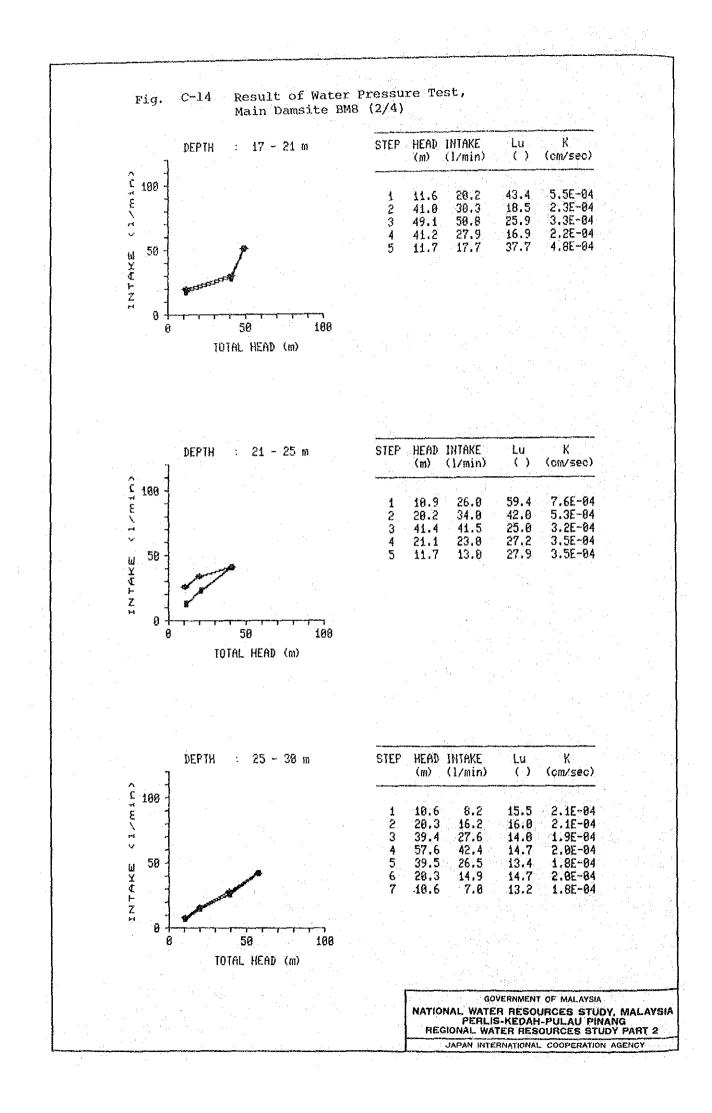
Fig, C-10 Result of Water Pressure Test,



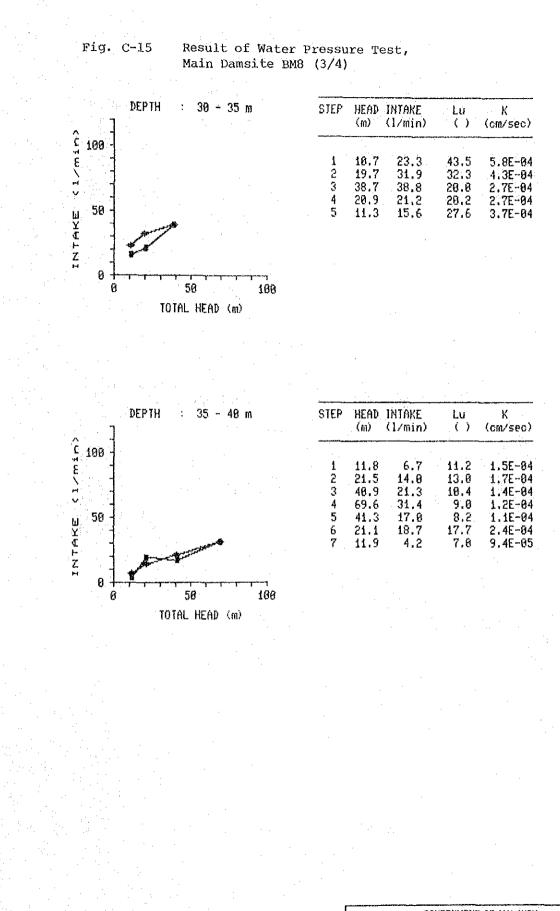




. . .

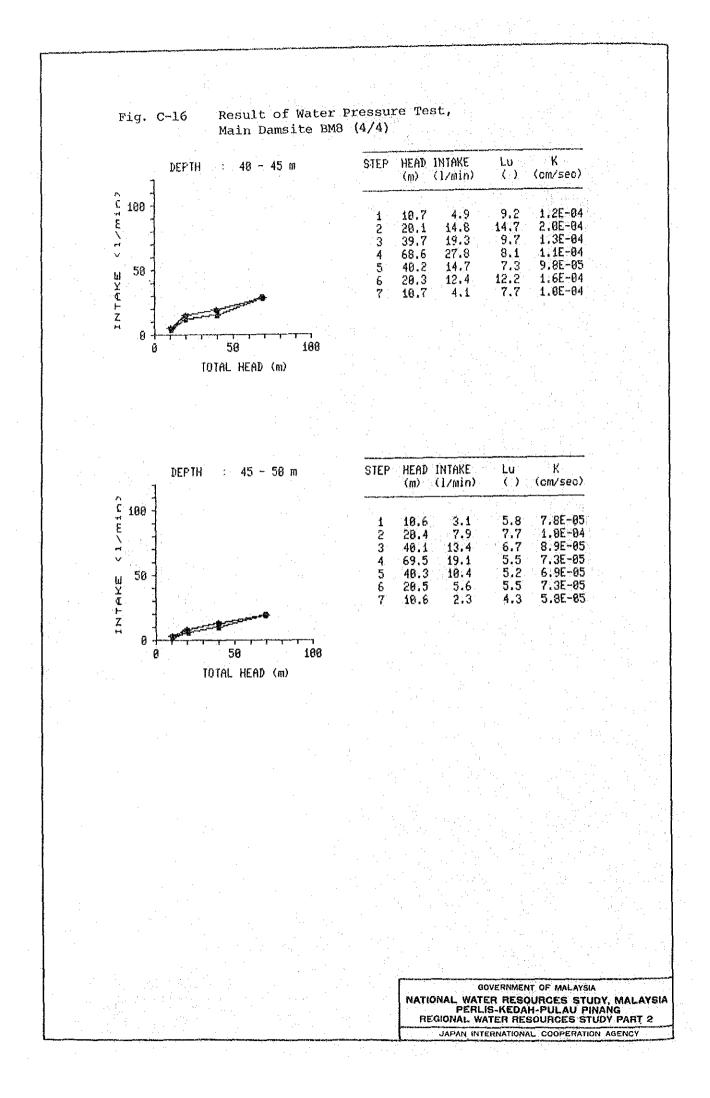


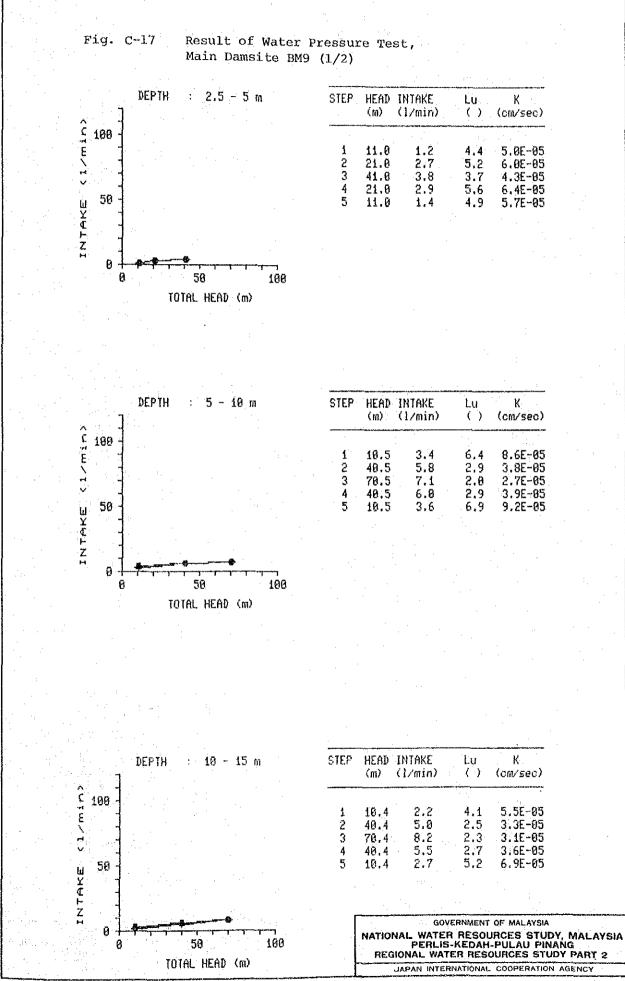




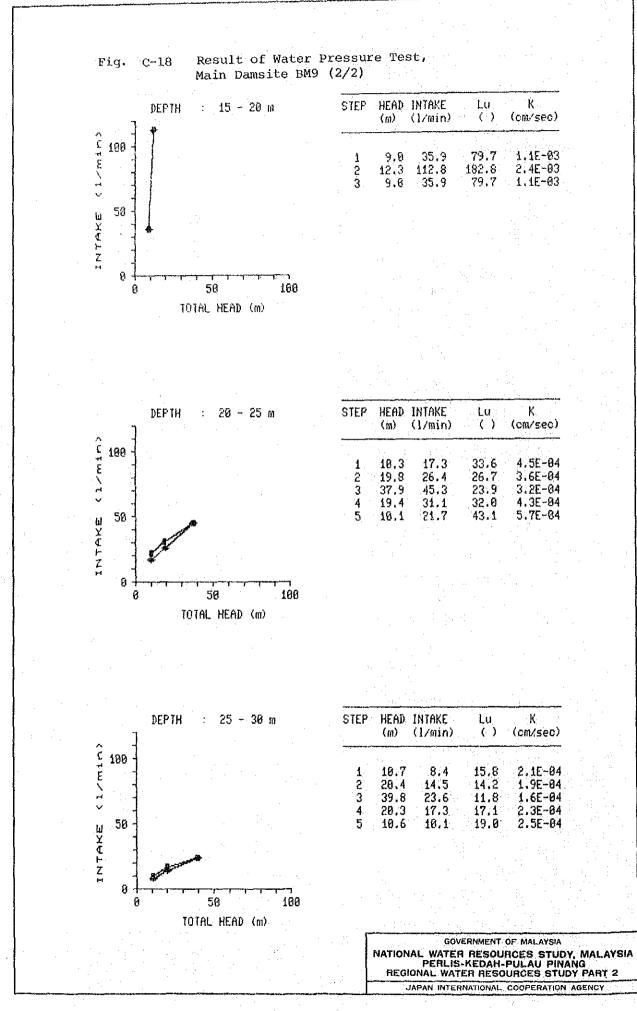
GOVERNMENT OF MALAYSIA NATIONAL WATER RESOURCES STUDY, MALAYSIA PERLIS-KEDAH-PULAU PINANG REGIONAL WATER RESOURCES STUDY PART 2

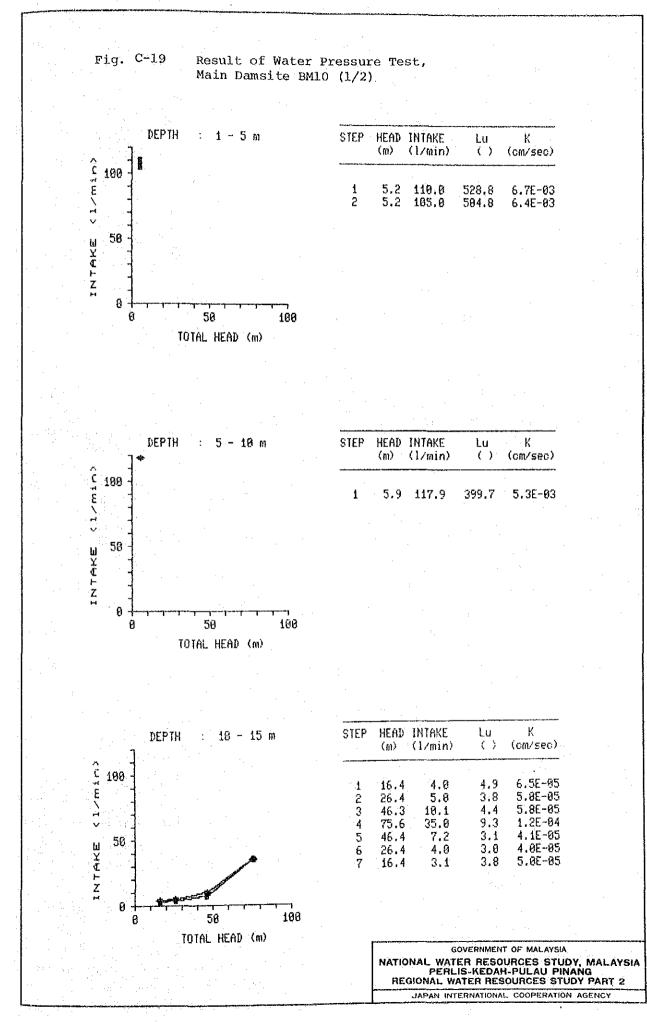
JAPAN INTERNATIONAL COOPERATION AGENCY

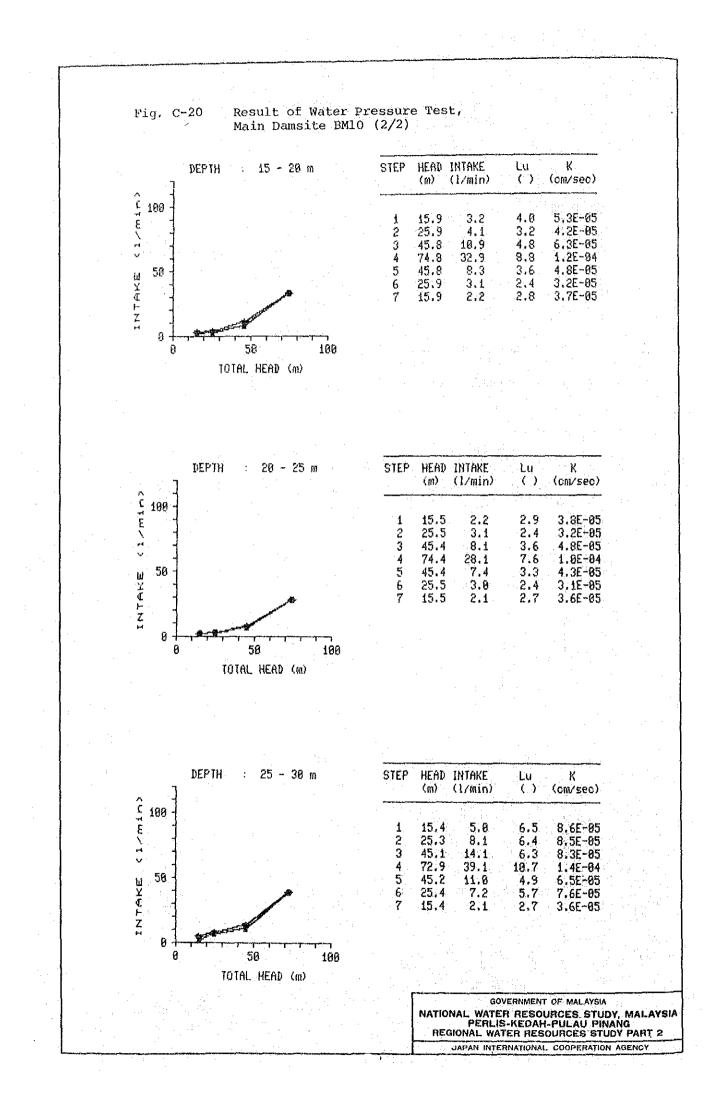


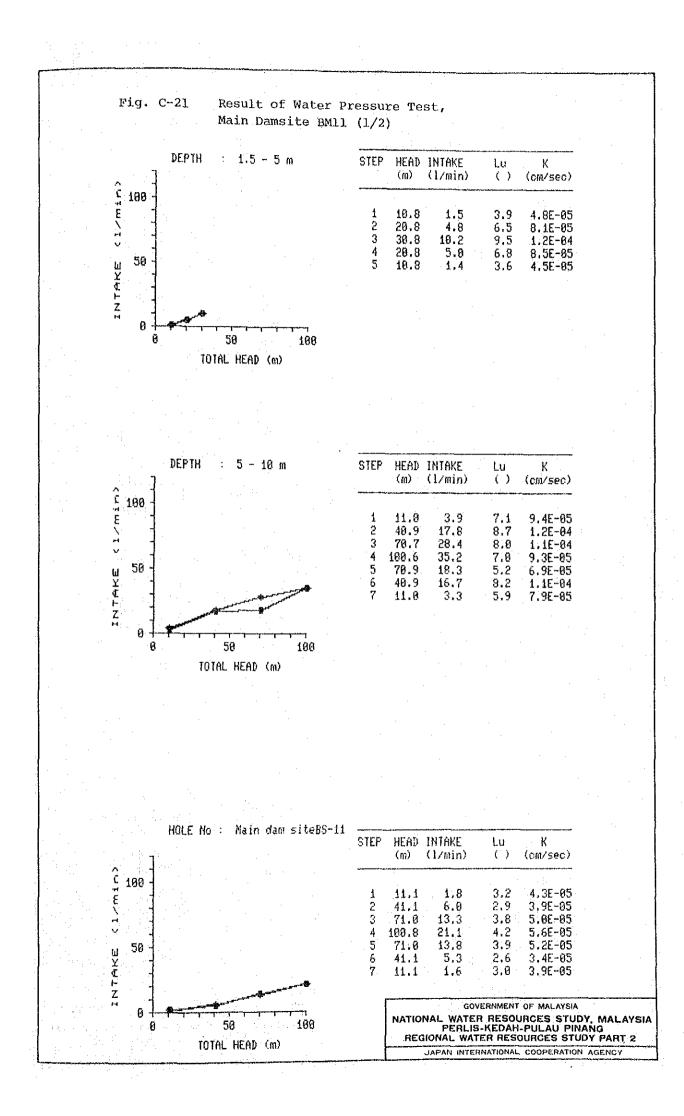


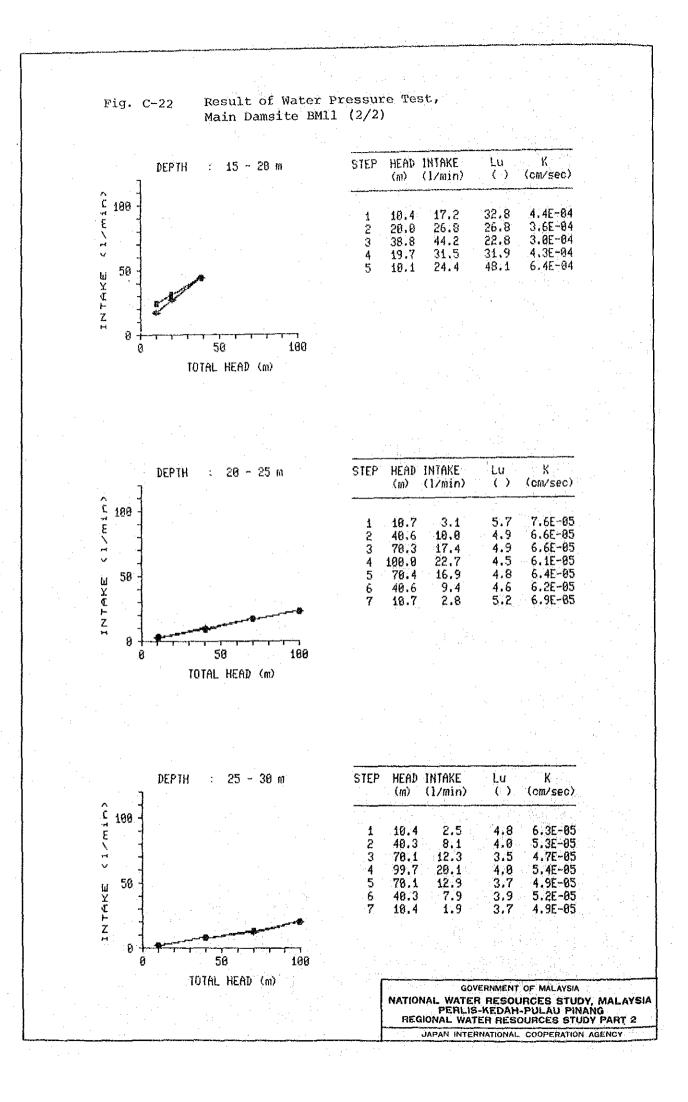
.

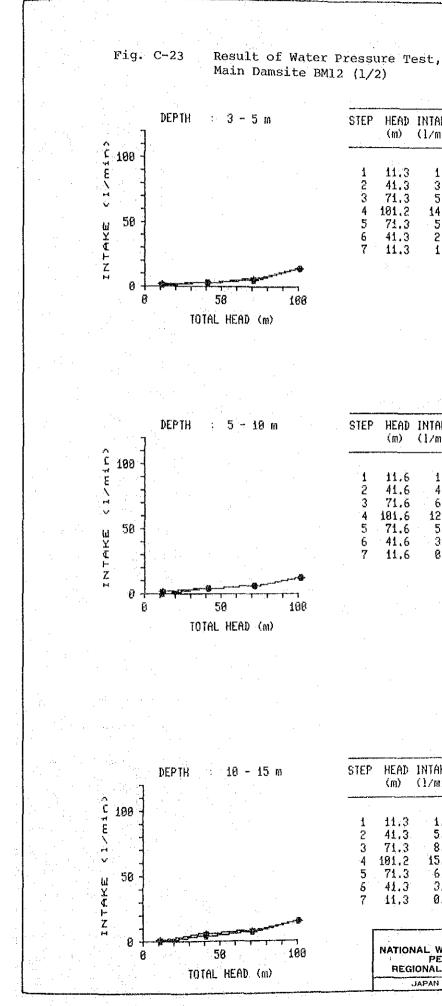






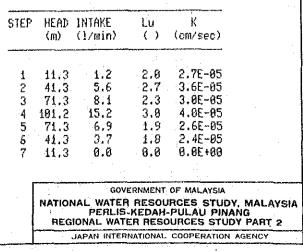


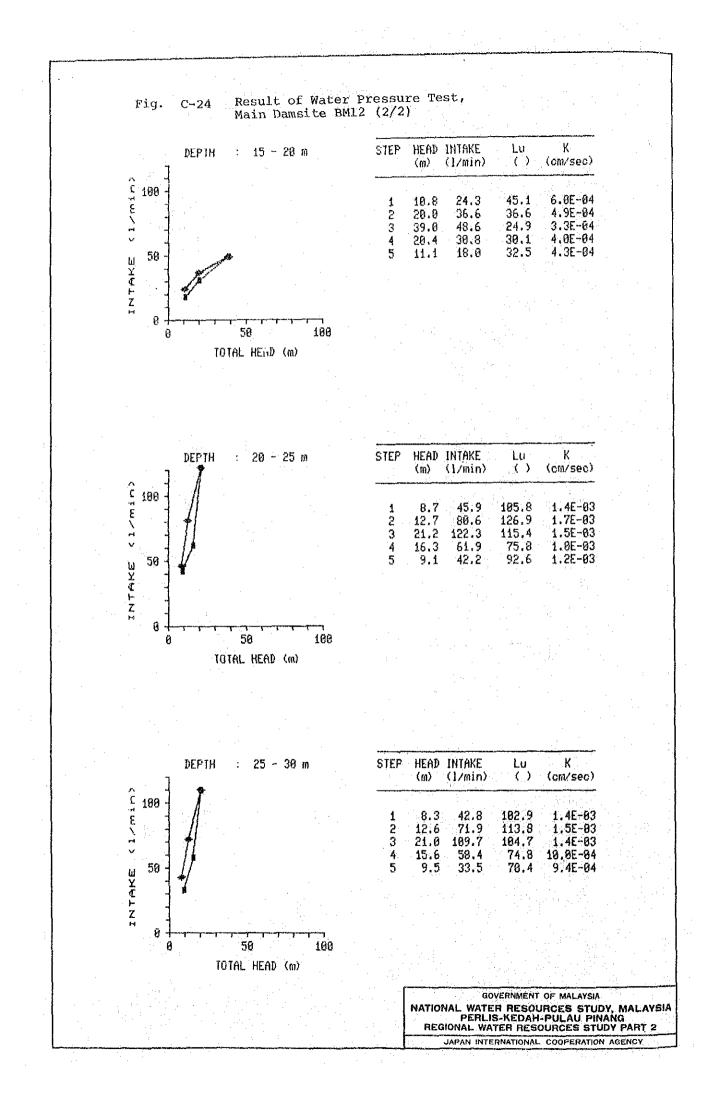


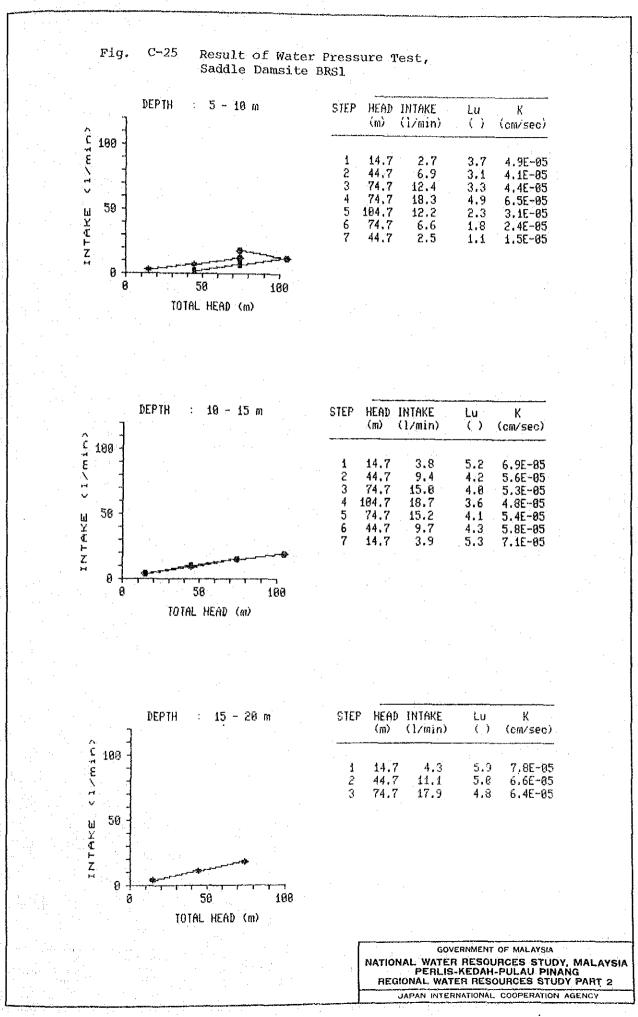


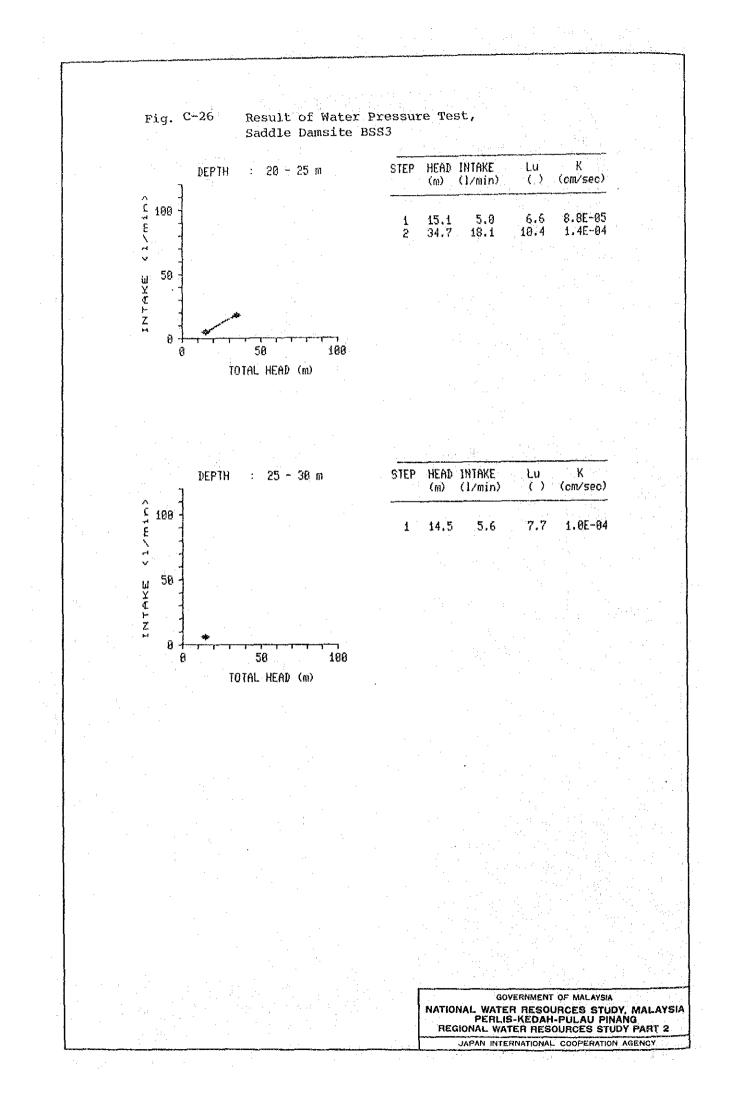
1 1	m) (1/m 1.3 1		7 (Gii	v/sec)
	1.3 1	~ •	÷.,	1.1
⊃ <i>∧</i>		.8 8	.1 8.	8E-05
L 7				32-05
$\frac{2}{3}$ $\frac{4}{7}$	1.3 5	.9 4	.1 4.	5E-05
	1.2 14	.2 7	.0 7.	6E-05
5 7	1.3 5	.4 3	.8 4,	2E-05
64	1.3 2	.9 3	.5 3.	8E85
7 1	1.3 1	.5 6	.5 7.	0E-05

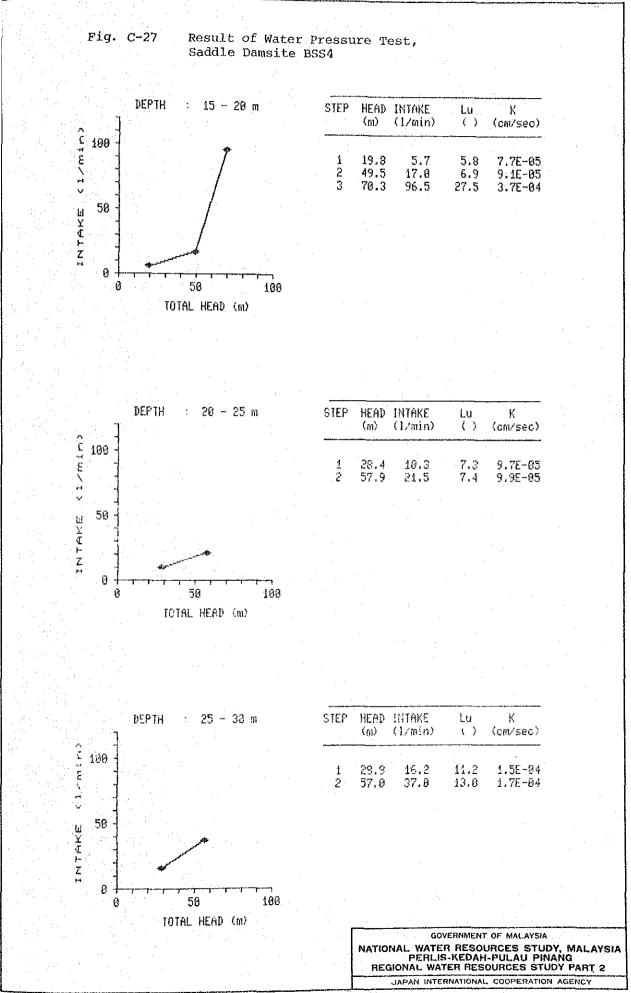
	<u> </u>			
STEP	HEAD	INTAKE	Lu	K
	(m)	(1/min)	()	(cm/sec)
1	11.6	1.8	3.1	4.2E-05
2	41.6	4.0	1.9	2.6E-05
3	71.6	6.2	1.7	2.3E-05
4	101.6	12.0	2.4	3.2E-05
5	71.6	5.7	1.6	2.1E+05
6	41.6	3.5	1.7	2.3E-05
7	11.6	8.0	8.0	8.0E+00











APPENDIX D

WATER HEAD FALLING TEST

LIST OF FIGURES

D-1.	Result of Water	Head Falling Test, I	Main Damsite BM4
D-2.	Result of Water	Head Falling Test, H	Main Damsite BM5
D-3.	Result of Water	Head Falling Test, 1	Main Damsite BM6
D-4.	Result of Water	Head Falling Test,	Saddle Damsite BSS2 (1/6)
D-5.	Result of Water	Head Falling Test,	Saddle Damsite BSS2 (2/6)
D-6.	Result of Water	Head Falling Test,	Saddle Damsite BSS2 (3/6)
D-7.	Result of Water	Head Falling Test,	Saddle Damsite BSS2 (4/6)
D-8.	Result of Water	Head Falling Test,	Saddle Damsite BSS2 (5/6)
D-9.	Result of Water	Head Falling Test,	Saddle Damsite BSS2 (6/6)
D-10.	Result of Water	Head Falling Test,	Saddle Damsite BSS3 (1/4)
D-11.	Result of Water	Head Falling Test,	Saddle Damsite BSS3 (2/4)
D-12.	Result of Water	Head Falling Test,	Saddle Damsite BSS3 (3/4)
D-13.	Result of Water	Head Falling Test,	Saddle Damsite BSS3 (4/4)
D-14.	Result of Water	Head Falling Test,	Saddle Damsite BSS4 (1/3)
D-15	Result of Water	Head Falling Test,	Saddle Damsite BSS4 (2/3)
D-16.	Result of Water	Head Falling Test,	Saddle Damsite BSS4 (3/3)

÷

Fig. D-1 Result of Water Head Falling Test Main Damsite BM4

WATER HEAD FALLING METHOD

DRAWDOWN

H

cm

2.10

55

45

30

40

30

20

11

10

0

DATE:

Ηt

Hz

BORE HOLE No. ______BM4_____

TESTING SECTION

TESTING SECTION 1.5 - 2.0 m

STATIC WATER LEVEL No : 4.81 b.g.1M

TIME FROM 10:05min. TO10:14 min.

t : sec

0

60

120

180

240

300

360

420

480

540

k

120

60

TIME

min.

: 06

07

:08

: 09

:10

: 11

: 12

:13

10:14

h

10 ; 05

WATER LEVEL

FROM

CASING TOP

сm

210

265

310

340

380

410

430

441

451

 $= 3.73 \times 10^{-4}$ cm/sec

0

TEST LOCATION : BERIS DEPTH FROM1.5 M TO 5.0M

GAGE HEIGHT ______M_

Radius of bore hole r:<u>3.3 cm</u> Length of test section L3.5 m Height of casing top from ground level

(1)
$$K = \frac{Q}{5.5 \times H \times 60}$$

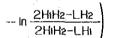
(2) $K = \frac{r^2}{2L(t_2 - t_1)} \ln \frac{L}{r} \ln \frac{L}{r}$

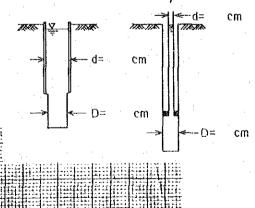
 $(3) T=V/(2x)x(H_2-H_1)x(t_2-t_1))$

K=T/L

V : volume of entering test sction in period t

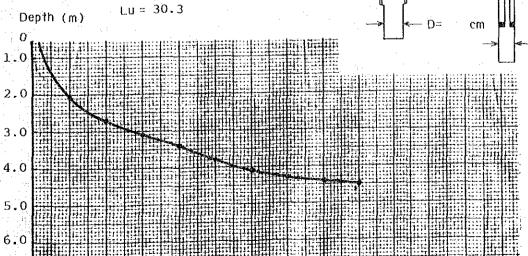
(4)
$$K = \frac{r^2}{2xLxt} \left(\frac{\sinh^{-1}(L/R)}{2} \ln \frac{2H_1 - L}{2H_2 - L} \right)$$





720

840



180 240 300 360 420 480 540 600 660

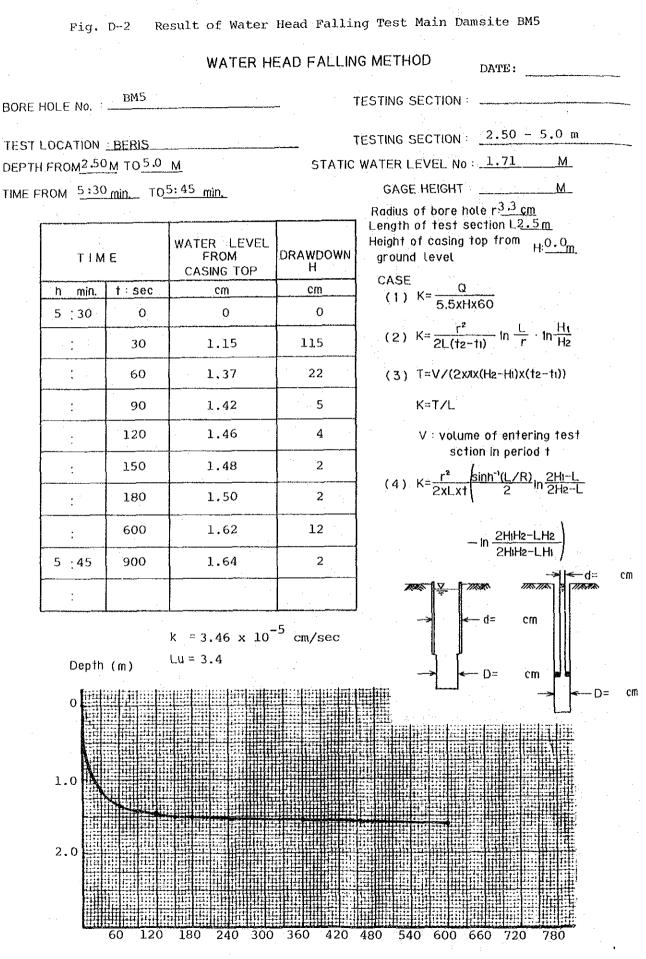


Fig. D-3 Result of Water Head Falling Test Main Damsite BM6

WATER HEAD FALLING METHOD

DATE:

M

н:0.0 m

BM6 BORE HOLE No.

TESTING SECTION : _

TESTING SECTION : 3.50 m

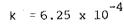
STATIC WATER LEVEL No : 4.0 b.g.1M

GAGE HEIGHT

Radius of bore hole $r_{3.3}$ cm Length of test section L:3.5m Height of casing top from

TIME FROM 11:10 min. TO11:20 min.

and the second se			
TIM	E	WATER LEVEL FROM CASING TOP	DRAWDOWN H
h min,	t : sec	cm	cm
11 :10 ^{am}	60	105	105
	120	195	90
	180	245	50
•	240	298	53
	300	345	47
	360	365	20
	420	384	19
:	480	395	11
	540	398	3
am 11 :20	600	400	2



240

180

300

Lu = 50.5

Depth (m)

0

1.0

2.0

3:0

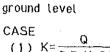
4.0

5.0

6.0

60

120



1)
$$K = \frac{1}{5.5 \times 10^{-1}}$$

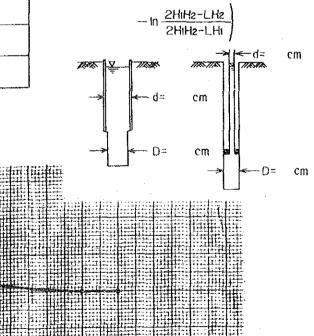
(2)
$$K = \frac{r^2}{2L(t_2-t_1)} \ln \frac{L}{r} \cdot \ln \frac{H_1}{H_2}$$

 $(3) T=V/(2xx(H_2-H_1)x(t_2-t_1))$

K=T/L

V : volume of entering test sction in period t

(4)
$$K = \frac{r^2}{2xLxt} \left(\frac{\sinh^{-1}(L/R)}{2} \ln \frac{2H_1-L}{2H_2-L} \right)$$



TEST LOCATION BERIS DEPTH FROM1.50M TO 5.0 M

Time(sec)

600

540

420

360

480

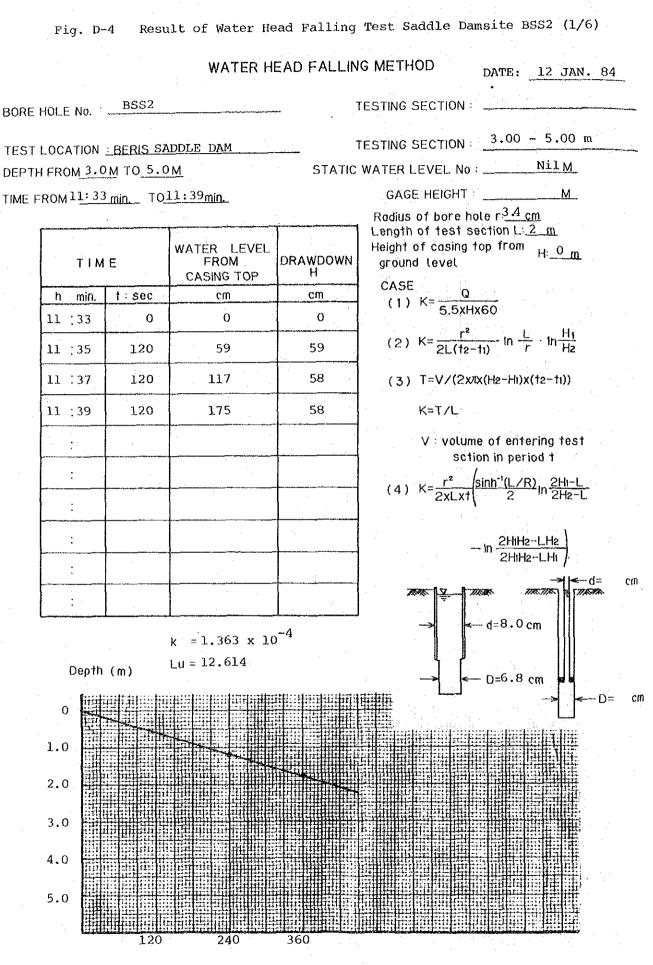


Fig. D-5 Result of Water Head Falling Test Saddle Damsite BSS2 (2/6)

WATER HEAD FALLING METHOD

DATE: 13 JAN. 84

Μ.

BSS2 BORE HOLE No. -

TESTING SECTION

TEST LOCATION : BERIS SADDLE DAM

ground level

TESTING SECTION : 5.00 - 10.00 m

STATIC WATER LEVEL No : _____6,20 M

DEPTH FROM 5.0 M TOLO.0 M TIME FROM 15:28 min. TO15:48 min. WATER LEVEL TIME FROM DRAWDOWN CASING TOP H. h t : sec min. cm сm 15 .28 0 0 0 300 15 33 55 55 15 .38 300 110 55 15 :43 300 165 55 15 .48 300 200 55 : : : ... : $= 1.8725 \times 10^{-5}$

Lu = 1.4144

Depth (m)

CASE Q (1) $K = \frac{W}{5.5 \times H \times 60}$ (2) $K = \frac{r^2}{2L(t_2-t_1)} \ln \frac{L}{r} \cdot \ln \frac{H_1}{H_2}$

GAGE HEIGHT : _____

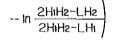
Radius of bore hole $r_{1}^{3.4}$ cm Length of test section L: 5 m Height of casing top from H: 0 m

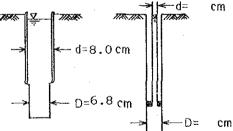
 $(3) T=V/(2x_1x_1(H_2-H_1)x_1(t_2-t_1))$

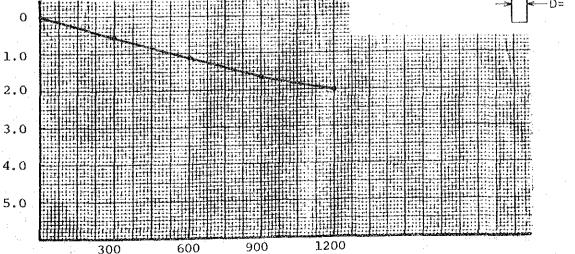
K=T/L

V : volume of entering test sction in period t

(4)
$$K = \frac{r^2}{2xLxt} \left(\frac{\sinh^{-1}(L/R)}{2} \ln \frac{2H_1-L}{2H_2-L} \right)$$







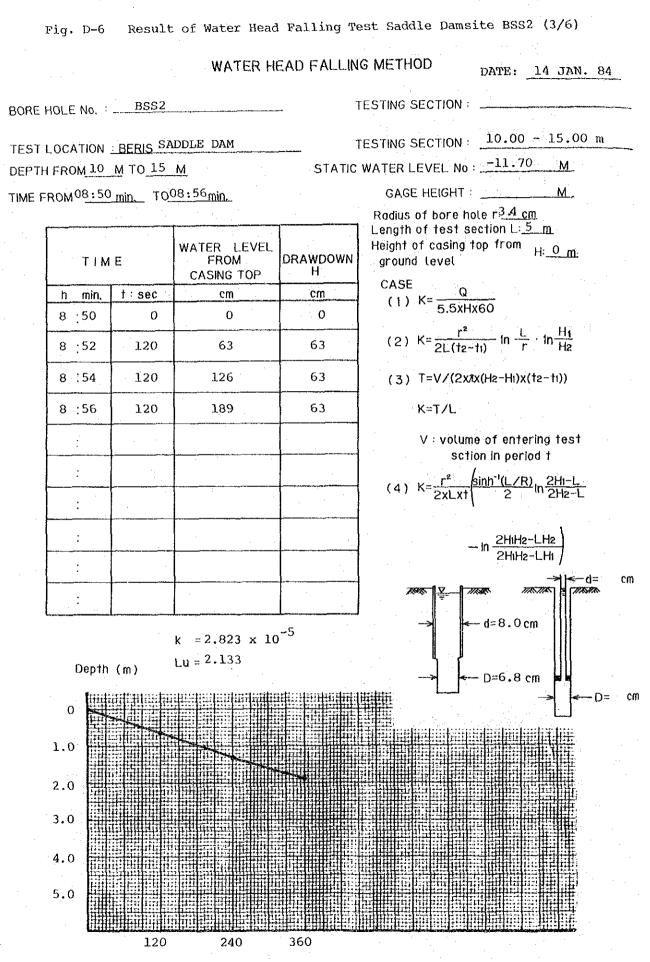


Fig. D-7 Result of Water Head Falling Test Saddle Damsite BSS2 (4/6)

WATER HEAD FALLING METHOD

DRAWDOWN

H

сm

100

100

100

0

DATE: 14 JAN. 84

BSS2 RORE HOLE No. TEST LOCATION BERIS SADDLE DAM DEPTH FROM 10 M TO 20 M

WATER LEVEL

FROM

CASING TOP

сm

100

200

300

 $k = 1.783 \times 10^{-4}$

Lu = 13.471

0

TESTING SECTION : _

TESTING SECTION 10.00 - 20.00 m

STATIC WATER LEVEL No : -12.00 M

TIME FROM 15:00 min. T015:15 min.

t : sec

0

29

32

32

TIME

min.

h

15.:00

•

.

:

•

:

·

:

:

:

Depth (m)

GAGE HEIGHT _____M

Radius of bore hole r3.4 cmLength of test section L:10 m Height of casing top from H: 0 m ground level

CASE
(1)
$$K = \frac{Q}{5.5 \times H \times 60}$$

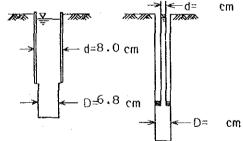
(2)
$$K = \frac{r^2}{2L(t_2-t_1)} \ln \frac{L}{r} \cdot \ln \frac{H_1}{H_2}$$

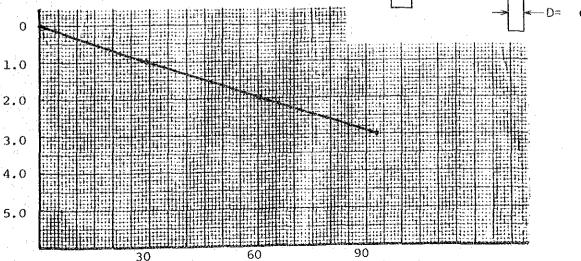
(3) T=V/(2xxx(H2-H1)x(t2-t1))

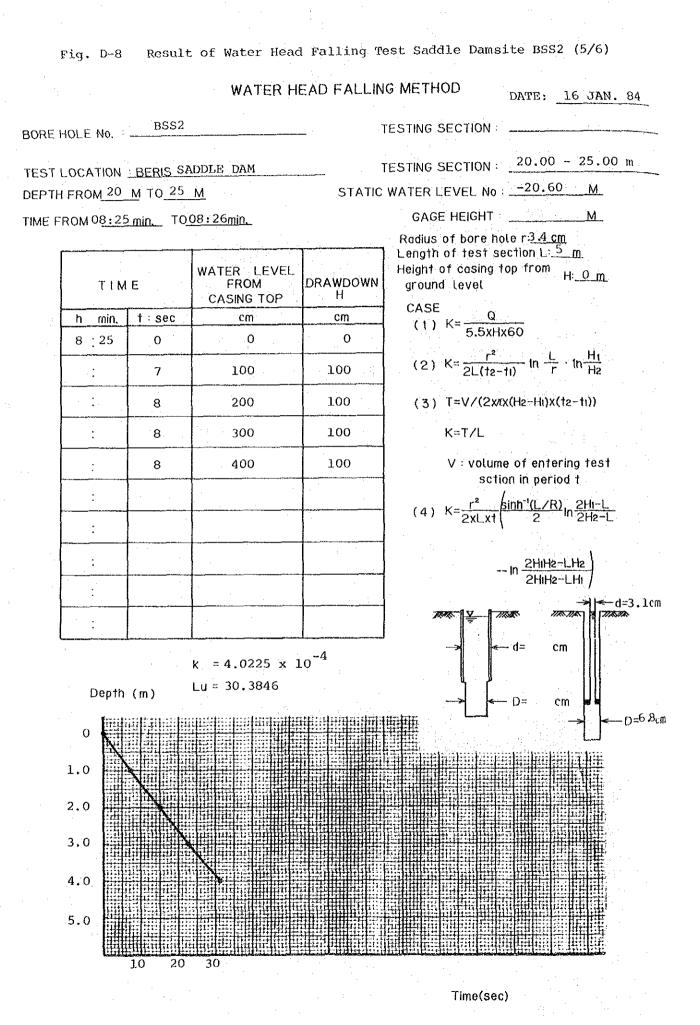
K=T/L

V : volume of entering test sction in period t

(4)
$$K = \frac{r^2}{2xLxt} \frac{\sinh^2(L/R)}{2} \ln \frac{2H_1-L}{2H_2-L}$$







Result of Water Head Falling Test Saddle Damsite BSS2 (6/6) Fig. D-9

WATER HEAD FALLING METHOD

DATE: 16 JAN. 84

М

M_

BSS2 BORE HOLE No.

TESTING SECTION : .

TESTING SECTION : 25.00 - 30.00 m

TEST LOCATION : BERIS SADDLE DAM DEPTH FROM M TO 30 M

STATIC WATER LEVEL No : ______

Radius of bore hole r: 3 Acm Length of test section L 5 m Height of casing top from H: 0 m

GAGE HEIGHT

(1) $K = \frac{Q}{5.5 \text{ xHx60}}$

K=T/L

(4) K= r-2xLxt

(2) $K = \frac{r^2}{2L(t_2-t_1)}$ in $\frac{L}{r} \cdot \ln \frac{H_1}{H_2}$

(3) T=V/(2x1x(H2-H1)x(t2-t1))

V : volume of entering test sction in period t

sinh'(L/R)

-- In 2H1H2-LH2 2H1H2-LH1

7185

d=

77877

cm

cm

>|<-d=3.1cm

D=6.8cm

ground level

CASE

TIME FROM 18:35 min. TO18:36 min.

ТІМ	E	WATER LEVEL FROM CASING TOP	DRAWDOWN H
h min.	t : sec	cm	Ċm
18 · 35	0	0	0
	4	100	100
	8	300	200
· ·			
:			
н. н. н. Н. н. н.			

 $k = 7.47 \times 10^{-4}$

Lu = 56.4259Depth (m)

15

0

1.0

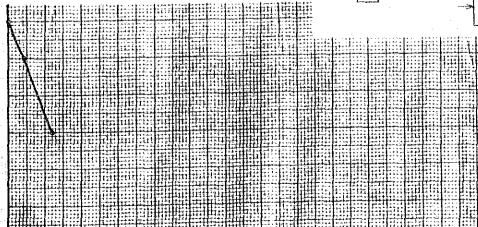
2.0

3.0

4.0

5.0

 \square =





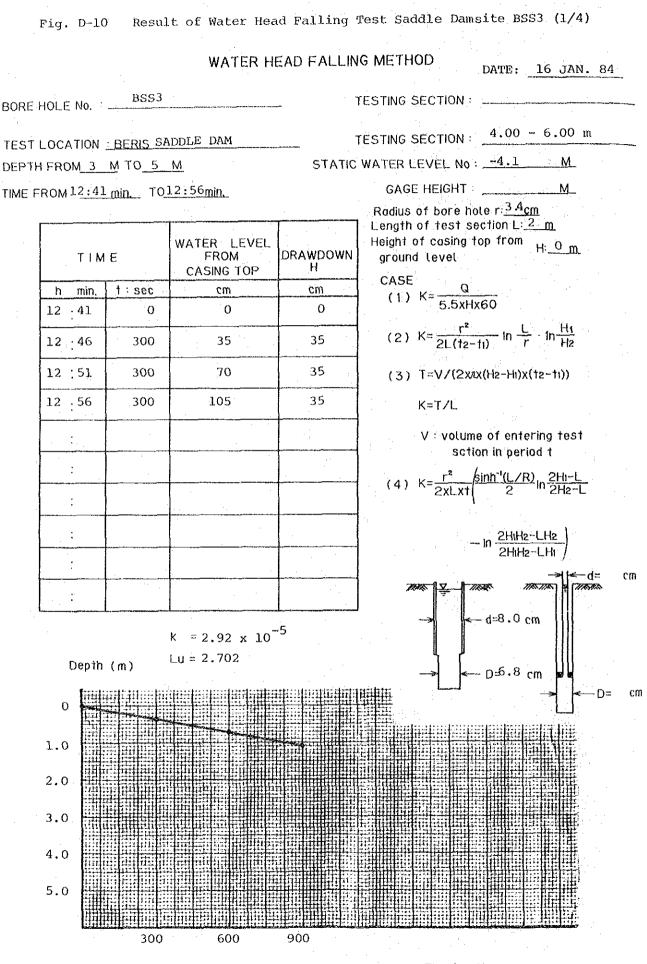
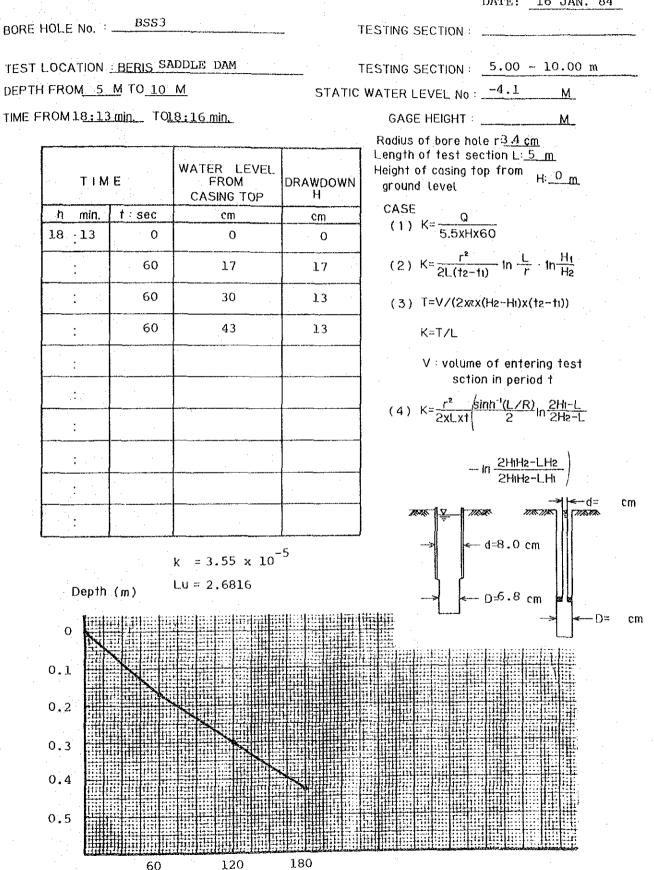


Fig. D-ll Result of Water Head Falling Test Saddle Damsite BSS3 (2/4)

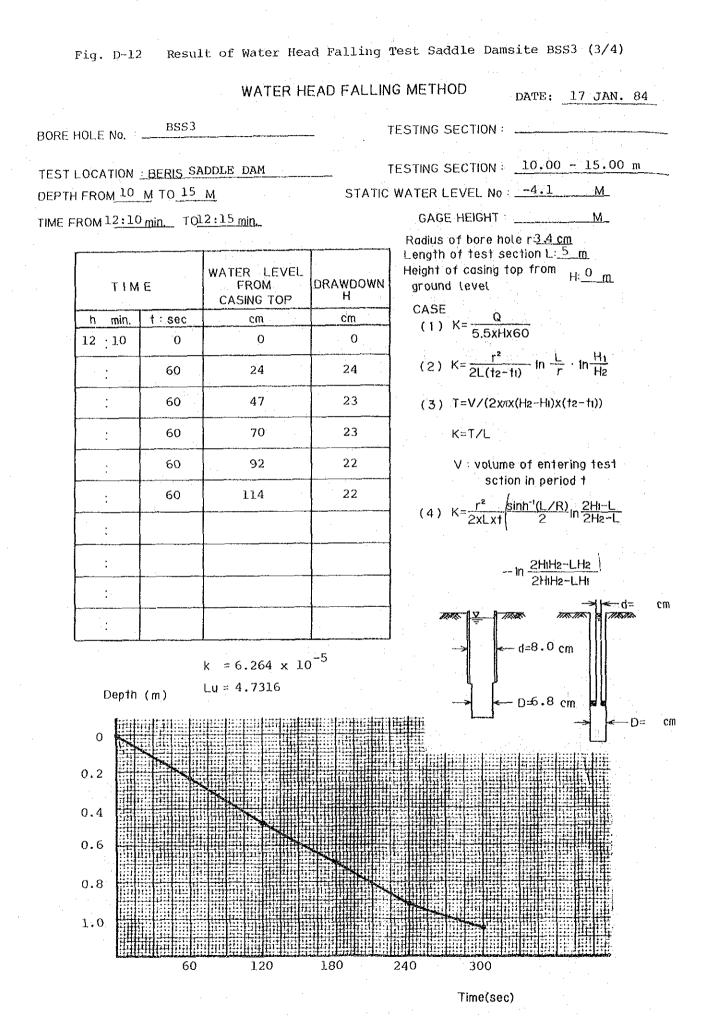
WATER HEAD FALLING METHOD

DATE: 16 JAN. 84



Time(sec)

•



Result of Water Head Falling Test Saddle Damsite BSS3 (4/4) Fig. D-13

WATER HEAD FALLING METHOD

DATE: 17 JAN. 84

BSS3 BORE HOLE No.

TESTING SECTION :

TESTING SECTION : 15.00 - 20.00 m

TEST LOCATION BERIS SADDLE DAM DEPTH FROM 15 M TO 20 M TIME FROM 17:05 min. To17:11 min.

STATIC WATER LEVEL No : _____

WATER' LEVEL FROM TIME DRAWDOWN Н CASING TOP h t : sec min. cm cm $17\ \cdot\ 05$ 0 0 0 60 16 16 : • 60 30 14 60 43 13 : 60 55 12 1 60 67 12 : 60 79 12 : : : . $k = 3.478 \times 10^{-5}$

Lu = 2.627 Depth (m)

М

GAGE HEIGHT M_

Radius of bore hale r 3.4 cm Length of test section L: 5 mHeight of casing top from H: 0 m ground level

CASE (1) $K = \frac{1}{5.5 \times 10^{-5}}$ Q

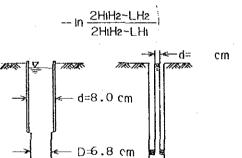
(2)
$$K = \frac{r^2}{2L(t_2-t_1)} \ln \frac{L}{r} \ln \frac{H_1}{H_2}$$

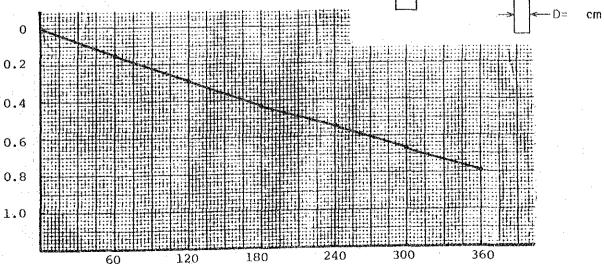
(3) $T=V/(2x_{1}x_{1}(H_2-H_1)x_{1}(t_2-t_1))$

K=T/L

V : volume of entering test sction in period t

(4)
$$K = \frac{r^2}{2xLxt} \left(\frac{\sinh^{-1}(L/R)}{2} \ln \frac{2H_1-L}{2H_2-L} \right)$$





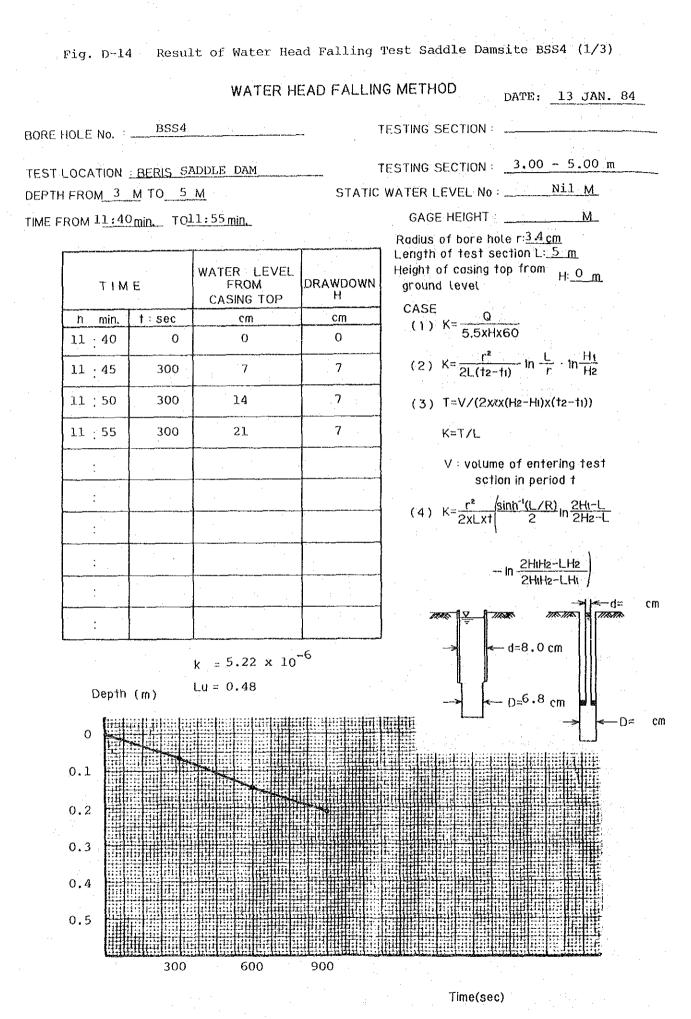


Fig. D-15 Result of Water Head Falling Test Saddle Damsite BSS4 (2/3)

WATER HEAD FALLING METHOD

DATE: 13 JAN. 84

BSS4 BORE HOLE No.

TESTING SECTION : _

М

TESTING SECTION : 5.00 - 10.00 m

GAGE HEIGHT

(2) $K = \frac{r^2}{2L(t_2-t_1)} \ln \frac{L}{r} \cdot \ln \frac{H_1}{H_2}$

 $(3) T=V/(2x/x(H_2-H_1)x(t_2-t_1))$

Radius of bore hole $r\frac{3.4}{cm}$ cm Length of test section L: 5 m Height of casing top from H: 0 m

STATIC WATER LEVEL No :

ground level

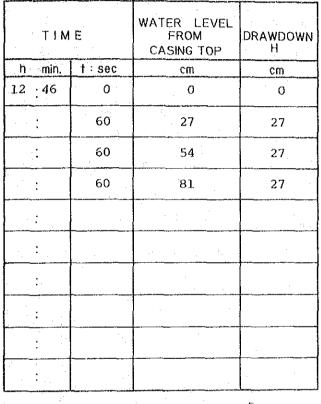
(1) $K = \frac{1}{5.5 \times 10^{-5}}$

K=T/L

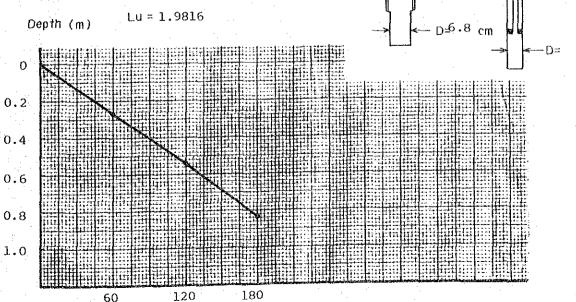
CASE

TEST LOCATION BERIS SADDLE DAM DEPTH FROM 5 M TO 10 M

TIME FROM 12:46 min. TO12:49 min.



 $k = 2.623 \times 10^{-5}$



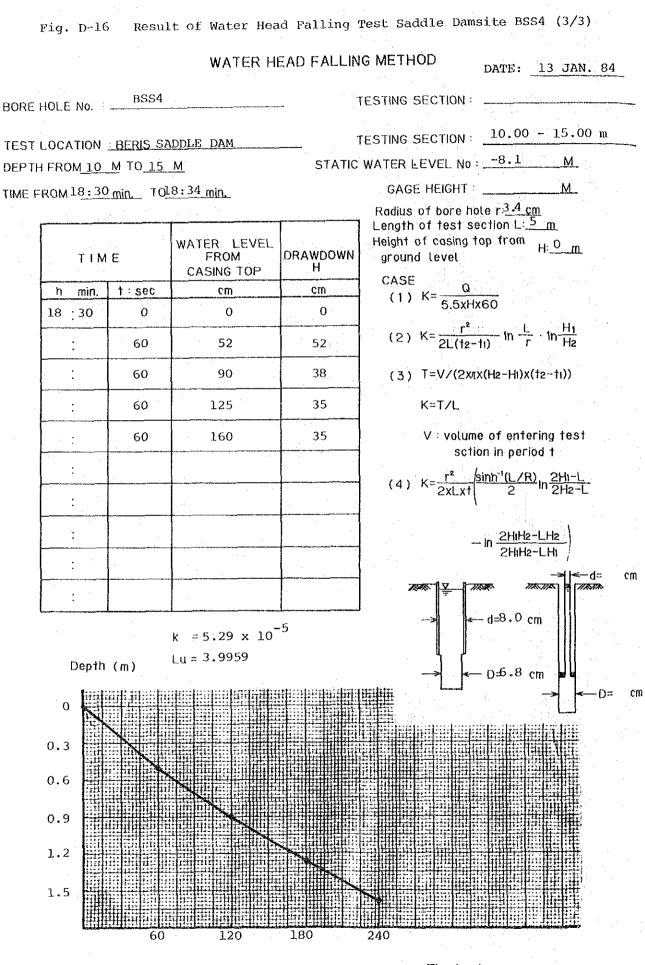
Time(sec)

sction in period t

(4)
$$K = \frac{r^2}{2xLxt} \left(\frac{\sinh^{-1}(L/R)}{2} \ln \frac{2H_1-L}{2H_2-L} \right)$$

$$-\ln\frac{2H_{1H2}-LH_{2}}{2H_{1H2}-LH_{1}}$$

сm



ANNEX H CONSTRUCTION MATERIAL