

DA - 8

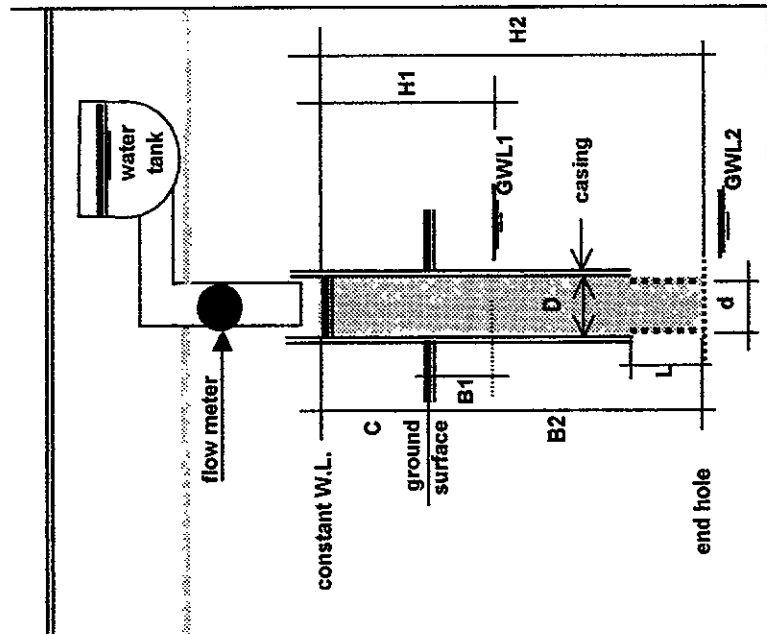
GWL NONE

CONSTANT HEAD TEST

GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 19, 2005
 HOLE NO. : DA-8
 STAGE NO. : 1
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 3,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,00 m
 LENGTH OF TEST SECTION : 1,00 m
 WATER LEVEL HEIGHT : 3,00 m
 CONSTANT WATER LEVEL HEIGHT : 4,00 m
 STATIC HEAD PRESSURE : 0,400 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 0,400 kg/cm²
 APPLIED DISCHARGE : 28,55 ltr/min
 COEFFICIENT OF PERMEABILITY : 5,21E-02 cm/sec.
 LUGEON UNIT : 713,75



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	0,400	0,400	20,00	571,00	28,55

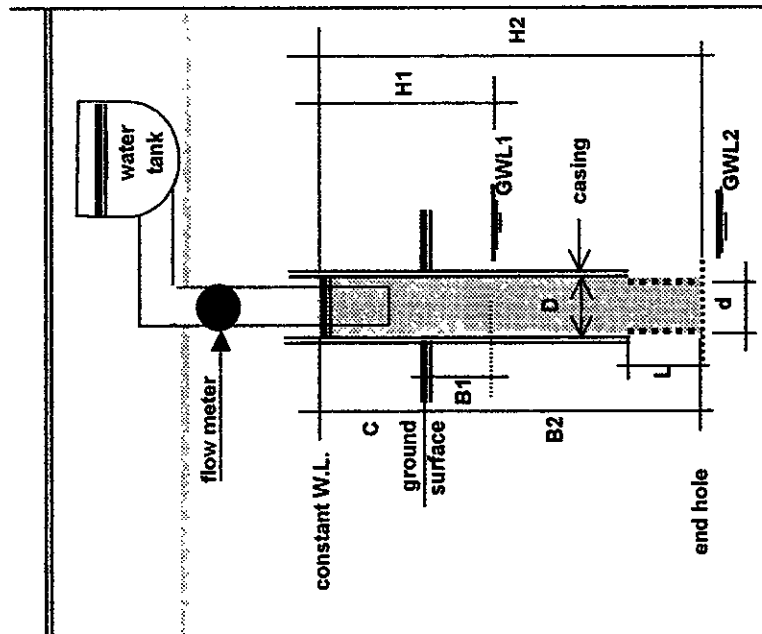
GWL NONE

CONSTANT HEAD TEST

GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 19, 2005
 HOLE NO. : DA-8
 STAGE NO. : 2
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 6,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,50 m
 LENGTH OF TEST SECTION : 1,50 m
 WATER LEVEL HEIGHT : 6,00 m
 CONSTANT WATER LEVEL HEIGHT : 7,50 m
 STATIC HEAD PRESSURE : P1 1,186 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 1,186 kg/cm²
 APPLIED DISCHARGE : Q 21,60 ltr/min
 COEFFICIENT OF PERMEABILITY : K 2,64E-02 cm/sec.
 LUGEON UNIT : Lu 192,00



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	1,186	1,186	20,00	432,00	21,60

GWL NONE

CONSTANT HEAD TEST

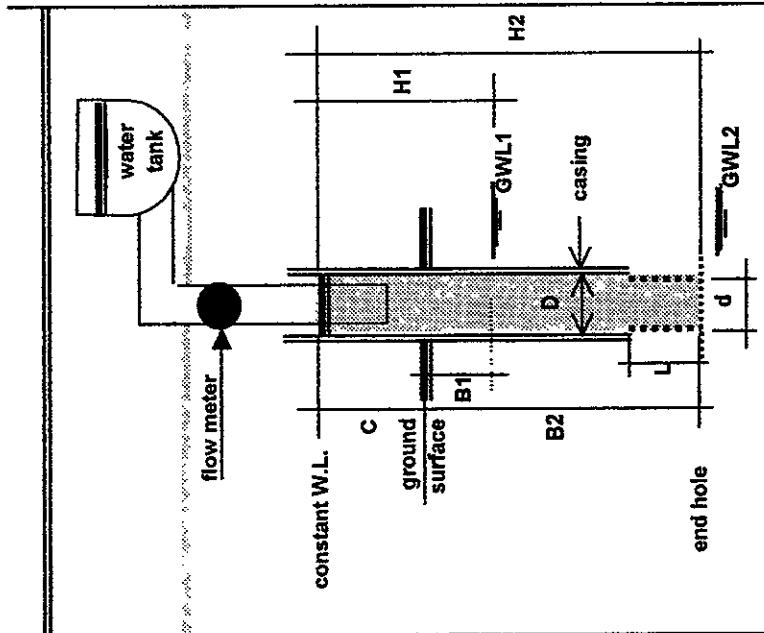
GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 20, 2005
 HOLE NO. : DA-8
 STAGE NO. : 3
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 9,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,00 m
 LENGTH OF TEST SECTION : 1,00 m
 WATER LEVEL HEIGHT : 9,00 m
 CONSTANT WATER LEVEL HEIGHT : 10,00 m
 STATIC HEAD PRESSURE : 1,581 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 1,581 kg/cm²
 APPLIED DISCHARGE : 5,30 ltr/min
 COEFFICIENT OF PERMEABILITY : 4,87E-03 cm/sec.
 LUGEON UNIT : 53,00

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	1,581	1,581	20,00	106,00	5,30



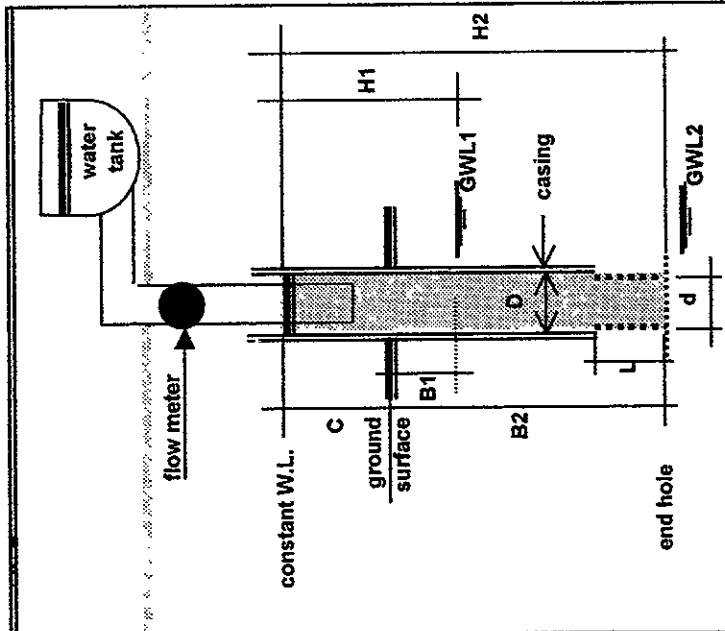
GWL NONE

CONSTANT HEAD TEST

GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 23, 2005
 HOLE NO. : DA-8
 STAGE NO. : 5
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 15,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,00 m
 LENGTH OF TEST SECTION : 1,00 m
 WATER LEVEL HEIGHT : 15,00 m
 CONSTANT WATER LEVEL HEIGHT : 16,00 m
 STATIC HEAD PRESSURE : 2,530 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 2,530 kg/cm²
 APPLIED DISCHARGE : 3,05 ltr/min
 COEFFICIENT OF PERMEABILITY : 1,75E-03 cm/sec.
 LUGEON UNIT : 19,06



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	2,530	2,530	20,00	61,00	3,05

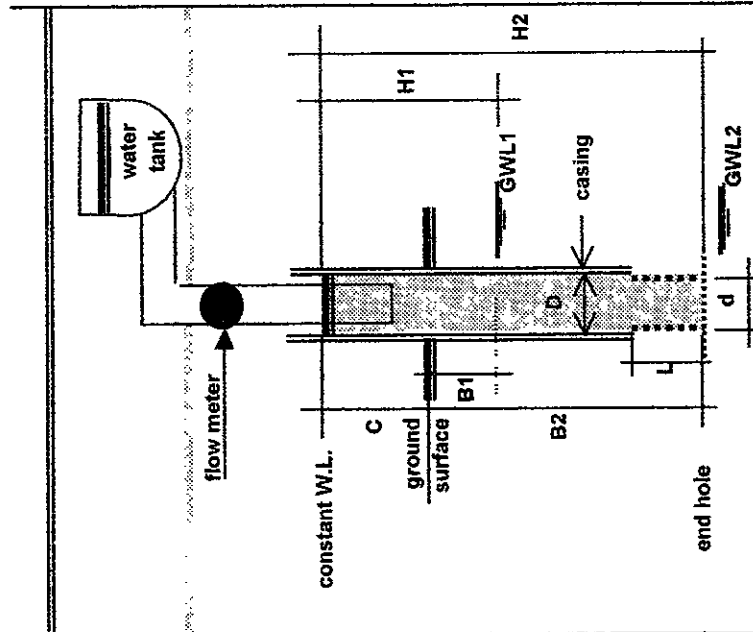
GWL NONE

CONSTANT HEAD TEST

GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 24, 2005
 HOLE NO : DA-8
 STAGE NO. : 7
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 18,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,50 m
 LENGTH OF TEST SECTION : 1,50 m
 WATER LEVEL HEIGHT : 18,00 m
 CONSTANT WATER LEVEL HEIGHT : 19,50 m
 STATIC HEAD PRESSURE : 3,084 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 3,084 kg/cm²
 APPLIED DISCHARGE : 3,55 ltr/min
 COEFFICIENT OF PERMEABILITY : 1,67E-03 cm/sec.
 LUGION UNIT : 12,14



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	3,084	3,084	20,00	71,00	3,55

GWL NONE

CONSTANT HEAD TEST

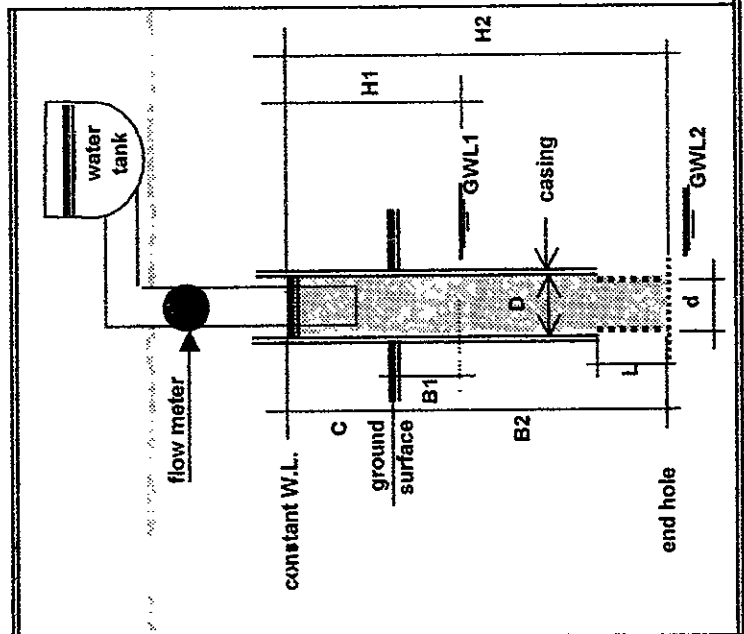
GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 25, 2005
 HOLE NO. : DA-8
 STAGE NO. : 8
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 21,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,50 m
 LENGTH OF TEST SECTION : 1,50 m
 WATER LEVEL HEIGHT : 21,00 m
 CONSTANT WATER LEVEL HEIGHT : 22,50 m
 STATIC HEAD PRESSURE : 3,558 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 3,558 kg/cm²
 APPLIED DISCHARGE : 2,35 ltr/min
 COEFFICIENT OF PERMEABILITY : 9,59E-04 cm/sec
 LUGEON UNIT : 6,96

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	3,558	3,558	20,00	47,00	2,35



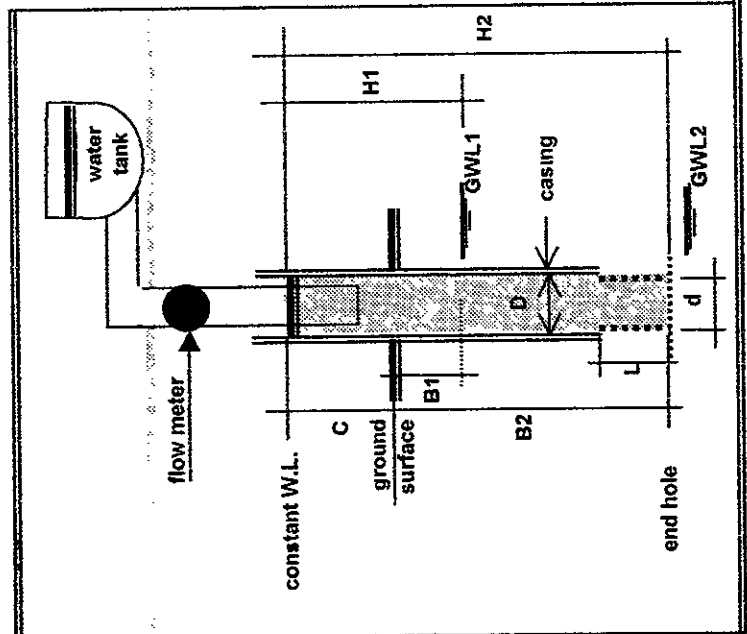
GWL NONE

CONSTANT HEAD TEST

GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 28, 2005
 HOLE NO. : DA-8
 STAGE NO. : 10
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 27,00 m
 GROUND WATER LEVEL DEPTH : NONE
 HEIGHT OF CASING : 1,50 m
 LENGTH OF TEST SECTION : 3,00 m
 WATER LEVEL HEIGHT : 27,00 m
 CONSTANT WATER LEVEL HEIGHT : 28,50 m
 STATIC HEAD PRESSURE : 4,507 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 4,507 kg/cm²
 APPLIED DISCHARGE : 6,00 ltr/min
 COEFFICIENT OF PERMEABILITY : 1,93E-03 cm/sec.
 LUGEOON UNIT : 7,02



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	4,507	4,507	20,00	120,00	6,00

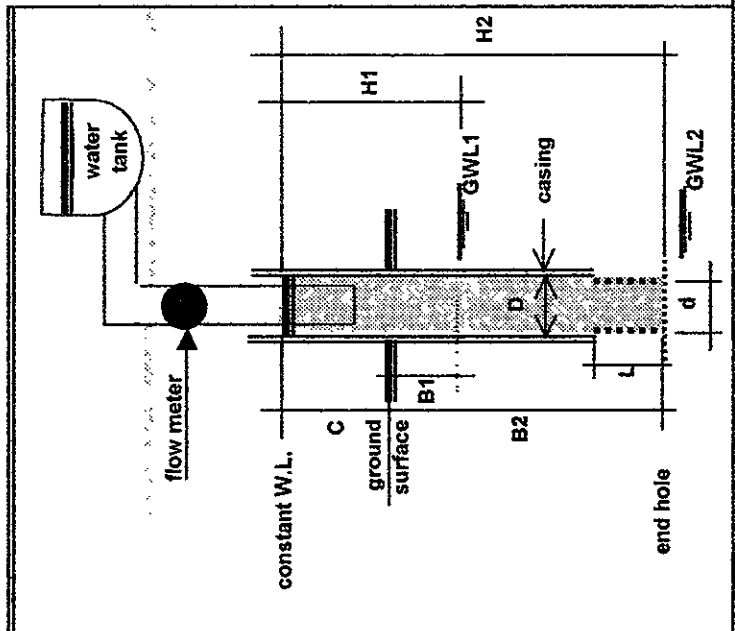
GWL NONE

CONSTANT HEAD TEST

GEOLOGICAL INVESTIGATION AYUNG DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : NOV, 29, 2005
 HOLE NO. : DA-8
 STAGE NO : 11
 DIAMETER OF HOLE : 66

HOLE DIAMETER : 6,60 cm
 HOLE RADIUS : 3,30 cm
 CASING DIAMETER : 8,30 cm
 HOLE DEPTH : 27,00 m
 GROUND WATER LEVEL DEPTH : NONE m
 HEIGHT OF CASING : 1,50 m
 LENGTH OF TEST SECTION : 3,00 m
 WATER LEVEL HEIGHT : 30,00 m
 CONSTANT WATER LEVEL HEIGHT : 31,50 m
 STATIC HEAD PRESSURE : 4,982 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 4,982 kg/cm²
 APPLIED DISCHARGE : 11,73 ltr/min
 COEFFICIENT OF PERMEABILITY : 3,42E-03 cm/sec.
 LUGEON UNIT : 12,41



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, Q (l/min.)
0,000	4,982	4,982	40,00	469,00	11,73

GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

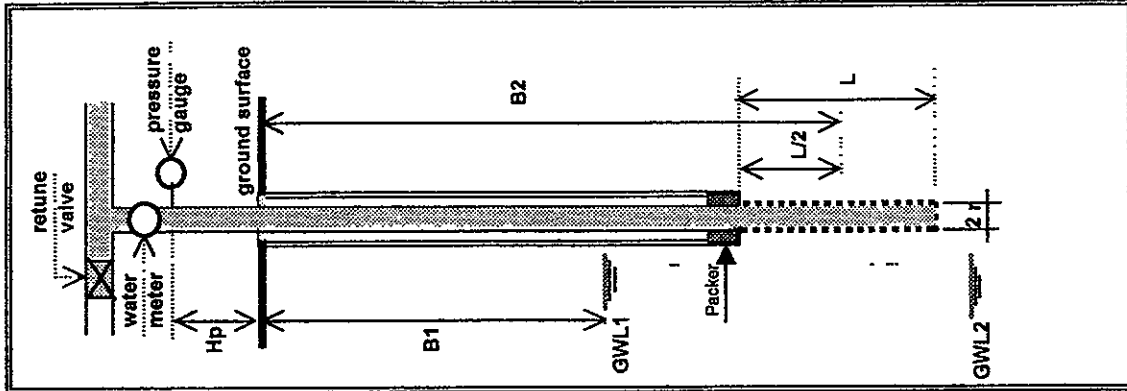
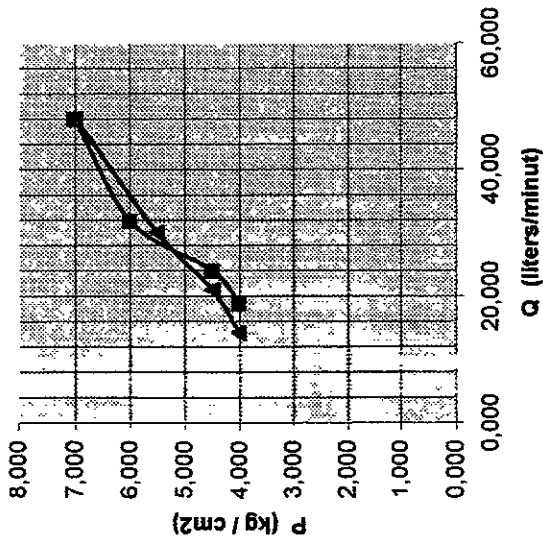
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 4, 2005
 HOLE NO. : DA-8
 STAGE NO. : 12
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 35,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B2
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H2
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEON VALUE : Lu

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
0,500	3,510	4,010	10	189,00	18,900
1,000	3,510	4,510	10	240,00	24,000
2,500	3,510	6,010	10	319,00	31,900
3,500	3,510	7,010	10	480,00	48,000
2,000	3,510	5,510	10	300,00	30,000
1,000	3,510	4,510	10	210,00	21,000
0,500	3,510	4,010	10	142,00	14,200

P-Q GRAPH



GWL NONE

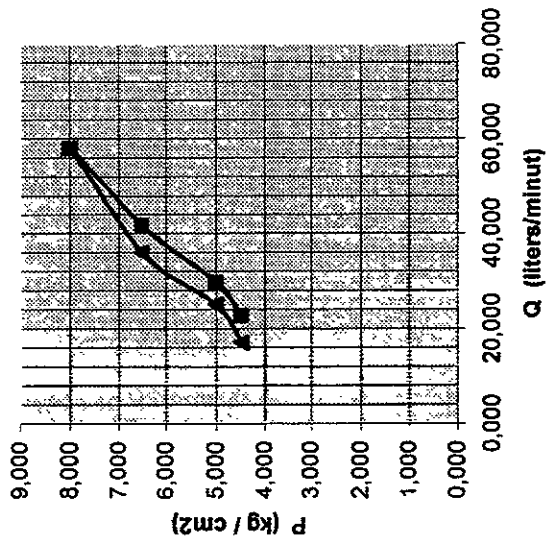
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION RIGHT/LEFT BANK (DAM SITE)
 DATE DEC, 5, 2005
 HOLE NO : DA-8
 STAGE NO. : 13
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

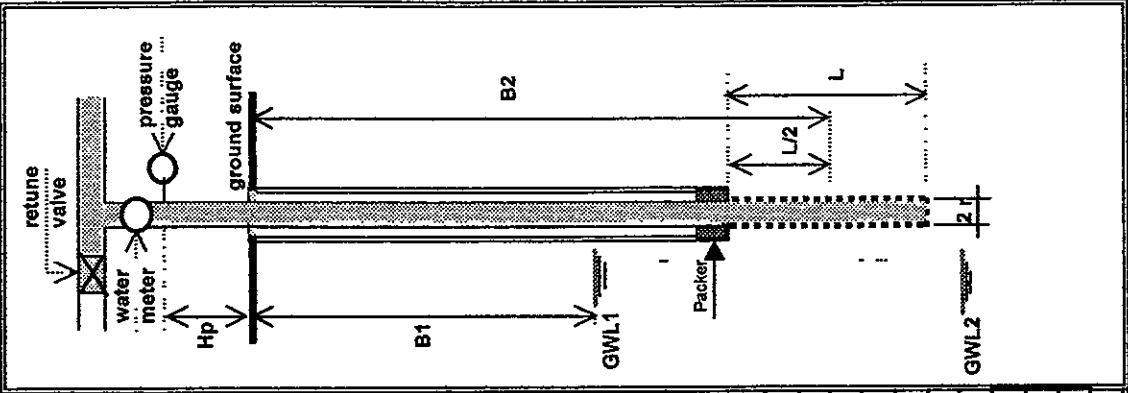
HOLE DEPTH 35,00 m
 TEST LENGTH L 5,00 m
 GROUNDWATER LEVEL DEPTH GWL none m
 STATIC WATER HEAD B2 37,50 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,60 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H2 40,10 m
 STATIC HEAD P1 4,010 kg/cm2
 APPLIED EFFECTIVE PRESSURE P 6,510 kg/cm2
 WATER INJECTION RATE q 41,800 ltr/min
 COEFFICIENT OF PERMEABILITY k 2,78E-04 cm/sec
 LUGEON VALUE Lu 20,85

P - Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm2)	STATIC HEAD, P1 (kg/cm2)	EFFECTIVE PRESSURE, P (kg/cm2)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
0,500	4,010	4,510	10	228,00	22,800
1,000	4,010	5,010	10	298,00	29,800
2,500	4,010	6,510	10	418,00	41,800
4,000	4,010	8,010	10	580,00	58,000
2,500	4,010	6,510	10	360,00	36,000
1,000	4,010	5,010	10	250,00	25,000
0,500	4,010	4,510	10	170,00	17,000



GWL NONE

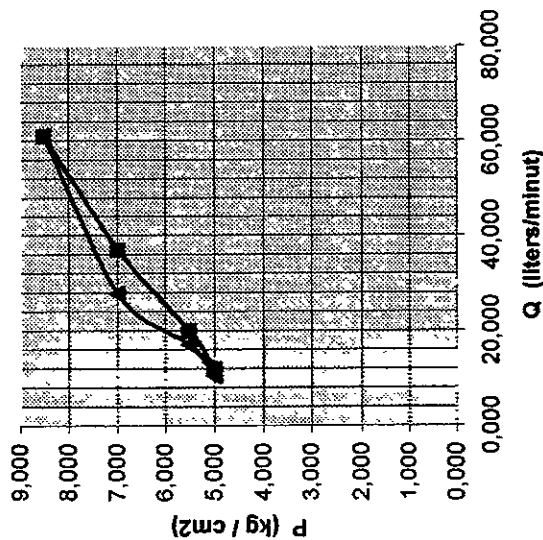
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 6, 2005
 HOLE NO : DA-8
 STAGE NO. : 14
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

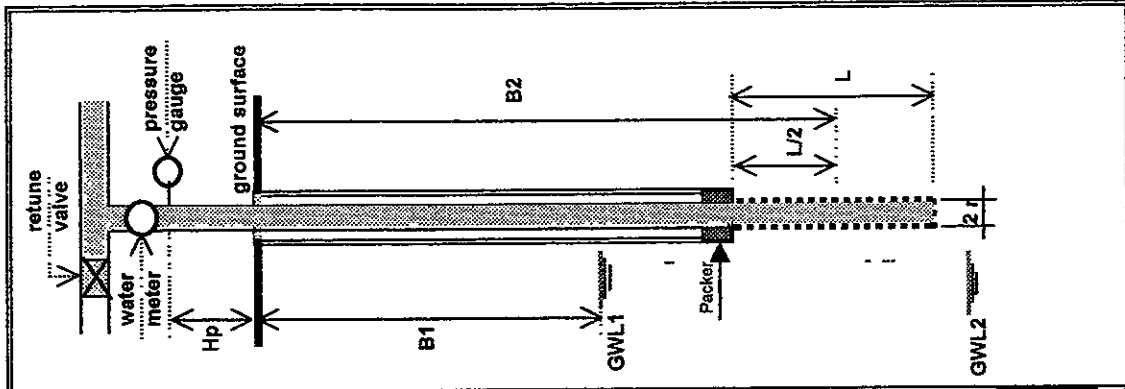
HOLE DEPTH 40,00 m
 TEST LENGTH L 5,00 m
 GROUNDWATER LEVEL DEPTH none m
 STATIC WATER HEAD B2 42,50 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,60 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H2 45,10 m
 STATIC HEAD P1 4,510 kg/cm2
 APPLIED EFFECTIVE PRESSURE P 7,010 kg/cm2
 WATER INJECTION RATE q 37,000 ltr/min
 COEFFICIENT OF PERMEABILITY k 2,19E-04 cm/sec
 LUGEON VALUE Lu 16,41

P - Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm2)	STATIC HEAD, P1 (kg/cm2)	EFFECTIVE PRESSURE, P (kg/cm2)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
0,500	4,510	5,010	10	120,00	12,000
1,000	4,510	5,510	10	200,00	20,000
2,500	4,510	7,010	10	370,00	37,000
4,000	4,510	8,510	10	610,00	61,000
2,500	4,510	7,010	10	278,00	27,800
1,000	4,510	5,510	10	170,00	17,000
0,500	4,510	5,010	10	105,00	10,500



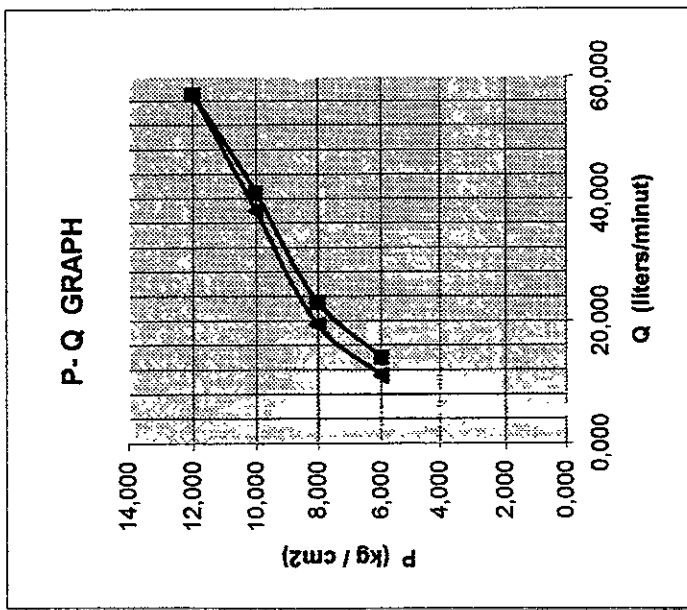
GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

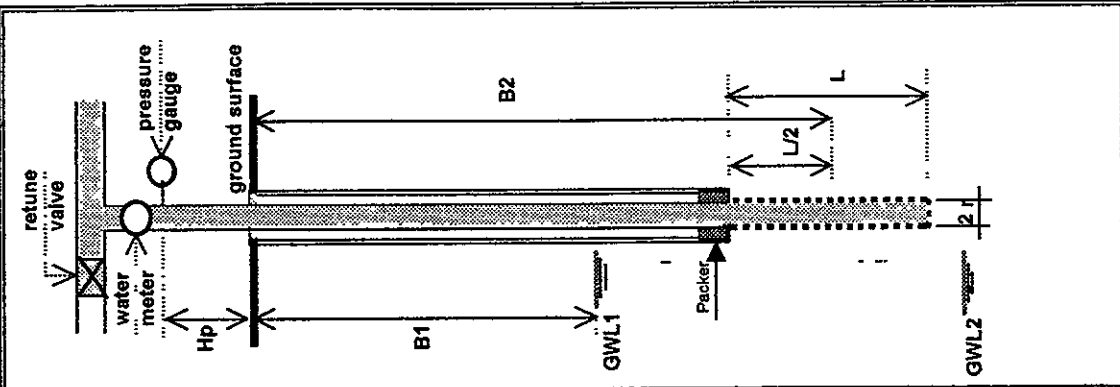
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 7, 2005
 HOLE NO : DA-8
 STAGE NO. : 15
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 45,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B2
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H2
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEON VALUE : Lu



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm2)	STATIC HEAD, P1 (kg/cm2)	EFFECTIVE PRESSURE, P (kg/cm2)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
1,000	5,010	6,010	10	140,00	14,000
3,000	5,010	8,010	10	230,00	23,000
5,000	5,010	10,010	10	410,00	41,000
7,000	5,010	12,010	10	570,00	57,000
5,000	5,010	10,010	10	380,00	38,000
3,000	5,010	8,010	10	194,00	19,400
1,000	5,010	6,010	10	110,00	11,000



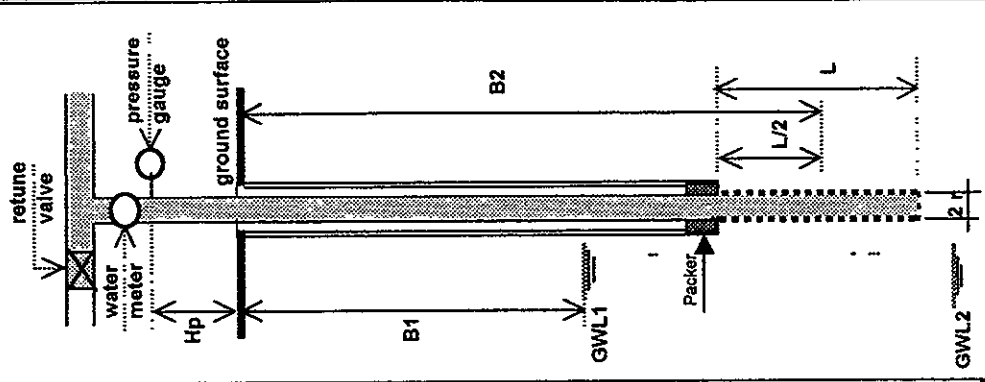
GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 11, 2005
 HOLE NO : DA-8
 STAGE NO. : 16
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

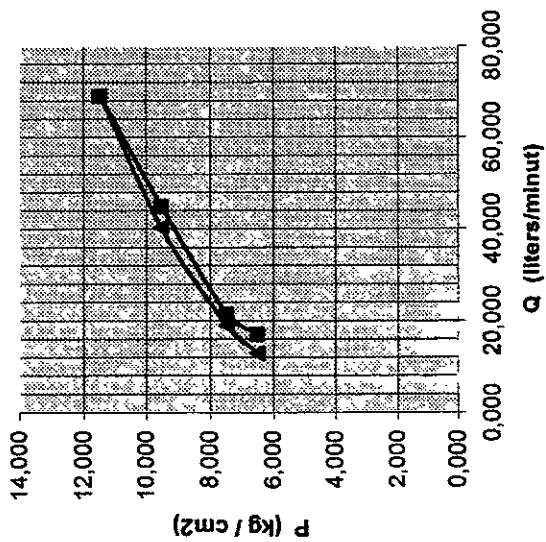
HOLE DEPTH : 55,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B2
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H2
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEON VALUE : Lu



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
1,000	5,510	6,510	10	170,00	17,000
2,000	5,510	7,510	10	215,00	21,500
4,000	5,510	9,510	10	450,00	45,000
6,000	5,510	11,510	10	690,00	69,000
4,000	5,510	9,510	10	403,00	40,300
2,000	5,510	7,510	10	190,00	19,000
1,000	5,510	6,510	10	128,00	12,800

P - Q GRAPH



GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

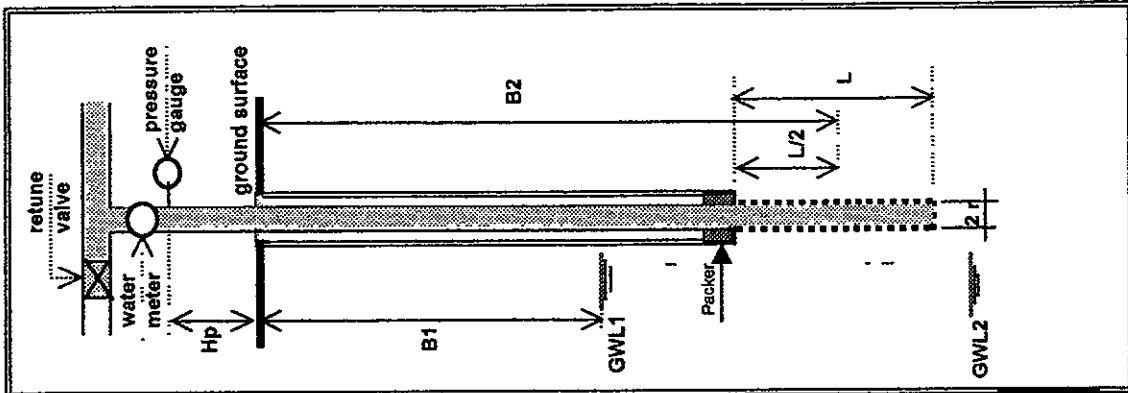
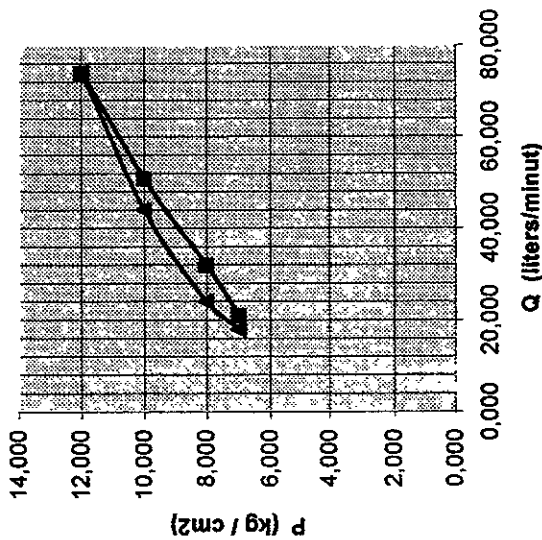
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 13, 2005
 HOLE NO. : DA-8
 STAGE NO. : 17
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 55,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B2
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H2
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEON VALUE : Lu

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
1,000	6,010	7,010	10	210,00	21,000
2,000	6,010	8,010	10	320,00	32,000
4,000	6,010	10,010	10	509,90	50,990
6,000	6,010	12,010	10	740,00	74,000
4,000	6,010	10,010	10	440,00	44,000
2,000	6,010	8,010	10	241,00	24,100
1,000	6,010	7,010	10	180,00	18,000

P - Q GRAPH



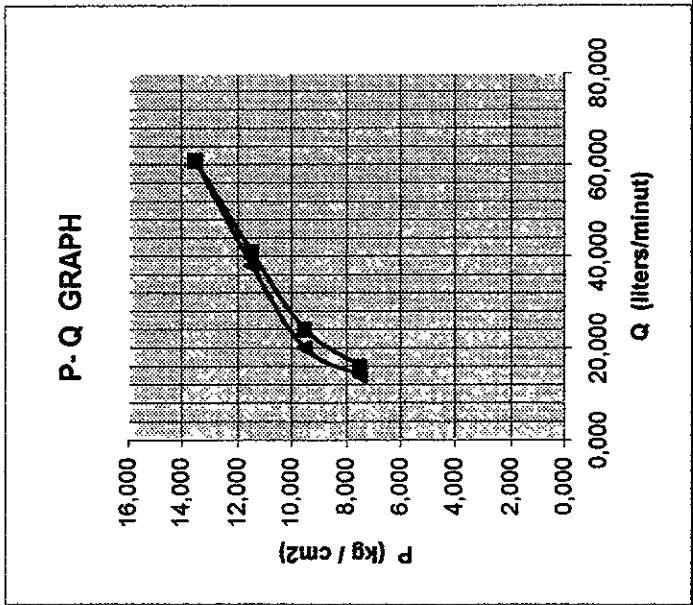
GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 14, 2005
 HOLE NO. : DA-8
 STAGE NO. : 18
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 60,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL none m
 STATIC WATER HEAD : B2 62,50 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 2,60 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H2 65,10 m
 STATIC HEAD : P1 6,510 kg/cm2
 APPLIED EFFECTIVE PRESSURE : P 11,510 kg/cm2
 WATER INJECTION RATE : q 41,000 ltr/min
 COEFFICIENT OF PERMEABILITY : k 1,68E-04 cm/sec
 LUGEOON VALUE : Lu 12,60 -



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
1,000	6,510	7,510	10	160,00	16,000
3,000	6,510	9,510	10	240,00	24,000
5,000	6,510	11,510	10	410,00	41,000
7,000	6,510	13,510	10	610,00	61,000
9,000	6,510	15,510	10	880,00	88,000
11,000	6,510	17,510	10	1,200,00	120,000
13,000	6,510	19,510	10	1,600,00	160,000
15,000	6,510	21,510	10	2,100,00	210,000
17,000	6,510	23,510	10	2,700,00	270,000
19,000	6,510	25,510	10	3,400,00	340,000
21,000	6,510	27,510	10	4,200,00	420,000
23,000	6,510	29,510	10	5,100,00	510,000
25,000	6,510	31,510	10	6,100,00	610,000
27,000	6,510	33,510	10	7,200,00	720,000
29,000	6,510	35,510	10	8,400,00	840,000
31,000	6,510	37,510	10	9,700,00	970,000
33,000	6,510	39,510	10	1,100,000	1,100,000
35,000	6,510	41,510	10	1,250,000	1,250,000
37,000	6,510	43,510	10	1,400,000	1,400,000
39,000	6,510	45,510	10	1,560,000	1,560,000
41,000	6,510	47,510	10	1,730,000	1,730,000
43,000	6,510	49,510	10	1,900,000	1,900,000
45,000	6,510	51,510	10	2,080,000	2,080,000
47,000	6,510	53,510	10	2,270,000	2,270,000
49,000	6,510	55,510	10	2,470,000	2,470,000
51,000	6,510	57,510	10	2,680,000	2,680,000
53,000	6,510	59,510	10	2,900,000	2,900,000
55,000	6,510	61,510	10	3,130,000	3,130,000
57,000	6,510	63,510	10	3,370,000	3,370,000
59,000	6,510	65,510	10	3,620,000	3,620,000
61,000	6,510	67,510	10	3,880,000	3,880,000
63,000	6,510	69,510	10	4,150,000	4,150,000
65,000	6,510	71,510	10	4,430,000	4,430,000
67,000	6,510	73,510	10	4,720,000	4,720,000
69,000	6,510	75,510	10	5,020,000	5,020,000
71,000	6,510	77,510	10	5,330,000	5,330,000
73,000	6,510	79,510	10	5,650,000	5,650,000
75,000	6,510	81,510	10	5,980,000	5,980,000
77,000	6,510	83,510	10	6,320,000	6,320,000
79,000	6,510	85,510	10	6,670,000	6,670,000
81,000	6,510	87,510	10	7,030,000	7,030,000
83,000	6,510	89,510	10	7,400,000	7,400,000
85,000	6,510	91,510	10	7,780,000	7,780,000
87,000	6,510	93,510	10	8,170,000	8,170,000
89,000	6,510	95,510	10	8,570,000	8,570,000
91,000	6,510	97,510	10	8,980,000	8,980,000
93,000	6,510	99,510	10	9,400,000	9,400,000
95,000	6,510	101,510	10	9,830,000	9,830,000
97,000	6,510	103,510	10	10,270,000	10,270,000
99,000	6,510	105,510	10	10,720,000	10,720,000
101,000	6,510	107,510	10	11,180,000	11,180,000
103,000	6,510	109,510	10	11,650,000	11,650,000
105,000	6,510	111,510	10	12,130,000	12,130,000
107,000	6,510	113,510	10	12,620,000	12,620,000
109,000	6,510	115,510	10	13,120,000	13,120,000
111,000	6,510	117,510	10	13,630,000	13,630,000
113,000	6,510	119,510	10	14,150,000	14,150,000
115,000	6,510	121,510	10	14,680,000	14,680,000
117,000	6,510	123,510	10	15,220,000	15,220,000
119,000	6,510	125,510	10	15,770,000	15,770,000
121,000	6,510	127,510	10	16,330,000	16,330,000
123,000	6,510	129,510	10	16,900,000	16,900,000
125,000	6,510	131,510	10	17,480,000	17,480,000
127,000	6,510	133,510	10	18,070,000	18,070,000
129,000	6,510	135,510	10	18,670,000	18,670,000
131,000	6,510	137,510	10	19,280,000	19,280,000
133,000	6,510	139,510	10	19,900,000	19,900,000
135,000	6,510	141,510	10	20,530,000	20,530,000
137,000	6,510	143,510	10	21,170,000	21,170,000
139,000	6,510	145,510	10	21,820,000	21,820,000
141,000	6,510	147,510	10	22,480,000	22,480,000
143,000	6,510	149,510	10	23,150,000	23,150,000
145,000	6,510	151,510	10	23,830,000	23,830,000
147,000	6,510	153,510	10	24,520,000	24,520,000
149,000	6,510	155,510	10	25,220,000	25,220,000
151,000	6,510	157,510	10	25,930,000	25,930,000
153,000	6,510	159,510	10	26,650,000	26,650,000
155,000	6,510	161,510	10	27,380,000	27,380,000
157,000	6,510	163,510	10	28,120,000	28,120,000
159,000	6,510	165,510	10	28,870,000	28,870,000
161,000	6,510	167,510	10	29,630,000	29,630,000
163,000	6,510	169,510	10	30,400,000	30,400,000
165,000	6,510	171,510	10	31,180,000	31,180,000
167,000	6,510	173,510	10	31,970,000	31,970,000
169,000	6,510	175,510	10	32,770,000	32,770,000
171,000	6,510	177,510	10	33,580,000	33,580,000
173,000	6,510	179,510	10	34,400,000	34,400,000
175,000	6,510	181,510	10	35,230,000	35,230,000
177,000	6,510	183,510	10	36,070,000	36,070,000
179,000	6,510	185,510	10	36,920,000	36,920,000
181,000	6,510	187,510	10	37,780,000	37,780,000
183,000	6,510	189,510	10	38,650,000	38,650,000
185,000	6,510	191,510	10	39,530,000	39,530,000
187,000	6,510	193,510	10	40,420,000	40,420,000
189,000	6,510	195,510	10	41,320,000	41,320,000
191,000	6,510	197,510	10	42,230,000	42,230,000
193,000	6,510	199,510	10	43,150,000	43,150,000
195,000	6,510	201,510	10	44,080,000	44,080,000
197,000	6,510	203,510	10	45,020,000	45,020,000
199,000	6,510	205,510	10	45,970,000	45,970,000
201,000	6,510	207,510	10	46,930,000	46,930,000
203,000	6,510	209,510	10	47,900,000	47,900,000
205,000	6,510	211,510	10	48,880,000	48,880,000
207,000	6,510	213,510	10	49,870,000	49,870,000
209,000	6,510	215,510	10	50,870,000	50,870,000
211,000	6,510	217,510	10	51,880,000	51,880,000
213,000	6,510	219,510	10	52,900,000	52,900,000
215,000	6,510	221,510	10	53,930,000	53,930,000
217,000	6,510	223,510	10	54,970,000	54,970,000
219,000	6,510	225,510	10	56,020,000	56,020,000
221,000	6,510	227,510	10	57,080,000	57,080,000
223,000	6,510	229,510	10	58,150,000	58,150,000
225,000	6,510	231,510	10	59,230,000	59,230,000
227,000	6,510	233,510	10	60,320,000	60,320,000
229,000	6,510	235,510	10	61,420,000	61,420,000
231,000	6,510	237,510	10	62,530,000	62,530,000
233,000	6,510	239,510	10	63,650,000	63,650,000
235,000	6,510	241,510	10	64,780,000	64,780,000
237,000	6,510	243,510	10	65,920,000	65,920,000
239,000	6,510	245,510	10	67,070,000	67,070,000
241,000	6,510	247,510	10	68,230,000	68,230,000
243,000	6,510	249,510	10	69,400,000	69,400,000
245,000	6,510	251,510	10	70,580,000	70,580,000
247,000	6,510	253,510	10	71,770,000	71,770,000
249,000	6,510	255,510	10	72,970,000	72,970,000
251,000	6,510	257,510	10	74,180,000	74,180,000
253,000	6,510	259,510	10	75,400,000	75,400,000
255,000	6,510	261,510	10	76,630,000	76,630,000
257,000	6,510	263,510	10	77,870,000	77,870,000
259,000	6,510	265,510	10	79,120,000	79,120,000
261,000	6,510	267,510	10	80,380,000	80,380,000
263,000	6,510	269,510	10	81,650,000	81,650,000
265,000	6,510	271,510	10	82,930,000	82,930,000
267,000	6,510	273,510	10	84,220,000	84,220,000
269,000	6,510	275,510	10	85,520,000	85,520,000
271,000	6,510	277,510	10	86,830,000	86,830,000
273,000	6,510	279,510	10	88,150,000	88,150,000
275,000</					

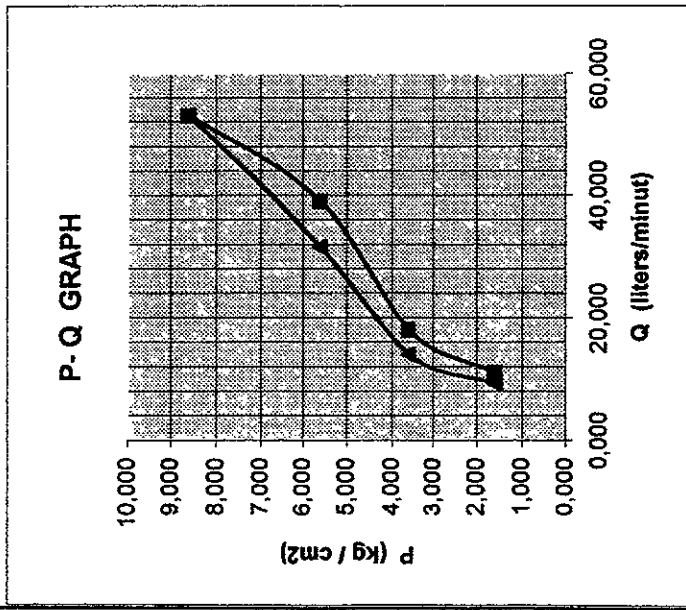
GWL UP

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

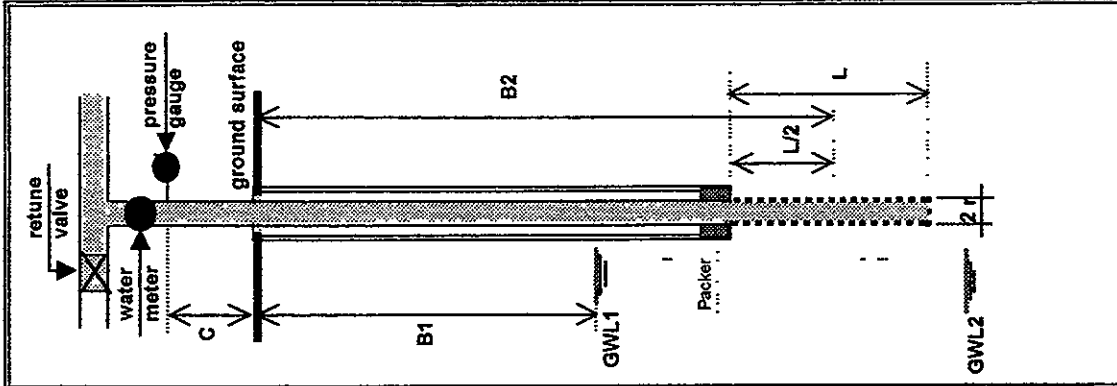
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 15, 2005
 HOLE NO. : DA-8
 STAGE NO : 19
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 65,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL 66,50 m
 STATIC WATER HEAD : B1 3,50 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 2,60 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H1 6,10 m
 STATIC HEAD : P1 0,610 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 5,610 kg/cm²
 WATER INJECTION RATE : q 39,100 ltr/min
 COEFFICIENT OF PERMEABILITY : k 1,71E-03 cm/sec
 LUGEOON VALUE : Lu 128,20



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	0,610	1,610	10	110	11,000
3,000	0,610	3,610	10	180	18,000
5,000	0,610	5,610	10	391	39,100
8,000	0,610	8,610	10	531	53,100
5,000	0,610	5,610	10	315	31,500
3,000	0,610	3,610	10	140	14,000
1,000	0,610	1,610	10	93	9,300



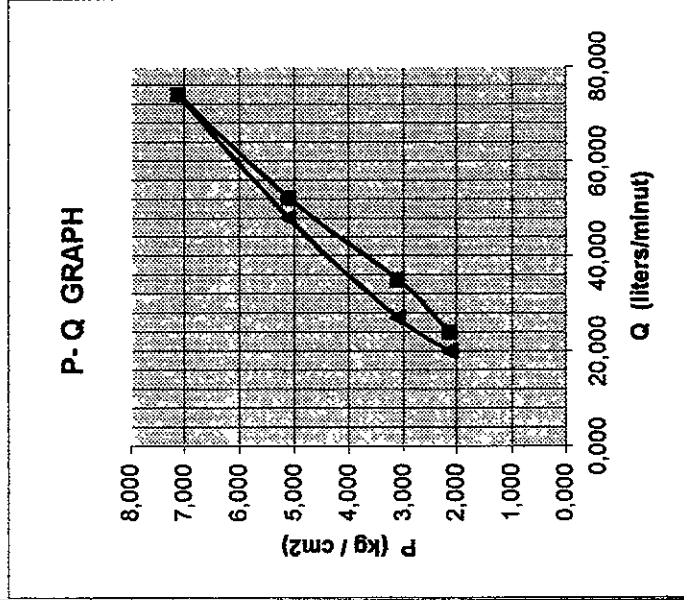
GWL UP

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

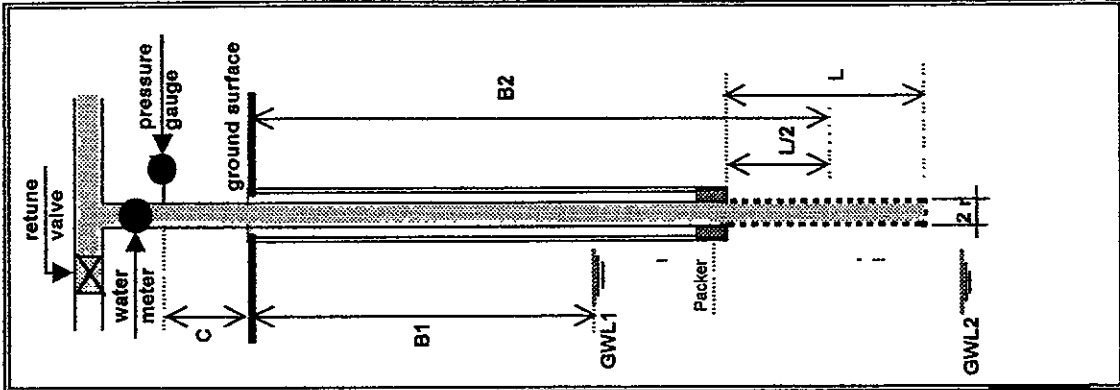
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : DEC, 16, 2006
 HOLE NO. : DA-8
 STAGE NO. : 20
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 70,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL 66,50 m
 STATIC WATER HEAD : B1 8,50 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 2,60 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H1 11,10 m
 STATIC HEAD : P1 1,110 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 5,110 kg/cm²
 WATER INJECTION RATE : q 52,200 ltr/min
 COEFFICIENT OF PERMEABILITY : k 1,25E-03 cm/sec
 LUGEON VALUE : Lu 94,05



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	1,110	2,110	10	240	24,000
2,000	1,110	3,110	10	350	35,000
4,000	1,110	5,110	10	522	52,200
6,000	1,110	7,110	10	740	74,000
4,000	1,110	5,110	10	480	48,000
2,000	1,110	3,110	10	270	27,000
1,000	1,110	2,110	10	200	20,000



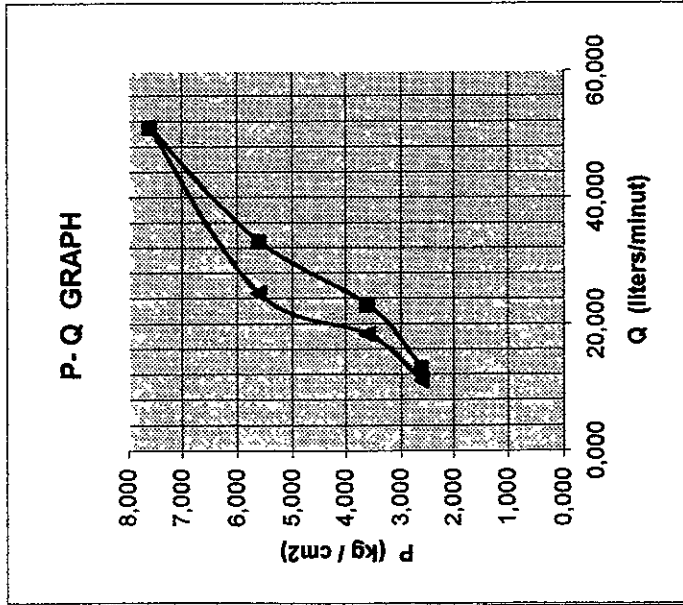
GWL UP

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

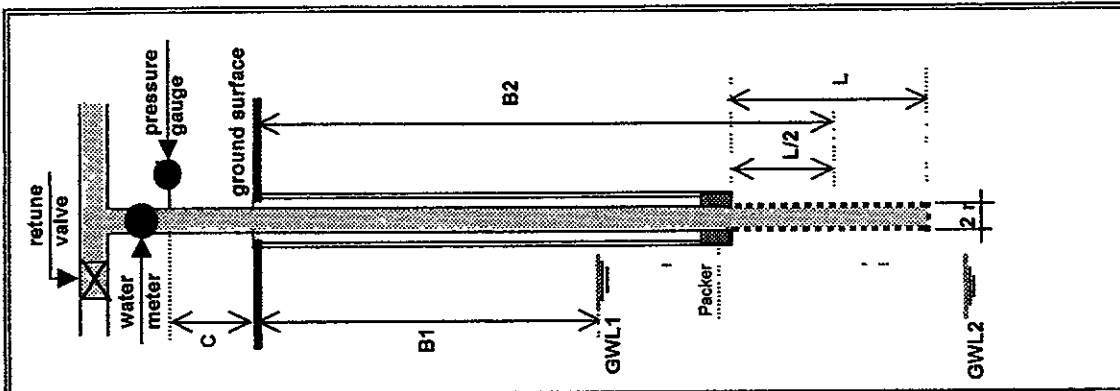
LOCATION RIGHT/LEFT BANK (DAM SITE)
 DATE DEC, 17, 2005
 HOLE NO DA-8
 STAGE NO 21
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH 75,00 m
 TEST LENGTH L 5,00 m
 GROUNDWATER LEVEL DEPTH GWL 66,50 m
 STATIC WATER HEAD B1 13,50 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,60 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H1 16,10 m
 STATIC HEAD P1 1,610 kg/cm²
 APPLIED EFFECTIVE PRESSURE P 5,610 kg/cm²
 WATER INJECTION RATE q 33,000 ltr/min
 COEFFICIENT OF PERMEABILITY k 5,46E-04 cm/sec
 LUGDON VALUE Lu 40,99



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	1,610	2,610	10	130	13,000
2,000	1,610	3,610	10	230	23,000
4,000	1,610	5,610	10	330	33,000
6,000	1,610	7,610	10	510	51,000
4,000	1,610	5,610	10	248	24,800
2,000	1,610	3,610	10	184	18,400
1,000	1,610	2,610	10	110	11,000



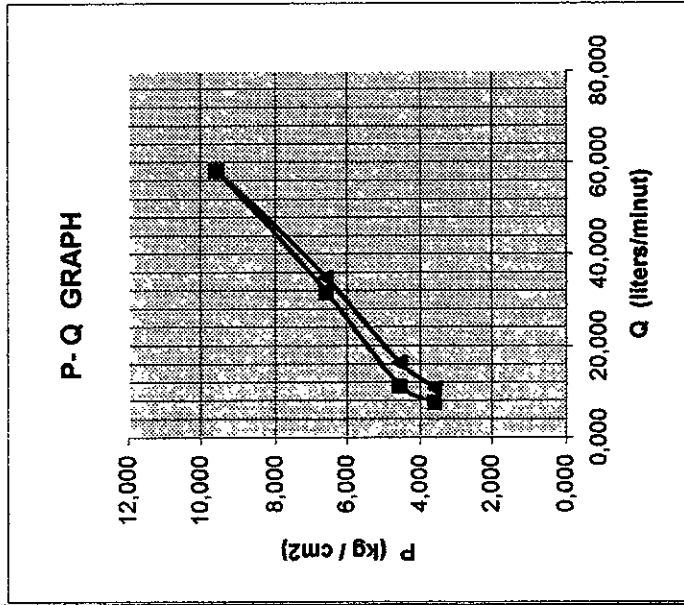
GWL UP

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

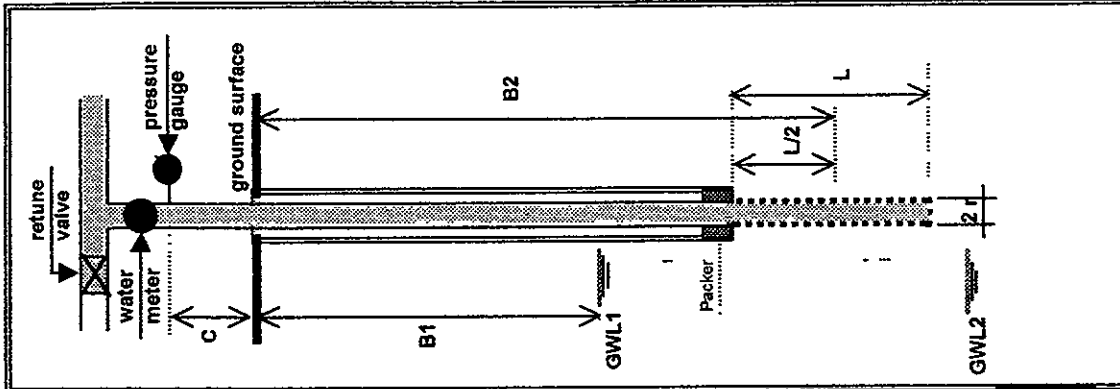
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : FEB. 9, 2006
 HOLE NO. : DA-8
 STAGE NO : 23
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 85,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL 66,80 m
 STATIC WATER HEAD : B1 23,20 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 2,60 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H1 25,80 m
 STATIC HEAD : P1 2,580 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 6,580 kg/cm²
 WATER INJECTION RATE : q 31,600 ltr/min
 COEFFICIENT OF PERMEABILITY : k 3,26E-04 cm/sec
 LUGDON VALUE : Lu 24,50



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	2,580	3,580	10	77	7,700
2,000	2,580	4,580	10	112	11,200
4,000	2,580	6,580	10	316	31,600
7,000	2,580	9,580	10	582	58,200
4,000	2,580	6,580	10	348	34,800
2,000	2,580	4,580	10	162	16,200
1,000	2,580	3,580	10	107	10,700



GWL UP

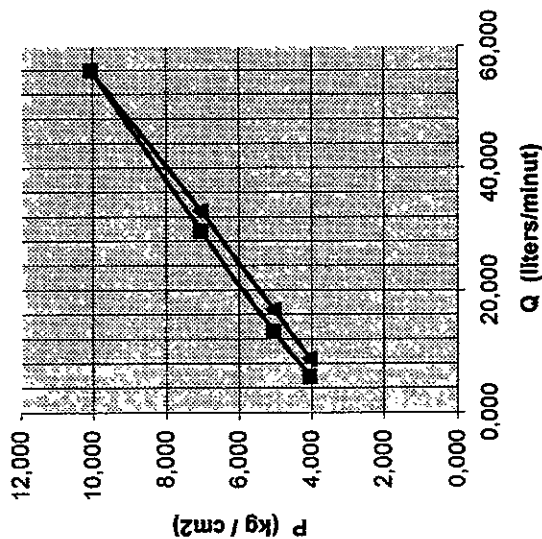
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : FEB, 10, 2006
 HOLE NO. : DA-8
 STAGE NO : 24
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

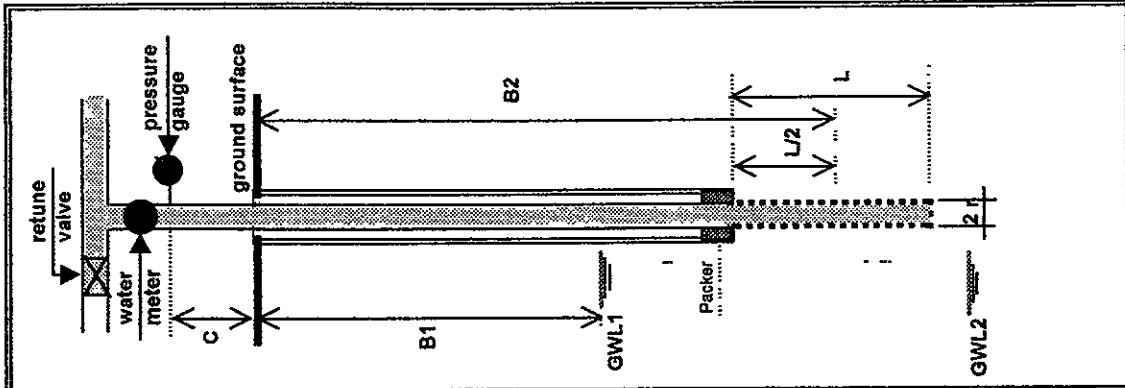
HOLE DEPTH : 90,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL 67,00 m
 STATIC WATER HEAD : B1 28,00 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 2,60 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H1 30,80 m
 STATIC HEAD : P1 3,060 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 7,060 kg/cm²
 WATER INJECTION RATE : q 29,700 ltr/min
 COEFFICIENT OF PERMEABILITY : k **2,592E-04** cm/sec
 LUGEON VALUE : Lu **19,41**

P - Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	3,060	4,060	10	59	5,900
2,000	3,060	5,060	10	132	13,200
4,000	3,060	7,060	10	297	29,700
7,000	3,060	10,060	10	560	56,000
4,000	3,060	7,060	10	329	32,900
2,000	3,060	5,060	10	167	16,700
1,000	3,060	4,060	10	88	8,800



GWL UP

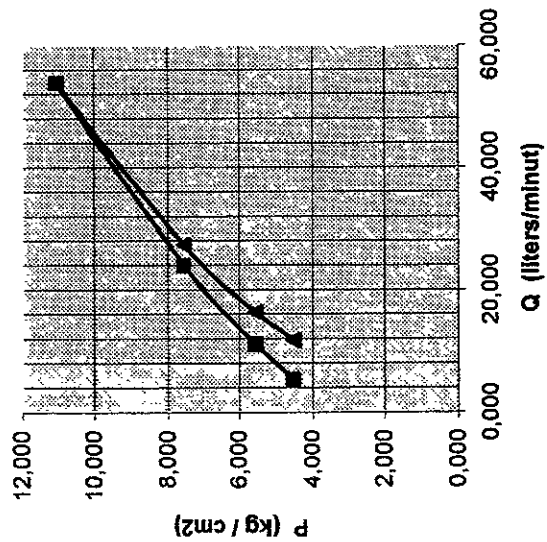
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : FEB, 11, 2006
 HOLE NO : DA-8
 STAGE NO : 25
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

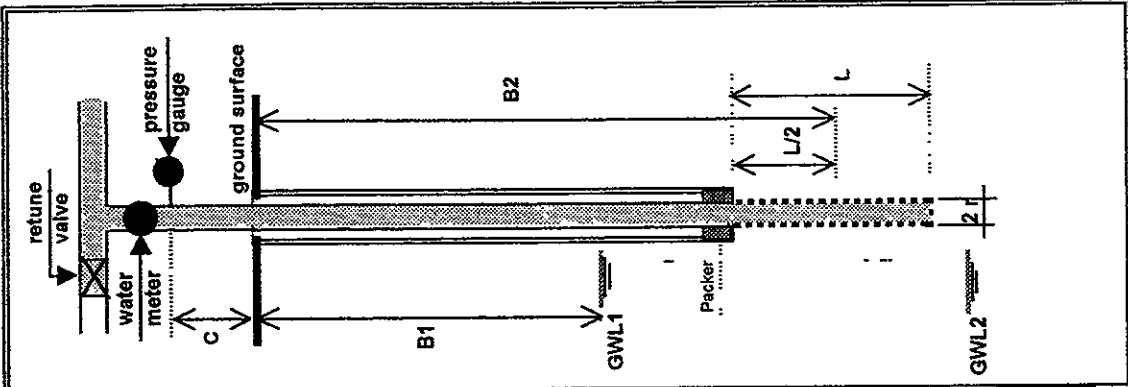
HOLE DEPTH : 95,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL 67,00 m
 STATIC WATER HEAD : B1 33,00 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 2,60 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H1 35,60 m
 STATIC HEAD : P1 3,560 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 7,560 kg/cm²
 WATER INJECTION RATE : q 24,000 ltr/min
 COEFFICIENT OF PERMEABILITY : k 1,80E-04 cm/sec
 LUGION VALUE : Lu 13,48

P - Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	3,560	4,560	10	53	5,300
2,000	3,560	5,560	10	111	11,100
4,000	3,560	7,560	10	240	24,000
7,500	3,560	11,060	10	539	53,900
4,000	3,560	7,560	10	273	27,300
2,000	3,560	5,560	10	163	16,300
1,000	3,560	4,560	10	117	11,700



DA - 9

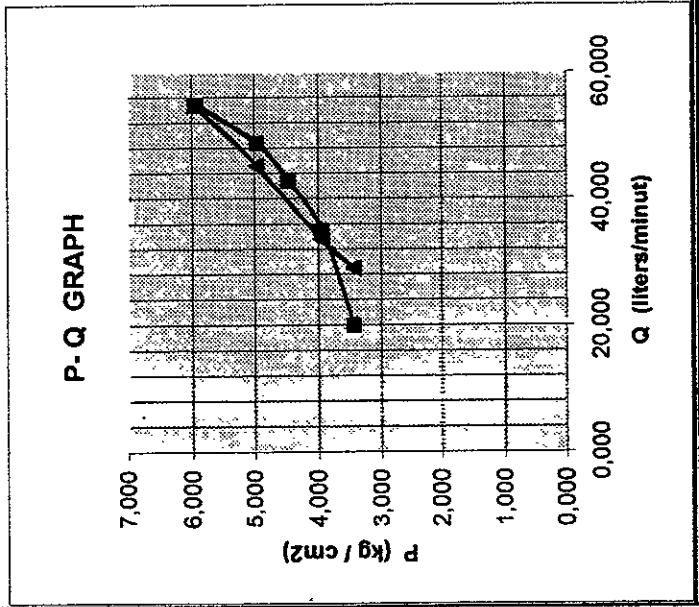
GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

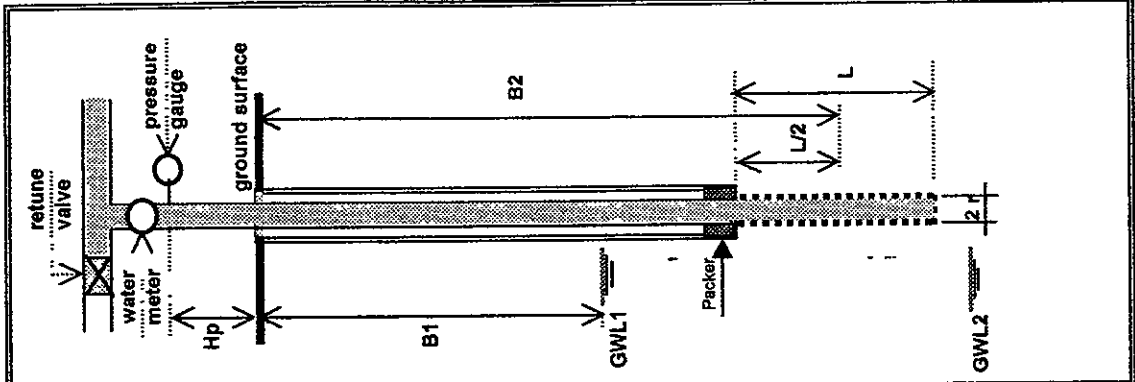
LOCATION LEFT BANK (DAM SITE)
 DATE FEB, 17, 2006
 HOLE NO. DA-9
 STAGE NO. 6
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH 25,00 m
 TEST LENGTH L m
 GROUNDWATER LEVEL DEPTH GWL m
 STATIC WATER HEAD B2 m
 PUMPING PRESSURE HEAD A m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) m
 FRICTION ENERGY LOSS Hf m
 WATER PRESSURE IN HEAD H2 m
 STATIC HEAD P1 m
 APPLIED EFFECTIVE PRESSURE P kg/cm²
 WATER INJECTION RATE q ltr/min
 COEFFICIENT OF PERMEABILITY k 4,40E-04 cm/sec
 LUGEON VALUE Lu 33,04



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q ((/min.))
0,500	2,950	3,450	10	200,00	20,000
1,000	2,950	3,950	10	349,50	34,950
1,500	2,950	4,450	10	427,80	42,780
2,000	2,950	4,950	10	487,40	48,740
3,000	2,950	5,950	10	547,50	54,750
2,000	2,950	4,950	10	451,10	45,110
1,000	2,950	3,950	10	334,90	33,490
0,500	2,950	3,450	10	289,50	28,950



GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

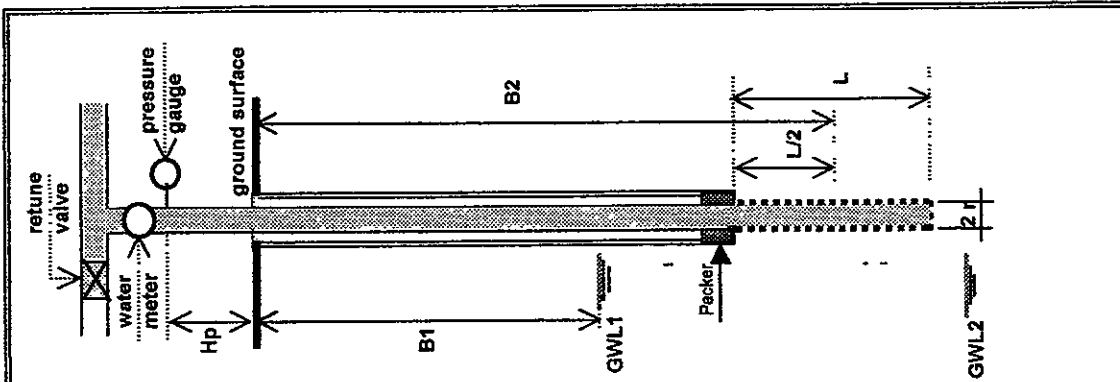
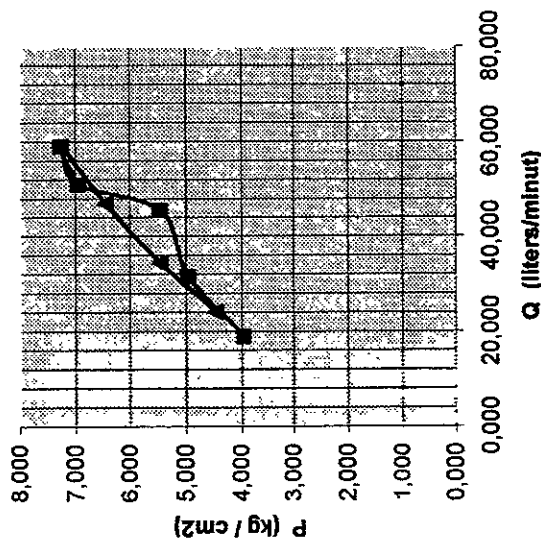
LOCATION : LEFT BANK (DAM SITE)
 DATE : FEB, 17, 2006
 HOLE NO : DA-9
 STAGE NO. : 7
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH 30,00 m
 TEST LENGTH L m
 GROUNDWATER LEVEL DEPTH GWL m
 STATIC WATER HEAD B2 32,50 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,10 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H2 34,80 m
 STATIC HEAD P1 3,460 kg/cm2
 APPLIED EFFECTIVE PRESSURE P 6,960 kg/cm2
 WATER INJECTION RATE q 50,990 ltr/min
 COEFFICIENT OF PERMEABILITY k 3,93E-04 cm/sec
 LUGEOON VALUE Lu 29,47

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm2)	STATIC HEAD, P1 (kg/cm2)	EFFECTIVE PRESSURE, P (kg/cm2)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
0,500	3,460	3,960	10	189,70	18,970
1,500	3,460	4,960	10	315,50	31,550
2,000	3,460	5,460	10	455,50	45,550
3,600	3,460	6,960	10	509,30	50,930
3,800	3,460	7,260	10	589,60	58,960
3,000	3,460	6,460	10	469,30	46,930
2,000	3,460	5,460	10	344,30	34,430
1,000	3,460	4,460	10	240,10	24,010

P-Q GRAPH



GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

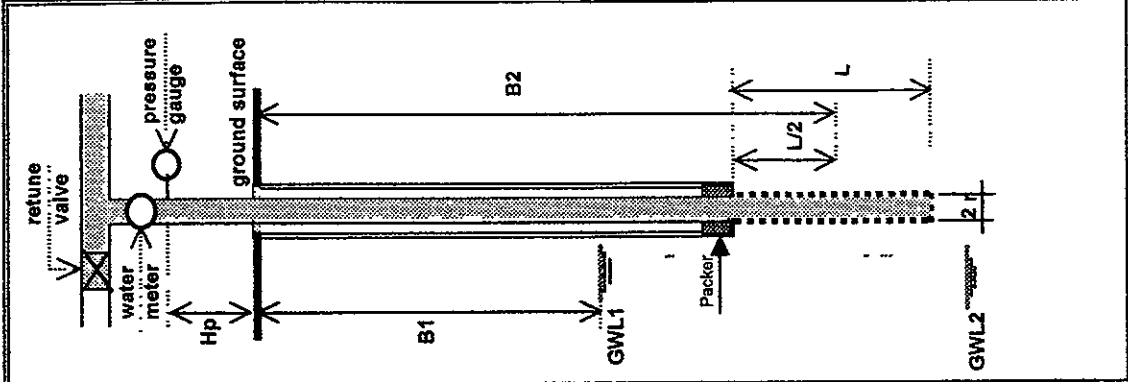
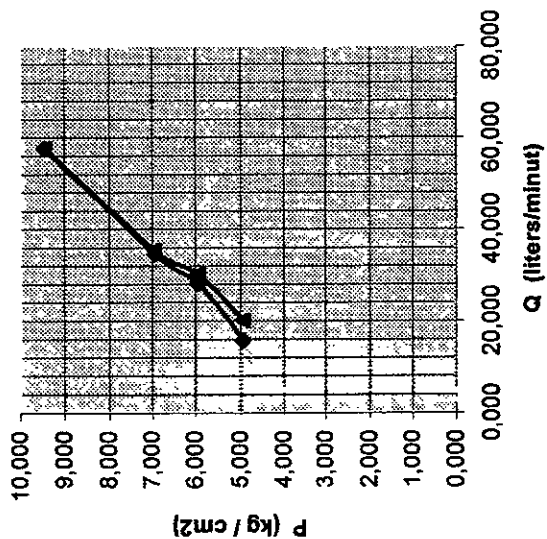
LOCATION LEFT BANK (DAM SITE)
 DATE FEB, 17, 2006
 HOLE NO. DA-9
 STAGE NO. 8
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH 35,00 m
 TEST LENGTH L 5,00 m
 GROUNDWATER LEVEL DEPTH GWL none m
 STATIC WATER HEAD B2 37,50 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,10 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H2 39,60 m
 STATIC HEAD P1 3,960 kg/cm2
 APPLIED EFFECTIVE PRESSURE P 6,960 kg/cm2
 WATER INJECTION RATE q 34,620 ltr/min
 COEFFICIENT OF PERMEABILITY k 2,33E-04 cm/sec
 LUGEOON VALUE Lu 17,48

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm2)	STATIC HEAD, P1 (kg/cm2)	EFFECTIVE PRESSURE, P (kg/cm2)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
1,000	3,960	4,960	10	157,70	15,770
2,000	3,960	5,960	10	280,90	28,090
3,000	3,960	6,960	10	346,20	34,620
5,500	3,960	9,460	10	576,50	57,650
3,000	3,960	6,960	10	354,40	35,440
2,000	3,960	5,960	10	302,50	30,250
1,000	3,960	4,960	10	200,40	20,040

P-Q GRAPH



GWL NONE

WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

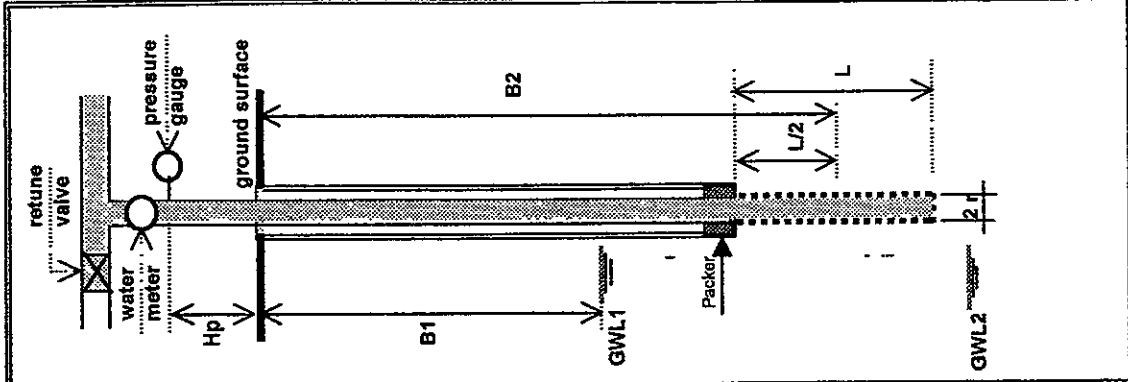
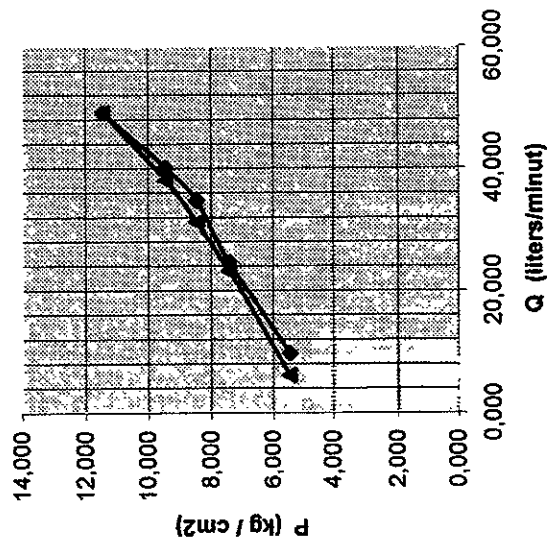
LOCATION : LEFT BANK (DAM SITE)
 DATE : FEB, 18, 2006
 HOLE NO. : DA-9
 STAGE NO : 9
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH 45,00 m
 TEST LENGTH 5,00 m
 GROUNDWATER LEVEL DEPTH none m
 STATIC WATER HEAD 42,50 m
 PUMPING PRESSURE HEAD 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE 2,05 m
 FRICTION ENERGY LOSS 0,00 m
 WATER PRESSURE IN HEAD 44,55 m
 STATIC HEAD 4,455 kg/cm²
 APPLIED EFFECTIVE PRESSURE 9,455 kg/cm²
 WATER INJECTION RATE 40,140 ltr/min
 COEFFICIENT OF PERMEABILITY $k = 2,40E-04$ cm/sec
 LUGEOON VALUE $L_v = 18,02$

TEST RECORDS :

PRESSURE GAUGE, P ₀ (kg/cm ²)	STATIC HEAD, P ₁ (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, Q (liter)	UNIT TAKE, q (l/min.)
1,000	4,455	5,455	10	97,00	9,700
3,000	4,455	7,455	10	245,90	24,590
4,000	4,455	8,455	10	346,80	34,680
5,000	4,455	9,455	10	401,40	40,140
7,000	4,455	11,455	10	491,20	49,120
5,000	4,455	9,455	10	380,90	38,090
4,000	4,455	8,455	10	312,20	31,220
3,000	4,455	7,455	10	231,40	23,140
1,000	4,455	5,455	10	61,10	6,110

P-Q GRAPH



WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

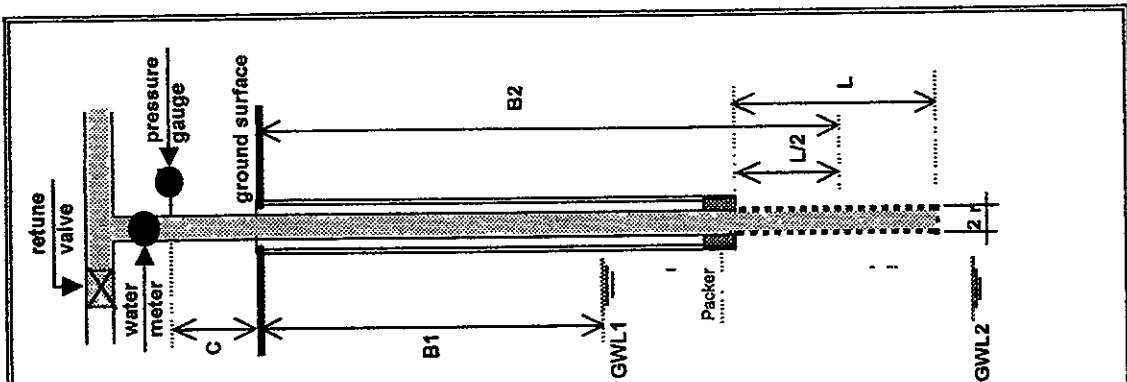
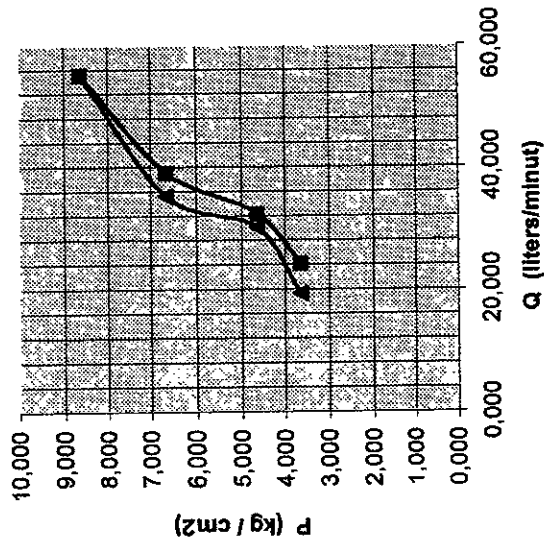
LOCATION : RIGHT/LEFT BANK (DAM SITE)
 DATE : February, 18, 2006
 HOLE NO. : DA-9
 STAGE NO : 10
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 45,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B1
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H1
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGHEON VALUE : Lu

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	2,645	3,645	10	241,70	24,170
2,000	2,645	4,645	10	322,80	32,280
4,000	2,645	6,645	10	391,90	39,190
6,000	2,645	8,645	10	551,00	55,100
4,000	2,645	6,645	10	352,00	35,200
2,000	2,645	4,645	10	300,60	30,060
1,000	2,645	3,645	10	192,90	19,290

P-Q GRAPH



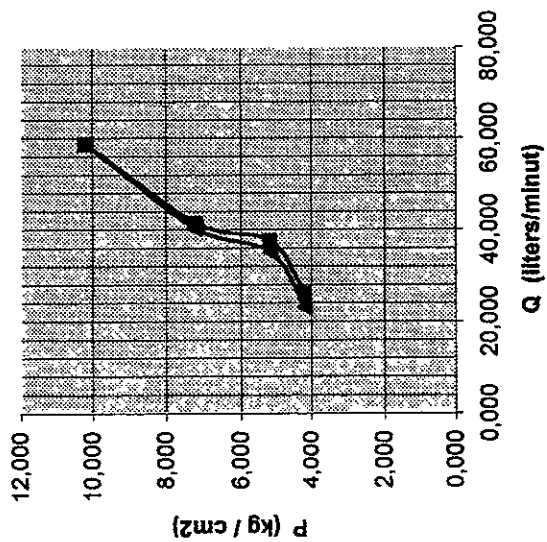
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION LEFT BANK (DAM SITE)
 DATE February, 19, 2006
 HOLE NO. DA-9
 STAGE NO 11
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

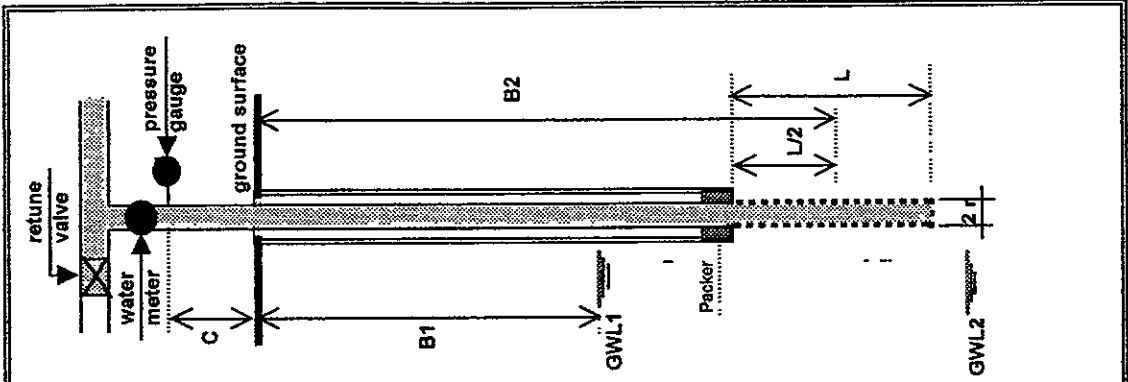
HOLE DEPTH 50,00 m
 TEST LENGTH L 5,00 m
 GROUNDWATER LEVEL DEPTH GWL 25,20 m
 STATIC WATER HEAD B1 29,80 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,10 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H1 31,90 m
 STATIC HEAD P1 3,190 kg/cm²
 APPLIED EFFECTIVE PRESSURE P 7,190 kg/cm²
 WATER INJECTION RATE q 41,410 ltr/min
 COEFFICIENT OF PERMEABILITY k 3,46E-04 cm/sec
 LUGEOON VALUE Lu 25,96 -

P-Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (/min.)
1,000	3,190	4,190	10	260,10	26,010
2,000	3,190	5,190	10	375,50	37,550
3,000	3,190	7,190	10	414,10	41,410
4,000	3,190	10,190	10	587,70	58,770
5,000	3,190	13,190	10	702,10	70,210
6,000	3,190	16,190	10	816,50	81,650
7,000	3,190	19,190	10	930,90	93,090
8,000	3,190	22,190	10	1,045,30	1,04,530
9,000	3,190	25,190	10	1,159,70	1,15,970
10,000	3,190	28,190	10	1,274,10	1,27,410



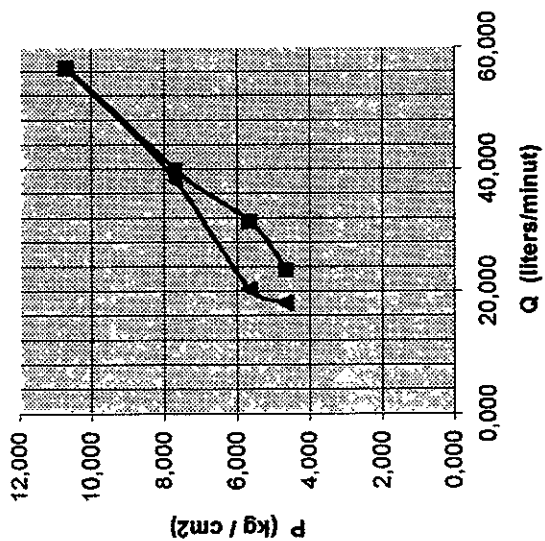
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION LEFT BANK (DAM SITE)
 DATE February, 21, 2006
 HOLE NO DA-9
 STAGE NO : 12
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

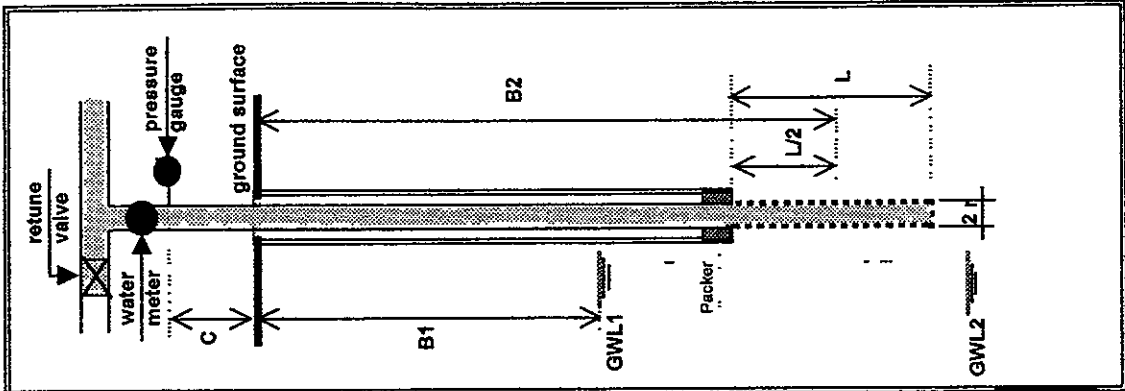
HOLE DEPTH 55,00 m
 TEST LENGTH L 60,00 m
 GROUNDWATER LEVEL DEPTH GWL 5,00 m
 STATIC WATER HEAD B1 25,30 m
 PUMPING PRESSURE HEAD A 34,70 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 0,00 m
 FRICTION ENERGY LOSS Hf 2,05 m
 WATER PRESSURE IN HEAD H1 0,00 m
 P1 36,75 m
 APPLIED EFFECTIVE PRESSURE P1 3,675 kg/cm²
 WATER INJECTION RATE P 7,675 kg/cm²
 COEFFICIENT OF PERMEABILITY q 39,890 ltr/min
 LUGEOON VALUE k 2,89E-04 cm/sec
 Lu 21,71 -

P - Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P ₀ (kg/cm ²)	STATIC HEAD, P ₁ (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	3,675	4,675	10	234,80	23,480
2,000	3,675	5,675	10	314,70	31,470
4,000	3,675	7,675	10	398,90	39,890
7,000	3,675	10,675	10	565,80	56,580
4,000	3,675	7,675	10	381,10	38,110
2,000	3,675	5,675	10	203,20	20,320
1,000	3,675	4,675	10	180,70	18,070



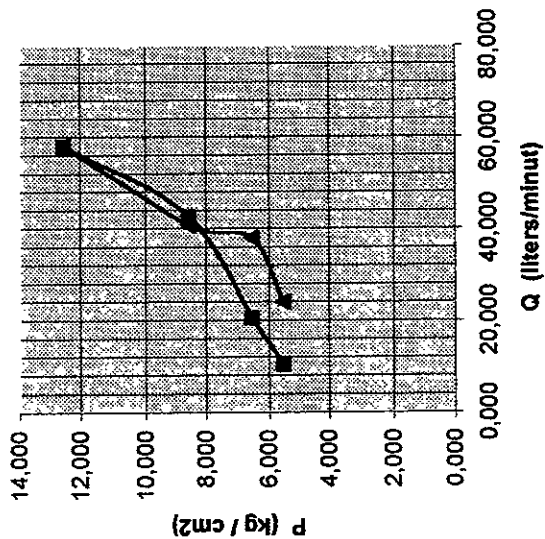
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION LEFT BANK (DAM SITE)
 DATE February, 22, 2006
 HOLE NO DA-9
 STAGE NO : 14
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

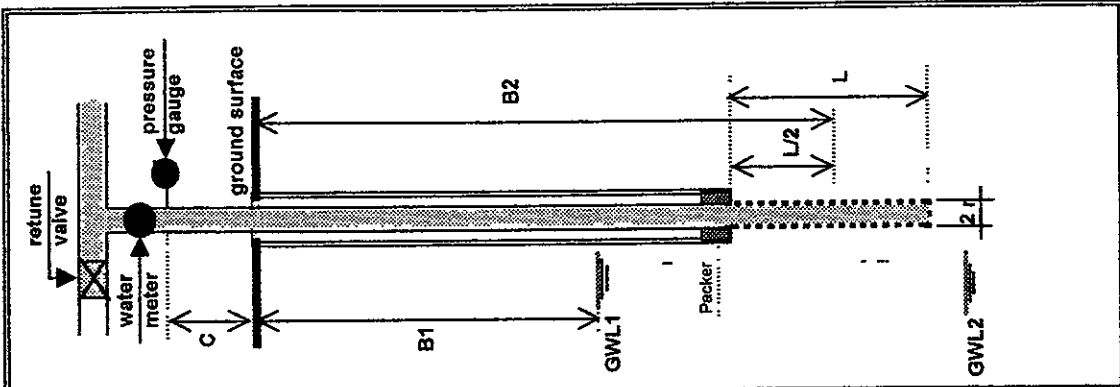
HOLE DEPTH 65,00 m
 TEST LENGTH L 5,00 m
 GROUNDWATER LEVEL DEPTH GWL 26,50 m
 STATIC WATER HEAD B1 43,50 m
 PUMPING PRESSURE HEAD A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE C(Hp) 2,05 m
 FRICTION ENERGY LOSS Hf 0,00 m
 WATER PRESSURE IN HEAD H1 45,55 m
 STATIC HEAD P1 4,555 kg/cm2
 APPLIED EFFECTIVE PRESSURE P 8,555 kg/cm2
 WATER INJECTION RATE q 42,580 ltr/min
 COEFFICIENT OF PERMEABILITY k 2,49E-04 cm/sec
 LUGEOON VALUE Lu 18,70 -

P-Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	4,555	5,555	10	103,80	10,380
2,000	4,555	6,555	10	205,40	20,540
4,000	4,555	8,555	10	425,80	42,580
8,000	4,555	12,555	10	580,00	58,000
4,000	4,555	8,555	10	406,80	40,680
2,000	4,555	6,555	10	380,00	38,000
1,000	4,555	5,555	10	239,00	23,900



WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

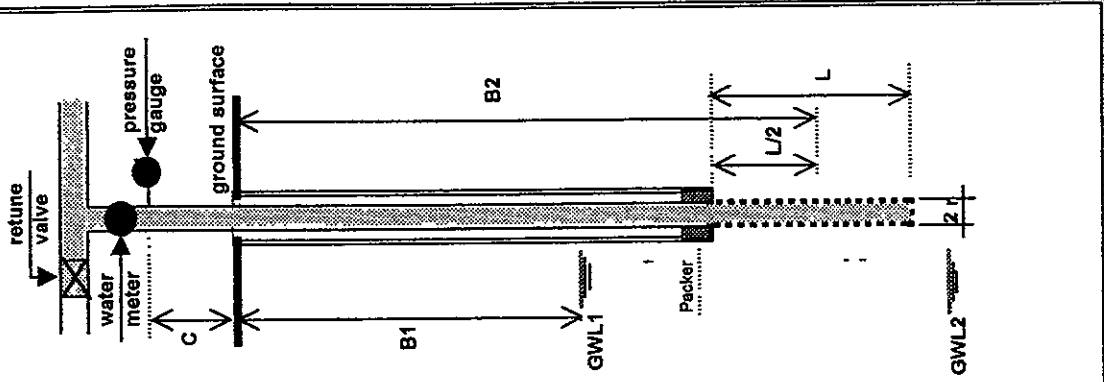
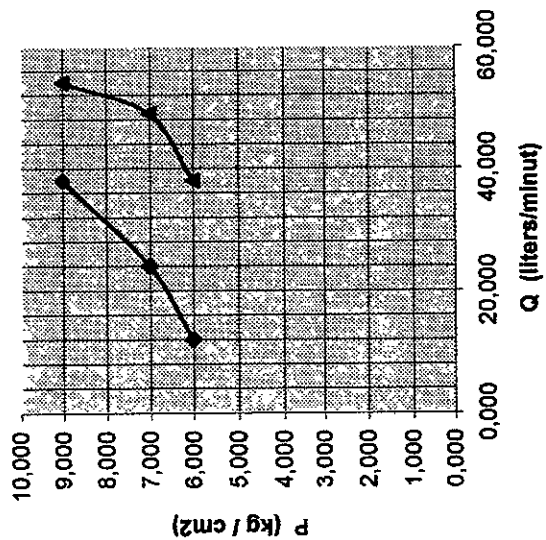
LOCATION : LEFT BANK (DAM SITE)
 DATE : February, 23, 2006
 HOLE NO. : DA-9
 STAGE NO : 15
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 70,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B1
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H1
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEON VALUE : Lu

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	5,030	6,030	10	120,00	12,000
2,000	5,030	7,030	10	240,00	24,000
4,000	5,030	9,030	10	380,00	38,000
2,000	5,030	7,030	10	490,00	49,000
1,000	5,030	6,030	10	380,00	38,000

P - Q GRAPH



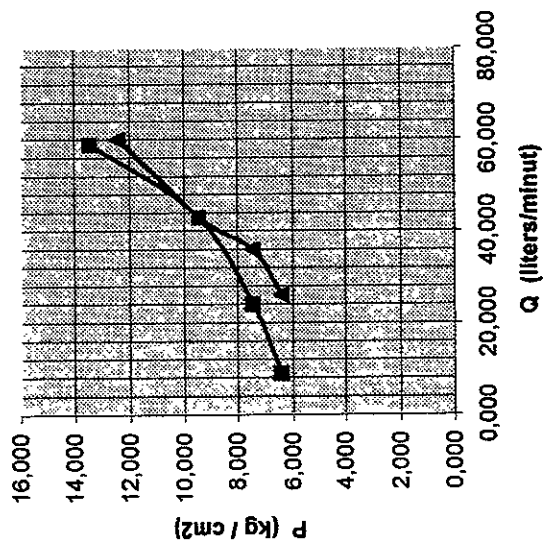
WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : February, 24, 2006
 HOLE NO : DA-9
 STAGE NO. : 16
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

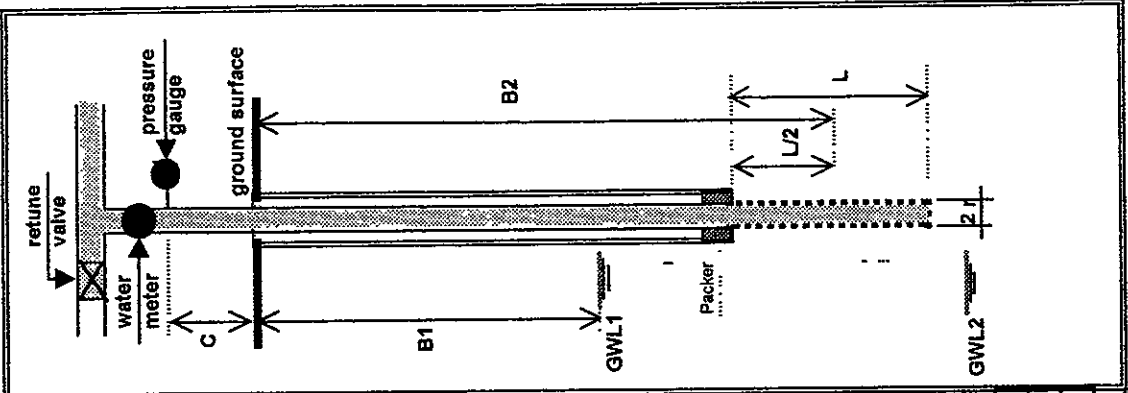
HOLE DEPTH : 80,00 m
 TEST LENGTH : 5,00 m
 GROUNDWATER LEVEL DEPTH : 27,80 m
 STATIC WATER HEAD : 52,20 m
 PUMPING PRESSURE HEAD : 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : 2,15 m
 FRICTION ENERGY LOSS : 0,00 m
 WATER PRESSURE IN HEAD : 54,35 m
 STATIC HEAD : 54,35 m
 APPLIED EFFECTIVE PRESSURE : 5,435 kg/cm²
 WATER INJECTION RATE : 13,435 kg/cm²
 COEFFICIENT OF PERMEABILITY : 59,000 ltr/min
 LUGEOON VALUE : **2,89E-04** cm/sec
 : **21,71** -

P - Q GRAPH



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	5,435	6,435	10	90,00	9,000
2,000	5,435	7,435	10	240,00	24,000
4,000	5,435	9,435	10	430,00	43,000
8,000	5,435	13,435	10	590,00	59,000
7,000	5,435	12,435	10	600,00	60,000
4,000	5,435	9,435	10	490,00	49,000
2,000	5,435	7,435	10	360,00	36,000
1,000	5,435	6,435	10	260,00	26,000

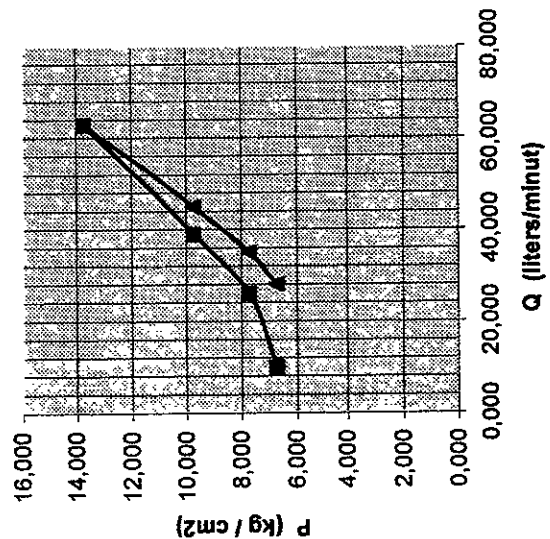


WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

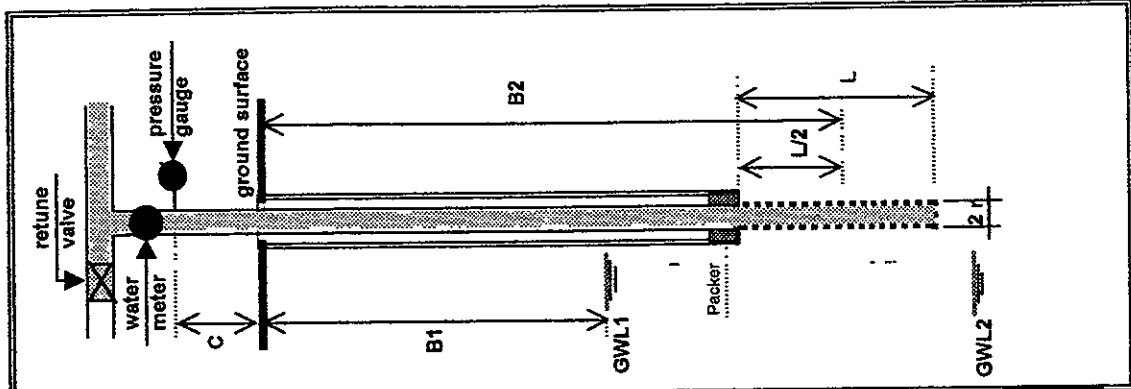
LOCATION : LEFT BANK (DAM SITE)
 DATE : February, 25, 2006
 HOLE NO : DA-9
 STAGE NO. : 17
 HOLE DIAMETER (cm) : D 6,6
 (cm) r 3,3

HOLE DEPTH : 85,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B1
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H1
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEOON VALUE : Lu



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	5,720	6,720	10	100,00	10,000
2,000	5,720	7,720	10	260,00	26,000
4,000	5,720	9,720	10	390,00	39,000
8,000	5,720	13,720	10	630,00	63,000
4,000	5,720	9,720	10	450,00	45,000
2,000	5,720	7,720	10	350,00	35,000
1,000	5,720	6,720	10	280,00	28,000



WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

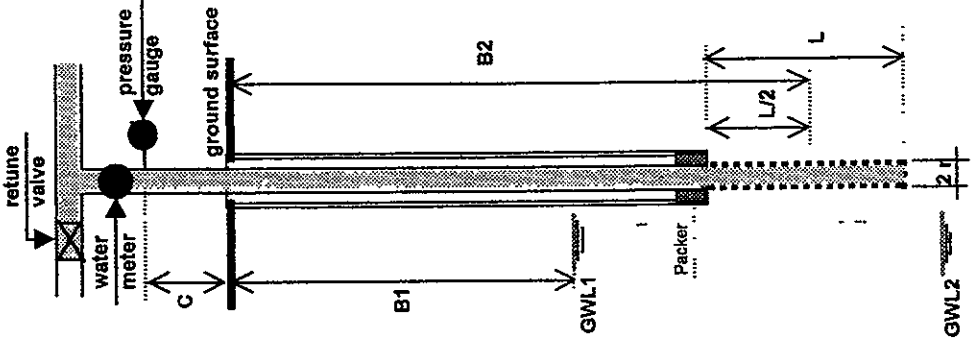
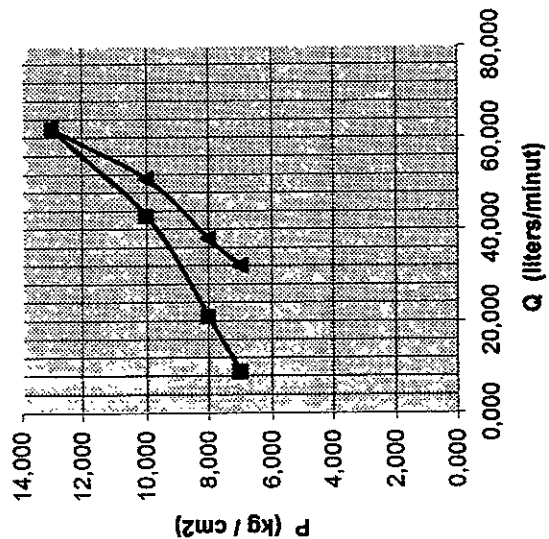
LOCATION : LEFT BANK (DAM SITE)
 DATE : February, 26, 2006
 HOLE NO. : DA-9
 STAGE NO : 18
 HOLE DIAMETER (cm) : D 6,6
 (cm) r 3,3

HOLE DEPTH : 85,00 m
 TEST LENGTH : L
 GROUNDWATER LEVEL DEPTH : GWL
 STATIC WATER HEAD : B1
 PUMPING PRESSURE HEAD : A
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp)
 FRICTION ENERGY LOSS : Hf
 WATER PRESSURE IN HEAD : H1
 STATIC HEAD : P1
 APPLIED EFFECTIVE PRESSURE : P
 WATER INJECTION RATE : q
 COEFFICIENT OF PERMEABILITY : k
 LUGEOON VALUE : Lu

TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	6,015	7,015	10	90,00	9,000
2,000	6,015	8,015	10	210,00	21,000
4,000	6,015	10,015	10	430,00	43,000
7,000	6,015	13,015	10	620,00	62,000
4,000	6,015	10,015	10	510,00	51,000
2,000	6,015	8,015	10	380,00	38,000
1,000	6,015	7,015	10	320,00	32,000

P - Q GRAPH

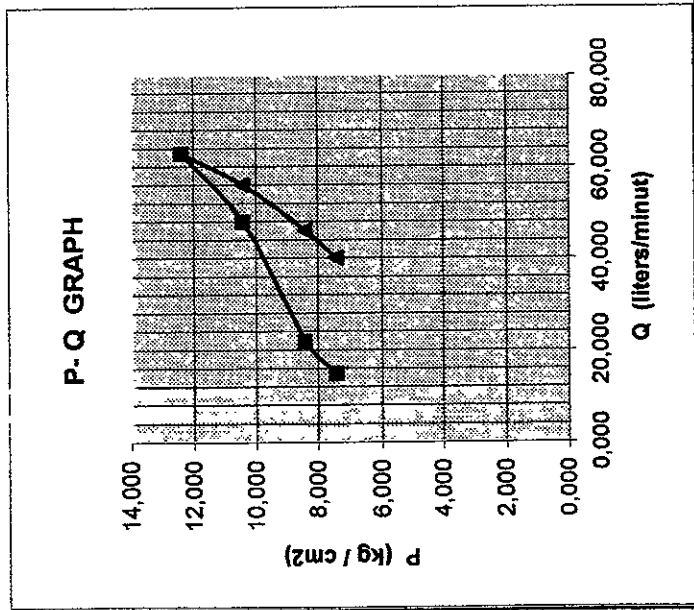


WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

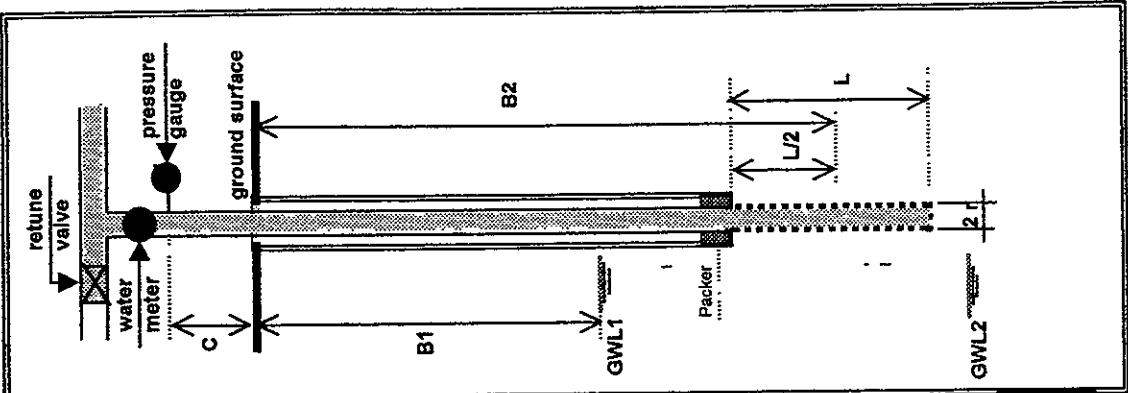
LOCATION : LEFT BANK (DAM SITE)
 DATE : February, 26, 2008
 HOLE NO. : DA-9
 STAGE NO. : 19
 HOLE DIAMETER (cm) D 6,6
 (cm) r 3,3

HOLE DEPTH : 90,00 m
 TEST LENGTH : L 5,00 m
 GROUNDWATER LEVEL DEPTH : GWL 32,70 m
 STATIC WATER HEAD : B1 62,30 m
 PUMPING PRESSURE HEAD : A 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : C(Hp) 1,90 m
 FRICTION ENERGY LOSS : Hf 0,00 m
 WATER PRESSURE IN HEAD : H1 64,20 m
 STATIC HEAD : P1 6,420 kg/cm²
 APPLIED EFFECTIVE PRESSURE : P 10,420 kg/cm²
 WATER INJECTION RATE : q 48,000 ltr/min
 COEFFICIENT OF PERMEABILITY : k 1,99E-04 cm/sec
 LUGEON VALUE : Lu 14,95



TEST RECORDS :

PRESSURE GAUGE, P0 (kg/cm ²)	STATIC HEAD, P1 (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	6,420	7,420	10	150,00	15,000
2,000	6,420	8,420	10	220,00	22,000
4,000	6,420	10,420	10	480,00	48,000
6,000	6,420	12,420	10	630,00	63,000
4,000	6,420	10,420	10	560,00	56,000
2,000	6,420	8,420	10	460,00	46,000
1,000	6,420	7,420	10	400,00	40,000



WATER PRESSURE TEST

GEOLOGICAL INVESTIGATION AYUNG - DAM

LOCATION : LEFT BANK (DAM SITE)
 DATE : February, 27, 2006
 HOLE NO. : DA-9
 STAGE NO. : 20
 HOLE DIAMETER (cm) D 6.6
 (cm) r 3.3

HOLE DEPTH : 100,00 m
 TEST LENGTH : 5,00 m
 GROUNDWATER LEVEL DEPTH : 32,70 m
 STATIC WATER HEAD : 67,30 m
 PUMPING PRESSURE HEAD : 0,00 m
 HEIGHT OF WATER PRESSURE GAUGE : 2,30 m
 FRICTION ENERGY LOSS : 0,00 m
 WATER PRESSURE IN HEAD : 69,60 m
 STATIC HEAD : 6,960 kg/cm²
 APPLIED EFFECTIVE PRESSURE : 10,960 kg/cm²
 WATER INJECTION RATE : 46,000 ltr/min
 COEFFICIENT OF PERMEABILITY : **1,763E-04** cm/sec
 LUGEOON VALUE : **13,22**

TEST RECORDS :

PRESSURE GAUGE, P ₀ (kg/cm ²)	STATIC HEAD, P ₁ (kg/cm ²)	EFFECTIVE PRESSURE, P (kg/cm ²)	INJECTION TIME, t (minute)	ABSORPTION, q (liter)	UNIT TAKE, q (l/min.)
1,000	6,960	7,960	10	120,00	12,000
2,000	6,960	8,960	10	280,00	28,000
4,000	6,960	10,960	10	460,00	46,000
6,500	6,960	13,460	10	630,00	63,000
4,000	6,960	10,960	10	460,00	46,000
2,000	6,960	8,960	10	340,00	34,000
1,000	6,960	7,960	10	300,00	30,000

P-Q GRAPH

