DRILL LOG

SITE	TRO DAMSITE	HOLE No.	JD-103
LATITUDE	LONGITUDE	ELEVATION	253.60m
DATE	1991/06/28~1991/07/22	DEPTH	150.00m
ANGLE	180° UP / DOWN 0° / 90°	DIRECTION	270° W / N 0° / 90° E / 180° S
SLOPE	HORIZON 0° / 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
1	0.80	253.00	ALLUVIAL	Top Soil			Organic	6/28	N.C 76mm	
	1.00	252.80								
2	2.00	251.80		Residual Soil			Basalts of varied weathering and dark brown organic sandy clay.			
3	3.00	250.80								
4	4.00	249.80								
5	5.00	248.80								
	5.70	248.10								
6	6.00	247.80		Weathered Basalt		D	Highly weathered, soft.	6.00		
7	6.85	246.95								
	7.00	246.80								
8	8.00	245.80		Basalt		Ch	Slightly weathered to fresh. Coarse grained, hard. To 8.40m, vesicular and weathered in joints. Below 8.40m, non-vesicular, massive.	7/01		
	8.40	245.40								
9	9.00	244.80								
10	10.00	243.80				B				7/02 10.35
	10.35	243.45								
11	11.00	242.80						11.00		
12	12.00	241.80								
13	13.00	240.80		Weathered Basalt		Cl	Highly weathered, soft. Cores are fragmental.	7/02		
	13.50	240.30								
14	14.00	239.80		Basalt		Cm	Moderately weathered, non vesicular. Soft to moderately hard.			
	14.70	239.10								7/03 15.10
15	15.00	238.80				Ch	Slightly weathered.			
	15.80	238.00								
16	16.00	237.80	YOUNG LAVA	Weathered Basalt		Cl	Highly weathered vesicular basalt, brown coloured, soft but compact.	16.00	D.B. 76mm	
17	17.00	236.80								
18	18.00	235.80								
19	19.00	234.80								
20	20.00	233.80		Basalt		Cm	Moderately weathered, vesicular. Highly vesicular parts are intensely weathered.	7/03		
21	21.00	232.80								
22	22.00	231.80								
23	23.00	230.80				B	Fresh, hard. Vesicular in 23.0 - 23.6m and 24.2 - 25.2m. Containing breccia and tuff in 26.0 - 26.4m.			7/04 23.77
	23.77	230.03								
24	24.00	229.80								
25	25.00	228.80						25.00		
26	26.00	227.80						7/04		
27	27.00	226.80								
28	28.00	225.80								7/05 20.50
	28.50	225.30								
29	29.00	224.80								
	29.60	224.20								
30	30.00	223.80		Weathered Basalt		Cl-D		30.00		

CORE RECOVERY % (m) 0 50 100 | R.Q.D % (m) 0 50 100 | WATER PRESSURE TEST 0 10 20 30 40 50

※R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO

DRILLING LOG OF JD-103 (1/5)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-23

Fig. B-24

DRILL LOG

SHEET NO.2 OF 5

SITE: TRO DAMSITE
LATITUDE: LONGITUDE:
DATE: 1991/06/28 ~ 1991/07/22
ANGLE: 180° UP DOWN 0° HORIZON 0° 90° DIRECTION 270° W 0° N 90° E 180° S SLOPE

HOLE No. JD-103
ELEVATION 253.80m
DEPTH 150.00m

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	BIT & DIAMETER	WATER LEVEL	DATE	CORE RECOVERY % (m)	R.Q.D % (m)	WATER PRESSURE TEST
31	30.20	223.60	Weathered Basalt	Hard Clay		C1~D	Highly weathered and brecciated.						
31	31.00	222.80				D	Brown, silty. A little organic.						
32	32.00	221.80	YOUNG LAVA	Weathered Basalt		C1	Highly weathered and altered. Soft, friable.						
33	33.00	220.80											
33	33.50	220.30											
34	34.00	219.80		Basalt		B	Fresh, hard, sparsely with pores. Inclined joints with white stains.						
35	35.00	218.80											
35	35.00	218.80											
35	35.50	217.80											
37	35.88	217.30							7/06 35.88				
37	37.00	216.80											
38	38.00	215.80		Hard Clay		C1~D	36.5m ~ 37.3m : Brown clay with basalt fragments. 37.3m ~ 37.55m : Red shale. 37.55m ~ 39.5m : yellow brown hard clay, half consolidated. 39.5m ~ 40.5m : Gradually changing down to reddish brown loam with weathered basalt fragments.						
39	39.00	214.80											
40	40.00	213.80											
40	40.80	213.20											
41	41.00	212.80											
42	42.00	211.80		Basalt		Ch	Fresh, except at the top.						
42	42.28	211.52							7/09 42.28				
43	43.00	210.80											
43	43.20	210.60											
44	43.70	210.10		Weathered Basalt		D	Highly weathered and decomposed.						
44	44.00	209.80											
45	45.00	208.80		Basalt		Cm	Moderately weathered, partly vesicular. Moderately hard to soft.						
46	46.00	207.80											
46	46.39	207.42							7/10 46.39				
47	47.00	206.80				B	Fresh, partly with pores. Water-stains on inclinesFresh, partly with pores. Water-stains on inclined joints.						
48	48.00	205.80				Cm	Irregular melange of vesicular basalts and non-vesicular basalts, and weathered rocks and fresh rocks. Cracks are white stained.						
49	49.40	205.40											
49	49.00	204.80											
50	50.00	203.80											
51	51.00	202.80											
52	52.00	201.80											
53	53.00	200.80											
53	53.20	200.60							7/11 53.28				
54	54.00	199.80											
55	55.00	198.80											
55	56.00	197.80											
57	57.00	196.80											
58	58.00	195.80											
59	59.00	194.80											
59	59.60	194.20				Ch							
60	60.00	193.80											

*R.Q.D is Rock Quality Designation, R.Q.D=(total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*PLUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-103 (2/5)

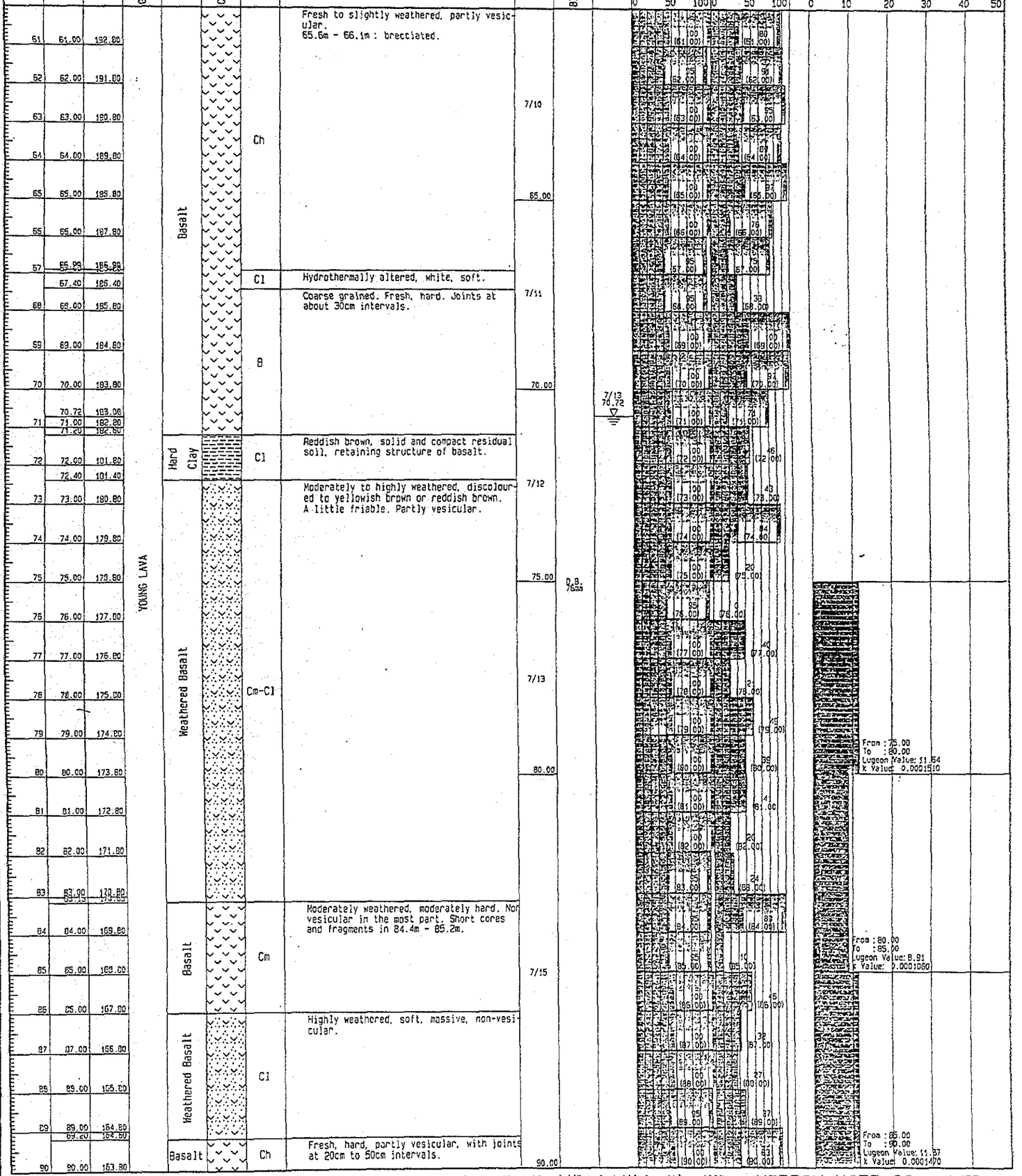
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

DRILL LOG

SITE	TRO DAMSITE	HOLE No.	JD-103
LATITUDE		LONGITUDE	ELEVATION 253.80m
DATE	1991/06/28 – 1991/07/22		DEPTH 150.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION	SLOPE: HORIZON 0°, 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
61	61.00	192.80	YOUNG LAVA	Basalt		Ch	Fresh to slightly weathered, partly vesicular. 65.6m – 66.1m : brecciated.	7/10		
62	62.00	191.80								
63	63.00	190.80								
64	64.00	189.80								
65	65.00	188.80						65.00		
66	66.00	187.80								
67	66.90	186.90								
	67.40	186.40				Cl	Hydrothermally altered, white, soft.			
68	68.00	185.80					Coarse grained. Fresh, hard. Joints at about 30cm intervals.	7/11		
69	69.00	184.80				B				
70	70.00	183.80						70.00		7/13 70.72
	70.72	183.08								
71	71.00	182.80								
	71.20	182.60								
72	72.00	181.80		Hard Clay		Cl	Reddish brown, solid and compact residual soil, retaining structure of basalt.			
	72.40	181.40								
73	73.00	180.80		Weathered Basalt			Moderately to highly weathered, discoloured to yellowish brown or reddish brown. A little friable. Partly vesicular.	7/12		
74	74.00	179.80								
75	75.00	178.80						75.00		
76	76.00	177.80								
77	77.00	176.80								
78	78.00	175.80				Cm-Cl		7/13		
79	79.00	174.80								
80	80.00	173.80						80.00		
81	81.00	172.80								
82	82.00	171.80								
83	83.00	170.80								
	83.95	170.05								
84	84.00	169.80		Basalt		Cm	Moderately weathered, moderately hard. Non vesicular in the most part. Short cores and fragments in 84.4m – 85.2m.			
85	85.00	168.80						7/15		
86	85.00	167.80								
87	87.00	166.80		Weathered Basalt		Cl	Highly weathered, soft, massive, non-vesicular.			
88	88.00	165.80								
89	89.00	164.80								
	89.20	164.60								
90	90.00	163.80		Basalt		Ch	Fresh, hard, partly vesicular, with joints at 20cm to 50cm intervals.	90.00		

CORE RECOVERY % (m) 0 50 100 | R.Q.D % (m) 0 50 100 | WATER PRESSURE TEST 0 10 20 30 40 50



*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-103 (3/5)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-25

DRILL LOG

SITE	TRO DAMSITE	HOLE No.	JD-103
LATITUDE	LONGITUDE	ELEVATION	253.80m
DATE	1991/06/28 – 1991/07/22	DEPTH	150.00m
ANGLE	180° UP, 90°, 00°N 0°	DIRECTION	SLOPE: HORIZON 0° / 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
91	91.00	163.00	YOUNG LAVA	Basalt		Ch	91.5m -92.0m: Weathered, soft.			7/16 91.05
	91.50	162.30								
92	92.00	161.80				Cl				
93	93.00	160.80				Ch		7/15		
94	94.00	159.80								
95	94.80	159.00								
	95.00	158.80		Weathered Basalt		Cl	Highly weathered, soft. Cores are partly fragmental.	95.00		
96	96.00	157.80								
97	97.00	156.80								7/19 97.30
	97.30	156.50		Basalt		B	Fresh, hard, massive. Non-vesicular. Vertical cracks at 99.0m - 100.0m, with white silty inclusion in joint.			
99	99.00	154.80								
100	100.00	153.80						7/16		
101	101.00	152.80								
102	102.00	151.80								7/20 102.25
	102.25	151.55		Weathered Basalt		Cl	Highly weathered, soft. Partly hard vesicular basalt is included. Tuffaceous component seems intermingling.			
103	103.00	150.80								
104	104.00	149.80								
105	105.00	148.80						105.00	9.6mm	
106	105.60	147.80								
	105.40	147.40		Basalt		Ch	Slightly weathered, vesicular, hard. Some weatherings along joints.			
107	107.00	145.80								
108	108.00	145.80		Weathered Basalt		Cl	Decomposed, soft.			
109	109.00	144.80								
110	110.00	143.80		Basalt		Ch	Fresh, hard. Vesicular in the top 40cm and the bottom 200cm. Reddish brown hard clay thinner than 10cm is intercalated between 112.4m and 113.4m. A 5cm thick yellow brown clay seam at 113.6m.	7/17		
111	111.00	142.80								
112	112.00	141.80								
113	113.00	140.80								
114	114.00	139.80								
115	115.00	138.80					Slightly weathered, vesicular. Intermingled with yellowish brown clay which appears to fill large pores in basalt. Clay inclusions are sometimes so large as to intercept basalt cores.			
116	116.00	137.80								
117	117.00	136.80						117.00		
118	118.00	135.80						7/18		
119	119.00	134.80								
120	120.00	133.80				B	Non-vesicular for the most part. Joints inclined at 45 degrees or lower angles, with white clayey fills, are at 20cm to	120.00		

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST

WATER PRESSURE TEST:
- From : 90.00 To : 95.00 Lugeon Value: 7.81 k Value: 0.0003010
- From : 95.00 To : 100.00 Lugeon Value: 8.02 k Value: 0.0001040
- From : 100.00 To : 105.00 Lugeon Value: 9.50 k Value: 0.0001230
- From : 105.00 To : 110.00 Lugeon Value: 9.85 k Value: 0.0001280
- From : 110.00 To : 115.00 Lugeon Value: 9.45 k Value: 0.0001220
- From : 115.00 To : 120.00 Lugeon Value: 8.83 k Value: 0.0001140

DRILLING LOG OF JD-103 (4/5)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

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※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

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DRILL LOG

SHEET NO.5 OF5

SITE	TRO DAMSITE	HOLE No.	JD-103
LATITUDE	LONGITUDE	ELEVATION	253.80m
DATE	1991/06/28~1991/07/22	DEPTH	150.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION	N 0°, E 90°, S 180°, W 270°
SLOPE	HORIZON 0°, 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
121	121.00	132.00					100cm intervals.			
122	122.00	131.00				B				
123	123.00	130.00								
124	124.00	129.00					Vesicular, slightly weathered, with inclusions of yellowish brown clay at about 1m intervals.	7/18		
125	125.00	128.00		Basalt						
126	126.00	127.00				Ch				
127	127.00	126.00								
128	128.00	125.80						128.00		
129	129.00	124.80								
	129.20	124.60		Hard Clay						
130	130.00	123.80					Fresh, hard, with pores. Calcareous material fills some joints.			
131	131.00	122.80								
132	132.00	121.80				Ch				
	132.30	121.50					Fresh, hard basalt intermingling with yellowish brown hard clay, which forms blocks and 2 to 5cm thick lenses.			
133	133.00	120.80								
134	134.00	119.80						7/19		
135	135.00	118.80	YOUNG LAVA						0.8. 96mm	
							Fresh, hard. Irregular mixture of vesicular parts and non vesicular parts. Steeply inclined joints develop.			
136	136.00	117.80								
137	137.00	116.80								
138	138.00	115.80				B				
139	139.00	114.80								
140	140.00	113.80		Basalt				140.00		
141	141.00	112.80								
142	142.00	111.80					Slightly weathered, hard. Intermingled with yellowish brown clay, which forms blocks of even 10cm in size.			
143	143.00	110.80								
144	144.00	109.80								
145	145.00	108.80						7/20		
146	146.00	107.80				Ch				
147	147.00	106.80								
148	148.00	105.80								
149	149.00	104.80								
150	150.00	103.80						150.00		

CORE RECOVERY % (m) 0 50 100

R.Q.D % (m) 0 50 100

WATER PRESSURE TEST 0 10 20 30 40 50

From : 120.00
To : 125.00
Lugeon Value: 8.66
k Value: 0.0001120

From : 125.00
To : 130.00
Lugeon Value: 8.03
k Value: 0.0001040

From : 130.00
To : 135.00
Lugeon Value: 8.12
k Value: 0.0001050

From : 135.00
To : 140.00
Lugeon Value: 9.63
k Value: 0.0001270

From : 140.00
To : 145.00
Lugeon Value: 8.30
k Value: 0.0001070

From : 145.00
To : 150.00
Lugeon Value: 8.56
k Value: 0.0001240

※R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
※LUGEON VALUE is 1/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

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DRILLING LOG OF JD-103 (5/5)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-27

DRILL LOG

SHEET NO.1 OF 2

SITE	TRO DAMSITE	HOLE No.	GT-4
LATITUDE	997316.31	LONGITUDE	995156.56	ELEVATION	145.24m
DATE				DEPTH	60.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION	270° N 0°, W, E, 180° S, 90°	SLOPE	HORIZON 0°, 90°	DRILLED	
						LOGGED	

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	OIL & DIAMETER	WATER LEVEL	CORE RECOVERY %	R.Q.D %	WATER PRESSURE TEST
1	1.00	145.24	ALLUVIAL	Talus Deposits		D	Brown soil with rock fragments.				100 (1.00)	0 (1.00)	
2	2.00	144.24									100 (2.00)	0 (2.00)	
3	3.00	143.24									100 (3.00)	0 (3.00)	
4	4.00	142.24									100 (4.00)	2 (4.00)	
	4.30	141.94											
5	5.00	141.24					Oolerlitic, non-vesicular, moderately weathered.				85 (5.00)	99 (5.00)	
6	6.00	140.24									100 (6.00)	17 (6.00)	
7	7.00	139.24									83 (7.00)	83 (7.00)	
8	8.00	138.24									25 (8.00)	17 (8.00)	
9	9.00	137.24				CH-CL	Vesicular basalt, highly to moderately weathered. Partly discoloured or friable. Clay at 15.3m and 15.4m.				90 (9.00)	18 (9.00)	
10	10.00	136.24									85 (10.00)	12 (10.00)	
11	11.00	135.24									100 (11.00)	66 (11.00)	
12	12.00	134.24									100 (12.00)	65 (12.00)	
13	13.00	133.24									100 (13.00)	83 (13.00)	
14	14.00	132.24									95 (14.00)	80 (14.00)	
15	15.00	131.24									100 (15.00)	96 (15.00)	From 10.00 To 15.00 Lugeon Value:0.80 k Value: 0.0000130
16	16.00	130.24									100 (16.00)	83 (16.00)	
17	17.00	129.24									100 (17.00)	80 (17.00)	
	17.60	128.64											
18	18.00	128.24				CH	Non-vesicular, fresh, hard.				95 (18.00)	78 (18.00)	
	18.20	128.04											
19	19.00	127.24				CH	Vesicular, moderately weathered, solid. White clay at 19.50m-19.55m.				100 (19.00)	83 (19.00)	
20	20.00	126.24									85 (20.00)	25 (20.00)	From 15.00 To 20.00 Lugeon Value:2.70 k Value: 0.0000870
21	21.00	125.24				CH	Black basalt, fresh, hard. Vesicular in 20.1-21.0m, 22.2-24.0m and 26.5-28.0m.				100 (21.00)	82 (21.00)	
22	22.00	124.24									100 (22.00)	89 (22.00)	
23	23.00	123.24									100 (23.00)	85 (23.00)	
24	24.00	122.24									100 (24.00)	70 (24.00)	
25	25.00	121.24									95 (25.00)	75 (25.00)	
26	26.00	120.24									70 (26.00)	70 (26.00)	
27	27.00	119.24									100 (27.00)	61 (27.00)	
28	28.00	118.24					Vesicular, discoloured, very friable.				100 (28.00)	75 (28.00)	
29	29.00	117.24				CH	Vesicular, moderately weathered, hard. Slightly discoloured.				100 (29.00)	76 (29.00)	
30	30.00	116.24	OLD LAVA (OL3)	Porphyritic Basalt							100 (30.00)	82 (30.00)	From 20.00 To 30.00 Lugeon Value:0.10 k Value: 0.0000029

*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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CONSULTING ENGINEERS, TOKYO

DRILLING LOG OF GT-4 (1/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-28

DRILL LOG

SITE	TRO DAMSITE	HOLE No.	GT-4
LATITUDE	997316.31	LONGITUDE 995156.55	ELEVATION 146.24 m
DATE			DEPTH 60.00 m
ANGLE	180° UP / DOWN 0° / 90°	DIRECTION N 0° / E 90° / S 180° / W 270°	SLOPE HORIZON 0° / 90°
			DRILLED
			LOGGED

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
31	31.00	115.24	OLD LAVA 3 (OL3)	Porphyritic Basalt		CH				
32	32.00	114.24								
	32.30	113.94								
33	33.00	113.24		Glassy Basalt		CH	Vesicular, moderately weathered to fresh. 32.5m - 33.8m Non-vesicular. 35.6m - 35.7m Friable, cracky. Amorphous silicate is formed in open cracks.			
34	34.00	112.24								
35	35.00	111.24								
36	36.00	110.24								
37	37.00	109.24		Weathered Glassy Basalt		CH	Moderately weathered basalt. Intensively weathered into brown clay near joints.			
	37.20	109.04								
38	38.00	108.24	OLD LAVA 2 (OL2)	Glassy Basalt			Fresh or slightly weathered. Weathering only in cracks. Greenish yellow stains on joint planes. A 5cm thick yellow clay at 44.70m. Vesicular in 37.2-37.8m, 42.7-43.5m, 44.1-45.2m, 46.2-48.7m, 51.0-51.7m and 52.5-52.7m.			
39	39.00	107.24								
40	40.00	106.24								
41	41.00	105.24								
42	42.00	104.24								
43	43.00	103.24								
44	44.00	102.24								
45	45.00	101.24				CH				
46	46.00	100.24								
47	47.00	99.24								
48	48.00	98.24								
49	49.00	97.24								
50	50.00	96.24								
51	51.00	95.24								
52	52.00	94.24								
	52.70	93.54					Vesicular basalt, decomposed.			
53	53.00	93.24		Weathered Glassy Basalt Hard Lava		D	Reddish brown hard clay. Shaly.			
	53.50	92.74		Weathered Glassy Basalt		CH	Moderately weathered basalt.			
54	54.00	92.24				CL	Non-vesicular, highly weathered basalt, greenish yellow gray coloured, friable.			
55	55.00	91.24								
	55.85	90.39				CH	Doleritic, non-vesicular, moderately weathered.			
57	57.00	89.24	OLD LAVA 1 (OL1)	Flow Breccia		D	Yellowish brown compact sandy silt containing rock blocks.			
58	58.00	88.24								
	58.50	87.54								
59	59.00	87.24		Weathered Basalt		CL	Vesicular basalt, highly weathered. Greenish gray, soft, friable.			
60	60.00	86.24								

CORE RECOVERY X(%) 0 50 100 | R.Q.D X(%) 0 50 100 | WATER PRESSURE TEST 0 10 20 30 40 50

From :30.00 To :40.00 Lugeon Value:0.80 k Value: 0.0000130

From :40.00 To :50.00 Lugeon Value:3.90 k Value: 0.0000590

From :50.00 To :60.00 Lugeon Value:0.10 k Value: 0.0000029

*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO

DRILLING LOG OF GT-4 (2/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

DRILL LOG

SHEET NO.1 OF 4

SITE	TRO DAMSITE	HOLE No.	JD-1
LATITUDE	996770.25 LONGITUDE 994978.88	ELEVATION	248.23m
DATE		DEPTH	120.00m
ANGLE	180° UP DOWN 0° 90°	DIRECTION	270° N 0° W E 90° 180° S
SLOPE	HORIZON 0° 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
1	1.00	247.23	ALLUVIAL	Residual Soil		D	Up to 0.85m, brown humic soil. Below 3.60m, reddish brown residual soil. Weathered, soft rock fragments are included.			
2	2.00	246.23								
3	3.00	245.23								
	3.60	244.63								
4	4.00	244.23		Weathered Basalt			Intensely weathered, light brownish grey basalt.			
5	5.00	243.23								
6	6.00	242.23								
	6.30	241.93				CL	Rock fragments of weakly weathered basalt are recovered from 6.3m to 7.8m.			
7	7.00	241.23								
	7.80	240.43								
8	8.00	240.23								
	8.20	240.03				D	Intensely weathered, light brownish grey basalt. Vesicular below 8.0m.			
9	9.00	239.23								
10	10.00	238.23		Basalt		CM	Dark grey, fresh doleritic basalt. Olivine phenocrysts are observable. Few vesicles are included.			
11	11.00	237.23								
12	12.00	236.23				CH				
13	13.00	235.23								
14	14.00	234.23								
	14.50	233.73				D	Moderately to intensely weathered, vesicular basalt. Low core recovery, Fragmental cores are recovered.			
15	15.00	233.23		Weathered Basalt						
16	16.00	232.23								
17	17.00	231.23								
18	18.00	230.23					Core loss.			
19	19.00	229.23				CL	Weakly to moderately weathered, vesicular basalt.			
20	20.00	228.23								
21	21.00	227.23								
22	22.00	226.23								
23	23.00	225.23								
	23.15	225.08				CM	From 23.15m to 26.85m, less vesicular doleritic basalt. From 24.6m to 26.25m, comparatively fresh and hard.			
24	24.00	224.23		Basalt						
	24.60	223.63				CH				
25	25.00	223.23								
26	26.00	222.23								
	26.25	221.98				CL				
27	26.85	221.38								
	27.03	221.20				D	Core loss.			
28	28.00	220.23		Flow Breccia			Moderately weathered rock. Possibly autobrecciated lava.			
29	29.00	219.23		Basalt		CM	Fine grained doleritic basalt.			
30	30.00	218.23								

CORE RECOVERY % (m) 0 50 100

R.Q.D % (m) 0 50 100

WATER PRESSURE TEST 0 10 20 30 40 50

YOUNG LAVA 4 (YL4)

*R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-1 (1/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-30

DRILL LOG

SITE	TRO DAMSITE	HOLE No.	JD-1
LATITUDE	996770.25 LONGITUDE 994978.88	ELEVATION	248.23m
DATE		DEPTH	120.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION	N 0°, E 90°, S 180°, W 270°
SLOPE	HORIZON 0°, 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
31	31.00	217.23	YOUNG LAVA 4 (YL4)	Basalt		CH	Fine grained doleritic basalt. Comparatively hard and less vesicular below 30.4m.
32	32.00	216.23					
33	33.00	215.23					
34	34.00	214.23					
35	35.00	213.23		Hard Clay		D	Reddish brown hard clay. Up to 34.5m, lapilli tuff like texture is observable.
36	36.00	212.23					
37	37.00	211.23					
38	37.55	210.68					
	38.00	210.23				CL	Weakly to moderately weathered, doleritic basalt. Light brownish grey, weathered rock fragments are included from 37.5m to 38.3m.
39	38.65	209.58					
	39.00	209.23		Weathered Basalt			
40	40.00	208.23					
41	41.00	207.23					
42	42.00	206.23		Flow Breccia		D	Intensely weathered, vesicular basalt. Fragmental cores are recovered. Supposed to be autobrecciated lava.
43	43.00	205.23					
44	44.00	204.23					
	44.40	203.83		Basalt		CM	Comparatively fresh, less vesicular doleritic basalt.
45	45.00	203.23					
46	45.99	202.24					
	45.35	201.88					
47	47.00	201.23	YOUNG LAVA 3 (YL3)	Weathered Basalt		CL	Moderately weathered, light grey to brownish grey vesicular basalt. Fragmental and short cylindric cores are recovered.
48	48.00	200.23					
49	49.00	199.23					
	49.25	198.98					
50	50.00	198.23		Basalt		CM	Less vesicular, doleritic basalt.
	50.30	197.93					
	50.70	197.53					Weakly and moderately weathered, vesicular basalt Partially leached to light brownish grey. Mostly recovered as short cylindric cores.
51	51.00	197.23		Weathered Basalt		CL	
52	52.00	196.23					
53	53.00	195.23					
54	54.00	194.23					
55	55.00	193.23					
55	55.80	192.43					
57	57.00	191.23		Basalt		CM	Weakly weathered vesicular basalt.
58	59.00	190.23					
59	59.05	189.28					
60	60.00	188.23					

WATER LEVEL: 14/8 44.40; 26/1 45.99

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST

Upper Depth : 54.00
Lower Depth : 60.00
Lugeon Value: 6.10
k Value: 0.0000E20

*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-1 (2/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-31

DRILL LOG

SHEET NO.3 OF 4.

SITE	TRO DAMSITE	HOLE No.	JD-1
LATITUDE	996770.25 LONGITUDE 994978.88	ELEVATION	248.23m
DATE		DEPTH	120.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION	N 0°, E 90°, S 180°, W 270°
SLOPE	HORIZON 0°, 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
61	60.96	187.39	YOUNG LAVA 3 (YL3)	Basalt		CM	
62	62.00	186.23		Weathered Basalt			Moderately weathered vesicular basalt. Vesicles are filled with white clay. Low core recovery below 62.0m.
63	63.00	185.23					
	63.50	184.73				CL	
64	64.00	184.23		Lapilli Tuff			Dark grey, lapilli size rubbles of basalt are filled with cream colored tuffaceous material.
	64.40	183.83					
65	65.00	183.23					Dark grey, fine grained doleritic basalt.
66	66.00	182.23		Basalt		CH	
67	67.00	181.23					
	67.80	180.43					
68	68.00	180.23					
69	69.00	179.23		Hard Clay		D	Reddish brown, consolidated clay. From 67.8m to 68.2m, texture of autobrecciated lava is observed.
70	70.00	178.23					
71	71.00	177.23		Weathered Basalt		CL	Moderately weathered vesicular basalt. Short cylindric cores are recovered.
72	72.00	176.23					
73	73.00	175.23					
74	74.00	174.23					
75	75.00	173.23					
76	76.00	172.23					
	76.75	171.48					
77	77.00	171.23		Basalt		CM	Compact and hard, less vesicular fresh basalt.
78	77.65	170.58					
	78.00	170.23		Weathered Basalt		CL	Moderately weathered vesicular basalt.
79	79.00	169.23					
80	80.00	168.23		Basalt		CM	Fresh to weakly weathered doleritic basalt. Compact and hard, partially vesicular.
	80.30	167.93					
81	81.00	167.23				CH	
82	82.00	166.23					
	82.55	165.68					
83	83.00	165.23		Weathered Basalt		CL	Moderately weathered, small spheluritic vesicles bearing, doleritic basalt. Cores are partially broken into fragments.
84	84.00	164.23					
85	85.00	163.23					
86	86.00	162.23					
87	87.00	161.23					
	87.30	160.93					
88	88.00	160.23		Basalt		CM	Fresh to weakly weathered doleritic basalt. Vesicular below 90.2m.
89	89.00	159.23				CH	
90	90.00	158.23					

BIT & DIAMETER	WATER LEVEL	CORE RECOVERY % (m)	R.Q.D % (m)	WATER PRESSURE TEST
		0 50 100	0 50 100	0 10 20 30 40 50
		100 (61.00)	53 (61.00)	
		100 (62.00)	34 (62.00)	
		50 (63.00)	0 (63.00)	
		50 (64.00)	0 (64.00)	Upper Depth : 60.00 Lower Depth : 65.00 Lugeon Value: 28.80 k Value: 0.0003730
		90 (65.00)	0 (65.00)	
		100 (66.00)	73 (66.00)	
		100 (67.00)	78 (67.00)	
		100 (68.00)	34 (68.00)	
		100 (69.00)	0 (69.00)	Upper Depth : 66.00 Lower Depth : 70.00 Lugeon Value: 23.30 k Value: 0.0002870
		100 (70.00)	0 (70.00)	
		100 (71.00)	13 (71.00)	
		100 (72.00)	0 (73.00)	
		100 (73.00)	0 (73.00)	
		100 (74.00)	0 (74.00)	
		70 (75.00)	0 (75.00)	Upper Depth : 70.00 Lower Depth : 75.00 Lugeon Value: 17.30 k Value: 0.0002390
		80 (76.00)	0 (76.00)	
		90 (77.00)	10 (77.00)	
		100 (78.00)	54 (79.00)	
		50 (79.00)	0 (79.00)	Upper Depth : 75.00 Lower Depth : 80.00 Lugeon Value: 0.00 k Value: 0.0000000
		100 (80.00)	49 (80.00)	
		60 (81.00)	69 (81.00)	
		50 (82.00)	47 (82.00)	Upper Depth : 80.00 Lower Depth : 82.00 Lugeon Value: 0.00 k Value: 0.0000000
		100 (83.00)	35 (83.00)	
		100 (84.00)	0 (84.00)	
		100 (85.00)	0 (85.00)	
		100 (86.00)	44 (86.00)	
		30 (87.00)	0 (87.00)	
		80 (88.00)	55 (88.00)	
		100 (89.00)	100 (89.00)	Upper Depth : 82.00 Lower Depth : 90.00 Lugeon Value: 0.10 k Value: 0.0000008
		70 (90.00)	75 (90.00)	

*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%

*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2

*DEPTH and ELEVATION are in meter

*DIAMETER is in millimeter

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DRILLING LOG OF JD-1 (3/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-32

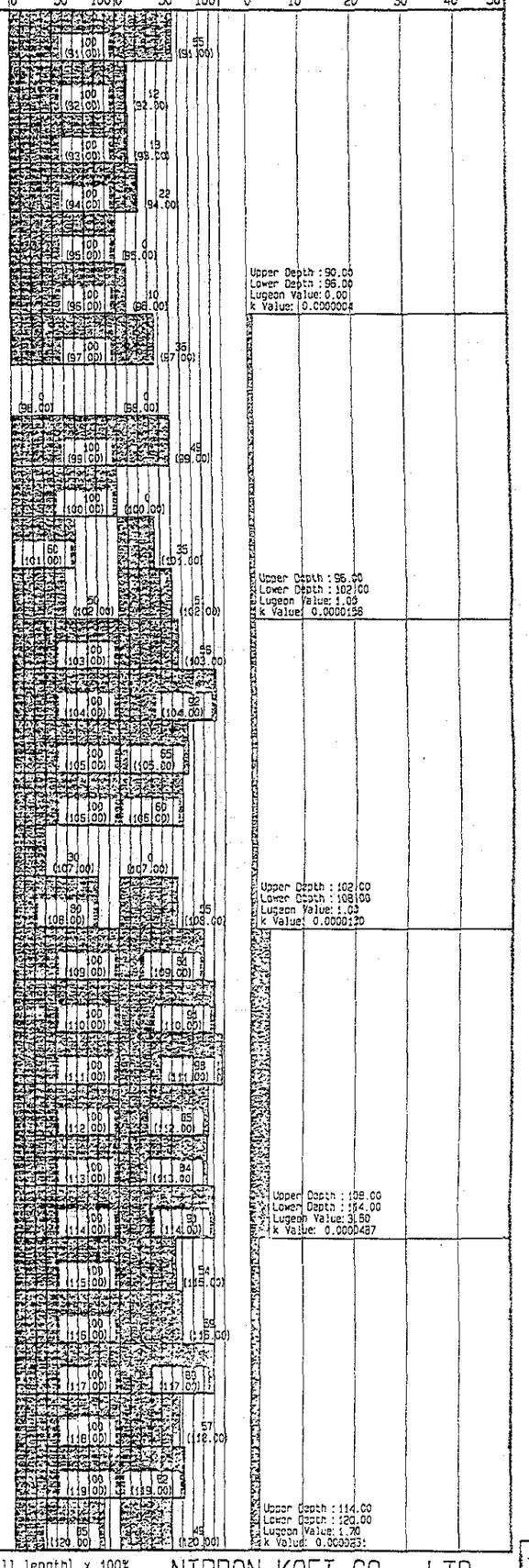
DRILL LOG

SHEET NO.4 OF4

SITE	TRO DAMSITE	HOLE No.	JD-1
LATITUDE	996770.25	LONGITUDE 994978.88	ELEVATION 248.23m
DATE			DEPTH 120.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION N 0° / W 270° / E 90° / S 180°	SLOPE HORIZON 0° / 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
	90.25	157.98	YOUNG LAVA 2 (YL2)	Basalt		CH	
91	91.00	157.23				CM	
	91.55	156.68					
92	92.00	156.23		Weathered Basalt		CL	Moderately to intensely weathered vesicular basalt. Partially earthy cores are recovered.
93	93.00	155.23					
94	94.00	154.23					
95	95.00	153.23					
96	96.00	152.23					
97	97.00	151.23		Basalt		CM	Fresh doleritic basalt.
98	98.00	150.23					Core loss.
99	99.00	149.23					Comparatively fresh doleritic basalt. Vesicular and cracky below 98.8m.
	99.70	148.53				CL	
100	100.00	148.23		Flow Breccia		D	Autobrecciated lava.
	100.35	147.88					
101	101.00	147.23		Basalt		CM	Weakly weathered to fresh doleritic basalt. Some large irregular vesicles are included up to 102.0m. Below 102.0m, compact and very hard.
102	102.00	146.23					
103	103.00	145.23					
104	104.00	144.23				CH	
105	105.00	143.23					
106	106.00	142.23					
	106.20	142.03		Weathered Basalt		CL	Reddish brown, moderately weathered vesicular basalt.
107	106.86	141.37					
108	108.00	140.23				CM	Weakly weathered, vesicular basalt. Abundant in irregular vesicles. Some vesicles are filled with opale and white clayey material.
	108.80	139.43					
109	109.00	139.23	YOUNG LAVA 1 (YL1)	Basalt		CH	Weakly weathered, less vesicular doleritic basalt.
110	110.00	138.23					
111	111.00	137.23					
112	112.00	136.23					
113	113.00	135.23					
114	114.00	134.23					
	114.66	133.57				CM	Weakly weathered vesicular basalt. Partially brecciated, and breccias are filled with yellowish brown clayey material.
115	115.00	133.23					
116	116.00	132.23					
117	117.00	131.23					
118	118.00	130.23					
119	119.00	129.23					
120	120.00	128.23					

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST



*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-1 (4/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-33

DRILL LOG

SHEET NO. 1 OF 4

SITE	TRO DAMSITE	HOLE No.	JD-2
LATITUDE	996913.69 LONGITUDE 994913.25	ELEVATION	248.23m
DATE		DEPTH	120.00m
ANGLE	180° UP / DOWN 0° / 90°	DIRECTION	N 0° / E 90° / S 180° / W 270°
SLOPE	HORIZON 0° / 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
1	1.00	247.23	ALLUVIAL	Residual Soil		D	Reddish brown residual soil. Weathered, soft rock fragments are included.
2	2.00	245.23					
3	3.00	245.23	YOUNG LAVA 4 (YL4)	Weathered Basalt		D	Intensely weathered, light brownish grey basalt. Rock fragments of weakly weathered basalt are recovered.
4	4.00	244.23					
	4.50	243.73					
5	5.00	243.23				CL-D	Moderately to intensely weathered vesicular basalt.
6	6.00	242.23					
7	7.00	241.23					
8	8.00	240.23					
9	9.00	239.23					
	9.50	238.73					
10	10.00	238.23		Basalt		CM	Weakly weathered less vesicular basalt. Partially weathered to light brownish grey.
	10.15	238.08				CL-D	
	10.60	237.63					
11	11.00	237.23				CM	
12	12.00	236.23		Weathered Basalt			Cracky weathered basalt. Olivine phenocrysts are observable. Few vesicles are included.
13	13.00	235.23				CL	
14	14.00	234.23					
	14.50	233.73					
15	15.00	233.23		Basalt		CM	Slightly weathered less vesicular doleritic basalt.
16	16.00	232.23					
17	17.00	231.23					
18	18.00	230.23		Weathered Basalt		CL-CM	Weakly to moderately weathered, less vesicular basalt.
	18.50	229.73					
19	19.00	229.23				CM	
20	20.00	228.23					
21	21.00	227.23					
	21.50	226.73					
22	22.00	226.23					
23	23.00	225.23		Basalt		CM	Weakly weathered to fresh, less vesicular basalt. Compact and hard.
24	24.00	224.23					
25	25.00	223.23					
26	26.00	222.23					
	26.20	222.03		Weathered Basalt			From 26.2m to 27.25m, less vesicular, moderately weathered basalt.
27	27.00	221.23				CM	
	27.25	220.98		Flow Breccia			Flow breccia. Reddish brown basaltic rubbles are filled with cream colored tuffaceous consolidated matrix.
28	28.00	220.23					
29	29.00	219.23					
30	30.00	218.23					

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST

*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-2 (1/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-34

DRILL LOG

SITE	TRO DAMSITE	HOLE No.	JD-2
LATITUDE	996913.69 LONGITUDE 994913.25	ELEVATION	248.23m
DATE		DEPTH	120.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION	N 0° / E 90° / S 180° / W 270°
SLOPE	HORIZON 0° / 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
31	31.00	217.23	YOUNG LAVA 4 (YL4)	Flow Breccia		CM	Flow breccia. Reddish brown basaltic rubbles are filled with cream colored tuffaceous consolidated matrix.
32	32.00	216.23					
	32.25	215.98				CL-D	Core loss.
33	33.00	215.23					
34	34.00	214.23					Flow breccia. Partially weathered up to 35.3m.
	34.70	213.53				CL	
35	35.00	213.23					
36	36.00	212.23					
	36.30	211.93					Core loss.
37	37.00	211.23				CM	Consolidated flow breccia. Fine basalt fragments are included in tuffaceous matrix.
38	38.00	210.23					
39	39.00	209.23		Hard Clay		CL	Yellowish brown to brown, hard clay.
40	40.00	209.23				D	
41	41.00	207.23					
42	42.00	206.23		Weathered Basalt			Intensely weathered vesicular basalt.
	42.70	205.53					
43	43.00	205.23		Basalt		CM	Weakly weathered, less vesicular basalt.
	43.60	204.63					
44	44.00	204.23		Weathered Basalt		D	Intensely weathered vesicular basalt. Earthy cores are recovered.
45	45.00	203.23				CL-D	
	45.75	202.48				CH	Weakly weathered to fresh, less vesicular doleritic basalt. Discolorized along cracks.
46	46.00	202.23					
47	47.00	201.23					
48	48.00	200.23					
49	48.98	199.23				CL-D	Moderately weathered vesicular basalt. brownish grey. Fragmental and short cylindric cores are recovered. Weakly weathered from 50.0m to 50.5m.
50	50.00	198.23					
51	51.00	197.23				CL	
52	52.00	196.23					
53	53.00	195.23					
	53.40	194.83					
54	54.00	194.23		Basalt		CM	Weakly weathered, less vesicular basalt. Cracks are coated with white calcareous film.
55	55.00	193.23					
	55.55	192.68					
56	56.00	192.23		Weathered Basalt		CL-D	Intensely weathered vesicular basalt. Mostly recovered as fragmental to earthy cores.
57	57.00	191.23					
58	58.00	190.23		Basalt		CM-CH	Slightly weathered vesicular basalt. Partially weathered along cracks.
59	59.00	189.23					
	59.20	189.03					Slightly weathered, less vesicular, compact basalt.
60	60.00	188.23					

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST

Upper Depth : 55.00
Lower Depth : 60.00
Lugeon Value: 7.60
K Value: 0.000011

※R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO

DRILLING LOG OF JD-2 (2/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-35

DRILL LOG

SITE	TRO DAMSITE			HOLE No.	JD-2
LATITUDE	996913.69	LONGITUDE	994913.25	ELEVATION	248.23m
DATE				DEPTH	120.00m
ANGLE	180° UP / DOWN 0° / 90°	DIRECTION	N 0° / W 270° / E 90° / S 180°	SLOPE	HORIZON 0° / 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
	60.50	187.73	YOUNG LAVA 3 (YL3)	Basalt		CM-CH	
61	61.00	187.23		Weathered Basalt		D-CL	Brownish grey, intensely weathered basalt. Partially supposed to be flow breccia.
62	62.00	186.23					
	62.50	185.73					
63	63.00	185.23		Basalt		CH	Dark grey, fine grained doleritic basalt. Fresh, compact and hard. Some large, irregular vesicles are included.
64	64.00	184.23					
65	65.00	183.23					
	65.00	182.23					
	66.55	181.68					
67	67.00	181.23		Weathered Basalt		CL	Weathered basalt.
	67.50	180.73		Basalt			Slightly weathered less vesicular doleritic basalt.
68	68.00	180.23					
	68.70	179.53		Weathered Basalt		CL-D	Discolorized, intensely weathered rock. From 68.7 to 69.45m, grey mudstone like clayey rock with vitreous luster.
69	69.00	179.23		Hard Clay			
	69.45	178.78					
70	70.00	178.23		Weathered Basalt			
	70.23	178.00					
71	71.00	177.23					
	71.50	176.63					
72	72.00	176.23		Basalt		CL	Black fine grained olivine rich basalt. Compact, hard. Cracks are coated with yellowish brown clayey film.
73	73.00	175.23				CH	
74	74.00	174.23					
75	75.00	173.23					
76	76.00	172.23					
	76.70	171.53					
77	77.00	171.23					
	77.45	170.78				CL	Moderately, weathered vesicular basalt. Below 79.6m, reddish brown, soft earthy cores are recovered.
78	78.00	170.23	YOUNG LAVA 2 (YL2)	Weathered Basalt		CM	
79	79.00	169.23					
	79.75	169.48				CL	Moderately weathered vesicular basalt. Mostly recovered as short cylindric cores.
80	80.00	168.23					
81	81.00	167.23					
82	82.00	166.23					
83	83.00	165.23					
	83.70	164.53					
84	84.00	164.23		Basalt		CH	Fresh doleritic basalt. Up to 85.5m, vesicles of various size make flow structure. Below 85.5m, less vesicular and compact.
85	85.00	163.23					
86	86.00	162.23					
87	87.00	161.23					
88	88.00	160.23					
	88.40	159.83				CM	
89	89.00	159.23					
90	90.00	158.23					

DATE | BIT & DIAMETER | WATER LEVEL: 3/9 70.23

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST

Upper Depth : 60.00
Lower Depth : 65.00
Lugeon Value: 44.10
k Value: 0.0005710

Upper Depth : 65.00
Lower Depth : 70.00
Lugeon Value: 3.20
k Value: 0.0000415

Upper Depth : 70.00
Lower Depth : 75.00
Lugeon Value: 6.10
k Value: 0.0000789

Upper Depth : 75.00
Lower Depth : 80.00
Lugeon Value: 22.30
k Value: 0.0002890

Upper Depth : 80.00
Lower Depth : 85.00
Lugeon Value: 3.10
k Value: 0.0003464

*R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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CONSULTING ENGINEERS, TOKYO

DRILLING LOG OF JD-2 (3/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-36

DRILL LOG

SHEET NO.4 OF 4

SITE	TRO DAMSITE	HOLE No.	JD-2
LATITUDE	996913.69	LONGITUDE 994913.25	ELEVATION 248.23m
DATE			DEPTH 120.00m
ANGLE	180° UP / DOWN 0°, 90°	DIRECTION N 0° E 90° S 180° W 270°	SLOPE HORIZON 0° / 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
91	91.00	157.23	YOUNG LAVA 2 (YL2)	Basalt		CM	
	91.30	156.93					Weakly weathered vesicular basalt. Cracks and vesicles are coated with white powdery material.
92	92.00	156.23					
93	93.00	155.23					
94	94.00	154.23					Fresh doleritic basalt. Some spheluritic vesicles are included.
95	95.00	153.23					
96	96.00	152.23					
97	97.00	151.23		Weathered Basalt		CL	Weakly to moderately weathered, vesicular basalt. Partially flow-breccia-like texture is observed.
98	98.00	150.23					
99	99.00	149.23					
100	100.00	148.23					
	100.20	149.03					
101	101.00	147.23		Basalt		CM	Slightly weathered doleritic basalt. Vesicles and cracks are coated with white powdery material. In some vesicles, egg-shaped opals are observed.
102	102.00	145.23					
103	103.00	145.23					
	103.80	144.43					
104	104.00	144.23		Hard Clay		CL-D	Altered to grey clayey rock.
	104.50	143.73		Weathered Basalt			Moderately weathered in general, partially intensely weathered vesicular basalt.
105	105.00	143.23					
106	106.00	142.23					
107	107.00	141.23					
108	108.00	140.23					
	108.20	140.03					
109	109.00	139.23		Basalt		CM	Slightly weathered less vesicular doleritic basalt. From 109.7 to 110.0m, weathered along cracks.
110	110.00	138.23					
111	111.00	137.23					
	111.55	136.68					
112	112.00	136.23				CM-CL	Vesicular basalt. Some weathered parts are supposed to be flow breccia. Some cracks are coated with cream colored film.
113	113.00	135.23					
	113.30	134.93					
114	114.00	134.23				CM	
115	115.00	133.23					
116	116.00	132.23					
117	117.00	131.23					
	117.60	130.63					
118	118.00	130.23				CL-D	Core loss.
	118.15	130.08					
119	119.00	129.23					
	119.45	128.78					
120	120.00	128.23				CM	Slightly weathered vesicular basalt.

25/1 111.63 ▽

CORE RECOVERY % (m) 0 50 100

R.Q.D % (m) 0 50 100

WATER PRESSURE TEST 0 10 20 30 40 50

Upper Depth : 90.00
Lower Depth : 95.00
Lugeon Value: 6.80
k Value: 0.0000885

Upper Depth : 95.00
Lower Depth : 102.00
Lugeon Value: 7.40
k Value: 0.0000991

Upper Depth : 102.00
Lower Depth : 108.00
Lugeon Value: 6.20
k Value: 0.0001100

Upper Depth : 108.00
Lower Depth : 114.00
Lugeon Value: 15.90
k Value: 0.0002050

Upper Depth : 114.00
Lower Depth : 120.00
Lugeon Value: 19.00
k Value: 0.0002550

*R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-2 (4/4)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-37

DRILL LOG

SHEET NO.1 OF2

SITE	TRO DAMSITE	HOLE No.	JD-3
LATITUDE	997509.63	LONGITUDE 995037.88	ELEVATION 167.46m
DATE			DEPTH 40.00m
ANGLE	UP 180° / DOWN 0° / 90°	DIRECTION N 0° / E 90° / S 180° / W 270°	SLOPE HORIZON 0° / 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
	0.60	166.66	ALUVI-AL	Top Soil		D	Brownish grey soil
1	1.00	166.46	YOUNG LAVA 2 (YL2)	Weathered Basalt		CM	Vesicular, slightly weathered. Doleritic. Water stains and orange colored clay are in cracks.
2	2.00	165.46					
3	3.00	164.46					
4	4.00	163.46					
5	4.80	162.66		Basalt		CH	Non-vesicular, fresh, hard. Cracks are frequently open with white clay mineral and brown stains. Generaly solid rock.
	5.00	162.46					
	5.50	161.96					
6	6.00	161.46					
7	7.00	160.46					
8	8.00	159.46					
9	8.80	158.66					Vesicular basalt.
	9.00	158.46					
	9.70	157.76					Rock fragments are filled with white clay.
10	10.00	157.46		Flow Breccia		CH	
	10.20	157.26					Vesicular basalt.
11	11.00	156.46					
12	12.00	155.46					Compact doleritic basalt.
13	13.00	154.46					
14	14.00	153.46					
	14.70	152.76					
15	15.00	152.46					Vesicular in general, and non-vesicular only in 16.6m-17.5m. Moderately weathered. Cracky with wide open cracks filled with white dolomitic veins. Reddish brown stains in joints.
	15.20	152.26					
16	16.00	151.46		Basalt		CL	
17	17.00	150.46					
18	18.00	149.46				CM	
	18.70	148.76		Flow Breccia		CL	Fragmental cores are recovered. Supposed to be flow breccia.
19	19.00	148.46				CM	Fresh, hard. Vesicular between 20.0m and 21.2m.
20	20.00	147.46					
21	21.00	146.46				CH	
22	22.00	145.46					
23	23.00	144.46					
24	24.00	143.46					
25	25.00	142.46					
26	26.00	141.46					
	26.20	141.26					
	26.80	140.66				CM	
27	27.00	140.46		Flow Breccia		CL	Weathered but hard around cracks in 26.6-28.0m. Silty material at 28.0-28.1m.
28	28.00	139.46					
	28.80	138.66	YOUNG LAVA 1 (YL1)	Basalt		CM	Fresh, doleritic basalt.
29	29.00	138.46				CH	
30	30.00	137.46					

DATE / BIT & DIAMETER / WATER LEVEL

CORE RECOVERY % (m) / R.Q.D % (m) / WATER PRESSURE TEST

Upper Depth : 2.00
Lower Depth : 5.00
Lugeon Value: 129.10
k Value: 0.0015400

Upper Depth : 5.00
Lower Depth : 10.00
Lugeon Value: 22.20
k Value: 0.0002980

Upper Depth : 10.00
Lower Depth : 15.00
Lugeon Value: 31.40
k Value: 0.0004180

Upper Depth : 15.00
Lower Depth : 20.00
Lugeon Value: 23.30
k Value: 0.0003110

Upper Depth : 20.00
Lower Depth : 25.00
Lugeon Value: 8.50
k Value: 0.0001130

Upper Depth : 25.00
Lower Depth : 30.00
Lugeon Value: 22.10
k Value: 0.0002940

*R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-3 (1/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-38

DRILL LOG

SHEET NO.2 OF2

SITE	TRO DAMSITE	HOLE No.	JD-3
LATITUDE	997509.63	LONGITUDE 995037.88	ELEVATION 167.46m
DATE			DEPTH 40.00m
ANGLE	180° UP / DOWN 0° / 90°	DIRECTION (N 0° / W 270° / E 90° / S 180°)	SLOPE HORIZON 0° / 90°

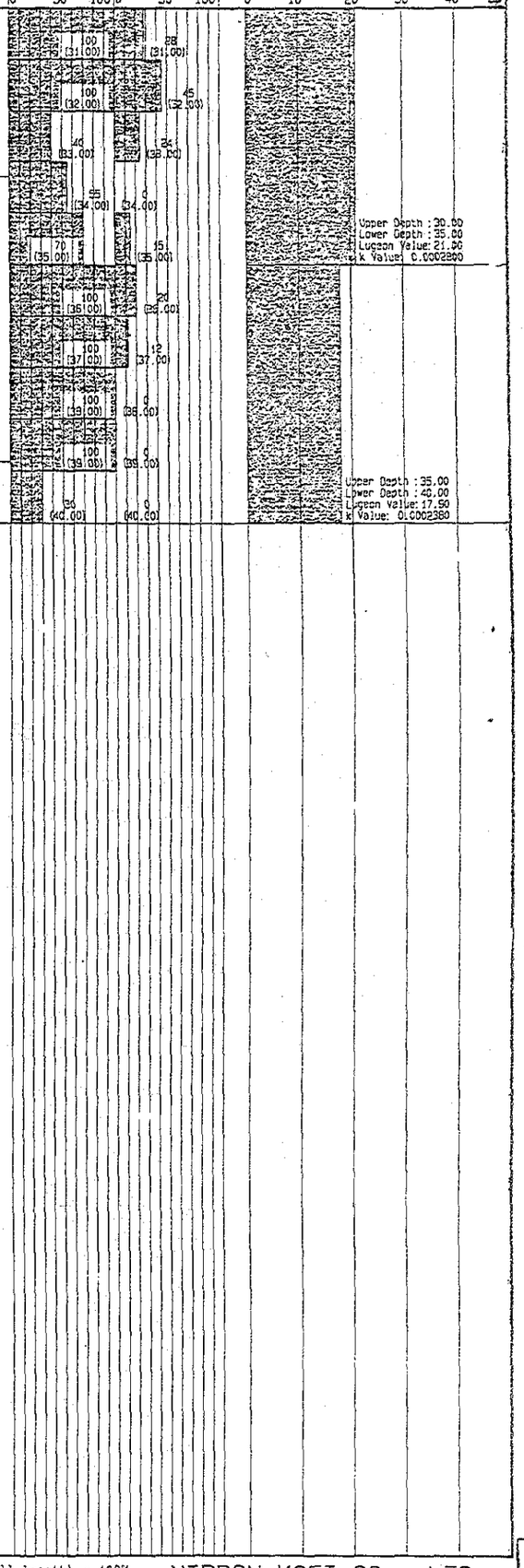
SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
	30.30	137.16	YOUNG LAVA 1 (YL1)	Basalt		CH	
31	31.00	136.46		Weathered Basalt		CM	Moderately weathered vesicular basalt.
32	32.00	135.46		Basalt		CH	Slightly weathered to fresh basalt.
	32.30	135.16		Hard Clay		D	Reddish brown shaly hard clay.
33	33.00	134.46	OLD LAVA 3				
	33.30	134.16		Porphyritic Basalt		CL-D	Highly weathered into brown or yellow brown clayey material. Compact, dense. Partly moderately hard rock, but soft and discoloured in general.
34	34.00	133.46					
35	35.00	132.46					
36	36.00	131.46					
37	37.00	130.46					
38	38.00	129.46					
39	38.82	128.64					
	39.00	128.46					
40	40.00	127.46					
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							

DATE | BIT & DIAMETER | WATER LEVEL

16/11 33.30

25/1 38.82

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST



*R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

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DRILLING LOG OF JD-3 (2/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-39

DRILL LOG

SHEET NO.1 OF2

SITE	TRO DAMSITE	HOLE No.	JD-4
LATITUDE	997225.44	LONGITUDE 995140.06	ELEVATION 186.41m
DATE			DEPTH 50.00m
ANGLE	132° 55° DOWN 45° 90°	DIRECTION N 0° E 90° S 180° W 270°	SLOPE HORIZON 0° 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
1	1.00	185.41	ALLUVIAL	Talus Deposits			Including boulders.			
2	2.00	184.41								
3	3.00	183.41								
4	4.00	182.41								
5	5.00	181.41								
6	5.55	180.86								
7	6.35	179.51	YOUNG LAVA 2 (YL2)	Basalt		CH	Vesicular basalt. Fresh, hard.			
8	8.00	178.41				CH-B	Not vesicular, doleritic. Hard, solid. Cracks brown water-stained in 8.95-9.70m.			
9	9.00	177.41								
10	10.00	176.41								
11	11.00	175.41								
12	12.00	174.41								
13	13.00	173.41		Weathered Basalt		CM	Vesicular, moderately weathered, cracky.			
14	14.00	172.41								
15	15.00	171.41		Basalt		B	Fresh, hard. Vesicular in the upper half thickness.			
16	15.70	170.71								
17	17.00	169.41		Weathered Basalt		CL	Vesicular, highly weathered. Frequent core-losses. Recovered cores are moderately hard and fragmental.			
18	18.00	168.41								
19	19.00	167.41								
20	20.00	166.41								
21	21.00	165.41								
22	22.00	164.41								
23	23.00	163.41								
24	24.00	162.41		Basalt		CH-B	Non-vesicular doleritic basalt with only sparse pores. Solid.			
25	25.00	161.41								
26	26.00	160.41								
	26.40	160.01								
27	27.00	159.41		Flow Breccia		CH	Fragments of vesicular basalt are recovered. Supposed to be flow breccia.			
	27.60	158.81								
28	28.00	158.41		Weathered Basalt		CL	Recovered cores are moderately hard.			
29	29.00	157.41		Basalt		CH	Mostly non-vesicular, fresh, hard. Soft brown clay seam at 28.6m.			
	29.05	156.76								
30	30.00	155.41		Weathered Basalt		CL				

CORE RECOVERY % (m) 0 50 100

R.Q.D % (m) 0 50 100

WATER PRESSURE TEST 0 10 20 30 40 50

Upper Depth : 0.00
Lower Depth : 5.00
Lugeon Value: 54.60
k Value: 0.0012270

Upper Depth : 5.00
Lower Depth : 10.00
Lugeon Value: 53.10
k Value: 0.0006750

Upper Depth : 10.00
Lower Depth : 15.00
Lugeon Value: 35.20
k Value: 0.0004650

Upper Depth : 15.00
Lower Depth : 20.00
Lugeon Value: 80.60
k Value: 0.0033170

Upper Depth : 20.00
Lower Depth : 25.00
Lugeon Value: 25.90
k Value: 0.0003450

Upper Depth : 25.00
Lower Depth : 30.00
Lugeon Value: 21.20
k Value: 0.0002540

※R.Q.D is Rock Quality Designation. R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

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DRILLING LOG OF JD-4 (1/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-40

DRILL LOG

SHEET NO.2 OF2

SITE	TRO DAMSITE	HOLE No.	JD-4
LATITUDE	997226.44	LONGITUDE 995140.05	ELEVATION 186.41m
DATE			DEPTH 50.00m
ANGLE	180° UP, DOWN 0°, 90°	DIRECTION N 0°, E 90°, S 180°, W 270°	SLOPE HORIZON 0°, 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL	CORE RECOVERY % (m)	R.Q.D % (m)	WATER PRESSURE TEST
31	31.00	155.41	YOUNG LAVA 2 (YL2)	Weathered Basalt		CL	Vesicular basalt, highly weathered. Cores are fragmental and low in recovery including brown clay.				0 50 100	0 50 100	0 10 20 30 40 50
32	31.80	154.61											
33	33.00	153.41		Basalt		CH	Vesicular, fresh, hard. Cracks are water-stained or with yellowish white silt.						Upper Depth : 33.00 Lower Depth : 35.00 Lugeon Value: 19.80 k Value: 0.0005850
34	34.00	152.41											
35	35.00	151.41											
36	36.00	150.41											
37	37.00	149.41		Weathered Basalt		CL	Vesicular, highly weathered. Core recovery fragmental and poor.						
	37.30	149.11											
38	38.00	148.41		Basalt		B	Vesicular at the top and the bottom. Fresh, silid.						
39	39.00	147.41											
40	40.00	146.41		Weathered Basalt		CM	Vesicular, moderately weathered basalt.						Upper Depth : 35.00 Lower Depth : 40.80 Lugeon Value: 17.50 k Value: 0.0002340
	40.30	146.11											
41	41.00	145.41		Flow Breccia		CL	Rubbles of basalt are filled with reddish brown clay.						
42	42.00	144.41		Basalt		CH-B	Non-vesicular, doleritic basalt. Slightly weathered, solid. Vesicular only at tha top 1.3m section.			16/11 42.42			
	42.42	143.99											
43	43.00	143.41											
44	44.00	142.41											
45	45.00	141.41											Upper Depth : 45.00 Lower Depth : 45.00 Lugeon Value: 13.00 k Value: 0.0001730
46	46.00	140.41											
47	47.00	139.41											
48	48.00	138.41											
49	49.00	137.41		Weathered Basalt		CM	Vesicular, moderately weathered. White clay and calcareous material in cracks and pores.						
	49.40	137.01		Flow Breccia		CL	Brecciated. Supposed to be flow breccia.			23/11 50.00			Upper Depth : 45.00 Lower Depth : 50.00 Lugeon Value: 19.40 k Value: 0.0002690
50	50.00	135.41											
51													
52													
53													
54													
55													
56													
57													
58													
59													
60													

※R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) × 100%
※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMTER is in millimeter

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DRILLING LOG OF JD-4 (2/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-41

DRILL LOG

SHEET NO.1 OF2

SITE	TRO DAMSITE	HOLE No.	JD-5
LATITUDE	997304.63	LONGITUDE 994987.94	ELEVATION 167.55m
DATE			DEPTH 50.00m
ANGLE	180° UP, DOWN 0°, 90°	DIRECTION N 0°, E 90°, S 180°, W 270°	SLOPE HORIZON 0°, 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
1	1.00	165.55	ALLUVIAL	Talus Deposits			Organic soil and basalt blocks.			
2	2.00	165.55								
3	3.00	164.55								
4	4.00	163.55								
5	5.00	162.55								
6	6.00	161.55								
7	7.00	160.55								
8	8.00	159.55								
9	9.00	158.55								
10	10.00	157.55								
11	11.00	156.55								
12	12.00	155.55								
13	13.00	154.55	YOUNG LAVA 1 (YL1)	Weathered Basalt		CL-D	Highly weathered basalt. With much core loss, only hard portions are recovered.			
14	14.00	153.55								
15	15.00	152.55								
16	16.00	151.55								
17	17.00	150.53								
18	18.00	149.53		Basalt		CH	Doleritic, slightly weathered to fresh. Weathering is seen in cracks. Vesicular below 18.3m.			
19	19.00	148.55								
	19.40	148.15								
20	20.00	147.55		Weathered Basalt		CM	Vesicular, moderately weathered. Core samples are fragmental.			
21	21.00	146.55								
22	22.00	145.55								
23	23.00	144.55		Basalt		B	Vesicular, doleritic basalt. Fresh and solid.			
24	24.00	143.55								
	24.50	143.05								
25	25.00	142.55					Non-vesicular, doleritic, solid.			
26	26.00	141.55								
27	27.00	140.55								
28	28.00	139.55				CH	Vesicular basalt, gradually weathered downward to moderately hard or soft rock with reddish brown stains in cracks. Cores are fragmental at the bottom.			
29	29.00	138.55								
30	30.00	137.55	PYROCLASTIC FLOW (YL0)	Flow Breccia		CL	Sections of core-loss and weathered basalt alternate. The basalt cores are moderately to highly weathered, some			

CORE RECOVERY % (m) 0 50 100 | R.Q.D % (m) 0 50 100 | WATER PRESSURE TEST 0 10 20 30 40 50

※R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

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DRILLING LOG OF JD-5 (1/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-42

DRILL LOG

SHEET NO.2 OF2

SITE	TRO DAMSITE	HOLE No.	JD-5
LATITUDE	997304.63	LONGITUDE 994987.94	ELEVATION 157.55m
DATE			DEPTH 50.00m
ANGLE	180° UP DOWN 0° 90°	DIRECTION N 0° E 90° S 180° W 270°	SLOPE HORIZON 0° 90°

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION	DATE	BIT & DIAMETER	WATER LEVEL
31	31.00	126.55	PYROCLASTIC FLOW (VLO)	Flow Breccia		CL	vesicular and others not. Core losses in 28.9-30.00m, 31.00-32.00m and 32.70-34.40m.			
32	32.00	125.55								
33	33.00	124.55								
34	34.00	123.55								
35	34.65	122.90								
	35.50	122.05					Porphyritic, highly weathered. Yellowish gray, moderately hard. Less weathered downward.			
36	36.00	121.55								
37	37.00	120.55								
38	38.00	119.55								
39	39.00	118.55								18/12 39.53
	39.53	118.02								
40	40.00	117.55								
41	41.00	116.55								28/1 41.88
	41.55	116.00								
42	42.00	115.55	OLD LAVA 3 (OL3)	Porphyritic Basalt		CH-CL				
43	43.00	114.55								
44	44.00	113.55								
45	45.00	112.55								
46	46.00	111.55								
47	47.00	110.55								
48	48.00	109.55								
49	49.00	108.55								
50	50.00	107.55								
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										

CORE RECOVERY % (m) 0 50 100

R.Q.D % (m) 0 50 100

WATER PRESSURE TEST 0 10 20 30 40 50

Upper Depth : 31.00
Lower Depth : 35.50
Lugeon Value: 4.90
k Value: 0.0000552

Upper Depth : 35.50
Lower Depth : 40.00
Lugeon Value: 7.39
k Value: 0.0000875

Upper Depth : 40.00
Lower Depth : 45.00
Lugeon Value: 3.10
k Value: 0.0000412

Upper Depth : 45.00
Lower Depth : 50.00
Lugeon Value: 4.30
k Value: 0.0000578

※R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
※LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
※DEPTH and ELEVATION are in meter
※DIAMETER is in millimeter

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DRILLING LOG OF JD-5 (2/2)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. B-43

DRILL LOG

SHEET NO.1 OF1

SITE	TRO DAMSITE	HOLE No.	JD-6
LATITUDE	997357.50 LONGITUDE 994911.55	ELEVATION	146.29m
DATE		DEPTH	30.00m
ANGLE	180° UP, DOWN 0°, 90°	DIRECTION	N 0°, E 90°, S 180°, W 270°
SLOPE	HORIZON 0°, 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
1	1.00	145.29	ALLUVIAL	Talus Deposits			Brown organic clayey soil with rock fragments.
2	2.00	144.29					
3	3.00	143.29					
4	4.00	142.29					
5	5.00	141.29					
6	6.00	140.29	YOUNG LAVA 1 (YL1)	Basalt		CH	Oxleritic basalt, vesicular in general. Slightly weathered to fresh, frequently cracked. Discoloured purple in 6.4-7.0m. Hard to moderately hard. Cracks stained.
7	7.00	139.29					
8	8.00	138.29					
9	9.00	137.29					
	9.40	136.89					
10	10.00	135.29	PYROCLASTIC FLOW	(No core)		D	Core loss.
11	11.00	135.29					
12	12.00	134.29				CM	Moderately hard. Core samples are hard but fragmental, including yellow brown clay.
13	13.00	133.29	OLD LAVA 3 (OL3)	Porphyritic Basalt		CH	Dark gray, hard. Cracks are not stained. Porphyritic. 12.05m ~ 13.00m Vesicular. 13.00m ~ 14.90m Not vesicular. 14.90m ~ 19.40m Vesicular.
14	14.00	132.29					
15	15.00	131.29					
16	16.00	130.29					
17	16.75	129.54					
	17.00	129.29					
18	18.00	128.29					
19	19.00	127.29					
	19.40	126.89					Discoloured purple, hard.
	19.60	126.69				CL	Highly weathered, with pores sparsely.
20	20.00	126.29					
	20.30	125.99				CH	Slighttly weathered to fresh. Hard solid rock. Cracks at 20 cm intervals or sparser in the sections of 20.3-22.2m, 23.7-26.0m, 26.9-27.4m, 27.8-28.1m, 28.6-28.85m and 29.4-30.0m.
21	21.00	125.29					
22	21.88	124.41					
	22.00	124.29					
23	23.00	123.29					
24	24.00	122.29					
25	25.00	121.29					
26	26.00	120.29					
27	27.00	119.29					
28	28.00	118.29					
29	29.00	117.29					
30	30.00	116.29					

DATE: 7/12, 16.76 m

BIT & DIAMETER: 25/1, 21.88 m

WATER LEVEL

CORE RECOVERY % (m)

R.Q.D % (m)

WATER PRESSURE TEST

Upper Depth : 15.00
Lower Depth : 20.00
Lugeon Value: 13.10
k Value: 0.0201740

Upper Depth : 20.00
Lower Depth : 25.00
Lugeon Value: 10.00
k Value: 0.0001420

Upper Depth : 25.00
Lower Depth : 30.00
Lugeon Value: 9.60
k Value: 10.0001280

*R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
*LUGEON VALUE is l/min/m under injection water pressure of 10kg/cm2
*DEPTH and ELEVATION are in meter
*DIAMETER is in millimeter

DRILLING LOG OF JD-6 (1/1)

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Fig. B-44

DRILL LOG

SITE	TRO DAMSITE	HOLE No.	JD-7
LATITUDE	997366.38 LONGITUDE 995132.13	ELEVATION	124.42m
DATE		DEPTH	50.00m
ANGLE	180° DOWN 0° 90°	DIRECTION	N 0° E 90° S 180° W 270°
SLOPE	HORIZON 0° 90°		

SCALE	DEPTH	ELEVATION	GEOLOGICAL AGE	ROCK TYPE	COLUMN SECTION	ROCK CLASS	DESCRIPTION
1	1.00	123.42	ALLUVIAL	Talus Deposits			All cores are moderately weathered or fresh basalts with white clay.
2	2.00	122.42					
	2.58	121.84					
3	3.00	121.42					
	3.80	120.62					
4	4.00	120.42	OLD LAVA 3 (OL3)	Porphyritic Basalt		CH	Doleritic basalt, slightly weathered to fresh. Solid. Cracks water-stained at 5.7 to 6.0m. Vesicular only for 20cm length at the bottom.
5	5.00	119.42					
6	6.00	118.42					
7	7.00	117.42					
8	8.00	116.42					
9	9.00	115.42					
10	10.00	114.42					
	10.50	113.92				CL	Highly weathered basalt.
	10.75	113.67					
11	11.00	113.42				CM	Vesicular, moderately weathered and moderately hard. Discoloured purple.
12	12.00	112.42					
13	13.00	111.42					Vesicular, slightly weathered, solid. Partly non-vesicular (14.9-14.5m). White clay is in some of open cracks, white dolomitic inclusions in the pores.
14	14.00	110.42					
15	15.00	109.42					
16	16.00	108.42					
17	17.00	107.42					
18	18.00	106.42					
19	19.00	105.42					
20	20.00	104.42					
	20.60	103.82					
21	21.00	103.42	OLD LAVA 2 (OL2)	Glassy Basalt		CH	Doleritic basalt, moderately weathered. Vesicular only at the bottom.
22	22.00	102.42					
23	23.00	101.42					
24	24.00	100.42		Weathered Glassy Basalt			
25	25.00	99.42					Vesicular, moderately weathered and moderately hard. Discoloured purple.
	25.50	98.92					
26	26.00	98.42		Glassy Basalt			Vesicular except in 28.1m to 28.7m. Cracks at 5cm to 15cm intervals.
27	27.00	97.42				CH	
28	28.00	96.42					
29	29.00	95.42					
	29.50	94.92					
30	30.00	94.42					Doleritic, only partly vesicular.

DATE | BIT & DIAMETER | WATER LEVEL

16/11 1.99

CORE RECOVERY % (m) | R.Q.D % (m) | WATER PRESSURE TEST

Upper Depth : 4.00
Lower Depth : 10.00
Lugeon Value: 24.10
k Value: 0.0003330

Upper Depth : 10.00
Lower Depth : 15.00
Lugeon Value: 19.80
k Value: 10.0002850

Upper Depth : 15.00
Lower Depth : 20.00
Lugeon Value: 17.90
k Value: 0.0002390

Upper Depth : 20.00
Lower Depth : 25.00
Lugeon Value: 17.90
k Value: 0.0002380

Upper Depth : 25.00
Lower Depth : 30.00
Lugeon Value: 14.20
k Value: 0.0001900

※R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindric cores longer than 10 cm)/(Total drill length) x 100%
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DRILLING LOG OF JD-7 (1/2)

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Fig. B-45