

DRILL LOG

HOLE NO. NWO-2 SHEET NO. 1 OF 2

PROJECT		PORT LOUIS WATER SUPPLY					DEPTH		80 m		ELEVATION							
SITE		NWO DAM		COORDINATE		:	:	INCLINATION		VERTICAL		DRILL RIG						
AVERAGE CORE RECOVERY				DATE		FROM		TO		DRILLED		LOGGED						
										DDS		M.Y.						
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY		RQD (%)	Lugeon - Value (Lu) Permeability Coefficient (K)					DEPTH		
								%	cm		50	10	20	30	40			
2	2.6		Top soil		0-1.7 m; reddish brown clayey soil													
4			(Intensively weathered zone)		Water loss at 3.6 m													
6					2.6-4.1 m; vesicular lavas													
8					4.1-5.2 m; doleritic lavas													
10					5.2-7.4 m; vesicular lavas; pipe size is 5-10 mmφ; inside pipes is fresh.													
12					Core loss at 7.7-9.0 m.													
12					7.4-7.7, 9.0-10.3 m; weathered and reddish brown soil.													
14				Predominant vesicular lavas		Below 10.3 m, purplish to greyish vesicular lavas. Pipe size is 5-10 mm in dia.												
16						(CM)												
18						17.5-18.0 m; steep joints; joints are oxidized.												
20						Inside vesicles are very fresh.												
22					(CM)													
24					23.5-25.4 m; less vesicles; doleritic lavas.													
26					Max. size of pipes is 3 cm. (B)													
28					27.5-28.0 m; cracky; whitish tuffaceous materials fill along cracks.													
30					(CM-CH)													
32					32.0-34.0 m; very hard doleritic lavas.													
34				Whitish tuffaceous materials at 34.2 m.														
36			Vesicular lavas		(CM)													
38					Insides of vesicles are fresh.													
40					Below 38.0 m; whitish tuffaceous materials are observed along joints and cracks.													
42					(CM)													
44					42.0-44.0 m; vesicles are developed frequently.													
46					Below 44.0 m; massive basaltic lavas; hard; few vesicles.													
48					(CH)													
50					Below 50 m; dark grey vesicular lavas. Clear sound emits by hammer hitting.													
52					(CM)													
54					Whitish tuffaceous materials fill on insides of vesicles.													
56				58.0-60.0 m; doleritic lava; very hard; few vesicles														
58				(CM)														
60																		

LOG FORM-B

HOLE NO.

- * R.Q.D is Rock Quality Designation, R.Q.D = (Total length of cylindric cores longer than 10 cm) / (Total core length) × 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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DRILL LOG

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DRILL LOG

HOLE NO. TR9-(2) SHEET NO. 1 OF 1

PROJECT		PORT LOUIS WATER SUPPLY					DEPTH	50.0 m		ELEVATION	
SITE		TR9 DAM		COORDINATE		:	:	INCLINATION	VERTICAL		DRILL RIG
AVERAGE CORE RECOVERY				DATE	FROM	TO		DRILLED	DDS	LOGGED	M.Y
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	RQD (%)	PERMEABILITY TEST Lu - Value (K - Value cm/s) SPT (N-Value)	
	2		Top soil		0.0 - 1.1 m; dark brownish clayey soil 1.1 - 1.5 m; light brownish; silty clayey						
	6		Residual soil		5.0 - 8.0 m; dark reddish-chocolate silty clay; some contents of weathered gravel.						
	12				(D)						
	12				12.0 - 13.0 m; no core recovery.						
	14		Deteriorated lava boulder		13.0 - 14.4 m; deteriorated vesicular lavas.						
	16		Residual soil		Clayey soil (D)						
	18				18.0 - 19.5 m; no core recovery.						
	20		Deteriorated lavas		20.5 - 22.5 m; intensively weathered rock fragments or short cylindric cores.						
	22				22.5 - 23.0 m; dark greyish weathered fragments with soil. (D-C)						
	24		Doleritic lava		Below 24.2 m; moderately vesicular fine grained doleritic lavas; hard						
	26				Vesicular parts are at 27.5 - 28.0, 30.6 - 31.4, 35.2 - 37.4 m (C-M-C)						
	28				Weathered portions are at 27.5 - 28.0, 30.6 - 31.4, 35.2 - 36.0 m						
	30										
	32										
	34										
	36										
	38										
	40										
	42				Below 42.0 m; recovered cores are fresh or less vesicular doleritic lavas. (C)						
	44				47.0 - 47.4 m; only fragmental weathered rocks are recovered Below 47.5 m; only weathered soil materials are recovered.						
	46				Bottom of borehole						

*RQD is Rock Quality Designation, RQD = Total length of cylindric cores longer than 10 cm / Total core length * 100%
 *SLUGON VALUE is 1 min/m under injection water pressure of 10 kg/cm²

*DEPTH and ELEVATION are in meter

*DIAMETER is in millimeter

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DRILL LOG

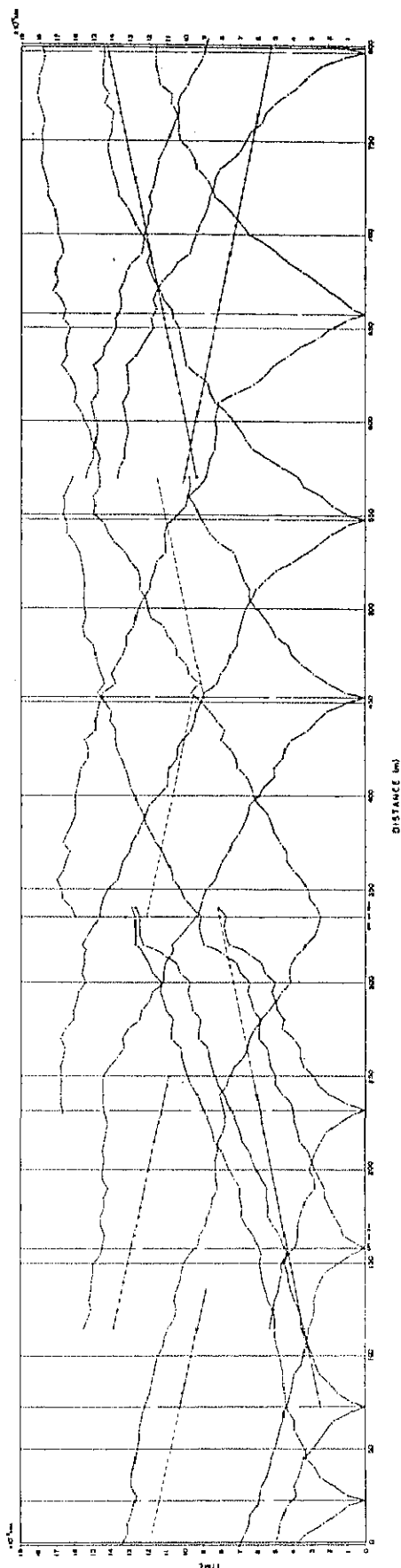
HOLE NO. TR9(5) SHEET NO.1 OF 1

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH		30.0 m		ELEVATION								
SITE		TR9 DAM		COORDINATE		INCLINATION		VERTICAL		DRILL RIG								
AVERAGE CORE RECOVERY				DATE		FROM TO		DRILLED		LOGGED								
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	RQD (%)	Lu & K Value • N-Value (SPT)				DEPTH				
								%	cm	50	100	10	20	30	40			
	2		Residual soil		0-3 m; light brownish; clayey soil. Slightly organic	$\phi = 90 \text{ cm}$												
	4				3.0-6.3 m; reddish brown lateritic soil.													
	6				SPT at 6.0 m (N=8)													
	8	7.5	Weathered lava		6.5-7.0 m; none core recovery.	$\phi = 90 \text{ cm}$												
	10	9.6			7.5-9.6 m; deteriorated zone; only rock texture remains.													
	12				9.6-12.0 m; dark greenish basaltic lavas; intensively weathered; few vesicles; frequently developed joints.													
	14				12.9-14.5 m; dark greyish vesicular lavas. (CL-CM)													
	16				14.5-16.0 m; only dark brownish deteriorated soil.													
	18		Doleritic lava		Below 16.0 m; greyish doleritic lavas; very hard; few vesicles.	$\phi = 56 \text{ cm}$	-17.0m											
	20				17.0-18.8 m													
	22				22.0-23.0 m; steep-vertical cracks are observed. (C11)													
	24				24.8-25.0 m; weathered joints at the rate of 1 joint/m.													
	26				Homogeneous condition continue to the bottom of the hole. (C11)													
	28																	
	30																	
					(Bottom of borehole)													

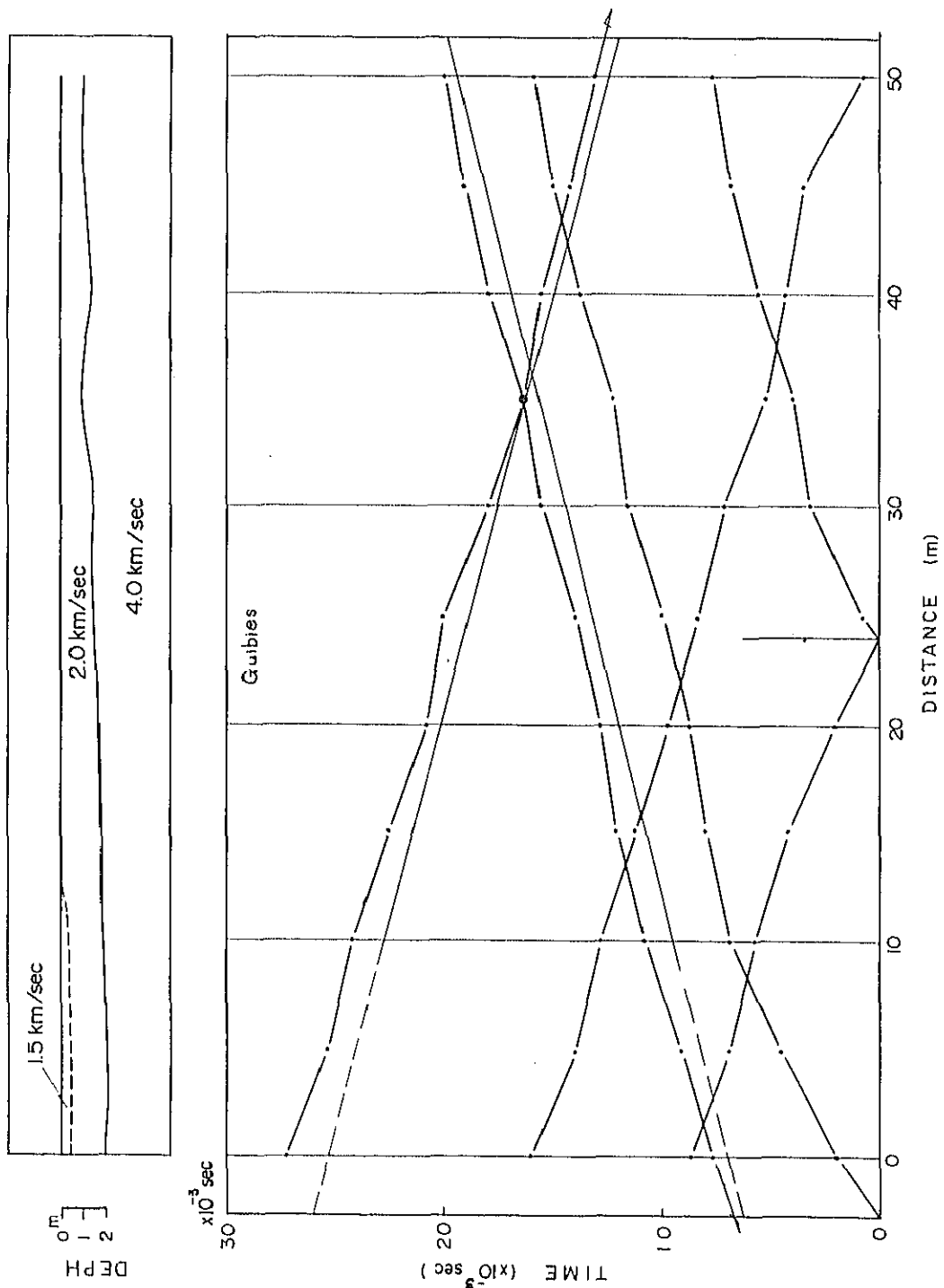
LOG FORM-B

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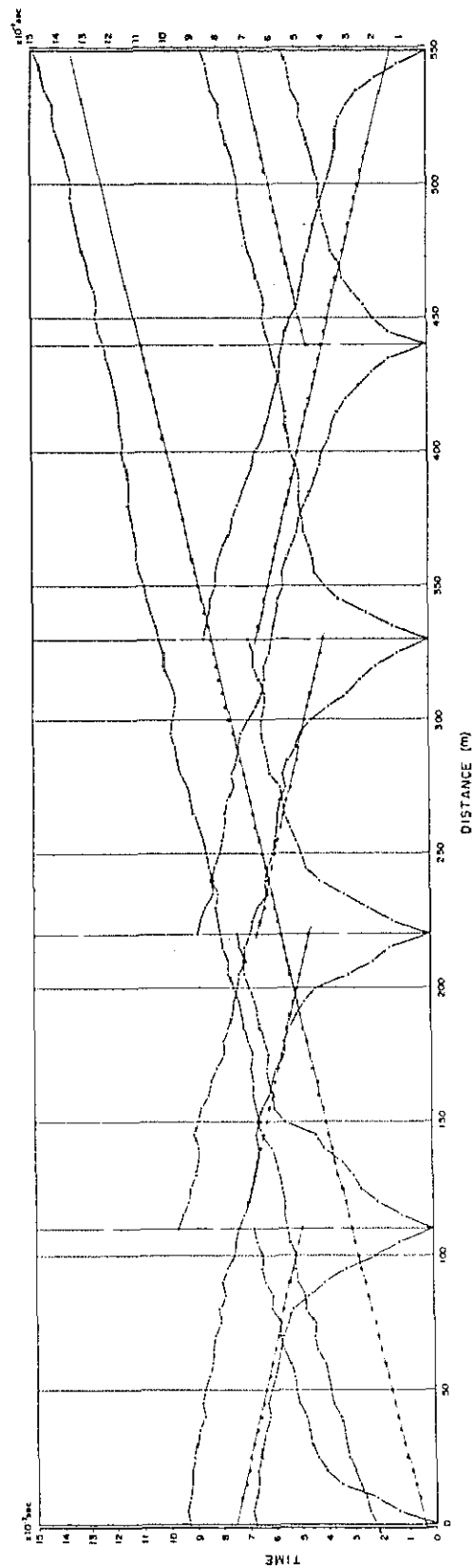
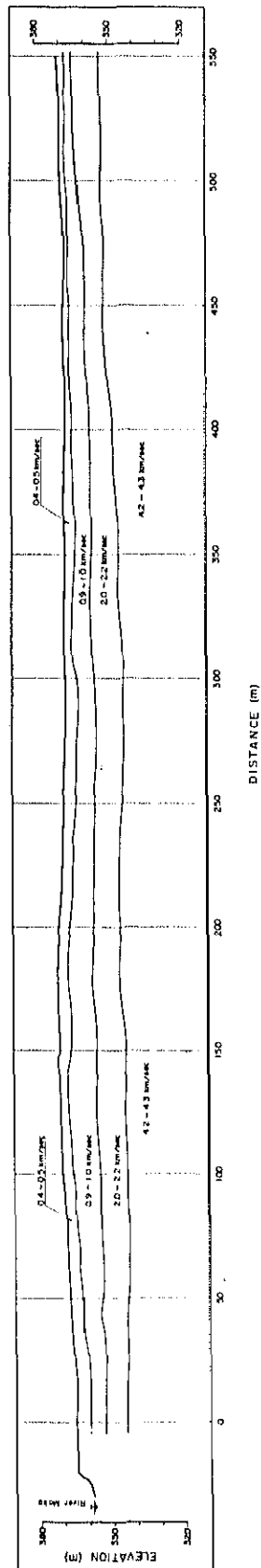


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF GUBIES DAMSITE ALONG THE RIGHT ABUTMENT RIDGE

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Baptiste Dam Site

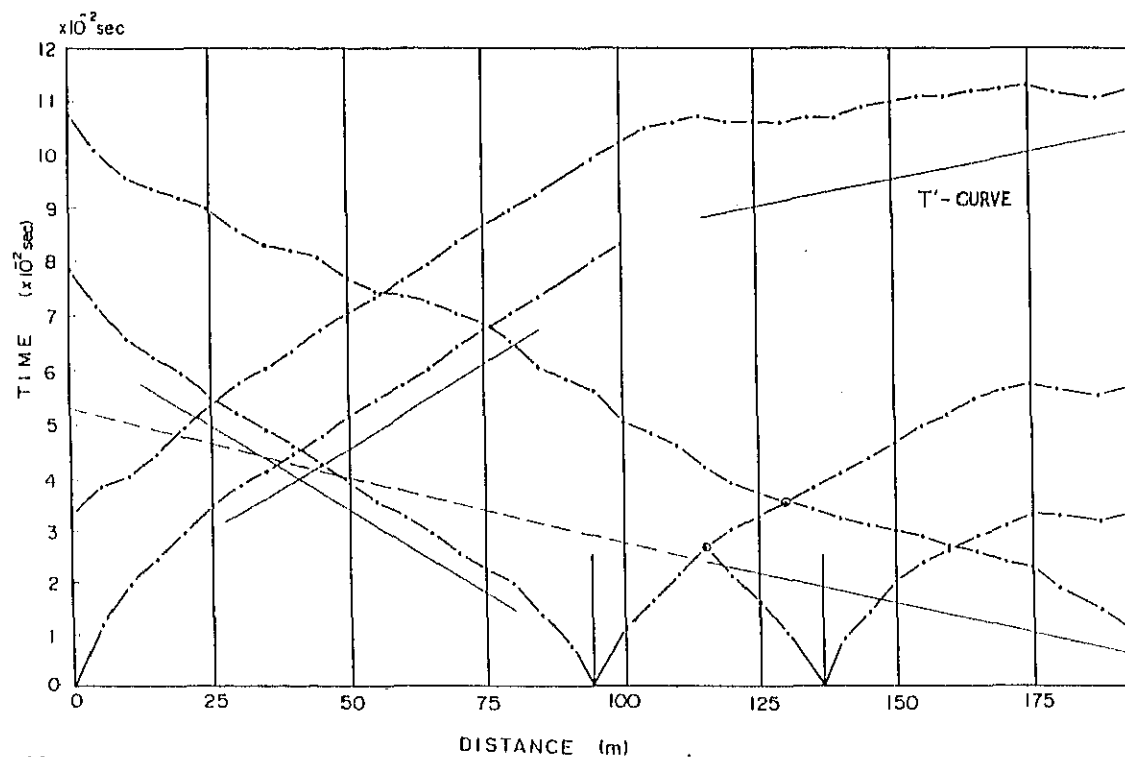


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BAPTISTE DAMSITE ALONG THE DAM AXIS

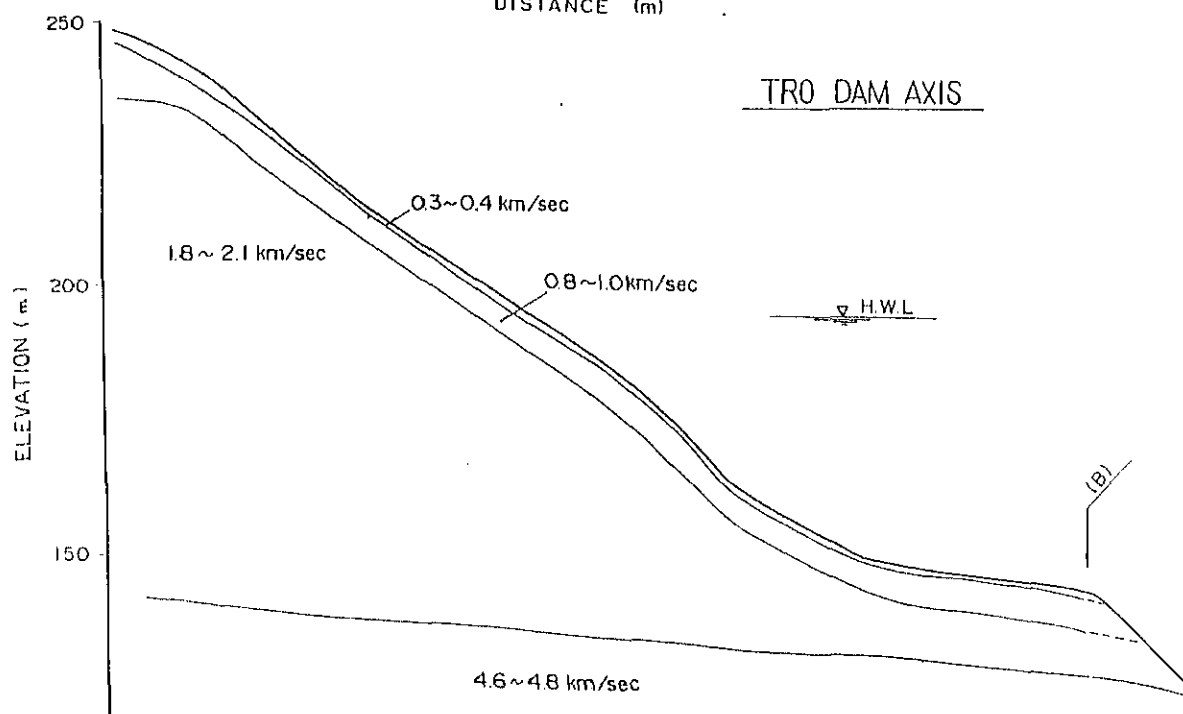
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TRO TIME - DISTANCE CURVE



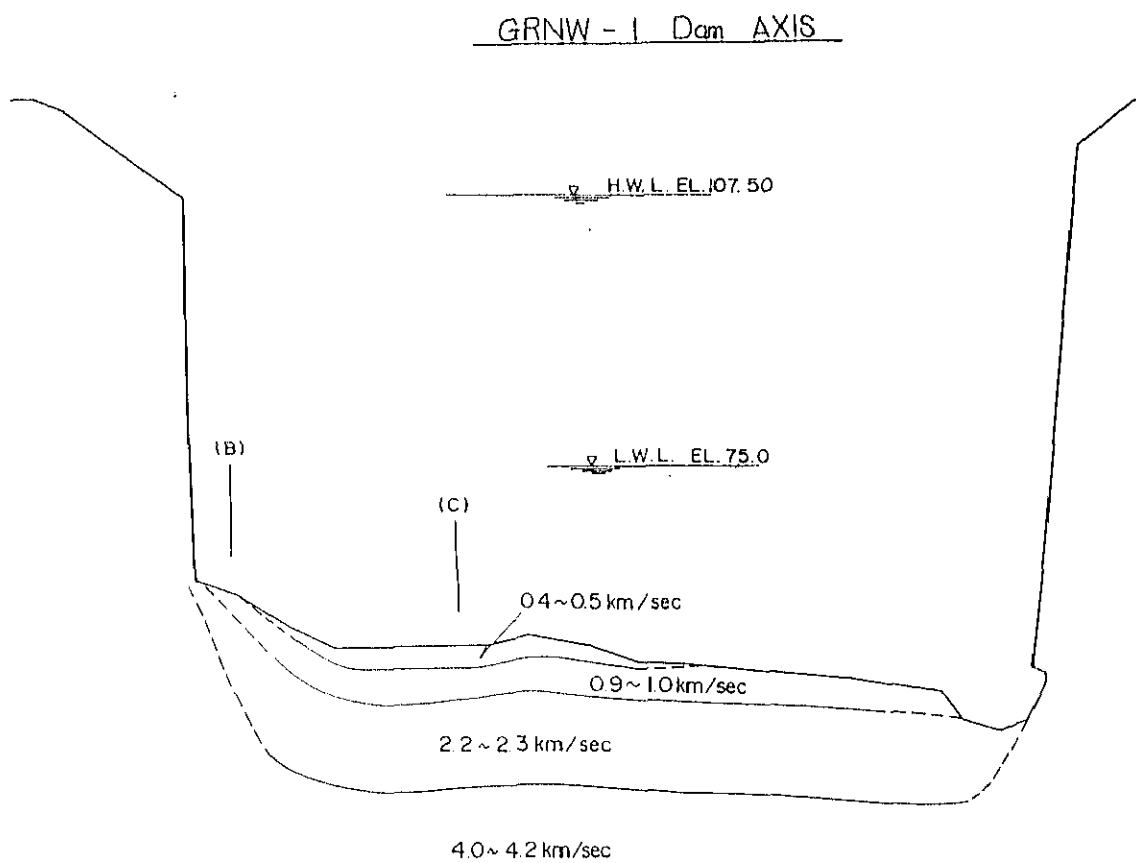
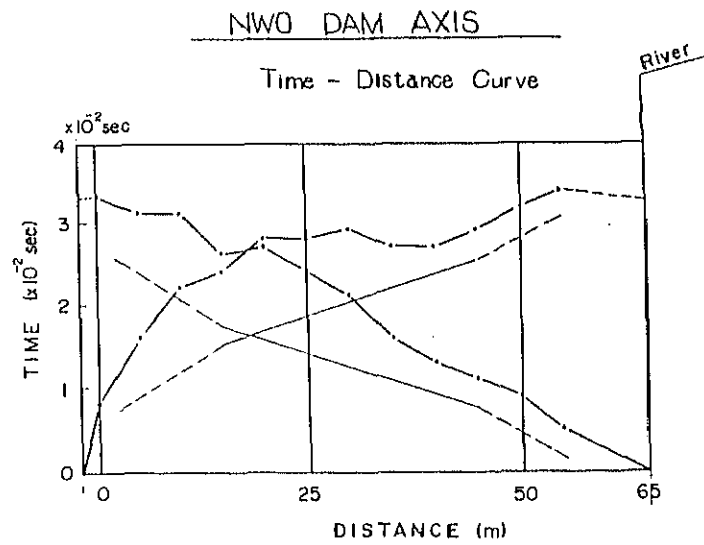
TRO DAM AXIS



TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF TRO DAMSITE ALONG THE DAM AXIS

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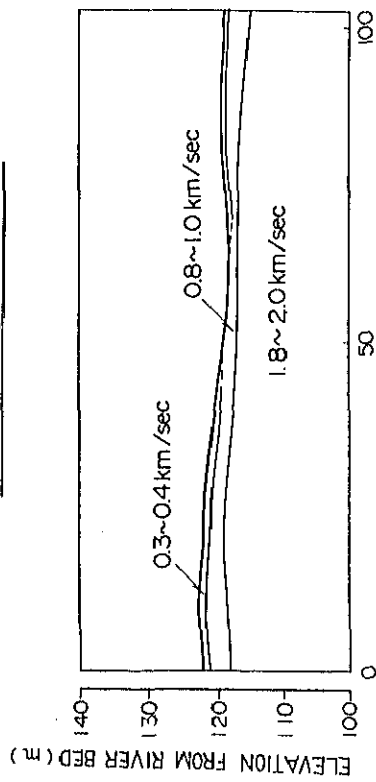


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF NWO DAMSITE (1/2) ALONG THE DAM AXIS

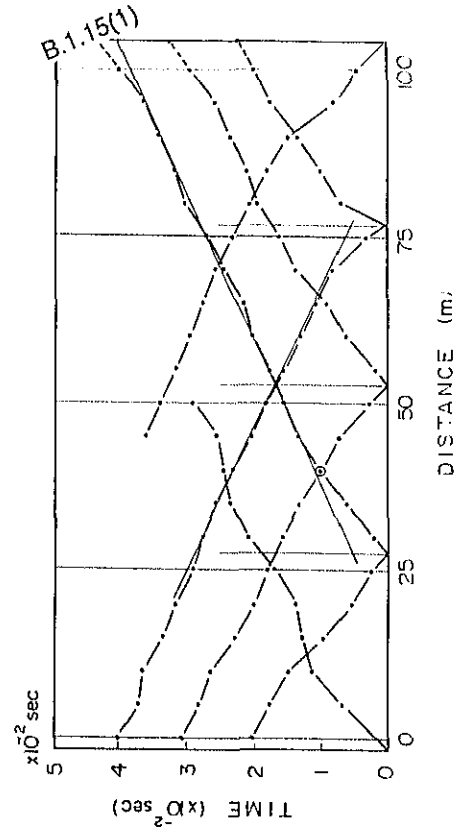
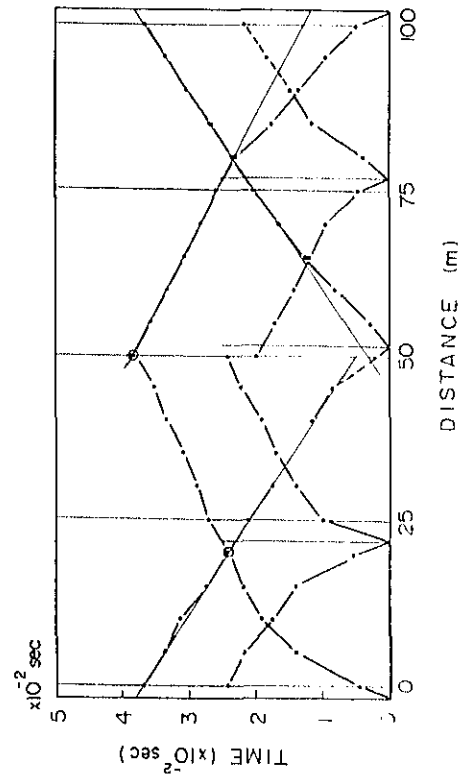
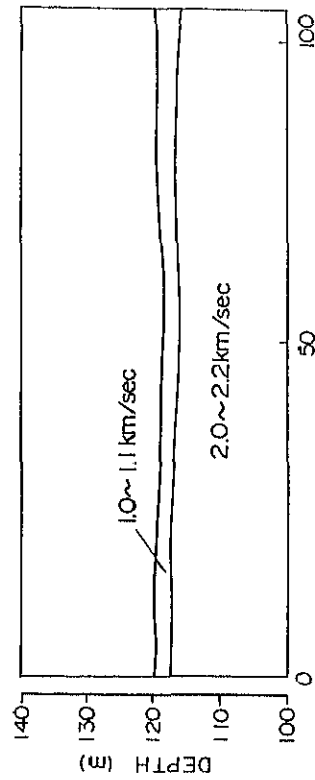
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NW0 Right Bank



NW0 Left Bank

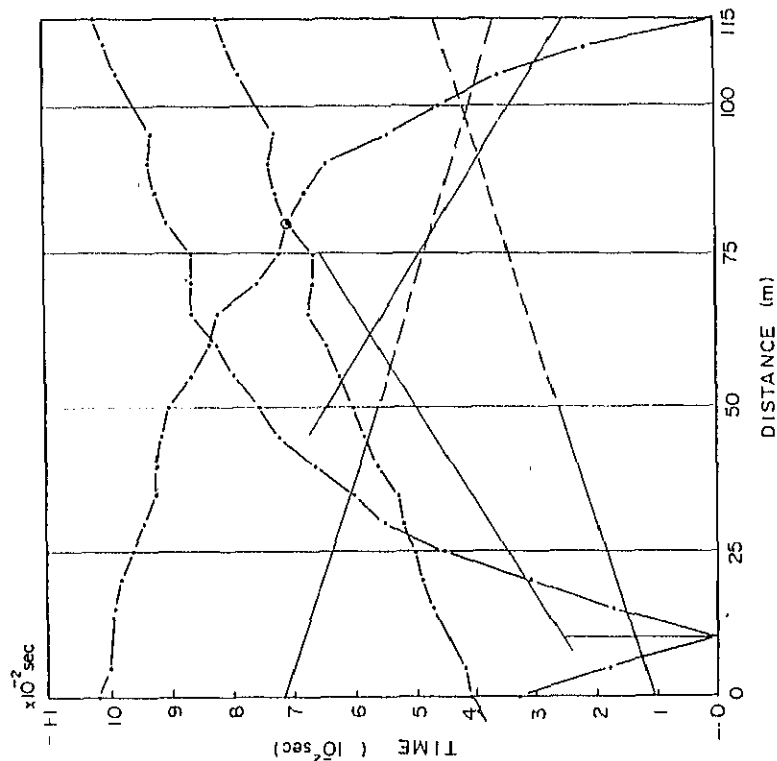


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF NW0 DAMSITE (2/2) ON BOTH BANKS

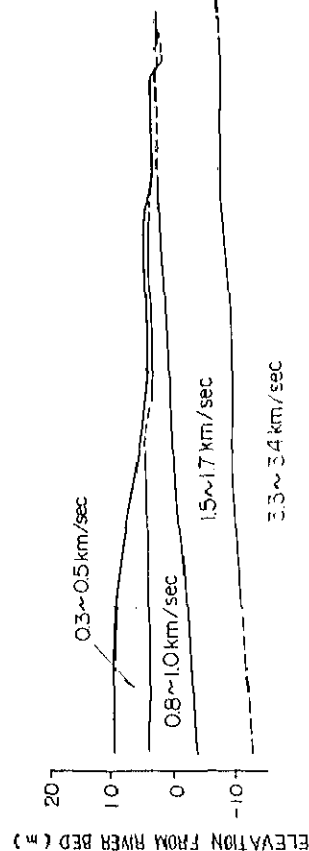
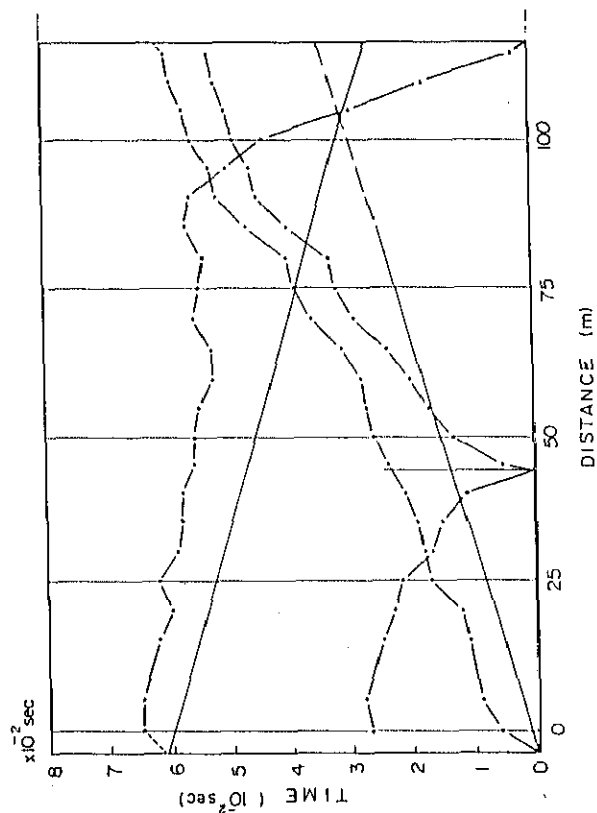
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Terre Rouge 9 (TR-9)
Right Bank



Terre Rouge 9 (TR-9)
Left Bank

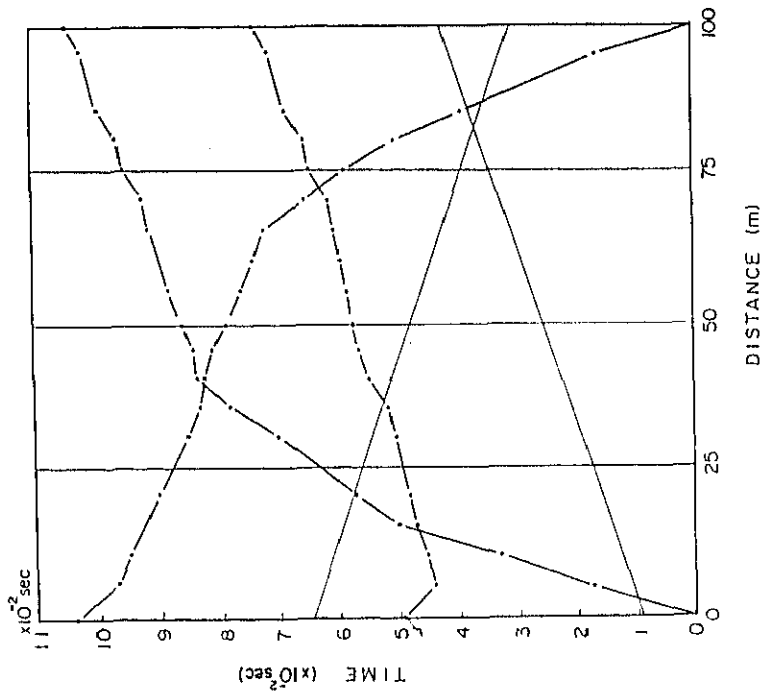


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF TR9 DAMSITE ALONG THE DAM AXIS

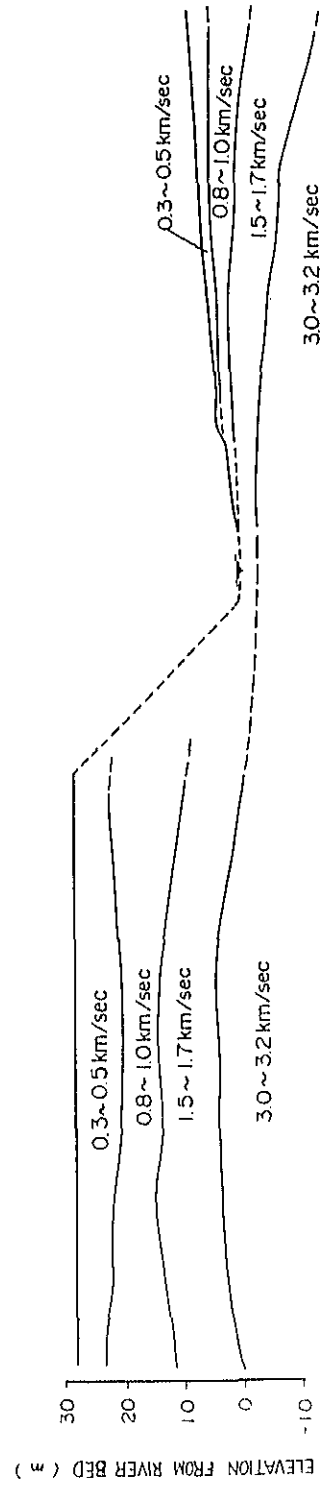
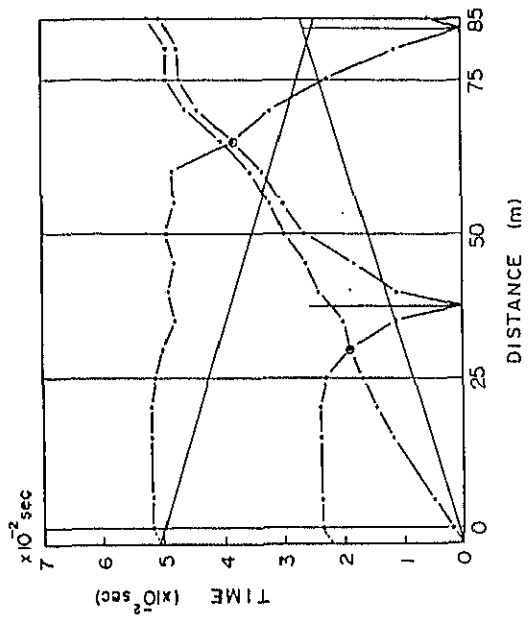
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Cascade A (CA2)
Left Bank



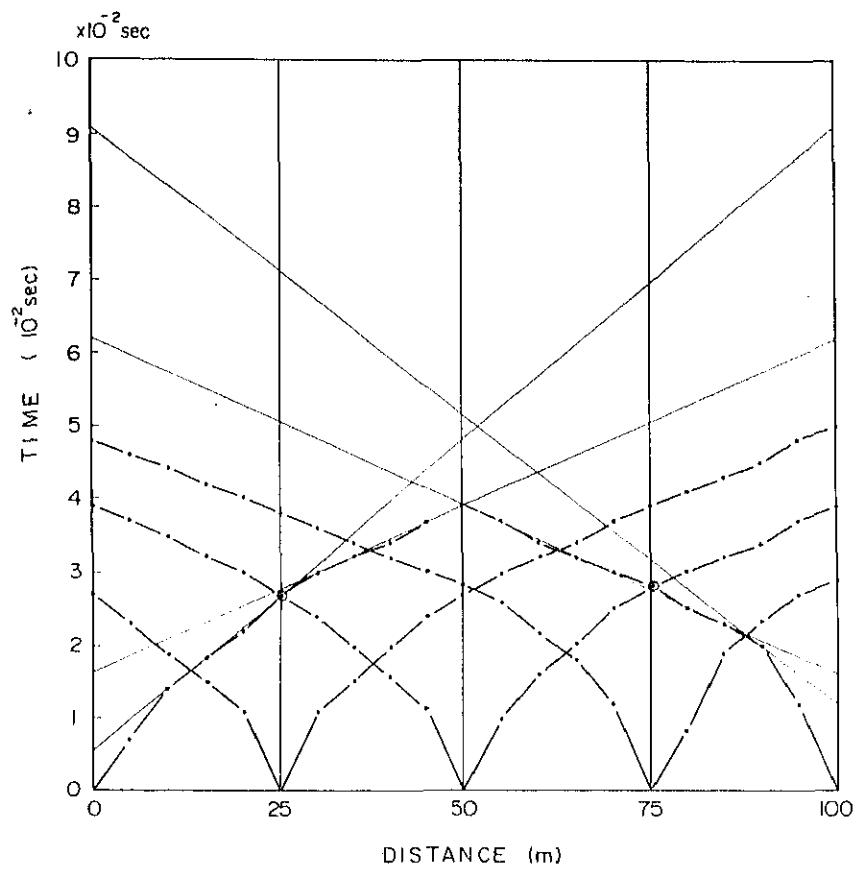
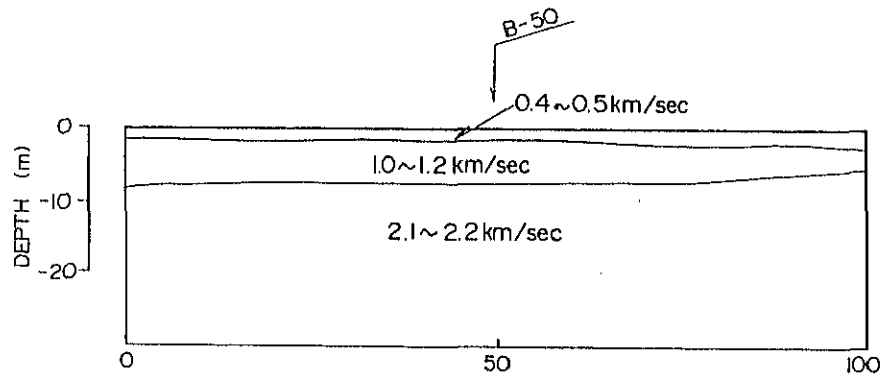
Cascade A (CA2)
Right Bank



TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF CA2 DAMSITE ALONG THE DAM AXIS

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PORT LOUIS WATER SUPPLY PROJECT

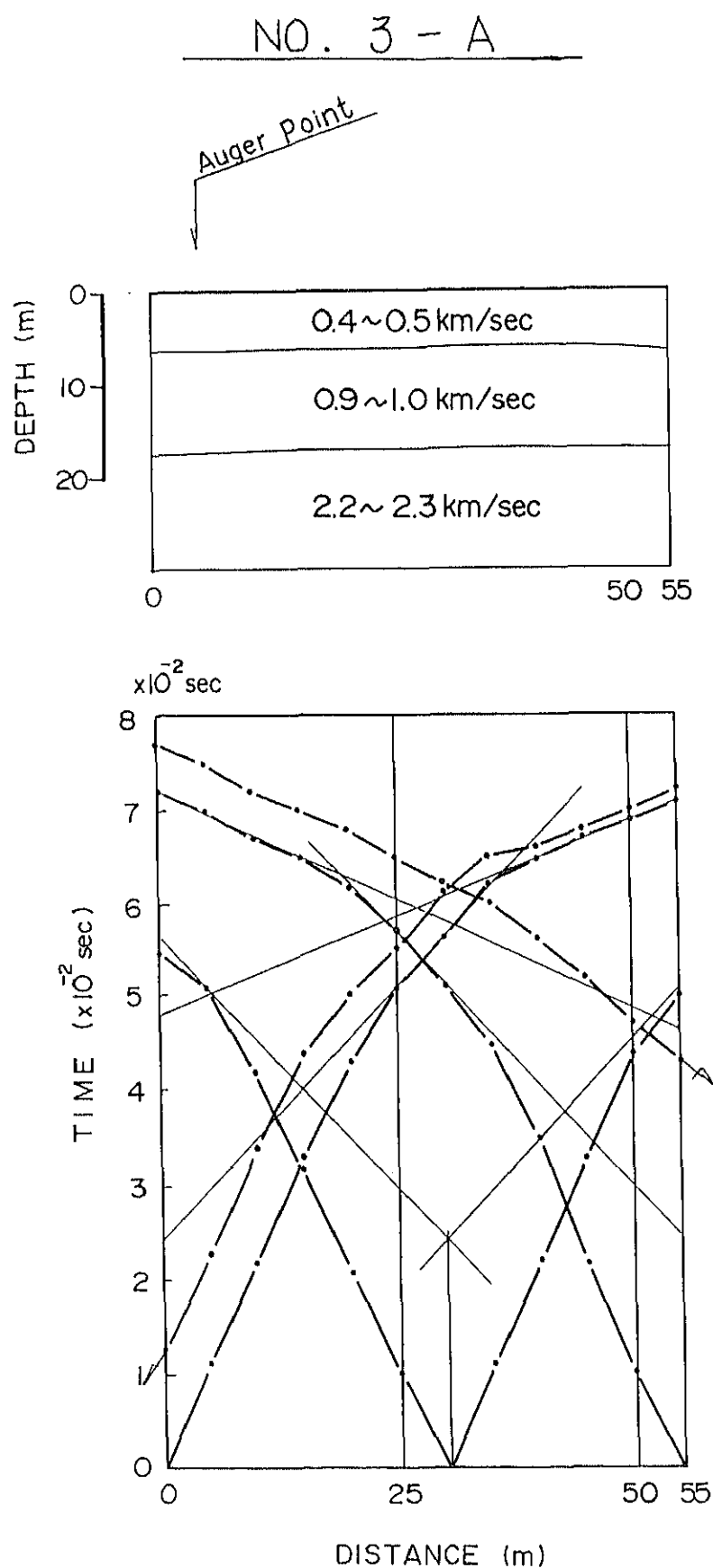
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TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.2

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PORT LOUIS WATER SUPPLY PROJECT

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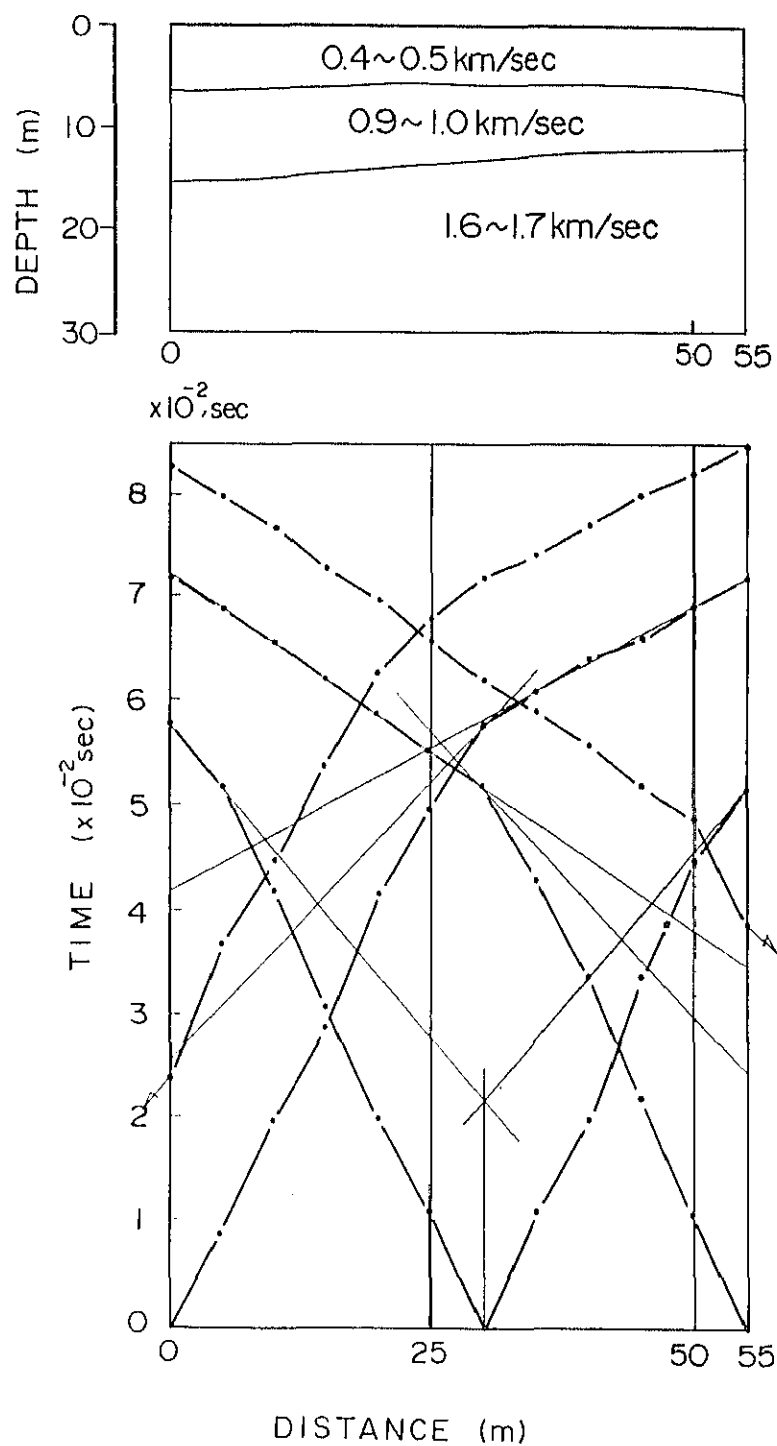


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.3-A

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PORT LOUIS WATER SUPPLY PROJECT

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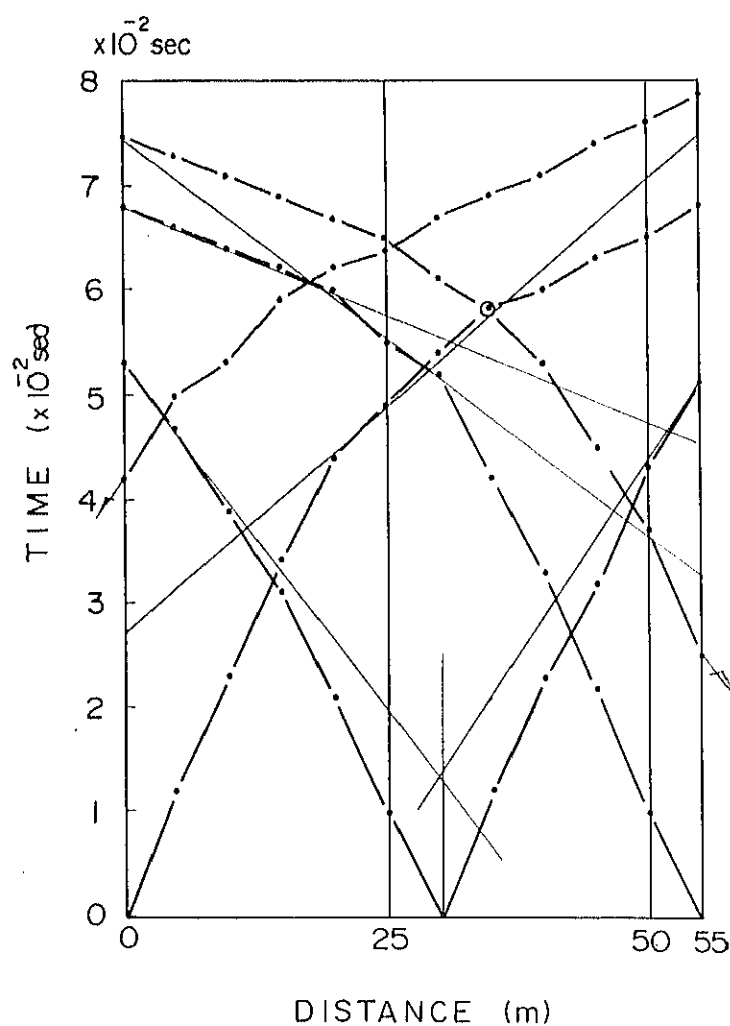
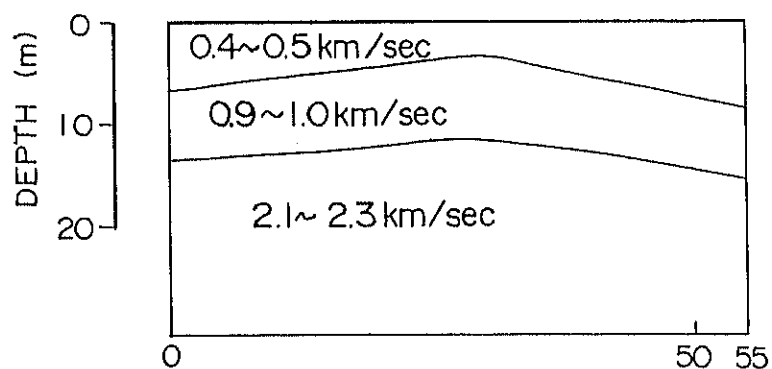
NO. 3 - B



TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No. 3-B

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NO. 3 - C

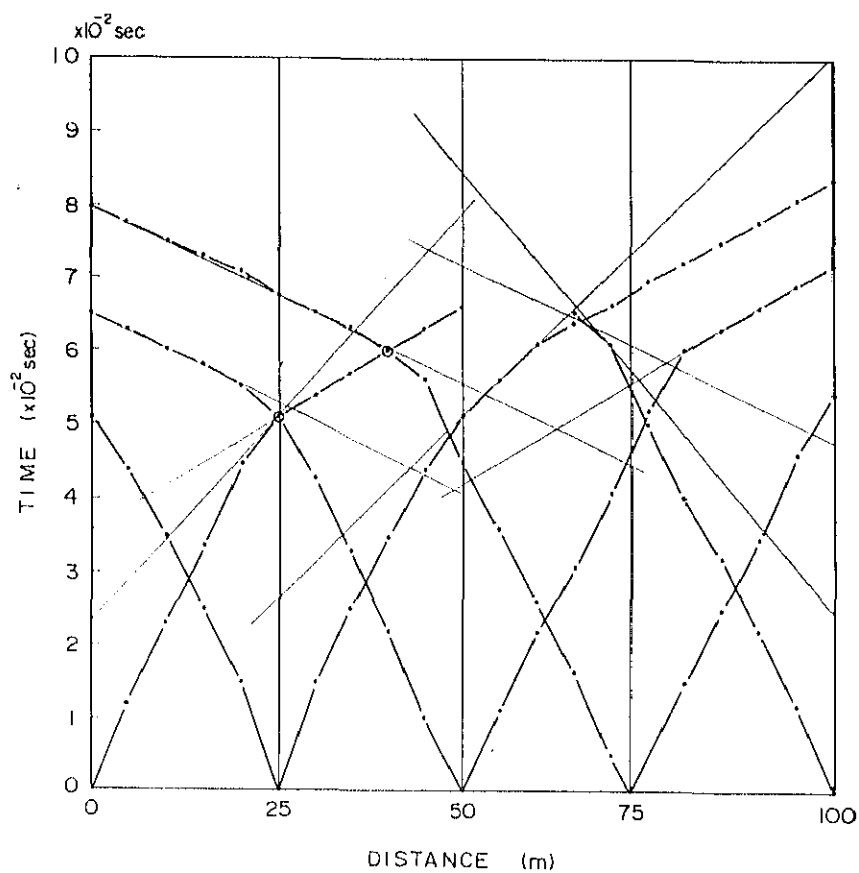
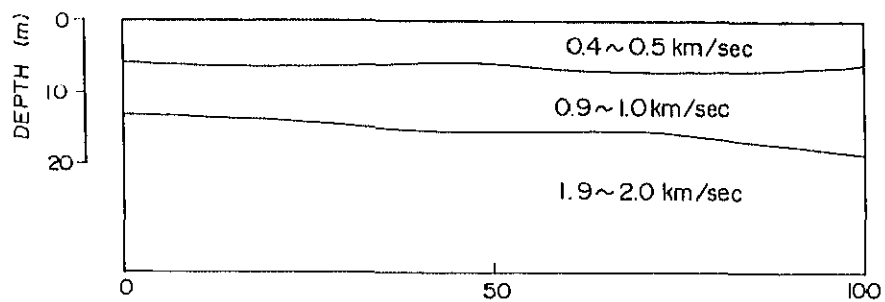


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.3-C

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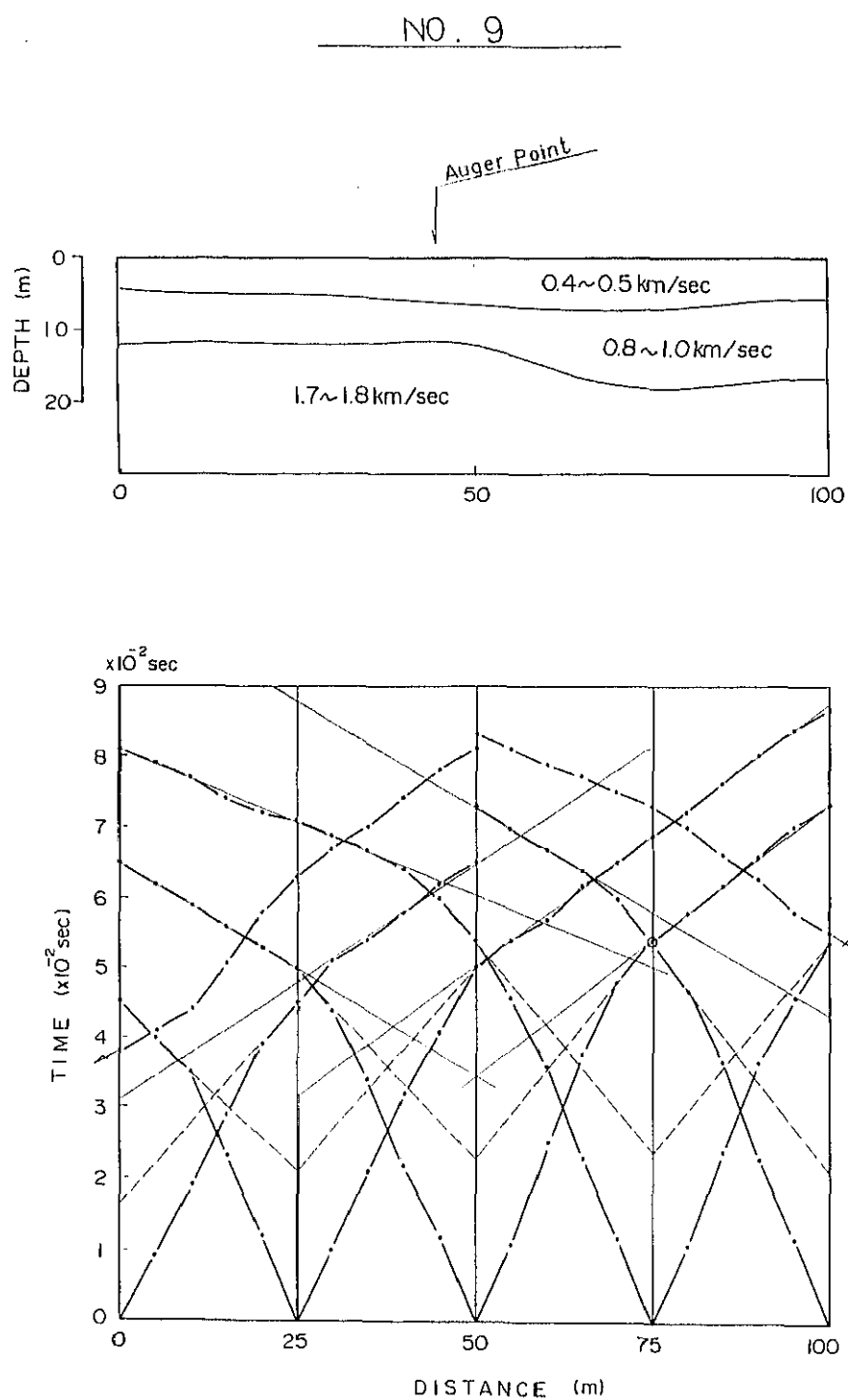
NO. 5



TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.5

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

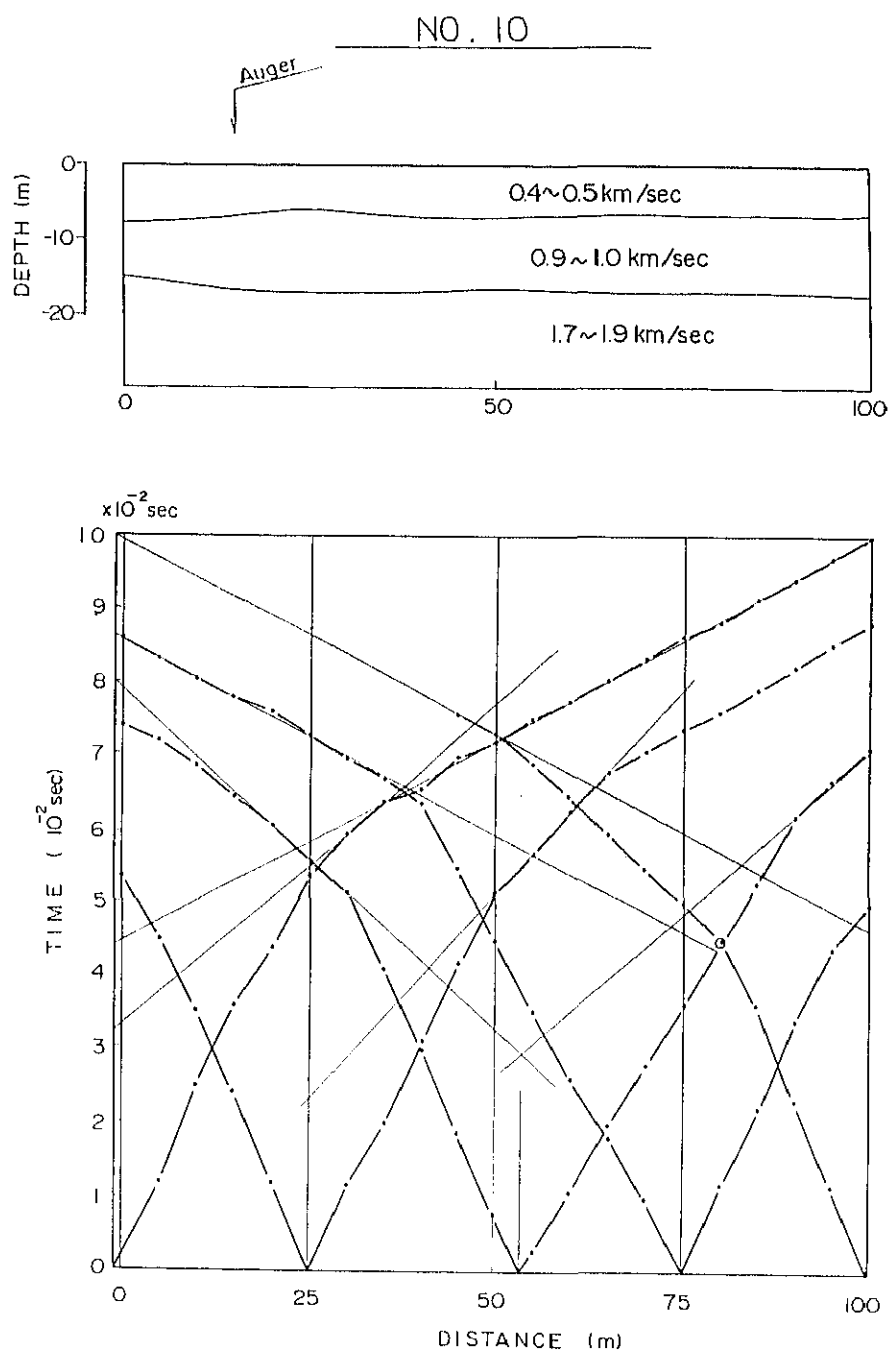
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TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No. 9

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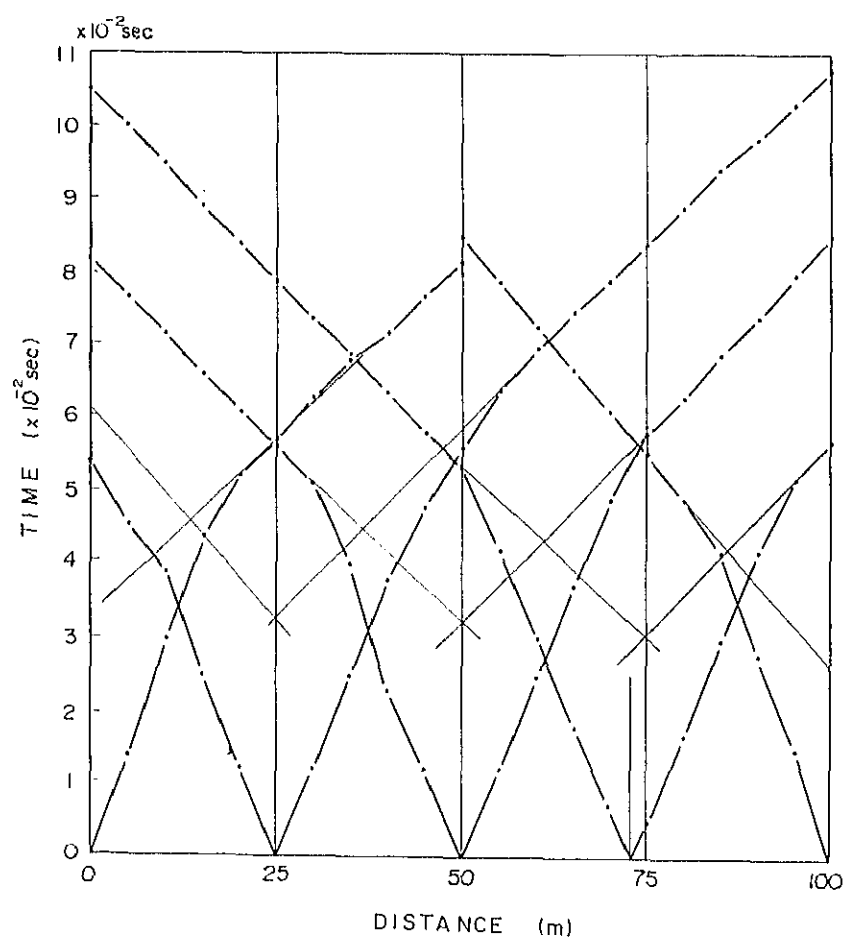
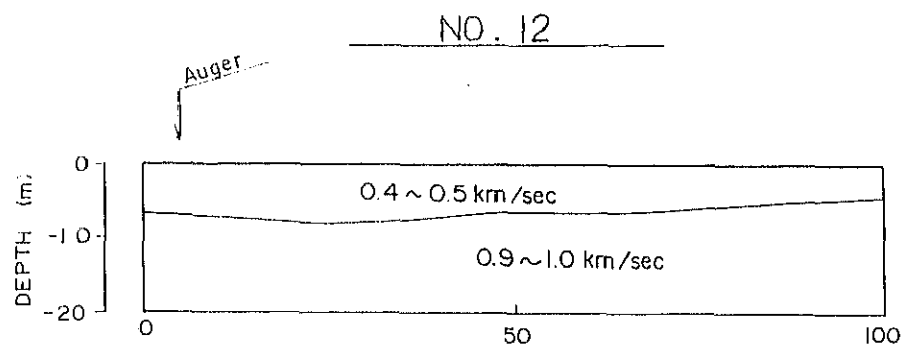
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TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.10

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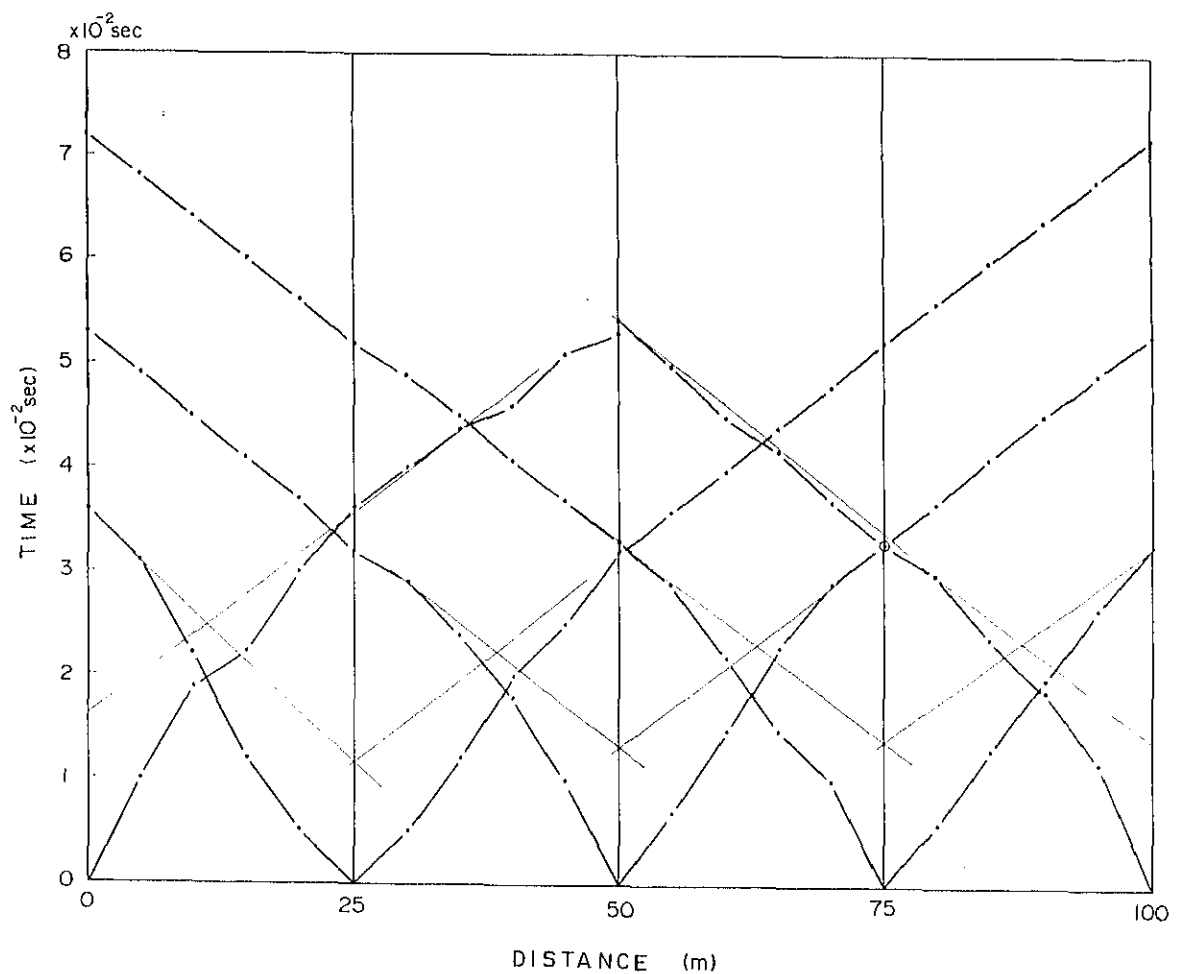
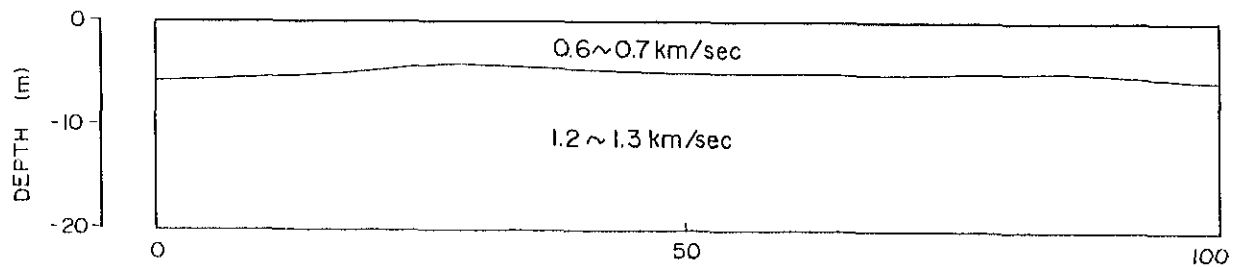


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.12

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NO. 13 - A

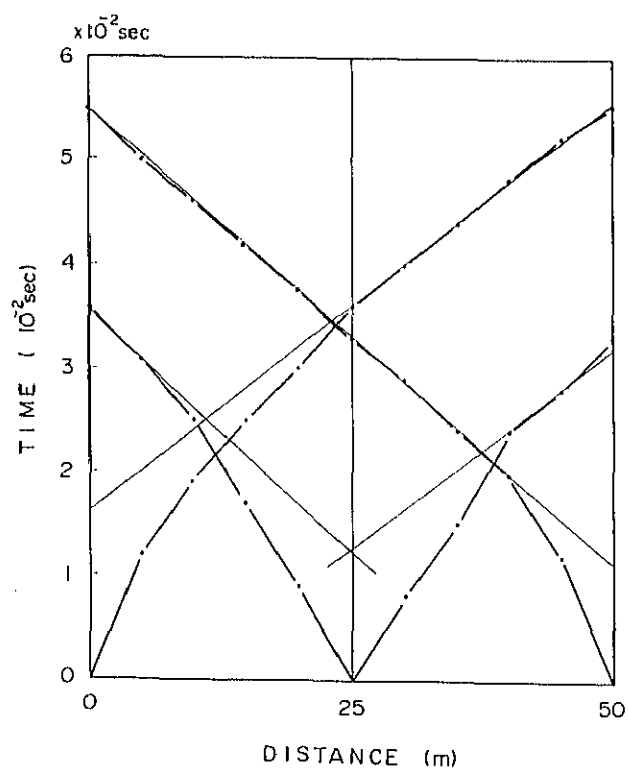
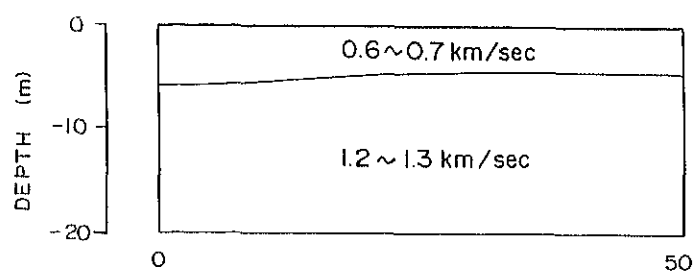


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.13-A

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NO. 13 - B

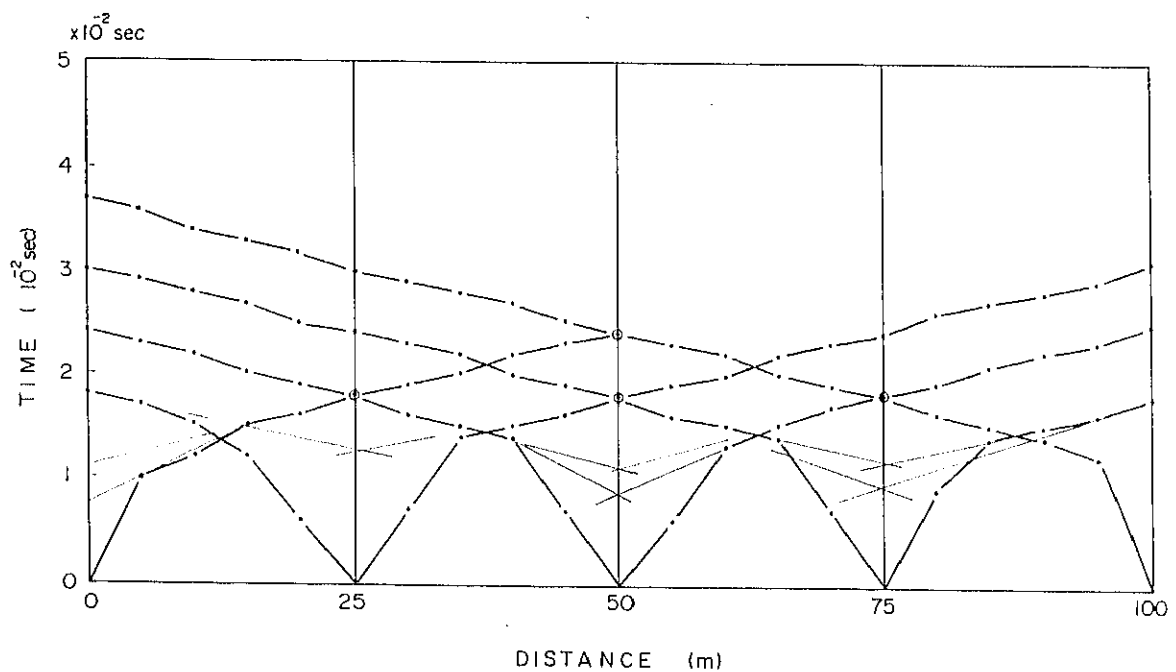
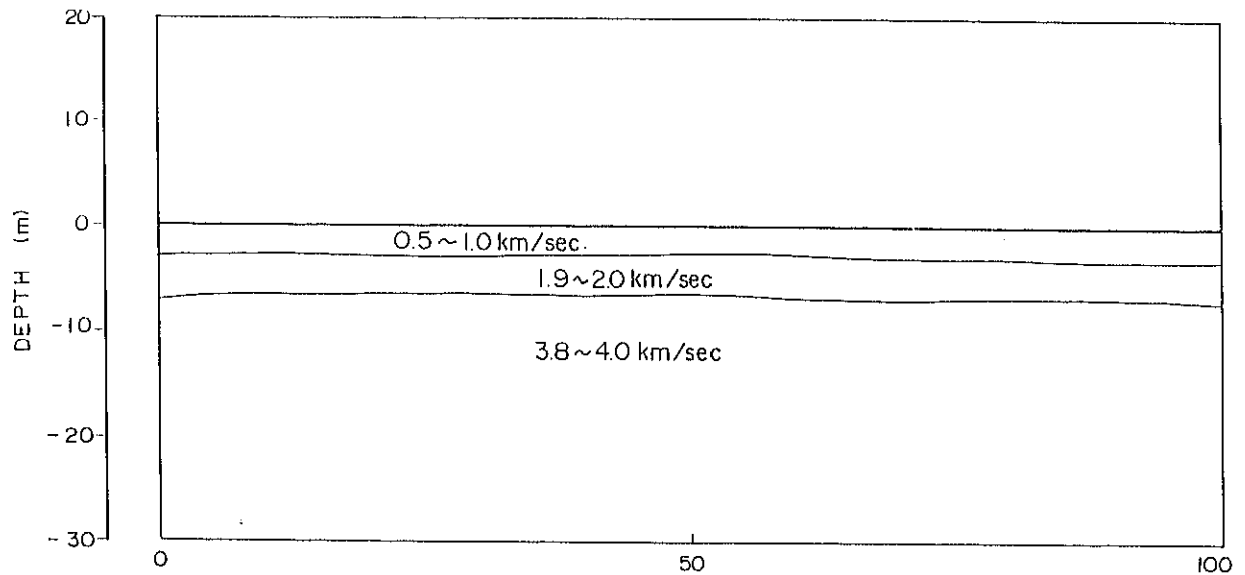


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.13-B

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

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NO. 14

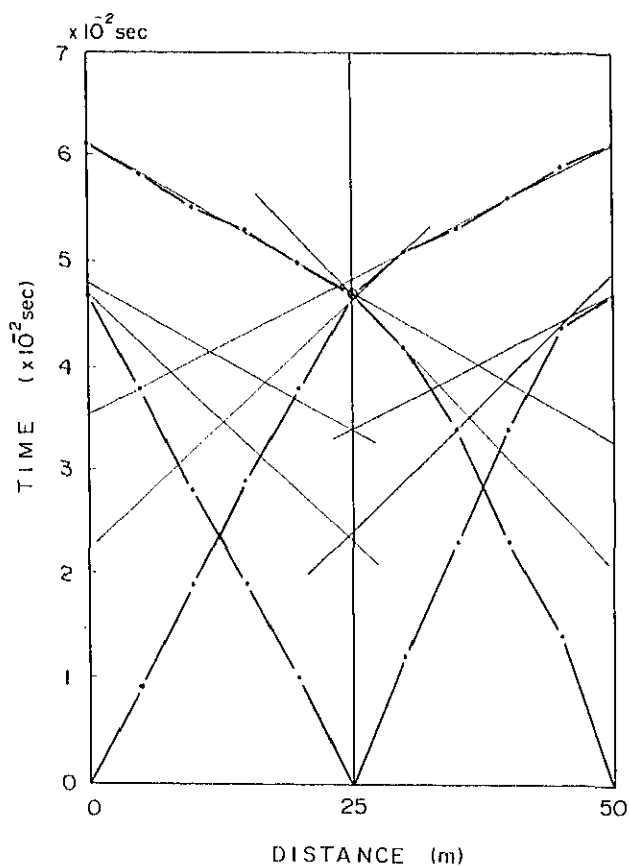
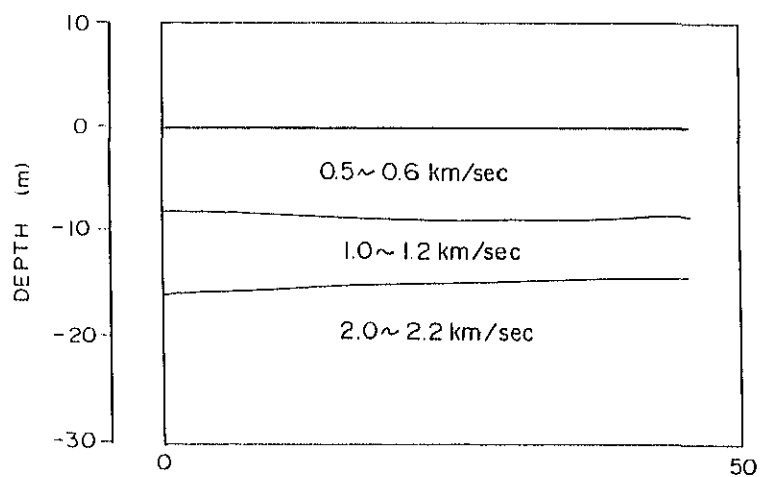


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.14

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

NO. 15 - A

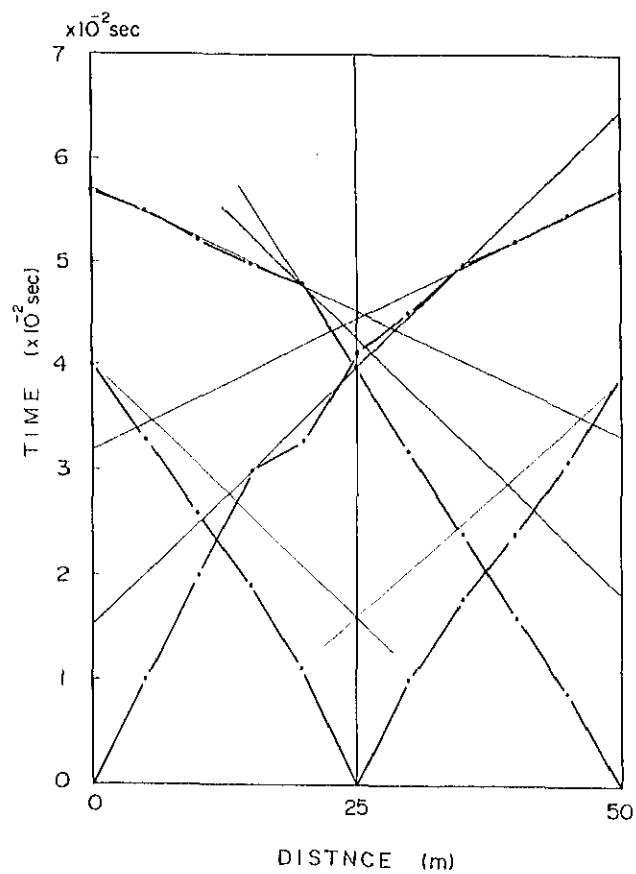
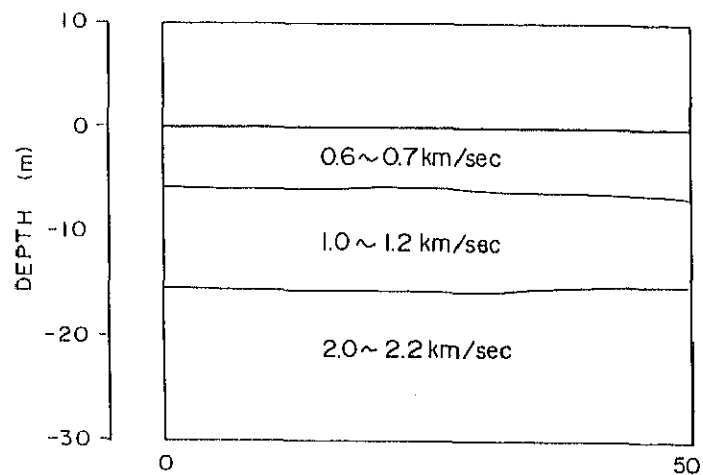


TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.15-A

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

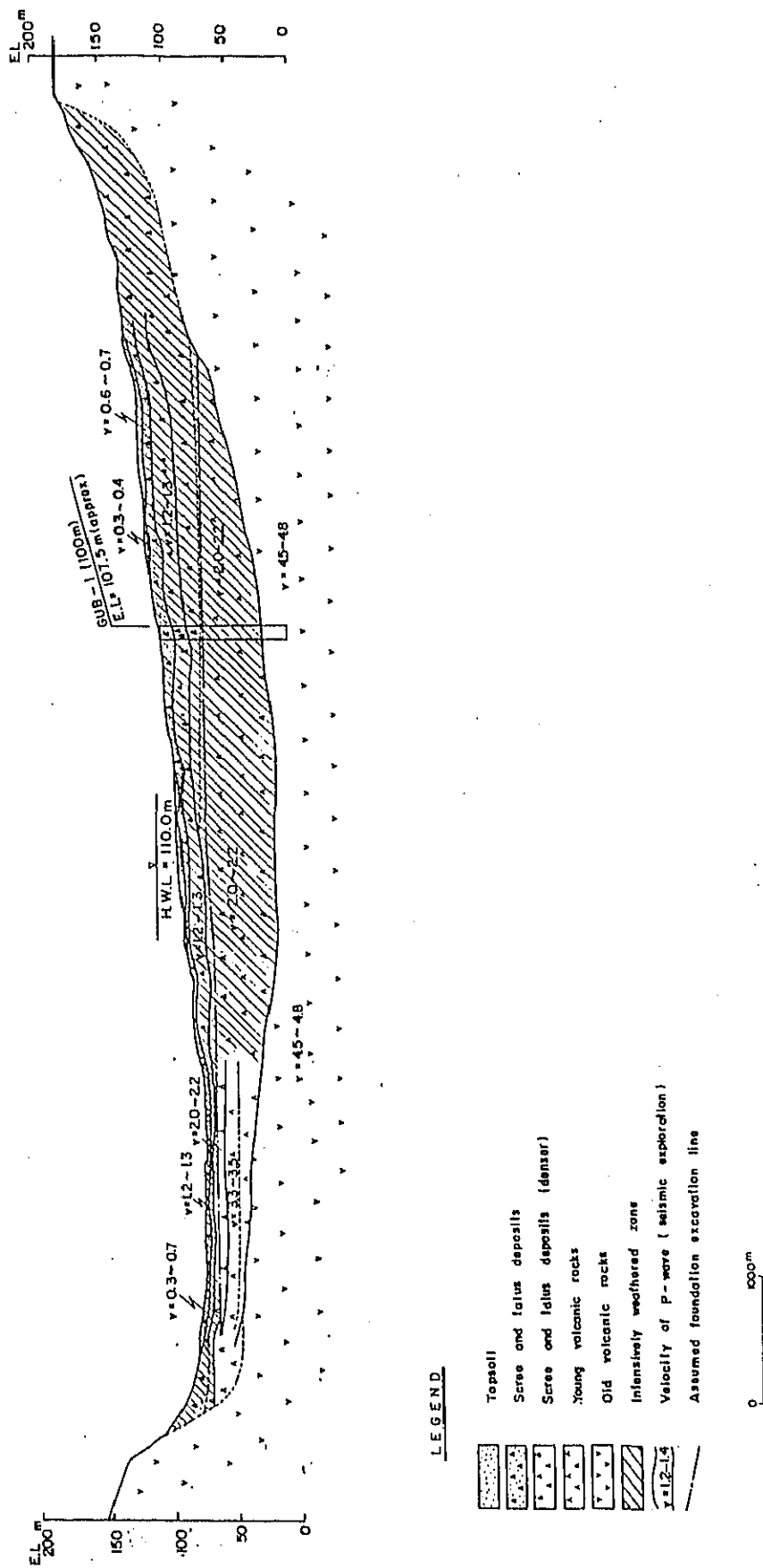
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NO. 15 - B



TIME-DISTANCE CURVE AND VELOCITY PROFILE
OF BORROW AREA No.15-B

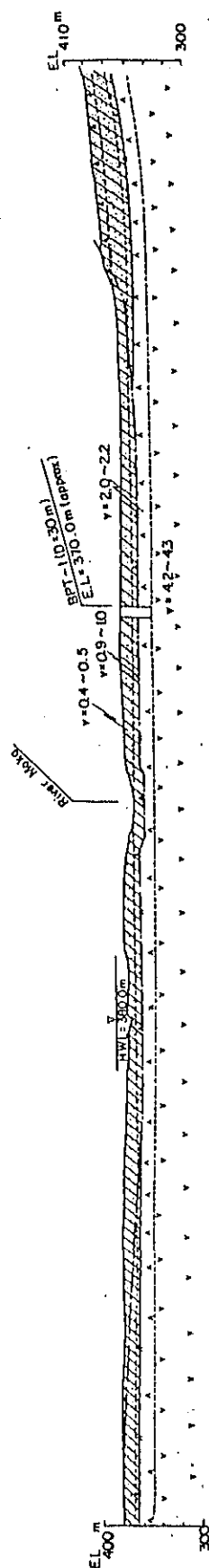
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PORT LOUIS WATER SUPPLY PROJECT
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GEOLOGICAL PROFILE OF ALONG GUILBIES DAM AXIS

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

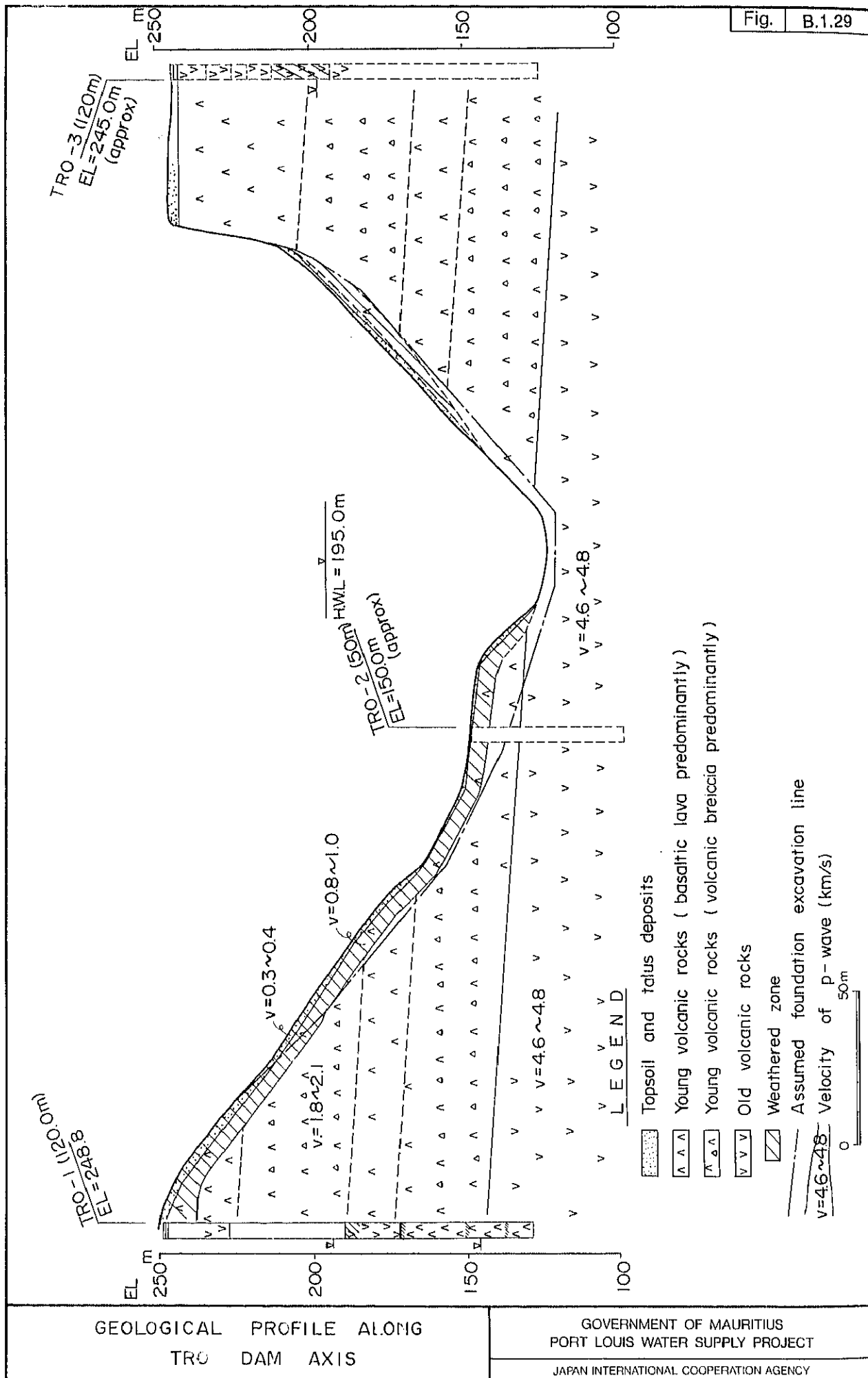
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LEGEND

- Scree and talus deposits
- Residual soil including topsoil
- Young volcanic rocks
- Old volcanic rocks
- Intensively weathered zone
- Velocity of P-wave (km/s)
- Assumed foundation excavation line

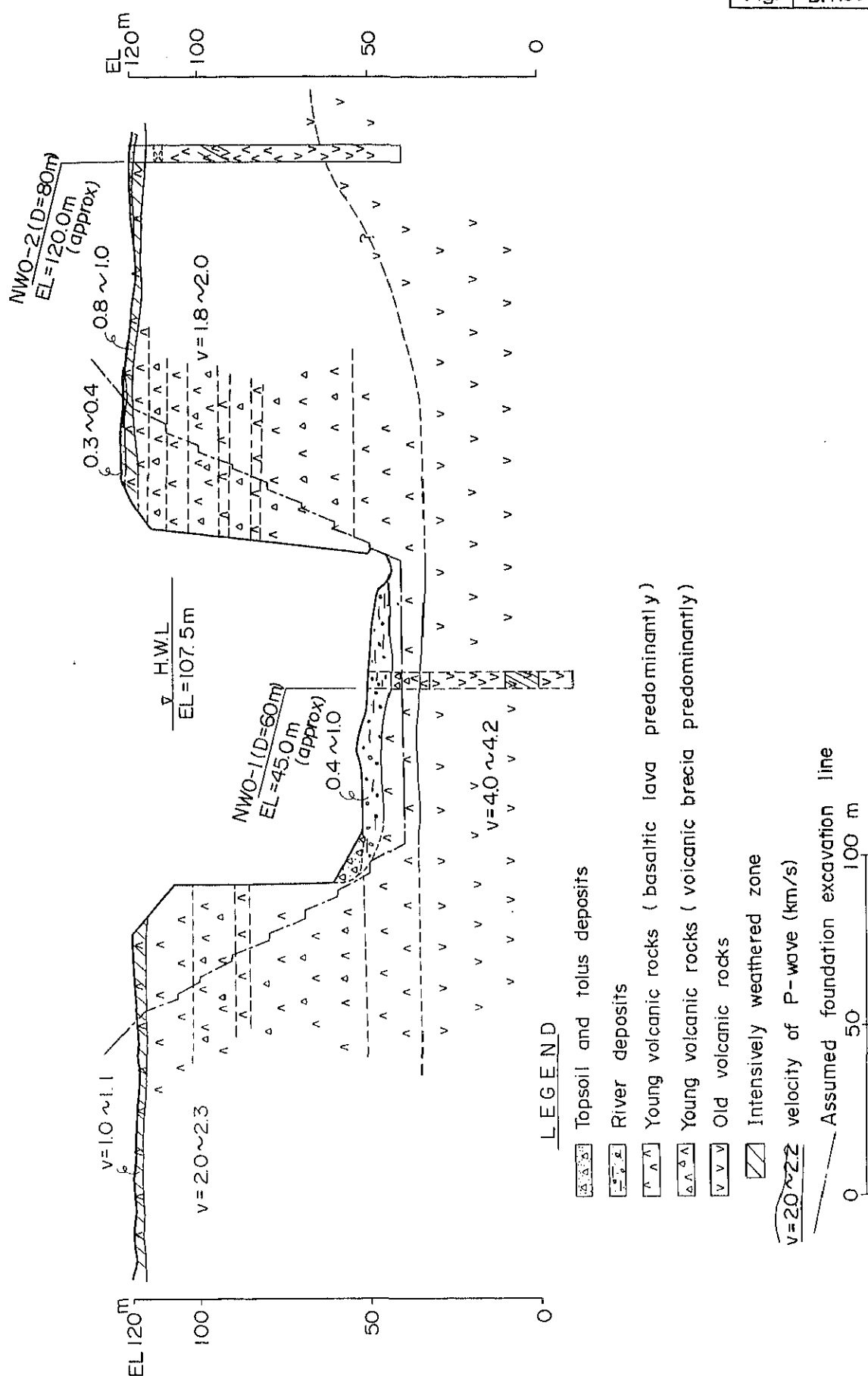
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GEOLOGICAL PROFILE ALONG
TRO DAM AXIS

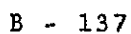
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

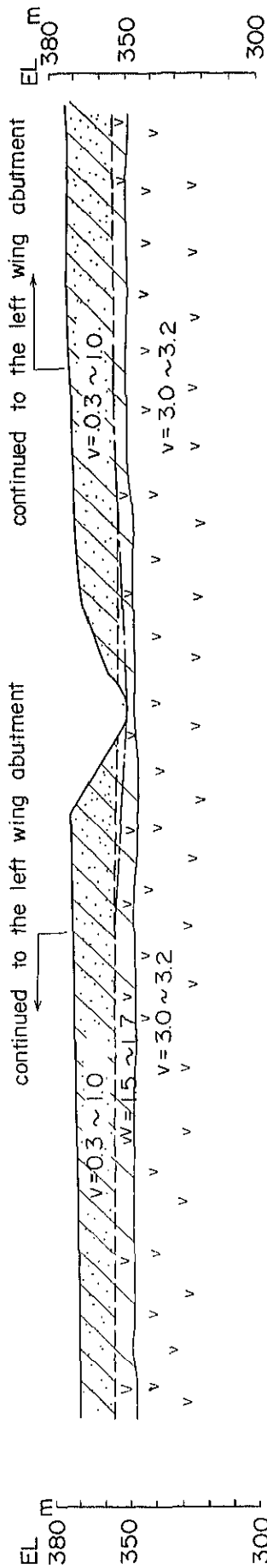
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GEOLOGICAL PROFILE ALONG
NWO DAM AXIS

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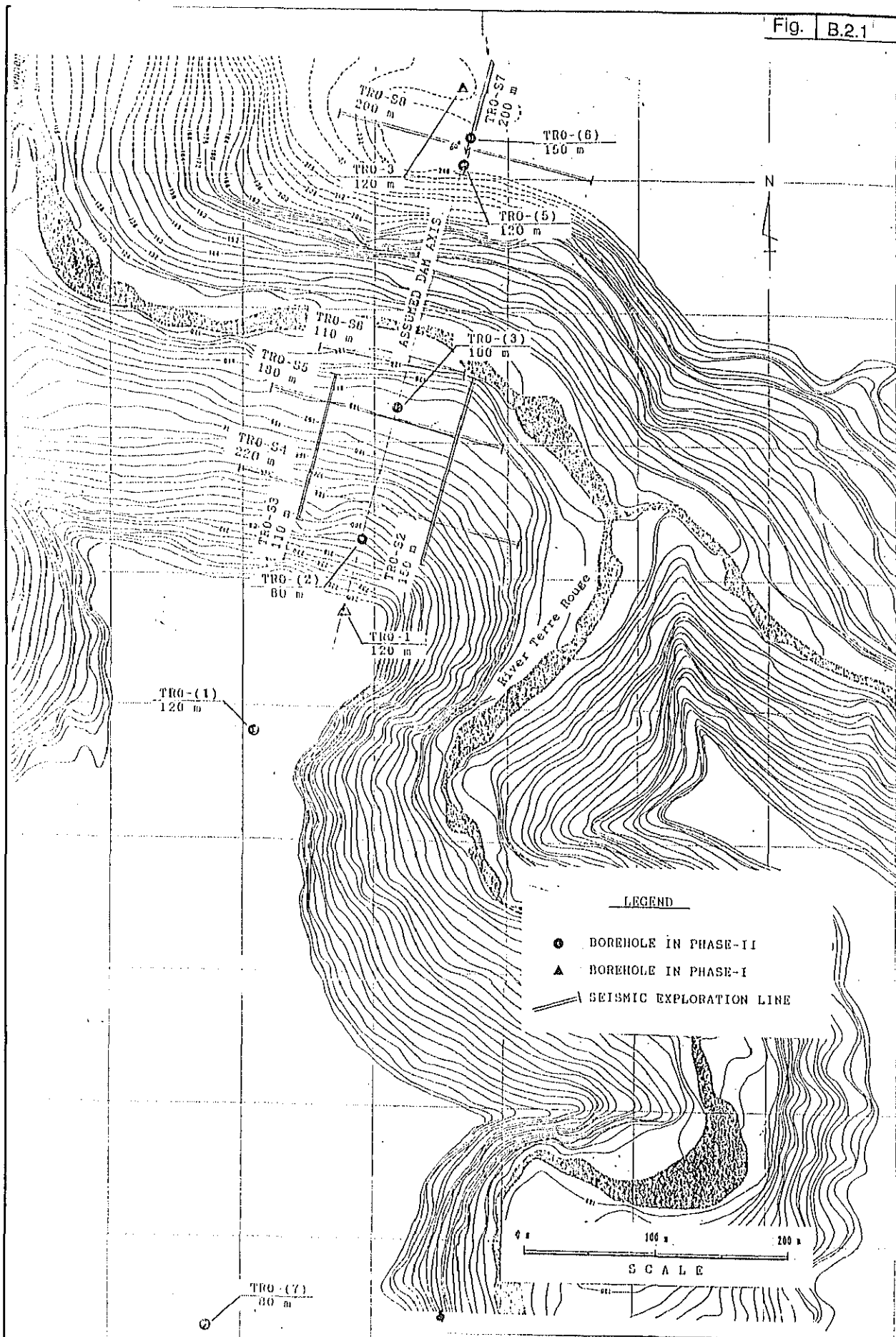


GEOLOGICAL PROFILE ALONG
CA2 DAM AXIS

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

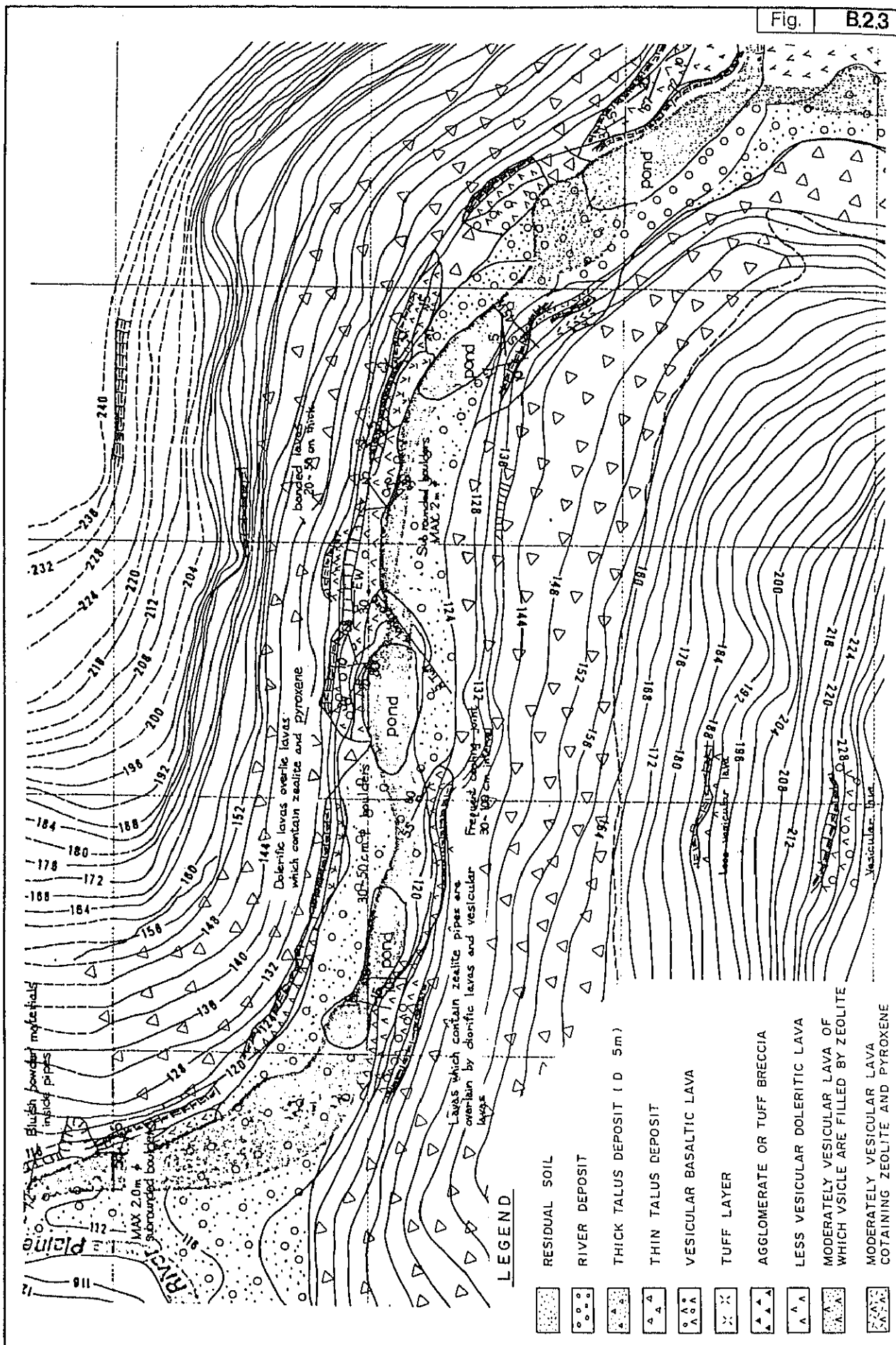
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Fig. B.2.1



LOCATION MAP FOR GEOLOGICAL
INVESTIGATION - I

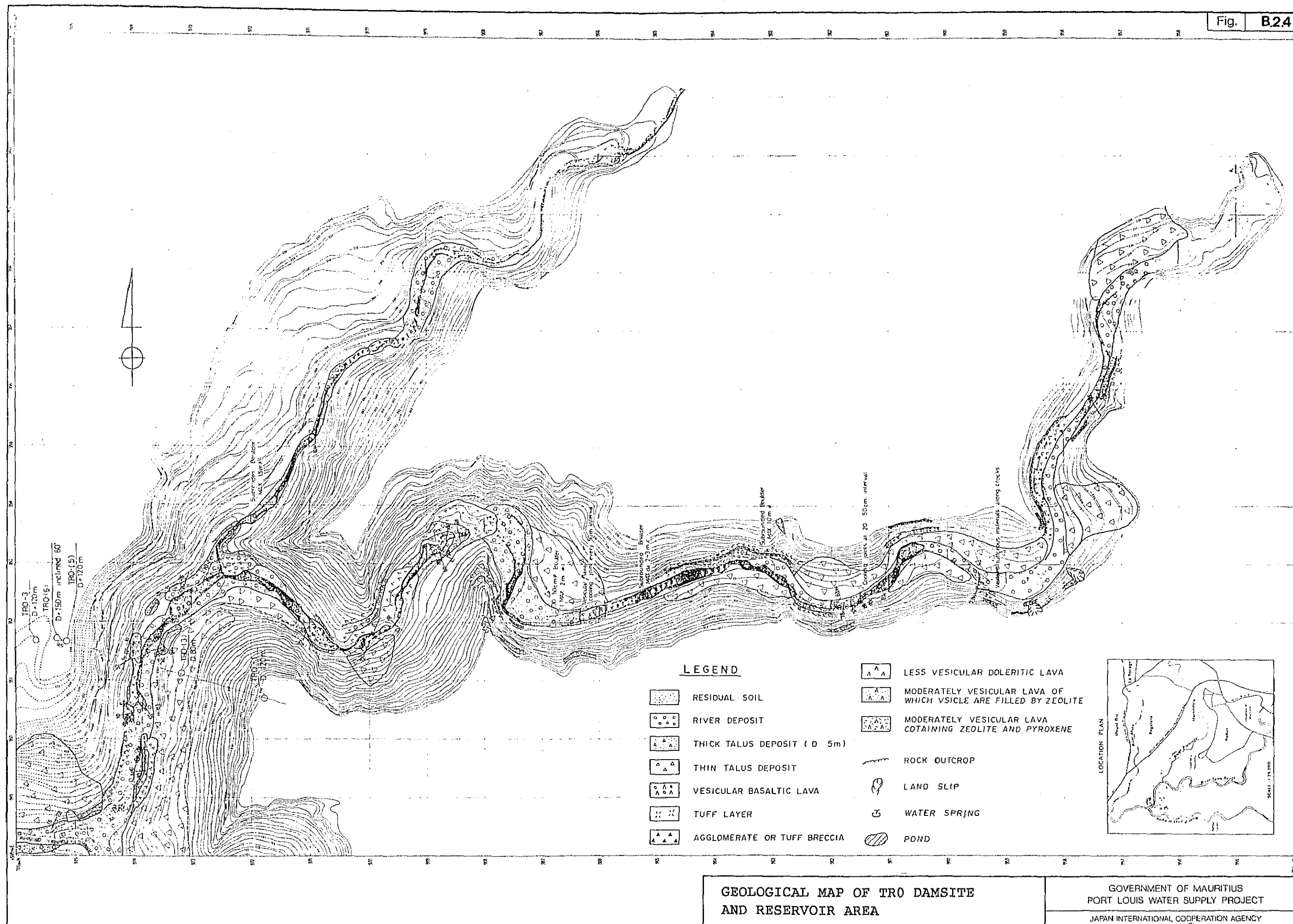
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY

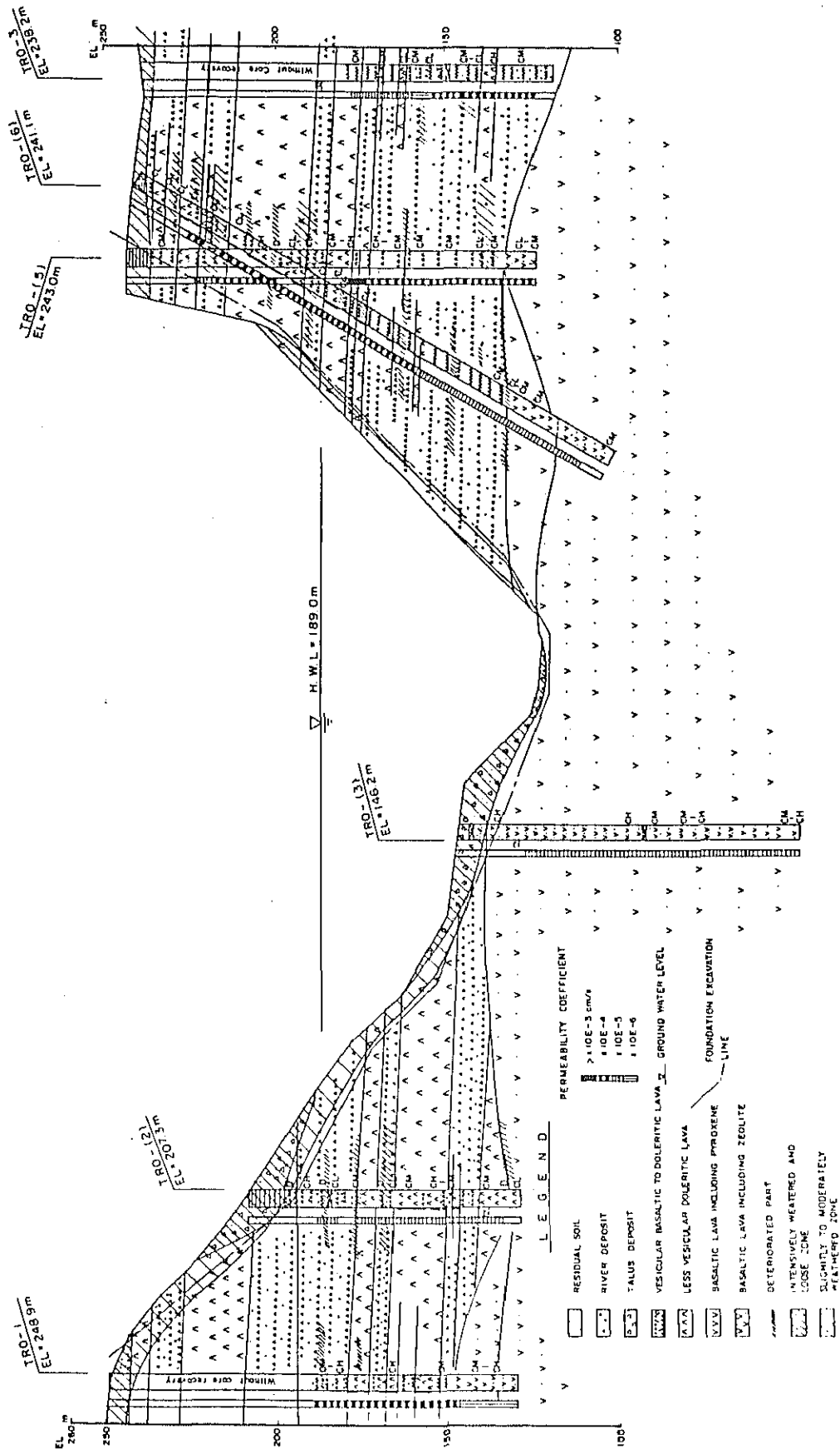


GEOLOGICAL MAP OF TRO DAMSITE

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

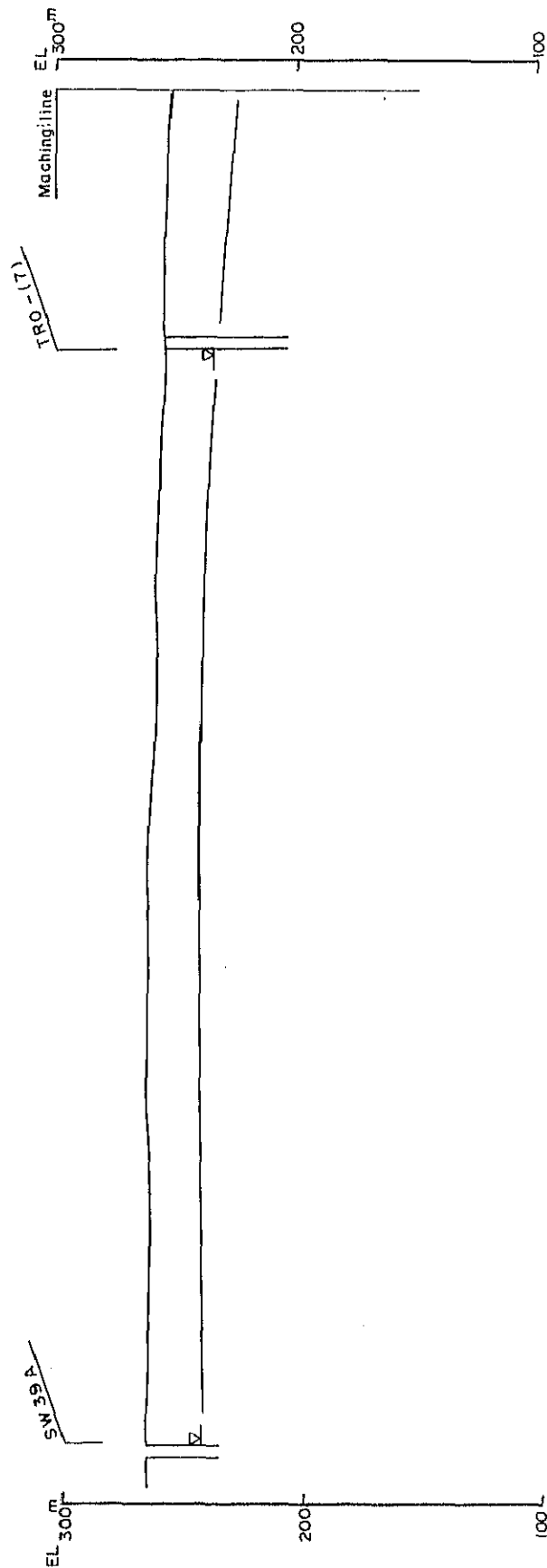




GEOLOGICAL PROFILE ALONG TRO DAM AXIS

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

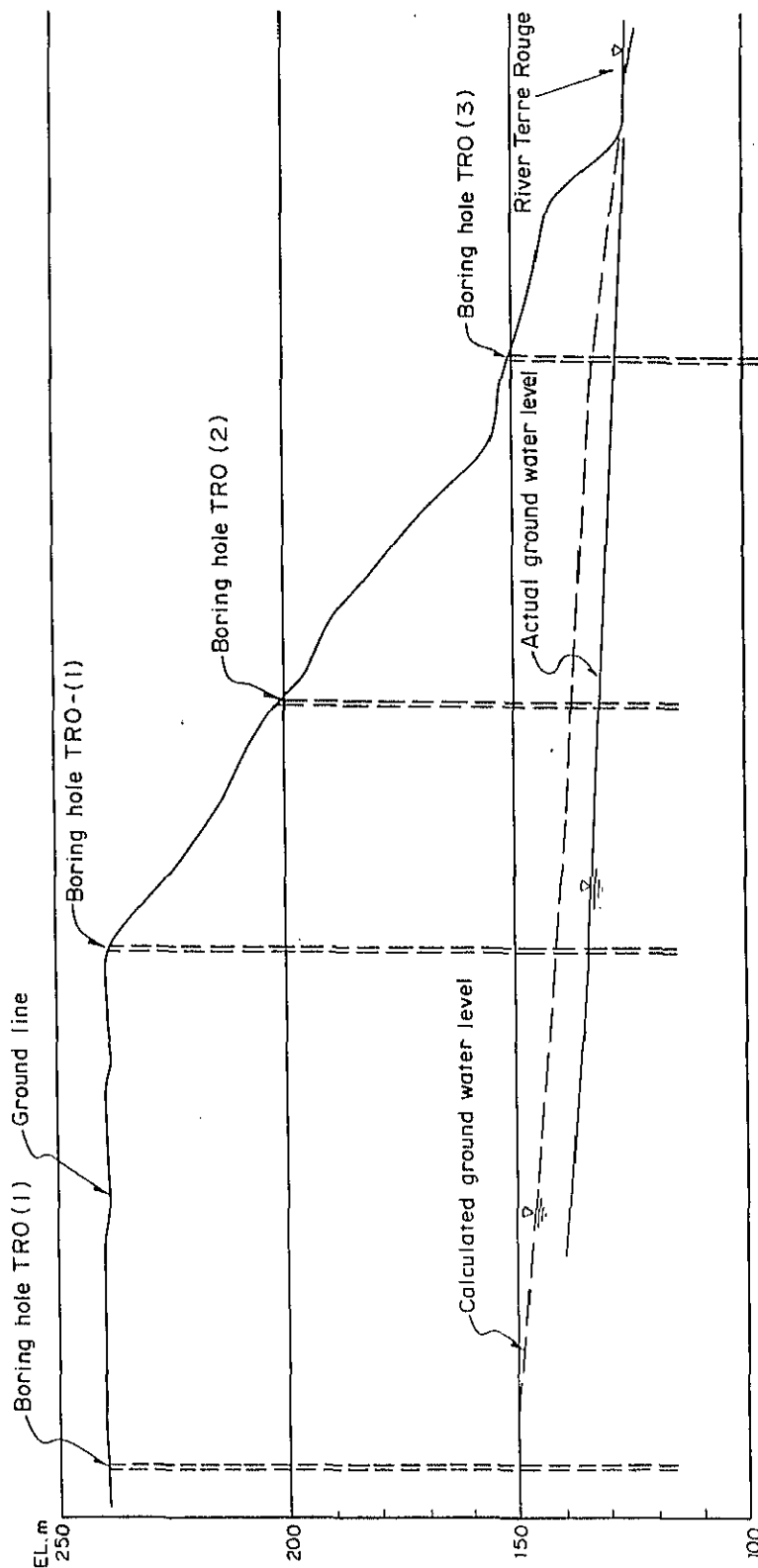
JAPAN INTERNATIONAL COOPERATION AGENCY



DISTRIBUTION OF GROUNDWATER TABLES
IN TRO DAM ABUTMENT (1/3)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

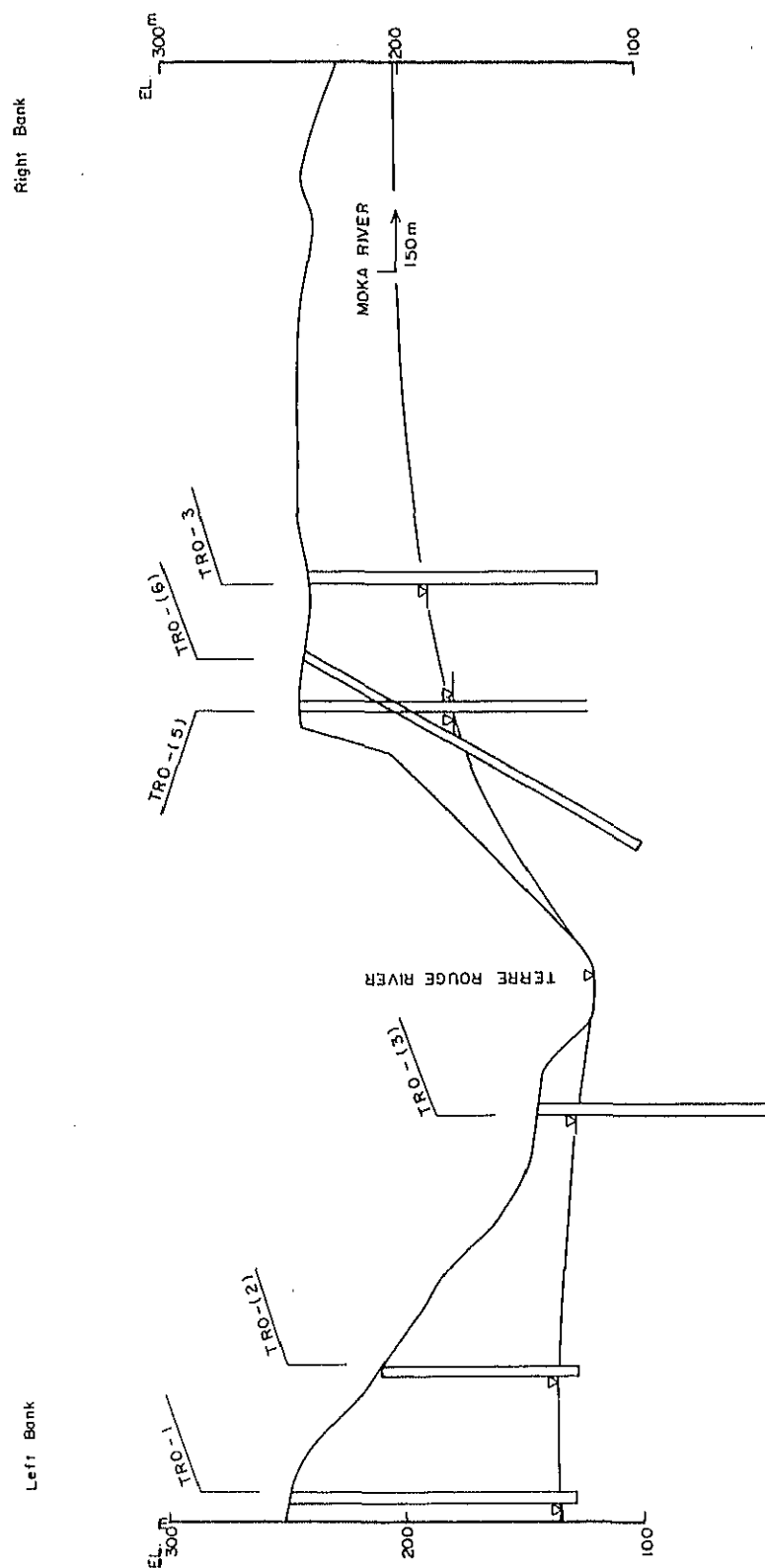
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DISTRIBUTION OF GROUNDWATER TABLES
IN TRO DAM ABUTMENT (2/3)

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

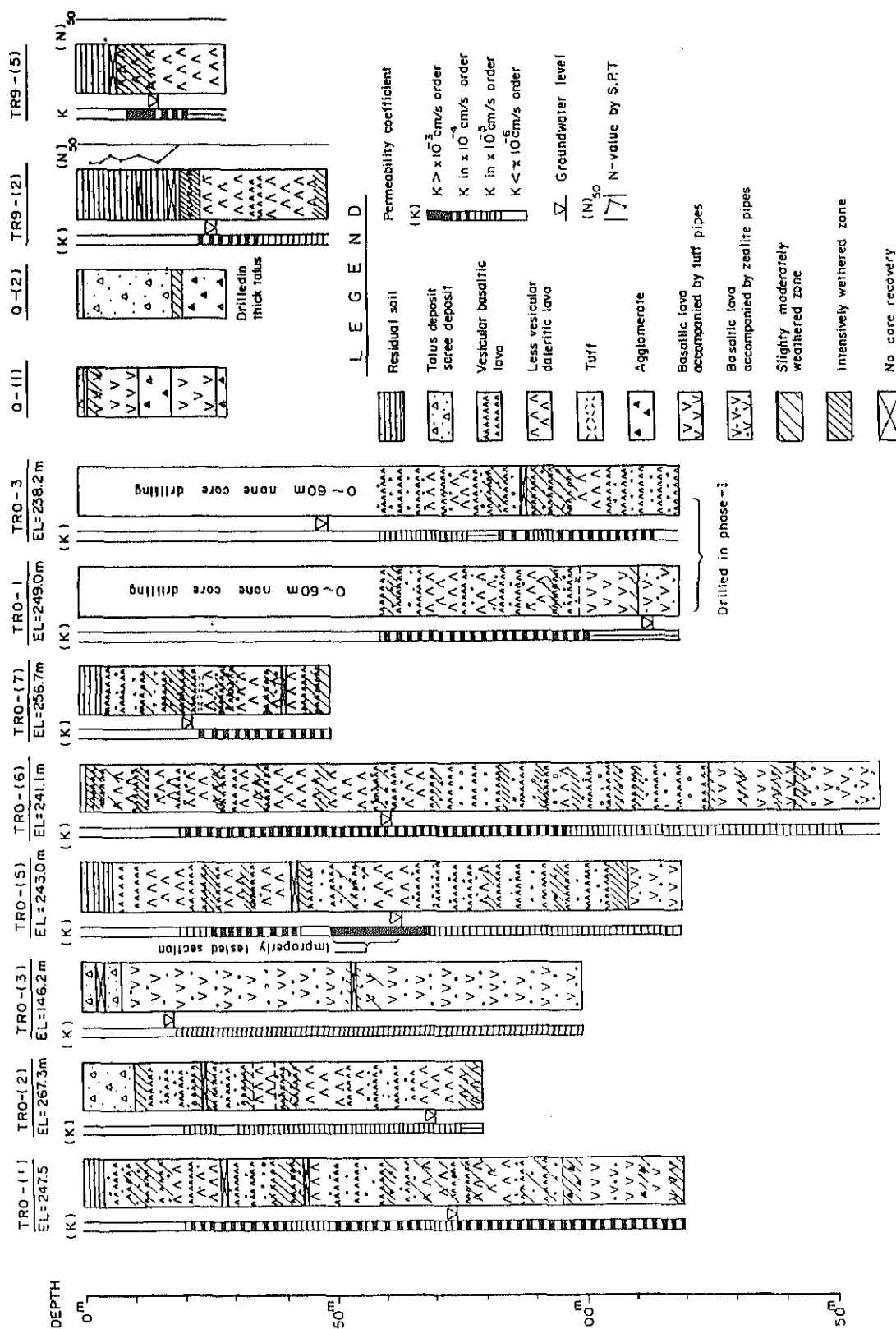
JAPAN INTERNATIONAL COOPERATION AGENCY



DISTRIBUTION OF GROUNDWATER TABLES
IN TR0 DAM ABUTMENT (3/3)

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

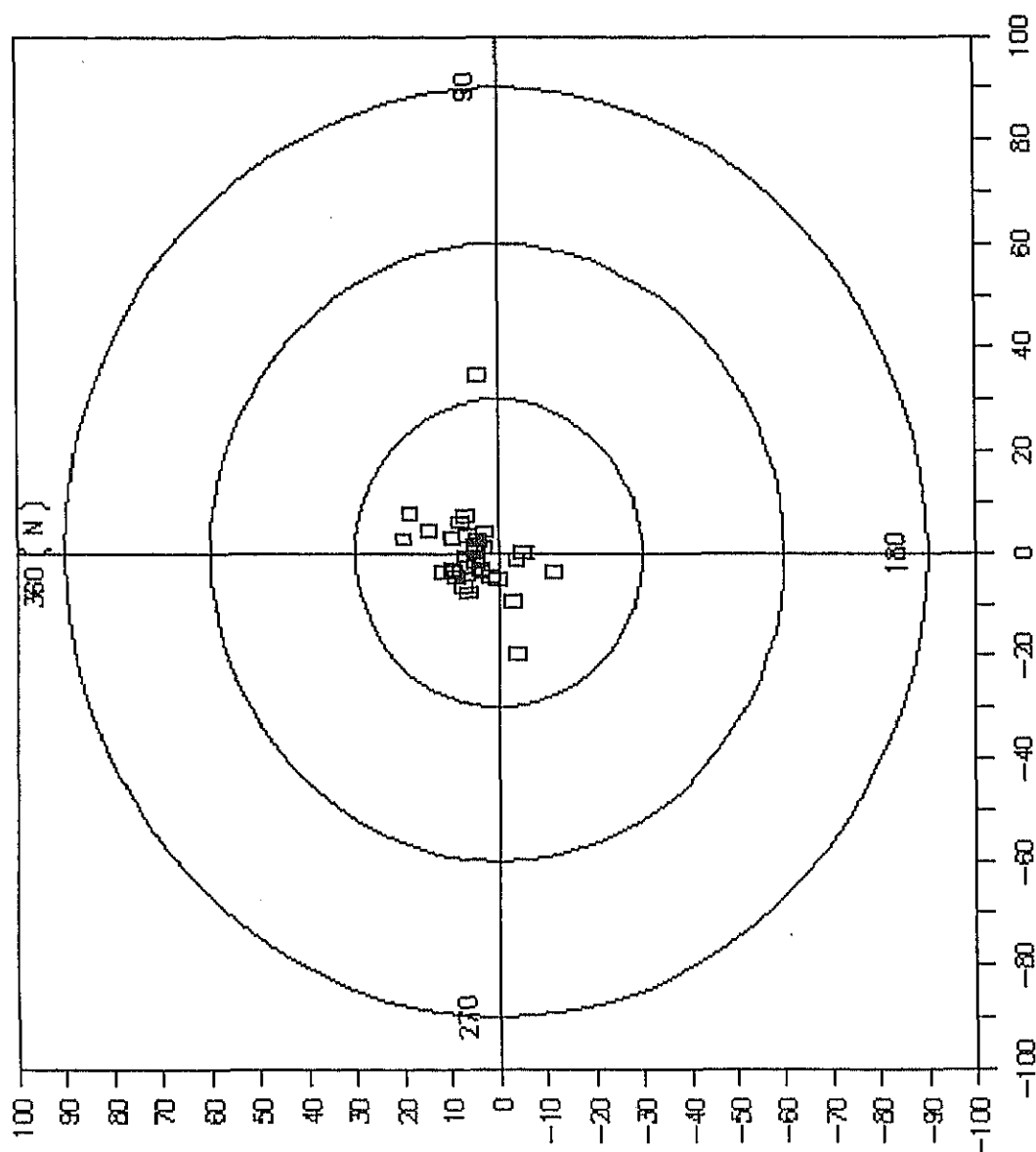
Fig.	B.2.7
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SUMMARY OF DRILL CORE LOG

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

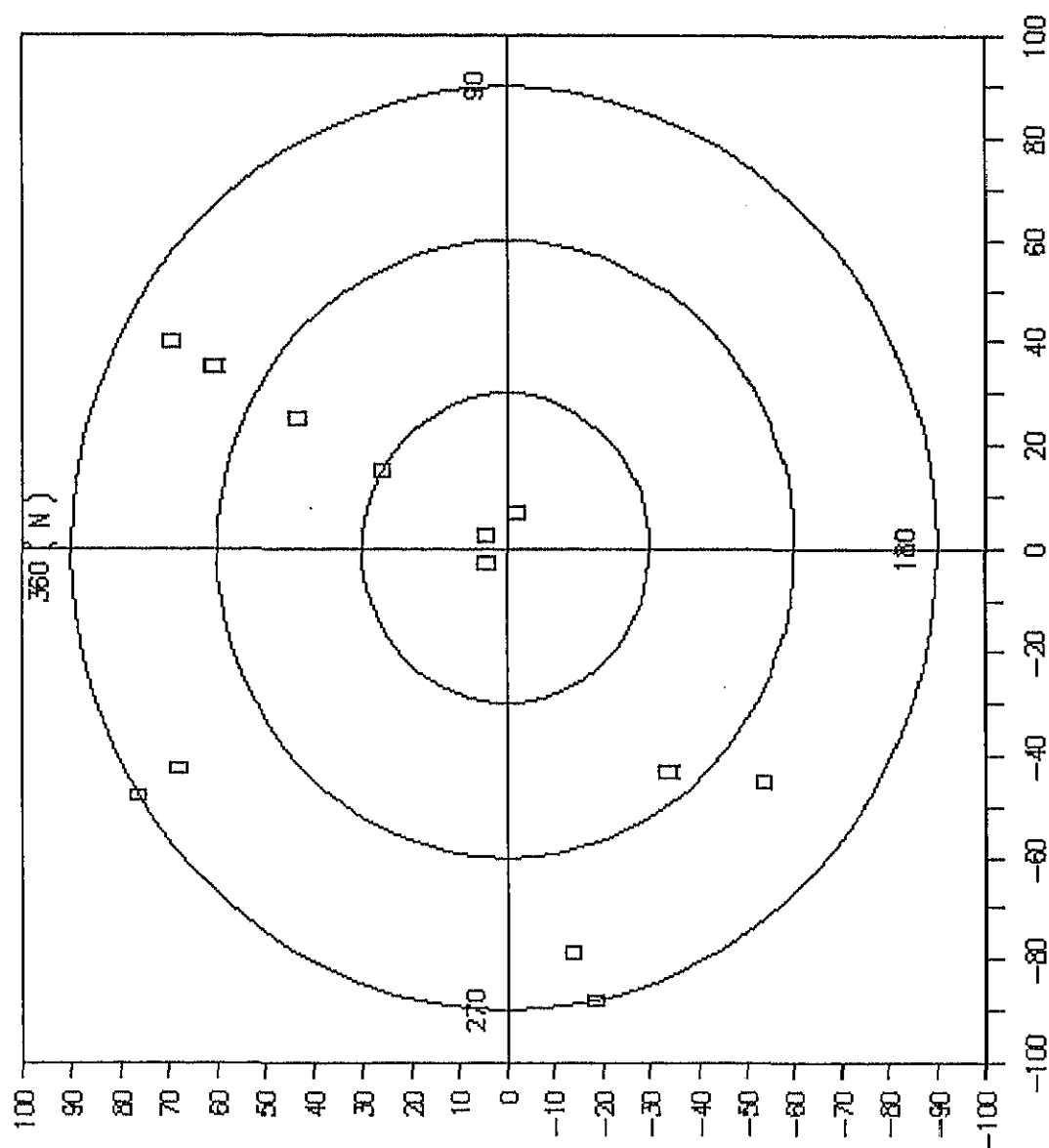
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DISTRIBUTION OF BEDDING PLANES
ON SCHMIDT'S NET

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

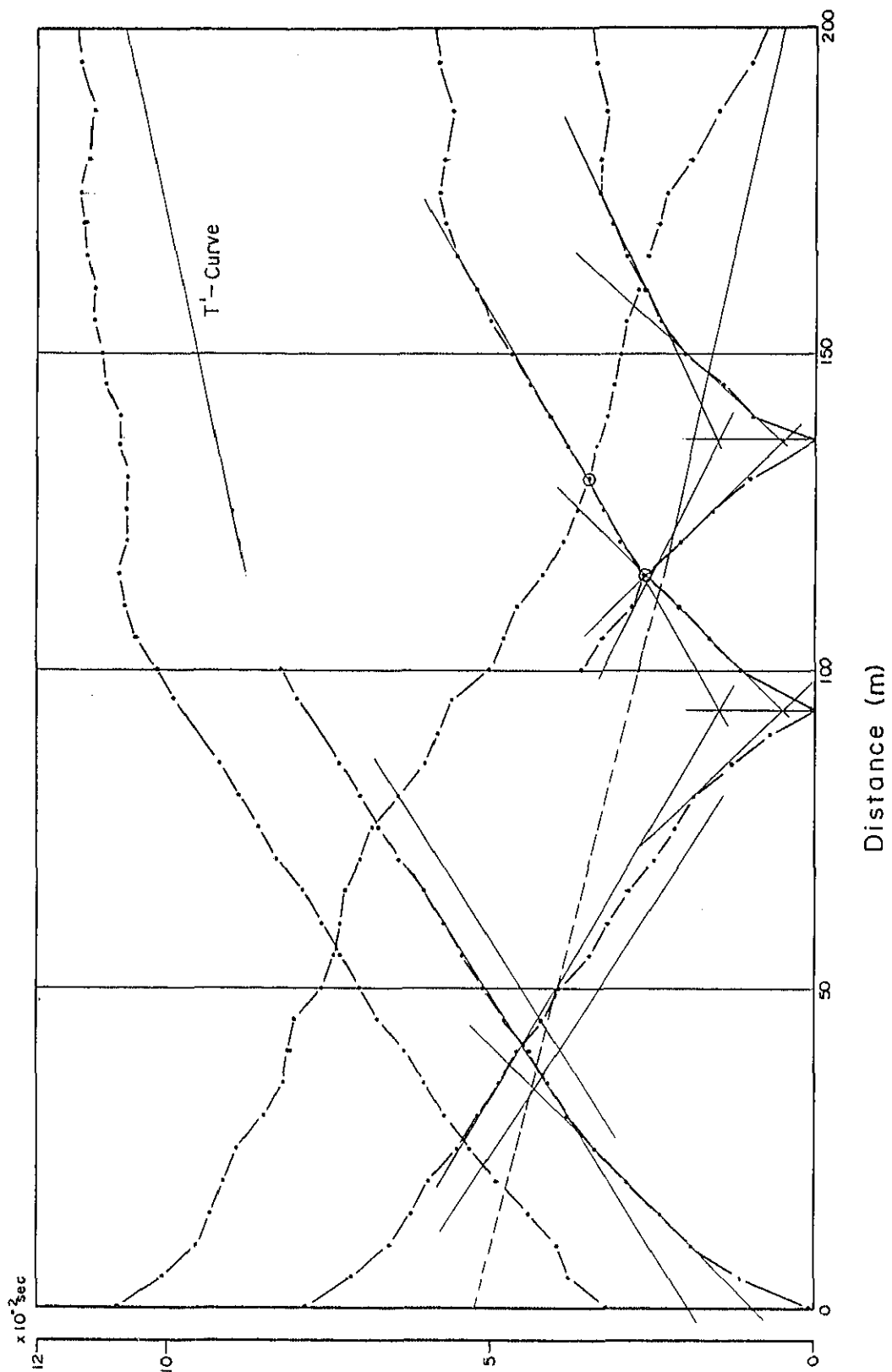
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DISTRIBUTION OF JOINT PLANES
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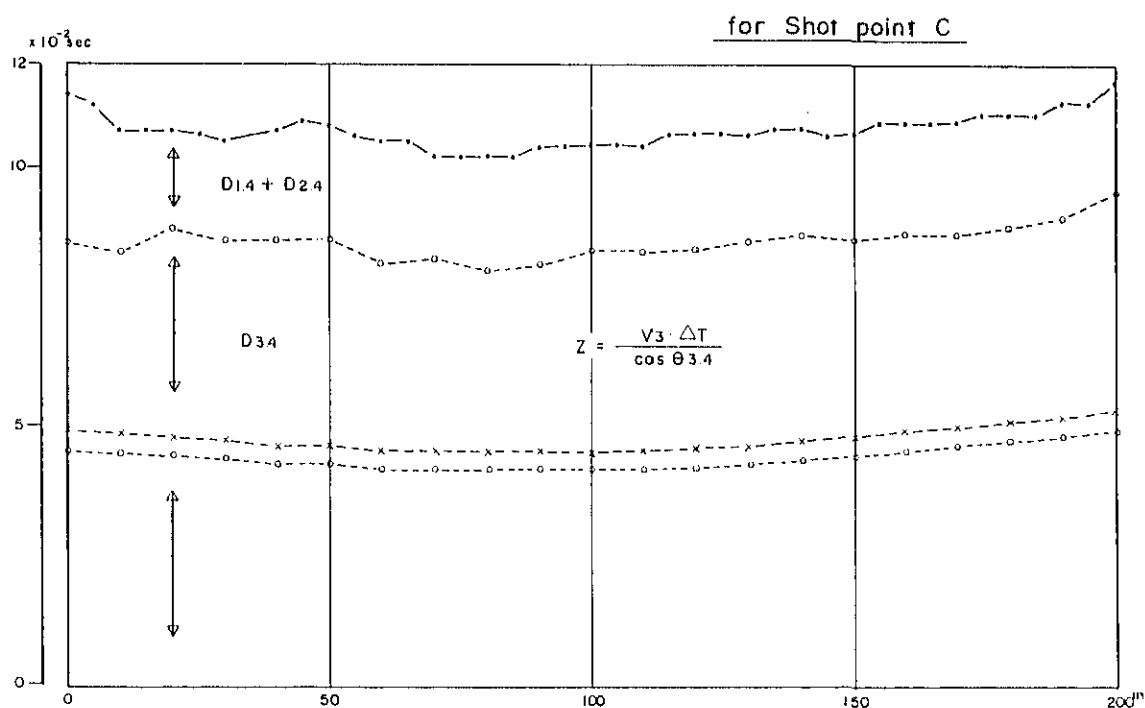
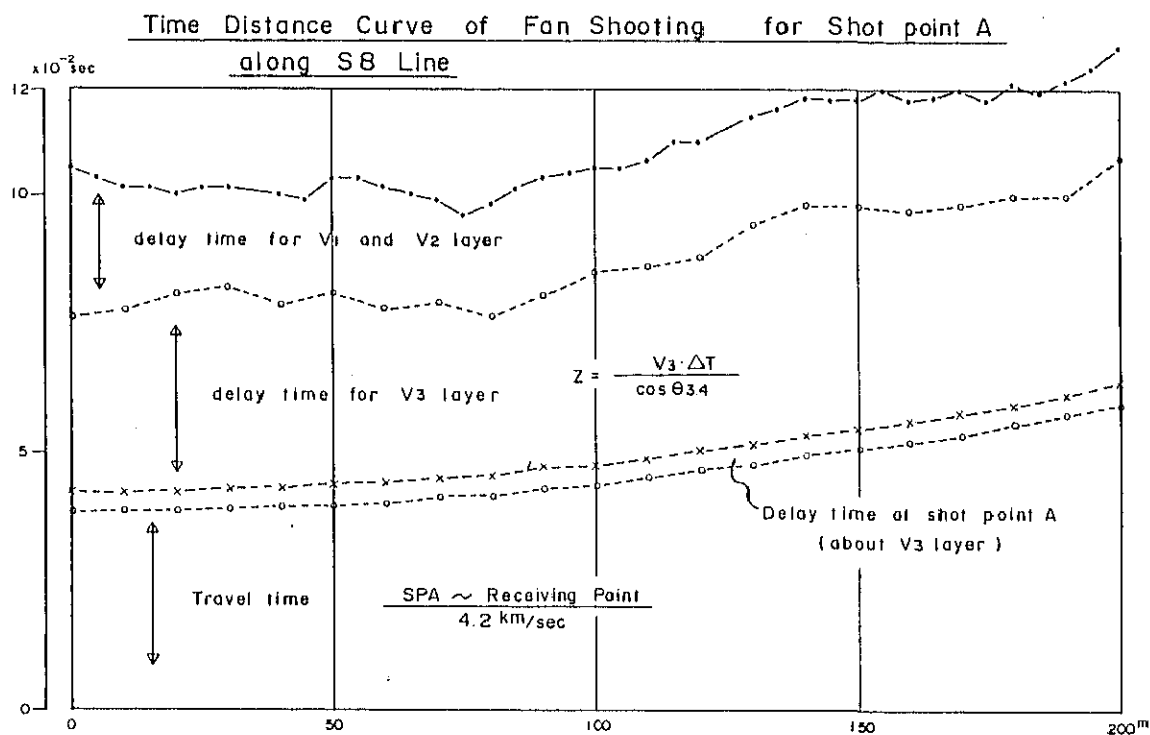
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY



TIME-DISTANCE CURVE OF
TR0-S1 (PHASE-1)

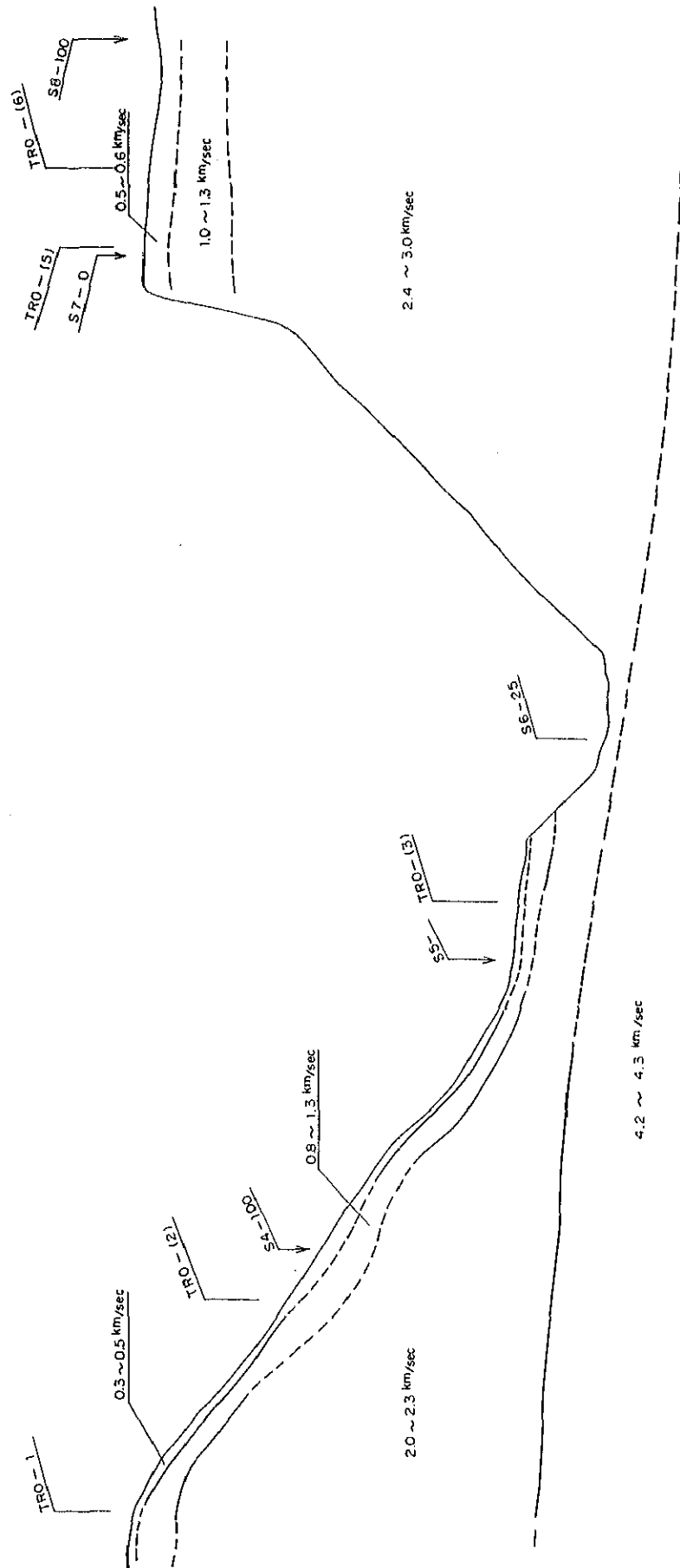
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
JAPAN INTERNATIONAL COOPERATION AGENCY



TIME-DISTANCE CURVE AND P-WAVE VELOCITY
PROFILE BY FAN SHOOTING FROM SHOOTING
POINTS OF A AND C

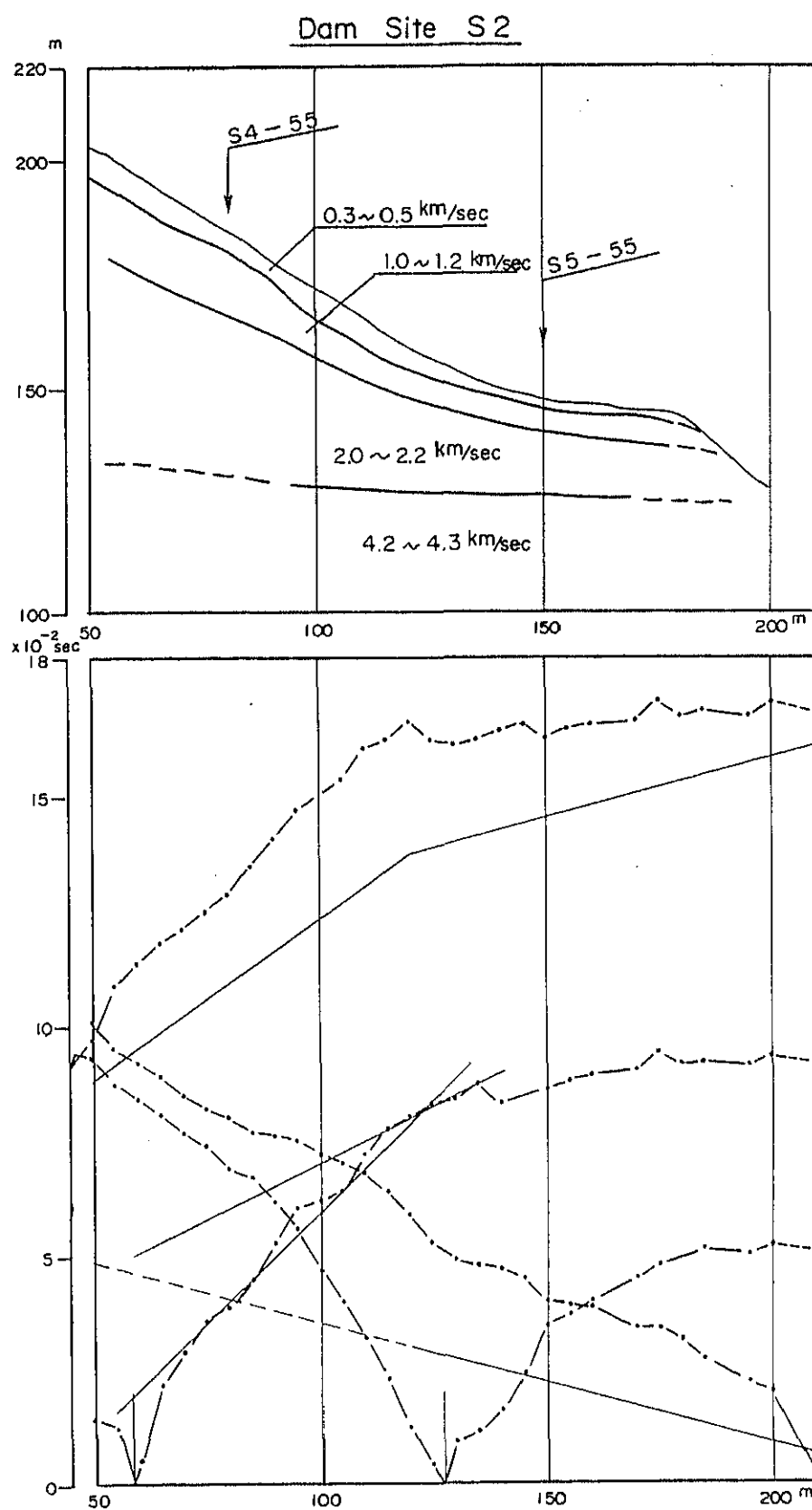
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

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P-WAVE VELOCITY PROFILE
ALONG TR0 DAM AXIS

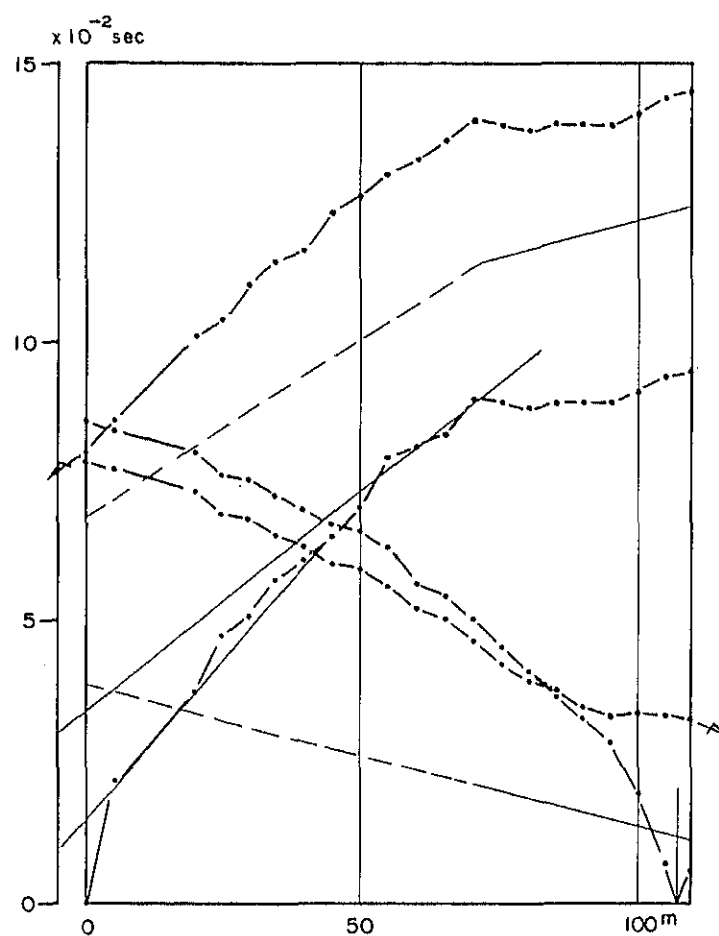
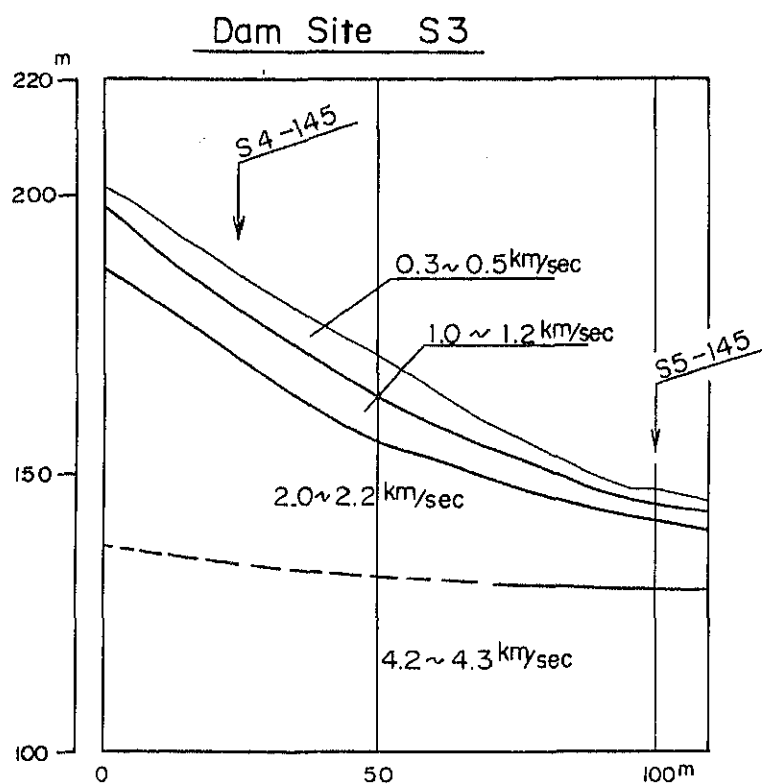
GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT
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TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-S2

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

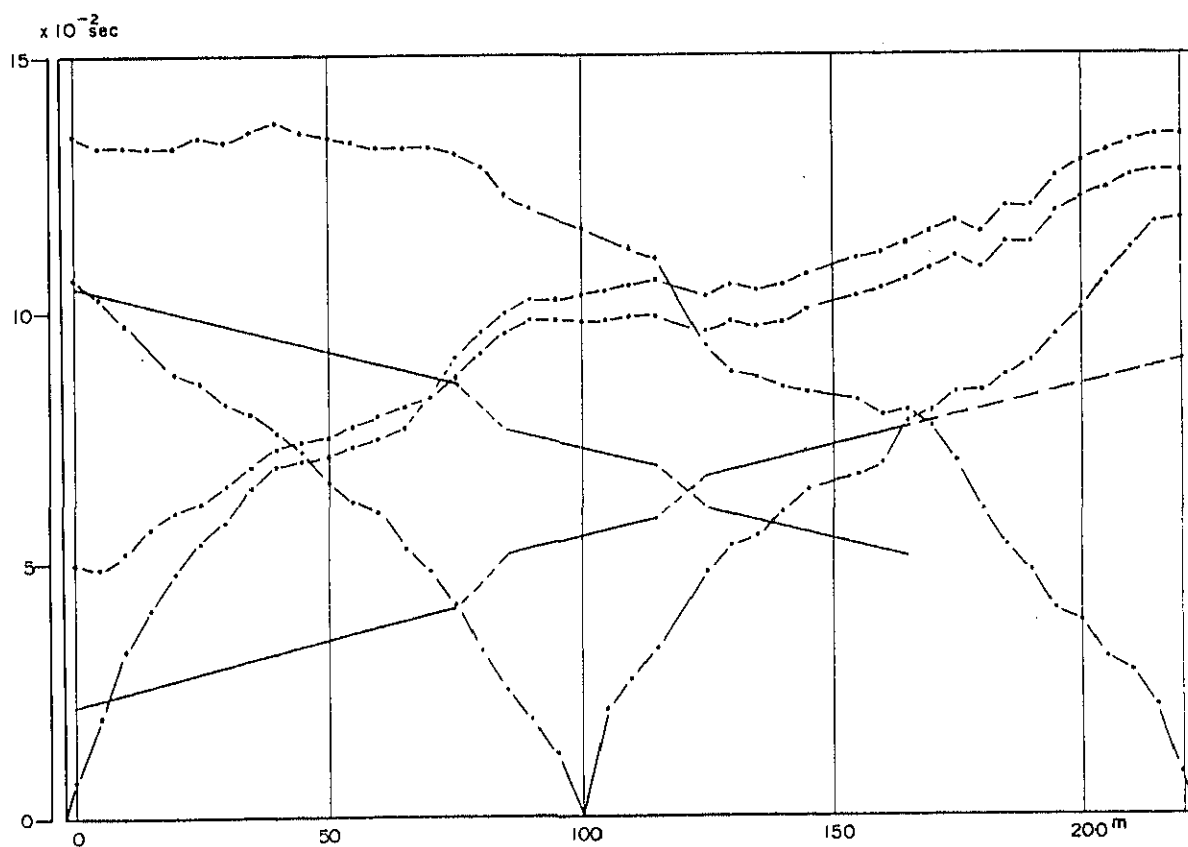
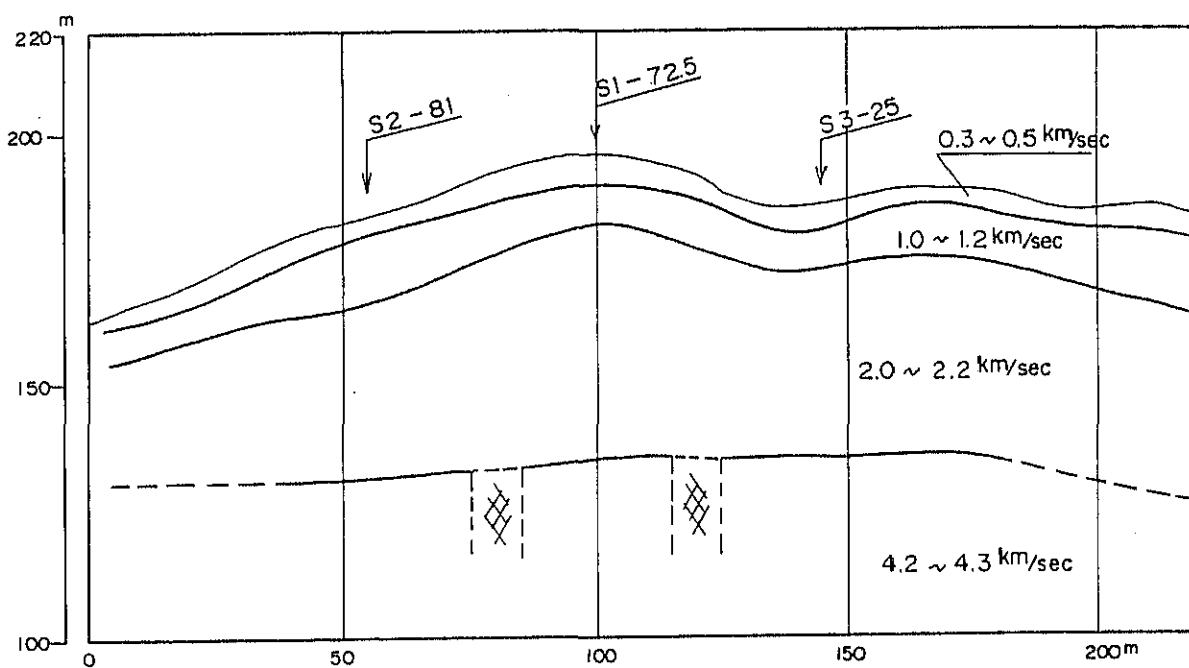


TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-S3

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

Dam Site S4

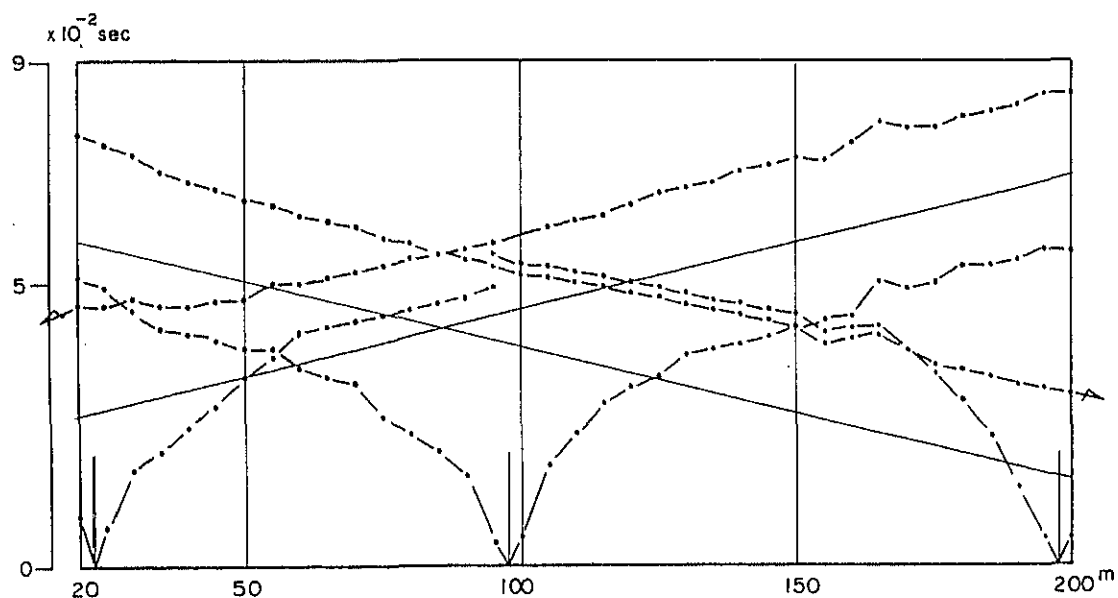
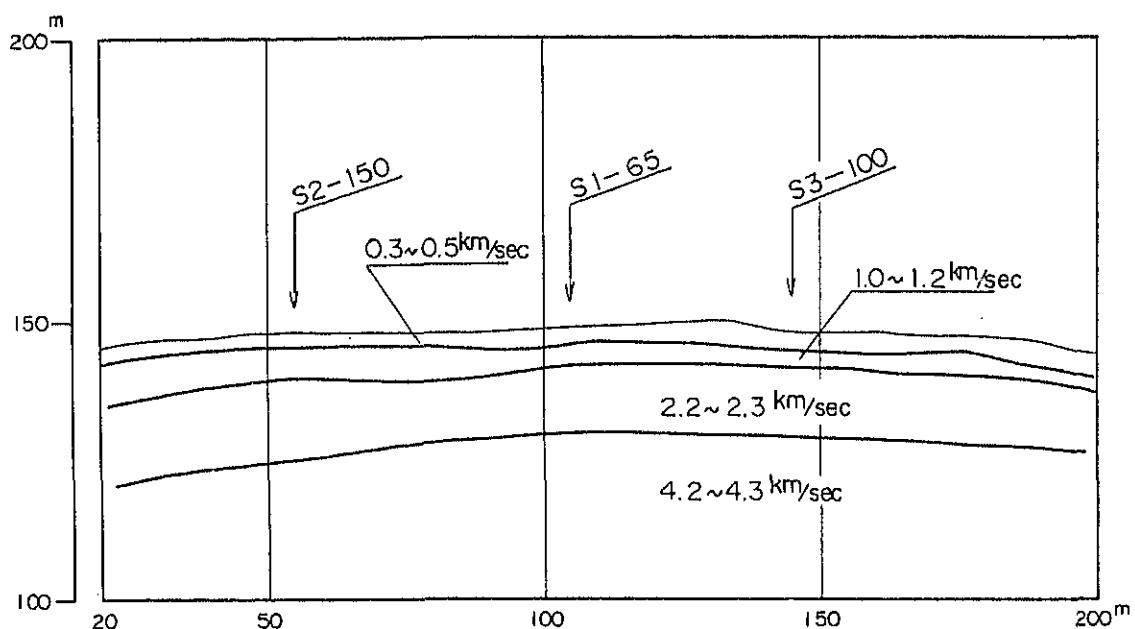


TIME-DISTANCE CURVE AND P-WAVE VELOCITY PROFILE OF TR0-S4

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

Dam Site S5

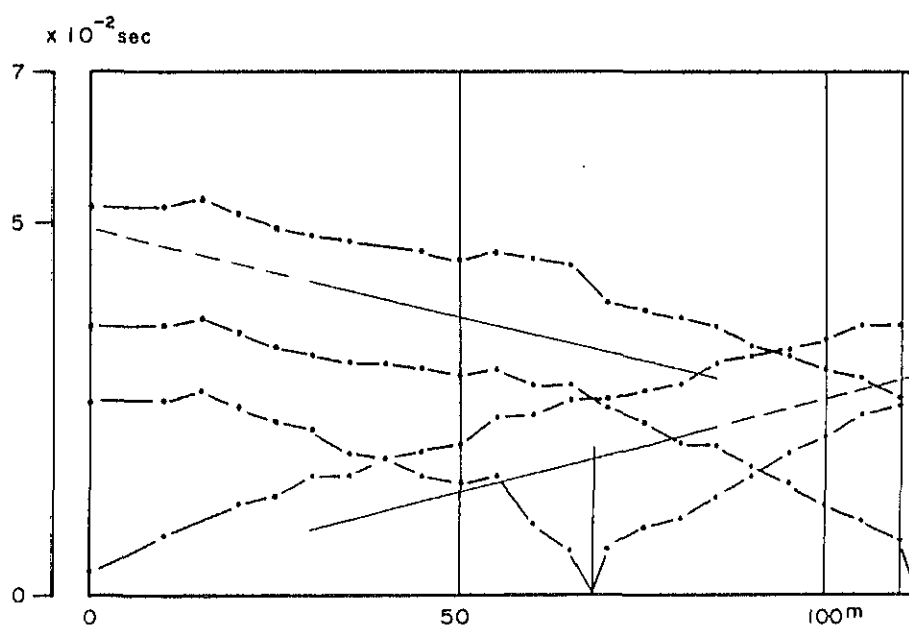
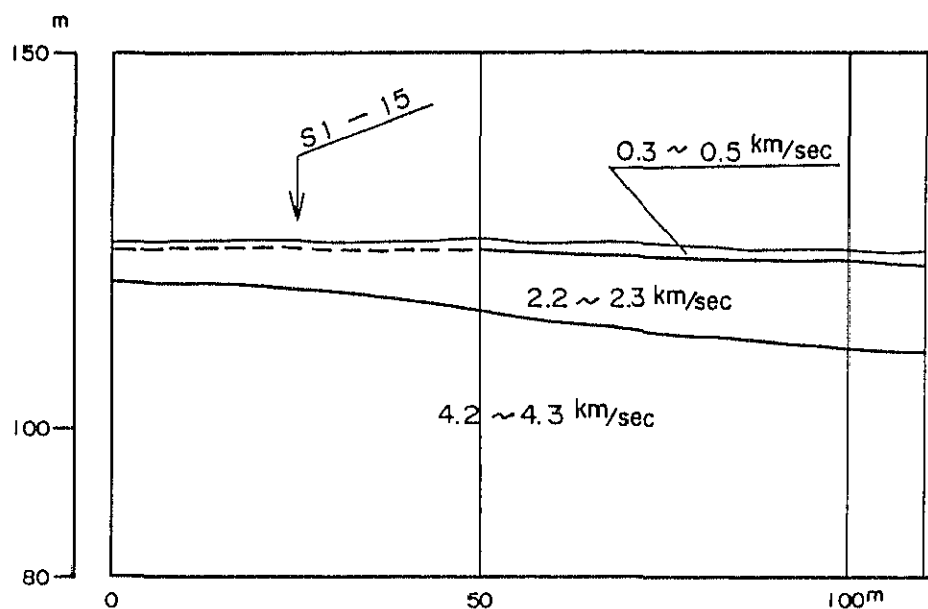


TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-S5

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

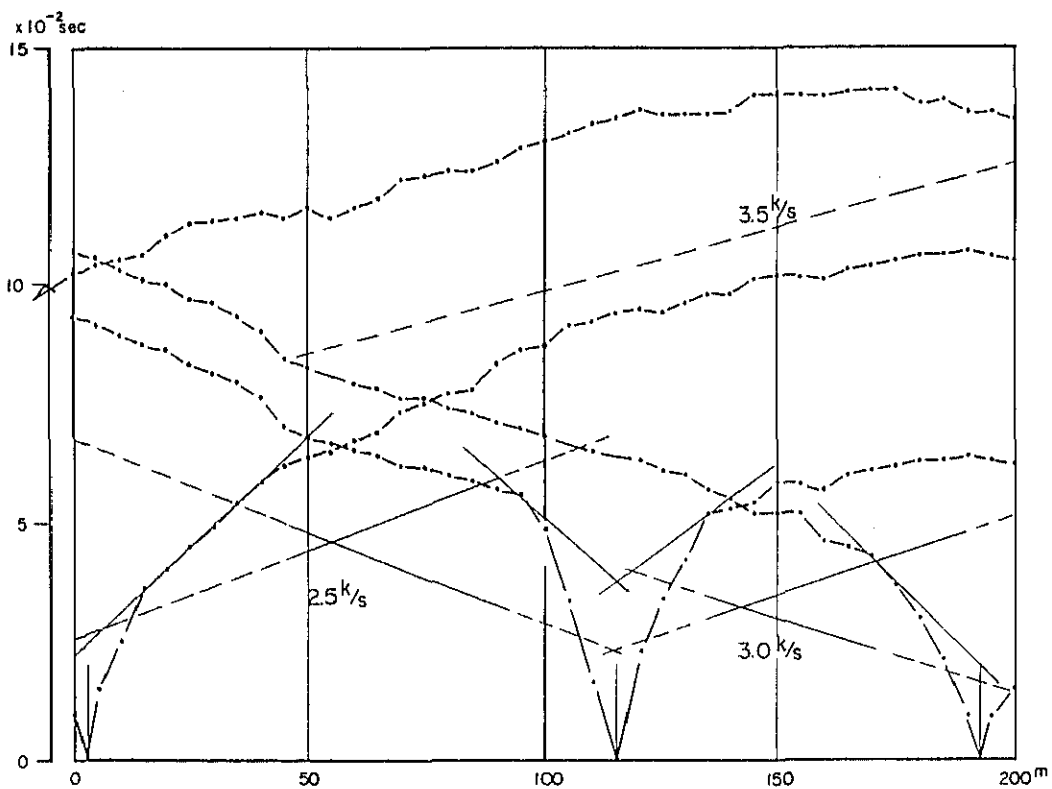
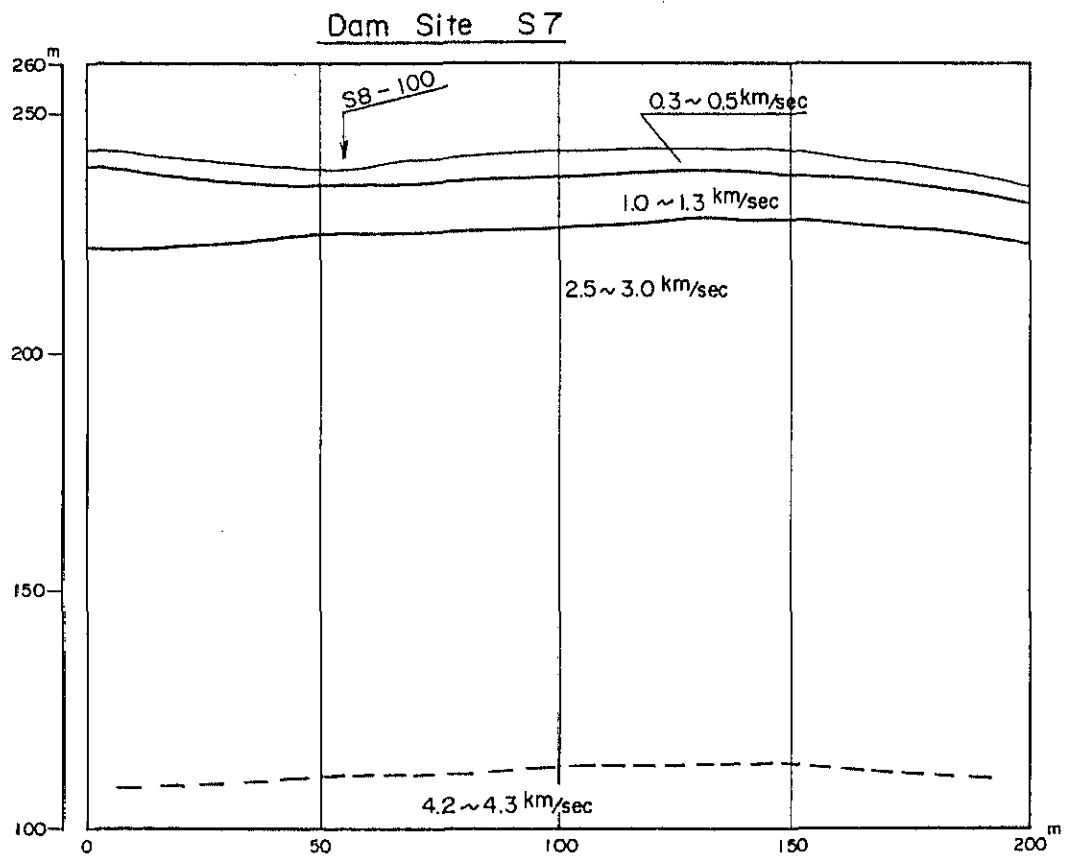
Dam Site S-6



TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-S6

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

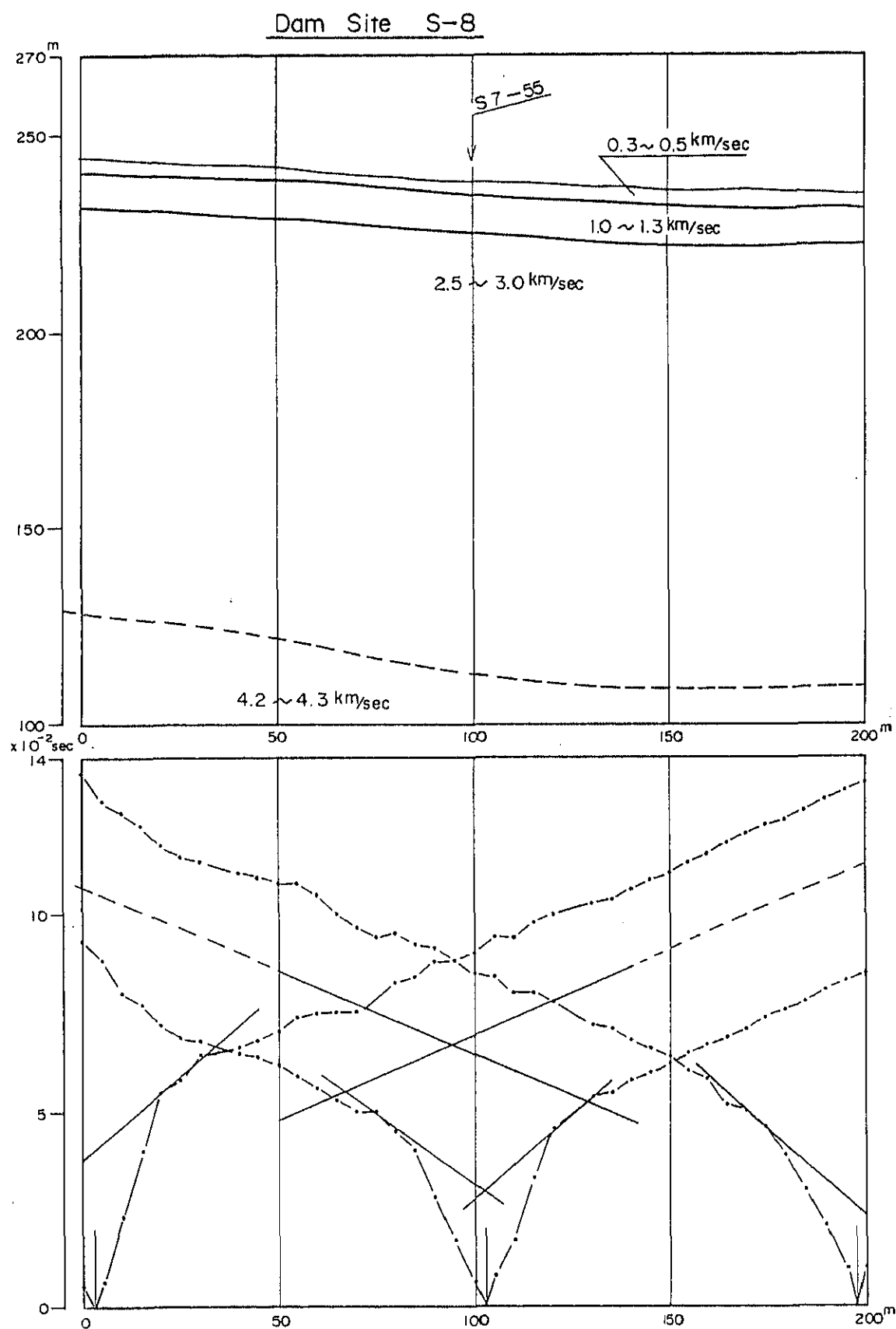
JAPAN INTERNATIONAL COOPERATION AGENCY



TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-S7

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

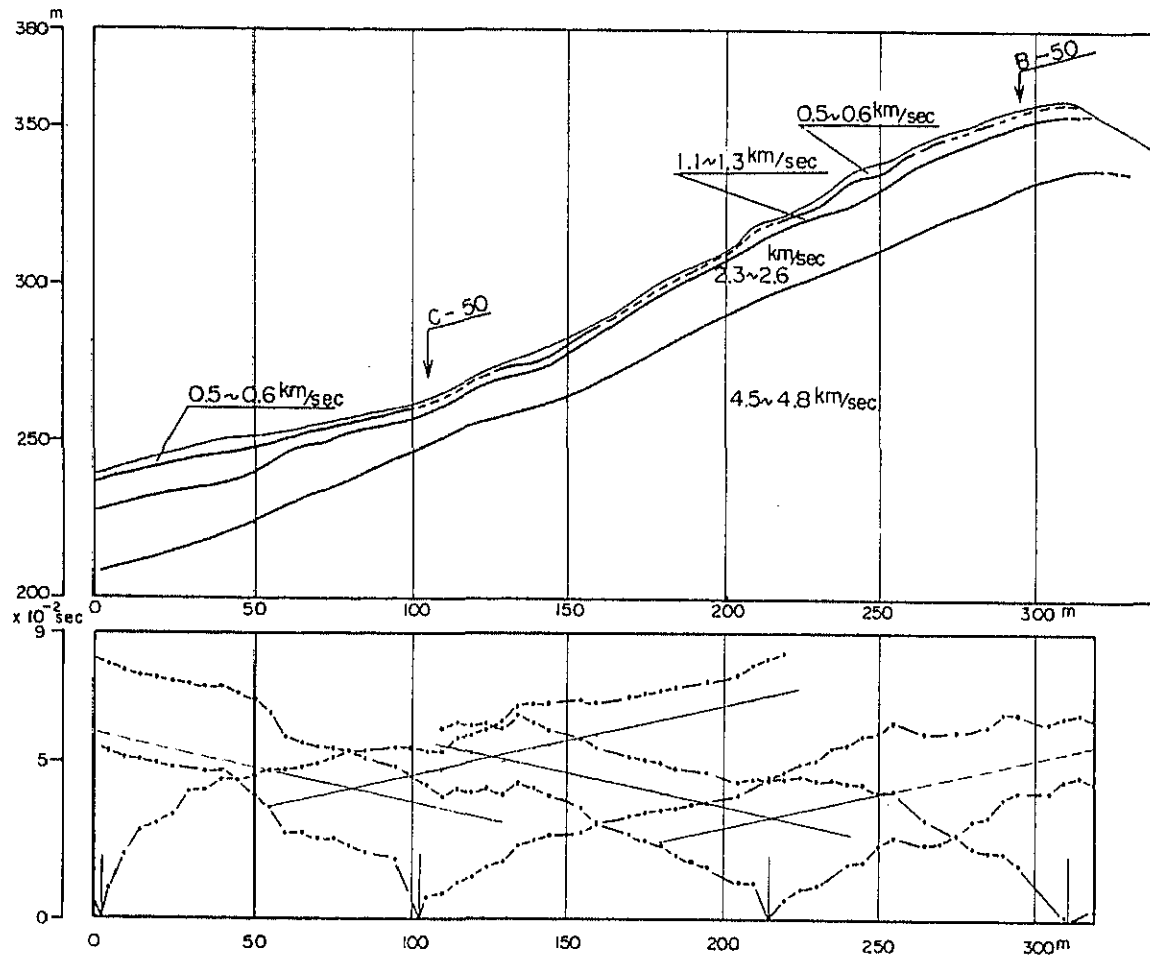


TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-S8

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

Quarry Site A-Line

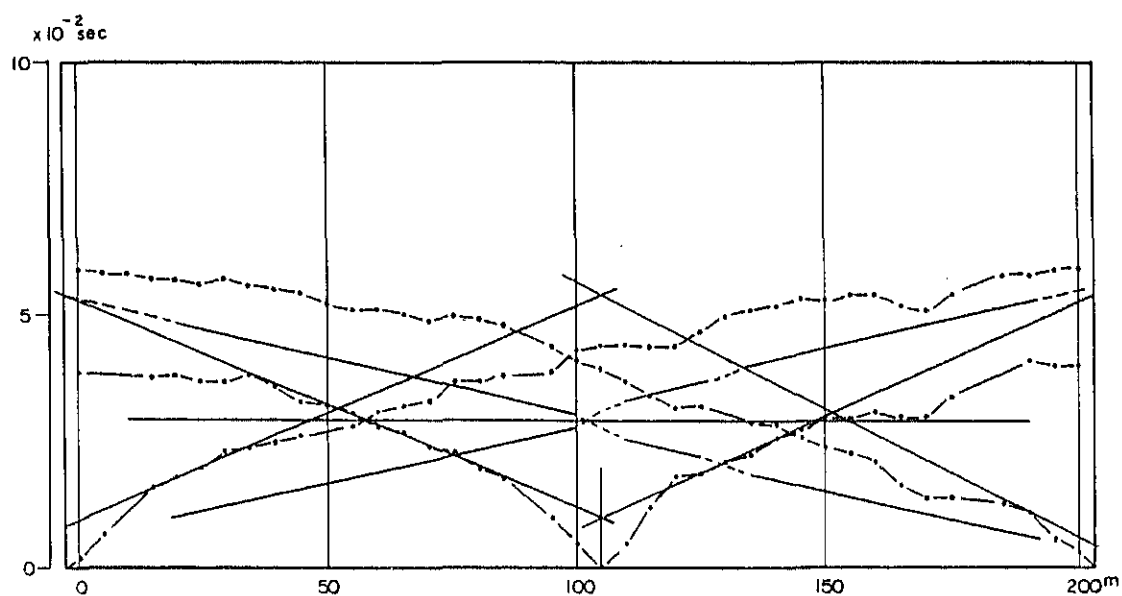
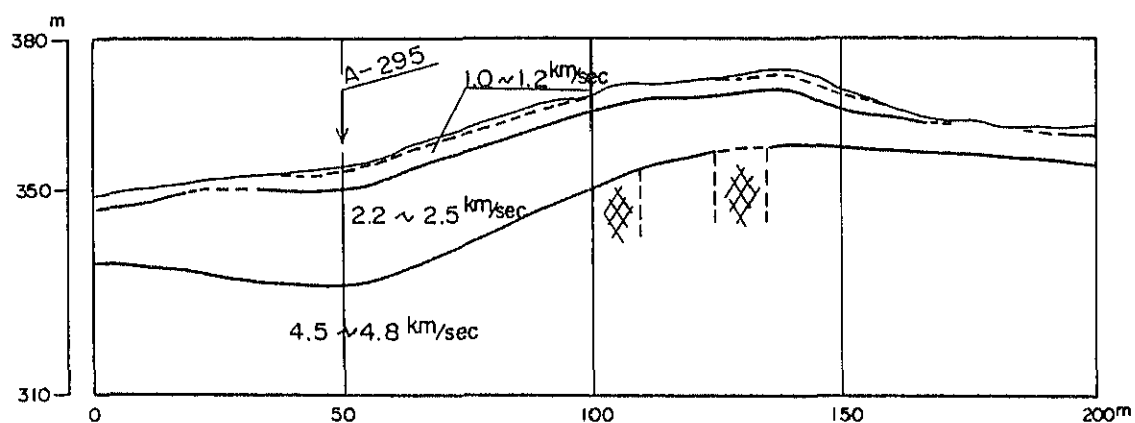


TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-Q-A

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

Quarry Site B-Line

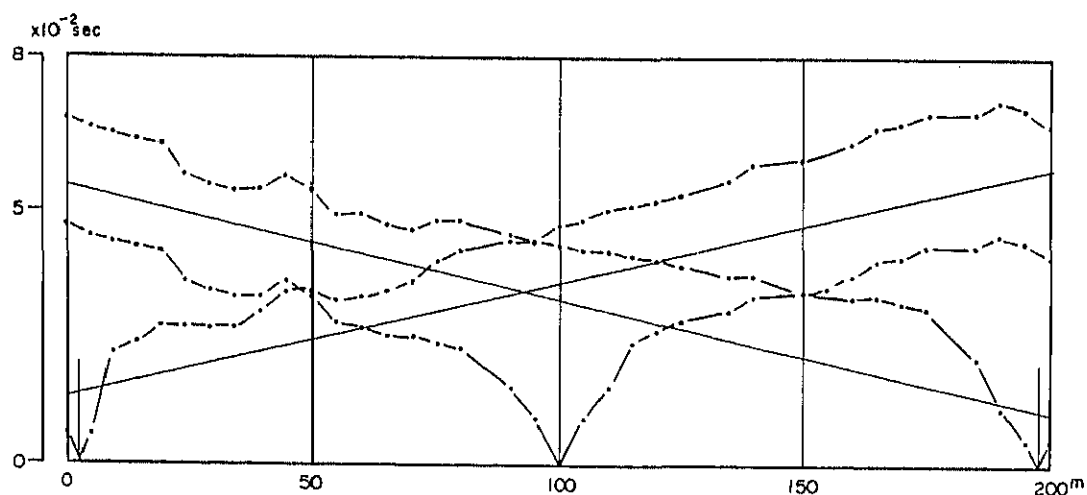
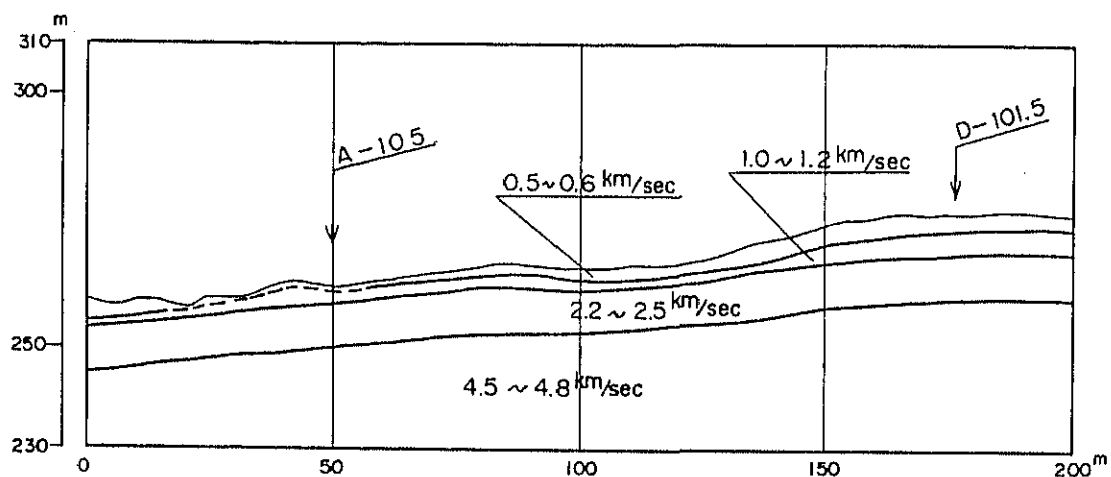


TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-Q-B

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

Quarry Site C-Line

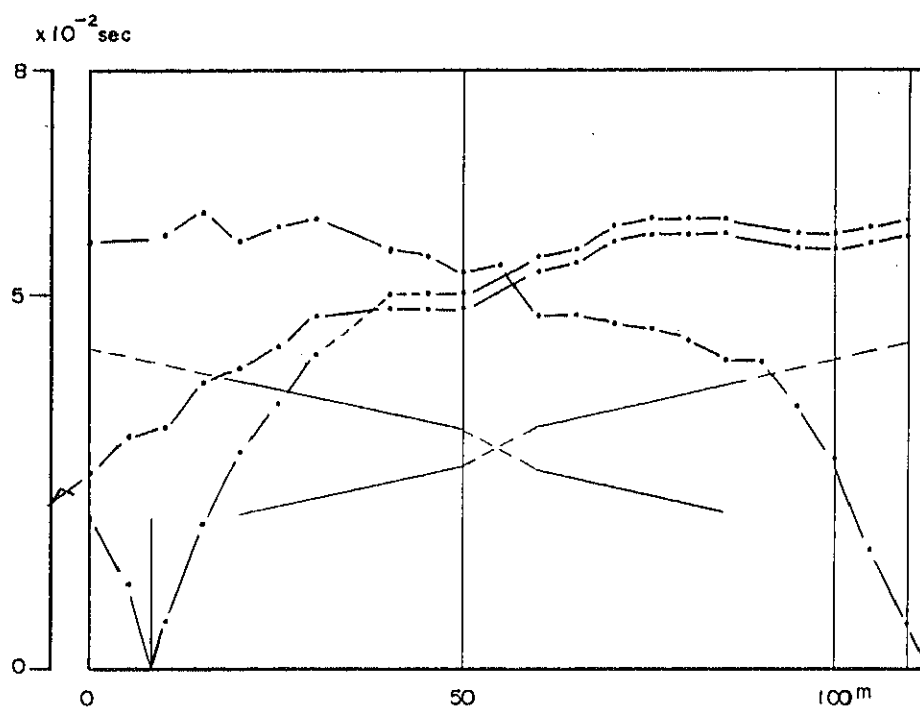
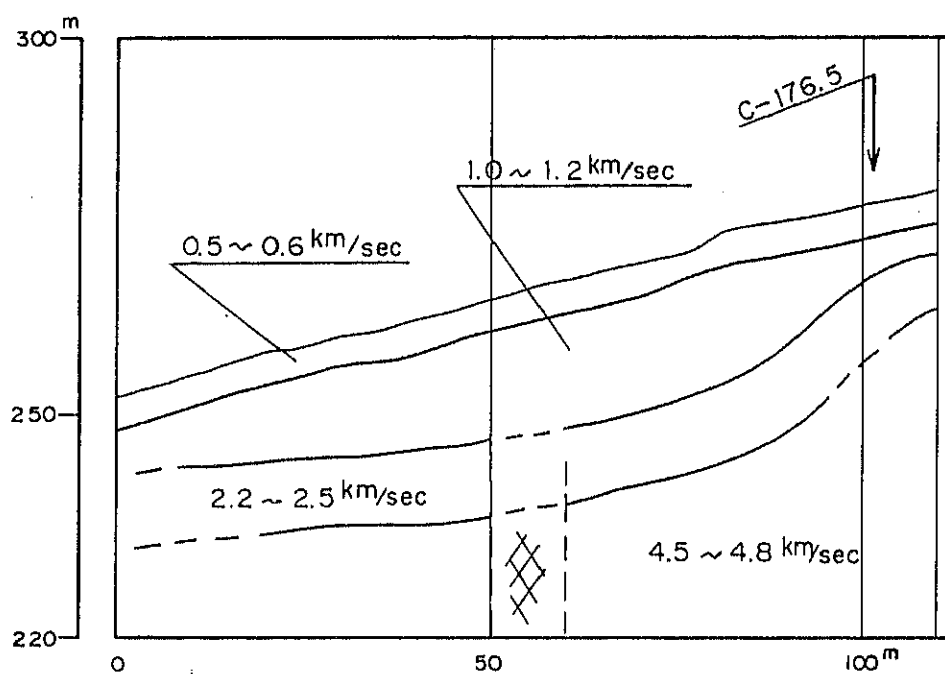


TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-Q-C

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

Quarry Site D-Line



TIME-DISTANCE CURVE AND P-WAVE
VELOCITY PROFILE OF TR0-Q-D

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

JAPAN INTERNATIONAL COOPERATION AGENCY

DRILL LOG

HOLE NO. TRO-(1) SHEET NO. 1 OF 2

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH		120 m		ELEVATION		247.5			
SITE		TRO DAM		COORDINATE	:	:	INCLINATION		VERTICAL		DRILL RIG				
AVERAGE CORE RECOVERY				DATE	FROM	TO	DRILLED		DDS		LOGGED				
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	RQD (%)	Lugeon Value (Lu) Permeability coefficient (K)					DEPTH
								%	cm	80	10	20	30	40	
2			Residual soil		Silty clayey with weathered fragments. 1.5-1.9, 2.2-2.9 m; boulders										
4															
6					4.0-5.1 m; doleritic lavas										
8					5.1-5.9 m; intensively weathered										
10					6.0-8.0 m; vesicular doleritic lavas. (CH)										
12					8.0-9.0 m; reddish brown weathered portion; rock texture remains.										
14					Vesicular lavas; fragile; grey-light brownish. (CM-CL)										
16					12.0-14.0 m; only fragmental cores and short cylindric cores are recovered. (CL)										
18					Highly weathered vesicular lavas; dark brownish; frequent vesicles.										
20															
22					Below 19.1 m; very hard less vesicular doleritic lavas mainly; tuffaceous materials fill or inside pipes.										
24															
26					22.8 m -; doleritic hard lavas; less vesicular. (CM)										
28					Tuffaceous materials along joints.										
30					27.5-29.0 m; core loss; washed out.										
32					29.1-30.3 m; doleritic lava; less vesicular.										
34					32.0-34.0 m; weathered basaltic vesicular lavas; dark brownish										
36					34.0-36.0 m; slightly weathered vesicular lavas (CM-CL)										
38					36.2-38.0 m; weathered and fragments with soil material are recovered. Tuffaceous materials are along cracks.										
40					38.7-44.0 m; intensively weathered; mostly dark brownish soil materials are recovered with some cylindric cores. (CL)										
42					44.0-45.0 m; core loss; washed out										
44															
46					45.5-47.3 m; vesicular basaltic lavas										
48					46.0-46.2- 46.9-47 m; fragile portions										
50					47.3-48.6 m; dark greenish grey less vesicular doleritic lavas. (CM)										
52					48.6-52.0 m; weathered vesicular lavas; halfly fragmental. (CM)										
54					Below 52.0 m; moderately vesicular basaltic lavas.										
56					54.0-58.0 m; slightly weathered vesicular lavas; appears to be dark greyish; whitish tuffaceous materials in pipes and along cracks										
58															
60					58.0-61.5 m; fresh vesicular lavas. (CM)										

LOG FORM-B

HOLE NO.

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

NIPPON KOEI CO., LTD.
 CONSULTING ENGINEERS, TOKYO.

DRILL CORE LOG OF TRO-(1), 1/2

[illegible]

LOG FORM-C-

HOLE NO.

DRILL CORE LOG OF TRO-(1),2/2

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO-(2) SHEET NO. 1 OF 2

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH		80.0 m		ELEVATION		207.3						
SITE		TRD DAM		COORDINATE		INCLINATION		VERTICAL		DRILL RIG								
AVERAGE CORE RECOVERY				DATE		FROM TO		DRILLED		DDS		LOGGED M.Y.						
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY		RQD (%)	Lugeon Unit (Lu) Permeability coefficient (K)					DEPTH		
								%	cm		50	10	20	30	40			
	2		Talus deposits		0-3.5 m, no core recovery.													
	4				Only fragment and soil materials in the section between 3.5-4.0 m.													
	6				5.0-5.3 m; stiff clayey soil.													
	8				Below 7.5 m; weathered fragments with soil materials.													
	10				4.0-5.0; 5.3-6.0 m; boulders													
	12				10.0-10.3 m; subrounded small gravels.													
	14		(Weathered zone)		10.5-14.0 m; intensively weathered vesicular lavas; only brownish fragile weathered rock and fragments are recovered. (D)													
	16		Vesicular lava		Below 14.0 m; vesicular/basaltic lavas; whitish tuffaceous materials fix on inside pipes. (CM)													
	18				15.5-16.6 m; doleritic lavas.													
	20				13.0-16.0 m; dark brownish-chocolate intensively weathered doleritic lavas.													
	22		(Weathered zone)		21.0-26.0 m; intensively weathered; mostly deteriorated to be reddish brown soil materials with some short cores and fragments. (D-C1)													
	24				24.0-25.0 m; core loss													
	26		Doleritic lava		31.8-33.5 m; fragile fragments													
	28				33.5-37.6 m; deteriorated hard lavas; less vesicular; pipe size is 0.5-5 cm.													
	30				Occasionally whitish tuffaceous materials are observed in pipes.													
	32				41.5-44.0 m; fragile fragments are recovered. (D-C1)													
	34		(Weathered zone)		Below 45.2 m; bluish less vesicular doleritic lavas; hard (CM)													
	36		Doleritic lava		Pipe size is 0.2-2.0 cm φ; inside of vesicles are fresh; tuffaceous materials in pipes													
	38				47.0-48.0 m; vesicular lava (CH)													
	40				53.0-55.0, 56.5-58.0 m; very hard doleritic tuff; less vesicular.													
	42				51.6-53.0, 55.0-56.5, 58.0-60.0 m; basaltic vesicular lavas; whitish tuffaceous materials in pipes and along cracks. (C1-CM)													
	44																	
	46																	
	48																	
	50																	
	52																	
	54																	
	56																	
	58																	
	60																	

LOG FORM-B

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

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DRILL CORE LOG OF TRO-(2), 1/2

DRILL LOG

HOLE NO. TRO-(2) SHEET NO. 2 OF 2

DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK GRADE	GROUNDWATER LEVEL	CORE RECOVERY		R. Q. D	WATER PRESSURE TEST LUGEON VALUE						DEPTH					
								%	cm													
											50	10	20	30	40	50						
	62		Intercalation of basaltic vesicular lavas and doleritic lavas	△ △ △	64.0-67.7 m; vesicular lavas; whitish tuffaceous materials in pipes. 66.2-67.5 m; pipes are 1-3 cm φ in size; they are not continuous.		▽ -70.6															
	64			△ △ △ △ △ △																		
	66			△ △ △ △ △ △																		
	68			△ △ △ △ △ △																		
	70			△ △ △																		
	72			△ △ △																		
	74		Doleritic lavas	△ △ △	Below 67.7 m; bluish grey very hard doleritic lavas; less vesicular. (CM)																	
	76			△ △ △																		
	78			△ △ △																		
	80			△ △ △																		
	82		Boundary between young lava sand old lavas?	△ △ △ △ △ △	75.1-77.3 m; reddish brown soil material; weathered zone 77.3-bottom; light brownish soil with frag sand fragments (C-CL)																	
	84			△ △ △ △ △ △																		
	86				(Bottom of borehole)																	

LOG FORM-C

HOLE NO.

DRILL CORE LOG OF TRO-(2),2/2

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO(3) SHEET NO. 1 OF 2

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH		100.0 m		ELEVATION		146.2				
SITE		TRO DAM		COORDINATE		INCLINATION		VERTICAL		DRILL RIG						
AVERAGE CORE RECOVERY		DATE		FROM TO		DRILLED		DDS		LOGGED		M.Y.				
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY		RQD (%)	PERMEABILITY TEST				DEPTH	
								%	cm		Lugeon Value (Lu) Permeability Coefficient (K)					
										50	10	20	30	40		
	2		Talus deposit	△ △	0-3.0 m; dark brownish clayey soil with weathered rock fragments.											
	4			⊗	3.0-4.5 m; no core recovery											
	6			△ △	4.5-5.5 m; gravels of weathered lavas.											
	8	795		△ △	5.5-7.8 m; doleritic lavas; small grains of glass are found; very hard;											
	10		Vesicular basaltic lavas including fragment zeolite pipes (Old lava?)	▽	Below 7.8 m; vesicular lavas; pipes are filled up by whitish zeolites; cores appear to be greenish brown. (CII)											
	12			▽	Tuff layers at 9.8, 12.2, 14.0 15.1-15.2 m;											
	14			▽	Generally cores appear to be greenish grey.											
	16			▽	Vesicles are filled up by zeolite.											
	18			▽	Almost homogeneous core samples of basaltic to doleritic lavas which include zeolite pipes, are recovered.											
	20			▽												
	22			▽												
	24			▽												
	26			▽	27.0-29.8 m; doleritic less vesicular lavas (CII)											
	28			▽												
	30			▽												
	32			▽	30.5-32.0 m; reddish brown vesicular lavas; vesicles are filled up with zeolite or whitish tuffaceous materials. (CII)											
	34			▽												
	36			▽												
	38			▽												
	40			▽	40.0-43.5 m; very hard; rounded zeolite pipes											
	42		▽	42.9-43.0, 44.5-44.6 m; bluish tuffaceous layers for 10 cm.												
	44		▽	Recovered core samples are fresh and intact condition. (CM-CII)												
	46		▽	Small granular zeolites fill insides of vesicles												
	48		▽	53.1-54.9 m; weathered to be reddish brown.												
	50		▽	53.8-54.7 m; no core recovery.												
	52		▽	55.0-57.0 m; greenish grey basaltic; less vesicular.												
	54		▽	57.0-60.2 m; weathered, vesicular basaltic lavas; zeolites are in vesicles. (CM)												

HOLE NO.

LOG FORM-B

*R.Q.D. is Rock Quality Designation, R.Q.D. = (Total length of cylinder cores longer than 10 cm) / (Total core length) × 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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DRILL CORE LOG OF TRO(3),1/2

DRILL LOG

HOLE NO. TRO-(3) SHEET NO. 2 OF 2

DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY		R. Q. D.	WATER PRESSURE TEST										DEPTH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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	62		Vesicular basaltic lavas including gealite pipes (Old lavas?)	V V	57.0-57.8, 62.5-67.5, 69.7-71.0 m; brecciated lavas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

DRILL CORE LOG OF TRO-(3),2/2

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO-(5) SHEET NO. 1 OF 2

PROJECT		PORT LOUIS WATER SUPPLY					DEPTH		120 m		ELEVATION		24.30					
SITE		TRO DAM		COORDINATE				INCLINATION				DRILL RIG						
AVERAGE CORE RECOVERY				DATE		FROM TO		DRILLED				LOGGED		M.Y				
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY		RQD (%)		PERMEABILITY TEST Lu - Value (K - Value cm/s)				DEPTH		
								%	cm	50	100	10	20	30	40			
	2		Residual soil		Reddish to dark brownish clayey; poor core recovery											2		
	4					0-2 m; no core recovery											4	
	6	63				(D)											6	
	8		Intercalation of vesicular lavas and hard massive lavas		Moderately vesicular lavas continue to 10.5 m; slightly weathered; yellowish clayey materials along cracks (CM)											8		
	10					11.5-13.8 m; frequently vesicular lavas; pipes size is 5-10 mm.											10	
	12					13.8-19.3 m; massive very hard doleritic lavas. Weathering is developed along cracks. (CH)											12	
	14					18.3-21.0 m; frequently vesicular lavas											14	
	16					21.0-22.0 m; hard doleritic lavas											16	
	18					22.5-25.0 m; weathered dark brownish vesicular lavas											18	
	20					25.0-26.0 m; hard massive lava; few vesicles (CH)											20	
	22					26.0-27.3; weathered; short cores and fragments are recovered (CM)											22	
	24					28.4-32.6 m; doleritic hard lavas; few vesicles (max 5 mmφ); inside vesicles are fresh. (CH)											24	
	26					32.6-34.5 m; weathered tuff breccia; only fragments with soil materials are recovered. (CL-CM)											26	
	28					Weathered cracks at 35.5, 36.0, 36.9 m Greyish; less vesicular; hard doleritic lavas. Whitish tuffaceous materials stain along cracks. (CH-CM)											28	
	30					Slightly weathered lava; weathered to be light brownish.											30	
	32			Intensively weathered zone		41.7-44.0 m; reddish brown clayey soil. Core loss between 42.0-43.4 m (D)											32	
	34						44.0-46.8 m; short cylindric; weathered lavas; texture of vesicular lavas remains; dark brown weathered vesicular lavas continue to be											34
	36						57.8 m; whitish tuffaceous materials stain inside pipes. (CL-CM)											36
	38					Only fragments are recovered from the section, 52.6-53.5, 56.3-56.9 m											38	
	40					58.0-61.2m; less vesicular doleritic lavas (CM-CH)											40	
	42																42	
	44																44	
	46																46	
	48															48		
	50															50		
	52															52		
	54															54		
	56															56		
	58															58		
	60															60		

HOLE NO.

LOG FORM-B

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

NIPPON KOEI CO., LTD.
 CONSULTING ENGINEERS, TOKYO.

DRILL CORE LOG OF TRO-(5), 1/2

DRILL LOG

HOLE NO. TRO-(5) SHEET NO. 2 OF 2

DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK GRADE	GROUNDWATER LEVEL	CORE RECOVERY		R. Q. D	WATER PRESSURE TEST LUGEON VALUE						DEPTH
								%	cm		50	50	10	20	30	40	
	62		Predominant vesicular lavas	^ ^	Less vesicular lavas continue to be 65.0 m; weathered at 61.2-62.0 m 2-3 cm ϕ pipes are at 62.3-62.5 m inside pipes are fresh. (CH-CM)		-63.2										62
	64			^ ^													64
	66			^ ^													66
	68			^ ^	65.0-67.0 m; weathered lavas; dark brownish-reddish brown; fragments with short cylindric cores.												68
	70			^ ^	68.6-72.3 m; vesicular lavas; diabasic.												70
	72			^ ^	Weathered zones at 69.4-69.6, 70.5-71.5, 74.5-74.7, 75.3-75.4, 75.9-76.0 m												72
	74			^ ^	Whitish tuffaceous materials stain along cracks. (CM-C11)												74
	76			^ ^													76
	78			^ ^													78
	80			^ ^													80
	82		Old lavas including zeolite crystals	^ ^	81.1-89.0 m; vesicular lavas; weathering develops at 82.2-83.7, 84.3-84.4, 87.1-87.5 m, 87.1-88.0 m; weathered lavas appear to be dark brownish. (CM)												82
	84			^ ^													84
	86			^ ^													86
	88			^ ^													88
	90			^ ^	89.0-90.5 m; less vesicular doleritic lavas; cooling joints at 10 cm interval. (CM)												90
	92			^ ^													92
	94			^ ^	91.0-92.0 m; vesicular lavas, dark brownish.												94
	96			^ ^	94.0-96.0, 97.8-99.1 m; highly weathered portion												96
	98			^ ^	Doleritic vesicular lavas; weathered portions at 100.0-100.2, 100.9-101.2, 102.5-102.7 m												98
	100			^ ^													100
	102			^ ^	103.2-104.0 m; intensively weathered; reddish brown soil.												102
	104			^ ^	104.0-109.0 m; brownish soil with rock fragments. (CL-D)												104
	106			^ ^	109.0-109.6 m; highly weathered vesicular lavas.												106
	108			^ ^													108
	110	109.6		^ ^	Below 109.6 m; zeolites are observed in pipes.												110
	112			^ ^													112
	114			^ ^	112.0-112.7 m; weathered fragmental												114
	116			^ ^	116.0-116.2, 116.8-116.9, 118.5-118.6, 119.8-120.0 m; weathered and fragmental												116
	118			^ ^	Generally cores appear to be light brownish to greyish. (CL-CM)												118
	120	120.0		^ ^	(Bottom of borehole)												120

LOG FORM-C'

HOLE NO.

DRILL CORE LOG OF TRO-(5),2/2

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO-(6) SHEET NO. 1 OF 3

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH	160.0 m	ELEVATION	241.1							
SITE		TRO DAM		COORDINATE	:	INCLINATION	60. DEC.	DRILL RIG								
AVERAGE CORE RECOVERY				DATE	FROM	TO	DRILLED	DOS	LOGGED	M.Y.						
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	RQD (%)	Lugeon Unit (Lu) Permeability Coefficient (K)					DEPTH	
								%	cm	50	10	20	30	40		
	1.0		Residual soil		0.2-2.0 m; reddish brown clayey soil.											
2	3.0		Intensively weathered lava		Vesicular lavas; fragments only. (C-C1)										2	
4			Intercalation of vesicular basaltic lavas and doleritic lavas.		Below 4.0 m; short cylindric weathered vesicular lavas. Cracks appear to be blackish because of weathering. (CL)										4	
6					6.8-10.5 m; slightly to moderately weathered doleritic lavas; greyish; hard; almost without vesicles (CM)										6	
8					10.5-15.8 m; intensively weathered vesicular lavas; whitish tuffaceous material in pipes or along cracks below 14.5 m. (CL)										8	
10					15.8-19.0 m; less vesicular doleritic lavas; dark greyish. (C1)										10	
12					18.0-18.3 m; vertical cracks											12
14					19.5-20.6 m; weathered vesicular lavas. (CM-C1)											14
16					Below 20.6 m; vesicular doleritic lavas; very hard; greyish											16
18					22.0-23.8 m; doleritic lavas; vesicular											18
20					23.8-25.0 m; purplish brown vesicular lavas; pipes are filled up by whitish tuffaceous materials. (CM)											20
22					31.5-35.4 m; very hard doleritic lavas; insides of pipes are very fresh. Pipe size is 0.3-1.0 cmφ; whitish tuffaceous materials fill up vesicles. (C1)											22
24					35.4-39.0 m; light brownish weathered vesicular lavas. Pipes and cracks are filled up by tuffaceous yellowish materials. (CM)											24
26					39.0-53.0 m; less vesicular doleritic lavas; very hard. (C1)											26
28					Occasionally 0.5-2 cmφ pipes are found; insides of pipes are fresh.											28
30					45.6-49.2 m; chocolate brownish deteriorated soil with weathered core are recovered. (CL)											30
32					50.0-51.0 m; weathered vesicular lavas.											32
34				51.0-57.3 m; hard doleritic lavas except 53.0-54.0 m. (CM)											34	
36				54.0-55.5 m; 0.5-3.0 cmφ pipes; insides of pipes are fresh. (C1-CM)											36	
38				Below 57.3 m; very frequently developed vesicles are observed. Core are brownish because of weathering.											38	
40															40	
42															42	
44															44	
46															46	
48															48	
50															50	
52															52	
54															54	
56															56	
58															58	
60															60	

LOG FORM-B

HOLE NO.

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

DRILL CORE LOG OF TRO-(6), 1/3

NIPPON KOEI CO., LTD.
 CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO-(6) SHEET NO. 2 OF 3

DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK GRADE	GROUNDWATER LEVEL	CORE RECOVERY		R. Q. D	WATER PRESSURE TEST LUGEON VALUE					DEPTH
								%	CM		50	10	20	30	40	
	62		Vesicular lavas and less vesicular doleritic lavas	▲▲▲▲▲	Cores appear brownish grey but they are hard in general whitish tuffaceous material along cracks are in pipes. (CM)											62
	64			▲▲▲▲▲												64
	66			▲▲▲▲▲	64.8-70.5 m; very hard; greyish doleritic lavas; less vesicular; weathered steep cracks are 66.0-66.3 m. (CH-CM)											66
	68			▲▲▲▲▲												68
	70			▲▲▲▲▲	Below 68.5 m; vesicular lavas; 68.5-70.4 m; intensively weathered zone. Tuffaceous materials along cracks are in pipes.											70
	72			▲▲▲▲▲												72
	74			▲▲▲▲▲												74
	76			▲▲▲▲▲												76
	78			▲▲▲▲▲												78
	80			▲▲▲▲▲												80
	82		Intercalation of vesicular and less vesicular doleritic lavas	▲▲▲▲▲	78.4-79.3 m; weathered and fragile 78.0-86.2 m; vesicular lavas; vesicles develop fragmently; vesicles size is 2-7 mm. (CM)											82
	84			▲▲▲▲▲	Weathered portions are; 80.0-80.4, 82.0-82.4, 84.6-85.1, 87.7-87.9, 88.7-89.5 m.											84
	86			▲▲▲▲▲												86
	88			▲▲▲▲▲	86.3-87.7 m; less vesicular doleritic doleritic lavas. (CM)											88
	90			▲▲▲▲▲												90
	92			▲▲▲▲▲	90.0-92.0, 92.7-93.4, 94.7-95.0 m; weathered portions.											92
	94			▲▲▲▲▲												94
	96			▲▲▲▲▲	There are tuffaceous materials in vesicles partly. (CM)											96
	98			▲▲▲▲▲	97.5-95.5 m; intensively weathered. 96.0-97.5 m; doleritic lavas. 97.5-99.5 m; intensively weathered doleritic vesicular lavas											98
	100			▲▲▲▲▲												100
	102		Basaltic vesicular lava (Old lava?)	▲▲▲▲▲	100.8-101.2 m; weathered; whitish tuff fill up pipes and joint. (CM)											102
	104			▲▲▲▲▲												104
	106			▲▲▲▲▲	Below 104.2 m; purplish brown weathered basaltic vesicular lavas; tuff fills pipes and joint.											106
	108			▲▲▲▲▲	Below 104.0 m; purplish brown weathered basaltic vesicular lavas; pipes and joints are filled up with whitish tuffaceous materials.											108
	110			▲▲▲▲▲												110
	112			▲▲▲▲▲	108.5-106.0, 106.3-107.8, 109.1-109.4, 110.0-110.2 and 111.8-112.4 m; weathered portions. (CM)											112
	114			▲▲▲▲▲												114
	116			▲▲▲▲▲	Reddish brown weathered cracks are at 115.8 m.											116
	118			▲▲▲▲▲	116.4-121.0 m; weathered and deteriorated to be brownish soil with weathered fragments. (CL-CM)											118
	120			▲▲▲▲▲												120
	122			▲▲▲▲▲	Bedding of lava layers dip about 10° at 122.5-123.0 m.											122
	124			▲▲▲▲▲												124
	126			▲▲▲▲▲	125.0-128.0 m; slightly to moderately weathered less vesicular doleritic lavas.											126
	128			▲▲▲▲▲	Below 126.0 m; basaltic vesicular lavas including zeolite pipes.											128

LOG FORM-C

HOLE NO.

DRILL CORE LOG OF TRO-(6),2/3

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO-(6)

SHEET NO. 3 OF 3

Fig. B.2.11(5)-3

DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT DIAMETER	GROUNDWATER LEVEL	CORE		R. Q. D	WATER PRESSURE TEST		DEPTH
								RECOVERY	CM		LUGEON VALUE		
	132		Basaltic vesicular lavas including zeolites and pyroxene or olivine crystals (Old lavas?)		Basaltic vesicular lavas including zeolites and pyroxene or olivine crystals						$Lu = 4.1$ $K = 5.7 \times 10^{-5}$	132	
	134				131.5-133.5 m; deteriorated parts. (CL-CM)								134
	136				133.5-137.1 m; light greenish grey basaltic lava. (CM)							$Lu = 4.0$ $K = 5.6 \times 10^{-5}$	136
	138												138
	140												140
	142												142
	143.0										$Lu = 5.3$ $K = 3.8 \times 10^{-5}$	143.0	
	144		Basaltic vesicular lavas including zeolite pipes (Old lavas?)		143.0-146.1 m; basaltic lava including zeolite pipes; weathered. (CM-C11)							144	
	146				Below 146.1 m; bluish grey; very hard lavas; zeolites are included often in vesicles and along cracks; zeolite pipes are 0.5-1.01 mφ (C11)						$Lu = 2.5$ $K = 7.4 \times 10^{-5}$	146	
	148												148
	150												150
	152												152
	154					The same condition continue to the bottom of the borehole.							154
	156												156
	158												158
	160												160
	160.0												160.0
					(Bottom of borehole)								

DRILL CORE LOG OF TRO-(6),3/3

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. TRO-(7) SHEET NO. 1 OF 1

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH	50.0 m	ELEVATION	256.7						
SITE		TRO DAM		COORDINATE	:	INCLINATION	VERTICAL	DRILL RIG							
AVERAGE CORE RECOVERY				DATE	FROM	TO	DRILLED	DDS	LOGGED						
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	RQD (%)	PERMEABILITY TEST Lugeon Value (Lu) Permeability Coefficient (K)				DEPTH	
								%	cm	50	10	20	30	40	
	0				0-0.5 m; Top soil										
	0.5				0.5-4.0 m; light brownish clayey soil.										
	4.0														
	4				4.0-5.2 m; weathered fragments of vesicular doleritic lavas.										
	6				7.3-9.0, 17.0-18.4, 19.0-19.8, 20.2-21.5, 22.0-22.3 m; weathered portions;										
	8				Weathered portion appears to be dark brownish.										
	10				10.5-11.6 m; small zeolite pipes are found.										
	12				18.0-21.0 m; basaltic vesicular lavas; weathered; greenish brown. (CL-CM)										
	14														
	16														
	18														
	20														
	22														
	24				24.0-25.0 m; whitish tuffaceous material.										
	26				25.9-27.6 m; doleritic vesicular lavas.										
	28				27.0-32.1 m; weathered vesicular brownish grey; mostly fragmental (CL)										
	30														
	32				32.1-37.0 m; doleritic less vesicular lavas; steep joints developed often; whitish tuffs are along joints (CM)										
	34														
	36														
	38				Below 37.0 m; intensively weathered; reddish brown clayey soil with weathered fragments only.										
	40														
	42				40.9-41.3 m; core loss (CL-D)										
	44				41.3-41.5 m; subrounded gravel like materials.										
	46				39.4-40.7, 42.0-43.0 m; less vesicular doleritic lava.										
	48				Below 43.0 m; vesicular lavas.										
	50				Below 45.0 m; fragmental cores are recovered mostly. (CL-D)										
					(Bottom of borehole)										

*R.Q.D. is Rock Quality Designation, R.Q.D. = (Total length of cylindric cores longer than 10 cm) / (Total core length) × 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.

DRILL CORE LOG OF TRO-(7)

DRILL LOG

HOLE NO. Q-(1) SHEET NO. 1 OF 1

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH	30.0 m		ELEVATION								
SITE		ROCK QUARRY		COORDINATE	:	:	INCLINATION	VERTICAL		DRILL RIG							
AVERAGE CORE RECOVERY				DATE	FROM	TO	DRILLED	DDS		LOGGED	M.Y.						
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY		RQD (%)						DEPTH	
								%	cm		50	100	10	20	30		40
	2	1.8	Talus	△ △ △	0-1.8 m dark brownish clayey soil with weathered fragments.												
	4		Dike rock like lava	△ △ △	1.8-4.0 m; weathered fragments of blackish lavas.												
	6			△ △ △	4.5-5.4 m; short cylindric.												
	8			△ △ △	Below 5.4-12.3 m; blackish dike like lavas; very hard; small grade grains are included.												
	10			△ △ △	(CM-C11)												
	12	12.3		△ △ △													
	14		Agglomerate	△ △ △	Below 12.3 m; brownish agglomeratic rocks; very hard consolidated.												
	16			△ △ △	Quartz veins are found partly.												
	18	18.4		△ △ △	(C11)												
	20		Dike rock like lava	△ △ △	18.4-27.8 m; blackish-dark greyish dike like lavas; very hard												
	22			△ △ △	Zeolite crystals are at 18.9 m												
	24			△ △ △	20.7-21.4, 22.7-23.7, 27.4-27.8 m												
	26			△ △ △	(C11)												
	28	27.8		△ △ △	22.9-23.5 m; rather cracky.												
	30		Agglomerate	△ △ △	Below 27.8 m; reddish brown; very hard												
					(Bottom of borehole)												

LOG FORM-B

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

DRILL CORE LOG OF TRO Q-(1)

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. Q-(2) SHEET NO. 1 OF 1

PROJECT		PORT LOUIS WATER SUPPLY				DEPTH	30.0 m		ELEVATION								
SITE		COORDINATE		:		INCLINATION	VERTICAL		DRILL RIG								
AVERAGE CORE RECOVERY		DATE	FROM	TO		DRILLED	DDS		LOGGED	M.Y.							
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	RQD (%)					DEPTH			
								%		80	100	10	20	30	40		
	2		Talus deposit		0.0-1.0 m; top soil											2	
	4				1.0-8.0 m; light brownish to reddish brown weathered fragments.												4
	6																6
	8																8
	10					8.0-12.0 m; fragmental dike rock like lavas; only fragmental samples are recovered.											10
	12																12
	14					Light brownish weathered boulders of basaltic lavas; partly vesicular but generally blackish massive lavas.											14
	16					(D)											16
	18		Agglomerate													18	
	20				19.0-21.2 m; dark greyish weathered basaltic lavas; fragile.												20
	22				(C _L -D)												22
	24				21.2-22.4 m; light greyish weathered short cores of basaltic lavas.												24
	26				(C _L)												26
	28				22.4-28.0 m; reddish brown agglomerate; yellowish tuffaceous materials are matrix of agglomerate.												28
	30	30.0			Below 28.0 m; dark grey less vesicular lavas; joints are weathered and brownish.											30	
					(C _M)												
					(Bottom of borehole)												
					This borehole was drilled in very gentle lower slope surrounding steep mountain ranges.												

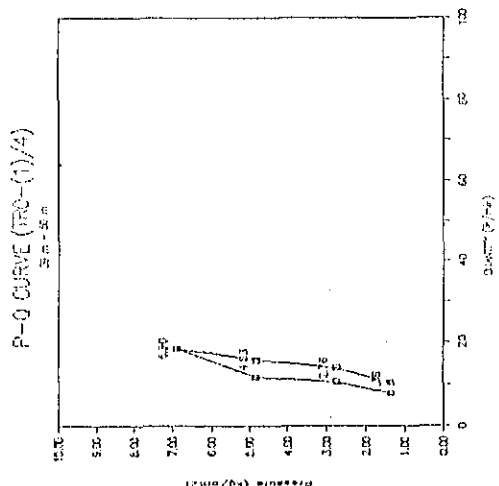
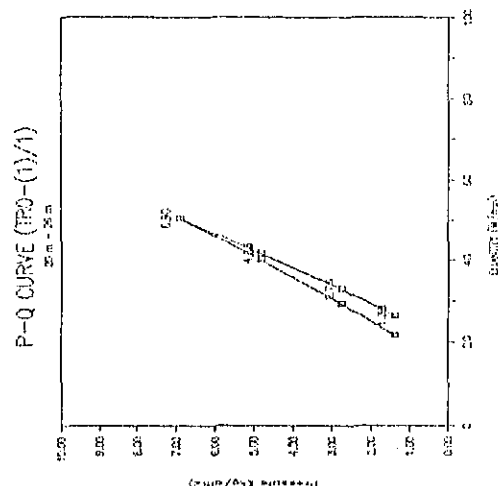
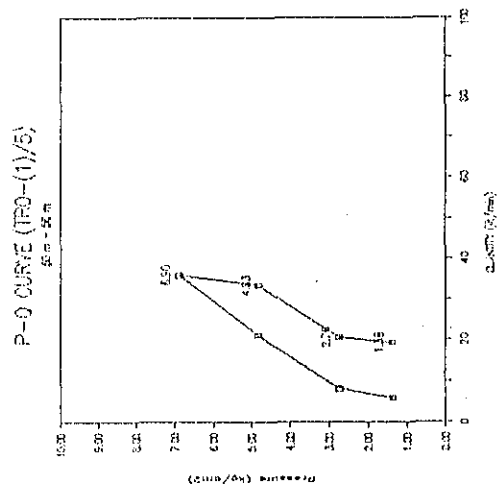
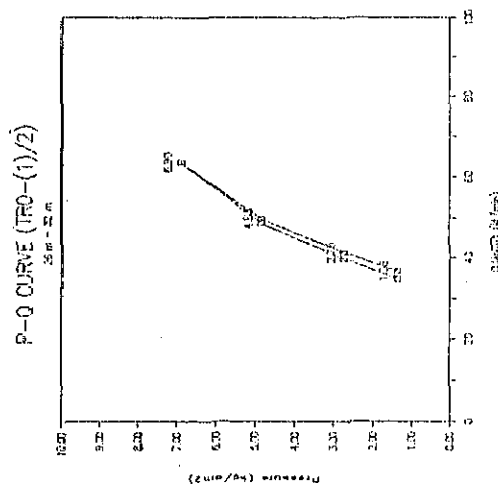
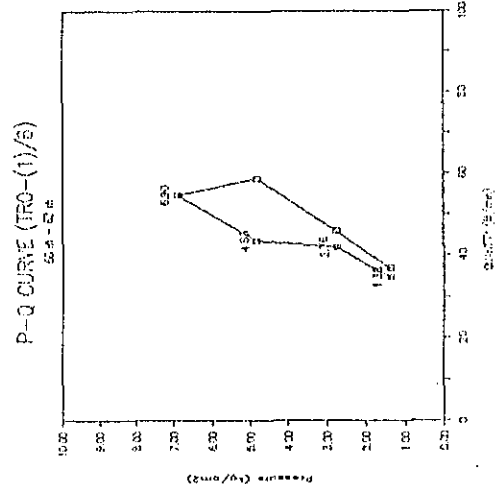
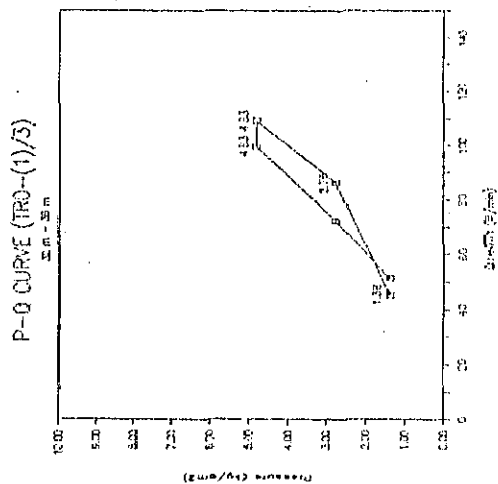
LOG FORM-B

- * R.Q.D is Rock Quality Designation, R.Q.D = (Total length of cylindric cores longer than 10 cm) / (Total core 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

DRILL CORE LOG OF TRO Q-(2)

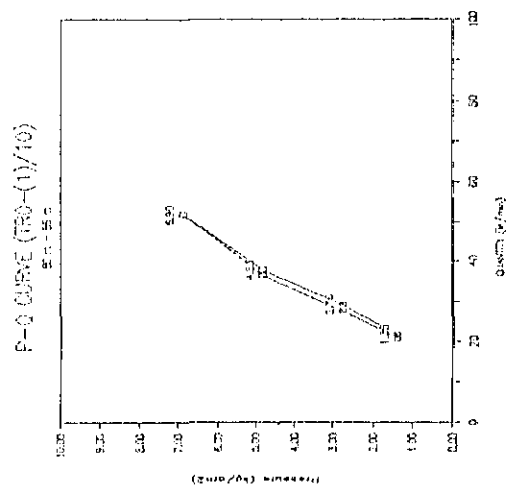
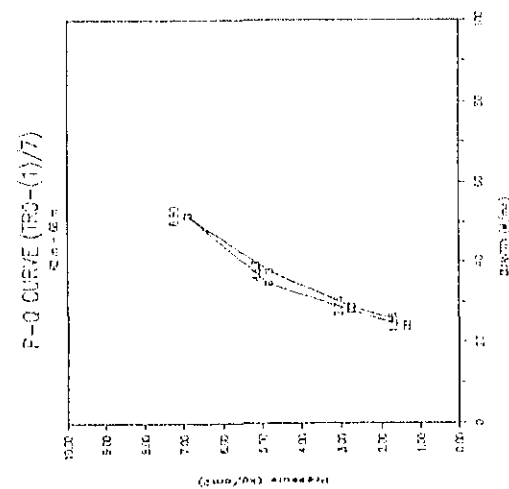
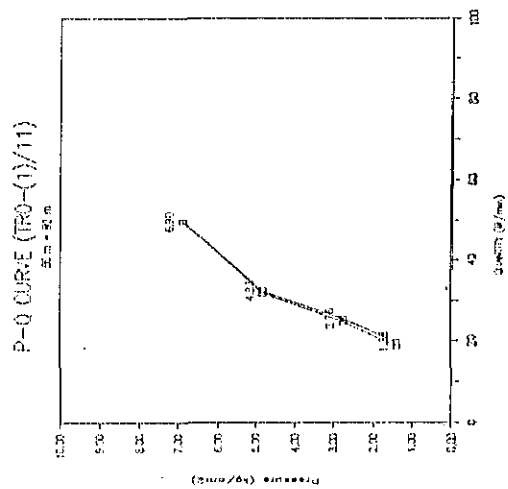
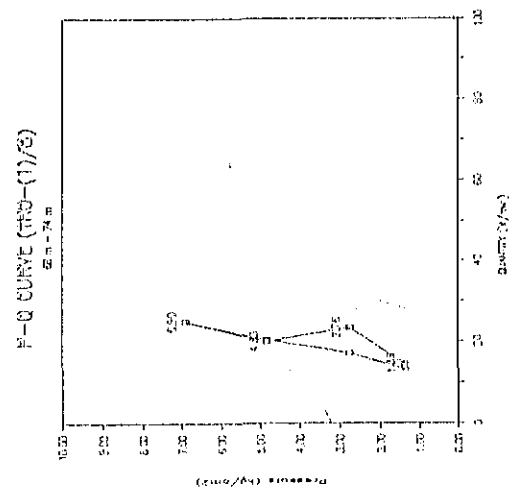
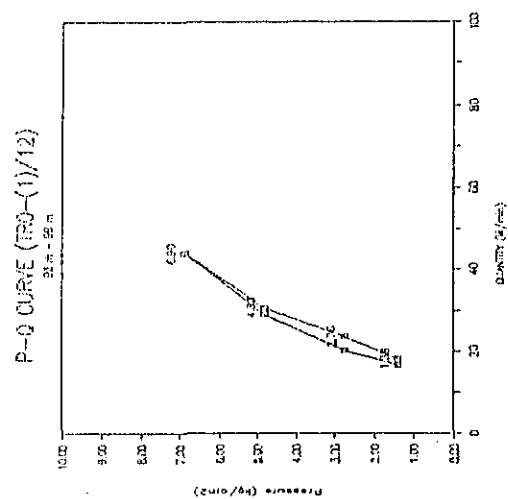
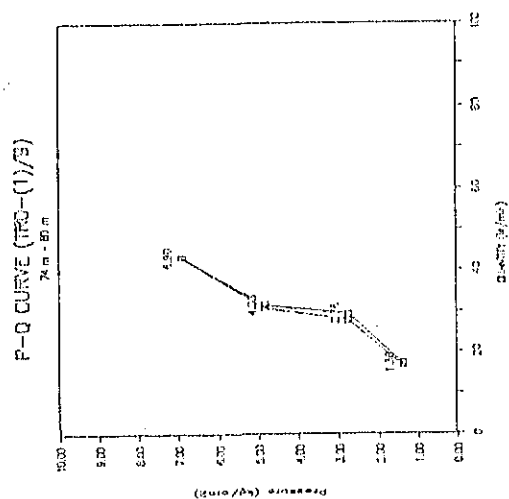
NIPPON KOEI CO., LTD.
 CONSULTING ENGINEERS, TOKYO.

HOLE NO.



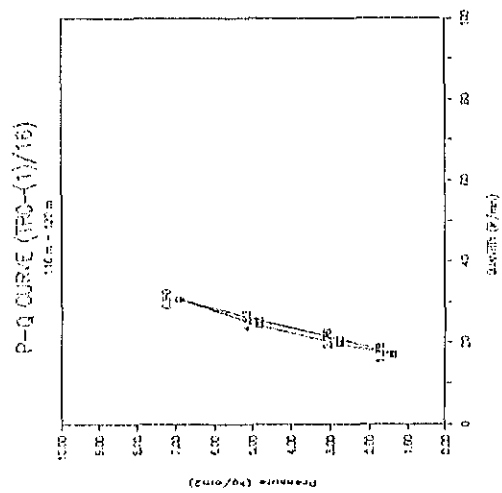
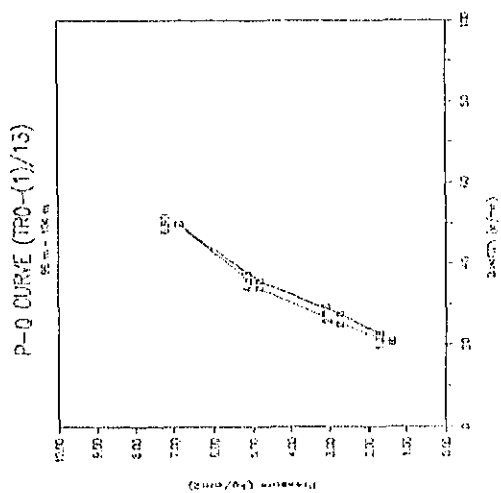
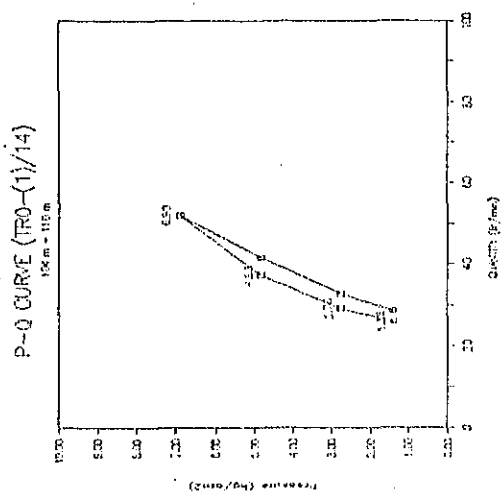
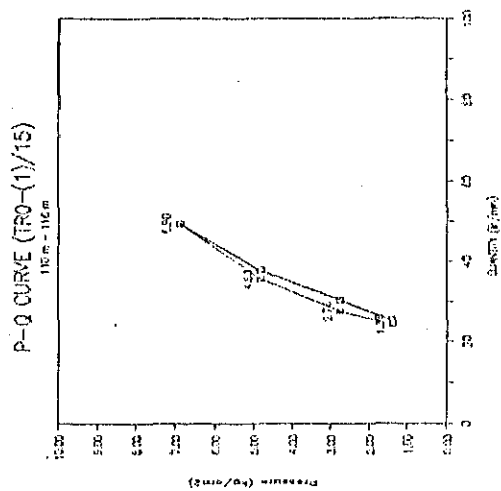
P-Q CURVE, TR0-(1)-1/3

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PORT LOUIS WATER SUPPLY PROJECT
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P-Q CURVE, TR0-(1)-2/3

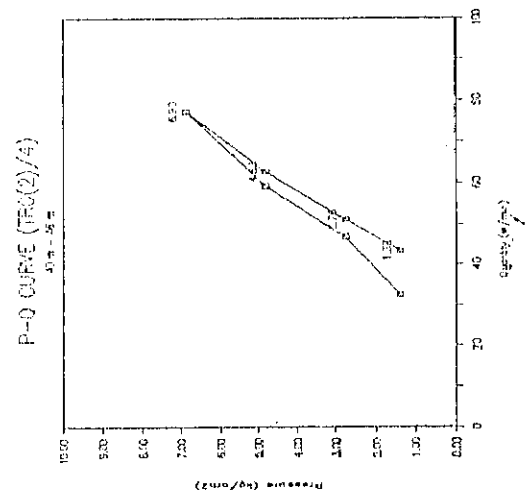
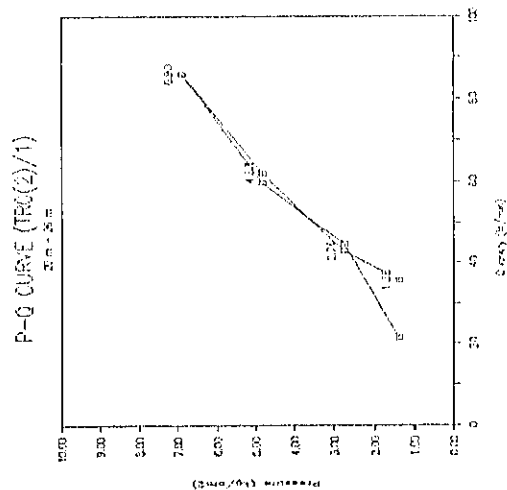
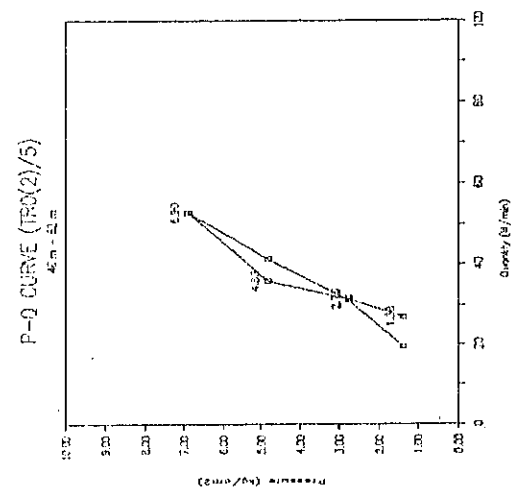
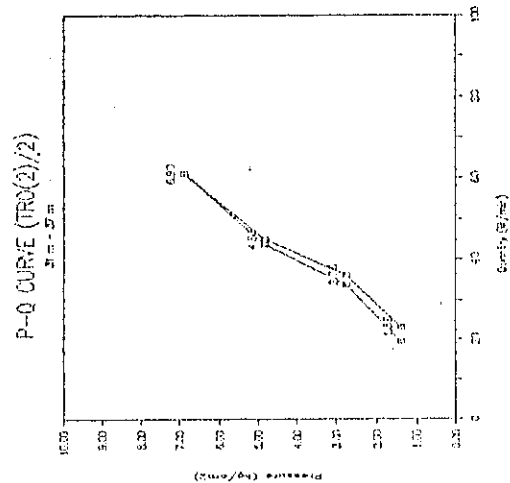
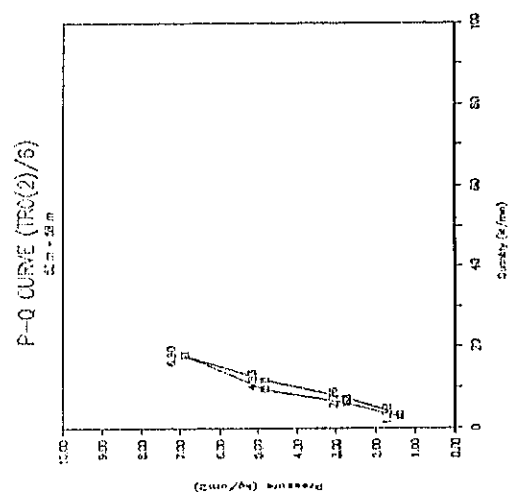
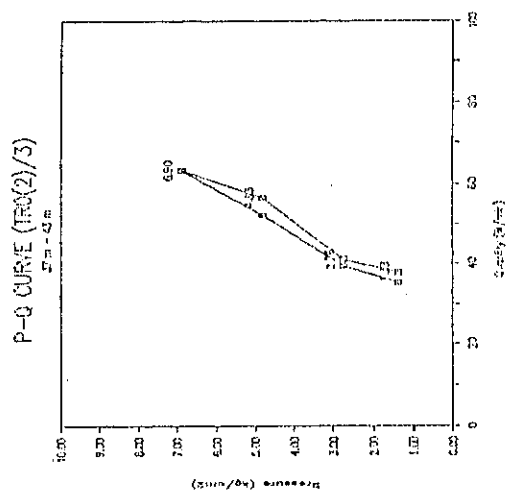
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P-Q CURVE, TR0-(1)-3/3

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

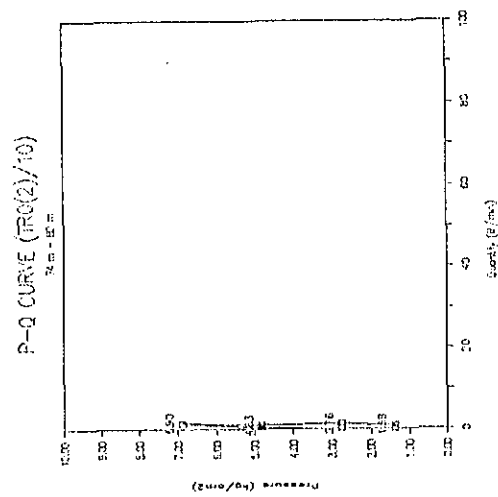
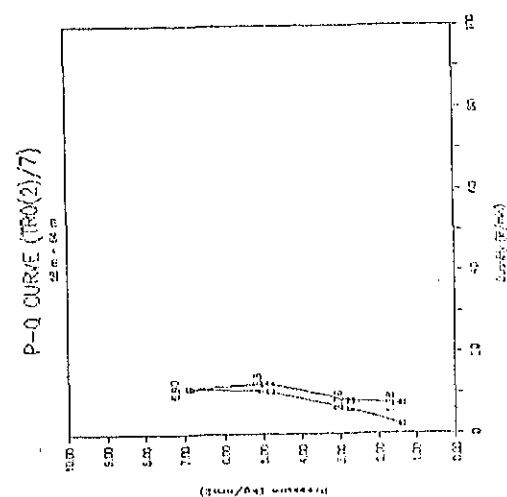
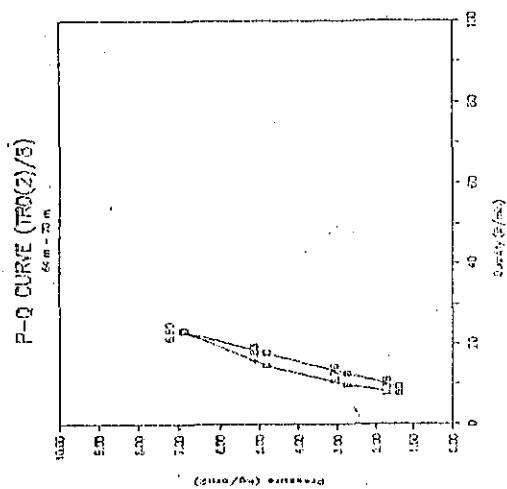
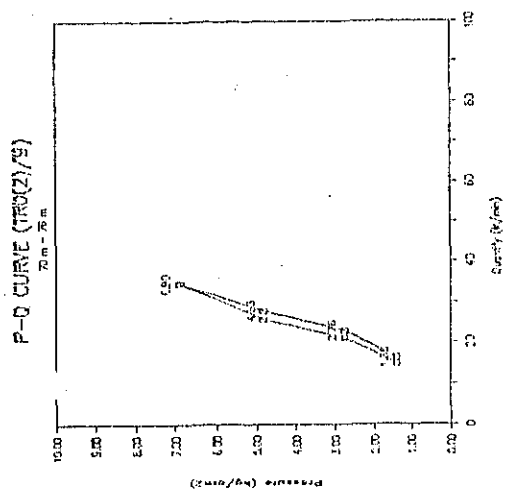
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P-Q CURVE, TR0-(2)-1/2

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PORT LOUIS WATER SUPPLY PROJECT

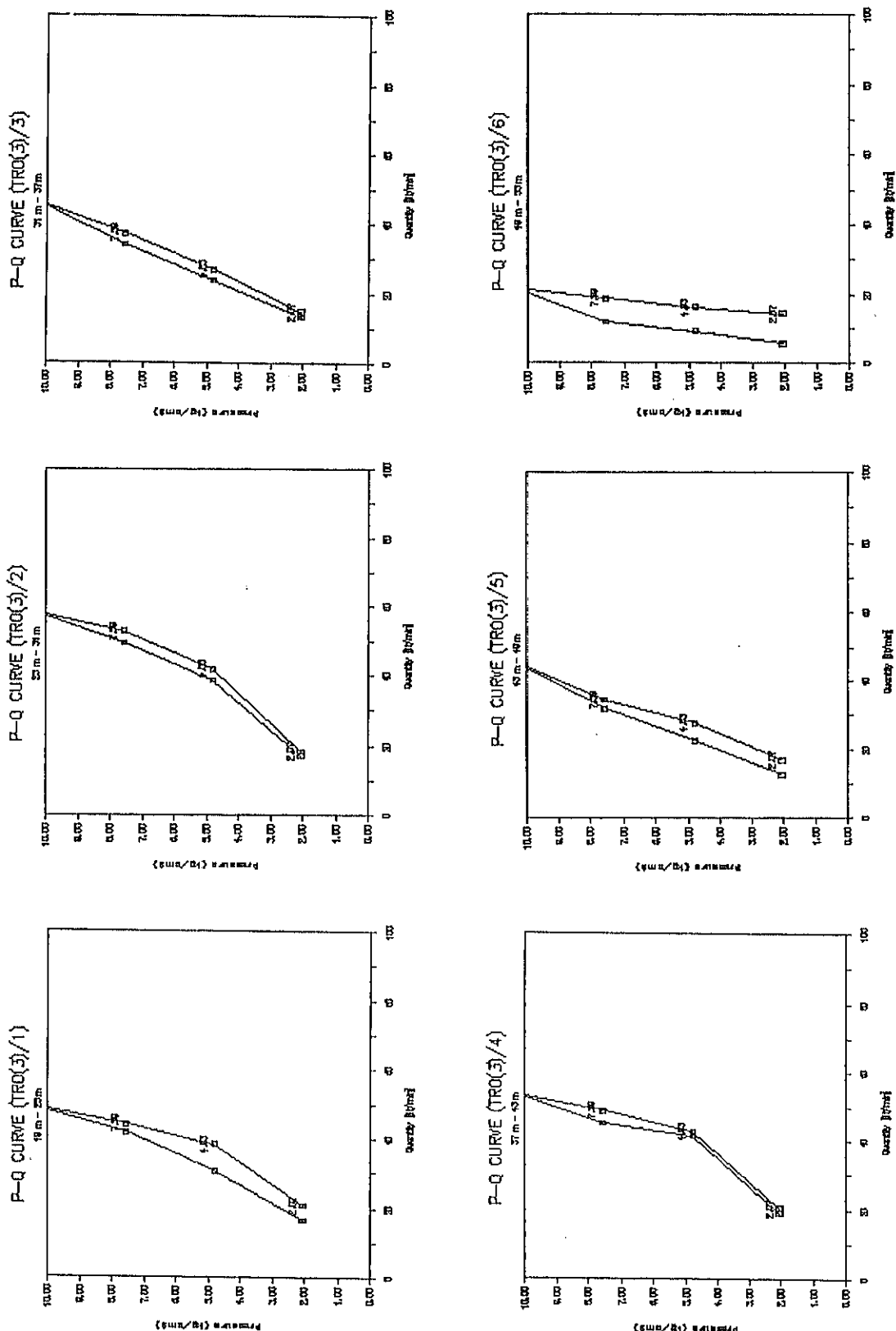
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P-Q CURVE, TR0-(2)-2/2

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

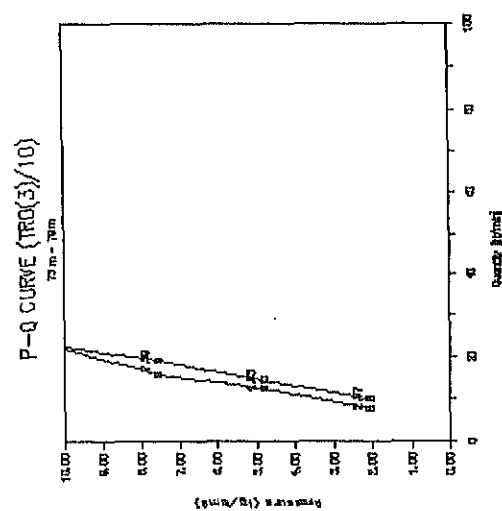
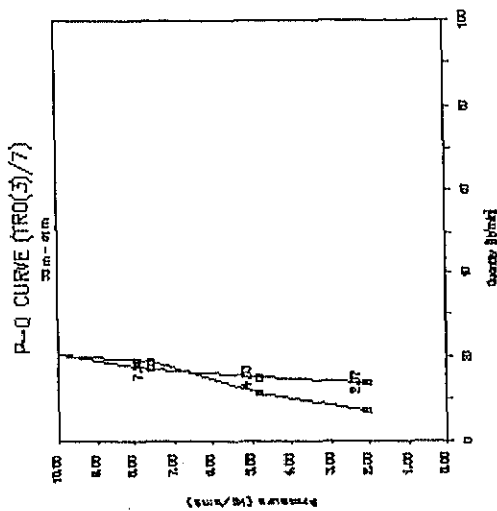
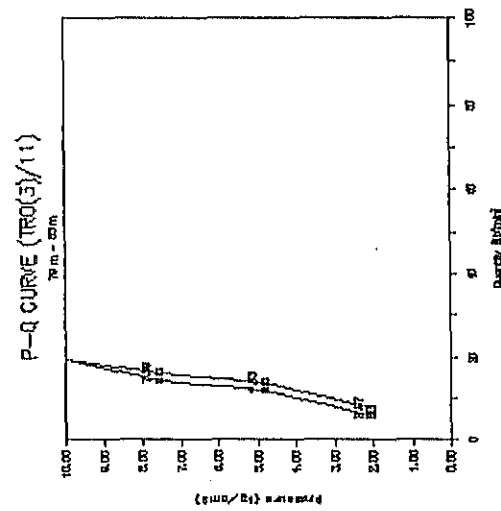
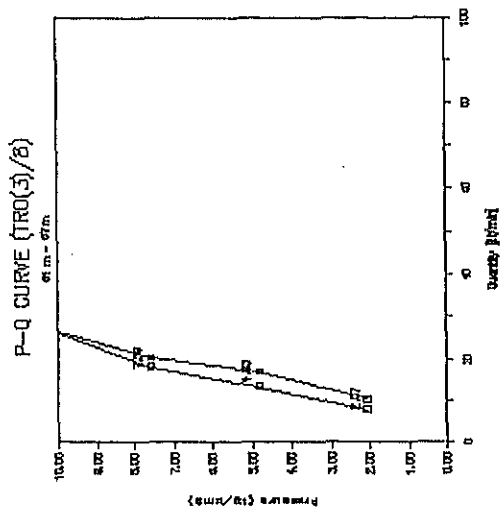
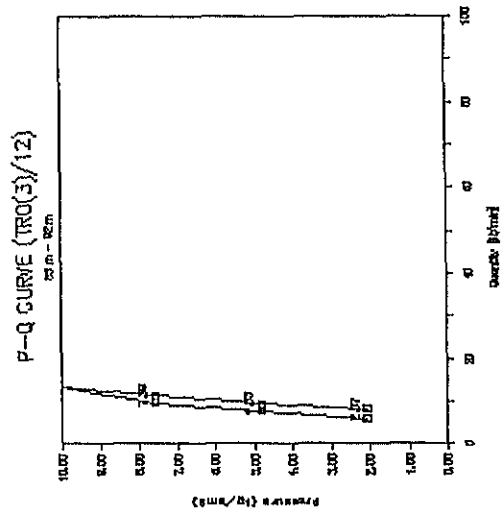
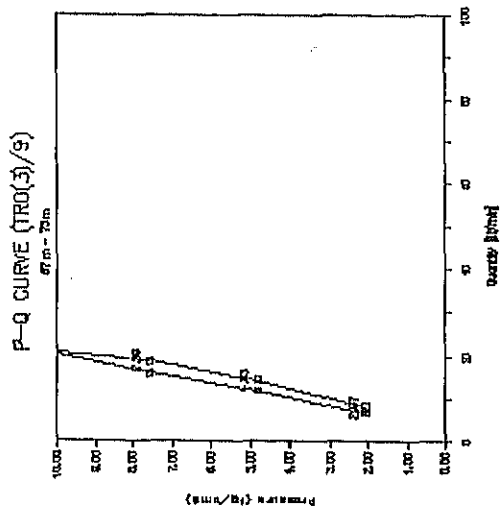
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P-Q CURVE, TR0-(3)-1/3

GOVERNMENT OF MAURITIUS
PORT LOUIS WATER SUPPLY PROJECT

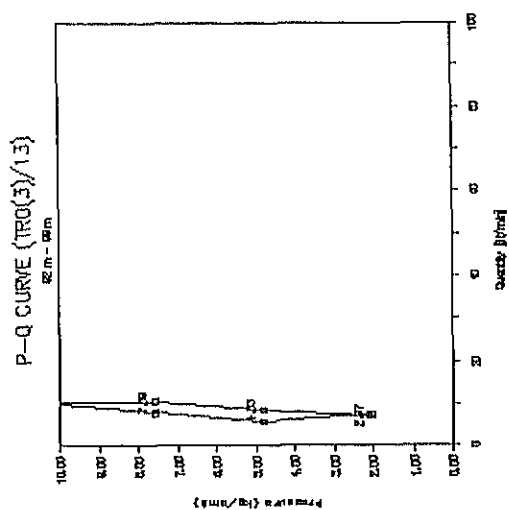
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P-Q CURVE, TRO-(3)-2/3

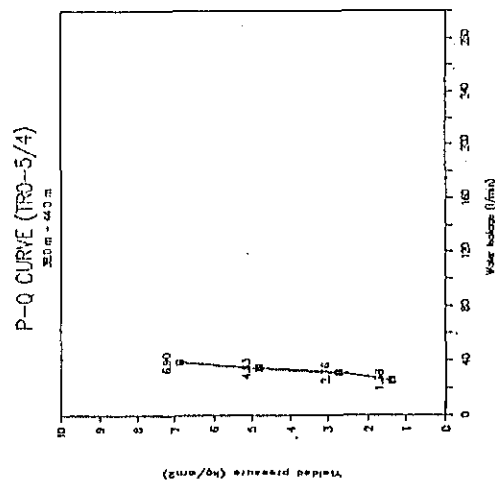
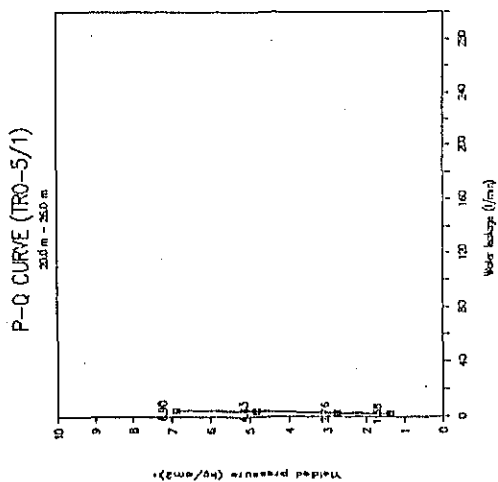
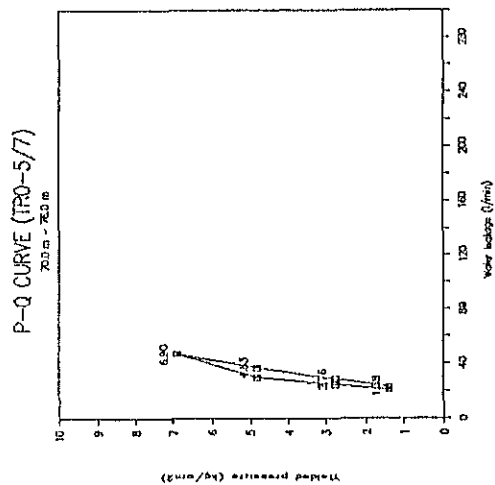
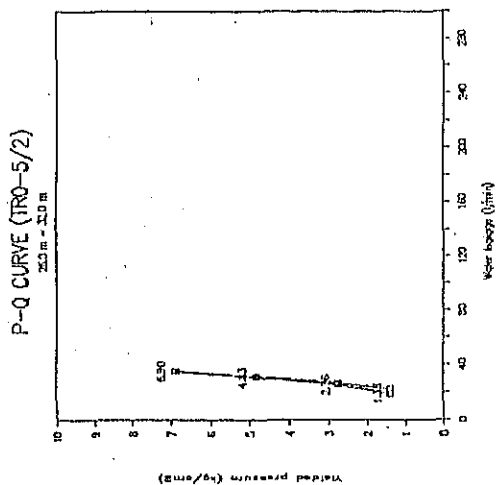
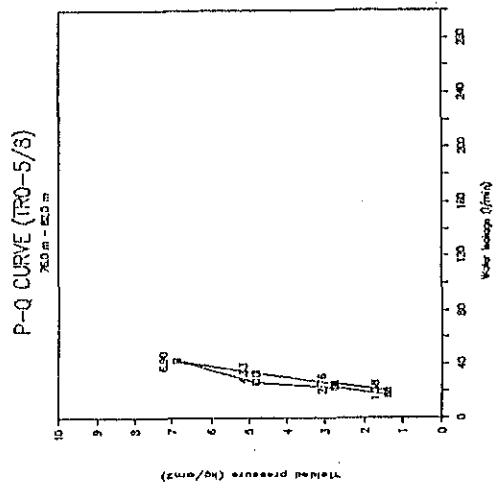
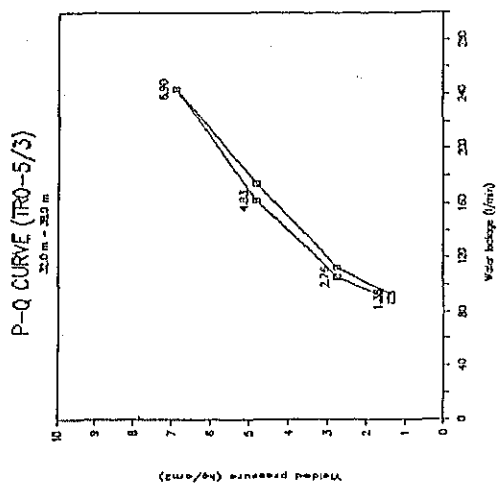
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P-Q CURVE, TR0-(3)-3/3

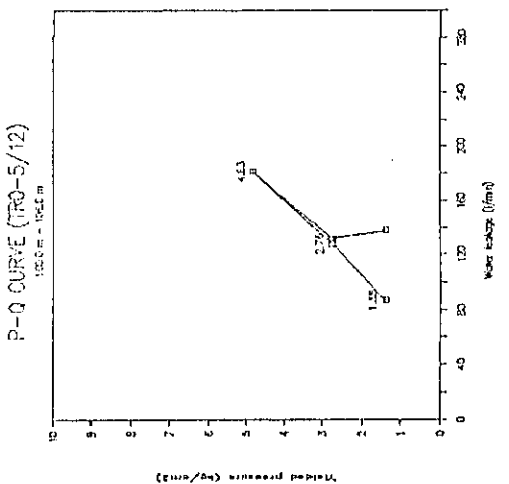
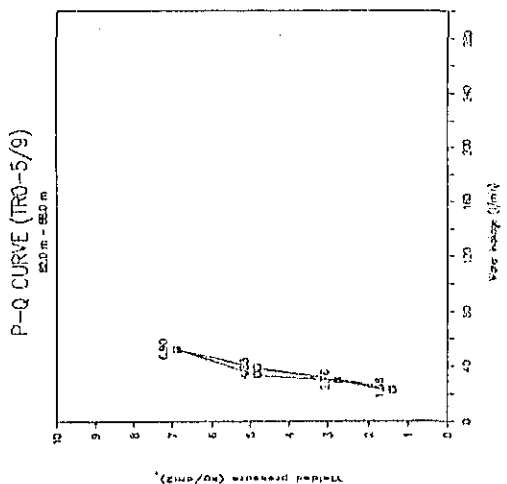
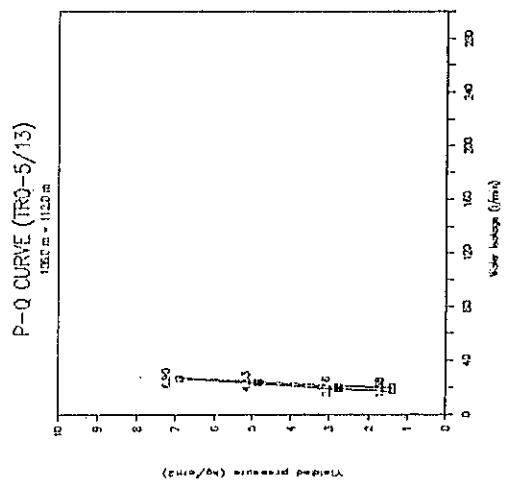
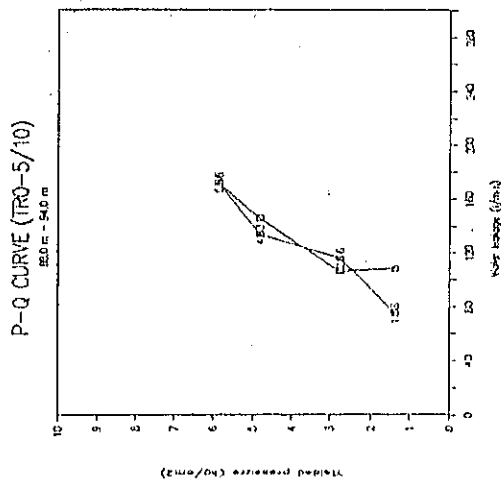
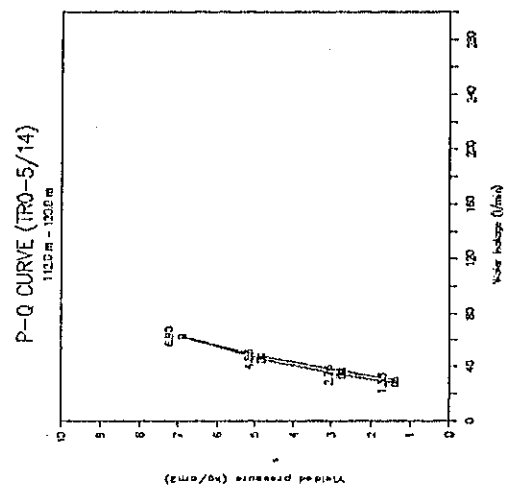
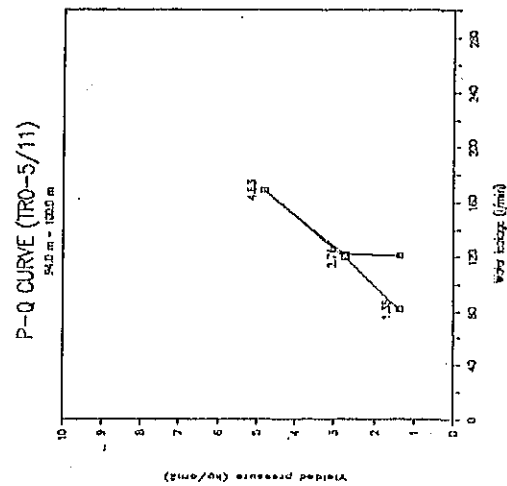
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P-Q CURVE, TR0-(5)-1/2

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PORT LOUIS WATER SUPPLY PROJECT

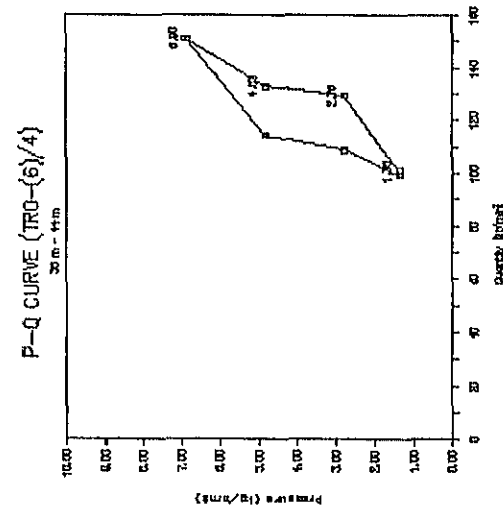
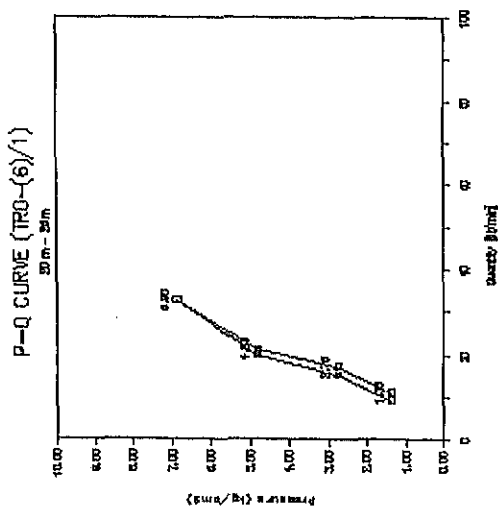
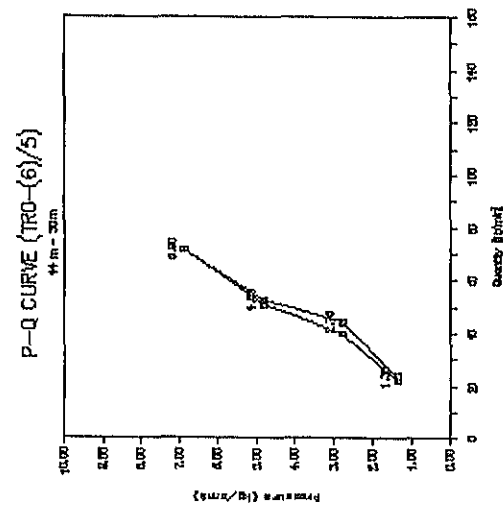
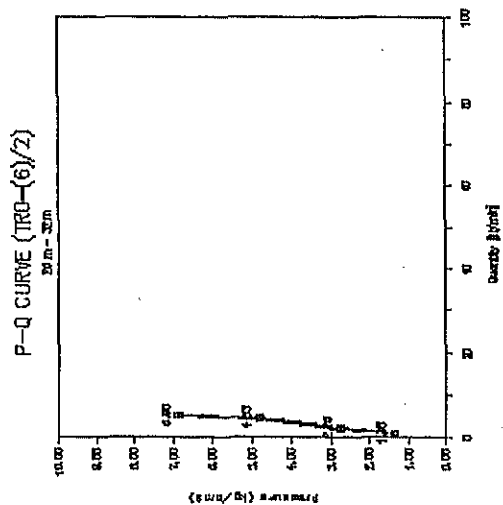
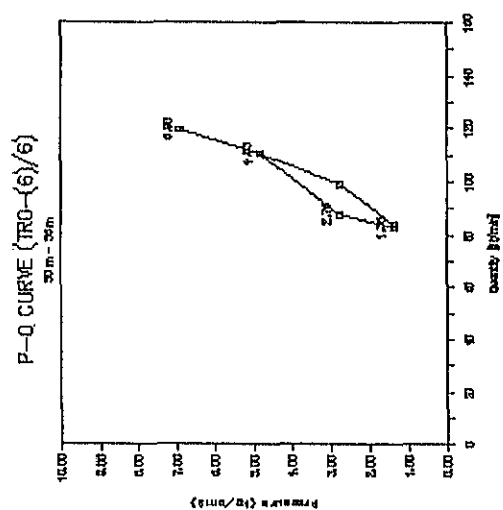
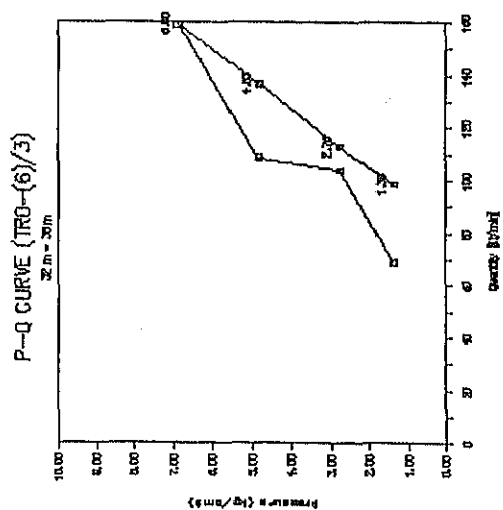
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P-Q CURVE, TR0-(5)-2/2

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PORT LOUIS WATER SUPPLY PROJECT

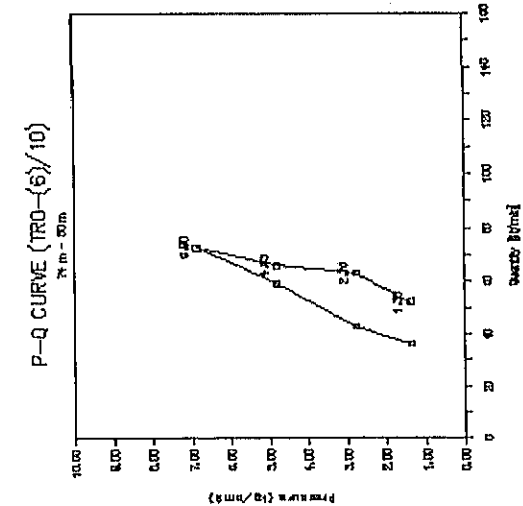
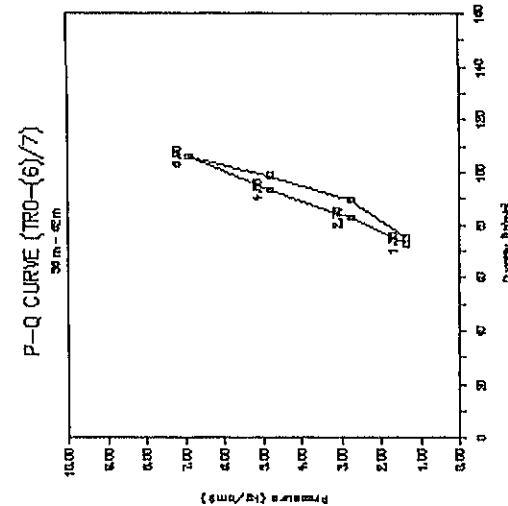
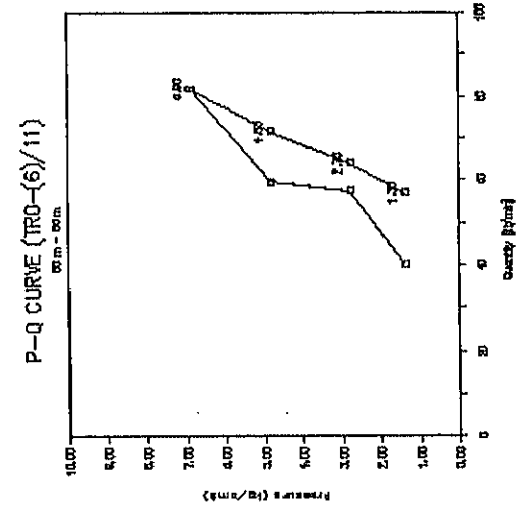
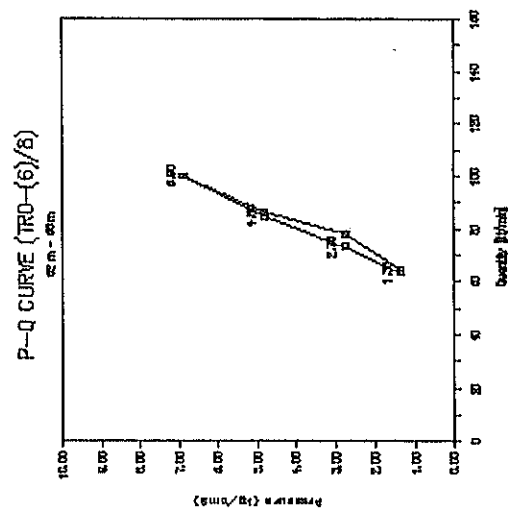
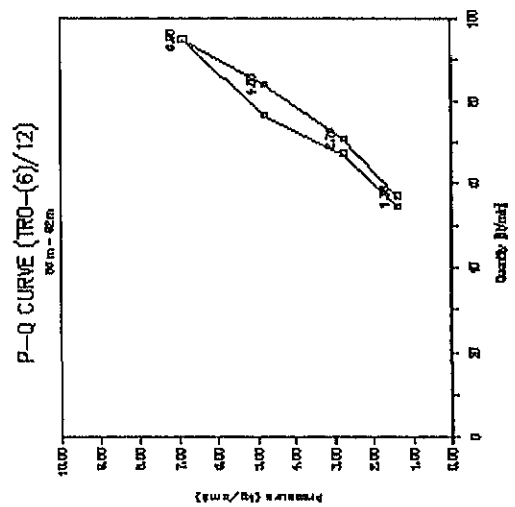
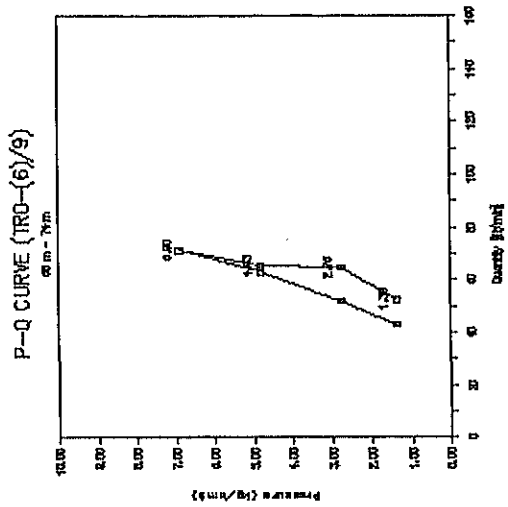
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P-Q CURVE, TR0-(6)-1/4

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P-Q CURVE, TR0-(6)-2/4

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