Department of Main Roads (Tas)
Materials and Research Division

borehole no: B90-10
sheet 1 of 2

engineering log - borehole

J1494 file: 02.0346

BASS HWY. - DUPLICATION
project: VICTORIA BRIDGE - DEVONPORT 246937E 437858N
borehole location: 26m L of ℄ and parallel to existing E abutment

hole commenced: 7/3/90
hole completed: 7/3/90
supervised by: JR
log checked by: JGG

drill model and mounting: GEMCO 210 D
hole diameter: 100 mm
slope: Vert. deg.
bearing: deg.
R.L. surface: 4.71 m
datum: State
operator: G. Baker

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. / depth metres	graphic log	classification symbol	material: soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer kPa 100 200 300 400	structure and additional observations
AS					4.0			FINE GRAVELS; old pavement				old bridge approach
					1.0		GW	FILL; clayey, sandy, gravel				old abutment fill
				N* = 13 5,7,6	2.0		GW	GRAVEL; sandy, sl. clayey	M	L-MD		old abutment fill; gravel with dolerite and river-washed materials
				N* = 33 3,30,3 see note	3.0							SPT cutter damaged; highly variable relative density index
					4.0							(grab sample)
				N* = 52 11,21,31	5.0			CLAY; highly plastic, with some texture				possibly in situ EW dolerite
								continued on cored borelogte sheet				

key

method
AS auger screwing*
AD auger drilling*
R roller/tricone
W washbore
CT cable tool
* bit shown by suffix:
B – blank bit
V – "V" bit
T – TC bit
e.g. ADT

support
C casing
M mud

penetration
1 2 3 no resistance ranging to refusal

water
10 Oct, 73 water level on date shown
water inflow
water outflow

notes – samples and tests
U50 – undisturbed sample 50 mm diameter
D – disturbed sample
N – standard penetration tesnfigure = result
N* – SPT + sample
Nc – cone penetrometer

classification symbols and soil description
based on unified classification system

moisture
D – dry
M – moist
W – wet

consistency/relative density
VS – very soft
S – soft
F – firm
St – stiff
VSt – very stiff
H – hard
Fb – friable
VL – very loose
L – loose
MD – moderately dense
D – dense
VD – very dense

DEPARTMENT OF MAIN ROADS (TAS.)
MATERIALS AND RESEARCH DIVISION

M & R F8

borehole no: B90-10
sheet 2 of 2

engineering log — cored borehole

J1494 File No. 02.0345

BASS HWY. — DUPLICATION
project: VICTORIA BRIDGE-DEVONPORT 246937E 437858N
borehole location: 26m L of ℄ and parallel with existing E abutment

hole commenced: 7/3/90
hole completed: 7/3/90
supervised by: JR
log checked by: JGG

drill model and mounting: GEMCO 210 D slope: Vert. deg.
barrel type and length: NQTT 2.45m fluid H_2O bearing: deg.

R. L. surface: 4.71 m
datum: State Driller G. Baker

drilling information				rock substance					rock mass defects	
method	case-lift	water	R.L depth metres	graphic log / core loss	substance description (rock type: grain characteristics, colour, structure, minor components. continued from borehole sheet)	weathering	strength Is(50) EL VL L M H VH EH	defect spacing mm 30 100 300 >300	defect description: thickness, type, inclination, planarity, roughness, coating. particular	general
NQ					DOLERITE; EW, brown				hard clay consistency	
			6.0							
			-2.0		; grey, fine grained	HW			broken core	
			7.0			SW			40° dip joint curved vert. to 45° dip joint sub horiz. joint sub horiz. joint	iron stained, mostly tight ends
						MW			45° dip joint } sub vert. joint 70° dip joint }	typically around 40° dips, some infilled or clay coated, but steep planar
			8.0			SW				
			-4.0			MW			70° dip fracture zone with clay infilling	
			9.0			SW				
					; blue-grey	Fr			sub. horiz. joint	
			10.0						sub horiz. joint	no staining or infilling
			-6.0							
			11.0						sub horiz. joint	
					End of hole at 11.4m					

key

method
AS auger screwing
AD auger drilling
R roller/tricone
W washbore
NMLC NMLC core drilling

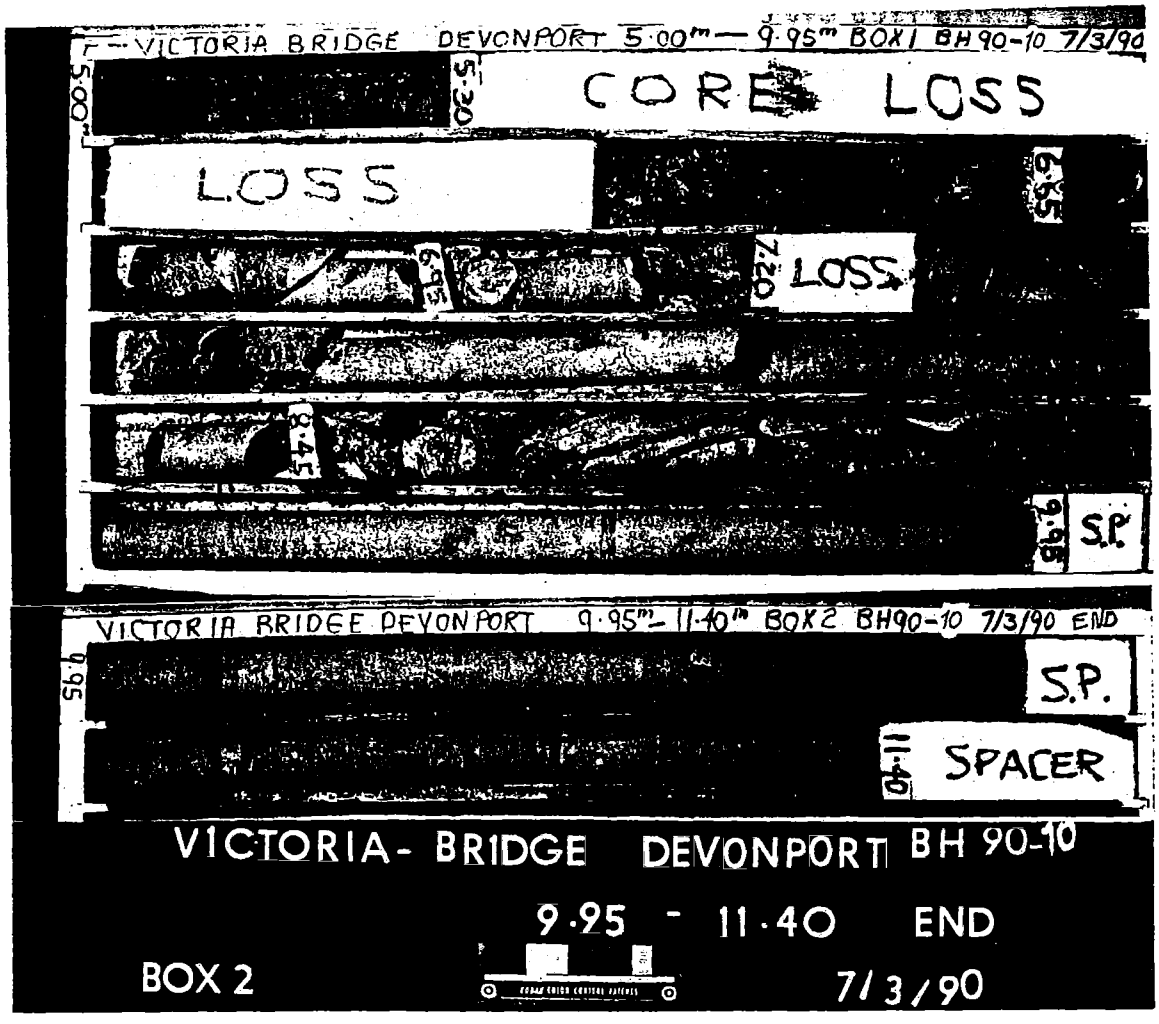
case-lift
casing used
barrel withdrawn

water
10 Oct, 73 water level date shown
water inflow
partial drilling water loss
complete drilling water loss

graphic log/core loss
core recovered (hatching indicates material)
no core recovered

weathering
Fr — fresh
SW — slightly weathered
MW — moderately weathered
HW — highly weathered
EW — extremely weathered

strength (Indirect tensile strength)
EL — extremely low
VL — very low
L — low
M — medium
H — high
VH — very high
EH — extremely high


VICTORIA BRIDGE DEVONPORT 5.00m — 9.95m BOX1 BH90-10 7/3/90
CORE LOSS
LOSS
LOSS
S.P.
VICTORIA BRIDGE DEVONPORT 9.95m — 11.40m BOX2 BH90-10 7/3/90 END
S.P.
SPACER
VICTORIA- BRIDGE DEVONPORT BH 90-10
9.95 - 11.40 END
BOX 2
7/3/90

BH90-10