Hydro Tasmania

Engineering Log
Borehole

borehole no: RT 1

sheet 1 of 2

Job no: E203332 file:

Project: DUNGROVE DAMS
RUPERTS

Borehole Location: mE 492126.6
mN 5320781

Borehole commenced: 14/02/08
Borehole completed: 15/02/08
Supervised by: D. BEAR.
Log checked by:

drill model and mounting: HPSCOUT slope: Vertical R.L surface m
hole diameter: 125mm bearing: datum Driller: D. ROBERTS

drilling information						material substance						
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, density index	hand penetrometer kPa 100 200 300 400	structure and additional observations
AD				SPT 0.5-0.95 4-7-12 n=19			SM	SAND silty fine brown minor cobbles	D	MD		SPT 0.5-0.95 n=19
				SPT 1.0 11,19,22 n=41				grading to yellow brown lightly cemented				SPT 1.0-1.45 n=41
								well cemented, micaceous				
								AUGER REFUSAL 1.5 SEE CORED HOLE LOG				
					2							
					3							
					4							
					5							
					6							
					7							
					8							

KEY

method
- AS auger screwing
- AD auger drilling
- RR roller/tricone
- W washbore
- HA hand auger
- HFA hollow flight auger

support
- T - timbering
- C - casing

penetration
1 2 3 — no resistance / ranging to / refusal

water
- level (date)
- inflow
- outflow

notes - samples and tests
- U_s undisturbed sample 50mm diameter
- S disturbed sample
- N standard penetration test (SPT)
- N* SPT - sample recovered
- Bs bulk sample
- R refusal

classification symbols and soil description
based on Unified Classification System

moisture condition
- D dry
- M moist
- W wet
- PL plastic limit

consistency/ density/ index
- VS very soft
- S soft
- F firm
- St stiff
- VSt very stiff
- H hard
- Fb friable
- VL very looose
- L loose
- MD medium dense
- D dense
- VD very dense

Hydro Tasmania

Engineering Log
Cored Borehole

borehole no: RT 1

Sheet 2 of 2

Job no: E203332 file:

Project: DUNGROVE DAMS EXPERTS

borehole location: mE 492126.6 (MGA 94) mN 5320781

hole commenced: 14/02/08
hole completed: 15/02/08
supervised by: D. [illegible]
log checked by:

drill model and mounting: HP SCOUT slope: vertical 84°
barrel type and length: NQTT fluid WATER bearing: 020°

R.L surface: m
datum: AHD Driller D. ROBERTS

drilling information				rock substance			rock mass defects			
method	case-lift	water	R.L depth (m)	graphic log / core loss	substance description: rock type: grain characteristics, colour, structure, minor components.	weathering	strength (EL VL L M H VH EH; x = Point Load Test)	defect spacing mm (30 100 300 1000 >3000)	RQD %	defect description: thickness, type, inclination, planarity, roughness, coating (particular / general)
RR			0.0		CASING ADVANCED TO 1.5					
			1.0		REFER TO BORED HOLE LOG					
	1		2.0		SANDSTONE: fine (silty) yellow brown with interbedded grey clayey layers. Sub horizontal bedding	DW			55	- joints 1-5mm planar along bedding - clay infill - joints 1-5mm planar along bedding - clayey silt infill.
			3.0		CORE LOSS 0.1m					CORE LOSS 0.1
	2		4.0				x		75	1-3mm joints planar along bedding, clean Is(50) = 0.3MPa Diametral, 0.8MPa Axial
			5.0		CORE LOSS 0.1					At depth = 5.6m Is(50) = 0.7MPa Diametral CORE LOSS 0.1 = 1.7MPa Axial
	3		6.0		CORE LOSS 0.5				66	1-10mm wide joints planar along bedding clay infill 1-2mm joints along bedding CORE LOSS 0.5
			7.0		SANDSTONE: fine to medium yellow brn to grey, sub horizontal bedding		x x x x			Is(50) = 0.6MPa Diametral, 1.4MPa Axial - 1mm joint clean planar along bedding Is(50) = 0.1MPa Diametral, 0.5MPa Axial Is(50) = 0.1MPa Diametral, 1.3MPa Axial
	4		8.0		END OF HOLE					NOTES: orientation not possible due to core loss or erosion at start of each NQTT run
			9.0							

KEY

method
- AS auger screwing
- AD auger drilling
- R roller/tricone
- W washbore
- NQTT NQ triple tube core drilling

case-lift
- casing used
- barrel withdrawn

water
- 6 May 07 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
- DW - distinctly weathered
- EW - extremely weathered
- RS - residual soil

strength
(indirect tensile strength)
- x Point Load Test
- EL extremely low
- VL very low
- L low
- M medium
- H high
- VH very high
- EH extremely high