BOREHOLE No. BH01

Project: RTA Wharf Upgrade | Client: Rio Tinto Aluminum | Driller: Dave | Northings: 5446344.7mN | Logged: MT
Location: Bell Bay | Start - Finish Date: 18/02/09 - 19/02/09 | Rig: Hydropower Scout | Eastings: 489000.3mE | Checked: DRAFT
Job No: PI30328 | Bore dia: 150/100mm | Surface Conditions: Wharf | RL: -11.0 | Oriented: -90

LABORATORY DATA						FIELD DATA				SOIL DESCRIPTION		SOIL CONDITION		COMMENTS
dry density (t/m³)	moisture content (%)	liquid limit (%)	plasticity index (%)	percent fines (%)	design / test data	field & other tests	sample type	field tests	ground water depth (m)	graphic log	soil type, unified classification, colour, structure, particle characteristics, minor components	consistency/ density	moisture condition	drilling method, well construction, water and additional observations
											SANDY CLAY (CL) grey, orange-brown, fine to coarce grained sand	F		
	29.7	32	17	63		0/4/4 (N=8)	●		1		SANDY SILT (ML) / SILTY SAND (SM) grey, orange, find sand	F / L		30cm sample in SPT
									2		SILTY SAND (SM)	L		
						2/4/6 (N=10)			3					SPT no sample
									4		SILTY CLAY (CL) brown, dark grey, trace fine sand,	St		
						2/3/6 (N=9)	●				SANDY SILT (ML) / SILTY SAND (SM) grey, brown, fine sand	St / L		30cm sample in SPT, variation of some thin layer in SPT sample
									5					
									6		SILTY SAND (SM) grey, black, fine to medium, trace black sand	VL		
						1/1/2 (N=3)	●		7					shelby no sample, 30cm sample in SPT
									8					
									9		SILTY CLAY (CL) grey	VSt		
									10					

LABORATORY DATA
- UQN Unconfined Comp. (Natural)
- UQC Unconfined Comp. (Compacted)
- TQN Uncons. Undrained Triax. (Natural)
- TQC Uncons. Undrained Triax. (Compacted)
- TRX Consolidated Undrained Triaxial with pwp measurement
- PSA Particle Size Analysis
- CS 1D oedometer Test
- LPM Laboratory Permeability

FIELD DATA ABBREVIATIONS
- Suv = Uncorrected vane shear (kPa)
- Sup = Pocket penetrometer (kPa)
- N = SPT blows per 300mm
- FPM = Field permeability

GROUNDWATER SYMBOLS
- = Water level (static)
- = Water level (during drilling)
- = Outflow / Inflow

FIELD DATA SYMBOLS
- × = Shear vane test
- ⊥ = Pocket Penetrometer test
- ▽ = Standard Penetration Test (SPT top = start of N blowcount)
- ▼ = SPT Spoon Sample (Pushed)
- ■ = Undisturbed Tube Sample
- ● = Disturbed Sample
- ▮ = Bulk Sample

DENSITY (N-value)

VL	(very loose)	0 - 4
L	(loose)	4 - 10
MD	(medium dense)	10 - 30
D	(dense)	30 - 50
VD	(very dense)	50 - 100
CO	(compact)	>50/150mm

MOISTURE CONDITION
D = Dry M = Moist W = Wet

CONSISTENCY (Su)

VS	(very soft)	< 12 kPa
S	(soft)	12 - 25
F	(firm)	25 - 50
St	(stiff)	50 - 100
VSt	(very stiff)	100 - 200
H	(hard)	> 200 kPa

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Driller: Dave
Rig: Hydropower Scout
Surface Conditions: Wharf

Northings: 5446344.7mN
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1.44	27	38	13	88	TRX c'=9 ϕ'=39°	Sup=>300 Suv=186					SILTY CLAY (CL) grey *(continued)* with fine sand			45cm sample in push tube
						5/9/11 (N=20)			11					45cm sample in SPT
									12					
									13					
						8/10/12 (N=22)					dark grey	VSt		45cm sample in SPT
									14					
									15					
									16					
	31.8	50	25			5/9/14 (N=23)					mixed dark grey and orange-brown with sand	VSt		45cm sample in SPT
											SAND (SP) brown, fine to coarse, trace black sand, trace low plastic fines	MD		
									17					change in drilling rate
	19.3			8		6/9/17 (N=26)			18		yellow-brown			45cm sample in SPT
									19					
											grey	L		
									20					

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		14	3	9		1/3/6 (N=9)	●	21		SAND (SP) brown, fine to coarse, trace black sand, trace low plastic fines *(continued)*	L		45cm sample in SPT
										Borehole terminated in SAND at 21.05m			

22 23 24 25 26 27 28 29 30

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