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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No **BH107**
SHEET **1** of **5**
REFERENCE No **11466**

PROJECT Townsville Ring Road Section 4
LOCATION Kalynda Parade Overpass COORDINATES 467767.1 E; 7866504.0 N
PROJECT No FG6020 SURFACE R.L. 13.48m PLUNGE _____ DATE STARTED 3/4/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 4/4/13 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING ROCK ROLLER WASH BORING	RQD () %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	13.48												
1	12.88				A	Silty SAND (TOPSOIL) Pale brown, moist, loose. Medium to coarse grained sand, some tree roots.	(SP)					1,3,2 N=5	SPT
2					B	Silty SAND Brown, moist, loose. Medium to coarse grained sand.						3,3,5 N=8	SPT
3					C	Becoming dense.						3,14,21 N=35	SPT
4					D	Becoming very dense with fine grained sand.	(SM)					25,30/90 N>50	SPT
5					E		(SM)					30/70 N>50	SPT
6					F	Becoming brown fine to medium grained sand.						30/150 N>50	SPT
7					G	Becoming medium dense to dense.						7,12,15 N=27	SPT
9	4.48				H	Sandy Silty CLAY Pale brown, moist, very stiff to mainly hard. Low plasticity, mainly fine to medium grained sand.	(CI)					MC= 49.8% LL=35.4% PI=14.2% LS=9.6% 16,30/135 N>50	SPT
10													

REMARKS _____

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PROJECT Townsville Ring Road Section 4
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PROJECT No FG6020 SURFACE R.L. 13.48m PLUNGE _____ DATE STARTED 3/4/13 GRID DATUM GDA 94
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DEPTH (m)	R.L. (m)	AUGER CASING ROCK ROLLER WASH BORING	RQD () %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10	3.48												
11					J	Sandy Silty CLAY Cont'd						6,10,12 N=22	SPT
12					K		(CI)					MC = 25.1% LL=38.2% PI=13% LS=10.2% 11,30/140 N>50	SPT
13					L							14,25,30/90 N>50	SPT
14	-0.53					Silty SAND Pale brown to brown, moist, medium dense to dense. Medium to coarse grained sand.							
15					M		(SM)					11,22,22 N=44	SPT
16					N							8,11,11 N=22	SPT
17													
18	-4.03				P	Sandy SILT Pale brown to brown, moist, dense. Fine grained sand.						9,15,22 N=37	SPT
19	-5.53												
20					Q	Silty SAND Pale grey mottled with orange brown, moist, medium dense to dense. Fine to medium grained sand.	(SM)					12,20,22 N=42	SPT

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20	-6.53												
21					R	Silty SAND Cont'd						10,14,25 N=39	SPT
22					S		(SM)					10,12,17 N=29	SPT
23					T							9,9,11 N=20	SPT
24	-11.23				U	Sandy Silty CLAY Pale grey to pale brown, moist, hard. Low to medium plasticity, fine grained sand.						MC = 18.9% LL=41% PI=21.6% LS=13% 15,28,30/130 N>50	SPT
25					V		(CL-Cl)					14,28,30/130 N>50	SPT
26					W							12,22,30 N>50	SPT
27													
28													
29													
30													

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30	-16.53				X	Sandy Silty CLAY Cont'd						14,25,30/100 N>50	SPT
31					Y		(CL-CI)					MC = 22% LL=26.2% PI=8% LS=6% 7,13,21 N=34	SPT
32	-19.03				Z	Silty SAND Pale grey mottled with orange brown, moist, dense. Fine grained sand.						8,14,22 N=36	SPT
33					AA		(SM)					10,16,26 N=42	SPT
34	-22.03				AB	Silty SAND (Residual) Brown, moist, very dense. Fine grained sand.						30/90 N>50	SPT
35					AC	DOLERITE Fine grained intrusive igneous rock of mafic composition XW: Generally exhibits the engineering properties of dark grey to black, moist, very dense, fine grained clayey sand.						30/100 N>50	SPT
36	-23.73				AD		XW					30/80 N>50	SPT
37						GRANITE XW: (See over)							
38	-25.83						XW						
39													
40													

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40	-26.53					GRANITE Medium to coarse grained, intrusive igneous rock of felsic composition. XW: (Cont'd) Generally exhibits the engineering properties of brown to orange, red, medium to coarse grained, very dense, clayey sand.								
41														
42	-28.53					Borehole terminated at 42m								
43														
44														
45														
46														
47														
48														
49														
50														

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