

COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the [Creative Commons Attribution 4.0 Licence](#) (CC BY 4.0). When reusing the Document, in whole or in part, please attribute the Department as follows: "*(c) State of Queensland (Department of Transport and Main Roads) 2020, licensed under the CC BY 4.0 Licence*". This licence does not apply to the Queensland Government logo or trademarks.

LIMITATION OF LIABILITY

The CC BY 4.0 Licence contains a comprehensive Disclaimer of Warranties and Limitation of Liability. In addition, please note that this Document was prepared for Departmental use only. Reuse of the Document by anyone for any other purpose could result in error and/or loss. You should obtain professional advice before making decisions based on the contents of the Document.

When reproducing any part of this Document, you must also reproduce this limitation of liability notice in addition to the italicised attribution statement above.

Retrieved from the Queensland Geotechnical Database <http://ggd.org.au/>

ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH104**
SHEET **1** of **4**
REFERENCE No **11463**

PROJECT Townsville Ring Road Section 4
LOCATION Kalynda Parade Overpass COORDINATES 467726.5 E; 7866479.7 N
PROJECT No FG6020 SURFACE R.L. 14.72m PLUNGE _____ DATE STARTED 19/3/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/3/13 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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
									EH	VH	H	M	J	VL	EL	20	60	200		
0	14.72					Sandy SILT (TOPSOIL) Pale brown, dry, soft. Low plasticity, some tree roots.														
1	14.22				A	Silty SAND Pale brown, slightly moist, medium dense. Fine to medium grained.													6,11,12 N=23	SPT
2					B	Becoming very dense. Medium to coarse grained, partly cemented.													22,30/145 N>50	SPT
3					C	Occasional fine gravel.													30/120 N>50	SPT
4					D	Fine to medium grained sand.													30/120 N>50	SPT
5					E														24,30/80 N>50	SPT
6					F		(SM)												20,30/125 N>50	SPT
7					G	Becoming dense.													11,17,30 N=47	SPT
8					H														9,14,25 N=39	SPT
9																				
10																				

REMARKS _____

LOGGED BY
VP

ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH104**
SHEET **2** of **4**
REFERENCE No **11463**

PROJECT Townsville Ring Road Section 4
LOCATION Kalynda Parade Overpass COORDINATES 467726.5 E; 7866479.7 N
PROJECT No FG6020 SURFACE R.L. 14.72m PLUNGE _____ DATE STARTED 19/3/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/3/13 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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	4.72												
11	4.42				J	Silty SAND (Cont'd) Clayey SILT Brown, moist, very dense.	(SM)					LL=35.6% PI=11.2% LS=8.6% 15,30/145 N>50	SPT
12					K	Silty sand layers. Fine grained sand, loose. Dark grey in parts.	(ML)					3,4,4 N=8	SPT
13	1.92				L	Clayey SAND Greyish brown, slightly moist, very dense. Fine to medium grained sand.						13,29,30/120 N>50	SPT
14					M	Orange in parts.						18,30/140 N>50	SPT
15					N	Becoming dense.	(SC)					11,15,20 N=35	SPT
16					O	Medium to coarse grained sand. Occasional fine gravel.						12,16,23 N=39	SPT
17					P							9,20,16 N=36	SPT
18													
19													
20													

REMARKS _____

LOGGED BY
VP

ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH104**
SHEET **3** of **4**
REFERENCE No **11463**

PROJECT Townsville Ring Road Section 4
LOCATION Kalynda Parade Overpass COORDINATES 467726.5 E; 7866479.7 N
PROJECT No FG6020 SURFACE R.L. 14.72m PLUNGE _____ DATE STARTED 19/3/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/3/13 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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
20	-5.28					Clayey SAND (Cont'd)							
21					Q	Becoming pale yellowish brown, medium dense and medium to coarse grained.						10,12,18 N=30	SPT
22													
23					R	Becoming dense.	(SC)					11,13,20 N=33	SPT
24					S	Fine to medium grained sand.						13,16,27 N=43	SPT
25	-10.28					24.5m - 24.7m: Very dense layer.							
26					T	Sandy CLAY Pale greyish yellow, moist, hard. Medium plasticity.	(CI)					MC = 22.8% LL=50.2% PI=26.8% LS=13% 11,17,23 N=40	SPT
27	-11.78				U	Clayey SAND Pale grey, brown with some orange, moist, very dense. Fine to medium gained sand. Occasional angular, medium gravel.						14,27,30/110 N>50	SPT
28							(SC)						
29					V							15,25,30/110 N>50	SPT
30	-14.78					Sandy Silty CLAY Pale greyish brown to dark brown, moist, hard.	(CL-CI)					LL=35.2%	

REMARKS _____

LOGGED BY
VP

ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH104**
SHEET **4** of **4**
REFERENCE No **11463**

PROJECT Townsville Ring Road Section 4
LOCATION Kalynda Parade Overpass COORDINATES 467726.5 E; 7866479.7 N
PROJECT No FG6020 SURFACE R.L. 14.72m PLUNGE _____ DATE STARTED 19/3/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/3/13 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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
30	-15.28												
31					W	Sandy Silty CLAY(Cont'd) Low to intermediate plasticity, fine grained sand.						PI=14.6% LS=8.6% 17,30/140 N>50	SPT
32					X	With some pale pink and dark grey.						19,30/120 N>50	SPT
33					Y	Becoming pale pinkish brown.						MC = 22.5% LL=33% PI=14.6% LS=9% 16,28,30/120 N>50	SPT
34	-19.78												
35						Silty SAND Pale greyish brown, moist, very dense. Fine to medium grained sand.							
36					Z							15,27,30/120 N>50	SPT
37	-22.68												
38	-23.52				AA	GRANITE Medium to coarse grained, intrusive igneous rock of felsic composition. XW: Generally exhibits engineering properties of a pale greyish yellow, moist, very dense, clayey silt.						38,30/90 N>50	SPT
39						Borehole terminated at 38.24m							
40													

REMARKS _____

LOGGED BY
VP