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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH608
SHEET 1 of 5
REFERENCE No H11577

PROJECT Townsville Ring Road Section 4
LOCATION Dalrymple Overpass COORDINATES 467204.2 E; 7867037.8 N
PROJECT No FG6020 SURFACE R.L. 16.52m PLUNGE DATE STARTED 7/10/13 GRID DATUM MGA94 Zone 55
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING DATE COMPLETED 9/10/13 DRILLER Saxon

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	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				
0	16.52																		
16.22						Sandy SILT (Topsoil): Pale brown, dry, soft-firm. Some tree roots.													
					A	Sandy SILT Pale grey brown, dry, very stiff.												7,12,16 N=28	SPT
1																			
2					B	Becoming hard. Colour change to dark grey brown.												9,17,20 N=37	SPT
3					C	High content of sand	(ML)											9,27,30/100 N>50	SPT
4					D													23,30/70 N=50	SPT
5					E	Colour change to yellow brown.												15,28,30/110 N=50	SPT
6	10.52																		
					F	Silty SAND Brown, moist, dense. Fine to medium grained sand.												10,18,26 N=44	SPT
7																			
8					G	Becoming Clayey Sand. Colour change to grey brown. Fine to coarse grained sand.	(SM)											20,24,24 N=48	SPT
9																			
					H	Becoming medium dense.												8,9,13 N=22	SPT
10	6.52																		

REMARKS _____

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BOREHOLE No BH608
SHEET 2 of 5
REFERENCE No H11577

PROJECT Townsville Ring Road Section 4
LOCATION Dalrymple Overpass COORDINATES 467204.2 E; 7867037.8 N
PROJECT No FG6020 SURFACE R.L. 16.52m PLUNGE DATE STARTED 7/10/13 GRID DATUM MGA94 Zone 55
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING DATE COMPLETED 9/10/13 DRILLER Saxon

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	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				
10	6.52					Sandy SILT: Grey brown, moist, hard.													
11					J												9,13,18 N=31	SPT	
12							(ML)												
13					K												7,15,21 N=36	SPT	
14					L	Becoming very stiff.											7,9,15 N=24	SPT	
15	2.02					Clayey SAND: Pale grey brown, moist, dense. Fine to coarse grained sand.													
16	0.52				M		(SC)										12,20,29 N=49	SPT	
17					N	Sandy SILT: Grey brown, moist, hard.											13,28,30/110 N>50	SPT	
18							(ML)												
19					P												14,21,25 N=46	SPT	
20																			

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BOREHOLE No BH608
SHEET 3 of 5
REFERENCE No H11577

PROJECT Townsville Ring Road Section 4
LOCATION Dalrymple Overpass COORDINATES 467204.2 E; 7867037.8 N
PROJECT No FG6020 SURFACE R.L. 16.52m PLUNGE DATE STARTED 7/10/13 GRID DATUM MGA94 Zone 55
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING DATE COMPLETED 9/10/13 DRILLER Saxon

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
									EH	VH	H	M	J	VL				
20	-3.48				Q	Sandy SILT: (Cont'd)											9,18,16 N=34	SPT
21							(ML)											
22	-4.98				R	Clayey SAND: Pale grey brown, moist, dense. Fine to medium grained sand.											8,15,19 N=34	SPT
23					S	Becoming fine to coarse grained sand.											12,15,21 N=36	SPT
24							(SC)											
25					T	High content of clay.											14,29,20 N=49	SPT
26					U												10,16,17 N=33	SPT
27	-10.48				V	Sandy SILT: Brown, moist, hard. High content of fine grained sand.											11,17,26 N=43	SPT
28							(ML)											
29					W	Becoming fine grained dense Silty SAND.											10,19,22 N=41	SPT
30	-13.48																	

REMARKS _____

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**ENGINEERING
BOREHOLE LOG**

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BOREHOLE No **BH608**
SHEET **4** of **5**
REFERENCE No **H11577**

PROJECT Townsville Ring Road Section 4
LOCATION Dalrymple Overpass COORDINATES 467204.2 E; 7867037.8 N
PROJECT No FG6020 SURFACE R.L. 16.52m PLUNGE _____ DATE STARTED 7/10/13 GRID DATUM MGA94 Zone 55
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 9/10/13 DRILLER Saxon

2013 TMR LIBRARY:GLB Log A. ENGINEERING BOREHOLE LOG W LITHOLOGY TOWNVILLE RING ROAD 4 DALRYMPLE OVERPASS BH607 - BH610.GPJ <<DrawingFile>> Datgei.CPT Tool:gnI Add-In 27/11/2013 09:03

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING							DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS													
									EH	VH	H	M	J	VL	EL					20	60	200	600	2000								
30	-13.48					Silty SAND Brown, moist, dense. Fine to medium grained sand. Trace gravel.												15,24,42 N>50	SPT													
31				X																												
32					Y															(SM)												22,18,19 N=37
33						Clayey SAND Pale grey/white to brown, moist, very dense. Fine to coarse grained sand. Some medium gravel.												12,27,30/140 N>50	SPT													
34				Z																												
35	-17.98				AA															(SC)												24,30/70 N>50
36						GRANITE Medium to coarse grained, intrusive, igneous rock of felsic composition. XW: Generally exhibits engineering properties of a cream, pale grey, dry to moist, very dense, Silty Sand. Fine to coarse grained sand.												18,25,30/100 N>50	SPT													
37				AB																												
38					AC															Becoming Gravelly Sand.												30/90 N>50
39	-21.98					GRANITE Medium to coarse grained, intrusive, igneous rock of felsic composition. XW: Generally exhibits engineering properties of a cream, pale grey, dry to moist, very dense, Silty Sand. Fine to coarse grained sand.												30/40 N>50	SPT													
40					AD																											

REMARKS _____

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BOREHOLE No BH608
SHEET 5 of 5
REFERENCE No H11577

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DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	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	V				
40	-23.48					GRANITE XW: (Cont'd)													
41					AE												30/100 N>50	SPT	
42																			
43	-25.98		(83)		AF	SW: Pink grey orange, medium to coarse grained, massive, high strength. Defects: -Joints at 20° (1/m) -Joints at 80° - 90° (4/m) Defects are medium spaced, planar, rough, open and clean.												HB N>50	SPT
44	-26.73		100 (68)			DOLERITE Fine to medium grained intrusive, igneous rock of mafic composition SW: Black, fine to medium grained, massive, high to very high strength. Defects: -Joints at 50° (1/m) -Joints at 80° - 90° (3/m) Defects are medium to widely spaced, planar, rough, open and iron stained.													
45	-28.98		100																
46						Borehole terminated at 45.5m													
47																			
48																			
49																			
50																			

REMARKS _____

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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT & MAIN ROADS
 Geotechnical Branch
 35 Butterfield Street, HERSTON Qld 4006
 Phone 07 3066 3336



Department of
 Transport and Main Roads

Project Name	Townsville Ring Road Section 4		
Project No	FG 6020	Date	07/10/13
Borehole No	BH 608	TMR H No	11577
Location	Dalrymple Overpass	Start Depth (m)	42.5
Detail		Finish Depth (m)	45.5
Chainage		Submitted By	J. Lopez
Remarks			

