ENGINEERING BOREHOLE LOG

Queensland Government

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

BOREHOLE No BH111
SHEET 1 of 3
REFERENCE No H10867

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE

LOCATION Pier 3, Centreline COORDINATES 718793.4 E; 7655035.0 N

PROJECT No FG5635 SURFACE R.L. 8.08m PLUNGE DATE STARTED 16/10/10 GRID DATUM MGA94 Zone 55

JOB No HEIGHT DATUM AHD BEARING DATE COMPLETED 18/10/10 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( )% CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
0	8.08				**Sandy SILT (ALLUVIAL)** Light mottled brown-grey, dry becoming moist with depth, very stiff. Medium to high plasticity; fine grained sand.									
				A			(MH)					7,8,12 N=20		SPT
				B								5,8,11 N=19		SPT
	3.58			C	**GRANODIORITE** **Intrusive, coarse grained, massive, crystalline, acidic igneous rock** **XW:** Generally exhibits the engineering properties of pale brown-grey, moist, hard, clayey sandy silt.								12,16,29 N=45		SPT
				D	Medium to high plasticity; occasional fine gravel <10mm. Some rock fragments @ 5.60m.							15,28,30/90mm N>50		SPT
				E			XW					8,13,20 N=33		SPT
				F								13,12,18 N=30		SPT
				G								8,13,18 N=31		SPT
10														

REMARKS

LOGGED BY JA

QLD_DMR_LIB_01A.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY BAKERS FG5635- WALKERSTON BYPASS.GPJ <<DrawingFile>> Datgel CPT Tool gINt Add-In 01/09/2011 14:56

ENGINEERING BOREHOLE LOG

Queensland Government

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

BOREHOLE No BH111
SHEET 2 of 3
REFERENCE No H10867

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE
LOCATION Pier 3, Centreline COORDINATES 718793.4 E; 7655035.0 N
PROJECT No FG5635 SURFACE R.L. 8.08m PLUNGE DATE STARTED 16/10/10 GRID DATUM MGA94 Zone 55
JOB No HEIGHT DATUM AHD BEARING DATE COMPLETED 18/10/10 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( ) % CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
10	-1.92				**GRANODIORITE** **XW:** (Cont'd)									
				H								7,9,13 N=22	SPT	
11														
12				J			XW					7,11,15 N=26	SPT	
13														
				K	Iron concretion nodules <20mm @13.50m.							9,19,26 N=45	SPT	
14	-6.42													
				L	**GRANODIORITE** **HW:** Pale grey, moist, dense to very dense, gravelly silty sand. Subangular gravel <30mm. Becoming extremely low to very low strength friable rock.							~~30/110mm~~ N>50	SPT	
15														
				M								11,23,29 N>50	SPT	
16														
				N								10,16,23 N=39	SPT	
17							HW							
				O								17,30/145mm N>50	SPT	
18														
				P								30/130mm N>50	SPT	
19			(90)											
												Is(50) = 0.02MPa Is(50) = 0.10MPa	o x	
20			100											

REMARKS

LOGGED BY
JA

ENGINEERING BOREHOLE LOG

Queensland Government

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

BOREHOLE No **BH111**
SHEET 3 of 3
REFERENCE No **H10867**

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE
LOCATION Pier 3, Centreline COORDINATES 718793.4 E; 7655035.0 N
PROJECT No FG5635 SURFACE R.L. 8.08m PLUNGE DATE STARTED 16/10/10 GRID DATUM MGA94 Zone 55
JOB No HEIGHT DATUM AHD BEARING DATE COMPLETED 18/10/10 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( ) % / CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
20	-11.92		(86)		**GRANODIORITE** **HW:** (Cont'd) Defects: - Joints @ 60° (<1/m) - Joints @ 10° (<1/m) - Broken zones (possibly drilling-induced) Defects are generally planar, slightly rough, closed to tight and clean.							Is(50) = 0.13MPa Is(50) = 0.01MPa	o x	
21			97								CZ			
			(0)								CZ	Is(50) = 0.09MPa Is(50) = 0.01MPa	o x	
22			73								Drilling-induced BZ			
			(69)				HW				CZ			
23			100								CZ	Is(50) = 0.05MPa Is(50) = 0.03MPa	x o	
			(60)								CZ			
24			100								CZ			
			(50)									Is(50) = 0.11MPa Is(50) = 0.12MPa	x o	
	-16.37		100											
25			(97)		**GRANODIORITE** **SW:** Pale grey with black and pink speckling, medium to coarse grained, massive, very high strength. Defects: - Joints @ 10° (<1/m) Defect surfaces are planar, slightly rough to rough, open and clean.		SW					Is(50) = 5.98MPa Is(50) = 6.44MPa UCS = 57.3 MPa	x o	
26														
	-18.72		100									Is(50) = 8.76MPa Is(50) = 5.24MPa	x o	
27					Borehole terminated at 26.8m									
28														
29														
30														

REMARKS

LOGGED BY
JA

Project: **Walkerston Bypass (Bakers Ck)**

Borehole No: **BH111**

Start Depth: 19.00 m
Finish Depth: 26.80 m
Project No: FG5635
H No:

0 100 200 300 400 500 600mm

SCALE 1:5

F:GEOT043/1