

## **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://qgd.org.au/>



# ENGINEERING BOREHOLE LOG

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

BOREHOLE No   BH100    
 SHEET   1   of   4    
 REFERENCE No   H10883  

PROJECT   WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE    
 LOCATION   Abutment A, LHS   COORDINATES   718723.4 E; 7655041.7 N    
 PROJECT No   FG5635   SURFACE R.L.   9.84m   PLUNGE        DATE STARTED   28/10/10   GRID DATUM   MGA94 Zone 55    
 JOB No        HEIGHT DATUM   AHD   BEARING        DATE COMPLETED   28/10/10   DRILLER   Drillsure Pty Ltd  

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	TH	IM	J	VL	EL				
0	9.84					<b>Sandy CLAY (ALLUVIAL)</b> Grey-brown, moist, firm to stiff.  Low plasticity; medium to coarse grained sand.												Based on Driller's logs only	
1					A		(CL)											2,4,4 N=8	SPT
2																			
3	7.34				B	<b>Silty CLAY (ALLUVIAL)</b> Brown, moist, stiff to very stiff.  Medium plasticity.												3,6,7 N=13	SPT
4					C		(CI)											4,7,10 N=17	SPT
5	4.89				D	<b>Clayey SAND (ALLUVIAL)</b> Grey, moist, medium dense to mainly dense.  Medium to coarse grained sand.												6,11,11 N=22	SPT
6																			
7					E		(SC)											11,16,22 N=38	SPT
8						Cemented sand and fine to medium gravel at 8.0m												30/80mm N>50	SPT
9	1.24				F	<b>GRANODIORITE</b> Intrusive, coarse grained, massive, crystalline, acidic igneous rock <b>XW:</b> Generally exhibits the engineering properties of brown-grey, moist, hard, sandy silty clay.	XW												
10																			

REMARKS \_\_\_\_\_

LOGGED BY  
JA



# ENGINEERING BOREHOLE LOG

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

BOREHOLE No   BH100    
 SHEET   2   of   4    
 REFERENCE No   H10883  

PROJECT   WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE    
 LOCATION   Abutment A, LHS   COORDINATES   718723.4 E; 7655041.7 N    
 PROJECT No   FG5635   SURFACE R.L.   9.84m   PLUNGE        DATE STARTED   28/10/10   GRID DATUM   MGA94 Zone 55    
 JOB No        HEIGHT DATUM   AHD   BEARING        DATE COMPLETED   28/10/10   DRILLER   Drillsure Pty Ltd  

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD ( ) %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	WEATHERING							DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
								USC	EH	VH	I	M	J	VL				
10	-0.16					<b>GRANODIORITE</b> <b>XW: (Cont'd)</b>	XW										11,13,17 N=30	SPT
11	-0.46				G	<b>DOLERITE / BASALT</b> Extrusive, fine to medium grained, massive, crystalline, intermediate igneous rock <b>XW: Generally exhibits the engineering properties of brown, moist, hard, clayey silt.</b>	XW										8,15,19 N=34	SPT
12					H		XW										6,11,16 N=27	SPT
13					J												10,18,27 N=45	SPT
14	-4.16					<b>DOLERITE / BASALT</b> <b>HW: Brown-grey, moist, hard, gravelly sandy clay.</b>											30,30/50mm N>50	SPT
15					K												10,22,30 N>50	SPT
16					L												25,30,25 N>50	SPT
17							HW											
18					M													
19																		
20	-10.16				N													

REMARKS \_\_\_\_\_

LOGGED BY  
JA



# ENGINEERING BOREHOLE LOG

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

BOREHOLE No   BH100    
 SHEET   3   of   4    
 REFERENCE No   H10883  

PROJECT   WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE    
 LOCATION   Abutment A, LHS   COORDINATES   718723.4 E; 7655041.7 N    
 PROJECT No   FG5635   SURFACE R.L.   9.84m   PLUNGE            DATE STARTED   28/10/10   GRID DATUM   MGA94 Zone 55    
 JOB No                    HEIGHT DATUM   AHD   BEARING            DATE COMPLETED   28/10/10   DRILLER   Drillsure Pty Ltd  

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
20	-10.16					<b>DOLERITE / BASALT</b> <b>HW:</b> (Cont'd) Generally exhibits the engineering properties of brown-red, sandy clayey gravel.  Gravel fragments are angular and <30mm. Grading to low strength rock with depth.						30,30/100mm N>50	SPT
21					P								
22												30,30/50mm N>50	SPT
23					Q								
24							HW					30/50mm N>50	SPT
25					R								
26												10,30,30/100mm N>50	SPT
27					S								
28	-17.36		(0)	100		<b>DOLERITE / BASALT</b> <b>MW:</b> Brown, fine grained, massive, low to high strength.  Broken and fractured throughout.		MW				Is(50) = 1.13MPa	o
29	-18.20		(0)	100		<b>DOLERITE / BASALT</b> <b>SW:</b> Grey, fine grained, massive, high to mainly very high strength.  Defects: - Joints @ 20° (<1/m) - Joints @ 60° (<1/m)  Defects are generally planar, slightly rough and iron stained.		SW				Is(50) = 3.51MPa Is(50) = 10.05MPa	o x
30			(29)									Is(50) = 7.19MPa	o
			100	(37)								Is(50) = 3.13MPa Is(50) = 3.27MPa	o x
			100	(93)		Frequent multidirectional calcite veins.							

REMARKS \_\_\_\_\_

LOGGED BY  
JA



# ENGINEERING BOREHOLE LOG

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

BOREHOLE No   BH100    
SHEET   4   of   4    
REFERENCE No   H10883  

PROJECT   WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - BAKER'S CREEK BRIDGE    
LOCATION   Abutment A, LHS   COORDINATES   718723.4 E; 7655041.7 N    
PROJECT No   FG5635   SURFACE R.L.   9.84m   PLUNGE        DATE STARTED   28/10/10   GRID DATUM   MGA94 Zone 55    
JOB No        HEIGHT DATUM   AHD   BEARING        DATE COMPLETED   28/10/10   DRILLER   Drillsure Pty Ltd  

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	I	M	J	VL				
30	-20.16					<b>DOLERITE / BASALT SW: (Cont'd)</b>		SW										Is(50) = 5.02MPa Is(50) = 4.75MPa Is(50) = 4.13MPa UCS = 66.6 MPa	x o o
31	-21.10		100			Borehole terminated at 30.94m													
32																			
33																			
34																			
35																			
36																			
37																			
38																			
39																			
40																			

REMARKS \_\_\_\_\_

LOGGED BY  
JA

Project: **Walkerston Bypass Bakers Ck Bridge**

Borehole No: **BH100**

Start Depth: 27.20m

Finish Depth: 30.94 m

Project No: FG5635

H No: H10883



SCALE 1:5

F:GEO043/1