

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 BH126
 SHEET 1 of 4
 REFERENCE No H10887

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE
 LOCATION ABUTMENT B - (Ch. 84575.5 10.0m LHS) COORDINATES 721569.6 E; 7654821.3 N
 PROJECT No FG5635 SURFACE R.L. 9.28m PLUNGE _____ DATE STARTED 27/10/10 GRID DATUM MGA 94
 JOB No 242/33B/6 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 28/10/10 DRILLER Cairns Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	ROD () % 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	L				
0	9.28				Clayey SAND (ALLUVIAL) Brown to mottled yellow, moist, mainly loose. High plastic fines; minor fine gravel fraction.													
				A		(SC)											3,4,3 N=7	SPT
	6.73				Sandy Silty CLAY (ALLUVIAL) Pale brown to yellow, moist, very stiff. High plasticity; minor sand and gravel fraction.													
				B		(CH)											6,11,15 N=26	SPT
	5.23				Sandy Clayey SILT (ALLUVIAL) Pale grey, moist, very stiff. Fine grained sand.													
				C		(MH)											7,12,14 N=26	SPT
	3.78				SAND (ALLUVIAL) Pale grey, wet, loose to mainly medium dense, mostly fine to medium grained. Some coarse sand to fine gravel bands with minor silt.													
				D													3,5,4 N=9	SPT
				E		(SM)											3,3,4 N=7	SPT
				F													6,7,8 N=15	SPT
10																		

REMARKS Note: *Failure appears to have occurred along a pre-existing defect plane.

LOGGED BY
ME



ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH126
 SHEET 2 of 4
 REFERENCE No H10887

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE
 LOCATION ABUTMENT B - (Ch. 84575.5 10.0m LHS) COORDINATES 721569.6 E; 7654821.3 N
 PROJECT No FG5635 SURFACE R.L. 9.28m PLUNGE _____ DATE STARTED 27/10/10 GRID DATUM MGA 94
 JOB No 242/33B/6 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 28/10/10 DRILLER Cairns Drilling Pty Ltd

DEPTH (m)	R.L. (m)	RQD (%)	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10	-0.72		SAND (ALLUVIAL) (Cont'd)								
11					(SM)					6,9,11 N=20	SPT
12	-2.22		Silty SAND (ALLUVIAL) Pale grey, moist, mainly medium dense to very dense. Layers of varying grain size and fines content.							7,9,12 N=21	SPT
13											
14					(SM)					6,6,9 N=15	SPT
15											
16											
17	-7.87		Silty CLAY (RESIDUAL) Mottled pale grey and orange, moist, very stiff to mainly hard. High plasticity; Fe/Mn oxide nodules; some minor sandy layers.							13,27,29 N>50	SPT
18					(CH)					12,19,26 N=45	SPT
19	-10.12										
20			Silty SAND (RESIDUAL) (See over)		(SM)					10,11,15 N=26	SPT

REMARKS Note: *Failure appears to have occurred along a pre-existing defect plane.

LOGGED BY
ME



ENGINEERING BOREHOLE LOG

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

BOREHOLE No	<u>BH126</u>
SHEET	<u>3</u> of <u>4</u>
REFERENCE No	<u>H10887</u>

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE
 LOCATION ABUTMENT B - (Ch. 84575.5 10.0m LHS) COORDINATES 721569.6 E; 7654821.3 N
 PROJECT No FG5635 SURFACE R.L. 9.28m PLUNGE _____ DATE STARTED 27/10/10 GRID DATUM MGA 94
 JOB No 242/33B/6 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 28/10/10 DRILLER Cairns Drilling Pty Ltd

DEPTH (m)	R.L. (m)	ALGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	INTACT STRENGTH						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
								USC	WEATHERING	EH	VH	I	M				
20	-10.72					Silty SAND (RESIDUAL) (Cont'd) Pale grey, moist, medium dense.	(SM)										
21	-11.22				O	Layers of varying grain size and fines content. Silty CLAY (RESIDUAL) Mottled pale grey and orange, moist, hard. High plasticity; Fe/Mn oxide nodules; some minor sandy layers.	(CH)								10,15,22 N=37	SPT	
22	-12.72				P	GRANODIORITE Intrusive, medium to coarse grained, massive, crystalline, porphyritic, acidic, igneous rock XW: Exhibits the engineering properties of brown, moist, hard, silty clay.									9,30/120mm N>50	SPT	
23							HW										
24															30/30mm N>50	SPT	
25																	
26	-16.27				R	DOLERITE / BASALT Extrusive or intrusive, fine to medium grained, massive, crystalline, basic igneous rock. HW: Brown speckled black, high to mainly very high strength.									30/20mm N>50	SPT	
27	-17.55					Defects: - Joints @ 60-90° (2/m) - Joints @ 20-40° (2/m) Defects are generally planar, smooth, closed to open with iron staining, heavily altered and some clay infill. SW in some areas. MW: Brown speckled black, high to mainly very high strength.	MW								CLy seam 90°, <20mm, subplanar CLy seam	Is(50) = 0.42MPa Is(50) = 1.82MPa	x o
28															J, 90°, Clnf <50mm, subplanar	Is(50) = 2.62MPa Is(50) = 3.75MPa	x o
29	-19.67					SW: Grey speckled black with minor pink, mainly very high strength.	SW									Is(50) = 7.28MPa	o
30																	

OLD_DMR_LIB_01A_GLB_Log_A_ENGINEERING_BOREHOLE_LOG_W_LITHOLOGY_COWLEYS_FG5635-WALKERSTON_BYPASS.GPJ <<DrawingFile>> D:\get CPT Tool\gint\Add-In: 12/12/2011 15:32

REMARKS Note: *Failure appears to have occurred along a pre-existing defect plane.

LOGGED BY
ME



ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH126
 SHEET 4 of 4
 REFERENCE No H10887

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE
 LOCATION ABUTMENT B - (Ch. 84575.5 10.0m LHS) COORDINATES 721569.6 E; 7654821.3 N
 PROJECT No FG5635 SURFACE R.L. 9.28m PLUNGE DATE STARTED 27/10/10 GRID DATUM MGA 94
 JOB No 242/33B/6 HEIGHT DATUM AHD BEARING DATE COMPLETED 28/10/10 DRILLER Cairns Drilling Pty Ltd

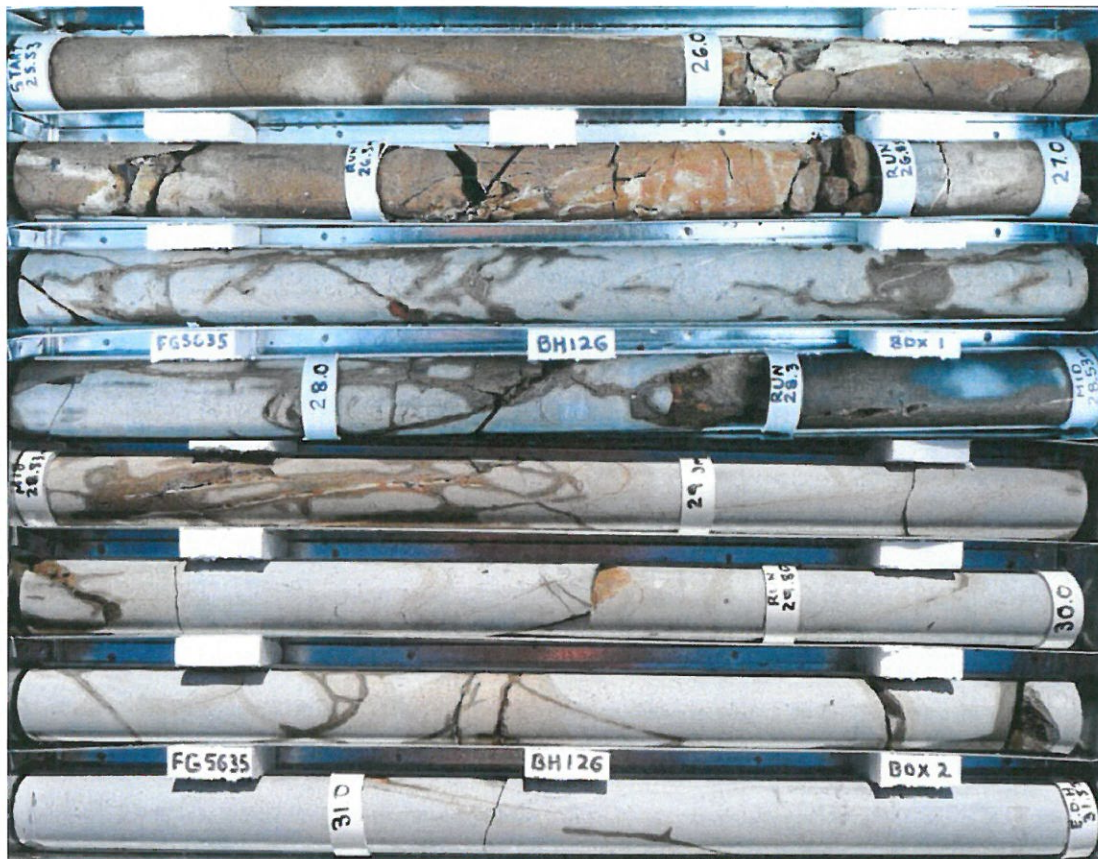
DEPTH (m)	R.L. (m)	AUGER WASHING CORE DRILLING	RQD (%)	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH		DEFECT SPACING (mm)		GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
							EH	VH	H	M			
30	-20.72			DOLERITE / BASALT SW: (Cont'd)								Is(50) = 6.12MPa Is(50) = 1.66MPa	x o
31	-22.25		100	Defects: - Joint @ 40-60° (1/m) - Joint @ 10-20° (2/m) Defects are generally planar, smooth and closed with iron staining.		SW						Is(50) = 2.88MPa Is(50) = 3.72MPa	x o
32				Borehole terminated at 31.53m									
33													
34													
35													
36													
37													
38													
39													
40													

OLD_DMR_LIB_01A.C1.B_Log_A_ENGINEERING_BOREHOLE_LOG_W/LITHOLOGY_COWLEYS_FG5635-WALKERSTON_BYPASS.GPJ <<DrawingFile>> Digital GPT Tool gINI Add-In 12/12/2011 15:32

REMARKS Note: *Failure appears to have occurred along a pre-existing defect plane.

LOGGED BY
ME

Project: **Walkerston Bypass Geotechnical Investigation**
Borehole No: BH126 (Cowleys Road Bridge Ch. 84575.5 10.0m left)
Start Depth: 25.53 m
Finish Depth: 31.53 m
Project No: FG5635
H No: 10887



SCALE 1:5

F:GEOT043/1