

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	BH4
SHEET	1 of 2
REFERENCE No	11234

PROJECT TRAVEL TIME SIGNAGES FOUNDATION INVESTIGATION (SOUTH COAST REGION) - STAGE 3
 LOCATION Nerang Exit 69 N/B COORDINATES 533873.9 E; 6907526.8 N
 PROJECT No FG5798 SURFACE R.L. 12.53m PLUNGE _____ DATE STARTED 1/11/11 GRID DATUM MGA94
 JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 1/11/11 DRILLER Terratest Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	INTACT STRENGTH						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
							USC	WEATHERING	EH	VH	IM	J				
0	12.53				TOPSOIL Brown to grey. Minor organic content.										Based on Driller's logs only	
1	11.53			A	Gravelly SAND (ENGINEERED FILL) Grey, dry, medium dense. Gravel sizing up to 40mm.	CL									10,10,10 N=20	SPT
2	10.78			B	GREYWACKE Fine to medium grained, massive, low grade metamorphic rock XW: Generally exhibits the engineering properties of pale grey to grey, dry, dense silty sand. Becoming clayey sand with depth.	XW									10,18,24 N=42	SPT
3	9.03			C	HW: Grey, moist, hard, sandy gravelly clay. High plasticity; frequent high strength rock fragments sizing up to 50mm.	HW									22,29,16 N=45	SPT
4	7.23			D	SW: Grey to dark grey, foliated, high to very high strength. Interbedded with argillite. Defects: - Joints @ 75-80° (1-2/m) - Joints @ 30-35° (2/m) - Minor calcite veins @ 70-75° (1/m)	SW									30/50mm N>50	SPT
5			(93)	E	Defect surfaces are planar, slightly rough, open, occasionally with clay infill and iron coating.										21,30/100mm N>50	SPT
6			100												Is(50) = 14.63MPa Is(50) = 3.24MPa	x o
7			(95)												J @ 75-80°, Clnf Is(50) = 6.24MPa Is(50) = 1.68MPa	x o
8			100												Argillite I/B Is(50) = 6.91MPa Is(50) = 2.86MPa	x o
9			(85)												Argillite I/B Is(50) = 8.60MPa Is(50) = 1.76MPa Is(50) = 3.71MPa Is(50) = 2.37MPa; **	x o x o
10	2.53		100												CA VN CA VN Water loss Is(50) = 2.08MPa Is(50) = 4.66MPa	x o

REMARKS **** Failed along pre-existing defect surface**

LOGGED BY
LD/AD



ENGINEERING BOREHOLE LOG

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

BOREHOLE No	<u>BH4</u>
SHEET	<u>2</u> of <u>2</u>
REFERENCE No	<u>11234</u>

PROJECT TRAVEL TIME SIGNAGES FOUNDATION INVESTIGATION (SOUTH COAST REGION) - STAGE 3
 LOCATION Nerang Exit 69 N/B COORDINATES 533873.9 E; 6907526.8 N
 PROJECT No FG5798 SURFACE R.L. 12.53m PLUNGE _____ DATE STARTED 1/11/11 GRID DATUM MGA94
 JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 1/11/11 DRILLER Terratest Drilling 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	IM	J	VL				
10	2.53					ARGILLITE Fine to medium grained, foliated, low grade metamorphic rock SW: Dark grey to black, thinly foliated, high to very high strength. Defects: - Occasional foliation partings <45° (1-2/m) - Drilling-induced breaks <20° (1/m)	SW								J @ 75-80° (1/m) J @ 10-15° (1/m)	Is(50) = 5.85MPa Is(50) = 0.35MPa Is(50) = 2.23MPa	x o o
11	1.23		100			Borehole terminated at 11.3m									Is(50) = 7.62MPa Is(50) = 2.23MPa	x o	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	

REMARKS ** Failed along pre-existing defect surface

LOGGED BY
LD/AD

Project: **TRAVEL TIME SIGNAGE (SOUTH COAST)**

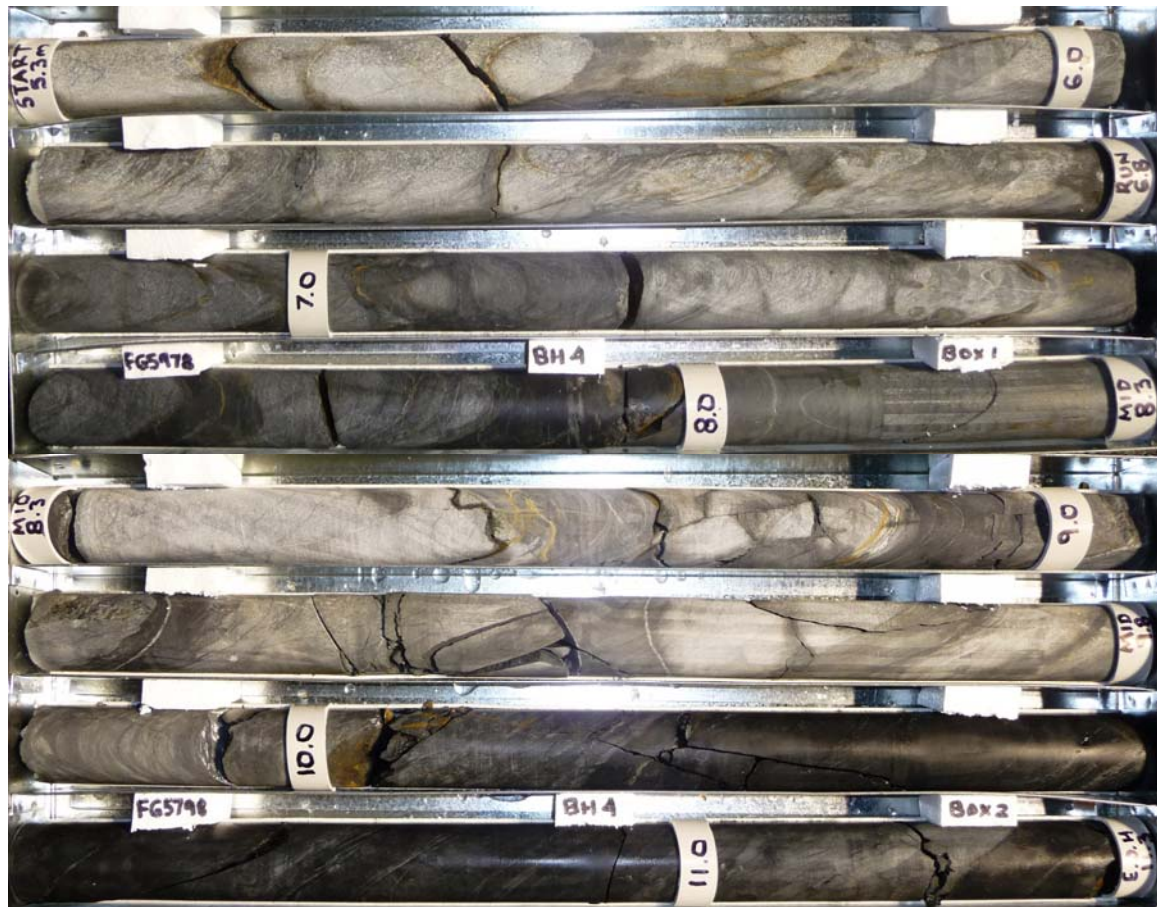
Borehole No: **BH4**

Start Depth: 5.30m

Finish Depth: 11.30m

Project No: FG5798

H No:



SCALE 1:5

F:GEO043/1