ENGINEERING BOREHOLE LOG

Queensland Government

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

BOREHOLE No **BH9**
SHEET 1 of 2
REFERENCE No **11239**

PROJECT TRAVEL TIME SIGNAGES FOUNDATION INVESTIGATION (SOUTH COAST REGION) - STAGE 3
LOCATION Nerang Exit 69 S/B COORDINATES 533932.5 E; 6907422.7 N
PROJECT No FG5798 SURFACE R.L. 13.59m PLUNGE DATE STARTED 31/10/11 GRID DATUM MGA94
JOB No HEIGHT DATUM AHD BEARING DATE COMPLETED 31/10/11 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 (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	13.59				**ROAD PAVEMENT** Asphalt, concrete and roadbase.							Based on Driller's logs only		
	12.69													
1				A	**Clayey Sandy GRAVEL (ENGINEERED FILL)** Brown to black, moist, medium dense. Subangular to angular high strength rock fragments sizing up to 40mm; fine grained sand.		(CH)					16,12,14 N=26	SPT	
2				B								14,15,8 N=23	SPT	
	10.84													
3				C	**Silty CLAY (ALLUVIAL)** Pale grey to mottled orange, moist, stiff to very stiff. Medium to high plasticity.							6,7,9 N=16	SPT	
4				D			(CL)					3,5,8 N=13	SPT	
	8.84													
5				E	Contains gravels up to 8 mm		XW					12,15,22 N=37	SPT	
	7.84				**ARGILLITE** **Fine grained, foliated, low grade metamorphic rock** **XW:** Generally exibits the engineering properties of dark grey to mottled brown, moist, hard silty clay with occasional gravel and rock fragments. Traces of fine sand in parts.									
6				F			HW					29,30/140mm N>50	SPT	
7				G	**HW:** Dark grey to black, moist, hard gravelly sandy clay.							29,30/50mm N>50	SPT	
	6.29		(46)		High plasticity; high strength rock fragments sizing up to 30mm.							CLy band CLy band		
8					**METAGREYWACKE** **Fine grained, low grade metamorphic rock** **MW:** Light brown to grey, foliated, medium to high strength.		MW					Is(50) = 1.89MPa; * * Is(50) = 5.74MPa; * * Is(50) = 4.05MPa Is(50) = 2.49MPa	x x x o	
			100 (0)		Minor argillite interbeds. Defects: - Joints @ 50-55° (4/m) - Joints @ 75° (2/m) Defect surfaces are planar, open with clay infill.									
9	4.49						SW					Is(50) = 3.55MPa	o	
			100 (65)											
10	3.59				**ARGILLITE SW:** (See over)									

REMARKS ** Failed along pre-existing defect surface

LOGGED BY
LD/ AD

QLD_DMR_LIB_01A.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG5798 TRAVEL TIME SIGNAGE STH COAST RGN.GPJ <<DrawingFile>> Datgel CPT Tool gINt Add-In 25/01/2012 17:21

ENGINEERING BOREHOLE LOG

Queensland Government

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BOREHOLE No **BH9**
SHEET 2 of 2
REFERENCE No **11239**

PROJECT TRAVEL TIME SIGNAGES FOUNDATION INVESTIGATION (SOUTH COAST REGION) - STAGE 3

LOCATION Nerang Exit 69 S/B COORDINATES 533932.5 E; 6907422.7 N

PROJECT No FG5798 SURFACE R.L. 13.59m PLUNGE DATE STARTED 31/10/11 GRID DATUM MGA94

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10	3.59				**ARGILLITE** **SW:** (Cont'd) Light grey, massive, high strength. Minor metagreywacke interbeds. Defects: - Joints @ 50-55° (2/m) - Joints @ 75° (1/m)		SW					Js 55°, Clnf Is(50) = 7.40MPa Is(50) = 2.92MPa Is(50) = 8.99MPa Is(50) = 6.26MPa Is(50) = 10.86MPa Is(50) = 4.00MPa	x o x o x o	
11			(44) 100											
	2.09		100		Defect surfaces are planar, open, slighly rough, occasionally with clay infill.									
12					Borehole terminated at 11.5m									
13														
14														
15														
16														
17														
18														
19														
20														

QLD_DMR_LIB_01A.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG5798 TRAVEL TIME SIGNAGE STH COAST RGN.GPJ <<DrawingFile>> Datgel CPT Tool gINt Add-In 25/01/2012 17:21

REMARKS ** Failed along pre-existing defect surface

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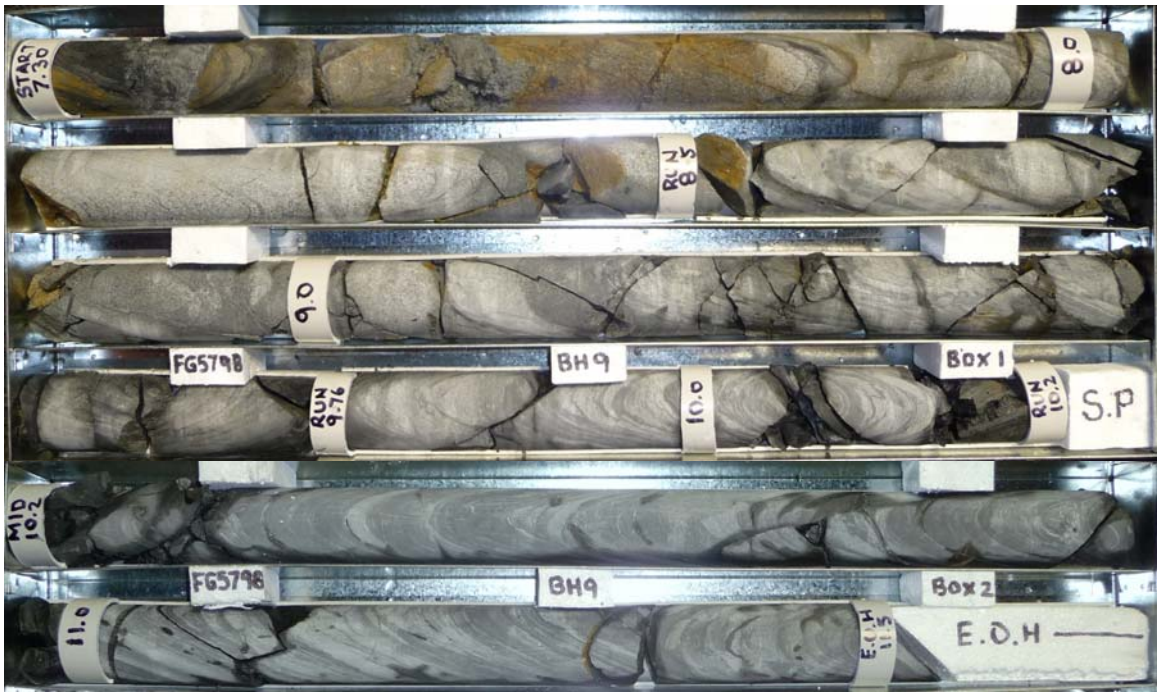
Project: **TRAVEL TIME SIGNAGE (SOUTH COAST)**

Borehole No: **BH9**

Start Depth: 7.30m
Finish Depth: 11.50m
Project No: FG5798
H No:



0 100 200 300 400 500 600mm

SCALE 1:5

F:GEOT043/1