

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 BH113
 SHEET 1 of 4
 REFERENCE No H10907

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra
 LOCATION Blunder Road exit COORDINATES 498299.1 E; 6950873.0 N
 PROJECT No FG5779 SURFACE R.L. 3.45m PLUNGE -90° DATE STARTED 23/11/10 GRID DATUM GDA94
 JOB No 140/U16/902 HEIGHT DATUM AHD BEARING DATE COMPLETED 23/11/10 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	CASING OTHER WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	INTACT STRENGTH						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
							USC	WEATHERING	EH	VH	H	M				
0	3.45					Gravelly CLAY (Non Engineered Fill) Asphalt and concrete fill in parts.									Non destructive digging (Based on Drillers logs only)	
1.95					A	Silty CLAY (Possible Estuarine?) Mottled grey, moist, mainly very soft. soft to firm Medium plasticity.										U100
					B										HW,HW,1 N=1	SPT
															inferred GWT	
					C										su>25kPa p_c=182kPa OCR=4.4	U100
-1.05					D	Silty CLAY (Alluvium) Mottled grey, moist, mainly firm. High Plasticity. Becoming sandy at base.									HW,2,4 N=6	SPT
					E		(CH)								2,3,2 N=5	SPT
					F										2,2,3 N=5	SPT
-3.55					G	Silty SAND (Alluvium) Grey-brown, moist, mainly loose. Sand fraction medium to coarse grained; slightly organic.									2,4,3 N=7	SPT
					H	Silty CLAY (Residual) Mottled yellow to grey, moist, stiff to very stiff. High plasticity; red iron staining in parts.									3,6,11 N=17	SPT
					J	(See over)									4,6,7 N=13	SPT

REMARKS _____

LOGGED BY
BW / SG



ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH113
SHEET 2 of 4
REFERENCE No H10907

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra
LOCATION Blunder Road exit COORDINATES 498299.1 E; 6950873.0 N
PROJECT No FG5779 SURFACE R.L. 3.45m PLUNGE -90° DATE STARTED 23/11/10 GRID DATUM GDA94
JOB No 140/U16/902 HEIGHT DATUM AHD BEARING DATE COMPLETED 23/11/10 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	CASING OTHER WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC WEATHERING	INTACT STRENGTH						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
								EH	VH	H	M	L	VL				
10	-6.55					Silty CLAY (Residual) Cont'd	(CH)										
	-7.15				K	SILTSTONE FINE GRAINED SEDIMENTARY ROCK MAINLY COMPOSED OF SILT SIZED PARTICLES XW: Generally exhibits engineering properties of yellow-brown, moist, hard clayey silt.									9,14,24 N=38	SPT	
					L	Medium plasticity.									12,17,19 N=36	SPT	
					M	Contains interbeds of fine grained sandstone below 12.5m depth.	XW								12,17,26 N=43	SPT	
					N										12,15,22 N=37	SPT	
	-11.05				P	CLAYSTONE FINE GRAINED SEDIMENTARY ROCK MAINLY COMPOSED OF CLAY SIZED PARTICLES XW: Generally exhibits engineering properties of mottled grey-brown, moist, hard silty clay.									9,12,18 N=30	SPT	
					Q	High plasticity.									8,14,20 N=34	SPT	
					R	Relict rock fabric structure visible in parts.	XW								10,17,23 N=40	SPT	
	-14.05				S	MUDSTONE FINE GRAINED SEDIMENTARY ROCK MAINLY COMPOSED OF CLAY SIZED PARTICLES XW: Generally exhibits engineering properties of dark grey to black, moist, hard silty clay.									9,14,18 N=32	SPT	
					T	Bcoming HW below 20m depth.	XW								12,18,30 N=48	SPT	
					U	(See over)									11,19,25 N=44	SPT	

REMARKS _____

LOGGED BY
BW / SG



ENGINEERING BOREHOLE LOG

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

BOREHOLE No	<u>BH113</u>
SHEET	<u>3</u> of <u>4</u>
REFERENCE No	<u>H10907</u>

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra
 LOCATION Blunder Road exit COORDINATES 498299.1 E; 6950873.0 N
 PROJECT No FG5779 SURFACE R.L. 3.45m PLUNGE -90° DATE STARTED 23/11/10 GRID DATUM GDA94
 JOB No 140/U16/902 HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 23/11/10 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	CASING OTHER WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC WEATHERING	INTACT STRENGTH					DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS	
								EH	VH	H	M	L					VL
20	-16.55					MUDSTONE XW: (Cont'd)											
					V		XW								15,30/45mm N>50	SPT	
21	-17.55		(100)			SW: Dark black, massive with minor laminations, fine grained, mainly very low to low strength. Displays cracking on drying. Contains interbeds of siltstone app. 500mm thick. Generally defects are rare. - Drilling induced lamination partings @ 5° (<1/m) Defects are mainly wide spaced, planar, smooth, closed and clean.								Siltstone interbeds	Is(50) = 0.08MPa Is(50) = 0.07MPa	x o	
22			100												Is(50) = 0.10MPa Is(50) = 0.08MPa	x o	
23			(100)												Is(50) = 0.09MPa Is(50) = 0.07MPa	x o	
24			100												Is(50) = 0.10MPa Is(50) = 0.09MPa	x o	
25			(0)												Is(50) = 0.08MPa Is(50) = 0.07MPa	x o	
26			3				SW								Possible XW mudstone.		
27			(90)												Is(50) = 0.05MPa Is(50) = 0.05MPa	x o	
28			100												Is(50) = 0.06MPa Is(50) = 0.07MPa	x o	
29			(80)												Is(50) = 0.06MPa Is(50) = 0.08MPa	x o	
30			100			Becoming HW claystone with depth.									Is(50) = 0.07MPa	o	
31	-25.25		(0)			SILTSTONE HW:											
32							HW								Possible XW siltstone.		
33			27			(See over)											

REMARKS _____

LOGGED BY
BW / SG



ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH113

SHEET 4 of 4

REFERENCE No H10907

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra

LOCATION Blunder Road exit COORDINATES 498299.1 E; 6950873.0 N

PROJECT No FG5779 SURFACE R.L. 3.45m PLUNGE -90° DATE STARTED 23/11/10 GRID DATUM GDA94

JOB No 140/U16/902 HEIGHT DATUM AHD BEARING DATE COMPLETED 23/11/10 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	CASING OTHER WASH BORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC WEATHERING EH VH H M L VL EL	INTACT STRENGTH			DEFECT SPACING (mm)			GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS		
										20	60	200				600	2000
30	-26.55				SILTSTONE (Cont'd) HW: Generally exhibits engineering properties of dark grey, moist, hard sandy clay to silty clay. Contains medium strength rock kernals between 28.25 - 28.80m. Occasional mudstone interbeds below 32.5m depth.												
31				W										14,25,30/150mm N>50	SPT		
32						HW											
33				X										14,20,28 N=48	SPT		
34	-30.84			Y										20,30/140mm N>50	SPT		
35					Borehole terminated at 34.29m												
36																	
37																	
38																	
39																	
40																	

REMARKS _____

LOGGED BY
BW / SG

Project: **Ipswich Motorway Upgrade - Rocklea to Darra**
Borehole No: **BH 113**
Start Depth: 21.0m
Finish Depth: 28.95m
Project No: FG5779
H No: H10907



SCALE 1:5

F:GEOT043/1