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# ENGINEERING BOREHOLE LOG

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

BOREHOLE No   BH118    
 SHEET   1   of   3    
 REFERENCE No   H10899  

PROJECT   Ipswich Motorway Upgrade - Rocklea to Darra    
 LOCATION   Near entrance to disused Fire Station (Bridge BR22)   COORDINATES   497239.5 E; 6950621.4 N    
 PROJECT No   FG5779   SURFACE R.L.   25.23m   PLUNGE   -90°   DATE STARTED   28/10/10   GRID DATUM   GDA94    
 JOB No   140/U16/902   HEIGHT DATUM   AHD   BEARING            DATE COMPLETED   29/10/10   DRILLER   Foundrill Pty Ltd  

DEPTH (m)	R.L. (m)	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	J	VL				
0	25.23					<b>Embankment FILL</b>									Non destructive digging up to 1.5m depth Based on drillers logs only		
1	23.73					<b>Silty CLAY (Engineered Fill)</b> Reddish brown, moist, soft. High plasticity.									Based on Drillers logs only		
2	22.73				A	<b>Silty CLAY (Residual)</b> Mottled grey-brown to dark red, very stiff to mainly hard. Medium to high plasticity; iron concretions nodules below 4.5m depth.	(CH)								7,11,15 N=26	SPT	
3					B										12,17,20 N=37	SPT	
4					C		(CI-CH)								18,18,19 N=37	SPT	
5					D										16,30/120mm N>50	SPT	
6					E										15,19,20 N=39	SPT	
7	18.03				F	<b>MUDSTONE FINE GRAINED SEDIMENTARY ROCK MAINLY COMPOSED OF CLAY SIZED PARTICLES</b> XW:Generally exhibits engineering properties of brownish grey, moist, mainly very stiff. Mainly high plasticity.	XW								6,7,11 N=18	SPT	
8					G	Contains interbeds of carbonaceous mudstone below 8.4m depth app. 600mm thick.									Carbonaceous mudstone. 6,7,12 N=19	SPT	
9	16.23				H	<b>CLAYSTONE FINE GRAINED SEDIMENTARY ROCK MAINLY COMPOSED OF SILT SIZED PARTICLES.</b> (See over)	HW								20,27,30/120mm N>50	SPT	
10																	

QLD\_DMR\_LIB\_01.GLB Log A:ENGINEERING BOREHOLE LOG FG5779 IPSWICH MWY ROCKLEA TO DARRA.GPJ <<DrawingFile>> Datigel CPT Tool (gINI Add-in 14/02/2011 17:35

REMARKS   Observation well installed, infiltration zone from 5.0m to 28.7m.  

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# ENGINEERING BOREHOLE LOG

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

BOREHOLE No   BH118    
SHEET   2   of   3    
REFERENCE No   H10899  

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra  
LOCATION Near entrance to disused Fire Station (Bridge BR22) COORDINATES 497239.5 E; 6950621.4 N  
PROJECT No FG5779 SURFACE R.L. 25.23m PLUNGE -90° DATE STARTED 28/10/10 GRID DATUM GDA94  
JOB No 140/U16/902 HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 29/10/10 DRILLER Foundrill Pty Ltd

DEPTH (m)	R.L. (m)	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	J	VL					EL
10	15.23					<b>CLAYSTONE (Cont'd)</b> HW: Generally exhibits engineering properties of pale grey, moist, hard.												
					I	Medium to high plasticity.											30/150mm N>50	SPT
					J	Minor traces of fine grained sand in parts; yellow iron staining below 12.5m depth.	HW										12,16,20 N=36	SPT
					K												11,16,28 N=44	SPT
	11.73				L	<b>SANDSTONE</b> <b>FINE TO MEDIUM GRAINED, MASSIVE, POORLY CEMENTED SEDIMENTARY ROCK.</b> HW: Generally exhibits engineering properties of grey to yellow, moist, very dense clayey sand.	HW										30/70mm N>50	SPT
	10.73				M	Sand fraction fine to medium grained.											16,21,30/105mm N>50	SPT
	9.73				N	<b>CLAYSTONE</b> HW: Pale grey, moist, hard clayey silt / silty clay. Low to medium plasticity.	HW										30/150mm N>50	SPT
					O	<b>SANDSTONE</b> HW: Generally exhibits engineering properties of pale grey, moist, very dense clayey sand.  Sand fraction fine grained.	HW										27,30/110mm N>50	SPT
	7.73				P	<b>MUDSTONE</b> HW: Generally exhibits engineering properties of dark grey to black, moist, hard silty clay.  Medium to high plasticity.  Gradually grading into low strength rock.											30/70mm N>50	SPT
					Q		HW										13,22,26 N=48	SPT
					R												14,23,28 N>50	SPT

REMARKS Observation well installed, infiltration zone from 5.0m to 28.7m.

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BOREHOLE No   BH118    
SHEET   3   of   3    
REFERENCE No   H10899  

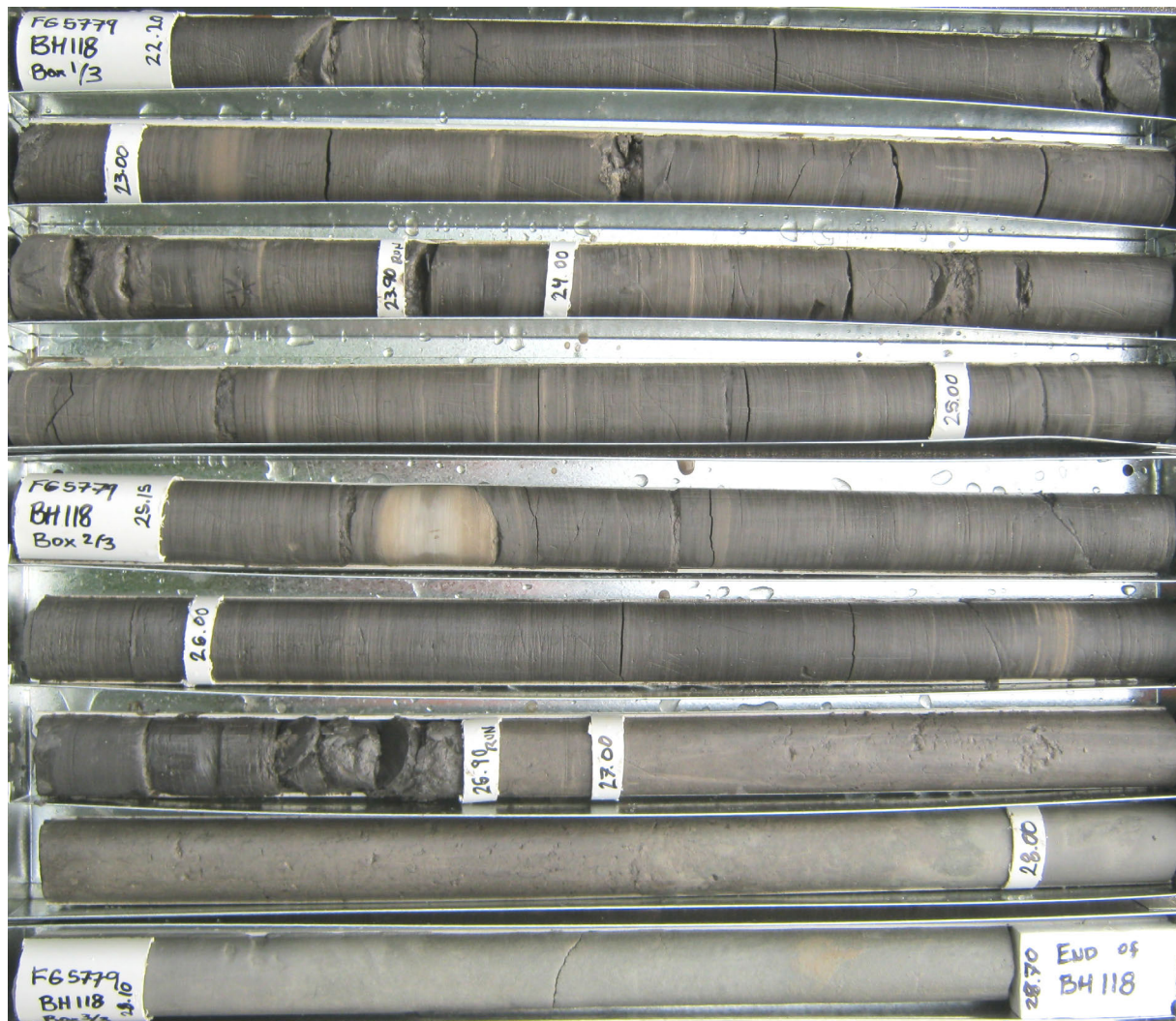
PROJECT Ipswich Motorway Upgrade - Rocklea to Darra  
LOCATION Near entrance to disused Fire Station (Bridge BR22) COORDINATES 497239.5 E; 6950621.4 N  
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JOB No 140/U16/902 HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 29/10/10 DRILLER Foundrill Pty Ltd

DEPTH (m)	R.L. (m)	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	J				
20	5.23					<b>MUDSTONE HW (Cont'd)</b>										
21					S										15,20,31 N>50	SPT
22					T										15,19,28 N=47	SPT
23	3.03		(94)			<b>SW:</b> Dark grey to black, thinly laminated, mainly very low to low strength.  Contains vein of fine grained sandstone along lamination.  Numerous drilling induced partings.  Defects: - Drilling induced lamination partings @ 5 - 10° (2/m) - Joints @ 25° and 35° (2/m)							Sandstone band Joint @ 20°, clay infill	Is(50) = 0.02MPa Is(50) = 0.22MPa	x o	
24			100										Clay zone Joint @ 35°, clay infill	DD = 1.66t/m <sup>3</sup> ; WD = 2.05t/m <sup>3</sup> ; MC = 23%; UCS=1744KPa Is(50) = 0.08MPa Is(50) = 0.10MPa	x o	
25			(96)			Defects are close to medium spaced, planar, mainly smooth, but often slickensided and polished, open and closed with clay infill or iron stained.	SW							Is(50) = 0.00MPa Is(50) = 0.13MPa	x o	
26			100											Is(50) = 0.05MPa Is(50) = 0.18MPa	x o	
27	-1.67		(100)			<b>SILTSTONE SW:</b> Light grey, massive, fine grained with clay matrix, low strength.  Generally defects are rare.	SW							Is(50) = 0.09MPa Is(50) = 0.13MPa	x o	
28	-2.87					<b>SANDSTONE SW:</b> Pale grey, fine to medium grained, mainly low strength.	SW							Is(50) = 0.09MPa Is(50) = 0.08MPa	x o	
29	-3.47		100			Defects same as above. Borehole terminated at 28.7m										
30																

REMARKS Observation well installed, infiltration zone from 5.0m to 28.7m.

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Project: **Ipswich Motorway Upgrade - Rocklea to Darra**  
Borehole No: **BH 118**  
Start Depth: 22.20m  
Finish Depth: 28.70m  
Project No: FG5779  
H No: H10889



SCALE 1:5

F:GEO043/1