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Queensland Government

GEOTECHNICAL BOREHOLE LOG

FINAL 26/06/2015

BOREHOLE No BH208

Sheet 1 of 3

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 H12153 REFERENCE No Ipswich Motorway Upgrade - Rocklea to Darra PROJECT COORDINATES 499040.2 E; 6951045.4 N Oxley Creek Bridge LOCATION FG6202 SURFACE RL 4.43m PLUNGE 90° DATE STARTED 29/04/2015 GRID DATUM MGA94 Z56 PROJECT No DRILLER North Coast 201/416/003 DATE COMPLETED 30/04/2015 HEIGHT DATUM AHD JOB No BEARING USCS WEATHERING ADDITIONAL DATA AND TEST RESULTS INTACT STRENGTH DEFECT SPACING LITHOLOGY SAMPLES TESTS SAMPLE DEPTH (RΙ MATERIAL DESCRIPTION (m) CORE REC % ᇁᆂᆂᆋᅴᅿᆿᆸᇛᇬᄓᄫᇂᇂᇕ Sandy CLAY (Fill) Brown grey, moist, soft to firm. Low to medium plasticity, minor (CI) fine angular gravel, some tree roots. 3.33 Silty CLAY (Fill) Dark grey dark brown, moist, 2, 1, 2 N=3 soft. firm SPT High plasticity, minor tree roots. (CH) 1.83 Silty CLAY (Residual) Brown yellow grey mottled, 5, 11, 14 moist, very stiff. N=25 SPT Low plasticity, minor fine angular gravel. (CL) -0.07 C SILTSTONE (Tod) 12/06/2015 14, 30/100mm SPT XW: Recovered as pale grey brown yellow mottled, moist to dry, hard Clayey Sandy Silt. Low plasticity. Thin bands of fine grained XW sandstone. Some angular fine to medium XW-HW rock D gragments. 30. 30/90mm SPT XW 30/120mm SPT Е 30/60mm F SPT Continued on next sheet **REMARKS:** Tod - Darra formation. **LOGGED BY REVIEWED BY** A standpipe is installed in this borehole. MS SF TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

Queensland Government

GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014

FINAL 26/06/2015

BH208

Sheet 2 of 3

BOREHOLE No

H12153 REFERENCE No Ipswich Motorway Upgrade - Rocklea to Darra PROJECT COORDINATES 499040.2 E; 6951045.4 N Oxley Creek Bridge LOCATION FG6202 SURFACE RL 4.43m PLUNGE 90° DATE STARTED 29/04/2015 GRID DATUM MGA94 Z56 PROJECT No 201/416/003 DATE COMPLETED 30/04/2015 DRILLER North Coast HEIGHT DATUM AHD JOB No BEARING ADDITIONAL DATA AND TEST RESULTS USCS WEATHERING INTACT STRENGTH DEFECT SPACING SAMPLES TESTS LITHOLOGY SAMPLE DEPTH (RΙ MATERIAL DESCRIPTION (m) CORE REC % SILTSTONE (Tod) XW: (Contd') 30/100mm G XW -6.97 SANDSTONE (Tod) XW: Recovered as pale grey, moist to dry, very dense Silty 30/90mm Sand. Fine grained sand. Thin bands of XW siltstone. 12.50m-13.50m: Band of Siltstone recovered as Clayey Silt. 13 XW 30/90mm 30/60mm 15 SPT Κ -11.07 SILTSTONE (Tod) XW: Recovered grey brown, moist, hard Clayey Sandy Silt. XW 16 16.00m: Becoming HW Siltstone Low plasticity. -12.07 Is(50)=1.10 MPa Is(50)=1.20 MPa (100) D (16.55m) SILTSTONE (Tod) A (16.60m) MW: Dark grey - grey, fine 16.81m: Sandstone band (30mm) LM grained, thinly to thickly laminated, mainly medium 100 strength. (100) Some fine grained MW UCS=9.55 MPa (17.50m) MW sandstone interbeds (<15mm). Is(50)=0.74 MPa D (17.80m) Defects: LP at 5° (2/m): PI, Ro, TI, ls(50)=0.99 MPa A (17.85m) 18 100 (100) -14.22 SILTSTONE (Tod) Is(50)=0.70 MPa Is(50)=0.84 MPa D (18.80m) SW: Dark grey - grey, fine A (18.85m) grained, thinly laminated to thickly bedded, medium SW strength. Defects: LP at 5° (2/m): PI, Ro, TI, Cn. Continued on next sheet **REMARKS:** Tod - Darra formation. **LOGGED BY REVIEWED BY** A standpipe is installed in this borehole. MS SF TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

Queensland Government

GEOTECHNICAL BOREHOLE LOG

FINAL 26/06/2015

BH208

Sheet 3 of 3

BOREHOLE No

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 H12153 REFERENCE No Ipswich Motorway Upgrade - Rocklea to Darra PROJECT COORDINATES 499040.2 E; 6951045.4 N Oxley Creek Bridge LOCATION DATE STARTED 29/04/2015 GRID DATUM MGA94 Z56 FG6202 SURFACE RL 4.43m PLUNGE 90° PROJECT No 201/416/003 BEARING ° DATE COMPLETED 30/04/2015 DRILLER North Coast HEIGHT DATUM AHD JOB No ADDITIONAL DATA AND TEST RESULTS USCS WEATHERING RQD INTACT STRENGTH DEFECT SPACING LITHOLOGY SAMPLES TESTS DEPTH (m) SAMPLE RΙ MATERIAL DESCRIPTION (m) CORE REC % ᇁᆂᆂᆂᅬᅿᅿᆿᆸᆔᇬᄓᇗᇂᇂᇕ SILTSTONE(Tod) Is(50)=0.93 MPa Is(50)=0.72 MPa SW: (Contd') A (20.28m)-D (20.33m) SW 100 (100) Is(50)=0.93 MPa Is(50)=0.95 MPa A (22.25m) A (22.25m) -18.02 100 Borehole completed at 22.45m 23 25 26 27 **REMARKS:** Tod - Darra formation. **LOGGED BY REVIEWED BY** A standpipe is installed in this borehole. MS SF TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI



STANDPIPE INSTALLATION LOG

BOREHOLE No BH208

Sheet 1 of 3

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 **BH208** PIEZOMETER No Ipswich Motorway Upgrade - Rocklea to Darra PROJECT COORDINATES 499040.2 E; 6951045.4 N Oxley Creek Bridge LOCATION DATE STARTED 29/04/2015 grid datum MGA94 Z56 FG6202 SURFACE RL 4.43m PLUNGE 90° PROJECT No DRILLER North Coast 201/416/003 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 30/04/2015 JOB No Standpipe Construction Details Ξ LITHOLOGY R.L. MATERIAL DESCRIPTION (m) Depth (m) /RL 50mm PVC Class No. 18 **Backfill Details** (AHD) Stick Up = 0.50m Sandy CLAY (Fill) Brown grey, moist, soft to firm. Low to medium plasticity, minor fine angular gravel, some tree roots. Grout (Bentonite / Cement Mix) 3.33 Silty CLAY(Fill) Dark grey dark brown, moist, soft. High plasticity, minor tree roots. 2.00m / 2.43 AHD Bentonite Seal 1.83 Silty CLAY(Residual) Brown yellow grey mottled, moist, very stiff. 3.00m / 1.43 AHD Top of Slotted Pipe Low plasticity, minor fine angular gravel. -0.07 12/06/2015 SILTSTONE (Tod) XW: Recovered as pale grey brown yellow mottled, moist to dry, hard Clayey Sandy Silt. Low plasticity. Thin bands of fine grained XW sandstone. Some angular fine to medium XW-HW rock gragments. Continued on next sheet **REMARKS:** Tod - Darra formation. **LOGGED BY REVIEWED BY** A standpipe is installed in this borehole. MS SF TMR STANDPIPE INSTALLATION LOG - CREATED WITH HOLEBASE SI



STANDPIPE INSTALLATION LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No BH208

Sheet 2 of 3

PIEZOMETER No BH208

Ipswich Motorway Upgrade - Rocklea to Darra PROJECT COORDINATES 499040.2 E; 6951045.4 N Oxley Creek Bridge LOCATION SURFACE RL 4.43m grid datum MGA94 Z56 FG6202 PLUNGE 90° DATE STARTED 29/04/2015 PROJECT No DRILLER North Coast 201/416/003 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 30/04/2015 JOB No Standpipe Construction Details Ξ LITHOLOGY R.L. MATERIAL DESCRIPTION (m) Depth (m) /RL 50mm PVC Class No. 18 **Backfill Details** (AHD) Stick Up = 0.50m SILTSTONE (Tod) XW: (Contd') -6.97 SANDSTONE (Tod) XW: Recovered as pale grey, moist to dry, very dense Silty Sand. Fine grained sand. 12 Thin bands of XW siltstone. 13 Filter: Washed / Graded Sand 15

-12.07 **

** SILTSTONE (Tod)

** MW: Dark grey - grey, fine grained, thinly to thickly

** laminated, mainly medium strength.

** Some fine grained MW sandstone interbeds

XW: Recovered grey brown, moist, hard Clayey

(<15mm).

SILTSTONE (Tod)

Sandy Silt. Low plasticity.

-11.07

16

17

18

19

Defects: LP at 5° (2/m): PI, Ro, TI, Cn.

SSUB SILTSTONE (Tod)

SW: Dark grey - grey, fine grained, thinly laminated

to thickly bedded, medium strength. Defects: LP at 5° (2/m): PI, Ro, TI, Cn.

Continued on next sheet

REMARKS: Tod - Darra formation.

A standpipe is installed in this borehole.

MS REVIEWED BY

TMR STANDPIPE INSTALLATION LOG - CREATED WITH HOLEBASE SI

FINAL 26/06/2015



STANDPIPE INSTALLATION LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No BH208

Sheet 3 of 3

PIEZOMETER No BH208

Ipswich Motorway Upgrade - Rocklea to Darra PROJECT Oxley Creek Bridge COORDINATES 499040.2 E; 6951045.4 N LOCATION PLUNGE 90° DATE STARTED 29/04/2015 FG6202 SURFACE RL 4.43m GRID DATUM MGA94 Z56 PROJECT No DRILLER North Coast 201/416/003 HEIGHT DATUM AHD BEARING $^{\circ}$ DATE COMPLETED 30/04/2015 JOB No **Standpipe Construction Details** DEPTH (m) LITHOLOGY R.L. MATERIAL DESCRIPTION (m) Depth (m) /RL 50mm PVC Class No. 18 **Backfill Details** (AHD) Stick Up = 0.50m SILTSTONE(Tod) SW: (Contd') 21.50m / -17.07 AHD Cuttings 22.45m / -18.02 AHD -18.02 Borehole completed at 22.45m 23 25 26 27 28 29 **REMARKS:** Tod - Darra formation. **LOGGED BY REVIEWED BY** A standpipe is installed in this borehole. MS SF TMR STANDPIPE INSTALLATION LOG - CREATED WITH HOLEBASE SI



Project Name Ipswich Motorway Upgrade – Rocklea to Darra				
Project No.	FG6202		Date Completed	30/04/2015
Borehole No.	BH208		Reference Number	H12153
Location	37163.9 E; 151914.8 N		Start Depth (m)	16.50
Submitted By	DP		Finish Depth (m)	22.45
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