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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH1B
SHEET 1 of 5
REFERENCE No 11597

PROJECT Mt Whitestone: Slope Instability Investigation - Preliminary Inclinator Boreholes
LOCATION Gatton-Clifton Rd, LHS table drain (Northern) Ch 15.173km COORDINATES 416243.3 E; 6937857.9 N
PROJECT No FG6128 SURFACE R.L. 214.88m PLUNGE _____ DATE STARTED 23/6/14 GRID DATUM MGA94
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 25/6/14 DRILLER Hinterland Drilling

DEPTH (m)	R.L. (m)	AUGER WASH BORING CORE DRILLING	RQD () %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH (AS1726)	DEFECT SPACING (AS1726)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	214.88					Drilling pad fill							
1	213.88				A	Clayey Sand (COLLUVIUM) Pale grey brown, moist, medium dense.	(SC)					6,6,6; LL = 30; LS = 10.4	SPT
2	212.88				B	Silty CLAY (COLLUVIUM) Pale grey mottled orange, moist, soft to very stiff with trace fine grained sand. Intermediate plasticity. Sandy in parts.						4,6,7	SPT
3					C								U50
4					D								U50
5					E							9,18,24	SPT
6					F							11,15,22	SPT
7					G		(CI)					8,12,19	SPT
8					H							8,13,18; LL = 42; PI = 26; LS = 12.8; MC = 15.8%	SPT
9					I							10,16,20	SPT
10	206.18				J	Becoming sandy CLAY with iron concretions up to 40mm in size.						29,27,30/130mm	SPT
						Sandy CLAY with Cobbles and Boulders (COLLUVIUM) Orange brown, moist. Generally comprises a hard Sandy Clay of intermediate plasticity which contains a mix of high strength cobbles and boulders up to 250mm size. Occasional boulders up to 1m size.	(CI)				 Sandstone boulder		

REMARKS *Load cell used does not comply with the test method requirements.

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BOREHOLE No BH1B
SHEET 2 of 5
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PROJECT Mt Whitestone: Slope Instability Investigation - Preliminary Inclinator Boreholes
LOCATION Gatton-Clifton Rd, LHS table drain (Northern) Ch 15.173km COORDINATES 416243.3 E; 6937857.9 N
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DEPTH (m)	R.L. (m)	AUGER WASH BORING CORE DRILLING	RQD () %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH (AS1728)	DEFECT SPACING (AS1728)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10	204.88											
11					Sandy CLAY with Cobbles and Boulders (COLLUVIUM) (Cont'd) As before.						Soft clay seam Soft clay layer with rock fragments	
12			95									
13											Sandstone cobble Sandy seam	
14											Sandstone cobble	
15			77			(CI)					Soft clay seam with rock fragments	
16			50									
17			100								Soft clay seam with rock fragments	
18			100								Soft clay seam with rock fragments Sandstone boulder up to 1m size.	
19			97									
20											UCS=354kPa	

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BOREHOLE No BH1B
SHEET 3 of 5
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DEPTH (m)	R.L. (m)	AUGER WASH BORING CORE DRILLING	RQD () %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH (AS1726)	DEFECT SPACING (AS1726)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
20	194.88												
21			96		Sandy CLAY with Cobbles and Boulders (COLLUVIUM) (Cont'd) As before.								
22			100									%Pass 2.360mm = 97 %Pass 0.075mm = 57 %Pass 0.002mm = 24	
23													
24			97									Soft clay seam Broken zone Fracture at 30° planar, polished, tight & clean Fracture at 60° planar, polished, tight & clean	
25						(Cl)						Fracture at 30° planar, polished, tight & clean Fracture at 50° planar, polished, tight & clean	
26			96									Soft clay seam	
27												Clay seam	
28			100									VWP installed Fracture at 25° planar, polished, tight & clean %Pass 2.360mm = 99 %Pass 0.075mm = 77 %Pass 0.002mm = 35 UCS=458kPa	
29			100										
30													

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30	184.88				Sandy CLAY with Cobbles and Boulders (COLLUVIUM) (Cont'd) As before.							
31	183.64		96 100			(CI)					Basalt fragments Broken zone	
32	182.79				Interbedded SILTSTONE and SANDSTONE XW: Recovered as orange grey, moist, hard, sandy CLAY.	XW					Is(50) = 0.08MPa; * Is(50) = 0.05MPa; *	x o
33			94		HW: Grey to light grey very low to extremely low strength with some iron staining. Laminations at 45° in parts. Deformed, sheared and fractured throughout. Defects: J: 35° (<1/m); Pl/Ro, TI, Fe St.	HW					32.0m top of standpipe piezometer Is(50) = 0.06MPa; * Is(50) = 0.07MPa; * Fractured coal seam (relict shear zone?) Relict shear zone Soft clay layer with very low strength rock fragments 33.8m tip of standpipe piezometer Relict shear zone? 34.0m base of standpipe piezometer	x o
34	180.85		100 (100)		SW: Grey to dark grey, fine grained, generally medium strength. Laminations at 0-5°.						Sandstone interbeds Is(50) = 0.39MPa; * Is(50) = 0.24MPa; *	x o
35			100 (97)		Defects: LP: 0-5° (1/m); Pl/Ro, TI.							
36												
37						SW						
38			100 (40) 100 (83)		38.12 - 38.52m Black mudstone / grey claystone						Is(50) = 0.51MPa; * Is(50) = 0.27MPa; * Fracture at 15° planar, polished, tight & clean Soft clay layer Fracture at 70° planar, polished, tight & clean	x o
39					Defects: Js 10-15° (<1/m); PL/Sm-SI, TI. Js 25-30° (2/m); PL/Sm-SI, TI. Js 40-45° (1/m); PL/Sm-SI, TI. Js 70° (<1/m); PL/Sm-SI, TI.						Is(50) = 0.23MPa; * Is(50) = 0.38MPa; *	x o
40												

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40	174.88				Interbedded SILTSTONE and SANDSTONE SW: (Cont'd) As before.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT AND MAIN ROADS
Geotechnical Section
35 Butterfield Street, Herston Qld 4006
Phone 07 3066 3336



Project Name	Mt Whitestone: Slope Instability Investigation, Supp. Inclinator Boreholes		
Project No.	FG6128	Date	23/6/14
Borehole No.	BH1B	TMR H No.	H11597
Location	Gatton-Clifton Rd	Start Depth (m)	8.70m
Detail	LHS table drain	Finish Depth (m)	40.75m
Chainage	Ch 15.308km	Prepared By	TAH
Remarks			



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