#### **COPYRIGHT NOTICE**

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the <u>Creative Commons Attribution 4.0 Licence</u> (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/



TMR LIBRARY FILE 2014.GIB Log A\_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6128 MT WHITESTONE COMBINED.GPJ <<DrawngFile>> Datgel CPT Tool gillt Add-In 11/11/2015 15:25

# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/7-2014

BOREHOLE No	<u>BH1A</u>
SHEET	1 of4
REFERENCE No	<u>11525</u>

PROJECT <u>Mt Whitestone: Sl</u>	<u>lope Instability Investigation - Preliminary Incline</u>	meter Boreholes	
LOCATION <u>Gatton-Clifton</u> Rd	, LHS table drain, approx Ch 15.17km	COORDINATES 416244.0 E; 6937858.8 N	<u> </u>
PROJECT No <u>FG6128</u>	SURFACE R.L214.83m_ PLUNGE	DATE STARTED 21/11/13 GRID DATUM MGA94	
JOB No	HEIGHT DATUM <u>AHD</u> BEARING	DATE COMPLETED 26/11/13 DRILLER Northcoast	
R.L. (m) RQD ( ) % (m) CORE BOKING CORE WASH BOKING CORE REC % SAPER CORE	MATERIAL DESCRIPTION	INTACT DEFECT STRENGTH SPACING OF ADDITIONAL DATA  STRENGTH SPACING OF ADDITIONAL DATA  AND  TEST RESULTS	SAMPLES
0 214.83 ₹3≥ŏ REC % %	Sandy CLAY (COLLUVIUM) Grey orange, moist, firm to stiff. Intermediate plasticity with minor organic inclusions and angular gravel sized to 10mm.	Based on drillers logs	7) H
A A		6,10,14; %Pass 0.075mm = 90 %Pass 0.002mm = 43	SPT -
B		Rock Roller used to advance through higher strength material.	SPT
10	Becoming orange brown silty CLAY, heavily iron stained with occasional iron concretions.	11,18,29	SPT
REMARKS *See point load test	t results for details of this test	LOGGED BY TAH	



TMR LIBRARY FILE 2014.GIB Log A\_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6128 MT WHITESTONE COMBINED.GPJ <<DrawngFile>> Datgel CPT Tool gillt Add-In 11/11/2015 15:25

# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/7-2014

BOREHOLE No \_\_\_BH1A \_\_\_

SHEET \_\_2\_\_ of \_\_4\_\_

REFERENCE No \_\_\_11525 \_\_\_

PRO	JECT				ope Instability Investigation - Preliminary Inclin	<u>ome</u>	ter_B	<u>orel</u>	eholes					
	ATION												ES 416244.0 E; 6937858.8	<u>N</u>
		o <u>FG6</u>	128		SURFACE R.L214.83m PLUNGE									
JOB	No				HEIGHT DATUM _AHD BEARING			D	DATE COMP	PLETED	<u>26/11</u>	<u>/13</u>	DRILLER Northcoast _	
	R.L.	وي	RQD ()%						INTACT STRENGTH	DEFECT		Δ	DDITIONAL DATA	
DEPTH (m)	(111)	SORING	1 / / / /		MATERIAL	β	RING	ľ	STRENGTH  (AS1726)  TRENGTH  (AS1726)	(AS1726)	- VW EW GRAPHIC LOG	,	AND	S
DEPTI		K 2 L	]	SAMPLE	DESCRIPTION	LITHOLOGY	TH ATH	_,	_	.c. >	V PHC			SAMPLES
10	204.83	N S A S	REC %	SAN		島	USC	古艺	ŢŦ≅ŢŸŪŬ	í>o≥≥5 Lllll	GR E		TEST RESULTS	SAN
-					Sandy CLAY (COLLUVIUM) (Cont'd)				: : : : : ‡					-
-									: : : : : ‡		:			]
-														-
- 11									<u> </u>					]
-									: : : : : ‡					=
-									:::: <u>‡</u>					]
-								:	: : : : : ‡					]
- 12								:	: : : : =					
				D					<u> </u>				14,16,18	SPT =
-														-
-								:			:			1
- 13									+					_
-								:	: : : : : ‡					]
-									· · · · · · +					-
-									: : : : <b>: :</b>					]
- 14									: : : : <del> </del>					_
-							(CI)		: : : : <b>: :</b>					]
-							(01)		: : : : <del>!</del>					-
-									: : : : : ‡					-
- 15									<u> </u>					-
-				Е					: : : : : ‡				16,27,29	SPT -
_									:::::					
-									= = = = = = = = = = = = = = = = = = = =					-
_ _ 16									:::::					-
-									: : : : : ‡					=
-									: : : : <del> </del>					=
-														=
17 								:	+		:			-
-														
-									: : : : : +					-
-									::::: <b></b>					]
18 				_	Becoming silty sandy CLAY with gravel sized				+				00.00.00	-
-				F	to 25mm.				: : : : : ‡				20,29,29	SPT -
-	196.13										<u>:</u>			-
			(43)		Sandy CLAY with Cobbles and Boulders (COLLUVIUM)	6		:						-
19  -  -					Pale orange and grey, moist, hard.	000	]	:						_
-					With high strength rock fragments sizing up to 200mm.	0	(CL)	:	+					-
F						000	1	:	:::::		:			-
20						60			+					
R	EMARK	s <u>*See</u>	point load	d test	results for details of this test			_					LOGGED BY	
													TAH	



TMR LIBRARY FILE 2014.GLB Log A\_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6128 MT WHITESTONE COMBINED.GPJ <<DrawingFile>> Datgel CPT Tool gilnt Add-in 11/11/2015 15:25

# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/7-2014

BOREHOLE No	<u>BH1A</u>
SHEET	3 of4
REFERENCE No	11525

PROJECT	Mt V	/hiteston	e: Sl	lope Instability Investigation - Preliminary Inclin	omet	er Bo	oreholes			
LOCATION	<u>Gatte</u>	on-Cliftor	n <u>R</u> d	, LHS table drain, approx Ch 15.17km				CC	OORDINATES <u>416244.0 E; 6937858.8</u>	N
PROJECT N	lo <u>FG6</u>	128		SURFACE R.L. <u>214.83m</u> PLUNGE _			DATE STARTED 2	1/11	/13 GRID DATUM MGA94	
JOB No				HEIGHT DATUM <u>AHD</u> BEARING _			DATE COMPLETED _2	6/11	/13 DRILLER Northcoast	
R.L. (m)	AUGER CASING WASH BORING	RQD ()%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT DEFECT STRENGTH SPACING (AS1726) (AS1726)	GRAPHIC LOG	ADDITIONAL DATA  AND  TEST RESULTS	SAMPLES
20 194.00	111	100		Sandy CLAY with Cobbles and Boulders	60	_  -	<del>                                     </del>			
-22 -22 -23 -24 -25 -26				Sandy CLAY with Cobbles and Boulders (COLLUVIUM) (Cont'd)		(CL)			☐— Sandstone boulder in colluvium ☐— Light grey slickensided clay seam	
27 27 28 		97 (65) 34 (90)			TO SPONO PONO				- Clay seam - Core loss	
		100			00		: : : : : <del> </del>		— Clay seam	-
30		(100)			000		<u> </u>			=
	S <u>*See</u>	point load	d test	results for details of this test					LOGGED BY TAH	



TMR LIBRARY FILE 2014.GIB Log A\_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6128 MT WHITESTONE COMBINED.GPJ <<DrawngFile>> Datgel CPT Tool gillt Add-In 11/11/2015 15:25

# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/7-2014

BOREHOLE No \_\_\_BH1A \_\_\_

SHEET \_\_4\_\_ of \_\_4\_\_

REFERENCE No \_\_\_11525 \_\_\_

PRO.	JECT				lope Instability Investigation - Preliminary Incline									
	ATION				, LHS table drain, approx Ch 15.17km								ORDINATES <u>416244.0 E; 6937858.8</u>	<u>N</u>
					SURFACE R.L214.83m PLUNGE									
JOB	No				HEIGHT DATUM <u>AHD</u> BEARING				DATE COMP	PLETE	ED _20	<u> 5/11/</u>	DRILLER Northcoast	
	R.L. (m)	9 <u>8</u> 8	RQD ()%					ص :	INTACT STRENGTH	DEFE	ECT CING	9	ADDITIONAL DATA	
DEPTH (m)		S BORING DRILLING		ш	MATERIAL	OGY	1	ERI	STRENGTH  (AS1726)	(AS17	726)	IC LOG	AND	S
DEP	184.83			SAMPLE	DESCRIPTION	LITHOLOGY	200	EATH	   	200		GRAPHIC I	TEST RESULTS	SAMPLES
30	184.83	111 ≰0≷0	REC %	/S	Sandy CLAY with Cobbles and Boulders		Š  š	≥ "				9		/S <sup>□</sup>
-					(COLLUVIUM) (Cont'd)	01	1		‡					-
-						000	(CL	L)	<u> </u>	-: : :				-
-			100			000			::::: <u>‡</u>			•	- Basalt fragments	-
-31 -	183.77		(93)		SILTSTONE	$\stackrel{\wedge}{\times}$	1	+	· · · · · · · ·	-: : :		• [	Thinly bedded @ 45°	-
-					Fine grained sedimentary rock composed	X >	XW	.,						]
-					silt sized particles XW: Generally exhibits the engineering	× ×	₹	v						_
- -32			86		properties of Pale grey mottled orange, moist, hard, silty clay.	××	_	4					- Clay seam - Core loss	-
- 32			(100)		Contains 290mm thick relict shear zone.	× >								]
-	182.25					× × × ×	XW	۷					Relict shear zone	-
	.02.20		100		HW: Grey to pale grey, fine grained, low	× × × × × ×								=
- -33			(76)		strength. thinly laminated in parts. Contains relict shear zone and coal seams.	× ×	}						— Crushed coal seam	-
-					Defects: BP: 0°-10° (2/m); PI-Un/Sm-Ro, CD-OP.	X X	HW	v					Relict shear zone	]
-						× × × × × ×							Nelict Stiear Zone	-
-						× > × >								=
-34	180.73		100			× >		_						-
-			(100)		<b>MW:</b> Grey to pale grey, fine grained, medium strength.	× × × ×							ls(50) = 0.66MPa ls(50) = 0.07MPa; *	0 - X -
-					Occasional medium grained Sandstone interbeds up to 250mm thick.	X X X X X X X X X X X X X X X X X X X					: :		Sandstone interbed	-
-					Defects: Js: 15° (2/m); PI-Un/Ro, CD-OP.	× × × × ×	MV	٧					Is(50) = 0.60MPa 	o - x -
-35 - -			100 (78)		Js: 70° (2/m); Pl-Un/Ro, CD-OP. PB: 0-10° (2/m); Pl-Un/Ro, CD-OP.	X >	}				: :		VWP installed	^ =
-			(1.5)		1 B. 0-10 (2/m), 1 1-01/1/0, 0B-01 .	× > × >							⊐– Clay seam	-
-	179.03		100			× >	SW	٧					Is(50) = 0.65MPa Sandstone interbeds(50) = 0.37MPa; *	0 <u>-</u> X
- -36			(0)		Borehole terminated at 35.8m				<u> </u>	-: : :			Sample not retrieved Inclinometer installed	=
-									<u> </u>					-
-									+	-: : :				-
-									<u> </u>					-
- 37 -										-				_
-									‡					-
-									<u> </u>					]
- - -38									<u> </u>	- : :				-
									<u> </u>					=
-									: : : : : <del> </del>	-: : :				-
-									<u> </u>					=
- -39									<u> </u>	-: : :				-
-									:::::::::::::::::::					-
F									#	-: : :				-
- 40									<u> </u>					-
_40  R	EMARK!	S *See	point load	d test	results for details of this test		_						LOGGED BY	
	**												TAH	

DEPARTMENT OF TRANSPORT & MAIN ROADS Geotechnical Branch 35 Butterfield Street, HERSTON Qld 4006 Phone 07 3066 3336



Project Name	Gatton-Clifton Rd: Investigation of Instab	pility at Mt Whitestone	
Project No	FG 6128	Date	21/11/13
Borehole No	BH 1A	TMR H No	11525
Location	LHS table drain (Northern),	Start Depth (m)	18.70
Detail	77	Finish Depth (m)	35.80
Chainage	Ch 15.04 - 15.4km	Submitted By	J. Lopez
Remarks		· · · · · · · · · · · · · · · · · · ·	
FG6128	O G'S	So. American St.	Box I
24.0	FG6128		RUN X ZALON
0 100	200 300 400 SCALE 1:5	500 600	700

DEPARTMENT OF TRANSPORT & MAIN ROADS Geotechnical Branch 35 Butterfield Street, HERSTON Qld 4006 Phone 07 3066 3336



Borehole No BH 1A TMR H No Location LHS table drain (Northern), Start Depth (m) Detail Finish Depth (m)	21/11/13 11525 23.10 35.80 J. Lopez
Borehole No BH 1A Location LHS table drain (Northern), Start Depth (m) Detail Finish Depth (m) Chainage Ch 15.04 - 15.4km Submitted By Remarks  FGG128  FGG128	11525 23.10 35.80
Location LHS table drain (Northern), Start Depth (m) Detail Finish Depth (m) Chainage Ch 15.04 - 15.4km Submitted By Remarks  FG6128  FG6128  RH CORE LOSS  CORE LOSS	23.10 35.80
Detail Chainage Ch 15.04 - 15.4km Remarks  Submitted By  FG6128  BH 1  BOX 3  CORE LOSS  Remarks  Finish Depth (m) Submitted By  FORE LOSS	35.80
Chainage Ch 15.04 - 15.4km Submitted By Remarks  Submitted By Remarks  Rema	J. Lopez
Remarks  SEX  PG SEX	***************************************
FG6128  BHI  BOX3  CORE LOSS  CORE LOSS  CORE LOSS	98
FG6128  BHI  BOX3  CORE LOSS  CORE LOSS  CORE LOSS	
FG6128  BHI  BOX3  CORE LOSS  CORE LOSS  CORE LOSS	
FG6128  BHI  BOX3  CORE LOSS  CORE LOSS  CORE LOSS	
FGG128  BHI  BOX 3  OFF  CORE LOSS  OFF  CORE LOSS	
FGG128  BHI  BOX 3  OFF  CORE LOSS  OFF  CORE LOSS	
FGG128  BHI  BOX 3  OFF  CORE LOSS  OFF  CORE LOSS	70
CORE LOSS 882 CORE LOSS	RES
CORE LOSS 882 CORE LOSS	1
CORE LOSS 882 CORE LOSS	LOSS
CORE LOSS 882 CORE LOSS	
- CORE LOSS - 88	Or Control
- CORE LOSS - 88	Z K
- CORE LOSS - 88	
- CORE LOSS - 88	
- CORE LOSS - 88	
To the state of th	
To the state of th	18.2
N. S.	
38	
FG6128 BH I BOX4	
100 P	MID 30.7m
e e	En
0 400 000 000 400 500	
0 100 200 300 400 500 600	700
	700
SCALE 1:5	700

DEPARTMENT OF TRANSPORT & MAIN ROADS Geotechnical Branch 35 Butterfield Street, HERSTON Qld 4006 Phone 07 3066 3336



Gatton-Clifton Rd: Investigation	n of Instability at Mt White	stone
FG 6128	Date	21/11/13
		11525
Ch 15.04 - 15.4km		J. Lopez
	,	'
THE REAL PROPERTY.		
No. No.	<b>的数件的外别的</b>	大学台灣學科
	A DESCRIPTION OF	
	- COREIO HI	
	# LOSS & R	
FG6128 BH	BC	ex S
THE PARTY OF THE P	70	A TOTAL STATE
	35.	
	MANAGER AND	
6		
		THE RESERVE TO THE PARTY OF THE
	A 34 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
A State of the Assessment	m ·	And the second s
THE A MINE		0
WINT I WINE !		35.0
the second of the second		HE FOH
		wim 2
200 300	400 500 60	00 700
200 300	400 500 60	00 700
	BH 1A LHS table drain (Northern), Ch 15.04 - 15.4km	BH 1A  LHS table drain (Northern),  Start Depth (m)  Finish Depth (m)  Ch 15.04 - 15.4km  Submitted By