Outeniqua Lab (Pty) Ltd.
Materials Testing Laboratory
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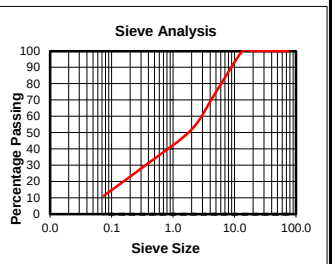
T0347

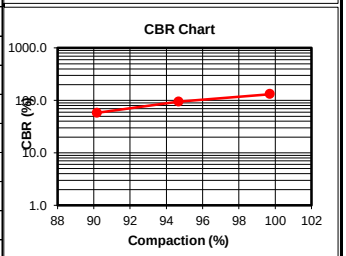
Customer :	Robberg Quarry	Project :	Yard
	Po Box 3021	Date Received :	04/02/13
	Plettenberg Bay	Date Reported :	22/02/13
	6600	Req. Number :	0200/13
Attention :	R Julian	No. of Pages :	1

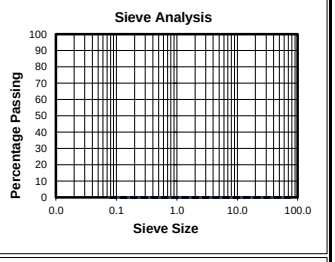
TEST REPORT
CALIFORNIA BEARING RATIO - (TMH 1 Method A1(a),A2,A3,A4,A5,A7,A8)

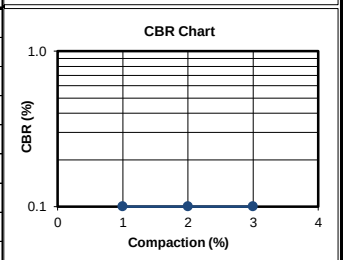
Material Indicators								
Sample Position (SV)		Stockpile	**Spec.**	Opinion			Opinion
Depth (mm)		N/A	**G7 -**				
Sample No		**50016**	**TRH 14**				
Materials Description	Source	Robberg Quarry					
	Colour	Light Brown					
	Soil Type	Crushed Quartzitic Sandstone					
	Classification	Proposed -15mm SSG (G7)					
Max. Stone size in hole (mm)							
Percentage Passing	75.0 mm	100					
	63.0 mm	100					
	53.0 mm	100					
	37.5 mm	100					
	26.5 mm	100					
	19.0 mm	100					
	13.2 mm	100					
	4.75 mm	74					
	2.00 mm	52					
	0.425 mm	32					
	0.075 mm	11.3					
Soil Mortar & Constants							
Grading Modulus		2.05	≥0.75	✓			
Coarse Sand	<2.0 >0.425	38.2					
Med.	<0.250 >0.150	40.1					
Silt	<0.075	21.8					
Liquid Limit (%)		NP					
Plasticity Index (%)		NP	≤12	✓			
Linear Shrinkage (%)		0.0					
CBR / Density Relationship							
MOD	Max Dry Density (kg/m^3)	2187					
	Opt Moisture Content (%)	7.0					
	Mould Moisture Con. (%)	7.3					
	@100% Mod AASHTO	99.7					
	Swell (%)	0.01	≤1.5	✓			
NRB	100% NRB	94.7					
	Swell (%)	0.02					
Proc	100% Proctor	90.2					
	Swell (%)	0.04					
CBR	@ 100% Mod AASHTO	134					
	@ 98% Mod AASHTO	119					
	@ 95% Mod AASHTO	96					
	@ 93% Mod AASHTO	80	≥15	✓			
	@ 90% Mod AASHTO	57					
Insitu Moisture Content (%)							
Soil Classification							
TRH 14		G7					
PRA System		A-1-b / A-2-4					
Unified System		GP-GM					

50016









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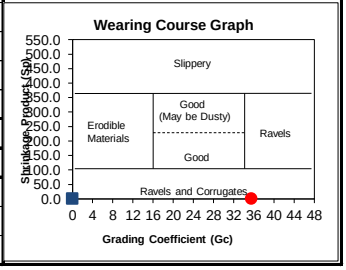

- **Specimens sampled by Outeniqua Lab according to sampling Plan TMH 5 Methods MB1 & MC1**
- **Specimens sampled by : M Sangwe**
- **The weather conditions are such that there is no detrimental effect on the sample taken.**

L Heathcote (Director)
For Outeniqua Lab (Pty) Ltd
Technical Signatory

1. **Opinions and interpretations expressed herein are outside the scope of SANAS accreditation.**
2. The opinion column is an interpretation of the direct comparison between the quoted specification and the single test sample results obtained. The compliant (✓), non compliant (×) and uncertain (∗) opinion indicators are based on an approximate 95% level of confidence with reference to SAMM GUIDANCE 1, Issue 2 : 20 June 2007 Section 2.
3. The uncertain (∗) indicates that the test result is either equal to or is above / below the specified limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliant (✓) or non compliant (×) based on a 95% level of confidence with reference to SAMM GUIDANCE 1, Issue 2 : 20 June 2007 Section 2.
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5. Measuring Equipment, traceable to National Standards is used where applicable. Results reported in this Test Report relate only to the items tested and are an indication only of the sample provided and/or taken.
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