Outeniqua Lab (Pty) Ltd.
Materials Testing Laboratory
Registration No. 95/07742/07
6 Mirrorball Street, George : PO Box 3186, George Industria, 6536
Tel: 044 8743274 : Fax: 044 8745779 : e-mail: llewelyn@outeniqualab.co.za

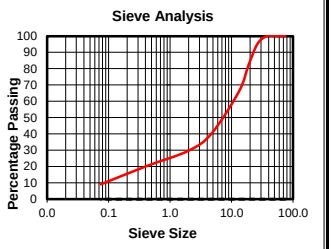
T0347

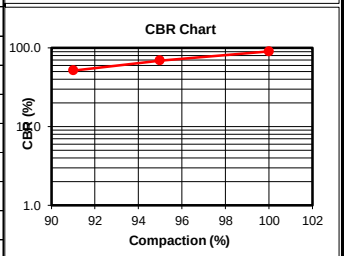
Customer :	Robberg Quarry	Project :	Yard
	Po Box 3021	Date Received :	04/02/13
	Plettenberg Bay	Date Reported :	22/02/13
	6600	Req. Number :	0200/13
Attention :	R Julian	No. of Pages :	1

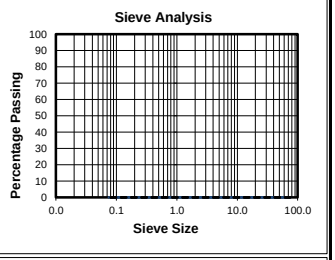
TEST REPORT
CALIFORNIA BEARING RATIO - (TMH 1 Method A1(a),A2,A3,A4,A5,A7,A8)

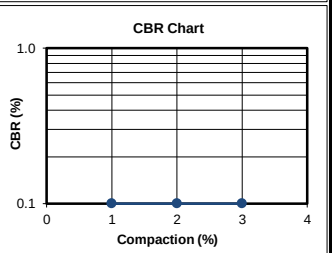
Material Indicators								
Sample Position (SV)		Stockpile	**Spec.**					Opinion
Depth (mm)		N/A	**SABS**					
Sample No		**50015**	**1200ME**					
Materials Description	Source	Robberg Quarry						
	Colour	Reddish						
	Soil Type	Crushed Quartzitic Sandstone						
	Classification	Proposed Wearing Course G5						
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	95						
	19.0 mm	82						
	13.2 mm	66						
	4.75 mm	40						
	2.00 mm	30						
	0.425 mm	20						
	0.075 mm	9.1						
Soil Mortar & Constants								
Grading Modulus		2.41						
Coarse Sand	<2.0 >0.425	31.3						
Med.	<0.250 >0.150	38.0						
Silt	<0.075	30.6						
Liquid Limit (%)		18						
Plasticity Index (%)		8						
Linear Shrinkage (%)		4.0						
CBR / Density Relationship								
MOD	Max Dry Density (kg/m^3)	2263						
	Opt Moisture Content (%)	5.3						
	Mould Moisture Con. (%)	5.6						
	@100% Mod AASHTO	100.0						
	Swell (%)	0.07						
NRB	100% NRB	95.0						
	Swell (%)	0.08						
Proc	100% Proctor	91.0						
	Swell (%)	0.10						
CBR	@ 100% Mod AASHTO	90						
	@ 98% Mod AASHTO	82						
	@ 95% Mod AASHTO	69	≥45	✓				
	@ 93% Mod AASHTO	60						
	@ 90% Mod AASHTO	48						
Insitu Moisture Content (%)								
Soil Classification								
Oversize Index (%)		0.0	≤5	✓				
Shrinkage Product (-37.5mm)		80.0	100–365	×				
Grading Coefficient (-37.5mm)		26.0	16–34	✓				

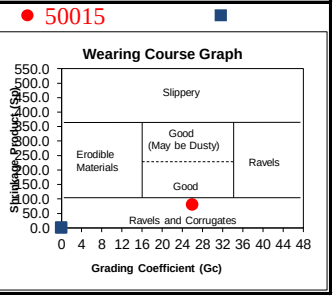
50015











- **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.
4. This report (with attachments) is the correct record of all measurements made, and may not be reproduced other than with full written approval from the Technical Director of Outeniqua Lab (Pty) Ltd.
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.
6. While every care is taken to ensure the correctness of all tests and reports, neither Outeniqua Lab nor its employees shall be liable in any way whatever for any error made in the execution or reporting of tests or any erroneous conclusions drawn therefrom or for any consequence thereof.