

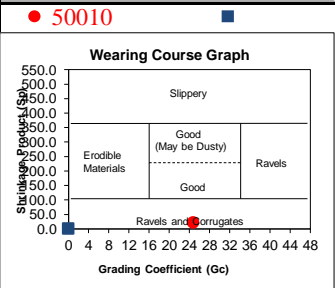
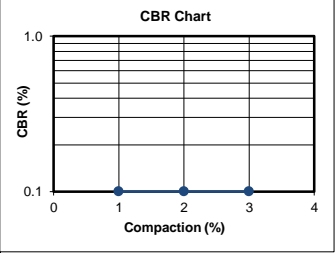
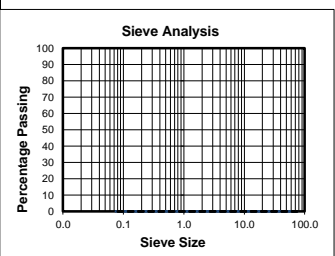
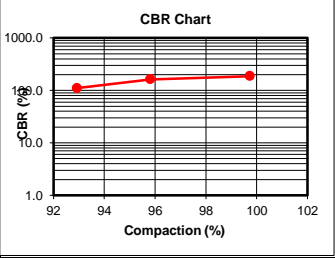
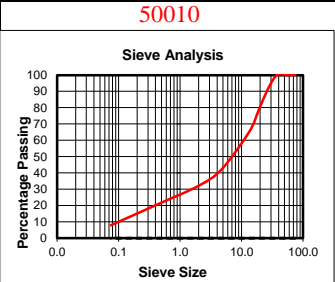


Customer :	Robberg Quarry	Project :	Yard
	Po Box 3021	Date Received :	04/02/13
	Plettenberg Bay	Date Reported :	22/02/13
Attention :	6600	Req. Number :	0200/13
	R Julian	No. of Pages :	1

### TEST REPORT

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

Material Indicators		Opinion		
Sample Position (SV)	Stockpile	Spec.		
Depth (mm)	N/A	G5 -		
Sample No	<b>50010</b>	TRH 14		
Materials Description	Source			
	Colour			
	Soil Type			
	Classification			
Max. Stone size in hole (mm)	Robberg Quarry			
	Light Brown			
	Crushed Quartzitic Sandstone			
	Proposed Subbase G5			
Percentage Passing	75.0 mm	100		
	63.0 mm	100		
	53.0 mm	100		
	37.5 mm	100		
	26.5 mm	91		
	19.0 mm	78		
	13.2 mm	65		
	4.75 mm	42		
	2.00 mm	32		
	0.425 mm	21		
0.075 mm	7.9			
<b>Soil Mortar &amp; Constants</b>				
Grading Modulus	2.39	≥1.5	✓	
Coarse Sand <2.0 >0.425	35.8			
Med. <0.250 >0.150	39.6			
Silt <0.075	24.6			
Liquid Limit (%)	13	≤30	✓	
Plasticity Index (%)	3	≤10	✓	
Linear Shrinkage (%)	1.0	≤5	✓	
<b>CBR / Density Relationship</b>				
MOD	Max Dry Density (kg/m <sup>3</sup> )	2232		
	Opt Moisture Content (%)	4.8		
	Mould Moisture Con. (%)	5.1		
	@ 100% Mod AASHTO	99.7		
	Swell (%)	0.00	≤0.5	✓
NRB	100% NRB	95.8		
	Swell (%)	0.05		
Proc	100% Proctor	92.9		
	Swell (%)	0.11		
CBR	@ 100% Mod AASHTO	195		
	@ 98% Mod AASHTO	173		
	@ 95% Mod AASHTO	140	≥45	✓
	@ 93% Mod AASHTO	119		
	@ 90% Mod AASHTO	86		
Insitu Moisture Content (%)				
<b>Soil Classification</b>				
TRH 14		G5		
PRA System		A-1-a / A-1-b / A-2-4		
Unified System		GP-GM		



- 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

- Opinions and interpretations expressed herein are outside the scope of SANAS accreditation.
- 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.
- 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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