



5 Voorbaai Crescent, Bayview, Hartenbos
Tel.: (044) 695 0831

P.O. Box 35, Hartenbos, 6520
e-mail: jaco@testpro.co.za



Client:	Zec 4 (Pty) Ltd
	P.O Box 154
	Hartenbos
	6520
Attention:	Dreyer van Zyl, 0825716279

SOIL ANALYSIS TEST REPORT

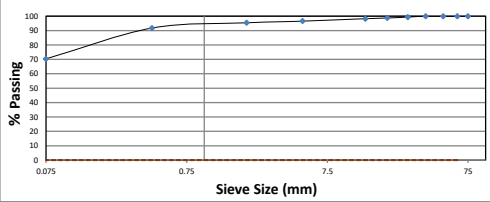
Job No:	TP16923	
Order No:	2022_04_01	
Sample No:	1647	
Project Information:	Outeniquasbosch Phase 11 & 13, Hartenbos	
Number of pages:	2	
Date Received:	27/04/2022	
Date Sampled:	27/04/2022	
Sampled by:	TESTPRO Laboratory	
Sample plan included:	No	
Environmental Conditions:	Hot /	Sunny /
Delivered by:	TESTPRO Laboratory	
Sampling method:	TMH5:MA2	
Source of sample	Test Pit 1	
Condition of sample:	Good	
Conformity statement requested by client:	Yes	
Subcontractor (if any)	No	
Material description:	Orange Brown Silty Sandy Clay	
Tests Requested/Method:	SANS	
	Grading	SANS 3001-GR1
	Atterberg Limits	SANS 3001-GR10 & -GR20
	M.D.D	SANS 3001-GR30 & -GR20
	C.B.R.	SANS 3001-GR40 & -GR20
Date Completed:	10/05/2022	

Notes/Deviations

Remarks:

- All tests marked (#) are not included in our schedule of Accreditation.
- The results reported relate only to the sample tested. Statement of conformity are not made or implied in the report, unless required by the client. Review the results, expanded uncertainty, and specifications to ensure they meet your requirements.
The final decision rule will be the customers risk and not the Laboratory.
The Laboratory does not report a statement of conformity unless it is inherent in the requested specification or standard.
- This document is the correct record of all measurements made, and may not be reproduced other than with full written approval from the Technical Manager of TESTPRO Laboratory.
- Measuring equipment is traceable to national standards (Where applicable).
- Samples will be retained, for a one month period, before disposal.
- Tests are reported with an approximate 95% level of confidence.
- Uncertainty of measurement will only be reported if requested by the client.
- Opinions & Interpretations are not included in our schedule of Accreditation.

Technical Signatory
Jaco van Rensburg

 TESTPRO LABORATORY Materials Testing Laboratory				 sanas Testing Laboratory 10552																										
5 Voorbaai Crescent, Bayview, Hartenbos Tel.: (044) 695 0831				P.O. Box 35, Hartenbos, 6520 e-mail: jaco@testpro.co.za																										
Client:	Zec 4 (Pty) Ltd P.O. Box 154 Hartenbos 6520			Date Reportec	27/05/2022	Job nr:	TP16923																							
Attention:	Dreyer van Zyl, 0825716279			Specification:	COLTO	Order no:	2022_04_01																							
				Project:	Outeniquasbosch Phase 11 & 13, Hartenbos																									
SOIL ANALYSIS TEST REPORT																														
SAMPLE INFORMATION				MATERIAL PROPERTIES																										
Material Description	Orange Brown Silty Sandy Clay			GRADING	G9	Uncertainty	Opinion ✓ or X																							
Source	Test Pit 1	Position/ Layer	Layer 2	Sieve Size	% Passing	Specifications																								
Date Received	27/04/2022	Date Tested	10/05/2022	75	100																									
Sampling Method	TMH5:MA2	Sample Number	1647	63	100																									
MOD, BD & AD Analysis				50	100																									
MDD	1881	kg/m³	OMC	12.4																										
BD	-		WA	-																										
AD	-																													
Method	Scalped	% Scalped	0.2																											
Uncertainty				37.5	100																									
MDD		kg/m³	OMC																											
				28	99																									
				20	99																									
				14	98																									
				5	97																									
				2	95																									
				0.425	92																									
				0.075	70.4																									
				SIEVE ANALYSIS																										
																														
				Test	Results	Specifications	Opinion																							
				Grading Modulus	0.4	0.75<2.7	X																							
				Coarse Sand Ratio	4	N/A																								
				Strength (kN)																										
				10% FACT (Dry)		Mudrock Only																								
				10% FACT (Wet)																										
				Wet/Dry Rel. (%)																										
				CBR																										
				Moulding MC%	12.4																									
				CBR @ 98%	1																									
				CBR @ 97%	1																									
				CBR @ 95%	1																									
				CBR @ 93%	1	Min 7	X																							
				CBR @ 90%	1																									
				Swell																										
				Swell @ 100%	5.3	Swell<1.5%	X																							
				Durability (%)																										
				ACV (Dry)																										
				ACV (Wet)																										
				Flakiness Index																										
				20mm<28mm																										
				14mm<20mm																										
				Atterberg Limits																										
				-0.425mm																										
				Liquid Limit	44																									
				Plastic Limit	21																									
				Linear Shrinkage	10.5																									
				LSx%Pass0.425	963																									
				Plasticity index	23	Max 12	X																							
				-0.075mm																										
				Liquid Limit	-																									
				Plastic Limit	-																									
				Linear Shrinkage	-																									
				Plasticity index	-																									
				Classification:	<G9																									
				Technical Signatory Jaco van Rensburg																										
Fractured Faces <table border="1"> <thead> <tr> <th>Size</th> <th>Fractured Faces %</th> <th>Size</th> <th>Fractured Faces %</th> <th rowspan="4">#N/A</th> </tr> </thead> <tbody> <tr> <td>37.5</td> <td></td> <td>14</td> <td></td> </tr> <tr> <td>28</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>20</td> <td></td> <td>All>5</td> <td></td> </tr> </tbody> </table>				Size	Fractured Faces %	Size	Fractured Faces %	#N/A	37.5		14		28		5		20		All>5		<table border="1"> <tbody> <tr> <td>✓</td> <td>In Spec</td> </tr> <tr> <td>X</td> <td>Out of Spec</td> </tr> <tr> <td>□</td> <td>Even with a 95% certainty, reading could be out of spec.</td> </tr> </tbody> </table>				✓	In Spec	X	Out of Spec	□	Even with a 95% certainty, reading could be out of spec.
Size	Fractured Faces %	Size	Fractured Faces %	#N/A																										
37.5		14																												
28		5																												
20		All>5																												
✓	In Spec																													
X	Out of Spec																													
□	Even with a 95% certainty, reading could be out of spec.																													