



TESTPRO LABORATORY
Materials Testing Laboratory

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

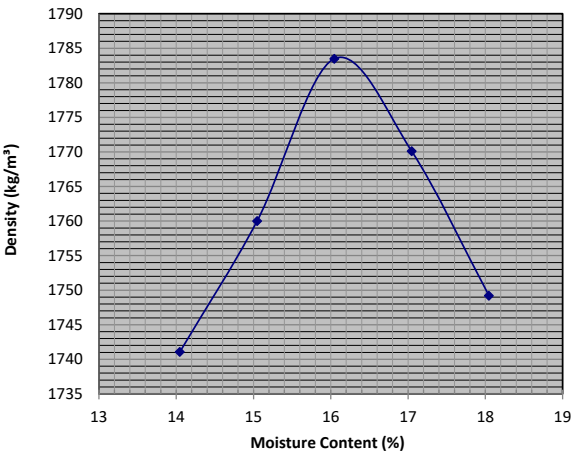
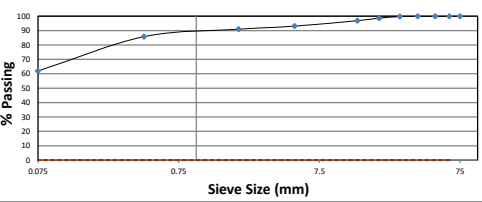
Job No:	TP16923	
Order No:	2022_04_01	
Sample No:	1648	
Project Information:	Outeniquasbosch Phase 11 & 13, Hartenbos	
Number of pages:	2	
Date Received:	27/04/2022	
Date Sampled:	27/04/2022	
Sampled by:	TESTPRO Laboratory	
Sample plan included:	No	
Environmental Conditions:	Windy /	Sunny /
Delivered by:	TESTPRO Laboratory	
Sampling method:	TMH5:MA2	
Source of sample	Test Pit 5	
Condition of sample:	Good	
Conformity statement requested by client:	Yes	
Subcontractor (if any)	No	
Material description:	Yellowish White sided 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 10952											
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	Yellowish White sided Sandy Clay			GRADING		G9									
Source	Test Pit 5	Position/ Layer	Layer 2	Sieve Size	% Passing	Specifications	Uncertainty								
Date Received	27/04/2022	Date Tested	10/05/2022	75	100										
Sampling Method	TMH5:MA2	Sample Number	1648	63	100										
MOD, BD & AD Analysis				50	100										
MDD	1784	kg/m³	OMC	37.5	100										
BD	-		WA	28	100										
AD	-			20	99										
Method	Scalped	% Scalped	0.3	14	97										
Uncertainty				5	93										
MDD		kg/m³	OMC	2	91										
				0.425	86										
				0.075	62.0										
				SIEVE ANALYSIS											
															
				<table border="1"> <thead> <tr> <th>Test</th> <th>Results</th> <th>Specifications</th> <th>Opinion</th> </tr> </thead> <tbody> <tr> <td>Grading Modulus</td> <td>0.6</td> <td>0.75<2.7</td> <td>✗</td> </tr> <tr> <td>Coarse Sand Ratio</td> <td>6</td> <td>N/A</td> <td></td> </tr> </tbody> </table>				Test	Results	Specifications	Opinion	Grading Modulus	0.6	0.75<2.7	✗
Test	Results	Specifications	Opinion												
Grading Modulus	0.6	0.75<2.7	✗												
Coarse Sand Ratio	6	N/A													
				Strength (kN)											
10% FACT (Dry)				Mudrock Only											
10% FACT (Wet)															
Wet/Dry Rel. (%)															
CBR															
Moulding MC%				16.0											
CBR @ 98%				3											
CBR @ 97%				2											
CBR @ 95%				2											
CBR @ 93%				1											
CBR @ 90%				1											
Swell															
Swell @ 100%				1.6											
				Swell<1.5%											
Durability (%)															
ACV (Dry)															
ACV (Wet)															
Flakiness Index															
20mm<28mm															
14mm<20mm															
Atterberg Limits															
				-0.425mm											
Liquid Limit				39											
Plastic Limit				16											
Linear Shrinkage				10.0											
LSx%Pass0.425				858											
Plasticity index				22											
				Max 12											
-0.075mm															
Liquid Limit				-											
Plastic Limit				-											
Linear Shrinkage				-											
Plasticity index				-											
Classification:				<G9											
Fractured Faces															
Size	Fractured Faces %	Size	Fractured Faces %	#N/A											
37.5		14													
28		5													
20		All>5													
				In Spec											
				Out of Spec											
				Even with a 95% certainty, reading could be out of spec.											
				Technical Signatory Jaco van Rensburg											