112 Zendeling Street, Rustenburg, 0229
Tel: +27(0)73 110 4807
Email: rustenburg@civilab.co.za
Website: www.civilab.co.za

Civilab
Civil Engineering Testing Laboratories

Client	:	MO MOLEMI TRADING ENTERPRISE (COO)			
Address	:	441 TAU SECTION	**Client No.**	:	MOM001
	:	LUKA	**Client Reference**	:	
	:	RUSTENBURG	**Order No.**	:	
Attention	:	Letlhogonolo	**Date Received**	:	16/05/2025
Telephone	:	063 079 8236	**Date Tested**	:	16/05/2025 - 27/05/2025
E-mail	:	mo.molemitradingenterprise@gmail.com	**Date Reported**	:	27/05/2025
Project	:	N4			
Project No.	:	25-R-377	**Report Status**	:	Final
			Page	:	1 of 3

Herewith please find the test report(s) pertaining to the above project. All tests were conducted in accordance with prescribed test method(s). Information herein consists of the following:

Test(s) conducted / Item(s) measured	Qty.	Test Method(s)	Authorized By**	Page(s)
California Bearing Ratio	1.000	SANS 3001:GR40	I Itumeleng	2
Sieve Analysis to 0,075 mm	1.000	SANS 3001:GR1	I Itumeleng	2
Atterberg Limits	1.000	SANS 3001:GR10	I Itumeleng	2
Moisture Density Relationship: MDD	1.000	SANS 3001:GR30	I Itumeleng	3

Civilab Rustenburg branch is currently not accredited by the South African National Accreditation System (SANAS).

Any information contained in this test report pertain only to the areas and/or samples tested. Documents may only be reproduced or published in their full context.

While every care is taken to ensure that all tests are carried out in accordance with recognised standards, neither Civilab (Proprietary) Limited nor its employess shall be liable in any way whatsoever for any error made in the execution or reporting of tests or any erroneous conclusions drawn therefrom or for any consequences thereof.

All interpretations, Interpolations, Opinions and/or Classifications contained in this report falls outside our scope of accreditation.

The following parameters, where applicable, were excluded from the classification procedure: Chemical modifications, Additional fines, Fractured Faces, Soluble Salts, pH, Conductivity, Coarse Sand Ratio, Durability (COLTO: G4-G9).

The following parameters, where applicable, were assumed: Rock types were assumed to be of an Arenaceous nature with Siliceous cementing material.

Unless otherwise requested or stated, all samples will be discarded after a period of 3 months.

This report is completely confidential between the parties (Civilab and Civilab`s client) and shall not be disclosed to anybody else, unless agreed upon in writing or made publicly available by the client or required to make available by law. As part of the SANAS accreditation arrangement and Internal audit policy, Civilab will be assessed and audited on an ongoing basis to ensure continuous compliance to ISO/IEC 17025 and SANAS policies and procedures. All service providers (including SANAS) have signed a Non-disclosure Agreement/ Confidentiality Agreement as part of our contractual agreement in order to have access to these results if needed.

Deviations in Test Methods:

**All results are authorized electronically by approved managers and/or technical signatories.

Technical Signatory: _____

I Itumeleng

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Project	:	N4	Date Reported	:	27/05/2025
Project No.	:	25-R-377	Page No.	:	2 of 3

CALIFORNIA BEARING RATIO (CBR) & ROAD INDICATOR REPORT

Laboratory No.		S-25-8198
Field Number		
Client Reference		Luka S/Pile 1 Dump Rock
Depth (m)		
Position		
Coordinates	X	
	Y	
Description		Gray Gravel
Additional information		
Calcrete/Crushed		
Stabilizing Agent		

Sieve Analysis (Wet preparation)

Percentage Passing	100 mm	56
	75 mm	53
	63 mm	50
	53 mm	46
	37.5 mm	41
	28 mm	33
	20 mm	24
	14 mm	21
	5 mm	15
	2 mm	13
	1 mm	11
	0.425 mm	9
	0.250 mm	7
	0.150 mm	5
	0.075 mm	3
Grading Modulus		2.75

Soil Mortar Analysis

Coarse Sand	32
Coarse Fine Sand	17
Medium Fine Sand	14
Fine Fine Sand	13
Silt and Clay	24

Atterberg Limits

Liquid Limit (%)	0
Plasticity Index (%)	NP
Linear Shrinkage (%)	0.0

Laboratory No.		S-25-8198

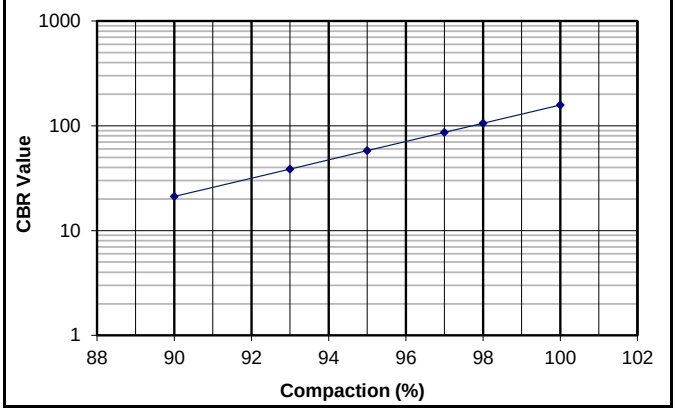
Maximum Dry Density & Optimum Moisture Content

MDD	kg/m^3	2563
OMC	%	5.3

California Bearing Ratio

Compaction Data				
Moisture	%	5.67		
Dry Density	kg/m^3	2557	2378	2268
Compaction	%	100.0	93.0	88.7

Penetration Data				
CBR at	2.54 mm	108	85	21
	5.08 mm	172	110	29
	7.62 mm	224	122	34
Swell	%	0.0	0.0	0.0
Final Moisture (%)		5.9	7.585	7.792

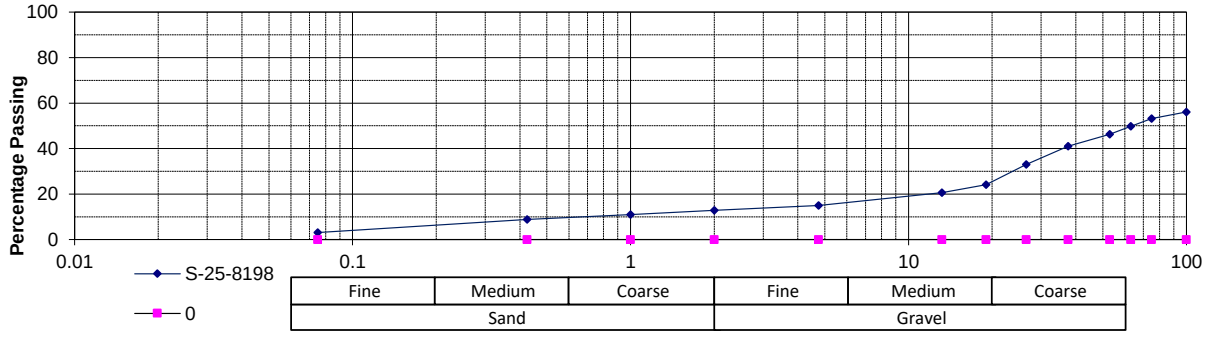


Interpolated CBR Data

CBR	@ 100%	Mod. AASHTO	158
	@ 98%		106
	@ 97%		86
	@ 95%		58
	@ 93%		39
	@ 90%		21
	@		95

Classifications

HRB (AASHTO)	A-1-a(0)
COLTO	
TRH14	G5



Technical Signatory: _____

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Project	: N4	Date Reported:	27/05/2025
Project No:	25-R-377	Page No. :	3 of 3

MOISTURE DENSITY RELATIONSHIP

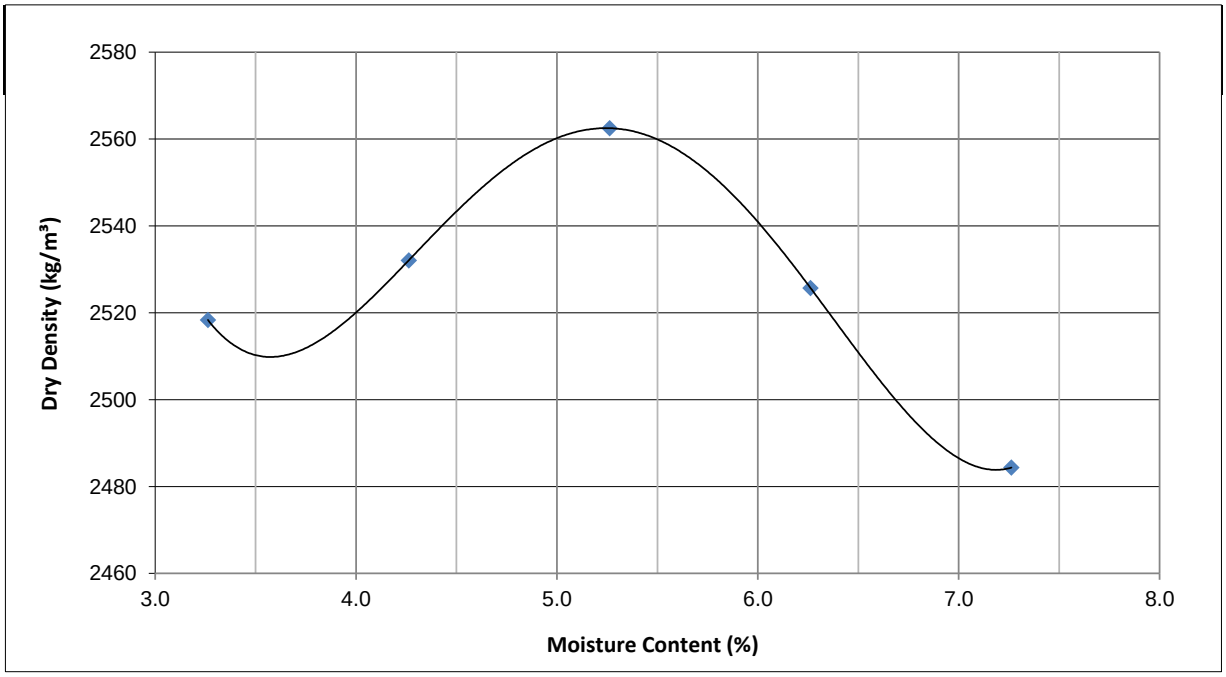
Laboratory Number		S-25-8198
Field Number		
Client Reference		Luka S/Pile 1 Dump Rock
Depth (m)		
Position		
Coordinates	X	
	Y	
Description		Gray Gravel
Additional Information		
% of Sample Scalped		
Stabilizing Agent		

Maximum Dry Density & Optimum Moisture Content - SANS 3001 GR30

Compactive Effort:	Modified AASHTO

Dry Density	kg/m³	2518	2532	2562	2484	2526	
Moisture Content	%	3.3	4.3	5.3	7.3	6.3	

Max. Dry Density	kg/m³	2563
Optimum Moisture	%	5.3



Technical Signatory: _____

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