



Certificate of Analysis

Nviro Business Hub unit 6, Ou Wapad road, Ifafi, Hartbeespoort, 0260 | Tel: 012 252 7588 | www.nviroteklabs.co.za

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To/Aan:	JG LANDBOUDIENSTE (PTY) LTD	Representative/Verteenwoordiger:	MARISKA/MADELEIN
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Lab Nommer	Sample Reference	pH KCl	P Bray	EXCH ACID-Eksteen *	K AmAc *	Na AmAc *	Ca AmAc *	Mg AmAc *	EXCH ACID KCl	Ca% AmAc *	Mg% AmAc *	K% AmAc *	Na% AmAc *	ACID SAT. AmAc *	Ca:Mg AmAc *	(Ca+Mg)/K AmAc *	Mg:K AmAc *	S-VALUE AmAc *	Na:K AmAc *	T-VALUE AmAc *	Dens. *
Lab Number	Monsterverwysing	-	mg/kg	cmol(+)/kg	mg/kg	mg/kg	mg/kg	mg/kg	cmol(+)/kg	%	%	%	%	%				cmol(+)/kg	cmol(+)/kg	cmol(+)/kg	g/ml
G40-24799	Land 1 1 0-30	5.39	51	0.25	168	95	547	74	0.00	61.79	13.62	9.73	9.30	5.56	4.54	7.75	1.40	4.18	0.96	4.42	1.18
G40-24800	Land 1 1 30-60	4.74	30	0.44	79	170	597	121	0.00	55.67	18.50	3.75	13.79	8.29	3.01	19.78	4.93	4.92	3.68	5.37	1.18
G40-24801	Land 1 2 0-30	5.80	103	0.04	204	23	640	53	0.00	74.49	10.15	12.17	2.34	0.85	7.34	6.95	0.83	4.26	0.19	4.30	1.27
G40-24802	Land 1 2 30-60	6.44	32	0.02	202	52	696	77	0.00	71.34	12.94	10.59	4.67	0.46	5.51	7.96	1.22	4.85	0.44	4.88	1.29
G40-24803	Land 2 1 0-30	6.34	136	0.02	97	41	1126	135	0.00	78.39	15.35	3.45	2.50	0.31	5.11	27.19	4.45	7.16	0.73	7.18	1.14
G40-24804	Land 2 1 30-60	6.55	129	0.01	32	40	1390	151	0.00	82.23	14.62	0.98	2.05	0.11	5.62	98.83	14.92	8.44	2.10	8.45	1.00
G40-24805	Land 2 2 0-30	5.72	49	0.11	64	45	633	143	0.00	65.79	24.44	3.38	4.06	2.33	2.69	26.67	7.23	4.70	1.20	4.81	1.17
G40-24806	Land 2 2 30-60	5.23	39	0.30	40	82	528	116	0.00	60.61	21.84	2.34	8.23	6.98	2.77	35.21	9.33	4.05	3.52	4.35	1.18

Lab Nommer	Sample Reference	S AmAc *
Lab Number	Monsterverwysing	mg/kg
G40-24799	Land 1 1 0-30	32.67
G40-24800	Land 1 1 30-60	120.16
G40-24801	Land 1 2 0-30	11.95
G40-24802	Land 1 2 30-60	31.23
G40-24803	Land 2 1 0-30	14.35
G40-24804	Land 2 1 30-60	10.59
G40-24805	Land 2 2 0-30	16.67
G40-24806	Land 2 2 30-60	14.85

NOTAS / NOTES:

Resultate goedgekeur deur / Results approved by:

Pieter Lourens
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 Technical Signatory



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BELANGRIK / IMPORTANT

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Test	Method	Test	Method
pH(KCl)*	WIN 031	Na%(AmAc)	WIN 072
P(Bray II)*	WIN 080	ACID SATURATION(AmAc)	WIN 072
EXCH ACID-Eksteen	WIN 060	Ca:Mg(AmAc)	WIN 072
K(AmAc)	WIN 072	(Ca+Mg)/K (AmAc)	WIN 072
Na(AmAc)	WIN 072	Mg:K(AmAc)	WIN 072
Ca(AmAc)	WIN 072	S-VALUE(AmAc)	WIN 072
Mg(AmAc)	WIN 072	Na:K	WIN 072
EXCH ACID KCl	WIN 031	T-VALUE(AmAc)*	Calculation
Ca%(AmAc)	WIN 072	Dens. - Density*	WIN 076
Mg%(AmAc)	WIN 072	S (AmAc)	WIN 072
K%(AmAc)	WIN 072		

End of Report

Vredelus – Soil Survey and Suitability for Table Grape Production

To whom it may concern,

Soil samples were collected on 17 February 2026 to determine the suitability of the soils for table grape production. Laboratory analyses were conducted on four composite samples (0–30 cm depth).

Summary of Key Soil Properties

The soils show generally favourable chemical characteristics for table grape cultivation:

- **Soil pH (KCl):** Ranges from **5.39 to 6.34**
→ Slightly acidic to near optimal range for grapevines
- **Acid saturation:** Very low (**0.31 – 5.56%**)
→ Indicates minimal aluminium toxicity risk
- **Phosphorus (Bray II):** **49 – 136 mg/kg**
→ Adequate to high levels across all samples
- **Calcium (Ca):** Dominant cation (**61.79 – 78.39%**)
→ Supports good soil structure and root development
- **Magnesium (Mg):** Moderate to high (**10.15 – 24.44%**)
- **Potassium (K):** Adequate but variable (**3.38 – 12.17%**)
- **Sodium (Na):** Low (**2.34 – 9.3%**)
→ No sodicity concerns; favourable for long-term vine health

Interpretation

The soils are **chemically well-balanced** with no major limitations that would restrict the establishment or long-term production of table grapes.

- The **low acid saturation** confirms that liming requirements will be minimal, although slight adjustments may be beneficial in lower pH zones.
- **Phosphorus levels** are sufficient to support early root development and establishment.
- **Calcium dominance** is highly favourable for grapevine performance and soil physical condition.
- **Sodium levels are low**, reducing the risk of soil structure degradation and ensuring good permeability over time.

Some variability in **potassium and magnesium ratios** exists between samples and should be managed through a balanced fertilisation programme to optimise vine nutrition.

Recommendations

To maximise production potential, the following practices are recommended:

- **Soil preparation:**
 - Deep ripping to alleviate compaction
 - Installation of effective drainage where required
 - Ridging in heavier or poorly drained areas
- **Soil amendments:**
 - Apply lime selectively where pH < 5.5
 - Adjust potassium levels based on block-specific requirements
 - Maintain balanced Ca:Mg:K ratios

Conclusion

Based on the analytical results and interpretation, the soils at Vredelus are **suitable for table grape production** and can be classified as **highly productive** when appropriate soil preparation and nutrient management practices are applied.

Kind regards,

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herewith certifies that
Michael Du Toit Prins
Registration Number: 130291
is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)
Agricultural Science (Professional Natural Scientist)

Effective **3 March 2021**

Expires **31 March 2026**



A handwritten signature in black ink, appearing to read 'S. Neph'.

Chairperson

A handwritten signature in black ink, appearing to read 'N. Maseko'.

Chief Executive Officer

