

CERTIFICATE OF ANALYSES

Report Nr.: WT006377.DOC

Tobie Esterhuyzen
Croydon Vineyard Estate
R102
Somerset West
7130

Date received: 24-04-2017

Sampled by client

Water Analyses Report

Irrigation evaluation

Origin	Lab. Nr.	pH @ 25°C	EC @ 25°C mS/m	Na mg/l	K mg/l	Ca mg/l	Mg mg/l	Fe mg/l	Cl mg/l	CO ₃ ²⁻ mg/l	HCO ₃ ⁻ mg/l	SO ₄ mg/l	B mg/l	Mn mg/l	Date Sampled	*OP (kPa)	*Adj. SAR	*Langelier index	*Class
B1	6377	7.7	508.7	920.8	10.8	83.2	65.2	0.1	1360.0		384.0	256	0.23	0.13	23/04/2017	183.1	21.0	0.8	C4-S4
B2	6378	7.0	442.9	707.4	6.5	93.1	92.9	0.0	1060.0		432.0	319	0.22	0.26	23/04/2017	159.4	14.1	0.3	C4-S4
Norm		≥5.5-≤9.0	≤270.0	≤70.0				≤1.5	≤100.0		≤150.0		≤1.00	≤10.00				≥-0.5-≤0.5	

Origin	Lab. Nr.	Temperature at reception (°C)	Date Analysed
B1	6377	24.6	03/05/2017
B2	6378	24.9	03/05/2017
Norm			

* = Not SANAS Accredited

See [analyses interpretation](#) for assistance with interpreting the report and relevance of each analyses.

The classification of the water has the following meaning:

C4: Very high salinity water - Not suitable for irrigation under normal conditions.

S4: Very high sodium water - Generally unsuitable for irrigation except at C1 and perhaps C2, where gypsum can be applied.

Comments:

With sodium concentrations greater than 200 mg/l severe problems with sodium toxicity is expected. The water is not suitable for irrigation.

With chloride concentrations greater than 200 mg/l severe problems with Cl toxicity is expected. The water is not suitable for irrigation.

A positive value for the Langelier index indicate a tendency for calcium carbonate to precipitate, whereas a negative value indicate that the water will dissolve calcium carbonate. The latter water is regarded as aggressive and corrosive. If there is a tendency for calcium to precipitate it will result in a higher SAR value than the value shown in the table above and the sodium hazard with use of this water will therefore be greater.

Statement: The reported results may be applied only to samples received. Any recommendations included with this report are based on the assumption that the samples were representative of the source from which they were taken.

Notes:

To ensure sample integrity, samples are stored only for seven days after release of the report. Thereafter it is disposed of and a fresh sample will be required if additional analyses are requested.

Results marked with "**Not SANAS Accredited**" in this report are not included in the SANAS Schedule of Accreditation for this laboratory. These results relate to the items tested.

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CO₃²⁻ analysis only applicable in case of pH > 7.5.

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

Refer to [website](#) for uncertainty of measurement and referenced methods.

Sample condition: Samples received in good condition.



Dr. Pieter Raath
General Manager



Sandisiwe Mbula
Technical Signatory(Water chemistry)

04-05-2017
Date reported

—————**END OF REPORT**—————