Established 1964

Doc.No. 7.8 # 1 Rev.4

THE WATER & WASTE WATER SPECIALISTS No. 1, Vine Park

Consulting Analytical & Industrial Chemists Specialists in Water & Waste Water Treatment Telephone (021)448 6340/1 After Hours (083-3263887) e-Mail Address:

info@alabbott.co.za



Vine Road 7925 P.O. Box 483 WOODSTOCK, CAPE 7915

T0276 Certificate of Analysis

WITZENBERG MUNICIPALITY: BID 08/2/12/30&32

Witzenberg Municipality Reticulation Waters

29: Water Treatment Works. Final ex Wolseley

DATE SAMPLED: 2022/09/07

DATE RECEIVED: 2022/09/08 OUR REF.: 2022/09/07/28370

DATE ANALYSIS 2022/09/08 REPORT NO.: 5463 **COMMENCED:**

	Sample Number	28370		
Mthd ALA No.	Analyses	Results	SANS 241-1:2015	% Uncertainty of Measurement
19	pH (at 25 °C)	8.28	≥5 - ≤ 9.7 Operational	1.5
9	Conductivity (mS/m) (at 25 °C)	<5.0	≤170 Aesthetic	4.5
27	Turbidity (NTU)	0.32	≤1 Operational : ≤5 Aesthetic	11
97	Colour (mg/l as Pt)	<4	≤15 Aesthetic	22
99	Nitrite Nitrogen (mg/l as N)	<0.20	≤0.9 Acute Health	4
7	Total Dissolved Solids (mg/l)	20	≤1200 Aesthetic	-
95	Ammonia Nitrogen (mg/l as N)	<0.10	≤1.5 Aesthetic	5.2
96	Chloride (mg/l as Cl)	<10.0	≤300 Aesthetic	10
98	Fluoride (mg/l as F)	<0.50	≤1.5 Chronic Health	4.4
100	Nitrate & Nitrite Nitrogen (mg/l as N)	<0.20	≤12 Acute Health	10.2
92	Manganese (µg/l as Mn)	<20	≤100 Aesthetic ≤400 Chronic Health	4.2
92	Aluminium (µg/l as Al)	50	≤300 Operational	3.8
92	Copper (µg/l as Cu)	<20	≤2000 Chronic Health	3.7
66	Free Chlorine (mg/l)	0.48	≤5 Chronic Health	-
66	Total Chlorine (mg/l)	0.52	N/A	-
84	E.coli (count per 100 ml)	<1	Not Detected	4.9
85	Total Coliform Bacteria (count per 100 ml)	<1	≤10 Operational	4.2
88	Heterotrophic Plate Count (count per ml)	<1	≤1000 Operational	5.1
105	Total Organic Carbon (mg/l as C)	0.44	≤10 Chronic Health	0.07
N/A	Combined Trihalomethanes (µg/l)	<0.40	≤1.0	-
92	Iron (µg/I as Fe)	<20	≤300 Aesthetic ≤2000 Chronic Health	5.1

Sampler: M.Van Rhyn (ALA)

This report relates only to the samples tested and is issued subject to the company's standard terms and conditions of business.

Doc.No. 7.8 # 1 Rev.4

THE WATER & WASTE WATER SPECIALISTS Consulting Analytical & Industrial Chemists Specialists in Water & Waste Water Treatment Telephone (021)448 6340/1 After Hours (083-3263887) e-Mail Address:



No. 1, Vine Park Vine Road 7925 P.O. Box 483 WOODSTOCK, CAPE 7915

To 276 Certificate of Analysis

WITZENBERG MUNICIPALITY: BID 08/2/12/30&32

Witzenberg Municipality Reticulation Waters

29: Water Treatment Works. Final ex Wolseley

DATE SAMPLED: 2022/09/07

info@alabbott.co.za

DATE RECEIVED: OUR REF.: 2022/09/07/28370 2022/09/08

DATE ANALYSIS 2022/09/08 REPORT NO .: 5463 **COMMENCED:**

	Sample Number	28370		
Mthd ALA No.	Analyses	Results	SANS 241-1:2015	% Uncertainty of Measurement
N/A	Trihalomethane (Bromodichloromethane) (μg/l)	<10.0	≤60 Chronic Health	-
N/A	Trihalomethane (Bromoform) (µg/l)	<10.0	≤100 Chronic Health	-
N/A	Trihalomethane (Chloroform) (µg/l)	<10.0	≤300 Chronic Health	-
N/A	Trihalomethane (Dibromochloromethane) (µg/l)	<10.0	≤100 Chronic Health	-
N/A	Combined Nitrate plus Nitrite (mg/l as N)	0.22	≤1.0	-
Calc	Nitrate Nitrogen (mg/l as N)	<0.20	≤11 Acute Health	3.4
76	Odour	<1	N/A	-
105	Dissolved Organic Carbon (mg/l as C)	0.36	N/A	-
92	Calcium (mg/l as Ca)	<1.0	N/A	6.5

Notes:

- . Test marked with an asterisk (*) on attached Appendix 1 (Doc. 7.8#3) are SANAS Accredited and are included in the SANAS Schedule of Accreditation for this laboratory.
- Schedule of Accreditation excludes sampling. Where applicable pH and Free & Total Chlorine Residual results are supplied by the sampling officer and 2. will be indicated on the Certificate of Analysis. This is marked as "Field".
- Sampling plans are as requested by the customer. Sampling is done according to A.L. Abbott and Associates (Pty) Ltd sampling procedures which are 3 available on request.
- Uncertainty of Measurement and Method Description will be provided upon request.
- Results are reported at the 95% Confidence Interval with a Coverage Factor K = 2.
- The laboratory does not normally issue any statement of conformity, unless by prior arrangement. 6. Decision Rule: Results reflecting on the Certificate of Analysis are actual results as obtained at the time of testing and do not include any uncertainty consideration.
- 7. The quality and integrity of samples submitted has a direct correlation on the results reported. Results reflected on this report therefore relate only to the sample as received.
- In the absence of customer specified limits, SANS 241-1:2015 or General Limits will appear, as applicable. 8.
- This report may not be reproduced, except in full, without the prior written approval of the laboratory. 9
- 10. Opinions and interpretations are not included in the Certificate of Analysis.

THE WATER & WASTE WATER SPECIALISTS

Doc.No. 7.8 # 1 Rev.4

Consulting Analytical & Industrial Chemists Specialists in Water & Waste Water Treatment Telephone (021)448 6340/1 After Hours (083-3263887) e-Mail Address: info@alabbott.co.za



No. 1, Vine Park Vine Road 7925 P.O. Box 483 WOODSTOCK, CAPE 7915

To 276 Certificate of Analysis

WITZENBERG MUNICIPALITY: BID 08/2/12/30&32

Witzenberg Municipality Reticulation Waters

29: Water Treatment Works. Final ex Wolseley

DATE SAMPLED: 2022/09/07

DATE RECEIVED: 2022/09/08 OUR REF.: 2022/09/07/28370

DATE ANALYSIS 2022/09/08 REPORT NO .: 5463 **COMMENCED:**

> J.L. DA SILVA (Cert.Sci.Nat.) **TECHNICAL MANAGER** 19 September 2022

TO: WITZENBERG MUNICPALITY P O Box 44 **CERES** 6835

Att: S. FARMER

Sampler: M.Van Rhyn (ALA)