



CK. 89/14418/23  
**REGEN WATERS**  
 LABORATORY • LABORATORIUM

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**MICROBIOLOGICAL ANALYSIS  
 TEST REPORT**

Sample From:

**Nkangala District Municipality  
 Municipal Health Services  
 Emakhazeni Town Council**

**Address: Posbus 437  
 Walter Sisulu  
 Middelburg  
 1050**

**Date Received: 23-Aug-18  
 Date Analyzed: 23-Aug-18  
 Date Reported: 25-Aug-18  
 Quantity Analyzed: 22**

Ref No: **H 963 - 984 / 18 B**

LAB REF ID	LAB NO	SAMPLE NAME	STERILIZED BOTTLE		STANDARD LIMITS					
					≤ 10		Nil	Nil	≤ 1000	
					TOTAL COLIFORM BACTERIA PER / 100ML	A / B	FAECAL COLIFORM PER / 100 ML	ESCHERICHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML	
<b>WATERVALBOVEN</b>					YES	NO				
S	H 963	WB17/8/18: Watervalboven Sewerworks Final	x		-	B	Nil	-	-	
D	H 964	WB8/8/18: Watervalboven Waterworks Final	x		Nil	B	Nil	Nil	649	
D	H 965	WB18/8/18: Watervalboven Reservoir	x		Nil	B	Nil	Nil	368	
D	H 966	WB19/8/18: Stand P118 (602)	x		Nil	B	Nil	Nil	753	
D	H 967	WB20/8/18: Khayalami Service Centre	x		Nil	B	Nil	Nil	186	
D	H 968	WB21/8/18: Vulingcondo Stimulation Centre	x		Nil	B	Nil	Nil	309	
D	H 969	WB22/8/18: Mississippi Restaurant	x		Nil	B	Nil	Nil	214	
D	H 970	WB23/8/17: Technical Workshop	x		Nil	B	Nil	Nil	439	
D	H 971	WB24/8/18: Silverdays Old Age Home	x		Nil	B	Nil	Nil	482	
METHOD USED					A- SANAS 5221 OR B- COLILERT (MPN)		SANS 5221	COLILERT (MPN)	SANS 5221	

**S.A.N.S. 241-1:2015 MICROBIOLOGICAL REQUIREMENTS**  
 Allowable compliance for **DRINKING WATER**

Determinant	Risk	Unit	Standard limits
Escherichia Coliform / or Faecal Coliform bacteria	Acute Health - 1	Count per 100 ml	Not Detected
Heterotrophic Plate Count	Operational	Count per 1 ml	≤ 1 000
Total Coliform Bacteria	Operational	Count per 100 ml	≤ 10

Results exceeding alert levels will require immediate remedial action and follow-up sampling.

**EFFLUENT WATER**

Regional Standard (Department Water Affairs and Forestry) of 26 March 2004 No.399 for Waste water species : Waste water or Effluent shall **not** contain more than 1000 Faecal Coliform per 100 ml.

These results relate only to samples tested.

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

# - Samples highlighted in grey are not within the limits as specified.

REMARKS:

- a.) Samples WB8/8/18: Watervalboven Waterworks Final, WB18/8/18: Watervalboven Reservoir, WB19/8/18: Stand P118 (602), WB20/8/18: Khayalami Service Centre, WB21/8/18: Vulingcondo Stimulation Centre, WB22/8/18: Mississippi Restaurant, WB23/8/17: Technical Workshop, WB24/8/18: Silverdays Old Age Home complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. The water is bacteriologically suitable for domestic use.

P.L.G UYS (M.D.)  
 Technical Signatory

**SANS**  
**241-1**  
**Edition 2**  
**2015**



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		<b>MACHADODORP</b>	YES	NO		A / B			
S	H 973	MH5/8/17: Leeuwspruit Before Sewerworks	X		1120	B	70	50	493
S	H 974	MH7/8/18: Leeuwspruit After Sewerworks	X		>2420	B	780	613	1280
S	H 976	MH12/8/18: Sewer Works Outlet	X		-	B	200	-	-
METHOD USED					A - SANAS 5221 OR B - COLILERT (MPN)		SANS 5221	COLILERT (MPN)	SANS 5221

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		<b>MACHADODORP</b>	YES	NO		A / B			
D	H 972	MH3/8/18:Machado Waterworks Final	X		Nil	B	Nil	Nil	43
D	H 975	MH 1/8/18: Machado Waterworks Inlet	X		>2420	B	100	50	891
D	H 977	MH14/8/18: Emthonjeni Clinic	X		Nil	B	Nil	Nil	34
D	H 978	MH15/8/18: TPA Offices	X		Nil	B	Nil	Nil	4
D	H 979	MH16/8/18: Stadnd 1485	X		Nil	B	Nil	Nil	404
D	H 980	MH17/8/18: Machado Clinic	X		Nil	B	Nil	Nil	477
D	H 981	MH18/8/18: Highway Nissan Garage	X		Nil	B	Nil	Nil	84
D	H 982	MH19/8/18: The Hog Pub	X		Nil	B	Nil	Nil	12
D	H 983	MH20/8/18: Cement Reservoir	X		Nil	B	Nil	Nil	8
D	H 984	MH21/8/18: Steeltannk	X		Nil	B	Nil	Nil	13
METHOD USED					A- SANAS 5221 OR B - COLILERT (MPN)	SANS 5221	COLILERT (MPN)	SANS 5221	

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## REMARKS:

- a.) Samples MH3/8/18:Machado Waterworks Final, MH14/8/18: Emthonjeni Clinic, MH15/8/18: TPA Offices, MH16/8/18: Stadnd 1485, MH17/8/18: Machado Clinic, MH18/8/18: Highway Nissan Garage, MH19/8/18: The Hog Pub, MH20/8/18: Cement Reservoir, MH21/8/18: Steeltannk complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. The water is bacteriologically suitable for domestic use.
- b.) Sample MH 1/8/18: Machado Waterworks Inlet tested positive for Faecal coliform. These bacteria are pathogenic (disease forming) in nature and the water is not safe for human consumption. It is recommended to investigate the source of contamination and chlorinate the water for total disinfection. **DO NOT DRINK THIS WATER.**
- c.) Sample MH 1/8/18: Machado Waterworks Inlet does not comply with the limit for E.coli in drinking water as set out in the SANS 241:2015 standard. These bacteria are pathogenic (disease forming) in nature and the water is not safe for human consumption. It is recommended to investigate the source of contamination and chlorinate the water for total disinfection. **DO NOT DRINK THIS WATER.**

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