



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

4 Woltemade Street  
 P.O. Box 8328  
 WITBANK 1035  
 Tel.: 013-690-1487  
 Fax: 013-656-5050  
 E-mail: regenlab@mweb.co.za

### MICROBIOLOGICAL ANALYSIS TEST REPORT

Sample From:

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

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

Date Received: **20-Aug-18**  
 Date Analyzed: **20-Aug-18**  
 Date Reported: **22-Aug-18**  
 Quantity Analyzed: **17**

Ref No: **H 628 - 644 / 18 B**

LAB REF ID	LAB NO	SAMPLE NAME	STERILIZED BOTTLE		STANDARD LIMITS				
					≤ 10	Nil	Nil	≤ 1000	
					TOTAL COLIFORM BACTERIA PER / 100ML	FAECAL COLIFORM PER / 100 ML	ESCHERISCHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML	
		<b>BELFAST</b>	YES	NO	A / B				
D	H 628	BF1/8/18: Belfast Waterworks Inlet	x		<b>770</b>	<b>B</b>	<b>3</b>	<b>1</b>	<b>708</b>
D	H 629	BF3/8/18 & BF4/8/18: Belfast Waterworks Final	x		Nil	B	Nil	Nil	3
D	H 630	BF10/8/18: Siyathuthuka Clinic	x		Nil	B	Nil	Nil	10
D	H 631	BF11/8/18: Leratong Creche'	x		Nil	B	Nil	Nil	2
D	H 632	BF12/8/18: Stand 3423/3	x		Nil	B	Nil	Nil	10
D	H 633	BF13/8/18: HA Grove Hospital	x		Nil	B	Nil	Nil	9
D	H 634	BF15/8/18: Belfast Old Age Home	x		Nil	B	Nil	Nil	11
D	H 635	BF 16/8/18: Siyatuthuka Reservoir	x		Nil	B	Nil	Nil	15
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 specifies :  
 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 BF3/8/18 & BF4/8/18: Belfast Waterworks Final, BF10/8/18: Siyathuthuka Clinic, BF11/8/18: Leratong Creche', BF12/8/18: Stand 3423/3, BF13/8/18: HA Grove Hospital , BF15/8/18: Belfast Old Age Home, BF 16/8/18: Siyatuthuka Reservoir complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. The water is bacteriologically suitable for domestic use.
- b.) Sample BF1/8/18: Belfast 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 BF1/8/18: Belfast 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.**

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

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


**MICROBIOLOGICAL ANALYSIS  
 TEST REPORT**

Sample From:

**Nkangala District Municipality  
 Municipal Health Services  
 Emakhazeni Town Council**
**Address: Posbus 437  
 Walter Sisulu  
 Middelburg  
 1050**

Date Received:

20-Aug-18

Date Analyzed:

20-Aug-18

Date Reported:

22-Aug-18

Quantity Analyzed:

17

Ref No: H 628 - 644 / 18 B

LAB REF ID	LAB NO	SAMPLE NAME	STERILIZED BOTTLE		STANDARD LIMITS				
					≤ 10	Nil	Nil	≤ 1000	
					TOTAL COLIFORM BACTERIA PER / 100ML	FAECAL COLIFORM PER / 100 ML	ESCHERICHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML	
		<b>WATERVALBOVEN</b>	YES	NO		A / B			
D	H 636	WB1/8/18: Watervalboven Waterworks Inlet	x		>2420	B	TNTC	>2420	1259
D	H 637	WB3/8/18: Watervalboven Waterworks Final	x		200	B	150	101	183
D	H 638	WB16/8/18: Watervalboven Reservoir	x		>200	B	170	145	172
D	H 639	WB10/8/18: Stand P118 (602)	x		165	B	60	50	182
D	H 640	WB11/8/18: Khayalami Service Centre	x		200	B	70	53	139
D	H 641	WB12/8/18: Vulingcondo Stimulation Centre	x		4	B	2	1	110
D	H 642	WB13/8/18: Mississippi Resturant	x		66	B	50	45	128
D	H 643	WB14/8/18: Technical Workshop	x		200	B	80	56	149
D	H 644	WB15/8/18: Silverdays Old Age Home	x		4	B	3	2	110
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 specifies : 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 WB1/8/18: Watervalboven Waterworks Inlet, WB3/8/18: Watervalboven Waterworks Final, WB16/8/18: Watervalboven Reservoir, WB10/8/18: Stand P118 (602), WB11/8/18: Khayalami Service Centre, WB12/8/18: Vulingcondo Stimulation Centre, WB13/8/18: Mississippi Resturant , WB14/8/18: Technical Workshop and WB15/8/18: Silverdays Old Age Home tested positive for Faecal coliform. These bacteria are pathogenic (disease forming) in nature and the water is not save for human consumption. It is recommended to investigate the source of contamination and chlorinate the water for total disinfection. **DO NOT DRINK THIS WATER.**
- b.) Samples WB1/8/18: Watervalboven Waterworks Inlet, WB3/8/18: Watervalboven Waterworks Final, WB16/8/18: Watervalboven Reservoir, WB10/8/18: Stand P118 (602), WB11/8/18: Khayalami Service Centre, WB12/8/18: Vulingcondo Stimulation Centre, WB13/8/18: Mississippi Resturant , WB14/8/18: Technical Workshop and WB15/8/18: Silverdays Old Age Home 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

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

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