



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

4 Woltemade Street  
 P.O. Box 8328  
 WITBANK 1035  
 Tel.: 013-690-1487  
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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:

26-Apr-18

Date Analyzed:

26-Apr-18

Date Reported:

28-Apr-18

Quantity Analyzed:

28

Ref No: D 1557 - 1583 / 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			
S	D 1557	BF8/4/18: Belfast Sewerworks Final	X		-	B	Nil	-	-
D	D 1558	BF26/4/18: Belfast Waterworks Final	X		56	B	Nil	Nil	133
D	D 1559	BF27/4/18: Siyathuthuka Reservoir	X		95	B	Nil	Nil	146
D	D 1560	BF28/4/18: Belfast Old Reservoir	X		66	B	2	1	116
D	D 1561	BF29/4/18: Belfast New Reservoir	X		89	B	Nil	Nil	157
D	D 1562	Siyathuthuka Clinic	X		95	B	3	1	207
D	D 1563	Leratong Creche'	X		89	B	2	1	229
D	D 1564	Stand 3423/3	X		83	B	2	1	163
D	D 1565	HA Grove Hospital	X		78	B	3	1	134
D	D 1566	Bottom End Liquer Store	X		95	B	6	2	156
D	D 1566 A	Belfast Old Age Home	X		101	B	Nil	Nil	149
					A - SANS 5221 OR B - COLILERT		SANS 5221	COLILERT	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:

- Samples BF26/4/18: Belfast Waterworks Final, BF27/4/18: Siyathuthuka Reservoir and BF29/4/18: Belfast New Reservoir has a Total Coliform count not within the SANS 241:2015 limit. These bacteria are not pathogenic (disease forming) but it is advised to chlorinate the water for total disinfection.
- Samples BF28/4/18: Belfast Old Reservoir, Siyathuthuka Clinic, Leratong Creche', Stand 3423/3, HA Grove Hospital and Bottom End Liquer Store 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.
- Samples BF28/4/18: Belfast Old Reservoir, Siyathuthuka Clinic, Leratong Creche', Stand 3423/3, HA Grove Hospital and Bottom End Liquer Store 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 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.

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

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



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					≤ 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>DULLSTROOM</b>	YES	NO		A / B			
D	D 1567	DS20/4/18: Dullstroom Waterworks Final	X		Nil	B	Nil	Nil	14
D	D 1568	DS21/4/18: Sakhelwe Reservoir	X		Nil	B	Nil	Nil	7
D	D 1569	DS22/4/18: Dullstroom Reservoir	X		1	B	Nil	Nil	13
D	D 1570	DS23/4/18: Sakhelwe Clinic	X		Nil	B	Nil	Nil	4
D	D 1571	DS24/4/18: Cosmo General Dealer	X		Nil	B	Nil	Nil	12
D	D 1572	DS25/4/18: Sakhelwe Creche'	X		Nil	B	Nil	Nil	18
D	D 1573	DS26/4/18: La Bamba Centre	X		Nil	B	Nil	Nil	15
D	D 1574	DS27/4/18: Municipal Offices	X		Nil	B	Nil	Nil	4
D	D 1575	DS28/4/18: Epilepsy Centre	X		Nil	B	Nil	Nil	64
METHOD USED					A- SANAS 5221 OR B - COLILERT		SANS 5221	COLILERT	SANS 5221

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#### EFFLUENT WATER

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 Waste water or Effluent shall **not** contain more than 1000 Faecal Coliform per 100 ml.

These results relate only to samples tested.

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#### REMARKS:

- a.) Samples DS20/4/18: Dullstroom Waterworks Final, DS21/4/18: Sakhelwe Reservoir, DS22/4/18: Dullstroom Reservoir, DS23/4/18: Sakhelwe Clinic, DS24/4/18: Cosmo General Dealer, DS25/4/18: Sakhelwe Creche', DS26/4/18: La Bamba Centre, DS27/4/18: Municipal Offices, DS28/4/18: Epilepsy Centre complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. The water is bacteriologically suitable for domestic use.

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		<b>WATERVALBOVEN</b>	YES	NO		A / B			
D	D 1576	WB22/4/18: Watervalboven Waterworks Final	x		165	B	12	6	1140
D	D 1577	WB23/4/18: Watervalboven Reservoir	x		89	B	Nil	Nil	100
D	D 1578	WB24/4/18: Stand P118 (602)	x		>200	B	10	6	299
D	D 1579	WB25/4/18: Khayalami Service Centre	x		165	B	13	11	601
D	D 1580	WB26/4/18: Vulingcondo Stimulation Centre	x		200	B	3	2	180
D	D 1581	WB27/4/18: Mississippi Restuarant	x		145	B	7	3	181
D	D 1582	WB28/4/18: Technical Workshop	x		165	B	6	4	230
D	D 1583	WB29/4/18: Silverdae Old Age Home	x		200	B	4	2	171
METHOD USED					A - SANAS 5221 OR B - COLILERT		SANS 5221	COLILERT	SANS 5221

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#### REMARKS:

- Sample WB23/4/18: Watervalboven Reservoir has a Total Coliform count not within the SANS 241:2015 limit. These bacteria are not pathogenic (disease forming) but it is advised to chlorinate the water for total disinfection.
- Samples WB24/4/18: Stand P118 (602), WB25/4/18: Khayalami Service Centre, WB26/4/18: Vulingcondo Stimulation Centre, WB27/4/18: Mississippi Restuarant, WB28/4/18: Technical Workshop and WB29/4/18: Silverdae 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.**
- Samples WB24/4/18: Stand P118 (602), WB25/4/18: Khayalami Service Centre, WB26/4/18: Vulingcondo Stimulation Centre, WB27/4/18: Mississippi Restuarant, WB28/4/18: Technical Workshop and WB29/4/18: Silverdae 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 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.**

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