



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:

27-Feb-18

Date Analyzed:

27-Feb-18

Date Reported:

1-Mar-18

Quantity Analyzed:

13

Ref No: **B 1713 - 1725 / 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
		BELFAST	YES	NO		A / B			
D	B 1713	BF18/2/18: Belfast Old Reservoir	X		95	B	24	19	396
D	B 1714	BF20/2/18: Belfast New Reservoir	X		165	B	25	18	627
D	B 1715	BF26/2/18: Belfast Watweworks Final	X		>200	B	10	9	936
METHOD USED					A - SANAS 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:

- a.) Samples BF18/2/18: Belfast Old Reservoir, BF20/2/18: Belfast New Reservoir and BF26/2/18: Belfast Watweworks Final 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.**
- b.) Samples BF18/2/18: Belfast Old Reservoir, BF20/2/18: Belfast New Reservoir and BF26/2/18: Belfast Watweworks Final 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



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 TEST REPORT**

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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	ESCHERISCHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML	
		DULLSTROOM	YES	NO						
S	B 1716	DS8/2/18: Dullstroom Sewerworks Final	X		-	B	Nil	-	-	
D	B 1717	DS20/2/18: Dullstroom Waterworks Final	X		Nil	B	Nil	Nil	9	
D	B 1718	DS21/2/18: Sakhelwe Reservoir	X		Nil	B	Nil	Nil	12	
D	B 1719	DS22/2/18: Dullstroom Reservoir	X		Nil	A	Nil	Nil	25	
D	B 1720	DS23/2/18: Sakhelwe Clinic	X		Nil	B	Nil	Nil	16	
D	B 1721	DS24/2/18: Cosmo General Dealer	X		Nil	B	Nil	Nil	14	
D	B 1722	DS25/2/18: Sakhelwe Creche'	X		Nil	B	Nil	Nil	22	
D	B 1723	DS26/2/18: La Bamba Centre	X		Nil	B	Nil	Nil	18	
D	B 1724	DS27/2/18: Municipal Offices	X		Nil	B	Nil	Nil	16	
D	B 1725	DS28/2/18: SA Epilepsy Centre	X		Nil	B	Nil	Nil	20	
METHOD USED					A- SANAS 5221 OR B - COLLERT		SANS 5221	COLILERT	SANS 5221	

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

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Escherichia Coliform / or Faecal Coliform bacteria	Acute Health - 1	Count per 100 ml	Not Detected
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These results relate only to samples tested.

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

- a.) Samples DS20/2/18: Dullstroom Waterworks Final, DS21/2/18: Sakhelwe Reservoir, DS22/2/18: Dullstroom Reservoir, DS23/2/18: Sakhelwe Clinic, DS24/2/18: Cosmo General Dealer, DS25/2/18: Sakhelwe Creche', DS26/2/18: La Bamba Centre, DS27/2/18: Municipal Offices, DS28/2/18: SA Epilepsy Centre 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

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Edition 2
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