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MICROBIOLOGICAL ANALYSIS TEST REPORT

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

Date Received: **31-Jan-18**
Date Analyzed: **31-Jan-18**
Date Reported: **2-Feb-18**
Quantity Analyzed: **18** Ref No: **A 1697 - 1714 / 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	
					YES	NO	A / B		
BELFAST									
D	A 1697	BF26/1/18: Belfast Waterworks Final	X				Nil	Nil	6
D	A 1698	BF28/1/18: Belfast Old Reservoir	X		>200	A	5	4	517
D	A 1699	BF33/1/18: HA Grove Hospital	X		130	B	Nil	Nil	363
D	A 1700	BF34/1/18: Bottom End Liquer Store	X		118	B	Nil	Nil	258
D	A 1701	BF36/1/18: Belfast New Reservoir	X		>200	B	Nil	Nil	572
D	A 1702	BF37/1/18: Siyathuthuka Reservoir	X		>200	B	5	3	455
D	A 1703	BF38/1/18: Belfast Old Age Home	X		130	B	Nil	Nil	354
D	A 1704	BF39/1/18: Leratong Creche'	X		>200	B	4	2	604
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:

- Samples BF33/1/18: HA Grove Hospital, BF34/1/18: Bottom End Liquer Store, BF36/1/18: Belfast New Reservoir and BF38/1/18: Belfast Old Age Home 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 BF28/1/18: Belfast Old Reservoir, BF37/1/18: Siyathuthuka Reservoir and BF39/1/18: Leratong Creche' 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.
- Samples BF28/1/18: Belfast Old Reservoir, BF37/1/18: Siyathuthuka Reservoir and BF39/1/18: Leratong Creche' 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.
- Sample BF26/1/18: Belfast Waterworks Final 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



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

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					YES	NO	A / B		
MACHADODORP									
D	A 1705	MH24/1/18: Machado Waterworks Final	x		Nil	B	Nil	Nil	7
D	A 1706	MH25/1/18: Cement Reservoir	x		Nil	A	Nil	Nil	26
D	A 1707	MH26/1/18: Steeltank	x		Nil	B	Nil	Nil	16
D	A 1708	MH27/1/18: Emthonjeni Clinic	x		Nil	B	Nil	Nil	7
D	A 1709	MH28/1/18:TPA Offices	x		Nil	B	Nil	Nil	10
D	A 1710	MH29/1/18: Stand 1485	x		Nil	B	Nil	Nil	12
D	A 1711	MH30/1/18: Machado Clinic	x		Nil	B	Nil	Nil	158
S	A 1712	MH37/1/18: Emthonjeni Sewer Final Outlet	x		-	B	Nil	-	-
D	A 1713	MH32/1/18: Speelgoed Creche'	x		Nil	B	Nil	Nil	10
D	A 1714	MH31/1/18: Highway Nissan Garage	x		Nil	B	Nil	Nil	50
METHOD USED					A- SANAS 5221 OR B - COLILERT		SANS 5221	COLILERT	SANS 5221

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REMARKS:

- a.) Samples MH24/1/18: Machado Waterworks Final , MH25/1/18: Cement Reservoir, MH26/1/18: Steeltank, MH27/1/18: Emthonjeni Clinic, MH28/1/18:TPA Offices, MH29/1/18: Stand 1485, MH30/1/18: Machado Clinic, MH32/1/18: Speelgoed Creche', MH31/1/18: Highway Nissan Garage 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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