


**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-Nov-18

Date Analyzed:

23-Nov-18

Date Reported:

25-Nov-18

Quantity Analyzed:

31

Ref No: K 1416 - 1446 / 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	
		BELFAST	YES	NO		A / B			
D	K 1416	NBF10/11/18: Siyathuthuka Clinic	X		5	B	4	3	11
D	K 1417	NBF11/11/18: Leratong Creche'	X		Nil	B	Nil	Nil	10
D	K 1418	NBF12/11/18: Stand 3423/3	X		6	B	3	1	8
D	K 1419	NBF13/11/18: HA Grove Hospital	X		4	B	Nil	Nil	9
D	K 1420	NBF14/11/2018: Bottom End Liquer Store	X		25	B	Nil	Nil	28
D	K 1421	NBF15/11/2018: Belfast Old Age Home	X		Nil	B	Nil	Nil	75
D	K 1422	NBF18/11/2018: Belfast Old Reservoir	X		38	B	Nil	Nil	73
D	K 1423	NBF20/11/2018: Nelfast New Reservoir	X		32	B	Nil	Nil	80
D	K 1424	NBF16/11/2018: Siyathuthuka Reservoir	X		2	B	Nil	Nil	7
METHOD USED					A - SANAS 5221 (CFU) OR B - COLILERT (MPN)		SANS 5221	COLILERT (MPN)	SANS 5221
					REGEN WATERS METHOD: MLPM 4A AND 4B.				

**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 NBF14/11/2018: Bottom End Liquer Store, NBF18/11/2018: Belfast Old Reservoir and NBF20/11/2018: Nelfast New Reservoir have Total Coliform counts not within the SANS 241:2015 limit. These bacteria are not pathogenic (disease forming) but it is advised to chlorinate these water samples for total disinfection.
- b.) Samples NBF10/11/18: Siyathuthuka Clinic and NBF12/11/18: Stand 3423/3 tested positive for pathogenic bacteria (E.Coli/ Faecal coliform bacteria). These bacteria are disease forming and the water samples are not safe for human consumption. It is recommended to investigate the source of contamination and chlorinate these water samples for total disinfection. **DO NOT DRINK THIS WATER.**
- c.) Samples NBF13/11/18: HA Grove Hospital, NBF15/11/2018: Belfast Old Age Home, NBF16/11/2018: Siyathuthuka Reservoir complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. These water samples are bacteriologically suitable for domestic use.

SANS
241-1
Edition 2
2015

P.L.G UYS / A.KOHRIS

Technical Signatory

(A signed copy of this report is available)



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

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					YES	NO	A / B					
DULLSTROOM												
D	K 1425	NDS10/11/18:Sakhelwe Clinic	X				Nil	B	Nil	Nil	8	
D	K 1426	NDS11/11/18: Cosmo General Dealer	X				1	B	Nil	Nil	9	
D	K 1427	NDS12/11/18: Sakhelwe Creche'	X				Nil	B	Nil	Nil	4	
D	K 1428	NDS13/11/18: La Bomba Centre	X				Nil	B	Nil	Nil	7	
D	K 1429	NDS14/11/18: Municipal Offices	X				2	B	Nil	Nil	6	
D	K 1430	NDS15/11/18: SA Epilepsy Centre	X				Nil	B	Nil	Nil	10	
D	K 1431	NDS16/11/18: Sakhelwe Reservoir	X				Nil	B	Nil	Nil	8	
D	K 1432	NDS18/11/18: Dullstroom Reservoir	X				3	B	Nil	Nil	5	
METHOD USED					A - SANAS 5221 (CFU) OR B - COLILERT (MPN)		SANS 5221	COLILERT (MPN)	SANS 5221	REGEN WATERS METHOD: MLPM 4A AND 4B.		

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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.

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

REMARKS:

- a.) Samples NDS13/11/18: La Bomba Centre, NDS14/11/18: Municipal Offices, NDS15/11/18: SA Epilepsy Centre, NDS16/11/18: Sakhelwe Reservoir, NDS18/11/18: Dullstroom Reservoir complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. These water samples are bacteriologically suitable for domestic use.

P.L.G UYS / A.KOHRS

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MACHADODORP			YES	NO					
D K 1433	NMH14/11/18: Emthonjeni Clinic	X		Nil	B	Nil	Nil	1	
D K 1434	NMH15/11/18: Municipal Offices	X		5	B	Nil	Nil	55	
D K 1435	NMH16/11/18: Stand 1485	X		Nil	B	Nil	Nil	3	
D K 1436	NMH17/11/18: Machado Clinic	X		Nil	B	Nil	Nil	2	
D K 1437	NMH18/11/18: Highway Garage	X		Nil	B	Nil	Nil	4	
D K 1438	NMH19/11/18: The Hog Pub	X		Nil	B	Nil	Nil	51	
D K 1439	NMH20/11/18: Cement Reservoir	X		Nil	B	Nil	Nil	7	
D K 1440	NMH22/11/2018: Steeltank	X		9	B	3	1	28	
METHOD USED					A - SANAS 5221 (CFU) OR B - COLILERT (MPN)	SANS 5221	COLILERT (MPN)	SANS 5221	
REGEN WATERS METHOD: MLPM 4A AND 4B.									

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REMARKS:

- a.) Sample NMH22/11/2018: Steeltank tested positive for pathogenic bacteria (E.Coli/ Faecal coliform bacteria). These bacteria are disease forming 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 NMH17/11/18: Machado Clinic , NMH18/11/18: Highway Garage, NMH19/11/18: The Hog Pub, NMH20/11/18: Cement Reservoir complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. These water samples are bacteriologically suitable for domestic use.

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		WATERVALBOVEN	YES	NO		A / B			
D	K 1441	NWB10/11/18: Stand P118 (602)	X		Nil	B	Nil	Nil	4
D	K 1442	NWB11/11/18: Khayalami Service Centre	X		Nil	B	Nil	Nil	10
D	K 1443	NWB12/11/18: Vulingcondo Stimulation Centre	X		Nil	B	Nil	Nil	34
D	K 1444	NWB13/11/18: Mississippi Restaurant	X		Nil	B	Nil	Nil	5
D	K 1445	NWB14/4/18: Technical Workshop	X		Nil	B	Nil	Nil	6
D	K 1446	NWB15/11/18: Silverdays Old Age Home	X		Nil	B	Nil	Nil	5
METHOD USED					A - SANAS 5221 (CFU) OR B - COLILERT (MPN)	SANS 5221	COLILERT (MPN)	SANS 5221	

REGEN WATERS METHOD: MLPM 4A AND 4B.

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REMARKS:

- a.) **Samples NWB13/11/18: Mississippi Restaurant , NWB14/4/18: Technical Workshop, NWB15/11/18: Silverdays Old Age Home complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. These water samples are bacteriologically suitable for domestic use.**

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