



**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-Sep-18
 Date Analyzed: 20-Sep-18
 Date Reported: 22-Sep-18
 Quantity Analyzed: 30**

Ref No: I 1282 - 1311 / 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	
		MACHADODORP	YES	NO		A / B			
D	I 1282	MH1/9/18: Machado Waterworks Inlet	x		>2420	B	TNTC	>2420	1215
D	I 1283	MH3/9/18: Machado Waterworks Final	x		Nil	B	Nil	Nil	13
D	I 1284	MH5/9/18: Leeuwspruit before Sewer	x		>2420	B	1900	1046	1528
D	I 1285	MH7/9/18: Leeuwspruit after Sewer	x		>2420	B	T	>2420	1680
S	I 1286	MH12/9/18: Emthonjeni Sewerworks Final	x		-	B	Nil	-	-
D	I 1287	MH14/9/18: Emthonjeni Clinic	x		Nil	B	Nil	Nil	20
D	I 1288	MH15/9/18: Municipal Offices	x		Nil	B	Nil	Nil	9
D	I 1289	MH16/9/18: Stand 1485	x		Nil	B	Nil	Nil	12
D	I 1290	MH17/9/18: Machado clinic	x		Nil	B	Nil	Nil	12
D	I 1291	MH18/9/18: Highway Nissan Garage	x		Nil	B	Nil	Nil	16
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 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 MH3/9/18: Machado Waterworks Final, MH14/9/18: Emthonjeni Clinic, MH15/9/18: Municipal Offices, MH16/9/18: Stand 1485, MH17/9/18: Machado clinic, MH18/9/18: 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.
- b.) Samples MH5/9/18: Leeuwspruit before Sewer and MH7/9/18: Leeuwspruit after Sewer 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.) Samples MH5/9/18: Leeuwspruit before Sewer and MH7/9/18: Leeuwspruit after Sewer 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**



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

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		MACHADODORP	YES	NO		A / B		
D	I 1292	MH19/9/18: The Hog Pub	X		Nil	B	Nil	15
D	I 1293	MH20/9/18: Cement Reservoir	X		Nil	B	Nil	12
D	I 1294	MH22/9/18: Steeltank	X		Nil	B	Nil	34
METHOD USED					A - SANAS 5221 OR B - COLILERT (MPN)	SANS 5221	COLILERT (MPN)	SANS 5221

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		WATERVALBOVEN	YES	NO		A / B								
D	I 1295	WB10/9/18: Stand P 118 (602)	X		>200	B	15		11		190			
D	I 1296	WB11/9/18: Khayalami Service Centre	X		>200	B	16		11		154			
D	I 1297	WB12/9/18: Vulingcondo Stim Centre	X		>200	B	6		5		124			
D	I 1298	WB13/9/18: Mississippi Resturant	X		36	B	2		1		31			
D	I 1299	WB14/9/18: Technical Workshop	X		>200	B	30		18		193			
D	I 1300	WB15/9/18: Silverdays Old Age Home	X		>200	B	5		4		169			
D	I 1301	WB16/9/18: Boven Reservoir	X		>200	B	50		36		160			
METHOD USED					A- SANAS 5221 OR B - COLILERT (MPN)		SANS 5221		COLILERT (MPN)		SANS 5221			

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			YES	NO	A / B				
		BELFAST							
D	I 1302	BF10/9/18: Siyathuthuka Clinic	X		Nil	B	Nil	Nil	7
D	I 1303	BF11/9/18: Leratong Creche'	X		36	B	Nil	Nil	15
D	I 1304	BF12/9/18: Stand 3423/3	X		15	B	Nil	Nil	18
D	I 1305	BF13/9/18: HA Grove Hospital	X		109	B	Nil	Nil	47
D	I 1306	BF14/9/18: Bottom Enf Liquer Store	X		74	B	Nil	Nil	21
D	I 1307	BF15/9/18: Belfast Old Age Home	X		62	B	Nil	Nil	15
D	I 1308	BF16/9/18: Siyathuthuka Reservoir	X		36	B	Nil	Nil	18
D	I 1309	BF18/9/18: Belfast Old Reservoir	X		>200	B	Nil	Nil	134
D	I 1310	BF20/9/18: Belfast New Reservoir	X		165	B	Nil	Nil	150
D	I 1311	Belfast Water Works Final	X		109	B	Nil	Nil	120
METHOD USED					A - SANAS 5221 OR B - COLILERT (MPN)	SANS 5221	COLILERT (MPN)	SANS 5221	

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