


**MICROBIOLOGICAL ANALYSIS
 TEST REPORT**

Sample From:

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

Date Received:

30-Apr-18

Date Analyzed:

30-Apr-18

Date Reported:

2-May-18

Quantity Analyzed:

12

Ref No: D 1617 - 1628 / 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	D 1617	MH23/4/18: Waterworks Outlet Final	x		Nil	B	Nil	2	
D	D 1618	MH24/4/18: Cement Reservoir	x		Nil	B	Nil	1	
D	D 1619	MH25/4/18: Steel Tank	x		Nil	B	Nil	1	
D	D 1620	MH26/4/18: Emthonjeni Clinic Tap	x		Nil	B	Nil	3	
D	D 1621	MH27/4/18: TPA Offices Tap	x		Nil	B	Nil	4	
D	D 1622	MH28/4/18: Stand 1485 Tap	x		Nil	B	Nil	3	
D	D 1623	MH29/4/18: Machado Clinic Tap	x		Nil	B	Nil	4	
D	D 1624	MH30/4/18: Highway Nissan Garage	x		Nil	B	Nil	6	
D	D 1625	MH31/4/18: Speelgoed Creche' Tap	x		Nil	B	Nil	1	
D	D 1626	MH32/4/18: Leeuwspruit River Before Sewer	x		2420	B	70	1130	
D	D 1627	MH34/4/18: Leeuwspruit River After Sewer	x		>2420	B	410	1479	
D	D 1628	MH36/4/18: Sewer Works Outlet Final	x		-	B	30	-	
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 MH23/4/18: Waterworks Outlet Final, MH24/4/18: Cement Reservoir, MH25/4/18: Steel Tank, MH26/4/18: Emthonjeni Clinic Tap, MH27/4/18: TPA Offices Tap, MH28/4/18: Stand 1485 Tap, MH29/4/18: Machado Clinic Tap, MH30/4/18: Highway Nissan Garage, MH31/4/18: Speelgoed Creche' Tap complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. The water is bacteriologically suitable for domestic use.
- b.) Samples MH32/4/18: Leeuwspruit River Before Sewer and MH34/4/18: Leeuwspruit River 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 MH32/4/18: Leeuwspruit River Before Sewer and MH34/4/18: Leeuwspruit River 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

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