



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-Mar-18

Date Analyzed:

27-Mar-18

Date Reported:

29-Mar-18

Quantity Analyzed:

9

Ref No: C 1431 - 1439 / 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	C 1431	MH23/3/18: Waterworks Outlet Final	X		Nil	B	Nil	Nil	4
D	C 1432	MH24/3/18: Cement Reservoir	X		19	B	Nil	Nil	56
D	C 1433	MH25/3/18: Steel Tank	X		11	B	Nil	Nil	34
D	C 1434	MH32/3/18: Leeuwspruit River Before Sewer	X		>2420	B	120	104	2450
D	C 1435	MH34/3/18: Leeuwspruit River After Sewer	X		>2420	B	550	448	2410
S	C 1436	MH36/3/18: Sewage Works Final	X		-	B	Nil	-	-
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.

SANS
 241-1
 Edition 2
 2015

REMARKS:

- Samples MH24/3/18: Cement Reservoir and MH25/3/18: Steel Tank 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.
- Sample MH23/3/18: Waterworks Outlet Final complies with the SANS 241:2015 microbiological drinking water standard for the tested parameters. The water is bacteriologically suitable for domestic use.
- Samples MH32/3/18: Leeuwspruit River Before Sewer and MH34/3/18: 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.**
- Samples MH32/3/18: Leeuwspruit River Before Sewer and MH34/3/18: 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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					TOTAL COLIFORM BACTERIA PER / 100ML	FAECAL COLIFORM PER / 100 ML	ESCHERISCHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML	
		WATERVALBOVEN	YES	NO		A / B			
D	C 1437	WB3/3/18: Water Final Works	X		200	B	6	5	225
S	C 1438	WB8/3/18: Sewage Works Final	X		-	B	>1000	-	-
D	C 1439	WB16/3/18: Reservoir Boven	X		200	B	7	5	184
METHOD USED					A- SANAS 5221 OR B - COLLILERT		SANS 5221	COLILERT	SANS 5221

S.A.N.S. 241-1:2015 MICROBIOLOGICAL REQUIREMENTS
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Determinant	Risk	Unit	Standard limits
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- Samples highlighted in grey are not within the limits as specified.

REMARKS:

- a.) Sample WB16/3/18: Reservoir Boven 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.) Sample WB16/3/18: Reservoir Boven 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.**

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