



(PTY) LTD 2018/379064/07  
**REGEN WATERS**  
 LABORATORY • LABORATORIUM

4 Woltemade Street  
 P.O. Box 8328  
 WITBANK 1035  
 Tel.: 013-690-1487  
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 E-mail: regenlab@mweb.co.za

### MICROBIOLOGICAL ANALYSIS TEST REPORT

Sample From: Nkangala District Municipality Municipal Health Services  
 Emakhazeni Town Council

Address: Posbus 437  
 Walter Sisulu  
 Middelburg  
 1050

Date Received: 24 May 2019  
 Date Analyzed: 24 May 2019  
 Date Reported: 26 May 2019  
 Quantity Analyzed: 13

Attention: Marianne Joubert  
 Solly Links  
 E-Mail : [marianne.joubert2011@gmail.com](mailto:marianne.joubert2011@gmail.com)  
 Ref No: E 1331 - 1343 / 19 B

LAB REF ID	LAB NUMBER	SAMPLE NAME	STERILIZED BOTTLE		STANDARD LIMITS				
					≤ 10		Nil	Nil	≤ 1000
					TOTAL COLIFORM BACTERIA PER / 100ML	A / B	FAECAL COLIFORM PER / 100 ML	ESCHERISCHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML
		<b>MACHADODORP</b>	YES	NO					
D	E 1331	NMH1/5/19: Waterworks Inlet	x		649	B	60	44	783
D	E 1332	NMH3/5/19: Waterworks Outlet Final	x		Nil	B	Nil	Nil	9
	E 1333	NMH5/5/19: Leeuwspruit River Before Sewer	x		488	B	110	88	464
	E 1334	NMH7/5/19: Leeuwspruit River After Sewer	x		>2420	B	490	326	1644
S	E 1335	NMH9/5/19: Sewage Works Final	x		-	B	Nil	-	-
D	E 1336	NMH15/5/19: Emthonjeni Library	x		Nil	B	Nil	Nil	5
D	E 1337	NMH16/5/19: Emakazeni Housing Units	x		Nil	B	Nil	Nil	12
METHOD USED					A- SANAS 5221 (CFU) OR B - COLILERT (MPN)	SANS 5221 (CFU)	COLILERT (MPN)	SANS 5221 (CFU)	
					REGEN WATERS METHOD: MLPM 4A AND 4B.				

#### S.A.N.S. 241:2015 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.

**SANS 241  
 2015**

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:

- Sample NMH1/5/19: Waterworks Inlet 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.**
- Samples NMH3/5/19: Waterworks Outlet Final, NMH15/5/19: Emthonjeni Library, NMH16/5/19: Emakazeni Housing Units 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.KOHRIS  
 Technical Signatory



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					YES	NO	A / B		
<b>MACHADOWORKS</b>									
D	E 1338	NMH18/5/19: Highway Nissan Garage	X		Nil	B	Nil	16	
D	E 1339	NMH19/5/19: Machado Police Station Tap	X		Nil	B	Nil	11	
D	E 1340	NMH20/5/19: Cement Reservoir	X		Nil	B	Nil	17	
D	E 1341	NMH22/5/19: Steeltank	X		Nil	B	Nil	20	
D	E 1342	NMH14/5/19: Emthonjeni Clinic	X		Nil	B	Nil	24	
D	E 1343	NMH17/5/19: Machado Clinic Tap	X		Nil	B	Nil	7	
METHOD USED					A- SANAS 5221 (CFU) OR B - COLILERT (MPN)		SANS 5221 (CFU)	COLILERT (MPN)	SANS 5221 (CFU)
					REGEN WATERS METHOD: MLPM 4A AND 4B.				

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**REMARKS:**

- a.) Samples NMH18/5/19: Highway Nissan Garage, NMH19/5/19: Machado Police Station Tap, NMH20/5/19: Cement Reservoir, NMH22/5/19: Steeltank, NMH14/5/19: Emthonjeni Clinic, NMH17/5/19: Machado Clinic Tap 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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