



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

4 Woltemade Street
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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: 24 April 2019
 Date Analyzed: 24 April 2019
 Date Reported: 26 April 2019
 Quantity Analyzed: 11

Attention: Marianne Joubert
 Solly Links
 E-Mail : marianne.joubert2011@gmail.com
 Ref No: D 1337 - 1347 / 19 B

LAB REF ID	LAB NUMBER	SAMPLE NAME	STERILIZED BOTTLE		STANDARD LIMITS								
					≤ 10 TOTAL COLIFORM BACTERIA PER / 100ML	Nil FAECAL COLIFORM PER / 100 ML	Nil ESCHERISCHIA COLIFORM PER 100 ML	≤ 1000 HETEROTROPHIC PLATE COUNT PER 1.0 ML					
MACHADODORP					YES	NO	A / B						
D	D 1337	NMH1/4/19: Machado Waterworks Inlet	x					>2420	B	350	211	1580	
D	D 1338	NMH3/4/19: Machado Waterworks Final	x					Nil	B	Nil	Nil	13	
S	D 1339	NMH 5/4/19: Emthonjeni Sewerworks Final	x					-	B	>1000	-	-	
D	D 1340	NMH14/4/19: Emthonjeni Clinic	x					Nil	B	Nil	Nil	17	
D	D 1341	NMH15/4/19: Emthonjeni Library	x					Nil	B	Nil	Nil	15	
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 NMH1/4/19: Machado 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 NMH3/4/19: Machado Waterworks Final, NMH14/4/19: Emthonjeni Clinic, NMH15/4/19: Emthonjeni Library 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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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	ESCHERICHIA COLIFORM PER 100 ML	HETEROTROPHIC PLATE COUNT PER 1.0 ML	
MACHADODORP					YES	NO				
D	D 1342	NMH16/4/19: Emakazeni Holding Units	X		Nil	B	Nil	Nil	11	
D	D 1343	NMH17/4/19: Machado Clinic	X		Nil	B	Nil	Nil	16	
D	D 1344	NMH18/4/19: Highway Nissan Garage	X		Nil	B	Nil	Nil	20	
D	D 1345	NMH19/4/19: Machado Police Station	X		Nil	B	Nil	Nil	15	
D	D 1346	NMH20/4/19: Cement Reservoir	X		Nil	B	Nil	Nil	16	
D	D 1347	NMH22/4/19: Steeltank	X		Nil	B	Nil	Nil	22	
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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SANS 241 2015

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REMARKS:

- a.) Samples NMH16/4/19: Emakazeni Holding Units, NMH17/4/19: Machado Clinic , NMH18/4/19: Highway Nissan Garage, NMH19/4/19: Machado Police Station, NMH20/4/19: Cement Reservoir, NMH22/4/19: Steeltank 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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