

**AVENG - KEYPLAN
OPTIMUM COLLIERY**

HENDRINA

CHEMICAL ANALYSIS

Date Received : 15 August 2013

Date Reported : 29 August 2013

Quantity Analyzed: 1

	Analysis Results mg/l	G383 Potable Water 14/8/2013	SANS Standards -241 (2011) Domestic Water
			Standard Limits
Physical requirements			
	Colour as Pt-Co	<5.0	
	Conductivity at 25° C in mS/m	21.7	≤ 170
	Total Dissolved Solids	142	≤ 1 200
	Odour	Inoffensive	Inoffensive
	pH-Value at 25 ° C	7.67	≥ 5.0 to ≤ 9.7
	Taste	Inoffensive	Inoffensive
	Turbidity as N.T.U.	0.70	Operational ≤ 1.0 - Aesthetic ≤ 5.0
	Total Alkalinity as CaCO ₃	53	
	Total Chlorine as Cl ₂	1.5	
	Free Chlorine as Cl ₂	1.0	
Macro Determinants			
	Free & Saline Ammonia NH ₃ as N	<0.20	
	Calcium as Ca	21.5	
	Chlorides as Cl	2.83	≤300
	Fluoride as F	<0.20	≤1.5
	Magnesium as Mg	6.1	
	Nitrate & Nitrite as N	<0.1	≤ 11
	Potassium as K	1.55	
	Sodium as Na	10.2	≤ 200
	Sulphate as SO ₄	51.2	Acute Health ≤ 500 - Aesthetic ≤ 250
	Zinc as Zn	0.01	≤5

All heavy metal analyses have been performed on filtered samples.

Tests marked with an asterisk * are not SANAS accredited

These results are related only to the items tested

These results must be read in conjunction
with the Uncertainty of Measurement
list as provided by Regen Waters Laboratory

**AVENG - KEYPLAN
OPTIMUM COLLIERY**

HENDRINA

CHEMICAL ANALYSIS

Date Received : 15 August 2013

Date Reported : 29 August 2013

Quantity Analyzed: 1

G383

Analysis Results	Potable Water 14/8/2013	SANS Standards -241 (2011) Domestic Water
		Standard Limits
Micro Determinants µg/l		
Aluminium as Al	60	≤ 300
Antimony as Sb	4.27	≤20
Arsenic as As	<1	≤10
Cadmium as Cd	<1	≤3
Total Chromium as Cr	<1	≤50
Cobalt as Co	<1	≤500
Copper as Cu	<1	≤2000
Cyanide as CN *	<70	≤70
Iron as Fe	30	Chronic Health ≤ 2000 - Aesthetic ≤ 300
Lead as Pb	<1	≤10
Manganese as Mn	<10	Chronic Health ≤ 500 - Aesthetic ≤ 100
Mercury as Hg	<1	≤6
Nickel as Ni	<1	≤70
Selenium as Se	<1	≤10
Vanadium as V	<1	≤200
Organics Determinand mg/l		
Total Organic Carbon	0.59	≤ 10
Total Trihalomethanes mg/l		
Phenolic Compounds	<0.005	≤ 0.01

All heavy metal analyses have been performed on filtered samples.
Tests marked with an asterisk * are not SANAS accredited
These results are related only to the items tested

These results must be read in conjunction with the Uncertainty of Measurement list as provided by Regen Waters Laboratory

QUALITY CONTROL CHECKS

Cation Balance	2.06
Anion Balance	2.21
% Difference	-3.4
Measured TDS	142
Calculated TDS	126
Limits > 1.0 - <1.2	1.1
Calcul TDS / E.C. (0.55 - 0.70)	0.6

P.L.G UYS