

**Unsafe**  
**Grunter Gully St, Bayhead, Durban, South Africa**



**Test Conditions**

<b>Loaded Date</b>	06-05-2024 12:44	<b>Test Date</b>	03-05-2024
<b>Water Source</b>	Other	<b>Testing Method</b>	watercan
<b>Province</b>	KwaZulu-Natal	<b>Municipality</b>	eThekweni Metropolitan Municipality

**Environmental Parameters**

<b>Water Colour</b>	Brown
<b>Smell Present</b>	Yes
<b>Smell Description</b>	Sewage Smell
<b>Damage</b>	Maybe
<b>Pollution Present</b>	No

**Chemical Analysis**

<b>Nitrate: 20</b>	<b>Warning</b>
<p><b>Interpretation</b>                  Nitrate level is safe for human exposure but is high and needs to be monitored.</p> <p><b>Extra Information</b>                  Nitrate is a nutrient needed by all aquatic plants and animals to build protein. The decomposition of dead plants and animals and human waste release nitrates into the system. Excess nitrates could be due to fertilizers, agricultural runoff and sewage.</p>	
<b>Nitrite: 0</b>	<b>Safe</b>
<p><b>Interpretation</b>                  Values below 1ppm are safe.</p> <p><b>Extra Information</b>                  Cancer causing substance in high concentrations.</p>	
<b>Phosphate: 25</b>	<b>Warning</b>
<p><b>Interpretation</b>                  Phosphate levels still safe for human consumption but are approaching warning levels.</p> <p><b>Extra Information</b>                  The main effects are primarily based on aesthetic, although indirect health effects associated with the possible presence of fecal matter and fertilizers (&gt;25 ppm).</p>	

<b>Hardness: 25</b>
<p><b>Interpretation</b></p> <p>Does not have a direct impact on health. Hardness is beneficial to health but excessive hardness should be avoided.</p> <p><b>Extra Information</b></p> <p>Hardness is beneficial to health, however, excessive hardness should be avoided by sensitive groups. At &gt; 600 mg/l causes chronic effects to some individuals.</p>

<b>Total Chlorine: 0</b>	<b>Safe</b>
<p><b>Interpretation</b></p> <p>If chlorine is detectable in municipal drinking water it can be assumed that bacteria have been killed.</p> <p><b>Extra Information</b></p> <p>All water for cities and communities must be disinfected even water that comes from clean sources such as protected watersheds, reservoirs. Chlorine is the most commonly used disinfectant because it is effective and cheap. If an adequate concentration of chlorine is present in the water for few minutes, disease causing bacteria will be destroyed. A number of conditions affect the disinfection action of chlorine.</p>	

<b>Free Chlorine: 0</b>	<b>Safe</b>
<p><b>Interpretation</b></p> <p>The water is at a safe level of free chlorine for human contact.</p> <p><b>Extra Information</b></p> <p>Free available (residual) chlorine is the free chlorine concentration remaining 30 minutes after breakpoint disinfection of the water with chlorine. The free available chlorine is an indication of the efficacy of the disinfection process and thus a rapid indicator of the probable microbiological safety or otherwise of the treated water. Free available chlorine does not occur in nature.</p>	

<b>Bromine: 0</b>	<b>Safe</b>
<p><b>Interpretation</b></p> <p>Does not pose a direct health risk.</p> <p><b>Extra Information</b></p> <p>Bromine is sometimes used as an alternative to chlorine because it's less abrasive, less chemical-smelling, and less likely to trigger asthma attacks.</p>	

<b>Alkalinity: 120</b>
<p><b>Interpretation</b></p> <p>Interpret alkalinity levels in conjunction with pH.</p> <p><b>Extra Information</b></p> <p>High alkalinity promotes scaling and ineffective soap lathering but is not an immediate health risk.</p>

<b>pH: 9</b>	<b>Warning</b>
<p><b>Interpretation</b></p> <p>No significant effects on health due to toxicity of dissolved Range metal ions and protonated species, or on taste are expected. Metal ions (except manganese) are unlikely to dissolve readily unless complexing ions or agents are present. Slight metal solubility may occur at the extremes of this range. Aluminium solubility begins to increase at pH 6, and amphoteric oxides may begin to dissolve at a pH of greater than 8.5. Very slight effects on taste may be noticed on occasion.</p> <p><b>Extra Information</b></p> <p>Water that is very acidic (high concentrations of H<sup>+</sup> ions) or very basic (high concentrations of OH<sup>-</sup> ions) is unsafe to use around the home; can be dangerous if you swim in it; and will kill aquatic plants and animals. The pH for drinking water is between 7.8 and 8.4. pH can be affected by industrial waste, agricultural runoff, drainage from mining operations and sewage.</p>	

<b>Metals:</b>	<b>Safe</b>
<p><b>Interpretation</b></p> <p>No sample value submitted to evaluate.</p> <p><b>Extra Information</b></p> <p>This test checks for the presence of Cadmium, Colbalt, Copper, Iron, Lead, Mercury, Nickel, Zinc. If more than one metal is detected, values are combined.</p>	

## Bacterial Analysis

### Details

Waited 36 Hours	true	First Results (Hours)	36
Plate Clear	false	Spots Result	Unsafe

Coliform Colour: Black	Unsafe
<b>Interpretation</b> This indicates the test is positive. If the water turns black, bacteria like faecal coli are present and the water is NOT safe to drink.	
<b>Extra Information</b> Sewage discharge water may have limited faecal bacteria. Even rivers or dams have faecal matter from birds or animals.	

Blue Spots: 11
<b>Interpretation</b> Unsafe if more than 0 blue spots are visible for tap water and if more than 10 blue spots are visible for other water. This indicates traces of e-coli is present in the water.
<b>Extra Information</b> Sewage discharge water or river may not have more than 10 blue or red spots but depending on usage rather consider 10 spots as maximum.

Red Spots: 11
<b>Interpretation</b> Unsafe if more than 1 red spot is visible for tap water and if more than 10 red spots are visible for other water. This indicates traces of coliform is present in the water.
<b>Extra Information</b> Sewage discharge water or river may not have more than 10 blue or red spots but depending on usage rather consider 10 spots as maximum.