



**GREATER TZANEEN MUNICIPALITY**  
**WATER SERVICES LABORATORY**

Tzaneen Cetral Laboratory  
Portion 7 Dornhoek farm 535 LT  
Tel: +27 15 307 8217/9  
Fax : +27 15 307 8246

Ref no: ALL/ Q3/ 25-26/02/ Jan- March 2026

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

Date Sampled: Averaged: 3rd Quarter 2025/2026

Date analysed: Averaged Quartely

Feb-26



| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 8,07    | 6,88       | 7,24      | 8,28         | > 5- ≤ 9.7 Operational                |
| Turbidity (NTU)                                | 0,65    | 0,08       | 2,40      | 0,64         | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 3,38    | 4,80       | 16,13     | 12,00        | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 11,50   | 20,88      | 16,62     | 4,25         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 26,55   | 29,22      | 28,44     | 23,82        | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 42,75   | 135,71     | 108,05    | 27,66        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 19,50   | 26,40      | 71,00     | 10,7         | N/A                                   |
| Total Hardness (mg/l)                          | 24,00   | 40,60      | 53,75     | 10,0         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 14,00   | 19,80      | 27,38     | 3,7          | N/A                                   |
| Calcium as Ca (mg/l)                           | 5,61    | 7,93       | 10,96     | 1,47         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 10,00   | 20,80      | 23,38     | 6,33         | N/A                                   |
| Magnesium as Mg (mg/l)                         | 2,43    | 5,05       | 5,68      | 1,54         | N/A                                   |
| Sodium as (Na) (mg/l)                          | 8,11    | 6,51       | 33,30     | 7,8          | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 1,05    | 2,50       | 2,05      | 0,83         | N/A                                   |
| Chloride as Cl (mg/l)                          | 12,41   | 12,19      | 31,29     | 9,46         | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,05    | 0,11       | 0,43      | 0,25         | ≤ 1.5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 0,50    | 0,40       | 2,38      | 0,3          | ≤ 250 Aesthetics ≤ 500 Acute Health-1 |
| Nitrate as N (mg/l)                            | 0,10    | 0,32       | 1,58      | 0,5          | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 57,50   | 10,60      | 78,00     | 57,00        | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 14,00   | 6,00       | 13,25     | 4,33         | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,03    | 0,03       | 0,11      | 0,03         | ≤ 1.5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 115,50  | 15,60      | 52,13     | 42,0         | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,03    | 0,05       | 0,03      | 0,04         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,09    | 0,03       | 0,15      | 0,14         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 2,00       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 6,50    | 6,00       | 0,75      | 0            | ≤ 1000 Operational                    |

4 = Outside limit

Signature : .....

Date : ..... 27/02/26 .....



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**WATER SERVICES LABORATORY**

Tzaneen Cetral Laboratory  
Portion 7 Dornhoek farm 535 LT  
Tel: +27 15 307 8217/9  
Fax : +27 15 307 8246

Ref no: ALL/ Q3/ 25-26/01/ Jan- March 2026

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

Date Sampled: Averaged: 3rd Quarter 2025/2026

Date analysed: Averaged Quartely

Jan-26



**blue drop**  
CERTIFICATION  
drinking water quality  
REGULATION

| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 6,88    | 7,03       | 7,19      | 6,87         | > 5- ≤ 9.7 Operational                |
| Turbidity (NTU)                                | 0,31    | 0,26       | 0,31      | 0,69         | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 3,88    | 6,70       | 2,25      | 11,00        | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 5,78    | 20,66      | 19,39     | 3,95         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 25,29   | 25,86      | 27,16     | 21,37        | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 37,58   | 134,27     | 266,41    | 25,72        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 22,25   | 78,80      | 26,00     | 10,7         | N/A                                   |
| Total Hardness (mg/l)                          | 21,13   | 64,40      | 42,00     | 10,0         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 14,50   | 22,40      | 19,00     | 3,7          | N/A                                   |
| Calcium as Ca (mg/l)                           | 5,81    | 8,97       | 7,61      | 1,47         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 6,63    | 42,00      | 23,00     | 6,33         | N/A                                   |
| Magnesium as Mg (mg/l)                         | 1,61    | 10,20      | 5,58      | 1,54         | N/A                                   |
| Sodium as (Na) (mg/l)                          | 9,28    | 24,70      | 15,77     | 7,8          | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 1,24    | 1,64       | 0,60      | 0,83         | N/A                                   |
| Chloride as Cl (mg/l)                          | 13,08   | 12,19      | 23,40     | 9,46         | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,34    | 0,29       | 0,12      | 0,25         | ≤ 1.5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 0,25    | 0,60       | 2,00      | 0,3          | ≤ 250 Aesthetic ≤ 500 Acute Health-1  |
| Nitrate as N (mg/l)                            | 0,90    | 0,72       | 0,50      | 0,5          | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 50,00   | 22,40      | 10,00     | 57,00        | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 6,38    | 13,40      | 4,00      | 4,33         | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,04    | 0,17       | 0,01      | 0,03         | ≤ 1.5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 58,00   | 28,00      | 149,00    | 42,0         | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,06    | 0,04       | 0,00      | 0,04         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,08    | 0,09       | 0,10      | 0,15         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 5,90       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 2,75    | 16,20      | 4,13      | 0            | ≤ 1000 Operational                    |

4 = Outside limit

Signature : .....

Date : 30 / 01 / 26





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Tzaneen Cetral Laboratory  
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Ref no: ALL/ Q2/ 25-26/2/ Oct- Dec 2025

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

Date Sampled: Averaged: 2nd Quarter 2025/2026

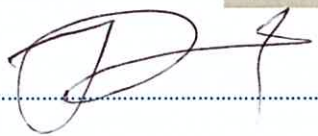
Date analysed: Averaged Quartely

Dec-25



| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 7,27    | 6,99       | 7,31      | 7,15         | > 5- ≤ 9.7 Operational                |
| Turbidity (NTU)                                | 0,34    | 0,42       | 0,13      | 0,37         | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 6,46    | 11,03      | 5,21      | 1,11         | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 6,81    | 22,70      | 22,89     | 4,25         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 23,11   | 47,17      | 25,22     | 24,36        | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 44,27   | 147,54     | 148,78    | 27,62        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 30,63   | 78,80      | 83,75     | 20,0         | N/A                                   |
| Total Hardness (mg/l)                          | 28,50   | 64,40      | 72,29     | 15,7         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 15,67   | 22,40      | 36,58     | 10,0         | N/A                                   |
| Calcium as Ca (mg/l)                           | 6,28    | 8,97       | 14,65     | 4,00         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 12,83   | 42,00      | 35,83     | 5,67         | N/A                                   |
| Magnesium as Mg (mg/l)                         | 3,12    | 10,20      | 8,70      | 1,38         | N/A                                   |
| Sodium as (Na) (mg/l)                          | 11,66   | 24,70      | 29,55     | 10,0         | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 0,95    | 1,64       | 1,23      | 0,83         | N/A                                   |
| Chloride as Cl (mg/l)                          | 12,59   | 12,19      | 22,66     | 12,05        | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,04    | 0,29       | 0,13      | 0,1          | ≤ 1.5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 0,67    | 0,60       | 5,21      | 0,0          | ≤ 250 Aesthetic ≤ 500 Acute Health-1  |
| Nitrate as N (mg/l)                            | 0,55    | 0,72       | 1,02      | 0,57         | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 27,79   | 22,40      | 5,94      | 75,00        | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 4,58    | 13,40      | 8,25      | 4,00         | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,08    | 0,17       | 0,07      | 0,01         | ≤ 1.5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 59,13   | 28,00      | 76,33     | 2,3          | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,02    | 0,04       | 1,28      | 0,07         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,15    | 0,11       | 0,08      | 0,26         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 3,17       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 6,28    | 25,27      | 13,34     | 0            | ≤ 1000 Operational                    |

 = Outside limit

Signature : 

Date : 



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**WATER SERVICES LABORATORY**

Tzaneen Cetral Laboratory  
Portion 7 Dornhoek farm 535 LT  
Tel: +27 15 307 8217/9  
Fax : +27 15 307 8246

Ref no: ALL/ Q2/ 25-26/2/ Oct- Dec 2025

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

Date Sampled: Averaged: 2nd Quarter 2025/2026

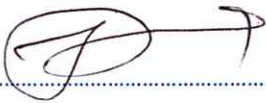
Date analysed: Averaged Quartely

Nov-25



| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 7,28    | 7,10       | 7,20      | 7,18         | > 5- ≤ 9.7 Operational                |
| Turbidity (NTU)                                | 0,23    | 0,37       | 0,14      | 0,46         | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 5,13    | 10,30      | 4,63      | 0,67         | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 6,92    | 21,54      | 26,48     | 4,32         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 21,88   | 25,65      | 25,23     | 23,17        | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 44,99   | 140,01     | 172,06    | 28,08        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 29,44   | 78,80      | 96,63     | 20           | N/A                                   |
| Total Hardness (mg/l)                          | 29,50   | 64,40      | 83,94     | 15,7         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 17,00   | 22,40      | 42,38     | 10,0         | N/A                                   |
| Calcium as Ca (mg/l)                           | 6,81    | 8,97       | 16,97     | 4,00         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 12,50   | 42,00      | 41,75     | 5,67         | N/A                                   |
| Magnesium as Mg (mg/l)                         | 3,04    | 10,20      | 10,14     | 1,38         | N/A                                   |
| Sodium as (Na) (mg/l)                          | 11,03   | 24,70      | 32,61     | 10           | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 1,10    | 1,64       | 1,34      | 0,83         | N/A                                   |
| Chloride as Cl (mg/l)                          | 13,12   | 12,19      | 23,71     | 12,05        | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,02    | 0,29       | 0,20      | 0,1          | ≤ 1.5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 1,00    | 0,60       | 6,32      | 0            | ≤ 250 Aesthetic ≤ 500 Acute Health-1  |
| Nitrate as N (mg/l)                            | 0,67    | 0,72       | 1,08      | 0,57         | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 26,69   | 22,40      | 8,75      | 75,00        | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 6,88    | 13,40      | 12,38     | 4,00         | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,10    | 0,17       | 0,11      | 0,01         | ≤ 1.5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 65,94   | 28,00      | 60,50     | 2,3          | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,02    | 0,04       | 1,90      | 0,07         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,15    | 0,13       | 0,10      | 0,23         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 3,50       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 5,04    | 6,40       | 14,32     | 0            | ≤ 1000 Operational                    |

 = Outside limit

Signature : 

Date : 27/11/25





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**WATER SERVICES LABORATORY**

Tzaneen Cetral Laboratory  
Portion 7 Dornhoek farm 535 LT  
Tel: +27 15 307 8217/9  
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Ref no: ALL/ Q2/ 25-26/1/ Oct- Dec 2025

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

Date Sampled: Averaged: 2nd Quarter 2025/2026

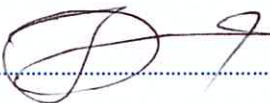
Date analysed: Averaged Quartely

Oct-25



| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 7,10    | 6,67       | 6,92      | 7,14         | > 5- ≤ 9,7 Operational                |
| Turbidity (NTU)                                | 0,45    | 0,26       | 0,27      | 0,9          | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 6,13    | 8,90       | 6,00      | 1,33         | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 6,77    | 18,19      | 26,33     | 4,34         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 21,64   | 24,48      | 25,38     | 21,57        | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 44,02   | 118,20     | 171,11    | 28,24        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 24,38   | 42,60      | 92,00     | 20           | N/A                                   |
| Total Hardness (mg/l)                          | 23,50   | 57,60      | 82,00     | 15,7         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 15,50   | 30,60      | 40,00     | 10,0         | N/A                                   |
| Calcium as Ca (mg/l)                           | 6,21    | 12,25      | 16,02     | 4,00         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 8,00    | 27,00      | 42,00     | 5,67         | N/A                                   |
| Magnesium as Mg (mg/l)                         | 1,95    | 6,56       | 10,20     | 1,38         | N/A                                   |
| Sodium as (Na) (mg/l)                          | 9,39    | 16,93      | 30,24     | 10           | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 1,35    | 3,30       | 1,30      | 0,83         | N/A                                   |
| Chloride as Cl (mg/l)                          | 13,12   | 26,37      | 21,27     | 12,05        | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,04    | 0,28       | 0,16      | 0,1          | ≤ 1,5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 0,00    | 2,20       | 6,00      | 0            | ≤ 250 Aesthetic ≤ 500 Acute Health-1  |
| Nitrate as N (mg/l)                            | 0,79    | 0,64       | 1,30      | 0,57         | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 19,88   | 39,20      | 0,00      | 75,00        | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 7,75    | 7,80       | 16,00     | 4,00         | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,19    | 0,16       | 0,08      | 0,01         | ≤ 1,5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 42,38   | 20,80      | 75,00     | 2,3          | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,04    | 0,07       | 0,01      | 0,07         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,12    | 0,09       | 0,08      | 0,31         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 1,50       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 1,33    | 12,70      | 2,63      | 0            | ≤ 1000 Operational                    |

 = Outside limit

Signature : 

Date : 31/10/25



**GREATER TZANEEN MUNICIPALITY**  
**WATER SERVICES LABORATORY**

Tzaneen Cetral Laboratory  
Portion 7 Dornhoek farm 535 LT  
Tel: +27 15 307 8217/9  
Fax : +27 15 307 8246

Ref no: ALL/ Q1/ 25-26/3/ July- Sept 2025

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

Date Sampled: Averaged: 1st Quarter 2025/2026

Date analysed: Averaged Quartely

Sept-25



**blue drop**  
CERTIFICATION

drinking water quality  
REGULATION

| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 7,64    | 6,90       | 7,16      | 7,59         | > 5- ≤ 9.7 Operational                |
| Turbidity (NTU)                                | 0,24    | 0,17       | 0,13      | 0,25         | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 5,33    | 2,80       | 4,96      | 6,77         | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 6,08    | 18,54      | 22,62     | 4,49         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 21,28   | 23,07      | 21,24     | 20,8         | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 40,09   | 120,54     | 147,00    | 29,18        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 24,67   | 42,60      | 93,79     | 26,33        | N/A                                   |
| Total Hardness (mg/l)                          | 23,04   | 57,60      | 106,13    | 32,7         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 11,92   | 30,60      | 56,38     | 11,3         | N/A                                   |
| Calcium as Ca (mg/l)                           | 4,77    | 12,25      | 22,57     | 4,54         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 11,13   | 27,00      | 49,42     | 21,33        | N/A                                   |
| Magnesium as Mg (mg/l)                         | 2,70    | 6,56       | 12,00     | 5,18         | N/A                                   |
| Sodium as (Na) (mg/l)                          | 9,36    | 16,93      | 27,76     | 10,06        | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 0,97    | 3,30       | 1,13      | 0,97         | N/A                                   |
| Chloride as Cl (mg/l)                          | 10,19   | 26,37      | 25,88     | 10,4         | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,07    | 0,28       | 0,13      | 0,05         | ≤ 1.5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 0,04    | 2,20       | 9,42      | 0,33         | ≤ 250 Aesthetic ≤ 500 Acute Health-1  |
| Nitrate as N (mg/l)                            | 0,67    | 0,64       | 1,50      | 1,2          | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 39,83   | 39,20      | 13,75     | 78           | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 4,54    | 7,80       | 8,63      | 20,00        | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,02    | 0,16       | 0,19      | 0,06         | ≤ 1.5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 45,04   | 20,80      | 11,25     | 7,7          | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,06    | 0,07       | 0,06      | 0,03         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,16    | 0,03       | 0,11      | 0,28         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 2,87       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 0,79    | 10,67      | 2,54      | 0            | ≤ 1000 Operational                    |

 = Outside limit

Signature : 

Date : 29 / 09 / 25





**GREATER TZANEEN MUNICIPALITY**  
**WATER SERVICES LABORATORY**

Tzaneen Cetral Laboratory  
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Ref no: ALL/ Q1/ 25-26/2/ July- Sept 2025

Area : Tzaneen, Nkowankowa, Letsitele and Haenertsburg

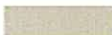
Date Sampled: Averaged: 1st Quarter 2025/2026

Date analysed: Averaged Quartely

Aug-25



| Determinants                                   | Tzaneen | Nkowankowa | Letsitele | Haenertsburg | Standard limits                       |
|------------------------------------------------|---------|------------|-----------|--------------|---------------------------------------|
| Ph (-logH)                                     | 8,00    | 7,58       | 7,36      | 7,56         | > 5- ≤ 9.7 Operational                |
| Turbidity (NTU)                                | 0,16    | 0,26       | 0,14      | 0,33         | ≤ 5 Aesthetic ≤ 1 Operational         |
| Colour (as Pt)                                 | 6,00    | 7,25       | 8,13      | 6,65         | ≤ 15 Aesthetic                        |
| Conductivity (mS/m)                            | 6,17    | 21,58      | 22,41     | 4,73         | ≤ 170 Aesthetic                       |
| Temperature °C                                 | 19,92   | 22,58      | 19,45     | 19,87        | N/A                                   |
| Total Dissolved Solids (mg/l)                  | 40,11   | 141,88     | 145,67    | 30,74        | ≤ 1200 Aesthetic                      |
| Total Alkalinity (mg/l)                        | 20,50   | 66,75      | 100,00    | 26,33        | N/A                                   |
| Total Hardness (mg/l)                          | 21,32   | 79,00      | 105,00    | 32,7         | N/A                                   |
| Calcium Hardness as CaCO <sub>3</sub> (mg/l)   | 11,38   | 42,50      | 60,00     | 11,3         | N/A                                   |
| Calcium as Ca (mg/l)                           | 4,56    | 17,02      | 24,02     | 4,54         | N/A                                   |
| Magnesium Hardness as CaCO <sub>3</sub> (mg/l) | 9,94    | 36,50      | 45,00     | 21,33        | N/A                                   |
| Magnesium as Mg (mg/l)                         | 2,42    | 8,86       | 10,93     | 5,18         | N/A                                   |
| Sodium as Na (mg/l)                            | 7,41    | 19,59      | 32,53     | 10,06        | ≤ 200 Aesthetic                       |
| Potassium as K (mg/l)                          | 1,13    | 1,30       | 1,00      | 0,97         | N/A                                   |
| Chloride as Cl (mg/l)                          | 9,27    | 25,35      | 27,65     | 10,4         | ≤ 300 Aesthetic                       |
| Fluoride as F (mg/l)                           | 0,07    | 0,20       | 0,27      | 0,05         | ≤ 1.5 Chronic Health                  |
| Sulphate as SO <sub>4</sub> (mg/l)             | 0,07    | 0,00       | 15,00     | 0,33         | ≤ 250 Aesthetic ≤ 500 Acute Health-1  |
| Nitrate as N (mg/l)                            | 0,68    | 0,33       | 1,80      | 1,2          | ≤ 11 Acute health-1                   |
| Iron as Fe (µg/l)                              | 44,00   | 46,50      | 3,00      | 78           | ≤ 300 Aesthetic ≤ 2000 Chronic Health |
| Manganese as Mn (µg/l)                         | 6,82    | 9,50       | 6,00      | 20,00        | ≤ 100 Aesthetic ≤ 400 Chronic Health  |
| Ammonia as N (mg/l)                            | 0,01    | 0,23       | 0,00      | 0,06         | ≤ 1.5 Aesthetic                       |
| Aluminium as Al (µg/l)                         | 41,07   | 21,25      | 1,00      | 7,7          | ≤ 300 Operational                     |
| Zinc as Zn (mg/l)                              | 0,08    | 0,05       | 0,02      | 0,03         | ≤ 5 Aesthetic                         |
| Free Res. Chlorine (mg/l)                      | 0,16    | 0,20       | 0,15      | 0,27         | ≤ 5 Chronic Health                    |
| E.Coli (count/100ml)                           | 0,00    | 0,00       | 0,00      | 0,00         | 0 Acute Health-1                      |
| Total Coliform Bacteria (count/100ml)          | 0,00    | 6,50       | 0,00      | 0,00         | ≤ 10 Operational                      |
| Heterotrophic plate Count (count/ml)           | 1,00    | 10,75      | 0,38      | 0            | ≤ 1000 Operational                    |

 = Outside limit

Signature : .....

Date : .....

31/08/25