

Genesee County Water Treatment Plant 2018 Water Analysis

2018 Annual Average Daily Sample Results

| Temp | pH | Turbidity | Hardness | | Alkalinity | Fluoride | Aluminum | Phosphate | Sulfate | Chloride | Chlorine |
|------|------|-----------|----------|------|------------|----------|----------|-----------------|-----------------|----------|----------|
| | | | Total | Ca | Total | F- | Al | PO ₄ | SO ₄ | Cl | Free |
| °C | S.U. | NTU | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| 14 | 7.4 | 0.1 | 114 | 92 | 78 | 0.72 | 0.18 | 2.6 | 26 | 12 | 1.4 |

2018 Water Analysis Annual Average Results

| Analyte | Frequency | Result | Maximum Contaminate Limit | Unit |
|--------------|-----------|--------------|---------------------------|------|
| Iron | Quarterly | Not Detected | - | mg/L |
| Nitrate as N | Quarterly | Not Detected | 10 | mg/L |
| Nitrite as N | Quarterly | Not Detected | 1 | mg/L |
| Sodium | Quarterly | 7 | - | mg/L |
| Arsenic | Quarterly | Not Detected | 0.01 | mg/L |
| Antimony | Annual | Not Detected | 0.006 | mg/L |
| Barium | Annual | 0.014 | 2 | mg/L |
| Beryllium | Annual | Not Detected | 0.004 | mg/L |
| Cadmium | Annual | Not Detected | 0.005 | mg/L |
| Chromium | Annual | Not Detected | 0.1 | mg/L |
| Lead | Annual | Not Detected | 0.015 | mg/L |
| Mercury | Annual | Not Detected | 0.002 | mg/L |
| Nickel | Annual | 0.00036 | 0.1 | mg/L |
| Selenium | Annual | Not Detected | 0.05 | mg/L |
| Thallium | Annual | Not Detected | 0.002 | mg/L |

Chemicals Used in Treating Water And Their Purpose

| Chemical | Purpose |
|---------------------|---|
| Alum | Works as the primary coagulant in the water treatment process. |
| Chlorine | Disinfectant. Kills any remaining parasites, bacteria and viruses. |
| Fluoride | Prevents tooth decay. |
| Phosphate | Anti-corrosion. Forms a protective layer and acts as a barrier to corrosion, reducing dissolution of lead into the water. |
| Polymer | Coagulant aid in the water treatment process. |
| Potassium Manganate | Algae control. |
| Sodium Hydroxide | pH control. |