

Rocky View Water Co-op

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Lab Number: 98628

PO Number:

Sample Info: Semi Annual
RR22

Sampled By: Jay Wray
Date Sampled: 1/15/2025
Date Received: 1/15/2025
Date Reported: 1/30/2025

TEST REPORT

| Analyte | Units | Result | CDW Guideline Maximum | Detection Limit |
|--|-------|--------|-----------------------|-----------------|
| Calcium | mg/L | 44.5 | No Guideline | 0.02 |
| Iron | mg/L | <0.03 | AO: 0.3 | 0.03 |
| Magnesium | mg/L | 15.9 | No Guideline | 0.02 |
| Manganese | mg/L | <0.01 | AO: 0.02, MAC: 0.12 | 0.01 |
| Potassium | mg/L | 0.6 | No Guideline | 0.02 |
| Sodium | mg/L | 4.1 | AO: 200 | 0.02 |
| Bicarbonates | mg/L | 144 | No Guideline | - |
| Bromides | mg/L | 0.2 | No Guideline | 0.2 |
| Carbonates | mg/L | 0 | No Guideline | - |
| Chlorides | mg/L | 10.9 | AO: 250 | 0.1 |
| Fluorides | mg/L | 0.11 | MAC: 1.5 | 0.02 |
| Nitrates as N | mg/L | 0.08 | MAC: 10 | 0.04 |
| Nitrites as N | mg/L | <0.05 | MAC: 1 | 0.05 |
| NO ₃ + NO ₂ as N | mg/L | 0.08 | No Guideline | 0.04 |
| Sulfates | mg/L | 50 | AO: 500 | 0.9 |

| Parameter | Units | Result | CDW Guideline Maximum | Detection Limit |
|--|-------|---------|-----------------------|-----------------|
| Electrical Conductivity (at 25°C) | µS/cm | 352 | No Guideline | 0.2 |
| pH | pH | 7.87 | 7.0 - 10.5 | - |
| Hardness (as CaCO ₃) | mg/L | 177 | No Guideline | 0.1 |
| Total Alkalinity (as CaCO ₃) | mg/L | 118 | No Guideline | 3 |
| P-Alkalinity (as CaCO ₃) | mg/L | 0 | No Guideline | - |
| Hydroxide (as CaCO ₃) | mg/L | 0 | No Guideline | - |
| Total Dissolved Solids (calculated) | mg/L | 197 | AO: 500 | 4 |
| Sulfides as S | mg/L | <0.02 | AO: 0.05 | 0.02 |
| Color | TCU | <5 | AO: 15 | 5 |
| Ammonia Nitrogen | mg/L | 0.5 | No Guideline | 0.5 |
| Total Organic Carbon | mg/L | 1.6 | No Guideline | 0.5 |
| Bromate | mg/L | <0.0095 | MAC: 0.01 | 0.0095 |
| Chloramines | mg/L | 0.2 | No Guideline | 0.1 |
| Chlorate | mg/L | <0.10 | MAC: 1 | 0.10 |
| Chlorite | mg/L | <0.10 | MAC: 1 | 0.10 |

| | | | |
|----------------|------|-------------------------|------|
| Sum of Cations | 3.72 | TDS / EC Ratio | 0.56 |
| Sum of Anions | 3.72 | Sodium Adsorption Ratio | 0.13 |
| Ion Balance | 1.00 | Saturation Index | 0.20 |

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| Trace Metals | Units | Result | CDW Guideline Maximum | Detection Limit |
|--------------|-------|--------|-----------------------|-----------------|
| Boron | µg/L | 4.4 | MAC: 5000 | 0.5 |
| Aluminum | µg/L | 30.5 | OG: 100, MAC: 2900 | 0.2 |
| Chromium | µg/L | 0.2 | MAC: 50 | 0.1 |
| Copper | µg/L | 1.3 | AO: 1000, MAC: 2000 | 0.08 |
| Zinc | µg/L | <0.2 | AO: 5000 | 0.2 |
| Arsenic | µg/L | 0.1 | MAC: 10 | 0.04 |
| Selenium | µg/L | 0.4 | MAC: 50 | 0.04 |
| Strontium | µg/L | 195 | MAC: 7000 | 0.06 |
| Silver | µg/L | <0.04 | No Guideline | 0.04 |
| Cadmium | µg/L | <0.05 | MAC: 7 | 0.05 |
| Antimony | µg/L | <0.3 | MAC: 6 | 0.3 |
| Barium | µg/L | 39.5 | MAC: 2000 | 0.1 |
| Mercury | µg/L | <0.05 | MAC: 1 | 0.05 |
| Lead | µg/L | <0.1 | MAC: 5 | 0.1 |
| Uranium | µg/L | 0.2 | MAC: 20 | 0.04 |

WSH Labs (1992) Ltd. as per: _____

Legalities**Lab Number:** 98628

- (1) The results above are related only to the items analyzed.
- (2) Results apply to the sample(s) as received. Date and time sampled are solely provided by the client.
- (3) Analytical determinations were performed in Calgary, AB. 3851B - 21 Street NE.
- (4) Condition of sample(s) upon receipt:
Acceptable
- (5) External provider(s) of laboratory results:
BV Labs

References

- (1) Accredited by CALA to ISO/IEC 17025 for specific tests.
- (2) Guidelines for Canadian Drinking Water Quality are provided courtesy of Health Canada, July 2024.
https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/water-eau/sum_guide-res_recom/summary-tables-eng-2024-07.pdf

Acronyms & Nomenclatures

< denotes less than detection limit
> denotes greater than
AO = Aesthetic Objective
CDW = Canadian Drinking Water

MAC = Maximum Acceptable Concentration
OG = Operational Guidance Value
TNTC = Too Numerous To Count (>80 colonies)

Standard Methods for the Examination of Water and Wastewater 23rd Edition (2017)

Alkalinity. 2320 B. Titration Method.
Ammonia Nitrogen. 4500-NH₃ C. Titrimetric Method.
Anions. 4110 B. Ion Chromatography with Chemical Suppression of Eluent Conductivity.
Biochemical Oxygen Demand. 5210 B. 5-Day BOD Test.
Color. 2120 B. Visual Comparison Method.
Conductivity. 2510 B. Laboratory Method.
Fluoride. 4500-F⁻ C. Ion-Selective Electrode Method.
Hardness. 2340 B. Hardness by Calculation.
Metals. 3125 B. Inductively Coupled Plasma / Mass Spectrometry (ICP-MS) Method.
Organic Carbon. 5310 B. High-Temperature Combustion Method.
pH. 4500-H⁺ B. Electrometric Method.
Total Kjeldahl Nitrogen / Nitrogen (Organic). 4500-Norg B. Macro-Kjeldahl Method.
Total Suspended Solids. 2540 D. Total Suspended Solids Dried at 103-105°C.
Turbidity. 2130 B. Nephelometric Method.

Hach Methods

Chemical Oxygen Demand. Hach Method 8000.
Chlorine, Total & Free. As per Hach CN66 Test Kit Instructions.
Coliforms, Total and E. coli. (Membrane Filtration). Hach Method 10029.
Ortho-Phosphate. Hach Method 8048.
Sulfides. Hach Method 8131.
Tannin & Lignin. Hach Method 8193.
Total Phosphate. Hach Method 8190.