



**Aaron Drilling Inc.**  
 211 - 3 Street NE, PO Box 434  
 Black Diamond, AB T0L 0H0

**Phone:** (403) 938-4961      **Lab Number:** 92051  
**Fax:** (403) 938-3324  
**Email:**                                      **PO Number:**

**Sample Info:** 9492

**Sampled By:**  
**Date Sampled:** 1/27/2022  
**Date Received:** 1/27/2022  
**Date Reported:** 1/28/2022

**TEST REPORT**

Analyte	Units	Result	CDW Guideline Maximum	Detection Limit
Calcium	mg/L	21.7	No Guideline	0.02
Iron	mg/L	0.05	AO: 0.3	0.03
Magnesium	mg/L	12.8	No Guideline	0.02
Manganese	mg/L	0.02	AO: 0.02, MAC: 0.12	0.01
Potassium	mg/L	1.9	No Guideline	0.02
Sodium	mg/L	149	AO: 200	0.02
Bicarbonates	mg/L	358	No Guideline	-
Bromides	mg/L	<0.2	No Guideline	0.2
Carbonates	mg/L	0	No Guideline	-
Chlorides	mg/L	7.4	AO: 250	0.1
Fluorides	mg/L	0.48	MAC: 1.5	0.02
Nitrates as N	mg/L	0.11	MAC: 10	0.04
Nitrites as N	mg/L	<0.05	MAC: 1	0.05
NO <sub>3</sub> + NO <sub>2</sub> as N	mg/L	0.11	No Guideline	0.04
Sulfates	mg/L	123	AO: 500	0.9

Parameter	Units	Result	CDW Guideline Maximum	Detection Limit
Electrical Conductivity (at 25°C)	µS/cm	834	No Guideline	0.2
pH	pH	8.25	7.0 - 10.5	-
Hardness (as CaCO <sub>3</sub> )	mg/L	107	No Guideline	0.1
Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	294	No Guideline	3
P-Alkalinity (as CaCO <sub>3</sub> )	mg/L	0	No Guideline	-
Hydroxide (as CaCO <sub>3</sub> )	mg/L	0	No Guideline	-
Total Dissolved Solids (calculated)	mg/L	493	AO: 500	4

WSH Labs (1992) Ltd. as per: \_\_\_\_\_

Sum of Cations	8.66	TDS / EC Ratio	0.59
Sum of Anions	8.68	Sodium Adsorption Ratio	6.27
Ion Balance	1.00	Saturation Index	0.59

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**Legalities****Lab Number:** 92051

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- (1) The results above are related only to the items analyzed.
- (2) Results apply to the sample(s) as received.
- (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:  
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**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, September 2020.  
[https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt\\_formats/pdf/pubs/water-eau/sum\\_guide-res\\_recom/summary-table-EN-2020-02-11.pdf](https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/water-eau/sum_guide-res_recom/summary-table-EN-2020-02-11.pdf)

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**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)

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

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**Alkalinity.** 2320 B. Titration Method.  
**Ammonia Nitrogen.** 4500-NH<sub>3</sub> 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<sup>-</sup> 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<sup>+</sup> 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.

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**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.