

CERTIFICATE OF ANALYSIS

REPORTED TO Black Mountain Irrigation District
285 Gray Avenue
KELOWNA, BC V1X 1W8

ATTENTION Bryan Vig

PO NUMBER

PROJECT Screen Works/ Chemistry

PROJECT INFO

WORK ORDER 26F4241

RECEIVED / TEMP 2026-06-29 11:25 / 18.4°C

REPORTED 2026-07-07 17:15

COC NUMBER No Number

Introduction:

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Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



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If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Black Mountain Irrigation District
Screen Works/ Chemistry

WORK ORDER REPORTED 26F4241
2026-07-07 17:15

Analyte	Result	RL	Units	Analyzed	Qualifier
Screenworks (26F4241-01) Matrix: Drinking Water Sampled: 2026-06-29 07:32					
<i>Field Parameters</i>					
Chlorine, Free	2.40	0.02	mg/L	2026-06-29	
Temperature, field	18.5		°C	2026-06-29	
<i>General Parameters</i>					
Alkalinity, Total (as CaCO ₃)	37.0	1.0	mg/L	2026-07-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Bicarbonate (as CaCO ₃)	37.0	1.0	mg/L	2026-07-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Carbon, Total Organic	3.04	0.50	mg/L	2026-07-03	
Colour, True	< 5.0	5.0	CU	2026-06-30	
Conductivity (EC)	109	2.0	µS/cm	2026-07-02	
pH	6.87	0.10	pH units	2026-07-02	HT2
Turbidity	0.62	0.10	NTU	2026-07-02	
UV Transmittance @ 254nm	89.0	0.10	% T	2026-07-02	

Screenworks (26F4241-01RE1) | Matrix: Drinking Water | Sampled: 2026-06-29 07:32

<i>General Parameters</i>					
pH	7.28	0.10	pH units	2026-07-02	HT2, LOW EC

WTP Intake Raw (26F4241-02) | Matrix: Water | Sampled: 2026-06-29 07:54

<i>Field Parameters</i>					
Temperature, field	13.4		°C	2026-06-29	
<i>General Parameters</i>					
Carbon, Total Organic	3.81	0.50	mg/L	2026-07-03	

Pearson School (26F4241-03) | Matrix: Water | Sampled: 2026-06-29 09:01

<i>Anions</i>					
Chloride	9.99	0.10	mg/L	2026-07-02	
Fluoride	< 0.10	0.10	mg/L	2026-07-02	
Nitrate (as N)	< 0.010	0.010	mg/L	2026-07-02	
Nitrite (as N)	< 0.010	0.010	mg/L	2026-07-02	
Sulfate	3.7	1.0	mg/L	2026-07-02	
<i>Calculated Parameters</i>					
Hardness, Total (as CaCO ₃)	35.6	0.500	mg/L	N/A	
Langelier Index	-1.7	-5.0		2026-07-06	CT10
Solids, Total Dissolved	60.4	1.00	mg/L	N/A	

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2026-07-07 17:15

Analyte	Result	RL	Units	Analyzed	Qualifier
Pearson School (26F4241-03) Matrix: Water Sampled: 2026-06-29 09:01, Continued					
<i>Field Parameters</i>					
Chlorine, Free	0.74	0.02	mg/L	2026-06-29	
Temperature, field	19.2		°C	2026-06-29	
<i>General Parameters</i>					
Alkalinity, Total (as CaCO ₃)	42.3	1.0	mg/L	2026-07-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Bicarbonate (as CaCO ₃)	42.3	1.0	mg/L	2026-07-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Colour, True	< 5.0	5.0	CU	2026-06-30	
Conductivity (EC)	114	2.0	µS/cm	2026-07-02	
Cyanide, Total	< 0.0020	0.0020	mg/L	2026-07-02	
pH	7.25	0.10	pH units	2026-07-02	HT2
Temperature, at pH	22.7		°C	2026-07-02	HT2
Turbidity	0.29	0.10	NTU	2026-07-02	
<i>Total Metals</i>					
Aluminum, total	0.218	0.0050	mg/L	2026-07-03	
Antimony, total	< 0.00020	0.00020	mg/L	2026-07-03	
Arsenic, total	< 0.00050	0.00050	mg/L	2026-07-03	
Barium, total	0.0078	0.0050	mg/L	2026-07-03	
Boron, total	< 0.0500	0.0500	mg/L	2026-07-03	
Cadmium, total	< 0.000010	0.000010	mg/L	2026-07-03	
Calcium, total	10.6	0.20	mg/L	2026-07-03	
Chromium, total	< 0.00050	0.00050	mg/L	2026-07-03	
Cobalt, total	< 0.00010	0.00010	mg/L	2026-07-03	
Copper, total	0.00158	0.00040	mg/L	2026-07-03	
Iron, total	0.020	0.010	mg/L	2026-07-03	
Lead, total	< 0.00020	0.00020	mg/L	2026-07-03	
Magnesium, total	2.19	0.010	mg/L	2026-07-03	
Manganese, total	0.00483	0.00020	mg/L	2026-07-03	
Mercury, total	< 0.000010	0.000010	mg/L	2026-07-06	
Molybdenum, total	0.00047	0.00010	mg/L	2026-07-03	
Nickel, total	< 0.00040	0.00040	mg/L	2026-07-03	
Potassium, total	0.76	0.10	mg/L	2026-07-03	
Selenium, total	< 0.00050	0.00050	mg/L	2026-07-03	
Sodium, total	7.31	0.10	mg/L	2026-07-03	
Strontium, total	0.0553	0.0010	mg/L	2026-07-03	
Uranium, total	0.000054	0.000020	mg/L	2026-07-03	
Zinc, total	< 0.0040	0.0040	mg/L	2026-07-03	

Well #5 (26F4241-04) | Matrix: Water | Sampled: 2026-06-29 10:08

TEST RESULTS

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WORK ORDER REPORTED 26F4241
2026-07-07 17:15

Analyte	Result	RL	Units	Analyzed	Qualifier
Well #5 (26F4241-04) Matrix: Water Sampled: 2026-06-29 10:08, Continued					
Anions					
Chloride	15.2	0.10	mg/L	2026-07-02	
Fluoride	0.13	0.10	mg/L	2026-07-02	
Nitrate (as N)	4.54	0.010	mg/L	2026-07-02	
Nitrite (as N)	< 0.010	0.010	mg/L	2026-07-02	
Sulfate	31.5	1.0	mg/L	2026-07-02	
Calculated Parameters					
Hardness, Total (as CaCO ₃)	261	0.500	mg/L	N/A	
Langelier Index	0.4	-5.0		2026-07-06	CT10
Solids, Total Dissolved	300	1.00	mg/L	N/A	
Field Parameters					
Chlorine, Free	0.77	0.02	mg/L	2026-06-29	
Temperature, field	11.9		°C	2026-06-29	
General Parameters					
Alkalinity, Total (as CaCO ₃)	204	1.0	mg/L	2026-07-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Bicarbonate (as CaCO ₃)	204	1.0	mg/L	2026-07-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	1.0	mg/L	2026-07-02	
Colour, True	< 5.0	5.0	CU	2026-06-30	
Conductivity (EC)	532	2.0	µS/cm	2026-07-02	
Cyanide, Total	< 0.0020	0.0020	mg/L	2026-07-02	
pH	7.96	0.10	pH units	2026-07-02	HT2
Temperature, at pH	22.6		°C	2026-07-02	HT2
Turbidity	< 0.10	0.10	NTU	2026-07-02	
Total Metals					
Aluminum, total	< 0.0050	0.0050	mg/L	2026-07-03	
Antimony, total	< 0.00020	0.00020	mg/L	2026-07-03	
Arsenic, total	< 0.00050	0.00050	mg/L	2026-07-03	
Barium, total	0.0212	0.0050	mg/L	2026-07-03	
Boron, total	< 0.0500	0.0500	mg/L	2026-07-03	
Cadmium, total	< 0.000010	0.000010	mg/L	2026-07-03	
Calcium, total	79.2	0.20	mg/L	2026-07-03	
Chromium, total	< 0.00050	0.00050	mg/L	2026-07-03	
Cobalt, total	< 0.00010	0.00010	mg/L	2026-07-03	
Copper, total	0.00223	0.00040	mg/L	2026-07-03	
Iron, total	< 0.010	0.010	mg/L	2026-07-03	
Lead, total	0.00025	0.00020	mg/L	2026-07-03	
Magnesium, total	15.2	0.010	mg/L	2026-07-03	
Manganese, total	< 0.00020	0.00020	mg/L	2026-07-03	
Mercury, total	< 0.000010	0.000010	mg/L	2026-07-06	

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Analyte	Result	RL	Units	Analyzed	Qualifier
Well #5 (26F4241-04) Matrix: Water Sampled: 2026-06-29 10:08, Continued					
<i>Total Metals, Continued</i>					
Molybdenum, total	0.00195	0.00010	mg/L	2026-07-03	
Nickel, total	< 0.00040	0.00040	mg/L	2026-07-03	
Potassium, total	2.16	0.10	mg/L	2026-07-03	
Selenium, total	0.00144	0.00050	mg/L	2026-07-03	
Sodium, total	12.3	0.10	mg/L	2026-07-03	
Strontium, total	0.334	0.0010	mg/L	2026-07-03	
Uranium, total	0.00253	0.000020	mg/L	2026-07-03	
Zinc, total	0.0049	0.0040	mg/L	2026-07-03	

Well #6 (26F4241-05) | Matrix: Water | Sampled: 2026-06-29 10:14

<i>Anions</i>					
Chloride	6.82	0.10	mg/L	2026-07-02	
Fluoride	0.13	0.10	mg/L	2026-07-02	
Nitrate (as N)	0.949	0.010	mg/L	2026-07-02	
Nitrite (as N)	< 0.010	0.010	mg/L	2026-07-02	
Sulfate	27.7	1.0	mg/L	2026-07-02	

<i>Calculated Parameters</i>					
Hardness, Total (as CaCO3)	224	0.500	mg/L	N/A	
Langelier Index	0.4	-5.0		2026-07-06	CT10
Solids, Total Dissolved	249	1.00	mg/L	N/A	

<i>Field Parameters</i>					
Chlorine, Free	< 0.02	0.02	mg/L	2026-06-29	
Temperature, field	13.3		°C	2026-06-29	

<i>General Parameters</i>					
Alkalinity, Total (as CaCO3)	192	1.0	mg/L	2026-07-02	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Bicarbonate (as CaCO3)	192	1.0	mg/L	2026-07-02	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2026-07-02	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2026-07-02	
Colour, True	< 5.0	5.0	CU	2026-06-30	
Conductivity (EC)	448	2.0	µS/cm	2026-07-02	
Cyanide, Total	< 0.0020	0.0020	mg/L	2026-07-02	
pH	8.04	0.10	pH units	2026-07-02	HT2
Temperature, at pH	22.8		°C	2026-07-02	HT2
Turbidity	< 0.10	0.10	NTU	2026-07-02	

<i>Total Metals</i>					
Aluminum, total	< 0.0050	0.0050	mg/L	2026-07-03	
Antimony, total	< 0.00020	0.00020	mg/L	2026-07-03	
Arsenic, total	< 0.00050	0.00050	mg/L	2026-07-03	

TEST RESULTS

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2026-07-07 17:15

Analyte	Result	RL	Units	Analyzed	Qualifier
Well #6 (26F4241-05) Matrix: Water Sampled: 2026-06-29 10:14, Continued					
<i>Total Metals, Continued</i>					
Barium, total	0.0141	0.0050	mg/L	2026-07-03	
Boron, total	< 0.0500	0.0500	mg/L	2026-07-03	
Cadmium, total	< 0.000010	0.000010	mg/L	2026-07-03	
Calcium, total	68.6	0.20	mg/L	2026-07-03	
Chromium, total	< 0.00050	0.00050	mg/L	2026-07-03	
Cobalt, total	< 0.00010	0.00010	mg/L	2026-07-03	
Copper, total	< 0.00040	0.00040	mg/L	2026-07-03	
Iron, total	< 0.010	0.010	mg/L	2026-07-03	
Lead, total	< 0.00020	0.00020	mg/L	2026-07-03	
Magnesium, total	12.8	0.010	mg/L	2026-07-03	
Manganese, total	0.00093	0.00020	mg/L	2026-07-03	
Mercury, total	< 0.000010	0.000010	mg/L	2026-07-06	
Molybdenum, total	0.00146	0.00010	mg/L	2026-07-03	
Nickel, total	< 0.00040	0.00040	mg/L	2026-07-03	
Potassium, total	1.91	0.10	mg/L	2026-07-03	
Selenium, total	0.00062	0.00050	mg/L	2026-07-03	
Sodium, total	9.59	0.10	mg/L	2026-07-03	
Strontium, total	0.278	0.0010	mg/L	2026-07-03	
Uranium, total	0.000865	0.000020	mg/L	2026-07-03	
Zinc, total	< 0.0040	0.0040	mg/L	2026-07-03	

Sample Qualifiers:

CT10 Results were based on lab pH.

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.

LOW EC Low ionic pH analysis using KCl addition.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Black Mountain Irrigation District
Screen Works/ Chemistry

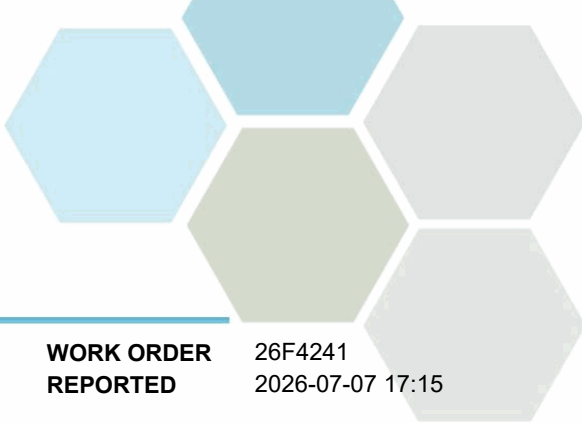
WORK ORDER REPORTED 26F4241
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	Kelowna
Colour, True in Water	SM 2120 C (2021)	Spectrophotometry (456 nm)	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Cyanide, SAD in Water	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Langelier Index in Water	SM 2330 B (2021)	Calculation		N/A
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Turbidity in Water	SM 2130 B (2020)	Nephelometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
CU	Colour Units (referenced against a platinum cobalt standard)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Black Mountain Irrigation District	WORK ORDER	26F4241
PROJECT	Screen Works/ Chemistry	REPORTED	2026-07-07 17:15

General Comments:

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