

### **CERTIFICATE OF ANALYSIS**

**REPORTED TO** Kaleden Irrigation District

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.

119 Ponderosa Avenue Kaleden, BC V0H 1K0

**ATTENTION** Mike Snair **WORK ORDER** 24B1695

**PO NUMBER** 

THMs **REPORTED** 2024-02-23 14:35 **PROJECT** 

No Number **PROJECT INFO COC NUMBER** 

### Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

We've Got Chemistry

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

Ahead of the Curve

research, regulation and instrumentation, analytical centre the knowledge you BEFORE you need it, so you can stay up to date and in the know.

2024-02-15 09:23 / 6.1°C

Through and knowledge, the more are your technical

**RECEIVED / TEMP** 

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

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

#### Authorized By:

Team CARO

Client Service Representative

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



# **TEST RESULTS**

REPORTED TO PROJECT	Kaleden Irrigation District THMs				WORK ORDER REPORTED	24B1695 2024-02-23 14:35	
Analyte		Result	Guideline	RL	Units	Analyzed	Qualifie
100 Ash Ave (24B	1695-01)   Matrix: Water   Sa	ampled: 2024-	02-14 10:53				
Calculated Paramet	ters						
Total Trihalometha	nes	0.0858	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids							
Monochloroacetic /	Acid	< 0.0020	N/A	0.0020	ma/l	2024-02-21	
Monobromoacetic Acid		< 0.0020	N/A	0.0020		2024-02-21	
Dichloroacetic Acid		0.0142	N/A	0.0020		2024-02-21	
Trichloroacetic Acid		0.0234	N/A	0.0020		2024-02-21	
Dibromoacetic Acid		< 0.0020	N/A	0.0020		2024-02-21	
Total Haloacetic Acids (HAA5)		0.0377	MAC = 0.08	0.00200		N/A	
Surrogate: 2-Bromopropionic Acid		107		70-130		2024-02-21	
Volatile Organic Co							
Bromodichloromethane		0.0075	N/A	0.0010	mg/L	2024-02-22	
Bromoform		< 0.0010	N/A	0.0010		2024-02-22	
Chloroform		0.0783	N/A	0.0010		2024-02-22	
Dibromochloromet	hane	< 0.0010	N/A	0.0010		2024-02-22	
Surrogate: Toluene	e-d8	77		70-130	%	2024-02-22	
Surrogate: Toluene Surrogate: 4-Brom		77 78		70-130 70-130		2024-02-22 2024-02-22	
Surrogate: 4-Brom	ofluorobenzene 4B1695-02)   Matrix: Water	78	24-02-14 11:43				
Surrogate: 4-Brom	ofluorobenzene 24B1695-02)   Matrix: Water ters	78	24-02-14 11:43 MAC = 0.1		%		
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Parameter  Total Trihalometha	ofluorobenzene 24B1695-02)   Matrix: Water ters	78   Sampled: 20		70-130	%	2024-02-22	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Parameter  Total Trihalometha	ofluorobenzene 24B1695-02)   Matrix: Water ders nes	78   Sampled: 20		70-130	% mg/L	2024-02-22	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Parameter  Total Trihalometha  Haloacetic Acids	efluorobenzene  24B1695-02)   Matrix: Water ters nes	78   Sampled: 20 0.0745	MAC = 0.1	0.00400	% mg/L	2024-02-22 N/A	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Parameter  Total Trihalometha  Haloacetic Acids  Monochloroacetic	efluorobenzene  24B1695-02)   Matrix: Water ters nes  Acid Acid	78   Sampled: 20 0.0745 < 0.0020	MAC = 0.1 N/A	0.00400	mg/L mg/L mg/L	N/A 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Parameter  Total Trihalometha  Haloacetic Acids  Monochloroacetic  Monobromoacetic	ofluorobenzene  24B1695-02)   Matrix: Water ters nes  Acid Acid	78   Sampled: 20 0.0745  < 0.0020 < 0.0020	MAC = 0.1 N/A N/A	0.00400 0.0020 0.0020	mg/L mg/L mg/L mg/L	N/A 2024-02-21 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet  Total Trihalometha  Haloacetic Acids  Monochloroacetic  Monobromoacetic  Dichloroacetic Acid	ofluorobenzene  24B1695-02)   Matrix: Water  ders nes  Acid Acid d	78   Sampled: 20 0.0745  < 0.0020 < 0.0020 0.0211	MAC = 0.1 N/A N/A N/A	0.00400 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet Total Trihalometha  Haloacetic Acids  Monochloroacetic Monobromoacetic Dichloroacetic Acid Trichloroacetic Acid	efluorobenzene  24B1695-02)   Matrix: Water  ders nes  Acid Acid d d	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204	MAC = 0.1  N/A  N/A  N/A  N/A  N/A	0.00400 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet Total Trihalometha  Haloacetic Acids  Monochloroacetic Monobromoacetic Dichloroacetic Acid Trichloroacetic Acid Dibromoacetic Acid	eduorobenzene  24B1695-02)   Matrix: Water  ders  nes  Acid Acid Id	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204   < 0.0020	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  N/A  N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 2024-02-21 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet Total Trihalometha  Haloacetic Acids  Monochloroacetic Dichloroacetic Acid Trichloroacetic Acid Dibromoacetic Acid Total Haloacetic Acid Surrogate: 2-Brom	eduorobenzene  24B1695-02)   Matrix: Water  ders nes  Acid Acid d d d d cids (HAA5) opropionic Acid	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204   < 0.0020   0.0415	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  N/A  N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 2024-02-21 N/A	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Parametro Total Trihalometha  Haloacetic Acids  Monochloroacetic Acid  Dichloroacetic Acid  Trichloroacetic Acid  Dibromoacetic Acid  Total Haloacetic Acid	editorobenzene  24B1695-02)   Matrix: Water  ders  nes  Acid Acid d d d did cids (HAA5) opropionic Acid  mpounds (VOC)	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204   < 0.0020   0.0415	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  N/A  N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 2024-02-21 N/A	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet  Total Trihalometha  Haloacetic Acids  Monochloroacetic Acid  Dichloroacetic Acid  Trichloroacetic Acid  Total Haloacetic Acid  Surrogate: 2-Brom  Volatile Organic Co	editorobenzene  24B1695-02)   Matrix: Water  ders  nes  Acid Acid d d d did cids (HAA5) opropionic Acid  mpounds (VOC)	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204   < 0.0020   0.0415   115	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  N/A  MAC = 0.08	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020 70-130	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 N/A 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet Total Trihalometha  Haloacetic Acids  Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Dibromoacetic Acid Total Haloacetic Acid Surrogate: 2-Brom  Volatile Organic Co	editorobenzene  24B1695-02)   Matrix: Water  ders  nes  Acid Acid d d d did cids (HAA5) opropionic Acid  mpounds (VOC)	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204   < 0.0020   0.0415   115   0.0067	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  MAC = 0.08	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020 70-130	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 N/A 2024-02-21 2024-02-21	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet Total Trihalometha  Haloacetic Acids  Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Total Haloacetic Acid Total Haloacetic Acid Surrogate: 2-Brom  Volatile Organic Co  Bromodichlorometi Bromoform	edB1695-02)   Matrix: Water ders nes Acid Acid d d d d d d d d mpounds (VOC) hane	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   < 0.00211   0.0204   < 0.0020   0.0415   115   0.0067   < 0.0010	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  MAC = 0.08	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020 0.00200 70-130	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 N/A 2024-02-21  2024-02-22 2024-02-22	
Surrogate: 4-Brom  621 Linden Ave (2  Calculated Paramet Total Trihalometha  Haloacetic Acids  Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Total Haloacetic Acid Total Haloacetic Acid Surrogate: 2-Brom  Volatile Organic Co  Bromodichlorometic Bromoform Chloroform	edB1695-02)   Matrix: Water ders nes  Acid Acid d d d d di cids (HAA5) opropionic Acid mpounds (VOC) hane	78   Sampled: 20 0.0745   < 0.0020   < 0.0020   0.0211   0.0204   < 0.0020   0.0415   115   0.0067   < 0.0010   0.0678	MAC = 0.1  N/A  N/A  N/A  N/A  N/A  N/A  MAC = 0.08	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020 0.00200 70-130 0.0010 0.0010	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A  2024-02-21 2024-02-21 2024-02-21 2024-02-21 N/A 2024-02-21 2024-02-22 2024-02-22 2024-02-22	



## **APPENDIX 1: SUPPORTING INFORMATION**

**REPORTED TO** Kaleden Irrigation District

**PROJECT** THMs

WORK ORDER

24B1695

REPORTED

2024-02-23 14:35

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond

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

### Glossary of Terms:

RL Reporting Limit (default)

Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors

MAC Maximum Acceptable Concentration (health based)

mg/L Milligrams per litre

EPA United States Environmental Protection Agency Test Methods

### **Guidelines Referenced in this Report:**

Guidelines for Canadian Drinking Water Quality (Health Canada, September 2022)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user

### **General Comments:**

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Caro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed. The quality control (QC) data is available upon request

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted red. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do <u>not</u> take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager:TeamCaro@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.