How to Read Your Report

Spring 2020

Thank you for Testing with CARO!

You have come a long way from collecting your sample until receiving the reports. And we want to thank you for helping make the world safer and healthier. Now, you are wondering how to interpret the data and insights you have received. We are here to help you understand our report!

Page 1

This page includes all reporting and project information we received at the time of sample submission. It will tell you the date, time, and temperature that we received your submission at, as well as the date your results were reported on.

Your unique CARO work order number can also be found here. This is a 7-digit number that we use to personally identify your submission. If you do call or email in with questions about your report or your submission, be sure to reference this number so we can easily find it.

The “Introduction" section summarizes the CALA Accreditation to ISO standards that CARO upholds.

CERTIFICATE OF ANALYSIS

REPORTED TO: Company Name, Address, City, Province, Postal Code

ATTENTION: Client Name

PO NUMBER: ##

PROJECT: Project Name

PROJECT INFO: Project Info

WORK ORDER: #######

RECEIVED / TEMP: Date, Time, Temp

REPORTED: Date, Time

COC NUMBER: No 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

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

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

you have any quest... concerns, please contact me at teamcaro@caro.ca

Authorized By:

Team CARO

Client Service Represe...

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Caring About Results, Obviously.

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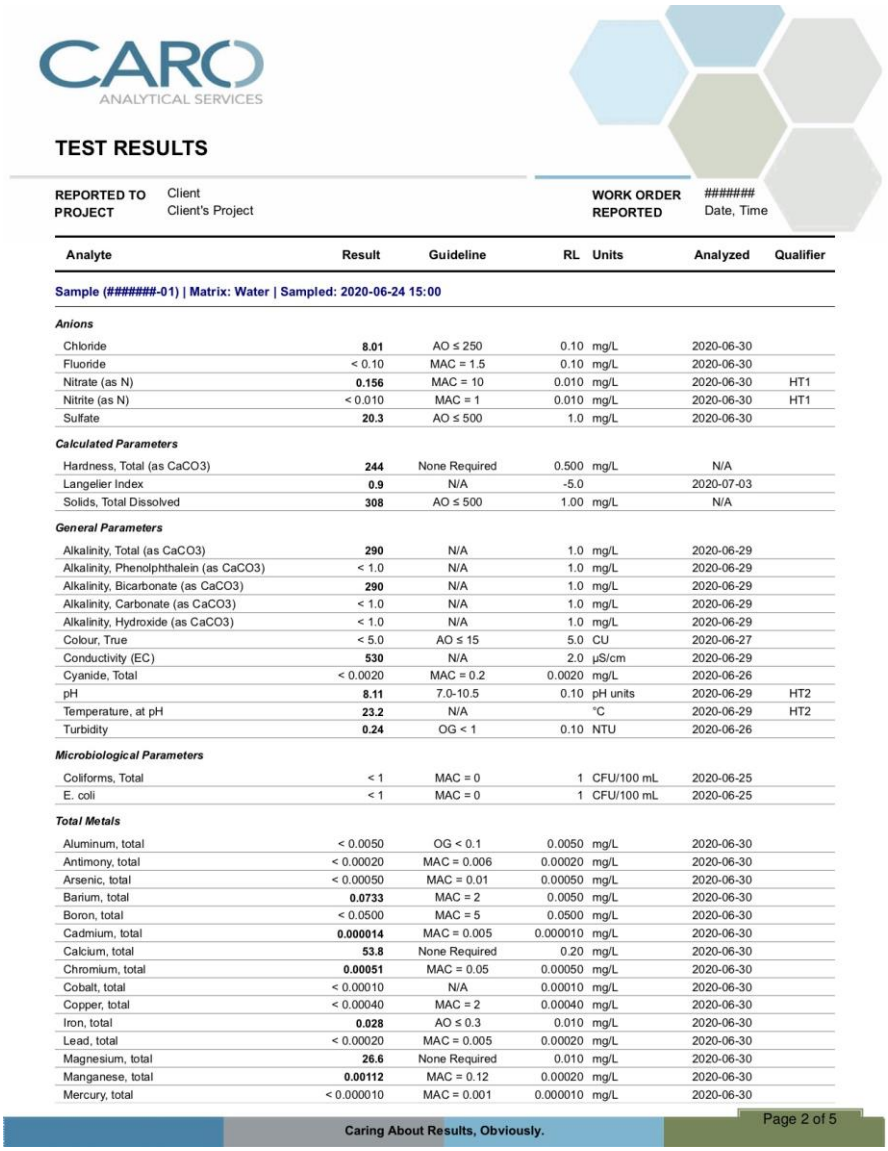
At the bottom of the page, you will find your Account Manager's information, as highlighted. If you have any questions or concerns about your report, feel free to reach out to them for assistance.

Page 2

Here is where the science starts, and where you will find your test results. Samples are presented in numerical order; if you do not see the sample you are looking for immediately, keep scrolling!



CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO Client
PROJECT Client's Project

WORK ORDER #######
REPORTED Date, Time

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Sample (#######-01) | Matrix: Water | Sampled: 2020-06-24 15:00						
Anions						
Chloride	**8.01**	AO ≤ 250	0.10	mg/L	2020-06-30	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2020-06-30	
Nitrate (as N)	**0.156**	MAC = 10	0.010	mg/L	2020-06-30	HT1
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2020-06-30	HT1
Sulfate	**20.3**	AO ≤ 500	1.0	mg/L	2020-06-30	
Calculated Parameters						
Hardness, Total (as CaCO3)	**244**	None Required	0.500	mg/L	N/A	
Langelier Index	**0.9**	N/A	-5.0		2020-07-03	
Solids, Total Dissolved	**308**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**290**	N/A	1.0	mg/L	2020-06-29	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-06-29	
Alkalinity, Bicarbonate (as CaCO3)	**290**	N/A	1.0	mg/L	2020-06-29	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-06-29	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-06-29	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2020-06-27	
Conductivity (EC)	**530**	N/A	2.0	µS/cm	2020-06-29	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2020-06-26	
pH	**8.11**	7.0-10.5	0.10	pH units	2020-06-29	HT2
Temperature, at pH	**23.2**	N/A		°C	2020-06-29	HT2
Turbidity	**0.24**	OG < 1	0.10	NTU	2020-06-26	
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2020-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2020-06-25	
Total Metals						
Aluminum, total	< 0.0050	OG < 0.1	0.0050	mg/L	2020-06-30	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2020-06-30	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2020-06-30	
Barium, total	**0.0733**	MAC = 2	0.0050	mg/L	2020-06-30	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2020-06-30	
Cadmium, total	**0.000014**	MAC = 0.005	0.000010	mg/L	2020-06-30	
Calcium, total	**53.8**	None Required	0.20	mg/L	2020-06-30	
Chromium, total	**0.00051**	MAC = 0.05	0.00050	mg/L	2020-06-30	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2020-06-30	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2020-06-30	
Iron, total	**0.028**	AO ≤ 0.3	0.010	mg/L	2020-06-30	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2020-06-30	
Magnesium, total	**26.6**	None Required	0.010	mg/L	2020-06-30	
Manganese, total	**0.00112**	MAC = 0.12	0.00020	mg/L	2020-06-30	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2020-06-30	

Caring About Results, Obviously.

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Any results bolded in black (ex. **120** mg/L) are parameters that our instruments did detect in your sample(s) but were not above the attached regulation (if applicable). Any parameter not detected by our instrument will be reported as a < result and is therefore a non-detect.

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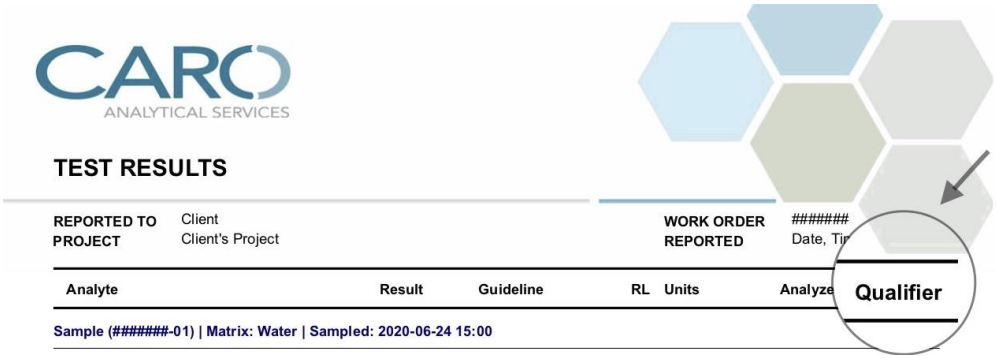
The “Guideline” column is where you will find the regulation that is applied to your reports. If you do not have a regulation applied to your results, this column will be blank and none of your results will be bolded in red. The “RL Units” column is where you will find our Reporting Limits. This is essentially the lowest amount of that specific analyte that our instruments can detect.

Any results bolded and in red (ex. **500** ug/L) are results that we did detect in your sample(s) and were above the guideline applied in your report. NOTE: not all reports include guidelines.



TEST RESULTS

REPORTED TO Client
PROJECT Client's Project

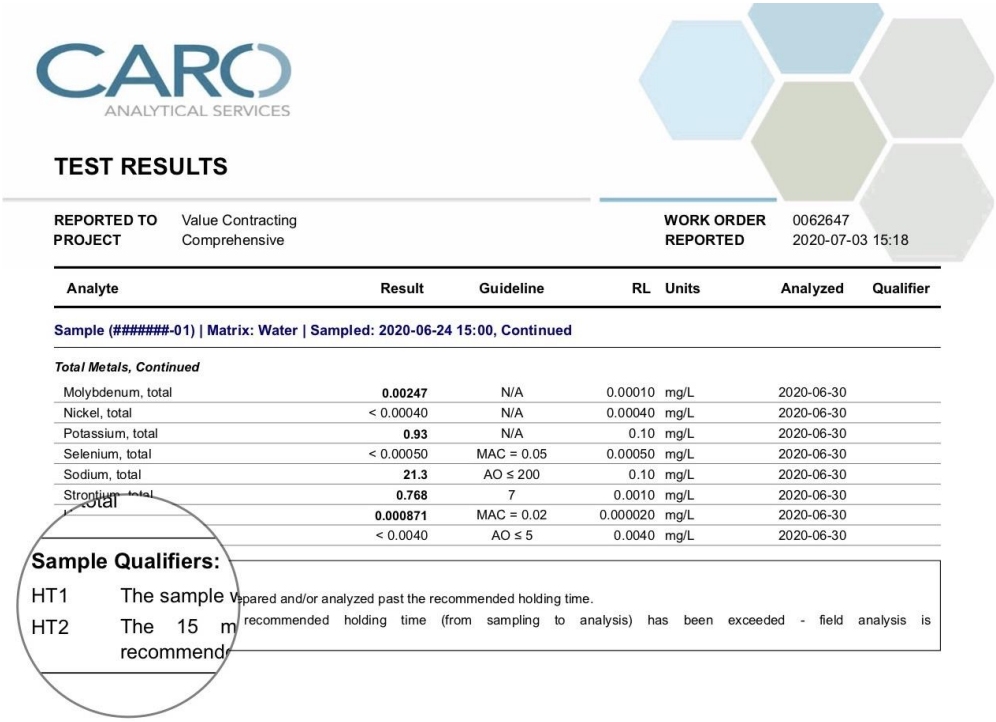
WORK ORDER #######
REPORTED Date, Ti

Analyte	Result	Guideline	RL	Units	Analyze

Qualifier

Sample (#######-01) | Matrix: Water | Sampled: 2020-06-24 15:00

The “Qualifier” column will tell you if there are any special notes that our lab needed to share. For example, you may have a qualifier if your sample was received after its recommended holding time, or if the correct preservative was not used. If any qualifiers were applied, you will find a legend at the end of your results page that will help you understand what that means.



TEST RESULTS

REPORTED TO Value Contracting
PROJECT Comprehensive

WORK ORDER 0062647
REPORTED 2020-07-03 15:18

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Sample (#######-01) | Matrix: Water | Sampled: 2020-06-24 15:00, Continued						
Total Metals, Continued						
Molybdenum, total	**0.00247**	N/A	0.00010	mg/L	2020-06-30	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2020-06-30	
Potassium, total	**0.93**	N/A	0.10	mg/L	2020-06-30	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2020-06-30	
Sodium, total	**21.3**	AO ≤ 200	0.10	mg/L	2020-06-30	
Strontium, total	**0.768**	7	0.0010	mg/L	2020-06-30	
	0.000871	MAC = 0.02	0.000020	mg/L	2020-06-30	
	< 0.0040	AO ≤ 5	0.0040	mg/L	2020-06-30	

Sample Qualifiers:

HT1 The sample was prepared and/or analyzed past the recommended holding time.

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

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Supporting information

Added to the information provided, supported data is included with further analysis and explanation of the sampling process on the Appendix–supplementing with acronyms and clarities used in the report.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Client	**WORK ORDER**	#######
PROJECT	Client Project	**REPORTED**	Date, Time

General Comments:

The results in this report apply to the 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. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing. 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 not 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.

Quality Control

With each sample submission we receive, we perform quality control tests to ensure that both our instruments and our analysts are operating at optimal standards! The data from these QC tests are reported in this section. These are not your results, but are extra tests we perform at no cost to you to ensure we are providing you with the highest standard of results.

What's next? What do I do with my results?

That's up to you! If you do have any results bolded red, it is recommended for you to talk with a water technician or consultant about strategies to reduce that/those concentration(s). If you require further assistance, please, connect with us on teamcaro@caro.ca.

Caring About Results… Obviously!

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