# Application

**February 12, 2020**
**Version 1.1**

PTC | Proficiency Testing Canada

## Table of Contents

# 1.0 Instructions

This PT application only has to be completed if the laboratory is new to the PT Canada program (formerly the CALA PT Program) or has additions that they would like to make. If the participant is seeking PT samples for the next scheduled study, the application must be submitted at least four weeks prior to the shipping date.

## 1.1 COMPLETE SECT. 2.0 LABORATORY IDENTIFICATION

All new applicants must complete section 2. Be sure that the shipping address can be used for the delivery of PT samples by courier. Refunds or credits will not be provided for samples that are delivered to the wrong location, if the error is due to information provided in this section.

All communication between PT Canada and participants is by email. The participant may include more than one email address. Be sure that the participant's email provider and filter always allows emails from the PT Canada domain (@ptcanada.org).

## 1.2 REVIEW SECT. 3.0 CANADA ANTI-SPAM LEGISLATION

Review this section and indicate the types of communication you would like to receive from PTC. Please note that PT participants may not opt out of communication necessary for conducting business (e.g., invoices, PT reports, etc.).

## 1.3 COMPLETE SECT. 4.0 TERMS AND CONDITIONS OF PT PARTICIPATION

PT Canada participants must comply with the terms and conditions. Failure to conform to these terms and conditions may result in withdrawal of PT participation.

## 1.4 COMPLETE SECT. 5.0 PROFICIENCY TESTING PARTICIPATION

Only complete section 5 if your laboratory is requesting new proficiency testing.

## 1.5 SUBMIT YOUR APPLICATION

Completed applications may be submitted by mail, fax or scanned and emailed. The application sections that must be included in the application are:

- Section 2 (if a new participant or there are changes);
- Section 4 (signed by an authorized person); and,
- Section 5.

If there are changes to the laboratory identification, they may be included as well.

Send your completed application to:

Proficiency Testing Canada
Attention: Program Administrator
102-2934 Baseline Road
Ottawa, ON K2H 1B2

Telephone: (613) 233-5464
Email: programadmin@PTCanada.org

# 2.0 Laboratory Identification For PT Program

| | | | |
|---|---|---|---|
| PT Canada File No. (existing clients only) | | | |
| Name of Laboratory | | Publicly Traded: ❑ Yes ❑ No | |
| | | Exchange(s): | Symbol(s): |
| Name of Parent Institution | | Publicly Traded: ❑ Yes ❑ No | |
| | | Exchange(s): | Symbol(s): |
| **LOCATION OF FACILITY** | | | |
| Contact | | Email | |
| Street | | | |
| City | Province | Postal Code | Country |
| Phone Number | | Facsimile Number | |
| **MAILING ADDRESS** | | **SAME AS (check, if applicable)** | ■ **"Location of Facility"** |
| Contact | | Email | |
| Street | | | |
| City | Province | Postal Code | Country |
| Phone Number | | Facsimile Number | |
| **PT SAMPLE SHIPPING (COURIER) ADDRESS** | | **SAME AS (check one, if applicable)** | ■ **"Mailing Address"**<br>■ **"Location of Facility"** |
| Contact | | Email | |
| Street | | | |
| City | Province | Postal Code | Country |
| Phone Number | | Facsimile Number | |
| **BILLING ADDRESS** | | **SAME AS (check one, if applicable)** | ■ **"Mailing Address"**<br>■ **"Location of Facility"** |
| Contact | | Email | |
| Street | | | |
| City | Province | Postal Code | Country |
| Phone Number | | Facsimile Number | |
| **MANAGEMENT** | | | |
| Laboratory Manager/Director | | Email | |
| Quality Assurance Officer | | Email | |
| **WITHHOLDING TAX (INTERNATIONAL ONLY)** | | | |
| Withholding Tax Required: ❑ Yes ❑ No Amount of tax: ____% | | | |
| **HOW DID YOU HEAR ABOUT PT CANADA** | | | |
| How did you hear about PT Canada? (Please check all that apply) ❑ Internet Search ❑ Conference ❑ Word of Mouth<br>❑ Regulatory Requirement ❑ Email from PT Canada ❑ Other_____ | | | |

# 3.0 Canada Anti-Spam Legislation (CASL)

Canada's new anti-spam law was passed in December 2010 and came into force on July 1, 2014. This law, among other things, will mainly prohibit the sending of commercial electronic messages (CEMs) without the recipient's consent (permission), including messages to email addresses, social networking accounts, and text messages sent to a cell phone.

## 3.1 HOW DOES CASL IMPACT PT CANADA CLIENTS/LABORATORIES?

Current PT Canada clients will receive emails directly related to the delivery of products and services where there is an existing business relationship (i.e., received program application form or registration form, or active volunteer). However, we require your express consent (permission) to send you PT Canada SUBSCRIPTION communications via email.

## 3.2 WHAT ARE PT CANADA SUBSCRIPTION COMMUNICATIONS?

PT Canada SUBSCRIPTION communications are the electronic delivery of up to date PT Canada information and industry announcements. These subscription communications can include any of the following:

1) Surveys: feedback obtained from surveys is very important for program and service development and improvements.
2) Newsletter: contains important information on PT Canada programs/services, as well as notices, Board updates, industry news and PT Canada document updates.
3) General Marketing: occasionally PT Canada PT Canada will forward information on services, products and upcoming events of interest to CALA clients.

For each email identified earlier in this application form, please have the email owner check off all and initial desired PT Canada SUBCRIPTION Communications. A person can unsubscribe at any time.

| Email Address | Initials of Email owner | | PT Canada Subscription Selection 2 | 3 | 4 |
|---|---|---|---|---|---|
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |
| | | | ❑ | ❑ | ❑ |

# 4.0 Terms And Conditions Of Proficiency Testing

_____ _____

Name of Laboratory PT Canada File No.

As an Authorized Representative of this laboratory, I agree to the following general terms and conditions.

Participants in the PTC PT program acknowledge and agree that:

1) these Terms and Conditions of Proficiency Testing may change at any time.
2) all appropriate fees shall be paid.
3) they authorize PTC to forward PT outcomes to the Canadian Association for Laboratory Accreditation Inc. (CALA) for analytes that appear on the participant's current CALA scope of accreditation.
4) they acknowledge that if the analyte accredited by CALA (3 above) is also licensed by the Ontario Ministry of the Environment, Conservation and Parks drinking water licensing program, that CALA will forward this PTC generated PT data to the OMECP following each PT round.
5) they will conform to the publicity guidelines specified by PTC (POL07 –Publicity Policy).
6) they will comply with all laws and regulations concerning those tests for which proficiency testing is being run.
7) all dealings between the participant and PTC shall be governed by the laws of the Province of Ontario (without reference to its choice of laws and conflict of law rules). Any action or proceeding commenced by either party against the other shall be commenced at and heard in the City of Ottawa, Ontario, Canada, and each party irrevocably submits to the jurisdiction of the courts of the Province of Ontario and waives any objection they may have to either the jurisdiction of or venue in such courts.
8) they will comply with modifications to requirements following due notice (which may be given by PTC newsletter, e-mail and/or hard copy by mail) of changes by PTC to the criteria, requirements, or conditions for PTC Programs, in a timeframe that, in the opinion of PTC, is reasonable.
9) they will analyze Proficiency Testing samples at the facility specified in the Application, provide the results to PTC, in the manner specified, and by the due date specified on the Instruction Sheet (provided with the samples and available on the PTC Web site).
10) with the exception of specific instructions provided on the web site for each PT, PT samples shall be processed using the same workflow and level of effort as afforded the majority of client samples analysed using the PTC registered method (i.e., treated as routine).
11) participants may not collude with other participants, either within the same laboratory or between different laboratories, and may not falsify results or other information provided to PTC.
12) results not reported for a registered analyte will be assigned an unacceptable PT evaluation.
13) PTC will not accept any changes to reported results after the reporting deadline.

14) PTC will not extend the deadline for reporting for an individual participant.
15) the participant will pay for any replacement samples with the exception of those lost or damaged during the shipping process. PTC must be notified within forty-eight hours of sample delivery of any damages. The participant will pay for any replacement samples requested more than forty-eight hours after receipt.
16) the participant may Dispute the outcome of a PT evaluation within thirty days of the Final PT Report being issued. Should the participant disagree with the resolution of the Dispute, the participant may Appeal this decision within ten days of receiving the decision on the Dispute. All communication with regard to Disputes and Appeals must be made in writing.
17) if the participant resides outside of Canada, the participant will pay the shipping costs plus 15% for administration, and be responsible for customs clearance and any costs associated. PTC delivery responsibilities are considered to have been met once the PT samples have arrived in the participant's country and awaiting customs clearance.
18) PTC, and PTC's directors, officers, employees, and agents shall not be liable to the laboratory for any claims, damages, expenses, demands, losses, including lost revenue or profits, or any special, consequential or indirect damages whatsoever, arising from or incidental to the suspension or withdrawal of proficiency testing recognition by PTC, including without limitation, in the event when, following a dispute or an appeal instituted by the laboratory, the proficiency testing recognition status of the laboratory is reinstated by PTC, or to any other services offered by PTC, including without limitation, its published PT Directory of Laboratories.
19) the participant recognizes the right of PTC to suspend proficiency testing participation for any breach of paragraphs 1 to 18 of these TERMS AND CONDITIONS OF PROFICIENCY TESTING.

❑ This laboratory is licensed or applying for a license under the OSDWA.

| | |
|---|---|
| Authorized Representative | Signature |
| Title | Date DD/MM/YY |

# 5.0 Proficiency Testing Participation

The tables below identify all tests that are part of the PT Canada Proficiency Testing Program. Please indicate the new or additional participation you require by:

1) *Analyte*: check the appropriate analyte(s) that are to be added;
2) *Test Method*: The Test Method is defined in terms of analytical techniques. Examples include: ICP-MS; GC/MS; etc. For microbiology methods, specify the media (e.g., MF-mENDO); and,
3) *Quantity*: The number of sample sets that are required. Unless otherwise requested, the participant will receive one set of samples per study.

The default PT registration involves receiving samples in the months indicated. The months that each PT is offered is provided in the application below. If the participant only requires samples in one of these months, please indicate below:

| Test Group Series | Check only one per series | | |
|---|---|---|---|
| Mar./Oct. Test Groups | ❑ Mar. and Oct. | ❑ Mar. only | ❑ Oct. only |
| Jan./Jun. Test Groups | ❑ Jan. and Jun. | ❑ Jan. only | ❑ Jun. only |

If a PT participant is already receiving either a Jan/Jun or Mar/Oct group, we cannot accept a request for a single study participation for that same group. For example, if you are registered for a Jan/Jun group, you cannot request another Jan/Jun group but to only participate in either just January or just June. If you are not currently registered for a Jan/Jun or Mar/Oct study, you can then request a single study participation.

The participant is responsible for arranging customs clearance where necessary.

PT Canada provides discounts to Institutional members of the Canadian Association for Laboratory Accreditation (CALA).

## 5.1 WATER INORGANICS

| C01A Major Ions In Water | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>500 mL<br>Preservative: None | ❑ | Alkalinity (pH 4.5) | |
| | ❑ | Calcium | |
| | ❑ | Chloride | |
| | ❑ | Conductivity (25 °C) | |
| | ❑ | Fluoride | |
| | ❑ | Hardness (as $CaCO_3$) | |
| | ❑ | Inorganic Carbon | |
| | ❑ | Magnesium | |
| | ❑ | Nitrate | |
| | ❑ | Nitrate plus Nitrite | |
| | ❑ | Potassium | |
| | ❑ | Reactive Silica | |
| | ❑ | Sodium | |
| | ❑ | Sulfate | |

Quantity Requested (Default = 1):

| C01B Simple Nutrients In Water | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>250 mL<br>Preservative: None | ❑ | Ammonia | |
| | ❑ | Bromide | |
| | ❑ | Nitrite | |
| | ❑ | Organic Carbon | |
| | ❑ | Phosphate | |

Quantity Requested (Default = 1) :

| C02A Metals (Full Range) In Water | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>250 mL<br>Preservative: 0.2% $HNO_3$ | ❑ | Aluminum | |
| | ❑ | Antimony | |
| | ❑ | Arsenic | |
| | ❑ | Barium | |
| | ❑ | Beryllium | |
| | ❑ | Boron | |
| | ❑ | Cadmium | |
| | ❑ | Chromium | |
| | ❑ | Cobalt | |
| | ❑ | Copper | |
| | ❑ | Iron | |

| C02A (Cont.) | | Analyte | Test Method |
|---|---|---|---|
| | ❑ | Lead | |
| | ❑ | Manganese | |
| | ❑ | Molybdenum | |
| | ❑ | Nickel | |
| | ❑ | Selenium | |
| | ❑ | Silver | |
| | ❑ | Strontium | |
| | ❑ | Thallium | |
| | ❑ | Tin | |
| | ❑ | Titanium | |
| | ❑ | Uranium | |
| | ❑ | Vanadium | |
| | ❑ | Zinc | |

Quantity Requested (Default = 1) :

| C02B Metals (High Range) In Water | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>250 mL<br>Preservative: 0.2% $HNO_3$ | ❑ | Aluminum | |
| | ❑ | Barium | |
| | ❑ | Boron | |
| | ❑ | Chromium | |
| | ❑ | Cobalt | |
| | ❑ | Copper | |
| | ❑ | Iron | |
| | ❑ | Lead | |
| | ❑ | Manganese | |
| | ❑ | Molybdenum | |
| | ❑ | Nickel | |
| | ❑ | Strontium | |
| | ❑ | Thallium | |
| | ❑ | Titanium | |
| | ❑ | Vanadium | |
| | ❑ | Zinc | |

Quantity Requested (Default = 1)

| C02C Metals (Total) In Water | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>250 mL<br>Preservative: 0.2% $HNO_3$ | ❑ | Aluminum | |
| | ❑ | Antimony | |
| | ❑ | Arsenic | |
| | ❑ | Barium | |

## C02C (Cont.)

| | Analyte | Test Method |
|---|---|---|
| ❑ | Beryllium | |
| ❑ | Boron | |
| ❑ | Cadmium | |
| ❑ | Chromium | |
| ❑ | Cobalt | |
| ❑ | Copper | |
| ❑ | Iron | |
| ❑ | Lead | |
| ❑ | Manganese | |
| ❑ | Molybdenum | |
| ❑ | Nickel | |
| ❑ | Selenium | |
| ❑ | Silver | |
| ❑ | Strontium | |
| ❑ | Thallium | |
| ❑ | Tin | |
| ❑ | Titanium | |
| ❑ | Uranium | |
| ❑ | Vanadium | |
| ❑ | Zinc | |

Quantity Requested (Default = 1) :

## C03 Complex Nutrients in Water

Mar. and Oct.
250 mL

Preservative: pH < 2 $H_2SO_4$

| | Analyte | Test Method |
|---|---|---|
| ❑ | Total Kjeldahl Nitrogen | |
| ❑ | Total Phosphorus | |

Quantity Requested (Default = 1) :

## C04A Solids in Water

Mar. and Oct.
500 mL
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Total Dissolved Solids | |
| ❑ | Total Suspended Solids | |
| ❑ | Volatile Suspended Solids | |

Quantity Requested (Default = 1) :

| C04B Biochemical Oxygen Demand in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>1000 mL | ❑ | BOD (5 day) | |
| | ❑ | CBOD (5 day) | |
| Preservative: Freezing | | Quantity Requested (Default = 1): | |

| C04C Turbidity in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>100 mL | ❑ | Turbidity | |
| Preservative: None | | Quantity Requested (Default = 1) : | |

| C04D Chemical Oxygen Demand in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>100 mL | ❑ | COD | |
| Preservative: pH < 2 $H_2SO_4$ | | Quantity Requested (Default = 1) : | |

| C14 Cyanide in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>100 mL | ❑ | Cyanide (Strong acid dissociable) | |
| Preservative: pH > 12 NaOH | | Quantity Requested (Default = 1) : | |

| C15 pH in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>125 mL | ❑ | pH | |
| Preservative: None | | Quantity Requested (Default = 1) : | |

| C19 Mercury in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>125 mL | ❑ | Mercury | |
| Preservative: 0.5% Bromine Monochloride | | Quantity Requested (Default = 1) : | |

## C32 Chlorine in Water

| | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>250 mL | ❑ | Free Chlorine | |
| | ❑ | Total Chlorine | |

Preservative: None Quantity Requested (Default = 1):

## C33 Total 4AAP Phenolics in Water

| | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>250 mL | ❑ | Total Phenolics | |

Preservative: pH < 2 $H_2SO_4$ Quantity Requested (Default = 1):

## C34 Oil and Grease in Water

| | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>1000 mL | ❑ | Mineral Oil and Grease | |
| | ❑ | Total Oil and Grease | |

Preservative: pH < 2 $H_2SO_4$ Quantity Requested (Default = 1):

## 3C7 Colour in Water

| | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>125 mL | ❑ | True Colour | |

Preservative: pH < 2 HCl Quantity Requested (Default = 1):

## C41 Hexavalent Chromium in Water

| | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>125 mL | ❑ | Hexavalent Chromium | |

Preservative: pH 9.3 – 9.7 Ammonium Chloride Quantity Requested (Default = 1):

## C42 Sulphide in Water

| | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>125 mL | ❑ | Sulphide | |

Preservative: pH 10 NaOH and Zn Ac Quantity Requested (Default = 1):

| C46 Acidity in Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Jan. and Jun.<br>250 mL<br>Preservative: None | ❑ | Acidity | |

Quantity Requested (Default = 1):

## 5.2 WATER ORGANICS

| C06A Organochlorine Pesticides In Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Jan. and Jun.<br>1000 mL<br>Preservative: None | ❑ | alpha-BHC | |
| | ❑ | a-Chlordane | |
| | ❑ | Aldrin | |
| | ❑ | Dieldrin | |
| | ❑ | Endosulfan I | |
| | ❑ | Endosulfan II | |
| | ❑ | Endrin | |
| | ❑ | g-Chlordane | |
| | ❑ | Heptachlor | |
| | ❑ | Heptachlor Epoxide | |
| | ❑ | Lindane (gamma-BHC) | |
| | ❑ | Mirex | |
| | ❑ | o,p'-DDT | |
| | ❑ | p,p'-DDT | |
| | ❑ | p,p' Methoxychlor | |

Quantity Requested (Default = 1):

| C06B PCBs In Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Jan. and Jun.<br>1000 mL<br>Preservative: None | ❑ | Aroclor 1242 | |
| | ❑ | Aroclor 1248 | |
| | ❑ | Aroclor 1254 | |
| | ❑ | Aroclor 1260 | |
| | ❑ | Total PCB | |

Quantity Requested (Default = 1):

| C07 Polycyclic Aromatic Hydrocarbons in Water | | | |
|---|---|---|---|
| | | **Analyte** | **Test Method** |
| Jan. and Jun.<br>1000 mL<br>Preservative: None | ❑ | Acenaphthene | |
| | ❑ | Acenaphthylene | |
| | ❑ | Anthracene | |
| | ❑ | Benzo(a)anthracene | |
| | ❑ | Benzo(a)pyrene | |
| | ❑ | Benzo(b)fluoranthene | |
| | ❑ | Benzo(b+j)fluoranthene | |
| | ❑ | Benzo(g,h,i)perylene | |
| | ❑ | Benzo(k)fluoranthene | |
| | ❑ | Chrysene | |
| | ❑ | Dibenzo(a,h)anthracene | |
| | ❑ | Fluoranthene | |
| | ❑ | Fluorene | |
| | ❑ | Indeno(1,2,3-cd)pyrene | |
| | ❑ | Naphthalene | |
| | ❑ | Phenanthrene | |
| | ❑ | Pyrene | |
| | | | Quantity Requested (Default = 1): |

| C16 Volatile Organic Compounds In Water | | | |
|---|---|---|---|
| | | **Analyte** | **Test Method** |
| Jan. and Jun.<br>40 mL x 2<br>Pres: Sodium Bisulphate | ❑ | 1,1-Dichloroethane | |
| | ❑ | 1,1-Dichloroethylene | |
| | ❑ | 1,1,1-Trichloroethane | |
| | ❑ | 1,1,2-Trichloroethane | |
| | ❑ | 1,1,2,2-Tetrachloroethane | |
| | ❑ | 1,2-Dichlorobenzene | |
| | ❑ | 1,2-Dichloroethane | |
| | ❑ | 1,2-Dichloropropane | |
| | ❑ | 1,3-Dichlorobenzene | |
| | ❑ | 1,4-Dichlorobenzene | |
| | ❑ | Acetone (2-Propanone) | |
| | ❑ | Benzene | |
| | ❑ | Bromodichloromethane | |
| | ❑ | Bromoform | |
| | ❑ | Carbon Tetrachloride | |
| | ❑ | Chlorobenzene | |
| | ❑ | Chlorodibromomethane | |
| | ❑ | Chloroform | |

| C16 (Cont.) | | Analyte | Test Method |
|---|---|---|---|
| | ❑ | cis-1,2-Dichloroethylene | |
| | ❑ | cis-1,3-Dichloropropene | |
| | ❑ | Dichloromethane | |
| | ❑ | Ethylbenzene | |
| | ❑ | Ethylene dibromide | |
| | ❑ | m/p-xylene | |
| | ❑ | Methyl ethyl ketone | |
| | ❑ | Methyl isobutyl ketone | |
| | ❑ | Methyl t-butyl ether | |
| | ❑ | o-xylene | |
| | ❑ | Styrene | |
| | ❑ | Tetrachloroethylene | |
| | ❑ | Toluene | |
| | ❑ | trans-1,2-Dichloroethylene | |
| | ❑ | trans-1,3-Dichloropropene | |
| | ❑ | Trichloroethylene | |
| | ❑ | Trichlorofluoromethane | |
| | ❑ | Vinyl Chloride | |

Quantity Requested (Default = 1):

| C22 Organophosphorus Pesticides In Water | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>1000 mL<br>Preservative: None | ❑ | Atrazine | |
| | ❑ | Azinphos-methyl | |
| | ❑ | Bendiocarb | |
| | ❑ | Carbaryl | |
| | ❑ | Carbofuran | |
| | ❑ | Chlorpyriphos (ethyl) | |
| | ❑ | Cyanazine | |
| | ❑ | Diazinon | |
| | ❑ | Dimethoate | |
| | ❑ | Diuron | |
| | ❑ | Malathion | |
| | ❑ | Metolachlor | |
| | ❑ | Metribuzin | |
| | ❑ | Parathion (ethyl) | |
| | ❑ | Phorate | |
| | ❑ | Simazine | |
| | ❑ | Terbufos | |
| | ❑ | Trifluralin | |

Quantity Requested (Default = 1):

## C24 Aryloxy Acid Pesticides In Water

Jan. and Jun.
1000 mL
Preservative: pH < 2 $H_2SO_4$

| | Analyte | Test Method |
|---|---|---|
| ❑ | 2,4-Dichlorophenoxy-acetic acid | |
| ❑ | 2,4,5-Trichlorophenoxy-acetic acid | |
| ❑ | Bromoxynil | |
| ❑ | Dicamba | |
| ❑ | Diclofop-methyl (as free acid) | |
| ❑ | Dinoseb | |
| ❑ | Picloram | |

Quantity Requested (Default = 1):

## C25 Phenolic Compounds In Water

Jan. and Jun.
1000 mL
Preservative: pH < 2 $H_2SO_4$

| | Analyte | Test Method |
|---|---|---|
| ❑ | 2,3,4,6-tetrachlorophenol | |
| ❑ | 2,4-dichlorophenol | |
| ❑ | 2,4,6-trichlorophenol | |
| ❑ | Pentachlorophenol | |

Quantity Requested (Default = 1):

## C27 Glyphosate In Water

Jan. and Jun.
250 mL
Preservative: 0.01% Thiosulphate

| | Analyte | Test Method |
|---|---|---|
| ❑ | Glyphosate | |

Quantity Requested (Default = 1):

## C29 Aldicarb In Water

Jan. and Jun.
250 mL
Preservative: 0.001 Thiosulphate

| | Analyte | Test Method |
|---|---|---|
| ❑ | Aldicarb | |

Quantity Requested (Default = 1):

| C40A Petroleum Hydrocarbons In Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Jan. and Jun.<br>40 mL x 2 | ❑ | Benzene | |
| | ❑ | Ethylbenzene | |
| | ❑ | F1: C6 – C10 | |
| | ❑ | m/p-Xylene | |
| | ❑ | o-Xylene | |
| | ❑ | Toluene | |
| | ❑ | VH: C6-C10 (NEW) | |
| Preservative: Sodium Bisulphate | | | Quantity Requested (Default = 1): |

| C40B Petroleum Hydrocarbons In Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Jan. and Jun.<br>1000 mL<br>Preservative: None | ❑ | F2: C10 – C16 | |
| | ❑ | F3: C16 – C34 | |
| | ❑ | F4: C34 – C50 | |
| | | | Quantity Requested (Default = 1): |

| C47 Haloacetic Acids In Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Jan. and Jun.<br>40 mL x 2 | ❑ | Bromochloroacetic acid | |
| | ❑ | Dibromoacetic acid | |
| | ❑ | Dichloroacetic acid | |
| | ❑ | Monobromoacetic acid | |
| | ❑ | Monochloroacetic acid | |
| | ❑ | Trichloroacetic acid | |
| Preservative: Ammonium Chloride | | | Quantity Requested (Default = 1): |

## 5.3 WATER MICROBIOLOGY

| C05A Microbiology (Quantified) In Water | | | |
|---|---|---|---|
| | | Analyte | Test Method |
| Mar. and Oct.<br>2 – 5 mL<br>Preservative: Stabilized | ❑ | *Escherichia coli* (*E.coli*) | |
| | ❑ | Fecal (Thermotolerant) | |
| | ❑ | Heterotrophic Plate Count | |
| | ❑ | Total Coliforms | |
| | | | Quantity Requested (Default = 1): |

| C05B Microbiology (Presence/Absence) In Water | | | |
|---|---|---|---|
| | | **Analyte** | **Test Method** |
| Mar. and Oct.<br>2 – 5 mL | ❑ | *Escherichia coli* (*E.coli*) | |
| | ❑ | Total Coliforms | |
| Preservative: Stabilized | | | Quantity Requested (Default = 1): |

| Human Pathogens and Toxins Act<br><br>**Any Canadian laboratory registering for C05A or C05B must provide PTC with their Public Health Agency of Canada licence number and expiry date.** | |
|---|---|
| **Licence Number** | **Expiry Date** |
| | |

## 5.4 SOIL

| C17 Metals in Soil | | | |
|---|---|---|---|
| | | **Analyte** | **Test Method** |
| Jan. and Jun.<br>5 – 7 g<br>Preservative: None | ❑ | Aluminum | |
| | ❑ | Antimony | |
| | ❑ | Arsenic | |
| | ❑ | Barium | |
| | ❑ | Beryllium | |
| | ❑ | Boron | |
| | ❑ | Cadmium | |
| | ❑ | Chromium | |
| | ❑ | Cobalt | |
| | ❑ | Copper | |
| | ❑ | Iron | |
| | ❑ | Lead | |
| | ❑ | Manganese | |
| | ❑ | Mercury | |
| | ❑ | Nickel | |
| | ❑ | Strontium | |
| | ❑ | Tin | |
| | ❑ | Titanium | |
| | ❑ | Uranium | |
| | ❑ | Vanadium | |
| | ❑ | Zinc | |
| | | | Quantity Requested (Default = 1): |

## C18 Polycyclic Aromatic Hydrocarbons in Soil

Jan. and Jun.
25 - 40 g
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Acenaphthene | |
| ❑ | Acenaphthylene | |
| ❑ | Anthracene | |
| ❑ | Benzo(a)anthracene | |
| ❑ | Benzo(a)pyrene | |
| ❑ | Benzo(b)fluoranthene | |
| ❑ | Benzo(b+j)fluoranthene | |
| ❑ | Benzo(g,h,i,)perylene | |
| ❑ | Benzo(k)fluoranthene | |
| ❑ | Chrysene | |
| ❑ | Dibenzo(a,h)anthracene | |
| ❑ | Fluoranthene | |
| ❑ | Fluorene | |
| ❑ | Indeno(1,2,3-cd)pyrene | |
| ❑ | Naphthalene | |
| ❑ | Phenanthrene | |
| ❑ | Pyrene | |

Quantity Requested (Default = 1):

## C31A Petroleum Hydrocarbons in Soil

Jan. and Jun.
8 g
Preservative: Methanol

| | Analyte | Test Method |
|---|---|---|
| ❑ | Benzene | |
| ❑ | Ethylbenzene | |
| ❑ | F1: (C6-C10) | |
| ❑ | m/p-xylene | |
| ❑ | o-xylene | |
| ❑ | Toluene | |
| ❑ | VH (C6-C10) | |

Quantity Requested (Default = 1):

## C31B Petroleum Hydrocarbons in Soil

Jan. and Jun.
30g
Preservative: Freezing

| | Analyte | Test Method |
|---|---|---|
| ❑ | F2: C10-C16 | |
| ❑ | F3: C16-C34 | |
| ❑ | F4: C34-C50 | |
| ❑ | F4G | |

Quantity Requested (Default = 1):

| C35 PCBs in Soil | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>30g<br>Preservative: None | ❑ | Aroclor 1242 | |
| | ❑ | Aroclor 1248 | |
| | ❑ | Aroclor 1254 | |
| | ❑ | Aroclor 1260 | |
| | ❑ | Total PCBs | |
| | | | Quantity Requested (Default = 1): |

| C36 Volatile Organic Compounds in Soil | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>8 g<br>Preservative: Methanol | ❑ | 1,1-Dichloroethane | |
| | ❑ | 1,1-Dichloroethylene | |
| | ❑ | 1,1,1-Trichloroethane | |
| | ❑ | 1,1,2-Trichloroethane | |
| | ❑ | 1,1,2,2-Tetrachloroethane | |
| | ❑ | 1,2-Dichlorobenzene | |
| | ❑ | 1,2-Dichloroethane | |
| | ❑ | 1,2-Dichloropropane | |
| | ❑ | 1,3-Dichlorobenzene | |
| | ❑ | 1,4-Dichlorobenzene | |
| | ❑ | Acetone (2-Propanone) | |
| | ❑ | Benzene | |
| | ❑ | Bromodichloromethane | |
| | ❑ | Bromoform | |
| | ❑ | Carbon Tetrachloride | |
| | ❑ | Chlorobenzene | |
| | ❑ | Chlorodibromomethane | |
| | ❑ | Chloroform | |
| | ❑ | cis-1,2-Dichloroethylene | |
| | ❑ | cis-1,3-Dichloropropene | |
| | ❑ | Dichloromethane | |
| | ❑ | Ethylbenzene | |
| | ❑ | Ethylene dibromide | |
| | ❑ | m/p-xylene | |
| | ❑ | Methyl ethyl ketone | |
| | ❑ | Methyl isobutyl ketone | |
| | ❑ | Methyl t-butyl ether | |
| | ❑ | o-xylene | |
| | ❑ | Styrene | |
| | ❑ | Tetrachloroethylene | |

| C36 (Cont.) | | Analyte | Test Method |
|---|---|---|---|
| | ❑ | Toluene | |
| | ❑ | trans-1,2-Dichloroethylene | |
| | ❑ | trans-1,3-Dichloropropene | |
| | ❑ | Trichloroethylene | |
| | ❑ | Trichlorofluoromethane | |

Quantity Requested (Default = 1)

| C38 Volatile Organic Compounds in Soil (TCLP) | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>100 g<br>Preservative: Freezing | ❑ | 1,2-Dichlorobenzene | |
| | ❑ | 1,2-Dichloroethane | |
| | ❑ | 1,4-Dichlorobenzene | |
| | ❑ | Benzene | |
| | ❑ | Carbon tetrachloride | |
| | ❑ | Chlorobenzene | |
| | ❑ | Chloroform | |
| | ❑ | Dichloromethane | |
| | ❑ | Methyl Ethyl Ketone | |
| | ❑ | Tetrachloroethylene | |
| | ❑ | Trichloroethylene | |

Quantity Requested (Default = 1):

| C39 Inorganics in Soil (TCLP) | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>200 g<br>Preservative: None | ❑ | Arsenic | |
| | ❑ | Barium | |
| | ❑ | Boron | |
| | ❑ | Cadmium | |
| | ❑ | Chromium | |
| | ❑ | Cyanide, (WAD) | |
| | ❑ | Fluoride | |
| | ❑ | Lead | |
| | ❑ | Mercury | |
| | ❑ | Nitrate-N | |
| | ❑ | Nitrate plus Nitrite as N | |
| | ❑ | Selenium | |
| | ❑ | Silver | |
| | ❑ | Uranium | |

Quantity Requested (Default = 1):

## C43 Solids in Soil

Jan. and Jun.
100 g
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Fixed Solids | |
| ❑ | Percent Moisture | |
| ❑ | Total Solids | |
| ❑ | Volatile Solids | |

Quantity Requested (Default = 1):

## C44 Nutrients in Soil

Jan. and Jun.
250 g
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Ammonia-N | |
| ❑ | Kjeldahl Nitrogen | |
| ❑ | Phosphorus | |
| ❑ | Organic Carbon | |

Quantity Requested (Default = 1):

## C45 Anions in Soil

Jan. and Jun.
250 g
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Bromide | |
| ❑ | Chloride | |
| ❑ | Fluoride | |
| ❑ | Nitrate-N | |
| ❑ | Phosphate-P | |
| ❑ | Sulphate | |
| ❑ | Percent Saturation | |

Quantity Requested (Default = 1):

## C74 Hexavalent Chromium in Soil

Jan. and Jun.
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Hexavalent Chromium | |

Quantity Requested (Default = 1):

## C75 Particle Size in Soil

Jan. and Jun.
40 g
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Percent Sand | |
| ❑ | Percent Silt | |
| ❑ | Percent Clay | |

Quantity Requested (Default = 1):

| C76 Oil and Grease in Soil | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun. | ❑ | Total Oil and Grease | |
| Preservative: None | | | Quantity Requested (Default = 1): |

| C77 Pesticides in Soil | | Analyte | Test Method |
|---|---|---|---|
| Jan. and Jun.<br>30 g ampoules<br>Preservative: None | ❑ | p,p'-DDT | |
| | ❑ | Aldrin | |
| | ❑ | Alpha-BHC | |
| | ❑ | Alpha-Chlordane | |
| | ❑ | Beta-BHC | |
| | ❑ | Dieldrin | |
| | ❑ | Endosulfan I | |
| | ❑ | Endosulfan II | |
| | ❑ | Endrin | |
| | ❑ | Lindane | |
| | ❑ | Gamma-Chlordane | |
| | ❑ | Heptachlor | |
| | ❑ | Heptachlor Epoxide | |
| | ❑ | Methoxychlor | |
| | | | Quantity Requested (Default = 1): |

## 5.5 OIL

| C08 PCBs in Oil | | Analyte | Test Method |
|---|---|---|---|
| Jan. and June<br>3 mL<br>Preservative: None | ❑ | Aroclor 1242 | |
| | ❑ | Aroclor 1248 | |
| | ❑ | Aroclor 1254 | |
| | ❑ | Aroclor 1260 | |
| | ❑ | Total PCB | |
| | | | Quantity Requested (Default = 1): |

## 5.6 AIR

**C09 Metals on Filters**

Jan. and Jun.
47 mm quartzL
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Cadmium | |
| ❑ | Copper | |
| ❑ | Lead | |
| ❑ | Zinc | |

Quantity Requested (Default = 1):

**C20 Asbestos**

Jan. Mar. Jun. and Oct.

| | Analyte | Analyst Name |
|---|---|---|
| ❑ | Asbestos | |
| ❑ | Asbestos | |
| ❑ | Asbestos | |
| ❑ | Asbestos | |

Slides/Wedge
Preservative: None

Quantity Requested (Default = 1):

## 5.7 TOXICOLOGY

**C11 Trout LC50**

Mar. and Oct.
1000 mL
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Trout LC50 (96 h) | |

Quantity Requested (Default = 1):

**C12 *Daphnia* LC50**

Mar. and Oct.
500 mL
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | *Daphnia* LC50 (48 h) | |

Quantity Requested (Default = 1):

**C13 Microtox™ IC50**

Mar. and Oct.
100 mL
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Microtox™ | |

Quantity Requested (Default = 1):

## 5.8 CANNABIS

| C70 Potency in Cannabis | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>1 g vials<br>Preservative: None | ❑ | Tetrahydrocannabinol (THC) | |
| | ❑ | Tetrahydrocannabinolic Acid (THCA) | |
| | ❑ | Cannabidiol (CBD) | |
| | ❑ | Cannabidiolic Acid (CBDA) | |

Quantity Requested (Default = 1):

| C71 Pesticides in Cannabis | | Analyte | Test Method |
|---|---|---|---|
| Mar. and Oct.<br>1 g vials and spiking solutions<br>Preservative: None | ❑ | Acephate | |
| | ❑ | Aldicarb | |
| | ❑ | Azoxystrobin | |
| | ❑ | Bifenazate | |
| | ❑ | Boscalid | |
| | ❑ | Carbaryl | |
| | ❑ | Carbofuran | |
| | ❑ | Diazinon | |
| | ❑ | Diclorvos | |
| | ❑ | Dimethoate | |
| | ❑ | Ethoprophos | |
| | ❑ | Etoxazole | |
| | ❑ | Fipronil | |
| | ❑ | Fluxioxonil | |
| | ❑ | Imidaclorprid | |
| | ❑ | Malathion | |
| | ❑ | Metalaxyl | |
| | ❑ | Methiocarb | |
| | ❑ | Methomyl | |
| | ❑ | Myclobutanil | |
| | ❑ | Oxamyl | |
| | ❑ | Paclobutrazol | |
| | ❑ | Propoxur | |
| | ❑ | Spiromesifen | |
| | ❑ | Spirotetramet | |
| | ❑ | Thiamethoxam | |
| | ❑ | Trifloxystrobin | |

Quantity Requested (Default = 1):

## C72 Metals in Hemp

Mar. and Oct.
2 g vials
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Arsenic | |
| ❑ | Cadmium | |
| ❑ | Chromium | |
| ❑ | Lead | |
| ❑ | Mercury | |

Quantity Requested (Default = 1):

## C73 Residual Solvents in Hemp Seed Oil

Mar. and Oct.
1 g vials and spiking solutions
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | 1-Butanol (n-Butanol) | |
| ❑ | 1-Pentanol | |
| ❑ | 1-Propanol (Propanol) | |
| ❑ | 2-Butanol | |
| ❑ | 2-Butanone (Methyl ethyl ketone, MEK) | |
| ❑ | 2-Propanol (Isopropyl alcohol) | |
| ❑ | 3-Methyl-1-butanol | |
| ❑ | Acetone (2-Propanone) | |
| ❑ | Anisole | |
| ❑ | Butane | |
| ❑ | Butyl acetate | |
| ❑ | Dimethyl sulfoxide | |
| ❑ | Ethanol | |
| ❑ | Ethyl acetate | |
| ❑ | Ethyl ether | |
| ❑ | Heptane | |
| ❑ | Isobutanol (2-Methyl-1-propanol) | |
| ❑ | Isobutyl acetate | |
| ❑ | Isopropyl acetate | |
| ❑ | Methyl acetate | |
| ❑ | Pentane | |
| ❑ | Propane | |
| ❑ | Propyl acetate | |
| ❑ | Triethylamine | |

Quantity Requested (Default = 1):

## C78 Water activation/%

Mar. and Oct.
2 g vials
Preservative: None

| | Analyte | Test Method |
|---|---|---|
| ❑ | Percent Moisture | |
| ❑ | Water Activity | |

Quantity Requested (Default = 1):

# 6.0 Special Notes:

* Cannabis PT will only be shipped to laboratories that hold a valid Health Canada licence for cannabis testing. When submitting the application, please submit a copy of your laboratory's licence.

# 7.0 History of Changes

| Date | Rev. No. | Sections | Changes |
|---|---|---|---|
| 12/18/2019 | 1.0 | | Initial publication |
| 02/12/2020 | 1.1 | 5.0 | Modified C20 to include Analyst Name |