



SCOPE OF ACCREDITATION TO ISO/IEC 17043:2023

PROFICIENCY TESTING CANADA INC.
2934 Baseline Rd.
Suite 102
Ottawa, ON K2H 1B2, CANADA
Ken Middlebrook 613 292 9631
kmiddlebrook@ptcanada.org

PROFICIENCY TESTING PROVIDER

Valid To: May 31, 2025

Certificate Number: 2298.01

In recognition of the successful completion of the A2LA evaluation process, this Proficiency Testing Provider has been found to meet the ISO/IEC 17043:2023, "Conformity assessment - General Requirements for the competence of proficiency testing providers." Accreditation is granted to this organization to provide proficiency testing samples in the following analyte/matrix combinations:

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C01A Major Ions Alkalinity (pH 4.5) Chloride Conductivity (25°C) Dissolved Calcium Dissolved Magnesium Fluoride Hardness (as CaCO ₃) Nitrate Nitrate plus Nitrite Potassium Reactive Silica Sodium Sulfate Inorganic Carbon	6 Months	Water
C01B Simple Nutrients Ammonia Bromide DOC Nitrite Phosphate (SRP)	6 months	Water

Program Name / Parameters¹

Frequency

Matrix

C02A Full Range Metals

6 months

Water

- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Manganese
- Molybdenum
- Nickel
- Selenium
- Silver
- Strontium
- Thallium
- Tin
- Titanium
- Uranium
- Vanadium
- Zinc

C02B High Range Metals

6 months

Water

- Aluminum
- Barium
- Boron
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Manganese
- Molybdenum
- Nickel
- Strontium
- Thallium
- Titanium
- Vanadium
- Zinc



<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C02C Total Metals	6 months	Water
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Boron		
Cadmium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Manganese		
Molybdenum		
Nickel		
Selenium		
Silver		
Strontium		
Thallium		
Tin		
Titanium		
Uranium		
Vanadium		
Zinc		
C03 Complex Nutrients	6 months	Water
Total Kjeldahl Nitrogen		
Total Phosphorus		
C04A Solids	6 months	Water
Total Dissolved Solids		
Total Suspended Solids		
Volatile Suspended Solids		
C04B BOD	6 months	Water
BOD (5 day)		
CBOD (5 day)		
C04C Turbidity	6 months	Water
Turbidity		
C04D COD	6 months	Water
COD		



<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C05A Microbiology (Not intended for multi-tube fermentation)	6 months	Water
<i>Escherichia coli</i> (<i>E. coli</i>) Fecal Coliforms Heterotrophic Plate Count (HPC) Total Coliforms		
C05B Microbiology (Presence/Absence)	6 months	Water
<i>Escherichia coli</i> (<i>E. coli</i>) Total Coliforms		
C06A Organochlorine Pesticides (OCP)	6 months	Water
Aldrin Alpha-BHC a-Chlordane g-Chlordane Dieldrin Endosulfan I Endosulfan II Endrin Heptachlor Heptachlor Epoxide Lindane (gamma-BHC) Mirex o,p' - DDT p,p' - DDT p,p Methoxychlor		
C06B Total PCB	6 months	Water
aroclor 1242 aroclor 1248 aroclor 1254 aroclor 1260 Total PCBs		
C07 Polycyclic Aromatic Hydrocarbons (PAH)	6 months	Water
Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b, j) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Chrysene Dibenzo(a,h)anthracene Fluoranthene		



<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C07 Polycyclic Aromatic Hydrocarbons (PAH) (<i>cont'd</i>)	6 months	Water
Fluorene		
Naphthalene		
Indeno (1,2,3-cd) pyrene		
Phenanthrene		
Pyrene		
C08 Total PCB in Oil	6 months	Oil
Total PCB		
aroclor 1242		
aroclor 1248		
aroclor 1254		
aroclor 1260		
C09 Metals on Air Filters	6 months	Air filters
Cadmium		
Copper		
Lead		
Zinc		
C11 Trout LC50	6 months	Water
Trout LC50 (96 h)		
C12 Daphnia LC50	6 months	Water
Daphnia LC50 (48 h)		
C13 Microtox IC50	6 months	Water
Microtox IC50 (15 min)		
C14 CN (SAD)	6 months	Water
Cyanide (Strong Acid Dissociable)		
C15 pH	6 months	Water
pH		
C16 Volatile Organic Compounds	6 months	Water
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		

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C16 Volatile Organic Compounds (<i>cont'd</i>)	6 months	Water
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 t-butyl ether (MTBE)		
Methyl isobutyl ketone (MIBK)		
o-xylene		
Styrene		
Tetrachloroethylene		
Toluene		
Trans-1,2-dichloroethylene		
Trans-1,3-dichloropropene		
Trichloroethylene		
Trichlorofluoromethane		
Vinyl Chloride		

C17 Metals in Soil / Sediment	6 months	Soil / Sediment
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Boron		
Cadmium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Manganese		
Mercury		
Nickel		

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C17 Metals in Soil / Sediment (<i>cont'd</i>)	6 months	Soil / Sediment
Strontium		
Tin		
Titanium		
Uranium		
Vanadium		
Zinc		
C18 Polycyclic Aromatic Hydrocarbons (PAH) in Soil / Sediment	6 months	Soil / Sediment
Acenaphthene		
Acenaphthylene		
Anthracene		
Benzo (a) anthracene		
Benzo (a) pyrene		
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		
C19 Mercury	6 months	Water
Mercury		
C22 OP Pesticides	6 months	Water
Atrazine		
Azinphos-methyl		
Bendiocarb		
Carbaryl		
Carbofuran		
Chlorpyriphos (ethyl)		
Cyanazine		
Diazinon		
Dimethoate		
Diuron		
Malathion		
Metolachlor		
Metribuzin		
Parathion (ethyl)		
Phorate		
Simazine		
Terbufos		
Trifluralin		

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C24 Aryloxy Acid Pesticides	6 months	Water
2,4-dichlorophenoxyacetic acid 2,4,5-trichlorophenoxyacetic acid Bromoxynil Dicamba Diclofop-methyl (as free acid) Dinoseb Picloram		
C25 Phenolic Compounds	6 months	Water
2,4,6-trichlorophenol 2,3,4,6-tetrachlorophenol 2,4-dichlorophenol Pentachlorophenol		
C27 Glyphosate	6 months	Water
Glyphosate		
C29 Aldicarb	6 months	Water
Aldicarb		
C31A PHC in Soil	6 months	Soil / Sediment
F1: C ₆ -C ₁₀ Benzene Ethylbenzene M/p-xylene o-xylene Toluene VH: C ₆ – C ₁₀		
C31B PHC in Soil	6 months	Soil / Sediment
F2:C ₁₀ -C ₁₆ F3:C ₁₆ -C ₃₄ F4:C ₃₄ -C ₅₀ F4 (Gravimetric methods only)		
C32 Chlorine	6 months	Water
Free Chlorine Total Chlorine		
C33 Total Phenolics	6 months	Water
Total Phenolics		

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C34 Oil and Grease Total Oil and Grease Mineral Oil and Grease (Gravimetric methods only)	6 months	Water
C35 PCBs aroclor 1242 aroclor 1248 aroclor 1254 aroclor 1260 Total PCB	6 months	Soil / Sediment
C36 VOCs 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 t-butyl ether (MTBE) Methyl isobutyl ketone (MIBK) o-xylene Styrene Tetrachloroethylene Toluene Trans-1,2-dichloroethylene Trans-1,3-dichloropropene Trichloroethylene Trichlorofluoromethane	6 months	Soil

<u>Program Name / Parameters</u> ¹	<u>Frequency</u>	<u>Matrix</u>
C37 Colour True Colour	6 Months	Water
C38 VOCs by TCLP 1,2-Dichlorobenzene 1,2-Dichloroethane 1,4-Dichlorobenzene Benzene Carbon tetrachloride Chlorobenzene Chloroform Dichloromethane Methyl Ethyl Ketone Tetrachloroethylene Trichloroethylene	6 Months	Soil
C39 Inorganics by TCLP Silver Arsenic Boron Barium Cadmium Chromium Lead Selenium Uranium Mercury Fluoride Nitrate-N Nitrate and Nitrite as N Cyanide (Weak Acid Dissociable)	6 Months	Soil
C40A Petroleum Hydrocarbons in Water Benzene Ethylbenzene F1: C6-C10 m/p-Xylene o-Xylene Toluene	6 Months	Water
C40B Petroleum Hydrocarbons in Water F2: C10-C16 F3: C16-C34 F4: C34-C50	6 Months	Water
C41 Hexavalent Chromium in Water Hexavalent Chromium	6 Months	Water

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C42 Sulfide in Water Sulfide	6 Months	Water
C43 Solids in Soil Percent Moisture Total Solids	6 Months	Soil
C44 Nutrients in Soil Ammonia-N Kjeldahl Nitrogen Organic Carbon Phosphorus	6 Months	Soil
C45 Anions in Soil Bromide Chloride Fluoride Nitrate-N Percent Saturation Sulphate	6 Months	Soil
C46 Acidity in Water Acidity	6 Months	Water
C47 Haloacetic Acids in Water Bromochloroacetic acid Dibromoacetic acid Dichloroacetic acid Monobromoacetic acid Monochloroacetic acid Trichloroacetic acid	6 Months	Water
C70 Potency in Cannabis Tetrahydrocannabinol (THC) Tetrahydrocannabinolic Acid (THCA) Cannabidiol (CBD) Cannabidiolic Acid (CBDA)	6 Months	Cannabis
C71 Pesticides in Cannabis Acephate Aldicarb Azoxystrobin Bifenazate Boscalid Carbaryl	6 Months	Cannabis

<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C71 Pesticides in Cannabis (<i>cont'd</i>)	6 Months	Cannabis
Carbofuran		
Diazinon		
Dichlorvos (DDVP)		
Dimethoate		
Ethoprophos		
Etoxazole		
Fipronil		
Fludioxonil		
Imidacloprid		
Malathion		
Metalaxyl		
Methiocarb		
Methomyl		
Myclobutanil		
Oxamyl		
Paclobutrazol		
Propoxur (Baygon)		
Spiromesifen		
Spirotetramat		
Thiamethoxam		
Trifloxystrobin		
C72 Metals in Hemp	6 Months	Hemp
Arsenic		
Cadmium		
Chromium		
Lead		
Mercury		
C73 Residual Solvents in Hemp Oil	6 Months	Hemp Oil
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		



<u>Program Name / Parameters¹</u>	<u>Frequency</u>	<u>Matrix</u>
C73 Residual Solvents in Hemp Oil (<i>cont'd</i>)	6 Months	Hemp Oil
Dimethyl sulfoxide		
Ethanol		
Ethyl acetate		
Ethyl ether		
Heptane		
Isobutanol (2-Methyl-1-propanol)		
Isobutyl acetate		
Isopropyl acetate		
Methyl acetate		
Pentane		
Propane		
Propyl acetate		
Triethylamine		
C74 Hexavalent Chromium in Soil	6 Months	Soil
Hexavalent Chromium		
C75 Particle Size in Soil	6 Months	Soil
Percent Sand		
Percent Silt		
Percent Clay		
C76 Oil and Grease in Soil	6 Months	Soil
Total Oil and Grease		
C77 Pesticides in Soil	6 Months	Soil
p,p'-DDT		
Aldrin		
Alpha-BHC		
Alpha-Chlordane		
Beta-BHC		
Dieldrin		
Endosulfan I		
Endosulfan II		
Endrin		
Lindane		
Gamma-Chlordane		
Heptachlor		
Heptachlor Epoxide		
Methoxychlor		
C78 Water Activity/% Moisture in Hemp	6 Months	Hemp
Percent Moisture		



¹Assigned values and associated uncertainties are determined by consensus of participant data. Acceptance limits are based on regression equations derived from historic data.





Accredited Proficiency Testing Provider

A2LA has accredited

PROFICIENCY TESTING CANADA INC.

Ottawa, Ontario, CANADA

This accreditation covers the specific proficiency testing schemes listed on the agreed upon Scope of Accreditation.

This provider is accredited in accordance with the recognized International Standard ISO/IEC 17043: 2023 *Conformity assessment - General requirements for proficiency testing*. This accreditation demonstrates technical competence for a defined scope and the operation of a quality management system.



Presented this 12th day of February 2021.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2298.01
Valid to May 31, 2025
Revised March 27, 2024

For the proficiency testing schemes to which this accreditation applies, please refer to the provider's Scope of Accreditation.