

P02-04 – CALA Program Description - PT Catalogue
Revision 1.18 – December 30, 2016



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CALA PROGRAM DESCRIPTION – PT CATALOGUE

1.0 INTRODUCTION

The CALA Proficiency Testing (PT) Program is accredited to ISO/IEC 17043- *Conformity assessment—General requirements for proficiency testing* and offers PT in support of inorganics, organics and microbiology methods covering matrices such as water, soil/sediment, oil and air filters. Not all of the test groups in this catalogue are covered by the scope of accreditation. For a detailed list of what is covered by the A2LA accreditation please refer to the on-line scope (<https://www.a2la.org/dirsearchnew/newsearch.cfm>).

With the exception of C05A (microbiology) and C05B (microbiology) samples are provided as whole samples and are ready to analyze. However, some samples may have to be diluted to bring the concentrations within the laboratory's calibration range, as is common practice for actual samples.

In general, each test group is shipped twice per year, one half being shipped in January and June and the other half shipping in March and October. With the exception of C38, C39, P50, P51 and P52, each test group consists of four samples of different concentration.

2.0 REFERENCES

The following CALA documents provide information about Proficiency Testing and other CALA programs:

- P02-01 - CALA Program Description;
- P02-02- CALA Program Description - Fee Schedule;
- P02-03 - CALA Program Description - Proficiency Testing Policy for Accreditation
- P02-05 - CALA Program Description - List of Approved PT Providers;
- PT15-01 - CALA PT Program - Scheme;
- PT15-02 - CALA PT Program - Policies;
- PT15-03 - CALA PT Program - Procedures;
- PT15-04 - CALA PT Program - Collaborator Laboratories;
- PT15-05 - CALA PT Program - Regression Equations; and,
- PT33-List of PT Collaborators.

3.0 2015 SHIPPING SCHEDULE

The table below provides details on important dates for the CALA PT Program (2017).

Water Inorganic Chemistry/Toxicology/Water Microbiology/Metals on Filters			
Test Groups	Registration deadline	Shipping Date	Reporting Deadline
C01A, C01B, C02A, C02B, C02C, C03, C04A, C04B, C04C, C04D, C05A, C05B, C11, C12, C13, C14, C15, C19, C32, C33, C37, C42 P50, P51, P52	February 13	March 13	April 13
	September 16	October 16	November 17

Water Organics/Soil Inorganics/Soil Organics/Oil/Metals on Filters			
Test Groups	Registration deadline	Shipping Date	Reporting Deadline
C06A, C06B, C07, C08, C09, C16, C17, C18, C22, C24, C25, C27, C29, C31A, C31B, C34, C35, C36, C38, C39, C40A, C40B,C41	December 16	January 16	February 17
	May 19	June 19	July 21

Asbestos			
Test Groups	Registration deadline	Shipping Date	Reporting Deadline
C20	December 16	January 16	February 10
	February 13	March 13	April 7
	May 19	June 26	July 21
	September 16	October 16	November 10

4.0 REGISTRATION

Laboratories wishing to participate in CALA Proficiency Testing must submit a completed Application (P04-02-CALA *Application for Proficiency Testing* for testing laboratories or P04-07 – CALA *Application for Drinking Water Treatment Proficiency Testing*).

5.0 TESTS OFFERED IN THE CALA PT PROGRAM

This section provides details on the test group names, analytes included in the test group, approximate concentration range, months that the studies occur, the volume of material provided and the preservative used. Note to international laboratories: Some samples may be subject to national import restrictions. Please consult with your national import authorities.

5.1 Inorganics and Basic Wet Chemistry in Water

C01A Major Ions in Water		Member	Non-Member
		\$250	\$325
Mar/Oct	Alkalinity to pH 4.5	(20 – 250 mg/L)	
500 mL	Chloride	(5 – 500 mg/L)	
No Preservative	Conductivity at 25°C	(20 – 2000 µS/cm)	
	Calcium	(2 – 200 mg/L)	
	Magnesium	(2 – 50 mg/L)	
	Fluoride	(0.2 – 4.0 mg/L)	
	Hardness as CaCO ₃	(10 – 800 mg/L)	
	Inorganic Carbon	(2 – 50 mg/L)	
	Nitrate	(0.20 – 20.0 mg/L)	
	Nitrate plus Nitrite	(0.20 – 20.0 mg/L)	
	Potassium	(1 – 40 mg/L)	
	Reactive Silica	(0.5 – 30 mg/L)	
	Sodium	(2 – 150 mg/L)	
	Sulfate	(5 – 200 mg/L)	

This PT is composed of naturally occurring surface waters. The only analytes added are Fluoride and Nitrate. Although participants may use their method of choice for participation, caution should be taken if the turbidimetric method is used for Sulphate determination as some samples may have a natural colour that might interfere.

C01B NH₃/PO₄/Carbon/Bromide/Nitrite in Water		Member	Non-Member
		\$210	\$275
Mar/Oct	Ammonia	(0.5 – 20.0 mg/L)	
250 mL	Organic Carbon	(2.0 – 20.0 mg/L)	
No Preservative	Phosphate	(0.1 – 3.0 mg/L)	
	Bromide	(1.0 – 10.0 mg/L)	
	Nitrite	(0.1 – 1.0 mg/L)	

The concentration ranges for this PT are intended to cover the range from clean waters to wastewaters.

C02A Metals (Full Range) in Water		Member	Non-Member
		\$210	\$275
Mar/Oct	Aluminum	(0.001 – 1.60 mg/L)	
250 mL	Antimony	(1.0 – 100 µg/L)	
0.2% HNO ₃	Arsenic	(1.0 – 100 µg/L)	
	Barium	(0.001 – 1.6 mg/L)	
	Beryllium	(0.001 – 0.10 mg/L)	

CO2A Metals (Full Range) in Water (Cont.)

Boron	(0.001 - 1.60 mg/L)
Cadmium	(0.001 - 0.10 mg/L)
Chromium	(0.001 - 1.60 mg/L)
Cobalt	(0.001 - 1.60 mg/L)
Copper	(0.001 - 1.60 mg/L)
Iron	(0.001 - 1.60 mg/L)
Lead	(0.001 - 1.60 mg/L)
Manganese	(0.001 - 1.60 mg/L)
Molybdenum	(0.001 - 1.60 mg/L)
Nickel	(0.001 - 1.60 mg/L)
Selenium	(1.0 - 100 µg/L)
Silver	(0.001 - 0.100 mg/L)
Strontium	(0.001 - 1.60 mg/L)
Thallium	(0.001 - 0.100 mg/L)
Tin	(0.001 - 0.100 mg/L)
Titanium	(0.001 - 1.60 mg/L)
Uranium	(0.001 - 0.1 mg/L)
Vanadium	(0.001 - 1.60 mg/L)
Zinc	(0.001 - 1.60 mg/L)

This PT test group is intended for analysis by ICP-MS or other technologies that can achieve low ppb detection levels. Although sample digestion is not required, hydrides by hydride generation will require the digestion specified by the method.

CO2B Metals (High Range) in Water

Member \$210 Non-Member \$275

Mar/Oct	Aluminum	(0.25 - 1.6 mg/L)
250 mL	Barium	(0.25 - 1.6 mg/L)
0.2% HNO ₃	Boron	(0.25 - 1.6 mg/L)
	Chromium	(0.25 - 1.6 mg/L)
	Cobalt	(0.25 - 1.6 mg/L)
	Copper	(0.25 - 1.6 mg/L)
	Iron	(0.25 - 1.6 mg/L)
	Lead	(0.25 - 1.6 mg/L)
	Manganese	(0.25 - 1.6 mg/L)
	Molybdenum	(0.25 - 1.6 mg/L)
	Nickel	(0.25 - 1.6 mg/L)
	Strontium	(0.25 - 1.6 mg/L)
	Thallium	(0.25 - 1.6 mg/L)
	Titanium	(0.25 - 1.6 mg/L)
	Vanadium	(0.25 - 1.6 mg/L)
	Zinc	(0.25 - 1.6 mg/L)

This PT is intended for laboratories that use ICP-OES or other technologies that have higher detection levels than ICP-MS. Sample digestion is not required.

C02C Metals (Total) in Water		Member	Non-Member
		\$210	\$275
Mar/Oct	Aluminum	(0.25 - 1.6 mg/L)	
250 mL	Barium	(0.25 - 1.6 mg/L)	
0.2% HNO ₃	Boron	(0.25 - 1.6 mg/L)	
	Chromium	(0.25 - 1.6 mg/L)	
	Cobalt	(0.25 - 1.6 mg/L)	
	Copper	(0.25 - 1.6 mg/L)	
	Iron	(0.25 - 1.6 mg/L)	
	Lead	(0.25 - 1.6 mg/L)	
	Manganese	(0.25 - 1.6 mg/L)	
	Molybdenum	(0.25 - 1.6 mg/L)	
	Nickel	(0.25 - 1.6 mg/L)	
	Strontium	(0.25 - 1.6 mg/L)	
	Thallium	(0.25 - 1.6 mg/L)	
	Titanium	(0.25 - 1.6 mg/L)	
	Vanadium	(0.25 - 1.6 mg/L)	
	Zinc	(0.25 - 1.6 mg/L)	

This PT is intended for metals analysis that requires a preliminary acid digestion.

C03 Total Nutrients in Water		Member	Non-Member
		\$175	\$230
Mar/Oct	Total Kjeldahl Nitrogen	(2.0 - 20 mg/L)	
250 mL	Total Phosphorus	(0.10 - 4.0 mg/L)	
pH < 2 with H ₂ SO ₄			

The concentration range covers both clean waters and wastewaters. An appropriate digestion is required prior to analysis. This PT is not intended for Total Nitrogen analysis involving a UV digestion.

C04A Solids in Water		Member	Non-Member
		\$165	\$215
Mar/Oct	Total Suspended Solids	(10 - 200 mg/L)	
500 mL	Volatile Suspended Solids	(5 - 150 mg/L)	
No Preservative	Total Dissolved Solids	(100 - 1000 mg/L)	

Solids concentrations are typical of those observed in wastewater treatment systems. Filters used should be Whatman 934-AH or equivalent.

C04B Biochemical Oxygen Demand in Water		Member	Non-Member
		\$180	\$235
Mar/Oct	BOD	(25 - 200 mg/L)	
1000 mL	CBOD	(25 - 200 mg/L)	
Freezing			

BOD and CBOD concentrations are typical of those observed in wastewater treatment systems.

C04C Turbidity in Water		Member	Non-Member
		\$160	\$210

Mar/Oct
250 mL
No Preservative

Turbidly (0.5 – 50 NTU)

The turbidity levels found in these samples are suitable for drinking water and for surface water.

C04D Chemical Oxygen Demand in Water		Member	Non-Member
		\$160	\$210

Mar/Oct
250 mL
pH < 2 with H₂SO₄

COD (30 – 500 mg/L)

The COD concentrations in these samples is typical of those found in wastewater treatment systems and is suitable for the HACH COD vials (or similar).

C14 Cyanide in Water		Member	Non-Member
		\$180	\$235

Mar/Oct
500 mL
pH > 12 NaOH

Strong Acid Dissociable Cyanide (0.2 – 5.0 mg/L)

This PT is suitable for methods that require a strong acid treatment to dissociate complex cyanides.

C15 pH in Water		Member	Non-Member
		\$135	\$180

Mar/Oct
125 mL
No Preservative

pH (3 – 10 pH units)

C19 Mercury in Water		Member	Non-Member
		\$170	\$225

Mar/Oct
125 mL
0.5% bromine monochloride

Mercury (0.1 – 5 µg/L)

C32 Chlorine in Water		Member	Non-Member
		\$160	\$210

Mar/Oct
250 mL
No Preservative

Free Chlorine (0.5 – 3.0 mg/L)
Total Chlorine (0.5 – 3.0 mg/L)

C33 Total 4AAP Phenolics in Water		Member	Non-Member
		\$185	\$245

Mar/Oct
250 mL
pH < 2 H₂SO₄

Total Phenolics (0.005 – 0.5 mg/L)

This PT is restricted to laboratories that use the 4AAP colorimetric method.

C34 Total Hexane Extractable Oil and Grease in Water	Member	Non-Member
	\$245	\$320

Jan/Jun	Total Oil and Grease	(10 – 500 mg/L)
1000 mL	Mineral Oil and Grease	(10 – 500 mg/L)
pH < 2 H ₂ SO ₄		

This PT is restricted to laboratories that use the hexane extractable/gravimetric procedure for oil and grease.

C37 Colour in Water	Member	Non-Member
	\$130	\$170

Mar/Oct	True Colour	(0 – 50 CU)
125 mL		
pH < 2 HCl		

C41 Hexavalent Chromium in Water*	Member	Non-Member
	\$225	\$295

Jan/Jun	Hexavalent Chromium	(50 – 500 µg/L)
125 mL		
pH 9.3 - 9.7 Ammonium sulphate		

C42 Sulphide in Water* NEW	Member	Non-Member
	\$170	\$225

Mar/Oct	Sulphide	(1 – 10 mg/L)
125 mL		
pH 10 with NaOH and ZnOAc		

4.2 Organics in Water

C06A Organochlorine Pesticides in Water	Member	Non-Member
	\$340	\$445

Jan/Jun	alpha-BHC	(0.05 – 3.0 µg/L)
1000 mL	Endosulfan I	(0.05 – 3.0 µg/L)
No Preservative	Endosulfan II	(0.05 – 3.0 µg/L)
	Endrin	(0.05 – 3.0 µg/L)
	Heptachlor Epoxide	(0.05 – 3.0 µg/L)
	Lindane (gamma-BHC)	(0.05 – 3.0 µg/L)
	Mirex	(0.05 – 3.0 µg/L)
	o,p' – DDT	(0.05 – 3.0 µg/L)
	p,p' – DDT	(0.05 – 3.0 µg/L)
	p,p' Methoxychlor	(0.05 – 3.0 µg/L)
	Aldrin	(0.05 – 5.0 µg/L)
	Dieldrin	(0.05 – 5.0 µg/L)
	Heptachlor	(0.05 – 5.0 µg/L)
	a – Chlordane	(0.05 – 5.0 µg/L)
	g – Chlordane	(0.05 – 5.0 µg/L)

C06B Polychlorinated Biphenyls (PCBS) in Water		Member	Non-Member
		\$295	\$385
Jan/Jan	Total PCB	(1.0 - 20.0 µg/L)	
1000 mL	Aroclor 1242	(1.0 - 20.0 µg/L)	
No Preservative	Aroclor 1248	(1.0 - 20.0 µg/L)	
	Aroclor 1254	(1.0 - 20.0 µg/L)	
	Aroclor 1260	(1.0 - 20.0 µg/L)	

C07 Polycyclic Aromatic Hydrocarbons (PAHs) in Water		Member	Non-Member
		\$295	\$385
Jan/Jan	Acenaphthene	(0.4 - 12 µg/L)	
1000 mL	Acenaphthylene	(0.4 - 12 µg/L)	
No Preservative	Anthracene	(0.4 - 12 µg/L)	
	Benzo (a) anthracene	(0.4 - 12 µg/L)	
	Benzo (a) pyrene	(0.4 - 12 µg/L)	
	Benzo (b) fluoranthene	(0.4 - 12 µg/L)	
	Benzo (g,h,i) perylene	(0.4 - 12 µg/L)	
	Benzo (k) fluoranthene	(0.4 - 12 µg/L)	
	Chrysene	(0.4 - 12 µg/L)	
	Dibenzo(a,h)anthracene	(0.4 - 12 µg/L)	
	Fluoranthene	(0.4 - 12 µg/L)	
	Fluorene	(0.4 - 12 µg/L)	
	Indeno (1,2,3 - cd) pyrene	(0.4 - 12 µg/L)	
	Naphthalene	(0.4 - 12 µg/L)	
	Phenanthrene	(0.4 - 12 µg/L)	
	Pyrene	(0.4 - 12 µg/L)	

C16 Volatile Organic Compounds in Water		Member	Non-Member
		\$315	\$410
Jan/Jan	1,1,1-Trichloroethane	(2.0 - 200 µg/L)	
2 x 40 mL vials	1,1,2,2-Tetrachloroethane	(2.0 - 200 µg/L)	
No Preservative	1,1,2-Trichloroethane	(2.0 - 200 µg/L)	
	1,1-Dichloroethane	(2.0 - 200 µg/L)	
	1,1-dichloroethylene	(2.0 - 200 µg/L)	
	1,2-dichlorobenzene	(2.0 - 200 µg/L)	
	1,2-dichloroethane	(2.0 - 200 µg/L)	
	1,2-Dichloropropane	(2.0 - 200 µg/L)	
	1,3-Dichlorobenzene	(2.0 - 200 µg/L)	
	1,4-dichlorobenzene	(2.0 - 200 µg/L)	
	Acetone (2-Propanone)	(2.0 - 200 µg/L)	
	Benzene	(2.0 - 200 µg/L)	
	Bromodichloromethane	(2.0 - 200 µg/L)	
	Bromoform	(2.0 - 200 µg/L)	
	Carbon Tetrachloride	(2.0 - 200 µg/L)	
	Chlorobenzene	(2.0 - 200 µg/L)	
	Chlorodibromomethane	(2.0 - 200 µg/L)	
	Chloroform	(2.0 - 200 µg/L)	
	cis-1,2-Dichloroethylene	(2.0 - 200 µg/L)	
	cis-1,3-Dichloropropene	(2.0 - 200 µg/L)	
	Dichloromethane	(2.0 - 200 µg/L)	
	Ethylbenzene	(2.0 - 200 µg/L)	
	Ethylene Dibromide	(2.0 - 200 µg/L)	
	m/p-xylene	(2.0 - 200 µg/L)	
	Methyl Ethyl Ketone	(2.0 - 200 µg/L)	
	Methyl t-butyl ether (MTBE)	(2.0 - 200 µg/L)	
	Methyl isobutyl Ketone (MIBK)	(2.0 - 200 µg/L)	

C16 Volatile Organic Compounds in Water (Cont.)

o-xylene	(2.0 - 200 µg/L)
Styrene	(2.0 - 200 µg/L)
Tetrachloroethylene	(2.0 - 200 µg/L)
Toluene	(2.0 - 200 µg/L)
trans-1,2-Dichloroethylene	(2.0 - 200 µg/L)
trans-1,3-Dichloropropene	(2.0 - 200 µg/L)
Trichloroethylene	(2.0 - 200 µg/L)
Trichlorofluoromethane	(2.0 - 200 µg/L)
Vinyl Chloride	(2.0 - 200 µg/L)

C22 Organophosphorus Pesticides in Water

Member Non-Member
\$485 \$635

Jan/Jun	Atrazine	(2 - 5 µg/L)
1000 mL	Azinphos-methyl	(10 - 40 µg/L)
No Preservative	Bendiocarb	(1 - 40 µg/L)
	Carbaryl	(0.2 - 90 µg/L)
	Carbofuran	(0.2 - 90 µg/L)
	Chlorpyrifos (ethyl)	(2 - 10 µg/L)
	Cyanazine	(2 - 10 µg/L)
	Diazinon	(0.5 - 20 µg/L)
	Dimethoate	(2 - 20 µg/L)
	Diuron	(20 - 50 µg/L)
	Malathion	(2 - 10 µg/L)
	Metolachlor	(2 - 10 µg/L)
	Metribuzin	(2 - 10 µg/L)
	Parathion (ethyl)	(0.5 - 20 µg/L)
	Phorate	(0.5 - 5 µg/L)
	Simazine	(1 - 10 µg/L)
	Terbufos	(0.5 - 5 µg/L)
	Trifluralin	(1 - 10 µg/L)

C24 Aryloxy Acid Pesticides in Water

Member Non-Member
\$320 \$420

Jan/Jun	2,4-Dichlorophenoxyacetic Acid	(0.1 - 10 µg/L)
1000 mL	2,4,5-Trichlorophenoxyacetic Acid	(0.1 - 10 µg/L)
pH < 2 H ₂ SO ₄	Bromoxynil	(1 - 5 µg/L)
	Dicamba	(1 - 10 µg/L)
	Diclofop-methyl (as free acid)	(0.5 - 5 µg/L)
	Dinoseb	(1 - 10 µg/L)
	Picloram	(0.1 - 10 µg/L)

C25 Phenolic Compounds

Member Non-Member
\$310 \$405

Jan/Jun	2,4,6-Trichlorophenol	(2 - 20 µg/L)
1000 mL	2,3,4,6-Tetrachlorophenol	(2 - 20 µg/L)
pH < 2 H ₂ SO ₄	2,4-Dichlorophenol	(2 - 20 µg/L)
	Pentachlorophenol	(2 - 20 µg/L)

C27 Glyphosate in Water

Member Non-Member
\$270 \$355

Jan/Jun	Glyphosate	(25 - 80 µg/L)
250 mL		
0.01% thiosulfate		

C29 Aldicarb in Water		Member	Non-Member
		\$330	\$430

Jan/Jun	Aldicarb	(1 - 9 µg/L)
250 mL		
0.001% thiosulfate		

C40A Petroleum Hydrocarbons in Water*		Member	Non-Member
		\$290	\$380

Jan/Jun	Benzene	(1 - 100 µg/L)
40 mL vials (x2)	Ethylbenzene	(1 - 100 µg/L)
	F1: C6-C10	(20 - 1000 µg/L)
	m/p-Xylene	(1 - 100 µg/L)
	o-Xylene	(1 - 100 µg/L)
	Toluene	(1 - 100 µg/L)

C40B Petroleum Hydrocarbons in Water*		Member	Non-Member
		\$290	\$380

Jan/Jun	F2: C10-C16	(200 - 50,000 µg/L)
1000 mL Glass	F3: C16-C34	(200 - 50,000 µg/L)
	F4: C34-C50	(200 - 50,000 µg/L)

4.3 Soil

C17 Metals in Soil/Sediment		Member	Non-Member
		\$170	\$225

Jan/Jun	Aluminum	(1000 - 100000 µg/g)
5 - 7 g	Antimony	(0.4 - 4.0 µg/g)
No Preservative	Arsenic	(5.0 - 35 µg/g)
	Barium	(50 - 500 µg/g)
	Beryllium	(1.0 - 3.0 µg/g)
	Boron	(20 - 200 µg/g)
	Cadmium	(0.2 - 6.0 µg/g)
	Chromium	(50 - 150 µg/g)
	Cobalt	(10 - 20 µg/g)
	Copper	(30 - 600 µg/g)
	Iron	(1000 - 50000 µg/g)
	Manganese	(100 - 2000 µg/g)
	Mercury	(50 - 2000 ng/g)
	Nickel	(25 - 1000 µg/g)
	Lead	(5 - 400 µg/g)
	Strontium	(100 - 500 µg/g)
	Tin	(10 - 100 µg/g)
	Titanium	(500 - 5000 µg/g)
	Uranium	(1 - 5 µg/g))
	Vanadium	(25 - 200 µg/g)
	Zinc	(40 - 1600 µg/g)

This PT is intended for use by laboratories that utilize a strong acid digestion (e.g., aqua-regia) but is not intended for use with HF.

C18 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil		Member	Non-Member
		\$230	\$300
Jan/Jun	Acenaphthene	(0.2 - 50 µg/g)	
25 - 40 g	Acenaphthylene	(0.2 - 50 µg/g)	
No Preservative	Anthracene	(0.2 - 50 µg/g)	
	Benzo (a) anthracene	(0.2 - 50 µg/g)	
	Benzo (a) pyrene	(0.2 - 50 µg/g)	
	Benzo (b) fluoranthene	(0.2 - 50 µg/g)	
	Benzo (g,h,i) perylene	(0.2 - 50 µg/g)	
	Benzo (k) fluoranthene	(0.2 - 50 µg/g)	
	Chrysene	(0.2 - 50 µg/g)	
	Dibenzo(a,h)anthracene	(0.2 - 50 µg/g)	
	Fluoranthene	(0.2 - 50 µg/g)	
	Fluorene	(0.2 - 50 µg/g)	
	Indeno (1,2,3 - cd) pyrene	(0.2 - 50 µg/g)	
	Naphthalene	(0.2 - 50 µg/g)	
	Phenanthrene	(0.2 - 50 µg/g)	
	Pyrene	(0.2 - 50 µg/g)	

C31A Petroleum Hydrocarbons in Soil		Member	Non-Member
		\$275	\$360
Jan/Jun	F1: (C6-C10)	(30 - 3500 mg/kg)	
30 g	Benzene	(10 - 200 mg/kg)	
Freezing	Ethylbenzene	(10 - 200 mg/kg)	
	m/p- Xylene	(100 - 500 mg/kg)	
	o-Xylene	(100 - 500 mg/kg)	
	Toluene	(10 - 200 mg/kg)	
	VH (C6-C10)	(30 - 3500 mg/kg)	

Samples are intended for use by the CCME PHC method.

C31B Petroleum Hydrocarbons in Soil		Member	Non-Member
		\$275	\$360
Jan/Jun	F2: C10-C16	(150 - 6500 mg/kg)	
30 g	F3: C16-C34	(250 - 12500 mg/kg)	
Freezing	F4: C34-C50	(1000 - 12500 mg/kg)	
	F4: Gravimetric	(1000 - 12500 mg/kg)	

Samples are intended for use by the CCME PHC method.

C35 Polychlorinated Biphenyls (PCBS) in Soil		Member	Non-Member
		\$250	\$325
Jan/Jun	Total PCB	(2 - 150 µg/g)	
30 g	Aroclor 1242	(2 - 150 µg/g)	
No Preservative	Aroclor 1248	(2 - 150 µg/g)	
	Aroclor 1254	(2 - 150 µg/g)	
	Aroclor 1260	(2 - 150 µg/g)	

C36 Volatile Organic Compounds in Soil		Member	Non-Member
		\$335	\$440
Jan/Jun	1,1,1-Trichloroethane	(5 - 200 µg/g)	
8 g	1,1,2,2-Tetrachloroethane	(5 - 200 µg/g)	
Methanol	1,1,2-Trichloroethane	(5 - 200 µg/g)	
	1,1-Dichloroethane	(5 - 200 µg/g)	
	1,1-dichloroethylene	(5 - 200 µg/g)	
	1,2-dichlorobenzene	(5 - 200 µg/g)	
	1,2-dichloroethane	(5 - 200 µg/g)	
	1,2-Dichloropropane	(5 - 200 µg/g)	
	1,3-Dichlorobenzene	(5 - 200 µg/g)	
	1,4-dichlorobenzene	(5 - 200 µg/g)	
	Acetone (2-Propanone)	(5 - 200 µg/g)	
	Benzene	(5 - 200 µg/g)	
	Bromodichloromethane	(5 - 200 µg/g)	
	Bromoform	(5 - 200 µg/g)	
	Carbon Tetrachloride	(5 - 200 µg/g)	
	Chlorobenzene	(5 - 200 µg/g)	
	Chlorodibromomethane	(5 - 200 µg/g)	
	Chloroform	(5 - 200 µg/g)	
	cis-1,2-Dichloroethylene	(5 - 200 µg/g)	
	cis-1,3-Dichloropropene	(5 - 200 µg/g)	
	Dichloromethane	(5 - 200 µg/g)	
	Ethylbenzene	(5 - 200 µg/g)	
	Ethylene Dibromide	(5 - 200 µg/g)	
	m/p-xylene	(5 - 200 µg/g)	
	Methyl Ethyl Ketone	(5 - 200 µg/g)	
	Methyl t-butyl ether (MTBE)	(5 - 200 µg/g)	
	Methyl isobutyl Ketone (MIBK)	(5 - 200 µg/g)	
	o-xylene	(5 - 200 µg/g)	
	Styrene	(5 - 200 µg/g)	
	Tetrachloroethylene	(5 - 200 µg/g)	
	Toluene	(5 - 200 µg/g)	
	trans-1,2-Dichloroethylene	(5 - 200 µg/g)	
	trans-1,3-Dichloropropene	(5 - 200 µg/g)	
	Trichloroethylene	(5 - 200 µg/g)	
	Trichlorofluoromethane	(5 - 200 µg/g)	

C38 Volatile Organic Compounds in Soil (TCLP)*		Member	Non-Member
		\$310	\$405
Jan/Jun			
100 g	1,2-Dichlorobenzene	(0.025 - 5 mg/L)	
Freezing	1,2-Dichloroethane	(0.025 - 5 mg/L)	
	1,4-Dichlorobenzene	(0.025 - 5 mg/L)	
	Benzene	(0.025 - 5 mg/L)	
	Carbon tetrachloride	(0.025 - 5 mg/L)	
	Chlorobenzene	(0.025 - 5 mg/L)	
	Chloroform	(0.025 - 5 mg/L)	
	Dichloromethane	(0.025 - 5 mg/L)	
	Methyl Ethyl Ketone	(1.0 - 5 mg/L)	
	Tetrachloroethylene	(0.025 - 5 mg/L)	
	Trichloroethylene	(0.025 - 5 mg/L)	

C39 Inorganics in Soil (TCLP)*		Member	Non-Member
		\$325	\$425
Jan/Jan 200 g No Preservative	Metals		
	Silver		(0.0010 - 0.050 mg/L)
	Arsenic		(0.10 - 5.0 mg/L)
	Boron		(0.50 - 10.0 mg/L)
	Barium		(0.10 - 2.0 mg/L)
	Cadmium		(0.0010 - 0.050 mg/L)
	Chromium		(0.010 - 0.50 mg/L)
	Lead		(0.010 - 0.50 mg/L)
	Selenium		(0.050 - 1.0 mg/L)
	Uranium		(0.050 - 1.0 mg/L)
	Mercury		(0.0001 - 0.050 mg/L)
	Anions		
	Fluoride		(10 - 100 mg/L)
	Nitrate-N		(2 - 50 mg/L)
	Nitrate and Nitrite as N		(2.8 - 70 mg/L)
	Cyanide (Weak Acid Dissociable)		(0.1 - 5 mg/L)

4.4 Microbiology in Water **

C05A Microbiology (Quantified) in Water		Member	Non-Member
		\$215	\$280
Mar/Oct 2 - 5 mL Stabilized	<i>Escherichia coli</i> (E. coli) Fecal (Thermotolerant) Coliforms Heterotrophic Plate Count Total Coliforms		(20 - 100 CFU/100 mL) (20 - 100 CFU/100 mL) (200 - 1000 CFU/mL) (20 - 100 CFU/100 mL)

This PT is not intended for Multi-Tube fermentation methods.

C05B Microbiology (Presence/Absence) in Water		Member	Non-Member
		\$225	\$295
Mar/Oct 2 - 5 mL Stabilized	<i>Escherichia coli</i> (<i>E. coli</i>) Total Coliforms		

4.5 Oil

C08 Polychlorinated Biphenyls (PCBS) in Oil		Member	Non-Member
		\$240	\$315
Jan/Jan 3 mL vial No Preservative	Total PCB Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260		(5.0 - 150.0 µg/g) (5.0 - 150.0 µg/g) (5.0 - 150.0 µg/g) (5.0 - 150.0 µg/g) (5.0 - 150.0 µg/g)

4.6 Air

C09 Metals on Air Filters		Member	Non-Member
		\$220	\$290
Jan/Jan 47 mm x 2 (quartz) No Preservative	Cadmium Copper Lead Zinc		(4.0 - 30 µg/HVF) (4.0 - 60 µg/HVF) (4.0 - 80 µg/HVF) (4.0 - 60 µg/HVF)

C20 Asbestos*	Member	Non-Member
	\$270	\$355
Jan/Mar/Jun/Oct Slide/Wedge No Preservative		
Asbestos		

4.7 Toxicology

C11 Rainbow Trout LC50	Member	Non-Member
	\$265	\$345
Mar/Oct 1000 mL No Preservative		
Trout 96 Hour LC50		
(2 - 10 mL/L)		

C12 Daphnia LC50	Member	Non-Member
	\$265	\$345
Mar/Oct 500 mL No Preservative		
Daphnia 48 Hour LC50		
(2 - 40 mL/L)		

C13 Microtox	Member	Non-Member
	\$265	\$345
Mar/Oct 100 mL No Preservative		
Microtox 15 Minute IC50		
(4 - 10 mL/L)		

4.8 Water Treatment Operator PT

The P50 series of PT is intended for use by water treatment operators, using portable test kits.

P50 Chlorine in Drinking Water by Test-Kit*	Member	Non-Member
	\$85	\$115
Mar/Oct 125 mL No Preservative		
Total Chlorine		
Free Chlorine		
(0.5 - 3.0 mg/L)		
(0.5 - 3.0 mg/L)		

P51 Turbidity in Drinking Water by Test-Kit*	Member	Non-Member
	\$85	\$115
Mar/Oct 125 mL No Preservative		
Turbidity		
(0.5 - 10 NTU)		

P52 pH in Drinking Water by Portable Meter*	Member	Non-Member
	\$85	\$115
Mar/Oct 125 mL No Preservative		
pH		
(4 - 8 pH Units)		

Special Notes

* These test groups are not currently included in CALA's scope of accreditation. Please refer to the A2LA web-site for the most current coverage.

** Microbiology samples will not be shipped without the appropriate Public Health Agency of Canada license.

Fees: If there are any discrepancies between the fees in this document and P02-02 *CALA Program Description - Fee Schedule*, the fees in P02-02 are the ones that will be applied.

All Test Groups: The indicated concentration ranges are approximate values only. *Actual* concentrations may be higher or lower than those indicated.

General Organics: Because the assigned values used for the calculation of z-scores is based on consensus data, laboratories that are using isotope dilution procedures may observe a bias relative to the assigned values indicated in the PT reports.