

Annual Report

2019

Trust,
measured
accurately



CALA



**CALA believes that
good data is at the heart
of every good decision.**

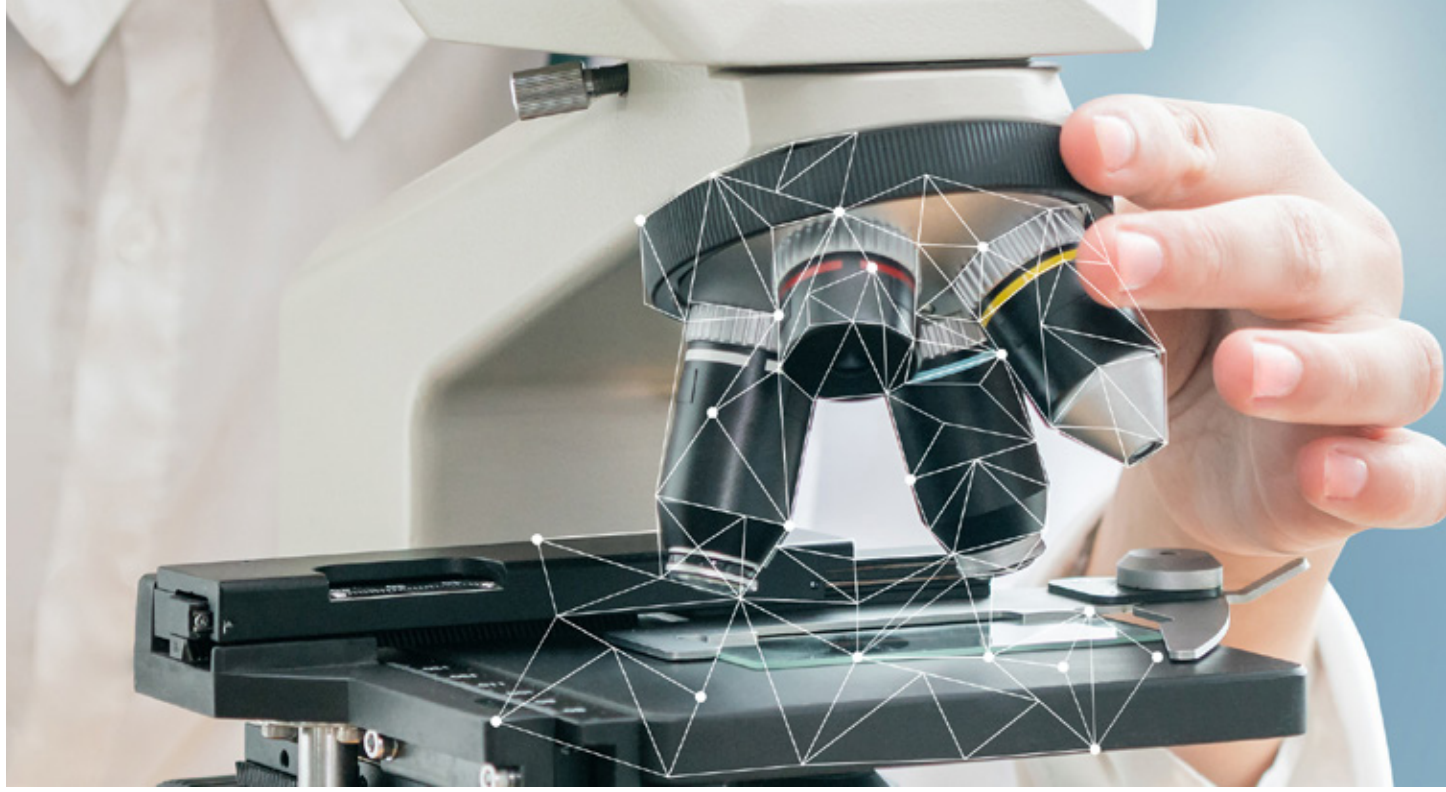


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Joint Letter from the CEO & the Chair



Jeff Zimmer
Chair



Andrew M. Adams
President & CEO

CALA HAS A PROUD HISTORY of providing accreditation, proficiency testing and training programs to environmental testing laboratories. We believe laboratories that choose accreditation are committed to producing quality data for their customers, thereby enabling them to make critical business decisions based on data they can trust.

In 2019, CALA was among 102 worldwide accreditation bodies signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). Customers and regulators are increasingly looking for accreditation bodies that are signatory to ILAC. This provides assurance that CALA is managing their programs according to international requirements for accreditation bodies. Furthermore, it opens up national and international opportunities for both laboratories and their customers who may be looking to do business beyond their own borders. Thus, CALA devotes time and effort as a member of ILAC and its international community. During 2019,

CALA participated in 3 international meetings (Singapore, Germany, Frankfurt), along with a number of committees, document reviews, voting, and the MRA process of evaluation of other accreditation bodies.

CALA's Accreditation Program invested considerable energy over the past year re-assessing our accreditation customers to the revised ISO/IEC 17025:2017 standard. The deadline for accreditation to the revised standard is November 29th, 2020. This date provided laboratories 3 years to complete their reassessment. Beyond this, CALA accredited 9 new laboratories, bringing the total number of CALA-accredited labs to 206 by the end of December 2019.

In December of 2019, CALA announced the extension of its services to include assessment and accreditation of sampling to the ISO/IEC 17025 standard. With the publication of ISO/IEC 17025:2017, the definition of a laboratory was expanded. Accreditation can now be granted to testing laboratories and to organizations that perform sampling for subsequent testing. By definition, the standard recognizes sampling as a stand-alone process that falls under the requirements of the ISO/IEC 17025:2017 standard.

CALA's Training Program felt the effects of laboratories being reassessed to the revised ISO/IEC 17025:2017 standard. Along with the newly revised standard came the requirement for laboratories to modify their management system. Training saw a 6% growth in students in 2019,

a 30% growth in the number of classes offered, a 39% growth in international students and the busiest first quarter in CALA's history.

Participation in CALA's Proficiency Testing Program saw a slight increase in 2019. Fees remained stable during 2019, although a slight increase in costs towards the end of 2019 will result in a small increase in fees for most test groups in 2020.

This annual report is significant in that 2019 was the last year for CALA in its long-standing form as a not-for-profit organization offering accreditation, proficiency testing and training. Effective the end of 2019, CALA no longer offers proficiency testing. These services are now offered by Proficiency Testing Canada Inc. (PTC). PTC is a not-for-profit organization incorporated in October 2019 and officially began operations in January 2020. Ken Middlebrook, CALA's long time Proficiency Testing Manager, was appointed Executive Director of PTC. Well suited to lead the company, Ken brings years of experience working in and managing laboratories prior to running CALA's Proficiency Testing program since 2004.

PTC is an independent company that has its own senior management and Board of Directors. It will buy support services from CALA including, finance, human resources, IT, among other resources, and will be co-located with CALA for the foreseeable future.

The last change at CALA that we would like to mention is CALA's transition to ISO/IEC 17011:2017. When the revised ISO/IEC 17025 standard for laboratories was released, a revised standard for accreditation bodies (ABs) was also released. ABs are working to the same timeline

as laboratories to transition to the new standard by November 29th, 2020. CALA will be evaluated by the Asia Pacific Accreditation Cooperation (APAC) against the requirements of the new standard sometime in 2020. We are confident the evaluation will go well given all the work gone into transitioning to the new standard.

Lastly, I would like to take this opportunity to acknowledge and thank the many volunteers who contribute so much to CALA's success. We are honoured by the number of individuals that volunteer their time and expertise serving as assessors, members of various committees (Accreditation Council, Advisory Panel, Program Committee) and on the Board of Directors. These volunteer positions offer the opportunity to develop new skills and we are delighted to hear that they get as much out of working for CALA as they give. Without the hundreds of willing volunteers CALA would be a very different organisation. Thank you all for your invaluable contribution.

The following pages of this annual report will provide you with more detail of the highlights mentioned above. If you have questions or wish to provide feedback to CALA please don't hesitate to contact us or any of the members of the Board of Directors. Their contact information can be found on the next page.

Best regards,

Jeff Zimmer
Chair

Andrew M. Adams
President & CEO

Board of Directors

Chair

Mr. Jeff Zimmer

Prairies and Northern, Not-For-Profit
Saskatoon, SK

Vice-Chair

Mr. R. Shane Harnish

At-Large, For-Profit
Edmonton, AB

Treasurer

Mr. Dalibor Ambrus

At-Large, Not-For-Profit
Calgary, AB

Secretary

Ms. Pam Reyno

Appointed, For-Profit
Dartmouth, NS

Dr. Joyce Austin

Pacific & Yukon Region, Not-For-Profit
Victoria, BC

Mr. Boniface Koudjonou

Ontario/Quebec, Not-For-Profit
Ottawa, ON

Mr. Barry Loescher

At Large, For-Profit
Gabriola Island, BC

Mr. Klas Ohman

At Large, For-Profit
Calgary, AB

Ms. Glenna Pike

Ontario/Québec, For-Profit
Waterloo, ON

Mr. Dave Schellenberg

Appointed, Atlantic, Not-For-Profit
Fredericton, NB

Corporate Profile

About CALA

Since 1989, CALA has helped Canadian laboratories conform to internationally accepted standards of competence and proficiency. By developing an Accreditation Program based on the assessment of a laboratory's quality management system and supported by the evaluation of analytical capability determined through proficiency testing, laboratories can be assessed for their technical competence. CALA's Accreditation Program was officially recognized by the Asia Pacific Laboratory Accreditation Cooperation (APLAC), now known as Asia Pacific Accreditation Cooperation (APAC), and the International Laboratory Accreditation Cooperation (ILAC) in November 2005.

Over the years, CALA's focus has grown to include the accreditation of cannabis, food, mineral, natural health products and petroleum testing laboratories. As of December 31st, there were 206 CALA-accredited government and private sector laboratories. Forty-seven (47) of those CALA-accredited laboratories were licensed under the Ontario *Safe Drinking Water Act* (OSDWA).

In 2019, CALA offered programs in 3 areas – Accreditation, Proficiency Testing and Training. Towards the end of 2019, CALA began ramping up for its reevaluation against the revised ISO/IEC 17011:2017 standard planned for May of 2020. To remain compliant to the revised standard, an accreditation body such as CALA shall not offer products or services that may affect its impartiality including proficiency testing. Therefore, CALA will be seceding the Proficiency Testing Program to operate as Proficiency Testing Canada Inc. (PTC), an independent corporate entity and this 2019 annual report will be the last that includes the CALA Proficiency Testing program.

Our Mission

CALA believes that good data is at the heart of every good decision. Our mission is to provide the highest quality accreditation of laboratories to ensure that people and organizations can trust the data they use to make the best decisions.

2019 in Retrospect

CALA-accredited Laboratories in 2019

CALA is pleased to recognize the following laboratories that were accredited to ISO/IEC 17025 in 2019:

- Canada Malting Co. (CMC)
- The BC Centre for Aquatic Health Sciences (BC CAHS)
- Microvi Laboratories Inc.
- Testmark Laboratories
- NOVA Analytics Inc.
- Innovatech
- Good Harbour Laboratories (GHL)
- Certispec
- Guardian Lab Services



CALA Members

CALA MEMBERS represent a diverse group of companies from both private and public sectors. In 2019, CALA had 475 members, comprising both institutional and individual memberships. Members have voting rights at annual and special member meetings, that can affect CALA programs. Members who desire to participate in the governance of CALA also have the opportunity to either nominate or be nominated for a position on CALA's Board of Directors and provide a voice for the members of CALA.

Additional benefits of institutional membership with CALA include discounts on CALA Training and Proficiency Testing. In addition, members have access to discounts on laboratory insurance, travel and car rental.

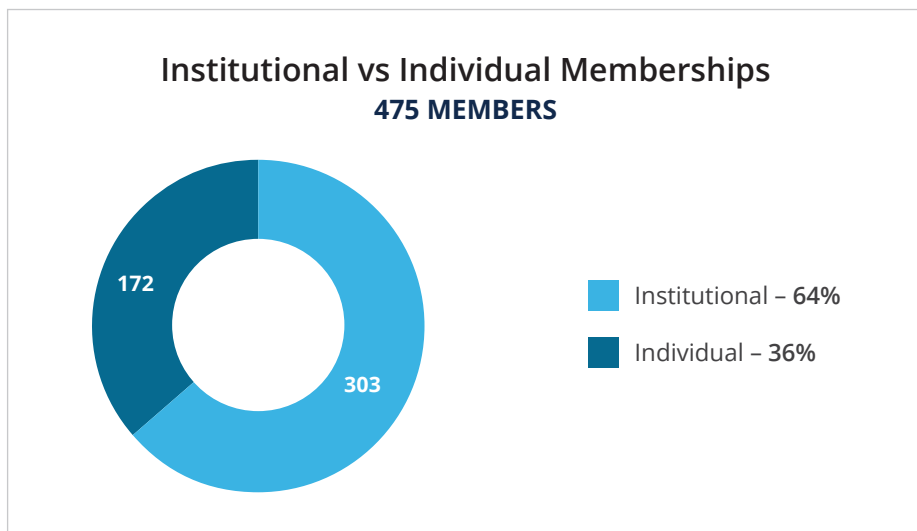
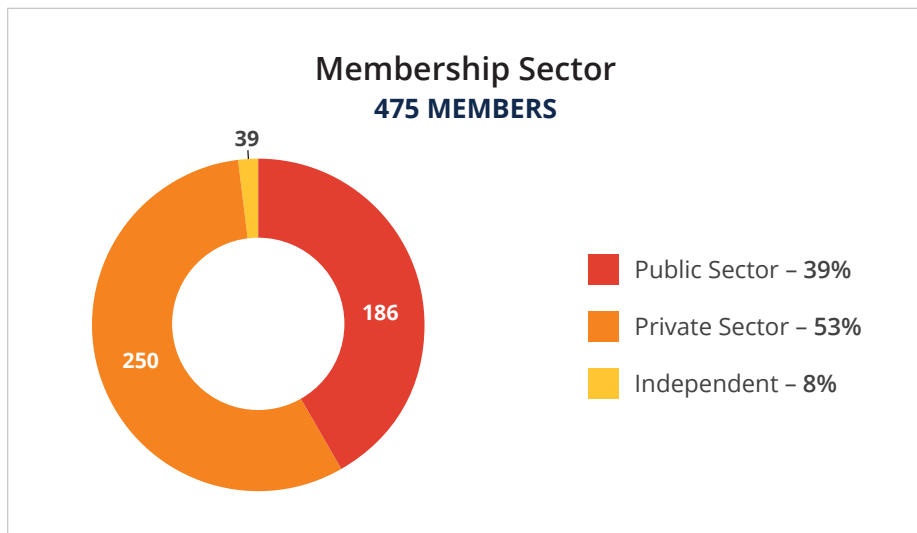


FIGURE 1: CALA membership

CALA Accreditation Program

CALA IS ONE of 102 worldwide accreditation bodies that is signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). CALA became signatory to ILAC on November 17, 2005. This arrangement provides stakeholders with assurance that the CALA Accreditation Program meets requirements of the international standard ISO/IEC 17011 – *Conformity Assessment – General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies*.

CALA Assessors

CALA assessors are at the heart of our organization. They are a dedicated group of volunteers, that are experts in their field, highly skilled and committed with at least 5 years of experience in a laboratory or laboratory-related environment. They are called upon throughout the year to assess laboratories against the requirements of ISO/IEC 17025:2017. These assessors undergo rigorous CALA assessor training and subsequent refresher training every 2 years. In 2019, CALA had 129 assessors from both the private and public sector (see Figure 2).

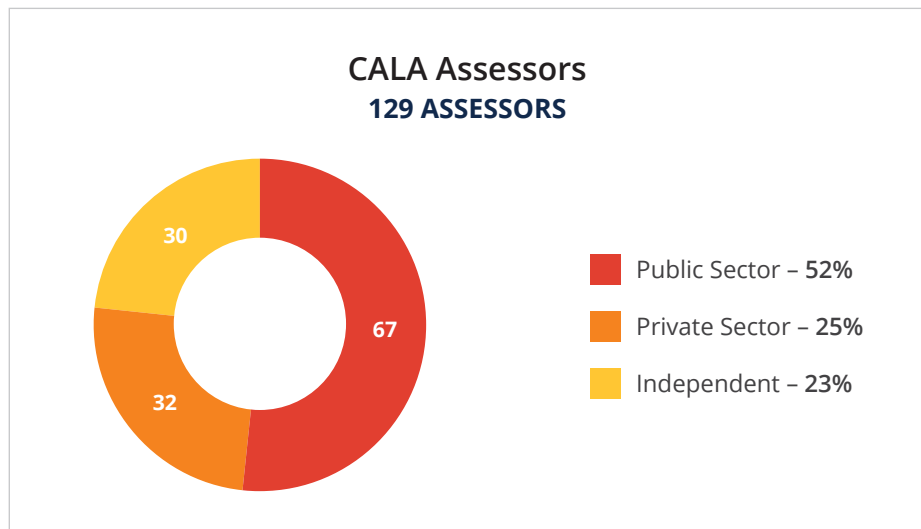


FIGURE 2: CALA Volunteer Assessors

CALA-Accredited Laboratories Assessed to the Revised ISO/IEC 17025:2017 Standard

On November 29, 2017, the newly revised version of the ISO/IEC 17025 standard was published, giving laboratories 3 years from date of publication to be reassessed to the revised standard. This required significant effort on behalf of CALA and our assessors to re-assess laboratories to the updated standard in a timely manner (see Table 1).

TABLE 1: CALA-accredited laboratories accredited to ISO/IEC 17025:2005 versus ISO/IEC 17025:2017

	Jan 1, 2019	Dec 31, 2019
CALA-Accredited labs	209	206
ISO/IEC 17025:2017	23	130
ISO/IEC 17025:2005	186	76

CALA made significant strides in ensuring that laboratories conformed to the new version of the standard. As of January 1st, 2019, 11% of CALA-accredited laboratories were accredited to ISO/IEC 17025:2017. By December 31st, 2019 63% of CALA-accredited laboratories were accredited to the ISO/IEC 17025:2017 standard.

CALA has accredited 206 laboratories in the government and private sectors.

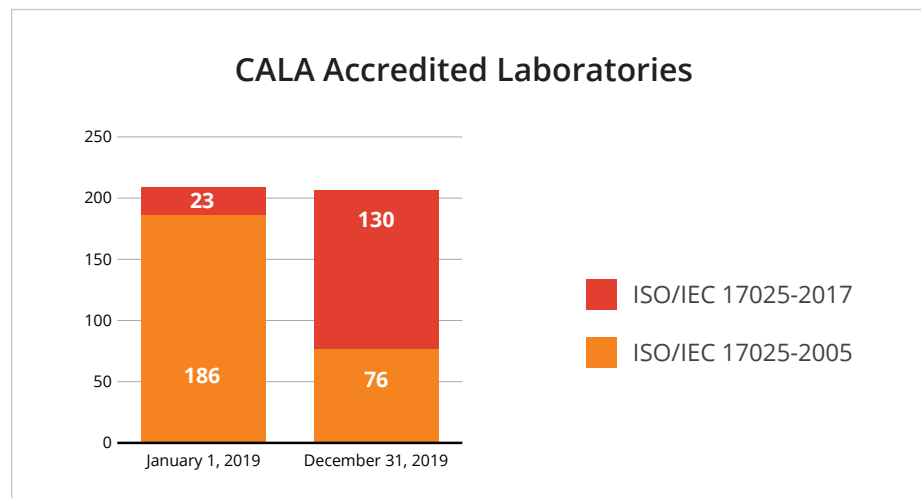


FIGURE 3: CALA accredited laboratories ISO/IEC 17025:2017 vs. ISO/IEC 17025:2005 standard

ACCREDITATION TURN-AROUND TIME

CALA prides itself on its turnaround time for the accreditation process. On average, the amount of time from the date of the site visit to the date of final approval was 93.6 days in 2019, a reduction of 16 days from 2018.

CALA ACCREDITATION PROGRAM (cont'd)

Laboratory Site Visits

As of December 31st, CALA had conducted a total of 123 site visits over the year for purposes ranging from initial assessment, reassessments conducted every two years, through to verification to confirm implementation of corrective actions. Of these, 15 (12%) were conducted at laboratories licensed under the OSDWA (Ontario *Safe Drinking Water Act*). The following figure (Figure 4) is a breakdown of the type of site visit conducted in 2019.

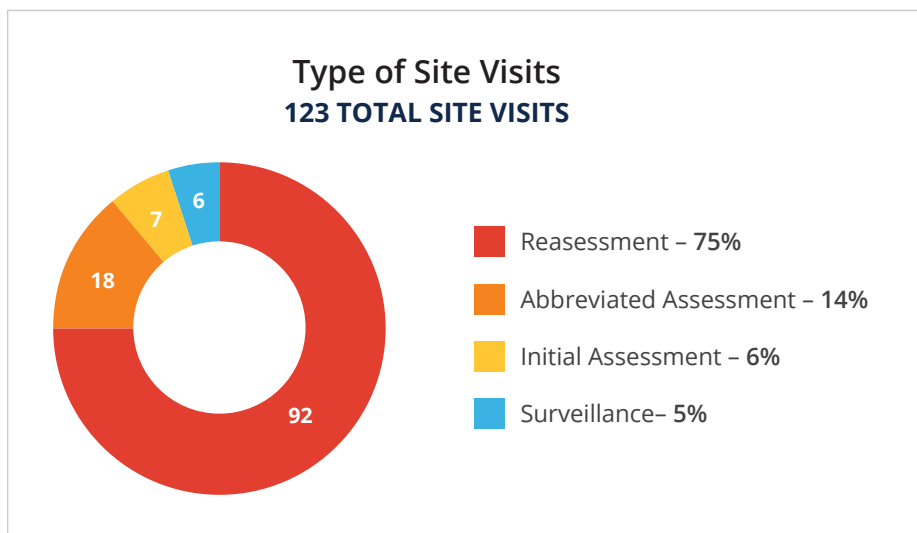


FIGURE 4: Type of site visit conducted in 2019

Suspensions and Withdrawals as a Result of Proficiency Testing (PT)

Over and above the assessment, an important component of the Accreditation Program process is demonstration of successful participation in proficiency testing (PT) as per P02-03 *Proficiency Testing Policy for Accreditation*.

Accreditation may be suspended, subsequent to being granted, if a laboratory fails to successfully analyze two successive sets of PT samples for a specific test (analyte) or does not submit a satisfactory Corrective Action Report in response to a CALA PT failure.

The summary of consecutive PT failures shown in Table 2 indicates that in general, non-CALA-accredited laboratories experienced the highest overall rate of consecutive failures while the accredited OSDWA laboratories experienced the lowest rate overall.

A third consecutive PT failure may result in withdrawal of accreditation for the analyte. In 2019, a total of 7 withdrawals occurred at accredited laboratories, with none occurring at an OSDWA laboratory.

TABLE 2: Consecutive PT failures at non-accredited, CALA accredited and accredited OSDWA laboratories

(Values are shown as a percentage of total PT test samples.) *

Study (2019)	Non-CALA-Accredited	CALA-Accredited	Accredited OSDWA
January	0.86%	0.47%	0.00%
March	0.23%	0.40%	0.07%
June	0.35%	0.15%	0.00%
October	0.8%	0.45%	0.00%
Overall Average	0.57%	0.36%	0.02%

* These values represent consecutive failures in the CALA PT Program only.

Column Definitions:

Non-CALA-Accredited: a PT participant that may or may not be accredited with another accreditation body.

CALA-Accredited: a PT participant accredited under the CALA Accreditation Program.

Accredited OSDWA: a PT participant accredited under the CALA Accreditation Program and Licensed under the Ontario Safe Drinking Water Act (OSDWA).

CALA Proficiency Testing Program

BY THE END OF 2019 the CALA Proficiency Testing (PT) Program offered 60 test groups, comprising 448 analytes. Samples for each test group are generally provided to participant laboratories twice each year. The test groups are split between March/October rounds (inorganic and microbiology) and January/June rounds (organics, and soils).

Proficiency Testing Offerings

The following is a summary of changes to the analytes offered in the PT Program in 2019:

The following were added in 2019

Acidity in Water (C46)

Haloacetic Acids in Water (C47)

The following were added at the end of 2019, to begin 2020

C70 Potency in Cannabis

C71 Pesticides in Cannabis

C72 Metals in Hemp

C73 Residual Solvents in Hemp oil

C78 Water Activity and Moisture in Hemp

C74 Hexavalent Chromium in Soil

C75 Particle Size in Soil

C76 Oil and Grease in Soil

C77 Pesticides in Soil

Due to low participation levels, the following test groups were removed at the end of 2019

P50 Chlorine for Test Kits

P51 Turbidity for Test Kits

P52 pH for Test Kits

Proficiency Testing Fees

PT fees remained unchanged for 2019. During the fall of 2019 the contracts with our subcontractors were renewed for an additional two years. This resulted in a small increase in cost for most of the Test Groups, resulting in a 3% increase in fees for most Test Groups for 2020.

Participation in Proficiency Testing

Participation showed a slight increase in 2019 (see *Figure 4*).

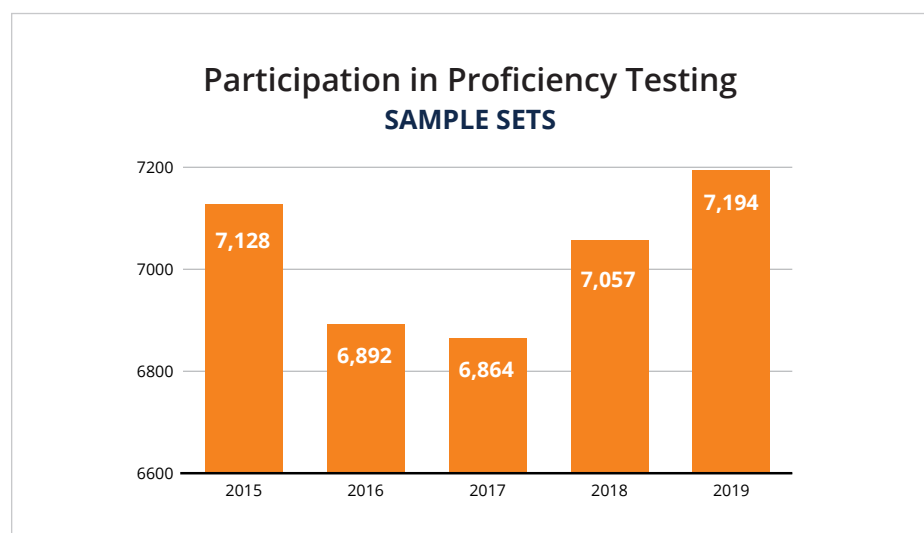


Figure 4: Registration Trend in the Proficiency Testing Program
(sample sets = total number of shipped test groups)

Proficiency Testing Turn-Around Times

Turnaround time from reporting deadline to the issuing of the PT final report continues to be shorter than the goal of five weeks.

Summary of Proficiency Testing Performance

Appendix A details the success rates observed for each test group in each study. Also detailed are the success rates for laboratories conducting tests under the Ontario Safe Drinking Water Act (OSDWA). In general, average success rates were over 90%, consistent with those observed in previous years.

CALA Training

THE CALA TRAINING PROGRAM delivers training on subjects related to laboratory accreditation. In 2019, CALA Training saw just over 30% growth in the number of classes and a 6% growth in the number of students.

New Training Offered in 2019

With the requirement for laboratories to change their management system to the newly revised ISO/IEC 17025:2017 standard, the first quarter of 2019 was the busiest three-month period for training in CALA's history, with the month of March being the single busiest month. The growth in training outside Canada increases, as companies continue to take advantage of distance learning options. In 2019 CALA saw a 39% growth in international students.

Two new courses were added in 2019, *Auditing Against ISO/IEC 17025:2017* and *Getting Things Done*®. CALA Training continues to deliver courses in both English and French.

Courses Offered in 2019

Understanding ISO/IEC 17025 :2017

ISO/IEC 17025:2017 - What's New or Different

ISO/IEC 17025:2017 - Highlights of Changes for General Staff

Cause Analysis

ISO/IEC 17025 Refresher

Risk-based Thinking in ISO/IEC 17025:2017

Internal Auditor for ISO/IEC 17025

Auditing Against ISO/IEC 17025:2017

Lead Auditor for ISO/IEC 17025

Laboratory Train the Trainer

Measurement Uncertainty (Analytical Chemistry)

Measurement Uncertainty (Microbiology)

Method Validation

Internal Calibration for Laboratories

Introduction to Control Charts

Use and Management of Control Charts

Management for Laboratory Managers

Getting Things Done

International Activity

Services Provided Internationally

In 2019, CALA delivered proficiency testing and/or accreditation services to 57 laboratories located outside Canada (an increase of 2 from 2018), mostly in the rest of the Americas. Ten (10) of these laboratories are in the Accreditation Program and 45 are in the Proficiency Testing Program only. The CALA Training Program sold services to participants internationally including the Philippines, South Africa, Jamaica, and the United States.

Mutual Recognition Arrangements

CALA is signatory to two (2) international Mutual Recognition Arrangements (MRAs), the Asia Pacific Accreditation Cooperation (APAC; formerly, the Asia Pacific Laboratory Accreditation Cooperation or APLAC), and the International Laboratory Accreditation Cooperation (ILAC). As a signatory to these arrangements, the acceptance of Canadian laboratory test results nationally and around the world is promoted.

Increasingly, both regulations and customers require accreditation by an accreditation body that is signatory to ILAC. Therefore, maintaining CALA's signatory status is critical for CALA customers. There are requirements and expectations that CALA will contribute to the operation of both APAC and ILAC. These requirements include active involvement in international meetings, sitting on committees, reviewing documents, and voting on ballots. In 2019, CALA staff participated in the following meetings:

- APAC General Assembly – Singapore
- ILAC Accreditation Issues Committee – Germany
- ILAC General Assembly - Frankfurt

A key activity that is critical to the MRA process is the evaluation of accreditation bodies to ISO/IEC 17011 – Conformity Assessment – *General requirements for accreditation bodies accrediting conformity assessment bodies*. At the end of 2019, CALA had three (3) evaluators on staff, two (2) designated as Lead Evaluators and one (1) as an Evaluator. In 2019, a CALA Lead Evaluator led one team on an evaluation, and 2 of our staff participated in evaluations.

Financial Report

CALA'S TOTAL REVENUE for 2019 was \$4.13 million, approximately 1.5% (\$61,476) lower than budget but 6.5% higher than the previous year results.

Evaluations as an income category on the Financial Statement are comprised of Proficiency Testing (PT) and Accreditation services. Year-end results for the PT Program were only 0.7% (\$11,462) below budget. Accreditation income for 2019 was 4.5% (\$108,144) greater than 2018 results but ended the year behind budget by 1.18% (\$19,594).

Finishing the year 3.79% (\$19,335) under budget, the Training Program fell slightly short of its target. ISO/IEC 17025 standards continued to drive Training sales through 2019 and sales remained relatively stable when compared to 2018.

Other income includes foreign currency gains and losses, interest income, gains (or losses) on disposal of sales of investments, and unrealized gains on investments. In 2019, continued investment in the Association Management System (AMS) has further reduced the investment portfolio but significant gains in the performance of investment portfolio has helped offset some of the reduction.

Total expenses for the fiscal year were approximately \$3.5 million, down 4.74% from prior year and 9.84% lower than budgeted expenses of \$3.9 million. Program-related costs were under budget by 7.05% for a total of \$108,734. Salary and benefit costs were as planned but general overhead and administrative costs were under budget by 29.96%. Underspensing in 2019 was driven mainly by the further delay in the development and launch of the AMS. This delay resulted in the deferral of the expenses to launch, train staff, and amortize the investment. We continue to focus on controlling and reducing administrative expenses while maintaining service levels. This is an ongoing annual strategy to ensure that CALA administrative expenses are monitored and kept within reasonable levels, further reducing the pressure on program areas.

Employees and volunteers are an integral part of our association and we are fortunate to have a very skilled and dedicated team working at CALA. While the economic value of volunteer time has not been captured in our financial statements, please note that the association continues to benefit greatly from the generous contribution made by all of its volunteers, allowing us to operate such successful programs.

In summary, the Association maintained its strong financial position in 2019 and ended 2019 with an operating surplus of \$612,751. This increase in net assets resulted in an ending accumulated surplus of \$3.35 million.

Moving into 2020, as a requirement of ISO/IEC 17011 – *Conformity Assessment – Requirements for accreditation bodies accrediting conformity assessment bodies*, CALA will be divesting of its Proficiency Testing Program. Through careful planning and a strong management system, CALA will continue to be successful in delivering accreditation and related services to its members.

FINANCIAL REPORT (cont'd)

Auditors' Report

Report of the Independent Auditor on the Summary Financial Statements

To the Members of

THE CANADIAN ASSOCIATION
FOR LABORATORY ACCREDITATION INC.

Opinion

The summary financial statements, which comprise the summary statement of financial position as at December 31, 2019, and the summary statements of operations and of cash flows for the year then ended, and related notes, are derived from the audited financial statements of Canadian Association for Laboratory Accreditation Inc. (the Entity) for the year ended December 31, 2019.

In our opinion, the accompanying summary financial statements are a fair summary of the financial statements, in accordance with the criteria disclosed in Note 1 to the summary financial statements.

Summary Financial Statements

The summary financial statements do not contain all the disclosures required by Canadian accounting standards for not-for-profit organizations. Reading the summary financial statements and the auditor's report thereon, therefore, is not a substitute for reading the Entity's audited financial statements and the auditor's report thereon.

The summary financial statements and the audited financial statements do not reflect the effects of events that occurred subsequent to the date of our report on the audited financial statements.

Management's Responsibility for the Summary Financial Statements

Management is responsible for the preparation of the summary financial statements in accordance with the criteria disclosed in Note 1 to the summary financial statements.

Auditor's Responsibility

Our responsibility is to express an opinion on whether the summary financial statements are a fair summary of the audited financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, *Engagements to Report on Summary Financial Statements*.

Chartered Professional Accountants
Licensed Public Accountants

Ottawa, Ontario
March 4, 2020

Summarized Statement of Financial Position

December 31, 2019

	2019	2018
ASSETS		
Current Assets	\$ 1,471,187	\$ 1,411,385
Long-Term Investments	869,318	871,050
Tangible Capital and Intangible Assets	1,841,048	1,344,055
	\$ 4,181,553	\$ 3,626,490
LIABILITIES AND NET ASSETS		
Current Liabilities	\$ 828,200	\$ 885,888
Unrestricted Net Assets	3,353,353	2,740,602
	\$ 4,181,553	\$ 3,626,490

(See accompanying note)

FINANCIAL REPORT (cont'd)

Auditors' Report

Summarized Statement of Operations and Change In Net Assets

Year ended December 31, 2019

	2019	2018
Revenues		
Evaluations	\$ 3,366,538	\$ 3,198,261
Memberships	160,165	160,600
Miscellaneous	6,169	5,874
Training	490,833	492,947
Other revenue	106,434	21,512
	4,130,159	3,879,194
Expenditures		
Evaluations	1,181,256	1,333,061
Operational	2,161,148	2,193,509
Training	175,004	166,000
	3,517,408	3,692,570
Excess of revenue over expenses	612,751	186,624
Net assets, beginning of year	2,740,602	2,553,978
Net assets, end of year	\$ 3,353,353	\$ 2,740,602

(See accompanying note)

Summarized Statement of Cash Flows

Year ended December 31, 2019

	2019	2018
CASH FLOWS PROVIDED BY (USED IN)		
Operating activities	\$ 481,786	\$ 229,182
Investing activities	(430,898)	(205,242)
NET INCREASE (DECREASE) IN CASH	50,888	23,940
CASH, BEGINNING OF YEAR	763,468	739,528
CASH, END OF YEAR	\$ 814,356	\$ 763,468

(See accompanying note)

Note to Summarized Financial Statements

Year ended December 31, 2019

Note 1

The information selected by management for presentation in the Summarized Annual Financial Statements has been identified as being the most pertinent and useful financial data for inclusion in the CALA annual report. The summarized financial statements do not reflect the substantial value of services contributed by volunteers.

Appendix

APPENDIX A

Summary of Proficiency Testing Performance

The following tables provide details of success rates for each test group. The first two (Tables A1 and A2) reflect the entire program, while the last two (Tables A3 and A4) are for laboratories licensed by the Ontario Ministry of Environment and Climate Change under the Ontario *Safe Drinking Water Act* (OSDWA). Note that non-reported results are not included among the failures in these estimates as these are sometimes related to registration changes after the study has started.

Table A1: Success rates for all laboratories participating in the January 2019 and June 2019 rounds

Total Program January/June 2019	January 2019		June 2019	
	Tests	Success %	Tests	Success %
WATER				
C06A-OCPs	346	95	362	95
C06B-PCBs	117	95	131	97
C07-PAHs	920	95	941	88
C16-BTEX/THMs/VOCs	2168	93	2192	94
C22-OP Pesticides	378	92	363	94
C24-Aryloxy acid pesticides	132	87	126	97
C25-Phenolics	105	97	108	99
C27-Glyphosate	15	100	15	100
C29-Aldicarb	11	100	13	92
C34-Total Oil and Grease	99	93	106	93
C40A-PHCs	185	90	189	88
C40B-PHCs	137	94	143	91
C41-Hexavalent Chromium	32	91	31	94
C46 Acidity	96	91	104	88
C47 Haloacetic Acids	448	92	496	98
OIL				
C08-Total PCBs	133	84	133	83
AIR FILTER				
C09-Metals	63	92	75	84

Table A1: Success rates for all laboratories participating in the January 2019 and June 2019 rounds (continued)

Total Program January/June 2019	January 2019		June 2019	
	Tests	Success %	Tests	Success %
SOIL/SEDIMENT				
C17-Metals	1355	88	1358	94
C18-PAHs	869	93	920	88
C31A-PHCs/BTEX	367	92	362	86
C31B-PHCs	199	95	204	87
C35-PCBs	127	94	132	87
C36-VOCs*	1291	97	1299	95
C38-TCLP VOCs	165	88	175	91
C39-TCLP Inorganics	461	93	431	91
C43 Solids in Soil	73	85	70	91
C44 Nutrients in Soil	53	81	43	88
C45 Anions in Soil	163	93	160	96
OCCUPATIONAL HEALTH				
C20-Asbestos	112	78	107	64

APPENDIX (cont'd)

Table A2: Success rates for all laboratories participating in the March 2019 and October 2019 rounds

Total Program March/October 2019	March 2019		October 2019	
	Tests	Success %	Tests	Success %
WATER (INORGANIC)				
C01A-Major ions	1685	91	1712	90
C01B-Simple Nutrients	517	91	514	92
C02A-Metals	2966	90	2709	93
C02B-Metals (high range)	346	95	392	98
C02C-Metals (Total)	1432	95	1374	96
C03-Complex Nutrients	212	92	208	93
C04A-Solids	391	96	389	95
C04B-BOD	218	96	215	95
C04C-Turbidity	116	92	115	87
C04D-COD	105	90	107	91
C14-Cyanide	39	90	36	97
C15-pH	274	97	280	94
C19-Mercury	89	92	*	*
C32-Chlorine	140	94	141	87
C33-Total Phenolics	32	84	33	91
C37-True Colour	64	90	64	91
C42-Sulphide	31	94	31	94
WATER (MICROBIOLOGY)				
C05A-Microbiology	530	93	560	93
C05B-Microbiology P/A	87	95	87	91
WATER (TOXICOLOGY)				
C11-Trout	22	86	20	90
C12-Daphnia	23	91	21	95
C13-Microtox	23	100	22	86
OIL				
C08-Total PCBs	133	84	133	83

* Analyte not evaluated due to problem with sample preservation

Table A3: Success rates for OSDWA laboratories participating in the January 2019 and June 2019 rounds

OSDWA Laboratories	January 2019		June 2019	
	Tests	Success %	Tests	Success %
WATER (ORGANIC)				
C06A-OCPs	125	100	125	99
C06B-PCBs	30	100	30	100
C07-PAHs	124	100	123	98
C16-BTEX/THMs/VOCs	516	92	484	99
C22-OP Pesticides	177	99	169	96
C24-Aryloxy acid Pesticides	63	97	63	98
C25-Phenolics	44	100	44	100
C27-Glyphosate	9	100	9	100
C29-Aldicarb	8	100	8	100
C34- Oil and Grease	17	88	17	100
C40A-PHCs	15	100	21	100
C40B-PHCs	18	100	18	100
C41-Hexavalent Chromium	4	100	4	100

APPENDIX (cont'd)

Table A4: Success rates for OSDWA laboratories participating in the March 2019 and October 2019 rounds

OSDWA Laboratories	January 2019		June 2019	
	Tests	Success %	Tests	Success %
WATER (INORGANICS)				
C01A- Major Ions	256	99	257	98
C01B- NH3/PO4/DOC	94	100	95	96
C02A- Metals	523	100	523	99
C02C- Total Metals	251	100	251	100
C03- TKN/TP	27	100	26	96
C04A-Solids	39	97	39	100
C04B-BOD	19	100	21	100
C04C- Turbidity	19	100	20	100
C04D-COD	10	90	10	100
C14-Cyanide	11	100	11	100
C15-pH	37	97	37	100
C19-Mercury	18	94	*	*
C32-Chlorine	17	100	17	100
C33- Total Phenolics	10	100	10	100
C37-True Colour	13	92	13	92
C42-Sulphide	9	100	9	100
WATER (MICROBIOLOGY)				
C05A- Microbiology	131	98	165	100
C05B- Microbiology P/A	20	100	22	100

* Analyte not evaluated due to problem with sample preservation



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