CANADIAN ASSOCIATION FOR LABORATORY ACCREDITATION INC.

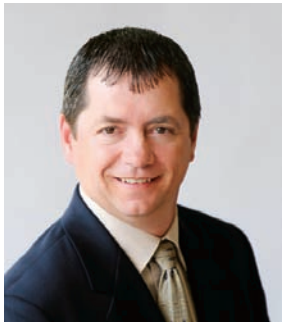
2010 Annual Report

CALA

Suite 310
1565 Carling Avenue
Ottawa ON
K1Z 8R1

Table of Contents

President's Report



At the time of the 2011 Annual General Meeting (AGM), where this report will be tabled, I will have completed my third full-year of service to the CALA Board of Directors. After a one-year term in 2006, I rejoined the Board in June 2009. I was elected to the CALA Presidency in June 2010 and I am very pleased to report on CALA's progress during my term as your President.

New Strategic Plan in Place

Following the 2010 AGM, the CALA Board of Directors and Staff held a professionally facilitated strategic planning workshop in order to renew our forward planning for the next five years. As a result of this exercise, your Board of Directors has committed to the achievement of eight key organizational outcomes:

- Developing a sustainable proficiency testing (PT) infrastructure
- Strategies to improve accreditation services
- Expanding the scope of accreditation (internally and/or through partnership)
- Developing a strategy to ensure a sustainable assessor pool
- Improved Marketing and Customer Service
- Improved I.T. infrastructure to meet member and organizational needs
- Improved Board Governance
- Improved Training Programs – internal and external

The CALA staff has completed an ambitious operational action plan based on measurable outcomes to be achieved in each of these key areas. As a Board, we are now actively engaged in regularly and actively monitoring this plan to ensure our ongoing success as an organization.

Board Governance Model Developing

For a number of years, CALA's Board governance has followed the "Policy Governance" model. Based on the Board's collective wish to simplify how it governs itself, we held a second professionally facilitated workshop in order to assist us in this endeavour. Our new model, once approved will likely retain many of the important elements of Policy Governance however will be simplified without sacrificing the Board's ability to monitor the organization. It is the Board's objective that our new model be just as rigorous as its predecessor, but more flexible in its implementation, allowing both Board and staff members to spend less time reading and writing voluminous reports and more time with customers and visioning and innovating the means to CALA's ongoing success as an organization.

CALA Adopts New Business Model Going Forward

This past year, the CALA Board of Directors has worked with its management staff to create a new, more sustainable business model for our association. Our new model will completely remove the subsidy of one program by another. Historically, revenue generated from our

Proficiency Testing (PT) Program was used to offset a significant portion of a laboratory's accreditation costs, allowing us to maintain accreditation fees much lower than many other accreditation bodies. Although this model has served our accredited laboratories well in the past, competition from other PT providers and changing international requirements for accreditation bodies requires us to change to a model in which each CALA program becomes financially self-sustaining.

A failure by CALA to adjust to these new realities would have put our PT Program at serious risk from competition. As well, it is possible that recent changes to ISO and ILAC requirements could ultimately necessitate the separation of our PT and Accreditation Programs into separate legal entities; should this occur, it is important that our accreditation program be financially self-sustainable.

As a result, PT fees effective January 1, 2011 were reduced significantly in order to put CALA in a stronger position to meet external competitive pressures. Our new model is now similar to many other accrediting bodies, in that we have moved from biennial to annual assessment fees in order to provide better cash flow for laboratories as well as for CALA.

While the impact of these changes will be different for each laboratory, a general conclusion is that all laboratories will see an increase in their accreditation fees,but any laboratory that participates in the CALA PT Program will also see significant reductions in their PT fees.

CALA is Committed to Listening and Acting

As a member driven, not-for profit organization, CALA strives to be as responsive as possible to the feedback it receives from its various stakeholders. Please consider assisting your association by completing the survey(s) that are circulated by CALA each year. We will respond in a timely manner to all of the constructive feedback suggestions we receive, since meeting the needs of our members will always remain our number one priority.

Volunteers

I would like to thank the many volunteers from our member organizations that donated their time over the past year as Assessors, Accreditation Council Members, Advisory Panel Members, Program Committee Members as well as Board Directors. If you are currently not involved with the organization but would like to be, contact us as there are many opportunities to get involved.

In closing, I have enjoyed the opportunity to serve as CALA's President and believe the organization is continuing in the right direction to improve the services it provides to our members. Thank you for your support over the last year.

Sincerely,
Paul Fewer, CALA President

CEO's Message

When this message is tabled at the 2011 AGM, I will have had the privilege of serving as CALA's CEO for two full years.

2010 was a very productive year, but also a year of significant change for CALA. A number of new initiatives were launched and partnerships were solidified. A complete revision of our Strategic Plan and our Business Model were completed (details in the President's Report). Historically high Member satisfaction levels were maintained or improved and plans were solidified for the ongoing use of web-based technologies to allow more Members to take an active role in their association.

New Management Staff Join CALA Team

CALA welcomed two new senior management staff during the year. Ms. Brenda Dashney became CALA's new Chief Financial Officer (CFO) and Ms. Cathy Wylie joined us as our new Training Manager. We have already seen very positive changes at CALA as a result of this new infusion of financial and training expertise.

Looking ahead, CALA is focused on a limited number of strategic priorities that are listed in the President's Report and I am very confident in the abilities of our staff team to make the achievement of these priorities a reality going forward.

CEO Member Visits to Continue

I would like to extend my personal thanks to all the senior management I had the opportunity to meet with face-to-face during 2010. Thank you all for taking the time out of your very busy schedules to tell me personally what issues are facing you and how you feel CALA can assist in their resolution. As a result of the feedback I received from Members who serve on the CALA Board, as well as from my in-person laboratory visits, we made the most significant decision of 2010 and that was to implement a totally new business model. In the short to medium term we feel our new approach will result in a "win-win" situation for laboratories and the association.

CALA has developed a range of expert capabilities that will continue to be well aligned with the issues and needs of our members as long as we continue to actively listen and act on our members' feedback. As an organization, CALA is dedicated to "Building Laboratory Excellence" and therefore, we must continually evolve as an organization to keep pace with other accrediting bodies and laboratory service providers both here in Canada and abroad.

CALA Operations Become "Greener"

In order to take a "greener" approach and save literally thousands of pages of paper, courier charges and the greenhouse gases generated from deliveries of paper documentation, CALA has adopted the use of both electronic Board Meetings

and an electronic master documents list as part of our office quality management system. Gone are all the binders of printed background or reference material. All Board Meeting documents were instead posted to the private and secure Board Member website. A large number of CALA Quality System Reference binders have also disappeared and access to this documentation is now only via electronic means. We continue to examine new ways to eliminate the use of paper through secure access to electronic documents.

New Partnership with SCC Underway with Positive Results

CALA's relationship with the Standards Council of Canada (SCC) has evolved in a very positive way over the past year. A number of consultations held this past year with the senior management staff at the SCC have been able to forge a number partnership initiatives designed to better service the needs of the entire laboratory community in a number of ways. As a result, we as organizations are now at the stage of having successfully issued our first joint statements on behalf of the whole laboratory community. This is a very positive development and one that we trust will continue to develop in the future.

Progress made at CALA during 2010 has in my opinion left us more responsive and robust than ever and better able to anticipate the needs of our members as we strive to deliver more refined programs and services even more efficiently and effectively.

C. Charles Brimley
Chief Executive Officer

Board of Directors

President
Mr. Paul Fewer
Maxxam Analytics Inc.
Bedford, NS

Vice-President
Ms. Linda Neimor
ALS Laboratory Group
Winnipeg, MB

Treasurer
Mr. Robin MacLean (Appointed)
(Since June 2010)
Uxbridge, ON

Secretary
Ms. Rosa Gonzalez
City of Hamilton
Hamilton, ON

Past President
Ms. Deborah Masson-Stogran
SGS Lakefield
Lakefield, ON

Mr. Michael Brodsky (Appointed)
(Since June 2010)
Brodsky Consultants
Thornhill, ON

Mr. Al Colodey (Ending May 2010)
Environment Canada
North Vancouver, BC

Mr. Tim Delaney (Since June 2010)
Nova Scotia Department of Agriculture
and Fisheries
Truro, NS

Mr. James Doull (Ending June 2010)
Health Canada
Ottawa, ON

Mr. James Downie
JRD Consulting Company
Heriot Bay, BC

Dr. T. Duncan Ellison (Appointed)
(Ending June 2010)
Canadian Water and Wastewater
Association
Ottawa, ON

Mr. Don Enns (Appointed)
(Ending June 2010)
Day One Ventures Ltd.
Burnaby, BC

Ms. Michèle J. Giddings (Appointed)
Health Canada
Ottawa, ON

Mr. Pat Lang
Alberta Environment
Edmonton, AB

Ms. Brenda McLay (Since June 2010)
Near North Laboratories Inc.
North Bay, ON

Ms. Trudy Toms (Ending March 2010)
Stantec Consulting Ltd.
St. John's, NL

Corporate Profile

Mission *The Canadian Association for Laboratory Accreditation (CALA) is a not-for-profit association that instills public confidence in laboratory test results by providing internationally recognized accreditation, proficiency testing and training.*

History

CALA was originally established as CAEAL in 1989 to help Canadian environmental laboratories conform to internationally accepted standards of competence and proficiency. It did this by developing an accreditation program based on the assessment of a laboratory's quality management system, supported by the evaluation of analytical capability determined through proficiency testing.

Between 1994 and 2004, CALA operated in partnership with the Standards Council of Canada (SCC), an arrangement in which CALA undertook all site assessments of environmental laboratories, conducted the proficiency testing program, and made recommendations to the Standards Council on the accreditation of the laboratories.

In 2005 CALA resumed granting accreditation independently from the SCC for over 150 laboratories, while also maintaining a partnership arrangement as described above with the Standards Council of Canada and the Ontario Ministry of Environment, specifically for the accreditation of laboratories conducting tests under the *Ontario Safe Drinking Water Act* (OSDWA).

In November, 2005 the CALA accreditation program was officially recognized by the Asia Pacific Laboratory Accreditation Cooperation (APLAC) and the International Laboratory Accreditation Cooperation (ILAC).

The CALA Board of Directors has defined the ultimate goal of the organization as:

- ***CALA accredited laboratories are recognized as meeting world-class levels of scientific and management excellence.***

A series of subordinate policies focus on benefits for both the laboratories and the users of laboratory data, and ensures that members' views are made known to regulatory and standards-related decision makers in Canada and internationally.

In 2007 CALA members approved a broader scope of activities for CALA programs, expanding the organization's focus beyond environmental laboratories. The CALA corporate strategic plan now provides for the expansion of accreditation activities, and applications for non-environmental accreditation are being accepted for any tests for which CALA can provide appropriate capability.

At the June 2008 AGM, members selected the new association name the Canadian Association for Laboratory Accreditation or "CALA" which facilitated a broader scope of accreditations beyond simply the environmental field. In October 2008, CALA officially launched its new identity and transitioned to a new "CALA" look. In

the same year, CALA signed an Agreement directly with the Ontario Ministry of the Environment for the accreditation of water-testing laboratories conducting tests under the OSDWA.

In 2009, CALA's international recognition from APLAC and ILAC was renewed for another four-year period. Later that year, CALA successfully hosted the 2009 joint meetings of ILAC and the International Accreditation Forum (IAF) in Vancouver.

In 2010, CALA's Board of Directors approved a new, more sustainable business model that completely removed the PT Program's subsidization of the Accreditation Program. Under this business model, the goal is for each CALA program to become financially self-sustaining.

Membership

By the end of 2010 there were 608 members of CALA (see Table 1), representing a decrease of 1.5% from 2009, primarily as a result of a reduction in individual memberships.

CALA offers programs and services in three major areas as follows:

- Accreditation (see page 13 for details)
- Proficiency Testing (see page 17 for details)
- Training (see page 21 for details)

Table 1. Components of the CALA membership

Type	Private Sector	Public Sector	Independent	Total
Institutional	267	136	-	403
Individual	65	92	38	195
Associate	7	3	-	10
Total	339	231	38	608

Financial Report

CALA's total operational revenue for 2010 was $3.4 million, approximately 4.1% lower than the $3.6 million budgeted, or $146,550 and 1.9% lower than the previous year results.

The PT Program's revenue came in under budget by approximately 8.4%. CALA experienced a reduction in PT participation from non-accredited laboratories presumably due to the economy. In addition, at the request of the Board, CALA further reduced its fees for some test samples by changing validation requirements and passing those savings directly to laboratories. A portion of the reduction in PT revenue against prior year results was anticipated due to the Alberta PT Program coming to an end in the first quarter of 2010.

The Accreditation Program surpassed its 2010 growth objectives by $16,043 mainly due to increased international accreditation work, and surpassed the 2009 revenue by 4.2%.

Training Program activities fell 33.4% below expectations in 2010 and 22.4% less than prior year results (direct and indirect expenses). Growth in the Training Program was planned based on the 2009 success of the in-class training program. We anticipated the delivery of training in the US (to the US Navy and Department of Defense) which did not materialize. Note that this training was to be delivered on behalf of NACLA (National Cooperation for Laboratory Accreditation, USA). Management made the decision to not dedicate any of its time to an organization it no longer has any ties to, especially since it meant potentially jeopardizing relationships with other U.S. MRA signatories. CALA's risk management practice in 2010 was to cancel courses if a minimum registration was not reached one month in advance. This practice resulted in having many courses on the calendar cancelled, thus reducing overall training revenue. When asked, members have indicated that they tend to wait to see if the course will actually go ahead rather than register in advance. Additionally, CALA had a vacancy for several months when long time Training Manager, Ned Gravel, took a position with a laboratory in the private sector. CALA's new training manager has now implemented a "guaranteed to run" initiative for select courses in an effort to bolster confidence in the Training Program.

Other income includes interest income and gains on foreign currency exchange, both being less than budget for 2010 and significantly less than 2009 due to the downward pressure on interest rates generally and the increasing Canadian Dollar. This amount was further reduced by losses on sales of investments incurred during the year as we managed our portfolio within the approved investment policy.

Total expenses for the fiscal year were approximately $3.1 million, down about 7.0% from prior year and 10.2% lower than anticipated budgeted expenses of $3.5 million. Program-related costs were down by $240,616. All program areas experienced reduced spending; the highest was in accreditations due to a change in accounting policy which no longer permits the amortization of expenses related to biennial assessor training over two years. With assessor biennial training allocated to the year in which it was incurred (2009), $150,000 of expenses were not required in the program contributing to higher than anticipated surplus at the end of the year.

Salaries, general overhead and administrative costs were also considerably below budget due to short staffing vacancies created by the departures of the Chief Financial Officer and the Training Manager in the latter half of 2010. In addition, Board-related and International travel expenses were lower than anticipated. In 2010, we continued to focus on controlling and reducing administrative expenses while maintaining service levels. This practice will be carried forward to future years as well to ensure that CALA's administrative expenses are monitored and kept within reasonable levels, further reducing the pressure on program areas to generate income.

There were no projects outside our regular operations in 2010 as compared to 2009 when CALA hosted the ILAC/IAF conference in Vancouver. The impact of the Conference is reflected in the 2009 comparative information.

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. The association continues to benefit greatly from the generous contribution made by all of its volunteers which allows us to put together such successful programs. Note that the significant economic value of volunteer time has not been captured in our financial statements.

In summary, the Association maintained its strong financial position in 2010 through consistent, careful management of revenue, expenses and cash flow and after factoring in amortization of capital assets, ended 2010 with an operating surplus of $279,552. This increase in net assets resulted in an ending accumulated surplus of approximately $1.7 million.

Report of the Summarized Financial Statements

To the Members of the Canadian Association for Laboratory Accreditation Inc.

The accompanying summarized financial statements, which comprise the summarized statement of financial position as at December 31, 2010, the summarized statement of operations and summarized statement of cash flows for the year then ended, and related note, are derived from the complete audited financial statements of the Canadian Association for Laboratory Accreditation Inc. (CALA) for the year ended December 31, 2010. We expressed an unmodified audit opinion on those financial statements in our report dated February 14, 2011.

These summarized financial statements do not contain all the disclosures required by Canadian generally accepted accounting principles. Reading these summarized financial statements, therefore, is not a substitute for reading the audited financial statements of CALA.

Management's Responsibility for the Summarized Financial Statements

Management is responsible for the preparation of a summary of the audited financial statements on the basis described in Note 1.

Auditor's Responsibility

Our responsibility is to express an opinion on the summarized financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, "Engagements to Report on Summary Financial Statements."

Opinion

In our opinion, the summarized financial statements derived from the audited financial statements of the Canadian Association for Laboratory Accreditation for the year ended December 31, 2010 are a fair summary of those financial statements, in accordance with the basis described in Note 1.

February 14, 2011
Ottawa, Canada

Raymond Chabot Grant Thornton LLP

Chartered Accountants,
Licensed Public Accountants

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.

Summarized Statement of Financial Position

As at December 31, 2010

Assets	2010	2009
Current assets	**$ 1,477,104**	$ 1,313,985
Investments	**1,238,435**	1,177,735
Capital assets	**32,648**	31,800
	$ 2,748,187	$ 2,523,520
Liabilities		
Current liabilities	**$ 1,054,487**	$ 1,150,150
	1,054,487	1,150,150
Net Assets		
Unrestricted	**1,693,700**	1,373,370
	$ 2,748,187	$ 2,523,520

These summarized financial statements do not reflect the substantial value of services contributed by volunteers.

Summarized Statement of Operations

Year ended December 31, 2010

Revenues	2010	2009
Evaluations	**$ 3,063,967**	$ 3,091,907
Memberships	**156,335**	159,792
Projects, net	**2,749**	11,164
Training	**179,944**	205,654
ILAC Conference and other	**19,342**	728,313
	3,422,337	4,196,830
Expenditures		
Evaluations	**1,321,691**	1,579,449
Operational	**1,752,174**	1,749,528
Training	**68,950**	51,808
ILAC Conference and other	**-**	686,393
	3,142,815	4,067,178
Excess of revenue over expenses	**$ 279,522**	$ 129,652

These summarized financial statements do not reflect the substantial value of services contributed by volunteers.

Summarized Statement of Cash Flows

Year ended December 31, 2010

Cash flows provided by (used in)	2010	2009
Operating activities	**$ 288,560**	$ 68,639
Investing activities	**(151,478)**	(52,676)
Net increase in cash	**137,082**	15,963
Cash, beginning of year	**275,530**	259,567
Cash, end of year	**$ 412,612**	$ 275,530

These summarized financial statements do not reflect the substantial value of services contributed by volunteers.

Accreditation Program

CALA is one of 71 accrediting bodies world-wide that is signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (as of March 2011). 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 laboratory accreditation is based on ISO/IEC 17025 (*General Requirements for the Competence of Testing and Calibration Laboratories*). The process to attain and maintain accreditation is as follows:

- An assessment is carried out against the criteria in ISO/IEC 17025;
- The laboratory receives a report of assessment findings;
- Laboratories respond to any observed non-conformances in a timeframe communicated to the laboratory by CALA;
- A laboratory's response to the findings is reviewed by CALA staff, the Lead Assessor, and Advisory Panel members;
- The Advisory Panel recommends to the CALA Accreditation Council whether to grant or maintain a laboratory's accreditation;
- When the Accreditation Council is satisfied that the appropriate corrective actions have been undertaken, CALA grants or maintains the accreditation.
- In all cases, laboratories must participate successfully in proficiency testing (PT).

Beginning in 2010, the requirement to participate in the CALA Proficiency Testing Program (where applicable) was no longer mandatory, allowing laboratories a choice among approved PT providers.

CALA has granted accreditation to 188 government and private sector laboratories (see Figure 1). Forty-six (46) of these accredited laboratories are licensed under the Ontario *Safe Drinking Water Act* (OSDWA). In 2010, seven (7) laboratories applied to the Accreditation Program and seven (7) laboratories voluntarily terminated their accreditation (two remained in the PT Program).

Site Visits

Figure 1 Sources of CALA-Accredited Laboratories

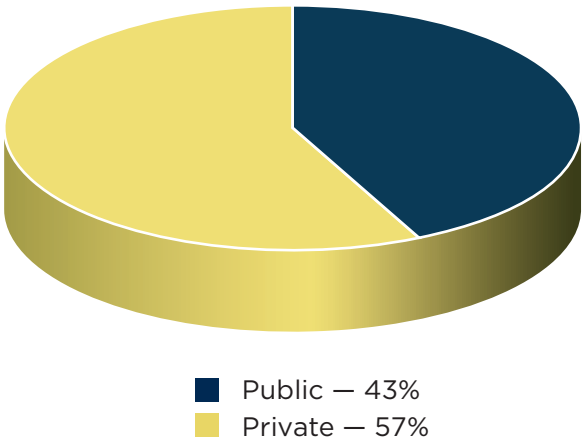
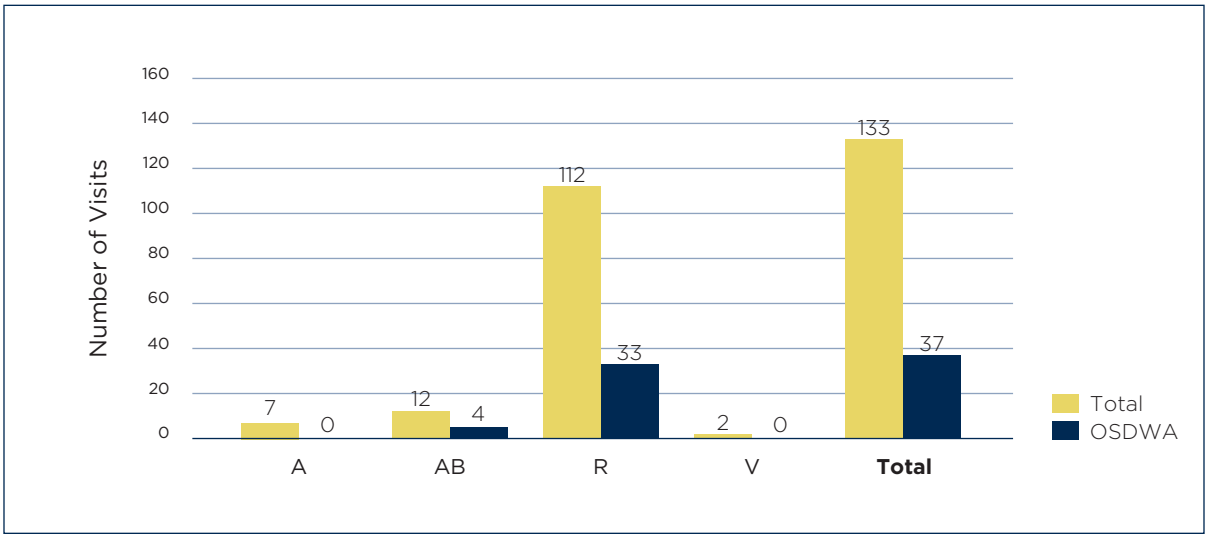


Figure 2 Categories of Site Visits Conducted in 2010



In 2010, CALA conducted a total of 133 site visits, of which 37 (28%) were conducted at laboratories licensed under the OSDWA (see Figure 2).

CALA conducts the following types of laboratory assessments:

- Initial Assessment (A): A site visit conducted at a laboratory applying for accreditation for the first time.
- Abbreviated Assessment (AB): A site visit to assess new appendices between regularly scheduled reassessments. The quality management system is not assessed during these assessments, only the technical requirements of the new test methods.
- Reassessment (R): The first reassessment is carried out one year after an initial assessment and every two years thereafter.
- Verification (V): A site visit to confirm implementation of corrective actions or to ensure satisfactory conditions following significant changes at a laboratory.

Assessors

CALA assessors are predominantly volunteers from member laboratories, although some do come from other types of laboratories or related organizations. They are a highly-skilled, highly-committed group of volunteers that represent a valuable resource for CALA. As well as having at least five years experience in a laboratory or laboratory-related environment, these volunteers attend a rigorous CALA Lead Assessor/Assessor course and participate in CALA-specific training once every two years. There are currently 150 active volunteer assessors, primarily from government and private sector laboratories (see Figure 3). Thirty-one (31) of these are from the 46 laboratories accredited and licensed under the OSDWA.

A total of 257 assessor trips were conducted to complete 133 visits in 2010.

The actual assignments would range from a single experienced assessor at a small laboratory, to several assessors required to conduct the reassessment of a large laboratory with a complex scope of testing.

Turn-Around Time

Table 2 shows a breakdown of the major steps in the accreditation process, and the average time taken to complete each step in 2010. This data is based on site assessments performed in 2010, and is current as of March 17, 2011.

New (or applicant) laboratories have up to 90 days to respond to any non-conformances identified during an assessment; the seven (7) applicants submitted responses to CALA within 70 days on average, the shortest time being 22 days after the assessment and the longest being 91 days after the assessment. Accredited laboratories have up to 45 days to respond to any non-conformances identified during a reassessment or an abbreviated assessment. Most already-accredited laboratories use all of this allowable time to respond, as evidenced by the fact that the average amount of time for accredited laboratories to submit responses to findings was 45 days. Laboratories awaiting a scope extension tend to respond somewhat faster, with an average submission time of 36 days.

CALA targets a maximum of 45 days for staff to perform an initial review of

Figure 3 Sources of CALA Volunteer Assessors

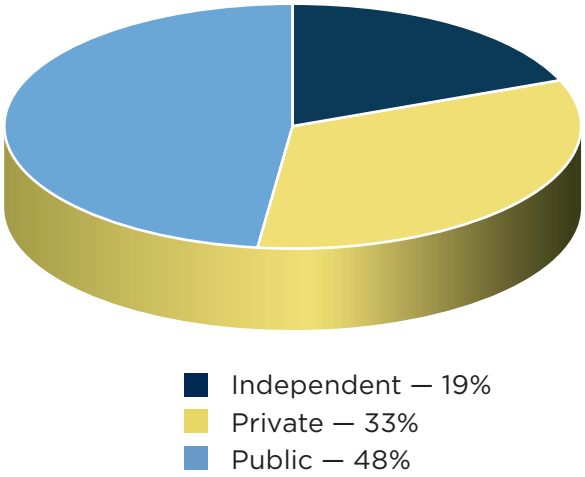


Table 2 Major Steps in the Accreditation Process

Step in the Accreditation Process	Average Time (days*)	1-7 days (No. of labs*)	8-21 days (No. of labs*)	22-45 days (No. of labs*)	46-90 days (No. of labs*)
Completion of Responses	41	7	15	48	49
Advisory Panel/Lead Assessor Review**	14	25	70	23	-
Accreditation Council Approval	7	53	53	-	-

*subject to change, following completion and approval of visits carried out in 2010
**includes technical and administrative follow-up

laboratory responses, and will request further information from the laboratory or inform the laboratory that the responses meet the requirements. At the time this Annual Report was prepared, 97% of the 2010 lab responses were initially reviewed within the 45-day target and the average time to do so was 26 days. All non-conformances were reviewed and deemed satisfactory within 41 days, on average. This average is four (4) days longer than that in 2009 and may be partially due to a larger number of assessments being carried out in 2010 (133 visits) as compared to 2009 (109 visits).

Proficiency Testing (PT) Suspensions and Withdrawals

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);
- does not submit a satisfactory Corrective Action Report in response to a PT failure.

The summary of suspensions shown in Table 3 indicates that the pattern reported in previous years was generally repeated in 2010: the non-accredited laboratories experienced the highest overall rate of suspensions while the accredited OSDWA laboratories generally experienced the lowest rate.

A PT failure subsequent to suspension may result in withdrawal of accreditation for the parameter. In 2010, a total of 18 withdrawals occurred at accredited laboratories, 1 of these at an OSDWA laboratory.

Table 3 Suspensions at Non-Accredited, Accredited and Accredited OSDWA Laboratories (values are shown as a percentage of total PT test samples)*

Study (2010)	Non-Accredited	All Accredited	Accredited OSDWA
January	1.00%	0.50%	0.00%
March	0.78%	0.29%	0.14%
June	0.69%	0.23%	0.07%
October	0.40%	0.40%	0.47%
Overall Average	0.71%	0.36%	0.17%

* These values do not include suspensions for reason other than PT failures, nor failures of PT provided by other approved PT providers.

Proficiency Testing Program

In 2010 the CALA Proficiency Testing (PT) Program offered 42 test groups, comprising 306 analytes. Samples for each test group are generally provided to member laboratories twice each year. The test groups are split between March/October rounds (inorganic and microbiology) and January/June rounds (organics and soils).

The scoring system and other details are provided in the PT15-*CALA PT Program* series of documents, which is available at: www.cala.ca.

PT Offerings

The following is a summary of changes to the analytes offered in the PT Program in 2010:

- C06B, C08 and C35; three aroclors (1242, 1254 and 1260) were added to each of these test groups.
- C32 Chlorine in water; This test group was split in to Total chlorine and Free chlorine.
- C36 VOCs in Soil: Vinyl chloride was removed from this test group.

Review of Concentration Ranges

The concentration ranges for C01B were reviewed for continued applicability. This resulted in the following changes to concentration ranges:

- Ammonia 0.5 – 20.0 mg/L as N
- Phosphate 0.1 – 3.0 mg/L as P
- Bromide 1.0 – 10.0 mg/L

Sample Characterization Procedure

A change to the way sample-to-sample variability and sample stability is assessed was examined in 2010. For C01A, C02A, C02B and C02C, the homogeneity and stability were evaluated using participant results rather than independent analyses on a randomly selected number of samples from each production lot. This has the benefit of identifying possible concerns that were not identified in our previous procedure and of being less costly.

It was concluded that this is a viable approach to use and will be implemented for all test groups in 2011.

PT Evaluation Procedure

2010 was the first complete year of the modified evaluation procedure. This procedure uses regression equations developed from previous studies to establish a lower limit to the standard deviation used in calculating the z-score. In effect, this ensures that the acceptance limits do not get tighter over time. The affect of this change has been lower suspension and withdrawal rates.

Participation

Participation showed a slight decrease in 2010 (see Figure 4). This decrease is due to a combination of economic factors (laboratories reducing their scope of operations) and a couple laboratories opting for PT from another provider. Participation levels for each test group are indicated in Table 4 on page 19.

Turn-around Times

CALA strives to return PT results to member laboratories within timeframes that enable the laboratories to undertake corrective actions in a timely manner. All study reports in 2010 were issued within the goal (see Figures 5 and 6). Procedures have been implemented in an attempt to reduce this turnaround time in 2011. The January 2011 study was reported within three weeks of the close of the study, suggesting that these changes were effective.

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

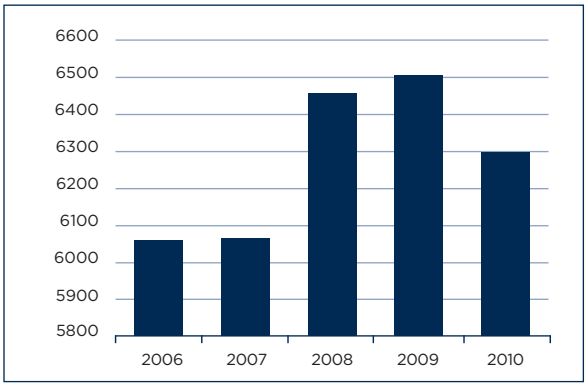


Figure 5 Turn-around time for January and June Proficiency Testing Shipments

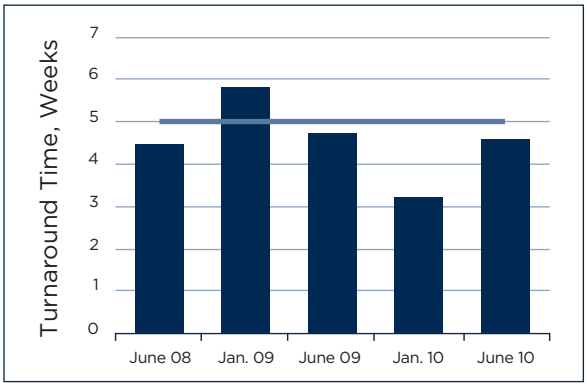


Figure 6 Turn-around time for March and October Proficiency Testing Shipments

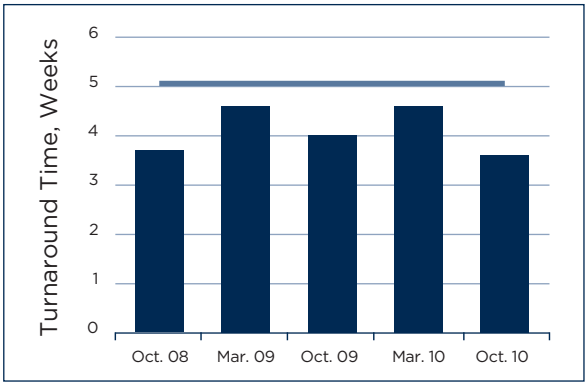


Table 4 Participation in Each Test Group of the CALA Proficiency Testing Program

PT	Group	Samples 2006	Samples 2007	Samples 2008	Samples 2009	Samples 2010
C-01A	Major Ions	451	425	473	470	449
C-01B	NH3, o-PO4, DOC	279	292	325	328	337
C-01C	Bromide/Nitrite	176	NA	NA	NA	NA
C-02A	Metals Full	314	268	285	274	261
C-02B	Metals High	97	109	108	99	86
C-02C	Total Metals	135	139	150	154	155
C-03	TKN & TP	260	249	272	275	269
C-04A	TSS	357	414	442	449	448
C-04B	BOD	266	295	303	301	283
C-04C	Turbidity	159	192	198	195	200
C-04D	COD	152	192	191	193	193
C-05A	Coliforms	356	326	356	353	318
C-05B	Coliforms (P/A)	79	92	99	101	100
C-06A	OCP/PCBs	133	128	107	78	73
C-06B	PCBs			41	81	79
C-07	PAH	137	138	141	143	135
C-08	PCB in Oil	97	96	98	91	85
C-09	Metals on Filters	43	41	41	38	30
C-10	Ions on Filters	35	26	27	24	21
C-11	Trout LC50	49	47	49	48	48
C-12	Daphnia LC50	41	42	45	42	41
C-13	Microtox IC50	51	58	59	58	59
C-14	CN (SAD)	94	101	103	106	101
C-15	pH	366	424	438	442	441
C-16	BTEX/THM	221	231	240	244	232
C-17	Metals in Soil	197	171	171	165	156
C-18	PAH in Soil	111	119	118	114	106
C-19	Mercury	152	160	157	162	155
C-20	Asbestos	212	249	257	256	249
C-21	Metals in Air	81	75	73	65	51
C-22	OP Pesticides	125	111	115	118	112
C-24	Aryloxy Acids	79	67	69	62	57
C-25	Phenolics	88	78	80	78	75
C-27	Glyphosate	28	26	32	34	33
C-28	VOCs in Air	30	28	30	22	16
C-29	Aldicarb	56	54	61	61	57
C-31A	BTEX soil	168	148	150	148	137
C-31B	PHC soil	122	138	147	142	135
C-32	Chlorine	84	105	113	108	128
C-33	Total Phenolics	78	84	99	103	101
C-34	Oil and Grease	99	125	135	150	147
C-35	PCB in Soil			58	65	65
C-36	VOCs in Soil				65	73
	TOTAL	**6058**	**6063**	**6456**	**6505**	**6297**

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, success rates ranged from approximately 90% to 100%, consistent with those observed in previous years.

Alberta Alternate Program

March 2010 was the last PT study coordinated for the Alberta Environment Alternate Program. The decision to cancel the PT portion of this program was made by Alberta Environment and was not related to the quality of service provided by CALA.

Training Program

The CALA Training Program delivers training on subjects related to laboratory accreditation. Training Program priorities remain unchanged for 2010:

- Training assessors to meet CALA accreditation program needs;
- Developing and delivering training within an approved training budget; and
- Assisting in the delivery of special services within the association and internationally.

In reaching out to CALA members in 2010, the Training Program delivered 35 in-class training sessions to over 280 members and non-members. The 2010 Training Schedule included courses delivered in 76 training days and in eight cities across Canada. Fifty-six (56) individuals took part in 23 online training sessions.

2010 was a transition year for the Training Program with Ned Gravel leaving in August and Cathy Wylie coming in as the training manager in November. This resulted in a reduced number of courses being offered in 2010 and the Training Program incurring a small financial loss for the year.

Preparing for 2011

The 2010 Training Program Needs Survey showed that members wanted stability in venues and more advanced technical courses.

The training schedule is found at http://www.cala.ca/t_sched.html.

New Online Training Facility

The move to the new online training that was planned for 2010 was only partially realized. The online site has been developed. The CALA online courses are being rewritten and will start to become available in June, 2011. The *Understanding ISO/IEC 17025* course will be the first course launched on the new system.

Guaranteed to Run

Starting in 2011, the Training Program introduced courses designated as Guaranteed to Run. Courses that are on the schedule as Guaranteed to Run will not be cancelled, even if the registration is below the required minimum. This change has proven to be very popular and we have received positive feedback from our members who are now able to sign up for a course and know that they will be attending it.

International Activity

Services Provided Internationally

In 2010, CALA delivered proficiency testing and/or accreditation services to 35 laboratories located outside Canada (no change from 2009), mostly in the rest of the Americas as shown in Figure 7. Nine (9) of these laboratories are in the accreditation program and 33 are in the proficiency testing program.

Mutual Recognition Arrangements

CALA continues to participate in activities to ensure the acceptance of Canadian laboratory results nationally and around the world. CALA is signatory to two (2) international mutual recognition agreements or MRAs (the Asia Pacific Laboratory Accreditation Cooperation – APLAC and the International Laboratory Accreditation Cooperation - ILAC) that provide global recognition of CALA accreditation by 71 accrediting bodies in 58 countries.

CALA is an active participant in these two international organizations by providing staff to participate in international evaluations of other accrediting bodies, and attending meetings of both APLAC and ILAC. This participation at APLAC and

Figure 7 Distribution of 35 international laboratories receiving services from CALA.

ILAC is important to ensure that CALA is not only aware of new developments but is active in their formulation. For example, during 2010, CALA and NIST (NVLAP) in the USA took the lead at ILAC to co-author and submit a discussion paper entitled "A Case for Different Voting Rules in the International Laboratory Accreditation Cooperation (ILAC)". The basic premise of the paper was to challenge the fairness of the ILAC policy of voting by "economy." The current ILAC voting policy in our opinion does not treat economies such as Canada, the USA, Japan and Thailand, which all have multiple Accrediting Bodies, in an equal fashion to other ILAC member economies that have only a single Accrediting Body. As a result, the paper was considered to have sufficient merit for it to be placed on the agenda of the ILAC Executive for further analysis during 2011.

As well, CALA was active in formulating the ILAC policy that applies to accreditation bodies that offer proficiency testing.

A CALA staff member served as Secretary to the APLAC Technical Committee and convenor of The APLAC Technical Committee Working Group on Remote Field Activities; the latter is in the process of drafting an APLAC technical guidance document on the contribution of remote sites to a laboratory's overall testing capabilities. CALA staff also acted as secretary for the ILAC Proficiency Testing Consultative Group.

While participation is valuable, the cost of participation does not go un-noticed. As a result of a review of our overall international activities in 2010, we were able to reduce our level of staff representation at these meetings while at the same time maintaining our obligations and responsibilities as a signatory to both the APLAC and ILAC MRAs.

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 under the Ontario *Safe Drinking Water Act*. 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 2010 and June 2010 rounds.

Total Program	January 2010		June 2010	
	Tests	Success %	Tests	Success %
Water (Organic)				
C06A-OCPs	471	93.2	479	96.2
C06B-PCBs	41	95.1	42	95.2
C07-PAHs	873	98.4	867	99.0
C16-BTEX/THMs/VOCs	2311	95.9	2223	95.5
C22-OP Pesticides	472	97.7	453	97.1
C24-Aryloxy acid pesticides	179	97.8	174	97.1
C25-Phenolics	125	98.4	123	96.7
C27-Glyphosate	16	100	16	100
C29-Aldicarb	18	100	16	100
C34-Total Oil and Grease	68	95.6	69	91.3
Oil				
C08-Total PCBs	40	95.0	43	97.7
Air Filter				
C09-Metals	58	96.6	58	98.3
C10-Major ions	35	100	35	88.6

Table A1 Continued from page 24

	January 2010		June 2010	
	Tests	**Success %**	**Tests**	**Success %**
Soil/Sediment				
C17-Metals	1328	96.8	1363	94.4
C18-PAHs	769	94.1	770	97.7
C31A-PHCs/BTEX	397	97.5	395	100
C31B-PHCs	208	99.0	211	94.3
C35-PCBs	31	96.8	32	94.8
C36-VOCs*	1010	89.1	976	98.6
Occupational Health				
C20-Asbestos	59	67.9	59	69.0
C21-Metals	55	90.9	51	100
C28-VOCs	18	100	18	100

Table A2 Success rates for all laboratories participating in the March 2010 and October 2010 rounds.

Total Program	March 2010		October 2010	
	Tests	**Success %**	**Tests**	**Success %**
Water (Inorganic)				
C01A-Major ions	1579	95.9	1543	95.3
C01B-NH3/PO4/DOC/Br/NO2	462	95.5	463	94.6
C02A-Metals	2514	95.5	2505	95.1
C02B-Metals (high range)	405	94.6	417	93.5
C02C-Metals (Total)	1169	98.0	1157	95.4
C03-TKN/TP	217	91.2	209	92.3
C04A-Solids	340	94.7	333	97.3
C04B-BOD	208	98.6	203	97.5
C04C-Turbidity	99	94.9	99	97.0
C04D-COD	97	90.7	96	93.8
C14-Cyanide	53	94.3	50	96.0

Table A2 Continued from page 25

	March 2010		October 2010	
	Tests	**Success %**	**Tests**	**Success %**
C15-pH	227	100	233	97.9
C19-Mercury	78	94.9	81	97.5
C32-Chlorine	81	93.8	86	93.0
C33-Total Phenolics	47	97.9	45	88.8
Water (Microbiology)				
C05A-Microbiology	474	96.4	467	98.1
C05B-Microbiology P/A	96	97.9	90	95.6
Water (Toxicology)				
C11-Trout	21	90.5	20	95.0
C12-Daphnia	20	100	20	90.0
C13-Microtox	29	89.7	29	93.1
Occupational Health				
C20-Asbestos	61	80.3	65	76.9
C21-Metals	51	100	47	100

Table A3 Success rates for OSDWA laboratories participating in the January 2010 and June 2010 rounds.

OSDWA Laboratories	January 2010		June 2010	
	Tests	**Success %**	**Tests**	**Success %**
Water (Organic)				
C06A-OCPs	202	99.0	192	96.3
C06B-PCBs	16	93.8	15	100
C07-PAHs	201	99.5	173	100
C16-BTEX/THMs/VOCs	689	96.7	679	98.7
C22-OP Pesticides	274	98.2	259	98.5
C24-Aryloxy acid Pesticides	99	98.0	92	100
C25-Phenolics	56	98.2	56	100
C27-Glyphosate	10	100	10	100
C29-Aldicarb	13	100	12	100
C34- Oil and Grease	9	88.9	10	100

Table A4 Success rates for OSDWA laboratories participating in the March 2010 and October 2010 rounds.

OSDWA Laboratories	March 2010		October 2010	
	Tests	Success %	Tests	Success %
Water (Inorganics)				
C01A- Major Ions	246	99.2	243	96.3
C01B- NH3/PO4/DOC	97	95.9	98	99.0
C02A- Metals	417	96.6	437	97.0
C02B- Metals (high range)	16	100	16	93.8
C02C- Total Metals	217	99.1	233	95.7
C03- TKN/TP	44	90.9	44	90.9
C04A-Solids	42	97.6	42	95.2
C04B-BOD	24	100	24	95.8
C04C- Turbidity	20	95.0	20	95.0
C04D-COD	13	92.3	13	92.3
C14-Cyanide	12	100	13	100
C15-pH	34	100	34	97.1
C19-Mercury	16	100	18	94.4
C32-Chlorine	21	90.5	22	90.9
C33- Total Phenolics	15	100	15	93.3
Water (Microbiology)				
C05A- Microbiology	128	99.2	128	100
C05B- Microbiology P/A	27	92.6	24	100