



CANADIAN ASSOCIATION FOR LABORATORY ACCREDITATION INC.

2011 Annual Report



CALA



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Chair's Report



Looking back on this past year I am pleased to report that CALA continued to build on the strategic plan developed in the fall of 2010, and focused on key areas

of growth and improvement requested by our members.

Joint Accreditation Program Between CALA and the CFIA

The joint accreditation program with the Canadian Food Inspection Agency (CFIA) was finalized this year, just in time for the 2012 assessment cycle. This means that laboratories who maintained accreditation from multiple agencies to cover both environmental and food testing, can now be accredited for both fields of testing under the CALA umbrella, significantly reducing their accreditation costs. Closing this agreement is a major success for CALA and its members. Please join me in congratulating the staff, which saw this agreement through to completion.

IT Infrastructure Renewal

Members have had many suggestions over the years for simplifying process by allowing more on-line access to forms and applications, as well as requesting options for PT report formats. Although CALA heard and noted these requests, the existing IT infrastructure did not support

implementation. I am very happy to report that a major redevelopment of the infrastructure has begun, and the first of three phases of service renewal is planned to go live in 2012. Additional improvements will follow in the future as all three phases are completed. I know these changes will make interactions with CALA simpler and more efficient for everyone.

Listening to Stakeholders

From its earliest days CALA has held itself to a high standard of excellence in service and in meeting member's needs. This past year the organization has focused on understanding the needs of all stakeholders including regulators and potential new members across Canada. Many face-to-face visits were conducted and more are planned for the future. Please help CALA understand how to serve you better both today and in the future by using these meetings to suggest and explore potential new programs and services. We are very interested in hearing your thoughts. Your suggestions will allow CALA to be proactive in serving you.

Volunteers

Thanking the CALA volunteers is never done lightly. Whether you serve as an Assessor, Advisory Panel Member, Accreditation Council Member, Program Committee Member, or as a Director, your contribution to CALA is un-measurable. It is because of your unselfish labours that this organization has grown into an

CHAIR'S REPORT

internationally recognized and locally celebrated agency. If you are interested in exploring volunteer opportunities please visit our website for more information.

In closing I want to extend my gratitude to the CALA members, staff, and volunteers. I have enjoyed my past three years on the Board and my term as Chair. I believe

CALA strives to offer exceptional services, by exceptional staff, for exceptional members, and it has been an honour to work for and with all of you.

Linda Neimor
Chair

President & CEO's Message



In the three years I have had the pleasure and privilege of serving CALA as its CEO (now as its President & CEO), 2011 has stood out in terms of the significant

changes that we have introduced as an association.

2011 was the implementation year for a completely revamped business model at CALA. Significant reductions in PT pricing came into effect and all program departments were adjusted toward individual self-sustainability. A minor hurdle with Members arose around our implementation of an annual billing cycle versus our historic biennial cycle, but in the end, a general consensus developed that our new annual billing approach was mutually beneficial for both our Member laboratories, as well as for CALA.

CALA's long-standing goal to expand our accreditation services to include food testing laboratories gained new traction during 2011. A formal agreement between CALA and the Canada Food Inspection Agency (CFIA) progressed to its final draft stages by year end. (A CFIA/CALA Agreement was subsequently formalized in early 2012).

CALA continued to openly ask our members for their feedback using a number of methods, including our annual satisfaction survey. Member satisfaction levels reported from this survey for 2011 showed improvements on all variables surveyed compared to 2010. CALA recognizes the limitations that are inherent with such surveys. To this end, we have instituted a number of other approaches to document our Members' needs and issues. As the President and CEO I have continued to reach out to our Members through face-to-face visits that allow for more candid input than is accommodated through any electronic survey. The bottom line is that every issue may not be one that CALA can help solve, but our diversified approach is meant to improve the confidence of our Members that we are listening and we will take appropriate action to address your concerns.

CALA Temporarily Loses/Gains New Management Staff

An exciting twist of fate took Brenda Dashney, CALA's CFO temporarily from the CALA management team following the adoption of one-year old twins. Brenda will be returning to CALA in September 2012, but in the meantime, I understand she is having the time of her life as a new parent. During this hiatus, CALA was very fortunate to gain the services of

Mary Fayad as our interim CFO. Mary's professional designation as a Chartered Accountant and her experience with not-for-profit entities have allowed her to function quickly and seamlessly in this critical management role at CALA.

CALA to Become More Remotely Accessible

In the second half of 2011, CALA spent a significant amount of time setting the groundwork for the roll out of a major IT infrastructure update in 2012. The sole purpose of this work is to allow CALA Members and volunteers to be able to work online and self-manage their profiles

and data related to PT, Accreditation and Training. This work will also result in a number of productivity gains at the CALA office, which should translate into further improvements in CALA's overall responsiveness to our Members.

CALA during 2011 has continued to raise the bar on the quality, quantity and responsiveness of our programs, leaving us better able to anticipate and respond quickly to the ever-changing needs of our Members.

C. Charles Brimley
President & CEO

Board of Directors

Chair

Ms. Linda Neimor
ALS Laboratory Group
Winnipeg, MB

Vice-Chair

Mr. James Downie
JRD Consulting Company
Heriot Bay, BC

Treasurer

Mr. Robin MacLean
Gilead Power Corporation
Uxbridge, ON

Secretary

Mr. Michael Brodsky
Brodsky Consultants
Thornhill, ON

Past Chair

Mr. Paul Fewer
Maxxam Analytics Inc.
Bedford, NS

Mr. Al Colodey
(Since June 2011)
Environment Canada
North Vancouver, BC

Mr. Tim Delaney
Nova Scotia Department of Agriculture
Truro, NS

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

Ms. Rosa Gonzalez
(Ending June 2011)
City of Hamilton
Hamilton, ON

Mr. Pat Lang
(Appointed)
Alberta Environment
Edmonton, AB

Mr. Marcus Maguire
(Since June 2011)
AGAT Laboratories Ltd.
Mississauga, ON

Ms. Deborah Masson-Stogran
(Ending June 2011)
SGS Environmental Services
Lakefield, ON

Ms. Brenda McLay
Near North Laboratories Inc.
North Bay, ON

Mr. Jason Oatley
(Since June 2011)
Region of Niagara
Thorold, ON

Mr. Klas Ohman
(Since June 2011)
Associated Engineering Alberta Ltd.
Calgary, AB

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 simply environmental laboratories. The CALA corporate strategic plan now provides for the expansion of accreditation activities. Currently, CALA-Accredited laboratories now include mineral testing laboratories (2), petroleum testing laboratories (3) and a coal testing laboratory.

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.

At the end of 2011, CALA had progressed on its goal to expand its scope of services

beyond only environmental testing by having drafted the basis for an agreement with the Canadian Food Inspection Agency (CFIA). The agreement was subsequently formalized on February 1st, 2012.

Membership

At the end of 2011 there were 627 members of CALA (see Table 1), representing an increase of 3.1% from 2010, primarily as a result of an increase in Institutional: Non-Voting, memberships.

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

- Accreditation (see page 15 for details)
- Proficiency Testing (see page 19 for details)
- Training (see page 23 for details)
- International Activities (see page 25 for details)

Table 1. Components of the CALA membership

| Type | Private Sector | Public Sector | Independent | Total |
|---------------|----------------|---------------|-------------|-------|
| Institutional | 273 | 145 | - | 418 |
| Individual | 66 | 94 | 35 | 195 |
| Associate | 7 | 2 | 5 | 14 |
| Total | 346 | 241 | 40 | 627 |

Financial Report

In 2011, CALA altered its business model and voluntarily reduced revenues through a 26% across the board reduction in PT fees. This loss of revenue was balanced through a combination of increased cost containment activities, increased revenues from our increasingly successful training program and increased accreditation fees.

CALA's total operational revenue for 2011 was \$3.2 million, approximately 6.7% (\$211,360) lower than the \$3.4 million budgeted, and 7.3% lower than the previous year results.

There was a very slight decrease in the Accreditation program revenue from budget (3%). Projections for new labs and applications from new labs were on target for the year.

The PT program's revenue came in under budget by approximately 18%. CALA experienced a reduction in PT participation from 10 laboratories belonging to the same network.

Training revenues were 29% higher than budgeted, and almost doubled from prior year results. Growth in the training department was due to the implementation of a Guaranteed to Run initiative for select courses in an effort to bolster confidence in the training program, as well as the ability to schedule courses based on demand.

Other income includes interest income and losses on disposal of sales of investments. This loss was significantly less than 2010 as we managed our portfolio within the approved investment policy.

Total expenses for the fiscal year were approximately \$3.05 million, down about 3.0% from prior year and 9.4% lower than budgeted expenses of \$3.3 million. Program-related costs were down by \$122,205. All program areas experienced reduced spending; the highest was in proficiency testing due to decreased unit cost for the production of PT samples and the non-participation of 10 labs previously mentioned.

Salaries, general overhead and administrative costs were also below budget. In addition, Board-related and International travel expenses were lower than anticipated since the ILAC meetings in Thailand were cancelled in the fall of 2011 and the decision not to attend the spring APLAC meeting. In 2011, 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 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. The association continues to benefit greatly from the generous contribution made by all of its volunteers, allowing us to operate 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 2011 through consistent, careful management of revenue, expenses and cash flow and, after factoring in amortization of capital assets, ended 2011 with an operating surplus of \$138,557. This increase in net assets resulted in an ending accumulated surplus of approximately \$1.8 million. CALA is a nimble organization that will continue to be successful through the diversity and versatility of the programs it offers and the strong management systems currently in place.

Report of the Independent Auditor on 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, 2011, 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, 2011. We expressed an unmodified audit opinion on those financial statements in our report dated March 8, 2012.

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, 2011 are a fair summary of those financial statements, in accordance with the basis described in Note 1.

March 8, 2012
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, 2011

| Assets | 2011 | 2010 |
|---------------------|---------------------|---------------------|
| Current assets | \$ 1,363,405 | \$ 1,477,104 |
| Investments | 1,258,619 | 1,238,435 |
| Capital assets | 110,169 | 32,648 |
| | \$ 2,732,193 | \$ 2,748,187 |
| Liabilities | | |
| Current liabilities | \$ 893,903 | \$ 1,054,487 |
| | 893,903 | 1,054,487 |
| Net Assets | | |
| Unrestricted | 1,838,290 | 1,693,700 |
| | \$ 2,732,193 | \$ 2,748,187 |

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

Summarized Statement of Operations

Year ended December 31, 2011

| Revenues | 2011 | 2010 |
|--|-------------------|-------------------|
| Evaluations | \$ 2,603,481 | \$ 3,063,967 |
| Memberships | 160,020 | 156,335 |
| Projects, net | 10,052 | 2,749 |
| Training | 380,524 | 179,944 |
| Other revenues | 32,745 | 19,342 |
| | 3,186,822 | 3,422,337 |
| Expenditures | | |
| Evaluations | 1,136,312 | 1,321,691 |
| Operational | 1,753,811 | 1,752,174 |
| Training | 158,142 | 68,950 |
| | 3,048,265 | 3,142,815 |
| Excess of revenue over expenses | \$ 138,557 | \$ 279,522 |

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

Summarized Statement of Cash Flows

Year ended December 31, 2011

| Cash flows provided by (used in) | 2011 | 2010 |
|---|-------------------|-------------------|
| Operating activities | \$ (879) | \$ 288,560 |
| Investing activities | 33,106 | (151,478) |
| Net increase in cash | 32,227 | 137,082 |
| Cash, beginning of year | 412,612 | 275,530 |
| Cash, end of year | \$ 444,839 | \$ 412,612 |

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

Accreditation Program

CALA is one of 74 accrediting bodies world-wide that is signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (as of April 2012). 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; and,
- Laboratories successfully participate in proficiency testing (PT) as per P02-03 *Proficiency Testing Policy for Accreditation*.

CALA has granted accreditation to 191 government and private sector laboratories (see Figure 1). Forty-five (45) of these accredited laboratories are licensed under the Ontario *Safe Drinking Water Act (OSDWA)*. In 2011, six (6) new laboratories applied to the Accreditation Program, while six (6) laboratories voluntarily terminated their accreditation (three (3) of these remained in the CALA PT Program).

Figure 1 Sources of CALA-Accredited Laboratories

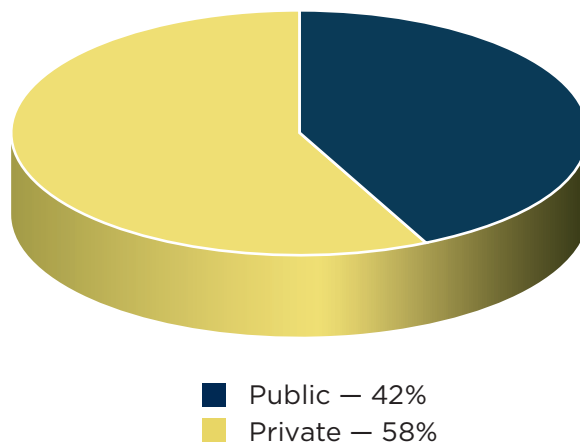
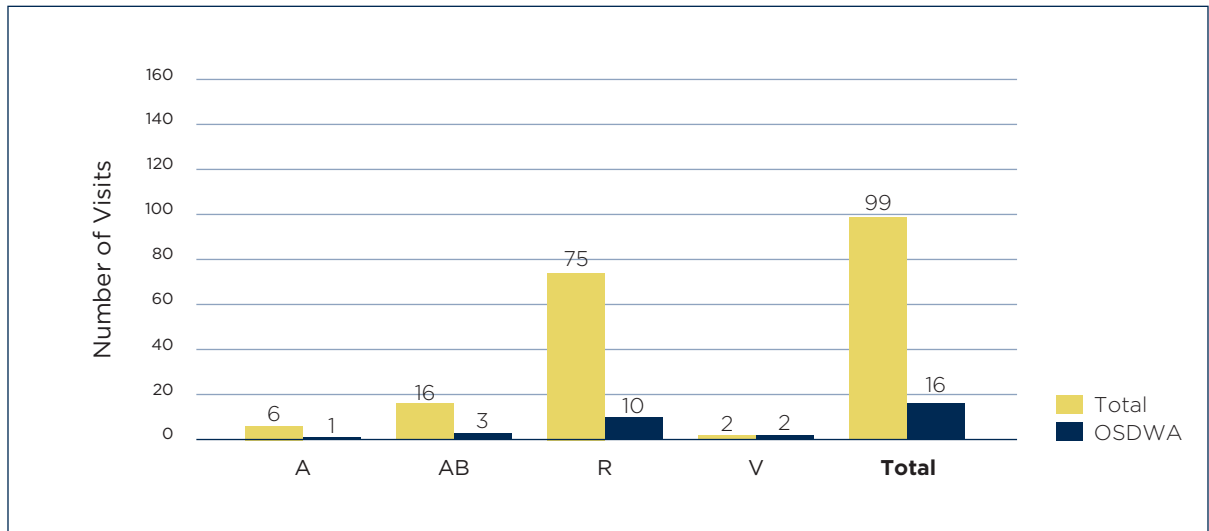


Figure 2 Categories of Site Visits Conducted in 2011

Site Visits

In 2011, CALA conducted a total of 99 site visits, of which 16 (16%) 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. In 2011, this biennial training session was held for two (2) days in March and was attended by 132 assessors. There are currently 146 active volunteer assessors, primarily from government and private sector laboratories

(see Figure 3). Twenty-nine (29) of these are from the 45 laboratories accredited and licensed under the OSDWA.

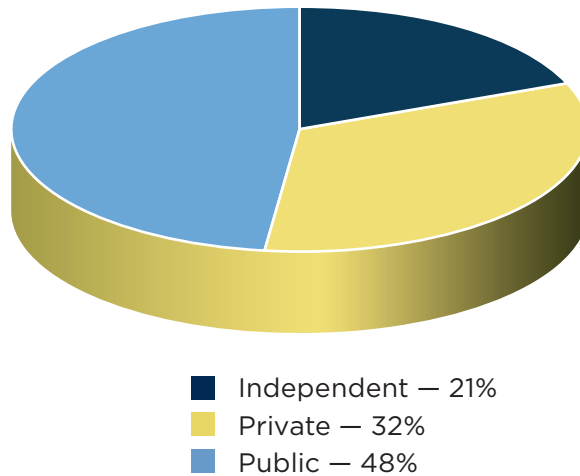
In 2011, 99 site visits were conducted, requiring 201 assessor trips. Assessor assignments would range from a single experienced assessor at a small laboratory, to several assessors required to conduct the reassessment of a large laboratory with a complex scope of testing.

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 2011. This data is based on site assessments performed in 2011, and is current as of March 27, 2012.

New (or applicant) laboratories have up to 90 days to respond to any non-conformances identified during an assessment; the six (6) applicants submitted responses to CALA within 64 days on average, the shortest time being 38 days after the assessment and the longest being 93 days after the

Figure 3 Sources of CALA Volunteer Assessors



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

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*) | >45 days (No. of labs*) |
|---------------------------------------|----------------------|-------------------------|--------------------------|---------------------------|-------------------------|
| Completion of Responses | 41 | 12 | 15 | 36 | 32 |
| Advisory Panel/Lead Assessor Review** | 12 | 36 | 43 | 11 | - |
| Accreditation Council Approval | 5 | 71 | 12 | - | - |

*subject to change, following completion and approval of visits carried out in 2011

**includes technical and administrative follow-up

findings was 45 days. Laboratories awaiting a scope extension tend to respond somewhat faster, with an average submission time of 31 days.

CALA targets a maximum of 45 days for staff to perform an initial review of 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, 93% of the 2011 lab responses were initially reviewed within the 45-day target and the average time to do so was 25 days. All non-conformances were reviewed and deemed satisfactory within 41 days, on average.

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 repeated in 2011: the non-accredited laboratories experienced the highest overall rate of suspensions while the accredited OSDWA laboratories experienced the lowest rate.

A PT failure subsequent to suspension may result in withdrawal of accreditation for the parameter. In 2011, a total of 30 withdrawals occurred at accredited laboratories, 7 of these at OSDWA laboratories.

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

| Study (2011) | Non-Accredited | All Accredited | Accredited OSDWA |
|-----------------|----------------|----------------|------------------|
| January | 0.54% | 0.33% | 0.08% |
| March | 0.74% | 1.01% | 0.33% |
| June | 0.97% | 0.43% | 0.08% |
| October | 1.6% | 0.41% | 0.25% |
| Overall Average | 1.00% | 0.55% | 0.18% |

* 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

At the end of 2011 the CALA Proficiency Testing (PT) Program offered 43 test groups, comprising 303 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 2011:

- Anions on filters (C10) and VOCs in carbon tubes (C28) were discontinued due to reduced participation levels.
- Three new PT test groups designed specifically for process control testing by drinking water treatment operators (P50 chlorine, P51 Turbidity and P52 pH) were implemented.

Sample Characterization Procedure

Starting in 2011, CALA changed the procedures for the determination of sample homogeneity and stability. Prior to 2011 this was performed through the analysis of a large number of samples for all of the analytes in the PT program. This was a significant contributor to sample cost. The new procedure involves the use of participant results to evaluate sample homogeneity and stability. CALA has now conducted four studies using this new procedure and has concluded that it is a more effective tool for identifying potential problems with the samples and adjusting the evaluations accordingly.

PT Evaluation Procedure

CALA underwent a major change to its business model, and the resulting impact on the PT program was a 26% reduction in overall PT fees.

Participation

Participation showed a 7% decrease in 2011 (see Figure 4). This decrease is due to a combination of economic factors (laboratories reducing their scope of operations) and several laboratories dropping out of CALA PT. Participation levels for each test group are indicated below in Table 4.

Turn-around Times

As mentioned in the 2010 Annual Report, new procedures have been implemented in an attempt to reduce the turnaround time of reports. Prior to 2010, turnaround times ranged between four (4) and five (5) weeks. Turnaround times observed for 2011 studies confirm that the new procedures have been effective (see Figures 5 and 6).

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.

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

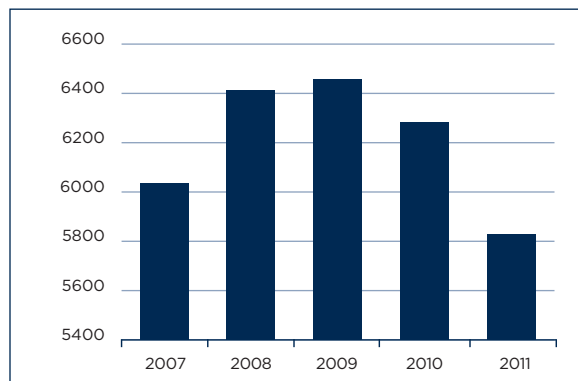


Figure 5 Turn-around time for January and June Proficiency Testing Shipments

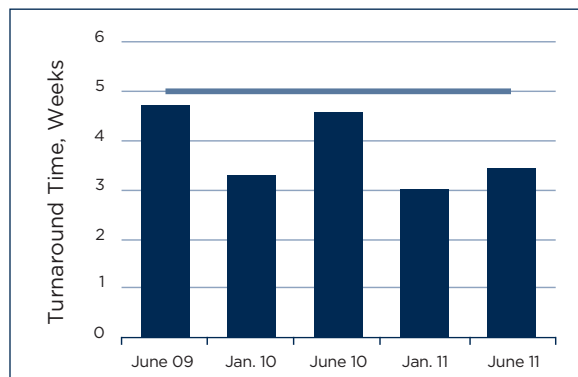


Figure 6 Turn-around time for March and October Proficiency Testing Shipments

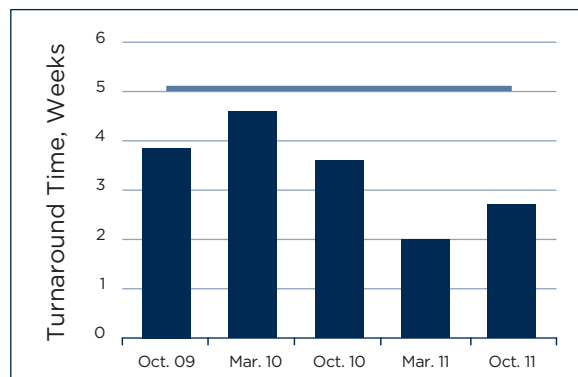


Table 4 Participation in Each Test Group of the CALA Proficiency Testing Program

| PT | Group | Samples 2007 | Samples 2008 | Samples 2009 | Samples 2010 | Samples 2011 |
|--------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| C-01A | Major Ions | 425 | 473 | 470 | 449 | 430 |
| C-01B | NH ₃ , o-PO ₄ , DOC | 292 | 325 | 328 | 337 | 334 |
| C-02A | Metals Full | 268 | 285 | 274 | 261 | 243 |
| C-02B | Metals High | 109 | 108 | 99 | 86 | 78 |
| C-02C | Total Metals | 139 | 150 | 154 | 155 | 138 |
| C-03 | TKN & TP | 249 | 272 | 275 | 269 | 251 |
| C-04A | TSS | 414 | 442 | 449 | 448 | 432 |
| C-04B | BOD | 295 | 303 | 301 | 283 | 267 |
| C-04C | Turbidity | 192 | 198 | 195 | 200 | 189 |
| C-04D | COD | 192 | 191 | 193 | 193 | 178 |
| C-05A | Coliforms | 326 | 356 | 353 | 318 | 300 |
| C-05B | Coliforms (P/A) | 92 | 99 | 101 | 100 | 81 |
| C06A | OCP/PCBs | 128 | 107 | 78 | 73 | 60 |
| C06B | PCBs | | 41 | 81 | 79 | 69 |
| C-07 | PAH | 138 | 141 | 143 | 135 | 117 |
| C-08 | PCB in Oil | 96 | 98 | 91 | 85 | 76 |
| C-09 | Metals on Filters | 41 | 41 | 38 | 30 | 28 |
| C-10 | Ions on Filters | 26 | 27 | 24 | 21 | 6 |
| C-11 | Trout LC50 | 47 | 49 | 48 | 48 | 48 |
| C-12 | Daphnia LC50 | 42 | 45 | 42 | 41 | 42 |
| C-13 | Microtox IC50 | 58 | 59 | 58 | 59 | 60 |
| C-14 | CN (SAD) | 101 | 103 | 106 | 101 | 91 |
| C-15 | pH | 424 | 438 | 442 | 441 | 435 |
| C-16 | BTEX/THM | 231 | 240 | 244 | 232 | 194 |
| C-17 | Metals in Soil | 171 | 171 | 165 | 156 | 138 |
| C-18 | PAH in Soil | 119 | 118 | 114 | 106 | 81 |
| C-19 | Mercury | 160 | 157 | 162 | 155 | 150 |
| C-20 | Asbestos | 249 | 257 | 256 | 249 | 282 |
| C-21 | Metals in Air | 75 | 73 | 65 | 51 | 38 |
| C-22 | OP Pesticides | 111 | 115 | 118 | 112 | 98 |
| C-24 | Aryloxy Acids | 67 | 69 | 62 | 57 | 51 |
| C-25 | Phenolics | 78 | 80 | 78 | 75 | 62 |
| C-27 | Glyphosate | 26 | 32 | 34 | 33 | 28 |
| C-28 | VOCs in Air | 28 | 30 | 22 | 16 | 7 |
| C-29 | Aldicarb | 54 | 61 | 61 | 57 | 44 |
| C-31A | BTEX soil | 148 | 150 | 148 | 137 | 103 |
| C-31B | PHC soil | 138 | 147 | 142 | 135 | 100 |
| C-32 | Chlorine | 105 | 113 | 108 | 128 | 137 |
| C-33 | Total Phenolics | 84 | 99 | 103 | 101 | 97 |
| C-34 | Oil and Grease | 125 | 135 | 150 | 147 | 135 |
| C35 | PCB in Soil | | 58 | 65 | 65 | 58 |
| C36 | VOCs in Soil | | | 65 | 73 | 60 |
| P50 | Chlorine in Water | | | | | 17 |
| P51 | Turbidity in Water | | | | | 8 |
| P52 | pH in Water | | | | | 6 |
| TOTAL | | 6063 | 6456 | 6505 | 6297 | 5847 |



Training Program

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

- 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 2011, the Training Program delivered 56 in-class training sessions to 655 members and non-members. The 2011 Training Schedule included courses delivered in 87 training days and in twelve cities across Canada. Thirty-four (34) individuals took part in online training courses.

Two (2) days of training were provided to CALA Assessors at the 2011 Biennial training session in March. An online training course covering new report writing requirements was developed, and was the first in a planned series of ongoing training for CALA assessors.

Two (2) new classroom courses were offered in 2011. *Laboratory Training Effectiveness* and *Uncertainty in Sampling and Compliance Assessment* were added to our training schedule.

Guaranteed to Run

Starting in 2011, the Training Program introduced courses designated as *Guaranteed to Run*, whereby a course 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 training participants.

AODA Customer Service Standard

New requirements of the *Accessibility for Ontarians with Disabilities Act* (AODA) required that, by January 1, 2012, all Ontario employees be trained on the AODA Customer Service Standard. In the latter half of 2011, the CALA Training Program provided free informational webinars to assist Ontario laboratories with the understanding of these requirements. To meet CALA's own training obligations, an online course for our employees and volunteers was developed. This course is now part of CALA's online training, and is available at a low cost to any laboratory that must train their employees on the AODA Customer Service Standard.

Online Training

In early 2011, the CALA Training Program completed the move to a new online training system and began offering our *Understanding ISO/IEC 17025* in an online format. Additional courses will be added

throughout 2012 - each completely redesigned to support self-paced learning. For more information visit www.cala.ca/training.

Preparing for 2012

A needs analysis was conducted throughout 2011, and the results show that laboratories would like CALA to continue to offer core courses, add additional courses, and explore offering courses on more advanced subjects. Leadership

training has also been identified as an area of interest. In response to these findings, we now offer courses on *Sampling* and *Control Charting*, and a *Leadership* webinar series will be introduced in the latter part of 2012.

Additional Information

Course descriptions, registration details and the training schedule can be found at www.cala.ca/training.

International Activity

Services Provided Internationally

In 2011, CALA delivered proficiency testing and/or accreditation services to 38 laboratories located outside Canada (up 3 from 2010), mostly in the rest of the Americas as shown in Figure 7. Eight (8) of these laboratories are in the accreditation program and 30 are in the proficiency testing program.

Mutual Recognition Arrangements

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 74 accrediting bodies in 61 countries. Being signatory to these arrangements ensures the acceptance of Canadian laboratory results nationally and around the world.

As a signatory to the APLAC and ILAC MRAs, CALA must comply with requirements including, but not limited to, promoting the acceptance of ILAC signatories within Canada, participating in the work of APLAC and ILAC, and providing staff to evaluate other accreditation bodies that are seeking

Figure 7 Distribution of 38 international laboratories receiving services from CALA.



signatory status. Two (2) CALA staff are APLAC evaluators and one (1) staff person assists with the APLAC Evaluator Training Working Group.

Another initiative in 2011 was the joint development of a statement with the Standards Council of Canada (SCC) to encourage and promote appropriate references to laboratory accreditation during the tendering process.

CALA does strive to balance costs and resources with maintaining obligations and responsibilities as a signatory to both the APLAC and ILAC MRAs. It is also important to note that while there is a cost to meeting these obligations, participation at the international level is beneficial to CALA and its stakeholders because staff are kept up to date with international policies and are active in their formulation.

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* (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 2011 and June 2011 rounds.

| Total Program | January 2011 | | June 2011 | |
|-----------------------------|--------------|-----------|-----------|-----------|
| | Tests | Success % | Tests | Success % |
| Water | | | | |
| C06A-OCPs | 376 | 98.1 | 407 | 97.5 |
| C06B-PCBs | 78 | 88.5 | 81 | 92.6 |
| C07-PAHs | 655 | 99.5 | 693 | 93.4 |
| C16-BTEX/THMs/VOCs | 1736 | 97.8 | 1996 | 94.9 |
| C22-OP Pesticides | 382 | 96.6 | 395 | 96.7 |
| C24-Aryloxy acid pesticides | 144 | 93.8 | 153 | 97.4 |
| C25-Phenolics | 99 | 98.0 | 107 | 100 |
| C27-Glyphosate | 14 | 92.9 | 15 | 93.3 |
| C29-Aldicarb | 14 | 100 | 14 | 100 |
| C34-Total Oil and Grease | 61 | 93.4 | 66 | 95.5 |
| Oil | | | | |
| C08-Total PCBs | 36 | 100 | 39 | 100 |
| Air Filter | | | | |
| C09-Metals | 50 | 100 | 54 | 100 |
| C10-Major ions | 15 | 100 | | |

Table A1 Continued from page 27

| | January 2011 | | June 2011 | |
|----------------------------|--------------|-----------|-----------|-----------|
| | Tests | Success % | Tests | Success % |
| Soil/Sediment | | | | |
| C17-Metals | 1143 | 93.7 | 1320 | 93.6 |
| C18-PAHs | 540 | 95.4 | 893 | 95.6 |
| C31A-PHCs/BTEX | 288 | 100 | 319 | 98.2 |
| C31B-PHCs | 153 | 91.3 | 165 | 98.2 |
| C35-PCBs | 70 | 74.2 | 72 | 90.3 |
| C36-VOCs* | 717 | 99.3 | 854 | 98.9 |
| Occupational Health | | | | |
| C20-Asbestos | 66 | 84.8 | 79 | 91.1 |
| C21-Metals | 39 | 100 | 39 | 100 |
| C28-VOCs | 14 | 100 | | |

Table A2. Success rates for all laboratories participating in the March 2011 and October 2011 rounds.

| Total Program | March 2011 | | October 2011 | |
|--------------------------|------------|-----------|--------------|-----------|
| | Tests | Success % | Tests | Success % |
| Water (Inorganic) | | | | |
| C01A-Major ions | 1394 | 95.6 | 1429 | 94.5 |
| C01B-NH3/PO4/DOC/Br/NO2 | 424 | 90.8 | 438 | 92.0 |
| C02A-Metals | 2222 | 96.0 | 2336 | 96.5 |
| C02B-Metals (high range) | 406 | 91.1 | 415 | 92.8 |
| C02C-Metals (Total) | 1019 | 94.7 | 1072 | 96.7 |
| C03-TKN/TP | 194 | 94.3 | 197 | 93.9 |
| C04A-Solids | 314 | 96.2 | 323 | 95.0 |
| C04B-BOD | 190 | 96.8 | 202 | 99.0 |
| C04C-Turbidity | 91 | 97.8 | 94 | 100 |
| C04D-COD | 83 | 94.0 | 90 | 91.1 |
| C14-Cyanide | 43 | 93.0 | 45 | 93.3 |

Table A2 Continued from page 28

| | March 2011 | | October 2011 | |
|-----------------------------|------------|-----------|--------------|-----------|
| | Tests | Success % | Tests | Success % |
| C15-pH | 222 | 99.1 | 227 | 98.2 |
| C19-Mercury | 73 | 95.9 | 80 | 93.8 |
| C32-Chlorine | 85 | 95.3 | 86 | 97.7 |
| C33-Total Phenolics | 43 | 88.4 | 43 | 88.4 |
| P50-Chlorine | | | 21 | 52.3 |
| P51-Turbidity | | | 7 | 71.4 |
| P52-pH | | | 6 | 83.3 |
| Water (Microbiology) | | | | |
| C05A-Microbiology | 438 | 97.0 | 454 | 96.0 |
| C05B-Microbiology P/A | 80 | 92.5 | 84 | 97.6 |
| Water (Toxicology) | | | | |
| C11-Trout | 21 | 90.5 | 20 | 100 |
| C12-Daphnia | 21 | 100 | 21 | 100 |
| C13-Microtox | 29 | 89.7 | 30 | 86.7 |
| Occupational Health | | | | |
| C20-Asbestos | 65 | 92.3 | 84 | 85.7 |
| C21-Metals | 39 | 84.6 | 39 | 97.4 |

Table A3 Success rates for OSDWA laboratories participating in the January 2011 and June 2011 rounds.

| OSDWA Laboratories | January 2011 | | June 2011 | |
|------------------------|--------------|-----------|-----------|-----------|
| | Tests | Success % | Tests | Success % |
| Water (Organic) | | | | |
| C06A-OCs | 166 | 99.4 | 166 | 99.4 |
| C06B-PCBs | 13 | 92.3 | 13 | 100 |
| C07-PAHs | 129 | 100 | 129 | 100 |
| C16-BTEX/THMs/VOCs | 535 | 99.4 | 536 | 98.5 |
| C22-OP Pesticides | 225 | 96.4 | 226 | 98.7 |

Table A3 Continued from page 29

| OSDWA Laboratories | January 2011 | | June 2011 | |
|-----------------------------|--------------|-----------|-----------|-----------|
| | Tests | Success % | Tests | Success % |
| Water (Organic) | | | | |
| C24-Aryloxy acid Pesticides | 79 | 97.5 | 79 | 100 |
| C25-Phenolics | 48 | 95.8 | 48 | 100 |
| C27-Glyphosate | 9 | 88.8 | 10 | 90 |
| C29-Aldicarb | 11 | 100 | 11 | 100 |
| C34- Oil and Grease | 8 | 100 | 8 | 87.5 |

Table A4 Success rates for OSDWA laboratories participating in the March 2011 and October 2011 rounds.

| OSDWA Laboratories | March 2011 | | October 2011 | |
|---|------------|-----------|--------------|-----------|
| | Tests | Success % | Tests | Success % |
| Water (Inorganics) | | | | |
| C01A- Major Ions | 215 | 96.7 | 224 | 95.9 |
| C01B- NH ₃ /PO ₄ /DOC | 81 | 97.5 | 83 | 96.4 |
| C02A- Metals | 379 | 97.6 | 416 | 98.6 |
| C02B- Metals (high range) | 16 | 100 | 30 | 50 |
| C02C- Total Metals | 184 | 97.8 | 199 | 95.5 |
| C03- TKN/TP | 35 | 97.1 | 37 | 91.9 |
| C04A-Solids | 33 | 100 | 34 | 91.2 |
| C04B-BOD | 18 | 100 | 20 | 100 |
| C04C- Turbidity | 17 | 100 | 18 | 100 |
| C04D-COD | 10 | 90 | 11 | 90.9 |
| C14-Cyanide | 11 | 90.9 | 12 | 100 |
| C15-pH | 29 | 100 | 30 | 96.7 |
| C19-Mercury | 14 | 100 | 15 | 100 |
| C32-Chlorine | 18 | 100 | 18 | 100 |
| C33- Total Phenolics | 12 | 91.7 | 13 | 100 |
| Water (Microbiology) | | | | |
| C05A- Microbiology | 116 | 100 | 120 | 99.2 |
| C05B- Microbiology P/A | 18 | 88.9 | 16 | 100 |

