# CANADIAN ASSOCIATION FOR LABORATORY ACCREDITATION INC.

2012 Annual Report

CALA

Suite 310
1565 Carling Avenue
Ottawa ON
K1Z 8R1

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# Chair's Report

I am now completing my 10th year of service to the CALA Board of Directors. My first term started in 1999. Back then we called ourselves CAEAL and focused solely on the Environmental Testing sector. Things sure have changed since then and this year was no slouch in the change department.

We started off the year with a bang by joining forces with the Canadian Food Inspection Agency (CFIA) to accredit Food Testing laboratories. This was just in time for the start of our 2012 site assessment cycle. Before these assessments could be delivered however we needed to train 8 new CFIA specialists on how CALA delivers site assessments. Our training group came through with flying colors and we had our new CFIA friends up to speed in time to assist our accreditation group in the delivery of site assessments to four food-testing laboratories. I would like to congratulate everyone involved including our new CFIA volunteer assessors on a job well done.

The next piece in the Food Testing pie is the addition of a food component to our already world class Proficiency Testing program. I am happy to say that our PT group is well on the way to launching a new Microbiology in Food testing option to our program and we are hopeful that chemistry in food testing will soon follow.

Another project that the accreditation group undertook in 2012 was the introduction of what we refer to as site assessments using "representative sampling". Up until now CALA has assessed 100% of the methods listed on a laboratory's scope of testing during each site assessment. This approach is unique amongst the world's Accrediting Bodies (AB). Representative sampling is the norm amongst the AB's of the world. The approach assesses a representative cross section of the tests a laboratory is accredited for. For a number of years we have been asked by you to bring more technical rigor to our site assessments. Representative sampling will afford our assessment teams the time to bring this technical rigor to your assessments. This program change will be launched in 2013. We look forward to seeing significant improvement in how your assessments are delivered and would appreciate your feedback.

As in the past we have and will continue to focus on listening to our stakeholders including testing laboratories, testing professionals, regulators and other data users. We use the information garnered through these face-to-face meetings and surveys to plan CALA's future. Please continue to help us understand your business needs.

Before closing my report, I would like to thank all of the volunteers including

Assessors, Advisory Panel Members, Accreditation Council Members, Program Committee Members, and Directors. Your contribution to CALA is our core strength. It is because of you that CALA continues to be so highly regarded both within Canada and throughout the world. Well done and keep up the quality work.

In closing I would like to thank the CALA members, staff, and volunteers I have had the privilege of working with over these 10 years. It has been an immensely rewarding experience.

James R Downie
Chair

# President & CEO's Message

CALA, as an organisation, experienced another year of net growth in 2012. Throughout the year, management adopted a more aggressive marketing and outreach program. Our objective was to showcase our expanded capabilities to assess and accredit petroleum, mineral and food testing laboratories in addition to our traditional environmental scope. Aggressive marketing of these newer programs has already resulted in some positive returns and our efforts will continue, since these areas hold significant potential for continued near-term growth.

2012 was the second year of CALA's new business model that mandated all programs become self-sustaining. At the end of 2012 CALA's Accreditation Program was fully self-sustaining and generated a net surplus. During 2012, the accreditation program also officially and seamlessly launched our first series of food-testing accreditations in conjunction with the Canadian Food Inspection Agency (CFIA) and pilot-tested a new representative sampling approach for laboratory visits. This new approach will be rolled out officially in 2013.

Our Proficiency Testing (PT) Program exceeded its budgeted revenue projections and was also fully self-sustainable at year end. In early 2012, the CFIA informed the laboratory community that it would no longer be supporting a PT program for food-testing laboratories. CALA, for its part, saw this as an opportunity to expand our PT offerings to include at least food microbiology in order to fill this void. As a result, significant time and effort has been invested and we are on track for an official launch of this new food micro PT program in 2013.

Our Training Program did not fare quite as well during 2012. The implementation of both webinar and online training formats helped our Training Program reach significantly more individual participants in 2012, however the revenue-generating capacity of electronic compared to in-class delivery did not result in the program recovering all of its costs during the year. As a result, CALA is developing a multi-faceted/multi-format Training Program going forward into 2013 and beyond. Due to the general restrictions we saw imposed on travel budgets during 2012, it may take the Training Program a couple of years to return its program to a fully sustainable status.

However, on balance in 2012, at an organizational level, CALA managed to surpass its budgeted financial targets and end the year with a net income of $42,356.

Also, in 2012 CALA recognized the limitations that are inherent with too many surveys. To this end, fewer annual surveys were instituted and a number of alternate approaches to document Members' needs and issues are being implemented. As the President and CEO, I again made the time to personally reach out to you the Members through face-to-face visits.

I believe this more personal approach allows for more candid input than can be collected through any electronic survey. The bottom line is that we are listening and we will take all necessary and appropriate actions to address your concerns. If I have not had opportunity to visit you to date and you would like an opportunity for a face-to-face meeting, please let me know and I will make every effort to accommodate.

Finally, before closing, I wish to commend all those who have actively taken part in CALA's work during 2012. I particularly wish to thank the CALA Board, our amazing team of assessors and other volunteers who contribute on our committees and also the CALA staff team for their continued commitment and diligence in delivering a level of service to our members that is second to none. Well done!

C. Charles Brimley
President & CEO

# Board of Directors

**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**
Ms. Linda Neimor
ALS Laboratory Group
Winnipeg, MB

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. Jane Kaczmer (since June 2012)
Alberta Children's Hospital
Calgary, AB

Mr. Pat Lang (Appointed)
Consultant
Edmonton, AB

Mr. Marcus Maguire
AGAT Laboratories Ltd.
Mississauga, ON

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

Mr. Jason Oatley
Region of Niagara
Thorold, ON

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

Ms. Rhonda Schop (since June 2012)
Ontario Ministry of the Environment
Toronto, ON

# Corporate Profile

***Mission*** *The Canadian Association for Laboratory Accreditation Inc. (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 in 1989 as the Canadian Association for Environmental Analytical Laboratories (CAEAL) 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 the Environment, specifically for the accreditation of laboratories conducting tests under the Ontario *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 the following types of testing: environmental, food, mineral, petroleum, and coal.

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.

In 2012, CALA, in conjunction with CFIA, undertook the development and implementation of food accreditation assessment procedures, and piloted a food microbiology PT program.

### Membership

At the end of 2012 there were 655 members of CALA (see Table 1). 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 22 for details)
- International Activities (see page 24 for details)

**Table 1.** Components of the CALA membership

| Type | Private Sector | Public Sector | Independent | Total |
|---|---|---|---|---|
| Institutional | 285 | 154 | - | 439 |
| Individual | 67 | 96 | 40 | 203 |
| Associate | 6 | 2 | 5 | 13 |
| **Total** | **358** | **252** | **45** | **655** |

# Financial Report

CALA's total revenue for 2012 was $3.1 million, approximately 7.5% ($250,561) lower than the $3.3 million budgeted, and 1.8% lower than the previous year results.

Evaluations as an income category on the Financial Statement are comprised of Proficiency Testing (PT) and Accreditation services. For 2012 it saw growth of 1.2% over the previous year. In the second year of a new business model, the PT program's revenue rebounded on the basis of new and returning clients to perform slightly greater than budget by 3.5% which was also 1.7% greater than 2011. Accreditation did not achieve the budget target set for 2012, falling short by $37,735 (2.9%); however growth over the previous year was 1.7%.

The Training program suffered a setback in 2012 after a strong showing in 2011. The year end result was 46.2% below budget and 28.6% below 2011 results. The 2012 targets were set based on the growth experienced in 2011, but were not achieved with lesser demand for training than was anticipated.

Other income includes interest income, gains/losses on disposal of sales of investments, and unrealized gains on investments. Unrealized gains and losses were formerly recognized on the balance sheet only as an adjustment to net asset. Effective 2012 with new not-for-profit accounting rules, these results are to be reported on the statement of operations (Income Statement) annually. In 2012 the unrealized gain on investments was $33,860 and the main driver of the growth in this line item.

Total expenses for the fiscal year were approximately $3.1 million, up 1.5% over prior year and 8.7% lower than budgeted expenses of $3.4 million. Program-related costs were down by $143,163. Most program areas experienced reduced spending; Only PT incurred higher than budgeted expenses due to the growth experienced in the program.

Salaries, general overhead and administrative costs were also below budget. In 2012, we continued to focus on controlling and reducing administrative expenses while maintaining service levels. This is an ongoing 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. 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 2012 through consistent, careful management of revenue, expenses and cash flow and, after factoring in amortization of capital assets, ended 2012 with an operating surplus of $42,356. This increase in net assets resulted in an ending accumulated surplus of approximately $1.9 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, 2012, 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, 2012. We expressed an unmodified audit opinion on those financial statements in our report dated March 7, 2013.

These summarized financial statements do not contain all the disclosures required by Canadian accounting standards for not-for-profit organizations. 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 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, 2012 are a fair summary of those financial statements, in accordance with the basis described in Note 1.

Welch LLP

Chartered Accountants
Licensed Public Accountants

Ottawa, Ontario
March 7, 2013.

## Summarized Statement of Financial Position

December 31, 2012

| Assets | 2012 | 2011 |
|---|---|---|
| Current assets | **$ 894,258** | $ 1,363,405 |
| Investments | **1,712,587** | 1,258,619 |
| Capital assets | **194,541** | 110,169 |
| | **$ 2,801,386** | $ 2,732,193 |
| **Liabilities and Net Assets** | | |
| Current liabilities | **$ 920,740** | $ 893,903 |
| Net Assets | | |
| Unrestricted | **1,880,646** | 1,838,290 |
| | **$ 2,801,386** | $ 2,732,193 |

## Summarized Statement of Operations

Year ended December 31, 2012

| Revenue | 2012 | 2011 |
|---|---|---|
| Evaluations | **$ 2,636,001** | $ 2,603,481 |
| Memberships | **155,810** | 160,020 |
| Miscellaneous | **9,671** | 10,052 |
| Training | **271,738** | 380,524 |
| Other revenue | **63,386** | 38,778 |
| | **3,136,606** | 3,192,855 |
| **Expenditures** | | |
| Evaluations | **1,080,938** | 1,136,312 |
| Operational | **1,829,322** | 1,753,811 |
| Training | **183,990** | 158,142 |
| | **3,094,250** | 3,048,265 |
| **Excess of revenue over expenses** | **$ 42,356** | $ 144,590 |

## Summarized Statement of Cash Flows

Year ended December 31, 2012

| | 2012 | 2011 |
|---|---|---|
| Cash flows provided by (used in) | | |
| Operating activities | **$ 71,861** | $ (879) |
| Investing activities | **(38,126)** | 33,106 |
| Net increase in cash | **33,735** | 32,227 |
| Cash, beginning of year | **444,839** | 412,612 |
| Cash, end of year | **$ 478,574** | $ 444,839 |

**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.

# Accreditation Program

CALA is one of 81 accreditation bodies world-wide that is signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement. 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 must also successfully participate in proficiency testing (PT) as per P02-03 *Proficiency Testing Policy for Accreditation*.

CALA has granted accreditation to 193 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 2012, seven (7) new laboratories applied to the Accreditation Program, while five (5) laboratories voluntarily terminated their accreditation (one (1) of these laboratories remained in the CALA PT Program).

**Figure 1** Sources of CALA-Accredited Laboratories

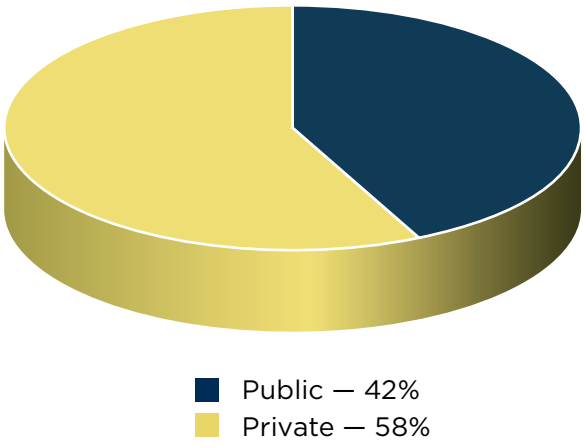
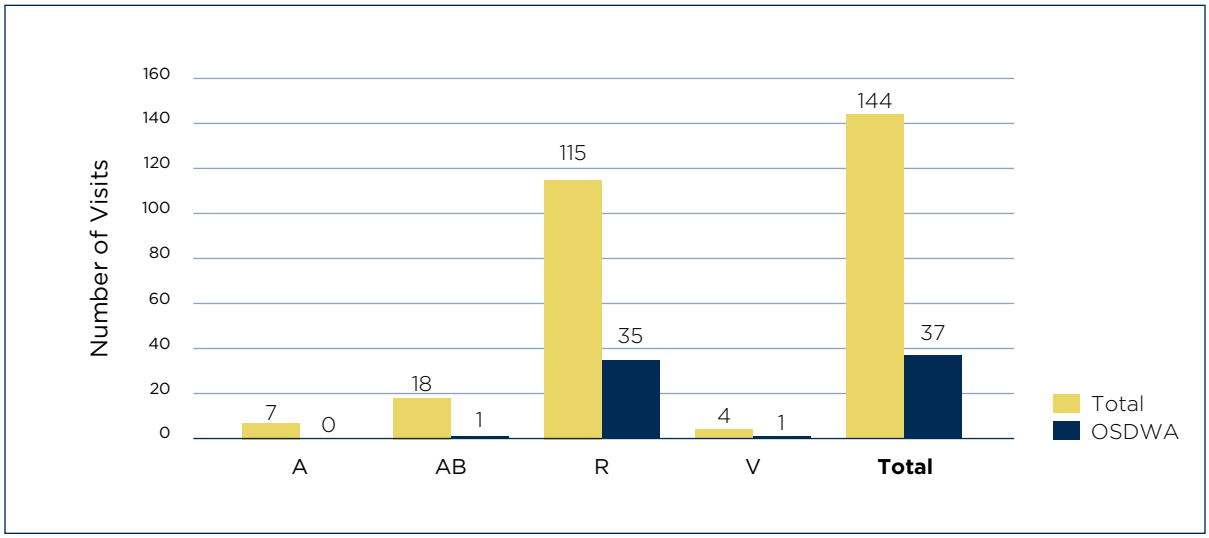


**Figure 2** Categories of Site Visits Conducted in 2012




## Site Visits

In 2012, CALA conducted a total of 144 site visits, of which 37 (26%) 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 155 active volunteer assessors, primarily from government and private sector laboratories (see Figure 3). Twenty-one (21) of these are from the 45 laboratories accredited and licensed under the OSDWA.

In 2012, 144 site visits were conducted, requiring 263 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 2012. This data is based on site assessments performed in 2012, and is current as of March 27, 2013.

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 67 days on average, the shortest time being 36 days after the assessment and the longest being 87 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 32 days.

**Figure 3** Sources of CALA Volunteer Assessors

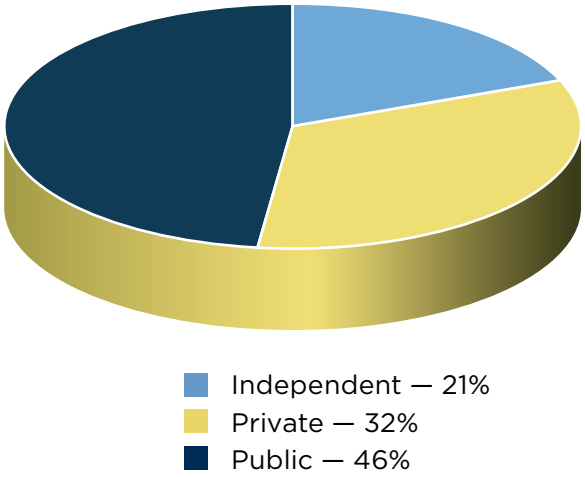



**Table 2** Major Steps in the Accreditation Process

| Step in the Accreditation Process | Average Time (days*) | 1-7 days (%) | 8-21 days (%) | 22-45 days (%) | >45 days (%) |
|---|---|---|---|---|---|
| Completion of Responses | 40 | 12 | 17 | 37 | 34 |
| Advisory Panel/Lead Assessor Review | 5 | 82 | 17 | 1 | - |
| Accreditation Council Approval | 7 | 64 | 36 | - | - |

*subject to change, following completion and approval of visits carried out in 2012

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, 90% of the 2012 laboratory 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 40 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 differed in 2012: the non-accredited laboratories continued to experience the highest overall rate of suspensions, while the accredited OSDWA laboratories experienced a higher rate compared to all accredited labs.

A PT failure subsequent to suspension may result in withdrawal of accreditation for the parameter. In 2012, a total of 22 withdrawals occurred at accredited laboratories, none were 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 (2012) | Non-Accredited | All Accredited | Accredited OSDWA |
|---|---|---|---|
| January | 0.10% | 0.17% | 0.44% |
| March | 1.63% | 0.33% | 0.08% |
| June | 2.45% | 0.69% | 1.20% |
| October | 1.6% | 0.56% | 0.76% |
| Overall Average | 1.53% | 0.44% | 0.61% |

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

# Proficiency Testing Program

At the end of 2012 the CALA Proficiency Testing (PT) Program offered 44 test groups, comprising 305 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 2012:

- Only one test group was added in 2012: C37 Colour in water.

As well, CALA and CEAEQ cooperated in the coordination of a food microbiology PT study in 2012. Samples were provided in six matrices; eggs, milk, cheese, pork, chicken and feed, and included both pathogens and non-pathogens.

## PT Fees

PT fees remained unchanged for 2012.

## Participation

Participation showed a 2.7% increase in 2012 (see Figure 4). In general, there was an increase in participation for the samples provided in March and October (inorganics and microbiology), and a decrease in the more costly organics samples provided in January and June. Participation levels for each test group are indicated below in Table 4.

## Turn-around Times

Turnaround time from reporting deadline to the issuing of the final report was maintained at between two and three weeks (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)

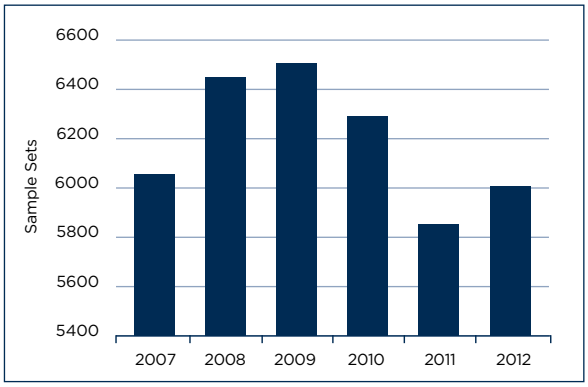



**Figure 5** Turn-around time for January and June Proficiency Testing Shipments

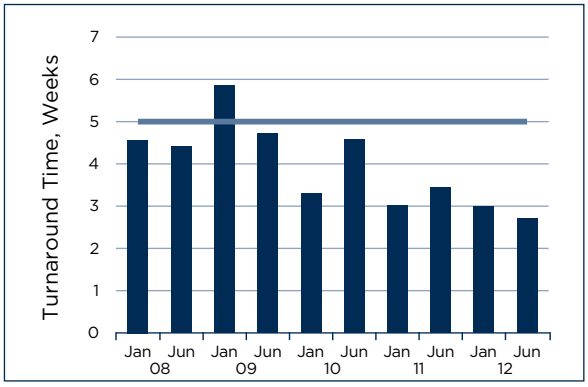



**Figure 6** Turn-around time for March and October Proficiency Testing Shipments

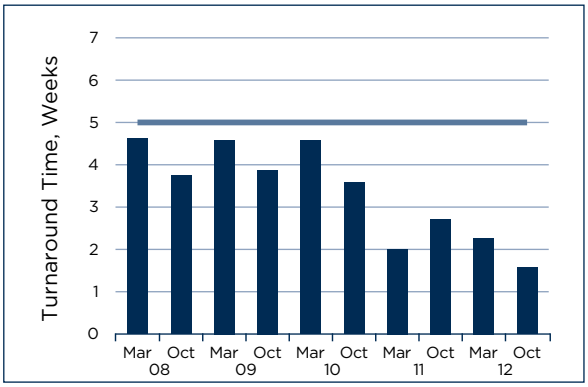


**Table 4** Participation in Each Test Group of the CALA Proficiency Testing Program

| PT | Group | Samples 2008 | Samples 2009 | Samples 2010 | Samples 2011 | Samples 2012 |
|---|---|---|---|---|---|---|
| C-01A | Major Ions | 425 | 473 | 470 | 449 | 430 |
| C-01B | NH3, o-PO4, 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** | **6456** | **6505** | **6297** | **5847** | **6006** |

# Training Program

The CALA Training Program delivers training on subjects related to laboratory accreditation. Training Program priorities remain unchanged for 2012:

- 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.

In reaching out to CALA members in 2012, the Training Program delivered 73 in-class training sessions to 439 members and non-members. The 2012 Training Schedule included courses delivered over 107 training days and in fourteen cities across Canada. One hundred and forty-eight (148) individuals took part in online training courses. Seven (7) webinars were presented to a total of 344 participants. The growth in our outreach of the program, resulted in training higher numbers of people, but fell short of our financial targets, based on an overall reduction in classroom participation.

In support of the CALA accreditation program training was provided to 10 new CALA assessors and to eight (8) CFIA assessors who joined the accreditation program to assess food programs. Additionally, online training was provided on report writing and Accessibility for Ontarians with Disabilities (AODA) to CALA assessors.

### Webinars

The CALA Training Program introduced webinars for the first time in 2012. Two series of webinars were started. The first was the Laboratory Series that focused on a laboratory's quality system and ISO/IEC 17025. The second was the Leadership series that covered topics of interest to leaders and people looking to develop leadership skills.

The feedback on the addition of webinars has been very positive. Participant satisfaction was very high. Two of the webinars sold out, resulting in a second session to meet the demand.

### Website and Registration

The CALA training website was redeveloped in 2012 to make it easier to navigate, to get information on the courses, and to register. The classroom and virtual course offerings can be easily navigated by either course description or by calendar.

## Preparing for 2013

Starting in 2013 virtual courses will be offered. These are courses from the regular classroom schedule that are offered at a distance. Participants attend the classes from their laboratory or from home. The sessions are live so participants can ask and answer questions, contribute to discussions and receive feedback on exercises.

Also new in 2013 will be a classroom based Leadership course. The “Management for New Managers” course will be available in 2013 and is targeted at leaders with less than 5 years experience or people looking to move into a leadership role.

## Additional Information

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

# International Activity

### Services Provided Internationally

In 2012, CALA delivered proficiency testing and/or accreditation services to 41 laboratories located outside Canada (up 3 from 2011), mostly in the rest of the Americas as shown in Figure 7. Nine (9) of these laboratories are in the accreditation program and 30 are in the proficiency testing program only.

### 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 81 accreditation bodies. Being signatory to these arrangements promotes 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 signatory status. 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.

**Figure 7** Distribution of 39 international laboratories receiving services from CALA.

# 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 the 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 2012 and June 2012 rounds.

| Total Program | January 2012 | | June 2012 | |
|---|---|---|---|---|
| | Tests | Success % | Tests | Success % |
| **Water** | | | | |
| C06A-OCPs | 331 | 98.8 | 354 | 95.5 |
| C06B-PCBs | 77 | 94.8 | 77 | 98.7 |
| C07-PAHs | 693 | 97.7 | 751 | 98.4 |
| C16-BTEX/THMs/VOCs | 1907 | 94.8 | 1978 | 93.6 |
| C22-OP Pesticides | 369 | 97.3 | 361 | 95.8 |
| C24-Aryloxy acid pesticides | 131 | 96.2 | 131 | 96.2 |
| C25-Phenolics | 92 | 97.8 | 90 | 98.9 |
| C27-Glyphosate | 15 | 93.3 | 15 | 100.0 |
| C29-Aldicarb | 14 | 100.0 | 13 | 92.3 |
| C34-Total Oil and Grease | 60 | 96.7 | 64 | 96.9 |
| **Oil** | | | | |
| C08-Total PCBs | 90 | 95.6 | 103 | 93.2 |
| **Air Filter** | | | | |
| C09-Metals | 46 | 100 | 50 | 92.0 |

**Table A1** Continued from page 25

| | January 2012 | | June 2012 | |
|---|---|---|---|---|
| | **Tests** | **Success %** | **Tests** | **Success %** |
| **Soil/Sediment** | | | | |
| C17-Metals | 1252 | 96.9 | 1430 | 93.1 |
| C18-PAHs | 557 | 93.0 | 601 | 93.8 |
| C31A-PHCs/BTEX | 305 | 96.7 | 335 | 90.7 |
| C31B-PHCs | 164 | 97.0 | 181 | 95.0 |
| C35-PCBs | 72 | 98.6 | 80 | 90.0 |
| C36-VOCs* | 915 | 96.0 | 938 | 94.2 |
| **Occupational Health** | | | | |
| C20-Asbestos | 79 | 91.3 | 86 | 90.7 |
| C21-Metals | 39 | 100 | 39 | 100 |

**Table A2.** Success rates for all laboratories participating in the March 2012 and October 2012 rounds.

| **Total Program** | March 2012 | | October 2012 | |
|---|---|---|---|---|
| | **Tests** | **Success %** | **Tests** | **Success %** |
| **Water (Inorganic)** | | | | |
| C01A-Major ions | 1453 | 93.7 | 1465 | 93.4 |
| C01B-NH3/PO4/DOC/Br/NO2 | 447 | 93.5 | 453 | 92.1 |
| C02A-Metals | 2376 | 95.2 | 2381 | 95.3 |
| C02B-Metals (high range) | 420 | 91.0 | 388 | 92.0 |
| C02C-Metals (Total) | 1155 | 95.8 | 1186 | 95.5 |
| C03-TKN/TP | 199 | 94.0 | 197 | 93.9 |
| C04A-Solids | 323 | 95.4 | 323 | 97.8 |
| C04B-BOD | 201 | 97.5 | 199 | 98.0 |
| C04C-Turbidity | 98 | 99.0 | 102 | 97.1 |
| C04D-COD | 92 | 92.4 | 93 | 96.8 |
| C14-Cyanide | 46 | 93.5 | 46 | 100 |

**Table A2** Continued from page 26

| | March 2012 | | October 2012 | |
|---|---|---|---|---|
| | **Tests** | **Success %** | **Tests** | **Success %** |
| C15-pH | 227 | 99.6 | 226 | 98.2 |
| C19-Mercury | 76 | 93.4 | 74 | 95.9 |
| C32-Chlorine | 90 | 91.1 | 90 | 93.3 |
| C33-Total Phenolics | 44 | 93.2 | 44 | 90.9 |
| **Water (Microbiology)** | | | | |
| C05A-Microbiology | 450 | 96.4 | 465 | 97.2 |
| C05B-Microbiology P/A | 80 | 100 | 82 | 100 |
| **Water (Toxicology)** | | | | |
| C11-Trout | 20 | 100 | 21 | 95.2 |
| C12-Daphnia | 20 | 90.0 | 22 | 100 |
| C13-Microtox | 28 | 96.4 | 30 | 86.7 |
| **Occupational Health** | | | | |
| C20-Asbestos | 79 | 83.5 | 85 | 98.8 |
| C21-Metals | 39 | 97.4 | 43 | 95.3 |

**Table A3** Success rates for OSDWA laboratories participating in the January 2012 and June 2012 rounds.

| OSDWA Laboratories | January 2012 | | June 2012 | |
|---|---|---|---|---|
| | **Tests** | **Success %** | **Tests** | **Success %** |
| **Water (Organic)** | | | | |
| C06A-OCPs | 136 | 100 | 136 | 99.3 |
| C06B-PCBs | 18 | 94.4 | 23 | 100 |
| C07-PAHs | 130 | 98.4 | 130 | 100 |
| C16-BTEX/THMs/VOCs | 561 | 95.5 | 541 | 98.2 |
| C22-OP Pesticides | 206 | 98.5 | 192 | 99.5 |

**Table A3** Continued from page 27

| OSDWA Laboratories | January 2012 | | June 2012 | |
|---|---|---|---|---|
| | Tests | Success % | Tests | Success % |
| **Water (Organic)** | | | | |
| C24-Aryloxy acid Pesticides | 65 | 98.5 | 65 | 100 |
| C25-Phenolics | 40 | 100 | 40 | 100 |
| C27-Glyphosate | 10 | 90.0 | 9 | 100 |
| C29-Aldicarb | 11 | 100 | 10 | 90.0 |
| C34- Oil and Grease | 6 | 100 | 7 | 100 |

**Table A4** Success rates for OSDWA laboratories participating in the March 2012 and October 2012 rounds.

| OSDWA Laboratories | March 2012 | | October 2012 | |
|---|---|---|---|---|
| | Tests | Success % | Tests | Success % |
| **Water (Inorganics)** | | | | |
| C01A- Major Ions | 231 | 98.3 | 235 | 95.3 |
| C01B- NH3/PO4/DOC | 86 | 94.2 | 88 | 89.8 |
| C02A- Metals | 435 | 98.6 | 438 | 96.6 |
| C02B- Metals (high range) | 30 | 96.7 | 16 | 100 |
| C02C- Total Metals | 202 | 99.0 | 203 | 96.1 |
| C03- TKN/TP | 38 | 94.7 | 39 | 100 |
| C04A-Solids | 34 | 100 | 34 | 100 |
| C04B-BOD | 20 | 100 | 18 | 100 |
| C04C- Turbidity | 20 | 100 | 20 | 100 |
| C04D-COD | 10 | 90.0 | 10 | 100 |
| C14-Cyanide | 12 | 91.7 | 12 | 100 |
| C15-pH | 32 | 100 | 32 | 96.9 |
| C19-Mercury | 16 | 100 | 16 | 100 |
| C32-Chlorine | 17 | 100 | 17 | 100 |
| C33- Total Phenolics | 13 | 100 | 13 | 92.3 |
| **Water (Microbiology)** | | | | |
| C05A- Microbiology | 115 | 100 | 116 | 98.3 |
| C05B- Microbiology P/A | 16 | 100 | 16 | 100 |