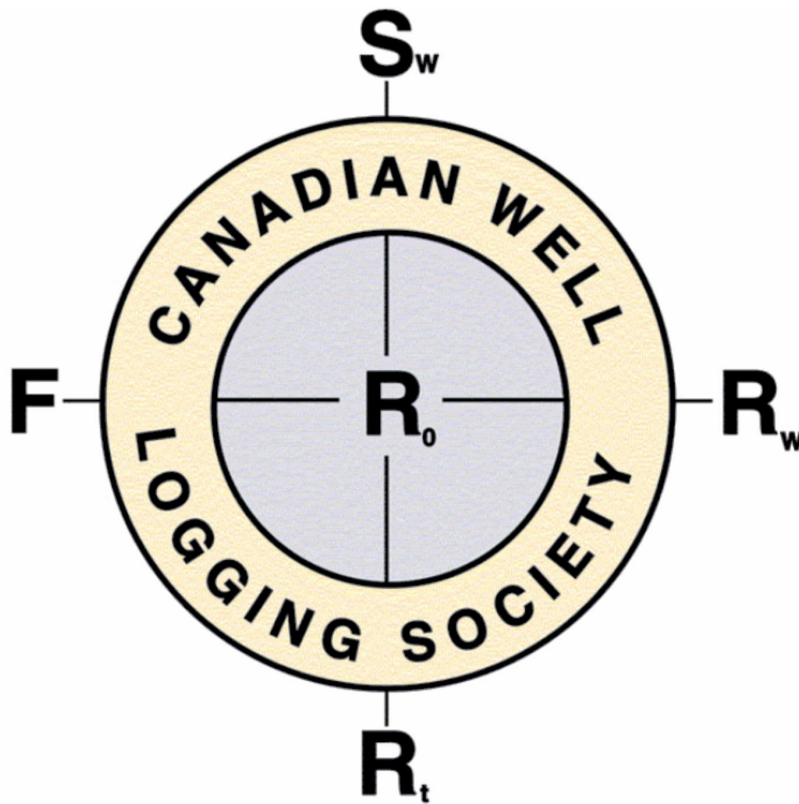


2016 - 2017 CWLS Annual Report



Canadian Well Logging Society

Fairmont Palliser Hotel, Calgary, Alberta

March 22nd, 2017

The President's Report

We continue to feel the current downturn in the oil and gas industry and how it affects our personal lives as well as the Canadian Well Logging Society (CWLS). We knew coming into last year that it would be a year in which we would have to make choices and take decisions keeping in mind the financial stability of the society and the value it brings to our members. With that in mind, the CWLS Executive has taken some strategic initiatives this past year that will not only position the society in a better financial position for the coming years, but equally important enhance the technical value we provide to our members.

I am extremely proud of the time and effort our 2016-2017 CWLS Executive team dedicated to the society, the results we achieved, and having the opportunity of working alongside with the support of our honorary and key senior members. Some of the major decisions, such as the motion to become a local SPWLA Chapter were taken with consultation from our general membership with an online survey. I personally want to thank all the members who participated in the survey and gave us feedback, and the ones who ultimately participated by voting for the SPWLA chapter motion online. I am confident that we will see the results of our efforts in the coming years, I invite you to take the time to read about all the hard work the CWLS Executive dedicated to the Canadian Well Logging Society in 2016.

Finances

The treasurer's report will go in more detail analyzing our profit and loss statement for last year, however I want to give an overview of the CWLS finances for 2016 and explain some of the decisions taken that we feel will position the society in better shape for the upcoming years.

Historically the main source of revenue for the society has been through the GeoConvention Partnership (GeoConvention), and we receive our percentage of the total revenue generated based on the joint partnership agreement we have in place with the Canadian Society of Exploration Geophysicists (CSEG) and the Canadian Society of Petroleum Geologists (CSPG). After the GeoConvention board had wrapped up the conference and completed their financial examination, they concluded that despite the overall success of the conference, it had run at a small deficit and therefore the CWLS would not receive any revenue for 2016. This is unprecedented for recent times and it goes to show the impact the downturn has had here in Calgary.

When I took on the role as President of the CWLS; one of the areas I wanted to lead some initiatives was in reducing the societies cost since we knew that 2016 would be a difficult year, some of those initiatives were accelerated when we received the news that the society would not generate revenue from GeoConvention. Without going into much detail in the profit and loss statement, in 2016 we had a significant reduction in our

The President's Report

overall revenue, but thanks to the initiatives to reduce costs, we also managed to cut our expenses for the year.

CWLS Office Change

In 2016 the CWLS physically moved to a new office as a result of switching from APEGA to Associations Plus for our administrative support. The CWLS will always appreciate the great support that we have received from APEGA for many years, and after a successful transition to Associations Plus we look forward to working with them. Based on the experience so far, the CWLS Executive is confident that by switching to Associations Plus, not only will improve the efficiency of the societies day to day operations but also reduce our administrative cost.

Our new office is located at 900 6 Ave SW #600, Calgary, AB T2P 3K2, and the phone number is (403) 244 4487. All these details should be updated on our website.

SPWLA Chapter Motion

As most of the CWLS members are aware the CWLS is the oldest organization devoted to log analysis worldwide, incorporated in Calgary, Canada in 1957. The society has a rich and successful history of bringing together our technical petrophysical community by hosting monthly technical luncheons, as well as supporting our members with initiatives such as the Catalog of Water Resistivities in sedimentary formations in western Canada.

During the last couple of years, the industry downturn has had a significant impact on our society, it is no secret that our general membership has dropped from 600 members to around 250 active members. We have also seen a drop in our corporate sponsors and our main source of revenue, GeoConvention, has also been affected as mentioned above.

The initiative to conduct a survey and eventually a vote to allow the CWLS Executive to start negotiations with the Society of Petrophysicists and Well Log Analysts (SPWLA) to become a local chapter, is not only being considered due to our current financial situation, but also in part because we have experienced lower involvement of our local petrophysicist members. I believe that by being part of a larger worldwide technical community such as the SPWLA, our members will have added benefits, which I believe ultimately enhances the value of becoming a member.

The survey conducted online had a positive participation and we gathered all the feedback our members gave us. Over 85% of the members who participated in the survey expressed their approval to become a local SPWLA chapter. We also received some valid concerns from a small portion of our membership, and those were addressed at two technical luncheons and in the form of supporting documents posted on our website. The decision to conduct both the survey and the vote online, was taken in order to maximize the participation from our general membership.

The President's Report

The voting for this motion will close 2 days prior to the AGM, to give the CWLS Executive time to gather the results and present them at the AGM. I want to thank everyone who participated in the survey and in the final vote.

The Winston Karel Student Scholarship

As some of you may remember, last year the CWLS re-named the student scholarship to honor Winston Karel, a long standing member and contributor to our society. The CWLS is honored to receive a donation from Lois Decker through Blade Ideas Ltd, to once again sponsor the student scholarship which will continue to carry her husband's name.

This year the winners of the scholarship will be announced later in the year during a luncheon event, this decision was made in order to collect the proper amount of student abstract submissions.

Acknowledgements

On behalf of the CWLS, I wish to acknowledge and thank APEGA for their continued support. Anita Denton continued to be a key member of the CWLS team and was invaluable as we transitioned the societies administrative duties to Associations Plus. I also want to thank Erika Holter and Jenny Kerr for their efficient support in taking on the administrative responsibilities of the CWLS.

As mentioned before, the 2016-2017 CWLS Executive had a difficult year, but I am thankful for their dedication and effort put into managing the societies needs.

Closing

It has been both an honour and a privilege to serve as your elected president for 2016-2017. I am extremely grateful to all the volunteers, honorary and senior members that stepped up this year for the CWLS. The executive team was an amazing and diverse group and I would like to reiterate my thanks for all of your hard work, dedication and patience over the last year. I would also encourage all of our members to consider volunteering in one capacity or another; it may not be easy to fit time in with our busy schedules, but the rewards are considerable.

To the incoming 2017-2018 Executive, I offer my congratulations on volunteering to be a part of this unique and vibrant community, and I wish you all continued success for the coming year.

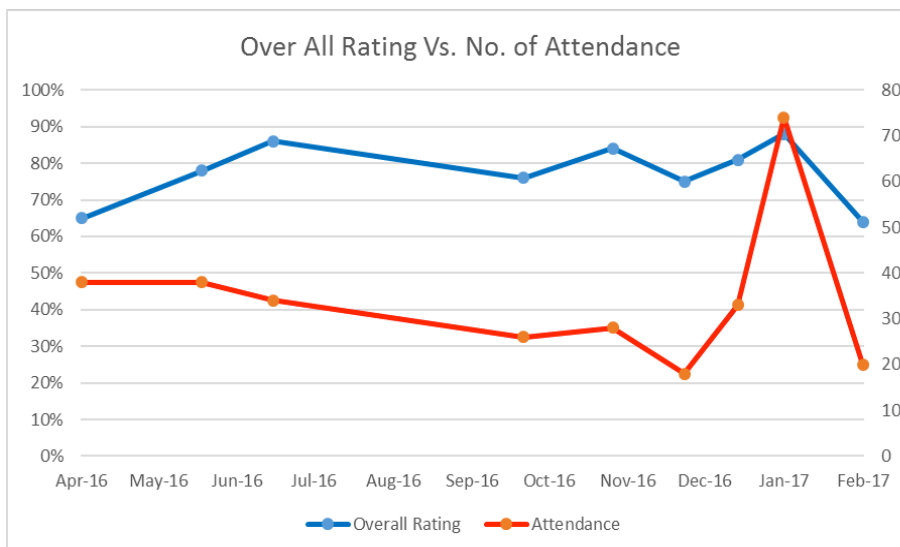
Manuel Aboud
2016-2017 President, Canadian Well Logging Society

The Vice-President's Report

Dear members and executive team at CWLS, thank you for your continued support and patronage over the last year, our 60th consecutive year of operations was challenging for our industry in general, as well as the CWLS and its sister societies, with all associated obstacles we continued our efforts to deliver valuable and high quality monthly technical luncheons.

Unfortunately, even though we received positive feedback on most of our monthly luncheon talk's, attendance had dropped almost by half comparing to previous years, which was a challenge for CWLS to recover costs in most months.

From April 2016 to Feb 2017, total of 9 luncheons where held, 309 tickets were sold, and an average of 34 people attended each lunch.



We aimed to deliver rich content focusing on local Canadian Petrophysics and Log Analysis of conventional and unconventional plays as much as we could, unfortunately finding speakers was another challenge, thanks to all speakers who voluntarily presented at CWLS luncheons last year.

Hopefully, if and once the CWLS become a local chapter of SPWLA, it will be easier to reach out to other worldwide societies to strengthen the synergy among those societies by means of speaker exchanges, increase number of audience at the luncheons and several other activities.

The Vice-President's Report

The following is a summary of the 2016-2017 Technical Luncheon speakers and topics:

| Date | Speaker | Title |
|-----------|--|---|
| 25-Jan-17 | Glenn Sather | Montney Reservoir Characterization |
| 21-Feb-17 | Connor Burt | Increasing Geologic Confidence Through Digital Rock Analysis in PerGeos |
| 20-Apr-16 | Joe Ramoin | Joe Ramoin discussing Digital Rock Characterization |
| 18-May-16 | Tyler E. Hauck | A Reassessment of the Keg River and Prairie Evaporite Formations in the Athabasca and Cold Lake Oil Sands Regions |
| 15-Jun-16 | David Foo & Alexander Kardash | Teaching and Old Log New Tricks: Improved Insights From Casing Inspection Logs |
| 21-Sep-16 | Cory Fehr | The Integrity Tool, Real Time Insitu Geomechanical Data |
| 26-Oct-16 | Alan D. Cull | Delineation of Thermally Altered Zones along Second Stage SAGD Producer Wells Through Resistivity Characterization using LWD Azimuthal Propagation Tool |
| 23-Nov-16 | John L. J. Duhault | Geophysics: Maximising Corporate Value During Low Commodity Prices |
| 14-Dec-16 | Bob Everett | Reconciling Log-Derived and Core Water Saturations |

Hopefully the Annual General Meeting will be an excellent event and I am sure everyone will enjoy our guest speaker: Brian Stollery, a highly regarded Corporate Comedian and I am sure the Turner Valley Ballroom at the Palliser is the right venue.

In conclusion, 2016 and early 2017 was another successful year for CWLS in such a challenging environment, thanks to all of our speakers for their continued support of our society over the past year, we also sincerely thank our sponsors and volunteers, to whom we owe a great debt of appreciation, special thanks to Anita Denton and all the APEGA office staff, Jenny Kerr and Erika Holter and all the Associations Plus staff for their diligent efforts, and Carla Paradis and Jason Edwards (Fairmont Palliser events team). We owe a great deal of thanks to all of them for helping to keep the CWLS and its events running smoothly.

Ben Zaied, Zeyad
2016-2017 Vice-President, Canadian Well Logging Society

Chair of Committee's Report

As most can expect 2016 – 2017 was a very challenging year for both the industry and the CWLS organization as a whole. With the challenges we saw a decrease in engagement both from the CWLS membership along with the industry as a whole. This created a stark lack of “out of the norm” CWLS board activity.

As the Chair of committees, you are tasked with overseeing these outside the box activities. The year, needless to say, did not provide much need for oversight. As was mentioned by the president the predominant thrust this year was to look into, and propose that, the CWLS become a local chapter of the SPWLA. This would enable the CWLS access to a larger base of technical knowledge and hopefully drive some cross-organization progress towards knowledge sharing.

Manuel was instrumental in communication with the SPWLA as well as helping to arrange a meeting with Dave Greenwood of the Legacy Committee. Through this meeting, we were able to determine the best course of action to move forward, as we have all seen as evidenced in this year's vote to join or abstain from a partnership with the SPWLA.

It has been a pleasure to serve on the board of the CWLS with a group of highly talented and motivated professional. I wish the future board great success and luck in dealing with the ongoing challenges of the industry.

Jarett Gough, P.Geol.

2016-2017 Chair of Committees, Canadian Well Logging Society

Publication Chair's Report

InSite magazine was published in spring-2016. The magazine has been printed in order to distribute hard copies, and an electronic copy is available for download at the CWLS website. We would like to receive more submissions from local authors for future issues of the magazine

This addition contained 3 technical articles. The first was Fracture Evaluation: Height and Contribution Using FMI and advanced Diagnostic Tools by Dr. Faathi Shnaib. The second was Delineation of thermally altered zones in SAGD producer wells through resistivity characterization using LWD azimuthal propagation tool by Anand Gupta, Alan Cull, Ian Theunissen, and Jim Kock. The last was Three Methods for Log-Derived Mineralogy: Part Three by Robert Everett.

The downturn in the industry and reduced activity in Canada has drastically effected technical submissions to the CWLS. Over 2016 we only had one submission that was not log related which was directed on to one of the sister societies.

We are very excited about the potential merge with the SPWLA and the fruit that it will bear in terms of technical content.

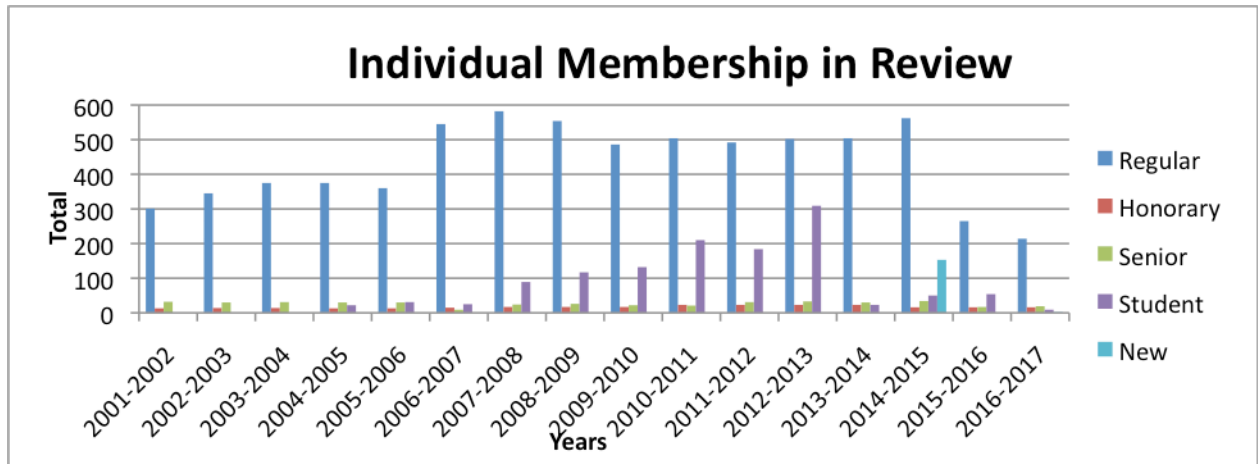
As always, the CWLS would like to improve on previous years and so if you have any constructive feedback on how to attract local material for the publication of InSite, please feel free to get in touch with the publications chair. We want to continue to add value to our members and non-members. If the society's aim is to further the science of well logging and petrophysics, then our publications need to be at the forefront of that vision.

I want to thank everyone who was involved in all our efforts this past year and look forward in working with you in the upcoming year.

Kevin Pyke
2016-2017 Publications Chair, Canadian Well Logging Society

The Membership Chair's Report

In 2016 the CWLS noticed another drop in active memberships. The largest factor of this drop is the harsh price environment in the oil and gas industry. Many of our previous members have found it difficult to attain a membership through their employer and many more do not see the value in maintaining their membership with the CWLS.



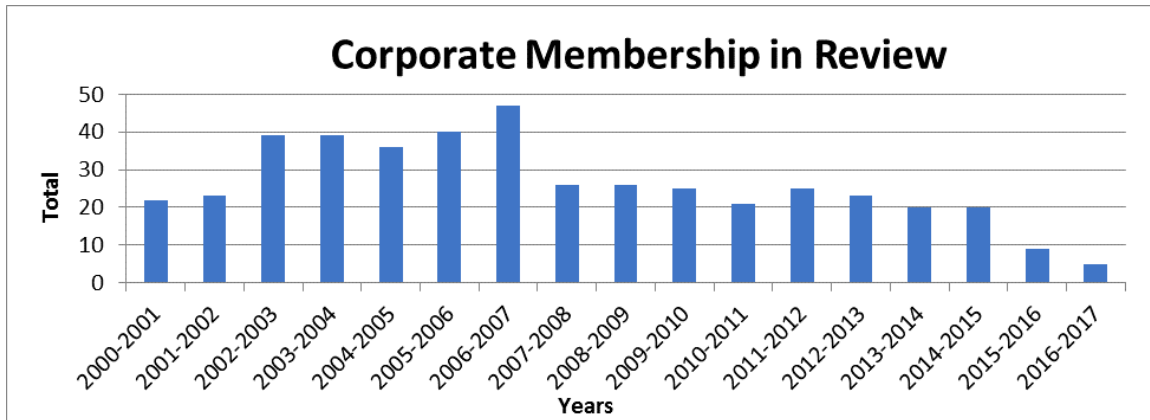
Our corporate membership also has been significantly affected by the downturn in industry resulting in a further decrease. A retention incentive was introduced last year as well as maintaining the current corporate membership rates. The executive is appreciative of the support we received this year from our corporate members.

The society too feels the pain of low oil prices and struggles with you. Corporate sponsorship plays a big role in enabling the CWLS to carry out its activities. Likewise, developments in the fields of logging, petrophysics and formation evaluation are increasingly important for companies as integration of disciplines and deeper understanding of how they are all connected is important to steer through uncertain times.

Corporate contributions enable us to support research through student awards and sponsorships, as well as giving us the ability to attract high quality presentations every month for our technical luncheon series. Due to this, we are greatly indebted to all of our corporate sponsors from this past year and hope to see those that took a break come back soon – Thank you!

Membership renewal has started for the 2016-17 year at the CWLS. The easiest way to do so is going to cwls.org and using the provided contact info. The CWLS has worked dilligently with Associations Plus to continue and make the website and email communication both functional and user friendly to our membership.

The Membership Chair's Report



Because our membership has traditionally grown through word of mouth in our technical community, we encourage you to continue to recommend us to your colleagues. Feel free to promote upcoming technical lunches to your peers and, if you are interested in volunteering, there are opportunities to get involved in sub-committees, future GeoConventions, and corporate sponsorship. We are also looking to gain membership from engaging societies to which we have joint interests, such as the engineering community through joint talks with the Society Petroleum Engineers, and mentorship activity with the The Canadian Society of Exploration Geophysicists please look out for future collaborations.

As a society we struggle to retain students as they transition to young professionals and would like to find ways to keep our young professional members active through courses and mentorship programs with our more experienced members.

As always, we will continue to host monthly technical luncheons at the Palliser, and provide a high quality technical program at annual GeoConventions. However, we want to build upon these great perks of membership by adding new ones. We look forward to your participation in these activities, and also your continued input to keep the focus on topics of relevance and importance to you.

Many of our executive meetings for last year were spent discussing what can be done about the decreasing membership and corporate sponsors. We feel that by joining the SPWLA we will be able to provide a renewed sense of value to our members and carry the CWLS forward for many years to come. As your Membership Chair, I want to thank everyone for the great support of the CWLS throughout this past year, and wish the best success for the society in the next!

Jason Moore
2016-2017 Membership Chair, Canadian Well Logging Society

Treasurer's Report

The accompanying Profit & Loss Statement and Balance Sheet reflect the financial position of the Canadian Well Logging Society (CWLS) for the year ended December 31, 2016. Tiffany Yaxley (Past-President), Manuel Aboud (President), and Zeyad Ben Ziaied (Vice-President), all members of the CWLS in good standing, in accordance with the CWLS by-laws, have reviewed the financial reports. The CWLS operated at a deficit of - **\$54,233** for the 2016 year. Total income was \$25,620 and Total Expenses were \$79,854. This year, the executive was able to cut down expenses by 40% from previous years to offset minimal income.

Membership

Total membership income decreased from \$12,715 in 2015 to \$5,522 in 2016. Membership dues were collected at \$40 for practicing members and \$20 for Senior members which offered the lowest dues of any petroleum society in Calgary.

Technical Luncheons

Our luncheons are heavily subsidized by the society to maintain affordability for all members and non-members alike. The cost to CWLS on a per plate basis is approximately \$55. Members pay \$40 and Non-members pay \$45 per luncheon ticket. Corporate tables are purchased for \$400 per table which seats 8 people. The CWLS reserves a table every luncheon for student attendance at no charge to the students.

The total revenue for all 2016 technical luncheons was \$12,148 which is ~40% decline from 2015. The total expenses for running the luncheons was \$19,077 which is ~60% decline from 2015. The executive was able to reduce the luncheon expenses by renegotiating the CWLS catering contract for 2016. 2016 luncheons consistently drew approximately 30-40 people per luncheon.

Annual General Meeting

The AGM is the greatest fixed annual expense for the society. In the past, part of the cost is offset with corporate sponsorship and ticket sales, but this is quite small. Along with low tickets sales and no corporate sponsorship, the CWLS funded the 2016 AGM in its entirety to ensure a minimum attendance. The 2016 Annual General Meeting operated at a cost of \$20,652 which is the same amount spent in 2015.

Publications

The society published the InSite magazine in Spring 2016 online. Free advertising was offered to corporations to provide maximum information to members. However, a deficit of -\$819 was reported for publications as the CWLS was unable to collect 2014 advertising fees from Weatherford and WellSight Systems.

Joint Annual Conference and Short Courses

This was the ninth year that the CWLS has been part of the Joint Annual Conference, GeoConvention, along with the CSPG and CSEG. 2016 was a difficult year for the GeoConvention were they operated at a deficit. Hence, the CWLS did not receive any revenue from the GeoConvention partnership. In efforts to provide the maximum value

The Treasurer's Report

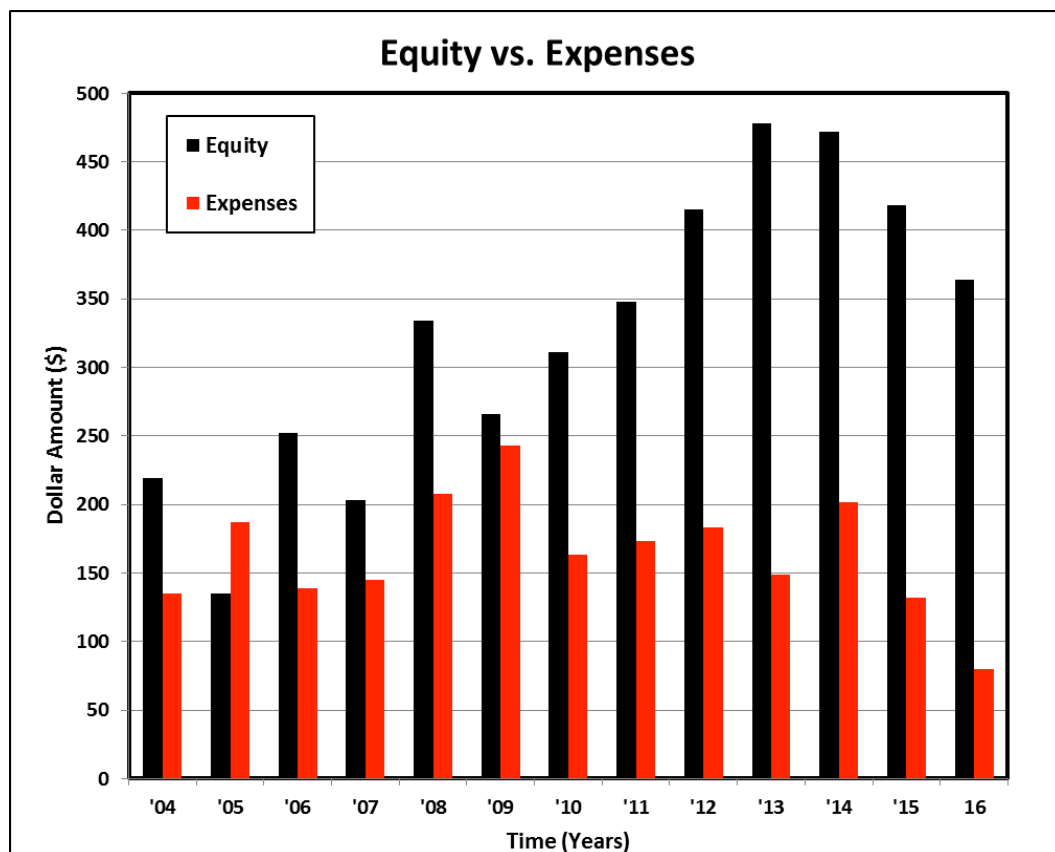
to members during the downturn, the CWLS offered one Short course on May 5th, 2016 titled "Exploration Using Integrated Petrophysics" for transition members. The course was a great success and the CWLS charged \$15 per attendee, which made revenue of \$176. This event did not generate any expenses due to the support of Ken Simpson.

Sponsorships and Student Awards

In 2016, the CWLS sponsored the CSEG Foundation and the Earth Science for Society (ESfS) with a total sponsorship amount of \$394. In addition, \$4000 was awarded for the best abstract (\$2000) and best thesis (\$2000) submitted by students.

Summary

Even though, 2016 was a low income year for the CWLS, the society still maintains a very strong financial position. Our Scotiabank chequing/savings account has \$37,908 and our three GIC's are valued at \$96,968 total. Our Scotia McLeod account has \$236,532 earning high interest. By the end of 2016, the member equity for the CWLS is \$363,909.



I have enjoyed serving on the executive and I look forward to serving you again as treasurer again for 2017-2018.

Kathy Diaz

The Treasurer's Report

2016-2017 Treasurer, Canadian Well Logging Society

PROFIT AND LOSS STATEMENT 2016

| INCOME | 2014 | 2015 | 2016 |
|---|----------------|----------------|----------------|
| Interest | 2,755 | 6,036 | 8,164 |
| AGM Revenue | 2,757 | 1,486 | 381 |
| Total Meeting Revenue | 26,714 | 20,052 | 12,148 |
| Total Ad Revenue/Web & Insite | 5,609 | 1,618 | -819 |
| Total membership | 20,252 | 12,715 | 5,522 |
| Total Publication Sales (Journals,Rw Catalogs,RWCD's) | 238 | 71 | 48 |
| Other Revenue/Gain-Loss on Securities | 0 | 0 | 0 |
| Short Course (CWL/CSPG/CSEG joint conference) | 33,743 | 2,572 | 176 |
| Joint Conference | 104,585 | 33,035 | 0 |
| GROSS INCOME | 196,654 | 77,586 | 25,620 |
| EXPENSES | 2014 | 2015 | 2016 |
| Joint Conference Expenses | 30,000 | 984 | 0 |
| Sponsorship/Donations | 7,000 | 2,500 | 394 |
| Short Course Expenses | 48,779 | 9,779 | 0 |
| Total Meeting Expenses | 52,359 | 47,102 | 19,077 |
| Student Awards | 0 | 0 | 4,000 |
| Election Expenses | 811 | 398 | 519 |
| AGM Expense | 31,744 | 21,694 | 20,652 |
| Total Publications (Includes Insite Magazine) | 3,250 | 2,100 | 2,688 |
| Total Office Expense | 29,048 | 27,844 | 20,344 |
| Web Page | 8,731 | 19,230 | 11,962 |
| Bank Charges | 125 | 168 | 218 |
| TOTAL EXPENSES | 201,846 | 131,799 | 79,854 |
| NET INCOME | -5,191 | -54,213 | -54,233 |
| Member's Equity at beginning of year | 477,546 | 472,355 | 418,142 |
| Member's Equity at end of year | 472,355 | 418,142 | 363,908 |

BALANCE SHEET 2016

| ASSETS | 2014 | 2015 | 2016 |
|---------------------------------------|----------------|----------------|----------------|
| <i>Current Assets</i> | | | |
| Chequing/Savings | 120,669 | 91,834 | 37,908 |
| Cash Box | 170 | 170 | 170 |
| Accounts Receivable | 26,298 | 7,463 | 2,433 |
| Inventory Asset | 1,550 | 1,550 | 1,550 |
| Prepaid Expenses | 9,250 | 3,250 | 0 |
| Scotiabank GIC's | 95,000 | 96,389 | 96,968 |
| Scotiabank Investment | 224,704 | 229,071 | 236,532 |
| TOTAL ASSETS | 477,641 | 429,727 | 375,561 |
| LIABILITIES & EQUITY | 2014 | 2015 | 2016 |
| <i>Current Liabilities</i> | | | |
| Accounts Payable | 5,286 | 11,585 | 6,053 |
| Visa - Scotiabank | 0 | 0 | 5,599 |
| Accrued Payables | 0 | 0 | 0 |
| Unearned Revenue | 0 | 0 | 0 |
| GST | 0 | 0 | 0 |
| TOTAL LIABILITIES | 5,286 | 11,585 | 11,653 |
| Member's Equity | 472,355 | 418,142 | 363,908 |
| TOTAL LIABILITIES & EQUITY | 477,641 | 429,727 | 375,561 |

Reviewed by:

Manuel Aboadi, President

Zeyad Ben Zaid, Vice President

Tiffany Yanley, Past President

Website Chair's Report

I would like to start by thanking the membership, executive committee and other volunteers for all their support and efforts this past year. Without your continued commitment to the CWLS we could not function as we do. I am honoured that I have had the opportunity to serve you this past year in the role of Website Chair and hope that you have gotten value, either directly or indirectly, from the executive committee and other volunteers' contributions.

As you may recall, the position of Website Chair was established just last year, by repurposing one of the Publication Chair positions, to help focus our attention and efforts as we continued to develop the CWLS website with third party vendors. Previous annual reports have highlighted that the website has been a primary focus for us as a means to communicate and engage with our membership and sponsors as well as minimize the administrative load we place on the CWLS's administrative staff (formerly APEGA, now Associations Plus). To recap the website's top three goals stated last year:

- 1) ROI for our membership – event notification, ease of ticket purchasing, profile management and access to industry specifications and tools (LAS, RW Catalogue, Core Data).
- 2) ROI for our sponsors – visibility and connection with our membership.
- 3) Ease of administration by staff and Executive Committee – update content, communicate with membership, manage and assist membership.


We continued to execute on those goals as demonstrated by: exposing links to old luncheon videos (hosted on the CSPG servers) on our website, enhancing PayPal related accounting reports, improving membership mailing list filtering and handling website content updates by administration staff. Case Struyk has continued to update and provide free software for handling LAS files – Thank-you Case for your ongoing dedication to the CWLS! The LAS pages continue to receive the most traffic on our website.

This year, the major event for our website infrastructure came when we transitioned our administrative support from APEGA to Associations Plus. Handling organisations like ours is Associations Plus primary purpose so we were pleased to discover the quality website infrastructure and support. Given their expertise and consolidated costs we transitioned our member area and database over to Associations Plus infrastructure. I am sure some of you noticed the change in user interface when purchasing your luncheon ticket so thank you for your patience in learning a new system. I hope the transition was easy for you. There is more website infrastructure to evaluate for future transition and I am hopeful Associations Plus will meet our needs while reducing costs. If you have any specific comments, suggestions or requests please do not hesitate to pass them along.

In conclusion, once again we have made many strides forward with the website and will continue to do so in the coming years. Thanks for all your support this past year.

Jamie Everett
2016-2017 Website Chair, Canadian Well Logging Society

Secretary's Report



It has been a great pleasure to serve and work with a great group of volunteers and Executive Board Members over the last few years. Thank you for giving me this opportunity.

During the difficult time, we had to make some hard choices as the Board, and I hope we have satisfied our members in the decisions we have made.

I have started to work with the GeoConvention Partnership, this has given me the opportunity to further work with the sister societies, CSPG and CSEG to further develop this relationship.

My duties as Executive Secretary this year included, but were not limited to:

- Preparing and keeping minutes of the CWLS Executive Meetings
- Sending executive monthly meeting minutes to the Executive
- Updating the CWLS Technical Luncheon Template
- Drawing up letters and communications as required
- Informing the CWLS office staff of course postings on website
- Compiling the 2016-2017 Annual Report

In closing, I want to thank each and every member that makes the CWLS a success. You are a vital part of this organization, and we would not be where we are today without your support. It was truly appreciated! Lastly, a special toast to my fellow Executives, as well as the incoming 2017-2018 Executive - I wish you all a successful year ahead!

David Brooke
2016-2017 Secretary, Canadian Well Logging Society