

2010 CSEG ANNUAL REPORT



CSEG 2010 Executive: (Back Row L-R) David Nordin, John Fernando, Mike Perz, Kelly Jamison, Cherat Mangat; (Front Row L-R) Kristy Manchul, Jon Downton, John Townsley, Larry Herd; (Missing: Barrie Jose, Pratt Barndollar, Jim Racette)

2010 Executive

John Townsley, President

Larry Herd, Vice President

John Fernando, Director of Educational Services

Mike Perz, Assistant Director of Educational Services

David Nordin, Director of Member Services

Barrie Jose, Assistant Director of Member Services

Kelly Jamison, Director of Finance

Pratt Barndollar, Assistant Director of Finance

Kristy Manchul, Director of Communications

Cheran Mangat, Assistant Director of Communications

Jon Downton, Past President

Jim Racette, Managing Director



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President

In March of 2010 I almost ripped the CSEG President's gavel from Jon Downton's hands and yet this past March I was content to pass the gavel to Larry Herd.

In hindsight, it's strange that I was so anxious to assume the role. My predecessor, Jon Downton, did a great job and I had no agenda. In fact, I had made a promise to not change anything in my Vice President's campaign platform/biography. Perhaps it was the glory of it all that made me so anxious to become CSEG President.

Most likely, I was anticipating all the fun reserved for the CSEG President. In that respect, the past year has exceeded my expectations. What a lot of fun the past year has been. I've seen once again that the work of the CSEG is done by the enthusiastic volunteers who organize the committees which run the technical and social activities of the society. There are a lot of very productive CSEG committees.

Most of my fun during the past year came from the monthly committee lunchtime meetings. I grew quite fond of the CSEG ham and cheese sandwiches as I attended monthly meetings of the CSEG Foundation, the APEGGA Geoscience Committee, the CSEG Executive Committee and the monthly Technical luncheon. Along with all those regular monthly luncheon meetings were the occasional meetings with the CSPG and CWLS Presidents, one unsettling member discipline problem, a lot of discussion regarding our convention business partnership with the CSPG, and a few formal gatherings where my attendance as CSEG President was intended to add some lustre to an already sparkling event.

My year began in April with our convention business. After receiving the CSPG's advance notice of termination of the Joint Annual Convention Partnership, the CSPG President, John Varsek, and I came up with an operator's agreement that would guide the partnership to the end of the 2014 convention. Working with the CWLS President, Dave Shorey, we added the CWLS to the partnership on a year-by-year basis. Finally, in July, we all got together to review the data prepared by Laurie Ross and her JAC Committee,

and as a group we decided to move the 2012 convention back downtown into the Telus Convention Centre.

In May the GeoCanada Convention was held with a technical program that we haven't seen since the last GeoCanada program ten years ago. It takes a lot of hard work to put together such a big show and as CSEG members we owe our gratitude to Co-Chairman Andrew Holder, Co-Technical Chair Graham Carter, Exhibits Chair Flo Reynolds, ESfS Chair Annette Milbradt, and Sponsorship Chair Brian Kulbaba. Thanks to these Committee Chairs and dozens of CSEG volunteers, the CSEG's involvement was instrumental in putting together the biggest show of the decade.

Also in May in Calgary, I attended the summer meeting of the Canadian Federation of Earth Sciences (CFES). Normally the CSEG President attends these meetings, but afterwards I asked Larry Herd to take my place at the fall 2010 CFES meeting. Hence, more on the CFES can be found in Larry's Vice President's report.

In June we hosted a fun afternoon / evening meeting of the CSEG's Long Range Planning Committee. We were perhaps 30 people, many of whom are from amongst the most enthusiastic CSEG members. When organizing the meeting, we attempted to corral all the CSEG Committee Chairs and were only able to round up about half of them. It would have been even more fun had everyone been able to attend. Doug Uffen was the meeting Moderator and was a big part of why the meeting was so enjoyable. It was at this meeting that Larry Lines announced his intention to revive the peer reviewed Canadian Journal of Exploration Geophysics (CJEG) and Dave Nordin came up with the idea hosting a CSEG Raft trip. I'm not sure we finalized many of the details of the CSEG's long range plan, but the meeting inspired me for months to come. I'd like to do it again soon.

In July, Rick Wierzbicki replaced Annette Milbradt as Chairman of the Earth Science for Society Committee and for the year 2011, the ESfS will operate as a convention subcommittee reporting to the 2011 Convention Chairmen. In 2010 at the GeoCanada Convention ESfS was

a bold step forward in public outreach and in making CSEG and CSPG members work together. I'm thrilled that our committee volunteers have the energy to do it again in 2011.

In August and September we began thinking about renewing the CSEG office lease as it expires in June of 2011. At that time we wanted to save money by taking advantage of lower rental rates to reduce our monthly expenses. In October our priorities changed slightly, and we decided that provided our expenses did not increase, we wanted to continue to co-locate with the CSPG. The CSPG also wanted to be near us, but not collocated. We looked at space near where the CSPG was considering and realized our expenses would increase significantly if we were to take it. Given our guidance of not increasing expenses, Larry Herd and Jim Racette found new office space on the Plus 15 network at a lower rate than we are now paying. This summer the CSEG office will move into the new space in the Roslyn building on 5th Ave.

In October, Jon Downton, Larry Herd and I attended the SEG Council Meetings in Denver at the SEG Annual Meeting. As I reported in my November column, the meetings were contentious due to a proposal to significantly change the bylaws and to remove influence from the SEG Council. We voted for the change, but unfortunately the proposal fell one vote short of the required 66% and did not pass. I imagine this year's SEG Council meeting will be just as interesting.

I spent a lot of time in the fall recruiting candidates for the 2010-11 CSEG Elections. The CSEG's preference is for members to nominate themselves (it takes just five signatures) as we desire a wide range of Executive members with a broad background. Unfortunately, very few CSEG members nominate themselves and almost all candidates are recruited with our formal nomination process. The established process is that a small committee is formed of Past Presidents and the committee makes a list of senior members. Finally, the President calls these members asking if they would like to run.

Calling these members and asking them to throw their hats in the ring was a lot of fun. I spoke with a few old friends

President (con't)

about the CSEG and I met a few new people who were also very interested in the CSEG. It took a lot of time because the process is linear in that the candidates need time to consider your proposal and during that time you can't approach another candidate. In the end we had nine candidates for the five contested positions. I'm grateful to each of the members who ran in the election. Sitting on the sidelines is easy, these nine CSEG members took a positive step towards improving our society and we should all be grateful to them.

Speaking with the candidates for the election was one of the very few activities I did on my own for the society. In almost all other aspects my role as President was to sit back and watch while others did the work. Usually, as with the 2010 ESfS events, I was in awe with how much a small group of committed people can achieve. There is so much amazing stuff going on. Technically our convention, our RECORDER magazine, and our DoodleTrain are the best. Socially, we have access to fun events in curling, golf, and skiing. Through our Foundation we

give away scholarships, we support national earth science initiatives, and we promote geophysics across Canada.

After one year at the helm, I remain enthused and proud to be a CSEG member. I've done what I said when I ran for office nearly three years ago—I've changed nothing. The CSEG remains a vibrant society that delivers great value to its members. I'm grateful for the opportunity to have served and humbled by the character of the people I have come to know.

*John Townsley
President*

Vice President

As Vice President, I have to say that the experience has reminded me once again how rewarding it is to be able to interact with such interesting, talented and devoted people working and volunteering for our Society. If there was one singular thing that I have learned over the years, it would be that our Society operates and relies entirely on the hands, backs, legs and wisdom of hundreds of unsung heroes. I can't express my gratitude enough for our employees and volunteers in all capacities, and I can't possibly list all of your names. You know who you are, and please accept my thanks.

Over the year, President John Townsley has introduced me to more acronyms than I can shake a stick at and I have started to share his load in such areas as our Annual Convention, the Joint Annual Convention Committee (JACC), the Chief Geophysicist's Forum (CGF), the Canadian Federation of Earth Sciences (CFES), the Society of Exploration Geophysicists (SEG) council, Earth Science for Society (ESfS), the President's Advisory Council (PAC) and a host of others.

In addition to the regular CSEG Council meetings held once each month, the year's activities as Vice President included

- Participating with John Townsley (President) and Jon Downton (Past President) at the SEG Denver Council meeting as CSEG representatives on

council in October. At this meeting, a motion to renew the SEG bylaws was narrowly defeated and there will undoubtedly be significant activity on this topic in the upcoming years;

- Representing the CSEG at the Canadian Federation of Earth Sciences Annual General Meeting in Ottawa in November. The CFES is an umbrella organization of 15 geoscience and academic societies of which the CSEG belongs to. It provides the CSEG an opportunity to coordinate large-scale efforts, trade experiences and learn from other similar societies. At the Ottawa AGM, Bill Stiebel was sworn in as the new President. The CFES is planning to bid on the 2020 International Geologic Congress (IGC);
- Sitting on the Chief Geophysicists Forum on behalf of the CSEG which meets four times per year. The CGF was created eleven years ago to identify and discuss various technical, regulatory and administrative issues relevant to both major and junior oil companies. The major item for this year has been the establishment of a subcommittee to study the use of geophysics in reserve/resource classification, evaluation and reporting;
- Attending various Outreach meetings with John Townsley and ESfS representatives. A decision was made this year to incorporate the great

efforts of the ESfS led by new chairperson Richard Wierzbicki directly into the 2011 joint Convention;

- Participating in joint convention activity and budget discussions with our Canadian Society of Petroleum Geologists (CSPG) and Canadian Well Logging Society (CWLS) counterparts as well as with the operations group and the Joint Annual Convention Committee (JACC). A strong CSEG team led by Co-Chair Rob McGrory, Technical Co-Chair Laurie Bellman and their CSPG and CWLS counterparts have promised an exciting *Road to Recovery 2011* convention; and
- Discussing future office plans with our current CSPG landlord and working with our office manager Jim Racette to initiate a search for a new office location for 2011;

As I reflect on the last year's activities, I realize how involved the Society is on a vast number of initiatives and how successful the past executive and staff has been in keeping the Society relevant in a evolving environment while maintaining a strong fiscal position. I look forward to continuing these efforts in my upcoming term as President and welcome the incoming Vice President Rob Kendall and the other new executive members onto the team.

*Larry Herd
Vice President*

Director of Educational Services

A year in the CSEG executive as the Director of Educational Services seemed like a long time at first but as the saying goes "Time flies when you are having fun". It has indeed been a year of contributing to the advancement of a vibrant and close knit society such as the CSEG, gaining valuable experience and working with the best and the brightest in the field of Geophysics. I have to thank my lucky stars.

The flagship of the education portfolio is without a doubt the monthly technical luncheons. At first it seemed like a difficult task to organize a line-up of distinguished speakers that would entice CSEG members, who expect technical presentations that are relevant to their day-to-day geophysical work, to attend. My thanks go to *Jennifer Leslie-Panek*, *Satinder Chopra* and especially the meticulous and well-organized individuals such as *Judy Wall*, *Crystal Dugger* and *Jenny Cole* of the SEG for their contributions in my choices of luncheon speakers. **Thank you all!**

TECHNICAL LUNCHEONS

The speakers and the titles of the technical luncheon presentations from April 2010 to March 2011 were as follows:

April 2010

Patrick Connolly (BP London, SEG Distinguished Lecturer); *"Robust Workflows for Seismic Reservoir Characterization"*

The SEG sent me an e-mail requesting me to make contingency plans in case Pat could not be at the April technical luncheon due to travel restriction. However, Pat braved the Icelandic ash cloud hovering over Western Europe at the time, to deliver a well-received technical presentation. **Thank you Pat!**

May 2010

There was no technical luncheon due to the GeoCanada 2010 Joint Convention held in Calgary.

June 2010

Dr. Don Lawton (Univ. of Calgary – Professor of Geophysics / Chair – Exploration Geophysics in the Dept. of Geoscience); *"Carbon Capture and Storage: Opportunities and Challenges for Geophysics"*

Don delivered a technical presentation on a topic that is bound to be the way of the future. My thanks to *Mike Perz*, Assistant Director of Educational Services for enlisting Don on short notice for the June Technical luncheon. **Thank you Don!**

July and August 2010

There were no technical luncheons during July and August and it was a welcome break from a hectic year at SAIT and volunteering at the CSEG.

September 2010

Richard J. Smith (Engineer, Imperial Oil); *"15 years of Passive Seismic Monitoring at Cold Lake, Alberta"*

It was a treat to listen to a technical presentation by an Engineer to an audience consisting mostly of Geophysicists. Richard's knowledge of Geophysics was indeed impressive. **Thank you Richard!**

A very significant milestone for the CSEG Educational Services portfolio was established by offering our corporate and non-corporate member companies the opportunity to participate in a technical luncheon sponsorship initiative. The main driving force for this was the reluctance on the part of the CSEG executive to continue raising luncheon ticket prices to keep abreast of rising costs of hosting monthly luncheons.

The response initially seemed a bit sluggish but the idea has resonated quite well with Service companies and Oil and Gas companies, as well as APEGGA. The sponsorships commenced with the October luncheon. The chance to speak to the members in a prime setting such as the technical luncheon and to have a reserved table for VIPs has been a resounding success!

October 2010

Chuck Diggins (Fusion Petroleum Technologies); *"Refraction Statics: The Art and Science of Near-Surface Interpretation"*

Sponsor: PennWest Energy

Chuck presented a technically well-received presentation on a topic relevant to the Geophysical industry in Calgary. **Thank you Chuck!**

November 2010

Dr. Mike Batzle – DoodleTrain Keynote Speaker (SEG Honorary Lecturer / Colorado School of Mines – Baker Hughes Distinguished Chair of Petrophysics and Borehole Geophysics); *"It's the Fluids that Count"*

Sponsor: Hampson-Russell, A CGGVeritas Company

I very much enjoyed Mike's technical presentation because of his incorporation of information from several fields of study including Geochemistry, Geology and especially Archaeology and even Theology. Being able to handle what is possibly a piece of a salt pillar from Biblical times was indeed an unexpected treat. **Thank you Mike for an excellent presentation!**

December 2010

Dr. Carl Sondergeld – CSEG / CSPG joint technical luncheon (SEG Distinguished Lecturer – Associate Dean – Mewbourne College of Earth and Energy / Curtis Mewbourne Professor – Mewbourne School of Petroleum and Geological Engineering, University of Oklahoma); *"Rumblings from the Laboratory: Past, Present, and Future"*

Sponsor: Halliburton, Landmark Software & Services

A joint luncheon is very much in the best interests of the CSEG and the CSPG and this year we were fortunate to have an individual such as Carl who is well versed in the disciplines of Geology and Geophysics. The attendance at the joint luncheon was very encouraging and I certainly encourage my successors to continue this tradition of a joint luncheon at least once a year. **Thank you Carl!**

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January 2011

Lee Hunt – Consultant (for Fairborne Energy); *"Quantitative Estimates of Fracture Density Variations: Further Perspectives"*

Sponsor: RPS BoydPetroSearch

Lee's technical presentation was an audience pleaser for its technical merit. I am sure Lee will be presenting again at a technical luncheon very soon.

Thank you Lee!

February 2011

Geoffrey A. Dorn – TerraSpark Geosciences / Director – GIVC Research Consortium); *"Advances in "True Volume" Interpretation of Structure and Stratigraphy in 3D Volumes"*

Sponsor: Arcis Seismic Solutions

Geoff's technical presentation was very relevant given the importance of 3D seismic data interpretation.

Thank you Geoff!

March 2011

Satinder Chopra – ARCIS – (CSEG Distinguished Lecturer); *"Extracting Meaningful Information from Seismic Attributes"*

Sponsor: APEGGA

At the time of my writing the director's report I am anticipating a technically well received luncheon presentation from Satinder who always gives the CSEG and its members his best effort.

Thank you Satinder for your dedication to the CSEG, its members and its mandate to spread the knowledge in Geophysics!

Phew! I know there is always room for improvement but that's it for the technical luncheons. At best, I feel as if I have not let any organizational mishaps mar all the good work my predecessors have done and accomplished.

Thank God!

BEST TECHNICAL LUNCHEON PRESENTATION AWARD

It has been a challenge getting a consistent number of evaluations for each technical luncheon. Luncheon attendees sometimes seem somewhat reluctant to provide feedback on the presentations perhaps because they believe they may not be able to judge the presentations fairly. No matter the reason, this is an issue that needs to be resolved by Mike and Hugh so that we can have a fairer judgement when it comes to choosing a winner.

With the evaluations that were available, the luncheon committee has decided on a winner for the 2010 award and the winner is **Dr. Don Lawton** (University of Calgary – Professor of Geophysics / Chair – Exploration Geophysics in the Dept. of Geoscience); *"Carbon Capture and Storage: Opportunities and Challenges for Geophysics."* **Congratulations Don!**

LUNCHBOX GEOPHYSICS

Much of the credit for the success of the Lunchbox Geophysics presentations goes to *Julie Latter* and *Robert Holt*. Their efforts in this regard are very-much appreciated by the CSEG and its members. **Thank you Julie and Rob!**

The benefits of these free lunch hour presentations provide budding Geophysicists as well as seasoned veterans a chance to share their knowledge and experience with the rest of the Geophysical community and especially the students from the University of Calgary, SAIT and Mount Royal University.

A special thanks also goes to *Kelman Technologies Inc.* for providing refreshments and organizing the Aquitaine venue free of charge.

Speakers and the titles of the Lunchbox Geophysics luncheons from April 2010 to March 2011 were as follows:

April 2010

Dr. Mostafa Naghizadeh; *"An Unsophisticated Look at Curvelets and How to use them for Seismic Data Processing extracting Meaningful Information from Seismic Attributes"*

May 2010

There was no lunchbox geophysics due to the GeoCanada 2010 joint convention held in Calgary.

June 2010

Juefu Wang; *"From Global to Local – A Two-Step Strategy For Land Data Interpolation"*

September 2010

Dr. Mauricio D. Sacchi; *"Tensor Analysis of 5D Seismic Data with Application to Denoising and Regularization"*

October 2010

Organizers: Dr. Don Lawton & Adam Pidlisecky; *"University of Calgary 2010 Geophysics Field School Poster Contest"*

Dr. Lawton approached me about the possibility of hosting the student poster contest prior to one of the technical luncheons. I made a suggestions that we instead have the poster contest as a lunchbox geophysics event. Don and Adam gladly accepted idea realizing that the students would have lot more time to showcase their efforts to the geophysical community.

The event was made more meaningful to the students by selecting senior geophysicists and a senior geologist to judge the individual posters. Judges chosen were (in alphabetical order): *Paul Bauman, Satinder Chopra, Andreas Cordsen, Julie Latter, Dr. Larry Lines, Mike Perz, Brian Russell, and John Varsek*. Needless to say the student efforts in creating the posters highlighting their work was most impressive. Full credit goes to Don and Adam for setting a high standard. I certainly hope that this would becomes an annual event that will be anticipated

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by the geophysical community as this is an incredible opportunity to realize the teaching efforts of the geophysics professors at the University of Calgary and a venue for recruiting young geophysicists.

February 2011 (Two presentations)

Peter Duncan; *"Coping with Really, Really Small (Micro) Seismic Signals"*

Marco Perez; *"Developing Seismic Interpretation Templates"*

I was able to bring my entire class of twelve second-year students in November 2009 to **Dr. Bob Hardage's** presentation on *"Expanding Seismic Stratigraphy to the Full-Elastic Wavefield"*. My students really enjoyed this opportunity to listen to a very experienced senior geophysicist and even more gratifying was the look on Bob's face, when he was asked to hold the starting of his presentation for the arrival of my students from SAIT. It is a treat to have a person such as Bob give a presentation to young students because of his vast experience in Geophysics. **Thank you Bob for your visit to Calgary for this presentation.**

SEG / EAGE DISTINGUISHED INSTRUCTOR SHORT COURSE (DISC) 2010

Colin Sayers (Schlumberger); *"Geophysics Under Stress: Geomechanical Applications of Seismic and Borehole Acoustic Waves"*

This was my first attendance at a DISC presentation. Needless to say it was a great opportunity to learn from a speaker very well-versed in the topic. At first, it seemed like a heavily mathematical presentation but Colin's ability to explain the difficult concepts by way of analogies made all the difference. The attendance at the event was a respectable 120. Later in the evening Colin was treated to dinner at the Palliser Hotel along with Jon Downton, and Satinder Chopra. **Thank you Colin for your excellent short course!**

GEOCANADA 2010 CONVENTION COURSES

Being the decennial convention I felt that it would be in the best interest of the convention attendees to have a greater selection of convention courses. Fortunately for me, several of the senior Geophysicist in Calgary agreed to teach a convention course. All in all six convention courses were offered and they were:

Course: "Planning Land 3-D Seismic Surveys"

Instructor: Andreas Cordsen

Course: "Seismic Attributes for Prospect Identification and Reservoir Characterization"

Instructor: Satinder Chopra

Course: "Introduction to Seismic Inversion"

Instructor: Brian Russell

Course: "Borehole Geophysics: Theory and Practice"

Instructor: Dr. Ron Hinds and Rick Kuzmiski

Course: "Microseismic Boot Camp"

Instructor: Shawn Maxwell

Course: "Design, Processing and Interpretation of Magnetic, Gravity and Electrical surveys"

Instructor: Ted Glenn

The total registrations for the six convention courses were respectable at 82 including four student volunteers. The special thank you to all the venue sponsors and the venue organizers: APEGGA (*Kate Handford*), BoydPetroSearch (*Diane Werenka*), CGGVeritas (*Brian Russell*), Devon (*Barb Jager*), Divestco (*Tova Stewart*), GX Technology (*Mike Hall*), Husky Energy (*Larry Mewhort*) and Schlumberger (*Shawn Maxwell*). Shell Canada and Arcis also offered their venues to host these courses, if it became necessary. I am also grateful to *Shawn Maxwell* for teaching his highly popular one day course on Microseismic, *pro bono*. **Thank you Shawn!**

The printing of the courses were done at XDocs at SAIT and my sincere thanks to *Margaret Barnes* at XDocs for all her efforts in ensuring timely delivery of course material at a very reasonable cost to the CSEG.

I surprised myself in being able to organize and host the six courses with not too much effort and part of the credit for my success goes to *Bill Nickerson* from whom I have learnt the art of organizing courses being involved in the DoodleTrain committee.

CONVENTION AWARDS

After much deliberation, the convention awards committee made the following decisions. Thank you to all the judges and the committee members. **Great work!**

STUDENT AWARDS

Geophysical Poster Presentation (Honourable Mention)

"The Influence of Reflectivity Color on Gabor Deconvolution"
Author / Co-author(s): Peng Cheng / Gary F. Margrave

Best Geophysical Poster Presentation & Andrew Baillie award

"Least-Squares Shot-Profile Wave-Equation Migration"
Author / Co-author(s): Sam Kaplan / Mauricio Sacchi

Geophysical Oral Presentation (Honorable Mention)

"Application of a Tomographic Velocity Model to the Prestack Depth Migration of a Buried Valley"
Oluwafemi Ogunsuyiam / Douglas R. Schmitt

Best Geophysical Oral Presentation

"The Influence of Stress and Geologic Structures on Mining-Induced Seismicity in the Creighton Mine, Sudbury, Ontario"
Author / Co-author(s): Paige Snelling / Laurent Godin and Steve McKinnon

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INDUSTRY AWARDS

Geophysical Poster Presentation (Honourable Mention)

"AVO Errors after Bleistein's Amplitude Preserving Kirchhoff Migration"

Author / Co-author(s): David Cho / Frederik Horn and David Close

Best Geophysical Poster Presentation & Andrew Baillie award

"Magnitude Assessment and Effective Interpretation of Microseismicity"

Author / Co-author(s): Adam Baig / Ted Urbancic

Geophysical Oral Presentation (Honorable Mention)

"Advances in Surface-Groundwater Modeling in Lagoon Environment with Airborne Electromagnetics and High Resolution Seismic: Example from the Venice Lagoon"

Author / Co-author(s): A. Viezzoli / Pietro Teatini and Luigi Tosi

Best Geophysical Oral Presentation

"Am I Really Predicting Natural Fractures in the Tight Nordegg Gas Sandstone of West Central Alberta? Part I: Theory and Statistics and Part II: Observations and Conclusions"

Author / Co-author(s): Lee Hunt / Scott Reynolds, Tyson Brown, Scott Hadley, Jon Downton and Satinder Chopra

DOODLETRAIN 2010

Needless to say, the DoodleTrain has been a truly successful endeavour, year after year. The registration numbers have been somewhat lower than previous years but that can be attributed to the economic downturn. There were in all, eighteen courses offered and the total registration was approximately 270. Combined with the DISC and the Convention course registrations, the total educational opportunities for the CSEG members and non-members were approximately 500.

The DoodleTrain committee continues to chug along thanks to the leadership of *Bill Nickerson* and a great group of volunteers: *Brian Hoffe, Carlos Nieto, Jason McCrank, Maggie Jiao (Shell) Svetlana Bidikhova (Shell) Megan Jubb, Sue Carr (Terradata), Mike Hall, Sheryl Meggeson, Jim Racette* and myself and many others. **Thank you Bill for your organizational and managerial skills: you are a true professional!**

A special thanks to *Dr. Mike Batzle* (Batz) for being the DoodleTrain keynote speaker at the November luncheon. I especially enjoyed his presentation given the fact that he brought concepts from several disciplines such as Geophysics, Geology, Geochemistry, Archaeology and even Theology.

I followed *Shawn Maxwell's* example and did my part for the CSEG and its members as the director of Educational services, by teaching my course in Seismic Data Basics – *pro bono*.

The list of courses offered at the 2010 DoodleTrain were as follows:

ACQUISITION

Course: *"Planning Land 3D Seismic Surveys"* (2 days)
Instructor: **Andreas Corden**

PROCESSING

Course: *"Blended Data Acquisition and Processing"* (1 day)
Instructor: **Eric Verschuur**

INTERPRETATION

Course: *"3D Seismic Attributes for Prospect Identification and Reservoir Characterization"* (2 days)
Instructor: **Satinder Chopra and Kurt Marfurt**

Course: *"Seismic Geomorphology"* (2 days)
Instructor: **Henry Posamentier**

Course: *"Structural Interpretation and Analysis of Fractured Reservoirs"* (2 days)
Instructor: **Paul McKay**

ROCK PROPERTIES

Course: *"Inversion Boot Camp"* (2 days)
Instructor: **John Pendrel and Dave Timko**

Course: *"Rock Physics for Geophysical Reservoir Characterization and Recovery Monitoring"* (2 days)
Instructor: **Gary Mavko**

Course: *"Geophysical Characterization of Heavy Oil Reservoirs"* (1 day)
Instructor: **Satinder Chopra and Larry lines**

BASIC CONCEPTS

Course: *"Seismic Data Basics I"* (2 days)
Instructor: **John R. Fernando**

Course: *"Exploration: From Geology to the Seismic Section"* (3 days)
Instructor: **Bob Parker**

DEVELOPMENT GEOPHYSICS

Course: *"Multicomponent Seismic Exploration in Western Canada"* (1 day)
Instructor: **Richard A. Bale and Robert Kendall**

Course: *"Naturally Fractured Reservoirs"* (2 days)
Instructor: **Roberto Aguilera**

Course: *"Hydraulic Fracturing and Microseismic"* (2 days)
Instructor: **Mike Jones and Shawn Maxwell**

Course: *"Geostatistics for Reservoir Characterization"* (2 days)
Instructor: **Clayton Deutsch**

Course: *"Fractured and Shale Reservoirs: From Geologic Concepts to Reservoir Models"* (2 days)
Instructor: **Ahmed Ouenes and John Lorenz**

PROFESSIONAL SKILLS

Course: *"Rules, Rights and Obligations of Seismic Data Ownership"* (1 day)
Instructor: **Doug Uffen**

Course: *"Value of Information Workshop"* (2 days)
Instructor: **Kent Burkholder**

Course: *"Leadership and Coaching: Active Mentoring"* (2 days)
Instructor: **Gary Waldron**

The new line-up of courses for the 2011 DoodleTrain will be announced at the 2011 CSEG/CSPG/CWLS joint convention. Be sure to take advantage of this opportunity to enrol in the courses that are offered.

Director of Educational Services (con't)

RECORDER AWARDS

Last but not least, the RECORDER award winners as selected by the RECORDER committee, under the auspices of Satinder Chopra, are:

BEST RECORDER PAPER

"Beyond Isotropy – Part I: A Prestack Perspective"

Author / Co-author(s): Marco Perez – September 2010

"Beyond Isotropy – Part 2: A Physical Model in LMR Space"

Author / Co-author(s): Marco Perez – October 2010

BEST RECORDER PAPER

(HONORABLE MENTION – FIRST)

"Microseismic Moment Tensors: the Good, the Bad and the Ugly"

David W. Eaton and Farshid Forouhdeh – November 2010

BEST RECORDER PAPER

(HONORABLE MENTION – SECOND)

"Tight Gas Geophysics: AVO Inversion for Reservoir Characterization"

Author / Co-author(s): David Close, Simon Stirling, David Cho, and Frederik Horn – May 2010

OUTREACH

Last but definitely not the least is the outreach committee. This group consists of a large and diverse group and is led by the very capable and efficient Annette Milbradt. I felt that I had kept the least updated as to what was happening with the outreach committee. My assistant, Mike Perz had agreed to attend monthly meetings but time constraints prevented him from attending them. However, I think we were both fully aware of Annette's efficiency in accomplishing everything possible under her sphere of influence, and perhaps felt that our

energies were perhaps better concentrated elsewhere. **Thank you Annette for your dedication to the cause of educating the younger generation in the geosciences!**

Well that brings to end the director's report for the Educational Services. It has been my absolute pleasure to be able to contribute at least in a small way to the advancement of the science of Geophysics. I thank all of you who have supported my efforts in so many ways because without that support my work would have been nearly impossible. My earnest wish is that I will be able to continue to do my part for our great society – CSEG and its members. My best wishes to *Mike Perz* (Incoming Director of Educational Services and *Hugh Geiger* (Incoming Assistant Director of Educational Services).

John Fernando
Director Educational Services

Director of Communications

At the 2010 long-range planning meeting, it became clear that many of the goals that our CSEG leaders wanted to achieve centred on the Communications portfolio. The Communications team, consisting of Cheran Mangat, Satinder Chopra (RECORDER Editor), Corey Hooge (Website Manager), me (Kristy Manchul) and our professional partners Jim Racette and Sheryl Meggeson, have been generating and implementing new ideas and new formats in which to reach out to our members. To this end, 2010 also welcomed Larry Lines to the Communications team, as the co-Editor of the Canadian Journal of Exploration Geophysics (The Journal).

The Communications team has taken the following steps towards actively engaging and informing our members in avenues which are current and appropriate.

Weekly bulletins have been reformatted and streamlined to provide our membership with timely information on CSEG activities and events. We are looking into the frequency versus

impact, and may move to a bi-weekly format to keep information fresh.

The RECORDER has been a forerunner in creating space for our committees to showcase their activities. Two new regular feature columns will appeal to both our newer members and our more experienced ones. The CSEG Outreach Committee will be providing information on their activities in and around the Canadian Universities and communities and highlighting achievements of our newest members. The Chief Geophysicists Forum will also be reporting regularly on their activities and their focus areas, in order to provide our membership with their insights as to industry trends.

Our CSEG website has been increasing its functionality over the past few years, and we aim to be even better next year. Online registration for CSEG events has been effectively implemented, and is helping speed the ticket process. The CSEG online calendar is also getting populated with online events and multiple committee meetings.

The Website committee has also been investigating new software for bringing both The RECORDER and The Journal fully online as readable magazines. We anticipate this will be done within the next 2-5 years. At this time, we are taking steps to prepare our membership for this change: student members receive only online magazine subscriptions and we are investigating advertising impact.

The Journal has been revived from dormancy to fulfill a need for our academic members to publish their articles in a peer-reviewed magazine. The Journal is going to be a purely online magazine, and we are expecting to have our first issue out around June 2011. Larry Lines and Satinder Chopra, as co-editors, are spearheading the revival.

In all, 2010 has seen the communications portfolio increase in its importance and overall impact on our membership. We look forward to 2011 and all the potential it holds.

Kristy Manchul
Director of Communications

Director of Member Services

On behalf of Barrie Jose and myself, I'd like to thank those member volunteers who have helped the CSEG put on an extensive slate of social events in 2010. **Please try to attend our Volunteer Appreciation Event held at Flames Central on Mar 23.** Our intent is to acknowledge your efforts for all the hours (days?) you've spent in making our events a success. A volunteer driven organization like the CSEG can only survive and thrive through a committed, enthusiastic support base and we are very fortunate to have one. Special thanks go out to the Chairs of our Social Events – your initiative and leadership helps ensure that these events go smoothly.

The **Doodlespiel** was moved to Lethbridge last year as the Banff Rec Centre is undergoing renovations. Changing venues requires considerably more work than staying put, so I know that the committee had their hands full. For those of us participating, though, there was little sign of any difficulty, a credit to those in charge. With a total of 73 teams participating, nearly 300 curlers; by Sunday the committee members did look a little tired....

Speaking of changing venues, the **Doodlebug Golf Tournament** also moved last year, relocating to Kimberley from Jasper. Feedback was very positive from participants and organizers so the Doodlebug will return to Kimberly for 2011. Unfortunately, I had to cancel out this year but hope to make it down for this year's event. Golf and socializing – what could possibly be better?

Golf and socializing... sounds like the **TWave Golf Tournament!** This year's event was fully subscribed, with a full shotgun of 144 people on the course. Another wonderful job of organizing. Not the warmest day, but then, when DID we have a warm day this so-called summer?

With the extended downturn in gas prices, the **Junior Geophysicists Forum** was at risk for lack of sponsorship. The perseverance of the committee paid off, however, and they were able to put on a terrific event at the International Hotel once again. More than 140 people (roughly 1/3 each – students, junior and senior geophysicists) attended. A networking event par excellence!

The **43rd Annual CSEG Family Ski Spree** was held in Fairmont again in 2010. True to form, another great weekend of camaraderie and friendly competition. This event is always extremely popular so if you are interested in participating, it's always best to be "fast out of the gate" with your registration. This year's event is fully booked but registration for 2012 will open in November 2011.

Outside of the social sphere, Membership Services completed a Corporate Membership survey, with some recommendations that have been implemented. Survey results are on the CSEG website. We're also moving forward to try a new event in 2011, a 1 day **Whitewater Rafting Trip**. Stay tuned for more information and registration in Spring 2011.

Thanks again to all of you who have given so freely of your time for the sake of the CSEG. Your efforts make it happen; your commitment and enthusiasm make it fun.

Dave Nordin
Director of Member Services

Barrie Jose
Assistant Director of Member Services

Director of Finance

With the approaching AGM, I expected my tenure on the executive to be coming to an end. I felt very comfortable handing the reins to Pratt Barndollar and the newly elected Glen Malcolm, but I've just recently been informed that Pratt has been transferred out of the country and therefore unfortunately will be unable to assume the position of Director of Finance for 2011. I want to thank Pratt for his contributions over the last 12 months and wish him all the best in his new assignment in Houston. I was asked by our incoming president, Larry Herd, to consider continuing in the role of Director of Finance for another year. After a short period of contemplation, I accepted his offer, and will be serving another year on the executive. I've truly enjoyed the last two years, and that made the decision to stay on much easier. I'm looking forward to working with the new executive and hopefully the experience I gained over the last two years will aid me in the year to come.

The biggest challenge we faced as an executive over the last couple of years was a gradual decline in CSEG memberships. This percolates through all of the programs and services we bring to our members, and forces us to scrutinize very carefully every dollar we spend. I think the executive has done a great job of maintaining excellent

programs and services, while keeping a close eye on the bottom line.

Both Pratt and I worked hard to rework how the monthly expenses are scrutinized and reported to the executive at each monthly meeting in order to more accurately track the financial situation of the society, and to stay on top of industry trends that affect our financial decision making.

Budgeting for 2010 was difficult due to a couple of key factors. First was the impact of the GeoCanada convention. In the past several years the joint convention was our largest source of revenue. While the numbers varied greatly, net revenue ranged from over \$400,000 net in 2007 to almost \$300,000 in 2009. In 2010 a GeoCanada convention resulted in a much smaller piece of the pie, and our budgeted revenue was \$155,000.

As an executive we felt this was a one-time reduction and we expect revenues to return to a more palatable number in 2011. That coupled with a very strong balance sheet allowed us to budget for a \$169,595 deficit in 2010.

Due to the excellent job of the convention committee the GeoCanada convention turned out to be extremely successful and that translated to much

more net revenue for all the societies involved. The CSEG convention revenue was in fact \$233,443, an increase of over \$78,000 to our bottom line.

The other highlight, budget wise, was advertising revenue in the recorder. We experienced a \$32,250 increase in revenue over budget, while only dealing with a \$1,663 increase in costs. From my perspective is as good an indicator of a recovery in our industry as any.

On the negative side, the biggest hit came from luncheon revenue. We budgeted for revenue of \$121,500, and only managed \$102,492. Fortunately we had an offsetting reduction in expenses from a budget of \$136,000 to an actual of \$106,891. The net result was an expected loss of \$14,500 turned into an actual loss of only \$4,399. The majority of this difference was revenue from corporate sponsors.

After all the other items sorted out, the net deficit for the CSEG in 2010 was \$43,332.

While this is much less than originally anticipated, it is our goal to reverse this trend and plan for a balanced budget in 2011.

*Kelly Jamison
Director of Finance*

Managing Director

With the CSEG bracing itself for what was predicted to be a tough financial year, some unexpected surprises actually produced a very favorable financial outcome in 2010.

- The second GeoCanada (first held in 2000) was staged with eight societies involved. With five additional groups involved the financial pie was planned to be thinly sliced. However the committee overcame some obstacles and the event seen a higher than predicted bottom line and in return the CSEG was a huge benefactor of that.
- The DoodleTrain's overall attendance was roughly the same as 2009, but still down from previous years before that, however 19 courses were provided and it still is considered a significant revenue stream for the CSEG.
- For the 4th year the CSEG elections were held online and with 26% of eligible voters participating.
- Both the RECORDER and technical luncheons basically broke even in their operations, even though both were not expected to achieve that in 2010. An initiative to incorporate sponsors for Luncheons provided a significant impact to the bottom line, while some companies who dropped or reduced their advertising in the RECORDER in

2009, resumed in some form or fashion and this to was a pleasant surprise.

- Finally for the first time in many years the CSEG offered a half dozen continuing education course before and after the convention and they were very well received.
- The CSEG held a very successful planning session in June with committee chairs, past presidents and key volunteers invited to formulate a plan for the next 1-5 years. Some great recommendations came out of this session, of which some are already being enacted.

Looking ahead

- There will be some physical changes to the CSEG for 2011. The five year lease agreement with the CSPG ends June 30th. The CSPG have decided to downscale their space and in the end will be relocating on their own. With that in mind the CSEG will most likely be on the move as well and are currently seeking a slightly smaller space in a location that will be convenient for our members and business partners to meet.
- The CSEG Journal will be making a comeback after its last issue was published 11 years ago. The CSEJ will

be an online publication, headed by Dr. Larry Lines.

- The CSEG, based on the convention budget, is looking at a promising year financially and in turn is looking to help build the Foundations corpus.

In closing I would again like to thank our executive for their support over the past year. Their commitment, along with the many volunteers serving on our committees, is the lifeblood of the CSEG and is unique among technical and professional societies in today's world. As our industry and the financial environment continue to change it is our commitment to the membership to provide the best service and information possible. It appears that the industry is slowly working its way out of the tough times and a recovery, though slower than we all would like, is becoming more apparent. In saying this both the Executive and staff are cognizant of the immediate future and have well positioned the CSEG to handle the slow recovery without drastically altering its services. We are using the strong financial years to help subsidize the recovery, and the plan appears to be working.

Jim Racette
Managing Director

The 2nd Annual CSEG T-Wave Golf Tournament

The 2nd Annual CSEG T-Wave Golf Tournament was held on June 14th at the Inglewood Golf & Curling Club. Once again Mother Nature decided to cooperate with us as it was a nice day for golf despite almost every other day in June being rainy. We had a full slate of 144 golfers registered with 77/67 geophysicist/service personnel respectively. We had a couple of changes that day due to emergency meetings but the ratio didn't change by much. We also had 17 people on the waiting list (which we used to fill up the tournament) only to prove that the first year wasn't a fluke and people did enjoy themselves and told others of their experience.

Once again, we focused on the fun and the networking aspect of the tournament and tried to organize it so that as many people as possible were eligible for most if not all of the prizes. For the most part, people chose their own foursomes with those entering solo being matched up with others. The best 20 out of the 36 teams won a prize and there were great hole prizes as well as door prizes. The low round that day was by the Synterra team of Tom Byers, Blair Thompson, Tim Little and Chuck Briere shooting 8 under with a 63. We even had a hole in one during the tournament.

Despite the continued state of the industry in Calgary, I believe sponsors saw the value in what the tournament was providing and supported us. Our Sponsors this year were (and are on the website):

Ace Level – *Divestco, Nexen, and SourceX Geophysical Corporation*

Eagle Level – *Boyd PetroSearch, Command Equipment/GeoTir, CSEG, Earth Signal Processing, Sensor Geophysical*

Birdie Level – *Apoterra, Arcis Seismic Solutions, CGGVeritas, Lornel Seismic Project Management, Maxam North America, Pulse Seismic*

Prize donations were given by: *Absolute Imaging, Fugro-Jason, Synterra, WesternGeco*

As with last year's tournament, our chosen charitable contribution for the tournament was the *Kids in Science Project (KISP)*. We sold 50/50 tickets and raised \$535 with a portion of that coming from John Townsley who won the 50/50 and gave back half his proceeds. We ended the year with a small surplus so we were able to top up our donation to \$2000.

A big thank you goes to all the great committee members who made this tournament such a huge success. We

may be new but we are learning every year and are committed to putting on a Great fun event for everyone.

Sponsorship – *David Caldwell, Dennis Melrose, Chris McGregor and Christian Sealy-Harrington*

Golf – *Patty Evans and Vladan Simin*

Finance – *Susan Thomson*

Registration – *Ashley Bender and Dick Willott*

Prizes – *Sandy Lucas*

Jeff Gautreau helped out the day of the tournament with Registration and 50/50 tickets.

Penny Colton was gracious enough to take unlimited pictures of our event – the pictures were culled and the photos are on the website for those interested.

It was a fun filled packed day and by the feedback we received, everyone had a great time. We are scheduled for June 20th, 2011, same location, Inglewood Golf & Curling Club with a shot gun starting in the afternoon at 1:00pm.

*Jocelyn Frankow
Chair*

CSEG Foundation Outreach Committee

It was another busy and rewarding year for the Outreach Committee in 2010. Volunteers contributed to our success and continued to deliver on our mandate to promote awareness and raise the profile of the science of geophysics and the CSEG. Thank you to active Outreachers Amanda Knowles, Annette Milbradt, Bob Parker, Candace Bruins, Charles Boyer, Craig Funk, Dave Nordin, Hassan Odhwani, Helen Isaac, Jen Elgar, Jessa-lyn Lagroix, Joseph Chow, Juan Joffre, Judith Chan, Kathryn Welsh, Keith Millis, Kevin Bianchini, Liliana Zuleta, Lori Barth, Louis Blinn, Marissa Whittaker, Mark Lane, Mark Sun, Mike Preiksaitis, Paul Hausmanis, Perry Kotkas, Stephen Kotkas, Sean Lovric, Torr Haglund, Adam Flynn, Alemayehu Aklilu, Alex Shrake, Andy Iverson, Becky Cook, Blaine Wagemakers, Brian Gamble, Corina Irvine, Chris Steinhoff, Dan Perez, Darryn Listwan, Greg Deutscher, Igor Senek, Jane Ling, Jessie Arthur, Karen Chong, Karin Michel, Matt Klukas, Matt Ng, Michael Smorodin, Michelle Korodimas, Nathan Fester, Ryan Burnham, Samuel Quiroga, Scott Spackman, Charles Welsh, Chris Savels, Jeff Gautreau. Your time and efforts are much appreciated! Thank you, also, to the many organizations who allowed their staff to volunteer for our many Outreach initiatives.

Helen Isaac chairs **Schools Outreach** and Perry Kotkas leads **Public Outreach**. Our dedicated and enthusiastic volunteers attended 20 **career fairs** and assorted exhibitions in 2010 and talked to students and the public about geophysics. We travelled with our booth to Vancouver, Kelowna, Winnipeg, Saskatoon, Regina, Canmore, and Edmonton as well as locally in the Calgary area. We present the science of geophysics with PowerPoint shows, interactive seismic displays and other demonstration materials. Volunteers also made **in-school presentations** in response to requests that came in, including two in BC in the lower mainland. *Earth Science for Society (ESfS)* was a major new Outreach initiative this year. It replaced previous years' *Kids In Science Program (KISP)*. On May 10th &

11th 2010, ESfS transformed the BMO Corral into a centre of Earth Science discovery. While thousands of geoscientists gathered for GeoCanada 2010, over 2000 Calgary and area junior high school students, teachers, parents, conference delegates and the general public explored the interactive exhibits at five pavilions: Energy for Us, Resources and You, One Dynamic Earth, Your Career?, and Our Future! This program was so successful that it will be taking place at the joint annual convention again this year. We appreciate the support of sponsors, exhibitors, and volunteers at ESfS. In October, CSEG Outreach hosted students from three Calgary high schools at *Seismic in Motion for Students (SIMfS)* where companies showcase their seismic acquisition technologies and procedures. We also presented information about careers in geophysics at one of the stations. Thank you to 2010 SIMfS sponsors: ConocoPhillips, Canadian Natural Resources, Cenovus, Chevron, Enerplus, Nexen, Shell, Bonavista, Perpetual, and Sigma Explorations. We received positive feedback from participants in all of our Schools and Public Outreach initiatives.

University Student Outreach (USO) is led by Stephen Kotkas. This subcommittee continues to expand its activities and has increased student membership to almost 250. USO activities included sponsoring three and attending two undergraduate conferences with the CSEG Outreach booth, attending two University career fairs, presenting Best Geophysical Paper awards at two undergraduate conferences, maintaining e-mail and newsletter communications with students, making connections between students and the Scholarship committee and the Foundation for travel grants, organizing a student area at the convention, helping to deliver Geoskills 2010 for university students and junior geophysicists, providing networking opportunities, and running a one day summer student field trip in June with twice the number of participants as in 2009. CSEG USO also liaises with other organizations for events like AAPG's Imperial Barrel Award, U of C EAGE's



CSEG Foundation Outreach Committee (con't)

student chapter talks, and APEGGA's Alberta Student Energy Conference. The Mentorship program was successfully launched in 2009-10 and in 2010-11 continues to grow and be a valuable resource for our university student members. We would like to recognize and thank Boyd PetroSearch for their generous sponsorship of 2010 student memberships. And thanks to Apache for being the 2011 sponsor. We greatly appreciate it!

The **Challenge Bowl** subcommittee is led by Mark Lane with Brian Russell and other Outreachers. The Challenge Bowl was emceed by the dynamic moderator, Peter Duncan. It was an entertaining evening with a full slate of eight teams in close competition. Congratulations to the winning team of Meriem Grifi and Andrew Brenders from the University of Western Ontario. They won an expense-paid trip to the 2010 SEG Convention to compete in the Challenge Bowl final.

CSEG Outreach members volunteered on the **Honourary Address (HA)** committee. The HA took place in

October. This year's theme was *Polar Exploration – The Next Generation of "Cool" Science*. Dr. Jacob Verhoef is a Geophysicist and Director of the UNCLOS Program at the Geological Survey of Canada, Natural Resources Canada. He spoke on "Geophysics in the Arctic Ocean: Breaking ice and making waves". Susan R. Eaton is a professional geologist and geophysicist who spoke about "A Geoscientist in Antarctica: Following in Shackleton's footsteps 100 years later...". About 1,300 students attended the daytime talks at the Southern Alberta Jubilee Auditorium and Outreachers manned the CSEG booth at the lobby display area for the evening event.

Ambassadors are CSEG representatives in cities across Canada and internationally. In 2010, this program included meet-and-greet opportunities for CSEG members and university students in Edmonton, Winnipeg, and Saskatoon.

Outreach members liaise with many

other organizations and share outreach and education ideas and resources. Wherever we can, we also support their great geoscience initiatives. As our resources allow, we would like to expand our efforts in central and eastern Canada.

Outreach operations moved under the CSEG Foundation umbrella as of January 1, 2010. We appreciate the support from the CSEG Executive and the Foundation over the past year.

Read our new column in the Regular Features section of the RECORDER. Helen Isaac is the CSEG Foundation Outreach publications coordinator for these reports on Outreach activities.

We're always looking for enthusiastic and energetic volunteers interested in helping with our activities. Contact us at outreach@cseg.ca for more information.

*Annette Milbradt
Chair*



Website

2010 remained a quiet year on the website, with on-going maintenance and improvements continuing.

An on-going project that was initiated early in 2008 was the clean-up and expansion of the RECORDER archives. While the hope will be to expand the archives to the earliest dates in order to have the entire catalog of RECORDER articles digitally archived, this will not be a high priority. This is now largely completed with the archives dating back to Sept 1985, the beginning of the RECORDER in its present magazine format.

Another project that has been initiated is the improvement of the CJEG (Canadian Journal of Exploration Geophysics) archives. The current version of the scans are not of acceptable quality and will need to be redone. Donated copies of the Journals have been given to the committee and re-scanning will begin in 2011.

The Calendar has been up and running for more than an year and while it remains a challenge to keep items up to date, the Committee hopes that this provides a useful service to the membership.

On-going efforts with ensuring up to date content in all areas continues. Additionally, expansion of content to provide new information relevant to the membership is also continuing.

We encourage the members to provide us with feed back so that we can continue to make the website the primary destination for society information.

*Corey Hooge
Chair*

RECORDER

Thirty-six technical articles and twenty-four semi-technical or articles of a general nature were published in the ten issues of the RECORDER in 2010. The ten issues focused on specific themes listed below.

- Microseismicity I and II
- Spatial sampling
- Canadian geophysical innovations
- Reservoir Geophysics I and II
- Fracture characterization
- Mineral exploration
- Time lapse seismic
- Seismic inversion and reservoir modeling

As has been customary, each issue of the RECORDER carried an interview. As per the feedback from the members it turns out that the interviews continue to be the most widely read column. The following ten eminent geoscientists were interviewed during 2010.

All the technical articles published in the RECORDER are also included in the SEG's Digital Cumulative Index (DCI).

Satinder Chopra (Arcis) remains the Chief Editor. After bringing on more members to the RECORDER

Committee and introducing fixed terms for the members a couple of years ago, this year some of the members completed their terms and we thanked them for their valuable service and contribution. These members were *Penny Colton* (Sensor), *Marian Hanna* (Ion), *Paul Anderson* (Apache), *Gary Margrave* (U of C), *Jon Howlett* (WesternGeco) and *Joanna Cooper* (U of C). As a small token of our regard for their work, the outgoing members were given a plaque each, which would also remind them of their contributions towards the CSEG

Sergey Fomel



Peter Cary



Shawn Maxwell



Maggie Stratton



John Boyd



John Pendrel



Nanna Eliuk



Norm Cooper



John Fernando



David D'Amico

RECORDER. We hope to continue this practice going forward.

The new additions to the team this year, besides *Eric Anderson* (Talisman) and *Kurt Wikel* (Petrobank) who joined the Committee last year, are *David Close* (Apache), *Tara Motamedi* (EnCana), *Rob Ferguson* (U of C) and *David Cho* (U of C). We would like to thank *Oliver Kuhn*, former Technical Editor for the RECORDER and CSEG Past-President, for editing all of the interviews, and contributing the semi-regular 'Science Break' articles. *Carmen Swalwell* (Swalwell Consulting) continues to serve in her role as a Regular Contributor for the Tracing the Industry column. *Kristy Manchul* took over from *Lorna Engleson* as a

Regular Contributor for the Grapevine column. *Jim Racette* and *Sheryl Meggeson* are always available for liaison and help, apart from their organization of advertising material and related things.

The PRINTMAN, Calgary continues to provide graphic design, production, and printing services for the RECORDER, and has been found to be satisfactory in terms of quality and efficiency.

The RECORDER production expenses during 2010 were at par with the advertising revenue. This has been possible because of the restriction we put on the number of pages we publish in each issue and which is in accordance with the directive of the CSEG Executive – that each arm of the

CSEG should function as a cost-effective/profit making entity.

All issues of the RECORDER published in 2010 are available on the CSEG website (www.cseg.ca). We have continued in our attempts to enhance, or at least maintain, the quality of the RECORDER through these difficult times; we count on the membership to cooperate and help as they have done in the past. As our industry continues to limp back to normal during 2011, we hope that we can return to a situation where we can once again offer the previous number of articles per issue.

Satinder Chopra
Chair

The CSEG Foundation

The CSEG Foundation was established with a mandate

- (a) to establish programs supporting education in geophysics and the earth sciences;
- (b) to support post secondary education in geophysics and the earth sciences, including the establishment and continuation of CSEG scholarships;
- (c) to support continuing education of geophysicists through the development of courses relating to developing technology, publications relating to the geosciences and by establishing education programs;
- (d) to support scientific activities by providing funding of academic research programs;
- (e) to develop and support non-profit programs designed to further the development of geophysical techniques aimed at improvements in geophysical applications in the earth sciences;
- (f) to support the preservation of the history of geophysical exploration;
- (g) and to support the business application of geophysics as defined in the mandate of the Canadian Society of Exploration Geophysicists.

The chairman of the committee is Brian Russell and committee members include Bill Goodway, Perry Kotkas, Dennis Melrose, Hassan Odhwani, Neil Rutherford, and the President of CSEG, John Townsley. The CSEG Foundation includes the CSEG Scholarship committee, chaired by Dennis Melrose, and their activity is described in a separate report.

Thanks to generous donations by the CSEG executive and individual CSEG members, I am pleased to announce that at the end of 2010 our corpus has grown to approximately \$700,000 from which we disburse close to \$30,000 annually, in addition to our ongoing scholarship funding from generous industry donors. We fund a number of worthy projects, such as the Challenge Bowl, the CSEG Distinguished Lecture tour and Alberta GeoSkills. Also, the activities of the CSEG Outreach Committee, chaired by Annette Milbradt, are supported through the CSEG Foundation from generous funding provided by the CSEG Executive Committee. The Outreach Committee has been very successful this year in promoting the CSEG and careers in geophysics at career fairs and university events throughout Canada, and also at increasing student membership in the CSEG.

The CSEG Foundation will also be embarking on a fund-raising initiative over the next several years to help build our corpus through tax-deductible donations from individuals and corporate members as well as other philanthropic foundations. Please feel free to get in touch with any of our board members for more information if you would like to contribute to help fund the Foundation's efforts in promoting geophysics across Canada. Please visit the CSEG Foundation page on the CSEG website at <http://www.cseg.ca/about/cseg-foundation.cfm>

*Brian Russell
Chair*

CSEG Foundation Scholarship Committee

The CSEG scholarship committee began its fundraising efforts for 2010 scholarships in February 2010 with a presentation at the February CSEG luncheon. Due to the economic conditions at the beginning of 2010, we were concerned about the level of funding we would receive. We are happy to report that many of our long term sponsors continued their support and several companies contributed for the first time. The CSEG scholarship committee received funding from 17 Calgary based oil and gas companies, service companies, and individuals to grant scholarships in the amount of \$2000 to 16 students from universities across Canada. Compared to the 20 scholarships that were granted in 2009, this is a slight decrease but we were very pleased with the amount of funding. The

scholarship committee would like to sincerely thank all of the sponsors for their continued support in helping geophysics students across Canada realize their academic goals during these difficult economic times

The number of applications received from students across Canada was slightly down in 2010 for reasons that are not all together clear. This year the USO committee advertised through numerous outlets on our behalf including:

- CUPC – Canadian Undergrad Physics Conference
- WIUGC – Western Interuniversity Geoscience Conference
- AUGC – Atlantic University Geoscience Conference

- GeoSkills Day
- CSEG Student Field Trip
- C3Geo Convention
- USO quarterly newsletter

We would like to thank the USO committee for their efforts. The scholarship committee has again realized that there are many smart, talented, involved and deserving students across Canada that we previously had not been reaching. The scholarship committee will continue their advertizing efforts through partnerships with the USO as well as increase our fundraising efforts going forward in order to be able to award these deserving students a CSEG Scholarship.

2010 CSEG Scholarship Winners and Donors

Recipient	University	Donor
Dunia Blanco	University of Alberta	Sigma Exploration Inc. / Apoterra Seismic Processing Ltd.
Francis Joseph Ryan	Memorial University	Pulse Seismic Data
Jennifer Fohring	University of British Columbia	Chris Elms Trust Fund
Matthew Baird	Memorial University	Arcis Corporation
Christopher Bird	University of Calgary	Sensor Geophysical/ John and Cindy Townsley/ Larry Lines
Hassan Khaniani	University of Calgary	EOG Resources Canada Ltd.
Nadia Kreimer	University of Alberta	GEDCO / John Pierce
Karol Rohraff	University of Alberta	Hampson-Russell Software Services Ltd.
John Mosquera	University of Waterloo	Zokero Inc.
Cassandra Budd	University of Alberta	Nexen Inc.
Judith Chan	University of Alberta	Boyd PertoSearch/CSEG Foundation
Eric-Martial Takam Takougang	Simon Fraser University	Canadian Natural Resources Inc.
Christopher Thompson	University of Calgary	Divestco Inc.
Danielle Mountjoy	University of Victoria	Penn West Energy Trust
Conrad Koziol	University of British Columbia	Bob Won Trust Fund
Aaron Foyer	University of Calgary	Ted Popilchak Trust Fund

2010 Scholarship Donors

Apoterra	\$1000
Arcis Corporation	\$2000
Boyd Petrosearch	\$1000
Canadian Natural Resources Ltd.	\$2000
Divestco	\$2000
EOG Canada	\$2000
GEDCO	\$1000
Hampson – Russell	\$2000
John Pierce	\$1000
Larry Lines	\$500
Sensor Geophysical	\$1000
Nexen Inc.	\$2000
Penn West Energy Trust	\$2000
Pulse Data	\$2000
John and Cindy Townsley	\$500
Sigma Explorations Inc	\$1000
Zokero Inc.	\$2000
Total	\$25,000

2010 CSEG Scholarship Committee

Dennis Melrose, Nexen Inc.
Chairman

Hassan Odhwani, Divestco Processing
Senior Trustee

Matthew Klukas, Talisman Energy
Junior Trustee

2011 CSEG Scholarship Committee

Hassan Odhwani, Divestco Processing
Chairman

Matthew Klukas, Talisman Energy
Senior Trustee

Sarah Cutten, ARC Resources
Junior Trustee

Contributions from the **Chris Elms Trust Fund, Ted Popilchak Trust Fund, Bob Won Memorial Trust Fund**, and the **CSEG Foundation** brought the total to \$32,000.

Dennis Melrose
Chair, CSEG Scholarship Committee

2010 Doodlebug Golf Tournament

This year saw big changes for the Doodlebug Golf Tournament. 2009 ended with several months of deliberations about the future of the Doodlebug that included input from the CSEG membership, an evaluation of the current demographics of the geophysical industry and discussions with the major golf resorts in Alberta and British Columbia. It was decided that the Doodlebug would move to Kimberley, B.C. for a minimum of 2 years. The 2010 Doodlebug Committee tackled this momentous task with an effort that went well beyond the normal requirements of a volunteer organization. But they were well rewarded with an event that was well attended and received a lot of appraisal from both new and old participants.

Trickle Creek Lodge at Kimberley Alpine Resort became the host for the 2010 Doodlebug. The Tournament was played at Kimberley Golf Club with the Thursday Warm-Up round at Bootleg Gap. The middle of September brought clear skies, warm days and fresh mountain air nights. The Doodlebug brought together persons from all aspects of the Geophysical Industry to enjoy a few days of good golf, to see old friends and make new ones, and a chance to partake of the premier social event of the season, the Doodlebug Theme Night.

The 2010 Doodlebug Committee strived to improve the opportunities for sponsorship and therefore to create value for the marketing dollars provided by the Sponsors. With a definite plan and achievable goal in place and a hint of recovery within the Geophysical Industry, the team of Mark Watson and Pascal St. Onge did an outstanding job at securing the dollars needed to run this event. They exceeded all of our expectations by bringing in a total of 68 sponsors including 9 E & P companies. A trend that we hope continues well into the future.

Registration brought forth some new challenges as the team of Clayton Thatcher and Justin Perry dealt with the

changes in venue, hotel and golf courses. Their efforts came close to making the event a sell-out though and I thank them for their efforts. Registration numbers also comprised about a third from E & P companies and quite a contingent of first-timers, a sign of changes within our industry.

The Doodlebug is of course, a golf tournament, and is comprised of the Inspection Tour, the Warm-up Round and two days of Tournament play. The changes in the courses and the format did not make things so easy this year for our Golf Committee of Don MacNeil, Chris Heaver and Patrick Tutty. But they persevered in ensuring that all golfers enjoyed each round of golf no matter what their skill levels as the Doodlebug is a Golf Tournament for all abilities. They should be recognized for all the hard work that goes in to making this event appear effortless.

The 2010 Doodlebug was comprised of 11 flights of golfers with Match play on Friday and Medal play on Saturday. Consensus was that all of the flights provided a fun competition and also hard fought battles. Daryl Robbins triumphed over his 7 other competitors, or should the word be outlasted, and captured the Mr. Doodlebug flight. Mr. Robbins is no stranger to the podium as evidenced by his articulate acceptance speech. Congratulations to Daryl and all the other flight winners as they will now have possession of one of the coveted ceramics given out. The Chuckwagon team event was won by Tom Podivinsky, Chris Copeland, Mike Dahl and Rey Javier even though it was Pod, Chris, Mike and Rey. I hope that all of the golfers had an enjoyable experience and look forward to returning in 2011.

Spouse and Guest Events proved to be one of the more difficult tasks this year. Kimberley was a new venue, hotel and city and one can only thank Janine Ballingall and Sally Befus for the hard efforts that they put in both at the Spouse and Guest Events and also at a majority of the weekend's functions. Lunch at the Bauernhaus and golf on the Friday were

well attended as was the River Float on the Saturday. Feedback was very good concerning these events as the rule states, 'If the Spouses and Guests are happy, then everyone is happy'.

The Entertainment Committee this year consisted of Kerry Befus and Bryan Tutty, no strangers to Entertainment. They did an excellent job at planning each evening's social events as well as most aspects of food and the all important beverage for the 2010 Doodlebug. Thursday night Registration saw an amazing layout of appetizers for all tastes and Friday's dinner satisfied all. But it is the Saturday banquet that is the most important and this year the theme was 'A Night at the Oscars'. A large Media backdrop containing the logos of all the Sponsors welcomed the registrants to the venue which had been transformed in to a Hollywood party complete with Martini luges, black & white movies and a multitude of Silver Screen Actors and Actresses. Thank-you to Kerry and Bryan for taking care of all of the details that made this event such a success. I must also thank Jill Bellm, Shawna Crawford and all of the staff at Kimberley Alpine Resort who did an amazing job working with us on our first year there.

Thank-you to Irene Lane for her role as Secretary/Graphics and Ladies Convenor. West Canadian again provided a portion of the registrant packages. The remainder of the handouts and the advertising were designed and produced by Irene. As well, the Guest Brunch on the Saturday morning was well attended and well received as evidenced by the major consumption of Champagne. Her support of the Doodlebug Chairman over that very busy weekend was also appreciated.

And finally, thanks to Elvis Floreani and some of the other Past Chairman. They laid the foundation that permits us to work on the fine details of this event and their advice was more than welcome. A special thank-you to my Vice Chairman, Evan Perry, who was such a tremendous

2010 Doodlebug Golf Tournament (con't)

help in what proved to be a difficult transition year. Without his support, and also that of the rest of the Doodlebug Committee, the 2010 Doodlebug would not have been the success that it was.

Although the Doodlebug Golf Tournament is not organized as a charity event, the Committee does make a grand effort to collect money from the registrants and sponsors each year to donate to a worthy cause. This year's Chairman's Charity was the Canadian Breast Cancer Foundation. The CBCF is the leading national volunteer-based organization in Canada dedicated to creating a future without breast cancer. I am pleased to announce through the generosity of the registrants and sponsors we raised \$11,075. A big thank-you from myself and the CBCF to everyone involved.

To all of the Sponsors of the 2010 Doodlebug, each year we are reminded that the success we have enjoyed in the past and that which we look forward to in the future is dependent on the tremendous support and contributions from you. 2010 was a remarkable event and we cannot express how much we appreciate your generous time and contributions that made it such a successful tournament, thank-you. To Kimberley Alpine Resort and their wonderful staff for providing first class accommodations and spectacular social events, thank-you. And of course to all the registrants and their spouses and guests, we thank-you for making this such a fun and enjoyable occasion.

The 2010 Doodlebug was a year of transition and acceptance. We accepted that the changing demographics required a more affordable venue. Nothing will ever equal the Jasper Park Lodge and its associated golf course. But we do believe that this year we provided more value for the sponsorship dollars and made the event more amicable to the younger Geophysicists in the industry. Evan Perry and I are always open to discussion about this and we can be reached at any time on this matter.

The 59th Annual Doodlebug Golf Tournament will be held at Kimberley Alpine Resort and Trickle Creek on the dates of August 25 – 27, 2011 and I wish the best of luck to Evan Perry and his 2011 Committee. 2011 will see more improvements to the Doodlebug Golf Tournament. The Tournament will be held in the warmer month of August and golfers will be challenged by the beautiful course at Trickle Creek. The new Convention Centre will be opening at Kimberley Alpine Resort to provide us with a world class venue for the Formal Dinner on Friday night and the Theme Dinner on Saturday night. The 2011 Doodlebug Committee will have taken in to consideration all the issues and concerns from the 2010 Tournament to enhance the experience for all the registrants and their guests at the 2011 event. I, for one, can't wait to participate in the 2011 Doodlebug Golf Tournament.

For more information on the Doodlebug, please visit www.doodlebuggolf.com

*Andrew Lane
2010 Doodlebug Chairman*

2010 Doodlebug Committee

Chairman	Andrew Lane	Emerge Oil and Gas
Vice Chairman	Evan Perry	LXL Consulting
Past Chairman	Elvis Floreani	Absolute Imaging Inc
Secretary/Graphics	Irene Lane	Olympic Seismic
Registration	Clayton Thatcher Justin Perry	DeeThree Exploration Geokinetics
Sponsorship	Mark Watson Pascal St. Onge	Olympic Seismic LXL Consulting
Golf	Don MacNeil Chris Heaver Patrick Tutty	Sercel MicroSeismic Earth Signal Processing
Entertainment	Kerry Befus Bryan Tutty	Seisware Crescent Point Energy
Guest Events	Janine Ballingall Sally Befus	Synterra Technologies HEF Petrophysical Consulting

2010 & 2011 Doodlespiel Results

A big thank you to all of those who attended last year's 38th annual Doodlespiel event in Lethbridge. This was the Doodlespiel's first year outside of Banff and from all accounts it appeared to have been a resounding success. There were 73 teams in last year's tournament and over 330 participants. In light of the success of last year's event, we did return to Lethbridge for the 39th annual Doodlespiel on January 21, 22 and 23, 2011.

Following are the 2010 Doodlespiel champions:

A – EVENT: *"Team Hansen"*, Sterling Hansen, Kelly Jamison, Gary Laskowski, and Bob Bachman

B – EVENT: *"Team McDonald"*, Brad McDonald, Victor Irwin, Lyle Cedargren, and Sarah Cutten

C – EVENT: *"Team Richards"*, Alan Richards, Barry Johnson, Don Anderson, and Gene Peters

D – EVENT: *"Team Williamson"*, this year short handed with James Muraro, Anthony Mersich, and Adrian Mitchell

HOLEPLUG: *"Team Ng"*

The 2011 Doodlespiel just played out in Lethbridge again, and proved to be another great weekend with some great games and big upsets in the final rounds. The weather gave us a rough run on the first day but by the end of the weekend, just like the curling all as well for some 82 teams. Now as we move towards 2012, the committee has the task of deciding where to go from here. Historically for 36 years Banff was home to the Doodlespiel, and we only moved because of the renovations being done at the rink. With the reno's complete and the town anxious to have us back, the committee has some tough work ahead.

This is also a great time to thank all our sponsors once more and the hard work the guys put in on the committee again this year. Have a great rest of the "winter season", we'll see you on the golf course soon and then it's anyone's guess right now as to where the next Doodlespiel will be.

Following are the current 2011 Doodlespiel champions:

A – EVENT: *"Team Herd"*, Larry Herd, Rick Rathier, Kevin Bowman and Murray Jasman

B – EVENT: *"Team Perry Dyck"*, Perry Dyck, Pat Brown, Ken Evans, Warren Young and Morley Bullock

C – EVENT: *"Team Kelly"*, Tom Kelly, Dale Rasnevson, Earl Hawkes, Larry Mathews and Frank VanHumbeck

D – EVENT: *"Team Heynyk"*, Randy Hrynyk, Marvin DeBlau, Mark Anderson, Melissa Vautour, and Stephen Menduic

HOLEPLUG: *"Team Brooks"*

Please visit the Doodlespiel website at www.doodlespiel.com for a complete list of this year's winners and for more information regarding next year's event!

Thanks so much,

*John Bertsch
Chairman of the
2011 Doodlespiel Committee*

Junior Geophysicists Forum

Another successful JGF event was held at the International Hotel on November 3, 2010, with close to 160 geophysicists and students gathering for some fun and education. There was almost an equal mix of Senior, Junior and Student Geophysicists this year – a record student attendance of 48 – thanks mostly to our new Student Liaison and Treasurer RJ Vestrum. The student door prizes, 2 engraved 32GB iPod Touches, went to Keith Adcock and Evan Yathom, and will hopefully help entice more students again next year! J Marian Hanna (ION Geophysical) took home an engraved 8 GB Ipod Nano, as our established geophysicist door prize.

Once again, the 35th Floor of the International Hotel proved to be a great hosting location for our event. With an

improved sound system, most everyone could hear the presentation by **Rob Kendall** of PetroBank, throughout the room. There was ample food and drink, and of course good conversation. Our icebreaker activity prodded attendees with such questions as “What would you be doing if you weren’t a Geophysicist?” and “How do you explain Geophysics to strangers?” Conversation erupted!

This event would not be possibly or so successful without the contributions of

our volunteers and our sponsors. My thanks to **Nanna Eliuk** (Waldron Corporation), **Rob Vestrum** (TBI), **Tim Wardell** (TransGlobe) and **RJ Vestrum** (UofC) for all of the hard work that they put in to make this a banner year for the JGF. Each year we learn and tweak the event and I think we’re close to getting it ‘right’ (whatever that is!). And of course thanks to our sponsors, who make all of this possible.

*Susan Thomson
Chair, JGF 2010*



**Junior
GEOPHYSICISTS
Forum**

Thanks to our sponsors:



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Oil & Gas Ltd.



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STRENGTH IN OUR RESOURCES



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ENERGY LTD.**



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ENERGY**



GALLEON ENERGY



PETROBAKKEN
A PETROBANK COMPANY



**TALISMAN
ENERGY**



**THE ENERGY OF
enerPLUS**



Paramount
PETROBANK



encana.
natural gas



CSG
Canada



AUDITOR'S REPORT

To the Members of Canadian Society of Exploration Geophysicists

I have audited the accompanying financial statements of Canadian Society of Exploration Geophysicists, which comprise the balance sheet as at December 31, 2010 and the statements of revenues and expenditures and net assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit includes performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on my judgemental, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, I consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I obtained in my audit is sufficient and appropriate to provide a basis for my opinion except as noted in the following paragraph.

In common with many charitable organizations, the Society derives revenue from membership dues, sponsorships, advertising and projects, the completeness of which is not susceptible to satisfactory audit verification. Accordingly, my verification of these revenues was limited to the amounts recorded in the records of the Society and I was not able to determine whether any adjustments might be necessary to revenues, excess of revenues over expenditures, current assets and net assets.

Tel: (403) 250-2777 Fax: (403) 250-2774
210, 2635 - 37th Avenue N.E., Calgary, Alberta T1Y 5Z6





Opinion

In my opinion, except for the effect of adjustments, if any, which I might have determined to be necessary had I been able to satisfy myself concerning the completeness of the revenues referred to above, the financial statements present fairly, in all material respects, the financial position of Canadian Society of Exploration Geophysicists as at December 31, 2010 and the results of their operations and their cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Calgary, Alberta
February 22, 2011

Murray Hunter
CHARTERED ACCOUNTANT

Tel: (403) 250-2777 Fax: (403) 250-2774
210, 2635 - 37th Avenue N.E., Calgary, Alberta T1Y 5Z6



Financial Statements

CANADIAN SOCIETY OF EXPLORATION GEOPHYSICISTS

Balance Sheet

December 31, 2010

	2010	2009
ASSETS		
CURRENT		
Cash	\$ 630,549	\$ 637,650
Accounts receivable	127,560	85,972
Prepaid expenses	63,366	72,000
	<u>821,475</u>	795,622
FURNITURE AND EQUIPMENT (Note 4)	12,345	46,383
RESTRICTED FUNDS	875,000	875,000
	<u>\$ 1,708,820</u>	<u>\$ 1,717,005</u>
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES		
Accounts payable and accrued expenses	\$ 78,829	\$ 59,754
Deferred income	25,359	20,671
	<u>104,188</u>	80,425
NET ASSETS		
Capital assets	12,345	46,383
Internally restricted	875,000	875,000
Unrestricted	717,287	715,197
	<u>1,604,632</u>	1,636,580
	<u>\$ 1,708,820</u>	<u>\$ 1,717,005</u>

ON BEHALF OF THE BOARD

Director

Director

See notes to financial statements

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 **MURRAY HUNTER**
PROFESSIONAL CORPORATION
CHARTERED ACCOUNTANT

CANADIAN SOCIETY OF EXPLORATION GEOPHYSICISTS
Statement of Revenues and Expenditures and Net Assets
Year Ended December 31, 2010

	2010	2009
REVENUES		
Memberships	\$ 101,490	\$ 108,932
Continuing education	44,795	65,310
Recorder	172,250	152,920
Outreach	-	5,497
CSPG/CSEG Convention	233,433	287,613
Doodletrain	180,600	185,523
Distinguished lecturers	15,219	14,900
Interest and other	53,551	49,139
Luncheon fees	102,491	121,886
	<u>903,829</u>	<u>991,720</u>
EXPENDITURES		
Administration	288,892	270,318
Distinguished lecturer	15,000	15,000
Amortization	34,037	41,569
Bad debts	1,170	-
Recorder	166,663	172,532
Interest and bank charges	2,499	2,600
Member services	27,894	20,039
Outreach	57,540	66,566
Doodletrain	136,057	148,108
Website	9,172	12,099
Continuing education	26,585	45,204
Luncheons	106,891	141,033
Professional fees	21,555	13,516
Professional dues	14,221	1,705
Distinguishing lecturer-SEG	20,623	13,385
Convention	6,978	6,250
	<u>935,777</u>	<u>969,924</u>
EXCESS(DEFICIENCY) OF REVENUES OVER EXPENDITURES	(31,948)	21,796
NET ASSETS_BEGINNING OF YEAR	<u>1,636,580</u>	<u>1,614,784</u>
NET ASSETS_END OF YEAR	<u>\$ 1,604,632</u>	<u>\$ 1,636,580</u>

See notes to financial statements

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CANADIAN SOCIETY OF EXPLORATION GEOPHYSICISTS

Statement of Cash Flows

Year Ended December 31, 2010

	2010	2009
OPERATING ACTIVITIES		
Net income (loss)	\$ (31,948)	\$ 21,796
Item not affecting cash:		
Amortization of property, plant and equipment	34,037	41,569
	<u>2,089</u>	<u>63,365</u>
Changes in non-cash working capital:		
Accounts receivable	(41,588)	(13,231)
Accounts payable	19,075	(57,186)
Deferred income	4,688	10,002
Prepaid expenses	8,635	(58,666)
	<u>(9,190)</u>	<u>(119,081)</u>
DECREASE IN CASH FLOW	(7,101)	(55,716)
Cash - beginning of year	<u>1,512,650</u>	<u>1,568,366</u>
CASH - END OF YEAR	\$ 1,505,549	\$ 1,512,650
CASH FLOWS SUPPLEMENTARY INFORMATION		
Interest paid	<u>\$ 2,581</u>	<u>\$ 2,600</u>
Income taxes paid	<u>\$ -</u>	<u>\$ -</u>
CASH CONSISTS OF:		
Cash	\$ 630,549	\$ 637,650
Term deposits	875,000	875,000
	<u>\$ 1,505,549</u>	<u>\$ 1,512,650</u>

See notes to financial statements

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CANADIAN SOCIETY OF EXPLORATION GEOPHYSICISTS

Notes to Financial Statements

Year Ended December 31, 2010

1. NATURE AND OBJECT OF THE SOCIETY

The Canadian Society of Exploration Geophysicists (the Society) was established as a Society under the Societies Act of Alberta on December 20, 1949 as a not-for-profit organization.

The object of the Society is to promote the science of geophysics, especially as it applies to exploration, and to promote fellowship and cooperation among the persons interested in geophysical problems.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Revenue recognition

The Society follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue of the appropriate fund in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue of the appropriate fund when received or receivable if the amount can be reasonably estimated and collection is reasonably assured.

Project revenues and expenses are recognized in the Project Fund during the period when the revenue is received and expenses are incurred.

Convention revenues and expenses are recognized in the Convention Fund during the period when the convention is held.

Capital assets

Capital assets are recorded in the Operating Fund at cost. Amortization is provided on straight-line basis over three to eight years, being the estimated useful life of the assets.

Leasehold improvements are amortized on a straight-line basis over the term of the lease, which is five years.

Contributed services

The operations of Society are dependant on the services of many volunteers. Although these volunteered services form an integral part of the ongoing operations, the value of contributed services has not been recognized in these financial statements.

Social committees

Various social committees within the society have monies available to them in order to administer the specific activities for which the committees were established.

The financial activities of these committees have not been reported upon in these financial statements..

Income taxes

The Society is a not-for-profit organization and is exempt from income taxes pursuant to Section 149 of the Income Tax Act.

(continues)

CANADIAN SOCIETY OF EXPLORATION GEOPHYSICISTS

Notes to Financial Statements

Year Ended December 31, 2010

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

Measurement uncertainty

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from these estimates.

3. INTERNALLY RESTRICTED FUND BALANCES AND INTERFUND TRANSFERS

The Society's Executive Committee has internally restricted resources amounting to \$ 875,000 (2009 - \$ 875,000). These internally restricted amounts are not available for other purposes without approval of the Executive Committee.

The internally restricted funds have been allocated as follows:

	<u>2010</u>	<u>2009</u>
Operating fund - reserve	\$ 830,000	\$ 800,000
Convention fund	45,000	75,000
	<u>\$ 875,000</u>	<u>\$ 875,000</u>

4. FURNITURE AND EQUIPMENT

	Cost	Accumulated amortization	<u>2010 Net book value</u>	<u>2009 Net book value</u>
Furniture and fixtures	\$ 94,344	\$ 94,344	\$ -	\$ 4,261
Software Development	33,790	33,790	-	11,264
Leasehold improvements	92,568	80,223	<u>12,345</u>	30,858
	<u>\$ 220,702</u>	<u>\$ 208,357</u>	<u>\$ 12,345</u>	<u>\$ 46,383</u>

5. FINANCIAL INSTRUMENTS

The Society's financial instruments that are included in the statement of financial position are comprised of cash and term deposits, accounts and advances receivable and accounts payable, all of which approximate fair value due to the immediate or short term maturity of these instruments. It is the opinion of management that the Society is not exposed to any material credit or interest rate risk on any of these financial instruments.

CANADIAN SOCIETY OF EXPLORATION GEOPHYSICISTS

Notes to Financial Statements

Year Ended December 31, 2010

6. COMMITMENTS

The Society is committed to a five year lease commencing July 1, 2006. Annual payments are \$25,083.60 payable in equal monthly installments of \$ 2,090.30.

Contractual obligation repayment schedule:

2011	\$	12,442
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Past Presidents

1950 J.O. Galloway	1971 R.O. Lindseth	1992 R.J. Brown
1951 C.M. Moore, Jr.	1972 J.K. Morrison	1993 W.E. Davitt
1952 L.I. Brockway, N.J. Christie	1973 W.N. Rabey	1994 G.G. Taylor
1953 W.R. Ogilvie	1974 J.H. Harding	1995 B.T. Korchinski
1954 R.J. Copeland	1975 J.R. Pullen	1996 D. Hampson
1955 R.D. Holland	1976 W.D. Evans	1997 R. Stewart
1956 R.B. Ross	1977 R.J. McCaffrey	1998 N. Shaw
1957 G.J. Blundun	1978 E.F. Mahaffy	1999 D. Pruden
1958 F.A. Hale	1979 L.R. Hatlelid	2000 P. Kotkas
1959 H.J. Kidder	1980 P.D. O'Brien	2001 R. Pelletier
1960 M.B. Dobrin	1981 A.E. Wren	2002 D. Uffen
1961 P.I. Bediz	1982 D.A. Carswell	2003 W. Goodway
1962 P.J. Savage	1983 V.A.A. Neilson	2004 P. Cary
1963 R.H. Carlyle	1984 J.R. Hume	2005 J. Stenhouse
1964 C.J. Chapman	1985 L.C. Fichtner	2006 Oliver Kuhn
1965 R.A. Boulware	1986 J.D. Boyd	2007 Doug Bogstie
1966 J. Hodgkinson	1987 R.L. Comer	2008 François Aubin
1967 E.A. Fulmer	1988 R.M. Lundberg	2009 Jon Downton
1968 G.E. Longphee	1989 A.J. Ferworn	2010 John Townsley
1969 W. Blair	1990 N.E. Rutherford	
1970 L.R. Baxendale	1991 B.H. Russell	

CSEG Medal

The CSEG Medal was introduced in 1988 and is the highest award that the Society bestows. "The CSEG Medal is given in recognition of the contribution to Exploration Geophysics by a member of the profession in Canada. It can be gained through a long-standing significant contribution to the application, teaching or business development of Exploration Geophysics. It can also be gained through a single achievement in any of these areas, which has been recognized over a period of years as a significant development. The award will be made to a member of the geophysical profession who is recognized for his integrity as well as his accomplishments."

Ted Rozsa	Hugh Stanfield	Don Lawton (2000)
Roy Lindseth	Donald Chamberlain	Dan Hampson (2004)
Greg Davidson (1990)	John Boyd (1994)	Bill Goodway (2007)
Dave Robson (1991)	Garry Kelman	George Betram (2008)
Robert R. Stewart (1992)	Brian Russell (1999)	Warner Loven (2009)

Honourary Membership Awards

Honourary Membership is normally given only to a few members who have gained recognition for distinguished contributions in the field of geophysics or in service to the CSEG, either nationally or internationally.

George D. Garland	A. Easton Wren (1987)	Robert Comer (2002)
J. Tuzo Wilson	Sudhir Jain	Robert Stewart (2003)
Norman Christie	Charlotte Keen	John Boyd (2003)
Milton B. Dobrin	Peter Gretener	Davey Einarsson (2004)
A.E. Pallister	Gordon West	Mike Galbraith (2005)
Roy O. Lindseth	Ron Clowes (1995)	John Bancroft (2005)
David W. Strangway	Douglas W. Oldenberg (1996)	Perry Kotkas (2006)
Peter J. Savage	Roy Hyndman (1996)	Peter Cary (2008)
R.H. Carylyle	Larry Lines (1998)	Peter Duncan (2009)
Ernest R. Kanasewich	Zoltan Hajnal (1999)	
Robert Boulware	Brian Russell (2000)	

Meritorious Service Awards

The Meritorious Service Award is given to members of the CSEG who have made a prominent and/or lengthy contribution to the Society and/or the industry as a whole. Current practice is to make a maximum of two of these awards each year.

• Harry McGrew	• Bud St. Clair	• Arthur Baptie	• Doug Uffen (1999)
• Cecil A. Collins	• William D. Evans	• Bob Comer	• Penny Colton (2000)
• Milton B. Dobrin	• Earle F. Mahaffy	• Dan Hampson (1991)	• Norm Cooper (2000)
• Alexander H. McKee	• Jack E. Setters	• Nancy Shaw	• Barry Korchinski
• Peter J. Savage	• Peter Bediz (1983)	• Ralph Lundberg (1992)	• George Fairs (2001)
• Percy Smith	• William C. Stroup	• Murray Olson	• Perry Kotkas (2002)
• Roy O. Lindseth	• Ernie K. Shaw (1984)	• George Kostashuk	• Oliver Kuhn (2003)
• John Hodgkinson	• William Davitt (1984)	• Robert Grigg	• Satinder Chopra (2005)
• Jack W. Bowden	• Ray Prudholme	• Neil Rutherford	• Bill Nickerson (2005)
• Hal W. Godwin	• George Blundun	• Ken Duckworth (1994)	• Helen Isaac (2007)
• J. Kenneth Morrison	• Valerie A.A. Neilson	• Melvin E. Best (1995)	• Mauricio Sacchi (2007)
• Westley N. Rabey	• Duncan A. Carswell	• Brian Russell (1995)	• Doug Schmitt (2008)
• Easton Wren (1977)	• P. Dennis O'Brien	• Don C. Lawton (1996)	• Larry Mewhort (2008)
• Mary C. Colberg	• Judi McDonald (1987)	• James Brown (1997)	• Tooney Fink (2009)
• A. Vern Street	• Dale Kary	• John Pierce	• John Logel (2009)
• Alan J. Ferworn	• D.K. Bruce Fenwick	• Gregg Milne	• J.M. Annette Milbradt (2010)
• Jack R. Pullen	• Lloyd Hatlelid	• Ernest Kanasewich	• Laurie Ross (2010)
• Sudhir Jain	• Larry Fichtner	• Michael Enachescu (1998)	
• Bill Blair	• Don Simpson	• Elaine Honsberger (1999)	
• Harold Acheson	• John Boyd (1988)	• Dave Siegfried (1999)	

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