

Newsletter

November 2018

Gresident's Letter

armest greetings to all SPEE members. This is my final letter to you, delivered for the first time via email rather than hard copy. The year has flown by. Looking back, oil prices have been volatile through the year, remaining reasonably resilient, although over the past month prices have become markedly softer as the market frets over lower demand for next year and surging supply in the US, Russia and Saudi Arabia. On the other hand.... there are those who are predicting a sharp rebound in the near term! As the reserves reporting season gets into full swing it appears that, like the weather around the world, volatility in the oil price has become the "new norm."

Meanwhile, much has been happening in the SPEE world in the past three months. The ballots for the Board elections have been counted and I am delighted to congratulate and welcome our 2019 Directors-elect: Chuck Boyer from Pennsylvania, Stephen Gardner of the Houston Chapter and Doug Wright of the Calgary Chapter. Welcome to the SPEE Board and I hope that you find this will be a rewarding experience for you. I want to thank Antony Corrie-Keilig of the SE Asia Chapter-in-Formation, Richard Smith of the Denver Chapter and Farhad Ghassemi of the Houston Chapter who were the other excellent candidates willing to put their names up for candidature. All six candidates are highly qualified who would be welcome additions to our Board. Unfortunately, however, only three can be chosen. I do hope you put your names forward for consideration again in the future.

To our outgoing Directors, Mark Ireland, Charles Boyette and Rhonda Gathers, SPEE thanks you for your time, service and dedication. I would like to thank Floyd Siegle for his leadership and guidance as he completes his year as Past-President and Chair of the Nominating Committee and his term on the Executive Committee after many years of outstanding service. We will be announcing the newest member of the Executive Committee at the January Board meeting in Houston, when Jennifer Fitzgerald will assume the position of President.

One of the pleasures of this office is meeting new colleagues with a common interest in resource evaluation, who often bring new perspectives than one's own. I was pleased to attend in September a meeting of the SE Asia Chapter-in-Formation in Perth, Australia, which was hosted by SPEE members Antony Corrie-Keilig and Simon Whittaker. Over 20 attendees were present,



representing a broad cross-section of evaluation professionals from major oil companies, independent oil companies, petroleum consultancies and an advisor to the Australian Stock Exchange, ASX. I was delighted to give an overview presentation on the SPEE, its mission and the benefits of joining the Society from a SE Asia perspective. Antony, with colleagues, then gave a presentation on key changes in PRMS 2018, which led to a lively discussion on several aspects. We afterwards enjoyed drinks and snacks courtesy of Antony and Simon's employer, RISC. I sensed the evening was a great success, with considerable interest shown in the Society by attendees. Antony has since reported that several applications for membership are in process. He is hopeful to quickly build on this interest and of reaching the ten memberships required for award of full Chapter Status by the first half of 2019. I wish Antony, Simon and Chapter Chairman Peter Stephenson every success in the coming months.

In October we held the 4th SPEE Software Symposium in Houston. There were over 100 attendees, with 12 vendors presenting their software for evaluation by users. Other topics included presentations on technical and commercial drivers for asset valuations, digital transformation as well as feedback on a user survey. The day closed with a cocktail reception. I have received positive feedback that the event was a great success, providing the opportunity for members to assess the capabilities and features of the software packages and for vendors to understand current industry evaluation needs. We were pleased to have over 300 responses to the user survey from

2018 Officers and Directors

Executive Committee

President	Simon McDonald (Europe)
Vice President	Jennifer Fitzgerald (Houston)
Secretary-Treasurer	Robert Green (Midland)
Past-President	Floyd Siegle (Calgary)

Directors

Charles Boyette (Dallas) Andrew Forcina (Denver) Rhonda Gathers (Denver) Anna Hardesty (Houston) Steve Hendrickson (Houston) Mark Ireland (Europe) Attila Szabo (Calgary) Paul Taylor (Europe)

Joe Young (Dallas)

Bylaws Committees

Chair of Past Presidents' CouncilRick	Krenek
Qualifications Neal H	loward
Committee: Steve Blair, Mark Reeves, Danilo Bandiziol and Claudio Virues	
Nominating Floyd	Siegle
Grievance Davi	d Gold
Committee: Dan Olds	
Reserves DefinitionsRo	d Sidle
Committee: Dave Elliott, John Etherington, Martin Hubbig, Russ Long, John Ritter	r,
Rawdon Seager, John Seidle and Tim Smith	

Individual Appointments

Evaluation Parameters Survey
Internet
Membership
Newsletter Coordinator
Newsletter Coordinator
Production Tax Summary and University Interface
Recommended Evaluation Practices
Annual Meeting Advance Planning
Professional Registration
Monograph 3 - Evaluation of Resource Plays
Monograph 4 - Unconventional Developed Reserves John P. Seidle Monograph 5-Type Curves
Monograph 5-Type Curves
Technical Training Joe Young SPE OGRC Oil and Gas Reserves Committee Observer Ron Harrell
SPE OGRC Oil and Gas Reserves Committee ObserverRon Harrell
COGEH (Canadian Oil and Gas Evaluation Handbook) Floyd Williams
UNECE Expert Group on Resource ClassificationDominique Salacz



Admin Asst Web Admin
Debbie Suter Kyle Fitzgerald
debbie@spee.org fitz@fitz.family

Financial Lisa Poletti lisa@spee.org Newsletter Editor Diane Pollard dpollard@austin.rr.com

www.spee.org

Houston, Texas 77070

Office: 832.972.7733

Toll Free: 800.651.1639

20333 State Highway 249, Suite 200

The SPEE Newsletter is a quarterly publication of the Society of Petroleum Evaluation Engineers. News items, correspondence, address changes and advertising inquiries should be directed to SPEE headquarters in Houston, Texas.

Chapter Officers - 2018

Asia-Pacific - Chapter in Formation

Chairman - Antony Corrie-Keilig

Calgary

Chairman – Mike Verney Vice Chairman – Larry Petropoulos Secretary – Tim Freeborn Treasurer – Gary Metcalfe Membership – Claudio Virues

California

Chairman - Brad DeWitt Vice Chairman – Rick Finken Secretary-Treasurer - Tom Walker Membership - John Davis

Central Texas

Chairman – Vice Chairman – Secretary – Charles Price Treasurer – Gary Gonzenbach Membership –

Dallas

Chairman - Jacob Walker Vice Chairman — Brenda Brown Treasurer - Tad Fielder Secretary - Christina Hilton Membership —

Denver

Chairman – Steve Gardner Vice Chairman - Mike Flanigan Secretary-Treasurer – Robert Schutzius Membership - Zack Warren

Europe

Chairman – Danilo Bandiziol Vice Chairman – Dominique Salacz Secretary-Treasurer – Joel Turnbull Membership – John Baillie

Houston

Chairman – Tosin Famurewa Vice Chairman – Ed Butler Secretary-Treasurer – Lucas Smith Program Chairman – Ali Porbandarwala

Midland

Chairman – Robert Green Vice Chairman – Secretary-Treasurer – Gail Hankinson Membership – Russell Hall

Northern Rockies

Chairman – Rick Vine Vice Chairman – Leo Giangiacomo Secretary/Treasurer – Tom Hohn Membership – Joe Sinner

Oklahoma City

Chairman – Aaron Anderson Vice Chairman -Secretary - Bruce Heath Treasurer - Steve Blair Membership - Don Jacks

Tulsa

Chairman - Phil Schenewerk Vice Chairman -Secretary-Treasurer - Laura Stauffer Membership Chairman -

Continued from page 1

across the industry. Vendor presentations as well as the user survey results are posted on the SPEE website. I would like to thank the organising committee members **Charles Boyette**, **Joe Young, Dilhan Ilk** and Debbie Suter for the planning and delivery of a very successful event. Thank you also to DeGolyer & MacNaughton for their generous sponsorship.

Earlier this year members voted to approve revisions to the By-Laws of the SPEE. One of the key changes made was the Grievance Procedure. While grievance issues are and should be rare, it is the possession of a well-defined grievance process that protects the very privileges and reputational benefits that SPEE Members derive through membership.

The By-Laws contain the basic framework for a grievance process, but intentionally lack detail in order to avoid overspecifying a process that necessarily requires a level of flexibility over time. The By-Laws therefore allow for the preparation of a separate Grievance Procedure document, which contains guidelines for SPEE's grievance process and which can be updated from time to time. Work has been underway this year by members of the Council of Past Presidents drafting a detailed process within the Grievance Procedure document, which contains the following sections:

- The Importance of SPEE's Grievance Process
- The Purpose of SPEE's Grievance Procedure document
- SPEE's By-Laws as Related to the Code of Ethics and the Grievance Process
- Overview of SPEE's Grievance Process
- The SPEE Grievance Process in Detail
- Graphical View of the SPEE Grievance Process

I am pleased to say that work is now complete and in November SPEE's Board of Directors approved the Grievance Procedure document. This has now been uploaded to the website for review by members. I believe that this is an excellent document, although I hope will only be called into use very rarely. It provides a strong grievance process which contributes to making SPEE a self-governing, professional organisation. I would like to thank Past Presidents Rick Krenek, Tim Smith, Marshall Watson, David Gold and Dan Olds for the considerable time, intellect and effort they expended in developing and refining the document.

November also saw the issue of the 2018 PRMS version 1.01. This corrects certain errata in the original version which was issued in the summer. You will find an updated copy on the website.

As the Newsletter is now being delivered electronically, members will no longer receive their Annual Dues notice in the post. Please go to the website after 1 December to find the link on the Home page as well as the Membership information page for payment of your 2019 Dues.

Sarah and I are already looking forward with anticipation to next year's Annual Meeting at The Fairmont Hotel in Lake Louise, Alberta. It is such an iconic location and I know that Robert Green is developing an exciting programme. It appears that many of you are similarly looking forward to the meeting. I understand that 90% of the rooms that have been set aside at highly discounted rates for the conference have already been reserved. I urge those of you that have not yet made the commitment to do so and to make your bookings as soon as possible.

Looking back, I am pleased to report that, together with my colleagues on the Executive Committee, I have so far this year reviewed over 30 new member applications to join the SPEE, either as Full members or as Associates. Several others are in the pipeline this year and I am hopeful we will exceed last year's tally of 33 new members, which was the highest for the past 10 years. Thank you to all members who are "out there" spreading the word about the benefits of being a member of the SPEE, to sponsors for taking the time to fill out the forms and the Qualifications Committee for vetting new members. As a responsible society we need to encourage membership growth to ensure we remain at the vanguard of industry guidance and leadership.

My year in office has passed in the blink of an eye, much quicker than I thought it would. It has been a most enjoyable and rewarding experience to serve the Society. The success of the SPEE, both past and future, is due to the quality of the membership and the efforts of all those who contribute to the running of the Society whether as chapter officers, committee chairs and members or members of the Board of Directors. I would like to thank you for your contributions and all members for giving me the opportunity to serve the Society in 2018 and making me so welcome. Special thanks also to Debbie Suter, SPEE's Executive Secretary, whose commitment and support behind the scenes has made my term in office so much easier and allows the Society to run as smoothly as it does. Best wishes to you and your families for the upcoming holiday season.

Simon McDonald 2018 SPEE President





Asia Pacific

The Asia Pacific Chapter continues with its formation as it communicates the SPEE Message to the oil and gas industry in the Asia Pacific region. On the evening of 13th September, Simon McDonald spoke in Perth to interested oil and gas professionals followed by an update on the 2018 PRMS presented by Asia Pacific Vice Chairman Antony Corrie-Keilig. The evening was well attended by Perth-based E&P companies and interest in joining the SPEE was evident. We sincerely thank Simon for making the time and sharing the SPEE vision in Perth.

With three SPEE members already in Perth, one in Jakarta and others in the application process throughout Asia, the Chapter is well on its way to establishment, and we look forward to its formal establishment in early to mid-2019. The SPEE is continuing to establish its credentials in Asia Pacific with a joint presentation to the Indonesian SPE Chapter and regulator SKK Migas with the SPE on the PRMS and the 2018 PRMS Update in Jakarta in the first week of November.

Calgary

The revised Canadian Oil and Gas Evaluation (COGEH) was published in September. Minor updates were released in mid-October.

The revised document is now one consolidated document. The document is available digitally to allow for easy searches. Downloading the document is available as a PDF. In addition, a subscription-based, web-accessible live document is also available.

Meetings - 3rd Tuesday of each month except June, July and August. Membership - 57

California

Membership - 15

Central Texas

Membership - 27

Dallas

The Dallas Chapter hosted its second luncheon meeting of the year on November 8th, with this being a joint meeting with the SPE of Dallas for our annual Ethics talk. Dwayne Purvis presented a timely talk on *Ethics of Brinkmanship*. Using a combination of videos, examples, "condescending pontification," and humor, Mr. Purvis helped raised our sensitivity and skill to resolve ethical challenges. There were 74 attendees from the SPEE and SPE.

Future meetings:

January 10, 2019: TBD

March 14, 2019: Erika Coombs, Manager of Consulting Services, BTU Analytics, *Permian Bottlenecks – Will Pipelines Arrive Soon Enough?*

May 2, 2019: Dr. Tom Blasingame, Texas A&M University, Topic TBD

Meetings – Bimonthly from September through May at the Brookhaven College Geotechnology Institute. Membership – 67

Denver

On August 11, the Denver Chapter of SPEE joined with the local chapter of SIPES for a summer social event held at the home of Roger and Connie Knight in Golden, Colorado. SPEE members in attendance and their spouses totaled 15, and a wonderful time was had by all. Additional joint luncheons, workshops, or other events are being considered for the future to further bolster relationships and cooperative objectives between our two sister societies.

Then on September 20, we sponsored our own summer soiree, the third annual, at Earl's on the 16th Street Mall in downtown Denver. Approximately 35 members and guests were in attendance, with a relatively even mix. The event was held at no cost to attendees, with objectives being to give back to current members and to recruit new ones.

Finally, on October 10, the Denver Chapter held its fourth quarterly luncheon meeting of 2018 with 65 in attendance – 29 members and 36 guests. SPEE member Gary Gonzenbach, Principal of CG Consulting and Chairman of the Monograph 5 Committee, gave a status update on production of SPEE Monograph 5: A Practical Guide to Type Well Profiles. A few concepts addressed in this update included well selection/binning, survivor bias, verification and uncertainty. Gary indicated acquiring enough operated data to analyze in a particular focus area is a challenge. At present, focus areas are Barnet Shale,



Program Chairman Mike Flanigan (L.) presents Gary Gonzenbach (R.) with a speaker's gift.

Montney, Niobrara/Codell and Permian Wolfcamp A.

Additionally, Emily Miller was confirmed by voice vote of members present to join the Denver Chapter officer rotation. She will assume the role of Membership chairman effective 1/1/19.

Meetings – 2nd Wednesday of first month of each quarter – Denver Athletic Club – The New Petroleum Club. Membership – 64

Europe

Since August, the Europe Chapter Meeting held one additional meeting in London at the October's Gallery, on September 20th. The meeting was attended by eleven members and non-members onsite and three members remotely via skype. The guest speaker for the evening was Rod Sidle of Aucerna. The talk for the meeting was An Introduction to Unconventional Resources Booking.

The talk covered initially the main differences between booking of unconventional resources versus conventional resources. Whereas in conventional resources you have numerous methods for estimating future production and EUR, such as analogy, volumetric, material balance, performance and simulation, with unconventional resources you really only have performance. This has important consequences.

Additionally, it was also explained that unconventional reserves booking is very different between Developed and Undeveloped Proved Reserves, providing references from SPEE Monograph 4 for the former, and discussing about the four "Tier 1" conditions you need to book the latter: hydrocarbons not held in place by hydrodynamic forces; a repeatable statistical variation; variability between offset wells; continuous regional hydrocarbon system.

The talk generated an interesting discussion around the table on items such definition of unconventional, role of adsorption, reserves booking for new fields, application of incremental deterministic booking to unconventional.

We tested for the second time remote attendance via skype for business; three attendees were connected remotely. The attempt was successful, communication issues had in the first meeting were mitigated and the sound on the remote side was better, even if there is still room for improvement, especially during the roundtable discussion.

The Europe Chapter is planning on holding one additional meeting (which will also be the Chapter's Annual General Meeting) on November 22nd.

Meetings - Four per year. Membership - 36

Houston

The Houston Chapter returned from summer break on September 5 with Dr. David Nordt, Managing Director of Engineering, PNC Corporate Bank, who spoke on *The Importance of an Oil & Gas Hedging Strategy and a Golf Analogy* from a bank engineer's perspective. This interesting topic took us on a journey through time of three companies with different hedging strategies. David also shared his early thoughts on hedging and the game of golf evolved from skeptic to believer.

At the October 3 luncheon, Former OGRC Member Delores "Dee" Hinkle's presentation was titled *Those Pesky Reserves Definitions: Why is it so Hard to Make Everyone Happy?* While reviewing the recently approved updates to the Petroleum Resource Management System, Dee looked at some of the more contentious issues around reserve and resource definitions, and the problems experienced in applying the definitions to day-to-day activities.

Elizabeth DeStephens, Vice President, California Resource Corporation presented at our November 7 luncheon on *Terminal Decline – When Does it Matter?* While we all agree that terminal decline is extremely important in the estimation of reserves, Elizabeth enlightened us the potential corporate implications of its effect on A&D/M&A asset valuations.

The final 2018 chapter luncheon meeting will be on December 4. Joshua J.A. Firestone, Petroleum Economist, Ryder Scott Company, will be speaking on Analytics in Unconventional Plays - A Multivariate Approach.

Meetings – 1st Wednesday of each month except June, July and August – Houston Petroleum Club. Membership – 175

Midland

Meetings – 2nd Wednesday odd months – Midland Petroleum Club. Membership - 24

Northern Rockies

On Thursday, December 13, the SPEE Northern Rockies Chapter, in conjunction with SPE and WGA, will present a technical program followed by lunch. The program will focus on NEVADA EOR Projects – Grant Canyon and Blackburn Fields and will be presented by Rod Prosceno and Eugene Wadleigh. The presentation will be video conferenced to select locations and membership in any of these organizations is not required to attend this meeting.

Rod Prosceno is currently a Managing Member for Grant Canyon Oil & Gas, LLC and Saddle Rim Energy (TX), LLC. Mr. Prosceno's current role is providing both management and engineering functions to the companies including direct management of field operations, engineering oversight of EOR reservoir processes, short term operational adjustments and long term development planning and financial team management.

Eugene Wadleigh is currently a Managing Member of Full-Spectrum Monitoring Inc (FSM), Grant Canyon Oil & Gas, LLC, and Saddle Rim Energy (TX), LLC. Mr. Wadleigh was instrumental in providing target selection for EOR projects presently operated by Grant Canyon.

Membership - 13

Oklahoma City

Meetings - Every odd-numbered month. Membership - 19

Tulsa

Meetings – Four times yearly - Summit Club. Membership – 21

THE ETHICS COLUMN

Always and Everywhere

Recently, I have been thinking about professional behavior. I think the recent election may have brought this to mind.

Another election is behind us, and I am thankful for that. Although I remain keenly interested in seeing democratic government develop policy and seek the common good, I seem to have less and less patience for politics any more. I hear rhetoric designed to inflame the passions (an insult, I think, to the intellect as well as violation of one of our Fundamental Canons). I see behaviors that might get a toddler sent home from daycare embraced and defended by the full range of political parties and ideologies. It has been this way as long as I can remember. In light of this, I thought I would offer a few thoughts about professional behavior on and off the job.



"Behavior is the mirror in which everyone shows their image." Johann Wolfgang von Goethe (writer and statesman, 1833).

Keeping with our political theme, do you know any politicians whose behavior shows an image that gives politics a good name? I hope you were able to answer "yes" to this question. I know I can. I would hazard a guess that we could name a significant number of politicians from both the left and the right who have behaved admirably. Why then, the negative stereotypes? Why is it that politicians just can't seem to catch a break? Time, space, and, frankly, a lack of knowledge prevent me from attempting an answer to this question, but will offer an observation. It only takes a few bad ones to tarnish the reputation of the entire profession, and sadly, tarnishing an opponent is a common weapon.

Their world and our world are nothing alike. But then again, their world and our world are not completely dissimilar. Do the actions of others taint us? I recall a conversation from a few years ago in which an oil and gas executive suggested that certain non-U.S. financial markets were simply not interested in U.S. oil and gas companies. They had been burned too many times in the past. Had bad behavior such as deliberately understating the risks involved played a part? Perhaps, but my point here is that the experience involving relatively few participants had tainted and perhaps limited access to finance for a great many more.

Code of Ethics of Engineers Fundamental Canon 6 states, "Engineers shall act in such a manner as to uphold and enhance the honor, integrity and dignity of the profession." This is important. This affects all of us, especially given the nature of our business. We often use a large statistical distribution of results to represent our expected outcome of the next few wells. The few wells will almost always deviate from the average, and in the event of disappointing results our reputation for honesty and hard work become critically important. Exemplary behavior by all who call themselves engineers or petroleum evaluators is absolutely essential.

Over the years, the Ethics Committee has followed several cases of ethical lapses that have appeared in the press. Charles Gleeson takes the lead for us in clipping and sharing these stories. So far, none have involved SPEE members. Predictably, the ones that gain the most press are the most egregious cases. I have yet to read in the press of a petroleum evaluator who worked long hours to produce an accurate report, although that is what we do. I haven't read of a single case of an engineer who was faced with an ethical dilemma and responded appropriately, although that, too, is what we do. I read of the ones who flaunt ethical considerations. And it seems the larger the lapse, the bigger the story. When these stories break, it is important that those who read them can reflect back on their association with any of us and say, "That's nothing like the oil and gas people I know."

My hope is that this column has almost nothing to do with you, at least not directly. Ethical behavior, on and off the job, applies to us all. Its ramifications affect us all. The whole idea of "right behavior" does not lend itself to compartmentalization. Suppose we were able to separate where and when we acted ethically or were able to adopt a range of ethical standards to which we hold ourselves based on different circumstances. Others would undoubtedly insist that ethical lapses in one area indicate likely lapses in another. Our behavior must always be beyond reproach.

Deacon Tom Collier Chair, SPEE Ethics Committee

SPEE Website News

For those of you unfamiliar with the world of the web, our website is created using a popular management system called Drupal. In combination with that, the back end of our website software for membership interaction management is called CiviCRM. Our website host will be upgrading their infrastructure and within that framework, will require a major upgrade in our CiviCRM version. This is scheduled to be done the last week of November. We do not foresee any downtime, but please let us know if you notice any issues with your use of the website membership area in functionality or readability in the weeks after the upgrade so that we may address it.

The update to the styling of our website is in process! We will be excited to unveil this new "look" in the coming year. Again, we would like to solicit any ideas on visual improvement or anything else that may have been bugging you about your SPEE website. Please submit these ideas or concerns to our group mailbox at info@spee.org. All suggestions will be highly appreciated!

Lastly, online membership dues payments for 2019 will go live on December 1st. A link to dues payments will always be available from the home page as well as from the Membership information page. A paper dues form will also be available if needed. You must be logged in to access the online membership dues form. Please remember to pay the dues associated with your membership level: General, Associate or Retired. If you are retired (you have concluded your professional career and are 65 years of age or over), please contact the SPEE office, Debbie at 832-972-7733 or debbie@spee.org, and she will change your membership status as such. An email reminder will be sent to all members on November 30th.

The address of the SPEE website is www.spee.org. If anyone has any website suggestions, comments or questions, please feel free to email us at our group inbox, info@spee.org.

Rhonda Gathers Your Internet Committee



We regret to note the passing of:

A. R. (Ron) Briggs Englewood, CO August 5, 2018



Dallas Chapter

Dordoni, Federico Member No. 958

Assistant Division Manager DeGolyer and MacNaughton 5001 Spring Valley Road, Suite 800 East Dallas, TX 75244 fdordoni@demac.com

Denver Chapter

Beam, Kyle Member No. 956

President
Oil and Gas Advisors LLC
909 Logan St.
Denver, CO 80203

Bormann, Stephanie

Financial Advisor Edward Jones 1606 S Hoyt St Lakewood, CO 80232 scbormann@gmail.com

Europe Chapter

Ward, Gavin Member No. 951

General Manager-UK RISC (UK) Limited Rex House, 4-12 Regent Street London SW1Y 4RF United Kingdom gavin.ward@riscadvisory.com

Member No. 957



The following member applicants have been processed by the Qualifications Committee. The by-laws require that names be presented to the membership for at least 30 days as a pre-membership requirement. Any member with an objection should address the objection to the Executive Committee (see by-laws regarding other important details) since the applications have already passed through the Qualifications Committee.

APPLICANT	SPONSOR	APPLICANT	SPONSOR
Becis, Adam Principal Engineer ERC Equipoise 50B Tras Street #03-02 Singapore 078989 Singapore	Simon McDonald Paul Chernik Paul Taylor	Hornbrook, John Senior Vice President DeGolyer and MacNaughton 5001 Spring Valley Road, Suite 800 Dallas, TX 75244	John Wallace Charles Boyette East Regnald Boles Joe Young
Caniggia, Matteo Principal Engineer ERC Equipoise Ltd. Stephenson House 2 Cherry Orchard Road Croydon, CR0 6BA	Simon McDonald Adam Law Paul Chernik	Kemshell, David Shell Oil Company Vice President, Resources Assuranc 1 Altens Farm Road Aberdeen AB12 3FY United Kingdom	Doug Connell e & Reporting Rod Sidle Farhad Ghassemi
United Kingdom Duran, Ernesto Senior Reserves Advisor Occidental Petroleum Corporation 5 Greenway Plaza, Suite 110 Houston, TX 77046	John Ritter Jennifer Fitzgerald Jorge Faz	Lawrence, Alex Maria (Associate) Shell Exploration & Production Con Country Resource Focal Point-Reser 150 N. Dairy Ashford Rd Houston, TX 77077 Nance, Melissa L. (Associate)	rvoir Engineer Charles Grimm Simon McDonald
Edie, Colin F. Senior Reserves Engineer Encana Corporation 500 Centre Street SE	Katherine Crerar Kevin Hanson Michael Verney	Reservoir Engineer EOG Resources Inc. 1111 Bagby, Sky Lobby 2 Houston, TX 77002	Dan DiLuzio Cheryl Collarini Mitch Reece
Calgary, Alberta T2G 1A6 Canada Froboese, Roland Project Engineer-Vice President DeGolyer and MacNaughton	Matthew Gross Regnald Boles	Pacholko, Jason Independent Consultant Senior Reservoir Engineer Calgary, Alberta Canada	Gary Metcalfe Floyd Williams Harry Helwerda
5001 Spring Valley Road, Suite 800 Dallas, TX 75244		Pignone, Thomas Staff Geologist	Jacob Walker
Fukushima, George F. Manager of Engineering Birchcliff Energy Suite 100, 600-3 Ave SW	Derek Longfield Nora Stewart Henry Helwerda	DeGolyer and MacNaughton 5001 Spring Valley Road, Suite 800 Dallas, TX 75244	Michael Eubanks East Ray Sulak Joe Young
Calgary, Alberta T2P 0G5 Canada Harmon, Mark Manager, Reservoir Engineering Devon Energy	Elizabeth Richards Ken Sigl	Wheeler, John Vice President Lee Keeling and Associates, Inc. 115 W. 3rd St., Suite 700 Tulsa, OK 74103	Russell Romoser Darrel Duvall Christina Hilton
333 W. Sheridan Ave.	Joe Young		

Oklahoma City, OK 73102