geoconvention

Calgary • Canada • May 15-19 2017

DELEGATE HANDBOOK

May 15 - 17, 2017

Calgary TELUS Convention Centre
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CSEG Canadian Society of Exploration Geophysicists

CSPG Canada's Energy Geoscientists

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Welcome to GeoConvention 2017

Six years ago, the theme of GeoConvention 2011 was Recovery and it might feel like we are emerging again from the next cycle in 2017. However, the transformation that our industry is experiencing, with the abundance of unconventional resources, the rising environmental constraints and the mutations of the world energy market, is profound and durable. In this rapidly changing environment, it is more crucial than ever to share ideas about technical innovations and business strategies, to help shaping our future.

GeoConvention 2017 is offering a very strong and diversified technical program, aiming at promoting multidisciplinary integration and collaborative approaches, for an even more efficient and responsible development of oil and gas resources.

From May 15-19 at the Telus Convention Centre, GeoConvention 2017 will be full of learning, networking and business opportunities with a packed exhibition floor, nearly 60 technical and panel sessions, keynote luncheons, fun events such as the Grizzly Den or the Challenge Bowl, and of course the CSPG Core Conference held in the world-class AER Core Research Centre of Calgary.

geoconvention partnership

On behalf of the GeoConvention Partnership, the partner societies CSPG, CSEG and CWLS, and the Organization Committee, we welcome all of you to join us from May 15-19 in Calgary!

Nanna Eliuk	Tristan Euzen	Gary Bugden
CSEG General Chair	*CSPG General Chair*	*CWLS General chair*

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For the most up-to-date information check out the mobile app

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www.tripbuildermedia.com/apps/gc365

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SCHEDULE AT A GLANCE

Calgary TELUS Convention Centre

MONDAY, May 15	TUESDAY, May 16	WEDNESDAY, May 17
Registration (7:00-5:00) Exhibition Foyer	**Registration** (7:00-5:00) Exhibition Foyer	**Registration** (7:00-3:00) Exhibition Foyer
Exhibit Floor Open (9:00-6:00)		**Exhibit Floor Open** (9:00-3:30)
Morning Technical Sessions (8:05-11:30) Glen and Telus Rooms		
Coffee with Exhibitors (9:00-10:15) Exhibit Floor **Poster Presentations** (9:30-10:15) Exhibit Floor		
Showcase Stage Monday and Tuesday (10:30-4:00) | Wednesday (10:30-2:30)		
Keynote Luncheon (11:30-1:00) Hyatt Imperial Ballroom	**Keynote Luncheon** (11:30-1:00) Exhibition Hall E	**Keynote Luncheon** (11:30-1:00) Exhibition Hall E
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	Grizzly Den (6:00-8:00) Exhibition Hall E	**Challenge Bowl** (5:00-7:15) Exhibition Hall E

MONDAY, MAY 15


MARK LACOUR AND JACOB CORLEY

Pulling Ahead in the Midst of Change

The Oil and Gas market is changing. What does this new world look like for the Oil and Gas industry? What do you need to do to remain competitive and how does your sales approach need to evolve to keep pace? What's going on with the digital land grab? Just like the old west, there is a land grab going on and you need to stake your claim before your competitors do. Join the hosts of "Oil and Gas This Week", the #1 podcast in Oil and Gas as they break it down and give you the answers.

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TUESDAY, MAY 16

JÜRGEN KRAUS

The Geology of Beer

Grab your **complimentary beer** and join us for this fun and informative luncheon!

Being safer than water, beer has been an important staple of health since the middle ages. For the producers, it has been recession proof as sales are inversely correlated to the oil price.

Two of the main historical factors of beer, water and natural refrigeration, are geological in that they rely on bedrock and faulting. Four anions are particularly responsible for a beer's characteristic taste: Ca, Mg, Na, and K.

Two regional case studies are presented that link beer to large-scale geological processes: (1) Laurentia (USA) and (2) the former passive continental margin of Laurussia (northern Europe). A generalized beer system from source to trap is introduced in analogy to petroleum. Finally, the role of beer in hydraulic fracturing and other geological applications is discussed.

It is concluded that there are presently no Friday evening alternatives to beer.

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WEDNESDAY, MAY 17

TOM FEUCHTWANGER

Chasing Adventure; Circumnavigating Africa Overland

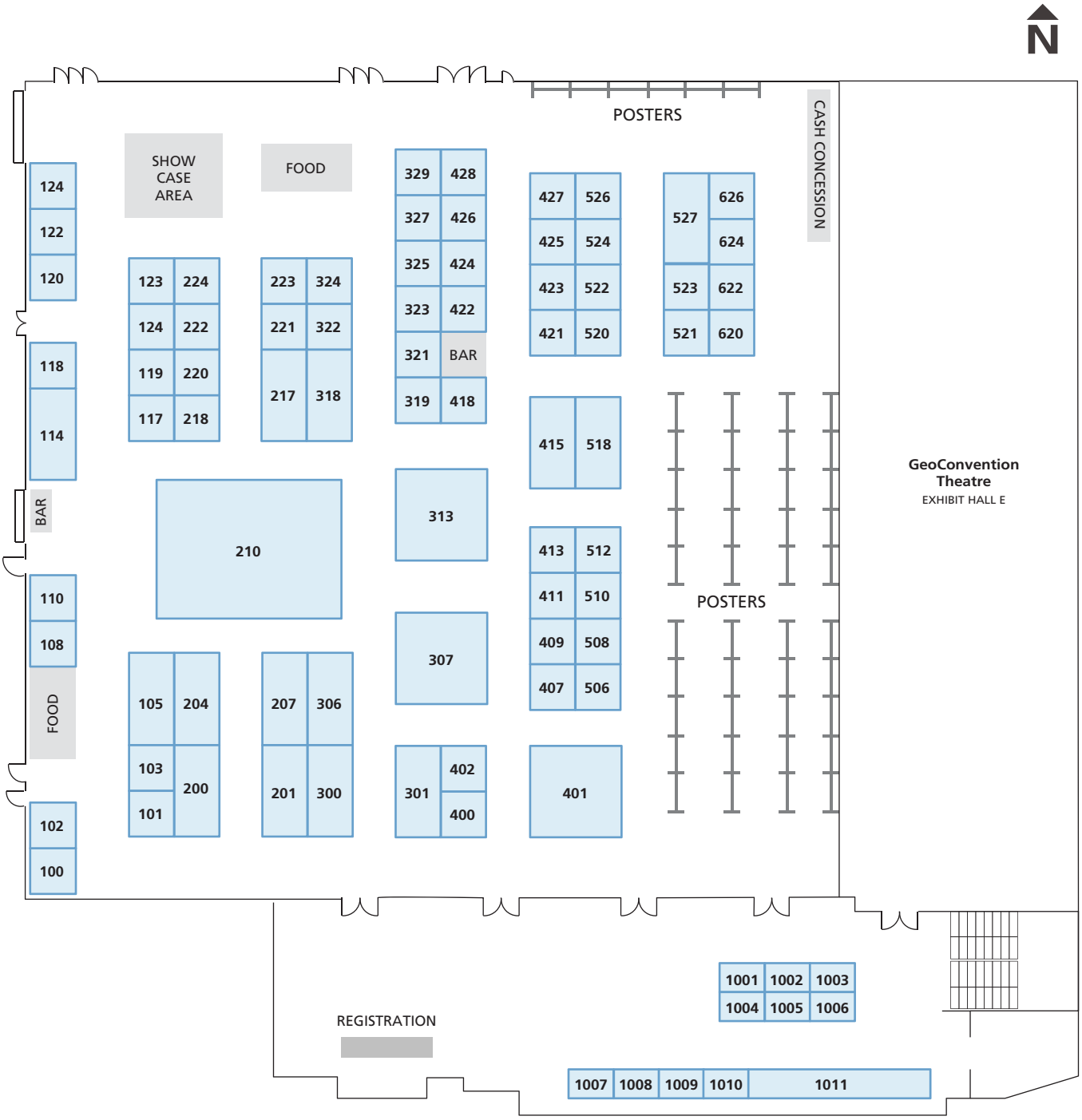
Thomas Feuchtwanger and his wife Janet set off alone in 2005 in a Land Cruiser to drive 85,000 kilometers around the continent of Africa. What they witnessed, who they met and what they discovered on this incredible journey both shocked and awed them. For over 500 days, venturing off the beaten track, they travelled through the world's second largest rainforest, crossed the Sahara, explored the African Rift Valley and witnessed savannas bursting with wildlife. They hiked the Virunga Volcanic Mountains in search of gorillas, camped alongside exploding lakes and experienced many diverse cultures, languages, customs and beliefs. They were welcomed into strangers homes and lives with unconditional generosity that they had never experienced before. There were exciting adventures, heart wrenching experiences and fascinating discoveries. This journey taught them to overcome their fears, to question their stereotypes and to work effectively as a team. It affected them deeply and changed them forever.

The presentation will give you new insights into the world's second largest continent which has 54 countries, over a billion inhabitants, more than 2000 spoken languages, and a tumultuous history. You will be inspired to go and see it with your own eyes. Tom will also briefly describe the recent East African hydrocarbon discoveries and will share some of the current challenges associated with developing them.

Exhibitor (listed in alphabetical order)

Partner and In-Kind Exhibitors

EXHIBIT HALL FLOOR PLAN



EXHIBITION HOURS

May 15th	May 16th	May 17th
MONDAY	**TUESDAY**	**WEDNESDAY**
9:00 AM – 6:00 PM	9:00 AM – 6:00 PM	9:00 AM – 3:30 PM

MONDAY MORNING

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	Quantitative Interpretation of 4D Seismic Monitoring Methods SESSION CHAIR(S): David Gray and Andrew Nicol	**Seismic Processing 1** SESSION CHAIR(S): Stewart Trickett and Rob Tilson	**Making maximum use of all of your data** SESSION CHAIR(S): Jean-Yves Chatelier and Damien Thenin	**Microseismic 1** SESSION CHAIR(S): Richard Pearcy and Barry Fish	**Western Canadian Petroleum Systems** SESSION CHAIR(S): Neil Watson and Tristan Euzen
8:05-8:15	INTRODUCTION				
8:15-8:40	**The seismic interpretability of a 4D data, a case study: The FRS project** Davood Nowroozi, Donald C. Lawton and Hassan Khaniani	**Case Example Showing the Effect of Prior 2D Interpolation on 5D ALFT Prestack Regularization** Muyi Kola-Ojo	**Estimating the Size and Value of the Duvernay Formation in Alberta for Risk-Based Decisions** Krista Beavis, Adam Preston, Omair Sadiq, Yangchen Sheka, Sean Stricker and Courtney Whibbs	**Finite-difference simulation of microseismic events associated with hydraulic-fracturing stimulation: Case study in a CBM reservoir** Germán Rodríguez-Pradilla and David W. Eaton	**Conventional Trapping in Unconventional Reservoirs; A Bakken Case Study** D.J. Cronkwright and P.K. Pedersen
8:40-9:05	**VSP azimuthal travel time analysis at the Field Research Station near Brooks, AB** Adriana J. Gordon Ferrebus, Don C. Lawton and David W. Eaton	**Five Dimensional Interpolation:exploring different Fourier operators** Daniel Trad	**Using traditional methods to predict pore pressure in Devonian Black Shale Basins of North East British Columbia** Sam Green, Shona Clarke, Chelsey Hillier, Rory Dunphy and David Thurston	**Testing the Reliability of Moment Tensor Inversion Using Surface and Borehole Monitoring** Thomas S. Eyre and Mirko van der Baan	**Deformation history in the southern Alberta foreland basin and petroleum system implications** Marian J. Warren and Mark Cooper
9:05-9:30	**Quantitative Interpretation of Time-Lapse Seismic for a SAGD Reservoir at Jackfish, Alberta** Glenn Larson and Carmen Dumitrescu	**Theory and Application of Vector Singular Spectrum Analysis (SSA) for Multicomponent Seismic data Reconstruction** Mauricio D. Sacchi, Jinkun Cheng and Scott Jenzen	**Pore Pressure Anomalies in the Horn River Basin, Northeastern BC** Ashlee Latimer, Maureen Hill and Jason Hendrick	**Differentiating Between Shear and Tensile Events Using Spectral Parameters** Megan Zecevic and David W. Eaton	**Estimation of Source-To-Sink Mass Balance by a Fulcrum Approach Using Channel Paleohydrologic Parameters of the Cretaceous Dunvegan Formation, Canada** Wen Lin and Janok Bhattacharya
9:30-10:15	COFFEE & POSTERS				
10:15-10:40	**Thermal Rock Physics Modelling of Shales** Jeremy Gallop and Glenn Larson	**Computing near-surface S-wave velocity models using converted-wave data** Raul Cova and Kris Innanen	**Comparing Montney and Duvernay chemostrat (XRF) data from different laboratories** Raphael A.J. Wust, Sam Tu, Albert Cui and Brent Nassichuk	**A twelve-parameter source model: Force, Moment and Torque** Scott Leaney and Chris Chapman	**Origin of sulfate in the Lower Triassic Montney tight gas play: late diagenetic processes and isotope signature** Mastaneh Haghnazar-Liseroudi, Omid H. Ardakani, Hamed Sanei, Per K. Pedersen and James M. Wood
10:40-11:05	**Identifying and Mapping Facies from Petrophysics to Geophysics** John V. Pendrel, Henk J. Schouten and Raphaël Bornard	**Incorporating reflection data into refraction statics solution** Bernie Law and Daniel Trad	**Data analytics – Finding black gold in big data** Yogi W. Schulz	**A comparision of subspace techniques with matched filtering and STA/LTA for detection of microseismic events: a case study** Ibinabo Bestmann and Mirko van der Baan	**Volumetric Method to Determine the Contribution of Monteney Sourced Hydrocarbons to the Doig and Montney Petroleum System** Wujun Feng, Zhuoheng Chen, Chunqing Jiang and Nicholas Harris
11:05-11:30	**A grid-search approach for 4D pressure-saturation discrimination** Hung Nho Dinh and Mirko van der Baan	**Least squares Kirchhoff depth migration with anti-aliasing and preconditioning** Landon Safron and Mauricio D. Sacchi	**Use of a Cloud-Based Geodatabase to Cost-Effectively Assess the Risk Posed by Aging Infrastructure** Jamie Wills	**Passive seismic source location using group sparsity constrained strained two-way waveform inversion** Wenlei Gao, Mauricio D. Sacchi and Zhenhua Li	**Petroleum systems analysis and reservoir characterization of Devonian shales in the Horn River and Liard Basins** Tessa Wilson and R. Marc Bustin

Telus 101-102	Telus 103	Telus 104-106	Telus 107	Telus 111
Optimizing Resource Recovery SESSION CHAIR(S): Tatyana Plaksina and Roman Shor	**Workplace Culture/Diversity** SESSION CHAIR(S): Alicia Bjarnason and Darrah Wolfe	**Geoscience Fundamentals 1** SESSION CHAIR(S): Bram Komaromi and Jon Noad SPONSORED BY: pulse seismic	**CREWES Research 1** SESSION CHAIR(S): Brian Russell and Michelle Montano Spagnolo	**Pipelines and Transportation** SESSION CHAIR(S): Cheibany Elemine
GIS-based Interpretation of Rock, Oil, Gas and PVT Data to Predict New Well Outcomes - Examples from the Montney, Doig, Second White Speckled Shale and Cardium Formations of the Western Canada Sedimentary Basin John B. Curtis, Stephen W. Brown, John E. Zumberge, Kevin A. Ferworn	**Community Partnerships: Promoting Employment for People with Developmental Disabilities** Wendy McDonald	**Implications of a U-Pb zircon study of Jurassic volcanic ashes, Western Canada Sedimentary Basin for stratigraphy, Cordilleran tectonics, and the International Chronostratigraphic Chart** Poulton P. Terence, Pan I. Dinu and Heaman M. Larry	**Evaluating the potential of reflection-based waveform inversion** Khalid Almuteri, Kris Innanen and Yu Geng	**Tenaris Part 1** TBD
Geologic influence on reservoir productivity in the Cardium Formation, Ferrier Oilfield, west-central Alberta, Canada Marco Venieri and Per Kent Pedersen	**Mental Health During the Downturn in Industry** Tara Sherstabetoff	**Depositional processes and environments of the Belle Fourche Formation, southern Alberta, Canada** Emma L. Percy and Per K. Pedersen	**Effects of discrepancies between modeled and true physics in anacoustic FWI** Scott D. Keating and Kristopher A. Innanen	**Utilizing Geophysical Methods to Optimize Pipeline Routing and Horizontal Directional Drilling** Paul Bauman, Douglas MacLean, Alastair McClymont and Dan Parker
Geosteering Workflow Considerations of How and Why? Alan Cull and Anand Gupta	**Conflict Myth Busters** Michelle Rose Phaneuf	**Dynamic sedimentation in the Late Albian, south-central Alberta and Saskatchewan** Matea Drljepan and A. Guy Plint	**FWI without tears: a forward modeling free gradient** Marcelo Guarido, Laurence R. Lines and Robert Ferguson	**Tenaris Part 2** TBD
The Upside Potential In Montney Completion Trends Morgan A. Kwan	**Disproportionly Unemployed: The Gendered Impact of the Economic Downturn on Geoscientists in Alberta** Rachael N. Pettigrew and Marian C. Hanna	**High Resolution Sequence Stratigraphy and Applications of Forward Stratigraphic Modelling; A Case Study from the Devonian Horn River Basin, BC, Canada** K. Ayranci, N. Harris and T. Dong	**To boldly go into a new dimension: 3D raypath interferometry issues** David C. Henley	**Acid Rock Drainage and Metal Leaching Assessment for Pipeline Projects - An Integrated Approach** Ould Elemine Cheibany, Farhadi Bahar, Soliman Sherif, Rizkalla Moness and Read Rod
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Hydraulic Fracture Stages Design Optimization in Shale Gas Reservoirs Using CMA-ES Algorithm Hamid Rahmanifard and Tatyana Plaksina	**Equity-Focused Leadership for the Oil and Gas Sector** Jake Stika	**Upper Cretaceous faulting within the Great Plains polygonal fault system** Andy St-Onge	**HTI anisotropy in heterogeneous elastic model and homogeneous equivalent model** Sitamai Ajiduah, Gary Margrave and Pat Daley	

MONDAY AFTERNOON

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1:25-1:50	**The Besa River Formation in Liard Basin, British Columbia** Filippo Ferri, Margot McMechan, Allan Chatenay, Richard Friedman and Robert Creaser	**Predicting oil sands viscosity from well logs, NMR logs, and calculated seismic properties** Eric A. Rops and Laurence R. Lines	**The Reconstruction of Paleo-Environment Albo-Aptian Sediments of the Massive El Hmaima North Tébessa North-Eastern Algeria** Diab Hamida	**How Do Seismic Event Sizes Scale in the Microseismic Range?** Megan Zecevic, Sarah Grant, David W. Eaton and Joern Davidsen	**An overview of the Western Canadian crude oil, natural gas and natural gas liquids markets.** Gerry Goobie
1:50-2:15		**Experimental study of a heavy oil carbonate under thermal recovery conditions: A case from the Grosmont Formation** Oliver N. Ong, Arif Rabbani, Douglas R. Schmitt, Randolf Kofman, Jason Nycz, and Ken Gray	**Provenance of the Peace River and Athabasca Oil Sands: Implications from Mineral Assemblages and Detrital Zircon Ages** Lynsey L. McKinnon, Ronald J. Spencer, Sytle M. Antao	**New microseismic technology for imaging complex hydraulic fracture geometries** Stepan Sergeevich Lavrinenko	
2:15-2:40	**Late Paleocene-Middle Eocene Source Rock Potential in the Arctic Beaufort-Mackenzie Basin** Lisa A. Neville David H. McNeil, Stephen E., Grasby, Hamed Sanei	**Interpretation of sonic logs in low-velocity hot oil sands** Ahmad Javanbakhti	**The stratigraphy, depositional environment, and geologic history of the Grimshaw gravel deposit, Peace River Lowlands, Alberta** Jessica M. Slomka and Gregory M.D. Hartman	**Estimating Primary and Secondary Production by Considering the Collective Behaviour of Microseismicty** Adam M. Baig, Ted Urbancic and Katie Bosman	**An overview of Pembina's infrastructure investments and plans for Western Canada** Jaret Sprott
2:40-3:00	COFFEE BREAK				
3:00-3:25	**Upper Ordovician reefs in the Hudson Bay Basin: Porosity evolution and hydrocarbon charge** Denis Lavoie, Ariane Castagner, Omid Haeri Ardakani and André Desrochers	**Modeling of Lithological Heterogeneity in Relation to the Rock's Physical Properties in a Heavy Oil Reservoir, NE Alberta** Latif Ibna-Hamid, Joan Embleton and Larry Lines	**Lithofacies properties, biostratigraphy, cyclicity and depositional environment of the Margala Hill Limestone, Hazara Basin, Northern Pakistan** Aman Ullah, Osman Salad Hersi and Sajjad Ahmed	**Topological Mapping of SMTI Derived Fractures to Identify Percolation** Ted Urbancic, Ellie Ardakani and Adam Baig	**A review of integrated field development planning from drilling through infrastructure construction to product marketing** John Kingsbury and Matt Tymchuk
3:25-3:50	**A conventional play in the Lower St. Lawrence River area (Québec, Canada): the silurian Sayabec Formation** Stéphanie Larmagnat, Alexandre Aubiès-Trouilh, Michel Malo and Jasmin Raymond	**Modeling of Lithological Heterogeneity in Relation to the Rock's Textural Properties in a Heavy Oil Reservoir, NE Alberta** Latif Ibna-Hamid and Larry Lines	**Genesis and depositional history of Late Jurassic back-bulge sandstone reservoir in southwestern Saskatchewan: The Roseray Formation** Osman Salad Hersi and Jason Bot	**A Comparison of DAS, Surface Patch, and Surface 3C Microseismic Data: A Case Study from the Eagle Ford** Dan Kahn and Barry Fish	**An overview of the infrastructure of a producing operator, operations and plans for Western Canada** TBA
3:50-4:15	**Petroleum Systems of the Sydney Basin, onshore and offshore Nova Scotia** Martin Fowler and Jamie Webb	**Duplex Wave Migration for 4D Monitoring of SAGD steam chambers – Athabasca Alberta** Art Siewert, Naum Marmalevskyi, Brian Link, Alex Kostyukevych and Ryan Schneider	**Influence of Sedimentary Paleoenvironment on Nano-pore Structure of Lacustrine Shale-Using a Quantitative Evaluation Method of Trace Elements and Low Temperature N2 Adsorption** Qilu Xu, Bo Liu, Jinze Xu and Zhangxin Chen	**Experiences in Deep Downhole Digital Micro-seismic Monitoring near 3 km at the PTRC Aquistore CO2 Sequestration Project** Chris G Nixon, Douglas R Schmitt, Randolf S. Kofman, Don White, Anna Stork, Michael Kendall and Kyle Worth	**Sayer's Perspective on the Current State of the A&D Market** Ben H. Rye, Sayer Energy Advisors
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Considerations for Efficient Water Wells and Cost Effective Groundwater Supply Projects Goetz K. Aust and W. Timothy Van Dijk	**The future of environmental geophysics in petroleum exploration** Joan Embleton and Larry Lines	**Caribou: The next Montney oil sweet-spot** Ian J. Cockerill	**Characterizing intrinsic and stratigraphic Q in VSP data with information measures** Siming Lv and Kris Innanen	**Full waveform inversion based on nonlinear gradient** Yu Geng and Kris Innanen
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10:00am 85
Exact solutions for reflection coefficients, in 2D
Heather K. Hardeman and Michael P. Lamoureux

10:05am 16
Offset dependent anisotropy analysis in vertically fracture reservoirs: A synthetic study
Sitamai W. Ajiduah, Gary F. Margrave and Pat F. Daley

10:05am 76
Application of Singular Spectrum Analysis for Ground Roll Attenuation
Alex Falkovskiy

10:05am 93
The Clues of Iron in the Border Algerian-Tunisian: Geology, Geochemistry, Mineralogy and Structural Aspects
Hamida Diab and Abdelmadjid Chouabbi

TUESDAY MORNING

	Glen 201-202	Glen 203-204	Glen 205	Glen 206	Glen 208-209
	Montney Reservoir Characterization SESSION CHAIR(S): Sheng Yang and Ryan Day SPONSORED BY: pulse seismic	**Getting More from Your Data** SESSION CHAIR(S): Aaron Stanton and Helen Isaac	**Global Carbon Capture, Storage, Utilization and Monitoring 1** SESSION CHAIR(S): Luc Rock and Kirk Osadetz	**Canadian Society for Unconventional Resources** SESSION CHAIR(S): Dan Allan and Jim Reimer SPONSORED BY: CSUR	**Fundamentals of Professional Career Branding** SESSION CHAIR(S): Jackie Rafter SPONSORED BY: HIGHER LANDING A Career Transformation Company
8:05-8:15	INTRODUCTION				
8:15-8:40	**A comparison study of existing and new mineralogical, (geo) mechanical, and petrophysical brittleness indices of the Alberta Montney and their applicability for optimizing well stimulations** Albert Cui, Raphael Wust and Brent Nassichuk	**Improved resolution in depth imaging through reflection static corrections derived from model-based moveout** Dennis Ellison, Greg Cameron and Kris Innanen	**Current Status of Carbon Capture and Storage: challenges and future prospects** James Craig	**Unconventional Geomechanics & Geomodelling** Chris Hawkes	**Preparing North America's Geoscience Professionals for the Future of Work** HALF DAY WORKSHOP PART 1 Here's the bottom line: North America's energy sector is in the midst of a paradigm shift. Career management has changed. Job search has changed. Forever. To thrive in 2017, you MUST know how to communicate your value in a way that truly separates you from the pack.
8:40-9:05	**Is the Montney Formation a Geomechanical Hybrid Sandstone-Shale Reservoir?** Vaisblat Noga, Korhan Ayranci and Nicholas B. Harris	**Seismic data reconstruction via fast and memory efficient Singular Spectrum Analysis** Jinkun Cheng and Mauricio D. Sacchi	**Industrial-scale CCS in Norway: experience gained and application to future projects** Britta Paasch, Philip Ringrose, Anne-Kari Furre, Peter Zweigel, Bamshad Nazarian, Rune Thorsen, Per Ivar Karstad	**Seismic and Rock Properties** Jeremy Gallop	
9:05-9:30	**Seismic investigation of lithological controls on effective stress** David Cho, Evan Mutual, David McHarg, David Miller and Lindsay Miller	**Considerations for effective rank based noise attenuation** Aaron Stanton and Jeff Deere	**Illinois Industrial Carbon Capture and Storage Project: Eliminating CO2 Emissions from the Production of Bio Fuels – A 'Green' Carbon Process** Scott McDonald	**Using Geoscience to Optimize completions in the Montney Formation, N.E British Columbia** Bogdan Batlai, Graham Janega and John Nieto	
9:30-10:15	COFFEE & POSTERS				
10:15-10:40	**Geomechanical Characterization of a Montney Equivalent Outcrop** Scott McKean, Mason MacKay and Jeffrey Priest	**Processing ground roll for the study of near-surface Rayleigh wave dispersion** Andrew Mills and Kris Innanen	**Overview of Shell CCS projects** Simon O'Brien	**Seismic Method to Mapping Geomechanical Properties** Marco Perez	**Preparing North America's Geoscience Professionals for the Future of Work** HALF DAY WORKSHOP PART 2 If you don't know what makes you exceptional, how can anyone else? This important workshop is your essential first step to prepare yourself to LAND HIGHER. Know who you really are and learn how to effectively brand yourself and articulate your value proposition. Find out how to start building your brand by knowing, believing and sharing what makes you extraordinary and learn the secrets of standing out to strategic prospects.
10:40-11:05	**Diagenesis of quartz, feldspar, and dolomite in the Montney Formation – implications for particle size analysis and rock properties** Raphael A.J. Wust and Brent Nassichuk	**Iterative modelling, migration and inversion (IMMI): the role of well calibration in the context of high geological complexity** Sergio Romahn and Kristopher Innanen	**Opportunities and Challenges for the use of Improved and Enhanced Conventional Petroleum Recovery in GHG mitigation strategies** Kirk G. Osadetz, Donald C. Lawton, Amin Saeedfar, Michael Pastula, Brain Borglum and Matthew Woofter	**3D Hydraulic Fracture and Production Simulation for Improved Completion Design** Steve Rogers	
11:05-11:30	**X-Ray Fluorescence and Spectral Image Core Analyses in the Montney Formation** Thomas Weedmark, Ronald Spencer and Justin Besplug	**5D reconstruction via robust tensor completion** Mauricio D. Sacchi and Jinkun Cheng	**Value Added Usage of Anthropogenic Carbon Dioxide in Oilfield Operations – New Applications in Unconventional Reservoirs** Murray M. Reynolds	**Emerging Technologies** Subhayan Guha Thakurta	

Telus 101-102	Telus 103	Telus 104-106	Telus 107	Telus 111
International Case Studies 1 SESSION CHAIR(S): Kathleen Dorey and Gary Paukert SPONSORED BY: CGEA	**On the Offensive – Strategic Staffing for a Thriving Post-Recovery** SESSION CHAIR(S): Candice Menger and Jenny Cruickshank SPONSORED BY: Schulich School of Engineering	**Induced Seismicity 1** SESSION CHAIR(S): Jonathan Winsor and John Evans	**Emerging Technologies** SESSION CHAIR(S): Patricia Gavotti and Kenneth D'Silva	**From Characterization to Dynamic Modeling of Unconventional Reservoirs** SESSION CHAIR(S): Chris Clarkson and Matthieu Delorme
Combined High Resolution Aeromagnetic and Radiometric Mapping of Uranium Mineralization and Tectonic Settings in Northeastern Nigeria H. A. Falade and A.A. Adepelumi	**Panel Discussion 1 – Tough Decisions, Now Proactive Strategies** The oil and gas market is finally stabilizing, and now organizations must overcome the consequences of decisions made as part of this and downturns before as they look to increase output and once again grow profits. While the cyclical nature of oil and gas poses a continual challenge, there is a key role for student programs to play within recovery staffing strategies. PANELISTS: Breanne O'Reilly, PetroLMI | ENFORM, Communications Advisor Jessica Forgeron, Husky Energy Inc., Recruitment Advisor Roby Mussi, PhD (Geology), Chevron Canada Ltd., HR Advisor – Recruitment Nicole-Marie Stordy, Repsol Oil & Gas Canada Inc., Talent Acquisition Specialist	**How wide spread is induced seismicity in the USA and Canada?** Mirko van der Baan and Frank Calixto	**Imaging of Micro-Scale Wettability and Fluid Distribution in Unconventional Light Oil Reservoirs** Christopher R. Clarkson, Hanford J. Deglint, Chris DeBuhr and Amin Ghanizadeh	**Transient Matrix-Fracture Flow Modeling for the Numerical Simulation of the Production of Unconventional Plays using Discrete and Deformable Fracture Network Model** O.M. Ricois, J. Gratien, D. Bossie-Codreanu and N. Khvoenkova
Seismic reservoir characterization of Utica-Point Pleasant shale – a case study Satinder Chopra, Ritesh Kumar Sharma, Hossein Nemati and James Keay		**Exploring the Public and Political Interest in Induced Seismicity** Chris Montgomery	**New insights on the age-old debate: understanding saturation and porosity measurements in unconventional reservoirs** Brent R. Nassichuk, Cory Twemlow, Albert Cui and Raphael Wust	**Petrological Controls on Reservoir Performance in Unconventional Light Oil/ Gas Plays: Three-Dimensional Insights from Bakken Formation, Southeastern Saskatchewan, Canada** Sochi Chiwuike Iwuoha and Per Kent Pedersen
Modeling noise in five dimensions: A case study from Sarukawa oil field in Japan Dmitri Skorinski, Markos T. S. Sourial and Kimiaki Ochi		**Effectiveness of the Traffic Light Protocol (TLP) for Induced Seismicity and its Implications to Shale Gas Regulation in British Columbia and Alberta, Canada** Honn Kao	**SYZYGY-energy from oilfields without any of the carbon. Potential routes to electrical power generation at scale from oil fields** Steve Larter, Marc Strous and Steven Bryant	**Improved Data Characterization and Integration for better Hydraulic Fracturing Design Prediction** Matthieu Delorme, Dan Bossie-Codreanu and Nina Khvoenkova
13C stratigraphy of the middle and upper units of the Visings Group, Sweden Katherine D Paukert and Carol M Dehler	**Panel Discussion 2 – Maximizing Value** This panel will bring together labor market and human resource experts to discuss the current challenges, as well as the various student programs available and how to determine which is best aligned with your company's needs. Employer value is at the core of every student program, and long-time industry partners have developed best practices that maximize this value. Tactics specific to role and/or project definition, streamlined recruitment, team integration, and performance feedback are instrumental in capitalizing on the full value a student brings. This panel will bring together technical managers and human resource professionals to share their experiences and succeeding recommendations. PANELISTS: Scott Quinell, Senior Reservoir Engineer, GLJ Petroleum Consultants Jeff Soderberg, Canadian Energy Services, Research and Development Manager Josée Arpin, Schulich School of Engineering, Internship Alumnae	**An Investigation on the Effects of Different Stress Regimes on the Magnitude Distribution of Induced Seismic Events** Afshin Amini and Erik Eberhardt	**Advances in the Realm of Exploration Geophysics: The Emerging Role of Quantum Geoelectrophysics in Exploration for Hydrocarbons, Minerals and Water** Gerald J. Gurba and Richard Hatala	**Improved Data Characterization and Integration for better Hydraulic Fracturing Design Prediction (con't)** Matthieu Delorme, Dan Bossie-Codreanu and Nina Khvoenkova
Geophysics: Creating Economic Independence in Southeast Asia Kathleen Dorey		**Possible Role of Progressive Aseismic In-Zone Failures in Generating Out-of-Zone Induced Seismicty** Mehrdad Soltanzadeh and Neil Watson	**Can Geophysical Processing Improve Medical Imaging Applications?** Julie A. Aitken, Elise Fear and Andrea Protzner	**Use of Drill Cuttings and Flowback Fluid Compositions to Constrain Connected Fracture Height Growth in Low-Permeability Reservoirs** C.R. Clarkson, S.M. Ghaderi, M.S. Kanfar and C.S. Iwuoha
Patos Marinza Oilfield, Albania: "Not Dead Yet" Terry B. Zwicker		**Seismic reservoir characterization of Duvernay shale with quantitative interpretation and induced seismicity considerations – a case study** Satinder Chopra, Ritesh Kumar Sharma, Mohammad Nemati, Ray Morin, Brian Schulte and David D'Amico	**UAVs/Drones Are Taking Off & Growing Exponentially: Understanding Basics Leading to Incredible Opportunity** David Willett	**A Comparison of Dynamic and Static Geomechanical Properties of the Montney Formation: An integrated Experimental Study** N. Riazi, S. McKean, A. Ghanizadeh, C.R. Clarkson, J. Priest, R.C.K Wong, A. Vahedian

TUESDAY AFTERNOON

	Glen 201-202	Glen 203-204	Glen 205	Glen 206	Glen 208-209
	Canada Frontier Basins 2 SESSION CHAIR(S): Fil Ferri and Stuart Tye	**Organic Geochemistry** SESSION CHAIR(S): Maria Romero-Sarmiento and Dan Jarvie	**Global Carbon Capture, Storage, Utilization and Monitoring 2** SESSION CHAIR(S): Luc Rock and Kirk Osadetz	**Best of SPE Papers Presented at the SPE Co-located Conferences** SESSION CHAIR(S): Mohammad Islam, Claudio Virues, Sahar Ghannadi and Vahid Mostafavi SPONSORED BY:	**The Future of the Oil and Gas Industry in Canada: Needs for New Business Strategies and Technological Innovation** SESSION CHAIR(S): Jean-Michel Gires
1:15-1:25	INTRODUCTION				
1:25 - 1:50	**Saglek Basin Macro- and Micro-Hydrocarbon Seeps – New Evidence, Reinterpretation, and Emerging Exploration Tools** Milovan Fustic, Barbara Neves, Rachelle Dove, Martin Fowler, Andy Mort, Anirban Chakraborty, Emily Ellefson, Erin Herder, Vonda Wareham, Suzanne Dufour, Evan Edinger and	**Estimation of Oil and Gas Volumes in Unconventional Systems: Mass Balances and Kinetic Modeling** Dr Françoise Behar	**Monitoring technology innovation at the CaMI Field Research Station, Brooks, Alberta** Don C. Lawton, Kirk G. Osadetz and Amin Saeedfar	**Multivariate Analysis Using Advanced Probabilistic Techniques for Completion Design Optimization** Bertrand Groulx, J. Gouveia and D. Chenery	**What is Innovation? Why is Innovation becoming more important today than before?** Jean-Michel Gires and Thomas Feuchtwanger
1:50-2:15	**Evaluating Undrilled Structural Plays Imaged in New Data from the Labrador Sea Using Structural Forward Models** Nathan Eichelberger, Roberta Masotti, Duncan Bate, Ian McGregor and Alan Nunns	**Estimating Oil Thermal Maturity from Biomarkers and Alkyl Aromatics** John Zumberge, Don Rocher and Craig Barrie	**Noble Gases as a Tracer of Subsurface Processes at CMC Research Institutes Field Research Station** Nicholas Utting, Dave Ryan, Stuart Gilfillan and Tom Darrah	**A Novel Approach to History Matching and Optimization of Shale Completions and EUR - a Case study of Eagle Ford Well** Estelle Rebel, Vivek Swami, Antonin Settari, Raki Sahai, Dan Costello and Ashley Mercer	**Where does new Innovation come from? Illustrations** Stuart Kinnear and Grant Sanden and Heather Herring
2:15-2:40	**Structural Restoration and 2D Basin Modeling in Western Newfoundland** Martin Schwangler, Nicholas B. Harris, John F. Waldron	**The Interplay of Source, Seal and Charge Loss in Unconventional Plays: An Example from the Mowry Petroleum System of the Powder River Basin, Wyoming.** David Thul and David Campagna	**Capillary limited flow behaviour for subsurface CO2 injection at the CMC Field Research Station** Samuel Krevor and Olivia Sloan	**Waterflooding a Multi-Layered Tight Oil Reservoir Developed with Hydraulically Fractured Horizontal Wells** Richard Baker	**Question and Answer Period**
2:40-3:00	COFFEE BREAK				
3:00-3:25	**Facies-dependent AVO prediction: a Rock Physics framework for prospect de-risking in the Flemish Pass and Orphan Basins** Nick Huntbatch, Alsing Selnes, Neil Whitfield, Ian Atkinson, Richard Wright, Deric Cameron and Dave McCallum	**Geochemical, Structural, and Mineralogical Controls of the Duvernay Shale Thermal Maturity** Jean-Yves Chatellier, Amjed Cheema and Jamil Afzal	**Demonstration of Secure CO2 Geological Storage in the PCOR Partnership Region** Neil Wildgust, Charles Gorecki, Scott Ayash, Wesley Peck, John Hamling, James Sorensen, Daniel Daly, Melanie Jensen, Ryan Klapperich, Loreal Heebink, Lawrence Pekot, Edward Steadman, John Harju	**SAGD Sand Control: Large Scale Testing Results** Mark Anderson	3:00 - 3:40: **How does innovation progress from Concept to commerciality? What is the reality of the innovation ecosystem?** Ralph Fraile, Stuart Kinnear, Grant Sandem, and Jean-Michel Gires
3:25-3:50	**Basin-margin reactivation due to episodic rifting in Jeanne d'Arc Basin: experimental models and outcrop analogs** Iain K. Sinclair, Craig Bateman, Martha O. Withjack, Mattathias Needle, Roy W. Schlische, Caroline McIlroy and Nadine Emberley	**The Montney Oil-Window of Alberta: Making sense of sources and migration in an organic-lean low permeability reservoir** Geoff R. MacDonald	**Integrated monitoring systems at the PTRC's Aquistore field laboratory: More than just a CO2 storage project** Erik H. Nickel, Kyle Worth, Rick Chalaturnyk, Kevin Dodds, Chris Hawkes, Ben Rostron, James Sorensen and Don White	**In-Situ Catalytic Aquathermolysis Combined with Geomechanical Dilation to Enhance Thermal Heavy Oil Production** Bin Xu	3:40 - 3:50: **Question and Answer Period**
3:50-4:15	**Way out there – application of recent marine processing technology to legacy data from the South Labrador Sea** Josef Heim, Derek Lemonson, Eugen Besoiu, and Hanieh Shahrokhi	**Paleo-migration of crude oil into Montney siltstone; its thermal evolution and effects on reservoir quality** Hamed Sanei, James Wood, Omid Ardakani and Chris Clarkson	**Quest CCS project's MMV program: overview and 1st year review post start of injection** Luc Rock	**Cenovus Grand Rapids SAGD Pilot - ICD Field Trial and Analysis** Krystal Drover, Dragani Jarrett and Zhang Xin	3:50 - 4:20: **What does mean, and how is it potentially transformative for the oil & gas industry?** Ralph Fraile, Heather Herring, Thomas Feuchtwanger
4:15-4:40					4:20 - 4:40: **Question and Answer Period** All Panelists

Telus 101-102	Telus 103	Telus 104-106	Telus 111
International Case Studies 2 SESSION CHAIR(S): Andreas Cordsen and Allan Chatenay	**Petrophysical Fundamentals and Pitfalls 1** SESSION CHAIR(S): Bob Everett and Brianna Saxton	**Induced Seismicity 2** SESSION CHAIR(S): Jonathan Winsor and John Evans	**Seismic Inversion 2** SESSION CHAIR(S): Haitham Hamid and Carl Reine
The unique seismic processing and imaging experience with fascinating data from Onshore Trinidad Svetlana Bidikhova and Mike Hall	**Porosity variations in the Upper Ordovician Utica Shale, southern Quebec, Canada** Omid H. Ardakani, Hamed Sanei, Amin Ghanizadeh, Denis Lavoie, Zhuoheng Chen,Christopher R. Clarkson	**Geomechanical Analysis of Hydraulic Fracturing Induced Seismicity at Duvernay Field in Western Canadian Sedimentary Basin** Suvrat P. Lele, Timothy Tyrrell, Ganeswara R. Dasari and William A. Symington	**Facies Classifications for Seismic Inversion** Jeremy Gallop
The Cretaceous System of the Al-Mado Basin, northeastern Somalia (Puntland State): a promising frontier basin akin to the petroleum-rich basins of the Arabian Peninsula Osman Salad Hersi	**Log Analysis of Mannville Lithic Reservoirs – An Innovative Approach** Fred Hyland and Bob Everett	**An Analytical Approach to Hydraulic Fracturing and Induced Seismicity Monitoring** John L. J. Duhault	**Quantitative interpretation via more robust low frequency models** Ritesh Kumar Sharma and Satinder Chopra
Clarinete gas field, Lower Magdalena Valley Basin, Colombia- a significant discovery in an established hydrocarbon province Andrew Willis, Luz Rodriguez, Nilanjan Ganguly, Steve Hiebert, Sean Johnston, Ken Umbach, Mark Teare, Aurora Juan and Rafael Guatame	**Reconcile Log-Derived and Core Water-Saturation, using Nuclear Magnetic Resonance for lost-from-core Free-Hydrocarbon Porosity** Robert V. Everett, James R. Everett, Noga Vaisblatt, Fred Hyland, Herman Vacca, Eric Rops and Kris Vickerman	**A Method to Assess Potential Induced Seismicity Hazard With Application to the Duvernay** Virginie Lavoie, Steve Willson, Jessa Lee, Greg Purdue and David Dempsey	**Inverted Density Estimates – Interpretation Elegance in High Fidelity** Fred Peterson
The Manyberries Astrobleme: A Complete Geophysical Analysis Amanda K. Obodovsky	**Random forests on the Atlantic margin: lithology prediction from wireline logs** Matt Hall, Diego Castañeda, Evan Bianco, and Jason Moore	**An Update to the Induced Seismicity Story in the Duvernay** Earl Galan, Daniel Ciulavu, Mat Fay, Ali Azad and Gennaro Esposito	**Bayesian Markov Chain Monte Carlo inversion for fluid term and dry fracture weaknesses** Huaizhen Chen and Kris Innanen
A Comparison between the Exploration plays of western Iran and Iraq, and implications for their remaining exploration potential Jon J Noad	**Gamma Ray Derivative Logs: An Innovative Method to Display Basin Cross-Sections Using Hundreds of Wells** Michael J. Ranger	**Microseismic Geomechanical Investigation of the Impact of Fracturing Fluid Viscosity on Seismic Hazard** Shawn C. Maxwell, Melanie Grob and Murray Reynolds	**The signature of attenuation and anisotropy on AVO and inversion sensitivities** Shahpoor Moradi and Kristopher Innanen
Always finding faults: New Zealand 2016 Kevin W. Hall, Helen Isaac, Malcolm Bertram, Kevin Bertram, Don Lawton, Alexis Constantinou, Doug Schmitt, Randy Kofman, Jennifer Eccles, Vera Lay, Stefan Buske, John Townend, Martha Savage, Andrew Gorman and Richard Kellett	**Calculating Formation Water Resistivity from The Spontaneous Potential – Obtaining the Right Result** Robert V. Everett, Mike Berhane, James R. Everett, Noga Vaisblatt, Fred Hyland, Herman Vacca and Eric Rops	**Event origin depth uncertainty - estimation and mitigation using waveform similarity** Anton Biryukov, Evgeny Chzen, Jan Dettmer, David Eaton	**Least squares Kirchhoff depth migration: important details** Daniel Trad
		Site Amplification Factor in Fox Creek area Gennaro Esposito, Earl Galan and Daniel Ciulavu	**Improving efficiency of first-arrival traveltime tomography by stochastic optimization** Mengyao Sun, Mauricio D. Sacchi and Jie Zhang

TUESDAY POSTERS SPONSORED BY:

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9:30am 23
Testing the Reliability of Moment Tensor Inversion Using Surface and Borehole Monitoring
Thomas S. Eyre and Mirko van der Baan

9:30am 35
Discussion about major and trace Elements behavior with a view to mineralogy in the coal mine Pabdana, East South Central Iran
Loghman Shirzadi and Jamal Rasouli

9:30am 41
Application of Integrated Interpretation, Modeling and Structural Restoration Workflow for an Extensional Basin Interpretation
Raza A. Siddiqui, Fenglin Xia, Robert Chelak and Hanyang Liu

9:30am 53
Assessment of the detectability of localized strong attenuation zones through finite-difference waveform modelling
Hongyuan Zhou, Olga Kovaleva, Sheng Ye, Dong Shi, Qi Zhao and Giovanni Grasselli

9:30am 87
The Reconstruction of Paleo-Environment Albo-Aptian Sediments of the Massive El Hmaima North Tébessa North-Eastern Algeria
Diab Hamida

9:35am 2
Carbon Isotope Analysis of Oil Samples from the Utsira High Area in Norway
Tianxin Jiang

9:35am 14
Estimation of Source-To-Sink Mass Balance by a Fulcrum Approach Using Channel Paleohydrologic Parameters of the Cretaceous Dunvegan Formation, Canada
Wen Lin and Janok P.Bhattacharya

9:35am 62
Detailed Facies Analysis and Sequence Stratigraphy of Potential Lacustrine Source Rocks, Greymouth Basin, New Zealand
Mrinmoy Kumar Maitra and Kari N. Bassett

9:35am 80
Palaeodepositional environment of the Bakken shales of Saskatchewan: insights from biomarker study
Titi Aderoju and Stephen Bend

9:40am 11
Integrated Methodology to Reduce Uncertainties in Selection of Frac Zones in Source Rocks
Reda Tawfik

9:40am 29
VSP azimuthal travel time analysis at the Field Research Station near Brooks, AB
Adriana J. Gordon Ferrebus, Don C. Lawton and David W. Eaton

9:40am 47
Probabilistic and Play-Based Approach to Reserves Evaluation for Alberta's Oil Sands Areas
Ysabel Nava, Tim Mack, Steve Lyster and Fran Hein

9:40am 89
Potential Health and Environmental Effects of Trace Elements in Karapinar (Turkey) Coals
Neslihan Unal, Selin Hokerek, Orhan Ozcelik, Mehmet Altunsoy

9:45am 20
How Do Seismic Event Sizes Scale in the Microseismic Range?
Megan Zecevic, Sarah Grant, David W. Eaton and Joern Davidsen

9:45am 38
An evaluation of the role of land use in soil erosion using 137Cs inventory and soil organic carbon stock, in a mountainous catchment of western Iran
Loghman Shirzadi,Jamal Rasouli and Kazem Nosrati

9:45am 90
Unsupervised Pixel Based Change Detection Technique from Color Image
Hassan E. Elhifnawy

9:50am 5
Measurement of Ground Vibration Generated in Limestone Blasting in Edo State Using Rectangular Drilled Pattern
Taiwo M. Edo, Christopher Aigbogun and Aigbe Ogunbor

9:50am 65
Correlating lithologic properties such as porosity and density derived from logs with seismically derived porosity, density and stiffness volumes of a channel reservoir
John R. Fernando

9:50am 71
Geologic influence on reservoir productivity in the Cardium Formation, Ferrier Oilfield, west-central Alberta, Canada
Marco Venieri and Per Kent Pedersen

9:50am 83
Lithologic and biostratigraphic properties of the Paleocene Lockhart Formation, Hazara and Potwar basins, northeast Pakistan: preliminary results
Ahmad Khan, Osman Salad Hersi and Sajjad Ahmed

9:55am 32
A model for porosity evolution in shale reservoirs- an example from the Upper Devonian Duvernay Formation, Western Canada Sedimentary Basin
Tian Donga, Nicholas B. Harrisa, Julia M. McMillana, Cory E. Twemlowb and Brent R. Nassichukb

9:55am 44
The use Time Domain Electromagnetic for delimiting saline water in a Quaternary deposit
Andres Gonzales Amaya

9:55am 84
Late Paleocene-Middle Eocene Source Rock Potential in the Arctic Beaufort-Mackenzie Basin
Lisa A. Neville, David H. McNeil, Stephen E., Grasby and Hamed Sanei

10:00am 17
Petrophysical Characteristics of Post-2000 Significant Discovery Wells in the Beaufort-Mackenzie Basin
Kezhen Hu, Zhuoheng Chen, and Dale Issler

10:00am 26
Differentiating Between Shear and Tensile Events Using Spectral Parameters
Megan Zecevic and David W. Eaton

10:00am 59
A quantitative model using geophysics logging data to predict gas production in coalbed methane wells: a case study in Shizhuangnan Block, northern China
Xiaohan Wei and Jianmeng Sun

10:00am 77
Research Progress on Nonlinear Flow of Heavy Oil in Porous Media
Xiankang Xin and Yiqiang Li

10:05am 8
Diagenesis of the Permian Ecca Sandstones and Mudstones, in the Eastern Cape Province, South Africa: Implications for the Shale Gas Potential of the Karoo Basin
Christopher Baiyegunhi and Kiuwu Liu

10:05am 50
Effect of Beam Skew on Pressurized Pulse Transmission Velocity Measurements in Tilted Transversely Isotropic Media
Wei Li, Xiwei Chen, Changchun Zou and Douglas R. Schmitt

10:05am 68
Disequilibria in the Uranium Decay Series During Weathering of Organic-rich Shale: Implications for Radon Generation
Ron Spencer, Danica Pawson, Heather Wright, Cole Lord and Michael Weiser

10:05am 86
Data analytics – Finding black gold in big data
Yogi W. Schulz

WEDNESDAY MORNING

	Glen 201-202	Glen 203-204	Glen 205	Glen 206	Glen 208-209
	Oilsands and Integrated Oilsands Case Studies SESSION CHAIR(S): Mark Caplan and Robert Gardner	**Seismic Processing 2** SESSION CHAIR(S): Raul Cova and Dave Henley	**Unconventional Geomechanics 1** SESSION CHAIR(S): Amy Fox and Dustin Bauer	**Revisiting and Extension of Mature Plays** SESSION CHAIR(S): Janelle Irvine-Springer and Carolyn Currie	**The Modern Geoscientist Panel** SESSION CHAIR(S): Emily Duncan Follow us on Twitter: @CSEGCSPGModernGeo
8:05-8:15	INTRODUCTION				
8:15-8:40	**Distribution and characterisation of a large-scale McMurray Formation sand fairway, Athabasca Oil Sands Region, Alberta** Harrison K. Martin, Cynthia Hagstrom, Sean Horner and Stephen M. Hubbard	**Wavelet processing of land data: current state-of-the-art and outstanding challenges** Mike Perz, Xinxiang Li and Peter Cary	**Acoustic Emission Geomechanics and Seismic Energy Budgets of Laboratory Hydraulic Fracturing** Shawn C. Maxwell, Sebastian Goodfellow and R. Paul Young	**That's Not a Train, It's Daylight!** Meridee J. Fockler and Ben McKenzie	**In today's economic environment, what does it mean to be a 'Modern Geoscientist' in Canada?** Panel members will discuss the Modern Geoscientist from their points of view: the financial sector; academia; and the oil and gas industry-from three perspectives: one from a small, private service company, another from a mid-size, national company and yet another from a large, international corporation. Topics will include a Modern Geoscientist's role, challenges, opportunities, career paths etc. in each of these areas. PANEL MEMBERS INCLUDE CHAIR: Emily Duncan, P.Geoph; BSc (Geophysics); Staff Geophysicist, Suncor Energy PANELISTS: Laurie Bellman, P. Geoph., B. Sc. (Physics/Astronomy), President, Sound QI Solutions Ltd David Gray, P.Geoph; BSc (Geophysics); M. Math; Senior Geophysical Advisor, Nexen Energy Dean Potter, P.Geol; MSc (Geology); Executive Chairman, Burgess Creek Exploration Inc; Owner, DPX Inc Dr. Paul Durkin, PhD (Geology), Postdoctoral Researcher, University of Calgary Karl Mome, GIT; BSc (Geophysics); Geophysicist in Training, Cenovus Energy
8:40-9:05	**Origin of Gas in Conductively Heated Reservoirs in SAGD operations – Theories and New Insights from Geomicrobiology** Milovan Fustic, Rudy Strobl and Casey Hubert	**Controlled phase processing of a 3C/3D multi-source, multi-survey heavy oil dataset** Peter Cary, Ann O'Byrne, Andrew Kuran, James Beck, Jounada Oueity, Xinxiang Li and Mike Perz	**Strain residual during hydraulic fracturing: an elastic model scenario with microseismicity** Neda Boroumand and David W. Eaton	**Lithic Mannville: Significant New Oil and Gas Opportunities-Defining, Evaluating, High Grading and Developing Prospect Potential** Leonard Stevens, Richard Wierzbicki, Frank Palmai, Fred Hyland and Gregg Milne	
9:05-9:30	**Rock physics and time-lapse seismic analysis of thermal heavy oil production** Evan, Mutual, David, Cho and Kristopher Innanen	**Controlled-amplitude, controlled-phase broadband processing of a 3C/3D Oklahoma dataset** Peter Cary, Xinxiang Li, Frank Meng, Doug Cook	**Using seismic inversion to predict geomechanical well behavior: a case study from the Permian Basin** Jeremy J. Meyer and Simon S. Payne	**Structural and Stratigraphic controls on Hydrocarbon Accumulations in the Viking Formation, West-central Saskatchewan** Dan J. Kohlruss	
9:30-10:15	COFFEE & POSTERS				
10:15-10:40	**Integration of Seismic and Geomechanics for 4D Monitoring - Application to Heavy-oil Reservoir** E. Rebel-Schissele and A. Settari	**Multi frequency FX filter for seismic random noise attenuation** Zhengrong Peng	**A comparison between Deterministic Inversion and Microseismic to be predictive about Geomechanical Parameters as they apply to Stimulation of Unconventional Reservoirs** James R Johnson	**Identification and Evaluation of New Resource Oil Plays in Northeastern British Columbia** Brad J. Hayes, Brent Nassichuk, Robert Bachman, Jason S. Clarke, and Raphael Wust	
10:40-11:05	**The promise of 3C 3D seismic data for improved imaging and reservoir characterization in the Alberta oil sands** Bobby J. Gunning, Don C. Lawton and J. Helen Isaac	**Anti-leakage least-squares spectral analysis for data regularization** Ebrahim Ghaderpour, Wenyuan Liao, Michael Lamoureux, Da Li and Spiros Pagiatakis	**Integrated Geomechanical Study of the Duvernay Formation** Emily GS Johns, Dan J Potocki and Darren Steffes	**Integrated geological reservoir characterization of the Cardium Wapiti Halo Play, Alberta** John-Paul Zonneveld, Barbara Rypien, Eric Keyser, and Darren Tisdale	
11:05-11:30	**Qualitative and Quantitative Characterization of McMurray Formation Chute Channel Deposits with Implications to Oil Recovery** Shuyu Zhang, Milovan Fustic and Rudy Strobl	**Increasing reflection SNRs on seismic field data acquired using multiple simultaneous vibrators driven by m-sequence pilots** Joe Wong, Kevin Hall and David Langton	**Prevention of liquefaction failure of saturated sands using biogas** Erxing Peng and Dinwen Zhan	**Data Sufficiency for Managing Unconventional Plays in a Conventionally Mature Basin: A Regulatory View of the Cardium Halo** Courtney Whibbs and Nick Roman	

Telus 101-102	Telus 103	Telus 104-106	Telus 107	Telus 111
Seismic Attributes for Reservoir Characterization SESSION CHAIR(S): Darren Kondrat and Homayoun Gerami	**Inorganic Geochemistry** SESSION CHAIR(S): Mathew Fay and Gemma Hildred	**The Montney Formation: New Insights on Stratigraphy and Sedimentology** SESSION CHAIR(S): Brian Zaitlin and Tristan Euzen	**Canadian Society for Gas Migration** SESSION CHAIR(S): Rose McPherson and Tony Cadrin SPONSORED BY: CSGM Canadian Society For Gas Migration	**Exploring Safety through Enform** SESSION CHAIR(S): Lisa Pollio and Justin Degagne SPONSORED BY: ENFORM
Applications of Machine Learning for Seismic Quantitative Interpretation Yexin Liu	**Whole Rock Inorganic Elemental Data Toolkit: case studies from East Coast Canada** David, A Riley, Tim, J. Pearce, Gemma V. Hildred, Ceri, Roach, Nicholas B. Sullivan and Marta, Barbarano	**Geochemical Assessment of the Montney Formation: Provenance Associations Linked to Immobile Elemental Chemistry** Natasha Morris, Michèle Asgar-Deen, David Gardner and Chad Glemser	**Well Abandonment Workshop: Industry Feedback** Anita Lewis	**How Industry Support Can Help your Company** Lisa Pollio
Basis Pursuit for Seismic Spectral decomposition Jiajun Han and Brian Russell	**Assessing the utility of stable isotope chemostratigraphy in Jurassic and Cretaceous strata on the eastern margin of Canada: refining correlations and the history of Atlantic rifting** Nicholas B. Sullivan, Gemma V. Hildred, David A. Riley, Timothy J. Pearce, Ceri Roach	**High-Resolution Biostratigraphic and XRF-Geochemical Correlation of the Montney Formation, NEBC** Charles M. Henderson and Shane Schoepfer	**Drilling and Completions** Zach Linkewich	**Hazard Assessment and Risk** Justin Degagne
Recovering data from seismic images by colourmap estimation Matt Hall and Matteo Niccoli	**Elemental Analysis of Sedimentary Rocks: Method Development in WD-XRF Analysis and Further Comparison of the Method to hXRF Practices** Zohrab Ahmadi, Adnan Younis, Vicente Fiorini Stefani, Matthew G. Adams and Amir Iqbal	**Stratigraphic Architecture and Facies Distribution of the, Montney Formation: Fundamental Control on Horizontal Well Productivity, Dawson Creek Region, N.E. B.C.** I. Peter Proverbs, Kerrie L. Bann, Chris M. Fratton, Colin J. Frostad and Andrea Juska	**Advanced Methodologies to Determine Venting Gas Flow Rates & Volumes in Soils (AGM) and Surface Casing Vents (SCVF) - Characterization, Classification and Determining the Origins of Undesired Natural Gas Invasion (Vapour Intrusion) at Resource Wells using Energy Forensics** B.J. Szatkowski, B.G. Johnston, S. Banerjee, A. L. Bangsund, Tony Cadrin and T. A. Schroh	**How Achieving a COR Can Help your Company** Juliet Goodwin
Reliable determination of density attribute from impedance inversion methods Ritesh Kumar Sharma, Satinder Chopra and Larry Lines	**Geochemical Analysis of Returned Treatment Waters (RTW) associated with shale gas production in the Appalachian Basin (USA) and Deep Basin (Canada): Potential use of Total Dissolved Solids (TDS) and Oxygen isotope data for assessing Water: Rock ratios and Stimulated Rock Volume (SRV)** Mathew C. Fay and L. Taras Bryndzia	**Basin-scale high-resolution sequence stratigraphy and internal architecture of the Spathian deposits of the Montney Formation in Western Canada (Lower Triassic).** Tristan Euzen, Thomas F. Moslow, Vincent Crombez and Sébastien Rohais	**Wellbore Leakage Intervention Strategies** Rose McPherson	**Health & Safety Training: Options Available to You** Lisa Pollio
Some applications of volumetric fault image enhancement Satinder Chopra and Kurt J. Marfurt	**Geographical and stratigraphical provenance changes in the Lower Cretaceous McMurray Formation, Alberta, Canada, as revealed by heavy mineral analysis and detrital zircon U-Pb geochronology** Marta Barbarano, Luca Caracciolo, Gemma V. Hildred, David A. Riley and Tim J. Pearce	**The 'Anisian Wedge': Insight on the Complexity of the Montney-Doig Boundary** Carolyn M. Furlong, Murray K. Gingras and John-Paul Zonneveld	**Abandonments** Gary Randal	**Supervisory Skills – Knowing Your Responsibilities** Justin Degagne
	Sm-Nd and detrital zircon provenance study of the Upper Devonian Sassenach Formation in the Jasper Basin Tyler E. Hauck and Dinu P na	**A Previously Unreported Bone Bed from the Triassic Sulphur Mountain Formation of Kananaskis, and its implications for Montney sequence stratigraphy** Jon J. Noad	**Effects and Impacts of Methane Leakage and Emissions** Kirk Osadetz	**Silica – What you Need to Know** Robert Waterhouse

WEDNESDAY AFTERNOON

	Glen 201-202	Glen 203-204	Glen 205	Glen 206	Glen 108-109
	Source Rock Characterization SESSION CHAIR(S): Hamed Sanei and Per Kent Pedersen	**Integrating Geoscience to Optimize Unconventional and Oilsand Resource Plays** SESSION CHAIR(S): Al Turner and Adam Fraser	**Unconventional Geomechanics 2** SESSION CHAIR(S): Adam Baig and Mehrdad Soltanzadeh	**Hydrogeology 2** SESSION CHAIR(S): Hugh Abercrombie and Jim McKinley	**The Value In Geophysics** SESSION CHAIR(S): Rob Kendall and Greg Staples SPONSORED BY: pulse seismic
1:15-1:25	INTRODUCTION				
1:25 - 1:50	**Organic matter facies of the thermally immature Upper Cretaceous Second White Specks and Belle Fourche formations, Alberta, Canada.** Dane P. Synnott, Keith Dewing, Hamed Sanei, Per Kent Pedersen, Omid H. Ardakani	**Characterization of tight shales from hyperspectral imagery of drill core** B. Rivard, M. Speta, J. Feng, H. Corlett and N. Harris	**Towards seismic moment tensor inversion for source mechanism** Faranak Mahmoudian and Kristopher A. Innanen	**Adding Insight to Groundwater Source Model Calibration and Prediction with Application of a Two Phase Gas-Water Reservoir Model** Rebecca A. Jacksteit	**An Overview of the CGFs Initiative to Advocate for the Value of Geophysics** James Lamb
1:50-2:15	**A new method for estimating source rock maturity from whole rock and extracted samples pyrolysis samples analysis - Macasty (Utica of Anticosti) Case Study** B. Granger and F. Hamel	**High Gamma Ray in the Steam Chamber: A New Method for Continuous Observation of the EOR Process** Terence O`Sullivan	**Geomechanical Strength of a Porous Carbonate Saturated with a Highly Viscous Fluid: Implications for Production from the Grosmont Formation** Tyson Epp, Douglas R. Schmitt, Ken Gray and Jason Nycz	**Geological Controls on Radon Potential in Cochrane, Alberta. Understanding the Generation of Radon as Part of the Uranium 238 Decay Chain** Danica Pawson, Ron Spencer and Heather Wright	**The Value Proposition with Microseismic Imaging of Hydraulic Fractures** Shawn Maxwell
2:15-2:40	**A hyperspectral analysis of sandstones, siltstones, shales, and mudstones from the Duvernay and Montney Formations: relating quartz, amorphous silica, clay, and carbonates identified on the micrometer scale to TOC and porosity** Michelle C. Tappert, Ralf Tappert and Roland Stalder	**Solving the Second White Specks: Integrating petrophysics and allostratigraphy to find sweet spots** Kienan P. Marion and Burns A. Cheadle	**Integrated Geomechanical Analysis to Predict the Behavior of Naturally Fractured and Laminated Reservoirs During Hydraulic Fracturing** Ken Glover and Robert Hawkes	**Disequilibria in the Uranium Decay Series During Weathering of Organic-rich Shale: Implications for Radon Generation** Ron Spencer, Danica Pawson, Heather Wright, Cole Lord and Michael Weiser	**Maximizing Success using a Risk Reduction Approach to Integrated Geophysics (Part 1)** John L. J. Duhault
2:40-3:00	COFFEE BREAK				
3:00-3:25	**Source Rock Kerogen Kinetics Using Hydrocarbon Pyrograms from routine Rock-Eval Analysis** Zhuoheng Chen, Xiaojun Liu, Chunqing Jiang and Andy Mort	**A Virtual McMurray Formation Outcrop Tour – An Evolving Tool for Characterizing Oil Sands Reservoirs and Creating Realistic Geomodels** Rudy Strobl, Milovan Fustic and Rob Davies	**Establishing confidence in fracture orientations from microseismicity** Adam M. Baig, Ted Urbancic and Doug Angus	**An evaluation of the role of land use in soil erosion using 137Cs inventory and soil organic carbon stock, in a mountainous catchment of western Iran** Loghman Shirzadi, Jamal Rasouli and Kazem Nosrati	**Maximizing Success using a Risk Reduction Approach to Integrated Geophysics (Part 2)** John L. J. Duhault
3:25-3:50	**The Lodgepole Formation Souris Valley Beds: petroleum source rocks and potential self-sourced unconventional reservoir, an initial assessment** Scott G. MacKnight and Stephen L. Bend	**Sedimentary fabric control on hydraulic fracture stimulation, tight light oil sandstone reservoirs of the Cardium Formation, SW Pembina Field, western Alberta** Dan W. Hill and Per Kent Pedersen	**A Workflow for Analysing Stress Shadow Effects during Hydraulic Fracturing, With Application to the Bakken Formation, Southeast Saskatchewan** Mostafa Gorjian and Christopher D. Hawkes	**Hydrological Modeling of Athabasca River Basin, Canada using Soil and Water Assessment Tool** Narayan Kumar Shresthaand and Junye Wang	**An Overview of the Value In Geophysics for Some Specific Applications** Rob Kendall
3:50-4:15		**Artificial intelligence for mineral and chemical stratigraphic correlations** JP Paiement and Marc H. Enter	**Understanding the Causation of Shear Induced Casing Failure: Potential Application to Induced Seismicity** Jeremy J. Meyer, Jeremy G. Gallop, Alvin Chen and Scott D. Mildren	**Theoretical and empirical investigations to evaluate in situ hydraulic conductivity using piezocone data** Mingfei Zhang and Liyuan Tong	**Panel Discussion** Rob Kendall, John Duhault, Shawn Maxwell, James Lamb and Greg Staples
4:15-4:40					

Telus 101-102	Telus 103	Telus 104-106	Telus 111
Diversification of the Energy Industry SESSION CHAIR(S): Sean Kleiner and Alexandria Shrake	**Petrophysical Fundamentals and Pitfalls 2** SESSION CHAIR(S): Rick Anderson and Xianfeng Zhang	**Geoscience Fundamentals 2** SESSION CHAIR(S): Melanie Klucker and Fiona Marshall	**The Future in Seismic Acquisition and Design** SESSION CHAIR(S): Sobhi Alhashwa and Jason Schweigert
Canadian Renewables Today and our Energy Demand Future Alexandria Shrake and Aaron Foyer	**A Well Testing Model on Pressure Characteristics of the Heterogeneous Composite Gas Reservoir** Leng Tian, Kaiqiang Zhang, Guangfeng Liu and Jinpeng Guo	**Significance of Sequence Stratigraphic Surfaces in the Famennian Wabamun (Three Forks) to Tournaisian Banff (Lodgepole)** Tim H.D. Hartel	**Improving Data Quality and Operational Efficiency through Recent Advances in Acquisition Technology** C. Jason Criss
Geothermal 101: Bring the Heat Canada! Elizabeth M. Lappin	**Integrated Reservoir Characterization and Landing Zone Selection in the Liquids-rich Duvernay Formation, Kaybob North, Central Alberta** Craig Rice, Tyler Maksymchuk, Virginie Lavoie, James McCarthy, Joe Comisky, Brian Coffey and Casey Donohue	**Exshaw-Banff! petroleum systems in Southern Alberta** Andy Mort	**High Density Vibroseis 3D in NW Alberta – A Case Study** Allan Châtenay, Paul Thacker and Annette Milbradt
Geothermal Energy in Iceland, New Zealand, United States, and Canada; Production, Laws and Regulations Chelsea Beach	**Core Permeability** Lou G Monahan	**Investigation the role of geochemical characteristics in the magmatic evolution Jebal-e-Barez plutonic complex, SE Iran** Jamal Rasouli and Loghman Shirzadi	**Vertical Seismic Profiling with Distributed Acoustic Sensing** Heather K. Hardeman and Matt MacDonald
Geothermal Energy Potential of Western Canadian Sedimentary Basin in the Athabasca Region, Northeast Alberta, Canada Ellie P. Ardakani and Douglas R. Schmitt	**Particle Size Distribution (PSD) from wireline logs and core photographs: Maximizing the value of legacy data and optimizing high-density coring operations** John G. Manchuk, Hong Long, Clayton V. Deutsch, Rebecca Haspel and Xavier Mathieu	**The application of seismic derived rock properties in predicting Duvernay Induced Fractures** Ronald M. Weir, Dr. D. Eaton, Dr. L Lines and Dr. D. Lawton	**Optimizing 3D Survey Design for Follow-up Programs** Norman M. Cooper and Yajaira Herrera-Cooper
Geothermal Energy in Alberta – Finding and Unlocking a Resource Dr. Jonathan Banks and Sean C. Collins	**High Resolution Core Logging using Nuclear Magnetic Resonance and Computed Tomography** Petro Babak, Sergey Kryuchkov, Jonathan Bryan and Apostolos Kantzas	**Conformal mapping for RTM from topography** Fernanda Carozzi, Amsalu Y. Anagaw and Mauricio D. Sacchi	**Spatial Sampling Dilemma in Seismic Acquisition: Regular (Deterministic) vs. Irregular (Random)** Mostafa Naghizadeh
	Effect of Beam Skew on Pressurized Pulse Transmission Velocity Measurements in Tilted Transversely Isotropic Media Wei Li, Xiwei Chen, Changchun Zou and Douglas R. Schmitt	**The Role of Density in Elastic Full-waveform Inversion** Wenyong Pan, Yanhua Yuan, Frederik Simons and Kris Innanen	**A High Resolution, Low Environmental Impact, Impulsive Seismic Source for the Oil Sands** Allan Châtenay and Paul Thacker
			Preservation of AVO after migration Oliver Lahr, Gary Margrave and Kay Yuhong Liu

WEDNESDAY POSTERS SPONSORED BY:

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9:30am 9
Case Study of ES-SAGD in Oil Sands Reservoirs with Lean Zones
Yanguo Yu, Zhangxin Chen and Jinze Xu

9:30am 15
Chemical composition of biotite as a guide to petrological characteristics in the Jebal-e-Barez plutonic complex, SE Iran
Jamal Rasouli and Loghman Shirzadi

9:30am 27
Theoretical study of new materials based on theophene for Solar Cells
Tayeb.Abram, Lahcen Bejjit, Mohamed Naciri Bennani and Mohammed Bouachrine

9:30am 75
Post- and Pre-Stack Attribute Analysis and Inversion of Teapot Dom 3D Seismic Dataset
Kamal Abo Jnah and Igor Morozov

9:35am 36
Stable Isotope Laser Spectrometer Comparative Study through Vapor Concentration Manipulation
Madeline Widjaja, Peter Troch and Till Volkmann

9:35am 48
Deformation history in the southern Alberta foreland basin and petroleum system implications
Marian J. Warren and Mark Cooper

9:35am 54
Finite-difference modelling of the seismic wave attenuation in the Athabasca Basin
Camille Hebert, Dong Shi and Bernd Milkereit

9:35am 66
A new reference-sample-guided computed-tomographic method for porosity quantification of reservoir sandstones
Jae Hwa Jin, Junho Kim, Jeong-Yil Lee and Young Min Oh

9:40am 3
Seismic Signal Processing and Image Analysis
Sunjay Sunjay

9:40am 21
Provenance of the Peace River and Athabasca Oil Sands: Implications from Mineral Assemblages and Detrital Zircon Ages
Lynsey McKinnon and Dr. Ronald Spenced

9:40am 28
Sedimentology, Sequence Stratigraphy and Reservoir Characterization of the 'Wilrich', Spirit River Formation, west-central Alberta
Dillon J Newitt and Per K Pedersen

9:40am 81
A Technical and Economic Assessment of Direct Air Capture with Zeolite 13X and Sequestration Systems
Hamid Rahmanifard and Tatyana Plaksina

9:45am 12
Performance of SAGD with Nitrogen in Oil Sands Reservoirs
Yanpeng Zhang, Zhangxin Chen and Jinze Xu

9:45am 30
A Synthetic Test of Q Tomography for Multi-Source VSP data
Dong Shi and Bernd Milkereit

9:45am 72
Applications of Deep Learning for Seismic Image Interpretation
Yexin Liu

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9:50am 39
Enhancing seismic discontinuity attributes with creative workflows
Satinder Chopra and Kurt J. Marfurt

9:50am 45
Conventional Trapping in Unconventional Reservoirs; A Bakken Case Study
D.J. Cronkwright and P.K. Pedersen

9:50am 57
Vertical Seismic Profiling of the Chicxulub Impact Basin Peak Ring
Chris G. Nixon, Randy Kofman, Douglas R. Schmitt, Sean Gulick, Steffen Saustrup and Joanna Morgan

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An investigation into the genesis of the Zaccar iron deposit with special reference to its fluid inclusions (MILIANA, AIN DEFLA, ALGERIA)
Chaa Halima, Boutaleb Abdelhak and Hammadi Aziza

9:55am 18
Light Oil Exploration Potential for Devonian-Silurian (Fortin and Chaleurs Groups) Carbonates/Mudstones, Central Gaspe, Quebec, Canada, near the Grande Riviere Transform Fault
Linda R. Sternbach, Charles A. Sternbach, Stephane Sejourne, and Jerry McCullough

9:55am 78
Resolving Ambiguity in AVO and AVAz Inversion
Reza Malehmir, Nasser Kazemi and Douglas R. Schmitt

10:00am 33
Description of the Horn River Group shales from one outcrop in the southern Peel Plateau, NWT
Viktor Terlaky, Kathryn M. Fiess and Jonathan Rocheleau

10:00am 51
Lithofacies properties, biostratigraphy, cyclicity and depositional environment of the Margala Hill Limestone, Hazara Basin, Northern Pakistan
Aman Ullah, Osman Salad Hersi and Sajjad Ahmed

10:00am 69
New microseismic technology for imaging complex hydraulic fracture geometries
Stepan Sergeevich Lavrinenko

10:05am 24
SSA for multicomponent data
Scott P. Janzen, Jinkun Cheng and Mauricio D. Sacchi

10:05am 42
Gamma Ray Derivative Logs: An Innovative Method to Display Basin Cross-Sections Using Hundreds of Wells
Michael J. Ranger Petroleum Consultant

10:05am 60
The Evolution of Petrophysical Properties During Pyrolysis: Examples from the Montney Formation and Duvernay Formation, Alberta, Canada
Katherine M. Clarke, Christopher R. Clarkson and Hamed Sanei

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A History of GeoConvention

Formally, GeoConvention began in 2013 with the signing of an agreement that committed the CWLS, the CSEG, and the CSPG to a limited partnership that was designed to provide a showcase technical conference dedicated to the petroleum geoscience of Canada and parts of the United States. The agreement took a dedicated committee of 7 volunteers from the three societies (3 from CSPG, 3 from CSEG and 1 from CWLS) and input from the executives of all three societies almost a year and half to negotiate.

Although the agreement was signed in 2013 the three technical societies had been collaborating for over a decade on joint conventions.

The early roots of the GeoConvention began in the early stages of the Alberta Geological Society (AGS), who would have meetings in Banff to look at rock, socialize, and have a few days out of the office. These could be raucous affairs and were generally well attended by the relatively small membership. In the 1970's and 80's the CSPG Convention grew exponentially, however it was not the only party in town as the CSEG was also established and growing quickly. At this time there were clear distinctions between Geologists and Geophysicists. In many oil companies, they kept these two disciplines apart and in some cases they would not cross-train one between the disciplines for fear that individual employees would become too valuable and would leave. Once the NEP (National Energy Program) hit in 1980, the party died. What followed was a protracted slump in oil prices and deterioration in the employment of new graduates into the industry. Through this time, the companies learned to do more with fewer people. This was greatly facilitated with the advent and use of micro-computers in the office. The labs, research centres, large log libraries and main frame computers that each oil company maintained to process seismic data became a thing of the past. Companies began to outsource everything that was peripheral to the main task of finding and producing hydrocarbons. Service companies began to emerge as both significant employers and drivers of new technology through their investment in research and development. Also the service industry became an increasingly important employer in the industry. The service companies needed to show case their abilities and the individual conventions of the three societies became an important marketing tool for that purpose.

Eventually three conventions became simply too much and the societies began running joint conventions some years and separate events in other years. The membership of the societies clearly showed a preference for joint conventions although there were still some that preferred isolated conventions. Gradually this opinion became a small minority and the membership insisted that in the future the conventions should be joint. A Joint Annual Committee on Conventions (JACC) was formed, September 2007, and a formal process was begun to hold an integrated convention.

JACC started out with a committed group of volunteers from each of the three societies that were selected by the executives from each of the member societies. These volunteers were tasked with identifying: General Co-Chairs, technical chairs and the rest of the core set of volunteers to run the joint conventions. The CSPG and CSEG would each act as an operator on a two year rotating basis. This was critical for the Convention Committee's ability to conduct its business. The infrastructure made available by the societies to the Convention Committee such as meeting rooms, accounting, banking and a convention manager were critical to the success of each conventions. Like most things the idea was good but one of the great problems for the operating societies was the volunteer nature of participation and the revolving door of leadership (convention managers). Some years relationships were good and other years, relationships were sticky. Like any relationship there are highs and lows. Additionally, the JACC model was very restrictive in the ability to forward plan and develop our convention as a brand.

The one thing that all three societies could agree on was that the convention was one of the most important events of the year from a technical and social point of view, as well as providing significant funds to support each society. From this, GeoConvention was born. Once again, a committee of seven volunteers was struck, made up of former members of JACC, former General Co-Chairs and significant joint convention volunteers and executive members of all three societies, tasked with evaluating JACC and charting a longer term course for our beloved convention. There was some reluctance from a minority of the membership of all three societies to enter into an agreement that had permanence to it, but overwhelming the majority of the membership was in favour of the formation of GeoConvention and the opportunity that it brought to each society and their membership. After a year and half of planning, negotiating and with both legal and financial advice, GeoConvention Partnership LLP was born.

It is a significant scientific meeting, an excellent opportunity to showcase technology, an efficient method to keep abreast of industry, and one of the best networking opportunities for geoscientists during the year. Future generations will find ways to make it better but as long as we meet as one group we will continue to advance both our science and industry.

Historically, our three societies have housed many of the greatest pioneers of the petroleum industry and have contributed greatly to the global understanding of the subsurface. Collectively, we can all stand proud as Canadian geoscientists and the foundations set by GeoConvention enable us to showcase the wisdom, talents and abilities in our profession for many years to come.

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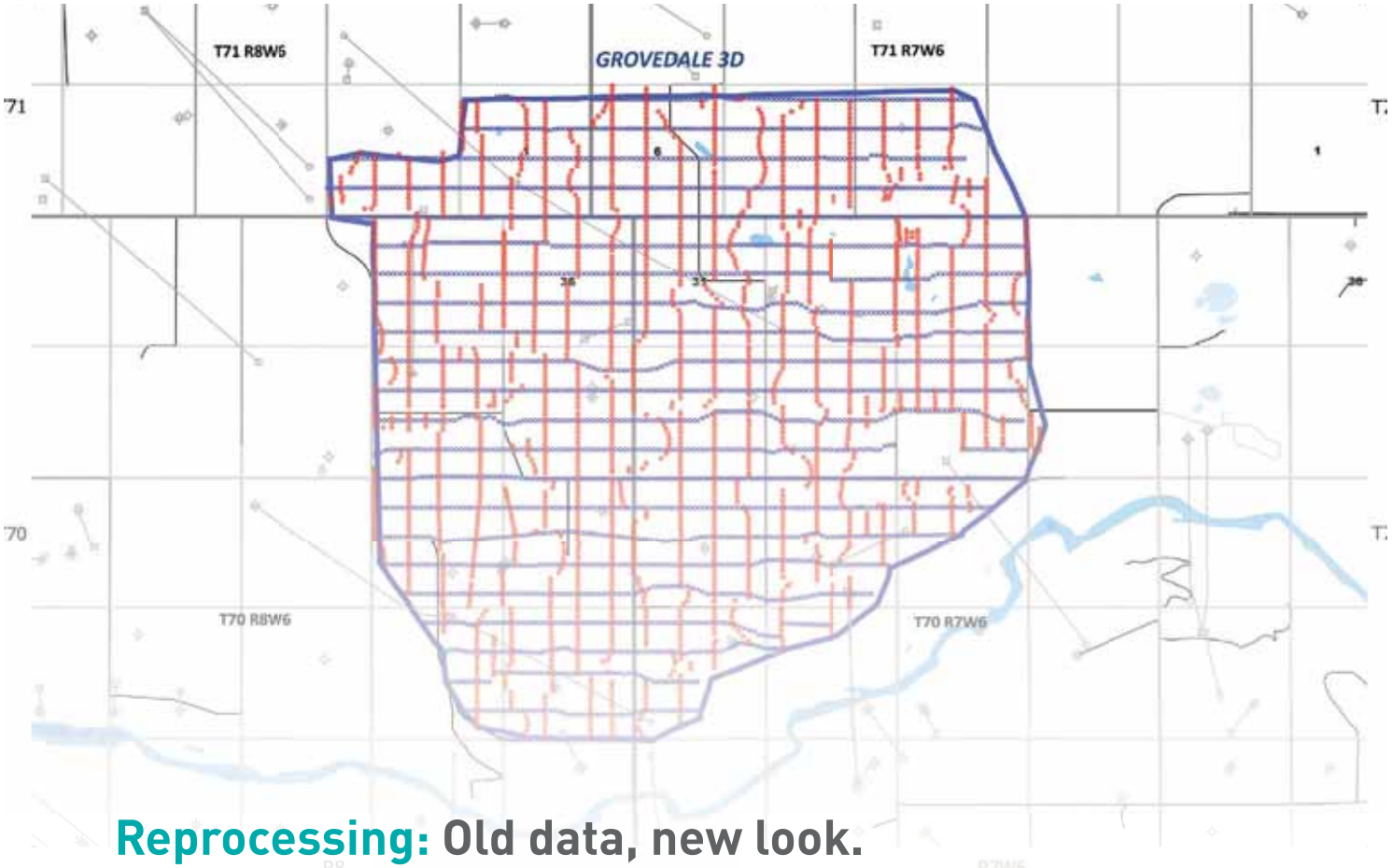

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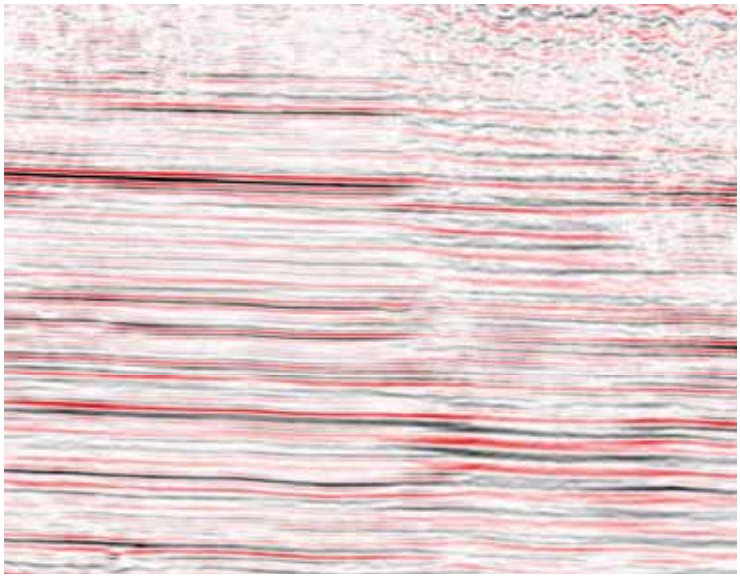

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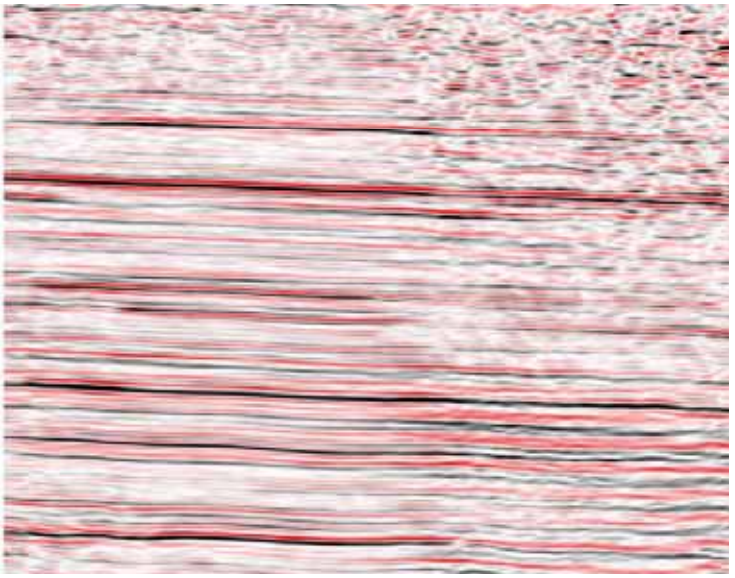

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