

GeoConvention 2019



geo**convention**

Calgary • Canada • May 13-17 **2019**

DELEGATE HANDBOOK

May 13-17, 2019

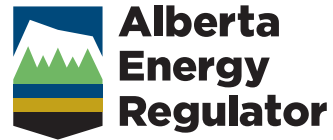
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Welcome to GeoConvention 2019

After a protracted downturn, the political, financial and technical landscape finally appears to be turning in favour of the energy industry in Canada. Turnarounds happen quickly and experience tells us that a reactive approach is usually too little, too late. In order to take advantage of improved conditions, companies and individuals must be prepared with knowledge, training and awareness of today's innovations. This is even more critical in an industry that has lost a vast amount of knowledge base to retirement and departures. Who will lead us into the imminent up-cycle, and will they know how?

GeoConvention 2019 delivers the tools that individuals will need to lead their companies into success in the technical and political environment of the 2020s. Convention delegates have access to over 400 technical and poster presentations and on the exhibit floor, convention attendees have the opportunity to get hands on with the industry leading companies and technology that are driving the innovation in today's oil patch. Social and networking events will pay dividends in more efficient energy discovery and production as activity ramps up.

On behalf of the hundreds of volunteering professionals who participate in the GeoConvention project, we welcome you to GeoConvention 2019 at the Telus Convention Centre.

We thank you for your continued support of the CSPG, CSEG and CWLS and know you will once again both enjoy and benefit from your investment in GeoConvention.



geoconvention
partnership

On behalf of the GeoConvention Partnership, the partner societies CSPG, CSEG and CWLS, and the Organizing Committee, we thank you for joining us.

Gary Paukert
CSEG General Chair



Robert Flowerday
CSPG General Chair



Gary Bugden
CWLS General chair



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PROGRAM SUBJECT TO CHANGE

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

PLEASE NO PHOTOS OR VIDEOS OF PRESENTATION MATERIALS

While we encourage you to take in all that GeoConvention has to offer and ask questions, we request that you do not take pictures of technical material due to confidentiality concerns. You will have the opportunity to talk with the presenters directly about the content delivered.

EXHIBITOR LISTINGS

EXHIBITION HOURS

May 13th
MONDAY
9:00 AM – 6:00 PM

May 14th
TUESDAY
9:00 AM – 6:00 PM

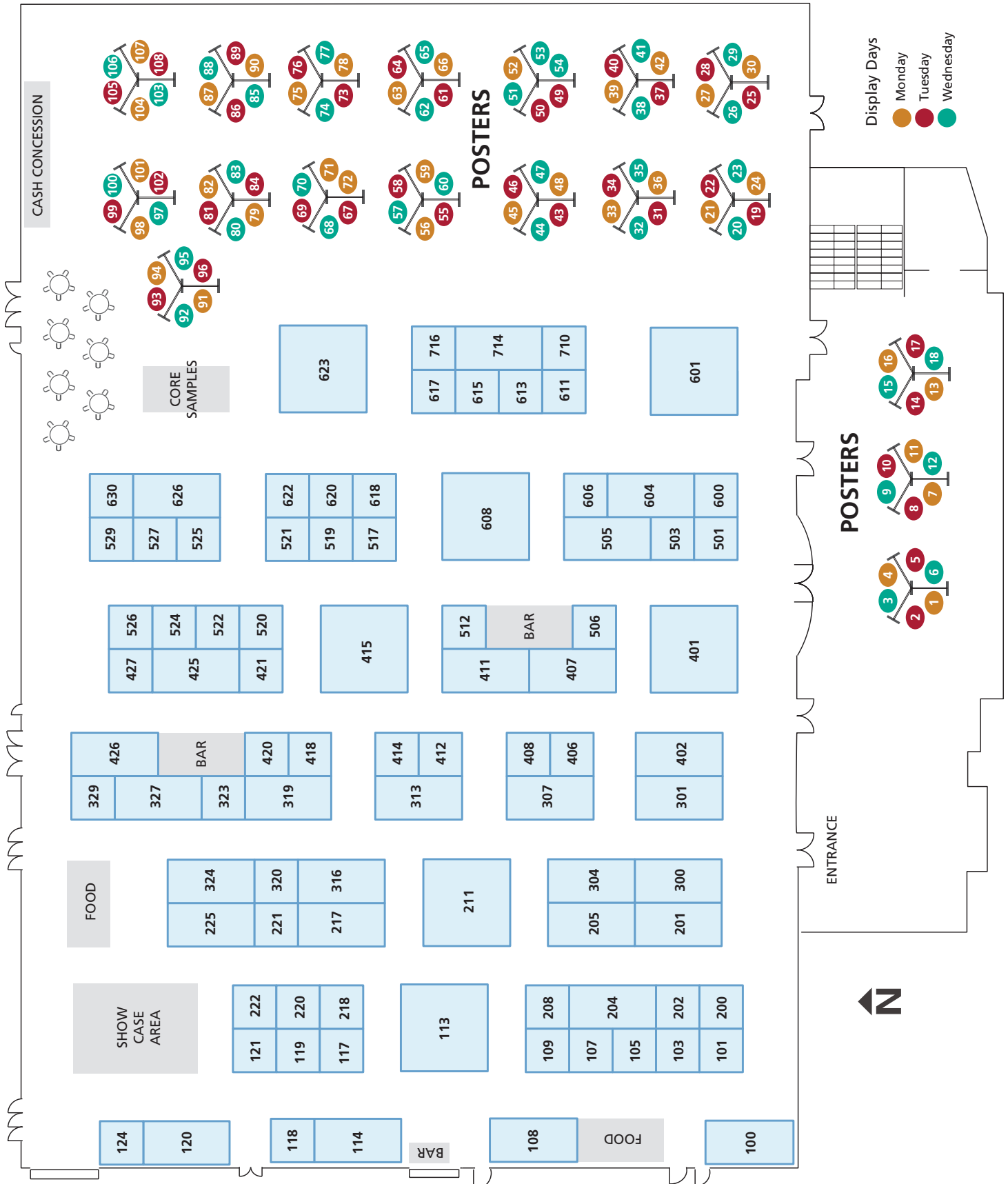
May 15th
WEDNESDAY
9:00 AM – 3:30 PM

EXHIBITOR (listed in alphabetical order)

COMPANY	BOOTH NUMBER
Advanced Logic Technology.....	201
AGAT.....	225
Alberta Energy Regulator / Alberta Geological Survey.....	121
APEGA.....	519
Aramco Services Company	401
Baker Hughes a GE Company.....	217
Belloy Petroleum Consulting / GazServ.....	425
BOWEN Group.....	200
Cabra Consulting / XRF Solutions	204
Cadeon Inc.	323
Canada Huiangu Technology Inc.....	620
Canadian Association of Geophysical Contractors.....	118
Canadian Discovery.....	411
Canadian Global Exploration Forum.....	114
Canadian Society of Exploration Geophysicists.....	611
Canadian Society of Petroleum Geologists	618
Canadian Society for Unconventional Resources	617
Canadian Stratigraphic Services Ltd.	208
Canadian Well Logging Society.....	107
Cegal Geoscience Inc.	408
CGG	304
CHAD Data Ltd.	522
Chinook Consulting	407
Cordax Evaluation Technologies.....	202
Core Laboratories Ltd.....	506
DigitCore	626
Eliis.....	520
Emerson.....	300
EnergyNow	101
Enlighten Geoscience	324
ESG Solutions.....	301
European Association of Geoscientists and Engineers.....	529
Evil Corporation Brewing, Long Hop, Freehold Brewing.....	124
Frontier Sonde Inc.	620
Gabon 12 Licensing Round.....	623
GeoConvention 2020.....	630
GeoEdges Inc.	421
geoLOGIC systems Ltd.....	601
Geospace Technologies Ltd.....	307
Geospatial.....	613
Geo-Steering Solutions Inc.	418
Government of Saskatchewan.....	427
H2 Laboratories.....	222
Hydrogeological Consultants Ltd.	710
Ikon Science.....	313

COMPANY	BOOTH NUMBER
Initial Exploration Services Inc.	525
Lenovo.....	109
Loring Tarcore Labs Ltd.....	626
M/D Totco I NOV Wellbore Technologies	108
Mount Royal University - Massage Therapy	714
Nanometrics.....	600
Natural Resources Canada.....	615
Neuralog.....	501
Newfoundland and Labrador	319
Northwest Territories Geological Survey	221
OpenGeoSolutions	414
Petrocraft Products/Rigsat.....	327
Petro-Explorers Inc.....	604
PetroGem Inc.	220
Petrosys Canada Inc.	402
PGS	505
Pro Geo Consultants	412
Qeye.....	320
Queen's University - Master of Earth & Energy Resources	524
ResourceYYC	716
Rock Flow Dynamics.....	211
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EXHIBIT HALL FLOOR PLAN



MONDAY, MAY 13

CSPG KEYNOTE LUNCHEON

Is There A New Energy Norm - and If So How Do I Play the Game?

As the energy transition progresses companies are faced with dealing with a very dynamic and volatile world with up and down commodity prices, changing geopolitical landscapes and major shifts in markets for which to plan.

11:45am - 1:15pm

Hyatt Hotel, Imperial Ballroom 5/7/9
700 Centre Street SE

Tickets available for \$60 - inquire at the convention registration desk

PRESENTED BY:  **CSPG**
Canada's Energy Geoscientists

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BOB FRYKLUND
Chief Strategist Upstream,
IHS Markit

TUESDAY, MAY 14

CSEG LUNCHEON

Let's Get geoPhysical

Social Networking Lunch at the
Palomino Smokehouse

Including: Lunch & Drink Ticket

11:45am - 1:15pm

The Palomino Smokehouse, 109 7 Ave SW

Tickets available for \$37 - inquire at the convention registration desk

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WEDNESDAY, MAY 15 CWLS LUNCHEON

Refresh at the Bank and Baron

Social Networking Lunch in the private mezzanine of the Bank and Baron, open to CWLS members and non-members

Including: selection of appetizers, entree, dessert, your choice of beverage

11:45am – 1:15pm

Bank and Baron, 125 8 Ave SW

Tickets available for \$37 - inquire at the convention registration desk

PRESENTED BY:



CORE SHOWCASE

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DigitCore is proud to sponsor core samples on the exhibit floor, giving all attendees an opportunity to get hands on with physical samples and learn from presenting industry experts.

MONDAY

Dave Hills from Enhance Energy displaying a Leduc core from 100/04-12-40-24W400

TUESDAY

Naomi Wiebe from Selachian Geological Consulting Inc displaying a Muskeg core

WEDNESDAY

Sarah Schultz from SFU displaying a Viking core 02/09-30-49-25W400

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MONDAY MORNING

Glen 201-204

Regional to Microscale: Geochemical and Engineering Applications to Montney Reservoir Evaluation

SESSION CHAIRS:
Gabriela Gonzalez Arismendi
& Michele Asgar-Deen

Glen 205

Getting More From Your Data

SESSION CHAIRS:
Alexey Romanov & Maureen Mackinnon

Glen 206

Discipline Fundamentals — Geophysics

SESSION CHAIRS:
Svetlana Bidikhova & Mike Hall

Glen 208-209

Sedimentology and Stratigraphy — Case Studies

SESSION CHAIRS:
Jon Noad & Ivan Pasechnik

8:25-8:35 INTRODUCTION

8:35-9:00

Origin and Evolution of Clay Mineralogy in the Montney Formation

Noga Vaisblat, Nicholas B. Harris,
David L. Bish

The Reservoir Quality of Tithonian Sandstone From Mizzen F-09; the Application of Whole Rock Inorganic Geochemical Data

David A Riley, Paul O'Neill, Tim J. Pearce,
Marta Barbarano, Brenton Fairey,
David Rutledge, Gareth Smith, Peter Lucas

Structural Evaluation and Interpretation of TM-Field in Niger Delta Using Velocity Models.

Anaele Callistus, Sylvester A. Ugwu

Lacustrine Sequence Stratigraphy of the Greymouth Rift Basin, New Zealand: Tectonic Evolution and Distribution of Source Rock Facies

Mrinmoy Kumar Maitra,
Kari Nicalo Bassett

9:00-9:25

$\delta^{13}\text{C}$, $\delta^{18}\text{O}$ and $^{87}\text{Sr}/^{86}\text{Sr}$ Isotope Composition of Montney Formation Carbonate Phases: Implications for the Nature of Diagenetic Fluids

Mastaneh H. Liseroudi, Omid H. Ardakania,
Hamed Sanei, Per K. Pedersen,
Ronald J. Spencer, James M. Wood

Controls on CO_2 Partial Pressure in Petroleum Reservoirs During Burial Diagenesis

Peng Lu, Guanru Zhang, Chen Zhu

Dynamic Fluid Substitution in Porous Rock by Inversion for Mechanical Properties

Igor B. Morozov, Shuna Chen

Evolving Coastal and Alluvial Systems, Subsidence Patterns, and Eustatic Changes in SW Alberta During the Late Albian and Earliest Cenomanian

Slavena Galic, A. Guy Plint

9:25-9:50

Fluid Inclusion Stratigraphy on Montney Well Cuttings

Markus Pagels, Donald Hall,
Walker Neumann, Troy Curzon

The Canol Shale Basin of NW Canada: New Outlook on Lithostratigraphy and Paleocceanographic Control of a Devonian Shale-Hydrocarbon Prospect

Pavel B. Kabanov, Sofie A. Gouwy,
Christine Deblonde, Chunqing (Dennis) Jiang,
Mary L. Borrero

Barycentric Interpolation of Towed-Streamer Position Data

Stuart Bergen

Facies Control on Fluid Accumulation, Viking Formation, Elrose Field, Saskatchewan, Canada

Stefan Wieclawek

9:50-10:35 COFFEE & POSTERS

10:35-11:00

What Do we Know About the Gas Isotopic Composition from British Columbia's and Alberta's Montney Fm.?

Gabriela Gonzalez Arismendi, K.
Muehlenbachs

BC Montney Shale Data Analytics for Shale Sweep Spot Identification and Well Completion Optimization — A Journey of Machine Learning Technology Application by a Geologist

Decong Yu

Pump Up (or Down) the Volume with Color Infrared Imagery and Surface Consistent Scaling

Dr. Christopher B. Harrison, Paul Thacker,
Allan Chatenay

Evidence for Rapid Lateral and Vertical Movement of the Cretaceous Forebulge: Late Albian Westgate Alloformation, NE Alberta

Arwa Zourob, A. Guy Plint

11:00-11:25

Reservoir Gas Ratio Interpretation

Lucian Fl. Nitu

Enhancing the Structural Fidelity of Magnetotelluric Inversion — an Example from the Bolivian Foothills

Federico Golfré Andreasi, Mauro Pezzoli,
Simone Re, Evanz Lazaro, Sergio Burga

Modeling Seismic Waves in Layered Anelastic Media — Beyond the Viscoelastic Approach

Yichuan Wang, Igor B. Morozov

Welcome to the Thermocene: The Potential Impact of Global Warming on the Sedimentary Record

Jon Noad

11:25-11:50

Elastic Anisotropy and Dynamic Rock Mechanical Properties of the Montney and Duvernay Formations (Canada): A Comparative Laboratory Study

C.R. Clarkson, N. Riazi, A. Ghanizadeh,
A. Vahedian, A. Younis, J.M. Wood

Using Deep Learning Approaches to Determine and Map the Spatial Extent of Core Trays

Shervin Gholam Azad,
Vincent Dube Bourgeois

Measurement of Apparent Attenuation in Seismic Sections by using Waveform Synthetics

Osama El Badri, Igor B. Morozov

Tight Oil Play of the Upper Devonian Torquay Formation in Southeastern Saskatchewan, Canada

Chao Yang

11:50-12:15

Sonic Anisotropy and Monoclinic Modelling at the CaMI Site

Scott Leaney, Edgar Arteaga, Don Lawton,
Kris Innanen

Calibration of the Lower Cretaceous Type Sections and Petroleum Systems of the Atlantic Margin

Grant D. Wach, Graeme E. Wach,
Darragh E. O'Connor

Telus 101-102		Telus 104-105		Telus 106		Telus 111 (The colab)	
Emerging Opportunities and Methodologies SESSION CHAIRS: Emily Duncan & John Parkin		Skill Fundamentals 101 and Case Studies: Part 1 SESSION CHAIRS: Shelley Leggitt & Brian Zaitlin		Induced Seismicity — Modeling and Case Studies SESSION CHAIRS: Sepideh Karimi & Mehrdad Soltanzadeh SPONSORED BY: 		New Conventional Plays and Revisiting or Extension of Mature Plays SESSION CHAIRS: Mahbub (Bob) Alam & Haitham Hamid	
So What is the Size of the Grains in Your Sandstone, How Do You Measure Them and Why You Should Care Grant Sanden, Yannai Segal, Mikhail Kostousov, Martin Trobec, Britnee J. Beitel, Russell P.W. Standcliffe		Sequence Stratigraphy Using Well Logs and Cores, a Systematic Approach Janok P. Bhattacharya		Connecting Fluid-Flow Along Faults to Hydraulic Fracturing Induced Seismicity: An Integrated Geoscience Study Elwyn Galloway, Tyler Hauck, Hilary Corlett, Dinu Pana, Ryan Schultz		Devonian-Carboniferous Reservoir and the Utopian Sea Level Curve Tim Hartel	
Development of Thermal Breakout Technology for Determining the Maximum Horizontal In Situ Stress Jay R. Nopola, Samuel J. Voegeli				Implications of Long-Lived Post-Injection Induced Seismicity Near Fox Creek, Alberta Thomas S. Eyre, David W. Eaton		Large Scale Tectonics, Oil-Window Fairways, and Localized Hydrothermal Dolomite: Windfall's Exshaw — Wabamun Combination Dean Knight, Geoff MacDonald	
High-Resolution UAV Magnetometry Surveys for Localizing Legacy/Abandoned Wells Callum A. Walter, A. Braun, G. Fotopoulos		Integrating Ichnology with Sedimentology to Solve Sequence Stratigraphic Problems: Case Study of a Forced Regressive Asymmetric Delta, Viking Formation, Kaybob-Fox Creek, AB James A. MacEachern, Nakarí Díaz		Performance Evaluation of a Real-Time Induced Seismicity Management Tool Sepideh Karimi, Dario Baturan		Revisiting Glauconitic Sandstone in Countess Field, Southern Alberta Md Abu Sayed, Bazlur Rahman, Md Nazmul Haque Mondol, Mahbub (Bob) Alam	
Inpainting: A New Way to Restore Geophysical Data Corrupted by Culture Noise and Missing Data Gaps Hassan H. Hassan, Serguei Goussev		Fundamental Skills in Core to Log Correlations in Unconventional Resource Plays: Examples from the Montney Formation Thomas F. Moslow, John-Paul Zonneveld		Seismic Hazard Analysis of an Induced-Seismicity Sequence Associated With a Hydraulic-Fracturing Stimulation in a Duvernay Shale Play, Western Canada Germán Rodríguez-Pradilla, David W. Eaton		Practical Method of Identification of Presence of Natural Fracture — Including Mature Fields C. M. Ruhul Amin	
Distributed Acoustic Sensing Applications for Near-Surface Characterization and Traffic Monitoring Raul Cova, Heather K. Hardeman-Vooy, Da Li, Matt McDonald				Understanding Public Risk Perception in the Oil and Gas Industry Jordan Phillips, Mirko van der Baan, Scott McKean		Cased Hole Dual Physics Nuclear Measurement — Opportunities Created Through Measurement Adam J. MacDonald	
Enhanced Resolution and Earth Properties Estimation Using Least-Squares Imaging: A Mexico Land Case Study Cesar Alejandro Gamez Mayes, Janet Isabel Ravelo Cervantes, Julio Hernandez Villalobos, Juan Gabriel Hernandez Jaime, John Mathewson, Josue Jurado Ramirez		Core to Log Correlation of Montney Members and Stratigraphic Surfaces John-Paul Zonneveld, Thomas F. Moslow				Borehole Image Analysis and Core Evaluation of Fractures/Vugs Distribution and Impact on Nisku Enhanced Oil Recovery Dragan Andjelkovic, Hakima Ali Lahmar, Wade Zaluski, Majid Faskhoodi, Cindy Xu, William Sawchuk	

MONDAY AFTERNOON

Glen 201-204

Oil Sands and Integrated Oil Sands Case Studies

SESSION CHAIRS:
Mark Caplan & Michael Webb

Glen 205

Seismic Inversion — Full-Waveform Inversion

SESSION CHAIRS:
Marissa Whittaker & Andrew Iverson

Glen 206

Emerging Seismic Technology

SESSION CHAIRS:
Andrea Crook & Jeff Deere

Glen 208-209

Managing the Risks of Unconventional Development

SESSION CHAIRS:
Mike Finn & Sean Kleiner

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1:15-1:25 INTRODUCTION

1:25-1:50	The Biot Coefficient and Anisotropic Stress Estimation from Seismic Carmen C. Dumitrescu, Glenn Larson	Edge-Preserving FWI Via Regularization by Denoising Amsalu Y. Anagaw, Mauricio D. Sacchi	Transitioning to High Density Vibroseis Seismic Acquisition: A Case Study Andrea Crook, Rob McGrory, Nathan Baker, Adam Westlake	Geologic Overview: Setting the Stage What Makes the Duvernay Tick at the Reservoir Level Matthew J. Johnston, Jean-Francois Gagnon
1:50-2:15	The Effects of Seismic Data Conditioning on Density Estimates From PP-PS Joint Pre-Stack Inversion: An Example from the Athabasca Oil Sands Weimin Zhang, Jinling Zhang, Rosalind Damer	Effect of Deconvolution Operations on the Elastic FWI of a Walkaway VSP Dataset Raul Cova, Kris Innanen, Marianne Rauch-Davies	The Operational Efficiency of ISSN™ in Western Canada Paul Thacker, Allan Châtenay	Drilling Practices and Challenges: With Some of the Deepest and Longest Laterals in Canada, What Are Some of the Challenges and Successes in the Duvernay Sean Kleiner
2:15-2:40	Improved Subsurface Characterization Through Stochastic Modeling Techniques at Imperial's Kearl Mine, Alberta Nathan R. Pittman, Adam E. Montgomery, Martin Huang	Reducing Crosstalk in Viscoelastic FWI Through Parameterization Choice Scott D Keating, Kristopher A Innanen	Robust Deblending of Simultaneous Source Seismic Data Aaron Stanton, Keith Wilkinson	Completion Journey: Where We Started... to Where We Are Today, Preferred Methods, What Has Worked and What Has Not Been as Successful as We May Have Hoped Corey Van Engelen

2:40-3:20 COFFEE & POSTERS

3:20-3:45	Neural Network Models for Predicting the Size and Horizontal Location of Shale Barrier Using Reservoir Parameters and SAGD Production Data Min Kim, Hyundon Shin, Hyun Suk Lee	Log-Validated Waveform Inversion With Wavelet Phase and Amplitude Updating Sergio J. Romahn, Kristhoper Innanen	Simultaneous Source vs. Regular Vibroseis Acquisition — a Direct Comparison Andrea J. Crook	Advancing the Management of Induced Seismicity Risk in the Duvernay Formation Sobhi Alhashwa
3:45-4:10	Predictive Applications of Bitumen Geochemistry at Devon's Jackfish In-Situ Project Scott R. Barlund, Matt Abram, Jordan Curkan	Confidence Measure for Bayesian Facies Estimations John V. Pendrel, Henk J. Schouten	Ultra-High-Density 3D Seismic in the Oil Sands With Near Zero Environmental Footprint Allan Châtenay, Paul Thacker	Production Operations: Artificial Lift Design, Facility Philosophy, H₂S Production Challenges (From Where and How Much) Hsao-Hsien Chio
4:10-4:35		Toward 4C FWI: Distributed Acoustic Sensing and 3C as Complementary Datasets Matthew Eaid, Kris Innanen	Field Deployment and Response of a Shaped DAS Fibre Loop Kris Innanen, Don Lawton, Kevin Hall, Kevin Bertram, Malcolm Bertram, Henry Bland	FCOG: A collaborative approach to responsible resource development of the Duvernay formation in the Kaybob area TBD

4:35-5:00

Telus 101-102	Telus 104-105	Telus 106	Telus 111 (The colab)
Microseismic I SESSION CHAIRS: Barry Fish & Natalia Verkhovtseva	Skill Fundamentals 101 and Case Studies Part II SESSION CHAIRS: Shelley Leggitt & Brian Zaitlin	International Case Studies I SESSION CHAIRS: Kathleen Dorey & Juan Pablo Collazos	Unconventional EOR SESSION CHAIRS: Giselle Fonseca & Ian Kirkland
Microseismic Event Locationing Considering Refraction and Ambiguity of S-Wave Picking: Horn River Case Study Satoshi Ishikawa, Naoyuki Shimoda, Hiroyuki Tokunaga	Tight Oil Geochemistry Daniel M. Jarvie	Exploring Pakistan's Indus Basin — Applying Knowledge from Western Canada Brad J. Hayes	Eagle Ford: Introducing the Big Bad Wolf Scott Malo, Nick Volkmer, Jimmy McNamara, Ehsan Amirian
Anisotropic Velocity Model Calibration with Controlled Complexity — A Microseismic Monitoring Case Study Junwei Huang, Philip J. Usher		NMR Facies Definition for Carbonate Rocks Using Core/Log and Pore-Scale Measurements Alireza Mardani, Reza Rezaee, Ashkan A. Eskandar	Huff & Puff Enhanced Oil Recovery in the Liquids-Rich Portion of the Montney Play Jose A. Rivero, Majid M. Faskhoodi, Giselle Garcia Ferrer, Herman Mukisa
Attenuation Tomography Using Recorded Microseismicity in a Mine Himanshu Barthwal, Frank J. Calixto, Mirko van der Baan	In Situ Versus Produced Hydrocarbons in Unconventional Reservoirs: Insight from Produced and Mud Gas Geochemistry (Montney Resource Play, Western Canada) Tristan Euzen, Jean-Yves Chatellier, Neil Watson	Two Inversion Case Studies From the SCOOP and STACK Area of Oklahoma Satinder Chopra, Ritesh Kumar Sharma, James Keay	Enhanced Recovery Methods in Unconventional Plays: 'Soaking' — Friend or Foe? Carolyn Currie
Permeability Estimation From Hydraulic Fracturing Induced Microseismicity: Effect of Fracture Growth Himanshu Barthwal, Mirko van der Baan	Petroleum Hydrodynamics Fundamentals 101 Phil A. Esslinger	A New Approach of Utilizing Real Time Resistivity Image Measurements in North Kuwait Carbonate Formation Evaluation for Completion Optimization: Case Study Ghadeer Taleb Boland, Chao Chen, Stephen Antonson, Eslam Elabsy	Possible Alteration of Mineral Wettability due to Interaction With Reservoir and Hydraulic Fracturing Fluids A. Younis, H. Yarveicy, C.R. Clarkson, C. DeBuhr, H.J. Deglint, A. Ghanizadeh
Distinguishing Operational Microseismicity in Western Canada from Induced Earthquakes Rebecca O. Salvage, David W. Eaton		Unmixing Mixed Signals in Ancient Fluvial Deposits: Implications for Paleogeographic Reconstructions and Sedimentary Provenance Sampling Strategies. Curtis Ferron, Janok Bhattacharya, William Matthews	Miscible or Immiscible? Gas Flooding for Bakken Reservoirs in Southeast Saskatchewan Peng Luo, Petro Nakutnyy, Kelvin D. Knorr
	What's Hydrodynamics Done for Me Lately? Select Case Studies From the Conventional and Unconventional Montney Formation Kaush Rakhit, Allison Gibbs		
	The Importance of Hydrodynamics in the Geomechanical Understanding of Oil and Gas Plays: Upper Mannville Case Study Neil D. Watson, Amy D. Fox		

MONDAY POSTERS SPONSORED BY:



MORNING

- 10:00am** 1
Ghost-Rock Karstification of Devonian Paleotopography at the Hammerstone Quarry Site in Northeast Alberta
Paul L. Broughton
- 10:00am** 21
Study on Surface Tension and Wetting Behavior of a Novel Fluorocarbon Surfactant
Hong Li, Pingchuan Dong
- 10:00am** 39
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Zhan Niu, Jian Sun, Daniel O. Trad
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Square Root Arithmetical Mean of the Amplitude in Multi Seismic Survey Processing Merging for AVO and Seismic Inversion Analysis East-Mexico. A Case of Study
Roberto Rodriguez Sandoval
- 10:00am** 56
Drilling & Completion Lessons Learned in the Duvernay From Appraisal to Development
Trevor L. Holding
- 10:00am** 94
The 3D Provincial Geological Framework Model of Alberta, Version 2: Updating a Province Wide 3D Geocellular Model to Incorporate 30 New Model Zones
Laurence Jayawardane
- 10:10am** 7
Unsupervised Machine Learning Applications for Seismic Facies Classification
Satinder Chopra, Ritesh Kumar Sharma, James Keay
- 10:10am** 45
Optimizing Site Locations to Reduce Long-Term Environmental Liabilities
Greg R. Potter
- 10:10am** 82
Exploring in Asia for Oil and Gas in Naturally Fractured and Weathered Basement Reservoirs
Tako Koning

- 10:10am** 63
How to Not Ruin Your Vibe — Delineating Potential Risk Zones for Seismic Operations in Wetland-Dominated Regions Using Colour-Infrared and LiDAR
Ysabel M. Garcia, Pierce A. Laing, Christopher B. Harrison, Allan R. Chatenay, Paul Thacker
- 10:10am** 27
Incorporating Formation Re-Evaluations with Laboratory Rock and Fluid Testing to Achieve Long Lived and Cost-Effective Disposal, Injection and Producing wells.
P.F. DuBois, M. Noorzi, D. Drozd, T. Walker, F. Yan
- 10:10am** 101
Enhancement of the Gas Extraction for Reservoir Identification in a New Mud Logging System
Daniela Marum, Maria Diná Afonso
- 10:20am** 71 & 72
Moving Beyond 'Salt Thickness': A Detailed Assessment of Lithological Heterogeneity Within Salt-Bearing Evaporite Successions in the Elk Point Group of Alberta
Tyler E. Hauck
- 10:20am** 33
Looking for SS Waves in Conventional 3C Seismic Data
Saul E. Guevara, Daniel Trad
- 10:20am** 52
Lower Jurassic Source Rock of the Scotian Margin: Effects of Salt on Maturation and Implications on the Petroleum System
Juan C. Wong, Xin Yue Hu, Ricardo L. Silva, Grant D. Wach
- 10:20am** 13
Neural Network Models for Predicting the Size and Horizontal Location of Shale Barrier Using Reservoir Parameters and SAGD Production Data
Min Kim, Hyundon Shin, Hyun Suk Lee
- 10:20am** 87
Detrital Zircon U-Pb Ages: Evidence for Variscan Sediment Provenance in the Grand Banks, Offshore Newfoundland
Brenton J. Fairey, Marta Barbarano, David A. Riley, Tim J. Pearce

- 10:20am** 107
Possible Alteration of Mineral Wettability Due to Interaction With Reservoir and Hydraulic Fracturing Fluids
A. Younis, H. Yarveicy, C.R. Clarkson, C. DeBuhr, H.J. Deglint, A. Ghanizadeh

AFTERNOON

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Acoustic Emissions of Hydraulic Fracturing Laboratory Experiment on Montney Shale
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Evaluation of Hydration Expansion and Plugging Performance of Micro-Nano Water Plugging Agent
Yun Zhou, Pingchuan Dong
- 2:45pm** 42
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J. Helen Isaac, Don C. Lawton, Malcolm B. Bertram
- 2:45pm** 79
The AER Play Workbook — Aligning Geoscience and Engineering Analyses for Regulatory Delivery and Public Reserves Reporting
Courtney Whibbs, Erin Wadsworth, et. al.
- 2:45** 59
Characterization and Distribution of Lithofacies of the East Duvernay Shale Basin Near Elnora/Twining, Alberta Through Core and Log Analysis
Erin L. Bohlender, Henry G. Portilla, Per K. Pedersen
- 2:45pm** 104
Tight Oil Play of the Upper Devonian Torquay Formation in Southeastern Saskatchewan, Canada
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- 2:55pm** 66
Optimization of Hydraulic Fracture Design Parameters, Using Multivariate Statistical Analysis With Integration of Unconventional Fracture Modeling (UFM) and Calibrated Production Data, A Montney example
Majid Mohammadpour Faskhoodi

MONDAY POSTERS SPONSORED BY:



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Sand Structures for Offshore Exploration and Logistics in Environmentally Protected Areas		A Comprehensive Study on Mineral Scaling Potential During Water Flooding in an Offshore Oilfield		Evaluation of SCVF and GM Measurement Approaches to Detect Fugitive Gas Migration Around Energy Wells	
Max Chernetsov		Mohammad Malieri, Raya Matourian		Neil A. Fleming, Tiago A. Morais, Celia S. Kennedy, M. Cathryn Ryan	
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Closing the Gap... by Codifying What Efficient Team Work Should Be in Geomodeling Projects		Impact Craters in Seismic Data: Ongoing Study of Astroblemes and Their Importance to the Oil & Gas Industry		Case Study of Proppant Selection for a Montney Well Using Discrete Element Simulations	
T. Jerome		Amanda K. Obodovsky		Wenbo Zheng, Dwayne Tannant	
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The Canol Shale Basin of NW Canada: New Outlook on Lithostratigraphy and Paleooceanographic Control of a Devonian Shale-Hydrocarbon Prospect		Early Jurassic Source Potential and Ocean Redox Conditions Inferred From Trace Metal and Organic Geochemistry of the Gordondale Member and Poker Chip Shale, Northeastern BC			
Pavel B. Kabanov, Sofie A. Gouwy, Christine Deblonde, Chunqing (Dennis) Jiang, Mary L. Borrero		Alex Kunert, Brian Kendall, Thomas Moslow, Gerald Nyberg, Bernadette Pedersen, Craig Smith			
2:55pm	90				
Analytic Models of Distributed Acoustic Sensing Data for Straight and Helical Fibre					
Heather K. Hardeman-Vooys, Michael P. Lamoureux					

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	Glen 201-204	Glen 205	Glen 206	Glen 208-209
	Duvernay I SESSION CHAIRS: Marco Venieri & Robert Riopel <div> SPONSORED BY:  </div>	Seismic Interpretation Case Histories SESSION CHAIRS: Robert Gunning & Ron Wier	Machine Learning / AI / Big Data I SESSION CHAIRS: Farrukh Akram & Edward Little	George Pemberton Memorial Session: Sedimentology/ Ichnology I SESSION CHAIRS: Mike Ranger & Jason Lavigne
8:25-8:35	INTRODUCTION			
8:35-9:00	Sedimentological and Stratigraphic Observations from the Margin-to-Basin system of the Duvernay Formation: 'A Field Notebook is Worth a Thousand Words' Henry Galvis-Portilla; Marco Venieri; Simon Poirier; Scott McKean; Samantha Mackie, Per Kent Pedersen	Investigating the Role of Crestal Faulting on Hydrocarbon Trapping in Rollover Structures of the Sable Subbasin, Offshore Nova Scotia — Insights From the Migrant Structure Kenneth T. Martyns-Yellowe, Grant D. Wach, Frank W. Richards, Neil Watson	An Organic Porosity Evolution Model Through Machine Learning, Example From Upper Devonian Duvernay Formation, Western Canada Sedimentary Basin Zhuoheng Chen, Jon Liu, Edward Little, Jijin Yang, Yu Zhou, Dennis Jiang	Tribute to George Pemberton
9:00-9:25	Detailed Sedimentological and Sequence Stratigraphic Analysis of the Duvernay Formation in the Kaybob Area, Alberta Daniel J. Shaw, Nicholas B. Harris	Application of High Resolution 2D Marine Seismic Technique for Geological and Geotechnical Objectives at Paterson Lake South Triple R Uranium Deposit Sorin Dobrovicescu, Ross McElroy, Ray Ashley	Machine Learning Strategies to Perform Facies Classification Marcelo Guarido	Applying Ichnology to Sequence Stratigraphy — A Legacy of S. George Pemberton James A. MacEachern, Murray K. Gingras, Kerrie L. Bann, Sarah K. Schultz
9:25-9:50	Lithofacies and the Paleo Environment of the Southern West Shale Basin of the Duvernay Formation Blair C. Cann, Laurence R. Lines	Cataloguing and Evolution of Structures in Southern Sindh Monocline, Indus Basin, Pakistan Formed in Multi-Extensional Tectonic Episodes of Indian Plate Shabeer Ahmed, Sarfraz Hussain Solangi	Unsupervised Machine Learning Applications for Seismic Facies Classification Satinder Chopra, Ritesh Kumar Sharma, James Keay	The Exploited: Ichnologic Analogs for Multi-Lateral Horizontal Oil Drilling Strategies in the Lower Cretaceous Grand Rapids and Clearwater Formations, Upper Mannville Group, Alberta, Canada Indraneel (Indy) Raychaudhuri, Matthew J. Young, James A. MacEachern, Murray K. Gingras
9:50-10:35	COFFEE & POSTERS			
10:35-11:00	Clay Mineral Structural Changes and Mineralogical Transformation in the Devonian Duvernay Shales Raphael Wust, Sam Tu, Mashrur Zaman, Graham Spray	Collisional Tectonics and Its Effects on Hydrocarbon Entrapment and Progression: A Case Study From Potwar Plateau, NW Corner of Indian Plate Rana Faisal Shahzad, Uzair Hamid Awan, Shabeer Ahmed Abbasi	Use of Theory-Guided Neural Networks to Perform Seismic Inversion Jonathan E. Downton, Daniel P. Hampson	Bioturbation and Sedimentation Rates in Prodeltas Janok P. Bhattacharya
11:00-11:25	Mineralogical Controls on Organic-Hosted Pore Volume and Pore Size — Duvernay Formation, Alberta, Canada Levi J. Knapp, Shinnosuke Uchida, Takashi Nanjo, Omid Haeri-Ardakani	Post-Stack Seismic Image Optimization for Fracture Seismic Attributes — A Practical Guide of the SSIO Methodology Ricardo De Oliveira, Mariana Figuera	A Comparison of Machine Learning Methods for Seismic Inversion to Estimate Velocity and Density Yexin Liu	Delta or Estuary: That is the Question — The Role of Ichnology in the Interpretation of Shallow Marine Systems, an Example from the Clearwater Formation, Cold Lake, Alberta Carolyn Currie
11:25-11:50	Certified Organic — Including the Effects of TOC in Rock-Physics Modelling and Classification of the Duvernay Carl Reine, Jessa-lyn Lee	Gas Storage Case Study: Southwestern Ontario Marissa Whittaker, Julie Clarke, Luc Gravel	Data Driven Models Using Machine Learning Methods to Predict Well Productivity in Montney Formations Shengnan Chen, Shuhua Wang	Interstratification of Deltaic and Bay Sedimentation in a Marginal-Marine, Wave-Influenced Coastline: The Glauconite Formation, Alberta, Canada Scott E. Botterill, William Clark, M. Ryan King, Murray K. Gingras

Telus 101-102	Telus 104-105	Telus 106	Telus 111 (The colab)
Water: Hydrogeology and More! SESSION CHAIRS: Krista Beavis & Stacia Skappak <div> SPONSORED BY:  </div>	Business and Financial SESSION CHAIRS: Marty Hewitt & Byron Kelly	International Case Studies II SESSION CHAIRS: Graham Price & Catherine Huff	Global Carbon Capture, Storage, Utilization and Monitoring SESSION CHAIRS: Anne Halladay & David Hills Reservoir Engineering and Hydraulic Fracturing in Unconventional Plays SESSION CHAIRS: Ali Ziarani & Erin Summers
Optimizing Site Locations to Reduce Long-Term Environmental Liabilities Greg R. Potter, Sheila C. Duchek	Differentially Stuck Meridee J Fockler	Depth Imaging in the Delaware Basin — a Case Study Josef Heim, Candace Bruins, James Beck, Renita Aranha, Hanieh Shahrokhi	Final Preparations for Alberta's Biggest CO₂ Enhanced Oil Recovery in the Leduc Formation at Clive David Hills
A Comprehensive Study on Mineral Scaling Potential During Water Flooding in an Offshore Oilfield Mohammad Malaieri, Raya Matoorian, Mehrdad Soltanzadeh	Canada and US Unconventional Play Trends Nathan C Nemeth	Characterization of Facies and Fracture Patterns Within Chalk Deposits: Example From the Mungo Field, UK Central North Sea Greg M. Baniak, Zoë Sayer, Hannah Patterson	Using Passive Seismic Data at the CaMI Field Research Station, Newell County, Alberta Canada Marie Macquet, Don Lawton
Responsible Disposal of Oil and Gas Waste Fluids: Trends, Risks and Mitigation Kim David Kingsmith	Re-Thinking the Operating Model with Integrated Operations Denise T. Chengler, Rachael N. Pettigrew	Tectono-Eustatic Effects on Siliciclastic-Rich to Siliciclastic-Poor Outer-to-Inner Ramp Carbonate Transition: Albian to Early Turonian Dhalqut Formation, Dhofar, Southern Oman Osman Salad Hersi, Iftikhar A. Abbasi, Abdulrahman Al-Harthy	Processing of Walk-Away DAS and Geophone VSP Data from the CaMI Field Research Station, Newell County, Alberta Adriana Gordon, Don C. Lawton, Kevin Hall, Tom Daley
Water Use Performance in the In Situ Oil Sands Sector Brent Welsh, Jill Hume	The Montney: Changing the Face of the Western Canadian Natural Gas Industry Simon Mauger	A Proposed Evolutionary Lineage of Eurygnathodus and Its Role in Defining the Base of the Olenekian (Lower Triassic) Zhengyi Lyu, Michael J. Orchard, Laishi Zhao, Zhong-Qiang Chen	Simulation-Based Hydraulic Fracture Workflows for Optimizing Unconventional Asset Development Kevin Joslin
	New Technology Plays of Western Canada: What is the Value? Michael Muirhead	Reservoir Quality Assessment by Petrographic and Petrophysical Analyses in Kupe Gas Field, Southern Taranaki Basin, New Zealand S.M. Talha Qadri; Md. Aminul Islam, M.R. Shalaby	Optimization of Hydraulic Fracture Design Parameters, Using Unconventional Fracture Modeling (UFM) Approach, A Montney Example Majid M. Faskhoodi, Drazenko Boskovic, Alexey Zhmodik, Li Qiuguo, Oscar P. Michi, Venkateshwaran Ramanathan, Raouf Ameuri
			KEYNOTE PRESENTATION Integrated Frac-Through-Flowback Modeling to Estimate the Initial Conditions of Flowback: Example From the Montney Formation C.R. Clarkson, Z. Zhang, B. Yuan, A. Ghanizadeh, J.D. Williams-Kovacs

TUESDAY AFTERNOON

Glen 201-204

Montney Reservoir Characterization

SESSION CHAIRS:
Ali Ziarani & Nasir Rahim

Glen 205

Seismic Processing — Applied

SESSION CHAIRS:
Dmitri Skorinski & Marian Hanna

Glen 206

Machine Learning-AI-Big Data II

SESSION CHAIRS:
Farrukh Akram & Edward Little

Glen 208-209

George Pemberton Memorial Session II

SESSION CHAIRS:
Mike Ranger & Jason Lavigne

1:15-1:25 INTRODUCTION

1:25-1:50

Analysis of the Metre-Scale Depositional Architecture of the Montney Fm. in Outcrop Using UAV Technology: Implications for Sedimentology and Fracture Stratigraphy

Simon Poirier, Per Kent Pedersen, Henry Galvis-Portilla

Wrinkles in Time: Removing Surface Effects from 3D Source Ensembles

David C. Henley

An Active Role for Quantum Computation in Exploration Seismology

Shahpoor Moradi, Daniel Trad, Kristopher A. Innanen

S. George Pemberton's Brackish-Water Model: Origins and Applications

Murray Gingras, James MacEachern

1:50-2:15

Quasi Seismic-Scale Modeling of the Montney Formation from Well Log Data: A Quick Look Technique for Assessing Reservoir Heterogeneity and Geomechanical Characteristics

Sochi C. Iwuoha, Per K. Pedersen, Christopher R. Clarkson

Geophone Noise Attenuation After Dual Sensor Summation for Ocean Bottom Data in the Wavelet Domain

Hong Liang, Houzhu Zhang

Convolutional Neural Network with Transfer Learning for Automatic Velocity Analysis

Min Jun Park, Mauricio D. Sacchi

Non-Marine and Marine Trace Fossil Assemblages Within the Cretaceous Blackhawk Formation, Utah

Grant D. Wach, Keith W. Shanley

2:15-2:40

Chemostratigraphic Correlations Across the Alberta Montney Formation

Raphael Wust, Sam Tu, Albert Cui, Cory Twemlow, Nik Minions

VSP Using Distributed Acoustic Sensing at the CaMI Field Research Station in Newell County, AB — August 2018

Heather K. Hardeman-Voos, Matt McDonald, Michael P. Lamoureux

Probabilistic Clustering of a Discrete Fracture Network from Microseismic Data

Scott H. McKean, Jeffrey A. Priest, Jan Dettmer, David W. Eaton

Ripples and Deep-Sea Levees — Together, Forever

R. William (Bill) Arnott

2:40-3:20 COFFEE & POSTERS

3:20-3:45

Stress-Dependence of Porosity and Permeability of Tight Rocks of the Montney Formation: New Insights From Holistic Interpretations of MICP Data

Albert Cui, Jordan Wilson, Raphael Wust, Brent Nassichuk, Cory Twemlow

Joint PP-PS Model Building for Complex Geology — an Example From Offshore Mexico

John Mathewson, Miguel Acosta Perez, Edgar Serrano Casillas, Silvino Dominguez Garcia, Jorge Diaz de Leon Chagolla

Application of Independent Component Analysis and Gaussian Mixture Models in Micro-Seismic Signal Detection

Amir Shamsa, Mehdi Paydayesh

Facies Analysis of the Clearwater Formation in Marten Hills and Nipisi, North-Central Alberta

Cole L. Ross, Murray K. Gingras, Scott W. Hadley, Michael J. Ranger

3:45-4:10

Integrated Anisotropic Model Building for the Montney Using Sonic and Hybrid Cable DAS VSP

Scott Leaney, Theo Cuny, Edgar Arteaga, Takashi Mizuno, Marco Perez

Shear-Wave Studies of the Near-Surface at the CaMI Field Research Station in Newell County, Alberta

J. Helen Isaac, Don C. Lawton, Malcolm B. Bertram

A Deep Learning Perspective of the Forward and Inverse Problems in Exploration Geophysics

Jian Sun, Zhan Niu, Kristopher Innanen, Junxiao Li, Daniel Trad

The Application of Ichnology, Sedimentology and Sequence Stratigraphy to Identify Reservoir Distribution in the Middle Triassic Sunset Prairie Formation, Northeastern British Columbia

Carolyn M. Furlong, Murray K. Gingras, John-Paul Zonneveld

4:10-4:35

A New Method for Production Forecasting: Predictive Analytics vs Conventional Methods in the Montney

Melanie Popp, Alex Renaud

CREWES 2018 Multi-Azimuth Walk-Away VSP Field Experiment

Kevin W. Hall, Kevin L. Bertram, Malcolm Bertram, Kris Innanen, Don C. Lawton

Deep Learning Approach to Automatically Detect Faults and Fractures from Magnetic Data Using Convolutional Neural Network (CNN)

Hassan H. Hassan, Serguei Goussev

Applied Ichnology in Reservoir Geology: A New Biogenic-Diagenetic Model for Dolomites in Mississippian Upper Midale Beds, Weyburn Oilfield, Saskatchewan

Arjun D. Keswani, S.George Pemberton

4:35-5:00

Least-Squares RTM of a Seismic-While-Drilling Dataset

Nasser Kazemi, Daniel Trad, Kris Innanen, Roman Shor

Telus 101-102	Telus 104-105	Telus 106	Telus 111 (The colab)
Petrophysics SESSION CHAIRS: Glenn Sather & Robert Everett	Integrating Geoscience to Optimize Unconventional Resource Plays SESSION CHAIRS: Ivan Pasechnik & Matt Ng	Frontier Basins and East Coast Canada SESSION CHAIRS: Catherine Huff & Homayoun Gerami	Petroleum Geochemistry SESSION CHAIRS: Barry Bennett & Zied Ouled Ameur
Enhancement of the Gas Extraction for Reservoir Identification in a New Mud Logging System Daniela Marum, Maria Diná Afonso	Integration of Multi-Discipline Data-Sets for Completions and Development Optimization Andrei Popescu, Igor Kuvaev, Igor Uvarov	Low-Rank Coal Reservoir Character and CBM Exploration Potential in Junggar Basin — a New Exploration Frontier Case From Xinjiang, NW China Yuanjiang Yu, Yonghua Wang	Geochemical Signatures of Doig Sourced Hydrocarbons: Can Doig Phosphate Source Rock Generate Two Different Types of Oils? Wujun Feng, Zhuoheng Chen, Chunqing Jiang, Julito Reyes, Xiaojun Liu
Comparing Petrophysical Models for an Unconventional Shale Play: A Case Study of the Lower Jurassic Nordegg/ Gordondale Members in Alberta Rafael A. Becerra Delmoral	Optimization of Hydraulic Fracture Design Parameters, Using Multivariate Statistical Analysis with Integration of Unconventional Fracture Modeling (UFM) and Calibrated Production Data, a Montney Example Majid M. Faskhoodi, Drazenko Boskovic, Alexey Zhmodik, Li Qiuguo, Oscar P. Michi, Venkateshwaran Ramanathan, Raouf Ameuri	Chemostratigraphy and Stable Isotope Stratigraphy of the Triassic and Lower Jurassic Within the Well Spoonbill C-30; an Intergrated Stratigraphic Approach D. Riley, T. J. Pearce, D. Rutledge	Interpreting Classical Molecular Maturity Parameters Based on Qualitative and Quantitative Data Barry Bennett, Steve Larter
Overview of NMR Techniques for Core Analysis M. J. Dick, D. Veselinovic, D. Green	Come for a Scroll, Stay for the Bar — Interpretation and Development Strategy of a Large-Scale Point Bar at Imperial's Aspen Project, Alberta B. Joan Carter, Becky Rogala, Robert Yates, Dave Moreton, Bogdan Varban	Evidence for Petroleum Systems Offshore Baffin Island Christopher D. Jauer	Using Biomarker Geochemistry as a Reservoir Surveillance Tool; Supported by 4D Seismic and Observation Well Results Noel Devere-Bennett, Tess Storck, Mitchell Gillrie
Advanced Algorithms for Quantification of Mineralogical Composition from Elemental Composition (XRF) Data: Examples from the Montney, Duvernay and Bakken Formations (Canada) Z. Yang, C.P. Vocke, C.R. Clarkson, A. Younis, A. Vahedian, H.J. Deglint, C. DeBuhr, A. Ghanizadeh	Quantitative Analysis of Smectite and Associated Clay Minerals in Drill Cutting Samples by XRD with Rietveld and Relative Intensity Ratio Methods Mashrur Zaman, Graham Spray, Philip Haig, Raphael A. J. Wust, Brent Nassichuk	Triassic Syn-Rift Reservoir Architecture — Linking Across the Atlantic Conjugate Margin (Fundy Basin, Canada; Essaouira Basin and Argana Valley, Morocco) Nadine Mader-Kayser, Jonathan Redfern	Experimental and Numerical Studies of Aquathermolysis Tests of Christina Lake Bitumen with Steam Zied Ouled Ameur, Chris Elliott, Simon Gittins
Improving Formation Factor and Permeability Estimation in Clean Sediments for Reservoir Characterization of Oil Sands Ned Etris	Analyzing the Decision-Making Process of Hydraulic Fracturing Operations Jieyu Zhang, Mirko van der Baan	Provenance from Mafic and Ultramafic Rocks for the Sedimentary Succession of the Southern Grand Banks, Offshore Newfoundland Marta Barbarano, Brenton J. Fairey, David A. Riley, Tim J., Pearce	Triggers for Organic Matter Accumulation in the Middle and Upper Devonian Horn River Shale, Canada, Identified from Microsampling of Drill Cores Haolin Zhou, Nicholas B. Harris, Jilu Feng
Planning and Evaluating New Generation Pulsed Neutron Logs: An Example from Duvernay Shale Jason A. Gendur	The Modern Geophysicist: Using Geophysics the Geophysicist to Add Value and Influence Business Decisions Matt Ng, Chelsea Squires		Advances in Petroleomics Approaches for Petroleum Systems Assessment Using Ultrahigh Resolution Mass Spectrometry — FTICR-MS Thomas B.P. Oldenburg, Melisa Brown, S. Hossein Hosseini, Ygor dos Santos Rocha, Reinhard F. Sachsenhofer, Steve R. Larter
			Organic and Isotope Geochemistry of Hybrid Hydrocarbon Accumulations Jaime Cesar, Michael Nightingale, Veith Becker, Bernhard Mayer

TUESDAY POSTER DISPLAYS

TUESDAY POSTERS SPONSORED BY:



MORNING

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Sunjay
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Refining Depositional Environment Interpretation Using Ichnofacies and Their Potential Impact on Enhanced Reservoir Properties: A Case Study of Baiyinchagan Sag, Erlan Basin, China
Shengyu Li, Jingchun Tian, Milovan Fustic, Dongdong Yang
- 2:55pm** 46
Molecular Composition and Isotope Mapping of Natural Gas in NEBC
Curtis Evans, Michael J. Whiticar

TUESDAY POSTERS SPONSORED BY:



<p>2:55pm 69</p> <p>Application of Chemical and Stable Carbon and Hydrogen Isotope Compositions to Aid Operators in Determining the Source of Leaking Thermogenic Natural Gas in Surface Casing Vents (SCVF) or Soils Outside Casing (AGM) in Area Base Closures</p> <p>Bryan J. Szatkowski</p>	<p>2:55pm 10</p> <p>Implications of Glacial Isostatic Adjustment on Petroleum Reservoirs in the Grand Banks of Newfoundland</p> <p>Malcolm D.J. MacDougall, Alexander Braun, Georgia Fotopoulos</p>	<p>3:05pm 58</p> <p>Induced Seismicity and Hydraulic Fracturing Insights From a Fracture Survey of an Analogous Duvernay Outcrop</p> <p>Scott Harold McKean, Simon Poirier, Jeffrey A. Priest, Per Kent Pedersen, Henry Galvis-Portilla; Marco Venieri, Samantha Mackie</p>
<p>2:55pm 89</p> <p>Seismic and Sequence Stratigraphic Analyses to Delineate the Hydrocarbon Potential of Olawah Field, Niger Delta Basin, Nigeria</p> <p>Taofeek Agboola Ogunfolabo</p>	<p>3:05pm 34</p> <p>Cataloguing of Structures Formed in Multi-Tectonic Episodes of Indian Plate: A Model from Southern Sindh Monocline (SSM), Lower Indus Basin, Pakistan</p> <p>Shabeer Ahmed, Sarfraz Hussain Solangi</p>	<p>3:05 76</p> <p>Transitioning to High Density Vibroseis Seismic Acquisition: A Case Study</p> <p>Andrea Crook, Rob McGrory, Nathan Baker, Adam Westlake</p>
<p>2:55pm 105</p> <p>Ultra-High-Density 3D Seismic in the Oil Sands with Near Zero Environmental Footprint</p> <p>Allan Châtenay and Paul Thacker</p>	<p>3:05pm 17</p> <p>Hydrochemical Analysis of Lithium in the Williston Basin: Bakken and Frobisher Aquifers</p> <p>Zachary L. Maurer, Benjamin J. Rostron, Osman Salad Hersi, Tsilavo Raharimahefa</p>	<p>3:05 93</p> <p>High-Resolution UAV Magnetometry Surveys for Localizing Legacy/ Abandoned Wells</p> <p>Callum A. Walter, A. Braun, G. Fotopoulos</p>

3D SEISMIC DATA	2D SEISMIC DATA
65,310 KM ²	829,207 KM

WEDNESDAY MORNING

Glen 201-204

Duvernay II

SESSION CHAIRS:
Daniel Ciulavu & Brad Sinex

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Glen 205

Seismic Processing — Theory I

SESSION CHAIRS:
Aaron Stanton & Wenlei Gao

Glen 206

GeoModelling: Modelling Geological and Geophysical Phenomena

SESSION CHAIRS:
Erin Pemberton & Sean Fletcher

Glen 208-209

Diversification of the Energy Industry and Geothermal

SESSION CHAIRS:
Svetlana Bidikhova & Tatyana Plaksina

8:25-8:35 INTRODUCTION

8:35-9:00

Quantification of Geological and Geomechanical Heterogeneity of the Duvernay Shale Through Integration of Outcrop and Subsurface Data and Its Application to Unconventional Exploration

Marco Venieri, Henry Galvis Portilla, Scott McKean, Simon Poirier, Samantha Mackie, Per Kent Pedersen

Viscoacoustic Reverse Time Migration in Tilted TI Media With Attenuation Compensation

Marco Venieri, Henry Galvis Portilla, Scott McKean, Simon Poirier, Samantha Mackie, Ali Fathalian, Daniel O. Trad, Kristopher A. Innanen

Basin Modelling and Thermal History of the Horn River and Liard Basins, Cordova Embayment, and Adjacent Parts of the Western Canadian Sedimentary Basin

Tessa K. Wilson, Robert M. Bustin

Hydrochemical Analysis of Lithium in the Williston Basin: Bakken and Frobisher Aquifers

Zachary L. Maurer, Benjamin J. Rostron, Osman Salad Hersi, Tsilavo Raharimahefa

9:00-9:25

Role of Robust Velocity Model for Reservoir Characterization

Ritesh Kumar Sharma, Satinder Chopra, Larry Lines

Pure P- and S-Wave Elastic Reverse Time Migration with Adjoint State Method Imaging Condition

Jorge E. Monsegny, Daniel O. Trad

Implications of Glacial Isostatic Adjustment on Petroleum Reservoirs in the Grand Banks of Newfoundland

Malcolm D.J. MacDougall, Alexander Braun, Georgia Fotopoulos

Helium in Southern Saskatchewan: Accumulation and Geological Setting

Melinda Yurkowski

9:25-9:50

Parent-Child Interference in the Duvernay Play: Guidelines for Completing Children Wells in Multiple-Well Pads

Giselle Garcia Ferrer, Majid M. Faskhoodi, Alexey Zhmodik, Li Qiuguo, Herman Mukisa

A Kronecker Sum Decomposition of the Hessian Matrix for Fast Least-Squares RTM Migration

Wenlei Gao, Gian Matharu, Mauricio Sacchi

Particle Swarms for Numerical Wave Equation

Michael P. Lamoureux, Heather K. Hardeman-Voys

Geothermal Resource Characterization of the Middle Devonian Slave Point Formation at Clarke Lake Field, Fort Nelson, B.C., Canada

Evan D. Renaud, John A.W. Weissenberger, Nicholas B. Harris, Jonathan C. Banks

9:50-10:35 COFFEE & POSTERS

10:35-11:00

Impact of Geomechanics on Hydraulic Fracture Geometry and Well Spacing in the East Duvernay Shale Basin, Canada

Farhan Alimahomed, Eric Wigger, Matthew Drouillard

Letting the Data Drive the Initial Model Building for Refraction Tomography

Simone Re, Mattia Speziali

Nonlinear Inversion for Fluid and Stress Parameters

Huaizhen Chen, Junxiao Li, Kristopher Innanen

Techno-Economic Assessment of CAES Technologies in Enhanced Geothermal Systems (EGS) in Alberta

Hamid Rahmanifard, Tatyana Plaksina

11:00-11:25

The Sun Rises in the East Shale Duvernay

Kay-Cee M. Hermanson

A Simplified 2D Common Reflection Surface Stack

Zhengsheng Yao, Valentina Khatchatrian, Randy Koles

Fluid Flow and Trap Adequacy — Contrasting Triassic Fluvial Outcrops and Cretaceous Deltaic Reservoirs Onshore and Offshore Nova Scotia

Darragh O'Connor, F.W. Richards, G. Wach

Defining a Geo-model of the South Swan Hills Reef Complex for Geothermal Use, Swan Hills, Alberta

Christopher Noyahr, John A. Weissenberger, Nicholas B. Harris, Jonathan C. Banks

11:25-11:50

Internal Multiple Prediction and the Downward Generator Space

Andrew S. Iverson, Scott D. Keating, Kristopher A. H. Innanen, Daniel O. Trad

Kinetics of Anhydrite Precipitation from Carbonate Hosted Geothermal Reservoirs

Ashley K. Went, Jonathan C. Banks, Daniel S. Alessi

11:50-12:15

Analysis of Alberta Precambrian Basement core and modelling the fracture characteristics necessary for operating an Enhanced Geothermal System in the Alberta Precambrian Basement

Samuel D. Johnson, Jonathan C. Banks, Daniel S. Alessi

Telus 101-102

Microseismic II

SESSION CHAIRS:
Neil Taylor & Carolyn Currie

Telus 104-105

The Value of Geosciences

SESSION CHAIRS:
Tanya Yeomans & John Duhault

Telus 106

New Technologies for Frontier Plays and Unconventional Resources

SESSION CHAIRS:
Sochi Iwuoha & Behrooz Hosseini

Telus 111 (The colab)

Geomechanics in Hydraulic Fracturing

SESSION CHAIRS:
Sheng Yang & Ramil Ahmadov

Factors Affecting Velocity Model Calibration for Microseismic Event Location

Natalia Verkhovtseva, Timur Mukhtarov

Displaying Well Control Incident Data in Petrel; a Workflow for Promoting Rig Safety Across Disciplines

Kurt D. Armbruster

A Data Driven Method for Sweet Spot Identification in Shale Plays Using Well Log Data

Bianca Zadrozny, Haniff Ramdeen, Matthias Kormaksson, Marcos R. Vieira

Case Study of Proppant Selection for a Montney Well Using Discrete Element Simulations

Wenbo Zheng, Dwayne Tannant

Empirical and Numerical Investigation of the Effects of In Situ Stress Regime on Induced Seismicity Magnitude Distribution

Ali Mehrabifard, Erik Eberhardt

How Geophysics Became Integral to Potash Mining in Saskatchewan

Craig Funk, Randy Brehm, Tanner Soroka

Birefringence Analysis of 3C PS Seismic Data: Permian Basin — Case Study, NE Midland

Tony D. Johns

A Rock Mass Approach to Assess Hydro-Mechanical Deformation in Tight Rock Reservoirs

Mason K. MacKay, Christopher R. Clarkson, David W. Eaton

Semblance-Weighted Stack for Improved Microseismic Monitoring

Ben Witten, Aaron Booterbaugh, Ryan Segstro

History of Significant Petroleum Geomechanics Advances in Western Canada and a Look at the Future

Amy D. Fox, Pat McLellan

Seismic Reservoir Characterization of the Bone Spring and Wolfcamp Formations in the Delaware Basin with Efforts at Quantitative Interpretation — Part 1

Satinder Chopra, Ritesh Kumar Sharma, James Keay

Value of Data Analytics in Fracturing Design and Production Optimization

Yogi W. Schulz

Multi-Well RTA in Unconventional Wells with Non-Uniform Microseismicity-Constrained SRVs

Peyman Moradi

The Importance of Geoscience in Using Machine Learning to Predict and Optimize Well Performance — Case Study from the Spirit River Formation

John Hirschmiller, Bertrand Groulx, Scott Quinell, Brian Emmerson, Bill Spackman

Seismic Reservoir Characterization of the Bone Spring and Wolfcamp Formations in the Delaware Basin with Efforts at Quantitative Interpretation — Part 2

Ritesh Kumar Sharma, Satinder Chopra, James Keay, Larry Lines

On Geomechanical Effects on Production Enhancement in Steam-Assisted Gravity-Drainage Process. Part II: Cam-Clay Model

Mazda Irani

Can Continuously Recorded Seismic Data be Improved With Signal Processing? The Application of Deconvolution to Microseismic Data

Ronald Weir, L. Lines, D. Lawton, D. Eaton, A Poulin

Incorporating Formation Re-Evaluations With Laboratory Rock and Fluid Testing to Achieve Long Lived and Cost-Effective Disposal, Injection and Producing Wells

P.F. DuBois, M. Noorzi, D. Drozd, T. Walker, F. Yan

Advanced Simulation Environment for Induced Seismicity Mitigation and Integrated Control (ASEISMIC)

Thomas S. Eyre, David W. Eaton, Mike Chappell, Scott McKean

Geomechanical Characterization Methodology for Quantifying Fine Scale Heterogeneity

Ramil S. Ahmadov, Jesse J. Hampton, Greg G. Boitnott

Seismic to Production: Using Seismic Attributes to Draw Correlations Between Well Trajectories and Production in the Montney

Farhan Alimahomed

An Integrated Approach to Determine the Hydrocarbon Compositions and PVT Properties of Unconventional Gas Condensate Reservoirs

Albert Cui, Jordan Wilson

3D Simulation of Stimulated Reservoir Volume Evolution During Hydraulic Fracturing

Erfan Sarvaramini, Caralyn Bennett, Chad Lemke, Michael Morgan, Leonard Herchen

WEDNESDAY AFTERNOON

Glen 201-204

The Value of Geosciences Panel

SESSION CHAIRS:
Tanya Yeomans & John Duhault

Glen 205

Seismic Processing — Theory II

SESSION CHAIRS:
Aaron Stanton & Wenlei Gao

Glen 206

GeoModelling: Building Geologically Realistic Geomodels

SESSION CHAIRS:
Erin Pemberton & Sean Fletcher

Glen 208-209

WIA Improving Wellbore Integrity

SESSION CHAIRS:
Leah Davies & Joel Nealon

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1:15-1:25 INTRODUCTION

1:25-1:50

Moderated By:

Danielle Smith, Past Wildrose Party Leader and Radio 770 Talk Show Host

Panelists include:

Wayne Foo, Geologist, President and CEO, Parex Resources

Rob Morgan, Engineer, President and CEO, Cona Resources

Kevin Angus, Geophysicist, Strategic Advisor, Point Loma Resources

Gary Bunio, Engineer, General Manager, Strategic Technology, Suncor Inc.

Patrick Ward, Geologist, President and CEO, Painted Pony Energy

Jen Russel-Houston, Geologist, Vice President Geosciences, Osum Oil Sands Corp.

Spectral Decomposition as a Quality Control Tool in 5D Interpolation

Muyi Kola-Ojo

The 3D Provincial Geological Framework Model of Alberta, Version 2: Updating a Province Wide 3D Geocellular Model to Incorporate 30 New Model Zones

Laurence Jayawardane

Application of Chemical and Stable Carbon ($\delta^{13}\text{C}$) and Hydrogen (δD) Isotopic Compositions to Aid Operators in Determining the Source of Leaking Thermogenic Natural Gas in Surface Casing Vents (SCVF) or Soils Outside Casing (AGM) in Area Base Closures.

Bryan J. Szatkowski

1:50-2:15

SSA Reconstruction Without Binning

Fernanda Carozzi, Mauricio D. Sacchi

Incorporating Multiple Sedimentological Trends Into a Realistic Geomodel: Using the Modern Mississippi False River Point Bar as a Proxy for the Ancient McMurray

Duncan John Findlay, Bogdan Varban

The Mitigation of Deep Depth Wellbore Leakage Using Microbially Induced Carbonate Precipitation (MICP)

Justin M. Whitkaer, Dru Heagle, Andrew Wigston, Sai Vanapalli, Danielle Fortin

2:15-2:40

Coherence Cube Analysis Via a 3D Riesz Transform

Bernal Manzanilla Saavedra, Mauricio D. Sacchi

Three-Dimensional Property Modelling of the Montney Formation in Alberta

Steve Lyster, Tiffany Playter, Mike Berhane

Effects and Impacts of Methane Leakage and Emissions

Kirk G. Osadetz

2:40-3:20 COFFEE & POSTERS

3:20-3:45

Panel session continues

Simultaneous Signal and Ground Roll Modeling with L2 and L1 Constraints

Iliana Papathanasaki, Mauricio D. Sacchi

From Township to Well Pad: A Geological Approach to Geomodeling McMurray Formation Channel-Belt Deposits

Paul R. Durkin, Siavash Nejadi, Jordan A. Curkan, Stephen M. Hubbard

A Technology Roadmap to Improve Wellbore Integrity

Andrew Wigston, Jay Williams

3:45-4:10

Ground Roll Attenuation Via NMO-Stack Deconvolution and Transform-Domain Noise Synthesis

Felix Oghenekohwo, Mauricio D. Sacchi

Three-Dimensional Property Modelling of Scollard and Paskapoo Formations and Their Equivalent Bedrock Units in Southwest Alberta

Shilong Mei

WIA Panel

Jay Williams, Andrew Wiggins, Bob Noakes, Rose MacPherson

4:10-4:35

A Non-Parametric Bayesian Dictionary Learning Method for SNR Enhancement

Chao Zhang, Mirko van der Baan

Data Integration, Modeling, and Up-scaling with Adaptive Grid Block Size

Leon Fedenczuk

4:35-5:00

Multi-Focusing Stacking Using the Very Fast Simulated Annealing Global Optimization Algorithm

Hossein Jodeiri Akbari Fam, Mostafa Naghizadeh

WEDNESDAY AFTERNOON

Telus 101-102	Telus 104-105	Telus 106	Telus 111 (The colab)
Quantitative Interpretation of 4D Seismic Monitoring Methods SESSION CHAIRS: Draga Talinga & George Allen	Oil Sands Geology SESSION CHAIRS: Paul Broughton & Khalis Ahmed	Workplace Culture / Diversity SESSION CHAIRS: Alicia Bjarnason & Zabeen Gale	Completions Technology SESSION CHAIRS: Keri Yule & Matt Hogg
Induced Seismicity — Detection, Processing and Characterization SESSION CHAIRS: Paige Mamer & Sahar Ghannadi			
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Time-Lapse Seismic Data Processing and Inversion Using Shared Information From Vintages Felix Oghenekohwo, Felix J. Herrmann	The McMurray Conundrum: Brackish Water and Tidal Influence Murray K. Gingras, Shahin E. Dashtgard, Andrew D. La Croix	The Personality Challenge: BEET, DISC, CVI, Colors and Others Wael Badawy	Multivariate Analysis of Completion Design Parameters and Their Effects on Effective Fracture Volume Tamer Moussa, Hassan Dehghanpour, Yingkun Fu, Obinna Ezulike
A Data Driven Solution to the Mystery of Seismic Velocities in Oil Sands Ahmad Javanbakhti	The McMurray Formation 'A2 Valley': Where is the Shoreline? Paul R. Durkin, Stephen M. Hubbard, Sean C. Horner, Harrison K. Martin, Cynthia A. Hagstrom, Dylan Evanik	Geoethics 2019 Tom Sneddon, Joy Cohen	Close Encounters in the 3rd Dimension: Using Diagnostic Fracture Injection Tests (DFITs) From the Alberta Duvernay Shale Formation to Quantify Simultaneous Horizontal- & Vertical-Plane Hydraulic Fracture Growth Kirby Nicholson
Rapid 4D Inversion Using a Production Facies Approach Jeremy Gallop, Marie Hong, Majid Saeedi, Tim Lau	Depositional Architecture of the Middle McMurray Formation: Suncor Firebag SAGD Asset Heather A. Gray	The Fourth Industrial Revolution and the Future of Work Melanie Popp	Hydraulic Fracture Characterization Through Visualizations, a Catalyst for Collaboration, Engagement, and Reducing Bias Alexander G. Lafreniere, Charles A. Wrightson
Forecasting Gutenberg-Richter Parameters in Probabilistic Seismic Hazard Analysis for Induced Seismicity Mauricio Reyes Canales, Mirko van der Baan	High GR Readings (Hot-Shale and Hot-Mud) in McMurray Formation — Characterization and Origin Raza A. Siddiqui, Milovan Fustic, Rajeev S. Nair, Tim Hartel	Is a #MeToo Moment Long Overdue in the Geosciences? A Discussion on Harassment, Sexual Harassment and Sexual Violence Within Alberta's Resource Sector, and What We Can All Do About It. Alicia D. Bjarnason	Determining the Most Effective Diversion Strategy Using Pressure Based Fracture Maps: A Meramec (STACK) Case Study Jeff Kopp
A Numerical Investigation of the Effects of Formation Stiffness on Injection Induced Seismicity Magnitudes Afshin Amini, Erik Eberhardt	Vertically Stacked Meander-Belt Deposits of the McMurray Formation and Implications for Steam Assisted Gravity Drainage Jordan Curkan, Siavash Nejadi, Paul Durkin, Stephen M. Hubbard	Gender-Based Analysis (GBA+) and Bill C-69 — A Tool for Equity and Innovation Marcie G. Hawranik	
Mapping the Susceptibility to Amplification of Seismic Ground Motions in the Montney Play Area, Northeast British Columbia Patrick Monahan, Victor Levson, Brad Hayes, Kathleen Dorey, Yevgen Mykula, Ryan Brenner, Jason Clarke, Beth Galambos, Cliff Candy, Claudia Krumbiegel, Elizabeth Calderwood	The Eastern Flank: Predicting the Architecture of the McMurray Formation Beyond its Subcrop Edge Thomas R. Jean, Shahin E. Dashtgard	Identifying Barriers: Preliminary Results of APEGA's Investigation Into the Challenges Faced by Women in Engineering and Geoscience Workplaces Alissa D. Boyle	

WEDNESDAY POSTER DISPLAYS

WEDNESDAY POSTERS SPONSORED BY:



MORNING

10:00am 3
Looking at the Cardium Formation from Top to Bottom — Understanding the Self-Sourcing Nature of the Cardium and the Implications of This to Resource Estimates and Recovery Factors
 Robert Day, Carolyn Currie

10:00am 74
Picking the Bedrock Top in the Fort McMurray/Muskeg Mountain Region
 Daniel Utting, Laurence Andriashek, Steve Pawley

10:00am 20
Study on Well Spacing Optimization in Tight Sandstone Gas Reservoir
 Xiaoxu Feng, Xinwei Liao, Zhiyu Liu

10:00am 57
The Interaction Between CM- and M-Scale Heterogeneity of the Duvernay Formation Based on an Outcrop Case Study: Implications for 3-D Reservoir Modeling
 Samantha Mackie, Marco Venieri, Scott McKean, Henry Galvis Portilla, Simon Poirier, Per Kent Pedersen

10:00am 38
Comparison Between Time Domain and Frequency Domain Least-Squares Reverse Time Migration
 Lei Yang, Daniel O. Trad

10:00am 92
Data Integration, Modeling, and Up-scaling with Adaptive Grid Block Size
 Leon Fedenczuk

10:10am 9
Seismogenic Polygonal Fault System Generation
 Andy St-Onge

10:10am 26
"Factory Geosteering". Challenges and solutions.
 Sergey Lebedev

10:10am 44
Subsurface Migration, Environmental Impacts, and Fate of Fugitive Gas From Energy Resource Development: A Controlled Natural Gas Release Experiment in NE British Columbia
 Bethany Ladd, Aaron G. Cahill, Jessie Chao, Julia Soares, Cara Manning, Chitra Chopra, Niko Finke, Tim Cary, Iain Hawthorne, Andrew Black, K. Ulrich Mayer, Sean Crowe, Rachel Lauer, Bernhard Mayer, Laurie Welch, Roger Beckie

10:10am 80
Facies-Controlled Dolomitization of the Lower Cretaceous Qamchuqa Formation, Kurdistan Region, Northern Iraq
 Ala A. Ghafur, O.Salad Hersi, Varoujan K. Sissakian, Hassan O. Omer, Hawkar A. Abdulhaq



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WEDNESDAY POSTERS SPONSORED BY:



10:10am	62	AFTERNOON		2:55pm	100
Toward the Use of Deep Learning and High-Resolution Digital Elevation Models for Extracting Geological Landforms: An Example for Eskers		2:45pm	23	Advanced Algorithms for Quantification of Mineralogical Composition from Elemental Composition (XRF) Data: Examples from the Montney, Duvernay and Bakken Formations (Canada)	
Daniel Pilon, Mathieu Turgeon-Pelchat, Charles Papasodoro, Yves Moisan, Pierre Gravel		Study of the Flow Law of the Reservoir Rock Based on Lattice Boltzmann Method		Z. Yang, C.P. Vocke, C.R. Clarkson, A. Younis, A. Vahedian, H.J. Deglint, C. DeBuhr, A. Ghanizadeh	
		Hong Li, Pingchuan Dong, Zisen Wu			
10:10am	97	2:45pm	41	3:05pm	35
Unmixing Mixed Signals in Ancient Fluvial Deposits: Implications for Paleogeographic Reconstructions and Sedimentary Provenance Sampling Strategies.		An Implicitly Weighted Least Squares Algorithm for Time Domain Radon Transform		Adequate QC Steps and Their Impact on Reservoir Characterization Analysis	
Curtis Ferron, Janok Bhattacharya, William Matthews		Zhengsheng Yao, Valentina Khatchatryan, Randy Kolesar		Ritesh Kumar Sharma, Satinder Chopra, Larry Lines	
10:20am	85	2:45pm	6	3:05pm	53 & 54
Stratigraphy, Depositional Setting, and Reservoir Quality of the Logan Canyon Formation, Offshore Nova Scotia		Devonian Shale Basin Characterization in the Central Northwest Territories — Results of Outcrop and Well Sampling		Interstratification of Deltaic and Bay Sedimentation in a Marginal-Marine, Wave-Influenced Coastline: The Glauconite Formation, Alberta, Canada	
Trevor B. Kelly, Grant D. Wach		Viktor Terlaky, Kathryn M. Fiess, Jonathan Rocheleau		Scott E. Botterill, William Clark, M. Ryan King, Murray K. Gingras	
10:20am	51	2:45pm	60	3:05pm	18
1D and 2D Petroleum System Modelling of Potential Lower Jurassic Source Rock on Scotian Margin		The Eastern Flank: Predicting the Architecture of the McMurray Formation Beyond Its Subcrop Edge		Triggers for Organic Matter Accumulation in the Middle and Upper Devonian Horn River Shale, Canada, Identified From Microsampling of Drill Cores	
Xinyue Hu, C. Wong; R. Silva; G. Wach		Thomas R. Jean and Shahin E. Dashtgard		Haolin Zhou, Nicholas B. Harris, Jilu Feng	
10:20am	15	2:45pm	95	3:05pm	70
Earth's Planetary Evolution and the Extinction of the Dinosaurs		Fusion of Multi-Physics Data with Machine Learning Independent Component Analysis (ICA) Improves Detection of Geological Features		Seismic and Lithological Characterization and Source Rock Potential of the Aptian Naskapi Shale Member, Logan Canyon Formation, Offshore Nova Scotia	
Christopher J. Irvine		Hassan H. Hassan, Serguei Goussev		Anne C. Hargreaves, F.W. Richards, Ricardo Silva, Grant Wach	
10:20am	32	2:55pm	12	3:05pm	106
High Pressure Situations: Understanding Reservoir Compartmentalization in the Sable Subbasin		Controls on CO₂ Partial Pressure in Petroleum Reservoirs during Burial Diagenesis		A Deep Learning Perspective of the Forward and Inverse Problems in Exploration Geophysics	
Grant D. Wach, Carla H. Skinner		Peng Lu, Guanru Zhang, Chen Zhu		Jian Sun, Zhan Niu, Kristopher Innanen, Junxiao Li, Daniel Trad	
10:20am	68	2:55pm	65		
Glossifungites-Demarcated Stratigraphic Surfaces: Landward Limits of the Omission Suite Paradigm		Optimization of Hydraulic Fracture Design Parameters, Using Unconventional Fracture Modeling (UFM) Approach, A Montney Example			
Michael R. King, Scott Botterill, Murray Gingras, James A. MacEachern		Majid Mohammadpour Faskhoodi			
10:20am	103	2:55pm	29		
Investigating the Role of Crestal Faulting on Hydrocarbon Trapping in Rollover Structures of the Sable Subbasin, Offshore Nova Scotia — Insights From the Migrant Structure		Pump Up (or Down) the Volume with Color Infrared Imagery and Surface Consistent Scaling			
Kenneth T. Martyns-Yellowe, Grant D. Wach, Frank W. Richards, Neil Watson		Christopher B. Harrison, Paul Thacker, Allan Chatenay			

THANK YOU FOR ATTENDING



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Schedule at a Glance

Calgary TELUS Convention Centre

MONDAY, May 13	TUESDAY, May 14	WEDNESDAY, May 15
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) Showcase Stage (9:00-5:00)		Exhibit Floor Open (9:00-3:30) Showcase Stage (9:00-3:00)
Morning Technical Sessions (8:25-11:50) Glen and Telus Rooms <div>Coffee with Exhibitors (9:00-10:45) Exhibit Floor Poster Presentations (9:55-10:35) Exhibit Floor</div>		
Lunch Concessions (10:30-1:30) Exhibit Floor		
CSPG Keynote Luncheon (11:45-1:15) Bob Fryklund, "Is There A New Energy Norm- and If So How Do I Play the Game?" Hyatt Hotel, Imperial Ballroom	CSEG Social Luncheon (11:45-1:15) "Let's Get geoPhysical" Palomino Smoke House	CWLS Social Networking Lunch (11:45-1:15) Bank and Baron
Afternoon Technical Sessions (1:15-4:35) Glen and Telus Rooms <div>Coffee with Exhibitors (2:40-3:20) Exhibit Floor Poster Presentations (2:45-3:15) Exhibit Floor</div>		
Ice Breaker Reception (4:00-6:00) Exhibit Floor	Networking Reception (4:00-6:00) Exhibit Floor	Industry Mixer (4:30 - 5:25) Exhibition Foyer
		Challenge Bowl (5:25-7:45) Glen 201-204