



CANADIAN GLOBAL
EXPLORATION FORUM



Canada's Global Energy Connection: An Alberta Perspective

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CANADIAN GLOBAL
EXPLORATION FORUM

- Canadian Global Exploration Forum
- Investing with Canadian Companies operating internationally
- History of the Oil and Gas Industry in Canada
- Investing in Canadian Opportunities
- 2018 CGEF Conference
 - (June 11, 2018 in conjunction with the Global Petroleum Show)

WHAT IS THE CANADIAN GLOBAL EXPLORATION FORUM (CGEF)?

- **CGEF** is a registered industry volunteer organization that promotes cooperation between Canada-based, internationally operating energy companies and their international counterparts and governments.
- **CGEF** is a primary Canadian contact point for international energy companies, services, and governments who are visiting Calgary seeking Canadian investment or expertise
- **CGEF** members are E&P companies that share Canadian expertise, technology, and opportunities with each other and internationally
- **CGEF** supports a vibrant, Canada-based, international energy industry through networking events, conferences and workshops



CANADIAN PUBLIC & PRIVATE E&P COMPANIES

>100 companies

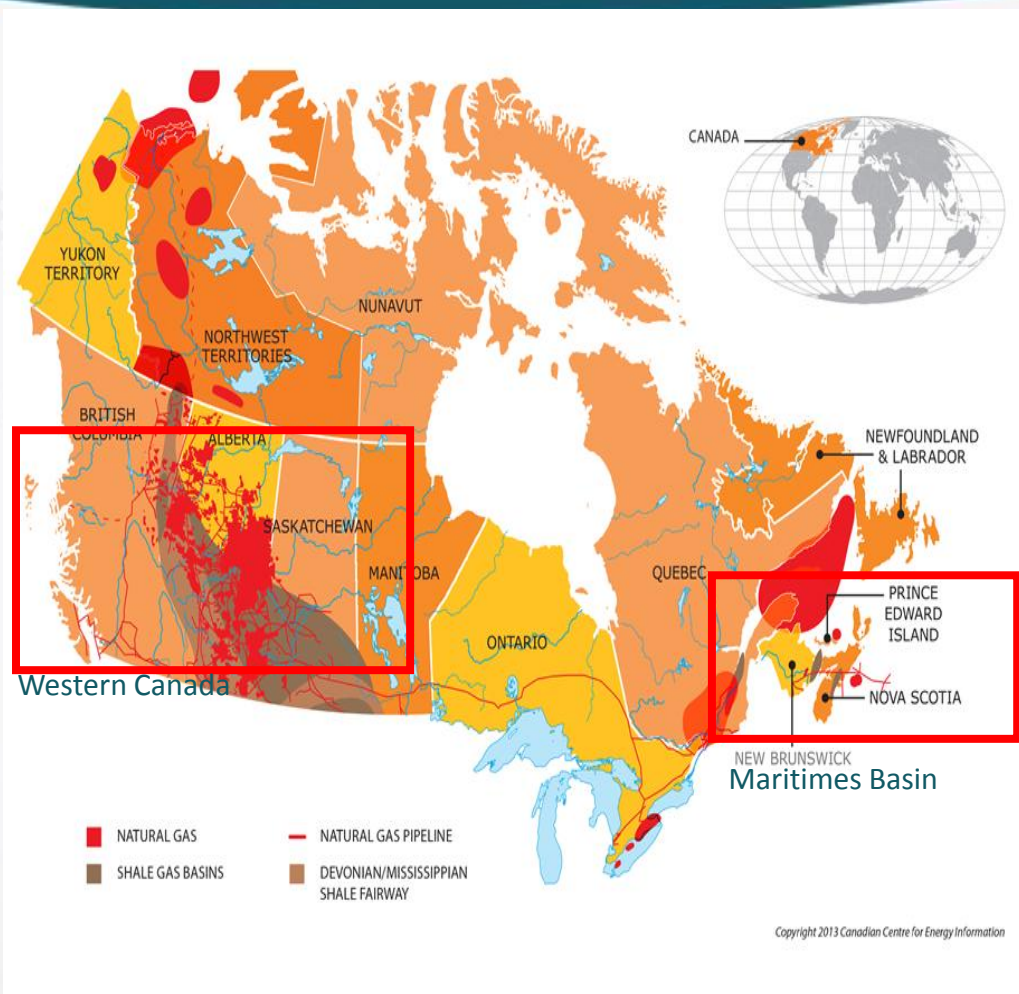
>100 countries



WHY DO BUSINESS WITH CANADIAN/ALBERTAN E&P AND SERVICE COMPANIES?

- The Canadian energy industry has a long track record of proven expertise in the development and application of the latest technologies for the full spectrum of oil and gas exploration, development and re-development in all types of reservoirs and reservoir fluids
- World class regulatory and environmental protection standards
- With the current foreign exchange rate (1 CAD~0.80 USD) the highest standard of operations and services are available at very competitive prices
- Access to both public and private capital markets
- Canadian operators and service companies are actively searching for collaboration with local partners for entry into international oil & gas opportunities

THE CANADIAN PETROLEUM INDUSTRY: OVERVIEW



Waterton, AB:
oldest Alberta well
(1897)



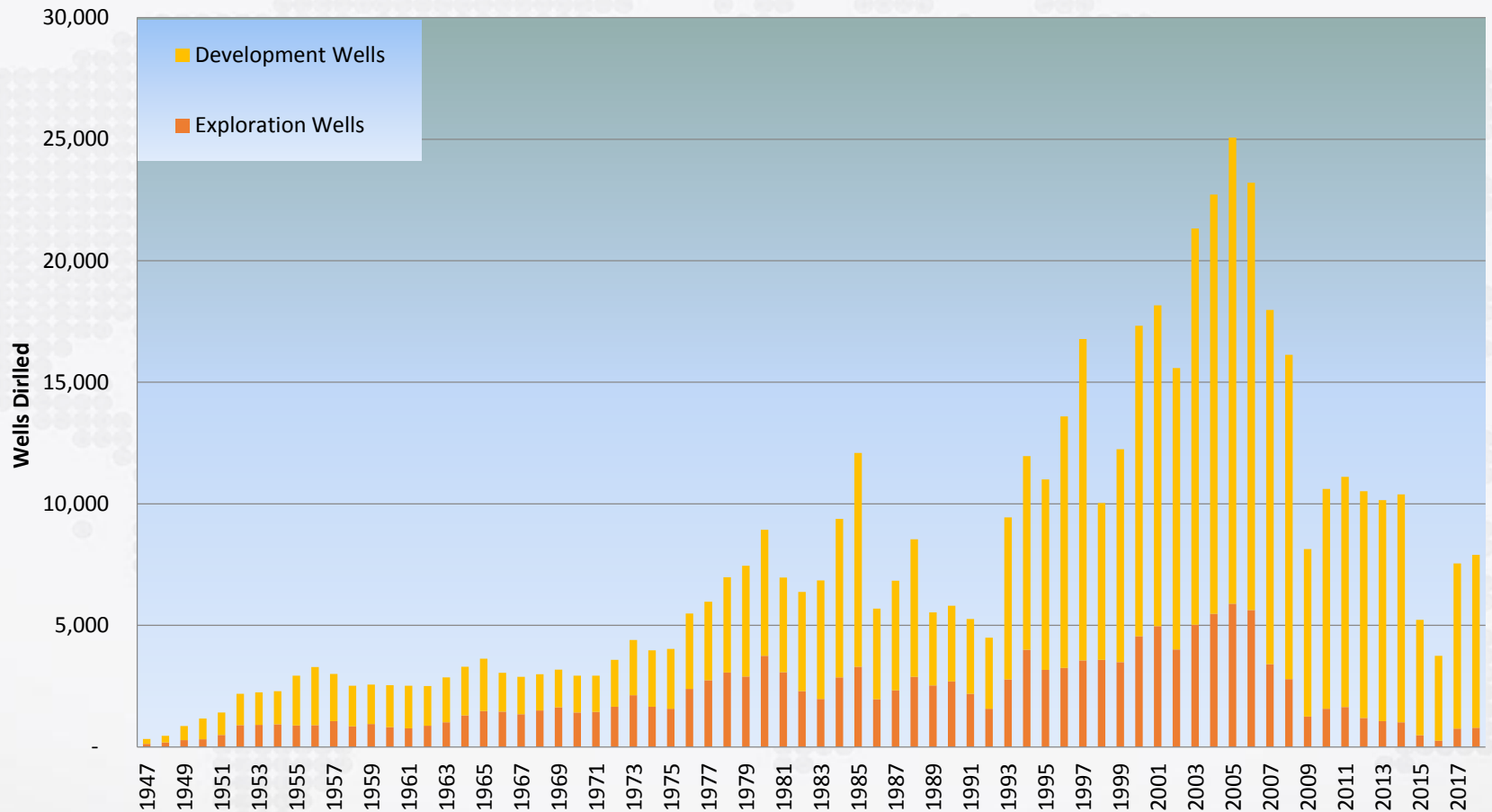
Hibernia platform,
East Coast

Canada

- Third largest natural gas producer
- Fifth largest energy producer
- Sixth largest crude oil producer
- Third in crude oil reserves

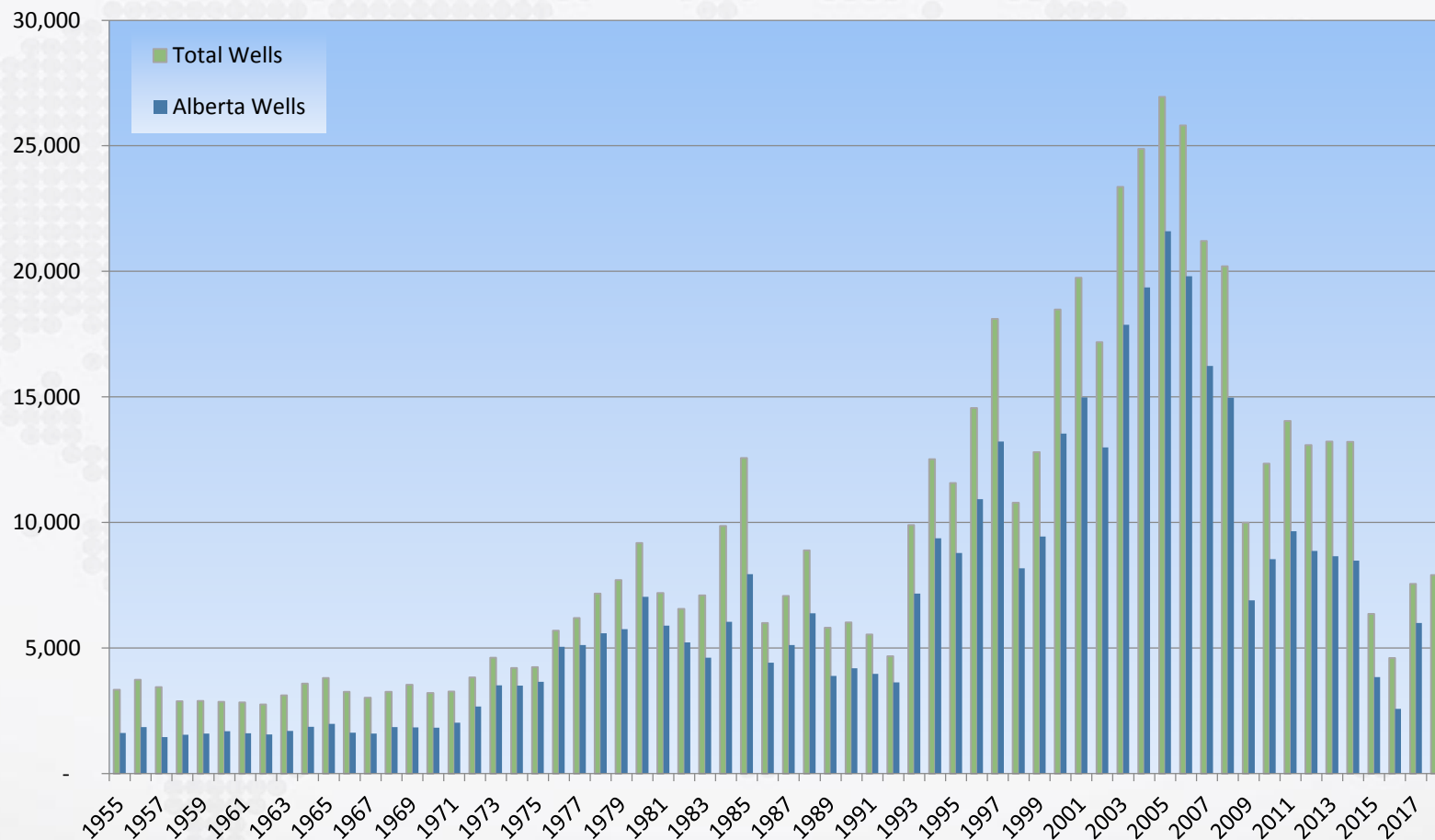
HISTORIC WELLS IN CANADA

Wells Drilled in Western Canada 1947 to 2018



HISTORIC WELLS IN ALBERTA

Wells Drilled in Canada and Alberta 1955-2017



ALBERTA INDUSTRY MERGERS AND ACQUISITIONS

DATE	TYPE	ACQUIRER	TARGET	VALUE	REGION/PLAY	BOE/D	\$/BOE/D
2018-01-15	Asset	Vermilion Energy		\$908,000,000			
2017-12-21	Asset	Ikkuma Resources		\$34,000,000	Cardium, Montney	14,300	\$2,378
2017-12-21	Asset		Cequence Energy	\$4,300,000		100	\$43,000
2017-12-18	Working Interest	Razor Energy		\$4,600,000	West Central Alberta	250	\$18,400
2017-12-14	Asset	Whitecap Resources	Cenovus	\$940,000,000	Western Canada	11,500	\$81,739
2017-11-26	Asset	Questerre		\$7,250,000	Williston Basin	180	\$40,278
2017-11-03	Asset		Pengrowth Energy Corporation	\$150,000,000	Swan Hills	5,060	\$29,644
2017-11-03	Asset		Pengrowth Energy Corporation	\$6,500,000	Southern Alberta	1,900	\$3,421
2017-10-23	Asset		Pengrowth Energy Corporation		Alberta	5,500	
2017-10-19	Asset	Torxen Energy	Cenovus	\$1,300,000,000	Southeastern Alberta	54,000	\$24,074

M&A activity by Alberta based E&P in the last 5 months

- Mean Deal size: \$372MM CDN

- Total Deal: \$3.354B CDN

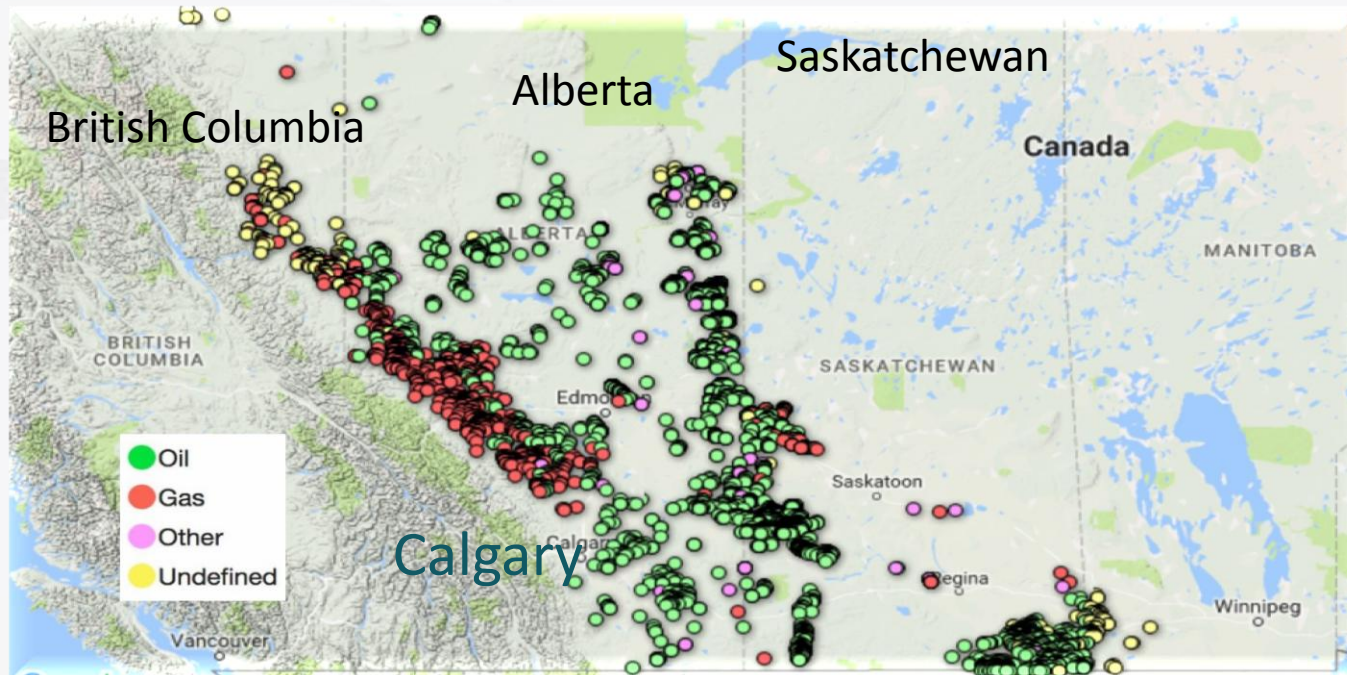
- Attractive Deal Metrics (\$/boed)

THE PETROLEUM INDUSTRY IN CANADA: TECHNICAL EXPERTISE

Government Support:

- Unrivalled public database of Western Canadian well data, production data, sample cuttings, and core data by the Government of Alberta
- The Alberta government has an advanced model for organizing data and making them available in the public domain; a similar service is provided by the other provincial energy department
- The Alberta Energy Regulator (AER) routinely consults to foreign governments regarding regulatory issues. They have set up the International Centre of Regulatory Excellence to work with foreign regulators to share Alberta's best practices

TECHNICAL EXPERTISE IN EXPLORATION, DEVELOPMENT AND PRODUCTION



**Well Drilled Western
Canada (past year):
~8000 wells**

- 120 years of exploration and development in structurally complex settings
- Expertise in assessing and exploiting new unconventional plays quickly and efficiently
- Unconventional resource plays (shale gas: Bakken, Montney; shale oil; tight sand oil, CBM)
- Example: oil sands development:
 - 54,000 mi²
 - 1.7 trillion barrels bitumen in place
 - Ca. 10% **recoverable: 178 billion barrels**

TECHNICAL EXPERTISE IN EXPLORATION, DEVELOPMENT AND PRODUCTION

Enhanced Production and Recovery

- Hydraulic fracturing routinely applied for decades
- Over 75% of wells drilled in Canada (2015) were horizontal
- Secondary and tertiary recovery technologies are routinely applied
 - Waterfloods, immiscible and miscible gas floods with sweet gas, CO₂ or H₂S rich miscible gas flood; alkaline-surfactant-polymer (ASP) flood, SAGD in oilsands, etc.
- Cold Heavy Oil Production with Sand (CHOPS) (Lloydminster)
- All forms of artificial lift in use throughout Canadian oilfields and products exported worldwide

CLEAN TECHNOLOGIES: ALBERTA EXAMPLES

- **Questor Technologies Inc.**
 - Enhancements in well site emissions control
- **CHEMWave Inc.**
 - STAGR™ Stage Gate Process Software : EOR improvement
- **Transworld Technologies**
 - BioEOR enhancements of waterflood
 - First pilot project in Alberta with new oil identified by 4th month

2018 CGEF CONFERENCE



June 11, 2018
Hyatt Regency Hotel
Calgary, Alberta

Global Dynamics
Evolving Markets
Capital Funding
Unconventional Opportunities
What's Hot Where
What the Future Holds



GLOBAL PETROLEUM SHOW
North America's Leading Energy Event

June 12-14, 2018
3 days of International Country Markets

1000+ Booths
150 Speakers
50,000+ Attendees

THANK YOU

- Alberta and Canada offers a mature, highly regulated oil & gas industry that is well respected around the world with strong corporate governance and CSR
- The Canadian oil & gas industry offers the full spectrum of services at competitive prices
- Albertan operators and service companies are open for collaboration and the sharing of expertise with the international oil & gas industry
- Special thanks to Michael Padua and Laurent Auger from the Government of Alberta, Economic Development and Trade
- Note: Slides 5-6 and 10-12 modified from **Kraus & McMechan (2017)**: *Perspectiva Canadiense de Exploración en México*. Presentation at the Mature Fields Conference in Mexico City, *22nd February 2017*.

