

# CALIMA

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## ENERGY



## Montney Formation

British Columbia

March 2019

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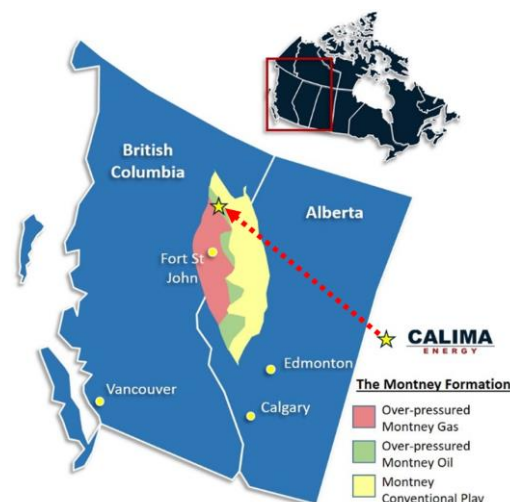
The petroleum resources information in presentation is based on, and fairly represents, information and supporting documentation in a report compiled by technical employees of McDaniel and Associates Ltd, a leading independent Canadian petroleum consulting firm registered with the Association of Professional Engineers and Geoscientists of Alberta, and was subsequently reviewed by Mr Mark Sofield, a consultant to the Company. Mr Sofield holds a BSc. Geology (Hons), is a Geologist with over 20 years of experience in petroleum geology, geophysics, prospect generation and evaluations, prospect and project level resource and risk estimation and is a member of the American Association of Petroleum Geologists. Mr Sofield has consented to the inclusion of the petroleum resources information in this announcement in the form and context in which it appears.

Print date 06-03-19

# INTRODUCTION TO CALIMA

## Capital Structure

Ordinary Shares	1,444 M
Management Perf. Equity <sup>(1)</sup>	55.5 M
Market Capitalisation <sup>(2)</sup>	\$67 M
Cash & Securities (no debt) <sup>(3)</sup>	\$21.4 M



## Shareholders

Institutions	21.15%
Board/Management/Founders <sup>(5)</sup>	19.89%
Tribeca Inv. Partners	10.25%
Total	51.29%

## Montney

Calima owns 72,000 acres of drilling rights

One of the best resource plays in North America

Prospective resource of 475 mmboe<sup>(4)</sup>

Production testing March 2019

Early monetisation strategy

(1) Includes performance shares, performance rights (\$0.15) and options (\$0.09 and \$0.12). For details see prospectus dated June 30<sup>th</sup> 2017

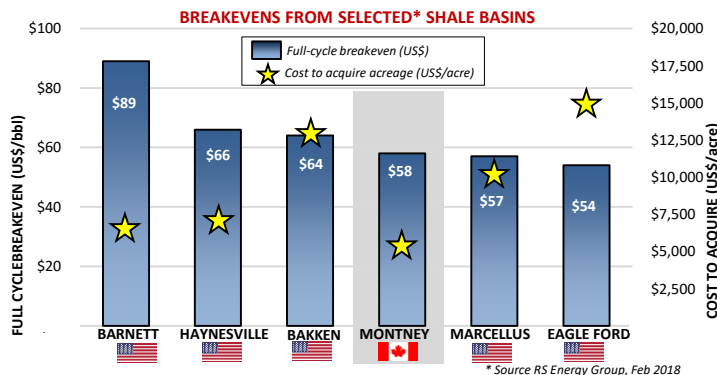
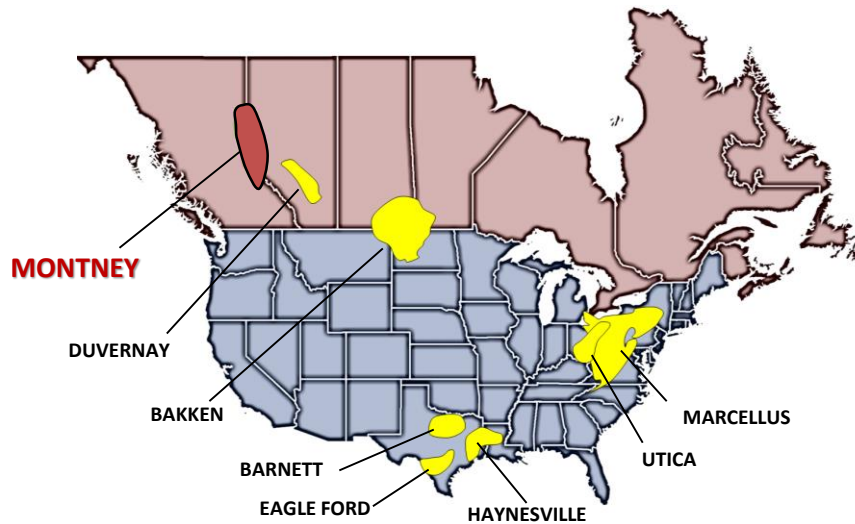
(2) Based on the closing price on February 25<sup>th</sup> 2019

(3) As at December 31<sup>st</sup> 2018

(4) McDaniel & Associates Report refer Appendix 2

(5) Founders includes former major shareholders of TSV Montney Limited and TMK Montney Limited who entered into voluntary escrow agreements until April 2019

# THE MONTNEY



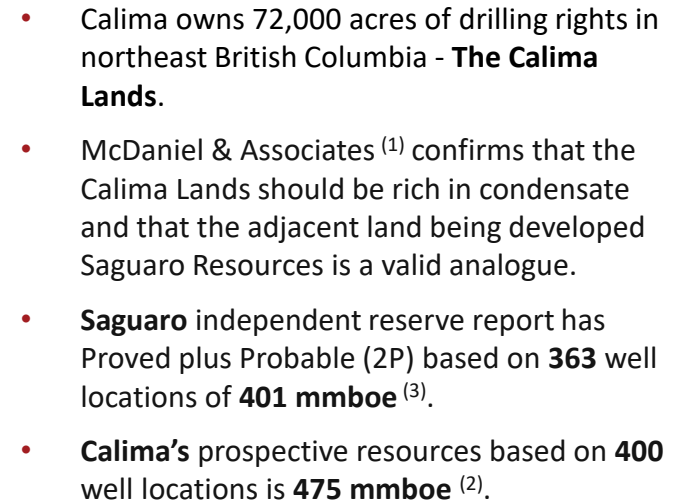
PLAY	AREA (km <sup>2</sup> )	GROSS THICKNESS	COST TO ACQUIRE ACREAGE (US\$/acre)
<b>MONTNEY (CAN)</b>	<b>130,000</b>	<b>Up to 300m</b>	<b>\$5,000</b>
BAKKEN (US/CAN)	520,000	Up to 40m	\$12,500
BARNETT (US)	13,000	25-180m	~\$6,000
EAGLE FORD (US)	52,000	15-85m	\$15,000
HAYNESVILLE (US)	24,000	40-110m	\$6,500
MARCELLUS (US)	247,000	25-90m	\$10,000

- **>C\$5.0 Billion** invested in 2018 – predicted to increase to C\$7.5 Billion by 2022<sup>(1)</sup> - The most active oil & gas play in Canada.
- **7 Billion cf/d** of gas production a 24% increase over the last 12 months<sup>(2)</sup>.
- **250,000 bbl/d** of condensate production - predicted to increase to 500,000 bbl/d by 2022.
- **870 Montney wells spudded** during 2018 which is 68% higher than 2016.
- Estimated remaining reserves **449 tcf of gas, 14.4 Billion bbls** of condensate and **1.1 Billion bbls** of oil<sup>(3)</sup>. Basin covers 130,000km<sup>2</sup> of British Columbia & Alberta.
- Montney reservoirs are siltstones encased in shale source rocks.
- Minerology predisposed to excellent ‘fracability’ allowing hydrocarbons to flow at greater quantities delivering **some of the best single well economics in North America**.
- Thicker than most other unconventional plays (200-300m) - allows for multi-layer completions from one surface location.
- **C\$4,437/acre** - Weighted average cost of undeveloped Montney land sales during 2018.

(1) Wood Mackenzie Unconventional Service, Montney Key Play Report, April 2017.  
<http://www.jwnenergy.com/article/2018/5/montney-drilling-activity-roars-near-record-q1/>  
 (2) The Ultimate Potential For Unconventional Petroleum From The Montney Formation Of British Columbia and Alberta, National Energy Board, November 2013  
 (3)



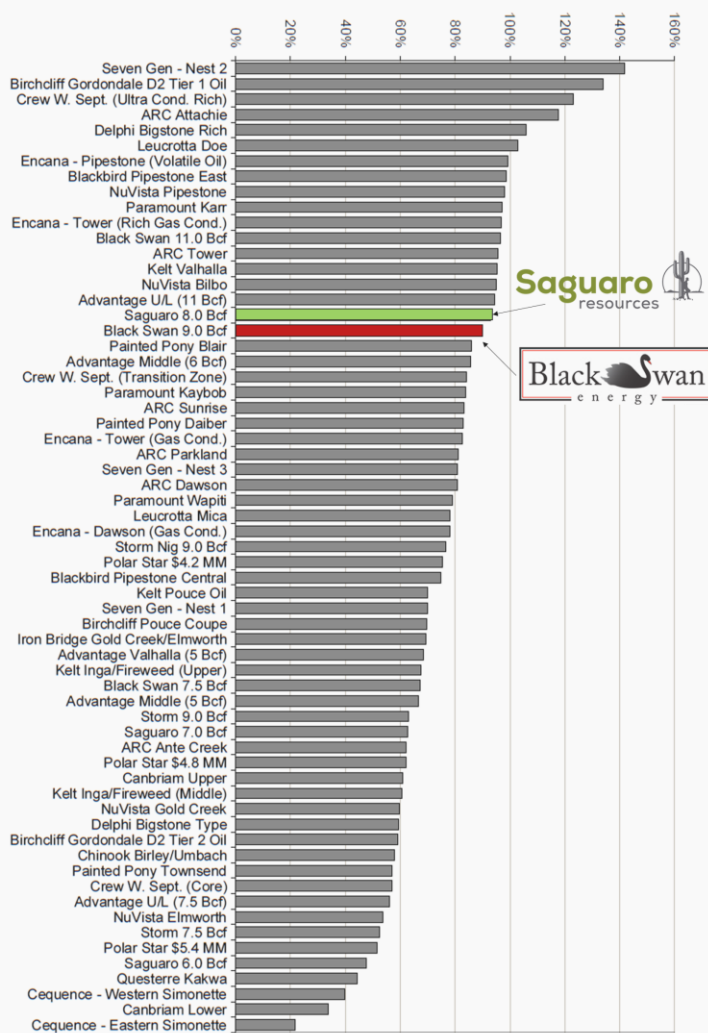
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- (1) Appendix 1,
- (2) Appendix 2
- (3) Refer to Saquaro Resources website

# SAGUARO RESOURCES – THE ANALOGUE

## Individual Well IRRs (%)



## Saguaro

- Saguaro has become one of the leading Montney producers.
- **114,000 acres** of drilling and production rights along the same geological trend as Calima Lands.
- **C\$600 mm** invested in land acquisition, drilling (64 wells) and infrastructure.
- **16,485 boe/d** ave. production 2018.
- **50 bbls/mmcf liquids yield** of which 70% is condensate.
- **60% of revenue** from liquids (50% from condensate).
- **\$14.90** per boe netback ave. 2018.

## Calima

- Performance target is to match Saguaro.
- Looking for;
  - Production rates > **5mmcf/d**,
  - Post strip condensate gas ratio > **50 bbl/mmcf**
  - Estimated Ultimate Recovery (EUR) > **7 bcf per well**.

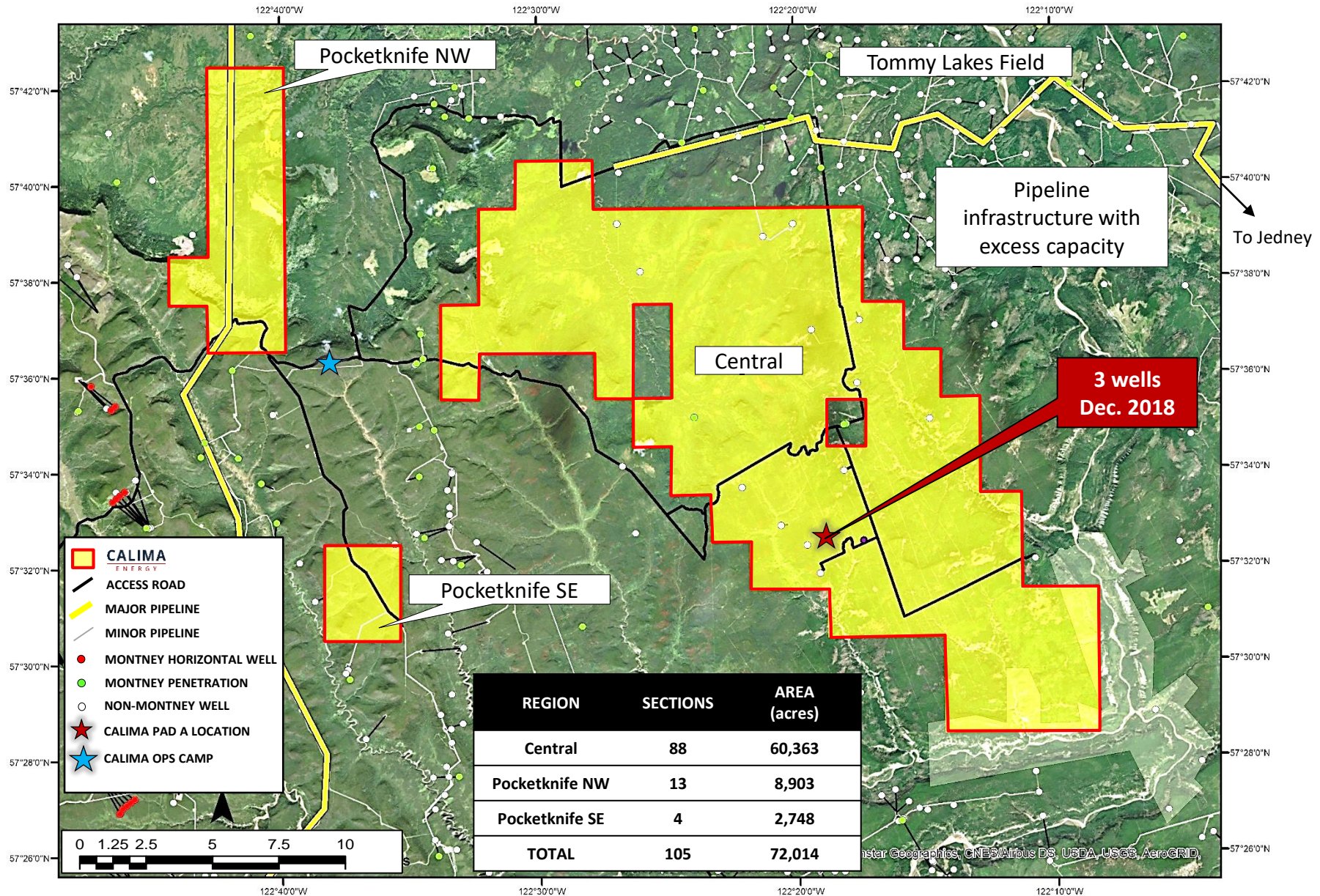
High value condensate at WTI crude prices turbocharges economics

## Montney Producers Ranked by IRR per Well

Source; Cormark Securities, May 2018 - Individual well IRR (half-cycle) based on WTI at US\$60 and AECO at C\$2.50 mcf

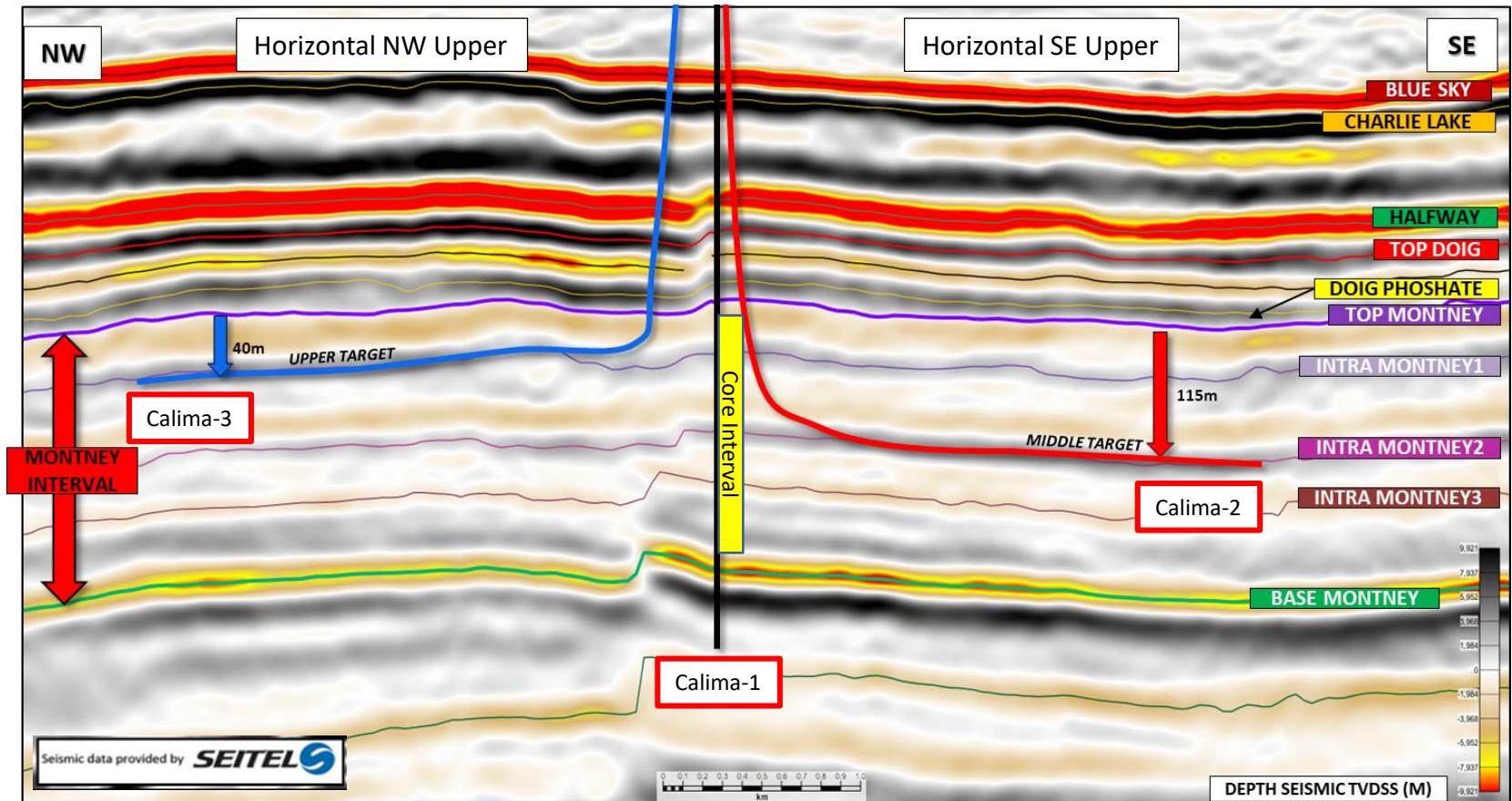


# LAND POSITION & DRILLING PROGRAMME





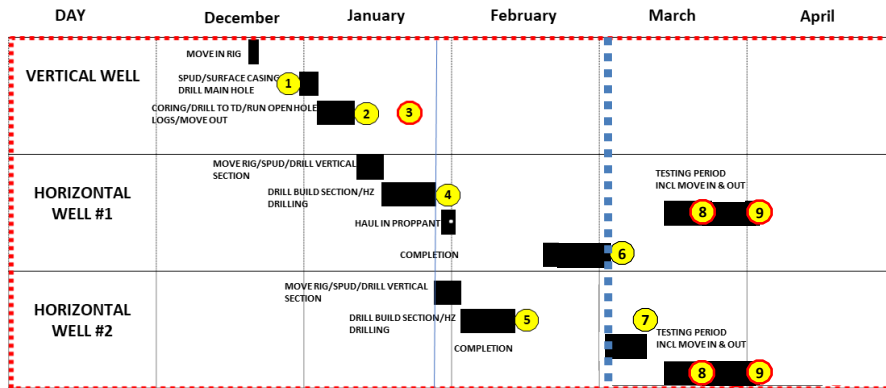
# THREE WELL DRILLING PROGRAMME



- Vertical well used for stratigraphic calibration, collection of wireline logs and core collection.
- Core will give early indication of hydrocarbon saturation and will calibrate rock properties for well performance modelling.
- Horizontals wells NW Upper & SE Lower used for extended flow test and then shut-in.
- Test data will demonstrate flow rates and liquid yield. Results used to revise independent resource report.



# PROGRESS REPORT



March 3<sup>rd</sup>, 2019



## Milestone Announcements

- 1 Spudding of the vertical well ✓
- 2 Finish drilling vertical well ✓
- 3 Preliminary log and core analysis ✓
- 4 Finish drilling of 1<sup>st</sup> horizontal well ✓
- 5 Finish drilling of 2<sup>nd</sup> horizontal well ✓
- 6 Finish completion operations 1<sup>st</sup> horizontal well ✓
- 7 Finish completion operation 2<sup>nd</sup> horizontal well
- 8 Interim test results –Mid March
- 9 Final test results and synopsis –End March

- A Well heads (Drilling rig is now off location)
- B Storage tanks providing water
- C Sandstorm units providing proppant
- D Pumps providing pressure

# SCORECARD SO FAR

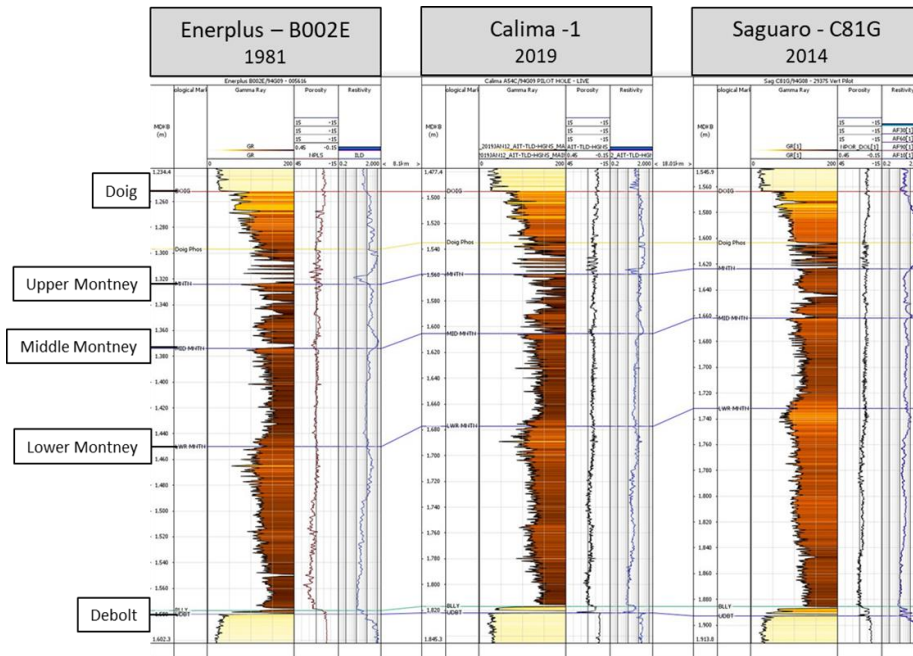
Objectives	CALIMA ENERGY
1. Stratigraphy	✓
2. Reservoir Quality	✓ ✓
3. Condensate	✓
4. Hydrocarbon Sat.	✓ ✓
5. Illus. Gas-In-Place	✓ ✓
6. Production Rate	?
7. Cond/Gas Ratio	?
8. Type Curve	?

✓ Matches offset operator    ✓ ✓ Exceeds offset operator    ? To be determined by testing

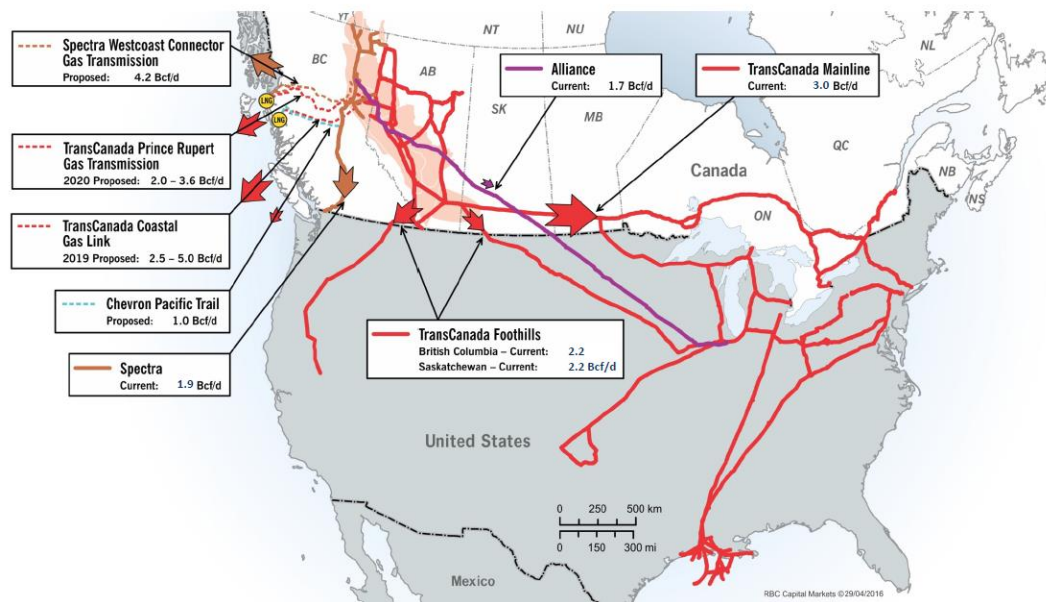
- The drilling campaign is designed to demonstrate that the prospectivity encountered by Saguaro extends into the Calima Lands.
- Saguaro are a top quartile Montney producer based on IRR per well.
- Log and core data from the vertical well, Calima-1, has met or exceeded expectations for the first 5 objectives.
- Production testing is the critical part of the campaign which will address;

- Flow rate
- Condensate Gas Ratio
- Estimated Ultimate Recovery per well

- Testing expected to begin within 10 days.
- Normal production tests are restricted to a maximum volume of 22 mmcf per well.
- As a new play opener Calima has approval for a maximum volume of 105 mmcf per well.

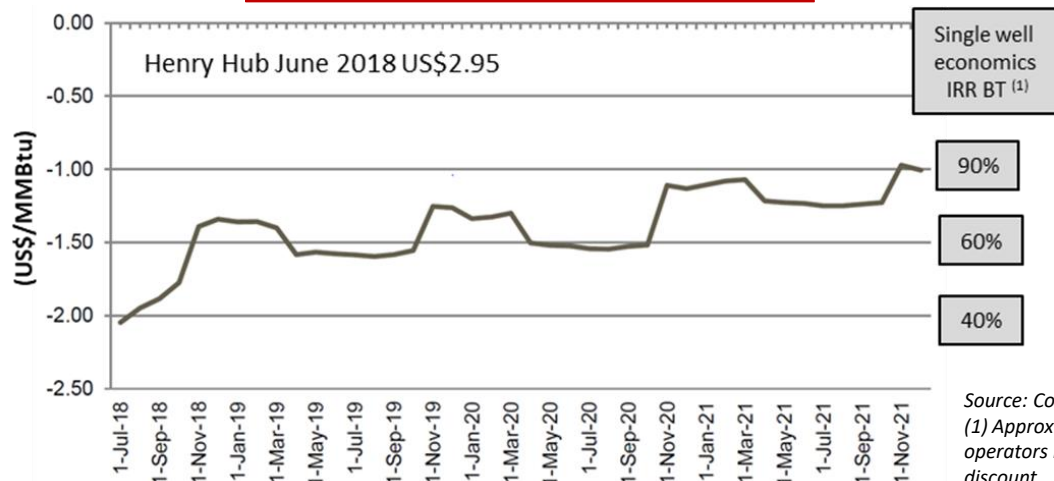


# MONTNEY GAS IS CURRENTLY SOLD INTO NORTH AMERICA



- Montney gas is sold into North American markets.
- Production has outgrown pipeline capacity.
- Montney gas is priced at a steep discount to Henry Hub gas prices in the US.
- Operators accept discounted gas prices in order to produce high value condensate.
- \$10 bn of Investments in new infrastructure is opening up new domestic egress routes.
- The discount to Henry Hub is predicted to close over the near term but pricing remains linked to North American markets.
- Shell, Petronas and partners have recently sanctioned Canada's first LNG project.
- Four other projects have been approved by Government.

## AECO – Henry Hub gas price differential



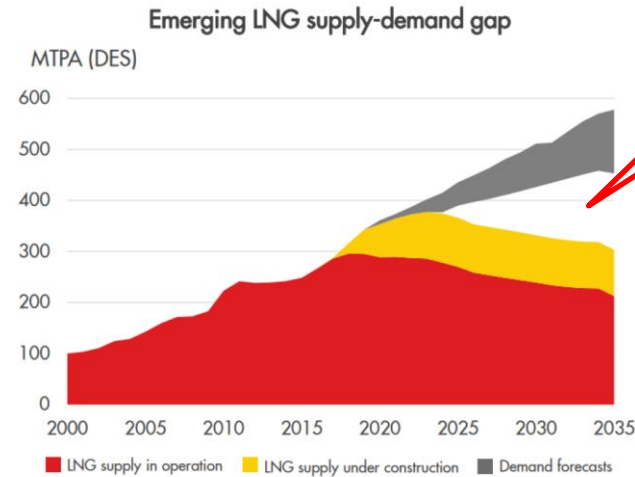
Source: Cormark Securities, May 2018

(1) Approximate internal rate of return before tax for a single well using data released by adjacent operators in the liquids rich Montney. Illustrates positive impact of decreasing the AECO to Henry Hub discount.

**LNG in Western Canada opens up the Montney to new markets with better pricing**

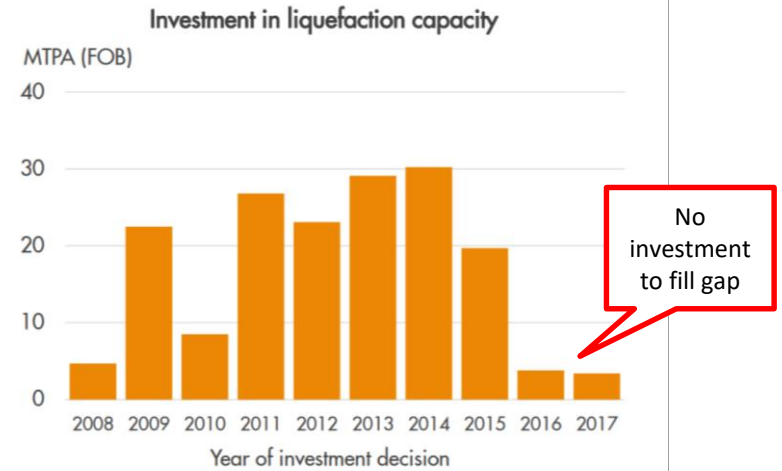


# IMPROVING LNG OUTLOOK

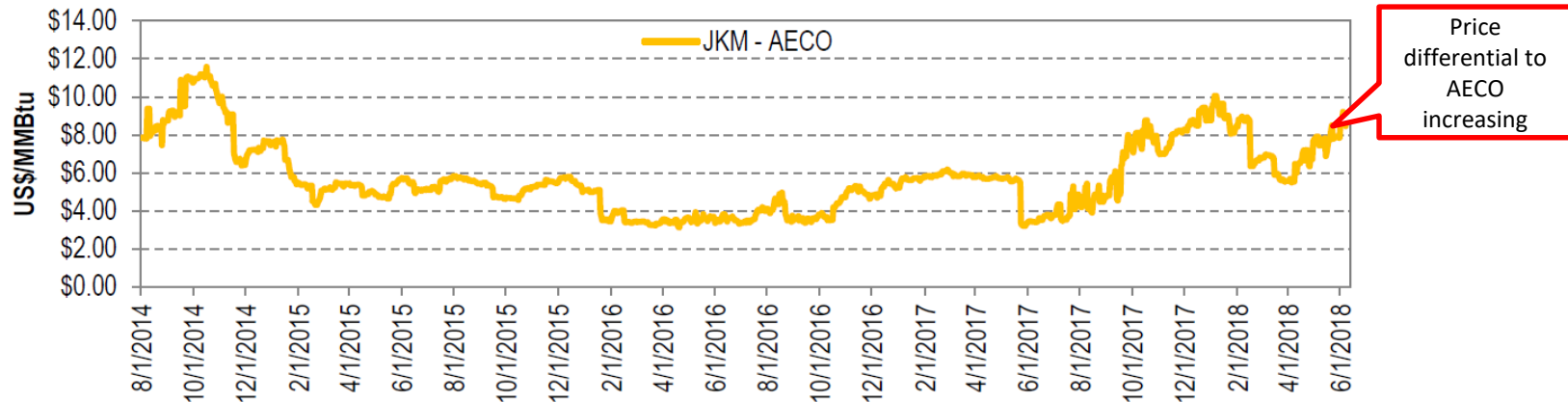


Source: Royal Dutch Shell

Widening supply demand gap opens up around the 2024 start up date for LNG Canada.



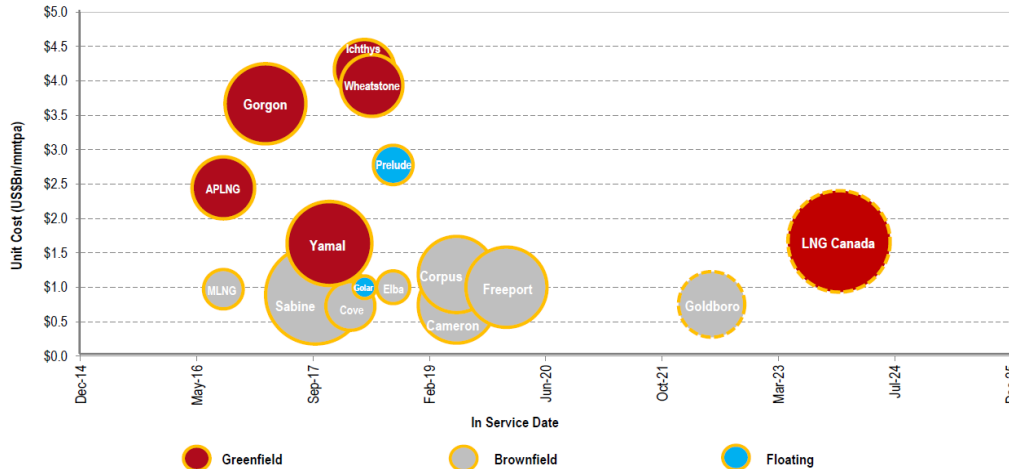
Shortage of new LNG projects sanctioned in recent years creates the supply gap.



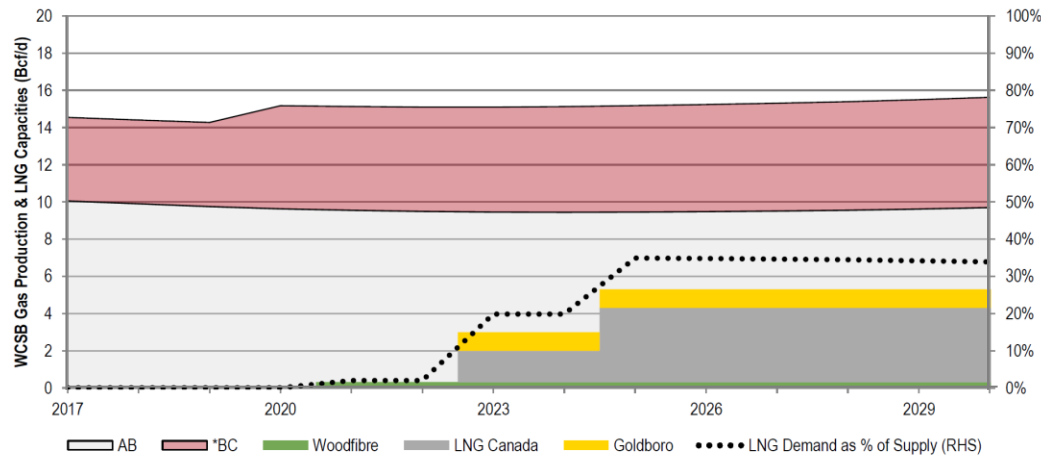
International LNG prices based on Brent substitution (JKM) are increasing relative to Western Canadian gas prices (AECO). Opening up the Montney to international LNG prices could deliver benefits to producers.

# CANADIAN LNG WELL PLACED TO CAPTURE MARKETS

## Unit cost of global LNG projects



- With an estimated unit cost 50% lower than comparable Australian projects, more than 1,000 tcf of gas resource and a similar sailing time to reach Asian markets Canadian gas will be very competitive.
- LNG Canada is expected to be the first of several new projects sanctioned for Canada and northeast US.



- By 2025 35% of all gas produced in Western Canada (including the Montney) will be required to feed the LNG Canada and Goldboro projects.
- Additional LNG projects are expected to result in a significant change in the supply demand dynamics as competition for reserves increases.

## Western Canada gas production and LNG demand as a % of production



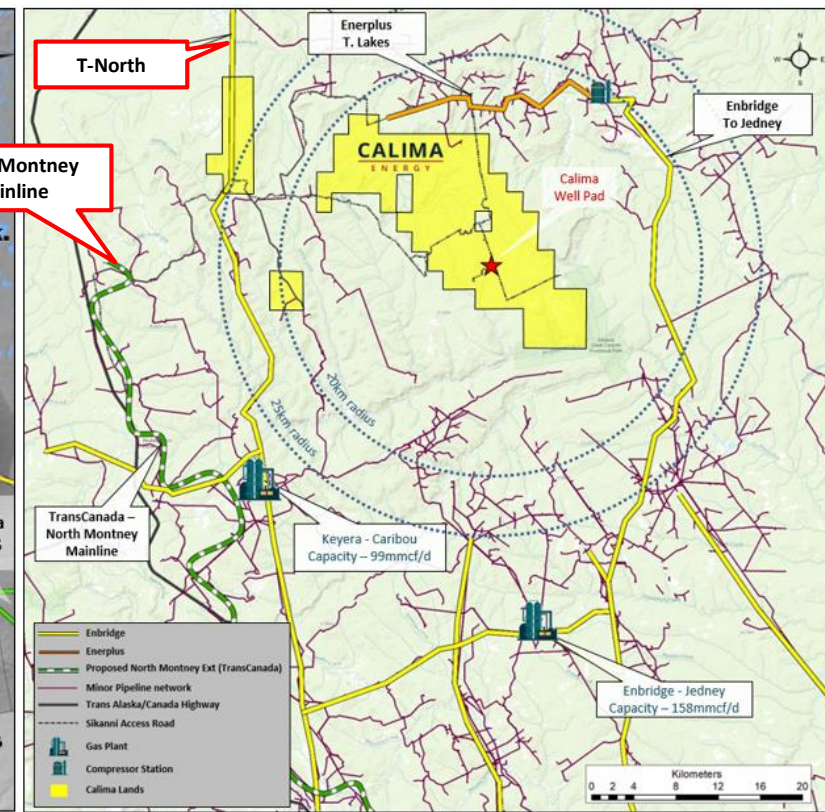
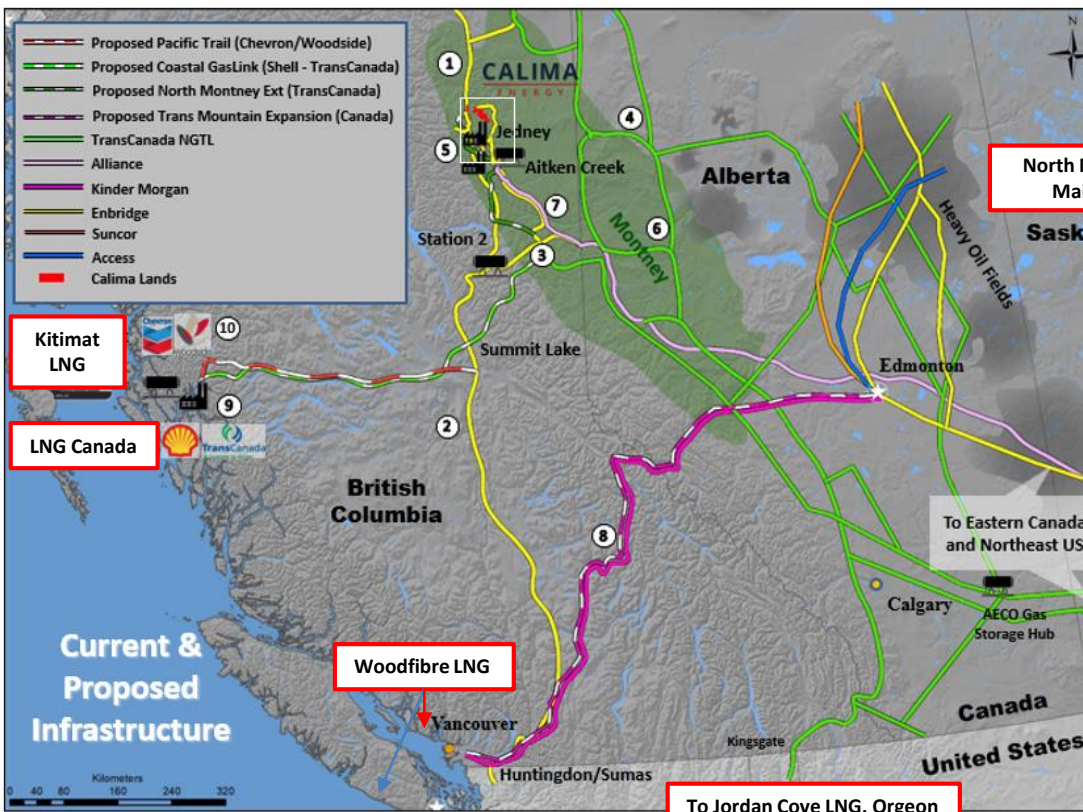
*"LNG Canada, as the project is called, is stunning in scale. It proposes to eventually ship as much as 28 million tons a year out of Kitimat, the equivalent of 10% of global LNG supply in 2017. It would carve out a new path -- the shortest by days -- between North America and Asia for super-chilled gas. For Canada, whose energy exports are sold almost exclusively to the U.S. at depressed prices for the lack of a coastal facility, **it means unlocking the Montney, a massive formation holding about half the total reserves of Qatar.** It would also mean an investment triple the size of Canada's largest single infrastructure project to date."*

LNG Canada Chief Executive Officer Andy Calitz

- **C\$40 billion to be invested by LNG Canada**, a consortium operated by Shell, in an LNG terminal at Kitimat on the west coast of Canada.
- Biggest ever infrastructure project in Canada.
- **13 mtpa (approx. 1.7 bcf/d)** start-up capacity with option to expand to **28 mtpa (3.4 bcf/d)**.
- 2.1 bcf/d 670 kilometre Coastal Gaslink Pipeline (TransCanada) will supply gas with potential expansion to 5 bcf/d.
- Progress (Petronas) has agreed to acquire a 25% interest in the project and is expected to provide gas to the project.
- Progress operates immediately to the west of Calima Lands.
- Montney gas to be exported to international markets outside North America for the first time.
- Global LNG prices are improving - introduces attractive alternate pricing mechanisms for Montney gas.
- Additional LNG projects are proposed for the west coast of Canada and the US.
- Potential to re-rate asset values e.g. LNG in Queensland.



# CALIMA CLOSE TO LNG INFRASTRUCTURE



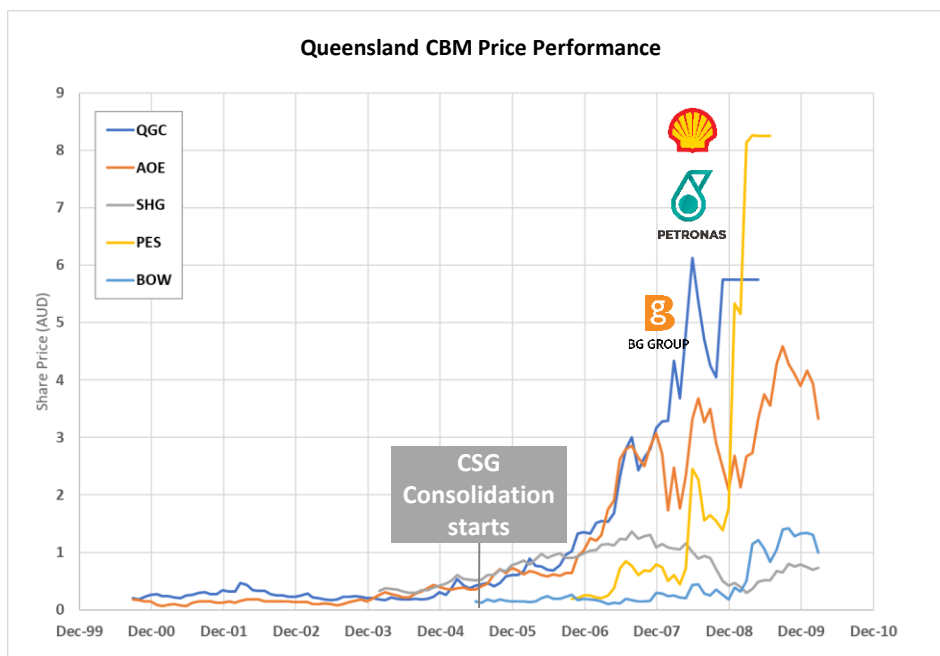
- Calima is well positioned relative to pipeline infrastructure.
- North Montney Mainline will feed Canada LNG.
- T-North will feed Kitimat LNG.
- LNG projects will make Calima's land position more attractive.

## LNG Canada: Acquisitions needed?

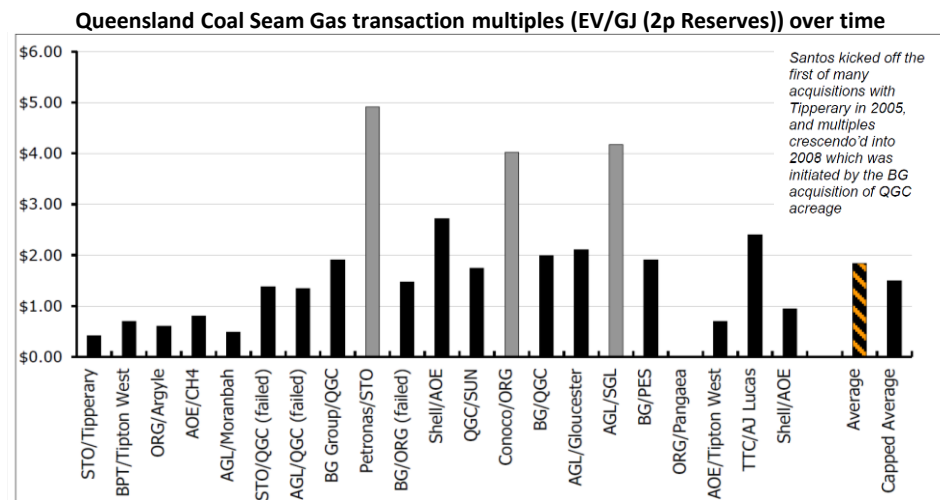
According to Wood Mackenzie, the sponsors of LNG Canada currently only have half the recoverable reserves and resource (or 33.2Tcf 2P+2C) to fill Phase 1 and 2 of the project. A portion of the gas for LNG Canada will likely be sourced from open market purchases, given the cheap natural gas prices. If Phase 2 of LNG Canada were to proceed, however, we do think that acquisitions or JVs will be necessary among all the participants in order to bridge a portion of the supply gap.

BMO Capital Markets, August 2018.

# LNG - IMPACT ON QUEENSLAND RESOURCE VALUATIONS



- Introduction of LNG into Queensland had a major impact on the valuation of resources.
- Consolidation of CBM players began in mid-2005.
- Major international companies entered in 2008.
- Average transaction multiple was c. A\$1.75 per GJ (2P reserves).
- The impact of LNG on Queensland resource valuations was dramatic.
- The Montney is a significantly bigger and better established basin but it is expected that the introduction of several LNG projects will still have a significant positive impact.



SOURCE: MORGANS RESEARCH, COMPANY



- Drilling and completion work is on schedule and within budget.
- Results to date have met or exceeded expectations.
- Testing starts in the next ten days.



- Un-risked prospective resource<sup>(1)</sup> 475 mmboe.
- 72,000 net acres of drilling rights.
- Average price of undeveloped Montney land sales during 2018 was **C\$4,437** per acre.

(1) Appendix 2



# CALIMA

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## ENERGY

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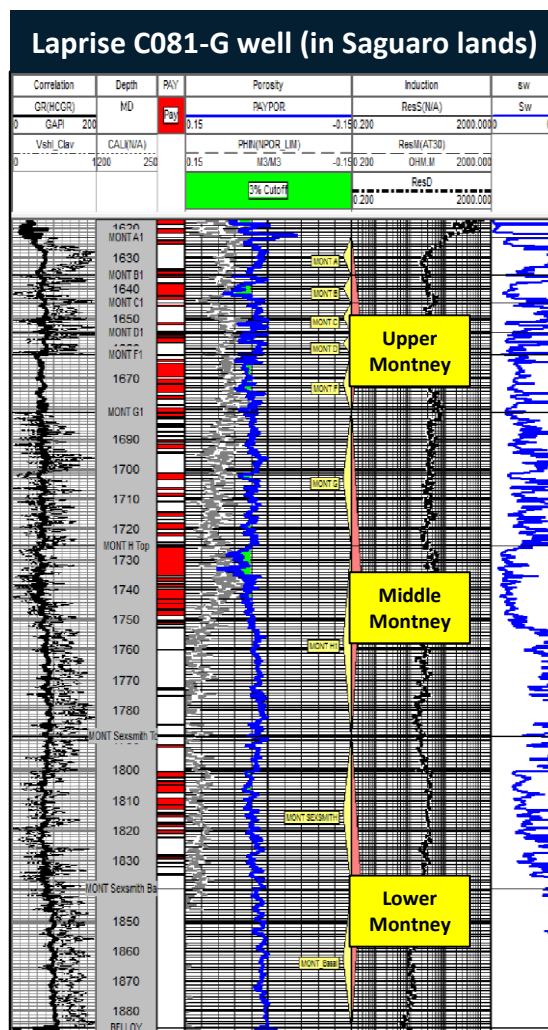
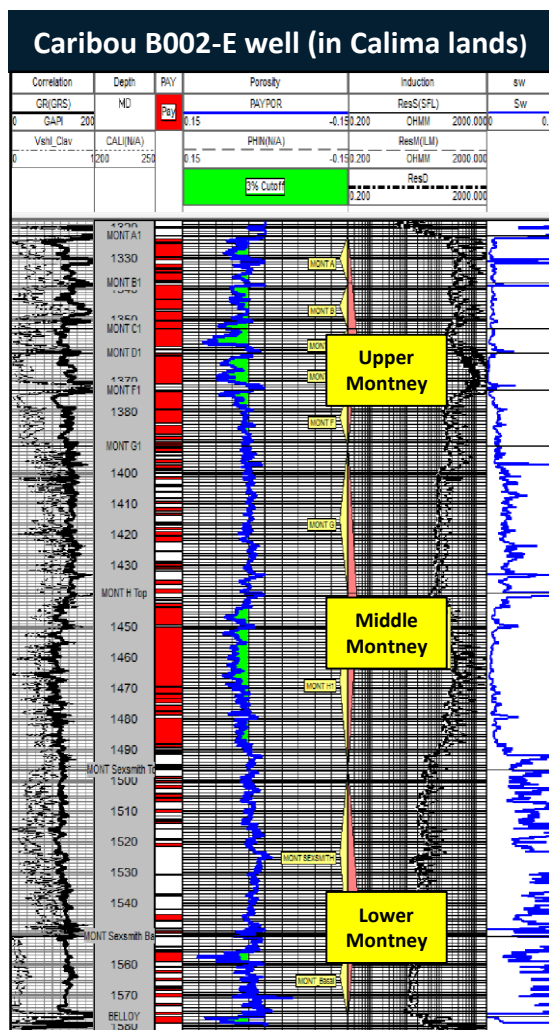


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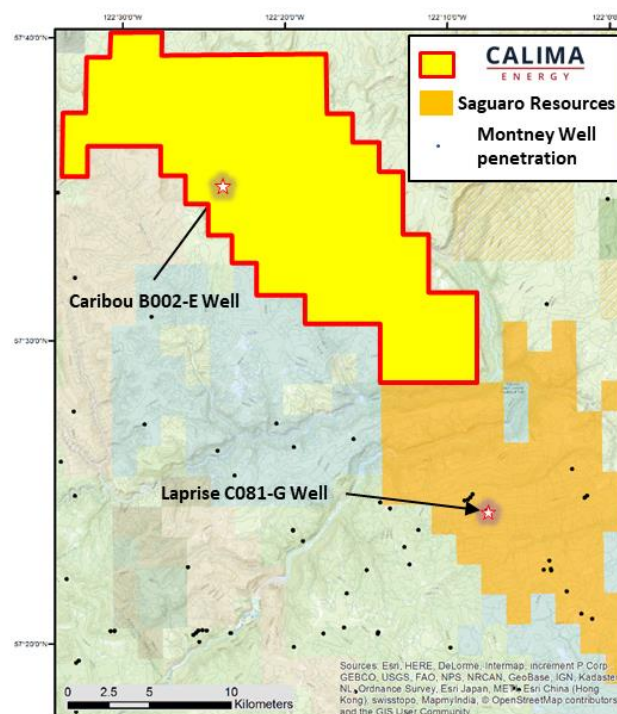
[instagram.com/calimaenergy](https://instagram.com/calimaenergy)

## APPENDIX 1 - SAGUARO RESOURCES – THE ANALOGUE



In July 2017, McDaniel & Associates Consultants Limited (McDaniel) provided a geological audit and review of offsetting production for the Montney Formation on the Calima lands in the Caribou Area.

*Calima expects wells drilled in its lands will deliver similar performance to those drilled by Saguaro.*



- Log data from a well in the Calima Lands (Caribou B002-E) and a well in the adjacent Saguaro lands (Laprise C081-G) used by McDaniel to compare reservoir parameters. Red flag denotes pay zone. A full copy of the McDaniel report can be obtained from the Company website ([www.calimaenergy.com](http://www.calimaenergy.com)).

## APPENDIX 1 - SAGUARO RESOURCES – THE ANALOGUE

### Upper Montney

Well ID	Top (m)	Pay (m)	Porosity (%)	Water Saturation (%)	Gradient (kPa/metre)	Temperature (Celsius)	Pressure (kPa)	Compressibility (Z-factor)	Illustrative Gas in Place (Bcf/sq mile)
Calima	1332.6	55.5	5.2	15	11.5	42	15,209	0.764	<b>40.0</b>
Saguaro	1622.7	26.4	4.2	17	13	52	21,096	0.805	<b>19.2</b>

### Middle Montney

Well ID	Top (m)	Pay (m)	Porosity (%)	Water Saturation (%)	Gradient (kPa/metre)	Temperature (Celsius)	Pressure (kPa)	Compressibility (Z-factor)	Illustrative Gas in Place (Bcf/sq mile)
Calima	1391.2	63.3	4.5	15	11.5	45	15,998	0.771	<b>40.9</b>
Saguaro	1680.9	37.1	4.1	16	13	54	21,851	0.814	<b>27.1</b>

### Lower Montney

Well ID	Top (m)	Pay (m)	Porosity (%)	Water Saturation (%)	Gradient (kPa/metre)	Temperature (Celsius)	Pressure (kPa)	Compressibility (Z-factor)	Illustrative Gas in Place (Bcf/sq mile)
Calima	1496.5	21.2	4.3	26	11.5	48	17,209	0.780	<b>12.0</b>
Saguaro	1788.4	16.1	3.5	23	13	57	23,249	0.830	<b>9.5</b>

The following extract from the McDaniel report describes the comparison of a well in the Calima Lands with a well in the Saguaro lands;

- *“The Middle and Upper Montney reservoirs on Calima acreage compare favourably to what has recently and is currently being developed by Saguaro to the south.*
- *Pay thickness and average porosity are both higher in the Caribou Area.*
- *The biggest difference between the Caribou and Laprise areas is the reservoir depth, the Montney Formation at Laprise is roughly 300 m deeper than Caribou, which would explain the difference in porosity as the zone is at a lower burial depth and likely has seen less compaction.”*

A copy of the McDaniel report can be obtained from the Company website ([www.calimaenergy.com](http://www.calimaenergy.com)).



## APPENDIX 2 - RESOURCE AUDIT BY McDANIEL & ASSOCIATES <sup>(1)</sup>

	Calima Lands 100%
Natural Gas (tcf)	2.16
Condensate (mmbbl)	54.20
Natural Gas Liquids <sup>(2)</sup> (mmbbl)	60.22
<b>Total Liquids (mmbbl)<sup>(3)</sup></b>	<b>114.42</b>
<b>TOTAL (mmboe)<sup>(4)</sup></b>	<b>475.79</b>

- McDaniel estimates based on 400 locations using 70% of available drainage area.
- Assumes a two layer development of Upper and Lower Montney whereas Saguaro are developing three layers into the Upper Middle and Lower Montney.
- Estimated ultimate recovery (EUR) from individual wells; 6.8 Bcf Upper Montney and 5.6 Bcf Lower Montney. <sup>(1)</sup>
- Saguaro EUR's now trending towards 8 Bcf.
- Calima Lands are of sufficient scale to warrant standalone development.
- Drilling at the end of the year should elevate some of these prospective resources to reserves and contingent resources.

### BEST ESTIMATE UNRISKED PROSPECTIVE RESOURCES <sup>1,5</sup>

(1) ASX announcement dated March 14<sup>th</sup> 2018

(2) Natural Gas Liquids (propane and butane) volumes do not include Condensate.

(3) Sum of Condensate and Natural Gas Liquids. Based on public domain data and the results of wells drilled on adjacent land McDaniel estimate that the average condensate to gas ratio for wells in the Calima Lands would be 23 bbl/MMcf (wellhead condensate/gas ratio). Additional liquids would be stripped from the gas upon processing. The adjacent Operator, Saguaro, recovers more than 50 bbl/MMcf after processing and obtains more than 50% of its revenue from condensate and other natural gas liquids. (Saguaro Resources Ltd. Investor Presentation, January 2018)

(4) Barrels of Oil Equivalent based on 6:1 for Natural Gas, 1:1 for Condensate and C5+, 1:1 for Ethane, 1:1 for Propane, 1:1 for Butanes. BOE's may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf:1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

(5) Prospective resources are the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to undiscovered accumulations. These estimates have both an associated risk of discover and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. The project maturity sub-class is Prospect which means that the project is regarded as sufficiently well defined to represent a viable drilling target.

## APPENDIX 3 - CALIMA BOARD & MANAGEMENT

### **Alan Stein**

#### Managing Director

Dr Stein has more than 25 years' experience in the international oil and gas industry. He was one of the founding partners of the geoscience consultancy IKODA Limited based in London and Perth and was the founding Managing Director of Fusion Oil & Gas plc and Ophir Energy plc.

Dr Stein is currently the Non-Executive Chairman of Hanno Resources Ltd and Sea Captaur Limited and is a Non-Executive Director of Bahari Holding Company Limited.

### **Glenn Whiddon**

#### Chairman

Mr Whiddon has an extensive background in equity capital markets, banking and corporate advisory, with a specific focus on natural resources. Glenn holds a degree in Economics and has extensive corporate and management experience. He is currently Director of a number of Australian and international public listed companies in the resources sector.

Mr Whiddon was formerly Executive Chairman, Chief Executive Officer and President of Grove Energy Limited, a European and Mediterranean oil and gas exploration and development company, with operations in Italy, Romania, Slovenia, Tunisia and the UK and Dutch North Seas.

Mr Whiddon is currently a director of Auroch Minerals Limited, Statesman Resources Limited and Fraser Range Metals Group Limited.

### **Jonathan Taylor**

#### Technical Director

Mr Taylor has more than 25 years' experience in the international oil and gas industry. He started his career with Amerada Hess in the UK before moving to Clyde Petroleum plc. He relocated to Perth in 1998 to take up the role of Technical Director at Fusion Oil & Gas plc. Following the sale of Fusion, Mr Taylor, together with Dr Stein, was one of the two founding executive directors of Ophir Energy plc serving initially as its Technical Director.

Mr Taylor is currently a non-executive director of Octant Petroleum, Helium One Limited and Citra Partners Ltd.

### **Neil Hackett**

#### Non-Executive Director

#### Member of the Audit & Risk Committee & Remuneration Committee

Mr Hackett holds a Bachelor of Economics from the University of Western Australia, Post-graduate qualifications in Applied Finance and Investment, and is a Graduate (Order of Merit) with the Australian Institute of Company Directors.

Mr Hackett is currently Non-executive Chairman of Australian Securities Exchange listed entity Ardiden Ltd (ADV), and previous NED of African Chrome Fields Ltd (ACF), Modun Resources Ltd (MOU) and has held various ASX Company Secretary positions including Sundance Resources Ltd, Ampella Mining Ltd, and ThinkSmart Ltd. Mr Hackett is currently Chairman of WA State Government peak cycling organisation West Cycle Inc and company secretary of industrial footwear manufacturer Steel Blue Pty Ltd.

## APPENDIX 3 - CALIMA BOARD & MANAGEMENT

### **Mike Dobovich**

Country Manager (Canada)

Mr Dobovich has over 20 years of experience in the oil and gas industry in Canada and the US. A graduate of the Land Acquisition and Management program of Olds College, he has been involved in the development and operations of onshore oil and gas plays, SAGD oil sands as well as offshore exploration. Mr. Dobovich has extensive experience in Stakeholder and Aboriginal Engagement as well as Regulatory and Environmental process in multiple jurisdictions. He recently held a position on the Senior Leadership Team of Statoil Canada as the Head of Safety and Sustainability.

### **Aaron Bauer**

Operations Manager (Canada)

Mr Bauer is an engineer with more than 15 years of drilling and completions experience in the Montney and other resource plays in Canada. He has worked for large companies such as Caltex and Burlington Resources as well as West Valley Energy, a private equity funded start-up where he was VP Operations involved in all aspects of business development including commercial modelling and scenario planning.

### **Justin Norris**

Montney Sub-Surface Project Leader

Mr Norris is a geophysicist with over 20 years of experience in the international oil and gas industry across a wide variety of jurisdictions and geological regions. He entered the industry as a Schlumberger graduate and had several international postings before leaving the service industry. Mr Norris took up the role of chief geophysicist at Fusion Oil & Gas plc and Ophir Energy plc and headed Ophir's New Ventures team in London.

Justin is a member of the Society of Exploration Geophysics (SEG), Petroleum Exploration Society of Great Britain (PESGB), European Association of Geoscientists and Engineers (EAGE) and the American Association of Petroleum Geologists (AAPG).

### **Mark Freeman**

Business Development

Mr Freeman is a Chartered Accountant with more than 20 years' experience in corporate finance and the resources industry. He has considerable experience in strategic planning, business development, mergers, acquisitions and project management. Mr Freeman has worked with a number of successful public resource companies and since 2015 has been providing strategic advice to TSVM.

A graduate of the University of Western Australia with a Bachelor of Commerce, Mr Freeman also holds a Graduate Diploma in Applied Finance from the Securities Institute of Australia. Mr Freeman will take responsibility for merger integration and also business development for the enlarged group.



## APPENDIX 4 – HAVOC PARTNERS

In May 2017 the five founding partners of Havoc Partners LLP (Havoc) all joined the management team of the Company. Alan Stein and Jonathan Taylor joined the Board as Managing Director and Technical Director respectively and the three remaining partners; Richard Higgins, Justin Norris and Mark Sofield fulfil technical and commercial management functions.

Havoc is a natural resources investment company focused on oil and gas, precious- and base-metals and strategic noble gases. The five founding partners of Havoc are geoscientists who have worked together for more than 16 years and collectively have more than 100 years of international upstream experience. Havoc was established to provide a platform to deploy the expertise and relationships of the partners in making direct and indirect investments in the natural resources sector with an emphasis on oil and gas.

The partners were the founders of AIM listed Fusion Oil & Gas plc which made several discoveries offshore Mauritania and then were the founders of Ophir Energy plc which made discoveries offshore Equatorial Guinea and Tanzania. When it listed on the LSE in 2011 Ophir was the biggest ever E&P IPO in London at the time and was the most successful float of the year.

The Havoc team took Ophir from a small exploration focused African player to a c. £1.9 Bn FTSE 250 company with contingent resources in excess of 1 bn bbls; one of the most successful growth stories of the African E&P players.



UK AIM listed

**Mauritania**

Chinguetti, Banda and Tevet.



UK LSE listed

**Equatorial Guinea**

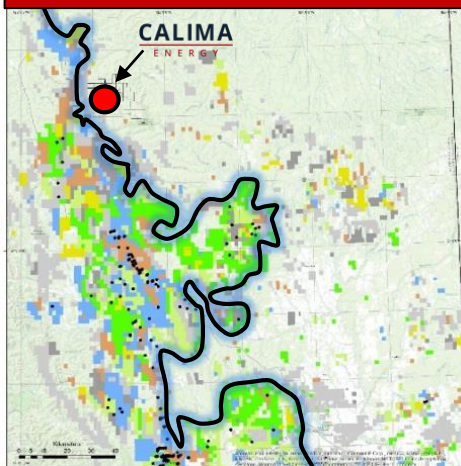
Fortuna, Silenus, Viscata, Tonel and Lykos.

**Tanzania**

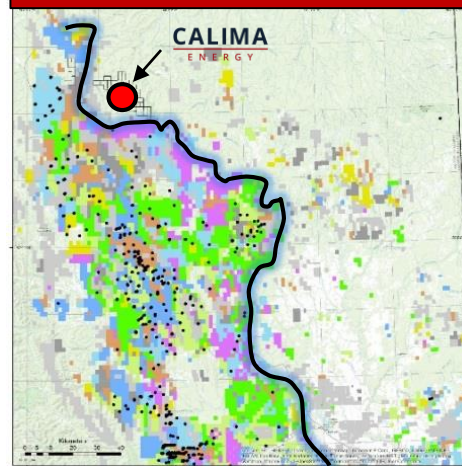
Jodari, Mzia, Pweza, Taachui, Kamba, Mkizi, Chewa, Papa and Chaza.

## APPENDIX 5 - CALIMA'S PATH INTO THE MONTNEY

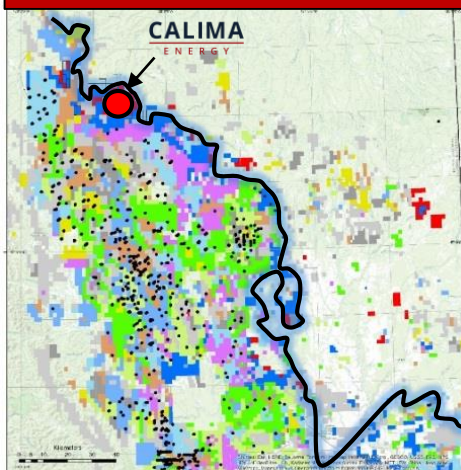
**2011**



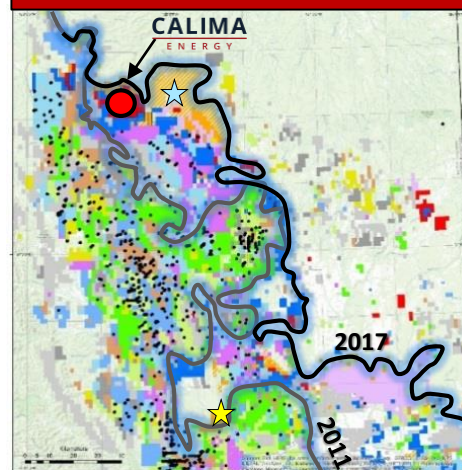
**2013**



**2015**



**MID 2017**



- **2013** - Two Australian companies (TSV and TMK) formed a 60/40 joint venture to use a proprietary geoscience workflow to identify liquids rich zones within the emerging wet gas play in the Montney.
- **2014** - Havoc Partners LLP, a natural resources investment group <sup>(1)</sup>, acquired 11% of TMK and took a seat on the Board.
- **2014-15** – The JV started acquiring land in Northeast BC beyond the accepted limit of the Montney play.
- **2016** - Havoc makes a multi-stage farm-in offer to the TSV/TMK JV to earn up to 55%.
- **2017** – Calima Energy acquires Havoc assets and management team. Becomes the project Operator.
- **2018** – Calima completes stage one of the farm-in to earn a 20% interest.
- **2018** – Calima completes 100% consolidation of the Calima Lands via takeover offers to TSV and TMK shareholders.

(1) Appendix 4

● Montney Horizontal Production Well

Montney Acreage Limit

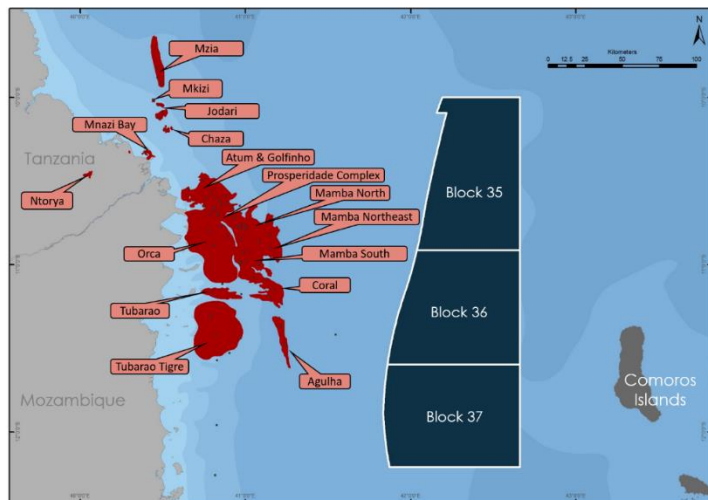
**LAND SALES**

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 YTD 2017 August 2017

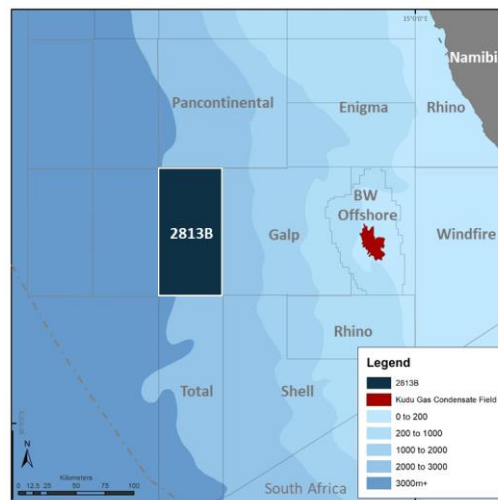
## APPENDIX 6 – PORTFOLIO ASSETS

- As part of the transaction announced on May 1<sup>st</sup> 2017 Calima acquired certain other assets from Havoc Partners LLP.
- Bahari Holding Company Limited (10% shareholding) – Bahari has exploration interests offshore Comoros in East Africa.
- Western Sahara (50% interest in 4 PSCs) – Calima has interests in 4 PSCs subject to resolution of a sovereignty dispute.
- In May 2018 the Company was awarded a 56% interest in Block 2813B offshore Namibia.
- These are passive investments which do not currently require any capital investment from Calima.

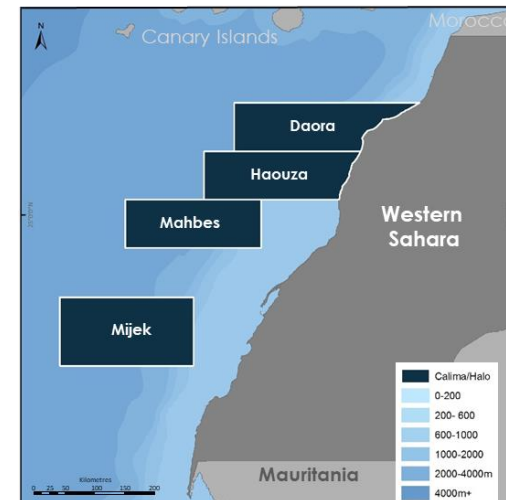
**Comoros**



**Namibia**



**Western Sahara**



For further information regarding the portfolio assets please refer to the Company's website; [www.calimaenergy.com](http://www.calimaenergy.com)