



Market Announcements Platform  
ASX Limited  
Exchange Centre  
20 Bridge Street  
Sydney NSW 2000

**7 September 2017**

## **Calima Energy advances its liquids-rich Montney play**

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### **Highlights:**

- **Licensed 60 km<sup>2</sup> of Montney 3D seismic data over core of Calima Lands**
  - **Acquired extensive well database with more than 60 wells within 35 km**
  - **Sub-surface evaluation well advanced, integrating new seismic and well data**
  - **Initiated well planning studies with a view to drilling in 2018**
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**Calima Energy Limited (ASX:CE1)** ("Calima" or the "Company") continues to advance the liquids-rich Montney play and has licensed a high-quality 3D seismic database covering a significant portion of Calima's landholding ("Calima Lands") in addition to acquiring a regional well log database that includes more than 60 Montney penetrations within 35 km of the Calima Lands. The seismic and well database will be used in the subsurface evaluation and well planning, with a view to commencing drilling activities in 2018. The company is pleased to provide the following regional update and briefing.

The Calima Lands, in the Caribou area of British Columbia (Figure 1), cover an area of 51,455 acres that has quietly been built up over the past three years through established open land sale auctions in British Columbia. The Company continues to participate in regular Government land sale auctions with a view to increasing its position to 65-70,000 acres by year-end, providing a sound foothold in the basin and providing significant scale in a Tier 1 basin.

Based on a proprietary mapping methodology<sup>(1)</sup> developed using more than 1,400 wells across the Montney play, including well penetrations of the Montney in, and immediately adjacent to, the Calima Lands, the Company expects the area to be liquids-rich and comparable to the acreage being operated by Saguaro Resources Limited (Saguaro) immediately to the southeast.

Saguaro has invested more than C\$400 million in drilling and infrastructure. As of August 2017, Saguaro has drilled 46 wells with current production (from 36 wells) averaging c. 10,500 boed (peak daily production in July 2017 exceeded 15,500 boed). Condensate and Natural Gas Liquids (NGLs) account for ~25% of Saguaro's production volume but deliver almost 50% of revenue. Saguaro reported



estimated ultimate recoveries (EURs) of 6 to 8 Bcf per well which gives an IRR of 40 to 83% respectively, at current prices.

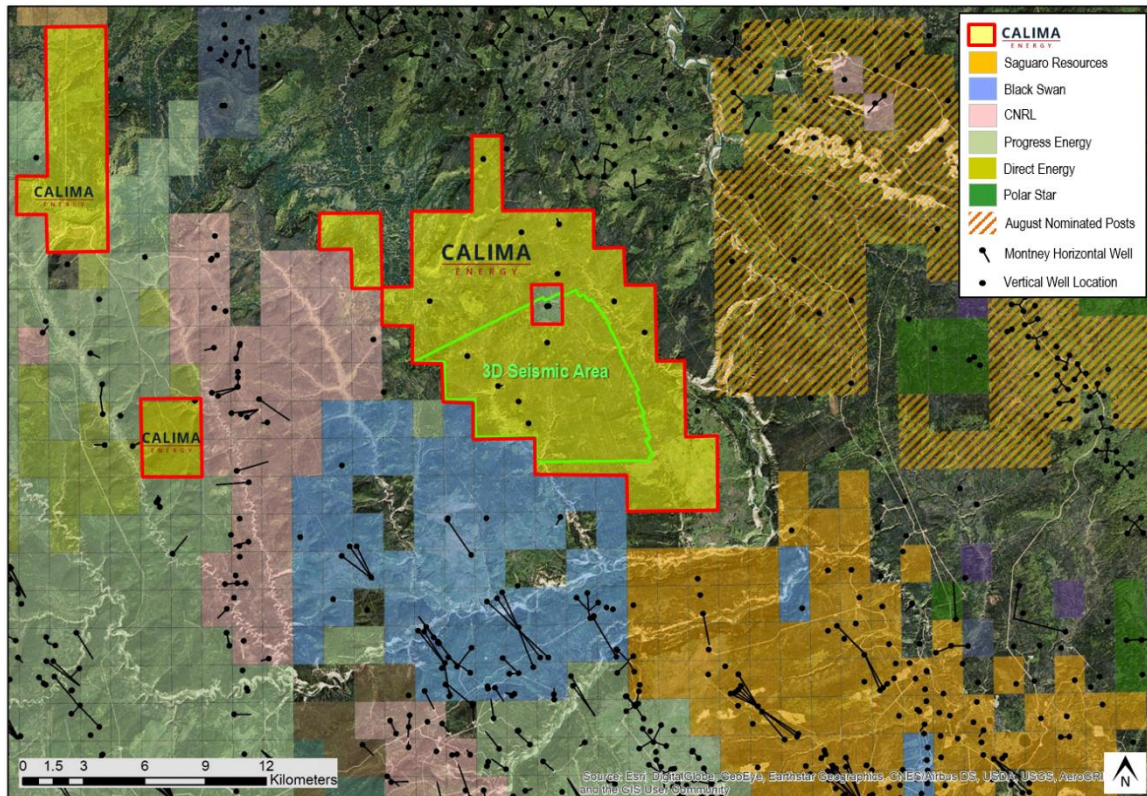


Figure 1 – Calima's landholding in British Columbia (in yellow) covers an area of 51,455 acres. The outline of the 3D seismic survey recently licensed by the Company is shown in green. Saguaro's acreage, located along geological strike, is shown in orange.

**Alan Stein, Calima's Managing Director commented;** *"The existing wells in and around our acreage position have confirmed our view that the Montney Formation in the acreage acquired by Calima is directly analogous to the acreage being successfully developed by Saguaro Resources immediately to the southeast. It is fortunate that we have been able to acquire a substantial land holding in the core of the liquids-rich play fairway on advantageous terms ahead of the industry."*

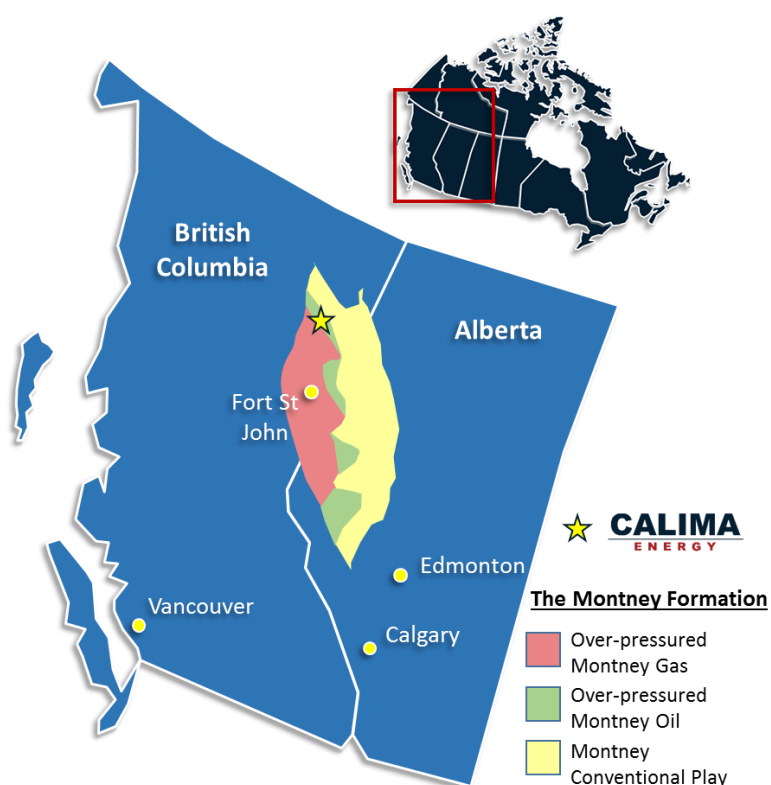
*"We believe that proving up the play by drilling and completing three horizontal wells will be a key value catalyst, and we have initiated well planning studies to drill these in 2018."*



## The Montney Play

The Lower Triassic Montney Formation of Alberta and British Columbia (BC) (Figure 2) has been the target of oil and gas exploration since the 1950s and, until the mid-2000s, historical investment activity was directed towards conventional sandstone and dolostone reservoirs. With recent advances in horizontal drilling and multi-stage hydraulic fracturing it has become possible to develop these siltstones, which are up to 300 meters thick, are saturated with oil and gas and have natural porosity. As a consequence, the Montney has become the most active oil and gas play in Canada and is one of the most economically attractive plays in North America, with the basin currently responsible for the greatest number of rigs operating in Canada today.

According to the National Energy Board of Canada<sup>(2)</sup> the siltstones of the Montney Formation are expected to contain 449 Tcf of marketable natural gas, 14.5 Bnbbbl of marketable NGLs, and 1.1 Bnbbbl of marketable oil.



*Figure 2 – The Lower Triassic Montney Formation is considered to be prospective over an area of approximately 130,000 km<sup>2</sup> in British Columbia and Alberta.*



## Drilling Activity & Deal Flow

The Company believes that growing levels of investment into the Montney and the presence of an active asset transaction market creates optionality in how the Calima Lands are developed, monetised or otherwise transacted to deliver value to shareholders.

The pace of activity and acreage deal flow in the Montney appears to be on an upward trend. According to Wood Mackenzie it is currently the most active play in Canada with C\$5.2 bn in investment planned for this year, which is predicted to rise to C\$7.5 bn by 2022. Current production is 4.9 billion cubic feet of gas per day and 247,000 barrels of condensate and other liquids per day. This is predicted to more than double by 2022<sup>(3)</sup>.

The number of wells drilled into the Montney Formation in BC during 1H 2017 is 67% higher than the corresponding period in 2016. In the June and July 2017 auctions for Crown land there were successful bids for 149 sections, which is an increase of almost 100% over the same period last year. The July auction was particularly noteworthy with a bid of C\$77m for c. 13,700 acres (~C\$5,600/acre) in the liquids-rich part of the play in the Attachie area of BC, some 120 km to the south of the Calima Lands. In June 2017 the Government noted that it has received a request for c. 100,000 acres to the east of the Calima Lands to be included in an upcoming land sale. This is an unusually large tract of land to be included in a land sale and it would extend the play limit far to the east of the Calima Lands.

In a recent note (22 July 2017) on Montney deal metrics the Bank of Montreal (BMO) commented that certain areas of the liquids-rich Montney play generated comparable, if not superior, economics to the mainstream US plays including the Permian. BMO noted that in light of this that there was an apparent disconnect between typical transaction metrics of \$2,500-5,000/acre in the Montney with c \$30,000/acre in the Permian. In the four month period to July 2017 there were C\$1,256 bn of asset transactions in the Montney (Table 1). The weighted average cost per acre was C\$3,776.

Date	Buyer	Seller	Value (C\$ M)	Production (boe/d)	C\$/boe	Acreage (acres)	\$/acre (C\$)
July 17	Paramount	Trilogy	650	25,133	25,862	118,000	5,508
May 17	?	Paramount	150	1,400	107,143	47,360	3,167
May 17	Primavera	Crew	49	n/a	n/a	18,400	2,663
May 17	Leucrotta	?	36	n/a	n/a	11,840	3,041
May 17	Painted Pony	UCR	229	8,500	27,012	69,143	3,312
May 17	?	Trilogy	50	1,100	45,455	44,427	1,125
April 17	ConocoPhillips	Pengrowth	92	n/a	n/a	23,424	3,928

Table 1 – Asset transactions in the Montney April-July 2017.





## Enhanced Economics - Liquids Rich Fairway

Although predominantly a gas play, most recent activity in the Montney has been focussed on those parts of the play that are rich in condensates and other NGLs as they offer superior economics. Wood Mackenzie noted that breakeven costs in the liquids-rich part of the play were currently around US\$1.70/mcfe, one of the most competitive in North America. A recent research note by BMO said:

*“The super liquids rich window of the Montney in British Columbia will emerge as one of the top plays in Western Canada and perhaps in North America.”*

For further information visit [www.calimaenergy.com](http://www.calimaenergy.com) or contact:

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## About Calima Energy

**Calima Energy Limited** is listed on the ASX (**ASX:CE1**). The principal activity of Calima is investing in oil and gas exploration and production projects, with an initial emphasis on Canada, and as opportunities arise, further internationally.

The Company website is, [www.calimaenergy.com](http://www.calimaenergy.com), which will provide investors with further detail on the Company, including projects and important updates.

(1) Finding Sweet-Spots and Quantifying Recovery Potential in Unconventional Plays, Cockerill and Hughes, Canadian Society of Exploration Geophysicists Recorder, pp12-15, March 2016.

(2) The Ultimate Potential for Unconventional Petroleum from the Montney Formation of British Columbia and Alberta, National Energy Board, November 2013.

(3) Wood Mackenzie Unconventional Service. Montney Key Play April 2017.

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