



Australian Energy & Minerals, Brisbane, March 27, 2019

Calima Energy - Liquids Rich Montney

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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.

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 prospective resources have also been classified using a deterministic method of petroleum reserves estimation having an evaluation date of December 31st, 2017.

Print date 26-03-19

INTRODUCTION TO CALIMA



Capital Structure

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



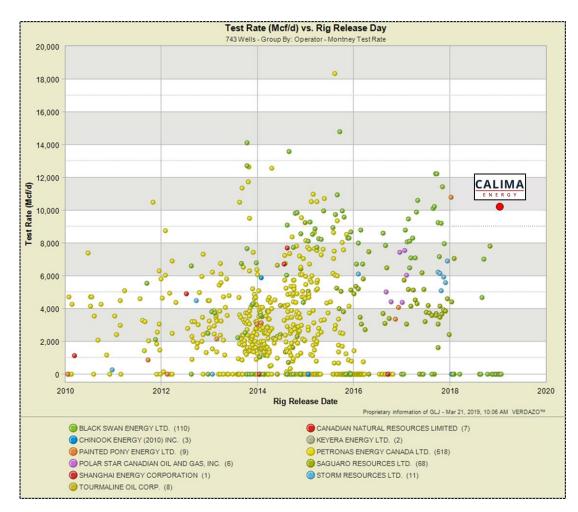
Shareholders				
Institutions	21.15%			
Board/Management/Founders ⁽⁵⁾	19.89%			
Tribeca Inv. Partners	10.25%			
Total	51.29%			

Montney

72,000 acres of Montney drilling rights One of the best resource plays in North America Gross prospective resource of 475 mmboe⁽⁴⁾ Production testing underway.

- (1) Includes performance shares, performance rights (\$0.15) and options (\$0.09 and \$0.12). For details see prospectus dated June 30th 2017
- (2) Based on the closing price on February 25th 2019
- (3) As at December 31st 2018
- (4) Appendix 1 Net prospective resource 376 mmboe
- (5) Founders includes former major shareholders of TSV Montney Limited and TMK Montney Limited who entered into voluntary escrow agreements until April 2019

PRODUCTION TESTING – CALIMA-2





- Maximum gas rate **10.2** mmcf/d
- Maximum liquid rate **151** bbl/d at gas rate of **8.4** mmcf/d (equivalent CGR **36** bbl/mmcf)

In analysing the results Michael Morgan, Director of Analytics at GLJ Petroleum Consultants in Calgary commented;

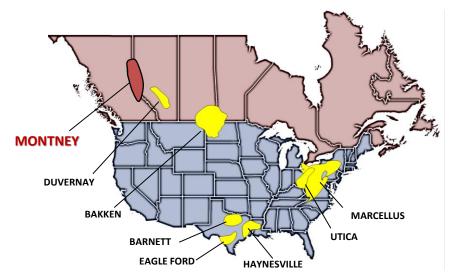
"In reviewing the test results, it looks like the Calima-2 well is going to meet its primary objective in matching or exceeding the performance of adjacent wells. Gas and light oil or condensate flow rates compare very favourably with the peer group at this early stage of testing.

The condensate recovery rates are typical for wells in the liquids rich zone of the Montney and the liquid chromatography results are also typical for condensates recovered from wells adjacent to the Calima Lands".

Test rate (mmcf/d) after 48 hours vs rig release date. The Calima-2 maximum gas rate during clean-up at 10.2 mmcf/d plots within the top quartile of the peer group.

- The numbers of barrels recovered at the well-head is not indicative of the total number of barrels typically won from production. Based on expected deep cut recoveries through standard processing facilities in the area the liquids recoveries would be expected to more than double after treatment. For this analysis the Company has determined that plant recoveries are equal to well head recoveries. The liquid rate and condensate to gas ratio is therefore based on the sum of the total liquids recovered at the well head plus the total liquids assumed to be recoverable after gas processing.
 Cluber and condensate to gas ratio is therefore based on the sum of the total liquids recovered at the well head plus the total liquids assumed to be recoverable after gas processing.
- (2) GLJ Petroleum Consultants have been retained by the company to provide analysis of the production test results. <u>https://qlipc.com/</u>

THE MONTNEY



PLAY	AREA (km²)	GROSS THICKNESS	COST TO ACQUIRE ACREAGE (US\$/acre)
MONTNEY (CAN)	130,000	Up to 300m	\$5,000
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



- Biggest oil and gas play in Canada which ranks alongside the best of the US plays.
- >C\$5 billion per year upstream investment and active M&A market.
- Estimated remaining reserves as at 2014 449 tcf of gas and 14.4 billion bbls of condensate.
- Montney condensate priced at or above WTI.
- More than 8,000 wells drilled with negligible failure rate.
- Lack of pipeline capacity has caused Montney gas to trade at a discount to Henry Hub US benchmark.

Tomorrow

- **C\$10 billion** of investment in new pipelines and upgrades is opening up access to the US market.
- Futures curve predicts a significant decrease in the discount to Henry Hub by 2020.
- Shell and partners sanctioned C**\$40 billion** for a 28 mtpa LNG project in October 2018.
- LNG on the west coast opens up the Montney to premium priced international markets for the first time.

MANAGEMENT & MONTNEY

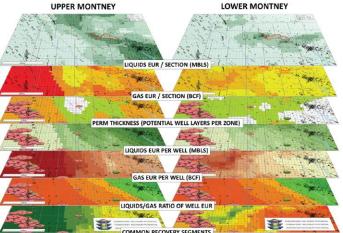




- Calima has been using an innovative mapping technique⁽¹⁾ to predict areas in the Montney that should be liquids rich.
- Used data from more than 1,400 wells to create a multicomponent data model.
- Havoc invested in 2014.
- The mapping guided the acreage acquisition strategy.
- At this time the Calima Lands were not considered to be part of the Montney trend.
- Subsequent drilling by adjacent operators validated the prediction.
- Calima acquired an initial interest in the project in 2017 and then 100% ownership in 2018.

- Havoc Partners joined the Calima management team in May 2017.
- Five geoscientists that have worked together for 18 years.
- Founders of Fusion Oil & Gas (AIM) and Ophir Energy (LSE).
- Discovered more than 2,500 billion boe.
- Ophir was the largest ever E&P IPO in London entering FTSE 250 after listing.
- Peak market cap in excess of £2 billion.
- Havoc Partners established as an investment vehicle in 2014.

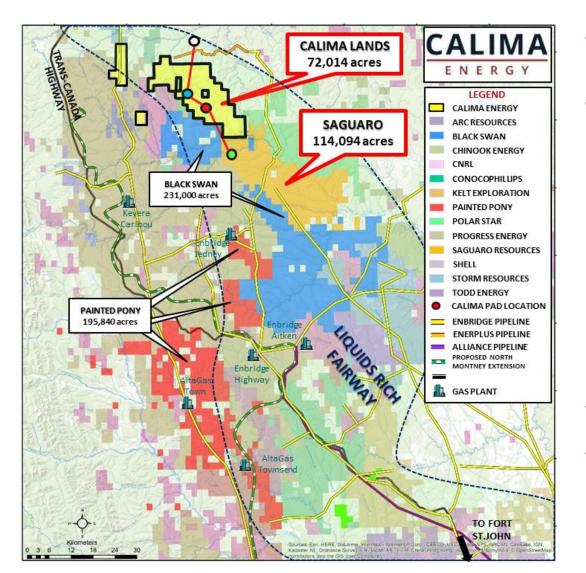
A New Way To Map The Montney



(1) Common Recovery Segment Mapping. Example from Inga area NE British Columbia. From, Cockerill & Hughes, CSEG Recorder, March 2016.

CALIMA LANDS





- Calima owns 72,000 acres of drilling rights in northeast British Columbia **The Calima** Lands.
- **Calima's** prospective resources based on **400** well locations is **475 mmboe** ⁽¹⁾.

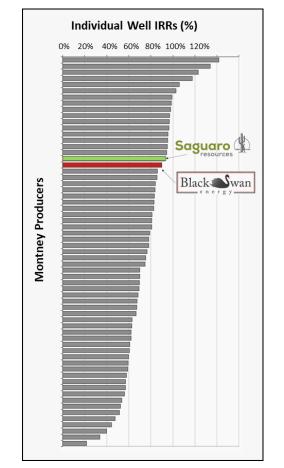
	Calima Lands Gross	Calima Lands Net
Natural Gas (Tcf)	2.16	1.69
Condensate (Mmbbl)	54.20	45.30
Natural Gas Liquids² (Mmbbl)	60.22	48.88
Total Liquids (Mmbbl) ³	114.42	95.20
TOTAL (Mmboe)⁴	475.79	376.76

- Adjacent operator Saguaro Resources is considered to be a close analogue for Calima.
- Saguaro has drilled more than 60 successful wells.



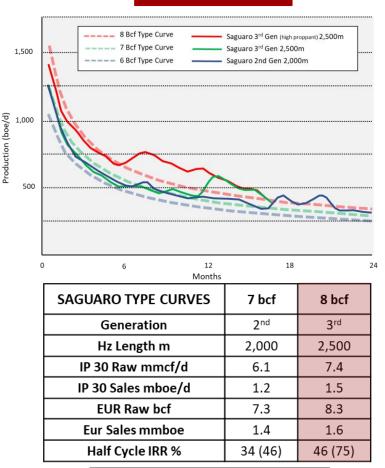
SAGUARO RESOURCES – THE ANALOGUE

Montney Producers Ranked by IRR per Well



Saguaro's recent 8 bcf type curve wells deliver top tier performance.

Saguaro Type Curves



Calima's target - Match the Saguaro 8bcf type curve

Saguaro is a top tier Montney producer.

- 114,000 acres
- C\$600 M invested.
- 16,485 boe/d ave. production 2018.
- 50 bbls/mmcf liquids yield of which 70% is condensate.

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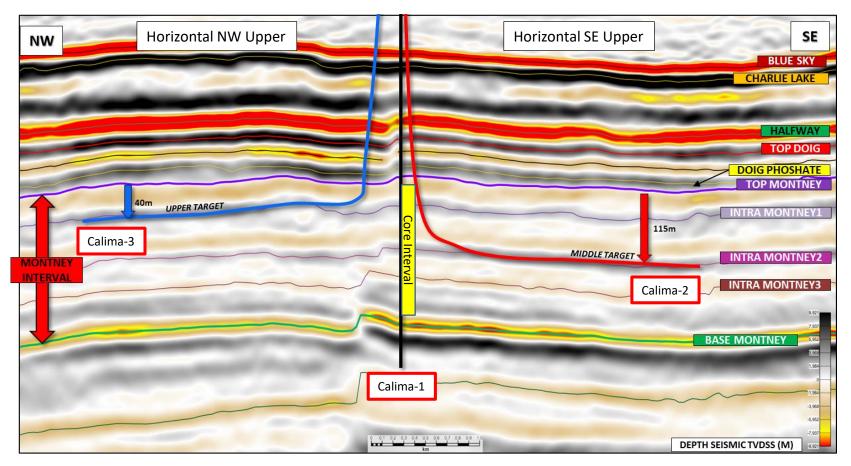
- 60% of revenue from liquids (50% from condensate).
- 2018 \$14.90 per boe netback.

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

Source: Saguaro Corporate Presentation February 2019. Half cycle IRR's based on AECO \$1.50 GJ and WTI US\$60 bbl. IRR upside case in parentheses based on AECO C\$2.00 GJ and WTI US\$65.00 bbl.

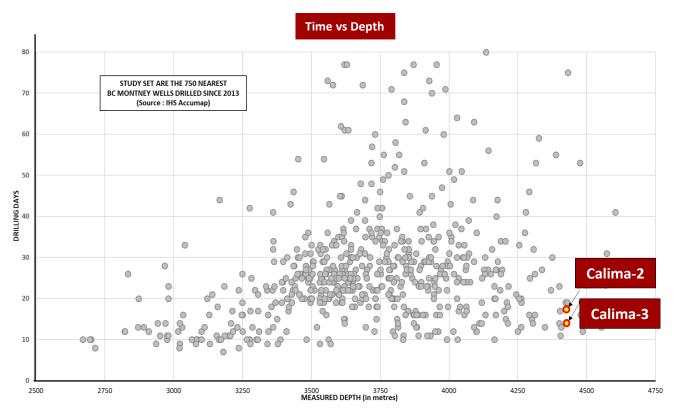


2019 DRILLING – 1X VERTICAL, 2X HORIZONTAL



- Calima-1: vertical well used for stratigraphic calibration. Full suite wireline logs and 230m of core recovery (90% of Montney).
- Core has given an early indication of hydrocarbon saturation and will calibrate rock properties for well performance modelling.
- Calima-2/Calima-3; 2,500 m horizontal sections used for an extended production test and then shut-in as a future producer.
- Test will demonstrate flow rates and liquid yield. Results will validate prospectivity prediction and will be used to revise independent reserve auditors report.

TOP QUARTILE DRILLING PERFORMANCE





 Relationship with CWL Energy provides operations support.

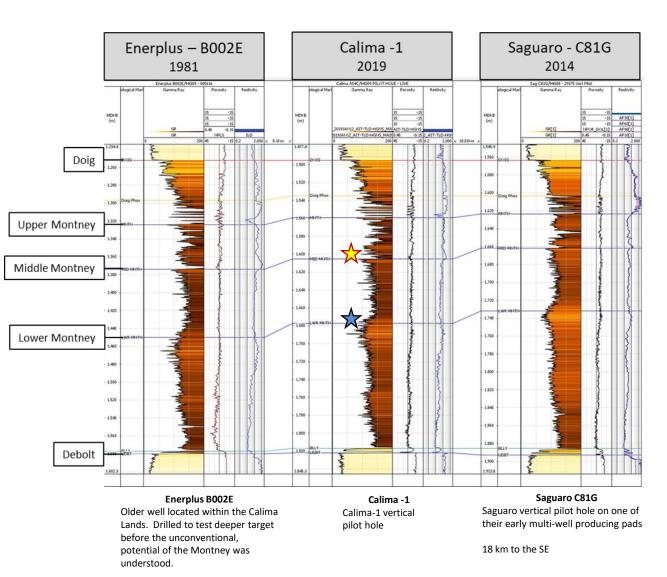
CALIMA

ENERGY

- CWL has experience with most other Operators in the region.
- Permitting.
- Stakeholder relationships.
- Site construction.
- Accommodation and support logistics.
- Top quartile drilling performance.
- On schedule.
- Within budget.
- No major HSE reports.



CALIMA-1 VERTICAL WELL



 Demonstrated that the Montney geology across the Calima Lands is very similar to Saguaro's.

ENERGY

- Presence of gas and condensate confirmed by laboratory analysis of core samples.
- Porosity and hydrocarbon saturation higher than comparable Saguaro wells based on log analysis.
- Targets for horizontal wells (Upper and Middle) match the same target intervals favoured by Saguaro.



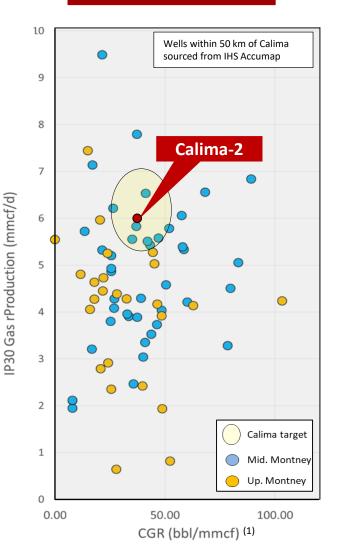
8 km to the NW

PEER GROUP IP 30 AND CGR RESULTS

Calima-2



IP30 Gas vs Condensate Gas Ratio





Test Results

- Public domain data from wells within a 50 km radius of Calima show variation in initial production rates (IP30) and in the CGR.
- Calima's pre-testing target zone⁽²⁾ outlined in yellow.

Calima-2 test results have hit the target.

- (1) CGR shown here is the total yield of condensate (C5+) including other NGL's (C3-4). The CGR is determined based on the sum of total liquids recovered at the well head plus the total liquids recovered after gas processing. Company has assumed that plant yields are equal to well head yields based on analysis of adjacent Operators. IP 30 is estimated to be 60% of initial peak rate based on comparison with adjacent Operators. Provisional results only.
- (2) ASX release 14th March, 2019

SCORECARD SO FAR



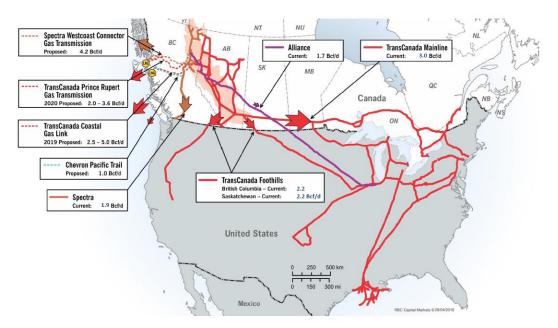
Objectives	
1. Stratigraphy	
2. Reservoir Quality	
3. Condensate	
4. Hydrocarbon Sat.	
5. Illus. Gas-In-Place	
6. Production Rate (1)	
7. Cond/Gas Ratio (2)	
8. Type Curve ⁽³⁾	

- The drilling campaign was designed to demonstrate that the prospectivity encountered by Saguaro extends into the Calima Lands.
- Saguaro are a top tier Montney producer based on IRR per well.
- Calima drilling campaign has met or exceeded all objectives.

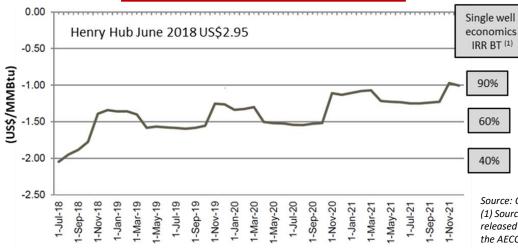
Calima has opened an extension of the sought after liquids rich zone of the Montney.

- (1) The initial 48 hour gas production rate of Calima-2 appears to plot within the top quartile of the peer group (Slide 10).
- (2) Based on a total liquids yield assuming that liquids recovered from processing equals liquids recovered from the well-head (slide 11).
- (3) Based on initial production rate (Slide 10) and an assumed IP 30 (Slide 11) Management expects type curves to be comparable with latest type curves reported by Saguaro.

MONTNEY GAS CURRENTLY SOLD IN NORTH AMERICA BUT.....



AECO – Henry Hub gas price differential



- Montney gas currently sold in North American markets.
- Production at >7bcf/d has outgrown pipeline capacity.
- Montney gas has been priced at a steep discount to Henry Hub gas prices in the US.
- Operators have accepted discount in order to produce high value condensate.
- C\$10 bn of investment in new infrastructure is opening up new domestic egress routes.
- Futures curves show the discount to Henry Hub narrowing over the near term with pricing remaining 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.

LNG in western Canada will open up the Montney to new markets with better pricing

Source: Cormark Securities, May 2018

(1) Source Internal: 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 CANADA



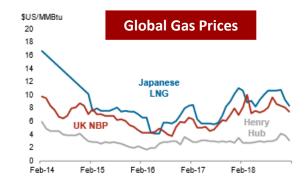
LNG Canada, Kitimat BC





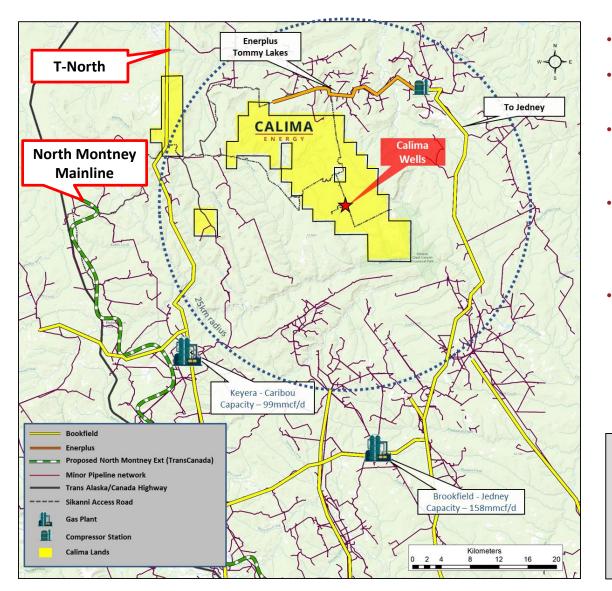
"LNG Canada, as the project is called, is stunning in scale. It proposes to eventually ship as much as 28 million tons a year out of Kitimat, the equivalent of 10% of global LNG supply in 2017. It would carve out a new path -- the shortest by days -- between North America and Asia for superchilled gas. 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."

- 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).
- Petronas who operate immediately east of Calima have bought a 25% stake in LNG Canada.
- LNG unit cost ~50% less than Australia with similar sailing time to Asia.
- By 2025 LNG Canada will consume more than 30% of all the gas produced in Western Canada.
- Four more projects have been approved for export by the Canadian Government including the Chevron/Woodside project also at Kitimat.
- LNG attracts a price premium over Montney gas which usually trades at a discount to Henry Hub



CALIMA CLOSE TO PIPELINES





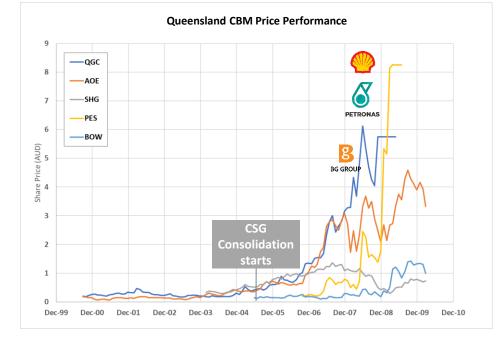
- Several pipeline options available.
- There is spare capacity in a pipeline to the Jedney processing facility.
- Calima is close to the **North Montney Mainline** which will supply gas to the Shell operated **LNG Canada** project.
- Calima is also well located with respect to the **T-North** pipeline which will supply gas to the proposed **Chevron/Woodside** LNG terminal at Kitimat.
- LNG has the potential to transform resource valuations in the Montney.

LNG Canada: Acquisitions needed?

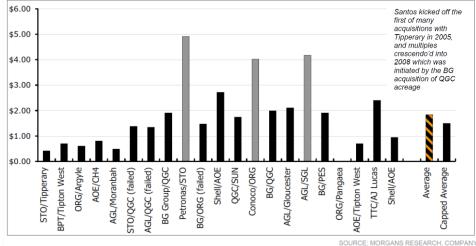
According to Wood Mackenzie, the LNG Canada partners currently only have half the recoverable reserves and resource (or 33.2Tcf 2P+2C) to fill Phase 1 and 2 of the project.

BMO Capital Markets, August 2018.

LNG - IMPACT ON RESOURCE VALUATIONS



Queensland Coal Seam Gas transaction multiples (EV/GJ (2p Reserves)) over time



- Introduction of LNG into Queensland had a major impact on resource valuations.
- Consolidation of CBM players began in mid-2005.
- Major international companies entered in 2008.
- Average transaction multiple was ~A\$1.75 per GJ of 2P reserves or ~A\$1.90 mcf.
- LNG had a dramatic impact on Queensland resource valuations ahead of project start up.
- Transaction metrics for Montney undeveloped land during 2018 averaged C\$4,400/acre which was almost 2x the rate for 2017.
- Calima is currently valued at less than C\$1,000 per acre.





- Drilling and testing operations on schedule and within budget.
- Results have met or exceeded expectations.
- Calima has acquired all necessary data to complete a revised reserve auditor statement (May 2019).





- Un-risked prospective resource 475 mmboe ⁽¹⁾.
- 72,000 net acres of drilling rights valued at <C\$1,000 per acre.
- Average transaction metric for undeveloped Montney land during 2018 was C\$4,400 per acre.

(1) Appendix 1 – Net prospective resource 376 mmboe

CALIMA ENERGY





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	Calima Lands Gross	Calima Lands Net
Natural Gas (Tcf)	2.16	1.69
Condensate (Mmbbl)	54.20	45.30
Natural Gas Liquids² (Mmbbl)	60.22	48.88
Total Liquids (Mmbbl) ³	114.42	95.20
TOTAL (Mmboe)⁴	475.79	376.76

- **BEST ESTIMATE GROSS UNRISKED PROSPECTIVE RESOURCES** 1, 5
- (1) ASX announcement dated March 14th 2018 McDaniel & Associates Resource Report
- (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.

(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. The prospective resources have also been classified using a deterministic method of petroleum reserves estimation having an evaluation date of December 31st, 2017.

- 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.⁽¹⁾
- 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.