



Euroz - Rottnest Conference, 13th March, 2019

Calima Energy - Liquids Rich Montney

DISCLAIMER

This presentation has been prepared by Calima Energy Limited (Company), based on information available as at the date of this presentation. The information in this presentation is provided in summary form and does not contain all information necessary to make an investment decision.

The purpose of this presentation is to provide general information about the Company. It is not recommended that any person makes any investment decision in relation to the Company based solely on this presentation. This presentation does not necessarily contain all information which may be material to the making of a decision in relation to the Company. Any investor should make its own independent assessment and determination as to the Company's prospects prior to making any investment decision, and should not rely on the information in this presentation for that purpose.

This presentation does not involve or imply a recommendation or a statement of opinion in respect of whether to buy, sell or hold securities in the Company. The securities issued by the Company are considered speculative and there is no guarantee that they will make a return on the capital invested, that dividends will be paid on the shares or that there will be an increase in the value of the shares in the future.

This presentation contains certain statements which may constitute "forwardlooking statements". Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements. No representation or warranty, express or implied, is made by the Company that the matters stated in this presentation will be achieved or prove to be correct. Recipients of this presentation must make their own investigations and inquiries regarding all assumptions, risks, uncertainties and contingencies which may affect the future operations of the Company or the Company's securities.

The Company does not purport to give financial or investment advice. No account has been taken of the objectives, financial situation or needs of any recipient of this document. Recipients of this document should carefully consider whether the securities issued by the Company are an appropriate investment for them in light of their personal circumstances, including their financial and taxation position.

This presentation is presented for informational purposes only. It is not intended to be, and is not, a prospectus, product disclosure statement, offering memorandum or private placement memorandum for the purpose of Chapter 6D of the Corporations Act 2001. Except for statutory liability which cannot be excluded, the Company, its officers, employees and advisers expressly disclaim any responsibility for the accuracy or completeness of the material contained in this presentation and exclude all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error or omission there from. The Company accepts no responsibility to update any person regarding any inaccuracy, omission or change in information in this presentation or any other information made available to a person nor any obligation to furnish the person with any further information.

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 11-03-19

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 March 2019

(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

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

Today

- 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** gross 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.
- 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



SCORECARD SO FAR



- The drilling campaign is supposed 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.
- 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 (CGR)
 - Estimated Ultimate Recovery (EUR)
- Testing commencing imminently.
- 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.

Enerplus B002E Older well drilled to test deeper target before Calima the unconventional, potential of the Montney was understood.

Calima -1 Calima-1 vertical pilot hole Saguaro C81G

Saguaro vertical pilot hole on one of their early multi-well producing pads

18 km to the SE

8 km to the NW

PEER GROUP IP 30 AND CGR RESULTS



IP30 Gas vs Condensate Gas Ratio



Test Results

- Production testing of the Calima-2 and Calima-3 wells is about to commence within the next few days.
- Public domain data from wells within a 50 km radius of Calima show variation in initial production rates (IP30) and in the CGR.
- Saguaro has an average liquid yield over more than 60 wells of 50 bbl/mmcf of which 35 bbls (70%) is condensate (C5+) with the balance being other natural gas liquids (NGL's) such as propane and butane (C3-C4).
- Just under half the total liquids yield is free condensate recovered at the well head with the balance being recovered after processing.
- Peer group analysis will be used to give the Calima results context.
- Saguaro report an average IP30 from their more recent wells of 7.4 mmcf/d and typically recover 20-23 bbl/mmcf of condensate and NGL's at the well head.

Condensate priced at or above WTI crude turbocharges the well economics

Newsflow⁽²⁾

March 18th - Initial test results Calima-2

March 21st - Initial test results Calima-3

March 25th - Analysis of initial test results.

Early April - Final test results

Mid May - Updated reserve auditors report

(1) Timing of announcements is based on management's best estimates and is subject to variation depending on operation circumstances.

(1) CGR shown here is the total yield of condensate (C5+) excluding other NGL's (C3-4)

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.

FUTURE PLANS





- Based on the current business plan the Company is funded through to Q4 2019.
- Central area has no drilling requirements until 2021.
- Primary focus is to build the resource inventory, deliver early cash flow and realise a valuation that better reflects market metrics.
- Subject to market dynamics there are plans in place to;
 - Drill additional wells.
 - Install a pipeline to deliver cashflow.
 - Increase the acreage position.
- Testing results announced through March and early April.
- Updated reserve auditors report available by May.
- A further investment of C\$30 million could build the pipeline and drill three additional wells.
- Calima could be producing ~5,000 boe/d⁽¹⁾ from five wells by early 2020.
- The Montney has an active M&A market which typically goes through pulses of activity.
- Calima is well positioned to react to future pulses in M&A activity.

(1) Based on average IP 30 rates achieved by adjacent Operator see Slide 6





- Drilling and reservoir stimulation completed on schedule and within budget.
- Results to date have met or exceeded expectations.
- Testing about to start.





- Un-risked gross 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





Contact us:

Calima Energy Limited 1A /1 Alvan Street, Subiaco WA 6008, Australia Tel: +61 8 6500 3270 Fax: +61 8 6500 3275 info@calimaenergy.com www.calimaenergy.com ASX:CE1



twitter.com/CalimaEnergy



linkedin.com/company/calima-energy.com



facebook.com/CalimaEnergy



instagram.com/calimaenergy

С	-		L	I	N	1/	4
	Е	Ν	Е	R	G	Y	

	Calima Lands Gross	Calima Lands Net
Natural Gas (Tcf)	2.16	1.69
Condensate (Mmbbl)	54.20	45.30
Natural Gas Liquids ² (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.