

Update

August 27, 2018

PUL - TSXV \$0.29  
TARGET: \$0.50  
PROJ. RETURN: 75%  
VALUATION: 65% NAV/FD SHARE

#### Share Data

Basic Shares O/S (mm): 88.5  
Fully Diluted O/S (mm): 127.2  
Market Cap (\$mm): 25.2  
Enterprise Value (\$mm): 24.3  
Net Debt (W.C.) (\$mm): (0.9)  
Next Reporting Date August 2018

#### Thomson Chart – One Year



#### Corporate Profile

Pulse Oil Corp. is an oil and gas exploration and production company targeting oil rich Mannville plays in Alberta. The company plans to grow through a combination of strategic acquisitions and through low risk, technically diligent drilling. Pulse also offers substantial upside from its miscible flood of tow Nisku Pinnacle reef at its 100% owned Bigoray property.

## PULSE OIL CORP. – SPECULATIVE BUY

### Study Shows Excellent Reservoir Quality For Bigoray EOR

#### ACTION – Reiterate SPECULATIVE BUY and \$0.50 Target Price

This morning Pulse Oil Corp. (“PUL”) announced that it has successfully completed Phase One of the Bigoray Enhance Oil Recovery (“EOR”) dynamic reservoir model of the company’s two Bigoray Nisku reefs (100% W.I.). Of note, the Phase One study, incorporated all available petrophysical well log data and core cuttings and showed pervasive matrix dolomitization and a tri-modal porosity system, which compares favorably with off-setting pools where EOR implementation has been completed. We reiterate our \$0.50 target price on the potential for low risk production growth through the reactivation and recompletion program and the massive upside potential from the miscible flood EOR project at Bigoray.

#### DETAILS – Completes Phase 1 Of Nisku Reef Reservoir Model

**Phase 1 of Dynamic Reservoir Model Complete:** On May 9<sup>th</sup>, 2018, PUL announced that it had contracted Schlumberger to complete a petrotechnical model of the company’s Nisku D and Nisku E reef pools at Bigoray (100% W.I.). Phase One of the EOR dynamic model project has now been completed. Phase One included analysis and interpretation of the logs and petrophysical data associated with 15 wells drilled within the two Nisku pools, followed by analysis and interpretation 10 cores cut within the two pools.

**Phase 1 Shows Tri-modal Porosity:** The Phase One study showed that the Nisku D and Nisku E reservoirs have a tri-modal porosity system, with matrix, vugular and fracture porosity, that compares favorably with off-setting pools where EOR implementation has resulted in recovery factors as high as 85% of petroleum initially in place (“PIIP”).

**Phase 2 Structural Study Underway:** Phase Two involves the construction of an architectural and structural reservoir model incorporating the petrological and petrophysical data gathered in Phase One with the company’s 2-D and 3D seismic data base.

**Massive Low Risk Upside from Miscible Flood:** The average recovery factor of 52 nearby analogous reefs that have been developed with a miscible flood is approximately 80%. Assuming a conservative recovery factor of 55%, and a modest \$15/boe cash flow netback, the potential NPV<sub>10</sub> is \$78 million (\$0.61/fd share) (Figure 1). With a recovery factor equal to the average of 80% and a \$15/boe netback, the NPV<sub>10</sub> increases to \$177 million (\$1.39/fd share).

#### IMPACT – Positive. Dynamic Reservoir Model to Maximize Oil Recovery

The purpose of the reservoir study is to incorporate all of the petrophysical log data, petrological core and drill-cuttings data, 2-D and 3-D seismic data, and historical production and pressure data into a single dynamic model. This dynamic model should allow PUL to determine the best development and solvent injection methodology that will maximize the oil recovery from its Nisku Reefs. In addition, PUL incorporating modern completion techniques not yet available to the off-setting analogues, which could accelerate and maximize daily oil production. Maintain **SPECULATIVE BUY**.

*This report has been created by analysts who are employed by Mackie Research Capital Corporation, a Canadian Investment Dealer. For further disclosures, please see last page of this report.*

### **BIGORAY – MASSIVE POTENTIAL WITHOUT DRILLING A WELL**

The company's Bigoray assets include a 100% interest in two Nisku Pinnacle reefs. The fields have produced an average of 35% of the petroleum initially in place ("PIIP") under waterflood. The average recovery factor of 52 nearby analogous reefs that have been developed with a miscible flood is approximately 80%. Assuming Pulse achieves a similar recovery factor, a miscible flood has the potential to add up to 12 mmboe. To illustrate the potential impact of the Bigoray EOR program, Pulse included a table in its current presentation which shows a potential range value based upon different recovery factors and cash flow netbacks (Figure 1). With the WTI currently over US\$65/bbl, the potential netback could be at the higher end of the range.

**Figure 1: Range of Potential Value Based Upon the Ultimate Recovery Factor and Cash Flow Netback**

## **The Bigoray Nisku E.O.R. Pulse's "Home Run"**



**Pulse Timing: 2018 Program Start; Reap the Benefits of Future Revenue Upside for multiple years of significant cashflows:**

<b>NPV10 Potential Based On Netback Per BOE</b>	<b>55% RF NPV10 Potential</b>	<b>60% RF NPV10 Potential</b>	<b>65% RF NPV10 Potential</b>	<b>70% RF NPV10 Potential</b>	<b>75% RF NPV10 Potential</b>	<b>80% RF NPV10 Potential</b>
\$25.00	\$131 million	\$164 million	\$197 million	\$230 million	\$263 million	\$296 million
\$20.00	\$104 million	\$131 million	\$157 million	\$184 million	\$210 million	\$236 million
\$15.00	\$78 million	\$98 million	\$118 million	\$138 million	\$158 million	\$177 million
\$10.00	\$52 million	\$65 million	\$79 million	\$92 million	\$105 million	\$118 million
\$5.00	\$26 million	\$33 million	\$39 million	\$46 million	\$53 million	\$59 million

*Source: Company reports, Mackie Research Capital*

## RISKS TO TARGET

While this is not an exhaustive list, we view the following risks as being noteworthy to investors in PUL.

**Financial Risk:** At the current production level, PUL is generating a limited amount of cash flow. Future expenditures will be dependent on cash flow as well as external capital sources which may include debt or equity. Should it not be possible to obtain the necessary financing, there would likely be an adverse impact on the company's development or production activities.

**EOR Miscible Flood Program:** PUL plans to implement a miscible flood program on the Nisku-D and Nisku-E oil pools. Although both pools responded well to a waterflood program, the effectiveness of a miscible flood program is unknown at this time.

**Commodity Price Risk:** Operational results and financial condition, and therefore the amount of capital expenditures are dependent on the prices received for crude oil and natural gas production. A prolonged or significant weakness in the price of oil and natural gas would affect PUL's ability to spend capital and potentially lead to shut-in of operations.

**Regulatory Policy Risk:** Various levels of government extensively regulate the energy industry with influence over exploration and production activities, prices, taxes, royalties and export restrictions. New regulations or modifications to existing regulations could adversely impact the company's profitability.

**Exploration Risk:** The majority of PUL's capital expenditures is directed to towards lower-risk development projects including well reactivation and workovers. As the company grows production and cash flow, a portion of PUL's future capital expenditures may be directed to toward exploration activities that carry a higher degree of risk.

**Exchange Rate Risk:** PUL operations are exposed to changes in the exchange rate between the U.S. dollar and Canadian dollar.

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