

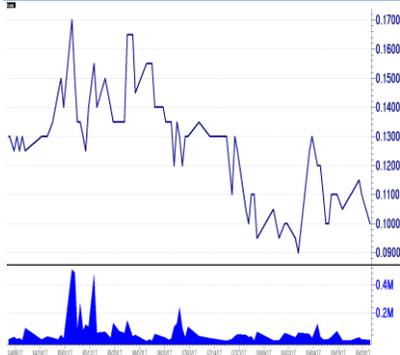
PUL - TSXV	\$0.10
TARGET:	\$0.50
PROJ. RETURN:	400%
VALUATION:	65% NAV/FD SHARE

#### Share Data

Basic Shares O/S* (mm):	88.1
Fully Diluted O/S* (mm):	127.1
Market Cap (\$mm):	8.8
Enterprise Value (\$mm):	7.4
Net Debt (W.C.) (\$mm)**:	(1.4)
Next Reporting Date	Nov 2017

\*Includes 14.1 mm shares for the Bigoray transaction.

\*\*As at June 30, 2017, adjusted for financing & Bioray transactions



#### 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 the miscible flood of tow Nisku Pinnacle reef at its 100% owned Bigoray property.

## PULSE OIL CORP. – SPECULATIVE BUY

### Potential 10 Bagger; Nisku Reef Play Conservatively Valued @ \$65mm(\$0.75/sh) Vs. Market Cap of \$4mm

#### ACTION – Initiating Coverage with A Spec. Buy Rating, \$0.50/share Target Price

We are initiating coverage of Pulse Oil Corp. (“PUL or Pulse”) with a **SPECULATIVE BUY** recommendation and a 12-month target price of \$0.50 per share. The newly formed company has taken advantage of the recent commodity price downturn, completing two attractive asset acquisitions covering ~ 42,000 net acres in Alberta. The Manville assets have near term production growth potential through low risk well reactivations, well recompletions and development drilling. But the big upside for investors, and what differentiates this small cap company from others in the current market, is its miscible flood Enhanced Oil Recovery (“EOR”) project of two **Nisku Pinnacle Reefs at Bigoray (100% W.I.)**. The EOR play has the potential to add between 6.5 million and 12 million barrels of light oil reserves valued at \$65 million (\$0.74/sh) on the low end *with upside to over \$177 million (\$2.01/sh) versus a current market capitiation of ~\$4 million.*

#### DETAILS – Potential To Add 12 mmbbls Through Miscible Flood Of Nisku Reefs

**Experienced Management Team and Board With Skin In The Game:** Pulse was founded by Garth Johnson and Drew Cadenhead, the ex-senior management team of TAG Oil Ltd., where they implemented a similar proven growth strategy of acquiring quality assets during a market downturn and unlocking immediate growth and value through low-risk field operations followed by development and exploration drilling. **Garth and Drew have a combined investment of \$1.3 million in Pulse at an average cost of ~\$0.11 per share holding ~14% of the outstanding shares, while taking no salary for the last 2 years.** The significant level of ownership aligns the interest of management with shareholders.

**Massive Low Risk Upside From Miscible Flood of Nisku Pinnacle Reefs:** The company’s Bigoray assets include a 100% interest in two Nisku Pinnacle reefs that have produced an average of 35% of the 26 million barrels (mmbbl) of 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 mmbbl of reserves with production additions of over 2,000 boe/d. We assumed recovery factor of only 60% translating into ~6.5 mmbbl of new reserves conservatively valued (at \$65 million (\$0.74 per share) versus the current market capitalization of \$4 million. With a recovery factor equal to the average of 80%, we see upside value potential of \$177 million (\$2.01 per share). As most of the required infrastructure is in place, the miscible flood project requires *only \$3.0 million of investment per Nisku Reef providing massive upside without the risk and significant cost of an extensive horizontal drilling program.*

#### IMPACT – A Potential 10 Bagger Even In The Conservative EOR Case Scenario

The potential upside from a successful Nisku Reef EOR project is so large that we expect substantial stock price appreciation (ie. 10x upside) even if the miscible flood achieves expectations at the low end of the range. Production additions of ~2,000 boe/d from Bigoray should generate substantial free cash flow that can be invested into drilling the company’s large inventory of Mannville locations. We initiate coverage on PUL with a target price of \$0.50 per share equivalent to a 0.65x multiple of our NAV estimate

## OIL &amp; GAS

## PULSE OIL CORP.

## TABLE OF CONTENTS

Overview – <i>Not Your Typical Junior</i> .....	3
Bigoray – <i>Immediate production Growth With Huge EOR Upside</i> .....	4
Well Reactivation to Grow Net Production 7x from 70 boe/d to 500 boe/d.....	4
Potential Reserves Additions of 8 to 12 mmboe From Miscible Flood .....	7
Massive Potential Value with a Minimal Investment: .....	7
Mannville Assets - <i>Large Inventory Of Development Drilling Locations</i> .....	8
Valuation .....	9
Investment Risks .....	10
Summary and Recommendation – <i>Its All About The Nisku</i> .....	11
Appendix 1: Management.....	13
Appendix 2: Board of Directors.....	15

*Note: All financial figures in this report are in Canadian dollars, unless stated otherwise. Report pricing date: 10-25-17*

## OVERVIEW – NOT YOUR TYPICAL JUNIOR

In February 2017, the capital pool company Wolfpack Capital Corp. completed its qualifying transaction by acquiring Pulse Oil Corp. (previously Hydrate Resources Corp.). On March 7, 2017, Pulse Oil Corp. (“Pulse” or “PUL”) commenced trading as a Tier 2 Oil and Gas Company on the TSX Venture Exchange under the symbol PUL. Pulse was founded by Garth Johnson (CEO) and Drew Cadenhead (President) who previously were CEO and COO respectively of TAG Oil Ltd. (TAO on TSX; BUY; \$1.30Target). TAG grew from a start-up oil and gas company with no production and a market capitalization of \$2 million, to a company with 3,000 boe/d of production and a market capitalization of over \$650 million. This growth was achieved in part through the opportunistic acquisition of distressed assets that were then exploited to achieve rapid production and cash flow growth. With the current market downturn, Pulse saw the opportunity to repeat this strategy in Alberta.

**Completes Two Acquisitions:** In February 2017, Pulse completed its first acquisition, which was an initial 50% interest in the Bigoray Assets and in October 2017, the company announced a series of transactions that will increase its interest to 100%. The transactions are expected to close later this month. In June 2017, Pulse completed its second acquisition which was a 100% interest in the Queenstown/Mannville assets (“Mannville Assets”). Combined the assets are producing ~140 boe/d (expected to increase to ~570 boe/d within three to six months), cover a large area of over 42,000 acres and hold ~2.6 million boe of reserves with an net present value discounted @ 10% (“NVP<sub>10%</sub>”) of \$21.3 million (\$0.26/fd share). Note that the Bigoray net asset value in Figure 1 does not include any potential value for the EOR miscible flood program. In the short term, Pulse will focus on low risk operations in order to quickly build a production and cash flow base that will be reinvested into a miscible flood of Nisku Pinnacle reefs that should result in step growth without drilling a single well.

Pulse has identified a large inventory of Mannville development and exploration locations to fund the medium and longer term growth of the company and the company plans to continue to expand its opportunity base through the acquisition of assets that offer immediate production and cash flow potential through well reactivations, recompletions and through development drilling.

**Figure 1: Summary of Current Oil & Gas Assets Held By Pulse**

Property	W.I.	Current Net Production (boe/d)	Net Production in 3 -6 (boe/d)	Reserves		Reserves Value*			Net Acreage
				Proved (boe)	Proved + Probable (boe)	Proved NPV 10	Proved + Probable NPV 10	2P NPV/sh	
Bigoray	100%	70	500	1,083,000	1,585,000	\$ 10,977,800	\$ 15,760,800	\$ 0.18	12,019
Mannville Assets	100%	70	70	529,000	1,031,000	\$ 1,171,000	\$ 5,524,000	\$ 0.06	30,720
<b>Total</b>		<b>140</b>	<b>570</b>	<b>1,612,000</b>	<b>2,616,000</b>	<b>\$ 12,148,800</b>	<b>\$ 21,284,800</b>	<b>\$ 0.24</b>	<b>42,739</b>

\*Bigoray NAV does not include any value for the EOR miscible flood program

Source: Company Presentation, Mackie Research Capital

## **BIGORAY – IMMEDIATE PRODUCTION GROWTH WITH HUGE EOR UPSIDE**

**Increases W.I. to 100% with Limited Upfront Capital:** In late 2016, Pulse acquired a 50% interest in the Bigoray Assets located in Central Alberta for cash consideration \$750,000 and a commitment to provide funding for operations. Then in October 2017, Pulse announced agreements that will increase its interest in Bigoray to 100% through a series of transactions which included an assets swap and the acquisition of the remaining Bigoray interests from two joint venture partners for \$4.2 million comprised of a combination of cash and shares. The acquisition was structured to preserve cash with \$500,000 paid at closing, another \$1.6 million paid in cash installments until 2020, and \$2.0 million paid in PUL stock at a deemed price of \$0.14/sh (Figure 2).

**Figure 2: Payment Schedule for Buyout of Bigoray Partners**

1. \$500,000 in cash payable at closing.
2. Issuance of 14,118,037 Pulse common shares at a deemed issue price of \$0.14 per Common Share, equal to an aggregate deemed value of \$1,976,525 and subject to required regulatory hold periods.
  - a. One-third of the issued shares (4,705,542 shares) shall be released for trading upon the initial expiry of the required regulatory hold period, with the balance of the shares (9,412,495) to be released one-third (1/3, or 3,137,185 shares) every six (6) months, commencing after the expiry of the regulatory hold periods; and
  - b. The Pulse shares issued as part of the acquisition price will be dividended out by the seller to the seller's shareholders of record as of the closing date of the agreement. No single shareholder of the seller will own more than 2% of Pulse's outstanding common shares.
3. Cash installments as follows:
  - a. \$8,125.00 per month effective November 1, 2017 until June 1, 2018 (total \$65,000); and
  - b. \$62,500 per quarter beginning July 1, 2018 for four quarters (total \$250,000); and
  - c. \$125,000 per quarter for 11 quarters (total \$1,375,000).

*Source: Company reports, Mackie Research Capital*

**Phased Approach to Bigoray Development:** Over the past 4 years, very little capital has been invested into the assets due to the capital constraints of the previous operator. Pulse plans to take a phased approach to exploit the property. Phase 1 includes the reactivation of proven producing wells that were shut-in near the start of the oil price downturn. **Phase 2 is the implementation of a miscible (solvent flood) of two Nisku Pinnacle Reefs which has the potential to add between 6.5 million boe to 12 million boe of reserves and production of over 2,000 boe/d with little or no risk and with minimal capital investment.**

### **Phase 1. Bigoray Well Re-activation to Grow Net Production 10x up to 500 boe/d**

Commencing in Q4/17 and continuing through Q1/18, Pulse plans to restart production from their two Nisku oil reefs currently still on water flood, adding over 150 boe/d to 200 boe/d of 38° API oil, gas and LNG's. Pulse will also restart approximately five Mannville natural gas wells adding another 160 boe/d of net production. Pulse will then place the Cardium B light oil pool back on production through the reactivation of vertical wells adding approximately 100 boe/d net of 31 °API oil (Figure 3). The Phase 1 development program is expected to be completed within 6 months at a cost of ~\$3 million and should increase net production at Bigoray from a current 40 boe/d to over 400 boe/d. The high quality production generates strong netbacks even in a low commodity price environment (Figure 4). Assuming a WTI oil price of US\$50/bbl, the annualized cash flow from Bigoray is estimated to be C\$4 million.

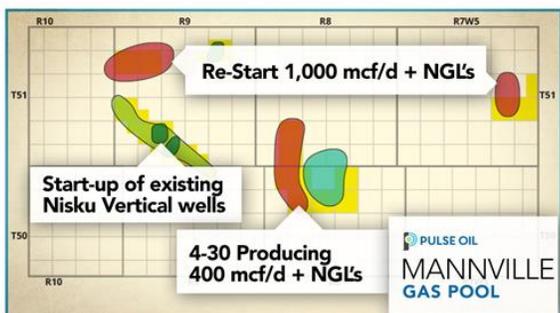
Figure 3: Bigoray Phase 1 Program: Restart Production from Previously Producing Shut-in Wells

# Bigoray Assets: Phase 1



Re-start shut-in production: \$3 million to get 500 BOE/d net to Pulse

- **Cardium "B" Pool**
  - 100 BOE/d net awaiting start-up of existing vertical wells
- **31° API Light Oil**
- **Cardium Waterflood EOR**
  - 1-2MMBOE's Hz line sweep Cardium



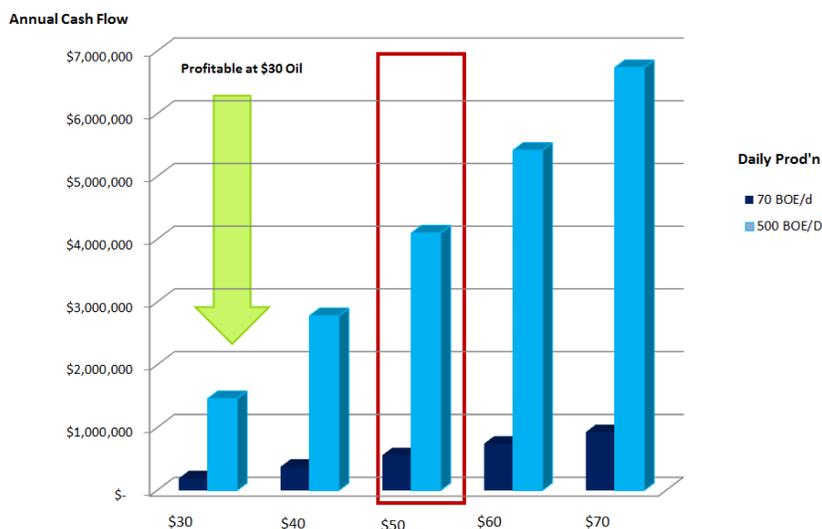
- **Mannville Gas Pools**
  - Presently producing 400 mcf/d + NGL's (160 BOE/d net to Pulse)
  - 1,000 mcf/d 5-well re-start (160 BOE/d net)
- **Nisku Oil Pools (not including Nisku EOR)**
  - 150 BOE/d net awaiting start-up of existing vertical wells
- **38° API Light Oil**

2

Source: Company reports, Mackie Research Capital

Figure 4: Bigoray Cash Flow vs. Oil Price Sensitivity Analysis

# Pulse Cash Flow Growth



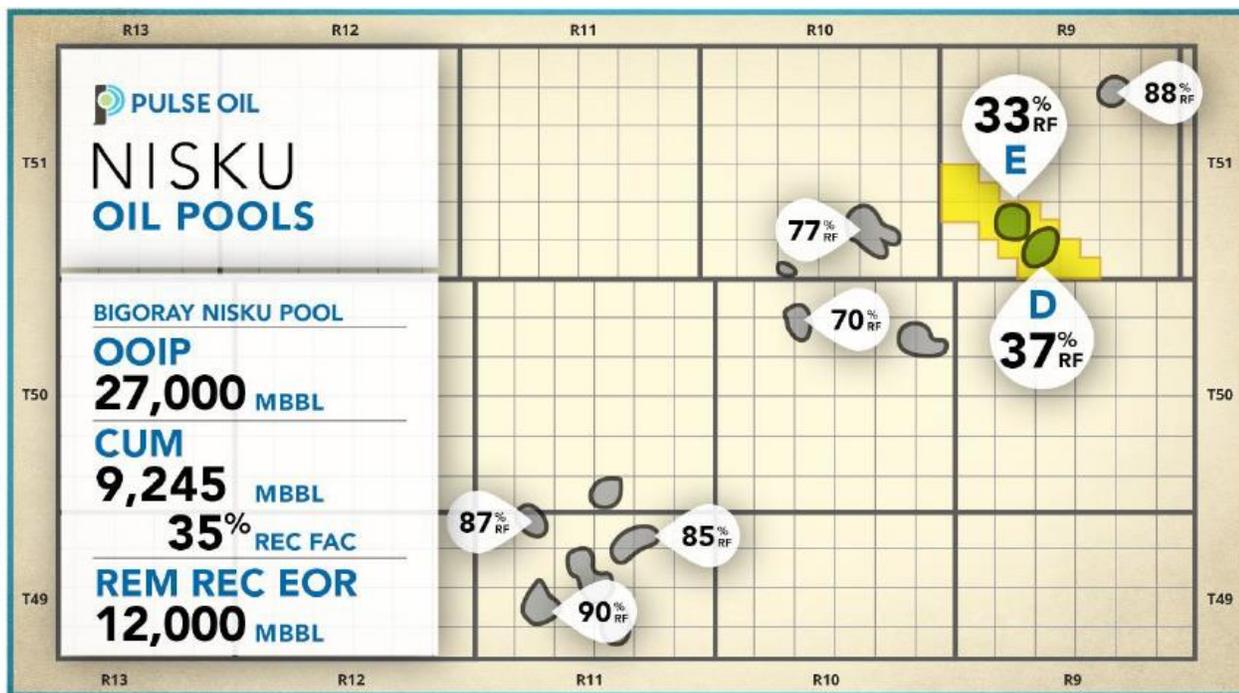
Source: Company reports, Mackie Research Capital

**BIGORAY – POTENTIAL VALUE OF \$177 MILLION WITHOUT DRILLING A WELL**

Average Recovery Factor of a Miscible Flooded Nisku Pinnacle Reefs is 80%

Pulse identified 52 Nisku pinnacle reefs within the Bigoray greater area. Almost all of these nearby analogous reefs have been developed with a miscible flood achieving a remarkable average recovery factor of ~80% of PIIP (Figure 5). The Nisku-D and Nisku-E reefs owned by Pulse have produced on primary and secondary recovery (water flood) but have not yet been developed with a miscible flood.

**Figure 5: Recovery Factors of Nisku Pinnacle Reefs Near To Pulse’s Nisku-D and Nisku E Oil Pools.**



Source: Company reports, Mackie Research Capital

### Potential Reserves Additions of 6.5 mmboe to 12 mmboe

Combined the Nisku-D and Nisku-E reefs have an estimated petroleum initially in place ("PIIP") of ~26 mmboe of which only an average of 35% has been recovered to date (Figure 6). Assuming a successful miscible flood achieves the average recovery factor of 80% (the average of surrounding similar Nisku Pinnacle Reefs), the estimated additional reserves are 12 mmboe. Assuming a more conservative low case scenario with only a 60% recovery factor, the reserve additions are still significant at an estimated 6.5 mmboe. Nisku pinnacle reef wells are prolific producers and a successful EOR program is expected to add production of ~1,000 – 1,500 boe/d for each reef, which would generate substantial free cash flow. Using sliding sleeve completion technology Pulse plans to expedite the production response to within months of initiation of the flood.

**Massive Potential Value with a Minimal Investment:** The estimated start-up cost to complete pipeline work, convert water injector wells into miscible injectors, facilities upgrades and to install compression is just \$3.0 million for each reef and the cost of purchasing the miscible solvent (likely propane) is ~\$9 million (per reef) over the life of the project. Note that near the end of the project during the blowdown period, Pulse will be able to resell the propane, likely at a significant premium due to the higher liquids content. In Figure 7, we show the potential value for new reserves additions from the miscible flood base upon a range of ultimate recovery factors and value of reserves in the ground. Assuming a successful miscible flood achieves an average recovery factor of 80% we estimate the potential incremental value is \$177 million (\$2.01/sh). **Taking a much more conservative 60% recovery factor, we estimate a potential value of \$65 million (\$0.74/sh). In other words, the low case scenario has tremendous upside.**

Figure 6: Summary of Petroleum Initially In Place, Recover Factor to Date, and Potential Ultimate Recovery

Reserves		Base Case			Low Case		
		D-Pool	E-Pool	Total	D-Pool	E-Pool	Total
Petroleum Initially In Place	mmboe	13.9	12.5	26.4	13.9	12.5	26.4
Produced To date	mmboe	5.1	4.2	9.3	5.1	4.2	9.3
Remaining Oil In Place	mmboe	8.8	8.3	17.1	8.8	8.3	17.1
rf to date	%	36.7%	33.6%	35.2%	36.7%	33.6%	35.2%
Ultimate rf	%	80.0%	80.0%	80.0%	60.0%	60.0%	60.0%
<b>Additional Reserves</b>	mmboe	6.0	5.8	<b>11.8</b>	3.2	3.3	<b>6.5</b>

Source: Company reports, Mackie Research Capital

Figure 7: Range of Potential Value Based Upon the Ultimate Recovery Factor and Value of Reserves in the Ground

		Ultimate Recovery Factor						
		55%	60%	65%	70%	75%	80%	85%
		Reserves Additions (mmboe)						
		5.22	6.54	7.86	9.18	10.5	11.82	13.14
		Incremental Value of Reserves Additions From Solvent Flood (\$MM)						
\$/boe		\$ 26	\$ 33	\$ 39	\$ 46	\$ 53	\$ 59	\$ 66
\$ 5.00	\$	52	<b>\$ 65</b>	\$ 79	\$ 92	\$ 105	\$ 118	\$ 131
\$ 10.00	\$	78	<b>\$ 98</b>	\$ 118	\$ 138	\$ 158	<b>\$ 177</b>	\$ 197
\$ 15.00	\$	104	\$ 131	\$ 157	\$ 184	\$ 210	\$ 236	\$ 263
\$ 20.00	\$	131	\$ 164	\$ 197	\$ 230	\$ 263	\$ 296	\$ 329
\$ 25.00	\$							
		Ultimate Recovery Factor						
		55%	60%	65%	70%	75%	80%	85%
		Reserves Additions (mmboe)						
		5.22	6.54	7.86	9.18	10.5	11.82	13.14
		Value Per Share						
\$/boe		\$ 0.30	\$ 0.37	\$ 0.45	\$ 0.52	\$ 0.60	\$ 0.67	\$ 0.75
\$ 5.00	\$	0.59	<b>\$ 0.74</b>	\$ 0.89	\$ 1.04	\$ 1.19	\$ 1.34	\$ 1.49
\$ 10.00	\$	0.89	<b>\$ 1.11</b>	\$ 1.34	\$ 1.56	\$ 1.79	<b>\$ 2.01</b>	\$ 2.24
\$ 15.00	\$	1.19	\$ 1.49	\$ 1.78	\$ 2.08	\$ 2.38	\$ 2.68	\$ 2.98
\$ 20.00	\$	1.48	\$ 1.86	\$ 2.23	\$ 2.61	\$ 2.98	\$ 3.35	\$ 3.73
\$ 25.00	\$							

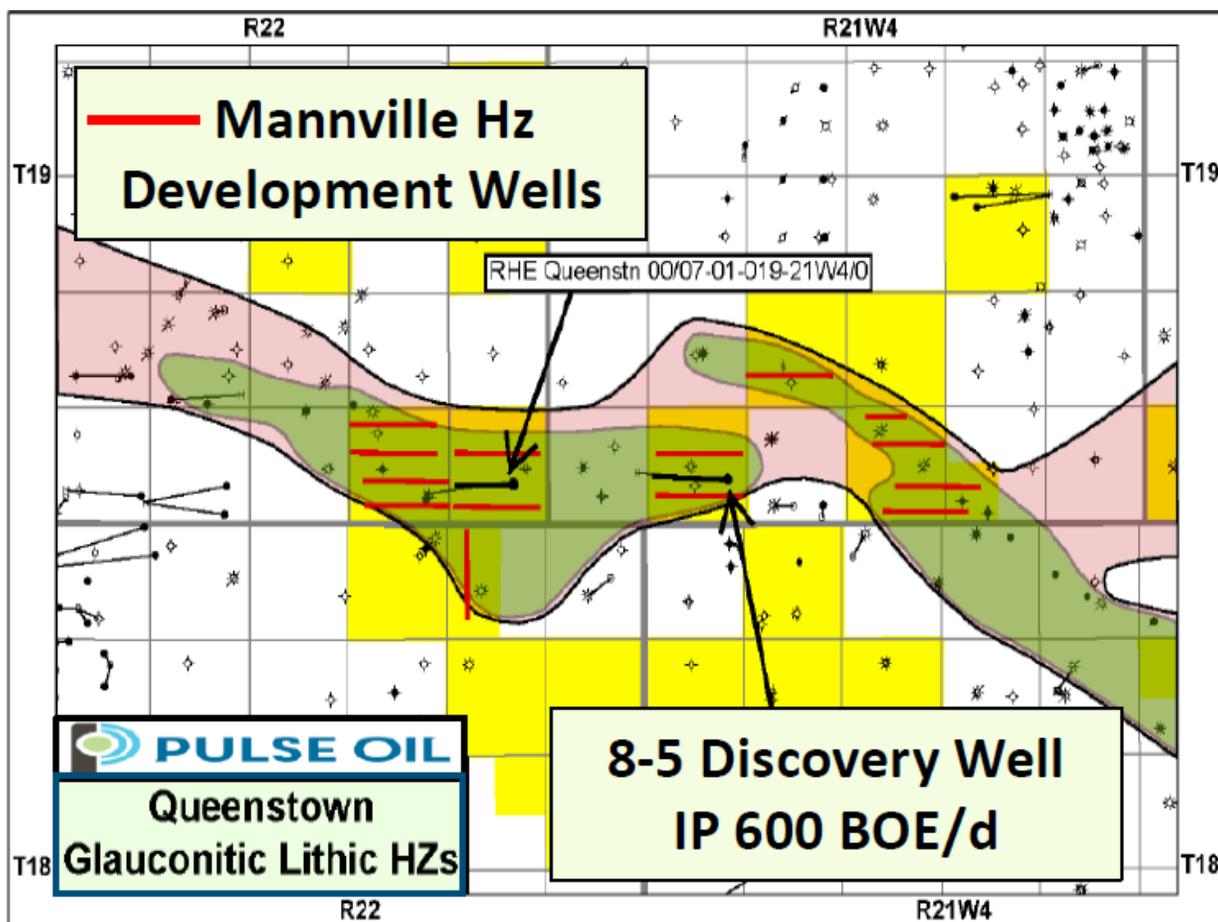
Source: Company reports, Mackie Research Capital

## MANNVILLE ASSETS – LARGE INVENTORY OF DEVELOPMENT DRILLING LOCATION

**Conventional Oil & Gas within the Mannville Trend:** In June 2017, Pulse completed the acquisition of an operated 100% interest in 48 sections (30,720 net acres) in the Queenstown area in southern Alberta (“Mannville Assets”) from a private company for total consideration of \$1.71 million (\$1.35 million in cash plus 3 million shares of PUL). The assets hold proven and probable reserves of ~1 million BOE with a net present value discounted at 10% (“NVP 10”) of \$5.5 million that includes just 10 of the more than 20 infill development wells currently identified on seismic. Pulse is targeting the Mannville group, specifically Glauconitic lithic channel sandstone reservoirs found at a relatively shallow depth of between 1,500 to 2,000 metres which allows for relatively low drilling costs. Historically, Mannville reservoirs in vertical wells were not completed or produced poorly as the reservoir is relatively tight for vertical production; however, horizontal well and multi-stage fracturing technology has resulted in a new, highly economic play.

**Large Inventory of Development Locations:** Pulse has identified over 20 drill-ready horizontal locations within established oil pools. A typical horizontal well costs ~\$1.5 million to \$1.75 million to drill complete and tie-in with initial production of ~200 boe/d. Of note, the most recently drilled 6-5-19-21W4 discovery well (Figure 8) achieved an initial production rate of 600 boe/d. In 2018, Pulse plans to drill follow up development wells close to the 6-5 well which could boost production. Pulse has extensive 3D seismic coverage, which will be utilized to further expand its Mannville drilling locations, as well as opportunities in the Ellerslie, Pekisko/Shunda and Nisku formations.

**Figure 8: Queenstown Mannville Horizontal Play**



Source: Company Presentation, Mackie Research Capital

## VALUATION – CORE NAV OF \$0.23/FD SH INCREASING TO \$0.75/FD SH WITH EOR

### Trades at a Large Discount to Our Core NAV of \$0.23/fd share:

We estimate PUL's core net asset value at \$0.23/fd share, representing a Price-to-NAV of 0.43x (Figure 9). This valuation is based on estimated proven plus probable reserves adjusted for the Bigoray consolidation transactions and adjusted for net positive working capital. Our fully diluted share estimate includes the exercise of 39 million warrants with a strike price of \$0.17 expiring on June 13, 2019. The core NAV **excludes any potential the EOR program planned for the Nisku Pinnacol reefs.**

### Potential \$0.74 per share upside from EOR project:

In our conservative low case scenario we estimated a successful miscible flood of the Nisku Pinnacle Reefs could \$65 million of value or \$0.74/sh (\$0.51/fd share) which increases our NPV estimate to \$1.00/ sh (\$0.75/fd share) equal to a Price-to-Risked NAV of 0.13x

We note that PUL currently trades at a steep discount to both its core NAV and risked NAV. We expect this discount to diminish as the company demonstrates results from the Nisku EOR program.

Figure 9: Net Asset Value Estimate

<b>Core NAV</b>	<b>C\$ mm</b>	<b>\$/share</b>
Proven	\$12.1	\$0.14
Probable	\$9.1	\$0.10
<b>Proven + Probable</b>	<b>\$21.3</b>	<b>\$0.24</b>
Undeveloped Land	\$0.0	\$0.00
<b>Total Assets</b>	<b>\$21.3</b>	<b>\$0.24</b>
Net Debt (Working Capital)	(\$1.4)	\$0.02
NAV (Basic)	\$22.7	\$0.26
Dilution	\$6.6	\$0.07
<b>Core NAV (FD)</b>	<b>\$29.3</b>	<b>\$0.23</b>
<b>NAV With EOR Value</b>	<b>C\$ mm</b>	<b>C\$/share</b>
Resource Value (Nisku)	\$65.4	\$0.74
Risked NAV/sh	\$88.1	\$1.00
<b>NAV (FD)</b>	<b>\$94.7</b>	<b>\$0.75</b>
Price/Core NAV		<b>0.43x</b>
Price/Risked NAV		<b>0.13x</b>

Source: Company documents, Mackie Research Capital

## INVESTMENT RISKS

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.

## **SUMMARY AND RECOMMENDATION – ITS ALL ABOUT THE NISKU**

At the current market price we believe Pulse Oil Corp. represents a strong speculative buying opportunity for the following reasons.

**Not Your Typical Junior (*Huge Upside Could Be Achieve with Little Capital*):** What differentiates Pulse from other junior E&P companies is the massive upside from the miscible floor of its Nisku-D and Nisku-E reefs at Bigoray which has the potential to add reserves of 6.5 mmboe base on our conservative estimates and up to 12 mmboe of reserves base upon nearby analogs. **Our valuation for the miscible flood is \$65 million (\$0.74/sh) on the low end with upside to over \$177 million (\$2.01/sh).** As most of the required infrastructure is in place the miscible flood project requires only \$3.0 million of investment per Nisku Reef providing massive upside without the risk and significant cost of an extensive horizontal drilling program.

**Management with a Large Vested Interest:** Garth and Drew have combined invested \$1.3 million into Pulse at an average cost of ~\$0.11 per share holding ~14% of the outstanding shares, while taking no salary for the last 2 years. The significant level of ownership aligns the interest of management with shareholders.

**Large Discount to Net Asset Value:** At the current market price PUL currently trades at a steep discount to our core NAV estimate of \$0.23/fd share which excludes the Nisku miscible flood. Our NAV increases to \$0.75/fd share when we include are conservative valuation for the flood. We expect this discount to diminish as the company secures funding to complete the Nisku EOR program.

**Massive Upside Base on Conservative Assumptions:** The potential upside from a successful Nisku Reef EOR project is so large that we expect substantial stock price appreciation even if the miscible flood achieves expectations at the low end of our expectations. Production additions of ~2,000 boe/d from Bigoray should generate substantial free cash flow that can be invested into drilling the company's large inventory of Mannville locations providing long term growth potential.

On that bases we initiate coverage on PUL with a **SPECULATIVE BUY** recommendation and a 12-month target price of \$0.50 per share equivalent to a 0.65x multiple of our NAV estimate.

Figure 10: Summary

<b>Pulse Oil Corp.</b>			<b>PUL</b>		
<b>Share Data</b>		<b>Market Value</b>	<b>Stock Price</b>		<b>Target Price</b>
Basic Shares (mm):	88.1	Market Cap. (\$ mm): \$	8.8	Close: \$0.10	Target:
Diluted Shares (mm):	88.1	Enterprise Value (\$ mm): \$	7.4	High: \$0.21	Potential Return:
Fully Diluted (mm):	127.1	Net Debt (W.C) (\$ mm): \$	(1.4)	Low: \$0.07	
<b>NAV, Reserves and Concessions</b>					
<b>Net Asset Value*</b>			<b>Reserve Estimate (31/12/2016)</b>		
	<u>C\$m</u>	<u>C\$/share</u>		<u>(mboe)</u>	
Reserves (P + P)	21.3	\$0.24	Proven	62%	1,613
Working Capital Net of Debt	1.4	\$0.03	Probable	38%	1,003
Undeveloped Land	-	\$0.00	P+P		2,616
Net Asset Value (Basic)	22.7	\$0.26			
Dilution	6.6	\$0.07			
<b>Core NAV/FD Share</b>	<b>29.3</b>	<b>\$0.23</b>	<b>Undeveloped Land</b>		
Price to core NAV		0.43x	<u>net acres</u>		
Risked Resource Value (C\$)	65.4	\$0.74	Bigoray		12,019
<b>Risked NAV/FD share</b>	<b>94.7</b>	<b>\$0.75</b>	Mannville Assets		30,720
Price to risked NAV (multiple)		0.13x			42,739

Source: Company Reports, Thomson Reuters, Mackie Research

## APPENDIX 1: MANAGEMENT

### Management Team & Directors

Drew Cadenhead a cofounder and President, COO and a Director of Pulse. Mr. Cadenhead is an exploration geologist with over 37 years of experience in the oil and gas industry. Mr. Cadenhead started his career with Canadian Hunter Exploration a company with operations focused in the Western Canadian Sedimentary Basin (“WCSB”). Mr. Cadenhead then worked for Ulster and then Summit Resources before gaining international oil and gas experience with PetroCorp, the New Zealand based state-owned oil company. Subsequently Mr. Cadenhead joined TAG where he spent 12 years in various executive positions including President, CEO, and COO (2003-2015). Garth Johnson is a cofounder and CEO Corporate Secretary and Director of Pulse. Mr. Johnson has 18 years of experience in the oil and gas industry and has occupied both CFO and CEO roles at TAG (2001-2015). **Garth and Drew have skin in the game having invested ~\$1.3 million into Pulse at an average price of ~\$0.11/sh.** Aaron Doyle is the current CFO of Pulse with over 10 years as an executive in the oil and gas industry and is both a chartered professional accountant and a petroleum engineer. Solana Jear is the Consulting Exploration Manager with over 27 years of experience in the WCSB. Ms. Jear has a proven track record of drilling wells, prospecting and overseeing development of oil and gas fields with companies such as PennWest, Twin Butte, Amoco Canada, and Chinook Energy. Darren Lehne is the Operations and HSE Manager at Pulse and has over 25 years of experience in the upstream oil and gas industry. Mr. Lehne has extensive production experience having worked as a Senior Production Operator and a Production Foreman with Home Oil and Anderson Exploration, in addition to working as an Operations Manager for several junior oil & gas companies including TAG. Dan Brown is the Controller at Pulse and has over 13 years of experience in the oil and gas industry.

Both Mr. Cadenhead and Mr. Johnson have a significant vested interest in the success of Pulse, as their combined share ownership accounts for ~11.73mm of shares outstanding.

The board of directors consists of Drew Cadenhead, Garth Johnson, Dr. Douglas Ellenor and Jack Doyle. Dr. Ellenor is a geologist with 45 years of experience much of which spend with Royal/Dutch Shell and Mr. Doyle is a petroleum engineer with over 30 years of exponent in the Canadian and international energy industry.

Figure 11: Management and Board of Directors

Company Management			
Name	Position	Shares (000's)	% Basic Shares
Garth Johnson	CEO	6,084	6.9%
Drew Cadenhead	President, COO	5,684	6.5%
Aaron Doyle	CFO	83	0.1%
Solana Jear	Consulting Exploration Manager	-	0.0%
Darren Lehne	Operations and HSE Manager	-	0.0%
<b>Management Total</b>		<b>11,851</b>	<b>13.5%</b>

Board of Directors			
Name	Relationships	Shares (000's)	% Basic Shares
Garth Johnson	See "Management" above		0.0%
Drew Cadenhead	See "Management" above		0.0%
Douglas Ellenor	Director of Amerisur Resources plc	322	0.4%
John Doyle	Co-founded and Partner of Base Engineering; Contract	-	0.0%
<b>Management and Board Total</b>		<b>12,173</b>	<b>13.8%</b>

Major Shareholders			
Name		Shares (000's)	% Basic Shares
Devinder Randhawa	Former Pulse Oil CEO	3,500	4.0%
David Sidoo	Agent to the qualifying transaction	4,167	4.7%
<b>Major Shareholders</b>		<b>7,667</b>	<b>8.7%</b>

Figure 12: Management Team

Name and Title	Biography
Drew Cadenhead - President and COO	Drew Cadenhead is a professional geologist (APEGA) who developed his technical expertise, team leadership and marketing skills through a 37-year career in the oil and gas industry. Drew got his start in Calgary, Alberta working with Canadian Hunter, Ulster and Summit Resources. He progressed into management with PetroCorp, a state-owned oil company before taking on a remarkable 12-year Executive role with TAG Oil Ltd. Drew's experience allows him to stress the vital role of risk assessment in an industry built on risk / reward. Technical acumen is the foundation of Cadenhead's success; that combined with charismatic communication skills make him unique in this multi-faceted industry. With nearly 4 decades in the "oil-patch", Drew has accumulated a wealth of technical, operational and market experience
Garth Johnson - CEO and Corporate Secretary	Garth Johnson is a chartered professional accountant experienced at building growth and creating value for shareholders and stakeholders. After Joining TAG Oil as Chief Financial Officer in 2001 he accepted the position of Chief Executive Officer in 2007, boosting the company's market value of approximately \$2 million to a high of over \$650 million. Mr. Johnson's disciplined approach to business is key to anticipating and managing the risks involved in operating in the energy industry. A strong leader and a hard worker, Garth has skillfully executed complex multimillion dollar transactions in capital markets and in partnerships. Strategic experience, corporate governance, HS&E, media communication, legal, commercial contracts, negotiating acquisitions, marketing, joint venture and operations in the oil and gas industry are all part of Garth's experience. A passion for sound leadership, accountability, teamwork, discipline, and long-term prudent planning are pivotal to his success in driving businesses growth.
Aaron Doyle - CFO	Aaron Doyle is a chartered professional accountant and a petroleum engineer with over 10 years of experience as an executive in the oil and gas industry. Aaron has focused significantly on financial governance, budgeting, reporting, and business growth while actively ensuring safety comes first in all projects.
Solana Jear - Consulting Exploration Manager	Solana Jear is a professional geologist with more than 27 years of experience in the Western Canadian Basin in senior roles as an employee and as a consultant with a proven track record of drilling wells, prospecting and overseeing development of oil and gas fields with companies such as PennWest, Twin Butte, Amoco Canada, Dome and Chinook Energy.
Darren Lehne - Operations and HSE Manager	Darren Lehne has worked in the upstream oil and gas industry for over 25 years and has an extensive background in production operations both domestically and internationally. Darren has worked in the field as a Senior Production Operator and a Production Foreman with Home Oil and Anderson Exploration. He has also performed the role of Operations Manager for a number of junior oil & gas companies, including TAG Oil Ltd.
Dan Brown - Controller	Dan Brown has over thirteen years of experience, primarily with TAG Oil, managing operations of public and private companies and providing financial oversight expertise as well as facilitating joint venture relations, regulatory compliance and corporate governance.

Source: Company documents, Mackie Research

**APPENDIX 2: BOARD OF DIRECTORS****Figure 13: Board of Directors**

Name	Biography
Drew Cadenhead	See Figure 12
Garth Johnson	See Figure 12.
Dr. Douglas Ellenor	Dr. Douglas Ellenor has 45 years of experience in the petroleum exploration and production industry, having spent 25 of those on international assignments with the Royal/Dutch Shell Group in Australasia, Europe and North and South America. He is a registered Professional Geoscientist in British Columbia and member of the American Association of Petroleum Geologists. Since 2004, Dr. Ellenor has continued working in the oil and gas industry as an independent consultant and he currently sits on the board of Amerisur Resources plc, a company with exploration and production activities in South America.
Jack Doyle	Jack Doyle is a petroleum engineer with 30+ years of experience in the Canadian and international energy industry and is a current member of APEGA. Jack has a proven ability to bring technical, cost sensitive and project management expertise to construction, drilling, completions and workover projects. He has managed drilling and completion operations for a number of companies including Amoco Canada, Dominion Exploration, Northstar Energy, Hawker Resources and TAG Oil Ltd. Jack is the founder and CEO of Base Engineering Ltd., a private engineering firm specializing in drilling, completions and workover engineering and project management for industry clients in Canada and abroad.

Source: Company documents, Mackie Research

**RISKS TO TARGET**

Please see section on Investment Risks

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