

Cuda Oil & Gas Inc.

(CUDA-T: C\$1.48)

BUY

Target: C\$2.75

February 15, 2019

Adam Gill, CFA / (403) 232-1243

agill@viiicapital.com

Tin Duong, P.Eng / (403) 232-2191

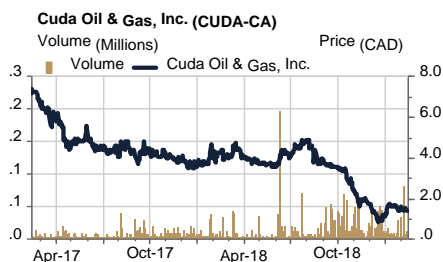
tduong@viiicapital.com

Compelling Creation of Real Value

CUDA-T	New	Last		
Rating	Buy	--		
Target Price	\$2.75	--		
Projected Return (Incl. Dividends)	90%	--		
Current Price		\$1.45		
52 Week L/H		\$0.70-\$5.50		
Market Cap. (\$MM)		\$32		
Enterprise Value (\$MM)		\$64		
Shares Outstanding - Basic (MM)		21.9		
Shares Outstanding - Diluted (MM)		21.9		
Avg Daily Volume (1 Mth)		11,814		
Current Net Debt (\$MM)		\$32		
Annual Dividend per Share/Yield		\$0.00 / 0.0%		
Fiscal Year End		Dec 31		
FORECAST				
Pricing	2018E	2019E	2020E	
WTI (US\$/Bbl)	\$64.95	\$55.15	\$58.00	
AECO Gas (\$/Mcf)	\$1.53	\$1.65	\$1.85	
FX Rate (\$C/\$US)	\$0.77	\$0.76	\$0.76	
Production				
Liquids (Bbl/d)	171	1,025	1,699	
Gas (Boe/d)	116	396	485	
Boe/d (6/1)	287	1,421	2,184	
% Oil & Liquids	60%	72%	78%	
FINANCIALS				
Cash Flow (\$MM)	2018E	2019E	2020E	
Free CF (\$MM)	(\$4)	\$12	\$26	
CFPS (dil)	(\$0.29)	\$0.40	\$0.78	
VALUATION				
EV/DACF	2018E	2019E	2020E	
EV/Boe/d	nmf	5.1x	2.6x	
Net Debt/CF	\$215,100	\$53,126	\$34,414	
	nmf	2.6x	1.2x	
2P NAV (\$/sh)			\$1.29	
Riskd NAV (\$/sh)			\$3.68	
P/2P NAV			2.1x	
P/Riskd NAV			0.7x	
EV/boe 2P Reserves (2017)			\$0.75	
Target Valuation Parameter	50/50 NAV & Historic EV/DACF			
2019 Estimates	Q1E	Q2E	Q3E	Q4E
Liquids (Bbl/d)	809	727	1,271	1,285
Gas (Boe/d)	458	358	193	576
Boe/d (6/1)	1,267	1,085	1,463	1,861
CFPS (dil)	\$0.08	\$0.05	\$0.13	\$0.13

Source: Eight Capital

CUDA: Price/Volume Chart



Source: Factset

Company Description

Cuda is a junior producer primarily focused on oil production development in the Powder River Basin, but also with conventional oil opportunities in Southern Alberta and Quebec, as well as a large St. Lawrence Utica acreage holding.

We are initiating coverage on Cuda Oil & Gas with a BUY rating and \$2.75 PT. While the company has a number of high-impact opportunities across three jurisdictions in the US and Canada, the development in Shannon play alone is enough to get us excited given the \$3.70/sh. in estimated NAV.

Most importantly, compared to our oil coverage universe, we see Cuda as a real value creator over the next two years through the development of Barron Flats Unit, while the bulk of our coverage is more in value preservation mode.

- On 2019 metrics, Cuda is in the middle of the pack on leverage and margin, and notably higher on capital spending to cash flow which is not surprising given the early stage of the BFU development. That said, when we look at 2020 metrics, the relative positioning improves dramatically, with Cuda moving to the top quartile position on all measures.
- The driver of this massive improvement in relative positioning is from the significantly higher Debt-Adjusted Production per Share Growth that Cuda offers (117%) vs. peers (average 2%), driven by the strong returns and netback from conventional oil development in the US over horizontal, unconventional oil drilling that is focused in Canada for most producers.
- With the strong Debt-Adjusted Production per Share Growth, Cuda will see significant Y/Y compression in EV/DACF valuation into 2020, with the multiple climbing down 2.5 points and leaving the company as the lowest valuation in our coverage universe. Success in the BFU will drive a re-rate of the stock, in our view, and one that we believe will lead to significant upside.

Another Valuation Lens

- We have looked at the value of the acreage as another angle to back our bullishness. The recent transactions in the Powder River Basin have been high at ~\$1,500-\$3,000 per acre on an adjusted basis.
- Based on our acreage analysis, we arrive at a \$2.76/share valuation on the low-end of the transaction metric range and \$3.46/share at the median, which implies 64% and 109% upside, respectively.

Target Price & Investment Thesis

Our \$2.75 price target is calculated similarly to our valuations for other E&Ps, based on a 50/50 blend of selected multiple on 2020 EV/DACF and NAVPS. On 2020 EV/DACF, we have applied a 3.0x target which is a ~1.0 point discount from our oil E&P average multiple of 4.0x. Our NAVPS stands at \$3.68, which does not even include upside for potential in Quebec given the political climate around energy development in that province. In taking a conservative approach, we do risk our NAVPS by 50% in our target price calculation versus par to NAVPS for other producers.

That said, even with that heavy risking, we arrive at a \$2.75 price target, which implies a return of 90% which is the highest in our energy coverage universe.

Cuda Oil & Gas Inc. (CUDA.CA)

All figures in \$C unless otherwise noted

Production (Boe/d)	2017A	2018E	2019E	2020E
Q1	0	0	1,267	2,029
Q2	0	0	1,085	1,866
Q3	54	268	1,463	2,278
Q4	0	872	1,861	2,558
FY	14	287	1,421	2,184
% Gas	0%	40%	28%	22%
PPSG	-34%	1215%	121%	36%
DAPPSG	3%	482%	118%	36%

EIGHT CAPITAL BASE PRICING

Commodity Prices	2017A	2018E	2019E	2020E
WTI Crude Oil (US\$/Bbl)	\$50.81	\$64.95	\$55.15	\$58.00
AECO Natural Gas (\$/Mcf)	\$2.18	\$1.53	\$1.65	\$1.85
Forex (C\$/US\$)	\$0.77	\$0.77	\$0.76	\$0.76

Financials (\$MM)

Revenue (Production + Other)	\$0.0	\$4.0	\$26.7	\$47.5
Royalty	\$0.0	(\$1.5)	(\$5.6)	(\$10.1)
Hedging	\$0.0	\$0.0	\$0.0	\$0.0
Operating/Transportation Costs	\$0.0	(\$1.2)	(\$4.2)	(\$6.0)
G&A	(\$2.1)	(\$3.4)	(\$2.0)	(\$2.0)
Interest	(\$0.3)	(\$2.2)	(\$3.2)	(\$3.4)
Other Costs	(\$0.7)	(\$3.1)	(\$8.7)	(\$12.9)
Net Income Before Tax	(\$3.1)	(\$7.0)	\$3.2	\$13.3
Taxes (Current/Deferred)	(\$0.1)	\$2.0	(\$3.3)	(\$14.1)
Net Income After Tax	(\$3.2)	(\$5.0)	(\$0.0)	(\$0.8)
Total Non-Cash Items	\$0.7	\$1.5	\$12.0	\$27.0
Cash Flow	(\$2.6)	(\$3.5)	\$11.9	\$26.2
Net Debt (Surplus)	(\$24.0)	\$30.0	\$30.9	\$30.6
Average D/CF	nmf	nmf	2.6x	1.2x
Net Capital Spending	\$6.6	(\$48.9)	(\$22.1)	(\$25.7)
Free Cash Flow	\$4.1	(\$52.3)	(\$10.2)	\$0.5
Free Cash Flow Yield	10%	-122%	-17%	1%

Per Share Values

CFPS (\$/sh dil)	(\$0.31)	(\$0.29)	\$0.40	\$0.78
Basic Shares Outstanding (MM)	8.8	21.9	30.7	30.7
FD Shares Outstanding (MM)	11.3	17.4	31.8	35.1

\$/Boe Values

Revenue (Production + Other)	\$18.41	\$38.55	\$51.50	\$59.42
Hedging Gains (Losses)	\$0.00	\$0.00	\$0.00	\$0.00
Royalties	\$0.00	(\$14.21)	(\$10.82)	(\$12.60)
Operating/Transportation Costs	\$0.00	(\$11.15)	(\$8.11)	(\$7.53)
Operating Netback	\$1.88	\$12.61	\$32.57	\$39.30
G&A	(\$414.38)	(\$32.14)	(\$3.86)	(\$2.50)
Interest	(\$69.76)	(\$21.28)	(\$6.09)	(\$4.28)
Cash Taxes/Other	(\$33.04)	\$4.35	(\$0.00)	\$0.00
Cash Flow Netback	(\$515.29)	(\$36.45)	\$22.63	\$32.51

Valuation and Performance

2018E EV/DACF	-38.8x
2019E EV/DACF	5.1x
Target 2019E EV/DACF	4.1x
2018E PPSG	1215%
P/2P NAV	213%
P/Upside NAV	37%
2018E EV/Boe/d	\$215,100
2017A EV/Boe P+P	\$727.23

Source: Eight Capital

Reserves	2015A	2016A	2017A	2017 Adj.
Proven (MMBoe)	0.01	0.01	0.02	3.07
Proven + Probable (MMBoe)	0.02	0.09	0.09	3.78

STRIP PRICING

Commodity Prices	2017A	2018E	2019E	2020E
WTI Crude Oil (US\$/Bbl)	\$50.81	\$64.95	\$55.02	\$56.02
AECO Natural Gas (\$/Mcf)	\$2.18	\$1.53	\$1.65	\$1.74
Forex (C\$/US\$)	\$0.77	\$0.77	\$0.76	\$0.77

Financials (\$MM)

Revenue (Production + Other)	\$0.0	\$4.0	\$26.3	\$44.1
Royalty	\$0.0	(\$1.5)	(\$5.5)	(\$9.4)
Hedging	\$0.0	\$0.0	\$0.0	\$0.0
Operating/Transportation Costs	\$0.0	(\$1.2)	(\$4.2)	(\$5.9)
G&A	(\$2.1)	(\$3.4)	(\$2.0)	(\$2.0)
Interest	(\$0.3)	(\$2.2)	(\$3.2)	(\$3.5)
Other Costs	(\$0.7)	(\$3.1)	(\$8.7)	(\$12.9)
Net Income Before Tax	(\$3.1)	(\$7.0)	\$3.0	\$10.6
Taxes (Current/Deferred)	(\$0.1)	\$2.0	(\$3.0)	(\$11.2)
Net Income After Tax	(\$3.2)	(\$5.0)	(\$0.0)	(\$0.6)
Total Non-Cash Items	\$0.7	\$1.5	\$11.7	\$24.1
Cash Flow	(\$2.6)	(\$3.5)	\$11.7	\$23.5
Net Debt (Surplus)	(\$24.0)	\$30.0	\$31.0	\$32.9
Average D/CF	nmf	nmf	2.7x	1.4x
Net Capital Spending	\$6.6	(\$48.9)	(\$22.0)	(\$25.2)
Free Cash Flow	\$4.1	(\$52.3)	(\$10.3)	(\$1.7)
Free Cash Flow Yield	10%	-122%	-18%	-3%

Per Share Values

CFPS (\$/sh dil)	(\$0.31)	(\$0.29)	\$0.39	\$0.70
Basic Shares Outstanding (MM)	8.8	21.9	30.7	30.7
FD Shares Outstanding (MM)	11.3	17.4	31.8	35.1

\$/Boe Values

Revenue (Production + Other)	\$18.41	\$38.55	\$50.80	\$55.21
Hedging Gains (Losses)	\$0.00	\$0.00	\$0.00	\$0.00
Royalties	\$0.00	(\$14.21)	(\$10.68)	(\$11.72)
Operating/Transportation Costs	\$0.00	(\$11.15)	(\$8.07)	(\$7.42)
Operating Netback	\$1.88	\$12.61	\$32.05	\$36.07
G&A	(\$414.38)	(\$32.14)	(\$3.86)	(\$2.50)
Interest	(\$69.76)	(\$21.28)	(\$6.08)	(\$4.42)
Cash Taxes/Other	(\$33.04)	\$4.35	(\$0.00)	(\$0.00)
Cash Flow Netback	(\$515.29)	(\$36.45)	\$22.12	\$29.14

Valuation and Performance

2018E EV/DACF	-39.2x
2019E EV/DACF	5.2x
Target 2019E EV/DACF	4.1x
2018E PPSG	1215%
P/2P NAV	196%
P/Upside NAV	37%
2018E EV/Boe/d	\$217,390
2017A EV/Boe P+P	\$734.97

Investment Thesis & Executive Summary

We are initiating on Cuda Oil & Gas with a BUY rating at a \$2.75 price target. We believe that the value creation through the drill bit over 2019 will support a significant rise in share price given the strong growth forecast in the Barron Flats Unit in Wyoming. Beyond the vertical, conventional style development in the unit, there is potential in a number of tight-oil zones which have been exploited across the Powder River Basin and provides material upside in the story. On top of the Power River potential, Cuda has conventional light oil development opportunities in Alberta and the Gaspé Peninsula, as well as the huge Utica shale gas play in the St. Lawrence area.

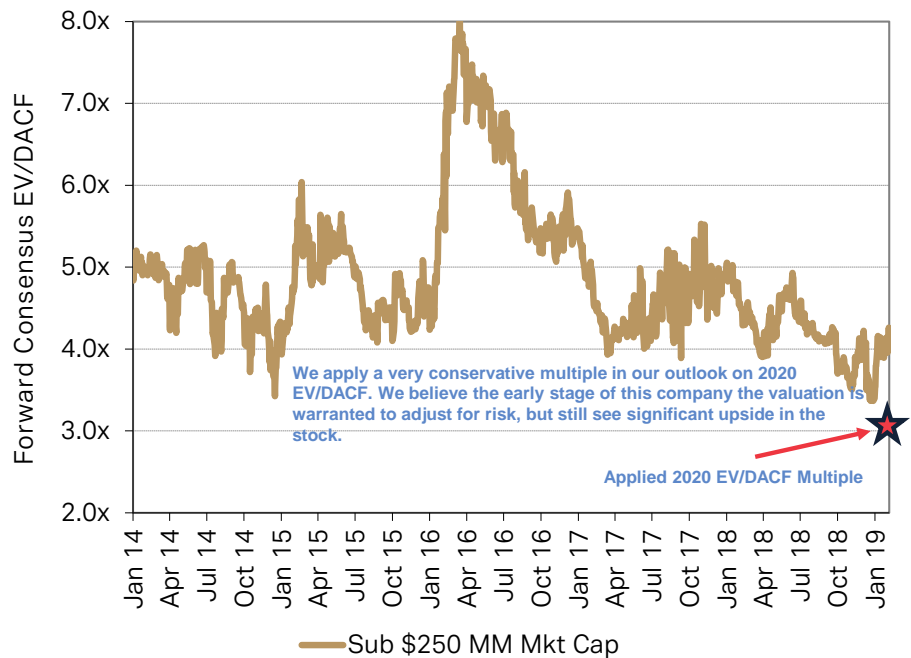
While the options in the company are significant, we did heavily risk our valuation given a number of factors. Our \$2.75 price target is calculated similarly to our valuations for other E&Ps, based on a 50/50 blend of selected multiple on 2020 EV/DACF and NAVPS. On 2020 EV/DACF, we have applied a 3.0x target which is a 1.0 point discount from our oil E&P average multiple of 4.0x. Our NAVPS stands at \$7.30, which does not even include upside potential in Quebec given the political climate around energy development in that province. In taking a conservative approach, we do risk our NAVPS by 50% in our target price calculation versus par to NAVPS for other producers. We also note that, compared to consensus estimates on sub \$250 MM market cap E&Ps, we are applying a ~1 point discount to the market's valuation of small cap E&Ps (see Figure 1), although we do note that across our coverage we are taking a conservative approach on the multiple.

The three major risking adjustments that we believe need to be considered are: 1) non-operatorship of the core asset (with Atomic Oil & Gas being the operator); 2) spending in excess of cash flows in 2019 to drive initial BFU growth; and 3) no horizontal well results directly on Cuda's Wyoming acreage. With that, we feel a more cautious approach to valuation is fair.

That said, even with that heavy risking, we arrive at a \$2.75 price target, which implies a return of 86%, which is the highest in our energy coverage universe.

Figure 1. Sub-\$250 MM Market Cap. E&P Historical EV/DACF

Even with that heavy risking, we arrive at a \$2.75 price target, which implies a return of 86%, the highest in our energy coverage universe.



Source: Bloomberg and Eight Capital

Another valuation lens that can be used to review the company is by looking at other Powder River Basin acquisition metrics. Over 2018, there were a number of disclosed deals that put a substantial valuation on the acreage in the basin, with an adjusted median value of \$3,140/acre (see Figure 2.)

We have looked at the value of the acreage. In our analysis, we have carved out the value of the conventional Shannon formation, as we do not believe this zone is the driver of the valuation but see the tight-zones (Dakota and Frontier key ones for Cuda) as the key to the high acreage metrics.

Based on our acreage analysis, we arrive at a \$2.76/share valuation on the low-end of the transaction metric range and \$3.46/share at the median, which implies 90% and 139% upside, respectively. With that, we feel very comfortable in recommending a BUY on the stock given the high upside potential discovered under a number of valuation methodologies.

Figure 2. Powder River Basin Transaction Metrics & Implied Cuda Valuation

Date Announced	Buyer	Seller	Transaction Value (US\$ MM)	Production Acquired (Boe/d)	Acreage Acquired (Net)	\$ per Acre (Headline)	\$ per Acre (Adjusted)	
28-Aug-18	Vermillion Energy	Massif Oil & Gas	\$143.0	2,527	55,000	\$2,601	\$1,429	
28-Aug-18	Rebellion Energy II LLC	Liberty Resources II LLC	\$100.0	na	19,000	\$5,263	\$5,263	
28-Aug-18	Navigation Powder River LLC	Undisclosed	\$10.0	na	3,000	\$3,333	\$3,333	
30-Jun-18	Anadarko	Undisclosed	\$100.0	na	40,000	\$2,500	\$2,500	
11-Jun-18	Cuda Oil and Gas Inc.	Undisclosed	\$37.0	1,000	7,000	\$5,286	\$1,643	
9-May-18	Undisclosed Buyer	Samson Resources II LLC	\$44.4	na	7000*	\$6,343	\$6,343	
17-Jan-18	Undisclosed Buyer	BXP Partners IV LP	\$10.0	na	3,393	\$2,947	\$2,947	
9-Jan-18	Northwoods Energy LLC	SM Energy	\$500.0	2,200	112,200	\$4,456	\$3,956	
						Minimum:	\$2,500	\$1,429
						Median:	\$3,895	\$3,140
						Maximum:	\$6,343	\$6,343

* There was also 15,000 acres exchanged to the seller in another basin as part of this transaction.

Cuda Acreage Valuation (\$MM)

Net Acreage	12,500	Minimum Valuation	\$115.7
		Less YE 2020 Net Debt	\$30.6
Minimum Acreage Value (\$1,429/ac.)	\$17.9	Equity Value	\$85.1
Median Acreage Value (\$3,140/ac.)	\$39.3	Minimum Equity Value per Share	\$2.76
		Median Valuation	\$137.1
		Less YE 2020 Net Debt	\$30.6
Total Minimum Value	\$115.7	Equity Value	\$106.5
Total Median Value	\$137.1	Median Equity Value per Share	\$3.46

Source: Company reports, Bloomberg and Eight Capital

Company History & Management Track Record

- Cuda Oil & Gas is the combination of public Quebec-focused E&P, Junex Inc., and private producer, Cuda Energy Inc., with the current management and majority of the board coming from the latter entity.
- The two companies both brought in assets from basins within Canada, with Junex holding acreage in Quebec's Utica shale gas play and Galt oil play on the Gaspé peninsula (~1.8 MM acres total), and Cuda Energy holding 2,560 acres in Southern Alberta, with 700 Boe/d of gas production (15% liquids) potential and targets in the conventional Nisku and Glauc plays.
- The merger of the two entities occurred over the summer of 2018, with Cuda announcing an RTO of the public Junex Inc. Junex brought \$23 MM of cash-on-hand, as well as long-term optionality in Quebec (although we do note that given a less than friendly political environment in Quebec to the industry, we do not expect that these opportunities will be exploitable in the near-term or even longer).
- Along with the merger deal, Cuda also brought in the initial purchase of the Barron Flats assets which was announced in conjunction with the merger in June 2018 and closed August 14th, 2018. With this purchase, Cuda gained a 27.75% WI in the Barron Flats Unit for US\$37 MM, which was financed through ~8.0 MM Cuda shares (post-exchange & consolidation from the merger) and US\$31 MM in cash. The BFU covers 25,000 gross acres (~7,000 net to Cuda) of land and was producing ~1,000 Boe/d (280 Boe/d net to Cuda), 92% light oil at the time of announcement. Drilling on the Barron Flats Unit started in July 2018 and 15 drilling licenses have been obtained.
- In October 2018, the company accessed the equity market and raised \$7.2 MM (~3.0 MM shares at a price of \$2.40 per share).
- Along with the equity raise, Cuda acquired a WI in the Cole Creek Unit under the AMI with Atomic, which is located to the west of the BFU. This unit covers 11,000 gross (3,667 net at 33.3% WI) acres and was producing 50 Boe/d when acquired. This area is unique from the BFU, sitting on a structural high in the basin. The company also

Cuda's management team has a strong record of value creation in both the US and Canada, with a particularly strong background in conventional oil plays.

added 5,045 gross (1,682 net at 33.3% WI) of Federal lands offsetting the BFU in late 2018, bringing the total PRB holdings to 42,000 gross acres (12,500 net with mixed WI averaging ~30%).

- Cuda's opportunity in the Power River Basin might seem too good to be true given the "hot" nature of M&A activity in the area. That said, investors are just benefiting from Cuda's deep technical understanding of the plays and historical relationships in the US which presented the company with this great opportunity. This is also an opportunity to piggyback on the on-the-ground knowledge of operator Atomic Oil & Gas, who are headquartered in Denver, Colorado and who were able to secure this opportunity in the PRB given their close relationship to the area.
- Glenn Dawson and his team have a strong track record. A number of the team's prior endeavours were noteworthy for their success building organic growth companies. Nuloch Resources grew from 0 to 1,500 Boe/d in the Williston Basin along the Saskatchewan & North Dakota borders before being sold to Magnum Hunter Resources (Not Rated) for \$327 MM, resulting in a 249% ROI to investors. In addition, Forge Petroleum Corp. targeted a conventional Nisku pool in the Elnora area of Alberta (southeast of Red Deer) which was developed from 70 to ~2,000 Boe/d before being acquired by Whitecap Resources (WCP-BUY; \$7.50 TP), resulting in a 265% ROI to investors. This speaks well to the potential in the Southern Alberta conventional pool that the company is targeting, as well as showing the team's ability to create value.

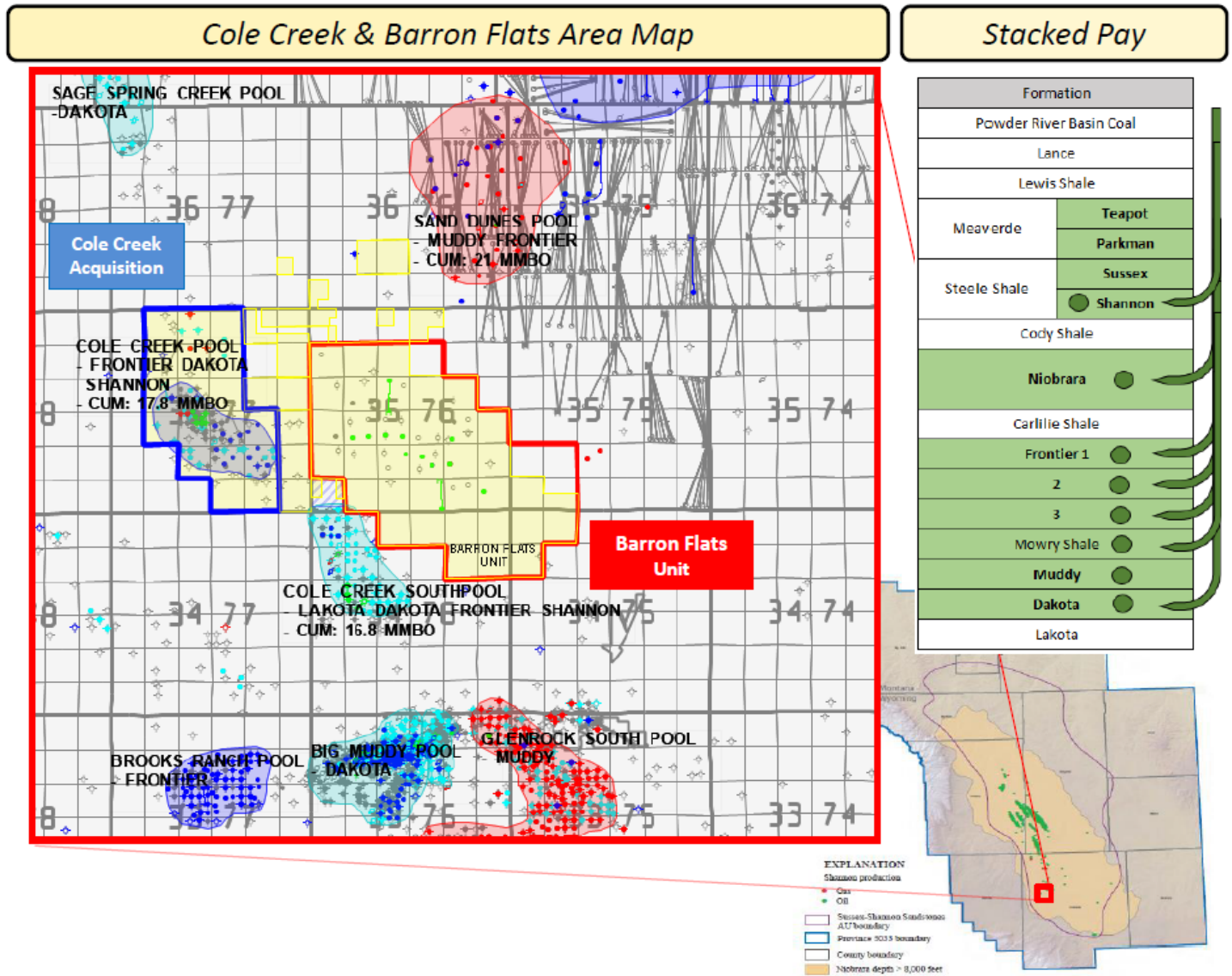
Capitalization Structure & Funding

- The capital structure of the company is 21.96 MM shares (basic, 25.73 MM fully diluted) with a current market cap of \$32.9 MM. Net debt was \$31.7 MM at the end of Q3/18 (with \$4.3 MM in cash) and is estimated to stand at \$29.9 MM.
- The company also has a \$1.5 MM convertible loan that carries a 12% annual interest rate and \$4.35 per share conversion price (so far out of the money). Part of the holders of this debt have been fine with taking equity in lieu of cash for the interest payment, with half of the last semi-annual interest payment (\$45,616) settled with 33,541 shares.
- Cuda also has a \$35 MM bridge loan with Bridging Finance Inc. at a 10.5% interest rate. This is a temporary loan due back on June 29th, 2019. That said, with a large increase in PDP value with the development of the BFU, we believe the company will be able to swap into a revolving credit facility in 2019, securing a long-term lending solution.
- Given the heavy spending assumed over 2019 to drive growth in the BFU and the maturity of the bridge loan, we have also assumed that the company will raise \$10 MM at the current share price in Q2 to help fund capital spending.
- There is still one dissenting shareholder with 875,000 shares in new Cuda, where the company and the investor have not come to terms on the value of the purchase. Cuda has an accrual obligation of \$3.1 MM to settle this outstanding issue. Overall, we see this as a minor issue with the story.

Asset Overview - Powder River Basin

The core asset of the company is its working interest in 42,000 gross (12,500 net) acres in the Powder River Basin. This acreage is across two proximal areas, the Barron Flats Unit (25,000 acres at 27.75% WI to Cuda) and a 33.3% WI in the remaining acreage, mainly concentrated in the Cole Creek area to the west of the BFU. The initial purchase of the Barron Flats asset for US\$37 MM was announced in June 2018 and closed August 18, and under this, Cuda gained a 27.75% WI in a unit which is producing ~1,000 Boe/d (280 Boe/d net to Cuda), 92% light oil at the time of announcement.

Figure 3. Cuda Wyoming Land Map

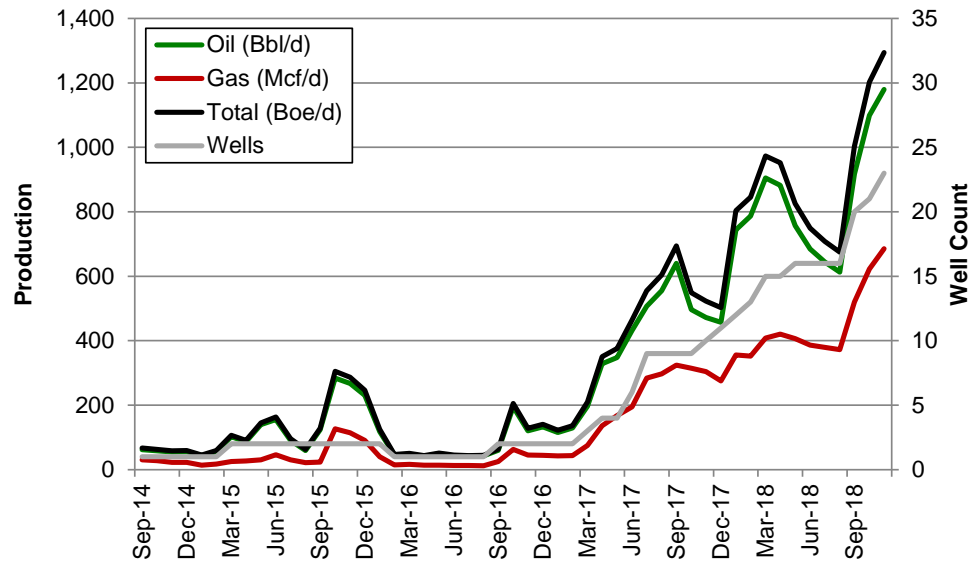


Source: Cuda Oil & Gas Inc.

There are 70 locations identified across the BFU in the conventional Shannon formation alone. The upside in the Shannon verticals should be easy for the market to attribute solid value. The bigger NAV upside comes from success of the gas flood which is the riskier part of the development just given a lack of production history from that recovery scheme in the unit.

In total, 17 gross (4.72 net) vertical wells have been drilled targeting the Shannon formation with ramp-up of development starting in 2017 (note there were legacy verticals in the unit beforehand). Based on public data, production has increased to 1,180 Bbl/d of oil (1.3 MBoe/d total - ~360 Boe/d net to Cuda) in November with 23 verticals tied in, and current production stands at 1,200 Bbl/d (1,300 MBoe/d, 360 Boe/d net).

Figure 4. Barron Flats Unit Production

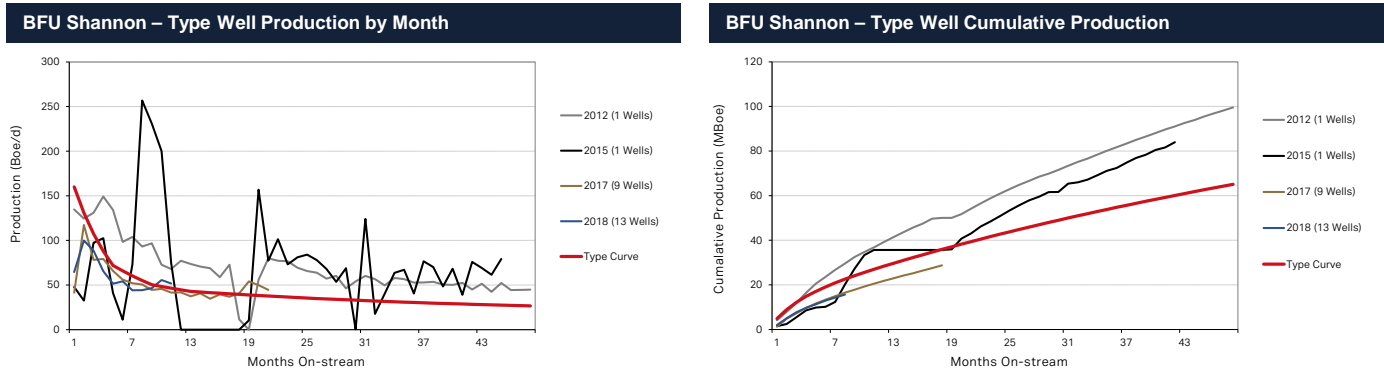


Source: HPDI and Eight Capital

Since acquiring an interest in the unit, Cuda has participated in the drilling of 11 gross wells in the Shannon. The productivity of the new wells drilled with larger frac in November is very robust, with peak IP rates of 201 Bbl/d and is outperforming the 150 MBoe Ryder Scott type curve at the front end. In setting our type curve, we have made yet another conservative assumption in our modeling, using a 1st month rate of 160 Boe/d but with an aggressive decline to bring the curve back in line with the older drills nine months out, and a recovery of 130 MBoe per well.

Based on primary development alone (which assumes a 10-15% recovery factor) with 70 gross new drills in the Shannon formation, we see \$51.3 MM / \$1.67/sh. of value on our price deck or \$43.4 MM / \$1.41/sh. on strip (note, per share values are post the \$10 MM equity financing we assume in our model).

Figure 5. Barron Flats Shannon Well Results



#	Name	Spud Date	Frac (T)	On Prod Date	Peak Rate (Bbl/d)	Dec./18 Avg. Rate (Bbl/d)
1	BFU 23-14	Jul. 24/18	110	Sep. 1/18	180	85
2	BFU 44-22	Aug. 8/18	110	Sep. 4/18	155	61
3	BFU 22-29	Aug. 26/18	110	Oct. 6/19	182	104
4	BFU 23-27	Aug. 19/18	110	Sep. 26/18	169	100
5	BFU 32-27	Sep. 5/18	110	Oct. 13/18	136	104
6	BFU 41-30	Sep. 13/18	135	Oct. 24/18	130	51
7	BFU Fed 11-28	Sep. 22/18	140	Nov. 25/18	172	123
8	BFU Fed 12-20	Oct. 2/18	135	Nov. 12/18	220	132
9	BFU Fed 32-21	Oct. 12/18	140	Nov. 21/18	210	139

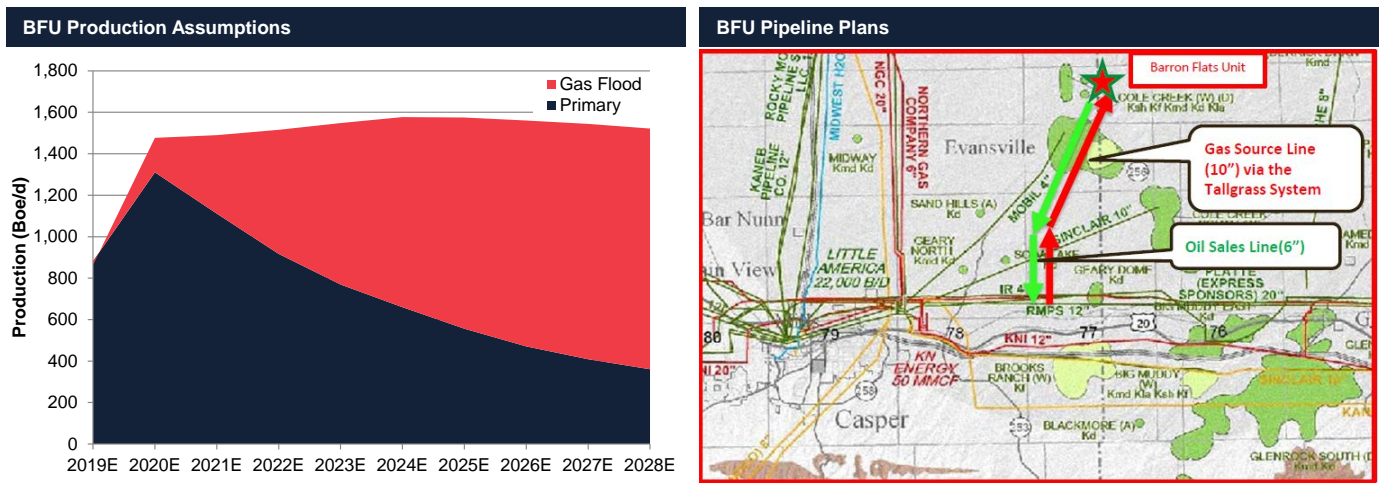
Source: HPDI, Cuda Oil & Gas, and Eight Capital

Now while recovery is expected to be 10-15% of the OOIP on primary, this increases toward 50% with a gas miscible flood which Cuda and the operator plan to initialize in 2019. With the flood, the company will be building a source pipeline and injection facility which it will own 1/3 of at a cost of up to US\$3 MM.

Cuda and Atomic Oil & Gas have created a Midstream company called PipeCo, which will access source gas via an 8-10" high pressure pipeline from the Tallgrass system at Glenrock just seven miles south of the field. In addition, planning is underway for a returning 6" oil sales line to deliver this high diesel rich Shannon Oil to improve the differential by as much as US\$4 from a US\$2/Bbl discount to a US\$2/Bbl premium to WTI.

The success of this gas flood can add material value to the company, in our view, by driving a low decline in production and keeping net volumes to Cuda above 1.5 MBoe/d for over 10 years. We see this as a key part to massive value creation in the story, with our modeling showing \$93.1 MM / \$3.03/sh. of estimated value on our price deck and \$83.5 MM / \$2.72/sh. on strip. This will be one of the developments that we will be keeping a tight eye on. Given confirmation of success, this will drive material upside in the stock, in our view.

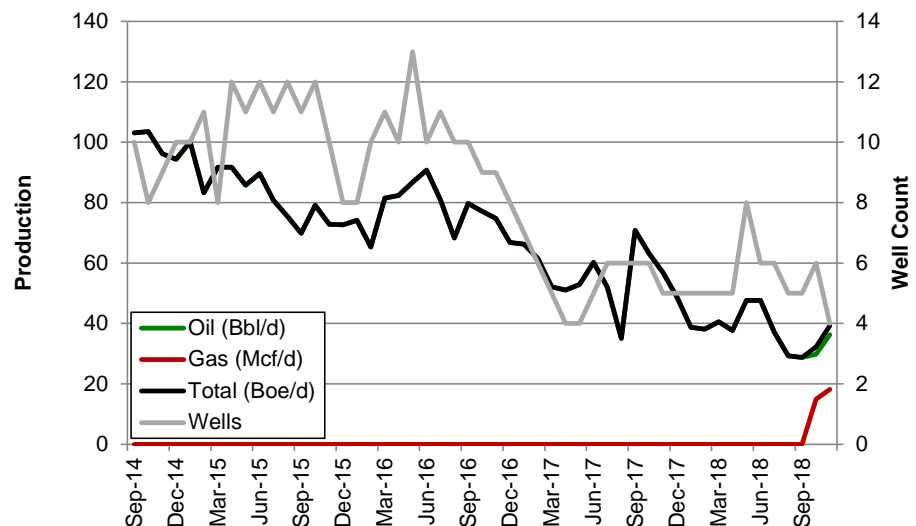
Figure 6. Primary & Secondary Recovery and BFU Tie-in (Net Cuda production)



Source: Eight Capital (Left) & Cuda Oil & Gas (Right)

In addition to the BFU, the company has acquired additional acreage in the area, with the biggest block being the Cole Creek area which is on a structural high to the west of the BFU, where the company holds a higher 33.3% WI. There is multi-zone potential as well with vertical legacy production from the Frontier 2 and Dakota. At this point, we focused our attention on the potential in the Frontier 2 and Dakota zones, where two, 1-2 mile horizontal wells are planned to be spud in mid-year 2019.

Figure 7. Cole Creek Production



Source: HPDI and Eight Capital

Now the biggest, near-term upside in the story beyond the development of the BFU is the potential in the other unconventional multi-stacked zones in the PBR, notably the Frontier and Dakota.

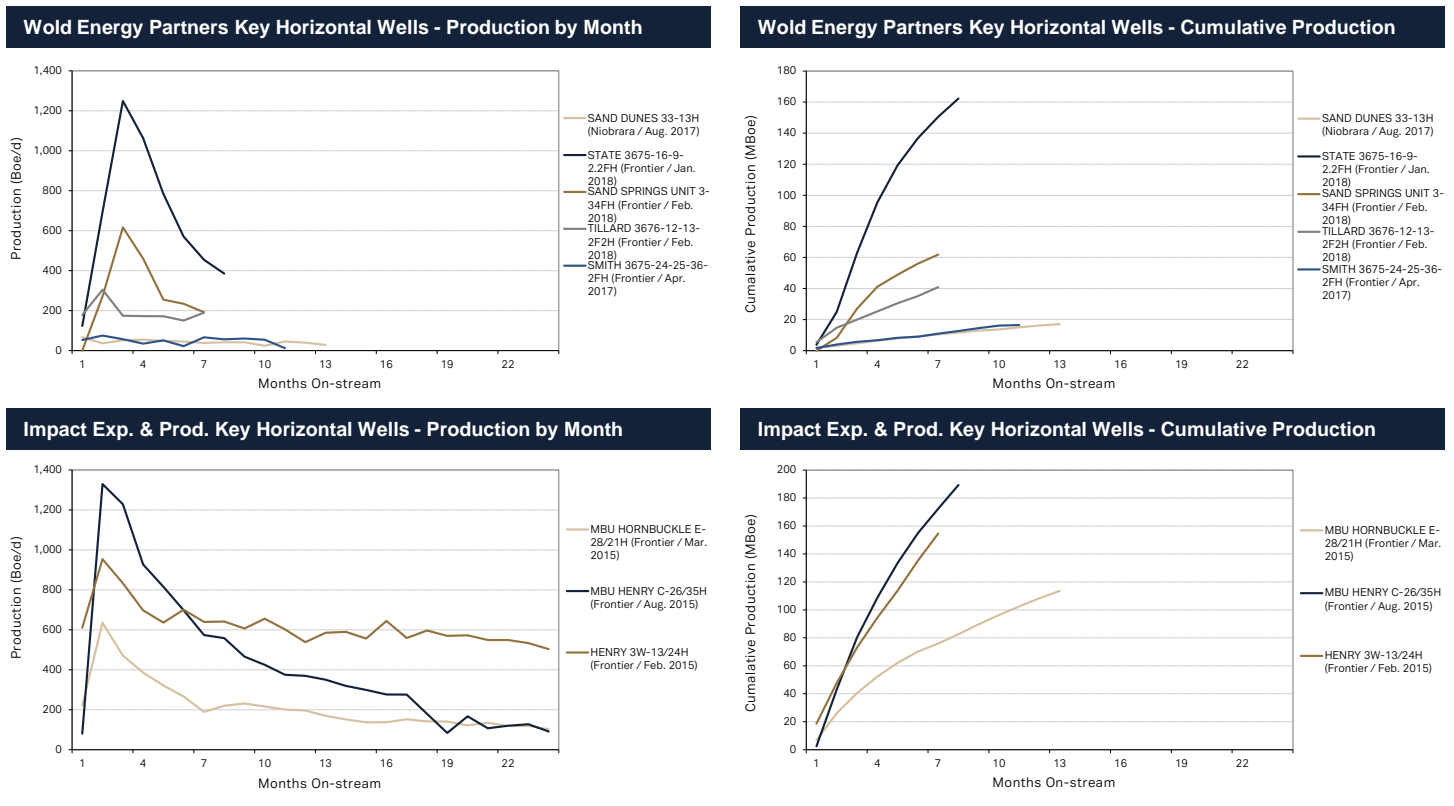
While there is a substantial set of horizontal wells targeting multiple zones in the Powder River stack, we focused on the closest results delivered by private producer Wold Energy Partners and Impact Exploration & Production (both private) whose lands are to the northwest of the BFU.

Wold has drilled two great results in the Frontier in 2018 (there was a 3rd well drilled in 2018 that had completion issues). The STATE 3675-16-9-2.2FH posted a max rate of 1,040 Bbl/d and recovered ~150 MBbl of oil, while the SAND SPRINGS UNIT 3-34FH posted a max rate of 555 Bbl/d and recovered ~60M Bbl of oil. We believe these strong results speak well to the potential in Cuda's PBR land for horizontal development.

Impact Exploration & Production has also seen solid success in the Frontier formation to the north of Wold, with three solid wells drilled in 2015 which had peak IP30 averages of 734 Bbl/d (973 Boe/d total), with a six month average cumulative production standing at 120 MBoe.

In attributing value to the Frontier and Dakota, we have taken a conservative approach by assuming 320 acre spacing (two, 2-mile horizontal wells per two sections of land) for the two zones, with our modeling showing \$64.9 MM / \$2.11/sh. of estimated value on our price deck and \$47.8 MM / \$1.56/sh. on strip. We see this as conservative on the spacing but we do believe results will need to be seen before getting more aggressive on our outlook (although development of the BFU alone provides significant upside in the stock).

Figure 8. Frontier Horizontal Well Results



Source: HPDI and Eight Capital

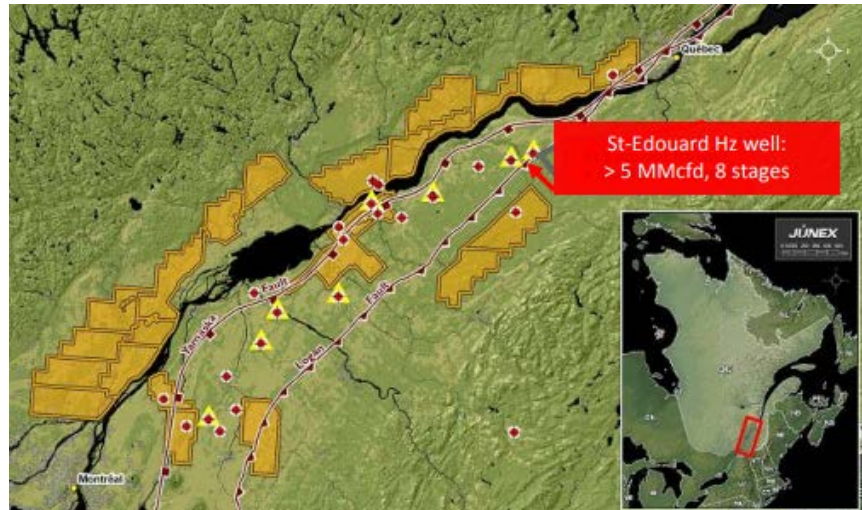
Asset Overview - Quebec

Cuda's assets in the Galt and Utica plays in Quebec provide optionality for the stock but comes with attached risk and uncertainty.

Cuda owns several permits in the Utica shale gas play situated south of the St. Lawrence River and between Montreal and Quebec City, as shown in Figure 9. The field has been very well delineated with 30+ wells and many vertical wells testing in the range of 100-900 Mcf/d. The St. Edouard #1 horizontal well, completed by Questerre Energy (Not Rated) in 2009 with an eight stage frac, produced at an IP30 rate of 5.7 MMcf/d. The field is situated in very close proximity to large gas markets of eastern Canada/NE United States. Netherland, Sewell & Associates (NSAI) assigned 3.5 TCF of prospective gas volumes for the play in 2009. That said, with Quebec's recently passed moratorium towards fracking shale gas in the

lowlands, any potential development plans in this area will have to be put on the back burner; thus, we haven't placed any value for this asset in the company's NAV in our model. There are some abonnement costs associated with Junex's development of the area, standing at \$2.5 MM net to the company and supported by a bond on the liability.

Figure 9: Quebec Utica Shale Gas Play - Cuda Permits

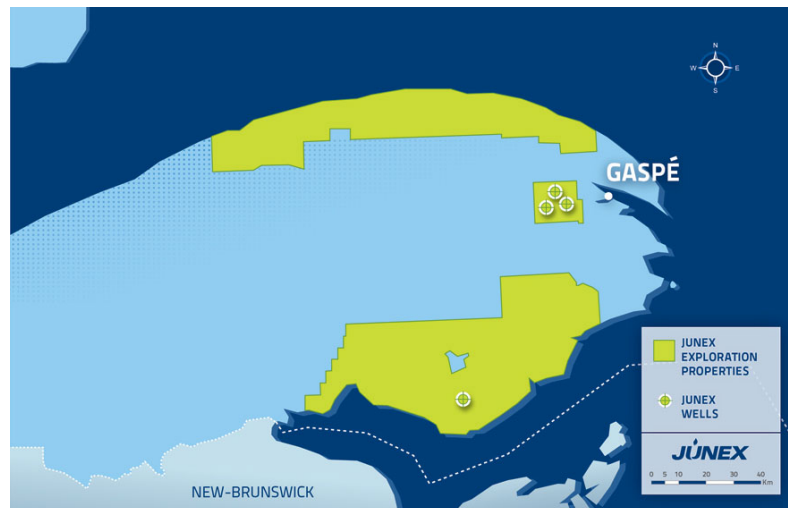


Source: Cuda Corporate Presentation

Cuda's properties in the Galt field situated on the Gaspé Peninsula in Eastern Quebec were assigned by NSAI a P50 Best Guess of 4.2MMBoe of Contingent Oil Resources for company volumes with potential development of 30 wells targeting the Forillon formation. Initial productivity seems very promising with the existing Galt #4 well IPing at 200 Bbl/d and capable of sustaining 150 Bbl/d. Cuda could drill two wells in 2019 (50/50 chance in our view), but development and continued production in the area is contingent on obtaining the necessary permits from Ressources Quebec. For production from Galt #4, the approval to produce is being worked on (Gov't of Quebec is working with Micmac First Nations for social appetence) and is expected to potentially be gained in 2020.

Contrary to the current situation at Utica shale gas play in the St. Lawrence Lowlands, the acceptance for the project in the Gaspé is overwhelmingly positive for oil development at Galt. The situation is progressing through MERN, with MERN having received a request for a drilling permit at Galt #6 (expected this summer), a conventional light oil drill that doesn't require fracking. We've also given zero value for this until we see further progress in this development, but do see this likely to have a positive outcome that will add to our forecast and valuation in the near-term.

Figure 10: Cuda's Galt Field

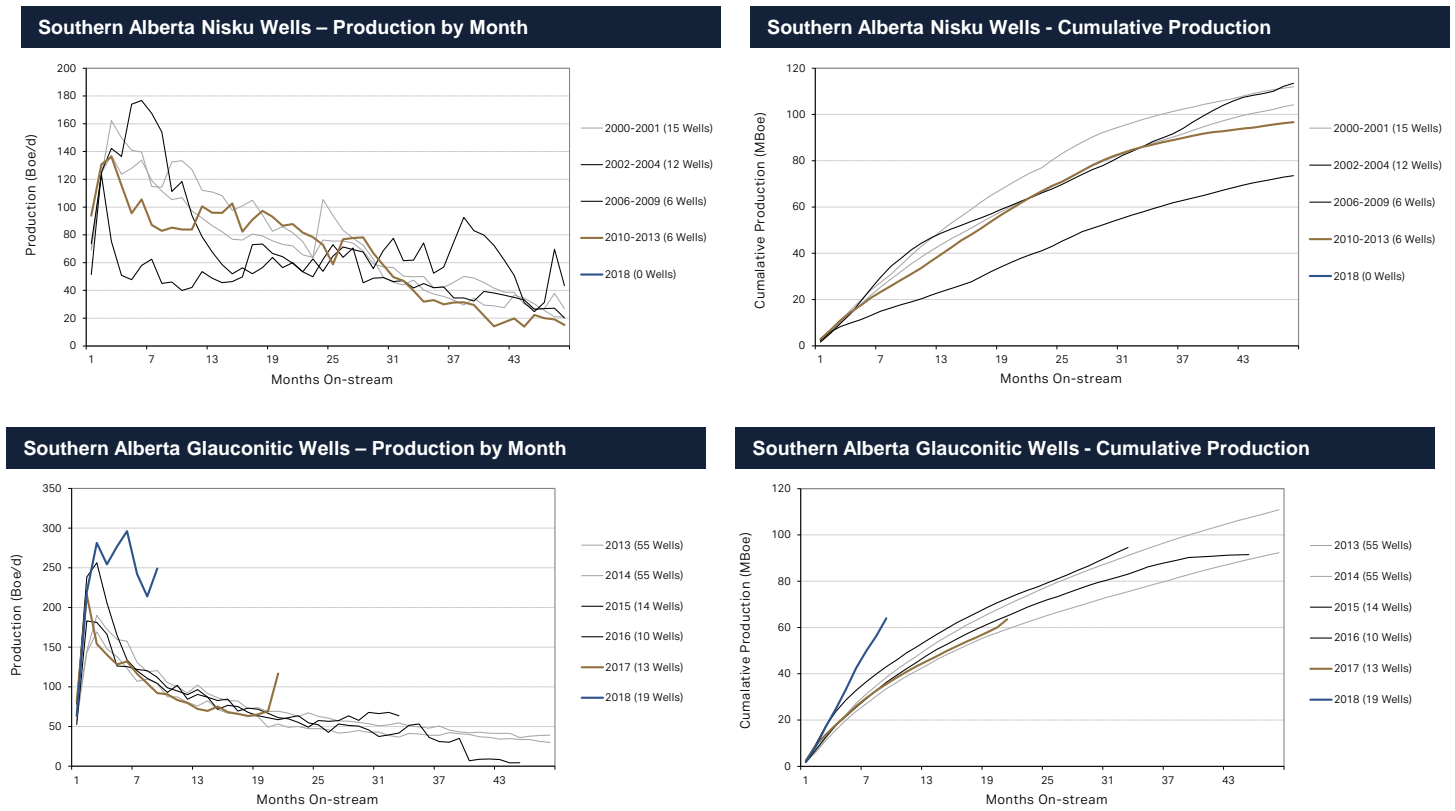


Source: Junex(Cuda) website

Asset Overview - Southern Alberta

Successful development in Southern Alberta could unlock upside and thus add more potential positive momentum to the stock, in our view. The plan for 2019 is to drill three wells targeting prospective oil zones in the Carbon Nisku, Rockyford Glau, and Long Coulee Glau, respectively. We believe the risk associated with these wells can be offset with their low cost structure of drilling (the Company believes capital costs will range from \$1.2MM for a successfully completed 400K DTA Glau well and \$1.35MM for a Nisku well, with the risked capital only being \$400-500K for a drilled and abandoned exploration shot) and strong economics with tightening light oil differentials. From a productivity standpoint, Figure 11 shows encouraging historical production in these zones (especially for the Glau) from offsetting comparable wells. If the wells planned for 2019 show strong results, this could spur further development in this area. We've kept the NAV estimate conservative and assumed dry holes for the three wells, and will await results to reassess our outlook on value should a commercially viable pool be discovered.

Figure 11: Southern Alberta Nisku, Glauconitic Historical Production



Source: GeoScout and Eight Capital

Comparative Metrics to Our E&P Coverage

It is important to understand how a company compares on a number of key metrics to understand drivers of relative valuation and potential for the stock to re-rate to the up or downside. The most important drivers for valuation, in our view, is leverage (D/CF), margin and total payout ratio (Capex + Dividend / CF) - with improvements in these metrics underpinned by strong Debt-Adjusted Production per Share Growth.

On 2019 metrics, Cuda is in the middle of the pack on leverage and margin, and notably higher on capital spending to cash flow, which is not surprising given the early stage of the BFU development. That said, when we look at 2020 metrics, the relative positioning improves dramatically with Cuda moving to an above average position on most measures.

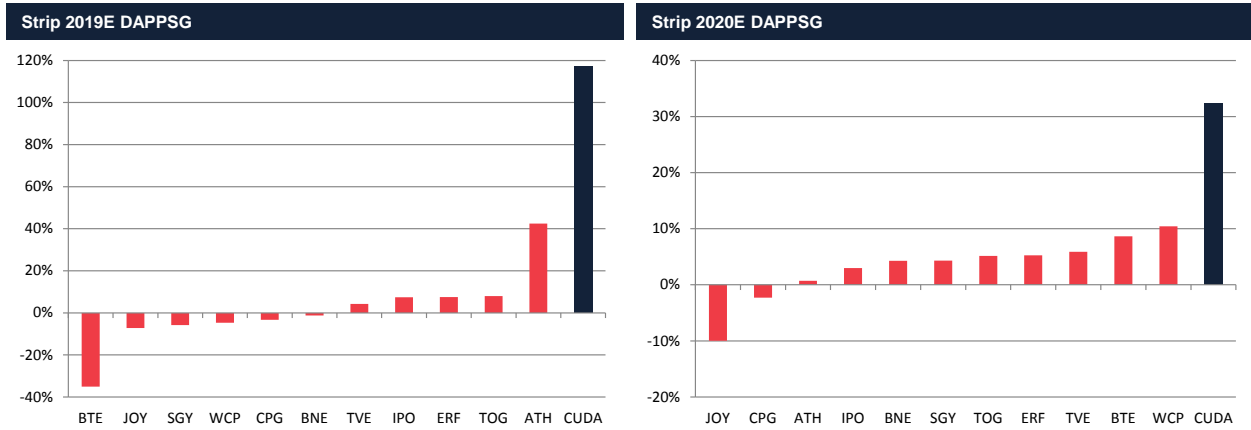
Figure 12: Oil E&P Key Performance Metric Comparison



Source: Eight Capital

The driver of this massive improvement in relative positioning is from the significantly higher Debt-Adjusted Production per Share Growth that Cuda offers vs. peers, driven by the strong returns and netback from conventional oil development in the US over horizontal, unconventional oil drilling that is focused in Canada for most producers.

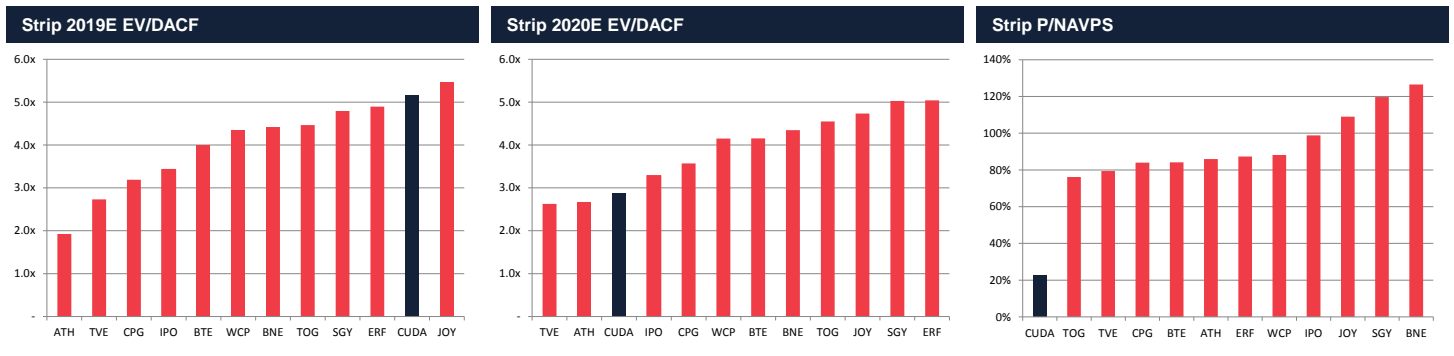
Figure 13: Oil E&P 2019 & 2020 Debt-Adjusted Production per Share Growth



Source: Eight Capital

With the strong Debt-Adjusted Production per Share Growth, Cuda will see significant Y/Y compression in EV/DACF valuation into 2020, with the multiple climbing down 2.5 points and leaving the company as the lowest valuation in our coverage universe. We also see Cuda trading at the largest discount to NAVPS which is already forward looking to 2020 and beyond, and is conservative with no upside granted to the Quebec assets, assumed dry hole drills on the Alberta assets, and 320 acre spacing (two wells per section) on Frontier and Dakota potential in the Powder River Basin. With that, we see an easy set-up for price appreciation through 2019 as the company delivers on the BFU growth.

Figure 14: Oil E&P Valuation Metric Comparison



Source: Eight Capital

Target Price Methodology

Our \$2.75 price target is calculated similarly to our valuations for other E&Ps, based on a 50/50 blend of selected multiple on 2020 EV/DACF and NAVPS. On 2020 EV/DACF, we have applied a 3.0x target which is a 1.0 point discount from our oil E&P average multiple of 4.0x. Our risked NAVPS stands at \$3.68, which does not even include upside for potential in Quebec given the political climate around energy development in that province. In taking a conservative approach, we do risk our NAVPS by 50% in our target price calculation versus par to NAVPS for other producers.

Figure 15: Cuda Target Price Calculation

Target Price & Valuations			
Cuda Oil & Gas Inc.		Ticker: CUDA	Share Price: \$1.45
Eight Capital Target Price Calculation			
Target EV/DACF Multiple:	3.0x	Target NAV Multiple:	50%
Implied Price:	\$1.81	Risked NAVPS:	\$3.68
Percent EV / DCF:	50%	Percent NAVPS:	50%
EV / DCF Contribution:	\$0.91	NAVPS Contribution:	\$1.84
Eight Capital Target Price	\$2.75		
Eight Capital Estimates & Implications			
2020 DCF:	\$29		
2020 Net Debt:	\$31	Risked NAVPS:	\$3.68
Current 2020 EV / DCF:	2.6x	Current P / NAVPS:	39%
Target Price:	\$2.75		
Implied Target EV / DCF:	4.1x	Implied Target P / NAVPS:	75%

Source: Eight Capital

Disclosures and Disclaimers

This research report (as defined in IIROC Rule 3400) is issued and approved for distribution in Canada by Eight Capital, a member of the Investment Industry Regulatory Organization of Canada, and the Canadian Investor Protection Fund. Eight Capital accepts responsibility for the dissemination of this report. Non-client recipients of the research report should not rely solely on the investment recommendations contained herein and should consult their own professional advisors. Eight Capital will not treat any non-client receiving this report as its own. Institutional clients who require additional information on securities discussed in this report should contact a qualified sales person at Eight Capital.

Eight Capital accepts no liability whatsoever for any loss arising from any use or reliance on this research report or the information contained herein.

This research report is being provided only to institutional clients of Eight Capital and is intended for informational purposes only. This research report is not an offer to sell or the solicitation of an offer to buy any of the securities discussed herein. The information contained in this research report is prepared from publicly available information, internally developed data and other sources believed to be reliable, but has not been independently verified by Eight Capital. Eight Capital makes no representations or warranties with respect to the accuracy, correctness or completeness of such information and they should not be relied upon as such.

All estimates, opinions and recommendations expressed herein constitute judgments as of the date of this research report and are subject to change without notice. Eight Capital does not accept any obligation to update, modify or amend this research report or to otherwise notify a recipient of this research report in the event that any estimates, opinions and recommendations contained herein change or subsequently become inaccurate or if this research report is subsequently withdrawn.

Past performance is not a guarantee of future results, and no representation or warranty, expressed or implied, is made regarding future performance of any security mentioned in this research report. The price of the securities mentioned in this research report and the income they generate may fluctuate and/or be adversely affected by market factors or exchange rates, and investors may realize losses on investments in such securities, including the loss of investment principal. Nothing in this research report constitutes legal, accounting or tax advice. Investors should consult with his or her independent legal or tax adviser in this regard.

US Residents: This report is provided to US residents under a chaperoning arrangement pursuant to Rule 15a-6 of the U.S. Securities Exchange Act of 1934 (the "Rule"). Eight Capital is a non-U.S. broker-dealer for the purposes of the Rule and is not registered with the Financial Industry Regulatory Authority, the Securities and Exchange Commission or any state securities regulatory authority. This research report is intended only for persons who are a "major U.S. institutional investor" which is defined as a U.S. institutional investor or any other entity which owns or manages at least \$100 million in financial assets. This research report is not a solicitation to sell the securities discussed herein; however, should you choose to make an unsolicited transaction in such securities we may refer you to our chaperone. Please be advised that Eight Capital may earn a commission in connection with transactions through our chaperone and, in certain cases, our chaperone may give up trading to Eight Capital for execution.

Eight Capital Corp. is a U.S. registered broker-dealer, a member of FINRA and an affiliate of Eight Capital. Eight Capital Corp. accepts responsibility for the contents of this research report, subject to the terms and limitations as set out above. U.S. residents seeking to effect a transaction in any security discussed herein should contact Eight Capital Corp. directly. Research reports published by Eight Capital are intended for distribution in the United States only to Major Institutional Investors (as such term is defined in SEC 15a-6 and Section 15 of the Securities Exchange Act of 1934, as amended) and are not intended for the use of any person or entity.

Dissemination of Research

Eight Capital's Research is distributed electronically through email, website (password protected) or hard copy. Dissemination of initial research reports and any subsequent research reports is made simultaneously to a pre-determined list of clients of Eight Capital's Institutional Sales and Trading representatives.

Conflicts of Interest

Eight Capital has written procedures designed to identify and manage potential conflicts of interest that arise in connection with its research and other businesses. The compensation of each Research Analyst/Associate involved in the preparation of this research report is based competitively upon several criteria, including performance assessment criteria, the quality of research and the value of the services they provide to clients of Eight Capital. The Research Analyst compensation pool includes revenues from several sources, including sales, trading and investment banking. Research analysts and associates do not receive compensation based upon revenues from specific investment banking transactions.

Eight Capital generally restricts any research analyst/associate and any member of his or her household from executing trades in the securities of a company that such research analyst covers, with limited exception.

Should this research report provide web addresses of, or contain hyperlinks to, third party web sites, Eight Capital has not reviewed the contents of such links and takes no responsibility whatsoever for the contents of such web sites. Web

addresses and/or hyperlinks are provided solely for the recipient's convenience and information, and the content of third party web sites is not in any way incorporated into this research report. Recipients who choose to access such web addresses or use such hyperlinks do so at their own risk.

Unless publications are specifically marked as research publications of Eight Capital, the views expressed therein (including recommendations) are those of the author and, if applicable, any named issuer or Investment Dealer alone, and have not been approved by, nor are they necessarily those of, Eight Capital. Eight Capital expressly disclaims any and all liability for the content of any publication that is not expressly marked as a research publication of Eight Capital.

Forward-looking statements are based on current expectations, estimates, forecasts and projections based on beliefs and assumptions made by the author. These statements involve risks and uncertainties and are not guarantees of future performance or results and no assurance can be given that these estimates and expectations will prove to have been correct, and actual outcomes and results may differ materially from what is expressed, implied or projected in such forward-looking statements.

Research Analyst Certification

Each Research Analyst and/or Associate who is involved in the preparation of this research report hereby certifies that:

- the views and recommendations expressed herein accurately reflect his/her personal views about any and all of the securities or issuers that are the subject matter of this research report;
- his/her compensation is not and will not be directly related to the specific recommendations or views expressed by the Research Analyst in this research report;
- they have not affected a trade in a security of any class of the issuer whether directly or indirectly through derivatives within the 30-day period prior to the publication of this research report;
- they have not distributed or discussed this Research Report to/with the issuer, investment banking at Eight Capital or any other third party except for the sole purpose of verifying factual information; and
- they are unaware of any other potential conflicts of interest.

The Research Analyst involved in the preparation of this research report does not have any authority whatsoever (actual, implied or apparent) to act on behalf of any issuer mentioned in this research report.

Informal Comment

Informal Comments are analysts' informal comments that are posted on the Eight Capital website. They generally pertain to news flow and do not contain any change in analysts' opinion, estimates, rating or target price. Any rating(s) and target price(s) in an Informal Comment are from prior formal published research reports. A link is provided in any Informal Comment to all company specific disclosures and analyst specific disclosures for companies under coverage, as well as general disclosures and disclaimers.

Presentations

Presentations do not include disclosures that are specific to analysts and specific to companies under coverage. Please refer to formal published research reports for company specific disclosures, analyst specific disclosures and valuation methodologies used in determining target prices for companies under coverage.

Idea of Interest

Eight Capital has not initiated formal and continuous coverage of the companies mentioned in these publications, and maintain no recommendation, price target or earnings forecast. Statements and analysis in these publications are introductory in nature and may be published from time to time based on publicly available information.

IROC Rule 3400 Disclosures: A link ([here](#)) is provided in all research reports delivered by electronic means to disclosures required under IROC Rule 3400, including disclosures for sector research reports covering six or more issuers.

Company Specific Disclosures

Eight Capital and/or its affiliated companies have provided investment banking services to Cuda Oil and Gas Inc. in the past 12 months.

Explanation of Recommendations

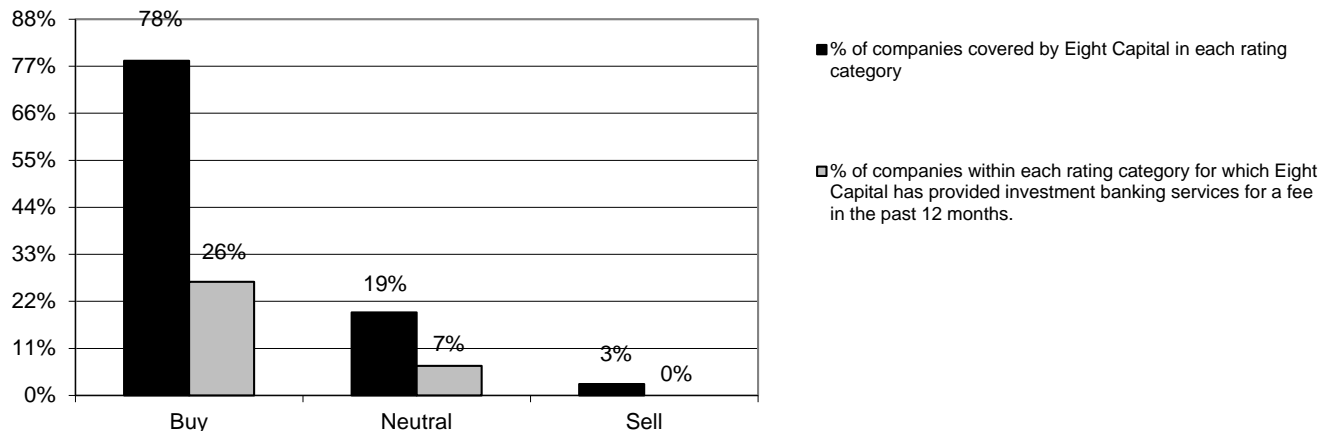
Eight Capital target: Represents the price target as required under IROC Rule 3400. Valuation methodologies used in determining the price target(s) for the issuer(s) mentioned in this research report are contained in current and/or prior research. Eight Capital target N/A: a price target and/or NAV are not available if the analyst deems there are limited financial metrics upon which to base a reasonable valuation.

Recommendations: **BUY:** Total returns expected to be materially better than the overall market with higher return expectations needed for more risky securities. **NEUTRAL:** Total returns expected to be in line with the overall market. **SELL:** Total returns expected to be materially lower than the overall market. **TENDER:** The analyst recommends tendering

shares to a formal tender offer. **UNDER REVIEW:** The analyst will place the rating and/or target price Under Review when there is a significant material event with further information pending; and/or when the analyst determines it is necessary to await adequate information that could potentially lead to a re-evaluation of the rating, target price or forecast; and/or when coverage of a particular security is transferred from one analyst to another to give the new analyst time to reconfirm the rating, target price or forecast.

SECURITY ABBREVIATIONS: NVS (non-voting shares); RVS (restricted voting shares); RS (restricted shares); SVS (subordinate voting shares).

Eight Capital Equity Research Ratings:



As at December 31, 2018
Source: Eight Capital