CAPITAL MARKETS
HAYWOOD
SECURITIES INC.
Member of the Canadian Investor Protection Fund

Research Report – April 13, 2018

Razor Energy Corp. (RZE-V, $1.99)

Rating	**BUY**
Target Price	**$3.00**
Return	**51%**
Overall Risk Rating	**Very High**

Christopher Jones, CFA | 403-509-1953 | cjones@haywood.com
Adam McBride, CA, CFA | 403-509-1920 | amcbride@haywood.com

Q4 Cash Flow Beats; Offset By Well Results At Kaybob

Company Profile

Industry	Oil & Gas
Website – www.razor-energy.com	
CEO – Doug Bailey	

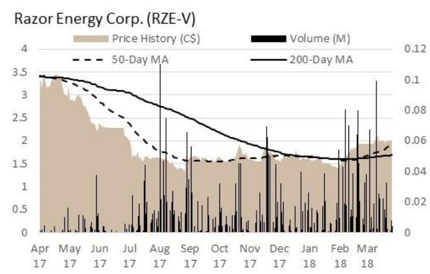
Razor Energy is a newly formed light oil weighted oil and gas producer that is focused on high capital efficiency production additions in the Swan Hills and Kaybob regions of West Central Alberta.

Company Data

52-Week High/Low	$3.55/$1.25
YTD Performance	20.6%
Dividend Yield	n/a
Shares O/S	15.8 MM (basic)
Market Capitalization	$25 MM
Net Debt (Q4/17)	$31 MM
Enterprise Value	$56 MM
Daily Volume (3 mos.)	21,000
Currency	C$ unless noted

	2017A	2018E
Production (boe/d)	3,813	5,000
% Gas	11%	12%
E & D CAPEX (MM)	$9.9	$32.5
Cash Flow (MM)	$6.6	$23.2
CFPS (fd)	$0.48	$1.47
D/CF	3.8x	1.7x
EV/DACF	4.4x	2.5x
EV/BOE/D	$13,649	$13,454

Price Performance



Source: Haywood Securities & Capital IQ

Event | This morning, RZE announced Q4/17 results that were in line on production but posted a solid beat on cash flow versus our expectations. The Company announced initial well results from four Kaybob development wells that encountered on average less than 10ft of net pay in the primary Kaybob South Triassic A Pool. In addition, test results were significantly lower than expectations with oil rates between 9 bbls/d and 36 bbl/d at water cuts ranging from 87.6% to 99%. We previously did not include value for its Kaybob development program. That said, new wells at Kaybob represented a major growth platform for the Company with volume contribution peaking at 700 boe/d in Q4/18. On a positive side, we believe well reactivations and workovers may still support its 5,000 boe/d average production guidance for the year. It is our view that the Kaybob Unit 1 & 2 drilling program is uneconomic at this stage and would be surprised if the Company risks any more capital on the program. Consequently, we could see a revised capital budget when Q1 results are announced in late May.

Valuation | RZE trades at 2.5x 2018 EV/DACF, compared to its light oil peers at 4.1x.

Impact – Neutral | Key Points:

- **Q4 results recap**. RZE reported production of 4,534 boe/d (+8 qoq), was 4% below our estimate of 4,700 boe/d. Funds flow of $0.29/sh ($4.6 MM) came in 26% ahead of our estimate of $0.23/sh ($3.7 mm). The beat was driven primarily by higher realized pricing. Field netbacks increased to $20.17/boe (up from $6.67/boe in the prior quarter) as the focus on reducing operating costs come to fruition. The Company's power generation project should be online by June, which could reduce operating costs by $2/boe.

- **Q1/18 ops update**. Due to a combination of scheduled and unscheduled 3rd party facility disruptions, March production was ~4,200 boe/d, and overall production in the quarter was impacted by ~400 boe/d. Additional planned facility downtime will persist into April, but production should rebound to above 5,000 boe/d later in Q2/18 and guidance of 5,000 boe/d in 2018 remains unchanged.

- **Changes to Estimates**. We are forecasting 2018 production of 5,000 boe/d (unchanged) on capital spending of $38.4 mm (unchanged). At strip, we forecast cash flow of $24 mm (from $23 mm) and D/CF of 1.6x.

- **Maintain Buy rating and target price of $3.00/sh.** The Company's shares trade at a 2018 EV/DACF multiple of 2.5x, which is a substantial discount to several junior light oil peers at 4.1x. We continue to rate the stock a BUY with a $3.00/sh price target, which is NAV based and maps to a 2018 EV/DACF multiple of 3.2x versus peers at 4.1x.

Please see page 8 for Analyst Certification, pages 8 - 10 for Important Information, Rating Structure, Legal Disclaimers, and notes.

CAPITAL MARKETS
HAYWOOD

Razor Energy (RZE-V)

http://www.razor-energy.com/

Rating	Buy	Target Price	$3.00
Current Price	$1.99	Return to Target	51%

STOCK DATA	
52-week High-Low (C$)	$3.55 - $1.25
Shares Outstanding (MM)	15.8
Net Debt Q4/17 (MM)	$25
Market Cap. (MM)	$31
Enterprise Value (MM)	$56

PRODUCTION	2017A	2018E
Oil & NGL's (bbls/d)	3,405	4,409
Nat. Gas (mcf/d)	2,448	3,546
Boe/d (6:1)	3,813	5,000
% Nat. Gas	*11%*	*12%*

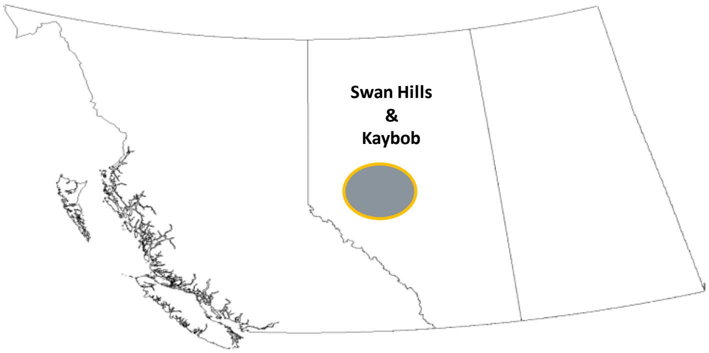
PRICING	2017A	2018E
Crude Oil WTI (US$/bbl)	$50.84	$62.50
Brent ($US/Bbl)	$54.34	$67.50
Nat. Gas NYMEX (US$/mcf)	$2.96	$3.00
AECO (C$/mcf)	$2.21	$1.90
Realized Oil & NGL's ($/bbl)	$52.35	$58.18
Realized Wellhead ($/boe)	$43.94	$52.65

NETBACKS ($/boe)	2017A	2018E
Revenue	$43.94	$52.65
Other Revenue	$3.72	$2.74
Royalties	$9.03	$8.96
Operating & Trans. Costs	$26.91	$27.00
Field Netback	$11.72	$19.43
Cash Netback	$4.18	$14.44

FINANCIALS	2017A	2018E
Cash Flow (MM)	$7	$23
CFPS - diluted	$0.48	$1.47
E&D Capex (MM)	$10	$33
Capex (MM)	$44	$38
Net Debt (MM)	$25	$40

VALUATION	2017A	2018E
P/CF	4.1x	1.4x
EV/DACF	4.4x	2.5x
Net Debt / CF	3.8x	1.7x
EV/BOE/D	$13,649	$13,454
P/NAVPS	0.2x	
EV/boe P+P	$2.77	

AREAS OF OPERATION



Reserves (mmboe) [2]	2016A	2017A	% Liquids
Engineer: Sproule			
Proved	10.1	15.1	90%
Probable	2.5	5.3	
Total	12.7	20.3	90%
PUD/Proved	0%	4%	n.a.
Proved/2P	80%	74%	74%
FD&A - Proved	n.a.	$0.00	
FD&A - P+P	n.a.	$0.00	
2P NPV - 10% AT (MM)		$198.8	
NAV per share - f.d		$11.02	

MANAGEMENT	DIRECTORS
Doug Bailey	Sony Gill
Frank Muller	Sonny Mottahead
Kevin Braun	Vick Saxon
Lisa Mueller	Stan Smith
Devin Sundstrom	Doug Bailey
Stephen Sych	Frank Muller

SHARE OWNERSHIP[1]	Basic	FD
Management and Directors	50.9%	50.9%

(1) As per capitalIQ and includes escrow shares owned by insiders

(2) Reserves are proforma completed acqusitions

Priced on April 12, 2018

Source: Company Reports, Haywood Securities Inc.

Q4/17 Results

Figure 1: Quarterly Summary

	Fcst	Actual		Actual	
	Q4'17E	Q4'17	Var	Q3'17	QoQ
Production					
Oil/Liquids (bbls/d)	4,263	3,984	(7%)	3,711	7%
Natural Gas (mcf/d)	2,814	3,299	17%	2,976	11%
Total (mboe/d)	4,732	4,534	(4%)	4,207	8%
Operating ($/boe)					
Realized Price	$45.93	$53.36	16%	$42.63	25%
Other Revenue	$3.14	$5.51	76%	$3.14	76%
Royalties	$8.27	$11.04	34%	$8.24	34%
Operating Costs	$28.00	$27.56	(2%)	$30.87	(11%)
Operating Netback	$12.80	$20.26	58%	$6.66	204%
G&A	$3.15	$5.14	63%	$3.44	50%
Interest	$1.24	$1.82	47%	$1.99	(8%)
Cash Netback	$8.41	$13.29	58%	$1.23	977%
Financial					
Cash Flow ($mm)	$3.7	$4.6	25%	$0.7	595%
CFPS (f.d.)	$0.23	$0.29	26%	$0.04	603%
E&D Capex ($mm)	$6.8	$3.7	(46%)	$4.2	(13%)

Source: Company reports, Haywood Securities

Operations Update

- **Operations update**. The Company announced initial well results from four Kaybob development wells that encountered on average less than 10ft of net pay in the primary Kaybob South Triassic A Pool. In addition, test results were significantly lower than expectations with oil rates between 9 bbls/d and 36 bbl/d at water cuts ranging from 87.6% to 99%. We see the news on companies Kaybob development drilling as disappointing. Management will continue to evaluate production from these wells and potentially adjust the locations and timing of the remaining four wells budgeted for 2018. At this point, we would be surprised if the Company risks any more capital on the program and could see a revised capital budget with Q1 results. Individual well results detailed below:
  - The **13-24-62-20W5 well** was rig released on January 31st, 2018 and encountered 11m of net pay. The well was subsequently completed and placed on production March 23rd, 2018. In its first 18 producing days onstream, 13-24 averaged 737 barrels of fluid per day at an average 98.5% watercut resulting in 12 bbl/d oil plus 18 mcf/d or 15 boe/d.
  - The **15-12-62-20W5 well** was rig released on February 11th, 2018 and encountered 10m of net pay. The well was subsequently completed and placed on production March 21, 2018. In its first 21 producing days onstream, 15-12 averaged 288 barrels of fluid per day at an average 87.6% watercut resulting in 36 bbl/d oil plus 22 mcf/d or 40 boe/d.
  - The **16-03-62-20W5 well** was rig released on February 22nd, 2018 and encountered 10m of net pay. The well was subsequently completed and placed on production March 12, 2018. In its first 22 producing days onstream, 16-03 averaged 1,401 barrels of fluid per day at an average 99% watercut resulting in 8 bbl/d oil plus 86 mcf/d or 22 boe/d.
  - The **08-07-62-20W5 well** was rig released on March 3rd, 2018 and encountered 4m of net pay. The well was subsequently completed and placed on production March 21, 2018. In its first 20 producing days onstream, 08-07 averaged 279 barrels of fluid per day at an average 98% watercut resulting in 5 bbl/d oil plus 22 mcf/d or 9 boe/d.

Summary Estimates

Figure 2: Changes to Estimates

	2018e Previous	2018e New	% Chg
Production Changes			
Crude Oil & NGLs (bbls/d)	4,409	4,409	0%
Natural Gas (mcf/d)	3,546	3,546	0%
Total (boe/d)	**5,000**	**5,000**	**0%**
% Natural Gas	12%	12%	0%
Financial Changes ($MM)			
Cash Flow	$25	$23	-6%
CFPS diluted	$1.56	$1.47	-6%
Net Debt (Cash)	$39	$40	2%
Avg. D/CF (x)	1.6x	1.7x	8%
E&D CapEx	$33	$33	0%
Pricing Assumption			
WTI (US$/bbl)	$62.50	$62.50	0%
AECO (C$/mcf)	$1.90	$1.90	0%
Exchange Rate (US$/C$)	$0.80	$0.80	0%

Source: Haywood Securities Inc.

Peer Comp Analysis

- **Trades >1.5x Turns Below Light Oil Peers**. As a moderately new and unknown company, RZE's shares trade at a 2018 EV/DACF multiple of 2.5x, a sizeable discount relative to junior light oil peers at 4.1x.

Figure 3: Peer Comp Analysis

		Market	Entity	Net Debt/ CF		EV/DACF		Production		OIL		Entity Value (1)(2)(3)(4)	
Company	**Share Price**	**Cap**	**Value**	**2017E**	**2018E**	**2017E**	**2018E**	**2017E**	**2018E**	**2017E**	**2018E**	**2017E**	**2018E**
	$CAD	($mm)	($mm)	(x)	(x)	(x)	(x)	(BOE/D)	(BOE/D)	(%)	(%)	($/BOE/D)	($/BOE/D)
Chinook Energy Inc.*	$0.19	$42	$38	nm	2.7x	7.5x	6.0x	3,525	4,765	15%	14%	$10,819	$8,003
Yangarra Resources Ltd.*	$5.48	$479	$542	1.9x	1.1x	10.0x	5.9x	5,765	9,250	56%	58%	$94,060	$58,622
Granite Oil Corp.*	$2.64	$93	$126	1.5x	1.4x	4.7x	4.8x	2,750	2,583	96%	98%	$45,798	$48,759
Inplay Oil Corp.*	$1.49	$101	$146	2.0x	1.6x	5.0x	3.8x	3,990	4,545	67%	69%	$36,601	$32,132
Gear Energy Ltd.	$0.82	$160	$207	1.1x	0.7x	4.4x	3.2x	6,511	7,350	86%	86%	$28,804	$24,747
Journey Energy Inc.*	$1.62	$83	$153	3.2x	2.2x	4.1x	3.1x	10,005	10,745	46%	47%	$15,246	$14,196
Marquee Energy Ltd.	$0.05	$20	$47	3.9x	3.0x	2.4x	2.0x	2,775	3,100	45%	50%	$7,773	$8,370
Average		**$140**	**$180**	**2.3x**	**1.8x**	**5.4x**	**4.1x**	**5,046**	**6,048**	**59%**	**60%**	**$34,157**	**$27,833**
Razor Energy Corp.	**$1.99**	**$31**	**$56**	**3.8x**	**1.7x**	**4.4x**	**2.5x**	**3,813**	**5,000**	**89%**	**88%**	**$13,649**	**$13,454**

(1) Entity Value (EV) defined as market capitalization plus net debt, adjusted for any acquisitions/dispositions or financings.
(2) Production and cash flow estimates based on Haywood estimates and street research.
(3) Net Debt used in calculation of Net Debt / Cash Flow does not include an adjustment for dilutive proceeds.
(4) Calculation of market cap and per share metrics include basic shares outstanding and adjustment for in-the-money dilutives.
* Estimates based on Bloomberg concensus

Source: Capital IQ, Haywood Securities

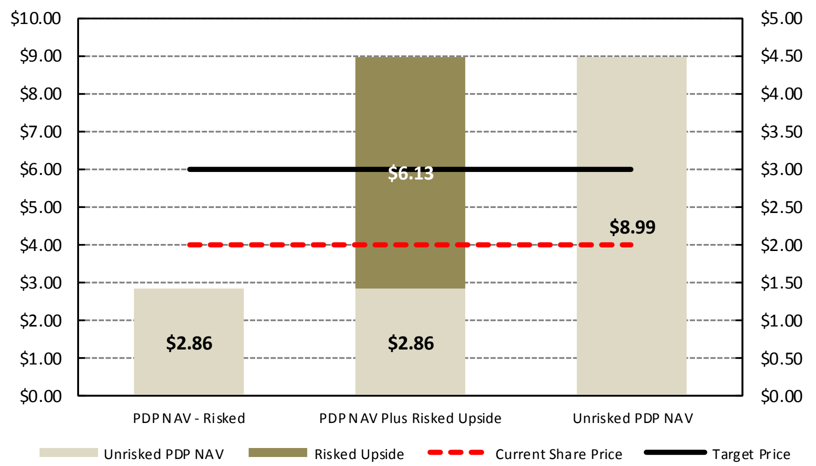
Recommendation

Maintain BUY rating and target price of $3.00. We continue to rate the stock a BUY with a $3.00/sh price target, which is NAV based and maps to a 2018 EV/DACF multiple of 3.2x versus peers at 4.1x.

Figure 4: Valuation Summary

VALUATION OVERVIEW - RAZOR ENERGY (RZE)

	NPV10, Unrisked		Risk Factor	NPV10, Risked	
	($mm)	**($/sh)**	**(%)**	**($mm)**	**($/sh)**
PDP Reserve Value [1]	$207.8	$11.14	45%	$93.5	$5.01
Net debt [2]	$40.2	$2.16	100%	$40.2	$2.16
PDP NAV	**$167.5**	**$8.99**		**$53.3**	**$2.86**
Target Price					**$3.00**
Current Share Price					$1.99
Implied Total Return					51%



Notes:
(1) PDP reserve value incl. Swan Hills & Kaybob acquisitions
(2) YE2018 estimate

Source: Haywood Securities Inc.

Investment Thesis

Razor has identified a unique business; namely capturing mature oil fields with low decline rates and low maintenance capital requirements that have both recompletion and development opportunities overlaying the assets. In 2018, we expect Razor to begin a substantial drilling program at Kaybob that we estimate could drive YoY production growth of +25% (12% exit-to-exit).

Risks

Significant Investment Risks

The investment to which this report relates carries various risks, which are reflected in our Overall Risk Rating. We consider the following to be the most significant of these investment risks:

- **Operational Risk.** Oil and natural gas exploration involves a high degree of risk and there is no assurance that expenditures made on exploration by Razor will result in new discoveries of oil or natural gas in commercial quantities. Razor currently has a limited number of identified development prospects. The long term commercial success of the Company depends on its ability to find, acquire, develop and commercially produce oil and natural gas reserves. No assurance can be given that the Corporation will be able to locate satisfactory properties for acquisition or participation. Moreover, if such acquisitions or participations are identified, the Company may determine that current markets, terms of acquisition and participation or pricing conditions make such acquisitions or participations uneconomic.

- **Asset Retirement Obligations/Liability Management Rating Risk.** An analysis of the Company's Asset Retirement Obligations (AROs) and Liability Management Ratio (LMR) is relevant given that much of Razor's asset base is characterized by a large number of wells with low individual production. The Company's current LMR is 1.23 (values below 1.0 require companies to post a security deposit), which is below Alberta's threshold of 2.0 for transactions and could provide a potential barrier to executing further acquisitions. In the near-term, Razor will continue to allocate capital towards abandonment and reclamation, and along with production growth in 2017/2018, should push its LMR ratio closer to 2.0. The current AROs of $75MM (undiscounted) are not a near-term concern, given that the immediate cash call from decommissioning liabilities in minimal. Decommissioning expenditures are expected to be $1.0-2.5 MM a year, not enough of a cash outlay to impede Razor's assets. Furthermore, the LMR ratio should increase overtime as the Company re-enters existing wellbores and places shut-in production onstream.

- **Legal Proceedings.** Razor is named as a co-defendant in relation to the Kaybob assets. Claim was filed by Malibu Energy, who claims Razor was made aware of confidential information relating to the Kaybob assets for which Razor had agreed to purchase. Management does not believe that the action will have a material effect on the business or financial condition of the company.

- **Regulatory Risk.** Regulatory risk is present on both the supply and demand side of operations. Extensive controls and regulations may be imposed from all levels of government, and amended from time to time, with these controls materially affecting the operations of each junior company.

- **Commodity Price Risk.** Razor's results of operations and financial condition are highly dependent on oil and gas prices which are largely determined by global supply and demand, in addition to other factors outside the company control. In addition, significant growth in crude production volumes in Western Canada and the northern United States has resulted in pressure on transportation and pipeline capacity, contributing to the widening of the light oil pricing differential between WTI and Cromer/WCS/Hardisty, resulting in fluctuations in the price of oil and natural gas. All of these factors are beyond Razor's control and can result in a high degree of price

- **Financial Risk.** The nature of operations creates exposure to financial risk, including interest rate fluctuations, changes in the Canadian/U.S. dollar exchange rate, and access to equity and debt markets. Commodities priced in U.S. dollars means revenue and cash flows earned on production are susceptible to declining in an environment with a strengthening Canadian dollar. As well, financial risk includes credit risk pertaining to counterparties with which the company conducts its financial transactions, and relating to joint ventures and the counterparties that purchase the commodities that the company produces. To mitigate financial risk, companies can maintain a conservative approach to their debt levels relative to cash flow, create flexible capital expenditure programs, and reduce reliance on any single financial counterparty.

For further information on our Risk Rating

please visit: http://haywood.com/what-we-offer/research/research-policy

Important Information and Legal Disclaimers

This report is neither a solicitation for the purchase of securities nor an offer of securities. Our ratings are intended only for clients of Haywood Securities Inc., and those of its wholly owned subsidiary, Haywood Securities (USA) Inc., and such clients are cautioned to consult the respective firm prior to purchasing or selling any security recommended or views contained in this report.

Estimates and projections contained herein, whether or not our own, are based on assumptions that we believe to be reasonable. The information presented, while obtained from sources we believe reliable, is checked but not guaranteed against errors or omissions. Changes in the rates of exchange between currencies may cause the value of your investment to fluctuate. Past performance should not be seen as an indication of future performance. The investments to which this report relates can fluctuate in value and accordingly you are not certain to make a profit on any investment: you could make a loss.

Haywood Securities, or certain of its affiliated companies, may from time to time receive a portion of commissions or other fees derived from the trading or financings conducted by other affiliated companies in the covered security. Haywood analysts are salaried employees who may receive a performance bonus that may be derived, in part, from corporate finance income.

Haywood Securities, Inc., and Haywood Securities (USA) Inc. do have officers in common however, none of those common officers affect or control the ratings given a specific issuer or which issuer will be the subject of Research coverage. In addition, the firm does maintain and enforce written policies and procedures reasonably designed to prevent influence on the activities of affiliated analysts.

Dissemination of Research

Research reports are disseminated either through electronic medium or in printed copy. Clients may access reports on our website, or receive publications directly via email. Haywood strives to ensure all clients receive research in a timely manner and at the same time. It is against our policy for analysts to discuss or circulate their recommendations internally prior to public distribution. This policy applies equally to recommendation changes, target changes and/or forecast revisions.

For Canadian residents: Haywood Securities Inc. is a Canadian registered broker-dealer and a member of the Investment Industry Regulatory Organization of Canada, the Toronto Stock Exchange, the Toronto Venture Exchange and the Canadian Investor Protection Fund and accepts responsibility for the dissemination of this report. Any Canadian client that wishes further information on any securities discussed in this report should contact a qualified salesperson of Haywood Securities Inc.

For U.S. residents: This investment research is distributed in the United States, as third party research by Haywood Securities (USA) Inc. Haywood Securities (USA) Inc. is a wholly owned subsidiary of Haywood Securities Inc., registered with the U.S. Securities and Exchange Commission, and is a member of FINRA and the Securities Investor Protection Corporation (SIPC). Haywood Securities (USA) Inc. as a U.S. registered broker-dealer accepts responsibility for this Research Report and its dissemination in the United States. Any U.S. client that wishes further information on any securities discussed in this report or wish to effect a transaction in these securities should contact a qualified salesperson of Haywood Securities (USA) Inc. Haywood Securities Inc. Research Analysts are considered Foreign Research Analysts to the USA and are not registered/qualified as Research Analysts with FINRA. As these analysts are considered Foreign Research Analysts *they may not be specifically subject to FINRA* (formerly NASD) Rule 2711 and FINRA (formerly NYSE) Rule 472 restrictions on communications with a Subject Company, Public Appearances and trading securities held by a Research Analyst Account.

This report may be distributed in the following states: nil. Otherwise, this report may only be distributed into those states with an institutional buyer state securities registration exemption.

Analyst Certification

I, Christopher Jones, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

Important Disclosures

Of the companies included in the report the following Important Disclosures apply:

- The Analyst(s) preparing this report (or a member of the Analysts' households) have a financial interest in Razor Energy Corp. (RZE-V), Gear Energy Inc. (GXE-T).

- Haywood Securities, Inc. or one of its subsidiaries has received compensation for investment banking services from Razor Energy Corp. (RZE-V), in the past 12 months.

Other material conflict of interest of the research analyst of which the research analyst or Haywood Securities Inc. knows or has reason to know at the time of publication or at the time of public appearance:

- n/a

Rating Structure

Each company within an analyst's universe, or group of companies covered, is assigned: (i) a recommendation or rating, usually BUY, HOLD, or SELL; (ii) a 12 month target price, which represents an analyst's current assessment of a company's potential stock price over the next year; (iii) an overall risk rating which represents an analyst's assessment of the company's overall investment risk; and (iv) specific risk ratings or risk profile parameters which in their aggregate support an analyst's overall risk rating. These ratings are more fully explained below. Before acting on our recommendation we caution you to confer with your Haywood investment advisor to determine the suitability of our recommendation for your specific investment objectives, risk tolerance and investment time horizon.

Recommendation Rating

BUY – The analyst believes that the security will outperform other companies in their sector on a risk adjusted basis or for the reasons stated in the research report the analyst believes that the security is deserving of a (continued) BUY rating.

HOLD – The analyst believes that the security is expected to perform in line with other companies in their sector on a risk adjusted basis or for the reasons stated in the research report the analyst believes that the security is deserving of a (continued) HOLD rating.

SELL – Investors are advised to sell the security or hold alternative securities within the sector. Stocks in is expected to under-perform other companies on a risk adjusted basis or for the reasons stated in the research report the analyst believes that the security is deserving of a (continued) SELL rating.

TENDER – The analyst is recommending that investors tender to a specific offering for the company's stock.

RESEARCH COMMENT – An analyst comment about an issuer event that does not include a rating or recommendation.

UNDER REVIEW – Placing a stock Under Review does not revise the current rating or recommendation of the analyst. A stock will be placed Under Review when the relevant company has a significant material event with further information pending or to be announced. An analyst will place a stock Under Review while he/she awaits sufficient information to re-evaluate the company's financial situation.

COVERAGE DROPPED – Haywood Securities will no longer cover the issuer. Haywood will provide notice to clients whenever coverage of an issuer is discontinued.

Haywood's focus is to search for undervalued companies which analysts believe may achieve attractive risk-adjusted returns. This research coverage on potentially undervalued companies may result in an outweighed percentage of companies rated as BUY. Management regularly reviews rating and targets in all sectors to ensure fairness and accuracy.

For further information on Haywood Securities' research dissemination policies, please visit: http://haywood.com/what-we-offer/research/research-policy

Overall Risk Rating

Very High Risk: Venture type companies or more established micro, small, mid or large cap companies whose risk profile parameters and/or lack of liquidity warrant such a designation. These companies are only appropriate for investors who have a very high tolerance for risk and volatility and who are capable of incurring temporary or permanent loss of a very significant portion of their investment capital.

High Risk: Typically micro or small cap companies which have an above average investment risk relative to more established or mid to large cap companies. These companies will generally not form part of the broad senior stock market indices and often will have less liquidity than more established mid and large cap companies. These companies are only appropriate for investors who have a high tolerance for risk and volatility and who are capable of incurring a temporary or permanent loss of a significant loss of their investment capital.

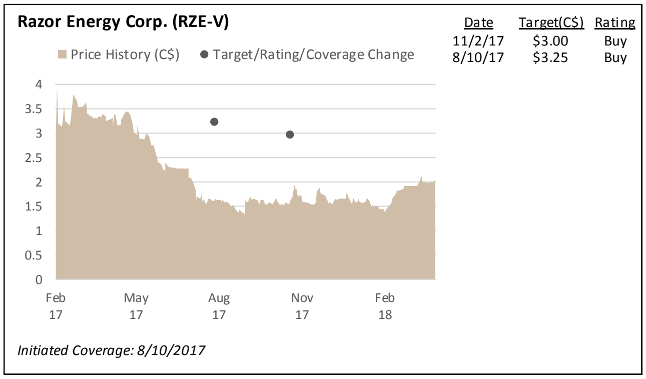
Medium-High Risk: Typically mid to large cap companies that have a medium to high investment risk. These companies will often form part of the broader senior stock market indices or sector specific indices. These companies are only appropriate for investors who have a medium to high tolerance for risk and volatility and who are prepared to accept general stock market risk including the risk of a temporary or permanent loss of some of their investment capital

Moderate Risk: Large to very large cap companies with established earnings who have a track record of lower volatility when compared against the broad senior stock market indices. These companies are only appropriate for investors who have a medium tolerance for risk and volatility and who are prepared to accept general stock market risk including the risk of a temporary or permanent loss of some of their investment capital.

Distribution of Ratings (as of April 13, 2018)

	%	#	IB Clients (TTM)
Buy	70.7%	70	96.2%
Hold	13.1%	13	3.8%
Sell	1.0%	1	0.0%
Tender	0.0%	0	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	15.2%	15	0.0%

Price Chart, Rating and Target Price History (as of April 13, 2018)



B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review
Source: Capital IQ and Haywood Securities