

## THIRD QUARTER 2023

Median Reserves Acquisition Price \$5.93/boe Median Production Acquisition Price \$28,025/boe/d Enterprise Value of Transactions \$2.1 billion Assets and Companies for Sale \$3.7 billion



# CANADIAN OIL INDUSTRY MERGER AND ACQUISITION REPORT

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## CANADIAN OIL INDUSTRY **MERGER AND ACQUISITION REPORT**

## **HIGHLIGHTS**

## **THIRD QUARTER 2023**

Median Reserves Acquisition Price Enterprise Value of Transactions \$5.93/boe

\$2.1 billion

Median Production Acquisition Price \$28,025/boe/d

Assets and Companies for Sale \$3.7 billion

Purchaser	Acquisition	Enterprise Value	Acquisit	ion Price	Page Number
		\$MM	\$/boe	\$/boe/d	
Cygnet	Athabasca assets	\$160.00	\$6.93	\$53,333	32
Cygnet	Murphy assets	\$150.00	\$24.61	\$76,726	34
Highwood	Boulder	\$135.08	\$4.93	\$48,211	36
Highwood	Castlegate	\$42.41	\$9.44	\$28,397	38
Highwood	Shale	\$14.23	\$0.45	\$12,978	40
Lycos	Wyatt	\$8.79	\$8.53	\$21,971	42
Peyto	Repsol assets	\$636.00	\$2.07	\$27,652	44
Strathcona	Pipestone	\$842.56	\$3.14	\$21,214	46

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## M&A VALUE DOWN 53% QUARTER-OVER-QUARTER

The total M&A activity in the third quarter of 2023 was approximately \$2.1 billion down 53% from the \$4.5 billion of total enterprise value of M&A activity recorded in the second quarter of 2023. In the third quarter of 2022, the total enterprise value was approximately \$6.7 billion. Total M&A activity in the first nine months of 2023 was \$9.9 billion.

The largest transaction this quarter was Strathcona Resources Ltd.'s amalgamation with Pipestone Energy Corp. for approximately \$843.0 million (page 46). Pipestone's main producing property was located in the Pipestone area of Alberta, just southwest of Grande Prairie. The transaction was structured as an amalgamation between Pipestone and Strathcona whereby each Pipestone shareholder received 0.067967 of an AmalCo share and each Strathcona shareholder received 0.089278 of an AmalCo share. Through this transaction, Strathcona became a publicly-traded oil and natural gas company, with production of approximately 185,000 boe/d (78% liquids). The management team of Strathcona will be running the go forward entity which will continue under the name Strathcona Resources Ltd.

Another significant transaction in the quarter was Peyto Exploration & Development Corp.'s purchase of substantially all of Repsol S.A.'s Canadian assets for \$636.0 million (page 44). Repsol's main producing property was located in the Edson area of Alberta. As part of the transaction, Peyto also acquired Repsol's interests in the non-Deep Basin lands which are located in British Columbia, Saskatchewan, Manitoba and frontier assets in Yukon, Nunavut and the Northwest Territories. The acquired assets also include approximately 571 MMcf/d of gross operated processing capacity (71% working interest) across five owned and operated facilities with ten compressor stations and approximately 2,200 km of operated pipelines with incremental access to third party plants. Concurrent with the acquisition, Peyto completed a \$201.0 million bought deal equity offering through the issuance of 16,916,500 shares at a price of \$11.90 per share to partially finance the acquisition. The acquisition was also funded through an upsizing of Peyto's current revolving credit facility from \$800.0 million to \$1.0 billion, and a new term loan facility of \$300.0 million. Peyto also announced a private placement issuance of \$16.0 million of senior secured notes with a coupon rate of 6.46% which mature in October 2030. Proceeds from the notes were used to repay the outstanding \$100.0 million, 3.70% notes due on October 24, 2023 and to decrease Peyto's borrowings under its amended credit facility.

The number of large transactions (over \$5 million in value) in the third quarter of 2023 increased to 14 deals from two in the second quarter of 2023. With the decrease in enterprise value in the third quarter, the average deal size for large transactions decreased to \$146.3 million, last quarter it was \$2.2 billion.

Of the 14 large transactions in the third quarter, there were seven corporate transactions and seven property deals, with total enterprise values of approximately \$1.1 billion and \$977.6 million, respectively. As there was an extremely low number of transactions last quarter, the third quarter 2023 numbers will be compared to the numbers calculated in the first quarter of 2023. In the first quarter of 2023 there were three corporate deals valued at approximately \$614.0 million and 14 property transactions valued at approximately \$2.6 billion. Of the approximately \$2.0 billion in large transactions in the quarter, seven deals were oil-weighted and seven transactions were weighted towards natural gas, with total enterprise values of \$230.4 million and \$1.8 billion, respectively.

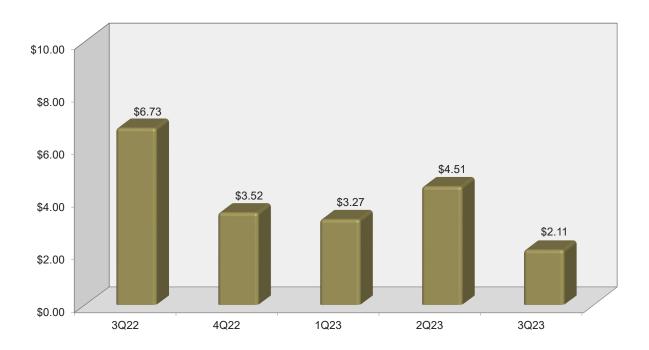
The median acquisition price paid per flowing barrel decreased 10% to \$28,025/boe/d in the third quarter of 2023 from \$31,022/boe/d in the first quarter of 2023. The median acquisition price for proven plus probable reserves increased 14% to \$5.93/boe in the third quarter of 2023 from \$5.19/boe in the first quarter of 2023.

In the third quarter of 2023, the median price paid for oil-weighted transactions was \$28,397/boe/d versus \$27,652/boe/d for natural gas transactions, a spread of \$745/boe/d. In the first quarter of 2023 the spread was \$22,577/boe/d towards oil. On a proved plus probable reserves basis, the spread between oil and natural gas also remained in favour of oil. The median acquisition price for oil in the third quarter of 2023 was \$8.53/boe and \$3.14/boe for natural gas, a \$5.39 spread towards oil. During the first quarter of 2023, the spread was \$4.19 towards oil.

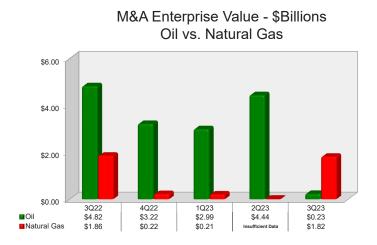
An interesting trend we witnessed in the third quarter of 2023 was a number of purchasers announcing multiple acquisitions. Highwood Asset Management Ltd. acquired three privately-held companies with its purchases of Boulder Energy Ltd. for \$135.1 million (page 36), Castlegate Energy Ltd. for \$42.4 million (page 38) and Shale Petroleum Inc. for \$14.2 million (page 40). Cygnet Energy Ltd. completed the acquisition of assets in the Placid, Saxon and Simonette areas of Alberta from Athabasca Oil Corporation (page 32) and Murphy Oil Corporation (page 34) for \$160.0 million and \$150.0 million, respectively. Lycos Energy Inc. acquired two private companies in the quarter with its purchases of Durham Creek Exploration Ltd. for \$22.5 million (page 29) and Wyatt Resources Ltd. for \$8.8 million (page 42). With high oil prices forecasted to remain for the foreseeable future, we will likely continue to see strong M&A activity for the remainder of 2023 and into early 2024.

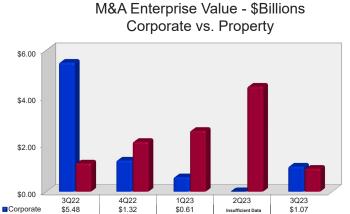
### **M&A ENTERPRISE VALUE**

M&A Enterprise Value of Transactions - \$Billions



The total M&A enterprise value (large and small deals) in the third quarter of 2023 decreased 53% to \$2.1 billion from the \$4.5 billion recorded in the second quarter of 2023. On a year-over-year basis, the enterprise value in the third quarter of 2023 dropped 69% from the \$6.7 billion recorded in the third quarter of 2022.





\$2.58

\$4.46

The enterprise value for large oil-weighted transactions valued at over \$5.0 million was \$230.4 million in the third quarter of 2023, a 95% drop from the \$4.4 billion calculated in the second quarter of 2023. The enterprise value for large natural gas-weighted transactions in the third quarter was \$1.8 billion compared to no natural gas-weighted transactions recorded in the second quarter of 2023.

Property

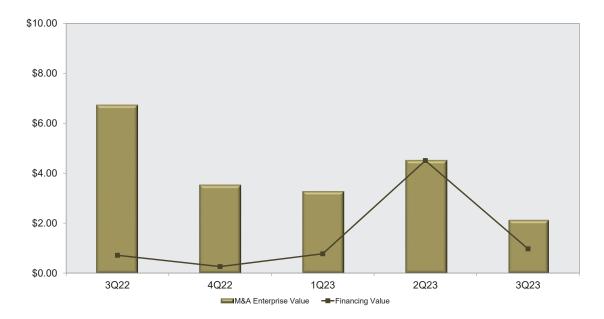
\$1.20

\$2.12

Corporate transactions valued at over \$5.0 million was \$1.1 billion in the third quarter of 2023 compared to no corporate transactions recorded in the second quarter of 2023. The enterprise value for property transactions valued at over \$5.0 million decreased 78% to \$977.6 million in the third quarter of 2023 from \$4.5 billion in the prior quarter.

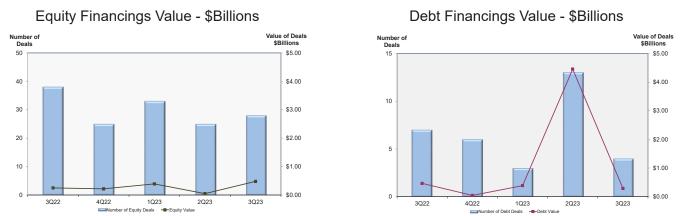
\$0.98

Enterprise Value of Transactions Relative to Total Value of Financings - \$Billions



The total value of financings in the third quarter of 2023 decreased 78% to \$969.7 million from \$4.5 billion in the second quarter of 2023. The total number of financings in the third quarter of 2023 was 32, compared to 38 in the previous quarter.

The amount of equity raised in the third quarter of 2023 was \$480.1 million, compared to \$48.8 million in the second quarter of 2023. The total number of equity financings in the third quarter was 28, compared to 25 in the second quarter of 2023. Debt financings dropped to \$288.2 million in the third quarter from \$4.5 billion in the second quarter. The total number of debt financings in the third quarter was four, compared to 13 in the previous quarter.

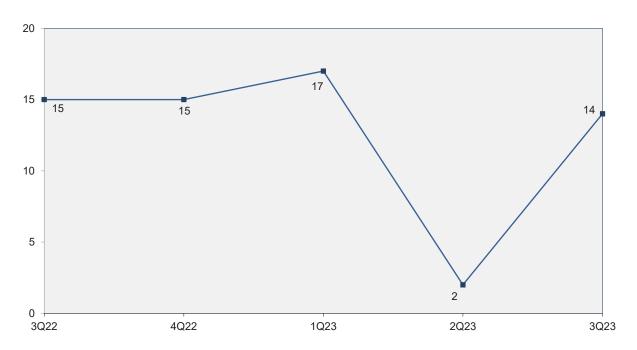


The largest equity offering in the quarter was Peyto's bought-deal equity financing in September for \$201.3 million. Peyto issued a total of 16,916,500 shares at a price of \$11.90 per share which included the overallotment option in full. Proceeds from the offering were used towards the acquisition of assets from Repsol (page 44).

The largest debt offering in the quarter was International Petroleum Corporation's unsecured note offering of \$201.4 million with a four-year term and a coupon rate of 7.25%. Net proceeds from the offering were used towards general corporate purposes.

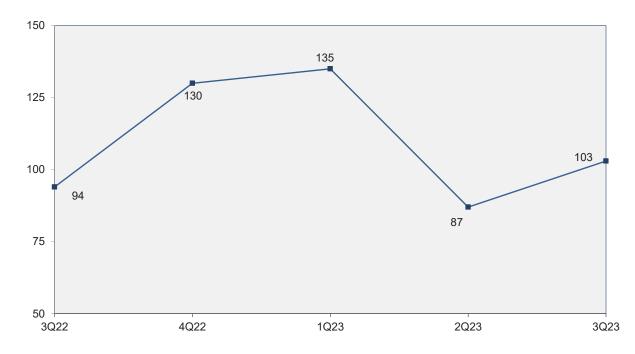
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Number of Transactions Over \$5.0 Million



The number of large transactions (valued at over \$5 million in size) was 14 in the third quarter of 2023, up 600% from two deals recorded in the previous quarter. The average deal size for large transactions in the third quarter was \$146.3 million compared to \$2.2 billion last quarter. There were seven large corporate transactions and seven large property transactions in the third quarter, with average deal sizes of \$152.9 million and \$139.7 million, respectively. The enterprise value of large transactions this quarter was \$2.1 billion compared to \$4.5 billion in the previous quarter.

The number of small deals (under \$5 million in size) increased 18% to 103 in the third quarter of 2023 from the 87 recorded last quarter. The total value of small deals rose 22% on a quarter-over-quarter basis to approximately \$63.8 million from approximately \$52.5 million.

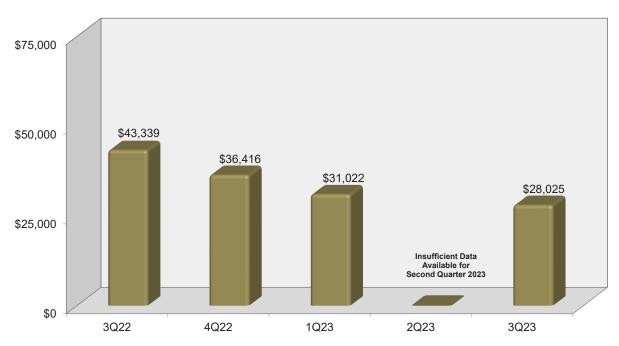


#### Number of Transactions Under \$5.0 Million

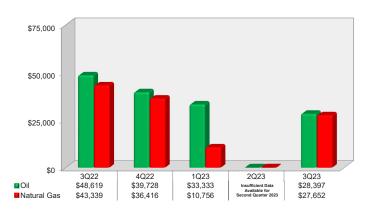
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## **MEDIAN PRODUCTION ACQUISITION PRICE**

Median Production Acquisition Price - \$/boe/d

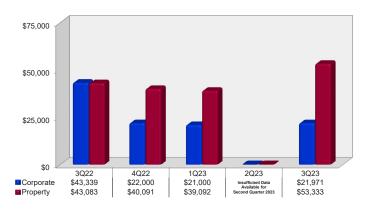


The median acquisition price per producing barrel of oil equivalent decreased 10% to \$28,025/boe/d in the third quarter of 2023 from the first quarter price of \$31,022/boe/d. On a year-over-year basis, the median acquisition price for production is down 35% from the \$43,339/boe/d recorded in the third quarter of 2022.



### Median Production Acquisition Price - \$/boe/d Oil vs. Natural Gas

#### Median Production Acquisition Price - \$/boe/d Corporate vs. Property



The median price paid for oil production decreased 15% to \$28,397/boe/d in the third quarter of 2023 from \$33,333/boe/d in the first quarter. The median price paid for natural gas-weighted transactions on a \$/boe/d basis increased 157% to \$27,652/boe/d from \$10,756/boe/d in the first quarter. There were seven large oil-weighted transactions and seven large natural gas-weighted transactions this quarter.

The median price paid for production for corporate transactions rose 5% in the third quarter to \$21,971/boe/d from \$21,000/boe/d in the first quarter of 2023. The median production price paid for property transactions increased 36% to \$53,333/boe/d from \$39,092/boe/d in the first quarter of 2023. There were seven large corporate transactions and seven large property transactions in the third quarter of 2023.

A transaction that is representative of the median acquisition price on a \$/boe/d basis was Peyto's acquisition of assets from Repsol for \$27,652/boe/d (page 44). Repsol's main producing property was located in the Edson area of Alberta. As part of the transaction, Peyto also acquired Repsol's interests in the non-Deep Basin lands which are located in British Columbia, Saskatchewan, Manitoba and frontier assets in Yukon, Nunavut and the Northwest Territories. The acquired assets also include approximately 571 MMcf/d of gross operated processing capacity (71% working interest) across five owned and operated facilities with ten compressor stations and approximately 2,200 km of operated pipelines with incremental access to third party plants. Key active natural gas plants include Edson (61% working interest), Wild River (81% working interest), and Bigstone (50% working interest). Peyto has identified over 800 gross drilling locations on the Repsol lands.

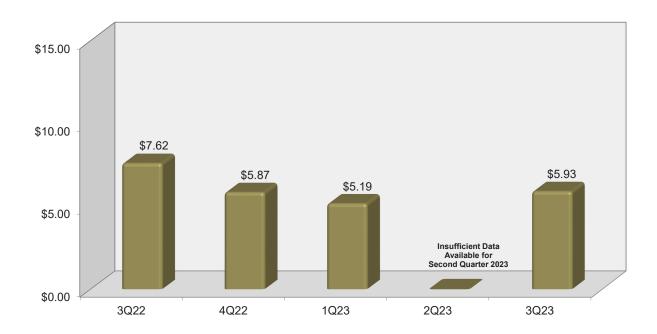
Another transaction that is representative of the median acquisition price on a \$/boe/d basis was Highwood's acquisition of Castlegate for \$28,397/boe/d (page 38). Castlegate's main producing property was located in the Wilson Creek area of Alberta. This was one of three acquisitions completed by Highwood in the third quarter, Highwood also purchased privately-held Boulder for \$48,211/boe/d (page 36) and privately-held Shale for \$12,978/boe/d (page 40). Concurrent with the acquisitions, Highwood also completed a \$35.0 million equity financing. With these transactions, Highwood is forecasting its production to be 4,700 boe/d (76% oil and natural gas liquids).

The highest-priced transaction on a production basis was Cygnet's acquisition of assets from Murphy for \$76,726/boe/d (page 34). The assets acquired are located in the Placid, Saxon and Simonette areas of Alberta. Murphy held a 70% operated interest at Saxon and Simonette targeting the Duvernay and a 30% non-operated interest at Placid targeting the Montney. Cygnet acquired Murphy's interests concurrently with the purchase of Athabasca's joint interests in these areas for \$53,333/boe/d (page 32). Athabasca held a 70% operated working interest at Placid and a 30% non-operated working interest at Saxon and Simonette.

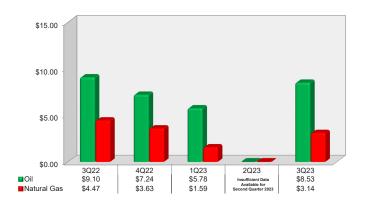
The second lowest-priced transaction on a production basis was Strathcona's amalgamation with Pipestone for \$21,214/boe/d (page 46). Pipestone's main producing property was located in the Pipestone area of Alberta, just southwest of Grande Prairie. The transaction was structured as an amalgamation between Pipestone and Strathcona whereby each Pipestone shareholder received 0.067967 of an AmalCo share and each Strathcona shareholder received 0.089278 of an AmalCo share. Through this transaction, Strathcona became a publicly-traded oil and natural gas company, with production of approximately 185,000 boe/d (78% liquids). The management team of Strathcona will be running the go forward entity which will continue under the name Strathcona Resources Ltd.

## MEDIAN RESERVES ACQUISITION PRICE

Median Reserves Acquisition Price - \$/boe P+P

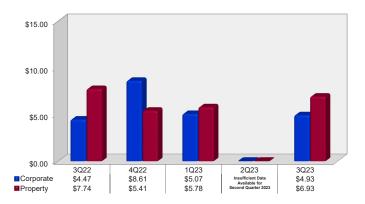


The median acquisition price for proven plus probable reserves increased 14% to \$5.93/boe this quarter from the \$5.19/boe calculated in the first quarter of 2023. On a year-over-year basis, the price for proven plus probable reserves decreased 22% from the \$7.62/boe recorded in the third quarter of 2022.



Median Reserves Acquisition Price - \$/boe P+P Oil vs. Natural Gas

#### Median Reserves Acquisition Price - \$/boe P+P Corporate vs. Property



The price paid for oil-weighted transactions rose 48% to \$8.53/boe in the third quarter of 2023 from the \$5.78/boe calculated in the first quarter of 2023. The price paid for natural gas-weighted transactions increased 97% to \$3.14/boe in the third quarter from the \$1.59/boe recorded in the first quarter of 2023.

The median reserves acquisition price paid for corporate transactions in the third quarter of 2023 decreased 3% to \$4.93/boe in the third quarter from the \$5.07/boe paid in the first quarter of 2023. The price paid for property transactions rose to \$6.93/boe in the third quarter compared to the \$5.78/boe calculated in the first quarter, a 20% increase.

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A transaction that is representative of the median reserves acquisition price on a \$/boe basis was Cygent's acquisition of assets from Athabasca for \$6.93/boe (page 32). The assets acquired are located in the Placid, Saxon and Simonette areas of Alberta. Athabasca held a 70% operated working interest at Placid targeting the Montney and a 30% non-operated working interest at Saxon and Simonette targeting the Duvernay. Cygnet acquired Athabasca's interests concurrently with the purchase of Murphy's joint interests in these areas for \$24.61/boe on a proven reserves basis (page 34). Murphy held a 70% operated interest at Saxon and Simonette and a 30% non-operated interest at Placid.

Highwood completed three corporate transactions in the third quarter of 2023, representing the lowest-priced transaction on a reserves basis, the highest-priced corporate transaction on a reserves basis and a transaction that is representative of the median reserves acquisition price on a \$/boe basis.

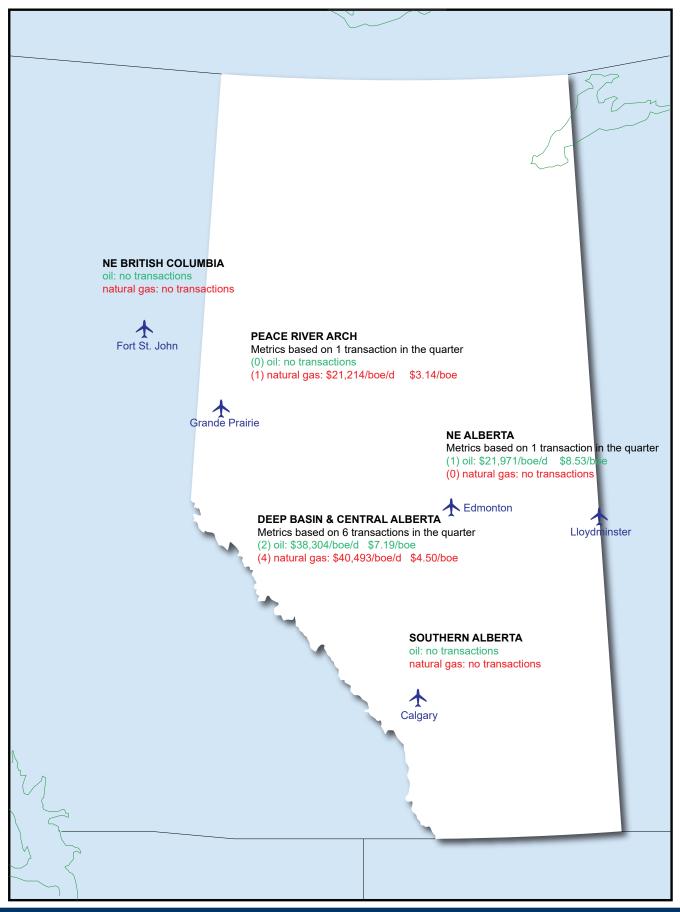
A corporate transaction that is representative of the median reserves acquisition price on a \$/boe basis was Highwood's acquisition of privately-held Boulder for \$4.93/boe (page 36). Boulder's main producing property was located in the Brazeau area of Alberta.

The highest-priced corporate transaction on a reserves basis was Highwood's acquisition of Castlegate for \$9.44/boe (page 38). Castlegate's main producing property was located in the Wilson Creek area of Alberta.

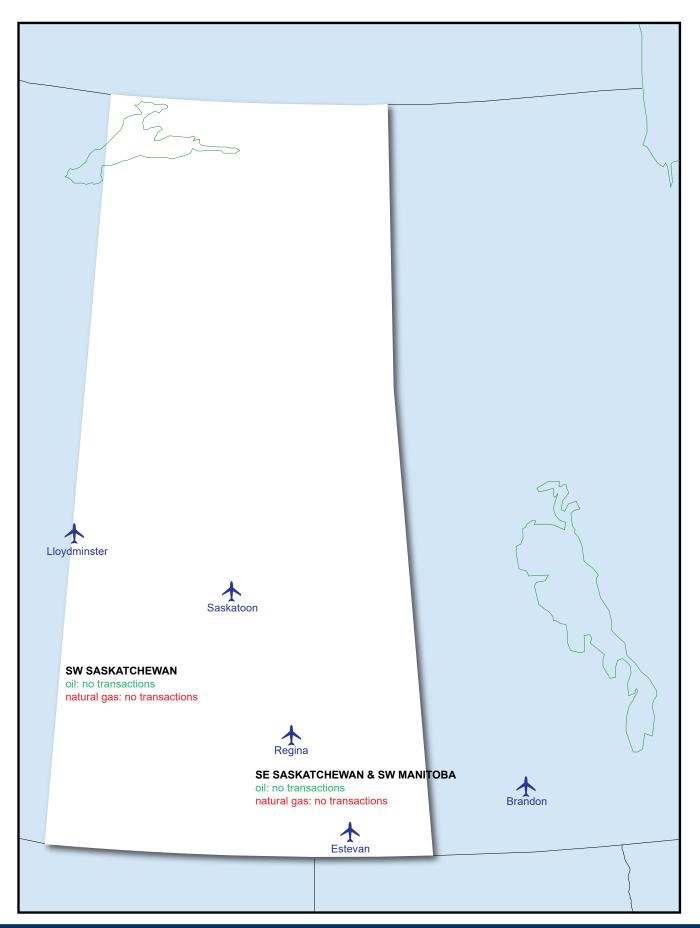
The lowest-priced transaction on a reserves basis was Highwood's acquisition of Shale for \$0.45/boe (page 40). Shale's main producing properties were located in the Claresholm, Harmattan and Ricinus areas of Alberta.

The second lowest-priced transaction on a reserves basis was Peyto's acquisition of assets from Repsol for \$2.07/boe (page 44). Repsol's main producing property was located in the Edson area of Alberta. As part of the transaction, Peyto also acquired Repsol's interests in the non-Deep Basin lands which are located in British Columbia, Saskatchewan, Manitoba and frontier assets in Yukon, Nunavut and the Northwest Territories. The acquired assets also include approximately 571 MMcf/d of gross operated processing capacity (71% working interest) across five owned and operated facilities with ten compressor stations and approximately 2,200 km of operated pipelines with incremental access to third party plants. Key active natural gas plants include Edson (61% working interest), Wild River (81% working interest), and Bigstone (50% working interest). Peyto has identified over 800 gross drilling locations on the Repsol lands.

## **PRODUCTION AND RESERVE METRICS BY AREA**



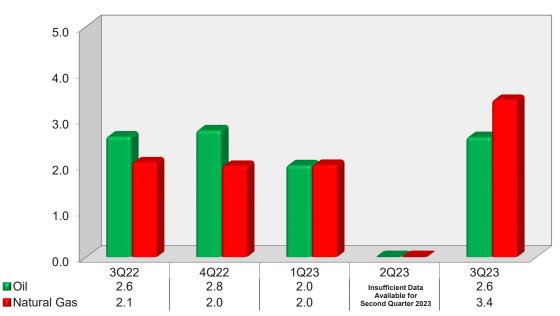
## **PRODUCTION AND RESERVE METRICS BY AREA**



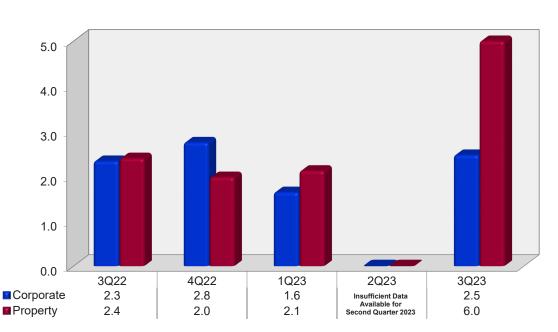
Third Quarter 2023

### **CASH FLOW MULTIPLES**

Median Acquisition Operating Cash Flow Multiples Oil vs. Natural Gas



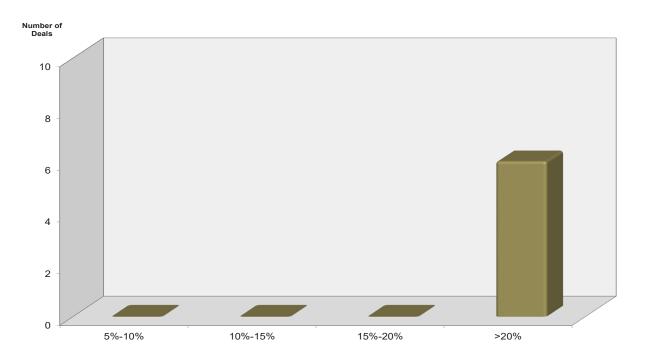
The median operating cash flow multiple for oil-weighted transactions in the third quarter of 2023 was 2.6, up 30% from the 2.0 recorded in the first quarter of 2023. The median operating cash flow multiple for natural gas-weighted transactions in the third quarter of 2023 rose 70% to 3.4 from 2.0 in the first quarter.



The median operating cash flow multiple for corporate transactions in the third quarter of 2023 increased to 2.5 in the third quarter, compared to the 1.6 recorded in the first quarter. The median operating cash flow multiple for property transactions in the third quarter of 2023 jumped to 6.0 from the 2.1 recorded in the first quarter. The significant increase in the operating cash flow multiple paid for property transactions in the third quarter of 2023 was driven by Cygnet's purchase of Athabasca's interests for 7.9 times forecasted operating cash flow. Care should be taken in drawing conclusions on operating cash flow multiples, given that the cash flow assumptions that were available for this analysis are not the same for every transaction.

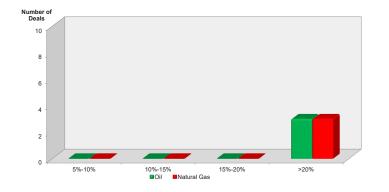
#### Median Acquisition Operating Cash Flow Multiples Corporate vs. Property

## **DISCOUNTED CASH FLOW RATES**



The discounted cash flow ("DCF") rates on a proven plus probable basis have been analyzed six transactions in the third quarter of 2023.

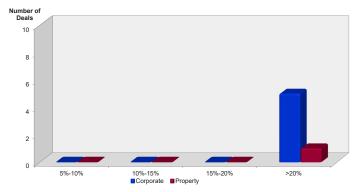
Care should be taken in drawing conclusions on DCF rates, given that the price forecasts in the engineering reports that were available for this analysis are not the same for each transaction. If price forecasts could be matched to current reserve evaluations at the time of the transactions, a more accurate representation of the DCF rates would exist.



**Discounted Cash Flow Rate** 

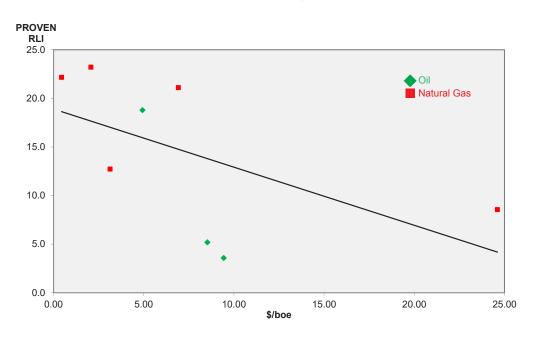
Oil vs. Natural Gas

#### Discounted Cash Flow Rates Corporate vs. Property



## **RESERVE LIFE INDEX COMPARED TO M&A PRICES**

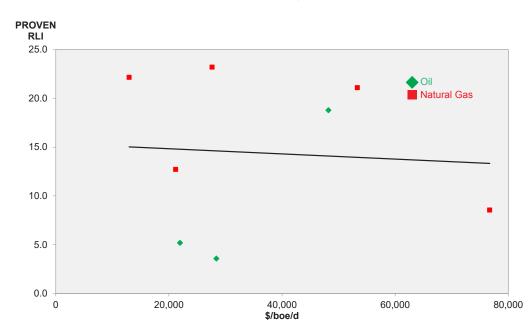
The graphs below show the relationship between proven RLI and acquisition prices paid on a reserves and production basis during the third quarter of 2023. The RLI is calculated by dividing the total proven reserves by the annualized production.



Proven RLI vs. \$/boe

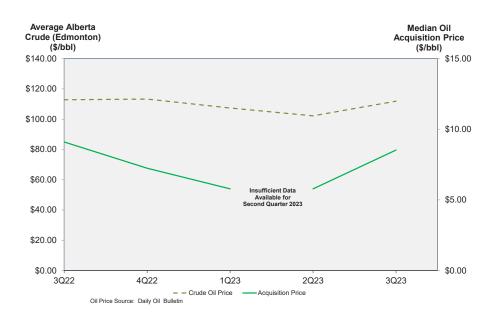
The trend line for RLI versus reserve acquisition prices (\$/boe) illustrated above shows a negative correlation between the RLI and price paid for reserves on a \$/boe basis in that as RLI decreases, reserves acquisition costs increase.

The chart for RLI versus production acquisition prices (\$/boe/d) illustrated below shows a slight negative correlation, in that as RLI decreases, production acquisition costs increase. Typically, the correlation between RLI and production acquisition costs are positive in that as RLI increases production acquisition costs also increase.



Proven RLI vs. \$/boe/d

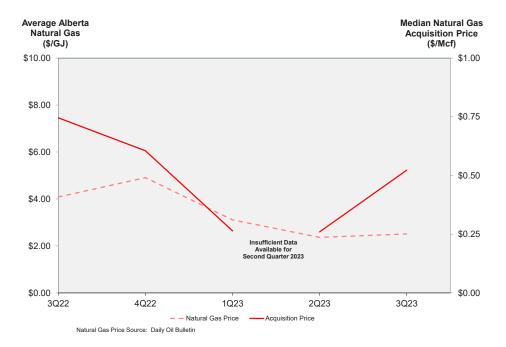
### **CORRELATION OF M&A PRICES AND COMMODITY PRICES**



Oil Acquisition Price vs. Crude Oil Price

The preceding graph shows the average Alberta spot crude oil price based on par quality at Edmonton, versus the median proven plus probable reserve oil acquisition price calculated by Sayer Energy Advisors. As illustrated in the graph above, acquisition prices have trended higher with the increase in the price of oil.

The graph below shows the average Alberta natural gas price (AECO-C) versus the median proven plus probable reserve natural gas acquisition price calculated by Sayer Energy Advisors. As illustrated in the graph below, the price of natural gas has remained relatively flat but acquisition prices for natural gas-weighted transactions has increased.



#### Natural Gas Acquisition Price vs. Alberta Natural Gas Price

## PRIOR QUARTER UPDATE

Sayer Energy Advisors is constantly updating previous quarters as new or updated information becomes available. Information subsequent to the second quarter of 2023 has allowed us to update our database and revise prior quarter statistics.

There were no material changes to our statistics since the second quarter of 2023.

## FOURTH QUARTER 2023 MERGER AND ACQUISITION ACTIVITY

There have been a number of deals announced in the first few weeks of the fourth quarter of 2023, some of which are highlighted below.

Cardinal Energy Ltd. announced the acquisition of assets in its core operating area for approximately \$25.0 million. The acquired assets will add approximately 2.0 MMboe of proved developed producing reserves and approximately 900 boe/d of production beginning in the fourth quarter of 2023. The acquisition includes the consolidation of working interests in an existing, operated, long-life light oil unit located in the Mitsue area of Alberta, and approximately 500 bbl/d of Clearwater heavy oil production located in the Buffalo-Figure Lake area of Alberta with up to 25 associated development drilling locations.

On October 4, 2023, Suncor Energy Inc. announced it was acquiring TotalEnergies EP Canada Ltd. for approximately \$1.5 billion. Originally, Suncor announced on April 26, 2023 it had entered into an agreement with TotalEnergies for the sale of all of the shares of TotalEnergies EP Canada Ltd. for \$5.5 billion in cash plus a contingent payment of up to \$600.0 million. This transaction was conditional upon ConocoPhillips waiving its right of first refusal with respect to the Surmont Oil Sands Project. ConocoPhillips subsequently exercised its preemption right to acquire the interest from TotalEnergies in the second quarter of 2023 and as a result, both Suncor and TotalEnergies negotiated the revised transaction early in the fourth quarter of 2023.

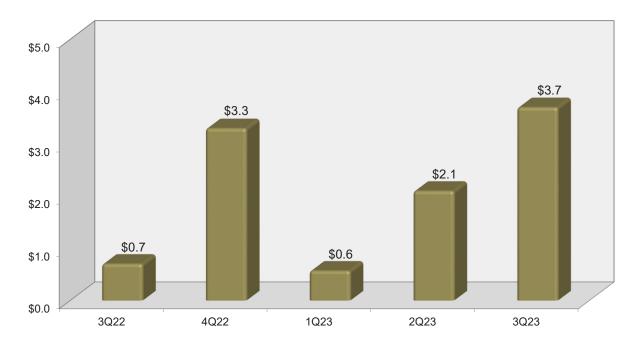
Tourmaline Oil Corp. announced it has entered into a definitive share purchase agreement to acquire all the shares of Bonavista Energy Corporation for approximately \$1.5 billion, consisting of \$725.0 million Tourmaline shares and \$725.0 million cash, less Bonavista's net debt. Bonavista's assets are located in the Deep Basin with average production in excess of 60,000 boe/d (64% natural gas), further consolidating Tourmaline's position in the area.

Perpetual Energy Inc. announced the sale of certain assets in the Mannville area of Alberta to privately-held Pointbreak Resources Inc. for \$35.8 million. The Mannville assets are substantially all of the production attributed to Perpetual's eastern Alberta cash-generating unit which averaged 1,449 boe/d (65% heavy oil).

Rubellite Energy Inc. announced an agreement to acquire assets in the Figure Lake and Edwand areas of Alberta as well as undeveloped land in the Nixon area of Alberta for \$34.0 million. The acquired assets include approximately 800 bbl/d of oil production and 215 net sections of land on the Clearwater play.

Tamarack Valley Energy Ltd. announced it has entered into an agreement to sell its non-core west central Alberta assets for \$123.0 million. Production from the assets is approximately 7,000 boe/d (65% natural gas) from the Cardium and Leduc formations.

## MERGER AND ACQUISITION CANDIDATES



Companies and Assets for Sale - \$Billions

The total value of companies and assets for sale increased 74% to approximately \$3.7 billion in the third quarter of 2023 from \$2.1 billion in the second quarter of 2023.

The "major assets for sale" category decreased 48% to approximately \$493.0 million in the third quarter from the \$953.0 million recorded last quarter.

The "companies for sale" category increased 186% to \$3.1 billion in the third quarter of 2023 from the \$1.1 billion recorded in the second quarter of 2023. In the third quarter, Gear Energy Ltd. initiated a strategic repositioning process. Gear's assets are located in the Greater Lloydminster area of Alberta and Saskatchewan, Tableland area of southeastern Saskatchewan and the Wilson Creek area of central Alberta with production of 5,742 boe/d (86% liquids).

The "companies for sale" section includes those companies that are for sale, reviewing strategic alternatives to maximize shareholder value or are in CCAA or receivership. Several entities, including Boulder (page 36), Castlegate (page 38), Pipestone (page 46), Shale (page 40) and Wyatt (page 42) were sold in the third quarter and had not previously publicly announced their intention to sell in advance.

## MERGER AND ACQUISITION CANDIDATES

#### **Companies with Major Assets for Sale**

Anova Resources Inc.	Elevation Oil & Gas Ltd.	West Lake Energy Corp.
(1)		

Total approximate value<sup>(1)</sup> for major sellers

\$493.0 million

#### Companies with Minor Assets for Sale

A2N Energy Corporation	Insignia Energy Ltd.	Tallahassee Exploration Inc.
Aldon Oils Ltd.	Kennibar Resources Ltd.	Tamarack Valley Energy Ltd.
Ascensun Oil and Gas Ltd.	Kiwetinohk Energy Corp.	Vermilion Energy Inc.
Asta Energy Ltd.	Long Fortune Petroleum (SK) Corporation	
Bering Exploration Company, ULC	Lycos Energy Inc.	
Burgess Creek Exploration Inc.	NuVista Energy Ltd.	
Cardinal Energy Ltd.	Prairie Provident Resources Inc.	
Erdol Resources Corp.	Raymark Lands Ltd.	
(4)		

Total approximate value<sup>(1)</sup> for minor sellers

#### **Companies for Sale**

Companies which announced in the quarter that they were either available for sale, seeking ways to "maximize shareholder value" or were insolvent are as follows:

Abbey Resources Corporation<sup>(2)</sup> CLEO Energy Corp. Copetrex Oil & Gas Co. Ltd.<sup>(2)</sup> Erikson National Energy Inc. Everest Canadian Resources Corp.<sup>(2)</sup> Primrose Drilling Ventures Ltd.

Fireweed Energy Ltd. Free Rein Resources Ltd.<sup>(2)</sup> Gear Energy Ltd. Goldenkey Oil Inc.<sup>(2)</sup>

Ribbon Creek Resources Inc. West 5 Resources Inc. Westdrum Energy Ltd. Woodrush Royalty ULC

Total approximate value<sup>(1)</sup> for companies for sale

## TOTAL APPROXIMATE VALUE<sup>(1)</sup> FOR ALL M&A CANDIDATES

\$3.7 billion

\$3.1 billion

\$62.4 million

Approximate value is an estimation of the overall value of the assets and companies for sale, including confidential offerings but we have not conducted a detailed 1). valuation of the individual assets or companies. The actual selling prices may vary, perhaps by a considerate amount, from the figures presented here.

2). Companies in BIA, CCAA or Receivership.

## SECOND QUARTER 2023 TRANSACTION ANALYSIS SUMMARY

Month	Purchaser	Acquisition	Enterprise Value <sup>(1)</sup>	Reserves Value <sup>(1)</sup>
			(\$million)	(\$million)
Мау	ConocoPhillips	TotalEnergies assets	4,440.00	4,440.00
Notoo: (1) F	Tan definitions and name 40			

Notes: (1) For definitions see page 49

(2) Based on total proven reserves

## SECOND QUARTER 2023 TRANSACTION ANALYSIS SUMMARY

Proven Producing Reserves Mix	Proven BOE Reserve Life Index <sup>(1)</sup>	Reserves <sup>(1)</sup>	Production <sup>(1)</sup>	Cash Flow Multiple <sup>(1)</sup>	Premium/(Discount) <sup>(1)</sup> To Market Price <sup>(1)</sup>
(%oil/%natural gas)	(Res./Annualized Prod.)	(\$/boe)	(\$/boe/d)	Operating	%
100/0 <sup>(2)</sup>	39.4	4.28	63,429	4.8	-

## THIRD QUARTER 2023 TRANSACTION ANALYSIS SUMMARY

Month	Purchaser	Acquisition	Enterprise Value <sup>(1)</sup>	Reserves Value <sup>(1)</sup>
			(\$million)	(\$million)
July	Cygnet	Athabasca assets	160.00	160.00
July	Highwood	Boulder	135.08	130.17
July	Highwood	Castlegate	42.41	39.76
July	Highwood	Shale	14.23	3.89
August	Cygnet	Murphy assets	150.00	150.00
August	Lycos	Wyatt	8.79	8.79
August	Strathcona	Pipestone	842.56	703.10
September	Peyto	Repsol assets	636.00	636.00

Notes: (1) For definitions see page 49

(2) Based on total proven reserves

## THIRD QUARTER 2023 TRANSACTION ANALYSIS SUMMARY

Proven Producing Reserves Mix	Proven BOE Reserve Life Index <sup>(1)</sup>	Reserves <sup>(1)</sup>	Production <sup>(1)</sup>	Cash Flow Multiple <sup>(1)</sup>	Premium/(Discount) <sup>(1)</sup> To Market Price <sup>(1)</sup>
(%oil/%natural gas)	(Res./Annualized Prod.)	(\$/boe)	(\$/boe/d)	Operating	%
45/55 <sup>(2)</sup>	21.1	6.93	53,333	7.9	-
50/50	18.8	4.93	48,211	3.8	-
80/20	3.6	9.44	28,397	1.4	-
36/64	22.2	0.45	12,978	2.2	-
39/61 <sup>(2)</sup>	8.5	24.61 <sup>(2)</sup>	76,726	-	-
99/1 <sup>(2)</sup>	5.2	8.53	21,971	-	-
40/60	12.7	3.14	21,214	2.7	(25.1)
24/76	23.2	2.07	27,652	4.1	-

## THIRD QUARTER MERGER AND ACQUISITION TRANSACTIONS

(exceeding \$5 million in value)

Month	Purchaser	Acquisition	Enterprise Value
			(\$million)
July	Archer	Cardinal assets	10.00
July	Cygnet	Athabasca assets	160.00
July	Highwood	Boulder	135.08
July	Highwood	Castlegate	42.41
July	Highwood	Shale	14.23
July	Topaz	Tamarack Valley assets	39.50
August	Advantage	Calima assets	10.00
August	Cygnet	Murphy assets	150.00
August	Erdol	Victoria University assets	(1)
August	Lycos	Wyatt	8.79
August	Strathcona	Pipestone	842.56
September	Lycos	Durham Creek	22.50
September	Persist	Dienerian	40.00
September	Peyto	Repsol assets	636.00
		Third Quarter Total	<b>\$2.1 billion</b> <sup>(2)</sup>

Notes: (1) The estimated or confidential amount for this transaction is included in the quarter total

(2) Confidential transactions are not included on the list, however their values are included in the total

## SELECTED THIRD QUARTER TRANSACTIONS

At this time we do not have enough information to complete a detailed analysis on the following selected transactions. When and if more information becomes available we will update the transaction with a more detailed analysis in one of our future reports.

Purchaser: Advantage Energy Ltd.		Acquisition: Calima E	Acquisition: Calima Energy Limited assets		
Transaction Type: Price:	Property \$10.0 million	Date Announced: Date Closed:	August 25, 2023 August 25, 2023		
The assets acquired are 33,643 net acres of Montney lands as well as facility interests in the Tommy Lakes area of British Columbia.					
		***			
Purchaser: Archer Exploration Corp. Acquisition: Cardinal Energy Ltd. assets					
Purchaser: Archer Ex	ploration Corp.	Acquisition: Cardinal I	Energy Ltd. assets		
<b>Purchaser:</b> Archer Ex Transaction Type: Price:	ploration Corp. Property \$10.0 million	Acquisition: Cardinal I Date Announced: Date Closed:	Energy Ltd. assets July 27, 2023 Second Quarter 2023		
Transaction Type: Price:	Property \$10.0 million	Date Announced: Date Closed:	July 27, 2023		
Transaction Type: Price:	Property \$10.0 million	Date Announced: Date Closed:	July 27, 2023 Second Quarter 2023		

Purchaser: Erdol Resources Corp.		Acquisition: Victoria U	niversity assets	
Transaction Type:	Property	Date Announced:	August 2023	
Price:	Undisclosed	Date Closed:	August 2023	

The assets acquired are Fee Title and royalty interests located in the Weyburn area of Saskatchewan.

#### Note: Sayer Energy Advisors acted as financial advisor to Victoria University for this transaction.

Purchaser: Lycos En	ergy Inc.	Acquisition: Durham (	Creek Exploration Ltd.
Transaction Type:	Corporate	Date Announced:	September 13, 2023
Price:	\$22.5 million	Date Closed:	October 16, 2023

\*\*\*

Durham Creek's main producing property was located in the Lindbergh area of Alberta. This was one of two corporate transactions announced by Lycos in the quarter as Lycos also acquired all of the issued and outstanding shares of Wyatt for \$8.8 million (page 42). Concurrent with the acquisition of Durham Creek, Lycos announced and subsequently completed a bought-deal equity financing for gross proceeds of approximately \$35.0 million. With these acquisitions, Lycos is forecasting its production to increase to 3,700 boe/d (99% oil).

\*\*\*

## SELECTED THIRD QUARTER TRANSACTIONS

Purchaser: Persist Oil and Gas, Inc.		Acquisition: Dienerian	Resources Inc.
Transaction Type:	Corporate	Date Announced:	September 6, 2023
Price:	\$40.0 million	Date Closed:	June 27, 2023

Persist and Dienerian merged in an all-stock transaction. Concurrent with the merger, Siguler Guff made a preferred equity commitment of approximately \$40.0 million in the pro forma combined company. Under terms of the agreement, Persist's executive team will lead the combined company with Siguler Guff holding half of the seats on the Board of Directors. Dienerian was formed in 2017 with a commitment from Siguler Guff, the company's largest investor, to develop, build infrastructure, and begin delineation of its Montney interests in the Wild River area of Alberta. Persist's oil and natural gas interests are located in southern Alberta targeting the Mannville Formation. Persist's production is approximately 4,250 boe/d.

Purchaser: Topaz Energy Corp.		Acquisition: Tamarack	Valley Energy Ltd. assets
Transaction Type:	Property	Date Announced:	July 27, 2023
Price:	\$39.5 million	Date Closed:	August 2023

\*\*\*

The assets acquired are a 49.9% interest in a facility in the Wembley area of Alberta as well as a GORR interest on lands targeting the Charlie Lake and Clearwater formations which include 17,000 gross undeveloped acres.

\*\*\*

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## **CYGNET / ATHABASCA ASSETS**

Purchaser: Cygnet Energy Ltd.	Acquisition: Athabasca
Date Announced: July 31, 2023	Date Completed: Septe
Transaction Type: Property	Operating CF Multiple:
Reserves Acquisition Price: \$6.93/boe	Production Acquisition I

Acquisition: Athabasca Oil Corporation assets Date Completed: September 14, 2023 Operating CF Multiple: **7.9 X** Production Acquisition Price: **\$53,333/boe/d** 

Estimated Value:	<u>\$MM</u>
Enterprise Value	\$160.00
less: Undeveloped land	-
Other assets	
Value of Reserves	<u>\$160.00</u>

#### Reserves:

	Oil & <u>NGL</u>	Natural <u>Gas</u>	<u>Total</u>
	(MMbbls)	(Bcf)	(MMboe)
Total Proven	10.395	76.230	23.100

Source of reserves estimate:

Effective date of reserves information:

McDaniel & Associates Consultants Ltd. with oil/natural gas reserves split based on production weighting December 31, 2022

<u>RLI</u> :	Total	Reserve Weighting:	Oil &	Natural
	<u>Proven</u> (years)		<u>NGL</u> (%)	<u>Gas</u> (%)
Oil & NGL	21.1	Proven	45	55
Natural Gas	21.1			
BOE	21.1			

#### Daily Production:

BOE:	3,000	boe/d
Natural Gas:	9.90	MMcf/d
Oil & NGL:	1,350	bbls/d

Basis of production information: Six months ended June 30, 2023

## **CYGNET / ATHABASCA ASSETS**

Undeveloped Land:	N.A.
Operating Cash Flow Estimate:	\$20.25 million per year
Basis of cash flow estimate:	Based on Athabasca's forecast of operating cash flow from the assets for the year ended December 31, 2023 before interest, overhead and current income tax.
Operating Cash Flow Multiple:	7.9 X

#### Comments:

The assets acquired are located in the Placid, Saxon and Simonette areas of Alberta. Athabasca held a 70% operated working interest at Placid targeting the Montney and a 30% non-operated working interest at Saxon and Simonette targeting the Duvernay. Cygnet acquired Athabasca's interests concurrently with the purchase of Murphy's joint interests in these areas for \$150.0 million (page 34). Murphy held a 70% operated interest at Saxon and Simonette and a 30% non-operated interest at Placid.

Date of Analysis: October 20, 2023

## **CYGNET / MURPHY ASSETS**

Purchaser: Cygnet Energy Ltd.	Acquisition: Murphy Oil Corporation assets
Date Announced: August 3, 2023	Date Completed: September 15, 2023
Transaction Type: Property	Operating CF Multiple: <b>N.A.</b>
Reserves Acquisition Price: \$24.61/boe	Production Acquisition Price: \$76,726/boe/d

Estimated Value:	<u>\$MM</u>
Enterprise Value	\$150.00
less: Undeveloped land	-
Other assets	
Value of Reserves	<u>\$150.00</u>

## Reserves<sup>(1)</sup>

	Oil & <u>NGL</u>	Natural <u>Gas</u>	<u>Total</u>
Total Proven	(MMbbls) 2.377	(Bcf) 22.308	(MMboe) 6.095
Iotal Floven	2.377	22.300	0.035

Source of reserves estimate: Effective date of reserves information: Murphy Oil Corporation with oil/natural gas reserves split based on production weighting December 31, 2022

<u>RLI</u> :	Total <u>Proven</u> (vears)	Reserve Weighting:	Oil & <u>NGL</u> (%)	Natural <u>Gas</u> (%)
Oil & NGL	( <b>years</b> ) 8.5	Proven	39	61
Natural Gas	8.5	Tioven	55	01
BOE	8.5			

## Daily Production<sup>(1)</sup>

Oil & NGL:	762	bbls/d
Natural Gas:	7.16	MMcf/d
BOE:	1,955	boe/d

Basis of production information: Current production as at August 3, 2023

## CYGNET / MURPHY ASSETS

Undeveloped Land: N.A.

Operating Cash Flow Estimate: N.A.

#### Notes:

1) Murphy's proven reserves and production were reported in after royalty numbers and have been grossed up by an estimated royalty rate of 15%.

#### Comments:

The assets acquired are located in the Placid, Saxon and Simonette areas of Alberta. Murphy held a 70% operated interest at Saxon and Simonette targeting the Duvernay and a 30% non-operated interest at Placid targeting the Montney. Cygnet acquired Murphy's interests concurrently with the purchase of Athabasca's joint interests in these areas for \$160.0 million (page 32). Athabasca held a 70% operated working interest at Placid and a 30% non-operated working interest at Saxon and Simonette.

Date of Analysis: October 20, 2023

## **HIGHWOOD / BOULDER**

Purchaser: Highwood Asset Management Ltd. Date Announced: July 5, 2023 Transaction Type: Corporate Reserves Acquisition Price: **\$4.93/boe**  Acquisition: Boulder Energy Ltd. Date Completed: August 3, 2023 Operating CF Multiple: **3.8 X** Production Acquisition Price: **\$48,211/boe/d** 

Estimated Value:	<u>\$MM</u>		<u>\$MM</u>
Equity Value	\$99.60 <sup>(1)</sup>	Enterprise Value	\$135.08
plus: Long term debt	-	less: Undeveloped land	-4.91
Working capital deficit	+2.84	Working capital surplus	-
Other liabilities	+32.65	Other assets	
Enterprise Value	<u>\$135.08</u>	Value of Reserves	<u>\$130.17</u>

#### Reserves:

Net Present Value of Reserves (\$MM):

	Oil &	Natural						
	<u>NGL</u>	<u>Gas</u>	<u>Total</u>			Discounted	l	
	(MMbbls)	(Bcf)	(MMboe)	0%	5%	10%	15%	20%
Proven Producing	5.144	31.214	10.346	174.50	139.70	116.39	100.03	88.05
Proven Non-Producing	0.429	0.513	0.514	17.49	13.85	11.24	9.34	7.91
Undeveloped	<u>5.618</u>	<u>12.204</u>	<u>7.651</u>	<u>167.51</u>	<u>106.13</u>	<u>69.48</u>	<u>46.46</u>	<u>31.33</u>
Total Proven	11.190	43.930	18.511	359.50	259.68	197.12	155.83	127.28
Probable	<u>6.469</u>	<u>8.446</u>	<u>7.877</u>	<u>277.23</u>	<u>176.82</u>	<u>122.52</u>	<u>90.00</u>	<u>68.94</u>
Total P+P	<u>17.659</u>	<u>52.377</u>	<u>26.388</u>	<u>636.73</u>	<u>436.49</u>	<u>319.64</u>	<u>245.83</u>	<u>196.22</u>

Source of reserves estimate: Effective date of reserves information: McDaniel & Associates Consultants Ltd. December 31, 2022

<u>RLI</u> :	Proven <u>Producing</u> (years)	Total <u>Proven</u> (years)	Total <u>P+P</u> (years)	<u>Reserve Weighting</u> :	Oil & <u>NGL</u> (%)	Natural <u>Gas</u> (%)
Oil & NGL	7.1	15.3	24.2	Proven Producing	50	50
Natural Gas	20.3	28.6	34.1	Proven	60	40
BOE	10.5	18.8	26.8	P+P	67	33

#### **Daily Production:**

BOE:	2,700	boe/d
Natural Gas:	4.21	MMcf/d
Oil & NGL:	1,998	bbls/d

Basis of production information: Highwood's forecast for the twelve months ended June 30, 2024

# HIGHWOOD / BOULDER

#### Undeveloped Land:

Total net acres:	49,135
Estimated value	\$4.91 million
Unit value	\$100.00/net acre
Source of land va	alue estimate: Sayer Energy Advisors

#### Operating Cash Flow Estimate: \$34.40 million per year

Basis of cash flow estimate:	Based on Highwood's forecast of Boulder's operating cash flow for the twelve
	months ended June 30, 2024 before interest, overhead and current income tax.

#### **Operating Cash Flow Multiple:** 3.8 X

Price Assumptions Used in Evaluation:			Estimated Future Capital Costs (\$MM):
	Edmonton Par <u>Price 40º API</u> (\$C/bbl)	AECO Natural <u>Gas Price</u> (\$C/MMbtu)	
2023	103.76	4.23	2023 28.12
2024	97.74	4.40	2024 26.32
2025	95.27	4.21	2025 45.12
2026	95.58	4.27	Thereafter <u>94.82</u>
2027	97.07	4.34	Total <u>194.38</u>

Effective date of pricing: Average of GLJ Ltd., McDaniel and Sproule Associates Limited's price forecast as at January 1, 2023

### Break Fee:

Size (millions)	\$2.00
As percentage of equity value	2.0%
As percentage of enterprise value	1.5%

#### Notes:

- Based on a cash payment of \$75.1 million, a \$14.0 million note payable to West Lake Energy Corp. (the shareholder of Boulder) and the issuance of 1,500,000 Highwood shares, with each Highwood share priced at \$7.00 on the last trading day prior to the announcement of the transaction.
- 2) Includes site restoration costs.

#### Comments:

Boulder's main producing property was located in the Brazeau area of Alberta. Highwood along with the acquisition of Boulder also purchased privately-held Castlegate for \$42.4 million (page 38) and privately-held Shale for \$14.2 million (page 40). Concurrent with the acquisitions, Highwood also completed a \$35.0 million equity financing. With these transactions, Highwood is forecasting its production to be 4,700 boe/d (76% oil and natural gas liquids).

At December 31, 2021, Boulder had approximately \$290.0 million in unused Canadian income tax pools.

Date of Analysis: October 11, 2023 Date of Financial Information: March 31, 2023

## **HIGHWOOD / CASTLEGATE**

Purchaser: Highwood Asset Management Ltd. Date Announced: July 5, 2023 Transaction Type: Corporate Reserves Acquisition Price: \$9.44/boe

Acquisition: Castlegate Energy Ltd. Date Completed: August 3, 2023 Operating CF Multiple: 1.4 X Production Acquisition Price: \$28,397/boe/d

Net Present Value of Reserves (\$MM):

15%

35.33

-

7.12

42.45

31.70

<u>74.15</u>

20%

31.88

-

<u>5.49</u>

37.37

<u>24.37</u>

<u>61.74</u>

Estimated Value:	<u>\$MM</u>		<u>\$MM</u>
Equity Value	\$40.90 <sup>(1)</sup>	Enterprise Value	\$42.41
plus: Long term debt	-	less: Undeveloped land	-0.52
Working capital deficit	-	Working capital surplus	-2.14 <sup>(3)</sup>
Other liabilities	<u>+1.51</u> <sup>(2)</sup>	Other assets	
Enterprise Value	<u>\$42.41</u>	Value of Reserves	<u>\$39.76</u>

#### **Reserves**:

	Oil &	Natural				
	<u>NGL</u>	<u>Gas</u>	<u>Total</u>			<b>Discounted</b>
	(MMbbls)	(Bcf)	(MMboe)	0%	5%	10%
Proven Producing	1.043	1.562	1.303	55.24	46.26	39.90
Proven Non-Producing	-	-	-	-	-	-
Undeveloped	<u>0.456</u>	<u>0.406</u>	<u>0.524</u>	<u>16.39</u>	<u>12.28</u>	<u>9.30</u>
Total Proven	1.499	1.968	1.827	71.63	58.54	49.20
Probable	<u>1.994</u>	<u>2.352</u>	<u>2.386</u>	<u>95.70</u>	<u>61.69</u>	<u>42.98</u>
Total P+P	<u>3.493</u>	<u>4.320</u>	<u>4.213</u>	<u>167.32</u>	<u>120.23</u>	<u>92.19</u>

Source of reserves estimate: Effective date of reserves information: GLJ Ltd. December 31, 2022

<u>RLI</u> :	Proven <u>Producing</u> (years)	Total <u>Proven</u> (years)	Total <u>P+P</u> (years)	<u>Reserve Weighting</u> :	Oil & <u>NGL</u> (%)	Natural <u>Gas</u> (%)
Oil & NGL	2.4	3.5	8.0	Proven Producing	80	20
Natural Gas	3.4	4.3	9.4	Proven	82	18
BOE	2.6	3.6	8.2	P+P	83	17

#### **Daily Production:**

BOE:	1,400	boe/d
Natural Gas:	1.26	MMcf/d
Oil & NGL:	1,190	bbls/d

Basis of production information: Highwood's forecast for the twelve months ended June 30, 2024

# HIGHWOOD / CASTLEGATE

#### Undeveloped Land:

Total net acres:	5,181
Estimated value	\$0.52 million
Unit value	\$100.00/net acre
Source of land va	alue estimate: Sayer Energy Advisors

#### Operating Cash Flow Estimate: \$27.93 million per year

Basis of cash flow estimate:	Based on Highwood's forecast of Castlegate's operating cash for the twelve
	months ended June 30, 2024 before interest, overhead and current income tax.

#### Operating Cash Flow Multiple: 1.4 X

Price Assumptions Used in Evaluation:			Estimated Future Capital Costs (\$MM):
	Edmonton Par <u>Price 40º API</u> (\$C/bbl)	AECO Natural <u>Gas Price</u> (\$C/MMbtu)	
2023	97.96	4.36	2023 4.70
2024	95.30	4.77	2024 7.40
2025	94.50	4.47	2025 9.60
2026	95.14	4.49	Thereafter <u>13.50</u>
2027	95.79	4.53	Total <u>35.20</u>

Effective date of pricing: January 1, 2023

#### Break Fee:

Size (millions)	\$0.65
As percentage of equity value	1.6%
As percentage of enterprise value	1.5%

#### Notes:

- 1) Based on each of 6,037,500 Castlegate shares and 525,000 Castlegate shares issued on the exercise of "in-themoney" options exchanged for \$6.232381 in cash.
- 2) Includes site restoration costs.
- 3) Includes proceeds from the exercise of "in-the-money" options.

#### Comments:

Castlegate's main producing property was located in the Wilson Creek area of Alberta. Highwood along with the acquisition of Castlegate also purchased privately-held Boulder for \$135.1 million (page 36) and privately-held Shale for \$14.2 million (page 40). Concurrent with the acquisitions, Highwood also completed a \$35.0 million equity financing. With these transactions, Highwood is forecasting its production to be 4,700 boe/d (76% oil and natural gas liquids).

At December 31, 2022, Castlegate had approximately \$10.3 million in unused Canadian income tax pools.

Date of Analysis: October 12, 2023 Date of Financial Information: March 31, 2023

## **HIGHWOOD / SHALE**

Purchaser: Highwood Asset Management Ltd. Date Announced: July 5, 2023 Transaction Type: Corporate Reserves Acquisition Price: **\$0.45/boe**  Acquisition: Shale Petroleum Ltd. Date Completed: August 3, 2023 Operating CF Multiple: **2.2 X** Production Acquisition Price: **\$12,978/boe/d** 

Net Present Value of Reserves (\$MM):

15%

8.76

-

7.83

16.59

29.27

<u>45.86</u>

20%

7.83

-

<u>5.81</u>

13.65

<u>20.74</u>

<u>34.38</u>

Estimated Value:	<u>\$MM</u>		<u>\$MM</u>
Equity Value	\$8.94 <sup>(1)</sup>	Enterprise Value	\$14.23
plus: Long term debt	-	less: Undeveloped land	-7.13
Working capital deficit	-	Working capital surplus	-3.20 <sup>(3)</sup>
Other liabilities	<u>+5.29</u> <sup>(2)</sup>	Other assets	
Enterprise Value	<u>\$14.23</u>	Value of Reserves	<u>\$3.89</u>

#### Reserves:

Oil & Natural NGL <u>Gas</u> <u>Total</u> **Discounted** (MMbbls) (Bcf) (MMboe) 10% 0% 5% **Proven Producing** 0.330 3.486 0.911 12.52 11.36 9.94 **Proven Non-Producing** \_ \_ \_ ---Undeveloped 0.488 6.164 1.515 <u>23.59</u> <u>15.56</u> 10.82 **Total Proven** 0.818 9.650 2.426 36.11 26.92 20.76 Probable <u>2.013</u> 25.457 <u>6.256</u> <u>114.70</u> 67.06 <u>42.96</u> Total P+P 2.831 35.107 8.682 <u>150.81</u> 93.98 <u>63.72</u>

Source of reserves estimate: Effective date of reserves information: GLJ Ltd. December 31, 2022

<u>RLI</u> :	Proven <u>Producing</u> (years)	Total <u>Proven</u> (years)	Total <u>P+P</u> (years)	<u>Reserve Weighting</u> :	Oil & <u>NGL</u> (%)	Natural <u>Gas</u> (%)
Oil & NGL	8.1	20.2	69.9	Proven Producing	36	64
Natural Gas	8.4	23.3	84.8	Proven	34	66
BOE	8.3	22.2	72.3	P+P	33	67

#### **Daily Production:**

BOE:	300	boe/d
Natural Gas:	1.13	MMcf/d
Oil & NGL:	111	bbls/d

Basis of production information: Highwood's forecast for the twelve months ended June 30, 2024

# **HIGHWOOD / SHALE**

#### **Undeveloped Land:**

Total net acres:	71,333
Estimated value	\$7.13 million
Unit value	\$100.00/net acre
Source of land va	lue estimate: Sayer Energy Advisors

#### **Operating Cash Flow Estimate:** \$1.77 million per year

Basis of cash flow estimate:

Based on Shale's actual operating cash for the three months ended March 31, 2023 before interest, overhead and current income tax.

#### **Operating Cash Flow Multiple:** 2.2 X

Price Assur	<u>nptions Used in E</u>	valuation:	Estimated Fut	ure Capital Costs (\$MM):
	Edmonton Par <u>Price 40º API</u> (\$C/bbl)	AECO Natural <u>Gas Price</u> (\$C/MMbtu)		
2023	97.96	4.36	2023	13.03
2024	95.30	4.77	2024	15.44
2025	94.50	4.47	2025	21.05
2026	95.14	4.49	Thereafter	
2027	95.79	4.53	Total	<u>49.52</u>
Effective d	ate of pricing: J	anuary 1, 2023		

#### Break Fee:

Size (millions)	\$0.20
As percentage of equity value	2.2%
As percentage of enterprise value	1.4%

## Notes:

1) Based on each of 139,219,625 Shale shares exchanged for 0.009172776 of a Highwood share, with each Highwood share priced at \$7.00 on the last trading day prior to the announcement of the transaction.

2) Includes site restoration costs.

#### Comments:

Shale's main producing properties were located in the Claresholm, Harmattan and Ricinus areas of Alberta. Highwood along with the acquisition of Shale also purchased privately-held Boulder for \$135.1 million (page 36) and privately-held Castlegate for \$42.4 million (page 38). Concurrent with the acquisitions, Highwood also completed a \$35.0 million equity financing. With these transactions, Highwood is forecasting its production to be 4,700 boe/d (76% oil and natural gas liquids).

At December 31, 2022, Shale had approximately \$28.4 million in unused Canadian income tax pools.

Date of Analysis: October 18, 2023 Date of Financial Information: March 31, 2023

## LYCOS / WYATT

Purchaser: Lycos Energy Inc.	Acquisition: Wyatt Resources Ltd.
Date Announced: August 24, 2023	Date Completed: September 1, 2023
Transaction Type: Corporate	Operating CF Multiple: N.A.
Reserves Acquisition Price: \$8.53/boe	Production Acquisition Price: \$21,971/boe/d

<u>Estimated Value</u> :	<u>\$MM</u>		<u>\$MM</u>
Equity Value	\$8.79 <sup>(1)</sup>	Enterprise Value	\$8.79
plus: Long term debt	-	less: Undeveloped land	-
Working capital deficit	-	Working capital surplus	-
Other liabilities	_	Other assets	_
Enterprise Value	<u>\$8.79</u>	Value of Reserves	<u>\$8.79</u>

#### Reserves:

	Oil & <u>NGL</u>	Natural <u>Gas</u>	<u>Total</u>	Discounted
	(MMbbls)	(Bcf)	(MMboe)	10%
Total Proven	0.749	0.048	0.757	13.98
Probable	<u>0.270</u>	<u>0.016</u>	<u>0.273</u>	<u>5.47</u>
Total P+P	<u>1.020</u>	0.064	<u>1.030</u>	<u>19.45</u>

Source of reserves estimate:

Sproule Associates Consultants Ltd. with oil/natural gas reserves split based on production weighting March 31, 2023

Net Present Value of Reserves (\$MM):

Effective date of reserves information:

RLI: Total Total **Reserve Weighting:** Oil & Natural <u>P+P</u> NGL Proven Gas (years) (years) (%) (%) Oil & NGL 5.2 7.1 1 Proven 99 Natural Gas 5.5 7.3 P+P 99 1 BOE 5.2 7.1

#### **Daily Production:**

Oil & NGL:	396	bbls/d
Natural Gas:	0.02	MMcf/d
BOE:	400	boe/d

Basis of production information: Current production as at August 24, 2023

## LYCOS / WYATT

Undeveloped Land: N.A.

Operating Cash Flow Estimate: N.A.

#### Price Assumptions Used in Evaluation:

	WCS <u>Price 20.5° API</u> (\$C/bbl)	AECO Natural <u>Gas Price</u> (\$C/MMbtu)
2023	90.67	3.20
2024	92.26	3.83
2025	86.77	4.13
2026	88.51	4.21
2027	90.28	4.30
Effective da	ate of pricing:	March 31, 2023

Estimated Future Capital Costs (\$MM):

Total <u>5.90</u>

### Notes:

1) Based on a cash payment of \$6.5 million and the issuance of 635,640 Lycos shares, with each Lycos share priced at \$3.60 on the last trading day prior to the announcement of the transaction.

#### Comments:

Wyatt's main producing properties were located in the Frog Lake and Wildmere areas of Alberta. This was one of two corporate transactions announced by Lycos in the quarter as Lycos also acquired all of the issued and outstanding shares of Durham Creek for \$22.5 million (page 29). Concurrent with the acquisition of Durham Creek, Lycos completed a bought-deal equity financing for gross proceeds of approximately \$35.0 million. With these acquisitions, Lycos is forecasting its production to increase to 3,700 boe/d (99% oil).

Date of Analysis: October 20, 2023 Date of Financial Information: March 31, 2023

## **PEYTO / REPSOL ASSETS**

Purchaser: Peyto Exploration & Development Corp. Date Announced: September 6, 2023 Transaction Type: Property Reserves Acquisition Price: **\$2.07/boe**  Acquisition: Repsol S.A. assets Date Completed: October 17, 2023 Operating CF Multiple: **4.1 X** Production Acquisition Price: **\$27,652/boe/d** 

Net Present Value of Reserves (\$MM):

5%

Estimated Value:	<u>\$MM</u>
Enterprise Value	\$636.00
less: Undeveloped land	-
Other assets	
Value of Reserves	<u>\$636.00</u>

#### Reserves:

	Oil & <u>NGL</u>	Natural <u>Gas</u>	<u>Total</u>
	(MMbbls)	(Bcf)	(MMboe)
Proven Producing	21.635	409.341	89.859
Proven Non-Producing	-	-	-
Undeveloped	<u>11.172</u>	<u>562.453</u>	<u>104.914</u>
Total Proven	32.807	971.794	194.773
Probable	<u>16.523</u>	<u>572.215</u>	<u>111.892</u>
Total P+P	<u>49.330</u>	<u>1,544.009</u>	<u>306.665</u>

#### Source of reserves estimate: GLJ Ltd. Effective date of reserves information: June 1, 2023

792.34 653.99

0%

-	-	-	-	-
<u>2,059.62</u>	<u>1,402.12</u>	<u>1,005.20</u>	<u>751.25</u>	<u>579.45</u>
2,851.96	2,056.12	1,521.65	1,173.44	936.71
<u>2,940.97</u>	<u>1,541.67</u>	<u>946.93</u>	<u>641.19</u>	<u>462.71</u>
<u>5,792.93</u>	<u>3,397.79</u>	<u>2,468.58</u>	<u>1,814.63</u>	<u>1,399.42</u>

**Discounted** 

10%

516.45

15%

422.19

20%

357.26

<u>RLI</u> :	Proven <u>Producing</u> (years)	Total <u>Proven</u> (years)	Total <u>P+P</u> (years)	Reserve Weighting:	Oil & <u>NGL</u> (%)	Natural <u>Gas</u> (%)
Oil & NGL	10.3	15.6	23.5	Proven Producing	24	76
Natural Gas	10.8	25.7	40.9	Proven	17	83
BOE	10.7	23.2	36.5	P+P	16	84

#### Daily Production:

BOE:	23,000	boe/d
Natural Gas:	103.50	MMcf/d
Oil & NGL:	5,750	bbls/d

Basis of production information: Average for the month of July 2023

## **PEYTO / REPSOL ASSETS**

Undeveloped Land: N.A.

<b>Operating Cash Flow Estimate:</b>	\$
--------------------------------------	----

156.00 million per year

Basis of cash flow estimate:Based on actual operating cash flow from the assets for the three months ended<br/>March 31, 2023 before interest, overhead and current income tax.

Operating Cash Flow Multiple: 4.1 X

Price Assumptions Used in Evaluation:		valuation:	Estimated Future Capital Costs (\$MM):
	Edmonton Par <u>Price 40º API</u> (\$C/bbl)	AECO Natural <u>Gas Price</u> (\$C/MMbtu)	
2023	99.26	2.97	2024 201.67
2024	97.18	3.73	2025 300.63
2025	95.30	4.25	2026 196.73
2026	96.79	4.31	Thereafter <u>415.13</u>
2027	98.73	4.41	Total <u>1,114.16</u>
	- 4 <b>6</b>		

Effective date of pricing:

Average of GLJ, McDaniel & Associates Consultants Ltd. and Sproule Associates Limited's price forecasts as at April 1, 2023

#### Comments:

Repsol's main producing property was located in the Edson area of Alberta. As part of the transaction, Peyto also acquired Repsol's interests in the non-Deep Basin lands which are located in British Columbia, Saskatchewan, Manitoba and frontier assets in Yukon, Nunavut and the Northwest Territories.

The acquired assets also include approximately 571 MMcf/d of gross operated processing capacity (71% working interest) across five owned and operated facilities with ten compressor stations and approximately 2,200 km of operated pipelines with incremental access to third party plants. Key active natural gas plants include Edson (61% working interest), Wild River (81% working interest), and Bigstone (50% working interest).

Peyto has identified over 800 gross drilling locations on the Repsol lands, including 297 booked in the GLJ reserve report.

Concurrent with the acquisition, Peyto completed a \$201.0 million bought deal equity offering through the issuance of 16,916,500 shares at a price of \$11.90 per share to partially finance the acquisition.

The acquisition was also funded through an upsizing of Peyto's current revolving credit facility from \$800.0 million to \$1.0 billion, and a new term loan facility of \$300.0 million.

Peyto also announced a private placement issuance of \$160.0 million of senior secured notes with a coupon rate of 6.46% which mature in October 2030. Interest will be paid semi-annually in arrears. Proceeds from the notes will be used to repay the outstanding \$100.0 million, 3.70% notes due on October 24, 2023 and to decrease Peyto's borrowings under its amended credit facility.

Date of Analysis: October 18, 2023

## **STRATHCONA / PIPESTONE**

Purchaser: Strathcona Resources Ltd. Date Announced: August 1, 2023				Acquisition: Date Compl	•	0, 1	ρ.	
0								
Transaction Type: Corp		_		Operating C	•			
Reserves Acquisition Pr	rice: \$3.14/	boe		Production /	Acquisition I	Price: <b>\$21,2</b>	14/boe/d	
Estimated Value: Equity Value		¢	<b>\$MM</b> 569.42 <sup>(1)</sup>	Enternri	se Value		¢	<u>\$MM</u> 842.56
plus: Long term d	oht		232.21		Undevelop	ed land	ψ	-7.57
Working cap			-	1633.		apital surplus	s -	131.89 <sup>(3)</sup>
Other liabiliti			+40.93 (2)		Other asse	• •	5	-
Enterprise Value		\$	842.56	Value	e of Reserve		\$	703.10
		<u> </u>					<u> </u>	
Reserves:				<u>N</u>	let Present	Value of Re	eserves (\$M	<u>M)</u> :
	Oil &	Natural						
	<u>NGL</u>	<u>Gas</u>	<u>Total</u>			<b>Discounte</b>	d	
	(MMbbls)	(Bcf)	(MMboe)	0%	5%	10%	15%	20%
Proven Producing	18.947	169.289	47.162	909.40	776.92	675.57	600.00	542.51
Proven Non-Producing	0.412	3.297	0.962	21.60	19.34	17.59	16.19	15.05
Undeveloped	<u>44.572</u>	<u>366.315</u>	<u>105.625</u>	<u>1,378.20</u>	<u>964.75</u>	<u>696.09</u>	<u>514.31</u>	<u>386.57</u>
Total Proven	63.931	538.901	153.748	2,309.20	1,761.00	1,389.25	1,130.51	944.13
Probable	<u>29.283</u>	<u>246.512</u>	<u>70.368</u>	1,271.06	830.64	585.25	438.24	<u>343.98</u>
Total P+P	<u>93.214</u>	<u>785.413</u>	<u>224.116</u>	3,580.26	2,591.64	1,974.50	1,568.75	1,288.12

Source of reserves estimate:

Effective date of reserves information:

McDaniel & Associates Consultants Ltd. adjusted for production from January 1, 2023 to June 30, 2023 by Sayer Energy Advisors December 31, 2022

<u>RLI</u> :	Proven <u>Producing</u> (years)	Total <u>Proven</u> (years)	Total <u>P+P</u> (years)	<u>Reserve Weighting</u> :	Oil & <u>NGL</u> (%)	Natural <u>Gas</u> (%)
Oil & NGL	3.8	12.9	18.8	Proven Producing	40	60
Natural Gas	3.9	12.6	18.3	Proven	42	58
BOE	3.9	12.7	18.5	P+P	42	58

## Daily Production:

13,568 bbls/d Oil & NGL: Natural Gas: 117.45 MMcf/d BOE: 33,143 boe/d

Basis of production information: Quarter ended June 30, 2022

#### **Undeveloped Land:**

Total net acres:	75,737
Estimated value	\$7.57 million
Unit value	\$100.00/net acre
Source of land va	lue estimate: Sayer Energy Advisors

#### **Operating Cash Flow Estimate:**

Basis of cash flow estimate:

\$256.61 million per year

Based on Pipestone's actual operating cash flow from the assets for the three months ended June 30, 2023 before interest, overhead and current income tax.

#### **Operating Cash Flow Multiple:** 2.7 X

## **STRATHCONA / PIPESTONE**

#### Price Assumptions Used in Evaluation:

#### Estimated Future Capital Costs (\$MM):

	Edmonton <u>Condensate</u> (\$C/bbl)	AECO Natural <u>Gas Price</u> (\$C/MMbtu)			
2023	106.22	4.23	2023	243.00	
2024	101.35	4.40	2024	287.00	
2025	98.94	4.21	2025	279.00	
2026	100.19	4.27	Thereafter	<u>668.00</u>	
2027	101.74	4.34	Total	1,477.00	

Effective date of pricing: Average of GLJ Ltd., McDaniel and Sproule Associates Limited's price forecast as at January 1, 2023

Share Information:		<u>Break Fee</u> :	
Share price paid	\$2.04/share	Size (millions)	\$25.00
Market price day prior		As percentage of equity value	4.4%
to announcement Share price discount	\$2.72/share (25.1%)	As percentage of enterprise value	3.0%

#### Notes:

1) Based on each of 279,638,000 Pipestone shares exchanged for 0.067967 of an AmalCo share, with each AmalCo share priced at \$29.96 which was the closing price of Strathcona on the first trading day after completion of the amalgamation.

2) Includes site restoration costs, executive severance and an estimate of future overhead costs necessary to produce Pipestone's reserves.

3) Includes an adjustment for the six months of capital expenditures by Pipestone between January 1, 2023 and June 30, 2023.

#### Comments:

Pipestone's main producing property was located in the Pipestone area of Alberta, just southwest of Grande Prairie. The transaction was structured as an amalgamation between Pipestone and Strathcona whereby each Pipestone shareholder received 0.067967 of an AmalCo share and each Strathcona shareholder received 0.089278 of an AmalCo share. Through this transaction, Strathcona became a publicly-traded oil and natural gas company, with production of approximately 185,000 boe/d (78% liquids). The management team of Strathcona will be running the go forward entity which will continue under the name Strathcona Resources Ltd.

At December 31, 2022, Pipestone had the following unused Canadian income tax pools:

	<u>\$MM</u>
Canadian Development Expense	244.5
Undepreciated Capital Cost Allowance	135.0
Non-Capital Losses	74.8
Canadian Oil & Gas Property Expense	23.7
Canadian Exploration Expense	21.9
Debt and Share Issuance Costs	1.7
TOTAL	<u>501.6</u>

Date of Analysis: October 20, 2023 Date of Financial Information: June 30, 2023

# Recent Transactions Completed by Sayer Energy Advisors



## NOTES

### 1. Definitions:

- a. \$/boe: the value ascribed on a per barrel of oil equivalent ("boe") basis to proven and probable reserves before royalties using NI 51-101. The detailed analysis of each transaction and the summary graphs use the conversion rates of 6 Mcf equals one barrel. Non-reserve assets and liabilities are excluded from the reserve purchase price for this calculation.
- b. \$/boe/d: Reserves Value divided by equivalent barrels of daily production.
- c. Acquisition Value: the estimated fair market value of the amount expended by the purchaser for the equity portion of the acquisition. In some transactions, this figure may be different from the Total Value as the purchaser only acquired a portion of the Total Value.
- d. Break Fee: the amount payable to the purchaser by the company being acquired (the "seller") if the seller does not proceed with the transaction agreement in certain circumstances. This would include, but is not limited to, accepting a superior take-over bid.
- e. Enterprise Value: the total equity value plus long-term debt, working capital deficit and other liabilities. The latter item includes such things as site restoration, executive compensation, future overhead expense, hedging contracts liability or asset.
- f. GORR: gross overriding royalty.
- g. Median Acquisition Price: the price where there is an equal number of transactions above and below the median. This approach is less sensitive to extreme values of \$/boe than a simple average and is less sensitive to larger deals than a weighted average.
- h. Operating Cash Flow Multiple: Reserves Value divided by an estimate of yearly net operating income before overhead, interest and current income tax.
- i. Premium/(Discount) to Market Price: the percentage premium of the price per common share paid by the purchaser for the acquisition compared to the closing market price of the purchased company on the day prior to the announcement of the take-over.
- j. Reserve Life Index ("RLI"): Total Proven Reserves divided by total yearly production at production rates noted in the transaction analysis.
- k. Reserves Value: the acquisition value excluding non-reserve assets and liabilities.
- I. Total Value: the cash purchase price paid for the assets in the case of an asset acquisition or the price paid for 100% of the equity of the company acquired in the case of a corporate transaction.
- 2. All Dollar amounts are in Canadian funds, unless noted otherwise.
- 3. This publication includes only those transactions that involve the purchase of oil and natural gas reserves. In addition to the transactions noted herein, a number of other private transactions have taken place. Although some transactions may not be included in our database, we believe the published data is representative of industry trends.
- 4. The Enterprise Value and the Value of Reserves used in this report do not include any value for tax pools acquired in the transaction or created as a result of the transaction. Where available, existing tax pools of the acquired company are described in the Comments section on each individual analysis.
- 5. The information contained herein was based on information which was obtained from sources which we believe are reliable, however we cannot guarantee its accuracy or completeness. The opinions expressed herein are based on our analysis and interpretation of this information and are not to be construed as a solicitation of an offer to buy or sell any securities. Sayer Energy Advisors may act as financial advisor or fiscal agent for certain companies mentioned herein and may receive remuneration for its services. This report is furnished on the basis and the understanding that Sayer Energy Advisors is to be under no responsibility or liability in respect thereof.
- 6. While every effort has been made to ensure the accuracy and timeliness of this publication, the analysis and comments are necessarily of a general nature. We would also like to note that there is more information available in our files on specific transactions that we can publish in the Report. Clients are urged to seek specific advice on matter of concern and not to rely solely on the text of this publication.
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