



2021 ANNUAL SUMMARY

Enterprise Value of Transactions

\$18.1 billion

Median Production Acquisition Price Median Reserves Acquisition Price

\$25,093/boe/d

\$2.66/boe



CANADIAN OIL INDUSTRY MERGER AND ACQUISITION REPORT

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TOTAL M&A VALUE FALLS SLIGHTLY IN 2021

The level of merger and acquisition (“M&A”) activity in 2021, measured by the total enterprise value of transactions (both large and small deals), decreased 9% to \$18.1 billion from the \$19.9 billion recorded in 2020. There were three deals in 2021 valued at over a billion dollars which accounted for approximately 40% of the total M&A value. In 2020, there was only one deal valued at over a billion dollars which was Cenovus Energy Inc. acquiring Husky Energy Inc. for \$15.0 billion.

The largest transaction in 2021 was ARC Resources Ltd.’s acquisition of Seven Generations Energy Ltd. in the first quarter for \$5.1 billion. Seven Generations’ main producing property was located in the Kakwa area of Alberta. Approximately 60% of production will be produced in Alberta, with the remaining 40% being produced in British Columbia. At the time of the transaction, the combined company became Canada’s largest condensate producer, third-largest natural gas producer, and sixth-largest upstream energy company. The combined company which continued under the name ARC Resources Ltd. was expected to deliver average daily production of over 340,000 boe/d, consisting of approximately 138,000 bbl/d of liquids and approximately 1.2 Bcf/d of natural gas.

The second largest transaction in 2021 was Tourmaline Oil Corp.’s acquisition of Black Swan Energy Ltd. in the second quarter for \$1.1 billion. Black Swan’s main producing properties were located in the Aitken and Nig areas of northeastern British Columbia. Black Swan also held material Montney land positions in the Beg, Jedney, Laprise and the Sojer areas of northeastern British Columbia. With this acquisition, Tourmaline forecasted its production would increase to between 465,000 to 475,000 boe/d (78% natural gas).

The third largest transaction in 2021 was Canadian Natural Resources Limited’s acquisition of publicly-held Storm Resources Ltd. in the fourth quarter for just over \$1.0 billion. Storm’s main producing properties were located in the Fireweed, Nig Creek and Umbach areas of British Columbia. Storm’s lands complemented Canadian Natural’s interests in northeastern British Columbia and provided Canadian Natural synergies with its operations in the area. This was the second significant corporate acquisition Canadian Natural completed in northeastern British Columbia in the last two years as Canadian Natural also acquired all of the issued and outstanding shares of publicly-held Painted Pony Petroleum Ltd. in the third quarter of 2020 for \$638.8 million. Painted Pony’s main producing properties were located in the Beg, Blair, Daiber, Gundy, Kobes, Townsend and West Blair areas of British Columbia.

Corporate transactions made up \$12.0 billion or 67% of the \$18.0 billion in total enterprise value of large deals (over \$5 million in value) in 2021. Property deals made up the remaining \$6.0 billion in total enterprise value. The split between corporate and property transactions is similar to what occurred in 2020 when corporate transactions made up 93% of the total M&A value.

As with the slight decrease in M&A value, the total value of oil-weighted transactions also fell in 2021 compared to the previous year. The value of oil-weighted transactions dropped to \$12.2 billion in 2021 from the \$17.9 billion calculated in 2020, while the value of natural gas-weighted transactions jumped 221% to \$5.8 billion compared to the \$1.8 billion recorded in 2020. In 2021, oil-weighted deals accounted for 68% of the total enterprise value of all large deals with natural gas-weighted deals accounting for the remaining 32%. The average transaction size for oil-weighted transactions decreased in 2021 to \$229.4 million from \$559.7 million in 2020. Natural gas-weighted transactions also fell slightly to \$138.1 million from \$138.8 million in 2020. The number of oil-weighted transactions increased to 53 deals from 32 deals in 2020 and natural gas-weighted transactions also jumped significantly to 42 deals in 2021 from 13 deals in the previous year.

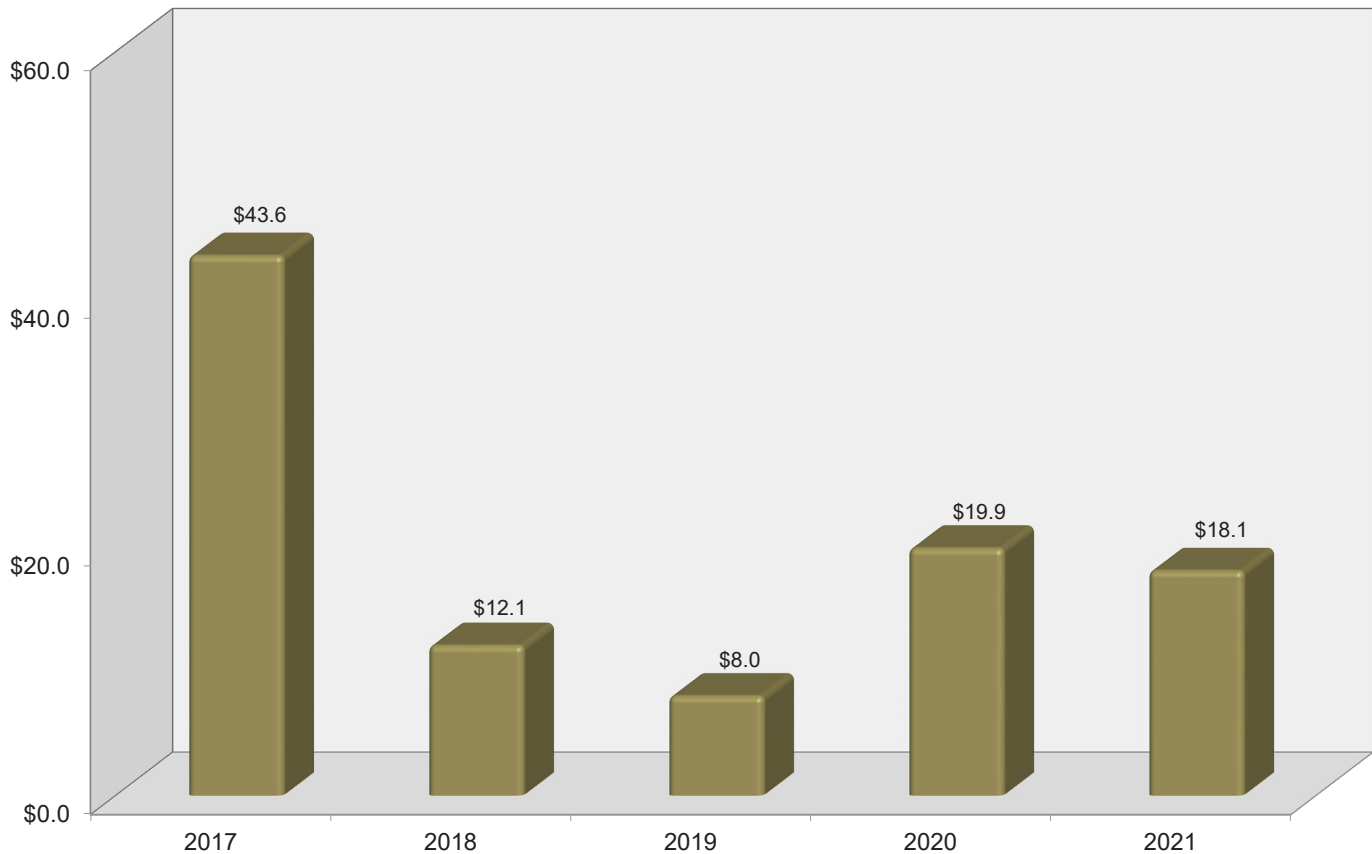
Annual acquisition prices paid for daily production increased 19% in 2021 to \$25,093/boe/d from \$21,053 /boe/d in 2020. Acquisition prices for proven plus probable reserves also increased 39% year-over-year to \$2.66/boe from \$1.91/boe in 2019.

On a commodity basis, the price paid for oil-weighted production decreased 18% year-over-year to \$27,023/boe/d in 2021 from \$32,802/boe/d in 2020. The price paid for oil reserves increased 89% to \$6.45/boe from \$3.42/boe in 2020. The acquisition price for natural gas-weighted production jumped 251% to \$20,892/boe/d in 2021 from \$5,948/boe/d in 2020 and the reserve acquisition price also increased, jumping 238% to \$2.20/boe in 2021 compared to \$0.65/boe in 2020.

The increase in commodity prices along with the continued lack of investment capital were the dominating factors that drove the M&A market in 2021. These factors led to a number of privately-held oil and natural gas companies being sold as illustrated by the aforementioned Tourmaline/Black Swan transaction. Other notable private oil and natural gas companies which were sold in 2021 were Velvet Energy Ltd. to Spartan Delta Corp. for approximately \$754.0 million and Anegada Energy Corp. to Tamarack Valley Energy Ltd. for approximately \$533.6 million.

ENTERPRISE VALUE

Enterprise Value of Large and Small Transactions - \$Billion



The total value of M&A activity for 2021 decreased to \$18.1 billion from \$19.9 billion in 2020.

There were three transactions valued at greater than \$1.0 billion in size in 2021 compared to one in 2020.

The largest transaction is ARC's acquisition of Seven Generations for \$5.1 billion in the first quarter. Seven Generations' main producing property was located in the Kakwa area of Alberta. The transaction was a share exchange wherein each Seven Generations shareholder received 1.018 of an ARC share for each Seven Generations share held. At the time of the transaction, the combined company became Canada's largest condensate producer, third-largest natural gas producer, and sixth-largest upstream energy company. The combined company which continued under the name ARC Resources Ltd. was expected to deliver average daily production of over 340,000 boe/d, consisting of approximately 138,000 bbl/d of liquids and approximately 1.2 Bcf/d of natural gas.

In the second quarter of 2021, Tourmaline acquired Black Swan for \$1.1 billion. Black Swan's main producing properties were located in the Aitken and Nig areas of northeastern British Columbia. Black Swan also held material Montney land positions in the Beg, Jedney, Laprise and the Sojer areas of northeastern British Columbia.

Canadian Natural acquired Storm for \$1.0 billion in the fourth quarter. Storm's main producing properties were located in the Fireweed, Nig Creek and Umbach areas of British Columbia. Storm's lands complement Canadian Natural's interests in northeastern British Columbia and provided Canadian Natural synergies with its operations in the area.

The tables below show the total value and number of transactions broken into those over \$5.0 million in size and those under \$5.0 million. The total value of transactions over \$5.0 million decreased to approximately \$18.0 billion in 2021 from \$19.7 billion in 2020. The total number of deals over \$5.0 million in 2021 more than doubled to 95, from the 45 deals recorded in 2020.

Year	Enterprise Value of Transactions Over \$5.0MM (\$Billion)	Number of Transactions Over \$5.0MM
2021	18.0	95
2020	19.7	45
2019	7.7	32
2018	11.7	79
2017	43.2	90

The total enterprise value of transactions valued at less than \$5.0 million fell to \$171.6 million from \$232.1 million in 2020. There were 457 small deals that took place in 2021, up 41% from the 324 small deals in 2020.

Year	Enterprise Value of Transactions Under \$5.0MM (\$Million)	Number of Transactions Under \$5.0MM
2021	171.6	457
2020	232.1	324
2019	288.3	328
2018	381.2	350
2017	372.3	330

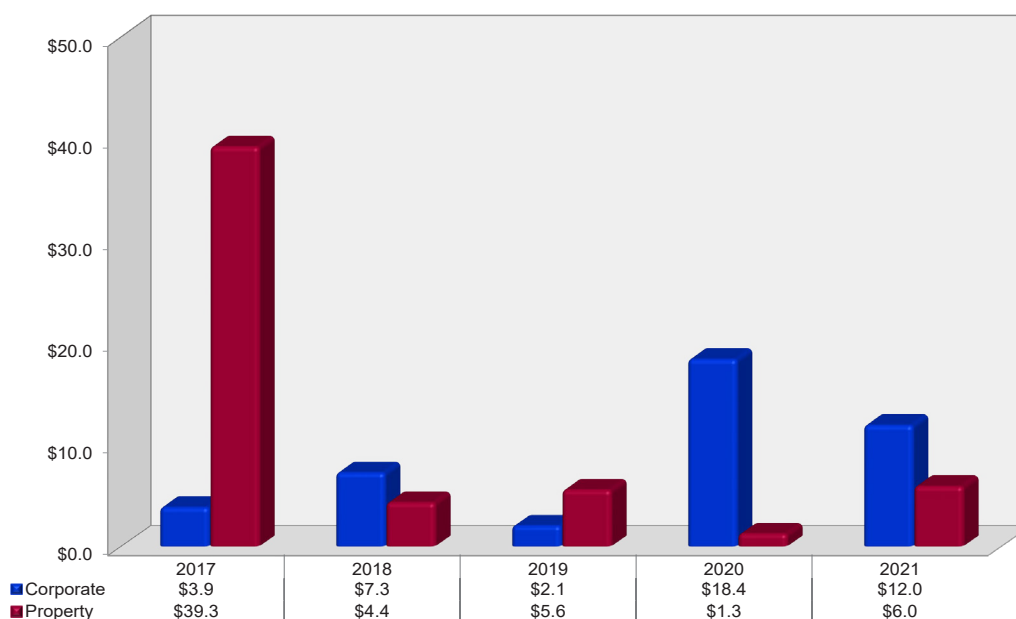
The average size of all transactions dropped in 2021 to \$32.9 million, compared to \$54.1 million in 2020. The average size of transactions over \$5.0 million decreased 57% on a year-over-year basis to \$189.1 million from \$438.1 million, while the average size of transactions under \$5.0 million decreased 47% to \$0.4 million in 2021 from \$0.7 million in 2020.

Year	Average Size of Transactions Over \$5MM (\$Million)	Average Size of Transactions Under \$5MM (\$Million)	Average Size of All Transactions (\$Million)
2021	189.1	0.4	32.9
2020	438.1	0.7	54.1
2019	241.5	0.9	22.3
2018	138.8	1.1	28.2
2017	479.8	1.1	103.7

The total enterprise value of large deals in 2021 was split 67% corporate and 33% property.

The total value of the corporate transactions in 2021 decreased 35% to approximately \$12.0 billion from the \$18.4 billion transaction value in 2020. The total value of the property deals increased in 2021, jumping 367% to approximately \$6.0 billion from the \$1.3 billion in asset transaction value calculated in 2020.

Enterprise Value of Large Transactions - \$Billion Corporate vs. Property



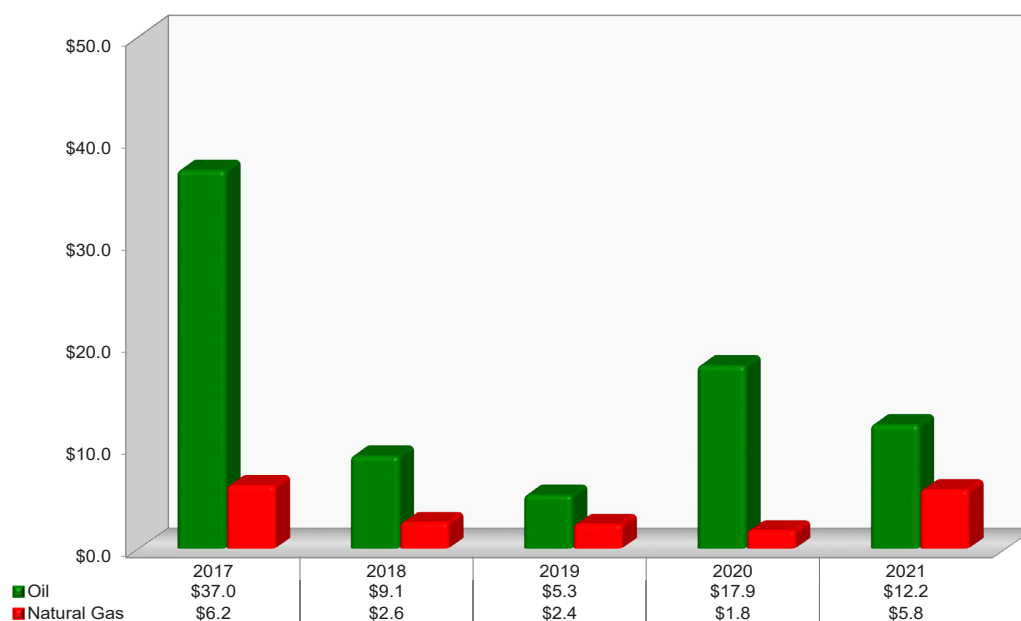
In 2021, the total value of all corporate transactions dropped 35%, while the total number of transactions was up 38% to 33 deals from the 24 tallied in 2020. The average value of corporate transactions dropped 53% to \$362.8 million from \$768.1 million in 2020.

The total value of all property transactions jumped 367% to approximately \$6.0 billion in 2021 and the number of property transactions increased 195% to 62 deals, compared to 21 in 2020. The average transaction size for property deals rose to \$96.6 million, a 58% increase from 2020.

Year	Enterprise Value of Corporate Transactions (\$Billion)	Number of Corporate Transactions	Average of Corporate Transactions (\$Million)	Year	Enterprise Value of Property Transactions (\$Billion)	Number of Property Transactions	Average of Property Transactions (\$Million)
2021	12.0	33	362.8	2021	6.0	62	96.6
2020	18.4	24	768.1	2020	1.3	21	61.1
2019	2.1	6	350.0	2019	5.6	26	216.5
2018	7.3	24	304.9	2018	4.3	55	59.1
2017	3.9	10	392.6	2017	39.3	80	490.7

The total enterprise value of large deals in 2021 was split 68% oil and 32% natural gas. The total value of oil-weighted transactions fell 32% to \$12.2 billion in 2021 from \$17.9 billion in 2020. Natural gas-weighted transactions jumped 221% to \$5.8 billion from \$1.8 billion in 2020.

Enterprise Value of Large Transactions - \$Billion Oil vs. Natural Gas

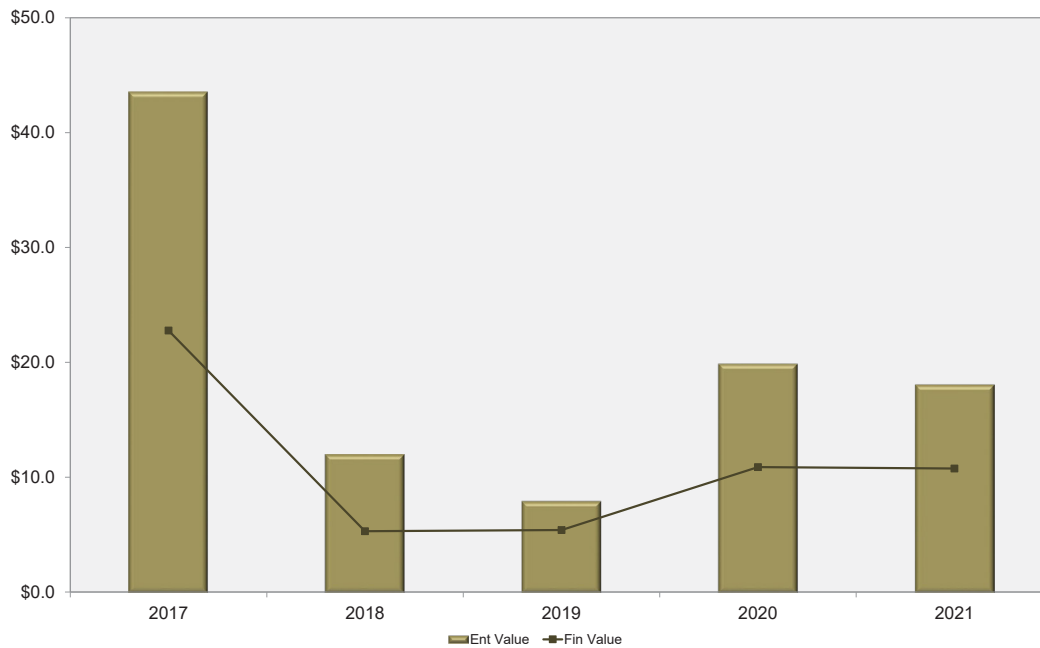


The average transaction size for oil-weighted deals decreased in 2021, falling 59% to \$229.4 million from \$559.7 million. The average size for natural gas-weighted transactions also decreased in 2021 to \$138.1 million from \$138.8 million in 2020. The number of oil-weighted transactions increased 66% to 53 deals from 32 in 2020. The number of natural-gas weighted transactions increased 223% to 42 deals from 13 in 2020.

Year	Enterprise Value of Oil Transactions (\$Billion)	Number of Oil Transactions	Average of Value of Oil Transactions (\$Million)	Year	Enterprise Value of Natural Gas Transactions (\$Billion)	Number of Natural Gas Transactions	Average Value of Natural Gas Transactions (\$Million)
2021	12.2	53	229.4	2021	5.8	42	138.1
2020	17.9	32	559.7	2020	1.8	13	138.8
2019	5.3	17	311.8	2019	2.4	15	161.8
2018	9.1	55	153.8	2018	2.6	24	108.5
2017	37.0	56	660.0	2017	6.2	34	183.0

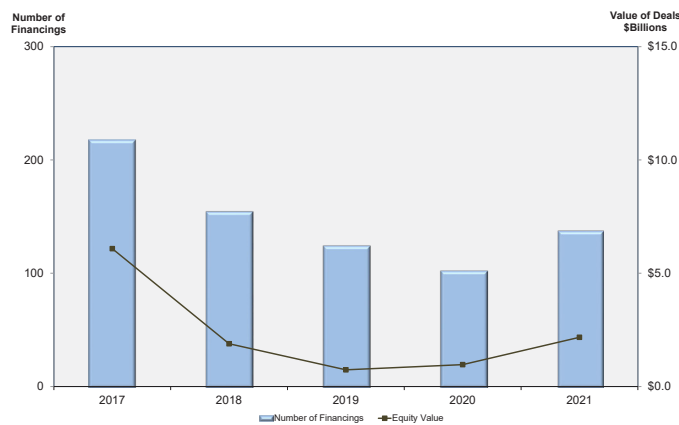
FINANCINGS VALUE

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

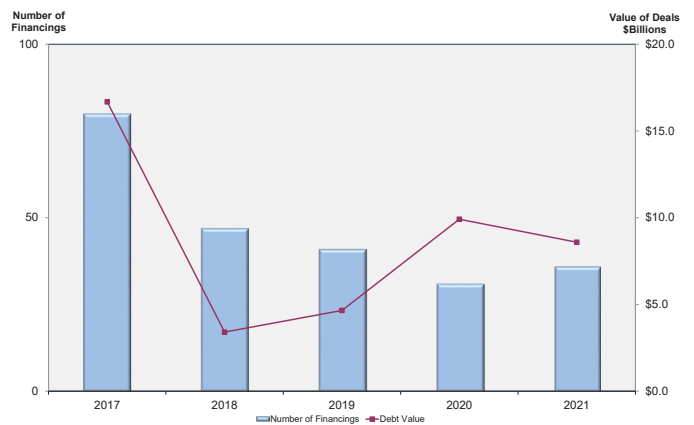


The total value of financings in 2021 fell to \$10.8 billion from \$10.9 billion in 2020. The total number of financings in 2021 was 174 compared to 134 in 2020.

Equity Financings Value - \$Billion



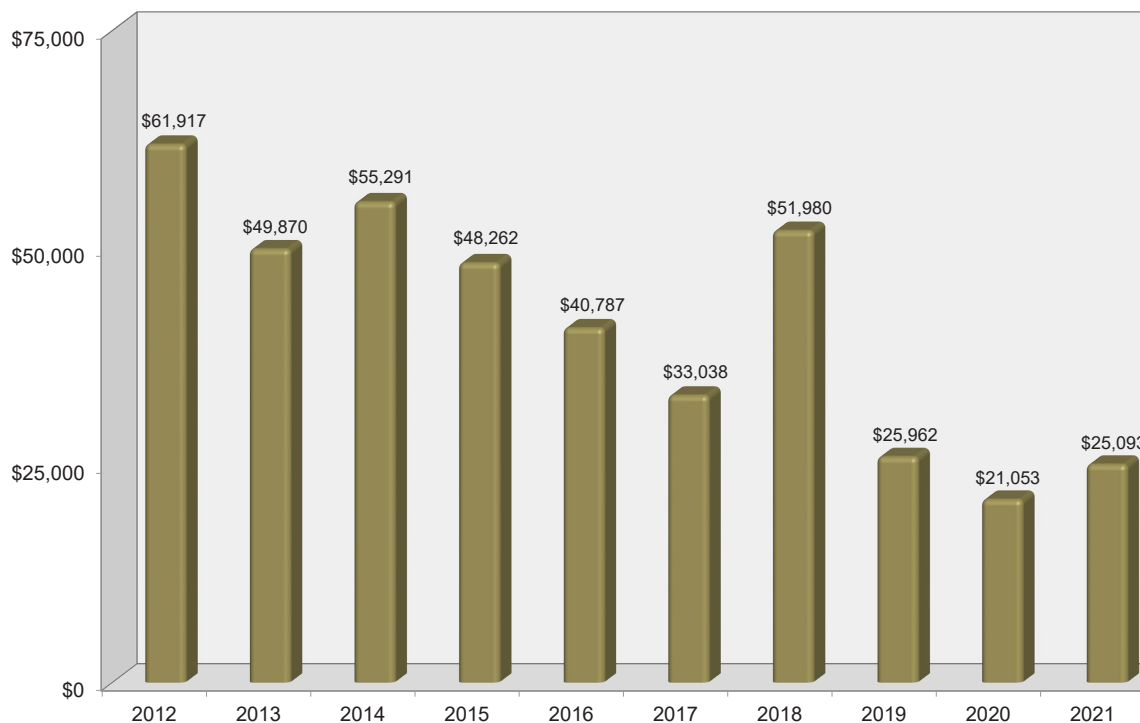
Debt Financings Value - \$Billion



The amount of equity raised in 2021 was \$2.2 billion compared to \$966.2 million in 2020. The total number of equity financings rose to 138 from 103 on a year-over-year basis. Debt financings decreased to \$8.6 billion from \$9.9 billion the previous year. The total number of debt financings rose to 36 from the 31 recorded in 2020.

MEDIAN PRODUCTION ACQUISITION PRICE UP 19% FROM 2020

Annual Median Price Paid - \$/boe/d



The median price paid for daily production is up 19% to \$25,093/boe/d in 2021 from \$21,053/boe/d in 2020. This method of analyzing transactions focuses on the value of the acquisition only on assets that are currently producing. It does not take into account production potential from reserves that are awaiting tie-in or behind pipe production that could be produced at a later date.

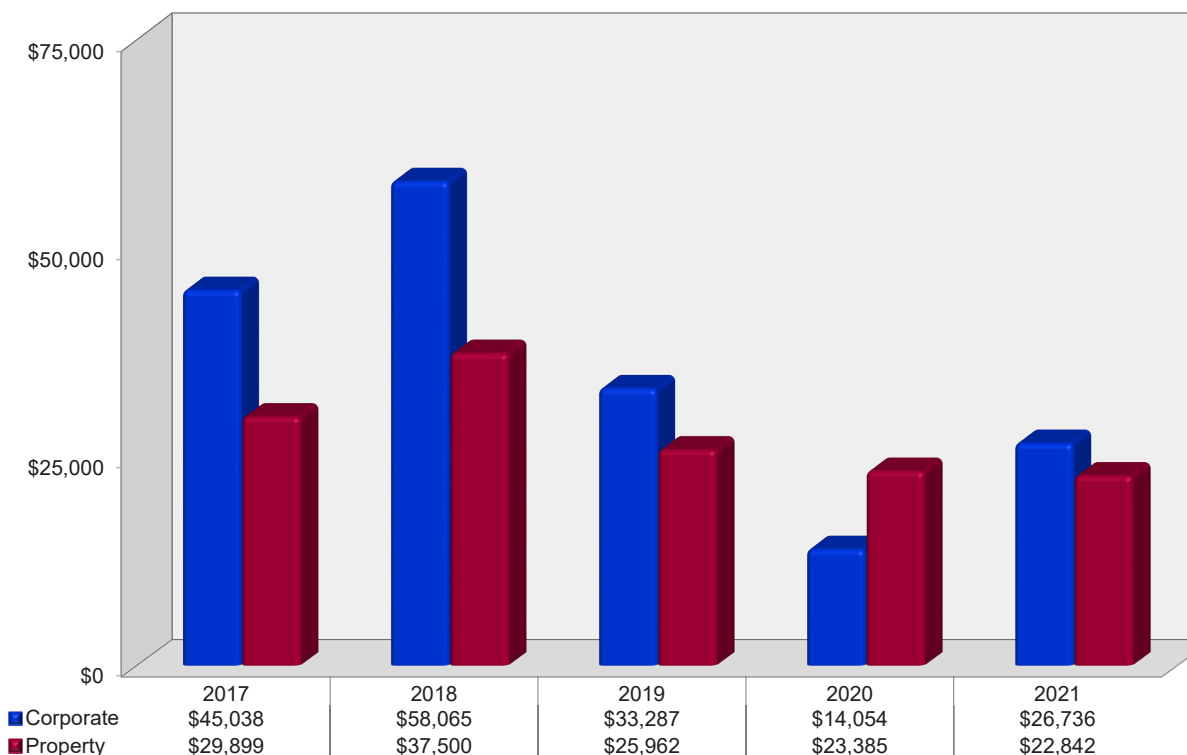
A transaction that is representative of the median acquisition price on a \$/boe/d basis is InPlay Oil Corp.'s acquisition of Prairie Storm Resources Corp. in the third quarter for \$23,490/boe/d. Prairie Storm's main producing property was located in the Willesden Green area of Alberta. InPlay identified approximately 80.1 net Cardium locations on the Prairie Storm lands. Concurrent with the announcement of this transaction, InPlay announced and subsequently completed a bought-deal equity financing for total proceeds of \$11.5 million through the issuance of 9,591,000 subscription receipts at a price of \$1.20 per subscription receipt. The subscription receipts converted to InPlay shares upon completion of the acquisition of Prairie Storm.

The highest-priced deal in 2021 on a production basis is Rubellite Energy Inc.'s acquisition of assets from Perpetual Energy Inc. in the third quarter for \$122,796/boe/d. The assets acquired were Perpetual's Clearwater interests located in the Figure Lake, Marten Hills and Ukalta areas of Alberta. The assets were acquired through a plan of arrangement with Perpetual wherein Perpetual shareholders received one Rubellite share for every 46 common shares of Perpetual held, and for every Rubellite share received, Perpetual shareholders received 12 arrangement warrants, each arrangement warrant entitled the holder to subscribe for one Rubellite share at a price of \$2.00 per share. As part of the acquisition, Rubellite raised a total of \$83.5 million in equity through a \$33.5 million arrangement warrant financing (as described above), \$30.0 million through a brokered private placement and \$20.0 million by way of a non-brokered private placement. Rubellite will be managed by the existing management team of Perpetual.

The price paid per boe of production was calculated by dividing the value of the acquired proven plus probable reserves by the current daily production rate. This method of calculation focuses on a relatively accurate item to measure (production) and not reserves, which is usually more open to interpretation. This measurement does not take into account higher or lower netbacks on specific production or from future price changes.

CORPORATE VS. PROPERTY PRODUCTION ACQUISITION PRICES

Annual Median Price Paid - \$/boe/d Corporate vs. Property



The median price paid for production associated with corporate transactions increased 90% year-over-year to \$26,736/boe/d in 2021 from \$14,054/boe/d in 2020. The median price paid for production associated with property transactions decreased slightly to \$22,842/boe/d in 2021 from \$23,385/boe/d in 2020. The differential between corporate and property acquisition prices is \$3,894/boe/d in 2021. In 2020, the differential was \$9,331/boe/d in favour of property transactions.

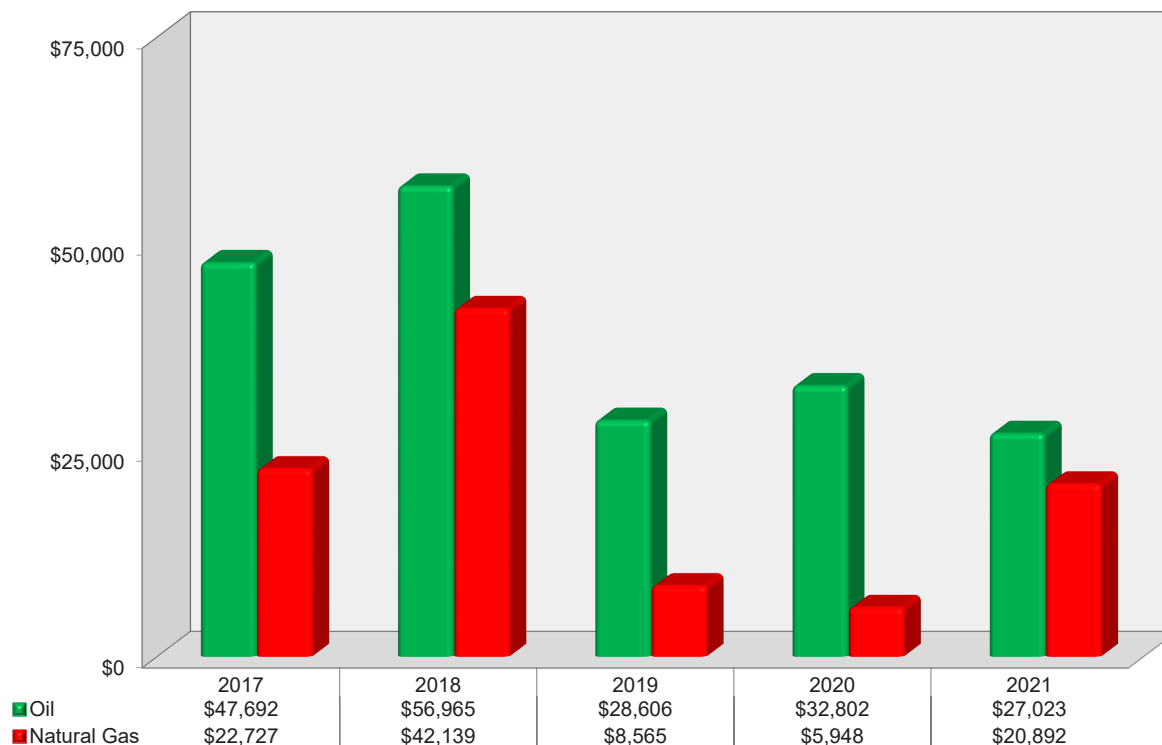
A corporate transaction that is representative of the median acquisition price on a \$/boe/d basis is Tourmaline's second quarter acquisition of Black Swan for \$26,777/boe/d. Black Swan's main producing properties were located in the Aitken and Nig areas of northeastern British Columbia. Black Swan also held material Montney land positions in the Beg, Jedney, Laprise and the Sojer areas of northeastern British Columbia. With this acquisition, Tourmaline forecasted its production would increase to between 465,000 to 475,000 boe/d (78% natural gas).

A property transaction that is representative of the median acquisition price on a \$/boe/d basis is Tourmaline's acquisition of assets from Saguaro Resources Ltd. for \$23,184/boe/d in the second quarter. Tourmaline acquired a 50% working interest in all of the assets of Saguaro and entered into a joint venture agreement to develop these assets. Tourmaline will operate the joint venture and related facilities. The acquired assets are located in the Laprise-Conroy area of northeastern British Columbia, immediately adjacent to the Polar Star Canadian Oil and Gas, Inc. and Chinook Energy Inc. assets which Tourmaline acquired in 2020. Proceeds from the transaction were used primarily to eliminate all of Saguaro's debt. Tourmaline anticipates production levels to increase to 12,500 boe/d net to Tourmaline from the Saguaro assets by the fourth quarter of 2021 after approximately \$35.0 million of net capital expenditures in the second half of 2021. The assets acquired include 645 gross Montney horizontal drilling locations.

Another asset transaction that is representative for the median acquisition price on a \$/boe/d basis is Tourmaline's acquisition of assets from Kelt Exploration Ltd. for \$22,500/boe/d in the third quarter. The assets acquired are located on the Peace River Arch. Tourmaline identified 12 gross (10.1 net) Charlie Lake drilling locations on the acquired lands.

OIL VS. NATURAL GAS PRODUCTION ACQUISITION PRICES

Annual Median Price Paid - \$/boe/d
Oil vs. Natural Gas



The median price paid for oil-weighted production fell 18% year-over-year to \$27,023/boe/d in 2021 from \$32,802/boe/d in 2020. The median price paid for natural gas-weighted production increased 251% to \$20,892/boe/d from \$5,948/boe/d in 2020. The differential between oil and natural gas acquisition prices decreased to \$6,131/boe/d in 2021 from \$26,854/boe/d in 2020.

A transaction that is representative of the oil-weighted median acquisition price on a \$/boe/d basis is ARC's acquisition of Seven Generations for \$26,695/boe/d in the first quarter. Seven Generations' main producing property was located in the Kakwa area of Alberta. The transaction was a share exchange wherein each Seven Generations shareholder received 1.018 of an ARC share for each Seven Generations share held. At the time of the transaction, the combined company became Canada's largest condensate producer, third-largest natural gas producer, and sixth-largest upstream energy company. The combined company which continued under the name ARC Resources Ltd. was expected to deliver average daily production of over 340,000 boe/d, consisting of approximately 138,000 bbl/d of liquids and approximately 1.2 Bcf/d of natural gas.

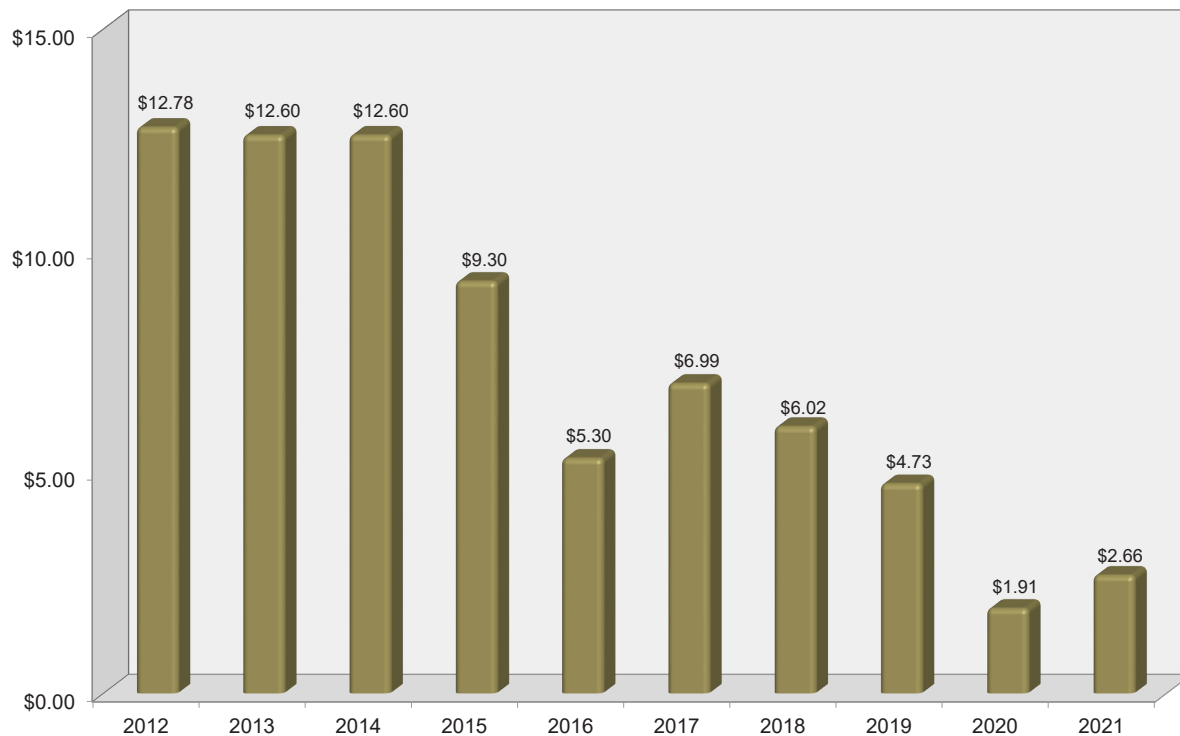
A transaction that is representative of the natural gas-weighted median acquisition price on a \$/boe/d basis is Tourmaline's acquisition of assets from Kelt for \$22,500/boe/d in the third quarter. The assets acquired are located on the Peace River Arch. Tourmaline identified 12 gross (10.1 net) Charlie Lake drilling locations on the acquired lands.

A high-priced oil-weighted transaction on a production basis is Tamarack Valley's acquisition of assets from Spur Petroleum Inc. for \$90,000/boe/d in the third quarter. The assets acquired are located in the Jarvie area of Alberta. The acquisition includes 53 net sections of Clearwater rights. Tamarack Valley identified 63 gross (59.7 net) future development locations on the lands acquired.

The highest-priced natural gas weighted transaction on a production basis is Leucrotta Exploration Inc.'s sale of assets to an undisclosed company for \$80,089/boe/d in the first quarter. The assets disposed of were non-core Montney interests in the Doe area of northeastern British Columbia.

MEDIAN RESERVES ACQUISITION PRICE UP 39% IN 2021

Annual Median Reserves Acquisition Price - \$/boe



The median acquisition price for proved plus probable reserves increased 39% to \$2.66/boe from \$1.91/boe in 2020.

A transaction that is representative of the median reserves acquisition price on a \$/boe basis is Journey Energy Inc.'s acquisition of Briko Energy Corp. for \$2.54/boe in the second quarter. Briko's main producing properties were located in the Kiskiu, Stolberg and West Ansell areas of Alberta. With this acquisition, Journey's production increased to between 7,600 to 7,900 boe/d (55% natural gas).

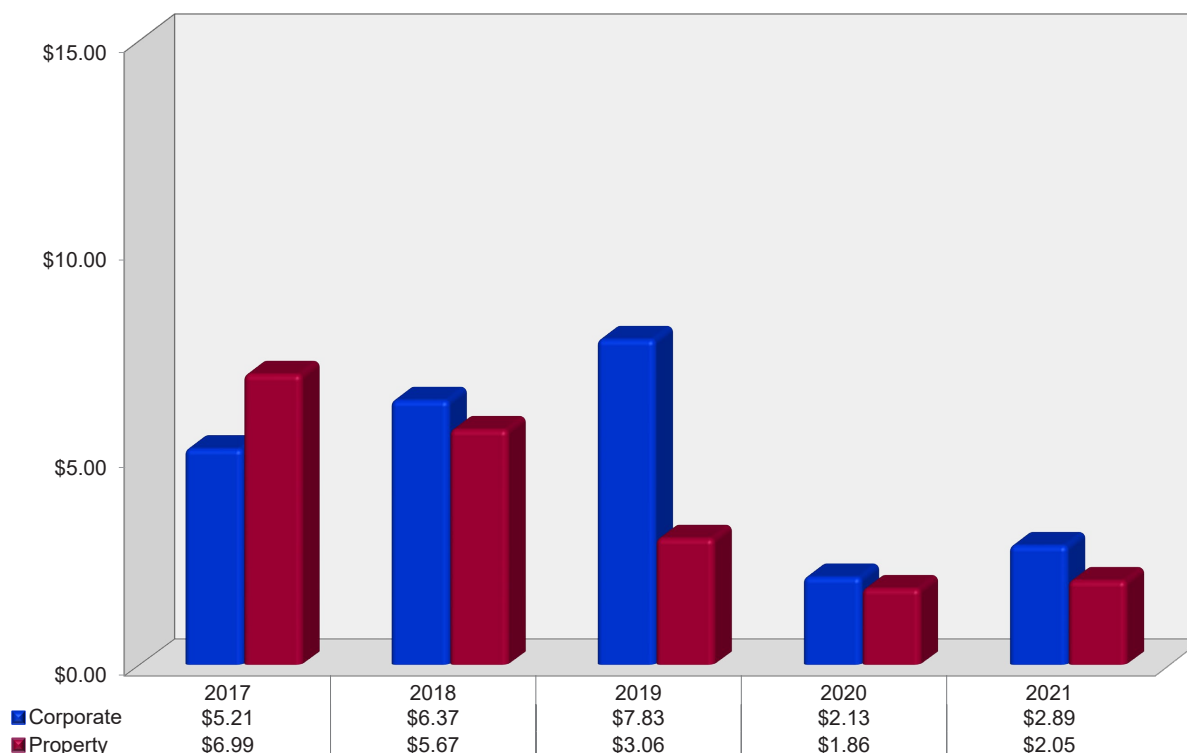
Another transaction that is representative of the median price on a reserves basis is Pine Cliff Energy Ltd.'s acquisition of Apogee Petroleum Inc. for \$3.00/boe in the fourth quarter. Apogee's main producing properties were located in the Drumheller, Michichi, Richdale and Rowley areas of Alberta. Apogee's interests are synergistic with Pine Cliff's assets in the greater Ghost Pine area. With this acquisition, Pine Cliff's production increased to 21,000 boe/d (89% natural gas).

The highest-priced deal in 2021 on a reserves basis is Tamarack Valley's pending acquisition of Crestwynd Exploration Ltd. for \$19.79/boe in the fourth quarter. With this transaction, Tamarack Valley will control 445 net sections of Clearwater land across the Nipisi, West Marten Hills and Southern Clearwater area. Tamarack Valley has identified 209 (153.7 net) future drilling locations on the Crestwynd lands.

One of the lowest-priced deals on a reserves basis in 2021 is i3 Energy plc's acquisition of assets from Cenovus for \$0.78/boe in the third quarter. The properties acquired are located in central Alberta and consist of conventional oil and natural gas production and infrastructure assets. The properties include an inventory of greater than 140 net drilling locations and 80 net reactivation opportunities. The assets acquired complement i3's existing assets in the area with approximately 3,090 boe/d of overlapping joint working interest production. Concurrent with the transaction, i3 raised CAD \$68.9 million (£40.0 million) by the placing of 363,700,000 i3 shares at an issue price of CAD \$0.19 (11 pence) per share.

CORPORATE VS. PROPERTY RESERVES ACQUISITION PRICES

Annual Median Reserves Acquisition Prices - \$/boe Corporate vs. Property



The median proven plus probable reserve acquisition price paid for corporate transactions increased 36% year-over-year, rising to \$2.89/boe in 2021 compared to \$2.13/boe in 2020. The median price paid for reserves associated with property deals rose 10% year-over-year to \$2.05/boe compared to \$1.86/boe in 2020. The differential between corporate and property acquisitions was \$0.84/boe in 2021 while in 2020 it was \$0.27/boe.

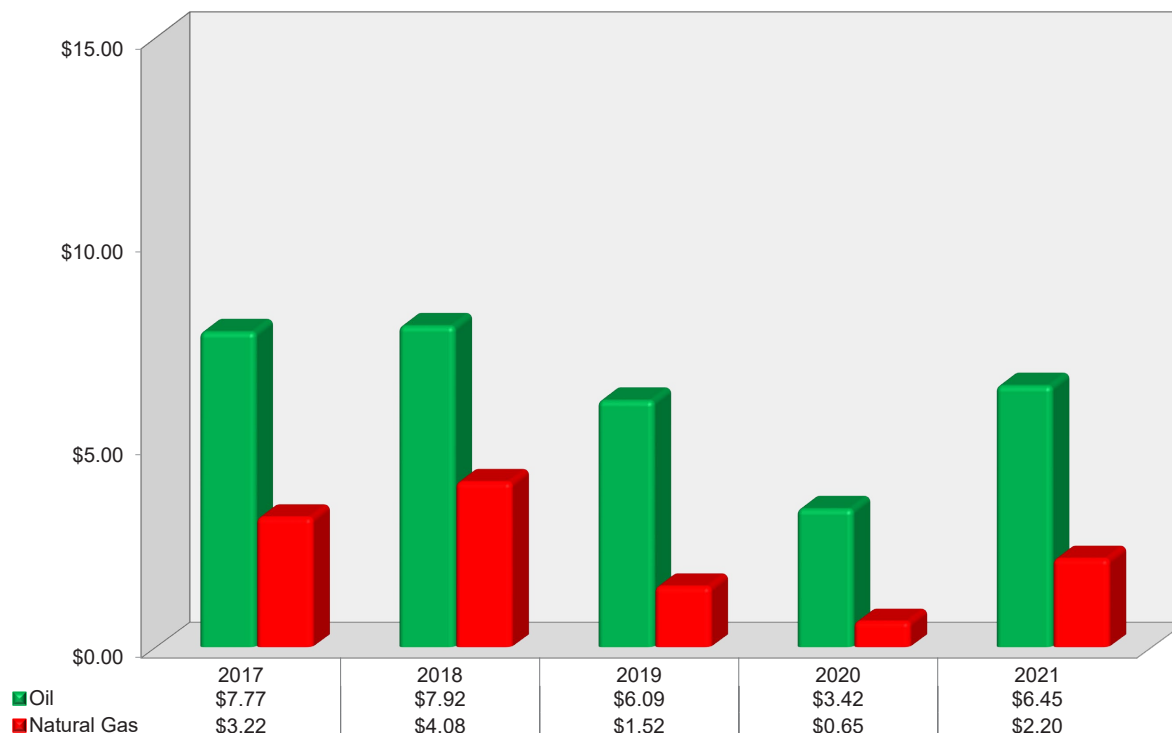
A transaction that is representative of the median acquisition price on a \$/boe basis for corporate deals is Kiwetinohk Resources Corp.'s acquisition of Distinction Energy Corp. for \$2.78/boe in the second quarter. This transaction involved Kiwetinohk acquiring the remaining common shares of Distinction not already held. Kiwetinohk prior to this transaction held 52% of the outstanding shares of Distinction. Our analysis is based on the acquisition of 100% of Distinction. Distinction's main producing properties were located in the Bigstone and Simonette areas of Alberta.

Another transaction that is representative of the median acquisition price on a \$/boe basis for corporate deals is Spartan Delta's acquisition of Velvet for \$3.21/boe in the third quarter. Velvet's main producing properties were located in the Gold Creek, Karr & Pouce Coupe areas of Alberta. Spartan has identified 732 net Montney drilling locations on the Velvet lands.

A transaction that is representative of the median acquisition price on a \$/boe basis for property deals is Razor Energy Corp.'s acquisition of assets from Sabre Energy Ltd. for \$1.85/boe in the third quarter. The assets acquired consist of a 32.5% working interest in the Swan Hills Unit No. 1, an 8.6% working interest in the Judy Creek Gas Plant and a 22.8% working interest in the South Swan Hills Unit Gathering System. With this acquisition, Razor's working interest in the Swan Hills Unit No. 1 increased to 49.7%.

OIL VS. NATURAL GAS RESERVE ACQUISITION PRICES

Annual Median Reserves Acquisition Prices - \$/boe
Oil vs. Natural Gas



Proven plus probable reserve acquisition prices for oil-weighted transactions increased 89% to \$6.45/boe in 2021 compared to \$3.42/boe in 2020. Over the same time period, prices paid for natural gas-weighted transactions increased 238% to \$2.20/boe compared to \$0.65/boe the year prior. The differential between oil-weighted and natural gas-weighted reserve acquisition prices increased year-over-year; the differential in 2021 is \$4.25/boe while in 2020 it was \$2.77/boe.

A transaction that is representative of the oil-weighted median acquisition price on a \$/boe basis is Obsidian Energy Ltd.'s acquisition of assets in the fourth quarter for \$6.45/boe. Obsidian acquired the remaining 45% interest in the Peace River Oil Partnership asset from its joint venture partner. The assets acquired are located in the Peace River area of Alberta, targeting the Bluesky Formation with upside in the Clearwater Formation.

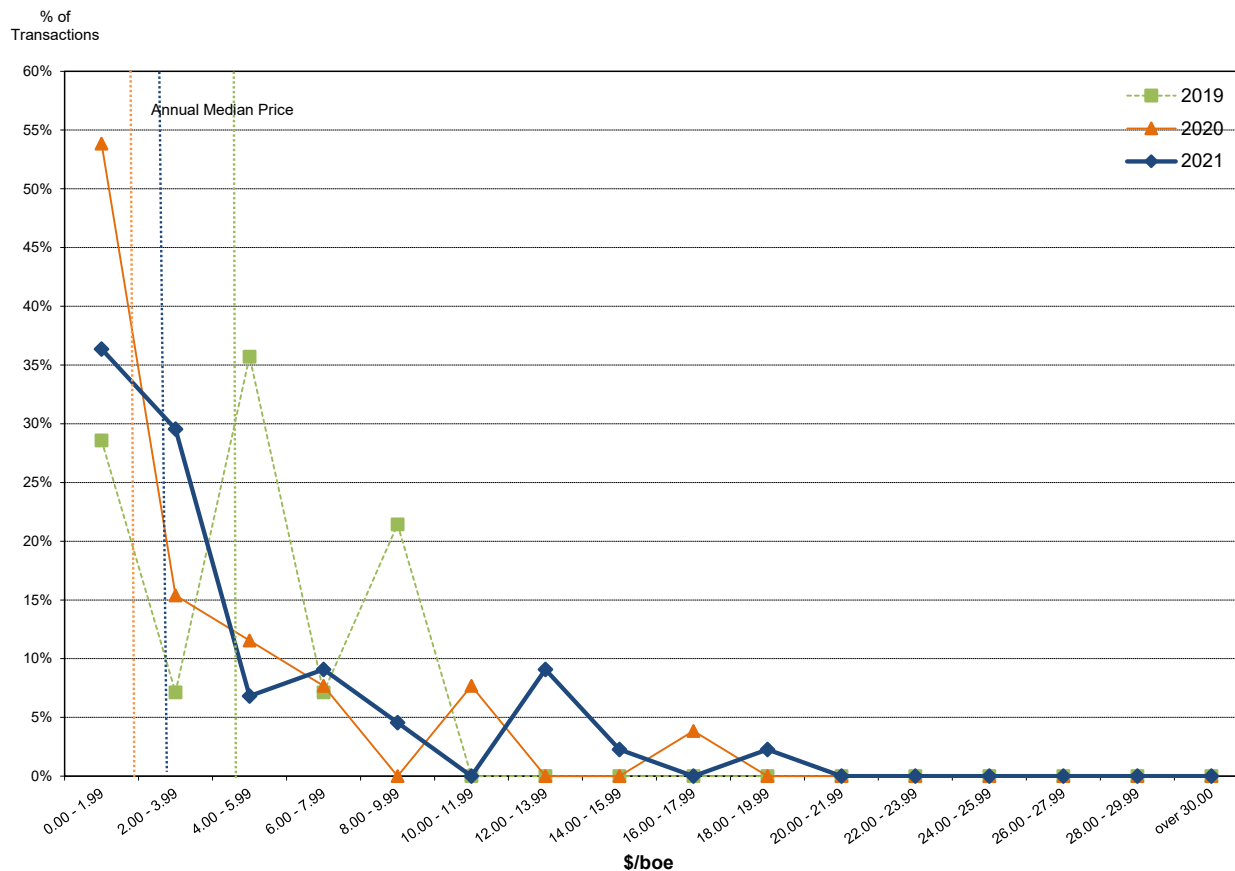
A transaction that is representative of the oil-weighted median acquisition price on a \$/boe basis is Cardinal Energy Ltd.'s acquisition of Venturion Oil Limited for \$6.47/boe in the second quarter. Venturion's main producing properties were located in the Killam, Viking-Kinsella and Worsley areas of Alberta and in the Mica area of British Columbia.

A transaction that is representative of the natural gas-weighted median acquisition price on a \$/boe basis is Tourmaline's second quarter acquisition of Black Swan for \$2.33/boe. Black Swan's main producing properties were located in the Aitken and Nig areas of northeastern British Columbia. Black Swan also held material Montney land positions in the Beg, Jedney, Laprise and the Sojer areas of northeastern British Columbia. With this acquisition, Tourmaline forecasted its production would increase to between 465,000 to 475,000 boe/d (78% natural gas).

A high-priced natural gas-weighted deal in 2021 on a reserves basis is Whitecap Resources Inc.'s acquisition of Kicking Horse Oil & Gas Ltd. for \$3.75/boe in the second quarter. Kicking Horse's main producing property was located in the Kakwa area of Alberta and complements Whitecap's existing Montney position at Karr. The acquisition includes 92 (60 net) sections of Montney rights that are 99% operated, with an average working interest of 65%. Whitecap's total acreage in the Montney resource play has increased to 168 (118 net) sections with 696 (437.4 net) drilling locations identified.

The graph below illustrates the distribution curve of acquisition prices in 2021 versus the two previous years. When analyzing the percentage of deals being completed in each of the specific intervals, we find that in 2021 the majority of the deals were in the \$0.01-\$4.00 range which was similar to 2020, while in 2019 the majority of the deals were in the \$0.01-\$6.00 range.

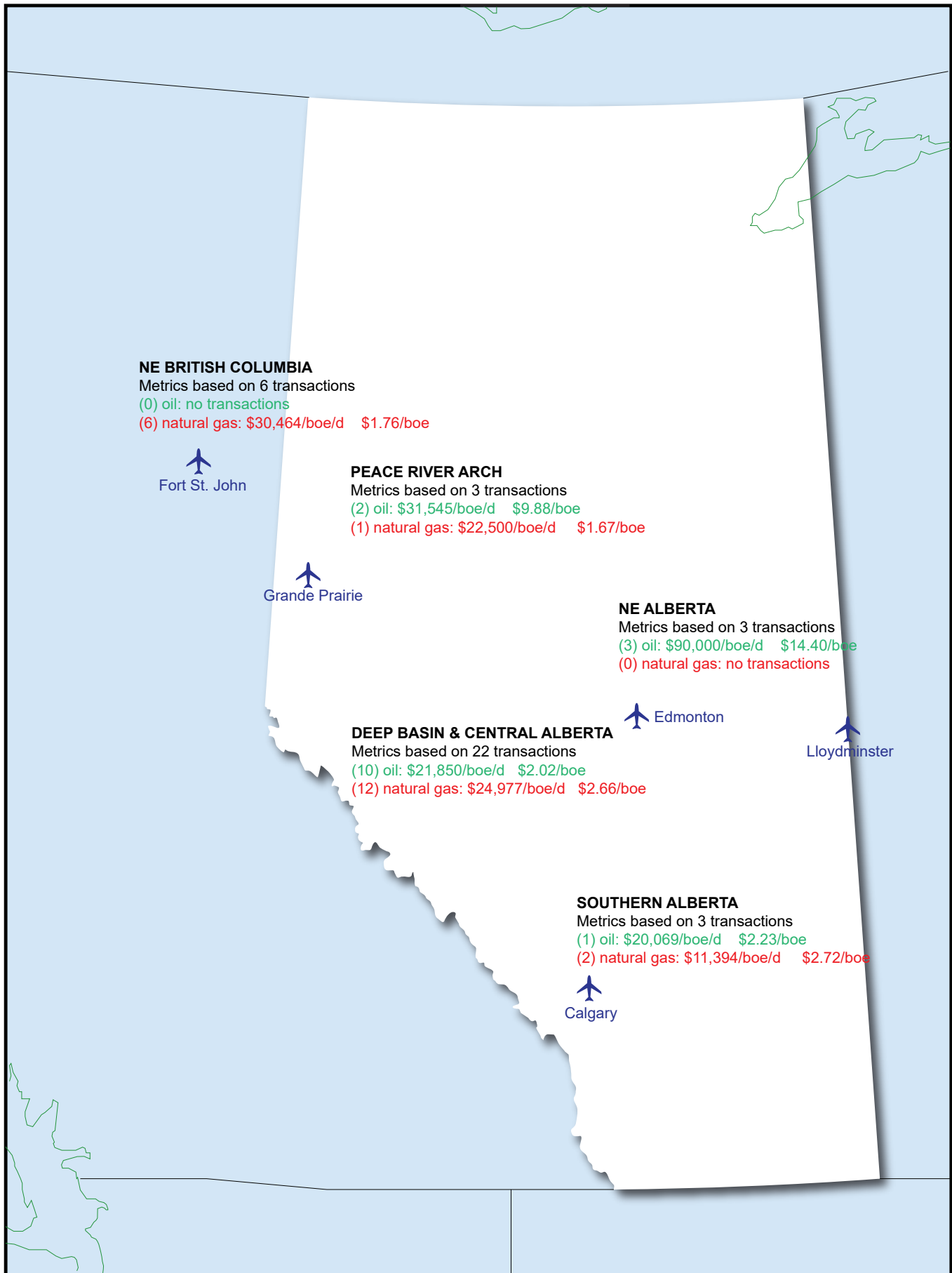
Distribution of \$/boe Prices



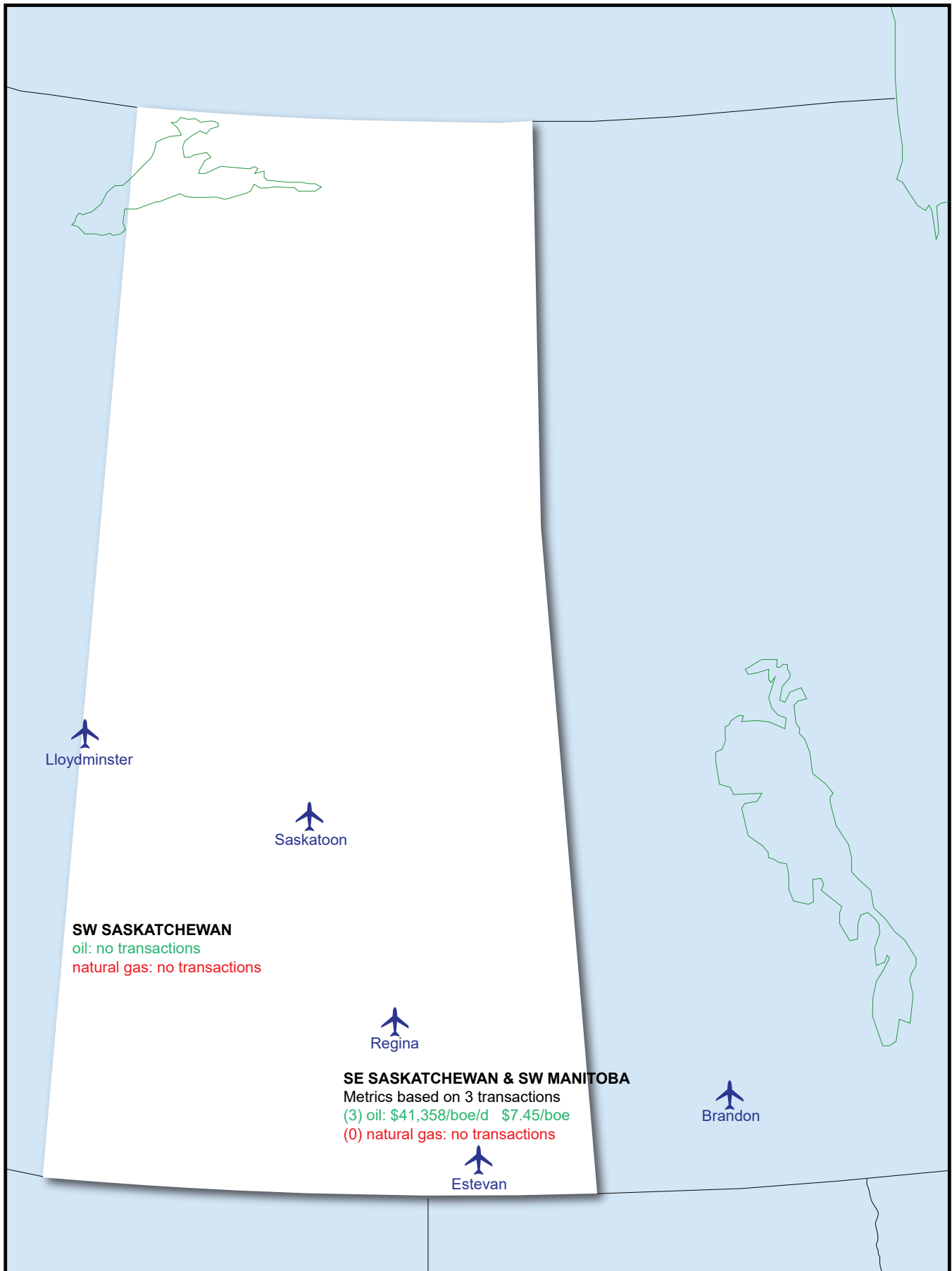
At the lower end of the distribution, 82% of the deals in 2021 were priced below \$8.00/boe compared to 88% in 2020 and 79% in 2019.

At the higher end of the distribution, there were no deals in 2021, 2020 or 2019 priced above \$20.00/boe.

PRODUCTION AND RESERVE METRICS BY AREA

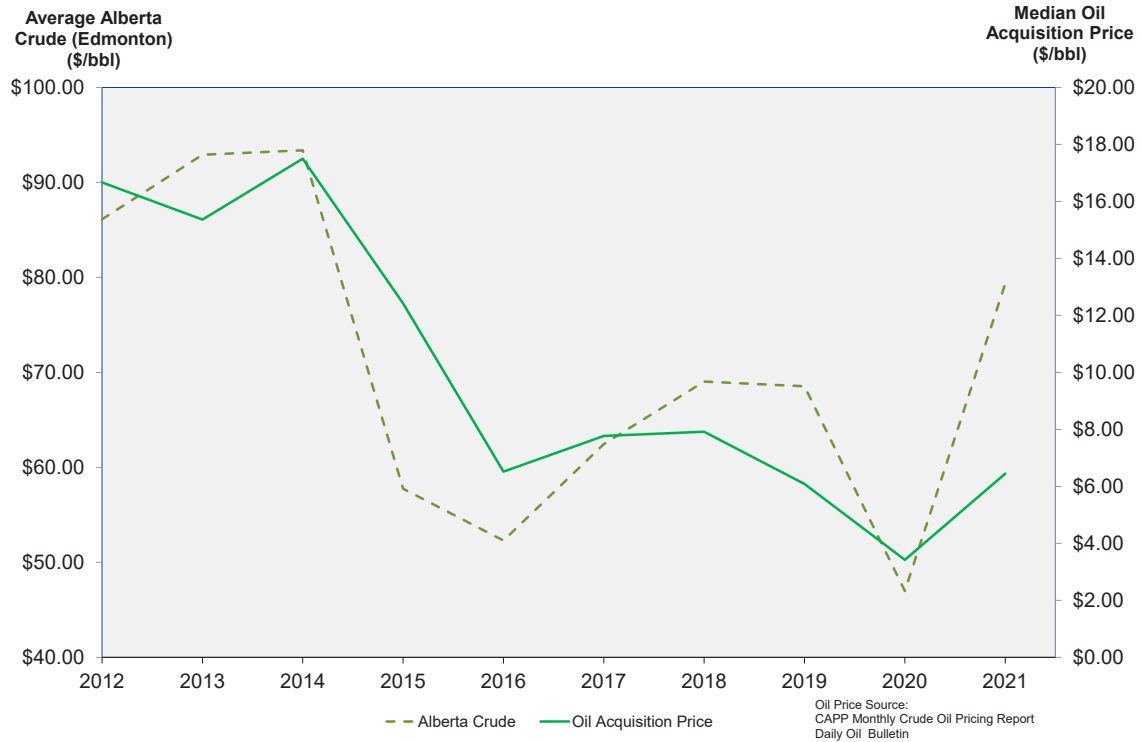


PRODUCTION AND RESERVE METRICS BY AREA



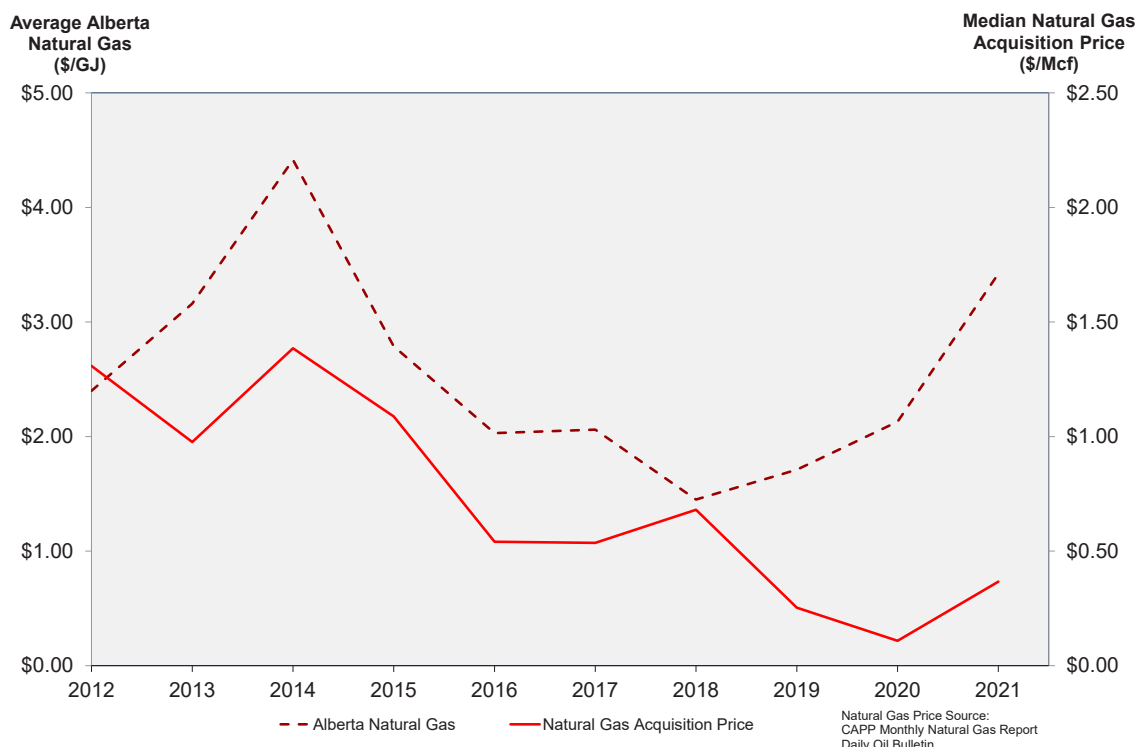
The graph below illustrates the average Alberta spot crude oil price based on par quality at Edmonton, versus the median oil acquisition price calculated by Sayer Energy Advisors. As can be seen from the graph, there has historically been a strong correlation between the commodity prices of oil and acquisition prices for oil-weighted transactions.

Oil Acquisition Price vs. Crude Oil Price (Edmonton)



The graph below illustrates the average Alberta natural gas price (AECO-C) versus the median natural gas acquisition price calculated by Sayer Energy Advisors. Natural gas-weighted acquisition prices have been essentially moving in tandem with the price of natural gas except in 2019 and 2020. In 2021, we witnessed both the acquisition price and the price of natural gas increase.

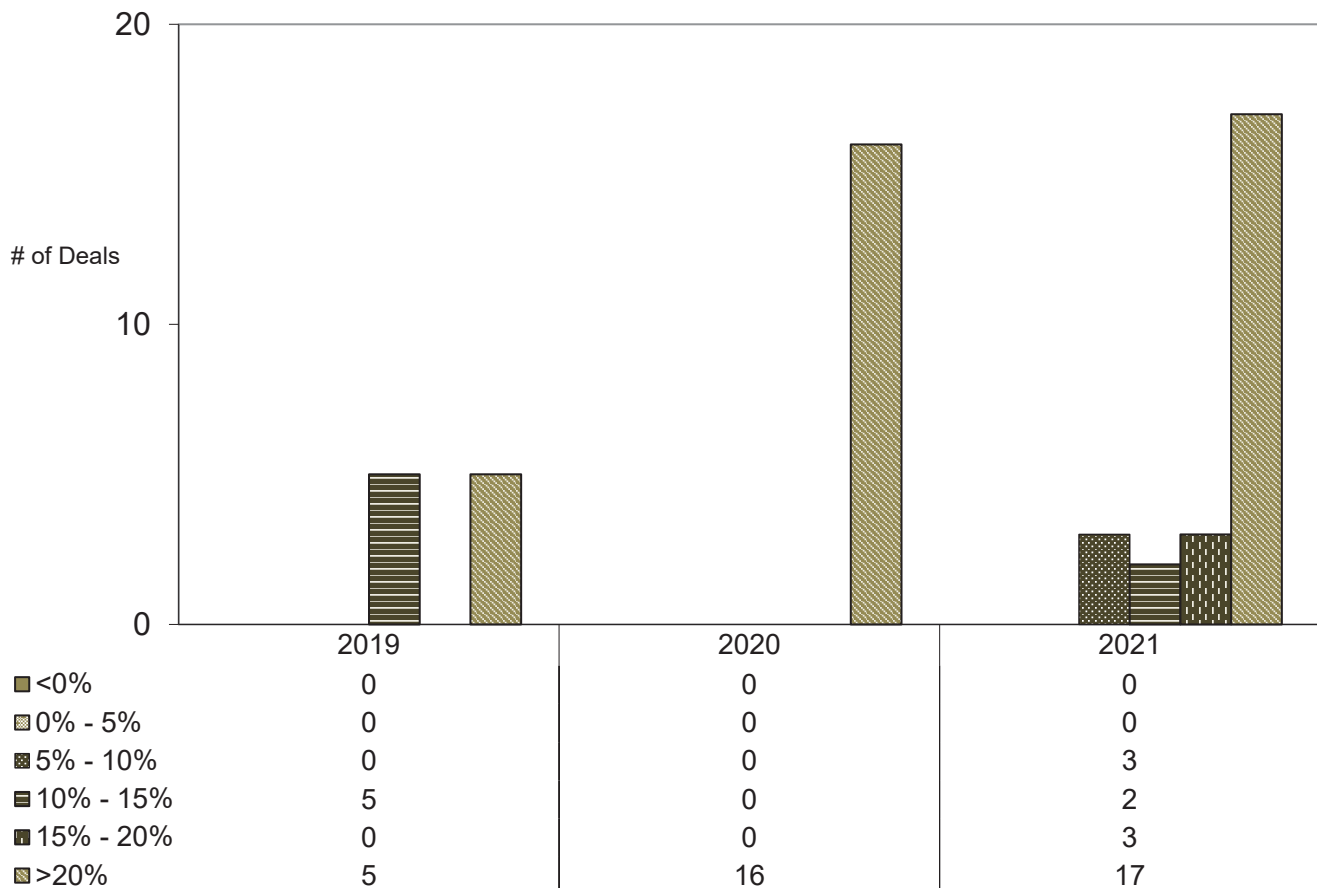
Natural Gas Acquisition Price vs. Alberta Natural Gas Price (AECO-C)



DISCOUNTED CASH FLOW RATES

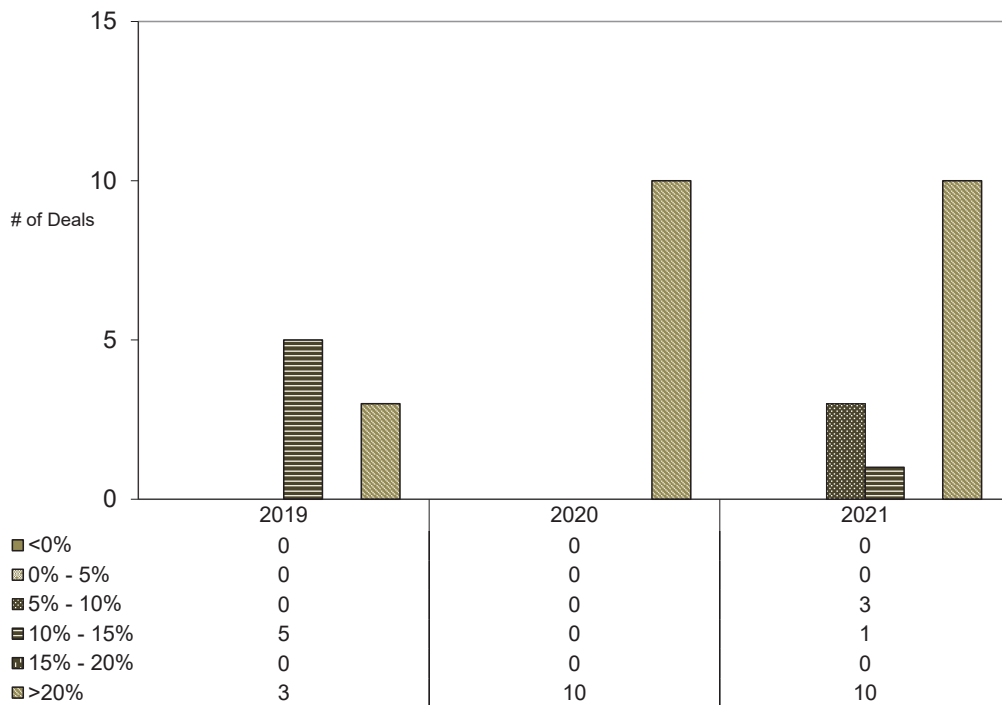
The discounted cash flow rates (“DCF”) for 25 transactions in 2021 have been analyzed in detail. The graph below illustrates the changes in the before-tax DCF of return reflected in the transactions analyzed over the three-year period from 2019 to 2021. The graph shows that from 2019 to 2021 the majority of the deals were transacted at DCF rates greater than 20% on a proved plus probable basis. In 2021, 68% of the deals (17/25) were completed at a DCF rate of 20% or greater compared to 100% in 2020 (16/16) and 50% in 2019 (5/10).

Discounted Cash Flow Rates



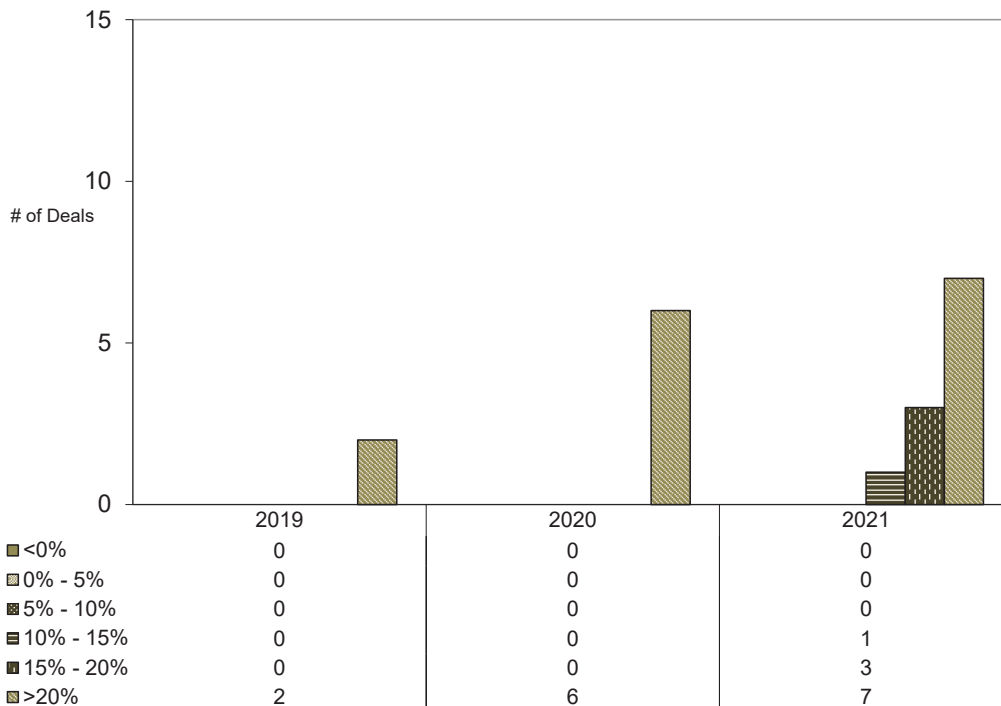
Care should be taken in drawing conclusions on DCF rates, given that the price forecasts in the engineering reports that were available for this analysis are not the same and are not all effective at the same time during the year. If price forecasts could be matched to current reserve evaluations at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

Discounted Cash Flow Rates - Oil-Weighted Transactions



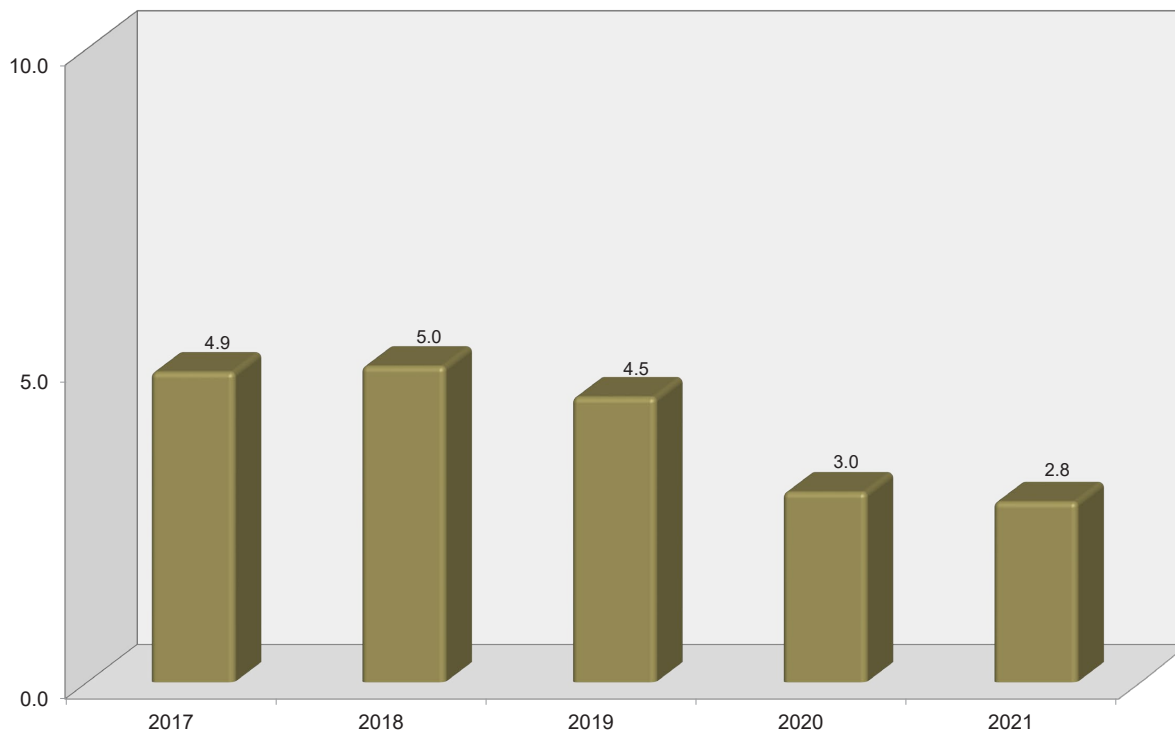
In 2021, the majority of the oil-weighted transactions were completed at discounted cash flow rates above a 20% DCF, as it was in the previous years. The majority of natural gas-weighted transactions in 2021 were completed above a 20% DCF.

Discounted Cash Flow Rates - Natural Gas-Weighted Transactions



OPERATING CASH FLOW MULTIPLE

Median Operating Cash Flow Multiples



In 2021, the median annual operating cash flow multiple decreased 7% to 2.8 times from 3.0 times in 2020. Operating cash flow multiples were calculated by dividing the value of the acquired reserves by an estimate of annualized operating cash flow at the time the transaction took place.

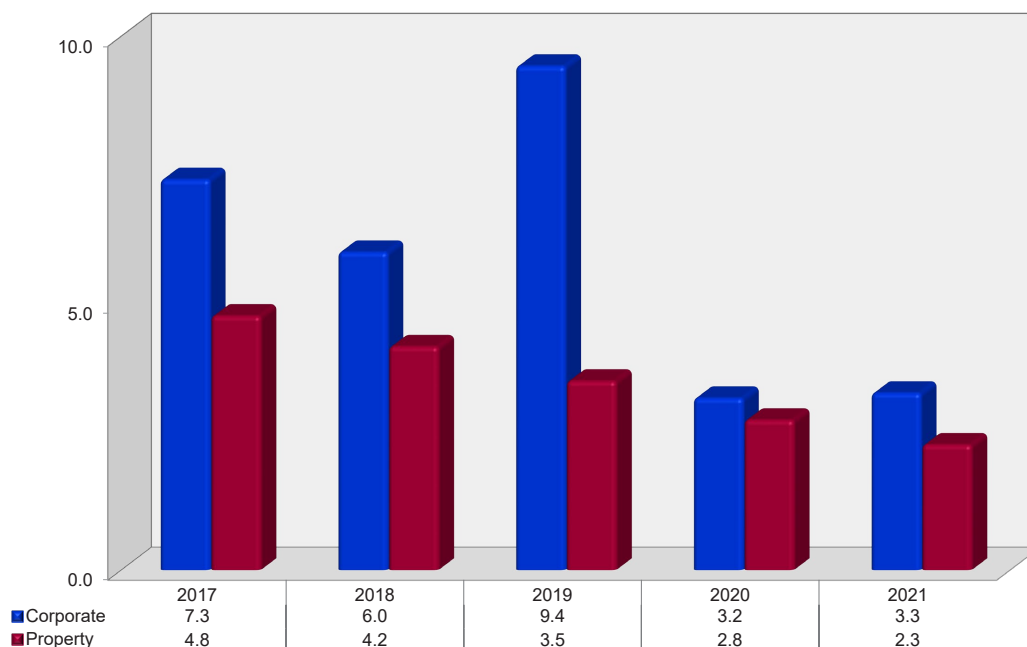
Note that in most cases the cash flow estimates are calculated on a trailing basis. In some cases, estimated forecasted cash flows from the company or engineering firm are provided, which can result in variations in the multiples.

The corporate transaction with the highest operating cash flow multiple during the year is Canadian Natural's acquisition of Storm in the fourth quarter. Canadian Natural paid 6.6 times Storm's actual operating cash flow for the three months ended September 30, 2021.

The property transaction with the highest operating cash flow multiple during the year is Leucrotta's sale of non-core Montney interests in the Doe area of northeastern British Columbia to an undisclosed buyer in the first quarter for 42.9 times actual operating cash flow for the year ended December 31, 2020.

A transaction with a low operating cash flow multiple is Saturn Oil & Gas Inc.'s acquisition of assets from Crescent Point Energy Corp. in the second quarter. Saturn paid 1.4 times Crescent Point's actual operating cash flow for the three months ended March 31, 2021.

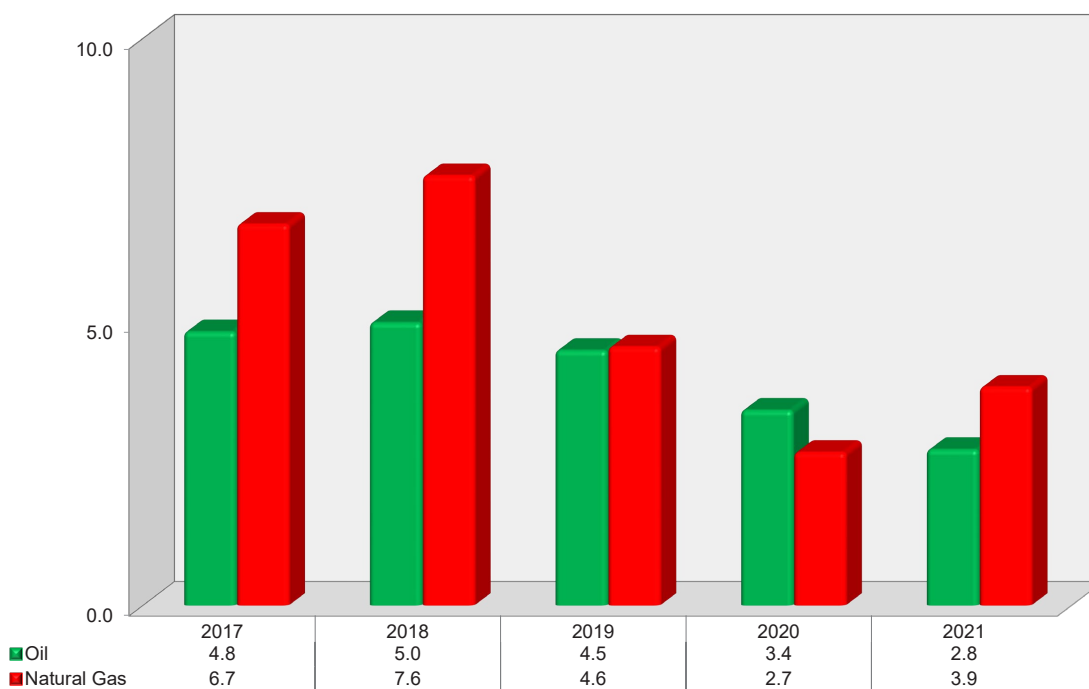
Median Operating Cash Flow Multiples Corporate vs. Property



The median operating cash flow multiple for corporate transactions in 2021 was 3.3, up slightly from the 3.2 recorded in 2020. The median operating cash flow multiple for property transactions decreased to 2.3 from 2.8 in 2020. Care should be taken in drawing conclusions on operating cash flow multiples, given that the cash flow assumptions that were available for the analysis are not the same for every transaction.

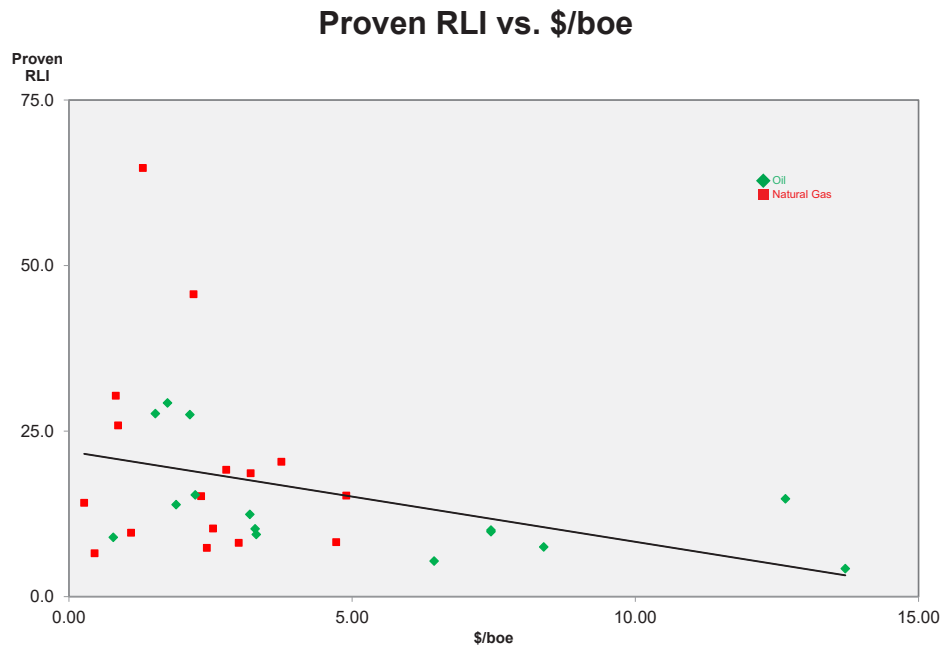
The median operating cash flow multiple for oil-weighted transactions in 2021 fell to 2.8 from the 3.4 in the previous year. The median operating cash flow multiple for natural gas-weighted transactions in 2021 was 3.9, up from the 2.7 in 2020.

Median Operating Cash Flow Multiples Oil vs. Natural Gas



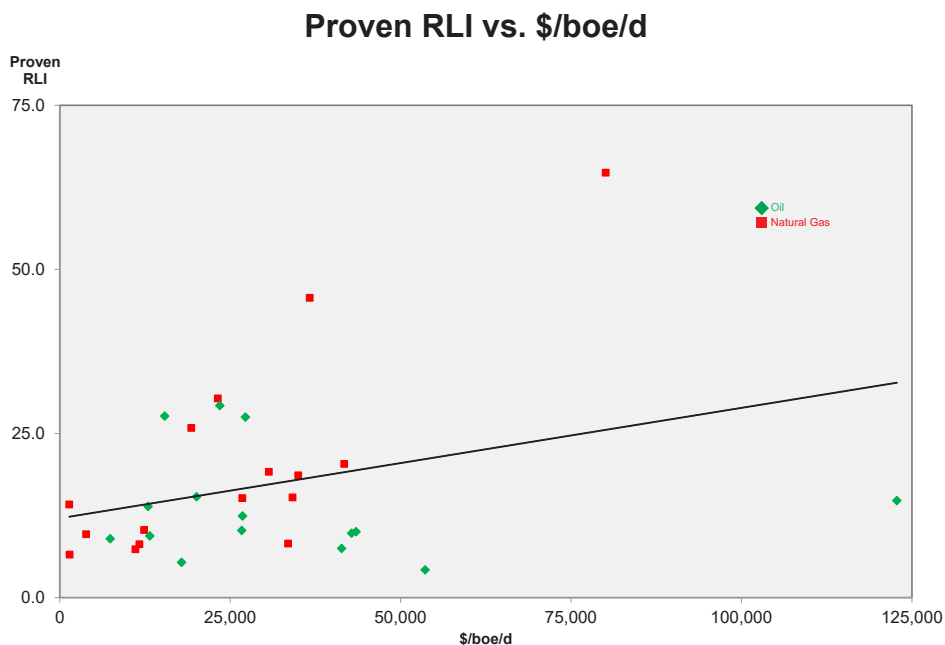
RESERVE LIFE INDEX COMPARED TO M&A PRICES

The graphs below show the relationship between proven RLI and acquisition prices paid on a reserves and production basis during 2021. The RLI is calculated by dividing the total proven reserves by the annualized production.

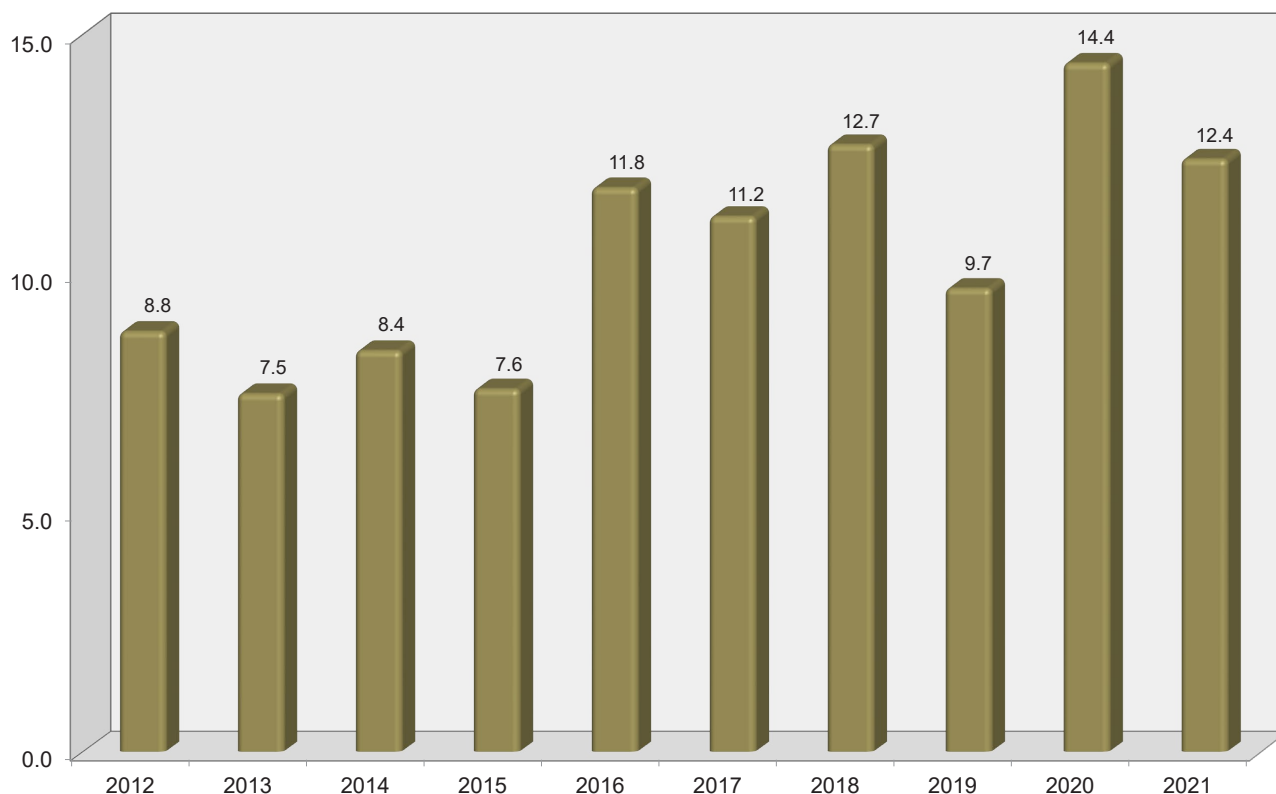


The trend line for RLI versus reserve acquisition prices (\$/boe) illustrated above shows a negative correlation between the RLI and price paid for reserves on a \$/boe basis in that as RLI decreases, reserves acquisition costs increase.

The chart for RLI versus production acquisition prices (\$/boe/d) illustrated below shows a positive correlation, in that as RLI increases, production acquisition costs also increase.



Annual Median Proven RLI



The graph above shows the median proven RLI for acquired reserves over the last ten years. The lowest median proven RLI was recorded in 2013 of 7.5 years while the highest was 14.4 years in 2020. The median proven RLI for 2021 is 12.4 years.

The transaction with the lowest proven RLI in 2021, at 4.2 years, is Tamarack Valley's acquisition of Woodcote Petroleum Inc. and assets from Surge Energy Inc. for \$149.6 million in the first quarter. The assets acquired from Surge are located in the Nipisi and Provost areas of Alberta. Woodcote's main producing property was located in the Greater Nipisi area of Alberta.

The acquisition with a high proven reserve life index in 2021 at 64.7 years is Leucrotta's sale of assets to an undisclosed buyer in the first quarter for \$30.0 million. The assets disposed of are non-core Montney interests in the Doe area of northeastern British Columbia.

TRENDS FOR THE FUTURE

A number of themes are expected to occur in the industry through 2022, which include:

- 1) There will be a slight decline in M&A activity in 2022 in comparison to 2021. We expect to see corporate transactions account for a significant portion of the M&A value in 2022 as it did in 2021.
- 2) In 2021 there were 11 insolvencies. We expect to see a lower number of insolvencies in 2022, in part due to the significant rebound in oil and natural gas commodity prices we have seen recently.
- 3) There won't be many multi-billion natural gas transactions taking place in 2022.
- 4) While minor oil sands assets may hit the market, we do not expect to see many multi-billion-dollar transactions in this sector in 2022.
- 5) There will be very few, if any, hostile takeover attempts in 2022.
- 6) Abandonment liabilities will continue to be an important factor in M&A activity. The issue of dealing with suspended wells and other such liabilities, encompassed under the Alberta Energy Regulator ("AER"), will continue to impact M&A activity in 2022.
- 7) There will be an increase in recapitalization transactions in 2022.
- 8) More junior players will consider and conclude mergers as opposed to outright cash sales.
- 9) We will continue to see purchasers using shares as currency in acquisitions.
- 10) We will continue to see more share buy-backs and increased dividends to shareholders will continue in 2022.
- 11) Capital markets will continue to be constrained and selective by primarily supporting larger public entities in 2022 and we also believe that there will be more debt financings versus equity financings because of the low interest rate environment we have been in since the onset of the COVID-19 pandemic.

PAST PREDICTIONS

In our 2020 Annual Summary, Sayer Energy Advisors made several predictions. We stated that we expected to see a slight decline in M&A activity in 2021 in comparison to 2020. In 2020, the total value of M&A activity in the Canadian oil patch was quite high by historical standards, totaling approximately \$19.9 billion. We expected to see corporate transactions account for a significant portion of the M&A value in 2021 as it did in 2020 when it reached \$18.4 billion. Total M&A value in 2021 came in at approximately \$18.1 billion with \$12.0 billion of the value from corporate transactions.

There were three deals in 2021 valued at over a billion dollars; with ARC acquiring Seven Generations for \$5.1 billion, Tourmaline purchasing Black Swan for \$1.1 billion and Canadian Natural taking over Storm for just over \$1.0 billion. These three transactions made up 40% of the total M&A value for the year. We were correct in not expecting to see many multi-billion-dollar natural gas transactions taking place in 2021. Of the three deals valued at over a billion dollars, two were natural gas deals; the aforementioned Tourmaline/Black Swan and Canadian Natural/Storm transactions.

We predicted that there would be very few, if any, hostile takeover attempts in 2021. We were correct, in that there were no hostile takeover attempts in 2021.

We predicted that 2021 would be a slow year for oil sands transactions. Our prediction was correct in that the only significant oil sands transactions in 2021 were HE Acquisition Corp.'s purchase of Japan Canada Oil Sands Limited and Strathcona Resources Ltd.'s planned acquisition of Cenovus' interests in the Tucker thermal oil sands project for \$800.0 million.

We stated that liabilities would continue to be an important factor in M&A activity and that the issue of dealing with suspended wells and other such liabilities under the umbrella of the AER, would continue to impact M&A activity in 2021. This prominent issue of dealing with such liabilities continued to affect M&A activity in 2021.

We predicted the number of insolvencies in 2021 to be similar to what we saw in 2020. In 2021, there were 11 insolvencies, compared to eight in 2020. This trend began in 2016 when the number of oil and natural gas companies that became insolvent shot from the historical average of approximately eight per year to 28 companies entering into receivership, bankruptcy or formal financial restructuring processes. This trend continued into 2017 with 16 insolvencies recorded and then dropped to six in 2018 and increased to 12 in 2019.

We predicted that more junior players would consider and conclude mergers as opposed to outright cash sales and we would continue to see purchasers using shares as currency in acquisitions. This trend was evident with the aforementioned ARC/Seven Generations transaction.

We predicted that share buy-backs will be minimal in 2021. We were blown out of the water on this prediction as commodity prices continued to appreciate throughout 2021 leading to significant cash flow for oil and natural gas producers and thus with this excess cash flow more and more companies were pursuing normal course issuer bids.

FIRST QUARTER MERGER AND ACQUISITION TRANSACTIONS

(exceeding \$5 million in value)

Month	Purchaser	Acquisition	Enterprise Value
			(\$million)
January	Kiwetinohk	25% of Distinction	40.00
February	ARC	Seven Generations	5,117.79
February	Calima	Blackspur	61.50
February	Crescent Point	Shell Canada assets	908.50
February	Distinction	Ovintiv assets	167.50
February	Kiwetinohk	Ovintiv assets	167.50
February	Peyto	Cenovus assets and Paramount assets	35.00
February	PrairieSky	Undisclosed assets	45.00
February	Ridgeback and Undisclosed	NuVista assets	94.00
February	Spartan Delta	Inception, Cequence assets and Enerplus assets	186.98
February	Undisclosed Buyers	Paramount assets	80.00
February	Waterous	55% of Osum	367.26
March	Canadian Natural	Birchcliff assets	12.70
March	Tamarack Valley	Woodcote and Surge assets	149.64
March	Topaz	Tamarack Valley assets	13.70
March	Undisclosed Buyer	Leucrotta assets	30.00
First Quarter Total			\$7.4 billion⁽²⁾

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

SECOND QUARTER MERGER AND ACQUISITION TRANSACTIONS

(exceeding \$5 million in value)

Month	Purchaser	Acquisition	Enterprise Value
			(\$million)
April	Conifer	Accel Energy Canada assets	(1)
April	Greenfire Acquisition	Greenfire Hangingstone assets	(1)
April	Tamarack Valley	Anegada	533.57
April	Topaz	Tamarack Valley assets	32.00
April	Whitecap	Kicking Horse	333.88
May	i3	Anegada assets	5.00
May	Petronas	JAPEX Montney assets	(1)
May	Saturn	Crescent Point assets	93.00
May	Spur	Cequence	(1)
May	Topaz	Cenovus assets	102.00
May	Topaz	Reserve Royalty	26.00
May	Topaz	Tourmaline assets	245.00
May	Tourmaline	British Columbia assets	24.50
May	Tourmaline	Paramount assets	88.00
May	Tourmaline	Saguaro assets	205.00
May	Undisclosed Buyer	Turm	(1)
June	Barrel	TAQA assets	(1)
June	Blue Sky	TAQA assets	(1)
June	Cardinal	Venturion	48.50
June	Journey	Briko	8.35
June	Kiwetinohk	48% of Distinction	133.76
June	Petro Viking	Avila assets	23.72 ⁽²⁾
June	Ricochet	ARC assets	(1)
June	Spartan Delta	Hammerhead assets and Alberta assets	10.10
June	Surge	Astra	196.27
June	Tourmaline	Black Swan	1,148.20
June	Westbrick	Velvet assets	143.00
Second Quarter Total			\$3.6 billion⁽³⁾

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

(2) Pending but not closed

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

THIRD QUARTER MERGER AND ACQUISITION TRANSACTIONS

(exceeding \$5 million in value)

Month	Purchaser	Acquisition	Enterprise Value
			(\$million)
July	Certus	Sitka	(1)
July	Conifer	Accel assets	(1)
July	Freehold	Rubellite assets	7.90
July	Harvard	Forge	(1)
July	Hawthorne	Tangle Creek	(1)
July	HE Acquisition	Japan Canada Oil Sands	(1)
July	i3	Cenovus assets	65.00
July	PrairieSky	Spur assets	155.00
July	Rubellite	Perpetual assets	59.40
July	Spartan Delta	Velvet	754.03
July	Strathcona	Cenovus assets	45.00
July	Topaz	Tourmaline assets	145.00
July	Whitecap	Highrock	67.00
August	Canadian Natural	Undisclosed assets	450.00
August	PrairieSky	Karve assets	34.80
August	Razor	Sabre assets	5.00
August	Spartan Delta	Calgary Oil & Gas	37.50
August	Tourmaline	Kelt assets	9.00
September	Cenovus	ExxonMobil assets/Equinor assets/ Mosbacher assets/Chevron assets	(1)
September	Hawkley	Persist	32.20 ⁽²⁾
September	InPlay	Prairie Storm	59.57
September	Murphy	ExxonMobil assets/Equinor assets/ Mosbacher assets/Chevron assets	(1)
September	New Times	Shanghai	20.00
September	Suncor	ExxonMobil assets/Equinor assets/ Mosbacher assets/Chevron assets	(1)
September	Tamarack Valley	Spur assets	36.00
September	Undisclosed Buyer	West Lake assets	(1)
September	West Lake	Boulder	(1)
Third Quarter Total			\$2.6 billion⁽³⁾

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

(2) Pending but not closed

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

FOURTH QUARTER MERGER AND ACQUISITION TRANSACTIONS

(exceeding \$5 million in value)

Month	Purchaser	Acquisition	Enterprise Value
			(\$million)
October	Chronos	Crew assets	10.30
October	Surge	Fire Sky	63.61
October	Tamarack Valley	Whitecap assets	7.80
October	Topaz	Alberta assets	30.40
October	Topaz	Whitecap assets	188.00
November	Canadian Natural	Storm	1,031.03
November	Obsidian	Alberta assets	43.50
November	PrairieSky	Heritage Royalty assets	728.00
November	Tamarack Valley	Cardinal assets	10.50
November	Undisclosed Buyer	Cenovus assets	238.00
November	Waterous and Strathcona	Caltex	(1)
December	Pine Cliff	Apogee	22.20
December	Strathcona	Cenovus assets	800.00 ⁽²⁾
December	Tamarack Valley	Crestwynd	190.01 ⁽²⁾
December	Whitecap	Western Saskatchewan assets	40.00
December	Whitecap	Eastern Saskatchewan assets	39.93
December	Whitecap	TimberRock	267.63
Fourth Quarter Total			\$4.4 billion⁽³⁾

- Notes:
- (1) The estimated or confidential amount for this transaction is included in the quarter total
 - (2) Pending but not closed
 - (3) Confidential transactions are not included on the list, however their values are included in the total

2021 TRANSACTION METRIC SUMMARY

Month	Purchaser	Acquisition	Equity Value	Enterprise Value	Reserves Value
			(\$million)	(\$million)	(\$million)
February	ARC Resources Ltd.	Seven Generations Energy Ltd.	2,774.14	5,117.79	5,075.67
February	Calima Energy Limited	Blackspur Oil Corp.	20.20	61.50	51.58
February	Crescent Point Energy Corp.	Shell Canada Energy assets	908.50	908.50	887.70
February	Distinction Energy Corp.	Ovintiv Inc. assets	167.50	167.50	167.50
February	Kiwetinochk Resources Corp.	Ovintiv Inc. assets	167.50	167.50	167.50
February	Spartan Delta Corp.	Inception Exploration Ltd., Cequence Energy Ltd. assets and Enerplus Corporation assets	179.18	186.98	186.98
February	Waterous Energy Fund	55% of Osum Oil Sands Corp.	225.82	367.26	301.83
March	Tamarack Valley Energy Ltd.	Woodcote Petroleum Inc. and Surge Energy Inc. assets	149.64	149.64	149.64
March	Undisclosed Buyer	Leucrotta Exploration Inc. assets	30.00	30.00	30.00
April	Tamarack Valley Energy Ltd.	Anegada Oil Corp.	484.57	533.57	533.57
April	Whitecap Resources Inc.	Kicking Horse Oil & Gas Ltd.	254.38	333.88	333.88
May	i3 Energy plc	Anegada Oil Corp. assets	5.00	5.00	5.00
May	Saturn Oil & Gas Inc.	Crescent Point Energy Corp. assets	93.00	93.00	93.00

Proven + Probable Reserves		Production		Reserves Acquisition Price	Production Acquisition Price	Discount Rate Range on Before Tax Future Cash Flow
(MMbbls)	(Bcf)	Oil & NGL (Bbls/d)	Natural Gas (MMcf/d)	(\$/boe)	(\$/boe/d)	(%)
843.528	4,201.993	109,100	486.20	3.29	26,695	>20
15.951	42.999	1,781	4.73	2.23	20,069	-
69.810	225.540	19,500	63.00	8.27	29,590	-
15.265	121.410	2,150	17.10	4.72	33,500	15-20
15.265	121.410	2,150	17.10	4.72	33,500	15-20
76.600	832.353	3,396	37.80	0.87	19,284	-
698.300	-	19,759	-	0.79	27,774	>20
9.900	6.100	2,412	2.28	13.71	53,601	5-10
5.000	107.900	79	1.78	1.31	80,089	-
28.471	69.774	8,400	20.40	13.31	45,218	-
30.366	351.734	2,575	32.55	3.75	41,734	>20
2.205	16.170	194	1.42	1.02	11,641	-
26.707	8.403	6,755	1.69	3.31	13,218	>20

Month	Purchaser	Acquisition	Equity Value	Enterprise Value	Reserves Value
			(\$million)	(\$million)	(\$million)
May	Tourmaline Oil Corp.	Saguaro Resources Ltd. assets	205.00	205.00	205.00
June	Cardinal Energy Ltd.	Venturion Oil Limited	37.60	48.50	48.50
June	Journey Energy Inc.	Briko Energy Corp.	7.05	8.35	7.55
June	Kiwetinohk Resources Corp.	48% of Distinction Energy Corp.	95.69	133.76	126.73
June	Surge Energy Inc.	Astra Oil Corp.	171.06	196.27	175.54
June	Tourmaline Oil Corp.	Black Swan Energy Ltd.	798.20	1,148.20	1,148.20
July	i3 Energy plc	Cenovus Energy Inc. assets	65.00	65.00	62.36
July	Rubellite Energy Inc.	Perpetual Energy Inc. assets	59.40	59.40	45.31
July	Spartan Delta Corp.	Velvet Energy Ltd.	371.43	754.03	720.73
August	Razor Energy Corp.	Sabre Energy Ltd. assets	5.00	5.00	5.00
August	Spartan Delta Corp.	Calgary Oil & Gas Syndicate Group Ltd.	37.50	37.50	34.90
August	Tourmaline Oil Corp.	Kelt Exploration Ltd. assets	9.00	9.00	9.00
September	InPlay Oil Corp.	Prairie Storm Resources Corp.	51.92	59.57	46.12
September	Hawkley Oil & Gas Limited	Persist Oil & Gas Inc.	14.20	32.20	32.20
September	New Times Energy Corporation Limited	Shanghai Energy Corporation	20.00	20.00	20.00
September	Tamarack Valley Energy Ltd.	Spur Petroleum Inc. assets	36.00	36.00	36.00
October	Surge Energy Inc.	Fire Sky Energy Inc.	60.61	63.61	62.04

Proven + Probable Reserves		Production		Reserves Acquisition Price	Production Acquisition Price	Discount Rate Range on Before Tax Future Cash Flow
(MMbbls)	(Bcf)	Oil & NGL (Bbls/d)	Natural Gas (MMcf/d)	(\$/boe)	(\$/boe/d)	(%)
54.412	1,157.490	2,117	40.36	0.83	23,184	>20
6.300	7.200	2,016	2.30	6.47	20,209	-
0.779	13.125	146	2.78	2.54	12,374	>20
46.400	292.000	3,556	30.32	2.78	30,669	>20
20.360	19.180	3,567	3.20	7.45	42,814	10-15
93.788	2,388.534	8,352	207.17	2.33	26,777	15-20
40.545	233.730	4,293	24.75	0.78	7,408	>20
3.582	-	369	-	12.65	122,796	5-10
110.536	684.623	11,600	54.00	3.21	34,987	>20
2.565	0.810	903	0.29	1.85	5,263	-
5.510	80.940	609	8.95	1.84	16,619	-
1.350	24.300	100	1.80	1.67	22,500	-
15.372	66.710	1,026	5.63	1.74	23,490	>20
5.598	45.730	1,015	11.31	2.44	11,103	-
3.243	245.128	731	78.58	0.45	1,446	>20
2.500	-	400	-	14.40	90,000	-
7.030	2.220	1,425	0.45	8.38	41,358	>20

Month	Purchaser	Acquisition	Equity Value	Enterprise Value	Reserves Value
			(\$million)	(\$million)	(\$million)
November	Canadian Natural Resources Limited	Storm Resources Ltd.	827.44	1,031.03	939.12
November	Obsidian Energy Ltd.	Alberta assets	43.50	43.50	43.50
December	Pine Cliff Energy Ltd.	Apogee Petroleum Inc.	22.20	22.20	22.20
December	Tamarack Valley Energy Ltd.	Crestwynd Exploration Ltd.	182.01	190.01	190.01

Proven + Probable Reserves		<u>Production</u>		Reserves Acquisition Price	Production Acquisition Price	Discount Rate Range on Before Tax Future Cash Flow
(MMbbls)	(Bcf)	Oil & NGL (Bbls/d)	Natural Gas (MMcf/d)	(\$/boe)	(\$/boe/d)	(%)
37.734	924.222	5,094	134.43	4.90	34,151	10-15
5.657	6.536	2,006	2.57	6.45	17,872	-
2.196	31.250	551	8.09	3.00	11,684	-
9.600	-	4,500	-	19.79	42,225	-

Month	Purchaser	Acquisition	Location of Assets
February	ARC Resources Ltd.	Seven Generations Energy Ltd.	Kakwa, AB
February	Calima Energy Limited	Blackspur Oil Corp.	Brooks, Thorsby, AB
February	Crescent Point Energy Corp.	Shell Canada Energy assets	Kaybob, AB
February	Distinction Energy Corp.	Ovintiv Inc. assets	Ferrier, Simonette, Willesden Green, AB
February	Kiwetinohk Resources Corp.	Ovintiv Inc. assets	Ferrier, Simonette, Willesden Green, AB
February	Spartan Delta Corp.	Inception Exploration Ltd., Cequence Energy Ltd. assets and Enerplus Corporation assets	Gold Creek, Simonette, Willesden Green, AB
February	Waterous Energy Fund	55% of Osum Oil Sands Corp.	Cold Lake, AB
March	Tamarack Valley Energy Ltd.	Woodcote Petroleum Inc. and Surge Energy Inc. assets	Nipisi, Provost, AB
March	Undisclosed Buyer	Leucrotta Exploration Inc. assets	Doe, B.C.
April	Tamarack Valley Energy Ltd.	Anegada Oil Corp.	Wembley/Pipestone, Valhalla, AB
April	Whitecap Resources Inc.	Kicking Horse Oil & Gas Ltd.	Kakwa, AB
May	i3 Energy plc	Anegada Oil Corp. assets	South Simonette, AB
May	Saturn Oil & Gas Inc.	Crescent Point Energy Corp. assets	Oxbow, SK
May	Tourmaline Oil Corp.	Saguaro Resources Ltd. assets	Laprise-Conroy, B.C.

<u>Reserve Mix</u>			<u>Reserve Life Index</u>			<u>Operating Cash Flow</u>	
Proven Prod. (%oil/%natural gas)	Proven (%oil/%natural gas)	P + P (%oil/%natural gas)	Proven Prod (years)	Proven (years)	P + P (years)	Estimate (\$million/year)	Multiple (x)
54/46	54/46	55/45	3.7	10.2	22.2	1,220.72	4.2
69/31	69/31	69/31	5.9	15.4	24.6	14.30	3.6
-	-	65/35	-	-	9.8	328.50	2.7
43/57	43/57	43/57	3.6	8.2	19.5	69.88	2.4
43/57	43/57	43/57	3.6	8.2	19.5	69.88	2.4
-	37/63	36/64	-	25.9	60.8	45.20	4.1
-	100/0	100/0	-	22.0	96.8	190.27	2.9
91/9	-	91/9	4.2	-	10.7	35.00	4.3
21/79	21/79	22/78	6.9	64.7	168.1	0.70	42.9
70/30	-	71/29	2.4	-	9.3	135.00	4.0
28/72	33/67	34/66	3.6	20.4	30.5	80.07	4.2
-	-	45/55	-	-	31.3	2.80	1.8
95/5	95/5	95/5	9.4	9.4	10.9	65.12	1.4
22/78	22/78	22/78	6.5	30.3	76.6	39.54	5.2

Month	Purchaser	Acquisition	Location of Assets
June	Cardinal Energy Ltd.	Venturion Oil Limited	Killam, Viking-Kinsella, Worsley, AB; Mica, B.C.
June	Journey Energy Inc.	Briko Energy Corp.	Kiskiu, Stolberg, West Ansell, AB
June	Kiwetinohk Resources Corp.	48% of Distinction Energy Corp.	Bigstone, Simonette, AB
June	Surge Energy Inc.	Astra Oil Corp.	Minard, Pinto, Steelman, Viewfield, SK
June	Tourmaline Oil Corp.	Black Swan Energy Ltd.	Aitken, Nig, B.C.
July	i3 Energy plc	Cenovus Energy Inc. assets	Central AB
July	Rubellite Energy Inc.	Perpetual Energy Inc. assets	Figure Lake, Marten Hills, Ukalta, AB
July	Spartan Delta Corp.	Velvet Energy Ltd.	Gold Creek, Karr, Pouce Coupe, AB
August	Razor Energy Corp.	Sabre Energy Ltd. assets	Swan Hills, AB
August	Spartan Delta Corp.	Calgary Oil & Gas Syndicate Group Ltd.	Ferrier, AB
August	Tourmaline Oil Corp.	Kelt Exploration Ltd. assets	Peace River Arch
September	InPlay Oil Corp.	Prairie Storm Resources Corp.	Willesden Green, AB
September	Hawkley Oil & Gas Limited	Persist Oil & Gas Inc.	Carseland, Garrington, Stolberg, Wayne, AB
September	New Times Energy Corporation Limited	Shanghai Energy Corporation	Greater Sierra, Horn River, B.C.; Wapiti, Willesden Green, AB
September	Tamarack Valley Energy Ltd.	Spur Petroleum Inc. assets	Jarvie, AB
October	Surge Energy Inc.	Fire Sky Energy Inc.	Bryant, Elcott, Manor, Steelman, SK

<u>Reserve Mix</u>			<u>Reserve Life Index</u>			<u>Operating Cash Flow</u>	
Proven Prod.	Proven	P + P	Proven Prod	Proven	P + P	Estimate	Multiple
(%oil/%natural gas)	(%oil/%natural gas)	(%oil/%natural gas)	(years)	(years)	(years)	(\$million/year)	(x)
84/16	-	-	8.6	-	-	-	-
40/60	27/73	26/74	5.2	10.3	13.3	2.23	3.4
44/56	50/50	49/51	7.3	19.2	30.3	60.46	4.4
90/10	87/13	86/14	4.0	9.8	15.7	58.10	3.0
20/80	19/81	19/81	6.7	15.2	31.4	257.30	4.5
51/49	-	51/49	9.0	-	25.9	37.52	1.7
100/0	100/0	100/0	3.0	14.8	26.6	3.41	13.3
51/49	51/49	49/51	3.6	18.6	29.9	202.18	3.6
95/5	-	-	7.8	-	-	-	-
-	-	29/71	-	-	24.8	12.34	2.8
-	-	25/75	-	-	37.0	-	-
55/45	58/42	58/42	6.3	29.2	37.0	14.22	3.2
36/64	42/58	42/58	5.2	7.4	12.5	-	-
5/95	7/93	7/93	5.2	6.5	8.7	17.67	1.1
-	-	100/0	-	-	17.1	6.70	5.4
95/5	95/5	95/5	2.6	7.5	13.5	26.00	2.4

Month	Purchaser	Acquisition	Location of Assets
November	Canadian Natural Resources Limited	Storm Resources Ltd.	Fireweed, Nig Creek, Umbach, B.C.
November	Obsidian Energy Ltd.	Alberta assets	Peace River, AB
December	Pine Cliff Energy Ltd.	Apogee Petroleum Inc.	Drumheller, Michichi, Richdale, Rowley, AB
December	Tamarack Valley Energy Ltd.	Crestwynd Exploration Ltd.	Jarvie, AB

<u>Reserve Mix</u>			<u>Reserve Life Index</u>			<u>Operating Cash Flow</u>	
Proven Prod.	Proven	P + P	Proven Prod	Proven	P + P	Estimate	Multiple
(%oil/%natural gas)	(%oil/%natural gas)	(%oil/%natural gas)	(years)	(years)	(years)	(\$million/year)	(x)
20/80	20/80	20/80	4.2	15.3	19.1	142.54	6.6
83/17	83/17	84/16	3.9	5.4	7.6	33.62	1.3
30/70	30/70	30/70	7.0	8.1	10.7	13.05	1.7
-	-	100/0	-	-	5.8	90.00	2.1

A Year in Review... 2021 Transactions


This announcement appears as a matter of record only.



Cor4 Oil Corp.

*has sold its interests
in the Dinosaur/Patricia area of Alberta*

The undersigned acted as financial advisor to Cor4 for this transaction.



January 2021

This announcement appears as a matter of record only.

*Certain oil and natural gas interests
in the Herronton area of Alberta held by*

HOUSTON OIL & GAS LTD.

have been sold through its receiver



The undersigned acted as financial advisor to BDO for these transactions.




February 2021

This announcement appears as a matter of record only.

CHAIR RESOURCES INC.

*has sold its interests
in the Swan Hills Unit No. 1*

The undersigned acted as financial advisor to Chair for this transaction.



February 2021


This announcement appears as a matter of record only.

*Certain oil and natural gas interests
in Alberta held by*



**POINT LOMA
RESOURCES LTD.**

have been sold through its receiver



The undersigned acted as financial advisor to BDO for these transactions.




February 2021

This announcement appears as a matter of record only.



**Medicine Hat
The Gas City**

*has sold its interests
in the Medicine Hat Glauconitic "C" East Unit
to*




**CACHE
ISLAND**

for total consideration of


\$20.0 million

The undersigned acted as financial advisor to
The City of Medicine Hat for this transaction.




February 2021

This announcement appears as a matter of record only.




**KNOWLEDGE
energy inc.**

*has sold its interests in the Morningside, Provost,
Wildmere and Veteran areas of Alberta to*



**GHOST RIVER
Resources Inc.**

The undersigned acted as financial advisor to Knowledge for this transaction.



March 2021


A Year in Review... 2021 Transactions

This announcement appears as a matter of record only.

LINTUS RESOURCES LIMITED

*has sold its interests
in the Swan Hills Unit No. 1*

The undersigned acted as financial advisor to Lintus for this transaction.



March 2021

This announcement appears as a matter of record only.

*Certain oil and natural gas interests
in Saskatchewan held by*



have been sold through its receiver

BDO CANADA

The undersigned acted as financial advisor to BDO for these transactions.



March 2021

This announcement appears as a matter of record only.

*Certain mineral interests in the Bolloque area of Alberta
held by*



have been sold through its licensed insolvency trustee




The undersigned acted as financial advisor to PwC for this transaction.




March 2021


This announcement appears as a matter of record only.



*has sold its interests in the Mirage
and Sneddon areas of Alberta to*



The undersigned acted as financial advisor to Knowledge for this transaction.



April 2021


This announcement appears as a matter of record only.

All of the issued and outstanding shares of

LOGIC Energy Ltd.


have been sold

The undersigned acted as financial advisor to Logic for this transaction.




April 2021

This announcement appears as a matter of record only.



*has sold its interests
in the Pine Creek area of Alberta*

The undersigned acted as financial advisor to Tallahassee for this transaction.



April 2021

A Year in Review... 2021 Transactions

This announcement appears as a matter of record only.

Certain oil and natural gas interests in Alberta held by



have been sold through its receiver




The undersigned acted as financial advisor to BDO for these transactions.




May 2021

This announcement appears as a matter of record only.


Certain oil and natural gas interests in Alberta held by



have been sold through its trustee




The undersigned acted as financial advisor to MNP for these transactions.




May 2021

This announcement appears as a matter of record only.


Certain oil and natural gas interests in Alberta held by



have been sold through its receiver



The undersigned acted as financial advisor to BDO for these transactions.



May 2021

This announcement appears as a matter of record only.

All of the issued and outstanding shares of



have been sold

The undersigned acted as financial advisor to Rake for this transaction.



May 2021

This announcement appears as a matter of record only.



has sold its royalty interests in Alberta


The undersigned acted as financial advisor to Maple Leaf for these transactions.



June 2021


This announcement appears as a matter of record only.

All of the issued and outstanding shares of



have been sold

The undersigned acted as financial advisor to Turm for this transaction.



June 2021

A Year in Review... 2021 Transactions

This announcement appears as a matter of record only.

All of the outstanding shares of



have been acquired by



for approximately
\$8.4 million


The undersigned acted as financial advisor to Briko for this transaction.




August 2021

This announcement appears as a matter of record only.


The oil and natural gas interests in the Maxhamish area of British Columbia held by




have been sold through its trustee



to



The undersigned acted as financial advisor to GS E&R and MNP for this transaction.




August 2021

This announcement appears as a matter of record only.



has sold its interests in the Lougheed area of Saskatchewan

The undersigned acted as financial advisor to Seek for this transaction.



August 2021

This announcement appears as a matter of record only.

Certain mineral interests in the Bolloque and Wimborne areas of Alberta held by



have been sold through its licensed insolvency trustee




The undersigned acted as financial advisor to PwC for these transactions.




August/September 2021

This announcement appears as a matter of record only.

Certain oil and natural gas interests in Alberta held by



have been sold through its trustee



The undersigned acted as financial advisor to MNP for these transactions.



September 2021

This announcement appears as a matter of record only.

Certain oil and gas interests held by



have been sold through its receiver



The undersigned acted as financial advisor to PwC for these transactions.




September 2021

A Year in Review... 2021 Transactions


This announcement appears as a matter of record only.

Certain oil and natural gas interests in Alberta held by




POINT LOMA
RESOURCES LTD.

have been sold through its receiver



BDO CANADA

The undersigned acted as financial advisor to BDO for this transaction.



SAYER
ENERGY ADVISORS

October 2021

This announcement appears as a matter of record only.

Certain oil and natural gas interests held by



SanLing
ENERGY LTD.

have been sold through its receiver



pwc

The undersigned acted as financial advisor to PwC for these transactions.



SAYER
ENERGY ADVISORS

October/December 2021


This announcement appears as a matter of record only.



1537974
Alberta Ltd.

has sold its royalty interests in the Gull Lake area of Saskatchewan

The undersigned acted as agent to 1537974 for this transaction.




SAYER
ENERGY ADVISORS

November 2021

This announcement appears as a matter of record only.


All of the outstanding shares of



2163754
Alberta Ltd.

have been sold

The undersigned acted as financial advisor to 2163754 for this transaction.



SAYER
ENERGY ADVISORS

December 2021

This announcement appears as a matter of record only.

Certain oil and natural gas interests in Alberta held by



BOW RIVER ENERGY

have been sold through its receiver



BDO CANADA


The undersigned acted as financial advisor to BDO for these transactions.



SAYER
ENERGY ADVISORS

December 2021


This announcement appears as a matter of record only.



TSE

has sold its interests in a number of ISO Containers

The undersigned acted as financial advisor to Top Speed for these transactions.



SAYER
ENERGY ADVISORS

December 2021

NOTES

1. Definitions:
 - a. 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.
 - b. 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.
 - c. Reserves Value: the acquisition value excluding non-reserve assets and liabilities.
 - d. 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.
 - e. \$/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.
 - f. \$/boe of Daily Production: Reserves Value divided by equivalent barrels of daily production.
 - g. Operating Cash Flow Multiple: Reserves Value divided by an estimate of yearly net operating income before overhead, interest and current income tax.
 - h. 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.
 - i. Reserve Life Index (“RLI”): Total Proven Reserves divided by total yearly production at production rates noted in the transaction analysis.
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 and that are publicly disclosed. 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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