MANAGEMENT'S DISCUSSION AND ANALYSIS

The following is management's discussion and analysis ("MD&A") of Perpetual Energy Inc.'s ("Perpetual", the "Company" or the "Corporation") operating and financial results for the year ended December 31, 2021 as well as information and estimates concerning the Corporation's future outlook based on currently available information. This discussion should be read in conjunction with the Corporation's audited consolidated financial statements and accompanying notes for the years ended December 31, 2021 and 2020. The Corporation's consolidated financial statements are prepared in accordance with Canadian generally accepted accounting principles ("GAAP") which require publicly accountable enterprises to prepare their financial statements using International Financial Reporting Standards ("IFRS"). Readers are referred to the advisories for additional information regarding forecasts, assumptions and other forward-looking information contained in the "Forward Looking Information and Statements" section of this MD&A. The date of this MD&A is March 14, 2022.

This MD&A contains certain specified financial measures that are not recognized by GAAP and used by management to evaluate the performance of the Corporation and its business. Since certain specified financial measures may not have a standardized meaning, securities regulations require that specified financial measures are clearly defined, qualified and, where required, reconciled with their nearest GAAP measure. See "Non-GAAP and Other Financial Measures" for further information on the definition, calculation and reconciliation of these measures. This MD&A also contains forward-looking information. See "Forward-Looking Information". Readers are also referred to the other advisory sections at the end of this MD&A for additional information.

NATURE OF BUSINESS: Perpetual is an oil and natural gas exploration, production and marketing company headquartered in Calgary, Alberta. Perpetual owns a diversified asset portfolio, including liquids-rich conventional natural gas assets in the deep basin of West Central Alberta, heavy crude oil and shallow conventional natural gas in Eastern Alberta, and undeveloped bitumen leases in Northern Alberta. Additional information on Perpetual, including the most recently filed Annual Information Form ("AIF"), can be accessed at www.sedar.com or from the Corporation's website at www.perpetualenergyinc.com.

2021 MATERIAL TRANSACTIONS

On July 16, 2021, Perpetual announced the creation of a new wholly owned subsidiary, Rubellite Energy Inc. ("Rubellite") and the sale of all of Perpetual's Clearwater lands, wells, roads and related facilities in northeast Alberta (the "Clearwater Assets") to Rubellite. On September 3, 2021, the Plan of Arrangement involving Perpetual, the shareholders of Perpetual, and Rubellite was completed following approval of the plan by the shareholders of Perpetual at its special shareholder meeting held on August 31, 2021 and the receipt of the final order of the Court of Queen's Bench of Alberta approving the Plan of Arrangement. At this time, Rubellite exchanged 1.4 million Rubellite common shares valued at $2.8 million and 16.7 million arrangement warrants with Perpetual shareholders for 8.2 million Perpetual common shares valued at $2.8 million. This MD&A includes operating results for Rubellite's Clearwater Assets up to the effective date of the Plan of Arrangement of September 3, 2021.

Rubellite acquired the Clearwater Assets from Perpetual for aggregate consideration of $65.5 million. The consideration consisted of promissory notes totaling $59.4 million, which were paid in cash on October 5, 2021, the issuance of 680,485 Rubellite common shares valued at $1.4 million, the return of the 8.2 million Perpetual common shares valued at $2.8 million and issuance of warrants to purchase 4.0 million Rubellite common shares at a price of $3.00 per share for a period of five years, valued at $2.0 million.

The Rubellite Financings were all completed on October 5, 2021 at $2.00 per Rubellite common share equivalent and included:

(i) a backstopped arrangement warrant financing, which resulted in the issuance of 16.7 million Rubellite common shares for total proceeds of $33.5 million;

(ii) a non-brokered $20.0 million private placement financing (10.0 million Rubellite common shares); and

(iii) a brokered $30.0 million subscription receipt financing (15.0 million subscription receipts) that closed on July 13, 2021 with cash held in escrow by a third-party trustee that was released on October 5, 2021. When each subscription receipt issued was exchanged on a one-to-one basis for 15.0 million common shares of Rubellite.

On July 15, 2021, Perpetual reached an agreement with its Term Loan lender for the settlement of principal and all interest owing on the Term Loan upon closing of the Rubellite Financings, for the payment of approximately $38.5 million in cash, delivery by Perpetual of 0.7 million Rubellite common shares (the "AIMCo Bonus Shares"), the issuance of a new $2.7 million second lien term loan bearing interest at 8.1% annually and maturing December 31, 2024, and up to a total of $4.5 million in contingent payments over the three year period ended June 30, 2024 in the event that Perpetual's annual average realized oil and natural gas prices exceed certain thresholds (the "Second Lien Loan Settlement"). As part of the Second Lien Loan Settlement, the Term Loan lender committed to fully exercise the arrangement warrants it received under the Plan of Arrangement associated with its approximately 4.0% equity ownership of Perpetual. In addition, the Term Loan lender agreed to subscribe for $4.5 million of the Non-Brokered Private Placement and upon completion of the transaction owned approximately 8.3% of the Rubellite common shares.

Upon closing of the Rubellite Financings on October 5, 2021, Perpetual received cash proceeds of approximately $53.6 million, and used the cash proceeds to satisfy the $38.5 million cash component of the Second Lien Loan Settlement with the remaining cash applied to repay a significant portion of the Credit Facility. Upon closing of the Rubellite Financings and concurrent completion of the Second Lien Loan Settlement, the Credit Facility has a Borrowing Limit of $17.0 million, reduced from $20.0 million, with a maturity of May 31, 2023.

FOURTH QUARTER 2021 HIGHLIGHTS

Fourth quarter production averaged 6,359 boe/d, up 34% from the comparative period of 2020 (Q4 2020 – 4,730 boe/d). The increase was due to production from nine (4.5 net) East Edson wells drilled in 2021 and the reactivation of heavy crude oil production which was shut-in during the second quarter of 2020 as oil prices recovered and stabilized, partially offset by the sale of the Clearwater oil assets. As of December 31, 2021, Perpetual had restarted substantially all heavy crude oil production that was initially suspended in late March 2020 in response to extremely low oil prices.

Realized revenue(1) was $36.56/boe in the fourth quarter of 2021, 68% higher than the comparative period of 2020 (Q4 2020 – $21.73/boe). The increase was due primarily to higher realized natural gas prices of $4.80/Mcf, which were significantly higher than the prior year period (Q4 2020 – $1.46/Mcf). Perpetual's realized oil price was $73.96/bbl and realized NGL price was $73.44/bbl in the fourth quarter of 2021, higher than 2020 due to an increase in West Texas Intermediate ("WTI") benchmark prices and all natural gas liquid ("NGL") component prices which tracked the rise in WTI prices.

Cash costs(1) were $12.2 million or $20.88/boe (Q4 2020 – $7.8 million and $17.92/boe). Compared to Q4 2020, total cash costs increased, reflecting higher royalties on improved commodity prices, higher production and operating expenses with increased production volumes and increased general and administrative costs as a result of restoring employee salaries and wages which were reduced in response to low commodity prices in 2020 and transaction costs related to the Rubellite transaction.

Adjusted funds flow(1) in the fourth quarter of 2021 was $8.6 million ($0.13/share), $7.4 million higher than the prior year period (Q4 2020 – $1.2 million). The increase was due primarily to significantly higher realized prices for conventional natural gas, oil and NGLs, combined with the 34% increase in production and lower cash finance expense resulting from repayment of the second lien term loan, partially offset by higher cash costs. Cash flow from operating activities was $1.6 million (Q4 2020 – cash flow used in operating activities of $1.1 million) was higher for the same reasons impacting adjusted funds flow(1).

Net income for the fourth quarter of 2021 was $5.7 million ($0.09/share), an improvement from the prior year period (Q4 2020 – net loss of $14.4 million; $0.24/share) due to the same reasons that impacted adjusted funds flow as well as the impairment reversal of $0.5 million in the Company's Eastern CGU.

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

2021 ANNUAL HIGHLIGHTS

On September 3, 2021, Perpetual and Rubellite completed the previously announced Plan of Arrangement involving Perpetual, the shareholders of Perpetual and Rubellite. The Rubellite Financings closed subsequent to the third quarter on October 5, 2021 and $53.6 million in promissory notes were repaid. The Rubellite Transactions provided a "full capital solution" for Perpetual by reducing Perpetual's net debt(1) to $56.4 million at September 30, normalizing the balance sheet leverage ratios and surfacing incremental value from enhanced ability to fund the future development of its assets. The Rubellite Transactions have materially improved Perpetual's liquidity and will enhance Perpetual's ability to capture the inherent value in its asset base by funding investment opportunities to grow and sustain production and adjusted funds flow. Interest cost savings alone is expected to improve Perpetual's adjusted funds flow(1) by approximately $4 million annually. The general and administrative cost recoveries under the Management and Operating Services Agreement ("MSA") with Rubellite will further enhance Perpetual's liquidity by approximately $2 to $3 million annually. Additionally, the 4.0 million, five-year Rubellite Share Purchase Warrants owned by Perpetual provide an opportunity for Perpetual to participate in value creation from Rubellite's Clearwater Assets.

Exploration and development capital expenditures(1) in 2021 was $19.1 million, more than triple the prior year (2020 – $6.0 million). Capital investment was focused at Perpetual's 50% working interest East Edson property, where the last of the 8-well carried interest commitment was drilled, completed and tied in during the third quarter of 2021 and the joint venture partner drilled an additional six (3.0 net) wells targeting the Wilrich formation in the second half of 2021. All of these wells have been completed and were on production by the end of 2021. Capital activity in Eastern Alberta during 2021 focused on waterflood optimization and battery consolidation projects as well as several shallow gas recompletions. Additionally, the Company has identified a number of horizontal, multi-lateral drilling opportunities targeting heavy oil at Mannville and modest capital spending was directed for preparatory work for first quarter 2022 activities. Six (5.0 net) wells were drilled in the Clearwater area and formed part of the assets in the Rubellite Transactions.

Production in 2021 averaged 5,389 boe/d (24% heavy crude oil and NGL), an increase of 8% from 5,012 boe/d (29% heavy crude oil and NGL) in 2020. Production levels steadily increased following the 50% working interest disposition of the East Edson properties in the second quarter of 2020, as three (1.5 net) remaining wells of the eight (4.0 net) carried interest wells were drilled at east Edson and brought on production along with six (3.0 net) wells drilled and completed in the second half of 2021 and brought on production in November in advance of the winter heating season. Production additions from East Edson drilling were partially offset by the disposition of the Clearwater oil assets in the third quarter of 2021.

Realized revenue(1) was $56.0 million in 2021, more than 1.7 times higher than $30.2 million of revenue in 2020 due to the combined effect of the 8% increase in average daily production and significantly higher commodity prices. Realized revenue(1) was $28.47/boe, 73% higher than the prior year period (2020 – $16.46/boe). Compared to the AECO Daily Index price of $3.44/Mcf, realized natural gas prices of $3.15/Mcf were impacted by modifications made to the natural gas market diversification contract for future periods. The market diversification contract reduced the realized natural gas price by $4.8 million or $0.60/Mcf in 2021. For the year ended December 31, 2021, Perpetual's realized oil price was $57.36/bbl, up 16% from $49.37/bbl in 2020. Realized oil prices were reduced modestly relative to benchmark prices by physical forward sales arrangements during 2021 while in 2020 Perpetual realized hedging gains of $19.05/bbl.

Cash costs[1] were $37.8 million in 2021, up $1.6 million (4%) from 2020. The increase was due primarily to higher royalties and production and operating expenses associated with the 8% increase in production, partially offset by increased general and administrative costs as result of restoring employee salaries and wages and increased professional fees on the Rubellite transaction. The deferral of Term Loan interest and payment in kind of Senior Notes interest also reduced cash finance expense by $5.3 million during 2021.

Net income for 2021 was $81.1 million ($1.29/share), up from a net loss of $61.6 million in 2020 ($1.01/share). Net income in 2021 was impacted by aggregate non-cash impairment reversal charges of $30.6 million (2020 – $42.5 million impairment) and a $47.5 million gain on disposition of the Clearwater Assets.

For the year ended December 31, 2021, adjusted funds flow[1] was $16.7 million ($0.27/share), up from a negative $7.8 million ($0.13/share) in 2020 as the impact of the 8% year-over-year increase in production combined with significantly higher commodity prices outweighed the 3% increase in cash costs.

Perpetual's reserve-based first lien credit facility (the "Credit Facility") borrowing limit (the "Borrowing Limit"), was confirmed at $17.0 million in December 2021. The Credit Facility has a maturity date that has been extended to May 31, 2023. As part of the Second Lien Loan Settlement, the maturity of the $2.7 million New Second Lien Term Loan has been extended to December 31, 2024.

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

2022 OUTLOOK

The Rubellite Transactions provided a "full capital solution" for Perpetual by reducing Perpetual's net debt[1] to $59.3 million, normalizing the balance sheet leverage ratios and surfacing incremental value. The Rubellite Transactions have materially improved Perpetual's liquidity and enhanced the Company's ability to capture the inherent value in its asset base by funding investment opportunities to grow and sustain production and adjusted funds flow[1]. Interest cost savings are forecast to improve Perpetual's adjusted funds flow[1] by approximately $4 million annually. General and administrative cost recoveries under the MSA with Rubellite will further enhance Perpetual's funds flow by approximately $2 to $3 million annually. Additionally, 4.0 million Rubellite Share Purchase Warrants owned by Perpetual provide an opportunity for Perpetual to participate in value creation from the Clearwater Assets over the next five years.

Perpetual's Board of Directors has approved exploration and development capital spending of up to $28 million for 2022 to be fully funded from adjusted funds flow[1].

A two-well drilling program is currently underway at Mannville in Eastern Alberta where two (2.0 net) horizontal, multi-lateral wells targeting heavy oil in the Sparky formation will be drilled and brought on stream prior to the end of the first quarter. Sales production is expected to commence in late April, several weeks after full recovery the oil-based drilling mud ("OBM") used during the drilling process. Recovered OBM is not recorded as sales production as it is reused in future drilling operations to the extent possible or sold and credited back to drilling capital. Perpetual plans to monitor performance of the new Sparky multi-laterals for several months prior to executing a follow-up drilling program of up to four (4.0 net) additional horizontal multi-lateral wells in the second half of 2022. Perpetual will also continue to be focused on waterflood optimization and battery consolidation projects as well as shallow gas recompletions and abandonment and reclamation activities in the Mannville property.

During the second half of 2022, Perpetual is planning to participate at its 50% working interest in an East Edson drilling program to drill, complete, equip and tie-in six (3.0 net) extended reach horizontal wells in the Wilrich formation, targeting to fill the West Wolf gas plant to maximize natural gas and NGL sales through next winter. Depending on processing capability, one (0.5 net) additional horizontal well is planned to begin evaluating the potential of secondary zones at East Edson.

Exploration and development capital spending for Perpetual for full year 2022 is expected to be $20 to $28 million, with $5 to $7 million to be spent in the first quarter. The table below summarizes anticipated capital spending and drilling activities for Perpetual for the first quarter and full year of 2022.

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

2022 Exploration and Development Forecast Capital Expenditures[4]

	Q1 2022 (*$ millions*)	**# of wells (*gross/net*)**	**2022 (*$ millions*)**	**# of wells (*gross/net*)**
West Central[1]	$0 - $1	-	$14 - $15	6 – 7 / 3.0 - 3.5
Eastern Alberta[2]	$5 - $6	2 / 2.0	$6 - $13	2 – 6 / 2.0 - 6.0
Total[3]	**$5 - $7**	**2 / 2.0**	**$20 - $28**	**8 - 13 / 5.0 - 9.5**

(1) Includes six (3.0 net) Wilrich development wells and one (0.5 net) secondary zone evaluation well.
(2) Two (2.0 net) multi-lateral wells to be drilled in the first quarter of 2022 will be monitored for performance prior to drilling up to four (4.0 net) follow-up wells in the second half of 2022.
(3) Excludes abandonment and reclamation spending.
(4) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

Total Company average production is expected to exceed 6,500 boe/d (18% oil and NGL) for the first quarter of 2022. Average production is forecast to grow 20% to 25% from 2021 levels to 6,500 to 6,750 boe/d in 2022 with oil and NGL representing approximately 20% of the production mix.

Perpetual continues its environmental, social, and corporate governance ("ESG") focus, with total abandonment and reclamation expenditures of up to $2.0 million planned in 2022, with an estimated $0.6 million to be funded through Alberta's Site Rehabilitation Program ("SRP"). The remaining $1.4 million will more than satisfy the Company's annual area-based closure spending requirements of $0.9 million.

2022 Guidance assumptions are as follows:

	2022 Guidance
Exploration and development expenditures(2)(*$ millions*)	$20 - $28
Cash costs(1)(2) (*$/boe*)	$17.00 - $20.00
Average daily production (*boe/d*)	6,500 - 6,750
Production mix (*%*)	20% oil and NGL

(2) Cash costs represents operating, transportation, interest, G&A and royalties.
(3) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

2021 FOURTH QUARTER AND ANNUAL CAPITAL EXPENDITURES(1)

	Three months ended December 31,		Years ended December 31,	
(*$ thousands*)	**2021**	2020	**2021**	2020
Exploration and development	**7,558**	464	**19,060**	5,975
Corporate assets	–	2	**2**	(36)
Capital expenditures(1)	**7,558**	466	**19,062**	5,939
Proceeds from dispositions, net of cash disposed(1)(4)	**53,407**	-	**49,549**	-

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.
(2) As at December 31, 2021 includes $53.6 million in promissory notes payable to Perpetual which were repaid in cash October 5, 2021, net of cash disposed of 4.1 million.

Acquisitions and Dispositions

In 2021, Perpetual participated for its 50% working interest in the acquisition of certain undeveloped lands, wells, pipelines and gross overriding royalties from third parties in the East Edson core area, for net consideration of $1.3 million.

In addition, Perpetual exercised an option to acquire certain assets in the Figure Lake area for $5.8 million. Consideration was in the form of a demand promissory note secured by the Figure Lake lands in the amount of $5.8 million. The acquired Figure Lake lands comprised part of the Clearwater Assets sold to Rubellite. The secured promissory note obligation owing to 197Co was assigned by Perpetual to Rubellite as part of the total consideration.

During the year ended December 31, 2021, dispositions included the sale of the Clearwater Assets to Rubellite for total consideration of $65.5 million, including $53.6 million in promissory notes, the assumption by Rubellite of $5.8 million in promissory notes due to 197Co, the return to Perpetual of 8.2 million Perpetual common shares valued at $2.8 million, 0.7 million Rubellite common shares ("AIMCo bonus shares") valued at $1.4 million and the issuance of Rubellite Share Purchase Warrants to purchase 4.0 million Rubellite common shares valued at $2.0 million.

Exploration and development spending by area

	Three months ended December 31,		Years ended December 31,	
(*$ thousands*)	**2021**	2020	**2021**	2020
West Central	**7,382**	441	**15,522**	476
Eastern Alberta(1)	**176**	23	**3,538**	5,499
Total	**7,558**	464	**19,060**	5,975

(1) Net of $4.1 million of payments received from the Figure Lake GORR financing for three (3.0 net) Figure Lake wells rig released prior to the effective date of the Plan of Arrangement.

Wells drilled by area

	Three months ended December 31,		Years ended December 31,	
(*gross/net*)	**2021**	2020	**2021**	2020
West Central - Edson(1)	**4.0/2.0**	3/1.5	**9.0/4.5**	5/2.5
Eastern Alberta – Clearwater Assets	**-/-**	–/–	**5.0/4.0**	–/–
Eastern Alberta – Mannville	**-/-**	–/–	**-/-**	4/4.0
Total	**4.0/2.0**	3/1.5	**14.0/8.5**	9/6.5

(1) Includes carried interest wells funded by the Edson joint venture partner.

Perpetual's exploration and development spending in the fourth quarter of 2021 was $7.6 million and for the year ended December 31, 2021 was $19.1 million. At the 50% owned East Edson Property, spending of $0.7 million included costs to upgrade roads and to maintain and optimize production through well workovers, including the installation of plunger lifts on 25 wells. The eighth and final carried interest well at East Edson was spud July 26, 2021, pursuant to Perpetual's joint venture partner's carried interest drilling commitment following which Perpetual is responsible for funding its 50% working interest share of future drilling costs. Six (3.0 net) additional extended reach horizontal wells targeting the Wilrich formation were drilled in 2021. All East Edson wells drilled and completed during 2021 were on production by December 2021.

For the year ended December 31, 2021, spending in Eastern Alberta included costs to drill five (4.0 net) Clearwater heavy crude oil wells and formed part of the Rubellite Transactions which were accounted for effective September 3, 2021.

Expenditures on decommissioning obligations

For the year ended December 31, 2021, Perpetual executed $1.7 million (2020 – $1.0 million) of which $0.7 million was funded by Alberta's Site Rehabilitation Program ("SRP"). SRP funding is presented on the consolidated statements of loss and comprehensive loss as "other income". During 2021 Perpetual received 15 reclamation certificates which will result in the cessation of associated property tax and surface lease expenses. Subsequent to year end, the Company has received 1 additional reclamation certificates related to projects completed in 2021.

Perpetual has been awarded an additional $0.6 million in SRP funding that is expects to utilize for abandonment and reclamation activities in 2022.

Operating netbacks[3]

The following table highlights Perpetual's operating netbacks for the three and twelve months ended December 31, 2021 and 2020:

	Three months ended December 31,				Twelve months ended December 31,			
($/boe) ($ thousands)		**2021**		2020		**2021**		2020
Production (*boe/d*)		**6,359**		4,730		**5,389**		5,012
Petroleum and natural gas revenue[1]	**36.66**	**21,449**	18.79	8,178	**30.92**	**60,814**	16.07	29,486
Realized gains (losses) on derivatives[2]	**(0.10)**	**(61)**	2.94	1,278	**(2.45)**	**(4,810)**	0.39	708
Royalties	**(6.47)**	**(3,786)**	(4.21)	(1,831)	**(5.04)**	**(9,920)**	(3.58)	(6,571)
Production and operating expenses	**(4.89)**	**(2,862)**	(6.93)	(3,014)	**(6.54)**	**(12,859)**	(6.34)	(11,634)
Transportation costs	**(1.49)**	**(871)**	(1.85)	(804)	**(1.52)**	**(2,993)**	(1.97)	(3,617)
Total operating netback[3]	**23.71**	**13,868**	8.74	3,807	**15.37**	**30,232**	4.57	8,372

(1) Includes revenues and payments related to the natural gas market diversification contract and physical forward sales contracts which settled during the period.
(2) Includes realized gains and losses on financial derivatives and financial prompt month price optimization contracts.
(3) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

Perpetual's operating netback[3] of $13.9 million ($23.71/boe) in the fourth quarter of 2021 increased from $3.8 million ($8.74/boe) in the comparative period of 2020. The increase was due to higher realized revenue on increased prices combined with average production that was 34% higher than the prior year period. The increase in production was the result of the reactivation of heavy crude oil production as oil prices recovered and stabilized, combined with increased conventional natural gas production from nine (4.5 net) East Edson wells during 2021. Higher realized revenue per boe was due to increased AECO Index prices, and Western Canadian Select ("WCS") benchmark oil prices and higher realized NGL prices.

For the fourth quarter of 2021, royalties increased significantly due to the increase in production volumes, combined with higher reference prices for all products. Production and operating costs in the fourth quarter of 2021 were slightly lower than the comparable period in 2020, but lower on a unit of production basis due to the effect of largely fixed costs at East Edson being applied to higher sales volumes. Transportation costs of $0.9 million were comparable to the fourth quarter of 2020 despite higher production due to transportation optimization activities to manage costs.

Perpetual's operating netback[3] of $30.2 million ($15.37/boe) for the year ended December 31, 2021, increased from $8.4 million ($4.57/boe) in the comparative year. The increase was due to higher revenue driven by increased pricing for all commodities, which more than offset higher royalties and production and operating expenses.

Production

	Three months ended December 31,		Years ended December 31,	
	2021	2020	**2021**	2020
Production				
Conventional natural gas (Mcf/d) [1]	**31,500**	19,512	**24,568**	21,504
Heavy crude oil (bbl/d) [2]	**714**	1,241	**963**	1,082
NGL (bbl/d) [3]	**395**	237	**331**	346
Total production (*boe/d*)	**6,359**	4,730	**5,389**	5,012

(4) Conventional natural gas production yielded a heat content of 1.17 GJ/Mcf for the fourth quarter of 2021 and year ended December 31, 2021, resulting in higher realized natural gas prices on a $/Mcf basis. See "Commodity Prices".
(5) Primarily heavy crude oil.
(6) Primarily related to West Central liquids-rich conventional natural gas.

Fourth quarter production averaged 6,359 boe/d, up 1,629 boe/d or 34% from 4,730 boe/d in the prior year period. In the fourth quarter of 2021, the production mix was comprised of 83% conventional natural gas and 17% heavy crude oil and NGL, an increase from 69% of conventional natural gas and 31% heavy crude oil and NGL in the fourth quarter of 2020.

Fourth quarter conventional natural gas production averaged 31.5 MMcf/d, an increase of 61% from 19.5 MMcf/d in the comparative period of 2020 with production additions from 9.0 (4.5 net) East Edson wells, partially offset by natural declines. During 2020, conventional natural gas production was impacted by the sale of a 50% working interest in the East Edson property in the second quarter of 2020, combined with the deferral of capital investment for drilling and completions in response to low AECO natural gas prices.

Fourth quarter NGL production was 395 bbl/d, 67% higher than the comparative period of 2020. The increase in NGL production is closely tied to higher conventional natural gas production at East Edson, where NGL yields were 12.5 bbls per MMcf in the fourth quarter of 2021 (Q4 2020 – 12.1 bbls per MMcf). Perpetual's average NGL sales composition for the fourth quarter of 2021 consisted of 65% condensate, higher than the prior year period when condensate represented 61% of total NGL production.

Heavy crude oil production in Eastern Alberta was 42% lower than the fourth quarter of 2020 due primarily to natural declines and the sale of the Clearwater Assets. For much of 2020, Perpetual had temporarily shut-in heavy crude oil production in response to the significant decline in global oil prices which began in late March 2020. The Company began reactivating certain low-cost heavy production in mid-May 2020 and continued to add production as oil prices strengthened.

For the year ended December 31, 2021, production increased 8% to 5,389 boe/d compared to 5,012 boe/d in the prior year. Production levels steadily increased following the 50% working interest disposition of the East Edson properties in the second quarter of 2020, as the nine (4.5 net) wells were progressively drilled and brought on production, partially offset by the disposition of the Clearwater oil assets in the third quarter of 2021.

Revenue

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
Petroleum and natural gas revenue				
Natural gas[1]	**13,914**	3,502	**33,012**	13,329
Oil	**4,863**	3,846	**20,172**	12,015
NGL	**2,672**	830	**7,630**	4,142
Petroleum and natural gas revenue	**21,449**	8,178	**60,814**	29,486
Realized gains (losses) on derivatives[2]	**(61)**	1,278	**(4,810)**	708
Realized revenue[3]	**21,388**	9,456	**56,004**	30,194
Unrealized gains (losses) on derivatives	**1,302**	(825)	**3,733**	9,901
Total revenue[3]	**22,690**	8,631	**59,737**	40,095
Realized revenue *($/boe)*	**36.56**	21.73	**28.47**	16.46
Total revenue *($/boe)*	**38.79**	19.83	**30.37**	21.86

(1) Includes revenues related to the market diversification contract and physical forward sales contracts which settled during the period.
(2) Includes realized gains and losses on financial derivatives and certain financial prompt month price optimization contracts.
(3) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

	Three months ended December 31,		Years ended December 31,	
	2021	2020	**2021**	2020
Reference prices				
NYMEX Daily Index (*US$/MMBtu*)	**5.83**	2.66	**3.84**	2.08
AECO 5A Daily Index (*$/GJ*)	**4.18**	2.50	**3.26**	2.11
AECO 5A Daily Index (*$/Mcf*)[1]	**4.41**	2.64	**3.44**	2.23
West Texas Intermediate ("WTI") light oil (*US$/bbl*)	**77.13**	42.66	**67.90**	39.40
Western Canadian Select ("WCS") differential (*US$/bbl*)	**(14.63)**	(9.30)	**(13.04)**	(12.60)
WCS average (*Cdn$/bbl*)[2]	**78.65**	43.37	**68.76**	35.91
Average Perpetual realized prices[5]				
Natural gas (*$/Mcf*)[1] [5] [6]				
AECO Daily Index	**4.41**	2.64	**3.44**	2.23
Heat content premium[3]	**0.48**	0.27	**0.37**	0.24
Market diversification contract[4] [5]	**-**	(0.37)	**(0.60)**	(0.09)
Realized gains (losses) on financial and physical gas derivatives[5]	**(0.22)**	(1.18)	**(0.35)**	(1.53)
Realized gains (losses) on prompt month price optimization[5]	**0.13**	0.10	**0.29**	–
Realized natural gas price (*$/Mcf*) [5]	**4.80**	1.46	**3.15**	0.85
Percent of AECO Daily Index	**109%**	55%	**107%**	38%
Realized oil price (*$/bbl*)[5] [6]	**73.96**	52.60	**57.36**	49.37
Realized NGL price (*$/bbl*) [5] [6]	**73.44**	38.03	**63.24**	31.40

(1) Converted from $/GJ using a standard energy conversion rate of 1.055 GJ:1 Mcf.
(2) Derived using the Bank of Canada average foreign exchange rate of US$1.00 = Cdn$1.26 for the three months ended December 31, 2021 (Q4 2020 – $1.30) and $1.25 for the year ended December 31, 2021 (2020 – $1.34).
(3) Realized natural gas prices are at a premium to the AECO Daily Index due to higher average heat content of 1.17 GJ/Mcf for the fourth quarter of 2021 and year ended December 31. Perpetual received an 11% premium to the AECO Daily Index for the three and twelve months ended December 31, 2021 (Q4 2020 – 10%; 2020 – 11%) related to its higher average heat content.
(4) For the year ended December 31, 2021, realized losses on derivatives include $4.8 million ($0.60/Mcf) of losses from the elimination of the Company's market

diversification contract obligations for the period April 1, 2021 through October 31, 2022 (Q4 2021 – nil).

(5) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

(6) Realized natural gas, oil and NGL prices include physical forward sales contracts for which delivery was made during the reporting period, along with realized gains and losses on financial derivatives and foreign exchange contracts.

Perpetual's petroleum and natural gas ("P&NG") revenue, before financial derivatives, for the three months ended December 31, 2021 of $21.4 million increased significantly from $8.2 million the fourth quarter of 2020, due to the 34% increase in average daily production combined with the impact of significantly higher reference prices for all products. For the year ended December 31, 2021, P&NG revenue was more than 2.0 times higher (2020 – $29.5 million), due to the 8% increase in average daily production and significantly higher commodity prices.

Natural gas revenue, before derivatives, of $13.9 million in the fourth quarter of 2021 comprised 65% (Q4 2020 – 43%) of total P&NG revenue while conventional natural gas production was 83% (Q4 2020 – 69%) of total production. Natural gas revenue increased significantly to $13.9 million (2020 - $3.5 million), reflecting a 61% increase in average daily production through the East Edson drilling, combined with significantly higher AECO Daily Index prices of $4.18 /GJ (Q4 2020 – $2.50/GJ). Higher AECO prices were partially offset by realized market diversification contract and hedging losses on financial and physical gas derivatives. The Company continued to realize physical hedging losses on AECO-NYMEX basis hedge positions that were locked-in during the second quarter of 2020. For the year ended December 31, 2021, natural gas revenue increased 1.5 times compared to the prior year, as a result of increased average daily production and higher reference prices.

Oil revenue of $4.9 million represented 23% (Q4 2020 – 47%) of total P&NG revenue while heavy crude oil production was 11% (Q4 2020 – 26%) of total production. Oil revenue was higher than the same period in 2020, due to the 81% increase in WCS average prices, partially offset by a 42% decrease in heavy crude oil production from the sale of the Clearwater oil assets. The increase in the WCS average price was mainly due to the increase in WTI light oil prices to US$77.13/bbl (Q4 2020 - $42.66) and increase in WCS differentials to US$14.63/bbl (Q4 2020 - US$9.30/bbl). For the year ended December 31, 2021, oil revenue increased 68% compared to the prior year, due primarily to the increase in the WCS average price to $68.76/bbl (2020 – $35.91/bbl).

NGL revenue for the fourth quarter of 2021 of $2.7 million comprised 12% (Q4 2020 – 10%) of total P&NG revenue while NGL production represented only 6% (Q4 2020 – 5%) of total Company production. Perpetual's realized NGL price for the fourth quarter of 2021 was $73.44/bbl, 93% higher than the fourth quarter of 2020 due to an increase in all NGL component prices which tracked the rise in WTI light oil prices.

Realized losses on derivatives totaled $4.8 million for 2021 which related to the elimination of the Company's remaining natural gas market diversification contract obligations for the April 1, 2021 to October 31, 2022 period (Q4 2020 – $2.4 million realized loss from natural gas derivatives) and $0.1 million of realized financial hedging losses from oil.

Unrealized gains on derivatives of $1.3 million were recorded in the fourth quarter of 2021 (Q4 2020 – unrealized gains of $0.8 million) and $3.7 million for the year ended December 31, 2021 (2020 – unrealized gains of $9.9 million). Unrealized gains and losses represent the change in mark-to-market value of derivative contracts as forward commodity prices and foreign exchange rates change. Unrealized gains and losses on derivatives are excluded from the Corporation's calculation of cash flow from (used in) operating activities as non-cash items. Derivative gains and losses vary depending on the nature and extent of derivative contracts in place, which in turn, vary with the Corporation's assessment of commodity price risk, committed capital spending and other factors.

Royalties

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
Natural gas royalties – crown	**460**	190	**126**	313
Oil royalties – crown	**595**	209	**1,116**	264
NGL royalties – crown	**203**	52	**860**	537
Total crown(1)	**1,258**	451	**2,102**	1,114
Natural gas royalties – freehold and overriding	**1,753**	839	**4,849**	3,349
Oil royalties – freehold and overriding	**378**	373	**1,607**	1,279
NGL royalties – freehold and overriding	**397**	168	**1,364**	829
Total freehold and overriding(1)	**2,528**	1,380	**7,820**	5,457
Total royalties	**3,786**	1,831	**9,920**	6,571
$/boe	**6.47**	4.21	**5.04**	3.58
Crown *(% of P&NG revenue)*(1)	**5.9**	5.5	**3.5**	3.8
Freehold and overriding *(% of P&NG revenue)*(1)	**11.8**	16.9	**12.9**	18.5
Total *(% of P&NG revenue)*	**17.7**	22.4	**16.4**	22.3
Natural gas royalties *(% of natural gas revenue)*(1)	**15.9**	29.4	**15.1**	27.5
Oil royalties *(% of oil revenue)*(1)	**20.0**	15.1	**13.5**	12.8
NGL royalties *(% of NGL revenue)*(1)	**22.4**	26.5	**29.1**	33.0

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

For the fourth quarter of 2021, royalties were $3.8 million, more than 2.0 times higher from the comparative period of 2020 as a result of increased production and higher reference prices. For the year ended December 31, 2021, royalties were $9.9 million (2020 – $6.6 million), 51% higher than the prior year period. The combined average royalty rate on P&NG revenue decreased from 2020, due primarily to the impact of higher reference prices and the fixed volume East Edson gross overriding royalty as a percentage of higher production. Specifically, the Alberta Gas Reference price and AECO Daily Index prices which are used to calculate crown and freehold natural gas royalties, respectively, increased significantly during the year.

For the three months and year ended December 31, 2021, freehold and overriding royalties of $2.5 million and $7.8 million increased from the comparative period (2022 - $1.8 million and $6.6 million), due primarily to the impact of higher AECO Daily Index, WCS and Alberta reference prices which are used to calculate freehold royalties and increased production. As part of the East Edson Transaction, Perpetual agreed to retain its joint venture partner's 50% working interest in the existing gross overriding royalty obligation on the property, equivalent to 2.8 MMcf/d of natural gas and associated NGL production for the period April 1, 2020 to December 31, 2022. This obligation has been recorded in the condensed interim consolidated statement of financial position under the heading "Royalty obligations". Prior to November 1, 2021, the retained East Edson royalty obligation was paid in-kind, and settled through non-cash delivery of contractual natural gas and NGL volumes to the royalty holder (note 20). As of November 1, 2021, the royalty obligation is settled through payment in cash.

Production and operating expenses

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
Production and operating expenses	**2,862**	3,014	**12,859**	11,634
$/boe	**4.89**	6.93	**6.54**	6.34

Total production and operating expenses decreased 29% on a unit-of-production basis to $4.89/boe for the fourth quarter of 2021, compared to $6.93/boe for the comparable period of 2020. On an absolute dollar basis, production and operating costs decreased by 5% due to increased conventional natural gas production at East Edson which has a high percentage of fixed operating costs and much lower operating costs as compared to heavy crude oil production. The decrease was also related to the decrease in oil production as a result of natural declines and the sale of the Clearwater oil Assets.

For the year ended December 31, 2021, production and operating expenses increased by 3% on a unit-of-production basis to $6.54/boe, compared to $6.34/boe for the comparable period of 2020. The increase was due to the reactivation of heavy crude oil production in Eastern Alberta which is higher cost as compared to the Company's other operating areas, partially offset by higher natural gas production and the sale of the Clearwater assets in the third quarter of 2021.

Transportation costs

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
Transportation costs	**871**	804	**2,993**	3,617
$/boe	**1.49**	1.85	**1.52**	1.97

Transportation costs include clean oil trucking and NGL transportation, as well as costs to transport natural gas from the plant gate to commercial sales points. For the fourth quarter of 2021, transportation costs were $0.9 million, an 8% increase from the prior year period of $0.8 million as a result of increased natural gas production and an increase in transportation rates charged on the NGTL system. On a unit-of-production basis, transportation costs decreased by 19% to $1.49/boe in the fourth quarter of 2021 (Q4 2020 – $1.85/boe), due to increased natural gas production and increased transportation optimization activities.

For the year ended December 31, 2021, transportation costs were $3.0 million, a decrease of 17% over the prior year period. The decrease was due to the reduction in Perpetual's natural gas firm transportation capacity, eliminating unutilized demand charges at East Edson, which took effect in the third quarter of 2020 and was offset by an increase in transportation rates on the NGTL system.

Exploration and evaluation ("E&E") expenses

	Three months ended December 31,		Years ended December 31,	
($ thousands)	**2021**	2020	**2021**	2020
Total E&E expense	**27**	483	**120**	712

Exploration and evaluation expenses include lease rentals on undeveloped acreage, geological and geophysical costs, and the write-down of carrying costs related to lease expiries. During the year ended December 31, 2021, the Company did not record any non-cash write-downs (2020 – $0.5 million) associated with expiring P&NG leases.

General and administrative ("G&A") expenses

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
G&A expense before recoveries	**3,847**	2,011	**11,451**	8,300
Overhead recoveries	**(190)**	(17)	**(694)**	(430)
Total G&A expense	**3,657**	1,994	**10,757**	7,870
$/boe	**6.25**	4.58	**5.47**	4.29

During the fourth quarter of 2021, G&A expense was $3.7 million, an 82% increase from the prior year period of $2.0 million. For the year ended December 31, 2021, G&A expense was $10.8 million, up 36% from the prior year (2020 – $7.9 million). The increase in G&A was related to the restoration to first quarter 2020 levels of employee salaries and benefits which had been reduced by over 20% in response to the collapse in commodity prices in March 2020 and increased professional fees related to the Rubellite Transaction.

Perpetual entered into the MSA with Rubellite whereby Perpetual receives payment for certain technical and administrative services provided to Rubellite on a cost recovery basis. For the year ended December 31, 2021, the amount of general and administrative costs billed to Rubellite was $0.4 million.

For the three and twelve months ended December 31, 2021, Perpetual received payments from the Canada Emergency Wage Subsidy ("CEWS") and Canada Emergency Rent Subsidy ("CERS") programs which reduced general and administrative expenses by $0.8 million and $0.1 million, respectively (2020 – $1.0 million and $0.3 million).

Overhead recoveries of $0.7 million increased over the prior year period (Q3 2020 – $0.4 million) due to increased capital spending and higher G&A costs.

Share-based payments

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
Share-based payments (non-cash)	**149**	104	**360**	517
Share-based payments (cash)	**319**	413	**1,684**	1,500
Total share-based payments	**468**	517	**2,044**	2,017

For the three and twelve months ended December 31, 2021 share-based payments expense was $0.5 million and $2.0 million, unchanged from the comparative period of 2020. During the year ended December 31, 2021, the Company granted 6.8 million share-based payment awards, comprised of deferred options, deferred shares, share options, and performance share rights (2020 – 6.4 million).

Depletion and depreciation

	Three months ended December 31,		Years ended December 31,	
($ thousands, except as noted)	**2021**	2020	**2021**	2020
Depletion and depreciation	**4,182**	2,906	**14,020**	15,533
$/boe	**7.15**	6.68	**7.13**	8.47

The Company calculates depletion using the net book value of the asset, future development costs associated with proved and probable reserves, salvage values on associated production equipment, as well as proved and probable reserves. As at December 31, 2020, depletion was calculated on a $154.3 million depletable balance and $75.3 million in future development costs (2020 – $108.1 million depletable balance and $112.5 million in future development costs). The depletable base excluded an estimated $3.7 million (2020 – $3.5 million) of salvage value.

Depletion and depreciation expense for the fourth quarter of 2021 was $4.2 million or $7.15/boe (2020 – $2.9 million or $6.68/boe). The increase reflects the 34% increase in production volumes compared to the prior year period as well as an increased depletable base, related to the impairment reversals recorded during 2021. On a unit-of-production basis, depletion and depreciation expense increased by 10% compared to the fourth quarter of 2020.

For the year ended December 31, 2021, Perpetual recorded $14.0 million or $7.13/boe (2020 – $15.5 million or $8.47/boe) of depletion and depreciation expense. The decrease is due primarily to the disposition of the Clearwater Assets, slightly offset by the 8% increase in production. On a unit-of-production basis, depletion and depreciation expense decreased by 15% to $7.13/boe (2020 – $8.47/boe), due primarily to the disposition of the Clearwater Assets and increased production.

Depreciation expense for the year ended December 31, 2021 was attributable to office furniture, office and computer equipment, leasehold improvements and right of use assets.

Impairment and impairment reversals

In accordance with IFRS, the Company is required to assess when internal or external indicators of impairment or reversal exist, and impairment testing is required. During the fourth quarter of 2021, the Company determined that indictors of impairment reversal existed and that the estimated recoverable amounts of the Eastern Alberta CGU exceeded the carrying amounts of $42.2 million. Accordingly, a non-cash impairment reversal of $0.5 million was included in net income.

During the second quarter of 2021, the Company determined that indictors of impairment reversal existed and that the estimated recoverable amounts of the West Central CGU and Eastern Alberta CGU exceeded the carrying amounts of $89.6 million and $28.6 million, respectively. Accordingly, a non-cash impairment reversal of $30.1 million was included in net income.

E&E assets are tested for impairment when internal or external indicators of impairment or impairment reversal exist as well as upon their reclassification to oil and natural gas properties in PP&E. At December 31, 2021, the Company conducted an assessment of indicators of impairment and impairment reversal for the Company's E&E assets. There were no triggers identified and therefore, no impairments or impairment reversals recognized during 2021.

Finance expenses

($ thousands)	Three months ended December 31, 2021	2020	Years ended December 31, 2021	2020
Cash finance expense				
Interest on revolving bank debt	**150**	293	**953**	1,662
Interest on term loan	**53**	(912)	**53**	1,812
Interest on 2022 Senior Notes[(1)]	**(608)**	733	**(1,253)**	2,938
Interest on 2025 Senior Notes[(2)]	**1,408**	–	**1,408**	–
Interest on lease liabilities	**36**	41	**148**	175
Total cash finance expense	**1,039**	155	**1,309**	6,587
Non-cash finance expense				
Interest accrued on Term Loan	**-**	–	**2,743**	–
Interest paid in-kind on 2022 Senior Notes[(1)]	**-**	1,823	**1,469**	1,823
Interest paid in-kind on 2025 Senior Notes[(2)]	**-**	–	**1,533**	–
Gain on senior note maturity extension[(1)]	**-**	–	**(1,591)**	–
Gain on Second Lien Loan Settlement[(3)]	**-**	–	**(6,820)**	–
Amortization of debt issue costs	**235**	502	**962**	1,673
Accretion on decommissioning obligations	**165**	96	**531**	443
Change in fair value of other liability[(4)]	**131**	–	**1,159**	–
Change in fair value of royalty obligations	**(663)**	(914)	**4,101**	1,305
Total non-cash finance expense (income)	**(151)**	1,507	**4,087**	5,244
Finance expenses recognized in net income (loss)	**888**	1,662	**5,396**	11,831

(1) On January 22, 2021, Perpetual's 2022 Senior Notes were exchanged for 2025 Senior Notes, providing Perpetual the option to pay interest in-kind. Perpetual elected to pay the January 23, 2021 semi-annual interest of $1.5 million by a PIK Interest Payment. As a result, the previously accrued 2022 Senior Note cash interest of $1.3 million was reversed and replaced by $1.3 million of 2025 Senior Note non-cash interest expense.

(2) The Company satisfied the semi-annual interest payment due July 23, 2021 by making a PIK Interest Payment. Subsequent to year end, the company satisfied the semi-annual interest payment due January 22, 2022 by making a cash interest payment.

(3) On September 3, 2021, upon completion of the Plan of Arrangement, Perpetual's Term Loan was substantively modified pursuant to the Second Lien Loan Settlement which included payment of $38.5 million, delivery of 0.7 million Rubellite shares valued at $1.4 million, the entry into a new second lien term loan of $2.7 million, and a contingent payment obligation valued at $0.2 million resulting in a gain of $6.8 million.

(4) Pursuant to the terms of the Second Lien Loan Settlement, $0.2 million has been earned related to the 2021 payment cap, and Perpetual is committed to pay up to an additional $3.2 million in potential contingent payments in the event that Perpetual's annual average realized crude oil and natural gas prices exceed certain thresholds. The change in fair value of this liability was recorded in the statement of comprehensive income (loss) as a non-cash finance expense.

Total cash finance expense was $1.0 million in the fourth quarter of 2021, higher than the prior year period (Q4 2020 – $0.2 million) due primarily to payment of interest on the Senior Notes and Term Loan in cash rather than in-kind.

Total non-cash finance income for the fourth quarter of 2021 was $0.1 million, $1.6 million lower than the prior year period (Q4 2020 – $1.5 million), due the extinguishment of the Term Loan, partially offset by a change in the fair value of the royalty obligations due to changing AECO natural gas and NGL prices and the recognition of fair value of "other liability" related to contingent payments related to the Second Lien Loan Settlement.

On January 22, 2021, the Company exchanged its unsecured 2022 Senior Notes for new $33.6 million secured 8.75% third lien senior notes due January 23, 2025. Interest on the 2025 Senior Notes may be paid in-kind at the option of the Company by adding the interest payment to the principal amount owing (a "PIK Interest Payment"). The Company elected to pay the January 23, 2021 and July 23, 2021 semi-annual interest payments by a PIK Interest Payment, which increased the principal amount of the 2025 Senior Notes outstanding to $36.6 million on July 23, 2021. Perpetual intends to pay the January 23, 2022 semi-annual interest payment in cash.

The Company recorded a net gain on the senior note maturity extension of $1.6 million, representing the difference between the carrying amount of 2022 Senior Notes of $34.5 million and the present value of the modified cash flows for the 2025 Senior Notes of $32.9 million, discounted at an effective interest rate of 12.4%. The gain has been recorded as a reduction of non-cash finance expense.

On September 3, 2021, upon completion of the Plan of Arrangement, Perpetual's agreement with its Term Loan lender for the settlement of principal and all interest owing on the Term Loan was accounted for as being effective. Perpetual extinguished the previous Term Loan in exchange for the payment of approximately $38.5 million in cash (reflected as current Term Loan payable on the statement of financial position), the delivery by Perpetual of the AIMCo Bonus Shares at a value of $1.4 million, the issuance of a new $2.7 million second lien Term Loan bearing interest at 8.1% annually and maturing December 31, 2024 (the "New Term Loan") and up to an aggregate $4.5 million in contingent payments over the three year period ended June 30, 2024 in the event that Perpetual's annual average realized oil and natural gas prices exceed certain thresholds (the "Second Lien Loan Settlement").

LIQUIDITY, CAPITALIZATION AND FINANCIAL RESOURCES

Perpetual's strategy targets the maintenance of a strong capital base to retain investor, creditor and market confidence to support the execution of its business plans. The Company manages its capital structure and adjusts its capital spending in light of changes in economic conditions such as depressed commodity prices, available liquidity, and the risk characteristics of its underlying oil and natural gas assets. The Company considers its capital structure to include share capital, senior notes, the Term Loan, revolving bank debt, and net working capital. To manage its capital structure and available liquidity, the Company may from time to time issue equity or debt securities, sell assets, and adjust its capital spending to manage current and projected debt levels. The Company will continue to regularly assess changes to its capital structure and repayment alternatives, with considerations for both short-term liquidity and long-term financial sustainability.

Capital management and net debt(1)

(*$ thousands, except as noted*)	**December 31, 2021**	December 31, 2020
Revolving bank debt	**2,487**	17,495
Term loan, principal amount	**2,671**	46,823
Senior notes, principal amount	**36,582**	33,580
Other liability	**1,387**	
Net working capital deficiency (surplus)(1)	**16,143**	7,099
Net debt(1)	**59,270**	104,997
Shares outstanding at end of period (*thousands*)(2)	**63,567**	61,305
Market price at end of period (*$/share*)	**0.70**	0.08
Market value of shares(1)	**44,496**	4,904
Enterprise value(1)	**103,767**	109,901
Net debt as a percentage of enterprise value(1)	**57**	96
Trailing twelve-months adjusted funds flow(1)	**16,746**	(7,787)

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.
(2) Shares outstanding are presented net of shares held in trust.

At December 31, 2021, Perpetual had total net debt of $59.3 million, down $45.7 million (44%) from December 31, 2020 as a result of the Rubellite Transactions and the extinguishment of the Term Loan.

Perpetual had available liquidity at December 31, 2021 of $14.6 million, comprised of the $17.0 million Credit Facility Borrowing Limit, adjusted for current cash of $1.1 million less borrowings of $2.5 million and letters of credit of $1.0 million.

Revolving bank debt

As at December 31, 2021, the Company's Credit Facility had a Borrowing Limit of $17.0 million (December 31, 2020 – $20.0 million) under which $2.5 million was drawn (December 31, 2020 – $17.5 million) and $1.0 million of letters of credit had been issued (December 31, 2020 – $0.9 million). Borrowings under the Credit Facility bear interest at its lenders' prime rate or Banker's Acceptance rates, plus applicable margins and standby fees. The applicable Banker's Acceptance margins range between 3.0% and 5.5%. The effective interest rate on the Credit Facility at December 31, 2021 was 5.9%. For the year ended December 31, 2021, if interest rates changed by 1% with all other variables held constant, the impact on annual cash finance expense and net income would be $nil.

During the third quarter of 2021, Perpetual entered into an agreement with its syndicate of lenders to extend its Credit Facility maturity to November 30, 2022 with the opportunity to extend the revolving period for a further six months subject to approval by the syndicate. If not extended on or before November 30, 2022 all outstanding advances will be repayable on May 31, 2023.

During the fourth quarter of 2021, the Credit Facility borrowing limit was reduced from $20.0 million to $17.0 million and on December 17, 2021 the semi-annual borrowing base redetermination of the Company's first lien credit facility was completed and the existing $17.0 million borrowing limit and term of the credit facility was maintained. The next borrowing limit redetermination is scheduled to occur on or before May 31, 2022.

The Credit Facility is secured by general first lien security agreements covering all present and future property of the Company and its subsidiaries. The Credit Facility also contains provisions which restrict the Company's ability to repay Term Loan and senior note principal and interest, and to pay dividends on or repurchase its common shares.

At December 31, 2021, the Credit Facility was not subject to any additional financial covenants and the Company was in compliance with all customary non-financial covenants.

Term loan

			December 31, 2021		December 31, 2020	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Term loan	November 30, 2021	8.1%	**$ 2,671**	**$ 2,469**	$ 46,823	$ 46,691

During the third quarter, Perpetual and its Term Loan lender entered into an agreement establishing the terms and conditions of the Second Lien Loan Settlement. On September 3, 2021, upon completion of the Plan of Arrangement, Perpetual's agreement with its Term Loan lender for the settlement of principal and accrued interest owing on the Term Loan was accounted for as being effective. Perpetual substantively modified the previous Term Loan for the payment of approximately $38.5 million in cash, the delivery by Perpetual of 0.7 million Rubellite common shares (AIMCo Bonus Shares) at a value of $1.4 million, the issuance of a new $2.7 million second lien Term Loan, and up to an aggregate of $4.5 million in potential contingent payments in the event that Perpetual's annual average realized oil and natural gas prices exceed certain thresholds initially valued at $0.2 million (note 11). The New Second Lien Term Loan bears interest at 8.1% annually, which Perpetual may elect to pay-in-kind, and will mature on December 31, 2024. All amounts related to the Second Lien Loan Settlement were paid.

The Company and the Term Loan lender agreed to allow $1.8 million of interest due on the December 31, 2020 to be paid-in-kind and added to the outstanding principal amount of the loan and all other interest owing on the Term Loan to be settled as part of the Second Lien Loan Settlement. Non-cash paid in-kind interest of $0.8 million was recorded in the third quarter of 2021, which increased the principal amount of the Term Loan owing upon settlement to $49.6 million. As a result of the Second Lien Loan Settlement , the carrying amount of $49.6 million was in excess of the consideration received of $42.8 million, resulting in a gain of $6.8 million being recognized (note 20).

The New Term Loan has a cross-default provision with the Credit Facility and contains substantially similar provisions and covenants as the Credit Facility (note 9). The Term Loan is secured by a general security agreement over all present and future property of the Company and its subsidiaries on a second priority basis, subordinate only to liens securing loans under the Credit Facility.

At December 31, 2021 the Term Loan is presented net of $0.2 million in issue costs which are amortized over the remaining term of the loan using a weighted average effective interest rate of 11.1%.

At December 31, 2021, the Term Loan was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

Senior notes

			December 31, 2021		December 31, 2020	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Senior notes	January 23, 2025	8.75%	**$ 36,583**	**$ 34,189**	$ 33,580	$ 32,359

On January 22, 2021, Perpetual announced the completion of a Court-approved plan of arrangement whereby the unsecured 2022 Senior Notes were exchanged for new 8.75% secured third lien notes due January 23, 2025. The 2025 Senior Notes have been issued under a trust indenture that contains substantially the same terms as the 2022 Senior Notes, other than the 2025 Senior Notes are secured on a third lien basis and allow for the semi-annual interest payments to be paid at Perpetual's option, in cash, or in additional 2025 Senior Notes (a "PIK Interest Payment"). The Company elected to pay the January 23, 2021 semi-annual interest of $1.5 million by a PIK Interest Payment, and satisfied the semi-annual interest payment due July 23, 2021 by making a PIK Interest Payment of $1.6 million, increasing the principal amount owing at December 31, 2021 to $36.6 million. Subsequent to year end, the Company satisfied the January 23, 2022 semi-annual interest payment of $1.6 million by making a cash payment.

At December 31, 2021, the senior notes are recorded at the present value of future cash flows, net of $2.4 million in issue and principal discount costs which are amortized over the remaining term using a weighted average effective interest rate of 11.3%.

The senior notes are direct senior secured, third lien obligations of the Company. The Company may redeem the senior notes without any repayment penalty. The senior notes have a cross-default provision with the Company's Credit Facility. In addition, the senior notes indenture contains restrictions on certain payments including dividends, retirement of subordinated debt, and stock repurchases. At December 31, 2021, the senior notes were not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

Entities controlled by the Company's CEO hold $15.9 million of the 2025 Senior Notes outstanding. An entity that is associated with the Company's CEO, and entities associated with Directors of the Company hold an additional $10.3 million and $0.8 million of the 2025 Senior Notes outstanding, respectively.

Equity

At December 31, 2021 there were 63.6 million common shares outstanding, net of 0.5 million shares held in trust to resource employee compensation programs. Basic and diluted weighted average shares outstanding for the three months ended December 31, 2021 were 63.6 million (Q4 2020 – 61.3 million) and 70.0 million for the year ended December 31, 2021 (2020 – 61.0 million).

At March 14, 2022, there were 63.1 million common shares outstanding which is net of 1.0 million shares held in trust for employee compensation programs. In addition, the following potentially issuable common shares were outstanding as at the date of this MD&A:

(millions)	**March 14, 2022**
Share options	**4,077**
Performance share rights	**3,065**
Compensation awards	**8,634**
Total(1)	**15,776**

(1) 4.6 million compensation awards, 0.7 million share options, and 1.7 million performance share rights have an exercise price below the December 31, 2021 closing price of the Company's common shares of $0.70 per share.

SEQUOIA LITIGATION UPDATE

On August 3, 2018, the Company received a Statement of Claim that was filed by PricewaterhouseCoopers Inc. LIT ("PwC"), in its capacity as trustee in bankruptcy (the "Trustee") of Sequoia Resources Corp. ("Sequoia"), with the Alberta Court of Queen's Bench (the "Court"), against Perpetual (the "Sequoia Litigation"). The claim relates to a six-year-old transaction when, on October 1, 2016, Perpetual closed the disposition of shallow conventional natural gas assets in Eastern Alberta to an arm's length third party at fair market value at the time after an extensive and lengthy marketing, due diligence, and negotiation process (the "Sequoia Disposition"). This transaction was one of several completed by Sequoia. Sequoia assigned itself into bankruptcy on March 23, 2018. PwC is seeking an order from the Court to either set this transaction aside or declare it void, or damages of approximately $217 million. On August 27, 2018, Perpetual filed a Statement of Defence and Application for Summary Dismissal with the Court in response to the Statement of Claim. All allegations made by PwC have been denied and applications to the Court to dismiss all claims has been made on the basis that there is no merit to any of them.

On January 13, 2020, the Court issued its written decision related to the Sequoia Disposition. The decision dismissed and struck all claims against the Company's CEO and all but one of the claims filed against Perpetual. The Court did not find that the test for summary dismissal relating to whether the asset transaction was an arm's length transfer for purposes of section 96(1) of the Bankruptcy and Insolvency Act (the "BIA") was met, on the balance of probabilities. Accordingly, the BIA claim was not dismissed or struck and only that part of the claim could continue against Perpetual. The Trustee filed a notice of appeal with the Court of Appeal of Alberta, challenging the entire decision, and Perpetual filed a similar notice of appeal contesting the BIA claim portion of the decision (the "First Appeal").

On February 25, 2020, Perpetual filed a second application to strike and summarily dismiss the BIA claim on the basis that there was no transfer at undervalue, and Sequoia was not insolvent at the time of the asset transaction nor caused to be insolvent by the asset transaction. In July 2020, the Orphan Well Association ("OWA"), certain oil and gas companies, and six municipalities applied to intervene in the second BIA dismissal application proceedings. The OWA and certain oil and gas companies were permitted to intervene (the "Intervenors") in the proceedings which took place on October 1 and 2, 2020. The Intervenors were also permitted to intervene in the First Appeal proceedings. On January 14, 2021 the Court issued its decision, finding that the Trustee could not establish a necessary element of the BIA Claim as Sequoia was not insolvent at the time of, nor rendered insolvent by, the Sequoia Disposition. The Court therefore concluded there is "no merit" to the BIA Claim and it summarily dismissed the balance of the Statement of Claim. The Trustee appealed this decision, and the Court of Appeal hearing took place on February 10, 2022, with the panel reserving judgement.

The First Appeal proceedings were heard on December 10, 2020. On January 25, 2021, the Court of Appeal of Alberta issued their judgement with respect to the First Appeal proceedings, dismissing the appeal filed by Perpetual and granting certain aspects of the appeals filed by the Trustee, thereby reinstating certain elements of the Sequoia Litigation for trial. On March 24, 2021, Perpetual applied for leave to appeal the First Appeal decision to the Supreme Court of Canada (the "SCC"). On July 8, 2021, the SCC dismissed Perpetual's application.

Management expects that the Company is more likely than not to be completely successful in defending against the Sequoia Litigation such that no damages will be awarded against it, and therefore, no amounts have been accrued as a liability in these financial statements.

SUMMARY OF QUARTERLY RESULTS

($ thousands, except as noted)	**Q4 2021**	Q3 2021	Q2 2021	Q1 2021
Financial				
Oil and natural gas revenue	**21,449**	14,603	13,226	11,536
Net income (loss)	**5,669**	51,141	27,017	(2,706)
Per share – basic	**0.09**	0.80	0.43	(0.04)
Per share – diluted	**0.08**	0.72	0.38	(0.04)
Cash flow from (used in) operating activities	**1,624**	6,655	2,854	1,682
Adjusted funds flow(1)	**8,585**	3,315	2,302	2,544
Per share(3)	**0.13**	0.05	0.04	0.04
Capital expenditures(1)	**7,558**	9,947	1,554	3
Net proceeds on dispositions, net of cash disposed	**53,407**	(4,060)	46	156
Common shares *(thousands)*				
Weighted average – basic	**63,853**	63,801	62,574	61,603
Weighted average – diluted	**70,873**	71,266	70,460	61,603
Operating				
Daily average production				
Natural gas *(MMcf/d)*	**31.5**	21.6	22.2	22.9
Oil *(bbl/d)*	**714**	972	1,074	1,097
NGL *(bbl/d)*	**395**	300	331	294
Total *(boe/d)*	**6,359**	4,876	5,099	5,211
Average prices				
Realized natural gas price *($/Mcf)* (1) (2)	**4.80**	2.59	2.25	2.25
Realized oil price *($/bbl)* (1) (2)	**73.96**	65.19	55.75	40.85
Realized NGL price *($/bbl)* (1) (2)	**73.44**	65.37	55.48	56.03

(*$ thousands, except where noted*)	Q4 2020	Q3 2020	Q2 2020	Q1 2020
Financial				
Oil and natural gas revenue	8,178	7,089	3,722	10,497
Net loss	14,443	(7,491)	(8,831)	(59,718)
Per share – basic	0.24	(0.12)	(0.15)	(0.98)
Per share – diluted	0.24	(0.12)	–	–
Cash flow from operating activities	(1,104)	(2,538)	(2,777)	(3,114)
Adjusted funds flow(1)	1,240	(2,098)	(3,328)	(3,601)
Per share – basic	0.02	(0.03)	(0.05)	(0.06)
Capital expenditures(1)	466	251	(11)	5,233
Net payments (proceeds) on acquisitions and dispositions	–	133	(34,661)	–
Capital expenditures net of acquisitions and dispositions	466	384	(34,672)	5,233
Common shares (*thousands*)				
Weighted average – basic and diluted	61,266	61,200	60,776	60,674
Operating				
Daily average production				
Conventional natural gas (*MMcf/d*)	19.5	16.3	16.9	33.3
Heavy crude oil (*bbl/d*)	1,241	1,193	573	1,320
NGL (*bbl/d*)	237	273	268	606
Total (*boe/d*)	4,730	4,188	3,662	7,479
Average prices				
Realized natural gas price (*$/Mcf*) (1) (2)	1.46	0.06	0.28	1.16
Realized oil price (*$/bbl*) (1) (2)	52.60	55.71	67.56	32.60
Realized NGL price (*$/bbl*) (1) (2)	38.03	28.09	17.35	36.48

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

(2) Realized natural gas, oil and NGL prices include physical forward sales contracts for which delivery was made during the reporting period, along with realized gains and losses on financial derivatives and foreign exchange contracts.

(3) Based on weighted average common shares outstanding for the period.

(4) During the fourth quarter of 2021 includes $53.6 million in promissory notes payable to Perpetual which were repaid in cash October 5, 2021. Cash disposed was recognized during the third quarter of 2021.

The Company's oil and natural gas revenue, net income (loss), cash flow from (used in) operating activities and adjusted funds flow are influenced by commodity prices and production levels. Conventional natural gas production levels decreased during 2020 due to natural declines and reduced capital expenditures in response to depressed and volatile AECO natural gas prices. The disposition of a 50% working interest in the East Edson property which closed on April 1, 2020 for net cash consideration of $34.8 million and an eight well carried capital commitment, further reduced conventional natural gas production in the second and third quarters of 2020, before being restored in the fourth quarter of 2020 and all of 2021 as nine (4.0 net) wells have been tied-in to production. In response to the significant decline in global oil prices which began in March 2020, oil-focused capital expenditures and high-cost production was temporarily suspended, pending a recovery of oil prices, and oil focused hedging gains were locked-in. Heavy crude oil production was restarted progressively in step with the recovery of oil prices.

For the year ended December 31, 2021, the Company's net income was driven by a gain on disposition of the Clearwater Assets of $47.5 million and impairment reversals of $30.6 million, compared to total net impairments of $42.5 million in the prior year (Q4 2020 – $18.0 million impairment reversal; Q1 2020 – $60.5 million impairment charge).

Commodity price risk management and sales obligations

Perpetual's commodity price risk management strategy is focused on managing downside risk and increasing certainty in adjusted funds flow(1) by mitigating the effect of commodity price volatility. Physical forward sales contracts and financial derivatives are used to increase certainty in adjusted funds flow(1), manage the balance sheet, lock in economics on capital programs, and to take advantage of perceived anomalies in commodity markets. Perpetual also utilizes foreign exchange derivatives and physical or financial derivatives related to the differential between natural gas prices at the AECO and NYMEX trading hubs and oil basis differentials between WTI and WCS in order to mitigate the effects of fluctuations in foreign exchange rates and basis differentials on the Corporation's realized revenue. Diversification of markets is a further risk management strategy employed by the Company.

As at March 14, 2022, the Company entered into the following swap commodity contracts:

Commodity	Volumes sold	Term	Reference/ Index	Contract Traded Bought/sold	Market Price *(CAD$/bbl)*
Crude Oil	100 bbls/d	Apr 1 – Jun 30, 2022	WTI (CAD$/bbl)	Swap – sold	$104.50
Crude Oil	100 bbls/d	Jul 1 – Dec 31, 2022	WTI (CAD$/bbl)	Swap – sold	$103.30
Crude Oil	200 bbls/d	Jan 1 – Jun 30, 2022	WCS FP (CAD$/bbl)	Swap – sold	$76.70
Crude Oil	200 bbls/d	Jan 1 – Dec 31, 2022	WCS FP (CAD$/bbl)	Swap – sold	$70.65
Crude Oil	200 bbls/d	Jul 1 – Dec 31, 2022	WCS FP (CAD$/bbl)	Swap – sold	$70.80

As at March 14, 2022, the Company entered into the following swap WTI-WCS basis differential which settle in US$:

Commodity	Volumes sold	Term	Reference/ Index	Market Price *(US$/bbl)*
Crude oil	100 bbls/d	Mar 1 – Dec 31, 2022	WCS Differential	(17.25)
Crude oil	100 bbls/d	Jan 1, 2023 – Dec 31, 2023	WCS Differential	(17.30)

As a March 14, 2022, the Company entered into the following physical fixed price natural gas sales arrangements at AECO:

Commodity	Volumes sold	Term	Reference/ Index	Contract Traded Bought/sold	Average Price *(CAD$/bbl)*
Natural gas	30,000 GJ/d	Mar 2022	AECO	Sold	$4.44
Natural gas	22,500 GJ/d	Mar 2022	AECO	Bought	$4.01
Natural gas	5,000 GJ/d	Apr 2022	AECO	Bought	$4.22

In the third quarter of 2021, the Company eliminated its fixed volume obligations of 25,400 MMBtu/d for the period commencing April 1, 2022 and ending on October 31, 2022 in consideration for the payment of $1.8 million over the term of the associated contract volumes. In the second quarter of 2021, the Company eliminated its 25,400 MMBtu/d market diversification contract obligations for the period commencing November 1, 2021 and ending on March 31, 2022 in consideration for the payment of $1.6 million over the term of the associated contract volumes. In the first quarter of 2021, the Company eliminated its remaining 10,000 MMBtu/d market diversification contract obligations for the period of April 1, 2021 to October 31, 2021, in consideration for the payment of $1.4 million over the term of the associated contract volumes. These modifications have been recognized as realized losses on derivatives in the condensed interim consolidated statements of loss and comprehensive loss.

Conventional natural gas volumes sold pursuant to the Company's market diversification contract are sold at fixed volume obligations and priced at daily index prices at each of the market price points, less transportation costs from AECO to each market price point as detailed below.

Market/Pricing Point	November 1, 2022 to October 31, 2024 Daily sales volume *(MMBtu/d)*
Chicago	–
Malin	15,000
Dawn	15,000
Michcon	–
Emerson	10,000
Total sales volume obligation	**40,000**

Subsequent to December 31, 2021, the company eliminated 10,000 MMBtu/d of fixed volume obligations for the period commencing November 1, 2022 and ending on March 31, 2023 and will receive payment of $1.2 million over the term of the associated contract volumes.

(1) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.

SELECTED ANNUAL INFORMATION

($ thousands, except where noted)	**2021**	2020	2019
Financial			
Oil and natural gas revenue	**60,814**	29,486	74,361
Net income (loss)	**81,121**	(61,597)	(94,015)
Per share – basic and diluted[1]	**1.29 / 1.16**	(1.01)	(1.56)
Cash flow from (used in) operating activities	**12,815**	(9,533)	17,806
Adjusted funds flow[2]	**16,746**	(7,787)	14,534
Per share[1]	**0.27**	(0.13)	0.24
Total assets	**178,851**	140,454	241,148
Total long-term liabilities	**73,393**	68,722	118,061
Revolving bank debt	**2,487**	17,495	47,552
Senior notes, principal amount	**36,582**	33,580	33,580
Term loan, principal amount	**2,671**	46,823	45,000
AIMCO Contingent payments	**1,387**		
TOU share margin demand loan, principal amount	**-**	–	100
TOU share investment	**-**	–	(15,220)
Net working capital deficiency[2]	**16,143**	7,099	7,068
Total net debt[2]	**59,270**	104,997	118,080
Capital expenditures			
Capital expenditures[2]	**19,062**	5,939	12,939
Net proceeds on dispositions, net of cash disposed[1][4]	**49,549**	27,754	–
Common shares (*thousands*)			
End of period[3]	**63,567**	61,305	60,513
Weighted average – basic and diluted	**62,969 / 69,989**	61,013	60,258
Operating			
Daily average production			
Conventional natural gas (*MMcf/d*)	**24.6**	21.5	42.3
Heavy crude oil (*bbl/d*)	**963**	1,082	1,224
NGL (*bbl/d*)	**331**	346	719
Total average production (*boe/d*)	**5,389**	5,012	8,988
Average prices			
Realized natural gas price (*$/Mcf*) [1] [2]	**3.15**	0.85	2.77
Realized oil price (*$/bbl*) [1] [2]	**57.36**	49.37	44.87
NGL price (*$/bbl*) [1] [2]	**63.24**	31.40	41.01
Wells drilled			
Conventional natural gas – gross (net)	**9 (4.5)**	5 (2.5)	– (–)
Heavy crude oil – gross (net)	**5 (4.0)**	4 (4.0)	5 (5.0)
Total – gross (net)	**14 (8.5)**	9 (6.5)	5 (5.0)

(1) Based on weighted average common shares outstanding for the year.
(2) Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this release.
(3) Reduced by shares held in trust (2021 – 532; 2020 – 556; 2019 – 801). See "Note 16 to the Consolidated Financial Statements".
(4) As at December 31, 2021 includes $53.6 million in promissory notes payable to Perpetual which were repaid in cash October 5, 2021, net of cash disposed of 4.1 million.

OFF BALANCE SHEET ARRANGEMENTS

Perpetual has no off balance sheet arrangements.

CHANGES IN ACCOUNTING POLICIES

Government grants

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as an expense reduction in the period in which the costs are incurred. Government grants related to income are recorded as other income in the period in which eligible expenses were incurred or when the services have been performed.

During the year ended December 31, 2021, the Company received government grants through the Canada Emergency Wage Subsidy ("CEWS") and Canada Emergency Rent Subsidy ("CERS") of $0.9 million (2020 – $1.3 million). For the year ended December 31, 2021, the grants were recognized as a reduction to general and administrative and production and operating expenses of $0.8 million and $0.1 million, respectively (2020 – $1.0 million and $0.3 million). For the year ended December 31, 2021, the Company also received government grants through the Alberta Site Rehabilitation program of $0.7 million (2020 - $0.8 million) to fund approved abandonment and remediation projects. These grants were recognized as "Other income" in the consolidated statements of loss and comprehensive loss. Associated expenditures were recorded as a reduction to decommissioning obligations on the consolidated statements of financial position.

RISK FACTORS

The Corporation is exposed to business risks that are inherent in the oil and gas industry, as well as those governed by the individual nature of Perpetual's operations. Risks impacting the business which influence controls and management of the Corporation include, but are not limited to, the following:

- geological and engineering risks;
- the uncertainty of discovering commercial quantities of new reserves;
- commodity prices, interest rate and foreign exchange risks;
- competition; and
- changes to government regulations including shut-in of gas over bitumen assets, royalty regimes and tax legislation.

Perpetual manages these risks by:

- attracting and retaining a team of highly qualified and motivated professionals who have a vested interest in the success of the Corporation;
- prudent operation of oil and natural gas properties;
- employing risk management instruments and policies to manage exposure to volatility of commodity prices, interest rates and foreign exchange rates;
- maintaining a flexible financial position;
- maintaining strict environmental, safety and health practices; and
- active participation with industry organizations to monitor and influence changes in government regulations and policies.

A complete discussion of risk factors is included in the Corporation's 2021 Annual Information Form ("AIF") available on the Corporation's website at www.perpetualenergyinc.com or on SEDAR at www.sedar.com.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

Perpetual's CEO and Chief Financial Officer ("CFO") have designed, or caused to be designed under their supervision, disclosure controls and procedures ("DC&P") and internal controls over financial reporting ("ICOFR") as defined in National Instrument 52-109 Certification of Disclosure in Issuer's Annual and Interim Filings in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with IFRS.

Disclosure controls and procedures

The DC&P have been designed to provide reasonable assurance that material information relating to Perpetual is made known to the CEO and CFO by others, and that information required to be disclosed by Perpetual in its annual filings, interim filing or other reports is filed or submitted by Perpetual under securities legislation.

Perpetual's CEO and CFO have concluded, based on their evaluation at December 31, 2021, the DC&P are designed and operating effectively to provide reasonable assurance that information required to be disclosed by the Corporation in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in the securities legislation and include controls and procedures designed to ensure that information required to be disclosed by the Corporation in its annual filings, interim filings or other reports filed or submitted under securities legislation is accumulated and communicated to the issuer's management, including its certifying officers, as appropriate to allow timely decisions regarding required disclosure.

Management's annual report on internal controls over financial reporting

Management is responsible for establishing and maintaining adequate ICOFR, which is a process designed by, or under the supervision of, the CEO and CFO, and effected by the board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

Under the supervision and with the participation of management, including the CEO and CFO, an evaluation of the effectiveness of the internal controls over financial reporting was conducted as of December 31, 2021 based on criteria described in "Internal Control – Integrated Framework" issued in 2013 by the Committee of Sponsoring Organization of the Treadway Commission. Based on this assessment, management determined that, as of December 31, 2021, the internal controls over financial reporting were designed and operating effectively.

INTERNAL CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

There were no changes in the Corporation's internal control over financial reporting during the period beginning on October 1, 2021 and ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

CEO and CFO certifications

Perpetual's CEO and CFO have filed with the Canadian securities regulators regarding the quality of Perpetual's public disclosures relating to its fiscal 2021 report filed with the Canadian securities regulators.

CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

Certain accounting policies require that management make appropriate decisions with respect to the formulation of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Management reviews its estimates on a regular basis. The emergence of new information and changed circumstances may result in actual results or changes to estimates that differ materially from current estimates.

Perpetual's financial and operational results incorporate certain estimates including:

- estimated commodity sales from production at a specific reporting date for which actual revenues have not yet been received, including associated estimated credit losses;
- estimated royalty obligations, transportation, and operating expenses at a specific reporting date for which costs have been incurred but have not yet been settled;
- estimated capital expenditures on projects that are in progress;
- estimated depletion charges that are based on estimates of reserves that Perpetual expects to recover in the future;
- estimated future recoverable value of PP&E and E&E and any associated impairment charges or reversals;
- estimated fair values of financial instruments that are subject to fluctuation depending upon the underlying forward curves for commodity prices, foreign exchange rates and interest rates, as well as volatility curves, and the risk of non-performance;
- estimated value of ARO that is dependent upon estimates of future costs and timing of expenditures;
- estimated compensation expense under Perpetual's share-based compensation plans including the PSUs awarded under the PSU Plans that are dependent on the final number of PSU awards that eventually vest based on a performance multiplier; and
- estimated fair values of assets acquired and liabilities assumed in a business combination.

A change in a critical accounting estimate can have a significant effect on net loss, including their impact on the depletion rate, provisions, impairments, and income taxes. A change in a critical accounting estimate can have a significant effect on the value of property, plant, and equipment, provisions, derivative financial instruments and accounts payable. A complete discussion of critical accounting estimates is included in the notes to the consolidated financial statements at December 31, 2021.

NON-GAAP MEASURES

Throughout this MD&A and in other materials disclosed by the Company, Perpetual employs certain measures to analyze financial performance, financial position, and cash flow. These non-GAAP measures, non-GAAP ratios and other supplemental financial measures do not have any standardized meaning prescribed under IFRS and therefore may not be comparable to similar measures presented by other entities. The non-GAAP measures, non-GAAP ratios and other supplemental financial measures should not be considered to be more meaningful than GAAP measures which are determined in accordance with IFRS, such as net income (loss), cash flow from operating activities, and cash flow used in investing activities, as indicators of Perpetual's performance.

Adjusted funds flow: Adjusted funds flow is calculated based on cash flows from (used in) operating activities, excluding changes in non-cash working capital and expenditures on decommissioning obligations since Perpetual believes the timing of collection, payment or incurrence of these items is variable. Expenditures on decommissioning obligations may vary from period to period depending on capital programs and the maturity of the Company's operating areas. Expenditures on decommissioning obligations are managed through the capital budgeting process which considers available adjusted funds flow and regulatory requirements. The Company has added back non-cash oil and natural gas revenue in-kind, equal to retained East Edson royalty obligation payments taken in-kind, to present the equivalent amount of cash revenue generated. The Company has also deducted payments of the gas over bitumen royalty financing from adjusted funds flow to present these payments net of gas over bitumen royalty credits received. These payments are indexed to gas over bitumen royalty credits and are recorded as a reduction to the Corporation's gas over bitumen royalty financing obligation in accordance with IFRS. Additionally, the Company has excluded payments of restructuring costs associated with employee downsizing costs, which management considers to not be related to cash flow from (used in) operating activities. Management uses adjusted funds flow and adjusted funds flow per boe as key measures to assess the ability of the Company to generate the funds necessary to finance capital expenditures, expenditures on decommissioning obligations, and meet its financial obligations.

Adjusted funds flow per share is calculated using the weighted average number of shares outstanding used in calculating net income (loss) per share. Adjusted funds flow is not intended to represent net cash flows from (used in) operating activities calculated in accordance with IFRS.

Adjusted funds flow per boe is calculated as adjusted funds flow divided by total production sold in the period.

The following table reconciles net cash flows from (used in) operating activities as reported in the Company's condensed interim consolidated statements of cash flows, to adjusted funds flow:

	Three months ended December 31,		Years ended December 31,	
($ thousands, except per share and per boe amounts)	**2021**	2020	**2021**	2020
Net cash flows from (used in) operating activities	**1,624**	(1,104)	**12,815**	(9,533)
Change in non-cash working capital	**4,197**	1,479	**(3,406)**	(1,015)
Decommissioning obligations settled	**1,382**	95	**1,759**	210
Oil and natural gas revenue in-kind	**1,382**	917	**4,995**	2,319
Payments of gas over bitumen royalty financing	**-**	(197)	**-**	(704)
Payments of restructuring costs	**-**	50	**583**	936
Adjusted funds flow	**8,585**	1,240	**16,746**	(7,787)
Adjusted funds flow per share	**0.13**	0.02	**0.27**	(0.13)
Adjusted funds flow per boe	**14.67**	2.85	**8.51**	(4.25)

Available Liquidity: Available Liquidity is defined as Perpetual's reserve-based first lien credit facility (the "Credit Facility") borrowing limit (the "Borrowing Limit"), less borrowings and letters of credit issued under the Credit Facility. Management uses available liquidity to assess the ability of the Company to finance capital expenditures and expenditures on decommissioning obligations, and to meet its financial obligations.

Cash costs: Cash costs are comprised of royalties, production and operating, transportation, general and administrative, and cash finance expense as detailed below. Cash costs per boe is calculated by dividing cash costs by total production sold in the period. Management believes that cash costs assist management and investors in assessing Perpetual's efficiency and overall cost structure.

	Three months ended December 31,		Years ended December 31,	
($ thousands, except per boe amounts)	**2021**	2020	**2021**	2020
Royalties	**3,786**	1,831	**9,920**	6,571
Production and operating	**2,863**	3,014	**12,859**	11,634
Transportation	**871**	804	**2,993**	3,617
General and administrative	**3,657**	1,994	**10,757**	7,870
Cash finance expense	**1,039**	155	**1,309**	6,587
Cash costs	**12,215**	7,798	**37,839**	36,279
Cash costs per boe	**20.88**	17.92	**19.24**	19.78

Realized revenue: Realized revenue is the sum of realized natural gas revenue, realized oil revenue, and realized NGL revenue which includes realized gains (losses) on financial natural gas, crude oil, NGL, and foreign exchange contracts. Realized revenue is used by management to calculate the Corporation's net realized commodity prices, taking into account the monthly settlements of financial crude oil and natural gas forward sales, collars, basis differentials, and forward foreign exchange sales. These contracts are put in place to protect Perpetual's adjusted funds flow from potential volatility in commodity prices and foreign exchange rates. Any related realized gains or losses are considered part of the Corporation's realized price.

Operating netback: Operating netback is calculated by deducting royalties, production and operating expenses, and transportation costs from realized revenue. Operating netback is also calculated on a per boe basis using total production sold in the period. Perpetual considers operating netback to be an important performance measure to evaluate its operational performance as it demonstrates its profitability relative to current commodity prices. Realized revenue is realized oil revenue which includes realized gains (losses) on financial crude oil and foreign exchange contracts. Realized revenue is used by management to calculate the Company's net realized commodity prices, taking into account the monthly settlements of financial crude oil and natural gas forward sales, collars, basis differentials, and forward foreign exchange sales. These contracts are put in place to protect Perpetual's adjusted funds flow from potential volatility. Refer to reconciliations earlier in the MD&A.

Net Debt and Working Capital: Net debt is calculated by deducting any borrowing under the Credit Facility from working capital. Working capital is calculated by adding cash, accounts receivable and prepaids less accounts payables and accrued liabilities. Perpetual uses net debt as an alternative measure of outstanding debt. Management considers net debt and working capital as important measures in assessing the liquidity of the Company.

Net debt includes the carrying value of net bank debt, other liability, the principal amount of the Term Loan, and the principal amount of senior notes. Net debt, net bank debt, and net debt to adjusted funds flow ratios are used by management to assess the Corporation's overall debt position and borrowing capacity. Net debt to adjusted funds flow ratios are calculated on a trailing twelve-month basis.

The following table reconciles working capital and net debt as reported in the Company's statements of financial position:

	As at December 31, 2021
Cash and cash equivalents	**1,090**
Accounts and accrued receivable	**11,671**
Prepaid expenses and deposits	**910**
Marketable securities	**2,409**
Accounts payable and accrued liabilities	**(32,223)**
Working capital deficiency	**(16,143)**
Bank indebtedness	**(2,487)**
Term loan (principal)	**(2,671)**
AIMCO contingent payments	**(1,387)**
Senior notes (principal)	**(36,582)**
Net debt	**(59,270)**

Realized Revenue and Total Revenue: Realized revenue is calculated as oil revenue less realized gains on derivatives. Total revenue is calculated as realized revenue less unrealized gain on derivates. The Company considers realized revenue and total revenue as important measures in assessing the operating performance of the Company after taking into consideration risk management activities. Refer to reconciliations earlier in the MD&A.

Capital Expenditures: Perpetual uses capital expenditures related to exploration and development to measure its capital investments compared to the Company's annual capital budgeted expenditures. Perpetual's capital budget excludes acquisition and disposition activities as well as the accounting impact of any accrual changes.

The most directly comparable GAAP measure for capital expenditures is cash flow used in investing activities. A summary of the reconciliation of cash flow used in investing activities to capital expenditures, is set forth below:

	Three months ended December 31,		Years ended December 31,	
	2021	2020	**2021**	2020
Net cash flows used in (from) investing activities	**(49,217)**	266	**(43,725)**	(34,925)
Acquisitions	**(700)**	-	**(1,325)**	(222)
Net proceeds on dispositions, net of cash disposed	**53,407**	-	**49,549**	27,754
Proceeds of sale of marketable securities	**-**	-	**-**	14,316
Change in non-cash working capital	**4,068**	200	**14,563**	(984)
Capital expenditures	**7,558**	466	**19,062**	5,939

Enterprise value: Enterprise value is calculated by multiplying the current shares outstanding by the market price at the end of the period and then adjusting it by the net debt. The Company considers enterprise value as an important measure as it normalizes the market value of the Company's shares for its capital structure. Refer to reconciliations earlier in the MD&A.

Non-GAAP Financial Ratios: Perpetual calculates certain non-GAAP measures per boe as the measure divided by weighted average daily production. Management believes that per boe ratios are a key industry performance measure of operational efficiency and one that provides investors with information that is also commonly presented by other crude oil and natural gas producers. Perpetual also calculates certain non-GAAP measures per share as the measure divided by outstanding common shares.

Supplementary financial measures

"Average realized price" is comprised of total commodity sales from production, as determined in accordance with IFRS, divided by the Company's total production.

"Realized NGL price" is comprised of NGL commodity sales from production and include physical forward sales contracts for which delivery was made during the reporting period, along with realized gains and losses on financial derivatives and foreign exchange contracts, as determined in accordance with IFRS, divided by the Company's NGL production.

"Realized oil price" is comprised of oil commodity sales from production and include physical forward sales contracts for which delivery was made during the reporting period, along with realized gains and losses on financial derivatives and foreign exchange contracts, as determined in accordance with IFRS, divided by the Company's oil production.

"Realized natural gas price" is comprised of natural gas commodity sales from production and include physical forward sales contracts for which delivery was made during the reporting period, along with realized gains and losses on financial derivatives and foreign exchange contracts, as determined in accordance with IFRS, divided by the Company's natural gas production.

"Depletion and depreciation expense per boe" is comprised of DD&A expense, as determined in accordance with IFRS, divided by the Company's total production.

"G&A expense per boe" is comprised of G&A expense, as determined in accordance with IFRS, divided by the Company's total production.

"Operating expense per boe" is comprised of operating expense, as determined in accordance with IFRS, divided by the Company's total production.

"Realized gain on derivative per boe" is comprised of realized gain on derivative, as determined in accordance with IFRS, divided by the Company's total production.

"Transportation expense per boe" is comprised of operating expense, as determined in accordance with IFRS, divided by the Company's total production.

"Royalties as a percentage of oil revenue" is comprised of royalties, as determined in accordance with IFRS, divided by oil revenue from production as determined in accordance with IFRS.

"Royalties per boe" is comprised of royalties, as determined in accordance with IFRS, divided by the Company's total production.

"Market value of shares" is comprised of common shares outstanding multiplied by the market price of shares.

VOLUME CONVERSIONS: Barrel of oil equivalent ("boe") may be misleading, particularly if used in isolation. In accordance with National Instrument 51-101, a conversion ratio for conventional natural gas of 6 Mcf:1 bbl has been used, which is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. In addition, utilizing a conversion on a 6 Mcf:1 bbl basis may be misleading as an indicator of value as the value ratio between conventional natural gas and heavy crude oil, based on the current prices of natural gas and crude oil, differ significantly from the energy equivalency of 6 Mcf:1 bbl. A conversion ratio of 1 bbl of heavy crude oil to 1 bbl of NGL has also been used throughout this MD&A. Refer to the "Production" section of this MD&A for details of constituent product components that comprise Perpetual's boe production.

FORWARD-LOOKING INFORMATION AND STATEMENTS: Certain information and statements contained in this MD&A including management's assessment of future plans and operations, and including the information contained under the headings "Future Operations" and "Outlook" may constitute forward-looking information and statements within the meaning of applicable securities laws. This information and these statements relate to future events or to future performance. All statements other than statements of historical fact may be forward-looking information and statements. The use of any of the words "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe", "outlook", "guidance", "objective", "plans", "intends", "targeting", "could", "potential", "strategy" and any similar expressions are intended to identify forward-looking information and statements.

In particular, but without limiting the foregoing, this MD&A contains forward-looking information and statements pertaining to the following: the potential outcome of the Sequoia Litigation, the ability to extend the Credit Facility or to refinance its Term Loan on favorable terms; the quantity and recoverability of Perpetual's reserves; the timing and amount of future production; future prices as well as supply and demand for conventional natural gas, NGL and heavy crude oil; the existence, operations and strategy of the commodity price risk management program; the approximate amount of forward sales and financial contracts to be employed, and the value of financial forward natural gas, oil and other risk management contracts; net income (loss) and adjusted funds flow sensitivities to commodity price, production, foreign exchange and interest rate changes; production and operating, general and administrative ("G&A"), and other expenses; the costs and timing of future abandonment and reclamation, asset retirement and environmental obligations; the use of exploration and development activity, prudent asset management, and acquisitions to sustain, replace or add to reserves and production or expand the Corporation's asset base; the Corporation's acquisition and disposition strategy and the existence of acquisition and disposition opportunities, the criteria to be considered in connection therewith and the benefits to be derived therefrom; Perpetual's ability to benefit from the combination of growth opportunities and the ability to grow through the capital expenditure program; expected compliance with credit facility and Term Loan covenants in 2021 and 2022; expected book value and related tax value of the Corporation's assets and prospect inventory and estimates of net asset value; adjusted funds flow; ability to fund exploration and development; the corporate strategy; expectations regarding Perpetual's access to capital to fund its acquisition, exploration and development activities; the effect of future accounting pronouncements and their impact on the Corporation's financial results; future income tax and its effect on adjusted funds flow; intentions with respect to preservation of tax pools and taxes payable by the Corporation; funding of and anticipated results from capital expenditure programs; renewal of and borrowing costs associated with the credit facility; future debt levels, financial capacity, liquidity and capital resources; future contractual commitments; drilling, completion, facilities, construction and waterflood plans, and the effect thereof; the impact of Canadian federal and provincial governmental regulation on the Corporation relative to other issuers; Crown royalty rates; Perpetual's treatment under governmental regulatory regimes; business strategies and plans of management including future changes in the structure of business operations and debt reduction initiatives; and the reliance on third parties in the industry to develop and expand Perpetual's assets and operations.

Various assumptions were used in drawing the conclusions or making the forecasts and projections in the forward-looking information contained in this MD&A, which assumptions are based on management's analysis of historical trends, experience, current conditions and expected future developments pertaining to Perpetual and the industry in which it operates as well as certain assumptions regarding the matters outlined above. Forward-looking information is based on current expectations, estimates and projections that involve a number of known and unknown risks, including, without limitation, the impact of COVID-19 as further described below, which could cause actual results to vary and in some instances to differ materially from those anticipated by Perpetual and described in the forward-looking information contained in this MD&A. In particular and without limitation of the foregoing, the recent outbreak of COVID-19 has had a negative impact on global financial conditions. Perpetual cannot accurately predict the impact that COVID-19 will have on its ability to execute its business plans in response to government public health efforts to contain COVID-19 and to obtain financing or third parties' ability to meet their contractual obligations with Perpetual including due to uncertainties relating to the ultimate geographic spread of the virus, the severity of the disease, the duration of the outbreak, and the length of travel and quarantine restrictions imposed by governments of affected jurisdictions; and the current and future demand for oil and gas. In the event that the prevalence of COVID-19 continues to increase (or fears in respect of COVID-19 continue to increase), governments may increase regulations and restrictions regarding the flow of labour or products, and travel bans, and Perpetual's operations, service providers and customers, and ability to advance its business plan or carry out its top strategic priorities, could be adversely affected. In particular, should any employees, consultants or other service providers of Perpetual become infected with COVID-19 or similar pathogens, it could have a material negative impact on Perpetual's operations, prospects, business, financial condition and results of operations. Undue reliance should not be placed on forward-looking information, which is not a guarantee of performance and is subject to a number of risks or uncertainties, including without limitation those described herein and under "Risk Factors" in Perpetual's Annual Information Form and MD&A for the year ended December 31, 2021 and in other reports on file with Canadian securities regulatory authorities which may be accessed through the SEDAR website (www.sedar.com) and at Perpetual's website (www.perpetualenergyinc.com).

The forward-looking information and statements contained in this MD&A reflect several material factors, expectations and assumptions of the Corporation including, without limitation, that Perpetual will conduct its operations in a manner consistent with its expectations and, where applicable, consistent with past practice; the general continuance of current or, where applicable, assumed industry conditions; the continuance of existing, and in certain circumstances, the implementation of proposed tax, royalty and regulatory regimes; the ability of Perpetual to obtain equipment, services, and supplies in a timely manner to carry out its activities; the accuracy of the estimates of Perpetual's reserve and resource volumes; the timely receipt of required regulatory approvals; certain commodity price and other cost assumptions; the timing and costs of storage facility and pipeline construction and expansion and the ability to secure adequate product transportation; the continued availability of adequate debt and/or equity financing and adjusted funds flow to fund the Corporation's capital and operating requirements as needed; and the extent of Perpetual's liabilities.

The Corporation believes the material factors, expectations and assumptions reflected in the forward-looking information and statements are reasonable, but no assurance can be given that these factors, expectations and assumptions will prove to be correct. The forward-looking information and statements included in this MD&A are not guarantees of future performance and should not be unduly relied upon. Such information and statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information or statements including, without limitation: volatility in market prices for oil and natural gas products; supply and demand regarding Perpetual's products; risks inherent in Perpetual's operations, such as production declines, unexpected results, geological, technical, or drilling and process problems; unanticipated operating events that can reduce production or cause production to be shut-in or delayed; changes in exploration or development plans by Perpetual or by third party operators of Perpetual's properties; reliance on industry partners; uncertainties or inaccuracies associated with estimating reserves volumes; competition for, among other things; capital, acquisitions of reserves, undeveloped lands, skilled personnel, equipment for drilling, completions, facilities and pipeline construction and maintenance; increased costs; incorrect assessments of the value of acquisitions; increased debt levels or debt service requirements; industry conditions including fluctuations in the price of natural gas and related commodities; royalties payable in respect of Perpetual's production; governmental regulation of the oil and gas industry, including environmental regulation; fluctuation in foreign exchange or interest rates; the need to obtain required approvals from regulatory authorities; changes in laws applicable to the Corporation, royalty rates, or other regulatory matters; general economic conditions in Canada, the United States and globally; stock market volatility and market valuations; limited, unfavorable, or a lack of access to capital markets, and certain other risks detailed from time to time in Perpetual's public disclosure documents. In addition, defence costs of legal claims can be substantial, even with respect to claims that have no merit and due to the inherent uncertainty of the litigation process, the resolution of the legal proceedings to which the Company has become subject could have a material effect on the Company's financial position and results of operations.

Readers are cautioned that the foregoing list of risk factors is not exhaustive. Forward-looking information is based on the estimates and opinions of Perpetual's management at the time the information is released, and Perpetual disclaims any intent or obligation to update publicly any such forward-looking information, whether as a result of new information, future events or otherwise, other than as expressly required by applicable securities law.

OIL AND GAS ADVISORIES

This MD&A contains metrics commonly used in the oil and natural gas industry, such as "finding and development" costs or "F&D" costs. These oil and gas metrics have been prepared by management and do not have standardized meanings or standard methods of calculation and therefore such measures may not be comparable to similar measures used by other companies and should not be used to make comparisons. Such metrics have been included in this MD&A to provide readers with additional measures to evaluate Perpetual's performance, however, such measures are not reliable indicators of Perpetual's future performance and future performance may not compare to Perpetual's performance in previous periods and therefore such metrics should not be unduly relied upon. Management uses these oil and gas metrics for its own performance measurements and to provide shareholders and investors with measures to compare Perpetual's operations over time. Readers are cautioned that the information provided by these metrics, or that can be derived from the metrics presented in this MD&A, should not be relied upon for investment or other purposes.

F&D costs are calculated on a per boe basis by dividing the aggregate of the change in F&D costs from the prior year for the particular reserve category and the costs incurred on exploration and development activities in the year by the change in reserves from the prior year for the reserve category. F&D costs take into account reserve revisions during the year on a per boe basis. The aggregate of the F&D costs incurred in the financial year and changes during that year in estimated F&D costs generally will not reflect total F&D costs related to reserves additions for that year.