

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 three and nine months ended September 30, 2022, 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 unaudited condensed interim consolidated financial statements and accompanying notes for the three and nine months ended September 30, 2022, as well as the audited consolidated financial statements and accompanying notes for the years ended December 31, 2021 and 2020. Disclosure, which is unchanged from the December 31, 2021 MD&A has not been duplicated herein. 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 November 7, 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. Additional information on Perpetual, including the most recently filed Annual Information Form, can be accessed at www.sedar.com or from the Corporation's website at www.perpetualenergyinc.com.

Q3 2022 OPERATIONAL AND FINANCIAL HIGHLIGHTS

- Third quarter average production was 5,882 boe/d, up 21% from the comparative period of 2021 (Q3 2021 – 4,876 boe/d; Q2 2022 – 6,123 boe/d) due to the continued success of core area capital programs. At East Edson, four (2.0 net) wells were drilled and placed on production in the fourth quarter of 2021 and seven (3.5 net) wells were added in the third quarter of 2022. At Mannville, two (2.0 net) horizontal multi-lateral heavy oil wells were drilled and placed on production late in the first quarter of 2022 and three (3.0 net) new horizontal, multi-lateral heavy oil wells were added in the third quarter of 2022. Third quarter production declined 4% from the second quarter of 2022 due to natural declines. Five (2.5 net) of the seven (3.5 net) wells drilled at East Edson commenced production during the fourth quarter and the three (3.0 net) heavy oil wells drilled at Mannville recovered oil-based mud ("OBM") load fluid prior to recording volumes to sales later in the third quarter. Current production is in excess of 7,000 boe/d based on field estimates for October 2022. Third quarter oil and NGL production represented 24% of production.
- Approximately \$22.6 million was invested in exploration and development capital expenditures (see "Non-GAAP and Other Financial Measures"), excluding acquisition or disposition expenditures, during the third quarter of 2022. This was attributable to the East Edson drilling program, where six (3.0 net) wells were drilled and seven (3.5 net) were completed, equipped, tied in and placed on production, and the Mannville drilling program, where three (3.0 net) horizontal, multi-lateral wells were drilled and placed on production, targeting heavy oil in the Sparky formation.
 - At Perpetual's 50% working interest East Edson property, \$14.1 million in capital was spent during the quarter (\$17.7 million year to date) to execute the seven (3.5 net) well drilling program. Six (3.0 net) wells targeting the Wilrich formation are on production and early time data indicates that on average they are expected to perform in accordance with Perpetual's type curve⁽¹⁾, bringing production to a level sufficient to fill the East Edson gas processing infrastructure to maximize natural gas and NGL sales through the upcoming winter.
 - At Mannville, \$8.5 million in capital was spent during the quarter (\$14.1 million year to date). Three multi-lateral wells targeting the Sparky formation were drilled during the third quarter following up encouraging results from the first quarter drilling program aimed at evaluating the applicability of Clearwater-style multi-lateral drilling technology to the Sparky reservoir. The three (3.0 net) wells drilled during the third quarter reached full recovery of their OBM load fluid in mid-July to late August and were turned over to production operations. All three wells have now reached the end of their initial 30-day production periods, recording IP30 rates of 384 bbl/d, 145 bbl/d and 79 bbl/d as compared to the Mannville Sparky type curve⁽¹⁾ IP30 of 50 bbl/d based on year end PUD and PPUD bookings.
- Oil and natural gas revenue for the third quarter of 2022 was \$22.9 million, 57% higher than revenue in the comparative period of 2021 due to significantly higher reference prices for all products and the 21% increase in production. Third quarter revenue declined 31% from the second quarter of 2022, as production decreased 4% and realized prices for all products declined 30%. Realized prices after gains on risk management contracts and sales obligations decreased 2% relative to the second quarter. During the period there were \$2.1 million of realized gains on risk management contracts, which included a \$3.5 million gain on the modification of market diversification contracts and a \$1.4 million realized loss on financial risk management contracts.
- Adjusted funds flow (see "Non-GAAP and Other Financial Measures") in the third quarter of 2022 was \$9.6 million (\$0.15/share), up \$7.4 million (336%) from the prior year period of \$2.2 million (\$0.03/share). Adjusted funds flow on a unit-of-production basis was \$17.82/boe in the third quarter of 2022, an increase from the prior year period of \$4.85/boe, driven by the increase in commodity prices and cost efficiencies related to higher production volumes. Adjusted funds flow recorded for the first nine months of 2022 was \$34.3 million (\$0.52 per share), up 390% from \$7.0 million (\$0.11/share) for the same period in 2021.
- Net cash flows from operating activities in the third quarter of 2022 were \$8.7 million, up \$2.1 million (30%) from the prior year period (Q3 2021 – \$6.7 million). The increase was due to higher realized prices for all products and the 21% increase in production, partially offset by higher cash costs due to higher royalties and cash interest payments. Cash finance expense was 25% higher than the prior year period as the 2025 Senior Note interest was paid in cash in 2022 relative to 2021 when Perpetual elected to pay the interest in-kind and add to the principal amount owing.
- Net income for the third quarter of 2022 was \$8.2 million (Q3 2021 – \$51.1 million). Net income in the third quarter of 2022 was driven by the \$8.6 million unrealized gain on risk management contracts. Net income in the third quarter of 2021 was positively impacted by a gain on disposition of the Clearwater Assets of \$47.9 million.

- Cash costs (see "Non-GAAP and Other Financial Measures") were \$14.8 million or \$27.39/boe in the third quarter of 2022, up 57% (30% on a unit-of-production basis) from the prior year period (Q3 2021 – \$9.4 million or \$21.01/boe). The increase was due to the impact of higher production, increased royalties on higher prices and higher cash interest payments. Efficiencies were realized on a unit-of-production basis as operating costs at East Edson decreased 23% to \$4.41/boe from \$5.73/boe in the comparative period.
- As at September 30, 2022, net debt (see "Capital Management") was \$66.1 million, an increase of 12% from December 31, 2021, as capital expenditures exceeded adjusted funds flow during the first nine months of 2022. As compared to the second quarter of 2022, net debt increased 40%, attributable to the \$22.6 million invested in capital expenditures during the third quarter. The majority of Perpetual's planned 2022 capital spending at East Edson and Mannville was executed during the third quarter, with production additions gradually contributing to sales volumes by late September. By December 31, 2022, forecast free funds flows related to increased sales volumes combined with limited additional capital spending during the fourth quarter is expected to bring net debt down to a similar level as experienced during the first half of 2022.
- Perpetual had available liquidity (see "Capital Management") at September 30, 2022 of \$21.8 million, comprised of the \$30.0 million borrowing limit of Perpetual's first lien credit facility ("Credit Facility Borrowing Limit") Credit Facility Borrowing Limit, less current borrowings and letters of credit of \$7.0 million and \$1.2 million, respectively.

(1) Type curve assumptions are based on the Total Proved plus Probable Undeveloped reserves contained in the McDaniel Reserve Report as disclosed in the Company's Annual Information Form which is available under the Company's profile on SEDAR at www.sedar.com. "McDaniel" means McDaniel & Associates Consultants Ltd. independent qualified reserves evaluators. "McDaniel Reserve Report" means the independent engineering evaluation of the crude oil, natural gas and NGL reserves, prepared by McDaniel with an effective date of December 31 2021 and a preparation date of March 10 2022.

2022 OUTLOOK

Perpetual continues to forecast exploration and development capital expenditures (see "Non-GAAP and Other Financial Measures") of \$31 – \$33 million for full year 2022, relative to previous guidance released on August 3, 2022 of \$29 - \$32 million, to be fully funded from the Company's credit facility and adjusted funds flow (see "Non-GAAP and Other Financial Measures"). With the East Edson and Mannville 2022 drilling programs fully executed, nominal capital spending is forecast for the fourth quarter, excess free funds flow will be directed to debt reduction.

The table below summarizes forecasted exploration and development capital expenditures and drilling activities for Perpetual for the remainder of 2022:

	Q1 - Q3 2022 (\$ millions)	# of wells (gross/net)	Q4 2022 (\$ millions)	# of wells (gross/net)	2022 (\$ millions)	# of wells (gross/net)
West Central	\$17.7	7 / 3.5	\$0.5 - \$1.0	0 / 0.0	\$18	7 / 3.5
Eastern Alberta ⁽¹⁾	\$14.1	5 / 5.0	(\$0.2)	0 / 0.0	\$14	5 / 5.0
Total⁽²⁾	\$31.8	12 / 8.5	\$0.3 - \$0.8	0 / 0.0	\$32	12 / 8.5

(1) Oil-based mud load fluid recovered is credited to capital upon recovery and sales.

(2) Excludes abandonment and reclamation spending and acquisitions or land expenditures, if any.

Total Company average production for the third quarter of 2022 was 5,882 boe/d (24% oil and NGL) and average production volumes are forecast to exceed 7,000 boe/d during the fourth quarter of 2022 as the seven (3.5 net) new wells come on production at East Edson and the three (3.0 net) wells at Mannville contribute to heavy oil production volumes. Full year average production is on track to grow approximately 25% from 2021 levels in accordance with guidance on August 3, 2022, of 6,500 to 6,750 boe/d. Cash costs (see "Non-GAAP and Other Financial Measures") are expected to average between \$20.00 and \$22.00 per boe for the calendar year, unchanged from previous guidance of \$20.00 to \$22.00 per boe.

2022 Guidance assumptions are as follows:

	2022 Guidance
Exploration and development expenditures ⁽¹⁾ (\$ millions)	\$31 - \$33
Cash costs ⁽¹⁾ (\$/boe)	\$20.00 - \$22.00
Average daily production (boe/d)	6,500 - 6,750
Production mix (%)	20% oil and NGL

(1) Non-GAAP measure and ratio. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A for an explanation of composition.

Perpetual continues its Environmental, Social, and Corporate Governance ("ESG") focus, with total abandonment and reclamation expenditures through to the end of the third quarter of \$1.1 million and up to an additional \$0.9 million of spending on Asset Retirement Obligations ("ARO") is planned in the fourth quarter of 2022. Of the total \$2.0 million of spending to manage ARO in 2022, an estimated \$0.4 million is expected to be funded through Alberta's Site Rehabilitation Program ("SRP"). The remaining \$1.6 million will exceed the Company's annual area-based closure spending requirements of \$0.9 million.

Perpetual's Board of Directors approved a capital budget of \$29 - 32 million for 2023, including \$5 to 7 million to be spent in the first quarter for pipeline infrastructure and to drill two (1.0 net) wells at East Edson. The remainder of the 2023 capital program is expected to be spent in the third quarter of 2023 and focus primarily at East Edson to drill to fill the infrastructure capacity and at Mannville to pursue additional multi-lateral drilling opportunities.

THIRD QUARTER FINANCIAL AND OPERATING RESULTS

Cash Flow used in Investing Activities, Capital Expenditures, Acquisitions and Dispositions

Cash flow used in investing activities in the third quarter of 2022 was \$6.8 million (Q3 2021 - \$4.1 million) and \$23.7 million during the first nine months of 2022 (2021 - \$5.5 million). In addition to cash flow used in investing activities, Perpetual uses capital expenditures to measure its capital investments compared to the Company's annual budgeted expenditures. The capital budget excludes acquisition and disposition activities as well as the accounting impact of any accrual changes. "Capital expenditures" is not a standardized measure and, therefore, may not be comparable with the calculation of similar measures by other entities.

For reconciliation of cash flow used in investing activities to capital expenditures, refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A.

The following table summarizes capital spending for both property, plant and equipment assets and exploration and evaluation assets, excluding non-cash items:

(\$ thousands)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Exploration and development	22,583	9,947	31,766	11,502
Corporate assets	13	—	28	2
Capital expenditures	22,596	9,947	31,794	11,504

Exploration and development spending by area

(\$ thousands)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
West Central	14,081	7,609	17,694	8,270
Eastern Alberta	8,502	2,338	14,072	3,232
Total	22,583	9,947	31,766	11,502

Wells drilled by area

(gross/net)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
West Central	6/3.0	3.0/1.5	7/3.5	5/2.5
Eastern Alberta	3/3.0	-/-	5/5.0	-/-
Total	9/6.0	3.0/1.5	12/8.5	5/2.5

Perpetual's exploration and development spending in the third quarter of 2022 was \$22.6 million, of which \$14.1 million was attributable to the East Edson drilling program, which restarted at the end of the second quarter and resulted in six (3.0 net) wells drilled and seven (3.5 net) wells completed, equipped, tied-in and placed on production. In addition, another \$8.5 million was spent to drill three (3.0 net) horizontal, multi-lateral wells at Mannville in Eastern Alberta, targeting heavy oil in the Sparky formation. All three Mannville heavy oil wells were brought on production recovered their OBM load fluid and began contributing to production later in the third quarter.

Perpetual's exploration and development spending in the second quarter of 2022 was \$4.4 million, of which \$2.3 million was attributable to the East Edson drilling program where three (1.5 net) wells were spud in the middle of June following spring break up. The three well pad commenced frac operations in late July. The Company also spent \$1.3 million on Crown land purchases at East Edson with its 50% joint interest partner. The remaining \$0.8 million of capital in the second quarter related to completing drilling operations for the two (2.0 net) horizontal, multi-lateral wells drilled at Mannville that were started in the first quarter of 2022.

Perpetual's exploration and development spending in the first quarter of 2022 was \$4.8 million. The majority of the spending related to the two (2.0 net) well drilling program at Mannville in Eastern Alberta.

Acquisitions and Dispositions

There were no acquisitions or dispositions during the first nine months of 2022.

During the first quarter of 2021, Perpetual participated for its 50% working interest in the acquisition of certain undeveloped lands, wells, pipelines and gross overriding royalties from a third party in the East Edson core area, for net consideration of \$0.6 million. Dispositions during the first quarter of 2021 also included the sale of non-operated equipment for net proceeds to Perpetual of \$0.2 million.

On September 3, 2021, the Company closed the sale of the Clearwater assets in Eastern Alberta (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 (the "Rubellite Transaction"). The promissory notes related to the Rubellite Transaction were repaid on October 5, 2021.

Expenditures on decommissioning obligations

During the third quarter of 2022, Perpetual executed \$0.8 million (Q3 2021 – nominal amount) of abandonment and reclamation projects, of which \$0.2 million (Q3 2021 - \$0.1 million) was funded by Alberta's Site Rehabilitation Program ("SRP"). SRP funding is presented on the

condensed interim consolidated statements of income and comprehensive income as other income. There were no reclamation certificates received from the Alberta Energy Regulator ("AER") during the third quarter of 2022 (Q3 2021 – 2 reclamation certificates). Total abandonment and reclamation expenditures of up to \$2.0 million are forecast in 2022, with up to \$0.4 million anticipated to be funded through the SRP. Abandonment and reclamation spending eventually leads to the cessation of associated property tax and surface lease expenses, reducing future operating costs.

Production

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Production				
Conventional natural gas (Mcf/d) ⁽¹⁾	26,939	21,624	30,363	22,230
Conventional heavy crude oil (bbl/d) ⁽²⁾	1,002	972	821	1,047
NGL (bbl/d) ⁽³⁾	390	300	385	309
Total production (boe/d)	5,882	4,876	6,267	5,061

⁽¹⁾ Conventional natural gas production yielded a heat content of 1.17 GJ/Mcf for the three months ended September 30, 2022 (Q3 2021 – 1.17), resulting in higher realized natural gas prices on a \$/Mcf basis. See "Commodity Prices".

⁽²⁾ Primarily from Eastern Alberta.

⁽³⁾ Primarily from West Central which produces liquids-rich conventional natural gas.

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Production by core area				
West Central	4,449	3,485	5,033	3,614
Eastern Alberta	1,433	1,391	1,234	1,447
Total production (boe/d)	5,882	4,876	6,267	5,061

Third quarter production averaged 5,882 boe/d, up 21% from 4,876 boe/d in the comparative period of 2021. In the third quarter of 2022, the production mix was comprised of 76% conventional natural gas and 24% conventional heavy crude oil and NGL, as compared to 74% of conventional natural gas and 26% conventional heavy crude oil and NGL in the third quarter of 2021. Production levels steadily increased during the third quarter of 2022 as seven (3.5 net) Edson wells and three (3.0 net) Mannville wells were brought on production, partially offset by the disposition of the Clearwater heavy oil assets near the end of the third quarter of 2021 and natural declines.

Third quarter conventional natural gas production averaged 26.9 MMcf/d, an increase of 25% from 21.6 MMcf/d in the comparative period of 2021 with production additions from two (1.0 net) of the new East Edson liquids-rich gas wells beginning to contribute to production midway through the third quarter, partially offset by natural declines and shut-ins proximal to fracing operations. Four (2.0 net) of the additional five (2.5 net) new East Edson wells were completed late in the third quarter and commenced production at the end of September, with the final well expected to come on production during the fourth quarter.

Conventional heavy crude oil production averaged 1,002 bbl/d which was 3% higher than the third quarter of 2021. The increase year-over-year was primarily due to the five (5.0 net) new multi-lateral heavy oil wells drilled at Mannville and brought on production through the second and third quarters of 2022, partially offset by the sale of the Clearwater Assets.

Third quarter NGL production was 390 bbl/d, 30% higher than the comparative period of 2021. The increase in NGL production is closely tied to higher conventional natural gas production at East Edson, where NGL yields were 16.2 bbl per MMcf in the third quarter of 2022 (Q3 2021 – 15.8 bbl per MMcf). Perpetual's average NGL sales composition for the third quarter of 2022 consisted of 59% condensate, slightly higher than the prior year period when condensate represented 57% of total NGL production as additional capital was spent during the third quarter on facility optimization to reduce emissions and increase NGL recoveries.

For the nine months ended September 30, 2022 production increased 24% to 6,267 boe/d compared to 5,061 boe/d in the comparative 2021 period. Production levels steadily increased as new wells were brought on production in both core areas, partially offset by the disposition of the Clearwater Assets in the third quarter of 2021 and natural declines.

Oil and Natural Gas Revenue

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Oil and natural gas revenue				
Natural gas	11,746	6,966	49,235	19,098
Oil	8,045	5,832	22,170	15,309
NGL	3,065	1,805	9,703	4,958
Oil and natural gas revenue	22,856	14,603	81,108	39,365

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Average Benchmark Prices				
NYMEX Daily Index (US\$/MMBtu)	8.18	4.01	6.77	3.18
AECO 5A Daily Index (\$/GJ)	3.94	3.54	5.10	3.11
AECO 5A Daily Index (\$/Mcf) ⁽¹⁾	4.16	3.60	5.38	3.28
West Texas Intermediate ("WTI") (US\$/bbl)	91.56	70.56	98.09	64.83
Exchange rate (US\$/CAD\$)	1.31	1.26	1.28	1.25
West Texas Intermediate ("WTI") (CAD\$/bbl)	119.55	88.91	125.84	81.04
Western Canadian Select ("WCS") (CAD\$/bbl)	93.51	71.81	105.54	65.46
WCS differential to WTI (US\$/bbl)	(19.87)	(13.58)	(15.73)	(12.51)
Perpetual Average Realized Prices⁽²⁾				
Natural gas (\$/Mcf)	4.74	3.50	5.94	3.15
Oil (\$/bbl)	87.24	65.22	98.95	53.56
NGL (\$/bbl)	85.48	65.40	92.37	58.77
Average realized price (\$/boe)	42.24	32.55	47.41	28.49

⁽¹⁾ Converted from \$/GJ using a standard energy conversion rate of 1.06 GJ:1 Mcf.

⁽²⁾ Non-GAAP ratio. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A for an explanation of composition.

Perpetual's oil and natural gas revenue for the three months ended September 30, 2022 of \$22.9 million was a 57% increase from \$14.6 million in the comparative period due to the 21% increase in average production combined with the impact of substantially higher reference prices for all products. Oil and natural gas revenue for the nine months ended September 30, 2022 of \$81.1 million was 106% higher than the comparative period in 2021, due to higher reference prices and the 24% increase in average production.

Natural gas revenue of \$11.7 million in the third quarter of 2022 comprised 51% (Q3 2021 – 48%) of total revenue while natural gas production was 81% (Q3 2021 – 72%) of total production. Natural gas revenue was 69% higher than the comparative period (Q3 2021 – \$7.0 million), reflecting the combined impact of higher AECO Daily Index prices and the 25% increase in conventional natural gas average production volumes driven by successful drilling activity at East Edson. For the nine months ended September 30, 2022, natural gas revenue was 158% higher than the prior year, as a result of the 37% increase in average production and higher reference prices.

Oil revenue of \$8.0 million represented 35% (Q3 2021 – 40%) of total revenue while conventional heavy crude oil production was 13% (Q3 2021 – 21%) of total production. Oil revenue was 38% higher than the third quarter of 2021, as a result of higher benchmark prices and the 3% increase in heavy crude oil production. Compared to the third quarter of 2021, the WCS average price of \$93.51/bbl was 30% higher, which moved with the increase in WTI prices to US\$91.56/bbl (Q3 2021 – US\$70.56/bbl). For the nine months ended September 30, 2022, oil revenue was 45% higher compared to the prior year, as a result of higher reference prices, partially offset by the 22% decline in average production as result of the sale of the Clearwater Assets.

NGL revenue for the third quarter of 2022 of \$3.1 million represented 13% (Q3 2021 – 12%) of total revenue while NGL production was 7% (Q3 2021 – 6%) of total production. NGL revenue increased 70% higher than the comparative period, reflecting a 30% increase in NGL production and an increase in all NGL component prices compared to the prior year period, in step with the rise in WTI oil prices. For the nine months ended September 30, 2022, NGL revenue doubled compared to the prior year, as a result of the 25% increase in average production and higher reference prices.

Risk Management Contracts

The Company uses both financial derivatives, physical delivery contracts and market diversification strategies to manage commodity price risk. Derivative contracts are put in place to manage fluctuations in commodity prices, protecting Perpetual's cash flows from potential volatility. The Company's market diversification strategies balance pricing exposure over multiple markets and are put in place to mitigate market and delivery point risks and dislocations. As a result, Perpetual's realized prices deviate from the index prices. The Company uses "average realized prices after risk management contracts" which is not a standardized measure, and therefore may not be comparable with the calculation of similar measures by other entities. The measure is used by management to calculate the Company's net realized commodity prices, taking into account the monthly settlements of physical and financial crude oil and natural gas forward sales, collars, basis differentials, forward foreign exchange sales and modifications to market diversification contracts.

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Unrealized gain (loss) on financial foreign exchange contracts	(188)	—	(188)	—
Unrealized gain (loss) on physical natural gas contracts	—	944	(147)	2,482
Unrealized gain (loss) on financial natural gas contracts	5,392	—	894	—
Unrealized gain (loss) on physical oil contracts	—	(88)	—	(26)
Unrealized gain (loss) on financial oil contracts	3,393	(25)	961	(24)
Unrealized change in fair value of derivatives	8,597	831	1,520	2,432
Realized gain (loss) on financial natural gas contracts	(542)	—	(6,351)	—
Realized gain (loss) on market diversification contracts	3,492	(1,808)	5,486	(4,749)
Realized gain (loss) on financial oil contracts	(890)	—	(3,904)	—
Realized gain (loss) on financial derivatives	2,060	(1,808)	(4,769)	(4,749)
Change in fair value of derivatives	10,657	(977)	(3,249)	(2,317)

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Realized loss on risk management contracts				
Realized loss on financial natural gas contracts (\$/Mcf)	1.19	(0.91)	(0.10)	(0.78)
Realized loss on financial oil contracts (\$/bbl)	(9.64)	—	(17.42)	—
Realized loss on risk management contracts (\$/boe)	3.81	(4.03)	(2.79)	(3.44)
Average Realized Prices after risk management contracts ⁽¹⁾				
Natural gas (\$/Mcf)	5.93	2.59	5.84	2.37
Oil (\$/bbl)	77.60	65.22	81.53	53.56
NGL (\$/bbl)	85.48	65.40	92.37	58.77
Average realized price (\$/boe)	46.05	32.55	44.62	28.49

⁽¹⁾ Non-GAAP ratio. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A for an explanation of composition.

Realized gains on risk management contracts totaled \$2.1 million for the third quarter of 2022, compared to losses of \$1.8 million for the comparative period of 2021. Realized losses on risk management contracts totaled \$4.8 million for the first nine months of 2022 (2021 - \$4.7 million realized loss). Included were realized gains of \$3.5 million and \$5.5 million for the three and nine months ended September 30, 2022 (Q3 2021 – realized losses of \$1.8 million and \$4.7 million, respectively) from the modification of the Company's market diversification contract in consideration for payments that are collected over those future contract period.

Unrealized gains on risk management contracts were \$8.6 million in the third quarter of 2022 (Q3 2021 – unrealized gains of \$0.8 million) and unrealized gains were \$1.5 million for the nine months ended September 30, 2022 (2021 – unrealized gains of \$2.4 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 Company's calculation of cash flow from 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 Company's assessment of commodity price risk, committed capital spending and other factors.

Royalties

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Crown royalties				
Natural gas	1,454	(599)	3,878	(334)
Oil	905	178	1,908	521
NGL	656	240	1,248	656
Total Crown royalties	3,015	(181)	7,034	843
Freehold and overriding royalties				
Natural gas	1,467	1,120	5,245	3,096
Oil	1,124	352	2,388	1,228
NGL	(32)	329	847	967
Total freehold and overriding royalties	2,559	1,801	8,480	5,291
Total royalties	5,574	1,620	15,514	6,134
\$/boe	10.30	3.61	9.07	4.44

Royalties as a percentage of oil and natural gas revenue⁽¹⁾

Crown	13.2	(1.2)	8.7	2.1
Freehold and overriding	11.2	12.3	10.5	13.4
Total (% of oil and natural gas revenue)	24.4	11.1	19.1	15.6
Natural gas royalties (% of natural gas revenue)	24.9	7.5	18.5	14.5
Oil royalties (% of oil revenue)	25.2	9.1	19.4	11.4
NGL royalties (% of NGL revenue)	20.4	31.5	21.6	32.7

⁽¹⁾ Non-GAAP ratio. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A for an explanation of composition.

Total royalties for the third quarter of 2022 were \$5.6 million, 244% higher than the comparative period. On a unit-of-production basis, royalties were up 2.9 times to \$10.30/boe (Q3 2021 – \$3.61/boe). During the third quarter of 2022, royalties were significantly higher as a result of increased production and higher reference prices. The combined average royalty rate on oil increased from 2021 as royalty rates escalate with price under the Crown royalty regime in Alberta. Freehold and overriding royalties increased to \$2.6 million from \$1.8 million the third quarter of 2021, due to the impact of higher AECO Daily Index and NGL prices. For the nine months ended September 30, 2022, royalties were \$15.5 million (2021 – \$6.1 million), 104% higher than the prior year period. The impact of the second quarter \$1.2 million one-time GCA adjustment on royalties for the nine month period ended September 30, 2022 was \$0.70/boe. Royalties increased for the nine month period relative to 2021, as the Alberta Gas Reference price and AECO Daily index prices, which are used to calculate Crown royalties and certain overriding royalties respectively, increased significantly during 2022 along with oil and NGL prices.

As part of the sale of 50% of the East Edson property on April 1, 2020, 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. As of November 1, 2021, the royalty obligation is settled through payment in cash.

Production and operating expenses

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Production and operating expenses	4,433	3,159	12,279	9,997
\$/boe	8.19	7.04	7.18	7.24

Total production and operating expenses increased 16% on a unit-of-production basis to \$8.19/boe for the third quarter of 2022, compared to \$7.04/boe for the comparable period of 2021. The increase was related to higher overall contract services and well servicing costs at Mannville related to the start-up operations of new wells during the third quarter of 2022. Also contributing to higher costs in the third quarter of 2022 was higher purchased energy costs at the non-operated Edson gas processing facility. Operating costs at East Edson were \$4.41/boe during the period as compared to \$5.73/boe for the comparable 2021 period, reflecting cost efficiencies realized with the 39% increase in production.

For the nine months ended September 30, 2022, production and operating expenses decreased 1% on a unit-of-production basis to \$7.18/boe, compared to \$7.24/boe for the comparable period of 2021. The decrease was due to increased conventional natural gas and NGL production at East Edson which has a high percentage of fixed operating costs and lower operating costs than the Company's conventional heavy crude oil production. The decrease was also related to lower conventional heavy oil production during the nine month period as a result of the sale of the Clearwater Assets and natural declines, offset by conventional heavy oil production additions driven by the Mannville drilling program. These factors combined to increase the percentage of lower cost East Edson production in the production mix.

On an absolute dollar basis, production and operating costs increased on higher production volumes.

Transportation costs

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Transportation costs	1,025	678	2,649	2,122
\$/boe	1.89	1.51	1.55	1.54

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. Transportation costs in the third quarter of 2022 were \$1.0 million, a 51% increase from the comparative period of 2021 as a result of higher average production volumes. On a unit-of-production basis, transportation costs increased by 25% to \$1.89/boe in the third quarter of 2022 (Q3 2021 – \$1.51/boe) due to increases in oil trucking costs primarily as a result of higher fuel costs and surcharges, partially offset by increased natural gas production which benefited from lower transportation costs on optimization activities.

For the nine months ended September 30, 2022, transportation costs were \$2.6 million, an increase of 25% over the prior year period on higher average production volumes. On a unit-of-production basis, transportation costs increased by 1% to \$1.55/boe (2021 – \$1.54/boe) due to increased natural gas production and transportation optimization activities.

Operating netbacks

"Operating netback" is a non-GAAP measure determined by deducting royalties, production and operating expenses, and transportation costs from oil and natural gas 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 commodity prices. Operating netback is not a standardized measure and, therefore, may not be comparable with the calculation of similar measures by other entities.

The following table highlights Perpetual's operating netbacks for the three and nine months ended September 30, 2022 and 2021:

(\$/boe) (\$ thousands)	Three months ended September 30,		Nine months ended September 30,					
	2022	2021	2022	2021				
Production (boe/d)	5,882	4,876	6,267	5,061				
Oil and natural gas revenue	42.24	22,856	32.55	14,603	47.41	81,108	28.49	39,365
Royalties	(10.30)	(5,574)	(3.61)	(1,620)	(9.07)	(15,514)	(4.44)	(6,134)
Production and operating expenses	(8.19)	(4,433)	(7.04)	(3,159)	(7.18)	(12,279)	(7.24)	(9,997)
Transportation costs	(1.89)	(1,025)	(1.51)	(678)	(1.55)	(2,649)	(1.54)	(2,122)
Operating netback ⁽¹⁾	21.86	11,824	20.39	9,146	29.61	50,666	15.27	21,112
Realized gain (loss) on risk management contracts	3.81	2,060	(4.03)	(1,808)	(2.79)	(4,769)	(3.44)	(4,749)
Total operating netback, including risk management contracts	25.67	13,884	16.36	7,338	26.82	45,897	11.83	16,363

⁽¹⁾ Non-GAAP measure. Refer to the section entitled "Non-GAAP and Other Financial Measures" for an explanation of composition.

For the third quarter of 2022, Perpetual's operating netback, including risk management contracts, was \$13.9 million (\$25.67/boe), up significantly from \$7.3 million (\$16.36/boe) in the comparative period of 2021. The increase was due to higher oil and natural gas revenue

driven by increased pricing for all commodities being applied to higher average production volumes and a realized hedging gain. The increase in 2022 was partially offset by higher royalties and higher costs in all areas.

For the nine months ended September 30, 2022 the operating netback, including risk management contracts, was \$45.9 million (\$26.82/boe) a significant increase from \$16.4 million (\$11.83/boe) in the comparative year. The increase was due to higher oil and natural gas revenue, partially offset by higher royalties driven by the one-time GCA adjustment, and a realized hedging loss.

General and administrative ("G&A") expenses

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
G&A expense before overhead recoveries	3,597	3,223	10,146	7,504
MSA recoveries ⁽¹⁾	(576)	—	(1,298)	
Overhead recoveries	(372)	(172)	(1,792)	(404)
Total G&A expense	2,649	3,051	7,056	7,100
\$/boe	4.90	6.80	4.12	5.14

⁽¹⁾ Concurrent with the sale of the Clearwater Assets to Rubellite on September 3, 2021, Perpetual entered into a Management and Operating Services Agreement (the "MSA") with Rubellite whereby Perpetual receives payment for certain technical and administrative services provided to Rubellite on a cost recovery basis.

During the third quarter of 2022, G&A expenses of \$2.6 million decreased 13% over the comparative period. For the nine months ended September 30, 2022, G&A expenses were \$7.1 million, consistent with the prior year period. Before recoveries, the increase in G&A was related to higher employee salaries and benefits, which had been reduced in the prior year in response to the collapse in commodity prices and were gradually re-instated over the second half of 2021. Overhead recoveries were higher due to increased capital spending and higher absolute production and operating costs.

For the three and nine months ended September 30, 2022, the costs billed under the MSA to Rubellite were \$0.6 million and \$1.3 million, respectively. Third quarter MSA recoveries increased from \$0.4 million in the second quarter of 2022 as a result of Rubellite's higher capital activity and increased production.

During 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 \$0.1 million during the third quarter of 2021 and \$0.7 million during the first nine months of 2021. There were no payments received in 2022.

Share-based payments

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Share-based payments (non-cash)	1,985	199	5,444	451
Share-based payments (cash)	376	375	1,126	1,125
Total share-based payments	2,361	574	6,570	1,576

Share-based payments expense for the three and nine month periods of 2022 was \$2.4 million and \$6.6 million, an increase from \$0.6 million and \$1.6 million relative to the comparative periods of 2021. During the third quarter of 2022, 1.3 million deferred options, 0.6 million deferred shares, 1.1 million share options, and 1.4 million restricted rights were granted to Officers, Directors, and employees of the Company.

Depletion and depreciation

(\$ thousands, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Depletion and depreciation	4,546	3,559	12,329	9,838
\$/boe	8.40	7.93	7.21	7.12

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 September 30, 2022, depletion was calculated on a \$179.1 million depletable balance and \$74.7 million in future development costs (2021 – \$141.5 million depletable balance and \$76.4 million in future development costs). The depletable base excluded an estimated \$3.8 million (2021 – \$3.4 million) of salvage value.

Depletion and depreciation expense for the third quarter of 2022 was \$4.5 million or \$8.40/boe (Q3 2021 – \$3.7 million or \$8.15/boe). Depletion and depreciation expense for the nine months ended September 30, 2022 was \$12.3 million or \$7.21/boe (2021 – \$9.8 million or \$7.12/boe). The increases reflect higher average production volumes compared to the comparative periods. On a unit-of-production basis, depletion and depreciation expense increased by 3% compared to the third quarter of 2021 and increased by 1% compared to the first nine months of 2021 due to an increase in the depletion rate driven by higher production relative to reserve additions. Depletion and depreciation expense will fluctuate from one period to the next depending on the amount of capital spent, the amount of reserves added and volumes produced.

Impairment

There were no indicators of impairment or reversal for the Company's CGUs as of September 30, 2022 and therefore an impairment test was not performed.

During the first quarter of 2022, the Company determined that indicators of impairment reversal existed and that the estimated recoverable amounts of the Eastern Alberta CGU exceeded the carrying amounts of \$44.8 million. Accordingly, a non-cash impairment reversal of \$7.4 million was included in net income. All previous impairment charges that were eligible for reversal have now all been reversed as at March 31, 2022 for property, plant and equipment.

During the fourth quarter of 2021, the Company determined that indicators 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.

E&E assets are tested for impairment both at the time of any triggering facts and circumstances as well as upon their eventual reclassification to oil and gas properties in PP&E.

At September 30, 2022, the Company conducted an assessment of indicators of impairment and impairment reversal for the Company's E&E assets. The Company transferred undeveloped land to PP&E at a value of \$0.2 million, which was equal to the book value in E&E. As a result of the transfer, an impairment test was required on transfer to PP&E. There were no impairments recorded to E&E as at September 30, 2022.

Finance expense

(\$ thousands)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Cash finance expense				
Interest on revolving bank debt	260	275	697	803
Interest on term loan	54	—	161	—
Interest on 2025 Senior Notes ⁽¹⁾	801	608	2,405	608
Interest on 2022 Senior Notes ⁽²⁾	—	—	—	(1,253)
Interest on lease liabilities	28	33	90	112
Total cash finance expense	1,143	916	3,353	270
Non-cash finance expense				
Interest paid in-kind on term loan	—	847	—	2,743
Interest paid in-kind on 2025 Senior Notes ⁽²⁾	—	178	—	3,002
Gain on senior note maturity extension	—	—	—	(1,591)
Gain on senior note extinguishment ⁽³⁾	(101)	—	(101)	—
Gain on Term Loan substantive modification	—	(6,820)	—	(6,820)
Amortization of debt issue costs	462	169	1,428	727
Accretion on decommissioning obligations	213	140	525	385
Change in fair value of other liability	59	1,028	1,618	1,028
Change in fair value of royalty obligations	439	1,742	2,619	4,764
Total non-cash finance expense	1,072	(2,716)	6,089	4,238
Finance expense recognized in net income (loss)	2,215	(1,800)	9,442	4,508

⁽¹⁾ During 2022, the Company settled semi-annual interest payments in cash, rather than payment-in-kind which was the method used in 2021.

⁽²⁾ On January 22, 2021, Perpetual's 2022 Senior Notes were exchanged for 2025 Senior Notes, providing Perpetual the option to pay interest in-kind ("PIK"). 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 Notes cash interest of \$1.3 million was reversed and replaced by \$1.3 million of 2025 Senior Note non-cash interest expense. The Company satisfied the semi-annual interest payment due July 23, 2021 by a PIK Interest Payment and accrued \$0.8 million of non-cash interest expense for the three months ended March 31, 2021.

⁽³⁾ During the three and nine month period ended September 30, 2022 the Company purchased and cancelled \$0.9 million of Senior Notes outstanding for gross proceeds of \$0.8 million, resulting in a gain on extinguishment of \$0.1 million.

Total cash finance expense was \$1.1 million in the third quarter of 2022, 25% higher than the comparative period as a result of payment of interest on the 2025 Senior Notes in 2022 rather than in-kind (Q3 2021 – \$0.9 million). For the nine months ended September 30, 2022, cash finance expense was \$3.4 million (2021 – \$0.3 million) which reflected the payment of interest in cash in 2022 rather than in-kind.

Total non-cash finance expense for the second quarter of 2022 was \$1.1 million, lower than the prior year period (Q3 2021 – \$2.7 million income). For the nine months ended September 30, 2022, non-cash finance expense was \$6.1 million (2021 – \$4.2 million). The decrease was attributable to the payment of interest on the Senior Notes and Term Loan in cash rather than in-kind. Non-cash finance expense is also driven by the change in the fair value of the royalty obligations which is sensitive to changing AECO natural gas and NGL prices and the recognition of future contingent payments related to the Second Lien Loan Settlement which are recorded as other liability with the change being recognized through finance expense.

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 paid the 2022 semi-annual interest payments in cash.

During the first quarter of 2021, 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. The gain has been recorded as a reduction of non-cash finance expense.

On September 3, 2021, upon completion of the plan of arrangement related to the Rubellite Transaction, 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, 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 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" – See "Term Loan").

LIQUIDITY AND CAPITAL 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 adjusted 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.

Perpetual uses net debt, adjusted working capital, enterprise value and trailing twelve-months adjusted funds flow as important indicators of capital resources, management and liquidity. Net debt includes the carrying value of net bank debt, the undiscounted portion of the other liability, the principal amount of the Term Loan, and the principal amount of senior notes. Net debt is calculated by deducting any borrowing from adjusted working capital. Adjusted working capital is current assets, adjusted for the removal of the current portion of risk management contracts, less accounts payable and accrued liabilities. Perpetual uses net debt as an alternative measure of outstanding debt. Management considers net debt and adjusted working capital as important measures in assessing the liquidity of the Company. 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. For calculation of adjusted working capital and adjusted funds flow, refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A.

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.

Capital management

<i>(\$ thousands, except as noted)</i>	September 30, 2022	December 31, 2021
Revolving bank debt	6,974	2,487
Term loan, principal amount	2,671	2,671
Senior notes, principal amount	35,647	36,583
Other liability, undiscounted amount	3,342	1,387
Adjusted working capital deficiency (surplus) ⁽¹⁾	17,509	16,143
Net debt ⁽¹⁾	66,143	59,271
Shares outstanding at end of period (thousands) ⁽³⁾	65,923	63,567
Market price at end of period (\$/share)	0.99	0.70
Market value of shares ⁽¹⁾	65,264	44,497
Enterprise value ⁽¹⁾	131,407	103,768
Net debt as a percentage of enterprise value ⁽²⁾	50%	57%
Trailing twelve-months adjusted funds flow ⁽¹⁾	42,880	16,746

⁽¹⁾ Non-GAAP measure. Refer to the section entitled "Non-GAAP and Other Financial Measures" for an explanation of composition.

⁽²⁾ Non-GAAP ratio. Refer to the section entitled "Non-GAAP and Other Financial Measures" for an explanation of composition.

⁽³⁾ Shares outstanding are presented net of shares held in trust.

At September 30, 2022, Perpetual had total net debt of \$66.1 million, up \$6.9 million (12%) from December 31, 2021 as capital expenditures exceeded adjusted funds flow as drilling in East Edson and Mannville resumed in the second quarter of 2022 following spring break-up.

Perpetual had available liquidity at September 30, 2022 of \$21.8 million, comprised of the \$30.0 million Credit Facility Borrowing Limit, less current borrowings and letters of credit of \$7.0 million and \$1.2 million, respectively.

Revolving bank debt

During the period ended September 30, 2022, the Company's first lien credit facility was increased to \$30 million (December 31, 2021 - \$17 million) with an initial term to May 31, 2023. The initial term may be extended to May 31, 2024 subject to approval by the syndicate. If the facility is not extended all outstanding balances would be repayable on May 31, 2024. The next semi-annual borrowing base redetermination is scheduled to be completed on or before November 30, 2022.

As at September 30, 2022, \$7.0 million was drawn (December 31, 2021 - \$2.5 million) and \$1.2 million of letters of credit had been issued (December 31, 2021 - \$1.0 million) under the Company's credit facility. 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 September 30, 2022 was 5.9%. For the period ended September 30, 2022

if interest rates changed by 1% with all other variables held constant, the impact on annual cash finance expense and net income would be \$0.1 million.

The Credit Facility is secured by general first lien security agreements covering all present and future property of the Company and its subsidiaries.

At September 30, 2022, the Credit Facility was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

Term loan

(\$ thousands, except as noted)	Maturity date	Interest rate	September 30, 2022		December 31, 2021	
			Principal	Carrying Amount	Principal	Carrying amount
Term loan	December 31, 2024	8.1%	2,671	2,508	2,671	2,469

During the third quarter of 2021, Perpetual executed an agreement with its Term Loan lender for the settlement of principal and all interest owing on the Term Loan. Perpetual substantively modified the previous Term Loan with Alberta Investment Management Corporation ("AIMCo") in exchange for the payment of approximately \$38.5 million in cash, 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 (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"). All amounts related to the Second Lien Loan Settlement were paid on October 5, 2021. The New Term Loan bears interest at 8.1% annually, which Perpetual may elect to pay-in-kind and will mature on December 31, 2024. Perpetual has the ability to repay the Term Loan at any time without any repayment penalty.

The New Term Loan has a cross-default provision with the Credit Facility and contains substantially similar provisions and covenants as the Credit Facility. 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 September 30, 2022, the Term Loan was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

Senior notes

(\$ thousands, except as noted)	Maturity date	Interest rate	September 30, 2022		December 31, 2021	
			Principal	Carrying Amount	Principal	Carrying amount
Senior notes	January 23, 2025	8.75%	35,647	34,192	36,583	34,189

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"). In 2021, the Company elected to pay the semi-annual interest payments by making PIK Interest Payments, increasing the principal amount to \$36.6 million.

The Company satisfied the January 23, 2022 and the July 23, 2022 semi-annual interest payment of \$1.6 million by making cash payments.

At September 30, 2022, the senior notes are recorded at the present value of future cash flows, net of \$1.5 million in issue and principal discount costs which are amortized over the remaining term using a weighted average effective interest rate of 13.9%.

During the third quarter of 2022 the Company purchased and cancelled a portion of the 2025 Senior Notes balance with a carrying value of \$0.9 million (2021 - nil) for gross proceeds of \$0.8 million. A gain on extinguishment of \$0.1 million (2021 - nil) is included in non-cash finance expense.

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 September 30, 2022, 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 holds an additional \$10.3 million of the 2025 Senior Notes outstanding.

Equity

At September 30, 2022, there were 65.9 million common shares outstanding, net of 1.1 million shares held in trust to resource employee compensation programs. 0.1 million shares were purchased by the independent trustee to be held in trust during the second quarter of 2022 (Q2 2021 - nil). Basic and diluted weighted average shares outstanding for the three and nine months ended September 30, 2022 were 65.0 million and 74.6 million and 64.0 million and 74.7 million, respectively (Q3 2021 - 63.8 million basic and 71.2 million diluted; 2021 - 62.7 million basic and 70.0 million diluted).

At November 7, 2022, there were 65.9 million common shares outstanding which is net of 1.1 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:

<i>(millions)</i>	November 7, 2022
Share options	3.6
Performance share rights	2.6
Compensation awards	8.9
Total ⁽¹⁾	15.1

⁽¹⁾ 7.6 million compensation awards, 2.3 million share options, and 2.5 million performance share rights have an exercise price below the September 30, 2022 closing price of the Company's common shares of \$0.99 per share.

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 by mitigating the effect of commodity price volatility. Physical forward sales contracts and financial derivatives are used to increase certainty in adjusted funds flow (see "Non-GAAP and Other Financial Measures"), 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 revenue. Diversification of markets is a further risk management strategy employed by the Company.

As at November 7, 2022, the Company had entered into the following swap commodity contracts:

Commodity	Volumes sold	Term	Reference/ Index	Contract Traded Bought/sold	Market Price
Natural gas	10,000 GJ/d	Oct 1 – Dec 31, 2022	AECO 5A (CAD\$/GJ)	Swap - sold	\$4.81
Natural gas	5,000 GJ/d	Jan 1 - Mar 31, 2023	AECO 5A (CAD\$/GJ)	Swap - sold	\$4.62
Natural gas	5,000 GJ/d	Nov 1, 2022 - Mar 31, 2023	AECO 7A (CAD\$/GJ)	Collar	\$7.00-8.00
Natural gas	10,000 GJ/d	Jan 1 - Mar 31, 2023	AECO 7A (CAD\$/GJ)	Collar	\$7.00-8.10
Crude Oil	400 bbl/d	Oct 1 – Dec 31, 2022	WCS FP (CAD\$/bbl)	Swap – sold	\$70.73
Crude Oil	100 bbl/d	Oct 1 – Dec 31, 2022	WTI (CAD\$/bbl)	Swap – sold	\$103.30
Crude Oil	100 bbl/d	Jan 1 – Dec 31, 2023	WTI (USD\$/bbl)	Swap – sold	\$89.15

As at November 7, 2022, the Company had entered into the following swap WTI-WCS basis differential which settle in CAD\$:

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

As at November 7, 2022, the Company had entered the following CAD/USD foreign exchange swaps which settle in CAD\$:

Contract	Notional amount	Term	Price (US\$/CAD\$)
Average rate forward (US\$/CAD\$)	\$316,444 US\$/month	Nov 1, 2022 – Mar 31, 2023	1.3740
Average rate forward (US\$/CAD\$)	\$500,000 US\$/month	Jan 1 – Dec 31, 2023	1.3710
Average rate forward (US\$/CAD\$)	\$200,000 US\$/month	Jan 1 – Dec 31, 2023	1.3029

During the nine month period ended September 30, 2022, the Company eliminated fixed volume sales obligations related to market diversification contracts of 15,000 MMBtu/d for the period commencing November 1, 2022 and ending on October 31, 2023 to align with forecast sales volumes and will receive payment of \$5.5 million over the term of the associated contract volumes. The amount was recognized as a realized gain on risk management contracts (note 19).

During the nine month period ended September 30, 2021, the Company eliminated sales obligations related to market diversification contracts of between 10,000 MMBtu/d and 25,400 MMBtu/d for the period commencing April 1, 2021 and ending on October 31, 2022 in consideration for the payment of \$3.2 million over the term of the associated contract volumes (note 19).

These modifications have been recognized as realized gains or losses on risk management contracts in the condensed interim consolidated statement of income (loss) and comprehensive income (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, 2023 Daily sales volume (MMBtu/d)	November 1, 2023 to October 31, 2024 Daily sales volume (MMBtu/d)
Malin	—	15,000
Dawn	15,000	15,000
Emerson	10,000	10,000
Total sales volume obligation	25,000	40,000

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 close to 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 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, a written decision related to the Application for Dismissal, 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"). 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.

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 (the "Second Summary Dismissal Application"). In July 2020, the Orphan Well Association ("OWA"), certain oil and gas companies, and six municipalities applied to intervene in the Second Summary 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. On March 25, 2022, the Court of Appeal issued their judgement with respect to this matter and allowed PwC's appeal on the basis that the Court of Queen's Bench erred in law in its handling of the end-of-life obligations and that based on the record, it could not be concluded the error was without consequence, and that the Court of Queen's Bench also erred in agreeing to hear the Second Summary Dismissal Application. On this basis, the BIA Claim has been directed to trial.

Subsequent to September 30, 2022 the Trustee filed its Amended Statement of Claim with the Court on October 14, 2022. Perpetual may file a statement of defense in response to the Amended Statement of Claim within 60 days of the filing and service of the Amended Statement of Claim.

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.

OFF BALANCE SHEET ARRANGEMENTS

Perpetual has no off balance sheet arrangements.

NON-GAAP AND OTHER FINANCIAL 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 and other 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 and other 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 from investing activities, as indicators of Perpetual's performance.

Non-GAAP Financial Measures

Capital Expenditures or Capital Spending: Perpetual uses capital expenditures or capital spending 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 or capital spending is cash flow used in investing activities. A summary of the reconciliation of cash flow used in investing activities to capital expenditures or capital spending, is set forth below:

(\$ thousands)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Net cash flows used in investing activities	(6,817)	(4,060)	(23,702)	(5,492)
Acquisitions	—	—	—	625
Net proceeds on dispositions, net of cash disposed	—	4,060	—	3,858
Purchase of marketable securities	8	—	37	—
Change in non-cash working capital	(15,787)	(9,947)	(8,129)	(10,495)
Capital expenditures	(22,596)	(9,947)	(31,794)	(11,504)

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.

(\$ thousands, except per boe amounts)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Royalties	5,574	1,620	15,514	6,134
Production and operating	4,433	3,159	12,279	9,997
Transportation	1,025	678	2,649	2,122
General and administrative	2,649	3,051	7,056	7,100
Cash finance expense	1,143	916	3,353	270
Cash costs	14,824	9,424	40,851	25,623
Cash costs per boe	27.39	21.01	23.88	18.55

Operating netback: Operating netback is calculated by deducting royalties, production and operating expenses, and transportation costs from oil and natural gas revenue. Operating netback is also calculated on a per boe basis using total production sold in the period and presented before and realized gains or losses from risk management contracts. Perpetual considers that netback is a key industry performance indicator and one that provides investors with information that is also commonly presented by other crude oil and natural gas producers. 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. Refer to reconciliations earlier in the MD&A under the "Operating Netbacks" section.

Net Debt: Net debt is calculated by deducting any borrowing under Perpetual's reserve-based credit facility (the "Credit Facility") from adjusted working capital. Adjusted working capital is current assets less accounts payable and accrued liabilities excluding short-term derivative assets and liabilities related to the Company's risk management activities, current portion of other liability, current portion of royalty obligations, current portion of lease liabilities, and current portion of decommissioning obligations. Perpetual uses net debt as an alternative measure of outstanding debt. Management considers net debt and adjusted working capital as important measures in assessing the liquidity of the Company. Net debt and net debt to adjusted funds flow ratios are used by management to assess the Company's overall debt position and borrowing capacity.

Net debt includes the carrying value of bank indebtedness, the undiscounted portion of the other liability, the principal amount of the second lien term loan (the "Term Loan"), and the principal amount of senior notes. Net debt and net debt to adjusted funds flow ratios are used by management to assess the Company's overall debt position and borrowing capacity. Net debt to adjusted funds flow ratios are calculated on a trailing twelve-month basis.

Previously, net debt was calculated using the current balance of the other liability. As of March 31, 2022, net debt has been computed using the undiscounted value of the other liability. The current determination of net debt is reflective of the measures used by Management to monitor its liquidity in light of operating and capital budgeting decisions. Net debt is not a standardized measure and therefore may not be comparable to similar measures presented by other entities.

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

(\$ thousands)	As of September 30, 2022	As of December 31, 2021
Cash and cash equivalents	—	1,090
Accounts and accrued receivable	13,793	11,671
Prepaid expenses and deposits	2,014	910
Marketable securities	2,745	2,409
Accounts payable and accrued liabilities	(36,061)	(32,223)
Adjusted working capital surplus (deficiency) ⁽¹⁾	(17,509)	(16,143)
Bank indebtedness	(6,974)	(2,487)
Term loan (principal)	(2,671)	(2,671)
Other liability (undiscounted amount)	(3,342)	(1,387)
Senior notes (principal)	(35,647)	(36,583)
Net debt	(66,143)	(59,271)

⁽¹⁾ Alternative calculation of current assets less current liabilities adjusted for the removal of the current portion of risk management contracts.

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 Company's gas over bitumen royalty financing obligation in accordance with IFRS. 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 is not intended to represent net cash flows from (used in) operating activities calculated in accordance with IFRS.

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:

(\$ thousands, except per share and per boe amounts)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Net cash flows from operating activities	8,749	6,655	26,592	11,192
Change in non-cash working capital	311	(5,621)	7,517	(7,604)
Decommissioning obligations settled (cash)	582	(54)	155	377
Oil and natural gas revenue in-kind	—	1,282	—	3,613
Payments of gas over bitumen royalty financing	—	(88)	—	(558)
Adjusted funds flow	9,642	2,174	34,264	7,020
Adjusted funds flow per share	0.15	0.03	0.52	0.11
Adjusted funds flow per boe	17.82	4.85	20.03	5.08

Available Liquidity: Available Liquidity is defined as Perpetual's Credit Facility Borrowing Limit, less current 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.

Enterprise value: Enterprise value is equal to net debt plus the market value of issued equity and is used by management to analyze leverage. 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.

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.

Net debt to adjusted funds flow ratio: Net debt to adjusted funds flow ratios are calculated on a trailing twelve-month basis.

Net debt as a percentage of enterprise value: Net debt as a percentage of enterprise value is calculated by dividing net debt by enterprise value.

Adjusted funds flow per share: Adjusted funds flow ratios are calculated on a per share as the measure divided by basic shares outstanding.

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

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 sales production on a boe basis.

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

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

"Realized natural gas price" is comprised of natural gas commodity sales from production, as determined in accordance with IFRS, divided by the Company's natural gas sales 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 sales production.

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

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

"Realized gain or loss on risk management contract per boe" is comprised of realized gain on risk management contracts, as determined in accordance with IFRS, divided by the Company's total sales production.

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

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

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

"Adjusted funds flow per share" is comprised of adjusted funds flow divided by the Company's shares outstanding.

FUTURE ACCOUNTING PRONOUNCEMENTS

The International Accounting Standards Board ("IASB") and the IFRS Interpretations Committee regularly issue new and revised accounting pronouncements which have future effective dates and therefore are not reflected in Perpetual's financial statements. Once adopted, these new and amended pronouncements may have an impact on Perpetual's condensed interim consolidated financial statements. Perpetual's analysis of recent accounting pronouncements is included in the notes to the consolidated financial statements at December 31, 2021.

CORPORATE GOVERNANCE

The Corporation is committed to maintaining high standards of corporate governance. Each regulatory body, including the Toronto Stock Exchange and the Canadian provincial securities commissions, has a different set of rules pertaining to corporate governance. The Corporation fully conforms to the rules of the governing bodies under which it operates.

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 July 1, 2022 and ended September 30, 2022 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

FORWARD-LOOKING INFORMATION AND STATEMENTS

Certain information in this MD&A including management's assessment of future plans and operations, and including the information contained under the heading "2022 Outlook" may constitute forward-looking information or statements (together "forward-looking information") under applicable securities laws. The forward-looking information includes, without limitation, statements with respect to: forecast production and exploration and development capital expenditures for 2022 and the expectation that such expenditures will be funded from adjusted funds flow; drilling activities for the remainder of 2022 including the number of gross and net wells to be drilled; cash costs estimates; projected abandonment and reclamation expenditures and the funding thereof; expectations as to drilling activity plans in various areas and the benefits to be derived from such drilling including the production growth and expectations respecting Perpetual's future exploration, development and drilling activities; and Perpetual's business plan.

Forward-looking information is based on current expectations, estimates and projections that involve a number of known and unknown risks, 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, material factors or assumptions on which the forward-looking information in this MD&A is based include: forecast commodity prices and other pricing assumptions; forecast production volumes based on business and market conditions; foreign exchange and interest rates; near-term pricing and continued volatility of the market including inflationary pressures; accounting estimates and judgments; future use and development of technology and associated expected future results; the ability to obtain regulatory approvals; the successful and timely implementation of capital projects; ability to generate sufficient cash flow to meet current and future obligations; the ability of Perpetual to obtain and retain qualified staff and equipment in a timely and cost-efficient manner, as applicable; the retention of key properties; forecast inflation, supply chain access and other assumptions inherent in Perpetual's current guidance and estimates; the continuance of existing tax, royalty, and regulatory regimes; the accuracy of the estimates of reserves volumes; ability to access and implement technology necessary to efficiently and effectively operate assets; and the ongoing and future impact of the coronavirus and the war in Ukraine and related sanctions on commodity prices and the global economy, among others.

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). 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.

GLOSSARY

The following is a list of abbreviations that may be used in this MD&A:

Measurement:

bbbl	barrel
bbbl/d	barrels per day
Mbbl	thousand barrels
MMbbl	million barrels
boe ⁽¹⁾	barrels of oil equivalent
boe/d ⁽¹⁾	barrels of oil equivalent per day
Mboe ⁽¹⁾	thousands of barrels of oil equivalent
MMboe ⁽¹⁾	millions of barrels of oil equivalent
Mcf	thousand cubic feet
Mcf/d	thousand cubic feet per day
MMcf	million cubic feet
MMcf/d	million cubic feet per day
MMBtu	million British thermal units
GJ	gigajoule
PUD	proved undeveloped reserves
PPUD	proved and probable undeveloped reserves

Volume Conversions:

Barrel of oil equivalent ("boe") may be misleading, particularly if used in isolation. In accordance with National Instrument 51-101 ("NI 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.

Financial and Business Environment:

AECO	Alberta Energy Company
DD&A	Depletion, depreciation and amortization
E&E	Exploration and evaluation
GAAP	Generally accepted accounting principles
G&A	General and administrative
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
NGLs	Natural gas liquids
NYMEX	New York Mercantile Exchange,
PP&E	Property, plant and equipment
TSX	Toronto Stock Exchange
WTI	West Texas Intermediate

Initial Production Rates:

Any references in this MD&A to initial production rates are useful in confirming the presence of hydrocarbons; however, such rates are not determinative of the rates at which such wells will continue production and decline thereafter and are not necessarily indicative of long-term performance or ultimate recovery. Readers are cautioned not to place reliance on such rates in calculating the aggregate production for the Company. Such rates are based on field estimates and may be based on limited data available at this time.

SUMMARY OF QUARTERLY RESULTS

<i>(\$ thousands, except as noted)</i>	Q3 2022	Q2 2022	Q1 2022	Q4 2021
Financial				
Oil and natural gas revenue	22,856	33,299	24,953	21,449
Net income	8,234	4,470	7,162	5,669
Per share – basic	0.13	0.07	0.11	0.09
Per share – diluted	0.11	0.06	0.10	0.08
Cash flow from operating activities	8,749	11,571	6,272	1,624
Adjusted funds flow ⁽¹⁾	9,642	10,505	14,117	8,585
Per share – basic ⁽²⁾	0.15	0.16	0.22	0.13
Capital expenditures ⁽¹⁾	22,596	4,361	4,837	7,558
Net payments (proceeds) on acquisitions and dispositions ⁽¹⁾	—	—	—	53,407
Common shares (thousands)				
Weighted average – basic	65,016	63,641	63,216	63,853
Weighted average – diluted	74,607	74,721	74,348	70,873
Operating				
Daily average production				
Natural gas (MMcf/d)	26.9	29.9	34.3	31.5
Oil (bbl/d)	1,002	775	682	714
NGL (bbl/d)	390	364	400	395
Total (boe/d)	5,882	6,123	6,804	6,359
Perpetual Average Realized Prices⁽²⁾				
Natural gas (\$/mcf)	4.74	7.92	5.16	4.80
Oil (\$/bbl)	87.24	117.20	95.55	74.03
NGL (\$/bbl)	85.48	104.71	87.86	73.53

<i>(\$ thousands, except as noted)</i>	Q3 2021	Q2 2021	Q1 2021	Q4 2020
Financial				
Oil and natural gas revenue	14,603	13,226	11,536	8,178
Net income	51,151	27,017	(2,706)	14,443
Per share – basic	0.80	0.43	(0.04)	0.24
Per share – diluted	0.72	0.38	(0.04)	0.24
Cash flow from operating activities	6,655	2,854	1,682	(1,104)
Adjusted funds flow ⁽¹⁾	2,174	2,302	2,544	1,240
Per share – basic ⁽²⁾	0.03	0.04	0.04	0.02
Capital expenditures ⁽¹⁾	9,947	1,554	3	466
Net payments (proceeds) on acquisitions and dispositions ⁽¹⁾	(4,060)	46	469	—
Common shares (thousands)				
Weighted average – basic	63,801	62,574	61,603	61,266
Weighted average – diluted	71,266	70,461	61,603	61,266
Operating				
Daily average production				
Natural gas (MMcf/d)	21.6	22.2	22.9	19.5
Oil (bbl/d)	972	1,074	1,097	1,241
NGL (bbl/d)	300	331	294	237
Total (boe/d)	4,876	5,099	5,211	4,730
Perpetual Average Realized Prices⁽²⁾				
Natural gas (\$/mcf)	3.50	3.03	2.92	1.95
Oil (\$/bbl)	65.22	55.71	40.84	33.69
NGL (\$/bbl)	65.40	55.48	56.01	38.07

⁽¹⁾ Non-GAAP measure. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MDA for an explanation of composition.

⁽²⁾ Non-GAAP ratio. Refer to the section entitled "Non-GAAP and Other Financial Measures" contained within this MD&A for an explanation of composition.