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 months ended March 31, 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 months ended March 31, 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 May 4, 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 ("AIF"), can be accessed at www.sedar.com or from the Corporation's website at www.perpetualenergyinc.com.

Q1 2022 OPERATIONAL AND FINANCIAL HIGHLIGHTS

- Quarter over quarter production growth of 7% was achieved, with average production of 6,804 boe/d, up 31% from the comparative period of 2021 (Q1 2021 5,211 boe/d; Q4 2021 6,359 boe/d). Throughout 2021, and into the first quarter of 2022, production increases at East Edson were due to a successful drilling program as nine (4.5 net) wells were drilled and placed onstream during 2021, including four (2.0 net) wells in the fourth quarter.
- Oil and natural gas revenue for the first quarter of 2022 was \$25.0 million, more than 2.0 times higher than revenue in the comparative period of 2021 due to significantly higher reference prices for all products and the 31% increase in production.
- Adjusted funds flow (see "Non-GAAP and Other Financial Measures") in the first quarter of 2022 was \$14.1 million (\$0.22/share), up \$11.6 million from the prior year period of \$2.5 million (\$0.04/share), due primarily to the \$3.2 million increase in cash flows from operating activities. Adjusted funds flow on a unit-of-production basis was \$22.99/boe in the first quarter of 2022, an increase from the prior year period of \$5.42/boe due to the significant increase in commodity prices.
- Net cash flows from operating activities in the first quarter of 2022 were \$6.2 million, up \$4.5 million from the prior year period (Q1 2021 \$1.7 million). The increase was due to significantly higher realized prices for all products and the 31% increase in production, partially offset by higher cash costs due to cash interest payments.
- Net income for the first quarter of 2022 was \$7.2 million, a significant improvement from the prior year period (Q1 2021 net loss of \$2.7 million). Net income in the first quarter of 2022 was positively impacted by non-cash impairment reversal of \$7.4 million.
- Approximately \$4.8 million was invested in exploration and development capital expenditures (see "Non-GAAP and Other Financial
 Measures"), excluding acquisition or disposition expenditures, during the first quarter of 2022. This was attributable to the drilling of
 2.0 (2.0 net) multi-lateral horizontal wells at Mannville targeting conventional heavy oil in the Sparky formation, of which one well
 was on production at the end of the first quarter, with the second well rig released early in April 2022.
- Cash costs (see "Non-GAAP and Other Financial Measures") were \$17.52/boe in the first quarter of 2022, up 14% from the prior year period (Q1 2021 \$15.41/boe) as the remaining higher cost heavy oil wells at Mannville were restored to production. On an absolute dollar basis, cash costs were \$10.7 million, up \$3.5 million (49%) from the prior year period. The increase was due to the impact of higher production, combined with increased cash finance expense which was \$1.1 million higher than the prior year period due primarily to the Term Loan and 2025 Senior Note interest that Perpetual paid in cash in 2022 relative to 2021 when Perpetual elected to pay the interest in-kind and add to the principal amount owing.
- As at March 31, 2022, net debt (see "Capital Management" section later in this MD&A) was \$48.8 million, down 18% from December 31, 2021 as adjusted funds flow exceeded capital expenditures during the quarter.
- Perpetual would also like to extend its sincerest gratitude to Mr. Robert Maitland for his fourteen years of service as a member of Perpetual's Board of Directors, including in the role of Chair of the Audit Committee. Rob's steadfast commitment to financial stewardship and to strategically navigating the multiple oil and natural gas price cycles experienced through his tenure is deeply appreciated.

2022 OUTLOOK

Perpetual expects exploration and development capital expenditures (see "Non-GAAP and Other Financial Measures") of \$28 - \$30 million for full year 2022, at the high end of previous guidance released on March 15, 2022, to be fully funded from adjusted funds flow (see "Non-GAAP and Other Financial Measures").

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

	Q1 2022 (<i>\$ millions</i>)	# of wells (<i>gross/net</i>)	Q2 – Q4 2022 (<i>\$ millions</i>)	# of wells (<i>gross/net</i>)	2022 (<i>\$ millions</i>)	# of wells (<i>gross/net</i>)
West Central ⁽¹⁾	\$0.1	-	\$15 - \$16	7 / 3.5	\$15 - \$16	7 / 3.5
Eastern Alberta ⁽²⁾	\$4.8	1 /1.0	\$8-\$9	5 / 5.0	\$13 - \$14	6 / 6.0
Total ⁽³⁾	\$4.9	1 / 1.0	\$23 - \$25	12 /8.5	\$28 - \$30	13 / 9.5

⁽¹⁾ Includes six (3.0 net) Wilrich development wells and one (0.5 net) secondary zone evaluation well.

At Mannville in Eastern Alberta, preliminary performance of the recent two-well, multi-lateral horizontal drilling program targeting heavy oil in the Sparky formation is promising. One (1.0 net) well rig released in mid-March has fully recovered its oil-based load fluid and is stabilizing at an oil production rate above expectations. No sales production was recorded in the first quarter for this well, as full recovery of the oil-based drilling mud ("OBM") used during the drilling process occurred on April 1. Recovered OBM is not recorded as sales production but is instead credited back to drilling capital and reused in future drilling operations to the extent possible. This first well in the drilling program recently completed its IP30 production period, averaging 247 bbl/d of conventional heavy oil production during the month of April. The second well, which was rig-released in early April, was drilled with a KCL-amine mud system and is still recovering its water-based load fluid with early indications of reservoir oil. Perpetual will continue to monitor performance of the new Sparky multi-laterals through the second quarter prior to executing the follow-up drilling program; however given the promising early performance of the multi-lateral horizontal drilling program at Mannville, Perpetual has made preparations to drill up to four (4.0 net) additional multi-lateral Sparky locations in the second half of 2022. Perpetual will also continue to be focused on waterflood optimization and battery consolidation projects as well as shallow gas recompletions and abandonment and reclamation activities in the Mannville property.

Following spring break-up, once field conditions allow, Perpetual will participate at its 50% working interest in an East Edson drilling program to drill, complete, equip and tie-in six (3.0 net) extended reach horizontal wells in the Wilrich formation as well as one (0.5 net) additional horizontal well targeting the Notikewin formation to begin evaluating the potential of secondary zones at East Edson. The seven (3.5 net) well drilling program is expected to fill the West Wolf gas plant to maximize natural gas and NGL sales through next winter.

Total Company average production for the first quarter of 2022 of 6,804 boe/d (16% oil and NGL) exceeded expectations due to the strong performance of the 2021 East Edson drilling program. Production is forecast to decline from first quarter levels through the second quarter of 2022 to an average of 5,900 to 6,200 boe/d, with oil and NGL expected to represent close to 22% of production as the two new multi-lateral heavy oil wells at Mannville begin to contribute to sales volumes. Average production volumes are forecast to grow to achieve 7,000 boe/d during the second half of 2022 as seven (3.5 net) new wells are drilled and come onstream at East Edson and assuming the four (4.0 net) well follow-up drilling program at Mannville is executed later in the third quarter. Full year average production is forecast to grow approximately 25% from 2021 levels to the high end of previous March 15, 2022 guidance of 6,500 to 6,750 boe/d, with oil and NGL representing approximately 20% of the production mix.

2022 Revised Guidance assumptions are as follows:

	2022 Guidance
Exploration and development expenditures ⁽¹⁾ (\$ millions)	\$28 - \$30
Cash costs ⁽¹⁾ (\$/boe)	\$17.00 - \$20.00
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 MDA for an explanation of composition.

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

FIRST QUARTER FINANCIAL AND OPERATING RESULTS

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

Cash flow used in investing activities was \$12.4 million as compared to \$1.0 million in the comparative prior period. 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.

One of the two (2.0 net) multi-lateral wells drilled in the first quarter of 2022 was rig released in early April 2022. Both wells will be monitored for performance prior to drilling up to four (4.0 net) follow-up wells in the second half of 2022.

⁽³⁾ Excludes abandonment and reclamation spending and acquisitions or land expenditures, if any.

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

	Three months ended March 31,	
_ (<i>\$ thousands</i>)	2022 2021	
Exploration and development	4,830 1	
Corporate assets	7 2	
Capital expenditures	4,837 3	

Exploration and development spending by area

	Three months ended March 31,
(\$ thousands)	2022 2021
West Central	34 1
Eastern Alberta	4,796 –
Total	4,830 1

Wells drilled by area

	Three months ended Marc	ch 31,
_(gross/net)	2022	2021
West Central	-/-	2/1.0
Eastern Alberta ⁽¹⁾	1/1.0	-/-
Total	1/1.0	2/1.0

⁽¹⁾ One of the two (2.0 net) multi-lateral wells drilled in the first guarter of 2022 was rig released in early April 2022.

Perpetual's exploration and development spending in the first quarter of 2022 was \$4.8 million. The spending represented a two-well drilling program at Mannville in Eastern Alberta where two (2.0 net) horizontal, multi-lateral wells targeting heavy oil in the Sparky formation were drilled, with the second well rig released in the second quarter of 2022. The first well was brought on stream prior to the end of the first quarter.

Perpetual's exploration and development spending in the first quarter of 2021 was nominal. At the 50% owned East Edson property, two (1.0 net) horizontal Wilrich wells were drilled and tied-in to production late in the first quarter of 2021 at no cost to Perpetual, pursuant to the joint venture partner's carried interest drilling commitment.

Acquisitions and Dispositions

There were no acquisitions or dispositions during the first quarter 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 disposition of the sale of the Clearwater Assets to Rubellite for total consideration of \$65.5 million, including \$53.6 million in promissory notes, the assumption by Rubellite of \$5.8 million in promissory notes due to 197Co, the return to Perpetual of 8.2 million Perpetual common shares valued at \$2.8 million, 0.7 million Rubellite common shares ("AIMCo bonus shares") valued at \$1.4 million and the issuance of Rubellite Share Purchase Warrants to purchase 4.0 million Rubellite common shares valued at \$2.0 million.

Expenditures on decommissioning obligations

During the first quarter of 2022, Perpetual executed \$0.07 million (Q1 2021 – \$0.3 million) of abandonment and reclamation projects, of which \$0.02 million was funded by Alberta's Site Rehabilitation Program. SRP funding is presented on the condensed interim consolidated statements of income (loss) and comprehensive income (loss) as other income. One reclamation certificate was received from the Alberta Energy Regulator ("AER") during the first quarter of 2022 (Q1 2021 – ten reclamation certificates). Total abandonment and reclamation expenditures of up to \$2.0 million are forecast in 2022, with up to \$0.6 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 March 31,	
	2022	2021
Production		
Conventional natural gas (Mcf/d) (1)	34,330	22,920
Conventional heavy crude oil (bbl/d) (2)	682	1,097
NGL (bbl/d) ⁽³⁾	400	294
Total production (boe/d)	6,804	5,211

⁽¹⁾ Conventional natural gas production yielded a heat content of 1.17 GJ/Mcf for the first quarter of 2022 (Q1 2021 – 1.17), resulting in higher realized natural gas prices on a \$/Mcf basis. See "Commodity Prices".

⁽²⁾ Primarily from Eastern Alberta which produces primarily conventional heavy crude oil.

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

	Three months ended M	Three months ended March 31,	
	2022	2021	
Production by core area			
Eastern Alberta	1,049	1,463	
West Central	5,755	3,748	
Total production (boe/d)	6,804	5,211	

First quarter production averaged 6,804 boe/d, up 31% from 5,211 boe/d in the comparative period of 2021. In the first quarter of 2022, the production mix was comprised of 84% conventional natural gas and 16% conventional heavy crude oil and NGL, as compared to 73% of conventional natural gas and 27% conventional heavy crude oil and NGL in the first quarter of 2021. Production levels steadily increased as nine (4.5 net) Edson wells were progressively drilled through 2021 and brought on production, partially offset by the disposition of the Clearwater oil assets in the third quarter of 2021.

First quarter conventional natural gas production averaged 34.3 MMcf/d, an increase of 66% from 20.7 MMcf/d in the comparative period of 2021 with production additions from the nine (4.5 net) new East Edson liquids-rich gas wells, partially offset by natural declines.

First quarter NGL production was 400 bbl/d, 36% 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 11.7 bbls per MMcf in the first quarter of 2022 (Q1 2021 – 12.8 bbls per MMcf). Perpetual's average NGL sales composition for the first quarter of 2022 consisted of 64% condensate, higher than the prior year period when condensate represented 61% of total NGL production.

Conventional heavy crude oil production in Eastern Alberta was 38% lower than the first quarter of 2021 due primarily to natural declines and the sale of the Clearwater Assets which contributed average production 430 boe/d in the comparative period.

Oil and Natural Gas Revenue

	Three months ended March 31,	
(\$ thousands, except as noted)	2022	2021
Oil and natural gas revenue		_
Natural gas	15,929	6,022
Oil	5,861	4,032
NGL NGL	3,163	1,482
Oil and natural gas revenue	24,953	11,536

	Three months ended March 31,	
	2022	2021
Average Benchmark Prices		
NYMEX Daily Index (<i>US\$/MMBtu</i>)	5.07	2.69
AECO 5A Daily Index (\$/GJ)	4.49	2.99
AECO 5A Daily Index (\$/Mcf) ⁽¹⁾	4.74	3.15
West Texas Intermediate ("WTI") (US\$/bbl)	94.29	57.84
Exchange rate (US\$/CAD\$)	1.27	1.27
West Texas Intermediate ("WTI") (CAD \$/bbl)	119.39	73.46
Western Canadian Select ("WCS") (CAD\$/bbl)	101.01	57.62
WCS differential to WTI (US \$/bbl)	(14.53)	(12.47)
Perpetual Average Realized Prices ⁽²⁾		
Natural gas (\$/Mcf)	5.16	2.92
Oil (\$/bbl)	95.55	40.84
NGL (<i>\$/bbl</i>)	87.86	56.01
Average realized price (\$/bbl)	40.75	24.60

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

Oil and natural gas revenue for the three months ended March 31, 2022 of \$25.0 million was 116% higher than the first quarter of 2021, due to significantly higher reference prices for all products and the 31% increase in average daily production.

Natural gas revenue of \$15.9 million in the first quarter of 2022 comprised 64% (Q1 2021 - 52%) of total revenue while natural gas production was 84% (Q1 2021 - 73%) of total production. Natural gas revenue increased 165% from the prior year period (Q1 2021 - \$6.0 million), reflecting the combined impact of higher AECO Daily Index prices and the 50% increase in conventional natural gas production volumes driven by 2021 drilling activity at East Edson.

Oil revenue of \$5.9 million represented 23% (Q1 2021-35%) of total revenue while conventional heavy crude oil production was 10% (Q1 2021-21%) of total production. Oil revenue was 45% higher than the first quarter of 2021, as a result of higher benchmark prices, partially offset by a 38% decrease in heavy crude oil production due to the sale of the Clearwater oil assets in the third quarter of 2021. Compared to the first quarter of 2021, the WCS average price of 101.01/bbl increased by 57%, in line with the increase in WTI prices to US\$94.29/bbl (Q1 2021-US\$57.84/bbl).

NGL revenue for the first quarter of 2022 was \$3.2 million, represented 13% (Q1 2021-13%) of total revenue while NGL production was just 6% (Q1 2021-6%) of total Company production. NGL revenue increased by 113% over the prior year period, reflecting a 36% 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 light oil prices.

⁽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.

Risk Management Contracts

The Company's realized price deviates from the index due to the Company's market diversification strategies that balances pricing exposure over multiple markets. In addition, the Company may use both financial derivatives and physical delivery contracts to manage fluctuations in commodity 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 financial crude oil and natural gas forward sales, collars, basis differentials, and forward foreign exchange sales. These contracts are put in place to protect Perpetual's cash flows from potential volatility.

	Three months en	ded March 31,
	2022	2021
Risk Management Contracts		
Unrealized loss on financial natural gas contracts	(7,004)	_
Unrealized gain on physical natural gas contracts	_	905
Unrealized loss on financial oil contracts	(3,990)	_
Unrealized loss on physical oil contracts	_	(469)
Unrealized gain (loss) on risk management contracts	(10,994)	436
Realized gain (loss) on financial natural gas contracts ⁽¹⁾	1,267	(1,374)
Realized loss on financial oil contracts	(987)	_
Realized gain (loss) on risk management contracts	280	(1,374)
Net loss on risk management contracts	(10,714)	(938)

⁽¹⁾ Includes a realized gain of \$1.2 million for the three months ended March 31, 2022 (Q1 2021 – realized losses of \$1.4 million) related to a modification to the Company's market diversification contract obligations for a future period.

	Three months er	nded March 31,
(\$ thousands, except as noted)	2022	2021
Realized gain (loss) on risk management contracts		
Realized gain (loss) on financial natural gas contracts (\$/Mcf)	0.41	(0.67)
Realized loss on financial oil contracts (\$/bbl)	(16.09)	-
Realized gain (loss) on risk management contracts (\$/boe)	0.46	(2.93)
Perpetual Average Realized Prices after risk management contracts ⁽¹⁾		
Natural gas (\$/Mcf)	5.57	2.25
Oil <i>(\$/bbl)</i>	79.46	40.84
NGL (<i>\$/bbl</i>)	87.86	56.01
Average realized price (\$/boe)	41.21	21.67

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 \$0.3 million for the first quarter of 2022, compared to losses of \$1.4 million for the same period of 2021. The realized gain of \$1.3 million includes a gain on the elimination of the performance obligations on 10,000 MMBtu for the November 1, 2022 to March 31, 2023 period of the Company's market diversification contract obligations in consideration for the payment of \$1.2 million to be collected over the original contract period. The realized loss related to oil contracts was \$1.0 million. In the comparative period, the total realized loss was due to the elimination of the performance obligation on a portion of the Company's market diversification contract obligations for the April 1, 2021 to October 31, 2021 period in the amount of \$1.4 million.

For the first quarter of 2022, Perpetual recorded an unrealized loss on risk management contracts of \$11.0 million (Q1 2021 – \$0.4 million unrealized gain). Unrealized gains and losses represent the change in mark-to-market value of derivative contracts as forward commodity prices and foreign exchange rates change. Unrealized gains and losses on derivatives are excluded from the Corporation's calculation of cash flow from (used in) operating activities as non-cash items. Derivative gains and losses vary depending on the nature and extent of derivative contracts in place, which in turn, vary with the Corporation's assessment of commodity price risk, committed capital spending and other factors.

Royalties

	Three months ended March 31,	
(\$ thousands, except as noted)	2022	2021
Natural gas royalties – crown	539	159
Oil royalties – crown	268	115
NGL royalties – crown	204	255
Total crown royalties	1,011	529
Natural gas royalties – freehold and overriding	1,510	988
Oil royalties – freehold and overriding	408	336
NGL royalties – freehold and overriding	313	278
Total freehold and overriding	2,231	1,602
Total royalties	3,242	2,131
\$/boe	5.30	4.54
Royalties as a percentage of oil and natural gas revenue ⁽¹⁾		
Crown (% of oil and natural gas revenue)	4.1	4.6
Freehold and overriding (% of oil and natural gas revenue)	8.9	13.9
Total (% of oil and natural gas revenue)	13.0	18.5
Natural gas royalties (% of natural gas revenue)	12.9	19.0
Oil royalties (% of oil revenue)	11.5	11.2
NGL royalties (% of NGL revenue)	16.4	36.0

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 first quarter of 2022 were \$3.2 million, 52% higher than the comparative period of 2021 as a result of increased production and higher reference prices. On a unit-of-production basis, royalties were up 17% to \$5.30/boe (Q1 2021 – \$4.54/boe). The combined average royalty rate on oil and natural gas revenue decreased from 2021, due primarily to the reduced impact of the fixed volume East Edson gross overriding royalty as a percentage of higher production. The Alberta Gas Reference price and AECO Daily Index prices which are used to calculate crown and freehold natural gas royalties, respectively, increased significantly during the year.

Freehold and overriding royalties increased 39% from the first quarter of 2021, due to the impact of higher AECO Daily Index 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 inkind, 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

	Inree months ended March 31,	
(\$ thousands, except as noted)	2022	2021
Production and operating expenses	3,659	3,286
\$/boe	5.98	7.01

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Total production and operating expenses decreased 15% on a unit-of-production basis to \$5.98/boe for the first quarter of 2022, compared to \$7.01/boe for the comparable period of 2021 due to increased conventional natural gas production at East Edson which has a high percentage of fixed operating costs and much lower operating costs as compared to the Company's conventional heavy crude oil production. The decrease was also related to the decrease in conventional heavy oil production as a result of the sale of the Clearwater Assets and natural declines. On an absolute dollar basis, production and operating costs increased by 11% on 31% higher average production volumes.

Transportation costs

	Three months ended March 3	,ı,
(\$ thousands, except as noted)	2022 202	21
Transportation costs	692 69	90
\$/boe	1.13 1.4	47

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 first quarter of 2022 were \$0.7 million, consistent with the prior year period of \$0.7 million. On a unit-of-production basis, transportation costs decreased by 23% to \$1.13/boe in the first quarter of 2022 (Q1 2021 - \$1.47/boe), due to increased natural gas production and increased 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 months ended March 31, 2022 and 2021:

		Three mon	ths ended M	arch 31,
_(\$/boe) (\$ thousands)		2022		2021
Production (boe/d)		6,804		5,211
Oil and natural gas revenue	40.75	24,953	24.60	11,536
Royalties	(5.30)	(3,242)	(4.54)	(2,131)
Production and operating expenses	(5.98)	(3,659)	(7.01)	(3,286)
Transportation costs	(1.13)	(692)	(1.47)	(690)
Operating netback ⁽¹⁾	28.34	17,360	11.58	5,429
Realized gain (loss) on risk				
management contracts	0.46	280	(2.93)	(1,374)
Total operating netback, including				
risk management contracts	28.80	17,640	8.65	4,055

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

For the first quarter of 2022, Perpetual's operating netback, including risk management contracts, was \$17.6 million (\$28.80/boe), up significantly from \$4.1 million (\$8.65/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, and lower production and operating expenses and transportation expenses, which more than offset higher royalties.

General and administrative ("G&A") expenses

	Three months ended March 3	
(\$ thousands, except as noted)	2022 202	
G&A expense before overhead recoveries	2,965 2,07.	
MSA recoveries ⁽¹⁾	(308)	
Overhead recoveries	(578) (2)	
Total G&A expense	2,079 2,05	
\$/boe	3.39 4.3	

As part of the sale of the Clearwater Assets to Rubellite on September 3, 2021, Perpetual entered into a Management Operating and 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 first quarter of 2022, G&A expense remained consistent with the prior year period at \$2.1 million. Before recoveries, G&A was \$3.0 million in the first quarter of 2022, an increase of 43% from the comparative period. The increase in G&A was related to higher employee salaries and benefits which had been reduced in response to the collapse in commodity prices and were gradually re-instated over the second half of 2021. Overhead recoveries of \$0.6 million increased over the prior year period (Q1 2021 – \$0.02 million) due to increased capital spending and higher absolute production and operating costs.

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 \$0.4 million during the first quarter of 2021. There were no payments received in 2022.

Share-based payments

	Three months ended March 31,
(\$ thousands, except as noted)	2022 2021
Share-based payments (non-cash)	240 105
Share-based payments (cash)	374 375
Total share-based payments	614 480

Share-based payments expense for the first quarter of 2022 was \$0.6 million, largely unchanged from the comparative period of 2021. During the first quarter of 2022, 0.04 million deferred options, 0.1 million deferred shares, 0.04 million share options, 0.7 million performance share rights, and were granted to Officers, Directors, and employees of the Company.

Depletion and depreciation

	Three months ended March 31,
(\$ thousands, except as noted)	2022 2021
Depletion and depreciation	4,018 2,986
\$/boe	6.56 6.37

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 March 31, 2022, depletion was calculated on a \$155.9 million depletable balance and \$71.5 million in future development costs (2021 – \$154.3 million depletable balance and \$75.3 million in future development costs). The depletable base excluded an estimated \$3.8 million (2021 – \$3.7 million) of salvage value.

Depletion and depreciation expense for the first quarter of 2022 was \$4.0 million or \$6.56/boe (2021 – \$3.0 million or \$6.37/boe). The increase reflects the 31% increase in production volumes compared to the comparative period. On a unit-of-production basis, depletion and depreciation expense increased by 3% compared to the first quarter of 2021 as a result of impairment reversals recognized during the second and fourth quarters of 2021.

Depreciation expense for the period ended March 31, 2022 was attributable to office furniture, office and computer equipment, leasehold improvements and right of use assets.

Impairment

In accordance with IFRS, the Company is required to assess when internal or external indicators of impairment or impairment reversal exist, and impairment testing is required. During the first quarter of 2022, the Company determined that indictors of impairment reversal existed and that the estimated recoverable amounts of the Eastern Alberta CGU exceeded the carrying amounts of \$44.8 million. Accordingly, a non-cash impairment reversal of \$7.4 million was included in net income. All previous impairments charges that were eligible for reversal have now all been reversed as at March 31, 2022 for property, plant and equipment.

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

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

E&E assets are tested for impairment both at the time of any triggering facts and circumstances as well as upon their eventual reclassification to oil and natural gas properties in property, plant and equipment. During the first quarter of 2022, Perpetual moved the Mannville undeveloped land value 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 successful drilling program during Q1 2022. As a result of the impairment test required at transfer, there were no impairments recorded to E&E in the first quarter of 2022. There were no indicators of impairment or impairment reversal as at March 31, 2022.

Finance expense

	Three months ended March 31,	
(\$ thousands)	2022	2021
Cash finance expense		
Interest on revolving bank debt	162	276
Interest on term loan	54	_
Interest on 2022 Senior Notes ⁽¹⁾	_	(1,253)
Interest on 2025 Senior Notes ⁽²⁾	804	_
Interest on lease liabilities	32	40
Total cash finance expense	1,052	(937)
Non-cash finance expense		
Interest paid in-kind on term loan	_	948
Interest paid in-kind on 2025 Senior Notes ⁽²⁾	_	2,057
Gain on senior note maturity extension ⁽²⁾	_	(1,591)
Amortization of debt issue costs	515	378
Accretion on decommissioning obligations	136	98
Change in fair value of other liability	1,501	_
Change in fair value of royalty obligations	1,595	1,109
Total non-cash finance expense	3,747	2,999
Finance expenses recognized in net income (loss)	4,799	2,062

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

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.

Total cash finance expense was \$1.1 million in the first quarter of 2022, higher than the prior year period (Q1 2021 – negative \$0.9 million). The increase was due primarily to payment of interest on the Senior Notes and Term Loan in cash rather than in-kind.

Total non-cash finance expense for the first quarter of 2022 was \$3.7 million, \$0.7 million higher than the prior year period (Q1 2021 – \$3.0 million) due the change in the fair value of the royalty obligations related to higher forecast 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". The increase was partially offset by the payment of interest on the Senior Notes and Term Loan in cash rather than in-kind.

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 January 23, 2022 semi-annual interest payment in cash.

The Company recorded a net gain on the senior note maturity extension of \$1.6 million, representing the difference between the carrying amount of 2022 Senior Notes of \$34.5 million and the present value of the modified cash flows for the 2025 Senior Notes of \$32.9 million. 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 Transactions, 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").

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 less current liabilities, adjusted for the removal of the current portion of risk management contracts. 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

_(\$ thousands, except as noted)	March 31, 2022	December 31, 2021
Revolving bank debt	9,553	2,487
Term loan, principal amount	2,671	2,671
Senior notes, principal amount	36,583	36,582
Other liability, undiscounted amount	3,404	1,387
Adjusted working capital deficiency (surplus) ⁽¹⁾	(3,413)	16,143
Net debt ⁽¹⁾	48,798	59,270
Shares outstanding at end of period (thousands)(3)	63,131	63,567
Market price at end of period (\$/share)	0.76	0.70
Market value of shares ⁽¹⁾	47,980	44,497
Enterprise value ⁽¹⁾	96,778	103,767
Net debt as a percentage of enterprise value ⁽²⁾	50%	57%
Trailing twelve-months adjusted funds flow ⁽¹⁾	28,901	16,746

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

At March 31, 2022, Perpetual had total net debt of \$48.8 million, down \$10.5 million (18%) from December 31, 2021 as adjusted funds flow exceeded capital expenditures during the quarter.

⁽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.

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

Perpetual had available liquidity at March 31, 2022 of \$6.4 million, comprised of the \$17.0 million Credit Facility Borrowing Limit, less current borrowings and letters of credit of \$9.6 million and \$1.0 million, respectively.

Revolving bank debt

As at March 31, 2022, the Company's Credit Facility had a Borrowing Limit of \$17.0 million (December 31, 2021 – \$17.0 million) under which \$9.6 million was drawn (December 31, 2021 – \$2.5 million) and \$1.0 million of letters of credit had been issued (December 31, 2021 – \$1.0 million). Borrowings under the Credit Facility bear interest at its lenders' prime rate or Banker's Acceptance rates, plus applicable margins and standby fees. The applicable Banker's Acceptance margins range between 3.0% and 5.5%. The effective interest rate on the Credit Facility at March 31, 2022 was 5.9%. For the period ended March 31, 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.

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

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

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

At March 31, 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

			Marc	h 31, 2022		Decemb	er 31, 202	:1
	Maturity date	Interest rate	Principal	Carrying	Amount	Principal	Carrying	amount
Term loan	December 31, 2024	8.1%	\$ 2,671	\$	2,478	\$ 2,671	\$	2,469

During the third quarter of 2021, Perpetual executed its 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 bearing interest at 8.1% annually and maturing December 31, 2024 (the "New Term Loan"), and up to an aggregate \$4.5 million in contingent payments over the three year period ended June 30, 2024 in the event that Perpetual's annual average realized oil and natural gas prices exceed certain thresholds initially valued at \$0.2 million (the "Second Lien Loan Settlement"). 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. All amounts related to the Second Lien Loan Settlement were paid on October 5, 2021.

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 March 31, 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

			March 31, 2022		Decemb	per 31, 2021
	Maturity date	Interest rate	Principal	Carrying Amount	Principal	Carrying amount
Senior notes	January 23, 2025	8.75%	\$ 36,583	\$ 34,486	\$ 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 of \$1.5 million by making PIK Interest Payments, increasing the principal amount to \$36.6 million.

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

At March 31, 2022, the senior notes are recorded at the present value of future cash flows, net of \$2.4 million in issue and principal discount costs which are amortized over the remaining term using a weighted average effective interest rate of 13.7%.

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 March 31, 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, and entities associated with other Directors of the Company hold an additional \$10.3 million and \$0.8 million of the 2025 Senior Notes outstanding, respectively.

Equity

At March 31, 2022, there were 63.2 million common shares outstanding, net of 0.9 million shares held in trust to resource employee compensation programs. 0.4 shares were purchased by the independent trustee to be held in trust during the first quarter of 2022 (Q1 2021 – nil). Basic and diluted weighted average shares outstanding for the three months ended March 31, 2022 were 63.2 and 74.3 million (Q1 2021 – 61.6 million – basic and diluted) respectively.

At May 4, 2022, there were 63.5 million common shares outstanding which is net of 0.6 million shares held in trust for employee compensation programs. In addition, the following potentially issuable common shares were outstanding as at the date of this MD&A:

(millions)	May 4, 2022
Share options	4.1
Performance share rights	3.8
Compensation awards	8.4
Total ⁽¹⁾	16.3

^{1) 8.0} million compensation awards, 2.4 million share options, and 3.8 million performance share rights have an exercise price below the March 31, 2022 closing price of the Company's common shares of \$0.76 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 May 4, 2022, the Company entered into the following swap commodity contracts:

			Reference/	Contract Traded	Market Price
Commodity	Volumes sold	Term	Index	Bought/sold	(CAD\$/bbl)
Natural gas	17,500 GJ/d	Apr 1 – Sept 30, 2022	AECO 5A (CAD\$/GJ)	Swap - sold	\$3.66
Natural gas	2,500 GJ/d	Apr 1 – Dec 31, 2022	AECO 5A (CAD\$/GJ)	Swap - sold	\$3.57
Natural gas	5,000 GJ/d	Oct 1 – Dec 31, 2022	AECO 5A (CAD\$/GJ)	Swap - sold	\$4.53
Natural gas	5,000 GJ/d	Jan 1 - Mar 31, 2023	AECO 5A (CAD\$/GJ)	Swap - sold	\$4.62
Crude Oil	100 bbls/d	Apr 1 – Jun 30, 2022	WTI (CAD\$/bbl)	Swap – sold	\$104.50
Crude Oil	100 bbls/d	Jul 1 – Dec 31, 2022	WTI (CAD\$/bbl)	Swap – sold	\$103.30
Crude Oil	200 bbls/d	Apr 1 – Jun 30, 2022	WCS FP (CAD\$/bbl)	Swap – sold	\$76.70
Crude Oil	200 bbls/d	Apr 1 – Dec 31, 2022	WCS FP (CAD\$/bbl)	Swap – sold	\$70.66
Crude Oil	200 bbls/d	Jul 1 – Dec 31, 2022	WCS FP (CAD\$/bbl)	Swap – sold	\$70.80

As at May 4, 2022, the Company entered into the following swap WTI-WCS basis differential which settle in CAD\$:

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

As a May 4, 2022, the Company entered into the following physical fixed price natural gas sales arrangements at AECO:

			Reference/	Contract Traded	Average Price
Commodity	Volumes sold	Term	Index	Bought/sold	(CAD\$/bbl)
Natural gas	5,000 GJ/d	Apr 2022	AECO	Sold	\$4.53
Natural gas	5,000 GJ/d	Apr 2022	AECO	Bought	\$4.22

In the first quarter of 2022, the Company eliminated 10,000 MMBtu/d of fixed volume obligations for the period commencing November 1, 2022 and ending on March 31, 2023 and will receive payment of \$1.2 million over the term of the associated contract volumes.

In the first quarter of 2021, the Company eliminated its remaining performance obligations on fixed volume obligations of 10,000 MMBtu/d for the period commencing April 1, 2021 and ending on October 31, 2021 in consideration for the payment of \$1.4 million to be collected over the term of the associated contract volumes.

In the third quarter of 2021, the Company eliminated its remaining fixed volume obligations of 25,400 MMBtu/d for the period commencing April 1, 2022 and ending on October 31, 2022 in consideration for the payment of \$1.8 million over the term of the associated contract volumes.

These modifications have been recognized as realized gain 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 March 31, 2023 Daily sales volume (MMBtu/d)	April 1, 2023 to October 31, 2024 Daily sales volume (MMBtu/d)
Malin	5,000	15,000
	•	•
Dawn	15,000	15,000
Emerson	10,000	10,000
Total sales volume obligation	30,000	40,000

Subsequent to March 31, 2022, the Company eliminated 5,000 MMBtu/d of fixed volume obligations for the period commencing November 1, 2022 and ending March 31, 2023, and will receive payment of \$0.8 million over the term of the associated contract volumes.

SEOUOIA LITIGATION UPDATE

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

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

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

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

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

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:

	Three months ended March 31,	
	2022	2021
Net cash flows used in investing activities	12,350	983
Acquisitions	-	(625)
Net proceeds on dispositions, net of cash disposed	-	156
Purchase of marketable securities	(23)	-
Change in non-cash working capital	(7,490)	(511)
Capital expenditures	4,837	3

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

	Three months ended March 31,		
(\$ thousands, except per boe amounts)	2021	2021	
Royalties	3,242	2,131	
Production and operating	3,659	3,286	
Transportation	692	690	
General and administrative	2,079	2,055	
Cash finance expense	1,052	(937)	
Cash costs	10,724	7,225	
Cash costs per boe	17.52	15.41	

Operating netback: Operating netback is calculated by deducting royalties, production and operating expenses, and transportation costs from oil and natural 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 current liabilities, adjusted for the removal of the current portion of risk management contracts. 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.

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

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 budging decisions. Net debt is not a standardized measure and therefore may not be comparable to similar measures presented by other entities.

Net working capital: Net working capital deficiency or surplus includes total current assets and current liabilities excluding short-term derivative assets and liabilities related to the Corporation's risk management activities, revolving bank debt, Term Loan, current portion of royalty obligations, current portion of lease liabilities, and current portion of decommissioning obligations.

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

	As at March 31,	As at December 31,
	2022	2021
Cash and cash equivalents	-	1,090
Accounts and accrued receivable	13,457	11,671
Prepaid expenses and deposits	591	910
Marketable securities	7,056	2,409
Accounts payable and accrued liabilities	(17,691)	(32,223)
Adjusted working capital surplus (deficiency) ⁽¹⁾	3,413	(16,143)
Bank indebtedness	(9,553)	(2,487)
Term loan (principal)	(2,671)	(2,671)
Other liability (undiscounted amount)	(3,404)	(1,387)
Senior notes (principal)	(36,583)	(36,583)
Net debt	(48,798)	(59,270)

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 Corporation's gas over bitumen royalty financing obligation in accordance with IFRS. Additionally, the Company has excluded payments of restructuring costs associated with employee downsizing costs, which management considers to not be related to cash flow from (used in) operating activities. Management uses adjusted funds flow and adjusted funds flow per boe as key measures to assess the ability of the Company to generate the funds necessary to finance capital expenditures, expenditures on decommissioning obligations, and meet its financial obligations.

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

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

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

	Three months ended March 31,		
(\$ thousands, except per share and per boe amounts)	2022	2021	
Net cash flows from operating activities	6,272	1,682	
Change in non-cash working capital	8,510	(150)	
Decommissioning obligations settled (cash)	(665)	115	
Oil and natural gas revenue in-kind	-	1,133	
Payments of gas over bitumen royalty financing	-	(236)	
Adjusted funds flow	14,117	2,544	
Adjusted funds flow per share	0.22	0.04	
Adjusted funds flow per boe	22.99	5.42	

Available Liquidity: Available Liquidity is defined as Perpetual's Credit Facility borrowing limit, less borrowings and letters of credit issued under the Credit Facility. Management uses available liquidity to assess the ability of the Company to finance capital expenditures and expenditures on decommissioning obligations, and to meet its financial obligations.

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.

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

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 January 1, 2022 and ended March 31, 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: future capital expenditure and production forecasts and the anticipated sources of funds to be used for capital spending; 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; the focus on waterflood optimization and battery consolidation projects as well as shallow gas recompletions and abandonment and reclamation activities in the Mannville property; the focus on ESG and planned abandonment and reclamation expenditures; 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; 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 Russia's invasion of 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.sedar.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:

bbl barrel

bbl/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

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

SUMMARY OF QUARTERLY RESULTS

Q1 2022	Q4 2021	Q3 2021	Q2 2021
24,953	21,449	14,603	13,226
7,162	5,669	51,141	27,017
0.11	0.09	0.80	0.43
0.10	0.08	0.72	0.38
6,272	1,624	6,655	2,854
14,117	8,585	3,315	2,302
0.22	0.13	0.05	0.04
4,837	7,558	9,947	1,554
-	53,407	(4,060)	46
63,216	63,853	63,801	62,574
74,348	70,873	63,801	62,574
			22.2
682	714		1,074
400		300	331
6,804	6,359	4,876	5,099
	4.80	3.50	3.03
		65.22	55.71
87.86	73.53	65.40	55.48
Q1 2021	Q4 2020	Q3 2020	Q2 2020
11,536	8,178	7,089	3,722
(2,706)	14,443	(7,491)	(8,831)
(0.04)	0.24	(0.12)	(0.15)
(0.04)	0.24	(0.12)	_
1,682	(1,104)	(2,538)	(2,777)
2,544	1,240		(3,328)
0.04	0.02	(0.03)	(0.05)
3	466	251	(11)
469	_	133	(34,661)
	7,162 0.11 0.10 6,272 14,117 0.22 4,837 - 63,216 74,348 34.3 682 400 6,804 5.16 95.55 87.86 Q1 2021 11,536 (2,706) (0.04) (0.04) 1,682 2,544 0.04 3	7,162 5,669 0.11 0.09 0.10 0.08 6,272 1,624 14,117 8,585 0.22 0.13 4,837 7,558 - 53,407 63,216 63,853 74,348 70,873 34.3 31.5 682 714 400 395 6,804 6,359 5.16 4.80 95.55 74.03 87.86 73.53 Q1 2021 Q4 2020 11,536 8,178 (2,706) 14,443 (0.04) 0.24 (0.04) 0.24 (1,682 (1,104) 2,544 1,240 0.04 0.02 3 466	7,162

Capital expenditures ⁽¹⁾	3	466	251	(11)
Net payments (proceeds) on acquisitions and	469	_	133	(34,661)
dispositions ⁽¹⁾				
Common shares (thousands)				
Weighted average – basic and diluted	61,603	61,266	61,200	60,776
Operating				
Daily average production				
Conventional natural gas (MMcf/d)	22.9	19.5	16.3	16.9
Heavy crude oil (bbl/d)	1,097	1,241	1,193	573
NGL (bbl/d)	294	237	273	268
Total (boe/d)	5,211	4,730	4,188	3,662
Perpetual Average Realized Prices ⁽²⁾				
Natural gas (\$/mcf)	2.92	1.95	1.63	1.34
Oil (\$/bbl)	40.84	33.69	35.89	23.24
NGL (<i>\$/bbl</i>)	56.01	38.07	28.07	18.45
(1) Non-GAAP measure. Refer to the section entitled "Non-GAAP a	nd Other Financial Measures"	contained within this M	DA for an explanation of	of composition.

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