



NEWS RELEASE

PERPETUAL ENERGY INC. REPORTS YEAR-END 2021 FINANCIAL AND OPERATING RESULTS AND RESERVES AND PROVIDES OPERATIONS UPDATE AND 2022 GUIDANCE

Calgary, Alberta – March 15, 2022 (TSX:PMT) – Perpetual Energy Inc. (“Perpetual”, or the “Company”) is pleased to release its fourth quarter and year-end 2021 financial and operating results and a summary of the Company’s year-end 2021 reserves as reported by the independent engineering firm McDaniel and Associates Consultants Ltd. (“McDaniel”). A complete copy of Perpetual’s audited consolidated financial statements, Management’s Discussion and Analysis (“MD&A”) and Annual Information Form for the year ended December 31, 2021 are available through the Company’s website at www.perpetualenergyinc.com and SEDAR at www.sedar.com.

Perpetual is also pleased to announce the appointment of Linda Dietsche to the Board of Directors. Linda has extensive finance and accounting experience, including executive leadership in the oil and gas environmental services industry. We look forward to the added depth and expertise that Linda will bring to the Company’s financial stewardship and strategic initiatives.

This release contains certain specified financial measures that are not recognized by GAAP and used by management to evaluate the performance of the Company 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 release also contains forward-looking information. See “Forward Looking Information”. Readers are also referred to the other advisory sections at the end of the MD&A for additional information.

FOURTH QUARTER AND YEAR-END 2021 HIGHLIGHTS

- On July 16, 2021, Perpetual announced the creation of a new wholly owned subsidiary, Rubellite Energy Inc. (“Rubellite”) and the sale to Rubellite of all of Perpetual’s Clearwater lands, wells, roads and related facilities in northeast Alberta (the “Clearwater Assets”). Rubellite acquired the Clearwater Assets for aggregate consideration of \$65.5 million (the “Rubellite Transactions”). The consideration consisted of promissory notes totaling \$59.4 million, which were paid in cash on October 5, 2021 upon closing of Rubellite’s private placement and arrangement warrant financings (the “Rubellite Financings”). Additional consideration included the issuance of 680,485 Rubellite common shares valued at \$1.4 million to Perpetual’s second lien term loan lender, the return of 8.2 million Perpetual common shares exchanged in a plan of arrangement with Perpetual, shareholders of Perpetual and Rubellite (the “Arrangement”) valued at \$2.8 million and issuance of warrants to purchase 4.0 million Rubellite common shares at a price of \$3.00 per share for a period of five years, valued at \$2.0 million.
- On October 5, 2021, \$53.6 million in promissory notes owing to Perpetual from the Rubellite Transactions were repaid in cash by Rubellite. Perpetual paid approximately \$38.5 million in cash and delivered 680,485 Rubellite common shares to extinguish all but \$2.7 million of its second lien term loan and the remainder of the cash proceeds were used to repay the majority of the Company’s outstanding bank debt.
- Results include the Clearwater Assets, which formed part of the Rubellite Transactions, through to September 3, 2021, being the effective date of the completion of the Arrangement.
- Exploration and development capital expenditures⁽¹⁾ totaled \$7.6 million in the fourth quarter of 2021, bringing full year 2021 capital spending to \$19.1 million.

- At Perpetual's 50% working interest East Edson property, the Company participated with its joint venture partner in a six (3.0 net) extended reach horizontal well drilling program targeting the Wilrich formation in the second half of the year. Two (1.0 net) wells were drilled, completed and placed on production at the end of September while an additional four (2.0 net) wells were drilled, completed, frac'd and commenced production in November, bringing throughput at the West Wolf gas plant to full capacity to maximize natural gas and NGL sales through the winter months.
- Three (1.5 net) carried interest wells were previously drilled at East Edson during the year to complete the eight-well carried capital commitment of the purchaser in the East Edson transaction in which Perpetual sold a 50% working interest on April 1, 2020.
- Driven by positive results from the East Edson drilling program, the Company sequentially grew production to 6,359 boe/d in the fourth quarter of 2021 (17% oil and NGL), up 30% from 4,876 boe/d in the third quarter (26% oil and NGL) and 34% higher than the 4,730 boe/d recorded in the fourth quarter of 2020 (31% oil and NGL). Production in 2021 averaged 5,389 boe/d (24% heavy crude oil and NGL), an increase of 8% from 5,012 boe/d (29% heavy crude oil and NGL) in 2020. Production levels steadily increased as 9 (4.5 net) East Edson Wilrich liquids-rich gas wells were progressively brought on production during 2021, partially offset by the disposition of the Clearwater Assets in the third quarter of 2021.
- In 2021, Perpetual spent \$1.7 million on abandonment and reclamation projects (Q4 2021 - \$0.6 million; 2020 - \$1.0 million; Q4 2020 - \$0.9 million) of which \$0.7 million was funded by Alberta's Site Rehabilitation Program ("SRP"). Perpetual abandoned 32 wells, 19 pipelines and 15 reclamation certificates were received from the Alberta Energy Regulator ("AER") which will result in the cessation of associated property tax and surface lease expenses. Subsequent to year end, the Company has received 1 additional reclamation certificates related to projects completed in 2021.
- Adjusted funds flow⁽¹⁾ in the fourth quarter of 2021 was \$8.6 million (\$0.13/share), \$7.4 million higher than the prior year period (Q4 2020 - \$1.2 million). The increase was due primarily to the 34% increase in production and higher realized prices for conventional natural gas, oil and NGLs, combined with lower cash finance expense resulting from repayment of the second lien term loan, partially offset by transaction costs related to the Rubellite Transactions. For the year ended December 31, 2021, adjusted funds flow was \$16.7 million (\$0.27/share), up materially from a negative \$7.8 million in 2020 as the 8% year-over-year increase in production combined with significantly higher commodity prices.
- Net income for the fourth quarter of 2021 was \$5.7 million (\$0.09/share), a significant improvement from the prior year period (Q4 2020 - net loss of \$14.4 million; \$0.24/share). Net income for 2021 was \$81.1 million (\$1.29/share), recovering from a net loss of \$61.6 million in 2020 (\$1.01/share). Net income in 2021 was impacted by aggregate non-cash impairment reversal charges of \$30.6 million (2020 - \$42.5 million impairment) and a \$47.5 million gain on disposition of the Clearwater Assets.
- Total net debt⁽¹⁾ outstanding at year-end 2021 dropped 44% to \$59.3 million, from \$105.0 million at year-end 2020, as a result of the Rubellite Transactions and the extinguishment of the second lien Term Loan.
- In December, the borrowing base on the Company's credit facility was confirmed at \$17.0 million and the maturity date has been extended to May 31, 2023. The maturity of the \$2.7 million second lien Term Loan, has been extended to December 31, 2024. The \$36.6 million 2025 Senior Notes are due January 23, 2025. Perpetual had available liquidity⁽¹⁾ at December 31, 2021 of \$14.6 million, comprised of the \$17 million Credit Facility Borrowing Limit, adjusted for current cash of \$1.1 million less borrowings of \$2.5 million and letters of credit of \$1.0 million.
- Total proved plus probable reserves were 31.6 MMboe at December 31, 2021, a decrease of 11% year-over-year reflecting the sale of the Clearwater Assets. Total future development costs ("FDC") decreased \$37.1 million (33%) to \$75.3 million at year-end 2021, 79% (\$29.3 million) of which related to the Rubellite Transactions. The net present value ("NPV") of Perpetual's total proved plus probable reserves (discounted at 10%), was \$230.5 million (2020 - \$187.8 million). Perpetual's reserve-based net asset value⁽¹⁾ ("NAV") (discounted at 10%) at year-end 2021 increased 80% to \$177.6 million (\$2.79 per share), reflecting the significant debt reduction associated with the sale of the Clearwater Assets combined with the increased reserve value driven primarily by the increase in the independent reserve evaluators' forecast for natural gas, crude oil and NGL prices at year-end 2021 as compared to the prior year, commensurate with forward market prices. See "*Year-End 2021 Reserves*".

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

2022 OUTLOOK

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

Perpetual’s Board of Directors has approved exploration and development capital spending⁽⁴⁾ of up to \$28 million for 2022 to be fully funded from adjusted funds flow.

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

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

Exploration and development capital spending⁽⁴⁾ for Perpetual for full year 2022 is expected to be \$20 to \$28 million, with \$5 to \$7 million to be spent in the first quarter. The table below summarizes anticipated capital spending and drilling activities for Perpetual for the first quarter and full year of 2022.

2022 Exploration and Development Forecast Capital Expenditures⁽⁴⁾

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

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

⁽²⁾ Two (2.0 net) multi-lateral wells to be drilled in the first quarter of 2022 will be monitored for performance prior to drilling up to four 4.0 net) follow-up wells in the second half of 2022.

⁽³⁾ Excludes abandonment and reclamation spending.

⁽⁴⁾ Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled “Non-GAAP and Other Financial Measures” contained within this release.

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

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

2022 Guidance assumptions are as follows:

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

⁽¹⁾ Cash costs represents operating, transportation, interest, G&A and royalties.

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

YEAR-END 2021 RESERVES

Production of 2.0 MMboe and dispositions of 3.4 MMboe were offset by reserve additions of 1.5 MMboe, resulting in an 11% reduction in total Company proved plus probable reserves year-over-year. Perpetual's proved plus probable reserves at year-end 2021 are 31.6 MMboe, comprised of 19% crude oil and NGL (2020 – 35.4 MMboe; 28% crude oil and NGL).

The quality of Perpetual's assets and positive momentum to drive operational and execution excellence in its core operating areas are demonstrated by the highlights below:

- Total proved reserves were 22.3 MMboe at year-end 2021, representing 71% of the Company's proved plus probable reserves (2020 – 71%).
- Proved plus probable producing reserves were 15.2 MMboe at December 31, 2021, representing 48% of total proved plus probable reserves (2020 – 12.4 MMboe; 35%).
- Total proved plus probable reserves in the Mannville district have increased by 12% excluding production despite no capital spending in 2021. Increases in reserves are largely due to extension of the economic limit due to higher prices combined with lower operating costs as higher cost wells have been permanently shut-in.
- Future development costs ("FDC") dropped to \$75.3 million (2020 - \$112.5 million) in the proved plus probable category, a reduction of \$37.2 million. The disposition of the Clearwater Assets was the primary driver, contributing to a reduction of \$29.3 million of FDC in the proved plus probable category. FDC for East Edson was reduced by \$7.3 million to \$54.1 million in the proved plus probable category with the drilling of 9 (4.5 net) carried and working interest wells in 2021, offset by the addition of 4 (1.5 net) new proved plus probable undeveloped drilling locations targeting the Wilrich formation. At year-end 2021, McDaniel recognized proved plus probable undeveloped reserves for 27 (12.7 net) Wilrich horizontal drilling locations. In the Mannville area, \$19.7 million of FDC to drill, complete and tie-in 16 (16.0 net) heavy crude oil drilling locations was recorded.
- Based on the three consultant average price (McDaniel, GLJ, Sproule) forecasts (the "Consultant Average Price Forecast") used by McDaniel, the net present value ("NPV") of Perpetual's total proved plus probable reserves (discounted at 10%) before income tax, was \$230.5 million (2020 – \$187.8 million). The increase related primarily to the material increase in the independent reserve evaluators' forecast for natural gas, crude oil and NGL prices at year-end 2021 as compared to the prior year.
- All abandonment, decommissioning and reclamation obligations are included in the reserve report, consistent with year-end 2020. All reserve well decommissioning obligations as well as the additional costs expected to be incurred to abandon and reclaim non-reserve wells, facilities and pipelines are included.
- Based on the Consultant Average Price Forecast, Perpetual's reserve-based NAV⁽¹⁾ (discounted at 10%) at year-end 2021 is estimated at \$177.6 million (\$2.79 per share) as compared to \$98.8 million (\$1.61 per share) at year-end 2020.

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

Reserves Disclosure

Working interest reserves included herein refer to working interest reserves before royalty deductions. Reserves information is based on an independent reserves evaluation report prepared by McDaniel & Associates Consultants Ltd. ("McDaniel") with an effective date of December 31, 2021 (the "McDaniel Report"), and has been prepared in accordance with National Instrument 51-101 ("NI 51-101") using the Consultant Average Price Forecast. Complete NI 51-101 reserves disclosure including after-tax reserve values, reserves by major property and abandonment costs will be included in Perpetual's Annual Information Form ("AIF"), which, when filed, will be available on the Company's website at www.perpetualenergyinc.com and SEDAR at www.sedar.com. Perpetual's reserves at December 31, 2021 are summarized below:

Working Interest Reserves at December 31, 2021⁽¹⁾

	Light and Medium Crude Oil (Mbbf)	Heavy Oil (Mbbf)	Conventional Natural Gas (MMcf)	Natural Gas Liquids (Mbbf)	Oil Equivalent (Mboe)
Proved Producing	12	1,629	61,676	872	12,793
Proved Non-Producing	–	177	2,621	4	618
Proved Undeveloped	–	865	44,022	689	8,891
Total Proved	12	2,671	108,319	1,565	22,301
Probable Producing	3	331	11,490	170	2,420
Probable Non-Producing	–	44	4,910	39	901
Probable Undeveloped	–	791	28,318	441	5,952
Total Probable	3	1,167	44,719	650	9,273
Total Proved plus Probable	15	3,838	153,038	2,215	31,574

⁽¹⁾ May not add due to rounding.

Total proved reserves at December 31, 2021 account for 71% (2020 – 71%) of total proved plus probable reserves. Proved producing reserves of 12.8 MMboe comprise 57% (2020 – 40%) of total proved reserves. Proved plus probable producing reserves of 15.2 MMboe represent 48% (2020 – 35%) of total proved plus probable reserves.

Reserves Reconciliation

Working Interest Reserves⁽¹⁾

Barrels of Oil Equivalent (Mboe)	Proved	Probable	Proved and Probable
Opening Balance, December 31, 2020	25,050	10,386	35,436
Extensions and Improved Recovery	605	(605)	–
Discoveries	–	–	–
Technical Revisions	(763)	(987)	(1,749)
Acquisitions	740	1,733	2,474
Dispositions	(2,020)	(1,396)	(3,415)
Production	(1,958)	–	(1,958)
Economic Factors	646	141	787
Closing Balance, December 31, 2021	22,301	9,273	31,574

⁽¹⁾ May not add due to rounding.

Dispositions included the Clearwater Asset disposition to Rubellite that was completed in 2021 and a small disposition in the Mannville Area.

Lands acquired in East Edson area added four additional locations and provided revisions to three previously recognized locations to extend their length thereby increasing their booked reserves. As well, reserve recoveries per well assigned to 8 (3.6 net) undeveloped locations were reduced slightly in the proved and probable undeveloped categories following updated type curve analysis, resulting in the negative technical revision in the conventional natural gas and natural gas liquids categories.

An in depth review of well performance and operating costs in the Mannville heavy oil property identified wells with high water cuts and high individual well operating costs. The decision to leave these wells shut-in resulted in a heavy crude oil negative technical revision but has had a positive impact in improved per barrel operating costs for the property.

The table below summarizes the FDC estimated by McDaniel by play type to bring proved plus probable non-producing and undeveloped reserves to production.

Future Development Capital⁽¹⁾

(\$ millions)	2022	2023	2024	2025	2026	Remainder	Total
Eastern Alberta Shallow Gas	–	0.3	0.3	0.3	0.6	–	1.6
Mannville Heavy Oil	6.7	3.8	4.4	4.8	–	–	19.7
Clearwater	–	–	–	–	–	–	–
East Edson Wilrich	15.5	12.3	7.5	12.8	5.6	0.4	54.1
Total	22.2	16.4	12.2	17.9	6.2	0.4	75.3

⁽¹⁾ May not add due to rounding.

The McDaniel Report estimates that FDC of \$75.3 million will be required over the life of the Company's proved plus probable reserves. Proved plus probable reserve forecast FDC have decreased by \$37.1 million (33%) from \$112.5 million at December 31, 2020.

The most significant reduction in FDC was a result of the disposition of the Clearwater Assets with a reduction of \$29.3 million in the proved plus probable undeveloped reserve category.

FDC for East Edson was reduced by \$7.3 million to \$54.1 million in the proved plus probable category with the drilling of nine (4.5 net) carried and working interest wells in 2021, offset by the addition of four (1.5 net) new proved plus probable undeveloped drilling locations targeting the Wilrich formation. At year-end 2021, McDaniel recognized proved plus probable undeveloped reserves for 27 (12.7 net) Wilrich horizontal drilling locations.

In the Mannville area, \$19.7 million of FDC to drill, complete and tie-in 16 (16.0 net) heavy crude oil drilling locations was recorded. This is down from 17 (17.0 net) at year end 2020. Future capital costs also include recompletion of 14 conventional natural gas wells included in Perpetual's proved plus probable reserves.

RESERVE LIFE INDEX

Perpetual's proved plus probable reserves to production ratio, also referred to as reserve life index ("RLI"), was 12.2 years at year-end 2021, while the proved RLI was 9.1 years, based upon the 2022 production estimates in the McDaniel Report. The following table summarizes Perpetual's historical calculated RLI.

Reserve Life Index⁽¹⁾

Year-end	2021	2020	2019	2018	2017
Total Proved	9.1	10.9	13.4	13.1	9.1
Total Proved plus Probable	12.2	14.5	21.5	19.9	13.2

⁽¹⁾ Calculated as year-end reserves divided by year one production estimate from the McDaniel Report.

NET PRESENT VALUE OF RESERVES SUMMARY

Perpetual's heavy crude oil, conventional natural gas, and NGL reserves were evaluated by McDaniel using the Consultant Average Price Forecast effective January 1, 2022 and include the forecasted impact of the Company's market diversification contract, but prior to provision for financial oil and natural gas price hedges, foreign exchange contracts, income taxes, interest, debt service charges and general and administrative expenses. The following table summarizes the NPV of future revenue from reserves at December 31, 2021, assuming various discount rates:

NPV of Reserves, before income tax⁽¹⁾⁽²⁾⁽³⁾

<i>(\$ millions except as noted)</i>	Undiscounted	5%	10%	15%	Discounted at 20%	Unit Value Discounted at 10%/Year (\$/boe)⁽⁴⁾
Proved Producing	112	101	88	77	69	8.67
Proved Non-Producing	4	4	3	3	2	5.89
Proved Undeveloped	134	90	66	50	39	8.03
Total Proved	251	195	157	130	111	8.31
Probable Producing	52	31	22	17	13	10.01
Probable Non-Producing	10	6	4	3	2	5.45
Probable Undeveloped	113	71	48	34	26	8.94
Total Probable	176	108	74	54	42	8.89
Total Proved plus Probable	426	304	230	184	153	8.49

⁽¹⁾ January 1, 2022 Consultant Average price forecast

⁽²⁾ Inclusive of the East Edson royalty and a further reduction for the retained East Edson royalty obligation by Perpetual through December 31, 2022 as part of the East Edson Transaction, asset retirement obligations for sites not assigned reserves, and natural gas market diversification contracts.

⁽³⁾ May not add due to rounding.

⁽⁴⁾ The unit values are based on net reserve volumes.

McDaniel's NPV10 estimate of Perpetual's total proved plus probable reserves at year-end 2021 was \$230.5 million, up 23% from \$187.8 million at year-end 2020. The increase related primarily to the material increase in the independent reserve evaluators' forecast for crude oil prices at year-end 2021 as compared to the prior year. At a 10% discount factor, total proved reserves account for 68% (2020 – 63%) of the proved plus probable value. Proved plus probable producing reserves represent 47% (2020 – 24%) of the total proved plus probable value (discounted at 10%) as obligations for non-producing wells, facilities and pipelines and forecast corporate marketing adjustments reduce the value of the developed producing reserves.

FAIR MARKET VALUE OF UNDEVELOPED LAND

Perpetual held 163,953 net undeveloped acres of land as at December 31, 2021, including 84,002 net undeveloped acres of oil sands leases. Undeveloped acres refers to land where there are not any existing wells within the rights associated with those lands and includes 56,198 net acres of undeveloped land assigned value by an independent third party at year end 2021. The estimate of the fair market value of the Company's undeveloped acreage was prepared by Seaton-Jordan & Associates Ltd. ("Seaton-Jordan") and is based on past Crown land sale activity, adjusted for tenure and other considerations. No undeveloped land value was assigned where proved and probable undeveloped reserves have been booked. The fair market value of Perpetual's undeveloped land at year-end 2021 is estimated by Seaton Jordan at \$6.4 million.

NET ASSET VALUE

The following NAV table shows what is normally referred to as a “produce-out” NAV calculation under which the Company’s reserves would be produced at forecast future prices and costs. The value is a snapshot in time and is based on various assumptions including commodity prices and foreign exchange rates that vary over time. It should not be assumed that the NAV represents the fair market value of Perpetual’s shares. The calculations below do not reflect the value of the Company’s prospect inventory to the extent that the prospects are not recognized within the NI 51-101 compliant reserve assessment, except as they are valued through the estimate of the fair market value of undeveloped land.

Pre-tax NAV at December 31, 2021⁽¹⁾⁽⁶⁾

(\$ millions, except as noted)	Undiscounted	Discounted at		
		5%	10%	15%
Total Proved plus Probable Reserves ⁽²⁾	426.4	303.6	230.5	184.3
Fair market value of undeveloped lands ⁽³⁾	6.4	6.4	6.4	6.4
Bank debt, net of working capital ⁽¹⁾	(18.6)	(18.6)	(18.6)	(18.6)
Term loan ⁽⁴⁾	(2.7)	(2.7)	(2.7)	(2.7)
AIMCo contingent payments ⁽⁵⁾	(1.4)	(1.4)	(1.4)	(1.4)
Senior notes ⁽⁴⁾	(36.6)	(36.6)	(36.6)	(36.6)
NAV	378.7	255.6	177.6	136.6
Common shares outstanding (million) ⁽⁶⁾	63.6	63.6	63.6	63.6
NAV per share (\$/share)⁽⁶⁾⁽⁷⁾	5.88	3.94	2.79	2.07

⁽¹⁾ Financial information is per Perpetual’s 2021 audited consolidated financial statements.

⁽²⁾ Reserve values per McDaniel Report as at December 31, 2021, including adjustments for natural gas market diversification contracts. All abandonment and reclamation obligations, including future abandonment and reclamation costs for pipelines and facilities and non-reserve wells, are included in the McDaniel Report.

⁽³⁾ Independent third-party estimate; excludes undeveloped land in West Central Alberta with reserves assigned.

⁽⁴⁾ Measured at principal amount.

⁽⁵⁾ Estimated fair value of contingent liability based on forward market commodity prices.

⁽⁶⁾ Shares outstanding are net of shares held in trust.

⁽⁷⁾ Non-GAAP measure, Non-GAAP ratio or supplementary financial measure that does not have any standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other entities. Refer to the section entitled “Non-GAAP and Other Financial Measures” contained within this release.

The above evaluation includes FDC expectations required to bring undeveloped reserves on production, as recognized by McDaniel, that meet the criteria for booking under NI 51-101. The fair market value of undeveloped land does not reflect the value of the Company’s extensive prospect inventory which is anticipated to be converted into reserves and production over time through future capital investment.

Financial and Operating Highlights

	Three months ended December 31		Year ended December 31	
<i>(\$Cdn thousands, except volume and per share amounts)</i>	2021	2020	2021	2020
Financial				
Oil and natural gas revenue	21,449	8,178	60,814	29,486
Net income (loss)	5,669	14,443	81,121	(61,597)
Per share – basic ⁽²⁾	0.09	0.24	1.29	(1.01)
Per share – diluted ⁽³⁾	0.08	0.24	1.16	(1.01)
Cash flow from (used in) operating activities	1,624	(1,104)	12,815	(9,533)
Per share ⁽¹⁾⁽²⁾	0.03	(0.02)	0.20	(0.16)
Adjusted funds flow ⁽¹⁾	8,585	1,240	16,746	(7,787)
Per share ⁽²⁾	0.13	0.02	0.27	(0.13)
Revolving bank debt	2,487	17,495	2,487	17,495
Senior notes, principal amount	36,582	33,580	36,582	33,580
Term loan, principal amount	2,671	46,823	2,671	46,823
Other liability	1,387	–	1,387	–
Net working capital deficiency ⁽¹⁾	16,143	7,099	16,143	7,099
Total net debt ⁽¹⁾	59,270	104,997	59,270	104,997
Capital expenditures				
Exploration and development ⁽¹⁾	7,558	466	19,062	5,939
Net proceeds on dispositions, net of cash disposed	53,407	–	49,549	27,754
Common shares outstanding (thousands)				
Weighted average – basic	63,853	61,266	62,969	61,013
Weighted average – diluted	70,873	61,266	69,989	61,013
Operating				
Daily average production				
Conventional natural gas (MMcf/d)	31.5	19.5	24.6	21.5
Heavy crude oil (bbl/d)	714	1,241	963	1,082
NGL (bbl/d)	395	237	331	346
Total (boe/d) ⁽⁶⁾	6,359	4,730	5,389	5,012
Average prices				
Realized natural gas price (\$/Mcf) ⁽⁵⁾	4.80	1.46	3.15	0.85
Realized oil price (\$/bbl) ⁽⁵⁾	73.96	52.60	57.36	49.37
Realized NGL price (\$/bbl) ⁽⁵⁾	73.44	38.03	63.24	31.40
Wells drilled				
Conventional natural gas – gross (net)	4 (2.0)	3 (1.5)	9 (4.5)	5 (2.5)
Heavy crude oil – gross (net)	– (–)	– (–)	5 (4.0)	4 (4.0)
Total – gross (net)	4 (2.0)	– (–)	14 (8.5)	9 (6.5)

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

⁽²⁾ Based on weighted average basic common shares outstanding for the period.

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

⁽⁴⁾ Realized natural gas, oil, and NGL prices included physical forward sales contracts for which delivery was made during the reporting period, along with realized gains and losses on financial derivatives and foreign exchange contracts.

⁽⁵⁾ Please refer to "Boe volume conversions" below.

About Perpetual

Perpetual is an oil and natural gas exploration, production and marketing company headquartered in Calgary, Alberta. Perpetual owns a diversified asset portfolio, including liquids-rich conventional natural gas assets in the deep basin of West Central Alberta, heavy crude oil and shallow conventional natural gas in Eastern Alberta and undeveloped bitumen leases in Northern Alberta. Additional information on Perpetual can be accessed at www.sedar.com or from the Company's website at www.perpetualenergyinc.com.

The Toronto Stock Exchange has neither approved nor disapproved the information contained herein.

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Susan L. Riddell Rose President and Chief Executive Officer
Ryan A. Shay Vice President Finance and Chief Financial Officer

ADVISORIES

RESERVES DATA AND OTHER METRICS

There are numerous uncertainties inherent in estimating quantities of crude oil, natural gas and NGL reserves and the future cash flows attributed to such reserves. The reserve and associated cash flow information set forth above are estimates only. In general, estimates of economically recoverable crude oil, natural gas and NGL reserves and the future net cash flows therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserve recovery, timing and amount of capital expenditures, marketability of oil and natural gas, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially. For those reasons, estimates of the economically recoverable crude oil, NGL and natural gas reserves attributable to any particular group of properties, classification of such reserves based on risk of recovery and estimates of future net revenues associated with reserves prepared by different engineers, or by the same engineers at different times, may vary. The Company's actual production, revenues, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations could be material.

All evaluations and reviews of future net revenue are stated prior to any provisions for interest costs or general and administrative costs and after the deduction of estimated future capital expenditures for wells to which reserves have been assigned. The after-tax net present value of the Company's oil and gas properties reflects the tax burden on the properties on a stand-alone basis and utilizes the Company's tax pools. It does not consider the corporate tax situation, or tax planning. It does not provide an estimate of the after-tax value of the Company, which may be significantly different. The Company's financial statements and the MD&A should be consulted for information at the level of the Company.

The estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to effects of aggregations. The estimated values of future net revenue disclosed in this news release do not represent fair market value. There is no assurance that the forecast prices and cost assumptions used in the reserve evaluations will be attained and variances could be material.

The reserve data provided in this news release presents only a portion of the disclosure required under NI 51-101. All of the required information will be contained in the Company's Annual Information Form for the year ended December 31, 2021, which will be filed on SEDAR (accessible at www.sedar.com) on or before March 31, 2022.

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

investors with measures to compare Perpetual's operations over time. Readers are cautioned that the information provided by these metrics, or that can be derived from the metrics presented in this new release, should not be relied upon for investment or other purposes.

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

VOLUME CONVERSIONS

Barrel of oil equivalent ("boe") may be misleading, particularly if used in isolation. In accordance with 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 news release.

ABBREVIATIONS

The following abbreviations used in this news release have the meanings set forth below:

bbl	barrels
bbl/d	barrels per day
boe	barrels of oil equivalent
MMboe	million barrels of oil equivalent
Mcf	thousand cubic feet
MMcf	million cubic feet
MMBtu	million British Thermal Units
GJ	gigajoules

NON-GAAP AND OTHER FINANCIAL MEASURES

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

Adjusted funds flow: Adjusted funds flow is calculated based on net cash flows from operating activities, excluding changes in non-cash working capital and expenditures on decommissioning obligations since the Company 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 Perpetual's operating areas. Expenditures on decommissioning obligations are managed through the capital budgeting process which considers available adjusted funds flow. 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 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 statements of cash flows, to adjusted funds flow and adjusted funds flow:

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

FORWARD-LOOKING INFORMATION

Certain information in this news release 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; expectations as to drilling activity plans 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 news release. In particular and without limitation of the foregoing, material factors or assumptions on which the forward-looking information in this news release 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 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 military actions in Ukraine 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.