

NEWS RELEASE

PERPETUAL ENERGY INC. REPORTS FIRST QUARTER 2021 FINANCIAL AND OPERATING RESULTS

Calgary, Alberta – May 4, 2021 (TSX:PMT) – Perpetual Energy Inc. ("Perpetual", or the "Company") is pleased to release its first quarter 2021 financial and operating results. Select financial and operational information is outlined below, and should be read in conjunction with Perpetual's unaudited condensed interim consolidated financial statements and related Management's Discussion and Analysis ("MD&A") for the three months ended March 31, 2021, which are available through the Company's website at www.perpetualenergyinc.com and SEDAR at www.sedar.com.

FIRST QUARTER 2021 HIGHLIGHTS

- Production of 5,211 boe/d (73% conventional natural gas) was 10% higher than the fourth quarter of 2020. Perpetual had previously disposed of a 50% working interest in the East Edson liquids-rich natural gas property in West Central Alberta, effective April 1, 2020. Production averaged 3,662 boe/d in the second quarter of 2020, representing the starting point from which Perpetual has sequentially grown production quarter-over-quarter. Relative to the second quarter of 2020, production has increased 42%, reflecting the commencement of production from seven (3.5 net) new wells at East Edson and the restart of heavy crude oil production which was shut-in late in the first quarter of 2020 in response to extremely low oil prices.
- Adjusted funds flow of \$2.5 million, more than two times higher than \$1.2 million recorded in the fourth quarter of 2020.
- Cash flows from operating activities of \$1.7 million, up \$2.8 million from the fourth quarter of 2020, reflecting higher realized prices for all products in combination with lower cash costs.
- Cash costs of \$7.2 million, down \$0.6 million from the fourth quarter of 2020. Lower cash costs reflect the payment of Term Loan and Senior Note interest in-kind rather than in cash, increasing the principal amount outstanding by \$0.9 million and \$2.1 million, respectively.
- Operating netbacks at West Central increased to \$10.88/boe from \$4.50/boe in the fourth quarter of 2020, reflecting higher natural gas prices and the impact of growing production across a largely fixed operating cost base.
- Operating netbacks in Eastern Alberta increased to \$13.36/boe from \$8.16/boe in the fourth quarter of 2020, reflecting the strengthening of Western Canadian Select ("WCS") benchmark oil prices.
- Exploration and development spending was nominal, consistent with guidance released on February 24, 2021 with the Company's 2020 year-end results.
- Perpetual continued its active abandonment and reclamation program, receiving 10 reclamation certificates in the first quarter of 2021 related to project work completed in 2020.
- Net debt of \$107.4 million, up \$2.4 million (2%) from December 31, 2020.
- Perpetual had available liquidity at March 31, 2021 of \$1.9 million, comprised of the \$20 million Credit Facility Borrowing Limit, less current borrowings and letters of credit of \$17.2 million and \$0.9 million, respectively.

2021 OUTLOOK

Perpetual's reserve-based Credit Facility maturity was recently extended to June 16, 2021, and its Term Loan matures on June 30, 2021. To preserve liquidity, the Company will continue to defer capital spending until the Credit Facility and Term Loan have been refinanced or maturities extended. The Company will issue its 2021 Outlook once capital spending plans have been approved by the Board of Directors. At East Edson, the eighth and final carried interest well is expected to be drilled, completed and tied-in by the end of the third quarter of 2021.

Production in the second quarter is expected to average 4,900 to 5,100 boe/d, reflecting production from the two (1.0 net) East Edson earning wells placed on stream in March, offset by natural declines.

Total abandonment and reclamation expenditures of up to \$2.4 million are forecast in 2021, with up to \$1.2 million to be funded through Alberta's Site Rehabilitation Program ("SRP"). The remaining \$1.2 million will more than satisfy the Company's area-based closure spending requirements of \$1.0 million.

CFO SUCCESSION

Effective today, Ryan Shay has been appointed Vice President Finance and Chief Financial Officer ("CFO") of the Company, succeeding Mark Schweitzer. Mr. Schweitzer will remain an employee of Perpetual until his planned retirement in June.

"We thank Mark for his exceptional leadership and strategic insights that have positioned Perpetual for future success. Mark's contributions to Perpetual have been invaluable and while he will be missed, we will celebrate with him in his upcoming retirement." said President and CEO Sue Riddell Rose. "As part of our regular succession planning, we are pleased to have Ryan joining the Perpetual executive team. With his experience as a Perpetual director since 2017 we anticipate a seamless transition."

Mr. Shay brings more than 25 years of industry experience and was most recently Managing Director, Head of Investment Banking at Cormark Securities. Mr. Shay holds Chartered Professional Accountant – Chartered Accountant and Chartered Financial Analyst designations, and a Bachelor of Commerce in Accounting from the University of Saskatchewan.

| Financial and Operating Highlights | Three months ended March 31, | | |
|---|------------------------------|----------|--------|
| (\$Cdn thousands except volume and per share amounts) | 2021 | 2020 | Change |
| Financial | | | |
| Oil and natural gas revenue | 11,536 | 10,497 | 10% |
| Net loss | (2,706) | (59,718) | 95% |
| Per share – basic and diluted ⁽²⁾ | (0.04) | (0.98) | 96% |
| Cash flow from (used in) operating activities | 1,682 | (3,114) | 154% |
| Adjusted funds flow ⁽¹⁾ | 2,544 | (3,601) | 171% |
| Per share – basic and diluted ⁽¹⁾⁽²⁾ | 0.04 | (0.06) | 167% |
| Total assets | 135,220 | 173,241 | (22%) |
| Revolving bank debt | 17,224 | 39,145 | (56%) |
| Term loan, principal amount | 47,771 | 45,000 | 6% |
| Senior Notes, principal amount | 35,637 | 33,580 | 6% |
| Adjusted working capital deficiency ⁽¹⁾ | 6,738 | 10,925 | (38%) |
| Net debt ⁽¹⁾ | 107,370 | 128,650 | (17%) |
| Capital expenditures | 3 | 5,233 | (100%) |
| Net payments on acquisitions and dispositions | 469 | _ | 100% |
| Net capital expenditures | 472 | 5,233 | (91%) |
| Common shares (thousands) ⁽³⁾ | | | |
| End of period | 62,530 | 60,717 | 3% |
| Weighted average - basic and diluted | 61,603 | 60,674 | 2% |
| Operating | | | |
| Daily average production | | | |
| Conventional natural gas (MMcf/d) | 22.9 | 33.3 | (31%) |
| Heavy crude oil (bbl/d) | 1,097 | 1,320 | (17%) |
| NGL (<i>bbl/d</i>) | 294 | 606 | (51%) |
| Total (<i>boe/d</i>) ⁽⁵⁾ | 5,211 | 7,479 | (30%) |
| Average prices | | | |
| Realized natural gas price (\$/Mcf)(4) | 2.25 | 1.16 | 94% |
| Realized oil price (\$/bbl)(4) | 40.85 | 32.60 | 25% |
| Realized NGL price (\$/bbl)(4) | 56.03 | 36.48 | 54% |
| Wells drilled – gross (net) | | | |
| Conventional natural gas | 2 (1.0) | - (-) | |
| Heavy crude oil | – (–) | 4 (4.0) | |
| Total | 2 (1.0) | 4 (4.0) | |

⁽¹⁾ These are non-GAAP measures. Please refer to "Non-GAAP Measures" at the end of this news release.

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

⁽³⁾ All common shares are net of shares held in trust (Q1 2021 – 0.6 million; Q1 2020 – 0.6 million). See "Note 14 to the condensed interim consolidated financial statements".

⁽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.

ADDITIONAL INFORMATION

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 Corporation'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

BOE 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 news release.

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

bbls barrels

boe barrels of oil equivalent
Mcf thousand cubic feet
MMcf million cubic feet

Non-GAAP Measures

This news release contains the terms "adjusted funds flow", "adjusted funds flow per share", "adjusted funds flow per boe", "available liquidity", "cash costs", "net working capital deficiency", "net debt", "net bank debt", "net debt to adjusted funds flow ratio", "operating netback", "realized revenue" and "enterprise value" which do not have standardized meanings prescribed by GAAP. Management believes that in addition to net income (loss) and net cash flows from (used in) operating activities as defined by GAAP, these terms are useful supplemental measures to evaluate operating performance. Users are cautioned however that these measures should not be construed as an alternative to net income (loss) or net cash flows from operating activities determined in accordance with GAAP as an indication of Perpetual's performance and may not be comparable with the calculation of similar measurements by other entities.

For additional reader advisories in regards to non-GAAP financial measures, including Perpetual's method of calculation and reconciliation of these terms to their corresponding GAAP measures, see the section entitled "Non-GAAP Measures" within the Company's MD&A filed on SEDAR.

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. 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.

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

Cash costs: Cash costs are comprised of royalties, production and operating, transportation, general and administrative, and cash finance expense. 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.

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

Operating netback: Operating netback is calculated by deducting royalties, production and operating expenses, and transportation costs from realized revenue. Operating netback is also calculated on a per boe basis using production sold in the period. Operating netback on a per boe basis can vary significantly for each of the Company's operating areas. Perpetual considers operating netback to be an important performance measure as it demonstrates its profitability relative to current commodity prices.

Net working capital deficiency: Net working capital deficiency 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, second lien term loan (the "Term Loan"), current portion of royalty obligations, current portion of lease liabilities, and current portion of decommissioning obligations.

Net bank debt, net debt, and net debt to adjusted funds flow ratio: Net bank debt is measured as current and long-term revolving bank debt, including the net working capital deficiency. Net debt includes the carrying value of net bank debt, 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.

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

Forward-Looking Information and Statements

Certain information and statements contained in this news release including management's assessment of future plans and operations, the ability to extend the Credit Facility or to refinance its Term Loan on favorable terms, and including the information contained under the headings "2021 Outlook" may constitute forward-looking information and statements within the meaning of applicable securities laws. This information and these statements relate to future events or to future performance. All statements other than statements of historical fact may be forward-looking information and statements. The use of any of the words "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe", "outlook", "guidance", "objective", "plans", "intends", "targeting", "could", "potential", "strategy" and any similar expressions are intended to identify forward-looking information and statements.

Various assumptions were used in drawing the conclusions or making the forecasts and projections in the forward-looking information contained in this news release, which assumptions are based on management's analysis of historical trends, experience, current conditions and expected future developments pertaining to Perpetual and the industry in which it operates as well as certain assumptions regarding the matters outlined above. Forward-looking information is based on current expectations, estimates and projections that involve a number of known and unknown risks, including, without limitation, the impact of COVID-19 as further described below, which could cause actual results to vary and in some instances to differ materially from those anticipated by Perpetual and described in the forward-looking information contained in this news release. In particular and without limitation of the foregoing, the outbreak of COVID-19 has had a negative impact on global financial conditions. Perpetual cannot accurately predict the impact that COVID-19 will have on its ability to execute its business plans in response to government public health efforts to contain COVID-19 and to obtain financing or third parties' ability to meet their contractual obligations with Perpetual including due to uncertainties relating to the ultimate geographic spread of the virus, the severity of the disease, the duration of the outbreak, and the length of travel and quarantine restrictions imposed by governments of affected jurisdictions; and the current and future demand for oil and gas. In the event that the prevalence of COVID-19 continues to increase (or fears in respect of COVID-19 continue to increase), governments may increase regulations and restrictions regarding the flow of labour or products, and travel bans, and Perpetual's operations, service providers and customers, and ability to advance its business plan or carry out its top strategic priorities, could be

adversely affected. In particular, should any employees, consultants or other service providers of Perpetual become infected with COVID-19 or similar pathogens, it could have a material negative impact on Perpetual's operations, prospects, business, financial condition and results of operations. Undue reliance should not be placed on forward-looking information, which is not a guarantee of performance and is subject to a number of risks or uncertainties, including without limitation those described herein and under "Risk Factors" in Perpetual's Annual Information Form and MD&A for the year ended December 31, 2020 and in other reports on file with Canadian securities regulatory authorities which may be accessed through the SEDAR website (www.sedar.com) and at Perpetual's website (www.perpetualenergyinc.com).

The forward-looking information and statements contained in this news release reflect several material factors, expectations and assumptions of the Corporation including, without limitation, that Perpetual will conduct its operations in a manner consistent with its expectations and, where applicable, consistent with past practice; the general continuance of current or, where applicable, assumed industry conditions; the ability of Perpetual to obtain equipment, services, and supplies in a timely manner to carry out its activities; the accuracy of the estimates of Perpetual's reserve and resource volumes; certain commodity price and other cost assumptions; the continued availability of adequate debt and/or equity financing and adjusted funds flow to fund the Corporation's capital and operating requirements as needed; and the extent of Perpetual's liabilities. The Corporation believes the material factors, expectations and assumptions reflected in the forward-looking information and statements are reasonable, but no assurance can be given that these factors, expectations and assumptions will prove to be correct.

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.