

Our reserve estimates and the after-tax PV-10 measure, or standardized measure of discounted future net cash flows relating to proved natural gas, oil and NGL reserve quantities, are highly dependent upon the respective commodity price used in our reserve and after-tax PV-10 calculations.

- Our reserves decreased 6% in 2020, compared to 2019, primarily due to a decrease in commodity pricing, partially offset by the reserves acquired from Montage.
- Our after-tax PV-10 value decreased in 2020 compared to 2019 as lower reserve levels resulted primarily from a decrease in SEC 12-month backward-looking commodity prices.
- We are the designated operator of approximately 97% of our reserves, based on the pre-tax PV-10 value of our proved developed producing reserves, and our reserve life index was approximately 11.3 years at year-end 2020, using an estimate of full year production from our recently acquired Montage properties.

The following table presents the PV-10 value of our reported year-end 2020 reserves balance using SEC 12-month backward-looking prices and the 12-month forward-looking strip prices as of January 4, 2021:

	2020 Year-End	
	SEC Pricing <sup>(1)</sup>	Strip Pricing
Natural gas price (per MMBtu)	\$ 1.98	\$ 2.70
WTI oil price (per Bbl)	\$ 39.57	\$ 47.67
NGL price (per Bbl)	\$ 10.27	\$ 11.82
Proved reserves after-tax PV-10 (in billions)	\$ 1.85	\$ 5.85

(1) Adjusted for market differentials.

The difference in after-tax PV-10 and pre-tax PV-10 (a non-GAAP measure which is reconciled in the 2020 Proved Reserves by Category and Summary Operating Data table below) is the discounted value of future income taxes on the estimated cash flows. Our existing tax attributes, including net operating losses and remaining depreciable tax basis related to our natural gas and oil properties, more than offset our future net operating income, resulting in no tax effect to our PV-10 calculation for the year ended December 31, 2020.

We believe that the pre-tax PV-10 value of the estimated cash flows related to our estimated proved reserves is a useful supplemental disclosure to the after-tax PV-10 value. Pre-tax PV-10 is based on prices, costs and discount factors that are comparable from company to company, while the after-tax PV-10 is dependent on the unique tax situation of each individual company. We understand that securities analysts use pre-tax PV-10 as one measure of the value of a company's current proved reserves and to compare relative values among peer companies without regard to income taxes. We refer you to "[Supplemental Oil and Gas Disclosures](#)" in Item 8 of Part II of this Annual Report for a discussion of our standardized measure of discounted future cash flows related to our proved natural gas, oil and NGL reserves, to the risk factor "Our proved natural gas, oil and NGL reserves are estimates that include uncertainties. Any material change to these uncertainties or underlying assumptions could cause the quantities and net present value of our reserves to be overstated or understated" in [Item 1A](#) of Part I of this Annual Report, and to "[Management's Discussion and Analysis of Financial Condition and Results of Operations – Cautionary Statement about Forward-Looking Statements](#)" in Item 7 of Part II of this Annual Report for a discussion of the risks inherent in utilization of standardized measures and estimated reserve data.

Lower natural gas, oil and NGL prices reduce the value of our assets, both by a direct reduction in what the production could be sold for and by making some properties uneconomic, resulting in decreases to the overall value of our reserves and potential non-cash impairment charges to earnings. Further non-cash impairments in future periods could occur if the trailing 12-month commodity prices decrease as compared to the average used in prior periods.