West Virginia Code of State Rules
Title 110. State Tax Department
Legislative Rule (Ser. 1j)
Series 1j. Valuation of Producing and Reserve Oil, Natural Gas Liquids, and Natural
Gas for AD Valorem Property Tax Purposes

W. Va. Code St. R. § 110-1J-5 § 110-1J-5. Yield Capitalization Model.

<Emergency action effective July 1, 2022.>

5.1 *Yield capitalization model.* -- A yield capitalization model shall be developed for each producing property. The model shall use as a beginning point and include for each producing well, the gross receipts (both working interest and royalty interest) based upon the total production amounts from the most recent production year preceding the July 1 assessment date. This total gross proceeds amount will be apportioned to the working interest model and royalty interest model.

5.2. The total amount determined under section 5.1 shall be apportioned to the working interest and to the royalty interest:

5.2.1. *Working interest model.* -- In order to determine the working interest gross receipts income series, the total gross receipts referenced in section 5.1 of this section heading shall be reduced by the actual annual operating expenses as set forth in this rule to yield a net working interest income series. The net working interest income series shall be discounted by applying, on an annual basis, a decline rate and a mid-year life Inwood factor reflecting the capitalization rate referenced in section 5.4 of this section heading. The total of the annual discounted income stream shall be the market value estimate for the working interest of the producing oil or natural gas wells, including personal property. The minimum appraised value for any producing well will not be less than the machinery and equipment value. This minimum rate will not apply to home-use only wells or farm-use wells.

5.2.2. *Royalty interest model.* -- In order to determine the royalty interest gross receipts income series, the total gross receipts referenced in section 5.1 of this section heading shall be discounted by applying, on an annual basis, a decline rate and a mid-year life Inwood factor reflecting the capitalization rate referenced in section 5.4 of this section heading. This amount will then be proportionally distributed to each royalty owner based on the royalty percentage received during the most recent calendar year to the July 1 assessment date. The summation of the annual discounted income streams shall be the market value estimate for the royalty interest of the producing oil or natural gas well for an area of up to one hundred twenty-five (125) acres per producing natural gas wells and up to forty (40) acres per producing oil wells.

5.3. *Decline Rate.* -- The net working interest gross receipts and the net royalty interest gross receipts will be multiplied by the applicable decline rates. The amounts determined under section 5.2 of this section heading will be adjusted by an appropriate production decline rate of 18 months that is derived

and applied based upon the age of the well and typical of the producing area and strata. Gross receipts and production amounts shall then be proportionately reduced by application of the appropriate annual rate to yield a declining terminal income series typical of the producing area and strata. Where the well did not produce during the entire calendar year, the gross receipts and royalties paid will be annualized prior to the process of applying a yield capitalization procedure. This net amount is then multiplied by the applicable capitalization rate. Nothing shall prohibit a taxpayer from supplying information concerning additional actual gross receipts and actual operating expense information that may be supplemented or used in lieu of the annualization calculations.

5.4. *Capitalization Rate.* -- A single state-wide capitalization rate for oil, natural gas, and natural gas liquids shall be determined annually. The declining terminal series for the working interest and royalty interest, for each well, as set forth in section 5.3 of this section heading will be multiplied by the capitalization rate in order to determine the value of the well for property tax purposes.

5.4.1. Oil and gas reserves that are actively being produced represent depleting assets. The valuation of the reserves must take the rate of depletion into account by calculating the present worth of the likely future income related to the ongoing production. The present worth of the future income stream is calculated by discounting the annual amounts of production income estimated. The Tax Department will use an annual calculation to be applied when valuing natural gas and oil producing properties based on a "Build-up-Model" of the Weighted Average Cost of Capital (WACC). The WACC provides an estimate of the overall expected rate of return required by industry equity participants and financial investors to continue to invest in the relevant ongoing industry, and in comparison to other investment options. The rate is converted to a table of annual multipliers known as the Inwood Table.

5.4.2. On an annual basis, the Tax Commissioner will use published information as described below to determine the proportion of equity and debt generally used by the industry to support its ongoing exploration, development, and production activities. The WACC is developed annually by the Tax Commissioner using the following factors:

5.4.2.a. Equity Portion:

5.4.2.a.1. Risk Free Rate: Also known as the "safe rate" represents the rate of return on a low-risk investment. Examples of investments with safe rates include U.S. Treasury securities and investment grade bonds.

5.4.2.a.2. Equity Risk Premium: This factor represents the historical premium over the risk-free rate commanded by market participants to invest in the overall or broad portfolio of marketable securities. This premium is added to the risk-free rate.

5.4.2.a.3. Industry Risk Adjustment: This adjustment is related to the difference between the expectations of one specific industry to those of the overall market. It is typically measured as "beta." It is a measure of the risk inherent in an investment that cannot be diversified away in a portfolio. The beta coefficient is mathematically converted to a rate premium and added to the risk-free rate.

5.4.2.a.4. Size Premium: This premium is based on research which shows that, generally, there is a relationship between the size of a company or an industry and the expected returns on investment. Smaller companies and industries, especially less established ones, generally command higher rates of returns. This risk is added to the risk-free rate.

5.4.2.a.5. Real Estate Tax and Management Component: This factor represents the average cost to maintain the investment as real estate. It is based on an annual survey of costs as a percentage of net income. The factor is added to the above risk components.

5.4.2.b. Debt Portion:

5.4.2.b.1. Borrowing Rate: Based on surveys of published bank and bond rates applicable to the industry.

5.4.2.b.2. Income Tax Rate: Based on surveys of published effective tax rates applicable to the industry. This rate is used to modify the debt rate.

Credits

History: Filed 6-8-21, eff. 7-20-21 (emergency); Filed 6-13-22, eff. 7-1-22 (emergency).

Current through register dated September 16, 2022. Some sections may be more current. See credits for details.

W. Va. C.S.R. § 110-1J-5, WV ADC § 110-1J-5