

**TITLE 110
LEGISLATIVE RULE
STATE TAX DEPARTMENT**

**SERIES 1J
VALUATION OF PRODUCING AND RESERVE OIL AND
NATURAL GAS FOR AD VALOREM PROPERTY TAX PURPOSES**

§110-1J-1. General.

1.1. Scope. -- This rule provides the methodology the State Tax Commissioner shall use to determine the appraised value of producing and reserve oil and natural gas properties for ad valorem tax purposes.

1.2. Authority. -- W. Va. Code §§11-1C-5(b), 11-1C-5a, and 11-1C-10(d).

1.3. Filing date. -- May 5, 2005.

1.4. Effective date. -- June 1, 2005
This rule applies to tax years beginning on or after January 1, 2006.

§110-1J-2. Introduction.

Oil or natural gas is one of the several estates in real property which may be owned either separately or in conjunction with other estates. If oil or natural gas is owned as a separate estate, either absolute, as a leasehold, or in conjunction with other estates, West Virginia property tax law requires that ownership be listed, valued and taxed in proportion to its value to be ascertained as directed by law. If oil or natural gas is owned in conjunction with other estates, the value of the oil or natural gas shall be included in the value of the other estate. Oil or natural gas may be owned without being produced. Oil or natural gas title may exist where no oil or natural gas is known to be present, or where the oil or natural gas is unproducible or depleted.

2.1. Categories for valuing oil and/or

natural gas properties. -- Parcels of property bearing or having the potential to bear oil and/or natural gas or having the oil and/or natural gas mineral interest separated from the fee of the property shall be categorized as:

2.1.1. producing property (to include home use/industrial on-property consumption);

2.1.2. non-producing property;

2.1.3. barren property; or

2.1.4. plugged and/or abandoned property.

§110-1J-3. Definitions.

As used in this rule and unless the context clearly requires a different meaning, the following terms have the meaning ascribed in this section.

3.1. "Bands of investment discount component" means a discount rate derived by assigning rates to various debt and equity investment financing tiers and summing these rates, weighted by their respective percentages of total financing.

3.2. "Barren oil and natural gas property" means those fee and mineral parcels in West Virginia where data suggests that the presence of oil and natural gas is very unlikely.

3.3. "Capitalization rate" means a rate used to convert an estimate of income to an

estimate of market value. Subsection 4.5 of this rule further explains this term.

3.4. "Commissioner" or "Tax Commissioner" means the Tax Commissioner of the State of West Virginia, or his or her delegate.

3.5. "Discount component" means a rate reflecting a provision for returning to an investor a sum of money equal to the aggregate of the anticipated return-on-investment over the economic life of an investment.

3.6. "Flat Rate royalty" means a royalty rate in which the amount paid per year (e.g. \$100 per year) is set within a lease and is not dependant on the production or income derived from the well.

3.7. "Flush production" means the production of oil and/or natural gas from any well on an oil and/or natural gas property with an initial production date that is two (2) calendar years or less prior to the July 1st assessment date. Production beginning after December 31st and prior to the July 1st assessment date must be reported.

3.8. "Gross receipts" means total income received from production on any well, at the field line point of sale, during a calendar year before subtraction of any royalties and/or expenses.

3.9. "Management rate" means a rate reflecting a return to an investor for the management of similar investment portfolios.

3.10. "Natural gas producing property" means the property from which natural gas has been produced or extracted at any time during the calendar year preceding the July 1 assessment date. Natural gas producing property includes the interest or interests underlying an area of up to one hundred

twenty-five (125) acres of surface per well for property with active wells on the parcel. All acreage of a natural gas producing property in excess of one hundred twenty-five (125) acres per well, shall be valued at the non-producing rate per acre referenced in section 4. of this rule.

3.11. "Nonliquidity rate" means a rate reflecting a return to an investor representing the loss of interest on an investment arising from the time required to sell the investment.

3.12. "Non-Producing or Shut-in Well" means a well, which due to the producer's decisions, market reasons and/or product performance, was non-productive during the entire most recent calendar year preceding the July 1st assessment date.

3.13. "Oil and/or natural gas, non-producing property" means properties that were not engaged in production during the previous assessment year period of July 1st through June 30th. This category includes any acreage that has been shut-in for the entire year.

3.14. "Oil and/or natural gas plugged and abandoned property" means plugged and abandoned oil and/or natural gas wells.

3.15. "Oil producing property" means property from which oil has been produced or extracted at any time during the calendar year preceding the July 1 assessment date. Oil producing property includes the interest or interests underlying an area of up to forty (40) acres of surface per well with one (1) or more active well(s) on the parcel. All acreage of an oil producing property in excess of forty (40) acres per well, shall be valued at the non-producing rate per acre referenced in Section 4 of this rule.

3.16. "Operating expenses" means only those ordinary expenses which are directly related to the maintenance and production of

natural gas and/or oil. These expenses do not include extraordinary expenses, depreciation, ad valorem taxes, capital expenditures or expenditures relating to vehicles or other tangible personal property not permanently used in the production of natural gas or oil.

3.17. "Overriding royalty" means the fractional interest in the gross production payable to a person who is neither the producer nor the owner of the oil and natural gas estate and who is not required to bear a share of the development or operating costs of the well.

3.18. "Personal property" used in oil or natural gas production means machinery and equipment in and about the well and all other tangible personal property used in oil and/or natural gas production from the well to the fieldline point of sale. It shall not include vehicles or other tangible personal property not permanently used in production.

3.19. "Producer/operator" means any person or persons, corporation, partnership, joint venture or other enterprise which proposes to or does locate, drill, produce, manage, or abandon any well.

3.20. "Property tax component" means a rate reflecting a provision for returning to an investor a sum of money equal to property taxes paid over the economic life of an investment.

3.21. "Recapture component" means a rate reflecting a provision for returning to an investor a sum of money equal to his or her investment.

3.22. "Risk rate" means a rate reflecting a return to an investor necessary to attract capital to an investment containing a possible loss of principal and/or interest.

3.23. "Royalty interest" means the

fractional interest in oil and/or natural gas production that is not subject to development costs or operating expenses and extends undiminished over the life of the property. Typically, it is retained by the oil and/or natural gas rights owner or lessor.

3.24. "Safe rate" means a rate reflecting a return to an investor on an investment which has little, if any, likelihood of loss of principal or of loss in anticipated return on investment.

3.25. "Settled production" means the production of oil and/or natural gas from all wells on a property with an initial production date that is more than two (2) calendar years prior to the July 1st assessment date.

3.26. "Storage wells" means drilled and completed wells on any property used for the artificial injection or storage of natural gas into a natural reservoir strata.

3.27. "Sum of the Years digit" means the weighted average that will be used in the calculations. For a 3 year weighted average, the sum of the years digit method places the first year at 50%, the second year at 33.33% and the third year at 16.67%.

3.28. "Summation discount component" means a discount rate expressed as the aggregate of a safe rate, risk rate, nonliquidity rate, and management rate, adjusted for inflation.

3.29. "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into underground strata for the extraction of oil or gas.

3.30. "Working interest" means the fractional interest in oil and/or natural gas production subject to development and operating expenses and owned by the leaseholder and/ or operator.

§110-1J-4. Methods of Valuation.

4.1. General. -- Oil and/or natural gas producing property value shall be determined through the process of applying a yield capitalization model to the net receipts (gross receipts less royalties paid less operating expenses) for the working interest and a yield capitalization model applied to the gross royalty payments for the royalty interest. Where ownership is split through a lease or royalty arrangement, different values shall be determined for the working interest and the royalty interest. If the well produced for less than twelve (12) months during the first calendar year of production, or during the first calendar year of production after being shut-in during the previous calendar year, the gross receipts and royalties paid shall be annualized prior to the process of applying a yield capitalization rate. Each term in this valuation is discussed below.

4.2. Percentage interest in oil and/or natural gas. -- Where the ownership of oil and/or natural gas in place is divided through a lease or other arrangement, the compensation to the owner of the property is derived by designating a percentage (generally one-eighth) of the production income to be the royalty payment to the owner. The remainder (generally seven-eighths) is the working interest. The Tax Commissioner shall annually determine working and royalty percentage interests on a per well or lease basis, through a review of oil and natural gas producer/operator annual property tax returns. These percentages shall be determined annually by dividing the total royalty paid by the reported gross income.

4.3. Average industry operating expenses. -- The Tax Commissioner shall every five (5) years, determine the average annual industry operating expenses per well. The average annual industry operating expenses shall be deducted from working

interest gross receipts to develop an income stream for application of a yield capitalization procedure.

4.4. Average industry production decline rates. -- The Tax Commissioner shall every five (5) years derive and report the average industry production decline rates by reviewing well production records of various State agencies along with data provided by companies and individuals.

4.5. Capitalization rate. -- A single statewide capitalization rate for oil and natural gas shall be determined annually by the Tax Commissioner through the use of generally accepted methods. The rate shall be based on the assumption of a declining-terminal, non-inflating income series. The capitalization rate used to value oil and natural gas shall be developed through consideration of: (1) a discount rate determined by the summation technique, and (2) a property tax component.

4.5.1. Discount component.

The summation technique shall be used in developing a discount component of the capitalization rate. The five subcomponents of the discount rate are;

4.5.1.a. Safe rate. -- The "safe rate" shall reflect a rate of return that an investor could expect on an investment of minimal risk. It shall be developed through review of interest rates offered on thirteen (13) week United States Constant Maturity Treasury Yields for a period of three (3) calendar years immediately prior to the July 1st assessment date. A weighted average (sum of years digits) will be used in order to arrive at a Safe Rate.

4.5.1.b. Risk rate -- The relative degree of risk of an investment in oil and natural gas property is difficult to determine from published interest rates. Interest rates required on loans for acquisition and/or

development of oil and natural gas properties shall be calculated by adding two percent (2%) to the Prime Interest Rate Charged By banks as published in the Economic Indicators Prepared By The Council Of Economic Advisors For The Joint Economic Committee for the three (3) calendar years immediately prior to the July 1 assessment date. The loan rate shall be compared to quarterly interest rates offered on thirteen (13) week United States Constant Maturity Treasury Yields for the same three (3) calendar years period. The weighted average (sum of years digits) difference between the two, combined with bands-of-investment analysis, shall be used as a basis to estimate the risk rate;

4.5.1.c. Nonliquidity rate. -- The "nonliquidity rate" shall be developed through an annual survey to determine a reasonable estimate of time that oil and natural gas properties, when exposed to the market for sale, remain on the market. The time determined in this manner shall be used to identify United States Constant Maturity Treasury Yields with similar time differentials in excess of thirteen (13) week United States Constant Maturity Treasury Yields. The interest differential between these securities shall be used to represent the nonliquidity rate. For example, if it is determined that oil and natural gas property remains on the market for an average of nine months (39 weeks) before being sold, the nonliquidity rate shall be derived by taking the rate on one (1) year United States Constant Maturity Treasury Yields minus the rate on 13-week United States Constant Maturity Treasury Yields; The rate used will be a weighted average (sum of years digits) of the data from the three (3) calendar year periods prior to the July 1 assessment date.

4.5.1.d. Management rate. -- The "management rate" represents the cost of managing the investment, not the cost of managing the oil and natural gas property. Because the management rate has

historically been one-half of one percent (0.5%) of the value of investment portfolios, for purposes of determining the discount component the management rate shall be one-half of one percent (0.5%); and

4.5.1.e. Inflation rate (negative). -- Nominal interest rates, including the "safe rate" mentioned in paragraph 4.5.1.a of this subdivision, are higher than real rates by an amount representing expectation of future inflation; however, net annual income from oil and natural gas property is to be estimated assuming level future royalties (no inflation). The capitalization rate shall be a real rate, net of expectation of inflation. The inflation rate shall be estimated through analysis of the most recent calendar year's urban consumer price index as determined by the U.S. Department of Labor, Bureau of Labor Statistics. The weighted average (sum of years digits) rate will be used from the data of the three (3) calendar year periods prior to the July 1 assessment date.

4.5.2. In determining the discount component of the capitalization rate, the Tax Commissioner shall deduct the inflation rate from the sum of the safe rate, the risk rate, the nonliquidity rate and the management rate.

4.5.3. Property tax component. -- This component shall be estimated by multiplying the assessment rate by the prior tax year's statewide average for Class III property. At the present time, research indicates that royalty rates on oil and natural gas include a component for property tax, with no additional compensation from the producer. As a result, the property tax component shall be used in the capitalization rate; however, if this described general practice changes and property taxes are paid as additional compensation, the use of this component shall be deleted. The rate used will be a weighted average (sum of years digits) of the data from the three (3) tax year periods prior to the July 1 assessment date.

4.5.4. Results of capitalization rate survey -- A review of economic data for development of components referenced in Subdivision 4.5.1 of this rule shall be conducted annually and results filed by the Tax Commissioner in the State Register on or before July 1st of each year. Public comment on the published results shall be accepted until August 1st of each year with final results filed in the State Register on or before September 1st of each year.

4.6. 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) and production amounts based on those gross receipts from the most recent consecutive three (3) full production calendar years preceding the July 1 assessment date. These amounts will be weighted average (sum of years digits) and then adjusted for production decline to reflect the income available to the property owner beginning with the July 1st assessment date to June 30 next succeeding the assessment date. Gross receipts and production amounts shall be proportionately reduced by application of the appropriate production decline rate, referenced in Subsection 4.4 of this rule, to yield a declining terminal income series typical of the producing area and strata. The income series shall be apportioned to the working interest and to the royalty interest based upon percentage interests referenced in Subsection 4.2 of this rule. 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.

4.6.1. Working interest model. -- The working interest weighted average (sum of years digits) gross receipts income series referenced in Subsection 4.6 of this rule

shall be reduced by the annual operating expenses referenced in Subsection 4.3 of 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 mid-year life Inwood factor reflecting the capitalization rate referenced in Subsection 4.5 of this rule. The summation of the annual discounted income streams shall be the market value estimate for the working interest of the producing oil and/or natural gas well including personal property as defined by Section 3 of this rule. The minimum appraised value for any producing well will not be less than the machinery and equipment value discussed in Section 4.16 of this rule. This minimum rate will not apply to home-use only wells.

4.6.2. Royalty interest model. -- The royalty interest weighted average (sum of years digits) gross receipts income series referenced in Subsection 4.6 of this rule shall be discounted by applying, on an annual basis, a mid-year life Inwood factor reflecting the capitalization rate referenced in Subsection 4.5 of this rule. 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 and/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.

4.6.3. Valuation of home-use only wells. -- The appraised value of wells used for home-use only will be an annual appraised value of \$500.00 resulting in an assessed value of \$300.00. If the home-use well owner has ownership in the mineral rights, the assessed value will be added to the real property assessment. However, if the home-use well owner only has rights in

the surface, the assessed value will be added to the personal property assessment.

4.6.4. Valuation of industrial use wells. -- The appraised value of wells used for industrial purposes only will be based on the actual most recent calendar year preceding the July 1 appraisal date MCF usage times the average West Virginia spot price for that calendar year determined by the "Natural Gas Monthly," published by the U.S. Department of Energy, Energy Information Administration.

4.7. Valuation of non-producing acreage. -- The value per acre of non-producing acreage, which includes shut-in wells, shall equal the discounted annual lease payment per acre. A valuation schedule for non-producing properties shall be determined annually by the Tax Commissioner for each district within a county, where data is available. The Tax Commissioner shall annually conduct a review of oil and/or natural gas lease agreements transacted at arms-length in all fifty-five (55) counties to determine the average annual delay rental lease payment per acre, and lease term. The per-acre value for non-producing property shall be the sum of the projected annual income stream from delay rental during the lease term discounted in each year by a capitalization rate. A valuation of \$1.00 per acre shall be used where property is located in those areas of the State where drilling activity/production have not been established and the property is presumed to be barren.

4.8. Valuation of plugged and abandoned acreage. -- Plugged and abandoned acreage shall be valued to the oil or gas owner at the nominal rate of one dollar (\$1.00) per acre. This category includes any plugged and abandoned acreage of up to one hundred twenty-five (125) acres per natural gas well and up to forty (40) acres per oil well.

4.9. Valuation of barren oil and natural gas areas. -- These oil and natural gas areas (fee accounts) shall be valued at \$1.00 per deed acre.

4.10. Valuation of wells that produce both oil and natural gas. -- The valuation of wells that produce both oil and natural gas shall be determined by use of the methods described in this rule. These values shall then be summed to result in the overall value of the oil and/or natural gas producing acreage.

4.11. Valuation of storage well areas. -- The valuation of storage well areas shall equal the discounted annual lease payment per acre that is applied to the reserve oil and gas acreage within the county. The minimum value applied to the areas will not be less than \$5.00 per deed acre. The value shall not include inventories stored within. Natural gas storage inventories shall be assessed to the inventory owner.

4.12. Annual reports. -- The Tax Commissioner shall on or before July 1st of each year publish and file in the State Register an annual summary of the variables to be considered in arriving at the value of the specific oil and/or natural gas related property. Public comments shall be accepted until August 1st of each year with the final results filed in the State Register on or before September 1st of each year.

4.13. Farm properties. -- The oil and gas rights, that are part of a "fee" estate where the use of the surface has qualified for farm use appraisal, shall be valued as described in the Tax Commission's rule, Valuation of Farmland and Structures Situated Thereon For Ad Valorem Property Tax Purposes, 110 C.S.R. 1A.

4.14. Property reports. -- On or before August 1st of each year the producer shall file the West Virginia Oil and Gas Producer/Operator Return with the State Tax

Commission, with acknowledgement to the county assessors in the counties where the oil and natural gas property is located. This Return form shall be designed by the State Tax Commissioner so that information pertinent to the valuation of the producing property, and plugged and abandoned property shall be reported properly by the oil and gas producer.

4.15. Confidentiality -- All information provided by or on behalf of a natural resources property owner or by or on behalf of an owner of an interest in natural resources property to any state or county representative for use in the valuation or assessment of natural resources property or for use in the development or maintenance of a legislatively funded mineral mapping or geologic information system is confidential. The information is exempt from disclosure under the provisions of West Virginia Code § 29B-1-4, and shall be kept, held, and maintained confidential except to the extent the information is needed by the state tax commissioner to defend an appraisal challenged by the owner or lessee of the natural resources property subject to the appraisal: Provided, That this section may not be construed to prohibit publication or release of information generated as part of the minerals mapping or geologic information system, whether in the form of aggregated statistics, maps, articles, reports, professional talks, or otherwise presented in accordance with generally accepted practices and in a manner so as to preclude the identification or determination of information about particular property owners.

4.16. Valuation of the Producer's Personal Property at Non-Producing or Shut-In wells—The valuation of the producer's personal property that is part of a non-producing or shut-in well's appraisal will be assigned to the producer at the same value applied to home use only wells.

4.17. Valuation of Pre-Production/Permit Leaseholds---Chattel real accounts (personal property) for pre-production/permit leaseholds will be valued by the county assessor.

4.18. Valuation of Producing Flat-Rate Royalty accounts ---- The appraised value of a producing flat-rate royalty will be valued using a level terminal income series rather than the declining terminal income series as discussed in Subsection 4.6 of this rule.