OIL AND GAS TAXATION COMPARISON

ANALYSIS OF SEVERANCE, PRODUCTION AND AD VALOREM TAXES IN NORTH DAKOTA AND OTHER OIL PRODUCING STATES

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Covenant Consulting Group

BISMARCK, NORTH DAKOTA

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Introduction

Taxation of energy resources is an important issue to royalty owners, production companies, state and local governments and the public in general. This report is designed to provide a comparison of oil and gas taxation among key producing states as well as states in the northern plains region and to determine how North Dakota's effective rate of taxation compares with the other states.

Because every state has its own tax laws, rules, incentives, rates and exemptions it makes a comparison such as this extremely difficult. The goal is to make a fair comparison that is as "apples-to-apples" as is possible. With that goal in mind and after analyzing several of the state's methods of taxation, our conclusion was the most appropriate method was to identify both the production and the various actual taxes to arrive at an effective tax rate. In short, we divided the taxes collected by the valuation of the production to arrive at a combined, overall effective rate for each state.

Scope and Methodology

In North Dakota oil is taxed on the value of the production and gas is taxed at an annually adjusted rate per thousand cubic feet (mcf). Two different taxes are assessed, including a "Production Tax" that applies to both oil and gas. This tax is imposed in lieu of property taxes on the oil and gas producing properties. In addition, North Dakota imposes an "Oil Extraction Tax" on the gross value of crude oil production.

Because North Dakota's Production Tax is in lieu of property taxes and because many other states or their local jurisdictions assess an ad valorem property tax in addition to their severance or production type taxes, we analyzed the severance/production taxes of the states included in this report, as well as the property taxes imposed on production equipment and on mineral reserves in the states.

Like North Dakota most states assess taxes on gas production at a rate per thousand cubic feet (mcf). The method of arriving at an effective rate by dividing tax collected by value of production is not something the states typically compute as part of gas taxation; however, because gas is often produced along with oil and because this method does provide a basis for comparison with oil, we have elected to use this method of computing effective rates among the states.

There have been several studies that have attempted to make similar comparisons to what our goal was here. Most of them are several years old and probably not relevant in today's market. All of the studies we reviewed began by explaining the difficulty in making such comparisons and all, including this one failed to be 100% apples to apples in the comparisons. LEGG, LLC produced a study in December of 2008 to compare oil taxation in the 10 largest oil producing states. The method they used was to tax a hypothetical oil company producing at certain levels and then apply the taxes as if that company were producing in each state. Unfortunately that study did not include North Dakota. A more recent analysis (September, 2012) conducted by the Montana Department of Revenue specifically compared oil taxation between North Dakota and Montana based on a hypothetical Bakken well in each state. Their analysis showed that Montana had lower tax rates than North Dakota. You will note our analysis arrived at a different conclusion mainly because we looked at statewide production and tax, whereas they looked only at a Bakken well. Montana has significantly lower rates on new horizontal wells for the first 18 months of production, thus the different conclusion relating to each state's effective tax rate.

We used data for the fiscal year ended June 30, 2010. In an effort to make the data as comparable as possible we gathered the production data on an accrual basis and then matched the specific tax collected to that production. Most states have a lag of 1 to 3 months for the actual collection of the tax. By using an accrual basis we were able to match the tax collected to the actual production for the fiscal year. We were not able to access fiscal year data in Wyoming so their data is based on calendar year 2009; however, the Wyoming effective tax rates came to the same percentage in both 2009 and 2010.

We used the year ended June 30, 2010; because as we started this process many states still did not have their accounting for either the production or tax collections completed for 2011, thus in order to use data that was time and price comparable we used fiscal year 2010. As we neared completion of our work we reconnected with each state to see if there were significant changes in tax law or rates since fiscal year 2010. In all cases we were assured there were no significant changes in taxation since 2010. Alaska was an exception, but their changes would not have an effect on the effective tax rates in this analysis.

Most states centrally assess their property tax on pipelines and that tax is not included in our rate computations. Because North Dakota centrally assesses pipelines and that is a separate tax from the Production Tax; we focused on the taxes in the other states that would be comparable to what the Production Tax in North Dakota replaces. Generally that meant we focused on the equipment at the wellhead including flowlines and on mineral reserves in those states that tax mineral reserves.

States generally do not tax royalties owned by the State or Federal government, thus that production was excluded from the computations. This was generally not a significant percentage amount except in Alaska.

Many states also assess administrative fees or excise taxes, these were included only when they were large enough to affect the effective rate when measured to the nearest one-tenth of 1 percent.

Effective tax rates by state

Based on severance, production and property taxes paid in ratio to taxable valuation of production

Fiscal Year ended 6-30-10

FY 6-30-10	Property Taxes	Taxable Value	Tax Collected_	Effective Rate
California (1)	YES	$ 15.233b	$ 380.2m	2.5%
Oklahoma	NO	11.104b	743.6m	6.7
Texas (1)	YES	49.408b	3,884.6m	7.9
North Dakota	NO	5.974b	582.7m	9.8
Montana	YES	1.969b	209.8m	10.7
Louisiana	YES	8.630b	936.6m	10.9
Wyoming	YES	8.301b	1,081.0m	13.0
Alaska	YES	14.039b	3,528.5m	25.1

Average rates in states other than ND	11.0%
Avg. rates excluding highest(AK) & lowest(CA)	9.8%

(1)California and Texas assess an ad valorem property tax on the market value of mineral reserves, and are assessed every year on the remaining value of the reserves.

Taxation process by state

North Dakota (no ad valorem taxes)

Oil And Gas Gross Production Tax

Imposition and Rates

The oil and gas gross production tax is imposed in lieu of property taxes on oil and gas producing properties.

Oil. A 5% rate is applied to the gross value at the well of all oil produced, except royalty interest in oil produced from a state, federal or municipal holding and from an interest held by an organized Indian tribe. Both the producer and purchaser of the oil are required to submit reports to the Tax Commissioner on a monthly basis. The reports show the volume and taxable value of sales of the production from each well. The producer remits the tax on oil not sold at the well. The purchaser is primarily responsible for remitting the tax on oil bought during a production month. The Tax Commissioner has the authority to waive a producer's filing requirement if certain conditions are met. Purchasers are required to file monthly reports electronically.

Gas. The gross production tax on gas is an annually adjusted flat rate per thousand cubic feet (mcf) of all nonexempt gas produced in the state. The annual adjustments are made according to the average producer price index for gas fuels. Rates through June 30, 2013 are as follows:

Time Period	Tax Rate
July 1, 2009 – June 30, 2010	$.1831
July 1, 2010 - June 30, 2011	$.0914
July 1, 2011 - June 30, 2012	$.1112
July 1, 2010 - June 30, 2013	$.1143

Exempt from the tax is gas used on the lease for production purposes and the royalty interest in gas produced from a state, federal or municipal holding and from an interest held by an organized Indian tribe.

Shallow gas produced during the first 24 months of production from and after the first date of sales from a shallow gas zone, is exempt from gross production tax. Gas, that would otherwise be flared, is exempt from the gross production tax when it is used in a generation unit producing electricity for use on site.

Monthly reports to the Tax Commissioner are required from both the producer and the purchaser/processor of the gas. The producer remits the tax on unprocessed gas and the purchaser/processor remits the tax on processed gas. The Tax Commissioner has the authority to waive a producer's filing requirement if certain conditions are met. Purchasers/processors are required to file monthly reports electronically.

Oil Extraction Tax

Imposition and Rates

The oil extraction tax is levied on the extraction of oil from the earth. The tax rate is 6½% of the gross value at the well of crude oil. However, the rate is reduced to 4% for oil produced from the following:

- A vertical or horizontal new well, after the appropriate exemption expires.
- A workover well after the exemption expires.
- Incremental oil from a qualifying secondary or tertiary recovery project, after the 5-year or 10-year exemption expires.
- Nonincremental oil from a qualifying secondary recovery project that has reached an average production level of at least 25% over normal operations for six consecutive months.
- Nonincremental oil from a qualifying tertiary recovery project that has reached a production level of at least 15% over normal operations for one month and continues to be operated as a qualifying project.

A qualifying secondary recovery project is a unit that uses water flooding and is certified by the North Dakota Industrial Commission. A qualifying tertiary recovery project is a unit that uses an enhanced recovery method which conforms with federal tax code provisions and is certified by the North Dakota Industrial Commission.

The rate is reduced to 2% for the first 75 thousand barrels or the first $4.5 million of gross value at the well whichever is less during the first 18 months after completion of a horizontal well drilled and completed after April 30, 2009. The rate reduction is effective the month following a month in which the average price of a barrel of crude is less than $55. The rate reduction becomes ineffective the month following a month in which the average price of a barrel of crude exceeds $70.

The oil extraction tax is paid monthly with the gross production tax on a combined reporting form.

Exemptions

To receive the full benefit of an exemption, the 4% reduced rate, or the 2% reduced rate, a producer must file the Industrial Commission's certification of well status with the Tax Commissioner within 18 months of the first day of eligibility. If the producer does not file within the 18-month period, then the exemption or reduced rate begins the first day of the month in which the certification is received by the Tax Commissioner.

The exemptions to the oil extraction tax are as follows:

- Royalty interest in oil extracted from a state, federal or municipal holding and from a Native American holding within the boundary of a reservation.
- Oil extracted from a certified stripper well property. A stripper well property is property whose average daily production during a 12-month period did not exceed10 barrels per day for a well of a depth of 6,000 feet or less, 15 barrels per day for a well of a depth of more than 6,000 feet but not more than 10,000 feet, and 30 barrels per day for a well of a depth of more than 10,000 feet.
- Oil produced during the first 15 months of production from a vertical new well. This exemption is subject to the "trigger" provisions described below.
- Oil produced during the first 24 months of production from a horizontal new well. The exemption is subject to the "trigger" provisions described below.
- Oil produced during the first 60 months of production from either a vertical new well or a horizontal new well drilled and completed on tribal trust land.
- Oil produced from a horizontal reentry well for a period of 9 months beginning on the date the well is recompleted as a horizontal well. The exemption is subject to the "trigger provisions" described below.
- Oil produced from a two-year inactive well for a period of ten years beginning the first day of the month in which the Industrial Commission's certification is received by the Tax Commissioner. The exemption is subject to the "trigger provisions" described below.
- Oil produced from a qualifying well that has been worked over. The exemption is for a 12-month period starting with the first day of the third month after completion of the workover project. A qualifying well is a well that has produced less than 50 barrels per day during the last six months of continuous production before workover. The well operator must notify the Industrial Commission before beginning the project. Project cost must exceed $65,000 or production must increase 50% or more in the first two months after project completion. The exemption is subject to the "trigger" provisions described below.
- Oil produced from a two-year inactive well for a period of ten years after being recompleted or returned to production. The exemption is subject to the "trigger provisions" described below.

- Incremental oil from a qualifying secondary or tertiary recovery project. The exemption is 5 years for secondary recovery projects and 10 years for tertiary recovery projects from the date the incremental production begins.

“Trigger” Provisions

The reduced rate provisions for new wells, horizontal wells, horizontal reentry wells, two-year inactive wells, workover wells, and enhanced recovery wells are ineffective if the average price of a barrel of crude oil exceeds the trigger price (thirty-five dollars and fifty cents, as indexed for inflation) for each month in any consecutive five-month period. Except for incremental oil produced from enhanced recovery wells, exemptions for the above wells also become ineffective if the average price of a barrel of crude exceeds the trigger price for the same consecutive five-month period. The reduced rates and exemptions are reinstated if the average price falls below the trigger price for each month in any consecutive five- month period.

The Tax Commissioner has determined that the tax incentives subject to the trigger price became ineffective for production periods beginning October 1, 2004, and until such time as the statutory provisions for reinstatement are met.

The trigger prices effective for calendar years through December 31, 2012 are as follows:

Time Period	Trigger Price
Jan. 1, 2009 - Dec. 31, 2009	$47.66
Jan. 1, 2010 - Dec. 31, 2010	$46.79
Jan. 1, 2011 - Dec. 31, 2011	$46.78
Jan. 1, 2012 - Dec. 31, 2012	$50.00

There have been no significant tax law changes since 2010.

Source: Office of ND Tax Commissioner & ND Red Book

Alaska (ad valorem taxes on equipment and flowlines)

Effective April 2006, the oil and gas production tax system in Alaska changed from a tax on the gross proceeds of oil and gas production to a tax on the net proceeds of oil and gas production. Originally called the Petroleum Production Tax (PPT), the Alaska legislature made several additional changes to the production tax in November 2007, resulting in the Alaska Clear and Equitable Share (ACES) production tax. The tax is calculated on oil and gas producing companies operating in Alaska as follows:

ACES Tax Liability = [Value - Costs * Tax Rate] - Credits

The terms used in the equation are defined as follows:

Value = Volume of Oil and Gas Produced x Wellhead Value

Costs = Operating Expenditures + Capital Expenditures

Tax Rate = 25% of the production tax value per BTU equivalent barrel of oil or gas. When the average monthly tax value is more than $30 per barrel but less than $92.50 an additional 0.4% progressive tax is due for each additional dollar of production tax value per barrel. When the average monthly production tax value exceeds $92.50 per barrel the tax rate is the sum of 25% and 0.1% of the difference between the average monthly production tax value and $92.50. The maximum tax may not exceed 75%.

Oil reserves are not subject to ad valorem property taxes in Alaska, but equipment and physical property used in the production of oil and gas are, at a rate of 20 mills, or 2% of assessed value.

Less than 1% of Alaska's royalties are taxed because most of the royalties are owned by the State or Federal governments. Net Royalty income to Alaska in FY 2010 was $ 1.47 billion.

For Alaska this report does not segregate production and tax between gas and oil. This based on advice from Alaska officials who stated the net effective tax on gas is actually a negative, thus we have combined gas and oil in our computations.

Incentives. The oil and gas production tax system offers several different types of tax credits to be used against the production tax liability. Most of these credits may be sold or transferred, and they do not expire. For example, the ACES tax offers credits for up to 20% of qualified capital expenditures against a tax liability in a given period, and credits of up to 50% for certain exploration-related capital expenditures. Credit in the amount of 25% of a company's net loss for the period may be redeemed under the production tax system. Companies producing less than 50,000 barrels of oil equivalent per day are eligible for a tax credit in the amount of $12 million annually.

There have been no significant changes in tax law since 2010. (Exception- Alaska has enacted new tax credits to incent gas production for local cities. The credits are capped at $130 million and generally would not apply to the major oil & gas producing areas of the state.)

Source: Alaska Department of Revenue and ND Red Book

California (ad valorem taxes on equipment and minerals)

California levies ad valorem taxes on real property, including mineral properties. Values are determined and assessed at the county governmental level. The statutory tax rate is 1%, but is subject to increases based on needs to retire voter approved debt. In fiscal year 2009-2010 the rate was 1.119%. Values are based on an adjusted acquisition value or the current market value, whichever is lower. Adjustments to acquisition value are made for depletion and increase in reserves and added or removed improvements. Most pipelines are centrally assessed as in North Dakota; the only exception is for pipelines that do not cross county lines.

There are no statewide severance taxes levied in California. Some local municipalities levee a severance tax. A nominal per barrel fee is collected to fund the Department of Conservation, Division of Oil, Gas & Geothermal Resources ($0.0880312 per barrel of oil and per 10,000 cf of gas).

There have been no significant tax law changes since 2010.

Sources: California Board of Tax equalization & ND Red Book

Louisiana (local ad valorem taxes on surface equipment)

A 12.5% severance tax is levied in lieu of all other taxes, including ad valorem taxes, on the oil and condensate production. There are no state ad valorem taxes but local governments do assess a property tax on surface equipment. Stripper wells (those with production of 10 barrels per day or less) are taxed at 3.125%, while "incapable" wells (those producing between 10 and 25 barrels per day and having at least a 50% S & W) are taxed at 6.25%. Tertiary recovery wells are exempt from sever-ance tax until the tertiary project reaches payout.

Louisiana also levies an "oil field site restoration fee" of 1.5¢ per barrel. The fee is reduced to 0.75¢ per barrel for incapable wells and 0.375¢ per barrel for stripper wells.

An "oil spill contingency fee" of 2¢ per barrel is levied on crude oil loaded or off loaded at a marine terminal facility in Louisiana waters. This fee is collected and remitted by the marine terminal operator.

Incentives. Oil production from certified deep wells and horizontal wells is exempt from severance tax for a period of two years or until payout of well costs, whichever occurs first. Oil production from certified wells is exempt for any month in which the gross value is below $20 per barrel.

There have been no significant tax law changes since 2010.

Source: Louisiana Department of Revenue and ND Red Book

Montana (ad valorem taxes on equipment and flowlines)

No ad valorem tax on minerals but there is on well equipment and flowlines.

Tax rates vary by type of production, by the date the well was drilled, and for working interests and non-working interests. The following is a summary of the tax rates effective January 2, 2000.

	Working Interest	Non-Working Interest
• Primary Recovery Production		
First 12 months	.5%	14.8%
Pre-1999 Well	12.5%	14.8%
Post-1999 Well	9%	14.8%
• Stripper Production[1]		
First 1-10 barrels	5.5%	14.8%
Over 10 barrels	9%	
Stripper well exemption	.5%	14.8%
Stripper well bonus production	6%	14.8%
• Horizontally Drilled Wells		
First 18 months	.5%	14.8%
Pre-1999 after 18 months	12.5%	14.8%
Post-1999 after 18 months	9%	14.8%
• Incremental Production [2]		
Secondary Production	8.5%	14.8%
Tertiary Production	5.8%	14.8%
* Horizontally Recompleted		
First 18 months	5.5%	14.8%
Pre-1999 after 18 months	12.5%	14.8%
Post-1999 after 18 months	***9%***	14.8%

[1] Stripper oil is oil produced from any well that produced less than 10 barrels a day for the calendar year immediately preceding the current year.

[2] This is the volume of oil in excess of the production decline curve as approved by the Board of Oil and Gas Conservation.

A report prepared by the Montana Department of Revenue in September of 2012 showed an effective tax rate in Montana at 7.4%. Significantly lower that we are reporting here. The main contributor to this difference is their study compared Bakken wells in each state and they do have a significantly lower rate for the first 18 months of horizontally completed wells.

There have been no significant tax law changes since 2010.

Source: Montana Department of Revenue and ND Red Book.

Oklahoma (no ad valorem taxes)

Oklahoma Gross Production Tax is a severance tax that is in lieu of Ad Valorem Tax and is levied upon the production of oil and natural gas produced in Oklahoma. The tax dates back to 1910 when the rate was 0.5% of the gross value of the product produced. Today the gross production tax rate is a variable rate tax based on the monthly average price of both oil and gas as determined by the Oklahoma Tax Commission.

Oil

The Gross Production Tax rate on oil is as follows:

- If the average price of Oklahoma oil equals or exceeds Seventeen Dollars ($17.00) per barrel, the tax shall be seven percent (7%) of the gross value.
- If the average price of Oklahoma oil is less than Seventeen Dollars ($17.00) but is equal to or exceeds Fourteen Dollars ($14.00) per barrel, then the tax shall be four percent (4%) of the gross value.
- If the average price of Oklahoma oil is less than Fourteen Dollars ($14.00) per barrel, then the tax shall be one percent (1%) of the gross value.

Gas

The Gross Production Tax rate on gas is as follows:

- If the average price of Oklahoma gas equals or exceeds Two Dollars and Ten Cents ($2.10) per mcf, the tax shall be seven percent (7%) of the gross value.

- If the average price of Oklahoma gas is less than Two Dollars and Ten Cents ($2.10) but is equal to or exceeds One Dollar and Seventy Five Cents ($1.75) per mcf, then the tax shall be four percent (4%) of the gross value.
- If the average price of Oklahoma gas is less than One Dollar and Seventy-Five Cents ($1.75) per mcf, then the tax shall be one percent (1%) of the gross value.

Oklahoma also levies a Petroleum Excise Tax on the production of oil and gas equal to ninety-five one thousandths of one percent (.095 of 1%) of the gross value of the product ($11.5 million in FY 2010).

Gross Production Incentive Rebates. In an effort to sustain the existing production of oil and gas in Oklahoma and encourage the drilling of new wells, legislation was enacted in 1994 that exempts the Gross Production Tax levied on oil and gas produced from certain wells. The exemption is equal to 6/7ths of the 7% Gross Production Tax and is rebated back to producers of qualified wells. Producers are eligible to file claims for refund on a July through June fiscal year basis.
Wells qualifying for the exemption are as follows:

- Horizontally Drilled Wells,
- The reestablished production of a well that was non-productive for one year,
- Production enhancements such as workovers and recompletions,
- Wells drilled and completed at a depth of 12,500 feet or greater,
- Wells classified as "New Discovery",
- Wells meeting the criteria as being "Economically at Risk", and
- Wells that are drilled and completed based on 3-D seismic technology.

Beginning July 1, 2012, in lieu of an incentive rebate for horizontally drilled and ultra-deep wells, a reduced tax rate shall be levied. Horizontal wells will be levied at 4% for the first 48 months of production. Deep wells drilled between 15,000 and 17,499 feet will be levied at 4% for 48 months and deep wells drilled below 17,500 feet will be levied at 4% for 60 months. Upon expiration of the incentive terms of 48 and 60 months, the Gross Production Tax Rate will be levied at the 7% base rate.

There have been no significant changes in tax law since 2010.

Source: Oklahoma Tax Commission and ND Red Book

Texas (ad valorem taxes on equipment and minerals)

Texas levies a 4.6% severance tax on the value of oil produced. This tax is reduced to 2.3% or to 0.00% if the oil qualifies for certain tax incentives. Oil properties in Texas are also subject to normal property taxes and to a 3/16 of a cent per barrel "regulatory tax," as well as a regulatory fee of 5/16 of a cent ($0.003125) per barrel for report periods prior to September 2001 and 5/8 of a cent ($0.00625) per barrel for report periods September 2001 and later. 99% + of the ad valorem taxes are generated from taxation of mineral reserves.

Incentives. Oil produced from Enhanced Oil Recovery (EOR) projects is taxed at 2.3% of the market value. Oil produced from well bores certified by the Texas Railroad Commission as 2-year or 3-year inactive well bores is exempt from the tax for 10 years.

Producers are eligible for a production tax credit for crude oil from low producing wells ranging from 100% if the average price is $22 or less to 0% if the average price is more than $30 per barrel. A certified orphan well put back in production is eligible for a 100% exemption from the oil production tax and the oilfield cleanup fee.

There have been no significant changes in tax law since 2010.

Source: Texas Comptroller of Public Accounts and ND Red Book

Wyoming (ad valorem taxes on equipment and production)

A severance tax is levied at 6% of the value of the oil produced. Stripper wells and tertiary recovery projects are eligible for a reduced tax rate of 4%. For tertiary projects, the reduced rate is good for five years and applies to production over an established "base level."

The tertiary project must have been certified after March 31, 2003, and before March 31, 2008, and the reduced tertiary rate is no longer allowed in months when the price per barrel equals or exceeds $27.50.

An ad valorem tax is levied on the same value as that used for severance tax purposes but is collected by the counties and based on the applicable local mill rates. Currently, the ad valorem taxes average about 6.7% of the value of the oil produced.

Incentives. Wyoming grants the reduced rate of 2% on the first 60 barrels per day from new wells for 24 months and all incremental oil from workovers and recompletions. New wells must be drilled between July 1, 1993 and March 31, 2003. Workovers or recompletions must be performed between July 1, 1993 and March 31, 2001. In the case of new oil wells, the incentive is canceled if the average price of oil is equal to or exceeds $22 per barrel for the preceding six (6) month period.

Oil produced from previously shut in wells is subject to a reduced severance tax rate of 1.5% for five years from the date of first renewed production. Wells must have had no production for two years prior to January 1, 1995. This incentive is canceled if the average price of oil exceeds $25 per barrel for six straight months.

There have been no significant changes in tax law since 2010.

Source: Wyoming Department of Revenue and ND Red Book

Effects of adding ad valorem taxes to the severance/production taxes

Fiscal Year ended 6-30-10

FY 6-30-11	Effective rate W/O ad valorem taxes	Effective Rate W/ ad valorem taxes
California	-0-%	2.5%
Oklahoma (1)	6.6	6.7
Texas	4.1	7.9
North Dakota	9.8	9.8
Montana	10.4	10.7
Louisiana	8.6	10.9
Wyoming	5.9	13.0
Alaska	23.0	25.1

(1) Petro Excise Tax in Oklahoma

Analysis and Findings

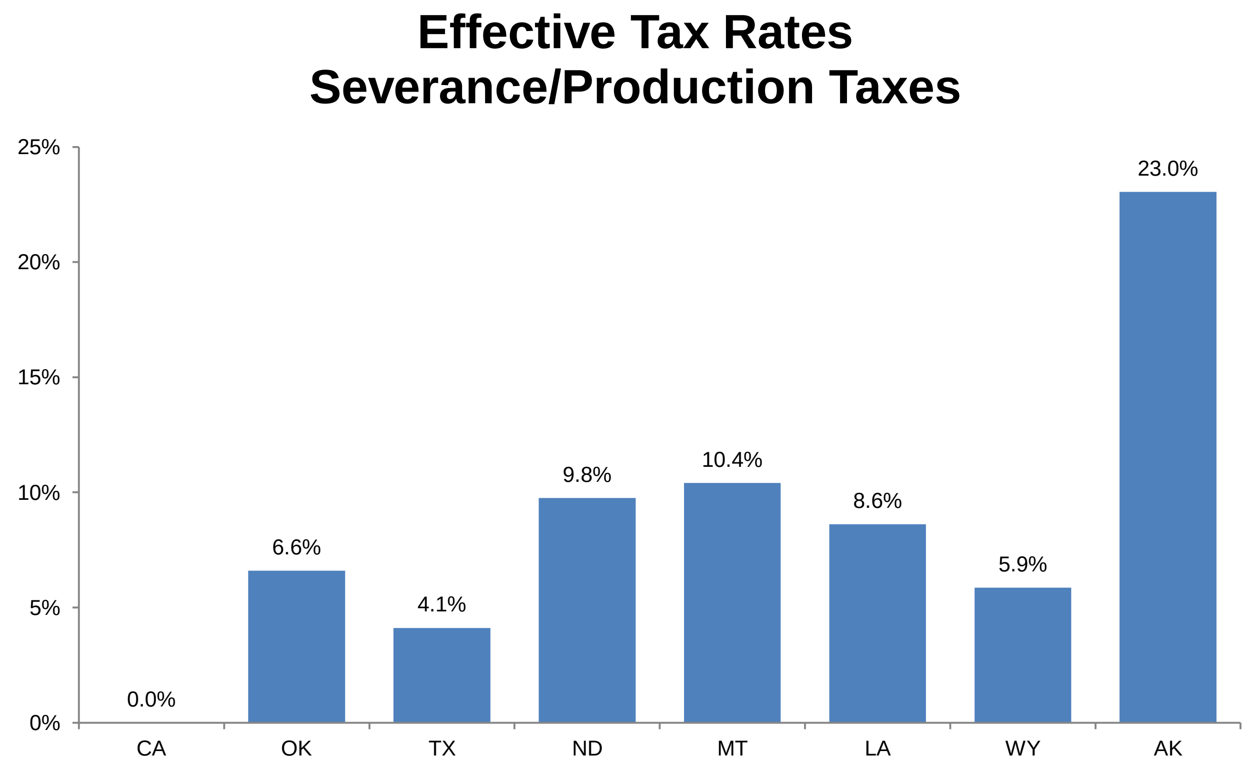
As discussed in the Scope and Methodology above, creating a true comparison among the states is virtually impossible. While the method of dividing total taxes by the production value provides a comparison it does not fully account for all the differences between the states. For example, in Alaska only about one percent of royalties are subject to tax; this is because most of the minerals are owned by the State or Federal government.

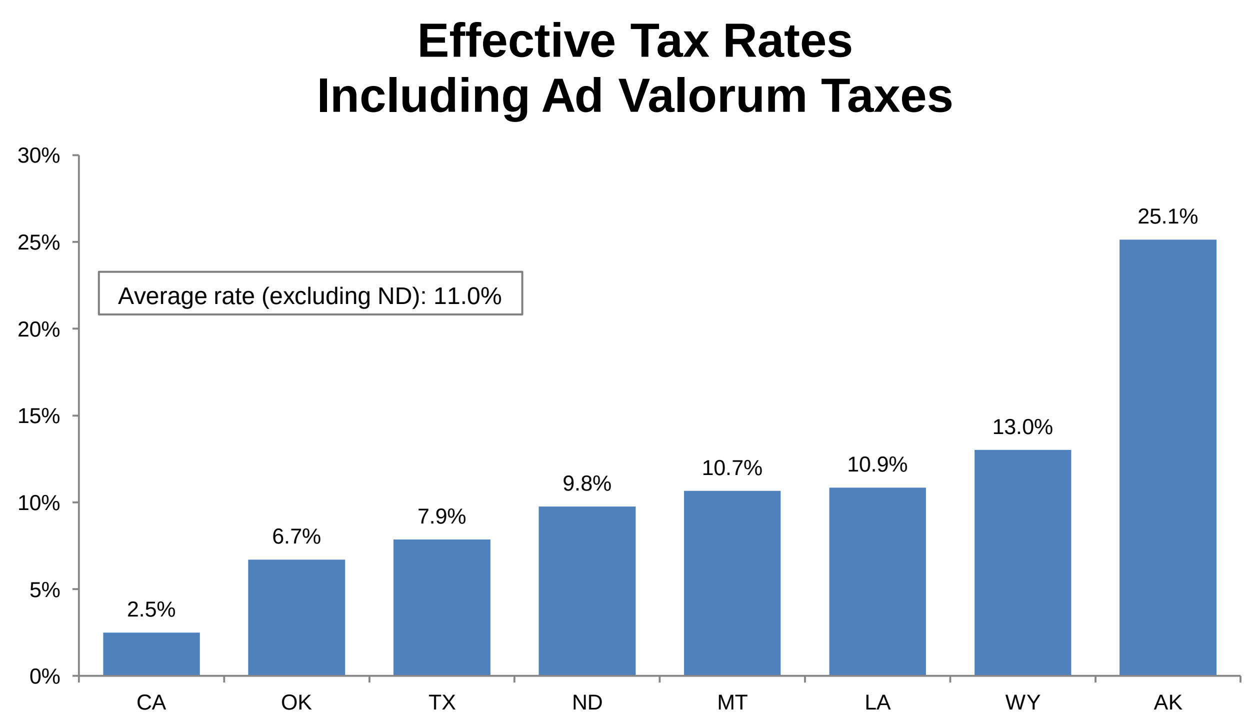
California does not assess a statewide severance or production tax on oil and gas. It does however, assess locally an ad valorem property tax on the mineral reserves in the state. Such taxation starts when the minerals are leased and continues as long as there are remaining estimated reserves. Texas also taxes mineral reserves. The Texas tax is assessed once production starts and is assessed annually until the reserves are depleted.

All states in the study have some form of ad valorem property tax that is assessed annually except for North Dakota and Oklahoma. You will notice our spreadsheets and charts show a one-tenth of 1 percent adjustment for Oklahoma in arriving at a total effective rate. This is attributable to an excise tax Oklahoma charges on oil and gas production in addition to their production tax.

Once the ad valorem taxes, administrative/regulatory fees and excise taxes are added in, the total effective rates range from 2.5% in California to 25.1% in Alaska. This creates an (unweighted) average effective rate among the states (excluding North Dakota) of 11.0%. If you exclude the highest and lowest rate states (AK & CA) the average effective rate is 9.8%. North Dakota's effective rate is 9.8%.

The property tax adjustments (see spreadsheet on page 21) represent an average effective rate of 3.0% in those states that assess a separate ad valorem tax. This is a 31% increase over the average effective rates computed on severance/production taxes alone. It should be noted most of this 31% is a recurring annual tax that is computed on the value of assets, equipment, flowlines and tanks. In California and Texas it also includes mineral reserves. These annual taxes are generally assessed regardless of production; Wyoming is the exception where most of the ad valorem tax is based on production, however, Wyoming also assesses an annual local property tax on equipment. In North Dakota and Oklahoma the severance/production taxes are in lieu of property tax and are assessed only once, when there is actual production.


Effective Tax Rates
Severance/Production Taxes
25%
20%
15%
10%
5%
0%
0.0%
6.6%
4.1%
9.8%
10.4%
8.6%
5.9%
23.0%
CA
OK
TX
ND
MT
LA
WY
AK


Effective Tax Rates
Including Ad Valorum Taxes
30%
25%
20%
15%
10%
5%
0%
Average rate (excluding ND): 11.0%
2.5%
6.7%
7.9%
9.8%
10.7%
10.9%
13.0%
25.1%
CA
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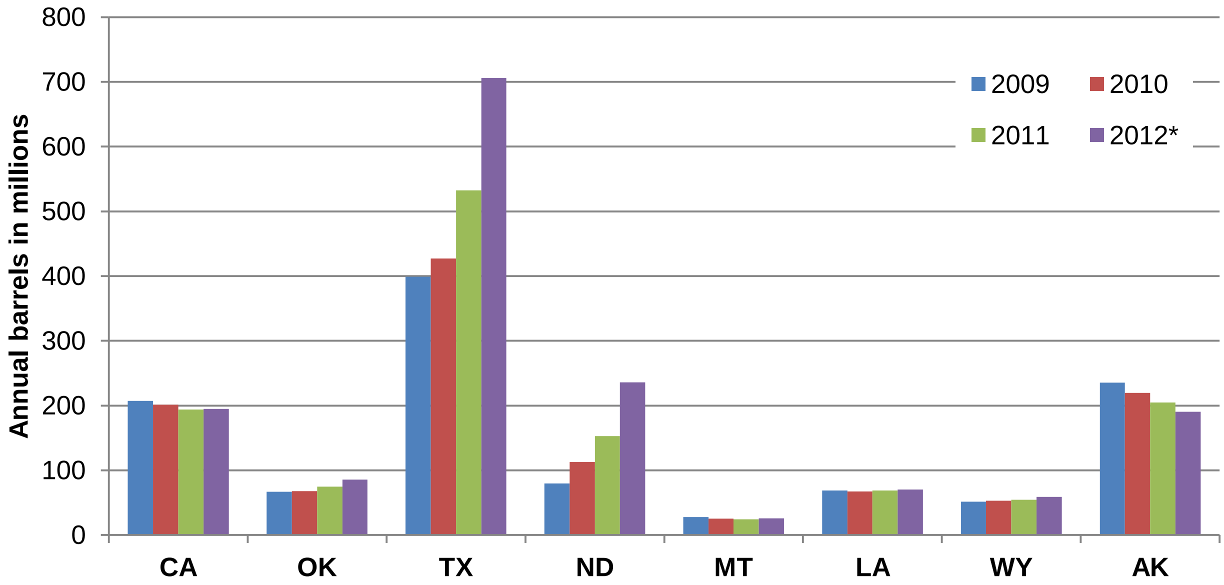
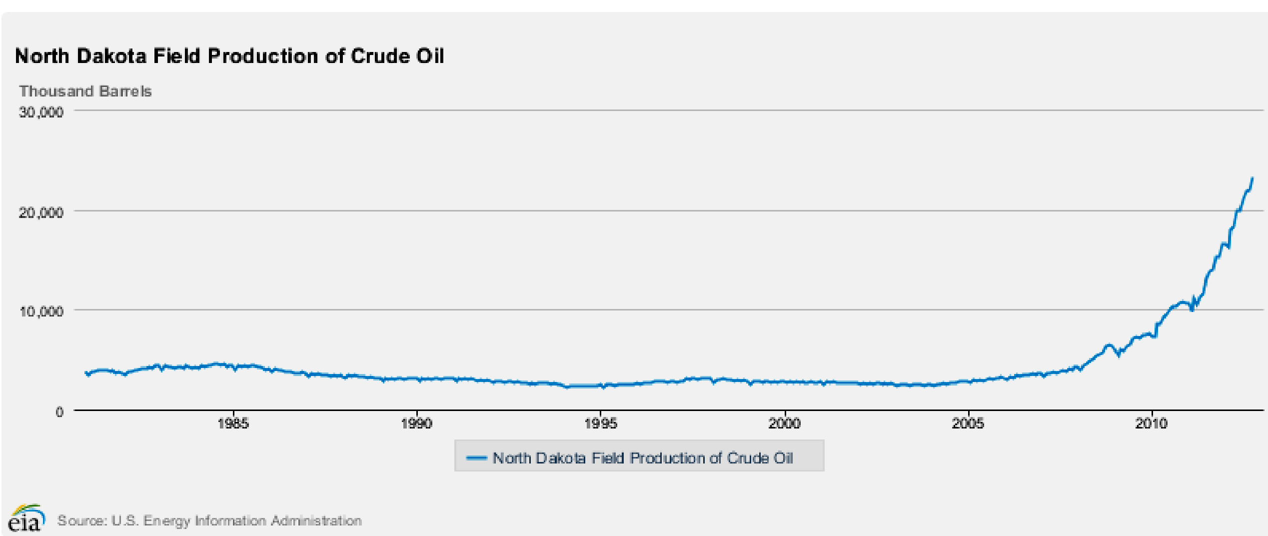
AK

Oil Production 2009-2012



Source: US Energy Information Administration

*2012-data annualized based on data through October



OIL TAX STUDY

		Avg Rates	ND	AK	CA	MT	OK	LA	TX	WY
Oil	Prod.		87,668,000	203,816,365	200,821,137	26,211,722	83,169,854	58,540,000	321,305,011	50,493,822
	Value		$5,706,984,000	$14,038,800,000	$14,047,438,533	$1,663,975,228	$5,390,238,238	$3,977,300,000	$22,970,671,438	$2,439,657,555
	Tax		$570,786,588	$3,235,101,557	-	$174,129,888	$377,316,675	$460,700,000	$1,001,971,125	$134,883,093
	Rate	10.3%	10.0%	23.0%	0.0%	10.5%	7.0%	11.6%	4.4%	5.5%
Gas	Prod.		68,165,915		262,884,801	90,315,072	1,642,009,701	1,082,000,000	7,006,058,324	2,365,186,657
	Value		$267,210,387		$1,185,610,452	$305,037,670	$5,714,193,759	$4,652,400,000	$26,436,901,514	$5,861,051,297
	Tax		$11,924,060		-	$30,761,372	$354,834,430	$282,500,000	$1,030,866,620	$351,663,078
	Rate	5.4%	4.5%		0.0%	10.1%	6.2%	6.1%	3.9%	6.0%
Oil & Gas										
	Value		$5,974,194,387	$14,038,800,000	$15,233,048,985	$1,969,012,898	$11,104,431,997	$8,629,700,000	$49,407,572,952	$8,300,708,852
	Tax		$582,710,648	$3,235,101,557	-	$204,891,260	$732,151,105	$743,200,000	$2,032,837,745	$486,546,171
	Rate	9.8%	9.8%	23.0%	0.0%	10.4%	6.6%	8.6%	4.1%	5.9%
Property	Local		No	Yes	Yes	No	No	Yes	Yes	Yes
	State		No	Yes	No	Yes	No	No	No	Yes
	Tax		-	$293,400,000	$380,209,000	$4,874,477	$11,500,000	$193,400,000	$1,851,813,708	$594,408,675
	Rate	3.0%	0.0%	2.1%	2.5%	0.2%	0.1%	2.2%	3.7%	7.2%
Definition	Well Equip./ Tanks		No	Yes	Yes	Yes	No	Yes	Yes	Yes
	Minerals		No	No	Yes	No	No	No	Yes	No
Severance & Property Tax Total	Value		$5,974,194,387	$14,038,800,000	$15,233,048,985	$1,969,012,898	$11,104,431,997	$8,629,700,000	$49,407,572,952	$8,300,708,852
	Tax		$582,710,648	$3,528,501,557	$380,209,000	$209,765,737	$743,651,105	$936,600,000	$3,884,651,453	$1,080,954,486
	Rate	11.0%	9.8%	25.1%	2.5%	10.7%	6.7%	10.9%	7.9%	13.0%
Tax changes since 2010			No	Yes	No	No	No	No	No	No

Notes:

1. *Average rates exclude ND*
2. *Alaska (gas data not segregated from oil)*
3. *Oklahoma adjustment is excise tax*
4. *Alaska audit collections adjusted downward for unusually large collection in FY 2010*