Oil and Gas Production Tax Comparison: Montana and North Dakota

November 8, 2012 (updated)

Executive Summary

This paper provides a brief description and comparison of North Dakota's and Montana's taxes on oil production. Trying to compare North Dakota's and Montana's oil and gas production taxes is difficult because of the very different provisions in each state. In order to overcome this difficulty, an oil production curve for a typical Bakken well developed by the North Dakota Industrial Commission is used to create a simple comparison.

Assuming an oil price of $80 per barrel to producers, the effective tax rate for North Dakota (10.6%) over the life of the well is higher than in Montana (7.4%). However, in Montana working interest owners are favored with a lower effective tax rate (6.3%) than non-working (royalty) interest owners who pay the highest rate in either state (15.06%).

Effective Tax Rates over the Lifetime of Production by a Typical Bakken Well				
	North Dakota	Montana		
	All Interests	Average over All Interests	Working Interests	Nonworking (Royalty) Interests
Oil price higher than the North Dakota trigger price	10.6%	7.4%	6.3%	15.06%

Additionally there is a comparison of other taxes - North Dakota's sales tax versus Montana's property tax on fixed business equipment. Sales taxes paid developing a typical well in North Dakota are estimated at $75,000. Property taxes on fixed business equipment in Montana are estimated to be $11,000 to $16,000 in Montana over the life of the well.

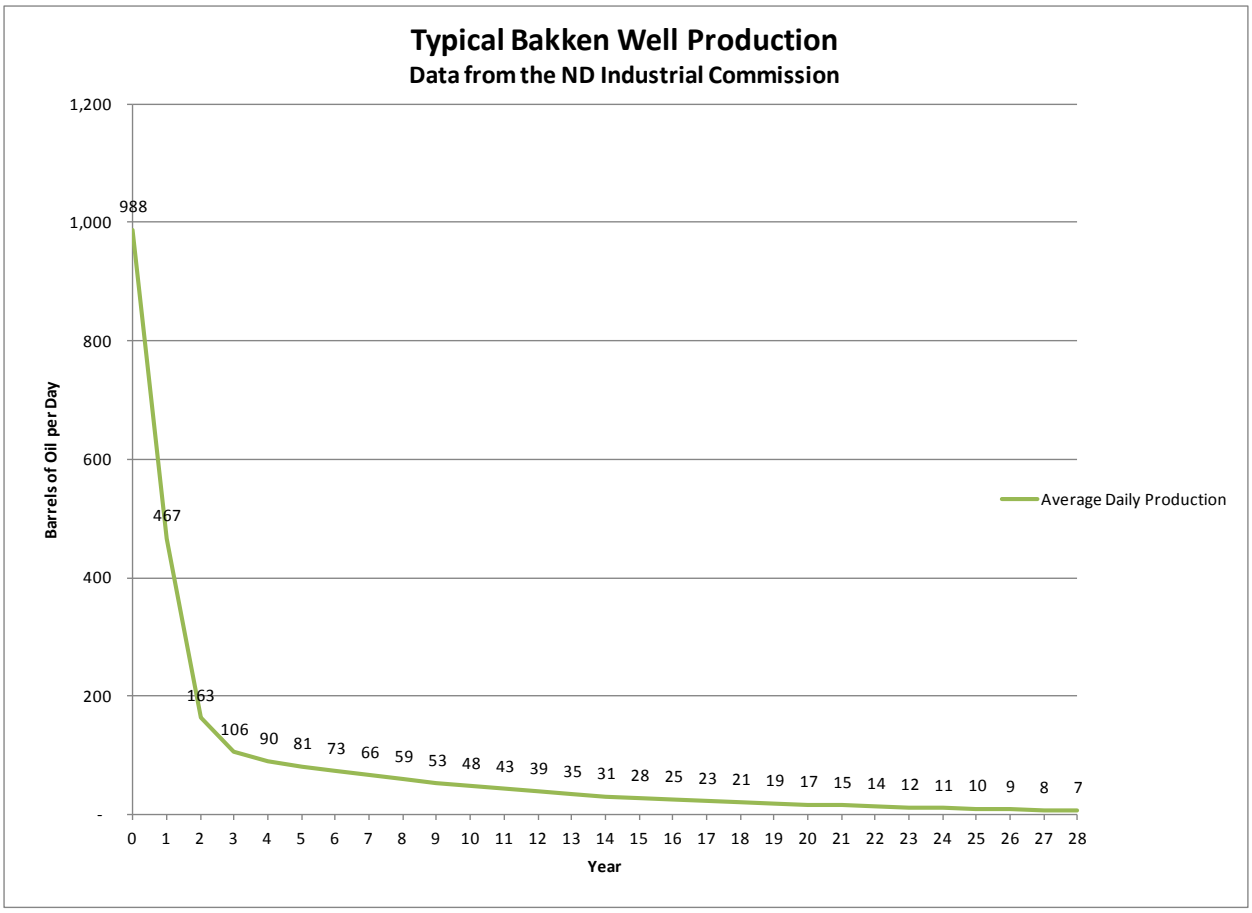
Introduction

This paper is intended as a short background paper for the biennial report. Recent publicity concerning the oil boom in western North Dakota and the stories about the unfilled jobs and expanding businesses have been a welcome change from the news on unemployment and slow business activity. Articles have also appeared in state papers concerning the actual or possible impact on Montana since the geologic formations being drilled and brought into production in North Dakota also extend into Montana and Canada. Montana's production peaked in 2006 with development of the Elm Coulee field in Richland County in the Williston Basin area. Production has since declined; however, there has been some recent leasing and drilling activity in Montana.

One question that has been raised is how do oil production taxes compare between North Dakota and Montana? Following is a simple comparison meant to show the major differences between the two state's tax regimes, followed by an appendix with more detailed descriptions of the tax structures, and a brief discussion of the distribution of these taxes.

Comparison of MT oil and gas severance and ND gross production and extraction taxes.

Comparing Montana's and North Dakota's taxes on oil and natural gas production can get complicated because the two states' taxes contain various provisions, including price related triggers, and holidays or exemptions that are not identical. To help make the comparison, we looked at how the two different state tax regimes could operate over the lifespan of a typical oil well. The North Dakota Industrial Commission has developed a production profile of a typical well (horizontally drilled) in the Bakken and used the profile in numerous presentations in 2011 and 2012. We requested the production data that underlies the production curve, shown below, and are using the data in our examples.



In the graph above, the first data point of 988 barrels a day is the initial production. All other values on the graph are the average production rate in barrels per day for the corresponding years. For example, in year 1 average production is 467 barrels of oil per day and in year 10 average production is 48 barrels per day.

Following is a simple scenario created to show what happens under the two state tax regimes. In this scenario the price of oil received by producers is assumed to be $80 per barrel. An oil price of $80 per barrel is slightly lower, but still consistent with the prices being received by producers in the Bakken (the Department of Mineral Resources, North Dakota Industrial Commission reported that the November 2011 sweet crude price received by producers was $88.54 per barrel; in October 2011 it had been $83.50 per barrel. In July, August and September 2012, the prices were $71.13, $80.65, and $84.98 per barrel respectively). Prices received by producers are usually lower than WTI (West Texas Intermediate) prices due to transportation costs which may also be affected by limited capacity. This example is meant to illustrate how important elements of the taxes work and is not intended as a revenue estimate, so things such as inflation have not been factored into the analysis.

North Dakota versus Montana

North Dakota collects two different taxes on oil production – the gross production tax and the oil extraction tax. The gross production tax is 5% and is not subject to a trigger price. The oil extraction tax is connected to a trigger price; in other words, the state's tax rate is reduced if the WTI (West Texas Intermediate) price is below a certain level. In North Dakota the current

trigger price is $50.07 per barrel (based upon WTI prices – see appendix), so the regular rate for oil extraction of 6.5% is in effect. In this example, the rates are assumed to be in effect for the entire life of the well, until the well is eligible for the stripper exemption. As our hypothetical well is based on a typical horizontal well in the Bakken, this well is assumed to be at least 10,000 feet deep and therefore eligible for the stripper exemption for the oil extraction tax when production goes below 30 barrels per day. The North Dakota stripper exemption is not tied to the trigger price so when production goes below 30 barrels per day in year 15, the oil extraction rate goes to 0%. All revenue from this well is assumed to be taxable.

YEAR	Average Daily Production	Annual Production (assuming 365 days per year)	Revenue assuming a price of $80 per barrel	ND - gross production taxes	ND - gross production tax revenue	ND - oil extraction tax rate	ND - oil extraction tax revenue	ND - Sum of extraction and production taxes
1	467	170,455	13,636,400	5.00%	681,820	6.50%	886,366	1,568,186
2	163	59,495	4,759,600	5.00%	237,980	6.50%	309,374	547,354
3	106	38,690	3,095,200	5.00%	154,760	6.50%	201,188	355,948
4	90	32,850	2,628,000	5.00%	131,400	6.50%	170,820	302,220
5	81	29,565	2,365,200	5.00%	118,260	6.50%	153,738	271,998
6	73	26,645	2,131,600	5.00%	106,580	6.50%	138,554	245,134
7	66	24,090	1,927,200	5.00%	96,360	6.50%	125,268	221,628
8	59	21,535	1,722,800	5.00%	86,140	6.50%	111,982	198,122
9	53	19,345	1,547,600	5.00%	77,380	6.50%	100,594	177,974
10	48	17,520	1,401,600	5.00%	70,080	6.50%	91,104	161,184
11	43	15,695	1,255,600	5.00%	62,780	6.50%	81,614	144,394
12	39	14,235	1,138,800	5.00%	56,940	6.50%	74,022	130,962
13	35	12,775	1,022,000	5.00%	51,100	6.50%	66,430	117,530
14	31	11,315	905,200	5.00%	45,260	6.50%	58,838	104,098
15	28	10,220	817,600	5.00%	40,880	0.00%	-	40,880
16	25	9,125	730,000	5.00%	36,500	0.00%	-	36,500
17	23	8,395	671,600	5.00%	33,580	0.00%	-	33,580
18	21	7,665	613,200	5.00%	30,660	0.00%	-	30,660
19	19	6,935	554,800	5.00%	27,740	0.00%	-	27,740
20	17	6,205	496,400	5.00%	24,820	0.00%	-	24,820
21	15	5,475	438,000	5.00%	21,900	0.00%	-	21,900
22	14	5,110	408,800	5.00%	20,440	0.00%	-	20,440
23	12	4,380	350,400	5.00%	17,520	0.00%	-	17,520
24	11	4,015	321,200	5.00%	16,060	0.00%	-	16,060
25	10	3,650	292,000	5.00%	14,600	0.00%	-	14,600
26	9	3,285	262,800	5.00%	13,140	0.00%	-	13,140
27	8	2,920	233,600	5.00%	11,680	0.00%	-	11,680
28	7	2,555	204,400	5.00%	10,220	0.00%	-	10,220
Total		574,145	45,931,600		2,296,580		2,569,892	4,866,472

As can be seen from the table above, this hypothetical well produces 574 thousand barrels over its lifetime, and, assuming a price of $80 per barrel, generates almost $46 million in total revenues (before taxes and expenses). In this case, North Dakota collects almost $2.3 million in gross production taxes and almost $2.6 million in oil extraction taxes. Together these taxes total $4.866 million over the well's lifetime. Finally, dividing $4.866 million of taxes by $45.931 million of total revenue produces an effective tax rate of 10.6% over the life of the well.

Had this hypothetical well been in Montana, then tax revenues would have been different as shown in the following table. Montana oil and gas taxes treat non-working or royalty income differently than working interests. In the following table the royalty share of production income is assumed to be13%, and the working interest share is assumed to be 87%.

YEAR	Average Daily Production	Annual Production (assuming 365 days per year)	Revenue--Assuming a Price of $80 per Barrel	Revenue to the Non-working Interest--Assuming Royalty Rate of 13%	Montana Tax Rate on Nonworking Share	Montana Taxes Paid by Nonworking Share	Revenue to the Working Interest -- Assumed at be 87%	Montana Tax Rate on Working Share	Montana Taxes paid by Working Share	Montana Sum of Taxes Paid
1	467	170,455	13,636,400	1,772,732	15.06%	266,973	11,863,668	0.76%	90,164	357,137
2	163	59,495	4,759,600	618,748	15.06%	93,183	4,140,852	5.01%	207,457	300,640
3	106	38,690	3,095,200	402,376	15.06%	60,598	2,692,824	9.26%	249,356	309,953
4	90	32,850	2,628,000	341,640	15.06%	51,451	2,286,360	9.26%	211,717	263,168
5	81	29,565	2,365,200	307,476	15.06%	46,306	2,057,724	9.26%	190,545	236,851
6	73	26,645	2,131,600	277,108	15.06%	41,732	1,854,492	9.26%	171,726	213,458
7	66	24,090	1,927,200	250,536	15.06%	37,731	1,676,664	9.26%	155,259	192,990
8	59	21,535	1,722,800	223,964	15.06%	33,729	1,498,836	9.26%	138,792	172,521
9	53	19,345	1,547,600	201,188	15.06%	30,299	1,346,412	9.26%	124,678	154,977
10	48	17,520	1,401,600	182,208	15.06%	27,441	1,219,392	9.26%	112,916	140,356
11	43	15,695	1,255,600	163,228	15.06%	24,582	1,092,372	9.26%	101,154	125,736
12	39	14,235	1,138,800	148,044	15.06%	22,295	990,756	9.26%	91,744	114,039
13	35	12,775	1,022,000	132,860	15.06%	20,009	889,140	9.26%	82,334	102,343
14	31	11,315	905,200	117,676	15.06%	17,722	787,524	9.26%	72,925	90,647
15	28	10,220	817,600	106,288	15.06%	16,007	711,312	9.26%	65,867	81,874
16	25	9,125	730,000	94,900	15.06%	14,292	635,100	9.26%	58,810	73,102
17	23	8,395	671,600	87,308	15.06%	13,149	584,292	9.26%	54,105	67,254
18	21	7,665	613,200	79,716	15.06%	12,005	533,484	9.26%	49,401	61,406
19	19	6,935	554,800	72,124	15.06%	10,862	482,676	9.26%	44,696	55,558
20	17	6,205	496,400	64,532	15.06%	9,719	431,868	9.26%	39,991	49,709
21	15	5,475	438,000	56,940	15.06%	8,575	381,060	9.26%	35,286	43,861
22	14	5,110	408,800	53,144	15.06%	8,003	355,656	9.26%	32,934	40,937
23	12	4,380	350,400	45,552	15.06%	6,860	304,848	9.26%	28,229	35,089
24	11	4,015	321,200	41,756	15.06%	6,288	279,444	9.26%	25,877	32,165
25	10	3,650	292,000	37,960	15.06%	5,717	254,040	9.26%	23,524	29,241
26	9	3,285	262,800	34,164	15.06%	5,145	228,636	9.26%	21,172	26,317
27	8	2,920	233,600	30,368	15.06%	4,573	203,232	9.26%	18,819	23,393
28	7	2,555	204,400	26,572	15.06%	4,002	177,828	9.26%	16,467	20,469
Total		574,145	45,931,600	5,971,108		899,249	39,960,492		2,515,944	3,415,192

As before, our hypothetical well produces 574 thousand barrels over its lifetime, and, at a price of $80 per barrel, generates almost $46 million in total revenues (before taxes and expenses). Total oil and gas production taxes paid over the life of the well to Montana are $3.415 million (see the last column on right). The effective tax rate over the life of the well is 7.4% ($3.415 million divided by $45.931 million).

However, the totals conceal an important feature of Montana oil and gas production taxes – that the share of taxes paid by the two different interests recognized by Montana, working and nonworking, are very different. State law defines a nonworking interest owner as “any interest

owner who does not share in the exploration, development, and operation costs of the lease or unit, except for production taxes" (15-36-303, MCA). In the case of our hypothetical well, the royalty owners or nonworking interests pay a production tax rate of 15.06% and are not eligible for any exemptions or holidays. The royalty or non-working interests receive revenue of almost $6 million (before taxes) and pay $899 thousand in taxes over the life of the well.

The definition of working interest is "an owner of an interest in an oil or natural gas well or wells who bears any portion of the exploration, development and operating costs of the well or wells". (15-36-303, MCA) The working interest is taxed at different rates during the life of the well. Because this is a horizontally completed well, the working interest is eligible for an exemption for the first 18 months and will pay a lower tax rate of 0.76%. After the exemption period ends, the working interest pays a tax rate of 9.26%. Our well's production is not eligible for the Montana stripper rate since the assumed price of oil is over $30 per barrel, but if it did qualify, the tax rate would have been reduced to 5.76% on the first 10 barrels per day.

Over the lifetime of our well, the working interest receives revenue of nearly $40 million (before taxes and expenses) and pays production taxes of $2.516 million. This is an effective tax rate of 6.3% ($2,515,944 / $39,960,492). The effective tax rate for the non-working share is 15.06% ($899,249 / $5,971,108), meaning that the effective tax rate for the non-working share is more than twice that of the working share (15.06 / 6.3 = 2.39 or 239%).

None of the examples above address natural gas. There is no similar production curve for natural gas to use for comparison purposes, but the tax rates are simpler. The tax rate in North Dakota in fiscal year 2013 is $0.1143 per mcf, or more than 11 cents per thousand cubic feet. According to the North Dakota Industrial Commission, in October 2012 the price of natural gas at delivery to Northern Border at Watford City was $2.96 per mcf, producing a tax rate of about 3.86% (0.1143 /2.96). The tax rate in Montana is 15.06% for the royalty interest, and 0.76% for the working interest for the first 12 months of a new well, and 9.26% for a horizontally completed well or for regular production from a post-1999 well. The rate for a pre-1999 well in regular production is 15.06% and for a pre-1999 well producing less than 60 mcf per day, it is reduced to 11.26%.

Other Taxes

There are other taxes associated with development and production in the two states. North Dakota collects sales taxes, but not property taxes on business equipment. Montana collects property taxes on business equipment, but does not have a general sales tax. If our hypothetical oil well is in North Dakota, sales taxes associated with developing the well are estimated at $75,000. If our hypothetical oil well is in Montana, there are no general sales taxes associated with developing the well, but property taxes on the fixed business equipment associated with the well are estimated to be $11,000 to $16,000 over the life of the well. How these estimates were developed is explained below.

North Dakota has estimated that the average oil well generates approximately $360,000 to $385,000 in sales taxes (see presentations by the Oil and Gas Division, Dept. of Mineral Resources, ND Industrial Commission, to the Conference of Western Attorneys General, Big Sky, 2-16-12 and WBPC Activity, 5-25-12). However, inquiries to the ND State Tax

Commission indicate that these estimates are based upon a broad group of expenditures, including pipeline and rail line investments associated with petroleum transport, and are probably too expansive for this comparison.

A narrower estimate of the sales taxes generated by developing an oil well is about $75,000 (communications with Kathy Strombeck, Director of Research, ND State Tax Commission, September 5, 2012) and is more useful for comparison with Montana property taxes on business equipment. The state sales tax rate is 5%, so in order to generate $75,000 in sales taxes there must have been $1.5 million of purchases to which the tax applied. However, cities and counties in North Dakota can impose local option taxes, and a review of current tax rates indicates that at least some of the western cities have a 2% rate, making the total sales tax rate 7.5% in some places. Dividing $75,000 by 7.5% results in $1.0 million of purchases to which the tax applied. The average horizontal oil well in the Bakken costs about $7.5 million to $10 million, including salaries and wages of $1.6 million, to drill and complete (see ND Industrial Commission presentations cited above and James MacPherson's 08/17/2012 article "ND oil drilling faster, more efficient but costlier" in the *Grand Forks Herald*). North Dakota collects sales tax on materials such as well casings and cement, so assuming $1.0 to $1.5 million of these expenditures is taxable is probably conservative.

Montana does not collect a general sales tax, but does collect property taxes on business equipment. The property tax applies to business equipment property above ground. It does not apply to property below ground (property that will eventually be installed below ground, but is still in inventory is taxable). Working with one of the eastern Montana property assessment offices, the permanently installed, above ground, equipment associated with a recently horizontally drilled oil well was found to be valued at about $102,000. Estimated property taxes associated with this group of property totals about $5,100 during the first five years of operation, an average of $1,020 per year. This estimate is based upon effective rates before the changes in SB 372, which will reduce tax rates, occur. Business equipment is subject to depreciation so the value and property tax will drop substantially over time. If the lifetime of the assets is assumed to be 28 years, same as that of our hypothetical oil well, with the same mill levy and no replacement or upgrading of the equipment, then total estimated property taxes are about $16,000 over its lifetime (under SB 372 the total estimated property tax is expected to be reduced by one-third for property under $2 million, so if the owner has less than $2 million dollars in value, the total taxes over the 28 year life of the well will be less than $11,000).

There may be some additional property taxes generated by mobile equipment; estimating the resulting property taxes is beyond the scope of this paper. However, industry practices have markedly reduced the average time needed to drill a well, allowing mobile equipment to be used to drill and complete more wells per year (see MacPherson article. The article reports that the time to drill a well has dropped from 65 days in 2007 to 20 days currently). Therefore, the property taxes generated by mobile equipment would be distributed among many more wells, reducing the taxes associated with any one well.

Conclusion

The original question was how do these two states' taxes on oil compare? The answer is complex and while the example above does not deal with all possible situations such as special rates for recompleted wells or other complexities of state tax law, they provide some information on how the rates and exemptions work on a typical new well. The results are summarized in the following table:

Effective Tax Rates over the Lifetime of Production by a Typical Bakken Well				
	North Dakota	Montana		
	All Interests	Average over All Interests	Working Interests	Nonworking (Royalty) Interests
Oil price higher than the North Dakota trigger price	10.6%	7.4%	6.3%	15.06%

Because North Dakota's tax rates are tied to a price trigger, state revenues are maximized when prices are higher than the price trigger, as they are now. Only when the relevant market price is lower than the price trigger, do most of North Dakota's exemptions and lower rates go into effect. When prices are lower (below the price trigger), then the state may see a disproportional reduction in tax revenues, as exemptions go into effect and rates are reduced.

Montana oil production taxes are mainly not tied to prices (the stripper and super stripper exemptions are tied to prices, but are not adjusted for inflation and apply to less production). In the face of an oil price drop, the tax revenue decrease is more likely to be proportional to the price drop. The other important feature of Montana oil production taxes is that they differentiate between ownership interests. Royalty owners, who by definition are passive recipients of oil income, are taxed at a higher rate in Montana. Working interests, who by definition, are putting their own capital at risk and making decisions concerning the investment of capital, are taxed at a lower rate in Montana.

Finally we compared other taxes that apply when oil wells are developed. Sales taxes paid developing a typical well in North Dakota are estimated by the North Dakota Tax Commission as $75,000. Property taxes on fixed business equipment associated with a recently drilled horizontal oil well in Montana are estimated to be $11,000 to $16,000 over the life of the well.

Appendix

North Dakota taxes on oil and natural gas production

North Dakota has two different taxes on the gross value from oil production – the oil and gas gross production tax and the oil extraction tax. The gross production tax is levied both on oil and gas. The oil extraction tax only applies to the value of oil production.

The gross production tax on oil is levied at a rate of 5% on the gross value at the well of all oil produced. There are no incentives involved in the gross production tax although there are some exemptions. Exempt from the gross production tax is the royalty interest in oil produced from a state, federal, or municipal holding; or a Native American holding within the reservation boundary.

The gross production tax on natural gas is levied at a tax rate which, by statute, is adjusted each year by the gas fuels producer price index, as published by the U.S. Department of Labor, Bureau of Labor Statistics. For fiscal year 2013 (July 1, 2012 through June 30, 2013), the tax rate is $0.1143 per thousand cubic feet or mcf (June 1, 2012, Gas Tax Rate Notice, North Dakota Office of State Tax Commissioner). Last year's tax rate was $0.1112 and the prior year tax rate was $0.0914 per mcf. Shallow gas is exempt from the gross production tax during the first 24 months of production. Shallow gas is defined in North Dakota as natural gas from a shallow gas zone which is a formation located above 5,000

NORTH DAKOTA
OIL AND NATURAL GAS PRODUCTION TAXES AND OIL EXTRACTION TAX

Oil and Gas Gross Production Tax	
Oil	5%
Natural Gas /1	
7/1/2010 - 6/30/2011	$ 0.0914
7/1/2011 - 6/30/2012	$ 0.1112
7/1/2012 - 6/30/2013	$ 0.1143
Oil Extraction Tax	
Regular production - Not subject to incentive rates or exemptions	6.5%
Vertical wells:	
First 15 months - Average price below trigger price 2/	0%
After first 15 months - Average price below trigger price 2/	4%
Average price above trigger 2/ - pays regular production rate	6.5%
Horizontal wells:	
First 24 months - Price below trigger price 2/	0%
After first 24 months, price below trigger price 2/	4%
Average price above trigger 2/ - pays regular production rate	6.5%
Horizontal well incentive trigger - effective through June 30, 2013	2%
Workover wells 3/:	
First 12 months - Price below trigger price 2/	0%
After first 12 months, price below trigger price 2/	4%
Average price above trigger 2/ - pays regular production rate	6.5%
Horizontal re-entry well:	
First 9 months after recompletion, price below trigger price	0%
After first 9 months, price below trigger price	6.5%
Average price above trigger 2/ - pays regular production rate	6.5%
Certified stripper well 4/	0%
Certified two-year inactive well, 10 year exemption, subject to trigger price	0.0%
After 10 year exemption	6.5%
New horizontal or vertical well on tribal trust land, first 60 months	0%
After first 60 months, price below trigger price 2/	4%
Average price above trigger 2/ - pays regular production rate	6.5%
Incremental oil from qualifying secondary or tertiary recovery project during exemption - 5 years for secondary recovery projects, 10 years for tertiary	0%
After exemption, price below trigger price	4%
Average price above trigger 2/ - pays regular production rate	6.5%

1/ Per mcf. Shallow gas produced during the first 24 months of production from a shallow gas zone is exempt from the production tax.

2/ The trigger price in CY 2011 was $46.78, for CY 2012 it is $50.07.

3/ A qualifying well is one that has produced less than 50 barrels per day during the last 6 months of production.

4/ Definition of stripper well varies by the depth of the well.

5/ Temporary horizontal well incentive subject to trigger price, extended to June 30, 2013.

feet below the surface, or lower if still above the Rierdon formation. To receive the exemption, shallow gas must be certified by the industrial commission to the tax commissioner.

The oil and gas gross production tax is imposed in lieu of property taxes on oil and gas producing properties. The gross production taxes and the extraction taxes are remitted monthly and reported on a combined reporting form by the seller to the state.

The oil extraction tax is levied at a rate of 6.5% of the gross value at the well for oil extracted. There are many exceptions to the 6.5% extraction rate, most of which are tied to a trigger price. By statute the original trigger price of $35.50 is updated for changes in the producer price index (Bureau of Labor Statistics, US Department of Labor). For calendar year 2012, the trigger price is $50.07. For calendar year 2011, the trigger price was $46.78.

Currently the average price of a barrel of crude oil is above the trigger price, so none of the exemptions or the reduced rates tied to the trigger price are in effect. The last time these tax incentives tied to the trigger price were in effect was October 1, 2004.

The definition of the average price in North Dakota for purposes of the oil trigger price is the monthly average of the daily closing price for a barrel of West Texas Intermediate (Cushing hub) crude oil minus $2.50. The average price must be below the trigger price for 5 consecutive months for the exemptions or lower rate to be effective. For example, under current prices, for a new horizontal well the taxpayer would pay the oil and gas production tax on oil and natural gas sales (5% on oil and 11.12 cents per mcf sold for natural gas). The taxpayer would also pay the 6.5% oil extraction tax on production. However, if the average price dropped below the trigger price for five consecutive months, then the oil extraction rate paid on production is the lower rate, as applicable.

The 2009 North Dakota legislature created a reduced extraction tax rate of 2% for horizontal wells located in the Bakken, drilled and completed after April 30, 2009, unless the computed average price exceeded a certain level. The incentive rate applies to the first 75,000 barrels produced or the first $4.5 million of gross value at the well, whichever is less, during the first 18 months after completion of the horizontal well. This reduced rate was scheduled to expire on June 30, 2013; however, because the computed average price exceeded the threshold of $70 per barrel, the incentive rate was discontinued for wells completed after October 31, 2009. If the average oil price goes below $55 a barrel before the end of the incentive period, the 2% extraction tax incentive becomes effective again for wells completed during the time the 2% incentive rate is in effect. Unlike the exemptions or 4% rate, the 2% rate stays with the well, that is, if the well is completed during a period the 2% rate is in effect, the well is eligible for the 2% rate for 18 months, regardless what happens to prices thereafter. If the 2% rate is not in effect on the date a well is completed, the 2% reduced rate does not apply to production from that well at any time.

Distribution of taxes

Under state law, the oil extraction tax is deposited monthly into the oil extraction tax development fund and monthly the state treasurer must allocate 20% to the sinking fund for North Dakota water development bonds and the southwest pipeline series. Any excess over

what is needed to fund those two items is deposited in the resources trust account and used to fund water project planning and construction, including that of rural water projects, by the state water commission. Additionally the industrial commission receives money for development, study, and grants for energy conservation projects, co-generation, use of waste products and renewable energy sources, etc. Twenty percent is allocated to the common schools fund and foundation aid stabilization fund. Thirty percent is allocated to the state general fund. Thirty percent is allocated to the Legacy Fund (57-51.1-07, Century Code of North Dakota).

The 2009 North Dakota legislature adopted House Concurrent Resolution No. 3054, which was then approved by the voters in November 2010 (Measure No. 1). The measure established the North Dakota Legacy Fund as a constitutional trust fund and revised the existing distributions. Thirty percent of all revenue collected from oil and gas production and extraction taxes are to be distributed to the fund beginning July 1, 2011. The state investment board will invest the fund principal. Interest and investment earnings will be retained in the fund until June 30, 2017, after which time interest accruing after June 30, 2017 is transferred to the general fund at the end of each biennium. The Legacy Fund cannot be touched by the Legislature until 2017; thereafter, a two-thirds vote is required to spend any principal of the fund. Expenditures from the fund are limited to 15% of the principal in any one biennium.

The gross production tax is also distributed monthly and is much more complicated in statute due to the directions for distributions to cities, counties, townships and school districts in producing areas (57-51-15, Century Code of North Dakota). Additionally, up to $100 million of this revenue is distributed each biennium to the oil and gas impact grant fund (in the November 2011 special session the ND legislature added $30 million to the grant fund if actual oil and gas tax revenues exceed projections by $48 million by the end of February 2012). Local governments that have been impacted by oil and natural gas production can apply for funding from this grant fund to help with infrastructure needs such as roads, water and sewage systems. Thirty percent of the production taxes go to the Legacy Fund. If there are revenues left over after the distributions, the leftover revenues go to the general fund. If there is a shortfall to the Legacy Fund after transfer of monies to local entities, the difference is to be made up by transfer of the state general fund share of oil extraction taxes to the Legacy Fund.

To give some sense of the scale, through November 2011, a little over $100 million had been deposited in the Legacy Fund for the biennium to date (since July 1st), and $77 million in production taxes and $85 million in extraction taxes had been deposited in the general fund to date (North Dakota REV-E-NEWS, December 2011, North Dakota Office of Management and Budget). Total deposits of these taxes to the general fund are capped at $300 million per year and once that cap is reached, revenues are deposited in several other funds, including the Legacy Fund, as set by law. By the end of September 2012, $535.2 million had been deposited in the Legacy Fund (North Dakota REV-E-NEWS, October 2012, ND Office of Management and Budget).

Montana taxes on oil and natural gas production

Montana levies oil and gas production taxes on production in the state. These taxes were simplified during several legislatures in the 1990s, but still retain some complexity.

Montana's oil and gas production tax recognizes two types of ownership interests -- working and nonworking (royalty) -- and taxes those differently. It also recognizes several categories of wells and taxes production revenues from those wells differently. The tax rate changes for some categories of wells -- stripper and "super stripper" wells -- if certain conditions are met, such as when oil prices are below a certain target price. The well categories include the age of the well, whether it was drilled vertically or using horizontal drilling techniques, the quantity of production, and whether primary, secondary or tertiary modes of extractions are used.

The overall tax rate on non-working (royalty) interests is 15.06% at all times – regardless of the type of well, level of production, whether it is oil or natural gas, or any other factor. The tax rate actually is 14.8% with an additional 0.26% levied to fund the Oil and Gas Conservation Division (0.09%) and the oil and natural gas natural resource fund which provides revenues addressing local impacts for local governments (0.17%). The 0.26% rate applies to all categories and is included in all rates shown in the summary table.

MONTANA
OIL AND NATURAL GAS PRODUCTION TAX RATES

NATURAL GAS		
ROYALTY INTERESTS		15.06%
WORKING INTERESTS		
Pre-1999 Wells (Regular Production)		15.06%
Post-1999 Wells (Regular Production)		9.26%
Horizontally Completed Wells		9.26%
Pre-1999 Wells Producing Less Than 60 MCF per Day		11.26%
The First 12 Months Of New Wells' Production		0.76%
OIL		
ROYALTY INTERESTS		15.06%
WORKING INTERESTS		
Pre-1999 Wells (Regular Production)		12.76%
Post-1999 Wells (Regular Production)		9.26%
Incremental Production From Secondary Recovery	1,2	8.76%
Incremental Production From Tertiary Recovery	1,2	6.06%
Horizontally Recompleted Wells - First 18 Months		5.76%
Horizontally Completed Wells - First 18 Months		0.76%
Stripper Wells - First 10 Barrels Per Day	1	5.76%
Super Stripper Wells - Oil Under $38 Per Barrel	2	0.76%
Super Stripper Wells - Oil $38 Per Barrel Or Higher	2	6.26%
Vertically Completed Wells - First 12 Months		0.76%
Wells Producing Less Than 3 Barrels Per Day When The WTI Prices Is Less Than $38 Per Barrel		0.76%
Wells Producing Less Than 3 Barrels Per Day When The WTI Prices Is Equal To Or Greater Than $38 Per Barrel.		6.26%

Stripper wells produce 3-15 barrels per day.
Super stripper wells produce less than 3 barrels per day.

All rates include 0.26% to fund the operations of the Oil and Gas Conservation Division and the Oil and Natural Gas Natural Resource Fund that is distributed to producing counties.

1 These rates apply if the price is under $30 per barrel. Otherwise, the regular production rates apply.
2 Oil price is the price for West Texas Intermediate Crude Oil reported in the Wall Street Journal.

The tax rate on working interests varies substantially depending on characteristics of the well. For example, the tax rate on production from a horizontally drilled oil well is 0.76% during the first 18 months of qualifying production, and 9.26% thereafter if it is in regular production (and was completed after 1999). If the well is vertically completed, then the lower rate of 0.76% applies for the first 12 months of qualifying production. There are also special rates for low producing

wells – those classified as stripper wells (averaging 3 to 15 barrels per day) or super-stripper wells (averaging less than 3 barrels a day) if prices are below a certain level.

The taxes are paid quarterly by the operator for all owners to the DOR (15-36-310, MCA). However, royalty payments made to an Indian tribe with respect to on-reservation oil and gas production are exempt as are royalty payments to the federal government, the state of Montana or a county or municipal government in Montana.

Distribution of taxes

The quarterly tax payment is due within 60 days after the end of the quarter. The DOR is required to make the quarterly distributions back to the county of production by the dates established in code. For example, production tax payments received for the calendar quarter ending March 31st, must be remitted to the county treasurer by August 1st (15-36-332(6), MCA). The direct local share averages about 46% of total production taxes. The distribution percentages are set in state law (15-36-331 and 332, MCA). The state share does not all go into the general fund, but is also distributed in accordance with state law and the distributions are as shown in the table below:

Fund or account	Fiscal year ending June 30, 2011	For fiscal years after June 30, 2011
Coal bed methane protection	1.23%	-
Natural resource projects	1.45%	2.16%
Natural resource operations	1.45%	2.02%
Orphan Share	2.99%	2.95%
University System	2.65%	2.65%
General Fund	Balance	Balance

The distributions described above apply to the 14.8% production tax. Before these distributions are made, however, the additional 0.26% levied to fund the Oil and Gas Conservation Division (0.09%) and the oil and natural gas natural resource fund which provides revenues addressing local impacts for local governments (0.17%) are deposited in the appropriate account.