

MARGINAL WELLS ARE NOT INSIGNIFICANT

by

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Marginal wells compose 69% of all producing oil wells in the United States, and 76% of all producing natural gas wells. In Louisiana in 2015, there were 20,576 oil wells that were considered marginal producers, pumping out 9 million barrels, or 14.3% of the state total of 62,861,269 barrels produced. For natural gas, Louisiana had 15,449 marginal wells, which produced 56,865,395 Mcf for the year, representing 3.2% of all natural gas production.¹ While the name “marginal” may connote something of secondary importance, the production from these wells is anything but that.

Marginal Wells

Oil

Marginal wells, also known in some circles as stripper wells, are wells that the maximum daily average oil production does not exceed 10 bbls of oil, or any natural gas well that the maximum daily average gas production does not exceed 250 Mcf, per day, during any 12-month consecutive period in Louisiana.² Marginal wells may have originally been high-volume wells, but through normal production declines, now produce smaller volumes. Some of the wells considered marginal have been producing for decades; these wells tend to have low maintenance costs, are kept active, and they may continue to produce for many years, as long as they are economically feasible. Typically, these wells paid out many years ago. While each well contributes a small volume to the amount produced, the magnitudes of wells considered marginal contribute a significant amount of oil and natural gas production. In fact, in Louisiana alone, marginal wells represent 14.3% of oil production, and marginal wells account for 11.2% of all oil production in the United States (see Table 1). In fact, Louisiana produces 3.1% of all the marginal oil production in the country.

Table 1. Marginal Oil Wells in the United States

State	Number of Marginal Oil Wells	Oil Production from Marginal Wells	Average Daily Production per Well (bbl)	Total Oil Production (bbl)	Marginal Share of Total Production
Louisiana	20,576	8,996,596	1.2	62,861,269	14.31%
Oklahoma	28,351	15,188,479	1.5	157,770,000	9.63%
Mississippi	992	1,170,601	3.2	23,659,686	4.95%
USA	408,490	292,529,299	2	2,613,488,988	11.19%
Louisiana Share	5.04%	3.08%		2.41%	

<http://iogcc.ok.gov/WebSites/iogcc/images/MarginalWell/MarginalWell-2015.pdf>

Putting the value of that production into monetary terms, when looking at just the value of the oil severed from the ground and not the additional economic benefit of employment, West Texas Intermediate (WTI) averaged \$49 per barrel in 2015. Multiply the \$49 per barrel by the nearly 9 million

¹ <http://iogcc.ok.gov/WebSites/iogcc/images/MarginalWell/MarginalWell-2015.pdf>

² [http://revenue.louisiana.gov/TaxForms/9051\(5_10\)F.pdf](http://revenue.louisiana.gov/TaxForms/9051(5_10)F.pdf)

barrels of production from marginal wells in Louisiana and there was over \$440 million worth of oil produced from marginal wells in Louisiana alone. Taking into consideration all marginal well production, 292.5 million barrels, and the production alone was valued at \$14.3 billion. In addition to the production revenue generated by extraction, there is also an economic benefit to the states and to the employees of the companies, which sever the oil. Severance tax for marginal wells (in Louisiana, Incapable Wells are the subset of marginal wells which produce an average between 10 and 25 barrels per day while Stripper Wells produce an average of 10 or fewer barrels per day) pay a lesser percentage of severance tax than high producing wells. Incapable well production is taxed at a 6.25% rate, and stripper well production is taxed at a 3.125% rate.³ The lower tax rate could be construed as an incentive to continue production for wells that have neared the end of their lifespan, albeit at a declined rate.

Natural Gas

As for natural gas, Louisiana produces almost 57 million Mcf from marginal wells, or about 3.25% percent of all natural gas produced in the state. That 57 million Mcf represents 2.91% of all natural gas produced from marginal wells in the United States. Seven percent of the 28 billion Mcf of natural gas produced in the United States was from marginal wells in 2015 (see Table 2), a lower percentage of marginal production than the 11.19% of oil produced from marginal wells. Louisiana produces 6.28% of all natural gas in the United States, spurred on by the Haynesville Shale, located in Northwest Louisiana (mainly in Bossier and Caddo Parishes).

Table 2. Marginal Natural Gas Wells in the United States

State	Number of Maginal Gas Wells	Gas Production from Marginal Wells	Average Daily Production per Well (Mcf)	Total Gas Production (Mcf)	Marginal Share of Total Production
Louisiana	15,449	56,865,395	10.1	1,754,317,208	3.24%
Oklahoma	45,340	310,610,973	18.8	2,499,599,000	12.43%
Mississippi	1,475	1,335,810	2.5	55,166,000	2.42%
USA	377,977	1,955,292,380	14.2	27,924,277,063	7.00%
Louisiana Share	4.09%	2.91%		6.28%	

<http://iogcc.ok.gov/Websites/iogcc/images/MarginalWell/MarginalWell-2015.pdf>

Putting a monetary value on just the production from natural gas extraction from marginal natural gas wells, Natural gas average price (per Mcf) was \$2.62. Multiply that number by the 56,865,395 (the production of natural gas from marginal wells in Louisiana) and that produces \$148,987,335 worth of production of natural gas from marginal wells in Louisiana. Taking into account all the natural gas marginal well production in the United States for 2015, the production value of the 1,955,292,380 Mcf was \$512,286,603,560. In Louisiana, marginal natural gas wells, like oil, have a lower percentage of severance tax, as production from incapable wells is taxed at \$0.013 per Mcf. Incapable wells are defined as a natural gas well that is incapable of producing an average of 250,000 cubic feet of gas per day. To qualify for the reduced rate, a gas well must be incapable of producing 250,000 cubic feet of gas per day during the entire taxable month.⁴

³ http://www.dnr.louisiana.gov/assets/TAD/data/severance/la_severance_tax_rates.pdf

⁴ http://www.dnr.louisiana.gov/assets/TAD/data/severance/la_severance_tax_rates.pdf