

July 30, 2020

Part 1: North Dakota's Abandoned Wells

Operators of wells and other energy sector infrastructure in North Dakota are expected to meet or exceed the regulatory standards to construct, operate, and maintain their facilities. In the excitement of increasing oil production, royalties, and revenues some may overlook the equally important requirement of proper plugging and reclamation of wells when they have reached the end of their producing life.

The COVID-19 pandemic has resulted in oil companies having less financial capacity to dedicate to well plugging and has made it nearly impossible for them to get new well bonds in place putting at risk an increasing number of abandoned and orphaned wells. Any well out of compliance is troubling to the Division and our citizens, especially wells categorized as either abandoned or orphaned.

• A well may be deemed as abandoned in North Dakota upon the removal of production equipment or the failure to produce oil or gas (or failure to inject) for one year; or, upon the removal of production equipment or the failure to produce water from a source well for one year. Should a well reach this status it must be promptly returned to production in paying quantities, approved by the Commission for temporarily abandoned status, or plugged and reclaimed within six months. If none of the three preceding conditions are met, the North Dakota Industrial Commission may also require the well to be placed immediately on a single-well bond in an amount equal to the cost of plugging the well and reclaiming the well site.



• A well may be deemed *orphan* when it does not have a responsible party, or the responsible party does not have sufficient bonding as required by the North Dakota Industrial Commission's Oil and Gas regulations. Orphan wells in North Dakota are plugged and reclaimed using the Abandoned Oil and Gas Well Plugging and Site Reclamation Fund ("AWPSRF") which is made up of fees, forfeiture of bonds, and fines collected from operators by the Oil and Gas Division.

Orphan wells historically have not been an issue in North Dakota. That is, until multiple recent Black Swan events hit the energy industry and US economy: an early price drop due to OPEC and Russia production agreements failing, COVID-19 shutting down crews and companies from working in the field, and the demand for fossil fuels plummeting as travel around the world all but ceased. These events cumulatively created never seen before negative oil prices.

In 2019, the IOGCC (Interstate Oil and Gas Compact Commission) recorded 61,479 documented orphan wells across 30 states and between 210,000 and 746,000 undocumented orphan wells across 35 states and Canadian provinces as of 2019. Pennsylvania's oil fields, which contain the first wells in the nation, may have up to 100,000 undocumented orphan wells. The State of North Dakota has proactively taken several steps to prevent wells from falling into this orphan category. As of April 1, 2020 the number of liabilities allowed on blanket bonds was decreased, the bonding requirements for abandoned wells and commercial saltwater disposal wells was doubled, and all wells in abandoned status are now required to have a single well bond in place equal to the estimated plugging and reclamation costs before they can be transferred to a new operator. However, the current abandoned, and orphaned wells need to be handled properly instead of sitting idle on the prairie for decades.



The number of abandoned wells in North Dakota was manageable when oil prices were above \$50/barrel WTI. Operators had additional capital available to finance their plans to bring wells into compliance. However, at current 2020 oil prices and an adjusted oil price forecast, many of these wells are at risk for becoming orphaned. Only a small number of current abandoned wells in North Dakota would be capable of producing in the foreseeable future at 2020 oil prices leaving a majority to be plugged and reclaimed. Over 70% of wells needing to be plugged and reclaimed are non-Bakken conventional wells drilled prior to 1985 - making them over 35 years old. For pre-1985 technology these wells have had a great run, but it is time to close their chapter. When requests to bring abandoned wells into compliance could not be met in 2020, due to the COVID-19 pandemic impacts, they became subject to confiscation by the Industrial Commission. The Bakken Restart Task Force submitted two requests for CARES Act funding totaling \$66 million to the Office of Management and Budget to assist with plugging and reclamation costs.

The Emergency Commission and legislative Budget Section approved the \$66 million dollars of CARES Act funding to be used to kickstart the plugging and reclamation of orphaned wells and sites in the state. This likely will not be the only funding source needed to reduce the number of orphaned wells back to zero. The budget section also authorized utilizing \$10 million from Abandoned Well Plugging and Site Restoration Fund. All North Dakota wells and facilities are required to have bonding and the Industrial Commission has authority to confiscate these bonds and/or use civil litigation to be reimbursed for the plugging and reclamation of the wells and facilities. The Oil and Gas Division has taken a

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position of keeping all these options on the table as we look to make sure all the orphaned

wells are properly plugged, and the land reclaimed.

This \$66 million project is just one small part of how CARES Act funding is being utilized

in North Dakota. The PPP program has spread \$1.9 Billion across 19,000 small businesses

in North Dakota, \$200 million in CARES Act funding has been provided to Job Service to

keep the Unemployment Insurance Trust Fund Solvent, and recently an additional \$68

million was approved by the emergency commission for small business loans to improve

their sales and retain staff. The Oil and Gas Industry has invested close to \$10 billion in

North Dakota in 2018 which generated \$2.33 billion in gross production and oil extraction

taxes and \$268 million in state sales tax. North Dakota's education system and water

resources projects like the Fargo diversion depend on these tax revenues. This \$66 million

in CARES Act funding is no different than the work taking place by state government to

help other small main street businesses keep their doors open, keep our neighbors

employed, and keep North Dakota ready to get back to work when opportunities improve.

Next week: Part 2 – Proper Plugging in North Dakota

Previous week: Oil and Gas Series: Abandoned Wells

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