

Bakken Shale Fact Sheet

Background

The Bakken Formation is an oil field located in western North Dakota, northeast Montana, and parts of Saskatchewan. Geologists have known for a long time that this formation contains a lot of oil, but because the oil is tightly locked in shale rock, we have been unable to produce much of the oil economically. Due to technological developments and the combination of hydraulic fracturing and horizontal drilling, extraction of this oil is now possible at a reasonable price. This has greatly increased amount of recoverable oil reserves and production in North Dakota.

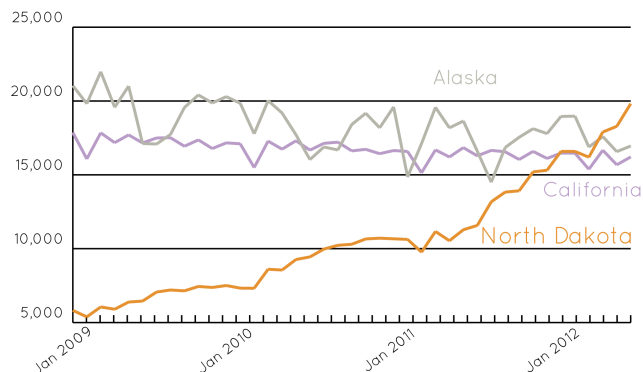
In 1995, the United States Geological Survey (USGS) reported that the Bakken Formation had just **151 million barrels** of technically recoverable oil.¹ In 2008 the USGS revised their estimate in light of technological advancement and estimated that **3.0–4.3 billion barrels** of technically recoverable oil in the Bakken, 25 times more than their 1995 report.² Many believe the new report vastly underestimates actual recoverable oil.

From 2008 to 2009 alone, the proved reserves in North Dakota increased from **573 million barrels to 1046 million barrels.**³

Production Growth

- In 2005, the Bakken Formation produced less than 3,000 barrels of oil per day, but that rapidly increased to an average of **547,000 barrels per day in for the first five months of 2012.**⁴
- In March 2012, North Dakota produced nearly **18 million barrels of oil**, surpassing Alaska and California, and second only to Texas.⁵
- In 2011, 468 rotary oil rigs were operating in North Dakota. This is 25% of the nation's supply of rotary rigs.⁶

North Dakota, California and Alaska Oil Production



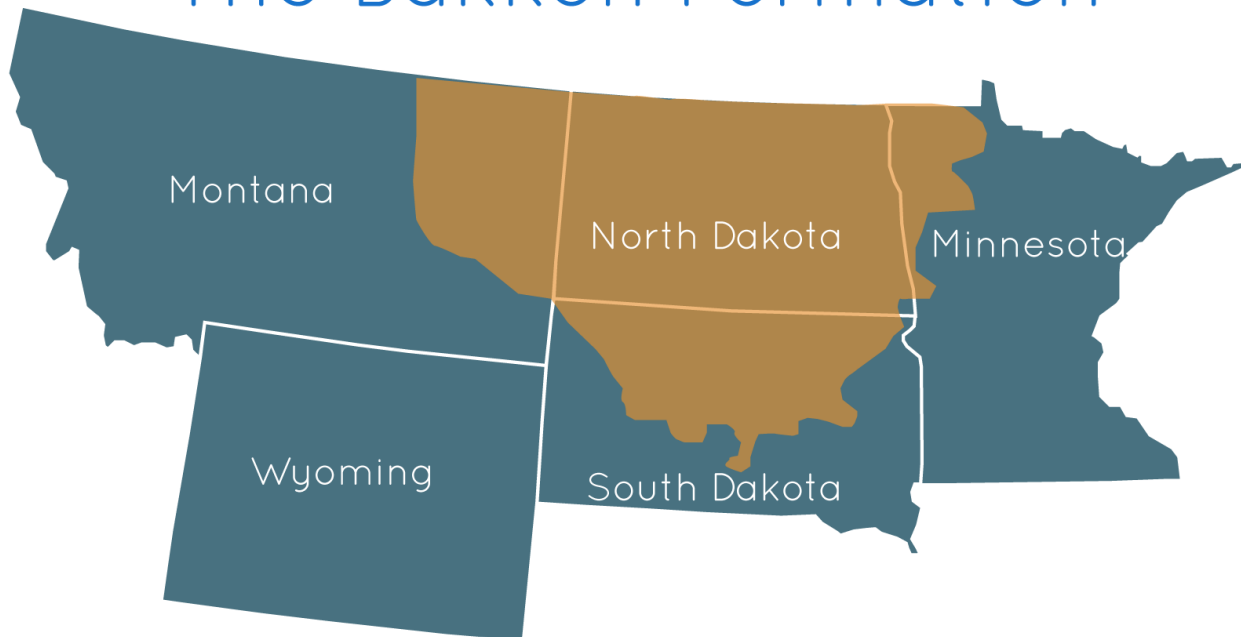
Economic Impacts

The increased level of oil production comes with a great deal of positive effects. At a time when most other states have been struggling economically, North Dakota has been thriving in large part due to the Bakken Formation:

- As of May 2012, North Dakota's **unemployment stood at 3%**, while the average unemployment in the U.S. was 8.2%.⁷

- In 2011, North Dakota ranked seventh in the U.S. in real GDP per capita at \$50,096, well above the national average.⁸
- While States such as California have a large budget deficit, North Dakota boasts a **budget surplus of \$1 billion**.⁹
- The workforce for the oil industry in North Dakota went from 5,000 in 2005 to 18,000 in 2009 and it is now estimated to be over 30,000.¹⁰

The Bakken Formation



-
- ¹ United States Geological Survey, 3 to 4.3 Billion Barrels of Technically Recoverable Oil Assessed in North Dakota and Montana's Bakken Formation, 25 Times More than 1995 Estimate. April 10, 2008
<http://www.usgs.gov/newsroom/article.asp?ID=1911#.T-tlVI73CRY>
- ² United States Geological Survey, 3 to 4.3 Billion Barrels of Technically Recoverable Oil Assessed in North Dakota and Montana's Bakken Formation, 25 Times More than 1995 Estimate. April 10, 2008
<http://www.usgs.gov/newsroom/article.asp?ID=1911#.T-tlVI73CRY>
- ³ Energy Information Administration, Proved Oil Reserves. December 30, 2010.
http://www.eia.gov/dnav/pet/pet_crd_pres_a_EPC0_R01_mmbbl_a.htm
- ⁴ North Dakota Department of Mineral Resources, *ND Monthly Bakken Oil Production Statistics*,
<https://www.dmr.nd.gov/oilgas/stats/historicalbakkenoilstats.pdf>
- ⁵ Energy Information Administration, Oil Production. May 30, 2012.
http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbbl_m.htm
- ⁶ Energy Information Administration, North Dakota: Data. June 22, 2012. <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=ND#Reserves>
- ⁷ Bureau of Labor Statistics, Local Area Unemployment Statistics. June 27, 2012.
<http://data.bls.gov/timeseries/LASST38000003>
- ⁸ Bureau of Economic Analysis, Regional Data: Per capita real GDP by state. June 5, 2012.
<http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=3>
- ⁹ Institute for Energy Research, North Dakota and the Economic Miracle. March 12, 2012.
<http://www.instituteforenergyresearch.org/2012/03/12/north-dakota-and-the-economic-miracle/>
- ¹⁰ Institute for Energy Research, Shale Oil May Mirror the Shale Gas Boom. June 30, 2011.
<http://www.instituteforenergyresearch.org/2011/06/30/shale-oil-may-mirror-the-shale-gas-boom/>