Barrels by the Billions: How the Bakken Basin Invigorated the US Oil Industry by Judy

Article published on December 25th 2011 | Business

In 1996, after the discovery of the Bakken Basin, the United States Geological Survey (USGS) made a careful study of the Bakken Basin area â€“ encompassing the states of Montana and North Dakota â€“ and have, since then, released multiple estimates of the technically recoverable oil in the Bakken Basin. The estimates varied due to the level of drilling technology available at the time to oil companies; obviously, the better the technology, the more oil can be harvested.

When the USGS first released its estimates in the late 1990s, it was at around 151 million barrels of oil â€“ much lower than the 13 billion barrels produced by the Prudhoe Bay in Alaska and a hundred times lower than the 1.6 billion barrels produced by Canada's Pembina Cardium in Alberta.

In 2008, the USGS released another report that took into account the advances in oil drilling technology and improvement in industry practices. By their estimates, the Bakken Basin contains 3 to 4.3 billion barrels of undiscovered technically recoverable oil. The USGS will undertake another survey of the area in 2012.

The US Energy Information Administration (EIA), in a press release, revealed that with new and better drilling technology, the Bakken Basin contains potentially larger reserves that can reach 503 billion barrels of oil. This exceeds the 125 billion barrels currently being exploited in Ghawar, Saudi Arabia's largest oil field.

The USGS' findings led many industry analysts to determine how much the Bakken Basin can affect the US oil industry and the economy as a whole. By their projections, Bakken Basin's oil reserve can produce enough crude oil to wean the US out of its oil importation from the Middle East for four decades straight. The quality of oil from the Bakken is also much better than the oil drilled from Alberta, Canada; whereas Alberta's oil is heavy, the Bakken oil is light and pure â€“ which can eventually translate to a drop in local oil costs to just $16 per barrel.

Technology to Drill Bakken Basin's Oils

Technology played a crucial role in tapping the billions of barrels of oil found in the Williston / Bakken Basin. The technology with the best capacity to exploit the oil find is called Horizontal Directional Drilling or HDD. Due to its sheer power to generate billions of dollars of income, it's pretty obvious that HDD is a closely guarded industry secret. Or rather, it is an open secret, one that has no value to oil companies that have not yet mastered the process.

The HDD is a complicated process quite unlike the traditional vertical drilling technique where you dig down deep until you hit a soft oil-filled spot where you can set up your oil rig. In theory, the HDD drills sideways â€“ a feat that requires skill and mastery to successfully pull off. It then releases the oil thousands of feet in opposite directions from the original drilling spot. While Dick Findley, the geologist who discovered the Bakken Basins, did not invent HDD, it was his idea to combine this technique with fracturing (layers of rocks are fractured) in order to build oil wells that would release the oil from the reserves drilled through HDD. With these two technologies, Findley and several oil companies were able to successfully and efficiently harvest the oil from the rock-layered Bakken Basin.

Riding the Tide of the Oil Boom

Entering your investment into the oil industry can diversify your investment portfolio, but you have to

make sure the oil exploration-production company you're placing your investments into also has a balanced, diversified investment portfolio. As investment advisers say, you can never go wrong with diversification.

If you plan to enter the Bakken Basin investment, look for companies that have good acreage position. Those that continually expand their acreage are in for higher returns, as more oil wells are built and bigger sources are tapped.

Lastly, make sure the company invests in technology. Better technologies such as 3-D seismic imaging technology can minimize drilling risks and increase the efficiency of oil production. The Bakken Basin is now an investment hotspot, and with the billions of barrels of oil projected to be produced in the area, it's never too late to make an investment in this oil boom.

This article is brought to you by OilPlusGas.org, a free resource directory dedicated to the oil and gas industry. The site offers a free oil and gas investment newsletter.

Article Source:
http://www.articleside.com/business-articles/barrels-by-the-billions-how-the-bakken-basin-invigorated-the-us-oil-industry.htm - Article Side

Judy - About Author:
This information is provided to you by OilPlusGas.org, an a oil and gas directory.

Article Keywords:
oil,gas,investing,investments,finance,money,drilling,oil and gas,basic materials,stocks,wall street

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!