

Fort Peck Oil & Gas

Welcome to where the Williston Basin's oil migrates. Fort Peck lies above major structural and stratigraphic transitional environments which formed petroleum reservoirs in Paleozoic carbonate and clastic rocks, along Mesozoic unconformities, and especially in Cretaceous sandstones. The **Bakken Play** has arrived and the **Lodgepole Play** awaits further confirmation. Deeper oil at the Poplar Dome is seeing development. The Northeast remains grossly under explored with multiple pay zones, and is surrounded by a political boundary which has nothing to do with the geologic hydrocarbon systems.

Elimination of the dual production tax, a tax holiday, and joint venture opportunities make Fort Peck the place to be!

Proven Pay Major Pay Zones include: **Charles, Mission Canyon, and Nisku Formations**; **Other Pay Zones** include: **Tyler, Amsden, Heath, Duperow, Winnipegosis, Interlake, Gunton, and Red River**; **Potenital Resource Plays** include: **Dawson Bay and Winnipeg Shelf Porosity.**

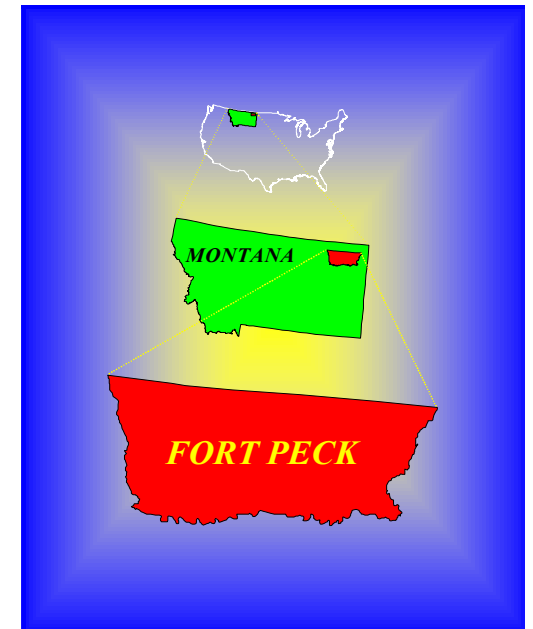



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Fort Peck Oil & Gas Exploration Opportunities 2013



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Fort Peck Oil

Oil was first discovered on the Fort Peck Indian Reservation in 1951 by Murphy Oil. That well opened the **East Poplar Oil Field** on the Poplar Dome. The unitized field has produced 50 million barrels of crude, ranking it in the top 10 largest producers in Montana. Operations by **Nautilus** have improved production in 31 wells to 6100



250 oil wells have produced 90 million barrels of oil.

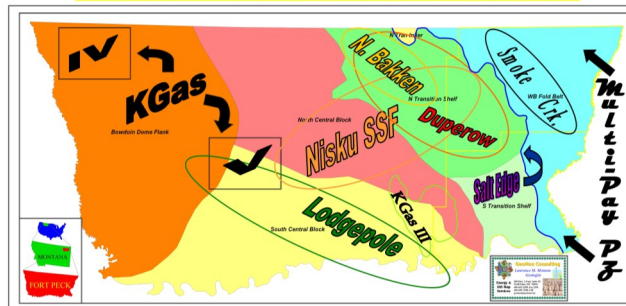
barrels per month from the Mississippian **Charles** dolomitic limestone and newly discovered Amsden. In the 1960's Murphy also brought in many of the Reservation's most prolific oil wells in the **Devonian Nisku** dolomite. Elusive, 160—1000 acre pools, in the central Reservation have collectively extracted 25 million barrels of oil from 20 wells. Two of these giants have recovered almost three million barrels each. The Tribes' own and operate one of these remarkable wells. The third stage of Fort Peck's development occurred during the boom years of the early 1980's in the western part of the Reservation. There the Mississippian Charles C carbonates produce at the **Lustre Field**, where low recovery rates have seen about 7 million barrels produced from approximately 50 wells. The Tribes now operate two of Lustre's best wells. **Anadarko Minerals** has revitalized operations in that area. Enticing, multi-pay potential has been realized in the northeast corner of the Reservation with small Ordovician Red River pools such as **Wakea** (3.3 MMBO) and Lobo. Many untested townships remain on this two million acre reservation. **Average drilling density on Fort Peck is 8 times less than in surrounding townships.**

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Surrounding Oil & Gas Development

Fort Peck is surrounded by many successful oil and gas fields. Sheridan County, to the northeast, produced 1.2 MMBO from 142 wells in 2012 from several Paleozoic reservoirs. Richland County, immediately to the southeast, was Montana's leading oil producer in 2012, with 11.1 MMBO flowing from 1100 wells that exploit the Bakken, Red River, and Mississippian Age formations primarily. Roosevelt County, which contains 2/3 of the Reservation produced 3.2 MMBO from 308 wells in 2012 (an increase of 123 wells since 2010). Montana's largest gas field lies only 25 miles west of the Reservation in the huge structural dome known as Bowdoin. In 2012, 750 shallow gas wells in mainly the Cretaceous Greenhorn/Phillips Formations, recovered more than 10.3 BCF from silty tight sands that have virtually no log signature to indicate a field that has produced more than 500 BCF and has only recently seen infill drilling. Bowdoin should recover a TCF of methane. [Production cums not complete for Dec/12] Within 20 miles of the Reservation's northern boundary is one of the Williston Basin's most heavily developed areas. Saskatchewan, Canada has promoted oil and gas exploration with numerous royalty and tax incentives. Horizontal drilling has occurred here for more than 15 years and proven projects utilizing CO2 injection are rapidly expanding and improving secondary recovery in primarily Mississippian carbonate reservoirs. The Canadians have long pursued much broader exploration plays that involve detailed mapping of stratigraphic trends along basin margin sub-crop pinchouts and salt dissolution enhancing traps. 170 MMBO were produced in 2012 (15,500 wells).

FORT PECK PLAY CONCEPT AREAS



Williston Basin, Northeast Montana

KGAS Project: Beginning in 1994, KGAS I attempted to extend the Phillips production of Montana's largest gas field, Bowdoin Dome, eastward along the Wolf Creek Nose. Phase II of the project tried to evaluate the Judith River Sandstone according to a seismic model successfully applied in southern Saskatchewan in the analogous, Belly River Group. **KGAS III** has seen eight attempts to test the Judith River Sands west of the Poplar Dome, where Murphy Oil completed field service wells at shallow depths for more than 600 mcf/gpd. **KGAS IV** steps way out to the northwest in a sparsely drilled area of the Reservation where the Tribes own a majority of the land over a plunging anticline with as much as 80 feet of potential pay. **KGAS V** will test the best Judith River Sand where it intersects the beginning of the Wolf Creek Nose. The Judith River remains a viable shallow gas target. Other shallow gas zones include the Eagle, Niobrara, and Martin Sand.

Current Plays: In early 2003 Continental Resources discovered oil in the enigmatic **Lodgepole** Formation. This led to leasing in four townships, 3D seismic in 2007, and two inconclusive tests in the summer of 2008. In the past six years, Richland County, immediately across the Missouri River, has seen 837 wells produce 130 MMBO, completed in horizontal wells tapping the **Bakken** dolomitic siltstone. **The Bakken Play** has leased most of northeastern Montana including the eastern third of the Reservation. 72 Bakken producers in Roosevelt County lie within 20 miles of the eastern edge. Other Paleozoic targets include the Duperow, Dawson Bay, Winnipegosis, Interlake, and Winnipeg Formations. The Winnipeg has tested rates of 1-3 MMCF/GPD. Three recent Nisku discoveries in the central Reservation keeps that play alive. The NE Pop Bakken Shelf Play in the North Transition Zone, remains largely untested. Other Paleozoic prospects exist in this area as well.

Fort Peck's progressive tribal council has ended the dual taxation on production and has set up the Fort Peck Energy Company to help develop and manage tribal resources. This will include active participation in exploration and drilling. Two horizontal Bakken tests have been completed and are under evaluation. These hope to confirm a favorable potential study done by Schlumberger and extend the Elm Coulee Embayment across the Missouri River. Active partners are encouraged.