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Filling up TAPS with ANWR oil

JUDY PATRICK

The trans-Alaska pipeline

ANWR: Many years of study, many unanswered questions

Until the U.S. Department of the Interior released its 1998 petroleum assessment of the Arctic National Wildlife Refuge's 1002 area, the bulk of the oil in the coastal plain was thought to be in the deformed (structural) eastern region vs. the undeformed (stratigraphic) western region.

"More oil has been allocated to the younger (Brookian) reservoirs in stratigraphic traps; less oil has been allocated to the deeper Ellesmerian reservoirs in structural traps," said Ken Boyd, director of the Alaska Division of Oil and Gas at the time. Boyd testified before the U.S. Senate Energy and Natural Resources Committee following the release of the 1998 evaluation in which the U.S. Geological Survey assessed in-place 1002 resources and the Bureau of Land Management determined recoverable resources, each consulting with the other.

Viewed as the most exhaustive study of the 1002 area's geological potential to date, the 1998 Interior evaluation increased the

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Kerr-McGee: Turning risk into reward on Alaska's North Slope

Dave Hager, Kerr-McGee's senior vice president responsible for oil and gas exploration and production

Kerr-McGee is two-for-two in Alaska. Close to finishing its second successful North Slope drilling season, the Oklahoma City-based independent said March 15, 2005, that results from an offshore appraisal well in its Nikaitchuq exploration unit "were encouraging."

The company said it has tested the Schrader Bluff reservoir at its Nikaitchuq No. 4 horizontal appraisal well and that the well came in at rates of up to 1,200 barrels per day during periods

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Big Oil returns to shallow waters of Gulf of Mexico in search of gas after working deepwater

Major oil companies, after years of withdrawing from exploration on the Gulf of Mexico's heavily exploited continental shelf, are returning in search of giant natural gas fields thought to lurk deep beneath the shelf.

Until fairly recently, the majors invested most of their time and money looking for elephant-size oil fields in the deepwater Gulf, leaving the relatively shallow waters of the Gulf to independent exploration and production companies.

While deepwater remains the primary focus of Big Oil in the

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BEAUFORT SEA

Every which way

Explorers head north of Barrow Arch; Shell returns to Alaska, Beaufort OCS

PETROLEUM NEWS

The March 30, 2005, Beaufort Sea federal lease sale, which saw the return of mega-major Shell Oil to Alaska, could signal the beginning of a new era for the state's oil and gas industry.

Shell, spending more than $44.4 million on 86 winning bids out of a total $46.7 million, purchased swathes of leases along a trend stretching east from Harrison Bay to an area north of the Arctic National Wildlife Refuge. These leases lie well north of a structural high called the Barrow Arch in an area where a relatively young rock sequence known as the Brookian dominates the geology.

JUDY PATRICK

Chandler Wilhelm, Shell's manager exploration new ventures, Americas region, attended the March 2005 MMS Beaufort Sea lease sale.

Exploration in the northern part of Alaska is currently moving west into the National Petroleum Reserve-Alaska along and just to the south of the Barrow Arch.

If a gas pipeline gets sanctioned to take North Slope gas to market then exploration will likely move south from the Arch towards the Brooks Range Foothills where gas explorers such as Anadarko Petroleum and Petro-Canada hold hundreds of thousands of acres of gas-prone leases.

If the 1002 area of ANWR is opened to drilling, exploration will no doubt move east along the Barrow Arch, a subsurface tectonic "bump" that runs southeast from Barrow, parallels the Arctic coastline, goes

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GULF OF MEXICO

Gulf leasing boom ahead

Thousands of 'newly available' deepwater blocks to hit market beginning in '06

By RAY TYSON

Petroleum News Houston Correspondent

The U.S. Gulf of Mexico will become a candy store for industry beginning next year as thousands of deepwater oil and gas leases currently held by companies start to expire without ever being explored.

Many of these so-called "newly available" blocks carry 10-year lease terms dating back to the mega-buck lease sales of 1996 to 1998, when a major government-sponsored drilling incentive known as the Deepwater Royalty Relief Act was introduced in the Gulf.

However, the U.S. Minerals Management Service

Giant oilfield service company Schlumberger said in January that the current business climate for the upstream industry was the most favorable the company had witnessed since the early 1970s, for both short-term and long-term activity.

concludes that "given the fact that most companies can only drill a small percentage of their active leases, it is likely that many high-quality leases will expire without being tested."

On average about 10 percent of the deepwater leas-

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ULTRA-DEEP GULF

Going deep for the gold

Gulf 'ultra-deep' play could hold trillions of cubic feet of natural gas

By RAY TYSON

Petroleum News Houston Correspondent

Exploration and production companies with deep pockets and a high tolerance for risk taking are tip-toeing into what could be the last pure wildcat play in the Gulf of Mexico.

So far, only a handful of explorers have dared to venture below 25,000 feet in the relatively shallow waters of the U.S. Gulf's continental shelf, where extreme pressures and temperatures in the so-called "ultra-deep" zone could wreak havoc with drilling equipment.

Nevertheless, the payoff could be grand — perhaps trillions of cubic feet of natural gas trapped within immense geological structures identified through seis-

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COURTESY ROWAN

No ultra-deep well on the continental shelf is being more closely watched than the ExxonMobil-operated Blackbeard West wildcat well on South Timbalier block 168, which is being drilled by Rowan's Scooter Yeargain jack-up rig (pictured above). The well is permitted to 32,000 feet but could go to 38,000 feet, which would put the hole just a few thousand feet shy of the deepest well (40,000 feet) ever drilled on planet Earth.