

DOE - Fossil Energy Techline - Issued on: August 18, 2004

## Hydraulic Oil Well Pump Undergoing Near-Flawless Field Testing

### *New Pump Could Dramatically Reduce Operating Costs, Increase Domestic Oil Recovery*

**Washington, DC** - A new hydraulic pump currently undergoing near-flawless field tests at the Department of Energy's Rocky Mountain Oilfield Testing Center (RMOTC) could reduce the operating cost of high-volume offshore oil wells by 40 percent, adding to America's oil reserves and energy security by prolonging the life of mature oil fields.

"This advance in oil field technology supports President Bush's National Energy Policy by making maximum use of U.S. energy resources," Secretary of Energy Spencer Abraham said. "This new oil pump allows us to recover maximum oil in an environmentally friendly manner while reducing costs. It's an excellent example of the Energy Department's focus on making the maximum use of our own natural resources while decreasing our dependence on foreign oil."

#### MORE INFO

- [Learn more about DOE's Rocky Mountain Oilfield Testing Center](#)

The new pump, the largest of its kind ever tested, is ideally suited for maturing oil fields where wells have a high "water cut," meaning that they produce larger volumes of water relative to the oil produced -- as much as 8,000 to 12,000 barrels a day -- along with oil.

Electric submersible pumps currently in use produce an oil-water emulsion that requires a costly separation process before the water can be properly disposed of and the oil sent to a refinery. The large-volume hydraulic pump now undergoing testing produces oil and water with little mixing and is much easier to service, which dramatically reduces operating and processing costs.

Reduced operating costs can often mean a longer economic operating life for an oil well. The longer a well operates, the more oil it produces, prolonging the life of the field and adding to recoverable reserves. The new pump would be admirably suited for use in mature high-volume offshore Gulf of Mexico oil wells, as well as in certain large volume onshore wells with higher water cuts.

The cost-shared, \$1.5 million, three-part test being conducted by RMOTC for Oilwell Hydraulics of Odessa, Texas is now in its second phase and is "going superbly," according to Bryant Mook, the RMOTC petroleum engineer who is managing the project.

Each test phase of the hydraulic pump was scheduled to last 30 days, Mook said, but the first phase went so well that RMOTC and Oilwell Hydraulics wrapped up the test after only a few days. The second phase is also

proceeding smoothly, partly because RMOTC offers ideal conditions for testing.

Mook said the payoff for Oilwell Hydraulics in partnering with the federal test site comes from RMOTC's large-bore test well that can replicate offshore conditions onshore; experienced personnel including expert engineers and oilfield hands, and a cost-sharing arrangement in which RMOTC's contribution of infrastructure and personnel covers seven percent to 10 percent of the test's \$1.5 million cost.

"You can compare it to conducting a medical experiment in a fully equipped hospital as opposed to a remote emergency medical unit," Mook said. "Everything you need is right here."

The payoff for RMOTC comes from helping to prove the value of a new technology that could add large volumes of domestic oil to recoverable reserves, adding to the nation's energy security by reducing our reliance on imported oil.

- End of *Techline* -

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