



IBM's PlayStation 3 Chips Help Repsol Find Deep Oil (Update2)

By Melita Marie Garza

July 1 (Bloomberg) -- **Repsol YPF SA**, Spain's largest oil company, is using chips that **International Business Machines Corp.** designed for video-game consoles to find oil in deep water as much as six times faster.

Supercomputers outfitted with IBM's PowerXCell 8i chips are helping analyze undersea rock formations in the search for untapped reserves, Madrid-based Repsol said today in a statement. The chips are an updated version of a product IBM, **Sony Corp.** and Toshiba Corp. designed for the PlayStation 3 game machine.

IBM is retooling consumer technology to handle supercomputer tasks more affordably, pitching the approach to everyone from candy makers and film producers to oil companies. The strategy may help boost hardware **sales**, which sagged 6.7 percent last quarter. The company increased its share of the supercomputer market to 46 percent last year, from 26 percent in 2002, according to the Top500 Project, a supercomputer-tracking group.

"Seventy-five percent of reserves are underwater and there are significant barriers because it is very hard to predict rock structures," said Srinu Chari, an analyst with New York-based Cabot Partners, a research firm. The **IBM** technology lets companies survey regions that weren't accessible before, he said.

Working with the Barcelona Supercomputing Center, Repsol is using so-called reverse time migration, a technique for mapping subsurface rock structures, to study the Gulf of Mexico.

The area's deep waters -- 30,000 feet (9,144 meters) -- may hold the equivalent of 56 billion barrels of oil. If recoverable, this would meet the entire U.S. demand for oil and gas for about five years, according to the U.S. Interior Department's Minerals Management Service.

The updated video-game chips run on the BladeCenter QS22 computer, which Armonk, New York-based IBM introduced in May.

IBM rose 74 cents to \$119.27 at 4 p.m. in New York Stock Exchange composite trading. The shares have climbed 10 percent this year. Repsol, little changed this year, fell 64 cents, or 2.6 percent, to 24.39 euros in Madrid.

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