Oil reserves may raise false US hopes
By Sheila McNulty in Houston
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No one knows the extent of US oil and natural gas reserves in the offshore and Arctic areas that are off-limits to drilling. The last time they were surveyed was in the 1980s and the technology then used is no longer considered accurate, say industry experts.

“The youngest seismic [tests] in some of these areas is 25 years old,” said Bobby Ryan, Chevron’s vice-president for global exploration.

So even though President George W. Bush on Monday lifted a presidential ban on drilling on the US outer continental shelf, it does not mean a big jump in US production is in the offing.

Not only must Congress lift a separate ban imposed in the 1980s but the industry must survey the area with new technology to see what is there.

When the latest data on protected areas were gathered, they were collected in pockets instead of across a wide area, as is done now, which makes them much less comprehensive and gives less precise results. The analysis of the data was also relatively primitive. So estimates of an extra 2m-3m barrels of oil a day – roughly the equivalent of the daily output of Venezuela – might be some way off.

With oil prices rising sharply, polls show most Americans want Congress to lift the offshore ban if it would help reduce prices at the pump. John McCain, the Republican presidential candidate, advocates scrapping the ban while Barack Obama, the Democratic candidate, opposes it, saying any extra oil and gas produced would take years to develop and further encourage fossil fuel use.

Regular efforts in Congress to lift the ban have been quashed, but growing public support will give the move a better chance.

Industry believes that surveys with new technologies should be conducted before any decisions about opening up production in the protected areas are made.

New technology would give a far better picture of what is under the ground or ocean than before. It gives indicators about rock type and quality, and whether there may be pockets that might contain fossil fuel deposits, among other things.

But the failure rate is still high until exploration wells can be drilled in promising areas. Two out of three exploration wells in the Gulf of Mexico turned out to be dry holes.

“It’s still a risky business,” Mr Ryan said. “You still have to drill a well to know for sure. You are still wildcatting.”

Tom McClure, responsible for the upstream petroleum segment for IBM Deep Computing, said the technology kept getting better, with computers becoming faster so they could process more data and make better sense of it. “Imaging techniques are even better than they were five years ago.”

David Bader, professor in computational science and engineering at Georgia Institute of Technology, has been working with IBM on developing its PowerXCell processor, a supercomputing chip originally designed for the Playstation 3, to search for oil reserves in what is known as “ultradeep water” – 5,000ft or more deep.

“The chip in the Play- station 3 is equivalent to what was in a super computer five years ago,” Mr Bader said.
But the industry is not going to use this technology to study protected areas unless they are open to production. “It costs a lot of money to take a look,” Mr McClure said. “Nobody wants to take a look unless you could get a return.”