

New Caspian Oil Finds Could Extend World Finite Reserve Estimates

HOUSTON--June 27, 2002--*Researched by Industrialinfo.com (Industrial Information Resources Incorporated; Houston, Texas).*

Recent positive announcements coming from countries with Caspian Sea current and future oil production interests are being tempered by transportation considerations which are linked in turn with local and geo-political considerations. This analysis is taking place upstage from a macro-strategic debate on the projected life of the world's known and estimated oil and gas reserves. The latter debate has a touch of Ripley's "Believe It or Not" about it at the extremes of opinion/analysis. Sectors, which can only find long-term strength in this fraught area, are alternate fuels and new sustainable energy technology and sources.

Major oil deposits have this month been reported by government officials in an area known as East Kashagan, in the Caspian Sea off the Kazakhstan coast. First estimates indicate an oil field holding a minimum of 20 billion barrels and a top estimate of 50 billion barrels. The lower estimate would increase known crude oil reserves by 2% and the larger by 5%. Compared to the East Kashagan field the USA has known reserves of 22 billion barrels and the North Sea about 16 billion barrels.

Concurrent with the Kazakhstan announcement Iran's oil ministry has identified major structures in a large area of the southern Caspian Sea area. Promising results have been produced from a seismographic survey. Shell, Lasm Oil and Veba Oil have been collecting data on the area.

Drilling operations are being undertaken to obtain a more precise assessment of proven resources. The recently discovered structures are at depths ranging between 400/900 meters. This phase of the \$300 million operation is due to be completed by the second half of this year although there appears to be some hedging about the final date.

Iran acknowledges that Russia's Gazprom is interested to take part in a project to transfer Iranian gas to India but will not commit to selecting a partner before a general understanding is reached with major consumers in the area and the surveys on the technical and economic facilities of the project are completed.

The oil ministry is currently negotiating with various gas companies including BG, BP, Total, Repsol and Shell on the construction of LNG (liquefied natural gas) units. The company or consortium undertaking investment in the LNG projects will have to adhere to four stages: production and transfer of natural gas to the surface, refining, desalination and liquefaction of gas, providing and building ships for transfer of gas as well as providing the equipment for LNG evacuation at the destination market and its reliquefaction.

All five countries bordering the oil rich Caspian littoral (Iran, Turkmenistan, Kazakhstan, Russia and Azerbaijan) have to reach mutually secure agreements to create an environment where forward production plans can be settled and which are politically compatible for international markets.

The mountain and desert terrain, prone to earthquakes, is forbidding enough for pipeline engineers. But the greatest obstacle, affecting routes in all directions from the Caspian, is the threat of local insurgencies and attacks plus new war thunder from Kashmir and Afghanistan making pipeline construction an operation for the very brave, if not foolhardy.

World crude oil and natural gas reserve estimates updated as of April 2002 and averaged from two sources (see accompanying charts) equal 1.016 trillion barrels and 5,369 trillion cubic feet respectively. Other estimates put the "possible" high/low oil reserves at between 2.3 and 3 trillion barrels but these could be inspired by projected demand. All estimators agree on a clear and finite horizon to be seen ahead by 2020.

Many oil industry companies and analysts see production from many major sources peaking between 2010 and 2020 and then beginning to run down after a plateau period. Others see new discoveries, such as in the Caspian and Asia extending the plateau stage forward another twenty years. Looking through 2010/20 alternate fuels and energy sources will need to have accelerated current production scenarios.

Many potentially major players in the "new energy" industry are possibly keeping wraps on favored alternate technologies and running interference/dummies with an eye on business cycles and market entry timing in a "market leader takes pole position" scenario. Is there a more interesting game in town?

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