Jack Field Oil Discovery

By CK Wong 2006.09.08

http://www.ck-wong.ca/Money%20Matters/jack%20field%20oil%20discovery%2020060908.pdf

Introduction

There is announcement by Chevron and it partners on the discovery of oil and liquid gas at the Gulf of Mexico's Jack Field. The announcement triggers a wash of panic in the energy field that lead to the down fall of crude oil price below U$68 which has been a very strong support. Should we sell the energy stock now?

Where is Jack Field?

The location of the test well at Jack Field is located about 270 miles southwest of New Orleans. The oil body is located about 7 miles below the sea level. This depth includes 5.4 miles of water and 7000 feet of seabed. Please note these numbers because you may not able to imagine the difficulty to reach the oil slick. First, you have to connect a 5.4 miles of pipes to reach the seabed and then drill further 7000 feet farther down. It is hard enough to drill 7000 feet. The oil patch is about 75 miles by 300 miles. This is a deep water off-shore oil field which has not been produced before, not even the North Sea.

The exploration project has drilled 19 holes in Jack Field but 12 holes failed. No details are available for other 6.

Reserve capacity

The test well has a flow rate of 6,000 barrel per day. The first estimated size of the reserve is about 3 to 15 billion barrel. As a reference, the current American reserve is 29.3 billion of barrels. The Jack Field discovery boosts the American reserve from 10 to 50%. Considering the yearly 12 billion barrel consumption rate of the American, it provide one season of oil supply or more than a full year of supply. These numbers should be considered preliminary until further details is available. For the meantime the 3 billion barrel is about U$200B which is a very significant revenue addition to Chevron and its partners.

Production challenges

We can say the well is located at nowhere. There is no production in the area so the infrastructure has to be build from the scratch. To put the production on stream, the crude oil has to be piped or barged. Since the production is not scheduled until 2009, there is the possibility to have a pipeline built. Other than the delivery problem, drilling is also a problem because for 7 miles, you could not drill with the current oil rig design. The drilling has to be at the seabed level which means you have to do all this 5.3 miles under the sea which translated to higher than normal production cost.

Bottom line

As many oil experts has pointed out, Simons and Groppe, that we may not run out of oil but we definitely running out of cheap U$60 oil. If the current price of U$68 oil is the norm than the oil from Jack Field will be sold higher than U$68 because you will also require capital for new oil refinery to convert the crude to gasoline or diesel.

This discovery is delightful and timely because it provides the false security of solving American's energy price which has been a major factor of inflation. The market reacts violently. In fact there is nothing to celebrate if you have considered the oil is not ready for use for at least 3 years with high cost of production. Nonetheless this could provide a soft landing of the American economy. May be not because the cause is the over spending by American and no saving.

Resources

[1] *New oil field deep in the Gulf a potential giant*, by Bill Hensel Jr. Chron.com 2006.09.06 http://www.chron.com/disp/story.mpl/front/4165848.html
[2] *Massive oil field found under Gulf*, World Net Daily, 2006.09.05, http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=51837