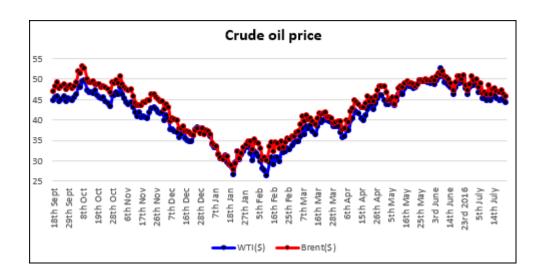
www.chopraseismic.com Calgary, Canada



- The crude oil price fluctuated between \$44 and \$46 this week. The reasons cited for this variation are given below.
- A recent EIA report showed that US crude stockpiles fell for the ninth week in a row. Last week the crude inventories fell by 2.34 mb. This saw the oil price rise somewhat. Goldman Sachs Group also said that the US crude oil production will decline more than previously forecast, and also that the North Sea shutdowns will be quicker.
- The US dollar has been gaining ground over the last six weeks, and combined with ample supply available, the crude oil price fell
- Exxon Mobil Corp. declared 'force majeure' on the shipments of Nigeria's biggest crude oil export. It is a term used for not being able to meet a contractual obligation due to unforeseen circumstances. The militant group, Niger Delta Avengers, has been targeting oil installations in Nigeria and causing disruptions.
- BP has estimated that the catastrophic Gulf of Mexico oil spill in 2010 off the coast of Louisiana, cost the company \$61.6 million. The explosion that took place at the time led to the sinking of the rig and eleven lives were lost, with millions of gallons of crude oil spewed into the Gulf for 87 days.
- According to a recent analysis from EIA for the financial results for Q1, 2016 of US onshore producers, although their operating cash flow is the lowest in any quarter in the last 5 years, they are trying to self-finance their investments, rather than borrow from outside sources. This is an interesting observation.
- Again, according to EIA, the crude oil production from the Permian Basin in August is expected to remain below 2 mb/d and below 1 mb/d from the Bakken. This will bring down the overall US crude production by 99,000 b/d. The production from the Eagleford shale is seen to be dropping by 48,000 b/d to 1.079 mb/d, Niobrara by 12000 to 370,000 b/d, Bakken by 32000 to 966,000 b/d and Permian by 6,000 to 1.974 mb/d.

- Recently, the US Congress had lifted the ban on most crude oil exports, which had been in place for decades. This has opened up the possibility of opening markets in Asia and Europe to the US oil. As part of that outcome, later this month, a tanker will load a cargo of 136,000 tons of Alaska North Slope crude oil and head for the Far East. In June, a 1mb/d cargo of Alaska North Slope crude was shipped to Japan.
- Many fields in the North Sea are shutting down as a result of the low oil prices and their high cost of production, as well as due to the uncertain investment environment created by Brexit. 30% of the UK North Sea fields are operating at a loss as per the consulting firm Wood Mackenzie Ltd., and the Brexit decision has prompted these and other producers to plug their wells. Besides, a third of the platforms in the UK are over 30 years old, and beyond their original designed life.
- Schlumberger reported a loss of \$2.16 billion in Q2, 2016, and has cut 16,000 jobs during the first half of this year. This has been due to the slow market conditions which affected their global operations.
- Halliburton also has cut 5000 jobs in Q2 this year, and has reported a loss of \$3.2 billion. The company now has a staff of 50,000.
- ConocoPhillips has planned to lay off 250 to 300 employees in coming September, with most of the layoffs to happen in Calgary. This is in line with the roughly 1000 jobs that the company plans to cut across North America.
- According to the Canadian Association of Petroleum Producers, since the beginning of the present downturn, at least 44,000 jobs have been lost in the oil and gas industry.
- Goldman Sachs Group has also predicted that by the end of 2018, the Russian oil output will exceed 11.42mb/d, a record it set in 1987. The Russian production will increase by 590,000 b/d over the next three years to 11.65 mb/d. Russia had indicated that it would boost its oil production after OPEC failed to adopt a plan in April this year for reducing the oil glut in the market. Russia is one of the world's lowest cost producers that generates positive cash flow with crude oil price above \$10 a barrel. This is helped with a progressive tax system that adjusts to lower prices.
- Some analysts are predicting that the market has to absorb the higher supply coming after the recent disruptions, and so the oil will probably slide back to \$40. So far Q2, 2016 has been reasonably good. But besides the small variations in the crude oil prices from day to day, if there is no significant increase in the oil price, this may be the best quarter in this year. Keep in mind that the industry as a whole has shrunk by \$2 trillion in the last two years in terms of market value of oil companies. According to Wood Mackenzie, over \$370 billion in global capital expenditure has been cut by upstream companies for 2016 and 2017, out of which \$150 billion has been reduced in the US Lower 48 alone.

So much for the industry news this week.

For the lighter side this week

Sometimes you may have heard or come across placards in restaurants saying the meat sold there is from animals that are raised without the use of antibiotics. I knew it had to do with antibiotic resistance, but decided to explore it. Here is what I found.

Antibiotics have been considered one of the wonders of the 20th century, in that they are the treatment for many infections. Antibiotics kill the infecting bacteria in patients, and so have served well. But in his 1945 Nobel Prize Award acceptance speech, the inventor of penicillin, Alexander Fleming had sounded a warning that overdose and under-treatment of a disease with penicillin could result in resistant bacteria. This warning probably got lost somewhere.

Soon after this invention, scientists discovered that antibiotics added to live stock fed in farms could accelerate growth and thus result in higher and cheaper production of meat. Thus antibiotics were not only for patients, but also for meat producers.

Even for patients, use of antibiotics (as quick cures) for diseases that could be otherwise treated without their use also led to their overuse. It is/was common in many countries to get antibiotics without a doctor's prescription, and have been used to treat illnesses such as common cold.

The results have become scary, and if not checked can reach alarming situations.

The overuse of antibiotics has resulted in bacteria becoming 'resistant' to them, and can survive. Not only survive, but can reproduce and multiply. Such bacteria acquire resistance in whatever way, and this leads to ability to resist different antibiotics. With time this resistance increases and then the bacteria become resistant to different families of antibiotics. The reproduced bacteria also are born with similar resistance characteristics.

What happens when patients have resistance to antibiotics? It means that treatment of patients even with minor injuries and common infections becomes more difficult. The illnesses could take longer to be cured, develop complications, and may have to be administered stronger drugs, that may be expensive, and all this doesn't work, the patients die.

Based on figures coming from different countries and published literature, it is clear now that antibiotic resistance has been rising. If this increasing resistance to bacteria is not checked soon, it will reach situations where doctors would not be able to treat patients. We definitely need to avoid such an apocalyptic scenario.

So what needs to be done?

- 1. We should never take antibiotics until they are prescribed by a doctor. This has been confirmed based on studies carried out in North America.
- 2. Animals raised in farms should not be administered feeds with antibiotics. If this is not checked, consuming that meat could lead to problems, and should be avoided.
- 3. Doctors need to be careful in their prescriptions, and prescribe antibiotics only if really necessary.

4. Awareness of the problem should be taken up globally and on a faster pace.

Did you know?

.. that frowning burns more calories than smiling?

As both frowning and smiling require muscle movement, they end up burning calories, but these are very small amounts. It may not be possible to know how many calories each act will burn, but 37 muscles are required for frowning compared with 22 for smiling, and thus frowning burns more calories. So, you are better off smiling!

Hey you all, smile away to glory.

I hope you find these interesting.

So much for this week! Till the next post, stay safe and happy!