



The Great Oil Price War of 2014 -15 Contango and Volatility Down from Extreme Levels, Rig Count Dropping but Inventories Continuing To Climb

Over the last nine months we have seen a 50% drop in the price of oil followed by a sideways move or price consolidation during this last 3 month period. What began as a slow decline from July through September of 2014 turned into a free fall after Thanksgiving Day, November 27, 2014 when OPEC failed to agree to production cuts. OPEC's motivation seems to be the desire to maintain market share and force higher cost producers out of the market, especially those in North America. This strategy has indeed affected US activities with rig count dropping as much as 50% from its high-last year. Despite this drop in drilling, oil production and inventories continue to climb, surprisingly. Production is estimated by the Energy Information Administration (EIA) at 9.4 mmb/d and 482 mmb in storage, a 26% increase from a year ago. The recent consolidation in price may be a reflection of this apparent contradiction whereby there is continued higher production and a prospect of filling storage to capacity in spite of declining activity.

Understanding this contradictory data is difficult because of the many variables involved. The first thing that must be understood is that production lags behind price moves and activity. Maximum well performance for unconventional production lag time is typically 4 to 6 months after a well is spud due to time to drill, complete and clean up a well. We are still in this 4 to 6 month time frame from drop off in drilling to resulting production. It may be too early to tell if the downturn in drilling will result in a production decline.

Second, drilling efficiencies may mean more production is temporarily possible from fewer wells that are drilling in play "sweet spots". These increased efficiencies may mean continued higher production in the face of lower rig count.

Third, despite the fact that storage capacity appears to be 75% filled, absolute inventory storage capacity is not precisely known. Storage capacities are reported only twice a year, May (of March data) and November (of September data). Keep in mind reported storage capacity and stocks in inventory treat pipeline capacity differently. This quote from EIA's "Working and Net Available Shell Storage Capacity" report highlights the issue. "Stocks reported monthly are a combination of barrels held in tank farms and pipeline fill. March and September reports include stocks held in tank farms without pipeline fill." In addition, storage capacity is growing rapidly. Storage capacity at Cushing has almost doubled in the last 4 years.

Futures prices continue to be in contango with front month prices (WTI) \$6 below prices a year from now. Earlier this year this spread was \$10. Futures options are also trading at reduced volatility, 42 versus 58 in January. This reduction in contango spread and options volatility are reminiscent of the bottoming of prices in 2009.

In conclusion, the oil market is in a holding pattern trying to see how the following questions will be resolved. Is production about to follow the downward trend of rig count and roll over? Will increased efficiencies allow production to increase? Are we about to see storage capacity filled with no place to store produced oil?