WORLD RATING OF OIL AND GAS TERMS

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Volume 1
Rating of North American Terms for Oil and Gas Wells with a Special Report on Shale Plays

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One Page Summary

The World Rating of Oil and Gas Terms is produced by PFC Energy, Rodgers Oil&Gas Consulting and Van Meurs Corporation with assistance from Ernst & Young under contract and from Barrows Company. It is an enhanced version of a study done by Van Meurs in 1997. Volume 1 deals with 188 oil and gas regimes of the 10 provinces of Canada and 25 states in the United States and with 16 shale plays based on 64 fiscal systems. Conclusions are:

- **For oil wells the best terms are for discovery wells in British Columbia, horizontal wells in Manitoba and Saskatchewan and general terms in Eastern Canada. The toughest terms are in Louisiana, Alabama and Texas.**
- **For dry gas wells the best terms are in Eastern Canada, New York, California on federal lands and in Alberta for coal bed methane and shale gas terms. The toughest terms are in British Columbia, Louisiana, Texas and on Indian oil and gas lands in Alberta. The ranking takes gas price differentials relative to Henry Hub into account. Interestingly, gas terms are better in jurisdictions close to markets.**
- **The range of government take in North America is not different from the international range. For a base case oil well the lowest government take is 31% and the highest is 83%. For a base case gas well and $ 5 per MMBtu Henry Hub the lowest government take is 38% and the highest is 99%.**
- **The best shale gas plays are the Montney play in Alberta and the Marcellus play in Pennsylvania and New York.**
- **The best shale oil plays are the Bakken formation plays in Saskatchewan and Manitoba.**
- **On average, provinces in Canada offer substantially better terms than states in the US. This is in part due to the differences in average corporate income tax rates (federal, states and provinces) of about 25.5% in Canada (by 2012) and 38.5% in the US.**
- **Most fiscal systems discourage investment in marginal wells and are front end loaded, despite stripper well rates applicable in certain states.**
- **All fiscal systems offer substantial “upside” for low cost wells and under high prices.**
- **All fiscal systems encourage efficient operations with a strong incentive to save costs.**
- **Except for Quebec, all fiscal systems reflect geological risk averse government policies.**
- **Under current gas prices, liquid content is a major factor in gas well economics**
- **Only a few jurisdictions provide fiscal incentives for new technologies and non-conventional resources. Utah has attractive shale oil terms for projects on state lands.**
- **Very significant gas reserves are available in the gas price range of $ 4.00 to $ 5.75, providing support for this price range for the medium term**
- **Gas prices and oil prices have now delinked. However, oil and gas fiscal systems are still linked. Except for Alberta, most gas fiscal systems are dysfunctional under current gas price conditions. Improved gas terms are required to increase drilling and gas production. Suggestions on how to improve such fiscal terms are provided in the report.**