

## **Evaluating, Classifying And Disclosing Unconventional Resources**

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The results of evaluations of hydrocarbon resources are used for many purposes, from international energy studies, government resource management, field development, to financial activities.

As a result of the increase in unconventional resource activity, the assets of many companies increasingly lie in categories such other than reserves, such as contingent or prospective resources. The evaluation, classification and disclosure of these presents challenges not encountered for conventional resources.

Common classification systems will be described, including the United Nations Framework Classification (UNFC), the Petroleum Resource Management System (PRMS) and those used in Canada and the United States. Published evaluation and classification guidelines include those in PRMS, the Recommended Evaluation Practices (REPs) of the Society of Petroleum Evaluation Engineers, and the Canadian Oil and Gas Evaluation Handbook (COGEH) which is the standard for Canadian oil and gas securities disclosure. Most of the guidance to the evaluation and classification of unconventional resources is general rather than being specific.

One of the most important uses of the results of evaluations is communication to the securities market in order to raise funds for exploration and development activities. The oil and gas securities disclosure regimes in the two largest capital markets for oil and gas, the United States and Canada, will be described and contrasted. One significant difference is that all classes of resource, not only reserves, are covered by the latter.

The Petroleum Department of the Alberta Securities Commission has carried out many reviews of oil and gas disclosure, including technical reviews of evaluations. The review process will be described, and issues surrounding the evaluation and classification of unconventional resources will be discussed. The location of many, if not most, unconventional resources is known and the emphasis lies on establishing productivity rather than on exploration. What is the appropriate classification during an often lengthy testing period between “discovery” and the establishment of productivity or during a period of technology development? What are the “contingencies” for a contingent resource? Since many unconventional reservoirs are poorly known and analogs are limited, how should analogs be used and how far is it reasonable to extrapolate or interpolate from existing data points?