

**John R. Etherington**

Managing Director, Petroleum Resource Analysts (PRA) International Ltd.

Member of SPE, AAPG, CIM Petroleum Society, and EAGE.

APEGGA-certified Professional Geologist.

Re: File # S7-XX-07

As verified in SEC's 2000 Clarification of Oil and Gas Reserves Definitions and Requirements: "Estimates of proved reserves do not include crude oil, natural gas, and natural gas liquids that may be recovered from oil shales, coal, gilsonite and other sources. Hydrocarbons "manufactured" through extensive treatment of gilsonite, coal and oil shales are mining activities reportable under Industry Guide 7. They can not be called proved oil and gas reserves". However, under previous Topic 12 guidance, coal bed methane gas can be classified as proved reserves if it is recovered from coal in its natural state and original location and recovery is shown to be economically feasible.

The following comments are submitted for consideration in potential amendments to existing SEC guidance on oil and gas reserves disclosures in this area of unconventional hydrocarbons. Not only is there a case to re-examine the above restrictions but there is also a need for improved alignment between SEC minerals and petroleum disclosure guidelines such that investors can assess the potential for petroleum sales from projects irrespective of the extraction method and processing applied. Increasing supplies of petroleum are currently being sourced from oil sands using extraction methods utilized by both mining and petroleum industries. Similar technologies are under development to recover petroleum from oil shales. In both instances, extensive processing is required to yield a marketable petroleum product suitable as feedstock for refineries.

In Canadian oil sands projects, bitumen may be recovered through open pit mining and/or through well bores and associated in situ recovery techniques. There are cases where both extraction methods are being applied on the same lease dependent on the burial depth of the oil sands. While the detailed assessment and development techniques may vary, use of similar classification and disclosure guidance would allow the public to clearly define the total petroleum being commercially developed.

The current SEC Industry Guide 7 requires issuers to disclose both Proved and Probable Mineral Reserves and assessments may utilize a 1-year historical average of costs and prices. This contrasts with SEC petroleum guidelines that restrict disclosures to Proved Reserves and apply the single day end-of-year pricing. The SEC technical definitions of Proved and Probable Mineral Reserves are broadly comparable to those promulgated in the current international minerals standards maintained by the Committee for Minerals Reserves International Reporting Standards (CRIRSCO). Through joint analysis, it is the opinion of both Society of Petroleum Engineers (SPE) and CRIRSCO, that their existing definitions yield estimates of Proved and Probable Reserves quantities

that are based on similar levels of technical and commercial confidence. By aligning minerals and petroleum disclosure rules, the SEC can create a “level playing field” and provide investors information by sales product type. If the primary sales product is petroleum, oil and gas disclosure guidance should apply.

Regulations should clearly and consistently identify the petroleum sales product in which to report the estimated reserves quantities irrespective of the extraction method and the degree of processing required. In some oil sands operations, the “lease sales product” is raw bitumen that is subsequently delivered to an “upgrader” for interim processing or delivered directly to a downstream refinery. In other operations, an upgrader is an integrated part of the upstream operations and the lease sales product is synthetic crude oil (SCO). This logic is similar to that currently applied in gas fields where the marketable product may be raw wet gas or residue gas and gas liquids where a gas processing plant is an integrated part of the lease operations. The extensive processing applied to separate liquids and remove non-hydrocarbons is analogous to bitumen upgrading. In neither case, can this interim processing be considered “downstream refining”.

Referencing the SEC request for comments format:

Questions 1, 11, 12 & 13. An underlying principle is that reserves quantities should be stated in terms of the hydrocarbon lease sales product irrespective of the extraction method (mining or in situ) and interim processing applied; there should be no exclusion for such products derived from oil sands. In oil sands operations, where custody transfer is at the upgrader outlet, the sales product is the synthetic crude oil (SCO). Where custody transfer is before upgrading, the sales product is raw bitumen.

Questions 2 & 3. The sum of Proved and Probable reserves aligns with the quantities considered by the operating company in their investment decisions and should form the basis of public disclosures. The same reserves categories are employed by the minerals and petroleum industries and there is general alignment of the inferred confidence levels. The existing definitions for Proved and Probable Reserves and associated evaluation guidelines as contained in the SPE Petroleum Resources Management System (PRMS) are appropriate for disclosures of petroleum derived from both conventional and unconventional sources.

Question 10. Cost and prices should be those defined by the issuer and used in their investment decisions. Prices are those received for the petroleum in its form and condition delivered at the custody transfer point. However, such disclosures should be supplemented with estimates based on a sensitivity case using one-year historical averages to assist the public in comparing investment opportunities. This would align with current SEC guidelines for Mineral Reserves disclosures.