

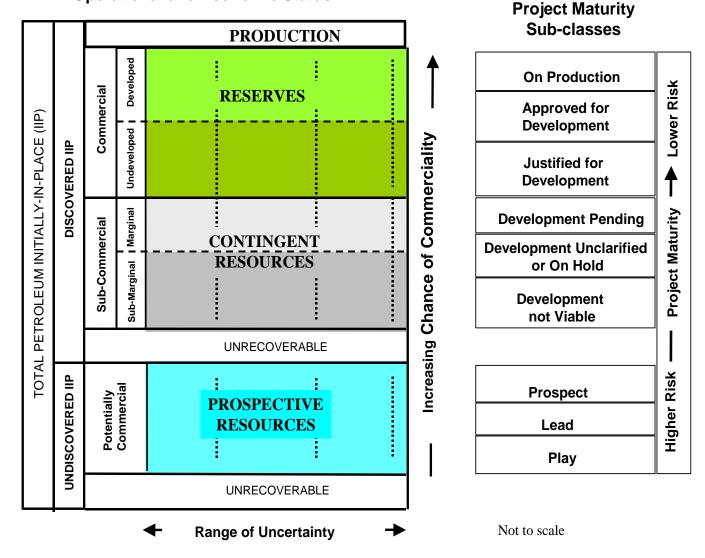
Comparison of Petroleum and Mineral Resources Classification

David MacDonald Segment Reserves Manager

SPE PRMS



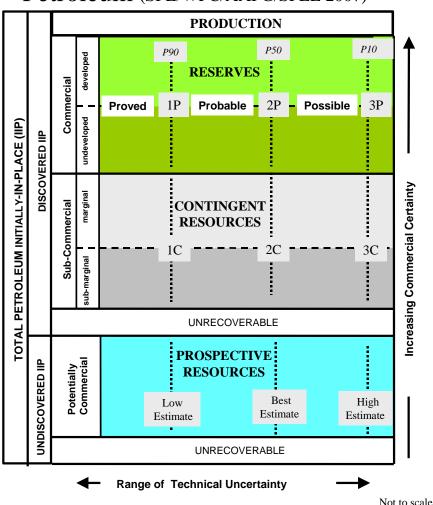
Operational and Economic Status



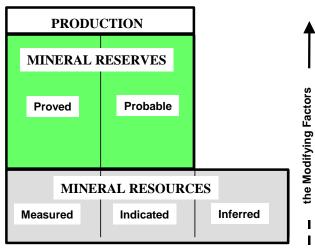
PRMS - CRIRSCO comparison



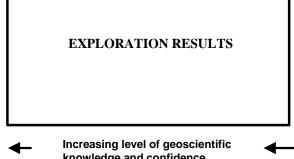
Petroleum (SPE/WPC/AAPG/SPEE 2007)



Minerals (CRIRSCO 2006)



Discovered Not Economic



knowledge and confidence

Common principles



- Estimated by competent persons or qualified evaluators
- Reserves are the marketable/extractable volume to which entitlement has been conferred
- Reserves are the integration of a project's production profile
- Project future net revenue is the integration of cash flow associated with a project and is impacted by production costs and commodity price
- Multiple projects may be applied to the same accumulation, sequentially or concurrently
- All projects involve risk and uncertainty

Differences to be aware of



- Volume Classified
 - PRMS classifies all hydrocarbons, whether discovered or undiscovered, commercial or sub commercial
 - CRIRSCO classifies those classes expected to be economic
 - PRMS estimates the sales quantity delivered
 - CRIRSCO estimates run-of-mine tonnage and grade
- Volumes Reported
 - In general, for petroleum, only proved reserves are reported externally
 - For minerals, proved and probable reserves
 - For petroleum, only entitlement reserves after royalty are reported
 - For minerals, reserves are reported on a gross basis with share shown separately

Integration of CRIRSCO, SPE and IASB



Maintained separately in linked websites

