



## **Potash**

### **Sub-committee Members**

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### **Geological Interpretation**

The potash deposits that are located in Saskatchewan, Canada, are characterized by their

Remarkable consistency of grade and thickness over many tens of kilometers. It is therefore possible to characterize a deposit with a relatively few drill holes, supplemented by sufficient seismic coverage to establish continuity between holes. There are however local disruptions of the deposit, either structural or mineralogical, which may preclude mining. The MRMR problem for potash is almost the inverse of that for other mining operations in that much of the exploration effort is directed at defining the location and size of the non- mineable areas within an otherwise continuous Resource.

Identification and delineation of the non- mineable portions of a deposit may be accomplished through direct observation (mine openings, drill holes) or may be by inference such as through the interpretation of seismic or other geophysical data, or combinations of direct and indirect methods. The assumptions behind any such inferences should be clearly stated or the relevant reports referenced. Similarly, barrier or safety pillars may be left around such features; the factors used to determine the size of these pillars should also be stated.

The potash deposits located in New Brunswick, Canada, are much more complex structurally than those in Saskatchewan, and much less extensive, such that a more conventional approach to MRMR is appropriate.

### **Mining and Economic Requirements**

An 'Economic Radius' must be considered when estimating potash reserves. This is the distance from the shafts beyond which it will no longer be economically possible to mine, somewhat analogous to a cut-off grade in that it is a function of market conditions and

Mining costs. It is also subject to change over time. A cut-off grade does not normally apply, except to define the presence of impurities (such as carnallite), which can contaminate the ore so that the cost of mining and processing is more than the revenue.