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Why Every Preliminary Economic Assessment is Fake News

A Monday Morning Musing from Mickey the Mercenary Geologist

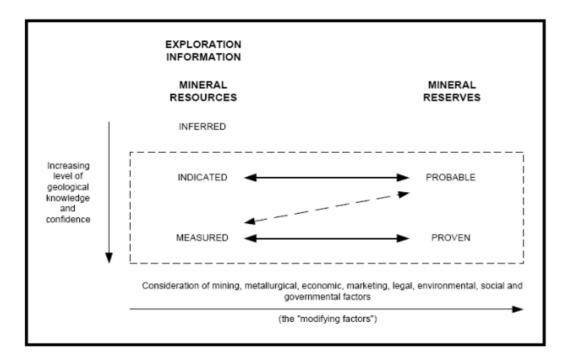
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On December 23, 2005, Canadian Securities Administrators (CSA) added a new wrinkle to the NI-43101 regulation of resource estimations with official creation of the so-called "preliminary economic assessment" (PEA). This is a document that can be tabled after a series of resource estimates and purports to address the economics of a mineral occurrence prior to technical pre-feasibility and feasibility studies.

In actuality, the preliminary economic assessment violates the very core principle of the NI-43101 mineral resources and reserves classification system. Nearly 10 years ago, I explained the Canadian Institute of Mining and Metallurgy (CIM) classifications in detail (Mercenary Musing, August 25, 2008).

The CIM systematic classification of mineral resources and mineral reserves is shown in this graphic:



The important item to note is that Inferred Mineral Resources are shown outside of the dashed box that contains all other categories. The reason is explained in an excerpt from the CIM Standards on Mineral Resources and Reserves published in 2000:

"Note that the confidence level in Inferred Mineral Resources is insufficient to allow the application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure."

The guidance on Inferred Mineral Resources was modified in 2010 to read:

"Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies."

A "preliminary economic assessment" actually allows both *economic evaluation* and *public disclosure* of inferred resources, which as per the above definitions published by the regulatory bodies that created the regulations, do not have sufficient geological confidence to be *evaluated economically*.

Yikes!

This is a veritable bureaucratic *Catch-22* of irrational circular reasoning in the best tradition of protagonist Yossarian's dilemma in the novel by Joseph Heller (1961).

Prior to NI-43101, this level of mineral evaluation was universally called a "scoping study". It was an *internal* document generated by exploration and mining companies after a cycle of advanced exploration. Internal scoping studies were used to determine if a project:

- continued to present economic possibilities for becoming an ore deposit and warranted additional exploration; or,
- had fatal flaws or did not meet company criteria and should be immediately shelved, abandoned, or sold.

In the real world of advanced mineral projects, a scoping study was more than a simple one-off affair. It was a series of early-stage attempts to construct technical and economic models of a mineral occurrence that underwent constant revision as more data was generated.

It was a non-public document compiled and written by company geologists and engineers and designed exclusively for management, insiders, and those who had signed confidentiality agreements; e.g., technical consultants and potential buyers, partners, and/or financiers.

The internal scoping study was never ever intended for release to the public or designed for public consumption by non-technical investors.

In my opinion, the invention and promotion of the preliminary economic assessment by Canadian Securities Administrators five years after adoption of regulations for technical reports was designed as a means to:

• collect additional filing fees from listed companies;

- increase the bureaucracy and workload of securities commissions;
- provide more work for consulting engineering firms;
- permit companies to include inferred resources in economic evaluations thus increasing the likelihood of a positive evaluation for the project;
- allow companies to prolong the tenure of advanced mineral projects of questionable economic value.

Most of the preliminary economic assessments that I review are not worth the time, the cost, the paper, or even the digital megabytes that they occupy in cyberspace for exchange filings, news releases, and company websites.

Taken in whole, I submit that:

- They often contain technical and economic assumptions that are far from rigorous or even acceptable by industry standards.
- The bad assumptions lead to flawed economic conclusions that involve inferred resources, which by definition cannot be evaluated economically.
- These documents often become liquidity events for early-stage professional speculators looking to off cheap stock at high-prices to retail "dumb money".
- All of the above result in mal-investment by the lay public.
- Bad investments result in reluctance by retail lay investors to speculate in a marketplace that they surmise is rigged against them.

To reiterate: a preliminary economic assessment by a junior exploration company is an *economic* evaluation of inferred resources with no demonstrable economic viability.

Therefore, I conclude that every preliminary economic assessment is simply and unequivocally *fake news*.

The preliminary economic assessment has bastardized the technical review process. I propose that it should be banned as a public document.

But since that is highly unlikely to happen anytime soon, you must always beware of frogs masquerading as princes:



Ciao for now,

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The Mercenary Geologist Michael S. "Mickey" Fulp is a Certified Professional Geologist with a B.Sc. Earth Sciences with honor from the University of Tulsa, and M.Sc. Geology from the University of New Mexico. Mickey has 35 years experience as an exploration geologist and analyst searching for economic deposits of base and precious metals, industrial minerals, uranium, coal, oil and gas, and water in North and South America, Europe, and Asia.

Mickey worked for junior explorers, major mining companies, private companies, and investors as a consulting economic geologist for over 20 years, specializing in geological mapping, property evaluation, and business development. In addition to Mickey's professional credentials and experience, he is high-altitude proficient, and is bilingual in English and Spanish. From 2003 to 2006, he made four outcrop ore discoveries in Peru, Nevada, Chile, and British Columbia.

Mickey is well-known and highly respected throughout the mining and exploration community due to his ongoing work as an analyst, writer, and speaker.

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