

## **ZOSTRICH GEOTECHNICAL**

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June 15, 2005

Attention: Kevin Jones

## RE: REVIEW OF FINAL BRW MINE STABILITY LETTER (OCTOBER 15, 2004)

This is a secondary portion of a third review of rock mechanics issues for the closure of the Nanisivik mine. The first review was addressed in a letter dated June 6, 2002. The second was issued April 15, 2004.

As can be stated for the closure plans, more work has been conducted, and additional information provided, as compared to the two previous reviews.

Yet, in order for an engineering review to be conducted, the reviewer must be provided with sufficient information to insure that the conclusions reached by the parties being reviewed are reasonable and accurate given the existing conditions and available data.

However, the usage of technical papers presented by government agencies at conferences, the lack of data, and the lack of technical analysis support for presented conclusions do not allow for adequate review.

## Thus, in short:

- The conclusions reached by Dr. Marc Betournay, of NRCan, are not considered acceptable as he is not a stamping engineer for this project, being employed by a government agency. While his work may be acceptable, this cannot be judged based on technical papers and written conclusions. The reviewer must be allowed the capacity to ascertain what another engineer states is correct is, indeed, valid. This is not the case here.
- The crown pillar stability analysis, prepared by Guy Lauzier, and presented as Appendix E, is similarly flawed. It states conclusions based on limited analysis. It does not appear to reference any variability in material strength, nor geologic structure, nor does it specifically address the portals, shallow cover tunnels, and/or the degradation of presently installed rock support. As an aside, rock failure is presently occurring at the West and East adit portals. This appears to be structural in nature, in both cases. Given the above assessment, this document is considered insufficient for assessment or design purposes.

As has been suggested previously, it would further this review substantially to provide the reviewer sufficient information to reach his own conclusions in regards to the sufficiency of the work conducted.

At present, the assessment is insufficient.

I hope this letter satisfies your requirements. I would be pleased to entertain comments at any time.

Regards,

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Rock mechanics engineer