

December 10, 2015

Mr. Joe Maki
Michigan Department of Environmental Quality
1504 W. Washington St.
Marquette, MI 49855

Subject: Crown Pillar Engineering Assessment - Eagle Mine, MP 01 2007

In accordance with Permit Condition E-8 of Mining Permit No. MP 01 2007, Eagle Mine is submitting the enclosed Crown Pillar Engineering Assessment. This report includes geologic, geotechnical, and hydrologic data that supports advancement of mining above 327.5 meters above sea level (MASL). As explained further below, Eagle Mine will continue to collect additional data while mining above the 327.5 meter level to support the final crown pillar design.

Consistent with industry leading practices, Eagle Mine and Golder Associates Ltd. have collected data to advance the assessment and final design of the crown pillar throughout mine construction. This effort has proceeded in phases as the mine investigations, studies and construction have progressed. The enclosed report reflects data collected to date during the third phase of this ongoing assessment, which encompasses an intensive investigation of the rock mass enveloping the upper levels of the mine, including the rock mass of the crown pillar itself. The phase three work establishes that mining can safely proceed above the 327.5 meter level. Specifically, these data support a mining approach which includes two additional levels of development (352 MASL and 381 MASL), the ramp to access them and one level of production stoping (between 323 MASL and 352 MASL).

The additional information collected from mapping this development on the 352 and 381 levels, which will allow for direct inspection of the rock conditions in the crown pillar, will allow a further phase of characterization of the rock mass in the crown pillar with accompanying stability analysis. If it is demonstrated to be stable, it may result in a subsequent request to the MDEQ to allow production mining up to the 381 level.

Supplemental information used to compile the report is available upon request. If you require any additional information please do not hesitate to contact me at 906-339-7075.

Sincerely,



Kristen Mariuzza, P.E.
HSE & Permitting Manager

enclosure