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Mr. Bill Dunn, P.Eng.
Chief Engineer
Curragh Resources Inc.
P.O. Box 1000
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Dear Mr. Dunn:

Re: Geotechnical Review of AY Zone in Faro Pit

As requested, Piteau Associates Engineering Ltd. has completed a geotechnical assessment of the AY Zone in the Faro Pit. Mr. A. Stewart visited the site on October 31 and November 1, 1992. During that time, the geology was reviewed and an inspection of the area was made with Mr. M. Wasel, mine geologist. Subsequent to this, discussions were held with yourself and Mr. J. Hogg, General Manager.

The AY Zone in the northwest corner of the Faro Pit is located directly above the sump at the north end of the pit. The ore zone is estimated to be up to about 120 ft high and to extend 75 to 80 ft into the wall. The general shape of the AY Zone is such that the western portion of the zone is only about 40 ft high and the eastern portion is only about 80 ft high. The 120 ft high central portion is only about 200 to 300 ft wide. The rock mass behind the ore is phyllite, in which the S2 foliation appears to strike parallel to the slope. While the overall foliation dip is expected to range from near vertical to gently out of the wall in the upper and lower reaches of the slope, respectively, it is also anticipated that intense folding has disturbed the S2 foliation such that, on a local scale, it will vary considerably. The present interramp slope angle in the area is about 40°, with locally steeper and flatter areas. The slope above this area has existed for a number of years in an apparently stable state.

In preparation for mining, and to minimize the potential for rockfalls that could be dislodged by the proposed mining activity, the slope above the AY Zone has been scaled. In this regard, Canadian Gun Crete & Grouting Ltd. scaled the larger potential rockfalls from the slope above the mining zone in late September and early October. A catch fence was also installed on the safety bench above the AY Zone to provide protection from small rockfalls and raveling debris.



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It is understood that mining will be carried out by Pelly Construction over about a one month period, starting in early November. Due to the shape, location and size of the deposit, small mining equipment will be used. It is understood that the contractor has considerable experience excavating highway rock cuts in the Yukon using such equipment. The general plan will be to mine the zone in 20 ft lifts, starting at the west end of the area, where the ore zone is only about 40 ft high. After each lift is drilled, cast blasting techniques will be utilized to break the rock and move as much of the muck as possible to the bottom of the slope, from where it will be loaded out. Where necessary, bulldozers will be used to push the muck to the bottom of the slope. It is understood that a 60° bench face is planned and that no intermediate safety berms would be left. The pit slope would be inspected on a lift by lift basis as mining progresses.

The above plan for mining the AY Zone appears to be reasonable, providing appropriate precautions are taken and excessive blast damage is not done to the pit wall. Initiating the mining in an area where the slope will only be about 40 ft high will allow the drilling, blasting and mucking procedures to be evaluated at an early stage of the work. With regard to not leaving any safety berms during mining, it is noteworthy that much of the Faro Pit was mined with 80 ft double benches, and that somewhat higher benches were excavated without incident at the bottom of the pit near the end of mining. As noted above, the 120 ft high portion of the AY Zone is only in the order of 200 to 300 ft wide. Notwithstanding the above, it is strongly recommended that the upper and newly excavated slopes be inspected after each blast to determine if any additional scaling or other remedial measures are required. The installation of three or four prisms on the safety bench where the catch fence has been installed is also recommended.

I hope the above is sufficient for your needs at this time. If you have any questions concerning the above, please do not hesitate to contact us.

Yours very truly,

PITEAU ASSOCIATES ENGINEERING LTD.

Alan F. Stewart, P.Eng.



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