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November 22, 1973

The Directors
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Gentlemen:

In a report to your Company and dated February 27, 1973, the writer reviewed the exploration work carried out on the group of fifteen mining claims located in Powell Township, Ontario. This work consisted of a geophysical survey, a program of geological mapping and one thousand and fifty seven feet of diamond drilling in four holes. The geophysical and geological work was done during August and September 1972 and the diamond drilling was completed during the period December 2, 1972 and February 6, 1973.

Rock exposures are quite sparse on the property so that only limited information was obtained from the geological mapping. The diamond drilling was localized to three areas on the claims group where the geophysical and geological work suggested shear zones and geological contacts that might have provided favourable host conditions for either gold or base metal deposition.

A wide, highly altered and carbonated shear zone was located near the volcanic-syenite contact in the south part of the claims group. This shearing is exposed in a small outcrop in the north-west corner of claim 329549. Rusty shearing was also noted in the southeast part of claim 329545. Several old trenches were observed in the north part of claim 329557 where there is evidence of fairly strong east-west shearing. One hole was drilled to check the shearing in the north part of claim 329557 and one to check the strong carbonate shear in the northwest part of claim 329549. The other two holes were drilled to cross-section a magnetic anomaly in the west central part of claim 329554.

No sulphide mineralization of any significance was observed in the core, and the assay returns only showed low values in gold. The hole drilled in the northwest corner of claim 329549 did show a very strong shear zone from 50.0 to 93.9 feet which was highly carbonated and carried considerable chlorite, epidote, specularite and minor pyrite and chalcopyrite. The assay returns from this core showed only low values in gold. The shearing was very strong and the rock showed considerable evidence of strong alteration from the

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intrusive syenite to the south. The volcanic-syenite contact is believed to extend for approximately five thousand feet across the south part of this property.

The strong carbonate shearing encountered in the hole drilled in the northwest corner of claim 329549, was the most encouraging structural feature observed in the exploration work carried out on the claims group. Because of the scarcity of rock exposures on the property and especially in the area of the volcanic-syenite it was recommended that some stripping, trenching and prospecting be carried out before further drilling was undertaken. During the period of April 7th to July 10th, 1973, the writer was in charge of an exploration program on the property of Carlton Explorations Limited, adjoining the Nautilus Explorations Limited group of fifteen claims on the east. The field crew on the Carlton ground consisted of C.J. Cryderman P.Eng. and P. Kroshko, geologist. This same crew along with a helper, were used to carry out the recommended work on the Nautilus Explorations Limited ground. During the period, the writer made five trips to the property to check on the progress of the work make geological investigations.

The prospecting, stripping and trenching was confined to the area of the volcanic-syenite contact in the south part of the claims group with the exception of some work in an outcrop area in the southeast corner of claim 329545. The heavy overburden covering most of the area in the south part of the property necessitated that this work be confined to the limited areas where rock was exposed or that the overburden was very light. Trenching and stripping was carried out in the northwest corner of claim 329549, north of a small pond in the south east corner of claim 329553, east of this same pond in the central part of claim 329547 and in the southeast corner of claim 329545. In all cases, rusty well weathered shearing was encountered. Much of the rusty material was found to be iron carbonate, probably resulting from a break down of specularite and pyrite mineralization. The entire zone appeared to be a very favourable environment for gold mineralization but only traces were observed in panning and the assay returns indicated only low values.

The writer is still of the opinion that this claims group is well located with respect to underlying geological conditions but the scarcity of rock exposures makes it very difficult to thoroughly explore the ground without resorting to costly diamond drilling. There is much renewed interest in the Matachewan area brought about largely by the recent increase in the price of gold. Most of the old showings have been re-staked and work is currently underway on several properties, especially in Baden Township adjoining Powell Township on the north. It is recommended that Nautilus Explorations Limited await developments in the immediate area of this property before undertaking further exploration work on the ground.

Toronto, Ontario November 22, 1973 Respectfully submitted, Sames D. McCannell, P.Eng., Consulting Geologist.

