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~~Nov 79~~ Jan 79.

STATEMENT 1.

STATEMENT OF GEOLOGY AND EXPLORATION PROPOSALS FOR  
PARYS/MONA PROJECT STAGE 3

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1. The General Geology, with maps, have been previously presented in the proposals for Stages 1 and 2.

2. Diamond Drilling Programme

Previous drilling on the northern contact of the felsite body with the Ordovician shale outlined of an area of copper sulphide mineralization in a zone of brecciation and silification (Carreg-y-Doll lode). The mineralization consists of pyrite and chalcopyrite disseminations and as veinlets in the country rock, with minor sphalerite and galena.

In the hanging wall of the Carreg-y-Doll zone several other lodes occur, as the North Discovery and the South Branch lodes, and all have been exploited in former mining operations. From the results of drilling it appears that these principal hanging wall lodes converge downwards and merge with the main Carreg-y-Doll zone at depths which vary from minus 300 ft. below surface (in Borehole M-7) to 850 ft. further to the west, in Borehole M-1. Below this convergence the main lode is the only one of economic interest and whilst it generally carries copper mineralization throughout its entire width where it opens into a wider body, there is usually a relative concentration of values at the top and bottom of the mineralized zone.

Several of the boreholes in this Northern Zone intersected considerable widths of copper mineralization and three such examples are as follows :

<u>Borehole</u>	<u>True Width</u>	<u>Grade Copper</u>
M - 10	310 feet	0.49%
30	175 feet	0.68%
36A	130 feet	0.65%

Dr. Norman Schindler in his report of April 30th, 1970, calculated an ore reserve based on these and other intersections as 32,825,000 short tons at an average grade of 0.71% copper. Whilst this tonnage is impressive the grade is too low for an

economic mining operation as the mineral would have to be extracted underground.

The same report presents an additional ore reserve figure, based only on the higher grade intersections, of 9,884,000 short tons at an average grade of 1.21% copper, allowing for a dilution factor of 10%.

This is the type of grade that could possibly be worked by an underground operation at a production rate of 5,000 tons per day. However, over a ten year period this calls for an ore reserve of 15 million tons. Consequently, a drilling programme is proposed to further test this Northern Zone to see if the previous ore reserve figure of just under 10 million tons can be increased by a factor of 50%. All holes would be located on the northern flank of the felsite, commencing in the Ordovician shales, and drilled southwards. The holes would be long, up to 1,800 feet in length, and a programme of 12,000 feet of drilling is justified.