

010117

~~Xerox p 10-11
12, 13~~

From 1973

An Rpt

- General loc'ns of
deposits

- New data on IONA
deposit

7000

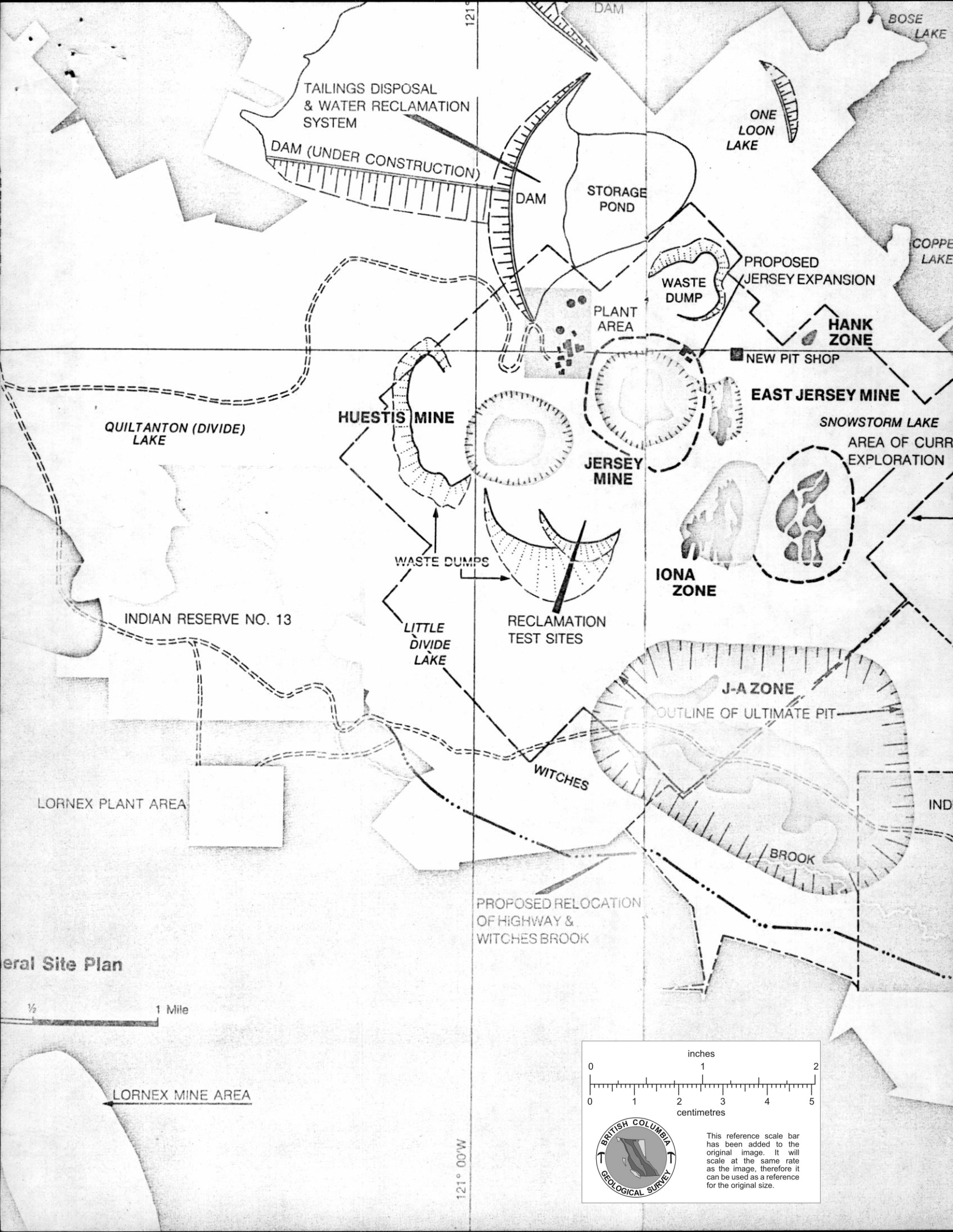
3 mos → Jan 31 65 000 1.5

April 464 000 1.50

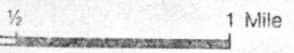
1281 000

65 000

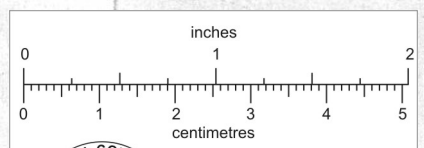
1216 000



General Site Plan

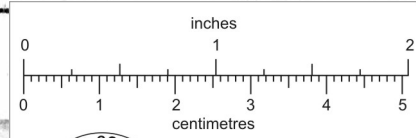
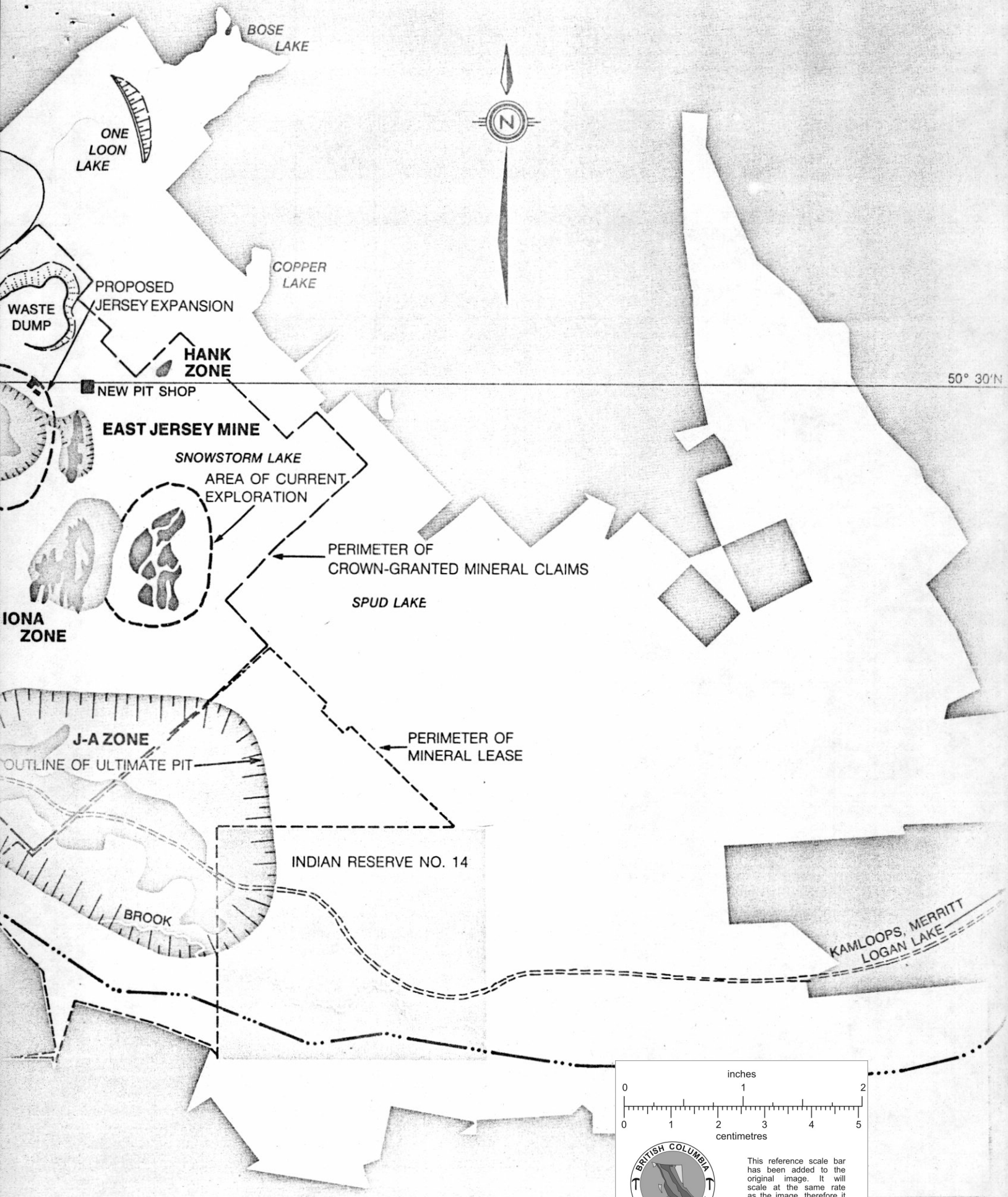


LORNEX MINE AREA

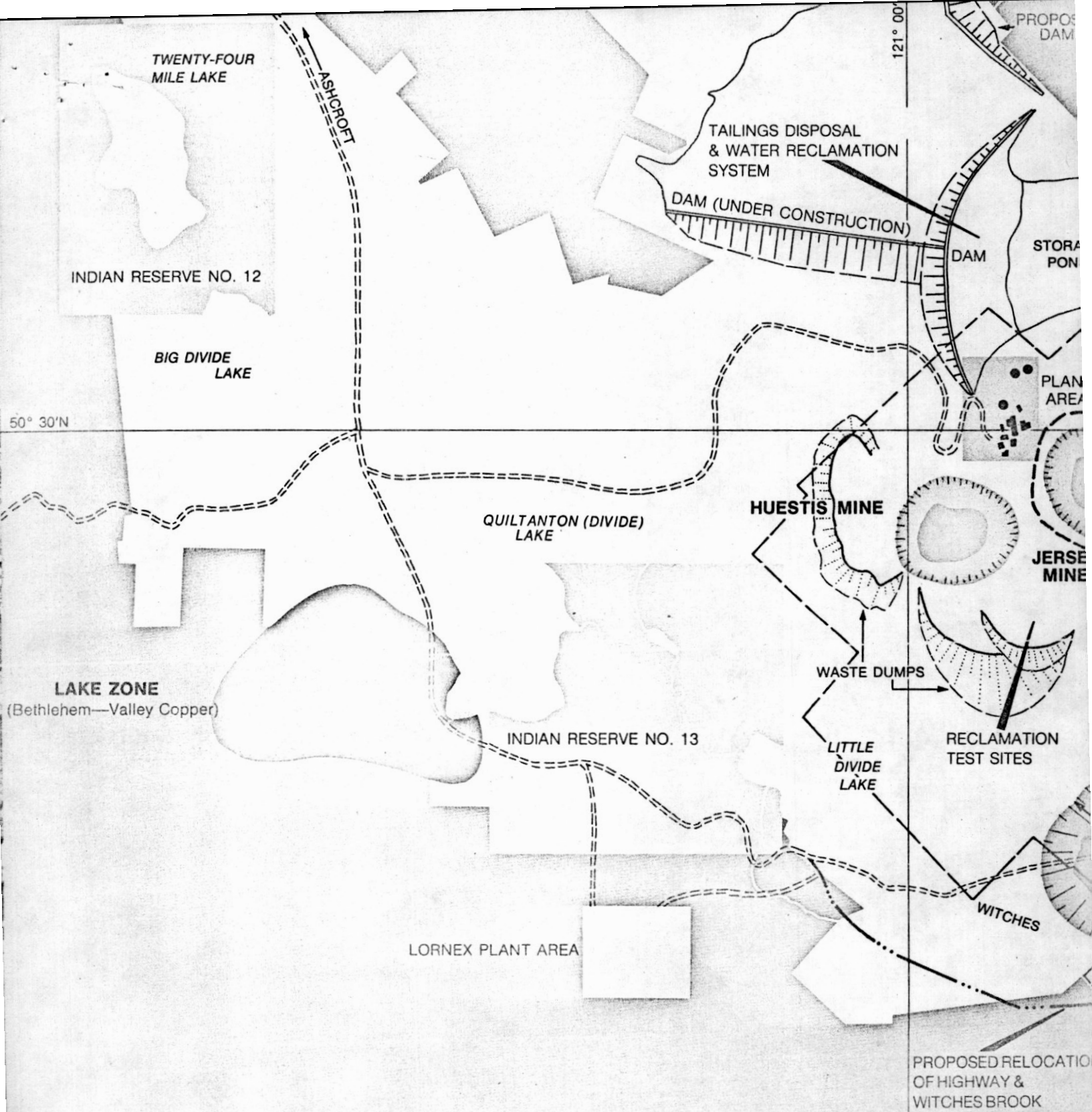


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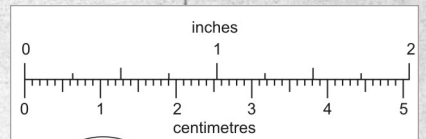
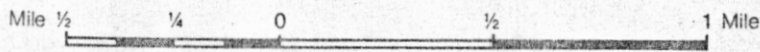
121° 00' W



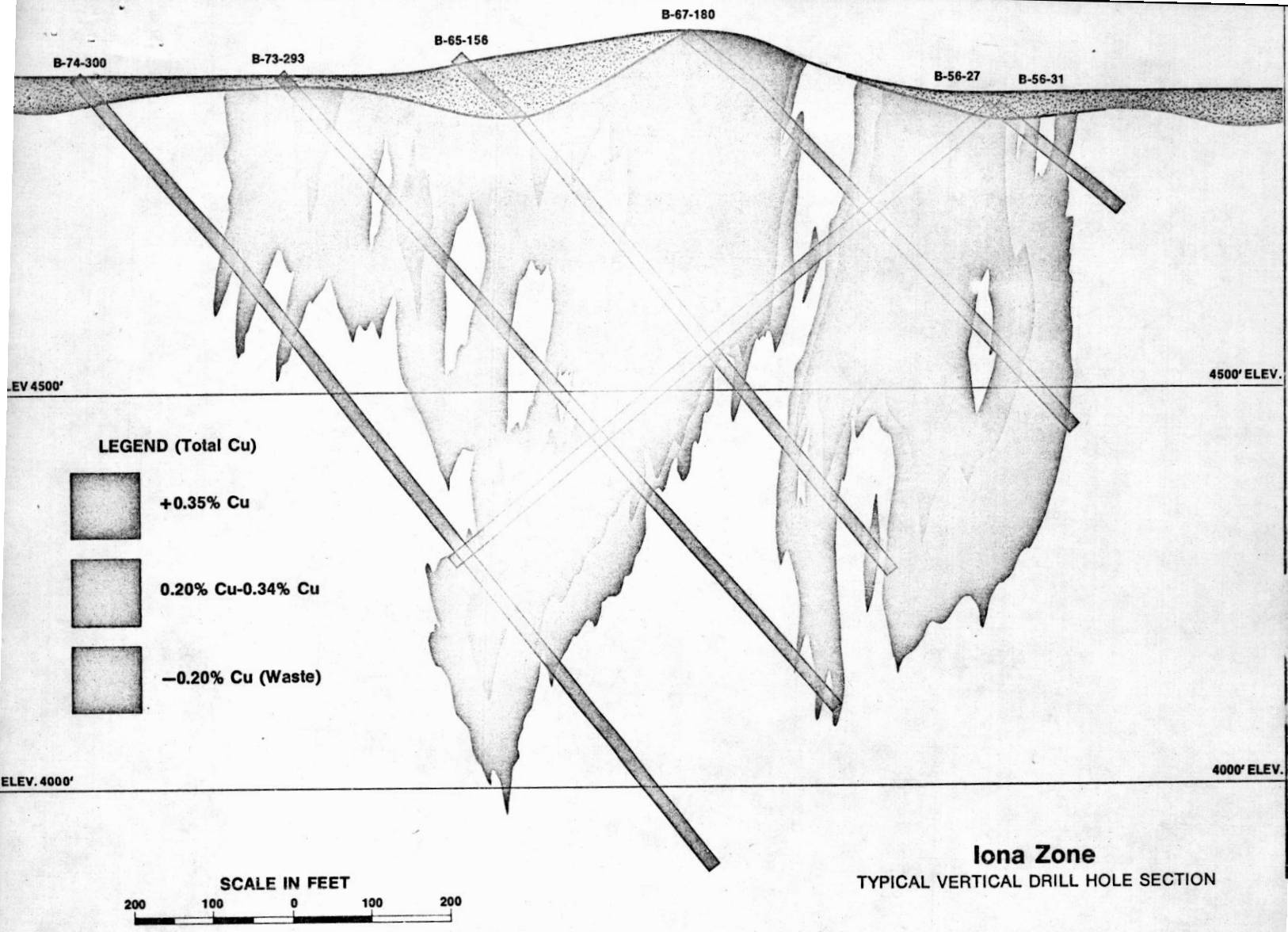
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Highland Valley General Site Plan



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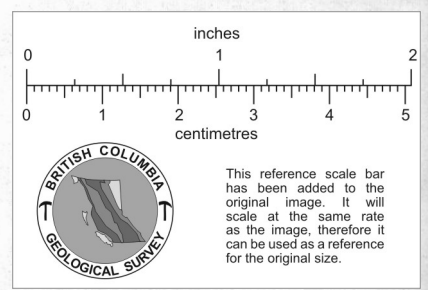
Iona Zone
TYPICAL VERTICAL DRILL HOLE SECTION

Comparative dimensions of a cross section of the orebody using 0.20% and 0.35% cut-off grades

sections can be used to determine the geologic structure of the orebody. Information to date indicates a complex geologic structure of near vertical high grade fault zones surrounding a more consistently mineralized area. Assays near the surface have revealed sporadic occurrences of oxidized ore in minor amounts which will have a bearing on tonnage calculations because the Bethlehem flotation mill is not designed to recover oxide copper.

The purpose of any drilling program is to estimate the reserves of available ore. Calculations are complicated by the degree of certainty which is placed on the presence of ore grade material. In other words, a problem always exists as to the area of influence to be applied to each individual hole and also to the possible extension of indicated ore trends.




Mineable reserves in the Iona should be established by mid-year. Metallurgical testing is being carried out to establish the milling characteristics of the ore. When the drilling and metallurgical testing programs are completed, mining plans will be developed including open pit designs. All these matters will be evaluated, along with metal prices, taxation statutes and production costs, before a final decision can be made to develop the zone for mining.

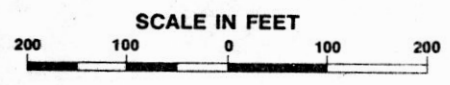


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LEGEND (Total Cu)

-  +0.35% Cu
-  0.20% Cu-0.34% Cu
-  -0.20% Cu (Waste)



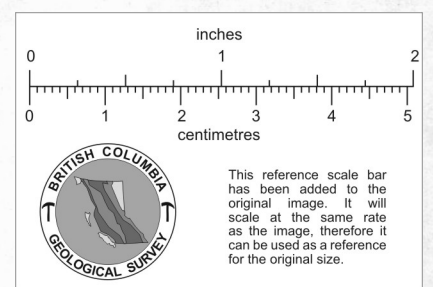
Iona Zone
TYPICAL VERTICAL DRILL HOLE SECTION

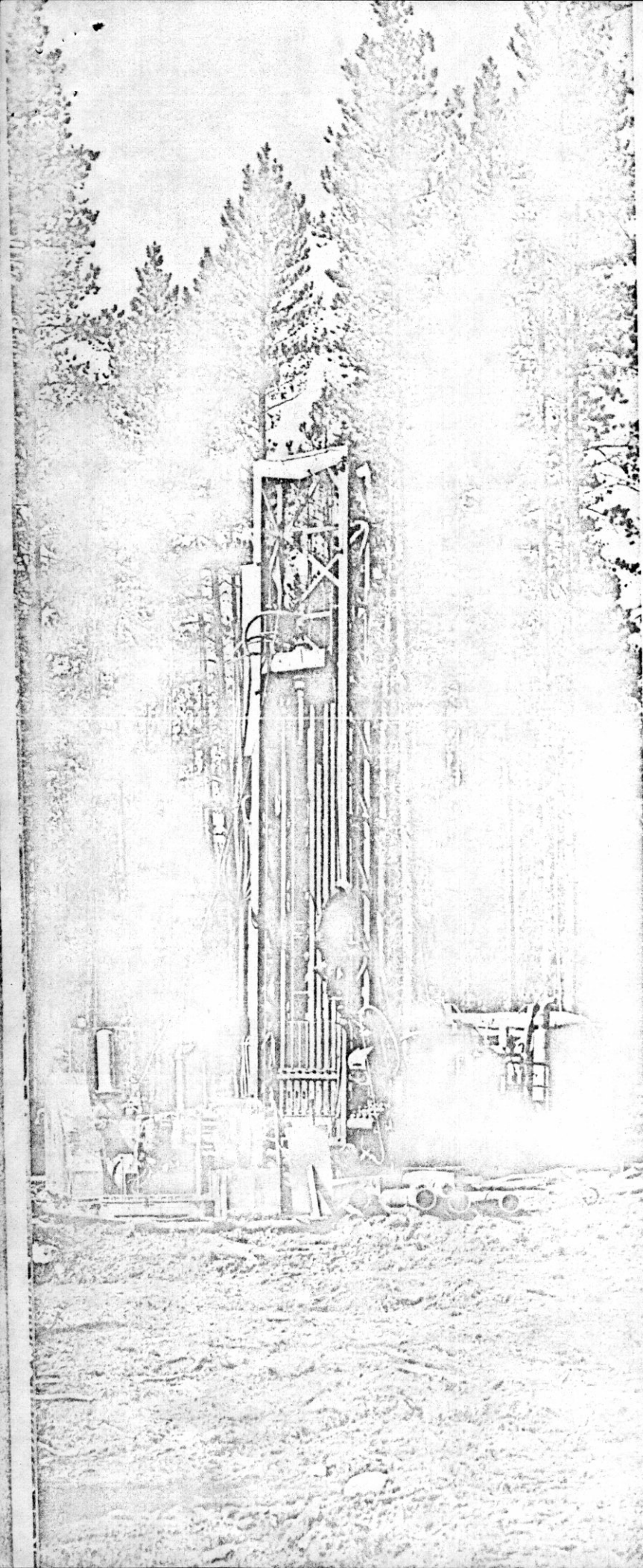
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Reappraisal of the Iona Zone

by Henry G. Ewanchuk, B.Sc., P.Geol., P.Eng.
Vice-President, Exploration

In 1955 when development of Bethlehem's Highland Valley property began, the Iona zone was one of the primary areas tested. Diamond drill holes B-1 and 2 were completed and encouraging results were obtained. Subsequent drilling outlined a mineralized zone but the copper content was insufficient to warrant economic development. At the same time, excellent results from the Jersey zone persisted and, finally, exciting assays from the East Jersey zone pushed the Iona zone from prominence. Eventually, the East Jersey was developed into a mine and it was followed by the Jersey and Huestis mines.

Little exploration was done in the Iona zone in the period from 1967 to 1973 and it was considered as a minor source of potential ore with reserves at 10,000,000 tons of 0.50 copper grade.

Mining techniques have improved in recent years and economics have, in many instances, changed to mineable ore that which was previously considered waste. During 1973 rising copper prices encouraged a re-evaluation of ore reserves and cut-off grades and in September, management proposed a close reappraisal of the Iona zone. A new estimate of reserves, based on a cut-off grade of 0.20% copper, was made and preliminary figures indicated 20,000,000 tons of 0.40% with a correspondingly greater geologic ore inference. At the October Directors' Meeting, funds were allocated to finance a program of diamond and percussion drilling in the Iona zone and adjacent areas. The project commenced in late November and drilling is continuing. To date 26,500 feet of diamond drilling and 18,000 feet of percussion drilling have been completed. Results tend to confirm the presence of a relatively large low grade deposit.

In estimating tonnage, assay results from the diamond drill core and percussion samples are plotted on vertical sections which run through the zone at 100 foot intervals and these