EASTERN HILL, STOREY'S CREEK,

MT. REX TIN N.L. PROPERTIES

INTRODUCTION:

A geological examination and survey of all surface lode exposures was undertaken at the request of the above Company to obtain the data necessary to formulate a comprehensive scheme for testing the nature and value of the lodes at depth.

The area consists of three sections, namely 9584/M, 47 acres, 11597/M, 40 acres, and 11598/M, 40 acres, in all 127 acres. The first named section charted in the name of E.L. Egan is east and adjoining the Storey Creek Wolfram Mines Consolidated Lease 11367/M, 336 acres, and is held under option, while the other two sections are east and adjoining the 47 acre section and are held under application for mining lease.

The compass survey was based upon and controlled by the surveys of the mineral sections and heights were determined by abney levelling and aneroid barometer readings based upon a datum of 2700 feet at the office of the Storey Creek Mine, and although the general height above sea level may not be strictly correct the relative heights approach a reasonable degree of accuracy.

GEOLOGY:

One great sedimentary series only, the Cambro-Ordovician slates, quartzites and tuffs etc., occupy the whole of the area under review. In most cases the cleavage almost completely masks the bedding planes, but in some instances they are distinguisable mainly by difference in lithological character among the various beds, for example a bed of quartzite adjoining slate. The general strike of the bedding planes was approximately N 40° W with dips ranging from 70° to vertical in a south westerly direction. One bed of slate was observed to have a steep north easterly dip.

The strike of the cleavage planes varies round about N 25° W and the dip is generally to the west or south west at angles ranging from 45° to 80° although the steeper angles are the most common.

Several sets of joint planes cross the cleavage planes either diagonally or at right angles, but no general rule could be deduced as to their behaviour.

VEIN SYSTEM:

The vein system consists of a number of narrow strike veins of quartz, generally parallel, in which although the dip varies at different places in the veins the general dip remains constant.

The colour and nature of the quartz varies from coarse, white and vitreous to fine grained and dense. Free cassiterite and a little wolfram were observable in one or two instances. The veins range in width from half an inch to eight inches and although the vein system has been worked at irregular intervals by means of adits, shallow trenches, underhand stoping etc., over a distance of half a mile, the greatest length of any one working is not more than 200 feet. With the exception of the winze and shaft each reported to be

at least 50 feet deep the average depth of workings would be three or four feet increasing to 10 feet in some places.

The vein system is confined to a zone about six chains wide in which there appears to be at least eight parallel veins marked "A" to "H" on plan, although in two cases "A" and "H" the assumption is based on one exposure only. Veins "B", "E", and "F" have an average dip of approximately 60° whereas "C" vein has a much flatter dip, namely from 28° to 34° - therefore if the dip continues without marked alteration vein "C" would intersect "B" at depths of approximately 30 to 60 feet from the surface. The veins show considerable variation in width along their length and in some places slight lateral dislocations; they may persist for some distance as mere stringers and then "make" to six to eight inches only to split and continue as two smaller veins.

In view of the characteristics of the vein systems in adjoining properties, the number and apparent continuity of this system there is ample justification for further testing it at depth. Therefore I would suggest the selected bore sites shown on the plan as the most favourable for achieving that purpose.. Further drilling would be governed by the results obtained.

The bore holes have been designed to test the veins at a vertical depth of 250 feet which is the greatest depth which can be obtained by means of an adit with the minimum amount of driving. In connection with the assumed adit level it must be pointed out that this is from creek level and that if the adit were on the Company's section the vertical distance would be reduced by at least 60 to 100 feet depending upon its position.

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