

## CANEX AERIAL EXPLORATION LTD.

DIVISION OF CANADIAN EXPLORATION LIMITED

700 BARRARD BUILDING

VANCOUVER 5, B. C. CANADA

1 August, 1963.

Noranda Exploration Co. Ltd.,  
2256 West 12th Avenue,  
Vancouver, B.C.

Attention: Mr. B.O. Brynelson

Homestake Mining Company,  
100 Bush Street,  
San Francisco, Calif., USA.

Attention: Mr. D.C. Sharpstone

Kerr-Addison Gold Mines Ltd.,  
409 Granville Street,  
Vancouver 2, B.C.

Attention: Mr. Wm. Siroia ✓

Silver Titan Mines Limited,  
Room 328 - 355 Burrard Street,  
Vancouver 1, B.C.

Attention: Dr. A. Aho

Gentlemen:

TITAN PROJECT

Progress Report

Correction to be Made in Previous Monthly Report:

On page 4, first paragraph and fifth line, please amend 5.2 parts per billion to read 520 parts per billion.

Introduction:

On July 15th an accidental fire destroyed the cabin which was serving as a field geochemical laboratory and soil sample storage shack. Lost in the fire were the mercury detector, soil sample preparation equipment and over 500 soil samples all of which had been prepared for mercury detection and wet analysis. The Shanghai samples, fortunately, had already been run with the detector, but the others have to be re-collected and prepared again for mercury detection when a new Lemaire instrument arrives. A complete list of the equipment lost in the fire accompanies this report.

This unexpected setback has upset the "Future Plans" as outlined in the last Monthly Report. In addition, Dr. Aho has stressed the importance of reconnaissance stream sediment sampling in the streams draining the areas to the west of the current properties on both limbs of the McQuesten anticline. A programme has been set up and will be initiated once the present Galena Hill soil sampling and magnetometer work is completed.

Galena Hill Properties:

Geophysical Methods:

A Jalander magnetometer is currently on loan to the Project. A survey of Area "A" has been completed and the results, although far from being clear-cut, do show a small southerly-dipping anomalously high area over the same ground under which the strong resistivity high was detected. A more detailed survey has been run over this anomalous area, but the results have not as yet become available. A survey will also be run over Area "B" in the next few days.

Geochemical Methods:

Soil sampling of the area over the resistivity high has been two-thirds completed, but has been slowed by the periodic smashing of the sampling tool on buried pebbles and boulders. The inorganic silts from the "G" horizon will be run with the mercury detector, but it is doubtful whether or not this method of mercury detection will reflect buried mineralization under the muskeg-type conditions. Dr. Clews has stated in his memorandum to Dr. Aho on July 17th, 1963 that "G" horizon soil samples and stream sediment samples should be analyzed for leachable metals. The method of mercury detection employed with a Lemaire instrument, that of an intense heating of the sample, is a total <sup>mercury</sup> metal method. It should be clearly understood then that the mercury detector is not a tool to be employed in reconnaissance stream sediment sampling, but rather in a follow-up situation where one is dealing with freely drained and essentially residual soils with a well-developed "B" horizon. Ideally, anomalies found in stream sediments through the use of cold extractable methods would be followed up with mercury detector sampling grids on the fully drained sides of the drainage systems. The reagents and equipment required for heavy metal determinations (a semi-quantitative analytical method for leachable metals) have been ordered. The "G" horizon samples will be run with this method which, in theory, should produce more reliable results than the mercury detector on these silts from below the muskeg.

North Limb Properties:

Shanghai Group:

Progress and future plans for this group are covered in some detail in the report on the feasibility of further trenching. The reader is referred to that report.

The Lundquist showings have been resampled. The samples had just been run with the detector and several strongly anomalous samples were being re-run when the fire broke out and destroyed both the samples and the results. The soils developed in this area are ideally suited for the detector, and the results should prove interesting.

Ur Group:

The Ur Group has been resampled and the numbers of unsamplable sample locations reduced to only one. However, the ground is marred by numerous muskeg-type areas the samples from which may confuse the issue when they are run for mercury beside the scattered "B" horizon samples. A combination of the mercury detector results with those from the heavy metal determinations may give a truer picture of the metal dispersion trends in the soils.

The four trenches towards the northeast boundary of the group of claims have also been sampled and the results should facilitate a decision on the necessity of further trenching.

A strongly flowing spring was recently discovered in Poli Creek during the course of reconnaissance drainage sampling. The creek boulders have been heavily iron-stained for at least 80 feet downstream of the spring, and considerable amounts of light to medium gray silt are currently issuing from the spring. There is a strong possibility that this spring marks the northeastern extension of the main shear zone of the Ur. The Jalander will be taken to test whether or not the dioritic dyke exposed across claim No. 45 can be traced under the overburden. If it is traceable, the extension of the main shear zone may be found by tracing the dyke until it is displaced by the shear. This shear zone (vein fault) is suspected to pass into an area of quartzite east of Poli Creek, and this area would form a more favourable site for ore deposition than would the area of schistose rocks along its southwestern end.

Reconnaissance Sampling Programme:

Dr. Aho has carried out photogeological studies over the western extensions of both limbs of the McQuesten anticline. His discovery of several strong northeast-trending lineaments has emphasized the necessity of a rapid but thorough stream sediment sampling programme in the drainage systems crossing the anticlinal limbs.

Brock, Hampton and Seymour will sample the drainage and prospect the lineaments of the north limb between Poli Creek on the east and the North McQuesten River on the west. This stage should not take more than three weeks of field work, but the analyses of the samples will probably add another 10 days to the total.

At the same time Templeman-Kluit and French will drainage sample and prospect the area between Seattle and Ross Creeks, west of Mt. Haldane. Templeman-Kluit returned on July 27th from the May Creek area and is currently preparing a report on the geology and economic potential of the area.

Therefore, by the end of August, the process of following up any anomalous samples will have begun. However, Templeman-Kluit and Brock will be returning to university early in September, and this reduction in staff will, of course, limit the amount of additional field work that can be carried out before the snow flies.

Silver Titan Camp,  
Elsa, Y.T.

28th July, 1963

(signed) David L. Seymour.  
Project Manager.

Typed Vancouver Office  
1 August, 1963  
/JHW

cc: J.D. Little, E.A. Scholz, L. Adie, D.L. Seymour.