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938/8E/9E

GEOLOGICAL REPORT

CITEX MINES LTD. (N.P.L.)

D, Sue, Noa, Barney, Acadian
Group of Claims

S. Venkataramani, M.Sc.CPG.

Edward O Chisholm, P.Eng.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2848 MAP _____

May 20, 1970

CITEX MINES LTD. (N.P.L.)

INTRODUCTION

In the spring of 1970, Citex Mines Ltd. (N.P.L.) acquired a substantial block of claims in the Cariboo mining division. These claims are situated adjacent to active exploration companies who have come up with some encouraging results on their properties. The claim group of Citex Mines Ltd. (N.P.L.) appears to overlie a known area of favorable geology for mineralization. To the west of Citex Mines Ltd. (N.P.L.) are situated the properties of Gunn Mines Ltd., Duval Corporation and Gibraltar Mines. It is understood that these companies have come up with substantial tonnage on their properties. About 5000 feet west of the property a bulldozer stripping was examined and good mineralization of copper consisting of malachite, azurite, chalcopryrite and chalcocite was noticed. This structure appears to have a southeasterly trend and it may possibly have an easterly extension. This has to be carefully checked out by geological examination and prospecting.

PROPERTY

The property consists of 90 contiguously located full claims and two fractional claims. The details of these claims are as follows:

| <u>Name & Number of Claim</u> | <u>Recording Number</u> |
|-----------------------------------|-------------------------|
| D 1 - 24 incl. | 56271 - 56294 |
| Sue 1 & 2 incl. | 56295 - 56296 |
| Noa 1 & 2 incl. | 55381 - 55382 |
| Barney 1 - 22 incl. | 51758 - 51779 |
| Acadian 1 - 40 incl. | 51183 - 51144 |

These claims are recorded at the Mine Recorder's Office, Quesnel, British Columbia.

LOCATION AND ACCESS

The property is located about nine miles northeast of the town of McLeese Lake, in the Cariboo mining division, British Columbia. These claims are situated immediately to the east of Gunn Mines Ltd. and south of Ardo Mines Ltd. (N.P.L.). The access to the property is good by means of all weather gravel road from McLeese Lake. Several secondary roads branch off from the main road and run to the different parts of the property. These secondary roads are not open during wintermonths but the property can be reached by Ski-Doo.

GEOLOGY

The property around Cuisson Lake and the vicinity is underlain by granitoid rocks with minor occurrences of tuffs, limestones and their metamorphic equivalents. The sedimentary metamorphosed rocks are believed to be of Permian-Pennsylvanian

Cache Creek group. The age of the granitoid rocks is not known. The area is entirely underlain by granodiorite of granite mountain batholith or schists derived from it. Other rock types, except for minor aplites, seemingly are absent. The granitoid rocks were originally foliated and have been subjected to long history of deformation and low grade regional metamorphism. They range from slightly cataclastic granodiorite to chloritic quartz muscovite schist.

The great majority of this property is covered by overburden of varying depths. Rock outcrops are very scarce, but when noticed, mostly of quartz muscovite schist. Copper carbonates, mainly malachite, was seemingly present on some of the outcrops. Finely disseminated chalcopryrite was exhibited by few rock outcrops. In general, chalcopryrite and pyrite are widely distributed in this area. Molybdenite is of more restricted occurrence. Chalcocite occurs replacing pyrite in certain near-surface localities. Pyrite and chalcopryrite both occur disseminated in transecting quartz veins and in quartz-rich segregations and blebs, parallel to schistosity. Disseminations commonly occur in streaks and networks, following chlorite-rich micaceous laminae. On a larger scale, schist zones are commonly the base-mineralized. Pyrite may have been deposited more than once because in adjacent schistose bands some occur as undistorted cubes with quartz shadows and others as striated and smeared out masses. In the close vicinity of this property, observed in a bulldozer trenching, mineralization consisting of malachite, azurite, chalcopryrite and chalcocite within the quartz veins and the adjacent chloritic mica schists.

WORK PERFORMED

In the early spring of this year, about 23 line miles of grid lines were cut, covering part of the Acadian and Barney group of claims. It was recommended to carry out geochemical and magnetometer surveys on these lines. Because of the snow condition, these surveys did not commence till the first week of May of this year, and they are still in progress. The entire work completed before the second week of May has been plotted and the interpretations are as follows:-

Geochemical Survey:

The southern half of the Acadian and Barney group of claims were subjected to a geochemical survey. Individual samples were taken along the previously cut grid lines by means of a stainless steel auger. These samples were taken at an average depth of one foot in an attempt to consistently sample the soil immediately below the humus layer, or otherwise known as the "B horizon". Sampling the "B horizon" would reduce the abnormal concentration effects of vegetative material. The samples were taken at 100 feet intervals on the grid lines, placed in manila envelopes, air dried, catalogued and sent to Crest Laboratories, Vancouver, for analysis. Under the supervision of Mr Alfred A Burgoyne, geochemist, the samples were subjected to cold acid extraction and then analyzed by means of an atomic absorption meter. Values in copper are expressed as parts per million and plotted on the enclosed map.

This survey was carried out by collecting soil samples along eight east-west lines and one north-south base line. The sampling interval was 100 feet and the grid line interval 400 feet.

The overall copper value expressed by this survey is low with limited zones of geochemical anomalies. The background value is comparatively low and the anomalous zones vary in strength from twice to five times background. The zone on 12 + 00 N. and 10 + 00 E. appears to be the strongest anomaly. It has a north-south trend and has a width of about 400 feet. Some minor zones of anomalies were indicated on the west side of the baseline.

It appears that the overburden in this area could be high enough to conceal any zones of geochemical anomalies of high intensity.

The magnetometer survey results were plotted and submitted to Mr Richard O Crosby, P.Eng., Geophysicist, of Seigel Associates Limited, and his comments are as follows:

"The magnetic field as recorded over a portion of the Acadian and Barney Groups indicates a total relief of about 260 gammas.

The most prominent feature is a north-south trending negative anomaly centred at 26 + 00 E on Line 8 + 00 N. It reaches a maximum value of -200 gammas. The general background level is about -60 gammas. The source of the anomaly is interpreted as a dike arising to within about 50 feet of the ground surface. The negative anomaly probably results from remnant magnetization.

The remainder of the magnetic field is quite featureless except for a slight depression centred about the Baseline and extending northward from 0 + 00.

A geochemical map of the grid showing the distribution of total copper (parts per million) indicates that the highest values recorded occur along the eastern flank of this depression and on L 8 + 00 N within it.

Since the McLeese Lake area is host to a large tonnage low grade copper deposit, the coincident geochemical highs and magnetic lows cannot be underestimated.

It is recommended that an induced polarization survey be conducted over the claim group in order to map the subsurface distribution of metallic sulphides."

CONCLUSION AND RECOMMENDATIONS

Some geochemical and geophysical surveying was carried out on the property of Citex Mines Ltd. (N.P.L.). These surveys have indicated anomalous zones of various strengths. In places, there is a good coincidence between the anomalous zones obtained by geophysical survey and the anomalous zones obtained by geochemical survey. This coincidence is a very interesting feature revealed by the surveys so far carried out.

In view of the favorable results obtained during the course of the work reported on herein, it is recommended that both, the geophysical and geochemical surveying be continued, in order to supply more complete and detailed information on this property. An induced polarization survey should follow, which could reveal an area of interest, as the mineralization in this area appears to be of disseminated nature.

In general, the property appears to be situated in an area of favorable mineral deposition. Immediately to the west of the property are situated the claims of Gunn Mines Ltd., who have come up with considerable tonnage of average grade copper ore on their property. Because of the favorable location and from the encouraging results obtained by the surveys so far carried out, the property warrants more systematic exploration programme on these claims.

The cost of further exploration programme will be prepared after the completion of the present phase of work.

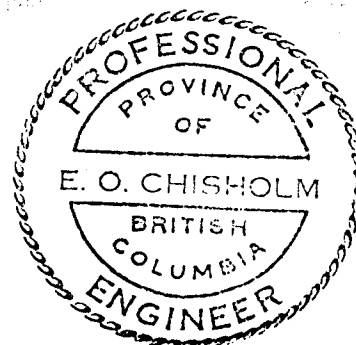
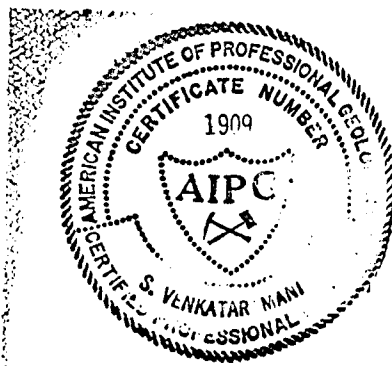
Respectfully submitted,



S Venkataramani, M.Sc.CPG.



Edward O Chisholm, P.Eng.



C E R T I F I C A T E

I, S Venkataramani, of Vancouver, British Columbia, do hereby certify that: -

1. I am a geologist with my office located at #630-890 West Pender Street, Vancouver, B.C.
2. I am a graduate geologist with a Master of Science Degree from the University of Madras, India.
3. I am a certified professional geologist belonging to The American Institute of Professional Geologists, Golden, Colorado, U.S.A.
4. I have been practising my profession for over eight years.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in this property or the securities of Citex Mines Ltd. (N.P.L.).
6. This report is based on my personal visit to the area and from previous reports on the property and the published geological literature.

Vancouver, British Columbia



S Venkataramani, M.Sc.C.P.G.

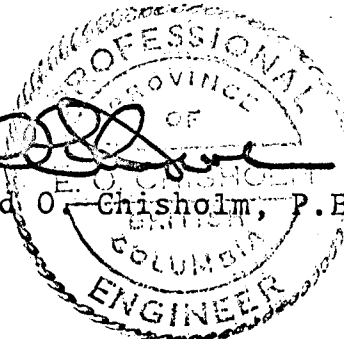


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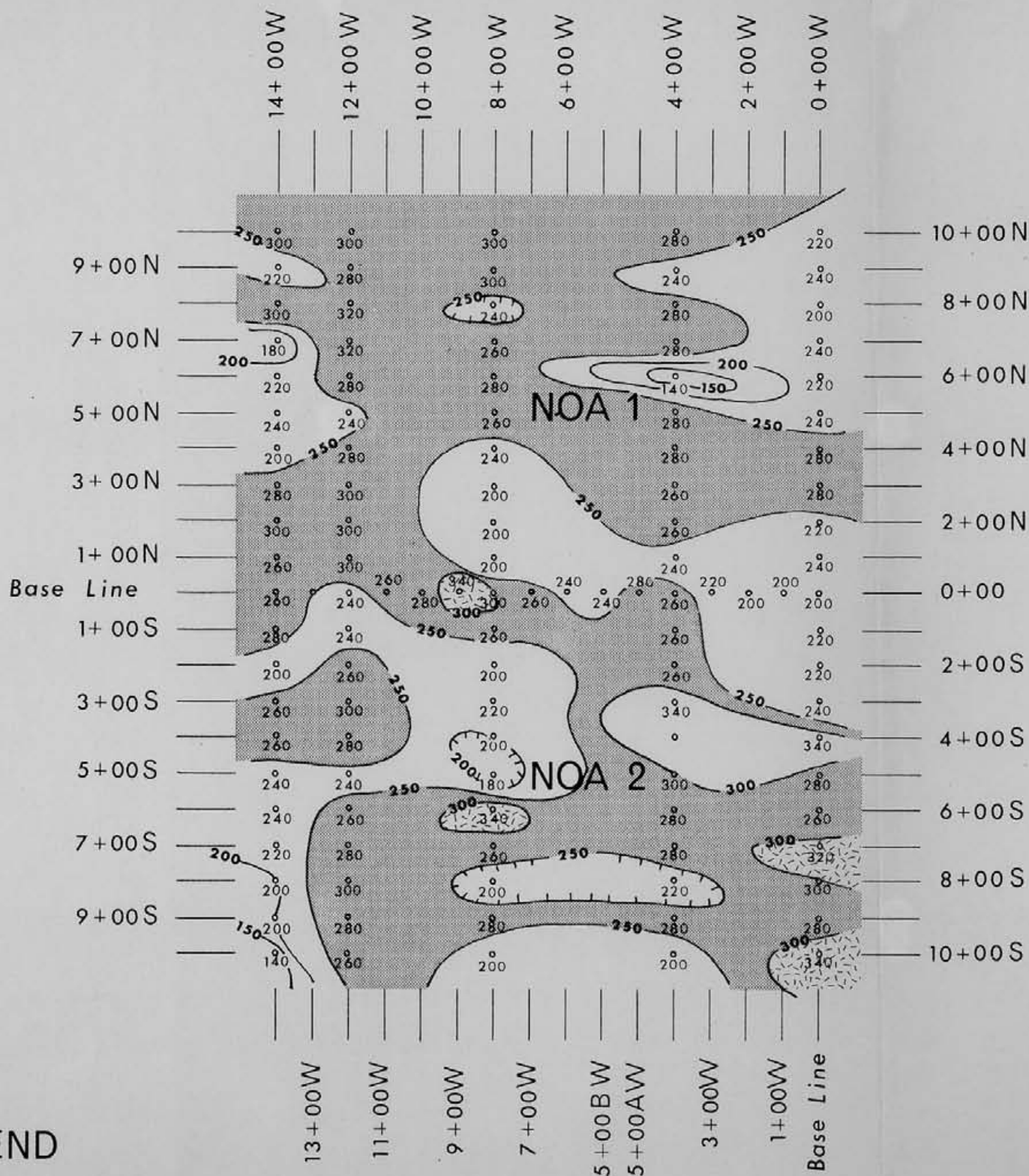
I, Edward O. Chisholm of the City of Vancouver in the Province of British Columbia, hereby certify that:

1. I am a geologist with offices at #821-602 West Hastings Street, Vancouver 2, B.C.
2. I am a graduate of the University of Toronto, Ontario, Master of Arts, 1945.
3. I am a member of the Association of Professional Engineers of the Provinces of Ontario and British Columbia.
4. I have no direct interest or indirect interest in either the property or securities of Citex Mines Ltd. (N.P.L.) or its affiliates, nor do I expect to receive any such interest.
5. This report is based on an examination of company records, maps and a general knowledge of the geology of the area.

DATED AT VANCOUVER, BRITISH COLUMBIA

A circular seal for the Professional Engineers of the Province of British Columbia. The seal contains the text "PROFESSIONAL ENGINEERS OF THE PROVINCE OF BRITISH COLUMBIA". A signature is written across the seal, and the name "Edward O. Chisholm, P. Eng." is printed below it.

Edward O. Chisholm, P. Eng.



LEGEND

SCINTREX MF-1 Vertical
Force Fluxgate Magnetometer

280 Magnetic Value in Gammas.
—250— Isomagnetic Contour
50 Gamma Contour Intervals

CITEX MINES LTD.

NOA 1 & 2 CLAIMS

McLeese Lake Area
Cariboo M.D.

Magnetometer Survey Map

Scale - 1 In. = 400 Ft.

SEIGEL ASSOCIATES LIMITED
GEOPHYSICAL CONSULTANTS & CONTRACTORS
A DIVISION OF SCINTREX LIMITED

December 30, 1970

Citex Mines Ltd.
630 - 890 West Pender Street
Vancouver, B. C.

Attention: Mr. Sankar Ramani

Dear Sirs:

At your request I have examined the data from a ground magnetometer survey executed over the NOA 1 and NOA 2 claims in the McLeese Lake area, British Columbia.

The survey was executed by your staff using a Scintrex MF-1 vertical force fluxgate magnetometer. Grid lines 2000' in length and oriented north-south as well as an east-west baseline were covered with stations read each 100'. The interline spacing was 400' except for the most westerly line which was only 200' from the adjoining profile. The survey totalled about 2.2 line miles.

The accompanying map, on a plan scale of 1" = 400', shows the data which you have submitted to me contoured in pencil with a 50 gamma contour interval. The magnetic values are seen to range from 140 to 340 gammas with nearly 50% of the values lying between 250 and 300 gammas. This is a rather narrow range by normal standards and indicative that the rocks underlying the survey grid are of quite uniform magnetic susceptibility. When rocks exhibit such low magnetic relief they are normally acidic in composition.

G.S.C. Map 1537 G, on the scale of 1" = 1 mile, shows the results of an airborne magnetometer survey flown at a nominal terrain clearance of 1000' over the area including and surrounding the NOA claims. This map shows very low magnetic relief near the claims, similar to a large surrounding area known to be underlain by acidic intrusive rocks of the Mesozoic Granite Mountain Batholith within which is found the Gibraltar Copper deposit. Other rock types in the area, including the Cache Creek Group and particularly the Tertiary Volcanics, are expected to give higher magnetic relief.

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Citex Mines Ltd.
December 30, 1970

Page 2

In summary, from the ground and airborne magnetics and known geology it appears that the NOA 1 and 2 claims may be underlain by acidic intrusive rocks. A disseminated copper deposit such as the Gibraltar deposit within such rocks is not expected to exhibit any pronounced magnetic character and would be most readily detectable using the induced polarization method.

Respectfully submitted,

SEIGEL ASSOCIATES LIMITED

A handwritten signature in cursive script, reading "Jon G. Baird".

Jon G. Baird, B.Sc., P.Eng.
Geophysicist

JGB:lm