2621

REPORT ON LINDA GROUP & MOON CLAIMS

for

TIGER SILVER MINES LTD. (N.P.L.)

&

KENNETH D. GORDON

by

A. R. Bullis, P. Eng.

Location - Jervis Inlet, Vancouver M.D.

Co-ordinates 50°00' N. Lat.
124°00' W. Long.

14th September, 1970.

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TABLE OF CONTENTS

-ooOoo-

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INTRODUCTION

The author reported on the Linda Claims for Tiger Silver Mines, after spending several days on the property in July, 1967.

Recently, the author was retained by Tiger Silver Mines Ltd. and Kenneth D. Gordon to plan and supervise a geochemical and geophysical survey on the Linda Group and Moon Claims.

The field work was carried out by Strato Geological Ltd. of Vancouver. The work described in this report was completed between July 11th and August 3rd, 1970, by Uno Leis, B.Sc., magnetometer operator and Howard Hong, assistant.

The author was on the property from 23rd July to 3rd August, 1970.

The following report describes the field methods employed, as well as results obtained and interpretation of the surveys.

PROPERTY & LOCATION

Tiger Silver Mines Ltd. (N.P.L.) hold under option, or have purchased outright, a total of forty Mineral Claims. Kenneth D. Gordon owns ten Mineral Claims. A list follows:

NAME	RECORD NUMBER
Tiger Silver Mines Ltd. (N.P.L.)	
LINDA 1 - 4 inclusive	10701 - 10704 inclusive
"L" 5 - 8 inclusive	10705 - 10708 inclusive
LINDA 9 - 12 inclusive	10709 - 10712 inclusive
13 - 23 (on owners card)	12708 - 12718
SUN 5 - 8 inclusive	15227 - 15230 inclusive
SUN 10 - 22 inclusive	15231 - 15243 inclusive
Kenneth D. Gordon	
MOON 1 - 10 inclusive	(not yet received)

The claims are located in the Vancouver Mining Division, on Lois River, situated near Prince of Wales Reach, Jervis Inlet. The co-ordinates of the centre of the claims are:

50°00' North Latitude

124°05' West Longitude

RECOMMENDATIONS

(1) Geochemical & Geophysical Surveys

The areas of significantly high readings in copper and zinc should be investigated by taking soil samples at 100 foot intervals along intermediate lines. The lines should be at a spacing of not more than 200 feet. All areas within the anomalous highs should be sampled.

(2) The magnetometer survey did not reveal any significant co-relation between the magnetic anomalies and the known mineralization soil anomalies, except in a general way in Zones 1 and 2.

The author does not believe that additional magnetometer work would add significantly to the information obtained, nor define targets for future investigation.

(3) The area below the upper showings should be mapped geologically. The information obtained should be compiled on a plan on the same scale as the geochemical plans, in order to compare bedrock geology to the known soil anomalies.

(4) Any mineralization found during the geological investigation should be stripped (by hand) and sampled.

(5) A limited electromagnetic survey, over selected areas, should be run in order to determine whether anomalous areas will respond to E.M. methods.

COST OF RECOMMENDED PROGRAMME

Geochemical Survey	-	11 lines	$ 3,000.00
Geological Investigation			$ 3,000.00
Electromagnetic Survey			$ 1,500.00
Camp etc.			$ 500.00
Transportation	-	(Contingency)	$ 1,000.00
		TOTAL	$ 9,000.00

Respectfully Submitted

A. R. Bullis, P.Eng.
BULLIS ENGINEERING LTD.

14th Sept. 1970

GEOCHEMICAL SURVEY

The physical work was carried out by Strato Geological Ltd. and the samples were analysed by the T.S.L. Laboratories, Vancouver, B.C.

A programme of line-cutting was carried out with the base line generally paralleling Lois Creek. Because of the nature of the topography, the base line is offset frequently and the line space varies from 200 to 400 feet with the lines running in a north-easterly direction.

A total of 5.7 miles were cut and picketed at 100 foot stations. A total of 306 samples were taken over the grid and submitted for analysis. The soils were collected from the "B" horizon below the humus which reached a depth of 15" to 18" in some areas. The soils collected were primarily of a sandy-clay nature. As the samples were collected, they were placed in a "soil-sample" envelope and marked with a location number.

Upon delivery of the samples to the T.S.L. laboratory, they were arranged in sequence and then dried in an oven at 200°F. The dried sample is then screened through a nylon mesh to - 18. From the sieved portion, a gram is measured out and is then digested in hot aqua regia. After complete digestion the solution is brought

Geochemical Survey - Cont.

up to volume and the sample is then "read" by means of a Jarrell-Ash Atomic Adsorption unit. This measures the parts per million of metals in the contained sample.

The samples are measured against standard solutions and frequently checked by use of samples which have been assayed by other methods and/or other type of atomic adsorption equipment.

The samples from the Tiger Silver property were tested for copper and zinc.

ASSESSMENT OF RESULTS

General

It will be noted on the maps that the copper values in general are much higher than the zinc. This is a most unusual situation as, generally speaking, any bedrock mineralization that has been sampled has shown much higher values in zinc than in copper.

The topography in the area is steep to rugged and the downward migration of the elements, especially zinc, could be expected to produce broad highs adjacent to Lois Creek.

No soil samples were taken over the area of the upper showings for two reasons: one, the soil is thin and bedrock outcrop abundant; two, the amount of stripping and trenching done on relatively high-grade material here would make any results suspect.

Copper

The copper values in P.P.M. vary from 3 to 685, with the general background below 40 P.P.M.

The plan of the survey (see rear pocket) shows three areas of interest i.e. where readings are 50 P.P.M. or greater. The first is situated south-east of the "upper showings" and covers the area along side Lines A to F, east of the Base Line. The anomalous areas are narrow elongated zones that lie parallel to the regional strike of the underlying sediments. The zones are located on a gently dipping, i.e. 15 degree - 18 degree, mountain side where downhill migration of the element may not be significant.

The second zone lies almost due south of the first on side lines H, I, J and K and it is also located east of Lois Creek. The values in Zone 2 are the highest obtained in the area, ranging from 100 to 685 P.P.M.

The side line spacing here is greater and less regular than elsewhere. The slope of the mountainside is steep; the tie-lines are on a slope of 25 - 35 degrees and downward migration of the copper must be an important factor.

The third area of interest lies west of Area 2, across Lois Creek. A broad anomalous zone is located along the side lines U, V, X, W and Y, with the highest significant values found on Line W.

Copper - Cont.

The slope of the mountainside here is at the angle of repose (about 25 - 30 degrees) and downward migration must be significant.

Zinc

As mentioned previously, the zinc values are surprisingly low in the area; they range from 3 to 293 P.P.M., with the background areas generally less than 15 P.P.M.

There are two zones of zinc values that correspond roughly with Zone 1 and Zone 3 described under "Copper" above. In Zone 1, the zinc values follow the same elongated pattern as do the copper values which corresponds with the regional attitude of the bedrock.

Zinc values on Zone 2, where the copper values were high, are almost all at background. There is no correspondence of zinc with copper values here.

Over the third Zone, the zinc anomalies correspond very closely with the anomalous copper values.

In addition to Zones 1 and 3, there are other zones of high zinc values. One of these lies along Lois Creek and is probably due entirely to migration of zinc into Lois Creek.

Zinc - Cont.

The other zone however, is not attributable to downhill migration. It lies along, or near, the base line, between the "upper showing" and the lower showing more-or-less along the line of sight between the two. The zone is discontinuous in nature with the best development and values found in the vicinity of the lower showing.

INTERPRETATION OF GEOCHEMICAL SURVEY

(1) Zone 1; in which both Copper and Zinc anomalies are present, follows the regional trend of the bedrock. The massive mineralization exposed in the upper showings is probably replacement along folded structures in favorable horizons. With this in mind, the anomalies in Zone 1 may be due to zones of replacement that are unknown on the surface.

(2) Zone 2; the high copper valeus here are due to some unknown source upslope from the anomaly where copper is being leached from the source and carried downslope. The high values are significent especially as the underlying rock is known to be mainly sediments. A reconnaisance traverse along Line H revealed some diorite outcrops near the top of the line where sediments and diorite are in contact. Shearing within the sediments is evident with sulfide mineralization in the form of pyrrhotite and pyrite noted in the shear zone. Zone 2 will have to be investigated further.

Interpretation of Geochemical Survey - Cont.

(3) Zone 3; in which both Copper and Zinc are anomalous, is probably the downslope expression of the migration of the elements. The contact between the sediments and the main mass of the granodiorite batholith lies above, and near, Zone 2. The cause of the anomalies are unknown and will have to be investigated further.

(4) The high zinc values located along Lois Creek are not unexpected; they are probably due to downstream migration of the zinc from a number of sources and are not considered significant.

(5) The discontinuous zone of zinc values between the upper and lower showings may be the expression of a zinc-rich band, or horizon, within the sediments in which both the upper and lower showings occur. The possibility should be investigated further.

MAGNETOMETER SURVEY

The instrument used was a Sabre Electronics Portable Magnetometer, with a sensitivity of 40 gammas per scale division. The readings were made along the same Base Lines and Side Lines that were used for the Soil Sampling survey; readings were taken at one hundred foot intervals along the lines over most of the area surveyed. The exception was the area of the "upper showings" where the stations were at 25 or 50 foot intervals.

Magnetometer Survey - Cont.

The instrument was calibrated at a fixed "base station" and the diurnal change was recorded by returning to a known station along the base-line. The diurnal variations were compensated for by adjusting the readings along the side lines in accordance with the recorded change at the Base Line station.

The readings that are shown on the accompanying plan were calculated by reducing the raw readings taken from the instrument by an arbitrary number (i.e. 400) of divisions and multiplying the remainder by 40 gammas.

The readings have been contoured at 1,000 gamma intervals, except between 3,500 and 4,000 gammas where a 500 gamma interval was used.

RESULT OF MAGNETOMETER SURVEY

The readings over the "upper showing" were remarkably uniform and, although the 3,500 gamma contour has been drawn on the plan, there were no highly anomalous areas located here.

The balance of the survey shows two isolated high readings, on Line S and Line H, and an elongated anomalous area that embraces parts of Zone 1 and 2, described in the "Geochemical Survey" section of the report.

INTERPRETATION OF MAG SURVEY

(1) The two "spot" high readings are probably caused by local concentrations of magnetite and may therefore, be significant because magnetite is known to be associated with the Copper-Zinc mineralization in the area.

(2) The broad anomalous area along the Base Line, that covers Zone 1 and 2, appears to conform with the strike of the bed-rock and may indicate intrusive sills, or possibly sediments of higher magnetic suseptibility than the surrounding rocks. The change in strike and/or apparent offset of the anomalous area, on Lines A to C, may indicate broad folding, or possible faulting, in the underlying rocks.

COSTS OF PROGRAMME

The following costs were incurred during the summer programme carried out between July 11th and August 1st, 1970 on the "Linda Group" (Forty Claims).

Supervisor and Technician 24 days x $60.00	$ 1,440.00
Sampler 24 days x $35.00	840.00
Assaying	272.50
Helicopter	807.50
Miscellameous Expenses	35.40
Board and Materials	139.12
Transportation (gas, oil, etc.)	18.00
Engineer on Property	450.00
TOTAL	$ 4,002.52

Respectfully Submitted

A. R. Bullis, P.Eng.

BULLIS ENGINEERING LTD.

14th September, 1970

COSTS OF PROGRAMME

The following costs were incurred on the Moon Claims during the programme carried out during the period July 29th to 3rd August, 1970.

Geochem & Geophysics

Technician 4 days x $60.00	$ 240.00
Helicopter	640.00
Sampler 4 days x $35.00	140.00
Mapping	70.00
Assaying	100.00
Crone Instrument	138.40
TOTAL	$ 1,328.40

Respectfully Submitted

A. R. Bullis, P.Eng.

BULLIS ENGINEERING LTD.

14th September, 1970

CERTIFICATE OF QUALIFICATIONS

I, Albert Ralph Bullis, do hereby certify:

1. I am a practising Geological Engineer, with residence at 5215 Saratoga Drive, Delta, B.C.

2. I am a graduate in Applied Science of the University of British Columbia.

3. I have been practising my profession since 1952.

4. I am a member of the Association of Professional Engineers of British Columbia.

5. I think I am qualified to make this report from a personal knowledge of the property.

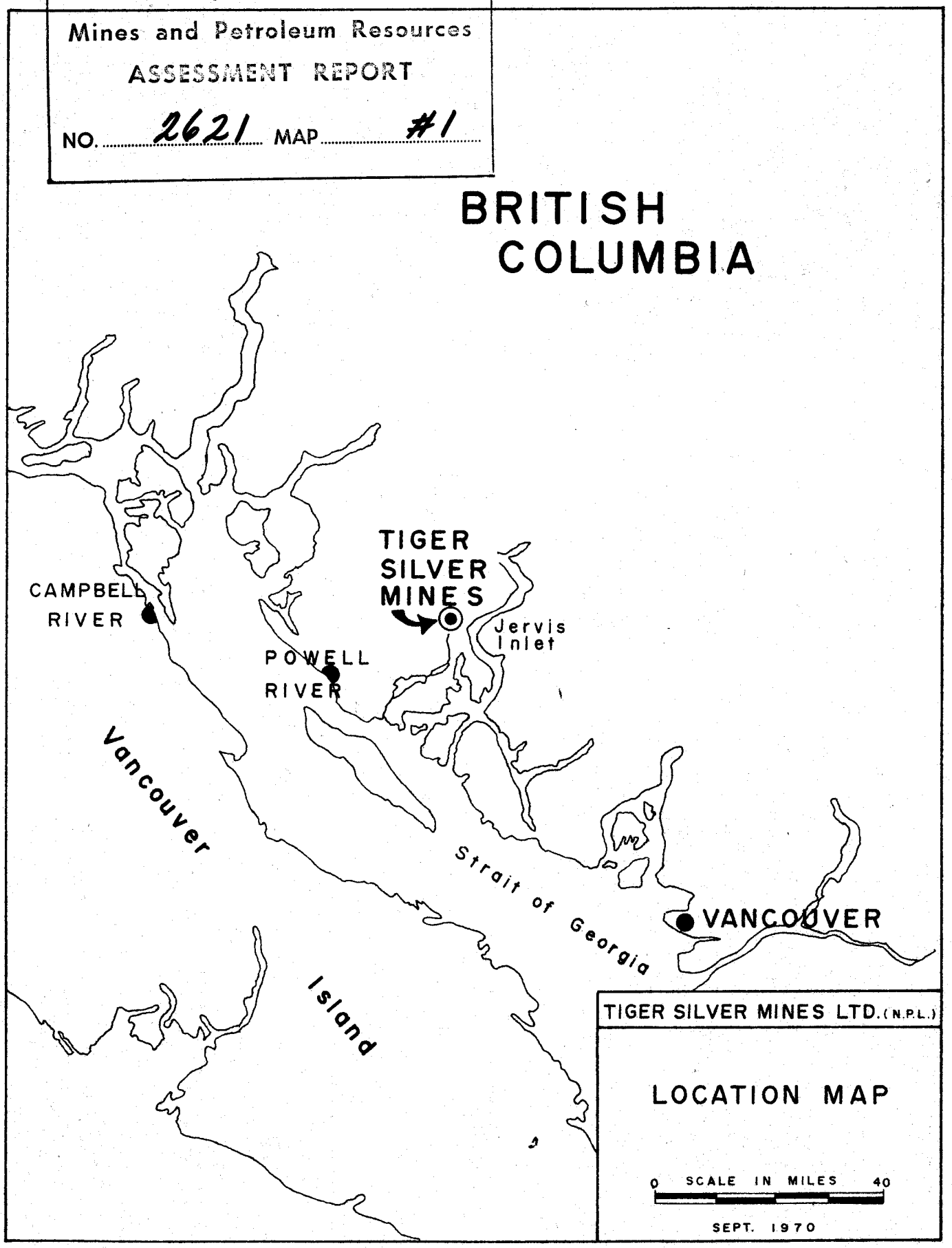
6. I have no interest, directly or indirectly, in the property or securities of Tiger Silver Mines Ltd. (N.P.L.).

7. I do not expect to receive any interest in the property nor in the securities of the above mentioned mining company.

A.R. Bullis, P.Eng.

14th September, 1970.
DELTA, B.C.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2621 MAP #1

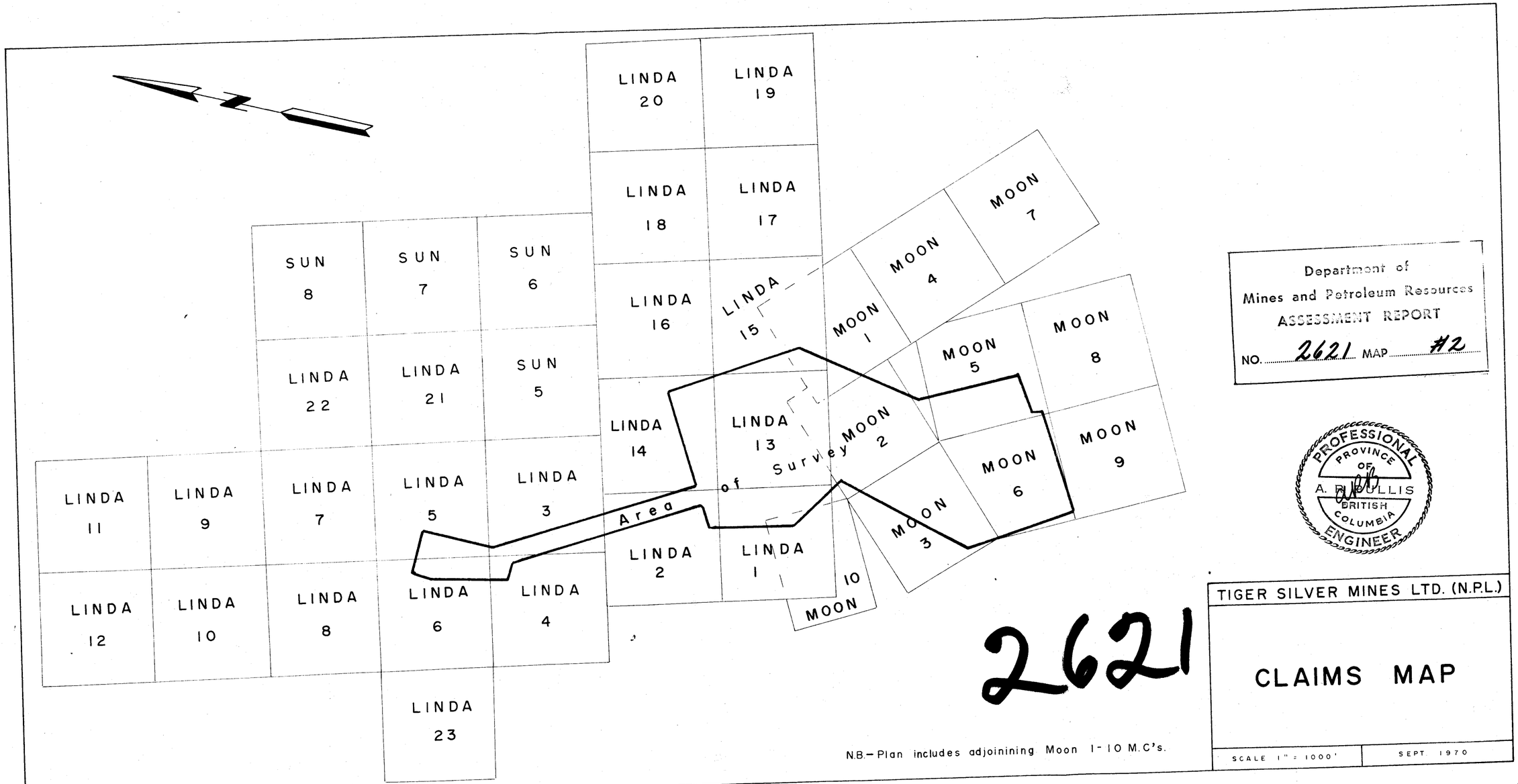


TIGER SILVER MINES LTD. (N.P.L.)

LOCATION MAP

0 SCALE IN MILES 40

SEPT. 1970



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2621 MAP #2

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. R. ELLIS

2621

N.B.– Plan includes adjoinining Moon 1-10 M.C's.

TIGER SILVER MINES LTD. (N.P.L.)

CLAIMS MAP

SCALE 1" = 1000' | SEPT 1970

2

97 Copper in p.p.m.

50 Contour interval in p.p.m.

To Accompany Report By A.R. BULLIS, P.Eng.

Field Work By STRATO GEOLOGICAL LTD.

2621

TIGER SILVER MINES LTD. (N.P.L.)

GEOCHEMICAL PLAN

COPPER

Scale 1" = 200' Sept. 1970

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2621 MAP #5

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. R. BULLIS

CONTOUR INTERVAL — 1,000 GAMMAS,
Except from 3,500 to 4,000 GAMMAS

To Accompany Report By A.R.BULLIS, P.Eng
Field Work By STRATO GEOLOGICAL LTD.

2621

TIGER SILVER MINES LTD. (N.P.L.)

MAGNETOMER SURVEY

SCALE-1" = 200' | SEPT 1970

25 Zinc in ppm.

50 Contour interval in ppm

2621

To Accompany Report By A.R.BULLIS, P.Eng.

Field Work By STRATO GEOLOGICAL LTD.

TIGER SILVER MINES LTD. (N.P.L.)

GEOCHEMICAL PLAN

ZINC

Scale 1" = 200' Sept. 1970