2329

GEOCHEMICAL SURVEY

of

Claims Cy 1 - 8

4 Miles S.E. of Princeton
49° 120° S.E.

Similkameen Mining Division

by

A.S. Ashton, P. Eng.

for

THOR EXPLORATIONS LTD. (N.P.L.)

May 12 - 21 Inclusive, 1969

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SUMMARY

This report interprets a geochemical survey over the 8 contiguous claims of the Cy Group in the Similkameen Mining Division. While there is no co-incidence with copper and zinc anomalies, there appears to be a certain co-relation between magnetic lows and geochemical copper values as well as a flanking relation-ship between one magnetically high zone and a zinc anomaly. It is recommended that these conditions be investigated by bulldozer trenching or if impracticable, by limited diamond drilling.

INTRODUCTION

In the spring of 1969, a geochemical survey was carried out in an attempt to further explain magnetic anomalies which lie within the Cy Group. Lines at 250 foot spacing were traversed at right angles to the general northerly trend of the magnetics. Samples were gathered by Strato Geological Limited, analysis were carried out by Technical Services Ltd., all under the supervision of Bullis Engineering Ltd.

LOCATION & ACCESS

The claim block lies on the west flank of Darcy Mountain, some four air-miles south-east of Princeton in the Similkameen Mining Division. From Princeton you travel easterly on Highway 3 for two miles to the Amber Road exit. On the Amber Road you pass the Taylor Sawmill on a long open grade and once past the mill take the first exit road left. This is the Darcy Mountain road. Follow this road up until it crosses a power line and at this point you are at the approximate centre of the claim group.

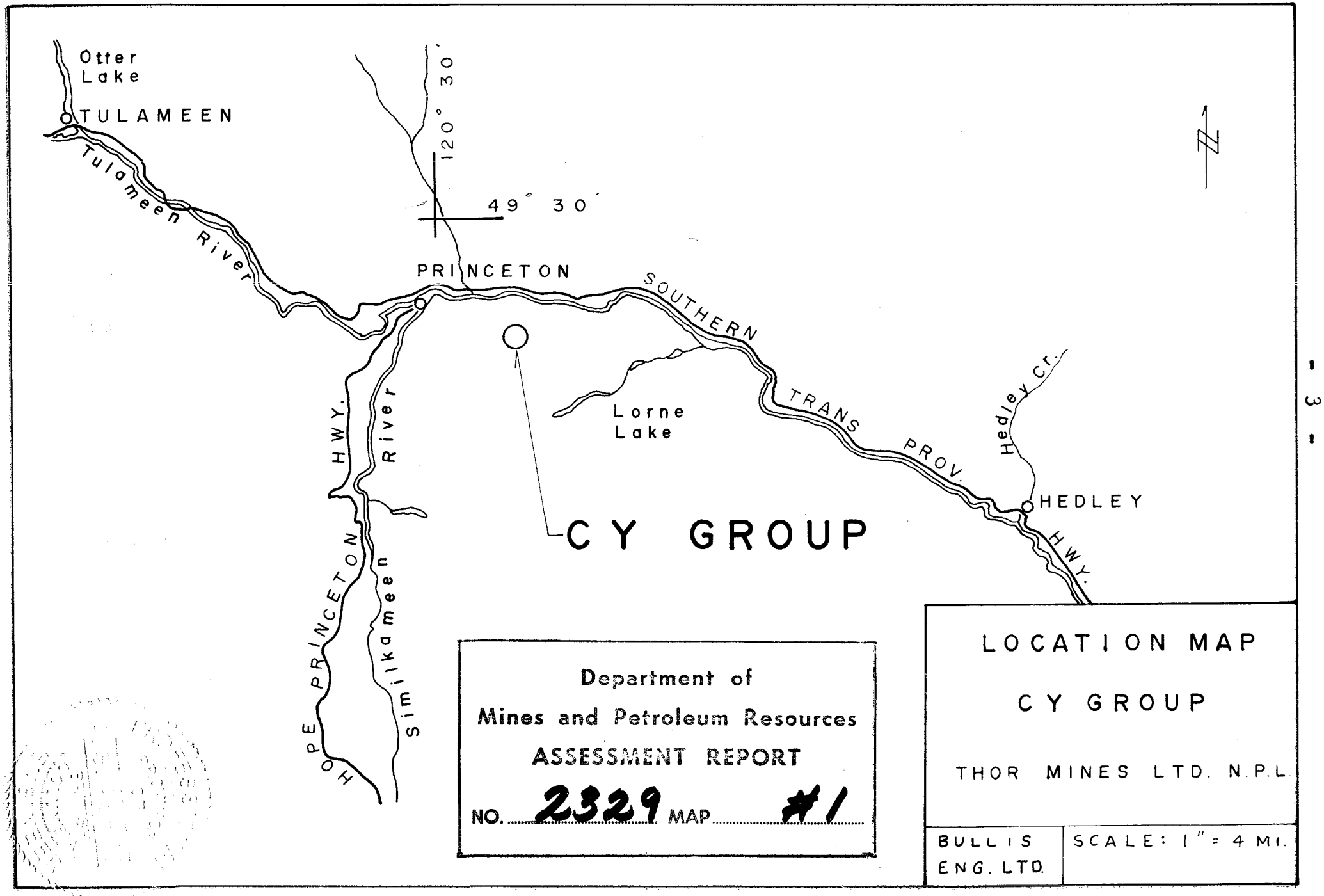
CLAIMS

A block of eight contiguous mining claims in the Similkameen Mining Division are held by:

THOR EXPLORATIONS LTD. (N.P.L.)
#403 - 540 Burrard Street,
Vancouver 1, B.C.

These claims are as follows:

Cy 1 - 8 - 22225-32 inclusive.


Otter Lake
TULAMEEN
Tulameen River
120° 30'
49° 30'
PRINCETON
SOUTHERN TRANS PROV.
Hedley Cr.
HEDLEY
HWY.
Lorne Lake
HOPE PRINCETON HWY.
Similkameen River
CY GROUP
N
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2329 MAP #1
LOCATION MAP
CY GROUP
THOR MINES LTD. N.P.L.
BULLIS ENG. LTD.
SCALE: 1" = 4 MI.

TOPOGRAPHY & CLIMATE

The area lies within the Interior Plateau, but unlike the more northern sections, dissection has greatly obscured the level surface. In general, the mountains are broad, gentle, rounded and timber covered. Drainage is to Wolfe Creek and/or the Similkameen River.

The climate is typical continental with warm summers and cool winters. Precipitation is not heavy.

GENERAL GEOLOGY

The Darcy Mountain area is underlain by the Nicola volcanic formation of upper Triassic age and the Coast and the copper intrusions of Jurassic or later age.

The Nicola consists of a series of volcanic flows and their related tuffs and breccias. These are chiefly andesites, augite porphyries and basaltic breccias with minor amygdaloidal flows and brown biotized fragmental flows.

The grey granodiorite which intrudes the volcanics is considered to be of the Coast Intrusion phase. Generally, it is light grey with medium grain and uniformly granitic. Much of the intrusion has developed as the result of digestion and alteration of the volcanics.

Felsite dikes, pegmatite dikes, aplite and their related porphyries cut the grandiorite and volcanic flows.

ECONOMIC GEOLOGY

Economically, the Nicola volcanics have provided a good host rock for copper mineralization associated with the Copper Mountain camp and the Voight camp. At these and other locations the intrusions have fractured and sheared the volcanics around their perimeters and later mineralizing solutions have deposited copper bearing minerals both in the volcanics and margins of the intrusives.

GEOCHEMICAL SURVEY

The physical work was carried out by Strato Geological Ltd. under the direction of A.R. Bullis of Bullis Engineering Ltd.

Using a previously established magnetometer grid as a base, further lines were cut and chained ultimately leading to a grid with the base line north-south and east-west lines at 250 foot intervals across the claims. Soils were gathered systematically at 100' stations on the grid lines.

A total of 600 samples were taken over 60,000 line feet (11.36 miles of line).

The samples were taken below the humus layer which is very thin, over a mantle of glacial detritus. Generally the samples were of sandy clay composition with numerous small pieces of rock.

The collected soil samples were placed in 'soil sample' envelopes on which was marked a number signifying its location on the grid. The samples were then

GEOCHEMICAL SURVEY - cont'd.

packed and shipped to Technical Services Laboratories in Vancouver for analysis.

Upon receipt of the samples at the laboratory, they are arranged as to number and then dried in an oven at 200° F. After having been dried, each sample is seived separately in an aluminum framed nylon seive to -18 mesh.

From the seived portion, one gram of sample is measured out and this specimen is then digested in hot hydrochloric acid. After digestion, the solution is brought to volume and then 'read' in a Jarrel-Ash Atomic Adsorption unit. The samples are measured against standard solutions and frequently checked against solutions read by other machines in other laboratories.

The results are recorded in parts per million of contained metal found in each sample. The samples from this property were analyzed for copper and zinc.

DISCUSSION

A study of the results of the geochemical survey indicates one small copper anomaly on the Cy #4 claim with a few isolated highs on the Cy #1, #2 and #4, at the south end of the property. In the north-west sections of the group, some above normal, elongated in a northerly direction, zinc anomalies occur. These anomalies vary from 1000 to 2000 feet in length and generally indicate from 100 to 200 feet in possible width.

DISCUSSION - cont'd.

Due to the mobility of the zinc ions, the source is probably considerably smaller than indicated on the map. A few minor zinc high areas occur elsewhere on the property.

There is no apparent coincidence between the copper or zinc anomalous conditions.

In conjunction with the magnetometer survey, there appears to be at least in part, a coincidence between magnetic lows and the above background copper values. In this regard, the best copper anomaly, (A) which lies in the centre of Cy #4 claim warrants further investigation, as well as the smaller zone (B) immediately west and adjacent to the base line.

In the Cy #7 claim adjacent to the base line (zone C) both high zinc values and a small magnetic anomaly appear to be partially coincident. This zone also appears to justify further work.

RECOMMENDATIONS

The anomalous conditions at locations A, B and C, should be further investigated. This could be handled in one of three ways;

(a) Electromagnetic survey
(b) Diamond drilling
(c) Surface trenching

An electromagnetic survey in the vicinity of the power lines near the A and B zones would be of questionable value because of electrical interference, particularly with the currently popular geophysical methods.

RECOMMENDATIONS - cont'd.

It is recommended that a programme of surface trenching be carried out across the anomalous zones. This would best be done by a Caterpillar D8 with rippers and trenches would vary from about 200 feet to 500 feet in length. In all, the preliminary investigation would entail some 6 trenches and from the initial results obtained here, other above background zones could be checked.

In the event that the overburden is of such composition or depth that the bulldozer cannot trench to bedrock, a provision has been made to test the anomalies by limited diamond drilling. Unless drilling is carried out in the early spring, it will be necessary to haul water. Further work will depend on the results of the aforementioned programme.

COST ESTIMATES

Bulldozer trenching, 30 hrs. @ $50.00/hr.		$ 1,500.00
Mapping & Supervision		500.00
Assaying		500.00
		$ 2,500.00
Contingencies 10%	-	250.00
TOTAL	-	$ 2,750.00
Alternatively, if trenching not possible;		
Diamond Drilling, 1000 ft. @ $12.00/ft. inclusive		$ 12,000.00
Assaying		200.00
Supervision, etc.		1,000.00
		$ 13,200.00
Contingencies 10%	-	1,300.00
TOTAL	-	$ 14,500.00

If trenching is successful and results warrant it, the above drilling programme should be carried out.

Respectfully submitted,

A.S. Ashton, P. Eng.

BULLIS ENGINEERING LTD.

March 4th, 1970

DELTA, B.C.

GEOCHEMICAL SURVEY

Heino Leis	Supervision	May 12-21/69 inclusive
Uno Leis		May 12-21/69 "
Brian Stranders		May 12-21/69 "
Bruce Hillaby		May 12-21/69 "
Cliff Ralph		May 12-21/69 "
James Schellenberg		May 13-15/69 "
A.R. Bullis, P. Eng.		May 14, 1969
A.S. Ashton, P. Eng.		Feb. 23, 24, 1970 March 3, 5, 1970
M.S. Mitchell, Typing		Feb. 24, 1970 March 3, 6, 1970
R. Bullis, Drafting		Feb. 24-26/69 inclusive March 5, 1970

COSTS

Strato Geological Ltd.

(a) Line cutting (b) Soil-sampling (c) Wages, Supplies, etc.	$ 4,196.00
Technical Services Laboratories (600 samples)	$ 610.00
Bullis Engineering Ltd.	
Engineering Fees	$ 750.00
Typing	31.50
Drafting	193.00
TOTAL COSTS -	$ 5,780.50

Declared before me at the City of Vancouver, in the Province of British Columbia, this 16th day of April 1970 A.D.

A.S. Ashton

A Commissioner for taking Affidavits within British Columbia or
A Notary Public for the Province of British Columbia.
MINING RECORDER

CERTIFICATE OF QUALIFICATIONS

I, Arthur Sydney Ashton, do hereby certify that:

1. I am a practising geological engineer with residence at 5441 7B Avenue, Delta, B.C.

2. I am a graduate of the University of Toronto and have been granted a degree of Bachelor of Applied Science.

3. I have been practising my profession as a geological engineer for twenty years.

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

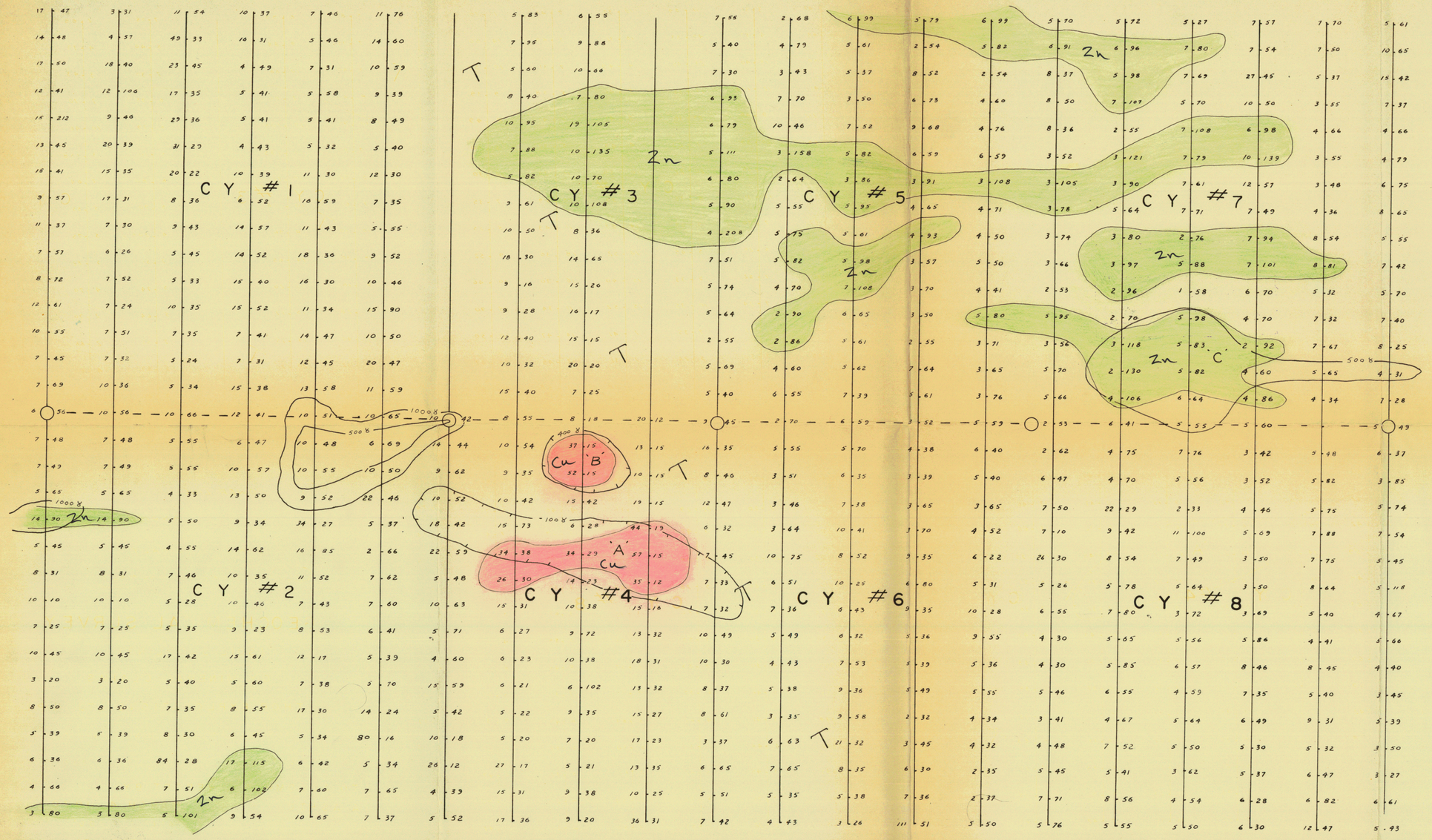
5. This report is based on a study of magnetic and geochemical information supervised by Bullis Engineering Ltd.

6. I have no interest, directly or indirectly, in the properties or securities of Thor Explorations Ltd. (N.P.L.)

A.S. Ashton, P. Eng.

March 4, 1970

DELTA, B.C.



N

LEGEND

COPPER P.P.M.	ZINC P.P.M.	
5	36	CLAIM POST
		POWER LINE
Cu		COPPER ANOMALY
	Zn	ZINC ANOMALY
	500γ	MAGNETIC ANOMALY

GEOCHEMICAL SURVEY

(SOIL SAMPLING)

CY MINERAL CLAIMS

THOR EXPLORATIONS LTD. N.P.L.

SIMILKAMEEN MINING DIVISION

LAT. 49° 25' LONG. 120° 25'

TO ACCOMPANY REPORT BY:
A. ASHTON P. ENG., MARCH 4 1970

SCALE: 1" = 200'

A. Ashton BULLIS ENG. LTD.