

507

CANADIAN EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT  
ON THE  
ROB NOS. 1 - 22 MINERAL CLAIMS  
FOR  
UTICA MINES LIMITED (N.P.L.)  
FRANCOIS LAKE AREA 93 K/3 S.E.  
OMINECA MINING DIVISION, BRITISH COLUMBIA

September 5, 1963

C. W. Ball  
C. E. Dunn  
R. E. Cribbs

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### LIST OF ILLUSTRATIONS

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Scale 1" = 1,000'
- Map No. 2 Geological Sketch Map Rob Nos. 1-22 Mineral Claims  
Scale 1" = 1,000'  
Dated August 28, 1963 by C. W. Ball, P. Eng.
- Map No. 3 Geochemical Map Rob Nos. 1-22 Mineral Claims  
Scale 1" = 1,000'  
Dated September 1, 1963 by R. E. Cribbs

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>507</u> MAP.....
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## SUMMARY

As a result of geological coverage of the area of the Rob Nos. 1-22 Mineral Claims it has been possible to delineate a fairly well defined contact between the Endako granite and volcanic rocks of (?) Tertiary age. A large number of geochemical silt samples were collected but to date only a limited number of assays are available.

No molybdenite showings are known in the area of the claims and it is recommended that option terms be revised accordingly.

## AGREEMENT

The agreement dated "the 1st day of September, A.D. 1962" made between Canadian Exploration Limited, a participant with Endako Mines Ltd. (N.P.L.) in an option agreement with Utica Mines Limited (N.P.L.). Canadian Exploration Limited committed itself to exploration and development of the following Mineral Claims:

<u>Grouping</u>	<u>Name of Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>
Utica No. 1	Rob 1	14180	Sept. 5, 1963
	Rob 3	14182	Sept. 5, 1963
	Rob 5-8 incl.	14184-187 incl.	Sept. 5, 1963
	Rob 11-14 incl.	14190-193 incl.	Sept. 5, 1963
	Rob 17-20 incl.	14196-199 incl.	Sept. 5, 1963

<u>Grouping</u>	<u>Name of Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>
Utica No. 2	Rob 2	14181	Sept. 5, 1963
	Rob 4	14183	Sept. 5, 1963
	Rob 9	14188	Sept. 5, 1963
	Rob 10	14189	Sept. 5, 1963
	Rob 15	14194	Sept. 5, 1963
	Rob 16	14195	Sept. 5, 1963
	Rob 21	14200	Sept. 5, 1963
	Rob 22	14201	Sept. 5, 1963

### EXPLORATION AND DEVELOPMENT

#### 1. Access and Control

An east-west trending base line of wide dimension was cut by a D-8 cat and 4,500 feet of the base line lies within the boundaries of the Rob Mineral Claims. It passes through Rob Nos. 11, 13 and 15 Mineral Claims.

#### 2. Geology

Geological work was carried out on the Rob Mineral Claims in June and August 1963 and the adjoining ground was also mapped geologically in the intervening period.

#### 3. Geochemical Sampling

Soil samples were taken at 100 feet spacing on lines 1,000 feet apart. Soil sampling was not carried out over most of the southern half of the group because previous sampling of sediment and water from the drainages indicated that the soil from this area had a very low molybdenum content.

4. Assays

The samples collected in July were sent to the University of British Columbia for molybdenum analyses. The thiocyanate method of analyses was used on unsieved samples.

The samples collected in August are being run at present in the Canex laboratory at Endako. The minus 60 mesh portion of the samples are being analyzed for molybdenum by the thiocyanate method.

GEOLOGICAL FINDINGS

A considerable amount of glacial overburden covers the ground. Nevertheless, as a result of six separate traverses carried out by Mr. C. W. Ball and his assistant Mr. E. Rychkun between June 5 and August 12, it is possible to outline the main geological features. These are shown on the attached geological map on a scale of 1,000 feet to one inch. The base map is a contour map on the same scale with 25 foot contour interval. The latter was prepared from air photos.

A contact has been traced between the Endako granite and the volcanic rocks. The endako granite which occurs on the claims is the regular type of medium textured red porphyritic granite such as is typical of the Stella property. The rock contains abundant

pink felspar as phenocrysts, 20% to 30% quartz, kaolinized white felspar and a little chlorite which is secondary after biotite. Accessory minerals include a little magnetite and ilmenite. In general, it can be said that the quartz content of the granite along the contact with the volcanics is somewhat higher than usual and the granite becomes granophyric in places indicating eutectic conditions.

The (?) Tertiary volcanics in the vicinity of the contact consist of andesite flows, tuffs and agglomerates. Pyrite is heavy in close proximity to the contact and occurs principally along joints in the andesitic rocks.

Dykes of aplite, quartz felspar porphyry and felspar porphyry are found at several points notably at Menard's Camp and directly adjoining the granite-volcanic contact.

Although the evidence is by no means conclusive it is suggested that the granite in common with the dykes mentioned above may be younger than the volcanics. This in itself suggests that the Endako granite may be Tertiary in age.

The trace of the surface exposure of the granite contact is clearly shown on the accompanying map. The arcuate sweep from north-west to due north as we proceed from Francois Lake is apparent and the area of concavity in the vicinity of the bulldozer base line is

one which may warrant testing at some future date. This idea is made still more intriguing by virtue of the fact that gossany red porphyritic granite was noted in the field just south of the base line at Station 36. There are minor signs of leaching in the granite at this point but although the rock is slightly rusty, the alteration is not intense.

Apart from the favorable conditions which may be imparted on account of the change in strike of the granite-volcanics contact from north-west to due north as described above, the Utica ground as covered by Rob Nos. 1 to 22 Mineral Claims is of no special immediate interest. It appears at this stage of our information to be a little too far south and west of the favorable structures outlined at Stella molybdenum property.

#### ASSAY RETURNS

A survey of stream sediment and stream water (not shown on the enclosed map) indicated that the soils and bedrock have a low molybdenum content.

Analysis of the soil samples collected in August has not been completed. The results to date indicate that the soil over these claims averages less than 4 ppm Mo, and probably averages no more than 1 ppm Mo. This is a molybdenum content similar to soils over unmineralized granites. Soils over adjacent areas where

there is known molybdenum mineralization have an average molybdenum content twenty to one hundred times greater.

### EVALUATION

Geological mapping has indicated a contact between the granite and the volcanic rocks. The contact as inferred from widely spaced outcrops shows a distinct sweep or curve in the vicinity of the bulldozer base line. The area of concavity in the vicinity of the base line is one which may warrant testing by diamond drilling. Apart from this reasonable deduction the Utica ground does not warrant our special attention at this stage.

### RECOMMENDATION

In view of the complete lack of mineralization by molybdenum and broad structural features without any obvious control, it is recommended that the option be revised along such lines as will enable Canex to proceed to a possible drilling stage.

*Clive W. Hall P. Eng.*

Vancouver, B.C.  
5 September, 1963  
/mg



APPENDIX I

GEOLOGICAL AND GEOCHEMICAL SURVEY

ROB NOS. 1 - 22 MINERAL CLAIMS

LIST OF EXPENDITURES

<b>1. <u>Bulldozer Work</u></b>		
*(Cutting base line over a distance of 4,500 feet on the Rob Nos. 11, 13 and 15 Mineral Claims)		
Aug. 15 - 4 hrs.		
16 - 9 hrs.		
17 - 12 hrs.		
19 - 8 hrs. 33 hrs. @ \$18/hr.		\$ 594.00
Swamper - 4 days @ \$14/day		56.00
Bulldozer supervision - 4 days @ \$20/day		80.00
<b>2. <u>Survey Control</u></b>		
Surveyor - 4 days @ \$35/day		140.00
Surveyor helper - 4 days @ \$26/day		104.00
<b>3. <u>Geological Mapping and Supervision</u></b>		
10 man days @ \$40/day		400.00
Dates of geological field work - June 5, 10, 11, 15 and August 5, 12		
<b>4. <u>Geochemical</u></b>		
**15 man days - soil sampling @ \$30/day	\$450.00	
Direct supervision - 3 days @ \$50/day	<u>150.00</u>	600.00
Plus 50% overhead and general supervision		300.00
Truck rental - 1 day @ \$10/day		10.00
**Soil sampling crews worked on the following dates: July 15, 16 and August 6, 7		
Assays - 48 samples @ \$1/sample		48.00
Plus 24 samples at north end of Rob Group @ \$1.00		<u>24.00</u>
<b>TOTAL</b>		<b><u>\$2,356.00</u></b>

\*Total length of base line = 8,500 feet

Prepared by W.D. McDermott

Vancouver, B.C.

5 September, 1963

*And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act"*

700 BARRARD BUILDING

*W.D. McDermott*

*Declared before me at Vancouver, B.C. this 5 day of Sept. 1963 A.D.  
Shirley St. ...*

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CANADIAN EXPLORATION LIMITED

700 BURRARD BUILDING

VANCOUVER 5, B. C. CANADA

This is to state that Mr. R. E. Cribbs is a graduate Geological Engineer of the University of Michigan and is fully qualified as a geochemist, having been engaged in such work during the past five years.

*Clive W. Ball P. Eng.*

Clive W. Ball, P. Eng.

Vancouver, B.C.  
September 5, 1963



**Legend:**

- 4 Overburden
- 3 Granite  
(Franciose Qtz. Monzonite)
- 2 Volcanics (TAKLA) anc
- 1 Quartz Felspar porphyry  
& Felspar porphyry  
h/1 Calc. latite Porphy. etc.

75° Strike & dip of Joints  
& fractures.

3400 Contours (Elev<sup>ns</sup> in feet above sea-level)

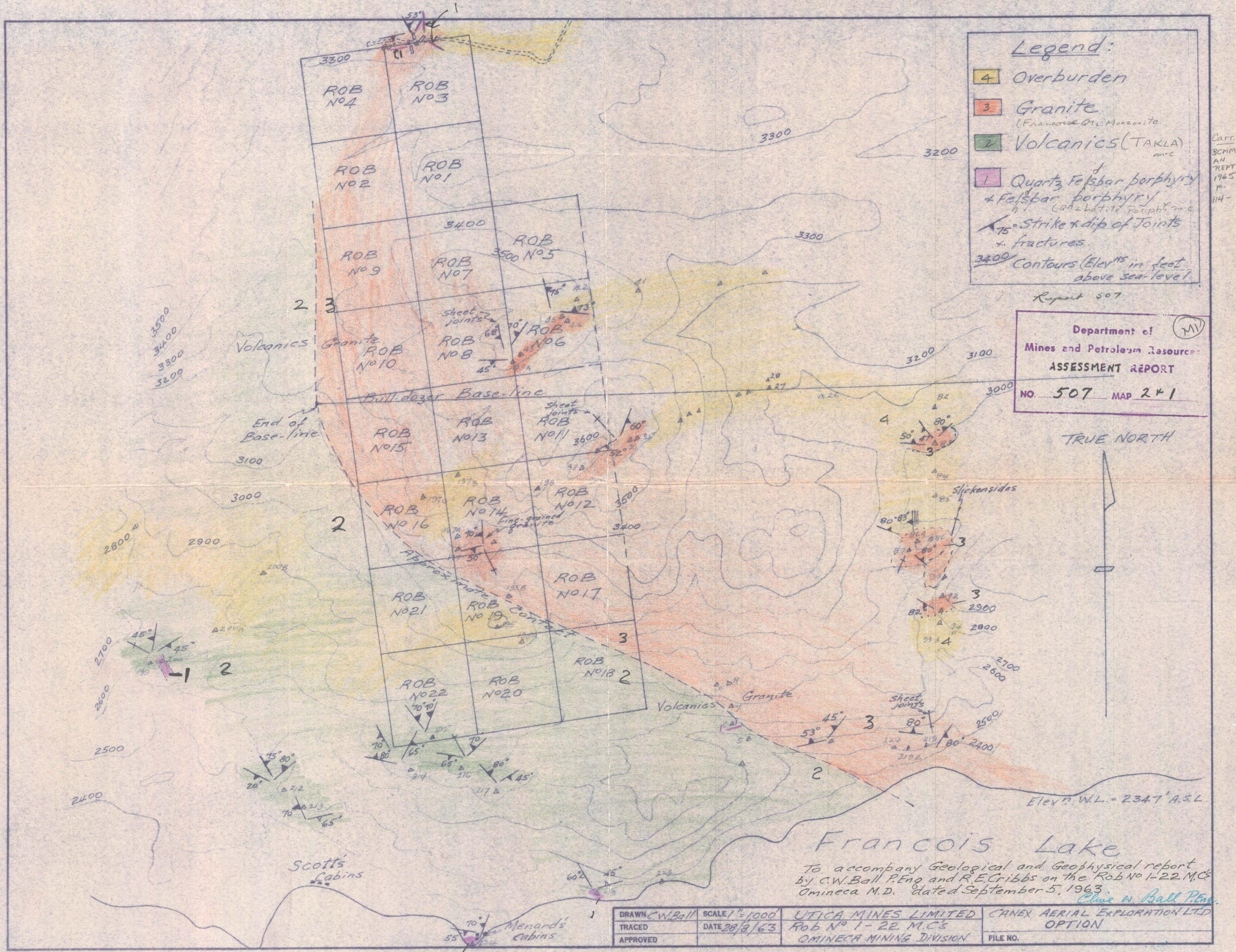
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Department of **MI**  
Mines and Petroleum Resources

**ASSESSMENT REPORT**

NO. 507 MAP 241



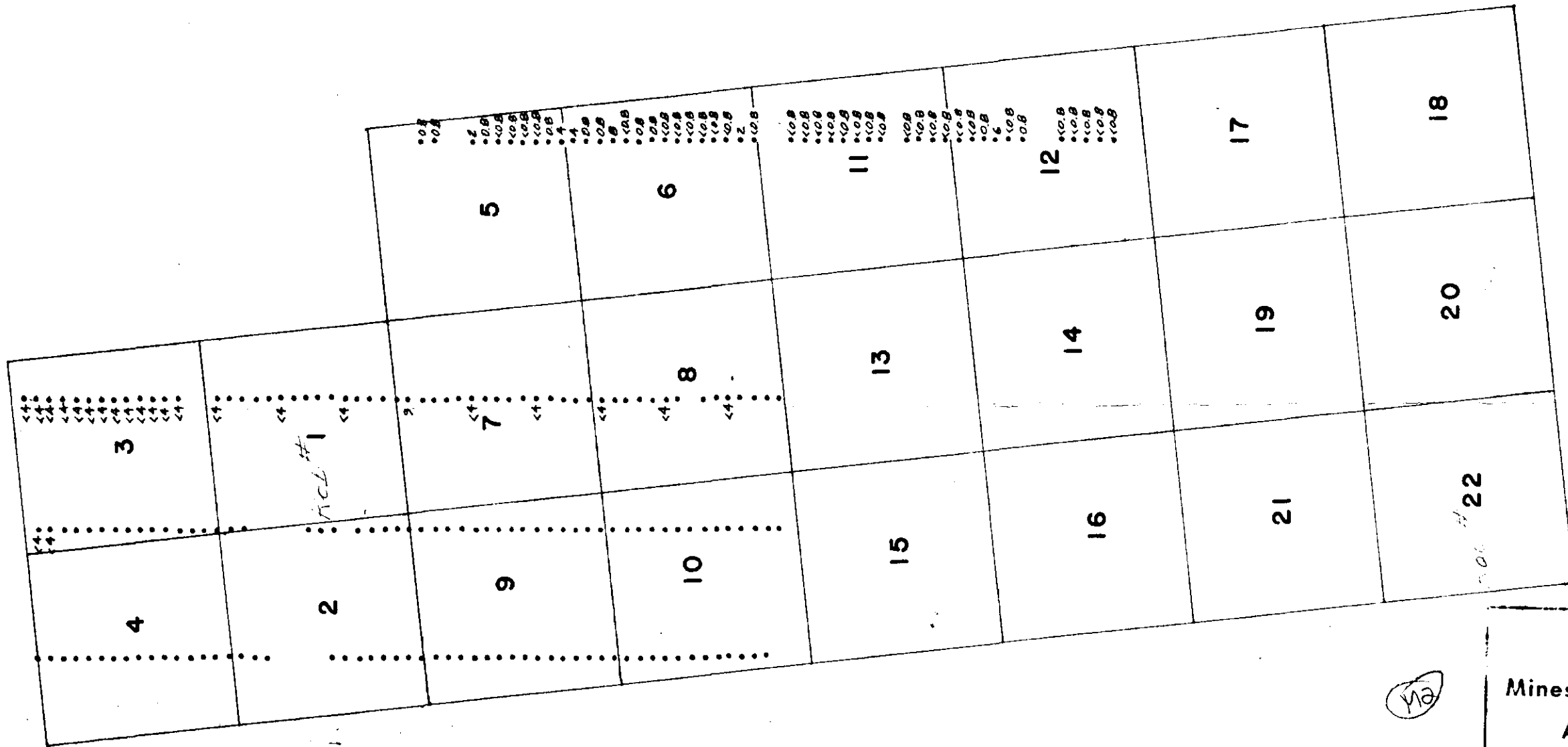
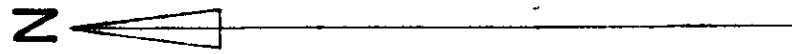
Franciois Lake

To accompany Geological and Geophysical report  
by C.W. Ball P.Eng and R.E. Cribbs on the Rob No 1-22 M.C's  
Omineca M.D. dated September 5, 1963.

Clive W. Ball P.Eng.

DRAWN C.W. Ball	SCALE 1"=1000'	UTICA MINES LIMITED	CANEX AERIAL EXPLORATION LTD
TRACED	DATE 28/8/63	Rob No 1-22 M.C's	OPTION
APPROVED		OMINECA MINING DIVISION	FILE NO.





GEOCHEMICAL SURVEY  
 \*+ PPM MO (UBC)  
 <+ PPM MO (CANEX)

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 507 M.A.P. 3

*Report 507*

To accompany Geological and Geophysical report by C.W. Ball, P.Eng. and R.E. Cribbs on the  
 Utica No's 1 & 2 Groups, Francois Lake, Omneca M.D., dated Sept. 5, 1963.

DRAWN R.E.C.	SCALE 1"=1000'	ENDAKO MINES LTD.	FILE NO.
TRACED	DATE Sept. 5, 1963	UTICA NOS. 1 & 2 GROUPS	
APPROVED <i>R.E. Cribbs</i>			

FRANCOIS LAKE