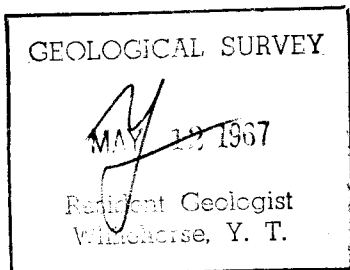


Report on the F.L. Claims of
VENTURES MINING LTD.

ALRAE EXPLORATION LTD.

February 14, 1967



This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

D. C. Findlay
RESIDENT GEOLOGIST

Approved as to cost in the amount
of \$ 1737.80

H. E. Paulson
RESIDENT MINING ENGINEER

Approved as representation work
under Section 53(4) Yukon Quartz
Mining Act.

[Signature]
COMMISSIONER OF YUKON

TO PROTECT OUR CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS AND
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MAPS

	Scale
Claim Map	1" = 1/2 mi.
Surface Plan and Geology	1" = 200 ft.
Magnetometer Survey - Magnetic Readings	1" = 50 ft.
- Contour Plan	1" = 50 ft.

Report on the F.L. Claims of
VENTURES MINING LTD.

INTRODUCTION

The F.L. group consists of 118 mineral claims located approximately five miles southeast of a small lake, locally referred to as Fire Lake, in the Yukon Territory. Situated in an area of schists, gneisses and intrusive rocks the claims were staked to cover an airborne magnetic anomaly.

Personnel of Alrae Exploration Ltd. carried out geological mapping and a magnetometer survey over a portion of the claims during the period July 31 - August 17, 1966.

Reconnaissance geological mapping and magnetometer surveying was carried out in the central portion of the claim group with the detailed magnetometer survey confined to FL numbers 1, 3, 68 and 70 claims.

LOCATION AND ACCESS

The claims lie between four and nine miles southeast of Fire Lake, approximately 90 miles northwest of Watson Lake, Yukon Territory. Co-ordinates of the property are 130° 25' west longitude, 61° 05' north latitude.

Access is by float equipped aircraft to Black Lake, approximately six miles to the southeast, or to Fire Lake, approximately six miles to the northwest, then on foot to the property.

PHYSIOGRAPHY

The claims lie in the valleys of the North and Black Rivers and the intervening ridge, consisting of low swampy areas and steep sided ridges and canyons.

Rock outcrop, exposed mainly in canyons and the northwest portion of the property, is sparse in the southeast half of the claim group.

CLAIMS

The F.L. group consist of the following contiguous claims:

FL numbers 1 - 110 inclusive;

FL numbers 145 - 152 inclusive.

GEOLOGY

Regional mapping on Geological Survey of Canada Map 105G shows the area occupied by the FL claims to be mainly overburden covered, consisting of unconsolidated glacial and alluvial deposits. Granitic rocks of Jurassic and/or Cretaceous age occur in the northwest portion of the claim block. Gneissic and schistose rocks have been mapped immediately east and southeast of the claims and probably underlie the major portion of the claim group.

The main structural feature in the area is the northwest trending Tintina Fault lying immediately west of the claim group.

Geological mapping at the time of the recent work near the centre of the claim group shows the area of FL numbers 7 - 10 to be underlain mainly by quartzose gneiss with schist predominating to the south and west. Granitic talus was noted in the northwest corner of the mapped area between FL numbers 74 and 76, and earlier prospecting indicated granitic rocks underlie much of the claim group northwest of this.

Throughout most of the area the schist consists mainly of quartz and mica, often containing abundant quartz lenses and stringers. On FL numbers 1 and 3, a dark green chloritic schist, in places containing considerable euhedral and subhedral magnetite crystals, occurs along with gneiss in the area of a magnetic anomaly.

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Throughout the mapped area the schists and gneisses strike northwesterly and dip moderately to steeply northeast.

A number of northwest trending draws apparently represent faults, one striking parallel to, and along the centre of the most southern magnetic anomaly.

No sulphide mineralization was seen during the mapping. The nearest known major sulphide deposit is that of Atlas Explorations Ltd. lying approximately six miles to the northwest. This consists of pyrite, pyrrhotite and chalcopyrite replacing flat lying mica and chlorite schists. It is reported that magnetite is present in the chlorite schists.

MAGNETOMETER SURVEY

General

Geological Survey of Canada Map 1360G shows a northwesterly trending magnetic anomaly, approximately 1-3/4 miles long, lying between the North and Black Rivers in the area now covered by the FL claims.

Reconnaissance ground magnetometer surveys were conducted along claim lines and boundaries of eight claims near the centre of the claim group. This reconnaissance work located the anomalous area indicated by the airborne survey, which was subsequently outlined by a detailed survey.

GRID

The grid in the area of the detailed magnetometer survey was established by pace and compass. Base lines were in a N20°W direction with cross lines at 100 foot spacings. Readings were taken at 50 and 25 foot spacings along a total of approximately 6,100 feet of cross lines and base lines.

OBSERVATIONS

The magnetometer survey partially outlined three anomalous areas, all trending northwesterly. The southernmost one measures 800 feet long by up to 250 feet wide; the second, immediately northwest of this, measures 600 feet by a maximum of 150 feet; the third, approximately 400 feet northeast of the second, measures 450 feet by 70 feet.

MAGNETOMETER USED

A Sharpe Model A-3 vertical force magnetometer was used for both the reconnaissance and detailed surveys. The instrument, which is hand held, is a direct reading, self-levelling, self-orienting instrument.

When used as a reconnaissance instrument, it is read as a dip needle with a range of plus or minus 12,000 gammas. Used as a vertical force magnetometer, it has a range of plus or minus 50,000 gammas and a sensitivity of 50 gammas.

Vernier readings are recorded, and, using a graph supplied with the instrument, converted to absolute vertical magnetic values in gammas.

FIELD PROCEDURE

The instrument was used as a dip needle in the reconnaissance survey which was carried out along blazed claim lines and along compass lines between these.

For the detailed survey, the instrument was read as a vertical force magnetometer. In this case it was zeroed at each station and the vernier setting recorded.

The sensitivity of plus or minus 50 gammas for the instrument precludes the necessity of temperature corrections.

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Also, a check of diurnal variations showed these fell within the allowable limits for this instrument.

CONCLUSIONS AND RECOMMENDATIONS

The ground magnetometer survey partially outlined three small northwesterly trending anomalies, which coincide with the trend and position of the airborne magnetic anomaly. The ground survey was not extensive enough to completely outline the anomalous areas.

Geological mapping disclosed a chlorite schist containing magnetite, which would account for the magnetic anomalies.

Although no economic mineralization was noted, most of the area is overburden covered. As a similar magnetite bearing chlorite schist occurs at the Fire Lake sulphide deposit to the north, it is felt further work should be carried out to fully evaluate the property.

Future work should consist of a more extensive magnetometer survey, additional geological mapping and a geochemical soil sampling survey.

Submitted by:

F. Holcapek

R. Philp

F. Holcapek,

R. Philp, P. Eng.

REFERENCES

Geological Survey of Canada Map 8-1960

Geology, Finlayson Lake, Yukon Territory

Geological Survey of Canada Map 1360G, Waters Creek, Y.T.

Geological Survey of Canada Paper 62-27, Mineral Industry of Yukon Territory and Southwestern District of Mackenzie, 1961, - R. Skinner, pp 39 - 40.

Ventures Mining Ltd.
848 W. Hastings Street
Vancouver 1, B. C.

IN ACCOUNT WITH

Alrae Exploration Ltd.
846 W. Hastings Street
Vancouver, B. C.

RE: AUGUST 1966

Invoice No. 66-144

Magnetometer and Geological Surveys - Fire Lake Claims

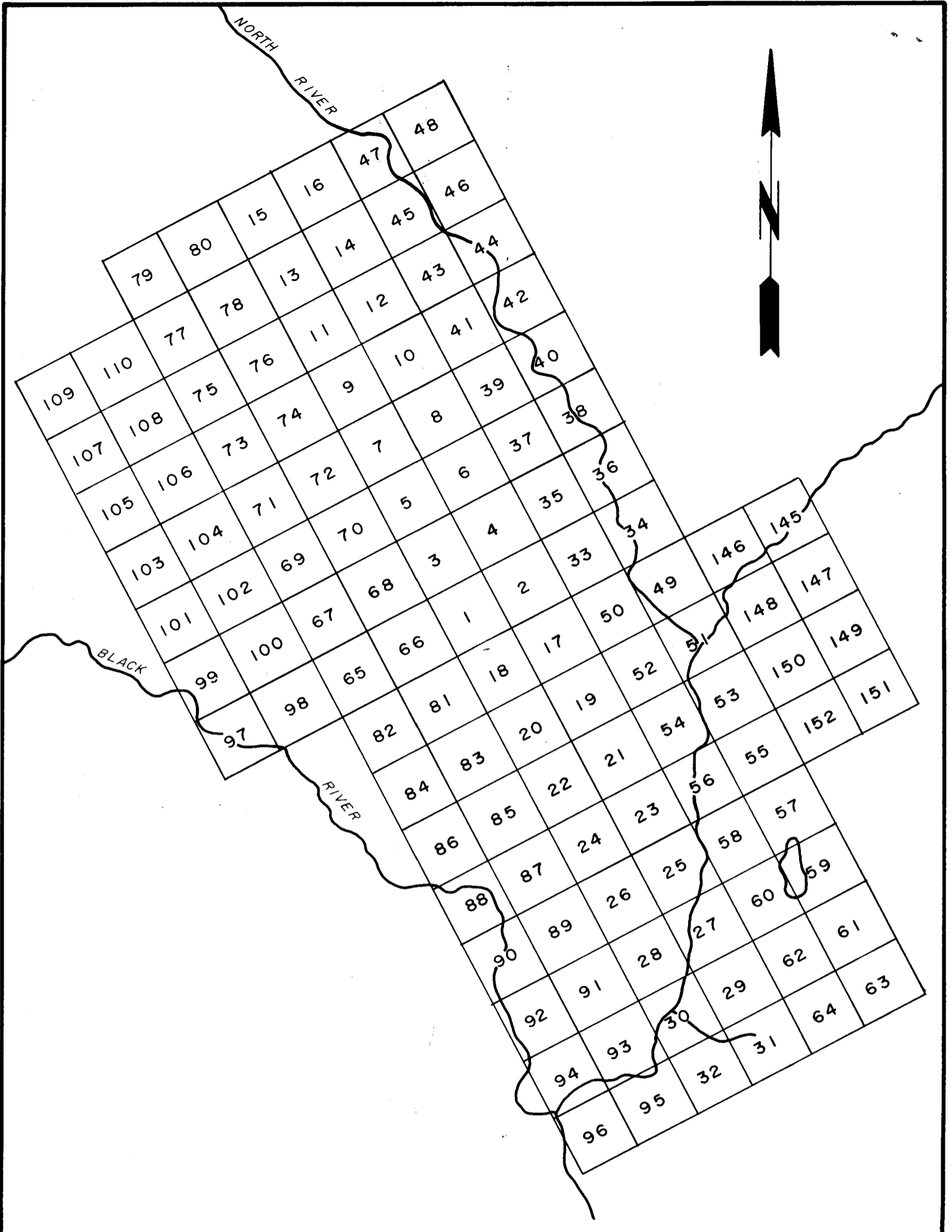
Personnel:

C. Nelson - July 31 - Aug. 17/66 - 17-1/2 days	\$	291.55
F. Holcapek - July 31 - Aug. 17/66 - 18 days		<u>360.00</u>
	\$	651.55
Board and Room 35-1/2 man days @ \$7.50		<u>266.25</u>
	\$	917.80

Disbursements:

Watson Lake Flying Services Ltd. - 1593	\$	185.00	
- 1651		100.00	
Great Northern Airways - 4371		<u>145.00</u>	\$ 430.00
Air Fare - F. Holcapek			\$ 140.00
Miscellaneous and Magnetometer Rental			\$ <u>250.00</u>
			\$ <u>1,737.80</u>

August 31, 1966



VENTURES MINING LTD.	
ALRAE EXPLORATION LTD.	
"FL" GROUP Claim Map	
Designed : R. P.	Scale : 1" = 2640'
Drawn : M. L.	Date : February 1967



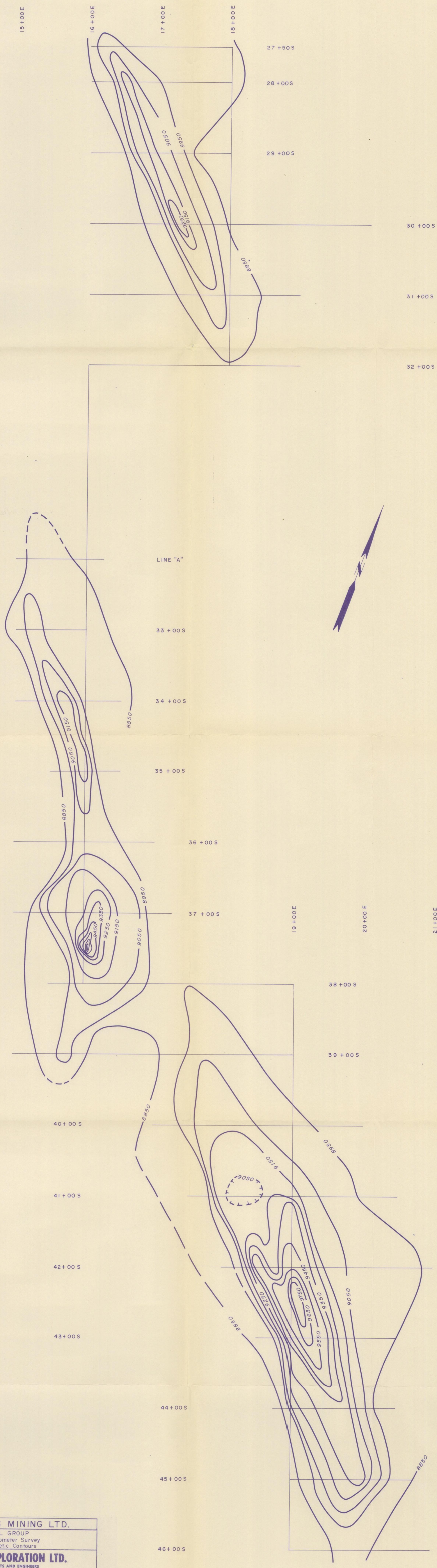
- LEGEND**
- Mica Schist
 - Chlorite Schist
 - Gneiss
 - Granite
 - Schistosity
 - Fault
 - Outcrop
 - Blazed Lines Along Which Preliminary Magnetometer Survey Was Run.

VENTURES MINING LTD.

F.L. GROUP
SURFACE PLAN SHOWING GENERAL
GEOLOGY & AREA of MAGNETOMETER SURVEY

ALRAE EXPLORATION LTD.
GEOLOGISTS AND ENGINEERS
VANCOUVER, B.C.

DESIGNED: R.P.	SCALE: HOR. 1" = 200'	REV.
DRAWN: H.W.C.	VERT.	
CHECKED:	DATE: FEBRUARY 1967	JOB No.
ALRAE EXP. LTD. DWG. No.		



VENTURES MINING LTD.	
FL GROUP	
Magnetometer Survey	
Magnetic Contours	
ALRAE EXPLORATION LTD.	
GEOLOGISTS AND ENGINEERS	
VANCOUVER, B. C.	
DESIGNED..... F. H.	SCALES
DRAWN..... M. L.	HOR: 1" = 50'
CHECKED.....	VERT: 1" = 50'
ALRAE EXP. LTD. DWG. No.	DATE FEBRUARY 1967
INSTRUMENT: SHARP A-3	JOB No.
ABSOLUTE VALUES PLOTTED.	CONTOUR INTERVAL: 100 gmmms