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RESTRICTED

GEOPHYSICAL SURVEY REPORT
"GORA" GROUP
ALATOR CORP. LTD., TORONTO



GEOPHYSICAL SURVEY REPORT
OF
THE "GORA" GROUP OF MINERAL CLAIMS
FOR
ALATOR CORPORATION LTD., TORONTO, ONTARIO.

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VANCOUVER, B.C.,
December, 1954.

January 5, 1955.

Mining Recorder,
Dept. of Northern Affairs & National Resources,
WHITEHORSE, Y.T.

Dear Sir:

We submit herewith our report and maps covering a geophysical survey and geological investigation of the GORA group of claims in the Pelly River area, Yukon Territory.

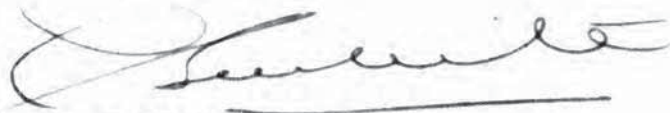
The work was conducted between September 27th and October 15th, 1954, by a party of seven men under direction of a qualified geologist.

Plans appended hereto include the map showing magnetometer survey lines, plus magnetic contour intervals and indicated anomalies. Also included is a general geological plan outlining the main rock outcroppings on the claim group.

Our expense statement covering costs of the job has been attached.

Affidavits for Certificates of Work to be granted under Section 54 (2B) of the Yukon Quartz Mining Act are being forwarded together with our cheque covering the fees.

Yours very truly,



L. G. White,
Agent for Alator Corporation Limited,
66 King Street, West,
Toronto, Ontario.

LGW/hc.
enc.

A MAGNETOMETER SURVEY REPORT
ON
THE "GORA" GROUP OF MINERAL CLAIMS
PELLY RIVER AREA, YUKON TERRITORY.

VANCOUVER, B.C.,
December, 1954.

By: G. E. Dunn,
Geologist.

THE "GORA" GROUP OF MINERAL CLAIMS
PELLY RIVER DISTRICT, YUKON TERRITORY

PREFACE: This report is to be classified as a geophysical survey investigation, as per Section 54-2-B of the Yukon Quartz Mining Act.

All supplies were flown from Whitehorse to Jackknife Lake and transported $3\frac{1}{2}$ miles by packhorses to the "GORA" group.

From September 27th to October 15th the following men were employed: C. E. Dunn, D. Smarsh, J. Testewick, A. Roberts and J. Dawson. L. Jorgenson, M. McNeil and Chris. Henry were added as extra help from October 5th to 15th.

Seventy-five thousand eight hundred feet of picket lines were cut and chained.

LOCATION: The claims are situated at $62^{\circ} 16'$ N. Latitude and $133^{\circ} 06'$ W. Longitude, four miles by map due south of Mount Mye, elevation 6736 feet, TAY RIVER Sheet 105K N.T.S.

The group is bounded on the north by the Gran group; on the east by the Blind group (Conwest Exploration Co.); on the south by the Mac group; and on the west by the Insurance and Art groups (Prospectors Airways Ltd.)

PROPERTY: The GORA group consists of eight mineral claims under recorded ownership of Alator Corporation Ltd., 66 King Street, West, Toronto, Ontario.

Names and corresponding grant numbers are as follows:

<u>Name</u>	<u>Grant Number</u>
Gora No. 1	67254
" " 2	67255
" " 3	67256
" " 4	67257
" " 5	67258
" " 6	67259
" " 7	67260
" " 8	67261

METHOD OF INVESTIGATION:

A Wolfson, Model #239, Vertical Force Magnetometer was used to record readings at 200-ft. intervals along the picket lines. Prospectors Airways Ltd. conducted a magnetometer survey earlier in the season on the adjoining Insurance claims and their 4400 North baseline was used as a control.

GEOLOGY & ROCK TYPES:

The major rock exposures consist of schists, altered diorites and feldspar porphyry. A small graphitic schist outcrop occurs on the Insurance group near the boundary of the GORA group. The schists vary from a chloritic schist to a green schist, which in hand specimens approach a greenstone in appearance.

The chlorite schists contain quartz lenses that pinch and swell parallel to the schistosity. The contact between the diorite and green schist on the GORA No. 8 Mineral Claim is covered with overburden.

The diorite is pale green to gray in colour and contains some epidote. On the southern edge of the outcrop the diorite becomes slightly schistose and is altered to a fine-grained rock resembling a greenstone.

The feldspar porphyry outcrop on the GORA No. 6 Mineral Claim likely represents a facies of the large granitic mass to the north and is assumed to intrude the schists.

MAGNETIC READING INTERPRETATIONS:

The average trend of the higher gamma contour intervals (viz 400 to 800 gammas) is North 45° East. The anomaly on the GORA No. 8 Mineral Claim is an exception to this general trend. The "anomalies" do not conform to one particular rock type. They occur in diorite, along the northern edge of feldspar porphyry, and in or near outcrops of chlorite schist. Consequently, the changes in magnetic intensity cannot be considered as due solely to changes in rock types. It is rather a combination of other factors such as depth, width, attitude and susceptibility to magnetic fields.

The area defined by the 600 and 700 gamma contours on the GORA No. 4 Mineral Claim was checked by several additional readings with the magnetometer. High readings were found to persist along the 5400 E. picket line.

Lack of evidence of mineralization, no change in the attitude of the schist and the narrow width of the zone, did not substantiate possibilities of the presence of a mineralized band below the surface.

An area trending N. 45° E. is contained by the 400-500-600 contours along the 7000 East picket line bordering the large outcrop of feldspar porphyry. This anomaly is situated in deep overburden and appears to represent a change in rock types along a buried contact. It would seem logical that the feldspar porphyry is a sell-like intrusion into the Yukon series of rock found on the GORA group and the Magnetic highs result from metamorphic alteration along the contact.

The north-south trend of the gamma contours on the diorite outcrop on the GORA No. 8 Mineral Claim represent an abrupt change in the structural pattern assumed to extend across the GORA group. The diorite is weakly fractured along a bearing of N. 40° W. with dips 30° north. The fracture planes are occupied by minute stringers of quartz containing porcelain coloured feldspar and a green material consisting of chlorite or serpentine.

Detailed prospecting around the diorite outcrop failed to locate any evidence of mineralization. A band of graphite schist occurs in the chlorite schist on the Insurance mineral claim adjoining the GORA No. 8 mineral claim. This probably accounts for the anomaly reported by Prospectors Airways on their ground. It is possible that similar structural characteristics account for the high readings obtained on the GORA claim.

CONCLUSIONS & RECOMMENDATIONS:

Preliminary work with the magnetometer outlined a definite anomaly on the southeast end of the claim group worthy of further investigation, providing Prospectors Airways continue to show interest and drill their ground immediately west on the Mac and Insurance claims.


The interesting area is about 800 feet long and 400 feet wide and could be drilled quite readily. The indicated anomaly is not large enough or strong enough to warrant initiation of a full scale drill program. With drills working on the adjoining Prospectors Airways' property, arrangements could possibly be arranged with Boyles Brothers to contract one or two holes on the GORA Group.

Dependent on results of the test drilling, a full scale program could then be laid out if required.

Other indicated anomalies were outlined but would not be worthy of further investigation, unless the area at the south-east end of the group showed encouragement from initial drill results.

Respectfully submitted,


C. E. Dunn.


L. G. White.

Vancouver, B.C.,
December, 1954
/hc.

December/54.

EXPENSE SUMMARYTO:

Supplying and maintaining a crew camped three miles north of Jackknife Lake, Pelly River, for the purpose of conducting a magnetometer survey of the GORA group of claims.

Crew: 8 men
Time: 125 man/days
No. of Claims: 8

LABOUR COSTS - Per Payroll Summaries:

1 Geologist in Charge	- \$18.00/day - 19 days	\$ 342.00	
4 Line Cutters	- \$12.00/day - 19 days	912.00	
2 Prospectors	- \$15.00/day - 10 days	300.00	
1 Wrangler	- \$10.00/day - 10 days	<u>100.00</u>	\$ 1654.00

Workmen's Compensation Insurance @ 5% - 82.70

BOARD COSTS - Per Northern Commercial Invoices:

Food Supplies - averaged \$3.00/day/man (3x125) 375.00

TRANSPORTATION - Whitehorse Flying Services:

2 Plane Charters - 6 hours @ \$80.00 - 480.00

HORSE RENTALS - T. Connelly, Ross River, Y.T.

Packing Supplies - 3 horses @ \$9.00 - 10 days 90.00

MAGNETOMETER RENTAL

1 month @ \$150.00 150.00

PREPARATION & PRINTING REPORT - Engineering Service100.00

TOTAL EXPENSES:

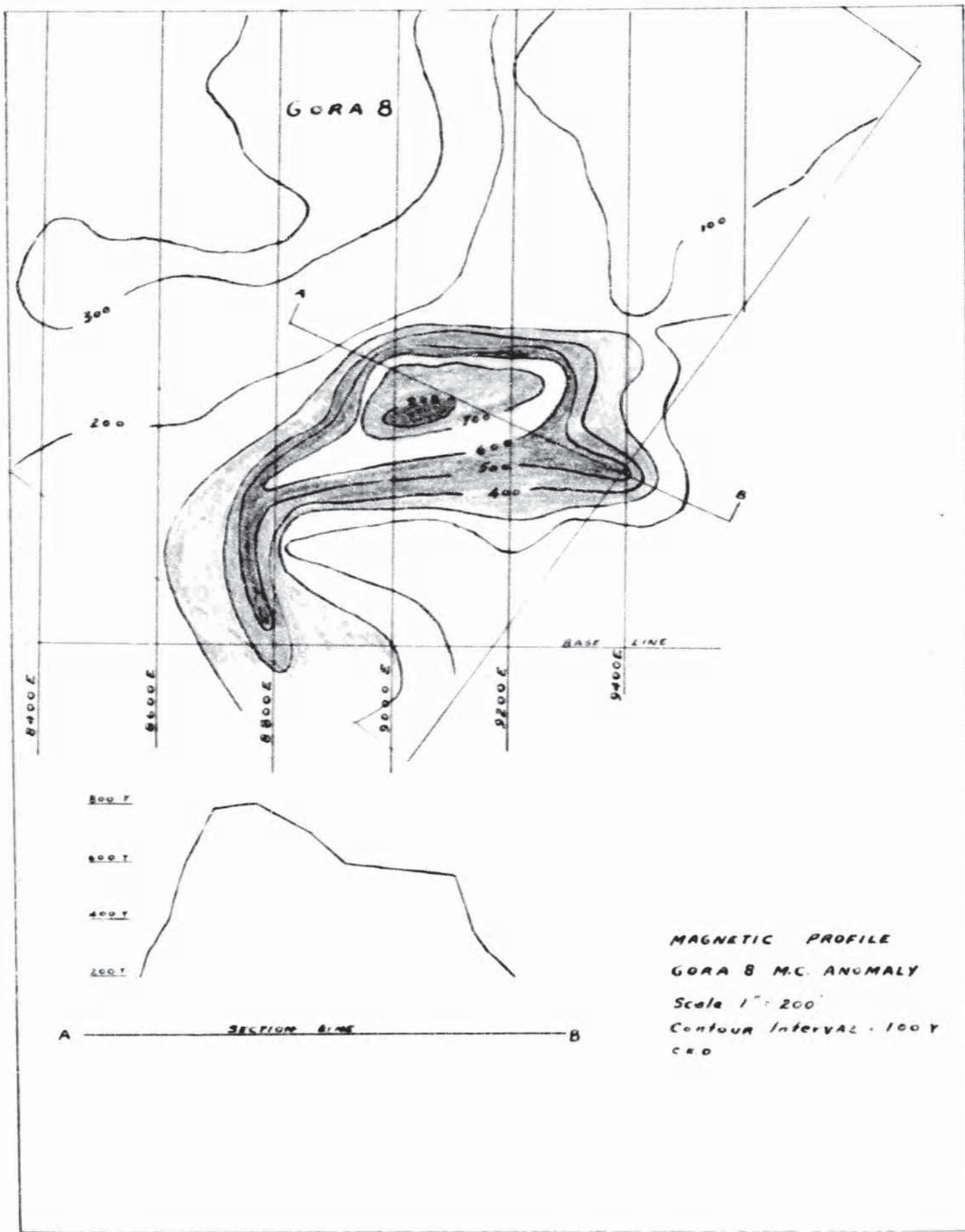
\$ 2931.70

EXPENSE/CLAIM:

\$ 366.41

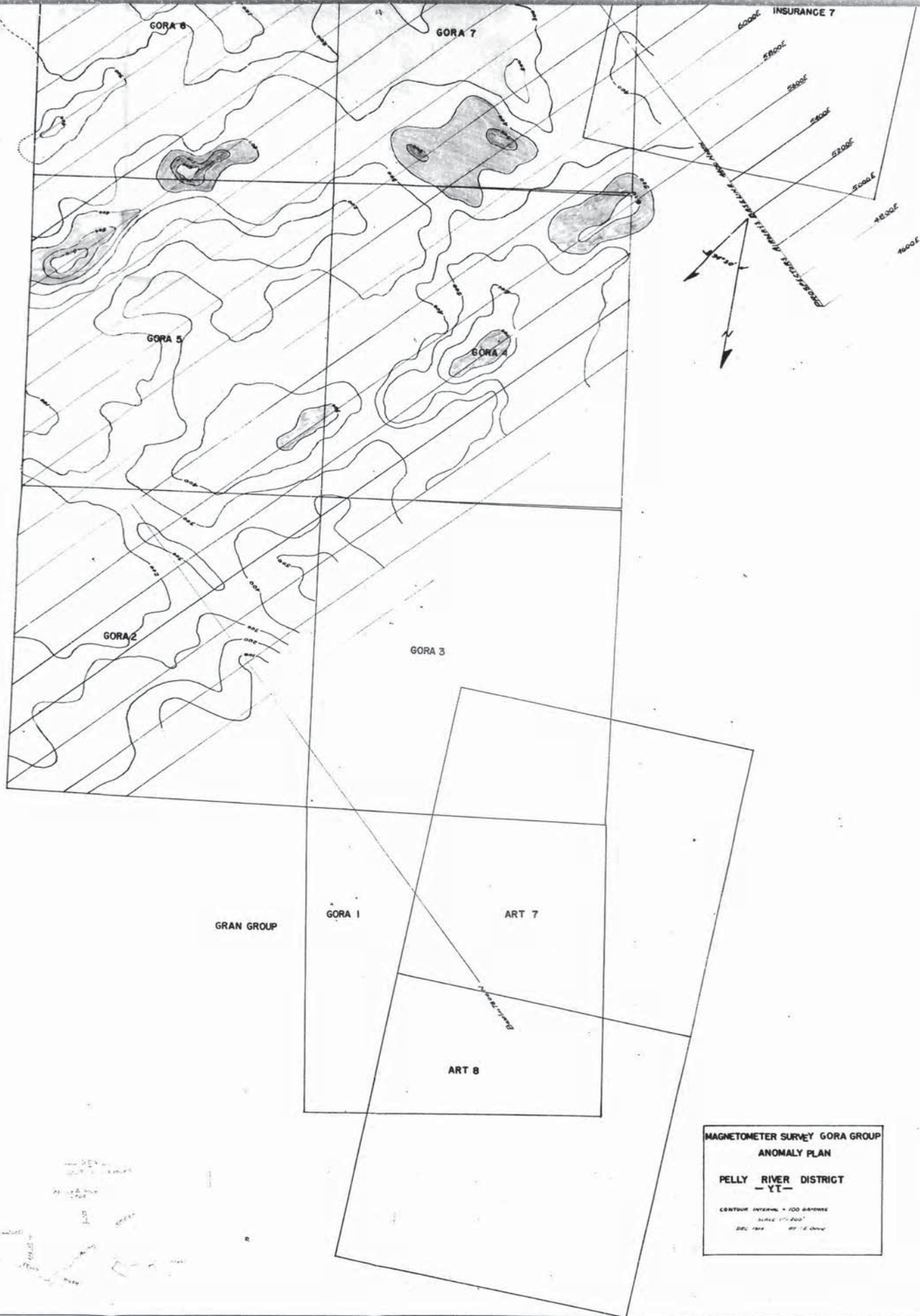
Correct:


 L. O. White.



MAGNETIC PROFILE
 GORA 8 M.C. ANOMALY
 Scale 1" = 200'
 Contour Interval = 100 T
 CRO





LAND GROUP
(cont'd)

GORA 5

GORA 4

GORA 2

GORA 3


GRAN GROUP

GORA 1

Mt 7

ART B

LEGEND

-  RIVER
-  WETLAND
-  WILSON PLANTATION
-  ROADWAY
-  FENCE LINE
-  DRAINAGE



GEOLOGICAL PLAN
 GORA GROVE
 PELLY RIVER DISTRICT
 — Y. T. —
 SCALE 1" = 500'