52N04SE0193 63.191 BYSHE

Report on the
Geophysical and Geological Surveys
of the Property of the Bradford
Syndicate, Byshe Township,
Red Lake Area, Ontario.

Introduction

The claims comprising this property are almost completely covered with a fairly heavy mantle of clay and boulders. The only rock exposures of any consequence are located at the extreme north end of the property.

The combined geophysical and geological surveys were made to obtain as much information as possible concerning rock types, contacts and structural features.

The only outcrops observed were fairly massive, coarse-grained diorite. The location of the outcrops is shown on the accompanying Fig. No. 50-11. A narrow dyke was observed in the northeastern corner of Claim No. L.L.-20938.

The combined surveys indicate that the property is underlain by two types of rock. The higher Fraser readings in the northern and the southern portions of the property are interpreted as representing a mafic dyke, and the lower Fraser readings in the central portion of the property are probably the result of conformation of layers. There are no rock outcrops observable in the low swampy area to verify this interpretation, however.

Two maps, Nos. 50-7 and 50-11, drawn to a scale of 1" = 200 feet accompany this report.

Map No. 50-7 shows the magnetic readings in gauss at each station where an observation was made, and our interpretation of the magnetic results, based on a correlation of the magnetic lines and the geological data.

Map No. 50-11 shows the location and nature of the rock outcrops observed.

TOPOGRAPHY

The Woodford group is generally low, with little relief. The claims are almost completely covered with a fairly heavy mantle of clay and boulders.

Rock outcrops occur in only a few places, mainly in the northern portion of the property.

GENERAL GEOLOGY

The only bedrock exposed on the property is a rather coarse-grained diorite, which is fairly massive. The observed outcrops occur in the northern end in the southern parts of the property. These diorite outcrops correspond to normal or higher than normal magnetic readings.

No outcrops were observed in the central portion of the claim group. Here the magnetic readings are, almost without exception, lower than normal. It is our interpretation that this portion of the property is underlain by lavas of low magnetic susceptibility.

It is recommended that future exploration of the Woodford property be concentrated on the areas between the high and low magnetic areas, as these areas probably represent contacts between diorite and lavas.

FIELD WORK

Field work for the magnetic survey was started on April 28th, 1950 and completed on May 5th, 1950. This work was done by F. E. Dunn and helpers.

The geological field work was done from June 3rd, 1950, to June 5th, 1950, by R. McIntosh and helpers.

LOCATION AND ACCESSIBILITY

The Woodford Syndicate group of claims, Nos. K.R.L. 20176 and K.R.L. 20987-20993 inclusive, is located on the north shore of Hop Lake, which is readily accessible from the settlement of Red Lake by boat or plane. The property lies approximately 8 miles east of Red Lake.

LINE SURVEY

An east-west base line was established near the southern boundary of the group. North-south picket lines were put in at 300 foot intervals, extending from the base line to the northern and southern limits of the property. These lines were chained and picketed at 100 foot intervals.

A total of approximately 20.4 miles of lines was cut and chained, including approximately .7 miles of base line, and approximately 9.7 miles of picket lines.

previous work

A small amount of trenching and stripping has been done on the Woodford claims. Most of these trenches have caved in and were full of water at the time these surveys were made.

geology

To date no economic deposits of ore have been found in the immediate vicinity of the Woodford claims. Some gold values were obtained on the property of Virginia Red Lake Gold Mines Ltd., which adjoins the Woodford claims on the northwest, in surface trenching and diamond drilling. Geological conditions on the Virginia Red Lake Gold Mines property are similar to those on the Woodford group.

No extensive work has been done on the Woodford or on the surrounding properties, with the exception of Virginia Red Lake.

geophysical survey

general

The instrument used for the magnetic survey was a Sharpe type magnetometer set to a sensitivity of 1/.2 gamma per scale division. Base stations were established, and corrections were made for diurnal variation, temperature changes, and possible changes in the center of gravity of the instrument due to shock. With the above corrections applied to the field readings, the magnetic values at each station stand in absolute relation to one another as though all the readings had been taken simultaneously. A total of 490 readings were taken.

INTERPRETATION

Our interpretation of the magnetic readings is shown on Map No. 50-7. The normal vertical magnetic intensity of the rocks on the Woodford property was assumed to be between 200 and 300 gamma. Areas above 300 gamma are coloured blue and areas below 200 gamma are coloured yellow. Deeper shades of blue and yellow indicate greater departures of the magnetic values from the normal readings.

The normal and higher than normal readings in the northern and southern portions of the property are interpreted as representing diorite. This is borne out in cases where outcrops were observed in that readings directly over diorite outcrops were in most cases over 200 gamma.

The central portion of the property, where the magnetic readings are in most cases below 200 gamma, is probably underlain by lavas, which in this area are of lower magnetic susceptibility than diorite.

CONCLUSIONS

No pronounced structural features were indicated by the geological or geophysical survey. The most favourable exploration possibilities on the property appear to be along the indicated contacts between rocks of different magnetic susceptibilities. It is unlikely that trenching would be an efficient means of exploring these areas, due to the overburden, leaving diamond drilling as the most logical way of doing such exploration.

It is our recommendation that future exploration of the property should consist of diamond drilling to explore the zone north and south of the lower than normal magnetic area which lies in the central portion of the property and initially to comprise exploratory drilling only of an informational nature. Such drilling would be necessary to determine if favourable conditions lie at or near the contact for gold deposition.

Respectfully submitted,

YOUNG, YOUNG & BOOTH, LIMITED,

W. R. Young

Per: W. R. Young, P. Eng.

Toronto, Ontario,
June 30th, 1950.
Encl: Dept Rpts. 50-7 and 50-11.

The following statement, which is certified to be correct by the undersigned, is to form an appendix to the Report on the Geophysical and Geological Surveys of the Property of the Bradford Syndicate, Byrne Township, Red Lake, Ontario, by Young, Young & Grant, Limited, dated June 30th, 1950.

1. Name of Mine	Young, Young & Grant, Limited
2. Dates of Field Work	Geophysical - Apr. 28-May 5, 1950 Geological - June 3-5th, 1950
3. Type of Instrument, and Scale Constant	One Sch-Mit-type Inclinometer 27.2 Gamma per scale division
4. Total number of Stations established	490
5. Number of miles of line cut	30.4
6. Tape	50-ft and 500-ft, submitted
7. Report	June 30th, 1950, submitted
8. Personnel of each Survey Employed	
(A) Geophysical	
(a) Line-Cutters John Murdoch Nat Galvardy	• Apr. 28-May 5 • 28 days x 4 ½ • Apr. 28-May 5 • 28 days x 4 ½
(b) Instrument Operator Fred E. Penn	• Apr. 28-May 5 • 28 days x 4 ½
(B) Geological	
(a) Field Work J. McIntosh John Murdoch	• June 3-5 • 3 days x 4 12 • June 3-5 • 3 days x 4 12

(cont'd)

(c) Office

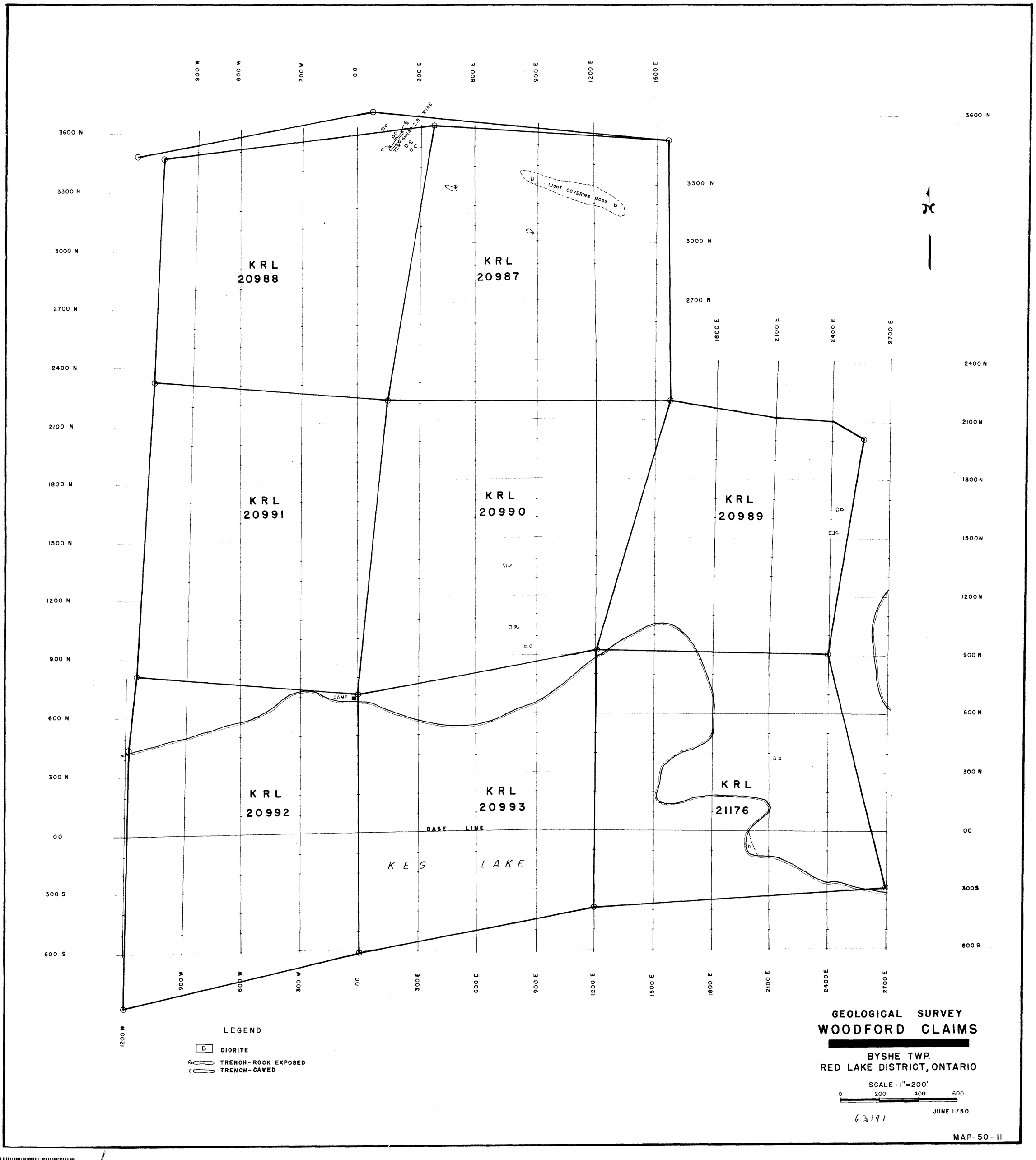
(a) Drafting			
E. Bell		3 days x 4	12
John S. Ross		2 days x 4	8
(b) Consultants (report, etc.)		5 days x 4	20
TOTAL OF MAN-DAYS			280

YOUNG, YOUNG & GROSS, LIMITED,

W. N. Gross

Per W. N. Gross,
Professional Engineer.

(191)



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200

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WOODFORD CLAIMS
MAGNETOMETER SURVEY
BYSHE TWP.
RED LAKE DISTRICT, ONTARIO

SCALE : 1"=200'

0 200 400 600

JUNE 1/50

63.191

YOUNG, YOUNG & GROSS MAP-50-7

LEGEND

ISO-MAGNETIC LINES —100—

ASSUMED ISO-MAGNETIC LINES ---200---

MAGNETIC INTENSITY IN GAMMAS 123

- HIGHER THAN NORMAL INTENSITY
- NORMAL INTENSITY
- LOWER THAN NORMAL INTENSITY

KRL 20988

KRL 20987

KRL 20991

KRL 20990

KRL 20989

KRL 20992

KRL 20993

KRL 21176

KEG LAKE

BASE LINE

CAMP

POST NO.3 20855

1200 W 900 W 600 W 300 W 00 300 E 600 E 900 E 1200 E 1500 E 1800 E 2100 E 2400 E 2700 E

3600 N 3300 N 3000 N 2700 N 2400 N 2100 N 1800 N 1500 N 1200 N 900 N 600 N 300 N 00 300 S 600 S

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