

23 965

INTRODUCTION



52L07NE0045 63.965 REX LAKE

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The claim group consists of 21 claims numbered KRL 25943 to KRL 25965, located in the Trapline Lake area, in the District of Kenora. The property lies approximately 50 miles north of the town of Kenora and is accessible by aircraft to Upper Fortune Lake which lies on the East boundary of the Claim Block. A road is presently being built to Gordon Lake about six miles to the West to service the Copper Nickel deposit held by Eastern Mining and Smelting.

TOPOGRAPHY.

The area is more rugged than is usual in the Pre-Cambrian shield, with elevation differences occurring on the property of up to 200 feet. Marked East-west striking depressions transect the group with frequent development of vertical cliff faces up to 40 feet high.

On the high ground the rocks are practically free of any overburden. Glacial action in the area appears to have had limited effect on the topography. The lineaments do not conform to the regional glacial direction. Glacial drift deposits are scant over the majority of the ground and in the depressions, overburden does not appear to be very thick.

The ground is sparsely timbered with spruce and pine and occasional birch.

WORK DONE.

A baseline was established across the property at a true bearing of 90°, and then lines were cut at 400 foot intervals. These lines were used for tying in the outcrops.

GEOLOGY:

GENERAL.

The area was first mapped in 1929 by D. R. Derry for the Ontario Department of Mines. The mapping was of reconnaissance type following the main waterways and with only limited traversing through the bush.

The consolidated rocks of the area are all Pre-Cambrian in age. The main rock types consist of a sedimentary series with occasional associated volcanics which have all been highly metamorphosed, and an intrusive series ranging from diorite to granite with much associated pegmatite. The intrusive bodies are of great extent. Locally around Werner and Rex Lakes small lenses of peridotite occur often with sulphide mineralization.

TABLE OF FORMATIONS: (After D. R. Derry).

<u>Quaternary.</u>	Recent.	Peat, Lake deposits of clay and sand.
	Pleistocene.	Glacial boulder clay.
<u>Pre-Cambrian.</u>	Algoman.	Pegmatite and Aplite.
		White Binary granite.
		Porphyritic biotite granite.
		Grey granodiorite and Oligoclase granite.
		Diorite.
	Keewatin.	Peridotite ?
		Sedimentary Gneiss,
		Quartz Biotite schists.
		Garnet Hornblende Schists,
		Basic Schists.

DESCRIPTION OF FORMATIONS.

ALGOMAN.

On the claim group the Algoman is represented by a pink granite and a small body of diorite. The granite is usually equigranular and consists of Quartz, Orthoclase, Hornblende and minor biotite. In some areas the mafic mineral content decreases until the rock is almost an Alaskite. Biotite or hornblende clots occur frequently and are partly assimilated xenoliths of the sediments. Near the contacts the gneissic inclusions become very abundant, and the contact zone is not sharp but transitional. The contact is taken as being where original gneissic structures are visible and can be traced along the strike.

Granite underlies the southernmost four claims of the block. Another belt of granite occurs in the centre of the group between zones of paragneiss, and this belt includes the small mass of diorite. This rock consists of coarse hornblende set in a host of coarse white plagioclase in the centre of the body and at the margins it becomes finer grained and the hornblende shows a strong gneissic structure.

KEEWATIN:

Peridotites: These rocks have been grouped with the Keewatin although insufficient is known about them to assign them definitely to any period. In form the bodies are lenticular in shape with lengths up to several hundred feet and widths of up to 100 feet. They appear to occur as very altered fine grained rocks with the degree of alteration varying with grain size. Generally the finer the texture, the higher the metamorphism. Thin section studies have shown some specimens to have a high hypersthene content. The writer considers it possible that these rocks may not be intrusive in origin, but might be products of the regional metamorphism.

Sedimentary Gneisses: The sedimentary rocks were placed by Derry in the Keewatin as they compose the oldest rocks in the area and are also lithologically similar to those of the series occurring at the town of Keewatin, 50 miles to the south.

Three main types of gneiss are present; namely a Biotite hornblende gneiss, which is dark and fine to medium grained, a garnet hornblende gneiss which is medium to coarse grained, and a siliceous garnet gneiss. Considerable lit par lit injection has occurred in these rocks and also they are frequently riddled by irregular dykes of granitic and pegmatitic material. In some parts the injected material may constitute more than 50% of the rock, but where the original gneissic or sedimentary features are still recognisable, the rocks are still classed as paragneiss. Two bands of Paragneiss cross the property and are separated by a belt of granite 1000 feet wide. The rocks have a well developed gneissosity varying from 80° to 110° and with a vertical or slight northerly dip.

STRUCTURE:

The regional and local strike of the metasediments is East-west. Folding is present only on a small scale and can be regarded as more a local contortion than as a structural feature.

No faults or breaks are exposed on the ground although suspected loci of such breaks are the two drift covered areas. The regional fault direction is East-west.

Mineralization:

The area was covered very closely in the search for outcrops and mineralization. Nothing, apart from very small areas of pyrite staining was found.

The high 0.4 ohm/feet resistivity anomaly on line 32E, 1150N was drilled from the north with an inclined diamond drill hole. From 150 feet to 180 feet there was some disseminated pyrrhotite which had replaced mafic minerals in the paragneiss.

A second drill hole was put down at 21+75 feet N, the next best anomaly, but only barren paragneiss was found.

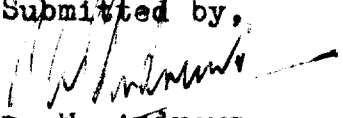
The two best mineralized five foot sections of core from hole #1 were split and assayed: both returned 0.07% Cu and nil nickel.

Conclusions and Recommendations:

The group of claims examined were underlain by sediments in various stages of metasomatism, and by granitic gneiss. Although they lie on strike of the nickel deposits of Eastern Mining and Smelting the mineralization on the claim group is not of economic interest.

I recommend that the option be dropped.

Sogemines Development Co. Ltd.,
206 Park Street,
Port Arthur, Ontario.
June 9th, 1958.

Submitted by,

P. W. Andrews.



Report on MAGNETOMETER SURVEY - Stratmat Group,
Fortune Lake.

INTRODUCTION:

Location: A group of 21 claims Numbered KRL 25943 to KRL 25963 inclusive, under option from Stratmat Limited were covered by a magnetometer survey during February and March, 1958. The claim group is located on and about Lower Fortune Lake, District of Kenora, 48 air miles north west of the town of Kenora. The Gordon Lake property of Eastern Mining and Smelting is approximately six miles west.

Topography: The topography is typical of that of the general area with lightly wooded hills up to 150 feet in height separated by narrow valleys which can be followed for many miles east west across the whole region. The area is generally well drained and few swamps occur.

Geology: The rocks underlying this claim group are all of Precambrian age and are, almost without exception, various phases of a lit par lit injection paragneiss. These phases range from an almost pure pegmatite through increasing amounts of included sediments to a completely recrystallized sediment. Garnets are found in varying amounts throughout the whole.

Magnetometer Survey: The magnetic survey, using a Sharpe D2 vertical variometer with scale constant of 20 gammas, was carried out to explore the possibility of the presence of the pyrrhotite bearing basic intrusive in which the nickel and copper are found to the west.

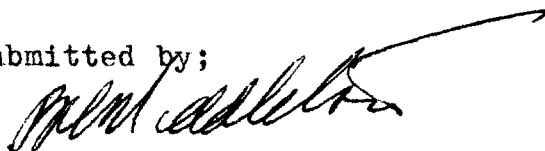
A base line was established east west across the claims and cross lines were established at 400 foot intervals. These cross lines were chained at 100 foot intervals for the magnetometer readings. Readings were taken at closer intervals where required. The total length of line cut was 18.9 miles.

Magnetic base stations were established at convenient intervals and a total of 1,052 readings were taken during the survey.

The general level of magnetic intensity lies between 800 and 1000 gammas. Local concentrations of magnetite gave extremes ranging from a high of 11,653 gammas to a low of minus 3,507 gammas.

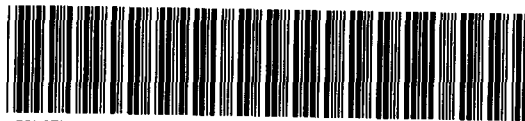
Interpretation: The erratic distribution of the magnetite tends to obscure any possible weaker anomalies such as would be caused by pyrrhotite or a basic intrusive. One anomaly lying between 11*00N 28+00E and 12+00N 36+00E on claims KRL 25953 and 25962 was found to be caused by massive pyrrhotite by subsequent work.

Submitted by;



206 Park Street,
Port Arthur, Ontario.
June 19th, 1958.

B. M. Middleton,
For Sogemines Development Co. Ltd.



52L07NE0045 63.965 REX LAKE

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Report on RESISTIVITY SURVEY - Stratmat Group, Fortune Lake.

INTRODUCTION:

Location: A group of 21 claims numbered KRL 25943 to KRL 25963 inclusive, under option from Stratmat Limited were covered by a magnetometer survey during February and March, 1958. The claim group is located on and about Lower Fortune Lake, District of Kenora, 48 air miles north west of the town of Kenora. The Gordon Lake property of Eastern Mining and Smelting is approximately six miles west.

Topography: The topography is typical of that of the general area with lightly wooded hills up to 150 feet in height separated by narrow valleys which can be followed for many miles east west across the whole region. The area is generally well drained and few swamps occur.

Geology: The rocks underlying this claim group are all of Precambrian age and are, almost without exception, various phases of a lit par lit injection paragneiss. These phases range from an almost pure pegmatite through increasing amounts of included sediments to a completely recrystallized sediment. Garnets are found in varying amounts throughout the whole.

Resistivity Survey: A resistivity survey, using a grounded cable and vacuum tube volt meter pickup, was carried out over the claim group on a 400 foot interval picket line grid previously established. The probes were 50 feet apart and readings were taken at 50 foot intervals.

The purpose of the survey was to act as a follow up for a magnetometer survey in an attempt to discriminate between magnetic anomalies caused by magnetite and those caused by some other agent such as a pyrrhotite body.

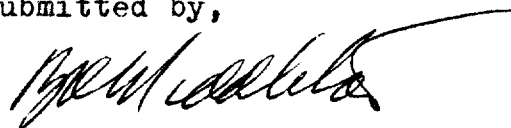
The effectiveness of this method is somewhat reduced by terrain effects since swamps and depressions produce anomalous conditions but these can be generally eliminated by the intensity of the readings.

Interpretation: Numerous anomalies were found but most could be attributed to terrain effects. Several first class anomalies were found, the chief of which coincided with a magnetic anomaly between 11+00N 28+00E and 12+00N 36+00E on claims KRL 25953 and KRL 25962. This is a narrow lenticular anomaly about which Dr. H. O. Seigel, Consultant Geophysicist of Toronto, states:

" This is a very sharp resistivity low (as low as 4 ohm meters) occurring on lines 28E, 32E, and 36E. This correlates extremely well with very sharply defined magnetic anomalies of up to 4,000 gammas amplitude. The continuation of the magnetic anomaly westward suggests that there may possibly be some extension beyond the area of the prominent resistivity anomaly. I feel that the possibility of pyrrhotite mineralization underlying this conductor is very good. The depth of overburden is less than 25 feet, judging by the magnetic curves, and the dip is steeply to the north. Assuming that no further information can be obtained on this conductor, then I would recommend that it be drilled on Section 32E, with the collar of the hole approximately 1250' north of the base line and oriented south along the line at 45° inclination for 300 feet."

206 Park Street,
Port Arthur, Ontario.
June 19th, 1958.

Submitted by,



B. M. Middleton,
For Sogemines Development Co. Ltd.

CONNETT LAKE AREA G-2609

LEGEND

- HIGHWAY AND RAILROADS
- OTHER ROADS
- TRAILS
- SURVEYED LINES
- TOWNSHIPS, BASE LINES ETC
- LOTS, MINING CLAIMS, PARCELS, ETC
- UNSURVEYED LINES
- LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORF LINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT
- TOURIST CAMPS (OP - OUTPOST)

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
SURFACE RIGHTS ONLY	○
MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
SURFACE RIGHTS ONLY	◼
MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	▼
ORDER IN COUNCIL	○
RESERVATION	⊙
CANCELLED	⊖
SAND & GRAVEL	⊙

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT (R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1)

REFERENCES

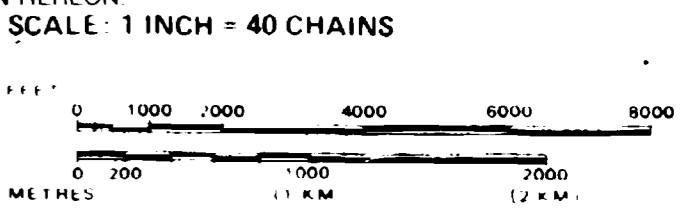
AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. MINING RIGHTS ONLY
- S.R.O. SURFACE RIGHTS ONLY
- M.+S. MINING AND SURFACE RIGHTS

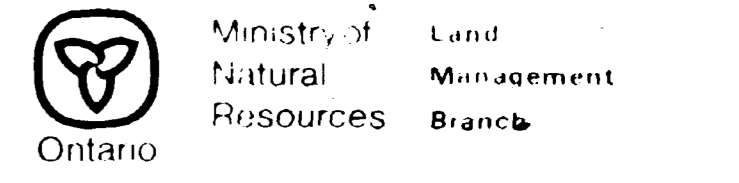
Description	Order No.	Date	Disposition	File
(*)	W 5782	2/27/72	S.R.O.	14223

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

Officer in Charge



AREA
REX LAKE
 M.N.R. ADMINISTRATIVE DISTRICT
KENORA DATE OF ISSUE
 MINING DIVISION **MAY 21 1998**
KENORA
 LAND TITLES / REGIONAL OFFICE
KENORA (PATRICIA PORTION)



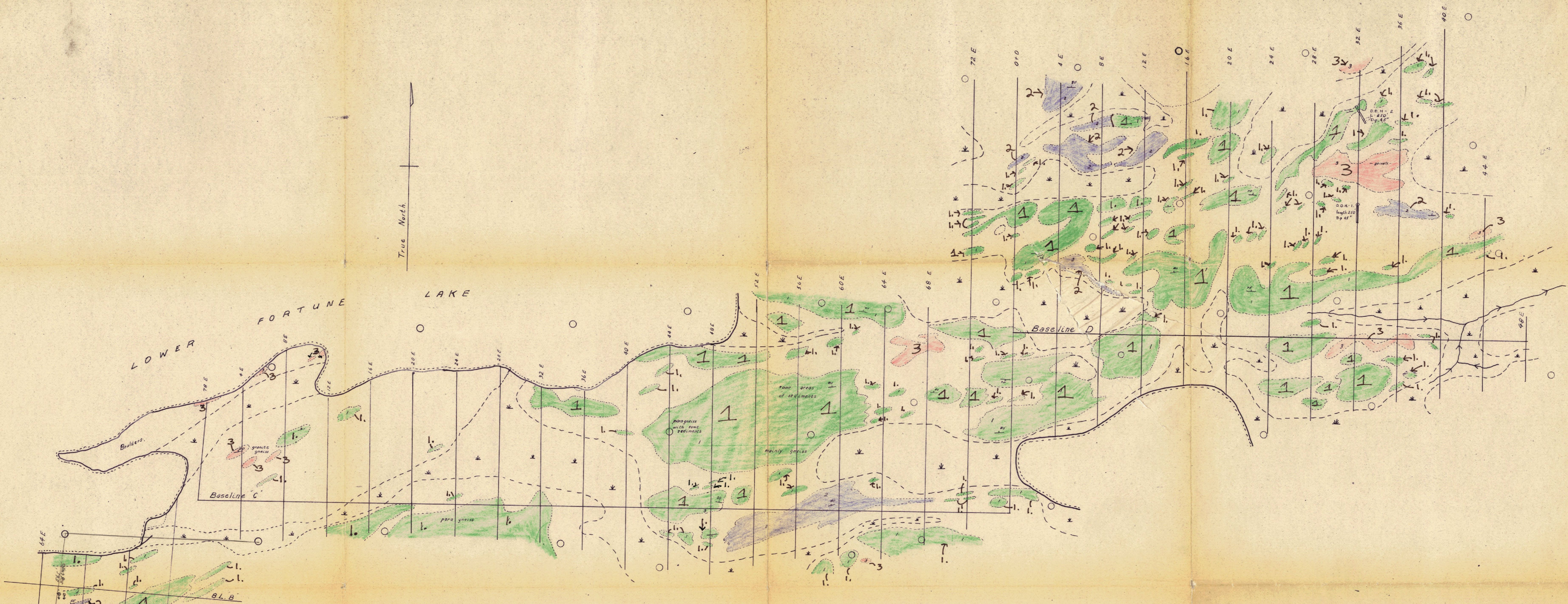
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 M-2421

WERNER LAKE AREA G-2654

ROGER LAKE AREA G-1864

PATERSON LAKE AREA G-2634



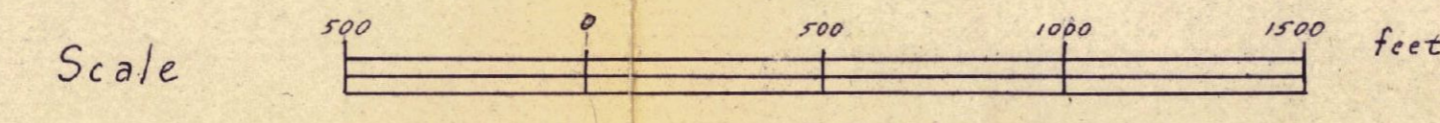
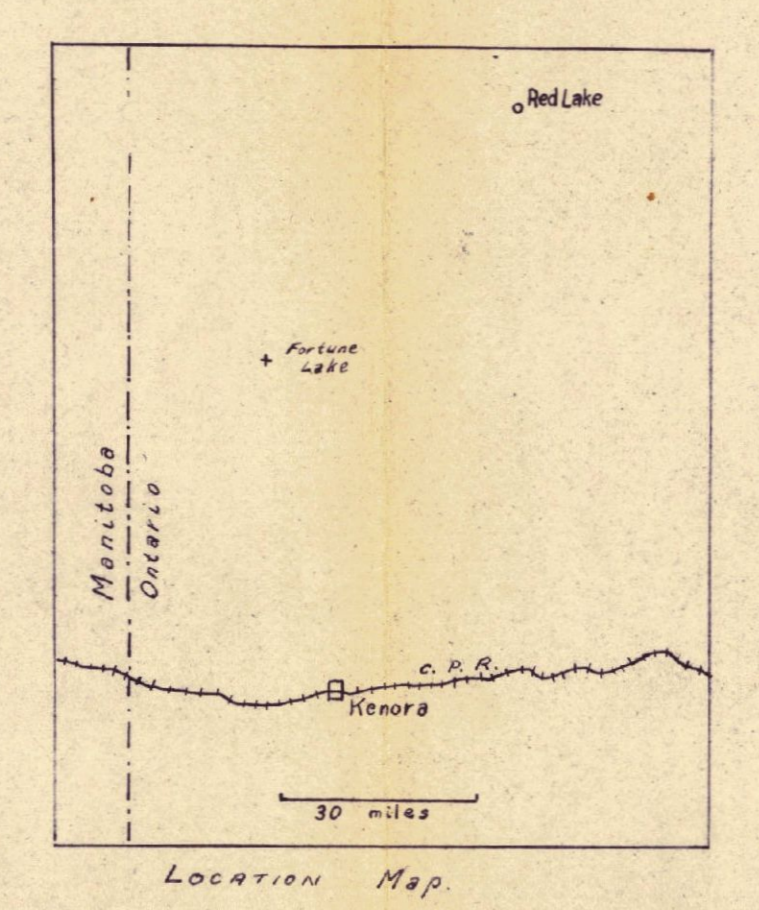


LEGEND

- Claim posts.
- ⊥ Drill holes
- ⋈ Swamp
- Outcrops.
- Bedding & Gneissosity.

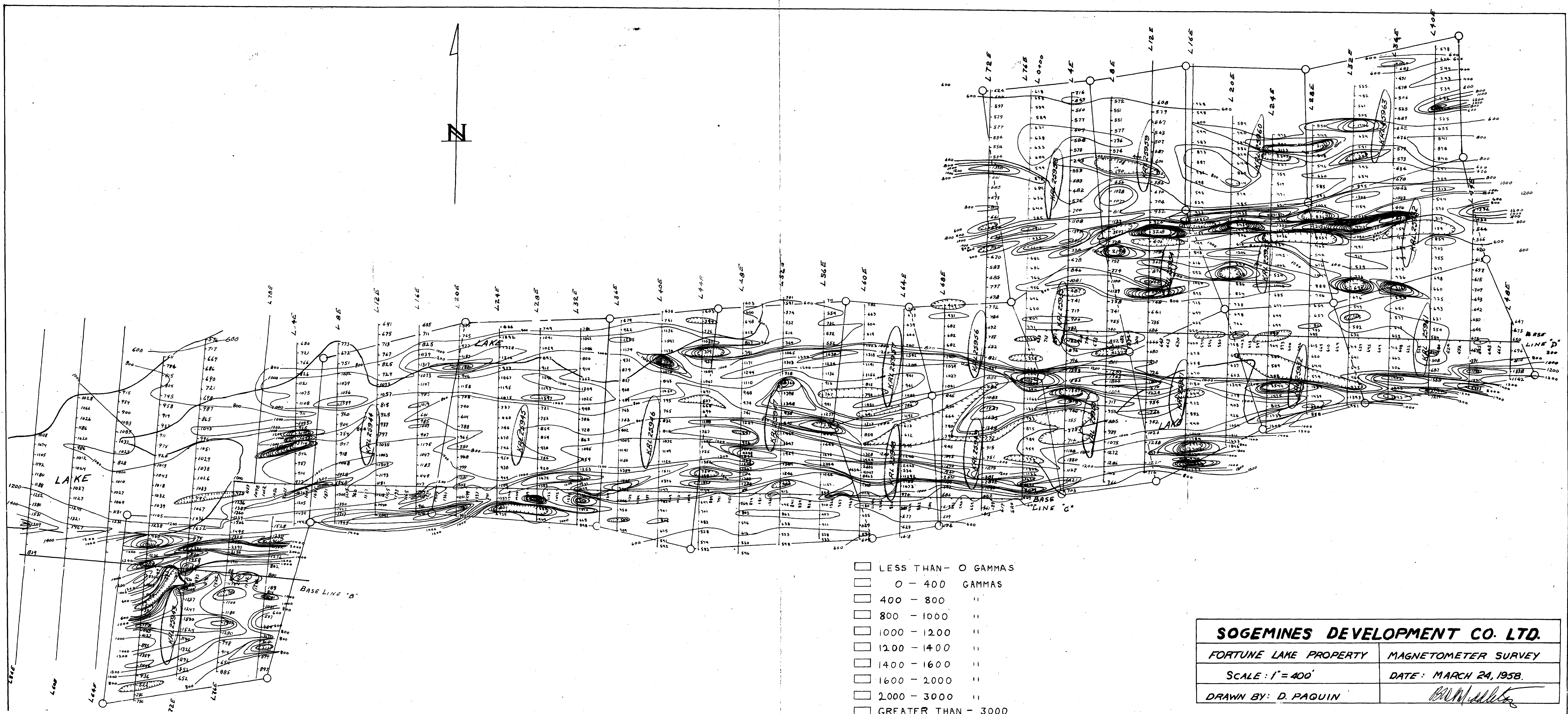
Bedrock throughout property varies from metamatised sediments through lit parlit injection gneissess to granitic gneiss, with contacts gradational.

- 1. 1 - mainly paragneiss.
- 2. 2 - " sediments.
- 3. 3 - " granitic gneiss.



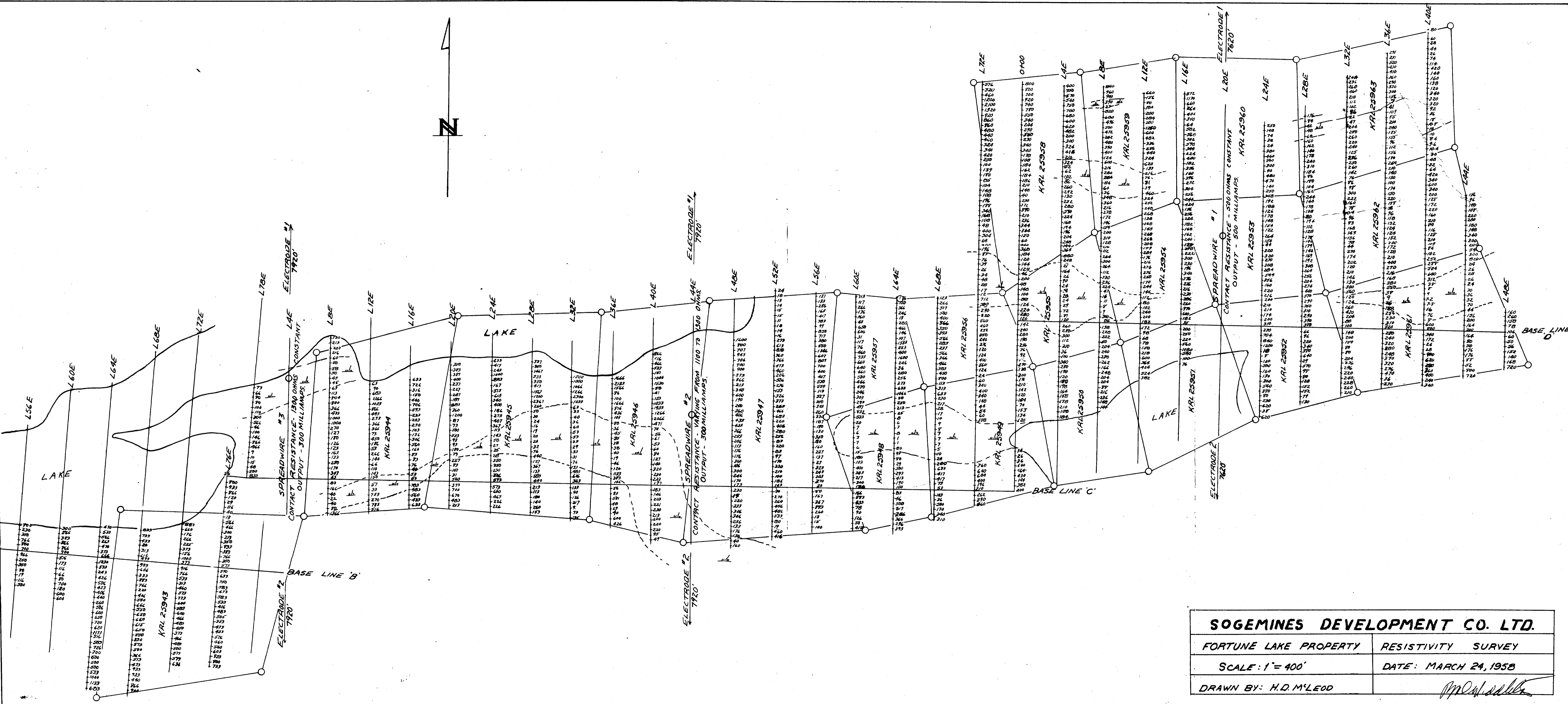
63.965

SO GEMINES DEVELOPMENT CO. LTD.	
FORTUNE LAKE PROPERTY	GEOLOGY AND DIAMOND DRILLING.
STRATMAT OPTION	DATE: MAY-JUNE 1958.
Scale 1 inch to 400 ft.	Geology by: P.W. Andrews. Drawn: P.W.A.



- LESS THAN - 0 GAMMAS
- 0 - 400 GAMMAS
- 400 - 800 "
- 800 - 1000 "
- 1000 - 1200 "
- 1200 - 1400 "
- 1400 - 1600 "
- 1600 - 2000 "
- 2000 - 3000 "
- GREATER THAN - 3000

SOGEMINES DEVELOPMENT CO. LTD.	
FORTUNE LAKE PROPERTY	MAGNETOMETER SURVEY
SCALE : 1" = 400'	DATE : MARCH 24, 1958.
DRAWN BY: D. PAQUIN	<i>[Signature]</i>



SOGEMINES DEVELOPMENT CO. LTD.	
FORTUNE LAKE PROPERTY	RESISTIVITY SURVEY
SCALE: 1" = 400'	DATE: MARCH 24, 1958
DRAWN BY: H.D. McLEOD	<i>[Signature]</i>