

1. Summary:

This report covers twenty-seven claims that form a part of a larger claim group situated mainly in Semple Township, District of Sudbury. The claim group overflows into Sothman Twp. in the south, a distance of one claim length.

The area is accessible both by road and by plane from South Porcupine, which is located about thirty-five miles to the north.

A geological and a magnetometer survey have been made on the area.

On only four of the twenty-seven claims examined was rock located in spite of the fact that traverses 200 ft. apart were made from picket lines cut every 400 ft.

These four claims are essentially composed of basic flows intruded by a macroscopically determined basic syenite and acid dikes. Little structure information could be ascertained from any of the rock exposures. Mineralization is very scanty, consisting of a little disseminated pyrite in the syenite and acid dikes. There is practically no evidence of hydrothermal action in the area covered by this report.

2. General:

The claims referred to in this report are part of a claim group located in the southern half of Semple Township and the north part of Sothman Twp., District of Sudbury.

The area, situated about 35 miles south of South Porcupine, is accessible by plane from Porcupine Lake to Parting Lake, the site of a permanent camp. It is also accessible by road from the Buffalo Ankerite Gold Mines, south to Parting Lake through McArthur, Bartlett and English Townships.

To facilitate referring to these claims, they have been allocated to groups as follows:

Group I - Claims S-56839, S-56838, S-56836, S-56835, S-56834, S-56833, S-56837.

Group II - Claims S-56822, S-56823, S-56821 S-55793

Group III - Claims S-56832, S-56833, S-56829, S-56828, S-56827.

Group IV - Claims S-56884, S-56894, S-56891, S-56895, S-56893, S-56892, S-56888, S-56887.

Group V - Claims S-56885, S-56886, S-56889, S-56890.

The purpose of staking Groups I, II, III, and of making the subsequent geological and magnetic surveys was to investigate a sudden "cut-off" of magnetic "highs" by an area of magnetic "lows". The trend of this postulated fault or acid intrusive contact, is northeast, and cuts all three of the above-mentioned groups.

The purpose of staking claim groups IV and V was to investigate a magnetically interpreted east-west fault zone through these groups.

A total of five weeks was spent by myself and an assistant on these claims, and a total of four weeks was spent by a crew of three men in making a magnetometer survey. Two prospectors spent two weeks probing the ground with "probing rods" in an

PARTING LAKE - SEMPLE GROUP I CONT'D - W. A. ROBINSON

effort to locate rock. Picket lines were cut every four hundred feet to facilitate the magnetic and geological surveys.

Topography:

Group I topography is for the most part, gently rolling with occasional high sand ridges on the two northern claims, S-56839, S-56838. Vegetation primarily consists of pine, spruce and balsam, the exception being claim S-56836 which is largely covered by tag alders, moose-maple and slash.

Group II is almost half covered by the north end of Parting Lake. The remaining area is covered by sand. Birch, spruce and balsam grow abundantly in this section.

Water covers about one-third of Group III. The topography is a rolling nature with fairly high sand country surrounding the enclosed lakes. Vegetation consists of birch, moose-maple and spruce and poplar.

Group IV, which straddles the Semple-Sothman Township line, is about one-quarter covered by water and swamp. The topography is gently rolling. Birch, spruce and poplar are predominate north of the township line while the two claims south of the township line are covered by spruce, moose-maple and slash.

Group V, which also straddles the Semple- Sothman Twp. line, is generally rolling and sandy. The south section of claims S-56889 and S-56890 however is covered by a spruce and cedar swamp.

Description of Formations:

No rock exposures were located in Groups I, II, III or IV, nor could any rock be found by using a five foot "probing rod". However, there is a possibility that the dacite flows and dacite agglomerate which outcrop about 900 ft. southeast of claim S-56887 extend north into Group IV.

A considerable number of rock exposures were located in claims S-56885 and S-56886 of group V. Considerably less rock was found on the two southerly claims S-56889 and S-56890.

Algonian:

Acid dikes: These dikes usually not more than ten feet in width, are fairly common in the area. They have a nearly vertical dip but have no common direction of strike. All are light colored and very siliceous.

Syenite:

Two fairly large plugs of macroscopically determined syenite were located in claims S-56885 and S-56886. This rock, which appears to be a basic syenite, is light weathering, dark colored with very distinct orthoclase crystals.

Keewatin:

Andesite:

This rock is widely scattered throughout Group V but no information regarding its structure can be ascertained from exposures in this group.

Quartz Amphibolite

A few outcrops of macroscopically determined amphibolite are found in Group V. This rock is dark green, dense and often contains small blue quartz eyes. Although the amphibolites have been classified temporarily as a metamorphosed lava,

PARTING LAKE - SEAPLE GROUP I CONT'D. - W.A. ROBINSON

there is some doubt now as to whether they may be a facies of granophyr gabbro. This sections of this rock type are now being made and studied.

Structural Features:

Beyond the fact that the basic flows are intruded by a basic syenite, little information is known of the rock structure in this area. However the andesites to the west of this claim group vary in strike from north-west to east of north.

Mineralization:

Mineralization observed in the claim group was scanty with little evidence of any hydrothermal action.

Both the andesites and the amphibolite were often found to be magnetic. Small amounts of disseminated pyrite were noted in the syenite and acid dikes.

/IT:

'W. A. Robinson'

W. A. Robinson



41P14SE0359 63.266 SOTHMAN

020

SEMPLE TOWNSHIP CLAIMS

APPENDIX A

INTERPRETATION

This claim block is broken into three main areas which are interesting from the magnetic point of view. Outside of these three major anomaly zones the magnetic data is extremely uniform and interpretation of structure is virtually useless.

The first anomaly zone - the "Crescent" anomaly - is centered about Serpentine Lake. Here an anomaly showing some 13,000 gamma magnetic relief indicates the presence of a body high in magnetite content. Surface exposures and diamond drilling indicate that the anomaly is caused by an ultrabasic intrusive, peridotite. It is believed that this intrusive was probably conformable to the lava series in the area, and its present shape is due to folding of the entire series. There is some geologic evidence that the anomaly represents an anticline plunging to the east, although magnetic evidence for such a statement is extremely weak. The broadening of the contours in claims 5-55788 and 5-55789 might be construed as indicating an easterly plunge.

The second anomaly area centered about Little Bear Lake is composed of two bands of high magnetic intensity. Surface outcrops indicate the presence of serpentized peridotite along the anomalous bands. An inlier of dioritic andesite in the southern anomalous band shows a one to one correspondence with a magnetic low breaking into the highly anomalous band. The peridotite appears to have been intrusive into the lavas possibly in part conformably, but for the most part it appears to cut across the lavas at right angles. It is believed that the arcuate trend of the southernmost anomaly zone west of Little Bear Lake indicates the trend of the lavas in that section, while a much smaller anomaly in claim 5-55774 indicates the regional trend in that area.

The third anomaly area, southeast of Toby's Lake is believed due to a series of multiple intrusions into the lava series. The magnetic anomalies in this region are much less intense than those encountered elsewhere on the property. The major structural feature here, is an east - west trending fault, which is indicated by surface exposures, and the discontinuity of magnetic anomalies.

There is some slight magnetic evidence for a fault between the south end of Parting Lake and the south end of Cork Screw Lake in the southwest corner of the map area. Certain magnetic trends appear to be offset, the movement being west side south about 400 feet.

The northern section of the claim group contains the western ends of two magnetic anomalies, which have been interpreted as basic intrusives.

Sample Two. - Group I Claims - Appendix A cont'd

No surface exposures are available in this region, with the result that definite answers to the cause of the anomalies are lacking. In addition, the magnetic data available is not sufficient to completely detail these anomalies.

The remainder of the property is characterized by amazingly uniform magnetic intensities, thus an interpretation of these areas cannot be made. It is believed however that the underlying rocks are probably uniform flows.

J. H. MATCLIFFE

/dc

DOMINIONREPORT ON GROUND MAGNETOMETER SURVEYSEMPLER TOWNSHIP CLAIMS GROUP ISUDBURY MINING DIVISIONPROVINCE OF ONTARIO

A group of 129 claims was staked in Semple and Sothman Townships for the purpose of investigating in detail structural conditions interpreted from an aeromagnetic survey performed by the Dominion Gulf Company in 1949. Of these 129 claims, only 127 were covered by the survey here described.

The ground magnetometer survey was required to provide detail as necessary for additional structural features beyond those directly obtainable from the observed geology.

The ground magnetometer survey was performed over a period of time by various members of the Dominion Gulf Company Geophysical Section under the supervision of Mr. B. M. Middleton, a member of our geophysical staff.

Measurements were made at intervals of 100 feet along profiles spaced 400 feet apart. Additional readings were made and extra lines were cut where severe gradients or anomalies were encountered. A total of 2347 observations were made along 127 miles of profile. Schmidt Balance type Askania magnetometers were used in making these measurements. The sensitivity settings of the instruments were approximately 25 gammas per scale division.

A contoured map of the magnetometer data was prepared in the offices of the Dominion Gulf Company. The scale of this map is 400 feet per inch and it will be used with the geological map of the area to:

- (a) Outline the boundaries of the peridotite bodies.
- (b) Aid in delineating cross folds and faults which may be of interest as controls for re-deposition.

A considerable amount of drilling has been done on the major peridotite body, and more is planned in this and other areas of cross faulting.

D. J. Torrens

D. J. Torrens.

/IT:

26,000 N

24,000 N

22,000 N



200

8,000 E

10,000 E

12,000 E

14,000 E

16,000 E

DOMINION GULF COMPANY

TOPOGRAPHY

SEMPLÉ TWP. CLAIMS-GRP. I

SEMPLÉ TWP. PROVINCE OF ONTARIO

SCALE : 1" = 400' FEB. 5, 1952.

NOTE : NO OUTCROPS REPORTED IN THIS AREA.

26,000

8,000

10,000

12,000

14,000

16,000

24,000

22,000

NORTH TIE LINE

TREMBLAY LAKE

MAKKANEN LAKE

BROATHEN LAKE

ANY LAKE

Gabbro



210

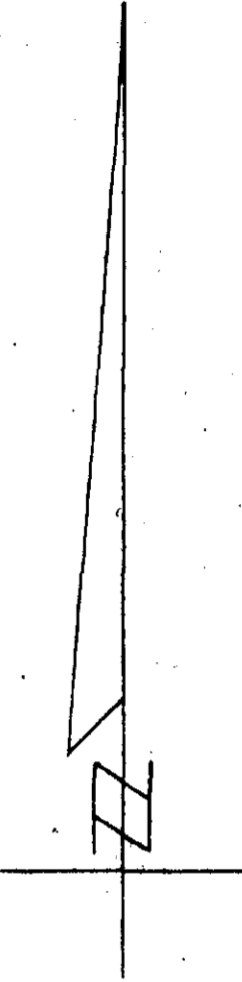
S-56624

S-56623

S-56622

S-56621

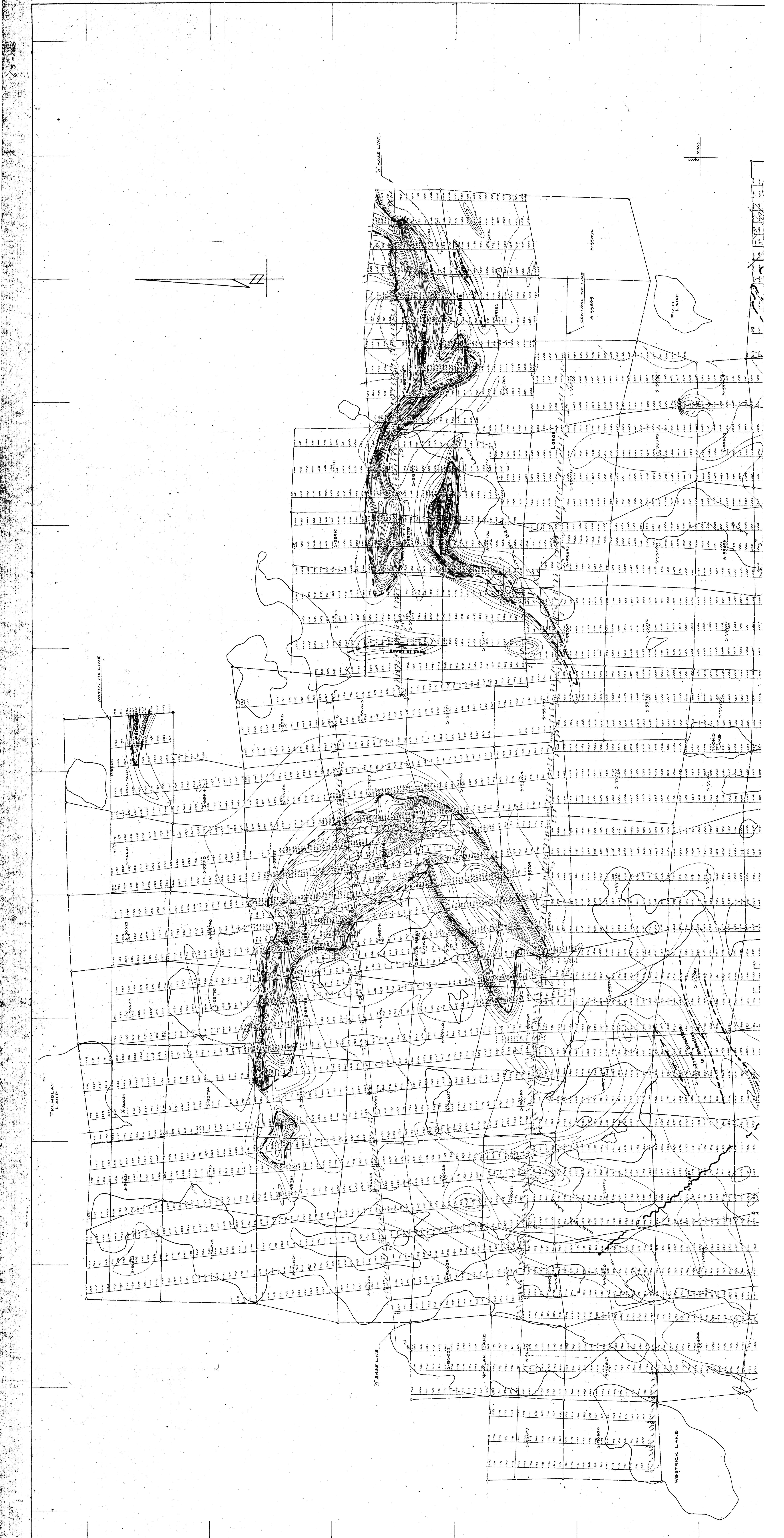
S-56627



LEGEND

Interpreted contact

DOMINION GULF COMPANY
 GROUND MAGNETOMETER SURVEY
 SEMPLE TWP. CLAIMS
 GROUP I
 SEMPLE TWP. - PROVINCE OF ONTARIO
 SCALE: 1"=400' SEPT. 6, 1951
 SHEET No 2



NORTH TIE LINE

5 BASE LINE

CENTRAL TIE LINE

TREMBLAY LAKE

FISH LAKE

WOODS LAKE

WESTRICK LAKE

SHIMO LAKE

DEANS NEST LAKE

2000

2000

4000

4000

4000

4000

