

July 27th/1951.

63. 260

ZAVITZ-HUTT, GROUP I.

NORTHWEST GOMGANDA - 42A/3S:

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1. Introduction:

The purpose of the investigation was to determine the cause and economic implications of certain anomalous areas in the Keewatin lavas, and to generally map and prospect the claim group.

The Zavitz-Hutt boundary line was cleared out and used as a base line. Picket lines were turned off of this at 400' intervals and driven the length of the property. These were used to tie in all outcrops and topography.

2. Location, Means of Access, etc.

The group consists of 26 claims situated in N.E. Hutt and S.E. Zavits Townships, 19 of the group being in the latter township. A camp-site was selected on Moray Lake, at the north boundary of the group.

The only convenient means of access is by air, and Moray Lake is suitable for small aircraft with light loads. Heavier equipment would have to be moved by Austin Lake, situated about 1 mile N.E. of the property.

3. Summary; Conclusions; Recommendations.

The area mapped consists almost entirely of slightly sheared and locally mineralized acid volcanics. These are intruded by a few small masses of peridotite, gabbro, diorite, and diabase. The shearing is fairly consistent, being vertical, and having NW-SE strike. Mineralization consists chiefly of pyrite, locally coarse, and disseminated pyrrhotite, locally occurring as blotches. A few small stringers of asbestos occur in the peridotites. From the geological evidence observed in outcrops, and negative values obtained from sampling the best mineralization, there does not appear to be much indication of an economical ore deposit at present.

4. Rock Formations:

Keweenawan: Diabase Dike

Algoman: Diorite Porphyry

Haileyburian (?): Peridotite - Gabbro - Diorite.

ASSESSMENT REPORT - ZAVITZ-HUTT - NW GOMGANDA CONT'D. JULY 27/51

Rock formations cont'd.

Kewatin: Rhyolite and Rhyolite Breccia
Dacite
Andesite.

KBEWATIN

Andesite:

The andesites are generally dark green, dense, amygdaloidal, and fairly hard. In the southwest part of the group, the andesites appear to have been altered by the adjacent peridotite intrusive. The alteration has made the rock magnetic. One outcrop of fragmental andesite with fragments up to $\frac{1}{2}$ " was found on the extreme eastern end of Base Line #1. The fragments are both lighter and darker in colour than the groundmass.

Dacite:

About 50 percent of the rock on the group was mapped as dacite, and ranges in colour from light grey green to medium green. It is hard, mostly dense, locally amygdaloidal and fragmental with fragments up to $\frac{1}{2}$ ". The fragments are lighter in colour than the groundmass. One outcrop of flow top on the extreme southern of line 116W indicates a strike of 125°. Two other outcrops at 126 + 00W; 12 + 00N; and 51 + 00W, 26 + 00N have pillows striking 130° and 135° respectively. Another outcrop at 22 + 00W, and 8 + 00N of Base Line #2 has pillows striking 35°. Tops are undeterminable, although there is a slight indication of tops facing north on the pillows striking N.W.

Rhyolite:

The rhyolites are hard, silicious, dense, ranging from light grey to dark. A few outcrops of rhyolite breccia located at 66 + 00W, and 29 + 00N have a slightly graphitic matrix. On the west side of one of these outcrops the rhyolite is black probably due to the nearby peridotite.

HAILEYBURIAN

Diorite:

The rock mapped as diorite is characterized by slender hornblende crystals, and located on the shore of Moray Lake.

Gabbro:

Most of the gabbro on the property is dioritic gabbro, except for the outcrop 8 + 00N of Base Line #2, and 30 + 00W which tends to be of the pyroxenite gabbro type. A two foot wide lamprophyre dike striking 140° was found cutting the gabbro at 14 + 50N and 107 + 00W. It was characterized by fine biotite flakes and small cubes of pyrite.

Peridotite:

The peridotites range from fairly hard, black, dense and unaltered to soft, dark green, medium-grained and serpentized. The peridotites all weather grey and no bleaching was noted from fractures; except the outcrops on the point of Moray Lake where there was some bleaching out from cracks where a little fibre was present. Small stringers of asbestos up to $\frac{1}{8}$ " were seen on the shore of Moray Lake, and on the east shore of Luke Lake. These also contained picrolite and stringers of what appears to be talc. The outcrop at 11 + 50N on line 108W was characterized by numerous fibrous talc stringers, and the peridotite at 14 + 00N and 107 " 00W contained numerous carbonate stringers. Picrolite was observed in the peridotite at 81 + 00W and 10 + 00S.

ASSESSMENT REPORT - ZAVITS-HUT - NW GOMGANDA CONT'D. JULY 27/51

ALGOMAN

Diorite Porphyry:

This rock mapped on Moray Lake is characterized by its rounded and angular fragments that range from a fraction of an inch to six inches. The fragments and groundmass are dark grey and appear to have the same composition. Both also contain phenocrysts of white feldspar. This may be a porphyritic phase of the acid intrusives.

KEWEENAWAN

Diabase Dike:

This rock is the Keweenawan type of diabase having a N W strike.

STRUCTURE:

A few scattered outcrops show pillows striking NW - SE with tops showing a slight indication of facing north. The general picture of the shearing is also NW - SE, dipping steeply to the south or vertical. Adjacent to and north of the mineralized area at 9 + 00N of Base Line #2 and 30 + 00W another set of shearing in dacites strike 70° dipping 80° south. About 800 Feet east of there, pillows were found striking 30°. This change in structure might have been caused by the basic intrusive there, but there is insufficient evidence to build up any local important structural picture.

Mineralization:

A few stringers of asbestos were seen in the peridotites in Moray Lake, and on the east shore of Luke Lake.

Pyrrhotite blotches were found at 8 + 50N of Base Line #2 and 30 + 00W in rusty rhyolite breccia. Stripping was done here uncovering a number of scattered quartz stringers containing very coarse pyrite mixed with pyrrhotite. No values were obtained on assays for gold and silver. A soft grey mineral occurring as specks throughout the outcrop area has been identified as altered biotite by Swastika Laboratories. Fine disseminated pyrrhotite occurs locally in the surrounding dacites.

Also stripped was an area 800 feet east of Provins Pond. Pyrrhotite was seen in rhyolite breccia as blotches and fragments up to one inch. A positive nickel test was obtained with the standard chemical kit, and a sample sent for assay. The value has not been received yet. At the south tip of a small outcrop here fragments of massive graphite occur.

Immediately north of Base Line #1, between lines 92W and 84W the ground has been worked over before. An old test pit was found. Most of the mineralization was pyrite with a little fine disseminated pyrrhotite, and occurring in rusty dark rhyolite.

/IT:
Att. 1 Map.

'W. Rainboth'

Approved: _____

'J. P. Nowlan'



DOMINION GULF COMPANY

REPORT OF GROUND MAGNETIC SURVEY - ZAVITZ-HUTT CLAIMS.

SUDBURY MINING DIVISION, ONT.

INTRODUCTION

A group of 26 claims were staked in Zavitz-Hutt Township covering an area of complex aeromagnetics in this vicinity.

The reconnaissance geological survey indicated several outcrops carrying significant amounts of pyrrhotite, pyrite and chalcopyrite. The available outcrops were too few and scattered to permit the development of a structural analysis of the claims. A detailed ground magnetic survey was undertaken with the expectation that it would assist in extending the known geological data, and in developing a structural map of the claims.

The survey was carried out by a Dominion Gulf magnetometer party under the supervision of Mr. B. M. Middleton, geologist - geophysicist. The magnetic party consisted of Mr. R. Hodgins & Mr. R. McDonald.

The survey was started on Aug. 22, 1951 and completed on Sept. 25th, 1951.

The measurements were made with an Askania magnetometer of the Schmidt balance type with a sensitivity setting of approximately 25 gammas per scale division. 1996 Stations were observed at intervals of 100 feet on lines spaced 400 feet apart. Magnetic detail was added by filling in with profiles at 200 foot intervals and with stations at 50 ft. intervals along these detail profiles. Stations were observed along 32 miles of profile.

Pertinent data on survey is as follows:

- (a) Line Cutters:
 - W. Rainboth
 - D. Sprague
 - P. Lariviere
 - Ole Eliason
 - Leo Potila
- (b) Magnetometer Operators:
 - R. Hodgins, Operator
 - R. McDonald, Helper.

REPORT OF GROUND MAGNETIC SURVEY - ZAVITZ HUTT CLAIMS CONT'D. - Oct. 1951.

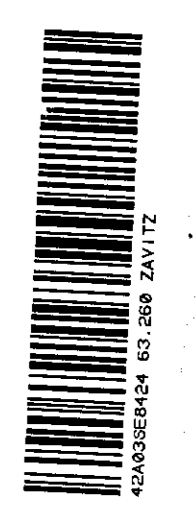
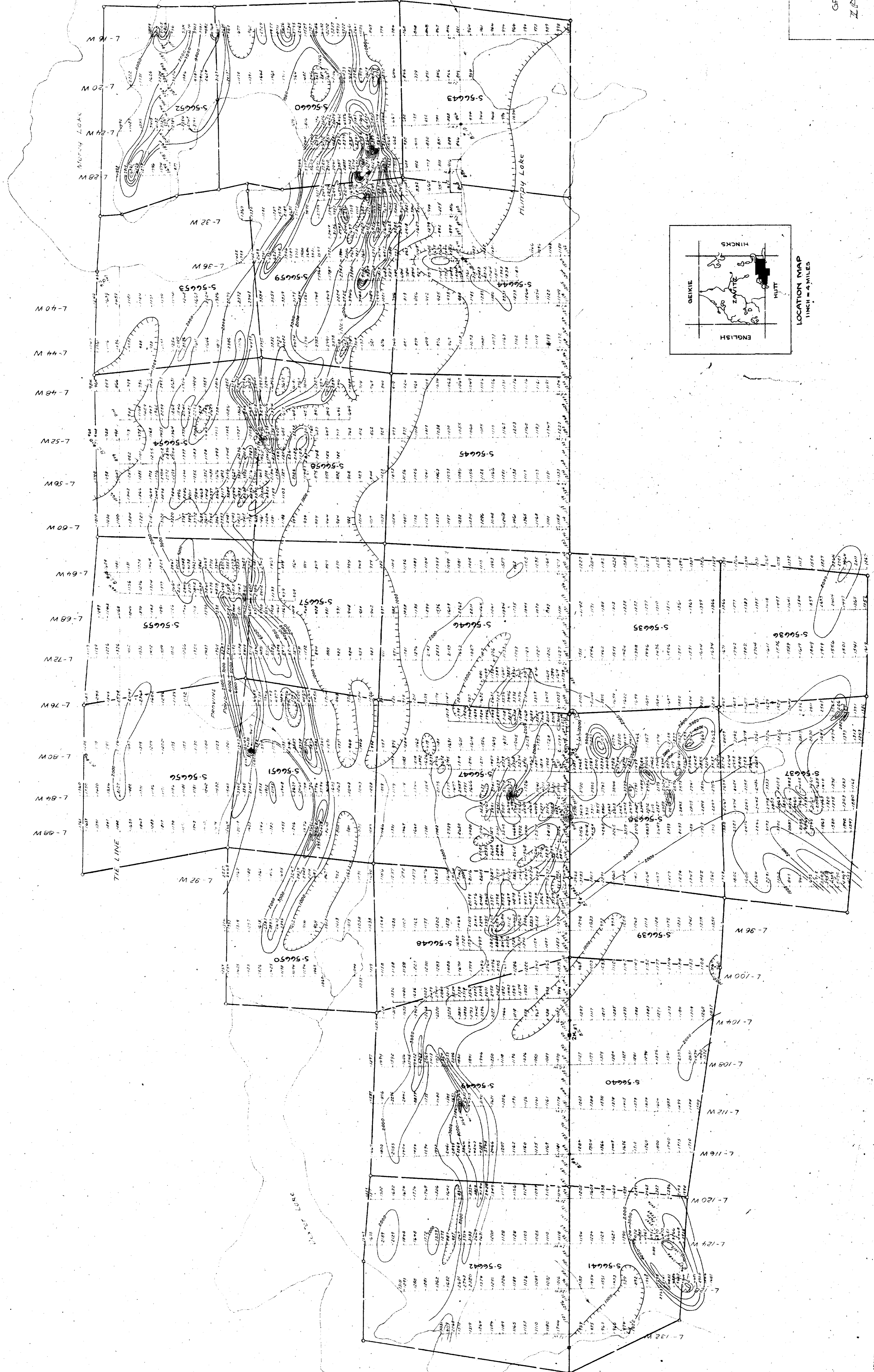
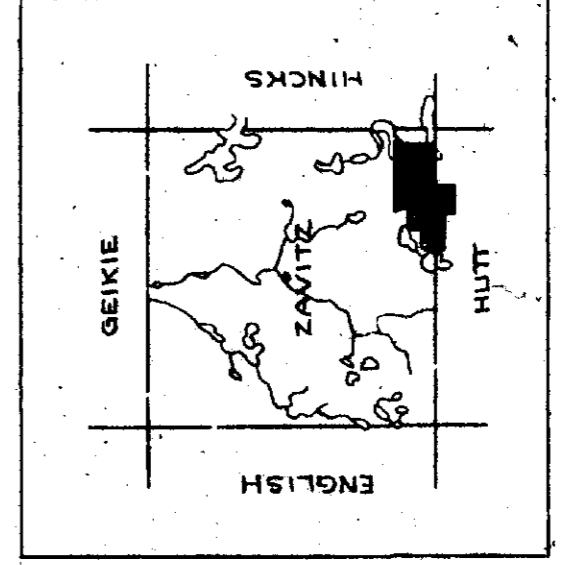
- (c) Supervised by B. M. Middleton - Dominion Gulf Co.
- (d) Draftsman - Don Lewis.

The magnetic data assisted materially in defining the band of peridotites striking east-west across the northern part of the claim group. Another zone of high magnetics is interpreted as going eastward from Dexter Lake, about three quarters of a mile, and then breaking southward off the claim group.

EWJ/IT:

'E. W. Westrick'

DOMINION GULF COMPANY
 GROUND MAGNETOMETER SURVEY
 ZAVITZ - HULL TWP. CLAIMS
 GROUP I
 ZAVITZ 4 HULL TWPS. - PROV. OF ONT.
 SCALE: 1" = 400' DATE: OCT. 12, 1951.
 CONTOUR INTERVAL: 1000 GAMMA





LEGEND

- KEWEENAW
- DIABASE
- ALGOMAN
- Diorite Porphyry
- HAILEYBURIAN
- Pentotite
- Gabbro (Gbl.) Diorite (Dior)
- KEEWATIN
- Rhyolite (Rhy) & Rhyolite Breccia, Dacite (Da)
- Andesite

DOMINION GULF COMPANY
 GEOLOGY
ZAVITZ - HILL TWP. CLAIMS
 GROUP I
 ZAVITZ HILL TWP. - PROV. OF ONT.
 SCALE: 1" = 400' DATE: JULY 27/51.

