

#### REPORT ON

# MAGNETOMETER AND EM SURVEYS

CLAIMS P-58174-91

# PROSSER AND TULLY TOWNSHIPS, ONT.

#### PORCUPINE MINING DIVISION

#### Property

This is a contiguous group of eighteen claims, of which four are in Prosser township and the remainder in Tully, all in Concessions III and IV. Total area is 720 acres. A winter road passes through the north part of the property, and originates at the High Falls road in Little township. Otherwise the only convenient access to the property is by helicopter from Timmins sirport, a distance of 14 miles, landing on the winter road.

# Geology

There is an area of several small rock outcrops on Claims P-58182-5 in the south-central part of the property. Host of them are of chlorite schist, striking N 70° E, dipping vertically, and a schist zone at least 400 feet wide is indicated. South of it are several small outcrops of fairly massive gabbre. The remainder of the property is clearly cedar swamp.

# Exploration

#### Linecutting

A baseline bearing due east was cut on the centre line of Concession III, which line is also the north boundary of Claims P-58174 to P-58179. The lines also bearing due east were cut along the north and south boundaries of the property. Picket lines were cut at 400-foot intervals bearing due north

and south over the entire property. Line cut totalled 20.4 miles.

# Magnetometer Survey

Magnetoweter resdings by Askania were taken at 100-foot intervals on the picket lines. Magnetic relief varied up to 4,700 games, the anomalous areas being of irregular shape and at scattered locations on the property.

#### EM Survey

The FM survey was carried out using a Sharpe SE-200 instrument by the broadside technique.

This instrument consists of a bettery-powered coil of vire 18 inches in diameter, the transmitter, developing an alternating current of 1,250 cps. and a second 18-inch coil of vire, the receiver, equipped with earphones and a clinometer by which the tilt plane of the coil may be measured. In operation, one man carrying the transmitter walks along a picket line stopping at every station to transmit a signal to the receiver. When transmitting, the coil is held in a vertical plane pointed at the receiver. The man operating the receiving coil walks along a picket line 400 feet away from, and exactly opposite the transmitter. To take a reading the receiver coil is held in a horizontal plane and then rotated in either direction from the horizontal until in the earphones a noticeable increase in the sound signal is heard. the angle of inclination of the coil from the horisontal at these two positions is noted, and the mean of the two angles is the null angle, or point of minimum signal strength. This is the parameter which is measured. If the magnetic field act up by the transmitter is not distorted by a conductive body in its vicinity, the null angle will be zero. If there is a conductive body lying below surface between the conductor and the receiver and at a

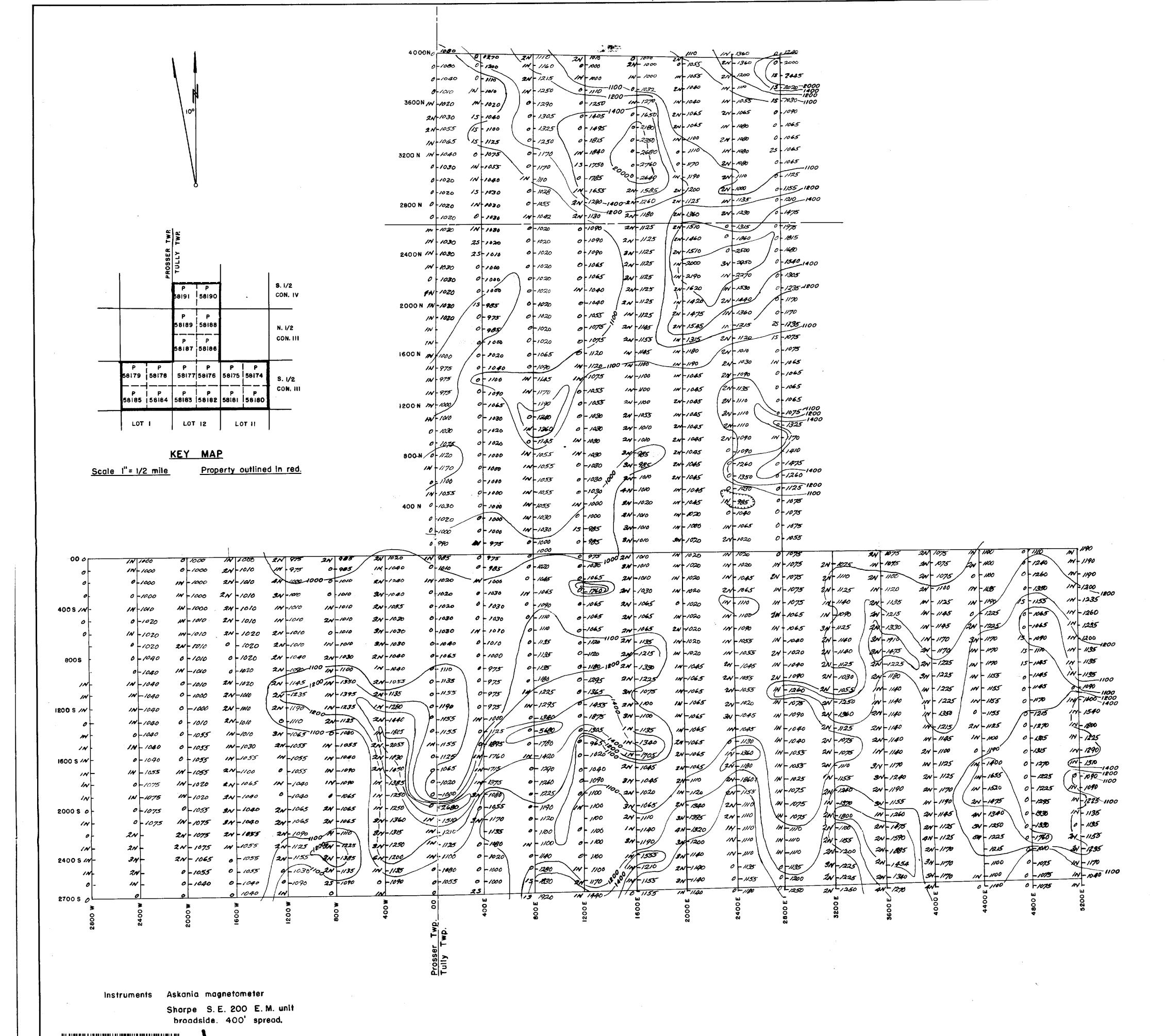
depth detectible by the instrument (normally half their distance apart or 200 feet), the null angle will be deflected away from the conductor on either side of it and zero directly over it. Conductors are thus delineated by zero angles lying between angles of opposite distortion, and the total amplitude of the distortion ("peak-to-peak" angle) is a rough measure of the strength of the conductor.

In this survey readings were taken at 100-foot intervals on the picket lines. Dip angles of up to six degrees were noted in the course of the survey, but in no case was there a distinct crossover of any consequence, and it must be concluded that neither the magnetometer nor the EM survey located a target considered worthy of further exploration.

PHILIP ECKNAN

Milip Eckman

Toronto, March 18, 1965



THE PATINO MINING CORPORATION

# MAGNETOMETER & E.M. SURVEY

CLAIMS P58174-91 PROSSER & TULLY TWPS.

ONTARIO

Scale 1" = 200'

Date Nov. 20, 1964

Mily Eckman