



SUMMARY

During February 1967, we carried out an electromagnetic survey on part of a claim group in Macklem Township, for Gaspe Park Mines Limited. The property is located east of Night Hawk Lake, approximately one mile south of Highway 101 and 20 miles east of the town of Timmins.

The survey was made to investigate a gold-bearing carbonate-serpentine zone where previous work (diamond drilling and underground development) suggested a close association of gold values and heavy sulphides. Such mineralization would respond to electromagnetic methods providing the zones had sufficient size and continuity.

One moderate and two very weak conductors were located by the survey. Diamond drilling is recommended.

METHOD

Line cutting at 200 foot intervals was carried out by contractors for the company, off a baseline 6800 feet long.

The Turam method was used to carry out the survey. This is a fixed source electromagnetic method which uses a long grounded cable or large rectangular loop as an energizing source. Alternating current is supplied to the primary layout from a motor generator. The resultant field is measured with the use of two receiver coils connected to a compensator-amplifier unit. The field strength ratios and phase differences are measured for successive intervals perpendicular to the primary layout and are plotted as profiles on the accompanying map. Field strength ratios are expressed as percentage change from an undisturbed primary field and phase differences are plotted in degrees. A frequency of 220 c.p.s. was used for the survey.

Magnetic measurements were made with an ABEM MZ-4 vertical force torsion magnetometer with a scale constant 10.7 gammas. Corrections were made for diurnal variation by repeating base points at regular intervals.

#### RESULTS

One, low amplitude, good conductivity zone was located on two traverses, lines 6W and 8W. Two weak indications were noted, on lines 22 West and 26 East. A minimal response was also obtained at the old Aquarius shaft.

The magnetic profiles indicate a high intensity area on the north half of the grid, likely caused by the serpentinized peridotite encountered in the drilling. The high magnetic relief to the north of the shaft suggests concentrations of magnetite.

#### CONCLUSIONS AND RECOMMENDATIONS

The conductor on 8W - 6W is on strike with a rhyolite-andesite contact, as indicated in previous drilling.

The conductor on 22W is close to a drilled intersection where interesting gold values were obtained in a sulphide zone over a width of 12.7 feet.

The conductor on 26E is on strike with the main shear zone.

The following holes are recommended:-

Line 8 West - 500 south - drill grid north at 55° for 400 feet.

Line 22 West - 225 north - drill grid north at 55° for 300 feet.

Line 26 East - baseline - drill grid north at 55° for 400 feet.

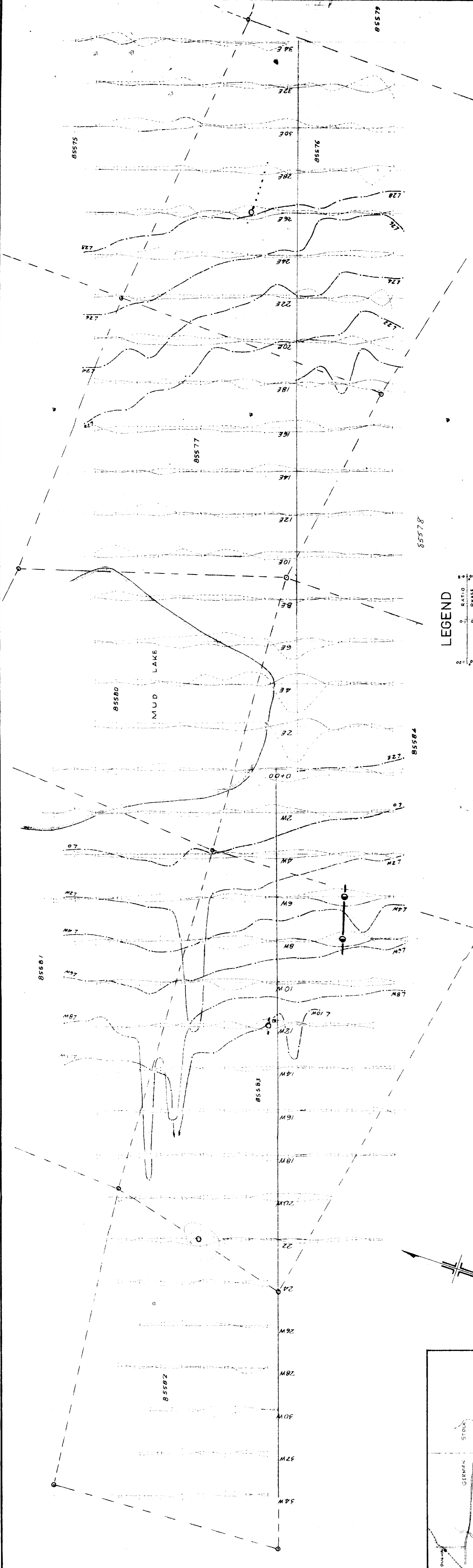
Respectfully submitted,

*F. Scott per Eng Moreau P. Eng.*

Fenton Scott, P. Eng.,  
Moreau, Woodard & Company Ltd.

FS/cm

TURAM ELECTROMAGNETIC SURVEY  
 BY  
 MOREAU, WOODWARD & COMPANY LTD.  
 FOR  
**GASPE PARK MINES LIMITED.**  
 ON THE  
 MACKLEM TOWNSHIP PROPERTY,  
 NIGHT-HAWK LAKE AREA.  
 DRAWN BY *[Signature]*  
 DATE *[Date]* Scale 1 in = 200 ft



**LEGEND**

