



SUMMARY

EIGHT CONDUCTORS AND A BROAD MAGNETIC HIGH WERE LOCATED.

CONDUCTORS C AND E ARE PROBABLY CAUSED BY CONDUCTIVE CLAYS UNDER A SWAMP.

CONDUCTORS A, B, AND D ARE WEAK FEATURES PROBABLY DUE TO SLIGHTLY CONDUCTIVE SHEARS OR ROCK CONTACTS.

CONDUCTOR F IS STRONG, DEFINITE, AND CORRELATES WITH A MAGNETIC HIGH.

CONDUCTORS G AND H ARE INDEFINITE AND NON-MAGNETIC.

A MAGNETIC HIGH EXTENDS IN BOTH STRIKE DIRECTIONS FROM A KNOWN NICKEL-COPPER SHOWING ON LINE O.

TWO DRILL HOLES ARE PROPOSED TO TEST CONDUCTOR F AND THE SHOWING AREA.

INTRODUCTION

THE CLAIMS WERE OPTIONED BY AGENA MINING BECAUSE OF THE KNOWN NICKEL-COPPER SHOWING IN A FAVORABLE GABBRO SETTING.

LINES WERE CUT ACROSS THE CLAIMS AND AN ELECTROMAGNETIC AND A MAGNETIC SURVEY WERE CARRIED OUT.

THE RESULTS ARE SHOWN ON THE ACCOMPANYING MAP.

CLAIM DETAILS

THE PROPERTY IS MADE UP OF 5 CLAIMS, NUMBERED K 38963 TO K 38967, AND REGISTERED IN THE KENORA MINING DIVISION. THEY ARE HELD UNDER OPTION BY AGENA MINING COMPANY LIMITED FROM A. GLATZ OF DRYDEN, ONTARIO.

PREVIOUS WORK

PRESTON EAST DOME GOLD MINES LTD. DID 959 FEET OF DRILLING ON A SHOWING IN THE NORTHWEST CORNER OF CLAIM K 38963. NO INTERESTING COPPER OR NICKEL VALUES WERE INTERSECTED. THE SHOWING IS A REPLACEMENT DEPOSIT OF CHALCOPYRITE AND PYRRHOTITE IN FRACTURES OR SHEARS IN GABBRO, AND THE DRILL RESULTS SUGGEST THAT IT IS SMALL. THE WORK WAS DONE IN 1956.

A MAGNETIC HIGH OCCURS IN THE OLD TRENCHES, BUT FADES OUT WITHIN A FEW FEET FROM THE WORKINGS. NO REGIONAL HIGH OCCURS. A WEAK CONDUCTOR LIES ON STRIKE TO THE EAST. NO CONDUCTIVITY WAS FOUND IN THE TRENCH AREA.

NO OLD LINES WERE SEEN ON THE CLAIMS, AND NO OTHER WORK IS KNOWN TO HAVE BEEN DONE.

DISCUSSION OF GEOPHYSICAL RESULTS

THE SHOWING OCCURS WITHIN A MAGNETIC HIGH WHICH IS ABOUT 1800 FEET LONG. THE EM WORK SUGGESTS SOME WEAK CONDUCTIVITY IN ASSOCIATION WITH THIS HIGH. THE PROFILES, HOWEVER, ARE VAGUE ABOUT THIS BECAUSE OF THE MASKING EFFECT OF THE VERY STRONG CONDUCTOR E TO THE NORTH.

IN ANY CASE, THE MAGNETIC HIGH SUGGESTS THAT THERE MAY BE IMPORTANT DIMENSIONS TO THE MINERALIZATION, AND IT IS WORTH DRILLING ON THIS EVIDENCE ALONE.

CONDUCTOR F IS STRONGLY CONDUCTIVE AND HAS A MAGNETIC CORRELATION, AND IS ALSO WELL WORTH DRILLING. IT PASSES OUT OF THE CLAIMS GOING EAST, BUT MORE CLAIMS IN THIS DIRECTION ARE HELD BY THE COMPANY.

CONDUCTORS C AND E ARE DUE TO HORIZONTAL CONDUCTIVITY, AND THERE IS LITTLE DOUBT THEY ARE DUE TO CONDUCTIVE CLAYS UNDER A SWAMP. THE CONDUCTORS COINCIDE CLOSELY WITH THE MARGINS OF THE SWAMP, AS SHOWN ON THE MAP.

CONDUCTORS A, B, AND D ARE WEAK FEATURES HAVING NO DIRECT MAGNETIC CORRELATIONS. IT IS THOUGHT THAT THEY ARE CAUSED BY SHEARING OR ROCK CONTACTS. SHOULD THE INITIAL DRILLING YIELD INTERESTING RESULTS, CONSIDERATION SHOULD BE GIVEN TO DRILLING THE WEST END OF CONDUCTOR C, IN THE AREA OF THE TWIN MAGNETIC HIGHS.

CONDUCTORS G AND H ARE ALSO WEAK FEATURES WITHOUT MAGNETIC CORRELATIONS. CONDUCTOR H IS GEOLOGICALLY OF INTEREST BECAUSE OF THE NEARBY SURFACE SHOWING DRILLED BY PRESTON EAST DOME. IT SHOULD BE CAREFULLY PROSPECTED AFTER THE SNOW GOES. CONDUCTOR G IS INDICATIVE, ALONG WITH THE MAGNETIC RESULTS, OF A CHANGE IN ROCK STRIKE IN THE SOUTH SECTION OF THE CLAIMS, BUT IT DOES NOT APPEAR TO HAVE ANY INTEREST IN ITSELF.

CONCLUSIONS

1. CONDUCTOR F AND THE MAGNETIC HIGH AT THE SHOWING ARE OF POSSIBLE ECONOMIC INTEREST.
2. THE OTHER CONDUCTORS AND MAGNETIC HIGHS, WITH THE POSSIBLE EXCEPTION OF THE WEST END OF CONDUCTOR C, ARE DEEMED TO HAVE NO IMPORTANCE.

RECOMMENDATIONS

1. TWO DRILL HOLES ARE PROPOSED, HAVING A TOTAL FOOTAGE OF 1000 FEET. THE COLLAR LOCATIONS ARE SHOWN ON THE MAP.

THE HOLE DETAILS ARE AS FOLLOWS:

	<u>LOCATION</u>	<u>DIRECTION</u>	<u>ANGLE</u>	<u>LENGTH</u>
<u>HOLE 1</u>	3N ON LINE 0	000° T	-50°	500 FEET
<u>HOLE 2</u>	450N ON LINE 12E	352° T	-50°	500 FEET

THE COST OF THIS DRILLING WOULD BE ABOUT \$6,000.

2. AFTER THE SNOW GOES, SOME CAREFUL PROSPECTING OF CONDUCTOR H, AND ALSO THE OTHER CONDUCTORS AND MAGNETIC FEATURES, SHOULD BE DONE.

THE COST OF THIS WORK WOULD BE ABOUT \$1,000.

TOTAL COST ESTIMATE = \$ 7,000.00



VANCOUVER, B.C.
JANUARY 12TH, 1967

ROSS KIDD
MINING ENGINEER

A P P E N D I X O N E

METHODS OF SURVEY

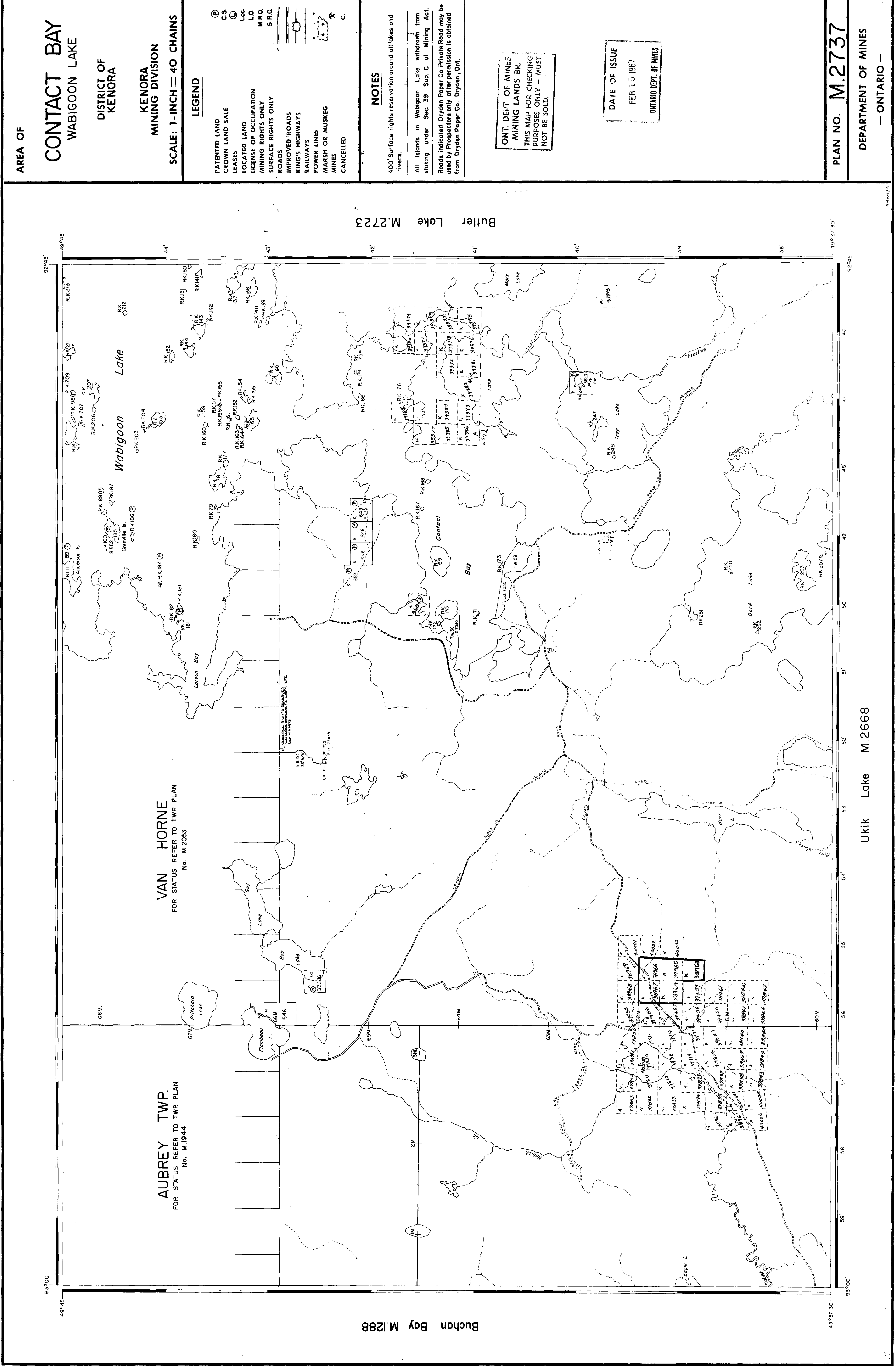
THE ELECTROMAGNETIC WORK WAS DONE WITH A RONKA EM 16 UNIT. THIS EQUIPMENT USES HORIZONTAL TRANSMISSIONS FROM NAVAL VLF BROADCAST STATIONS AS A PRIMARY FIELD. READINGS ARE TAKEN OF THE REAL AND QUADRATURE PHASES OF THE VERTICAL COMPONENT OF ANY SECONDARY FIELDS PRESENT.

THE ADVANTAGES OF THE UNIT ARE GREAT DEPTH PENETRATION AND EASE OF OPERATION. THE DISADVANTAGES ARE TOO HIGH A SENSITIVITY, GIVING RISE TO OVERBURDEN AND SHEAR ZONE CONDUCTORS, AND SOMETIMES POOR COUPLING BETWEEN THE TRANSMITTER STATION AND THE EXPECTED CONDUCTORS.

IN THIS SURVEY A TRANSMITTER STATION IN MAINE WAS USED, AND THE COUPLING WAS GOOD.

ONLY THE DIP ANGLE PROFILES ARE SHOWN ON THE MAP, BUT THE QUADRATURE RESPONSES CORROBORATE THE POSITIONS OF THE VARIOUS CONDUCTORS.

THE MAGNETIC READINGS WERE MADE ON A SHARPE MF-1 FLUXGATE MAGNETOMETER RECORDING THE VERTICAL COMPONENT OF THE EARTH'S MAGNETIC FIELD. THE MAGNETIC NORMAL IS TAKEN AS ABOUT 800 GAMMAS.



AREA OF
CONTACT BAY
WABIGON LAKE

DISTRICT OF
KENORA

KENORA
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

- LEGEND**
- ⊙ PATENTED LAND
 - CS. CROWN LAND SALE
 - ⊙ LEASES
 - ⊙ LOCATED LAND
 - ⊙ LICENSE OF OCCUPATION
 - ⊙ MINING RIGHTS ONLY
 - ⊙ SURFACE RIGHTS ONLY
 - ROADS
 - IMPROVED ROADS
 - KING'S HIGHWAYS
 - RAILWAYS
 - POWER LINES
 - MARSH OR MUSKEG
 - MINES
 - CANCELLED

NOTES

400' Surface rights reservation around all lakes and rivers.

All islands in Wabigon Lake withdrawn from staking under Sec. 39 Sub. C. of Mining Act.

Roads indicated Dryden Paper Co. Private Road may be used by Prospectors only after permission is obtained from Dryden Paper Co., Dryden, Ont.

ONT. DEPT. OF MINES
MINING LANDS BR.
THIS MAP FOR CHECKING
PURPOSES ONLY - MUST
NOT BE SOLD.

DATE OF ISSUE
FEB 13 1967
ONTARIO DEPT. OF MINES

PLAN NO. **M.2737**

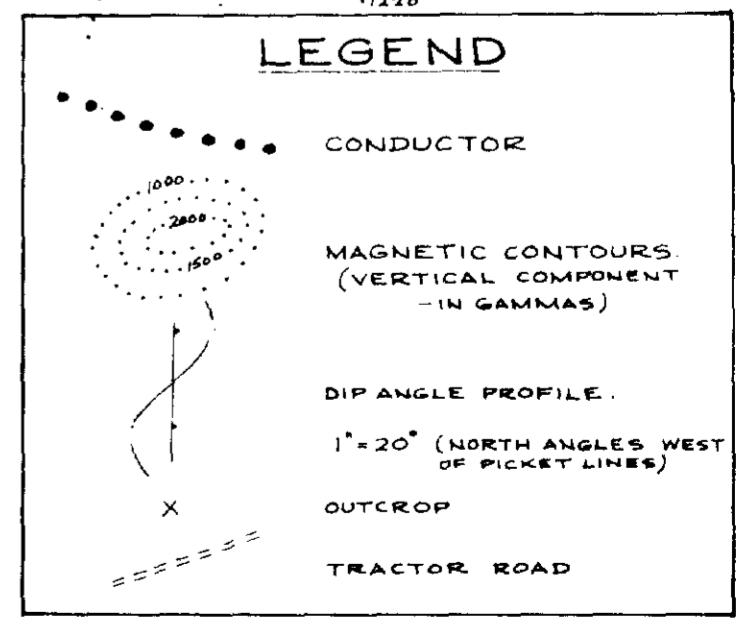
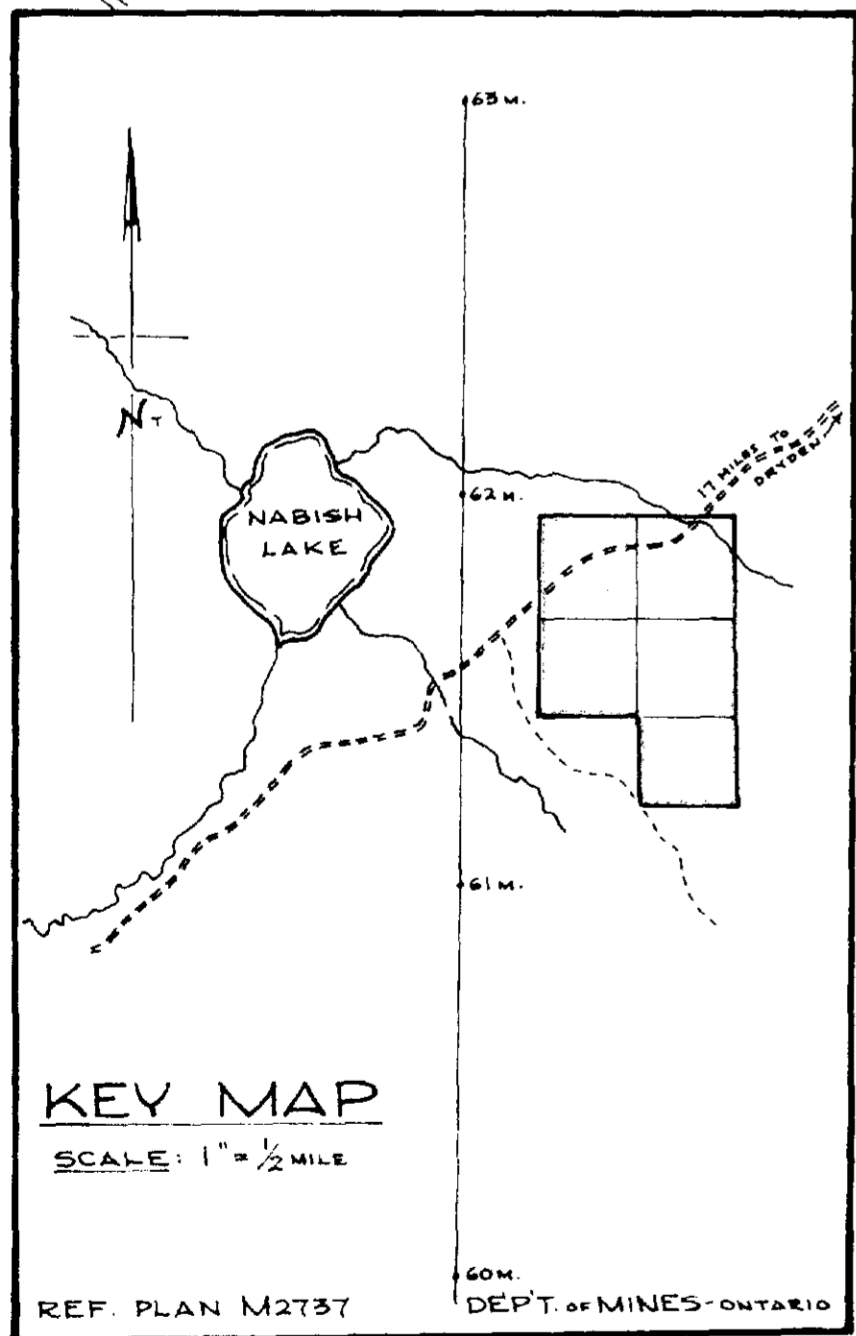
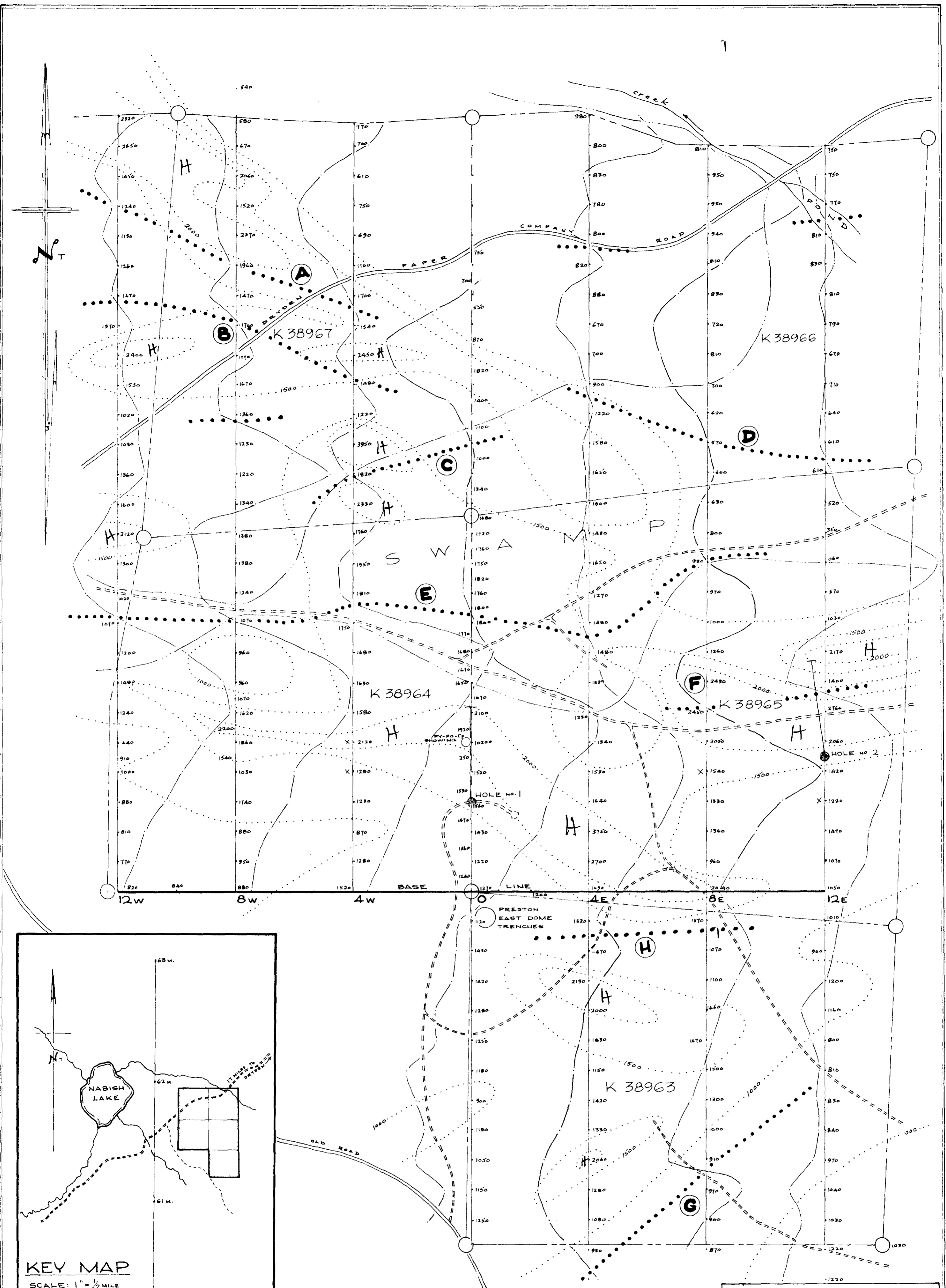
DEPARTMENT OF MINES
— ONTARIO —

TRIM LINE

TRIM LINE

200





GEOPHYSICAL RESULTS

GLATZ OPTION

AGENA MINING COMPANY LTD.

DRYDEN AREA

ONTARIO

Scale: 1 IN. = 200 FT.

