



42A12SE0129 63.1678 JAMIESON

010

INTRODUCTION

A magnetic and an electromagnetic survey was carried out on a 10 claim group in Godfrey and Jamieson Townships by Shield Geophysics Limited during July 1969.

The property is registered in the name of Volcanic Mines Limited, 60 Richmond Street West, Toronto, Ontario.

The property consists of ten contiguous mining claims numbered as follows: P-28440, 28441, 28442, 46022, ⁴⁹⁷⁹⁵ 67656, 67657, 96661, 96662, 96663.

LOCATION AND ACCESS

The property consists of all of lot 7 Concession 1 Jamieson Township and the north half of the north half of lot 7 Concession 6 Godfrey Township.

The property is readily accessible from highway 576 via an access road to the Mount Jamieson Ski-Chalet.

INSTRUMENTS USED AND SURVEY METHOD

(A) Magnetic Survey

The magnetic survey was carried out using a Scintrex MF-1-100 fluxgate magnetometer with a sensitivity of ± 1 gamma.

Base stations were established at 100 foot intervals on all baselines. The survey was tied to the Ontario Department of Mines magnetic base station on the Jamieson-Godfrey township line on the east side of the Mattagami River. This station has a value of 1000 gammas. Stations were established at 100 foot intervals along profile lines except in areas of abrupt magnetic

change where 50 foot stations were recorded. A total of 762 readings were taken.

(8) Electromagnetic Survey:

The entire survey was carried out using a Crone JEM transceiver unit. Coil spacing was 200 feet and the shoot-back system and in-line method was employed.

The instrument and survey procedure are fully described in the accompanying appendix.

GENERAL GEOLOGY

A considerable amount of outcrop occurs on the property. O.D.M. geological maps P-20, Jamieson Township, 1954-4 Godfrey Township indicate that all the underlying rocks are rhyolitic rocks which have been intruded by diabasic rocks having a northwesterly strike.

The property has been extensively prospected by Mr. E. Jutila who has uncovered a number of sulphide showings.

The following is a direct quotation from O.D.M. map F521, Geophysical Series by R. Middleton.

"Numerous pyrite occurrences are found in a belt between the Jameland-Kam-Kotia Mine area southward to the Canadian Jamieson Mine in Godfrey Township and Mount Jamieson. Values in gold, silver, copper and zinc have been reported from quartz veins in the southwest corner of Jamieson Township.

Quartz veins on the E. Jutila claims on Mount Jamieson were noted. Assays of grab samples taken by Mr. Jutila from 2 zones within an 800-foot long vein contained gold contents ranging

from \$4.00 to \$10.50 per ton. A 150-foot long zone containing 10% pyrite gave the highest assay. Lower gold values and minor silver values were received from an 80-foot zone having a combined 5% chalcopyrite, sphalerite, galena and pyrite content. This vein is 2 inches to 15 inches wide and is directly controlled by a prominent joint-fracture system that strikes N 20° W and dips 75° W. Numerous smaller veins and veinlets branch off and parallel the main vein. These veins are barren or contain minor amounts of pyrite. The brittle felsic wall rocks occasionally contain high concentrations of pyrite.

In the same claim group a 20-foot wide shear zone containing stringers of sphalerite, chalcopyrite and pyrite were noted. Trenching by Mr. Jutila indicates that the zone extends for more than 1000 feet in a northwest direction and may be related to the shear structure mentioned under Structural Geology."

SURVEY RESULTS

The magnetic survey outlined several northwesterly trending diabase dikes. No other anomalous conditions are readily apparent.

No anomalous conditions were detected with the electromagnetic survey.

CONCLUSIONS AND RECOMMENDATIONS

No anomalies of economic significance were detected by either survey. The fact that no anomalies were detected does not preclude the fact that economically significant sulphide occurrences could underly the property.

Consideration should be given to attempting to locate anomalous conditions in the vicinity of the sulphide surface showings with high powered vertical loop units.

Overburden cover on the claim group is generally light and relatively non-conductive so that induced polarization methods might be successful in locating sulphide concentrations.

It is also recommended that the outcrop areas on the property be carefully mapped.

Respectfully submitted

SHIELD GEOPHYSICS LIMITED

W. E. Steers
Consulting Geologist
for

Timmins, Ontario,

July 16, 1969.

J. E. Steers,

Consulting Geologist.



42A12SE0129 63.1678 JAMIESON

020

INTRODUCTION

An electromagnetic survey was carried out over the north-easterly portion of a 10 claim group located in Godfrey and Jamieson Townships by Shield Geophysics Limited during October, 1969.

The property is registered in the name of Volcanic Mines Limited, 60 Richmond Street West, Toronto, Ontario. At the time of the survey the property was held under option by Conwest Exploration Company Limited, 1001, 85 Richmond Street West, Toronto, Ontario.

LOCATION AND ACCESS

The property consists of all of lot 7, Concession I, Jamieson Township and the north half of the north half of lot 7, Concession 6, Godfrey Township.

The 10 contiguous mining claims are numbered as follows:
P-28440, 28441, 28442, ⁴⁶⁰²²40622, 67656, 67657, 96661, 96662, 96663.

The property is readily accessible from highway 576 via an access road to the Mount Jamieson Ski-Chalet.

INSTRUMENT USED AND SURVEY METHOD

The entire survey was carried out utilizing a Crone "Radem" V.L.F. receiving unit. The eight most easterly lines were read utilizing the transmitting stations located at Cutler Maine. Dip angle measurements of the resultant magnetic field were taken in the position of minimum coupling. The resultant dip angles are plotted in profile form at a scale of 1" to 20 degrees. Field strength measurements were recorded in the position of maximum coupling and are plotted numerically as a per cent of the primary field strength.

The instrument was set to read 100% in a neutral area where a "zero" dip angle was obtained. The remainder of the area was surveyed using Annapolis Maryland as the transmitter station because the Cutler and Seattle stations were inoperable for several days.

The instrument used and survey procedure are freely described in the accompanying Appendix.

GENERAL GEOLOGY

A considerable amount of outcrop occurs in the property. O.D.M. geological maps P-20, Jamieson Township, 1954-4 Godfrey Township indicate that all the underlying rocks are rhyolitic rocks which have been intruded by diabasic rocks having a northwesterly strike.

The property has been extensively prospected by Mr. E. Jutila who has uncovered a number of sulphide showings.

The following is a direct quotation from O.D.M. map P521, Geophysical Series by R. Middleton.

"Numerous pyrite occurrences are found in a belt between the Jameland-Kam-Kotia Mine area southward to the Canadian Jamieson Mine in Godfrey Township and Mount Jamieson. Values in gold, silver, copper and zinc have been reported from quartz veins in the southwest corner of Jamieson Township.

Quartz veins on the E. Jutila claims on Mount Jamieson were noted. Assays of grab samples taken by Mr. Jutila from two zones within an 800-foot long vein contained gold contents ranging from \$4.00 to \$10.50 per ton. A 150-foot long zone containing 10%

pyrite gave the highest assay. Lower gold values and minor silver values were received from an 80-foot zone having a combined 5% chalcopyrite, sphalerite, galena and pyrite content. This vein is two inches to fifteen inches wide and is directly controlled by a prominent joint-fracture system that strikes N 20° W and dips 75° W. Numerous smaller veins and veinlets branch off and parallel the main vein. These veins are barren or contain minor amounts of pyrite. The brittle felsic wall rocks occasionally contain high concentrations of pyrite.

In the same claim group a 20-foot wide shear zone containing stringers of sphalerite, chalcopyrite and pyrite were noted. Trenching by Mr. Jutila indicates that the zone extends for more than 1000 feet in a northwest direction and may be related to the shear structure mentioned under Structural Geology."

PREVIOUS WORK

The property has been extensively prospected, where possible, and a magnetic and electromagnetic survey were carried out over the area by Shield Geophysics Limited in July, 1969.

SURVEY RESULTS

At least six conductive zones and several "one-line" cross-overs have been indicated on the property.

It is believed that the conductor located on line 64 W, 4+50 feet south of baseline, "C" is a legitimate bedrock conductor since it's presence has also been indicated by a vertical loop E.M.

survey on the adjoining property.

Conductive zone "D" is believed to be a legitimate bedrock conductor since there is a small but distinct increase in field strength associated with the conductor axis.

Zones "C" and "E" are highly suspect since the field strength measurements indicate that the zones are probably flat lying. They are likely caused by narrow clay lenses in a bedrock depression.

Conductive zones "A" and "B" appear to coincide with the edges of diabase dikes and are likely to be conductive shears flanking the diabasic rocks.

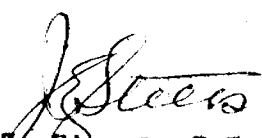
Zone "F" is a questionable zone since the indicated zone could be due to topography, however, the zone is very close to a test pit containing sulphide mineralization.

CONCLUSIONS AND RECOMMENDATIONS

Several conductive zones have been indicated at least three of which may be significant.

It is recommended that the property be carefully mapped geologically and that 88 W, 92 W, 96 W, be re-run in the vicinity of conductive zone "F" using either Seattle or Cutler as the transmitting station and that field strength measurements be made in this area.

Respectfully submitted,
SHIELD GEOPHYSICS LIMITED,


J. E. Steere, F.G.A.C.,
Consulting Geologist.

A P P E N D I X

Instrument Data and Survey Method

ELECTROMAGNETIC SURVEY

The "Radem" unit is essentially a specially designed radio receiver which receives very low frequency radio signals from transmitters located at various points throughout the world.

The receiving unit is used to measure the direction of the magnetic component of the transmitted field.

The normal VLF magnetic field is horizontal, however, the field is distorted by the presence of a conductive body. The presence of a conductive body can, therefore, be determined by measuring the dip angle of the resultant field at regular intervals.

The instrument is so designed that when in the position of minimum coupling, the arrow on instrument points towards the conductive body. The axis of the body will be located at the zero or "cross-over" point between sets of dip angles which point towards the zero point.

The magnitude of the dip angle and the direction in which the arrow points are recorded at each field station.

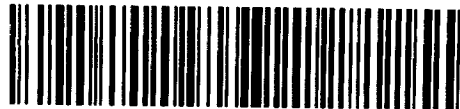
The direction of the magnetic component of the field from a VLF transmitting station is horizontal and perpendicular to the line between the operator and the transmitting station.

For best results, a station is selected so that the magnetic field is perpendicular to the suspected strike of possible conductive bodies.

The unit is turned on and the volume control knob adjusted so that the signal is clearly heard. The unit is then held in a

horizontal position and rotated until an audio null is obtained. The unit is then aligned parallel to the field direction. The receiver is then rotated into the vertical position and rotated about a vertical axis until an audio null is heard. The dip angle is then noted as well as the direction in which the arrow points.

If, when reading a station to the south, a dip angle of 20 degrees is obtained and the arrow points to the east the conductor is located to the east.



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INTRODUCTION

On October 12 and 13, 1964, Mespi Mines Limited of 1705 Victory Building, 80 Richmond Street, West, Toronto conducted two electromagnetic surveys for E.J. Jutila on two of his claims in Jamieson township.

LOCATION OF CLAIMS AND ACCESS

Two claims located in Jamieson township, Concession I, Lot 7, Porcupine Mining Division, Ontario are numbered as follows:

P. 67656 and P. 67657.

Access to the claims is by way of highway 576 and a logging road which turns north off of the same about one mile past Mount Jamieson. The claims are approximately 15 miles north west of Timmins, Ontario.

INSTRUMENTS USED AND METHOD OF SURVEY

A Crone dual frequency transceiver unit was used for the initial survey. The survey was carried out using an in-line method, a coil separation of 300' and readings taken at 100 foot intervals. The dip angles shown on the plan are the resultant angles. There were 1.25 miles of line cut and 59 stations were read with the Crone E.M.

For a follow-up survey a Ronka Mark IV horizontal loop E.M. was used. The survey was carried out using normal in-line procedures with a 300' coil separation and readings taken at 100' intervals. A total of 57 stations were read with this unit.

SURVEY RESULTS

Crone J.E.H.

No conductive responses were detected. There are slight variations in background "noise level" probably due to changes in overburden conductivity.

Ronka MK IV

No anomalies were detected.

CONCLUSIONS AND RECOMMENDATIONS

As there were no conductive responses detected no further work is recommended on these claims.

Respectfully submitted

MESPI MINES LIMITED



W.E. Nyman
Exploration Manager

WEN/jf

Macdiarmid Twp. - M. 294

THE TOWNSHIP
OF
CLAIM MAP
JAMIESON

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND
- 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.
- Flooding rights to areas along Mattagami River to H.E.P.C. - L.O 7085

DATE OF ISSUE
 JAN 20 1970
 ONTARIO DEPT. OF MINES

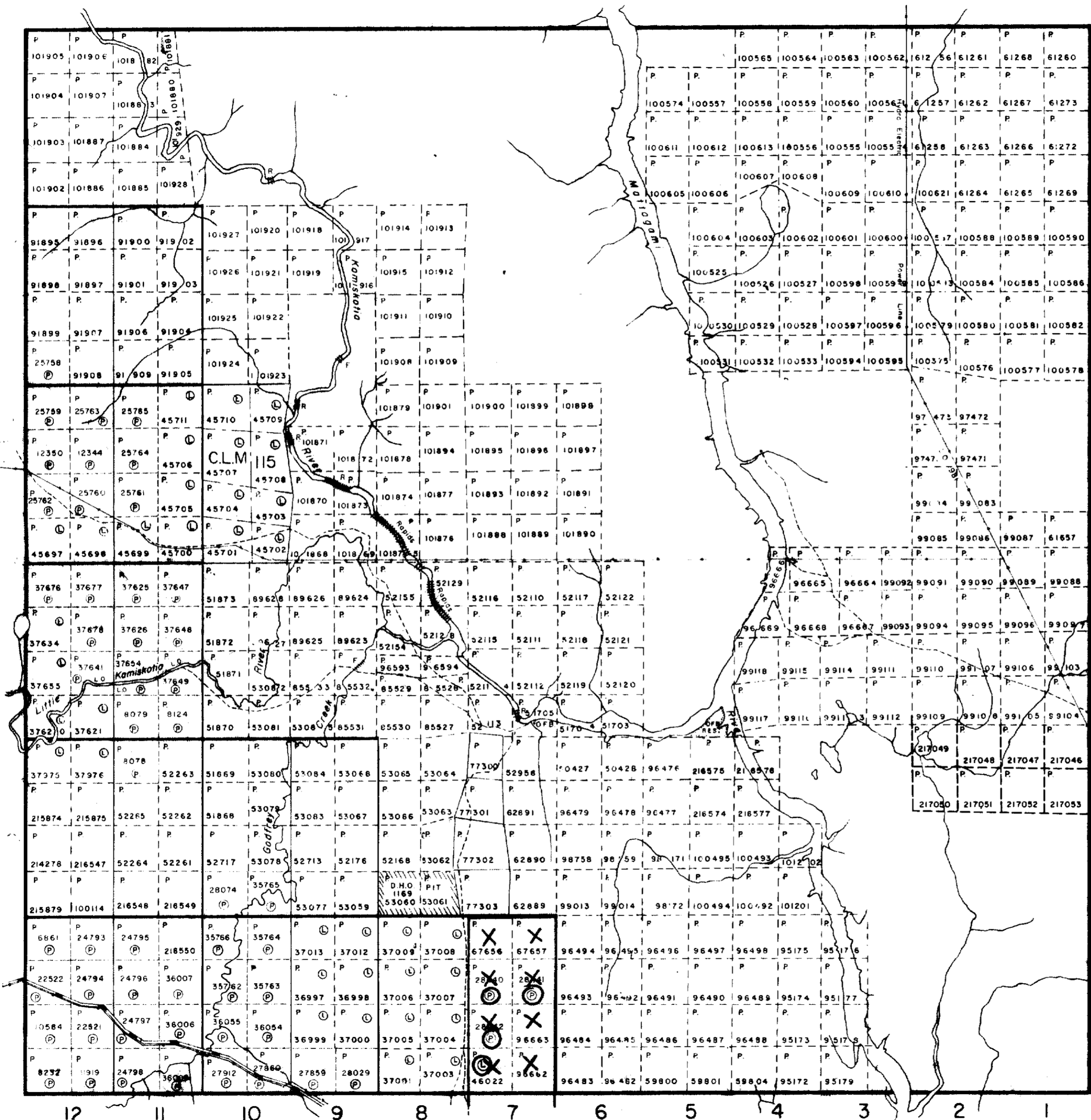
PLAN NO. - **M.288**

DEPARTMENT OF MINES

— ONTARIO —

Robb Twp. - M.309

Jessop Twp. - M.289



Godfrey Twp. - M. 284



42A125E0129 63.1678 JAMIESON

Jamieson Twp. (M.288)

Map Radar S16
Dept. of National Defence
Withdrawn from Staking
Sec.34(1) of Mining Act. File 16905
















THE TOWNSHIP
OF
CLAIM MAP
GODFREY

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- PATENTED LAND 
- 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 BUSHES 
- MINES 
- CANCELLED 

NOTES

400' surface rights reservation around all lakes and rivers.

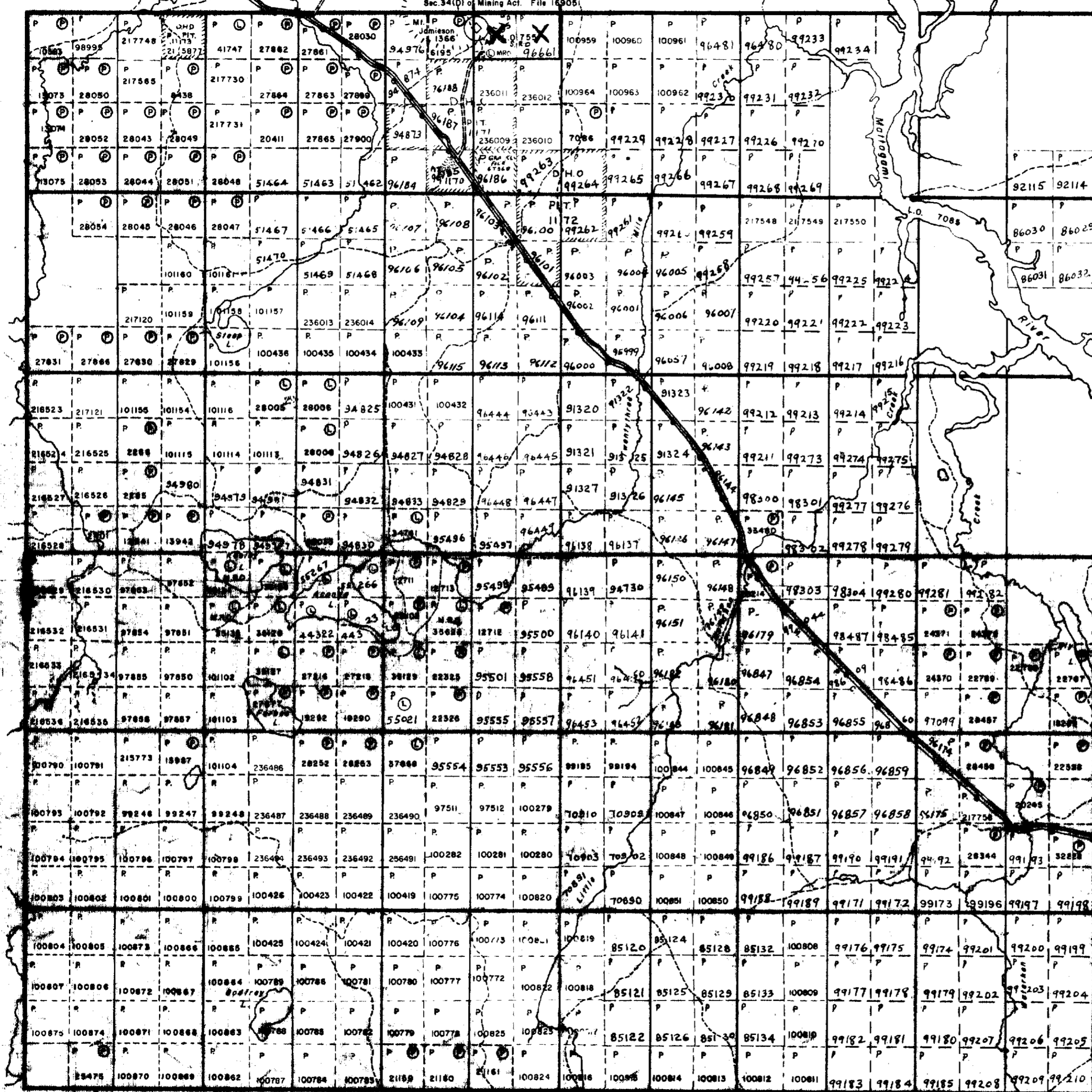
Flooding rights on either side of the Mattagami to H.E.P.C.

DATE OF ISSUE
JAN 20 1950
ONTARIO DEPT. OF MINES

PLAN NO. **M.284**

DEPARTMENT OF MINES

- ONTARIO -



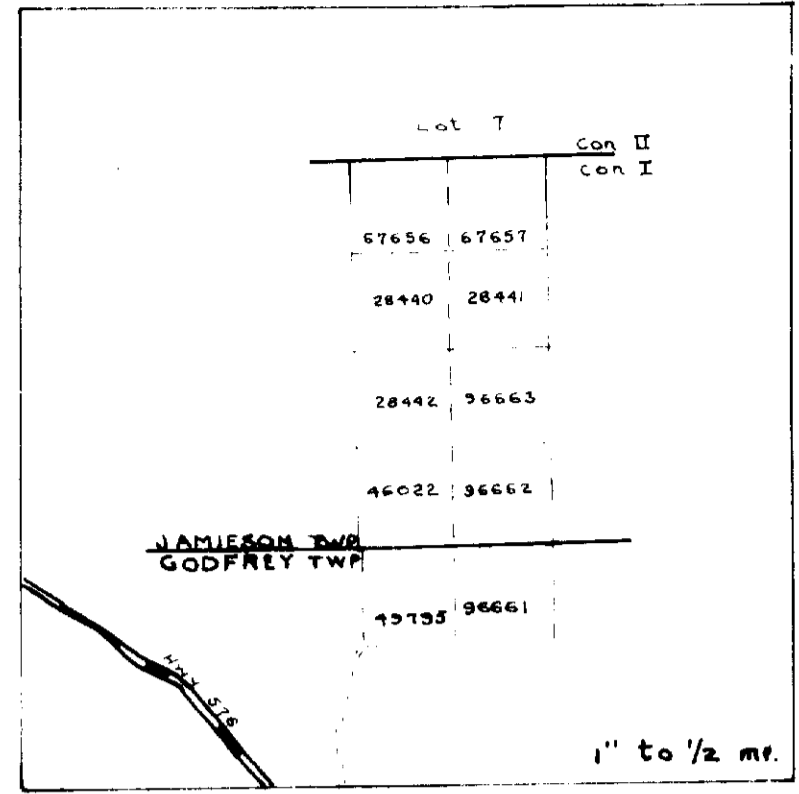
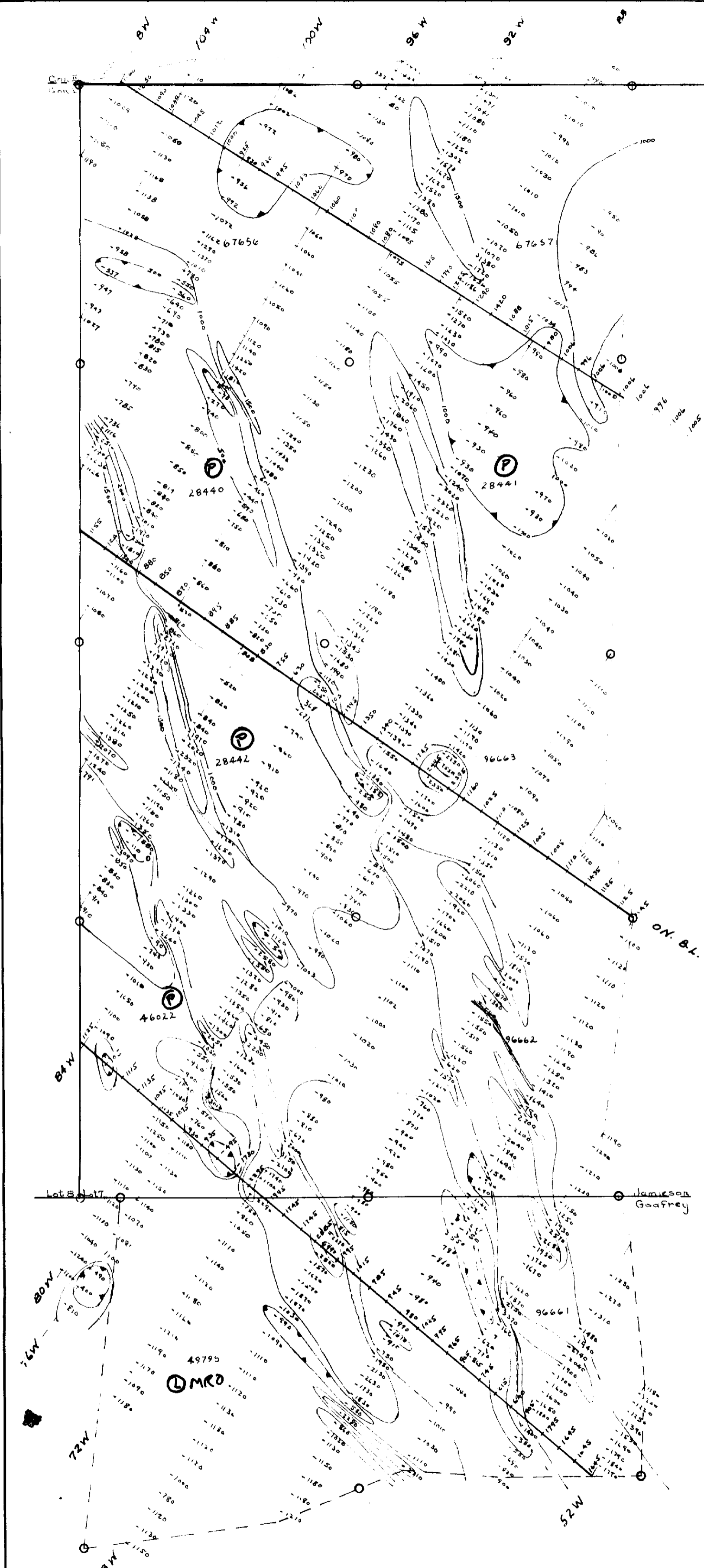
Turkish Twp. (M.316)

Mountjoy Twp. (M.302)

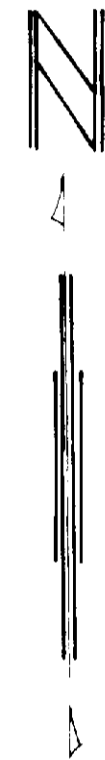
12 11 10 9 8 7 6 5 4 3 2 1



Bristol Twp. (M.264)



KEY MAP



LEGEND

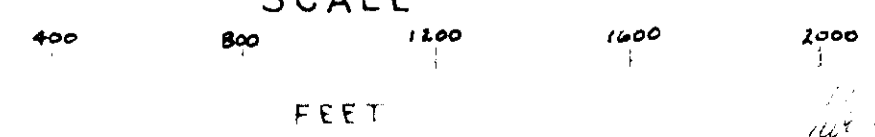
- Measurement station along picket line
- Relative value of the vertical component of the earth's magnetic field in gammas.
- Magnetic contour
- Contour interval 200 gammas
- Claim post.
- INSTRUMENT Sharpe MF-100 Flugate magnetometer

MAGNETOMETER SURVEY

ON THE PROPERTY OF
VOLCANIC MINES LTD.
JAMESON AND GODFREY TWP'S
PORCUPINE MINING DIV.

BY
SHIELD GEOPHYSICS LIMITED

SCALE

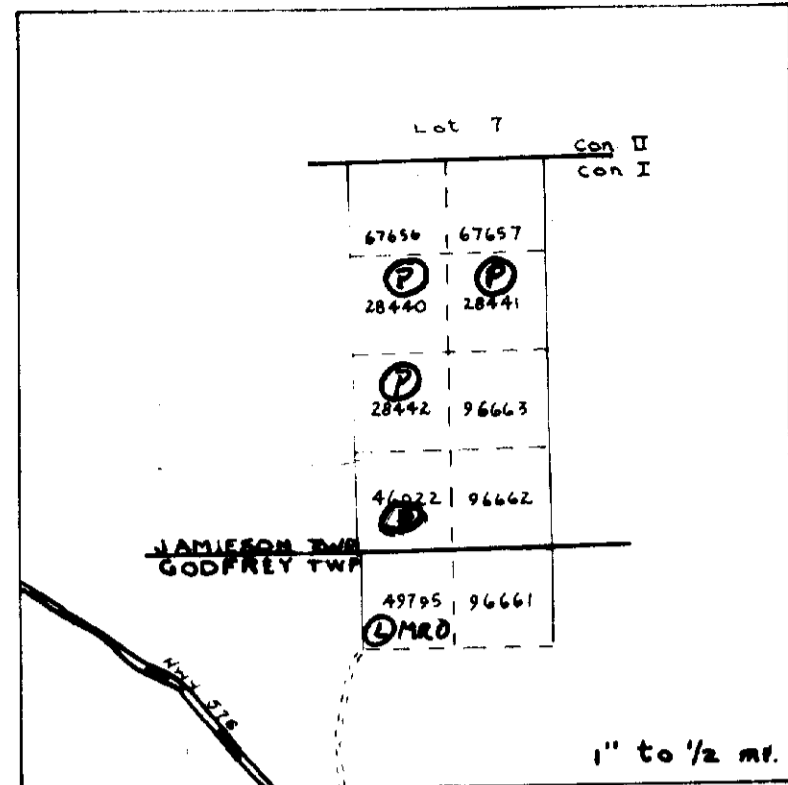
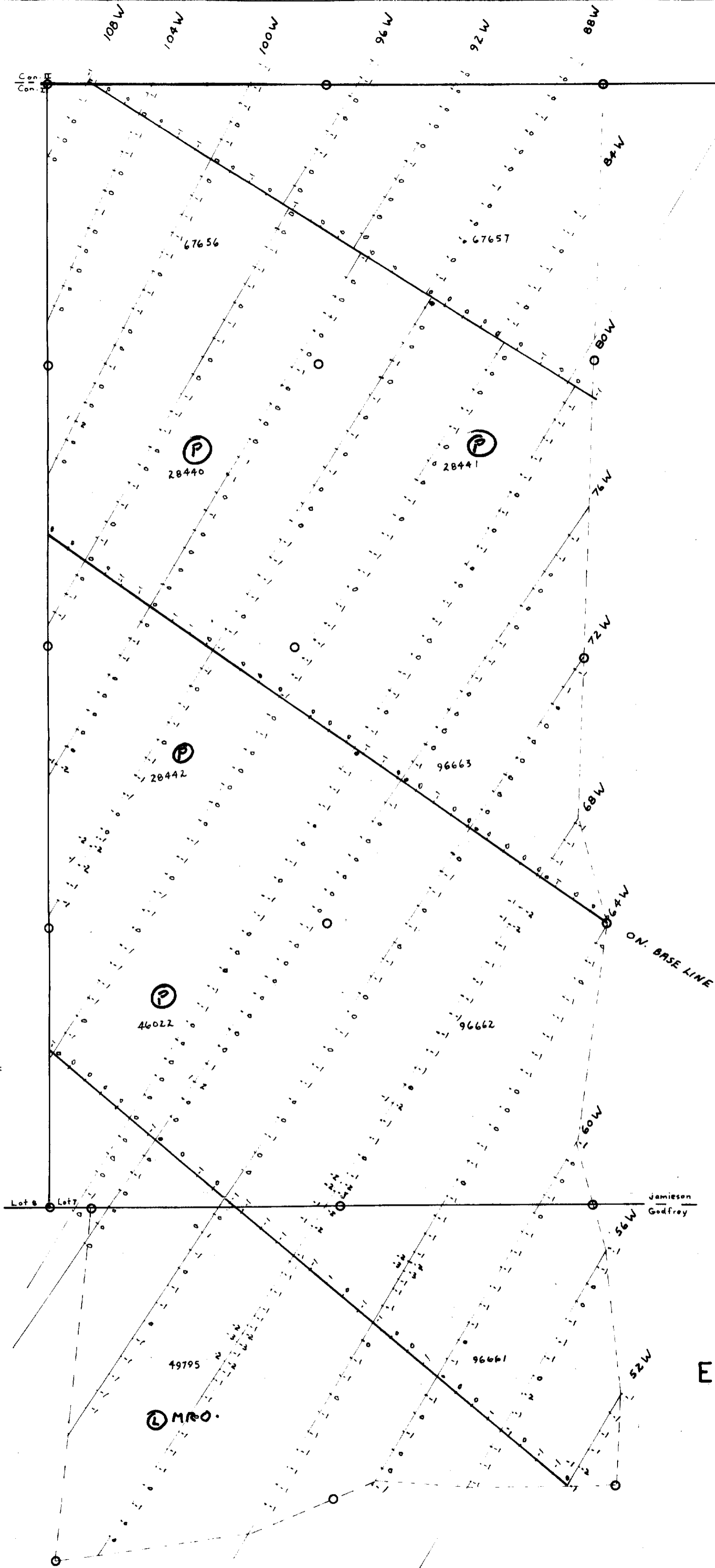


JULY

FEET

1969





KEY MAP



SYMBOLS

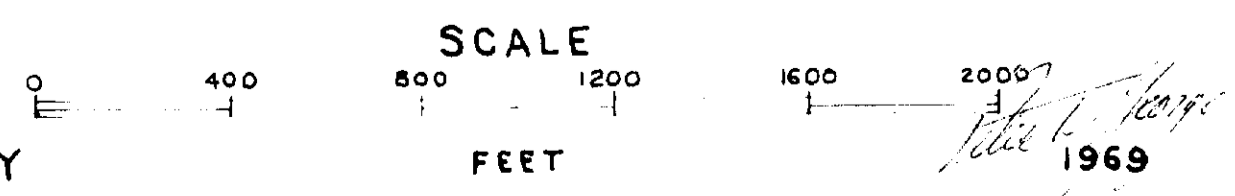
- Measurement station along picket line
- Dip Angles in degrees
- Resultant 1800 c.p.s.
- Resultant 480 c.p.s.
- Claim post

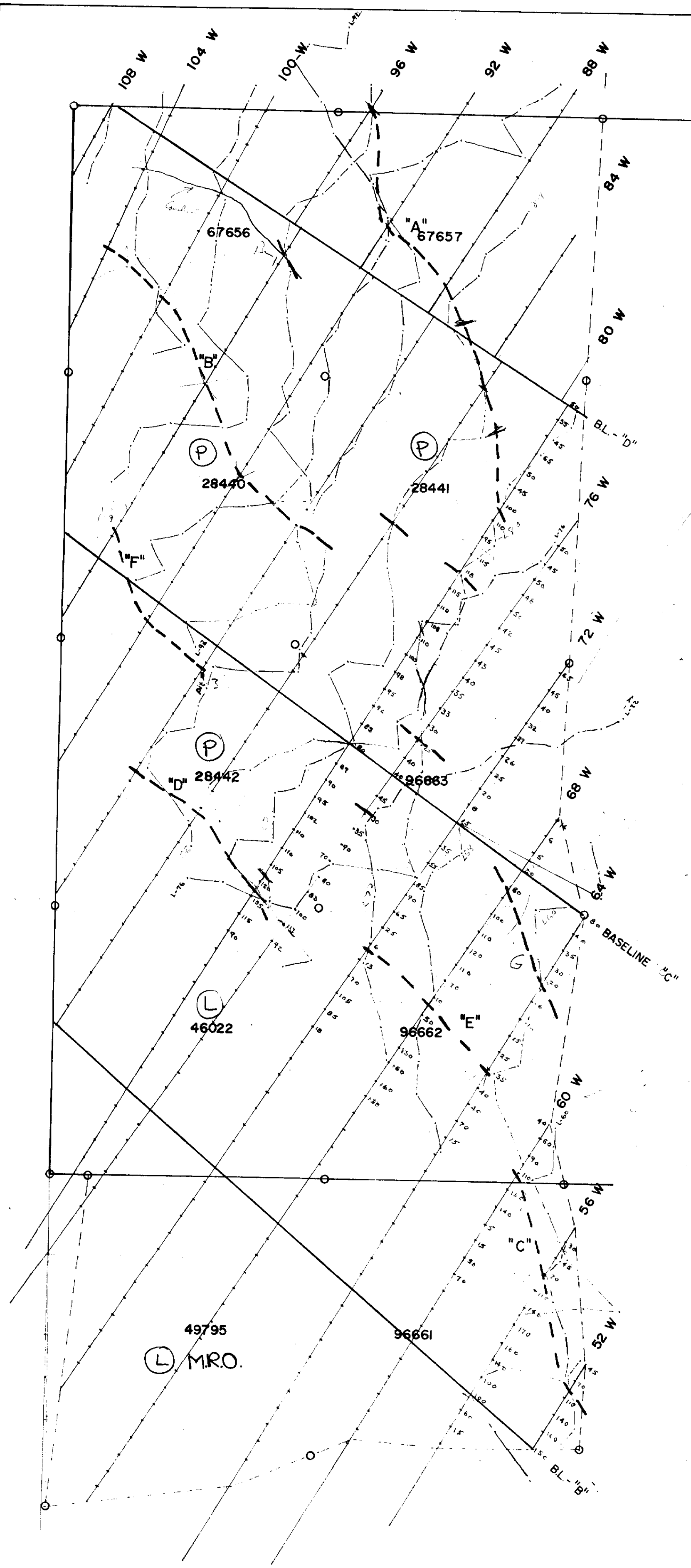
INSTRUMENT: Crone JEM, 1800 & 480 c.p.s.
 In-line method
 200 foot coil separation

ELECTROMAGNETIC SURVEY

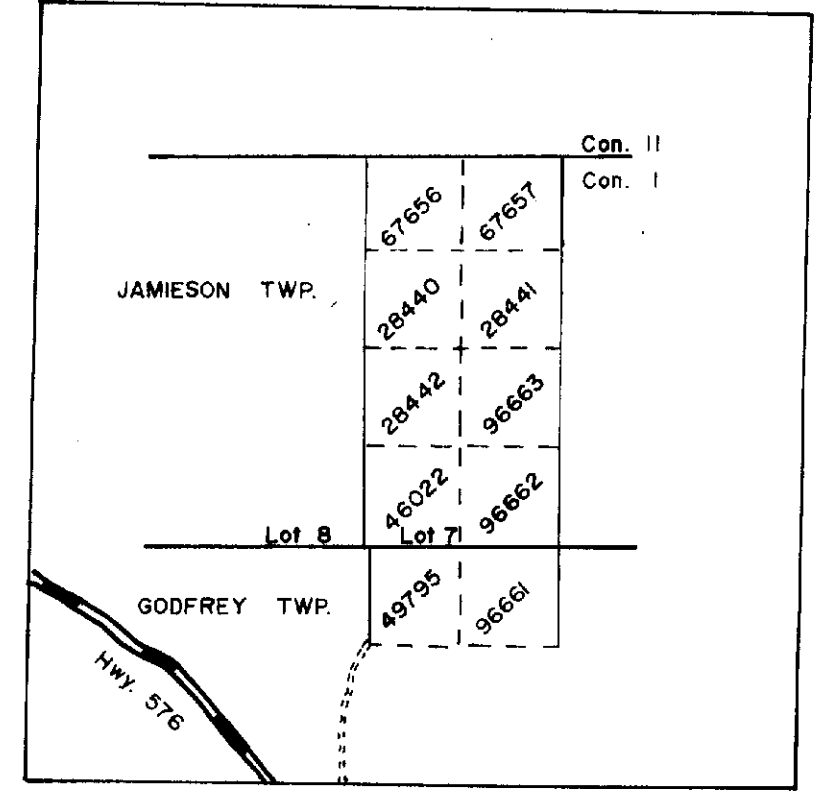
ON THE PROPERTY OF
VOLCANIC MINES LTD.
 JAMIESON AND GODFREY TWP'S
 PORCUPINE MINING DIV.

BY
SHIELD GEOPHYSICS LIMITED





KEY MAP
one inch to one half mile



LEGEND

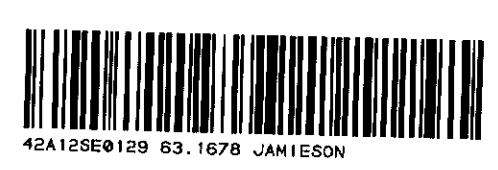
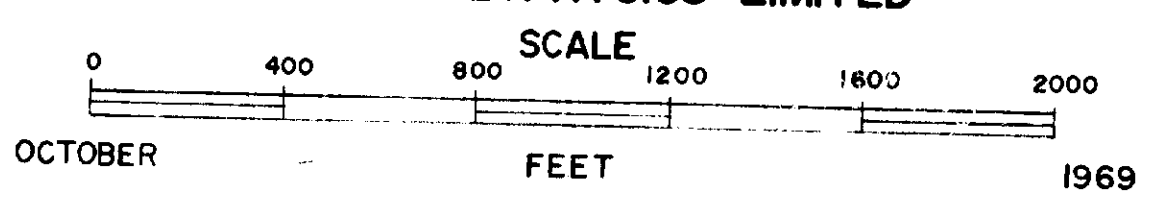
- Measurement station along picket line
- Dip angles in degrees
- Field strength in %
- Profile scale: one inch to twenty degrees
- Conductor axis
- Claim post

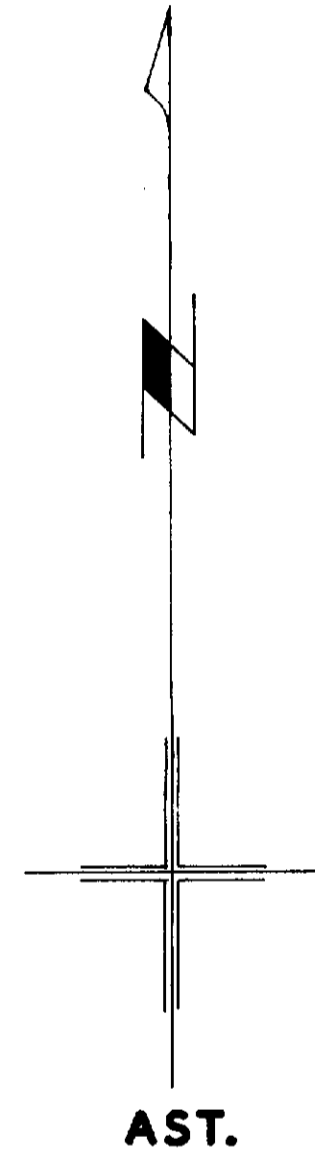
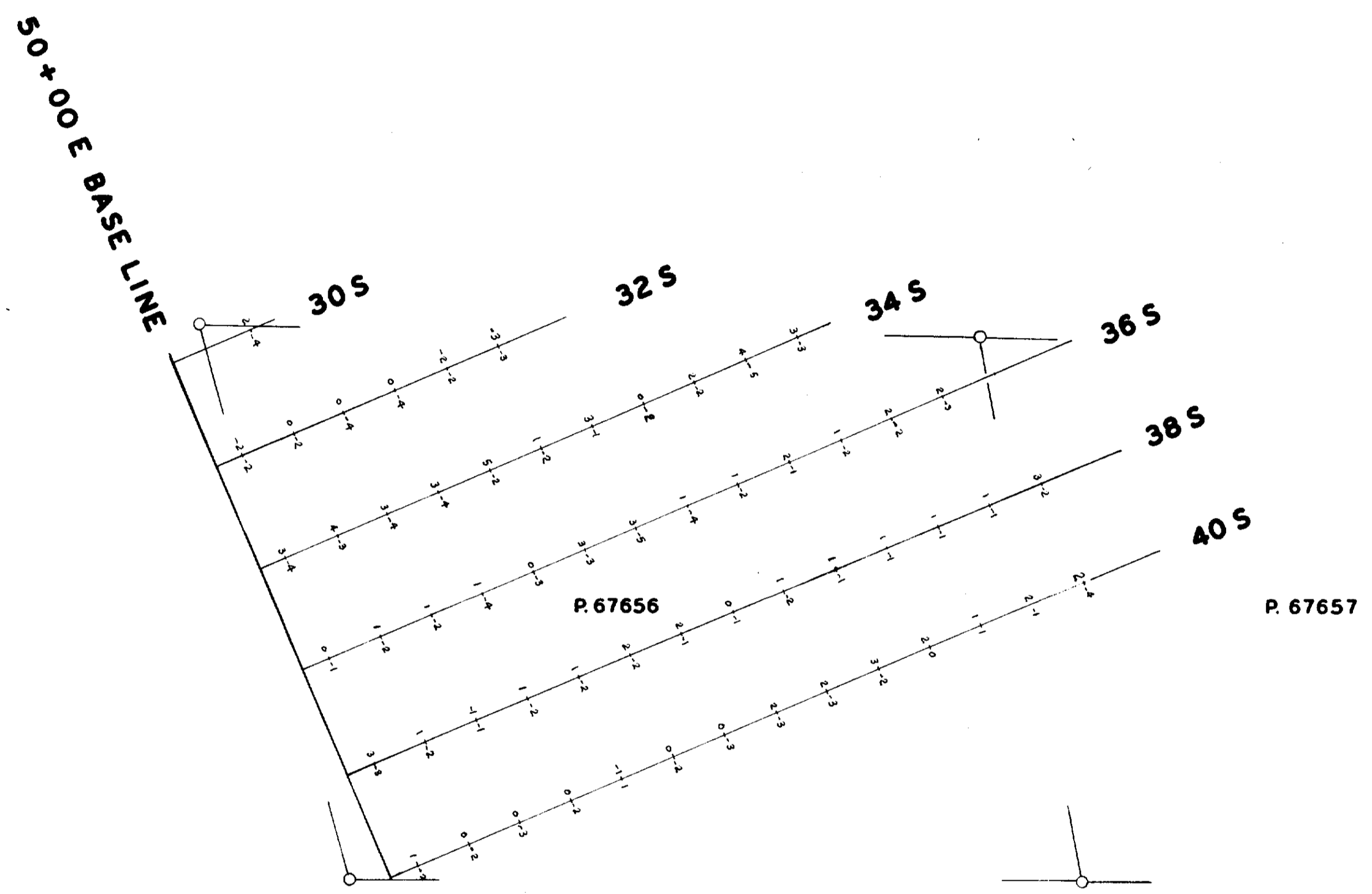
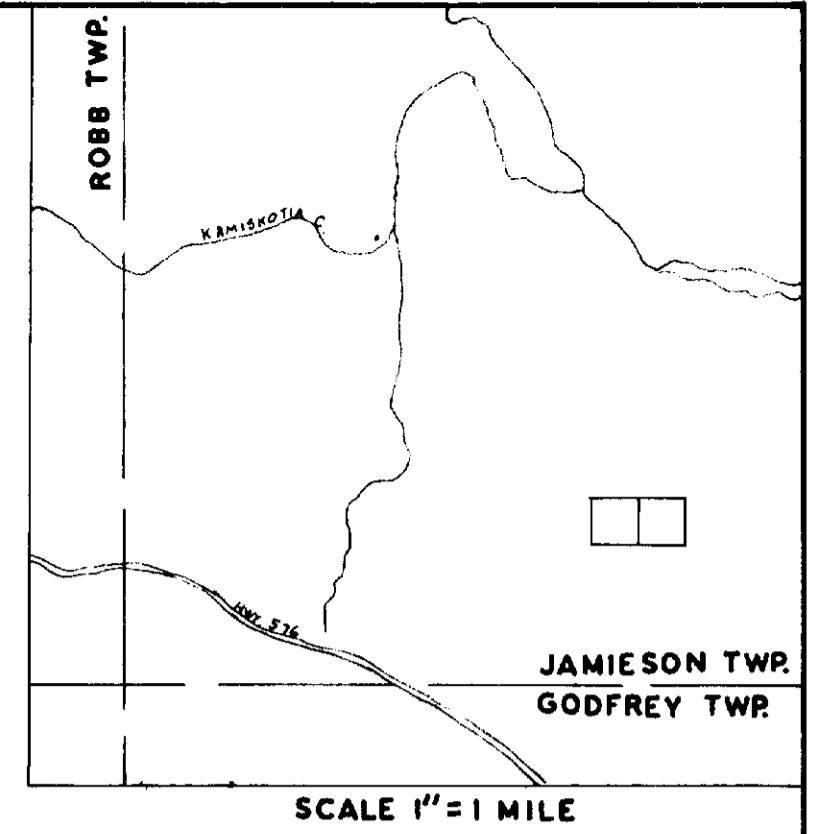
South dip over W of line 1'm.

INSTRUMENT: Crone Radem; Transmitter location Cutler, Maine, and Annapolis, Maryland; Operating frequency 17.8 KC.

North dips east of line.

(ULF) ELECTROMAGNETIC SURVEY
ON THE PROPERTY OF
VOLCANIC MINES LIMITED
JAMIESON & GODFREY TWPS., PORCUPINE MINING DIVISION
BY
SHIELD GEOPHYSICS LIMITED

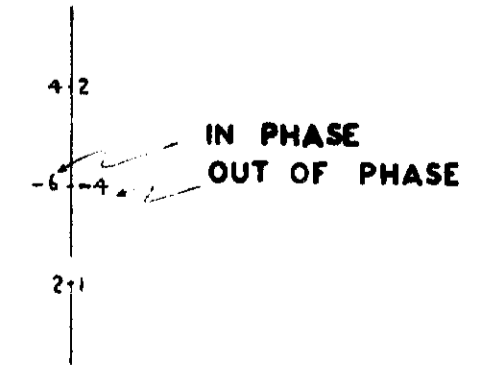


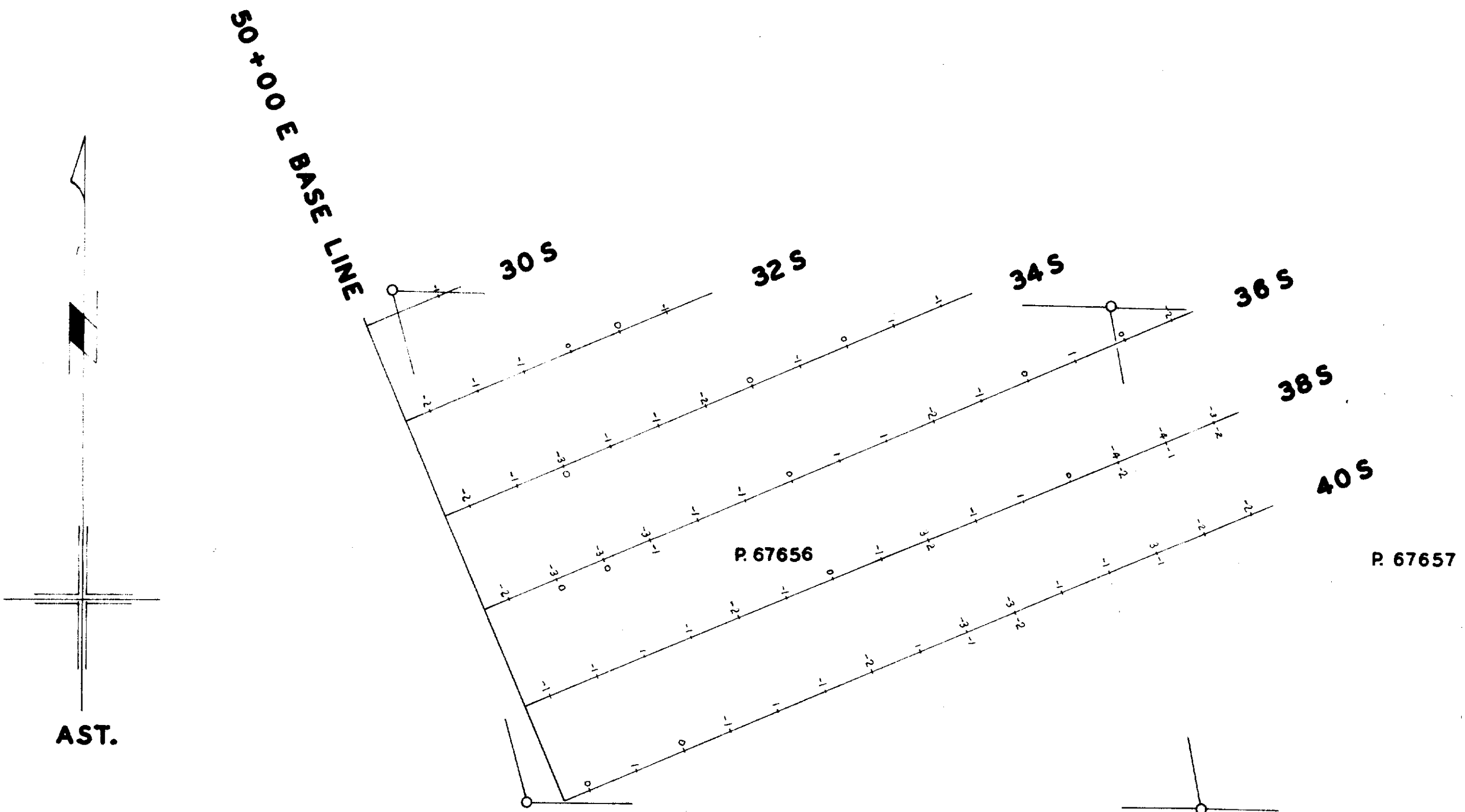
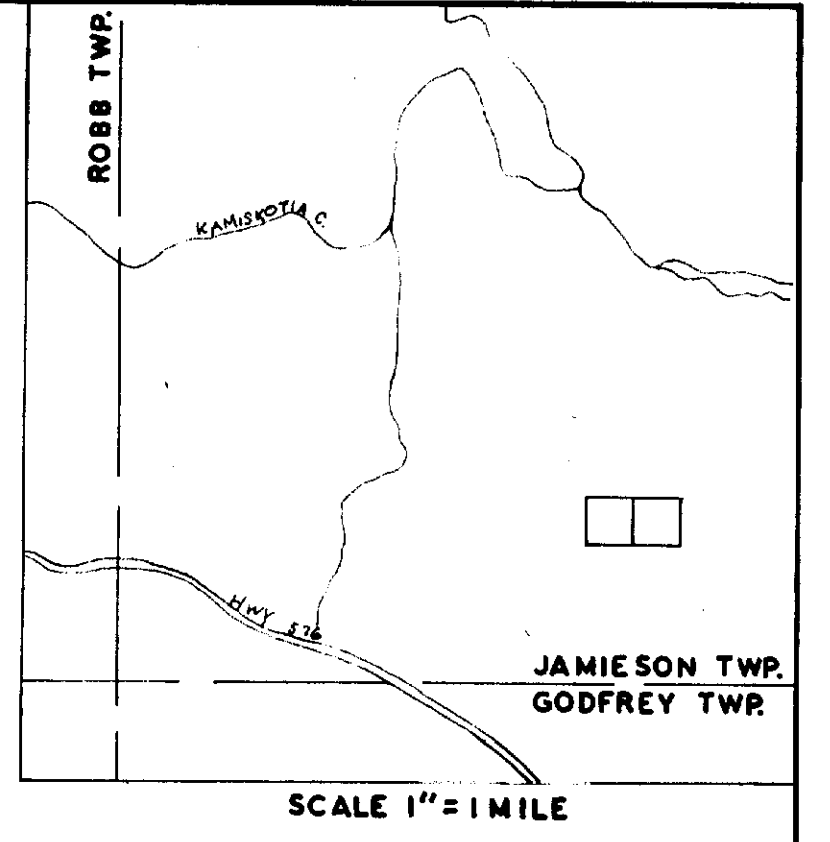


MESPI MINES LTD.
 ELECTRO-MAGNETIC SURVEY
 JAMIESON TWP. ONT.
 FOR E.J. JUTILA

INSTRUMENT: RONKA H.E.M.
 COILS 300' APART
 MAP SCALE 1"=200'
 PROFILE SCALE 1"=20'

LEGEND





MESPI MINES LTD.
ELECTRO-MAGNETIC SURVEY
JAMIESON TWP. ONT.
FOR E.J. JUTILA

INSTRUMENT: CRONE J.E.M.
DUAL FREQUENCY: IN-LINE METHOD
COILS 300' APART
MAP SCALE: 1" = 200'

LEGEND

