

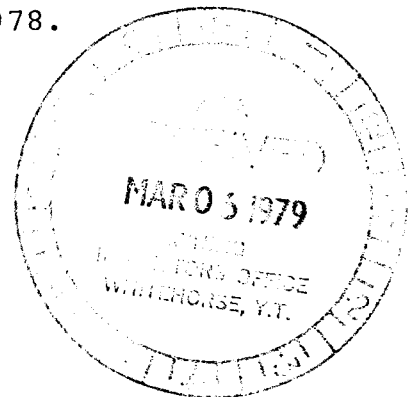


HELICOPTER MAGNETIC AND  
ELECTOMAGNETIC SURVEY  
ROSS RIVER AREA, YUKON TERRITORIES

on behalf of  
MR. ALLEN CARLOS



CLAIMS: Eagle, Fred, Shale  
LOCATION: 131° 15'W 61° 47'N  
N.T.S. 105 G-14  
DATE FLOWN: September 9, 1978.



090442  
November 15, 1978  
Toronto, Ontario.

AERODAT LIMITED  
W. P. Boyko, M.Sc., P. Eng.  
R. F. Sheldrake, B.Sc.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

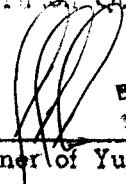
\$ ~~5,422.00~~ 6,100.00

JM

J. Ammin

Resident Geologist or  
Resident Mining Engineer

Considered as representation work under  
Section 53 (4), Yukon Quartz Mining Act.



B. R. BAXTER  
Supervising Mining Recorder

Commissioner of Yukon Territory

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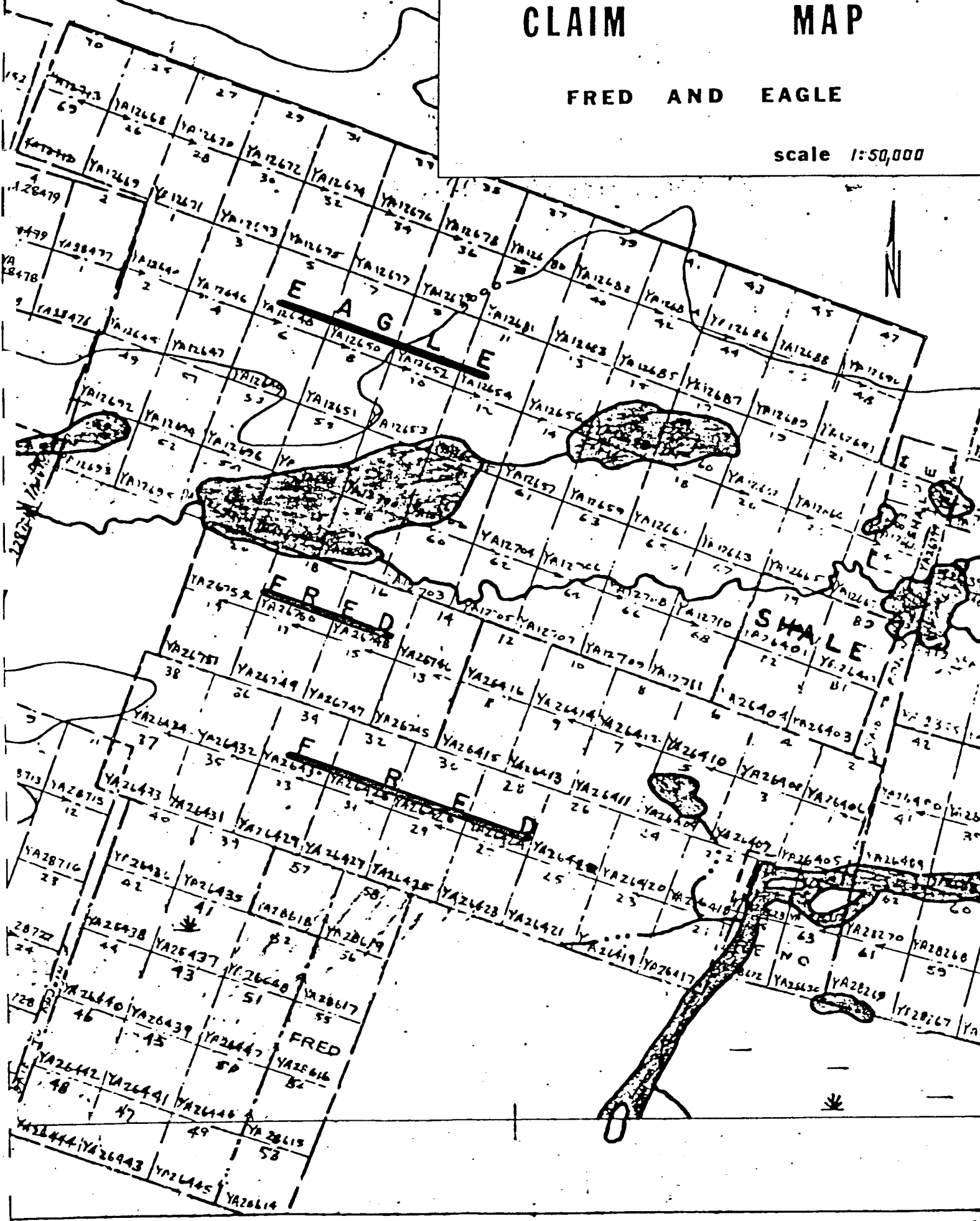
|  |                |
|--|----------------|
| 1. Electromagnetic Survey Profiles and<br>Filtered Magnetics | Scale 1:20,000 |
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| 3. Interpretation Map  | Scale 1:20,000 |

# CLAIM

# MAP

FRED AND EAGLE

scale 1:50,000



1. INTRODUCTION

On September 9, 1978, a combined helicopter borne Magnetic and Electromagnetic Survey was conducted over the EAGLE, FRED and SHALE claims on behalf of Mr. Allen Carlos of Whitehorse, Yukon Territories.

The survey consisted of ten traverses totalling 62 linear kilometers. The survey traverses were oriented north-east to south-west at an interline spacing of 400 meters. Aircraft positioning laterally was controlled from photo-mosaics and horizontally controlled by means of a radar altimeter. A mean terrain clearance of 65 meters for the helicopter was maintained and continuously recorded on the analogue chart and magnetic tape.

The Geonics 33-1 Electromagnetometer is a solid state system especially designed for helicopter transport.

It consists of two coaxial coils, one serving as a transmitter and the other as a receiver, which are mounted six meters apart, in a rigid "bird" with their axes horizontal and in the direction of flight. The bird is towed 30 meters below the helicopter by means of a suitable cable which also carries the electrical signals and power to and from the bird.

The system operates at 736 hertz. Changes in the alternating magnetic field at the receiver coil, caused by eddy currents in the subsurface rock, are recorded. These changes are expressed in ratios of the normal undistorted primary field. They are so small as to be expressed in parts per million or p.p.m. Total field and quadrature VLF data were recorded on the analogue tape, but were not compiled, and were used for reference in the interpretation procedure.

The magnetometer used on this survey was a Barringer AM-104. It is a total field nuclear precession instrument which measures the magnetic field strength with a sensitivity of one gamma. The sensor is toroidal and is positioned, with its axis vertical, half way between the helicopter and the E.M. 33-1 bird.

The data for this survey was recorded on magnetic tape made compatible for computer processing, and simultaneously displayed on an 8-track recorder.

Appendix I gives details of the geophysical equipment used for this survey. Appendix II describes the flight tape and flight path recovery process.

## 2. DATA PRESENTATION

### 2.1 Electromagnetics

The Electromagnetic Survey Profiles and Filtered Magnetics Map shows the profiles of inphase and quadrature E.M. responses along the flight lines with contours of the filtered magnetic values. The E.M. profiles are transcribed and plotted from magnetic tape recorded in flight, after assigning a suitable base level value.

The Electromagnetic Survey Interpretation Map shows inphase anomaly amplitude in parts per million (p.p.m.) of the primary field strength, and the apparent conductivity thickness values which are divided into 10 ranges shown on the map legend. These are represented on the map as a number within a circle at the anomaly location.

Apparent depth is calculated from the phasor diagram shown on the Electromagnetic Survey Interpretation Map. The apparent depth may deviate from the true depth because the conductor may differ substantially from the half-plane model, or the anomalous response may be distorted by conductive overburden. Most of the conductors are less deeply buried than indicated by their apparent depth values.

## 2.2 Magnetics

The Total Field Magnetic Map shows contours of the total magnetic field uncorrected for regional variation. The maps are computer contoured at an interval of 20 gammas with 100 gamma contours "weighted" for clarity. Magnetic depressions are indicated with an upper case letter "L" located inside the enclosure.

The filtered magnetic contours, which are displayed on Maps 1 and 4 are based on a modified second derivative operator, and are designed to highlight magnetic discontinuities and linear features.

### 3. INTERPRETATION

#### 3.1. General

Both Magnetic and Electromagnetic Maps can be interpreted to reveal areas underlain by different rock types and lineaments which could indicate fault zones. Magnetic maps can reveal the location of orebodies which contain higher percentages of magnetite or pyrrhotite than the surrounding rocks.

The electromagnetic responses encountered by the survey are of three main types. Bedrock conductors, responses which are due to surficial conductivity, and a combination of the above; a bedrock conductor overlain by a layer of conductive overburden.

Where a conductive material overlays a bedrock conductor the response due to the bedrock layer is superimposed on the response of the overburden. Depending on the conductivity contrasts, and the thickness of the overburden some bedrock conductors can be recognized through the surficial layer.

The interpretation was aimed at determining which conductors are bedrock features and constructing a "pseudo-geological" map from the geophysical parameters. This interpretation is displayed on Maps 3 and 6.

Conductivity-thickness is the "parameter-pair" measured with the electromagnetometer. Materials which conduct electronically, metallic sulphides and graphite, have higher conductivity-thickness values than electrolytic conductors such as clays (in overburden) and ion rich rivers or sloughs.

There is overlap, but typically electrolytic conductors have conductivity-thickness values less than 8 mhos.

When conductors are also magnetic the electromagnetic responses can become distorted. The distortion tends to decrease the inphase response, often reversing the sign of the E.M. anomaly. Apparent depths and conductivity-thickness products, in this case, are generally not representative.

#### 4. DISCUSSION OF RESULTS

Zones of conductive bedrock and volcanic rocks have been outlined on Map 3. The kilometer wide zone of conductive rock, labelled C, is a formational response and is typical of graphitic sediments.

Within the conductive zone, two areas of increased conductivities are indicated as shaded areas. The conductivity-thickness values, in those areas range between 30-60 mhos on a background of 15-30 mhos and are formational in character.

A distinct change in conductivity occurs at the contact between Zone C and Zone D. The rocks in Zone D are substantially more resistive than Zone C.

The zones labelled V are characterized by relative changes in magnetic susceptibilities which are indicative of volcanic rock.

5. CONCLUSIONS AND RECOMMENDATIONS

The electromagnetic and magnetic surveys were successful in delimiting areas of conductive rocks and rocks of increased magnetic susceptibility.

The information taken from the maps in this report should be combined with the available geological data and specific drill targets identified.

6. SUMMARY

The survey areas have been measured for conductivity and magnetic susceptibility. On the basis of the parameters pseudo-geological maps have been constructed and they indicate zones where host rocks, suitable for Faro type orebodies, may occur.

Respectfully submitted,

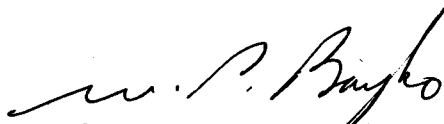
AERODAT LIMITED

A handwritten signature in cursive script that reads "R. F. Sheldrake". The letters are fluid and connected, with a prominent loop at the end of the last name.

R. F. Sheldrake, B.Sc.

November 15, 1978.

Toronto, Ontario.

A handwritten signature in cursive script that reads "W. P. Boyko". The signature is written in a fluid, connected style with a long, sweeping underline.

W. P. Boyko, M.Sc., P. Eng.

## BIBLIOGRAPHY

1. Tempelman-Kluit, D.J., (1970): Geology and Origin of The Faro, Vangorda and Swim Concordant Zinc-Lead Deposits, Central Yukon Territory.  
Geol. Surv. Canada, Bulletin 208.

APPENDIX I  
Instrumentation

Electromagnetic Instrument

Type: Helicopter mounted in-phase - quadrature instrument manufactured by Geonics Limited, Toronto.

Coils: The transmitting and receiving coils are coaxial 6 meters apart in a towed bird 30 meters below the helicopter. The coil axis is in the direction of travel.

Frequency: 736 Hz.

Noise Level: Approximately 1/6 p.p.m.

VLF Electromagnetic Instrument

Type: Totem 1A - quadrature and total field instrument manufactured by Herz Industries Limited, Willowdale, Ontario.

Coils: Three receiving coils (3 perpendicular coils in an X, Y, Z configuration). The coils are mounted between the helicopter and the E.M. "bird".

Frequency: 17.8 KHz - Cutler Maine Tx station.

Noise Level: ± 1% of the quadrature field.

APPENDIX I

- 2 -

Magnetometer

Type: Proton precession model AM-104 manufactured by  
Barringer Research Limited, Toronto, Ontario.

Cycling Time: 1.13 seconds.

Polarizing Time: 1.587 seconds

Sensing Head  
Design: 5 inch diameter Toroid.

Ancillary Equipment:

Barringer eight-channel analogue recorder.

Perle digital recorder.

Geocam 35 mm Flight Path Camera and Intervalometer.

Hoffman Radio Altimeter.

## APPENDIX II

### The Flight Tape and Path Recovery

The flight tape consists of eight channels of information as follows:

| <u>Channel</u>       | <u>Time Constant</u> | <u>Scale Units/mm</u> | <u>Noise</u> |
|----------------------|----------------------|-----------------------|--------------|
| 1. Radar Altitude    | 1 sec                | 10 feet               | 2 feet       |
| 2. EM - inphase      | 0.6 sec              | 1 ppm                 | 1/2 ppm      |
| 3. EM - quadrature   | 0.6 sec              | 1 ppm                 | 1/2 ppm      |
| 4. EM - inphase      | 2 sec                | 1/3 ppm               | 1/6 ppm      |
| 5. EM - quadrature   | 2 sec                | 1/3 ppm               | 1/6 ppm      |
| 6. VLF - total field | 1 sec                | 1.25%                 | 1%           |
| 7. VLF - quadrature  | 1 sec                | 1.25%                 | 1%           |
| 8. Magnetometer      | 1 sec                | 5 gammas              | 2 gammas     |

In addition, three fiducial markers are used between the channels, as follows:

| <u>Fiducial</u>     | <u>Occurrence</u>                                      |
|---------------------|--|
| Camera fiducials    | occurs regularly at 2.5 second intervals on every line |
| Navigator fiducials | occurs discontinuously on every line                   |
| Time                | at 10 second and one minute intervals                  |

The navigator fiducial marks represent points on the ground which were recognized by the aircraft navigator. The beginning of the flight line is flagged by a pair of navigator fiducials. These are followed by a series of unevenly-spaced

fiducials moving right-wards along the tape, which is the direction of flight. The end of the line is flagged by a string of three navigator fiducial marks.

The helicopter flight path is recovered from 35 mm film, which is exposed at 2.5 second intervals indicated by the camera fiducial marks on the analogue tape. After processing and annotating, recognizable fiducials are pinpointed on the photo mosaic.

The flight line numbers and anomaly letters are marked on the maps are taken directly from the flight tapes. The line numbers, followed by a direction of flight are displayed at the top of the tape above the radar altitude trace. The anomaly letters, in alphabetic order by line, are found between the radar altitude trace and the upper inphase EM trace.

APPENDIX III

Anomaly List



| LINE AND ANOMALY | INPHASE PPM | QUADRATURE PPM | CONDUCTOR MHOS | DEPTH | BIRD HEIGHT |
|------------------|-------------|----------------|----------------|-------|-------------|
|------------------|-------------|----------------|----------------|-------|-------------|

|     |    |    |    |    |     |
|-----|----|----|----|----|-----|
| 20A | 3  | 6  | 1  | 0  | 184 |
| 20B | 4  | 10 | 1  | 0  | 167 |
| 20C | 1  | 5  | 0  | 0  | 135 |
| 20D | 4  | 10 | 1  | 0  | 154 |
| 20E | 4  | 9  | 2  | 0  | 145 |
| 20F | 12 | 7  | 14 | 7  | 163 |
| 20G | 14 | 6  | 22 | 6  | 159 |
| 20H | 10 | 4  | 21 | 6  | 181 |
| 20J | 13 | 5  | 24 | 57 | 117 |
| 20K | 4  | 13 | 1  | 12 | 98  |
| 20M | 4  | 10 | 1  | 17 | 105 |
| 20N | 6  | 14 | 2  | 5  | 110 |
| 20O | 12 | 17 | 4  | 8  | 109 |
| 20P | 35 | 25 | 16 | 5  | 105 |
| 20Q | 39 | 29 | 16 | 4  | 100 |
| 20R | 48 | 15 | 50 | 22 | 91  |
| 20S | 38 | 7  | 90 | 40 | 88  |
| 20T | 47 | 12 | 66 | 42 | 74  |

ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS

| LINE AND ANOMALY | INPHASE PPM | QUADRATURE PPM | CONDUCTOR MHOS | DEPTH | BIRD HEIGHT |
|------------------|-------------|----------------|----------------|-------|-------------|
| 20U              | 41          | 8              | 97             | 29    | 95          |
| 20V              | 11          | 3              | 40             | 56    | 137         |
| 20W              | 5           | 10             | 2              | 0     | 134         |
| 20X              | 4           | 10             | 1              | 0     | 130         |
| 21A              | 3           | 7              | 1              | 0     | 157         |
| 21B              | 7           | 7              | 5              | 4     | 161         |
| 21C              | 12          | 7              | 15             | 6     | 164         |
| 21D              | 17          | 1              | 229            | 27    | 147         |
| 21E              | 20          | 4              | 85             | 31    | 128         |
| 21F              | 18          | 9              | 19             | 5     | 143         |
| 21G              | 15          | 10             | 14             | 18    | 133         |
| 21H              | 4           | 10             | 1              | 18    | 109         |
| 21J              | 5           | 9              | 2              | 49    | 92          |
| 21K              | 4           | 9              | 2              | 28    | 108         |
| 21M              | 10          | 7              | 10             | 28    | 143         |
| 21N              | 13          | 4              | 31             | 27    | 149         |
| 21O              | 15          | 10             | 12             | 14    | 135         |
| 21P              | 26          | 21             | 12             | 6     | 110         |
| 21Q              | 55          | 28             | 28             | 21    | 81          |
| 21R              | 24          | 22             | 10             | 27    | 86          |
| 21S              | 33          | 32             | 10             | 33    | 67          |
| 21T              | 41          | 29             | 17             | 5     | 99          |
| 21U              | 42          | 30             | 17             | 2     | 101         |
| 21V              | 1           | 6              | 0              | 2     | 116         |
| 21W              | 3           | 7              | 1              | 29    | 114         |
| 21X              | 3           | 4              | 2              | 80    | 114         |
| 22A              | 2           | 2              | 2              | 154   | 83          |
| 22B              | 11          | 6              | 13             | 40    | 133         |
| 22C              | 5           | 4              | 5              | 65    | 136         |
| 22D              | 25          | 12             | 24             | 13    | 121         |
| 22E              | 24          | 12             | 22             | 3     | 131         |
| 22F              | 17          | 11             | 13             | 0     | 147         |
| 22G              | 11          | 3              | 45             | 47    | 145         |
| 22H              | 7           | 3              | 19             | 35    | 181         |
| 22J              | 9           | 5              | 12             | 33    | 154         |

ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS

| LINE AND ANOMALY | INPHASE PPM | QUADRATURE PPM | CONDUCTOR MHOS | DEPTH | BIRD HEIGHT |
|------------------|-------------|----------------|----------------|-------|-------------|
| 22K              | 12          | 4              | 36             | 71    | 114         |
| 22M              | 18          | 6              | 36             | 0     | 164         |
| 22N              | 20          | 8              | 30             | 0     | 151         |
| 22O              | 17          | 10             | 16             | 5     | 142         |
| 22P              | 10          | 9              | 7              | 26    | 131         |
| 22Q              | 5           | 8              | 3              | 25    | 123         |
| 22R              | 0           | 2              | ?              | ?     | 93          |
| 22S              | 2           | 2              | 4              | 190   | 97          |
| 22T              | 0           | 14             | ?              | ?     | 118         |
| 23A              | 0           | 4              | ?              | ?     | 77          |
| 23B              | 5           | 6              | 4              | 8     | 173         |
| 23C              | 13          | 8              | 14             | 0     | 171         |
| 23D              | 17          | 8              | 23             | 0     | 170         |
| 23E              | 15          | 5              | 34             | 0     | 172         |
| 23F              | 12          | 10             | 9              | 0     | 172         |
| 23G              | 17          | 12             | 12             | 0     | 158         |
| 23H              | 15          | 12             | 11             | 29    | 114         |
| 23J              | 21          | 11             | 20             | 43    | 99          |
| 23K              | 14          | 14             | 7              | 33    | 101         |
| 23M              | 28          | 18             | 18             | 6     | 116         |
| 23N              | 19          | 11             | 17             | 0     | 149         |
| 23O              | 9           | 6              | 11             | 46    | 135         |
| 23P              | 2           | 6              | 0              | 41    | 83          |
| 24A              | 1           | 4              | 0              | 38    | 95          |
| 24B              | 14          | 16             | 6              | 11    | 113         |
| 24C              | 31          | 19             | 19             | 12    | 107         |
| 24D              | 19          | 18             | 8              | 39    | 83          |
| 24E              | 10          | 11             | 6              | 58    | 84          |
| 24F              | 15          | 10             | 13             | 2     | 148         |
| 24G              | 24          | 12             | 22             | 0     | 150         |
| 24H              | 28          | 17             | 17             | 9     | 115         |
| 24J              | 67          | 32             | 32             | 0     | 103         |
| 24K              | 62          | 26             | 37             | 0     | 113         |
| 24M              | 62          | 32             | 29             | 0     | 107         |
| 24N              | 25          | 28             | 8              | 0     | 114         |

ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS

| LINE AND ANOMALY | INPHASE PPM | QUADRATURE PPM | CONDUCTOR |       | BIRD HEIGHT |
|------------------|-------------|----------------|-----------|-------|-------------|
|                  |             |                | MHOS      | DEPTH |             |
| 240              | 32          | 12             | 34        | 0     | 132         |
| 24P              | 34          | 9              | 59        | 0     | 161         |
| 24Q              | 21          | 5              | 51        | 0     | 161         |
| 24R              | 18          | 9              | 21        | 0     | 158         |
| 24S              | 0           | 3              | ?         | ?     | 63          |
| 25A              | 6           | 6              | 5         | 0     | 179         |
| 25B              | 4           | 4              | 5         | 26    | 176         |
| 25C              | 7           | 4              | 11        | 38    | 162         |
| 25D              | 16          | 4              | 46        | 11    | 159         |
| 25E              | 24          | 5              | 75        | 0     | 167         |
| 25F              | 23          | 7              | 45        | 0     | 182         |
| 25G              | 17          | 6              | 34        | 0     | 175         |
| 25H              | 24          | 8              | 36        | 0     | 159         |
| 25J              | 29          | 11             | 35        | 13    | 120         |
| 25K              | 36          | 16             | 29        | 8     | 112         |
| 25M              | 37          | 19             | 25        | 0     | 122         |
| 25N              | 36          | 22             | 19        | 0     | 118         |
| 25O              | 22          | 19             | 11        | 16    | 105         |
| 25P              | 6           | 10             | 3         | 42    | 95          |
| 25Q              | 17          | 14             | 10        | 4     | 130         |
| 25R              | 21          | 15             | 13        | 0     | 132         |
| 25S              | 13          | 11             | 9         | 14    | 131         |
| 25T              | 0           | 2              | 0         | 43    | 124         |
| 26A              | 0           | 3              | 0         | 0     | 145         |
| 26B              | 1           | 2              | 0         | 90    | 109         |
| 26C              | 5           | 3              | 9         | 74    | 148         |
| 26D              | 34          | 18             | 23        | 0     | 122         |
| 26E              | 23          | 14             | 17        | 13    | 118         |
| 26F              | 10          | 5              | 16        | 82    | 99          |
| 26G              | 39          | 22             | 22        | 0     | 118         |
| 26H              | 23          | 20             | 10        | 19    | 98          |
| 26J              | 23          | 21             | 10        | 31    | 85          |
| 26K              | 31          | 22             | 15        | 0     | 118         |
| 26M              | 25          | 16             | 16        | 0     | 129         |
| 26N              | 19          | 12             | 15        | 11    | 128         |

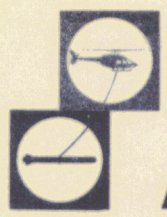
ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS

| LINE AND ANOMALY | IN PHASE PPM | QUADRATURE PPM | CONDUCTOR MHOS | DEPTH | BIRD HEIGHT |
|------------------|--------------|----------------|----------------|-------|-------------|
| 260              | 21           | 5              | 54             | 28    | 126         |
| 26P              | 17           | 3              | 69             | 49    | 120         |
| 26Q              | 17           | 4              | 48             | 34    | 130         |
| 26R              | 16           | 6              | 27             | 17    | 144         |
| 26S              | 22           | 14             | 16             | 12    | 121         |
| 26T              | 15           | 10             | 13             | 3     | 145         |
| 27A              | 12           | 6              | 17             | 13    | 161         |
| 27B              | 29           | 8              | 50             | 0     | 159         |
| 27C              | 23           | 5              | 64             | 4     | 147         |
| 27D              | 22           | 3              | 128            | 0     | 160         |
| 27E              | 13           | 8              | 13             | 0     | 166         |
| 27F              | 21           | 7              | 35             | 0     | 167         |
| 27G              | 19           | 8              | 24             | 5     | 145         |
| 27H              | 22           | 11             | 20             | 36    | 103         |
| 27J              | 21           | 12             | 16             | 44    | 93          |
| 27K              | 16           | 11             | 11             | 7     | 137         |
| 27M              | 19           | 15             | 12             | 3     | 129         |
| 27N              | 23           | 14             | 17             | 12    | 120         |
| 27O              | 25           | 12             | 23             | 32    | 102         |
| 27P              | 19           | 9              | 20             | 57    | 91          |
| 28A              | 2            | 7              | 1              | 64    | 74          |
| 28B              | 15           | 7              | 19             | 62    | 98          |
| 28C              | 13           | 8              | 15             | 57    | 104         |
| 28D              | 15           | 7              | 19             | 79    | 83          |
| 28E              | 12           | 5              | 21             | 49    | 128         |
| 28F              | 11           | 1              | 169            | 0     | 227         |
| 28G              | 10           | 8              | 9              | 40    | 123         |
| 28H              | 16           | 16             | 8              | 31    | 95          |
| 28J              | 25           | 23             | 10             | 19    | 93          |
| 28K              | 43           | 23             | 24             | 0     | 115         |
| 28M              | 61           | 23             | 43             | 0     | 115         |
| 28N              | 82           | 22             | 70             | 0     | 126         |
| 28O              | 40           | 12             | 48             | 0     | 155         |
| 29A              | 8            | 8              | 5              | 0     | 160         |

ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS.

| LINE AND ANOMALY | INPHASE PPM | QUADRATURE PPM | CONDUCTOR MHOS | DEPTH | BIRD HEIGHT |
|------------------|-------------|----------------|----------------|-------|-------------|
| 29B              | 14          | 13             | 7              | 13    | 122         |
| 29C              | 14          | 17             | 6              | 18    | 104         |
| 29D              | 7           | 7              | 6              | 62    | 111         |
| 29E              | 9           | 9              | 6              | 55    | 100         |
| 29F              | 22          | 18             | 11             | 38    | 85          |
| 29G              | 35          | 26             | 15             | 19    | 89          |
| 29H              | 25          | 18             | 14             | 18    | 105         |
| 29J              | 26          | 17             | 17             | 10    | 115         |
| 29K              | 24          | 14             | 18             | 22    | 109         |
| 29M              | 14          | 5              | 26             | 21    | 152         |
| 29N              | 10          | 4              | 22             | 0     | 218         |
| 29O              | 17          | 6              | 34             | 0     | 193         |
| 29P              | 41          | 8              | 85             | 0     | 171         |
| 29Q              | 54          | 13             | 74             | 0     | 157         |
| 29R              | 50          | 12             | 68             | 0     | 162         |
| 29S              | 26          | 8              | 41             | 0     | 171         |
| 29T              | 0           | 0              | 1              | 297   | 146         |
| 30A              | 12          | 3              | 52             | 2     | 187         |
| 30B              | 17          | 4              | 51             | 0     | 186         |
| 30C              | 21          | 5              | 56             | 0     | 168         |
| 30D              | 21          | 6              | 40             | 0     | 163         |
| 30E              | 17          | 5              | 38             | 0     | 166         |
| 30F              | 8           | 5              | 11             | 5     | 182         |
| 30G              | 22          | 14             | 16             | 19    | 113         |
| 30H              | 34          | 17             | 25             | 14    | 106         |
| 30J              | 46          | 16             | 43             | 9     | 106         |
| 30K              | 45          | 14             | 50             | 11    | 105         |
| 30M              | 27          | 20             | 13             | 30    | 87          |
| 30N              | 24          | 24             | 9              | 35    | 75          |
| 30O              | 32          | 32             | 10             | 19    | 81          |
| 30P              | 40          | 32             | 14             | 19    | 82          |
| 30Q              | 27          | 19             | 14             | 28    | 92          |
| 30R              | 13          | 9              | 11             | 51    | 102         |
| 30S              | 5           | 6              | 3              | 26    | 143         |

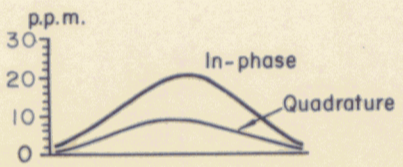
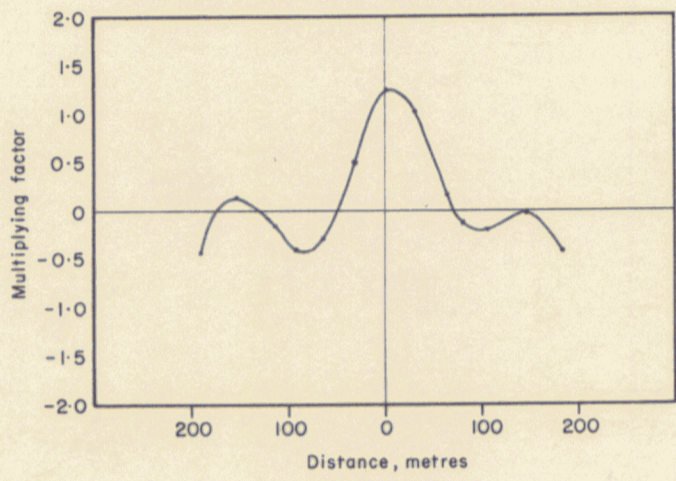
ESTIMATED DEPTH MAY BE UNRELIABLE BECAUSE THE STRONGER PART OF THE CONDUCTOR MAY BE DEEPER OR TO ONE SIDE OF THE FLIGHT LINE, OR BECAUSE OF A SHALLOW DIP OR OVERBURDEN EFFECTS



AERODAT

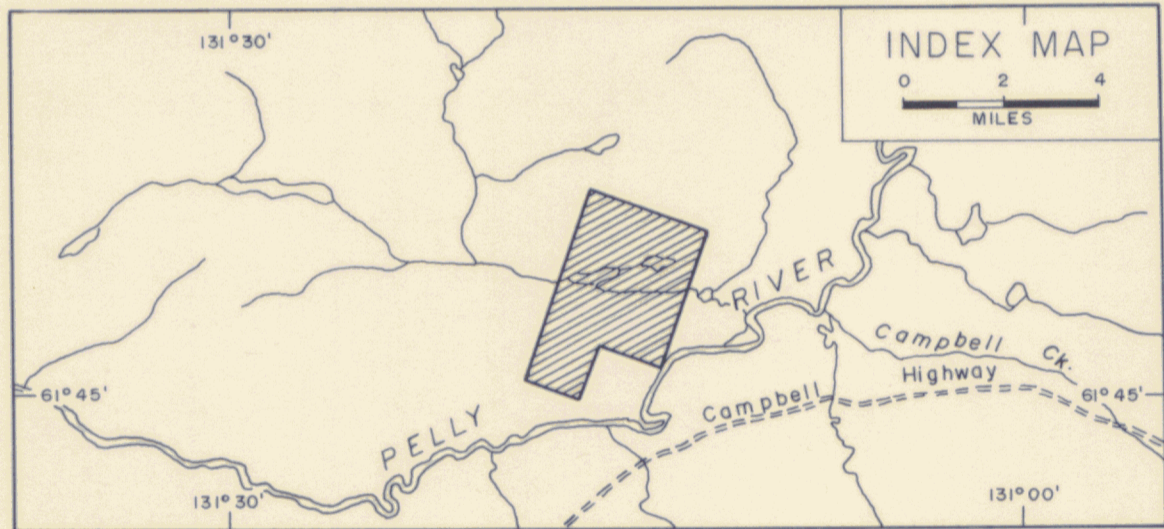


CHARACTERISTIC OF MAGNETIC LINE FILTER



LEGEND

- 500 gammas .....
- 100 gammas .....
- 20 gammas .....
- 0 gammas .....

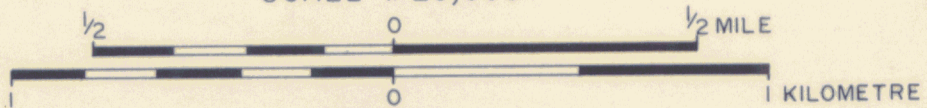


Map 1

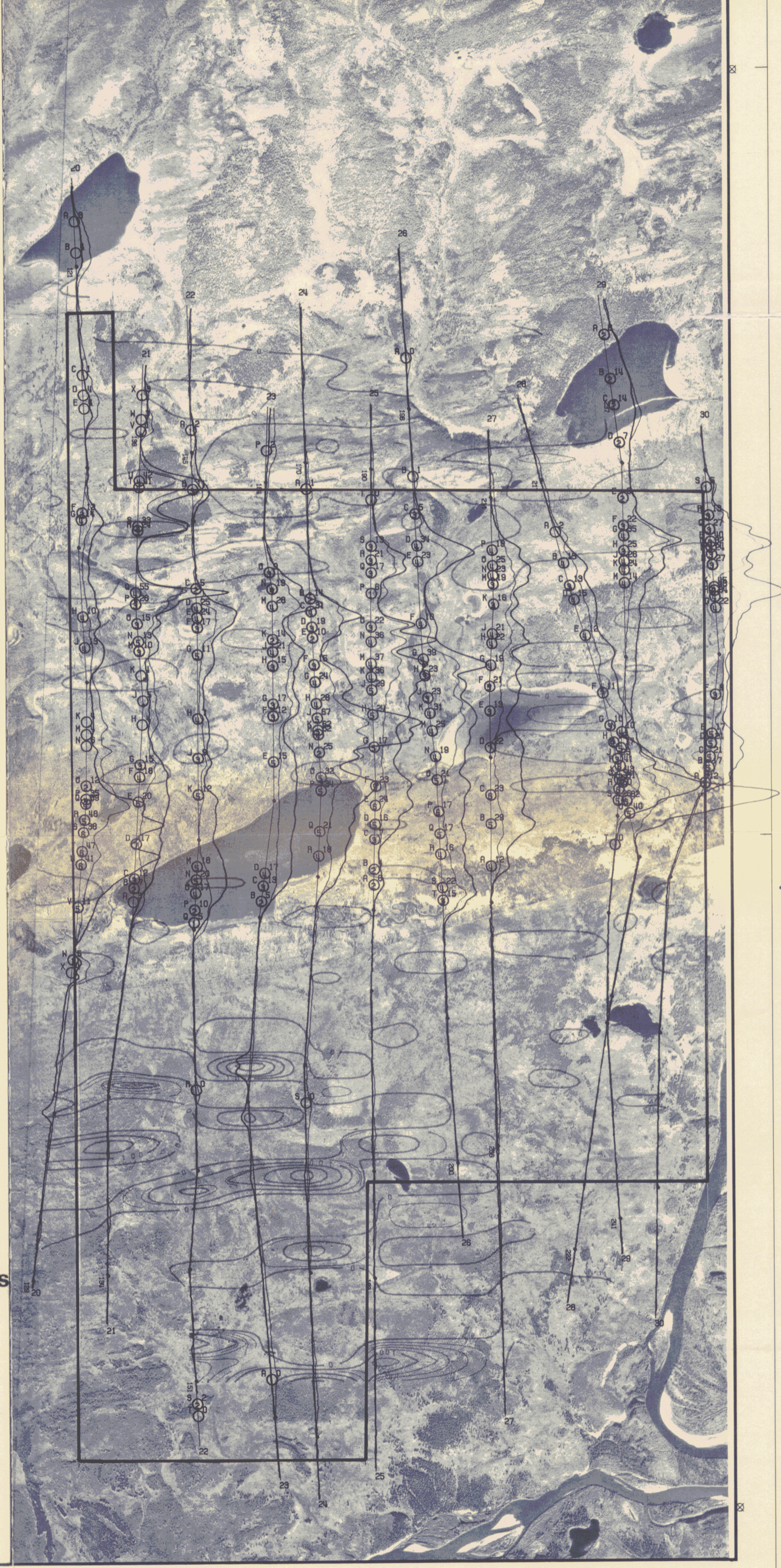
**AIRBORNE ELECTROMAGNETIC SURVEY PROFILES AND FILTERED MAGNETIC MAP**

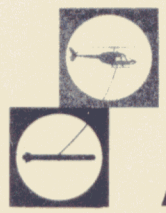
ROSS RIVER AREA  
YUKON TERRITORY  
ALLEN CARLOS  
EAGLE AND FRED AND SHALE CLAIMS

SCALE 1/20,000

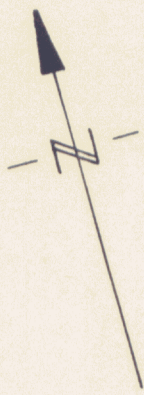


NOVEMBER 1978



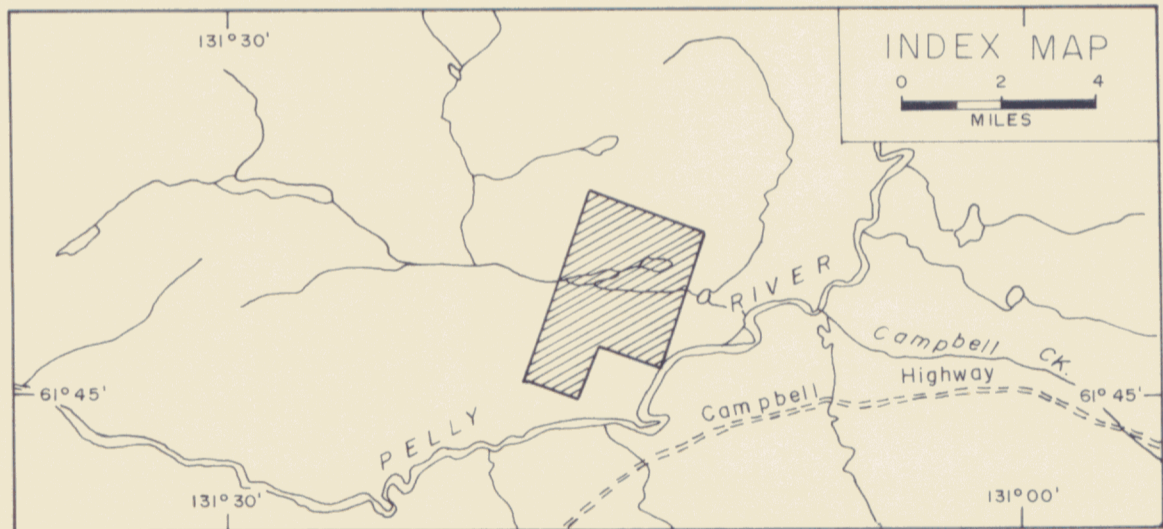


AERODAT



LEGEND

- 500 gammas .....
- 100 gammas .....
- 20 gammas .....



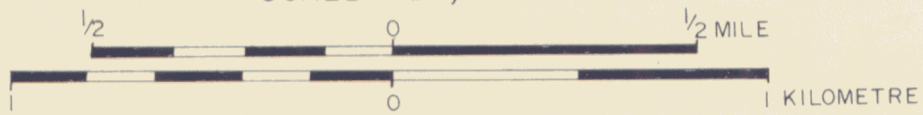
Map 2

TOTAL FIELD MAGNETIC MAP

ROSS RIVER AREA  
YUKON TERRITORY

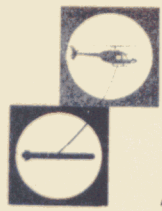
ALLEN CARLOS  
EAGLE AND FRED AND SHALE CLAIMS

SCALE 1/20,000

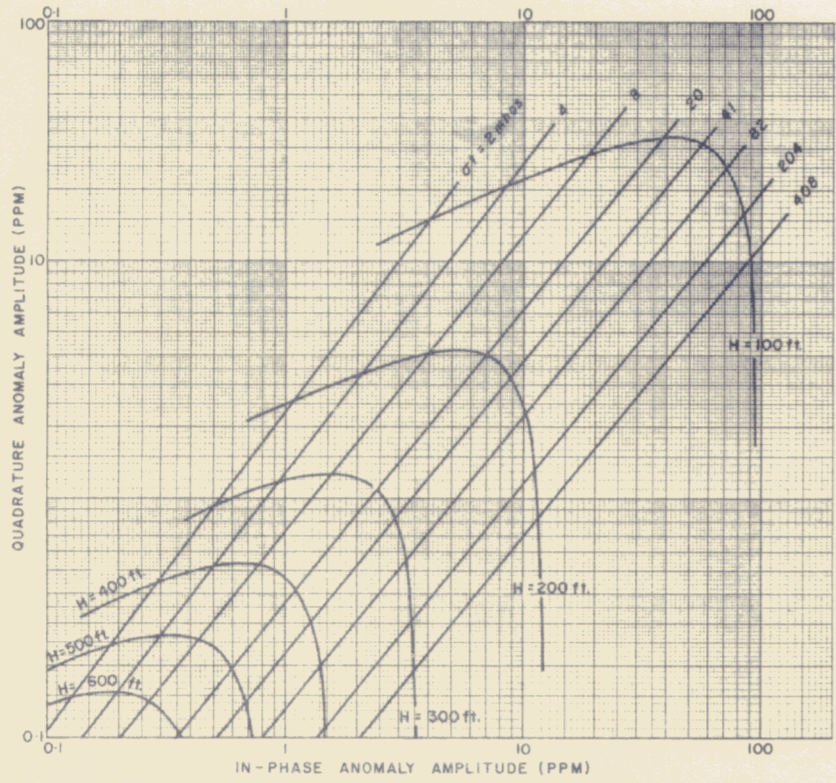
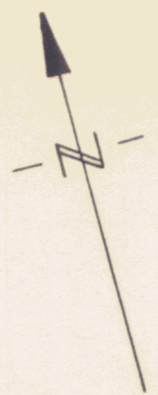


NOVEMBER 1978





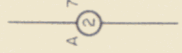
AERODAT



EM RESPONSE  
Conductivity thickness in mhos

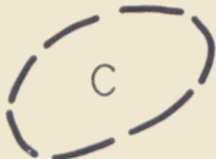
- ⑨ > 500
- ⑧ 250 - 500
- ⑦ 125 - 250
- ⑥ 60 - 125
- ⑤ 30 - 60
- ④ 15 - 30
- ③ 8 - 15
- ② 4 - 8
- ① 2 - 4
- < 2
- 25 Inphase response

EM ANOMALY SYMBOLS



EM Anomaly A, in-phase amplitude 7 p.p.m.  
Conductivity thickness range 2 (see code)

INTERPRETATION LEGEND

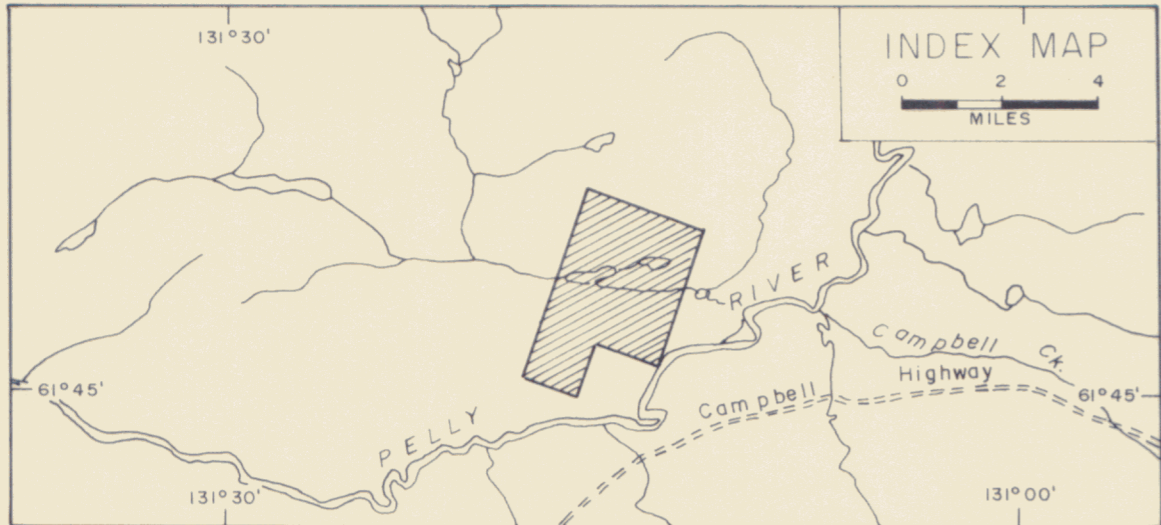


Zone of conductive rocks



Zone of more intense conductivity

Horizontal control ..... based on photo laydown  
Average bird height ..... 65 metres  
Line spacing ..... 400 metres

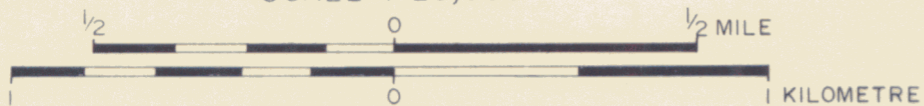


Map 3

INTERPRETATION MAP  
AIRBORNE ELECTROMAGNETIC SURVEY

ROSS RIVER AREA  
YUKON TERRITORY  
ALLEN CARLOS  
EAGLE AND FRED AND SHALE CLAIMS

SCALE 1/20,000



NOVEMBER 1978

