# REPORT

## ON A
## COMBINED HELICOPTER BORNE MAGNETIC, ELECTROMAGNETIC AND VLF SURVEY

## AKWESKWA PROJECT
## ONTARIO

FOR

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September 18, 1995

9537

# TABLE OF CONTENTS

## Figures

## Appendices

# MAPS

The results of the survey are presented in a series of black line and colour maps at a scale of 1:5,000. The survey area is covered in 1 map sheet.

The black line maps show a screened topographic base provided by Eastmain Resources. The colour maps show a UTM grid plus planimetry digitized from the topographic maps, claim boundaries and claim numbers.

Map types are as follows:

**Black Line Maps** Scale 1:5,000

1. Topographic base map
2. Compilation map
3. Total magnetic field
4. Calculated vertical magnetic gradient
5. Apparent resistivity - 4600 Hz
6. Apparent weight percent magnetite
7. VLF total field (line station)

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2. Calculated vertical magnetic gradient
3. Apparent resistivity - 4600 Hz
4. Apparent weight percent magnetite
5. VLF total field (line station)
6. EM offset profiles - 865 and 935 Hz data
7. EM offset profiles - 4175 and 4600 Hz data
8. EM offset profiles - 33000 Hz data

**Derivative Colour Maps** Scales 1:5,000 and 1:20,000

1. Colour shadowgraph map of the total magnetic field

All but the base and shadow maps show the flight path. EM anomaly centres are shown on all but the base map. Colour contour maps show colour fill plus superimposed line contours.

# REPORT ON A COMBINED HELICOPTERBORNE MAGNETIC, ELECTROMAGNETIC AND VLF SURVEY AKWESKWA PROJECT, ONTARIO

## 1. INTRODUCTION

This report describes a helicopter-borne geophysical survey carried out on behalf of Eastmain Resources Inc. by Aerodat Inc. under an agreement dated May 29, 1995. Principal geophysical sensors included a five frequency electromagnetic system, a high sensitivity cesium vapour magnetometer and a VLF system. Ancillary equipment included a GPS navigation system with GPS base station, a colour video tracking camera, radar and barometric altimeters, powerline monitor and a base station magnetometer.

The survey was flown over an area of 12.5 square kilometres in Kenogaming Township and about 50 km southwest of Timmins. The survey was flown in the period July 11 to 14, 1995. The flight line spacing was 50 m. Total coverage (traverse plus tie lines) as measured within the survey boundary was 263 line kilometres. The Aerodat job number is J9537.

This report describes the survey, the data processing and presentation. Based on geological and exploration data provided by Eastmain Resources, the survey results are reviewed and prominent lithological units and structures with a distinct geophysical expression transferred to a compilation map. Promising exploration targets are highlighted and discussed.

## 2. SURVEY AREA AND SPECIFICATIONS

The survey area is shown on a regional scale in figure 1. A more detailed map showing claim boundaries has been provided by Eastmain Resources and is reproduced here as figure 2.

The area is rectangular with dimensions 2.5 km by 5 km. It runs northwest from the southern end of Akweskwa Lake in Kenogaming Township. Topographic relief in the area is low with most elevations in the range of 350 to 380 metres. The area is free of major roads, power lines and railroads.

Starting in the northern corner and advancing clockwise, the survey area corners are

| | | | | |
|---|---|---|---|---|
| 1. | 429 600 east | 5 335 200 north | 81° 56' 48" west | 48° 10' 05" north |
| 2. | 433 925 east | 5 332 675 north | 81° 53' 17" west | 48° 08" 45" north |
| 3. | 432 675 east | 5 330 500 north | 81° 54' 16" west | 48° 07' 34" north |
| 4. | 428 350 east | 5 333 025 north | 81° 57' 47" west | 48° 08' 54" north |

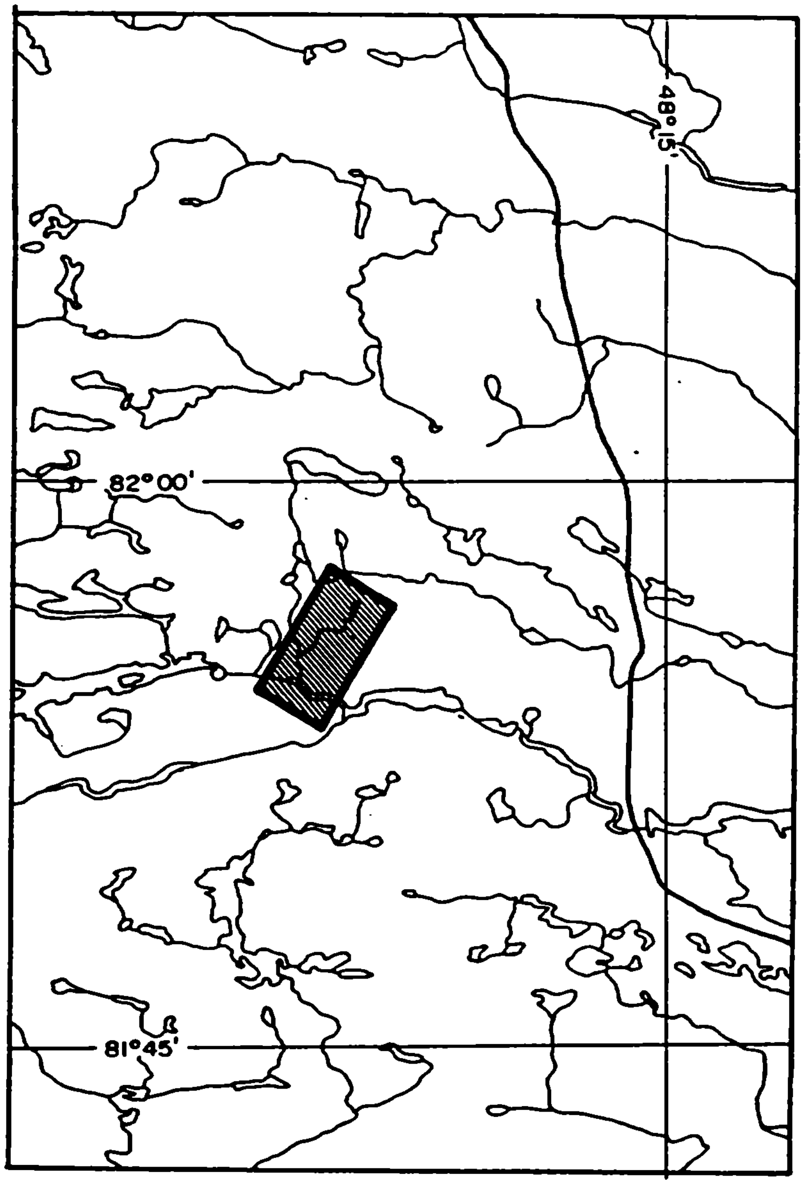

**Figure 1 - LOCATION MAP**

Combined Helicopter borne
Magnetic, Electromagnetic and VLF Survey

Akweskwa Project
Ontario
for
Eastmain Resources Inc.
by
Aerodat Inc.
J9537

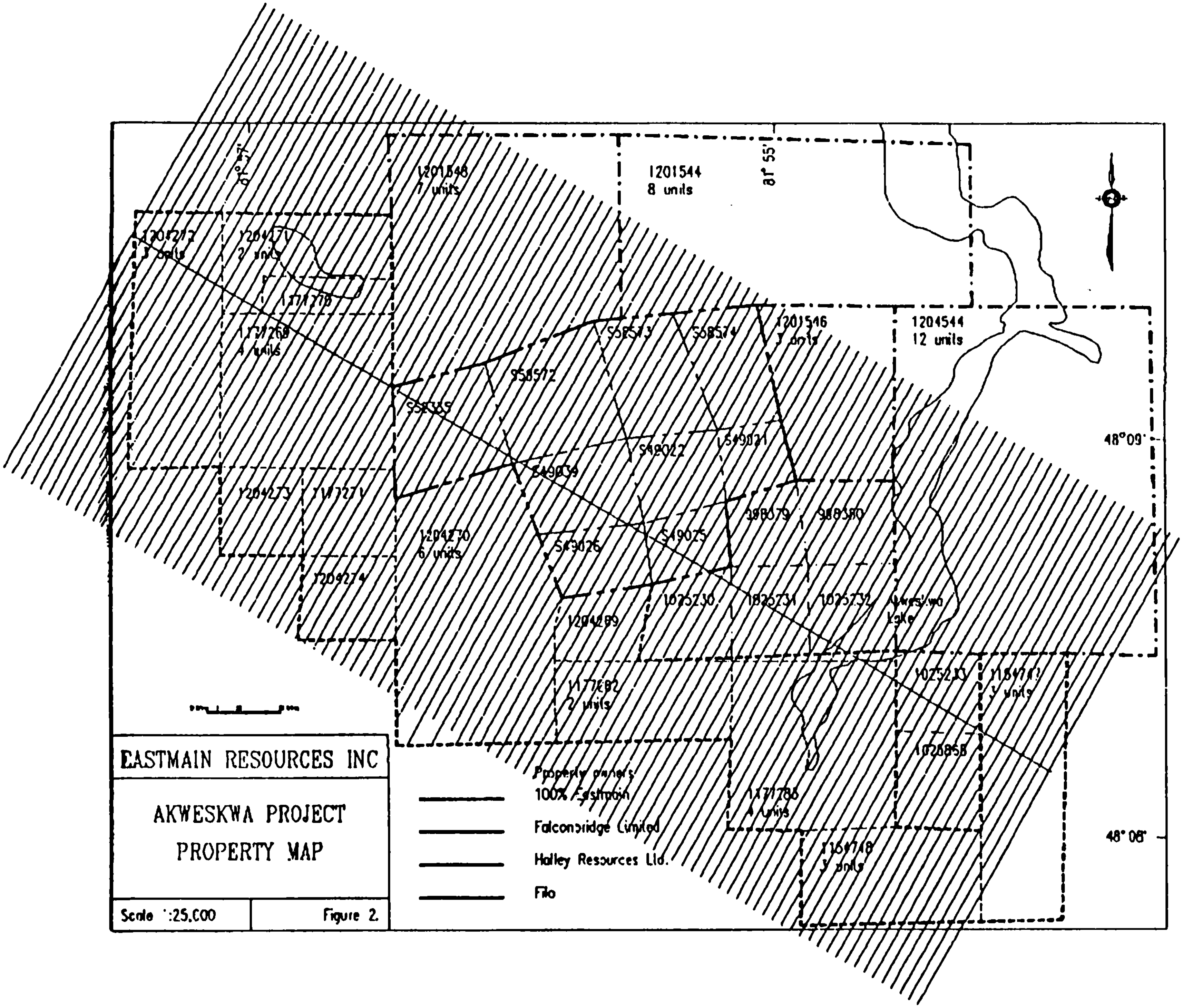

**Figure 2 :** Survey area map showing claim boundaries (from Eastmain Resources)

The UTM grid is based on the North American 1927 datum (Clarke 1866 spheroid with WGS 84 to local datum shifts of 9 m (dx), -157 m (dy) and -184 m (dz)), zone 17 with the central meridian at 81° west.

The area is centered at about 81° 55' west, 48° 10' north. For an elevation of 400 metres and a 1995.5 date, the geomagnetic field looks like

| | |
|---|---|
| Total field : | 58,357 nT |
| Inclination : | 75.1° |
| Declination : | magnetic north is 10.1° west of geographic north |
| Latitude gradient : | 2.51 nT/km to the north |
| Longitude gradient : | 0.97 nT/km to the west |
| Elevation gradient : | 30.22 nT/km |

## Specifications

| | |
|---|---|
| Traverse line spacing : | 50 metres |
| Traverse line direction : | 30° east of north |
| Tie lines : | two tie lines |
| Nominal survey ground speed : | 60 knots (31 metres per second) |
| Nominal sensor terrain clearances | |
| EM : | 30 metres |
| Magnetometer and VLF : | 45 metres |
| Sampling | |
| EM and VLF : | 0.1 seconds |
| Magnetometer : | 0.2 seconds |

1. The distance between adjacent flight lines will not exceed 1.5 times the line spacing for a distance of more than 1 kilometre along any flight line.

2. The nominal EM sensor height will be 30 metres and will be consistent with safety of aircraft and crew.

3. EM noise levels are generally less than 1 ppm excluding spherics. Magnetometer noise levels are 0.1 nT or less.

4. Reflights will be attempted wherever lines or part lines are noted in the field to be beyond the agreed tolerances and unacceptable. Occasional deficiencies or discontinuities of VLF information due to VLF transmission conditions will not be grounds for rejection of acquired data.

## 3. SURVEY PERSONNEL AND PROCEDURES

The survey was flown in the period July 11 to 14, 1995. Five flights were needed to complete the project. The Aerodat personnel involved in the project are listed in Appendix 1.

The flight line spacing was 50 metres. The flight line direction was 30° east of north. Two tie lines were flown. The aircraft ground speed was maintained at approximately 60 knots (31 metres per second). The nominal helicopter terrain clearance was maintained at 60 m (sensor terrain clearances of 30 m - EM, 45 m - magnetometer and VLF).

Navigation was assisted by a GPS receiver and data acquisition system which translate GPS coordinates as WGS 84 latitude/longitude into local UTM x/y, direct the pilot over a pre-programmed survey grid and record current position. A base station records static GPS positions for later differential correction of the airborne record.

The operator entered manual fiducials over prominent topographic features as seen on local topographic maps. Survey lines which showed excessive deviation were re-flown.

Calibration lines at the start, middle (if required) and end of every survey flight were flown outside of ground effects to record electromagnetic zero levels.

## 4. DELIVERABLES

The survey is described in a report which is provided in two copies. Folded copies of the black line maps are bound with the report. One copy of all colour maps and 2 copies of all shadow maps are provided. The colour maps and stable base originals of the black line maps are rolled and delivered in map tubes.

The results of the survey are presented in a series of black line and colour maps at a scale of 1:5,000. The survey area is covered in 1 map sheet.

The black line maps show a screened topographic base provided by Eastmain Resources. The colour maps show a UTM grid plus planimetry (secondary roads, lakes and rivers) digitized from the topographic maps and claim boundaries and claim numbers taken from a photographic enlargement of figure 2.

Map types are as follows:

**Black Line Maps** Scale 1:5,000

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All but the base and shadow maps show the flight path. EM anomaly centres are shown on all but the base map. Colour contour maps show colour fill plus superimposed line contours.

All grids are provided on diskette in Geosoft format. The profile data is archived on a CD ROM (ISO 9660), written as columnar ASCII records.

All original analog records, base station magnetometer records, flight path video tape and the navigators map are delivered at the end of the project.

## 5. AIRCRAFT AND EQUIPMENT

### 5.1 Aircraft

An Aerospatiale AS350BA A-Star helicopter - registration C-FNJY - owned and operated by Abitibi Helicopters of La Sarre was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The survey aircraft was flown at a nominal terrain clearance of 60 metres.

## 5.2 Electromagnetic System

The electromagnetic system was an Aerodat 5-frequency system. Two vertical coaxial coil pairs were operated at 935 and 4600 Hz and three horizontal coplanar coil pairs at 865, 4175 and 33,000 Hz. The transmitter-receiver separation was 7 metres. Inphase and quadrature signals were measured simultaneously for the 5 frequencies with a time constant of 0.1 seconds. The HEM bird was towed 30 metres below the helicopter.

## 5.3 Magnetometer

The magnetometer employed a Scintrex cesium vapour, optically pumped magnetometer sensor. The sensitivity of this instrument is 0.001 nanoTeslas at a 0.2 second sampling rate. The sensor was towed in a bird 15 metres below the helicopter.

## 5.4 VLF System

A Herz Totem IIA VLF system was used. This unit measures the total field and vertical quadrature component from two VLF transmitters. The stations are designated 'line' and 'ortho' where the line station is ideally 90° from the flight line direction - i.e. parallel to geologic strike. The ortho station is ideally in a direction from the survey area given by the flight line direction.

NAA, Cutler (24.0 kHz) was used throughout as the line station. The azimuth of this station is 14° south of east from the survey area. NSS, Annapolis (21.4 kHz) was used as the ortho station. The azimuth of this station is 65° south of east.

## 5.5 Ancillary Systems

### Base Station Magnetometer

A GSM-19 base station magnetometer was set up at the base of operations to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation. Digital recording resolution was 0.01 nT. The update rate was 4 seconds.

External magnetic field variations are recorded on a printer plot and in digital form. The analog record shows the magnetic field trace plotted with at vertical scales of 1 and 10 nT/cm. Chart speed is about 1 cm per minute. The date, time and total magnetic field value are printed every two minutes.

### Radar Altimeter

A King KRA-10 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude.

### Barometric Altimeter

A Rosemount 1241M 3 B1 barometric altimeter recorded elevation above sea level in feet. This unit is factory calibrated based on a standard atmosphere of about 1 millibar per 10 metres. As normal daily pressure variations are on the order of ± 10 millibars, the absolute accuracy of the barometric elevation is about ± 100 m. The relative accuracy is better.

### Tracking Camera

A Panasonic colour video camera was used to record flight path on VHS video tape. The camera was operated in continuous mode. The flight number, 24 hour clock time (to 0.1 second), and manual fiducial number are encoded on the video tape.

### GPS Navigation System

The navigation system consisted of

- Magnavox MX 9212 GPS receiver + laptop PC to log data
- PNAV-2001 navigation console to provide guidance to the pilot
- Novatel GPS receiver + laptop PC as base station.

GPS data is recorded both in the air and at the base station to allow post-flight differential corrections of the flight path record.

The airborne GPS antenna is mounted about 6 m down the tow cable.

### Analog Recorder

An RMS dot matrix recorder was used to display the data during the survey.
Record contents are as follows:

| Label | Contents | Scale |
|---|---|---|
| GEOPHYSICAL SENSOR DATA | | |
| MAGF | Total Field Magnetics, Fine | 2.5 nT/mm |
| MAGC | Total Field Magnetics, Coarse | 25 nT/mm |

| | | |
|---|---|---|
| L9XI | 935 Hz, Coaxial, Inphase | 2.5 ppm/mm |
| L9XQ | 935 Hz, Coaxial, Quadrature | 2.5 ppm/mm |
| M4XI | 4600 Hz, Coaxial, Inphase | 2.5 ppm/mm |
| M4XQ | 4600 Hz, Coaxial, Quadrature | 2.5 ppm/mm |
| L8PI | 865 Hz, Coplanar, Inphase | 10 ppm/mm |
| L8PQ | 865 Hz, Coplanar, Quadrature | 10 ppm/mm |
| M4PI | 4174 Hz, Coplanar, Inphase | 10 ppm/mm |
| M4PQ | 4175 Hz, Coplanar, Quadrature | 10 ppm/mm |
| H3PI | 33000 Hz, Coplanar, Inphase | 20 ppm/mm |
| H3PQ | 33000 Hz, Coplanar, Quadrature | 20 ppm/mm |
| VLT | VLF Total Field, Line Station | 2.5 %/mm |
| VLQ | VLF Vertical Quadrature, Line Station | 2.5 %/mm |
| VOT | VLF Total Field, Ortho Station | 2.5 %/mm |
| VOQ | VLF Vertical Quadrature, Ortho Station | 2.5 %/mm |

ANCILLARY DATA

| | | |
|---|---|---|
| RALT | Radar Altimeter | 10 ft/mm |
| BALT | Barometric Altimeter | 50 ft/mm |
| GALT | GPS Altimeter | 50 ft/mm |
| PWRL | 60 Hz Power line monitor | - |

The zero of the radar altimeter is 5 cm (5 large divisions) from the top of the analog chart. The full analog range for the radar altimeter is therefore 500 feet. A flying height of 60 m (197 feet) gives an analog trace which is three large divisions (3 cm) below the top of the analog record.

Chart speed is 2 mm/second. The 24 hour clock time is printed every 20 seconds. The total magnetic field value is printed every 30 seconds.

Vertical lines crossing the record are operator activated manual fiducial markers. The start of any survey line is identified by two closely spaced manual fiducials. The end of any survey line is identified by three closely spaced manual fiducials. Manual fiducials are numbered in order. Every tenth manual fiducial is indicated by its number, printed at the bottom of the record.

Calibration sequences are located at the start and end of each flight and at intermediate times when needed.

### Digital Recorder

An RMS data acquisition system recorded the digital survey data on magnetic media. Contents and update rates were as follows:

| DATA TYPE | SAMPLING | RESOLUTION |
|---|---|---|
| Magnetometer | 0.2 s | 0.001 nT |
| HEM (10 channels) | 0.1 s | 0.03 ppm (935, 4600 Hz)<br>0.12 ppm (865, 4175 Hz)<br>0.24 ppm (33000 Hz) |
| VLF (4 channels) | 0.2 s | 0.1 % |
| Position (2 channels) | 1.0 s | 0.1 m |
| Altimeter | 0.2 s | 0.1 m |
| Power Line Monitor | 0.2 s | - |
| Manual Fiducial | | |
| Clock Time | | |

## 6. DATA PROCESSING AND PRESENTATION

### 6.1 Base Map

The base map for the black line presentation has been provided by Eastmain Resources. Prominent topographic features - secondary roads, lakes and rivers - were digitized to form a planimetric base for the colour maps. To this was added claim boundaries and claim numbers digitized from a 5 times enlargement of figure 2.

Base maps are constructed assuming the scale of the topographic maps is correct to within the accuracy required - normally better than 0.5 %. When registering the airborne results to the base maps, a larger scale error may be detected and the bases are redone. The scale of the airborne results as given by GPS latitude and longitude is assumed to be exact.

### 6.2 Flight Path and Registration

The raw flight path record, expressed as WGS 84 latitude/longitude, is differentially corrected using the base station GPS data. The corrected flight path is translated into x and y coordinates in the local UTM system in metres.

The local reference ellipsoid and UTM protocol are described above - see section 2.

The flight path is drawn using linear interpolation between x,y positions from the navigation system. Processing includes speed checks to identify spikes and offsets which are removed. Positions are updated every second and expressed as UTM eastings (x) and UTM northings (y) in the local UTM system in metres.

The manual fiducials are shown as a small circle labelled by fiducial number. The 24 hour clock time is shown as a small square, plotted every 30 seconds. Large tick marks are shown every 10 seconds. Small tick marks are plotted every 2 seconds.

The survey line and flight numbers are given at the start and end of each survey line. The 102 traverse lines are numbered 10000 1 to 11010 1. Numbering increases from northwest to southeast. The 2 tie lines are numbered 80010 5 and 80020 5.

### Registration

Despite advances in absolute positioning systems such as GPS, the registration of the flight path to the local topographic maps is ultimately based on a reasonable fit between manual fiducials or points picked from the video tape and local topographic maps. In countries with reliable topographic maps, the theoretical registration (based on an assumed datum and translation from WGS 84 coordinates) and the registration based on a best fit with local topographic features are commonly identical.

Where the local topographic maps, particularly the datum on which they are based, are more uncertain, differences in these two types of registration can occur.

The topographic maps and map datum have been found to be reliable and registration based on manual fiducials is in good agreement with the registration based on the theoretical datum.

## 6.3 Electromagnetic Data

For traverse lines 56 to 64 inclusive, all but the positional data were not recorded digitally. It was therefore necessary to digitize the magnetic, EM and VLF data for these 9 line from the analog records.

The electromagnetic data were recorded digitally at a sample rate of 10 per second with a time constant of 0.1 seconds. A two stage digital filtering process was used to reject major sferic events and the reduce system noise.

Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events.

The signal to noise ratio was further enhanced by the application of a low pass digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This low effective time constant gives minimal profile distortion.

Following the filtering process, a base level correction was made using EM zero levels determined during high altitude calibration sequences. The correction applied is a linear function of time that ensures the corrected amplitude of the various inphase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data were used in the determination of apparent resistivity (see below).

The corrected EM data are presented as offset profiles at scales of 2 ppm/mm (935 and 4600 Hz), 8 ppm/mm (865 and 4175) and 16 ppm/mm (33000 Hz).

**Apparent Resistivity**

The apparent resistivity is calculated by assuming a 200 metre thick conductive layer over resistive bedrock. The computer determines the resistivity that would be consistent with the sensor elevation and recorded inphase and quadrature response amplitudes at the selected frequency. The apparent resistivity profile data were interpolated onto a regular grid at a 10 metre true scale interval using an Akima spline technique and contoured using logarithmically arranged contour intervals. The contour interval is 0.1 log(ohm.m). This translates to contour lines at 100, 126, 158, 200, 251, 316, 398, 501, 631 and 794 ohm.m and multiples of 10. Thicker contour lines are used for 100 and 316 ohm.m and multiples of 10.

Where the coaxial inphase response amplitude is less than 1.5 ppm (or coplanar inphase response less than 6 ppm), the apparent resistivity is calculated from the quadrature response alone. This arises where the resistivities are extremely high or negative inphase responses due to magnetite (or pyrrhotite) are common. In this case, the conductive layer is assumed to be at surface.

The highest measurable resistivity is approximately equal to the transmitter frequency. The lower limit on resistivity is rarely encountered.

**Apparent Weight Percent Magnetite**

The apparent weight percent magnetite has been calculated from the 4175 Hz inphase EM response. The algorithm is based on the HEM response to a non-conducting, magnetically polarizable half-space. The calculation involves a correction to a sensor elevation of 30 m followed by a conversion to weight percent. The elevation correction is based on the cubic fall-off of response amplitude with height. As a rule of thumb, a negative inphase response of 1 ppm in either coaxial channel (or -4 ppm in the coplanar channels) will work out to a percent magnetite by weight of about 0.4 %.

The results will be misleading if the source is a near-vertical dyke or intrusion. In such cases, the calculated weight percent magnetite may be too little by a factor of 10 or more.

The calculated apparent percent magnetite data were interpolated on a square grid (10 m grid cell size). The grid provided the basis for threading the presented contours. The minimum contour interval is 0.1%.

## 6.4 Magnetic Data

The aeromagnetic data were corrected for diurnal variations by adjustment with the recorded base station magnetic values. This was followed by fine levelling using manual adjustments applied to the profile data. The corrected profile data were interpolated on to a square grid using an Akima spline technique. The grid cell size was 10 m. A 5 x 5 Hanning grid filter was passed over the preliminary grid. The final grid provided the basis for threading the presented contours. The minimum contour interval is 2 nT.

Hanning profile and grid filters are used extensively in processing airborne geophysical data. These are cosine shaped low pass or smoothing filters which reduce noise with minimal signal distortion. Coefficients for a 7 point Hanning profile filter for example are .0625, .125, .1875, .25, .1875, .125 and .0625.

### Vertical Magnetic Gradient

The vertical magnetic gradient was calculated from the gridded total field magnetic data. The calculation is based on a 17 x 17 point convolution operator. The filtered data is further subject to a 3 x 3 Hanning grid filter. The results are contoured using a minimum contour interval of 0.025 nT/m. The grid cell size is the same as that used in processing the total field data.

### Shadow Maps

The shadow component is produced by calculating and displaying the reflectance of a surface defined by the total magnetic field grid. The reflectance of a surface is a measure of the proportion of illuminating light which will be reflected back to an observer from the surface. The reflectance at each grid cell is given by the cosine of the angle between the surface normal and a specified illumination direction.

The most important setting in producing shadow maps is the illumination direction or azimuth. An illumination declination of 270° and an inclination of 45° have been used to generate the colour shadowgraph maps.

## 6.5 VLF Data

The profile data is subject to a band pass filter which eliminates long period variations due to changes in primary field strength and high frequency noise. The filtered line station data are interpolated onto a 10 m grid using an Akima spline technique. Following a 5 x 5 Hanning grid filter, the contour maps are presented at a minimum contour interval of 1 %.

## 6.6 EM Anomaly Selection and Analysis

The main purpose of EM anomaly selection is to identify possible thin sheet bedrock conductors. If the source conductance is not large, such anomalies may not register on the apparent resistivity maps as a distinctive resistivity low.

The response type expected from a vertical thin sheet conductor is a positive anomaly in the coaxial EM channels with a coincident low in the coplanar channels of the same frequency. Characteristic EM responses to a number of simple conductor types are shown in Appendix 2.

These criteria reject EM anomalies due to gradual changes in overburden thickness or resistivity. For such anomalies, the coaxial and coplanar channels (either inphase or quadrature) for the same operating frequency move together and no separation is seen. This information is best seen in the contour plan maps of apparent resistivity.

A second type of EM anomaly is a negative inphase response due to a near surface concentration of magnetite (or pyrrhotite). For a half space with a uniform weight percent magnetite ($W_m$) and an EM sensor clearance of 30 metres, the coaxial inphase response (R) is approximately

$$R = -2.5 * W_m \text{ ppm.}$$

A half space of 1% by weight magnetite produces a coaxial inphase response of -2.5 ppm (and a coplanar inphase response of -10 ppm). This is independent of operating frequency. It is very sensitive to sensor height.

Because magnetic sources are often wide, sharp negative EM peaks are rare - broad negatives are more common and 'magnetite' anomaly centers are a poor representation of the near surface distribution of magnetite. Where broad negative inphase responses are common, maps of apparent weight percent magnetite are sometimes more appropriate.

In some cases a negative inphase anomaly will be accompanied by a positive quadrature response which suggests a source which is both conductive and magnetic (or conductors and magnetic sources which are very close). In rare instances, the coaxial inphase trace shows a small positive peak superimposed on larger negative responses in both coaxial and coplanar channels. Such anomalies are often of special exploration interest.

**Anomaly Selection**

EM anomalies are manually picked from the offset profiles. The selection process is as follows:

1. Scan the analog records for any powerline monitor responses. None were seen.

2. Pick all negative inphase responses on the 935/865 Hz offset profiles. Unlike bedrock conductors, magnetic sources may be wide and therefore may not generate a clear anomaly peak.

3. Pick all normal thin sheet type anomalies on the 935/865 Hz offset profiles. Pick all anomalies which show the traditional response to a dipping thin sheet conductor. Horizontal conductors are identified by EM anomalies at their edges.

4. Transfer all anomaly picks from steps 1,2 and 3 to the 4600/4175 Hz offset profiles. Check that anomaly picks show reasonable fit with the middle frequency data. Add anomalies which were not picked from the low frequency data.

The survey results show a large number of negative inphase responses characteristic of near surface concentrations of magnetite. Most such responses are broad and the anomaly center format is a poor representation of the geology.

Bedrock conductors which are not influenced by nearby or coincident magnetite (or pyrrhotite) are rare, of short strike length and of low apparent conductance. There are fewer than 5 such conductors in the survey area.

Bedrock conductors which coincide with or are near magnetic sources are more common. They are most often seen as a positive excursion in the coaxial inphase channel - although peak amplitudes may still be negative because of the dominance of the negative inphase response. Some of these conductors would be of special interest in any base metals exploration program.

### Analysis

The picked anomalies are digitized by location and type (normal or magnetite). The 4600 Hz inphase and quadrature anomaly amplitudes are recovered for the locations given. Normal anomalies are modelled as a vertical thin sheet conductor using an automated version of the phasor diagram shown in Appendix 2. Inversion returns estimates of source conductance and depth of burial. Anomaly centres showing the conductance range and inphase response are plotted on selected map products. The 'magnetite' anomalies are shown as an open circle with an 'M' printed inside.

All anomalies are catalogued in anomaly listings - see Appendix 3 - which shows the anomaly letter, survey line, location, 4600 Hz response amplitudes and conductance/depth of burial estimates (where appropriate).

Conductance estimates for EM anomalies which have a negative inphase peak amplitude are meaningless. The inphase amplitude is assumed to be zero and the conductance estimate is therefore very low. Inferences about source strength can only be taken from anomaly shapes as seen on the offset profiles. In most cases, the source conductance is probably high.

## 7. INTERPRETATION

### 7.1 Area Geology and Exploration Target

The purpose of the survey is to better define the geology and to outline areas of felsic volcanics - the host for the known gold occurrences. IP/resistivity surveys over these felsic units are being considered. Strong bedrock conductors which may represent massive metallic sulphides are not to be ignored.

The survey area is over the extreme eastern end of the Deloro metavolcanic - metasedimentary belt of the Abitibi Subprovince. The Deloro complex consists dominantly of mafic metavolcanics with only minor metasediments and is distinguished from the Swayze complex to the southwest by different types of felsic metavolcanics and a greater abundance of mafic and ultramafic rocks. The Deloro volcanic complex is a maximum of 13 km wide at its eastern edge in Kenogaming and Sewell Townships. It extends westward for about 40 km where it is terminated by fault zones and granitic intrusions, both possibly related to the Kapuskasing Structural Zone.

Early Precambrian diabase dykes and faults are common and trend nnw/sse. Lake Precambrian diabase dykes of regional extent trend ene/wsw.

Several mineral occurrences are shown in or near the survey area on regional Ontario Dept. of Mines maps. The most common are asbestos and nickel, followed by gold and zinc.

The geology compilation provided by Eastmain Resources (figure 3) shows a mixture of ultramafic and felsic volcanics with some metasediments. Four gold showings are shown in association with the metasediments. Much of the gold is found in a 2000 m long quartz-sericite-pyrite-carbonate schist. IP anomalies are seen over the gold zones. Drilling over one of the targets has found up to 18.5 gpt Au over 3.04 m and 20.5 gpt Au over 1.95 m.

The gold occurrences are thought to be similar to the Bousquet deposit - gold-bearing laminated units that have been interpreted as sediments.

### Geophysical Considerations

The airborne results should, at a minimum, establish the geophysical setting and signature of the known gold occurrences and their host. The high resolution data set should be ideally suited to this task. From these results, extensions or new exploration targets may be apparent - although nothing in the deposit model is expected to have a clear airborne expression.

The airborne survey may also define other base and precious metal targets. Included here would be any interesting bedrock conductors.

## 7.2 General Comments

### EM

Overall resistivities are high - from 1000 to more than 300 ohm.m - with the highest resistivities over topographic highs. The lowest apparent resistivities - 250 to 500 ohm.m - are seen over Akweskwa and Chabot lakes. This is common in the Archean where the overburden cover is thin. But for massive metallic sulphides and graphite, most rocks are very resistive and resistivity variations reflect changes in the thickness or water content of the overburden.

The most persistent EM responses are negative inphase anomalies due to near-surface concentrations of magnetite. For most such anomalies, the coaxial and coplanar responses move negative in parallel and there is little or no coincident quadrature response. This is consistent with ultramafic volcanics which are no more conductive than the surrounding felsic units.

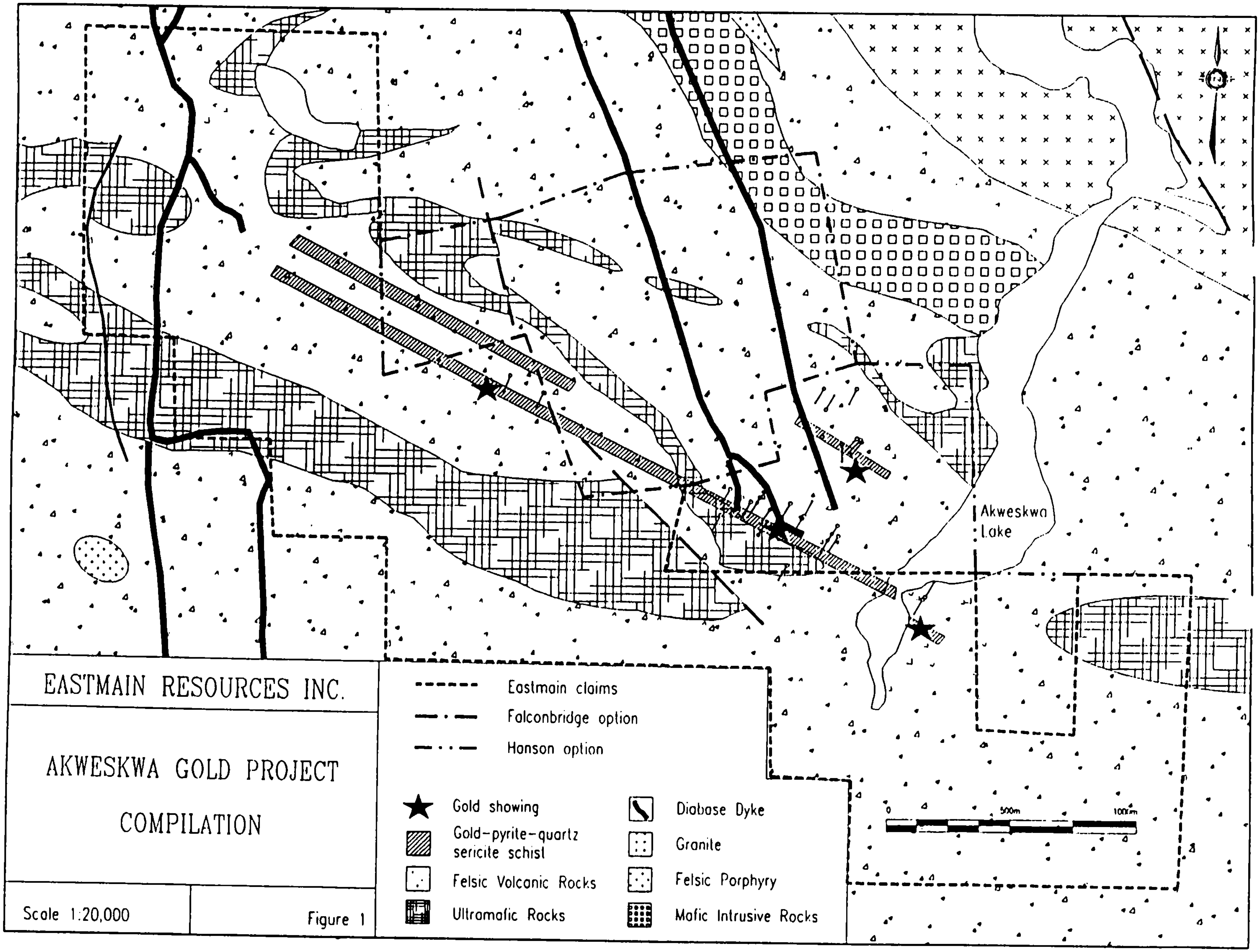


Figure 3 : Geological compilation (from Eastmain Resources)

In some special cases, the coaxial inphase channels show a small positive peak superimposed on a much larger negative anomaly. These are interpreted as strong bedrock conductors within the ultramafics. As noted above the conductance estimate is very low due to the net negative coaxial inphase amplitude. These conductance estimates should be ignored - a much higher value is more likely. Given the poor representation of these conductors in all map products, target selection and ranking is based mostly on the EM offset profiles.

Conventional bedrock conductors free of the influence of strongly magnetic sources are few and weak.

The apparent weight percent magnetite map is a good reflection of the surface outline of the ultramafics and the stronger diabase dykes. Bedrock conductors within the ultramafics are not represented in this map.

## Magnetics

The total field map shows a mean of about 58,400 nT with 95 % of the data in the range 58,000 to 59,800 nT. Anomaly amplitudes over the broader bands of ultramafics exceed 1,500 nT. Peak amplitudes over parts of the diabase dykes are less - 100 to 500 nT.

The magnetic results show good overall agreement with the geology, particularly the ultramafics and some of the nne/ssw trending diabase dykes. Minor changes in the outline and placement of both rock types may be taken from the airborne results. A large area of ultramafics would be interpreted under Lake Akweskwa.

The airborne results do not support a band of mafic intrusives immediately west and northwest of Lake Akweskwa.

But for the magnetic high over Lake Akweskwa, total magnetic field and apparent weight percent magnetic highs show good agreement. Presumably the EM system has failed to respond to magnetic sources under the lake because they are beyond the detection range.

Faults which trend east/west are most readily interpreted from breaks and interruptions in the magnetics.

## VLF

The VLF results show the overall east/west grain expected when using this transmitter - Cutler - which is 14° south of east. There are a number of VLF highs with peak amplitudes of 20 %. Most do not show any clear relationship to the geology or terrain and their explanation is uncertain.

## Gold Occurrences

The geology map shows four gold showings. For the discussion which follows, the showings are labelled by claim number. The four showings are

1204270 (Eastmain claims) - northwest end of main gold zone, 2 drill holes
1025230 (Hanson option) - center of main gold zone, 15 drill holes
988379 (Hanson option) - 400 m northeast of main showing, 4 drill holes
1177283 (Eastmain claims) - southeast end of main gold zone, 1 drill hole

### 1204270

On or just north of a weak magnetic axis clearly seen only in the vertical gradient map. The northwest end of this magnetic feature shows higher amplitudes and near-surface magnetite - features of the larger bands of ultramafics. The gold may be in the felsics volcanics just north of this narrow band of ultramafics (or mafic volcanics). The magnetics do not support the linear gold zone and the connection with the showing in 1025230.

No coincident of nearby EM responses (high resistivity and no detectable magnetite). No VLF response.

### 1025230

Some 50 metres north of a 50 to 100 m wide band of ultramafics. The southeast end of these ultramafics may be terminated by a fault. The magnetics do not support a continuous linear horizon connecting with the showing in 1204270. The airborne results suggest looking to the northwest along the northeast side of this narrow band of ultramafics.

But for an anomaly at line 67 (14:22:20), there are no coincident EM responses. Numerous negative inphase (magnetite) responses over the ultramafics to the southwest). The one line anomaly shows evidence of both magnetite and a coincident bedrock conductor (not shown as an anomaly center). No VLF response.

### 988379

In an area without strong magnetic sources (felsic volcanics?). The vertical gradient map shows weak and uncertain magnetic relief. No coincident or nearby EM responses. A weak VLF anomaly of variable strike.

**1177283**

At or just off the western end of a band of ultramafics. Possibly on strike with 1025230. No coincident or nearby EM responses. No VLF response.

### 7.3 Compilation Map

Prominent aspects of the airborne geophysical results have been extracted from various map products and fine drawn on a 1:5,000 scale compilation map. The maps shows the flight path and anomaly centres plus the following features

- outline of ultramafic volcanics. Taken from a combination of weight percent magnetite, vertical gradient and total magnetic field highs. Isolated 'magnetite' anomalies may not be included within these major bands of ultramafics. The total magnetic field high under Lake Akweskwa has been used to infer ultramafics and their outline is therefore more uncertain.

- outline of possible n/s to nne/ssw trending diabase dykes. Taken largely from the vertical gradient map.

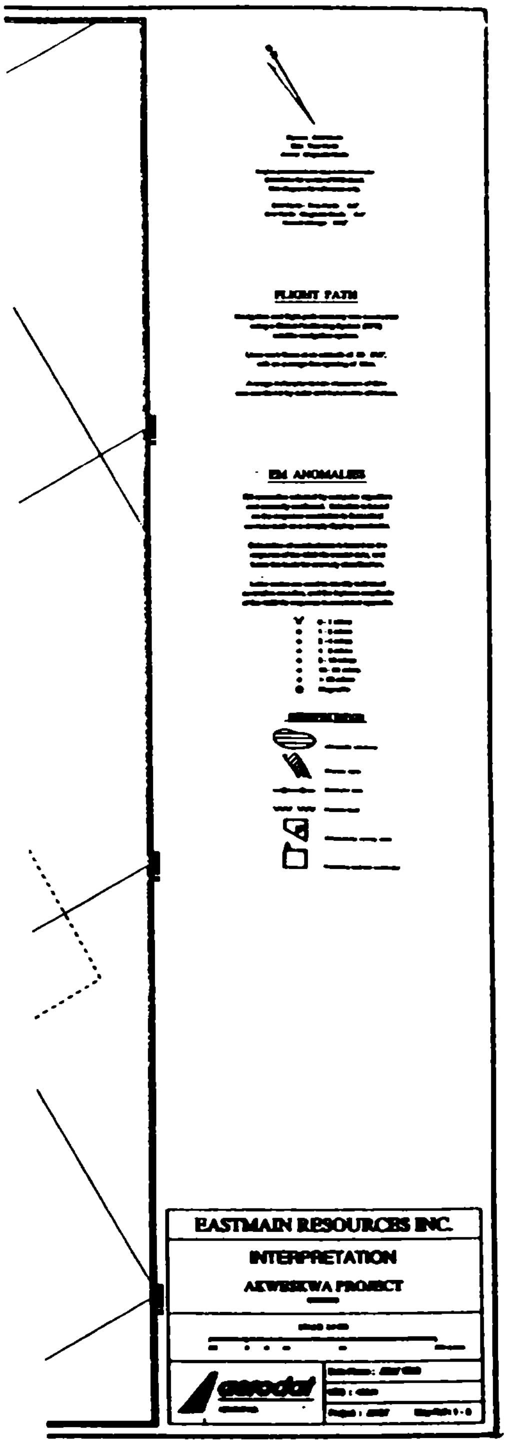
- possible faults - all trend east/west.

- conductor axes. These are lines which join EM anomalies of similar personality or setting on neighbouring survey lines. Where the trend, based on the EM results alone, is unclear, the strike direction is assumed to parallel local magnetic trends.

- a large open rectangle around the area considered most promising for a ground IP/resistivity survey.

- open rectangles around 4 of the most prominent bedrock conductors. All are within bands of ultramafic volcanics. As noted above, there is some chance these features represent massive metallic sulphides. They are labelled A to D. Each is discussed below.

A page size copy of the compilation map is attached.



See attached
Maps at 1:5,000

## 7.4 Preferred Targets

If the purpose of the survey is to suggest areas for IP/resistivity surveys, the central area of felsic volcanics which holds the gold showings in claims 988379 and 1025230 would seem to be the most promising. The area to the west and northwest, defined by narrow bands of ultramafics to the north and south might be more interesting than any possible extension to the southeast. Scattered magnetite indications without any clear aeromagnetic expression are seen northwest of the 1025230 showing.

Of the many indications of strong bedrock conductors within the ultramafics, four targets have been selected as being of greatest promise. The selection is based solely on anomaly amplitudes and clarity as seen in the EM offset profiles. The four targets are labelled A to D with labelling advancing from north to south - the order does not reflect ranking. Within each of these conductors, the best anomalies are located as follows

A : line 20 (16:43:27)
B : line 16 (16:54:34)
C : line 45 (15:36:13)
D : line 67 (14:21:55)

Based on very subjective and inexact criteria, target D is the most attractive.

There are a number of other weaker bedrock conductors within the ultramafics. Given that the distinction between strong and weak is so uncertain, these second priority targets may also be of interest. This is particularly so if any of targets A to D are born out on the ground.

There is at least one weak conductor without any clear affiliation with the ultramafics which might be examined. It is centered at line 27 (16:22:37) and has no magnetic expression.

## 8. CONCLUSIONS

A high resolution helicopter-borne geophysical survey has been completed over an area of 12.5 square kilometres in Kenogaming Township and about 50 km southwest of Timmins. Sensors included a 5 frequency EM system, a high sensitivity magnetometer and a VLF system. Total coverage was 263 line kilometres. Results have been presented as colour and black line maps at a scale of 1:5,000.

The results have been reviewed based on geological and exploration data provided by Eastmain Resources. Prominent lithological and structural features have been extracted from various map products and drafted onto a compilation map. The area over which a IP/resistivity might seem most appropriate is outlined. Four promising bedrock conductors within the ultramafic volcanics are highlighted.

Respectfully submitted,

Ian Johnson

Ian Johnson, Ph.D.,P.Eng.
Aerodat Inc.

September 18, 1995
J9537

LICENSED PROFESSIONAL ENGINEER
I. M. JOHNSON
PROVINCE OF ONTARIO

# APPENDIX 1

## PERSONNEL

### FIELD

| | |
|---|---|
| **Flown** | July 11 to 14, 1995 |
| **Pilot(s)** | Richard Gelias, Robert Fauteaux |
| **Operator(s)** | Mark Fortier |

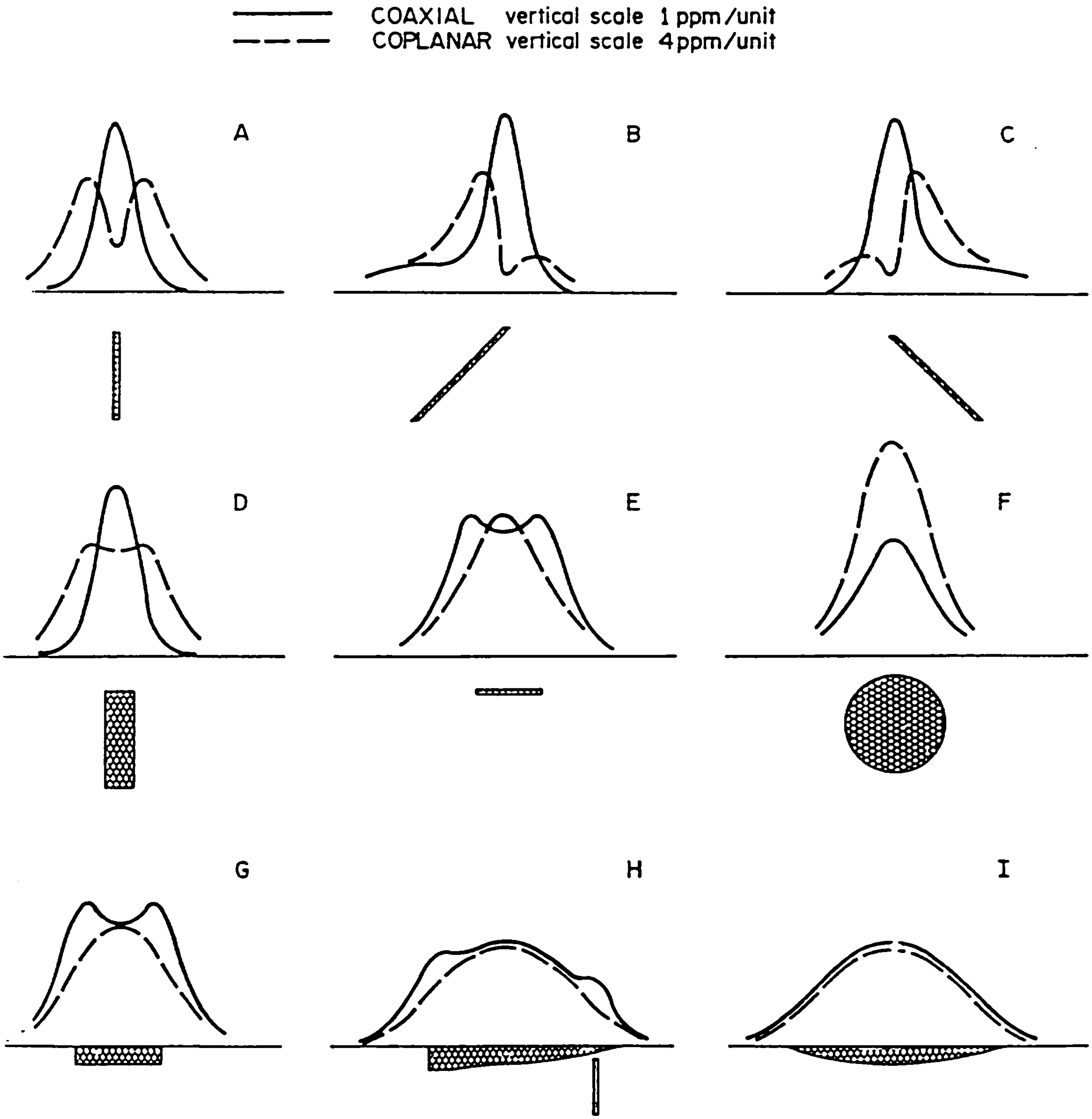
### OFFICE

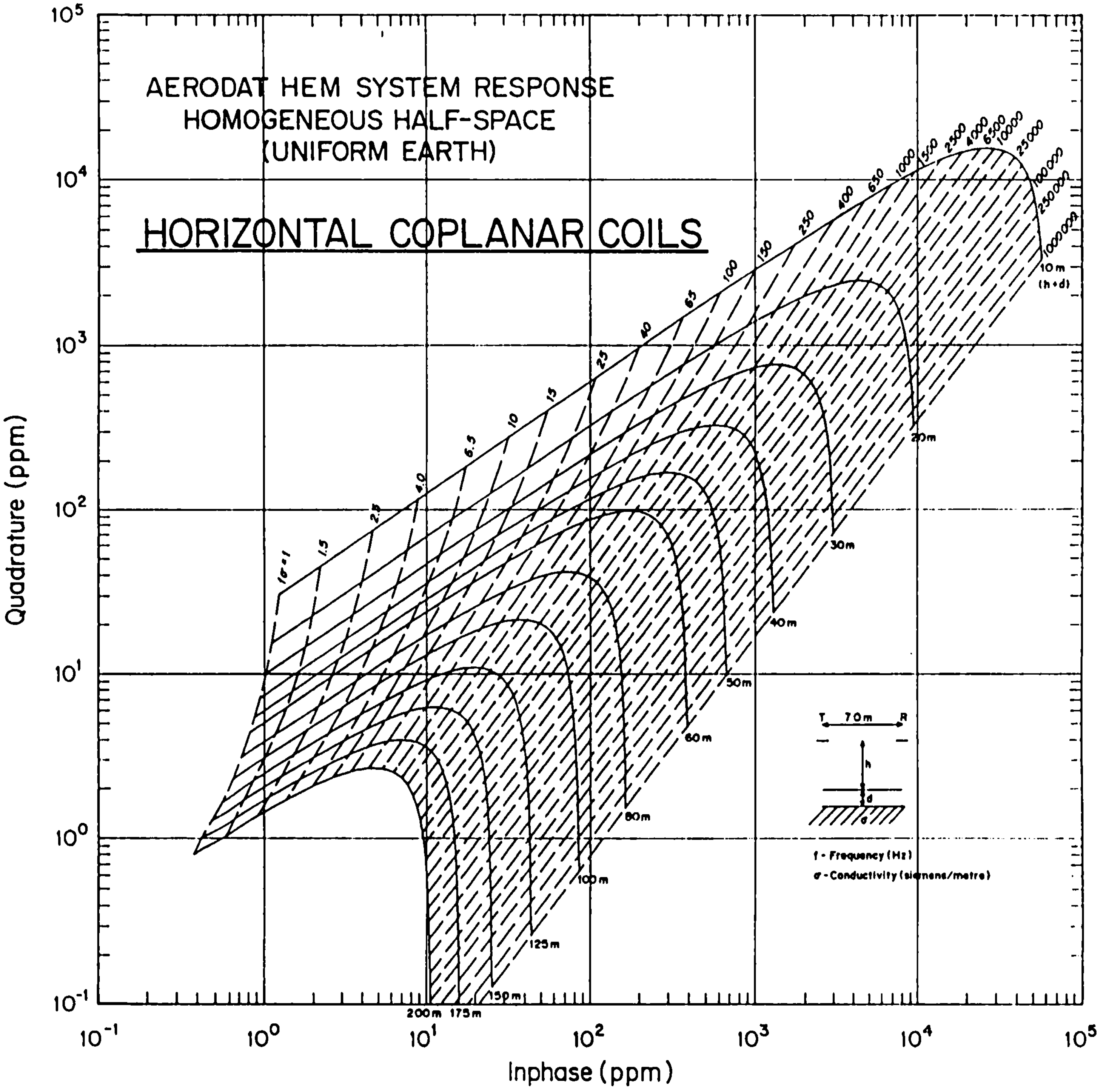
| | |
|---|---|
| **Processing** | Ed Hamilton<br>George McDonald |
| **Reporting** | Ian Johnson |

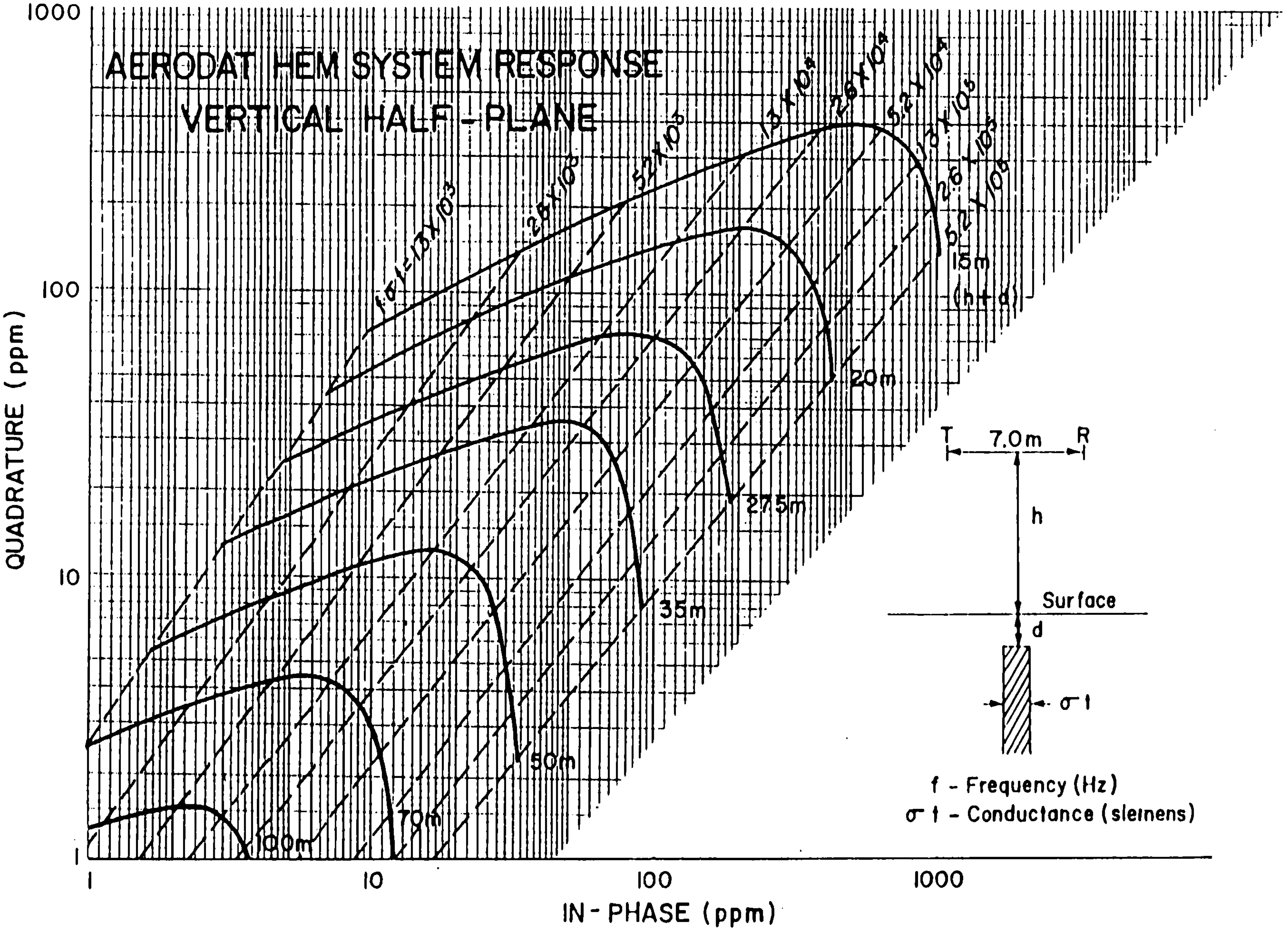
# APPENDIX 2

# EM RESPONSE DIAGRAMS

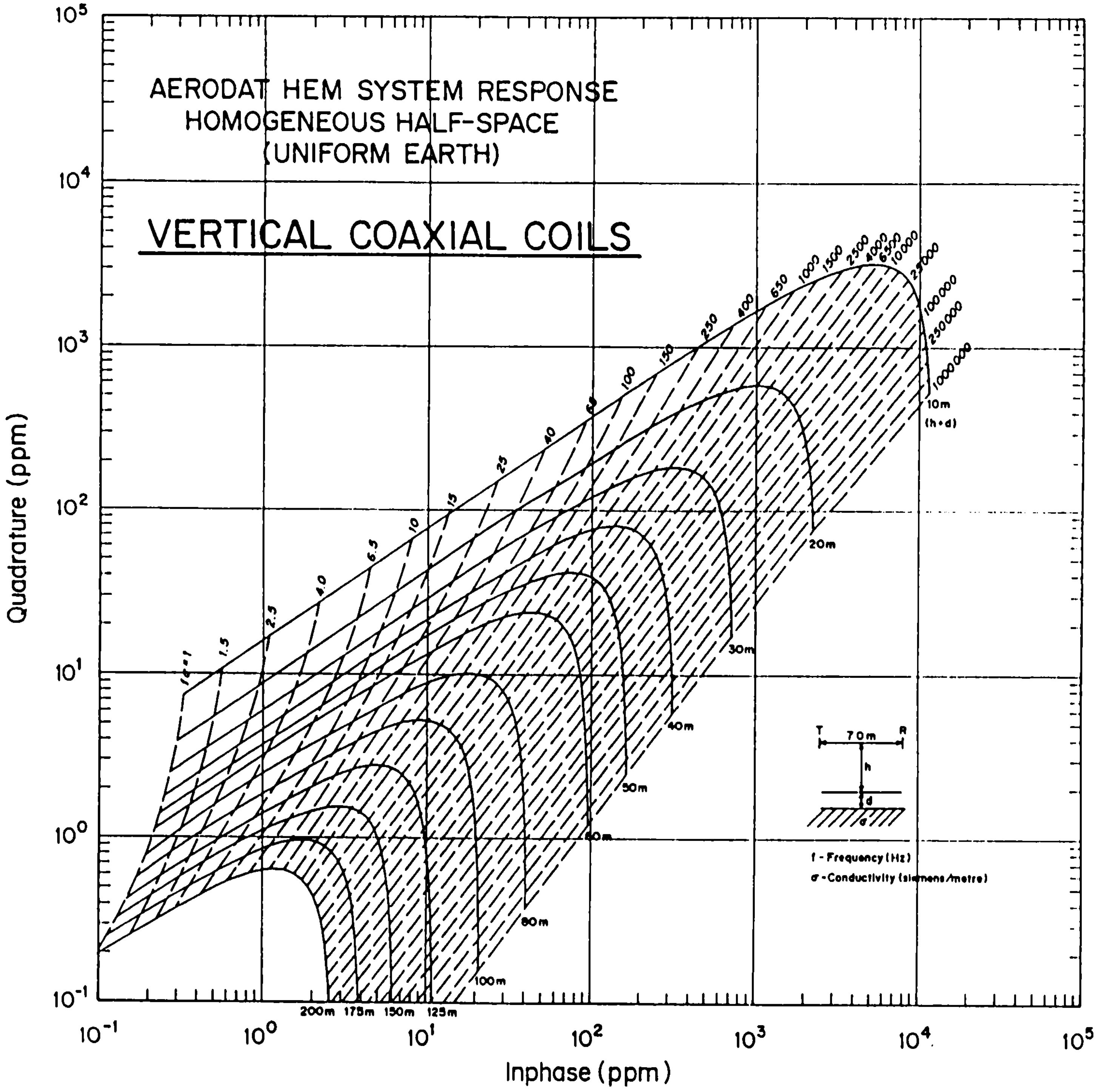
# HEM RESPONSE PROFILE SHAPE AS AN INDICATOR OF CONDUCTOR GEOMETRY




AERODAT HEM SYSTEM RESPONSE
HOMOGENEOUS HALF-SPACE
(UNIFORM EARTH)
HORIZONTAL COPLANAR COILS
Quadrature (ppm)
Inphase (ppm)
$10^5$
$10^4$
$10^3$
$10^2$
$10^1$
$10^0$
$10^{-1}$
fσ=1
1.5
2.5
4.0
6.5
10
15
25
40
65
100
150
250
400
650
1000
1500
2500
4000
6500
10000
25000
100000
250000
1000000
10m
(h+d)
20m
30m
40m
50m
60m
80m
100m
125m
150m
200m
175m
T
70m
R
h
d
σ
f - Frequency (Hz)
σ - Conductivity (siemens/metre)



AERODAT HEM SYSTEM RESPONSE
VERTICAL HALF-PLANE


AERODAT HEM SYSTEM RESPONSE
HOMOGENEOUS HALF-SPACE
(UNIFORM EARTH)
VERTICAL COAXIAL COILS
Quadrature (ppm)
$10^{-1}$
$10^{0}$
$10^{1}$
$10^{2}$
$10^{3}$
$10^{4}$
$10^{5}$
Inphase (ppm)
f=1
1.5
2.5
4.0
6.5
10
15
25
40
65
100
150
250
400
650
1000
1500
2500
4000
6500
10000
25000
100000
250000
1000000
10m
(h+d)
20m
30m
40m
50m
60m
80m
100m
125m
150m
175m
200m
T
70m
R
h
d
σ
f - Frequency (Hz)
σ - Conductivity (siemens/metre)

EASTMAIN RESOURCES INC.

```
                                                  CONDUCTOR  BIRD
                                   AMPLITUDE (PPM)   CTP DEPTH HEIGHT
FLIGHT   LINE ANOMALY CATEGORY  INPHASE  QUAD.   MHOS  MTRS  MTRS
------   ---- ------- --------  -------  -----   ----  ----  ----

   4   10000    A  MAG    0      -6.1     3.2   0.0     0    30  428414.1 5333263.5
   4   10000    B  MAG    0      -7.5     3.4   0.0     0    30  428644.6 5333651.0
   4   10000    C  MAG    0      -6.2     4.2   0.0     0    35  428699.8 5333745.5
   4   10000    D  MAG    0      -6.7     2.2   0.0     0    25  429093.4 5334442.5
   4   10000    E  MAG    0      -4.4     0.8   0.0     0    24  429227.9 5334672.0
   4   10000    F  MAG    0      -6.0     4.1   0.0     0    28  429433.3 5335016.5

   4   10010    A  MAG    0      -5.3     3.2   0.0     0    42  429564.6 5335063.5
   4   10010    B  MAG    0      -4.0     4.3   0.0     0    37  428768.8 5333710.0
   4   10010    C  MAG    0      -7.4     4.5   0.0     0    31  428481.6 5333216.5
   4   10010    D  MAG    0     -10.8     9.0   0.0     0    28  428410.1 5333090.5

   4   10020    A  MAG    0      -4.0     5.9   0.0     0    37  428463.1 5333045.0
   4   10020    B  MAG    0      -3.9    11.9   0.0     0    34  428511.8 5333127.0
   4   10020    C  MAG    0      -5.5     5.7   0.0     0    30  428838.9 5333704.5
   4   10020    D  MAG    0      -4.9     4.1   0.0     0    27  429037.5 5334062.5
   4   10020    E  MAG    0      -5.5     7.0   0.0     0    31  429458.2 5334791.0
   4   10020    F  MAG    0     -10.7     4.5   0.0     0    34  429565.2 5335001.0
   4   10020    G  MAG    0     -10.4     5.3   0.0     0    33  429619.4 5335095.5
   4   10020    H  MAG    0      -5.3     6.4   0.0     0    34  429660.7 5335166.0

   4   10030    A  MAG    0      -3.8     5.4   0.0     0    42  429671.0 5335047.5
   4   10030    B  MAG    0      -2.4     7.2   0.0     0    39  429534.5 5334798.0
   4   10030    C  MAG    0      -9.6     2.2   0.0     0    24  429127.7 5334095.5
   4   10030    D  MAG    0      -6.1     3.7   0.0     0    26  429088.7 5334026.0
   4   10030    E  MAG    0      -9.0     7.2   0.0     0    29  428926.3 5333746.5
   4   10030    F  MAG    0      -5.8    11.2   0.0     0    33  428632.5 5333260.5
   4   10030    G  MAG    0      -7.0     6.4   0.0     0    30  428607.8 5333220.0
   4   10030    H  MAG    0     -10.9     9.2   0.0     0    25  428557.7 5333128.0
   4   10030    J         0     -11.3    18.9   0.0     0    25  428504.3 5333027.0
   4   10030    K  MAG    0     -11.5    17.3   0.0     0    25  428492.2 5333004.0
   4   10030    M  MAG    0     -12.1    12.9   0.0     0    25  428463.9 5332950.0

   4   10040    A  MAG    0      -4.6    11.6   0.0     0    33  428535.8 5332989.5
   4   10040    B  MAG    0      -7.6     5.3   0.0     0    32  428668.5 5333201.5
   4   10040    C  MAG    0      -9.2     4.7   0.0     0    25  429122.5 5334006.0
   4   10040    D  MAG    0     -13.6     2.6   0.0     0    24  429152.7 5334060.5
   4   10040    E  MAG    0      -7.8     8.6   0.0     0    35  429451.8 5334574.0
   4   10040    F  MAG    0     -11.1     7.6   0.0     0    32  429572.0 5334785.5
   4   10040    G  MAG    0      -4.2     6.6   0.0     0    34  429684.2 5334984.5
   4   10040    H  MAG    0     -10.1     5.3   0.0     0    35  429729.1 5335066.5

   4   10050    A  MAG    0      -5.4     6.3   0.0     0    39  429786.8 5335045.5
   4   10050    B  MAG    0      -9.6     6.0   0.0     0    33  429757.5 5334992.5
```

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.

EASTMAIN RESOURCES INC.

```
                                                     CONDUCTOR  BIRD
                                 AMPLITUDE (PPM)    CTP DEPTH HEIGHT
FLIGHT   LINE ANOMALY CATEGORY  INPHASE  QUAD.     MHOS  MTRS  MTRS
------   ---- ------- --------  -------  -----     ----  ----  ----

   4   10050    C  MAG     0     -11.2     4.7   0.0     0     29  429645.6 5334794.0
   4   10050    D  MAG     0     -14.9     5.7   0.0     0     30  429603.5 5334723.0
   4   10050    E  MAG     0     -13.4     4.3   0.0     0     33  429497.2 5334529.5
   4   10050    F  MAG     0     -10.3     1.7   0.0     0     25  429217.0 5334050.5
   4   10050    G  MAG     0      -8.4     2.7   0.0     0     28  429185.8 5334001.0
   4   10050    H  MAG     0     -19.6     5.1   0.0     0     26  428692.4 5333155.5
   4   10050    J  MAG     0      -9.2    11.4   0.0     0     26  428589.8 5332975.5
   4   10050    K          0      -6.5    12.9   0.0     0     28  428572.3 5332946.5

   4   10060    A  MAG     0      -5.2     8.7   0.0     0     31  428631.1 5332968.0
   4   10060    B  MAG     0      -8.6     5.3   0.0     0     28  428736.3 5333143.0
   4   10060    C  MAG     0      -5.8     8.7   0.0     0     35  429042.0 5333667.5
   4   10060    D  MAG     0      -7.8     2.2   0.0     0     27  429217.6 5333966.5
   4   10060    E  MAG     0      -9.1     3.1   0.0     0     28  429261.6 5334039.0
   4   10060    F  MAG     0      -3.3     4.7   0.0     0     37  429427.9 5334321.5
   4   10060    G  MAG     0      -9.1     4.5   0.0     0     36  429524.1 5334506.0
   4   10060    H  MAG     0      -9.6     4.6   0.0     0     34  429704.9 5334809.5
   4   10060    J  MAG     0      -9.3     5.4   0.0     0     31  429816.8 5334980.5
   4   10060    K  MAG     0      -6.5     7.7   0.0     0     33  429881.8 5335095.0

   4   10070    A  MAG     0      -7.2     3.9   0.0     0     39  429900.9 5335060.5
   4   10070    B  MAG     0      -5.4     3.2   0.0     0     30  429840.1 5334957.0
   4   10070    C  MAG     0      -8.0     3.8   0.0     0     33  429749.9 5334785.5
   4   10070    D  MAG     0      -8.3     6.4   0.0     0     32  429578.8 5334491.5
   4   10070    E  MAG     0     -14.2     4.5   0.0     0     30  429534.9 5334420.0
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   4   10070    N  MAG     0     -14.0     5.8   0.0     0     24  428748.9 5333093.5
   4   10070    O  MAG     0      -6.1     6.9   0.0     0     24  428663.6 5332957.0
   4   10070    P          0      -5.8     8.2   0.0     0     26  428653.4 5332939.0

   4   10080    A  MAG     0      -5.8     4.3   0.0     0     29  428774.2 5333026.5
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   4   10080    E  MAG     0      -5.6     6.0   0.0     0     33  429119.8 5333622.0
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   4   10080    G  MAG     0      -6.5     1.3   0.0     0     27  429310.4 5333931.0
   4   10080    H  MAG     0      -5.6     4.2   0.0     0     33  429567.3 5334373.0
   4   10080    J  MAG     0      -3.9     7.0   0.0     0     33  429617.9 5334458.0
   4   10080    K  MAG     0      -6.3     3.4   0.0     0     34  429815.8 5334787.0
```

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.

EASTMAIN RESOURCES INC.

| | | | | | | CONDUCTOR | | BIRD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AMPLITUDE (PPM) | | CTP | DEPTH | HEIGHT | | |
| FLIGHT | LINE | ANOMALY | CATEGORY | INPHASE | QUAD. | MHOS | MTRS | MTRS | | |
| 4 | 10080 | M MAG | 0 | -11.5 | 5.6 | 0.0 | 0 | 31 | 429931.6 | 5335013.5 |
| 4 | 10090 | A MAG | 0 | -5.3 | 1.8 | 0.0 | 0 | 38 | 429967.5 | 5335012.0 |
| 4 | 10090 | B MAG | 0 | -6.6 | 0.7 | 0.0 | 0 | 33 | 429822.8 | 5334768.0 |
| 4 | 10090 | C MAG | 0 | -2.1 | 6.1 | 0.0 | 0 | 30 | 429625.6 | 5334415.0 |
| 4 | 10090 | D MAG | 0 | -6.1 | 2.6 | 0.0 | 0 | 34 | 429561.7 | 5334315.0 |
| 4 | 10090 | E MAG | 0 | -5.4 | 1.3 | 0.0 | 0 | 25 | 429312.3 | 5333865.5 |
| 4 | 10090 | F MAG | 0 | -14.4 | 1.0 | 0.0 | 0 | 25 | 429261.8 | 5333778.5 |
| 4 | 10090 | G MAG | 0 | -7.1 | 5.9 | 0.0 | 0 | 26 | 429162.7 | 5333620.0 |
| 4 | 10090 | H MAG | 0 | -6.9 | 3.6 | 0.0 | 0 | 28 | 429087.5 | 5333490.5 |
| 4 | 10090 | J MAG | 0 | -8.5 | 3.9 | 0.0 | 0 | 31 | 428992.0 | 5333326.5 |
| 4 | 10090 | K MAG | 0 | -5.3 | 3.2 | 0.0 | 0 | 38 | 428872.6 | 5333111.5 |
| 4 | 10090 | M MAG | 0 | -6.3 | 4.6 | 0.0 | 0 | 30 | 428792.3 | 5332968.0 |
| 4 | 10100 | A MAG | 0 | -6.1 | 3.3 | 0.0 | 0 | 32 | 428846.4 | 5332973.5 |
| 4 | 10100 | B MAG | 0 | -8.1 | 0.7 | 0.0 | 0 | 30 | 428903.9 | 5333072.5 |
| 4 | 10100 | C MAG | 0 | -8.7 | 1.0 | 0.0 | 0 | 35 | 429058.6 | 5333317.5 |
| 4 | 10100 | D MAG | 0 | -15.4 | 2.1 | 0.0 | 0 | 30 | 429178.3 | 5333528.5 |
| 4 | 10100 | E MAG | 0 | -13.4 | 3.4 | 0.0 | 0 | 27 | 429241.3 | 5333632.0 |
| 4 | 10100 | F MAG | 0 | -18.7 | -0.5 | 0.0 | 0 | 22 | 429303.0 | 5333735.5 |
| 4 | 10100 | G MAG | 0 | -16.0 | -0.6 | 0.0 | 0 | 25 | 429329.0 | 5333779.0 |
| 4 | 10100 | H MAG | 0 | -8.2 | 3.6 | 0.0 | 0 | 34 | 429493.5 | 5334065.0 |
| 4 | 10100 | J MAG | 0 | -12.8 | 3.2 | 0.0 | 0 | 33 | 429602.5 | 5334274.5 |
| 4 | 10100 | K MAG | 0 | -6.0 | 7.8 | 0.0 | 0 | 26 | 429648.9 | 5334358.0 |
| 4 | 10100 | M MAG | 0 | -6.7 | 1.3 | 0.0 | 0 | 28 | 429888.3 | 5334778.5 |
| 4 | 10100 | N MAG | 0 | -16.1 | 3.7 | 0.0 | 0 | 30 | 430007.6 | 5334994.0 |
| 4 | 10110 | A MAG | 0 | -12.4 | 4.7 | 0.0 | 0 | 32 | 430061.2 | 5334989.5 |
| 4 | 10110 | B MAG | 0 | -5.7 | 2.2 | 0.0 | 0 | 35 | 429943.2 | 5334772.0 |
| 4 | 10110 | C MAG | 0 | -6.8 | 3.4 | 0.0 | 0 | 38 | 429643.3 | 5334228.5 |
| 4 | 10110 | D MAG | 0 | -14.0 | 0.5 | 0.0 | 0 | 24 | 429318.3 | 5333720.0 |
| 4 | 10110 | E MAG | 0 | -10.0 | 2.8 | 0.0 | 0 | 29 | 429243.1 | 5333590.5 |
| 4 | 10110 | F MAG | 0 | -8.6 | 2.4 | 0.0 | 0 | 32 | 429195.3 | 5333495.5 |
| 4 | 10110 | G | 0 | -10.0 | 1.3 | 0.0 | 0 | 33 | 429089.0 | 5333303.5 |
| 4 | 10110 | H MAG | 0 | -13.3 | 1.4 | 0.0 | 0 | 33 | 429079.1 | 5333287.0 |
| 4 | 10110 | J MAG | 0 | -7.1 | 5.8 | 0.0 | 0 | 32 | 428853.6 | 5332898.0 |
| 1 | 11010 | A MAG | 0 | -3.2 | 6.1 | 0.0 | 0 | 44 | 433546.8 | 5331995.5 |
| 1 | 11010 | B MAG | 0 | -8.6 | 2.0 | 0.0 | 0 | 17 | 433349.1 | 5331706.0 |
| 1 | 11010 | C | 0 | -5.8 | 3.3 | 0.0 | 0 | 22 | 433325.6 | 5331668.0 |
| 1 | 11010 | D MAG | 0 | -6.9 | 3.1 | 0.0 | 0 | 24 | 433281.5 | 5331572.0 |
| 1 | 11000 | A MAG | 0 | -8.9 | 5.4 | 0.0 | 0 | 30 | 433489.2 | 5332068.5 |
| 1 | 10990 | A MAG | 0 | -5.8 | 1.5 | 0.0 | 0 | 22 | 433120.9 | 5331576.0 |

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.

| | | | | | | CONDUCTOR | | BIRD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AMPLITUDE (PPM) | | CTP | DEPTH | HEIGHT | | |
| FLIGHT | LINE | ANOMALY | CATEGORY | INPHASE | QUAD. | MHOS | MTRS | MTRS | | |
| 1 | 10970 | A | 0 | -0.8 | 3.0 | 0.0 | 0 | 34 | 433496.3 | 5332425.0 |
| 1 | 10970 | B MAG | 0 | -5.6 | 1.7 | 0.0 | 0 | 29 | 433013.2 | 5331609.0 |
| 1 | 10960 | A | 0 | -4.4 | 2.8 | 0.0 | 0 | 25 | 432993.4 | 5331582.5 |
| 1 | 10950 | A | 0 | -0.9 | 5.8 | 0.0 | 0 | 29 | 433484.8 | 5332440.5 |
| 1 | 10950 | B MAG | 0 | -7.9 | 3.3 | 0.0 | 0 | 27 | 433061.7 | 5331777.5 |
| 1 | 10950 | C MAG | 0 | -5.4 | 4.1 | 0.0 | 0 | 28 | 432969.0 | 5331603.0 |
| 1 | 10950 | D | 0 | -2.6 | 5.4 | 0.0 | 0 | 29 | 432955.8 | 5331578.5 |
| 1 | 10941 | A | 0 | -2.8 | 4.4 | 0.0 | 0 | 28 | 433391.7 | 5332403.0 |
| 1 | 10930 | A MAG | 0 | -5.7 | 8.0 | 0.0 | 0 | 27 | 432876.6 | 5331621.5 |
| 1 | 10920 | A MAG | 0 | -6.1 | 10.6 | 0.0 | 0 | 32 | 432840.0 | 5331668.0 |
| 2 | 10892 | A MAG | 0 | -8.3 | 8.2 | 0.0 | 0 | 19 | 433334.2 | 5332925.5 |
| 2 | 10870 | A MAG | 0 | -2.7 | 1.2 | 0.0 | 0 | 22 | 432663.7 | 5331889.0 |
| 2 | 10860 | A MAG | 0 | -4.1 | 3.9 | 0.0 | 0 | 32 | 432627.2 | 5331951.5 |
| 2 | 10850 | A MAG | 0 | -4.8 | 2.2 | 0.0 | 0 | 19 | 432576.3 | 5331989.5 |
| 2 | 10840 | A | 0 | 1.9 | 5.0 | 0.1 | 0 | 57 | 432537.8 | 5332035.5 |
| 2 | 10830 | A | 0 | 4.5 | 14.8 | 0.1 | 0 | 45 | 432520.8 | 5332094.0 |
| 2 | 10820 | A | 0 | 0.6 | 11.9 | 0.0 | 0 | 45 | 432494.9 | 5332100.0 |
| 2 | 10770 | A | 0 | 4.7 | 20.9 | 0.0 | 0 | 38 | 432875.1 | 5333271.0 |
| 2 | 10750 | A | 0 | -0.3 | 35.6 | 0.0 | 0 | 29 | 432828.1 | 5333323.5 |
| 2 | 10730 | A MAG | 0 | -5.7 | 1.3 | 0.0 | 0 | 21 | 431666.2 | 5331539.5 |
| 2 | 10710 | A | 0 | 0.6 | 4.8 | 0.0 | 0 | 43 | 432223.9 | 5332722.0 |
| 2 | 10690 | A MAG | 0 | -3.1 | 3.8 | 0.0 | 0 | 35 | 432163.2 | 5332773.5 |
| 2 | 10690 | B | 0 | -0.7 | 4.6 | 0.0 | 0 | 34 | 432153.5 | 5332759.0 |
| 2 | 10690 | C MAG | 0 | -12.9 | 1.5 | 0.0 | 0 | 24 | 431929.2 | 5332415.5 |
| 2 | 10690 | D MAG | 0 | -13.2 | 0.7 | 0.0 | 0 | 22 | 431908.7 | 5332376.5 |
| 2 | 10690 | E MAG | 0 | -11.6 | 6.7 | 0.0 | 0 | 29 | 431749.0 | 5332090.5 |
| 2 | 10680 | A MAG | 0 | -5.7 | 5.2 | 0.0 | 0 | 36 | 431672.1 | 5332062.5 |

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.

EASTMAIN RESOURCES INC.

```
                                                        CONDUCTOR   BIRD

                                     AMPLITUDE (PPM)    CTP  DEPTH HEIGHT

FLIGHT   LINE ANOMALY CATEGORY   INPHASE   QUAD.    MHOS  MTRS   MTRS

------   ---- ------- --------   -------   -----    ----  ----   ----

   2   10680    B  MAG    0       -10.1     6.4   0.0     0     33  431712.8 5332128.0
   2   10680    C         0        -3.7     3.0   0.0     0     33  432116.0 5332813.0
   2   10680    D  MAG    0        -4.0     3.1   0.0     0     33  432133.3 5332841.0

   2   10670    A         0        -5.4     5.4   0.0     0     27  432085.2 5332821.5
   2   10670    B  MAG    0        -9.5     5.5   0.0     0     27  432079.7 5332811.5
   2   10670    C  MAG    0        -5.2     4.4   0.0     0     20  431726.4 5332244.5
   2   10670    D  MAG    0       -82.8    18.0   0.0     0     20  431658.6 5332114.5
   2   10670    E  MAG    0       -13.3     6.2   0.0     0     28  431591.2 5331990.0

   2   10660    A  MAG    0        -4.8     3.3   0.0     0     36  431544.2 5332020.5
   2   10660    B  MAG    0        -8.6     3.8   0.0     0     34  431620.6 5332141.5
   2   10660    C  MAG    0        -3.5     2.0   0.0     0     32  432032.4 5332846.5
   2   10660    D         0        -1.1     3.4   0.0     0     32  432038.9 5332859.5

   2   10650    A  MAG    0        -1.1     2.2   0.0     0     29  431975.4 5332901.0
   2   10650    B         0         0.0     3.2   0.0     0     29  431964.8 5332880.0
   2   10650    C  MAG    0        -7.6     2.0   0.0     0     28  431896.7 5332774.0
   2   10650    D  MAG    0       -47.0     1.0   0.0     0     20  431554.9 5332174.5
   2   10650    E  MAG    0       -25.0     4.9   0.0     0     22  431515.9 5332113.0

   2   10640    A  MAG    0        -4.4     3.4   0.0    33    -33  431411.8 5332062.0
   2   10640    B  MAG    0       -12.9     2.0   0.0    33    -33  431493.4 5332199.5

   2   10620    A  MAG    0       -24.8     1.7   0.0    32    -32  431442.9 5332267.0

   2   10610    A         3         0.7     0.0   6.2    99    -32  432009.8 5333353.5
   2   10610    B  MAG    0        -6.6     7.5   0.0    33    -33  431735.2 5332875.5
   2   10610    C  MAG    0        -9.0     0.6   0.0    32    -32  431498.9 5332434.0
   2   10610    D  MAG    0       -18.6     3.1   0.0    33    -33  431419.6 5332316.5
   2   10610    E  MAG    0        -8.4     4.7   0.0    33    -33  431257.6 5332035.5

   2   10600    A  MAG    0        -8.5    13.5   0.0    33    -33  431208.1 5332065.0
   2   10600    B  MAG    0        -8.3    12.3   0.0    33    -33  431365.0 5332349.5
   2   10600    C  MAG    0        -9.8    10.7   0.0    33    -33  431392.3 5332400.0

   2   10590    A         0        -4.3     3.6   0.0    21    -21  431874.7 5333329.0
   2   10590    B  MAG    0        -7.4     4.1   0.0    21    -21  431863.1 5333307.0
   2   10590    C         0        -5.7     4.0   0.0    21    -21  431664.2 5332970.5
   2   10590    D  MAG    0        -7.5     5.2   0.0    21    -21  431652.5 5332952.0
   2   10590    E         0       -20.7     2.1   0.0    23    -23  431472.7 5332606.0
   2   10590    F  MAG    0        -7.3     0.3   0.0    23    -23  431449.2 5332565.5
   2   10590    G  MAG    0       -28.0     9.5   0.0    22    -22  431347.7 5332408.5
   2   10590    H  MAG    0       -32.3     6.1   0.0    21    -21  431129.6 5332043.5

   2   10581    A  MAG    0        -2.5     0.0   0.0    20    -20  431093.2 5332102.0
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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.

| FLIGHT | LINE | ANOMALY | CATEGORY | AMPLITUDE (PPM) INPHASE | QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 10581 | B MAG | 0 | -5.1 | 0.1 | 0.0 | 21 | -21 | 431328.2 | 5332494.0 |
| 2 | 10581 | C MAG | 0 | -4.2 | 4.4 | 0.0 | 21 | -21 | 431629.8 | 5332986.5 |
| 2 | 10570 | A | 0 | 2.4 | 9.4 | 0.0 | 72 | -32 | 431651.5 | 5333180.5 |
| 2 | 10570 | B MAG | 0 | -9.8 | 8.3 | 0.0 | 32 | -32 | 431563.6 | 5332995.0 |
| 2 | 10570 | C MAG | 0 | -12.6 | 0.6 | 0.0 | 32 | -32 | 431516.8 | 5332898.5 |
| 2 | 10570 | D MAG | 0 | -10.2 | 2.8 | 0.0 | 32 | -32 | 431384.0 | 5332669.5 |
| 2 | 10570 | E | 0 | -8.8 | 3.7 | 0.0 | 32 | -32 | 431306.5 | 5332558.5 |
| 2 | 10570 | F MAG | 0 | -17.8 | 6.2 | 0.0 | 32 | -32 | 431288.4 | 5332529.5 |
| 2 | 10570 | G MAG | 0 | -14.3 | 5.0 | 0.0 | 33 | -33 | 431063.6 | 5332127.5 |
| 2 | 10560 | A MAG | 0 | -4.7 | 5.7 | 0.0 | 33 | -33 | 431284.7 | 5332610.5 |
| 3 | 10550 | A MAG | 0 | -1.6 | 6.1 | 0.0 | 0 | 34 | 431232.1 | 5332640.0 |
| 3 | 10550 | B MAG | 0 | -12.9 | 7.3 | 0.0 | 0 | 26 | 430984.3 | 5332229.0 |
| 3 | 10550 | C MAG | 0 | -6.9 | 8.3 | 0.0 | 0 | 31 | 430914.4 | 5332098.0 |
| 3 | 10540 | A MAG | 0 | -10.3 | 9.2 | 0.0 | 0 | 34 | 430861.7 | 5332103.5 |
| 3 | 10540 | B MAG | 0 | -12.2 | 8.0 | 0.0 | 0 | 28 | 430980.8 | 5332306.0 |
| 3 | 10540 | C MAG | 0 | -5.0 | 5.2 | 0.0 | 0 | 28 | 431206.7 | 5332681.0 |
| 3 | 10540 | D MAG | 0 | -3.4 | 2.6 | 0.0 | 0 | 24 | 431271.4 | 5332814.0 |
| 3 | 10530 | A MAG | 0 | -13.0 | 8.7 | 0.0 | 0 | 30 | 430817.6 | 5332085.5 |
| 3 | 10530 | B MAG | 0 | -16.8 | 6.3 | 0.0 | 0 | 26 | 430963.1 | 5332356.5 |
| 3 | 10530 | C MAG | 0 | -6.4 | 4.2 | 0.0 | 0 | 26 | 431181.6 | 5332704.0 |
| 3 | 10530 | D MAG | 0 | -3.0 | 1.8 | 0.0 | 0 | 24 | 431258.1 | 5332841.5 |
| 3 | 10530 | E MAG | 0 | -2.4 | 1.3 | 0.0 | 0 | 26 | 431692.2 | 5333595.5 |
| 3 | 10520 | A MAG | 0 | -1.9 | 5.2 | 0.0 | 0 | 33 | 431140.6 | 5332728.0 |
| 3 | 10520 | B MAG | 0 | -7.9 | 5.6 | 0.0 | 0 | 31 | 430926.7 | 5332372.5 |
| 3 | 10520 | C MAG | 0 | -6.1 | 8.1 | 0.0 | 0 | 35 | 430781.1 | 5332111.5 |
| 3 | 10510 | A MAG | 0 | -4.7 | 2.5 | 0.0 | 0 | 33 | 431320.4 | 5333152.5 |
| 3 | 10510 | B MAG | 0 | -4.7 | 2.6 | 0.0 | 0 | 27 | 431178.4 | 5332914.5 |
| 3 | 10510 | C MAG | 0 | -6.7 | 4.7 | 0.0 | 0 | 28 | 431091.1 | 5332773.5 |
| 3 | 10510 | D MAG | 0 | -13.0 | 5.1 | 0.0 | 0 | 26 | 430892.9 | 5332395.5 |
| 3 | 10510 | E MAG | 0 | -6.8 | 9.7 | 0.0 | 0 | 33 | 430729.0 | 5332122.5 |
| 3 | 10510 | F MAG | 0 | -6.4 | 7.4 | 0.0 | 0 | 31 | 430681.3 | 5332037.0 |
| 3 | 10500 | A MAG | 0 | -7.1 | 5.8 | 0.0 | 0 | 31 | 430632.2 | 5332057.5 |
| 3 | 10500 | B MAG | 0 | -6.1 | 9.9 | 0.0 | 0 | 34 | 430681.2 | 5332141.5 |
| 3 | 10500 | C MAG | 0 | -16.2 | 6.9 | 0.0 | 0 | 23 | 430831.6 | 5332414.5 |
| 3 | 10500 | D MAG | 0 | -7.5 | 3.5 | 0.0 | 0 | 21 | 430866.0 | 5332477.0 |
| 3 | 10500 | E | 0 | -5.2 | 14.7 | 0.0 | 0 | 27 | 431049.8 | 5332787.0 |
| 3 | 10500 | F MAG | 0 | -12.5 | 5.8 | 0.0 | 0 | 24 | 431069.0 | 5332818.0 |

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.

| | | | | | | CONDUCTOR | | BIRD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AMPLITUDE (PPM) | | CTP | DEPTH | HEIGHT | | |
| FLIGHT | LINE | ANOMALY | CATEGORY | INPHASE | QUAD. | MHOS | MTRS | MTRS | | |
| 3 | 10500 | G MAG | 0 | -8.2 | 3.8 | 0.0 | 0 | 27 | 431262.7 | 5333183.5 |
| 3 | 10490 | A MAG | 0 | -5.5 | 6.5 | 0.0 | 0 | 35 | 430567.2 | 5332069.5 |
| 3 | 10490 | B MAG | 0 | -8.4 | 9.5 | 0.0 | 0 | 34 | 430617.9 | 5332156.5 |
| 3 | 10490 | C MAG | 0 | -10.5 | 15.2 | 0.0 | 0 | 32 | 430676.6 | 5332254.0 |
| 3 | 10490 | D MAG | 0 | -11.1 | 8.3 | 0.0 | 0 | 28 | 430756.4 | 5332397.0 |
| 3 | 10490 | E MAG | 0 | -5.9 | 5.8 | 0.0 | 0 | 31 | 431030.4 | 5332847.0 |
| 3 | 10490 | F MAG | 0 | -5.7 | 6.1 | 0.0 | 0 | 26 | 431219.2 | 5333189.0 |
| 3 | 10480 | A MAG | 0 | -5.2 | 1.5 | 0.0 | 0 | 32 | 431203.8 | 5333269.5 |
| 3 | 10470 | A MAG | 0 | -5.7 | 3.2 | 0.0 | 0 | 28 | 431157.4 | 5333279.0 |
| 3 | 10470 | B MAG | 0 | -4.9 | 6.8 | 0.0 | 0 | 29 | 430947.6 | 5332915.0 |
| 3 | 10470 | C MAG | 0 | -11.9 | 10.7 | 0.0 | 0 | 28 | 430679.3 | 5332428.0 |
| 3 | 10470 | D MAG | 0 | -4.8 | 6.7 | 0.0 | 0 | 35 | 430481.9 | 5332080.0 |
| 3 | 10460 | A MAG | 0 | -5.9 | 7.3 | 0.0 | 0 | 34 | 430440.1 | 5332147.5 |
| 3 | 10460 | B MAG | 0 | -7.3 | 11.1 | 0.0 | 0 | 32 | 430556.5 | 5332346.5 |
| 3 | 10460 | C | 0 | -4.5 | 13.0 | 0.0 | 0 | 32 | 430595.5 | 5332417.0 |
| 3 | 10460 | D MAG | 0 | -6.3 | 10.9 | 0.0 | 0 | 35 | 430621.5 | 5332462.0 |
| 3 | 10460 | E | 0 | -2.0 | 8.5 | 0.0 | 0 | 29 | 430895.3 | 5332948.5 |
| 3 | 10460 | F MAG | 0 | -2.8 | 8.3 | 0.0 | 0 | 29 | 430904.1 | 5332964.5 |
| 4 | 10450 | A | 0 | -0.3 | 7.0 | 0.0 | 0 | 32 | 431146.6 | 5333464.0 |
| 4 | 10450 | B MAG | 0 | -7.3 | 7.3 | 0.0 | 0 | 29 | 431045.0 | 5333292.0 |
| 4 | 10450 | C | 0 | -2.7 | 12.2 | 0.0 | 0 | 28 | 431024.9 | 5333254.0 |
| 4 | 10450 | D | 0 | -7.6 | 9.9 | 0.0 | 0 | 25 | 430866.0 | 5332965.5 |
| 4 | 10450 | E MAG | 0 | -7.9 | 10.6 | 0.0 | 0 | 25 | 430856.2 | 5332948.5 |
| 4 | 10450 | F MAG | 0 | -8.0 | 10.4 | 0.0 | 0 | 32 | 430554.3 | 5332448.5 |
| 4 | 10450 | G MAG | 0 | -11.0 | 11.3 | 0.0 | 0 | 32 | 430489.1 | 5332327.0 |
| 4 | 10440 | A | 0 | -3.0 | 9.8 | 0.0 | 0 | 33 | 430826.1 | 5333001.0 |
| 4 | 10440 | B MAG | 0 | -4.6 | 11.0 | 0.0 | 0 | 33 | 430817.5 | 5332985.5 |
| 4 | 10440 | C MAG | 0 | -7.2 | 8.2 | 0.0 | 0 | 31 | 430513.3 | 5332447.0 |
| 4 | 10440 | D MAG | 0 | -7.2 | 8.2 | 0.0 | 0 | 35 | 430353.4 | 5332157.0 |
| 4 | 10430 | A MAG | 0 | -7.8 | 9.6 | 0.0 | 0 | 31 | 430476.8 | 5332480.0 |
| 4 | 10430 | B | 0 | -6.1 | 11.4 | 0.0 | 0 | 33 | 430488.9 | 5332504.0 |
| 4 | 10430 | C | 0 | -7.3 | 12.6 | 0.0 | 0 | 27 | 430795.5 | 5333035.0 |
| 4 | 10430 | D MAG | 0 | -7.2 | 13.4 | 0.0 | 0 | 28 | 430803.9 | 5333050.5 |
| 4 | 10420 | A MAG | 0 | -5.9 | 8.9 | 0.0 | 0 | 32 | 430386.0 | 5332451.0 |
| 4 | 10420 | B MAG | 0 | -5.3 | 13.4 | 0.0 | 0 | 27 | 430901.2 | 5333326.0 |
| 4 | 10410 | A MAG | 0 | -3.8 | 10.9 | 0.0 | 0 | 36 | 430846.6 | 5333313.5 |

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.

```
                                                    CONDUCTOR  BIRD
                                  AMPLITUDE (PPM)   CTP DEPTH HEIGHT
FLIGHT   LINE ANOMALY CATEGORY  INPHASE  QUAD.   MHOS  MTRS  MTRS
------   ---- ------- --------  -------  -----   ----  ----  ----

   4   10410    B  MAG    0       -5.2    10.1   0.0     0    30  430342.5 5332451.5

   4   10400    A  MAG    0       -6.5     7.8   0.0     0    28  430227.3 5332360.5
   4   10400    B  MAG    0       -9.3     9.3   0.0     0    26  430281.3 5332461.5
   4   10400    C  MAG    0       -5.6    11.8   0.0     0    23  430666.4 5333095.0
   4   10400    D  MAG    0       -5.5    12.0   0.0     0    30  430776.1 5333307.0
   4   10400    E  MAG    0       -7.0    11.8   0.0     0    32  430810.0 5333369.5
   4   10400    F  MAG    0       -4.9     2.9   0.0     0    26  431269.5 5334172.0

   4   10390    A  MAG    0       -5.4    11.3   0.0     0    31  430763.2 5333365.0
   4   10390    B  MAG    0       -4.0    10.5   0.0     0    30  430733.9 5333310.5
   4   10390    C  MAG    0       -3.6    15.2   0.0     0    27  430630.1 5333131.0
   4   10390    D  MAG    0       -5.2     9.1   0.0     0    27  430262.4 5332480.5
   4   10390    E  MAG    0       -6.4     9.7   0.0     0    25  430234.1 5332431.0
   4   10390    F  MAG    0       -6.7     8.0   0.0     0    27  430190.5 5332357.0

   4   10380    A  MAG    0      -12.9     5.6   0.0     0    31  430164.2 5332426.0
   4   10380    B  MAG    0       -4.8     7.8   0.0     0    28  430209.5 5332493.0
   4   10380    C         0       -4.0    22.3   0.0     0    24  430566.2 5333134.5
   4   10380    D  MAG    0       -4.8    21.9   0.0     0    24  430576.0 5333152.5
   4   10380    E  MAG    0      -13.9     8.1   0.0     0    25  430681.3 5333339.0
   4   10380    F  MAG    0      -14.7    11.4   0.0     0    26  430724.7 5333411.0
   4   10380    G  MAG    0       -2.5     4.0   0.0     0    35  431200.8 5334233.5

   4   10370    A  MAG    0       -4.1     5.2   0.0     0    35  431155.7 5334255.5
   4   10370    B  MAG    0       -9.2     8.3   0.0     0    32  430659.8 5333412.0
   4   10370    C  MAG    0       -6.0     6.3   0.0     0    31  430615.3 5333336.0
   4   10370    D  MAG    0      -12.6     4.7   0.0     0    27  430088.5 5332438.0

   4   10360    A  MAG    0      -17.6     4.3   0.0     0    28  430060.5 5332484.0
   4   10360    B  MAG    0       -7.4     5.6   0.0     0    31  430089.7 5332535.5
   4   10360    C         0       -3.5    16.3   0.0     0    32  430439.2 5333152.5
   4   10360    D  MAG    0       -5.0    14.6   0.0     0    33  430451.2 5333173.5
   4   10360    E  MAG    0      -11.8     5.0   0.0     0    30  430541.7 5333339.0
   4   10360    F  MAG    0      -10.3     9.4   0.0     0    30  430592.7 5333427.0
   4   10360    G  MAG    0       -3.7     6.4   0.0     0    35  431124.7 5334291.0

   4   10350    A  MAG    0       -4.2     6.5   0.0     0    38  430533.6 5333421.0
   4   10350    B  MAG    0       -6.7     3.3   0.0     0    36  430488.2 5333338.0
   4   10350    C         0       -1.4     9.4   0.0     0    37  430402.7 5333178.5
   4   10350    D  MAG    0       -2.8     9.9   0.0     0    37  430389.7 5333155.0
   4   10350    E  MAG    0       -8.7     3.5   0.0     0    33  429996.3 5332490.5

   4   10340    A  MAG    0      -14.8     4.9   0.0     0    31  429970.4 5332547.0
   4   10340    B         0       -1.5    10.0   0.0     0    36  430345.9 5333178.5
```

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.

EASTMAIN RESOURCES INC.

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                                                  CONDUCTOR  BIRD
                                  AMPLITUDE (PPM)   CTP DEPTH HEIGHT
FLIGHT   LINE ANOMALY CATEGORY  INPHASE  QUAD.   MHOS  MTRS  MTRS
------   ---- ------- --------  -------  -----   ----  ----  ----

   4  10340    C  MAG    0      -3.6     9.7   0.0     0    35  430358.9 5333202.0
   4  10340    D  MAG    0      -5.0     6.4   0.0     0    32  430432.4 5333342.0
   4  10340    E  MAG    0     -10.2     7.6   0.0     0    33  430484.8 5333437.0
   4  10340    F  MAG    0      -5.4     2.6   0.0     0    34  430944.9 5334241.5

   4  10330    A  MAG    0      -6.6     2.2   0.0     0    31  430918.3 5334254.0
   4  10330    B  MAG    0      -6.7     3.3   0.0     0    33  430882.5 5334186.5
   4  10330    C  MAG    0      -3.9     5.9   0.0     0    33  430789.8 5334030.0
   4  10330    D  MAG    0      -8.1     4.8   0.0     0    32  430697.3 5333884.0
   4  10330    E  MAG    0      -6.1     5.8   0.0     0    35  430640.3 5333788.5
   4  10330    F  MAG    0     -13.7     6.4   0.0     0    32  430422.6 5333422.0
   4  10330    G  MAG    0      -9.4     9.7   0.0     0    31  430324.4 5333281.5
   4  10330    H  MAG    0      -8.1     7.3   0.0     0    29  430278.7 5333211.0
   4  10330    J  MAG    0      -5.4     7.7   0.0     0    27  430081.9 5332869.0
   4  10330    K  MAG    0      -5.1     6.0   0.0     0    37  429894.9 5332562.0

   4  10320    A  MAG    0      -5.1     3.0   0.0     0    28  429740.5 5332387.0
   4  10320    B  MAG    0      -5.3     7.3   0.0     0    32  429822.3 5332541.5
   4  10320    C  MAG    0      -8.3     6.7   0.0     0    30  429882.9 5332637.5
   4  10320    D  MAG    0     -15.6     9.5   0.0     0    25  430035.4 5332888.0
   4  10320    E         0      -1.9    23.7   0.0     0    24  430064.3 5332943.0
   4  10320    F  MAG    0     -13.5     9.3   0.0     0    29  430246.1 5333256.5
   4  10320    G  MAG    0     -21.7     6.9   0.0     0    27  430347.1 5333420.5
   4  10320    H  MAG    0     -18.0     9.7   0.0     0    28  430368.8 5333456.5
   4  10320    J  MAG    0     -11.6     6.7   0.0     0    27  430568.2 5333796.5
   4  10320    K  MAG    0     -11.7     4.4   0.0     0    26  430632.1 5333899.5
   4  10320    M  MAG    0      -8.6     5.2   0.0     0    24  430697.4 5334005.0
   4  10320    N  MAG    0     -10.2     6.3   0.0     0    25  430765.5 5334123.5
   4  10320    O         0      -5.9     4.0   0.0     0    22  430837.9 5334256.5
   4  10320    P  MAG    0      -7.1     3.5   0.0     0    23  430847.7 5334272.0

   4  10310    A  MAG    0      -2.9     3.0   0.0     0    30  430816.1 5334288.0
   4  10310    B  MAG    0      -4.7     3.9   0.0     0    28  430713.6 5334107.0
   4  10310    C  MAG    0      -4.2     3.5   0.0     0    33  430629.2 5333961.0
   4  10310    D  MAG    0      -5.8     6.1   0.0     0    32  430511.4 5333757.0
   4  10310    E  MAG    0     -10.9     6.5   0.0     0    34  430312.7 5333421.0
   4  10310    F  MAG    0      -8.9     6.2   0.0     0    33  430212.3 5333238.5
   4  10310    G         0       0.1    19.1   0.0     0    27  430027.9 5332933.5
   4  10310    H  MAG    0     -14.0     9.4   0.0     0    26  429984.5 5332866.0
   4  10310    J  MAG    0      -5.9     7.1   0.0     0    32  429791.3 5332534.0
   4  10310    K  MAG    0      -5.1     3.7   0.0     0    29  429718.8 5332396.5

   4  10300    A  MAG    0     -19.3     2.1   0.0     0    24  429661.8 5332412.0
   4  10300    B  MAG    0      -7.8     4.8   0.0     0    32  429747.6 5332555.0
   4  10300    C  MAG    0     -14.8     4.9   0.0     0    25  429801.3 5332641.0
```

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.

EASTMAIN RESOURCES INC.

| | | | | | | CONDUCTOR | | BIRD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AMPLITUDE (PPM) | | CTP | DEPTH | HEIGHT | | |
| FLIGHT | LINE | ANOMALY | CATEGORY | INPHASE | QUAD. | MHOS | MTRS | MTRS | | |
| 4 | 10300 | D MAG | 0 | -4.1 | 8.0 | 0.0 | 0 | 34 | 429936.7 | 5332883.5 |
| 4 | 10300 | E MAG | 0 | -6.8 | 7.3 | 0.0 | 0 | 34 | 430176.4 | 5333278.0 |
| 4 | 10300 | F MAG | 0 | -10.0 | 5.8 | 0.0 | 0 | 28 | 430233.9 | 5333376.0 |
| 4 | 10300 | G MAG | 0 | -8.0 | 11.0 | 0.0 | 0 | 30 | 430286.8 | 5333474.0 |
| 4 | 10300 | H MAG | 0 | -4.7 | 11.1 | 0.0 | 0 | 31 | 430462.4 | 5333757.5 |
| 4 | 10300 | J MAG | 0 | -10.4 | 3.8 | 0.0 | 0 | 29 | 430582.4 | 5333959.5 |
| 4 | 10300 | K | 0 | -1.4 | 4.9 | 0.0 | 0 | 23 | 430649.4 | 5334092.0 |
| 4 | 10300 | M MAG | 0 | -2.6 | 3.4 | 0.0 | 0 | 27 | 430800.9 | 5334343.5 |
| 4 | 10290 | A | 0 | 0.1 | 2.8 | 0.0 | 0 | 36 | 430630.5 | 5334147.5 |
| 4 | 10290 | B MAG | 0 | -2.8 | 2.7 | 0.0 | 0 | 33 | 430522.7 | 5333937.5 |
| 4 | 10290 | C MAG | 0 | -3.2 | 7.6 | 0.0 | 0 | 37 | 430402.6 | 5333730.0 |
| 4 | 10290 | D MAG | 0 | -7.7 | 5.1 | 0.0 | 0 | 34 | 430228.4 | 5333447.5 |
| 4 | 10290 | E MAG | 0 | -13.8 | 6.1 | 0.0 | 0 | 33 | 430163.5 | 5333334.5 |
| 4 | 10290 | F MAG | 0 | -6.1 | 8.8 | 0.0 | 0 | 31 | 429906.4 | 5332887.0 |
| 4 | 10290 | G MAG | 0 | -10.1 | 5.5 | 0.0 | 0 | 31 | 429762.9 | 5332655.0 |
| 4 | 10290 | H MAG | 0 | -11.5 | 5.6 | 0.0 | 0 | 32 | 429714.6 | 5332569.5 |
| 4 | 10290 | J MAG | 0 | -12.2 | 3.2 | 0.0 | 0 | 27 | 429679.8 | 5332506.0 |
| 4 | 10290 | K MAG | 0 | -11.7 | 2.6 | 0.0 | 0 | 29 | 429648.6 | 5332449.0 |
| 4 | 10280 | A MAG | 0 | -8.4 | 4.1 | 0.0 | 0 | 30 | 429650.3 | 5332588.0 |
| 4 | 10280 | B MAG | 0 | -12.8 | 5.6 | 0.0 | 0 | 29 | 429693.4 | 5332662.5 |
| 4 | 10280 | C MAG | 0 | -9.9 | 8.6 | 0.0 | 0 | 30 | 429734.2 | 5332726.0 |
| 4 | 10280 | D MAG | 0 | -7.7 | 19.6 | 0.0 | 0 | 24 | 429848.2 | 5332912.0 |
| 4 | 10280 | E MAG | 0 | -21.8 | 6.6 | 0.0 | 0 | 28 | 430112.6 | 5333361.5 |
| 4 | 10280 | F MAG | 0 | -25.7 | 6.1 | 0.0 | 0 | 27 | 430137.9 | 5333406.0 |
| 4 | 10280 | G MAG | 0 | -19.4 | 6.6 | 0.0 | 0 | 27 | 430172.6 | 5333467.0 |
| 4 | 10280 | H MAG | 0 | -8.2 | 7.5 | 0.0 | 0 | 24 | 430324.7 | 5333746.5 |
| 4 | 10280 | J | 0 | 4.0 | 6.0 | 0.3 | 34 | 24 | 430570.9 | 5334174.0 |
| 4 | 10270 | A | 0 | 2.2 | 4.4 | 0.1 | 23 | 38 | 430508.8 | 5334171.0 |
| 4 | 10270 | B MAG | 0 | -5.9 | 4.6 | 0.0 | 0 | 32 | 430267.9 | 5333747.0 |
| 4 | 10270 | C MAG | 0 | -5.9 | 5.8 | 0.0 | 0 | 35 | 430100.6 | 5333468.5 |
| 4 | 10270 | D MAG | 0 | -8.6 | 5.6 | 0.0 | 0 | 35 | 430049.6 | 5333380.5 |
| 4 | 10270 | E MAG | 0 | -10.0 | 7.3 | 0.0 | 0 | 33 | 429666.0 | 5332716.5 |
| 4 | 10270 | F MAG | 0 | -10.6 | 6.5 | 0.0 | 0 | 31 | 429647.9 | 5332686.5 |
| 4 | 10270 | G MAG | 0 | -6.2 | 3.8 | 0.0 | 0 | 31 | 429590.8 | 5332588.5 |
| 4 | 10260 | A MAG | 0 | -6.7 | 4.4 | 0.0 | 0 | 32 | 429561.7 | 5332621.5 |
| 4 | 10260 | B MAG | 0 | -7.6 | 7.5 | 0.0 | 0 | 34 | 429629.7 | 5332760.0 |
| 4 | 10260 | C MAG | 0 | -4.9 | 5.8 | 0.0 | 0 | 36 | 430058.3 | 5333497.5 |
| 4 | 10260 | D MAG | 0 | -12.8 | 5.1 | 0.0 | 0 | 30 | 430226.1 | 5333778.0 |
| 4 | 10260 | E | 0 | 1.8 | 8.0 | 0.0 | 6 | 33 | 430476.4 | 5334192.0 |
| 4 | 10250 | A MAG | 0 | -6.4 | 4.8 | 0.0 | 0 | 37 | 430175.0 | 5333760.0 |

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.

EASTMAIN RESOURCES INC.

| | | | | | | CONDUCTOR | | BIRD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AMPLITUDE (PPM) | | CTP | DEPTH | HEIGHT | | |
| FLIGHT | LINE | ANOMALY | CATEGORY | INPHASE | QUAD. | MHOS | MTRS | MTRS | | |
| 4 | 10250 | B MAG | 0 | -7.4 | 7.4 | 0.0 | 0 | 34 | 429589.2 | 5332754.0 |
| 4 | 10250 | C MAG | 0 | -7.6 | 4.3 | 0.0 | 0 | 30 | 429511.7 | 5332616.5 |
| 4 | 10240 | A MAG | 0 | -7.4 | 6.7 | 0.0 | 0 | 36 | 429508.5 | 5332720.5 |
| 4 | 10240 | B MAG | 0 | -9.2 | 7.9 | 0.0 | 0 | 35 | 429558.0 | 5332800.0 |
| 4 | 10240 | C MAG | 0 | -8.2 | 7.7 | 0.0 | 0 | 35 | 429581.2 | 5332839.5 |
| 4 | 10240 | D MAG | 0 | -2.6 | 10.0 | 0.0 | 0 | 23 | 429880.1 | 5333367.0 |
| 4 | 10240 | E MAG | 0 | -5.3 | 7.9 | 0.0 | 0 | 31 | 429954.4 | 5333502.0 |
| 4 | 10240 | F MAG | 0 | -8.9 | 5.7 | 0.0 | 0 | 28 | 430060.7 | 5333695.0 |
| 4 | 10240 | G MAG | 0 | -17.5 | 9.1 | 0.0 | 0 | 28 | 430110.4 | 5333785.5 |
| 4 | 10240 | H MAG | 0 | -4.4 | 1.9 | 0.0 | 0 | 25 | 430280.1 | 5334086.5 |
| 4 | 10230 | A | 0 | 1.6 | 4.5 | 0.0 | 25 | 30 | 430250.8 | 5334124.5 |
| 4 | 10230 | B MAG | 0 | -9.0 | 10.3 | 0.0 | 0 | 33 | 430054.5 | 5333779.0 |
| 4 | 10230 | C MAG | 0 | -12.1 | 6.3 | 0.0 | 0 | 32 | 430022.6 | 5333730.5 |
| 4 | 10230 | D | 0 | -0.4 | 5.6 | 0.0 | 0 | 24 | 429704.9 | 5333215.5 |
| 4 | 10230 | E MAG | 0 | -4.3 | 6.5 | 0.0 | 0 | 37 | 429490.5 | 5332827.0 |
| 4 | 10230 | F MAG | 0 | -5.1 | 5.2 | 0.0 | 0 | 37 | 429429.9 | 5332732.5 |
| 4 | 10220 | A MAG | 0 | -7.9 | 10.2 | 0.0 | 0 | 35 | 429989.2 | 5333787.0 |
| 4 | 10220 | B | 0 | 0.9 | 5.2 | 0.0 | 4 | 38 | 430187.2 | 5334127.5 |
| 4 | 10210 | A | 0 | -0.8 | 2.9 | 0.0 | 0 | 40 | 430421.6 | 5334662.0 |
| 4 | 10210 | B MAG | 0 | -4.6 | 8.4 | 0.0 | 0 | 38 | 429907.9 | 5333748.5 |
| 4 | 10210 | C MAG | 0 | -2.9 | 4.6 | 0.0 | 0 | 37 | 429771.4 | 5333501.5 |
| 4 | 10210 | D MAG | 0 | -5.2 | 2.8 | 0.0 | 0 | 32 | 429583.2 | 5333183.5 |
| 4 | 10210 | E MAG | 0 | -7.9 | 5.8 | 0.0 | 0 | 34 | 429363.7 | 5332764.5 |
| 4 | 10210 | F MAG | 0 | -5.4 | 6.1 | 0.0 | 0 | 31 | 429319.3 | 5332682.0 |
| 4 | 10200 | A MAG | 0 | -5.9 | 3.1 | 0.0 | 0 | 32 | 429582.4 | 5333231.5 |
| 4 | 10200 | B MAG | 0 | -4.2 | 3.6 | 0.0 | 0 | 34 | 429739.8 | 5333514.5 |
| 4 | 10200 | C MAG | 0 | -7.6 | 6.6 | 0.0 | 0 | 36 | 429883.6 | 5333761.0 |
| 4 | 10200 | D | 0 | -7.4 | 2.6 | 0.0 | 0 | 29 | 430391.6 | 5334694.0 |
| 4 | 10200 | E MAG | 0 | -9.8 | 2.9 | 0.0 | 0 | 30 | 430398.1 | 5334705.5 |
| 4 | 10190 | A MAG | 0 | -5.7 | 3.2 | 0.0 | 0 | 36 | 430371.5 | 5334721.5 |
| 4 | 10190 | B | 0 | -3.4 | 2.7 | 0.0 | 0 | 36 | 430359.7 | 5334702.0 |
| 4 | 10190 | C MAG | 0 | -5.5 | 9.8 | 0.0 | 0 | 33 | 429836.3 | 5333771.5 |
| 4 | 10190 | D MAG | 0 | -9.5 | 2.9 | 0.0 | 0 | 29 | 429794.3 | 5333701.5 |
| 4 | 10190 | E MAG | 0 | -11.7 | 3.7 | 0.0 | 0 | 30 | 429684.4 | 5333520.5 |
| 4 | 10190 | F MAG | 0 | -2.8 | 6.4 | 0.0 | 0 | 34 | 429572.8 | 5333316.0 |
| 4 | 10190 | G MAG | 0 | -4.4 | 5.2 | 0.0 | 0 | 38 | 429322.0 | 5332876.0 |
| 4 | 10190 | H MAG | 0 | -6.8 | 4.8 | 0.0 | 0 | 38 | 429164.7 | 5332610.5 |
| 4 | 10180 | A MAG | 0 | -4.2 | 7.3 | 0.0 | 0 | 42 | 429286.8 | 5332902.5 |

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.

| | | | | | | CONDUCTOR | | BIRD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AMPLITUDE (PPM) | | CTP | DEPTH | HEIGHT | | |
| FLIGHT | LINE | ANOMALY | CATEGORY | INPHASE | QUAD. | MHOS | MTRS | MTRS | | |
| ------ | ---- | ------- | -------- | ------- | ----- | ---- | ---- | ---- | | |
| 4 | 10180 | B MAG | 0 | -8.5 | 3.8 | 0.0 | 0 | 33 | 429662.2 | 5333544.5 |
| 4 | 10180 | C | 0 | -6.6 | 2.8 | 0.0 | 0 | 31 | 430331.1 | 5334719.0 |
| 4 | 10180 | D MAG | 0 | -7.9 | 3.3 | 0.0 | 0 | 31 | 430338.9 | 5334730.0 |
| 4 | 10180 | E MAG | 0 | -17.6 | 4.7 | 0.0 | 0 | 30 | 430366.3 | 5334769.5 |
| 4 | 10170 | A MAG | 0 | -7.0 | 4.0 | 0.0 | 0 | 40 | 430314.5 | 5334777.0 |
| 4 | 10170 | B MAG | 0 | -18.7 | 3.0 | 0.0 | 0 | 28 | 429736.2 | 5333756.0 |
| 4 | 10170 | C MAG | 0 | -14.6 | 4.1 | 0.0 | 0 | 27 | 429599.2 | 5333535.0 |
| 4 | 10170 | D MAG | 0 | -8.2 | 21.7 | 0.0 | 0 | 25 | 429517.3 | 5333381.5 |
| 4 | 10170 | E | 0 | -4.1 | 6.1 | 0.0 | 0 | 34 | 429390.6 | 5333175.0 |
| 4 | 10170 | F MAG | 0 | -5.5 | 5.5 | 0.0 | 0 | 34 | 429384.0 | 5333163.5 |
| 4 | 10170 | G | 0 | -6.0 | 12.7 | 0.0 | 0 | 31 | 429248.1 | 5332924.5 |
| 4 | 10170 | H MAG | 0 | -7.6 | 9.8 | 0.0 | 0 | 32 | 429234.6 | 5332899.5 |
| 4 | 10170 | J | 0 | -3.2 | 7.9 | 0.0 | 0 | 38 | 429090.0 | 5332644.0 |
| 4 | 10170 | K MAG | 0 | -3.6 | 5.8 | 0.0 | 0 | 37 | 429079.0 | 5332626.5 |
| 4 | 10160 | A MAG | 0 | -7.7 | 6.6 | 0.0 | 0 | 32 | 429150.6 | 5332884.5 |
| 4 | 10160 | B MAG | 0 | -4.0 | 6.3 | 0.0 | 0 | 28 | 429205.2 | 5332984.0 |
| 4 | 10160 | C | 0 | -11.8 | 3.9 | 0.0 | 0 | 26 | 429350.6 | 5333212.0 |
| 4 | 10160 | D MAG | 0 | -13.8 | 4.8 | 0.0 | 0 | 29 | 429360.3 | 5333227.5 |
| 4 | 10160 | E MAG | 0 | -8.3 | 4.4 | 0.0 | 0 | 31 | 429503.3 | 5333466.5 |
| 4 | 10160 | F MAG | 0 | -5.9 | 4.3 | 0.0 | 0 | 30 | 429563.8 | 5333575.5 |
| 4 | 10160 | G MAG | 0 | -8.6 | 3.1 | 0.0 | 0 | 30 | 429609.3 | 5333661.0 |
| 4 | 10160 | H MAG | 0 | -5.8 | 10.1 | 0.0 | 0 | 31 | 429782.7 | 5333962.5 |
| 4 | 10160 | J MAG | 0 | -3.8 | 5.1 | 0.0 | 0 | 33 | 429864.5 | 5334107.5 |
| 4 | 10160 | K MAG | 0 | -3.0 | 4.9 | 0.0 | 0 | 22 | 430181.6 | 5334650.0 |
| 4 | 10160 | M MAG | 0 | -11.5 | 4.5 | 0.0 | 0 | 20 | 430227.5 | 5334735.5 |
| 4 | 10160 | N MAG | 0 | -33.2 | 8.0 | 0.0 | 0 | 22 | 430260.3 | 5334794.5 |
| 4 | 10150 | A MAG | 0 | -20.0 | 5.4 | 0.0 | 0 | 27 | 430191.7 | 5334792.0 |
| 4 | 10150 | B MAG | 0 | -11.8 | 2.9 | 0.0 | 0 | 28 | 430158.3 | 5334728.0 |
| 4 | 10150 | C MAG | 0 | -9.1 | 5.4 | 0.0 | 0 | 32 | 429813.4 | 5334112.0 |
| 4 | 10150 | D MAG | 0 | -7.8 | 14.4 | 0.0 | 0 | 31 | 429736.4 | 5333976.0 |
| 4 | 10150 | E | 0 | -5.1 | 18.6 | 0.0 | 0 | 30 | 429723.4 | 5333951.5 |
| 4 | 10150 | F MAG | 0 | -11.6 | 3.2 | 0.0 | 0 | 30 | 429498.4 | 5333560.0 |
| 4 | 10150 | G MAG | 0 | -11.0 | 2.2 | 0.0 | 0 | 29 | 429457.6 | 5333494.0 |
| 4 | 10150 | H | 0 | -15.6 | 3.2 | 0.0 | 0 | 25 | 429300.4 | 5333231.5 |
| 4 | 10150 | J MAG | 0 | -22.2 | 2.4 | 0.0 | 0 | 24 | 429290.7 | 5333214.5 |
| 4 | 10150 | K MAG | 0 | -8.7 | 3.1 | 0.0 | 0 | 24 | 429171.4 | 5333004.0 |
| 4 | 10150 | M MAG | 0 | -8.6 | 5.7 | 0.0 | 0 | 27 | 429138.9 | 5332945.0 |
| 4 | 10150 | N MAG | 0 | -11.8 | 4.8 | 0.0 | 0 | 28 | 429099.0 | 5332875.5 |
| 4 | 10140 | A MAG | 0 | -5.3 | 3.0 | 0.0 | 0 | 34 | 429085.0 | 5332991.0 |
| 4 | 10140 | B MAG | 0 | -3.5 | 1.1 | 0.0 | 0 | 35 | 429247.7 | 5333257.0 |
| 4 | 10140 | C MAG | 0 | -6.2 | 2.2 | 0.0 | 0 | 37 | 429430.2 | 5333596.0 |

**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.**

EASTMAIN RESOURCES INC.

```
                                                      CONDUCTOR  BIRD
                                    AMPLITUDE (PPM)   CTP DEPTH HEIGHT
FLIGHT   LINE ANOMALY CATEGORY  INPHASE  QUAD.   MHOS  MTRS   MTRS
------   ---- ------- --------  -------  -----   ----  ----   ----

   4   10140     D  MAG     0        -8.1      8.4   0.0     0     29  429730.3 5334104.0
   4   10140     E  MAG     0        -5.9      5.6   0.0     0     30  429784.6 5334207.5
   4   10140     F  MAG     0        -9.8      2.9   0.0     0     30  430096.8 5334751.5
   4   10140     G  MAG     0       -11.5      2.9   0.0     0     31  430127.8 5334804.0

   4   10130     A  MAG     0        -6.0      2.0   0.0     0     35  430071.5 5334792.0
   4   10130     B  MAG     0        -8.6      1.6   0.0     0     32  429370.5 5333604.5
   4   10130     C  MAG     0        -5.8      0.7   0.0     0     32  429162.5 5333236.5
   4   10130     D  MAG     0        -9.7      1.8   0.0     0     33  429021.5 5333002.0
   4   10130     E  MAG     0        -6.0      2.5   0.0     0     36  428886.7 5332747.5

   4   10120     A  MAG     0       -10.9      1.5   0.0     0     32  428864.4 5332812.5
   4   10120     B  MAG     0       -15.7      1.6   0.0     0     28  429136.3 5333283.0
   4   10120     C  MAG     0       -11.1      1.6   0.0     0     26  429347.7 5333639.0
   4   10120     D  MAG     0        -1.6     11.8   0.0     0     36  429576.2 5334016.0
   4   10120     E  MAG     0       -11.1      4.9   0.0     0     32  429683.1 5334210.5
   4   10120     F  MAG     0       -19.5      5.7   0.0     0     24  430010.3 5334792.5
   4   10120     G  MAG     0        -7.2      3.8   0.0     0     22  430047.2 5334861.0
```

**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.**

# APPENDIX 3

# EM ANOMALY LISTINGS

## APPENDIX 4

## CERTIFICATE OF QUALIFICATIONS

I, IAN JOHNSON, certify that:

1. I am registered as a Professional Engineer in the Province of Ontario.

2. I reside at 11 Hale Street in the hamlet of Port Bruce, Ontario.

3. I hold a Ph.D. in Geophysics from the University of British Columbia, having graduated in 1972.

4. I have been continuously engaged in both professional and managerial roles in the minerals industry in Canada and abroad for the past eighteen years.

5. The accompanying report was prepared from published or publicly available information and material supplied by Eastmain Resources Inc. and Aerodat Inc. in the form of government reports and proprietary airborne exploration data. I have not personally visited the specific property.

7. I have no interest, direct or indirect, in the property described nor in Eastmain Resources Inc.

8. I hereby consent to the use of this report in a Statement of Material Facts of the Company and for the preparation of a prospectus for submission to the appropriate securities commission and/or other regulatory authorities.

Signed,

Ian Johnson

Ian Johnson, Ph.D., P. Eng.

I. M. JOHNSON

J9537
Port Bruce, Ontario

September 18, 1995

Ministry of Northern Development and Mines
Ontario

# Report of Work Conducted After Recording Claim

Mining Act

| Transaction Number |
|---|
| W9560.00536 |

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.16399

**Instructions:**
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for r
  Recorder.
- A separate copy of this form must be comple
- Technical reports and maps must accompan
- A sketch, showing the claims the work is ass

42A04NW0052 2.16399 KENOGAMING

900

| | | |
|---|---|---|
| Recorded Holder(s) Eastmain Resources Inc. | | Client No. 300914 |
| Address 36 Toronto Street, Suite 1000, Toronto, Ont. M5C 2C5 | | Telephone No. (519) 940-4870 |
| Mining Division Porcupine | Township/Area Kenogaming TWP | M or G Plan No. G-3239 |
| Dates Work Performed Survey From: July 11, 1995<br>Report & Final Maps July 14, 1995 | To: July 14, 1995<br>October 11, 1995 | |

**Work Performed (Check One Work Group Only)**

| | Work Group | Type |
|---|---|---|
| ✓ | Geotechnical Survey | Combined Airborne Magnetic & Electromagnetic and VLF Survey |
| | Physical Work, Including Drilling | |
| | Rehabilitation | |
| | Other Authorized Work | |
| | Assays | |
| | Assignment from Reserve | |

~~RECORDED~~
~~DEC 12 1995~~
~~Receipt~~

RECEIVED
FEB - 8 1996
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 19,968.00

**Note:** The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

**Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)**

| Name | Address |
|---|---|
| Ian Johnson / Aerodat Inc | 3883 Nashua Dr. Mississauga, Ont. |
| Don Robinson | Eastmain Resources Inc. RR#1 Orangeville, Ont |
| Cathy Butella | Shawonis Explorations & Ent. Ltd. RR#1 Orangeville, Ont. |
| | |

(attach a schedule if necessary)

**Certification of Beneficial Interest** * See Note No. 1 on reverse side

| | | |
|---|---|---|
| I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder. | Date Dec. 12/95 | Recorded Holder or Agent (Signature) Catherine I Butella |

**Certification of Work Report**

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: Catherine Irene Butella

| | | |
|---|---|---|
| Telepone No. (519) 940-4870 | Date Dec. 12/95 | Certified By (Signature) Catherine I Butella |

**For Office Use Only**

| | | | |
|---|---|---|---|
| Total Value Cr. Recorded<br>$19,968. | Date Recorded | Mining Recorder | Received Stamp<br>RECEIVED (C)<br>DEC 12 1995<br>TB 10:50<br>PORCUPINE MINING DIVISION |
| | Deemed Approval Date<br>MARCH 12/96 | Date Approved | |
| | Date Notice for Amendments Sent | | |

0241 (03/91)

| Work Report Number for Applying Reserve | Claim Number (see Note 2) | Number of Claim Units | Value of Assessment Work Done on this Claim | Value Applied to this Claim | Value Assigned from this Claim | Reserve: Work to be Claimed at a Future Date |
|---|---|---|---|---|---|---|
| | P1154747 | 03 | 1,248.00 | 1,200.00 | 48.00 | |
| | P1154748 | 03 | 1,248.00 | 1,200.00 | 48.00 | |
| | P1204269 | 01 | 416.00 | 400.00 | 16.00 | |
| | P1204270 | 01 | 2,496.00 | 2,400.00 | 16.00 | 80.00 |
| | P1204271 | 02 | 832.00 | 800.00 | 32.00 | |
| | P1204272 | 03 | 1,248.00 | 1,200.00 | 48.00 | |
| | P1204273 | 01 | 416.00 | 400.00 | 16.00 | |
| | P1204274 | 01 | 416.00 | 400.00 | 16.00 | |
| | P1177269 | 04 | 1,664.00 | 3,200.00 | 0 | |
| | P1177270 | 01 | 416.00 | 800.00 | 0 | |
| | P1177271 | 01 | 416.00 | 800.00 | 0 | |
| | P1177282 | 02 | 832.00 | 1,600.00 | 0 | |
| | P1177283 | 04 | 1,664.00 | 3,200.00 | 0 | |
| | P 998379 ~~P 1154~~ | 01 | 416.00 | 0 | 416.00 | |
| | P 998380 | 01 | 416.00 ~~416.00~~ | 0 | 208.00 | 208.00 |
| | P 1025230 | 01 | 416.00 | 0 | 0 | 416.00 |
| | P 1025231 | 01 | 416.00 | 0 | 0 | 416.00 |
| | (see page 2)<br>Total Number of Claims | | (See page 2)<br>Total Value Work Done | (See page 2)<br>Total Value Work Applied | (See page 2)<br>Total Assigned From | ~~1,368.00~~<br>Total Reserve<br>(see page 2) |

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☑ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

**Note 1:** Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

**Note 2:** If work has been performed on patented or leased land, please complete the following:

| | | |
|---|---|---|
| I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed. | Signature<br>Catherine J Botella | Date<br>Dec 12/95 |

| Work Report Number for Applying Reserve | Claim Number (see Note 2) | Number of Claim Units | Value of Assessment Work Done on this Claim | Value Applied to this Claim | Value Assigned from this Claim | Reserve: Work to be Claimed at a Future Date |
|---|---|---|---|---|---|---|
|  | P1025232 | 01 | 416.00 | 0 |  | 416.00 |
|  | P1025233 | 01 | 416.00 | 0 |  | 416.00 |
|  | P1025868 | 01 | 416.00 | 0 |  | 416.00 |
|  | S58335 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S58572 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S58573 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S58574 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S49021 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S49022 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S49025 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S49026 | 01 | 416.00 | 0 | 416.00 | 0 |
|  | S49039 | 01 | 416.00 | 0 | 416.00 | 0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 29<br>Total Number of Claims |  | 19,968.00<br>Total Value Work Done | 17,600.00<br>Total Value Work Applied | 4,608<br>Total Assigned From | 2,368.00<br>Total Reserve |

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☑ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

**Note 1:** Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

**Note 2:** If work has been performed on patented or leased land, please complete the following:

| I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed. | Signature | Date<br>Dec 12/95 |
|---|---|---|

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des mines

Ontario

# Statement of Costs for Assessment Credit

# État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction W9560.00536

2.16399.

Personal information collected on this form is obtained under the authority of the **Mining Act**. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la **Loi sur les mines** et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

## 1. Direct Costs/Coûts directs

| Type | Description | Amount Montant | Totals Total global |
|---|---|---|---|
| **Wages Salaires** | Labour Main-d'oeuvre | | |
| | Field Supervision Supervision sur le terrain | | |
| **Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil** | Type Aerodat Ltd | 25,000 | |
| | Supervisor & Repts | 3,100 | |
| | (Robinson/ Butella) | | 28,100 |
| **Supplies Used Fournitures utilisées** | Type Maps & Reports | 251.00 | |
| | | | |
| | | | |
| | | | 257 |
| **Equipment Rental Location de matériel** | Type | | |
| | | | |
| | | | |
| | | **Total Direct Costs Total des coûts directs** | 28,357 |

Applying for 19,968.00
★ See attached letter re: discount

## 2. Indirect Costs/Coûts indirects

** **Note:** When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

| Type | Description | Amount Montant | Totals Total global |
|---|---|---|---|
| **Transportation Transport** | Type | | |
| | | | |
| | | | |
| | | | |
| | | | |
| **Food and Lodging Nourriture et hébergement** | | | |
| **Mobilization and Demobilization Mobilisation et démobilisation** | | | |
| | | **Sub Total of Indirect Costs Total partiel des coûts indirects** | |
| | | **Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)** | |
| | | **Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles** | |

RECEIVED
FEB - 8 1996
MINING LANDS BRANCH

**Note:** The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

**Note :** Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

---

### Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

| Total Value of Assessment Credit | | Total Assessment Claimed |
|---|---|---|
| | × 0.50 = | |

### Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

| Valeur totale du crédit d'évaluation | | Évaluation totale demandée |
|---|---|---|
| | × 0,50 = | |

RECEIVED
(c)
DEC 12 1995
10:50 TB
PORCUPINE MINING DIVISION

RECEIVED
NOV 1995
PORCUPINE MINING DIVISION

### Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as President of Eastmain Res Inc. I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

### Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de ____________________ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

| Signature | Date |
|---|---|
| | Oct 27/95 |

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Geoscience Approvals Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

February 26, 1996

Our File: 2.16399
Transaction #: W9560.00536

Mining Recorder
Ministry of Northern Development & Mines
60 Wilson Avenue, 1st Floor
Timmins, Ontario
P4N 2S7

Dear Sir:

**Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS P.1154747 ET AL IN KENOGAMING TOWNSHIP**

Assessment work credits have been approved as outlined on the original submission. The credits have been approved under Section 15, Airborne Geophysics (AMAG, AVLF & AEM), Mining Act Regulations.

**The approval date is february 26, 1996.**

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5858.

Yours Sincerely,
ORIGINAL SIGNED BY:

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

LJ/jl
Enclosure:

cc: Resident Geologist
Timmins, Ontario

✓Assessment Files Library
Sudbury, Ontario

## REFERENCE

AREAS WITHDRAWN FROM DISPOSITION

M R O – MINING RIGHTS ONLY
S R O – SURFACE RIGHTS ONLY
M + S – MINING AND SURFACE RIGHTS

| Description | Order No | Date | Disposition | File |
|---|---|---|---|---|

(R1) PROPOSED COTTAGING AREAS NOTICE RECEIVED DECEMBER 22, 1988

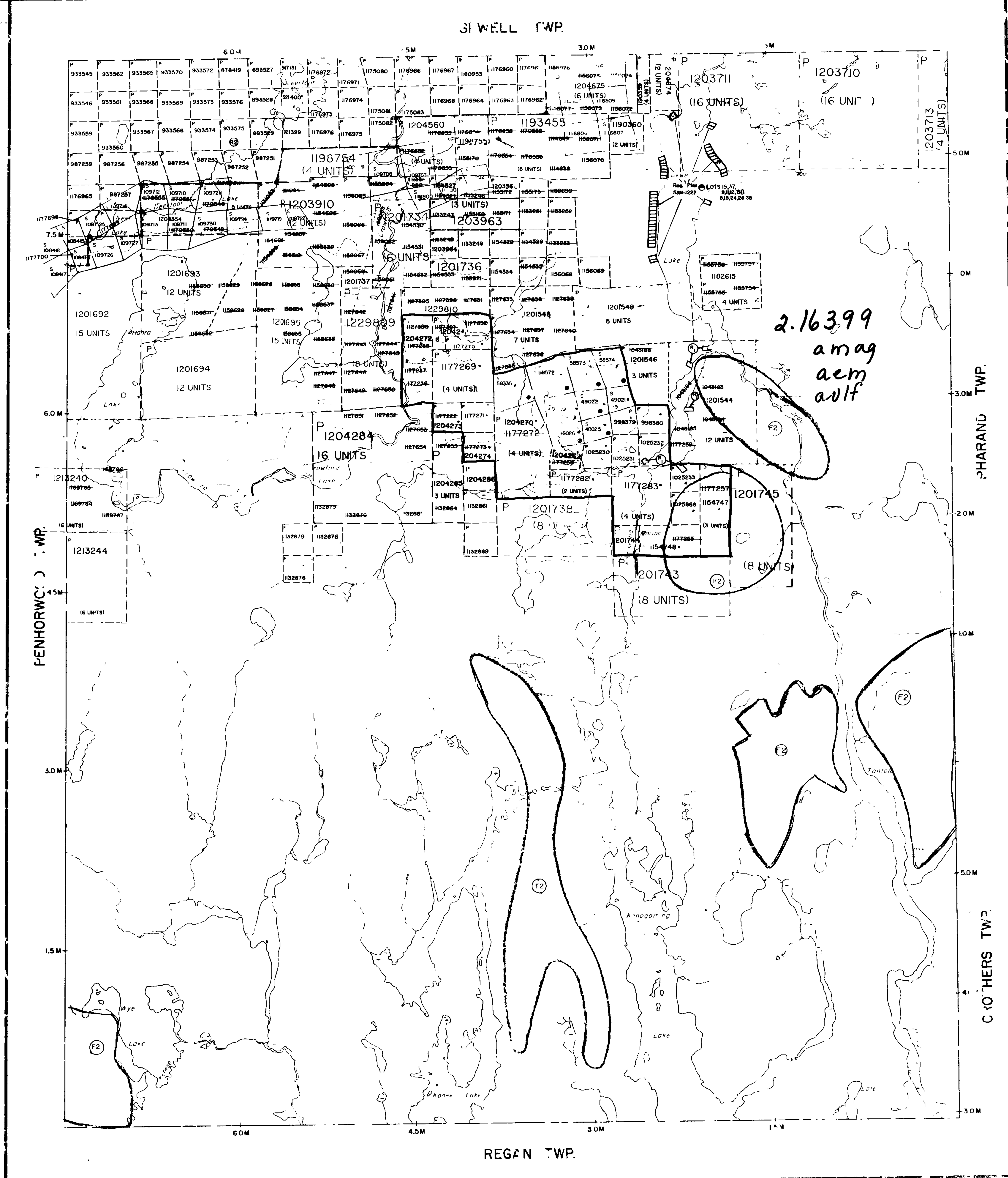
~~THIS TWP IS SUBJECT TO FOREST ACTIVITY IN 1992/93 FURTHER INFORMATION AVAILABLE ON FILE~~

(F2) THIS TWP SUBJECT TO FOREST ACTIVITY IN 1995/96 FURTHER INFORMATION AVAILABLE ON FILE

F O FILED ONLY REC,D DEC 12/94.

(R2) SURFACE AND MINING RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O 1990 DATED 95-MAY-29 ORDER NO. W-P 7/95 NER

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON



2.16399
amag
aem
avlf

## LEGEND

HIGHWAY AND ROUTE No
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS BASE LINES ETC
LOTS MINING CLAIMS PARCELS ETC
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORE LINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

## DISPOSITION OF CROWN LANDS

| TYPE OF DOCUMENT | SYMBOL |
|---|---|
| PATENT, SURFACE & MINING RIGHTS | ● |
| " SURFACE RIGHTS ONLY | ◒ |
| " MINING RIGHTS ONLY | ◓ |
| LEASE SURFACE & MINING RIGHTS | ■ |
| " SURFACE RIGHTS ONLY | ⬒ |
| " MINING RIGHTS ONLY | ⬓ |
| LICENCE OF OCCUPATION | ▼ |
| ORDER IN COUNCIL | OC |
| RESERVATION | Ⓡ |
| CANCELLED | ⊗ |
| SAND & GRAVEL | Ⓢ |

NOTE MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT R.S.O 1970, CHAP 380 SEC 63 SUBSEC

SCALE 1 INCH - 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

RECEIVED
FEB 8 1996
MINING LANDS BRANCH

TOWNSHIP

# KENOGAMING

M N R ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
SUDBURY

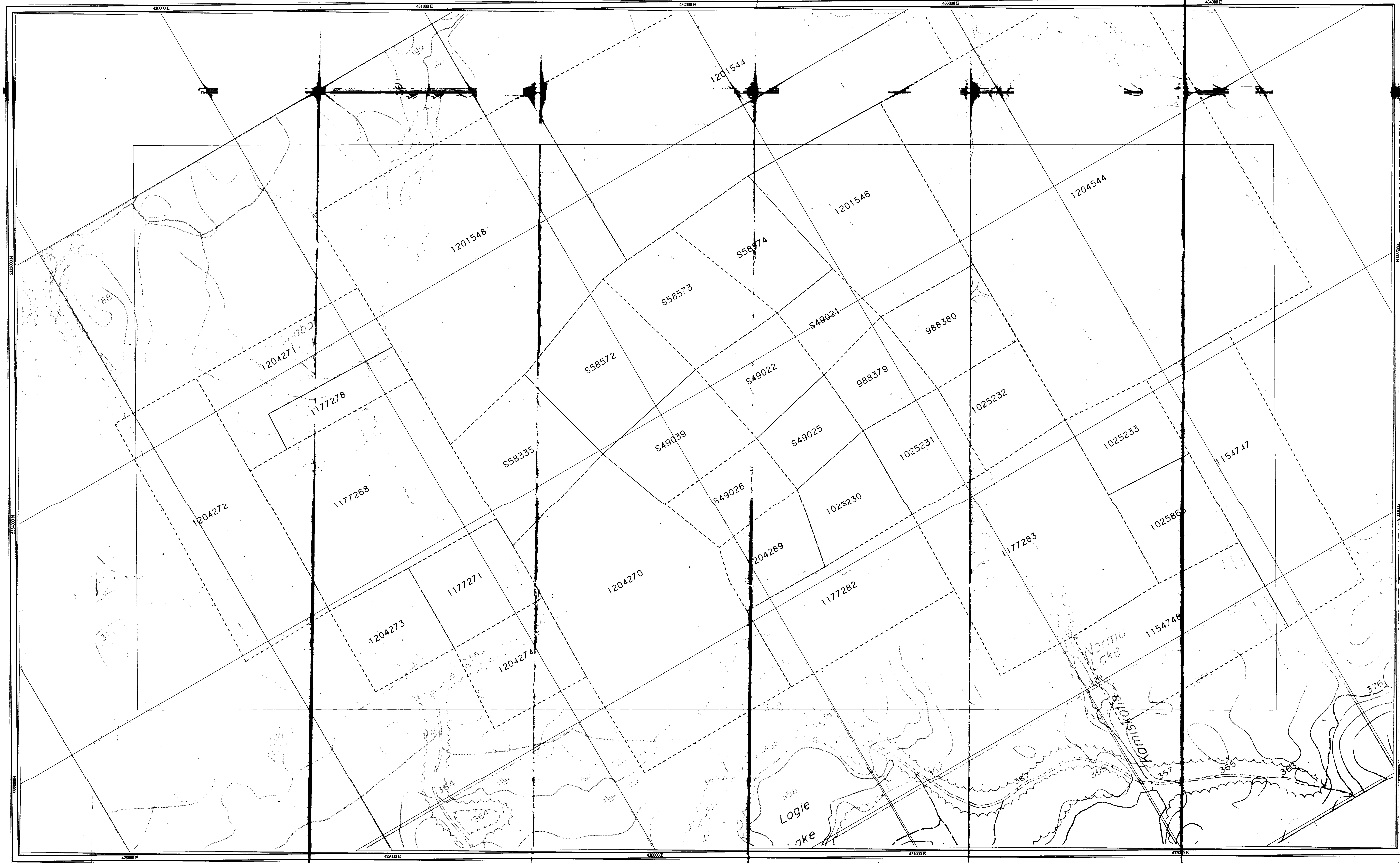
Ministry of Natural Resources
Land Management Branch
Ontario

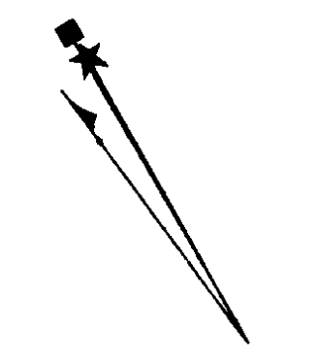
Date APRIL 1985
ACTIVATED ... 24 199.
BY D.C.
CHECKED BY J.W.

Number
G-3239

42A04NW0052 2 16399 KENOGAMING

200

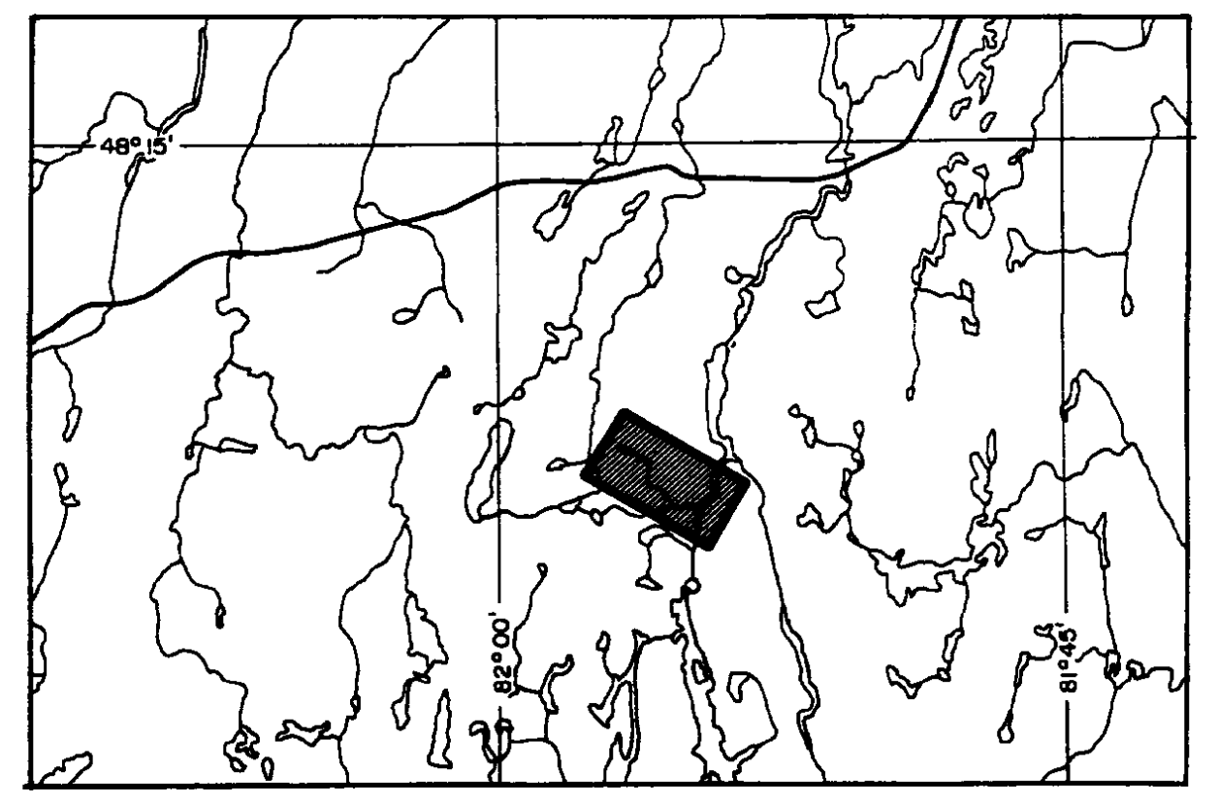




Square: Grid North
Star: True North
Arrow: Magnetic North

[illegible]
deviations for centre of NTS sheet.
Use diagram for reference only.

Grid North - True North : 0.6°
Grid North - Magnetic North : -8.4°
Annual change : 0.02°



# EASTMAIN RESOURCES INC.

2.163 99

## BASE MAP

## AKWESKWA PROJECT

ONTARIO

RECEIVED
ER - 8 1996
MINING LANDS BRANCH

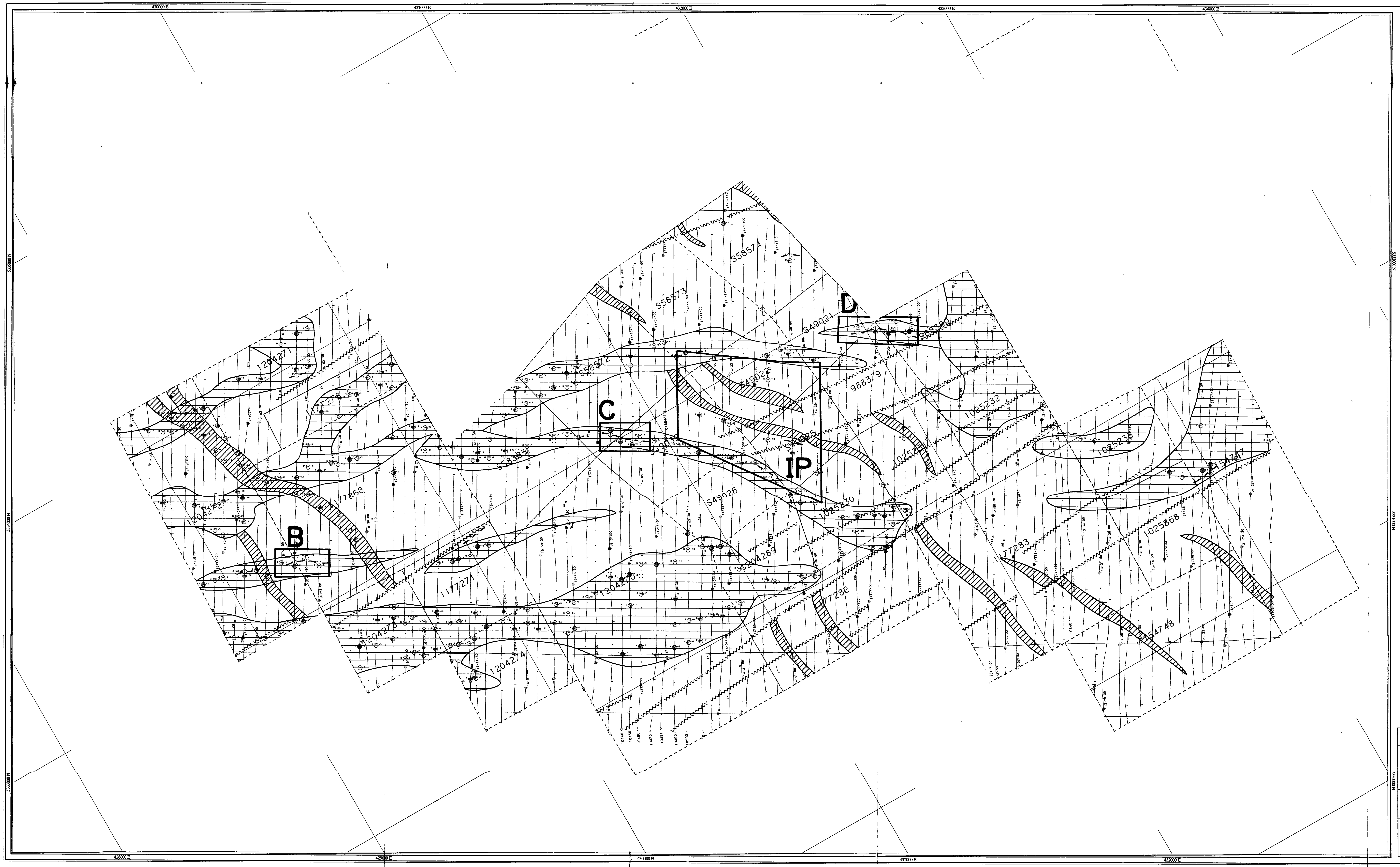
SCALE 1:5 000

100 0 50 100 250 500 metres

AERODAT INC.

Date Flown : JULY 1995
NTS : 42A/4
Project : J9537 Map Ref : 1 - 1

210



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean deviations for centre of NTS sheet
Use diagram for reference only

Grid North - True North 0 6°
Grid North - Magnetic North · -6 4°
Annual change 0 02°

## FLIGHT PATH

Navigation and flight path recovery was conducted using a Global Positioning System (GPS) satellite navigation system.

Lines were flown at an azimuth of 30 - 210°, with an average line spacing of 50m

Average helicopter-terrain clearance of 60m was monitored by radar and barometric altimeters

## EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite

| | |
|---|---|
| ◌ | 0 - 1 mhos |
| ○ | 1 - 2 mhos |
| ⊖ | 2 - 4 mhos |
| ◐ | 4 - 8 mhos |
| ◒ | 8 - 16 mhos |
| ◕ | 16 - 32 mhos |
| ● | > 32 mhos |
| Ⓜ | Magnetite |

### INTERPRETATION

| | |
|---|---|
| ▤ | Ultramafic volcanics |
| ▨ | Diabase dyke |
| —○—○— | Conductor axis |
| ⩘⩘ | Possible fault |
| IP | IP/resistivity survey area |
| A ☐ | Promising bedrock conductor |

2.16399

# EASTMAIN RESOURCES INC.

## INTERPRETATION

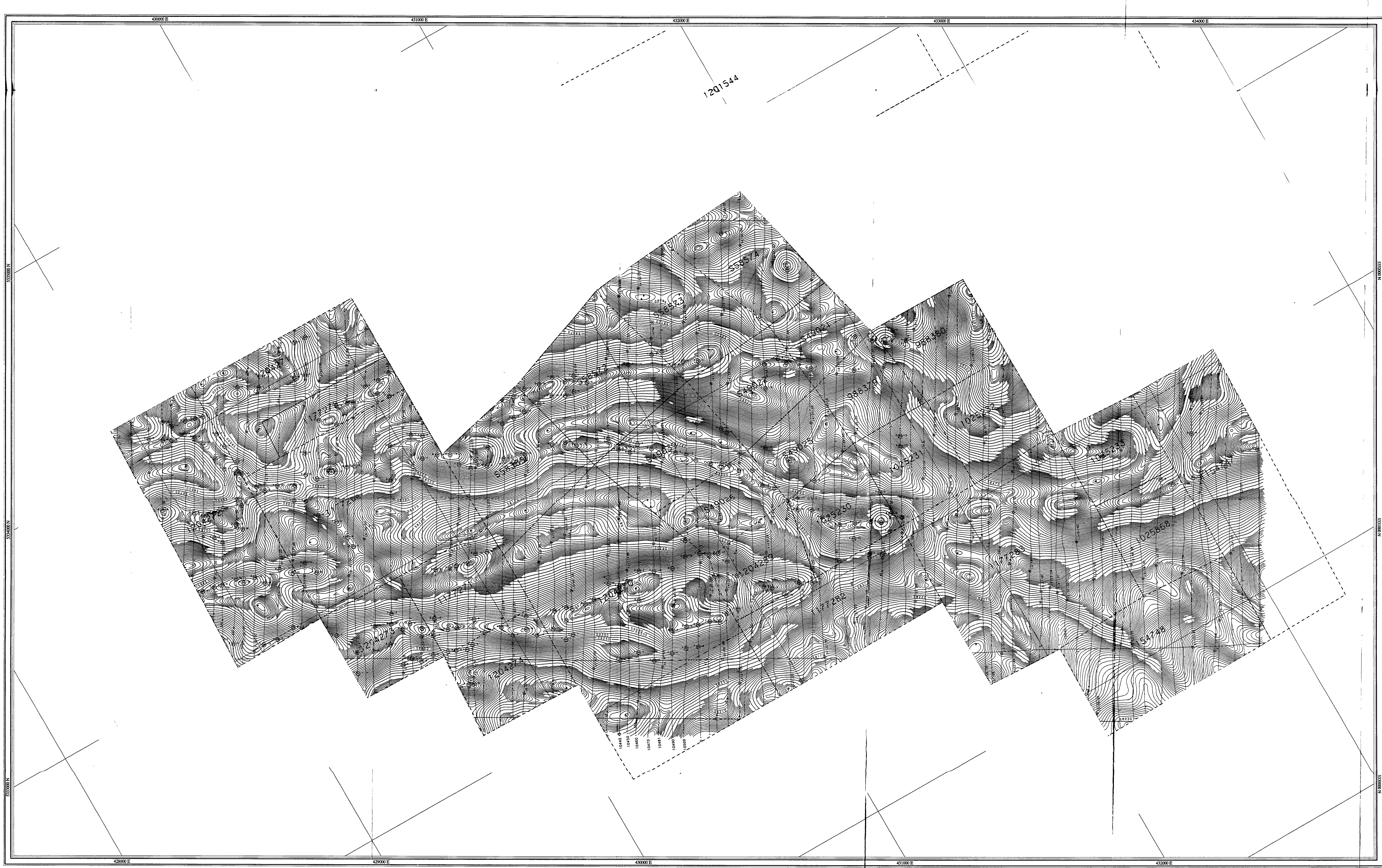
### AKWESKWA PROJECT
ONTARIO

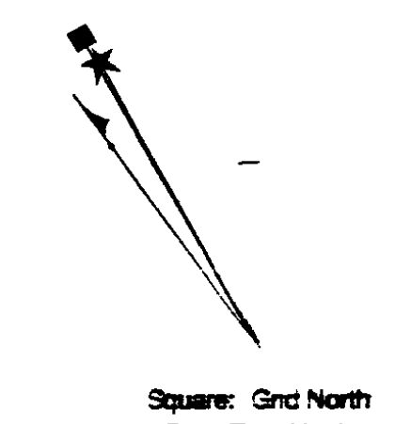
SCALE 1:5 000

100 0 50 100 250 500 metres

aerodat
AERODAT INC.

Date Flown : JULY 1995
NTS : 42A/4
Project : J9537 Map Ref : 1 - 2





Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean
deviations for centre of NTS sheet.
Use diagram for reference only.

Grid North - True North : 0 6°
Grid North - Magnetic North : -6.4°
Annual change : 0.02°

## TOTAL FIELD MAGNETICS

Total field magnetic intensity contour data, measured by a cesium high sensitivity magnetometer at an average sensor elevation of 45m, and corrected for diurnal variation.

Map contours are in nanoTeslas, and are multiples of those listed below:

| | |
|---|---|
| ─ | 2 nT |
| ─ | 10 nT |
| ─ | 50 nT |
| ━ | 250 nT |
| ━ | 1000 nT |

## FLIGHT PATH

Navigation and flight path recovery was conducted using a Global Positioning System (GPS) satellite navigation system.

Lines were flown at an azimuth of 30 - 210°, with an average line spacing of 50m.

Average helicopter-terrain clearance of 60m was monitored by radar and barometric altimeters.

## EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite

| | |
|---|---|
| A◌2 | 0 - 1 mhos |
| ○ | 1 - 2 mhos |
| ⊖ | 2 - 4 mhos |
| ◐ | 4 - 8 mhos |
| ◒ | 8 - 16 mhos |
| ◕ | 16 - 32 mhos |
| ● | > 32 mhos |
| Ⓜ | Magnetite |

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# EASTMAIN RESOURCES INC.

# TOTAL FIELD MAGNETICS

## AKWESKWA PROJECT

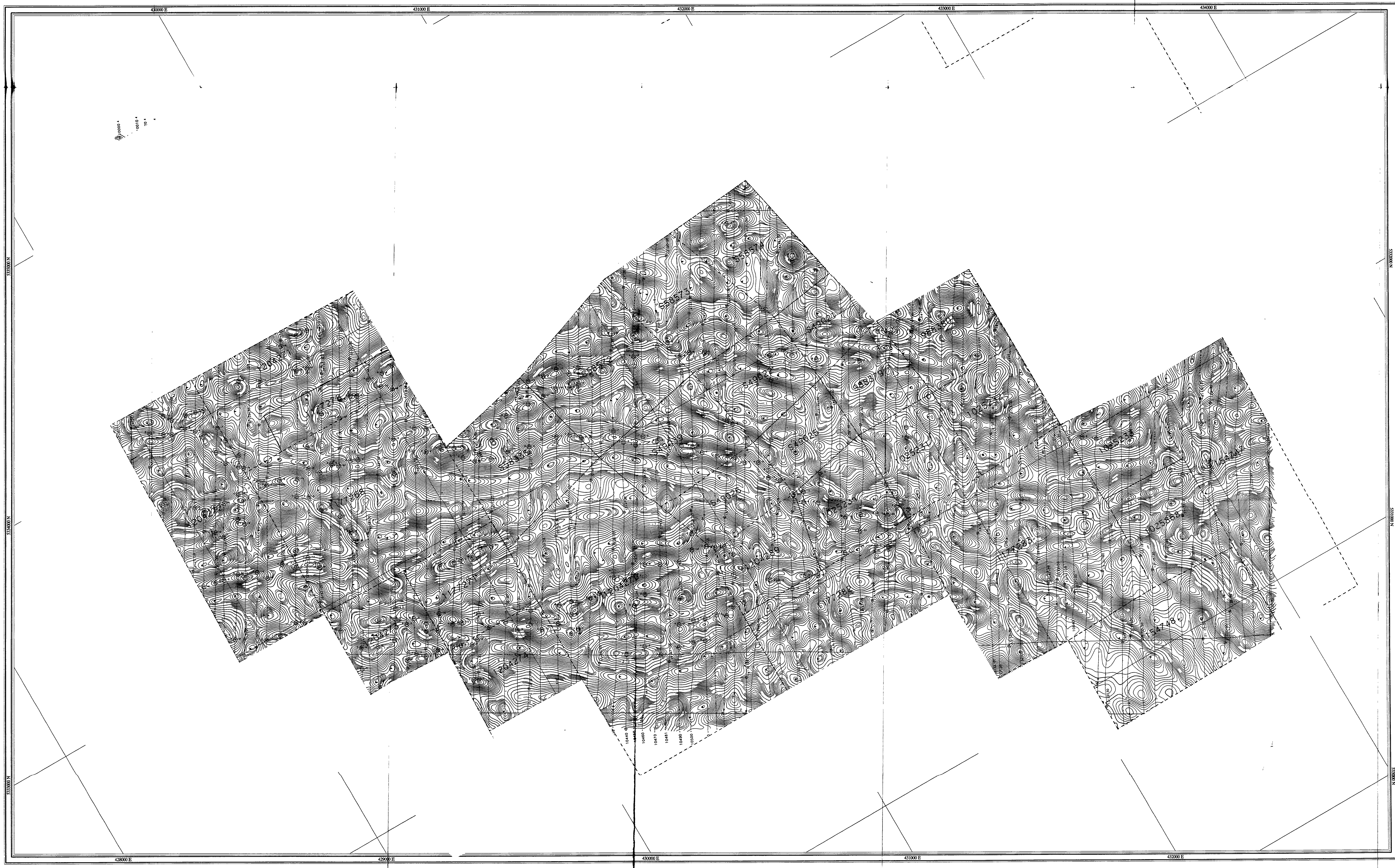
ONTARIO

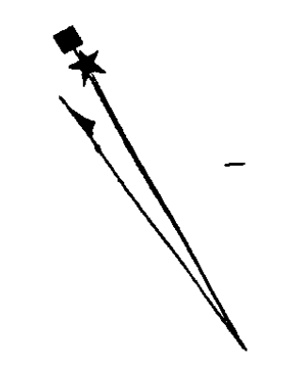
SCALE 1:5 000

100 0 50 100 250 500 metres

AERODAT INC.

Date Flown : JULY 1995
NTS : 42A/4
Project : J9537 Map Ref : 1 - 3





Angles presented are approximate mean deviations for centre of NTS sheet. Use diagram for reference only.

Grid North - True North : 0.6°
Grid North - Magnetic North : -6 4°
Annual change : 0.02°

## VERTICAL GRADIENT

Vertical magnetic gradient contour data, calculated from the gridded total field magnetics data by an FFT algorithm.

Map contours are in nanoTeslas/metre, and are multiples of those listed below:

- 0.05 nT/m
- 0.25 nT/m
- 1.0 nT/m
- 5.0 nT/m
- 25. nT/m

## FLIGHT PATH

Navigation and flight path recovery was conducted using a Global Positioning System (GPS) satellite navigation system.

Lines were flown at an azimuth of 30 - 210°, with an average line spacing of 50m.

Average helicopter-terrain clearance of 60m was monitored by radar and barometric altimeters.

## EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

| | |
|---|---|
| $\overset{A}{◌}^2$ | 0 - 1 mhos |
| ○ | 1 - 2 mhos |
| ⊖ | 2 - 4 mhos |
| ◐ | 4 - 8 mhos |
| ◒ | 8 - 16 mhos |
| ◕ | 16 - 32 mhos |
| ● | > 32 mhos |
| Ⓜ | Magnetite |

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# EASTMAIN RESOURCES INC.

# VERTICAL MAGNETIC GRADIENT

## AKWESKWA PROJECT

ONTARIO

SCALE 1:5 000

100 0 50 100 250 500 metres

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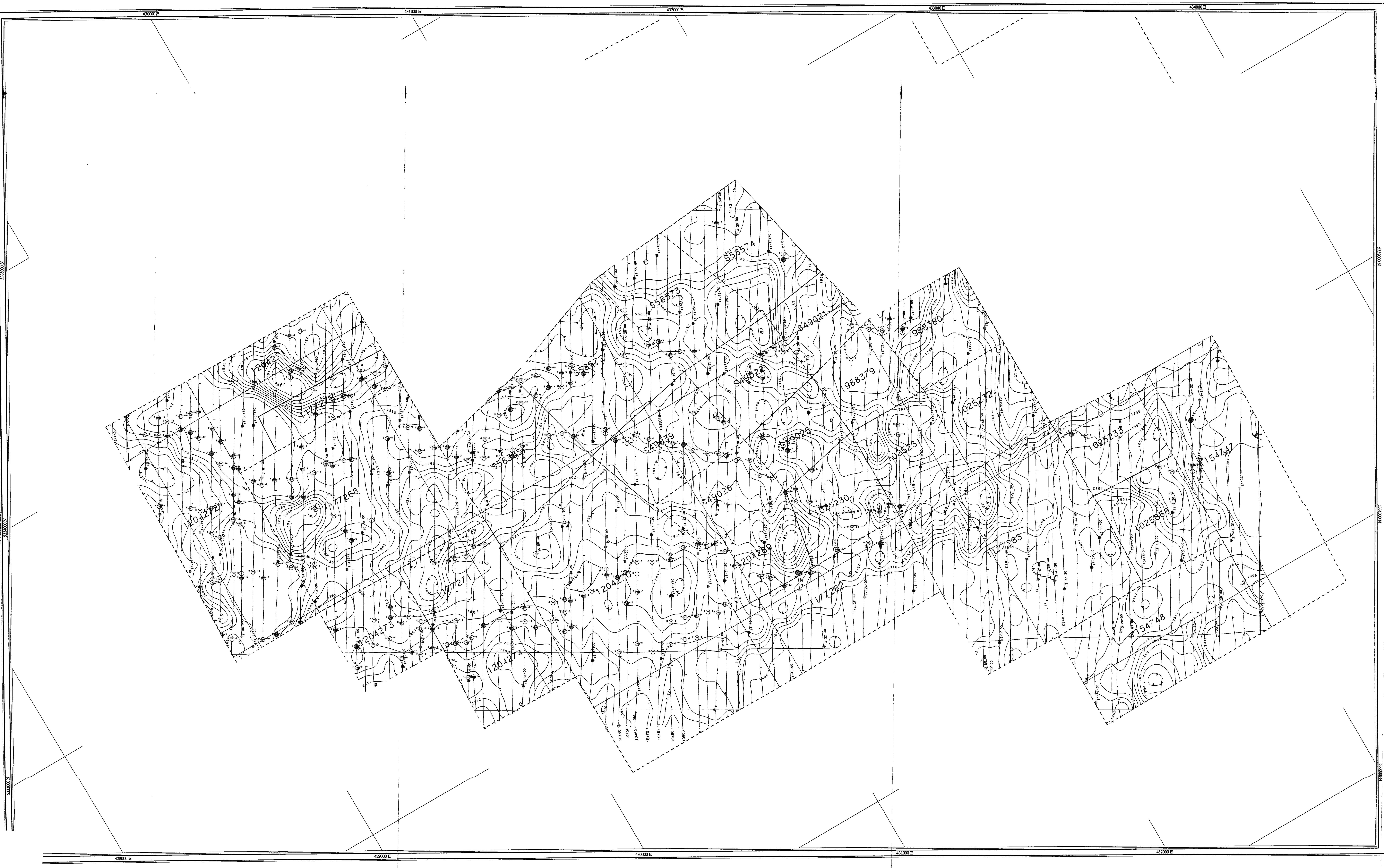
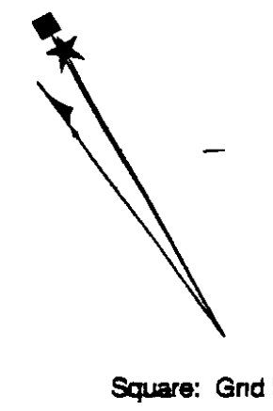
AERODAT INC.

Date Flown : JULY 1995

NTS : 42A/4

Project : J9537 Map Ref : 1 - 4





Square: Grid North
Star True North
Arrow: Magnetic North

Angles presented are approximate mean
deviations for centre of NTS sheet.
Use diagram for reference only.

Grid North - True North : 0.6°
Grid North - Magnetic North . -6 4°
Annual change · 0.02°

## APPARENT RESISTIVITY

Apparent resistivity calculated from the measured 4600 Hz coaxial EM response, assuming a resistive half-space (200m) model. Average sensor elevation was 30m.

Map contours are in ohm·m, at logarithmic intervals, in multiples of those listed below:

| | |
|---|---|
| ——— | 0.1 log(ohm·m) |
| ——— | 0 5 log(ohm·m) |
| ——— | 2.0 log(ohm·m) |

## FLIGHT PATH

Navigation and flight path recovery was conducted using a Global Positioning System (GPS) satellite navigation system.

Lines were flown at an azimuth of 30 - 210°, with an average line spacing of 50m

Average helicopter-terrain clearance of 60m was monitored by radar and barometric altimeters.

## EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

| | |
|---|---|
| A ○ 2 | 0 - 1 mhos |
| ○ | 1 - 2 mhos |
| ⊖ | 2 - 4 mhos |
| ◐ | 4 - 8 mhos |
| ◒ | 8 - 16 mhos |
| ◕ | 16 - 32 mhos |
| ● | > 32 mhos |
| Ⓜ | Magnetite |

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# EASTMAIN RESOURCES INC.

## APPARENT RESISTIVITY
4600 Hz COAXIAL

## AKWESKWA PROJECT
ONTARIO

SCALE 1:5 000

100 0 50 100 250 500 metres

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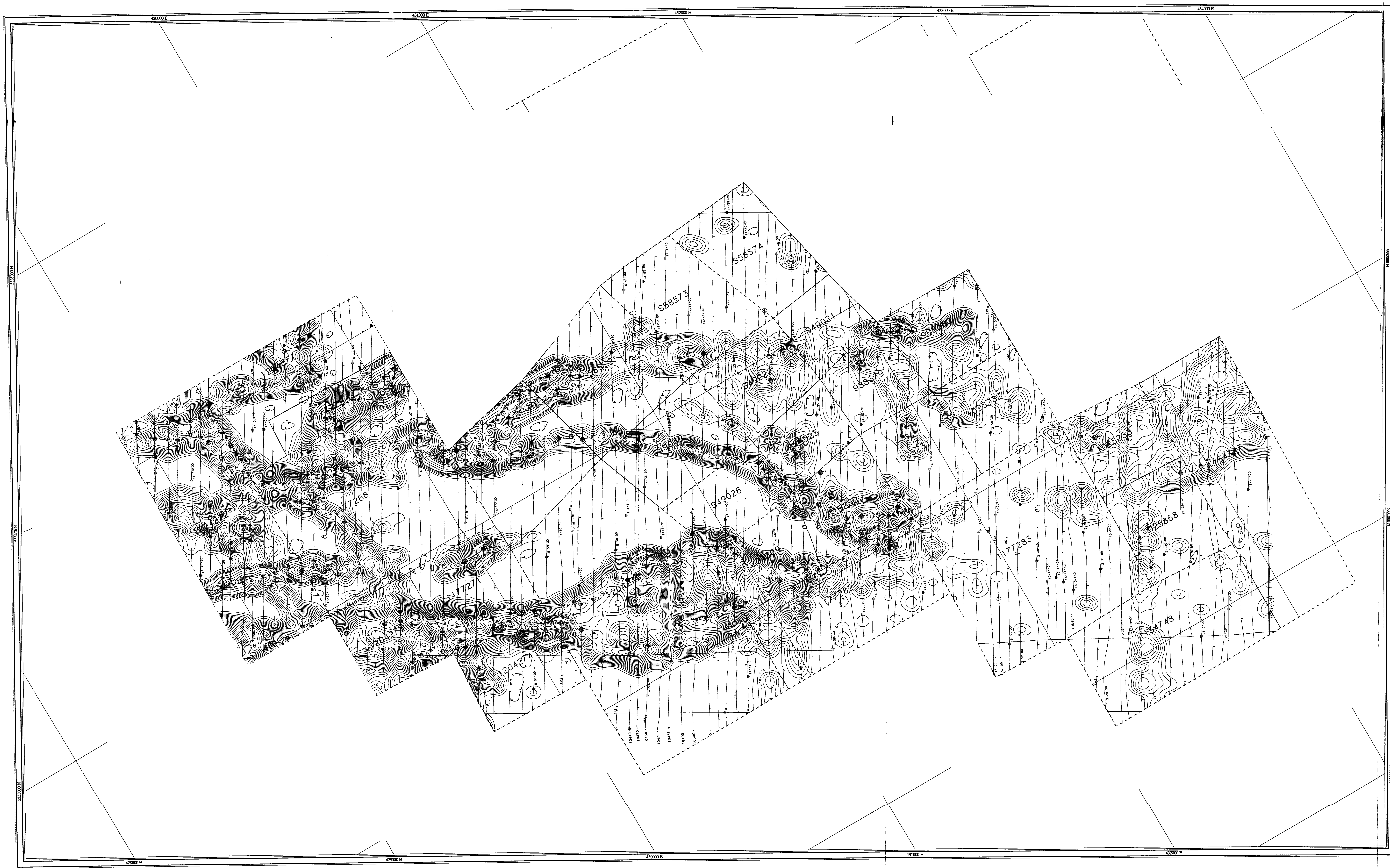
AERODAT INC.

Date Flown : JULY 1995

NTS : 42A/4

Project : J9537 Map Ref : 1 - 5

250



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean deviations for centre of NTS sheet. Use diagram for reference only.

Grid North - True North : 0.8°
Grid North - Magnetic North : -6.4°
Annual change : 0.02°

## WEIGHT PERCENT MAGNETITE

Total field magnetic intensity contour data, measured by a cesium high sensitivity magnetometer at an average sensor elevation of 45m, and corrected for diurnal variation.

Map contours are in nanoTeslas, and are multiples of those listed below:

| | |
|---|---|
| ——— | 0.1% |
| ——— | .5% |
| ——— | 2.5% |

## FLIGHT PATH

Navigation and flight path recovery was conducted using a Global Positioning System (GPS) satellite navigation system.

Lines were flown at an azimuth of 30 - 210°, with an average line spacing of 50m.

Average helicopter-terrain clearance of 60m was monitored by radar and barometric altimeters.

## EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

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| ◒ | 8 - 16 mhos |
| ◕ | 16 - 32 mhos |
| ● | > 32 mhos |
| Ⓜ | Magnetite |

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# EASTMAIN RESOURCES INC.

# WEIGHT PERCENT MAGETITE

## AKWESKWA PROJECT

ONTARIO

SCALE 1:5 000

100 0 50 100 250 500 metres

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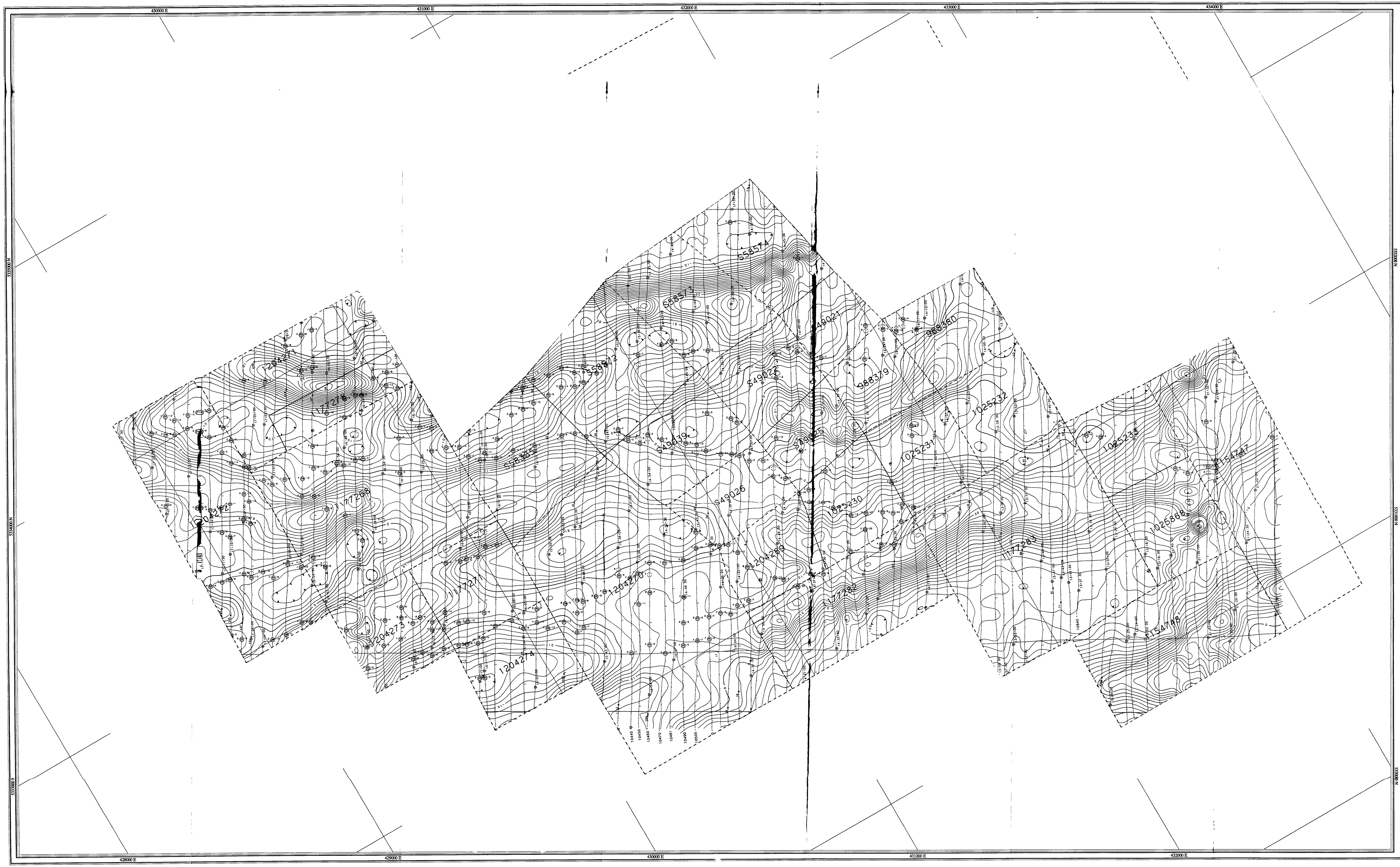
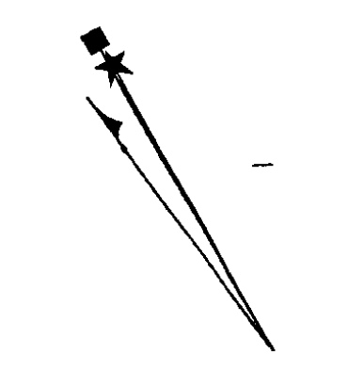
AERODAT INC.

Date Flown : JULY 1995
NTS : 42A/4
Project : J9537 Map Ref : 1 - 6

42A04NW0052 2 16399 KENOGAMING





Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean
deviations for centre of NTS sheet.
Use diagram for reference only.

Grid North - True North : 0.6°
Grid North - Magnetic North : -6.4°
Annual change : 0.02°

## TOTAL FIELD VLF-EM

Total field VLF-EM contour data, measured by a Herz Totem 2A sensor at an average elevation of 45m.

Flights 1 - 5, utilized station:
NAA, Cutler Maine U.S.A , 24.0 kHz.

Map contours are in percent, and are multiples of those listed below:

| | |
|---|---|
| ———— | 2 % |
| ———— | 10 % |
| ———— | 50 % |

## FLIGHT PATH

Navigation and flight path recovery was conducted using a Global Positioning System (GPS) satellite navigation system.

Lines were flown at an azimuth of 30 - 210°, with an average line spacing of 50m.

Average helicopter-terrain clearance of 60m was monitored by radar and barometric altimeters.

## EM ANOMALIES

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Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

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| ◐ | 4 - 8 mhos |
| ◒ | 8 - 16 mhos |
| ◕ | 16 - 32 mhos |
| ● | > 32 mhos |
| Ⓜ | Magnetite |

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# EASTMAIN RESOURCES INC.

# TOTAL FIELD VLF-EM

## AKWESKWA PROJECT

ONTARIO

SCALE 1:5 000

100 0 50 100 250 500 metres

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AERODAT INC.

Date Flown : JULY 1995
NTS : 42A/4
Project : J9537 Map Ref : 1 - 7

270