

Division of Geological & Geophysical Surveys

GEOPHYSICAL REPORT 2002-4

**PROJECT REPORT OF THE AIRBORNE GEOPHYSICAL SURVEY OF THE
SOUTHEASTERN EXTENSION OF THE SALCHA RIVER-POGO SURVEY,
GOODPASTER MINING DISTRICT, EAST-CENTRAL ALASKA**

by

Ruth Pritchard
Fugro Airborne Surveys

\$21.00

April 2002

**THIS REPORT HAS NOT BEEN REVIEWED FOR
TECHNICAL CONTENT OR FOR CONFORMITY TO THE
EDITORIAL STANDARDS OF DGGS**

Released by

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
Division of Geological & Geophysical Surveys
794 University Avenue, Suite 200
Fairbanks, Alaska 99709-3645



PROJECT REPORT OF THE
AIRBORNE GEOPHYSICAL SURVEY
OF THE SOUTHEASTERN EXTENSION
OF THE SALCHA RIVER-POGO SURVEY,
GOODPASTER MINING DISTRICT
EAST-CENTRAL ALASKA

STEVENS EXPLORATION MANAGEMENT CORP.
DIGHEM^V SURVEY
FOR THE
STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

Quadrangle: BIG DELTA B-1, B-2

Fugro Airborne Surveys Corp.
Mississauga, Ontario

Ruth A. Pritchard
Geophysicist

February 15, 2002

SUMMARY

This report describes the logistics and results of a DIGHEM^V airborne geophysical survey carried out under contract to Stevens Exploration Management Corp., Mining and Geological Consultants, for the State of Alaska, Department of Natural Resources, Division of Geological and Geophysical Surveys. The survey was flown on the 30th and 31st of August 2001, over one block, and was flown as a southeastern extension to a 1999 Geotrex-Dighem survey flown in the Salcha River-Pogo Mining area, Goodpaster mining district, east-central Alaska. Total coverage of the survey block amounts to 453.6 line-miles (729.9 line-km).

This airborne geophysical survey is part of a program to acquire data on Alaska's most promising mineral belts and districts. The information acquired is aimed at catalyzing new private sector exploration, discovery, and ultimate development and production. The purpose of the survey was to map the magnetic and conductive properties of the survey area, and to detect conductive mineralization. This was accomplished by using a DIGHEM^V multi-coil, multi-frequency electromagnetic system, supplemented by a high sensitivity cesium magnetometer. A GPS electronic navigation system ensured accurate positioning of the geophysical data with respect to the base maps. Visual flight path recovery techniques were used to confirm the location of the helicopter with respect to the ground.

Various maps depicting the survey results are provided at scales of 31,680 (1" = 1/2 mile) and 1:63,360 (1" = 1 mile). Some of the maps are presented on a topographic base. The data sets are processed and presented using Zone 6 of the Universal Transverse Mercator projection coordinates using the NAD27 datum. The following geophysical parameters are presented on the maps and/or on the digital archive:

- ? Total Field Magnetics
- ? Shadow Total Field Magnetics
- ? Apparent Resistivity – 900 Hz
- ? Apparent Resistivity – 7,200 Hz
- ? Interpreted Discrete Electromagnetic Anomalies

The Salcha River-Pogo area falls in the east-central geologic region of Alaska, approximately sixty miles east of Fairbanks and about forty miles north of Delta Junction. East central Alaska is composed of a number of accreted terranes that have continental, oceanic, and possibly island-arc affinities. The largest terrane, the Yukon-Tanana, has mostly continental affinities. The survey area falls within the Yukon-Tanana terrane, which consists largely of the area lying between the Yukon and Tanana Rivers.

Regional geology of the Salcha River-Pogo area consists of highly deformed, amphibolite-facies quartz-mica schist, paragneiss, and minor orthogneiss of the late Proterozoic to mid-Paleozoic. Yukon-Tanana terrane rocks have been intruded by Cretaceous (92 Ma) granitoid bodies of the Tombstone suite.

The total field magnetic and apparent resistivity data sets have successfully mapped the magnetic and conductive characteristics of the lithologies in the survey area. Numerous faults and contacts have been inferred from the survey results.

The discrete EM anomalies are interpreted to fall within one of three general categories. The first type consists of discrete, well-defined anomalies which are usually attributed to conductive sulphides or graphite. The second class of anomalies comprises moderately broad responses which exhibit the characteristics of a half space. Some of these anomalies may reflect conductive rock units or zones of deep weathering. The third class of anomalies consists of negative inphase responses which are indicative of magnetite.

It is recommended that the survey results be reviewed in detail, in conjunction with all available geophysical, geological and geochemical information. Particular reference should be made to the multi-parameter stacked profiles, which clearly define the characteristics of the individual anomalies in the identification of target areas. Image processing of existing geophysical data should be considered, in order to extract the maximum amount of information from the survey results.

CONTENTS

1.	INTRODUCTION.....	1.1
2.	SURVEY EQUIPMENT AND FIELD PROCEDURES	2.1
	Electromagnetic System.....	2.1
	Magnetometer	2.2
	Base Station Magnetometer	2.3
	Radar Altimeter	2.3
	Barometric Pressure and Temperature Sensors	2.3
	Analog Recorder	2.3
	Digital Data Acquisition System.....	2.4
	Video Flight Path Recording System	2.4
	Navigation (Global Positioning System).....	2.4
	Field Workstation	2.6
3.	PRODUCTS AND PROCESSING TECHNIQUES	3.1
	PRODUCTS	3.1
	Maps	3.1
	Other Products	3.2
	PROCESSING TECHNIQUES	3.3
	Topographic Base Maps.....	3.3
	Electromagnetic Anomalies	3.3
	Apparent Resistivity.....	3.6
	EM Magnetite (optional)	3.7
	Total Magnetic Field	3.7
	Calculated Vertical Magnetic Gradient (optional).....	3.7
	Magnetic Derivatives (optional)	3.8
	Multi-channel Stacked Profiles	3.8
	Contour, Colour and Shadow Map Displays	3.8
	Resistivity-depth Sections (optional).....	3.10
	Digital Terrain.....	3.11
4.	SURVEY RESULTS AND DISCUSSION.....	4.1
	Geology.....	4.1
	Survey Results	4.2
5.	CONCLUSIONS AND RECOMMENDATIONS	5.1

APPENDICES

- A. Background Information
- B. List of Personnel
- C. Archive Description
- D. EM Anomaly List

LIST OF TABLES

Table 2-1	The Analog Profiles	2-5
Table 3-1	Survey Products	3-2
Table 3-2	Multi-channel Stacked Profiles	3-9
Table 4-1	EM Anomaly Statistics.....	4-3
Table A-1	EM Anomaly Grades	A-2

LIST OF FIGURES

Figure 1-1	Location of the Salcha River – Pogo Mining Area and Southeastern Extension East-Central Alaska.....	1-2
Figure 3-1a	Processing Flow Chart – Electromagnetic data.....	3-4
Figure 3-1b	Processing Flow Chart – Magnetic data.....	3-4
Figure 4-1	Interpretation Sketch Map of the Southeastern Extension, Pogo Mining Area.....	4-4
Figure A-1	Typical DIGHEM Anomaly Shapes.....	A-4

LIST OF MAPS

2002_2	Interpretation Map of Southeastern Extension of the Pogo Mining Area	map pocket
--------	---	------------

1. INTRODUCTION

A DIGHEM^V electromagnetic/resistivity/magnetic survey was flown under contract to Stevens Exploration Management Corp., Mining and Geological Consultants for the State of Alaska, Department of Natural Resources, Division of Geological and Geophysical Surveys (DGGGS). The survey was flown from August 30 to August 31, 2001, over a survey block located in the Pogo Mining area. The survey area is a southeastern extension of a survey block in the Salcha River-Pogo Mining area which was flown for DGGGS in 1999 by Geoterrrex-Dighem. The survey area is located in the Big Delta quadrangle, map sheets B-1 and B-2 (Figure 1-1).

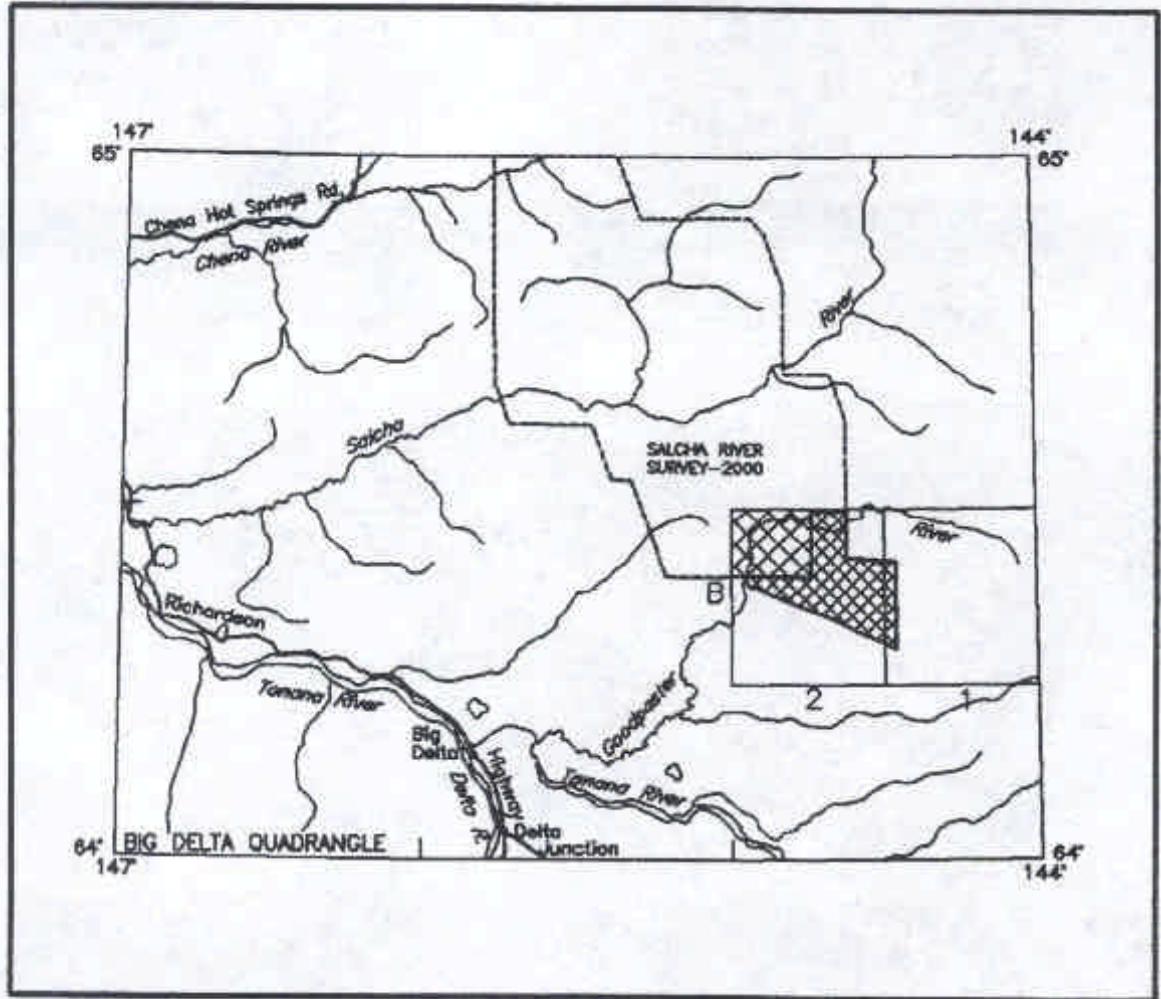
Survey coverage consisted of approximately 453.6 line-miles (729.9 line-km), including 86.5 miles (139.2 km) of tie lines. Flight lines were flown in an azimuthal direction of 160°/340° with a line separation of ¼-mile (approximately 400 metres).

Tie lines are flown perpendicular to the flight lines with a separation of 3 miles (5 kilometres). Several boundary lines were also flown around the edge of the survey area.

The survey employed the DIGHEM^V electromagnetic system. Ancillary equipment consisted of a magnetometer, radar altimeter, video camera, analog and digital recorders, and an electronic navigation system. The instrumentation was installed in an AS350B2 turbine helicopter (Registration N165EH) which was provided by ERA Helicopters Ltd. The helicopter flew at an average airspeed of 59 mph (96 km/h) with an EM sensor height of approximately 30 metres.

Section 2 provides details on the survey equipment, the data channels, their respective sensitivities, and the navigation/flight path recovery procedure. Section 3 describes the processing techniques, and lists the products which are delivered with this report. Section 4 gives a brief overview of the known geology in the survey area and the geophysical survey results, and Section 5 describes the conclusions and recommendations relating to the airborne survey.

LOCATION INDEX



**FIGURE 1-1
LOCATION MAP OF THE SURVEY AREA
SOUTHEASTERN EXTENSION
OF THE SALCHA RIVER-POGO SURVEY
GOODPASTER MINING DISTRICT
EAST-CENTRAL ALASKA**

2. SURVEY EQUIPMENT AND FIELD PROCEDURES

This section provides a brief description of the geophysical instruments used to acquire the survey data and the calibration procedures employed. The survey equipment was installed in an Aerospatiale AS350B2 turbine helicopter which was provided by ERA Helicopters Ltd. A bird, which houses much of the electromagnetic and magnetic equipment is suspended approximately 30 m below the helicopter.

Electromagnetic System

Model: DIGHEM^V

Type: Towed bird, symmetric dipole configuration operated at a nominal survey altitude of 30 metres. Coil separation is 8 metres for 900 Hz, 1000 Hz, 5500 Hz and 7200 Hz, and 6.3 metres for the 56,000 Hz coil-pair.

Coil orientations/frequencies:	<u>orientation</u>	<u>nominal</u>	<u>actual</u>
	coaxial /	1000 Hz	1072 Hz
	coplanar /	900 Hz	883 Hz
	coaxial /	5500 Hz	5954 Hz
	coplanar /	7200 Hz	7236 Hz
	coplanar /	56,000 Hz	56,360 Hz

Channels recorded: 5 in-phase channels
5 quadrature channels
2 monitor channels

Sensitivity: 0.06 ppm at 1000 Hz Cx
0.12 ppm at 900 Hz Cp
0.12 ppm at 5,500 Hz Cx
0.24 ppm at 7,200 Hz Cp
0.60 ppm at 56,000 Hz Cp

Sample rate: 10 per second, equivalent to 1 sample every 3 m, at a survey speed of 110 km/h.

The electromagnetic system utilizes a multi-coil coaxial/coplanar technique to energize conductors in different directions. The coaxial coils are vertical with their axes in the flight direction. The coplanar coils are horizontal. The secondary fields are sensed simultaneously by means of receiver coils which are maximally coupled to their respective transmitter coils. The system yields an in-phase and a quadrature channel from each transmitter-receiver coil-pair.

The Dighem calibration procedure involves four stages; primary field bucking, phase calibration, gain calibration, and zero adjust. At the beginning of the survey, the primary

field at each receiver coil is cancelled, or “bucked out”, by precise positioning of five bucking coils.

The phase calibration adjusts the phase angle of the receiver to match that of the transmitter. A ferrite bar, which produces a purely in-phase anomaly, is positioned near each receiver coil. The bar is rotated from minimum to maximum field coupling and the responses for the in-phase and quadrature components for each coil pair/frequency are measured. The phase of the response is adjusted at the console to return an in-phase only response for each coil-pair. Phase checks are performed daily.

The gain calibration uses external coils designed to produce an equal response on in-phase and quadrature components for each frequency/coil-pair. The coil parameters and distances are designed to produce pre-determined responses at the receiver, due to the current induced in the calibration coil by the transmitter when a switch closes the loop at the coil. The gain at the console is adjusted to yield secondary responses of exactly 100 ppm. Gain calibrations are carried out at the beginning and end of the survey.

The phase and gain calibrations each measure a relative change in the secondary field, rather than an absolute value. This removes any dependency of the calibration procedure on the secondary field due to the ground, except under circumstances of extreme ground conductivity.

During each survey flight, internal (Q-coil) calibration signals are generated to recheck system gain and to establish zero reference levels. These calibrations are carried out at intervals of approximately 20 minutes with the system out of ground effect. At a sensor height of more than 250 m, there is no measurable secondary field from the earth. The remaining residual is therefore established as the zero level of the system. Linear system drift is automatically removed by re-establishing zero levels between the Q-coil calibrations.

Magnetometer

Model:	Picodas MEP-710 processor with Geometrics G822 sensor
Type:	Optically pumped cesium vapour
Sensitivity:	0.01 nT
Sample rate:	10 per second

The magnetometer sensor is housed in the EM bird, 30 m below the helicopter.

Base Station Magnetometer

Model: GEM Systems GSM-19T
Type: Digital recording proton precession
Sensitivity: 0.10 nT
Sample rate: 0.2 per second

A digital recorder is operated in conjunction with the base station magnetometer to record the diurnal variations of the earth's magnetic field. The clock of the base station is synchronized with that of the airborne system to permit subsequent removal of diurnal drift.

Radar Altimeter

Manufacturer: Honeywell/Sperry
Model: AA 220
Type: Short pulse modulation, 4.3 GHz
Sensitivity: 0.3 m

The radar altimeter measures the vertical distance between the helicopter and the ground. This information is used in the processing algorithm which determines conductor depth.

Barometric Pressure and Temperature Sensors

Model: DIGHEM D 1300
Type: Motorola MPX4115AP analog pressure sensor
AD592AN high-impedance remote temperature sensors
Sensitivity: Pressure: 150 mV/kPa
Temperature: 100 mV/°C or 10 mV/°C (selectable)
Sample rate: 10 per second

The D1300 circuit is used in conjunction with one barometric sensor and up to three temperature sensors. Two sensors (baro and temp) are installed in the EM console in the aircraft, to monitor pressure and internal operating temperatures.

Analog Recorder

Manufacturer: RMS Instruments
Type: DGR33 dot-matrix graphics recorder
Resolution: 4x4 dots/mm
Speed: 1.5 mm/sec

The analog profiles are recorded on chart paper in the aircraft during the survey. Table 2-1 lists the geophysical data channels and the vertical scale of each profile.

Digital Data Acquisition System

Manufacturer: RMS Instruments
Model: DGR 33
Recorder: 48 Mb flash disk

The data are stored on a 48 Mb flash disk and are downloaded to the field workstation PC at the survey base for verification, backup and preparation of in-field products.

Video Flight Path Recording System

Type: Panasonic VHS Colour Video Camera (NTSC)
Model: AG 2400/WVCD132

Fiducial numbers are recorded continuously and are displayed on the margin of each image. This procedure ensures accurate correlation of analog and digital data with respect to visible features on the ground.

Navigation (Global Positioning System)

Airborne Receiver

Model: Ashtech Glonass GG24
Type: SPS (L1 band), 24-channel, C/A code at 1575.42 MHz, S code at 0.5625 MHz, Real-time differential.
Sensitivity: -132 dBm, 0.5 second update
Accuracy: Manufacturer's stated accuracy is better than 10 metres real-time

Base Station

Model: Marconi Allstar OEM, CMT-1200
Type: Code and carrier tracking of L1 band, 12-channel, C/A code at 1575.42 MHz
Sensitivity: -90 dBm, 1.0 second update
Accuracy: Manufacturer's stated accuracy for differential corrected GPS is 2 metres

Table 2-1 The Analog Profiles

Channel Name	Parameter	Scale units/mm	Designation on Digital Profile
1X9I	coaxial in-phase (1000 Hz)	2.5 ppm	CXI1000
1X9Q	coaxial quad (1000 Hz)	2.5 ppm	CXQ1000
3P9I	coplanar in-phase (900 Hz)	2.5 ppm	CPI900
3P9Q	coplanar quad (900 Hz)	2.5 ppm	CPQ900
2P7I	coplanar in-phase (7200 Hz)	5 ppm	CPI7200
2P7Q	coplanar quad (7200 Hz)	5 ppm	CPQ7200
4X7I	coaxial in-phase (5500 Hz)	5 ppm	CXI5500
4X7Q	coaxial quad (5500 Hz)	5 ppm	CXQ5500
5P5I	coplanar in-phase (56000 Hz)	10 ppm	CPI56K
5P5Q	coplanar quad (56000 Hz)	10 ppm	CPQ56K
ALTR	altimeter (radar)	3 m	ALTBIRD
MAGC	magnetics, coarse	20 nT	MAG
MAGF	magnetics, fine	2.0 nT	MAG
CXSP	coaxial spherics monitor		CXSP
CPSP	coplanar spherics monitor		CPSP
4XSP	coaxial spherics monitor		
CXPL	coaxial powerline monitor		CXPL
CPPL	coplanar powerline monitor		CPPL
1KPA	altimeter (barometric)	30 m	
2TDC	internal (console) temperature	1° C	
3TDC	external temperature	1° C	

The Ashtech GG24 is a line of sight, satellite navigation system which utilizes time-coded signals from at least four of forty-eight available satellites. Both Russian GLONASS and American NAVSTAR satellite constellations are used to calculate the position and to provide real time guidance to the helicopter. The Ashtech system can be combined with a RACAL or similar GPS receiver which further improves the accuracy of the flying and subsequent flight path recovery to better than 5 metres. The differential corrections, which are obtained from a network of virtual reference stations, are transmitted to the helicopter via a spot-beam satellite. This eliminates the need for a local GPS base station. However, the Marconi Allstar OEM (CMT-1200) was used as a backup to provide post-survey differential corrections.

The Marconi Allstar OEM (CMT-1200) is operated as a base station and utilizes time-coded signals from at least four of the twenty-four NAVSTAR satellites. The base station raw XYZ data are recorded, thereby permitting post-survey processing for theoretical accuracies of better than 5 metres.

The Ashtech receiver is coupled with a PNAV navigation system for real-time guidance.

Although the base station receiver is able to calculate its own latitude and longitude, a higher degree of accuracy can be obtained if the reference unit is established on a known benchmark or triangulation point. For this survey, the GPS station was located at latitude $64^{\circ}02.89220'N$ and longitude $145^{\circ}42.87364'W$ at an elevation of 364.8 m a.m.s.l. The GPS records data relative to the WGS84 ellipsoid, which is the basis of the revised North American Datum (NAD83). Conversion software is used to transform the WGS84 coordinates to the NAD27 system displayed on the base maps.

Field Workstation

A PC is used at the survey base to verify data quality and completeness. Flight data are transferred to the PC hard drive to permit the creation of a database using a proprietary software package (typhoon-version 17.01.04). This process allows the field operators to display both the positional (flight path) and geophysical data on a screen or printer.

3. PRODUCTS AND PROCESSING TECHNIQUES

This section describes the final delivered products and the techniques employed during the data processing, interpretation and presentation.

Table 3-1 lists the maps and products which have been provided under the terms of the survey agreement. Other products can be prepared from the existing dataset, if requested. These include magnetic enhancements or derivatives, percent magnetite, digital terrain or resistivity-depth sections. Most parameters can be displayed as contours, profiles, or in colour.

PRODUCTS

Maps

Maps depicting the survey results have been provided at scales of 1:63,360 and 1:31,680 as listed in Table 3-1. The data sets were processed and presented using the NAD27 datum. Details of this projection and the conversion from WGS84 are given below:

Projection Description:

Datum:	NAD27
Ellipsoid:	Clarke 1866
Projection:	UTM (Zone 6N)
Central Meridian:	-147
False Northing:	0
False Easting:	500000
Scale Factor:	0.9996
WGS to local conversion method:	Molodensky
Datum Shift (x,y,z):	+5, -135, -172

Table 3-1 Survey Products

Product Description	Product Number	Map Scale
Colour Total Magnetic Field with topography	2002_1_1a	1:63,360
Colour Total Magnetic Field with contours and sections lines	2002_1_1b	1:63,360
Colour Shadow Total Magnetic Field with section lines	2002_1_1c	1:63,360
Black & White Total Magnetic field Contours with section lines and simplified EM anomalies	2002_1_1d	1:63,360
Black & White Total Magnetic Field Contours with detailed EM anomalies and topography	2002_1_2a 2002_1_2b	1:31,680
Colour Resistivity (7200 Hz coplanar) with topography	2002_1_3a	1:63,360
Colour Resistivity (7200 Hz coplanar) with contours and section lines	2002_1_3b	1:63,360
Black & White Resistivity (7200 Hz coplanar) contours with section lines	2002_1_3c	1:63,360
Colour Resistivity (900 Hz coplanar) with topography	2002_1_4a	1:63,360
Colour Resistivity (900 Hz coplanar) with contours and section lines	2002_1_4b	1:63,360
Black & White Resistivity (900 Hz coplanar) contours with section lines	2002_1_4c	1:63,360
Flight lines with topography	2002_1_5a	1:63,360
CD-ROM containing profile and gridded data and DXF plot files	2002_2	-

Other Products

Multi-parameter stacked profiles are provided for all survey lines at a scale of 1:63,360. They are provided as plots on mylar, and digitally as HP2500 compatible plot files. A detailed description of the plotted parameters is given in Table 3-2.

The final digital archives are provided on CD-ROM. Both line data and grid archives are provided in Geosoft format. Appendix C gives a detailed description of the contents of the CD-ROMs and of the archive format.

All original materials, including flight path videos, flight analog records, and the calibration analogs are also provided.

PROCESSING TECHNIQUES

Figure 3-1 depicts the data processing flow for the electromagnetic and magnetic datasets.

Topographic Base Maps

Base maps of the survey area have been produced from published 1:63,360 scale topographic maps. The original topographic maps are scanned to a bitmap format and combined with the geophysical data for final map plotting.

Electromagnetic Anomalies

The EM data are processed at the recorded sample rate of 10 samples/second. The EM data are first filtered with a spike rejection filter. Appropriate median and/or Hanning filters are applied to reduce high frequency noise to acceptable levels. EM test profiles are then created to allow the interpreter to select the most appropriate EM anomaly picking controls for the given survey area. The EM picking parameters depend on several factors but are primarily based on the dynamic range of the resistivity within the survey area, and the types and expected geophysical responses of the geologic target models.

Anomalous electromagnetic responses are selected and analysed by computer to provide a preliminary set of electromagnetic anomalies. These preliminary anomalies are reviewed and interpreted by the geophysicist to produce the final interpreted EM anomaly maps. Excellent resolution and discrimination of conductors is accomplished by employing a common frequency on two orthogonal coil-pairs (coaxial and coplanar). The computed "difference channel" parameters often permit differentiation of bedrock and surficial conductors where the computed conductance alone can not.

The anomalies shown on the electromagnetic anomaly maps are based on a near-vertical, half-plane model. This model best reflects "discrete" bedrock conductors. Wide bedrock conductors or flat-lying conductive units, whether from surficial or bedrock sources, may give rise to very broad anomalous responses on the EM profiles. These may not appear on the electromagnetic anomaly map if they have a regional character rather than a locally anomalous character. These broad conductors, which more closely approximate a half space model, will be maximum coupled to the horizontal (coplanar) coil-pair and should be more evident on the resistivity parameter. Resistivity maps, therefore, may be more valuable than the electromagnetic anomaly maps in areas where broad or flat-lying conductors are considered to be of importance.

Anomalous EM responses have been interpreted from the electromagnetic data in the survey area. Table 4-1 summarizes these responses with respect to conductance grade and interpretation.

Figure 3-1a)
Processing Flow Chart - Electromagnetic Data

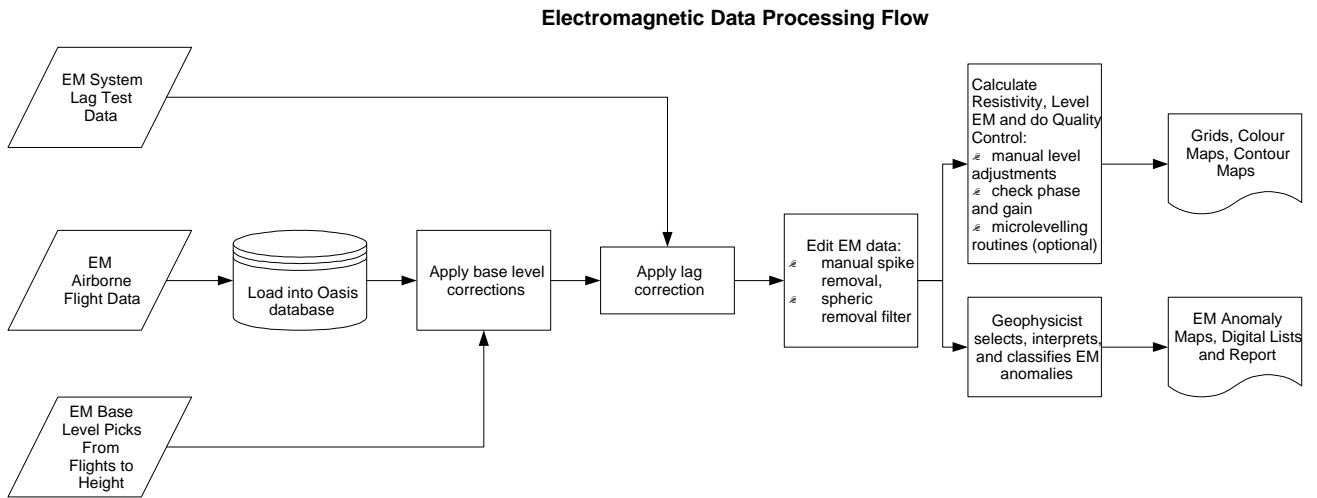
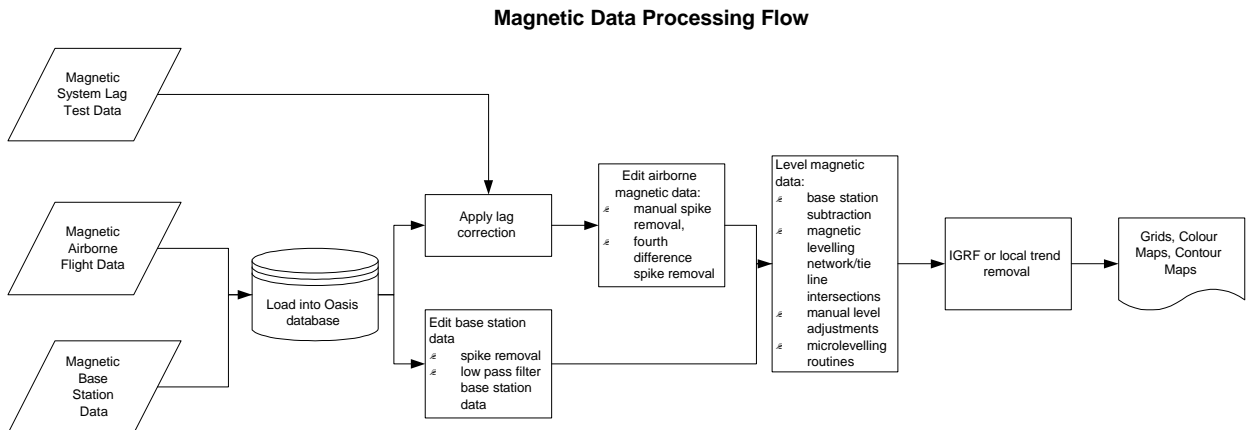


Figure 3-1b)
Processing Flow Chart – Magnetic Data



The EM anomalies resulting from this survey appear to fall within one of three general categories. The first type consists of discrete, well-defined anomalies which yield marked inflections on the difference channels. These anomalies are usually attributed to conductive sulphides or graphite and are generally given a "B", "T" or "D" interpretive symbol, denoting a bedrock source.

The second class of anomalies comprises moderately broad responses which exhibit the characteristics of a half space and do not yield well-defined inflections on the difference channels. Anomalies in this category are usually given an "S" or "H" interpretive symbol. The lack of a difference channel response usually implies a broad or flat-lying conductive source such as overburden. Some of these anomalies may reflect conductive rock units, zones of deep weathering, or the weathered tops of kimberlite pipe which can often yield "non-discrete" signatures.

The effects of conductive overburden are evident over portions of the survey area. Although the difference channels (DIFI and DIFQ) are extremely valuable in detecting bedrock conductors which are partially masked by conductive overburden, sharp undulations in the bedrock/overburden interface can yield anomalies in the difference channels which may be interpreted as possible bedrock conductors. Such anomalies usually fall into the "S?" or "B?" classification but may also be given an "E" interpretive symbol, denoting a resistivity contrast at the edge of a conductive unit.

The "?" symbol does not question the validity of an anomaly, but instead indicates some degree of uncertainty as to which is the most appropriate EM source model. This ambiguity results from the combination of effects from two or more conductive sources, such as overburden and bedrock, gradational changes, or moderately shallow dips. The presence of a conductive upper layer has a tendency to mask or alter the characteristics of bedrock conductors, making interpretation difficult. This problem is further exacerbated in the presence of magnetite.

In areas where EM responses are evident primarily on the quadrature components, zones of poor conductivity are indicated. Where these responses are coincident with magnetic anomalies, it is possible that the inphase component amplitudes have been suppressed by the effects of magnetite. Most of these poorly-conductive magnetic features give rise to resistivity anomalies which are only slightly below background. If it is expected that poorly-conductive economic mineralization may be associated with magnetite-rich units, most of these weakly anomalous features will be of interest. In areas where magnetite causes the inphase components to become negative, the apparent conductance and depth of EM anomalies may be unreliable. Magnetite effects usually give rise to overstated (higher) resistivities and understated (shallow) depth calculations. Direct magnetic correlation is shown where it exists.

The third class of anomalies consists of magnetite anomalies, which are given an "M" interpretive symbol. These anomalies denote zones of negative inphase due to magnetite, without the presence of an associated conductive source. Where a conductive anomaly is evident coincident with negative inphase, the conductive anomaly takes precedence.

It is difficult to assess the relative merits of EM anomalies on the basis of conductance. It is recommended that an attempt be made to compile a suite of geophysical "signatures" over areas of interest. Anomaly characteristics are clearly defined on the computer-processed geophysical data profiles which are supplied as one of the survey products.

In some portions of the survey area, the steep topography forced the pilot to exceed normal terrain clearance for reasons of safety. It is possible that some weak conductors may have escaped detection in areas where the bird height exceeded 120 m. In difficult areas where near-vertical climbs were necessary, the forward speed of the helicopter was reduced to a level which permitted excessive bird swinging. This problem, combined with the severe stresses to which the bird was subjected, gave rise to aerodynamic noise levels which are slightly higher than normal. Where warranted, reflights were carried out to minimize these adverse effects.

Anomalies which occur near the ends of the survey lines (i.e., outside the survey area), should be viewed with caution. Some of the weaker anomalies could be due to aerodynamic noise, i.e., bird bending, which is created by abnormal stresses to which the bird is subjected during the climb and turn of the aircraft between lines. Such aerodynamic noise is usually manifested by an anomaly on the coaxial inphase channel only, although severe stresses can affect the coplanar inphase channels as well.

Apparent Resistivity

Apparent resistivity is computed from the inphase and quadrature EM components for the 900, 7200 and 56000 Hz coplanar data sets using a pseudo-layer halfspace model. The inputs to this resistivity algorithm are the amplitude and phase of the EM response. The algorithm calculates the apparent resistivity in ohm-m and the apparent height of the EM bird above the half-space. Any differences between the apparent height and the radar altimeter are ascribed to a highly resistive upper layer, or pseudo-layer. Errors in the radar altimeter will not affect the resistivity calculation as altitude is not an input parameter for the pseudo-layer half-space model. Apparent resistivity calculated in this manner may behave quite differently from those calculated using other models. The resultant apparent resistivity maps portray the variation in apparent resistivity for the given frequency over the entire survey area. This full coverage contrasts with the electromagnetic anomaly map which provides information only over the interpreted discrete conductors. The large dynamic range afforded by the multiple frequencies in the DIGHEM^V system makes the apparent resistivity parameter an excellent mapping tool.

Preliminary apparent resistivity maps and images are carefully inspected to identify lines or line segments which may require base level adjustment. Subtle changes between in-flight calibrations of the system can result in line to line differences which are more readily recognizable in resistive (low signal amplitude) areas. If required, manual level adjustments are carried out to eliminate or minimize resistivity differences which can be attributed in part to changes in operating temperature. These leveling adjustments are usually subtle, and do not result in the degradation of discrete anomalies.

After the leveling process is complete, revised apparent resistivity grids are created. The resulting grid may be subjected to a microlevelling filter in order to smooth the data for

contouring. These grids can be filtered using a 3 cell by 3 cell smoothing filter prior to the preparation of the final maps. This final filter will not degrade the apparent resistivity given the broad 'footprint' of the parameter and the assumption of a homogeneous half space inherent in the apparent resistivity computation.

The calculated apparent resistivity values are clipped at a maximum value for each of the 900 and 7200 Hz data sets. These maxima eliminate the meaningless high apparent resistivity values which would result from very small EM amplitudes.

Contoured resistivity maps, based on the 900 Hz and 7200 Hz coplanar data are included with this report. Values are in ohm-metres on all final products.

EM Magnetite (optional)

The apparent percent magnetite by weight is computed wherever magnetite produces a negative in-phase EM response. This calculation is more meaningful in resistive areas.

Total Magnetic Field

A Picodas MEP-710 cesium vapour magnetometer was operated at the survey base 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 permit subsequent removal of diurnal drift.

Manual adjustments are applied to any lines that require levelling, as indicated by shadowed images of the gridded magnetic data or tie line/traverse line intercepts. The IGRF gradient has been removed from the data. The residual magnetic data have been presented on the base maps using a contour interval of 5 nT.

If a specific magnetic intensity can be assigned to the rock type which is believed to host the target mineralization, it may be possible to select areas of higher priority on the basis of the total field magnetic data. This is based on the assumption that the magnetite content of the host rocks will give rise to a limited range of contour values which will permit differentiation of various lithological units.

The magnetic results, in conjunction with the other geophysical parameters, have provided valuable information which can be used to effectively map the geology and structure in the survey areas.

Calculated Vertical Magnetic Gradient (optional)

The diurnally-corrected total magnetic field data can be subjected to a processing algorithm which enhances the response of magnetic bodies in the upper 500 m and attenuates the response of deeper bodies. The resulting vertical gradient map provides better definition and resolution of near-surface magnetic units. It also identifies weak magnetic features which may not be evident on the total field map. However, regional

magnetic variations and changes in lithology may be better defined on the total magnetic field map.

Magnetic Derivatives (optional)

The total magnetic field data can be subjected to a variety of filtering techniques to yield maps of the following:

- enhanced magnetics
- second vertical derivative
- reduction to the pole/equator
- magnetic susceptibility with reduction to the pole
- upward/downward continuations
- analytic signal

All of these filtering techniques improve the recognition of near-surface magnetic bodies, with the exception of upward continuation. Any of these parameters can be produced on request.

Multi-channel Stacked Profiles

Distance-based profiles of the digitally recorded geophysical data are generated and plotted by computer. These profiles also contain the calculated parameters which are used in the interpretation process. These are produced as worksheets prior to interpretation, and are also presented in the final corrected form after interpretation. The profiles display electromagnetic anomalies with their respective interpretive symbols. Table 3-2 shows the parameters and scales for the multi-channel stacked profiles.

Contour, Colour and Shadow Map Displays

The geophysical data are interpolated onto a regular grid using a modified Akima spline technique. The resulting grid is suitable for generating contour maps of excellent quality. The grid cell size is usually 25% of the line interval.

Colour maps are produced by interpolating the grid down to the pixel size. The parameter is then incremented with respect to specific amplitude ranges to provide colour "contour" maps. Colour maps of the total magnetic field are particularly useful in defining the lithology of the survey area.

Table 3-2 Multi-channel Stacked Profiles

Channel Name (Freq)	Observed Parameters	Scale Units/mm
MAG	total magnetic field (fine)	10 nT
MAG	total magnetic field (coarse)	100 nT
ALTBIRD	EM sensor height above ground	6 m
CXI1000	vertical coaxial coil-pair in-phase (1000 Hz)	2 ppm
CXQ1000	vertical coaxial coil-pair quadrature (1000 Hz)	2 ppm
CPI900	horizontal coplanar coil-pair in-phase (900 Hz)	4 ppm
CPQ900	horizontal coplanar coil-pair quadrature (900 Hz)	4 ppm
CXI5500	vertical coaxial coil-pair in-phase (5500 Hz)	4 ppm
CXQ5500	vertical coaxial coil-pair quadrature (5500 Hz)	4 ppm
CPI7200	horizontal coplanar coil-pair in-phase (7200 Hz)	8 ppm
CPQ7200	horizontal coplanar coil-pair quadrature (7200 Hz)	8 ppm
CPI56K	horizontal coplanar coil-pair in-phase (56,000 Hz)	20 ppm
CPQ56K	horizontal coplanar coil-pair quadrature (56,000 Hz)	20 ppm
CXSP	coaxial spherics monitor	
CXPL	coaxial powerline monitor	
CPPL	coplanar powerline monitor	
CPSP	coplanar spherics monitor	
	Computed Parameters	
DIFI (5500/7200 Hz)	difference function in-phase from CXI and CPI	4 ppm
DIFQ (5500/7200 Hz)	difference function quadrature from CXQ and CPQ	4 ppm
RES900	log resistivity	.06 decade
RES7200	log resistivity	.06 decade
RES56K	log resistivity	.06 decade
DP900	apparent depth	6 m
DP7200	apparent depth	6 m
DP56K	apparent depth	6 m
CDT	conductance	1 grade

Monochromatic shadow maps or images are generated by employing an artificial sun to cast shadows on a surface defined by the geophysical grid. There are many variations in the shadowing technique. These techniques can be applied to total field or enhanced magnetic data, magnetic derivatives, VLF, resistivity, etc. The shadow of the enhanced magnetic parameter is particularly suited for defining geological structures with crisper images and improved resolution.

Resistivity-depth Sections (optional)

The apparent resistivities for all frequencies can be displayed simultaneously as coloured resistivity-depth sections. Usually, only the coplanar data are displayed as the close frequency separation between the coplanar and adjacent coaxial data tends to distort the section. The sections can be plotted using the topographic elevation profile as the surface. The digital terrain values, in metres a.m.s.l., can be calculated from the GPS-Z value or barometric altimeter, minus the aircraft radar altimeter.

Resistivity-depth sections can be generated in three formats:

- (1) Sengpiel resistivity sections, where the apparent resistivity for each frequency is plotted at the depth of the centroid of the in-phase current flow¹; and,
- (2) Differential resistivity sections, where the differential resistivity is plotted at the differential depth².
- (3) Occam³ or Multi-layer⁴ inversion.

Both the Sengpiel and differential methods are derived from the pseudo-layer half-space model. Both yield a coloured resistivity-depth section which attempts to portray a smoothed approximation of the true resistivity distribution with depth. Resistivity-depth sections are most useful in conductive layered situations, but may be unreliable in areas of moderate to high resistivity where signal amplitudes are weak. In areas where in-phase responses have been suppressed by the effects of magnetite, the computed resistivities shown on the sections may be unreliable.

Both the Occam and Multi-layer Inversions compute the layered earth resistivity model which would best match the measured EM data. The Occam inversion uses a series of thin, fixed layers (usually 20 x 5m and 10 x 10m layers) and computes resistivities to fit the

¹ Sengpiel, K.P., 1988, Approximate Inversion of Airborne EM Data from Multilayered Ground: Geophysical Prospecting 36, 446-459.

² Huang, H. and Fraser, D.C., 1993, Differential Resistivity Method for Multi-frequency Airborne EM Sounding: presented at Intern. Airb. EM Workshop, Tucson, Ariz.

³ Constable et al, 1987, Occam's inversion: a practical algorithm for generating smooth models from electromagnetic sounding data: Geophysics, 52, 289-300.

⁴ Huang H., and Palacky, G.J., 1991, Damped least-squares inversion of time domain airborne EM data based on singular value decomposition: Geophysical Prospecting, 39, 827-844.

EM data. The multi-layer inversion computes the resistivity and thickness for each of a defined number of layers (typically 3-5 layers) to best fit the data.

Digital Terrain

The radar altimeter values (ALTR - aircraft to ground clearance) were subtracted from the differentially corrected GPS-Z values, which were transformed to the local datum, to produce profiles of the height above mean sea level along the survey lines. These values were gridded to produce contour maps showing approximate elevations within the survey blocks. The resulting digital terrain contours were compared against published topographic maps. The data were manually adjusted to remove differences between the two. The data were then subjected to a microlevelling algorithm to remove any remaining small line-to-line discrepancies.

The accuracy of the elevation calculation is directly dependent on the accuracy of the two input parameters, ALTR and GPS-Z. The ALTR value may be erroneous in areas of heavy tree cover, where the altimeter reflects the distance to the tree canopy rather than the ground. The GPS-Z value is primarily dependent on the number of available satellites. Although post-processing of GPS data will yield X and Y accuracies in the order of 5 metres, the accuracy of the Z value is usually much less, sometimes in the ± 20 metre range. Further inaccuracies may be introduced during the interpolation and gridding process.

Because of the inherent inaccuracies of this method, no guarantee is made or implied that the information displayed is a true representation of the height above sea level. Although this product may be of some use as a general reference, THIS PRODUCT MUST NOT BE USED FOR NAVIGATION PURPOSES.

4. SURVEY RESULTS AND DISCUSSION

Geology⁵

The Salcha River-Pogo mining area falls in the east-central geologic region of Alaska approximately sixty miles east of Fairbanks and about forty miles north of Delta Junction. East-central Alaska is composed of a number of accreted terranes (Jones and others, 1994) that have continental, oceanic, and possibly island-arc affinities. The largest terrane, the Yukon-Tanana terrane, has mostly continental affinities. The survey area falls within the Yukon-Tanana terrane, which consists largely of the area lying between the Yukon and Tanana Rivers.

The Yukon-Tanana terrane consists primarily of quartzitic, pelitic, calcic, and mafic metasedimentary rocks with some mafic and felsic metaigneous rocks that have been extensively intruded by Mesozoic and Cenozoic granite rocks and minor amounts of intermediate rocks. Metamorphic rocks within the Yukon-Tanana terrane vary in composition, origin of protoliths, present lithology, structure and metamorphic history. On this basis, Churkin and others (1982) divided the terrane into four sub-terranes (Y₁ to Y₄). The Salcha River-Pogo Mining area falls within three of these sub-terranes, Y₁ to Y₃.

Sub-terrane Y₁, which includes the southern Big Delta Quadrangle, is the largest and southernmost sub-terrane of the Yukon-Tanana terrane. The rocks are all metamorphosed to the amphibolite facies. Protoliths primarily are quartzitic and pelitic sedimentary rocks and felsic intrusive rocks with some intermediate and mafic intrusive and volcanic rocks. The dominant rock types include quartz-biotite gneiss and schist, sillimanite gneiss, quartzite, amphibolite, and orthogneiss.

Deformed and recrystallized ultramafic rocks occur in isolated outcrops and are infolded with gneisses and schists of sub-terrane Y₁; most are concentrated in the south-central and southeastern Big Delta Quadrangle. The ultramafic rocks probably composed a thrust sheet over part of sub-terrane Y₁ early in the development of the sub-terrane and were metamorphosed and deformed with the rocks of sub-terrane Y₁.

The units which generally underlie the southeast extension of the Salcha River-Pogo survey area are generally outlined on the compilation map, Geologic Map of Central (Interior) Alaska (open-file report 98-133-A), as units of early Paleozoic to Proterozoic gneiss and gneiss, schist and quartzite, zones of granitic rocks of both Tertiary and/or Cretaceous age, and a small unit of mafic and ultramafic rocks of Cretaceous age⁶.

⁵ Stevens, M., 2000, Project Report of the Airborne Geophysical Survey of the Salcha River-Pogo Mining Area, Central Alaska.

⁶ F. H. Wilson, J. H. Dover, D. C. Bradley, F. R. Weber, T. K. Bundtzen, and P. J. Haeussler, 1998, Geologic Map of Central (Interior) Alaska, Open File Report 98-133-A.

Survey Results

DISCRETE EM ANOMALY INTERPRETATION

A total of 933 discrete anomalous EM responses have been interpreted from the electromagnetic data set in the current survey area. Table 4-1 summarizes these responses with respect to conductance grade and interpretation for the survey area.

An interpretation sketch for the survey area is shown in Figure 4-1. Conductive zones have been identified with an "R", whereas zones which are highly resistive, but appear to reflect a distinct unit, are given an "RH" label. Magnetic zones are designated with an "M", whereas magnetic lows are shown as "ML". Linear features that have been interpreted from the magnetic data and may reflect possible structural breaks within the survey area are shown with a dashed line. Conductor trends defined by line to line correlation of the EM anomalies are shown as thick solid lines. Possible magnetic contacts within the area have been designated with the letter "C".

SALCHA RIVER-POGO MINING AREA, SOUTHEASTERN EXTENSION

The following discussion describes zones and structural features, which have been inferred from the resistivity and magnetic data.

General geological units underlying this survey area are described on the Geologic Map of Central (Interior) Alaska⁷, which is the result of a compilation and reinterpretation of published and unpublished 1:250,000 and limited 1:125,000 and 1:63,360-scale mapping. Due to the scale of this compilation, these units and their boundaries are taken as a guideline. More detailed work on an area to the northwest of the southeastern extension of the Salcha River – Pogo survey area can be seen on the Preliminary interpretive Report 2001-5⁸. These units may be extended after further investigation in the current survey area.

From the compilation map it can be seen than the survey is underlain by: 1) Units of early Paleozoic to Proterozoic gneiss and gneiss, schist, and quartzite which are part of the complex Yukon-Tanana metamorphic sequence. 2) Cretaceous aged granitic rocks which are largely granitic, but range from Tourmaline-bearing granite to diorite, and 3) Tertiary and/or Cretaceous aged granitic rocks which are chiefly biotite and biotite-hornblende graniodiorite, quartz monzonite, and alkali granite. A small rock unit mapped as Mesozoic, Paleozoic, or Late Proterozoic undivided ultramafic and mafic rocks is evident corresponding to the complex magnetic features, M1 through M3.

⁷ F. H. Wilson, J. H. Dover, D. C. Bradley, F. R. Weber, T. K. Bundtzen, and P. J. Haeussler, 1998, Geologic Map of Central (Interior) Alaska, Open File Report 98-133-A.

⁸ M. B. Werdon, R. J. Newberry, D. J. Szumigala, and L.E. Burns, 2001, Reconnaissance Bedrock Geology of the Pogo Area, Big Delta B-2 and B-3 Quadrangles, Alaska, Preliminary Interpretive Report 2001-5.

**TABLE 4-1 EM ANOMALY STATISTICS
SOUTHEASTERN EXTENSION
SALCHA RIVER - POGO**

CONDUCTOR GRADE	CONDUCTANCE RANGE SIEMENS (MHOS)	NUMBER OF RESPONSES
7	>100	0
6	50 - 100	0
5	20 - 50	0
4	10 - 20	1
3	5 - 10	2
2	1 - 5	20
1	<1	44
*	INDETERMINATE	866
TOTAL		933

CONDUCTOR MODEL	MOST LIKELY SOURCE	NUMBER OF RESPONSES
D	DISCRETE BEDROCK CONDUCTOR	162
B	DISCRETE BEDROCK CONDUCTOR	355
S	CONDUCTIVE COVER	386
E	EDGE OF WIDE CONDUCTOR	1
M	MAGNETITE	29
TOTAL		933

(SEE EM MAP LEGEND FOR EXPLANATIONS)

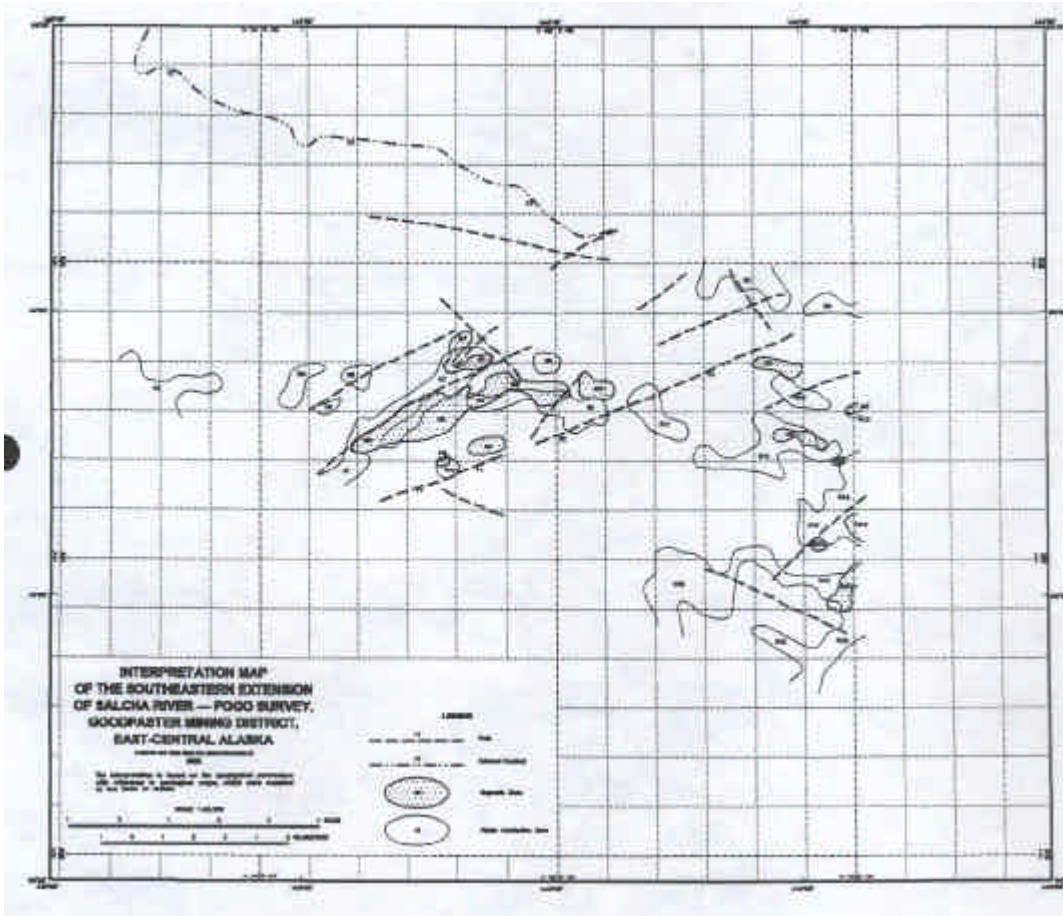


Figure 4-1 Interpretation Sketch Map

The magnetic data within the survey block can be divided into several moderately distinct zones. To the north of C1, the area is generally more magnetic, and C1 may reflect a contact between magnetically different rock units. The central region of the block is much less magnetic, but also appears to be more structurally complex, as many possible structural features have been inferred from the magnetic data within this portion of the area. Magnetic features within this zone are much less broad than those in the northern portion of the block, suggesting more discreet, closer to surface sources. The southeastern portion of the block, generally to the southeast of zones M1 through M9, is weakly magnetic but displays a noticeable difference in magnetic character to the central, non-magnetic zone.

The highest magnetic values are evident within magnetic zones M1 through M3, which appear to correspond to a mapped zone of mafic and ultramafic rocks which consist of gabbro, diorite, serpentinite, and mafic volcanoclastic rocks. These magnetic features, M1 through M3 appear to reflect similar sources which have been truncated and offset from each other by several prominent structural trends. These magnetic features are generally situated in the vicinity of the change in magnetic characteristics between the non-magnetic, moderately complex central region, and the weakly magnetic southeastern region. Conductive zones R7 and R9 display some correlation with these magnetic trends. R7 reflects multiple bedrock sources which reflect thin dyke-like sources. The two southern limbs of zone R7 flank the peak of the magnetic zone, M2. A high concentration of magnetite is evident in this zone from the strongly negative inphase response associated with it. The strength of the magnetic anomaly lessens over lines 10220 through 10250, as do the corresponding EM anomaly strengths. EM anomalies start to strengthen again at the northeastern limit of R7, where this zone displays some correlation with magnetic zone M1. This part of the conductive zone reflects multiple well-defined EM anomalies indicative of thin dyke-like bedrock sources.

Magnetic intensities increase again near the eastern limit of M2, and this part of the zone again displays high magnetite content. Conductive zone R9 displays good correlation with this portion of zone M2. R9 contains well-defined anomalies which are indicative of thin, dyke-like sources. There is some evidence of a north dip within this zone. The western end of zone R9 is located on the southern flank of magnetic zone M2, whereas the eastern portion is situated within a non-magnetic zone to the south of M3. A prominent structural break, seen on the map as F1 and F2, extends approximately east-northeast immediately south of magnetic zones M2 and M3.

Several other less extensive conductive zones are evident in the vicinity of R7 and R9. Zone R8 is situated to the north of R9. It contains several well-defined anomalies which are indicative of dyke-like bedrock sources. It is associated with a weakly magnetic zone.

Conductive zones R4, R5 and R6 are situated to the northwest of R7. They all reflect bedrock sources, although anomaly shapes are generally not as well-defined as those in R7 and R9. These zones show some association with a moderately magnetic zone, but don't display direct magnetic correlation. A possible structural feature trends northeast/southwest through R5 and R6.

Conductive zone R3 is situated at the southwestern edge of the survey block, within a broad, moderately magnetic zone. Although the profiles data suggests that this zone reflects a bedrock source, anomaly shapes are generally broad, and not well-defined. This zone is situated in a topographic low, a swamp covered area to the east of the Goodpaster River. Some of the conductivity within R3 may be due to surficial conductance, which may mask the bedrock sources.

The eastern portion of the survey contains several moderately extensive conductive zones which may reflect bedrock sources. The most extensive of these is R16. Anomaly shapes are poorly defined within this zone, and the EM traces seem to suggest broad conductors at depth rather than discrete sources for most of the zone. Magnetic correlation varies throughout the zone and few anomalies display direct correlation with the magnetics. Zone R15 is situated immediately to the north of R16. It displays similar conductance, but anomaly shapes are more discrete, suggesting thin bedrock sources. Several anomalies display direct correlation with small magnetic features M10 and M11. Zones R1, R2, R12, R13 and R14 are situated in the easternmost portion of the block, within an area of moderately complex magnetic features. All appear to reflect bedrock sources. R12 is interesting, as it is situated on the southern flank of a thin, moderately magnetic trend. Several structural breaks have been inferred in the vicinity of this magnetic feature. R13 is situated immediately east of R12, and shows direct correlation with a thin magnetic trend. The eastern extension of this trend is undefined by the survey. R14, although it appears to have similar conductance throughout the zone, displays a distinct difference in anomaly shape and magnetic correlation between the northern and southern limbs. The northern limb of the zone consists of multiple, closely spaced, sources, and is associated with a thin magnetic trend. The southern limb reflects a broader bedrock source within a much less magnetically active area.

5. CONCLUSIONS AND RECOMMENDATIONS

This report provides a very brief description of the survey results and describes the equipment, procedures and logistics of the survey.

The survey has been successful in mapping the magnetic and conductive properties of the survey area. The survey was also successful in locating several conductors which may warrant additional work. The various maps included with this report display the magnetic and conductive properties of the survey area. It is recommended that the survey results be reviewed in detail, in conjunction with all available geophysical, geological and geochemical information. Particular reference should be made to the computer generated data profiles which clearly define the characteristics of the individual anomalies.

The interpreted bedrock conductors defined by the survey should be subjected to further investigation, using appropriate surface exploration techniques. Anomalies which are currently considered to be of moderately low priority may require upgrading if follow-up results are favourable.

It is also recommended that image processing of existing geophysical data be considered, in order to extract the maximum amount of information from the survey results. Current software and imaging techniques often provide valuable information on structure and lithology, which may not be clearly evident on the contour and colour maps. These techniques can yield images which define subtle, but significant, structural details.

Respectfully submitted,

FUGRO AIRBORNE SURVEYS CORP.

Ruth A. Pritchard
Geophysicist

RAP/sdp

R6023FEB.02R

APPENDIX A

BACKGROUND INFORMATION

Electromagnetics

DIGHEM electromagnetic responses fall into two general classes, discrete and broad. The discrete class consists of sharp, well-defined anomalies from discrete conductors such as sulphide lenses and steeply dipping sheets of graphite and sulphides. The broad class consists of wide anomalies from conductors having a large horizontal surface such as flatly dipping graphite or sulphide sheets, saline water-saturated sedimentary formations, conductive overburden and rock, and geothermal zones. A vertical conductive slab with a width of 200 m would straddle these two classes.

The vertical sheet (half plane) is the most common model used for the analysis of discrete conductors. All anomalies plotted on the geophysical maps are analyzed according to this model. The following section entitled **Discrete Conductor Analysis** describes this model in detail, including the effect of using it on anomalies caused by broad conductors such as conductive overburden.

The conductive earth (half-space) model is suitable for broad conductors. Resistivity contour maps result from the use of this model. A later section entitled **Resistivity Mapping** describes the method further, including the effect of using it on anomalies caused by discrete conductors such as sulphide bodies.

Geometric Interpretation

The geophysical interpreter attempts to determine the geometric shape and dip of the conductor. Figure C-1 shows typical DIGHEM anomaly shapes which are used to guide the geometric interpretation.

Discrete Conductor Analysis

The EM anomalies appearing on the electromagnetic map are analyzed by computer to give the conductance (i.e., conductivity-thickness product) in siemens (mhos) of a vertical sheet model. This is done regardless of the interpreted geometric shape of the conductor.

This is not an unreasonable procedure, because the computed conductance increases as the electrical quality of the conductor increases, regardless of its true shape. DIGHEM anomalies are divided into seven grades of conductance, as shown in Table C-1. The conductance in siemens (mhos) is the reciprocal of resistance in ohms.

The conductance value is a geological parameter because it is a characteristic of the conductor alone. It generally is independent of frequency, flying height or depth of burial, apart from the averaging over a greater portion of the conductor as height increases. Small anomalies from deeply buried strong conductors are not confused with small

- Appendix A.2 -

anomalies from shallow weak conductors because the former will have larger conductance values.

Table A-1. EM Anomaly Grades

Anomaly Grade	Siemens
7	> 100
6	50 - 100
5	20 - 50
4	10 - 20
3	5 - 10
2	1 - 5
1	< 1

Conductive overburden generally produces broad EM responses which may not be shown as anomalies on the geophysical maps. However, patchy conductive overburden in otherwise resistive areas can yield discrete anomalies with a conductance grade (cf. Table A-1) of 1, 2 or even 3 for conducting clays which have resistivities as low as 50 ohm-m. In areas where ground resistivities are below 10 ohm-m, anomalies caused by weathering variations and similar causes can have any conductance grade. The anomaly shapes from the multiple coils often allow such conductors to be recognized, and these are indicated by the letters S, H, and sometimes E on the geophysical maps (see EM legend on maps).

For bedrock conductors, the higher anomaly grades indicate increasingly higher conductances. Examples: DIGHEM's New InscO copper discovery (Noranda, Canada) yielded a grade 5 anomaly, as did the neighbouring copper-zinc Magusi River ore body; Mattabi (copper-zinc, Sturgeon Lake, Canada) and Whistle (nickel, Sudbury, Canada) gave grade 6; and DIGHEM's Montcalm nickel-copper discovery (Timmins, Canada) yielded a grade 7 anomaly. Graphite and sulphides can span all grades but, in any particular survey area, field work may show that the different grades indicate different types of conductors.

Strong conductors (i.e., grades 6 and 7) are characteristic of massive sulphides or graphite. Moderate conductors (grades 4 and 5) typically reflect graphite or sulphides of a less massive character, while weak bedrock conductors (grades 1 to 3) can signify poorly connected graphite or heavily disseminated sulphides. Grades 1 and 2 conductors may not respond to ground EM equipment using frequencies less than 2000 Hz.

The presence of sphalerite or gangue can result in ore deposits having weak to moderate conductances. As an example, the three million ton lead-zinc deposit of Restigouche Mining Corporation near Bathurst, Canada, yielded a well-defined grade 2 conductor. The 10 percent by volume of sphalerite occurs as a coating around the fine grained massive pyrite, thereby inhibiting electrical conduction. Faults, fractures and shear zones may produce anomalies which typically have low conductances (e.g., grades 1 to 3). Conductive rock formations can yield anomalies of any conductance grade. The

- Appendix A.3 -

conductive materials in such rock formations can be salt water, weathered products such as clays, original depositional clays, and carbonaceous material.

For each interpreted electromagnetic anomaly on the geophysical maps, a letter identifier and an interpretive symbol are plotted beside the EM grade symbol. The horizontal rows of dots, under the interpretive symbol, indicate the anomaly amplitude on the flight record. The vertical column of dots, under the anomaly letter, gives the estimated depth. In areas where anomalies are crowded, the letter identifiers, interpretive symbols and dots may be obliterated. The EM grade symbols, however, will always be discernible, and the obliterated information can be obtained from the anomaly listing appended to this report.

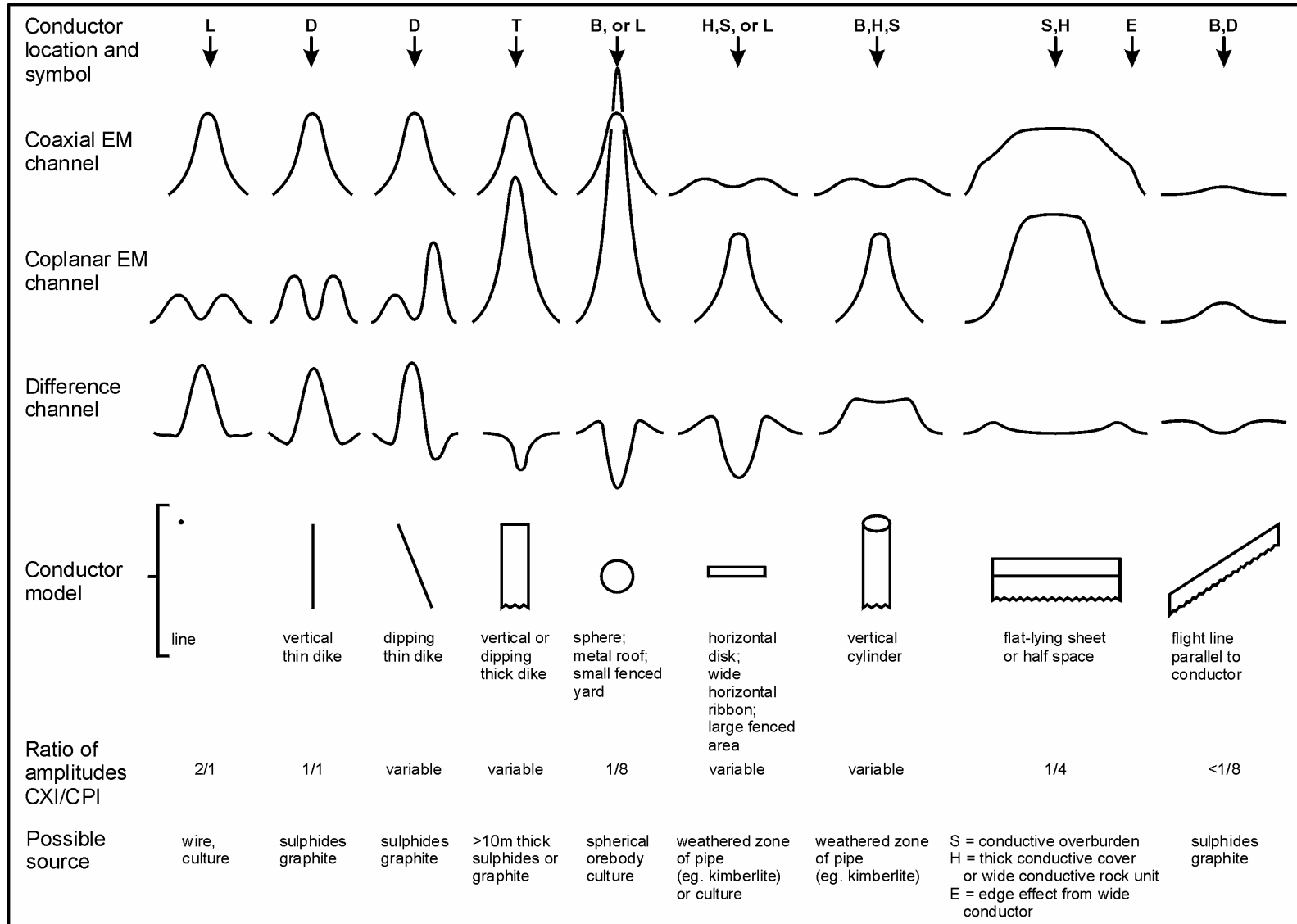
The purpose of indicating the anomaly amplitude by dots is to provide an estimate of the reliability of the conductance calculation. Thus, a conductance value obtained from a large ppm anomaly (3 or 4 dots) will tend to be accurate whereas one obtained from a small ppm anomaly (no dots) could be quite inaccurate. The absence of amplitude dots indicates that the anomaly from the coaxial coil-pair is 5 ppm or less on both the in-phase and quadrature channels. Such small anomalies could reflect a weak conductor at the surface or a stronger conductor at depth. The conductance grade and depth estimate illustrates which of these possibilities fits the recorded data best.

The conductance measurement is considered more reliable than the depth estimate. There are a number of factors which can produce an error in the depth estimate, including the averaging of topographic variations by the altimeter, overlying conductive overburden, and the location and attitude of the conductor relative to the flight line. Conductor location and attitude can provide an erroneous depth estimate because the stronger part of the conductor may be deeper or to one side of the flight line, or because it has a shallow dip. A heavy tree cover can also produce errors in depth estimates. This is because the depth estimate is computed as the distance of bird from conductor, minus the altimeter reading. The altimeter can lock onto the top of a dense forest canopy. This situation yields an erroneously large depth estimate but does not affect the conductance estimate.

Dip symbols are used to indicate the direction of dip of conductors. These symbols are used only when the anomaly shapes are unambiguous, which usually requires a fairly resistive environment.

A further interpretation is presented on the EM map by means of the line-to-line correlation of bedrock anomalies, which is based on a comparison of anomaly shapes on adjacent lines. This provides conductor axes which may define the geological structure over portions of the survey area. The absence of conductor axes in an area implies that anomalies could not be correlated from line to line with reasonable confidence.

- Appendix A.4 -



Typical DIGHEM anomaly shapes
Figure A-1

- Appendix A.5 -

DIGHEM electromagnetic anomalies are designed to provide a correct impression of conductor quality by means of the conductance grade symbols. The symbols can stand alone with geology when planning a follow-up program. The actual conductance values are printed in the attached anomaly list for those who wish quantitative data. The anomaly ppm and depth are indicated by inconspicuous dots which should not distract from the conductor patterns, while being helpful to those who wish this information. The map provides an interpretation of conductors in terms of length, strike and dip, geometric shape, conductance, depth, and thickness. The accuracy is comparable to an interpretation from a high quality ground EM survey having the same line spacing.

The attached EM anomaly list provides a tabulation of anomalies in ppm, conductance, and depth for the vertical sheet model. The EM anomaly list also shows the conductance and depth for a thin horizontal sheet (whole plane) model, but only the vertical sheet parameters appear on the EM map. The horizontal sheet model is suitable for a flatly dipping thin bedrock conductor such as a sulphide sheet having a thickness less than 10 m. The list also shows the resistivity and depth for a conductive earth (half-space) model, which is suitable for thicker slabs such as thick conductive overburden. In the EM anomaly list, a depth value of zero for the conductive earth model, in an area of thick cover, warns that the anomaly may be caused by conductive overburden.

Since discrete bodies normally are the targets of EM surveys, local base (or zero) levels are used to compute local anomaly amplitudes. This contrasts with the use of true zero levels which are used to compute true EM amplitudes. Local anomaly amplitudes are shown in the EM anomaly list and these are used to compute the vertical sheet parameters of conductance and depth. Not shown in the EM anomaly list are the true amplitudes which are used to compute the horizontal sheet and conductive earth parameters.

Questionable Anomalies

DIGHEM maps may contain EM responses which are displayed as asterisks (*). These responses denote weak anomalies of indeterminate conductance, which may reflect one of the following: a weak conductor near the surface, a strong conductor at depth (e.g., 100 to 120 m below surface) or to one side of the flight line, or aerodynamic noise. Those responses which have the appearance of valid bedrock anomalies on the flight profiles are indicated by appropriate interpretive symbols (see EM legend on maps). The others probably do not warrant further investigation unless their locations are of considerable geological interest.

The Thickness Parameter

DIGHEM can provide an indication of the thickness of a steeply dipping conductor. The amplitude of the coplanar anomaly (e.g., CPI channel on the digital profile) increases relative to the coaxial anomaly (e.g., CXI) as the apparent thickness increases, i.e., the thickness in the horizontal plane. (The thickness is equal to the conductor width if the conductor dips at 90 degrees and strikes at right angles to the flight line.) This report

refers to a conductor as thin when the thickness is likely to be less than 3 m, and thick when in excess of 10 m. Thick conductors are indicated on the EM map by parentheses "()". For base metal exploration in steeply dipping geology, thick conductors can be high priority targets because many massive sulphide ore bodies are thick, whereas non-economic bedrock conductors are often thin. The system cannot sense the thickness when the strike of the conductor is subparallel to the flight line, when the conductor has a shallow dip, when the anomaly amplitudes are small, or when the resistivity of the environment is below 100 ohm-m.

Resistivity Mapping

Resistivity mapping is useful in areas where broad or flat lying conductive units are of interest. One example of this is the clay alteration which is associated with Carlin-type deposits in the south west United States. The Dighem system was able to identify the clay alteration zone over the Cove deposit. The alteration zone appeared as a strong resistivity low on the 900 Hz resistivity parameter. The 7,200 Hz and 56,000 Hz resistivities show more of the detail in the covering sediments, and delineate a range front fault. This is typical in many areas of the south west United States, where conductive near surface sediments, which may sometimes be alkaline, attenuate the higher frequencies.

Resistivity mapping has proven successful for locating diatremes in diamond exploration. Weathering products from relatively soft kimberlite pipes produce a resistivity contrast with the unaltered host rock. In many cases weathered kimberlite pipes were associated with thick conductive layers which contrasted with overlying or adjacent relatively thin layers of lake bottom sediments or overburden.

Areas of widespread conductivity are commonly encountered during surveys. These conductive zones may reflect alteration zones, shallow-dipping sulphide or graphite-rich units or conductive overburden. In such areas, anomalies can be generated by decreases of only 5 m in survey altitude as well as by increases in conductivity. The typical flight record in conductive areas is characterized by in-phase and quadrature channels which are continuously active. Local EM peaks reflect either increases in conductivity of the earth or decreases in survey altitude. For such conductive areas, apparent resistivity profiles and contour maps are necessary for the correct interpretation of the airborne data. The advantage of the resistivity parameter is that anomalies caused by altitude changes are virtually eliminated, so the resistivity data reflect only those anomalies caused by conductivity changes. The resistivity analysis also helps the interpreter to differentiate between conductive bedrock and conductive overburden. For example, discrete conductors will generally appear as narrow lows on the contour map and broad conductors (e.g., overburden) will appear as wide lows.

The apparent resistivity is calculated using the pseudo-layer (or buried) half-space model defined by Fraser (1978)⁹. This model consists of a resistive layer overlying a conductive

⁹ Resistivity mapping with an airborne multicoil electromagnetic system: Geophysics, v. 43, p.144-172

- Appendix A.7 -

half-space. The depth channels give the apparent depth below surface of the conductive material. The apparent depth is simply the apparent thickness of the overlying resistive layer. The apparent depth (or thickness) parameter will be positive when the upper layer is more resistive than the underlying material, in which case the apparent depth may be quite close to the true depth.

The apparent depth will be negative when the upper layer is more conductive than the underlying material, and will be zero when a homogeneous half-space exists. The apparent depth parameter must be interpreted cautiously because it will contain any errors which may exist in the measured altitude of the EM bird (e.g., as caused by a dense tree cover). The inputs to the resistivity algorithm are the in-phase and quadrature components of the coplanar coil-pair. The outputs are the apparent resistivity of the conductive half-space (the source) and the sensor-source distance. The flying height is not an input variable, and the output resistivity and sensor-source distance are independent of the flying height when the conductivity of the measured material is sufficient to yield significant in-phase as well as quadrature responses. The apparent depth, discussed above, is simply the sensor-source distance minus the measured altitude or flying height. Consequently, errors in the measured altitude will affect the apparent depth parameter but not the apparent resistivity parameter.

The apparent depth parameter is a useful indicator of simple layering in areas lacking a heavy tree cover. The DIGHEM system has been flown for purposes of permafrost mapping, where positive apparent depths were used as a measure of permafrost thickness. However, little quantitative use has been made of negative apparent depths because the absolute value of the negative depth is not a measure of the thickness of the conductive upper layer and, therefore, is not meaningful physically. Qualitatively, a negative apparent depth estimate usually shows that the EM anomaly is caused by conductive overburden. Consequently, the apparent depth channel can be of significant help in distinguishing between overburden and bedrock conductors.

Interpretation in Conductive Environments

Environments having low background resistivities (e.g., below 30 ohm-m for a 900 Hz system) yield very large responses from the conductive ground. This usually prohibits the recognition of discrete bedrock conductors. However, DIGHEM data processing techniques produce three parameters which contribute significantly to the recognition of bedrock conductors in conductive environments. These are the in-phase and quadrature difference channels (DIFI and DIFQ, which are available only on systems with common frequencies on orthogonal coil pairs), and the resistivity and depth channels (RES and DP) for each coplanar frequency.

The EM difference channels (DIFI and DIFQ) eliminate most of the responses from conductive ground, leaving responses from bedrock conductors, cultural features (e.g.,

telephone lines, fences, etc.) and edge effects. Edge effects often occur near the perimeter of broad conductive zones. This can be a source of geologic noise. While edge effects yield anomalies on the EM difference channels, they do not produce resistivity anomalies. Consequently, the resistivity channel aids in eliminating anomalies due to edge effects. On the other hand, resistivity anomalies will coincide with the most highly conductive sections of conductive ground, and this is another source of geologic noise. The recognition of a bedrock conductor in a conductive environment therefore is based on the anomalous responses of the two difference channels (DIFI and DIFQ) and the resistivity channels (RES). The most favourable situation is where anomalies coincide on all channels.

The DP channels, which give the apparent depth to the conductive material, also help to determine whether a conductive response arises from surficial material or from a conductive zone in the bedrock. When these channels ride above the zero level on the digital profiles (i.e., depth is negative), it implies that the EM and resistivity profiles are responding primarily to a conductive upper layer, i.e., conductive overburden. If the DP channels are below the zero level, it indicates that a resistive upper layer exists, and this usually implies the existence of a bedrock conductor. If the low frequency DP channel is below the zero level and the high frequency DP is above, this suggests that a bedrock conductor occurs beneath conductive cover.

Reduction of Geologic Noise

Geologic noise refers to unwanted geophysical responses. For purposes of airborne EM surveying, geologic noise refers to EM responses caused by conductive overburden and magnetic permeability. It was mentioned previously that the EM difference channels (i.e., channel DIFI for in-phase and DIFQ for quadrature) tend to eliminate the response of conductive overburden.

Magnetite produces a form of geological noise on the in-phase channels of all EM systems. Rocks containing less than 1% magnetite can yield negative in-phase anomalies caused by magnetic permeability. When magnetite is widely distributed throughout a survey area, the in-phase EM channels may continuously rise and fall, reflecting variations in the magnetite percentage, flying height, and overburden thickness. This can lead to difficulties in recognizing deeply buried bedrock conductors, particularly if conductive overburden also exists. However, the response of broadly distributed magnetite generally vanishes on the in-phase difference channel DIFI. This feature can be a significant aid in the recognition of conductors which occur in rocks containing accessory magnetite.

EM Magnetite Mapping

The information content of DIGHEM data consists of a combination of conductive eddy current responses and magnetic permeability responses. The secondary field resulting from conductive eddy current flow is frequency-dependent and consists of both in-phase and quadrature components, which are positive in sign. On the other hand, the secondary field resulting from magnetic permeability is independent of frequency and consists of only an in-phase component which is negative in sign. When magnetic permeability manifests

- Appendix A.9 -

itself by decreasing the measured amount of positive in-phase, its presence may be difficult to recognize. However, when it manifests itself by yielding a negative in-phase anomaly (e.g., in the absence of eddy current flow), its presence is assured. In this latter case, the negative component can be used to estimate the percent magnetite content.

A magnetite mapping technique was developed for the coplanar coil-pair of DIGHEM. The method can be complementary to magnetometer mapping in certain cases. Compared to magnetometry, it is far less sensitive but is more able to resolve closely spaced magnetite zones, as well as providing an estimate of the amount of magnetite in the rock. The method is sensitive to 1/4% magnetite by weight when the EM sensor is at a height of 30 m above a magnetitic half-space. It can individually resolve steep dipping narrow magnetite-rich bands which are separated by 60 m. Unlike magnetometry, the EM magnetite method is unaffected by remanent magnetism or magnetic latitude.

The EM magnetite mapping technique provides estimates of magnetite content which are usually correct within a factor of 2 when the magnetite is fairly uniformly distributed. EM magnetite maps can be generated when magnetic permeability is evident as negative in-phase responses on the data profiles.

Like magnetometry, the EM magnetite method maps only bedrock features, provided that the overburden is characterized by a general lack of magnetite. This contrasts with resistivity mapping which portrays the combined effect of bedrock and overburden.

Recognition of Culture

Cultural responses include all EM anomalies caused by man-made metallic objects. Such anomalies may be caused by inductive coupling or current gathering. The concern of the interpreter is to recognize when an EM response is due to culture. Points of consideration used by the interpreter, when coaxial and coplanar coil-pairs are operated at a common frequency, are as follows:

1. Channels CXP and CPP monitor 60 Hz radiation. An anomaly on these channels shows that the conductor is radiating power. Such an indication is normally a guarantee that the conductor is cultural. However, care must be taken to ensure that the conductor is not a geologic body which strikes across a power line, carrying leakage currents.
2. A flight which crosses a "line" (e.g., fence, telephone line, etc.) yields a centre-peaked coaxial anomaly and an m-shaped coplanar anomaly.¹⁰ When the flight crosses the cultural line at a high angle of intersection, the amplitude ratio of coaxial/coplanar response is 8. Such an EM anomaly can only be caused by a line. The geologic body which yields anomalies most closely resembling a line is the vertically dipping thin dike. Such a body, however, yields an amplitude ratio of 4 rather than 8. Consequently, an m-shaped coplanar anomaly with a CXI/CPI amplitude ratio of 8 is virtually a guarantee that the source is a cultural line.

¹⁰ See Figure A-1 presented earlier.

- Appendix A.10 -

3. A flight which crosses a sphere or horizontal disk yields centre-peaked coaxial and coplanar anomalies with a CXI/CPI amplitude ratio (i.e., coaxial/coplanar) of 1/8. In the absence of geologic bodies of this geometry, the most likely conductor is a metal roof or small fenced yard.¹¹ Anomalies of this type are virtually certain to be cultural if they occur in an area of culture.
4. A flight which crosses a horizontal rectangular body or wide ribbon yields an m-shaped coaxial anomaly and a centre-peaked coplanar anomaly. In the absence of geologic bodies of this geometry, the most likely conductor is a large fenced area.⁵ Anomalies of this type are virtually certain to be cultural if they occur in an area of culture.
5. EM anomalies which coincide with culture, as seen on the camera film or video display, are usually caused by culture. However, care is taken with such coincidences because a geologic conductor could occur beneath a fence, for example. In this example, the fence would be expected to yield an m-shaped coplanar anomaly as in case #2 above. If, instead, a centre-peaked coplanar anomaly occurred, there would be concern that a thick geologic conductor coincided with the cultural line.
5. The above description of anomaly shapes is valid when the culture is not conductively coupled to the environment. In this case, the anomalies arise from inductive coupling to the EM transmitter. However, when the environment is quite conductive (e.g., less than 100 ohm-m at 900 Hz), the cultural conductor may be conductively coupled to the environment. In this latter case, the anomaly shapes tend to be governed by current gathering. Current gathering can completely distort the anomaly shapes, thereby complicating the identification of cultural anomalies. In such circumstances, the interpreter can only rely on the radiation channels and on the camera film or video records.

¹¹ It is a characteristic of EM that geometrically similar anomalies are obtained from: (1) a planar conductor, and (2) a wire which forms a loop having dimensions identical to the perimeter of the equivalent planar conductor.

Magnetics

Total field magnetics provides information on the magnetic properties of the earth materials in the survey area. The information can be used to locate magnetic bodies of direct interest for exploration, and for structural and lithological mapping.

The total field magnetic response reflects the abundance of magnetic material, in the source. Magnetite is the most common magnetic mineral. Other minerals such as ilmenite, pyrrhotite, franklinite, chromite, hematite, arsenopyrite, limonite and pyrite are also magnetic, but to a lesser extent than magnetite on average.

In some geological environments, an EM anomaly with magnetic correlation has a greater likelihood of being produced by sulphides than one which is non-magnetic. However, sulphide ore bodies may be non-magnetic (e.g., the Kidd Creek deposit near Timmins, Canada) as well as magnetic (e.g., the Mattabi deposit near Sturgeon Lake, Canada).

Iron ore deposits will be anomalously magnetic in comparison to surrounding rock due to the concentration of iron minerals such as magnetite, ilmenite and hematite.

Changes in magnetic susceptibility often allow rock units to be differentiated based on the total field magnetic response. Geophysical classifications may differ from geological classifications if various magnetite levels exist within one general geological classification. Geometric considerations of the source such as shape, dip and depth, inclination of the earth's field and remanent magnetization will complicate such an analysis.

In general, mafic lithologies contain more magnetite and are therefore more magnetic than many sediments which tend to be weakly magnetic. Metamorphism and alteration can also increase or decrease the magnetization of a rock unit.

Textural differences on a total field magnetic contour, colour or shadow map due to the frequency of activity of the magnetic parameter resulting from inhomogeneities in the distribution of magnetite within the rock, may define certain lithologies. For example, near surface volcanics may display highly complex contour patterns with little line-to-line correlation.

Rock units may be differentiated based on the plan shapes of their total field magnetic responses. Mafic intrusive plugs can appear as isolated "bulls-eye" anomalies. Granitic intrusives appear as sub-circular zones, and may have contrasting rings due to contact metamorphism. Generally, granitic terrain will lack a pronounced strike direction, although granite gneiss may display strike.

Linear north-south units are theoretically not well-defined on total field magnetic maps in equatorial regions due to the low inclination of the earth's magnetic field. However, most stratigraphic units will have variations in composition along strike which will cause the units to appear as a series of alternating magnetic highs and lows.

- Appendix A.12 -

Faults and shear zones may be characterized by alteration which causes destruction of magnetite (e.g., weathering) which produces a contrast with surrounding rock. Structural breaks may be filled by magnetite-rich, fracture filling material as is the case with diabase dikes, or by non-magnetic felsic material.

Faulting can also be identified by patterns in the magnetic total field contours or colours. Faults and dikes tend to appear as lineaments and often have strike lengths of several kilometres. Offsets in narrow, magnetic, stratigraphic trends also delineate structure. Sharp contrasts in magnetic lithologies may arise due to large displacements along strike-slip or dip-slip faults.

APPENDIX B

LIST OF PERSONNEL

The following personnel were involved in the acquisition, processing, interpretation and presentation of data, relating to a DIGHEM^V airborne geophysical survey carried out for The State of Alaska, Department of Natural Resources, Division of Geological and Geophysical Surveys in the Salcha River-Pogo survey area.

David Miles	Manager, Helicopter Operations
Emily Farquhar	Manager, Data Processing and Interpretation
Frank Corbin	Senior Geophysical Operator
Brett Robinson	Field Geophysicist
Tim Perry	Pilot (ERA Helicopters Ltd.)
Gordon Smith	Data Processing Supervisor
Stephen Harrison	Computer Processor
Ruth Pritchard	Interpretation Geophysicist
Lyn Vanderstarren	Drafting Supervisor
Susan Pothiah	Word Processing Operator
Albina Tonello	Secretary/Expeditor

The survey consisted of 453.6 line-miles (729.9 km) of coverage, flown from August 30 to August 31, 2001.

All personnel are employees of Fugro Airborne Surveys, except for the pilot who is an employee of ERA Helicopters Ltd.

APPENDIX C

ARCHIVE DESCRIPTION

APPENDIX C

ARCHIVE DESCRIPTION

Volume Label: CCD01667
Archive Date: 2002-February 12
This archive consists of 2 CD's

FINAL PROCESSED DATA ARCHIVES

This CD contains final processed data archives of an airborne geophysical survey of the southeastern extension of the Salcha River-Pogo survey, Goodpaster mining district, east-central Alaska. The survey area is located in the Big Delta quadrangle. The survey was conducted for the State of Alaska, Department of Natural Resources (DNR), Division of Geological & Geophysical Surveys (DGGGS). The data acquisition was performed by Stevens Exploration Management Corp and Fugro Airborne Surveys during July and August, 2001.

Where possible, the gridded and .DXF data are presented merged with data from a 1999 survey flown for DGGGS by CGG Geoterrex-Dighem, in the Pogo area. The line data archive contains data only from the 2001 survey, the southeast extension of the Pogo survey area.

This digital archive and other products from this survey are available by mail order, or in person, from DGGGS, 794 University Ave., Suite 200, Fairbanks, Alaska, 99709.

DESCRIPTIVE NOTES

The geophysical data were acquired with a DIGHEM V Electromagnetic (EM) system, and a Scintrex cesium magnetometer. The EM and magnetometer sensors were flown at a height of 100 feet. In addition, the survey recorded data from a radar altimeter, GPS navigation system, 50/60 Hz monitors and video camera. Flights were performed with an AS350B-2 helicopter at a mean terrain clearance of 200 feet along North/South (160°/340°) flight lines with a one-quarter mile line spacing. Tie lines were flown perpendicular to the flight lines at intervals of approximately 3 miles.

An Ashtech GG24 NAVSTAR/GLONASS Global Positioning System was used for navigation. The helicopter position was derived every 0.5 seconds using post-flight differential positioning to a relative accuracy of better than 5 m. Flight path positions were projected onto the Clarke 1866 (UTM zone 6) spheroid, 1927 North American datum using a central meridian of 147°, a north constant of 0 and an east constant of 500,000. Positional accuracy of the presented data is better than 10 m with respect to the UTM grid.

To determine the location of EM anomalies or their boundaries, the DIGHEM V EM system measured inphase and quadrature components at five frequencies. Two vertical coaxial-coil pairs operated at 1072 and 5954 Hz while three horizontal coplanar-coil pairs operated at 883, 7236, and 56,360 Hz. The EM data were

sampled at 0.1 second intervals. The EM system responds to bedrock conductors, conductive overburden, and cultural sources. The power line monitors and the flight track video were examined to locate cultural sources. The EM anomalies that are indicated are classified by conductance.

The total magnetic field data were acquired with a sampling interval of 0.1 seconds, and were (1) corrected for diurnal variations by subtraction of the digitally recorded base station magnetic data, (2) leveled to the tie line data, and (3) interpolated onto a regular 100m grid using a modified Akima (1970) technique. The regional variation (or IGRF gradient, 2000, updated to August 2001) was removed from the leveled magnetic data.

Akima, H., 1970, A new method of interpolation and smooth curve fitting based on local procedures: Journal of the Association of Computing Machinery, v. 17, no. 4, p 589-602.

ARCHIVE ORGANIZATION

There are 2 CD ROMs in this set containing grids, vector files, EM anomalies and line data.

CD #1 comprises 12 data files contained in 3 subdirectories

LINEDATA\

GPR2002_2.XYZ ASCII line data archive in Geosoft XYZ format
GPR2002_2 linedata.TXT text description file for the XYZ data archive

DXF\ (vector files in .DXF format)

(All at a scale of 1:63360 except for anomaly)

full_em - Electromagnetic Anomaly Legend
gpr2002_2_anomaly - Detailed Electromagnetic Anomalies at a scale of 1:31680
gpr2002_2_stategrid - Alaska State Grid (UTM - Nad 27)
gpr2002_2_fp - Flight Path
gpr2002_2_res900 - 900 Hz Apparent Resistivity (Ohm-m)
gpr2002_2_res7200 - 7200 Hz Apparent Resistivity (Ohm-m)
gpr2002_2_res56k - 56000 Hz Apparent Resistivity (Ohm-m)
gpr2002_2_magigrf - Total Magnetic Field - IGRF removed (nT)

TEXT FILES\

GPR2002_2 readme.txt - archive description
GPR2002_2_ANOMALY.XYZ - EM anomaly table (Pogo southeast extension data only)
GPR2002_2 metadata.txt - metadata for this publication

CD #2 comprises 14 data files contained in 2 subdirectory

GRIDS\ (in Geosoft .grd format and ASCII Grid Exchange Format .gxf)

gpr2002_2_res900 - 900 Hz Apparent Resistivity (Ohm-m)
gpr2002_2_res7200 - 7200 Hz Apparent Resistivity (Ohm-m)
gpr2002_2_res56k - 56000 Hz Apparent Resistivity (Ohm-m)
gpr2002_2_magigrf - Total Magnetic Field - IGRF removed (nT)
gpr2002_2_tfmag - Total Magnetic Field (nT)
gpr2002_2_dtm - Digital Terrain Model (m)

TEXT FILES\

GPR2002_2_readme.txt - archive description
GPR2002_2_ANOMALY.XYZ - EM anomaly table (Pogo southeast extension data only)
GPR2002_2metadata.txt - metadata for this publication

The coordinate system for all grids and XYZ files is described as follows:

Datum	NAD27
Spheroid	Clarke 1866
Projection	UTM Zone 6N
Central meridian	-147
False easting	500000
False northing	0
Scale factor	0.9996
Northern parallel	N/A
Base parallel	N/A
WGS84 to local conversion method	Molodensky
Delta X shift	+5
Delta Y shift	-135
Delta Z shift	-172

Geosoft XYZ ARCHIVE SUMMARY

JOB TITLE:

```

-----
TYPE OF SURVEY      :DIGHEM EM, MAGNETICS, RESISTIVITY
AREA                :Southeastern extension of the Salcha River-Pogo survey,
                    :Goodpaster mining district, east-central Alaska
CLIENT              :State of Alaska, Department of Natural Resources (DNR),
                    :Division of Geological & Geophysical Surveys (DGGS)
    
```

NUMBER OF DATA FIELDS : 28

#	CHANNAME	TIME	UNITS /	DESCRIPTION	<<< #	BYTES	decimals
1	X	0.1	m	UTME-NAD27(ZONE-6)	:	12	1
2	Y	0.1	m	UTMN-NAD27	:	12	1
3	FID	0.1			:	10	1
4	LAT	0.1		LATITUDE	:	12	6
5	LON	0.1		LONGITUDE	:	12	6
6	FLIGHT	0.1		Flight Number	:	10	0
7	IGRFMAG	0.1	nT	Magnetic Field - IGRF Corrected	l0		2
8	MAG	0.1	nT	Total Magnetic Field	:	10	2
9	ALTBIRDM	0.1	m	Bird Height	:	10	2
10	DTM	0.1	m	Digital Elevation Model	:	10	2
11	CXI1000	0.1	ppm	INPHASE-COAXIAL 1072 HZ	:	9	1
12	CXQ1000	0.1	ppm	QUADRATURE- COAXIAL 1072 HZ		9	1
13	CPI900	0.1	ppm	INPHASE-COPLANAR 883 HZ		9	1
14	CPQ900	0.1	ppm	QUAD- COPLANAR 883 HZ		9	1
15	CXI5500	0.1	ppm	INPHASE -COAXIAL 5954 HZ		9	1
16	CXQ5500	0.1	ppm	QUAD -COAXIAL 5954 HZ		9	1
17	CPI7200	0.1	ppm	INPHASE -COPLANAR 7236 HZ		9	1
18	CPQ7200	0.1	ppm	QUAD -COPLANAR 7236 HZ		9	1
19	CPI56K	0.1	ppm	INPHASE-COPLANAR 56360 HZ		9	1
20	CPQ56K	0.1	ppm	QUAD-COPLANAR 56360 HZ		9	1
21	RES56K	0.1	ohm*m	RESISTIVITY - 56 000 Hz		9	1
22	DP56K	0.1	m	DEPTH - 56 000 Hz		9	1
23	RES7200	0.1	ohm*m	RESISTIVITY - 7200 Hz		9	1
24	DP7200	0.1	m	DEPTH - 7200 Hz		9	1
25	RES900	0.1	ohm*m	RESISTIVITY - 900 Hz		9	1
26	DP900	0.1	m	DEPTH - 900 Hz		9	1
27	DIFI	0.1		DIFF. BASED ON 5500/7200 INPHASE		9	1
28	DIFQ	0.1		DIFF. BASED ON 5500/7200 QUAD		9	1

```

ISSUE DATE          :February 12, 2002
FOR WHOM            :State of Alaska, DGGS
BY WHOM             :FUGRO AIRBORNE SURVEYS
                    :2270 ARGENTIA ROAD, UNIT 2
                    :MISSISSAUGA, ONTARIO,
                    :CANADA L5N 6A6
                    :TEL. (905) 812-0212
                    :FAX (905) 812-1504
    
```

APPENDIX D

EM ANOMALY LIST

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE 10010 FLIGHT 54													
A	1560.0	B	598861	7143288	4.5	1.3	37.3	0.0	30.4	22.5	---	---	0
B	1554.1	B	598945	7143101	6.5	1.6	32.3	28.3	8.0	22.1	---	---	0
LINE 10020 FLIGHT 54													
A	1619.0	B?	599178	7143525	4.7	4.3	38.6	28.3	4.3	13.5	1.1	35	0
B	1660.3	B?	599748	7142181	0.4	6.7	8.6	91.7	3.3	15.2	---	---	0
C	1669.1	B	599870	7141872	4.9	11.6	59.4	86.5	8.6	18.0	---	---	0
LINE 10030 FLIGHT 54													
A	1793.0	B?	599923	7142824	1.9	10.4	5.2	57.7	1.9	7.3	---	---	0
B	1789.5	B?	599960	7142738	0.8	9.2	0.2	60.8	1.4	7.7	---	---	1
C	1778.0	S?	600083	7142430	0.7	6.4	4.0	50.0	1.6	7.0	---	---	0
D	1764.0	S?	600222	7142070	3.1	5.1	19.1	56.1	1.3	10.1	0.5	41	2
E	1757.1	B?	600278	7141916	2.0	9.2	8.4	27.8	1.7	5.1	---	---	2
LINE 10040 FLIGHT 54													
A	1922.0	B	600578	7142284	4.9	7.3	63.2	99.9	4.4	20.8	0.6	19	1
B	1928.0	D	600643	7142119	11.0	19.1	66.4	99.9	3.8	22.1	---	---	0
C	1941.5	D	600746	7141843	1.4	9.4	5.0	11.8	1.2	2.5	---	---	0
D	1954.0	B?	600832	7141634	1.1	4.0	12.0	41.8	1.2	8.5	---	---	6
LINE 10050 FLIGHT 54													
A	2106.8	S?	600756	7142913	6.2	17.4	46.0	104.8	4.6	18.8	---	---	0
B	2093.4	B	600898	7142540	2.5	6.9	10.4	86.2	2.6	11.6	---	---	0
C	2089.9	D	600928	7142464	6.1	14.3	69.8	86.2	1.5	27.0	---	---	2
D	2081.3	E	601007	7142268	9.5	12.7	65.0	113.1	2.4	20.7	---	---	0
E	2050.0	S?	601143	7141912	1.9	2.6	2.1	45.0	0.7	5.7	---	---	0
F	2013.8	B?	601436	7141196	3.2	7.6	6.7	38.6	0.3	6.5	---	---	4
LINE 10060 FLIGHT 54													
A	2182.8	B?	600922	7143491	18.1	28.4	101.3	160.2	3.8	32.1	---	---	0
B	2237.1	B	601484	7142182	13.4	32.4	31.0	124.1	1.5	19.3	---	---	0
C	2253.3	S?	601585	7141914	4.6	10.5	21.3	77.6	0.9	12.0	---	---	7
D	2297.0	S	601888	7141178	2.4	3.8	13.0	35.9	1.4	5.1	---	---	0
LINE 10070 FLIGHT 54													
A	2473.7	B?	601382	7143515	19.4	25.3	66.7	111.3	3.8	21.8	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10070		FLIGHT 54										
B	2453.5	B?	601625	7142891	17.1	21.6	103.2	152.7	3.6	29.1	---	---	0
C	2427.7	B?	601870	7142282	6.2	7.9	45.1	75.7	3.5	17.2	---	---	0
D	2393.0	S	602103	7141741	2.4	7.0	9.2	39.6	1.0	5.8	---	---	0
E	2365.4	S	602378	7140978	2.3	5.8	14.1	42.3	2.0	6.9	---	---	2
LINE	10080		FLIGHT 54										
A	2543.5	B?	601910	7143278	5.4	5.0	25.6	40.9	1.9	11.0	1.1	28	6
B	2580.3	B?	602251	7142428	4.9	5.0	10.7	26.8	0.8	5.4	---	---	0
C	2593.0	B?	602350	7142160	8.1	12.4	56.2	95.1	1.2	16.4	---	---	10
D	2613.3	S?	602551	7141692	1.7	9.2	11.7	53.3	0.3	7.0	---	---	0
E	2645.0	S	602918	7140772	0.6	1.5	10.1	46.2	1.5	6.9	---	---	0
LINE	10090		FLIGHT 54										
A	2866.5	B?	602324	7143326	3.3	6.7	30.8	47.8	1.2	12.2	0.4	20	0
B	2851.0	D?	602453	7143017	2.1	3.1	4.1	18.0	1.2	4.2	---	---	0
C	2821.8	D	602723	7142334	14.9	10.7	64.5	90.7	2.4	20.5	---	---	0
D	2815.9	B	602763	7142232	6.4	9.9	64.5	90.7	3.5	20.5	---	---	0
E	2800.9	D	602849	7142029	2.0	5.7	0.0	9.3	0.8	2.2	---	---	0
F	2745.5	S	603327	7140848	2.7	4.8	8.3	34.5	2.8	4.7	---	---	0
LINE	10100		FLIGHT 54										
A	3028.0	B?	602743	7143404	3.6	4.6	21.6	23.6	1.5	7.3	0.7	30	24
B	3059.0	B?	602929	7142899	0.1	5.1	3.2	9.8	1.7	1.0	---	---	0
C	3077.8	B	603115	7142443	3.0	4.2	27.4	57.1	0.8	9.9	---	---	0
D	3109.0	B?	603379	7141764	2.1	5.2	3.6	20.2	1.5	3.3	---	---	7
E	3134.1	D	603613	7141208	2.7	6.9	2.6	12.3	0.7	1.4	---	---	0
F	3149.9	D	603785	7140783	7.8	8.8	5.1	31.5	2.0	3.4	---	---	7
LINE	10110		FLIGHT 54										
A	3377.0	B?	603161	7143390	5.2	9.2	18.2	32.3	2.9	6.6	0.5	16	28
B	3354.2	D	603435	7142727	7.5	21.2	18.8	62.8	1.0	9.3	---	---	0
C	3342.7	B	603537	7142453	6.3	8.1	28.8	39.7	1.2	7.7	---	---	0
D	3328.9	D	603691	7142108	6.9	16.1	49.9	87.0	1.3	13.6	---	---	3
E	3308.5	B?	603919	7141515	2.3	2.6	4.0	12.9	4.0	2.2	---	---	0
F	3248.1	B?	604356	7140407	7.4	5.9	44.1	82.1	2.5	15.8	---	---	16
G	3239.9	D	604457	7140155	15.6	9.2	24.1	33.5	2.7	6.9	---	---	0
H	3232.5	D	604538	7139916	7.4	5.3	3.0	30.2	0.9	2.4	1.6	28	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE 10120 FLIGHT 54													
A	3492.1	D	603727	7143042	2.3	8.1	3.8	25.7	0.9	0.1	---	---	2
B	3515.9	D	603978	7142462	15.3	14.6	58.1	64.8	1.4	19.4	---	---	0
C	3537.1	D	604212	7141875	4.7	10.5	9.8	27.3	1.7	4.2	---	---	0
D	3548.0	B?	604352	7141520	1.7	4.5	4.4	14.0	0.7	2.7	---	---	0
E	3553.9	D	604427	7141332	3.4	7.1	3.0	8.6	1.2	0.6	---	---	1
F	3579.3	S?	604771	7140518	1.6	7.0	14.3	47.5	2.1	7.3	---	---	4
G	3589.0	D	604893	7140191	6.7	5.8	22.5	26.2	2.9	4.6	---	---	4
LINE 10130 FLIGHT 54													
A	3823.1	D	604023	7143409	3.7	13.0	18.1	56.6	0.8	8.4	---	---	5
B	3804.3	D	604250	7142861	8.7	5.2	30.0	15.8	1.4	12.3	---	---	0
C	3758.0	S	604701	7141746	0.8	3.4	13.4	41.4	1.1	5.0	---	---	7
D	3718.0	S	605060	7140844	2.1	2.8	12.7	34.5	0.7	5.3	---	---	0
E	3698.0	S	605274	7140333	0.2	1.5	12.2	39.6	1.1	7.0	---	---	0
F	3675.2	B	605521	7139638	79.4	14.3	357.1	77.1	250.5	111.1	---	---	0
LINE 10140 FLIGHT 54													
A	3909.2	D	604549	7143197	36.3	48.4	43.8	70.1	4.5	15.5	---	---	0
B	3956.4	D	604782	7142615	2.1	6.3	5.3	19.6	1.6	2.6	---	---	0
C	3975.7	B	604986	7142104	9.5	17.2	97.3	139.8	3.4	31.4	---	---	0
D	3979.5	B	605030	7141996	7.5	12.8	97.3	139.8	3.4	31.4	---	---	0
E	3996.0	B?	605171	7141640	3.1	3.5	7.2	35.6	1.4	2.9	0.7	43	0
F	4024.8	S	605456	7140940	1.9	9.3	9.3	58.0	0.2	8.8	---	---	0
G	4033.0	S	605563	7140667	2.7	6.7	11.1	38.5	1.7	6.5	---	---	0
H	4052.9	D	605781	7140162	23.2	17.3	52.1	105.6	6.5	23.3	---	---	24
I	4061.3	B	605873	7139919	21.3	5.8	115.2	78.6	93.0	37.1	---	---	0
J	4065.0	B	605918	7139803	16.3	3.2	115.2	0.0	93.0	37.1	13.1	31	0
K	4072.4	B	606015	7139564	3.6	11.3	5.0	37.2	10.0	4.2	---	---	49
LINE 10150 FLIGHT 54													
A	4308.3	D	604875	7143447	4.2	8.5	8.8	43.5	2.0	6.0	---	---	20
B	4291.7	D	605066	7142961	1.7	5.6	3.0	16.1	2.3	2.1	---	---	21
C	4256.1	D	605425	7142069	15.8	11.0	81.2	51.5	9.3	23.2	---	---	25
D	4252.8	B	605467	7141980	9.5	9.4	81.2	51.5	9.3	23.2	---	---	29
E	4219.0	B?	605759	7141236	5.0	7.8	29.3	36.5	0.6	6.9	0.6	24	18
F	4211.0	B?	605855	7140995	3.5	8.9	38.0	41.7	3.4	10.6	---	---	0
G	4195.3	D	606006	7140679	22.4	26.9	8.8	34.7	6.3	9.1	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE 10150 FLIGHT 54													
H	4169.5	B	606196	7140218	3.7	7.6	15.1	20.1	11.7	4.1	---	---	0
I	4152.1	S?	606377	7139757	0.2	7.8	8.8	37.4	6.6	4.5	---	---	5
J	4135.2	S	606588	7139222	2.4	11.2	6.7	68.7	1.0	9.2	---	---	0
LINE 10160 FLIGHT 54													
A	4420.0	S	605767	7142285	2.5	6.2	10.5	29.7	4.9	6.3	---	---	0
B	4443.6	S	606038	7141652	3.5	8.1	37.8	85.0	1.2	13.8	---	---	0
C	4470.9	D	606316	7141007	8.9	13.6	6.5	41.9	1.8	3.6	---	---	12
D	4492.5	M	606428	7140692	0.0	1.0	0.0	25.6	0.0	4.4	---	---	1048
E	4506.8	B?	606558	7140360	2.7	12.8	6.7	40.0	3.5	4.0	---	---	0
F	4521.0	S	606723	7139955	4.1	24.1	13.3	130.8	2.3	16.0	---	---	6
G	4544.8	S	606958	7139361	5.2	6.6	8.0	46.7	2.2	7.1	---	---	0
LINE 10170 FLIGHT 54													
A	4909.6	D	605738	7143481	2.2	8.8	2.9	13.8	0.9	2.2	---	---	0
B	4901.3	B	605856	7143166	13.5	5.4	43.7	31.9	23.4	20.3	---	---	0
C	4862.8	B?	606333	7141980	9.0	3.9	59.4	72.2	1.3	14.9	---	---	7
D	4853.2	B?	606432	7141715	5.1	4.0	41.3	81.0	5.3	20.0	---	---	7
E	4830.3	D	606624	7141293	174.7	237.4	321.6	494.8	40.7	105.2	---	---	53
F	4817.8	M	606717	7141056	0.0	1.0	0.2	15.7	0.1	4.0	---	---	0
G	4800.5	S	606864	7140692	2.6	7.3	11.4	49.1	0.6	3.6	---	---	0
H	4781.1	S	607003	7140314	1.7	6.3	2.2	11.0	0.8	2.0	---	---	0
I	4699.0	S	607445	7139233	1.7	3.8	8.3	21.2	3.3	5.2	---	---	0
LINE 10180 FLIGHT 54													
A	4990.0	B	606259	7143239	1.5	0.8	30.1	13.8	13.1	10.8	---	---	5
B	5003.2	B?	606428	7142817	6.0	8.9	27.8	52.5	11.7	12.0	---	---	0
C	5021.1	S	606679	7142219	5.7	10.6	35.8	79.7	6.2	17.0	---	---	0
D	5046.9	D	606948	7141548	13.0	13.2	49.1	34.3	5.1	12.7	---	---	20
E	5076.5	D	607192	7140926	20.5	31.0	124.0	152.5	6.1	33.7	---	---	0
F	5102.0	S	607481	7140235	0.2	6.2	2.7	36.3	1.1	5.9	---	---	0
G	5150.6	S	607725	7139644	0.0	1.8	5.2	18.0	5.5	1.8	-0.1	31	104
H	5182.0	S	608055	7138848	1.8	8.7	14.3	63.0	1.9	7.7	---	---	0
LINE 10190 FLIGHT 54													
A	5494.4	D	606572	7143544	11.0	11.6	24.5	55.1	5.9	11.1	---	---	6
B	5481.0	D	606743	7143114	4.2	5.7	10.5	11.6	1.8	2.6	0.7	32	0
C	5444.0	S	607070	7142299	1.5	5.7	7.1	38.7	2.4	4.3	---	---	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 5500 HZ Quad ppm	CP 7200 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Vertical Dike DEPTH* m	Mag. Corr NT
LINE	10190		FLIGHT 54										
D	5417.3	D	607299	7141752	44.6	26.1	219.5	103.1	100.8	73.9	---	---	3
E	5413.0	D	607334	7141669	53.4	38.1	219.5	103.1	100.8	73.9	---	---	53
F	5403.3	M	607407	7141473	4.8	0.0	0.0	1.4	0.0	1.5	---	---	0
G	5400.6	M	607431	7141419	12.8	2.3	0.0	1.4	35.1	1.2	---	---	760
H	5389.8	D	607520	7141205	39.1	36.2	92.7	115.7	28.6	38.2	---	---	0
I	5382.3	D	607586	7141042	3.9	12.4	20.4	40.9	28.6	7.9	---	---	0
J	5264.3	S	608432	7138925	1.5	3.7	18.0	48.5	3.2	7.3	---	---	17
K	5249.9	M	608596	7138533	0.0	0.0	0.0	191.2	0.0	24.9	---	---	139
L	5247.6	S?	608622	7138475	39.6	32.5	213.8	191.2	237.4	24.9	2.5	16	0
LINE	10200		FLIGHT 54										
A	5578.9	S	607274	7142851	1.6	6.7	5.8	32.8	0.6	5.4	---	---	0
B	5589.7	S?	607418	7142479	3.2	15.1	18.6	83.8	1.7	10.6	---	---	0
C	5607.9	D	607575	7142124	5.6	7.1	7.5	6.4	3.6	1.7	---	---	0
D	5616.4	D	607614	7142023	17.7	15.4	89.1	45.2	5.9	22.5	---	---	7
E	5629.6	M	607734	7141747	0.0	1.9	0.0	26.4	0.0	2.8	---	---	821
F	5643.0	D	607858	7141434	10.8	16.7	22.6	40.8	16.0	5.6	---	---	0
G	5670.5	B?	608071	7140915	1.8	5.6	2.5	17.9	0.5	2.6	---	---	0
H	5707.5	B?	608434	7140035	1.0	4.6	1.3	24.6	1.7	3.8	---	---	0
I	5727.9	B?	608635	7139575	2.3	9.4	2.2	46.1	1.1	5.9	---	---	0
J	5760.0	S	609026	7138550	1.4	1.7	7.0	36.5	2.9	5.5	---	---	0
LINE	10210		FLIGHT 54										
A	5990.5	S?	607814	7142588	3.7	11.6	11.5	57.7	3.1	7.3	---	---	0
B	5983.1	D	607904	7142381	16.3	33.3	81.1	109.1	36.9	26.8	---	---	10
C	5979.0	D	607945	7142305	27.6	51.2	81.1	109.1	36.9	26.8	---	---	33
D	5969.4	B?	608019	7142150	104.2	3.8	396.8	30.3	454.3	15.2	---	---	464
E	5963.1	M	608052	7142042	9.8	1.7	24.7	0.0	20.5	0.2	---	---	596
F	5950.3	D	608174	7141719	10.0	19.4	32.3	51.5	9.1	10.0	---	---	0
G	5937.6	S?	608346	7141330	1.1	8.7	13.8	44.3	15.5	5.5	-0.1	15	8
H	5936.5	M	608355	7141301	1.1	8.7	0.1	44.3	0.0	5.5	---	---	2
I	5924.0	D	608451	7141024	1.8	7.1	3.5	19.3	1.7	2.7	---	---	5
J	5900.0	S	608752	7140304	1.7	6.2	8.0	31.4	1.9	4.7	---	---	0
K	5840.0	S	609313	7138939	0.5	2.3	1.0	20.9	0.3	2.6	---	---	36
LINE	10220		FLIGHT 54										
A	6192.7	S	608132	7142911	3.1	8.5	11.0	56.8	0.5	5.8	---	---	41
B	6209.5	D	608299	7142471	16.7	20.0	70.2	45.4	51.0	19.2	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10220		FLIGHT 54										
C	6229.6	D	608446	7142104	14.6	20.7	41.4	59.8	15.2	10.0	---	---	0
D	6231.8	D	608461	7142071	11.6	18.6	41.4	59.8	5.2	10.0	---	---	0
E	6302.5	B?	609152	7140374	1.2	2.0	16.1	46.5	2.2	6.0	---	---	0
F	6332.3	D	609439	7139657	0.6	7.2	7.2	12.2	4.7	2.2	---	---	50
G	6392.7	S?	610108	7138019	5.6	9.0	9.9	62.4	1.0	7.3	---	---	0
LINE	10230		FLIGHT 54										
A	6676.5	S	608429	7143214	3.1	11.0	9.5	59.6	1.6	9.9	---	---	0
B	6668.9	D	608531	7142991	26.9	19.6	109.5	36.3	28.1	44.3	---	---	0
C	6666.0	B	608578	7142902	13.3	13.9	109.5	36.3	28.1	44.3	1.3	2	2
D	6663.8	B	608605	7142834	0.0	19.1	109.5	174.7	9.3	44.3	---	---	0
E	6660.8	D	608633	7142746	44.3	53.1	103.2	174.7	22.7	37.6	---	---	19
F	6647.1	M	608754	7142432	0.0	2.6	10.0	42.4	3.2	7.1	---	---	94
G	6642.7	D	608797	7142334	11.1	16.9	10.0	42.4	3.2	7.1	---	---	0
H	6607.5	S	609151	7141455	1.7	6.5	3.2	21.1	1.9	3.0	---	---	8
LINE	10240		FLIGHT 54										
A	6786.0	B?	608743	7143512	1.1	4.4	7.9	22.8	0.9	4.5	---	---	0
B	6792.0	D	608796	7143390	5.6	5.6	0.0	22.8	1.8	3.9	1.0	36	16
C	6805.8	D	608942	7143072	17.8	14.5	142.5	122.1	51.3	58.0	---	---	0
D	6809.1	B	608977	7142978	27.0	20.6	185.9	140.5	47.4	71.4	---	---	0
E	6811.7	B	609000	7142910	35.5	22.8	185.9	136.3	47.4	71.4	---	---	29
F	6834.0	B	609144	7142546	5.0	4.1	14.4	32.2	1.4	3.6	1.2	41	0
G	6886.0	S	609469	7141758	1.2	6.0	7.7	25.5	3.1	3.5	---	---	0
H	6934.7	S	609887	7140685	0.6	6.8	2.2	30.3	0.5	4.8	---	---	25
I	6947.4	B?	610025	7140352	7.0	7.5	10.9	20.3	2.0	1.3	---	---	0
J	6976.6	S	610360	7139534	3.1	5.2	12.8	34.8	0.5	4.6	---	---	2
K	7010.4	S	610726	7138656	2.9	15.4	4.9	68.9	1.0	8.5	---	---	0
L	7029.5	S	610880	7138241	2.0	6.5	12.2	46.3	0.5	6.4	---	---	0
LINE	10250		FLIGHT 54										
A	7402.6	S?	608896	7144259	4.0	18.7	19.4	118.9	0.4	16.9	---	---	1
B	7394.7	B?	608957	7144081	0.2	16.4	3.6	134.2	1.9	16.1	---	---	0
C	7390.6	B	608985	7143982	5.3	23.5	33.3	134.2	3.0	16.1	---	---	0
D	7384.2	D	609048	7143829	24.3	15.4	106.1	53.3	11.7	29.3	---	---	7
E	7375.3	S?	609141	7143617	2.7	14.4	48.7	99.5	5.0	21.6	---	---	0
F	7344.0	B	609334	7143097	25.2	7.5	158.6	52.0	83.7	62.4	8.1	20	11
G	7330.0	B	609481	7142803	5.9	9.4	18.2	30.7	3.4	5.2	0.6	27	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10250		FLIGHT 54										
H	7323.0	B?	609523	7142644	1.7	6.2	3.4	16.6	2.2	3.9	---	---	0
I	7297.0	B?	609767	7142071	0.1	5.7	5.0	17.8	1.4	1.4	---	---	8
J	7281.6	D	609911	7141733	2.6	8.0	0.9	22.6	1.1	4.2	---	---	6
K	7249.5	B?	610237	7140900	4.6	4.8	16.1	52.7	1.4	7.5	---	---	0
L	7223.0	S	610506	7140251	1.7	4.0	10.9	28.0	1.9	4.9	---	---	0
M	7175.0	B?	611094	7138832	0.7	5.4	3.6	35.9	1.2	4.1	---	---	0
N	7126.5	S	611426	7137964	2.1	4.0	19.3	58.3	1.4	8.9	---	---	54
LINE	10260		FLIGHT 55										
A	323.0	S	608946	7145161	3.4	4.8	4.7	30.8	0.0	4.9	0.6	48	26
B	343.8	S	609155	7144650	3.5	7.0	16.1	48.3	1.1	8.3	---	---	0
C	407.0	D	609480	7143838	19.3	26.6	112.7	155.3	3.1	46.9	---	---	0
D	411.1	B	609520	7143756	1.6	20.2	112.7	155.3	54.7	46.9	---	---	3
E	417.5	D	609587	7143601	19.0	19.0	72.4	70.5	5.6	22.2	---	---	0
F	428.8	B	609713	7143269	17.6	9.6	101.8	60.3	38.8	38.2	---	---	0
G	453.0	M	609928	7142766	0.0	0.1	0.0	4.3	0.0	0.9	---	---	138
H	464.0	B	610008	7142572	1.8	1.8	4.7	1.2	0.9	1.2	---	---	0
I	487.8	D	610173	7142115	28.0	16.7	111.6	90.8	21.7	40.5	---	---	0
J	502.4	B?	610359	7141676	2.1	9.7	4.2	18.6	2.4	3.1	---	---	0
K	525.2	S	610674	7140916	2.3	10.5	14.6	69.1	8.0	12.2	-0.2	0	281
L	565.0	S	611154	7139742	2.0	4.8	6.9	38.6	1.5	5.2	---	---	0
M	619.7	S	611705	7138357	1.1	5.3	4.2	40.2	0.4	5.6	---	---	0
LINE	10270		FLIGHT 55										
A	1206.5	S	608980	7146151	2.0	4.8	13.7	29.3	1.1	5.5	---	---	0
B	1194.1	S	609132	7145819	3.0	10.2	10.9	43.1	3.0	6.3	---	---	0
C	1141.0	S?	609485	7144913	4.2	11.8	4.2	78.5	4.8	12.3	---	---	6
D	1138.1	S?	609504	7144852	3.6	6.2	4.2	78.5	4.1	12.3	---	---	2
E	1090.2	B	609840	7144030	5.9	7.9	93.4	49.7	4.6	15.1	---	---	12
F	1086.3	D	609880	7143946	66.0	21.4	223.4	112.0	104.4	88.5	---	---	0
G	1082.7	B	609917	7143861	29.3	13.5	223.4	112.0	104.4	88.5	---	---	0
H	1042.8	B?	610074	7143451	2.5	6.9	6.0	25.2	6.1	4.8	---	---	0
I	1031.1	B?	610132	7143313	8.9	6.9	23.1	6.0	18.1	4.6	---	---	0
J	1023.4	M	610199	7143160	0.0	1.6	19.3	1.1	24.5	2.7	---	---	172
K	1011.5	M	610324	7142870	7.6	18.7	79.9	95.3	86.6	11.1	---	---	0
L	1005.5	M	610377	7142720	0.0	2.7	82.9	23.2	89.5	3.9	---	---	0
M	976.9	D	610606	7142141	23.0	11.4	79.3	8.9	3.5	35.6	---	---	0
N	946.8	B?	610845	7141569	1.9	10.1	10.0	48.6	0.9	6.9	---	---	9

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE 10270 FLIGHT 55													
O	905.0	S	611328	7140368	2.4	4.0	6.8	27.1	1.8	2.7	---	---	2
P	823.5	S	612255	7138058	1.5	3.4	4.5	26.4	2.0	3.6	---	---	0
Q	790.0	S	612699	7136987	0.3	3.0	5.7	41.8	0.1	6.3	---	---	0
LINE 10280 FLIGHT 55													
A	1347.0	S	608932	7147380	3.6	6.9	26.6	61.3	2.7	10.2	---	---	0
B	1354.0	S	609018	7147175	0.6	1.5	17.3	46.2	0.2	7.3	---	---	0
C	1370.2	S	609204	7146681	1.9	6.9	7.5	22.2	1.0	3.6	---	---	0
D	1395.4	S	609490	7145984	2.0	6.4	20.3	44.6	2.0	9.0	---	---	0
E	1421.7	S	609723	7145393	0.5	6.3	7.6	70.6	2.5	9.3	---	---	13
F	1479.7	S	610284	7144012	0.7	5.4	10.5	35.0	6.8	5.1	---	---	49
G	1491.3	M	610393	7143745	0.4	5.6	16.8	88.5	10.1	13.5	---	---	144
H	1493.2	S	610410	7143699	4.6	12.5	17.6	88.5	12.6	13.5	---	---	144
I	1531.2	M	610677	7143024	2.1	0.8	0.0	8.2	0.0	2.1	---	---	258
J	1551.5	D?	610855	7142590	1.7	6.7	0.3	31.7	0.1	4.8	---	---	28
K	1568.0	D	610995	7142258	130.3	86.2	388.9	320.3	125.1	146.8	---	---	0
L	1648.4	S	611782	7140307	3.3	7.5	5.8	26.3	1.3	4.3	---	---	1
M	1709.6	S	612621	7138250	1.7	8.7	4.9	69.9	1.0	9.2	---	---	6
LINE 10290 FLIGHT 55													
A	2327.4	S?	608843	7148649	0.7	4.8	7.8	49.0	2.7	6.0	---	---	0
B	2277.1	S	609436	7147160	0.8	14.2	18.1	129.9	2.8	18.4	---	---	0
C	2259.5	S?	609621	7146718	4.3	25.1	40.8	194.0	3.2	27.2	---	---	0
D	2255.9	S?	609663	7146647	9.2	25.4	40.8	194.0	10.8	27.2	---	---	13
E	2218.3	S	609983	7145838	1.8	9.7	9.7	107.5	2.6	15.6	---	---	0
F	2169.4	S	610511	7144536	2.0	6.9	4.9	38.0	0.9	4.9	---	---	0
G	2140.0	B?	610762	7143885	2.2	5.3	24.8	57.7	1.9	10.0	---	---	0
H	2136.5	B?	610806	7143792	5.1	8.2	24.8	57.7	2.4	10.0	---	---	13
I	2126.7	M	610914	7143519	0.8	0.0	5.1	20.2	8.3	3.7	---	---	102
J	2075.1	D	611323	7142497	22.6	19.0	126.1	153.7	21.8	37.9	---	---	0
K	1995.0	B?	612176	7140406	2.0	7.8	4.7	19.7	0.2	2.8	---	---	3
L	1989.0	B?	612228	7140273	3.3	2.9	1.5	42.6	0.4	5.6	---	---	0
M	1944.6	S	612705	7139133	1.0	7.0	12.0	86.0	0.2	9.6	---	---	2
N	1876.9	S	613403	7137379	0.1	8.2	2.7	52.0	0.7	6.4	---	---	1
O	1848.6	S	613691	7136688	3.9	15.2	24.5	134.6	0.7	19.2	---	---	0
LINE 10300 FLIGHT 55													
A	2443.5	S	609249	7148725	1.4	7.6	2.5	11.7	2.1	2.7	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Dike DEPTH* m	Mag. Corr NT		
LINE	10300		FLIGHT	55									
B	2468.0	S	609516	7148021	2.4	6.8	23.2	137.0	0.4	18.7	---	---	1
C	2520.1	S	610058	7146710	2.2	10.0	16.5	84.6	1.1	11.9	---	---	9
D	2524.7	S?	610106	7146580	2.4	5.2	3.4	11.3	0.7	8.8	---	---	0
E	2570.0	S	610603	7145341	0.5	0.0	4.9	13.9	2.3	1.8	---	---	6
F	2608.6	S	611169	7143978	1.9	7.5	4.4	21.1	1.5	2.6	---	---	0
G	2628.3	M	611401	7143405	0.0	0.8	6.4	20.4	62.8	3.9	---	---	43
H	2630.5	B?	611434	7143338	2.5	4.0	62.2	18.7	62.8	3.2	---	---	23
I	2635.4	B?	611502	7143178	10.0	10.3	62.2	22.1	15.6	2.3	1.2	29	0
J	2638.0	M	611534	7143092	0.0	3.5	0.0	22.1	15.6	2.3	---	---	0
K	2648.8	D	611675	7142729	17.0	28.4	73.5	57.7	29.7	27.1	---	---	119
L	2653.7	D	611744	7142554	25.0	18.4	73.5	72.3	21.3	27.1	---	---	0
M	2717.0	S	612419	7140912	1.6	2.4	7.1	30.2	0.6	3.8	---	---	3
N	2732.4	B?	612615	7140439	4.2	8.7	10.0	41.1	0.8	6.3	---	---	0
O	2754.0	D	612844	7139841	1.1	3.6	5.9	41.8	1.3	5.2	---	---	0
P	2759.3	D	612903	7139702	1.9	6.8	0.1	41.8	0.3	5.4	---	---	19
Q	2789.0	B?	613248	7138835	0.9	5.2	3.9	37.5	1.0	5.6	---	---	0
R	2822.2	S	613620	7137965	1.7	7.2	13.6	57.5	0.5	8.4	---	---	0
S	2893.5	S?	614322	7136209	3.5	10.5	16.8	86.1	0.8	11.3	---	---	0
LINE	10310		FLIGHT	55									
A	3526.5	B?	609443	7149332	1.2	6.0	11.5	48.7	3.9	7.5	---	---	0
B	3523.0	S	609485	7149233	0.5	3.4	11.5	48.7	0.1	7.5	---	---	0
C	3503.0	S?	609736	7148587	1.6	3.8	11.9	20.7	2.5	5.5	---	---	4
D	3459.0	S	610214	7147419	0.4	5.0	3.7	20.2	1.0	3.6	---	---	0
E	3443.7	S	610362	7147040	3.7	11.0	8.1	40.0	2.3	7.0	---	---	0
F	3414.6	S	610685	7146249	3.6	10.9	32.1	95.6	2.0	17.4	---	---	0
G	3407.2	S	610771	7146015	2.4	11.6	28.0	79.9	2.3	14.4	---	---	18
H	3397.4	S	610882	7145737	4.7	17.2	40.5	165.6	2.7	24.3	---	---	0
I	3281.3	S	611995	7143013	2.2	7.6	13.7	44.4	9.4	7.7	---	---	33
J	3263.8	B	612191	7142524	2.5	8.6	89.8	64.8	22.9	36.0	---	---	0
K	3258.1	B	612256	7142347	25.0	36.0	164.3	223.1	0.0	51.0	---	---	0
L	3250.0	B	612358	7142110	20.0	28.2	259.5	220.4	55.3	94.3	---	---	0
M	3246.1	B	612403	7142000	15.5	21.7	139.5	220.4	17.7	53.3	---	---	16
N	3212.0	B	612744	7141149	4.6	2.7	35.6	26.4	6.1	13.0	---	---	9
O	3178.3	B?	613118	7140236	2.4	8.0	9.6	58.4	1.6	6.5	---	---	0
P	3164.1	S	613308	7139785	1.0	6.4	19.1	108.2	2.0	18.0	---	---	0
Q	3108.5	B?	613789	7138581	1.0	3.3	3.1	24.7	1.3	3.5	---	---	1
R	3059.9	S	614273	7137403	1.9	6.4	12.6	94.5	1.5	13.7	---	---	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Vertical Dike DEPTH* m	Mag. Corr NT
LINE	10310		FLIGHT 55								
S	3055.6	S	614340	7137243	1.7	9.1	9.4	65.4	2.4	8.4	0
T	3030.1	S	614664	7136420	0.5	6.9	9.0	47.7	1.3	6.2	0
LINE	10320		FLIGHT 55								
A	3868.0	S	608729	7152143	1.7	3.5	1.9	34.0	3.7	5.2	0
B	4003.0	S	610060	7148809	1.1	2.2	11.1	33.9	2.1	6.1	0
C	4026.0	S	610271	7148301	0.8	3.2	26.6	58.1	2.0	9.6	0
D	4088.2	B?	610822	7146963	2.8	8.1	15.8	56.7	2.0	9.1	3
E	4099.1	D	610955	7146683	6.0	14.6	19.8	42.8	0.8	7.6	0
F	4142.5	S?	611222	7145980	4.6	12.3	31.0	100.3	3.1	14.8	0
G	4150.5	S?	611309	7145764	1.9	13.0	18.0	54.2	0.7	7.9	25
H	4205.9	D	612122	7143775	16.5	30.5	99.9	206.0	19.6	45.4	22
I	4209.0	D	612167	7143665	32.4	29.7	99.9	206.0	19.6	45.4	0
J	4259.5	B	612737	7142273	65.6	33.7	459.6	180.4	206.7	195.6	0
K	4261.6	B	612767	7142201	73.9	41.7	459.6	180.4	206.7	195.6	0
L	4268.9	D	612862	7141956	24.1	26.4	102.2	77.5	8.2	30.6	0
M	4279.7	D	612981	7141646	19.9	31.7	29.8	67.0	4.6	10.2	0
N	4289.5	B?	613076	7141434	3.1	5.3	20.8	34.2	4.1	8.7	0
O	4310.5	B?	613235	7141029	2.9	5.6	4.0	1.5	0.9	1.9	1
P	4351.3	B?	613703	7139836	3.1	8.8	10.9	37.6	1.1	6.3	0
Q	4357.4	S?	613778	7139668	1.9	9.8	15.9	59.8	1.6	10.2	1
R	4488.6	S?	615140	7136280	2.2	16.7	25.5	152.0	0.8	20.5	0
LINE	10330		FLIGHT 55								
A	5320.8	S	608825	7153025	1.0	9.4	2.8	60.2	2.3	6.9	0
B	5269.6	S	609303	7151801	1.8	4.5	5.4	31.8	1.6	4.8	5
C	5159.2	S?	610579	7148669	2.8	7.7	26.6	69.5	0.8	11.0	0
D	5146.9	S	610678	7148409	2.1	7.0	8.4	19.5	3.7	2.3	0
E	5118.0	S	610991	7147643	0.4	2.4	11.5	53.2	0.3	8.4	6
F	5080.5	B?	611306	7146822	5.6	14.5	12.5	29.0	1.8	5.1	5
G	5057.7	B?	611510	7146348	0.7	4.9	0.1	0.0	0.4	2.8	6
H	5026.9	S	611824	7145569	0.9	7.6	30.8	102.5	1.5	15.9	2
I	4983.5	S	612280	7144452	1.7	7.7	6.9	61.8	1.8	8.5	0
J	4949.9	D	612566	7143760	34.2	20.5	89.1	51.9	41.2	30.2	0
K	4941.9	B?	612622	7143607	3.5	26.8	23.6	30.2	11.6	5.5	0
L	4937.9	B?	612649	7143531	1.4	18.5	5.1	90.7	5.6	12.5	0
M	4890.2	B	613159	7142278	11.7	6.4	90.9	44.9	82.7	2.5	0
N	4876.5	D	613287	7141925	43.4	14.1	117.0	96.3	98.0	58.1	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Vertical Dike DEPTH* m	Mag. Corr NT		
LINE 10330			FLIGHT 55										
O	4868.7	B	613367	7141712	1.2	9.6	106.8	73.6	20.5	37.2	---	---	31
P	4866.0	D	613401	7141626	38.6	25.9	106.8	73.6	20.5	37.2	---	---	16
Q	4836.4	B?	613834	7140619	1.1	8.5	12.4	54.0	0.8	7.7	---	---	0
R	4801.0	S	614255	7139550	2.2	3.2	22.5	60.5	2.8	8.2	---	---	1
S	4786.0	B?	614407	7139141	0.9	3.1	4.6	21.8	0.9	3.0	---	---	2
T	4743.1	D	614800	7138214	5.6	11.4	20.5	48.9	1.2	6.2	---	---	6
U	4680.0	S	615580	7136306	1.7	3.4	13.4	48.1	1.2	6.8	---	---	53
V	4652.4	S	615865	7135589	2.3	14.2	8.5	77.3	1.1	10.2	---	---	0
LINE 10340			FLIGHT 57										
A	2494.7	S	609357	7152729	1.8	5.8	7.4	35.2	2.6	4.9	---	---	0
B	2547.9	S	609811	7151612	1.2	5.4	6.8	70.8	1.3	9.5	-0.2	23	2
C	2651.7	S	611063	7148498	1.6	4.1	12.9	40.3	1.5	5.1	---	---	0
D	2708.2	S	611627	7147125	3.9	11.1	33.4	99.8	1.1	16.0	---	---	13
E	2715.3	B?	611697	7146974	3.1	8.5	7.8	16.0	0.9	2.3	---	---	2
F	2775.4	B?	612172	7145829	2.1	6.9	2.5	50.6	1.4	7.9	---	---	0
G	2838.4	S?	612838	7144131	2.8	8.7	5.3	20.9	1.4	2.1	---	---	0
H	2856.4	B?	613007	7143738	3.9	7.1	11.8	25.4	1.8	4.6	---	---	0
I	2899.0	S	613345	7142883	1.7	5.9	10.8	46.6	2.0	5.2	---	---	0
J	2929.8	D	613688	7142034	60.8	53.1	163.2	171.4	25.3	58.7	---	---	12
K	2995.6	S	614396	7140247	1.9	7.8	8.2	63.0	0.7	7.4	---	---	0
L	3028.6	S	614811	7139256	3.1	11.1	20.1	90.3	3.8	13.3	---	---	0
M	3054.6	S	615112	7138527	1.5	4.5	2.6	38.1	2.6	4.7	---	---	1
N	3090.0	S	615452	7137694	0.5	2.0	3.4	19.5	0.9	2.9	---	---	0
O	3138.9	B	615857	7136697	27.6	2.8	190.8	26.2	113.6	66.6	---	---	1
P	3150.7	B	616003	7136343	109.1	52.1	692.5	204.2	418.5	223.3	---	---	3
Q	3157.6	B	616081	7136136	7.9	10.9	101.0	135.9	0.0	16.1	---	---	2
R	3166.2	B	616177	7135896	3.1	7.2	5.6	74.6	10.3	13.0	---	---	0
S	3173.4	B	616257	7135694	13.0	15.3	109.9	107.2	6.6	31.4	---	---	7
LINE 10350			FLIGHT 57										
A	3845.8	S?	609399	7153707	2.2	8.2	14.0	51.7	3.0	8.0	---	---	0
B	3796.0	S	609889	7152492	2.3	5.5	3.2	26.0	1.1	3.6	---	---	2
C	3761.0	S	610294	7151489	1.0	2.2	1.9	22.0	1.6	3.0	---	---	3
D	3719.0	S	610794	7150256	1.2	1.5	4.9	39.4	1.4	5.5	---	---	0
E	3680.0	S	611273	7149095	2.1	3.1	5.1	17.1	2.2	2.8	---	---	0
F	3626.9	B?	612128	7147003	4.9	8.0	17.3	32.8	0.0	6.4	---	---	0
G	3612.1	S?	612346	7146414	2.4	5.6	16.8	49.1	1.5	8.7	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	5500 HZ Quad ppm	CP 7200 HZ Real ppm	7200 HZ Quad ppm	CP 900 HZ Real ppm	900 HZ Quad ppm	Vertical Dike COND siemens	Dike DEPTH* m	Mag. Corr NT
LINE	10350		FLIGHT 57										
H	3523.0	B?	613340	7143977	0.8	5.9	0.1	15.3	1.2	1.6	---	---	3
I	3503.2	D	613547	7143449	2.0	8.0	3.1	22.9	0.2	4.0	---	---	0
J	3481.3	M	613813	7142774	0.0	3.2	11.3	11.4	0.0	1.8	---	---	218
K	3446.3	D	614208	7141812	13.9	23.2	55.0	96.2	3.2	19.0	---	---	0
L	3353.0	S	615419	7138843	1.0	1.4	10.1	28.9	0.2	5.4	---	---	0
M	3322.3	B?	615843	7137777	5.2	5.4	30.7	36.9	1.4	6.3	---	---	0
N	3292.0	B?	616294	7136668	0.3	4.4	4.9	39.4	7.4	4.8	---	---	0
O	3257.6	S?	616820	7135355	4.3	13.9	32.1	84.0	1.2	11.3	---	---	0
LINE	10360		FLIGHT 57										
A	4016.0	S	609932	7153488	1.8	4.3	29.4	46.6	2.0	7.9	---	---	0
B	4079.4	S?	610502	7152055	3.9	10.9	39.6	130.5	2.6	18.9	---	---	0
C	4193.2	S	611704	7149056	2.5	5.9	6.9	54.5	1.5	9.0	---	---	0
D	4213.3	S	611961	7148449	1.9	16.2	7.4	75.9	1.1	9.9	---	---	0
E	4218.7	S?	612032	7148283	1.9	10.6	6.1	43.2	1.4	5.7	---	---	1
F	4230.7	S	612193	7147890	1.3	6.4	5.1	47.9	0.2	6.4	---	---	8
G	4252.1	S	612449	7147226	0.7	11.7	10.7	85.1	0.5	10.4	---	---	43
H	4269.0	S	612640	7146774	1.3	4.8	0.9	29.6	1.1	4.9	---	---	0
I	4303.8	S	612994	7145915	1.4	6.8	5.1	58.5	0.3	7.4	---	---	0
J	4347.8	S	613484	7144684	1.9	6.7	13.5	39.0	2.0	5.3	---	---	0
K	4386.7	S?	613883	7143703	2.5	8.0	9.5	28.3	2.1	3.8	---	---	0
L	4393.3	M	613968	7143507	0.4	1.9	5.8	5.4	12.1	0.9	---	---	60
M	4406.0	S	614135	7143090	2.1	3.6	4.1	28.8	2.4	4.5	---	---	0
N	4440.0	S	614562	7142037	2.1	5.0	26.3	87.3	1.4	15.5	---	---	0
O	4443.1	S?	614600	7141935	7.6	16.8	25.8	87.3	1.4	14.6	---	---	0
P	4452.8	S	614724	7141625	1.4	7.3	2.8	28.9	1.0	3.5	---	---	0
Q	4536.0	S	615641	7139354	1.6	3.4	3.2	16.8	2.0	2.5	---	---	0
R	4591.6	S	616028	7138421	1.6	10.6	5.4	50.9	1.8	7.5	---	---	0
S	4641.6	B	616428	7137416	4.7	9.3	25.3	37.0	4.5	8.7	---	---	4
T	4660.5	B	616662	7136831	1.4	8.4	19.3	58.5	7.5	9.0	---	---	4
U	4680.8	B?	616905	7136262	14.3	10.0	86.2	69.1	2.5	20.7	---	---	0
V	4711.8	S?	617210	7135504	3.4	10.7	11.1	45.6	1.2	5.8	---	---	2
W	4725.4	D	617373	7135088	5.0	12.2	13.0	40.4	2.9	4.9	---	---	0
X	4729.2	D	617425	7134964	1.8	11.9	13.0	40.4	3.5	4.2	---	---	6
LINE	10370		FLIGHT 57										
A	5517.0	B?	610199	7153808	2.8	7.8	1.2	24.0	2.3	3.6	-0.3	28	1
B	5482.4	S	610534	7153049	1.0	5.2	8.5	81.3	1.5	11.8	-0.1	21	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ		CP 7200 HZ		CP 900 HZ		Vertical Dike		Mag. Corr NT
					Real ppm	Quad ppm	Real ppm	Quad ppm	Real ppm	Quad ppm	COND siemens	DEPTH* m	
LINE	10370		FLIGHT 57										
C	5462.6	S	610714	7152596	4.9	6.8	6.5	26.0	1.1	4.0	0.7	23	0
D	5400.4	S	611381	7150976	2.8	7.2	4.8	42.3	2.0	6.4	-0.3	25	5
E	5359.2	S	611708	7150162	1.1	6.3	1.1	31.3	1.2	4.1	---	---	0
F	5319.5	S	612192	7148967	0.7	3.8	6.6	45.1	1.4	6.0	---	---	0
G	5263.9	B?	612966	7147080	7.5	19.1	22.3	56.5	1.9	7.7	---	---	12
H	5191.0	S	613760	7145088	1.4	4.0	1.7	33.5	0.8	4.2	---	---	0
I	5162.8	S	614091	7144261	1.2	6.9	11.5	46.6	2.8	6.0	---	---	0
J	5153.0	S?	614221	7143950	2.1	4.3	22.4	57.6	1.4	8.7	---	---	0
K	5149.7	S?	614266	7143833	4.2	13.8	22.4	57.6	3.3	7.9	---	---	0
L	5144.1	B?	614347	7143630	5.1	11.7	14.8	18.6	3.4	3.1	---	---	0
M	5138.7	S?	614427	7143428	5.3	18.2	22.3	79.4	1.8	11.2	---	---	12
N	5103.4	S	614944	7142150	1.9	6.9	18.2	53.1	2.1	7.8	---	---	0
O	4932.6	S	616457	7138394	1.2	4.4	4.1	31.1	1.4	3.4	---	---	0
P	4901.0	B	616812	7137558	2.2	1.5	30.8	35.5	5.6	12.6	---	---	0
Q	4864.0	B	617353	7136219	4.8	2.6	37.1	45.3	23.2	19.4	---	---	1
R	4852.1	B	617512	7135800	38.8	28.7	247.6	235.4	22.8	60.3	---	---	2
S	4837.6	D	617713	7135344	12.7	24.1	41.7	67.3	1.7	13.5	---	---	0
T	4834.3	D	617757	7135253	5.3	14.4	41.7	67.3	3.9	13.5	---	---	0
U	4821.2	D	617907	7134878	5.2	14.0	31.0	41.8	1.3	8.1	---	---	2
V	4817.0	B?	617948	7134749	4.4	10.3	31.0	31.0	1.6	8.1	0.4	18	0
LINE	10380		FLIGHT 57										
A	5619.0	B?	610532	7154190	1.9	8.7	5.4	40.3	2.0	5.0	---	---	0
B	5645.5	B?	610849	7153389	1.3	4.5	3.7	19.3	1.6	2.9	---	---	0
C	5675.4	S?	611207	7152464	2.3	8.5	11.2	38.9	2.8	5.9	-0.2	8	0
D	5702.9	S	611579	7151561	0.9	10.6	4.6	66.7	2.1	8.3	-0.1	0	3
E	5794.0	S	612661	7148900	1.5	3.5	2.2	11.3	1.2	1.7	---	---	0
F	5855.8	B?	613264	7147379	4.1	7.6	15.6	35.4	0.4	6.6	0.5	17	0
G	5862.3	B?	613341	7147192	2.5	10.0	6.3	40.8	1.1	5.8	-0.2	6	1
H	5934.6	B	614075	7145424	5.2	25.9	12.0	90.4	0.1	12.2	---	---	0
I	5967.1	S	614486	7144268	2.6	9.0	17.3	71.6	1.8	9.9	---	---	0
J	5979.9	B?	614667	7143822	4.7	13.2	5.0	34.0	1.0	4.6	---	---	0
K	5996.4	B?	614925	7143277	1.9	9.6	6.4	39.5	1.8	5.4	---	---	0
L	6014.0	B?	615182	7142676	0.6	6.4	3.4	19.9	2.7	5.1	---	---	0
M	6020.8	B	615274	7142438	8.7	0.4	68.7	28.0	35.9	19.2	---	---	0
N	6026.5	D	615354	7142234	18.2	13.0	139.9	105.6	35.9	54.9	---	---	0
O	6040.0	S	615531	7141782	0.4	6.6	5.0	54.2	0.5	5.5	---	---	0
P	6056.2	B?	615721	7141323	11.8	10.3	179.7	256.2	7.3	47.7	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10380		FLIGHT 57										
Q	6095.0	S	616167	7140195	1.0	3.4	2.4	27.1	0.5	4.0	---	---	0
R	6160.0	S	616795	7138656	2.1	2.3	2.5	21.3	0.5	2.7	---	---	0
S	6172.6	S	616968	7138239	2.2	9.8	8.4	63.6	2.2	8.7	---	---	0
T	6198.5	B	617216	7137610	6.8	7.2	73.0	71.5	2.4	22.0	---	---	0
U	6230.7	B	617589	7136715	11.6	6.9	66.4	48.1	6.3	16.0	---	---	0
V	6239.6	B	617687	7136472	9.3	3.5	49.7	31.9	33.6	34.6	---	---	0
W	6250.7	B	617813	7136149	132.5	78.8	1169.1	517.5	421.5	492.2	---	---	0
X	6267.4	B	618032	7135604	9.5	26.2	110.9	277.0	4.4	42.9	---	---	7
Y	6270.8	D	618074	7135505	42.0	71.9	110.9	277.0	5.5	42.9	---	---	12
Z	6288.0	B?	618262	7135050	1.6	7.5	6.3	80.8	1.7	9.8	---	---	1
AA	6290.5	B?	618287	7134984	1.4	9.9	9.2	80.8	1.1	9.8	---	---	1
LINE	10390		FLIGHT 60										
A	5173.1	B?	611917	7151787	2.8	7.1	11.1	38.5	1.1	5.5	---	---	3
B	5152.0	S	612201	7151117	1.0	1.9	6.1	19.4	2.5	3.4	---	---	0
C	5068.5	S	613223	7148563	0.0	5.4	6.3	25.2	0.7	3.2	---	---	0
D	5036.0	S	613645	7147495	2.2	1.9	12.0	42.6	2.0	7.0	---	---	0
E	4957.6	S?	614413	7145598	4.0	12.9	23.0	95.3	1.2	11.8	---	---	0
F	4953.8	S?	614444	7145513	2.2	8.7	23.0	95.3	2.3	11.8	---	---	0
G	4916.9	B?	614918	7144356	3.2	15.3	5.7	41.6	0.8	5.4	---	---	0
H	4903.6	B?	615087	7143926	2.5	8.6	3.2	47.1	0.9	5.5	---	---	0
I	4881.7	B	615378	7143231	2.6	8.8	29.7	58.6	1.7	9.6	---	---	0
J	4858.4	B	615659	7142550	8.8	20.8	19.4	115.6	2.8	13.3	---	---	9
K	4845.5	B?	615825	7142131	1.7	12.0	8.8	64.7	2.9	9.6	---	---	0
L	4752.0	B?	616734	7139880	0.7	4.5	1.0	17.1	1.0	1.0	---	---	2
M	4702.0	S?	617230	7138663	0.6	5.3	6.4	22.5	0.5	3.3	---	---	0
N	4686.0	S	617429	7138190	0.8	3.2	5.0	17.6	2.2	2.2	---	---	2
O	4650.3	B	617858	7137115	10.1	10.7	51.5	59.8	3.8	15.6	---	---	4
P	4603.1	D	618355	7135896	7.2	23.8	17.7	92.8	3.9	12.2	---	---	0
Q	4585.1	B	618543	7135403	4.6	6.6	35.5	49.5	3.4	9.8	---	---	0
R	4563.2	B	618779	7134841	3.0	4.3	3.3	48.7	0.0	5.8	---	---	2
LINE	10400		FLIGHT 60										
A	3798.0	S	612505	7151407	0.7	4.1	10.3	18.7	0.5	5.0	---	---	0
B	3816.8	S	612722	7150866	1.4	5.8	10.9	37.7	0.7	5.4	---	---	0
C	3880.0	S	613417	7149188	1.1	3.4	3.4	24.6	3.5	3.5	---	---	0
D	3911.0	S	613795	7148230	1.3	8.7	16.3	39.5	0.8	7.0	---	---	2
E	4044.1	B?	614764	7145812	1.7	4.4	30.1	76.9	2.9	12.2	---	---	1

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10400		FLIGHT 60										
F	4073.8	S	615116	7144896	2.2	7.0	8.7	31.3	1.4	3.7	---	---	0
G	4109.9	S	615596	7143730	2.7	9.3	9.9	55.9	1.1	8.3	---	---	0
H	4130.9	D	615889	7143042	19.0	25.6	29.4	93.1	2.3	12.7	---	---	0
I	4153.0	S	616119	7142486	1.0	1.9	10.0	33.8	1.3	5.7	---	---	0
J	4191.3	B	616628	7141216	5.5	5.5	40.6	46.3	2.3	12.1	---	---	0
K	4318.5	D	617985	7137894	14.3	18.3	54.0	60.4	5.4	14.7	---	---	10
L	4327.0	B	618070	7137699	2.1	3.6	0.7	5.7	0.6	0.5	---	---	1
M	4388.0	B?	618635	7136227	8.4	21.5	49.1	113.2	2.9	17.6	---	---	0
N	4418.0	B	618990	7135389	3.9	5.9	12.8	31.1	1.9	6.3	0.6	32	1
O	4474.9	S?	619546	7134008	1.7	14.7	6.0	57.9	0.5	7.5	---	---	0
LINE	10410		FLIGHT 60										
A	3325.8	S	614926	7146495	0.7	7.4	4.0	43.1	1.9	6.0	---	---	15
B	3286.6	B?	615226	7145760	3.8	14.2	18.4	89.8	1.3	13.6	---	---	0
C	3278.8	S?	615324	7145508	1.9	7.1	11.0	30.1	1.1	3.8	---	---	0
D	3263.4	S?	615528	7145009	2.0	15.1	26.3	121.5	2.4	16.4	---	---	0
E	3260.1	S?	615576	7144900	4.8	22.8	26.3	121.5	2.2	16.7	---	---	0
F	3248.2	S	615736	7144506	4.5	9.6	6.7	28.7	0.5	4.5	---	---	0
G	3204.6	S?	616272	7143164	7.1	12.3	10.3	78.8	52.7	14.2	---	---	133
H	3203.2	M	616287	7143125	0.0	12.3	10.3	78.8	53.3	14.2	---	---	137
I	3199.7	B?	616318	7143038	10.9	22.9	10.3	88.1	53.9	13.0	---	---	0
J	3187.9	B?	616398	7142847	2.0	4.8	0.0	0.0	0.7	0.0	---	---	2
K	3142.0	B	616811	7141858	1.6	5.2	11.0	29.0	2.5	5.8	---	---	0
L	3076.0	B	617302	7140622	7.0	8.5	46.3	54.3	3.7	15.6	0.9	16	0
M	3012.6	S	617884	7139180	1.5	4.9	5.2	41.4	0.3	5.7	---	---	1
N	2952.6	B	618494	7137685	2.8	8.2	14.3	64.4	1.3	8.1	---	---	0
O	2897.7	B?	618982	7136457	3.5	32.8	46.3	217.6	5.8	28.2	---	---	2
P	2841.7	B	619452	7135319	4.8	6.0	24.8	32.1	13.7	11.1	---	---	1
Q	2781.4	B?	619942	7134097	2.1	14.3	8.1	72.5	2.2	8.6	---	---	0
LINE	10411		FLIGHT 60										
A	3536.0	S	612088	7153492	1.7	2.4	10.2	18.7	2.4	4.3	---	---	0
B	3468.0	S	612984	7151300	1.2	3.7	6.1	35.3	0.8	5.9	---	---	0
C	3425.0	S	613561	7149865	0.6	3.7	0.4	23.8	1.6	3.5	---	---	0
D	3389.5	S	614049	7148651	0.7	5.2	5.5	50.7	2.3	7.5	---	---	0
LINE	10420		FLIGHT 57										
A	892.0	S	612621	7153275	1.3	3.2	2.6	23.5	1.1	2.6	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	5500 HZ Quad ppm	CP 7200 HZ Real ppm	7200 HZ Quad ppm	CP 900 HZ Real ppm	900 HZ Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10420		FLIGHT 57										
B	827.7	S	613201	7151784	1.0	8.8	6.4	74.5	5.1	10.6	-0.1	7	2
C	768.4	S?	613745	7150488	1.1	6.6	5.9	21.7	2.7	3.4	---	---	0
D	751.9	S	613932	7150014	2.9	6.4	9.0	38.3	2.0	6.6	---	---	0
LINE	10421		FLIGHT 60										
A	2223.0	S	615364	7146479	3.1	2.2	4.6	43.6	0.3	5.9	---	---	0
B	2254.3	B?	615560	7145986	3.2	12.6	12.0	54.0	5.4	9.8	---	---	18
C	2258.8	S?	615609	7145875	0.0	7.7	0.5	107.9	0.0	16.2	-0.1	45	0
D	2281.0	S	615921	7145111	3.7	6.1	11.6	37.7	2.3	6.1	---	---	0
E	2294.4	B?	616123	7144612	1.8	10.0	8.0	31.1	2.0	4.1	---	---	3
F	2314.5	B?	616412	7143898	2.4	6.2	11.3	37.3	4.0	5.3	---	---	19
G	2333.8	D	616682	7143228	4.2	14.7	13.3	45.2	1.2	6.5	---	---	0
H	2343.0	D	616799	7142943	6.6	14.9	12.9	35.1	3.6	5.7	---	---	0
I	2436.0	B	617698	7140736	1.2	4.1	8.3	30.1	4.8	8.1	---	---	3
J	2488.0	S	618163	7139584	0.0	1.6	8.5	41.5	1.0	6.2	---	---	0
K	2544.0	B	618906	7137729	4.2	2.9	23.7	19.3	6.3	9.1	---	---	4
L	2574.2	B	619231	7136917	4.6	9.0	35.6	32.3	3.0	8.9	---	---	0
M	2627.6	B	619813	7135504	3.1	5.3	42.7	38.1	3.6	12.4	---	---	13
N	2682.7	S	620482	7133853	0.6	4.5	19.5	57.2	2.5	11.5	---	---	0
LINE	10430		FLIGHT 57										
A	1037.3	S	612680	7154228	0.6	8.1	4.5	55.8	1.9	8.0	---	---	0
B	1110.7	S	613310	7152626	1.9	4.6	4.2	49.5	0.2	7.4	-0.3	32	10
C	1212.1	S	614142	7150571	2.6	4.5	4.7	36.0	4.0	5.9	---	---	0
D	1227.7	S	614342	7150102	2.2	6.4	3.3	34.5	1.2	4.5	---	---	0
LINE	10431		FLIGHT 60										
A	2096.6	S	615848	7146355	1.0	5.3	6.1	14.8	4.8	2.5	---	---	53
B	2071.0	S	616024	7145923	2.6	8.9	13.9	65.1	0.7	9.5	---	---	0
C	2039.3	D	616356	7145100	4.5	17.1	14.5	62.2	1.4	9.2	---	---	0
D	2010.0	S	616745	7144144	0.5	2.9	10.5	26.9	2.1	5.7	---	---	4
E	1978.5	B?	617150	7143147	2.2	5.8	7.9	11.2	1.1	2.1	---	---	0
F	1940.4	S	617509	7142259	0.7	7.2	4.9	49.3	1.4	7.1	---	---	0
G	1864.0	B	618162	7140629	1.7	3.8	7.3	27.7	4.2	5.6	---	---	0
H	1736.8	B?	619522	7137302	4.6	8.4	20.0	13.8	5.1	1.3	---	---	2
I	1727.6	B?	619635	7137024	4.6	20.2	19.1	77.1	1.5	11.8	---	---	3
J	1671.3	S?	620142	7135774	2.5	5.3	3.1	18.4	1.3	3.1	---	---	0
K	1647.8	S	620333	7135289	2.7	6.8	12.4	65.8	0.7	10.1	---	---	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10431		FLIGHT 60										
L	1620.9	B?	620662	7134469	1.4	10.5	15.6	99.7	2.6	13.8	---	---	0
M	1615.8	B?	620725	7134317	1.8	10.4	15.6	93.2	0.4	11.9	---	---	0
N	1607.9	D	620822	7134087	2.4	17.7	11.1	104.2	3.1	15.2	---	---	2
O	1598.8	D	620936	7133802	9.9	18.7	34.6	15.7	2.8	5.9	---	---	3
P	1584.8	B	621113	7133350	13.8	44.2	70.8	217.5	6.5	33.2	---	---	0
LINE	10440		FLIGHT 56										
A	5063.2	S?	616153	7146685	1.6	13.3	13.1	63.0	2.1	7.7	---	---	74
B	5039.8	B	616358	7146181	4.5	5.4	19.0	45.0	0.8	0.9	---	---	197
C	5030.0	B	616437	7145976	2.8	10.9	11.8	39.9	2.0	6.7	---	---	5
D	5016.7	S	616570	7145645	3.0	10.8	18.4	66.0	1.8	9.8	---	---	3
E	5002.1	B?	616733	7145240	3.7	14.3	13.4	61.1	0.9	7.9	---	---	0
F	4987.1	S?	616945	7144750	3.9	8.0	6.8	7.1	3.2	2.1	---	---	2
G	4950.9	S?	617361	7143716	2.6	4.4	4.5	27.2	0.6	2.8	---	---	5
H	4920.0	S?	617616	7143063	3.5	7.5	14.2	36.9	0.8	5.6	0.4	17	1
I	4909.2	B?	617719	7142819	4.1	4.5	10.4	28.0	3.1	4.5	---	---	0
J	4901.9	D	617789	7142639	6.9	18.0	2.7	15.2	1.2	3.0	---	---	11
K	4887.7	S?	617923	7142313	0.7	7.7	16.5	76.1	1.1	10.9	---	---	0
L	4884.6	S?	617952	7142243	2.1	12.3	16.5	76.1	1.2	10.9	---	---	0
M	4788.0	B	618619	7140603	1.2	2.8	10.0	33.8	6.8	7.0	---	---	0
N	4748.3	S?	618938	7139813	2.1	9.0	11.7	59.8	1.7	8.6	---	---	0
O	4733.4	S	619094	7139419	2.5	9.2	16.2	95.3	2.6	11.7	---	---	0
P	4664.9	B?	619866	7137527	3.9	11.6	10.8	49.7	0.7	6.8	---	---	0
Q	4652.4	B?	619975	7137240	5.8	9.2	35.7	52.0	7.0	15.3	---	---	6
R	4627.3	B	620221	7136660	11.0	9.5	90.4	69.3	14.3	24.3	---	---	0
S	4614.7	B?	620370	7136292	4.4	11.0	12.9	44.6	3.0	7.3	---	---	0
T	4570.5	S?	620970	7134765	3.2	11.9	18.0	98.2	3.0	14.0	---	---	0
U	4568.6	S?	620995	7134700	2.8	14.2	18.0	98.2	2.1	14.0	---	---	0
V	4557.0	B	621158	7134325	8.0	18.8	37.5	70.7	3.3	16.0	---	---	0
W	4549.6	S?	621251	7134103	9.2	9.8	14.0	40.1	0.3	5.1	---	---	0
X	4541.6	B?	621356	7133853	5.6	16.0	3.8	40.2	2.5	7.9	---	---	1
Y	4535.4	B?	621438	7133644	10.8	13.7	36.9	21.6	4.2	8.8	---	---	0
Z	4524.7	S?	621561	7133319	3.3	20.2	37.4	149.6	3.6	22.3	---	---	2
LINE	10441		FLIGHT 57										
A	1509.8	S	613155	7154077	3.4	10.3	15.0	92.4	1.5	12.3	---	---	0
B	1446.4	S	613795	7152482	2.3	6.5	5.3	78.3	0.0	10.7	-0.3	27	2

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	5500 HZ Quad ppm	CP 7200 HZ Real ppm	7200 HZ Quad ppm	CP 900 HZ Real ppm	900 HZ Quad ppm	Vertical Dike COND siemens	Dike DEPTH* m	Mag. Corr NT
LINE 10450			FLIGHT 56										
A	3732.0	S	616525	7146816	3.2	7.1	20.5	68.0	2.2	12.3	---	---	14
B	3782.3	S?	616805	7146121	2.5	19.4	13.0	88.3	1.9	13.0	---	---	0
C	3792.9	S?	616896	7145901	7.9	21.6	34.6	173.9	9.4	22.5	---	---	0
D	3796.1	S?	616921	7145828	6.1	24.4	35.3	173.9	10.1	22.5	---	---	0
E	3810.8	S?	617089	7145419	2.8	20.8	12.9	102.6	1.4	12.9	---	---	1
F	3824.9	S	617268	7144955	3.3	14.4	21.4	61.1	1.2	9.7	---	---	3
G	3860.5	S	617617	7144143	1.0	6.5	1.0	26.6	3.5	3.0	---	---	19
H	3886.4	D	617806	7143665	5.2	8.0	11.8	17.2	0.8	3.3	---	---	24
I	3908.8	S?	618067	7143014	5.6	11.9	18.7	41.5	2.4	6.9	---	---	5
J	3939.7	S	618375	7142267	3.2	8.5	13.2	55.6	1.0	8.0	---	---	0
K	3964.0	B?	618626	7141639	2.3	7.9	7.3	29.5	1.3	4.6	---	---	0
L	3996.0	B	619024	7140664	9.6	4.1	61.4	4.2	50.1	19.6	3.5	28	0
M	4052.0	S	619373	7139788	1.1	1.0	5.1	20.1	1.5	3.8	---	---	0
N	4131.7	D	620194	7137757	3.4	13.0	19.4	28.4	2.7	5.5	---	---	0
O	4146.2	B?	620289	7137553	1.4	9.0	3.4	44.1	1.9	3.7	---	---	0
P	4167.0	B?	620449	7137152	2.5	5.5	6.3	12.0	3.4	3.4	---	---	5
Q	4182.0	B	620535	7136918	5.3	4.1	57.4	21.6	21.1	27.4	1.3	50	0
R	4236.3	S	620954	7135888	0.4	7.2	15.2	62.9	2.7	9.3	---	---	0
S	4278.3	S	621324	7134921	1.6	10.9	21.6	80.3	2.4	11.7	---	---	0
T	4286.8	S?	621411	7134697	3.6	18.5	15.6	96.1	5.6	12.0	---	---	0
U	4298.2	B	621543	7134412	19.9	47.1	103.0	218.6	12.3	40.7	---	---	0
V	4315.9	B	621718	7134000	6.1	10.6	36.7	76.3	2.7	13.9	---	---	0
W	4343.9	B?	621942	7133444	2.5	5.2	9.1	25.9	0.9	4.4	---	---	0
LINE 10451			FLIGHT 57										
A	1596.6	S	613632	7153987	0.5	6.7	5.7	28.9	1.9	3.1	---	---	0
B	1619.5	S?	613853	7153427	2.3	19.3	9.1	97.5	1.9	12.9	---	---	0
C	1645.2	S	614079	7152877	1.8	5.6	8.1	54.6	0.2	7.6	---	---	0
LINE 10460			FLIGHT 56										
A	3557.7	S?	617164	7146327	6.0	7.8	49.7	69.7	4.0	12.8	---	---	0
B	3448.3	S	618221	7143713	2.4	5.6	22.0	49.2	1.9	8.0	---	---	1
C	3444.2	B?	618267	7143596	5.3	3.3	20.6	11.0	1.3	5.3	---	---	0
D	3439.4	S	618329	7143458	4.3	9.3	20.6	60.1	3.0	9.2	---	---	0
E	3422.3	B?	618535	7142951	3.7	11.0	8.8	23.9	1.4	3.0	---	---	0
F	3408.8	S	618691	7142554	0.1	3.1	9.2	42.7	11.7	5.8	-0.1	29	10
G	3359.3	S	619223	7141244	3.1	10.9	15.9	65.8	4.3	10.0	---	---	1

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Vertical Dike DEPTH* m	Mag. Corr NT
LINE	10460		FLIGHT 56								
H	3320.5	B	619423	7140759	23.1	32.8	290.5	309.1	17.0	78.6	0
I	3288.0	S	619636	7140233	0.5	3.9	4.3	29.9	0.8	3.7	0
J	3194.1	B?	620512	7138056	4.4	12.2	18.8	38.0	1.5	6.6	0
K	3184.0	B?	620586	7137888	4.2	15.0	30.3	32.8	2.6	8.0	1
L	3172.5	B?	620656	7137710	1.5	5.9	8.2	21.5	1.3	4.8	5
M	3163.2	S	620716	7137571	1.8	8.5	6.2	74.7	1.7	10.4	0
N	3115.0	B	620940	7136983	3.5	4.4	18.5	20.1	4.7	7.6	1
O	3069.7	D	621249	7136233	23.9	31.3	62.3	121.4	2.8	18.2	0
P	3032.0	B	621720	7135085	6.8	4.3	49.3	29.7	9.1	20.5	0
Q	3022.6	B?	621845	7134765	5.2	9.6	34.8	75.5	1.5	12.7	2
R	3018.8	S?	621899	7134630	4.5	4.5	34.8	75.5	4.8	12.7	0
S	2992.3	S	622286	7133680	3.6	9.3	28.2	99.5	2.9	14.7	0
LINE	10461		FLIGHT 57								
A	1844.3	S	613981	7154199	2.9	8.9	21.1	94.0	3.9	12.7	0
LINE	10470		FLIGHT 58								
A	4877.4	S	617396	7146816	2.9	9.0	23.0	90.5	2.7	11.6	8
B	4811.4	S	618141	7144995	1.3	6.1	7.3	52.7	0.5	7.5	1
C	4791.1	S	618381	7144386	2.4	9.3	21.7	60.2	3.9	8.8	2
D	4767.5	S	618725	7143527	4.3	5.2	13.7	32.4	0.9	5.7	0
E	4739.7	S	619063	7142681	1.1	6.1	16.3	77.8	1.1	11.7	0
F	4720.7	D	619278	7142178	15.7	9.1	88.3	33.3	8.9	34.1	3
G	4710.3	B	619405	7141859	10.1	6.6	100.8	53.7	40.3	44.0	11
H	4701.8	D	619508	7141599	12.3	10.1	52.1	49.4	7.8	18.8	0
I	4667.2	D	619878	7140695	7.7	16.2	43.8	78.1	2.1	12.2	1
J	4630.8	B?	620215	7139866	0.7	5.8	4.0	32.3	0.9	3.5	0
K	4578.4	B	620802	7138393	9.3	15.1	32.7	69.2	1.6	14.5	0
L	4573.0	B	620857	7138255	8.4	1.5	98.0	69.2	10.1	28.9	0
M	4561.4	S	620982	7137963	1.3	6.0	17.2	66.9	1.9	9.7	0
N	4501.0	B	621362	7137012	2.4	0.9	10.0	7.4	5.7	4.9	0
O	4490.0	B	621423	7136866	1.7	1.9	4.5	8.8	0.4	1.2	0
P	4476.0	B	621508	7136677	0.8	0.6	0.0	0.0	0.2	0.1	0
Q	4455.5	B	621701	7136191	23.5	15.8	115.3	84.2	18.2	38.1	0
R	4440.8	B	621899	7135702	2.7	7.3	48.8	49.9	3.7	12.3	1
S	4419.8	B	622135	7135112	13.0	11.4	43.7	50.4	5.0	13.4	0
T	4412.8	B	622218	7134907	5.8	13.1	5.4	22.2	2.6	1.7	5
U	4406.0	D	622300	7134719	10.9	31.5	43.3	100.0	4.9	19.7	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	5500 HZ Quad ppm	CP 7200 HZ Real ppm	7200 HZ Quad ppm	CP 900 HZ Real ppm	900 HZ Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10470		FLIGHT 58										
V	4399.3	D	622374	7134529	2.2	9.7	18.2	25.5	1.5	5.1	---	---	0
W	4389.0	B?	622494	7134226	2.0	10.3	5.6	41.3	0.6	5.1	---	---	0
X	4368.4	S?	622718	7133691	5.9	21.7	43.1	174.6	2.7	24.8	---	---	0
LINE	10480		FLIGHT 58										
A	4956.1	B?	617857	7146775	8.7	3.2	46.1	32.5	5.7	16.9	---	---	12
B	4966.4	B?	617938	7146574	2.6	6.4	18.4	67.3	0.7	8.0	---	---	21
C	4973.4	B?	617994	7146428	1.5	8.3	0.0	56.3	0.7	7.4	---	---	0
D	5080.0	S	618675	7144762	0.0	0.9	8.3	28.7	0.9	5.3	---	---	1
E	5115.6	B?	619063	7143784	2.4	16.5	15.9	52.3	5.3	9.2	---	---	0
F	5123.8	B	619157	7143551	4.4	9.7	5.8	46.2	1.4	5.7	---	---	17
G	5161.1	B	619624	7142392	7.1	16.4	17.7	79.1	1.0	9.9	---	---	2
H	5175.1	D	619812	7141930	33.4	39.0	166.8	174.7	25.9	58.5	---	---	5
I	5178.1	B	619849	7141833	13.9	14.4	166.8	174.7	26.1	58.5	---	---	0
J	5181.9	B	619899	7141712	2.0	4.1	30.7	61.9	20.4	8.3	---	---	0
K	5187.1	B	619971	7141546	7.4	16.2	49.1	59.1	20.4	20.9	---	---	79
L	5188.8	D	619993	7141491	17.6	7.6	103.4	59.1	20.4	30.3	---	---	0
M	5192.3	B	620040	7141383	6.7	1.4	103.4	49.6	31.5	30.3	---	---	16
N	5195.0	B	620073	7141307	9.4	4.7	29.9	0.3	31.7	4.5	---	---	0
O	5198.4	B	620113	7141216	2.5	11.3	12.0	99.1	7.7	11.8	---	---	0
P	5202.1	B	620152	7141117	1.1	6.2	16.0	99.1	4.9	11.8	---	---	0
Q	5288.8	B?	621069	7138811	6.4	10.9	38.0	71.6	1.2	12.5	---	---	3
R	5291.3	D	621103	7138721	6.7	11.5	38.0	71.6	2.0	12.5	---	---	3
S	5298.9	D	621203	7138452	8.7	12.8	19.2	8.0	1.8	3.0	---	---	0
T	5308.7	S?	621326	7138136	2.0	12.1	16.8	78.1	14.0	10.1	---	---	0
U	5315.9	M	621414	7137923	0.0	0.0	53.9	106.7	23.6	21.1	---	---	142
V	5318.9	D	621453	7137840	12.6	24.4	53.9	106.7	23.6	21.1	---	---	0
W	5381.1	B	622128	7136221	9.3	3.3	74.8	62.5	1.2	12.7	---	---	0
X	5395.5	D	622310	7135754	23.5	30.0	77.6	96.4	2.2	16.0	---	---	0
Y	5416.4	B?	622614	7135008	5.5	18.8	54.3	121.6	3.3	22.1	---	---	0
Z	5422.6	B?	622693	7134812	2.2	6.9	5.8	14.4	1.8	3.4	---	---	0
LINE	10490		FLIGHT 58										
A	5904.3	S?	618221	7146953	6.0	16.5	28.3	81.1	1.5	13.4	---	---	0
B	5892.6	B	618368	7146640	23.6	36.4	77.9	124.7	3.4	20.9	---	---	5
C	5803.2	S	619409	7144026	2.2	6.8	7.1	46.7	1.3	5.8	---	---	0
D	5786.1	B?	619616	7143514	4.7	12.8	33.1	76.7	2.0	12.6	---	---	2
E	5781.5	B?	619673	7143355	2.8	5.6	33.1	17.1	3.2	1.7	---	---	10

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Vertical Dike DEPTH* m	Mag. Corr NT
LINE	10490		FLIGHT 58								
F	5761.7	B?	619935	7142673	3.2	8.4	5.0	16.4	0.7	1.9	0
G	5756.5	B?	620004	7142512	1.9	9.5	14.6	50.6	1.0	8.1	3
H	5749.7	B?	620087	7142324	4.9	14.2	32.5	107.3	2.4	15.0	0
I	5740.1	B?	620173	7142118	1.3	2.9	0.3	12.9	0.0	2.7	39
J	5716.0	D	620364	7141671	66.2	55.4	115.9	83.0	34.9	42.8	0
K	5710.6	B	620406	7141571	25.1	25.8	40.0	7.8	34.9	8.2	9
L	5703.3	D	620457	7141424	25.1	49.1	113.3	136.5	0.7	36.7	4
M	5691.6	B	620564	7141147	11.1	3.2	92.6	44.3	5.1	14.3	0
N	5674.4	S	620769	7140647	0.7	8.2	2.4	40.9	1.7	4.6	2
O	5628.5	D	621340	7139199	7.2	12.8	16.3	27.5	3.9	5.5	0
P	5622.6	B	621428	7139002	3.2	11.4	3.0	3.5	4.5	4.3	0
Q	5617.7	B	621497	7138842	15.5	14.3	76.4	69.7	4.7	16.1	4
R	5608.5	D	621620	7138531	6.5	11.0	1.8	17.8	1.1	2.2	0
S	5594.9	D	621803	7138076	29.0	23.9	145.9	111.2	18.5	43.4	0
T	5550.0	S	622280	7136915	1.5	8.7	26.2	82.5	0.6	11.4	37
U	5540.0	S	622404	7136610	1.7	4.9	25.8	34.6	4.1	5.2	2
V	5517.8	D	622681	7135927	9.2	24.6	27.3	108.1	2.1	16.4	0
LINE	10500		FLIGHT 58								
A	6004.0	S?	618652	7146963	4.6	10.5	27.0	22.8	1.9	4.4	0
B	6062.0	S	619197	7145604	5.0	1.4	6.8	22.0	0.9	3.2	15
C	6107.0	S	619501	7144857	0.5	2.2	2.1	16.8	0.7	2.6	0
D	6125.9	B?	619732	7144274	7.4	26.3	31.4	113.1	2.1	16.0	0
E	6139.5	M	619880	7143913	1.8	0.4	13.9	0.6	0.0	0.6	145
F	6144.3	M	619933	7143785	0.0	6.4	13.9	32.3	25.1	4.9	132
G	6148.7	S	619986	7143633	2.4	10.5	33.5	67.6	26.1	10.5	0
H	6161.0	B	620191	7143142	14.5	6.5	103.2	63.4	4.0	49.3	0
I	6165.0	B	620252	7142983	11.0	9.2	103.2	49.8	53.6	49.3	44
J	6170.5	D	620333	7142782	8.5	10.7	11.5	23.4	7.2	3.0	0
K	6178.0	D	620442	7142522	2.8	9.8	12.4	22.5	3.2	3.6	0
L	6193.6	B	620623	7142060	2.4	7.2	2.1	23.4	0.4	2.4	0
M	6222.0	D	620821	7141612	64.7	33.3	232.6	138.5	120.5	87.1	0
N	6230.8	B	620890	7141418	0.9	0.0	107.3	20.7	27.5	33.0	22
O	6236.5	B	620947	7141276	13.7	6.1	107.3	30.5	30.7	33.0	0
Q	6250.3	D	621096	7140878	15.0	11.0	30.1	34.6	6.1	8.7	0
P	6275.0	B?	621360	7140263	3.1	9.1	20.2	37.8	1.6	7.2	0
R	6286.0	S	621460	7139998	1.3	3.4	6.9	34.0	2.6	5.4	0
S	6302.9	B?	621693	7139430	4.9	14.9	24.1	83.1	1.9	11.9	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	Quad ppm	CP 7200 HZ Real ppm	Quad ppm	CP 900 HZ Real ppm	Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	10500		FLIGHT 58										
T	6306.0	D?	621738	7139320	3.7	8.5	24.1	83.1	2.2	11.9	---	---	0
U	6318.0	D	621913	7138905	13.8	25.1	20.7	44.0	0.1	7.7	---	---	0
V	6351.4	B?	622352	7137793	2.6	7.7	9.1	28.4	1.1	3.8	---	---	0
W	6371.5	B	622568	7137282	11.2	15.1	78.0	108.5	3.7	23.3	---	---	11
LINE	10510		FLIGHT 58										
A	6817.3	D	619247	7146551	0.6	7.5	31.3	39.6	6.6	10.4	---	---	0
B	6813.9	D	619292	7146437	8.0	11.3	31.3	39.6	6.6	5.4	---	---	14
C	6805.8	S	619405	7146159	2.6	7.8	19.7	24.1	4.2	5.0	---	---	7
D	6749.8	S	619999	7144708	2.4	13.8	21.9	91.4	2.6	11.3	---	---	0
E	6727.2	S	620294	7143947	2.3	9.3	20.0	36.7	12.2	4.8	---	---	0
F	6721.4	M	620363	7143768	1.3	0.2	0.0	12.3	0.0	2.6	---	---	187
G	6684.8	D	620712	7142942	33.3	38.0	76.4	113.1	9.2	26.3	---	---	8
H	6631.8	D	621100	7141977	1.6	6.0	4.2	21.0	0.5	3.5	---	---	7
I	6577.0	B	621423	7141127	2.0	3.5	22.6	51.6	4.4	6.9	---	---	0
J	6569.2	D	621478	7141034	17.2	13.9	75.7	66.1	15.1	24.9	---	---	2
K	6551.4	B?	621588	7140768	5.3	12.0	15.0	84.5	1.1	10.0	---	---	0
L	6531.9	B?	621792	7140258	2.6	14.9	4.9	47.0	0.9	5.7	---	---	5
M	6512.6	S?	621946	7139846	2.8	6.5	23.1	51.9	1.7	9.9	---	---	0
N	6491.9	D	622180	7139295	24.7	33.7	125.9	132.8	15.5	29.0	1.2	3	7
O	6488.4	D	622221	7139195	21.3	22.8	125.9	132.8	23.2	29.0	---	---	0
P	6484.0	B?	622276	7139076	0.0	15.6	1.6	94.6	23.9	20.1	-0.1	41	110
LINE	10520		FLIGHT 58										
A	6900.3	B	619773	7146309	7.2	7.0	61.9	22.1	21.8	19.1	---	---	16
B	6903.0	B	619806	7146227	2.8	1.9	61.9	23.7	21.8	19.1	---	---	0
C	6934.9	S	620130	7145464	2.7	8.9	6.0	45.3	0.8	6.4	---	---	5
D	6952.0	B	620357	7144895	2.6	11.4	6.9	37.0	1.9	4.9	---	---	0
E	6987.6	S	620831	7143700	0.7	3.7	2.0	42.4	0.4	4.9	---	---	0
F	7014.1	B	621125	7142977	19.4	33.8	121.2	250.0	5.0	44.9	---	---	0
G	7015.9	B	621148	7142921	14.7	20.5	113.0	250.0	8.9	38.9	---	---	34
H	7020.6	B	621205	7142780	2.5	7.0	98.3	82.6	10.2	47.4	---	---	0
I	7024.0	B	621242	7142681	7.0	5.6	98.3	54.3	38.8	47.4	1.4	39	10
J	7061.6	B	621634	7141716	1.8	8.0	3.9	56.4	2.2	4.3	---	---	0
K	7090.3	D	621993	7140842	9.3	13.5	0.6	36.5	3.3	10.7	---	---	36
L	7098.0	B?	622067	7140653	1.5	3.9	5.1	35.5	3.1	11.6	---	---	0
M	7117.8	B?	622312	7140041	4.1	12.5	25.5	75.7	2.2	11.7	---	---	5
N	7132.4	B?	622510	7139553	12.2	13.4	53.2	127.9	1.3	16.5	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ		CP 7200 HZ		CP 900 HZ		Vertical Dike		Mag. Corr NT
					Real ppm	Quad ppm	Real ppm	Quad ppm	Real ppm	Quad ppm	COND siemens	DEPTH* m	
LINE	10530		FLIGHT 58										
A	2995.7	S?	620536	7145494	6.9	9.9	35.5	91.7	2.9	15.1	---	---	4
B	3011.4	S	620754	7144978	2.3	10.5	3.2	46.3	1.2	7.2	---	---	0
C	3020.8	S?	620865	7144695	3.2	14.0	20.3	77.7	2.5	11.0	---	---	0
D	3036.5	S	620995	7144381	1.7	7.8	9.6	49.7	1.8	6.8	---	---	17
E	3079.3	S	621456	7143222	2.8	9.1	10.9	53.3	0.7	8.1	---	---	2
F	3099.9	B	621657	7142720	10.5	14.5	33.4	81.7	2.0	12.0	---	---	0
G	3156.0	S	622011	7141828	0.6	4.0	2.4	33.6	0.2	5.1	---	---	0
H	3178.2	D	622312	7141133	13.1	16.9	66.5	83.8	7.9	17.6	---	---	0
I	3192.0	B	622466	7140745	6.2	7.1	16.9	72.2	3.5	12.6	0.9	11	0
LINE	10540		FLIGHT 58										
A	2836.2	S?	620580	7146472	0.8	7.5	3.1	37.6	0.2	4.6	---	---	23
B	2829.4	S?	620634	7146339	1.3	6.4	1.8	27.2	1.3	3.0	---	---	0
C	2799.7	B	620954	7145522	6.1	7.2	22.6	42.5	0.6	9.9	---	---	4
D	2776.9	S	621220	7144880	1.8	9.5	6.2	92.7	0.3	11.6	---	---	0
E	2765.7	S	621372	7144540	2.7	13.2	19.8	67.8	2.7	10.3	---	---	0
F	2725.9	S	621794	7143478	3.6	5.0	15.3	52.3	0.9	10.9	---	---	0
G	2685.6	B	622165	7142574	14.0	22.3	105.0	147.4	5.5	35.2	---	---	0
H	2683.3	B	622191	7142518	9.0	19.5	105.0	147.4	9.1	35.2	---	---	78
LINE	10550		FLIGHT 58										
A	2426.0	S	620967	7146610	1.4	4.2	4.3	7.9	1.7	2.2	---	---	0
B	2454.2	D	621282	7145803	64.6	67.8	430.7	434.4	54.7	145.0	---	---	0
C	2478.3	B?	621485	7145291	5.3	24.8	35.6	240.4	2.4	33.3	---	---	0
D	2498.1	S	621741	7144722	1.4	10.9	8.8	76.3	3.4	10.0	---	---	0
E	2505.6	S?	621817	7144521	2.5	27.6	3.9	98.7	0.6	12.8	-0.1	5	0
F	2516.5	B?	621912	7144245	5.3	38.1	27.7	206.0	3.5	27.1	---	---	4
G	2520.1	B?	621950	7144155	4.5	39.8	27.7	206.0	0.0	27.1	---	---	0
H	2526.8	S?	622022	7143980	2.4	17.0	3.6	69.7	4.7	9.4	---	---	0
I	2535.3	B?	622126	7143728	6.6	22.5	40.5	127.0	1.7	18.7	---	---	0
J	2549.1	M	622251	7143384	0.0	0.0	7.5	18.4	1.6	2.3	---	---	22
LINE	10560		FLIGHT 58										
A	2354.6	S	621505	7146347	2.4	8.4	12.1	60.2	2.7	9.6	---	---	0
B	2329.0	B	621742	7145737	8.1	8.7	89.8	72.2	23.9	37.4	1.0	26	0
C	2291.5	S	622193	7144641	0.8	4.3	14.7	67.6	1.8	9.8	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	5500 HZ Quad ppm	CP 7200 HZ Real ppm	7200 HZ Quad ppm	CP 900 HZ Real ppm	900 HZ Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE 10570			FLIGHT 58										
A	2128.0	S	621968	7146262	0.7	0.1	9.4	36.7	1.1	5.4	---	---	0
B	2157.9	B	622141	7145838	8.7	24.2	51.0	85.0	9.6	22.4	---	---	0
C	2162.1	D	622188	7145740	14.3	23.0	39.3	81.1	4.4	19.1	---	---	34
LINE 19010			FLIGHT 57										
A	2246.1	S?	609236	7151861	1.1	7.9	10.7	72.3	0.6	9.5	---	---	0
B	2190.8	S?	610226	7152271	5.1	21.0	17.4	97.4	0.2	12.5	---	---	0
C	2166.7	B?	610829	7152511	5.1	8.0	13.8	49.0	3.8	5.7	---	---	0
D	2132.0	S	611668	7152852	0.5	1.6	0.9	23.8	0.2	3.4	---	---	0
E	2109.6	S	612126	7153035	1.0	5.4	7.9	31.4	2.9	4.9	---	---	0
F	2087.0	S	612674	7153263	1.4	4.8	0.5	39.0	1.3	4.6	---	---	2
G	2077.9	B?	612952	7153384	2.3	8.7	4.5	7.7	2.4	2.8	---	---	0
H	2005.4	S?	614254	7153898	3.3	20.0	26.7	232.8	1.8	31.2	---	---	0
LINE 19020			FLIGHT 57										
A	302.0	D	609529	7146758	11.2	35.4	26.9	160.9	1.9	22.5	---	---	6
B	317.5	D	609931	7146922	5.3	9.8	3.6	19.6	1.7	3.4	---	---	0
C	324.4	B	610098	7146994	3.0	11.6	10.9	31.8	1.1	3.4	---	---	0
D	377.4	B	611203	7147436	5.5	16.6	27.7	133.1	6.2	19.1	---	---	0
E	388.6	B?	611389	7147516	3.1	8.6	0.0	27.6	2.3	4.2	---	---	0
F	401.1	B?	611592	7147600	3.3	12.7	13.2	25.3	1.2	6.8	---	---	0
G	443.5	S?	612175	7147849	3.4	12.7	5.7	50.6	1.2	6.1	---	---	3
H	454.5	S	612331	7147922	2.1	10.9	11.9	70.9	0.9	10.2	---	---	0
I	492.2	S	613078	7148208	2.2	8.3	2.5	31.6	2.9	4.1	---	---	1
J	554.0	S	614041	7148607	0.8	5.8	9.4	48.5	1.5	7.5	---	---	0
LINE 19021			FLIGHT 61										
A	441.2	S	600015	7142864	1.3	17.4	1.9	77.9	1.4	9.9	---	---	0
B	413.0	S	600874	7143213	3.7	7.5	20.2	46.6	5.0	8.9	---	---	0
C	401.6	S	601281	7143382	4.1	14.8	34.8	79.3	3.1	16.4	---	---	0
D	392.6	S	601610	7143518	1.7	7.8	6.7	37.6	5.0	7.3	---	---	0
LINE 19030			FLIGHT 58										
A	1368.6	D	605980	7140086	17.5	22.0	87.2	127.6	8.5	32.3	---	---	22
B	1383.9	B	606380	7140254	1.7	2.3	4.1	20.7	4.2	1.5	---	---	1
C	1498.2	D	610124	7141774	4.8	11.6	13.8	28.5	3.4	6.8	---	---	0
D	1533.0	S	611270	7142255	2.4	6.9	8.7	34.6	0.7	3.5	---	---	30

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	DEPTH* m	Mag. Corr NT
LINE	19030		FLIGHT 58								
E	1543.3	D	611616	7142404	4.9	11.7	7.4	52.3	1.6	8.9	0
F	1548.5	D	611770	7142475	4.3	5.5	27.0	25.1	2.8	6.8	0
G	1553.4	D	611891	7142519	2.7	9.2	15.3	17.2	1.3	4.5	0
H	1559.5	D	612018	7142565	26.1	32.2	129.1	119.6	4.5	45.1	0
I	1627.4	M	613459	7143156	0.0	3.6	3.1	64.5	0.0	6.3	180
J	1630.2	S	613547	7143190	4.5	7.0	15.0	64.5	17.7	8.4	2
K	1648.3	S	614131	7143420	3.1	7.2	5.2	24.9	0.8	3.6	4
L	1661.6	S	614513	7143582	3.3	9.6	9.4	63.1	1.6	9.2	0
M	1672.2	D	614839	7143716	5.3	13.2	6.4	27.1	2.3	3.4	0
N	1689.3	S	615429	7143958	1.2	7.9	6.5	31.2	1.0	5.1	0
O	1778.6	S	617854	7144955	4.4	16.1	18.9	77.1	2.2	10.8	2
P	1786.4	S	618141	7145070	3.2	8.3	17.5	39.1	0.3	6.1	9
Q	1790.4	D	618286	7145129	4.4	9.0	17.5	27.2	2.5	5.3	9
R	1811.2	S	618850	7145347	1.3	2.1	10.6	68.4	0.3	9.3	7
S	1861.5	B	620033	7145842	4.8	4.4	16.1	45.2	1.0	5.9	1
T	1917.1	S	620853	7146177	2.1	13.2	23.0	76.6	3.6	11.8	2
U	1929.5	B?	621197	7146327	5.4	22.0	20.4	59.0	2.7	9.0	0
V	1934.5	S?	621365	7146395	6.3	22.0	20.4	91.9	1.7	11.9	3
LINE	19040		FLIGHT 58								
A	3675.3	D?	612814	7137683	3.5	8.3	7.0	31.2	0.4	4.6	4
B	3650.0	S?	613695	7138027	5.7	17.3	16.0	86.3	1.0	11.7	2
C	3610.5	B?	615036	7138577	1.3	5.6	4.8	7.7	1.8	2.2	0
D	3514.6	S?	617549	7139605	1.3	8.6	3.4	27.0	2.1	3.1	1
E	3503.4	S	617878	7139742	1.1	9.9	7.8	41.9	0.9	5.7	0
F	3470.7	B?	618834	7140140	2.1	9.1	8.5	33.7	1.8	5.1	2
G	3445.0	B	619615	7140452	1.5	4.4	10.8	20.1	3.1	7.0	0
H	3430.3	D	620023	7140618	6.5	9.3	38.0	58.1	2.4	9.8	0
I	3408.6	S	620512	7140822	2.1	4.9	8.1	57.8	1.0	7.9	0
J	3379.2	D	621341	7141156	31.4	29.8	67.9	80.7	4.5	21.9	0
K	3359.2	D	621968	7141415	7.5	15.2	21.1	66.3	0.2	7.1	0
LINE	19050		FLIGHT 58								
A	3971.4	D	618166	7134646	6.6	26.5	10.4	72.6	0.3	11.9	0
B	4014.0	B	619445	7135159	0.6	1.9	4.6	5.0	14.3	3.6	0
C	4031.2	B	619995	7135396	3.9	6.8	32.0	36.9	2.7	10.3	18
D	4094.6	S	621547	7136027	1.6	6.7	10.5	57.4	10.3	9.3	29
E	4105.7	B?	621834	7136127	5.3	11.5	21.8	53.6	5.0	7.2	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Dike DEPTH* m	Mag. Corr NT		
LINE 19050			FLIGHT 58										
F	4117.5	B?	622185	7136281	5.4	6.2	61.4	64.1	1.7	12.8	---	---	3
LINE 19060			FLIGHT 56										
A	967.0	B	599033	7143183	13.6	5.6	85.5	45.6	29.2	38.7	---	---	2
B	922.7	S	600452	7143231	4.9	10.6	37.9	72.9	5.2	14.1	---	---	11
C	909.1	S	600869	7143242	3.7	9.9	5.9	56.1	3.6	7.6	---	---	0
D	893.6	S	601413	7143266	0.8	7.7	34.9	63.8	5.4	12.9	---	---	0
E	891.3	S?	601498	7143269	7.4	11.3	35.3	68.0	5.4	12.9	---	---	8
F	823.7	B?	603128	7143330	3.0	17.0	16.0	62.9	0.8	9.0	---	---	7
G	772.2	D	604011	7143359	7.6	15.7	12.4	47.8	1.3	7.6	---	---	16
H	728.5	B?	604842	7143390	3.3	10.8	18.3	56.9	0.2	9.0	---	---	26
I	721.0	D	604971	7143399	16.6	6.2	59.1	56.9	18.3	23.5	---	---	0
J	629.8	S	605828	7143415	2.1	7.9	8.8	47.5	0.5	7.1	---	---	0
K	604.0	B?	606204	7143426	1.3	5.9	0.0	21.5	0.3	2.2	---	---	29
L	564.5	B?	606505	7143433	12.1	11.9	40.7	52.1	5.1	13.1	---	---	0
M	552.6	B?	606685	7143443	2.9	9.2	21.4	37.2	1.4	12.0	---	---	24
N	512.0	B?	607417	7143475	2.4	6.8	3.9	12.0	1.2	2.5	---	---	0
O	506.5	B?	607555	7143480	1.4	5.8	3.1	7.0	1.6	1.6	---	---	35
P	446.8	S?	608532	7143502	5.9	16.9	16.2	67.2	1.6	10.0	---	---	0
Q	430.3	B	608858	7143522	14.8	18.1	27.9	65.4	2.5	8.9	---	---	8
R	416.8	D	609091	7143525	0.0	6.9	0.0	5.0	14.0	0.0	-0.1	29	76
S	402.5	D	609290	7143533	9.1	20.0	51.8	66.5	4.6	15.2	---	---	0
T	374.0	B	609623	7143543	8.2	8.0	175.7	137.2	79.0	61.9	---	---	22
U	369.2	D	609686	7143549	62.2	41.3	175.7	137.2	78.8	61.9	---	---	0
V	364.1	M	609750	7143554	0.4	12.8	169.5	127.6	0.0	61.8	---	---	138
LINE 19070			FLIGHT 56										
A	6716.6	B	609173	7143011	35.5	32.2	252.8	122.0	107.2	106.3	---	---	21
B	6706.1	B	609165	7143206	6.7	2.7	49.8	57.1	15.8	27.9	---	---	0
C	6678.7	D	609149	7143740	8.7	15.1	37.5	63.3	5.2	16.1	---	---	0
D	6637.0	S	609119	7144581	2.1	1.3	14.7	41.3	1.3	5.9	---	---	0
E	6610.7	D	609087	7145240	6.5	20.2	22.9	66.4	1.9	10.3	---	---	0
F	6583.5	B?	609057	7146109	4.9	11.5	14.5	49.6	1.6	7.3	---	---	8
G	6544.4	S	609001	7147476	5.8	10.4	19.8	58.2	2.1	8.9	---	---	27
H	6335.3	S	608787	7153028	1.4	7.8	1.3	36.7	2.0	5.9	---	---	1
LINE 19080			FLIGHT 56										
A	6129.5	B?	609042	7153931	3.1	9.6	8.7	43.1	1.4	6.0	---	---	0

CX = COAXIAL
CP = COPLANAR

Note: EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ		CP 7200 HZ		CP 900 HZ		Vertical Dike		Mag. Corr NT
					Real ppm	Quad ppm	Real ppm	Quad ppm	Real ppm	Quad ppm	COND siemens	DEPTH* m	
LINE 19080			FLIGHT 56										
B	6114.1	D	609482	7153945	5.1	13.0	17.2	47.1	0.9	6.5	---	---	0
C	6090.0	B?	609959	7153976	4.7	6.4	8.4	23.1	1.6	4.2	0.7	18	0
D	6074.0	B?	610390	7153985	4.2	6.8	4.2	12.5	1.4	0.7	0.6	26	0
E	6063.0	S?	610748	7154000	2.3	8.9	6.9	29.2	1.6	4.5	---	---	0
F	6008.9	S	611734	7154036	2.1	8.1	2.5	32.5	1.9	4.6	---	---	0
G	5924.0	S	613196	7154081	1.6	3.9	10.1	44.0	0.6	6.3	---	---	0
H	5885.9	B?	613991	7154116	2.1	6.2	5.2	12.2	2.0	1.6	---	---	0
I	5870.6	B?	614246	7154128	1.9	10.3	12.1	30.7	1.0	6.1	---	---	0
LINE 19090			FLIGHT 56										
A	5595.9	S	613991	7154190	3.2	6.7	13.3	41.4	0.8	7.0	---	---	0
B	5536.8	S	614036	7152854	3.8	6.2	5.9	42.5	0.0	5.3	---	---	1
C	5524.6	S	614040	7152511	2.1	4.6	11.5	34.7	1.0	5.6	---	---	0
D	5485.6	S?	614095	7151363	0.8	7.4	2.9	26.3	1.7	2.8	---	---	0
E	5467.0	B?	614105	7150707	2.6	7.9	3.4	19.2	3.0	1.4	---	---	0
F	5463.2	B?	614112	7150567	2.7	4.8	4.2	18.8	1.3	3.6	---	---	0
G	5452.3	B	614123	7150176	1.7	8.5	9.8	17.9	2.2	3.0	---	---	0
H	5441.9	D	614136	7149809	2.3	7.9	2.3	41.1	1.6	5.9	---	---	0
I	5404.3	S	614175	7148648	1.8	7.1	0.0	34.6	1.0	5.5	---	---	0
J	5394.0	S?	614184	7148363	3.0	10.1	23.3	53.3	3.4	8.5	---	---	3
K	5369.5	B?	614205	7147632	4.5	13.4	26.9	71.6	2.8	10.1	---	---	26
L	5366.1	B?	614213	7147541	5.4	9.8	26.9	71.6	1.9	10.1	---	---	0
M	5361.0	B?	614231	7147418	1.5	11.5	8.3	41.5	1.7	5.1	---	---	18
LINE 19100			FLIGHT 60										
A	485.6	S	615266	7146760	0.0	5.7	12.6	33.3	2.7	5.8	---	---	4
B	501.4	B?	615623	7146758	6.0	11.6	25.5	81.2	2.8	13.5	---	---	0
C	539.8	B?	616360	7146712	3.0	9.1	22.1	43.4	4.1	9.6	---	---	24
D	550.9	B?	616603	7146705	2.7	8.8	25.8	39.2	1.7	10.3	---	---	0
E	587.3	B?	617312	7146683	9.7	25.5	54.8	118.5	3.6	24.0	---	---	0
F	591.4	B?	617443	7146682	5.1	15.0	54.8	118.5	4.8	24.0	---	---	10
G	601.7	B?	617799	7146661	9.8	15.0	53.9	88.0	1.7	18.7	---	---	0
H	626.4	B?	618373	7146648	12.7	27.0	100.0	195.3	1.4	32.7	---	---	0
I	644.8	D	618810	7146639	12.1	22.4	86.6	87.9	0.0	26.0	---	---	0
J	653.2	B?	619053	7146634	7.7	11.7	89.3	42.3	11.6	27.5	---	---	7
K	671.1	S	619574	7146608	3.7	8.5	30.3	68.3	3.4	12.9	---	---	13
L	729.3	S?	621097	7146532	2.4	8.1	4.9	23.3	2.2	3.4	---	---	27
M	750.6	S	621743	7146511	3.2	11.6	20.8	69.5	1.2	11.3	---	---	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ Real ppm	CP 7200 HZ Quad ppm	CP 900 HZ Real ppm	CP 900 HZ Quad ppm	Vertical Dike COND siemens	Vertical Dike DEPTH* m	Mag. Corr NT
LINE	19110		FLIGHT 60								
A	1350.8	S	622472	7133566	3.6	11.1	31.9	50.4	1.6	9.6	0
B	1297.8	S	622392	7135328	5.3	7.2	46.5	83.3	4.6	17.2	0
C	1284.9	D	622380	7135796	22.5	27.1	59.5	84.7	3.0	14.9	0
D	1264.9	B?	622358	7136343	1.4	5.8	11.4	44.3	4.1	6.5	0
E	1242.0	B?	622338	7136925	1.2	5.9	19.1	59.8	1.5	8.8	32
F	1224.0	B	622328	7137238	7.8	3.8	54.1	21.0	4.5	14.0	0
G	1201.1	S?	622300	7137820	3.5	11.2	13.9	55.8	1.0	6.5	0
H	1155.3	B?	622233	7139320	11.3	14.1	78.0	88.9	5.1	20.8	0
I	1116.7	B	622178	7140572	3.1	8.3	12.5	27.5	7.8	7.5	1
J	1104.3	D	622160	7140857	66.4	56.2	121.5	137.6	16.3	34.4	36
K	1089.6	B	622155	7141281	16.7	21.1	107.1	126.7	0.9	31.3	0
L	1063.7	S?	622123	7142105	2.3	10.4	2.2	37.7	1.6	5.6	18
M	1047.0	B	622108	7142496	4.9	17.4	104.8	116.8	11.4	36.3	41
N	1042.0	B	622099	7142617	16.3	17.6	104.8	116.8	3.6	36.8	0
O	1021.7	S	622076	7143118	2.7	8.8	11.0	44.6	1.5	7.7	2
P	996.9	S	622056	7143647	2.8	19.8	38.9	172.7	2.9	24.8	0
Q	971.5	S?	622028	7144434	4.3	21.7	16.0	59.9	1.2	8.8	0
R	944.5	B?	621994	7145253	2.6	5.6	3.4	31.1	1.1	3.6	0
S	932.2	D	621976	7145603	7.6	9.8	37.9	26.2	4.3	11.7	14
LINE	19120		FLIGHT 56								
A	2296.2	B?	613735	7136780	1.5	6.2	3.3	44.4	0.8	6.0	0
B	2372.8	S?	615340	7136096	4.3	13.4	31.8	124.6	2.9	18.1	7
C	2377.5	S?	615453	7136044	1.7	20.5	25.1	116.2	2.4	15.6	0
D	2417.9	B	616493	7135601	20.4	19.4	105.8	100.6	4.2	22.0	5
E	2421.6	B	616588	7135562	4.3	9.8	23.5	100.6	2.0	12.1	0
F	2433.6	S?	616896	7135430	7.9	22.2	52.7	138.2	3.2	22.7	0
G	2446.1	S?	617216	7135294	2.0	8.8	4.8	32.7	1.1	5.5	0
H	2456.7	D	617482	7135181	7.8	21.7	35.0	95.9	1.6	14.4	0
I	2462.7	B?	617634	7135115	3.4	7.3	31.1	61.3	1.9	11.3	5
J	2465.7	B?	617715	7135084	4.6	4.0	31.1	61.3	2.0	11.3	8
K	2599.9	S	620459	7133913	2.2	4.6	13.8	36.9	1.8	6.2	0
L	2618.1	D	620864	7133734	8.0	17.9	25.9	72.2	1.8	12.1	0
M	2635.1	S?	621245	7133570	4.8	8.9	22.3	61.9	4.6	12.3	0
N	2661.0	S	621793	7133339	3.8	3.1	21.1	86.2	1.1	11.9	0

CX = COAXIAL
CP = COPLANAR

Note:EM values shown above
are local amplitudes

*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 magnetite/overburden effects

EM Anomaly List

Label	Fid	Interp	XUTM m	YUTM m	CX 5500 HZ		CP 7200 HZ		CP 900 HZ		Vertical Dike		Mag. Corr NT
					Real ppm	Quad ppm	Real ppm	Quad ppm	Real ppm	Quad ppm	COND siemens	DEPTH* m	
LINE	19130		FLIGHT 56										
A	1257.1	B	599301	7142189	1.0	7.9	25.9	44.6	3.8	14.0	---	---	0
B	1293.6	B?	600223	7141854	12.1	28.0	61.1	162.6	6.8	28.7	---	---	8
C	1317.6	S?	600645	7141699	2.8	11.6	5.7	60.0	0.9	8.6	---	---	0
D	1330.0	S	600935	7141596	0.9	4.5	5.5	37.4	1.6	4.6	---	---	0
E	1345.3	S?	601351	7141430	1.2	7.6	4.5	54.7	1.0	7.8	---	---	0
F	1364.0	S	601931	7141227	2.0	3.7	24.5	71.5	1.4	10.7	---	---	0
G	1385.0	S	602548	7140984	0.9	0.5	12.0	31.9	1.8	4.9	---	---	0
H	1408.0	S	603202	7140738	2.4	4.7	13.8	58.1	1.2	7.6	-0.4	48	0
I	1422.7	B?	603616	7140586	3.3	8.6	4.0	43.3	0.2	5.4	0.3	21	0
J	1444.7	S	604199	7140381	3.8	5.7	23.0	52.9	3.5	10.0	---	---	0
K	1463.3	S	604625	7140228	2.2	10.3	14.4	60.9	0.0	8.8	---	---	2
L	1485.7	S	605158	7140020	3.3	5.7	26.9	75.0	0.6	12.8	---	---	0
M	1510.1	B	605813	7139766	18.6	4.4	251.6	27.6	182.5	74.4	---	---	61
N	1543.8	S?	606748	7139428	1.8	11.1	7.0	48.6	0.8	7.2	-0.1	4	0
O	1577.5	M	607678	7139083	0.0	4.1	0.0	43.1	0.7	7.3	---	---	145
P	1601.9	S	608305	7138851	2.3	6.7	12.8	61.1	2.1	8.5	-0.3	19	5
Q	1626.1	S	608855	7138645	2.2	7.3	5.3	28.0	2.5	4.6	-0.2	15	64
R	1637.7	S	609127	7138544	1.2	4.6	6.2	27.1	1.8	4.7	-0.2	24	0
S	1685.6	S	610287	7138113	1.8	7.4	20.8	55.4	2.8	8.4	---	---	11
T	1717.1	S	611213	7137757	2.6	5.0	10.6	50.5	0.9	7.7	---	---	1

CX = COAXIAL
 CP = COPLANAR
 GPR2002_2

Note: EM values shown above
 are local amplitudes

*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 magnetite/overburden effects