010

REPORT ON
COMBINED HELICOPTER-BORNE
MAGNETIC, ELECTROMAGNETIC,
AND VLF-EM SURVEY
ON
NAMEIGOS RIVER CLAIMS

RECEIVED
DEC 12 1983
MINING LANDS SECTION

for

PRYME ENERGY RESOURCES

by

AERODAT LIMITED

July 1983

TABLE OF CONTENTS

LIST OF MAPS

(Scale: 1/15,840)

Map 1	Interpreted Conductive Units
Map 2	Airborne Electromagnetic Survey Profile Map (955 Hz. coaxial)
Map 3	Total Field Magnetic Map
Map 4	VLF-EM Total Field Contours

Data provided but not included in report:

1 - master map (2 colour) of coaxial and coplanar profiles with flight path

2 - anomaly list providing estimates of depth and conductivity thickness

3 - analogue records of data obtained in flight

1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Pryme Energy Resources Limited by Aerodat Limited. Equipment operated included a 3 frequency electromagnetic system, a VLF-EM system, and a magnetometer.

The survey was flown on March 26 to March 29, 1983 from an operations base at Wawa Ontario. A total of 869.5 line miles were flown, at a nominal line spacing of 660 feet. Of the total flown, this report describes 238.6 line miles.

2. SURVEY AREA/CLAIM NUMBERS AND LOCATIONS

The mining claim numbers and locations covered by this survey are indicated on the map in the following pocket.

3. AIRCRAFT EQUIPMENT

3.1 Aircraft

The helicopter used for the survey was an Aerospatial Astar 350D owned and operated by North Star Helicopters. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The survey aircraft was flown at a nominal altitude at 60 meters.

3.2 Equipment

3.2.1 Electromagnetic System

The electromagnetic system was an Aerodat/ Geonics 3 frequency system. Two vertical coaxial coil pairs were operated at 955 and 4130 Hz and a horizontal coplanar coil pair at 4500 Hz. The transmitter-receiver separation was 7 meters. In-phase and quadrature signals were measured simultaneously for the 3 frequencies with a time-constant of 0.1 seconds. The electromagnetic bird was towed 30 meters below the helicopter.

3.2.2 VLF-EM System

The VLF-EM System was a Herz 2A. This instrument measures the total field and vertical quadrature component of two selected frequencies. The sensor was towed in a bird 15 meters below the helicopter.

The sensor aligned with the flight direction is designated as "LINE", and the sensor perpendicular to the line direction as "ORTHO". The "LINE" station used was NAA, Cutler Maine, 17.8 KHz or NLK, Jim Creek Washington, 24.8 KHz. The "ORTHO" station was NSS, Annapolis Maryland, 21.4 KHz. The NSS transmitter was operating on a very limited schedule and was not available during a large part of the survey.

3.2.3 Magnetometer

The magnetometer was a Geometrics G-803 proton precession type. The sensitivity of the instrument was 1 gamma at a 1.0 second sample rate. The sensor was towed in a bird 15 meters below the helicopter.

3.2.4 Magnetic Base Station

An IFG proton precession type magnetometer was operated at the base of operations to record diurnal variations of the earths magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation.

3.2.5 Radar Altimeter

A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

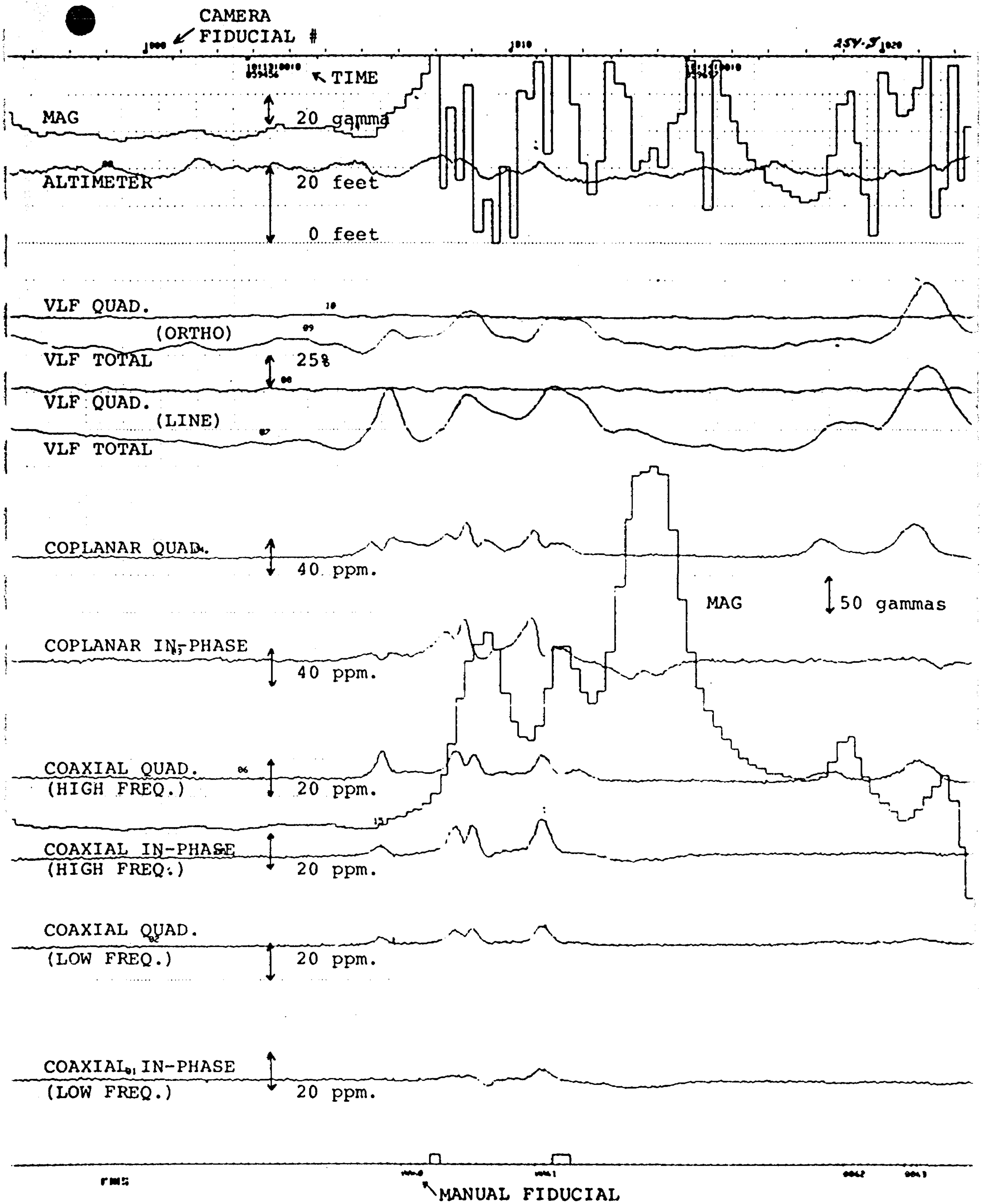
3.2.6 Tracking Camera

A Geocam tracking camera was used to record flight path on 35 mm film. The camera was operated in strip mode and the fiducial numbers for cross reference to the analog and digital data were imprinted on the margin of the film.

3.2.7 Analog Recorder

A RMS dot-matrix recorder was used to display the data during the survey. A sample record with channel identification and scales is presented on the following page.

ANALOG CHART



3.2.8 Digital Recorder

A Perle DAC/NAV data system recorded the survey data on cassette magnetic tape. Information recorded was as follows:

Equipment	Interval
EM	0.1 second
VLF-EM	0.5 second
magnetometer	0.5 second
altimeter	1.0 second
fiducial (time)	1.0 second
fiducial (manual)	0.2 second

4. DATA PRESENTATION

4.1 Base Map and Flight Path Recovery

The base map photomosaic at a scale of 1/15,840 was constructed from available aerial photography. The flight path was plotted manually on this base and digitized for use in the computer compilation of the maps. The flight path is presented with fiducials for cross reference to both the analog and digital data.

4.2 Electromagnetic Profile Maps

The electromagnetic data was recorded digitally at a high sample rate of 10/second with a small time constant of 0.1 second. A two stage digital filtering process was carried out to reject major sferic events, and reduce system noise.

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

The signal to noise was further enhanced by the application of a low pass filter. The filter was applied digitally. It has zero phase shift which prevents any lag or peak displacement from occurring and it suppresses only variation with a wavelength less than about 0.25 seconds. This low effective time constant permits maximum profile shape resolution.

Following the filtering processes, a base level correction was made. The correction applied is a linear function of time that ensures that the corrected amplitude of the various inphase and quadrature components is zero when no conductive or permeable source is present. This filtered and levelled data was then presented in profile map form.

The in-phase and quadrature responses of the coaxial 955 Hz configuration are plotted with the flight path and presented on the photomosaic base.

The in-phase and quadrature responses of the coaxial 4500 Hz and the coplanar 4130 Hz configuration are plotted with flight path and are available as a two colour overlay.

4.3 Magnetic Contour Maps

The aeromagnetic data was corrected for diurnal variations by subtraction of the digitally recorded base station magnetic profile. No correction for regional variation is applied.

The corrected profile data was interpolated onto a regular grid at a 2.5 mm interval using a cubic spline technique. The grid provided the basis for threading the presented contours at a 10 gamma interval.

4.4 VLF-EM Contour and Profile Maps

The VLF-EM "LINE" signal, was compiled in map form. The mean response level of the total field signal was removed and the data was gridded and contoured at an interval of 2%. When the "ORTHO" signal was available it was compiled in a similar fashion.

4.5 Electromagnetic Conductor Symbolization

The electromagnetic profile maps were used to identify those anomalies with characteristics typical of bedrock conductors. The in-phase and quadrature response amplitudes at 4130 Hz were digitally applied to a phasor diagram for the vertical half-plane model and estimates of conductance (conductivity thickness) were made. The conductance levels were divided into categories as indicated in the map legend; the higher the number, the higher the estimated conductivity thickness product.

As discussed in Appendix I the conductance should be used as a relative rather than absolute guide to conductor quality. A conductance value of less than 2 mhos is typical for conductive overburden material and electrolytic conducto› in faults and shears. Values greater than 4 mhos generally indicate some electronic conduction by certain metallic sulphides and/or graphite. Gold, although highly conductive, is not expected to occur in sufficient concentration to directly produce an electromagnetic anomaly; however, accessory mineralization such as pyrite or graphite can produce a measurable response.

With the aid of the profile maps, responses of similar characteristics may be followed from line to line and conductor axes identified.

The distinction between conductive bedrock and overburden anomalies is not always clear and some of the symbolized anomalies may not be of bedrock origin. It is also possible that a response may have been mistakenly attributed to overburden and therefore not included in the symbolization process. For this reason, as geological and other geophysical information becomes available, reassessment of the significance of the various conductors is recommended.

4.6 INTERPRETATION MAPS

The conductive trends are shown and discriminated for descriptive purposes.

These conductors are described below.

1	Definite bedrock conductor flanking magnetic feature, best conductivity at centre.
2	Questionable response in area of conductive overburden.
3	Possible bedrock response with magnetic coincidence.
4	Weak linear conductor appears to be in bedrock.
5	High amplitude poor conductivity parallel to magnetic features, possibly bedrock.
6	Poor conductor parallel to magnetic high. Probably overburden.
7	Possible short bedrock (?) conductor with magnetic coincidence.

8 Questionable conductor on magnetic high.

9 Questionable unit at edge of overburden response.

Respectfully submitted,

August 8, 1983. Fenton Scott, P.Eng.

APPENDIX I

GENERAL INTERPRETIVE CONSIDERATIONS

Electromagnetic

The Aerod t 3 frequency system utilizes 2 different transmitter-receiver coil geometries. The traditional coaxial coil configuration is operated at 2 widely separated frequencies and the horizontal coplanar coil pair is operated at a frequency approximately aligned with one of the coaxial frequencies.

The electromagnetic response measured by the helicopter system is a function of the "electrical" and "geometrical" properties of the conductor. The "electrical" property of a conductor is determined largely by its conductivity and its size and shape; the "geometrical" property of the response is largely a function of the conductors shape and orientation with respect to the measuring transmitter and receiver.

Electrical Considerations

For a given conductive body the measure of its conductivity or conductance is closely related to the measured phase shift between the received and transmitted electromagnetic field. A small phase shift indicates a relatively high conductance, a large phase shift lower conductance. A small phase shift results in a large in-phase to quadrature ratio and a large phase shift a low ratio. This relationship is shown quantitatively for a vertical half-plane model on the accompanying phasor diagram. Other physical models will show the same trend but different quantitative relationships.

The phasor diagram for the vertical half-plane model, as presented, is for the coaxial coil configuration with the amplitudes in ppm as measured at the response peak over the conductor. To assist the interpretation of the survey results the computer is used to identify the apparent conductance and depth at selected anomalies. The results of this calculation are presented in table form in Appendix I and the conductance and in-phase amplitude are presented in symbolized form on the map presentation.

The conductance and depth values as presented are correct only as far as the model approximates the real geological situation. The actual geological source may be of limited length, have significant dip, its conductivity and thickness may vary with depth and/or strike and adjacent bodies and overburden may have modified the response. In general the conductance estimate is less affected by these limitations than the depth estimate but both should be considered a relative rather than absolute guide to the anomalies properties.

Conductance in mhos is the reciprocal of resistance in ohms and in the case of narrow slab like bodies is the product of electrical conductivity and thickness.

Most overburden will have an indicated conductance of less than 2 mhos; however, more conductive clays may have an apparent conductance of say 2 to 4 mhos. Also in the low conductance range will be electrolytic conductors in faults and shears.

The higher ranges of conductance, greater than 4 mhos, indicate that a significant fraction of the electrical conduction is electronic rather than electrolytic in nature. Materials that conduct electronically are limited to certain metallic sulphides and to graphite. High conductance anomalies, roughly 10 mhos or greater are generally limited to sulphide or graphite bearing rocks.

Sulphide minerals with the exception of sphalerite, cinnabar and stibnite are good conductors; however, they may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously under rate the quality of the conductor in geological terms. In a similar sense the relatively non-conducting sulphide minerals noted above may be present in significant concentration in association with minor conductive sulphides, and the electromagnetic response only relate to the minor associate mineralization. Indicated conductance is also of little direct significance for the identification of gold mineralization. Although gold is highly conductive it would not be expected to exist in sufficient quantity to create a recognizable anomaly but minor accessory sulphide mineralization could provide a useful indirect indication.

In summary the estimated conductance of a conductor can provide a relatively positive identification of significant sulphide or graphite mineralization; however, a moderate to low conductance value does not rule out the possibility of significant economic mineralization.

Geometrical Considerations

Geometrical information about the geologic conductor can often be interpreted from the profile shape of the anomaly. The change in shape is primarily related to the change in inductive coupling among the transmitter, the target, and the receiver.

In the case of a thin, steeply dipping, sheet-like conductor, the coaxial coil pair will yield a near symmetric peak over the conductor. On the other hand the coplanar coil pair will pass through a null couple relationship and yield a minimum over the conductor, flanked by positive side lobes. As the dip of the conductor decreases from vertical, the coaxial anomaly shape changes only slightly, but in the case of the coplanar coil pair the side lobe on the down dip side strengthens relative to that on the up dip side.

As the thickness of the conductor increases, induced current flow across the thickness of the conductor becomes relatively significant and complete null coupling with the coplanar coils is no longer possible. As a result, the apparent minimum of the coplanar response over the conductor diminishes with increasing thickness, and in the limiting case of a fully 3 dimensional body or a horizontal layer or half-space, the minimum disappears completely.

A horizontal conducting layer such as overburden will produce a response in the coaxial and coplanar coils that is a function of altitude (and conductivity if not uniform). The profile shape will be similar in both coil configurations with an amplitude ratio (coplanar/coaxial) of about 4/1.*

In the case of a spherical conductor, the induced currents are confined to the volume of the sphere, but not relatively restricted to any arbitrary plane as in the case of a sheet-like form. The response of the coplanar coil pair directly over the sphere may be up to 8* times greater than that of the coaxial coil pair.

In summary a steeply dipping, sheet-like conductor will display a decrease in the coplanar response coincident with the peak of the coaxial response. The relative strength of this coplanar null is related inversely to the thickness of the conductor; a pronounced null indicates a relatively thin conductor. The dip of such a conductor can be infered from the relative amplitudes of the side-lobes.

Massive conductors that could be approximated by a conducting sphere will display a simple single peak profile form on both coaxial and coplanar coils, with a ratio between the coplanar to coaxial response amplitudes as high as 8.*

Overburden anomalies often produce broad poorly defined anomaly profiles. In most cases the response of the coplanar coils closely follow that of the coaxial coils with a relative amplitude ratio of 4.*

Occasionally if the edge of an overburden zone is sharply defined with some significant depth extent, an edge effect will occur in the coaxial coils. In the case of a horizontal conductive ring or ribbon, the coaxial response will consist of two peaks, one over each edge; whereas the coplanar coil will yield a single peak.

* It should be noted at this point that Aerodat's definition of the measured ppm unit is related to the primary field sensed in the receiving coil without normalization to the maximum coupled (coaxial configuration). If such normalization were applied to the Aerodat units, the amplitude of the coplanar coil pair would be halved.

Magnetics

The Total Field Magnetic Map shows contours of the total magnetic field, uncorrected for regional variation. Whether an EM anomaly with a magnetic correlation is more likely to be caused by a sulphide deposit than one without depends on the type of mineralization. An apparent coincidence between an EM and a magnetic anomaly may be caused by a conductor which is also magnetic, or by a conductor which lies in close proximity to a magnetic body. The majority of conductors which are also magnetic are sulphides containing pyrrhotite and/or magnetite. Conductive and magnetic bodies in close association can be, and often are, graphite and magnetite. It is often very difficult to distinguish between these cases. If the conductor is also magnetic, it will usually produce an EM anomaly whose general pattern resembles that of the magnetics. Depending on the magnetic permeability of the conducting body, the amplitude of the inphase EM anomaly will be weakened, and if the conductivity is also weak, the inphase EM anomaly may even be reversed in sign.

VLF Electromagnetics

The VLF-EM method employs the radiation from powerful military radio transmitters as the primary signals. The magnetic field associated with the primary field is elliptically polarized in the vicinity of electrical conductors. The Herz Totem uses three coils in the X. Y. Z. configuration to measure the total field and vertical quadrature component of the polarization ellipse.

The relatively high frequency of VLF 15-25 KHz provides high response factors for bodies of low conductance. Relatively "disconnected" sulphide ores have been found to produce measurable VLF signals. For the same reason, poor conductors such as sheared contacts, breccia zones, narrow faults, alteration zones and porous flow tops normally produce VLF anomalies. The method can therefore be used effectively for geological mapping. The only relative disadvantage of the method lies in its sensitivity to conductive overburden. In conductive ground the depth of exploration is severely limited.

The effect of strike direction is important in the sense of the relation of the conductor axis relative to the energizing electromagnetic field. A conductor aligned along a radius drawn from a transmitting station will be in a maximum coupled orientation and thereby produce a stronger response than a similar conductor at a different strike angle. Theoretically it would be possible for a conductor, oriented tangentially to the transmitter to produce no signal. The most obvious effect of the strike angle consideration is that conductors favourably oriented with respect to the transmitter location and also near perpendicular to the flight direction are most clearly rendered and usually dominate the map presentation.

The total field response is an indicator of the existence and position of a conductivity anomaly. The response will be a maximum over the conductor, without any special filtering, and strongly favour the upper edge of the conductor even in the case of a relatively shallow dip.

The vertical quadrature component over steeply dipping sheet like conductor will be a cross-over type response with the cross-over closely associated with the upper edge of the conductor.

The response is a cross-over type due to the fact that it is the vertical rather than total field quadrature component that is measured. The response shape is due largely to geometrical rather than conductivity considerations and the distance between the maximum and minimum on either side of the cross-over is related to target depth. For a given target geometry, the larger this distance the greater the depth.

The amplitude of the quadrature response, as opposed to shape is function of target conductance and depth as well as the conductivity of the overburden and host rock. As the primary field travels down to the conductor through conductive material it is both attenuated and phase shifted in a negative sense. The secondary field produced by this altered field at the target also has an associated phase shift. This phase shift is positive and is larger for relatively poor conductors. This secondary field is attenuated and phase shifted in a negative sense during return travel to the surface. The net effect of these 3 phase shifts determine the phase of the secondary field sensed at the receiver.

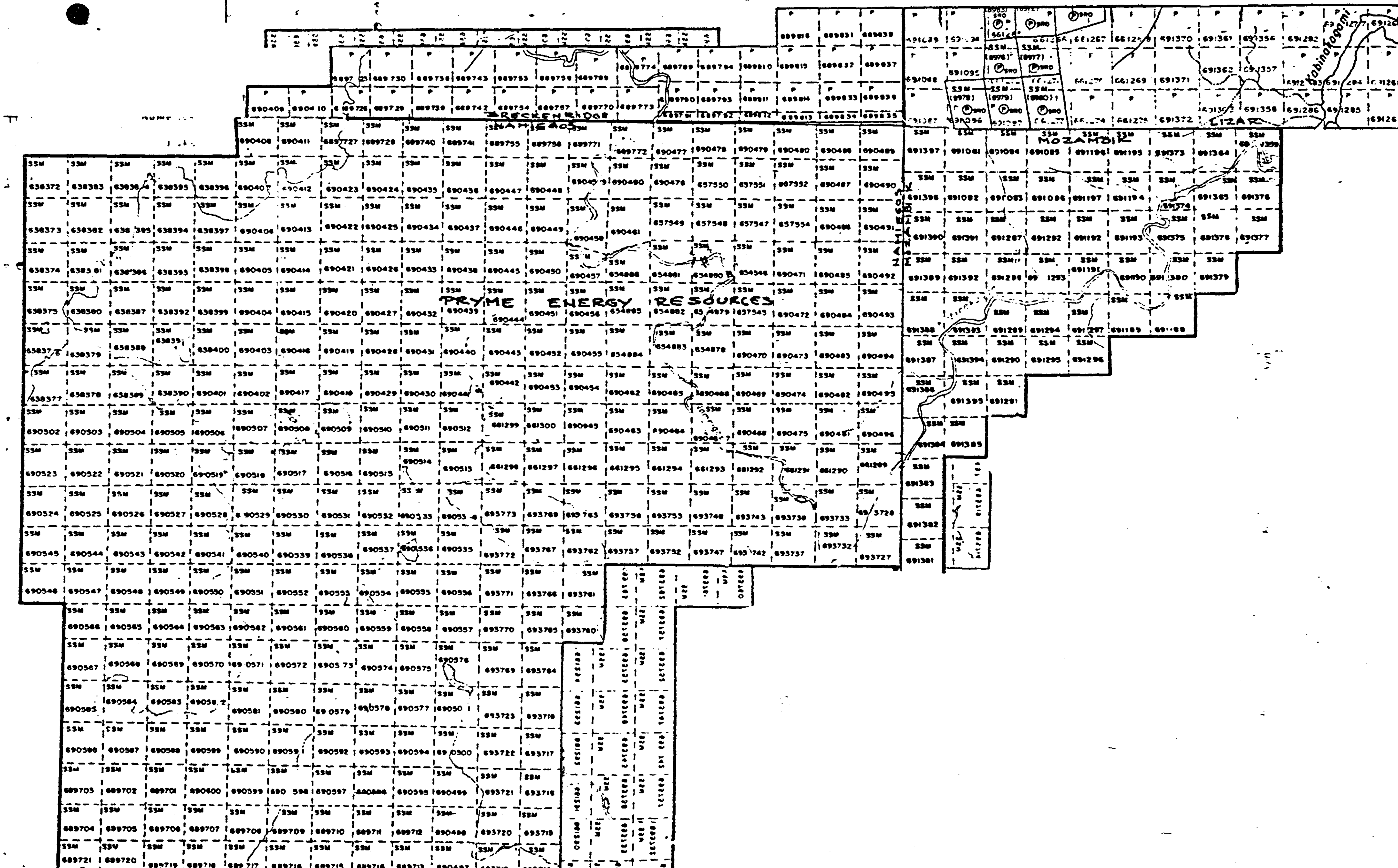
A relatively poor conductor in resistive ground will yield a net positive phase shift. A relatively good conductor in more conductive ground will yield a net negative phase shift. A combination is possible whereby the net phase shift is zero and the response is purely in-phase with no quadrature component.

A net positive phase shift combined with the geometrical cross-over shape will lead to a positive quadrature response on the side of approach and a negative on the side of departure. A net negative phase shift would produce the reverse. A further sign reversal occurs with a 180 degree change in instrument orientation as occurs on reciprocal line headings. During digital processing of the quadrature data for map presentation this is corrected for by normalizing the sign to one of the flight line headings.

42C15SE0006 NAMEIGOS0017 LIZAR

900

Initial Check	M. Anderson Dec 28, 1983
Assessed	Apr. 1/84 - O.K.
Approved Reports of Work sent out	
Notice of Intent filed	
Approval after Notice of Intent sent out	
Duplicate sent to Resident Geologist	
Duplicate sent to A.F.R.O.	


PRYME ENERGY RESOURCES
MOZAMBIK
LIZAR

SELF POTENTIAL

Instrument ______ Range ______

Survey Method ______

Corrections made ______

RADIOMETRIC

Instrument ______

Values measured ______

Energy windows (levels) ______

Height of instrument ______ Background Count ______

Size of detector ______

Overburden ______
(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey ______

Instrument ______

Accuracy ______

Parameters measured ______

Additional information (for understanding results) ______

AIRBORNE SURVEYS

Type of survey(s) MAGNETIC EM

Instrument(s) GEOMETRICS G-803 AERODAT 3 FREQ
(specify for each type of survey)

Accuracy 0.5 GAMMAS 1PPM
(specify for each type of survey)

Aircraft used AERO SPATIAL -A-STAR HELICOPTER

Sensor altitude 150' 100'

Navigation and flight path recovery method VISUAL NAVIGATION, MANUAL AND AUTOMATIC FIDUCIALS – ON BOARD CAMERA

Aircraft altitude 200' Line Spacing 660'

Miles flown over total area 869.5 Over claims only 238.6

File ____________

Ministry of Natural Resources

Ontario

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) ELECTROMAGNETIC, MAGNETIC, ~~[illegible]~~

Township or Area BRECKENRIDGE, LIZAR, NAMEGOS, MOSAMBIK

Claim Holder(s) ROCCO SCHIRALLI (INTRUST)

Survey Company AERODAT LIMITED

Author of Report FENTON SCOTT

Address of Author 17 MALABAR PL. DON MILLS ONT.

Covering Dates of Survey MARCH 26/83 → MARCH 29/83
(linecutting to office)

Total Miles of Line Cut 238.6

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not appl, to airborne surveys)

Magnetometer 20.2 Electromagnetic 20.2 ~~Radiometric~~ ____
(enter days per claim)

DATE: Nov. 30/83 SIGNATURE: [signature]
Author of Report or Agent

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

SEE LIST ATTACHED

If space insufficient, attach list

RECEIVED
DEC 13 1983
MINING LANDS SECTION

TOTAL CLAIMS 450

OFFICE USE ONLY

Res. Geol. ____________ Qualifications [illegible]

Previous Surveys

File No.	Type	Date	Claim Holder

837 (5/79)

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act **2.6150**

Instructions:
- Please type or print. Jan. 7th
- If number of mining claims traversed exceeds space on this form, attach a list.
- Note: Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

Type of Survey(s): GEOPHYSICAL E.M. & MAG. (AIRBORNE)

Township or Area: NAMEIGOS & MOSAMBIK

Claim Holder(s): Rocco Schiralli (In Trust) Agent for - see attached appendix

Prospector's Licence No.: A-39586

Address: Suite 420 - 181 University Ave., Toronto, Ont. M5H 3M7

Survey Company: Aerodat Limited, Mississauga, Ont.

Date of Survey (from & to): 26 03 83 – 29 03 83 (Day | Mo. | Yr.)

Total Miles of line Cut: 238.6

Name and Address of Author (of Geo-Technical report): Fenton Scott, 17 Malabar Place, Don Mills, Ont.

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	20
	Magnetometer	20
	Radiometric	

RECEIVED ... MINING ...

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

SAULT STE. MARIE MINING DIV.
RECEIVED
NOV 8 1983
A.M. 7,8,9,10,11,12,1,2,3,4,5,6 P.M.

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
SSM	638372		SSM	638395	
	638373			638396	
	638374			638397	
	638375			638398	
	638376			638399	
	638377			638400	
	638378			654878	
	638379			654879	
	638380			654880	
	638381			654881	
	638382			654882	
	638383			654883	
	638384			654884	
	638385			654885	
	638386			654886	
	638387			657545	
	638388			657546	
	638389			657547	
	638390			657548	
	638391			657549	
	638392			657550	
	638393			657551	
	638394		SEE ATTACHED LIST		

Total number of mining claims covered by this report of work: 377

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
15,080	November 8, 1983	[signature]
	Date Approved as Recorded: 84.4.3	Branch Director: [signature]

Date	Recorded Holder or Agent (Signature)
Nov 1, 1983	[signature]

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: [illegible] P.O. Box 1205 [illegible] Ont.

Date Certified	Certified by (Signature)
Nov 1, 1983	[signature]

1362 (81/9)

file on SSM 638372

Ministry of Natural Resources
Ontario

Jan 2nd

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

#341/83

The Mining Act 2.6150

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): Geophysical E.M. & Mag. (Airborne)

Township or Area: Breckenridge & Lizar

Claim Holder(s): Rocco Schiralli (In Trust)

Prospector's Licence No.: A-39586

Address: Suite 420, 181 University Ave., Toronto, Ontario. M5H 3M7

Survey Company: Aerodat Limited, Mississauga, Ont.

Date of Survey (from & to): 26 03 83 | 29 03 83 (Day | Mo. | Yr.)

Total Miles of line Cut: 238.6

Name and Address of Author (of Geo-Technical report): Fenton Scott, 17 Malabar Place, Don Mills, Ontario. M3B 1A5

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	20
	Magnetometer	20
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

RECORDED
NOV 3 1983
Receipt No. C1

Calculation of Expenditure Days Credits

Total Expenditures $ ______ ÷ 15 = Total Days Credits ______

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	661265		P	689774	
	661266			689789	
	661267			689790	
	661268			689791	
	661269			689792	
	661270			689793	
	661271			689794	
	661272			689810	
	661273			689811	
	661274			689812	
	661275			689813	
	689725			689814	
	689738			689815	
	689739			689816	
	689742			689831	
	689743			689832	
	689753			689833	
	689754			689834	
	689757			689835	
	689758			689836	
	689769			689837	
	689770			689838	
	689773			SEE ATTACHED LIST	

Total number of mining claims covered by this report of work: 72

PORCUPINE MINING DIVISION
RECEIVED
NOV 03 1983
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

For Office Use Only

Total Days Cr.: 2880 | Date Recorded: Nov 3/83 | Mining Recorder
Date Approved as Recorded: 84.4.3 | Branch Director

Date: Oct. 31/83 | Recorded Holder or Agent (Signature): R. C. Denommee

Certification Verifying Report of Work

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

Name and Postal Address of Person Certifying: R.C. Denommee, P.O. Box 1205, Timmins, Ont.

Date Certified: Oct. 31/83 | Certified by (Signature): R. C. Denommee

LIST OF CLAIMS FOR AIRBORNE E.M. & MAG. SURVEY:

CLAIM NOS.	ASSESSMENT WORK:
P-690409	40 days
690410	40
691087	40
691088	40
691089	40
691094	40
691095	40
691096	40
691097	40
691260	40
691261	40
691262	40
691277	40
691282	40
691283	40
691284	40
691285	40
691286	40
691356	40
691357	40
691358	40
691361	40
691362	40
691363	40
691370	40
691371	40
691372	40

Rocco Schiralli (In Trust) is agent for the following:

Noranda Exploration Company, Limited (NPL)	A.34387
Denis DeSerres	K.19783

List of Claims for Airborne Mag. Survey

Claim No.	Assessment Work	Claim No.	Assessment Work
SSM-657552	40 days	SSM-689717	40 days
657554	40 "	689718	40 "
SSM-661289	40 "	689719	40 "
661290	40 "	689720	40 "
661291	40 "	689721	40 "
661292	40 "	SSM-689740	40 "
661293	40 "	689741	40 "
661294	40 "	SSM-689755	40 "
661295	40 "	689756	40 "
661296	40 "	SSM-689771	40 "
661297	40 "	689772	40 "
661298	40 "	SSM-690401	40 "
661299	40 "	690402	40 "
661300	40 "	690403	40 "
SSM-689701	40 "	690404	40 "
689702	40 "	690405	40 "
689703	40 "	690406	40 "
689704	40 "	690407	40 "
689705	40 "	690408	40 "
689706	40 "	SSM-690411	40 "
689707	40 "	690412	40 "
689708	40 "	690413	40 "
689709	40 "	690414	40 "
689710	40 "	690415	40 "
689711	40 "	690416	40 "
689712	40 "	690417	40 "
689713	40 "	690418	40 "
689714	40 "	690419	40 "
689715	40 "	SSM-690420	40 "
689716	40 "	690421	40 "

List of Claims For Airborne Mag. Survey

Claim No.	Assessment Work	Claim No.	Assessment Work
…M- ~~[illegible]~~ 690422	40 Days	SSM-690452	40 Days
690423	40 "	690453	40 Days
690424	40 "	690454	40 "
690425	40 "	690455	40 "
690426	40 "	690456	40 "
690427	40 "	690457	40 "
690428	40 "	690458	40 "
690429	40 "	690459	40 "
690430	40 "	690460	40 "
690431	40 "	690461	40 "
690432	40 "	690462	40 "
690433	40 "	690463	40 "
690434	40 "	690464	40 "
690435	40 "	690465	40 "
690436	40 "	690466	40 "
690437	40 "	690467	40 "
690438	40 "	690468	40 "
690439	40 "	690469	40 "
690440	40 "	690470	40 "
690441	40 "	690471	40 "
690442	40 "	690472	40 "
690443	40 "	690473	40 "
690444	40 "	690474	40 "
690445	40 "	690475	40 "
690446	40 "	690476	40 "
690447	40 "	690477	40 "
690448	40 "	690478	40 "
690449	40 "	690479	40 "
690450	40 "	690480	40 "
690451	40 "	690481	40 "

List of Claims for Airborne E.M. & Mag. Survey

Claims No.	Assessment Work	Claim No.	Assessment Work
SM-690482	40 days	SSM-690512	40 days
690483	40 "	690513	40 "
690484	40 "	690514	40 "
690485	40 "	690515	40 "
690486	40 "	690516	40 "
690487	40 "	690517	40 "
690488	40 "	690518	40 "
690489	40 "	690519	40 "
690490	40 "	690520	40 "
690491	40 "	690521	40 "
690492	40 "	690522	40 "
690493	40 "	690523	40 "
690494	40 "	690524	40 "
690495	40 "	690525	40 "
690496	40 "	690526	40 "
690497	40 "	690527	40 "
690498	40 "	690528	40 "
690499	40 "	690529	40 "
690500	40 "	690530	40 "
690501	40 "	690531	40 "
690502	40 "	690532	40 "
690503	40 "	690533	40 "
690504	40 "	690534	40 "
690505	40 "	690535	40 "
690506	40 "	690536	40 "
690507	40 "	690537	40 "
690508	40 "	690538	40 "
690509	40 "	690539	40 "
690510	40 "	690540	40 "
690511	40 "	690541	40 "

List of Claims for Airborne E.M. & Mag. Survey ..5

laim No. – Assessment Work	
M-690542 —	40 Days
690543	40 "
690544	40 "
690545	40 "
690546	40 "
690547	40 "
690548	40 "
690549	40 "
690550	40 "
690551	40 "
690552	40 "
690553	40 "
690554	40 "
690555	40 "
690556	40 "
690557	40 "
690558	40 "
690559	40 "
690560	40 "
690561	40 "
690562	40 "
690563	40 "
690564	40 "
690565	40 "
690566	40 "
690567	40 "
690568	40 "
690569	40 "
690570	40 "
690571	40 "

Claim No. — Assessment Work	
SSM-690572 —	40 Days
690573	40 "
690574	40 "
690575	40 "
690576	40 "
690577	40 "
690578	40 "
690579	40 "
690580	40 "
690581	40 "
690582	40 "
690583	40 "
690584	40 "
690585	40 "
690586	40 "
690587	40 "
690588	40 "
690589	40 "
690590	40 "
690591	40 "
690592	40 "
690593	40 "
690594	40 "
690595	40 "
690596	40 "
690597	40 "
690598	40 "
690599	40 "
690600	40 "
SSM-690945	40 "

List of Claims for Airborne E.M. & Mag. Surveys

laim No.	Assessment Work	Claim No.	Assessment Work
M-691081	40 days	SSM-691374	40 days
691082	40 "	691375	40 "
691083	40 "	691376	40 "
691084	40 "	691377	40 "
691085	40 "	691378	40 "
691086	40 "	691379	40 "
M-691188	40 "	691380	40 "
691189	40 "	691381	40 "
691190	40 "	691382	40 "
691191	40 "	691383	40 "
691192	40 "	691384	40
691193	40 "	691385	40 "
691194	40 "	691386	40 "
691195	40 "	691387	40 "
691196	40 "	691388	40 "
691197	40 "	691389	40 "
SM-691287	40 "	691390	40 "
691288	40 "	691391	40 "
691289	40 "	691392	40 "
691290	40 "	691393	40 "
691291	40 "	691394	40 "
691292	40 "	691395	40 "
691293	40 "	691396	40 "
691294	40 "	691397	40 "
691295	40 "	SSM-693714	40 "
691297	40 "	693715	40 "
SM-691359	40 "	693716	40 "
SM-691364	40 "	693717	40 "
691365	40 "	693718	40 "
SM-691373	40 "	693719	40 "

List of Claims for Airborne E.M. & Mag Surveys

Claim No.	Assessment Work
SM-693720	40 days
693721	40 "
693722	40 "
693723	40 "
SM-693727	40 "
693728	40 "
SM-693732	40 "
693733	40 "
SM-693737	40 "
693738	40 "
SM-693742	40 "
693743	40 "
SM-693747	40 "
693748	40 "
SM-693752	40 "
693753	40 "
SM-693757	40 "
693758	40 "
SM-693760	40 "
693761	40 "
693762	40 "
693763	40 "
693764	40 "
693765	40 "
693766	40 "
693767	40 "
693768	40 "
693769	40 "
693770	40 "
693771	40 "

Claim No.	Assessment Work
SSM-693772	40 days
693773	40 days

378 claims

Nov. 1st, 1983

T. C. [illegible]

1983 12 20

Your File: 341
Our File: 2.6150

Mrs. M.V. St. Jules
Mining Recorder
Ministry of Natural Resources
875 Queen Street East
P.O. Box 669
Sault Ste. Marie, Ontario
P6A 5N2

Dear Madam:

We have received reports and maps for an Airborne Geophysical (Electromagnetic and Magnetometer) Survey submitted on Mining Claims SSM 638372 et al in the Townships of Nameigos and Mosambik.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours veey truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

A. Barr:mc

cc: Rocco Schiralli (In Trust)
Suite 420
181 University Avenue
Toronto, Ontario
M5H 3M7

cc: Fenton Scott
17 Malabar Place
Don Mills, Ontario
M3B 1A5

1983 12 20

Your File: 341
Our File: 2.6150

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for an Airborne (Electromagnetic and Magnetometer) Survey submitted on Mining Claims P661265 et al in the Townships of Breckenridge and Lizar.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-1380

A. Barr:mc

cc: Rocco Schiralli (in trust)
Suite 420
181 University Avenue
Toronto, Ontario
M5H 3M7

cc: Fenton Scott
17 Malabar Place
Don Mills, Ontario
M3B 1A5

Ontario

Ministry of Natural Resources

Geotechnical Report Approval

File 2.6150

Mining Lands Comments

☑ To: Geophysics Mr. R. Barlow.

Comments

☑ Approved ☐ Wish to see again with corrections

Date Jan 13/84

Signature R Barlow

☐ To: Geology - Expenditures

Comments

☐ Approved ☐ Wish to see again with corrections

Date

Signature

☐ To: Geochemistry

Comments

L.D.

☐ Approved ☐ Wish to see again with corrections

Date

Signature

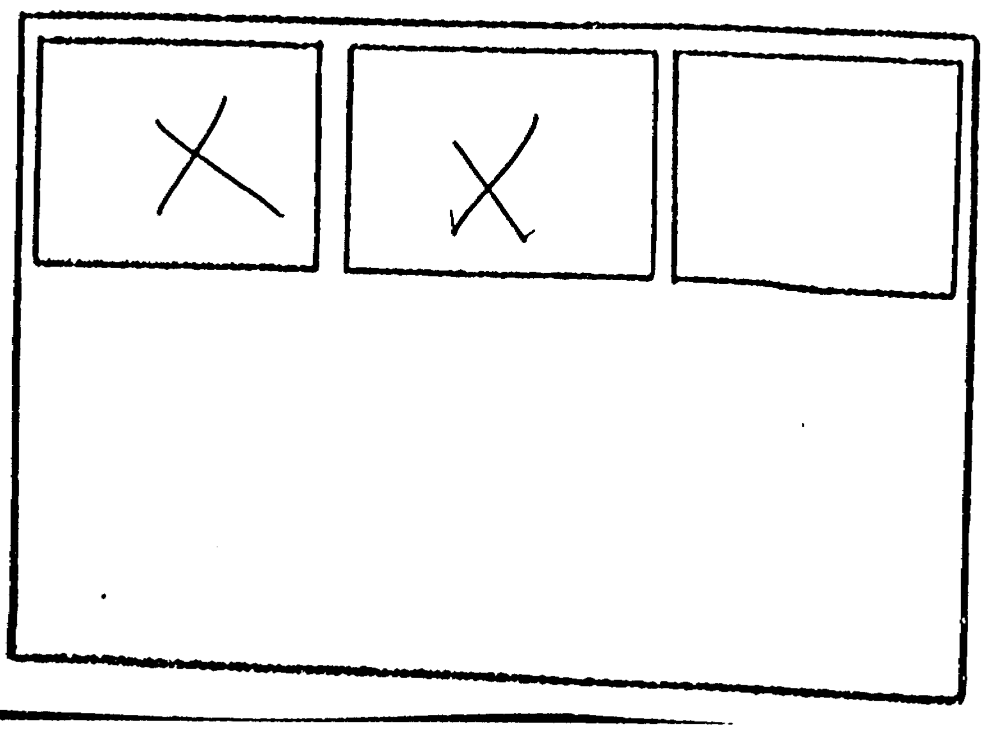
☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

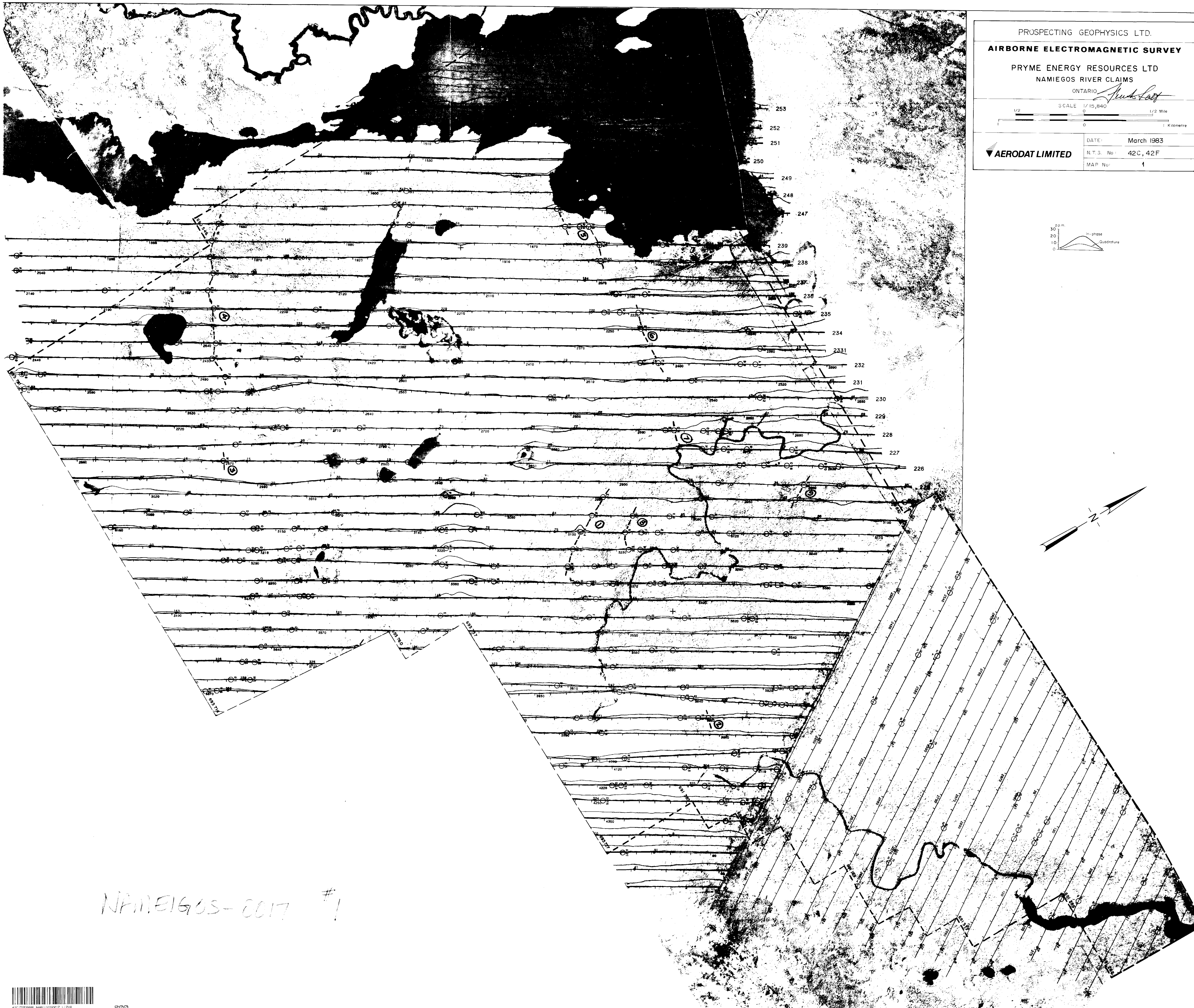
SEE ACCOMPANYING MAP(S) IDENTIFIED AS

NAMEIGOS - 0017 #1

2

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE (X)





PROSPECTING GEOPHYSICS LTD.

AIRBORNE ELECTROMAGNETIC SURVEY

PRYME ENERGY RESOURCES LTD

NAMIEGOS RIVER CLAIMS

ONTARIO

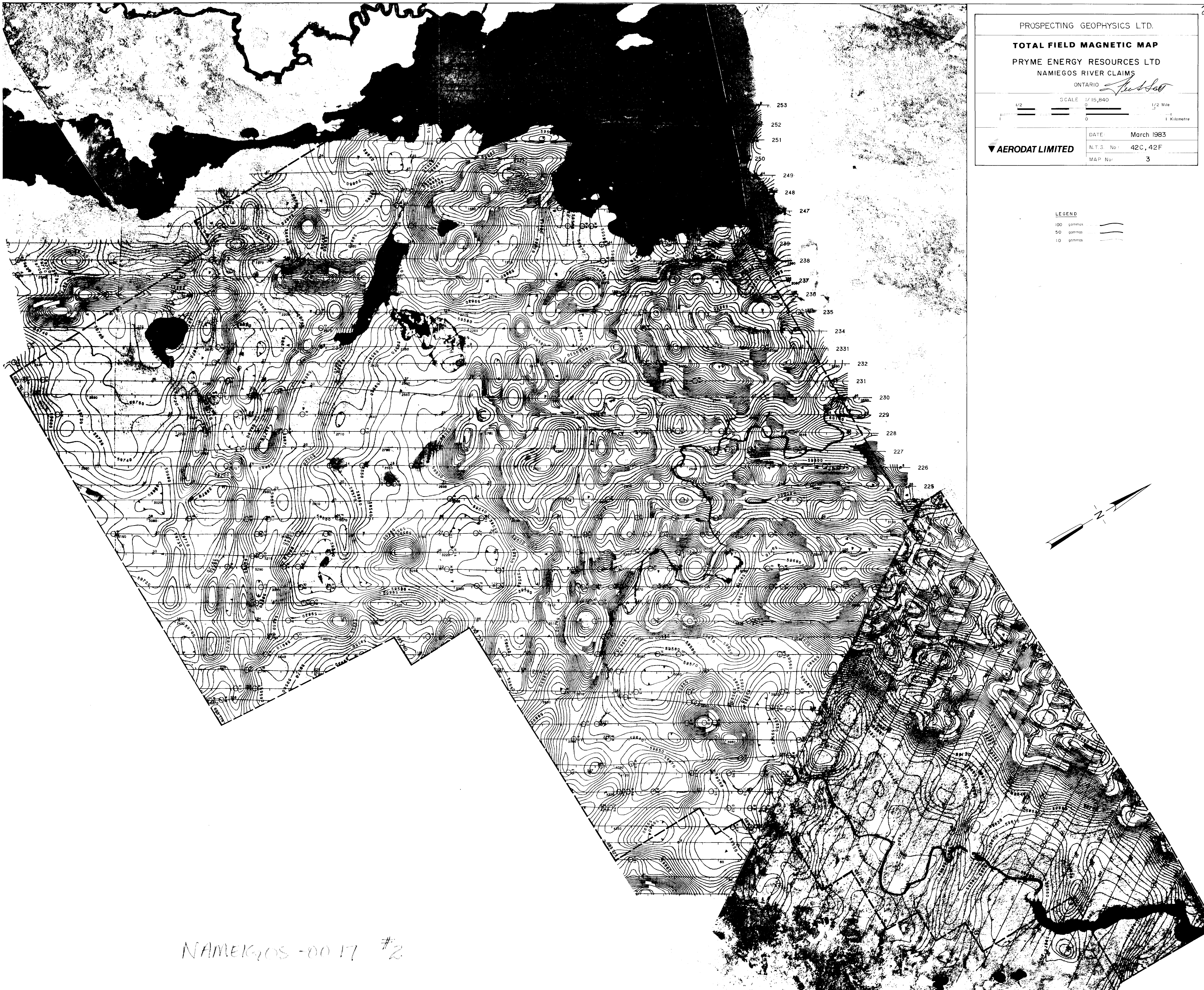
SCALE 1/15,840

1/2 0 1/2 Mile

1 0 1 Kilometre

AEROLAT LIMITED

DATE:	March 1983
N.T.S. No:	42C, 42F
MAP No:	1



NAMEIGOS-0017 #2

210