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

for
CAPTAIN CONSOLIDATED RESOURCES LTD.
by
AERODAT LIMITED
JULY 1983

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(Scale: 1/15,840)

Map 1	Interpreted Conductive Units
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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 Captain Consolidated Resources Ltd. by Aerodat Limited. Equipment operated included a 3 frequency electromagnetic system, A VLF-EM system, and a magnetometer.

The survey was flown on March 6 to March 22, 1983 from an operations base at Wawa Ontario. A total of 562 line miles were flown, at a nominal line spacing of 660 feet. Of the total flown, this report describes 100.25 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

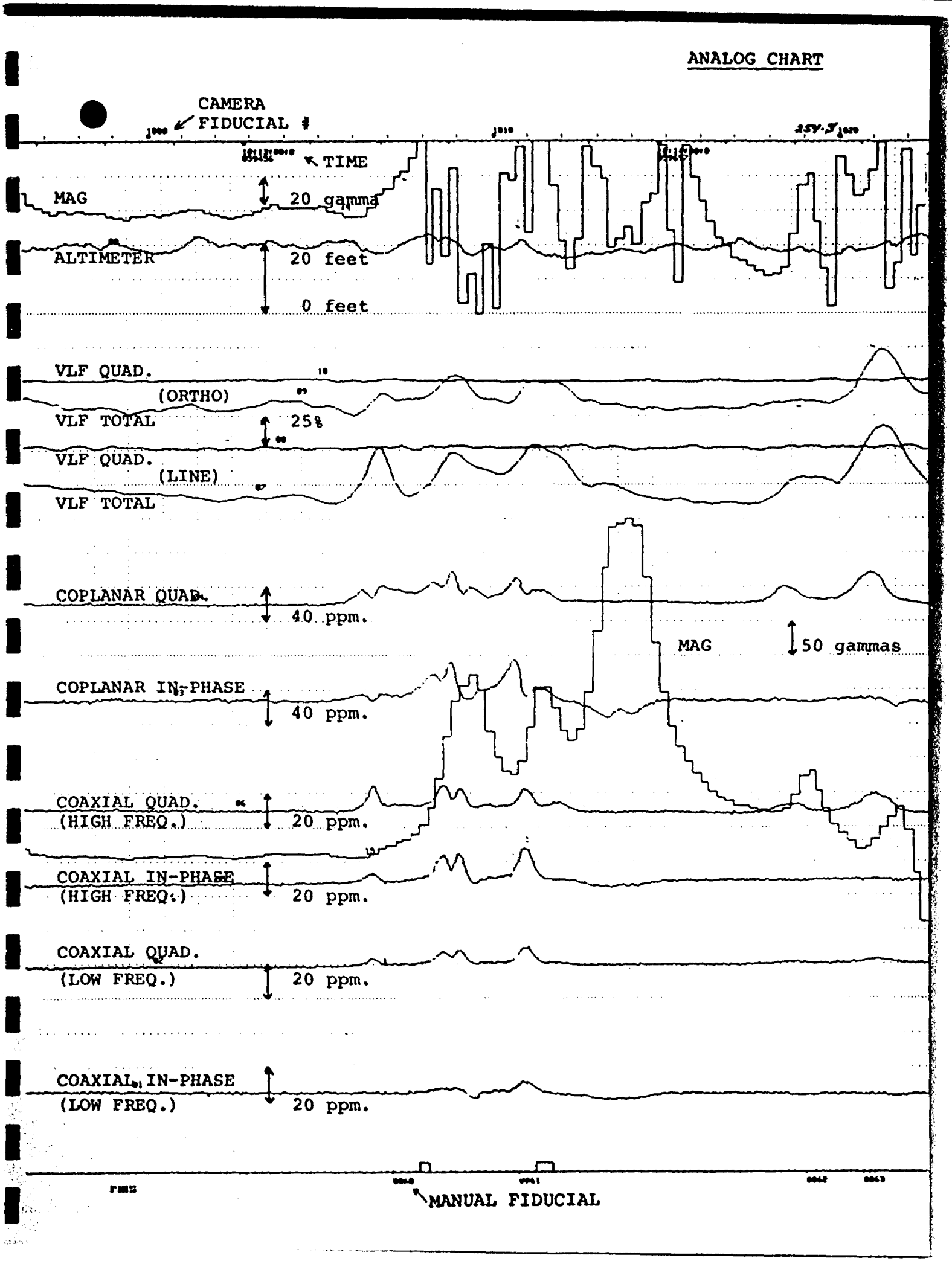
A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

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
CAMERA FIDUCIAL #
TIME
MAG
20 gamma
ALTIMETER
20 feet
0 feet
VLF QUAD.
(ORTHO)
VLF TOTAL
25%
VLF QUAD.
(LINE)
VLF TOTAL
COPLANAR QUAD.
40 ppm.
MAG
50 gammas
COPLANAR IN-PHASE
40 ppm.
COAXIAL QUAD.
(HIGH FREQ.)
20 ppm.
COAXIAL IN-PHASE
(HIGH FREQ.)
20 ppm.
COAXIAL QUAD.
(LOW FREQ.)
20 ppm.
COAXIAL IN-PHASE
(LOW FREQ.)
20 ppm.
MANUAL FIDUCIAL

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 conductors 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 Weak conductor on magnetic flank, mapped as granite/greenstone contact.

2 Moderate, bedrock conductor on south flank of magnetic high. Two segments separated by diabase dyke.

3 Weak, short conductor

4 Fair conductor contains magnetic minerals, near granite contact.

5 Weak conductor on south flank of magnetic trend

6 Weak conductor

7 Fair, shallow conductor follows magnetic high. Mapped as greenstone.

8 Moderate to fair conductor with some magnetic association near granite contact.

9 Poor, questionable conductor

10 Fair, magnetic conductor in area mapped as granite. May be extension of 7.

11 Moderate to fair isolated magnetic conductor

12 Poor conductor along VLF trend

13 Weak conductor on south flank of isolated magnetic high.

14 Weak conduccor associated with irregular magnetic profiles.

15 Fair conductor follows magnetic high. Mapped as iron formation.

16 Fair isolated magnetic conductor may be related to 15.

17 Associated magnetic bedrock conductor near mapped gabbro intrusive

18 Weak, questionable conductor

19 Questionable magnetic conductor

20 Good short magnetic conductor at location erroneously mapped as trondjhemite.

21 Bedrock conductors associated with magnetic high.

22,23 Bedrock conductors on flank of magnetic high, not granite.

Respectfully submitted,

July 21, 1983.

Fenton Scott, P.Eng.

Qual 63.1263

APPENDIX I

GENERAL INTERPRETIVE CONSIDERATIONS

Electromagnetic

The Aerodat 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.

APPENDIX I

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.

APPENDIX I

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.

APPENDIX I

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.

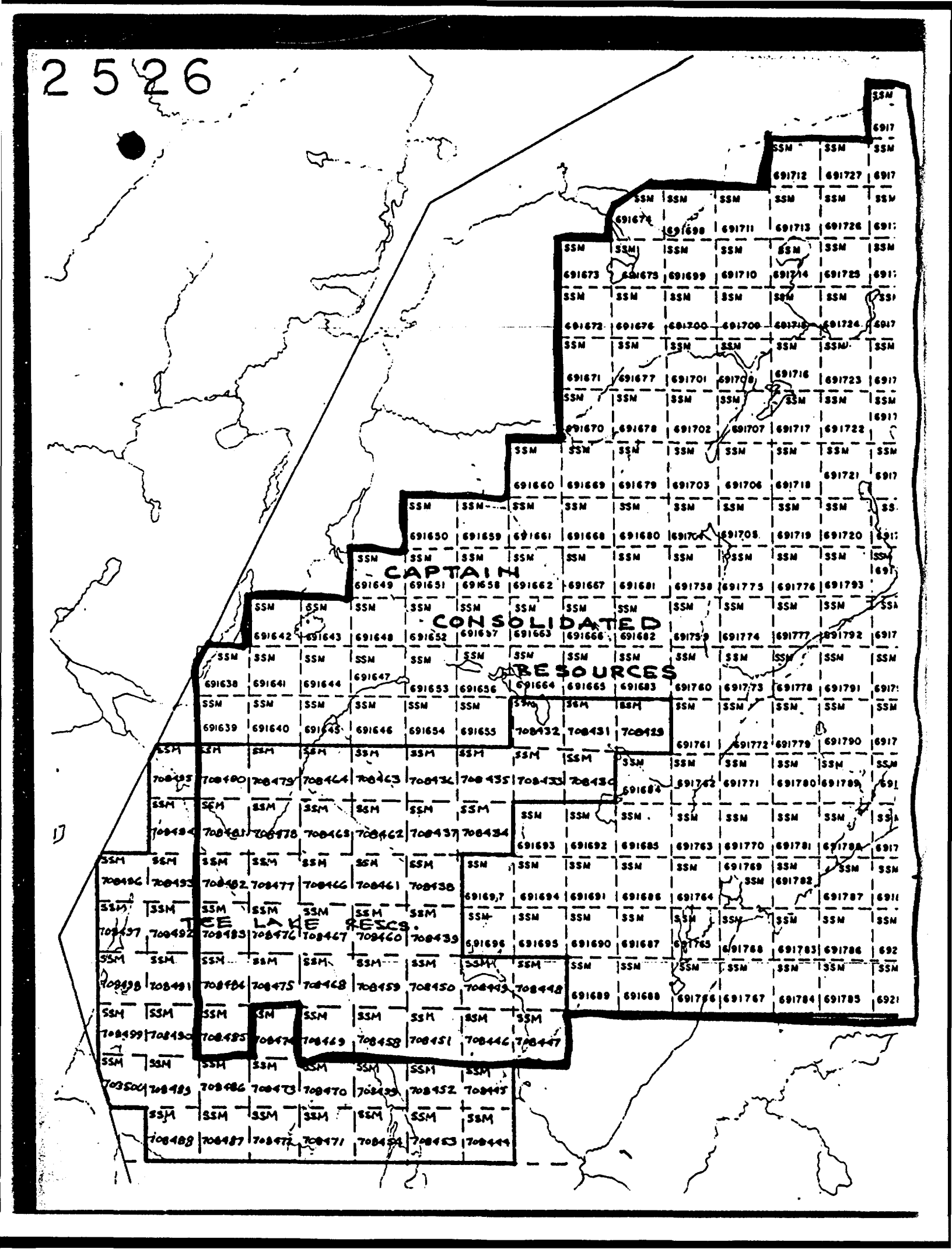
A net positive phase shift combined with the geometrical cross-over shape will lead to a positive quadrature response on the side of approach and a negative on the side of departure. A net negative phase shift would produce the reverse. A further sign reversal occurs with a 180 degree

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.

42C03NE0016 42C04NE0015 PUKASKWA RIVER

900

Initial Check	M. Anderson Jan 16.84
Assessed	R/3/84 - S.D.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.	


2526
CAPTAIN
CONSOLIDATED
RESOURCES
TEE LAKE RESCS.

Ontario

Ministry of Natural Resources

File _____

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) AIRBORNE ELECTROMAGNETIC, MAGNETIC, VLF-EM

Township or Area PUKASKWA RIVER

Claim Holder(s) BRIAN MURRAY (INTRUST)

CAPTAIN CONSOLIDATED RESOURCES

Survey Company AERODAT LIMITED

Author of Report FENTON SCOTT

Address of Author 17 MALABAR PLACE DON MILLS

Covering Dates of Survey MARCH 6/83 MARCH 22/83
(linecutting to office)

Total Miles of Line Cut 71.7

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 apply to airborne surveys)

Magnetometer 19.9 Electromagnetic 19.9 ~~Radiometric~~ VLF 19.9
(enter days per claim)

DATE: Nov. 20/83 SIGNATURE: Fenton Scott
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

S.S.M. 691.638
(prefix) (number)

See list attached

If space insufficient, attach list

RECEIVED
DEC 13 1983
MINING LANDS SECTION

TOTAL CLAIMS 144

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

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 | VLF

Instrument(s) GEOMETRICS G-803 | AERODAT 3FREQ | TOTEM 2A

(specify for each type of survey)

Accuracy 0.5 GAMMAS | 1 PPM | 1% (1MM)

(specify for each type of survey)

Aircraft used AERO SPATIAL – A-STAR HELICOPTER

Sensor altitude 150' | 100' | 150'

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 562 Over claims only 71.7

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

_____

_____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

_____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

_____

Drainage Development _____

Estimated Range of Overburden Thickness _____

_____

_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

_____

_____

_____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

R. Brian Murray — Claim List

SSM 691638	SSM691684	SSM691631	SSM691797
39	85	32	98
40	86	33	99
41	87	34	800
42	88	35	01
43	89	36	02
44	90		
45	91	SSM691758	
46	92	59	
47	93	60	TOTAL 147 CLAIMS
48	94	61	
49	95	62	
50	96	63	
51	97 < 98	64	
52	99	65	
53	691700	66	
54	01	67	
55	02	68	
56	03	69	
57	04	70	
58	05	71	
59	06	72	
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63	10	76	
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66	13	79	
67	14	80	
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71	18	84	
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73	20	86	
74	21	87	
75	22	88	
76	23	89	
77	24	90	
78	25	91	
79	26	92	
80	27	93	
81	28	94	
82	29	95	
83	30	96	

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.6151

Date March 29, 1984

Mining Recorder's Report of Work No. 167-83

Recorded Holder: R. BRIAN MURRAY (IN TRUST)

Township or Area: PUKASKWA RIVER AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	SSM 708429 to 39 inclusive 708446 to 51 inclusive 708458 to 69 inclusive 708475 to 85 inclusive
Electromagnetic 27 days	
Magnetometer 27 days	
~~XXXXXXXX~~ VLF 27 days	
Induced polarization ____ ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☒	
Special provision ☐ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ Insufficient technical data filed

SSM 708444-45
708452 to 55 inclusive
708470 to 74 inclusive
708486 to 500 inclusive

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60:

Ontario

Ministry of Natural Resources

File _____

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Type of Survey(s) ELECTROMAGNETIC, MAGNETIC, VLF-EM
Township or Area PUKASKWA RIVER
Claim Holder(s) R BRIAN MURRAY (IN TRUST)
TEE LAKE RESOURCES
Survey Company AERODAT
Author of Report FENTON SCOTT
Address of Author 17 MALABAR PL DON MILLS ONT.
Covering Dates of Survey MARCH 6-22 1993
(linecutting to office)
Total Miles of Line Cut 22.8

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 apply to airborne surveys)

Magnetometer 22.9 Electromagnetic 22.9 ~~Radiometric~~ VLF-EM 22.9
(enter days per claim)

DATE: Dec 10/93 SIGNATURE: Fenton Scott
Author of Report or Agent

Res. Geol. _____ Qualifications 63.1263

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

SSM 708429
(prefix) (number)

RECEIVED
DEC 13 1993
MINING LANDS SECTION

TOTAL CLAIMS 66

If space insufficient, attach list

OFFICE USE ONLY

0837 (6/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others _____

Field Analysis (_____ tests)
- Extraction Method _____
- Analytical Method _____
- Reagents Used _____

Field Laboratory Analysis
No. (_____ tests)
- Extraction Method _____
- Analytical Method _____
- Reagents Used _____

Commercial Laboratory (_____ tests)
- Name of Laboratory _____
- Extraction Method _____
- Analytical Method _____
- Reagents Used _____

General _____

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	VLF
Instrument(s) (specify for each type of survey)	GEOMETRICS G-803	AERODAT 2 FREQ	TOTEM 2A
Accuracy (specify for each type of survey)	0.5 GAMMAS	1 ppm	1% (1MM)
Aircraft used	AERO SPATIAL - A-STAR HELICOPTER		
Sensor altitude	150'	100'	150'
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 562 Over claims only 378

Ministry of Natural Resources
Ontario

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

#128-83

The Mining Act

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)	Township or Area
AIRBORNE ELECTROMAGNETIC, MAGNETIC, V.L.F.	PUKASKWA RIVER.

Claim Holder(s)	Prospector's Licence No.
HAROLD SAILE	D18263

Address: C/O BRIAN MURRAY (IN TRUST) SUITE 207, 122 ST. PATRICK ST. TORONTO

Survey Company	Date of Survey (from & to) Day / Mo. / Yr.			Total Miles of line Cut
AERODAT LIMITED	6 3 83	22 3 83		29·8

Name and Address of Author (of Geo-Technical report)
FENTON SCOTT, 17 MALABAR PLACE- DON MILLS, ONTARIO, M3B 1A4

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: Complete reverse side and enter total(s) here	Geophysical	
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	20
	Magnetometer	20
	~~Radiometric~~ V.L.F.	20

RECEIVED
SAULT STE. MARIE MINING DIV.
NOV 17 1983
A.M. 7 8 9 10 11 12 1 2 3 4 5 P.M.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Number	Expend. Days Cr.
SSM	691638	
	39	
	40	
	41	
	42	
	43	
	44	
	45	
	46	
	47	
	48	
	49	
	50	
	51	
	52	
	53	
	54	
	55	
	56	
	57	
	58	
	59	
	60	

Mining Claim Prefix	Number	Expend. Days Cr.
SSM	691661	
	62	
	63	
	64	
	65	
	66	
	67	
	68	
	69	
	70	
	71	
	72	
	73	
	74	
	75	
	76	
	77	
	78	
	79	
	80	
	81	
	82	
	83	

Total number of mining claims covered by this report of work: 60
(ADDITIONAL NUMBERS ATTACHED)

Expenditures (excludes power stripping)

Type of Work Performed	Performed on Claim(s)

RECEIVED
SAULT STE. MARIE MINING DIV.
lab rec'd.
NOV 1983
A.M. 7 8 9 10 11 12 1 2 3 4 5 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.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
3600	Nov. 4/83	
	Date Approved as Recorded	Branch Director
	85.V.V1	

Date	Recorded Holder or Agent (Signature)
OCT/31/83	R. B. Murray for F. H. SAILE.

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	Date Certified	Certified by (Signature)
FENTON SCOTT 17 MALABAR PLACE, DON MILLS, ONTARIO M3B 1A4	OCT. 31/83	

Recorded SSM 691638

1362 (83/9)

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSH	691684				
	85				
	86				
	87				
	88				
	89				
	90				
	91				
	92				
	93				
	94				
	95				
	96				
	97				

Ministry of Natural Resources
Ontario

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

179-83

The Mining Act

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)	Township or Area
AIRBORNE ELECTROMAGNETIC, MAGNETIC V.L.F.	PUKASKWA RIVER

Claim Holder(s)	Prospector's Licence No.
GEORGE MOWATT	D 18271

Address: C/O BRIAN MURRAY, (IN TRUST) SUITE 207, 122 ST. PATRICK ST. TORONTO.

Survey Company	Date of Survey (from & to) Day / Mo. / Yr.	Total Miles of line Cut
AERODAT LIMITED	6 3 83 / 21 3 83	16.4

Name and Address of Author (of Geo-Technical report): FENTON SCOTT, 17 MALABAR PLACE, DON MILLS, ONTARIO M3B1A4

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: Complete reverse side and enter total(s) here	Geophysical	
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	20
	Magnetometer	20
	~~Radiometric~~ VLF	20

BAULT STE. MARIE MINING DIV. RECEIVED NOV 4 1983 A.M. 7 8 9 10 11 12

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	691698		SSM	691721	
	99			22	
	700			23	
	01			24	
	02			25	
	03			26	
	04			27	
	05			28	
	06			29	
	07			30	
	08				
	09				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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

Total number of mining claims covered by this report of work: 35

Expenditures (excludes power stripping)

Type of Work Performed	
Performed on Claim(s)	MINING LAND

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.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1980	Nov 4/83	for M. St. Cyr
	Date Approved as Recorded: 83.12.21	Branch Director

Date	Recorded Holder or Agent (Signature)
OCT. 31/83	Fenton Scott for B. Murray and G. Mowatt.

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	Date Certified	Certified by (Signature)
FENTON SCOTT, 17 MALABAR PLACE, DON MILLS, ONTARIO M3B1A4	OCT 31/83	Fenton Scott.

SSM 691698

*362 (81/9)

Jan 3rd.

Ministry of Natural Resources
Ontario

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

131-83

The Mining Act

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)	Township or Area
AIRBORNE ELECTROMAGNETIC, MAGNETIC, VLF-EM.	PUKASKWA RIVER

Claim Holder(s)	Prospector's Licence No.
PETER MATTHEWS	D 18264

Address: C/O BRIAN MURRAY, (IN TRUST) SUITE 207, 122 ST. PATRICK ST. TORONTO.

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
AEROQUEST LIMITED	6 3 83 (Day Mo. Yr.) 22 3 83 (Day Mo. Yr.)	22.3

Name and Address of Author (of Geo-Technical report): FENTON SCOTT, 17 MALABAR PLACE, DON MILLS, ONTARIO, M3B1A4

Credits Requested per Each Claim in Columns at right

Special Provisions
For first survey: Enter 40 days. (This includes line cutting)
For each additional survey: using the same grid: Enter 20 days (for each)

	Days per Claim
Geophysical	
· Electromagnetic	
· Magnetometer	
· Radiometric	
· Other	
Geological	
Geochemical	

Man Days
Complete reverse side and enter total(s) here

Geophysical	
· Electromagnetic	
· Magnetometer	
· Radiometric	
· Other	
Geological	
Geochemical	

Airborne Credits
Note: Special provisions credits do not apply to Airborne Surveys.

	Days per Claim
Electromagnetic	20
Magnetometer	20
~~Radiometric~~ VLF	20

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

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	691758	
	59	
	60	
	61	
	62	
	63	
	64	
	65	
	66	
	67	
	68	
	69	
	70	
	71	
	72	
	73	
	74	
	75	
	76	
	77	
	78	
	79	
	80	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	691781	
	82	
	83	
	84	
	85	
	86	
	87	
	88	
	89	
	90	
	91	
	92	
	93	
	94	
	95	
	96	
	97	
	98	
	99	
	800	
	692801	
	802	

Total number of mining claims covered by this report of work: 45

Expenditures (excludes power stripping)

Type of Work Performed	
Performed on Claim(s)	
	MINING LAND

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.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
2700.	Nov. 4/83	for M.H. Gould
	Date Approved as Recorded	Branch Director
	85.2.21	

Date	Recorded Holder or Agent (Signature)
OCT. 31/83	Fenton Scott for B. Murray and P. Matthews

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: FENTON SCOTT, 17 MALABAR PLACE, DON MILLS, ONTARIO M3B 1A4

Date Certified	Certified by (Signature)
OCT 31/83	Fenton Scott

1362 (81/9)

Work Rec'd SSM 691758

Ministry of Natural Resources
Ontario

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

#1130-83

REVISED

The Mining Act

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): AIRBORNE ELECTROMAGNETIC, MAGNETIC, VLF. E.M.	Township or Area: PUKASKWA RIVER.
Claim Holder(s): ~~REDE ADDY~~ GEORGE MOWATT ++	Prospector's Licence No.: ~~D 18269~~
Address: C/O BRIAN MURRAY (IN TRUST) SUITE 207, 122 ST. PATRICK ST. TORONTO	
Survey Company: AERODAT LIMITED	Date of Survey (from & to): Day 6 Mo. 3 Yr. 83 / Day 22 Mo. 3 Yr. 83
Name and Address of Author (of Geo-Technical report): FENTON SCOTT 17 MALABAR PLACE, DON MILLS, ONTARIO, M3B 1A4	Total Miles of line Cut: 3

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions: For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Man Days: Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	20
	Magnetometer	20
	~~Radiometric~~ VLF.	20

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	69731				
	#732				
	#733				
	#734				
	#735				
	#736				

SAULT STE. MARIE MINING DIV. RECEIVED NOV 4 1983 A.M. P.M.

RECEIVED DEC 1 1983 MINING LANDS SECTION

SAULT STE. MARIE MINING DIV. RECEIVED NOV 17 1983 A.M. P.M.

Expenditures (excludes power stripping)

Type of Work Performed	
Performed on Claim(s)	
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.

Total number of mining claims covered by this report of work: 6

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
360	Nov 4/83	for M. St. Jean
	Date Approved as Recorded: 83.12.21	Branch Director

Date: OCT. 31/83 — Recorded Holder or Agent (Signature): Fenton Scott for B. Murray and R. Addy

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: FENTON SCOTT, 17 MALABAR PLACE, DON MILLS, ONTARIO.

Date Certified: OCT. 31/83 — Certified by (Signature): Fenton Scott

1367 (81/9)

Add'l re SSM 69731

The Mining Act

"Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): AIRBORNE ELECTROMAGNETIC, MAGNETIC, VLF-EM

Township or Area: PUKASKWA RIVER

Claim Holder: R BRIAN MURRAY (IN TRUST) (TEE LAKE RESOURCES)

Prospector's Licence No.: A45651

Address: SUITE 287, 122 ST PATRICK STREET, TORONTO M5T 2X8

Survey Company: AERODAT

Date of Survey (from & to): 6 3 93 (Day | Mo. | Yr.) 22 3 93 (Day | Mo. | Yr.)

Total Miles of line Cut: 37.8

Name and Address of Author (of Geo-Technical report): FENTON SCOTT 17 MALABAR PL DON MILLS ONTARIO

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	22.9
	Magnetometer VLF-EM	22.9
	~~Radiometric~~	22.9

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	708429	
	30	
	31	
	32	
	33	
	34	
	35	
	36	
	37	
	38	
	39	
	44	
	45	
	46	
	47	
	48	
	49	
	50	
	51	
	52	
	53	
	54	
	55	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	708458	
	59	
	60	
	61	
	62	
	63	
	64	
	65	
	66	
	67	
	68	
	69	
	70	
	71	
	72	
	73	
	74	
	75	
	76	
	77	
	78	
	79	
	80	

Total number of mining claims covered by this report of work: 66

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

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.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

Date: Dec 10/93

Recorded Holder or Agent (Signature): [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: FENTON SCOTT 17 MALABAR PLACE, DON MILLS, M3B1A4

Date Certified: Dec 16 93

Certified by (Signature): [signature]

Ministry of Natural Resources

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act

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)	Township or Area

Claim Holder(s)	Prospector's Licence No.

Address

Survey Company	Date of Survey (from & to) Day | Mo. | Yr. | Day | Mo. | Yr.	Total Miles of line Cut
		37.8

Name and Address of Author (of Geo-Technical report)

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	22.9
	Magnetometer	22.9
	VLF-EM ~~Radiometric~~	22.9

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	708481				
	82				
	83				
	84				
	85				
	86				
	87				
	88				
	89				
	90				
	91				
	92				
	93				
	94				
	95				
	96				
	97				
	98				
	99				
	708500				

Total number of mining claims covered by this report of work: 66

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

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.

Date	Recorded Holder or Agent (Signature)

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

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

Ministry of Natural Resources
Ontario

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

#167-83.

The Mining Act

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): AIRBORNE ELECTROMAGNETIC, MAGNETIC, VLF-EM	Township or Area: PUKASKWA RIVER
Claim Holder(s): R BRIAN MURRAY (IN TRUST) (TEE LAKE RESOURCES)	Prospector's Licence No.: A45651
Address: SUITE 207, 122 ST PATRICK STREET, TORONTO M5T 2X8	
Survey Company: AERODAT	Date of Survey (from & to): 6 3 83 (Day Mo. Yr.) 22 3 83 (Day Mo. Yr.)
Name and Address of Author (of Geo-Technical report): W. FENTON SCOTT 17 MALABAR PL DON MILLS ONTARIO	Total Miles of line Cut: 37.8

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 Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	22.9
	Magnetometer	22.9
	VLF-EM Radiometric	22.9

SAULT STE. MARIE MINING DIV. RECEIVED DEC 20 1983 A.M. P.M.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	708429	
	30	
	31	
	32	
	33	
	34	
	35	
	36	
	37	
	38	
	39	
	44	
	45	
	46	
	47	
	49	
	49	
	50	
	51	
	52	
	53	
	54	-50
	55	-50

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	708458	
	59	
	60	
	61	
	62	
	63	
	64	
	65	
	66	
	67	
	68	
	69	
	70	
	71	
	72	
	73	
	74	
	75	
	76	
	77	
	78	
	79	
	80	

RECEIVED
MINING LANDS SECTION

Revised work forms

(See attached)
Total number of mining claims covered by this report of work: 66

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

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.

For Office Use Only		
Total Days Cr. Recorded: 4534.2	Date Recorded: Dec 20/83	Mining Recorder: M.S. St Jules
	Date Approved as Recorded	Branch Director

Date: Dec 10/83 Recorded Holder or Agent (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
FENTON SCOTT 17 MALABAR PLACE, DON MILLS, M3B1A4

Date Certified: Dec 10/83 Certified by (Signature)

1362 (81/9)

Also on SSM 708429

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
SSM	708481				
	82				
	83				
	84				
	85				
	86				
	87				
	88				
	89				
	90				
	91				
	92				
	93				
	94				
	95				
	96				
	97				
	98				
	99				
	708500				

Action Memo

Time

Date 8312/12

To Arthur Barr

From (Name and Co.) C. Kingsley-Scott Recording Off.

I.C.N. No.	Area Code	Telephone No.	Ext.	Message Taken By

☐ Phoned ☐ On Hold ☐ Please Call ☐ Returned Your Call ☐ Will Call Back ☐ Wishes Appointment ☐ Waiting In Person ☐ Was Here ☐ Will Return

☐ File ☐ Draft Reply For My Signature ☐ Provide More Details ☒ For Your Information

☐ Type Draft ☐ For Your Approval and Signature ☐ Keep Me Informed ☐ Per Discussion

☐ Type Final ☐ Circulate, Initial and Return ☐ Take Appropriate Action ☐ Per Your Request

☐ Make Copies ☐ Return With Comments ☐ Note and See Me ☐ Returned With Thanks

☐ Please Answer ☐ Investigate and Report ☐ Note and Return ☐

Comments:

Revised Report of Work - #130-83. The original was forwarded to your office on or about 7/20. 17/83 in the name of Rene Audy. There was some (over)

7540-1037 (Rev. 11/82) ☐ Over

mix up in claim numbers and recorded holders. I have spoken to Mr. Fenton Scott and he has now made the necessary corrections. Please contact this office if you have any trouble with this.

Thanks.

Chris

1983 12 20 Our File: 2.6151

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, Magnetometer and VLF) Survey submitted on mining claims SSM 691758 to 802 inclusive in the Area of Pukaskwa River.

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: Peter Matthews
c/o Brian Murray
Suite 207
122 St. Patrick Street
Toronto, Ontario
M5T 2X8

cc: Fenton Scott
17 Malabar Place
Don Mills, Ontario
M3B 1A4

1983 12 20 Our File: 2.6151

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, Magnetometer and VLF) Survey submitted on Mining Claims SSM 708429 to 39 inclusive; 44 to 55 inclusive; 58 to 500 inclusive in the Area of Pukaskwa River.

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

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

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: Mr. Brian Murray
Suite 207
122 St. Patrick Street
Toronto, Ontario
M5T 2X8

cc: Fenton Scott
17 Malabar Place
Don Mills, Ontario
M3B 1A4

Ministry of Natural Resources
Ontario

APRIL 14/84

1984 03 29

Your File: 167-83
Our File: 2.6151

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:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. F.W. Matthews at 416/965-6918.

Yours very truly,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

D. Kinvig:mc

Encls.

cc: Mr. Brian Murray (In Trust)
Suite 207
122 St. Patrick Street
Toronto, Ontario
M5T 2X8

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

845

Ministry of Natural Resources
Ontario

Notice of Intent

for Technical Reports

1984 03 29

2.6151/167-83

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

2.6151

1984 05 04

Your File: 167-83
Our File: 2.6151

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:

RE: Notice of Intent dated March 29, 1984.
Airborne Geophysical (Electromagnetic, Magnetometer & VLF) Survey on Mining Claims SSM 708429 to 39 inclusive, 44 to 55 inclusive, 58 to 500 inclusive in the Area of Pukaskwa River.

The assessment work credits as listed with the above mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416) 965-6918

D. Kinvig:sc

cc: Mr. Brian Murray (In Trust)
Suite 207
122 St. Paterick Street
Toronto, Ontario
M5T 2X8

cc: Resident Geologist
Sault Ste. Marie, Ont.

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner,
Toronto, Ontario

Ontario Ministry of Natural Resources

Geotechnical Report Approval

File 2.6151

Mining Lands Comments

-okay-

☑ To: Geophysics Mr. R. Barlow

Comments

☑ Approved	☐ Wish to see again with corrections	Date Jan 21/88	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)

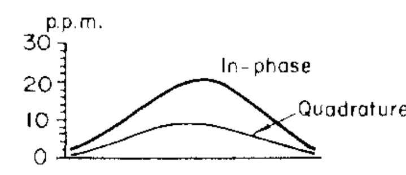
1503 (81/10)

FOR ADDITIONAL

INFORMATION

SEE MAPS:

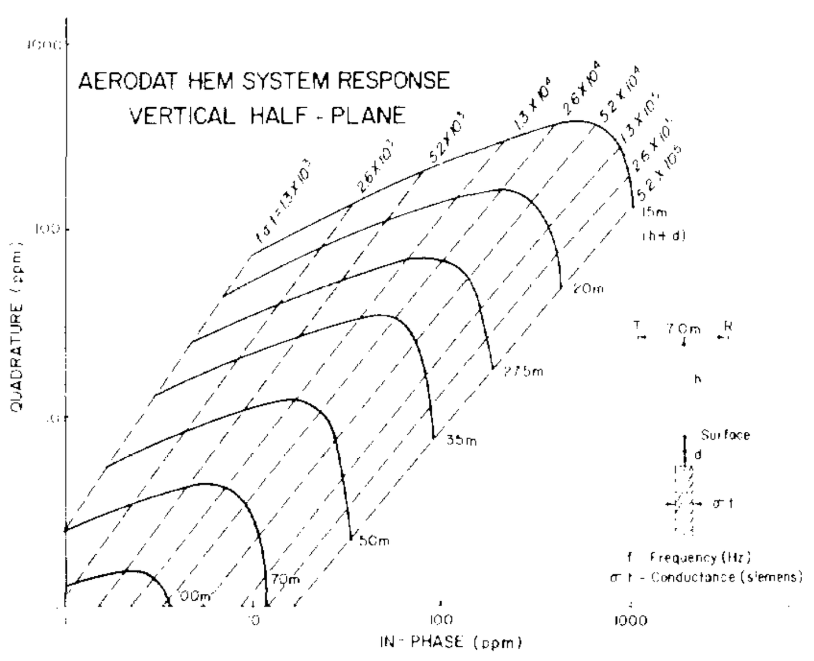
42C/04NE-0015 # 1-4

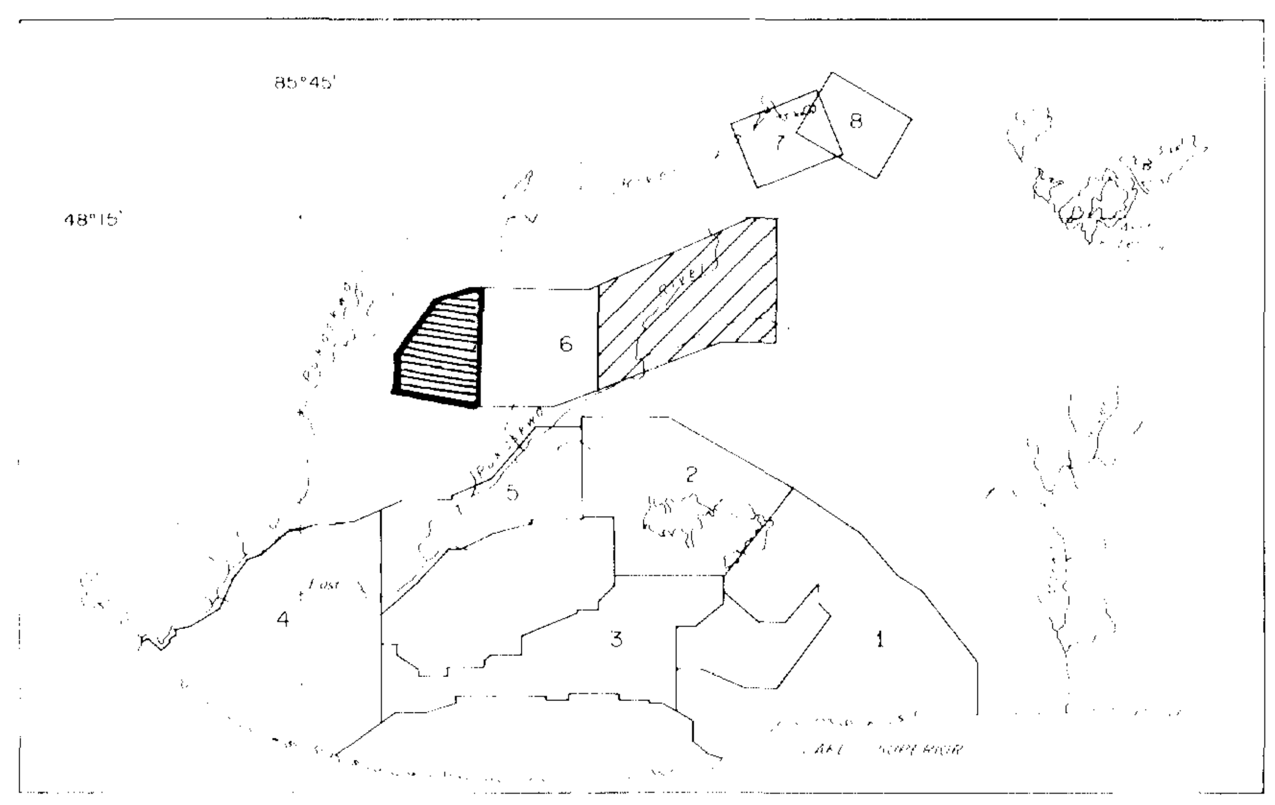


Horizontal control .... based on photo laydown

Average bird height .... 30 metres

Line spacing .... 660 feet





PROSPECTING GEOPHYSICS LTD.

AIRBORNE ELECTROMAGNETIC SURVEY

PROFILES

CAPTAIN CONSOLIDATED RESOURCES

WAWA AREA

ONTARIO

SCALE 1/15,840

1/2 Mile

1 Kilometre

▼ AERODAT LIMITED

DATE	February, March 1983
N.T.S. No.	41N, 42C
MAP No.	

42C/04NE-0015 #1

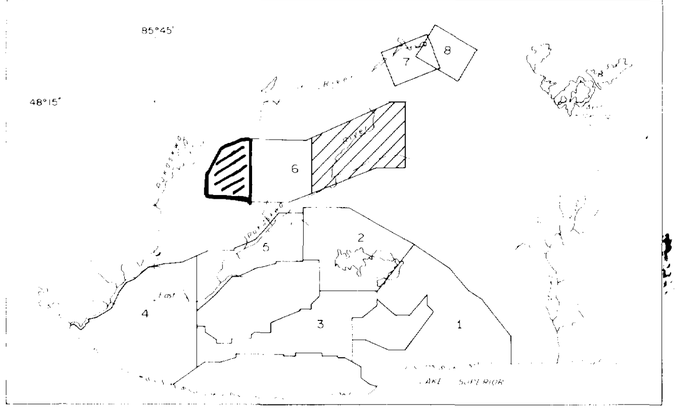
42C/04NE-0015 #2

LEGEND

100 gammas .....

50 gammas .....

10 gammas .....



PROSPECTING GEOPHYSICS LTD.

TOTAL FIELD MAGNETIC MAP

CAPTAIN CONSOLIDATED RESOURCES

WAWA AREA

ONTARIO

SCALE 1/15,840

1/2 0 1/2 Mile

1 0 1 Kilometre

▼ AERODAT LIMITED

DATE: February, March 1983

N.T.S. No: 41N, 42C

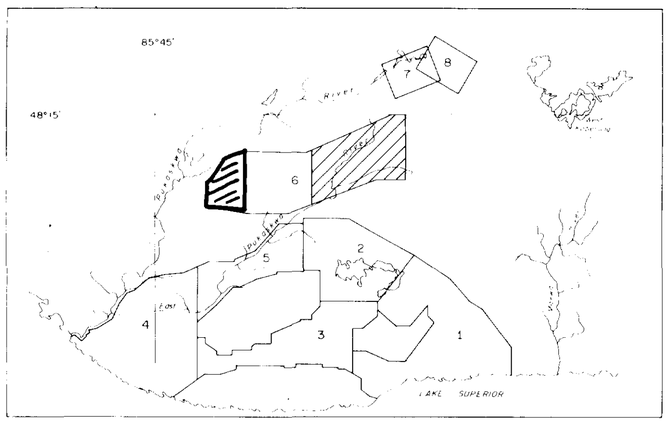
MAP No: 3

LEGEND

50 % .....

10 % .....

2 % .....



PROSPECTING GEOPHYSICS LTD.

VLF-EM

NAA (MAINE) 17.8 KHz.

CAPTAIN CONSOLIDATED RESOURCES

WAWA AREA

ONTARIO

SCALE 1/15,840

1/2 0 1/2 Mile

1 0 1 Kilometre

AERODAT LIMITED

DATE: February, March 1983

N.T.S. No: 41N, 42C

MAP No: 4

42C/04NE-0015 #4

#4