REPORT ON
COMBINED HELICOPTER BORNE MAGNETIC AND ELECTROMAGNETIC SURVEY
HOBLITZELL, ONTARIO

for

GOLDEN SHIELD RESOURCES LIMITED

by

AERODAT LIMITED

Dual. 2.6687

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(Scale: 1:10,000)

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MAP 2 - Electromagnetic Profile and Anomaly Map (946 Hz Coaxial Configuration)

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Map provided but not included in report:

Two-color master overlay of 4175 Hz coplanar and 4575 Hz coaxial electromagnetic profiles.

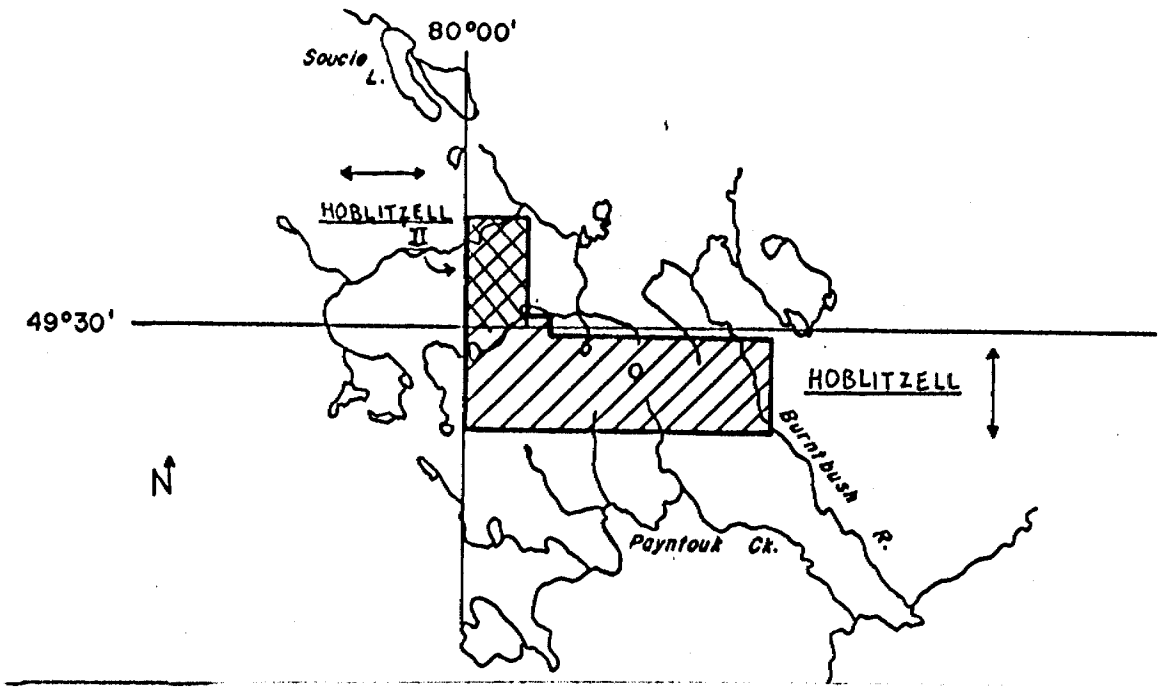
1. INTRODUCTION

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

The survey was located in the Hoblitzell Township of northeastern Ontario. Flown on June 11, 1984, it consisted a total of 145 kilometers (90 line miles) of data, of which 75 kilometers (46.6 miles) were over the specified claims.

2. SURVEY AREA LOCATION

The survey area and two map sheets are indicated on the index map below. The flight lines were flown at a nominal spacing of 1/4 mile in the directions shown.



3. AIRCRAFT AND EQUIPMENT

3.1 Aircraft

The aircraft used for the survey was an Aerospatiale A-Star 350D helicopter owned and operated by Maple Leaf Helicopters. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The helicopter was flown at a nominal altitude of 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 946 Hz and 4575 Hz, and a horizontal coplanar coil pair at 4175 Hz. The transmitter-receiver separation was 6.9 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 1A. This instrument measures the total field and vertical quadrature component of the selected frequency. The sensor was towed in a bird 15 meters below the helicopter, and the station used was NAA (17.8 kHz), Cutler, Maine.

3.2.3 Magnetometer

The proton precession magnetometer used was a Geometrics G-803. The sensitivity of the instrument was 1.0 gamma at a 0.5 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 earth's magnetic field. The clock of the base station was synchronized with that of the airborne system.

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

An RMS dot-matrix recorder was used to display the data during the survey. In addition to manual and time fiducials, the following data was recorded:

Channel	Input	Scale
00	altimeter (500 ft at top of chart)	10 ft./mm
04	high frequency quadrature	2 ppm/mm
03	high frequency in-phase	2 ppm/mm
06	mid frequency quadrature	4 ppm/mm

Channel	Input	Scale
05	mid-frequency in-phase	4 ppm/mm
02	low frequency quadrature	2 ppm/mm
01	low frequency in-phase	2 ppm/mm
14	magnetometer	5 gamma/mm
15	magnetometer	50 gamma/mm
07	VLF total field	2.5%/mm
08	VLF quadrature	2.5%/mm

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	0.7 second
magnetometer	0.5 second
altimeter	0.1 second
fiducial (time)	1.0 second
fiducial (manual)	0.2 second

3.2.9 Radar Positioning System

A Motorola Mini-Ranger (MRS III) radar navigation system was utilized for both navigation and track recovery. Transponders located at fixed known locations were interrogated several times per second and the ranges from these points to the helicopter measured to several meters accuracy. A navigational computer triangulates the position of the helicopter and provides the pilot with navigational information. The range/range data was recorded on magnetic tape for subsequent flight path determination.

3.3 Personnel

Personnel directly involved with the survey operation included:

Pilot: Dan Chinn

Equipment Operator/Technician: Mike Blondin

4. DATA PRESENTATION

4.1 Base Map and Flight Path

Photo map bases at 1:10,000 scale were prepared by enlargement of aerial photographs of the area.

The flight path was derived from the Mini-Ranger radar positioning system. The distance from the helicopter to two established reference locations was measured several times per second, and the position of the helicopter mathematically calculated by triangulation.

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.

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

The signal to noise ratio was further enhanced by the application of a low pass digital filter. It has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This low effective time constant 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 in-phase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data were then presented in profile map form.

The in-phase and quadrature responses of the coaxial 4575 Hz and the coplanar 4175 Hz configuration were plotted with flight path and presented as a two color overlay. The in-phase and quadrature responses of the coaxial 946 Hz configuration were plotted with electromagnetic anomaly information.

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 was 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.

The aeromagnetic data was presented with electromagnetic anomaly information.

5. INTERPRETATION

The electromagnetic profile maps were analysed to identify those responses typical of bedrock conductors. As discussed in Appendix I, the profile shape can indicate the general geometry of the conductive source. Anomalies that exhibited the characteristics of a horizontal conducting layer were attributed to conductive overburden. Those with characteristics of a thin, steeply dipping sheet were interpreted to be of bedrock origin. Where the response shape was insufficiently diagnostic to rule out the possibility of a conductive overburden source the conductor axis was indicated as a possible bedrock conductor.

The process of conductor identification emphasized profile shape rather than the estimated conductance. This parameter, however, was calculated by application of the high frequency coaxial in-phase and quadrature response to the phasor diagram for the vertical half-plane model. Carried out by computer, the results are tabulated in Appendix II and presented on the interpretation map in symbolized form.

The estimated conductance is a measure of the conductive properties of the source. A low conductance of say, under 4 mhos is more indicative of electrolytic conduction in faults and shears, possible minor disseminated mineralization or overburden.

This was the case for all the conductors selected in the Hoblitzell area as none has the higher conductances normally expected of significant graphite and sulphide mineralization. Nevertheless, based on the many well defined, narrow and dip-indicating anomaly shapes found in the area, 10 of the 19 conductors selected are granted the bedrock classification. Two common characteristics of these interpreted bedrocks are a low calculated conductivity thickness of around 1 mho and, where apparent, a northerly dip. The remaining zones outlined are more ambiguous in EM response characteristics but have enough narrowness, alignment and magnetic or geological support to warrant some consideration as weak, deep or surficial masked bedrocks.

Enveloping these more interesting anomalies are wider surficial-type responses of low to medium amplitudes which appear to mask the area. Known geology from the Ontario Ministry of Natural Resources' geological map 2453 (1982) reflects this. Drill hole measurements point to a thin overburden of around 10 metres or less from mainly swampy grounds, small lakes and rivers.

The surficial conductivity has affected the detection of weak bedrock conductors to some degree. It is at times

difficult to distinguish between possible bedrocks such as 1, 2, 4, 6, 14 and 19 from enhanced edge or trough effects of overburden. As well,while the surficial conductivity has little effect on the response shapes of the stronger or shallower interpreted bedrock zones it does hamper modelling calculations. The basic effect of the mainly quadrature component enhanced amplitudes is less attractive conductance and depth estimates. The mainly surface-depth calculations of the selected anomalies is a case in point, since most are located within surficials of similar or greater amplitudes. The only zones with any significant depth values, ranging between 10 and 20 metres, are the less surficial affected and stronger eastern zones of 9 to 15. It is likely that most of the other potential bedrocks would have depths greater than zero or the thickness of overburden and more significant conductances over 1 mho when manual selected and surficial background subtracted amplitudes are used.

The probabilities of the outlined conductors in being associated with the underlying geology are increased significantly by the apparent correlation of virtually all the zones with magnetic highs or contacts. The association of these conductors with the available geology is less certain as there seems to be some discrepancy between inferred subsurface geological boundaries and the apparent magnetic contacts. The

predominant mapped unit is Archean clastic metasediments of mainly arkose, tuff, and graphites. Yet the magnetic contours are far from uniform within this given geology. Many highs trend E/W through it, including a contact-like gradient down the northern margin, suggesting metavolcanics or intrusives within the metasediments. These apparent contacts and known graphites might account for some of the long formational zones such as 2, 7, 8, 9, and 16. The shorter band of bedrocks of 10 to 13 might be continuations of longer zones to the east separated by a mapped cross-fault or in the case of 12 and 13 extend further outside the area. Otherwise, with their direct magnetic associations, they might be massive sulphide prospects.

Three other units are also mapped within the area. Along the SSW margin are mafic to intermediate metavolcanics. There are no apparent bedrock conductors within this geology. Its contact with the metasediments is clearly shown on a N/S boundary on the magnetic contours. Along this feature is a series of weak intermittent EM responses, represented by zones 1, 4, and 6, which might reflect minor contact mineralization.

Separated to the east end by a cross-fault, apparent by the termination or separation of magnetic trends and EM conductors (4c/14, 10/15b, 16a/16) at around line 3020, is

a unit of felsic to intermediate metavolcanics. The obvious feature here is zone 15, the strongest combined EM and magnetic zone of the area.

Lastly, felsic to intermediate intrusive rocks are mapped on the NW corner. Here, the added set of perpendicular E/W flight lines (represented by the Hoblitzell II maps) is shown to be warranted as its magnetic contours clearly display the intrusive to be a N/S striking body that penetrates further south into the metasediments than as mapped. Unfortunately, the strong magnetic body is not complemented by any obvious bedrock conductors. Two weak, more surficial appearing trends run N/S along the edge of the magnetic body. At best, they reflect poor contact mineralization. Subzone 17a's 1020B response appears to be the most bedrock like anomaly of these tie lines but the analog records show it to be noise related. Due to more low frequency support, zone 19 in the metasediments to the south is actually given more bedrock potential than the other conductive trends in this little area.

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6. RECOMMENDATIONS

The survey in northeastern Ontario revealed the Hoblitzell area to be conductively and magnetically active and of high geophysical interest. In all, 19 separate conductors of potential are identified, 10 of which are interpreted as bedrocks. As an aid to geophysical/geological classification and follow-up considerations, these zones are prioritized and categorized in receding order below on the criteria of good bedrock conductors and common geophysical characteristics.

I - Zones: 8, 10, 15, 7, 11.
- Well defined interpreted bedrock conductors with moderate conductances (1 to 1.3 mhos), northerly dips and clastic metasediments geology.

II - Zones: 3, 16, 12, 13, 9.
- More marginal interpreted bedrock conductors in clastic metasediments geology that are less defined because of either low amplitudes, lower conductance, overburden masking, or lack of adjacent line support (as in the case of 12 and 13, the only "II" zones with calculated conductances above 0.5 mhos).

III - Zones: 14, 2, 19, 1.
- Higher potential "possible bedrocks" in surficially-masked environment with better definition, higher conductance, good alignment and/or magnetic association.

IV - Zones: 6, 5, 18, 17

- Lowest bedrock potential of all the selected conductors, whose poorly defined responses and negligible conductance estimates more likely reflect enhanced surficial or edge effects than underlying bedrock trends hinted at by magnetic correlations.

It should be noted, that based solely on the geophysical data provided by the survey, the above grading is highly tentative. Final follow-up priorities should be assessed by those who can correlate more detailed geological information with this report. This is especially valid in the search of gold, whose normally low concentration does not directly yield high conductive anomalies. Hence, any conductor axis, regardless of initial rating, can become prospects favourable to gold mineralization in accordance with its geological association, if and when proven as bedrock. For this reason, all the interpreted bedrock zones plus perhaps the higher potential "possible bedrocks" zones (i.e. categories I, II, and perhaps III) are recommended geophysically for follow-up of gold prospects. The remaining zones should merit ground investigation only if known geology strongly suggests it.

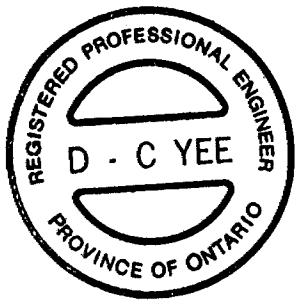
The generally low calculated conductances and formational-type zones of the survey, meanwhile, are less conducive to massive sulphide prospecting. In such a case, only the more

conductive, shorter and directly magnetic zones of 10, 12 and 13 warrant follow-up consideration.

Respectfully submitted,

AERODAT LIMITED

Richard Yee



September 13, 1984

Richard D.C. Yee, P. Eng.

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 II 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

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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 conduotors; however, they may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously underrate 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 associated 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 inferred 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 follows 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.

APPENDIX II

Anomaly List

ANOMALY LIST - HOBLITZELL AREA A

FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENCY 4575 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	2010	A	0	3.8	19.4	0.0	0	36
1	2010	B	0	4.3	21.1	0.0	0	40
1	2020	A	0	4.5	9.6	0.2	0	55
1	2020	B	0	4.0	11.1	0.1	0	44
1	2040	A	0	4.6	7.6	0.3	2	51
1	2040	B	0	2.4	7.6	0.0	0	49
1	2050	A	0	3.6	13.6	0.0	0	38
1	2060	A	0	3.4	9.5	0.1	0	54
1	2060	B	0	4.7	19.5	0.0	0	42
1	2060	C	0	11.3	28.4	0.3	0	44
1	2060	D	0	7.9	22.4	0.2	0	45
1	2060	E	0	9.7	16.8	0.4	0	45
1	2060	F	0	6.2	17.2	0.1	0	46
1	2060	G	0	0.3	4.1	0.0	0	54
1	2070	A	0	0.6	8.9	0.0	0	31
1	2070	B	0	0.4	6.2	0.0	2	26
1	2070	C	0	0.0	7.0	0.0	0	34
1	2070	D	0	4.5	16.3	0.1	0	38
1	2070	E	0	10.5	18.6	0.4	0	38
1	2070	F	0	7.9	18.5	0.2	0	39
1	2070	G	0	4.8	21.2	0.0	0	29
1	2080	A	0	3.5	10.4	0.1	0	44
1	2080	B	0	3.7	11.2	0.1	0	45
1	2080	C	0	5.6	7.7	0.5	7	48
1	2090	A	0	4.5	15.0	0.1	0	43
1	2090	B	0	3.5	11.9	0.1	0	46
1	2090	C	0	9.4	26.0	0.2	0	43
1	2090	D	0	3.7	16.8	0.0	0	41
1	2100	A	0	6.5	22.1	0.1	0	42
1	2100	B	0	8.6	21.3	0.2	0	46
1	2110	A	0	17.4	52.4	0.2	0	28
1	2110	B	0	11.1	48.6	0.1	0	25
1	2110	C	0	10.3	39.8	0.1	0	27
1	2110	D	0	10.6	52.0	0.1	0	22
1	2110	E	0	-0.6	6.4	0.0	0	38

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST - HOBLITZELL AREA A

FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENCY 4575 INPHASE	FREQUENCY 4575 QUAD.	CONDUCTOR CTP MHOS	CONDUCTOR DEPTH MTRS	BIRD HEIGHT MTRS
1	2120	A	0	4.1	21.7	0.0	0	40
1	2120	B	0	11.3	17.6	0.5	0	46
1	2130	A	1	23.8	24.1	1.3	10	28
1	2130	B	0	6.6	21.4	0.1	0	32
1	2130	C	0	5.1	17.9	0.1	0	42
1	2141	A	0	3.3	10.3	0.1	4	36
1	2141	B	1	13.9	13.2	1.2	3	45
1	2141	C	0	9.5	15.3	0.5	0	46
1	2150	A	0	17.8	25.7	0.7	11	24
1	2150	B	0	15.8	37.1	0.3	0	30
1	2150	C	0	10.8	40.3	0.1	0	28
1	2150	D	0	4.1	20.2	0.0	0	36
1	2160	A	0	4.1	12.3	0.1	0	37
1	2160	B	0	4.7	14.7	0.1	0	39
1	2160	C	0	3.7	17.5	0.0	0	32
1	2160	D	0	12.1	33.4	0.2	0	40
1	2160	E	0	6.0	14.5	0.2	8	30
1	2160	F	0	8.6	18.1	0.3	1	35
1	2170	A	1	32.3	43.0	1.0	0	32
1	2170	B	1	30.5	36.2	1.2	0	33
1	2170	C	0	14.5	36.6	0.3	2	25
1	2170	D	0	5.5	21.9	0.1	0	31
1	2170	E	0	6.8	24.4	0.1	0	32
1	2190	A	0	4.4	12.1	0.1	16	23
1	2201	A	1	21.5	17.0	1.8	13	31
1	2201	B	1	18.1	20.7	1.0	9	30
1	2201	C	1	16.0	15.9	1.2	11	34
1	2201	D	0	11.7	13.1	0.9	18	28
1	2201	E	0	8.8	13.5	0.5	19	24
1	2201	F	0	3.3	15.7	0.0	8	22
1	2201	G	0	2.9	9.6	0.0	0	40
1	2201	H	0	3.6	9.9	0.1	0	43
1	2210	A	0	3.1	13.0	0.0	0	43
1	2210	B	0	0.6	9.5	0.0	0	40
1	2210	C	0	2.7	5.5	0.2	8	48
1	2210	D	1	7.3	5.9	1.2	0	65

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST - HOBLITZELL AREA A

FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENCY 4575 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	2210	E	0	6.4	9.1	0.5	8	43
1	2220	A	0	6.0	12.3	0.2	10	32
1	2220	B	0	8.2	9.6	0.7	2	49
1	2220	C	0	3.5	8.7	0.1	18	27
1	2220	D	0	20.7	26.1	0.9	12	24
1	2220	E	0	2.3	8.3	0.0	6	35
1	2220	F	0	1.9	12.6	0.0	6	23
1	2230	A	0	0.3	6.5	0.0	0	47
1	2230	B	0	1.9	5.8	0.0	0	52
1	2230	C	0	3.9	9.4	0.1	0	46
2	3010	A	0	3.9	10.2	0.1	6	36
2	3010	B	0	2.1	11.4	0.0	0	33
2	3010	C	0	3.4	16.4	0.0	0	34
2	3020	A	0	3.1	10.4	0.1	0	64
2	3020	B	0	2.9	7.8	0.1	0	64
2	3031	A	0	7.3	12.4	0.4	0	47
2	3031	B	0	4.8	12.1	0.1	3	37
2	3031	C	0	2.5	10.9	0.0	0	35
2	3040	A	0	2.2	10.9	0.0	0	45
2	3040	B	0	1.9	5.2	0.1	2	51
2	3040	C	0	5.1	7.8	0.4	3	51
2	3040	D	0	6.6	10.0	0.4	14	34
2	3050	A	0	5.9	12.8	0.2	10	30
2	3050	B	0	5.3	11.4	0.2	3	39
2	3050	C	0	6.8	7.5	0.7	0	60
2	3050	D	0	5.7	6.2	0.7	6	56
2	3060	A	0	2.2	6.6	0.0	0	48
2	3060	B	0	4.4	10.4	0.2	8	35
2	3060	C	1	14.0	12.7	1.3	4	44
2	3060	D	0	13.0	14.6	0.9	7	38
2	3060	E	0	9.9	16.5	0.5	0	42
2	3060	F	0	15.4	34.1	0.4	0	45
2	3070	A	0	15.4	33.2	0.4	0	42
2	3070	B	0	9.1	20.1	0.3	5	30
2	3070	C	1	15.7	16.3	1.1	8	36
2	3070	D	1	15.4	17.3	1.0	9	33

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST - HOBLITZELL AREA B

FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENCY 4575 INPHASE	FREQUENCY 4575 QUAD.	CONDUCTOR CTP MHOS	CONDUCTOR DEPTH MTRS	BIRD HEIGHT MTRS
1	1010	A	0	3.1	13.7	0.0	0	45
1	1020	A	0	4.6	12.5	0.1	0	55
1	1020	B	0	3.0	4.8	0.3	14	49
1	1030	A	0	0.9	3.1	0.0	22	38
1	1030	B	0	4.0	12.1	0.1	0	43
1	1030	C	0	4.1	12.6	0.1	0	42
1	1040	A	0	4.8	11.6	0.2	0	51
1	1040	B	0	2.4	5.4	0.1	0	59
1	1050	A	0	0.5	11.8	0.0	0	30
1	1050	B	0	1.7	11.7	0.0	4	25
1	1050	C	0	3.6	17.3	0.0	0	38
1	1050	D	0	3.7	19.3	0.0	0	31
1	1050	E	0	6.3	28.6	0.0	0	30
1	1060	A	0	3.2	10.0	0.1	0	44
1	1060	B	0	2.5	11.1	0.0	0	37
1	1060	C	0	2.0	15.9	0.0	0	42
1	1070	A	0	2.8	18.0	0.0	0	33
1	1070	B	0	3.4	19.1	0.0	0	40
1	1070	C	0	2.8	15.8	0.0	0	30
1	1070	D	0	3.7	13.2	0.1	0	40
1	1070	E	0	2.5	9.4	0.0	0	53
1	1081	A	0	3.6	16.0	0.0	0	41
1	1081	B	0	2.8	13.1	0.0	0	33
1	1081	C	0	3.9	19.5	0.0	0	36
1	1081	D	0	3.8	19.0	0.0	0	33
1	1081	E	0	6.0	19.8	0.1	0	38
1	1081	F	0	1.6	10.6	0.0	0	43
1	1090	A	0	1.8	10.0	0.0	0	48
1	1090	B	0	3.8	13.9	0.1	0	44
1	1090	C	0	2.0	8.7	0.0	0	45
1	1090	D	0	2.4	8.7	0.0	0	47
1	1100	A	0	8.1	33.9	0.1	0	29
1	1100	B	0	2.9	15.9	0.0	0	37
1	1100	C	0	4.4	21.9	0.0	0	40
1	1100	D	0	6.7	22.4	0.1	0	42

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST - HOBLITZELL AREA B

FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENCY 4575 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	1100	E	0	5.4	23.6	0.0	4	22
1	1100	F	0	4.7	20.7	0.0	0	38

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

900

Mining Lands Section

File No 2.7378

Control Sheet

TYPE OF SURVEY

✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

L.D. Ld.

J. Hurst

Signature of Assessor

85-01-21

Date

1985 04 16

Your File: 417
Our File: 2.7378

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated March 19, 1985
Geophysical (Electromagnetic & Magnetometer)
Survey on Mining Claims L 628595, et al,
in Hobitzell and Noseworthy Townships

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)965-4888

S. Hurst:mc

cc: Golden Shield Resources Ltd
Suite 2210
1380Adelaide Street West
Toronto, Ontario
M5H 3P5
cc: Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3
Encl.

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario
cc: Resident Geologist
Kirkland Lake, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

AMENDED

File 2.7378

Date 1985 03 19

Mining Recorder's Report of Work No. 417

Recorded Holder
GOLDEN SHIELD RESOURCES LTD

Township or Area
HOBITZELL & NORSEWORTHY TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 10 days	L 628595 to 630 inclusive 628638 to 667 inclusive 628669 to 684 inclusive 628668 628685 to 694 inclusive
Magnetometer 10 days	
Radiometric ____ 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

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:

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.7378

Date 1985 02 05

Mining Recorder's Report of Work No. 417

Recorded Holder
GOLDEN SHIELD RESOURCES

Township or Area
HOBITZELL AND NOSEWORTHY TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 21 days	
Magnetometer 21 days	L 628631 to 637 inclusive 761653-54 761657 to 686 inclusive
Radiometric ____ 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

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:

828 (83/6)

Ministry of
Natural
Resources

Ontario

AMENDED April 3/85

Your File: 417
Our File: 2.7378

1985 03 19

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

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. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

S. Hurst:mc

Encls.

cc: Golden Shield Resources Ltd
Suite 2210
130 Adelaide Street West
Toronto, Ontario
M5H 3P5

cc: Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

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

AMENDED

Ministry of Natural Resources

Ontario

Notice of Intent

for Technical Reports

1985 03 19

2.7278/417

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 Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

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): Airborne Magnetic & Electromagnetic Survey

Township or Area: Hoblitzell & Noseworthy

Claim Holder(s): Golden Shield Resources Ltd.

Prospector's Licence No.: T-1402

Address: c/o Suite 2210, 130 Adelaide St. West, Toronto, Ontario M5H 3P5

Survey Company: Aerodat Surveys

Date of Survey (from & to): Day 07 Mo. 84 – Day 07 Mo. 84

Total Miles of line Cut:

Name and Address of Author (of Geo-Technical report): Aerodat Ltd., 3883 Nashua Drive, Mississauga, Ontario L4V 1R3

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	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	40
	Magnetometer	40
	Radiometric	

LARDER LAKE MINING DIV. RECEIVED SEP 13 1984 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628595	80
	628596	80
	628597	80
	628598	80
	628599	80
	628600	80
	628601	80
	628602	80
	628603	80
	628604	80
	628605	80
	628606	80
	628607	80
	628608	80
	628609	80
	628610	80
	628611	80
	628612	80
	628613	80
	628614	80
	628615	80
	628616	80
	628617	80

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628618	80
	628619	80
	628620	80
	628621	80
	628622	80
	628623	80
	628624	80
	628625	80
	628626	80
	628627	80
	628628	80
	628629	80
	628630	80
	628631	80
	628632	80
	628633	80
	628634	80
	628635	80
	628636	80
	628637	80
	628638	80
	628639	80
	628640	80

Total number of mining claims covered by this report of work: 132

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: Sept 11, 1984 — Recorded Holder or Agent (Signature): Bryan H. Wilson

For Office Use Only

Total Days Cr. Recorded: 10,560

Date Recorded: SEP 20 1984

Date Approved as Recorded: See Revised Statement

Mining Recorder:

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: Bryan H. Wilson c/o Suite 2210 - 130 Adelaide St. W. Toronto Ontario M5H 3P5

Date Certified: Sept 11 1984

Certified by (Signature): Bryan Wilson

1362 (81/9)

Ministry of Natural Resources
Ontario

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

Pg 2

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.

Pg 2

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

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

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	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628641	80
	628642	80
	628643	80
	628644	80
	628645	80
	628646	80
	628647	80
	628648	80
	628649	80
	628650	80
	628651	80
	628652	80
	628653	80
	628654	80
	628655	80
	628656	80
	628657	80
	628658	80
	628659	80
	628660	80
	628661	80
	628662	80
	628663	80

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628664	80
	628665	80
	628666	80
	628667	80
	628669	80
	628670	80
	628671	80
	628672	80
	628673	80
	628674	80
	628675	80
	628676	80
	628677	80
	628678	80
	628679	80
	628680	80
	628681	80
	628682	80
	628683	80
	628684	80
	761653	80
	761654	80
	761657	80

Total number of mining claims covered by this report of work.

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		
	Date Certified	Certified by (Signature)

Ministry of Natural Resources
Ontario

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

Pg 3

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.

Pg 3

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
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	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	761658	80
	761659	80
	761660	80
	761661	80
	761662	80
	761663	80
	761664	80
	761665	80
	761666	80
	761667	80
	761668	80
	761669	80
	761670	80
	761671	80
	761672	80
	761673	80
	761674	80
	761675	80
	761676	80
	761677	80
	761678	80
	761679	80
	761680	80

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	761681	80
	761682	80
	761683	80
	761684	80
	761685	80
	761686	80

Total number of mining claims covered by this report of work.

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		
	Date Certified	Certified by (Signature)

1362 (81/9)

Ontario Ministry of Natural Resources

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

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.

Pg 4

Type of Survey(s)	Township or Area

Claim Holder(s)	Prospector's Licence No.
Golden Shields Resources (page 4)	T1402

Address

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

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

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 - Electromagnetic - Magnetometer - Radiometric - Other Geological Geochemical	Days per Claim
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic Magnetometer Radiometric	Days per Claim

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.
L	628668	80			
	628685	80			
	628686	80			
	628687	80			
	628688	80			
	628689	80			
	628690	80			
	628691	80			
	628692	80			
	628693	80			
	628694	80			

PORCUPINE MINING DIVISION RECEIVED SEP 19 1984 A.M. P.M. 7 8 9 10 11 12 1 2 3 4 5 6

LARDER LAKE MINING DIV. RECEIVED SEP 20 1984 AM PM 7 8 9 10 11 12 1 2 3 4 5 6

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.

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

	Date Certified	Certified by (Signature)

1985 02 22

Your File: 417
Our File: 2.7378

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated February 5, 1985
Geophysical (Electromagnetic & Magnetometer)
Survey on Mining Claims L 628595, et al,
in Hobitzell & Noseworthy Townships

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)965-4888

S. Hurst:mc

cc: Golden Shield Resources Ltd
Suite 2210
130 Adelaide Street West
Toronto, Ontario
M5H 3P5

cc: Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

Encl.

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

cc: Resident Geologist
Kirkland Lake, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.7378

Date T985 02 05

Mining Recorder's Report of Work No. 417

Recorded Holder: GOLDEN SHIELD RESOURCES LTD

Township or Area: HOBITZELL & NOSEWORTHY TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 10 days	L 628595 to 630 inclusive 628638 to 667 inclusive 628669 to 684 inclusive
Magnetometer 10 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☒	
Special provision ☐ Ground ☐	

Add
628668
628685 to 694 incl.

☐ Credits have been reduced because of par coverage of claims.

☒ Credits have been reduced because of correc to work dates and figures of applicant.

fund not as filed

Special credits under section 77 (16) for the follc

No credits have been allowed for the following mining claims

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

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:

Ministry of
Natural
Resources

Ontario

Feb. 20/85

1985 02 05

Your File: 417
Our File: 2.7378

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

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. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

S. Hurst:mc

Encls.

cc: Golden Shield Resources Ltd
Suite 2210
130 Adelaide Street West
Toronto, Ontario
M5H 3P5

cc: Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

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

845

Ministry of Natural Resources

Ontario

Notice of Intent

for Technical Reports

1985 02 05

2.7378/417

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 Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

REGISTERED

December 31, 1984 2.7378

Golden Shield Resources Ltd
Suite 2210
130 Adelaide Street West
Toronto, Ontario
M5H 3P5

Dear Sirs:

RE: Airborne Geophysical (Magnetometer & Electromagnetic) Survey submitted on Mining Claims L 628595 et al in the townships of Noseworthy and Hoblitzell

---

Enclosed is a copy of our letter dated November 16, 1984 requesting additional information for the above-mentioned survey.

Unless you can provide the required data by January 11, 1985 the line miles will be estimated and assessment credits granted accordingly.

For further information, please contact Mr. Ray Pichette at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

S. Hurst:mc

cc: Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

cc: Mining Recorder
Kirkland Lake, Ontario

Encl.

November 16, 1984 File: 2.7378

Golden Shield Resources Ltd
Suite 2210
130 Adelaide Street West
Toronto, Ontario
M5H 3P5

Dear Sir:

RE: Airborne Geophysical (Magnetometer & Electromagnetic) Survey submitted on Mining Claims L 628595 et al in the Townships of Hoblitzell and Noseworthy

---

This will acknowledge receipt of the above-described survey on November 5, 1984.

In examining this survey, there appears to be a discrepancy between the number of assessment work credit days applied for, and the information contained in the report. The report states that the number of miles flown over the claims is 46.6, which would result in 40 days credit per claim for each instrument. The report, however, states, and the maps indicate 1/4 mile line spacing, which would mean ten days credit per claim per instrument.

Also, in calculating line miles, that portion of the claim group which was cross-flown, will have to be calculated separately from the rest of the claim block.

Would you please recheck your figures and advise this office of the proper line mileage for each section of the claim block.

When submitting this information, please quote file 2.7378.

For further information, please contact Susan Hurst at (416) 965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

S. Hurst:mc

cc: Mining Recorder
Kirkland Lake, Ontario

cc: Aerodat Limited
Mississauga, Ontario

GOLDEN SHIELD RESOURCES LIMITED
Suite 2210
130 Adelaide Street West
Toronto, Ontario M5H 3P5
(416) 367-9285

October 26, 1984

Mining Recorder
Ministry of Natural Resources
P.O. Box 984
4 Government Road East
Kirkland Lake, Ontario

Dear Sir:

Re: File No: L 628643 - Report #417 - Sept 20/84

Please find enclosed two (2) copies of a report in support of an airborn survey conducted over our claims in Hoblitzel Twp. We have submitted a 'Report of Work' form to you on September 11, and have received a copy of the same dated September 20th indicating 10,560 Days Credit having been recorded.

Trusting you will find this satisfactory, I remain,

Yours very truly,

Bryan R Wilson

Bryan Wilson

BW/kd
Enclosures (2)

Ministry of Natural Resources
Ontario

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

The Mining Act

Instructions: – Please type or print. #417
– 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 Magnetic & Electromagnetic Survey	Hoblitzell & Noseworthy

Claim Holder(s)	Prospector's Licence No.
Golden Shield Resources Ltd.	T-1402

Address: c/o Suite 2210, 130 Adelaide St. West, Toronto, Ontario M5H 3P5

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
Aerodat Surveys	Day 07 Mo. 84 Day 07 Mo. 84	

Name and Address of Author (of Geo-Technical report): Aerodat Ltd., 3883 Nashua Drive, Mississauga, Ontario L4V 1R3

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	40
	Magnetometer	40
	Radiometric	

LARDER LAKE MINING DIV.
RECEIVED
SEP 13 1984
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

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.
L	628595	80	L	628618	80
	628596	80		628619	80
	628597	80		628620	80
	628598	80		628621	80
	628599	80		628622	80
	628600	80		628623	80
	628601	80		628624	80
	628602	80		628625	80
	628603	80		628626	80
	628604	80		628627	80
	628605	80		628628	80
	628606	80		628629	80
	628607	80		628630	80
	628608	80		628631	80
	628609	80		628632	80
	628610	80		628633	80
	628611	80		628634	80
	628612	80		628635	80
	628613	80		628636	80
	628614	80		628637	80
	628615	80		628638	80
	628616	80		628639	80
	628617	80		628640	80

Total number of mining claims covered by this report of work: 132

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures				Total Days Credits
$	÷	15	=	

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)
Sept 11, 1984	Bryan H. Wilson

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
10,560	SEP 20 1984	
	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
Bryan H. Wilson c/o Suite 2210 - 130 Adelaide St. W. Toronto Ontario M5H 3P5

Date Certified	Certified by (Signature)
Sept 11 1984	Bryan Wilson

Ministry of Natural Resources
Ontario

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

Pg 2

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.

Pg 2

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

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

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	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628641	80
	628642	80
	628643	80
	628644	80
	628645	80
	628646	80
	628647	80
	628648	80
	628649	80
	628650	80
	628651	80
	628652	80
	628653	80
	628654	80
	628655	80
	628656	80
	628657	80
	628658	80
	628659	80
	628660	80
	628661	80
	628662	80
	628663	80

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628664	80
	628665	80
	628666	80
	628667	80
	628669	80
	628670	80
	628671	80
	628672	80
	628673	80
	628674	80
	628675	80
	628676	80
	628677	80
	628678	80
	628679	80
	628680	80
	628681	80
	628682	80
	628683	80
	628684	80
	761653	80
	761654	80
	761657	80

Total number of mining claims covered by this report of work.

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

Date Certified	Certified by (Signature)

Ministry of Natural Resources

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

Pg 3

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.

Pg 3

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

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

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		Days per Claim
	Geophysical	
	· Electromagnetic	
	· Magnetometer	
	· Radiometric	
	· Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	761658	80
	761659	80
	761660	80
	761661	80
	761662	80
	761663	80
	761664	80
	761665	80
	761666	80
	761667	80
	761668	80
	761669	80
	761670	80
	761671	80
	761672	80
	761673	80
	761674	80
	761675	80
	761676	80
	761677	80
	761678	80
	761679	80
	761680	80

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	761681	80
	761682	80
	761683	80
	761684	80
	761685	80
	761686	80

Total number of mining claims covered by this report of work.

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

	Date Certified	Certified by (Signature)

1362 (81/9)

Ministry of Natural Resources
Ontario

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

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.

Pg 4

Type of Survey(s)

Township or Area

Claim Holder(s)
Golden Shields Resources (page 4)

Prospector's Licence No.
T1402

Address

Survey Company

Date of Survey (from & to) Day | Mo. | Yr. | Day | Mo. | Yr.

Total Miles of line Cut

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	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	628668	80
	628685	80
	628686	80
	[illegible]	80
	628688	80
	628689	80
	628690	80
	628691	80
	628692	80
	628693	80
	628694	80

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

Total number of mining claims covered by this report of work.

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.

PORCUPINE MINING DIVISION RECEIVED SEP 19 1984 A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

LADDER LAKE MINING DIV. RECEIVED SEP 20 1984 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

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

	Date Certified	Certified by (Signature)

628 631

632

633

634

635

636

637

761653

654

761657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

(39)

double lines E W

(10.9 miles) 39 $\times 40$ => 11 days/claim

all claim N-S

(33.2 miles) ÷ 132 $\times 40$ = 10 days/claim

NOTE
400' Surface Rights Reservation
around all Lakes and Rivers.

CANCELLED
PATENTED LAND
CROWN LAND SALE
LEASES LAND
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY

LOC.
L.O.
MRO
SRO

North Ash

Chabbre Lake

Burntbush River

Burntbush

HOBLITZELL

BRADETTE

63M
62M
61M
60M
59M
58M
57M
56M
55M
54M

HOBLITZELL

M.502

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

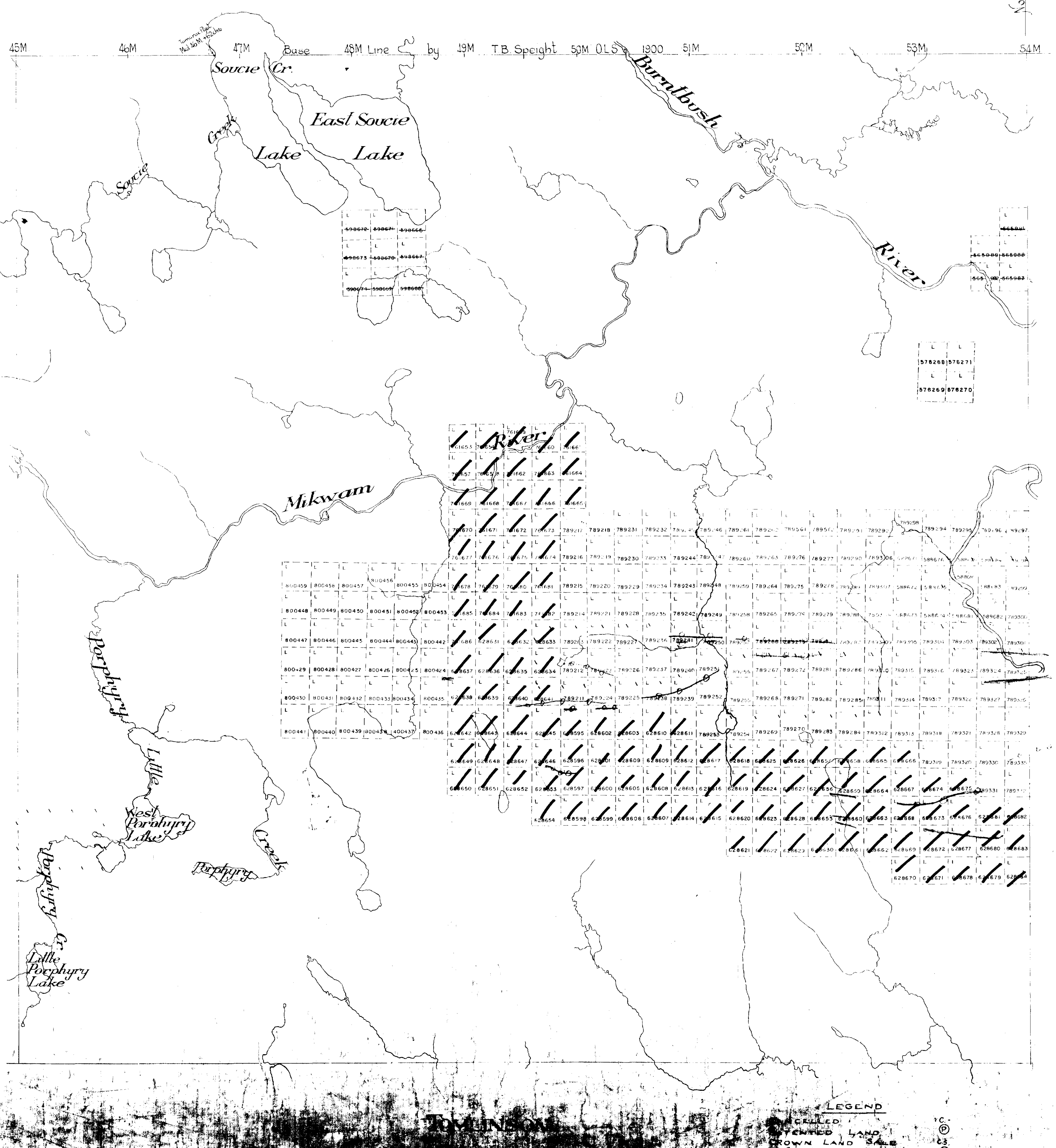
LARDER LAKE MINING DIVISION

DISTRICT OF COCHRANE

Scale: 40 Chains - 1 Inch

NOTE

400' Surface Rights Reservation around all Lakes and Rivers

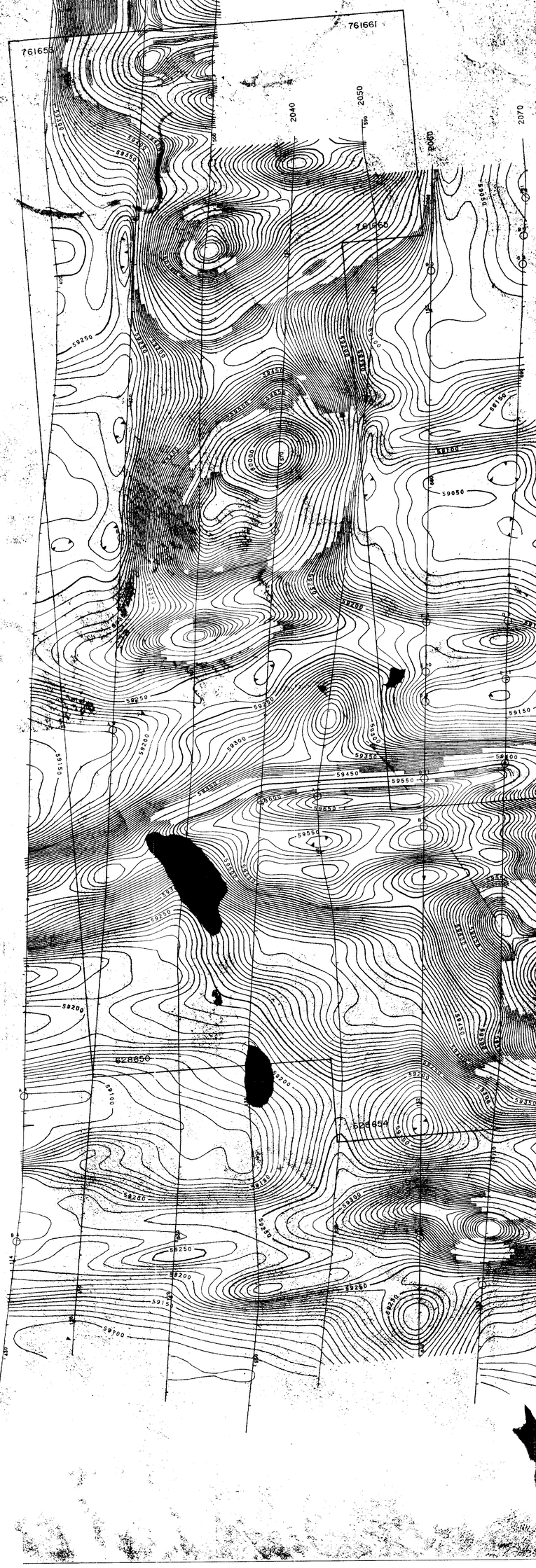


LEGEND

CANCELLED C.
PATENTED LAND (P)
CROWN LAND SALE C.S.
LEASED (L)
LOCATED LAND LOC.
LICENSE OF OCCUPATION L.O.
MINING RIGHTS ONLY M.R.O.
SURFACE RIGHTS ONLY S.R.O.

32E05NW0017 2.7378 NOSEWORTHY

210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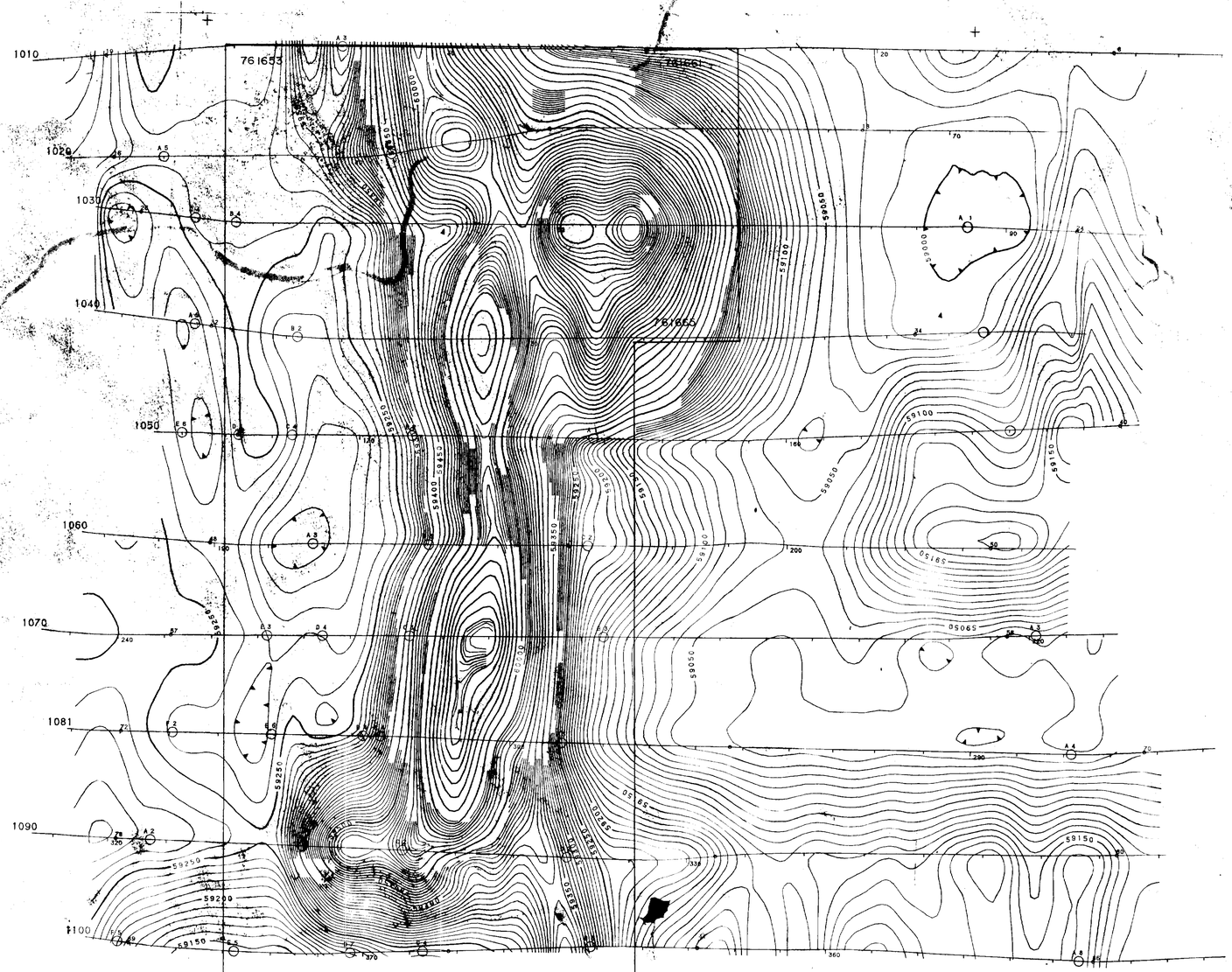


GOLDEN SHIELD RESOURCES LTD.

TOTAL FIELD MAGNETIC MAP

HOBLITZELL TOWNSHIP II

ONTARIO

SCALE 1/10,000

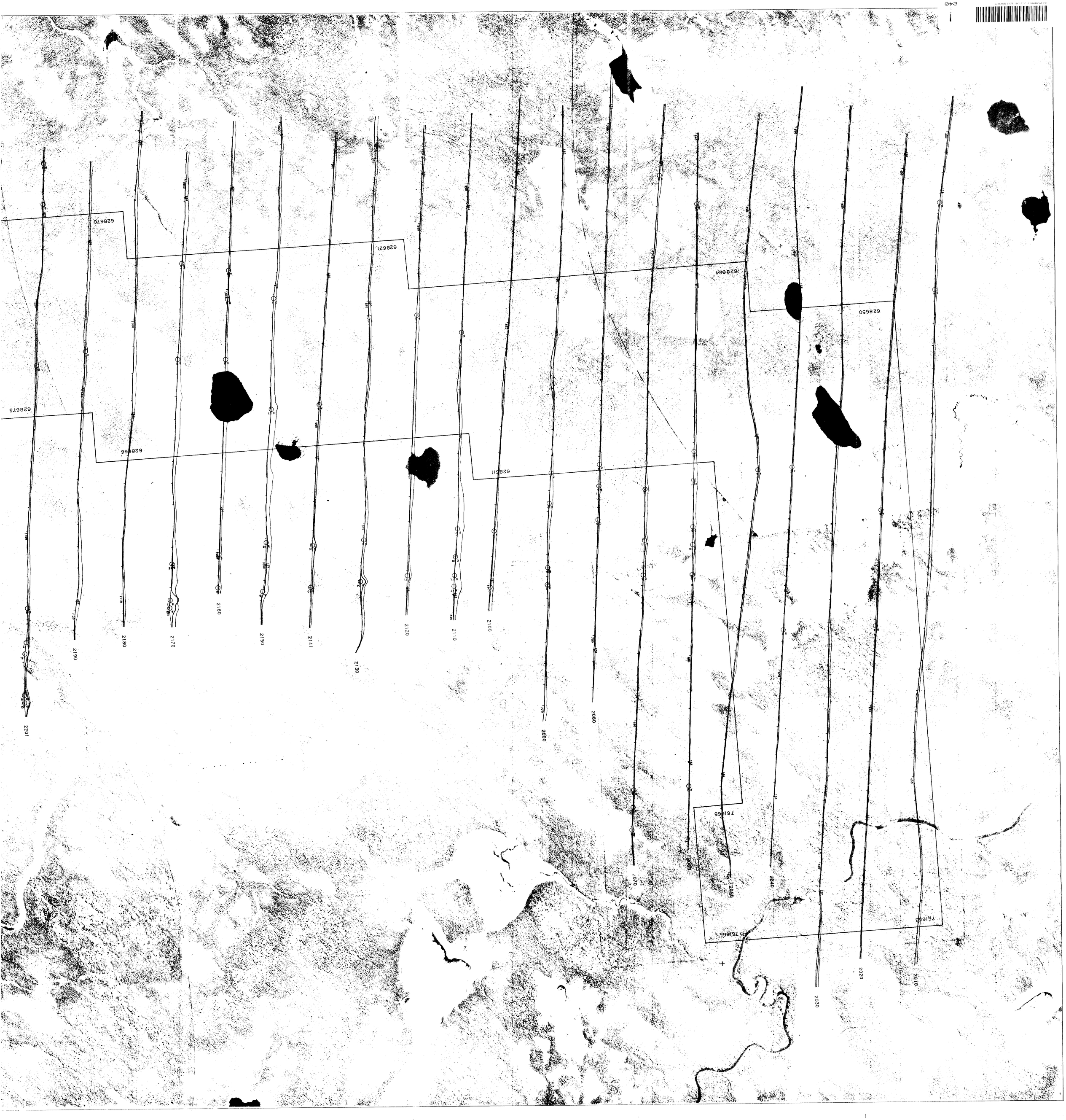
0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

DATE:	June 1984
N.T.S. No:	32 E
MAP No:	3

▼ AERODAT LIMITED

JB428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628621
628664
628650
628675
628666
628611
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2190
2180
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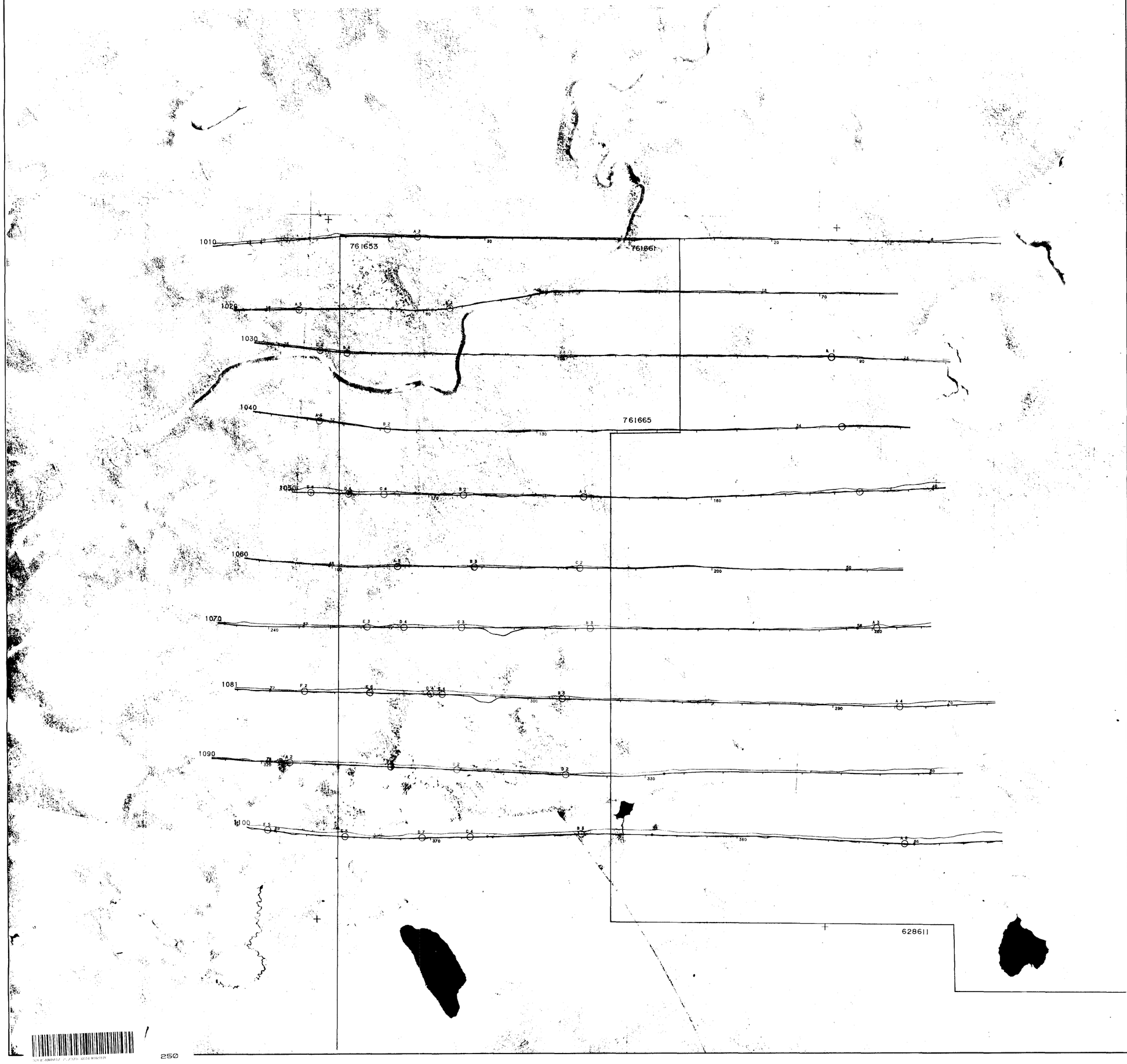
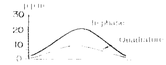
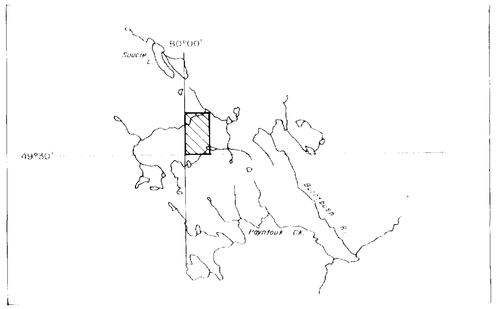
2040
2030
2020
2010
761665
761666
761668







GOLDEN SHIELD RESOURCES LTD.

AIRBORNE ELECTROMAGNETIC SURVEY

PROFILES - 946 Hz (coaxial)

HOBLITZELL TOWNSHIP II

ONTARIO

SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 Kilometre

DATE: June 1984

N.T.S. No.: 32 E

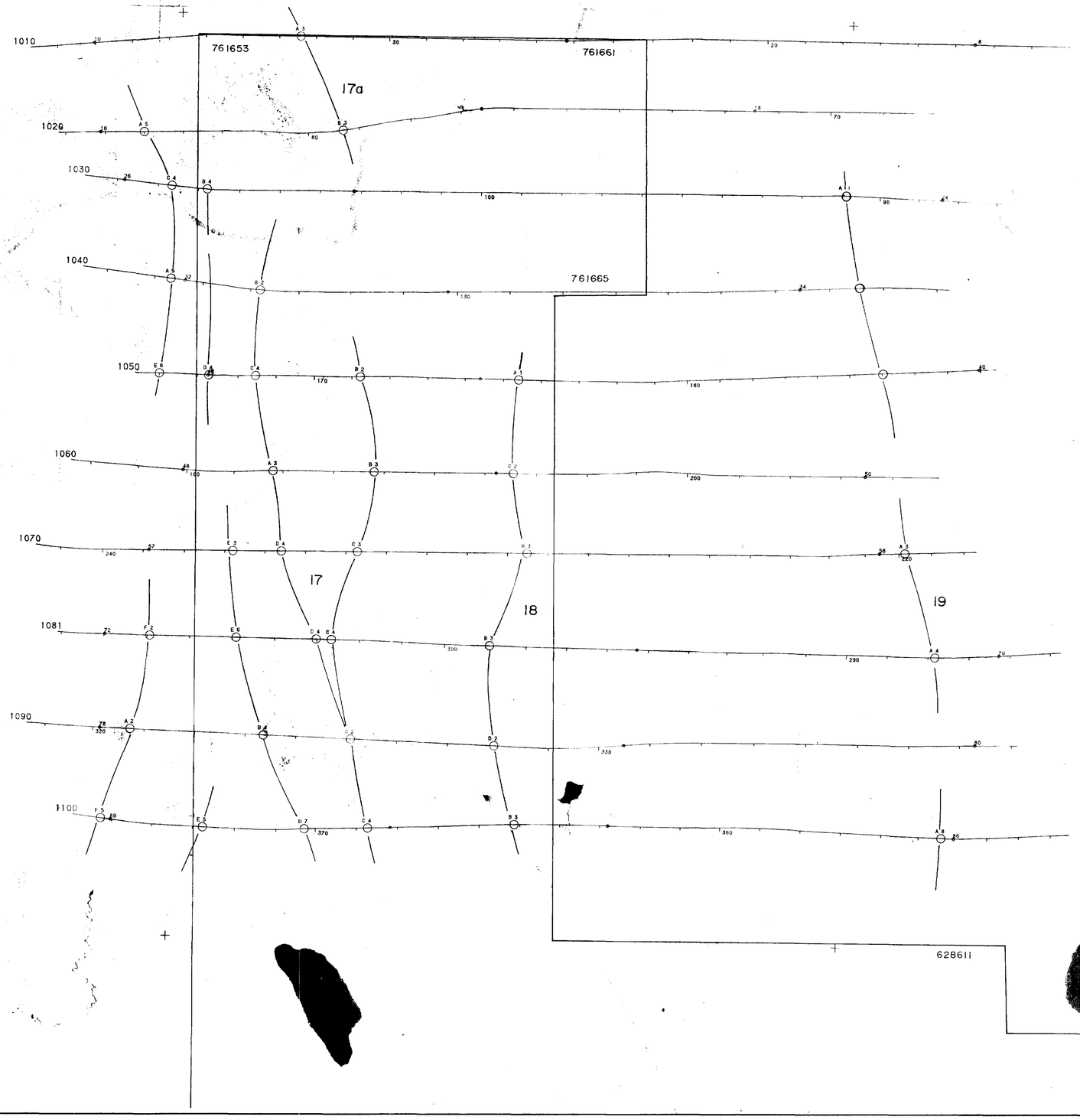
MAP No.: 2

▼ AERODAT LIMITED

JB428

250


761653
761661
761665
628611
628650
628654
628666
628621
628675
628670
1
2
2a
3
4a
4b
5
6
7
8
8a
9
9a
2b
1a
2010
2020
2030
2040
2050
2060
2070
2080
2090
2100
2110
2120
2130
2141
2150
2160
2170
2180
2190
2201



N

Horizontal control ..... based on photo laydown

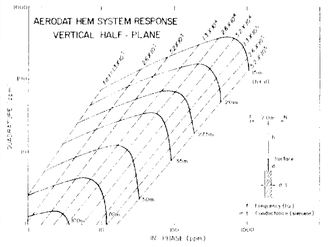
Average bird height ..... 30 metres

Line spacing ..... 400 metres

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

Interpreted bedrock conductor axis

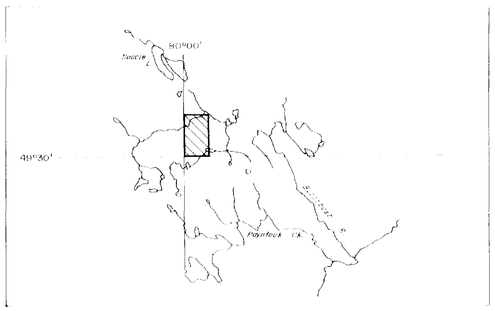
Possible bedrock conductor axis



EM RESPONSE

Conductivity thickness in mhos

7	60 - 120
6	30 - 60
5	15 - 30
4	8 - 15
3	4 - 8
2	2 - 4
1	1 - 2
0	0 - 1



GOLDEN SHIELD RESOURCES LTD.

AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP

HOBLITZELL TOWNSHIP II

ONTARIO

SCALE 1:20,000

0 330 660 1320 1/2 mile

0 100 200 500 Kilometre

▼ AERODAT LIMITED

DATE June 1984

N.T.S. No. 32 E

MAP No. 1

JR428

270

N

GOLDEN SHIELD RESOURCES LTD.

TOTAL FIELD MAGNETIC MAP

HOBLITZELL TOWNSHIP

ONTARIO

SCALE 1:10,000

1/2 mile

1 Kilometre

DATE: June 1984

N.T.S. No: 32 E

MAP No: 3

▼ AERODAT LIMITED

Rdy

19428

N

2170 2180 2190 2201 2210 2220 2230 3010 3020 3031 3040 3050 3060 3070 3080

628666

628675

628670

624990

624985

633132

GOLDEN SHIELD RESOURCES LTD.

AIRBORNE ELECTROMAGNETIC SURVEY

PROFILES - 946 Hz (coaxial)

HOBLITZELL TOWNSHIP

ONTARIO

SCALE 1/10,000

1 kilometre

▼ AERODAT LIMITED

DATE	June 1984
N.T.S. No.	32 E
MAP No.	2

N

Horizontal control ..... based on photo laydown

Average bird height ..... 60 metres

Line spacing ..... 400 metres

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

Interpreted bedrock conductor axis

Possible bedrock conductor axis

AERODAT HEM SYSTEM RESPONSE
VERTICAL HALF - PLANE

EM RESPONSE

Conductivity thickness in mhos

⑦	60 - 120
⑥	30 - 60
⑤	15 - 30
④	8 - 15
③	4 - 8
②	2 - 4
①	1 - 2
○	0 - 1

80°00'

49°30'

GOLDEN SHIELD RESOURCES LTD.

AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP

HOBLITZELL TOWNSHIP

ONTARIO

SCALE 1:10,000

1/2 mile

Kilometre

DATE June 1984

N.T.S. No. 32 E

MAP No. 1

▼ AERODAT LIMITED

18428