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

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for

GOLDEN SHIELD RESOURCES LIMITED

by AERODAT LIMITED

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MAP	3		Total Field Magn	etic Contours

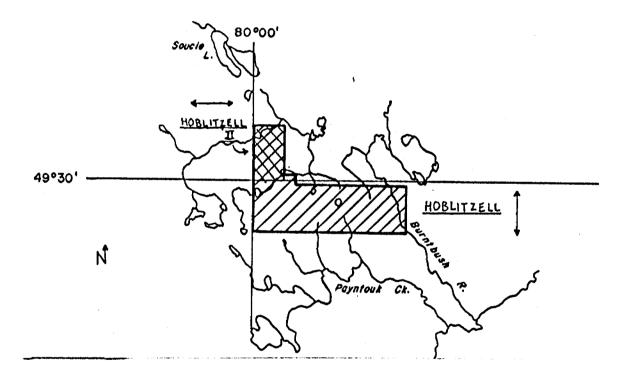
Map provided but not included in report:

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. 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

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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

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Digital Recorder 3.2.8

> 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 0.7 second VLF-EM magnetometer 0.5 second 0.1 second altimeter 1.0 second fiducial (time) fiducial (manual) 0.2 second

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3.2.9 Radar Positioning System

A Motorola Mini-Ranger (MRS III) radar navigation system was utilized for both navigation and track recovery. Transpohders 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 <u>Personnel</u>

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

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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 surfacedepth 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 magentically 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 surficiallymasked 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 See



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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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 is the depth estimate, but both should be considered as relative rather than absolute guides to the anomaly's properties. Conductance in mhos is the reciprocal of resistance in ohms and in the case of narrow slab-like bodies is the product of electrical conductivity and thickness.

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

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

Sulphide minerals with the exception of sphalerite, cinnabar and stibnite are good conductors; however, they may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously underrate the quality of the conductor in geological terms. In a similar sense the relatively nonconducting sulphide minerals noted above may be present in significant concentration in association with minor conductive

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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

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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 sheetlike 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.

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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.

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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.

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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

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Anomaly List

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ANOMALY LIST - HOBLITZELL AREA A

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FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENC INPHASE	Y 4575 QUAD.			BIRD HEIGHT MTRS
1.	2010	A	. 0	3.8	19.4	0.0	0	36
1	2010	В	0	4.3	21.1	0.0	0	40
1	2020	A	Ø	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		2	51
1	2040	В	• O	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	С	0	11.3	28.4	0.3	0	44
1.	2060	D	0	7,9	22+4	0.2	0	45
1	2060	Ε	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	С	0	0.0	7+0	0.0	0	34
1	2070	Ð	0	4.5	16.3	0.1	0	38
1	2070	Ē	0	10.5	18.6	0+4	0	38
1	2070	F	0	7.9			0	39
1	2070	G	0	4+8	21.2	0.0	0	29
1	2080	A	0		10.4		0	44
1	2080	в	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	В	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	В	0	8.6	21.3	0.2	0	46
1 .	2110	A	0	17.4	52.4	0.2	0	28
1	2110	в	0	11.1	48.6	0.1	0	25
1	2110	С	0	10.3	39+8	0 + 1	0	27
1	2110	\mathbf{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	FREQUENC INPHASE		CTP	MTRS	BIRD HEIGHT MTRS
1	2120	A	0	4 • 1	21.7	0.0	0	40
1.	2120	В	0	11.3	17.6	0,5	0	46
1	2130	A	1	23.8	24.1			28
1	2130	В	0	6+6			0	32
1.	2130	С	0	5.1	17,9	0.1	0	42
1	2141	A	0	· 3+3	10.3	0.1	4	36
1	2141	В	1	13.9			3	45
1	2141	С	0	9.5	15.3	0.5	0	46
1	2150	Α.	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				28
1	2150	D	0	4.1	20.2	0.0	0	36
1.	2160	A	0		12.3			37
1	2160	B	0	4.7				39
1	2160	С	0	3.7				32
1	2160	D	0	12.1				40
1	2160	E	0		14.5			30
1	2160	F	0	8+6	18.1	0.3	1	35
. 1	2170	A	1	32+3				32
1	2170	B	1	30.5				33
1	2170	С	0	14.5		0+3	2	25
1	2170	D	0	5.5				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		
1	2201	в	1	18.1	20.7	1.0	9	30
1.	2201	С	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	Н	0	3.6	9.9	0.1	0	43
1	2210	A	0	3.1	13.0	0.0	0	43
1	2210	в	0	0.6	9.5	0.0	0	40
1	2210	C	0	2.7	5.5	0.2	8	48
1	2210	I)	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

								BIRD
FLIGHT		ANOMALY	CATEGORY	FREQUENC	Y 4575 QUAD.	CTP MHOS	MTRS	HEIGHT
1	2210		0	6.4		0.5		43
1	2220	A	0	6.0	12.3	0.2	10	32
1	2220	В		8.2	9.6		2	49
1	2220	C	0		8.7	0.1		27
1	2220	D		20.7				24
1	2220	Ē	ŏ		8,3			35
1	2220	F	õ	1+9			6	
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	С	0	3.9	9+4	0.1	0	4.6
2	3010	A	0	3.9	10.2	0.1	6	36
	3010	в	0	2.1				33
2	3010	С	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	С	0	2.5	10.9	0.0	0	35
2	3040	A	0		10.9		0	45
2	3040	в	0		5.2	0.1	2	51
2	3040	С	0	5.1		0.4	3	51
2	3040	Γι	0	6.6	10.0	0.4	1.4	34
2	3050	A	0	5.9		0.2	10	30
2	3050	в	0	5.3	11.4	0.2	3	39
2	3050	С	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 2	3060	в	0	4.4	10.4	0.2	8	35
2	3060	С	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	В	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.

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ANOMALY LIST - HOBLITZELL AREA B

FLIGHT	LINE	ANOMALY	CATEGORY	FREQUENC' INPHASE		CTP	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		3.0	4 • 8	0.3	14	49
1	1030	A	0	0.9	3.1	0.0	22	38
1	1030	в	0	4+0	12.1	0.1	0	43
1.	1030	С	0	4.1	12,6	0.1	0	42
1	1040	A	0	4+8	11.6	0+2	0	51
1	1040	в	0	2.4	5.4	0 • 1	0	59
1	1050	A	0	0.5	11.8	0.0	0	30
1	1050	в	0	1.7	11.7	0.0	4	25
1	1050	С	0	3.6	17.3	0.0		38
1	1050	D	0	3.7				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	В	0	3.4	19.1	0.0	0	40
1	1070	С	0	2+8	15+8	0.0	0	30
1	1070	Ð	0	3.7	13.2	0.1	0	40
1	1070	E.	0		9+4	0.0	0	53
1	1081	A	0	3,6				41
1	1081	B	0	2.8	13.1	0.0		33
1	1081	С	0	3.9	19.5			36
1.		D	0		19.0			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	С	0	2.0	8.7	0.0	0	45
1	1090	р.	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		0.0	0	40
1.	1100	[I	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.

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ANOMALY LIST - HOBLITZELL AREA B

						CONI	NCTOR	BIRD
				FREQUENCY	4575	CTP	DEPTH	HEIGHT
FLIGHT	LINE	ANOMALY	CATEGORY	INPHASE	QUAD.	MHOS	MTRS	MTRS
		40 ap 20 80 80 90 ar 40		and the same same same same and		*** *** *** ***	**** **** **** ****	
1	1100	E	0	5.4	23.6	0.0	4	22
1	1100	C.	v	U + H	2:0+0	0 + V	-1	á., á.,
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 2.737

Control Sheet

TYPE OF SURVEY _____ GEOPHYSICAL _____ GEOLOGICAL

GEOCHEMICAL

EXPENDITURE

MINING LANDS COMMENTS:

.

2. Aural

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

Encl.

cc: Golden Shield Resources Ltd Suite 2210 1380Adelaide 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 cc: Resident Geologist Kirkland Lake, Ontario

Technical Assessment

Natural Posources

Ministry of

Work Credits

	File
	2.7378
1985 03 ₋ 19	Mining Recorder's Report of Work No. 417

AMENDED

Date

.

Recorded Holder

Ontario

828 (83/6)

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 days	
Magnetometer days	L 628595 to 630 inclusive 628638 to 667 inclusive
Radiometric days	628669 to 684 inclusive 628668 628685 to 694 inclusive
Induced polarization days	020005 to 094 merusive
Other days	
Section 77 (19) See "Mining Claims Assessed" column	· · · · · · · · · · · · · · · · · · ·
Geological days	
Geochemical days	
Man days 🗌 🛛 Airborne 🛛	
Special provision	¢
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 r	nining claims
No credits have been allowed for the following mining c	laims
not sufficiently covered by the survey	Insufficient technical data filed
	essary in order that the total number of approved assessment days recorded on flows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19)—60:



Technical Assessment

Work Credits

Date 1985 02 05 2.7378 Mining Recorder's Report of Work No.

File

Recorded Holder

GOLDEN SHIELD RESOURCES

Township or Area

828 (83/6)

HOBITZELL AND NOSEWORTHY TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical 21 Electromagnetic c	ays
Magnetometer 21 c	L 628631 to 637 inclusive 761653-54
Rediometric c	
Induced polarization c	ays
Other c	ays
Section 77 (19) See "Mining Claims Assessed" colum	n
Geological c	ays
Geochemical c	aγs
Man days 🗌 Airborne	$\overline{\mathbf{x}}$
Special provision 🗌 Ground	
Credits have been reduced because of p. coverage of claims.	artial
Credits have been reduced because of correct to work dates and figures of applicant.	tions
Special credits under section 77 (16) for the follow	ving mining claims
No credits have been allowed for the following min	
not sufficiently covered by the survey	Insufficient technical data filed
	f necessary in order that the total number of approved assessment days recorded on as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19)—60:



Ministry of Natural Resources

AMENDED

Your File: 417 Our File: 2.7378

Opil 3/85

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, 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

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.

Onterior Contentiate and Expenditures) Charles Contentiate and Charles Con	Dave Or !! Inkinger-
	ireas below.
Airborne Magnetic & Electromagnetic Survey Hoblitzell & Nosev	
Golden Shield Resources Ltd. T-1402	e No.
Address c/o Suite 2210, 130 Adelaide St. West, Toronto, Ontario M5H 3P5	
Survey Company Date of Survey (from & to) Total Mi	les of line Cut
Aerodat Surveys 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 Mining Claims Traversed (List in numerical sequence) Special Provisions Geophysical Days per Mining Claim Expend, Mining Claim	im Expend.
For first survey:	im Expend. mber Days Cr.
Enter 40 days. (This	18 80
includes line cutting) - Magnetometer 628596 80 6286	19 80
For each additional survey: - Radiometric 628597 80 6286	20 80
using the same grid: Enter 20 days (for each) 628598 80 6286	21 80
Geological 628599 80 6286	22 80
Geochemical 628600 80 6286	23 80
Man Days Geophysical Days per 628601 80 6286	
Complete reverse side	
and enter total(s) here 028002 80 0280 LARDER LAK Magnetometer 628603 80 6286	
UU SEP 1 3 1984 628605 80 6286	
AM PM - 628606 80 6286	
7 18 1911011112111213 (deton 6mice) 628607 80 Airborne Credits 628607 80	30, 80
Airborne Credits Days per 628608 80 6286	31 80
Note: Special provisions Electromagnetic 40 628609 80 6286	32 80
to Airborne Surveys, Magnetometer 40 628610 80 6286	33 80
Radiometric 628611 80 6286	34 80
Expenditures (excludes power stripping) 628612 80 6286	35 80
Type of Work Performed 628613 80 6286	
Performed on Claim(s) 628614 80 6286	
628615 80 6286	
Calculation of Expenditure Days Credits	
Total Expenditures Days Credits 628617 80 6286	······································
\$ 15 = Total number of m claims covered by treport of work.	
Total Days Credits may be apportioned at the claim holder's	L
choice. Enter number of days credits per claim selected in columns at right. Total Days Cr. Date Recorded 1984 Mining Recorder Recorded CED 2 1984	
Date Approved as Recorded Branch Director	
Bate Approved is Recorded Holder of Aport Statute 10, Date Approved is Recorded Apartment	,
Certification Verifying Report of Work	······
I hereby certify that I have a bersonal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having pe or witnessed same during and/or after its completion and the annexed report is true.	rformed the work
Name and Postal Address of Person/Certifying	T.I
Bryith H. Wilson To Suite 2210 - 130 Hallual St- White Data Certified Certified Certified Deta Signa	Honts
Contacio MSH 3PS Sept 11 1984 12mm	Men

Type of Survey(s) Claim Holder(s) Address Survey Company Name and Address of Author (of Credits Requested per Each C 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) Man Days Complete reverse side and enter total(s) here			The Mining A	10.	_	Please type or print. If number of mining claims traversed exceeds space on this form, attach a list Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns Do not use shaded areas below. The			
Address Survey Company Name and Address of Author (of Credits Requested per Each C 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) Man Days Complete reverse side				 	Township c		Shaded areas Deid	with a	
Survey Company Name and Address of Author (of Credits Requested per Each C 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) Man Days Complete reverse side						Prospecto	r's Licence No.		
Survey Company Name and Address of Author (of Credits Requested per Each C 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) Man Days Complete reverse side							· • • · · ·		
Name and Address of Author (of Credits Requested per Each C 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) Man Days Complete reverse side									
Credits Requested per Each C 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) Man Days Complete reverse side				Date of Surve	y (from & to)		Total Miles of line	Cut	
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) Man Days Complete reverse side	f Geo-Technical report)			Day Mo.	Yr. Day I	Mo. Yr.	l		
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) Man Days Complete reverse side	Olaim in Columns at r		Minina Clai	Trougrand			l		
Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each) Man Days Complete reverse side	Geophysical	Days per	Min	ing Claim	List in nume	N	Aining Claim	Expend.	
includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each) Man Days Complete reverse side	- Electromagnetic	Claim	Prefix	Number	Days Cr.	Prefix	Number	Days Cr.	
For each additional survey: using the same grid: Enter 20 days (for each) Man Days Complete reverse side	- Magnetometer			<u>628641</u>	80		628664	80	
using the same grid: Enter 20 days (for each) Man Days Complete reverse side	- Radiometric			328642	80		628665	80	
Man Days Complete reverse side				628643	80		628666	80	
Complete reverse side	- Other		ť	528644	80		628667	80	
Complete reverse side	Geological	ļ		628645	80		628669	80	
Complete reverse side	Geochemical	ļ		628646	80		628670	80	
•	Geophysical	Days per Claim		628647	80		628671	80	
	- Electromagnetic			628648	80	ł	628672	80	
	- Magnetometer			628649	80		628673	80	
	- Radiometric			628650	80		628674	80	
	- Other			628651	80		628675	80	
	Geological			628652	80		628676	80	
	Geochemicat			528653	80		628677	80	
Airborne Credits		Days per		628654	80		628678	80	
Note: Special provisions	Electromagnetic	Claim		628655	80		628679	80	
credits do not apply									
to Airborne Surveys.	Magnetometer			328656	80		628680	80	
Expenditures (excludes powe	Radiometric			628657	80		628681	80	
Type of Work Performed	3 Sulpping]		628658	80		628682	80	
				628659	80	l :	628683	80	
Performed on Claim(s)				628660	80		628684	80	
			(628661	80	1	761653	80	
Calculation of Expenditure Days	Credits		f	628662	80		761654	80	
Total Expenditures	٦	Total s Credits		628663	80		761657	80	
\$	+ 15 =						mber of mining vered by this work.		
Total Days Credits may be ap choice. Enter number of days			F	or Office Use	Only	<u>ן</u>			
in columns at right.			the second se	r. Date Recorde	the second s	Mining Re	corder		
Date Rec	orded Holder or Agent (S	Signature)		Date Approve	d as Recorded	Branch Di	rector		
Certification Verifying Repor				· ·	·····	·			
I hereby certify that I have a or witnessed same during and Name and Postal Address of Pers	/or after its completion a				t of Work annex	ed hereto,	having performed i	the work	
2 · · · · · · · · · · · · · · · · · · ·									

Resources (Geo	Natural (Geophyrical Geological			193			Please type or print. If number of mining claims traversed exceeds space on this form, attach a list Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." polumns		
Type of Survey(s)			The Mining A	.c1		Do not us	Expend. Days e shaded areas be	low 23	
TYDE OL SULVEYIEL					Township	DT ATES		0-	
Claim Holder(s)		••••••		······································		Prospecto	r's Licence No.		
Address									
Survey Company				Date of Surv	rey (from & 10)		Tota! Miles of li	ne Cut	
				Day Mo.	Yr. Day	Mo. Yr.			
Name and Address of Author (c	if Geo-Technical report)								
Credits Requested per Each	Claim in Columns at r		the second se	and the second se	d (List in nume		and the second		
Special Provisions	Geophysical	Days per Claim	Mini Prefix	ng Claim Number	Expend. Daγs Cr.	N Prefix	lining Claim Number	Expend. Days Cr.	
For first survey: Enter 40 days. (This	- Electromagnetic		L	761658	80	L	761681	80	
includes line cutting)	- Magnetometer			761659	80		761682	80	
For each additional survey:	Radiometric			761660	80		761683	80	
using the same grid: Enter 20 days (for each)	- Other			761661	80		761684	80	
	Geological			761662	80		761685	80	
	Geochemical		•	761663	80		761686	80	
Man Days	Geophysical	Days per Claim		761664	80				
Complete reverse side and enter total(s) here	- Electromagnetic			761665	80		·······		
	- Magnetometer			761666	80				
	- Badiometric	<u> </u>		761667	80				
	· Other			761668	80				
	Geological	<u>}</u>		761669	80		••••••••••••••••••••••••••••••••••••••		
	Geochemical	<u> </u>		761670	80		· · · · · · · · · · · · · · · · · · ·		
Airborne Credits		Days per	1		80				
Neter Special provisions	E la characteria	Claim	•	761671					
Note: Special provisions credits do not apply	Electromagnetic			761672	80				
to Airborne Surveys.	Magnetometer			761673	80				
Expenditures (excludes powe	Radiometric			761674	80				
Type of Work Performed	or strichhing)	<u>)</u>		761675	80	,			
				761676	80				
Performed on Claim(s)				761677	80	···	·		
				761678	80			_	
Calculation of Expenditure Days	Credits			761679	80				
Total Expanditures	1	fotal s Credits		761680	80				
\$] ÷ [15] = [nber of mining vered by this		
Instructions Total Days Credits may be ap	portioned at the claim h	older's	P			report of			
choice. Enter number of days in columns at right.			Total Days Cr.	r Office Use Date Recorde	ed Only	Mining Re	corder		
			Recorded						
Date Rec	orded Holder or Agent (S	Signature)		Date Approv	ed as Recorded	Branch Di	rector		
Certification Verifying Repo		/				······			
I hereby certify that I have a or witnessed same during and					rt of Work annex	ed hereto, l	having performed	I the work	
Name and Postal Address of Pers									
				Date Certifie	d	Certified F	y (Signature)		

•

Natural Resources (G	Report of Work (Geophysical, Geological, Geochemical and Experiditures)				- Note: -	Please type or print. If number of mining claims traversed exceeds space on this form, attach a list Only days credits calculated in the "Expenditures" section may be entered in the "Expend, Days Cr." plumns Do not use shaded areas below.			
Type of Survey(s)			Minin		– Township	Do not use	shaded areas beig	W. Kay	
Claim Holder (s)	· · · ·					Prospector	s Licence No.		
Golden Shields	Resources		(page .	1)		T140			
Address				 A second set of a second s					
Survey Company		· · ·		Date of Surve	y (from & to)	ד	otal Miles of tin	e Cut	
Name and Address of Author	(of Geo-Technical report)		-	Day Mo. j	Yr. Day J	Mo. Yr.		<u></u>	
Credits Requested per Each	n Claim in Columns at r	ight	Mining C	laims Traversed	(List in nume	rical sequer	nce)		
Special Provisions	Geophysical	Days per Claim		Mining Claim	Expend. Days Cr.		ning Claim Number	Expend. Days Cr.	
For first survey:	- Electromagnetic	;	L	628668	80				
Enter 40 days. (This includes line cutting)	Magnetometer			628685	80				
For each additional survey	- Radiometric			628686		-			
using the same grid;	- Other				80	-			
Enter 20 days (for each) Geological			628687	80				
	Geochemical			628688	80	-			
Man Days		Days per		628689	80				
Complete reverse side	Geophysical	Claim		628690	80				
and enter total(s) here	Electromagnetic			628691	80				
	 Magnetometer 			628692	80				
	- Radiometric			628693	80				
	- Other			628694	80		· · · · · · · · · · · · · · · · · · ·		
	Geological								
	Geochemical								
Airborne Credits		Daγs per Claim							
Note: Special provisions	Electromagnetic			Present and a standard					
credits do not apply to Airborne Surveys									
	Badiometric	-			_			_	
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1985 02 22

Mining & Lands Cosmissioner Toronto, Ontario CC: Resident Geologist Kirkland Lake, Ontario

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

P2N IA2
Dear Sir:
RE: Notice of Intent dated February 5, 1985
Geophysical (Electromagnetic & Madnetometer)
Survey on Hining 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

Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Quéen's Park Toronto, Ontario M7A 143 M7A 1W3 Phone: (416)965-4888

S. Hurstime

- Ltd CC: Resident Gologist Golden Shield Resources Ltd CC: Suite 2210 130 Adelaide Street Hest Toronto, Ontario M5H 3P5
- cc: Aerodat Limited 3883 Nashua Drive Nississauga, Ontario L4V 1R3

Encl.

Technical Assessment



Natural Work Credits

Date T985_02_05 Mining Recorder's Report of Work No. 477

.7378

Recorded Holder		
	GOLDEN SHIELD RESOURCE	ES LTD
Township or Area		

.....

828 (83/6)

HOBITZELL & NOSEWORTHY TOWNSHIPS

Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	
Magnetometer days	L 628595 to 630 inclusive
	628638 to 667 inclusive
Radiometric days	628669 to 684 inclusive
Induced polarization days	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological days	
Geochemical days	Add
Man days 🗌 Airborne 🙀	100110
Special provision	628668 628685 to 694 ind.
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Special credits under section 77 (16) for the follc	ns



Ministry of Natural Resources

Elr. 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

. . .



Ministry of Natural Resources 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 Torento, 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

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 semiliting 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,

Inba Bryan Wilson

BW/kd Enclosures (2)

RECEIVED

NOV 0 5 1984

MINING LANDS SECTION

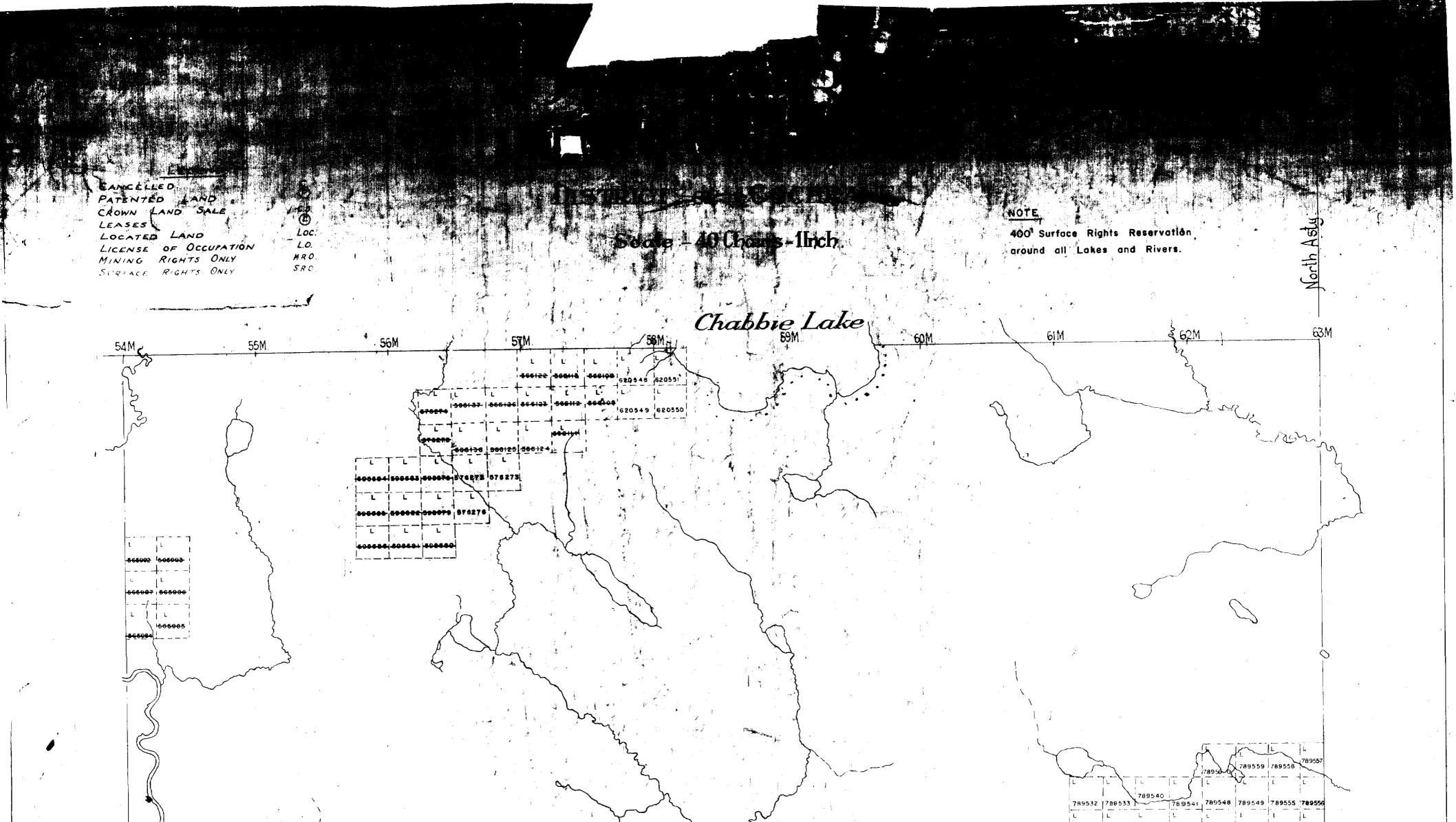
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Ministryof Natural Resources Control Report of Work (Geophysical, Geological, Geochemical and Expenditures)			The Mining) भुज्ज 8 Aa		 If number excends s Only da "Expendiin the " Do not us 	Please type or print. If number of mining claims traverse excerds space on this form, attach a his Only days credits calculated in the "Expenditures" section may be entere in the "Expend. Days Cr." Column Do not use shaded areas below, 2			
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Date Recorded Holder or Agent (Signature)				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								
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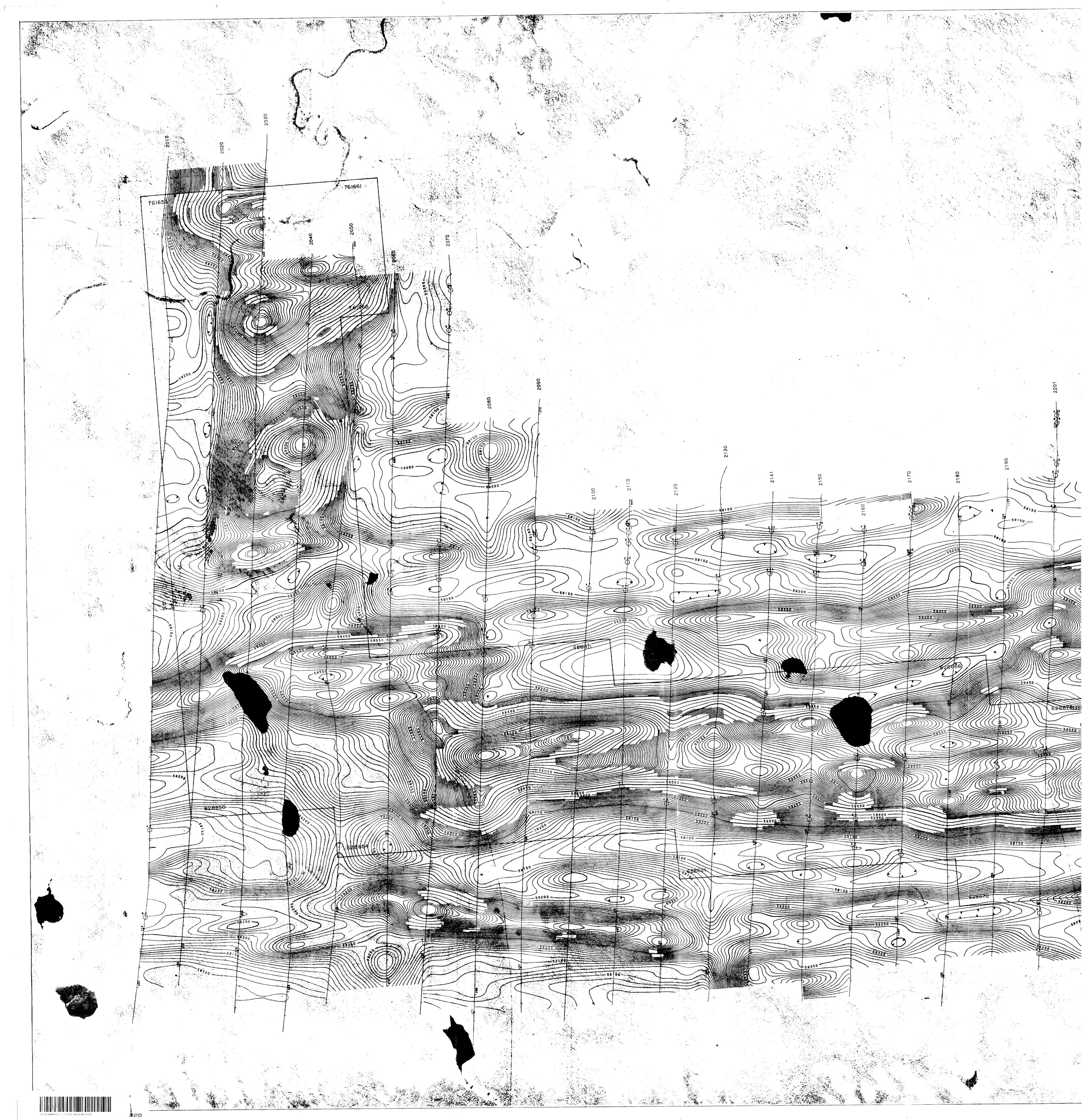
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