

We are committed to providing <u>accessible customer service</u>. If you need accessible formats or communications supports, please <u>contact us</u>.

Nous tenons à améliorer <u>l'accessibilité des services à la clientèle</u>. Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez <u>nous contacter</u>.

Golden Share Resources Corp.

Heli-GT Three-Axis Magnetic Gradiometer Survey

Ogoki Post Ontario, Canada

Operations and Processing Report





By

January 2023

1	Intr	roduction2									
2	Loc	cation3									
3	Are	a Geology and Past Work									
4	Mir	neral Claims4									
5	Air	borne Survey5									
	5.1	Flight Specifications5									
	5.2	Helicopter5									
	5.3	Personnel5									
6	Ge	ophysical System6									
	6.1	Bird7									
	6.2	Magnetic sensors7									
	6.3	Radar Altimeter7									
	6.4	Fluxgate Magnetometer7									
	6.5	Analog to Digital ADC7									
	6.6	GPS System7									
	6.7	Navigation and Recording System8									
	6.8	Base Station8									
7	Dat	a Compilation9									
	7.1	Basic Processing9									
	7.2	Gradient Processing9									
	7.3	Magnetic Levelling9									
	7.4	Gradient Tensor Gridding (GT-GRID)10									
	7.5	Pole Reduction10									
	7.6	First and Second Vertical Magnetic Gradient10									
	7.7	Horizontal Gradient11									
	7.8	Analytic Signal11									
	7.9	Tilt Derivative Angle11									
	7.10	Digital Terrain Model11									
8	Co	nclusions and Recomendations12									
A	ppen	dix - Digital Data Archive13									
	8.1	Gridded Data13									
	8.2	Profile Data14									
	8.3	Map Files15									

1 INTRODUCTION

Golden Share Resources Corp. (GSH) is exploring for diamond in the vicinity of the First Nations Community of Marten Falls at Ogoki Post, Northern Ontario. In December 2022, GSH contracted SHA Geophysics Inc. (SHA) to survey a number of claims hosting potential kimberlite magnetic anomalies, using SHA's Heli-GT tri-axial magnetic gradiometer system. Fourteen anomalies, numbered K2 through K15, were covered by eight survey blocks. Figure 1 below shows the distribution of the claim groups and survey blocks.

Equipment and crew mobilized to the region on Saturday, January 7th, 2023 and during the period January 9th through January 13th, 2023 a total of 1045 km of data was collected over the properties. Details of the airborne survey and compilation are documented in this report.



Figure 1 – Claim Group and Survey Block Index Map

2 LOCATION

The survey blocks were located around Ogoki Post, Ontario. Survey operations were based out of the airport in Nakina, Ontario, located approximately 170km south-southwest of Ogoki Post. An established fuel cache at the Ogoki Airport was used to support survey operations. See Figure 2 below.



Figure 2 - Location Map.

3 AREA GEOLOGY AND PAST WORK

The geology of most of the area is largely defined by unconsolidated Quaternary glacial sediments over a thin layer of flat lying Paleozoic sediment rocks of the James Bay Lowlands over Archean crystalline basement rocks. The glacial clay, sand, gravel and till can be over 60m thick. Outcrop is rare so the geology is largely inferred.

Over the area of interest, the Paleozoic cover rocks range from 0 to 200m in thickness, increasing gradually to the east. They are largely shallow marine carbonates with some evaporites with incursions of terrigenous detrital clastics. They are assumed to be non-magnetic.

The Archean basement rocks are mostly tonalite to granodiorite with some ultramafics, metavolcanics and minor metasedimentary rocks. Overall trends are east-west. The

area is transected by Marathon Kapuskasing mafic dikes; a northeast trending subswarm (circa 2124 to 2170 Ma).

The area was the focus of diamond exploration from about 2003 to 2010 but there was little follow up drilling. The few drill holes in the area intersected 15 to 58m of Quaternary deposits. In two shallow holes, Paleozoic rocks – dolostone, limestone and sandstone – were followed by Archean felsic to mafic gneiss.

4 MINERAL CLAIMS

The following mineral claims were covered by the survey blocks

Block K2

114155, 166106, 225510, 525448, 525449

Block K3

525450, 525451, 525452

Block K4_5_6_7

298728, 525453, 525454, 525455, 525456, 585457, 525458, 525459

Block K8_9_10

525460, 525528, 525529, 525499, 525500, 525501

Block K11

525461

Block K12 13

525462, 525530

Block K14

516349

Block K15

516392

5 AIRBORNE SURVEY

The airborne survey consisted of eight survey blocks and was based out of Nakina Airport, Nakina Ontario. Surveying took place during the period January 9th to January 13th, 2023.

5.1 Flight Specifications

Each survey block had the following specifications:

0

Production for each block is summarized below.

Block No.	<u>Line km</u>
K2	49
K3	82
K4_5_6_7	306
K8_9_10	235
K11	89
K12_13	108
K14	86
<u>K15</u>	<u>90</u>
Total	1045

5.2 Helicopter

Helicopter Owner / Operator	Expedition Helicopters, Cochrane, Ontario
Helicopter Model	A-Star 350BA+
Helicopter Registration	C-FODI

5.3 Personnel

<u>Field</u>

Technical Operations Manager	Frazer Hogg
Project Geophysicist	Steve Munro
Pilot	Nick Greenfield

<u>Office</u>

Compilation and Reporting Project Management Steve Munro Scott Hogg

6 GEOPHYSICAL SYSTEM

The airborne geophysical Heli-GT system consists of a towed bird that contains all of the geophysical sensors as well as altimeter and GPS antennae. A computer based recording and navigation system is located in the helicopter.



Figure 3 – The Heli-GT bird is towed 25 m below the helicopter. The basic orthogonal magnetic gradients G1, G2 and G3 are measured on 3 metre baselines. A radar altimeter and 4 GPS antennae are mounted on the towed bird. In the helicopter a touch screen computer tablet logs the data and directs navigation.

6.1 Bird

All of the geophysical and ancillary equipment is housed in a towed bird designed by SHA Geophysics Ltd. The bird is manufactured from non-magnetic FRP and breaks down for ease of transportation.

6.2 Magnetic sensors

Four Scintrex CS-3 cesium sensors are arranged in an orthogonal array with 3 m sensor separation from the nose sensor to those at the end of each arm. The output from each sensor was processed by a KVS KMAG4 unit to resolve the magnetometer output to a resolution of about 0.005 nT at a rate of ten samples per second. The Heli-GT bird was flown at a nominal altitude of 30m.

6.3 Radar Altimeter

A Terra TRA 3500 / TR 140 radar altimeter was used to measure bird height above ground. The range of operation was from 0 to 2500 ft.

6.4 Fluxgate Magnetometer

A Billingsley TFM100G2 3-axis fluxgate magnetometer was used to record the orientation of the bird with respect to the earth's magnetic field. The range of each component of the fluxgate was +/- 100,000 nT.

6.5 Analog to Digital ADC

The analog output of the radar altimeter and fluxgate magnetometer were digitized with a KVS KANA8 eight-channel differential ADC. The device provides 24 bit resolution and was operated at 10 Hz.

6.6 GPS System

GPS positional information was recorded using an array of four 12-channel receivers mounted on the Heli-GT bird. In addition to the measurement of Latitude, Longitude and Altitude a calculation of bird pitch, roll and yaw was calculated from differences between antennae with an accuracy better than 1 degree.

6.7 Navigation and Recording System

The navigation and recording system used was the DAQNAV, developed by SHA Geophysics. Both navigation and data recording are carried out using a tablet computer mounted in the helicopter cockpit. The tablet's touch screen provides an operator with an interface for monitoring the geophysical and ancillary instrumentation, as well as presenting graphic navigation information for the pilot.

The PPS pulse from the GPS system was recorded and tied to each of the sensors with an accuracy of about +/- 0.05 seconds.

Data recorded included the following:

Magnetic sensors:	10 Hz
Fluxgate sensors:	10 Hz
Radar Altimeter:	10 Hz
GPS X / Y / Z:	5 Hz
GPS Pitch / roll / yaw:	5 Hz

6.8 Base Station

A magnetic and GPS base station was established at the base of operations. A GEM SSM19TW proton magnetometer recorded the diurnal magnetic variation at 1 Hz with a resolution of 0.1 nT. A Ublox EVK-M8 GPS receiver provided a GPS time reference and recorded a differential correction file.

The base station at Nakina Airport was located at

50° 11.050' N latitude, 86° 42.2550' W longitude, WGS 84

7 DATA COMPILATION

7.1 Basic Processing

The data collected during flight, in the air and from the base station, was aligned with reference to GPS time. Each of the four magnetometer channels was compensated to remove magnetic error associated with bird orientation. The basic magnetic gradient components; G1, G2 and G3, measured from the nose sensor (mag4) to each of the radial sensors (mag1, mag2 and mag3) were calculated. Any noise spikes, if present, were identified and removed.

A low-pass filter was applied to the base station data to eliminate short wavelength artifacts. A median value was removed from the base station profile to create a diurnal correction profile, which was subtracted from the compensated mag4 profile. The base station corrected total field profile was stored as *mag_diur*. A small lag was applied to the diurnally-corrected profile and stored as *mag_lag*.

7.2 Gradient Processing

The recorded pitch, roll and yaw of the bird were used to mathematically rotate the measured basic gradient components to true G-north, G-east and G-down.

The GPS altitude of the bird was used to calculate a smooth drape surface. This is a smooth theoretical surface above the terrain that the bird would follow under ideal conditions. There would be only smooth altitude changes, line to line and along the flight line. The difference between the GPS altitude of this smooth drape surface and the actual GPS altitude of the bird was combined with the measured vertical gradient to calculate an altitude correction. The altitude correction was applied to mag_lag and the resulting profile was stored as mag_alt_cor.

7.3 Magnetic Levelling

The channel *mag_alt_cor* was used as input to the control line levelling process.

The intersections between traverse and control lines were calculated and the differences between the magnetic values were measured. Ignoring unreliable differences in locations of steep magnetic gradient, a correction was calculated to eliminate the measured differences at the intersections. This correction profile was a piecewise linear function between intersections. The control line leveled magnetic profile was stored as *mag_TL_lev*. A final microlevel correction was calculated and applied. The final data channel was stored as *mag_fin*.

7.4 Gradient Tensor Gridding (GT-GRID)

GT-Grid is a proprietary gridding program developed by SHA Geophysics that uses total magnetic field data as well as the measured horizontal gradient data to produce a total magnetic field grid. The total magnetic field grid produced by GT-Grid is a fully conformal process that simultaneously honours the total field as well as the measured horizontal gradient profile data.

The final, leveled total field magnetic channel (m*ag_fin*) and the G-east (*Ge*) and G-north (*Gn*) gradient channels, were used by the GT-GRID process to calculate total field magnetic grids for each block.

7.5 Pole Reduction

The anomaly shape associated with a vertically dipping magnetic source varies with the inclination of the earth's magnetic field. At the north and south magnetic pole, the inclination is vertical and the anomaly is positive, symmetrical and centered directly over the source. At the equator, with a horizontal inducing field, the anomaly is negative, symmetrical and centered directly over the source. Between 0 and 90 degrees of inclination the anomaly is asymmetric, with a positive and negative component, and is not centered over the source. The pole reduction process reshapes the anomaly measured at intermediate inclinations to resemble the shape that would have been measured at vertical inclination. Thus a steeply dipping source, without remanent magnetization, would be transformed to a simple positive peak above the source. A pole-reduced TMI grid was calculated for each block.

7.6 First and Second Vertical Magnetic Gradient

The vertical gradient accentuates shorter wavelengths and attenuates longer wavelengths. As a result, the map enhances the anomalies associated with small nearsurface magnetic sources while suppressing large-scale regional variations. The vertical gradient presentation provides added visual detail, particularly for small anomalies superimposed on or adjacent to larger anomalies.

The measured or calculated vertical magnetic gradients are also sensitive to the inclination of the earth's magnetic field. In the same manner as the total field, the asymmetry and peak displacement, arising from an inclined field, is removed by the pole reduction process. The horizontal width of the vertical gradient anomaly is about one half of that of the total field anomaly. If the width of the magnetic source is significant, greater than the sensor height above the source, the zero contour of the pole reduced vertical gradient reflects the location of the magnetic contact and the response peak will lie directly above a steeply dipping source.

Using an FFT filter, a pole-reduced first and second vertical derivative grid was created for each block.

7.7 Horizontal Gradient

This is the scalar amplitude of the horizontal gradient vector, calculated from the total magnetic field GT-Grid. The horizontal gradient grid is useful for highlighting geological contacts.

 $HGrad = ((dB/dx)^{2} + (dB/dy)^{2})^{\frac{1}{2}}$

A horizontal gradient grid has been calculated for each block.

7.8 Analytic Signal

The analytic signal grid presents the scalar magnitude of the full magnetic gradient vector. The analytic signal reflects proximity to the magnetic source, independent of source dip, magnetic field inclination or remanent magnetization.

ANS =
$$((dB/dx)^{2} + (dB/dy)^{2} + (dB/dz)^{2})^{\frac{1}{2}}$$

An analytic signal grid has been calculated for each block.

7.9 Tilt Derivative Angle

The tilt angle of the magnetic derivative is calculated in radians.

TDrv = tan⁻¹ [dB/dz / (
$$(dB/dx)^2 + (dB/dx)^2$$
)^{1/2}]

The tilt angle is independent of magnetization and helps emphasize weak anomalies. A Tilt derivative angle grid has been calculated for each block.

7.10 Digital Terrain Model

The digital terrain model was calculated by subtracting the radar altimeter profile from the GPS altitude. Errors in GPS altitude were corrected by microlevelling. The digital terrain was gridded for each survey block using a bi-directional Akima interpolation.

8 CONCLUSIONS AND RECOMENDATIONS

Eight magnetic gradiometer Heli-GT surveys were completed over twenty-seven mineral claims. Several isolated magnetic anomalies have been noted in the data. These magnetic anomalies are consistent with the response of volcanic intrusive bodies and may represent deposits of economic significance.

It is recommended that a magnetic modelling program be carried out to help prioritize the anomalies and to determine collar locations for follow-up diamond drill testing.

Respectfully submitted,

Steve Munro, B.Sc., P.Geo (limited) Chief Geophysicist SHA Geophysics Inc. Toronto, Canada February 02, 2023

APPENDIX - DIGITAL DATA ARCHIVE

All of the maps, grids and profile data have been provided in Geosoft digital format. Free viewing software is made available through Seequent Ltd.

https://www.seequent.com/products-solutions/geosoft-viewer/

The viewer allows the user to interact with the Geosoft format maps. Layers may be turned off and on to customize the view. Grids, profile databases and maps can be exported in a number of industry standard formats.

The following tables summarize the data provided with this report.

8.1 Gridded Data

The grids, projected in NAD83 UTM Zone 16n coordinates, are in Geosoft format. The cell size is 10 metres. The following table describes of the grid sets provided.

Grid Name	Units	Description
xx_DTM	metres	Levelled digital terrain model
xx_GT_TMI	nT	Total magnetic field GT-Grid
xx_GT_TMIRTP	nT	Total magnetic field GT-Grid, reduced to pole
xx_GT_CVGRTP	nT/m	First vertical derivative GT-Grid reduced to pole
xx_GT_2VGRTP	nT/m²	Second vertical derivative GT-Grid reduced to pole
xx_GT_HGrad	nT/m	Total horizontal magnetic gradient
xx_GT_ANS	nT/m	Analytic Signal
xx_GT_TDrv	radians	Tilt derivative angle.

Where 'xx' is one of: K2, K3, K4_5_6_7, K8_9_10, K11, K12_13, K14 or K15 .

GeoTIFF format image files (with pixel size of 2m) are also included for each grid type.

8.2 Profile Data

The profile data for each survey block is provided in Geosoft "gdb" format, including the following channels.

Channel	Units	Content
gpstime	seconds	GPS time
Х	metres	UTM easting NAD83, Zone 16n
У	metres	UTM northing NAD83, Zone 16n
lon	degrees	GPS Longitude WGS84
lat	degrees	GPS Latitude WGS84
gpsalt	metres	GPS altitude NAD83
radalt	metres	radar altimeter (bird height)
DTM	metres	levelled Digital Terrain elevation
fx	nT	Fluxgate axis x (forward)
fy	nT	Fluxgate axis y (port)
fz	nT	Fluxgate axis z (up)
heading	degrees	Bird heading
pitch	degrees	Bird pitch
roll	degrees	Bird roll
base_mag	nT	Filtered base station magnetometer
mag1_raw	nT	Raw upper port magnetometer
mag2_raw	nT	Raw down magnetometer
mag3_raw	nT	Raw upper starboard magnetometer
mag4_raw	nT	Raw nose magnetometer
mag1_comp	nT	Compensated upper port magnetometer
mag2_comp	nT	Compensated down magnetometer
mag3_comp	nT	Compensated upper starboard magnetometer
mag4_comp	nT	Compensated nose magnetometer
G1	nT/m	Magnetic gradient: mag4 to mag1
G2	nT/m	Magnetic gradient: mag4 to mag2
G3	nT/m	Magnetic gradient: mag4 to mag3
GT	nT/m	Measured magnetic Transverse gradient
GL	nT/m	Measured magnetic Longitudinal gradient
GD	nT/m	Measured magnetic Down gradient
GE	nT/m	Measured magnetic East gradient
GN	nT/m	Measured magnetic North gradient
GV	nT/m	Measured magnetic Vertical gradient
mag_diur	nT	Base station corrected magnetic profile
mag_lag	nT	Lagged magnetic profile
mag_alt_cor	nT	Altitude-corrected magnetic profile
mag_TL_lev	nT	Tie line network leveled magnetic profile
mag_fin	nT	Final microlevelled magnetic profile

8.3 Map Files

Geosoft format maps for each of the grid types have been provided at a scale of 1:20,000, in a NAD83, UTM Zone 16n projection. Where feasible, survey blocks were grouped into single maps. The following is a description of the map sets provided.

Map Name	Units	Description
xx_DTM	metres	Levelled digital terrain model
xx_GT-TMI	nT	Total magnetic field GT-Grid
xx_GT-TMIRTP	nT	Total magnetic field GT-Grid, reduced to pole
xx_GT-CVGRTP	nT/m	Calculated vertical derivative GT-Grid reduced to pole
xx_GT-2VGRTP	nT/m²	Second vertical derivative GT-Grid reduced to pole
xx_GT-HGrad	nT/m	Total horizontal magnetic gradient
xx_GT-ANS	nT/m	Analytic Signal
xx_GT-TDR	radians	Tilt derivative angle.

Where 'xx' is one of: K2, K3&K4_5_6_7, K8_9_10&K12_13, K11, K14 or K15.

Corresponding sets of JPEG and PDF images (at a resolution of 200 dpi) are also included.

-86° 539	°26′ 9000)	54000	-86°25′ 10	54	-86° 41000	24'	542000	-86°23'	54300	0	-86°22′ 54	4000	-86 5	^{'21'} 45000
000 ;94 5243000	1	712707 42M16E392	712711 42M16E393	712713 42M16E394	712719 42M16E395	712696 42M16E396	198616 42M16E397	134416 42M16E398	206616 42M16E399	168663 42M16E400	265882 42M16F381	295780 42M16F382	337352 42M16F383	337351 42M16F384	241 5743000
5 80 iD011	1	712686 42M16D012	712664 42M16D013	712659 42M16D014	712681 42M16D015	712665 42M16D016	206617 42M16D017	242427 42M16D018	111532 42M16D019	176412 42M16D020	111531 42M16C001	258391 42M16C002	229695 42M16C003	175793 42M16C004	337 42M1
2142000 27576 2031	S	712578 42M16D032	712559 42M16D033	712595 42M16D034	712604 42M16D035	712569 42M16D036	712598 42M16D037	195275 42M16D038	329179 42M16D039	213780 42M16D040	329178 42M16C021	288945 42M16C022	295782 42M16C023	295781 42M16C024	128 42M10
596 D051	5	712577 42M16D052	712566 42M16D053	712560 42M16D054	712579 42M16D055	712568 42M16D056	712561 42M16D057	269240 42M16D058	161234 42M16D059	262465 42M16D060	329180 42M16C041	339437 128394 42M16C042	156355 178460 42M16C043	223794 295784 42M16C044	223 295 42M1
000 575	5	712594 42M16D072	712602 42M16D073	712597 42M16D074	712590 42M16D075	712581 42M16D076	712591 42M16D077	183728 42M16D078	183727 42M16D079	195277 42M16D080	183726 42M16C061	183960 195276 42M16C062	178461 42M16C063	119926	123 183 42M1000
5 64 3D09	4	712558 42M16D092	712565 42M16D093	712567 42M16D094	712603 42M16D095	712580				131068 42M16D100	158417 183729 42M16C081	339439 329181 42M16C082	268466 (42M16C083	279787 22M16C084	339 289 42M1
00 554	4	712516 42M16D112	712517 42M16D113	712555 42M16D114	712529	T92926>	42M 800			— T92020> 42M16D120	103451 42M16C101	158407 42M16C102	119923 42M16C103	119089 42M16C104	119 122 57400
538 6D13	8 31	712515 42M16D132	712552 42M16D133	712522 42M16D134	712539 42M16D135	712556 42M16D136	525448	42M16D138		K2 42M16D140	327053 42M16C121	339453 42M16C122	268484 42M16C123	103467 42M16C124	339 180 42M
782 000	2	335561 42M16D152	295334 42M16D153	220673 42M16D154	139796 42M16D155	<t92010 174346 42M16D156</t92010 	114165 145739 424 (c) (c)	225510- 281110	166106 185310	<t92010< p=""> 159772 42M16D160</t92010<>	298439 42M16C141	223809 42M16C142	339454 42M16C143	298438 42M16C144	22: 24 42M ⁻ 573g
825 942 6D17	2 71	240783 42M16D172	191372 42M16D173	335562 42M16D174	193873 42M16D175	145740 42M16D176	1.7 234874 4	-119413 12180 1210	1289202 1289202 1289202 12892 1289 12892 1289 1289 1289 1289 1	425 1958	159773 42M16C161	179285 42M16C162	338961 42M16C163	177393 42M16C164	00 10 42M
362 6D19	2 91	240784 42M16D192	325106 42M16D193	248081 42M16D194	192426 42M16D195	315065 42M16D196	112164 42M16D197	245321 42M16D198	271051 42M16D199	225158 42M16D200	328372 42M16C181	179286 42M16C182	300734 42M16C183	106472 42M16C184	10 42M 570
6D21	7	335563 42M16D212	191373 42M16D213	174050 42M16D214	192427 42M16D215	112165 42M16D216	308368 42M16D217	159774 42M16D218	328373 42M16D219	121304 42M16D220	166363 42M16C201	185311 42M16C202	184174 42M16C203	244147 42M16C204	25
194	3 231	295335 42M16D232	155908 42M16D233	325107 42M16D234	106732 42M16D235	252756 42M16D236	133463 42M16D237	281112 42M16D238	166364 42M16D239	328374 42M16D240	185312 42M16C221	281111 42M16C222	184692 42M16C223	232002 42M16C224	25 42N 37(
2 <u>6</u> 539	9000)	54000	00	5	41000		542000		54300	00	54	4000	5	45000

Scale 1:20000 250 0 250 500 750 1000 1250 1500 (meters)

NAD83 / UTM zone 16N



Contour Intervals: 2, 10, 50 and 250 nT



The Heli-GT Magnetic System, developed by SHA Geophysics Ltd., measures three orthogonal magnetic gradients to provide Grad-East, Grad-North and Grad-Vertical.

The bird contains 4 cesium sensors in an orthogonal array with 3 metre baselines.

Geo-reference is provided by a radar altimeter, GPS position and bird pitch, roll and yaw.

The measurements are designed to optimize the GT-GRID mapping process that builds high resolution magnetic maps using total field and gradient information.

Golden Share Resources Corp.

K2 - Heli-GT Survey Ogoki Post, Northern Ontario

GT-Grid of Total Magnetic Intensity







Contour Intervals: 2, 10 and 50 nT



The Heli-GT Magnetic System, developed by SHA Geophysics Ltd., measures three orthogonal magnetic gradients to provide Grad-East, Grad-North and Grad-Vertical.

The bird contains 4 cesium sensors in an orthogonal array with 3 metre baselines.

Geo-reference is provided by a radar altimeter, GPS position and bird pitch, roll and yaw.

The measurements are designed to optimize the GT-GRID mapping process that builds high resolution magnetic maps using total field and gradient information.



Golden Share Resources Corp.

K3 and K4_5_6_7 - Heli-GT Survey Ogoki Post, Northern Ontario

GT-Grid of Total Magnetic Intensity





576000		6000	-85°53' 577000			578	-85°52′ 3000		-85°51' 579000			-85°50'	581000		-85°49'	
" 000	42N1	3E317	42N13E318	CARDNA3E3184	42N13E320	42N13F301	42113-302	4211131303	4213151504	1211101000						
51°51'00 5745	42N1	3E337	42N13E338	42N13E339	42N13E340	42N13F321	42N13F322	42N13F323	42N13F324	42N13F325	42N13F326	42N13F327	42N13F328	42N13F329	42N13F330	
'30" 000	200 42N1	13E357	42N13E358	42N13E350	42N13E360	42N13F341	42N13F342	42N13F343	42N13F344	Q 42N13F345	42N13F346	42N13F347	42N13F348	42N13F349	42N13F350	
51°50 5744	42N	13E377	42N13E378	(42013E379	42N13E380	42N13F361	42N13F362	42N13F363	42N13F364		42N13F366	42N13F367	42N13F368	42N13F369	42N13F370	
OO	42N	13E397	42N13E398	42N13E399	42N13E400	42N13F381	11988 119788 119788 119788 11988 11980 11980 11980 11980 11980 11980 11980 11980 11980 11980 11980 11980 11988 11988 11988 11988 11988 11988 11988 11988 11988 11988 11978		111260 111250 111250 111250 11230 11230 11230 11230 11220 11220 11220 11220 11220 11220 11220 11250 11	111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 1111111320 11111111320 11111111320 1111111111	42N13F386	42N13F387	42N13F388	42N13F389	42N13F390	
51°50 574300	42N	113D017	42N13D018	42N13D019	42N13D020	T911020>					42N13C005	42N13C007	42N13C008	42N13C009	42N13C010	
9'30"	421	J13D037	42N13D038	42N13D039	42N13D040	42N13C021	121 136022	42N13C02	5461	42N1397.8	42N KGP26	42N13C027	42N13C028	42N13C029	42N13C030	
51°49 5742000	421	V13D057	42N13D058	42N13D059	42N13D060	42N13C041	42 43C042	42N13C043	42N13C044		42N13C046	42N13C047	42N13C048	42N13C049	42N13C050	
00,6	421	N13D077	42N13D078	42N13D079	42N13D080	42N13C061 <t911010< th=""><th></th><th></th><th></th><th></th><th>42N13C066</th><th>6 42N13C067</th><th>42N13C068</th><th>42N13C069</th><th>42N13C070</th></t911010<>					42N13C066	6 42N13C067	42N13C068	42N13C069	42N13C070	
51°4 5741000	42	N13D097	42N13D098	42N13D099-	42N13D100	42N13C081	42N13C082 42N13C082 42N13C1110 42A1110 41110 41110				42N13C08	6 42N13C087	42N13C088	42N13C089	42N13C090	
)"	42	N43D/117	42N13D118	42N13D119	42N13D120	42N13C101	42N13C102	42N13C103	42W13C104	42N13C105	42N13C10	6 42N13C107	42N130108	42N13C109	42N13C110	
51°48'30 740000	42	2N13D137	42N13D138	42N13D139	42N13D140	42N13C121	42N13C122	42N13C123	42N13C124	42N13C125	42N13C12	6 42N13C127	42N13C128	42N13C129	42N13C13	
 21	4:	2N13D157	42N13D158	42N13D159	42N13D160	42N13C141	42N13C142	42N13C143	42N13C144	42N13C145	42N13C14	46 42N13C147	7 42N13C148	42N13C149	42N13C15	
51°48'00	57 -85°54	6000 f		57700 -85°5	00 3'	578	3000 -85°52'		579000	-85°51'	5800	000 -85°5	50'	42N13C169 1000	42N13C17 -85°49'	
_		1 —					250	0 250	Scale 1:200 500 750 (meters) NAD83/UTM zone	0 00 0 1000 16N	1250 1500					

ш

Contour Intervals: 1, 5 and 25 nT

The Heli-GT Magnetic System, developed by SHA Geophysics Ltd., measures three orthogonal magnetic gradients to provide Grad-East, Grad-North and Grad-Vertical.

The bird contains 4 cesium sensors in an orthogonal array with 3 metre baselines.

Geo-reference is provided by a radar altimeter, GPS position and bird pitch, roll and yaw.

The measurements are designed to optimize the GT-GRID mapping process that builds high resolution magnetic maps using total field and gradient information.

Golden Share Resources Corp.

K11 - Heli-GT Survey Ogoki Post, Northern Ontario

GT-Grid of Total Magnetic Intensity

Contour Intervals: 5, 25 and 100 nT

The Heli-GT Magnetic System, developed by SHA Geophysics Ltd., measures three orthogonal magnetic gradients to provide Grad-East, Grad-North and Grad-Vertical.

The bird contains 4 cesium sensors in an orthogonal array with 3 metre baselines.

Geo-reference is provided by a radar altimeter, GPS position and bird pitch, roll and yaw.

The measurements are designed to optimize the GT-GRID mapping process that builds high resolution magnetic maps using total field and gradient information.

Golden Share Resources Corp.

K14 - Heli-GT Survey Ogoki Post, Northern Ontario

GT-Grid of Total Magnetic Intensity

Contour Intervals: 2, 10, 50 and 250 nT

The Heli-GT Magnetic System, developed by SHA Geophysics Ltd., measures three orthogonal magnetic gradients to provide Grad-East, Grad-North and Grad-Vertical.

The bird contains 4 cesium sensors in an orthogonal array with 3 metre baselines.

Geo-reference is provided by a radar altimeter, GPS position and bird pitch, roll and yaw.

The measurements are designed to optimize the GT-GRID mapping process that builds high resolution magnetic maps using total field and gradient information.

Golden Share Resources Corp.

K15 - Heli-GT Survey Ogoki Post, Northern Ontario

GT-Grid of Total Magnetic Intensity

Expenses - Ogoki Project Golden Share Resources Corp.

Golden Share Resources' Ogoki Project consists of 10 scattered claim blocks holding 15 potential diamond targets in the Marten Falls FN – Ogoki Trading Post area of Ontario. The targets are labelled K1 to K15. The 10 claim blocks and the targets within each block, the claim numbers for the Golden Share claims within the block and the number of cells within the block are listed below. Within the 10 claim blocks, there are 24 multi-cell claims, 3 single cell claims and 3 boundary cell claims.

TARGETS	CLAIMS	CELLS
K1	189277, 255436, 525447	6
К2	114155, 166106, 225510, 525448, 525449	9
КЗ	515450, 515451, 525452	16
К4	525453	9
K5, K6, K7	298278, 525454, 525455, 525456, 525457, 525458, 525459	51
K8, K9, K10	525460, 525528, 525529, 525499, 525500, 525501	36
K11	525461	16
K12, K13	525462, 525530	20
К14	516349	16
K15	516392	16

Claims 189277 (K1) and 298278 (K5, K6, K7) are single cell claims. Claim 255436 (K1) is a single cell claim with restrictions as it is partly in the Albany River Provincial Park. Claims 114155, 166106 and 225510 (K2) are boundary cell claims. All other claims are multi-cell claims.

In early January, 2023, SHA Geophysics flew a Heli-GT three-axis magnetic gradiometer survey for Golden Share Resources over their Ogoki Project claim blocks holding targets K2 to K15. See figure 1. The claim block holding K1, in the East of Washi Lake Administrative Area and northwest of the Albany River, was not surveyed.

The survey was flown north – south at 50m with a 30m nominal sensor terrain clearance. Total production, including traverse and tie lines, as presented on final maps, was 1,045 line km. Line kilometers flown per block were –

BLOCK	LINE KM
K2	49
КЗ	82
K4, K5, K6 AND K7	306
K8, K9, K10	235
K11	89
K12, K13	108
K14	86
K15	90
TOTAL	1,045

K4, K5, K6 and K7 were flown as one survey block even though the claim block holding K4 is not contiguous with the claim block holding K5, K6 and K7.

Figure 1. 2023 High resolution helicopter magnetic gradiometer survey by SHA Geophysics for Golden Share Resources. Ogoki Project

The results were presented on maps at 1:20,000 in a NAD83, UTM Zone 16N projection. The SHA operations and processing report "Golden Share – Ogoki Post – Heli-GT Survey – Operations Report.pdf" is dated February 02, 2023.

The airborne geophysical survey and attendant First Nation and Technical consulting expenses are being filed for assessment credit for the 30 claims that hold Golden Share Resources Ogoki targets K2 to K15. The total of all expenses, excluding HST, was \$211,778.74. This includes the airborne survey, First Nations consulting and technical consulting expenses. Details for each category follow.

AIRBORNE GEOPHYSICAL SRUVEY	170,187.00
FIRST NATION CONSULTING	9,961.11
TECHNICAL CONSULTING	31,630.63
TOTAL EXPENSES	211,778.74

When submitting the Report of Work, the <u>exploration costs</u> or <u>exploration work</u> <u>expenses</u> are the sum of the costs of the airborne geophysical survey and the technical consulting. Exploration costs = \$201,817.63 (170,187.00 + 31,630.63)

Airborne Geophysical Survey

The airborne geophysical survey by SHA Geophysics for Golden Share Resources cost \$166,850.00 (not including HST). Copies of the three invoices from SHA Geophysics to Golden Share Resources to cover the cost of the survey are attached. To this is added \$3,337.00 for a total of \$170,187.00. The \$3,337.00 is 2% of the \$166,850.00, an amount paid to Marten Falls FN as part of an exploration agreement between Marten Falls FN and Golden Share Resources.

First Nation Consulting

Golden Share Resources' expenses involved in consulting with Eabametoong and Marten Falls First Nations on the Ogoki Project are detailed below. Shown are the date, the Golden Share Resources expense number, the name of the Golden Share person who incurred the expense, the reason for the expense and the amount. The total was \$9,961.11, not including HST. Invoices for these expenses are available if needed.

Date	#	Name	Regarding	Amount	Balance
12/15/2017	NZ12152017-1	Nick Zeng	Travel expense to Eabametoong FN	990.98	990.98
12/27/2017	NZ12272017-2	Nick Zeng	taxi/mileage to Eabametoong FN	108.20	1,099.18
12/27/2017	NZ12272017-2	Nick Zeng	Lodging fee to Eabametoong FN	227.07	1,326.25
01/23/2018	NZ01232018-2	Nick Zeng	Airfare to Thunder Bay and auto rental	533.86	1,860.11
12/03/2018	NZ12032018-2	Nick Zeng	air ticket to meet with Martin Falls FN	305.25	2,165.36
12/17/2018	NZ12172018-1	Nick Zeng	Trip for FN consulting	553.09	2,718.45
05/10/2019	NZ05102019-1	Nick Zeng	air flight to Marten Falls FN for consultation	4,403.36	7,121.81
05/10/2019	NZ05102019-1	Nick Zeng	Lodging fee for consultation at MFFN	291.12	7,412.93
05/10/2019	NZ05102019-1	Nick Zeng	Temporary Help from First Nation for	300.00	7,712.93
			meeting at MFFN		
05/10/2019	NZ05102019-1	Nick Zeng	meal for meeting at MFFN	111.75	7,824.68
05/10/2019	NZ05102019-1	Nick Zeng	supplies for meeting at MFFN	117.15	7,941.83
06/13/2019	NZ06132019-1	Nick Zeng	travel expense for FN consulting	1,552.57	9,494.40
06/13/2019	NZ06132019-1	Nick Zeng	Lodging fee for FN consulting	345.52	9,839.92
11/30/2022	DH11312022-1	Demin Huang	Parking fee	17.70	9,857.62
11/30/2022	DH11312022-1	Demin Huang	Meeting with Chief Bruce (Marten Falls FN)	103.49	9,961.11
			Total	9,961.11	9,961.11

Table 1. First Nation Consulting costs

Technical Consulting

Technical consulting on the Ogoki Project by various parties for Golden Share Resources are detailed below. Shown are the date of the expense, the invoice number, the source of the invoice, the subject of the invoice and the cost. The total was \$27,630.63, not including HST.

To this is added \$4,000.00 for time spent offering technical guidance on the project by Wes Roberts, Director and Interim CEO of Golden Share Resources, for a total of \$31,630.63.

Date	Invoice #	From	Regarding	Amount	Balance
07/01/2017	CA457	CSA Global Canada Geosciences Ltd. Technical consulting		1,890.00	1,890.00
09/06/2017	4-2017	Ian Johnson Technical consulting		1,500.00	3,390.00
09/29/2017	17-04	Biljana Milicevic Ogoki maps update		480.00	3,870.00
11/02/2017	5-2017	lan Johnson	Geophysics review	2,400.00	6,270.00
11/16/2017	2017-048	Clark Exploration Consulting Inc.	Map and exploration permit	2,520.00	8,790.00
11/28/2017	CA536	CSA Global Canada Geosciences Ltd.	Geological consulting	630.00	9,420.00
01/31/2018	CA570	CSA Global Canada Geosciences Ltd.	consulting fee	210.00	9,630.00
02/26/2018	18-01	Biljana Milicevic	map compilation	480.00	10,110.00
02/28/2018	CA590	CSA Global Canada Geosciences Ltd.	consulting fee	210.00	10,320.00
05/14/2018	18-02	Biljana Milicevic Map compilation		1,080.00	11,400.00
05/14/2018	18-02	Biljana Milicevic	Biljana Milicevic Map compilation		11,760.00
05/31/2018	CA656	CSA Global Canada Geosciences Ltd.	Technical consulting	630.00	12,390.00
06/30/2018	1-2018	lan Johnson	Ogoki project study and map compilation	2,125.00	14,515.00
07/12/2018	2018-046	Clark Exploration Consulting Inc.	Map and exploration permit	1,710.00	16,225.00
09/09/2018	2-2018	lan Johnson	Geological consulting	2,875.00	19,100.00
07/30/2019	CA977	CSA Global Canada Geosciences Ltd.	Technical consulting	840.00	19,940.00
11/28/2019	CA1082	CSA Global Canada Geosciences Ltd.	Consulting fee	420.00	20,360.00
03/24/2020	CA1164	CSA Global Canada Geosciences Ltd.	Geological consulting	840.00	21,200.00
03/31/2020	1-2020	lan Johnson	Technical consulting	250.00	21,450.00
04/01/2020	6.2019	lan Johnson	Technical consulting	500.00	21,950.00
07/22/2020	July 22,	lan Trinder	Geological consulting	500.00	22,450.00
	2020				
09/30/2020	5-2020	lan Johnson	Technical consulting	562.50	23,012.50
01/12/2021	2021-007	Clark Exploration Consulting Inc.	Map update	540.00	23,552.50
03/31/2021	3-2021	lan Johnson	Technical consulting	390.63	23,943.13
06/30/2021	4-2021	lan Johnson	Consulting fee	375.00	24,318.13
12/31/2021	8-2021	lan Johnson	Consulting fee	312.50	24,630.63
03/31/2022	3-2022	lan Johnson	Consulting fee	375.00	25,005.63
07/05/2022	5-2022	lan Johnson	Extension of time for 17	500.00	25,505.63
			claims, 12 early exploration		
			permits		
09/30/2022	8-2022	lan Johnson	Geological consulting 2022 Q3	750.00	26,255.63
12/31/2022	9-2022	lan Johnson	Geological consulting 2022	1,375.00	27,630.63
			Q4		
			Total	27,630.63	27,630.63

Table 2. Technical Consulting

Ian Johnson on behalf of Golden Share Resources Corp. March 03, 2023