MAYO LAKE MINERALS INC.
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Assessment Report

On the

Trail-Minto Claim Group

MIN1-90
RT1-194

Describing an

Airborne Geophysical Survey

105M 12/13

Latitude 63.83881N, Longitude 135.83738E

In the

Mayo Mining District
Yukon Territory

By

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and V. N. Rampton, Ph.D., P.Eng

August 21, 2012

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Introduction
The Trail-Minto Claim Group (the “Property”), wholly owned by Mayo Lake Minerals Inc., is located east of Mayo (**Figure 1**) to the west of the Keno Hill District, which produced over 200 million ounces of silver from veins cutting Mississippian quartzite and schist. The Property lies in the northeastern portion of the Tintina Gold Belt, a loosely defined 2100 km long zone of gold and silver deposits extending across central Alaska and Yukon. Nearby deposits include Dublin Gulch (6.4Moz Au), Keno Hill (242Moz Ag), Red Mountain (1.3Moz Au) and Marge (Au, Ag, Cu, Pb, and Zn).

This report outlines the survey operations, data processing activities and initial interpretation related to an airborne geophysical survey flown between March 02, 2012 and March 05, 2012, over the Property. The airborne geophysical survey, which was flown by Precision GeoSurveys Inc. for Mayo Lake Minerals Inc., resulted in the acquisition of high resolution magnetic data.

Location and Access
The property consists of 284 contiguous claims located approximately 14 kilometers north of Mayo, Yukon, Canada and spans NTS map sheets 105M 12 and 105M 13. They are registered in the Mayo Mining district under the name of Mayo Lake Minerals Inc. The claims are listed in **Table 1** below with the location of the claims shown in **Figure 1 & Figure 2**.

Grant number	Claim Name	Map sheet	Group Name
YD19951-YD19992	MIN1-MIN42	105M 12/13	Trail Minto
YE25243-YE25290	MIN43-MIN90	105M 12/13	Trail Minto
YE25501-YE25600	RT1-RT100	105M 12/13	Trail Minto
YD20001-YD20031	RT101-RT131	105M 12/13	Trail Minto
YD105952	RT132	105M 12/13	Trail Minto
YE31593-YE31600	RT133-RT140	105M 12/13	Trail Minto
YD72781-YD72800	RT141-RT160	105M 12/13	Trail Minto
YD72681-YD72698	RT161-RT178	105M 12/13	Trail Minto
YD72629-YD72640	RT179-RT190	105M 12/13	Trail Minto
YE79601	RT191	105M 12/13	Trail Minto
YE79602	RT192	105M 12/13	Trail Minto
YD72779	RT193	105M 12/13	Trail Minto
YD72780	RT194	105M 12/13	Trail Minto

Table 1 Claims comprising the Trail-Minto Claim Group

Access is provided by two pre-existing, four-wheel drive roads that cut across the northern and southern edges of the claim group, and connect to a government-maintained, gravel highway (Silver Trail) 2.5 km east of the property. The Silver Trail connects with the Yukon's paved or chip-sealed highway network at Mayo (**Figure 1**).

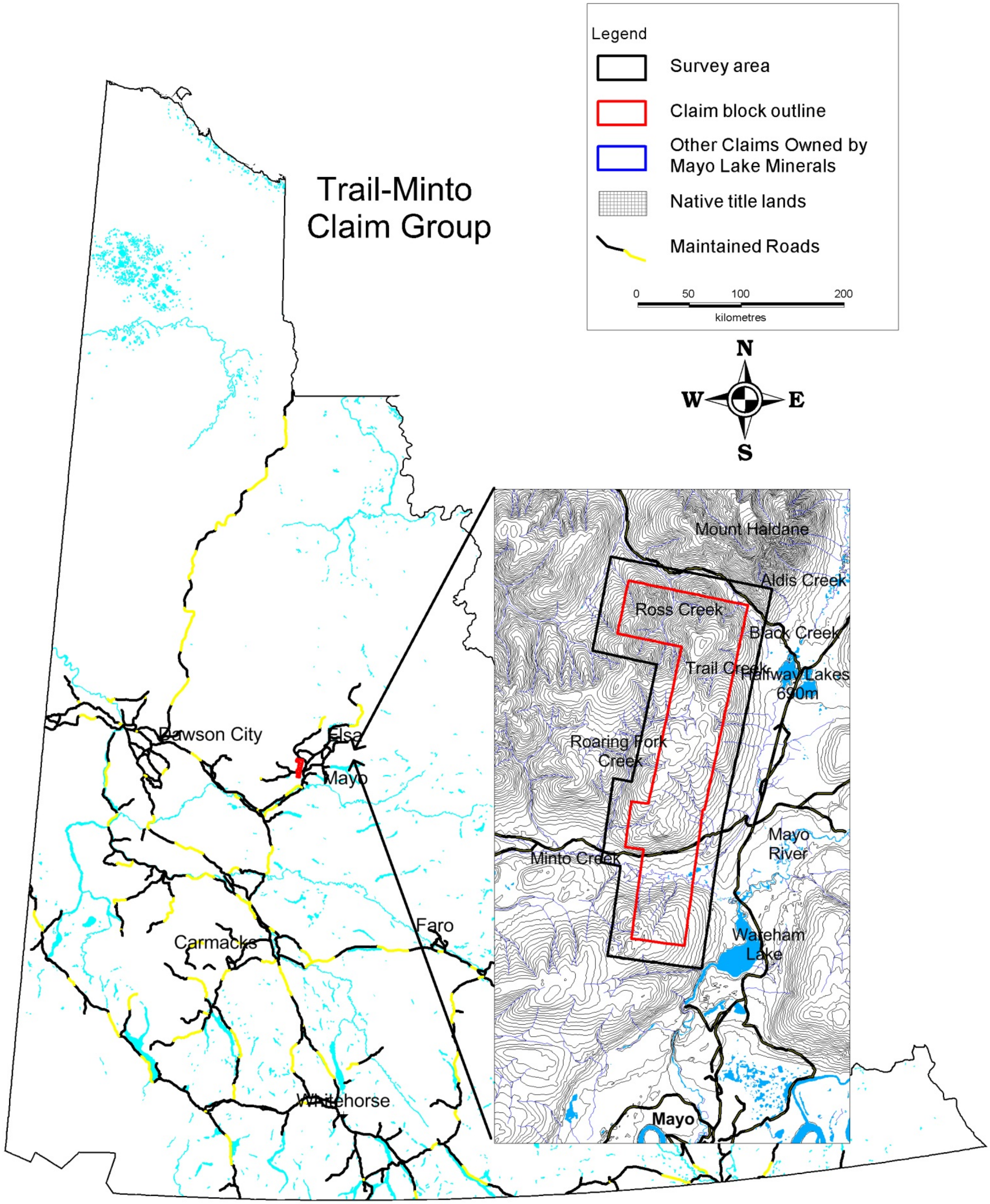


Figure 1 Trail-Minto property location

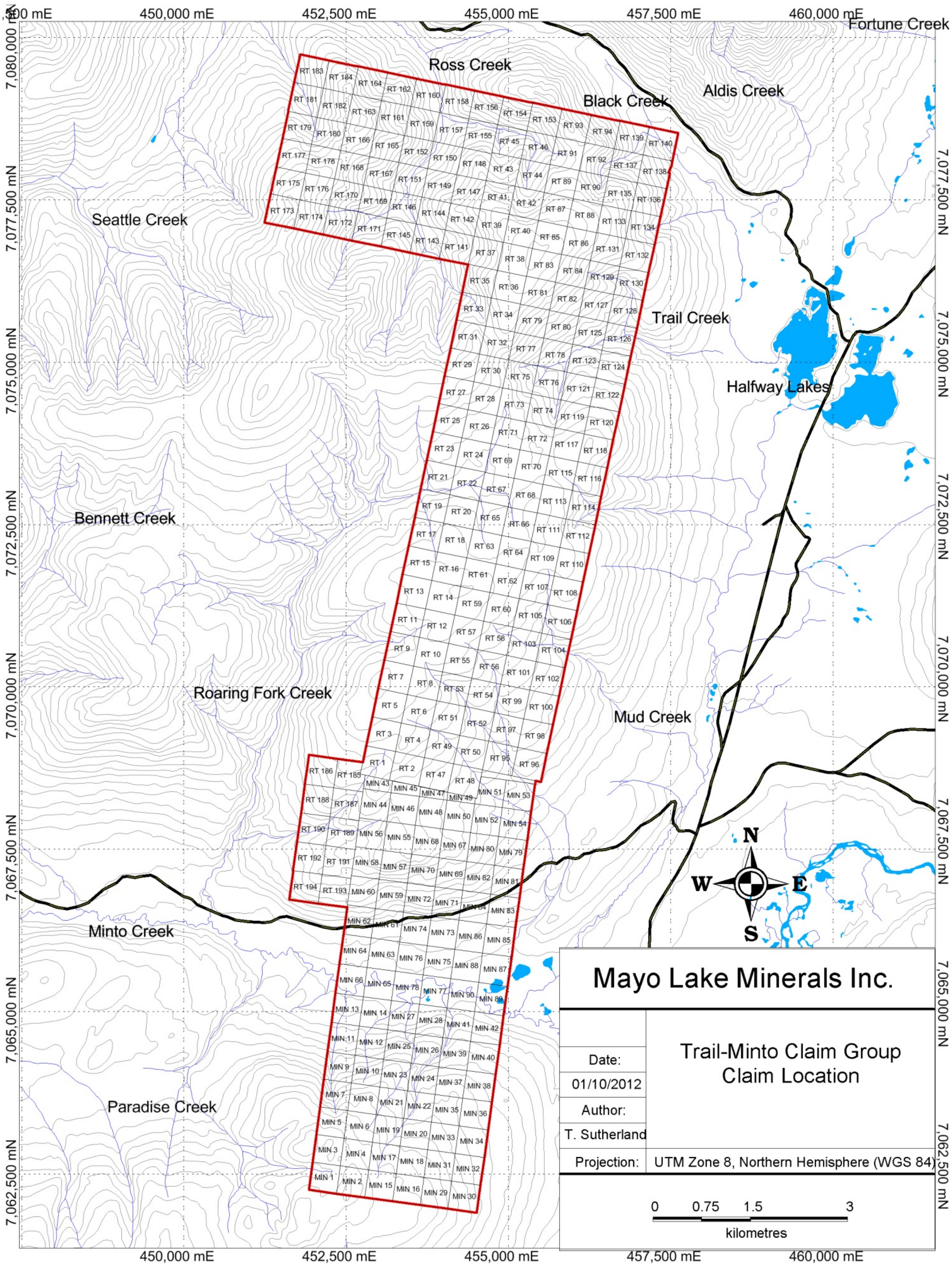


Figure 2 Claim map

Previous Work

Most early exploration conducted on the Property is poorly documented. The majority of previous work appears to consist of programs focused to the north of the claims near Mount Haldane, where silver-lead mineralization was found prior to 1906. Well documented exploration consists of regional government sampling and mapping programs or private company exploration after 2000 around the claim block periphery.

Project Keno Hill headed by Chris Gleeson of the Geologic Survey of Canada was completed in 1968. It covered the northern two thirds of the property with a stream sediment, water, heavy minerals and lithogeochemistry sampling program (Gleeson et al. 1965-1968, Gleeson & Boyle 1972, Gleeson 1980a, Gleeson 1980b). This program was systematic for some elements and indicated the presence of several anomalies in all media, notably; multi-element (As, Au, B, Cu, W, Zn) anomalies from several drainages in the north of the claim block, boron anomalies along the eastern slopes of the ridge and multi element (As, Au, Cu, Zn) anomalies in the Roaring Forks-Minto creek drainages. Mult-element anomalies containing Au, B, Cu and W in drainages in the northern portion of the Property coincide with heavy mineral anomalies. The southern portion of the property was not sampled for heavy minerals.

The Property was again stream sediment sampled by the Geologic Survey of Canada in 1987; however this survey provided insufficient coverage to make any reasonable conclusions about the claim group.

In 2000 Expatriate Resources Ltd. completed a soil sampling program centered to the north of the Trail Minto Claim group. The southern extent of this program overlaps the property and delimited a northwest

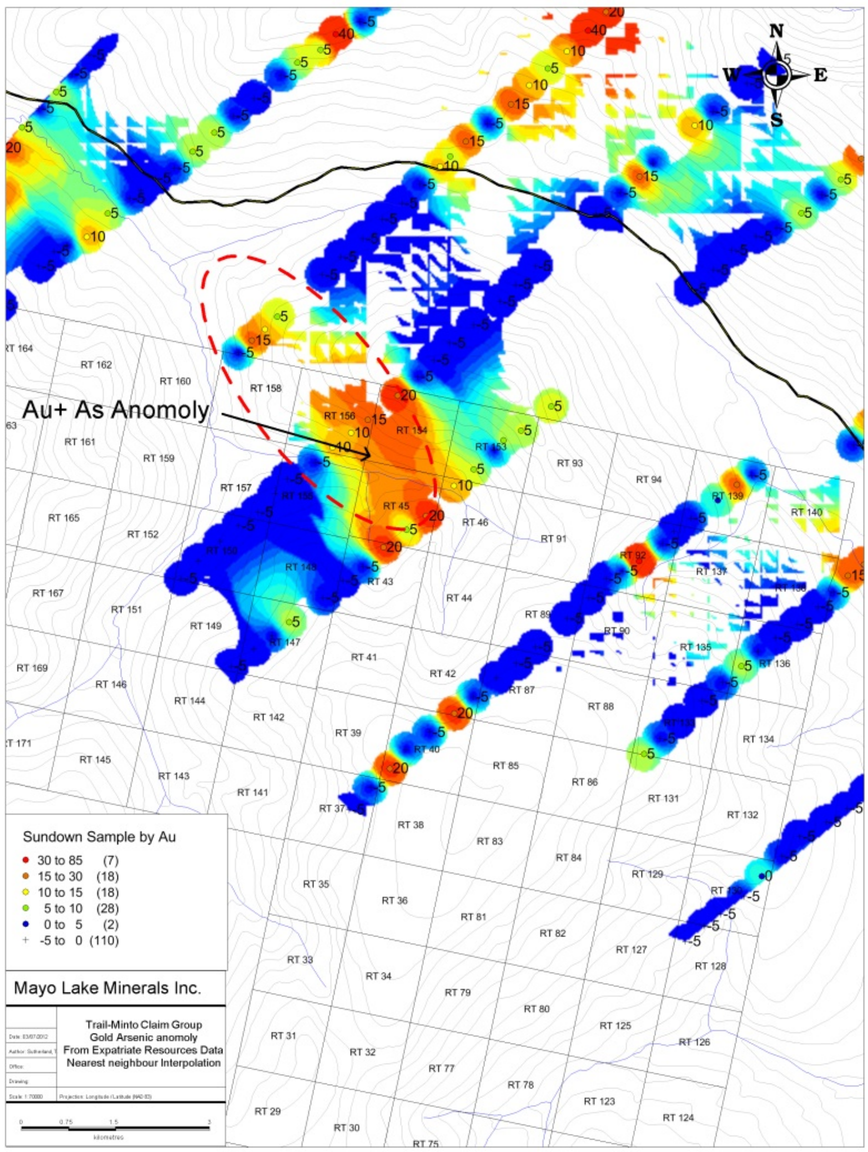


Figure 3 Gold-Arsenic soil anomaly at north boundary of claims (Expatriate Resources Ltd.)

trending Au/As anomaly **(Figure 3**).

Initial interest in the north end of the Property was prompted by discovery of minor amounts of argentiferous galena float on trend with the Mount Haldane vein system. This work culminated with discovery of a 4 m wide porphyry dyke that is strongly mineralized with disseminated arsenopyrite. A specimen of this material taken from a trench in 1978 assayed 58.0 g/t silver and 0.3% lead with 3 ppm tungsten and 19 ppm tin. Dykes of similar character have been located on the property, but no analyses have been reported.

Several creeks, notable Roaring Fork/Minto Creek and Ross creek have had intermittent placer operations either on or downstream from the Trail Minto Claim group.

Geomorphology

The Property covers from Ross Creek and Black Creek in the north to the highlands south of the valley containing Minto Creek (**Figure 1**). Most creeks have narrow valleys with moderate to steep slopes. Ridge crests are broad with moderate slopes. Creeks draining the property are all part of the Yukon River watershed.

The Property has been subjected to multiple glaciations (Hughes 1982); though it lies further west then the most recent, McConnell Glaciation whose western margin occupied the Mayo River Valley immediately east of the claim group. During the older Reid Glaciation, Minto Creek and Black Creek were filled with fast westward flowing ice (Bond 1999). Minto Creek is now filled with glacial drift and more recent alluvium. During the Reid Glaciation the broad ridge was covered by cold based ice and transport of rock and debris was minimal as is evidenced by landforms.

Outcrop is sparse on the property, rarely exceeding 5% in any area. Soil development is immature with Pleistocene glaciers having scoured some areas and deposited variable thicknesses of till on others.

Vegetation is predominantly black spruce with willow and alder understorey. Lowlands and north facing slopes exhibit a thick cover of organic matter, moss and Labrador tea. Southern slopes are similarly vegetated but also include balsam and poplar groves. Permafrost is likely pervasive on north facing slopes but discontinuous on south facing exposures.

Regional Geology and Mineralization

The Property is located within the Selwyn Basin and lies within the Tintina Gold Belt. Simplified regional geology as shown on **Figure 4** depicts Upper Proterozoic to Lower Cambrian Hyland Group stratigraphy, in contact with Paleozoic metasedimentary units of the Ern Group and Keno Hill Quartzite along the Robert Service Thrust. All stratigraphic units have been intruded by the Mid-Cretaceous age Tombstone Plutonic Suite, which host several known gold deposits including Dublin Gulch. Mid-Triassic mafic sills and greenstones are common in the Keno Hill quartzite, but are rarely encountered in other units.

The dominant structural features in the area are a series of imbricated thrust sheets that collectively make up the Robert Service Thrust. These thrusts are commonly difficult to distinguish due to subsequent intense folding of faults and contacts and a strong penetrative structural fabric imparted during the Tombstone Thrust event. The intense folding is especially evident in units immediately around Keno Hill. Large open folds, McQueston Antiform(E-W) and Mayo Lake Antiform (NW-SE), and several inferred brittle faults were developed after the large thrusting events (Roots 1997)

Abundant historical work focused in and around Keno Hill led to a separate nomenclature in which the Hyland Group was deemed the Upper Schist and the Ern Group was deemed the Lower Schist (Green 1971). This coincides with early inferences that the Upper Schist (Hyland Group) was younger than the Lower Schist (Ern Group). The term "Keno Hill Quartzite" is well developed in literature, though internal folding and imbrication have prevented the description of a type section or measurement of unit thickness thus far, therefore the formation status of the unit remains informal. Stratigraphically it lies immediately above Ern group. Green, 1971, includes meta-volcanic units in the Keno Hill Quartzite; this is likely the topmost unit of the Ern group (Murphy 1997, Roots 1997) though Roots 1997 includes this as the basal unit of the Keno Hill Quartzite at Keno Hill instead.

The Keno Hill silver camp has produced over two hundred million ounces of silver since 1921. Productive veins occur in the Keno Hill Quartzite and underlying Lower Schist. Although faults with associated mineralization ("mineralized faults") are believed to cut through the Robert Service Thrust and continue into the Hyland Group, no significant silver mineralization has been discovered above the thrust. Ore shoots within the veins typically consist of galena, sphalerite and tetrahedrite with siderite or quartz gangue. The mineralized faults trend northeast and dip steeply to the southeast with left lateral offsets ranging from a few metres to over a hundred metres (Boyle 1965). Cross faults offsetting the mineralized faults trend perpendicular to them and dip 20^{o} to 30^{o} to the southwest.

Silver-lead mineralization was found at Mount Haldane before 1906; by 1920 several surface trenches and three adits had explored the mineralization, and 24.7 tonnes grading 3100 g/t silver and 59% lead had been produced. Mineralization at Mount Haldane is typically Keno Hill Type veins which are roughly parallel to north and northeast trending high angle faults which offset the Robert Service Thrust; the largest being the Haldane Fault with 2000m of apparent dextral offset. Tombstone Suite intrusions mineralized with disseminated arsenopyrite have been mapped on the slopes above Black Creek and were a target of exploration by Expatriate Resources Ltd.

Two major gold occurrences are located within 25km of the Property. Dublin Gulch and Gold Dome, formerly Scheelite Dome, are intrusions of the Tombstone Plutonic Suite with high tonnage low grade gold mineralization in sheeted veins primarily in the stock but penetrating short distances into surrounding Hyland Group metasedimentary rocks. The largest, most advanced project is Dublin Gulch where a definitive feasibility study has been completed; it hosts an open pit resource containing 6.4 million ounces of gold.

Mapping in this region was done by D.C. Murphy and C.F Roots who integrated numerous geological publications dating from 1920 to 1995. Their work resulted in a series of maps at 1:50,000 scale (Murphy 1996, 1997) and a regional map at 1:250,000 scale (Roots 1997).

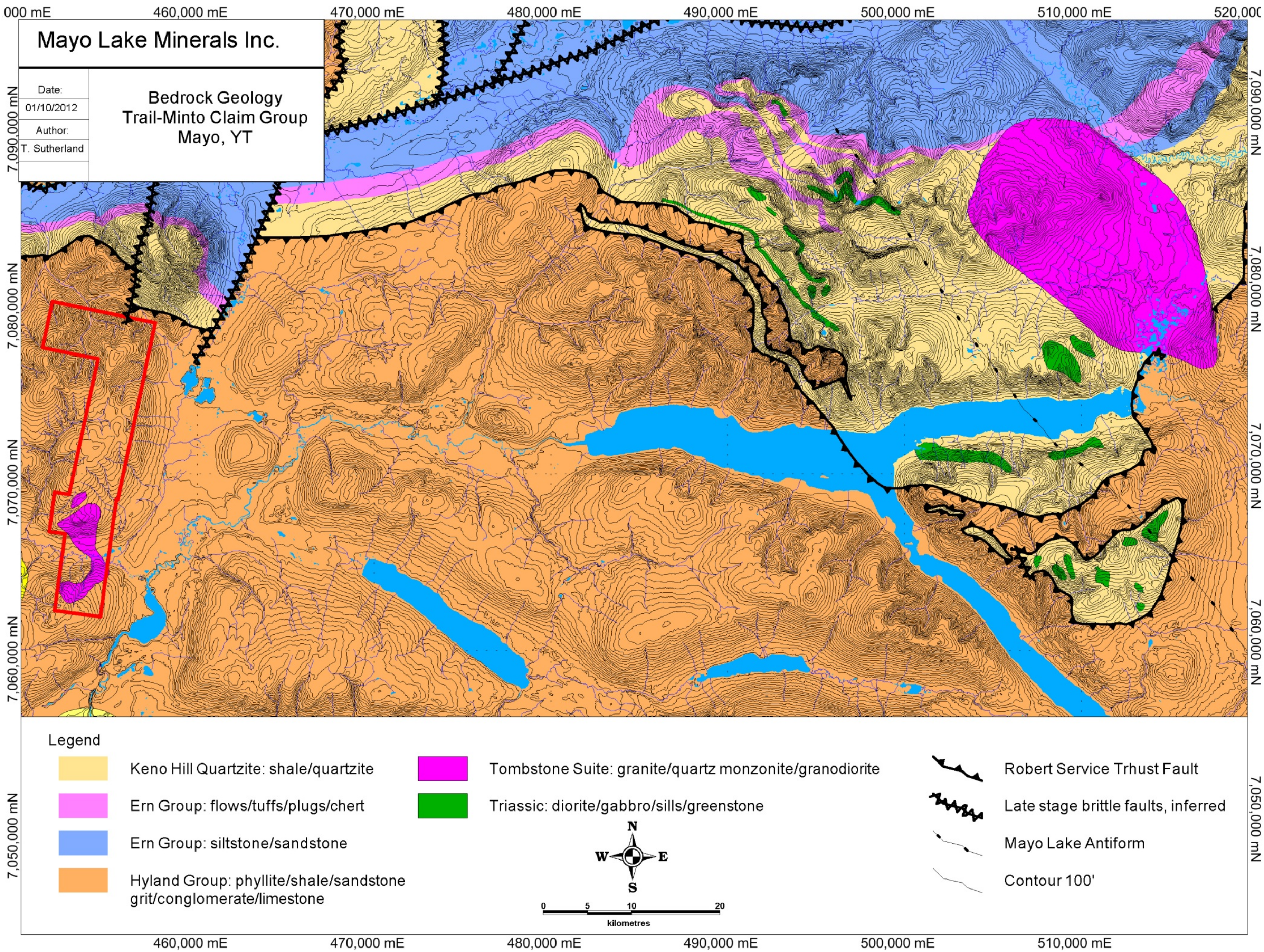


Figure 4 Regional geology

Property Geology

Property geology is shown on **Figure 5**.The Property is primarily Hyland Group metasediments south of the Robert Service Thrust. However several mapped intrusive bodies are also present, including the Roaring Forks Pluton a poorly defined member of the Tombstone suite of intrusives. Most stratigraphy has bedding parallel to foliation and dips between 18° and 40° and strikes 000° to 090° (Roots 1997).

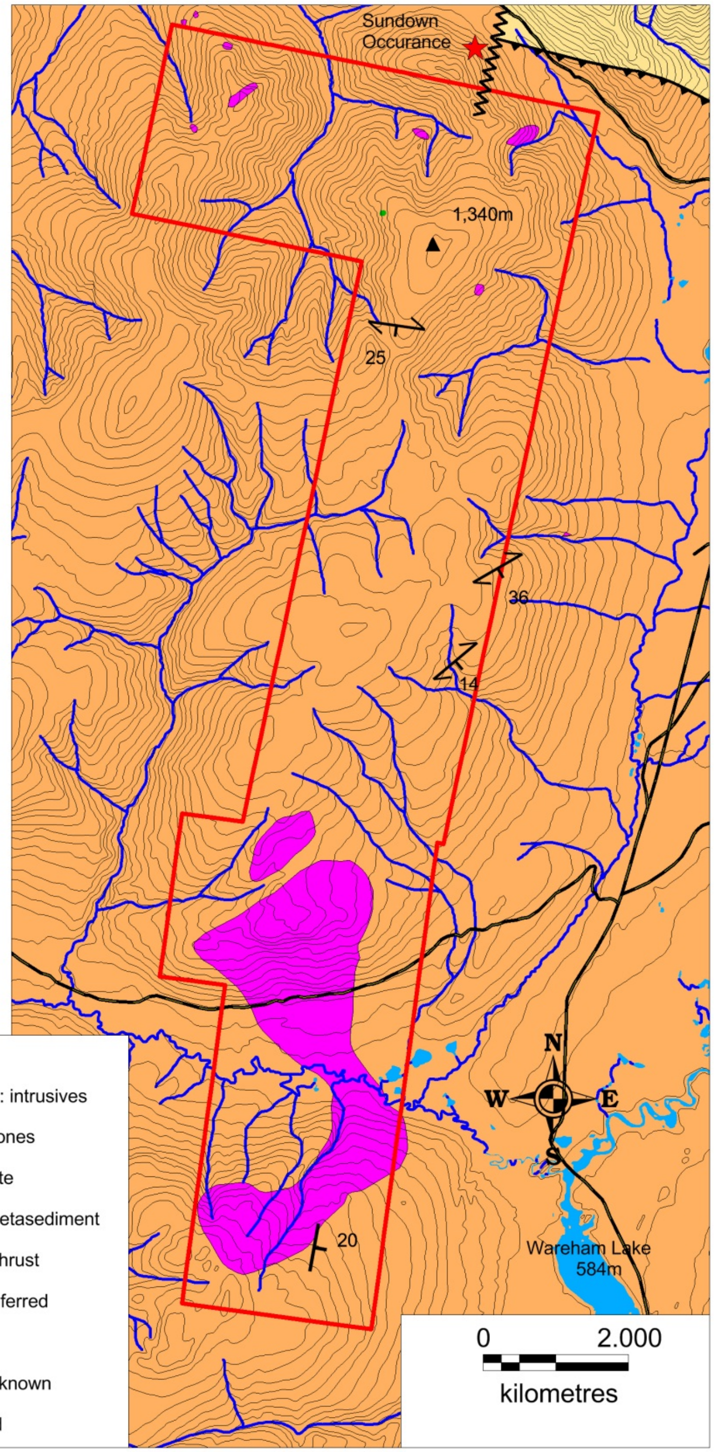
Stratigraphy

Hyland Group is locally mapped as the Yusezyu Formation and consists of compositionally layered medium to coarse-grained micaceous quartzose phyllite; muscovite-chlorite gritty phyllite; green and grey impure quartzite; metaconglomerate; and rare calcsilicate (Roots 1997).

Intrusions

Cretaceous Tombstone Suite intrusions are described as buff to grey weathering dykes, sills and small plugs with aplitic or granitic textures. Some of these bodies are locally quartz, feldspar and biotite phyric and mineralized with disseminated arsenopyrite (Becker 2000). Several intrusions belonging to this suite have been mapped on the Property. Also present on the Property is the Roaring Forks Pluton which is likely a high level or subvolcanic Tombstone Suite Intrusion.

Triassic metadiorite sills which are present are dark green, foliated, fine to medium grained and weather in a blocky fashion. The main mineral assemblage consists of amphibole, chlorite and plagioclase. Sills are common in the Keno Hill Quartzite and Ern Group,



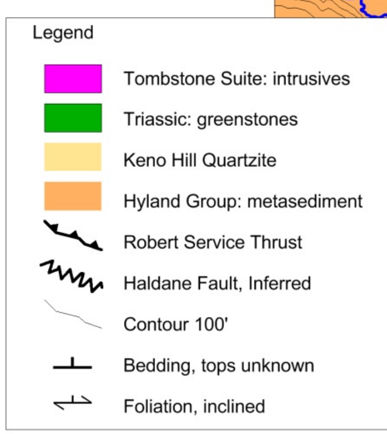


Figure 5 Property geology

but there are occurrences of these in the Hyland group at this location.

Structure

The Robert Service Thrust crosses north of the Property and marks the contact between the Hyland Group and the Keno Hill Quartzite. This structure dips southward at approximately 30°, and Keno Hill Quartzite may underlie the north of the property at a shallow depth. Local faults and shear zones dip steeply and are roughly north-northwest and east-northeast trending, respectively. Most of these structures appear to have small displacements. However, one inferred fault to the north, shows approximately 2000 m dextral offset of the Robert Service Thrust. Small scale isoclinal folds can be observed in large float with fold axis parallel to foliation. Broad post-metamorphic folding is also present and is indicated by variable foliation dips. No large scale fold hinges have been mapped so the amplitude and frequency of the folds is not known.

Mineralization

The Property is a prospective host to, a variety of gold deposit styles related to the complex Mesozoic and Cenozoic metamorphic, plutonic and volcanic history associated with the formation of the northern Canadian Cordilleran orogeny. The most attractive of these are:

- Pollymetallic veins of the Keno Hill Type that are typically high in silver, lead, and zinc and are related to the intrusion of the Tombstone Plutonic Suite. Veins of this type have been targeted on Mount Haldane.
- Reduced Intrusion Related gold ores related to post-orogenic, mid-Cretaceous plutons that intruded Selwyn Basin sedimentary rocks.
- Orogenic gold veins, Jurassic in age, which formed after peak metamorphism of the Yukon-Tanana Terrane; their erosion likely contributed to the Klondike placer deposits.
- Indications of Carlin-like gold mineralization are present in the area (Lynch 2006) though the local geology may limit the presence of this type of mineralization.

There is also good potential to host tungsten skarns similar to the Ray Gulch Tungsten Skarn at Dublin Gulch and a showing southeast of the Roop Pluton.

Geophysics

The Property was designated Block A for the duration of the survey. The total block is approximately 19 km by 8 km, including a buffer zone of approximately 1km around the outside of the claims to dampen edge effect. The survey area in relation to the claims can be observed on **Figure 1**. A total of 803 line kilometers of magnetic data were flown for this survey, including tie lines. The survey lines were flown at 150 meter spacings, at a 102°/282° heading; the tie lines were flown at 1500 km spacings, at a heading of 012°/192° (**Figure 6**).

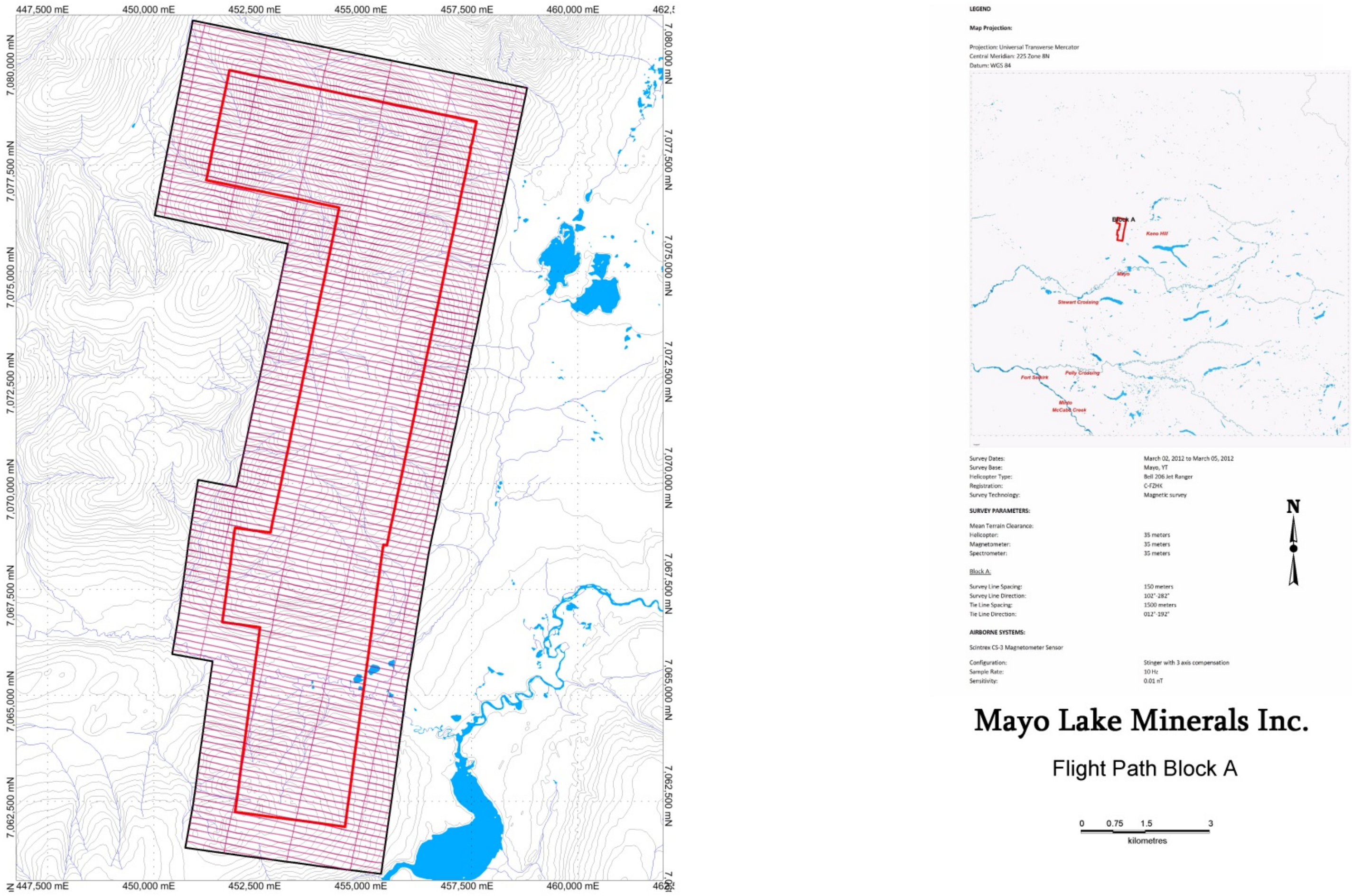


Figure 6 Flight lines from Precision Geosurveys Inc. The Trail-Minto property was designated Block A for the duration of the survey. A Larger version of this figure is included in Appendix C

Survey Specifications:

The geodetic system used for this survey is WGS 84, contained in zone 8N. The survey data acquisition specifications and coordinates for Trail Minto Claim Group are specified In **Tables 2&3**

Survey block	Line Spacing m	Planned Survey Line km	Planned Tie Line km	Total Planned Line km	Total Actual Flown km	Survey Line Orientation	Nominal Survey Height m
Trail Minto	150	722	81	803	803	$102^o/282^o$	35

Table 2 Trail-Minto Block survey acquisition specifications

Longitude	Latitude	Easting	Northing
135.837381	63.83881	458806.7	7079322
135.848293	63.81434	458234	7076603
135.850025	63.81048	458142.9	7076173
135.851756	63.80661	458051.7	7075743
135.853487	63.80274	457960.6	7075314
135.855217	63.79887	457869.5	7074884
135.856947	63.79501	457778.4	7074454
135.858677	63.79114	457687.3	7074024
135.860406	63.78727	457596.2	7073595
135.862134	63.7834	457505.1	7073165
135.863921	63.77945	457411.9	7072725
135.865686	63.77549	457318.8	7072286
135.867451	63.77154	457225.6	7071846
135.869215	63.76758	457132.4	7071407
135.87098	63.76363	457039.2	7070967
135.872743	63.75967	456946	7070528
135.874526	63.75572	456852.9	7070088
135.876289	63.75176	456759.7	7069649
135.878051	63.74781	456666.5	7069209
135.879812	63.74385	456573.4	7068770
135.881573	63.73989	456480.2	7068330
135.890832	63.71223	455980.4	7065254
135.891959	63.70816	455918.9	7064802
135.893065	63.7041	455857.5	7064350
135.894171	63.70003	455796.1	7063897
135.895223	63.6962	455738.3	7063472
135.896276	63.69238	455680.5	7063047
135.897328	63.68856	455622.7	7062621
135.898379	63.68473	455565	7062196
135.901961	63.67211	455367.5	7060791
135.92198	63.67306	454378.2	7060912
135.93103	63.67355	453931.8	7060972
135.939655	63.674	453505.4	7061030
135.948301	63.67447	453078.9	7061088
135.956926	63.67493	452652.4	7061145
135.965775	63.6754	452216	7061204
135.995504	63.67702	450747.6	7061407
135.992134	63.68586	450929.8	7062390
135.991095	63.68969	450987.5	7062815
135.990055	63.69351	451045.3	7063240

135.989016	63.69733	451103.1	7063666
135.987996	63.70116	451160.9	7064091
135.986956	63.70498	451218.6	7064517
135.985843	63.70906	451280.1	7064969
135.98475	63.71312	451341.5	7065421
135.983816	63.71654	451393.1	7065801
136.003177	63.71797	450439.6	7065976
136.000383	63.72596	450591.7	7066865
135.999271	63.73004	450653.1	7067317
135.998179	63.7341	450714.5	7067770
135.997105	63.7381	450775	7068215
135.99601	63.74211	450835.5	7068660
135.992001	63.7549	451055.6	7070082
135.97367	63.7535	451957.7	7069912
135.950779	63.8051	453172.9	7075645
136.014821	63.81072	450028.9	7076319
135.998026	63.85207	450927.2	7080913

Table 3 Mayo Lake Block A survey polygon coordinates using WGS 84 in zone 8N.

Magnetic Surveying:

Magnetic surveying is probably the most common airborne survey type to be conducted for both mineral and hydrocarbon exploration. The type of survey specifications, instrumentation, and interpretation procedures, depend on the objectives of the survey. Typically magnetic surveys are performed for:

- Geological Mapping, 1) to aid mapping of lithology, structure and alteration in both hard rock environments, 2) to map basement lithology, structure and alteration in sedimentary basins or 3) regional tectonic studies.
- Depth to Basement mapping for exploration in sedimentary basins or mineralization associated with the basement surface.

Survey Operations:

Precision GeoSurveys flew the Property using a Bell 206 BIII Jet Ranger. The survey lines were flown at a nominal line spacing of one hundred and fifty (150) meters and the tie lines were flown at 1500 m spacing for the magnetometer. The average survey elevation was 30 meters vertically above ground for Block A. The experience of the pilot helped to ensure that the data quality objectives were met and that the safety of the flight crew was never compromised given the potential risks involved in airborne surveying.

The base of operations for this survey was in Mayo, YT, Canada. The Precision crew consisted of three members:

Ola Vaage - Pilot

Stian Vaage – Operator

Shawn Walker - On-site Geophysicist

The survey was started March 02, 2012 and completed March 05, 2012. The survey encountered several delays due to poor weather conditions and magnetic solar storms.

Base Station Details:
A magnetic base station is set up before every flight to ensure that diurnal activity is recorded during the survey flights. In this case, the base station was located in bush north east of Janet Lake (**Table 4**).

Station Name	Easting/Northing	Longitude/Latitude	Datum/ Projection
GEM 4	476735E 7061033N	135.470E 63.676N	WGS84, Zone 8N

Table 4 Base station details

Base station readings were reviewed at regular intervals to ensure that no data was collected during periods with high diurnal activity (greater than 5 nT per minute). The base station was installed at a magnetically noise-free area, away from metallic items such as steel objects, vehicles, or power lines. The magnetic variations recorded from the stationary base station are removed from the magnetic data recorded in flight to ensure that the anomalies seen are real and not due to solar activity.

Equipment:
For this survey, a magnetometer, base station, laser altimeter, and a data acquisition system were required to carry out the survey and collect quality, high resolution magnetic data. The survey magnetometer is carried in an approved "stinger" configuration to enhance flight safety and improve data quality in this mountainous terrain.

AGIS:
The Airborne Geophysical Information System, AGIS, is the main computer used in data recording, data synchronizing, displaying real-time QC data for the geophysical operator, and to generate navigation information for the pilot display system. The AGIS was manufactured by Pico Envirotec; therefore the system uses standardized Pico software and external sensors that are connected to the system via RS-232 serial communication cables. The AGIS data format is easily converted into Geosoft or ASCII file formats by a supplied conversion program called PEIView. Additional Pico software allows for post real time magnetic compensation and survey quality control procedures.

Magnetometer:
The magnetometer used by Precision GeoSurveys is a Scintrex cesium vapor CS-3 magnetometer. The system was housed in a front mounted "stinger". The CS-3 is a high sensitivity/low noise magnetometer with automatic hemisphere switching and a wide voltage range, the static noise rating for the unit is +/- 0.01 nT. On the AGIS screen the operator can view the raw magnetic response, the magnetic fourth difference and the survey altitude for immediate QC of the magnetic data. The magnetic data is

recorded at 10 Hz. A magnetic compensator is also used to remove noise created by the movement of the helicopter as it pitches, rolls and yaws within the Earth's geomagnetic field.

Base Station:

For monitoring and recording of the Earth's diurnal magnetic field variation, Precision GeoSurveys operates the GEM GSM-19T magnetometer base station continuously throughout the airborne data acquisition survey. The base station is mounted as close to the survey blocks, and in an area with low magnetic gradient, as possible to give accurate magnetic field data. It is also mounted in an area away from electric transmission power lines and moving ferrous objects, such as aircrafts and motor vehicles. The GEM GSM-19T magnetometer with GPS uses the proton precession technology sampling at a rate of 0.5 Hz. The GSM-19T has an accuracy of +/- 0.2 nT at 1 Hz. Base station data recorded in the solid-state memory of the base station, are downloaded onto a field laptop using GEMLink 5.0 software. Profile plots of the base station readings are generated and updated at the end of each survey day.

Laser Altimeter:

The pilot is provided with terrain guidance and clearance with an Acuity AccuRange AR3000 laser altimeter. This is attached at the aft end of the magnetometer boom. The AR3000 sensor is a time-of-flight sensor that measures distance by a rapidly modulated and collimated laser beam that creates a dot on the target surface. The maximum range of the laser altimeter is 300 m off of natural surfaces with 90% reflectance and 3 km off special reflectors. Within the sensor unit, reflected signal light is collected by the lens and focused onto a photodiode. Through serial communications and analog outputs, the distance data are transmitted and collected by the AGIS at 10 Hz.

Data Acquisition Magnetometer Checks:

At the start of the survey, airborne magnetometer system tests were conducted. The three tests conducted were the compensation flight test, heading error test, and the lag test.

Compensation Flight Test:

During aeromagnetic surveying, noise is introduced to the magnetic data by the aircraft itself. Movement in the aircraft (roll, pitch and yaw) and the permanent magnetization of the aircraft parts (engine and other ferric objects) are large contributing factors to this noise. To remove this noise a process called magnetic compensation is implemented. The magnetic compensation process starts with a test flight at the beginning of the survey where the aircraft flies in the four orthogonal headings required for the survey (102^{o}/282^{o} and 012^{o} /192^{o} in the case of this survey) at an altitude where there is no ground effect in the magnetic data. In each heading, three specified roll, pitch, and yaw maneuvers are performed by the pilot; these maneuvers provide the data that is required to calculate the necessary parameters for compensating the magnetic data.

Lag Test:

Followed by the compensation flight, a lag test is conducted. This is performed to determine the relationship between the time the digital reading was recorded by the instrument and the time for the position fix for fiducial of the reading was obtained by the GPS system. The test was flown in the four orthogonal headings over an identifiable magnetic anomaly (ie.Truck, Trailer, etc.) at survey speed and height. A lag of 5 fiducials (0.5 seconds) was determined from the lag test.

Heading Error Test:
To determine the magnetic heading effect a cloverleaf pattern flight test is conducted. The cloverleaf test is flown in the same heading as the survey and tie lines. For each direction, it must fly over a recognizable feature on the ground in order to estimate the heading error.

Data Processing:
After a survey flight all of the data is collected and several procedures are undertaken to ensure that the data meets a high standard of quality. All data was processed using Pico Envirotec software and Geosoft Oasis Montaj geophysical processing software.

Magnetic Processing*:*
Before any processing and editing of the raw magnetic data, the data obtained from the compensation flight test must first be applied to the raw magnetic data. A computer program called PEIComp is used to create a model from the compensation flight test for each survey to remove the noise induced by aircraft movement; this model is applied to each survey flight so the data can be further processed. Filtering is applied to the laser altimeter data to remove vegetation clutter and to show the actual ground clearance. To remove vegetation clutter a Rolling Statistic filter is applied to the laser altimeter data and a low pass filter is used to smooth out the laser altimeter profile to remove isolated noise. As a result, filtering the data will yield a more uniform surface in close conformance with the actual terrain. The processing of the magnetic data involved the correction for diurnal variations. The base station data collected is edited, plotted and merged into a Geosoft (.gdb) database daily. The airborne magnetic data is corrected for diurnal variations by subtracting the observed magnetic base station deviations. Following the diurnal correction was a lag correction. A lag correction of 0.5 seconds was applied to the total magnetic field data to compensate for the lag in the recording system as the magnetometer sensor flies 5.70 m ahead of the GPS antenna. Lastly, a heading correction was applied to the data. Some filtering of the magnetic data is also required. A non linear filter was used for spike removal. The 1D Non-Linear Filter is ideal for removing very short wavelength, but high amplitude features from data. It is often thought of as a noise spike-rejection filter, but it can also be effective for removing short wavelength geological features, such as signals from surficial features. The 1D Non-Linear Filter is used to locate and remove data that is recognized as noise. The algorithm is 'non- linear' because it looks at each data point and decides if that datum is noise or a valid signal. If the point is noise, it is simply removed and replaced by an estimate based on surrounding data points. Parts of the data that are not considered noise are not modified. The combination of a non-linear filter for noise removal and a low pass trend enhancement filter resulted in level data as indicated in the results section of this report. The low pass filter smoothes out the magnetic profile to remove isolated noise. The corrected magnetic data from the survey and tie lines was used to level the data all together. Two forms of levelling are applied to the corrected data: conventional levelling and micro-levelling. There are two components to conventional levelling; the first involves statistical levelling of magnetic data to correct miss ties (intersection errors) followed by specific patterns or trends. For the second component, tie lines are brought to a common regional base value, using the mean value of the cross-level error. To obtain the

best possible levelled data, individual corrections are edited at selected intersections. Lastly, micro-levelling is applied to the corrected conventional levelled data. This will remove any residual line-direction-related noise, and any low amplitude component of flight line noise, that still remains in the data after tie line levelling.

Final Data Format

Abbreviations used in the GDB files are listed in **table 5**:

Table 5 Mayo Lake Block A survey channel abbreviations

Channel	Units	Description
X	m	UTM Easting - WGS84 Zone8 North
Y	m	UTM Northing - WGS84 Zone 8 North
Galt	m	GPS height - WGS84 Zone 8 North
DTM	m	Digital Terrain Model
Lalt	m	Laser Altimeter readings
GPStime	Hours:min:secs	GPS time
Basemag	nT	Base station diurnal data
Mag	nT	Total Magnetic Intensity

The files are provided in two (2) formats, the first is a .GDB file for use in Geosoft Oasis Montaj, and the second is a text format .XYZ file. A complete file, provided in each format will contain raw magnetic data.

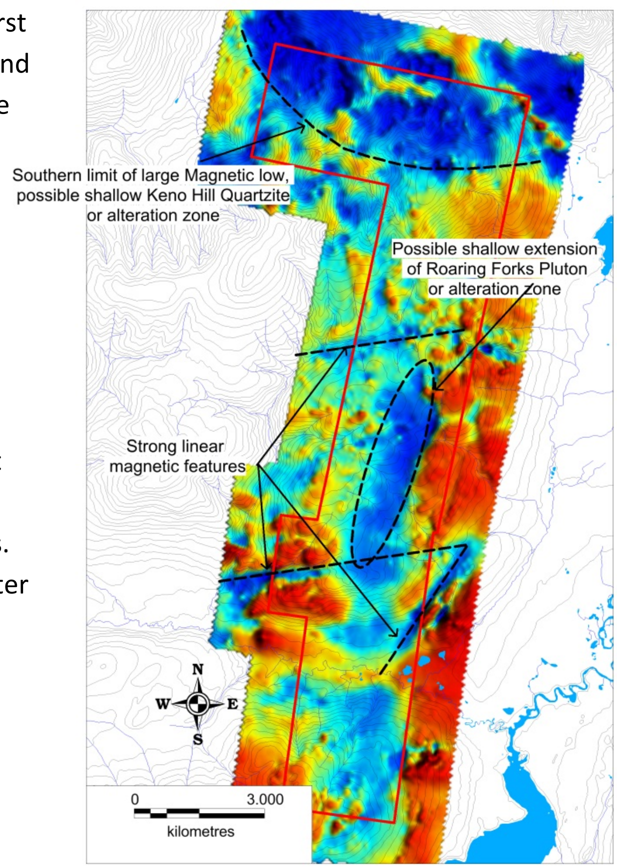


Figure 7 Total magnetic intensity map from survey Block A

Results

A review of print-outs of the total magnetic intensity (**Figure 7**) and the calculated vertical gradient show numerous features that suggest NE trending structures (faults), intrusions and magnetic lows (alteration zones). At some fault intersections, the plotted maps indicate the possibility of intrusions and/or alteration zones. The data requires further interpretation to better understand the precise nature and location of the above defined features. Hard copies of the data collected and flight lines are included in Appendix C.

Discussion and Conclusions

The Tintina Gold Belt, in which the Property lies, extends for more than 2100 km along the length of the North American Cordillera in Alaska and Yukon. It contains gold and silver deposits that are spatially and temporally associated with Cretaceous age plutonism. In general, bismuth-tungsten-tellurium signatures characterize deposits hosted by granitoid rocks while those hosted by sedimentary rocks and dyke systems characteristically have arsenic-antimony signatures (Goldfarb et al. 2000). Significant differences in structural styles, levels of deposit emplacement, ore-fluid chemistry and gold grades suggest that the prospects represent a broad range of depositional environments.

Several features make deposits in the Tintina Gold Belt desirable exploration and mining targets. The deposits have good size potential, for example Dublin Gulch is reported to contain 6.4 million ounces gold at a grade of 0.62 g/t and Brewery Creek is reported to contain 825,000 ounces gold at a grade of 1.36 g/t prior to production. The Fort Knox deposit is reported to contain 7 million ounces gold, at a grade of 0.9 g/t and POGO, an orogenic vein deposit, contains approximately 4 million ounces gold at a grade of 16 g/t.

The Property is most likely to host deposits related to the Tombstone Plutonic Suite. Mineralization would be late peripheral silver-lead-zinc veins (Keno Hill Type), or steeply dipping sheeted gold veins and stockworks (Reduced Intrusion Related Gold) within both intrusive and metasedimentary host rocks. If carbonate horizons are present they may react with mineralizing fluids and host either gold-arsenic-copper-bismuth-tungsten skarn or Carlin-type mineralization. The high quality aeromagnetics discussed in this report have outlined structural and alteration targets, which in combination with the location of placer deposits, can guide further exploration for gold and silver deposits.

The northern portion of the survey area clearly has a lower magnetic signature with a limit that roughly parallels the trend of the Robert Service thrust, however geological mapping of the Haldane Fault shows a large dextral offset north of the survey area which is not mirrored in the limit of the magnetic low. A magnetic low also trends NE from the Roaring Forks Pluton which is likely a shallow extension of the intrusion or related alteration. Several strong structural features indicate that there is good potential for structurally related mineralization on this claim block. Work is currently being undertaken by an independent geophysicist to provide greater interpolation of geophysical data. Further exploration should involve geochemical soil and stream sediment sampling to investigate potential structures, alteration zones and intrusions defined by the airborne magnetics, and to follow up Operation Keno anomalies. Prospecting and detailed mapping of the anomalies will also be required to define the extent of intrusions, alteration zones and potential mineralization.

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Appendix A

Statement of Expenditures

Cost per km: $67.89

Number of Km: 803km

Total Expenditure: $54515.67

Number of Claims: 284

Expenditure per claim: $192.00

This survey was completed as part of a larger geophysics program that covered six additional nearby claim blocks; for the duration of the survey these claims formed Block A.

Appendix B

Statement of Qualifications

Dr. V.N. Rampton, P.Eng.

Rampton Resources Group Inc.

P.O. Box 158, 3226 Carp Road

Carp, Ontario. K0A 1L0

Tel: (613) 836-2594; E-mail: vrampton@rogers.com

I, V.N. Rampton, Ph.D., P.Eng., do hereby certify that

1. I am President of Rampton Resource Group Inc. and President and CEO of Mayo Lake Minerals Inc.
2. I graduated with a B.Sc. Eng. (Geology) from University of Manitoba in 1962 and with a Ph.D. (Geology) from University of Minnesota in 1969.
3. I am a member of the Professional Engineers of Ontario.
4. I have worked as a geologist for over 50 years, specifically in mineral exploration for the last 40 years, in Canada, Slovakia, Finland, Spain, Burkina Faso, Jamaica and the United States of America.
5. By reason of my education, affiliation with a professional organization (as defined in N.I. 43-101) and past relevant work experience, I fulfill the requirements of a "qualified person" for the purposes of N.I. 43-101.
6. By reason of my being CEO, President and a Director and my share holdings in Mayo Lake Minerals Inc., I am not an "independent qualified person" for the purposes of N.I 43-101.
7. I am senior author and bare total responsibility for the preparation of the technical report titled "Assessment report on the Trail Minto Claim Group Geophysical Survey". The technical information contained within the report was collected for us by Precision Geosurveys Inc.

Dated the 21st day of August, 2012.

Vernon Neil Rampton

Statement of Qualifications

Tyrell Sutherland B.Sc.

Mayo Lake Minerals Inc.

P.O. Box 158, 3226 Carp Road

Carp, Ontario. K0A 1L0

Tel: (613) 884-8332; E-mail: tyrellsutherland@hotmail.com

I, T.B. Sutherland, B.Sc., do hereby certify that

1. I am an authorized agent of Mayo Lake Minerals Inc.
2. I graduated with a B.Sc. Honors Specialization Geology, from University of Ottawa in 2009
3. I am a member of the Prospectors and Developers Association of Canada.
4. I have worked as a geologist for approximately 3 years, specifically in mineral exploration, in Canada, Australia, Jamaica and China.
5. I do not fulfill the requirements of a "qualified person" for the purposes of N.I. 43-101.
6. I am a co-author and to the best of my knowledge all data used in the preparation of the technical report titled "Assessment report on the Trail Minto Claim Group Geophysical Survey" is correct and of good quality. The technical information contained within the report was collected for us by Precision Geosurveys Inc.

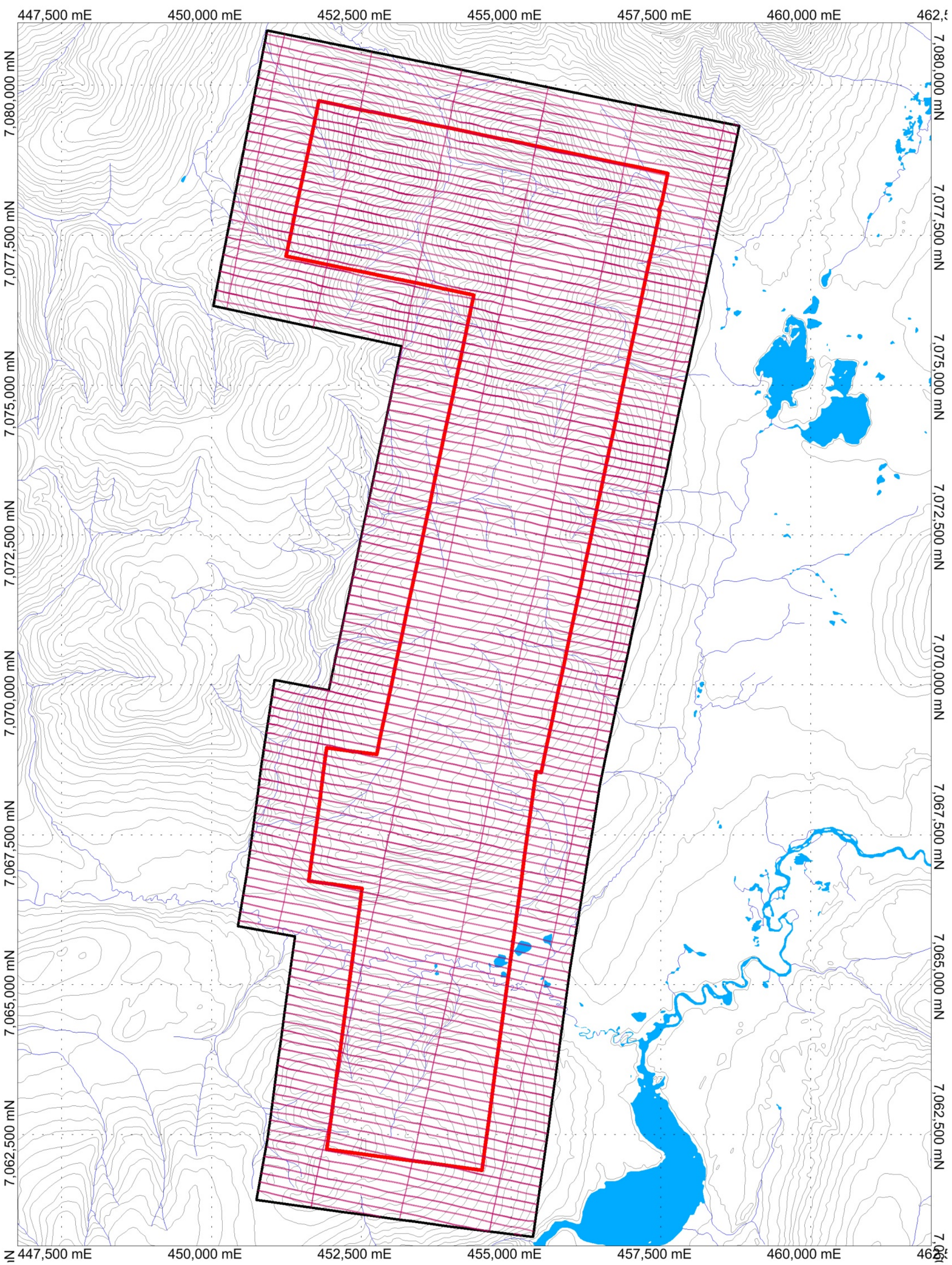
Dated the 21st day of August, 2012.

____

Tyrell Brodie Sutherland

Appendix C

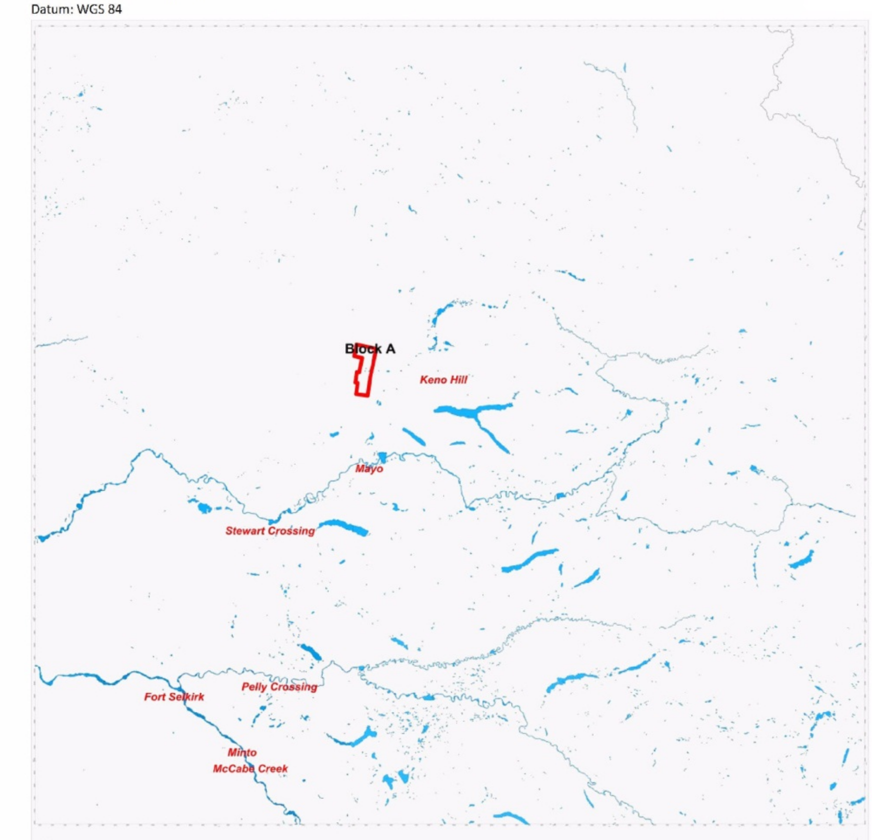
Geophysical Data



LEGEND

Map Projection:

Projection: Universal Transverse Mercator
Central Meridian: 225 Zone 8N
Datum: WGS 84



Survey Dates:	March 02, 2012 to March 05, 2012
Survey Base:	Mayo, YT
Helicopter Type:	Bell 206 Jet Ranger
Registration:	C-FZHK
Survey Technology:	Magnetic survey

SURVEY PARAMETERS:

Mean Terrain Clearance:	
Helicopter:	35 meters
Magnetometer:	35 meters
Spectrometer:	35 meters

Block A:

Survey Line Spacing:	150 meters
Survey Line Direction:	102°-282°
Tie Line Spacing:	1500 meters
Tie Line Direction:	012°-192°

AIRBORNE SYSTEMS:

Scintrex CS-3 Magnetometer Sensor

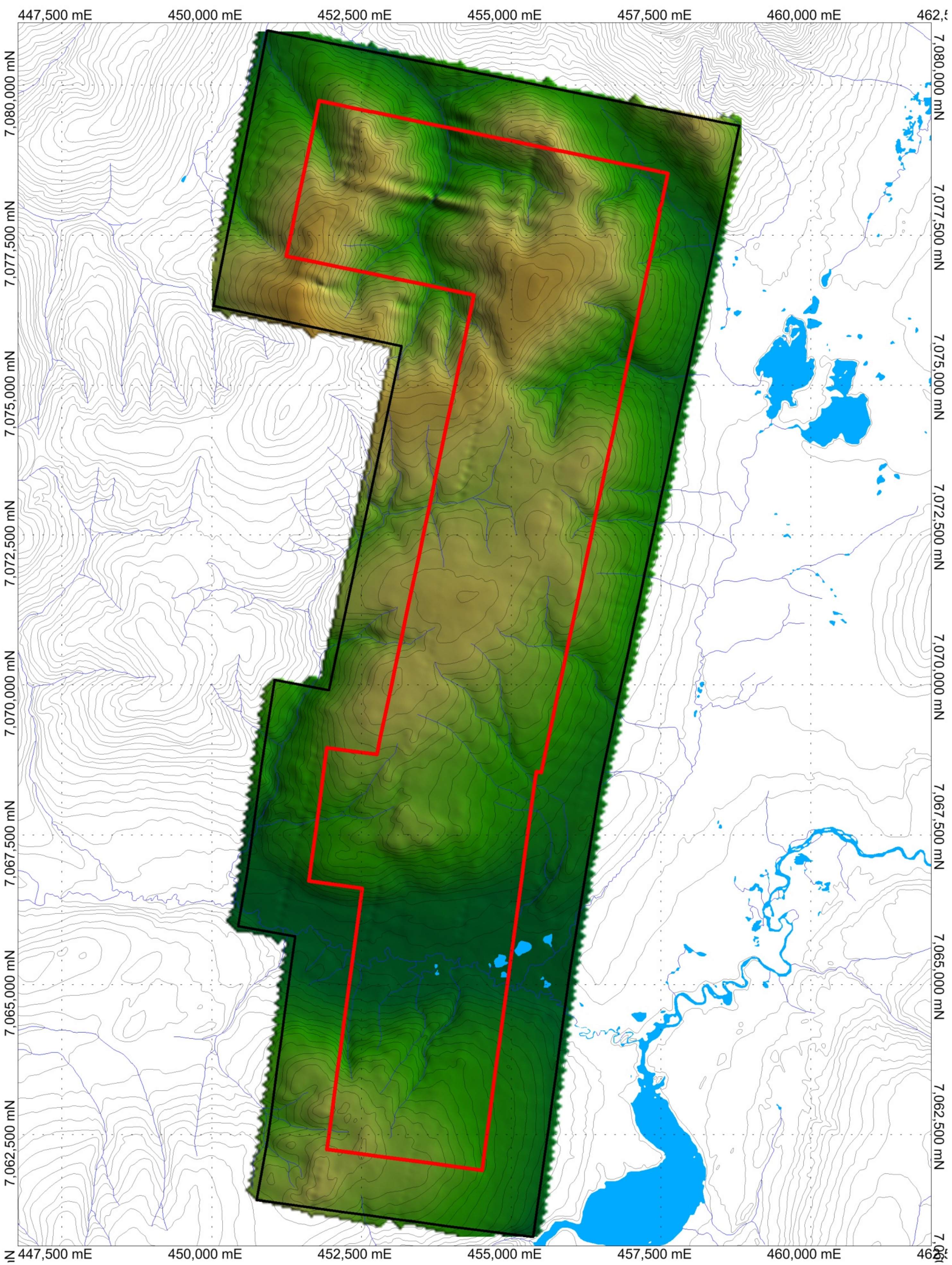
Configuration:	Stinger with 3 axis compensation
Sample Rate:	10 Hz
Sensitivity:	0.01 nT

N

Mayo Lake Minerals Inc.

Flight Path Block A

0 0.75 1.5 3
kilometres



LEGEND

Map Projection:

Projection: Universal Transverse Mercator
Central Meridian: 225 Zone 8N
Datum: WGS 84

Survey Dates:	March 02, 2012 to March 05, 2012
Survey Base:	Mayo, YT
Helicopter Type:	Bell 206 Jet Ranger
Registration:	C-FZHK
Survey Technology:	Magnetic survey

SURVEY PARAMETERS:

Mean Terrain Clearance:	
Helicopter:	35 meters
Magnetometer:	35 meters
Spectrometer:	35 meters

N

Block A:

Survey Line Spacing:	150 meters
Survey Line Direction:	102°-282°
Tie Line Spacing:	1500 meters
Tie Line Direction:	012°-192°

AIRBORNE SYSTEMS:

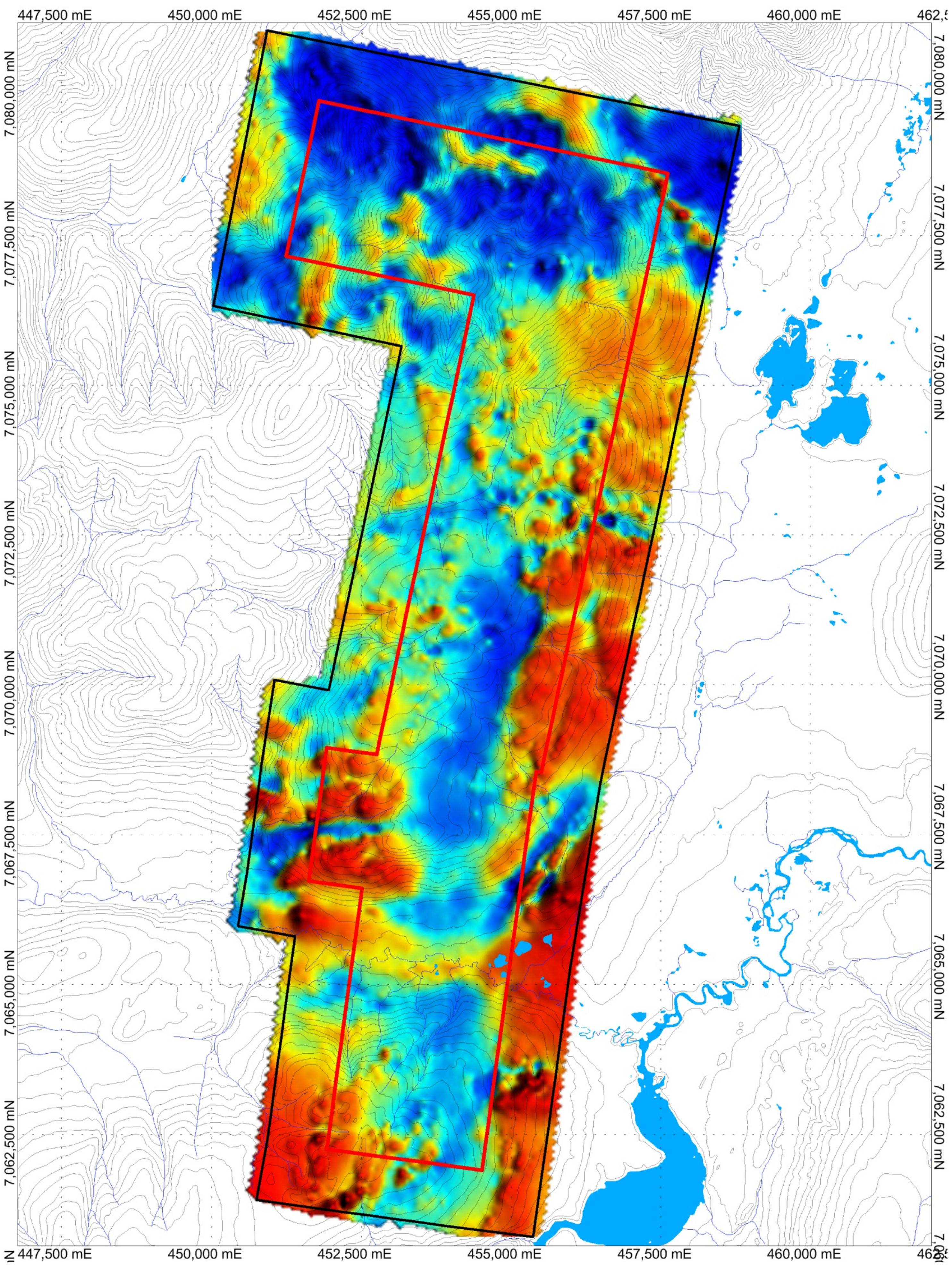
Scintrex CS-3 Magnetometer Sensor

Configuration:	Stinger with 3 axis compensation
Sample Rate:	10 Hz
Sensitivity:	0.01 nT

Mayo Lake Minerals Inc.

Digital Terrain Model Block A

0 0.75 1.5 3
kilometres



LEGEND

Map Projection:

Projection: Universal Transverse Mercator
Central Meridian: 225 Zone 8N
Datum: WGS 84

Survey Dates:	March 02, 2012 to March 05, 2012
Survey Base:	Mayo, YT
Helicopter Type:	Bell 206 Jet Ranger
Registration:	C-FZHK
Survey Technology:	Magnetic survey

SURVEY PARAMETERS:

Mean Terrain Clearance:	
Helicopter:	35 meters
Magnetometer:	35 meters
Spectrometer:	35 meters

Block A:

Survey Line Spacing:	150 meters
Survey Line Direction:	102°-282°
Tie Line Spacing:	1500 meters
Tie Line Direction:	012°-192°

AIRBORNE SYSTEMS:

Scintrex CS-3 Magnetometer Sensor

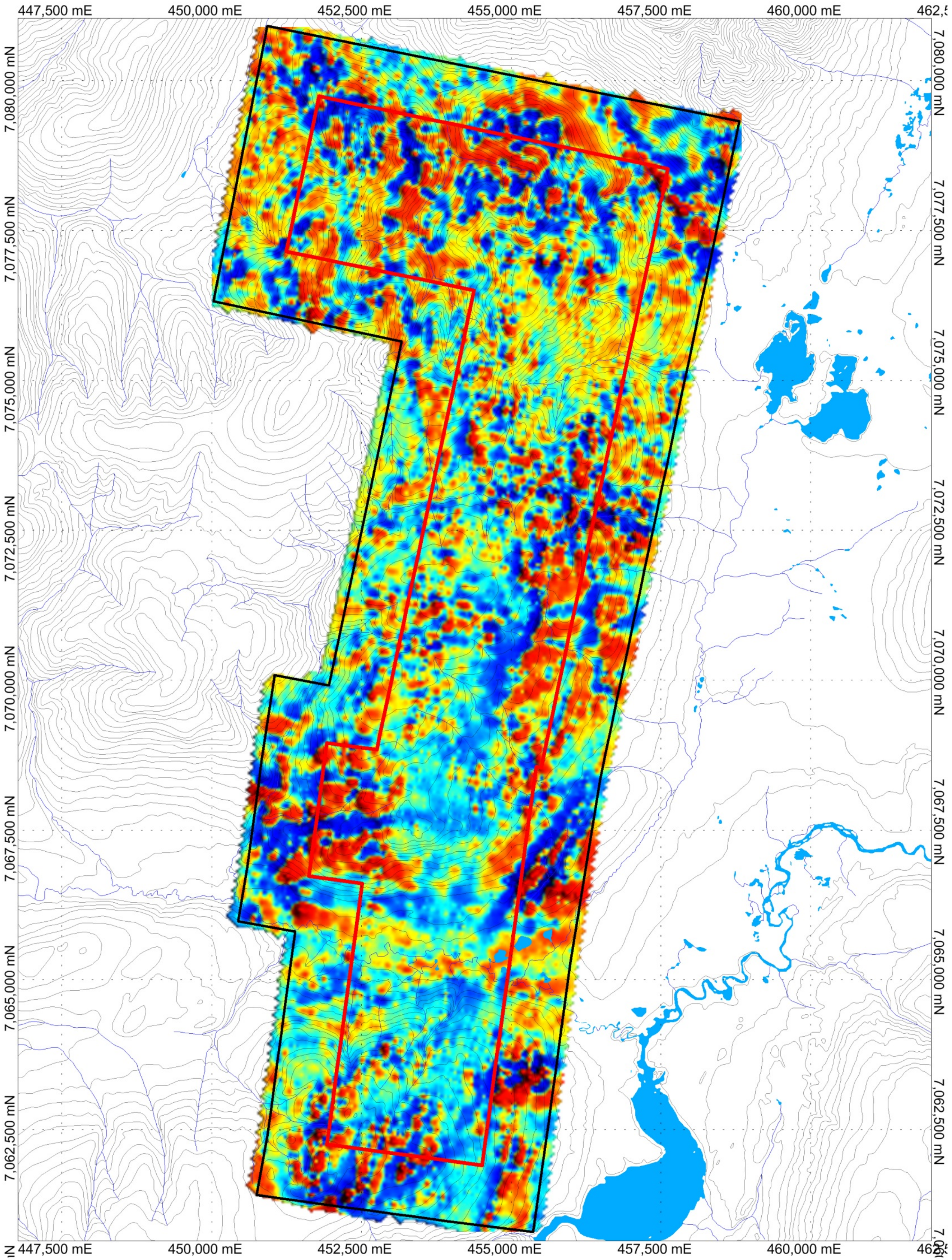
Configuration:	Stinger with 3 axis compensation
Sample Rate:	10 Hz
Sensitivity:	0.01 nT

N

Mayo Lake Minerals Inc.

Total Magnetic Intensity Block A

0 0.75 1.5 3
kilometres



LEGEND

Map Projection:

Projection: Universal Transverse Mercator
Central Meridian: 225 Zone 8N
Datum: WGS 84

Survey Dates:	March 02, 2012 to March 05, 2012
Survey Base:	Mayo, YT
Helicopter Type:	Bell 206 Jet Ranger
Registration:	C-FZHK
Survey Technology:	Magnetic survey

SURVEY PARAMETERS:

Mean Terrain Clearance:	
Helicopter:	35 meters
Magnetometer:	35 meters
Spectrometer:	35 meters

<u>Block A:</u>

Survey Line Spacing:	150 meters
Survey Line Direction:	102°-282°
Tie Line Spacing:	1500 meters
Tie Line Direction:	012°-192°

AIRBORNE SYSTEMS:

Scintrex CS-3 Magnetometer Sensor

Configuration:	Stinger with 3 axis compensation
Sample Rate:	10 Hz
Sensitivity:	0.01 nT

N

Mayo Lake Minerals Inc.

Calculated Vertical Gradient Block A

0 0.75 1.5 3
kilometres