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INTERPRETATION REPORT

on an

AIRBORNE MAGNETOMETER, ELECTROMAGNETOMETER and RADIOMETRIC SURVEY

on the

RILEY CREEK - RENNELL SOUND CLAIM BLOCK

SKEENA MINING DIVISION, BRITISH COLUMBIA

NTS 103F/7,8

Latitude: 53°20'N, Longitude: 132°25'W

Prepared for:

MISTY MOUNTAIN GOLD LIMITED

Prepared by:

E. Trent Pezzot, P. Geo.

Date of Survey: April, 1995

Date of Report: February, 1997

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

2 of 2

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25,086

TABLE OF CONTENTS

INTRODUCTION

S.J.V. Consultants Ltd. was commissioned by Misty Mountain Gold Limited to review and interpret the data from an airborne magnetometer, electromagnetometer and radiometric survey conducted across the Riley Creek - Rennell Sound claim block in the Queen Charlotte Islands. The survey was flown in the spring of 1995 and encompassed some 575 kilometers on east-west oriented lines spaced nominally at 100 metre intervals.

The survey data were provided in digital format in line, grid, Ipower and surview formats. Additionally, topographic contours were provided as digital AutoCad files.

These data were processed through Geopak and RTICAD software for analysis, interpretation and plotting.

DATA PRESENTATION

The following maps have been plotted at 1:20000 scale and stored in map pockets as Appendix 3.

Plate	Description
R-0a	Claim Map
	Flight Path Recovery Map
R-1a	Total Magnetic Field Intensity Contours (nT)
R-1b	Total Magnetic Field Intensity Contours (nT)
	Geophysical Interpretation
R-2a	Calculated Resistivity Contours (ohm-m)
	(7200 Hz coplanar EM coils)
R-2b	Calculated Resistivity Contours (ohm-m)
	(7200 Hz coplanar EM coils)
	Geophysical Interpretation
R-3a	Potassium Isotope Contours (cps)
	Geophysical Interpretation
R-4a	Compilation and Interpretation Map

DISCUSSION OF RESULTS

Magnetic Model Study

Seven magnetic profiles were generated from the gridded data across linear trends of interest. These profiles were studied using a 2-D modelling routine to provide estimates of the shape, size, susceptibility and attitude of the causative bodies. The results of this study are presented in Appendix 2 and are discussed in the text of this discussion as applicable.

Magnetics

The magnetic data can be viewed in several ways, each of which highlights different aspects of the interpretation.

Plate R-1b displays the data as 5 discrete levels of magnetic intensity which roughly correspond to the gross distribution of lithological units.

1. low (55600-56000 nT)- This magnetic intensity covers most of the block and likely reflects sediments and volcanics of the Yakoun Formation (mJY). Zonation within the unit into <55850 and >55850 closely follows topography (higher elevations with higher magnetics). This characteristic is most clearly evident where magnetic lows follow the stream patterns.
2. medium (56000-56250 nT) - This intensity level outlines a NW-SE trending zone along the northeast side of the survey grid. The SW edge of this zone likely follows the Riley Creek Fault. The medium intensities to the NE of the fault are attributed to volcanic rocks of the Masset Formation. The magnetic data indicates the Masset Formation extends further SE than indicated on Sutherland Browns' geology map.
3. medium (56250-56500 nT) - This second moderate level forms a NW trending zone in the NW corner or the survey area. Geology mapping suggests the response originates from syntectonic and post-tectonic plutons. A magnetic

model (Profile A) across the SE edge of this feature shows the pluton to have a dome shaped crest and near vertical dipping flank. A small satellite magnetic high is located immediately east of the main NW trending zone. Magnetic model Profile B suggests this anomaly is also caused by a dome shaped (antiformal) body of higher susceptibility material.

4. high (56500-57500 nT) - Seven small, high magnetic intensity anomalies are observed as small anomalies in the NW corner of the grid. Five lie within the NW trending pluton and two appear as outliers to the east. These magnetic highs are not restricted to any particular elevation Three rock types are mapped in the area and the most likely source of the magnetic highs are Karmutsen Formation massive basalt flows.

Plate R-1a displays the magnetic intensities with a more detailed contour scheme. The general divisions described above are still evident however details within each range of intensity are also revealed. This is most apparent in the low amplitude area reflecting the Yakoun Formation. There is a correlation observed between higher magnetic intensities and higher elevations. This could be due to several non-geological factors, including terrain clearance variations or increased overburden thickness in valleys. It is more likely that both the magnetics and topography are being controlled by the same underlying geological structures. Two areas are noted which contradict this observed correlation. First, a weak mag high located at 672400E/5912765N is at the base of a topographic high. Geology mapping shows this response is along strike from an ENE trending fault which extends across Shield Island to the west. Second, a weak mag high is coincident with a small peninsula in the SW corner of the survey grid (south of Rockrun Creek, beside MacKenzie Passage). Geology maps shows a sliver of limestone along this edge of the coast. The source of the magnetic high is unknown.

Geology shows a window of Longarm Fm (calcareous siltstone) in the SE corner of the block at the crest of a hill. A weak magnetic high is noted in the area which is not explained by the mapped geology. This could be evidence of an intrusion which suggests the area may have potential for skarn type mineralization..

A weak magnetic high, some 2 kilometers long, is located immediately along the coast line opposite Shields Island. Magnetic model Profile C shows this feature could be caused by either a gently easterly dipping basement (~1.5°E) or gradual thickening of overburden. A second weak magnetic high parallels the first, some 1.2 kilometres to the northeast. This anomaly closely follows a topographic ridge and is traced for some 1.7 km.. Magnetic model Profile E suggests the source is only weakly magnetic (<0.5% magnetite equivalent) and has a limited depth extent (~200 metres). The south-western edge dips steeply to the NE (~ 61°) while the NW edge is more gently (~11°). Considering the close relationship between this anomaly and the topography, it is interpreted as a relatively flat-lying layer within the Yakoun Formation.

The dominant NW trending magnetic lineations within the Yakoun formation are interrupted by an east-west trending magnetic low which closely follows an unnamed creek at 5913600N. The survey lines closely paralleled the topography in this area and it is likely that the strong magnetic gradients observed result from variations in terrain clearance along side hills. Magnetic model Profile B was run north-south across the northern flank of this magnetic low.

Electromagnetics

An algorithm used by DIGHEM has identified hundreds of EM anomalies in this area. The majority of these anomalies exhibit low conductance (1-5 siemens), flat-lying sources. These are likely related to overburden variations and are not considered exploration targets.

The conductance parameter cited is a measure of the conductivity - thickness product for the source body. Analysis of the EM data in profile form allows a comparison of the inphase and quadrature components of the anomalous responses which can be a measure of the relative conductivity of the source. I reviewed the EM profiles on a line by line basis for all 5 frequencies measured. With the exception of the 56k coplanar response, almost all of the responses are strongest in the quadrature component, suggesting low conductivity sources. One notable exception is the response over the ocean which is very strong in the inphase and only weakly evident in the quadrature (high conductivity). The 56k responses are more pervasive and several of these anomalies suggest higher conductivity sources.

I have highlighted 42 conductor segments which are particularly anomalous on the basis of either the amplitude of the EM response, the relative conductivity of the source or the correlation with topography and/or other geophysical parameters. Of these, 24 are characterised as poor conductors, 16 as moderate conductors and 2 as good conductors. Several of the segments align with each other and can be considered as reflecting the same source. Some of the conductors correlate with faults and some appear to be following geological contacts. Others are unexplained by the known or interpreted geology.

Calculated Resistivity

The coplanar EM data can be processed to generate a calculated apparent resistivity of the near surface. This procedure was completed for both the 900 Hz and 7200 Hz data. More local variations are seen in the higher frequency data set however both sets highlight the same regional trends. A strong resistivity low which maps the coast line is attributed to the salt water effects. The resistivity lows across the bulk of the grid mirror the drainage patterns and it is likely that the resistivity is mapping variations in overburden (thickness and/or composition) in the valleys. This is particularly noticeable along the north-eastern flank of Riley Creek. Conversely, many of the topographic ridges, which are likely covered by little or no overburden, appear as resistivity highs.

Eight areas (labelled σ1 - σ8 on Plate R-2b) are identified as anomalous in that they exhibit low calculated resistivities yet are not directly associated with surface drainages.

σ1. 674700E/5912200N: This corresponds to window of Longarm Fm (calcareous siltstone) located along a topo ridge. A second occurrence of Longarm Fm located at the extreme southern edge of the survey does not exhibit the response.

σ2. 676400E/5946000N: This topographic high and resistivity low is located at the eastern edge of the grid and is considered open to the east. A small resistivity low 1.5 km to the NE may be part of same response. The south-western edge of the trend forms a sharp gradient which parallels the magnetic indications of the edge of the Masset formation. The resistivity measurement may be an indication of this same lithology.

σ3. 673800E/5914700N: This is a subtle resistivity low which is located along the western half of an arcuate topographic high. No geological explanation for this anomaly is available.

σ4. 670900E/5914500N: This small resistivity low is located along a south-west facing slope which parallels the coastline. It is noteworthy in that it is coincident with a radiometric response and at the south-western end of a major northeast trending fault.

σ5. 669400E/5915600N: This resistivity low is located within a NNW trending saddle between two topographic highs. The local topography suggests that at one time this valley may have hosted a stream draining into Shields Bay. An increased thickness of overburden is a likely source. However, the area also hosts a radiometric anomaly and is the focal point of three interpreted faults.

σ6. 671500E/5917000N: This co-ordinate marks the approximate centre of an area 1.5 km EW by 1 km NS which exhibits complex resistivity patterns. A portion of the anomalous resistivity low coincides with a stream however the bulk of the anomaly is located at higher elevations. This response could be reflecting near surface Masset Formation rocks.

σ7. 669600E/5918300N: Geological mapping places this anomaly within the Masset Formation. It may be part of the normal response to this lithology but is anomalous in that it is located along the western flank of a mountain. Smaller anomalies at lower elevations to the south-east connect this feature with σ6 and σ2.

σ8. 66600E/5949000N: This anomaly is also located within the Masset Formation and extends from the top of a mountain down the west facing slope.

Radiometrics

A very close correlation is observed between the three isotopes measured (potassium (K), thorium (Th) and uranium (U)). Responses are generally best defined in the K isotope and most poorly defined in the Th isotope. Most of the roadways and many of the streams are reflected by increases in all three radiometric isotopes. This is attributed to a change in the ground cover (logging and/or natural clearings).

Three main trends (identified as R-1 to R-3) are observed in all three isotopes:

R-1. This radiometric high closely follows the coastline, south of the magnetically defined pluton. It is traced for some 6.5 km from 668900E/5915000N to 672900E/5910000N and is considered open to the south. The trend generally follows topography, lying between the coast and the 1000 foot elevation contour. No explanation is evident in the geological map. It could be related to overburden conditions.

R-2. This trend strikes easterly from trend R-1, following an unnamed creek and valley from 671500E/5913300N to 675500E/5913500N. It appears to have two localized centres of higher counts. The stronger is centred about 672400E/5913300N. The weaker is centred about 674700E/5913500N and is more prominent in the K isotope than the Th and U. Overburden variations are considered the most probable source. The trend is roughly mirrored by a magnetic low.

R-3. This trend is a regional feature which follows the north-eastern flank of the Riley Creek Fault system, from 676900E/5914500N to 668800E/5918600N. The trend is also mapped by calculated resistivity and magnetic highs. The radiometric response is comprised of three large areas of increased counts. A detailed analysis will likely divide each of these larger areas into several smaller ones. R-3a (676300E/5915000N) is most prominent in the Th and U isotopes and only weakly evident in the K. R-3b (674000E/5916300N) is located along the southeast slope of Old Baldy. The general shape of this anomaly is also reflected in the magnetics as a well defined high. R-3c (669400E/5918500N) is a complex feature and appears to form a doughnut shape, centred around a resistivity low. The magnetic response across this area is also complex and appears to highlight the NW-SE regional trend more than the discrete radiometric feature. Two smaller areas in the northern portion of the grid, identified as R-3d (667100E/5918700N) and R-3e (665200E/5919000N) could be included in this trend.

In addition to the three main trends described above, there are two smaller trends which warrant mention.

R-4. This NW trend extends for some 2.3 km from 673100E/5914500N to 671200E/5916300N. It lies between trends R-2 and R-3 and is comprised of two segments (R-4a and R-4b), separated by a north-easterly trending fault (F-2). These anomalies are located along south-westerly facing slopes and are associated with magnetic and resistivity lows.

R-5. This trend is comprised of two parallel, predominantly potassium isotope highs located in the NW corner of the grid area. The anomalies strike ~N65^{o}W and are mapped for 800m and 1100m strike length. Magnetic data shows they flank a NW trending intrusion and could indicate an alteration zone.

Structures

Geological contacts are typically recognised on planimetric magnetic, radiometric and calculated resistivity maps as sharp gradients between two different amplitude levels. Contacts with significant strike length are conducive to 2-D modelling techniques and profile analysis which can often provide accurate estimates of the attitude of the contact. The geological strike is often reflected in the dominant orientation of magnetic lineations. Faults are usually identified by discontinuities and offsets along lineations. Faults which parallel the geological strike often appear as contact type responses. Faults may also appear as sheet-like, weak conductors in EM data. In these cases the conductors often appear as discontinuous segments along a larger trend.

Geological maps indicate two major fault systems in the vicinity of this grid. The Rennell Sound Fault strikes NW through Rennell Sound, immediately west of the surveyed area. The Riley Creek Fault also strikes NW but crosses the north-eastern portion of the grid. This later structure is evident in the magnetic and calculated resistivity data as a contact type response (labelled F1), differentiating between Yakoun and Masset formation rocks on either side of the fault. The definition in the calculated resistivity data is not as distinct as in the magnetics and may be due in part to overburden variations. Magnetic modelling along one segment of the fault (Profile F) indicates it dips approximately 68° NE. Whereas the geological maps delineate the fault as a NW trending, slightly arcuate structure, the geophysical data clearly shows the fault is displaced in several locations by northerly to north-easterly trending cross faults.

The geophysical data outlines a major fault (labelled F2) striking N65°E across the central portion of this grid. This structure is evident as discontinuities in north-westerly oriented trends on the magnetic, calculated resistivity and radiometric maps. The structure is also reflected in the topography by a change in the direction of Riley Creek. The offset of the geophysical trends across this fault suggests a left lateral movement on the order of 500 metres.

The Riley Creek fault system appears to continue to the south-east of F2, beyond where it is shown on the geological maps. In this area the magnetic gradients indicate at least two, sub-parallel contact type responses which could be interpreted as faults.

The pluton in the NW corner of the survey appears to be fault controlled. Fault F3 is interpreted as striking N27°E for some 1.1 kilometres along the south-eastern edge of the pluton. Fault F4 forms the north-eastern edge of the main pluton body. It parallels the Riley Creek fault on an azimuth of N61°W and is traced for approximately 2.4 kilometres. The small pluton satellite east of the main body is wedged between F4 and F5, a 2.3 kilometre long fault which arcs from N10°W to N20°W. This later fault may extend far enough north to intersect the Riley Creek fault.

RECOMMENDATIONS

This project area is considered to be at the grass roots exploration stage. The following areas recommended for ground evaluation have been selected solely on the basis of the geophysical anomalies. Particular attention was afforded to areas with intersecting structures (faults). There are numerous areas which exhibit increased radiometric counts. These responses are often caused by changes in the ground cover and a strong correlation is observed between these anomalies and roads, logging activity and clearings. All of these anomalies should be compared to recent air photography to determine which should be downgraded on this basis.

Eleven areas of interest (A-1 to A-11) are described below and highlighted on the compilation map, Plate R-4a. These areas require geological and geochemical input.

A-1: This area covers the east and southeast edges of the magnetically and resistivity defined pluton. It is considered a high priority target. Particular attention should be afforded to the area near 669300E/5915950N, which appears to be the focal point of two or three intersecting faults. One of these faults is also reflected as a relatively high conductivity EM conductor. This response strikes N11°W and is mapped for some 800 metres length. In addition, this area is covered by a relatively small (350 metre long), elliptical shaped zone of high K isotope count. This could be attributed to the roads however the radiometric high is only evident in the potassium isotope, suggesting a geological source.

A-2: 673750E/5916000N: This area is on the southern facing slope of Old Baldy and is considered a high priority target. It is at the intersection of two major fault systems (F-1 and F-2). All the measured isotopes are elevated although the K is particularly strong (R-3b), suggesting alteration effects. A weak EM conductor is mapped at the south-western end of the area of interest.

A-3: 674750E/5915500N: This area is centred on a small K isotope high (part of R-3a). The anomaly appears to be located between two NW trending splays of the Riley Creek Fault system, immediately south of the N65°E cross structure F-2.

A-4: This large area encompasses the intersection of the Riley Creek fault and a NW trending fault which is the continuation of the fault mapped along the edge of the pluton to the south. The eastern portion of this area is likely underlain by Masset Formation volcanics but has elevated radiometric counts which extend from the roadways up the slopes.

A-5: 667600E/5916500N: This is a large area, approximately 1.5 km square selected primarily on the basis of anomalous potassium isotopes (R-5a, R-5b). Magnetics reveal the topographic hill in the area is associated with a NW trending intrusion which is one of a series of intrusive bodies in the NW corner of the grid. The K isotope highs are mapped along the flanks of this body, suggesting an alteration halo around the intrusion. The K anomalies strike ~N65°W and are mapped for 800m and 1100m length. Magnetics also infers a N62°W trending fault may lie along the south-western border of northernmost K anomaly.

A-6: 672800E/5915000N: This target is centred across an EM conductor and radiometric high (R-4a). The radiometric signature is best defined in the K isotope although weakly present in both U and Th as well. The EM anomaly is slightly downgraded because it parallels a topographic hill. The zone is immediately south of the major N65°E trending fault. This area could be extended to the northwest to include radiometric anomaly R-4b.

A-7: 674700E/5912400N: This area covers the weak magnetic high, resistivity low and EM conductor located in the vicinity of the geologically mapped Longarm Formation (calcareous siltstone). The magnetic response could be indicative of an unmapped intrusion which, if present, would suggest the potential for skarn type mineralization.

A-8: 668600E/5917000N: This area is centred on a northerly trending conductor, some 460 metres long. The conductor is at a slight angle to a coincident magnetic high (Magmod profile B) which is interpreted as a cap of intrusive material.

A-9: 670750E/5914600N: This area is located along radiometric high R-1, which follows the topography and coast line. The primary reason for this area being selected is the coincidence of the N65°E fault (F-2) and anomalously elevated K isotope counts. This area should be downgraded if the radiometric response can be attributed to a change in ground cover.

A-10: 669700E/5917100N: This relatively large area encompasses several high amplitude EM conductors. The conductors strike between N10°W and N30°W, at a slight angle to the more NW trending geological strikes evident in the magnetic and resistivity maps. The trends could be reflecting fault activity within the Yakoun Formation or a layered sedimentary sequence. The anomalies could be downgraded because they roughly parallel the local topography. The large area exhibits elevated radiometric counts however they do not appear to directly correlate with the EM anomalies.

A-11: 671550E/5917300N: This area is selected on basis of a relatively high conductivity EM anomaly. The anomaly is traced N-S for some 375m length and is considered open to the north. It is coincident with a low magnetic linear and could be reflecting a northerly trending fault zone. Weak radiometric highs complement the anomaly.

Respectfully submitted

per S.J.V. Consultants Ltd.

E. Trent Pezzot, B.Sc., P.Geo.

Geophysics, Geology

APPENDIX 1

Statement of Qualifications

I, E. Trent Pezzot, of the city of Surrey, Province of British Columbia, hereby certify that:

- I graduated from the University of British Columbia in 1974 with a B.Sc. degree in the combined Honours Geology and Geophysics program.
- I have practised my profession continuously from that date.
- I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.
- I have no interest in Misty Mountain Gold Ltd. or any of their subsidiaries or related companies, nor do I expect to receive any.

February 21, 1997

PROFESSIONAL PROVINCE OF E. T. PEZZOT BRITISH COLUMBIA GEOSCIENTIST

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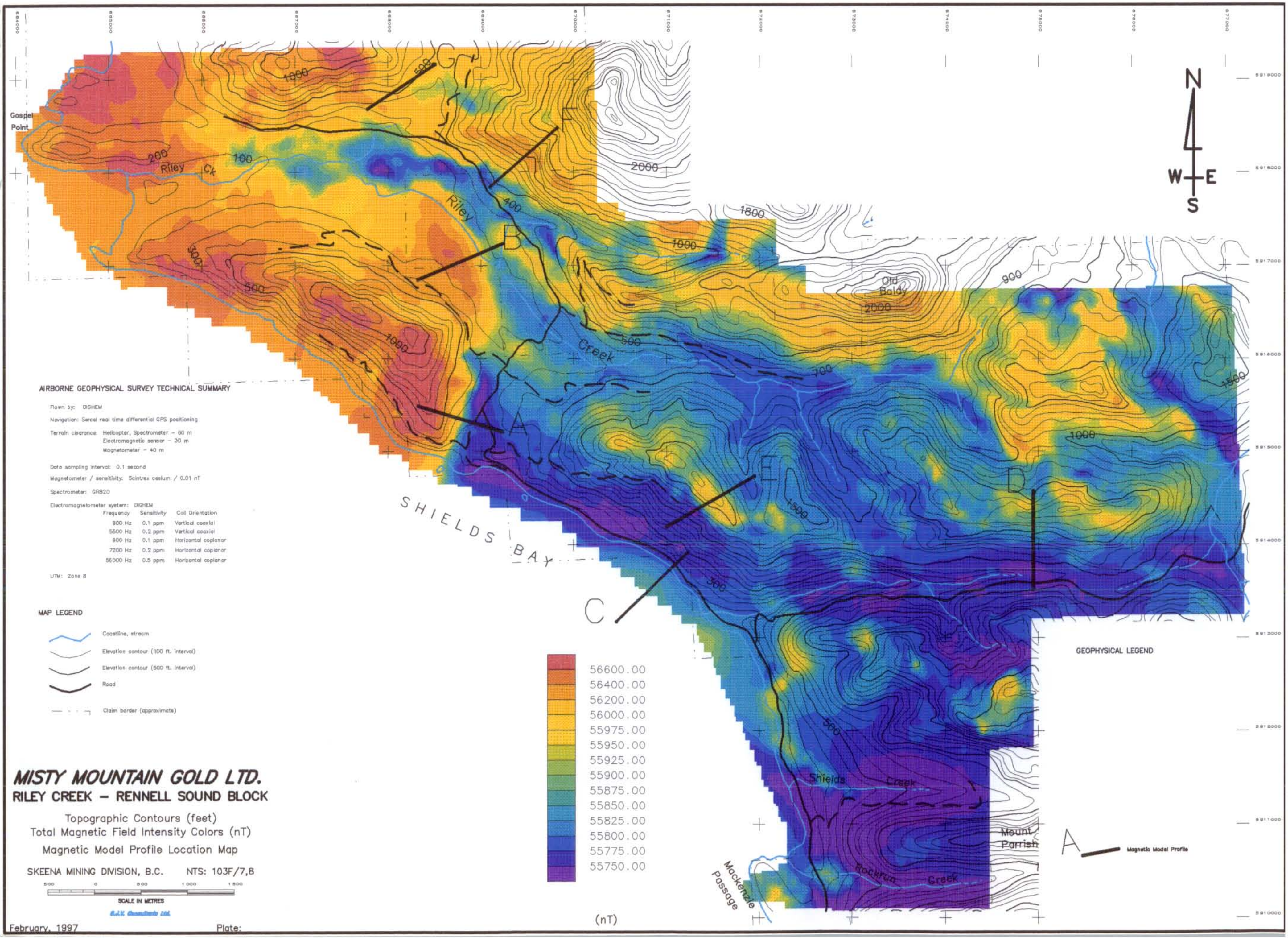
APPENDIX 2

Magnetic Model Study

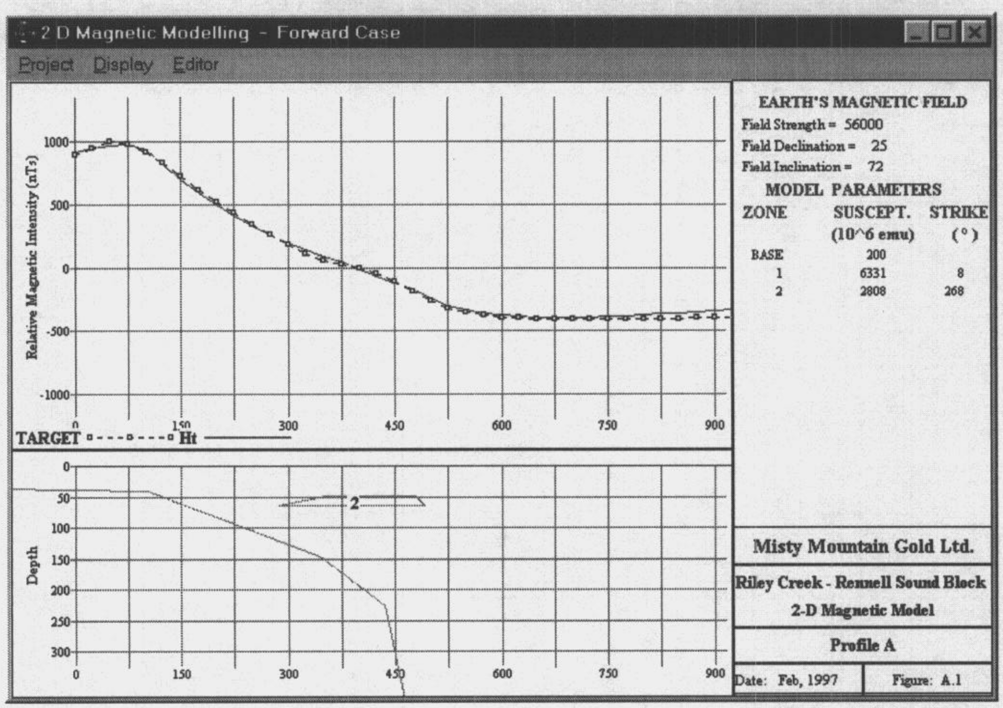


Gospel Point
Riley Ck
Riley
Creek
Old Baldy
SHIELDS BAY
Shields Creek
Rockrun Creek
Mount Parrish
Mackenzie Passage
A
B
C
D
E
F
G
N
W
E
S
AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY
Flown by: DIGHEM
Navigation: Sercel real time differential GPS positioning
Terrain clearance: Helicopter, Spectrometer – 60 m
Electromagnetic sensor – 30 m
Magnetometer – 40 m
Data sampling interval: 0.1 second
Magnetometer / sensitivity: Scintrex cesium / 0.01 nT
Spectrometer: GR820
Electromagnetometer system: DIGHEM
Frequency Sensitivity Coil Orientation
900 Hz 0.1 ppm Vertical coaxial
5500 Hz 0.2 ppm Vertical coaxial
900 Hz 0.1 ppm Horizontal coplanar
7200 Hz 0.2 ppm Horizontal coplanar
56000 Hz 0.5 ppm Horizontal coplanar
UTM: Zone 8
MAP LEGEND
Coastline, stream
Elevation contour (100 ft. interval)
Elevation contour (500 ft. interval)
Road
Claim border (approximate)
MISTY MOUNTAIN GOLD LTD.
RILEY CREEK – RENNELL SOUND BLOCK
Topographic Contours (feet)
Total Magnetic Field Intensity Colors (nT)
Magnetic Model Profile Location Map
SKEENA MINING DIVISION, B.C. NTS: 103F/7,8
SCALE IN METRES
56600.00
56400.00
56200.00
56000.00
55975.00
55950.00
55925.00
55900.00
55875.00
55850.00
55825.00
55800.00
55775.00
55750.00
(nT)
GEOPHYSICAL LEGEND
Magnetic Model Profile
February, 1997
Plate:

Profile A

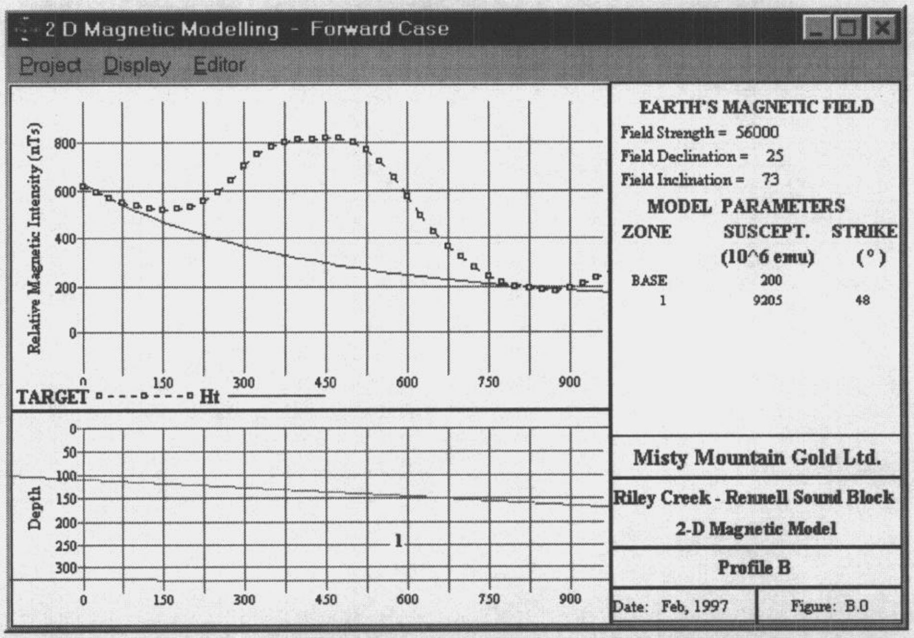
This profile strikes NW-SE across the south-eastern border of the strong magnetic high in the NW corner of the grid. It appears as a relatively linear gradient, high to the northwest and low to the SE. A small inflection is located near the base of the inflection.

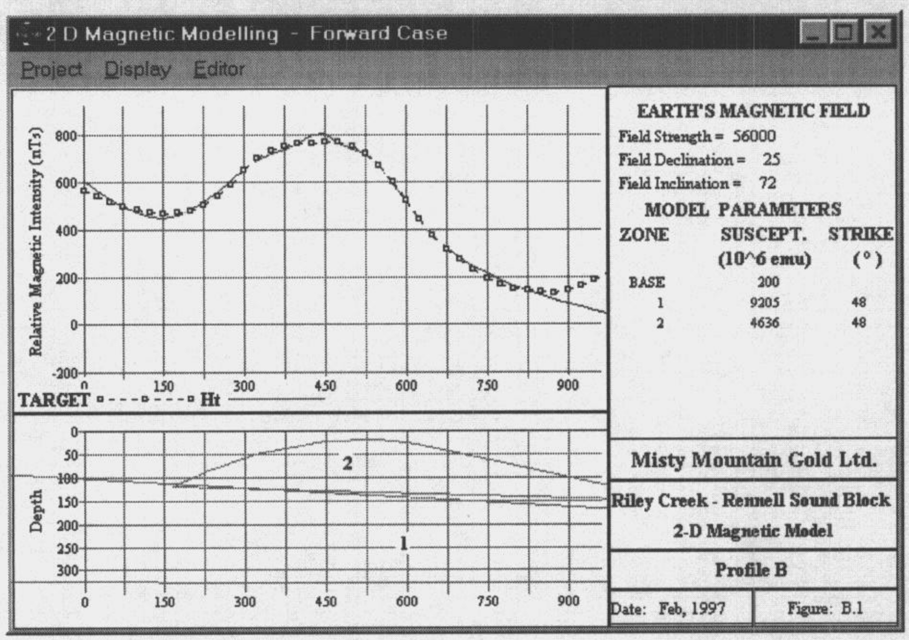
The major inflection could be generated by a shallow angle (~ 24°) south-easterly dipping contact and a near vertical contact or fault. The near surface response is likely due in part to the topography (survey line flown parallel to hill thereby effectively reducing the distance to the source). The near vertical contact or fault is located ~ 400 metres SE of the peak magnetic value (near the base of the regional inflection). The small inflection near the vertical contact could be the result of topographic effects or of a small, near surface body.



Profile B

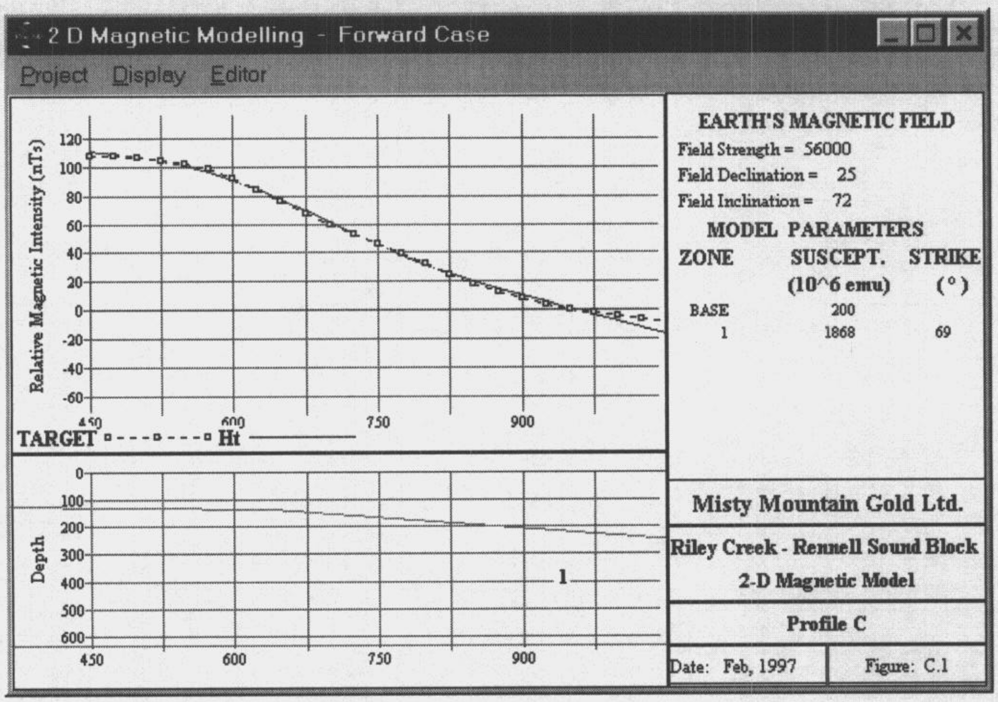
This profile strikes ENE across a small magnetic high which appears to form an isolated feature. It is located immediately east of a large magnetic high interpreted as reflecting an area of intrusive activity and could be an outlier of the same material. The anomaly appears as an asymmetrical high superimposed on a regional gradient. The regional gradient could be caused by a high susceptibility bedrock dipping ~ 3.5° to the east as shown on Plate B-1. The anomalous response superimposed on the regional is likely due to a near surface, dome shaped lens of high susceptibility material as shown on Plate B-2.





Profile C

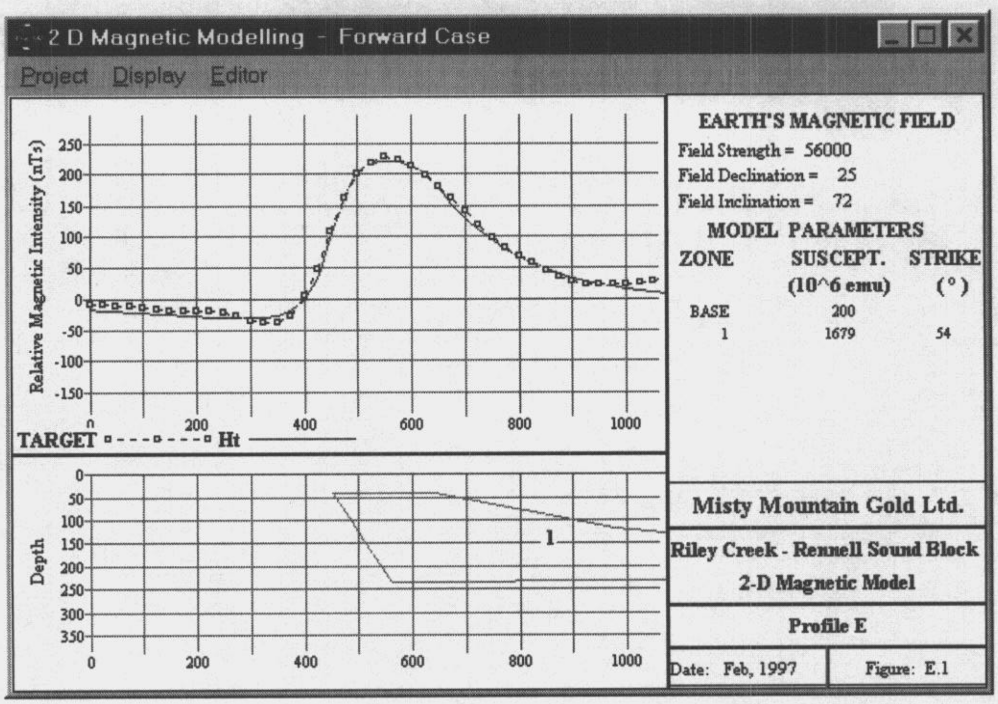
This profile covers a very weak magnetic high located along the coast line. The eastern flank of the anomaly exhibits a very gradual gradient (~ 120 nT peak to peak). This can be interpreted as either an increase in overburden thickness to the east or a gently easterly dipping basement (~15°).



Profile E

This profile crosses a weak magnetic high trending NW across the central portion of the grid. This response varies along strike, and may be caused by several closely spaced lenses of high susceptibility materials. It appears as a well defined high with a steep flank to the SW and more shallow flank to the NE. There is a shift of ~ 25 nT between the backgrounds on either side of the anomaly, indicating that it may occur along a contact between two different lithologies.

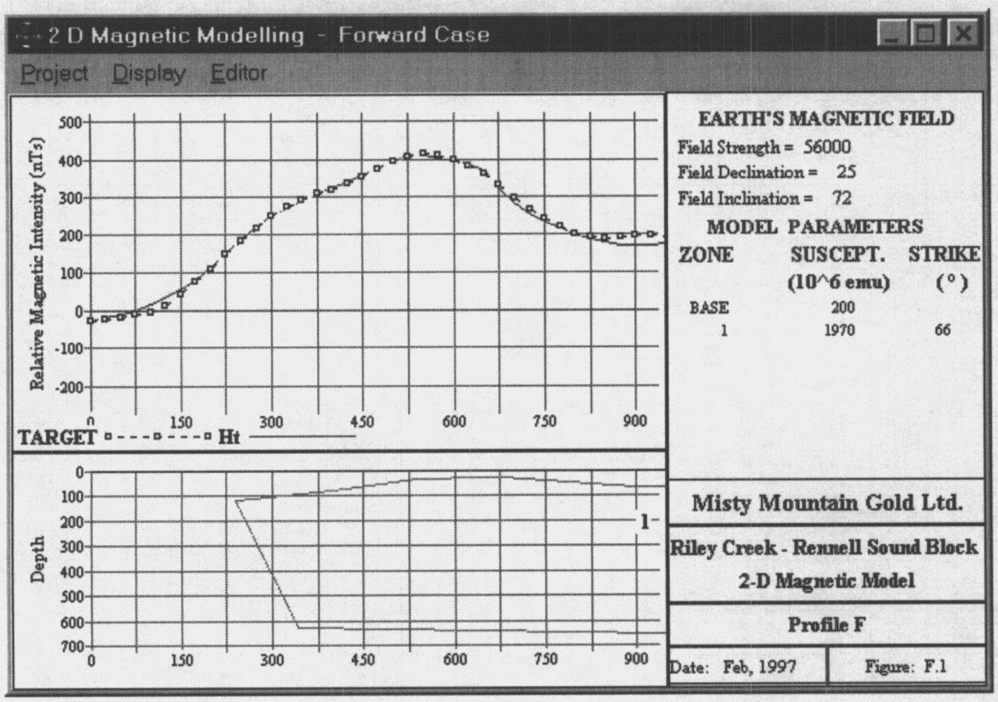
The model study shows a good match with a relatively thin unit (~ 200 metres thick) with an ~1480 emu susceptibility contrast. The south-western edge of this unit dips ~ 61° to the NE while the north-eastern edge dips ~ 11° NE. The limited depth extend is necessary to match the negative lobe on the south-western edge of the profile.



Profile F

This magnetic feature is likely tied to the Riley Creek Fault system. This fault roughly parallels the Rennell Sound fault which is known to dip near vertical or steeply (~75°) to the NE and rarely to the SW. The profile exhibits a 200 nT shift in the background magnetic fields (higher to the NE). The south-western flank appears as the more gradual slope although it exhibits a step like function which may be related to topography.

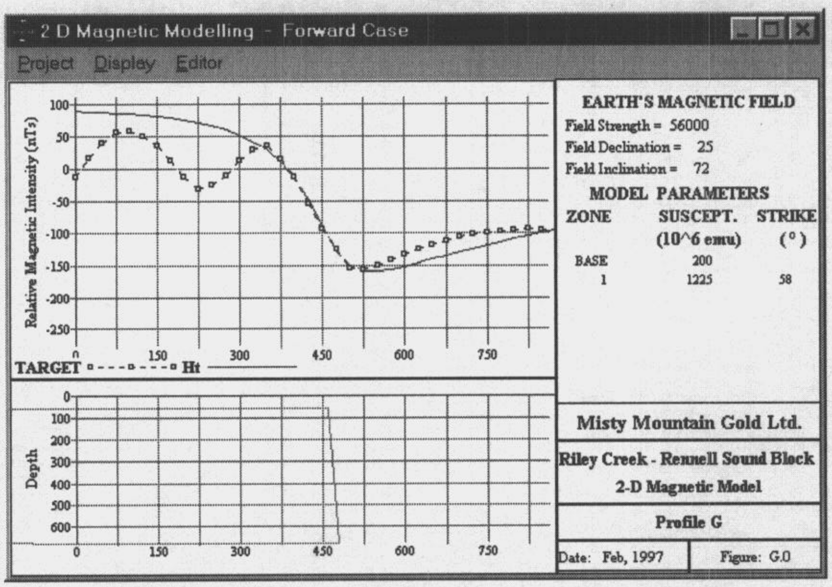
Model profile F-1 provides an excellent match to the field data. A rock susceptibility contrast of 1770 emu produces the observed background level shift. The contact between these units (near 200m) dips approximately 68° NE. Higher frequency variations (near 550m) on the magnetic profile are easily accounted for by terrain clearance and overburden thickness variations of ~ 30 metres.



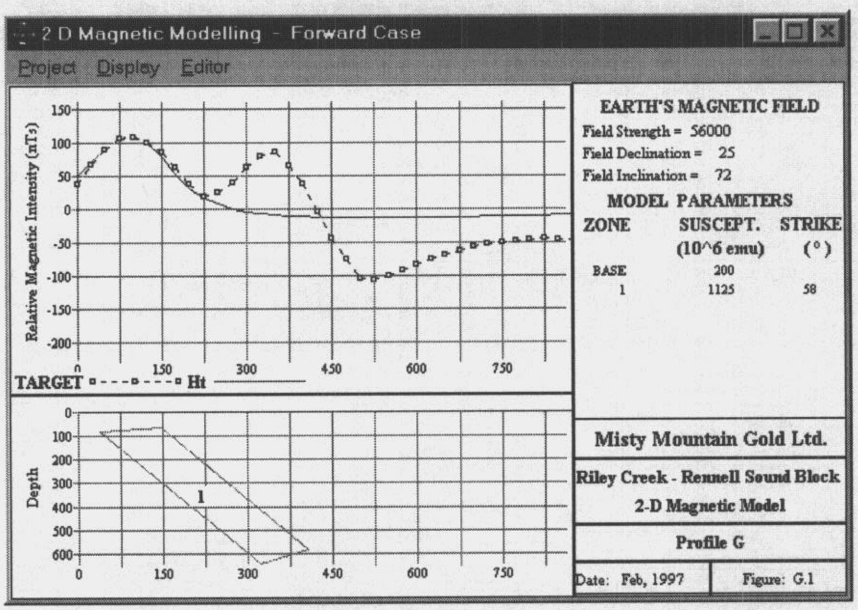
Profile G

This profile is NW of Profile F, located along the same Riley Creek Fault system. However, in this instance, the rocks to the southwest of the fault have higher susceptibility than those to the northeast (although total field intensity of the NE block is the same as that observed at profile F). The two magnetic highs observed to the SW of the Riley Creek Fault are likely related to intrusive activity. The inflection generated by the Riley Creek Fault and the peaks generated by the intrusives to the SW are modelled separately.

G-0: The magnetic model estimates a NE dip of ~ 88.14° to the Riley Creek Fault.



G-1: The intrusive response at 200m can be modelled as the flank of dyke steeply dipping to the NE.



APPENDIX 3

Geophysical Maps

Plate	Description
R-0a	Claim Map
	Flight Path Recovery Map
R-1a	Total Magnetic Field Intensity Contours (nT)
R-1b	Total Magnetic Field Intensity Contours (nT)
	Geophysical Interpretation
R-2a	Calculated Resistivity Contours (ohm-m)
	(7200 Hz coplanar EM coils)
R-2b	Calculated Resistivity Contours (ohm-m)
	(7200 Hz coplanar EM coils)
	Geophysical Interpretation
R-3a	Potassium Isotope Contours (cps)
	Geophysical Interpretation
R-4a	Compilation and Interpretation Map

AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY

Flown by: DIGHEM

Navigation: Sercel real time differential GPS positioning

Terrain clearance: Helicopter, Spectrometer – 60 m
Electromagnetic sensor – 30 m
Magnetometer – 40 m

Data sampling interval: 0.1 second

Magnetometer / sensitivity: Scintrex cesium / 0.01 nT

Spectrometer: GR820

Electromagnetometer system: DIGHEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	0.5 ppm	Horizontal coplanar

UTM: Zone 8

MAP LEGEND

Coastline, stream
Elevation contour (100 ft. interval)
Elevation contour (500 ft. interval)
Road
Claim border (approximate)

MISTY MOUNTAIN GOLD LTD.

RILEY CREEK – RENNELL SOUND BLOCK

Topographic Contours (feet)
Total Magnetic Field Intensity Contours (nT)
Geophysical Interpretation

SKEENA MINING DIVISION, B.C. NTS: 103F/7,8

500 0 500 1 000 1 500
SCALE IN METRES

S.J.V. Consultants Ltd.

February, 1997 Plate: R–1b

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,086 (2 of 2)

AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY

Flown by: DIGHEM

Navigation: Sercel real time differential GPS positioning

Terrain clearance: Helicopter, Spectrometer – 60 m
Electromagnetic sensor – 30 m
Magnetometer – 40 m

Data sampling interval: 0.1 second

Magnetometer / sensitivity: Scintrex cesium / 0.01 nT

Spectrometer: GR820

Electromagnetometer system: DIGHEM

Frequency	Sensitivity	Coil Orientation
900 Hz	0.1 ppm	Vertical coaxial
5500 Hz	0.2 ppm	Vertical coaxial
900 Hz	0.1 ppm	Horizontal coplanar
7200 Hz	0.2 ppm	Horizontal coplanar
56000 Hz	0.5 ppm	Horizontal coplanar

UTM: Zone 8

MAP LEGEND

- Coastline, stream
- Elevation contour (100 ft. interval)
- Elevation contour (500 ft. interval)
- Road
- Claim border (approximate)

Contour Intervals: 55750 – 56000 @ 25 nT

56000 – 56600 @ 200 nT

MISTY MOUNTAIN GOLD LTD.

RILEY CREEK – RENNELL SOUND BLOCK

Topographic Contours (feet)
Total Magnetic Field Intensity Contours (nT)

SKEENA MINING DIVISION, B.C. NTS: 103F/7,8

500 0 500 1 000 1 500
SCALE IN METRES

S.J.V. Consultants Ltd.

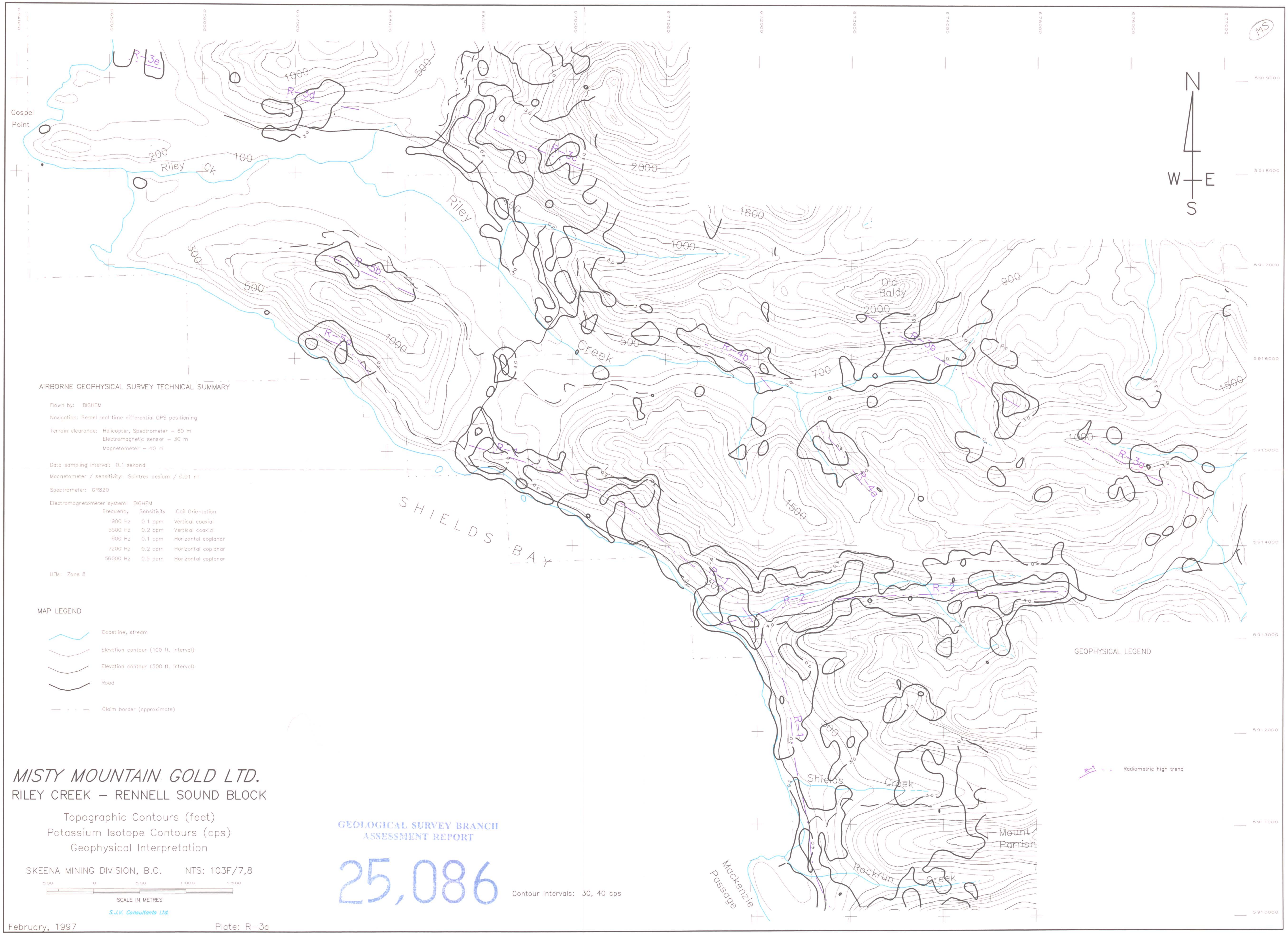
February, 1997 Plate: R–1a

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,086


MMG 1
325573
Gospel Gold 1
331302
Gospel Gold 2
331303
Gospel Point
MMG 2
325574
Riley Ck
MMG 3
325650
Riley
Creek
MMG 4
325651
MMG 5
325652
MMG 0
325788
SHIELDS BAY
MGM 14
325785
MGM 15
MGM 16
325791
Old Baldy
MGM 11
MMG 10
MMG 7
MMG 8
MMG 6
MMG 9
MMG 12
Shields Creek
Mount Parrish
Mackenzie Passage
Rockrun Creek
SHI-1
335719
SHI-2
335720
SHI-3
335721
N
W
E
S
AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY
Flown by: DIGHEM
Navigation: Sercel real time differential GPS positioning
Terrain clearance: Helicopter, Spectrometer – 60 m
Electromagnetic sensor – 30 m
Magnetometer – 40 m
Data sampling interval: 0.1 second
Magnetometer / sensitivity: Scintrex cesium / 0.01 nT
Spectrometer: GR820
Electromagnetometer system: DIGHEM
Frequency Sensitivity Coil Orientation
900 Hz 0.1 ppm Vertical coaxial
5500 Hz 0.2 ppm Vertical coaxial
900 Hz 0.1 ppm Horizontal coplanar
7200 Hz 0.2 ppm Horizontal coplanar
56000 Hz 0.5 ppm Horizontal coplanar
UTM: Zone 8
MAP LEGEND
Coastline, stream
Elevation contour (100 ft. interval)
Elevation contour (500 ft. interval)
Road
Claim border (approximate)
MISTY MOUNTAIN GOLD LTD.
RILEY CREEK – RENNELL SOUND BLOCK
Topographic Contours (feet)
Claim Map
Flight Path Recovery Map
SKEENA MINING DIVISION, B.C.
NTS: 103F/7,8
SCALE IN METRES
S.J.V. Consultants Ltd.
February, 1997
Plate: R–0a
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
25,086

MISTY MOUNTAIN GOLD LTD.
RILEY CREEK – RENNELL SOUND BLOCK
Topographic Contours (feet)
Compilation and Interpretation Map
SKEENA MINING DIVISION, B.C.
NTS: 103F/7,8
SCALE IN METRES
500 0 500 1000 1500
S.J.V. Consultants Ltd.
February, 1997
Plate: R-4a
AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY
Flown by: DIGHEM
Navigation: Sercel real time differential GPS positioning
Terrain clearance: Helicopter, Spectrometer ~ 60 m
Electromagnetic sensor ~ 30 m
Magnetometer ~ 40 m
Data sampling interval: 0.1 second
Magnetometer / sensitivity: Scintrex cesium / 0.01 nT
Spectrometer: CR820
Electromagnetometer system: DIGHEM
Frequency Sensitivity Coil Orientation
900 Hz 0.1 ppm Vertical coaxial
5500 Hz 0.2 ppm Vertical coaxial
900 Hz 0.1 ppm Horizontal coplanar
7200 Hz 0.2 ppm Horizontal coplanar
56000 Hz 0.5 ppm Horizontal coplanar
UTM: Zone 8
MAP LEGEND
Coastline, stream
Elevation contour (100 ft. interval)
Elevation contour (500 ft. interval)
Road
Claim border (approximate)
GEOPHYSICAL LEGEND
Interpreted fault
EM Conductor
Poor : IP << Q
Moderate : IP = Q
Good : IP >> Q
Radiometric high trend
Calculated resistivity low area
Area of Interest
N
W
E
S
Gospel Point
Riley Ck
Riley Creek
Old Baldy
SHIELDS BAY
Shields Creek
Rockrun Creek
Mackenzie Passage
Mount Parrish
A-1
A-2
A-3
A-4
A-5
A-6
A-7
A-8
A-9
A-10
A-11
F1
F2
F3
F4
F5
σ1
σ2
σ3
σ4
σ5
σ6
σ7
σ8
R-1
R-2
R-3a
R-3b
R-3c
R-3d
R-3e
R-4a
R-4b
R-5a
R-5b
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
25,086



MS
N
W
E
S
Gospel Point
Riley Ck
Riley Creek
Shields Bay
Old Baldy
Shields Creek
Mount Parrish
Rockrun Creek
Mackenzie Passage
R-3e
R-3d
R-3c
R-5b
R-5a
R-4b
R-5b
R-4a
R-3a
R-2
R-1
1000
500
2000
1800
200
100
300
700
900
1500
Contour Intervals: 30, 40 cps
AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY
Flown by: DIGHEM
Navigation: Sercel real time differential GPS positioning
Terrain clearance: Helicopter, Spectrometer – 60 m
Electromagnetic sensor – 30 m
Magnetometer – 40 m
Data sampling interval: 0.1 second
Magnetometer / sensitivity: Scintrex cesium / 0.01 nT
Spectrometer: GR820
Electromagnetometer system: DIGHEM
Frequency Sensitivity Coil Orientation
900 Hz 0.1 ppm Vertical coaxial
5500 Hz 0.2 ppm Vertical coaxial
900 Hz 0.1 ppm Horizontal coplanar
7200 Hz 0.2 ppm Horizontal coplanar
56000 Hz 0.5 ppm Horizontal coplanar
UTM: Zone 8
MAP LEGEND
Coastline, stream
Elevation contour (100 ft. interval)
Elevation contour (500 ft. interval)
Road
Claim border (approximate)
GEOPHYSICAL LEGEND
R-1 Radiometric high trend
MISTY MOUNTAIN GOLD LTD.
RILEY CREEK – RENNELL SOUND BLOCK
Topographic Contours (feet)
Potassium Isotope Contours (cps)
Geophysical Interpretation
SKEENA MINING DIVISION, B.C.
NTS: 103F/7,8
SCALE IN METRES
S.J.V. Consultants Ltd.
February, 1997
Plate: R-3a
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
25,086

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
25,086

Gospel Point
Riley
Old Baldy
Creek
SHIELDS BAY
Shields Creek
Mount Parrish
Creek
Mackenzie Passage
N
W
E
S
AIRBORNE GEOPHYSICAL SURVEY TECHNICAL SUMMARY
Flown by: DIGHEM
Navigation: Sercel real time differential GPS positioning
Terrain clearance: Helicopter, Spectrometer – 60 m
Electromagnetic sensor – 30 m
Magnetometer – 40 m
Data sampling interval: 0.1 second
Magnetometer / sensitivity: Scintrex cesium / 0.01 nT
Spectrometer: GR820
Electromagnetometer system: DIGHEM
Frequency Sensitivity Coil Orientation
900 Hz 0.1 ppm Vertical coaxial
5500 Hz 0.2 ppm Vertical coaxial
900 Hz 0.1 ppm Horizontal coplanar
7200 Hz 0.2 ppm Horizontal coplanar
56000 Hz 0.5 ppm Horizontal coplanar
UTM: Zone 8
MAP LEGEND
Coastline, stream
Elevation contour (100 ft. interval)
Elevation contour (500 ft. interval)
Road
Claim border (approximate)
MISTY MOUNTAIN GOLD LTD.
RILEY CREEK – RENNELL SOUND BLOCK
Topographic Contours (feet)
Calculated Resistivity Contours (ohm–m)
(7200 Hz coplanar EM coils)
SKEENA MINING DIVISION, B.C.
NTS: 103F/7,8
SCALE IN METRES
S.J.V. Consultants Ltd.
February, 1997
Plate: R–2a
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
25,086
Contour Intervals: 100 – 500 @ 50 ohm–m
500 – 1000 @ 250 ohm–m
1000 – 4000 @ 1000 ohm–m