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HARMONY GOLD PROJECT

1997 INTERPRETATION ASSESSMENT REPORT OF AIRBORNE GEOPHYSICAL SURVEY, RILEY CREEK - RENNELL SOUND AREA

SKEENA MINING DIVISION BRITISH COLUMBIA CANADA

> N.T.S. 103F/7E,8W Latitude 53°23' N Longitude 132°25'W

MINERAL CLAIMS REFERENCED

GOSPEL GOLD 1 - 2 MMG 0 - 12 MMG 14 - 16 SHI 1 - 3

Prepared for

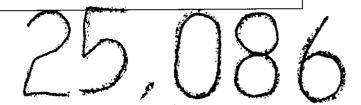
Misty Mountain Gold Limited 1020-800 West Pender St. Vancouver, B.C. V6C 2V6

August 1, 1997

by

Tara Case

10F2



1997 INTERPRETATION OF AIRBORNE GEOPHYSICAL SURVEY, FEATHER LAKE AREA

TABLE OF CONTENTS

		<u>Page</u>
1.0	Summary	1
2.0	Introduction	2
3.0	Location and Access	2
4.0	Claim Data	3
5.0	Physiography and Climate	3
6.0	Exploration History	4
7.0	Regional Geology	5
8.0	Interpretation of Airborne Geophysical Survey	6
9.0	Recommendations	7
10.0	Statement of Costs	8
11.0	References	9
12.0	Statements of Qualifications	10

LIST OF FIGURES

		Following Page
1.0	General Location Map	2
2.0	Claim Map, Riley Creek Claim Block	3
3.0	Regional Geology	3

LIST OF TABLES

		Following Page
1.0	Riley Creek Claim Block	3

APPENDIX

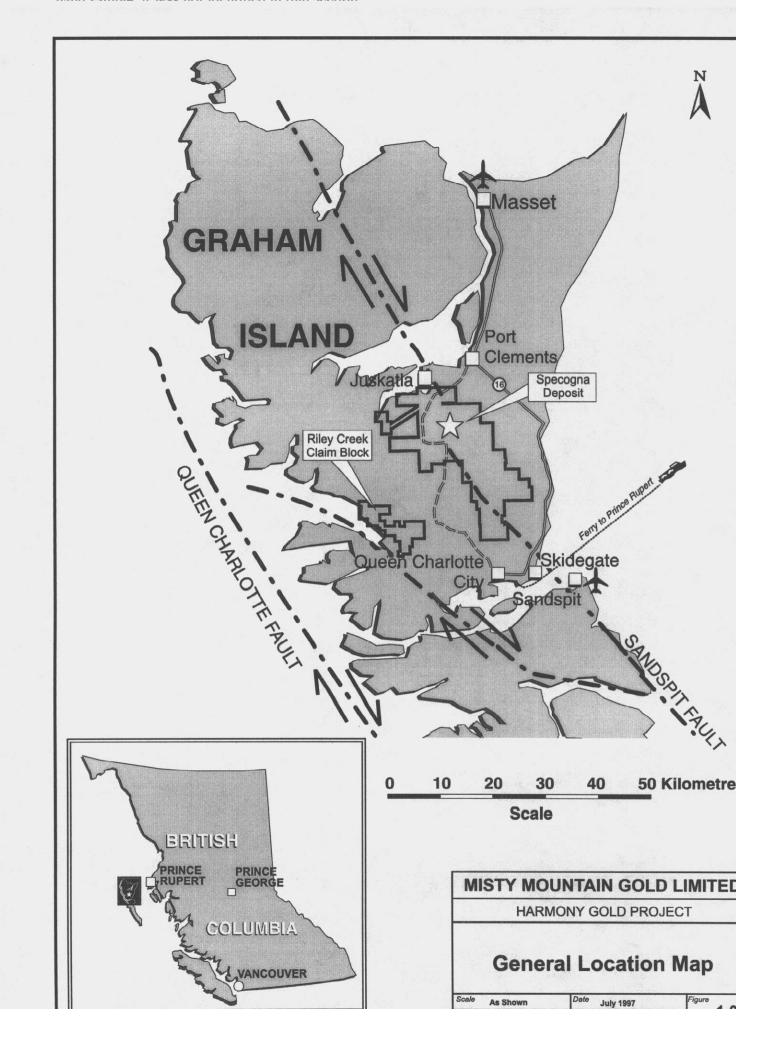
I Interpretation Report on an Airborne Magnetometer, Electromagnetometer and Radiometric Survey on the Riley Creek – Rennell Sound Claim Block

1.0 SUMMARY

The Harmony Gold Project is located on Graham Island, the northern and largest of the Queen Charlotte Islands, 779 kilometres north of Vancouver, British Columbia. The Project area consists of 172 mineral claims, including the 21 claims that form the Riley Creek claim block, that are owned by Misty Mountain Gold Limited.

The Harmony Gold Project is considered to be a prime exploration target for precious and base metal deposits due to the presence of the mineral-rich Specogna Deposit within the claim area and the dilational tectonic regime of the region. The Specogna deposit, located 18 kilometres south of Port Clements, is a large epithermal gold resource. Exploration activity in the Project area has concentrated on the Specogna Deposit, on which some 85,000 metres of drilling have been completed. Initial phased exploration has occurred beyond the Specogna Deposit area including an airborne geophysical survey flown over the Project area in early 1995.

In February 1997, S.J.V. Consultants Ltd. was commissioned by Misty Mountain Gold Limited to conduct an interpretation of the data from the airborne geophysical survey. This interpretation was successful in identifying eleven areas of interest in the area of the Riley Creek claim block on the basis of geophysical anomalies. The integration of these results with geochemical survey results and geological information will identify prime exploration targets warranting additional exploration work in the form of detailed ground evaluation.



2.0 INTRODUCTION

The MMG 0 to 12, MMG 14 to 16, Gospel Gold 1 to 2 and SHI 1 to 3 claims, referred to as the Riley Creek claim group, are part of the Harmony Gold Project, located in the Skeena Mining Division. The project is situated on Graham Island, the northern most island of the Queen Charlotte Islands, approximately 25 km northwest of Queen Charlotte City. A fairly extensive network of logging roads facilitates access.

The Riley Creek claim group consists of a total of 21 claims of 218 contiguous units, which is part of a larger package of 172 claims, totaling 444 km², owned by Misty Mountain Gold Limited.

This area is considered to be a prime exploration target for precious-metal deposits due to the presence of the mineral-rich Specogna Deposit within the claim area and the dilational tectonic regime of the region. The Specogna deposit, located 18 kilometres south of Port Clements, is a large epithermal gold resource.

In early 1997, S.J.V. Consultants Ltd. was commissioned by Misty Mountain Gold Limited to conduct an interpretation of an airborne geophysical survey flown in 1995. This report presents the results of that interpretation.

3.0 LOCATION AND ACCESS

The Harmony Gold Project is located approximately 779 kilometres north of Vancouver, British Columbia on the Queen Charlotte Islands (Figure 1.0). The Queen Charlotte Islands are accessible by regularly scheduled Canadian International Airlines jet service from Vancouver to Sandspit or via twice weekly ferry service from Prince Rupert to Skidegate, British Columbia.

The Riley Creek claim group is situated on Graham Island, the northernmost island of the Queen Charlotte Archipelago, approximately centered on latitude 53°23' North and 132°25' West.

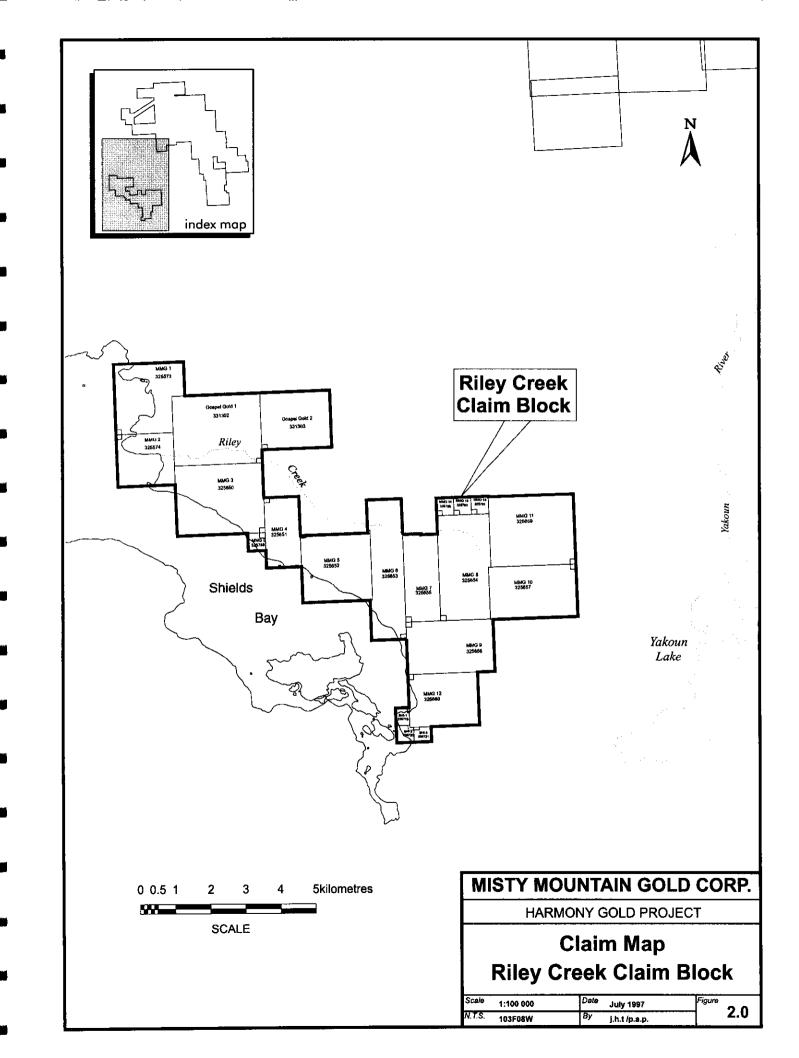
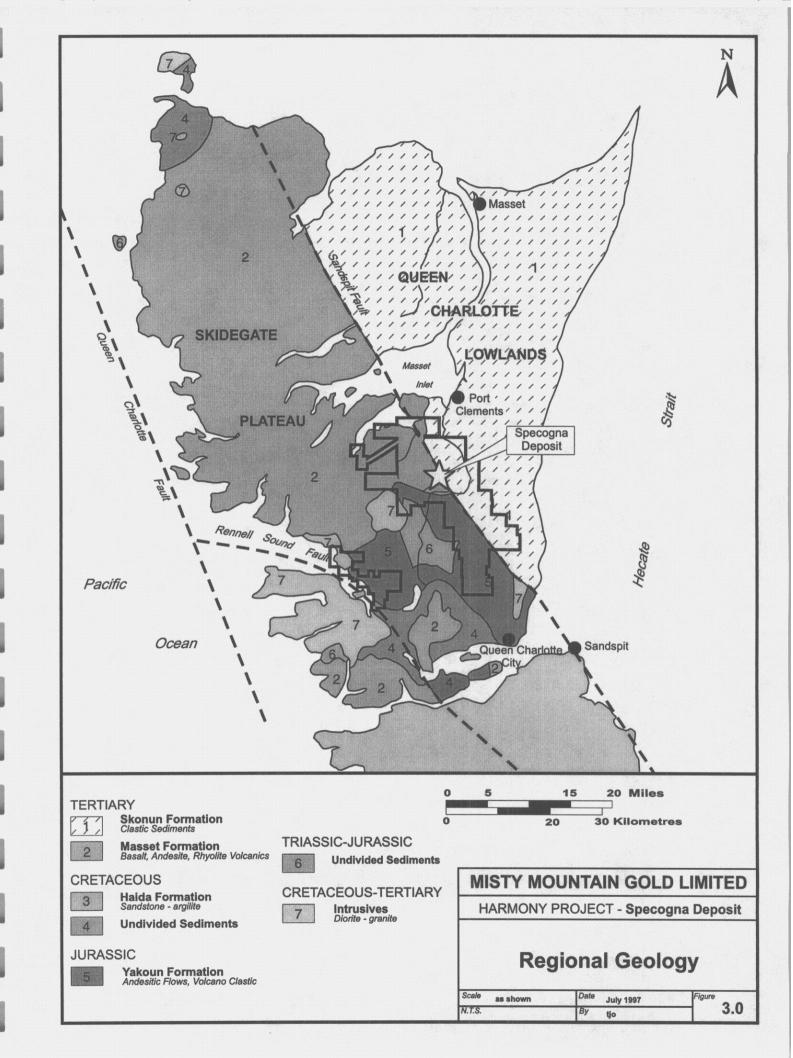


TABLE 1.0						
Riley Creek Claim Block						
CLAIM NAME	UNITS	TENURE NUMBER	COMPLETION DATE	EXPIRY DATE*		
MMG 0	1	325788	17-MAY-94	17-MAY-98		
MMG 1	16	325573	06-MAY-94	06-MAY-98		
MMG 2	9	325574	05-MAY-94	05-MAY-98		
MMG 3	20	325650	08-MAY-94	08-MAY-98		
MMG 4	8	325651	08-MAY-94	08-MAY-98		
MMG 5	16	325652	12-MAY-94	12-MAY-98		
MMG 6	16	325653	14-MAY-94	14-MAY-98		
MMG 7	10	325655	15-MAY-94	15-MAY-98		
MMG 8	18	325654	18-MAY-94	18-MAY-98		
MMG 9	15	325656	21-MAY-94	21-MAY-98		
MMG 10	15	325657	17-MAY-94	17-MAY-98		
MMG 11	20	325659	20-MAY-94	20-MAY-98		
MMG 12	12	325660	21-MAY-94	21-MAY-98		
MMG 14	1	325789	18-MAY-94	18-MAY-98		
MMG 15	1	325790	18-MAY-94	18-MAY-98		
MMG 16	1	325791	18-MAY-94	18-MAY-98		
GOSPEL GOLD	20	331302	06-OCT-94	06-OCT-98		
GOSPEL GOLD	16	331303	06-OCT-94	06-OCT-98		
SHI-1	1	335719	29-APR-95	29-APR-99		
SHI-2	1	335720	29-APR-95	29-APR-99		
SHI-3	1	335721	29-APR-95	29-APR-99		

^{*} subject to acceptance of this report



The claims are located on the southeast side of Rennell Sound, which is near the southwest end of Graham Island (Figure 2.0) and are contained within the boundaries of the Skeena Mining Division.

Access to the centre of the claim group is by a well-maintained network of logging roads which provide access from either Port Clements to the northeast, or Queen Charlotte City to the southeast.

4.0 CLAIM DATA

The Riley Creek claim block consists of 21 mineral claims comprising 218 contiguous units, owned 100% by Misty Mountain Gold Limited. The claims are part of a larger package of 172 claims, totaling 444 km², which is the Harmony Gold Project. The location of the Riley Creek claims is shown in Figure 2.0. These claims are situated in the Skeena Mining Division. A listing of the Riley Creek block of claims is given in Table 1.0.

5.0 PHYSIOGRAPHY AND CLIMATE

The Queen Charlotte Islands are divided by major northwest trending fault zones into three physiographic units: Queen Charlotte Ranges, Skidegate Plateau and Queen Charlotte Lowlands. The Riley Creek claim block is situated in the region of the Queen Charlotte Ranges.

The northwesterly trending Sandspit Fault forms a major physiographic and geological boundary on Graham Island. The Fault separates the hilly and mountainous terrain associated with Mesozoic and Tertiary rocks of the Skidegate Plateau and the Queen Charlotte Ranges to the west from the predominantly flat terrain associated with Late Tertiary rocks of the Queen Charlotte Lowlands in the east (Figure 3.0).

A substantial part of the claim area has been clear-cut logged.

The climate of the Queen Charlotte Islands is typical of British Columbia maritime areas, with temperatures ranging from 1°C in January to 15°C in August. Annual average precipitation is in the order of 200 millimetres. Rain falls on approximately 213 days of each year. Snow falls on approximately 18 days of each year.

6.0 EXPLORATION HISTORY

Efrem Specogna and Johnny Trinco discovered jarositic gossan and quartz stockwork veining on the property in 1970. The vein and wallrock they sampled carried gold and subsequently the Babe Property, now known as the Specogna Deposit, was staked.

The Specogna Deposit was optioned to a number of companies, including Kennco (Western) Limited, Canex Aerial Exploration, Cominco Ltd., Silver Standard Mines Ltd. and Quintana Minerals Corporation before it was acquired by Consolidated Cinola Mines Ltd. in 1977. Consolidated Cinola Mines conducted exploration activity on the deposit from 1977 to 1984. This activity included diamond drilling, percussion drilling, construction of an underground adit, metallurgical testwork, bulk samples and a 4,500 tonne bulk sample pilot plant test.

In 1986, City Resources (Canada) Limited acquired control of Consolidated Cinola Mines Ltd. Between 1986 and 1989, City Resources (Canada) Limited completed a diamond and reverse circulation drill program, relogged all existing project drill core, drove crosscuts, performed metallurgical test work and carried out geostatistical and ore reserve studies.

In 1989, Barrack Mine Management acquired control of City Resources (Canada) Limited and completed further confirmation drilling and metallurgical testwork before suspending all work in mid 1990.

In March 1994, City Resources (Canada) Limited changed the company name to Misty Mountain Gold Limited. On November 21, 1994 the Hunter Dickinson Group, through Romulus Resources Ltd., entered into an option agreement with Misty Mountain Gold Limited to actively

explore the Specogna Deposit and the Harmony Project claim area in order to earn a 50% interest in the Property.

In early 1995 Romulus Resources Ltd. contracted Digem I Power to perform an airborne magnetometer, electromagnetometer and radiometric geophysical survey over the entire claim area. Survey coverage consisted of approximately 4,785 line kilometres. Also in 1995, Romulus Resources performed regional geochemical sampling and prospecting throughout the claim area.

On November 6, 1995 Romulus Resources Ltd. and Misty Mountain Gold Limited merged with the operation control under the Hunter Dickinson Group. The new company continued its name as Misty Mountain Gold Limited. The deposit name Cinola was dropped and the deposit was renamed the Specogna Deposit after the original discoverer.

From October 1995 to December 1996, Romulus Resources and subsequently Misty Mountain Gold Limited, drilled 147 NQ2 (five centimetre) sized diamond drill holes totaling 34,627 metres on a systematic 20 metre centre grid. The objective of this drill program was to identify and delineate zones of higher-grade gold mineralization within the deposit through more closely spaced and regular drilling in a more optimal direction to accurately estimate the gold resource.

7.0 REGIONAL GEOLOGY

The Queen Charlotte Islands are part of the Insular Belt of the Canadian Cordillera and are separated from the Pacific Ocean floor by the Queen Charlotte Transform Fault (Figure 3.0). The Islands are included within the Pacific Continental Shelf physiographic region and they are divided into three units: Queen Charlotte Ranges, Skidegate Plateau and Queen Charlotte Lowlands. Boundaries between the physiographic units follow major northwest trending fault zones. The Riley Creek claim block is situated in the region of the Queen Charlotte Ranges.

The general geology of the Queen Charlotte Islands has been mapped by A. Sutherland-Brown and documented in the British Columbia Department of Mines Bulletin No. 54 (1968).

Regional mapping covering the Riley Creek area was done by the Geological Survey of Canada (C.J. Hickson) at 1:50,000 scale in 1987 and 1988 (Map 6-1990). Hickson identified numerous lithologies, ranging in age from upper Triassic to Tertiary (Miocene - Pliocene), in the area of the Riley Creek claim block. The dominant rock formations were middle Jurassic Yakoun Formation sedimentary rocks, Tertiary Masset Formation flows and pyroclastics, and Tertiary Kano plutonic suite. The regional geology is generally illustrated in Figure 3.0.

8.0 INTERPRETATION OF AIRBORNE GEOPHYSICAL SURVEY

In February 1997, Misty Mountain Gold Limited contracted S.J.V. Consultants Ltd. of Delta, B.C. to perform an interpretation of the data from an airborne geophysical survey flown across the Riley Creek claim block, Rennell Sound within the Harmony Gold Project. The airborne magnetometer, electromagnetometer, and radiometric survey was flown in the spring of 1995 and encompassed approximately 575 kilometres in the area of the performed interpretation.

The flight lines were flown in an east-west direction with a line spacing of 100 metres. A DIGHEM^v multi-coil, multi-frequency electromagnetic system, supplemented by a high sensitivity Cesium magnetometer, a 256-channel spectrometer and a four-channel VLF receiver was used to accomplish this survey.

The purpose of the interpretation of the geophysical survey was to identify geophysical features of interest with particular attention to structural complexity and areas with similar geophysical signatures to those observed across the Specogna deposit. Presentation of the data as well as a detailed discussion of the interpretation and results is attached as Appendix I in a report prepared by E.T. Pezzot of SJ Geophysics Ltd./S.J.V. Consultants in February, 1997.

9.0 RECOMMENDATIONS

The interpretation of the airborne geophysical survey was successful in identifying eleven areas of interest on the basis of the geophysical surveys. These areas warrant additional exploration work in the form of detailed ground evaluation. The results of this survey interpretation will be integrated with known geochemical survey results and geological information in order to identify prime exploration targets. A detailed discussion of the recommendations resulting from the interpretation can be found in Appendix I.

10.0 STATEMENT OF COSTS

1997 INTERPRETATION OF AIRBORNE GEOPHYSICAL SURVEY

Interpretation of Airborne Geophysics (S.J.V. Consultants Ltd.)

Data Processing and Interpretation	\$ 2,263.00
Plot Preparation and Interpretation	\$ 794.00
Report Writing	\$ 372.00

Report Preparation

2.5 man days @ \$250.00/day	\$		
			\$ 625.00

Subtotal

EXPENDITURES 1997 INTERPRETATION OF AIRBORNE

\$4,054.00

\$ 3,429.00

GEOPHYSICAL SURVEY

11.0 REFERENCES

- Augsten, B. and Case, T., 1997 Geochemical Sampling Assessment Report, Riley Creek / Rennell Sound Area, Southwest Graham Island, Queen Charlotte Islands, British Columbia. A report prepared for Misty Mountain Gold Limited, July 25, 1997.
- **Brommeland, L.K. and Rebagliati, C.M,** 1995 Airborne Geophysical Survey Assessment Report. A report prepared for Romulus Resources Ltd., August 1995.
 - Case, T., 1997 Interpretation Assessment Report of Airborne Geophysical Survey, Feather Lake Area. A report prepared for Misty Mountain Gold Limited, June 18, 1997.
 - Case, T., and Fischl, P., 1996 Specogna Deposit Diamond Drilling Program Assessment Report. A report prepared for Misty Mountain Gold Limited, May 1, 1997.
 - **Hickson, C.J.**, The Masset Formation on Graham Island, Queen Charlotte Islands, British Columbia; *in* Evolution and Hydrocarbon Potential of the Queen Charlotte Basin, British Columbia, GSC Paper 90-10, pp. 305-324, 1991.
- Rebagliati, C.M., Case, T., and DeLong, C., Harmony (Cinola) Property Assessment Report,

 1995 Geochemical Exploration Program. A report prepared for Romulus Resources Ltd.,

 May 11, 1995.

12.0 STATEMENT OF QUALIFICATIONS

I, Tara Therese Case, of the City of Vancouver, Province of British Columbia, DO HEREBY CERTIFY THAT:

- 1. I am a Geologist employed by Misty Mountain Gold Limited at Suite 1020 800 West Pender Street, Vancouver, British Columbia.
- 2. I am a graduate of the University of British Columbia, with a Bachelor of Science in Geology, 1993.
- 3. I have practiced my profession continuously since graduation.
- 4. I am a registered Geoscientist in Training, in good standing, of the Association of Professional Engineers and Geoscientists of British Columbia.
- 5. I have reviewed the 1997 interpretation of the data from an airborne geophysical survey.

Lara Case

Dated at Vancouver, British Columbia, this 1st day of August, 1997.

APPENDIX I

INTERPRETATION REPORT

on an

AIRBORNE GEOPHYSICAL SURVEY

on the

RILEY CREEK - RENNELL SOUND CLAIM BLOCK

INTERPRETATION REPORT

on an

AIRBORNE MAGNETORMETER, ELECTROMAGNETOMETER and RADIOMETRIC SURVEY

on the

RILEY CREEK - RENNELL SOUND CLAIM BLOCK

NTS 103F/7,8

prepared for

Misty Mountain Gold Limited

Harmony Gold Project

Queen Charlotte Islands,

British Columbia

by
E. Trent Pezzot
S.J.V. Consultants Ltd.
11762 - 94th Avenue
Delta, B. C.

February, 1997

THIS DOCUMENT IS BOUND SEPARATELY