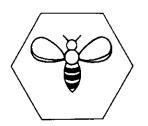
# 86-1016 - 15666



# Shangri-La Minerals Limited

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

GOLDBREAK 33 MINERAL CLAIM

FOR

NIK MARKOVINA

CASSIAR AREA, LIARD MINING DIVISION BRITISH COLUMBIA

NTS 104 P/6W

NORTH LATITUDE: 59 DEG. 21' WEST LONGITUDE: 129 DEG. 25'

BY

DAVID J. PAWLIUK, B.Sc., P.Geol.

SHANGRI-LA MINERALS LIMITED VANCOUVER, BRITISH COLUMBIA 13 JANUARY 1987

OLOGICAL BRANCH SESSMENT REPORT

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FEB 4 1987

M.R. # \_\_\_\_\_ \$ \_\_\_\_ VANCOUVER, B.C.

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#### SUMMARY

On October 14, 1986 geological mapping and geochemical sampling were performed on Goldbreak 33 mineral claim for Nik Markovina by Shangri-La Minerals Limited.

The Goldbreak 33 property consists of one modified grid system mineral claim of 20 units located approximately 27 km east-northeast of Cassiar, B.C.

The exploration work was performed to discover possible bedrock sources of the placer gold found north of the property along Dennis Creek.

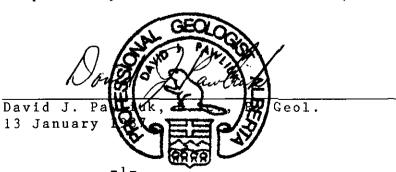
It is generally thought that the placer gold was transported by glacial ice from gold-quartz veins in the Sylvester Group volcanics; these rocks outcrop about 7.4 km west of the property. Atan Group rocks, which underlie part of Goldbreak 33 mineral claim, contain gold, silver, lead and zinc values 3.5 km southwest of the property.

Gold Hope Group and Atan Group rocks underlie Goldbreak 33 mineral claim. Quartzite, limestone and slatey phyllite occcur along the ridge in the central part of the property. The limestone has locally been brecciated and recrystallized; calcite veins fill fractures within brecciated limestone. Much of the brecciation has likely occurred along fault zones. Iron oxides locally coat the weathered surface of limestone within the property.

Rock samples from the area examined within Goldbreak 33 mineral claim contain low metal values.

A more thorough examination of Goldbreak 33 mineral claim is needed to determine whether or not it contains the bedrock source of the placer gold found in the region.

Respectfully submitted at Vancouver, B.C.



#### PART A

#### Introduction

On October 14, 1986 mineral exploration was performed on Goldbreak 33 mineral claim for Nik Markovina by Shangri-La Minerals Limited.

The purpose of the work was to perform a preliminary examination of the property, and to discover possible bedrock sources of the placer gold found north of the property along Dennis Creek.

## Property Status

The Goldbreak 33 property consists of one modified grid system mineral claim recorded in the Liard Mining Division. Particulars are as follows:

NAME RECORD NO. ANNIVERSARY AREA OWNER

Goldbreak 33 3471 Dec. 5, 1986 20 units B. Tambre

The claim is shown on British Columbia Ministry of Energy, Mines and Petroleum Resources Mineral Claim Map M104P/6W.

#### Location and Access

The Goldbreak 33 property is located approximately 27 km east-northeast of Cassiar, B.C. (Figure 1). Access is by helicopter.

#### Physiography

Elevations on the property range from 860 m to 1,810 m above sea level, about three-quarters of which is above treeline. A steep-sided ridge occupies the central portion of the property.

The climate is harsh; a couple of metres of snow typically accumulate during the winter.

The lower areas of the property are thinly to moderately forested by coniferous trees.

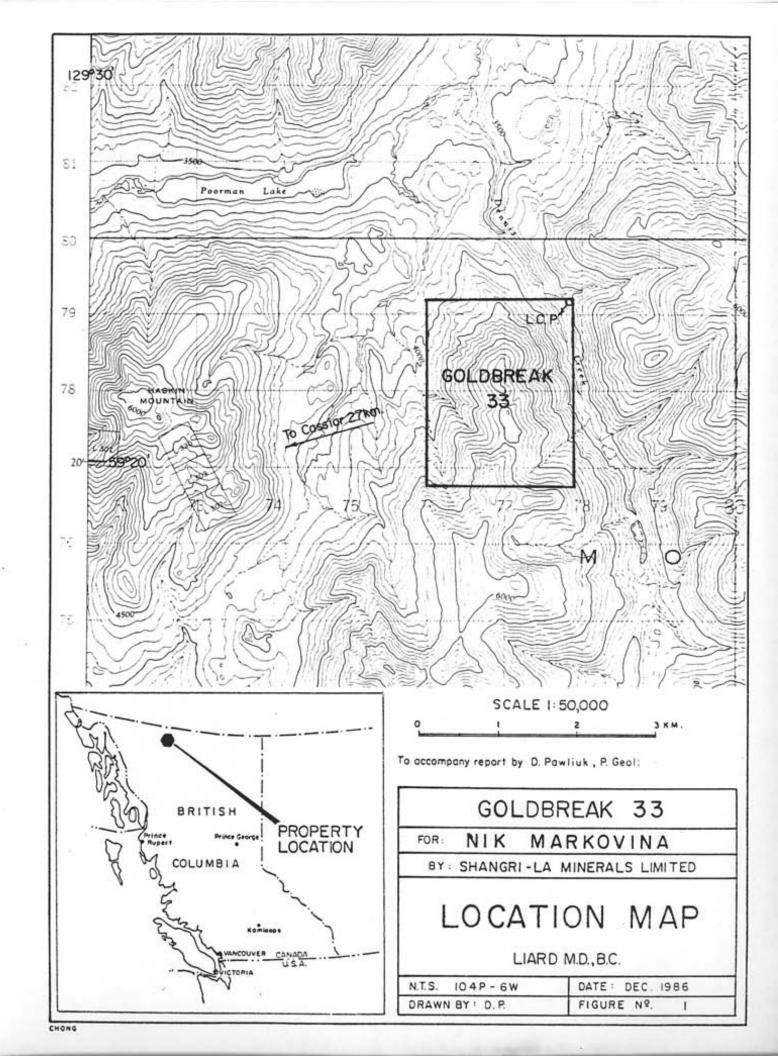
#### History

The Goldbreak 33 mineral claim area was first prospected after placer gold was discovered on McDame Creek (about 8 km south of the property) in 1874 (Gabrielse, 1963). Between 1874 and 1900 about \$2,000,000 worth of placer gold was recovered from McDame and Walker creeks, much of it by small-scale operations.

In the early 1900's placer gold was recovered from Dennis Creek, which flows through the northwestern corner of the property, and from Rosella Creek, which is 9 km northwest of Goldbreak 33 mineral claim (Gabrielse, 1963). It is generally thought that the placer gold was transported by glacial ice from gold-quartz veins in the Sylvester Group volcanic rocks; these rocks outcrop about 7.4 km west of Goldbreak 33 mineral claim.

Erickson Gold Mining Corp. produced over 1,950~kg (69,000 oz) gold and 1,190~kg (42,000 oz) silver as of December 31, 1984 from veins in the Sylvester Group volcanic rocks (Gardiner, 1986).

A grab sample of Atan Group rocks collected at Mt. Reed (3.5 km southwest of Goldbreak 33) assayed 0.02 oz/ton gold, 19.9 oz/ton silver, 12.58% lead and 15.9% zinc (Gabrielse, 1963). Atan Group rocks underlie a portion of Goldbreak 33 mineral claim.



#### PART B SURVEY SPECIFICATIONS

#### Geochemical Survey Method

A total of 17 geochemical rock samples was collected. The samples were analyzed by Acme Analytical Laboratories Ltd., Vancouver, British Columbia, using an induction coupled plasma spectrophotometer for 30 elements and atomic absorption for gold; analytical results form Appendix D.

#### PART C GEOLOGY

#### Regional Geology

The Goldbreak 33 mineral claim lies on the southwestern limb of a northwesterly trending anticlinorium within Proterozoic Good Hope Group and Lower Cambrian Atan Group rocks (Gabrielse, 1963). Proterozic to Mississippian age marine rocks within the region have been folded, faulted, and intruded by Mesozoic granitic rocks. Tertiary sediments and basalts occur locally.

The possibly allochthonous Sylvester Group volcanic terrane is about 7.4 km west of Goldbreak 33 mineral claim. The Sylvester Group hosts several gold-quartz veins which may be the source of the placer gold found within the region.

### Property Geology

The rocks underlying the Goldbreak 33 mineral claim belong to the Proterozoic Good Hope Group and to the Lower Cambrian Atan Group (Gabrielse, 1963).

Quartzite, limestone and slatey phyllite outcrops exist along the ridge in central Goldbreak 33 mineral claim (Figure 2).

#### Structure

The rocks on the property are part of the southwestern limb of an anticlinorium in Cambrian and Proterozoic rocks (Gabrielse, 1963). These rocks strike southeasterly to easterly, and dip to the southwest.

Limestone on the property has locally been brecciated and recrystallized; much of the brecciation has likely occurred along fault zones.

#### Alteration and Mineralization

Limestone within Goldbreak 33 mineral claim has locally been remobilized; off-white calcite veins fill fractures within brecciated limestone on the property. Calcite veins on the property range up to 25 cm wide and 7 m in length.

Red-orange iron oxides locally coat the weathered surface of limestone within the property. Hematite traces locally line fractures.

Pervasive minor limonite locally stains the fine grained quartzite at Goldbreak 33 mineral claim.

#### Discussion of Geochemical Results

The results of geochemical analyses of 17 rock samples from Goldbreak 33 mineral claim show that the rocks contain up to 4 parts per billion (ppb) gold, 0.2 parts per million (ppm) silver, 6 ppm copper, 4 ppm lead and up to 21 ppm zinc (Appendix D; Figure 2).

## PART D

#### Conclusions and Recommendations

Rock samples from the area examined within Goldbreak 33 mineral claim contain low metal values.

A more thorough examination of Goldbreak 33 mineral claim is needed to determine whether or not it contains the bedrock source of the placer gold found in the region.

Respectfully submitted at Vancouver, B.C.

David J. Phyliuk B Sc. Geol.

#### REFERENCES

Gabrielse, H. 1963

McDame Map-Area, Cassiar District, British Columbia; Memoir 319, Geological Survey of Canada.

Gardiner, C.D., ed., 1986

Canadian Mines Handbook 1985-86; Northern Miner Press Limited, 532 p.

# APPENDIX A

COST BREAKDOWN OF PHASE I PROGRAM

# APPENDIX A COST BREAKDOWN

	=====
TOTAL COSTS	\$2,000
Report, Drafting and Analysis Cost	s 400
Geological Mapping and Sampling 1:10,000 Scale	1,200
	<b>4400</b>
Mobilization and Demobilization	\$400

APPENDIX B
CERTIFICATE

#### CERTIFICATE

I, David J. Pawliuk of the Municipality of Delta in the Province of British Columbia, do hereby certify:

- I am a Consulting Geologist with the firm of Shangri-La I) Minerals Limited at 706-675 West Hastings Street, Vancouver, B.C., V6B IN2.
- I graduated in 1975 from the University of Alberta, Edmonton II) Alberta, and hold a Bachelor of Science with Specialization in Geology.
- III) I am a registered member, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- IV) Since graduation I have been involved in numerous mineral exploration programs throughout Canada.
- V) This report is based upon field work carried out by this author and a Shangri-La Minerals Limited crew on October 14, 1986.
- VI) I hold no direct nor indirect interest in the property, nor do I expect to receive any.
- VII) This report may be utilized by Nik Markovina for inclusion in a Prospectus or Statement of Material Facts.

at Vancouver, B.C. Respectfully s

David J. Geol.

13 January

# APPENDIX C ROCK SAMPLE DESCRIPTIONS

# APPENDIX C

## ROCK SAMPLE DESCRIPTIONS

G33D-1		Grab
	Buff weathering, grey, very fine grained limestoweakly brecciated and contains white carbonate ve	
G33D-2		Grab
	Red-orange weathering, pale grey, moderately ciated, recrystallized limestone.	brec-
G33D-3		Grab
	Red-orange weathering, pale grey, moderately ciated, recrystallized limestone.	brec-
G33D-4		Grab
	Red-orange weathering, off white to pale moderately brecciated, recrystallized limestone sulphides seen.	
G33D-5		Grab
	Red-orange weathering, off white to pale grey, brecciated, recrystallized limestone; no sulpseen.	
G33D-6		Grab
	Brownish orange to yellow brown, intensely brec limestone with abundant limonite and white car veinlets. Vuggy, pitted weathered surface. I likely local bedrock source.	bonate
G33D-7		Grab
	Grey, fine grained limestone with cream coloured bonate veinlets and local hematite lining fractur	
G33D-8		Grab
	Grey limestone with cream coloured carbonate vei wide.	n 2 cn

G33D-9 Grab

Irregular, discontinuous vein of coarsely crystalline calcite intruding grey limestone. Vein about 30 cm wide, orientation uncertaion.

G33D-10 Grab

Off-white calcite vein 4 cm wide within grey limestone.

G33D-11 Grab

Abundant off-white calcite veins with trace hematite within grey limestone.

G33D-12 Grab

White quartz vein with local hematite and limonite intrudes thinly bedded, pale prown, very fine grained Atan(?) quartzite.

G33D-13 Grab

Pale brownish grey weathering, fine grained Atan(?) quartzite with pervasive minor limonite throughout.

G33D-14 Grab

Pale maroon weathering, fine grained Atan(?) quartzite with local limonite coating fracture surfaces. Discontinuous off-white quartz veins up to 2 cm wide present. Sample frost-heaved rock, likely local bedrock source.

G33D-15 Grab

Pink-orange weathered surface, brecciated, recrystall-ized grey limestone. Rock very similar to G33D-2.

G33D-16 Grab

Off-white coarsely crystalline calcite vein float. Likely local bedrock source. Vein 25 cm wide, probably at least 7 m long, intrudes grey limestone.

G33D-17 Grab

Calcite veins up to 15 cm wide trend north-northeast, dip vertical, contain local pyrite traces. Veins intrude grey limestone.

# APPENDIX D ANALYTICAL RESULTS

852 E.HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

#### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HMO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML NITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.N.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 7 PPM.
- SAMPLE TYPE: ROCK CHIPS AUB ANALYSIS BY AA FROM 19 GRAM SAMPLE.

DATE DESCRIPTION BOTH DATE DESCRIPTION TO

Dec 17/86

ASSAYER. D. JUHI. DEAN TOYE. CERTIFIED B.C. ASSAYER.

DATE	RECEIV	ÆD:	DE	10 1	986 E	PATE	REF	ORT	MAI	LED	:	M	- ' (	jos	ρ	ISSA	YEK.	10. C.P.C.	<i>p-7.</i> .	, DEP	an L	UYE.	(JE)	< 1 1 P	16.0	r.L	. H:	THE	E.N.	
							SI	HANG	RI-l	.A M	INEF	RALS	PF	OJE	CT -	- GO	LDEF	REAKS I	FILE	# 8	96-3	951							FAG	F 1
SAMPLES	Mo PPM	Eu PP#	Pb PPH	In PPH	4g PP#	Ni PPM	Co <b>PPM</b>	Mn PPN	Fe I	ÅS PPH	U PPM	Au <del>PPH</del>	Th PPH	Sr PPM	Cd PPM	Sb PPM	B1 PPM	V Ca PPH I	P	la PPM	(r PPM	Hg I	Ba PP#	T <sub>1</sub>	P PPM	A) I	Na l	,	W PPH	
633D-1	1	1	2	2	.1	1	1	89	. 33	2	5	ND	í	1394	1	2	2	1 38.21	. 005	2	i	.27	9	.01	2	.03	.01	. 01	i	1
633D-2	4	1	2	2	.1	1	1	378	1.19	3	5	MD	5	46	1	2	2	1 20,17		2	1	9.78	4	.01	2	١٥.	.02	. 01	1	1
633D-3	4	1	3	3	.1	1	1	474	1.77	5	5	MD	5	101	1	2	2	1 20.48	. 001	2	1	9.13	4	.01	2	. 01	.01	.01	1	ı
6330-4	4	1	2	4	.1	1	1	298	1.49	3	5	ND	6	170	1	2	2	1 20.01	.003	2	1	9.70	5	.01	2	.03	.02	.02	1	1
6330-5	5	1	2	i	.1	1	- 1	302	.83	2	5	ND	5	118	1	2	2	1 20.16	.007	3	1	10.21	5	.01	2	.09	.02	.01	1	1
6330-6	3	3	4	11	. 2	4	1	557	1.86	7	5	ND	1	200	1	2	2	3 30.20	.016	3	1	2.96	40	.01	2	.06	.01	. 02	1	1
6330-7	2	1	3	2	. 1	1	1	94	. 32	3	5	ND	1	661	1	2	2	1 36.89	.002	2	1	1.09	16	.01	2	.02	.01	.01	1	1
633D-0	2	4	4	11	.1	3	1	108	. 66	3	5	ND	1	361	1	2	2	1 37.69	. 002	4	1	. 26	269	.01	2	. 05	.01	. 03	t	t
6330-9	1	3	2	21	.1	1	1	154	. 38	2	5	ND	1	170	1	2	2	1 38.16	.004	2	1	.84	11	.01	2	.04	.01	.02	1	1
633D-10	1	1	2	8	.1	2	1	109	. 40	2	5	ND	1	344	í	2	2	1 40.21	.001	3	1	. 21	40	.01	2	. 02	.01	.01	i	2
633D-11	1	1	3	2	.1	1	1	45	. 25	2	5	MD	ı	338	1	2	2	1 39.77	.00i	2	1	. 49	7	.01	2	. 02	.01	. 01	1	Ţ
633D-12	2	5	4	9	.2	4	3	455	1.75	2	5	ND	13	39	1	2	2	2 8.78	. 058	16	2	3.76	49	.01	2	.12	.01	. 07	1	ł
633D-13	1	6	2	3.	. 1	7	1	39	. 43	2	5	ND	1	7	1	2	2	1 .41	. 004	3	3	. 02	8	.01	2	.07	.01	. 04	4	4
633D-14	1	5	2	3	.1	4	1	67	. 52	2	5	ND	1	3	1	2	2	1 .07	.006	5	2	.03	6	.01	2	. 06	.01	. 04	3	1
6330-15	4	1	2	3	. 2	5	2	391	1.32	5	5	ND	á	42	1	2	2	1 19.18	.017	2	1	9.26	8	.01	2	.04	.01	. 02	1	1
6330-16	2	1	2	1	.1	1	i	280	. 64	2	5	MD	1	218	1	2	2	1 35.55	.001	4	1	1.76	4	.01	2	.01	.01	.01	1	ŀ
633D-17	2	3	2	5	.2	1	1	449	2.40	4	5	ND	3	461	i	2	2	1 25.62	.004	2	1	5.57	32	.01	2	.03	.01	.01	1	2
STD C/AU	-R 21	59	39	137	7.0	69	30	1013	3.95	41	16	8	34	49	17	15	21	63 .46	.103	36	58	. 88	181	. 08	37	1.72	.07	.13	13	510

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