

83-#833-# 11623
12

GEOCHEMICAL REPORT
ON THE
REDGOLD GROUP OF MINERAL CLAIMS
CARIBOO MINING DIVISION, BRITISH COLUMBIA
93A/6W
Latitude 52° 27' Longitude 121° 27'

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,623

Ownership: J. W. Morton
R. M. Durfeld

Operator: J. W. Morton
R. M. Durfeld

Author of Report: R. M. Durfeld
Durfeld Geological Management Ltd.

December, 1983

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Introduction

(1) Location Access and Physiography

The REDGOLD Claim Group is located in the Cariboo Mining Division of the Central British Columbia Interior, Map Sheet NTS 93 A/6. Specifically, at $121^{\circ} 27'$ west longitude and $52^{\circ} 27'$ north latitude.

The property is bounded on the north by the south shore of Quesnel Lake and on the east by the Horsefly River. The topography of the property is gently rolling with elevations ranging between 2400 and 3300 feet. The area was forested with fir, spruce and cedar but is now largely clearcut logged.

Access to the area is achieved by 100 km. of paved and all-weather road from Williams Lake via Horsefly townsite and then the Mitchell Bay Forest access road.

(11) Property Definition

(a) History of Exploration in the Vicinity of the REDGOLD Claim Group

Excepting reconnaissance geochemical and magnetometer surveys (Report #4557) and a geochemical survey on the SHIK #1 and #2 mineral clais, all previous assessment reports document exploration completed on the adjacent SL mineral claims in an area some distance from the SHIK mineral claims.

The previous exploration activities filed for assessment report purposes in the Shiko Lake Area are summarized as follows:

<u>Year</u>	<u>Company</u>	<u>Type of Work</u>	<u>Assessment Report No.</u>
1973	Fox Geological	Geochemical and Magnetometer Survey	4557
1973	Fox Geological	Induced Polarization Survey (closest portion of survey approximately 1 kilometer northwest of SHIK MINERAL CLAIMS)	4601
1974	Newconex	Percussion Drilling (7 holes on adjacent SL MINERAL CLAIMS)	5540
1983	Durfeld and Morton	Rock Chip Geochemical Survey on SHIK #1 & #2 MINERAL CLAIMS	

(b) Mineral Claims

<u>Claim Name</u>	<u>Number of Units</u>	<u>Record Number</u>	<u>Record Date</u>
SHIK #1	20	4331 (5)	May 31, 1982
SHIK #2	18	4332 (6)	June 1, 1982
REDGOLD #1	16	4615 (12)	December 17, 1982

The above mineral claims are grouped as the REDGOLD GROUP.

2386c

Mitchell Bay

PENINGULA

Horsefly Bay

SHIK 1

SURVEY AREA

SHIK 2

RED GOLD 1

LQP

Shiko Lake

Antoine Lake

Eric Lake

Dimmer Lake

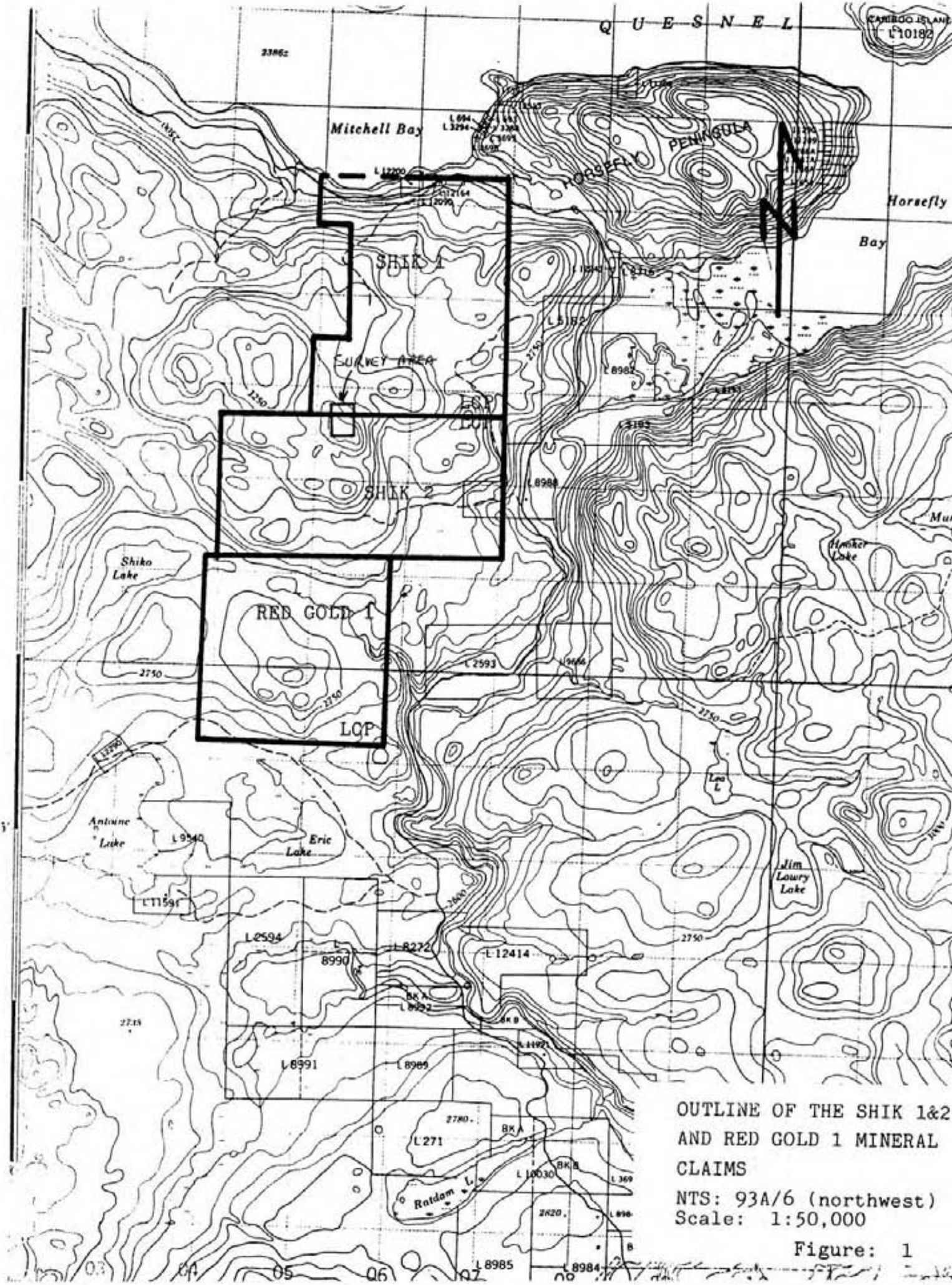
Jim Lowry Lake

Roldam L.

OUTLINE OF THE SHIK 1&2
AND RED GOLD 1 MINERAL
CLAIMS

NTS: 93A/6 (northwest)
Scale: 1:50,000

Figure: 1



(c) Regional and Economic Geology

The REDGOLD mineral claim group is underlain by a large structurally controlled depositional feature of Triassic to Jurassic Age known as the Quesnel Trough.

The Quesnel Trough is characterized by alkalic volcanic and clastic rocks with associated alkalic intrusions. The alkalic intrusions, in part, are coeval with the surrounding volcanic package.

To date, the Cariboo-Bell, copper-gold, and the Quesnel River, gold, properties and several lesser gold prospects have been discovered in this section of the Quesnel Trough.

The REDGOLD group of mineral claims encompass a geological environment similar to the one encountered at the Quesnel River and Cariboo-Bell prospects.

The reserves of the Quesnel River and Cariboo-Bell prospects can be summarized as follows:

<u>Property</u>	<u>Reserves</u>	<u>Grade</u>
Quesnel River	1.0×10^6 Tons	0.21 oz./Ton Au
Cariboo Bell	82×10^6 Tons	0.49% Cu 0.02 oz./Ton Au

(111) Geochemical Survey

This report documents forty-one rock and four soil samples that were collected on a detailed grid in a 200 metre by 400 metre area on the SHIK #1 and #2 mineral claims.

The rock chip samples were taken from outcrop and rubble over areas of approximately 4 square metres per sample. Four residual soil samples were also collected. Sample sites were flagged and located relative to a picketed chain and compass grid. These samples were sent to Chemex Labs. Ltd. in Vancouver and analyzed for copper, silver and gold.

The results of these analyses are documented in Appendix I and on Figures 3 and 4 of this report.

Results

(1) Geology

The area of the detailed sampling is generally underlain by an augite basalt originating as a debris flow from a phreatic centre.

The augite basalt is cut by several dioritic dykes whose spatial distribution is difficult to delineate due to lack of outcrop.

The hydrothermal alteration in the detailed sampled area is described as propylitic and is characterized by variable carbonate, epidote and chlorite alteration. Within this altered zone, areas of pyrite and chalcopyrite are recognized.

(11) Geochemical Interpretation

To better evaluate the results of the sampling, the copper and gold values have been statistically analyzed and are contoured on Figures 3 and 4.

Copper

Copper values were cut to 400 ppm and run on a statistical program to give a mean of 189 ppm and a standard deviation of 140 ppm.

These values were used to generate the contour intervals of 190 ppm, 330 ppm and 470 ppm copper that are plotted on Figure 3.

Gold

Gold values were cut to 100 ppb and run on a statistical program to give a mean of 28 ppb and a standard deviation of 32 ppb.

These values were used to generate the gold contour intervals of 28 ppb, 60 ppb and 92 ppb that are plotted on Figure 4.

Discussion

From the contoured copper and gold values, it can be seen that distinct copper and gold anomalies are developed in the sampled area.

It is also evident that there is a strong correlation between the copper and gold anomalies.

Conclusion

The area of the detailed sampling is underlain by a propylitically altered augite basalt debris flow.

Within this altered augite basalt coincident anomalous copper and gold values are developed.

APPENDIX I

GEOCHEMICAL ANALYTICAL CERTIFICATES AND PROCEDURES



CHEMEX LABS LTD.

212 BROOKSBANK AV
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C
 TELEPHONE: (604) 984-02
 TELEX: 043-5259

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

STE. 1400 - 750 W. PENDER STREET
 VANCOUVER, B.C.
 V6C 1K3

CERT. # : A8314364-00
 INVOICE # : I8314364
 DATE : 12-SEP-83
 P.O. # : NCNE
 120

ATTN: J. TURNER

Sample description	Prep code	Cu ppm	Ag ppm	Au ppb FA+AA			
4112	205	100	0.1	15	--	--	--
4113	205	85	0.1	50	--	--	--
4114	205	55	0.1	<5	--	--	--
4115	205	29	0.1	5	--	--	--
4116	205	210	0.1	5	--	--	--
4117	205	665	0.3	75	--	--	--
4118	205	2300	1.0	90	--	--	--
4119	205	475	0.1	70	--	--	--
4120	205	10	0.1	<5	--	--	--
4121	205	40	0.1	10	--	--	--
4122	205	340	0.2	40	--	--	--
4123	205	102	0.1	15	--	--	--
4209	205	305	0.7	55	--	--	--
4210	205	35	0.1	25	--	--	--
4211	205	155	0.2	10	--	--	--
4212	205	330	0.2	10	--	--	--
4213	205	143	0.1	5	--	--	--
4214	205	400	0.2	15	--	--	--
4215	205	310	0.2	5	--	--	--
4216	205	205	0.1	5	--	--	--
4217	205	430	0.3	30	--	--	--
4218	205	115	0.2	15	--	--	--
4219	205	18	0.1	10	--	--	--
4220	205	31	0.1	15	--	--	--
4221	205	95	0.1	5	--	--	--
4222	205	5	0.1	10	--	--	--
04440	205	617	0.5	350	--	--	--
04441	205	52	0.1	<5	--	--	--
04442	205	163	0.1	<5	--	--	--
04443	205	910	0.9	65	--	--	--
04444	205	725	0.2	15	--	--	--

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CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604) 984-0221
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

STE. 1400 - 750 W. PENDER STREET
VANCOUVER, B.C.
V6C 1K3

CERT. # : A8313821-002-A
INVILE # : 18313821
DATE : 23-AUG-83
P.O. # : NONE
333

CC: JIM TURNER

Sample description	Prep code	Cu ppm	Ag ppm	AU-AA ppb			
	204				--	--	--
770	204	188	0.1	<10	--	--	--
771	204	43	0.1	<10	--	--	--
772	204	30	0.1	<10	--	--	--
773	204	77	0.1	<10	--	--	--
04525	205	25	0.1	20	--	--	--
04526	205	25	0.2	165	--	--	--
04527	205	225	0.1	20	--	--	--
04528	205	127	0.1	<5	--	--	--
04529	205	140	0.1	15	--	--	--
04530	205	200	0.1	5	--	--	--
04531	205	158	0.1	<5	--	--	--
04532	205	480	0.4	15	--	--	--
04533	205	528	0.6	155	--	--	--
04534	205	328	0.2	<5	--	--	--

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AUG 26 1983



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Buchler*



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Buchler*

GEOCHEMICAL PROCEDURES

Chemex Laboratories

1. Geochemical samples (soil, silts) are dried at 80°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO₄ and concentrated HNO₃. Digestion time = 2 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analysed to atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit.

Copper	-	1ppm
Molybdenum	-	1ppm
Zinc	-	1ppm
*Silver	-	0.2ppm
*Lead	-	1ppm

* Ag & Pb are corrected for background absorption.

5. Elements present in concentrations below the detection limits are reported as one half the detection limit, i.e. Ag - 0.1 ppm.

PPB Gold: 5 gm samples ashed @ 800°C for one hour, digested with aqua regia - twice to dryness - taken up in 25% HCL-, the gold then extracted as the bromide complex into MIBK and analyzed via A.A. Detection limit - 10 PPB

PPB Mercury: The sample is digested with nitric acid plus a small amount of hydrochloric acid. Following digestion the resulting clear solution is transferred to a reaction flask connected to a closed system absorption cell. Stannous sulfate is rapidly added to reduce mercury to its elemental state. The mercury is then flushed out of the reaction vessel into the absorption cell where it is measured by cold vapour atomic absorption methods with a Jarrell Ash Multi-Versatility Spectro-photometer. The absorbance of samples is compared with the absorbance of freshly-prepared mercury standard solutions carried through the same procedure. The detection limit of this method is 5 ppb.

PPM Arsenic: a 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH_4 and the arsenic content determined using flameless atomic absorption.
Detection limit - 1 PPM

PPM Silver: a 1.0 gm portion of sample is digested in conc. perchloric-nitric acid (HClO_4 - HNO_3) for approx. 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Silver is determined by atomic absorption technique using background correction on analysis.
Detection limit - 0.2 PPM

APPENDIX II

ITEMIZED COST STATEMENT

Geologist - 2 days @ \$150.00/day	\$ 300.00
Geological Assistant - 2 days @ \$100.00/day	200.00
Transportation - 2 days @ \$50.00/day	100.00
Room & Board - 2 days @ \$50.00/man day	200.00
Geochemical Analyses:	
46 soil and rock samples @ \$12.45 ea.	572.70
Report Preparation and Drafting	<u>300.00</u>
Total	<u><u>\$1,672.70</u></u>



R. M. Durfeld B.Sc.
Geologist

Durfeld Geological Management Ltd.

APPENDIX III

2029 SOUTH LAKESIDE DRIVE
WILLIAMS LAKE, B.C. V2G 2R1

Telephone (604) 392-4691

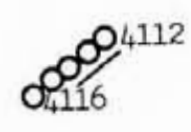
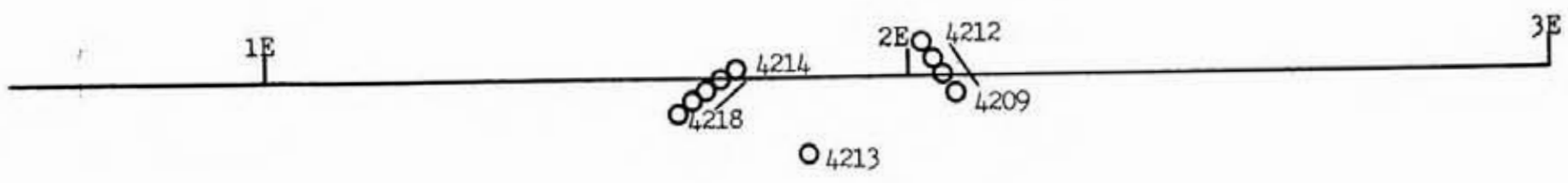
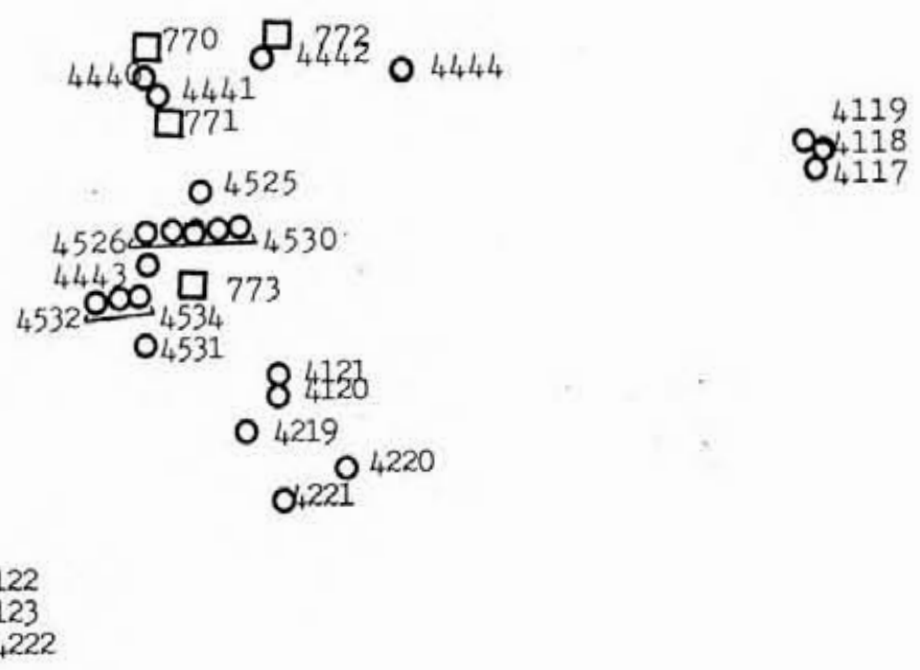
STATEMENT OF QUALIFICATIONS

I, Rudolf M. Durfeld of 2029 South Lakeside Drive,
Williams Lake, British Columbia, hereby certify that:

- 1) I am a graduate of the University of British Columbia Bachelor of Science (Geology Major) in 1972 and have practiced my profession as geologist since that time.
- 2) I am a Fellow of the Geological Association of Canada.
- 3) I am the author of this report which is based on work conducted on the SHIK #1 and #2 mineral claims during the period August 1st., to September 30th., 1983.



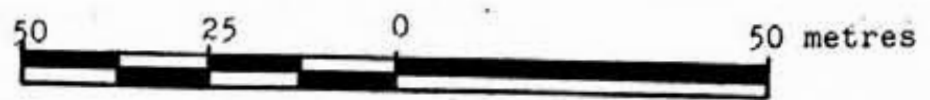
R. M. Durfeld B.Sc.
Geologist



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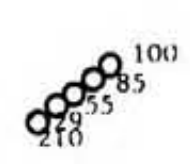
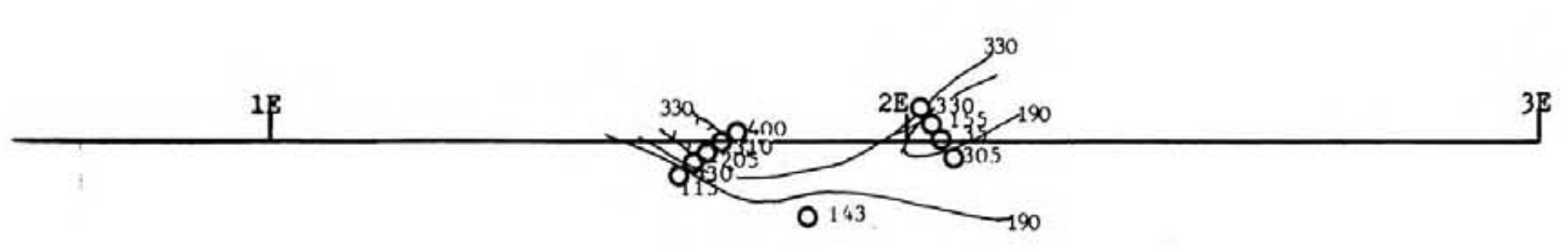
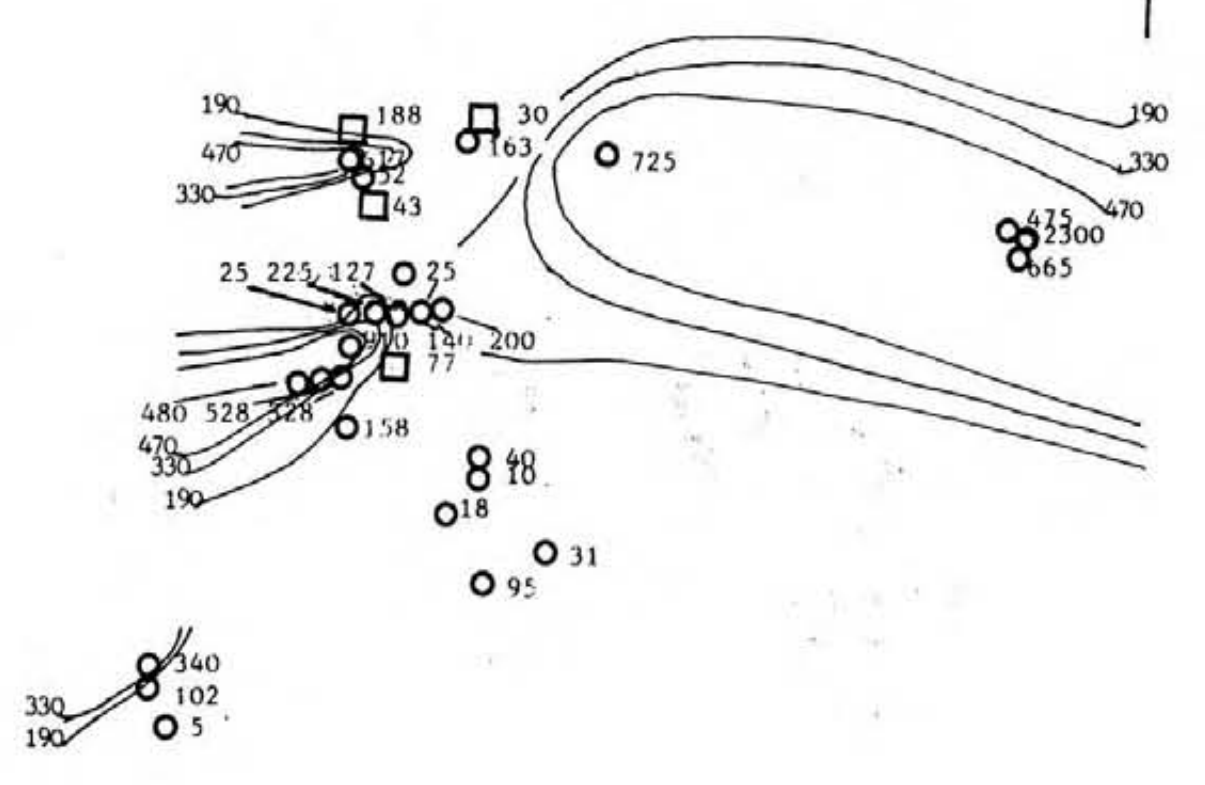
- Rock Chip Sample Site
- Soil Sample Site



DURFELD GEOLOGICAL MANAGEMENT LTD.
AND
J.W. MORTON (GEOLOGIST)

Scale: 1:1000
Date: Dec. 1983
Drawn By: rmd
NTS 93A/6

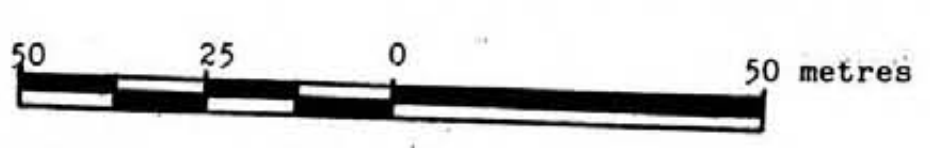
SHIK 1&2 and RED GOLD 1 MINERAL CLAIMS



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,623

- Rock Chip Sample Site
 - Soil Sample Site
 - 21 ppm Copper
-
- 470 ppm Copper
 - 330 " "
 - 190 " "



**DURFELD GEOLOGICAL MANAGEMENT LTD.
AND
J.W. MORTON (GEOLOGIST)**

Scale: 1:1000
Date: Dec. 1983

Drawn By: rmd
NTS 93A/6

,SHIK 1&2 and RED GOLD 1 MINERAL CLAIMS

