92P/8E

GEOLOGICAL REPORT

on the

Dan and Ran Claims

Located:

One mile east of Dunn Lake Latitude 51° 25° N Longitude 120° 06° W

By

George G. Addie, P.Geol.

for

Joseph G. Murphy

Work performed April 20-22, 1972 inclusive.



Department of Mines and Potroleum Resources

ASSESSMENT REPORT

.....

NO. 3600 MAP

۰,

GEOLOGICAL REPORT

on the

Dan and Ran Claims

Located:

One mile east of Dunn Lake Latitude 51° 25' N Longitude 120° 06' W

92 P /8E

By

George G. Addie, P.Geol.

for

Joseph G. Murphy

Work performed April 20-22, 1972 inclusive.

PREFACE

The author was retained by Joseph G. Murphy, P.Geol., 914 39th Avenue, Northwest, Calgary, Alberta to locate old workings on his Ran and Dan mineral claims situated one mile east of Dunn Lake, previously described in Government reports as "Gold Hill". Further, geological mapping was to be performed and a report written for submission as assessment work on these claims.

Acknowledgment

The author wishes to acknowledge the assistance of Mr. Fernando Saenz de Santa Maria (Geologist) without whose knowledge of the area the preparation of this report would have been impossible in such a short period of time. TABLE OF CONTENTS

		Page No
Preface		
Acknowledgment		
Introduction	•	1
Location and Accessibility	•	1
Previous Geological Work	•	2
Present Field Work and Sources	•	2
General Geology	•	3
Claim Geology	•	3
Economic Geology	•	4
Veins	•	4
Geophysics	•	6
Conclusions	•	7
Illustrations		
A [Gold Hill Geology	•	8
7 Gold Hill 3730 Adit (Ran 1)	•	9
A Gold Hill 2690 Adit (Ran 2)	•	10
É Gold Hill 2600 Adit (Ran 1)	•	11
Maps in Pocket - Aeromagnetic Map #5224G with location of claims	L	
6 Topographic Map 92P/8E with location of claims		
Appendices A - Publications		
B - Declaration of Qualifications		
C - Declaration of Costs		

INTRODUCTION

Location and Accessibility

The Ran and Dan claims (six) are located on "Gold Hill" situated one mile east of Dunn Lake, British Columbia. This lake is reached by a gravel road from Chu Chua approximately seven miles to the south. Chu Chua is a small railway siding on the Canadian National Railway line which follows the Thompson River. (Ref. Topographic Map 92P/8E in pocket)

The claims are reached by an old trail which starts one half mile south of Dunn Lake. This point of the trail is marked by a small white sign reading "Dunn Lake". The trail follows Dunn Creek. Where it first crosses the creek (approximately one mile east of the start point on Dunn Lake Road) one must climb a terrace at the top of which are two old cabins. From this point an obscure foot path leads to the workings at 2690 elevation and another path leads to the ridge giving access to these workings. Although these trails are obscure they should be used in preference to a direct traverse from Dunn Lake which will result in a considerable loss of time and effort.

Previous Geological Work

The geology of the area has been well described by Campbell and Tipper (1971). The Gold Hill area upon which these claims are located has been described by Uglow (1922), see Appendix A. Other reports on the Gold Hill mineral property contained in the British Columbia Minister of Mines Reports are referred to in Appendix A.

Present Field Work and Sources of Information

The exact location of the claims and the ridge workings were presented by Fernando Saenz de Santa Maria who had been present when the claims were staked.

A base map for the claims was made on the scale of 1:12000 from topographic map 92P/8E. Air photos A 13495-45-46; A13324-169; and BC 5258-084 were also available.

GEULOGY

Claim Geology

The claims are on volcanic rocks of the Fennell Formation (Mississippian or later age) described by Campbell and Tipper (1971) as consisting of: pillow lava flows, greenstone, foliated greenstone, greenschist, argillite, chert, minor amphibolite, limestone, breccia. (Ref. GSC Map 1278A)

On the claims only fine grain greenstones were seen, and along Dunn Creek some amygdaloidal basalts (see "Geology of Gold Hill"- this report). No doubt some of the greenstones are pillowed, but time was not available to study the stratigraphy of the volcanics. It is believed from Uglow's work (1922) that these volcanics form the east limb of a syncline and that this limb has a dip to the west.

At least three veins are present on the property: two are east-west and one north-south in orientation. (Further descriptions will be found under "Economic Geology".) The structural implications of these veins is not clear. The eastwest veins are probably en echelon. Their origin is probably related to the Baldy Mountain batholith approximately two miles to the east of the claims.

Economic Geology

"Individual grains of gold were seen as large as pin heads and a few the size of small peas" Uglow (1922 p 99A).

Since this statement was made concerning "Gold Hill" the area has attracted extensive prospecting. Consequently, the workings found probably represent the maximum that can be done from a prospecting level. The veins found can be presented as two groups based on orientation.

1. The north-south or Ridge group

2. The east-west or Cabin group

The Ridge veins are probably the same vein and represent a structure of at least 1500 feet long. This includes a pit at the 3200 ft. elevation which, although it has quartz float, did not have a readily available outcrop. (The pit looks as though it had been blasted out of Ridge and probably has a vein under the present rubble.)

The exposure of this vein is in an adit at the 3730 level (see chain and compass sketch map - this report). The tunnel entrance is caved but once inside the back was found to be secure and enough oxygen present to work safely. It appears that the main vein was encountered only at the end of the tunnel. At this location it is four feet wide and has

galena, chalcopyrite and pyrite. The quartz is vuggy, and contains dolomite crystals. Some of the calcite matrix has a brilliant red flourescence. This is the largest width of vein material seen within the claim group. (Ref. Gold Hill 3730 Adit Ran 1 + this report).

The Cabin group of veins are at a lower elevation than the Ridge group. There are at least two veins, probably each in the order of 1000 feet in length. In all cases the veins seem to be narrow. The lowest adit at the 2600 level -Ran 1 claim (Ref. this report) is typical of the veins and associated faults. Some of these faults also contain a little mineralization as well as the wallrocks which are buff coloured, probably due to hydrothermal alteration rather than a different rock type.

South of the 2600 ft.elevation vein is an extensively explored vein. (Ref. Gold Hill 2690 adit - Ran 2 claim, this report). At the 2690 foot elevation the vein is approximately east-west in bearing and has a width of 3-12 inches. At the west end there is a raise and collapsed stope (?), apparently values were found in this area. The entrance to this portal is loose. Water has been dammed by the debris for 40 feet within the tunnel, but at present does not restrict passage.

The mineralization is similar to the other veins except that copper staining was not seen as in the 3730 Ridge vein. West of the 2690 adit at elevation of 2800 feet there is another tunnel with a bearing of $N65^{\circ}W$. The floor is deep with mud and the back is loose so no mapping was attempted. The dump outside the portal contains excellent mineralization with galena. It was found that this material also has a calcite with brilliant red flourescence. This may indicate (if the dump material comes from the vein at the 2800 level) that both the Ridge veins and the Gabin veins have been mineralized at the same time.

Further westward at the 3100 ft level is another tunnel, again flooded. All the slide area down to the 2800 level has quartz float indicating that the vein is present under the slide.

Geophysics

Aeromagnetic Map 5224G (in pocket) shows that the claims are on a reentrant of the north-south 3000 gamma line, suggesting that a major east-west fault may be present in Dunn Creek giving a structural control to the veins.

Conclusions:

-

A geological situation exists which is at present unexplored and could lead to significant mineralization. It has been suggested that because of the presence of red flourescent calcite in both vein systems that they formed at the same time. Thus, where these veins meet on the ridge would be an ideal junction for vein filling and perhaps replacement of the wallrocks. The consequent ore shoot would probably have limited horizontal expression but long pav zones in the plunge direction which would be approximately $N33^{\circ}$ W at -60° . (Calculated from the intersection of the two vein systems.)

Respectfully submitted.

George G. Addie, P.Geol.

Dated April 24, 1972





Gold Hill 3730 adit (Ran I)

Chain and compass sketch map



Gold Hill 2690 adit (Ran 2 claim)

Chain and compass sketch map Department of Mines and Potroleum Resources ASJELSMENT REPORT NO. 3600 MAP 10 CEOREE C. ADDIE (P. Seall

APR 24, 1972.

Greenstones 62[°] Mines and Vettoleum Resources ASSESSMENT REPORT Department of 20 ALP. * e2° 0 0 buff coloured asilrocks 10 ft. SCALE

Gold Hill 2600 adit (Ran I)

Chain and compass sketch map

DEPARTMENT OF MINES

. HON. CHARLES STREAMER, MILLESPERT CRAMMER CARTERIA, DEPUTY MONOPER

CHEOLOGIOAE SURVIÈS

Buhamary, Report, 1921, Fart

CONTENTS

92.

No. 195



OTTAWA F. A. ACLAND FINNTER TO THE FINGS MOST ENGELLENT MAJESTY

PRINTER TO THE EINCE MOST ENCELLENT MALESTY

GOLD: LODE DEPOSITS

Gold Hill (1997)

The Gold Hill and Gold Hill Fraction are located on the southern and southeastern slopes of Gold Hill ridge. The chief mineralized zone, which is described below, occurs at altitudes varying from 2.720 feet to 3.425 feet. It is reached by a trail about 1½ miles long which leaves the main road three quarters of a mile south of the south end of Dunn lake. The nearest railway station is Chu Chua, 5 miles from the lower end of the trail.

The property is recorded in the names of George Founell and Henry Skoney, of Chu Chua.

The country rock is the greenstone pillow lave of the Fennell formation. This rock is traversed in a general east-west direction by shear zones which have been altered to cream and buff-coloured masses of siliceous ferrodolomite, through which ramify veinlets and irregular masses of white quartz. In many cases the quartz is broken and the fragments are comented by ferrodolomite. The contacts between the ferrodolomite and greenstone are, as a rule, transitional. The width of the main ferrodolomite zone varies up to 20 feet. The quartz stringers carry appreciable amounts of fine and medium-grained galena, associated with less amounts of chalcopyrite, pyrite, and sphalerite. Free gold occurs scattered through these veinlets, and seems to be associated with the galena. Individual grains of gold were seen as large as pin heads and a few the size of small peas. Much invisible gold is scattered through the quartz and also in the ferrodolomite. Small pieces of rusty quartz when panned produce a very decided yellow streak, due to fine particles of gold. The quartz is rather intimately impregnated with small grains, and traversed by tiny veinlets of ankerite. The easy cleavage of this mineral makes the quartz very friable, and produces by its exidation a buff to brown colour in the zone. Limonite is abundant as an exidation product of the ankerite, and malachite and azurite as alteration products of the chalcopyrite.

Very little work has been done to determine the extent and value of the ferrodolomite zone. At least eight trenches and shallow open-cuts intersect the mineralized zone, and these are spaced through an horizontal length of at least 1,500 feet. It is not certain that the mineralization extends for this distance or that the ferrodolomite zone is continuous, but the evidence suggests that this is the case.

These ferrodolomite zones have irregular transitional contacts with the greenstone, and the evidence points to a replacement of the greenstone along broken or shear zones. The origin of the carbonate minerals is uncertain. Some of the material may be derived from the alteration of the ferromagnesian minerals of the original lavas by hydrothermal processes. The source of the heat, and perhaps of some of the solutions, may have been the Baldie granite intrusive which outcrops about 2 miles to the east, but which may underlie the Fennell formation of Gold Hill at a relatively shallow depth.

No systematic sampling has been done to determine the values, but the presence of free gold scattered over such a length of deposit suggests that the zone might warrant careful investigation.

Wind Pass

This property is located on the plateau, 2 miles southwest of the crest of mount Baldie, at about 5,300 feet. It is now reached by a zigzag pack trail which leaves the main road near the south end of Dunn lake. The property is recorded in the names of Oscar Hargen, Olie Johnson, and Thos. Campbell.

The country rock of the vein is the upper micropegmatite facies of the micropegmatite-pyroxenite sill which trends in a north-south direction just east of the boundary of the Fennell formation. The deposit consists of a quartz vein with a general east-west strike and a northerly dip varying from 35 degrees to 80 degrees. 39850-73

99 A

ANNUAL REPORT

©#_1016

MINISTER OF MINES

TOR THE

YEAR ENDED SIST DECEMBER

1928

BEING AN ACCOUNT OF

MINING OPERATIONS FOR GOLD, COAL, ETC.

IN THE

PROVINCE OF BRITISH COLUMBIA.



PRINTED BY AUTHORITY OF THE LEGISLATIVE ASSENDED.

YILTORIA, B.C.: Princil by CHARLOS F. BASSIERD, Prince to the Ring's Most Revelled Majesty. Role. This group, owned by George Fennell and H. Skoning, of Chu Chua, lies in a Gold Hill Group, south-westerly direction from the Windpass mine. This property has attracted considerable attention this year. On it are exposed some very promising-

1-king outcrops. The values are mainly in gold. Very little underground work has been done on this ground as yet, although it is well worth it. The elevation of the more important outcrops are in the neighbourhood of 4,000 feet above sea-level.

Two parallel veins are exposed for some distance on the surface, the strike being approximately east and west and the ground rising as the veins are followed in a westerly direction. The lower of the two veins is called No. I vein and the upper No. 2 vein. These two veins have the same characteristics: they are both quarizose and carry a small amount of iron pyrites and galena. Their width is around 3 or 4 feet. No definite one-shoot has been developed on the surface as yet, but the gold values obtained here and there on top are good enough to warrant a campaign of underground work. The satisfactory results of such work on the Sweet Home year about a fulle away are an additional argument in favour of this course.

Assay returns on some samples taken by me this season are given below :---

No. 1 Ve	in—	Gold. Oz.	Silver. Oz.
(1.)	Sample across 8 feet (including some mineralized wall-rock)	0.02	0.8
(2.)	Sample taken at same point as (1) on subsequent visit when		
	cut made a little deeper	0.1 0	0.50
(3.)	Sample of well-mineralized material from cut about 100 feet		
	west of (1)	1.60	0.40
(4.)	Sample of well-mineralized material from cut about 50 feet		
	still farther west	0.00	3.50
(5.)	Some of the poorer-looking vein-matter taken from various		
	cuts when going along the vein	0.10	1,2
No. 2 Ve	in		
(1.)	Well-mineralized material from one cut	0,40	2.0
(2.)	Well-mineralized material from cut 100 feet farther west	0.56	0.G
(3.)	Some of the poorer-looking vein-matter collected from two		
	or three cuts on the vein	0.40	2.0

On what is probably an extension of No. 2 velu, a few hundred feet to the west from its most westerly exposure, an open-cat exposes a narrow fissure showing some gauge material in which some hunches of extremely high-grade gold ore have been found. The dip of this fissure α about 50° to the south, although both Nos. 1 and 2 velus dip at around 70° to the north.

Skoning reports some finds of high-grade float elsewhere in the group.

ANNUAL REPORT

OF THE

MINISTER OF MINES

FOR THE

YEAR ENDED 31ST DECEMBER

1928

BEING AN ACCOUNT OF

MINING OPERATIONS FOR GOLD, COAL, ETC.

IN THE

PROVINCE OF BRITISH COLUMBIA



PRINTED BY AUTHORITY OF THE LEGISLATIVE ASSEMBLY.

VIOTORIA, B.C.: Printed by CHARLES F. BANFIELD, Frinter to the King's Most Excellent Majesty. 1929.

C 212

REPORT OF THE MINISTER OF MINES, 1928.

This property is situated on a mountain rising to an elevation of over 4,000 Gold Hill. feet on the cast side of Dunn lake, near Chu Chua, on the Canadian National Ruilway. The mineral claims are situated on the east and west slopes of a southerly ridge of the mountain. A variable gold content has been found at several points along

two zones of shearing in the greenstone formation of the hill. These zones are characterized by the development of a buff-coloured siliceous dolomite and can be traced easily over the surface wherever their outcrops are not obscured by overburden. The two zones are only approximately parallel to one another, the general direction being east and west, with a dip of about 56 per cent. to the north.

Although some high values have been found in spots encountered in some shallow workings on the No. 1 or south zone, the greater possibilities would appear to lie in connection with the No. 2 zone, which had been traced over the surface for a distance of about 1,500 feet and varies from 5 to 15 feet in width. This zone, which is highly silicified throughout, includes numerous seams and stringers of quartz. It was suggested early in the year that a number of short tunnels should be driven along the length of this zone with a view to obtaining an estimate in regard to average values near surface as a first step toward development. A local syndicate was formed for the purpose of carrying out this work, but the work was suspended before completion of the full programme. It is understood that the results obtained from the work so far completed were not highly encouraging.

ANNUAL REPORT

OF THE

MINISTER OF MINES

FOR THE

YEAR ENDED 31ST DECEMBER

1929

BEING AN ACCOUNT OF

MINING OPERATIONS FOR GOLD, COAL, ETC.

PROVINCE OF BRITISH COLUMBIA

. . -

IN THE

PRINTED BY

VICTOBIA, B.C.: Printed by CHARLES F. BANFINLD, Printer to the King's Most Excellent Majesty. 1930.

REPORT OF THE MINISTER OF MINES, 1929.

Gold Hill.

Following the operations upon this property, situated near Chu Chua, on the North Thompson river, by the local syndicate referred to in the 1928 Annual

Report, an interest in it was acquired by A. E. Day, of Kamloops, and further development was carried on by him. A total amount of approximately 550 feet of tunnellingwork was carried out in the attempt to establish a workable gold content in the mineralized zones traversing the property.

The geological features of this occurrence were investigated by the late W. L. Uglow, who reported upon it in the Summary Report of the Geological Survey of Canada, 1921, Part A, as follows:—

"The country-rock is the greenstone pillow lava of the Fennell formation. This rock is traversed in a general east-west direction by shear-zones which have been altered to cream- and buff-coloured masses of siliceous ferrodolomite, through which ramify veinlets and irregular masses of white quartz. In many cases the quartz is broken and the fragments are cemented by ferrodolomite. The contacts between the ferrodolomite and greenstone are, as a rule, transitional. The width of the main ferrodolomite zone varies up to 20 feet. The quartz stringers carry appreciable amounts of fine- and medium-grained galena, associated with less amounts of chalcopyrite, pyrite, and sphalerite. Free gold occurs scattered through these veinlets and seems to be associated with galena. Individual grains of gold were seen as large as pin-heads and a few the size of small peas. Much invisible gold is scattered through the quartz and also in the ferrodolomite. Small pleces of rusty quartz when panned produce a very decided yellow streak, due to fine particles of gold. The quartz is rather intimately impregnated with small grains and traversed by tiny veinlets of ankerite. The easy cleavage of this mineral makes the quartz very friable and produces by its exidation a buff to brown colour in the zone. Limenite is abundant as an oxidation product of the aukerite and malachite and azurite as alteration products of the chalcopyrite.

"These ferrodolomite zones have irregular transitional contacts with the greenstone, and the evidence points to a replacement of the greenstone along broken or shear zones. The origin of the carbonate minerals is uncertain. Some of the material may be derived from the alteration of the ferromagnesian minerals of the original lavas by hydrothermal processes. The source of heat, and perhaps of some of the solutions, may have been the Baldie granite intrusive which outcrops about 2 miles to the east, but which may underlie the Fennell formation of Gold hill at a relatively shallow depth.

"No systematic sampling has been done to determine the values, but the presence of free gold scattered over such a length of deposit suggests that the zone might warrant careful investigation."

Of the total amount of work accomplished under the late management, about 170 feet was represented by drifting and crosscutting on the No. 2 zone.

The work on the No. 1 zone was inspired by reports of values encountered in some diamonddrilling carried out some years ago by the Granby Mining and Smelting Company. This work falled to give any satisfactory results and the seam itself was found to die out in the fractured greenstone, which showed considerable movement towards the west.

The work on the No. 2 zone was carried out at three different horizons. The outcrop of the dolomite-zone was picked up towards the east at a distance of approximately 500 feet from the 0^{-1} with workings. At this point the zone appears to have a normal strike of S. 75° W, and a $d_1^{-1} P$ of 70° north, but the 50-foot tunnel that was started on the outcrop angled away from the 2040 and no satisfactory results as to values were obtained.

At an elevation of about 300 feet vertically above the original workings No. 3 tunnel was driven for a distance of about 250 feet, no general direction being followed. The ground here is very much disturbed and there is an absence of any continuous seam or zone. Fifty feet above this tunnel a well-defined seam, in which there is a quartz vein, was followed for approximately 50 feet. A sample taken across 22 inches of the hanging-wall side on the face of this tunnel assayed: Gold, 0.23 oz, to the ton; silver, 4.0 oz, to the ton. And a sample taken across 22 inches in the foot-wall side assayed: Gold, trace; silver, trace. The face of this tunnel (No. 4) is about 60 feet east of the point where good values are reported to have been found in an opencut where the zone is intersected by crossing fractures. A 60-foot crosscut tunnel was driven to intersect the zone at this last-named point, at a depth of only a few feet below the surface. Two samples were taken from this tunnel, as follows: Across 20 inches on right-hand side of face: Gold, 0.1 oz, to the ton; silver, 1.6 oz, to the ton. Across 20 inches on the left-hand side of face: Gold, 0.68 oz, to the ton; silver, 3 oz, to the ton; lead, 9.2 per cent.

Some further work was done on the west slope of the hill, where originally some high-grade specimens showing free gold were obtained from a narrow seam.

The occurrence of crossing fractures having a general north and south direction, to which the occasional values have been thought to be related, is a feature of the apex of the hill and of the western slope; and the failure to discover appreciable gold or silver content at lower horizons on the eastern side is in support of this theory of the ore occurrence. Between the two sections there appears to have been a throw of the zone for a distance of about 50 feet to the north of its western end, and it would appear that the No. 3 tunnel lies within a faulted area.

A limited amount of work might be devoted to ascertaining whether any promising values are to be found in the lower section of the zone east of the faulted area; whether the occurrence in the No. 4 tupnel shows any sign of improvement in the next 50 feet; and whether any estimate of average values can be arrived at in connection with the outcrops on the western slope of the hill.

APPENDIX A

Gold Hill References

-

ı

1921	Geology of the North Thompson Valley Map area, B.C. by W. L. Uglow. Geol. Survey of Canada, Summary Report, part A p. 99A
1923	Annual Report of the Minister of Mines, p. A153
1928	Annual Report of the Minister of Mines, pp C211-212
1929	Annual Report of the Minister of Mines pp C225-226
1971	Geology of Bonapart Map Area, British Columbia by R. B. Campbell and H.W. Tipper. GSC Memoir 363, p 86

APPENDIX B

Resume

ADDIE, G. G.

Academic Education: B.Sc. Geology, Mount Allison University, Sackville, N.B. - 1958 B.S. (Honours) Geology, Washington State University, Pullman, Washington - 1968 Memberships: Fellow, Geological Association of Canada. Member, Canadian Institute of Mining and Metallurgy Member, Association of Professional Engineers, Geologists and Geophysicists of Alberta Commissioned 2nd Lt. Royal Canadian Military Service: Artillery Undergraduate: Quebec Department of Mines, Employment Record Mapping in Amos area. Iron Ore Co. of Canada, Mapping in Wabush area, Newmont Mining Corp., Mineral Exploration program in the Eskimo Point area of the Canadian Shield. 1958 - Northspan Uranium Mine, Elliot Lake, Ontario, Ore Control Geologist. 1958-1962 - Bralorne-Pioneer Gold Mines, Ltd. Bralorne, B.C., Mine Geologist. 1962-1964 - Granby Mining, Phoenix Copper Division, Grand Forks, B.C., Mine Geologist. 1965-1968 - Cominco, Sullivan Mine, Kimberley, B.C., Special Project Geologist. 1968-1970 - Pend Oreille Mines & Metals, Metaline Falls, Wash., Chief Geologist. 1970-1972 - J.C. Sproule and Associates Ltd. Calgary, Alberta, Exploration Geologist.

Resume continued

Publications

- "Angle of Intersection Using a Stereogram," C.I.M.M. Bulletin, January, 1962.
- "A Simplified Stereographic Projection Solution of the Two Drillhole Problem," Economic Geology, Vol. 57, 1962.
- "A Simple Solution of the Two Drillhole Problem Giving One Answer," Economic Geology, Vol. 59, p. 59, 1964.
- "Silver-Gold Ratios in some Witwatersrand Conglomerates," Economic Geology, Vol. 59, p. 325, 1964.
- "A New True Thickness Formula Based on the Apparent Dip," Economic Geology Vol. 63, 1968.
- "The Metaline District, Pend Oreille County, Washington," Department of Natural Resources, Bulletin No. 61, p. 65-78, State of Washington, Olympia, Washington, 1970.
- "The Reeves MacDonald Mine, Nelway, British Columbia," Bulletin No. 61, p. 29-88, Department of Natural Resources, Washington, 1970.

APPENDIX C

Professional Fees April 20 to April 22 inclusive \$450. Report Writing, drafting Apr. 24 150. Total \$600.

April 14, 1972

Rece	eived from MR. JOSEPH MURPHY	
the	sum of <u>SIX HUNDRED</u>	_ Dollars
for	Geological Consulting on Kamloops Mining Division	<u>property</u>

<u>\$600.00</u>.

George G. Addie, P.Geol.

Je.

CERTIFICATE

I, George G. Addie, of Calgary, Alberta, hereby certify:

- 1. That I reside at 2719 Lionel Crescent, Calgary, Alberta.
- That I am a Professional Geologist registered as a member of the Association of Professional Engineers of Alberta.
- That application is pending for membership in the Association of Professional Engineers of British Columbia.
- That I am a Fellow of the Geological Association of Canada.
- That I personally performed the geological work discussed in this report.
- That I have not, directly or indirectly, received nor do I expect to receive any interest direct or indirect, in the property described in this report.

Dated at Calgary, Alberta this 24th day of April, 1972. George G. Addie, P.Geol.





	CHU CHUA CREEK	HELPYTE INCREASE AN INTERVIEW			17/070300	the second s
	BRITISH COLUMBIA			40.00		(99)(100
	Porteite		A Part New Arrest AT			
willie at a	CONTINUE INTERNAL DAL FEET - FAULDRETAVEL DES LEDURAGE DES MEDICALES - FUEL DAL FEET - FUEL DES MEDICALES - FUEL D	Revenues and Arriston and Arriston and Arriston and Arriston and Arrive	TICOS FORM	4/10/	6) (6) (6)	-10-10-10 -10-10-10
	An opporting the backet of the second					MPLIL.
	To accompany geological report by George G. Addie, P. Geol. on the Dan and Ran claims on Gold Hill, east of Dunn Lake,			СНІ	92 P/B	CREEK E
	Kamloops Mining Division, British Columbia, dated April 24,	1972.				

here	hut	
tad areas at leasts	200 0.0 000 1.0	Statistics and the second
WT 12703. 6. MITT -		and the second second
They serves at easter	to prove them approved a	
1001000-	8.40.	
0.41-01 p*****	leves a series	
Barbas met it grapp with bart.	Control to be set of in a department.	willie for
Sectors at stars	Andre in construct you call.	848 2121 1