

800475

REPORT ON THE  
LAST CHANCE AND FONTENOY CROWN GRANTS,  
GREENWOOD MINING DIVISION  
BRITISH COLUMBIA

FOR

MCKINNEY RESOURCES INC.  
#19 - 777 BARRARD STREET  
VANCOUVER, B. C.

BY

W. G. Hainsworth, P. Eng.  
W. G. HAINSWORTH & ASSOCIATES LTD.  
905 - 837 West Hastings Street  
Vancouver, B. C.

V6C 1B6

Vancouver, B. C.

June 21, 1986

TABLE OF CONTENTS

Page

Summary and Conclusions . . . . . i  
Recommendations . . . . . ii  
Cost Estimates . . . . . iii

Introduction . . . . . 1  
Location and Access . . . . . 2  
Property . . . . . 3  
History . . . . . 4  
General Geology . . . . . 5  
Local Geology . . . . . 6  
Economical Geology. . . . . 7  
Exploration Potential . . . . . 8

Appendices

Appendix "A" Writers Certificate . . . . . 9  
Appendix "B" Bibliographies . . . . . 10

Figures

Figure 1 Location Map following page 2  
Figure 2 Claim Map following page 3

# W. G. HAINSWORTH & ASSOCIATES LTD.

## *Mining Consultants*

SUITE 905  
837 WEST HASTINGS STREET  
VANCOUVER, BRITISH COLUMBIA  
V6C 1B6 (604) 687-6930

### Summary and Conclusions

The Camp McKinney claims of McKinney Resources Inc. consist of two Crown granted claims, the Last Chance and the Fontenoy, located some 12 kilometers north of the village of Bridesville, British Columbia.

The two claims are in an area that merited a great deal of attention at the turn of the century when the Cariboo Mining and Milling Co. (and later successors) was mining the Cariboo vein. Mining at this particular property carried from 1894 through to 1903 with 123,457 tons of ore producing 69,581 ounces of gold (0.563 oz. gold per ton) and 4,359 ounces of silver (0.043 oz. silver per ton). In 1959-1962 this same property, under different management, produced 12,001 ounces gold (1.063 gold per ton) and 14,261 ounces silver (1.263 silver per ton) from 11,291 tons of ore from a fault offset portion of the original vein.

No production has been recorded from the two Crown-granted claims of McKinney but this is due to the inadequate mining approach of the past and the dormancy of the gold price in the intervening period. The revival of the gold price in the mid 1970's has had little effect on the Camp McKinney properties primarily due to the attention given such distinctive localities as Hemlo, Casa Berardi, Hedley, Bralorne and Beardmore.

The fact that one vein structure has produced in the past and that this same structure could extend eastward onto the McKinney claims justifies a thorough investigation of these claims. The writer has recommended a program of exploration in two phases with a total cost of \$220,500. It is recognized in mining circles that the best possibility of finding a producer is next door to a producer. The McKinney claims are well located in this regard.

## Recommendations

It has been better than half of a century since work was done on the Fontenoy and Last Chance claims. Field exploration techniques have improved considerably since the mid 1930's. However during 1980-81, work approximating \$80,000 was done in road building, stripping and trenching on the claims.

It is recommended that the McKinney claims be more fully investigated through surface and subsurface operations. The writer proposes that the Phase I exploration approach be that of a surface examination to allow for a more thorough examination of the two claims.

It is recommended that Phase I be composed of a surface program encompassing a magnetometer and V.L.F. E.M. geophysical surveys, coupled with a geochemical soil survey. The Phase II would be a limited drill program zeroing in on the known underground working and worthwhile targets presented by the Phase I portion of the programs.

The Phase III operation, contingent upon success of the foregoing phases, would be the dewatering of the underground workings and the detailed sampling and mapping of the shaft and drifts.

## Cost Estimates

### Phase IA - Surface Exploration

Grid the two claims into cross lines at 60 meter spacing and run the north-south lines to the boundaries of the two claims.

Line Gridding - 8.3 kilometers	\$ 1,800
Soil Sampling - @ 20 meter intervals	2,000
- assaying 400 samples @ \$12 per	4,800
EM Survey	2,000
Magnetometer Survey	2,000
Equipment Rental	3,000
Billoting and Crew Victualling - 2 men	2,000
Supervision	2,000
Transportation	<u>1,250</u>
	20,850
Contingency 10%	<u>2,150</u>
	\$ 23,000

### Phase IB - SubSurface Exploration

1200 feet of BQ drilling \$30/ft	36,000
Supervision, Transportation and core logging	2,500
Report	<u>1,000</u>
	39,500
Contingency 10%	<u>4,000</u>
	\$ 43,500

TOTAL Phase IA & B \$ 66,500

### Phase II Detailed Drilling

4500 feet of BQ at turnkey \$30/ft	\$135,000
Supervision, Transportation and core logging	4,000
Report	<u>1,000</u>
	140,000
Contingency 10%	<u>14,000</u>
	\$154,000

### Phase III Further Exploration

This is a success-contingent phase with the amount of drilling or underground work dependant upon the proceeding two phases - no cost estimates can be advanced at the present time.

# W. G. HAINSWORTH & ASSOCIATES LTD.

## *Mining Consultants*

SUITE 905  
837 WEST HASTINGS STREET  
VANCOUVER, BRITISH COLUMBIA  
V6C 1B6 (604) 687-6930

### Introduction

The writer was commissioned by the directors of McKinney Resources Inc., (McKinney) to report and make an exploration recommendation on the two Crown-granted claims held by the company in the Camp McKinney area of British Columbia. The property was visited by the writer on June 18, 1986.

McKinney Resources Inc. holdings in this particular area of British Columbia consist of 2 Crown-granted claims. These Crown-granted claims lie on strike with a known past producer - the Cariboo-Amelia Mine. This operation has a recorded production in its early history of some 70,000 ounces of gold and 6,000 ounces of silver. The mine paid over one half million dollars in dividends during its brief operation. Sporadic attempts with variable success have been made to mine further amounts of ore.

Several attempts have been made to mine the McKinney claims with no known record of production or the success of the venture.

With the rapid advance in the price of gold to where it is many fold the \$35.00 per ounce price of the last major effort at the mine site (1959-1962); and with the indication that the price may have established a floor level of \$330 U.S., and with expectations by many economists that the price of gold will continue to rise in value, it is considered that the exploration of the McKinney claims based on past production and location coupled with future potential, is warranted.

### Location and Access

The claim group of McKinney Resources Inc. is located about 9 miles north of the International Boundary, 7 miles (12 kilometers) north of Bridesville and 16 miles (27 kilometers) west of Rock Creek, both localities on the Transprovincial Highway No. 3. The claims are accessed by travelling some 12 kilometers north on the well-gravelled Mount Baldy turn off road with a 370 meter (1200 foot) bush road leading from this point to the main Fontenoy shaft.

The McKinney property is within the Greenwood Mining Division with the claim centering on North  $49^{\circ} 07'$  latitude and West  $119^{\circ} 10'$  longitude. Its National Topographic Series is 82E/3East.

## Property

The West Monashee Mountains property of McKinney is within the Greenwood Mining Division.

The holdings consist of two Crown-granted claims kept in good standing. Figure 2 shows the relationship of the two claims to the adjoining old producer, the Cariboo-Amelia and surrounding claims.

In total the property occupies approximately 38.3 hectares (94.7 acres) with the claims being at an elevation of 1340 meters (4400 feet) in a fairly flat section of the mountain ridge.

## The Claims

<u>Name</u>	<u>Record No.</u>	<u>Date of Grant</u>	<u>Size</u>
Last Chance	L753	Oct. 22, 1897	46.83
Fontenoy	L752	Oct. 22, 1897	47.86

Rock Creek (Jolly Creek) is some 1370 meters (4500 feet) north-northeast of the Fontenoy inclined shaft while Rice Creek is 1035 meters (3400 feet) west of the shaft. If necessary water could be drawn from the Waterloo shaft less than 300 meters (1000 feet) distant.



## History

The early beginning of the area was founded in placer mining well before 1860. In 1884 the first lode deposit (Victoria) was staked on the upper Rock (Jolly) Creek. In 1887 prospecting located the Cariboo vein and interest increased in the area.

The success of the camp lies in its only strong producer, the Cariboo-Amelia, which mined the Cariboo vein from 1894 to 1903. During this period of operation, the mine put through some 123,457 tons of ore from which 69,581 ounces of gold (0.564 ounces gold per ton) and 6,359 ounces of silver (0.052 ounces silver per ton) were recovered. During its production period the mine paid \$509,337 in dividends. In 1899 the highest recovered grade, 1.0 ounces gold per ton, was recorded.

In 1893, the Fontenoy claim sank a shallow inclined shaft on a vein with a different strike to the Cariboo-Amelia structure. In 1899 the shaft was deepened to its present depth. Some drifting and mining is reported.

The area lay dormant for more than a decade other than for sporadic attempts until 1917 when Consolidated Mining and Smelting carried out surface explorations. The Waterloo and Fontenoy shafts were dewatered in 1929 but no work was carried out.

In 1935, a subsidiary of Bralorne Mines, Bralco Development and Investment Co., resurveyed the claims and put 5 diamond drill holes down on the western extension of the Cariboo vein.

In 1939 Pioneer Gold Mines dewatered the various shafts, surveyed and mapped the workings, sampled the stopes and drifts and did some surface and underground drilling.

In 1958, surface drilling by T. McArthur and Associates of Greenwood intersected what was considered the faulted eastern portion of the Cariboo vein. The main shaft was dewatered for the third time and underground operations from the 5 level, 453 feet below the collar of the main shaft, eventually intersected the drill high grade section with the result that from July 1959 to May 1962, some 11,292 tons were extracted with an average grade of 1.06 ounces gold per ton and 1.26 ounces silver per ton.

There has been no production since this period either on the Cariboo-Amelia or any of the other vein structures in the area, due primarily to the fixed price for the metal.

Some interest, primarily surface work, has resulted in the last decade but there has been no local drilling or underground work.

## General Geology

Glacial deposits cover a good portion of the area but near Baldy Mountain in the Camp McKinney area, rock exposures are numerous.

The rocks in the area belong to the Anarchist series of the upper Triassic Era. The Osoyoos granodiorite batholith intrudes the formations to the west and south-west.

The Anarchist series consisting primarily of sedimentary origin formations include pure and impure quartzites, greenstones and limestones. All are interstratified and most are well banded. Alteration has been extensive but no schistosity has been developed within the formations. Recrystallization and silicification are general.

The normal strike of the sedimentary beds is northwesterly with a modest northeasterly dip. Locally there is some folding but of a minor nature. Faulting, however, is widespread and has had noticeable effects on mining operations. The main Cariboo vein was offset to the south at the east end during the initial 1894-1903 mining and was not relocated until the 1958 drilling and subsequent underground operation. The values are reported to have fallen off in eastern drifting.

### Local Geology

The brief examination of rock exposures in the vicinity of the inclined shaft showed the formations to be primarily siliceous argillites. The trend was northwest with the dip to the northeast. Several intercalated bands of highly silicified greenstones were observed in the general vicinity.

A deep gulley to the east of the main working and running north-south could be the surface indication of a fault structure.

## Economical Geology

Mineralization in the Camp McKinney area is confined to quartz veins. The most prevalent sulphide within the quartz vein structures is pyrite, with decreasing amounts of sphalerite, galena, chalcopyrite and occasionally pyrrhotite being present. Native gold has been reported in some locations but gold is generally tied in with the sulphides. The host formations carry little, or no, sulphides.

The Cariboo and Waterloo veins have an east-west trend which cuts across the bedded formations. They generally dip south. In contrast the Fontenoy vein in the water-filled inclined shaft is reported to be contained within a northwest striking shear zone with a moderate northerly dip. The vein material from observation of the shaft dump is moderately pyritized with galena and some sphalerite normally being present. Vein quartz was observed in the sheared material lining the shaft walls.

There is little, if any, evidence to extend the Main Cariboo vein through to the Fontenoy claim, a distance of 610 meters (2000 feet). Information concerning this particular area is sadly lacking as little exploration work, either drifting or drilling, was carried out in the past.

The Waterloo shaft did some rather limited mining in 1899 despite considerable underground drifting. Several other shafts closeby might be related to the same structure.

The Last Chance has a shallow 4.5 meter (15 foot) shaft sunk on a north trending structure.

The inclined shaft on the Fontenoy is reported to carry to a depth of 25 meters (80 feet) with a 55 meter (180 foot) drift at the face. A shallow caved shaft is reported some 67 meters (220 feet) to the northwest but could not be located during the examination. In addition, old reports refer to a 2 foot wide vuggy vein some 183 meters (600 feet) to the southeast upon which a shallow shaft was sunk. Similarly this shaft was not located during the visit. An 1894 Report of the Minister of Mines refers to average values of \$24 in silver and gold coming from the Main Shaft. If true, this would mean gold values in excess of 0.75 of an ounce.

The 280 foot deep Waterloo and Fontenoy shafts were dewatered in 1929 but no work was done. No information was reported.

## Exploration Potential

The opportunity for expansion of the Fontenoy vein system to the east and west appears quite possible. The grade of this structure is not known but the fact that the Waterloo shaft apparently was sunk on the western extension of the Fontenoy vein is a good sign.

Faulting within this general area makes continuity of vein structures very difficult.

The main operational vein of the area - Cariboo-Amelia - extends for some 915 meters (3000 feet) along strike and over 183 meters (600 feet) to depth. Despite the fault conditions of the area it would be expected that this structure could continue on strike and dip to a like distance which could well extend it into the McKinney Crown grants.

Respectfully submitted,

W. G. Hainsworth, P.Eng

APPENDIX "A"

CERTIFICATE

I, W.G. Hainsworth, P.Eng., of Vancouver, B. C. do hereby certify:

- (1) That I am a Consulting Geologist residing at 836 West 13th Avenue, Vancouver, B. C.
- (2) That I am a graduate of the University of Western Ontario, London, Ontario, Bachelor of Science Degree, Honours Geology.
- (3) That I have practiced my profession for some 30 years.
- (4) That I have been a continuous member of the Association of Professional Engineers of British Columbia since 1965 and am a Professional Geologist registered with the Association of Professional Engineers, Geologists, and Geophysicists of Alberta since 1979.
- (5) That I have no financial interest, direct or indirect, in McKinney Resources Inc., and do not expect to obtain any such interest.
- (6) That the information contained in this report is based on a visit to the Last Chance and Fontenoy Claims and perusal of all pertinent information available.
- (7) That consent is herewith given to McKinney Resources Ltd., to use any or all material from this report in information circulars, offerings or shareholders' brochures provided no attempt is made to misrepresent the stated facts of the report.

W. G. Hainsworth, P. Eng. (B.C.)  
P. Geol. (Alta)

To accompany:

Report on the  
Last Chance and Fontenoy Crown Grants,  
Greenwood Mining Division  
British Columbia  
for  
McKinney Resources Inc.  
Vancouver, B.C.  
June 21, 1986

APPENDIX "B"

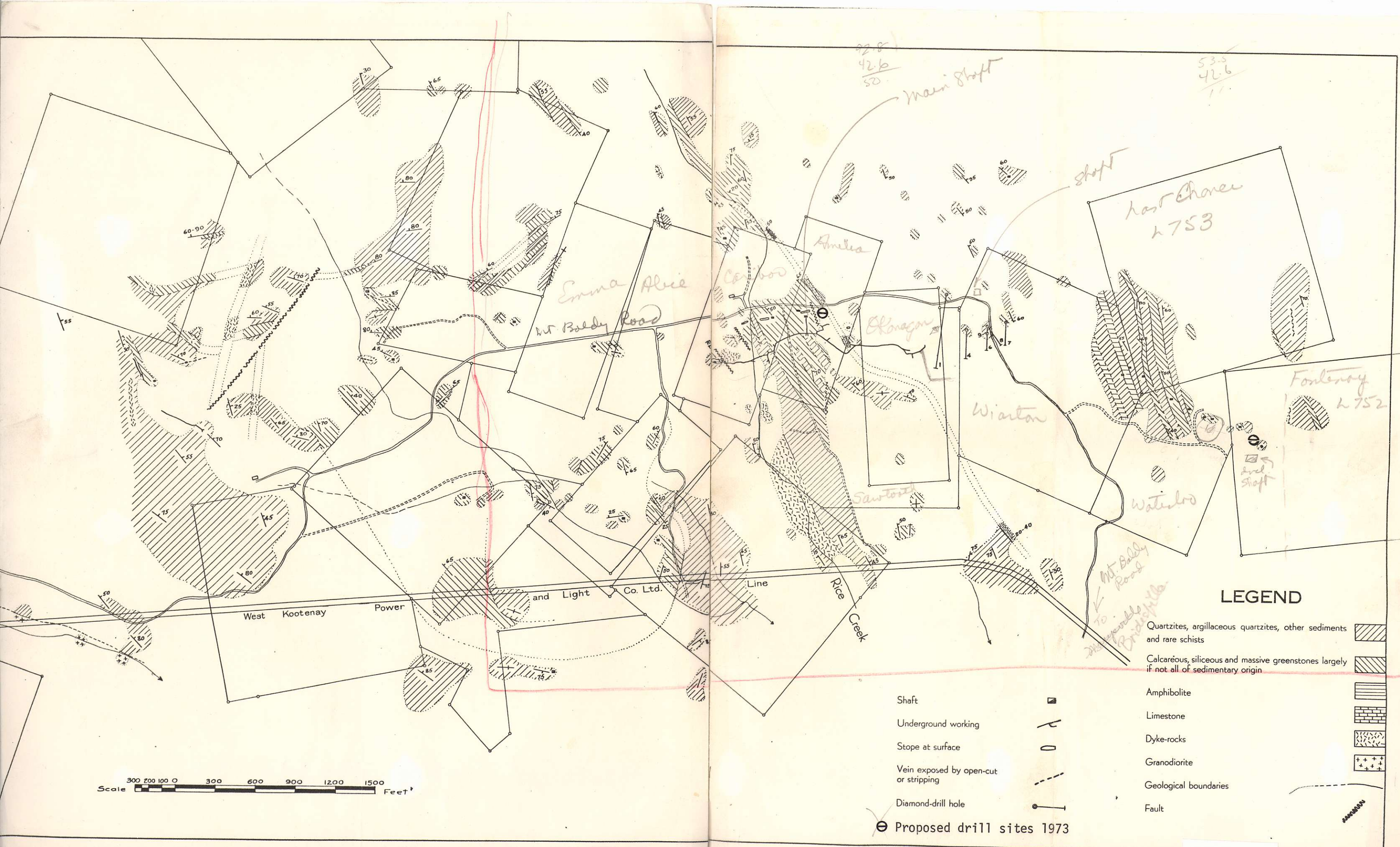
Bibliographies

B. C. Dept. of Mines Bulletin No. 6 M.S. Hedley, 1940

Various B. C. Dept of Mines Annual Reports for 1894, 1896, 1897,  
1898, 1899, 1900, 1901, 1902, 1961, 1962

G.S.C. Memoir 179 W. E. Cockfield, 1935

Report on the Property of McKinney Resources Inc. H. Brodie Hicks, 1979



**LEGEND**

- Quartzites, argillaceous quartzites, other sediments and rare schists
- Calcareous, siliceous and massive greenstones largely if not all of sedimentary origin
- Amphibolite
- Limestone
- Dyke-rocks
- Granodiorite
- Geological boundaries
- Fault
- Shaft
- Underground working
- Stope at surface
- Vein exposed by open-cut or stripping
- Diamond-drill hole
- Proposed drill sites 1973

Fig. 2. Surface geology of Camp McKinney showing surface workings and No. 4 level of Cariboo-Amelia Mine.

Last Chance