

R. W. PHENDLER, P. Eng., GEOLOGICAL CONSULTANT,  
EXPLORATION AND MINING  
7360 DECOURCY CRES., RICHMOND, B.C. V7C 4E9 (604) 271-2588

825486

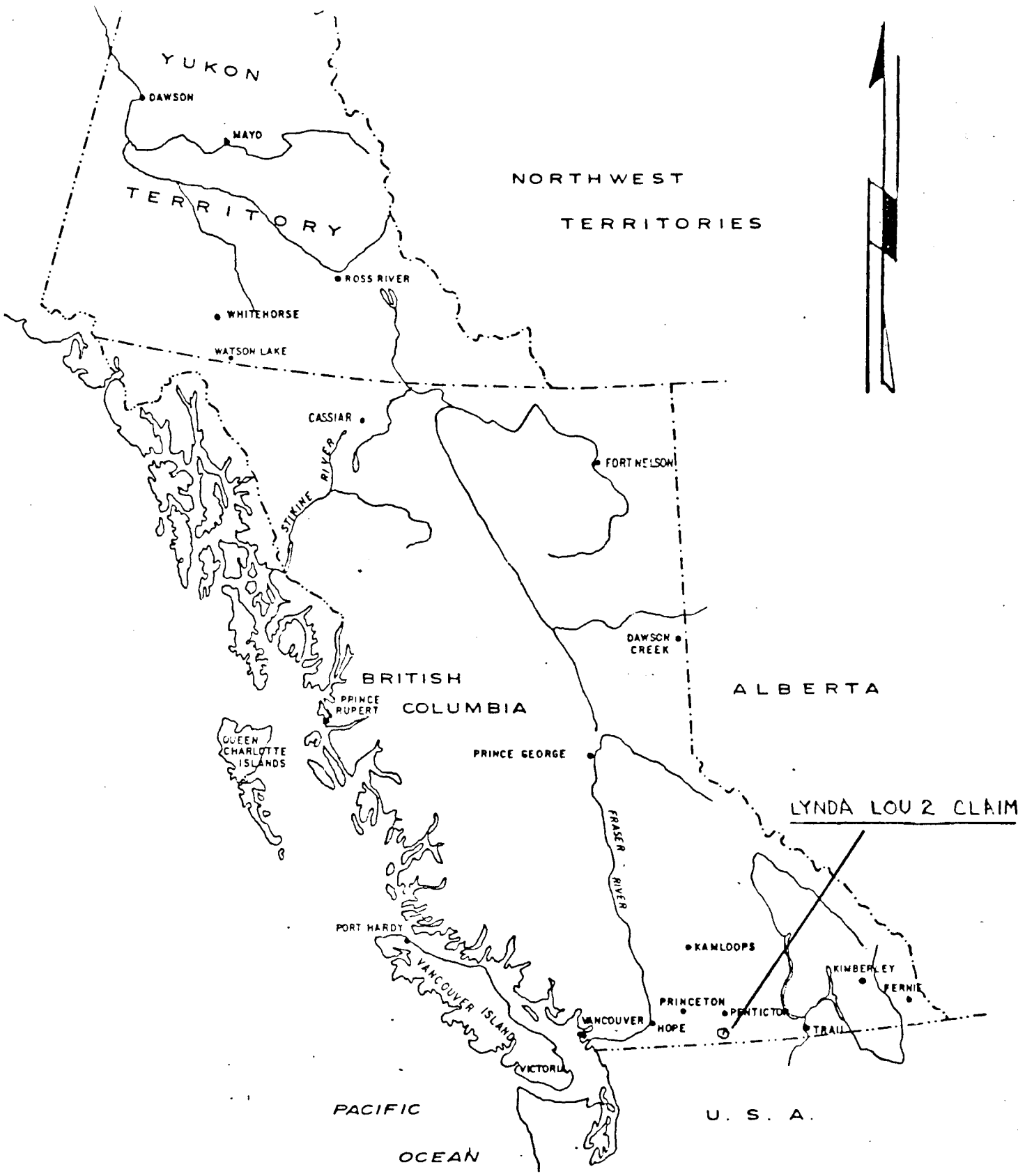
REPORT  
ON THE  
LYNDA LOU 2 PROPERTY  
FAIRVIEW CAMP  
OSOYOOS MINING DIVISION  
BRITISH COLUMBIA

for  
CHECKMATE RESOURCES LTD.

by  
R.W. PHENDLER, P. ENG.

Vancouver, Canada

July 10, 1983



1" = 250 MILES

LOCATION MAP	
VANCOUVER	BRITISH COLUMBIA
<b>CHECKMATE RESOURCES LTD</b>	
<b>LYNDA LOU 2 CLAIM</b>	
SCALE 1:12,672,000	
NTS.	DATE JULY, 1993 FIG. No. 1

C O N T E N T S

	<u>Page</u>
PART "A"	
SUMMARY AND CONCLUSIONS.....	1
RECOMMENDATIONS.....	2
COST ESTIMATE.....	2
 PART "B"	
INTRODUCTION.....	3
LOCATION AND ACCESS.....	3
PROPERTY AND OWNERSHIP.....	4
HISTORY.....	4
GEOLOGY AND MINERALIZATION.....	5
COMMENT.....	7
CERTIFICATION.....	8
BIBLIOGRAPHY.....	9

ILLUSTRATIONS

Figure 1 - Location Map - 1" = 250 miles.....(Frontispiece)	
Figure 2 - Fairview Camp - 1:25,000	10

PART "A"

SUMMARY AND CONCLUSIONS

Lying on the west southwest side of the gold-bearing quartz vein system of the old Fairview mining camp, the Lynda Lou 2 property appears to warrant a modest exploration program consisting of geophysical and geochemical surveying.

The Fairview gold camp is located between Cawston and Oliver in the South Okanagan region of South Central British Columbia and consists of a gold-bearing quartz vein system within a 3 kilometer-long shear zone associated with a granite-metasedimentary contact.

Exploration work and mining was carried out on the Stemwinder and Morning Star properties between 1898 and 1905 and again in the mid-1930's when the world price for gold increased from \$20 to \$35 per ounce.

The quartz vein system consists of a number of lenticular shoots that attain lengths of up to 200 feet with widths of up to 30 feet not uncommon. Widths between one and ten feet are the norm with pyrite, galena and sphalerite occurring in small to moderate amounts. Grades of the veins are somewhat of a question mark but the average of 132 chip samples taken on the Stemwinder property in 1899 averaged 0.27 oz Au per ton. This compares closely with a mill test carried out that year on 353 tons, which also averaged 0.27 oz per ton.

Shipments (probably hand-sorted) from the Morning Star property in 1935 totalled close to 3,000 tons, which averaged 0.53 oz Au per ton.

The quartz veins occur across a width of about 500 feet with the majority within the sheared metasediments. However, a number of gold-bearing quartz veins have also been found within the intrusive granitic rocks to both northeast and southwest.

It appears that the ground along strike from the known Fairview vein system has never received the benefit of modern exploration techniques to check for the presence of hidden veins and it is felt that this should be carried out at this time.

RECOMMENDATIONS

It is recommended that:

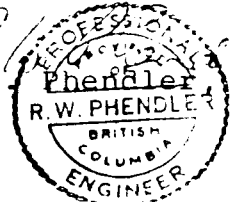
- 1) A grid be established over the Lynda Lou II claim.
- 2) A geochemical survey be carried out over the grid.
- 3) A V.L.F. electromagnetic survey and a magnetometer survey be carried out over the grid.
- 4) Prospecting and geological mapping be carried out over the grid.

COST ESTIMATE

1) Establish grid - 20 miles at \$300/mile .....	\$6,000
2) Geochemical survey (for gold) .....	8,000
3) Assay determination .....	3,500
4) V.L.F. and magnetometer survey .....	9,000
5) Prospecting and geological mapping .....	5,000
6) Engineering, geology, reports, etc. ....	6,000
7) Travel and accommodation .....	<u>6,000</u>
	Total - \$43,500
	15% Contingencies - <u>6,525</u>
	Total - \$50,025

The sum of \$50,000 should be made available at this time to carry out the above program. If results are favourable, additional funds may be required to carry out additional exploration work.

Respectfully submitted,

R.W.  P. Eng.  
R.W. PHENDLER  
BRITISH COLUMBIA ENGINEER

PART "B"INTRODUCTION

At the request of the Board of Directors of Checkmate Resources Ltd., the writer examined the Lynda Lou 2 claim on July 2 , 1983. He was accompanied and guided by Mr. G. Bowes.

Many pieces of quartz float were seen. The legal corner post and sufficient claim lines were observed to satisfy the writer that the claim was staked in accordance with the Mineral Act of British Columbia.

LOCATION AND ACCESS

The Lynda Lou 2 claim is located at an elevation of 3,000 - 5,500 feet (900 - 1,670 meters) about 300 kilometers east of Vancouver and 45 kilometers south of Penticton in south central British Columbia. It lies close to a dirt road between Cawston on Highway 3 and Oliver on Highway 97 and is accessible (about 10 kilometers) from both towns. This back road passes through the old abandoned mining camp of Fairview, which was active in the 1930's.

The claim lies on a westerly facing slope of moderate topography with the lower levels being grass covered (below 4,000 feet) and the higher elevations having a moderate tree cover of mixed varieties.

The area is relatively dry with only a few intermittent streams flowing west and northwestward.

No buildings exist on the property.

## PROPERTY AND OWNERSHIP

The Lynda Lou 2 claim contains 20 units (4 south, 5 west) with the legal corner post being located in the northeast extremity. They were recorded on May 25, 1983 and have been acquired by Checkmate Resources Ltd. Ltd.

## HISTORY

The Fairview Camp is one of the older mining camps in British Columbia with work being carried out on the Stemwinder property as early as 1899. At that time, the Main level drifting totalled 780 feet on a gold bearing quartz vein that was continuous and measured up to 20 feet in width. A raise to the upper level was continuously in "ore". A lower crosscut also cut the main vein where it was 7.0 feet in width. An average of 132 samples taken in the mine and a mill test of 353 tons averaged about 0.27 oz Au per ton. No work was carried out in the following year (1900) due to the bad effect the Boer War was having on the English money market. Canadian capital was acquired and it was intended to sink the shaft to the 500 foot level. This shaft was later sunk and a considerable amount of "ore" was extracted up to 1905. Three distinct veins were worked to a depth of 500 feet.

The Morning Star (Fairview) Gold Mines, Ltd., held about one mile of the quartz vein system and it is reported that several hundred tons of "rich ore" was mined from surface around 1900. Little was done until 1933 when underground work commenced. Two strong gold-bearing quartz veins occur on the property, in sheared greenstone with several lesser veins both in greenstone and in granite. During 1935, the property shipped 2,983 tons averaging 0.53 oz Au per ton. The price of gold had recently been increased from \$20 to \$35 per ounce.

It was considered that the Stemwinder property, which is located 2.5 kms northeast of the Lynda Lou 2 claim, was the principal producer of the camp.

It is understood that Cominco Ltd. has been investigating the Fairview Camp recently and may carry out some diamond drilling during 1983.

### GEOLOGY AND MINERALIZATION

The area in which the Lynda Lou 2 claim is located is underlain by a series of schists, quartzites and minor crystalline limestones known as the Kobau Group of Carboniferous Age. All these rocks have a pronounced schistosity, striking northwesterly and dipping at varying, generally steep angles to the northeast.

Intruding these metamorphic rocks, which are believed to have been derived from sedimentary formation, is a plug of quartz diorite considered to be part of the Nelson plutonic group of Cretaceous Age. This plug is oval in shape measuring about 3 kilometers in length and is located just east of the Lynda Lou 2 claim. It is medium grained, flesh coloured to light brown and locally has a gneissic structure.

About 500 meters to the north of the Nelson quartz diorite plug is an elongate intrusive of light pink to grey, medium to coarse-grained granite locally known as the Oliver intrusive but grouped as part of the Valhalla intrusives. It is considered to be younger than the Nelson intrusives but also of Cretaceous Age.

Two types of dykes occur in the area, a felsitic type and a more basic type, probably a diabase.



Mineralization in the Fairview Camp consists of a series of gold-bearing quartz veins associated with a strong shear zone which runs along the contact between the meta-sediments (Kobau formation) and the Nelson granodiorite (see Figure 2). This shear zone is about 3,000 meters in length and the vein system often has as many as five shoots parallel to one another. Widths of up to 30 feet have been reported as well as small amounts of pyrite, galena and sphalerite.

The veins occur, 1) within the schist conforming with the schistosity; 2) within the schist crosscutting the lineation; or 3) within either of the two granitic intrusives. The first type has received most attention and probably was the source of most of the production. The potential shear zone curves with the greenstone-granite contact changing from a strike of N 15° W in the south to N 70° W in the northwest.

Individual veins often attain lengths of 200 feet or more and widths in the 7 - 12 foot range were common. No deep exploratory work has ever been carried out in the camp nor has it been reported that the zone terminates along strike at either end.

The Susie property, which lies three kilometers north of the Lynda Lou 2 property, consists of a wide, flat-lying quartz vein striking northeasterly. Width is about 10-15 feet and is within the Valhalla granite. It was reported that a considerable tonnage had been developed by underground workings and that a larger tonnage was indicated by surface diamond drill holes.

"High" gold assays were reported on the Torres Group of claims, which lie 4 kilometers to the north within

granites. The quartz vein strikes E-W and dips  $40^{\circ}$  to the north.

Old records show very little in the way of grade other than that samples taken from the Stemwinder property averaged 0.27 oz Au and that one year's production (3,000 tons) from the Morning Star claim averaged 0.53 oz Au per ton. Undoubtedly this material was hand sorted before shipping, as was the practice at that time (1935).

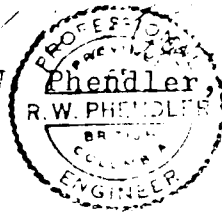
#### COMMENT

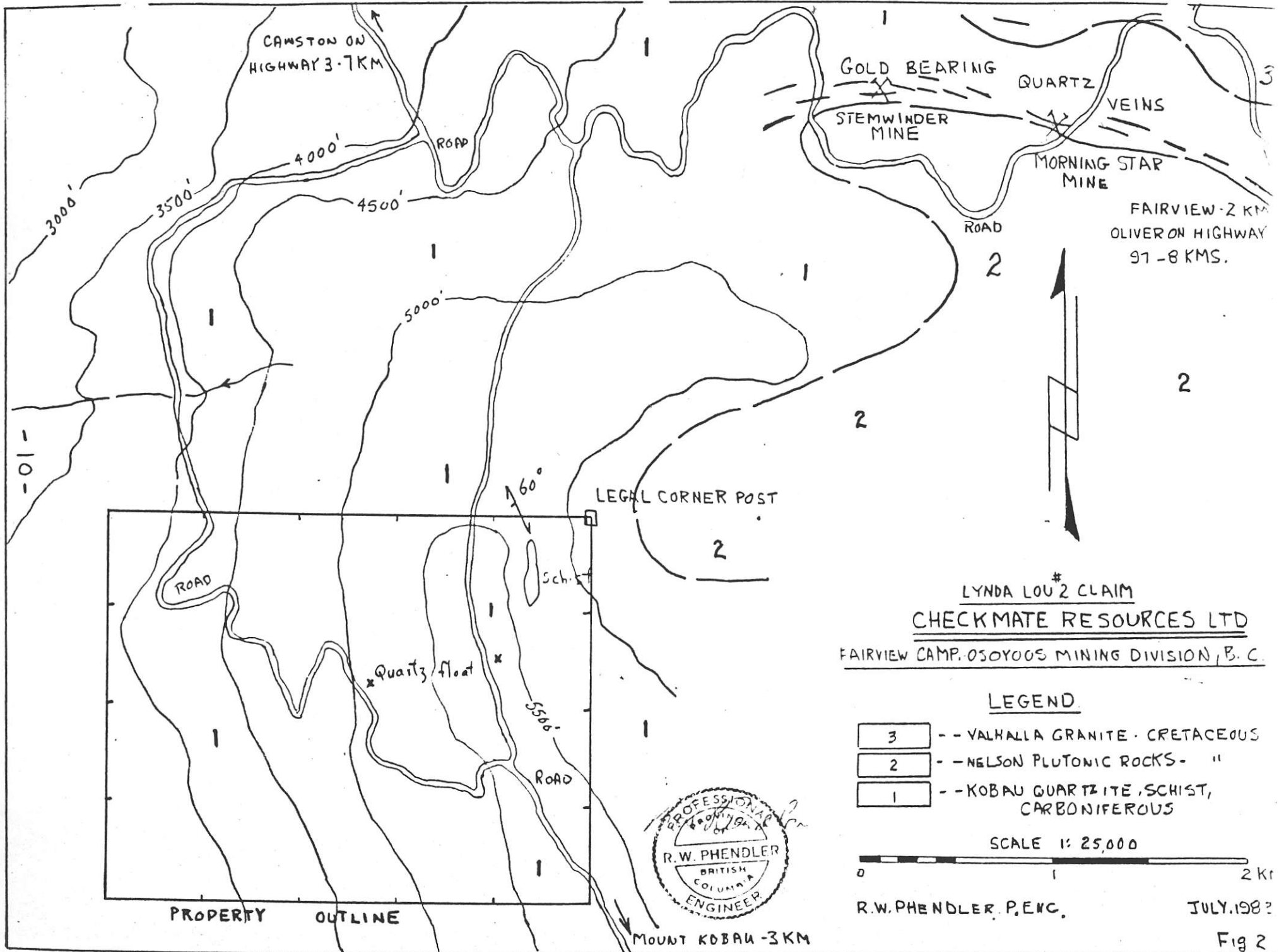
There appears to be a good possibility that the gold-bearing quartz veins and the Fairview shear zone continue to follow the north edge of the Nelson granite intrusive. Or that other parts of the contact zone may contain similar type quartz veins.

An examination of Figure 2 shows that the potential zone may continue to the vicinity of the Lynda Lou 2 claim and that veins may be obscured by overburden. This possibility exists and modern exploration techniques (geochemistry, geophysics) may disclose the presence of shear zones (hopefully with quartz veins) or anomalous gold values in soils.

Respectfully submitted,

R.W. Phendler, P. Eng.





# Boise Creek Exploring Two South Central B.C. Gold Prospects

Copied into K.A. Files  
82E4  
Jan 84  
82E

by Sam Stone

As yet non-trading, Vancouver-based Boise Creek is planning for first stage exploration on the Lynda Lou 1 property lying on the west southwest side of the gold bearing quartz vein system of the old Fairview Mining Camp near Oliver in the south Okanagan area of south central British Columbia.

The Lynda Lou is at an elevation of 3,000 to 5,500 feet and lies close to a dirt road between Cawston on Highway 3 and Oliver on Highway 97. The dirt road passes through the abandoned Fairview camp.

Professional Engineer R.W. Phendler has recommended that a grid be established over the claims and that geochem, VLF electromagnetic and magnetometer surveys be carried out along with prospecting and geological mapping.

The Fairview Camp was active between 1898 and 1905 and was re-activated in the mid '30's when the world price for gold rose to \$35.00 and ounce from \$20.00. The Stemm-winder and the Morning Star properties were the producing mines in the camp.

In 1899 drifting on the Stemm-winder totalled 780 feet on a continuous gold bearing quartz vein measuring 20 feet in width. A raise to the upper level was continuously in ore and a lower crosscut also cut the vein where it was 7 feet in width. In this year an average of 132 samples taken in the mine and a 353 ton mill test averaged about 0.27 ounces of gold per ton. A shaft was subsequently sunk to the 500 foot level and three distinct veins were worked to a depth of 500 feet and a considerable amount of ore was reported extracted.

The Morning Star Mine held about one mile of the quartz vein system and in 1900 several hundred tons of rich ore was reported mined from the surface.

Little further work was done on the Morning Star until 1933 when underground development started. Two strong gold bearing quartz veins in greenstone occur on the property with several lesser veins in both greenstone and granite. In 1935, 2,983 tons of ore averaging 0.53 ounces of gold per ton was shipped.

The general mineralization of the Fairview Camp is a series of quartz veins associated with a strong 3,000 foot shear zone, the vein system often has as many as five shoots parallel to each other and widths of 30 feet have been reported. Individual veins often attain lengths of 200 feet or more and widths of 7 to 12 feet are common. No deep exploratory work has been done and, naturally, no modern survey and exploration techniques have been made on the property.

Three kilometres north of the Lynda Lou is the Susie property which reported considerable ore tonnage from underground workings. Four kilometres north are the Torres

Group of claims and closer to the Lynda Lou the Tin Horn claims of Vancouver-based Lawrence Mining are showing a very significant 150 metre by 200 metre gold-lead-zinc anomaly.

The easily accessible 20 unit Bell Property near Olalla also in south central British Columbia is a further area for Boise's future exploration plans.

The Bell Property lies adjacent to the Shepherd-Sunrise Mine, a minor producer which shipped a few hundred tons of 0.53 ounce of gold ore in 1962 from quartz veins that could project on to the Bell. Three east trending veins are reported to have drill indicated reserves of 3,100 tons averaging 0.84 ounces gold and 1.99 ounces silver per ton.

The Shepherd-Sunrise was held by Friday Mines during the early sixties, the property then covering the northwest part of the ground now

held by Boise Creek. Geological mapping, trenching and diamond drilling was carried out.

Mineralization on the Bell consists of a number of erratically trending sulphide zones, with two showing on an east-west strike. The Hillside showing in the southeast corner of the property, with one short caved adit developed on a narrow sulphide zone and the Roadside showing to the east, consisting of a number of narrow sulphide zones which appear to be an extension of the "Something Good" prospect on an adjoining property to the west, where the #1 adit followed a 4-16 foot wide shear zone for 350 feet, the first 110 feet of which averaged an uncut 0.42 ounces of gold per ton across 1.86 feet.

Professional Engineer Phendler has recommended a \$50,000 program of geochemical and geological survey, prospecting, mapping and trenching.

