NORTHWEST GEOLOGICAL CONSULTING LTD.

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REPORT ON THE CARIBOO RIVER
PLACER GOLD PROPERTY

of
BIG VALLEY RESOURCES INC.

by
Uwe Schmidt, B.Sc., F.G.A.C.

July 8, 1986

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1. INTRODUCTION

The writer was commissioned by Big Valley Resources Inc. to summarize the work carried out to date on the company's Cariboo River placer mining property. The writer examined the property on May 2, 1986, and carried out a compass survey of the primary area of interest.

Big Valley Resources Inc. is a B.C. incorporated non-reporting company which owns a gold placer mining property northeast of Likely, B.C.

The company's placer leases are located in the historic Cariboo placer mining area which has produced gold since the 1860's. A testing program was carried out from late April to the end of May 1986. Modifications were made to the recovery plant and production commenced in June.

Three gravel types have been outlined with an estimated 3 year mining reserve, based on test work carried out to date. The geology of the property suggests that further testing will likely extend present reserves.

2. PROPERTY, LOCATION AND ACCESS

Big Valley Resources Inc. owns a group of placer leases in the Cariboo Mining Division. The Cariboo River property is located 6 km northeast of Likely, B.C. The Likely area is approximately 75 km, by road, northeast of Williams Lake, B.C. The lease numbers are as follows:

Cariboo River property

PL 14521

PL 14334

PL 10974

PL 10631

The company acquired all interest in these leases through purchase or staking. There are no work commitments related to the purchased leases.

The property is accessible by two-wheel drive vehicle via the Likely-Keithley road.

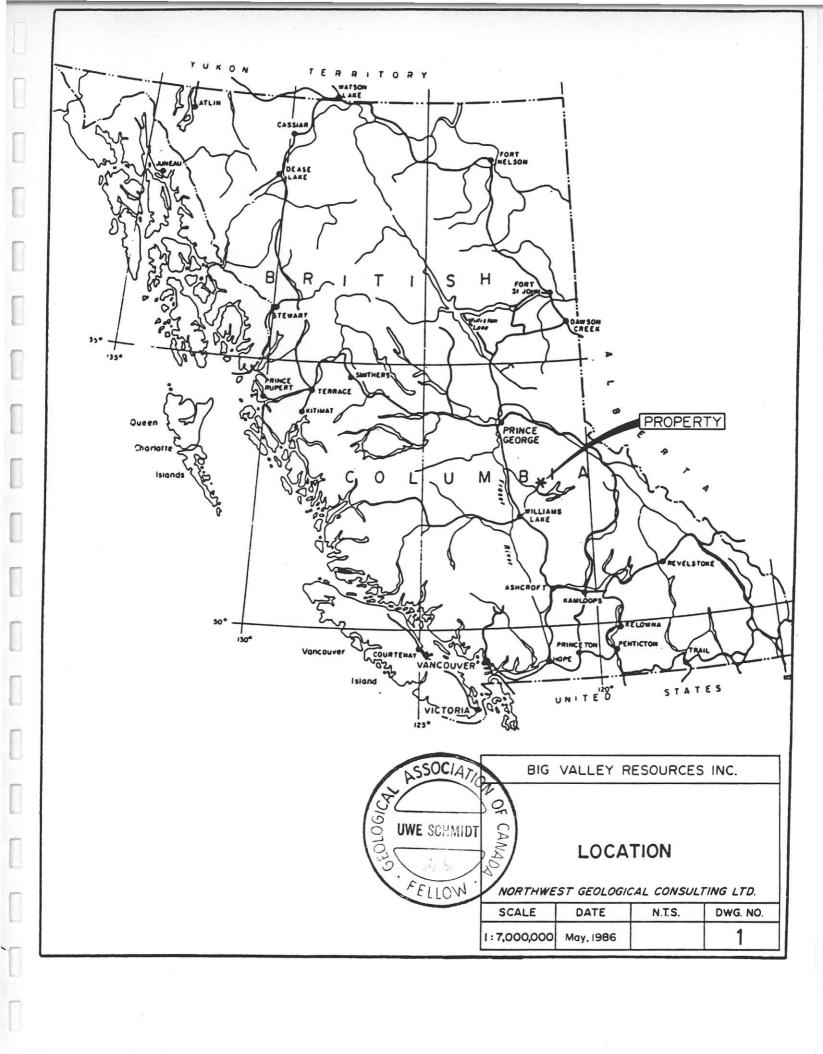
3. REGIONAL GEOLOGY

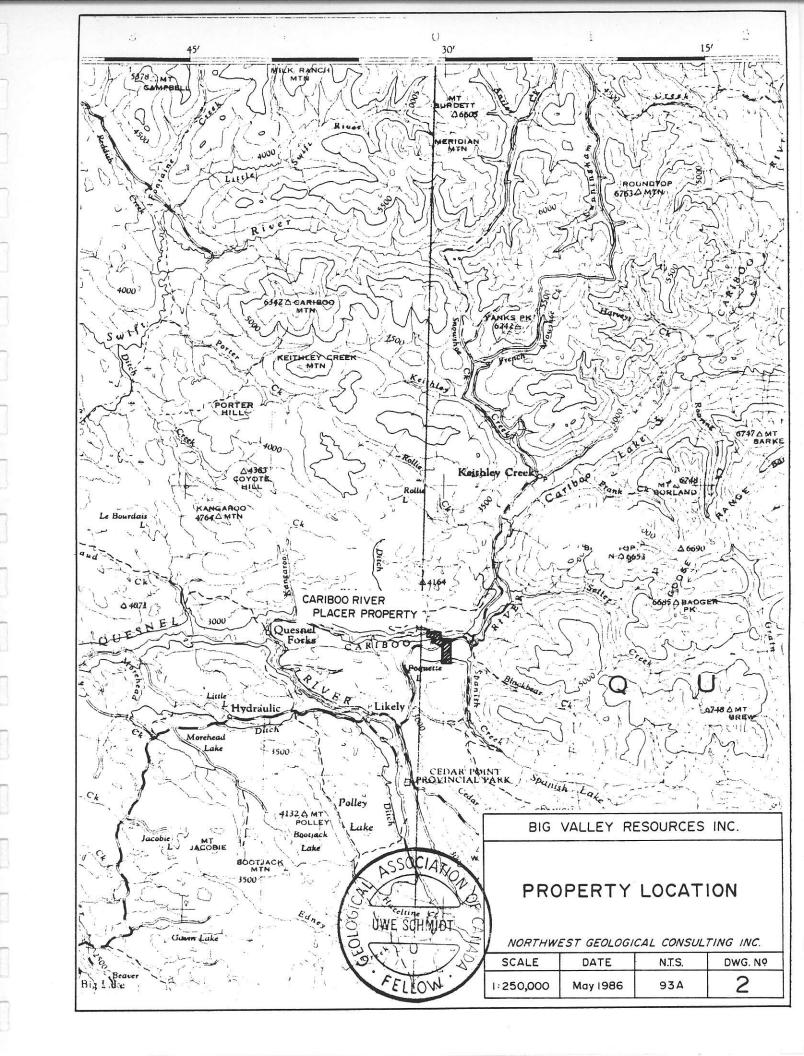
The property lies at the boundary between the Quesnel Trough and Omineca Terrane. The Cariboo River property is underlain by medium grey lustrous phyllites of upper Triassic age. Bedrock geology has no direct bearing on the placer deposits but this major geologic boundary is associated with bedrock and placer gold occurrences on a regional scale.

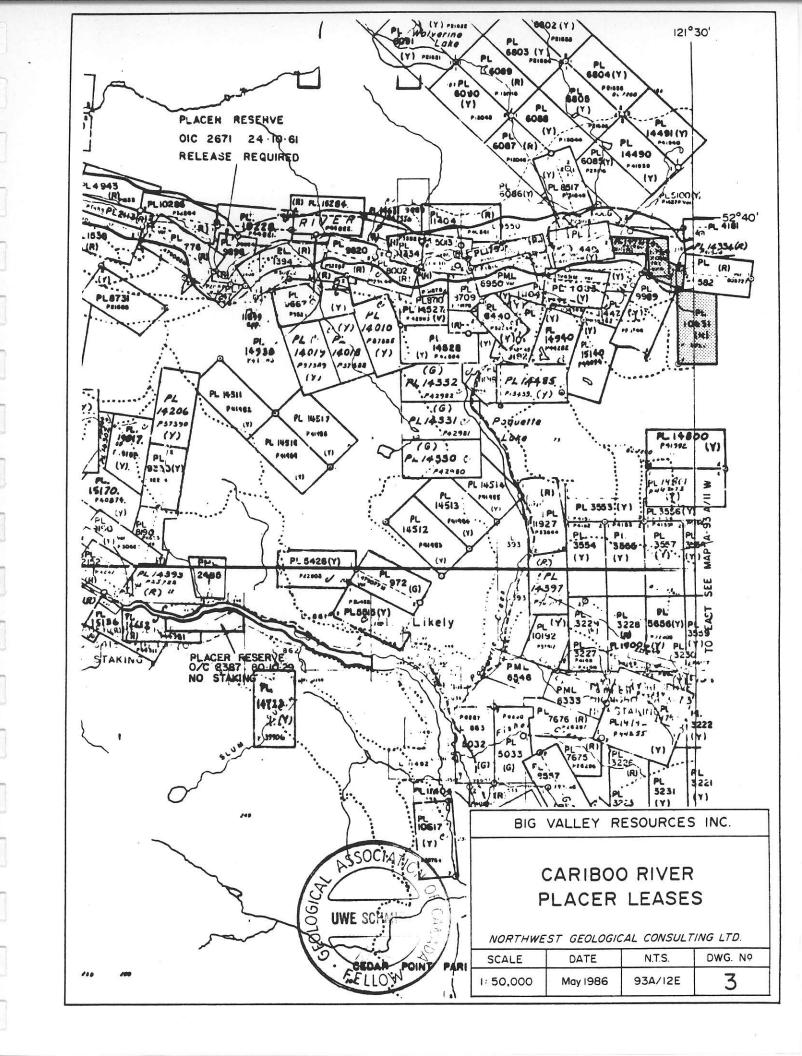
4. LOCAL GEOLOGY

The gold bearing gravels on the Cariboo River property can be divided into 3 varieties. These occur on a large bench on the south shore of the Cariboo River.

The largest volume of gravel is a poorly sorted, sandy, cobble bearing, glaciofluvial deposit. Fine gold flakes occur uniformly throughout a 2 m to 6 m thickness. This area is labelled Lower Bench in fig 4.







The unit is horizontally stratified, poorly sorted, and lacks evidence of stream channel deposition. The base of the upper gravel is marked by a 2 - 3 metre thick blue-green clay horizon. Similar gravels occur below the clay to within 10 metres of bedrock. No test work has been carried out on gravels below the blue clay horizon.

A coarse, red weathering, pre-glacial channel is exposed in the bottom 10 meters. This channel is made up predominantly from clasts of the local grey phyllite. Abundant pyrite and ferricrete cementation are two features which help distinguish this from glacial gravel deposits.

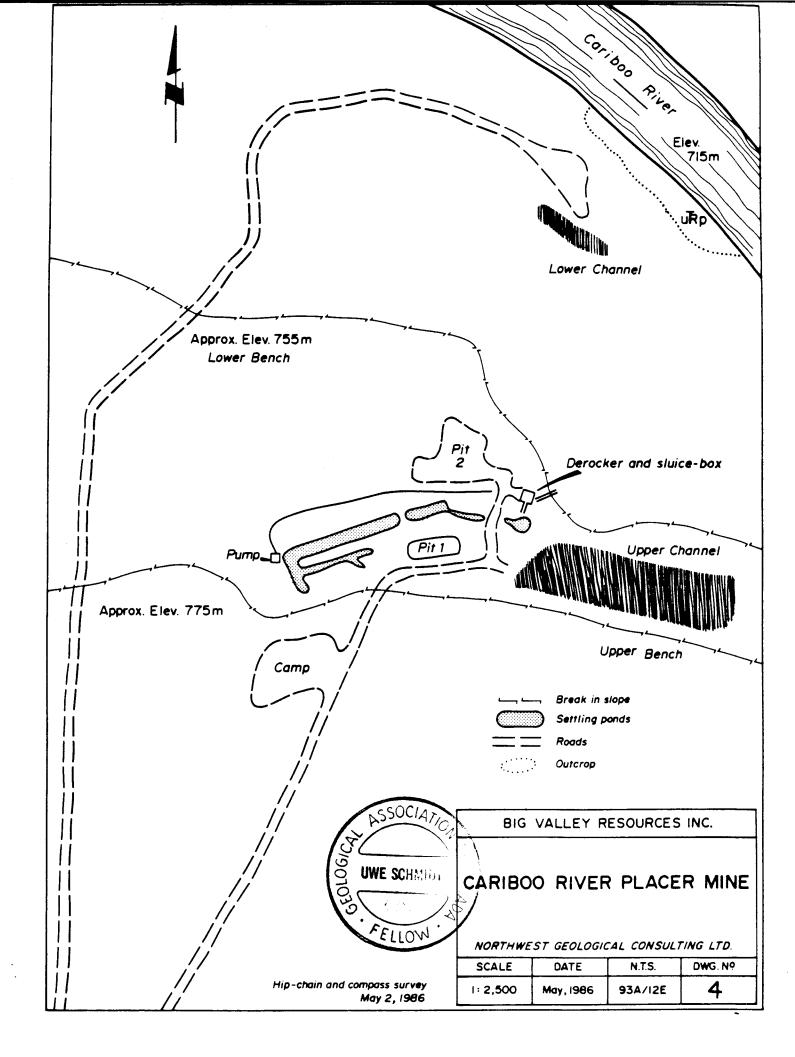
Limited production from this channel is reported by the previous operator to have yielded approximately \$10/yd at present gold prices, or about 0.02 oz/yd.

A coarse boulder and pebble bearing glaciofluvial channel was uncovered at the time of the writer's visit. This new channel is covered by a distinctive blue boulder clay till. Stripping of this channel commenced at the time of the writer's visit.

5. EXPLORATION TO DATE

Big Valley commenced large scale testing of the Cariboo River bench gravels in late April 1986. Prior to this, test samples ranging from 0.75 to 76 cu. m. in size were run through a portable sluice box.

At the time of the writer's visit, production scale testing of the upper glaciofluvial gravels was underway. The



upper 2 to 3 metres were being processed at a rate of about 600 to 760 cu. m./day. The washing plant is a combination Derocker and sluice box with a capacity of about 76cu. m./hour.

The initial test work indicated gold concentrations of about \$2 to 3/yd., or 0.004 to 0.006 oz Au/yd. The larger scale test work was not complete at the time of examination but early recoveries indicate an average gold content in that range. It was apparent though that a considerable loss of the fine gold fraction occurs in the larger recovery plant.

A previously unknown high level channel was discovered during this time. This channel is higher grade and a single one yard sample from the upper channel is estimated to have returned in the order of \$10/yd or 0.02 oz/yd.

The writer surveyed the mine site and measured gravel thicknesses. From this a reserve of approximately 300,000 yards (230,000 cu. m.) was calculated for the upper gravels. Although the lower pre-glacial channel is poorly exposed, the dimensions of the area, indicate a 100,000 yard (76,500 cu. m.) potential reserve. The depth of the upper channel has not been determined. The long axis of the channel has been traced for about 200 metres. It appears likely that this area also has a potential in excess of 100,000 yards. Total reserves at the time of the writer's visit were estimated to be sufficient for a mining life of about 3 six month seasons.

Since these reserve calculations were made, Mr. L. Tattersall, president of Big Valley Resources Inc., reports that modifications to the gold recovery system have been

completed. Modifications to the system include: a shortened sluice box, installation of a screening deck and 2 vibrating riffle machines. In this system, washed gravels from the Derocker are screened to -1/4". This fraction is pumped to the two vibrating riffle machines. Virtually all the fine gold is recovered. Recoveries are reported to be \$3 per yard and costs are approximately \$2 per yard.

Production during the past month has been 530 cu. m/day. The plant capacity is 760 cu. m/day. The company has purchased a 10 yard loader to replace the 5 yard loader now used. This will bring production up to design capacity.

6. RECOMMENDED WORK PROGRAM

A program of bulk sampling and selective drilling is recommended on the Cariboo River property. In particular, the gravels underlying the blue-green clay horizon should be tested. There is no difference in appearance between these and the gold-bearing gravels. If these gravels are gold-bearing and economic, It would greatly increase reserves.

7. BIBLIOGRAPHY

- Cockfield, W.E. and Walker, J.F., (1932) Summary Report, 1320, Geological Survey of Canada
- B.C. Ministry of Mines, Annual Report, 1902
- Poloni, J.R. (1985) Report on the Cariboo River Placer Claims, Big Valley Resources Inc., Unpublished Report.

Appendix A

1

STATEMENT OF QUALIFICATIONS

- I, Uwe Schmidt, of 656 Foresthill Place, Port Moody, B.C. do hereby declare:
- (1) I am a 1971 graduate of the University of British Columbia with a B.Sc. degree in Geology.
- (2) I am a Fellow of the Geological Association of Canada.
- (3) I have practiced my profession continuously since graduation.
- (4) Since graduation, I have managed various mineral projects in the Yukon Territory, British Columbia and Ontario.
- (5) I am a director and sharsholder of Big Valley Resources Inc.
- (6) This report is based on a field examination of the property and on selected publications and reports.

UWE SCHMIDT

July 8,1986 Port Moody, B.C Appendix B

COMPANY PROFILE

Big Valley Resources Inc. is a British Columbia incorporated resource company with interests in placer leases and mineral claims totalling 287 units. The company has been funded to this stage by over 200 small private investors. It is the company's intention to list its shares on the Alberta Stock Exchange.

The board of directors and employees at the mine site are long time local Cariboo area residents and experienced placer miners. The company currently employs 8 personnel on a rotating basis.

It has been the company's corporate philosophy to employ local residents and to use local suppliers in the Likely area.

Appendix C

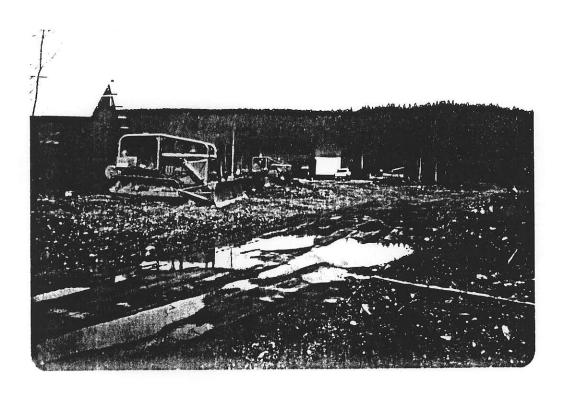


Photo 1 Cariboo River property camp

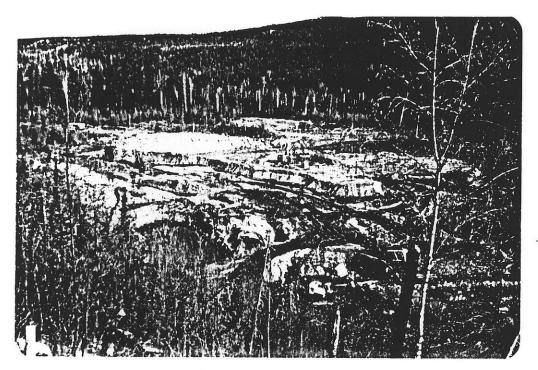


Photo 2 Lower bench, Cariboo River property

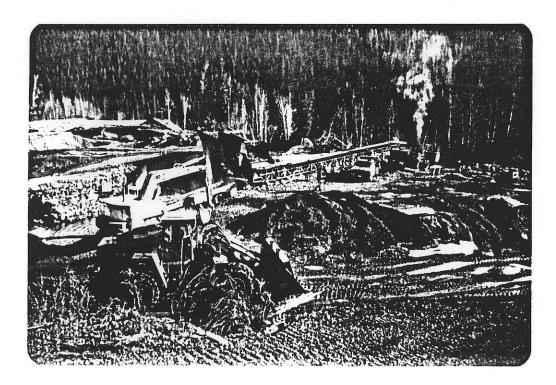


Photo 3 Derocker, sluice box, Cariboo River property

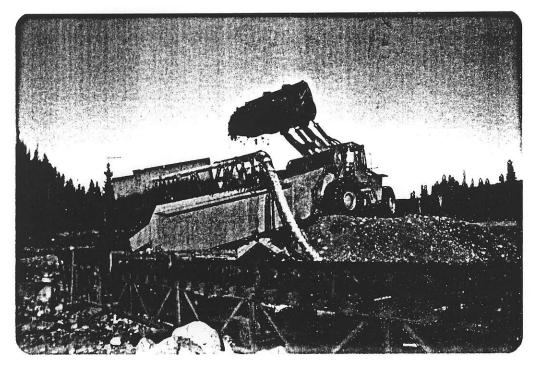


Photo 4 5 yard loader dumping into Derocker