

92H/6E

CAMP NO. 1 & NO. 2 CLAIMS #5053

Situated on Ladner Creek 12 air miles N. E. of Hope, B.C.

> New Westminster M.D. British Columbia

> > on behalf of

CAROLIN MINES LTD.

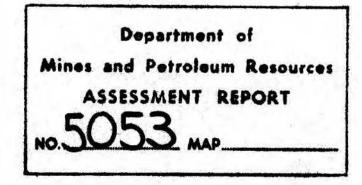
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Report by: D. Griffith, B.A. B.Sc. July 15, 1974 Delta, B.C.



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### PART A

#### A-1 PREAMBLE

During the summer of 1973, Carolin Mines Ltd. located two<sup>-</sup> mineral claims, (Camp No. 1 and No. 2) at the confluence of Ladner Creek and the Coquihalla River in Southern B.C. The claims partially cover an old gold prospect and the purpose of the work was to determine (if possible) the extent of mineralization.

This report describes the work completed to date (July 15, 1974), the methods used and the results obtained. The majority of the exploration expenditures incurred by Carolin Mines Ltd. has been submitted for assessment work credits, and assessment details are contained in the last section of this report.

#### A-2 SUMMARY AND CONCLUSIONS

 Carolin Mines Ltd. holds two (2) claims (Camp No. 1 and Camp No. 2) at the confluence of Ladenr Creek and the Coquihalla River in Southern B.C.
The claims cover an old gold prospect, and one grab sample from the old workings reportedly (verbal communication) carried 11 oz. Ag per ton.
Since July 30, 1973, Carolin Mines Ltd. has conducted exploration work on the claims, including:

a) Geological mapping of the claims and the immediately adjacent area,

b) approximately 3/4 line miles of detailed reconnaisance geochemical soil sampling surveys.

c) prospecting of the claims and the area immediately adjacent.

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In excess of eight hundred dollars (\$800.00) has been spent on the project to date.

4. Geological Mapping was completed at a scale of 1'' = 400', and preliminary analysis indicates a major fold in the area.

5. Geochemical soil sampling of the "B" horizon and subsequent analysis for Au, Ag, As and Cu has been completed. An anomalous and erratic zone was encountered over 350' along one line, and is open to the Northwest. Au, As and Cu gave good definition. The anomaly coincides with a 15 ' crosscut and what is believed to be an old trench approximately 200' long, and a winze of unknown depth. All the values obtained for Ag were above that normally found in soils. Statistical analysis of the data was not conducted due to the small number of samples (55).

6. One rock sample from the dump associated with the winze yielded trace amounts of Au and Ag.

7. The considerable effort extended by the old timers, the presence of a major fold structure, and the soil sampling results to date warrant additional work in the area, and an extended soil sampling program for Au, Ag, As and Cu is recommended. It is also recommended that the claims group be extended.

### PART B SETTING

# B-1 LOCATION AND ACCESS

The property is situated some 12 air miles E.N.E. of Hope, B.C. at the confluence of Ladner Creek and the Coquihalla River. Road access to the claims is via a logging/pipeline road up the Coquihalla River from Hope. The road is easily passible by car during the snow free months.

The National Topographic Systems Code for the claims is 92 H/6 (East  $\frac{1}{2}$ ); the latitude is 49<sup>o</sup>29' N and the longitude is 121<sup>o</sup>15' W. (Figure 1)

### **B-2 PROPERTY**

Carolin Mines Ltd. of #811 - 850 West Hastings Street, located two claims in the New Westminster Mining Division, which are shown on B.C. Department of Mines' Claim Map 92 H/6E (M).

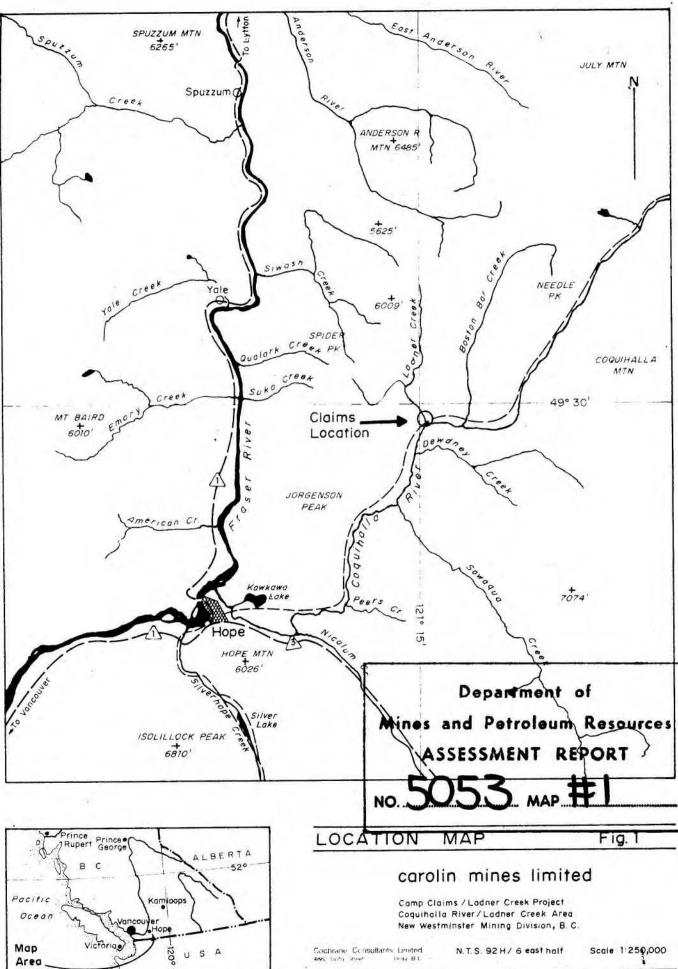
The following table lists pertinent claims information:

<u>Claim Name(s)</u>		Record No.(s)	Expiry Date	
Camp No. 1 & Camp No.	2	28783, 28784	July 30, 1974	

#### B-3 SETTING

The claims are situated in the Cascade Mountains of southwestern British Columbia, a region characterized by rugged peaks and dense heavy forest cover. Elevation on the property ranges from 1300' to 2000', and rises steeply to the West and Northeast. The creeks are deeply incised and in general there is only scattered outcrop, much of the

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area covered by a relatively thin mantle of drift.

The claims lie in the Ladner Group, of Jurassic Age, which in the claims area is composed mostly of black carbonaceous argillite. The Ladner Group is host to numerous gold occurrances, which are associated with quartz veins or auriferous sulphide/arsenide zones. Arsenopyrite, pyrrhotite, pyrite and chalcopyrite are often associated with these gold occurrences.

#### B-4 HISTORY

The discovery of the Ladner Group gold belt followed the intense placer activity along the Fraser River in the 1850's, and intermittent placer work was conducted in the Coquihalla region until the early 1900's. In 1906, the Teoque and the Williams claims were located on Ladner Creek about <sup>1</sup>/<sub>4</sub> mile upstream from the Coquihalla River, after discovery of a gold/arsenopyrite showing. Considerable trenching, in addition to a 15' crosscut and a winze of unknown depth apparently was completed, and still remains today. The claims appear to have lapsed after 1909 (B.C. Dept. of Mines Records). Several gold properties in the Ladner Group went into production in later years, including the Emancipation Mine, Aurum Mine and the Pipestem (Home Gold) Mine.

#### B-5 EXPLORATION PROGRAM

Early in August 1973, a base camp was established as part of Carolin Mines Ltd.'s exploration in the area. Apart from a general reconnaisance traverse, no serious work was done on the Camp claims until spring of 1974.

The area was geologically mapped and prospected on a 1" = 400' scale. The scarcity of outcrop dictated that indirect methods should be used in order to define zones of interest. Geochemical soil sampling was implemented as this method had previously given excellent results in the area (Cochrane, Griffith, Montgomery, 1974). Two lines were then flagged and sampled at the base of the slope along both sides of Ladner Creek, and extended Northwest of the claims themselves. These samples were dried in camp, and then shipped to Bondar-Clegg & Co. of North Vancouver, where they were analysed for gold, silver, arsenic and copper. The total cost of the program was just over eight hundred dollars (\$800.00) and most of this expenditure has been scheduled to obtain assessment work credits for 2 years on these claims.

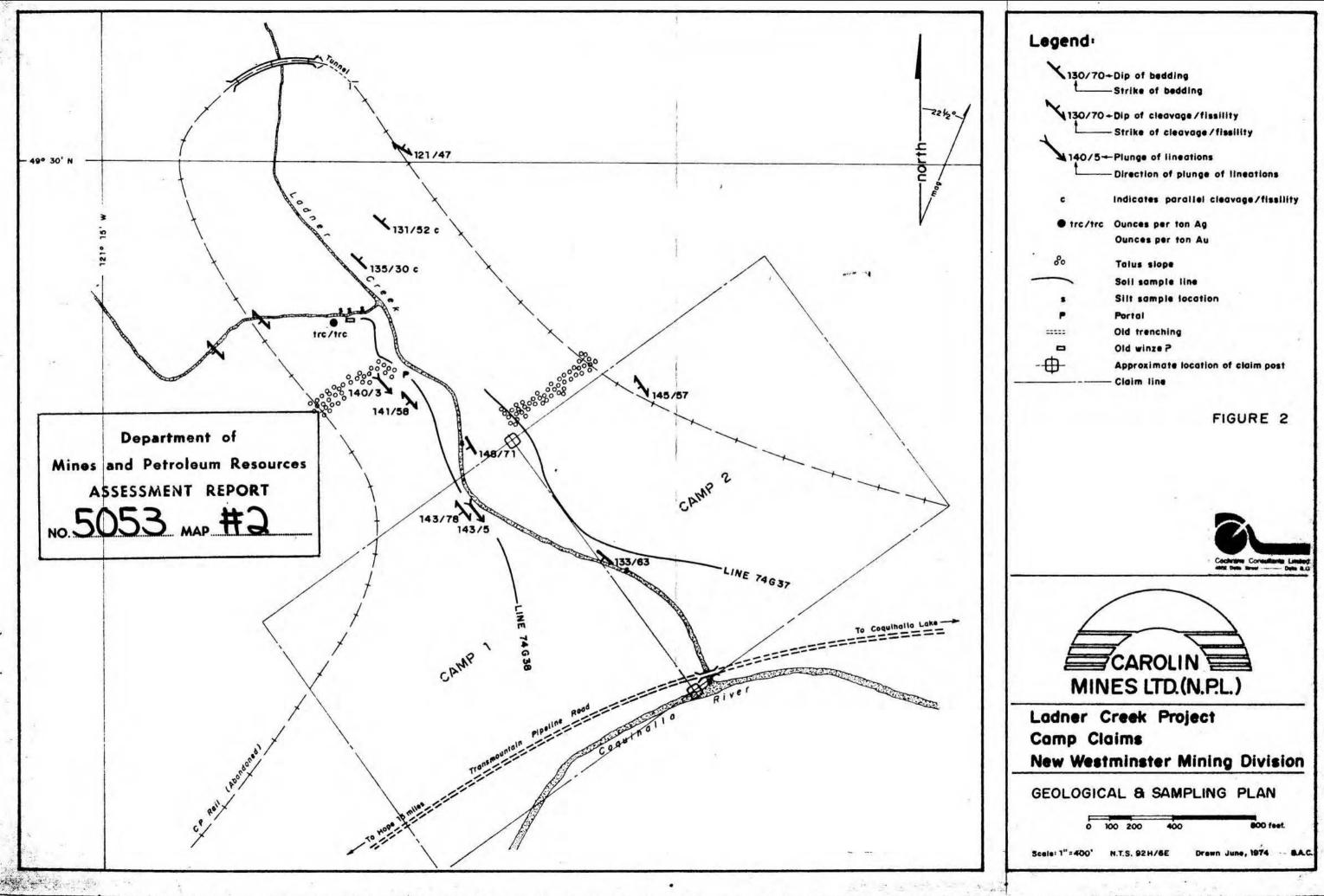
#### PART C GEOLOGY

Intermittent mapping of the claims area was done during May 1974. The claims are entirely within the Jurassic Ladner Group, which conforms to the NW/SE regional structural trend.

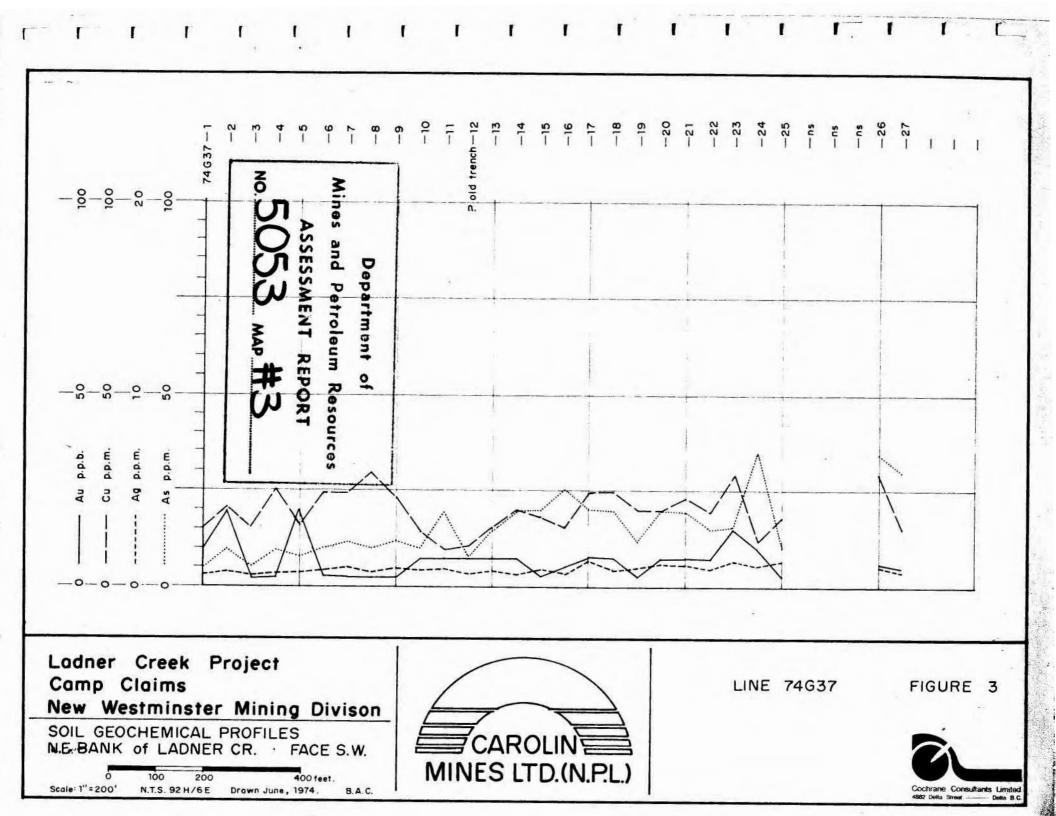
The Ladner Group in the claims area consists of black slate, which on closer examination appears to be a fissile carbonaceous argillite, with some slightly coarser bands. Where bedding is observed, it is parallel to the fissility and a strong slaty cleavage. Both pyrrhotite and pyrite are common, as veinlets parallel the bedding/fissility/cleavage and dissemination throughout the rock.

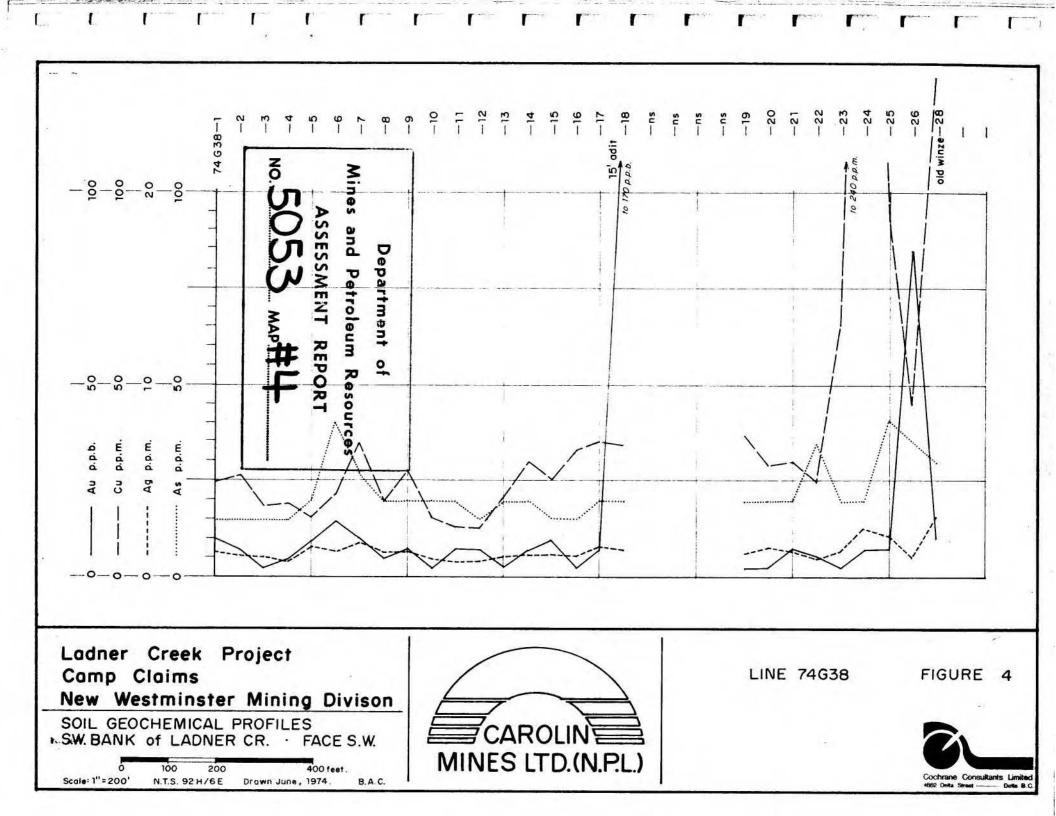
The main trend of the bedding/fissility/cleavage is  $145^{\circ}/70^{\circ}$  S.W. There appears to be a major antiform immediately to the Northwest of the claims, but extension of the mapped area is necessary to confirm this possibility. The NE limb of the fold appears to have an attitude of  $130^{\circ}/45^{\circ}$  NE. (Figure 2).

Quartz veins are common, and range in thickness from 1/8 " up to 6". Pyrrhotite, pyrite and trace amounts of arsenopyrite (?) are associated with some of these veins. The veins generally parallel the bedding/fissility/ cleavage.



Sec. 1	
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V	
130/70-	Dip of bedding
L	-Strike of bedding
\$ 130/70.	Dip of cleavage/fissility
L	-Strike of cleavage/fissility
140/5-	-Plunge of lineations
t	-Direction of plunge of lineations
c	Indicates parallel cleavage/fissility
• trc/trc	Ounces per ton Ag
	Ounces per ton Au
80	Talus slope
-	Soil sample line
	Silt sample location
•	Portal
	Old trenching
•	Old winze ?
<del>D</del> -	Approximate location of claim post
N	- Claim line





#### PART D SOIL GEOCHEMISTRY

#### D-1 PROCEEDURE

Two reconnaisance soil geochemistry lines were run, one on each side of Ladner Creek (Figure 2) at the base of the slope. Samples were taken at approximately 50' intervals, and the sample locations were flagged. The samples were taken at an average depth of 6" from the "B" horizon where present, which was the case for the majority of samples. The samples were analysed by Bondar-Clegg & Co. of North Vancouver for Gold, Silver, Arsenic and Copper. The hot extraction method was used, followed by atomic absorbtion for Au, Ag and Cu while As was determined by colourmetric methods. Due to the small amount of data (55 samples), no statistics were calculated.

The profiles of the results are presented in Figures 3 and 4.

#### D-2 GOLD

The values range from 5 ppb (parts per billion) to 170 ppb. Only two values are greater than 15 ppb, and both of these are on line 74G38 and are associated with the old workings.

## D-3 SILVER

The results for Ag are reported in ppm (parts per million). Both lines show relatively flat profiles with values ranging between 0.6 ppm and 2.5 ppm.

# D-4 COPPER

The results for Cu range between 10 ppm and 240 ppm, with only 4 values greater than 35 ppm. All of these values, like those anomalous Au values, are associated with the old workings.

# D-5 ARSENIC

The results for As vary between 5 ppm and 40 ppm, with only 6 values above 25 ppm. Four of these values are on line 74G38, and 3 of them are associated with the old workings.

# D-6 DISCUSSION

The background levels for Au, Cu and As are comparable to the general averages found in soils (Hawkes and Webb, 1962). The values reported for Ag are all anomalous when compared with the average soil value of 0.1 ppm (Hawkes and Webb, 1962).

The tendency of the anomalous values to be associated with the old workings and the open nature of these at present small anomalies, suggest an expanded geochemical soil sampling program is warranted.

Respectfully submitted,

David Griffith, B.A. B.Sc. July 15, 1974 Delta, B.C.

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# APPENDIX I

ASSESSMENT WORK DETAILS: <u>Project</u>: Camp Claims <u>Owner</u>: Carolin Mines Ltd. <u>Location</u>: 12 miles N. E. of Hope, B.C. Mining Division: New Westminster

SUMMARY OF WORK: Prospecting, geological mapping, soil sampling. Work conducted by Carolin Mines Ltd. personnel.

# APPENDIX II

PERSONNEL AND DATES WORKED

D. Griffith	May 4, 1974	½ day	mapping and prospecting
	May 16, 1974	½ day	mapping and prospecting
	May 27, 1974	½ day	soil sampling
	June 1, 1974	<sup>1</sup> <sub>2</sub> day	soil sampling
	June 24, 1974	l day	report preparation

B. Cochrane

June 27/28, 1974 2 days report preparation

# APPENDIX III

CERTIFICATES:

D. Griffith, (B.Sc. Geology, U.B.C. 1973) (B.A. Queen's 1967) Summer 1972, 1971 extensive geophysical experience with Cochrane Consultants Ltd.

B.A. Cochrane (A.O.C.A.) graduated 1970, data processing, geophysical draftsman, employed with Geo-X Surveys for 2 field years, employed by Coochrane Consultants for three years.

# APPENDIX IV

COST SUMMARY:

1.	Mapping and prospecting	1 day @ \$100	\$100.00
2.	Soil Sampling - labor	1 day @ \$100	\$100.00
	- Bondar-C	legg analysis	\$367.65
3.	Report preparation - D. Griffith 1 day @ \$100		\$100.00
		Cochrane ays @ \$66.18	\$132.35
		Total	\$800.00
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