

IES CLAIM

KAMLOOPS MINING DIVISION

BRITISH COLUMBIA

- for -

LARAMIDE RESOURCES LTD., 904 - 675 WEST HASTINGS STREET, VANCOUVER, B.C. V6B 1N2

Covering: Allies (20 units) Work Performed: April 23 - June 21, 1984. Location: (1) 25 km. NW of Kamloops, B.C. (2) NTS Map 921/15E (3) 50° 52'N, 120° 34' W

Prepared by:

KERR, DAWSON AND ASSOCIATES LTD.,

206 - 310 NICOLA STREET,

KAMLOOPS, B.C. V2C 2P5

J.M. DAWSON, P. ENG. June 21, 1984.

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#### INTRODUCTION:

This report describes the first phase of an extensive programme of exploration planned for the Allies property during 1984. This phase of the programme consisted of grid layout, prospecting and geological mapping. Maps showing location, property and surface geology are included with this report.

#### SUMMARY AND CONCLUSIONS:

1. The Allies property consists of one 20 unit metric claim located in relatively moderate terrain about 25 km. northwest of Kamloops in south central British Columbia and is road accessible.

2. This property was probably discovered in the early 1900's by prospectors attempting to follow the placer gold found in Tranquille River and its tributaries to the bedrock source. During the period 1924-34, extensive trenching, prospecting and underground exploration attempted to trace the source of an accumulation of float boulders containing high grade gold values. These efforts were unsuccessful.

During 1972-78, geophysical and geochemical surveys, trenching and limited diamond drilling were performed, however the source of the high grade float was not found.

3. The property is underlain by Miocene plateau basalt which has been locally eroded to expose a window of older rocks. These older rocks consist of a mixed assemblage of chloritic, andesite tuffs, carbonated greenstone, peridotite(?) and gabbro intruded by a number of northeast trending, feldspar porphyry dikes.



4. Gold mineralization is associated with quartz veining and stockworks containing minor pyrite in or adjacent to feldspar porphyry dikes. A number of low grade occurrences of this type have been found in place, however the source of the high grade float near No. 1 shaft has not been located.

5. The source of the high grade float is considered by the writer to be a short distance to the west or southwest of the discovery shaft and should be relatively easy to locate. In addition, since anomalous gold values have been found in several feldspar porphyry dikes, there is a good possibility for finding additional zones of potentially significant gold mineralization.

#### PROPERTY:

The property consists of one 20 unit modified grid system, located claim as follows:

Claim Name	Record No.	Tag Number	Expiry Date
Allies	3617	68481	June 23, 1984

The registered owner of this claim is Laramide Resources Ltd.

#### LOCATION AND ACCESS:

The property is located in south central British Columbia about 25 km. northwest of the city of Kamloops at the southern edge of the Bonaparte plateau. The approximate geographic center of the claim is at  $50^{\circ}$  52' north latitude and  $120^{\circ}$  34' west longitude.

The claim is accessible from Kamloops as follows: take the Bachelor Hills turnoff from North Kamloops and proceed via good gravel road for about 15 km. to McQueen Lake; from here a poor quality dirt road leads westerly for about 10 km. via Pass Lake and Watching Creek to Cannell Creek. Apoor quality jeep road leads up Cannell Creek for about 3 km. to the main showing on the property.

### PHYSIOGRAPHY AND VEGETATION:

The claim lies just at the southern edge of the Bonaparte Plateau. A gently rolling upland area with elevations in the 4,800 to 5,000 foot range is bisected by the northwest-trending valley of Cannell Creek. Elevations in this valley vary from about 3,900 feet a.s.l. at the southeast corner of the property to near 4,800 feet a.s.l. at the north and west claim boundaries.

The property is heavily wooded by mature spruce, fir and pine in the valley of Cannell Creek. Upland areas and southerly-facing slopes are generally more open and predominately forested by lodgepole pine with occasional meadows.

### HISTORY:

This property is first mentioned in the 1924 Annual Report of the B.C. Minister of Mines. Presumably it had been discovered a few years before this by prospectors working up Tranquille River and Watching Creek looking for the source of placer gold found in those creeks. Samples of material grading as high as 1.42 oz Au per ton were obtained from quartz stringers in a number of large blocks of silicified feldspar porphyry thought at first to be outcrops.

Over the next few years a considerable amount of prospecting and trenching had not established dimensions of the showing or even if the discovery material was in place.

In 1933-34 an extensive programme of underground exploration was carried out in an attempt to find and delineate the source of the goldbearing porphyry. At least 3 shafts and 5 adits totalling approximately 800 lineal feet were driven at several locations and although several occurrences of similar porphyry intrusions were located in place the source of the high grade float at the discovery or No. 1 shaft was not found. The property lay dormant until 1968 when minor trenching was done near some of the original workings.

In 1972-73, the property was controlled by Bon-Val Mines Ltd. and magnetic and VLF electromagnetic surveys as well as geochemical soil sampling was carried out. Bon-Val Mines was reorganized as Yamoto Industries Ltd.

In 1976, an extensive programme of geochemical soil sampling was undertaken with some 800 samples being analysed for gold and copper. Results showed only a few isolated gold highs, undoubtedly because of the heavy overburden.

In 1978, three diamond drill holes totalling 162.5 meters were bored near the No. 1 shaft. Logs reported barren "serpentine" in all holes with no porphyry or quartz veins encountered.

In 1984, title to the property was awarded to Laramide Resources Ltd. in a dispute over previous assessment work.

#### GEOLOGY AND MINERALIZATION:

The property is underlain primarily by Miocene plateau basalt which has been eroded along the valley of Cannell Creek to expose a window of older rocks. These older rocks consist of a mixed assemblage of chloritic andesite tuffs, carbonated greenstone, peridotite(?), and gabbro, intruded by a number of feldspar porphyry dikes.

The plateau basalt consists of fine grained, dense black basalt flows occasionally exhibiting columnar jointing. Locally these flows are amygdaloidal or vesicular. In the southern part of the grid area much of the basalt unit is fragmental consisting of agglomerate or flow breccias with fragments up to 20 cm. in diameter.

In at least 2 places at the base of the basalt succession there is a poorly stratified sedimentary unit. It weathers to a distinctive light brownish colour and may locally be as much as 30 meters thick. This unit consists of poorly indurated volcanic wacke and conglomerate. Most of the fragments consist of basalt, however minor amounts of greenstone and granitic boulders are also noted.

The older rocks exposed in the eroded "window" have been previously described as belonging to the Cache Creek Group. However, they are so poorly exposed that a definite correlation is not possible at this time. From the limited outcrop areas and material excavated from underground workings, the unit more closely resembles rocks of the Nicola Group.

Chloritic andesite tuffs are exposed at the southwest workings and in a pit near CannellCreek at 4 + OOE, 5 + 35S (see figure 249-3). This rock is pale grey green to dark green with sub-rounded fragments up to 5 mm. in diameter. In places it is soft and friable and is fairly homogeneous with no bedding features or appreciable changes in grain size.

At the southwest workings and main workings several types of altered greenstones and basic to ultrabasic intrusive rocks have been noted. These vary from relatively fresh, well crystallized gabbros and peridotites to heavily carbonated peridotites. Some of the "peridotites" are so heavily veined with calcite and quartz that their original composition is in doubt. They have been referred to as serpentines in previous reports, however, the writer prefers the term greenstones. The relationship between the obvious volcanic fragmentals and the basic and ultrabasic intrusives cannot be defined because of the very limited exposure.

The greenstones and basic intrusives have been cut by a number of feldspar porphyry dikes. These bodies appear to have a north-northeasterly strike and vary from less than a meter to more than 30 meters in thickness. Where unaltered they consist of a dense rock with up to 30% rounded feldspar phenocrysts in a very fine, siliceous dark grey matrix. However, usually these dikes are altered to some degree and commonly are bleached to a light grey or buff colour and contain disseminated pyrite and frequently veins and stockworks of white quartz.

This property was originally explored because of spectacular gold values obtained from quartz stringers in large boulders of feldspar porphyry. Values as high as 2 oz Au/ton were reported from selected pieces of this material near the discovery site (No. 1 shaft). The writer sampled a piece of the material from the dump of No. 1 shaft which assayed 0.45 oz Au and 0.61 oz Ag per ton.

In the early 1930's it was established that this material was definitely not in place and extensive surface and underground exploration was undertaken to find its source. Although a number of similar porphyry dikes were located, none returned the high gold assays found at the discovery site.

The mineralization at the discovery site consists of scattered fine to medium grained pyrite as isolated grains and clots in quartz veins and along fractures in silicified and bleached feldspar porphyry dikes. Pyrite seldom exceeds 5% of the rock volume. No free gold was seen however it has been reported by previous workers.

At 3 + 90E, 5 + 10S, a narrow feldspar porphyry dike is veined with narrow quartz stringers. These quartz stringers at times contain disseminations and blebs of pyrite and very minor galena. A selected sample of this material assayed 640 PPB gold and 0.6 PPM silver.

At 3 + 00S, 2 + 70W, there is a sizeable dump from the main adit at the southwest workings. This dump material consists of altered, carbonated greenstone and feldspar porphyry dike material. Quartz veins with pyrite are found in both rock types. A grab sample of this material assayed 600 PPB gold and 2.8 PPM silver.

A smaller caved adit is located about 45 meters southwest of the main adit (3 + 00W, 3 + 40S). Several boulders of silicified porphyry with disseminated to heavy pyrite (up to 20% by volume) are located on the dump of this adit. A grab sample of this material assayed 335 PPB gold and 2.0 PPM silver.

### EXPLORATION POTENTIAL:

Anomalous to ore grade gold values are found in quartz veins and stockworks associated with feldspar porphyry dikes at the Allies property. The source of the high grade float exposed near No. 1 shaft has never been found, however similar looking material containing anomalous gold values has been found in place at three locations. Recent exploration (i.e. trenching and drilling) has been concentrated in the immediate area of the original discovery. However, it is more probable that the source of this float is uphill to the west or southwest where similar material has already been found in place. From the size and number of the mineralized boulders, it is speculated that the source is probably less than 200 meters distant.

In the writer's opinion there is a good possibility of locating the source of the high grade float as well as for delineating other significant zones of gold mineralization associated with feldspar porphyry dikes in the immediate area.



Respectfully submitted: KERR, DAWSON & ASSOCIATES LTD.

J.M. Dawson, P. Eng. GEOLOGIST.

APPENDIX A

PERSONNEL

## PERSONNEL:

J.M. Dawson, P. Eng.	April 23, 26	
	May 9, 14	
	June 5, 12, 14, 15,	
	18, 19, 20, 21.	12 days
W. Gruenwald, B. Sc.	May 22.	1/2 day
R. Henderson	May 25, 26-31	6 1/2 days
W. Dawson	May 11, 15-23	
	June 5-7.	12 1/2 days
J.A. Whist	May 26-31	6 days
J.O. Whist	June 5-7	3 days
M. Holtz	May 15-23	9 days

APPENDIX B

STATEMENT OF EXPENDITURES

### PROGRAMME COSTS:

## Personnel:

J.M. Dawson, P. Eng.	\$2 600 00
12 days @ \$500/day	\$5,000.00
W. Gruenwald, B. Sc.	
1/2 day @ \$250/day	125.00
R. Henderson	
6 1/2 days @ \$200/day	1,300.00
W. Dawson	
12 1/2 days @ \$200/day	2,500.00
J.A. Whist	
6 days @ \$150/day	900.00
J.O. Whist	
3 days @ \$150/day	450.00
M. Holtz	
9 days @ \$150/day	1,350.00

\$10,225.00

Expenses and Disbursements:

Truck Rental	1,408.00	
Room and Board	1,031.18	
Base map preparation, enlargements, blue prints, etc.	176.82	
Drafting	374.50	
Xerox, Secretarial, telephone, postage, etc.	266.70	
Assays and Analyses	72.90	
Field equipment & Supplies	255.10	
		3,585.20

Total Programme Costs:

\$13,810.20

APPENDIX C

REFERENCES

### **REFERENCES:**

Cockfield, W.E. (1961): Geology and Mineral Deposits of Nicola Map Area, British Columbia; GSC Memoir 249.

Sookochoff, L. (1973): Summary Report on the Cannell Creek Property for Bon-Val Mines Ltd.

Mark, D.G. (1973): Geophysical Report on a Ground Magnetic and VLF-EM Survey - Dog Claim Group, Kamloops M.D. Private Report to Bon-Val Mines Ltd.

Mark, D.G. (1976): Geochemical Report on a Soil Geochemistry Survey on the Cannell Claim, Kamloops M.D. Private Report for Yamoto Industries Ltd.

Sookochoff, L. (1978): Diamond Drill Report on the Cannell Creek Property; Private Report to Yamoto Industries Ltd.

Annual Reports of B.C. Minister of Mines for 1924, 1931, 1932, 1933, 1934, 1968, 1972, 1973, 1976. APPENDIX D

WRITER'S CERTIFICATE

# JAMES M. DAWSON, P. ENG.

**Geological Engineer** 

#206 - 310 NICOLA STREET . KAMLOOPS, B.C. V2C 2P5 . TELEPHONE (604) 374-0544

CERTIFICATE

I, JAMES M. DAWSON OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT:

(1). I am a geologist employed by Kerr, Dawson and Associates Ltd. of Suite 206, 310 Nicola Street, Kamloops, B.C.

(2). I am a graduate of the Memorial University of Newfoundland - B. Sc. (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a member of the Association of Professional Engineers of British Columbia. I have practised my profession for 21 years.

(3). I am the author of this report which is based on an exploration programme carried out on the Allies property under my direct supervision.

KERR, DAWSON & ASSOCIATES LTD.

James M. Dawson, P. Eng.

GEOLOGIST.



KERR, DAWSON AND ASSOCIATES LTD. Consulting Geologists and Engineers

Kamloops, B.C. June 22, 1984.

