## JAMES M. DAWSON, P. ENG.

Geological Engineer

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

May 29, 1984.

Mr. A.F. Reeve, Laramide Resources Ltd., 904 - 675 West Hastings Street, Vancouver, B.C. V6B 1N2

RE: Snowflake Drilling

Dear Bert:

I have re-examined the interval between 134' and 151' in drill hole SF-83-8 and can find no visible gold. It is interesting to note that the interval before the suspect one (ie. 135' to 140') which is also black argillite assays .066 oz Au and 1.13 oz Ag/ton. The 15 foot

section from 135' to 150' averages 0.426 oz Au and 5.27 oz Ag/ton.  $\frac{45.72}{45.72}$ 

I have talked to the assayer who says that it cannot be coarse gold because his second assay was practically the same as the first. He has been in contact with Vancouver Petrographics who could find no free gold in the sample we sent them. I have therefore sent the entire bag of rejects to them for examination and have authorized an examination by electron microscope (about \$250.00).

We should have some results in about 2 weeks.

Yours very truly,

KERR, DAWSON & ASSOCIATES LTD.,

James M. Dawson, P. Eng.

GEOLOGIST.

JMD: AF

PROPERTY SNOWFLAKE

Suite 1 - 219 Victoria St. Kamloops, B.C. Phone 374-0544

HOLE No. SF-83-8

DIP AND AZIMUTH TEST							
	Corrected		Core Size	Total Depth	Sheet No1 of2		
Footage	Angle	Azimuth	Angle of Hole	% Recovery	Logged by		
			Claim	Elev. Collar	Date Begun		
			Section	Latitude	Date Finished		
			Bearing	Departure	Core Stored At		

DEPTH	CORE LOST	DESCRIPTION	SAMPLE No.	WIDTH of SAMPLE				
		Relogging of section between 134 feet & 151 feet.						
12/ 1201	7.7.4	T 42/100 425/100 11 1	_					
134-139	11"	From 134'0" to 135'10" black graphitic argillite				<del> </del>		
		and fine graywacke brecciated and sheared in part-					<u> </u>	
		frequent irregular pyrite stringers and narrow			•	<del> </del>		
		grey quartz blebs and stringers - mostly at 15-30°						
		to core axis. Estimate 10% pyrite.						
		From 135'10" to 136'10" or 137'9" if core loss is						
		included - friable, highly sheared black graphitic				<del> </del>		
		argillite - finely divided pyrite is visible scattered throughout the core.						
		From 137'9" to 139' dense fine grained black				<u> </u>	<u> </u>	
		argillite with abundant fine grained disseminated	-					
			_					
		pyrite - looks syngenitic, only very minor narrow quartz veinlets - no pyrite veins.						
		quartz vermiets - no pyrite verms.		<del>                                     </del>	İ -	<del> </del>		
139-144'	0	From 139' to 140' - dense fine grained black						
		argillite with bedding at ~ 20° to core axis -						
		tiny rounded pyrite grains in beds; from 140'						
		to 144' thinly interbedded black argillite and						
		siltstone to cherty layers from .lcm to 2 cm. thick,						
		vary from 20-45° to core axis. Frequent fine						

## KERR-DAWSON & ASSOCIATES LTD. - DIAMOND DRILL RECORD

Suite 206 - 310 Nicola St. Kamloops, B.C. Phone 374-0544

SNOWFLAKE HOLE No. \_\_\_\_ SF 83-8 SHEET No. 2 of \_\_\_\_\_2 PROPERTY\_\_\_\_\_ WIDTH DEPTH DESCRIPTION SAMPLE No. of SAMPLE LOST grained syngenitic pyrite; also scattered pyrite stringers and blebs, minor quartz and calcite stringers with larger pyrite grains and few scattered chalcopyrite grains. 144-151' 8'2" of From 144' to 145' black argillite with a few silty interbands as last section; from 145' to end of split section light to dark grey and partly bleached rock which may be the margin of a granitic or feldspatic dike - eg. many feldspar phenocrysts or ?? it could be a coarse unsorted feldspatic wacke or arkose; very difficult to tell which. There is a suggestion of a kind of hybrid (border phase) rock in places as if the core goes through a contact zone. Very minor disseminated pyrite; however there are 2 to 4 quartz veinlets from .5 to 2.5cm wide at 5 to  $10^{\circ}$  to core axis containing scattered grains and blebs of pyrite and chalcopyrite.



## Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39 B887 NASH STREET FORT LANGLEY, B.C. VOX 1JO

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Invoice 4554

Report for: Derek A. Blundell,

KRAL Ltd.,

912 - 1 Laval Crescent,

Kamloops, B.C.

llay 28, 1984

SAUPLE 5817.

The sample consists of crushed material which assays 1.2oz of gold per ton. Three slides and three pellets were made, polished and examined under reflected light. No gold or possible gold-bearing phases were seen.

Reflecting minerals make up about 20% of the sample; the remainder consists of fine silicates (unidentified) and carbonate (dominant). Mineral fragments vary in size from 0.005 to 0.2mm and are angular. Most are about 0.05mm in size. Material less than 0.005mm in size is also present but is mostly too small for positive identification. Approximate proportions of the reflecting minerals are:

pyrite	85
chalcopyrite	8
hematite	5
sphalerite	2

The minerals are not intergrown with one another or with silicates. Sphalerite is sometimes full of extremely fine chalcopyrite inclusions. The hematite often occurs in small aggregates of very fine grains.

Subsequent to this examination the coarsely crushed sample was submitted and three polished blocks were made from selected high-grade fragments. Two of the blocks contained gold in the form of electrum (Au-rich). Most of the electrum occurs in thin fractures in pyrite; some occurs as inclusions in pyrite and is associated with argentite which also occurs in fractures and between grains. In one of the blocks all the gold occurs in one pyrite aggregate in one fragment; in the other one it occurs in several.

(continued)

## SAMPLE 5817 (cont.)

The rock is a <u>fine grained limestone and sulphide mineralization</u> (pyrite, whalcopyrite, sphalerite) occurs within it. Pyrite forms cubic grains up to 0.4mm in size which are disseminated throughout the rock. It is concentrated in veinlets and patches a few millimeters in size where grain size is up to 2.0mm. In these the pyrite becomes massive. Chalcopyrite and sphalerite form massive patches enclosing the pyrite. Some of the chalcopyrite masses contain scattered small sphalerite and pyrite inclusions. Fine chalcopyrite is disseminated within the rock in some fragments. The spahalerite is crowded with very fine chalcopyrite and pyrite inclusions. Proportions of these minerals is the same as in the finely crushed sample.

Gold mineralization is associated with the chalcopyrite - sphalerite stage of mineralization. The electrum forms thin elongated grains occuring in fractures and rarely betten grains within the masses of pyrite. Thin elongated grains of chalcopyrite also occur in the fractures. Maximum size of the electrum grains is 0.15mm x 0.002mm; most are less than 0.1mm in length.

Electrum also occurs as inclusions in the pyrite. These are rounded to subangular and are less than 0.005mm in size. They are rare. Coarser grained electrum is associated with argentite inclusions and fracture fillings in the pyrite. In these the electrum occurs as subrounded grains within a grain of argentite. The argentite inclusions are rounded and up to 0.3mm in size; most are much smaller. Maximum size of the electrum grains within the argentite is 0.06mm; most are less than 0.03mm. It occurs rarely within the chalcopyrite also, but without gold. Fractures up to 0.2mm thick are filled with argentite which may be intergrown with electrum. One fracture was completely filled with electrum for a length of 0.5mm.

A. L. Littlejohn, M.Sc.