

# ARCHEL, CATHRO

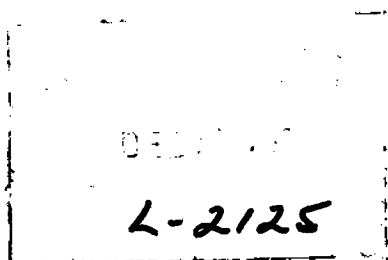
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CASCA BUILDING, WHITEHORSE, Y.T. 667-4113

BENTALL CENTRE, VANCOUVER, B.C. 688-3022 OR 522-1562



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	770 ONE BENTALL CENTRE 505 BARRARD ST. VANCOUVER 1, B.C.	
	December 9, 1968	
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	SLEIGHT COMMENTS	

Mr. John S. Brock,  
Exploration Manager,  
Atlas Explorations Ltd.,  
Marine Building,  
Vancouver 1, B.C.

Dear Sir;

Re: CAB Tungsten Property  
Pelly Mountains, Y.T.

The following are a few impressions gained from my brief visit to this property on September 2 and D.A. Lymons sampling program between September 2 and 12.

(1) The deposit has many similarities to skarn deposits in the tungsten belt which follows the Yukon - NWT border. These are:

- (a) bedded cambrian host rocks.
- (b) lies within the contact alteration halo of a small intermediate intrusive.
- (c) diopside - red garent - schielite - chalcopyrite - pyrrhotite skarn assemblage.

(2) Unlike the host rocks along the NWT tungsten belt, which consist of gently folded and weakly metamorphosed sediments, the CAB deposit occurs in a sequence of quartz-mica schist, gneiss and impure quartzite with minor limy bands. Individual units show almost no deformation, folding, or warping although the fabric within the unit is tightly crenulated and drag folded.

(3) From a rapid traverse down the well-exposed stratigraphic section in the cliff face south of the East Zone,

there does not appear to be an obvious change in lime content through the section, or repetitions of the limy bed which is host to the discovery zone.

(4) The topography is very rugged and parts of the showing can only be examined during a few short weeks in July or August. The weather during our program was very unpleasant - snow and rain fell frequently and made work in the steep areas very hazardous.

(5) The structural situation is confusing. The East and West Zones strike normal to one another and the relationship between them is not clear. The West Zone appears to cut into the stock for a considerable distance but occurs in such an inaccessible location that it can only be examined under ideal conditions.

(6) At first glance the deposit looks like an underground mining situation. However, the dip of the East Zone is about the same as that of the east side of the ridge it outcrops on. The south end of the East Zone, which comes as close as 75 feet to the ridge crest, could probably be open-pitted.

(7) The East Zone is mineralized for a length of 4000 feet and probably extends further to the north. The full width is poorly exposed but is about 50 feet, of which a central 5 - 10 foot intrusive sill is barren. The tonnage potential for the East Zone alone is about 14,000 tons per vertical foot.

My approach on this property would be as follows:

(1) Prepare a good base map from existing government air photos - 500 scale with 20 foot contours.

(2) Carry out a careful stratigraphic mapping program, looking for variations in lime content and trying to correlate the West Zone with the East Zone.

(3) Construct a tote trail from the Canol Road, sample the East Zone at 500 foot sections, by drilling rings of holes from drill stations prepared on the east side of the ridge with a bulldozer. These could be easily prepared by angling a bull dozer trail up the east side of the ridge at the same inclination as the outcrop trace of the Zone on the west side of the ridge.

Yours truly,

ARCHER, CATHRO & ASSOCIATES LTD.

  
Robert J. Cathro

RJC:sh

*John - This was written before seeing the assay results - a more cautious approach now seems in order*  
B

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CONSULTING GEOLOGICAL ENGINEERS**

*Cob Beal*

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HEAD	TO	ACT
	AFA	
770 ONE BENTALL CENTRE 505 BARRARD ST. VANCOUVER 1, B.C.		
February 27, 1969		
RETURN		
FILE		
SEE OVER FOR COMMENTS:		

Dear *John*

Attached please find a draft copy of the description of your <sup>two</sup> tungsten property<sup>ies</sup>, from my paper which is being prepared for the Third Northern Resources Conference in Whitehorse, April 10, 1969. It is also scheduled for publication in the April issue of the Western Miner.

I would be grateful if you would read the draft and advise me immediately if you have any corrections or additions to offer. As soon as the draft has been approved by all those concerned, I will forward you an advance copy for your private use.

Regards,  
ARCHER, CATHRO & ASSOCIATES LTD.

*R. J. Cathro*  
R. J. Cathro

*OK'd by telephone March 6<sup>th</sup>*  
*R.D.*

(6) Lened Group, (62°22'N, 128°35'W); . This deposit was discovered in 1960 by Canex Aerial Exploration Ltd., 32 miles northwest of Cantung. Scheelite bearing skarn was found in talus just above a cirque floor. Two distinct tungsten zones exist, one on either side of a narrow, highly altered granitic tongue. The footwall zone contains considerable massive pyrrhotite and some chalcopyrite and surface sampling gave the following results:

<u>Width</u>	<u>% WO<sub>3</sub></u>	<u>% Cu</u>	<u>% Fe</u>
7.0	2.20	0.72	34.3
22.5	0.74	0.30	11.0
19.5	2.50	0.09	18.7

The hangingwall contact contains <sup>less</sup> ~~very little~~ sulfide and it assayed as follows on surface:

8.0	7.60	0.08	5.6
8.8	2.15	0.18	11.1

The showing occurs at the base of the lower Cambrian carbonate unit, close to the contact of a biotite granite stock.

Canex drilled two holes in 1961, totalling about 450 feet, and was disappointed in the depth continuity. The showing was restaked in 1967 as the NIP Group by Atlas Explorations Ltd. During 1968, Atlas conducted a geochemical and geophysical survey to extend the showing.

(18) Fox Lake, (61°52' 133°17'W); Map 7-1960. This property was discovered in June, 1968 by prospector Peter Risby of Ross River and staked as the CAB claims. It is located about 30 miles southwest of Ross River, on a steep north-facing slope overlooking Fox Lake at the headwaters of Fox Creek.

This point is approximately midway between the summits of Fox Mountain and Twin Mountain.

*to be left out* ( Atlas Explorations Ltd. optioned the property late in the summer and conducted a preliminary sampling and mapping program. Two separate zones are present ~~on the property~~ and indications of tungsten mineralization have been found elsewhere in the district as well.) This is a typical scheelite-pyrrhotite-diopside skarn occurrence, developed in limy horizons in metasediments near the contact of a small quartz monzonite stock. The metamorphic rocks consist of micaceous schist, gneiss and quartzite, probably of Cambrian or older age.

The largest zone, No. 2, consists of two separate skarn bands, each about fifteen feet thick, separated by a ten foot granitic sill. It is intermittently exposed along a strike length of over half a mile and lies just above and conformable with the main intrusive contact, maintaining a constant north strike and a 45° east dip. The No. 1 zone is smaller and contains considerable pyrrhotite and a little chalcopyrite, whereas the No. 2 zone has a very low sulfide content. The two zones strike almost at right angles and are not seen within a quarter mile of one another. The structural relationship between them is not yet clear.

Initial surface sampling was difficult because of rugged topography and poor exposures. Assay results are conflicting and the grade is still uncertain, although it will be within the 0.5 to 1.0%  $WO_3$  range. ~~This property possesses~~ A good tonnage potential, <sup>is indicated</sup> because of the fortunate conformable relation between the No. 2 skarn zone and the intrusive contact over a considerable strike length. Most of ~~this~~ <sup>the</sup> deposit is only recoverable by underground mining methods.