673535 REPORT on the
BEV AND RITE-ON CLAIMS
KAMLOOPS MINING DIVISION, B.C.
for ALAKON METALS LTD. (N.P.L.)

by: W.R. Bacon, Ph.D, P.Eng.

April 10, 1972.



### BACON & CROWHURST LTD.

1720-1055 West Hastings Street Vancouver 1, B. C.

REPORT

on the

BEV AND RITE-ON CLAIMS

KAMLOOPS MINING DIVISION, B.C.

for

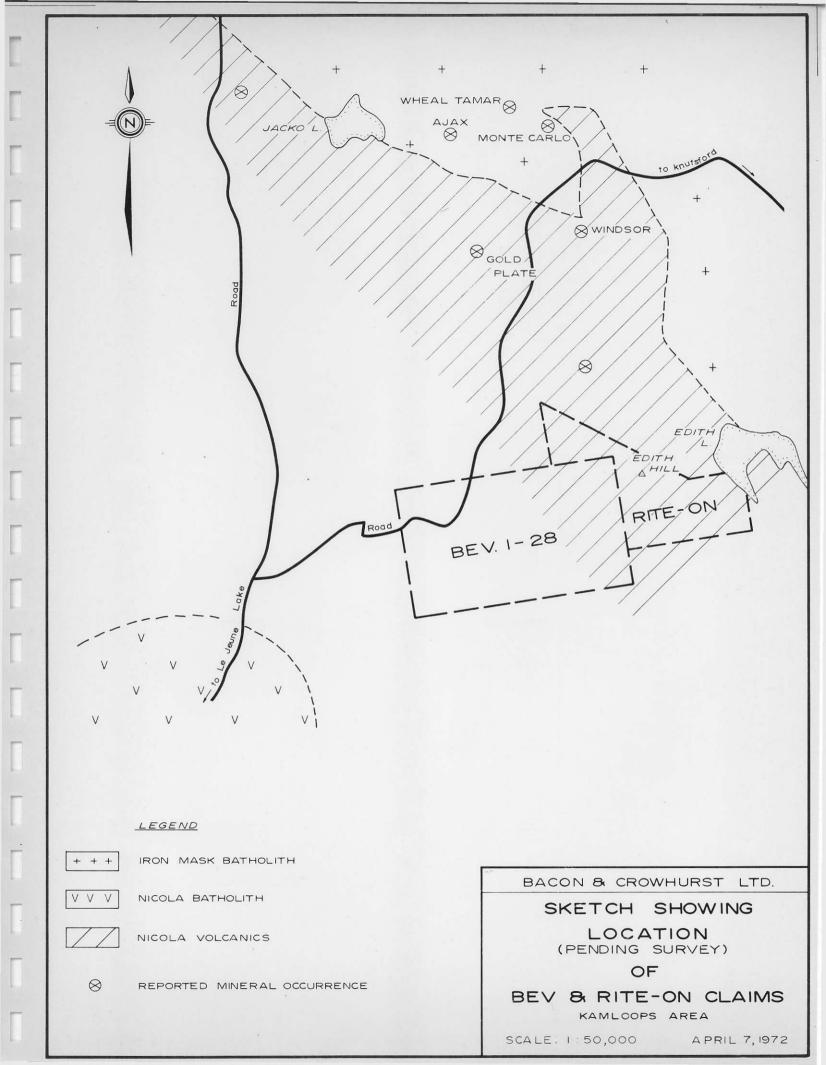
ALAKON METALS LTD. (N.P.L.)

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# ILLUSTRATION

Sketch showing Location of Bev & Rite-on Claims Scale: 1:50,000

Frontispiece

#### INTRODUCTION

The location of the Bev and Rite-on claims is shown on the frontispiece. They are 10 miles south of Kamloops and may be reached by secondary road from Knutsford, a hamlet 5 miles south of Kamloops on Highway 5.

The Bev claims were visted by the writer on February
1st, 1972. Several claim posts were examined and the staking appears
to be done in accordance with the Mineral Act.

At the time of examination, much of the area was covered by snow; consequently this report is derived largely from the writer's knowledge of the area and from a perusal of three Government reports\* on the general vicinity.

The property is on Edith Hill and the west flank of Edith Hill. The Bev claims form a rectangular block 7 claims long by 4 claims wide and the Rite-on claims are adjacent to the northeast corner of the Bev claims. The Rite-on claims consist of Rite-on 1-4, 13-22, 23 Fr., 24 Fr.

The area of the claims is partially timbered and partially open grazing country. Elevations range from 3000 feet to 3802 feet at the summit of Edith Hill.

<sup>\*</sup> Report of the Minister of Mines, 1956, pp. 47-69.
Report of the Minister of Mines, 1967, pp. 137-147.
G.S.C. Memoir 249, Geology and Mineral Deposits of Nicola Map Area,
B.C. by W.E. Cockfield.

#### GENERAL GEOLOGY

Any consideration of the Bev and Rite-on claims must involve a consideration of the Iron Mask batholith (see frontispiece). The batholith outcrops about 3 miles southwest of Kamloops. It trends northwesterly and is less than 3 miles in average width. In length, the batholith may be said to extend no farther north than the Trans-Canada Highway and, if so, its dimensions, 3 miles x 12 miles, do not qualify it for the name 'batholith'. If, however, one presumes the batholith to continue beyond the Trans-Canada Highway, beneath the Tertiary volcanics and sediments, and resurface in the Kamloops Lake area, its dimensions could be 3 miles x 20 miles and thus it would attain the minimum dimensions required of a batholith.

With regard to the country in which the Bev and Rite-on claims are located, it should be emphasized that outcrop is not common. The locale of both claim groups is a southeasterly trending remnant of Nicola group rocks that lies between the Iron Mask batholith on the north and the Nicola batholith on the south.

The rocks of the Iron Mask batholith are considered to be of Jurassic age and consist mainly of syenite, monzonite, diorite and gabbro. These rocks are intrusive into the Upper Triassic Nicola group rocks that in the area under consideration are entirely volcanic. Pyroclastic types of basaltic composition predominate on the southern margin of the Iron Mask batholith.

To the south of the volcanic re-entrant is the northern extremity of the Nicola batholith which extends northerly from Nicola

Lake for a distance of twenty-six miles. The Nicola batholith, which is about 5 miles wide for much of this distance, consists mainly of granodiorite and quartz diorite. In many places these rocks have a pronounced gneissic aspect.

### LOCAL GEOLOGY

The Nicola volcanics, between Jacko Lake and Edith Lake, are represented by bedded and massive tuffs of basaltic composition.

The Iron Mask rocks in the Edith Lake area are mainly the finer-grained batholithic rocks, consisting of microdiorite and micromonzonite. Pyroxenite, a coarser-grained rock, is also present in the Edith Lakes area. It is a heavy grey-green rock of crystalline appearance and is strongly magnetic. Dioritic or gabbroic rocks have been noted in the same area and have been termed pyroxenic diorite.

The Rite-on claims appear to be centred on a local magnetic high of 3140 gammas. The northwest corner of the Bev claims contains a magnetic depression. The significance of these features is not known at the present time.

No showings are known on the claims under consideration.

The Nicola rocks are favourable host rocks for copper, however, as witness the deposits of Craigmont and Similkameen Copper.

#### RECOMMENDATIONS

The property merits investigation for copper deposits.

Recent efforts, notably on the nearby Afton property, indicate clearly that the Iron Mask area and environs warrants serious attention.

An exploration program should start with linecutting, then proceed with magnetometer and soil surveys; should this give encouraging results, a second phase would involve an induced polarization survey and drilling. Drilling can be done with a percussion drill as, fortunately, the property has no cover of post-mineral Kamloops volcanics.

## COST ESTIMATE

### Phase 1

Perimeter survey of claims		\$3,000
Linecutting, 45 miles @ \$150	/line mile	6,750
Magnetometer survey		1,800
Soil survey		3,000
Supervision, geology, engine	arina	1,500
Vehicle rental	- A 448	500
venicle lencar		C. Oplication of the Contraction
		\$16,550
Contingencies	, say 10%	1,655
		A10 000
		\$18,205
Phase 2		
Induced polarization survey	10	\$20,250
45 miles @ \$450/line mi	16	
Percussion drilling, 5000 ft	. @ \$3/ft.	15,000
		\$35,250
		CONTROL OF THE PROPERTY OF THE
		App. 155
	Total	\$53,455

Respectfully submitted, BACON & CROWHURST LTD.

W.R. Bacon, Ph.D. P.Eng.

#### CERTIFICATE

I, William R. Bacon, with business address at 1720 - 1055 W. Hastings St., Vancouver, 1, British Columbia, DO HEREBY CERTIFY THAT:

- 1. I am a consulting geological engineer.
- 2. I am a graduate of the University of British Columbia with B.A.Sc. (1939) and M.A.Sc. (1942) degrees in Geological Engineering.
- 3. I am a graduate of the University of Toronto with a Ph.D (1952) degree in Economic Geology.
- 4. I have practised my profession for thirty years in Canada, South America and Australia. During the past twenty years, the majority of my time has been spent in British Columbia; it includes seven years (1949-56) as geologist with the B.C. Department of Mines.
- 5. I have personally examined the Bev claims in the Kamloops area of British Columbia.
- 6. I have no interest, direct or indirect, in the property nor do I expect to acquire any such interest.

W.R. Bacon, Ph.D. P.Eng.

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Vancouver, Canada. April 10th, 1972.