

REPORT on the  
JAM CLAIMS  
KAMLOOPS AREA, B.C.  
for  
GOLDEN GATE EXPLORATIONS LTD.

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

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BACON & CROWHURST LTD.

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on the  
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W.R. BACON, Ph.D., P.Eng.

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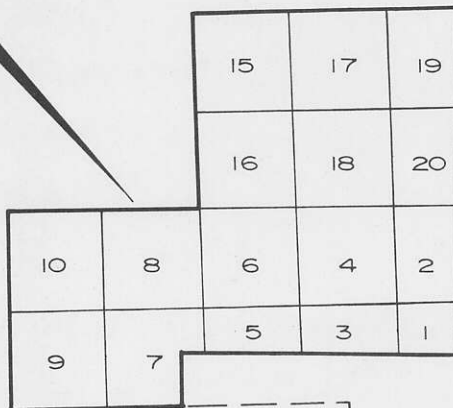
Map showing location of Jam Claims

Frontispiece

to Cache Creek

JAM CLAIMS

1 - 10  
15 - 20



to Kamloops

AFTON DRILLING

AFTON MINES LTD.



BACON & CROWHURST LTD.

MAP SHOWING LOCATION  
OF  
JAM CLAIMS  
KAMLOOPS AREA

SCALE: 1" = 1/2 Mile

Jan., 1972

### INTRODUCTION

The Jam claims are just north of the Trans-Canada Highway (No. 1), about 10 miles west of Kamloops. There are 16 claims in all, Jam Nos. 1-10 inclusive and Jam Nos. 15-20 inclusive.

The writer visited the claims during the second week of September, 1971.

The area of the claims is grassy rangeland typical of the Kamloops country. A northerly trending ridge on claims 17-20 reaches an elevation of 2600 feet which is 1500 feet above Kamloops Lake; the lake is two miles to the north of the property. Another ridge, paralleling the highway on its northern side, extends south-easterly onto claims Nos. 7-10. Relief on the property is low, amounting to a maximum of 400 feet.

Outcrop is quite sparse, particularly at the lower elevations.

### PROPERTY AND OWNERSHIP

As noted above, there are 16 Jam claims. They were located by J.R. McFhee of Vancouver and recorded on May 13, 1971.

On December 2, 1971 the Jam claims were transferred to William J. Abraham of Vancouver.



REGIONAL GEOLOGY

The Jam claims are in the environment of the Iron Mask batholith, long known for its numerous copper occurrences.

The Iron Mask batholith is about 2½ miles wide and extends for about 18 miles in a northwesterly direction. It is about 3 miles southwest of Kamloops and about 40 miles northeast of the Highland Valley copper belt which is in the Guichon batholith. The Iron Mask and Guichon batholiths are two of several on the eastern margin of the Coast Intrusions.

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 rocks (andesite, basalt, limestone, argillite) which occur on the eastern and western margins of the batholith. In the vicinity of Sugarloaf Hill, in the west part of the batholith, and just east of the southeastern corner of the Afton Mines Ltd. property, is a promontory of microdiorite porphyry, one of several porphyry stocks which intrude the batholith.

The Cherry Creek intrusions are found along the north and northeast margins of the batholith and are characterized by a pinkish to orange cast imparted to the rock by the widespread introduction of potash feldspar. These rocks range from fine grained phases of trachyte or latite porphyries to a breccia consisting of sub-rounded and angular fragments of plutonic and volcanic rocks set in a highly altered matrix. The Cherry Creek intrusions, like the Sugarloaf intrusions, have been observed cutting the rocks of the Iron Mask batholith and hence are younger than the batholithic rocks.

LOCAL GEOLOGY

In the frontispiece, the Jam claims are shown in relation to the Afton property, at the northwestern end of the Iron Mask batholith. They must be considered in relation to the Afton property, not only because of their proximity, but because the Afton geology is better known.

The Afton property is in a complex igneous area with less than 5 per cent outcrop and relatively large areas completely covered by overburden.

Within the boundaries of the Afton property are no less than four recognizable intrusive rock types. Of these, three are varieties of diorite and the fourth is a reddish syenite. In addition to these, on the south side of the highway just east of the Afton, the Cherry Creek Intrusions outcrop intermittently for  $1\frac{1}{2}$  miles.

There are two ages of volcanic rock on the Afton property, the older being the Nicola Group. There are four discrete occurrences of Nicola rocks on the Afton property. In one of these a current drilling program is finding appreciable amounts of primary native copper.

The southern part of the Afton property and much of the northern margin is underlain by post-mineral Miocene volcanics called the Kamloops Group. These rocks extend onto the Jam claims and, in fact, the Jam claims are rather effectively covered by alluvium and/or pyroclastics and clastics of the Kamloops Group. Beneath this cover, it is reasonable to expect that the geology should be quite similar to that exposed on the Afton property.

RECOMMENDATION

The proximity of the Jam claims to the Afton property is intriguing. The cover of post-mineral Kamloops volcanics on the Jam property, however, limits the exploratory techniques that can be applied. Geochemical soil sampling would have little application even if the volcanic cover is not complete; any positive results would tend to confuse. Likewise, no geophysical method could be expected to give meaningful results under the circumstances.

It is not known whether there is any relationship between the present topography and the thickness of the Kamloops volcanic cover but it may be that the parts of the Jam property that are lowest and southermost would have the shallowest cover. At any rate this is the part of the property that should be investigated first - claims Nos. 1 to 6.

These claims should be tested by drilling and, here, diamond drilling is preferable to percussion for the very important reason that a percussion drill may not be able to penetrate completely the post-mineral cover.

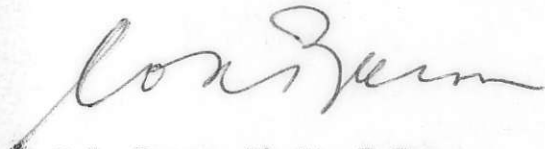
It is recommended that the Jam property be drilled to explore for copper mineralization similar to that being found on the adjoining Afton property. An amount of \$73,975 is recommended as detailed below.



Diamond drilling, 10 500' holes = 5000' @ \$12.00/ft. ✓	\$60,000
Helper to split core, etc. (salary, board for 2½ months)	2,000
Vehicle rental for 2½ months	1,250
Supervision, engineering, geology, assaying	<u>4,000</u>
	\$67,250
10% contingencies	<u>6,725</u>
	<u>\$73,975</u>

Respectfully submitted,

BACON & CROWHURST LTD.



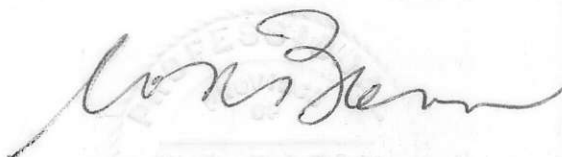
W.R. Bacon, Ph.D., P.Eng.



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 personally examined the Jam claims in the Kamloops area of  
British Columbia during the second week of September 1971.
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.

Vancouver, Canada.  
January 24th, 1972.