

November 7, 1946

Mrs. Esther L. Cogar
P. O. Box 727
Lakeview, Oregon

Dear Mrs. Cogar:

Enclosed is a copy of the analyses of the samples which Dr. Baldwin and I took at your property south of Paisley recently. We are preparing a short report on this property and when it is completed, a copy will be sent you. You will note that the samples taken in the Gaylord Tunnel and from the dump directly above the portal are much better than any other samples we took. Ore of this grade could be shipped directly to a smelter without concentration even though you have a stiff truck hauling charge, coupled with a high rail freight.

Dr. Baldwin and I are both very much interested in your property, partly from a purely geologic angle and also from the economic standpoint, since the values obtained in the tunnel indicate that there is a possibility for developing some shipping grade ore. The few samples that we took would have to be supplemented with a great many more channel samples, coupled with additional development work, before any mining operation could be considered.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:ff
Encl.

cc To FRANK BOSWELL
be to HON BURTON K SANDER

Oct. 21, 1966

Mr. K. D. Hannigan
Banff Oil Ltd.
550 Sixth Avenue S.W.
Calgary, Alberta, Canada

Dear Mr. Hannigan:

Your letter for information about the geology of T. 34 S., R. 18 E., Lake County, Oregon has been referred to me.

The only published geologic map is U. S. Geol. Survey Map MF-260, "Reconnaissance Geologic Map of the Eastern Half of the Klamath Falls (AMS) quadrangle, Lake and Klamath Counties, Oregon." The scale is 1-250,000 so there is not too much detail shown, but it should be helpful for the regional geology. It is available from the USGS Federal Center, Denver, Colorado for \$0.50.

There is also a study of a mineralized area by a student for a Masters Thesis from the University of Oregon: Appling, Richard N., 1950, Economic geology of the Brattain mining area, Paisley, Oregon: Oreg. Univ. Master's Thesis, 74 p. This could probably be borrowed from the U. of Oregon Library on an inter-library loan.

I have visited this locality briefly on two occasions in September of 1965 and from my notes can report to you that the area is underlain by a complex of early Tertiary volcanic rocks - tuffs, flows, agglomerates, with associated dikes and other intrusives. The composition ranges from basalt to rhyolite and there is one fairly large coarser-grained intrusive mass that we tentatively identified as a diorite. The mineralization appears to be confined to narrow fault zones that trend mainly N 60° W with minor N 20° E shears. The mineralization I have seen is spotty, and is sulfides; sphalerite, galena, and minor chalcopyrite. Wherever galena occurs silver is associated.

We did some preliminary soil testing and in one place detected heavy metals in a zone 50' wide over a length of several hundred feet. We hoped the owners would continue this soil testing program with the hope they could delineate an area for further exploration.

K. D. Hannigan
10/21/66

- 2 -

I hope this information is what you want and will be helpful to you.

Sincerely yours,

NVP:amj

Norman V. Peterson

BANFF OIL LTD.

Respectfully referred
to NVP

550 - SIXTH AVENUE S.W. - CALGARY, ALBERTA, CANADA
TELEPHONE 269-6901 TELEEX 038-2791

October 11, 1966

Department of Geology and Mineral Industries
Government of the State of Oregon
SALEM, Oregon

Gentlemen:

We would appreciate receiving information concerning the
availability of publications on regional geology and mineral
resources, in and around the following township:

Twp. 34S Rge. 18E, Lake County, Oregon.

Yours very truly,

BANFF OIL LTD.



K. D. Hannigan
Senior Geologist

KDH:s

RECEIVED
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STATE DEPT. OF GEOLOGY
& MINERAL IND.

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Oct. 28, 1966

Mr. K. D. Hannigan
Banff Oil Ltd.
550 Sixth Ave. S. W.
Calgary, Alberta, Canada

Dear Mr. Hannigan:

The available maps of the Paisley area are not too good, but the location of the anomalous soil samples is in sec. 13, T. 34 S., R. 18 E. This is on the east flank of Ennis Butte and as I remember it is east downhill from a strong fault that had a N. 70° W., vertical dip attitude. Mr. Don Tracy showed us around that day and either he or Mr. Ross Foster should be able to show you the location.

As I told you in my last letter our assay results were variable with some showing only traces. As a first guess I would say that the mineralization below the oxidized zone will probably be spotty too.

The presence of the coarser grained diorite(?) mass on the east side was interesting to me but our brief visit did not indicate any connection of the mineralization to this intrusive rock. I did find a few pieces of diorite float that contained a small amount of disseminated chalcopyrite.

If you are planning another visit to the area soon I would be glad to spend a day or so to give you what information I have.

Sincerely,

NVP:amj

Norman V. Peterson

BANFF OIL LTD.

550 - SIXTH AVENUE S.W. - CALGARY, ALBERTA, CANADA
TELEPHONE 269-6901 TELEEX 038-2791

October 25, 1966

Mr. Norman V. Peterson
State of Oregon
Department of Geology and
Mineral Industry
239 Southeast 'H' Street
P. O. Box 417
GRANTS PASS, Oregon

Dear Mr. Peterson:

Many thanks for your letter of October 21st, outlining some of your observations on the geology of the area south of Paisley. I have ordered the pertinent publications.

I had the opportunity of spending a day on the property in September and the owners have done considerable bulldozer stripping since your visits.

With little background in the examination of these highly leached showings, I find myself somewhat at a loss to assess the significance of minor or even nil assays of these veins at the surface (in most cases, their stripping hasn't downcut more than one or two feet). Of six samples that I cut from these exposures, four showed no lead and three no zinc; all had minor copper (.05 to .2%). Precious metal values ranged from .01 to .02 for gold and .1 to 2 ozs. for silver. Are there any "rules of thumb" for relating this spotty and universally low values to what might be anticipated below the leaching?

As I may have the opportunity to spend a day or two mapping the surface exposures, would it be possible to learn the location of your soil sampling anomaly? It would be important to know whether the owners have ignored the potential of these results in their bulldozing to date.

Yours very truly,

BANFF OIL LTD.



K. D. Hannigan
Senior Geologist

KDH:s

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GRANTS PASS

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1069 STATE OFFICE BUILDING
PORTLAND, OREGON 97201

November 28, 1966

Mr. Norman V. Peterson
State Assay Laboratory
Grants Pass, Oregon

Dear Norm:

Enclosed is a letter Don Wilkinson received from a former student of his - H.J. Steele, Exploration Superintendent of Magma Copper Company.

Don had Cy Fields reply to this for apparently Cy has been approached by others to inspect the area. Don is going to refer Hugh Steele to you.

This is being sent to you so you might have the full story and also to urge you to be of what assistance you can.

Regards.

Sincerely yours,

A handwritten signature in cursive script that reads "Hollis M. Dole".

Hollis M. Dole
State Geologist

HMD:jr
Encl.

MAGMA COPPER COMPANY

~~SAN MANUEL DIVISION~~
SAN MANUEL, ARIZONA 85631

November 19, 1966

Cy! -
Read this
& confer
Don

Dr. W. D. Wilkinson
Department of Geology
Oregon State University
Corvallis, Oregon

Dear Don:

A base metal prospect located in Lake County has recently been brought to my attention. Specimens submitted by the owner indicate some staining and incrustations of malachite, limonite impregnated vein material with galena, and some quartz with chalcopyrite which I take to be vein material. In addition, he said there was quite a bit of "granite" in the area. I tentatively identified the small specimens he sent as diorite and was interested in the evidence of disseminated chalcopyrite and pyrite in the rock. In some cases sulphide seemed to be associated with hornblende but I thought there was evidence of more prominent sulphide in small K-spar veinlets and blebs, indicative of possible potassic alteration, which we are perhaps overly conscious of in the Southwest.

A colored photograph submitted by the owner shows evidence of a sizeable brecciated zone with limonite and copper oxide staining.

By description these prospects are situated along the east side of T34S R18E, southwest of Paisley.

My concern, of course, is any potential base metal deposit that could be of interest to Magma. To my knowledge this is a virtually unexplored region, largely due to the thick volcanic cover and I am unaware of any window of pre-volcanic basement rock being exposed by faulting or erosion in the district. Some of the evidence presented suggests relatively small epithermal type veining, however, the intrusive diorite exposed cannot help but be of considerable interest, particularly in that evidence of potassic alteration suggests hydrothermal activity.

I am wondering if there are any reports or professional papers published on the area or if you have any personal knowledge of the occurrence. Inasmuch as our headquarters are in southern Arizona, plus the fact that my personnel is spread pretty thin, if a preliminary examination is warranted, a competent consultant would be preferable from my standpoint, in order to better judge whether or not a more comprehensive examination and exploratory effort is justified.

If you have any comments or suggestions, I will be very pleased to hear from you.

I had the pleasure of having Doc Hodge visit last summer and spent the day with him at our Superior Division. Some hilltop geology, a good look at the surface plant including mill and smelter and a session with our divisional geologists on the mine maps provided him with a good generalized concept of the Magma mine.

With my best personal regards,

Sincerely yours,

MAGMA COPPER COMPANY



H. J. Steele
Exploration Superintendent

HJS/dck