

## TOM McCALL

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## DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

## **ADMINISTRATIVE OFFICE**

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July 8, 1970

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

Dear Norm:

Harry Carson says that if you write to George Reynolds at the Toketee Ranger Station at Roseburg, he will be willing to guide you to the melt holes at Mt. Bailey.

Harry also remarked that they had marked the sites with blue and white ribbons so I assume you should have no difficulty in locating these fumaroles.

Best regards.

Sincerely yours,

Raymond E. Corcoran State Geologist

REC:jr

## United States Department of Agriculture Forest Service

Toketee Route, Box 101 Idleyld Park, Oregon 97447



and dance.

REPLY TO:

1560 State and Local Agencies

May 15, 1970

SUBJECT:

Volcanic Activity on Mt. Bailey

TO:

Mr. Norm Peterson State of Oregon Department of Geology and Mineral Industries P.O. Box 417 Grants Pass, Oregon 97526



This amplified our telephone conversation about possible fumaroles on Mt. Bailey. For the past several winters we have been checking snow depths for the future ski area. Melt holes in the snow have been observed in November, 1964, and the spring of 1969 and 1970. (We paid no attention in 1964, as snow was not deep and there were also bare rocks on the wind-swept ridges).

The accompanying photos were taken on April 1, 1969. We found three holes on the northwest slope at approximately 6,500' elevation. There was an air flow from the bottom of the largest hole at  $38^{\circ}$  F. Free air temperature above the snow was  $34^{\circ}$  F.

On the ground surface at the hole's bottom were basaltic appearing rocks with a small amount of lichens and moss on their surface. In summer the area appears as an outcropping of basaltic rocks with no surface vegetation.

I contacted the ski club members who saw holes this spring. Apparently they are at the same location. We plan to mark the holes so that you may make an investigation next summer, if you desire. The club also reports holes in the snow above the crater south of the summit. I have not seen these-they may be normal spring melting around large rocks.

There is a perodic outflow of cool air from a dry well on the northwest corner of Diamond Lake. A "stream" vent also shows up on cold mornings up road 2614 from this ranger station. These spots are also marked on the enclosed map.

HARRY B. CARSON
Acting District Ranger

Hood River Dist.