

## Office Memorandum • UNITED STATES GOVERNMENT

TO : Jack Groom, Chief, Mining Section

DATE: December 7, 1959

FROM : Colver F. Anderson, Mining Engineer

SUBJECT: Mining Claims (Francis Hibbard)

Reference is made to the letter of November 2, 1959 in reply to Honorable Charles O. Porter.

The claims of Francis Hibbard were examined by mineral examiner Anderson on November 18 and 19 accompanied by Mr. Hibbard on the first day.

The main working is about 1500' southwesterly from the end of the Foster Creek road and in a large erosion cut formed by a bend of Foster Creek.

The area of the two claims is volcanic in nature being meta-andesite rock over most of the surface and this is over a rhyolite flow which is quite thoroughly altered to clay minerals by weathering. This rhyolite is exposed along the creek continuously from the Foster Creek road to at least one quarter mile above the claims. The limited development work has been in the weathered rhyolite.

There is pyrite development in the rhyolite which would decompose to make the rock slightly acid which could then help neutralize an alkaline soil. To this extent the environment for plant growth would be improved and plant life would show some temporary reaction to this lowered alkalinity. The clay developed in the rhyolite may possibly have a small amount of bentonite as one of the weathering products and this would have a slight agglutinating (soil clumping) effect which makes the ground more workable. This in turn permits plant roots to penetrate more easily in search of nutrients.

There would be practically no real fertilizer action to this material. The normal content of  $P_2O_5$  in igneous rocks is less than  $\frac{1}{4}\%$  while natural phosphate rock ground for fertilizer contains 20%  $P_2O_5$ .

In this file we have two copies of assay reports and accompanying discussion of the samples submitted. The report dated February 25, 1959 for C. L. Cox, Medford, appears to be some of this rhyolite material and only showed a trace of  $P_2O_5$ . The report dated January 13, 1959 for John A. Stetler, Medford, was apparently a black sand concentrate from panning. A 1.7%  $P_2O_5$  value in a concentrate would not be sufficient to interest a fertilizer company in the least. The metallics reported in this concentrate are not significant and no metallics were reported in the February 25 assay which is significant, because the claimants say their main values are in gold and silver.