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Washoe County General

GO GETTER - PUP

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Branch of Radioactive Materials
Building 25, Federal Center
Denver 25, Colorado

August 25, 1961

Mr. R. R. Coats
U. S. Geological Survey
345 Middlefield Road
Menlo Park, California

Dear Bob:

The memorandum accompanying this note is somewhat later in getting finished and dispatched than it should have been. It was written mainly to preserve a record of what was seen in a rather rapid tour and the tentative and somewhat nebulous ideas stemming from the observations.

Uranium deposits of the kind near Mountain City are sufficiently widespread to suggest that resources of uranium in deposits of this kind might be significant. At the present time, however, too little is known about the critical aspects of the relation of such deposits to their geologic setting and of events that have shaped or taken place in that setting to permit any reasonable definition of that potential.

Although the exploited or discovered deposits near Mountain City are relatively small, study of them would contribute to knowledge of the habits, distribution and relation of such deposits to their setting that would be very useful in helping to understand better the significance of this environment for uranium.

I think that gaining the kind of information that is needed to resolve some of the problems is beyond the scope of what investigations by the AEC are likely to accomplish, even though Bob Cohenour is aware of the problems. I hope that the charter for your project is liberal enough so that you can find an opportunity to help fit the uranium deposits and their possible provenance into the more comprehensive geologic picture that your work will develop.

I am sorry that our visit to the area could not have come at a time when you were there, but timing had to be accommodated in part to the schedule for Mr. Udas of the Indian Atomic Energy Commission.

Best wishes,

Art

Arthur P. Butler, Jr.

Enclosure

Copy to: Director's Reading File
Office of Economic Geology

The Hot Spot, Race Track, and Tag prospects fall within 100 feet of a straight line trending N. 72° W. The Autunite-October, Hawk and Pixley-South Fork deposits are almost as perfectly aligned in a direction of N. 80° W. and about 1 mile farther north. Whether these alignments are fortuitous or reflect some obscure structural control of distribution is uncertain. Five of the deposits are also situated well down in the valley of California Creek and the position of the deposits may be related in some manner to the form of the pre-volcanic surface.

Washoe County, Nevada, and Lassen County, California

Deposits visited in Washoe County, Nev., and in Lassen County, Calif., include the following:

Type A deposits:

Go Getter and Pup claims, SW¼ sec. 27, T. 24 N., R. 19 E.
Divide claims, SW¼ sec. 26, T. 24 N., R. 19 E.
Jeanne K claims, sec. T. 23 N., R. 18 E.

Type B deposits:

Lowary claims, SE¼SE¼ sec. 36, T. 24 N., R. 20 E.
Red Bluff mine, NW¼ sec. 1, T. 23 N., R. 20 E.

Deposits at the Go Getter-Put and Divide claims are generally similar in geologic surroundings and habit to those in the lower part of the volcanic sequence near Mountain City. They are, however, on or close to ridge and mountain crests rather than in the valleys. The deposit at the Divide claims is partly in a very coarse boulder conglomerate set in a matrix of consolidated vitric and crustal tuff which suggests deposition as a mud flow that incorporated hillside rubble. Radioactive material at both deposits is mainly in thin carbonaceous layers interbedded with tuff and 1 to 5 feet above the irregular contact with underlying granitic rock. At the Divide claims irregularly distributed pods of carbonized plant remains are also slightly radioactive, about 0.15 MR, or 3 to 4 times local background. No uranium minerals were noted.

The deposits are explored by shallow open cuts 15 to 20 feet wide and 100 to 120 feet long but have not been productive.

At the deposit on the Jeanne K claim the rock consists about two-thirds of arkose and about one-third tuff and conglomeratic tuffaceous mud flows. The arkosic rocks include some carbonaceous layers as much as 2 feet thick. The carbonaceous rock is radioactive, and exhibits local bloom of a secondary uranium mineral, possibly schroeckingerite. A few hundred tons of ore were shipped from the deposit.