ABANDONED OR INACTIVE URANIUM MINES IN NEW MEXICO

A report of investigation carried out between August 1979 and May 1980 under contract with the New Mexico Energy and Minerals Department.

by

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INTRODUCTION

During the course of this investigation approximately 200 uranium mine sites were visited. Although these sites are distributed throughout 20 counties the majority are in McKinley, San Juan, and Valencia Counties, along the western and southern margin of the San Juan Basin. Other counties with an appreciable number of sites are Grant, Rio Arriba, Sandoval, Sierra, and Socorro.

Field work commenced in August, 1979 and extended although not continuously, into May, 1980. Information obtained during the on-site visits included location, type and size of mine, condition of mine, host formation, dimensions of remaining structures, proximity to residences or villages, water quality data, and radiation levels, although a gamma ray scintillometer was not obtained for the project until October 20, 1979. An effort was made to contact landowners whenever and wherever possible, however, no systematic attempt was made to determine land and mineral ownership during this phase of the investigation.

Mine operation data has been included where available. This consists of information on ore grades, production history mineralogy, and mine operator. Old publications of the U.S. AEC and the State Mine Inspectors office were helpful in this area.

The mine reports are arranged alphabetically by county with each county having its own index. A NM- or AZ-mine identification number is given with each mine name in the index. It is an AML numbering system devised by Don Baker, Jr. The first part of this

identification number is based on a U.S. Soil Conservation Service numbering system of 15' quadrangles beginning with 1 in the northwest corner of the state to 24 in the northeast corner, then returning to the western border to start a new tier. The second part refers to a 7½' quad within the 15' quad; these are numbered counterclockwise from 1 in the NE quadrant to 4 in the SE. The last part of the number refers to a particular mine within the 7½' quad. An AZ- prefix indicates the 15' quadrangle is an Arizona quad that overlaps the New Mexico state boundary.

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The help and cooperation of the Navajo Tribe Office in Window Rock, Arizona permitted a statewide investigation to be completed; a note of thanks goes to Mr. R. Zaman and Mr. William Armstrong of that office.

RIO ARRIBA COUNTY

Date visited 10/12/79

Mine name(s) La Paloma County Rio Arriba

Section N½ 30 Twnsh. 26 N R. 9 E

Quadrangle sheet La Madera

Mining district Petaca

Elevation 7,600'

Nearest city and/or dwellings Petaca is 3 miles to the north

The La Paloma can be reached by going north on the Petaca road from La Madera 6 miles, to the northern half of Sec. 29, T. 26 N., R. 9 E. Take a dirt road leaving the Petaca road west for one mile to the workings.

The La Paloma consists of a shallow shaft, and several small open pits and bulldozer cuts. The shaft is 6' x 6' at the surface, and water filled. The depth to the water is 4'. The total depth is not known, however, it probably does not exceed 10' (photos a and b). A water sample was taken, and the analysis is attached. The smaller pits and bulldozer cuts are located in a small drainage trending southwest from the main shaft (photo c). The pits are generally shallow, ranging from 1-5' in depth (photo d). The bulldozed areas have removed topsoil and exposed bedrock (photo c). The total disturbed area is 500' northeast/southwest x 100' northwest/southeast.

The workings at the La Paloma are on pegmatite veins in a quartz, mica schist. The pegmatites contain microcline, quartz, albite, and muscovite, with minor amounts of columbite, beryl, samarskite, and monazite (A.E.C.).

No uranium minerals were visible. Scintillometer reading taken along several traverses of the property averaged 75 cps. Backround readings were 70 cps, and a maximum reading of 100 cps was registered in a small pit to the northeast of the water filled shaft (photo d). The radioactivity at the La Paloma was attributed to samarskite and monazite (Chenoweth, 1974).

There has been no recorded production from the La Paloma, but a trial shipment was made late in 1954, which was found to be uneconomic (Chenoweth, 1974).

References: (1) Chenoweth, W., 1974, Uranium in the Petaca, Ojo Caliente, and Bromide Districts, Rio Arriba County, New Mexico, in New Mexico Geol. Soc., 25th Field Conf. Guidebook, p. 315.
(2) U.S. A.E.C., 1970, Preliminary Reconnaissance for Uranium in New Mexico, 1950-1958, RME-160, 223 p.

Photo (a) Looking west at surface openings of small pit. Field geologist is taking a water sample.

Photo (b) Close up of the small, water filled shaft on the La Paloma workings. Note hammer for scale.

Photo (c) Looking south at typical small pit (arrow) along a drainage on the La Paloma workings. Note the growth of pine along the drainage and on the dump south of the pit.

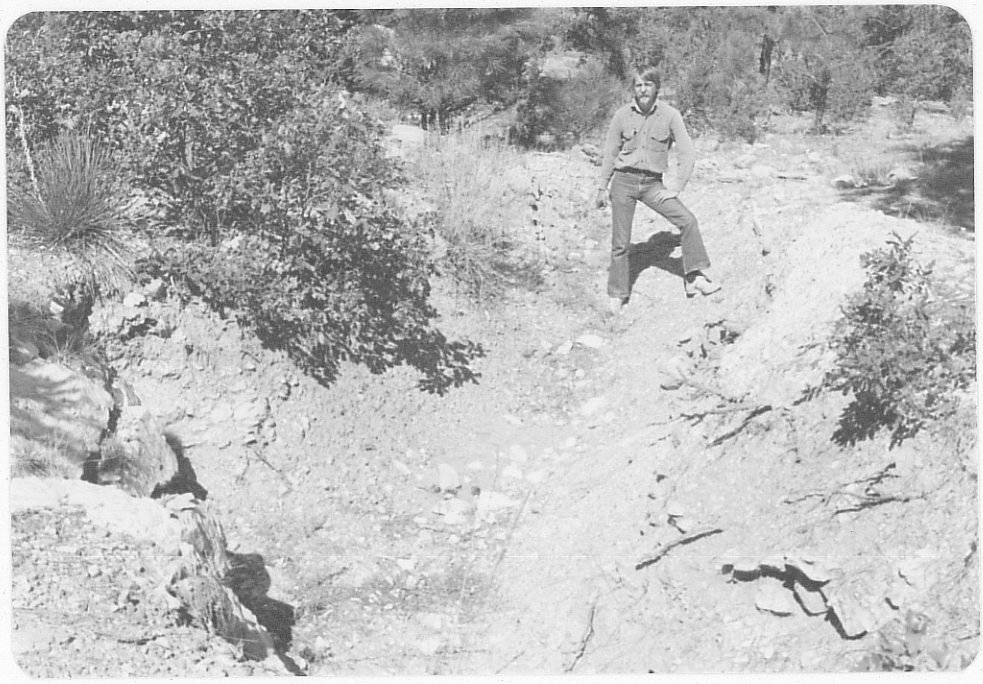

Photo (d) Shallow pit northeast of water filled shaft. Maximum scintillometer readings at this pit were 100 cps.

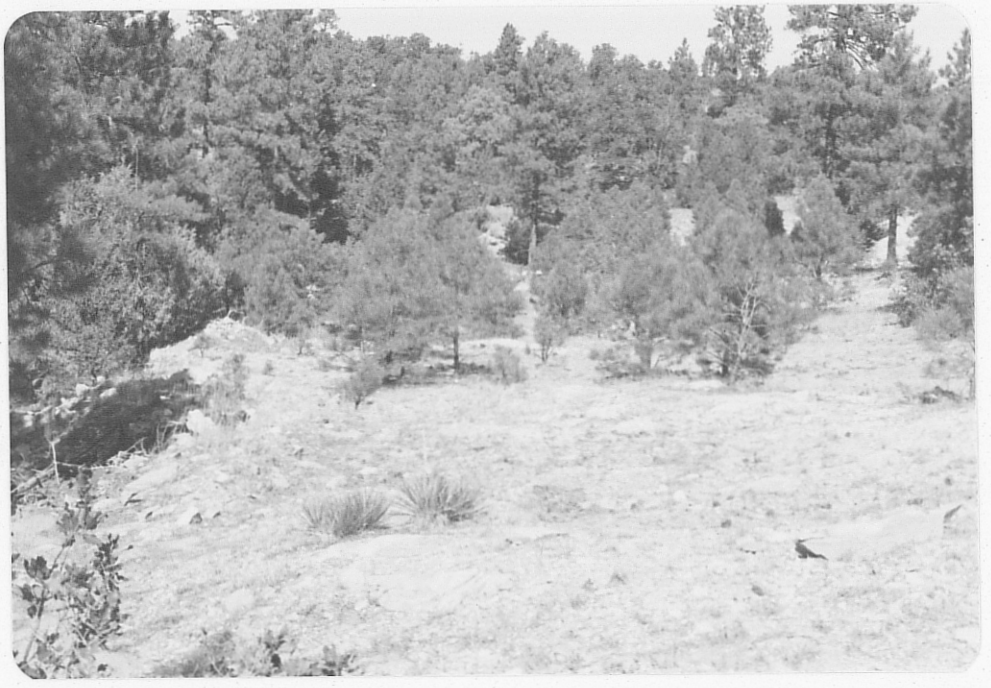

Photo (e) Bulldozed area on the La Paloma workings. Note rejuvination of area by pines and grasses.