

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.

Acknowledgments - The writer wishes to thank the following people for their valuable assistance in the field: Lars (Skip) Skotte, Richard Chamberlin, JoAnne Osburn, Mary Ann Anderson, and Cheryl Kyllonen.

A special thanks is extended to Mr. William Chenoweth of the U.S. Department of Energy, both for his time in the field as well as the claim maps and A.E.C. mine production records he provided. Mr. John Blagbrough provided helpful information about the Chuska district. The editorial assistance of Wyatt Brewster and Lars (Skip) Skotte is gratefully acknowledged.

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.

CATRON COUNTY

Quad: Mogollon 7½'

1. NM-377-1-1

Page 1

Baby Mine

Quad: Tejana Mesa 7½'

1. NM-242-1-1

Page 3

Section 21 (Varnum)

Quad: Telephone Canyon 7½'

1. NM-314-4-1

Page 5

Quary

Quad: Third Canyon 7½'

1. NM-245-2-1, NM-245-2-2

Page 7

Midnight #2, McPhaul Adit

Date visited 8/31/79

Mine name(s) Baby Mine County Catron

Section 20 Twnsh. 10 S R. 19 W

Quadrangle sheet Mogollon 7½'

Mining district Mogollon

Elevation 5,600'

Nearest city and/or dwellings Mogollon; 2.1 airmiles southeast

The mine site may be reached by taking Mineral Creek road northeastward out of Alma for approximately 6 miles; the last ¼ mile must be made on foot as the jeep trail that once existed along the creek as it enters Cooney Canyon is no longer passable.

The workings consist of lower and upper adits driven into the south wall of Cooney Canyon about 40' and 140' respectively above the floor. The lower and largest adit was entered and explored for the first 25' to 30'; at that point it makes a left and according to a mine sketch by Collins, 1957, continues for another 70'-75'. A wooden door remains in place about 15'-20' into the adit (see photos on following page).

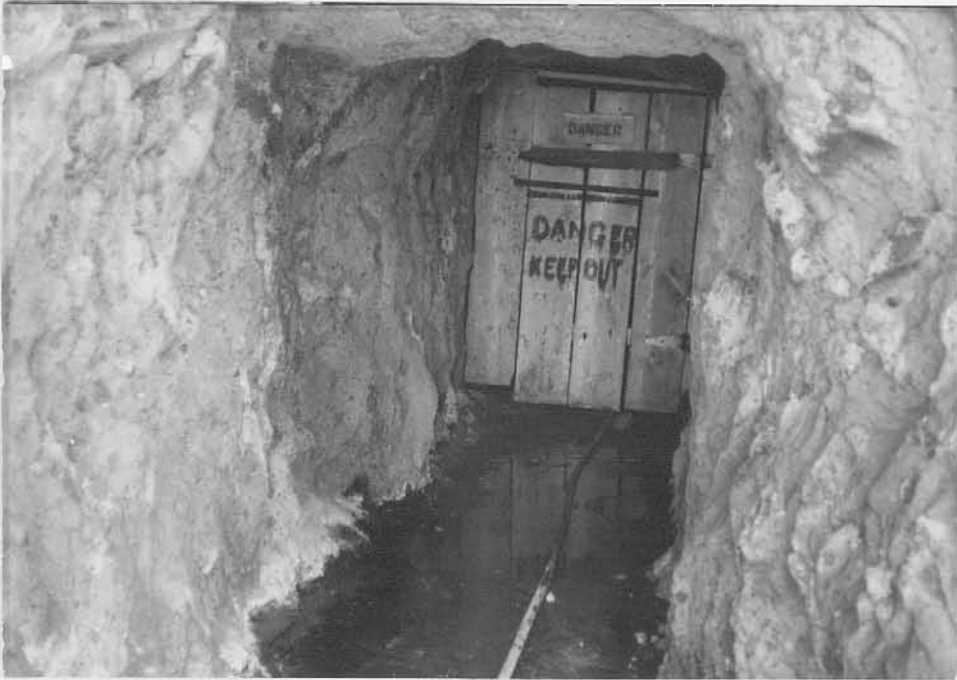
The adits were driven into a fracture zone in a purplish gray andesite; euhedral pyrite is disseminated throughout the andesite. In addition local concentrations of drusy quartz, calcite, and colorless to light green or dark purple fluorite occupy small fissures and brecciated zones in the hydrothermally altered portions of the andesite (Collins, 1957). Scintillometer readings in the lower adit were measured by Virginia McLemore who reported they were in the 250-350 cps range (background=100cps)

Collins, 1957, stated that;

"In April, 1955, anomalous radio-activity was discovered in two abandoned prospect adits in the south wall of Cooney Canyon in Section 20. The occurrence was staked as the Baby Mine and was leased to the Rome Mining Company of Rome, New York. Slightly more than 7 tons of poorly sorted ore that averaged 0.10% U<sub>3</sub>O<sub>8</sub> and 0.68% V<sub>2</sub>O<sub>5</sub> have been shipped from the lower adit".

The assistance of Virginia McLemore and Robert Eveleth of the NMBMMR in the investigation of this site is gratefully acknowledged.

- References:
- (1) Collins, G.E., 1957, Reconnaissance for Uranium in the Mogollon Mining District, Catron County, New Mexico, U.S. AEC Technical Memorandum DAO-4-TM-7.
  - (2) Collins, G.E., and Hye, T.S., 1955, Preliminary Reconnaissance Report on the Baby Mine, in U.S. AEC Uranium Investigation Reports 1951-56.
  - (3) Hilpert, L., 1965, Uranium Section in Mineral and Water Resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources, Bull. 87, p. 222.
  - (4) Weber, R.H., and Willard, M.E., 1959, Reconnaissance Geologic Map of the Mogollon 30' quadrangle, N.M. Bur. of Mines and Mineral Resources Geol. Map #10.
  - (5) Field notes, 8/31/79.



View inside lower (larger) adit of Baby Mine



Entrance to upper level (smaller) adit of Baby Mine