

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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New Mexico Bureau of Mines and
Mineral Resources
Open-File Report 148

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.

GRANT COUNTY

Quad: Burro Peak 7½'

1. NM-411-3-1 Page 1
Alhambra - Bluebelle No.2
2. NM-411-3-2 Page 3
Floyd Collins
3. NM-411-3-3 Page 6
Merry Widow

Quad: White Signal 7½'

1. NM-411-4-1 Page 9
Inez (Inez uranium deposit)
2. NM-411-4-2 Page 11
Shamrock
3. NM-411-4-3 Page 14
Calamity Mine
4. NM-411-4-4 Page 18
Blue Jay (Blue Jay Claim)
5. NM-411-4-5 Page 20
Eugenie

Mine name(s) Inez (Inez uranium deposit) County Grant
 Section S $\frac{1}{2}$ 24 Twنش. 20 S R. 15 W
 Quadrangle sheet White Signal 7 $\frac{1}{2}$ '
 Mining district White Signal
 Elevation Approximately 5,900'
 Nearest city and/or dwellings White Signal, 1 mile NW

The Inez Deposit is located in the SE $\frac{1}{4}$ sec. 24 on the north side of Walnut Creek. The area is accessible by dirt road leaving highway no. 280 $\frac{1}{2}$ mile north of White Signal. This road leads eastward, but dirt trails to the south at $\frac{1}{2}$ mile and at $1\frac{1}{2}$ mile down this road lead into the inactive mines in the S $\frac{1}{2}$ of sec. 24.

Mines and prospecting pits are very numerous in the SE $\frac{1}{4}$ of sec. 24. Open pits, cuts, vertical shafts, adits were all found, but without a scintillometer it is impossible to tell which may have been uraniferous. Photo (a) shows a typical small open cut. Photo (b) is a vertical shaft, which may not be in the SE $\frac{1}{4}$, but is somewhat of a hazard. Depth to water at this unfenced shaft site is 15'. Patented claims exist in the SE $\frac{1}{4}$ of sec. 24 and attempts to find the owners locally were met with failure. Without the express permission from the landowners, a thorough search was not carried out during the August 30, 1979 investigation.

Gillerman, (1964) reported that two carloads of ore averaging 0.2% U₃O₈ were shipped from the mine during or shortly after 1954. Mineralization is in the form of torbernite filling veinlets and minute fractures in a diabase dike rock.

- References: (1) Gillerman, Elliot, 1964, Mineral Deposits of Western Grant Co., New Mexico; New Mexico Bur. of Mines and Mineral Resources, Bull. 83; p. 93.
 (2) Hilpert, L., 1965, Uranium, in Mineral and Water Resources of New Mexico: New Mexico Bur. of Mines and Mineral Resources, Bull. 87; p. 222.
 (3) State Mine Inspector's Office, 43rd Annual Report, 1955, p. 44.
 (4) Field notes, 8/30/79.



Photo (a) Small open cut in dike rock in SE $\frac{1}{4}$ sec. 24; note hammer for scale.



Photo (b) Open vertical shaft in S $\frac{1}{2}$ sec. 24; depth to water is 15'.