

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.

VALENCIA COUNTY

Quad: Dos Lomas 7½'

- | | | |
|-----|---|---------|
| 26. | NM-149-4-26 | Page 1 |
| | Double Jerry (Vallejo) | |
| 27. | NM-149-4-27 | Page 4 |
| | Christmas Day | |
| 28. | NM-149-4-28 | Page 8 |
| | Red Bluff Claims 1,2,3,4,5,9 | |
| 29. | NM-149-4-29 | Page 15 |
| | Black Hawk, Bunney, Gay Eagle, Red Bluff, and UDC | |
| 30. | NM-149-4-30 | Page 28 |
| | Last Chance | |
| 31. | NM-149-4-31 | Page 31 |
| | Section Nine | |
| 32. | NM-149-4-32 | Page 39 |
| | Taffy (Bonanza) | |
| 33. | NM-149-4-33 | Page 41 |
| | La Jara | |
| 34. | NM-149-4-34 | Page 45 |
| | Zia | |
| 35. | NM-149-4-35 | Page 52 |
| | Linear Prospecting Trenches | |

Quad: Dough Mountain 7½'

- | | | |
|----|----------------------------|---------|
| 1. | NM-199-1-1 | Page 54 |
| | Sandy (South Laguna Mines) | |

Date visited 5/6/80

Mine name(s) Sandy (South Laguna Mines) County Valencia

Section SE $\frac{1}{4}$ 22, NE $\frac{1}{4}$ 27 Twنش. 9 N R. 5 W

Quadrangle sheet Dough Mountain 7 $\frac{1}{2}$ '

Mining district Laguna

Elevation 5,920'

Nearest city and/or dwellings Mesita, 3 miles northeast

The Sandy and/or South Laguna Mines are located near the sec. 22-27 line about 3/4 miles south of the south boundary of the Laguna Pueblo grant. The site may be reached by taking the Mesita exit off I-40 and proceeding south on a dirt road for about 1 $\frac{1}{2}$ miles to the second pipeline crossing. Then go west for about 1/4 miles to sec. 22. Prospecting pits and a mine dump are visible.

The mine consists of (1) a 50' diameter pit in the extreme north of sec. 27 (see photo a); (2) two small dumps or low grade ore piles, each about 10' wide, 40' long, and 4' high (see photo b); and (3) a rectangular pit, 20' x 30', 4' deep that is 450' east of the first pit (see photo c). Mineralization is in the uppermost beds of the Entrada sandstone and in the base of the overlying Todilto limestone. A diabase sill, locally up to 20' thick, has intruded the lower Todilto limestone. The intrusion has displaced the upper part of the deposit (Hilpert, 1969). The uranium occurs as finely disseminated coffinite and uranite (Hilpert, 1969). Scintillometer readings along the north wall of the first pit were up to 6,000 cps, in the rectangular pit up to 1,200 cps, and on the dumps shown in photo (b) up to 300 cps. Some dark greenish, black mineralization was noted, but little if any secondary oxidized uranium minerals were noted in the open pits. Some interesting mineralization has been produced by the metamorphism of uranium deposits near contacts with the diabase sill, (Moench, 1963).

The mine was operated in 1955 by the Anaconda Company. It is not certain if one of the two described pits was assigned the name Sandy and the other the South Laguna, but both were Anaconda operations. Hilpert (1969) listed the workings as the Sandy with additional deposits in sec. 27. The State Mine Inspector listed the workings as the South Laguna Mines located in both sections 22 and 27. Date of last registration of the mine is not known.

Recent drilling is evident in sec. 22 under the name of some "Laguna Project."

- References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.
(2) Moench, R. H., 1963, Geologic Limitations on the Age of Uranium Deposits in the Laguna District, in Geology and Technology of the Grants Uranium Region: New Mexico Bureau of Mines and Mineral Resources, Mem. 15, p. 161.

- (3) State Mine Inspector's Office, inactive uranium mine file.
- (4) Field notes, 5/6/80.



Photo (a) Looking westward into 50' diameter semi-circular pit in the extreme north of sec. 27.
Note person at right of center holding range pole for scale.



Photo (b) Looking northeastward at mine dump or low grade ore piles; left one is composed of Entrada sandstone, right one Todilto limestone; each is about 4' high.



Photo (c) Looking westward into small pit 450' east of main pit shown in photo (a).

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