

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 2/1/80

Mine name(s) Christmas Day County Valencia

Section NE $\frac{1}{4}$  Sec. 4 Twنش. 12 N R. 9 W

Quadrangle sheet Dos Lomas 7 $\frac{1}{2}$ '

Mining district Mt. Taylor

Elevation 7,000'

Nearest city and/or dwellings Milan, 9 miles south

The Christmas Day Mine is located in the SE $\frac{1}{4}$ , NE $\frac{1}{4}$  of sec. 4 immediately west of the Red Bluff #9 claim, see Fig. 1. To reach the mine area travel north on highway no. 53 for 7.3 miles from the no. 53 and U.S. no. 66 intersection. Then take the Roundy Ranch road northeastward for about 3 miles to the top of the mesa in sec. 4.

The mine consists of a more or less C-shaped trench, open to the north, with a 60' radius, (see photo a). The trench is up to 20' deep, but only the bottom 5' to 6' is in Todilto limestone, the remainder is aeolian overburden. The western arc or limb is the longest and widest and provided the access to the pit (see photo b). The tailings dump area is located 300' directly out from the access ramp and is shown in photo (c). Dump is 120' in maximum dimension, and up to 6' high; some secondary mineralization noted on the dump rock, scintillometer readings up to 700 cps.

The workings exploited a cluster of small to medium deposits in the lower Todilto, that trend northeasterly through the area, ranging from a few feet to 200' wide (Hilpert, 1969). Mineralization is associated with fractures and low amplitude intraformational folds. Scintillometer readings were in the 500-700 cps range; a trace of yellow secondary uranium mineralization was noted in places. Trenches are filling with tumbleweed and blow sand (see again photo a) and floors have developed vegetation cover.

Mine was operated from 1954 to 1956 (Hilpert, 1969); but last registration at State Mine Inspector's Office was in August, 1954.; by the Colamer Corporation.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 58.
  - (2) State Mine Inspector's Office, inactive uranium mine file.
  - (3) McLaughlin, E. D., Jr., 1963, Uranium Deposits in the Todilto Limestone of the Grants District, in Geology and Technology of the Grants Mineral Region: New Mexico Bureau of Mines and Mineral Resources, Memoir 15, p. 147.
  - (4) Field notes, 2/1/80.

V-4

R. 9 W.

33 34

T. 13 N.

T. 12 N.

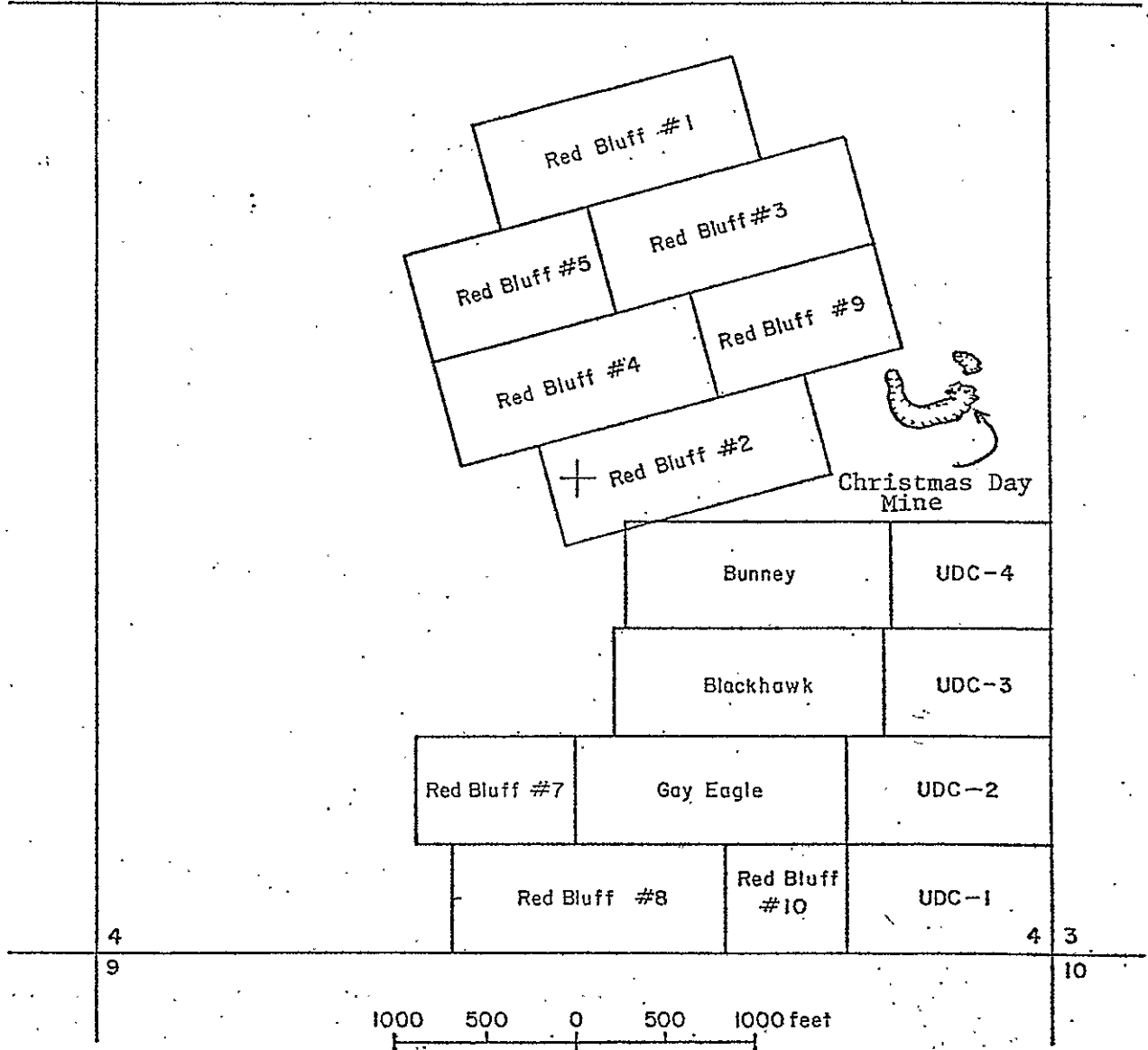


Fig. 1 Sec. 4 mining claims filed in late 1950 and early 1951 (source: mining claim records, Valencia Co., Courthouse). Note the Christmas Day Mine in the SE $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 4, just east of Red Bluff #9.

V-5



Photo (a) Looking westward into the east and south edges of the Christmas Day workings; blanket of aeolian sediment is here quite thick, often over 15'.



Photo (b) Looking northwestward into the western limb of the Christmas Day workings.



Photo (c) Looking northwestward at Christmas Day tailings dump area.  
—Note person in photo for scale.