

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) | |

Mine name(s) Zia County Valencia
 Section SW/4, 15 Twنش. 12N R. 9W
 Quadrangle sheet Dos Lomas
 Mining district Mt. Taylor
 Elevation 7,080'
 Nearest city and/or dwellings Ambrosia Lake junction 5 1/2 mi. N.; Roundy Ranch, 2 mi. NW.

The Zia mine is located on a low Todilto limestone capped mesa in the SW/4 Sec. 15 just 1/4 mi. inside the Cibola National Forest boundary. It is accessible via the U.S. Forest Service access road that leaves state Highway No. 53 at a point .75 mi. north of the UN-HP uranium mill. Travel eastward on the access road for 3.6 mi. to the Forest boundary and turn left (north) for 2 mi. At this point the Zia mine will be approximately 1/2 mi. to west and the tailings dump will be visible.

The mine consists of a box cut into the Todilto limestone that is 200' long (E-W), 120' wide, and 30' deep. Ramps descend to floor of cut from the SE corner and the NW corner. The Entrada-Todilto contact is exposed along the north wall of the cut and mineralization reportedly extends downward into the upper Entrada. A panoramic view to the east showing the mine site is given in photo (a). Views of the pit from the east end are shown in photos (b) and (c). Photo (b) shows the ramp at the northwest corner and photo (c) shows the two stub adits at the bottom, one in the west face and one in the south face. The portal of the western adit is 7' wide and presently only 3' high because recent caving and slumping has partially blocked the entrance. The adit is about 6' deep and crudely timbered in several places see photo (d). Scintillometer readings at the portal were up to 600 cps; or about 8x background.

The portal of the southern adit is also about 7' wide; some coarse waste rock partially blocks the entrance which is presently about 3 1/2' high on the right side (see photo e). The adit is approximately 18' deep with little evidence of oxidized uranium mineralization on the face, although the entire length was not explored in detail because of hazardous conditions. Some crude timbering remains in place; scintillometer readings ranged up to 1,700 cps just inside the adit.

Just to the west of the box cut, immediately behind the viewer in photo (a), is an east-west trending 120' long by 15' wide prospecting trench (see photo f). The trench descends gradually from the east end, reaches a maximum depth of 11' near the center and breaks through the edge of the mesa top on the west end forming a notch. The waste material at the west end (see photo g) extends down-slope for 60' or more with low scintillometer readings - 150 cps maximum. The material stockpiled at the east end of the trench produced much higher scintillometer readings, up to 600 cps; however, part of this material might have been derived from the larger box cut. A sketch of the entire mine site, Fig. 1, illustrates most of the features described above.

The deposit was mined during the 1952-60 period (Hilpert, 1969). The State Mine Inspector's Office records, however, show that the Zia Mining Company, which operated both the La Jara and Zia mines, last registered this mine in August, 1957. Total productions is not known.

A claim marker on the tailings dump south of the box cut contains an ammended claim location certificate dated 12/20/78. It ammends the original claim named the Hunch #14, dated 7/1/64, and staked by D.L. Varnum of Monahans, Texas 79756. The ammendment was signed by Warren Parker.

References:

1. Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S. Prof. paper 603
2. New Mexico State Mine Inspector's Office, inactive uranium mine file
3. Field notes 1/30/80

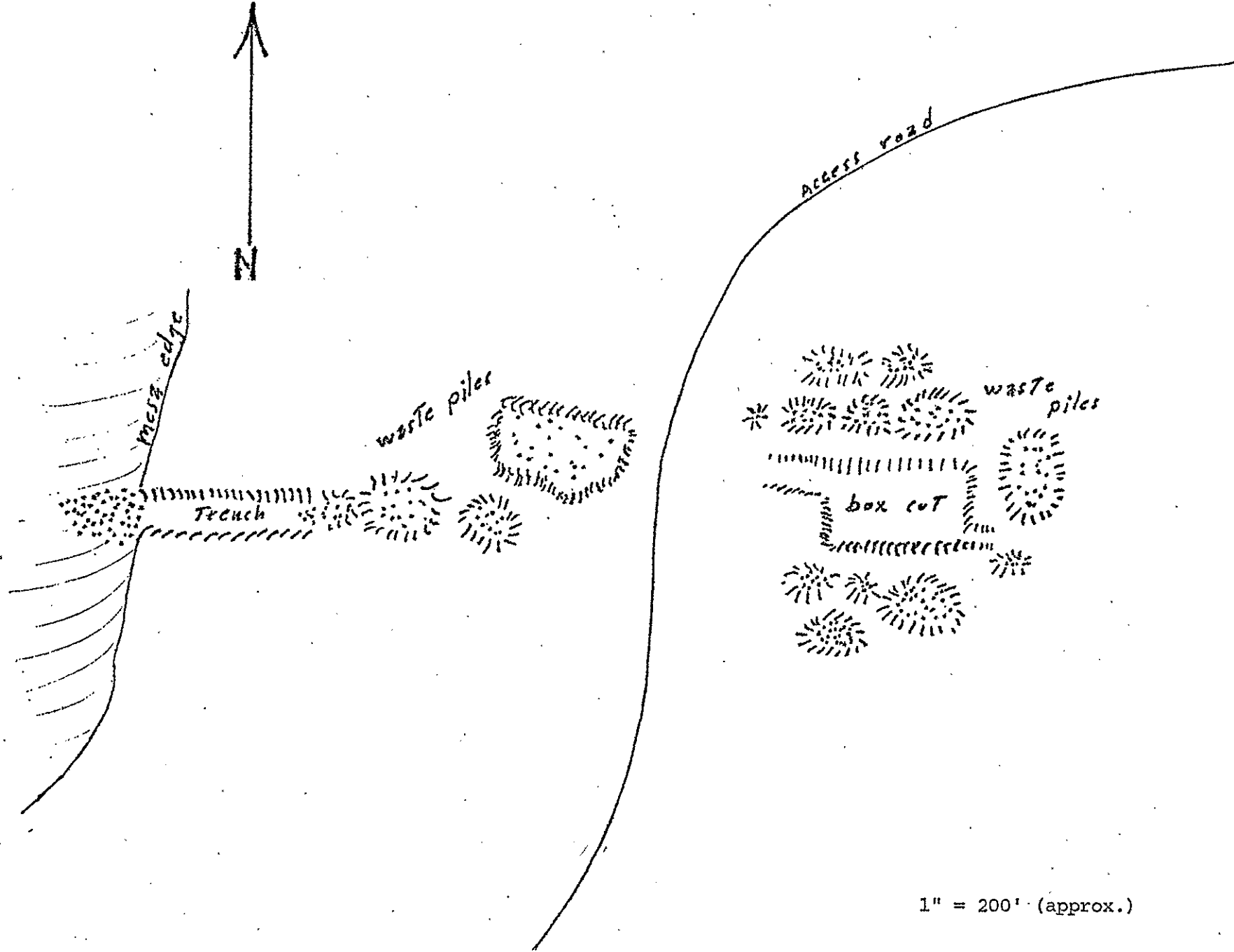


Fig. 1 Diagrammatic sketch of Zia mine site



Photo (a) Looking eastward at Zia Mine; open pit at center is 30' deep. La Jara Mesa in background at left. Photo taken after a light snow had fallen.



Photo (b) Looking westward at box cut; note ramp at upper right.



Photo (c) Looking westward from nearly same point as in photo (b), but both adits at bottom of cut are shown here.



Photo (d) Looking westward; close-up of adit driven in western face at cut.



Photo (e) Looking southward; close-up of adit driven in southern face of cut.



Photo (f) Looking westward into 120' long prospecting trench west of box cut.



Photo (g) Portion of dump at west end of trench; Haystack Mountain in center distant background