

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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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.

SANDOVAL COUNTY

Quad: Holy Ghost Spring 7½'

1. NM-129-2-1 Page 1  
Collins (Warm Springs) (Goodner-Collins leases)

Quad: La Gotera 7½'

1. NM-152-3-1 Page 5  
Dory (Dorie) Prospect
2. NM-152-3-2 Page 7  
Betty (Betty Claims)

Quad: La Ventana 7½'

1. NM-105-3-1 Page 12  
Butler Brothers
2. NM-105-3-2 Page 16/17  
Rambler #2 Prospect

Quad: Regina 7½'

1. NM-81-2-1 . \*found under Rio Arriba County; Quad: Regina  
Whiteflow.. (Corral #3)
2. NM-81-2-2 Page 18/20  
Sla-Tex Open Pit (Corral #3 Claim)

Date visited 3/4/80

Mine name(s) Butler Brothers County Sandoval

Section NE $\frac{1}{4}$  23 Twنش. 19 N R. 1 W

Quadrangle sheet La Ventana

Mining district La Ventana

Elevation 7,700'

Nearest city and/or dwellings La Ventana, 5 air miles southeast

The Butler Bros., is located in the NE $\frac{1}{4}$  of sec. 23, 1 mi. west of the San Miguel copper mine. It may be reached by dirt road leading eastward from highway no. 44 at a point 12 mi. south of Cuba. Proceed northeastward on this road for approximately 1 mi. to old no. 44, then jog to the right for 1/4 mi. to pick up dirt road heading eastward parallel to the drainage line. Proceed eastward for about 3 $\frac{1}{2}$  mi. to mine site.

The mine consists of a 110' long cut in basal Dakota Sandstone exposing at 1' thick carbonaceous shale or peat zone that is uraniferous, (see photo a). Although that is the extent of the mine it would appear that a considerable amount of material had to be moved to get to the ore zone. The ore zone is shown in photo (b). On the opposite, or down dip, side of the ore body a sandstone capped knob stands isolated; if ore existed on this side it has now been mined out. Photos (d) and (e) show the northern portion of the cut and indications of a small underground working; a small decline was apparently started just below the steeply dipping peat bed, but the opening was too small to allow an investigation (see again photo e). Scintillometer readings at the opening = 1,400 cps; maximum along north end of ore bearing peat zone = 4,000 cps.

A total of 23 tons of ore averaging .63% U<sub>3</sub>O<sub>8</sub> was produced from the mine during 1954-1957 (Chenoweth, 1974). The State Mine Inspector's office last registered the mine in June, 1955. However, a \$106.00 shipment of ore was reported again in 1959 (Elston, 1967).

Disturbance at the site is of minor significance and represents little if any hazard.

- References:
- (1) Chenoweth, W. L., 1974, Uranium Occurrences of the Nacimiento-Jemez Region, Sandoval and Rio Arriba Counties New Mex., in, New Mex. Geol. Soc. 25th Guidebook, Ghost Ranch; p. 312.
  - (2) Elston, W. E., 1967, Summary of the Mineral Resources of Bernalillo, Sandoval, and Santa Fe Counties, New Mexico; New Mexico Bur. of Mines and Mineral Resources; Bull. 81.
  - (3) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.

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



Photo (a) Looking southward into cut in basal Dakota Sandstone; beds are dipping at  $45^{\circ}$ - $50^{\circ}$  to right. Bench cut at upper left exposes 1' thick carbonaceous shale, or peat, unit with uranium values. Photo taken after light snowfall.

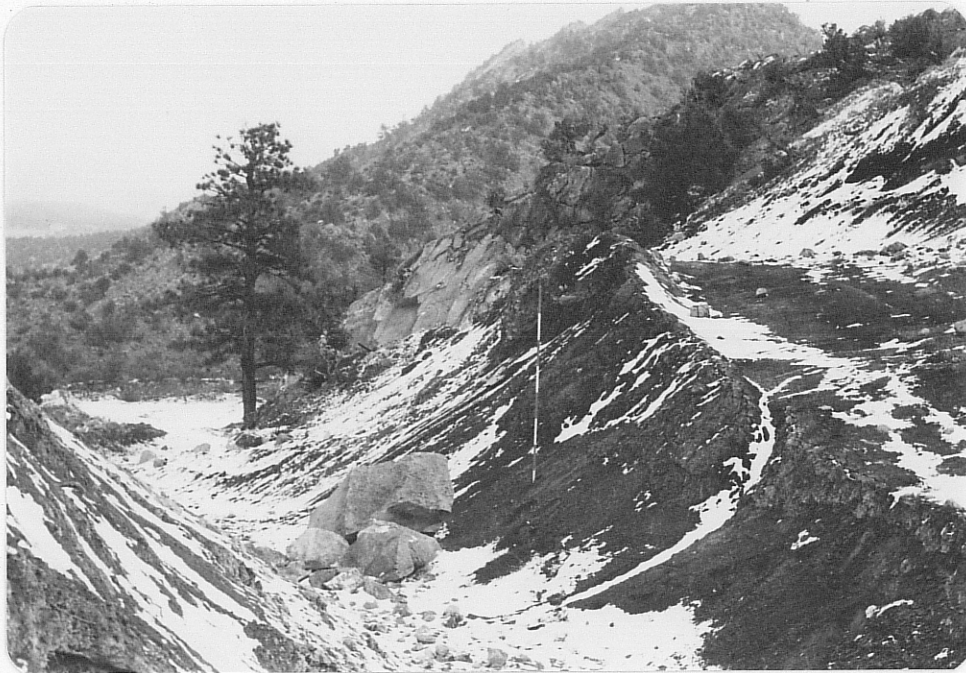


Photo (d) Looking northward through the cut showing ore zone above bench at upper right and access road descending at left.

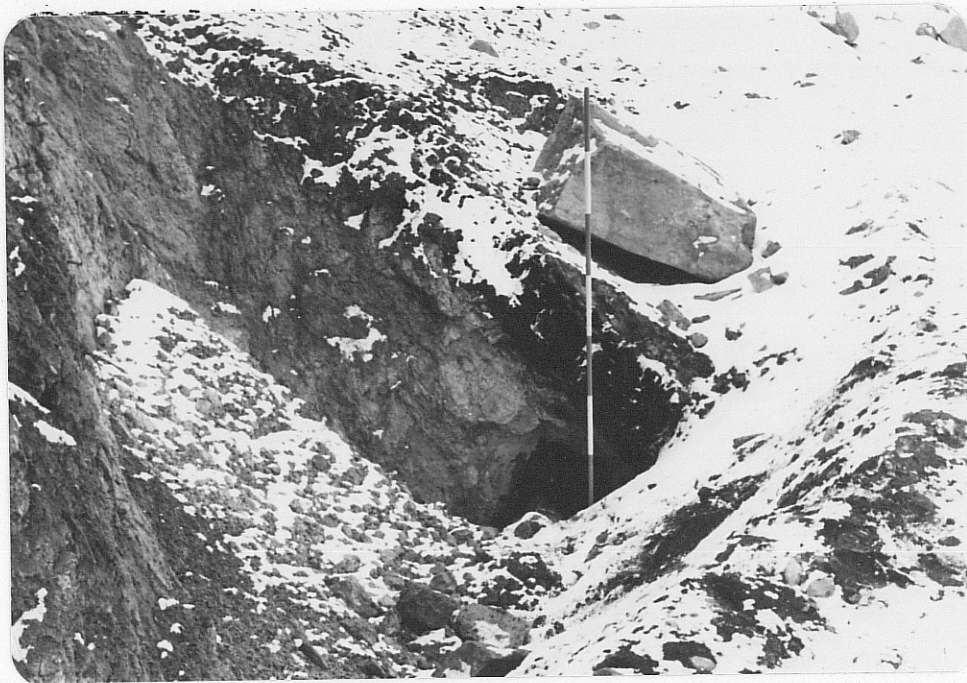


Photo (e) Evidence of minor underground workings at north end of bench shown in photo (d). A small incline may have been used to explore the peat zone visible just above the opening; opening is not large enough for a man to enter.