

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

Orin J. Anderson

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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.

Quad: Mariano Lake 7½'

1. NM-123-4-1 Page 214
Mac #1
2. NM-123-4-2 Page 217
Black Jack #2

Quad: Pinedale 7½'

1. NM-123-3-1 Page 222
Westwater

Quad: San Mateo 7½'

1. NM-150-3-1 Page 224
Rialto (Chill Wills)

*San Mateo Quad report #2 found under Valencia County

Quad: Thoreau NE 7½'

1. NM -148-1-1 Page 230
Alta
2. NM-148-1-2 Page 234
Silver Bit 15 and 18 (Pentada Prospect)
3. NM-148-1-3 Page 237
Francis
4. NM-148-1-4 Page 241
Evelyn
5. NM-148-1-5 Page 247
Billy The Kid and Greer Warren and McCormack

Date visited 12/5/79

Mine name(s) Westwater County McKinley

Section SE $\frac{1}{2}$ 2 Twنش. 15 N R. 16 W

Quadrangle sheet Pinedale 7 $\frac{1}{2}$ '

Mining district Gallup (Church Rock)

Elevation 7,500'

Nearest city and/or dwellings Church Rock, 6 mi. west-southwest

The Westwater Mine may be reached on foot from the Williams and Reynolds Mine in sec. 4, 2 mi. away. Access roads to the north and to the east exist, but were not investigated. Mine is on state owned land.

The workings found during this investigation consist of a NE-SW trending open cut across a nose of Westwater Canyon member sandstone. The cut measures 20' wide, up to 15' deep, and is about 35' long, (photo a). A knob of sandstone left isolated by the cut yielded higher gamma counts outside the cut than inside; inside readings were about 900 cps while outside (photo b) readings near a channel sand/mudstone contact ranged up to 1100 cps.

The U.S. AEC-PED-1 report, 1959, stated that two small parallel adits totaling 350' of underground drifts were driven on this property in 1957. Production through mid 1958 had totaled 496 tons of ore averaging .41% U₃O₈. No trace of these two adits was found during the on site visit. It seems very likely, however, that some ore was hauled off from the open cut described above.

The mine was last registered with the State Mine Inspector's Office in August, 1959. The workings as found represent no hazard.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.
 - (2) U.S. AEC-PED-1, 1959, Mine Operation Data Report; GJO/AEC, p. 65, microfiche only.
 - (3) State Mine Inspector's Office, inactive uranium mine file.
 - (4) Field notes, 12/5/79.

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Photo (a) Looking northeastward into open cut.



Photo (b) View of sandstone knob isolated by cut, showing channel sands with uranium values.

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