

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

New Mexico Bureau of Mines and
Mineral Resources
Open-File Report 148

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.

Acknowledgments - The writer wishes to thank the following people for their valuable assistance in the field: Lars (Skip) Skotte, Richard Chamberlin, JoAnne Osburn, Mary Ann Anderson, and Cheryl Kyllonen.

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.

RIO ARRIBA COUNTY

Quad: Arroyo del Agua 7½'

1. NM-82-2-1 Page 1
Lucky Strike (Mid Continent?)
2. NM-82-2-2 Page 4
Hillfoot (Serrano)
3. NM-82-2-3 Page 6
Red Head (Tinney #2) Claims, Red Bird

Quad: Burned Mountain 7½'

1. NM-36-2-1 Page 8
Tusas East Slope #5
2. NM-36-2-2 Page 10
J.O.L. (Royal)

Quad: Ghost Ranch 7½'

1. NM-59-3-1 Page 13
Lucky Dog/Horny Toad (Onego?)

Quad: La Madera 7½'

1. NM-60-1-1 Page 15
La Paloma
2. NM-60-1-2 Page 20
Pineapple

Date visited 10/17/79

Mine name(s) Lucky Strike (Mid Continent?) County Rio Arriba

Section SW $\frac{1}{4}$ NE $\frac{1}{4}$ 1 Twنش. 22 N R. 2 E

Quadrangle sheet Arroyo del Agua

Mining district N/A

Elevation 7,000'-7,020'

Nearest city and/or dwellings Arroyo del Agua is 1 $\frac{1}{2}$ miles to the east.

To reach the Lucky Strike, proceed west on New Mexico 96 from Arroyo del Agua approximately 1 $\frac{1}{2}$ miles to Agua Sarca Creek. Four hundred feet past the bridge is an abandoned farm and a road leading southwest to the workings. The workings are 300' southwest of the highway.

The workings at the Lucky Strike consist of a northern and a southern rim cut. The northern cut (photo a), is 300' long x 20' wide, and is as much as 6' deep. The southern cut is 250-300' southwest of the northern cut (photo b). It is 200-250' long x 20' wide x 6' deep. Some prospecting was done above the bench cut (photo c). A road continues beyond the southernmost cut for several hundred feet, but no further workings were encountered. No dumps of any appreciable size were located.

Both cuts are in the Agua Sarca Member of the Chinle Formation, and mineralization seems to be associated with carbonized plant debris. Faint traces of yellow mineralization may be uranium oxides.

Small trial shipments in 1955 from the Mid-Continental 1 and in 1957 from the Lucky Strike contained 0.05 and 0.07% U₃O₈, respectively (Chenoweth, 1974).

- References:
- (1) Chenoweth, W., 1974, Uranium Occurrences of the Nacimiento-Jemez Region, Sandoval and Rio Arriba counties, New Mexico, in N.M. Geol. Soc. Guidebook, 25th Field Conference.
 - (2) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S. Prof. Paper 603, p: 45.
 - (3) U.S. AEC, uranium mine records.
 - (4) Field notes, 10/17/79.



Photo (a) Looking southwest at the northern Lucky Strike cut.



Photo (b) Looking southwest at the southern Lucky Strike cut. Note scintillometer (circled) for scale.



Photo (c) Prospecting above the bench cut in photo (b) on the southern Lucky Strike workings.