

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.

QUAY COUNTY

Quad: Forrest 7½'

1. NM-214-4-1

Page 1

Good Luck

Quad: San Jon NW 7½'

1. NM-191-2-1

Page 3

Section 12

2. NM-191-2-2

Page 5

Little Rattler

Date visited 9/11/79

Mine name(s) Little Rattler County Quay

Section 11 & 12 Twنش. 11N R. 33E

Quadrangle sheet San Jon NW

Mining district N.A.

Elevation 3,920'

Nearest city and/or dwellings 1 mile west of farm house, approximately
9 miles northwest of San Jon

The Little Rattler prospect is located at the fork of a dry creek which drains west for two miles into Revuelto Creek.

The workings consist of a bulldozer or face cut, a small dump pile, and an ore sorter (see photo b). The cut runs roughly NE-SW for 200'-250', and 25'-80' in the NW-SE direction. The dump is NW of the cut and is 4' high, 75' long (NE-SW), and 15'-20' wide. The dump is located on the rim of the stream cut, but no tailings spill into the stream. The ore sorter is located on the southern end of the prospect. Several drill holes were located SW and above the benchcut. Total disturbed area is 300' x 75'.

No visible uranium minerals were noted, and no scintillometer readings were available. The cut is in the Chinle Fm., which is locally a light gray siltstone or mudstone grading upwards into red sandstone. The gray zone is 3-5' thick at the prospect. Trial shipments from the Little Rattler, Windy 9, and Good Luck #1 totaled 80 tons (Finch, 1972).

References:

- (1) Berkstresser, Jr., C. F., and Mourant, Walter A., -1966, Ground-water Resources and Geology of Quay County, New Mexico, N.M.B.M. Ground-water Rep. 9.
- (2) State Mine Inspector's Office, inactive uranium mine file.
- (3) Finch, W. I., Uranium in Eastern N.M., U.S.G.S. Open File Rep., pp. 12-13.



(photo a) Ore sorter and southern workings of Little Rattler



(photo b) Dump at northern edge of Little Rattler