

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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New Mexico Bureau of Mines and  
Mineral Resources  
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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.

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Bernalillo County	6 pages	\$1.20
Catron County	9 pages	\$1.80
Dona Ana County	6 pages	\$1.20
Eddy County	5 pages	\$1.00
Grant County	22 pages	\$4.40
Harding County	3 pages	\$ .60
Hidalgo County	10 pages	\$2.00
McKinley County	275 pages	\$55.00
Mora County	6 pages	\$1.20
Quay County	7 pages	\$1.40
Rio Arriba County	30 pages	\$6.00
Sandoval County	24 pages	\$4.80
San Juan County	192 pages	\$38.40
San Miguel County	15 pages	\$3.00
Santa Fe County	11 pages	\$2.20
Sierra County	19 pages	\$3.80
Socorro County	25 pages	\$5.00
Taos County	10 pages	\$2.00
Torrance County	5 pages	\$1.00
Valencia County	98 pages	<u>\$19.60</u>
		\$ 153.60

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) Good Luck County Quay

SE/4 NE/4 1  
Section SW/4 NW/4 6 Twنش. 7N R. 32E

Quadrangle sheet Forrest

Mining district N.A.

Elevation 4,550'

Nearest city and/or dwellings Forrest is 4.75 miles due south

The Good Luck mine is located 4.75 miles due north of the town of Forrest. The topography consists of mesas to the south, and erosional features where the prospect is located.

Workings consist of a trench cut trending E-W, 150' long, 15' wide, and 6' deep. Access to the prospect was by road from the south and east, which are now impassable. The disturbed area blends in well with the surrounding topography and is not readily discernible. It would not seem to warrant any immediate reclamation action, as there appear to be no hazards at the site.

The prospect occurs in Chinle sandstone. The ore horizon is a mottled gray color. No uranium minerals are visible. No scintillometer readings were available. The deposit produced 8.43 tons averaging 0.22%  $U_3O_8$  (Finch, 1972).

References:

Finch, Warren I., 1972, Uranium in Eastern N.M., U.S.G.S. openfile rep., p. 13, A.E.C.



(photo a) Looking SW at trenching on Good Luck prospect



(photo b) Access Rd. from the south.

Date visited 9/11/79

Mine name(s) Section 12 County Quay

Section W/2 12 Twنش. 11N R. 33E

Quadrangle sheet San Jon NW

Mining district N.A.

Elevation 3,950'

Nearest city and/or dwellings 9 miles NW of San Jon, farm 1 mi east

The Section 12 prospect is located on a small tributary east of Revuelto Creek (see photos), approximately 400' east-northeast of the Little Rattler prospect. A washed out road leads to the prospect from the NE.

Other than the road mentioned above, and possibly some minor bulldozer or drilling activity, the prospect appears to be unworked, and therefore does not constitute a hazard (see photos).

No uranium minerals were observed. The prospect is located in the middle Chinle (Finch, 1972). Although scintillometer readings were unavailable, the uranium mineralization is probably associated with carbonized plant debris locally present in the Chinle.

References:

Finch, W.I., 1972, Uran. in Eastern N.M., U.S.G.S. Open File rep., 19 p., A.E.C.



(photo a) Looking NE from Little Rattler dump at Sec. 12 area



(photo b) Looking E-NE at access road along creek to Sec. 12 prospect

351 Q-4

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