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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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: Grants 7½'

1. NM-173-1-1 Page 58

Anaconda F-33 (F-33)

2. NM-173-1-2 Page 66

Tom 13 (Tom)

3. NM-173-1-3 Page 68

Lone Pine 3 (Lone Pine)

4. NM-173-1-4 Page 74

Cedar 1 (Yucca) (Falcon?)

Quad: Mesa Gigante 7½'

1. NM-176-3-1 Page 78

Chavez (Canoncito)

Quad: Moquino 7½'

1. NM-175-1-1 Page 80

Woodrow (Woodrow Breccia Pipe)

Quad: San Mateo 7½'

1. NM-150-3-1 Found under McKinley Co; Quad: San Mateo

Rialto (Chill Wills)

2. NM-150-3-2 Page 83

San Mateo

Quad: South Butte 7½'

1. NM-199-2-1 Page 92

Crackpot Mine

Date visited 5/7/80

Mine name(s) Woodrow (Woodrow Breccia Pipe) County Valencia

Section 36 and 1 Twnsh. 10 N and 11 N R. 5 W

Quadrangle sheet Moquino 7½'

Mining district Laguna

Elevation 6,000'

Nearest city and/or dwellings Jackpile Mine headquarters, 1½ miles west

The Woodrow Mine is located on the township 10 N/11 N line in sections 36 and 1. To reach the site go to the Anaconda Jackpile Mine headquarters and speak to Mr. Ernest Wylie, as the mine is on Anaconda property.

The deposit was discovered in 1951 and was mined in two stages by Anaconda during 1954 and 1956. During the first phase of the operation the interval down to 100' was mined through the main north shaft (see fig. 1); ore grade averaged 1.53% U_3O_8 and 0.05% V_2O_5. During the second phase, in 1956, the interval from 100' to 200' was mined with an average ore grade of 0.32% U_3O_8. The small shaft on south (fig. 1) caved in 1956 with the loss of 1 life and the mine was shut down. The other shaft was just backfilled in early 1980 (Ernest Wylie oral communication 5/7/80).

At present the site is level and clean except for a 16' x 18' metal shed (photos a & b). Scintillometer readings on the north side of this shed, which is the site of the north shaft ranged up to 800 cps at a natural outcrop.

The deposit is in a breccia pipe, 24' to 34' in diameter, with a fairly steep dip of 67°-83° (Wylie, 1963). Among the minerals positively identified were autunite, torbernite, meta-autunite, coffinite, uraninite, becquerelite, and zippeite, plus pyrite, chalcopyrite, and marcasite, (Wylie, 1963).

References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603; p. 58.
(2) Hilpert, L., and Moench, R. H., 1960, Uranium Deposits of the Southern San Juan Basin, New Mexico, Econ. Geol., v. 55, p. 429.
(3) Wylie, Ernest T., 1963, Geology of the Woodrow Breccia Pipe, in Geology and Technology of the Grants Uranium Region: New Mexico Bur. of Mines and Mineral Resources, Mem. 15; p. 177.
(4) N.M. State Mine Inspector's Office, inactive uranium mine file.
(5) Field notes, 5/7/80.

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Photo (a) Looking westward at site of backfilled main shaft (northern shaft) at the Woodrow Mine.

Photo (b) Looking southwestward at the site of backfilled shaft about 80' south of site shown in photo (a).