

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: 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 12/7/79

Mine name(s) Mac #1 County McKinley

Section SE 12 Twنش. 15 N R. 14 W

Quadrangle sheet Mariano Lake 7 1/2

Mining district Ambrosia Lake

Elevation 7,460'

Nearest city and/or dwellings Indian dwelling 800' east of the east edge of the mine.

To reach the Mac #1, proceed west on the Mariano Lake Road 9 1/2 miles from the intersection with New Mexico 56. Take the Gulf Mine road south for 2 miles to the Gulf Mariano Lake Mine, then east for 3/4 of a mile to the Mac #1.

The shaft at the Mac #1 is covered and fenced with heavy duty steel posts and fencing, 6' high and 21' square (photo a). Several buildings and dumps mark the site (photo a). Two sheet metal buildings are found directly north of the shaft. The larger building is 72' x 30', and housed the draw works, the smaller building is 66' x 20', and was used as office and storage space.

The main dump is 225' x 45' x 6', and is located several hundred feet west of the shaft (photo b). A series of small piles forms a smaller dump, 220' x 40' x 2', just west of the larger dump (photo c). South of the shaft is a circular dump, 80' in diameter and up to 3' high (photo d).

The mine produced from the Poison Canyon Sandstone. Carnotite was visible in the circular dump, and the main dump. Scintillometer readings in the circular dump were up to 5,000 cps, 2,600 in the main dump, and 900 cps in the low dump.

A small drainage line trends eastward from the circular dump towards an Indian dwelling 800 feet east of the dump. There does not appear to be a radiation hazard, as scintillometer readings in the stream bed fall to less than 100 cps within 150' of the mine area.

The mine was operated by United Nuclear-Homestake Partners; it was last registered with the New Mexico State Mine Inspector's Office in February, 1970.

References: (1) U.S. AEC, Uranium Mine Records, GJO/AEC.
(2) New Mexico State Mine Inspector's Office.

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Photo (a) Panorama looking north at the buildings and shaft (circled) at the Mac #1 Mine. The main dump is in the foreground, and the circular dump is on the right center of the photo (as indicated by geologist).



Photo (b) Looking west at the main Mac #1 dump. Note the Gulf Mariano Lake Mine headframe in the background (circled).



Photo (c) Looking NE at the smaller dump. Note the larger main dump on the right of the photo.



Photo (d) Looking west at the circular dump on the Mac #1 property. Note Gulf's Mariano Lake headframe in the background (circled).

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