

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  
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.

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Date visited 12/6/79

Mine name(s) Mac #2 County McKinley  
Section SE $\frac{1}{4}$  18 Twنش. 15 N R. 13 W  
Quadrangle sheet Hosta Butte 7 $\frac{1}{2}$ '  
Mining district Smith Lake  
Elevation 7,440'

Nearest city and/or dwellings Smith Lake Mercantile, 6 air miles east; numerous single family dwellings on indian allotments within a 3 mile radius of the mine.

The Mac #2 is located nearly on the east line of section 18, or about 1 3/4 miles southeast of Gulf Minerals Mariano Lake Mine. The mine may be reached by taking the Mariano Lake road for 5 miles west of Smith Lake. At this point turn south on the Ruby Mine road and continue southwestward past the Ruby Mine turn-off for another 1 1/2 miles into sec. 18. Mine dump will be noticeable.

The deposit occurs in the Poison Canyon sandstone tongue of the Brushy Basin member. It was mined through a vertical shaft, probably not more than 350' deep, by United Nuclear-Homestake Partners during the late 1960's and early '70. The shaft has been backfilled and no trace of subsidence or caving has appeared. The mine dump remains (photo a), and the foundation or concrete pad for the hoisting equipment (photo b). Maximum scintillometer reading on the 40' x 110' tailings dump was 1,100 cps. Some drainage pipe has been left behind, but site is not trashy.

Western Nuclear Corp., (Phelps-Dodge subsidiary) has conducted a recent drilling program near the site as evidenced by their cemented in drill holes; the section is probably under active lease to Western Nuclear.

The mine was last registered with the State Mine Inspector's Office in February, 1970. Total production is not known.

References: (1) State Mine Inspector's Office, inactive uranium mine file.  
(2) Field notes, 12/6/79

W.F.S. 11/11/80



Photo (a) Looking northeastward at the Mac #2 mine site; main tailings dump at center is 40' x 110', up to 10' high. Note person at left of center for scale.



Photo (b) Looking northward from concrete pad in the foreground to the tailings dump. Maximum scintillometer reading on dump was 1,100 cps. Fence on right side of the dump follows the section line.