

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.

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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.

CATRON COUNTY

Quad: Mogollon 7½'

1. NM-377-1-1

Page 1

Baby Mine

Quad: Tejana Mesa 7½'

1. NM-242-1-1

Page 3

Section 21 (Varnum)

Quad: Telephone Canyon 7½'

1. NM-314-4-1

Page 5

Quary

Quad: Third Canyon 7½'

1. NM-245-2-1, NM-245-2-2

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Midnight #2, McPhaul Adit

Date visited 9/6/79

Mine name(s) Midnight #2, McPhaul Adit County Catron

Section E $\frac{1}{2}$  11, W $\frac{1}{2}$  12 (Midnight #2)  
NE $\frac{1}{4}$ , SE $\frac{1}{4}$  14 (McPhaul) Twnsh. 2 N R. 11 W

Quadrangle sheet Third Canyon 7 $\frac{1}{2}$ '

Mining district Datil

Elevation 7,745'

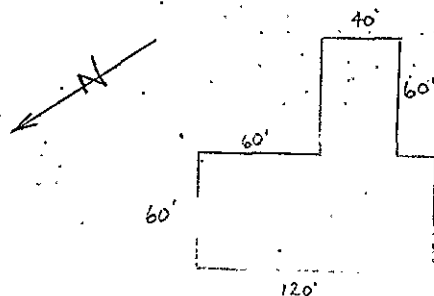
Nearest city and/or dwellings The McPhaul Adit is  $\frac{1}{4}$  mile NE of the McPhaul Ranch. The Midnight #2 workings are  $1\frac{1}{2}$  miles northeast of the ranch.

To reach the deposits, proceed west on New Mexico 60 from Datil for 13 miles. Take a dirt road leaving the highway, north, for approximately 11 miles to the McPhaul Ranch. The McPhaul adit is  $\frac{1}{4}$  mile northeast of the ranch on a small knoll on the east side of the road. To reach the Midnight #2 open pit, continue north on the dirt road, across Alamocita Creek. The road will form a "T" intersection. Take the left fork for  $\frac{1}{2}$  a mile, where the road forks again. Take the right fork and proceed north. The road turns into a jeep trail as it goes up the mesa. The pit is to the southwest of Oat Canyon on the northeast edge of a small mesa.

The McPhaul adit (photo did not turn out), is 6' x 6', and approximately 50 feet deep. A small dump spills down the slope northwest of the adit. The adit exposes a 1"-6" thick zone of dark gray sandstone at the base of the Point Lookout (?) Sandstone. Radioactivity is most pronounced where carbonaceous material is concentrated. A grab sample measured 0.04% eu (Hilpert, 1969).

The Midnight #2 is an "L" shaped open pit (photos a and b), as indicated by the sketch map (below).

Sketch Map of Midnight #2



The dimensions are indicated on the sketch map. Maximum depth on the pit is approximately 20 feet. A low dump 30' x 30' x 1-2' deep, lies to the south of the pit.

The pit is in the Point Lookout Sandstone (Hilpert, 1969). Yellow uranium oxides were visible coating grains (tyuyamunite?), and were more abundant in zones containing carbonaceous trash. No scintillometer readings were available.

A trial shipment of 38 tons was made in March of 1957 (Collins). It is unclear as to which deposit the 38 tons were from, but it was probably the Midnight #2.

- References:
- (1) Collins, G., Uranium Occurrences in the Datil Mountain Area, Catron and Socorro Counties, New Mexico, U.S.A.E.C., DBO-4-Tm-6.
  - (2) Hilpert, L., 1969, Uranium Resources of Northwestern New Mexico, U.S.G.S. Bull. 603, p. 33.
  - (3) U.S., AEC, Uranium Mine Records, GJO/AEC.
  - (4) New Mexico State Mine Inspectors Office



Photo (a) Looking E at the Midnight #2 open pit.



Photo (b) Looking N at entrance to Midnight #2 open pit.