

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

6.	NM-148-1-6	Page 252
	Elkins (Tom Elkins) (Lawrence Elkins)	
7.	NM-148-1-7	Page 255
	Maddox and Teague	
8.	NM-148-1-8	Page 258
	Golver	
9.	NM-148-1-9	Page 260
	Red Top	
10.	NM-148-1-10	Page 262
	Haven (Sec. 21)	
11.	NM-148-1-11	Page 265
	Red Cap Prospect	
12.	NM-148-1-12	Page 267
	Yucca #2	

Mine name(s) Alta County McKinley
 Section SW $\frac{1}{2}$ 5 Twنش. 14 N R. 11 W
 Quadrangle sheet Thoreau NE 7 $\frac{1}{2}$ '
 Mining district Smith Lake District
 Elevation 7,120'
 Nearest city and/or dwellings Prewitt S. 7 $\frac{1}{2}$ mi.

The Alta is located in the SW $\frac{1}{2}$ sec. 5 1 mile west of the Borrego Pass road. It is accessible by proceeding north on the dirt road from Prewitt for 5 $\frac{1}{2}$ miles to the ranch road (private). * Travel east on the ranch road (ore haulage road) for $\frac{1}{2}$ mile then turn left and proceed northward on dirt trail for 2 miles to the mine.

The mine consists of 3 adits driven northward in the uppermost sandstone of the Westwater Canyon member of the Morrison fm., and a wooden ore chute leading to a loadout level 40' below (see photos a & b). The middle adit is the largest; with a 5' high, 6' wide portal (see photo c), it goes in at least 50' then makes a right turn. Total length is unknown; maximum scintillometer reading observed inside was 3000 cps.

The adit on left (also photo c) is questionable; it is timbered differently and goes back only a few feet. It may have been a powder magazine.

The adit on the far right (east) shown in photo (d); the portal is 5' high, 6' wide, and the adit is timbered similar to middle adit. It is caved 12' back. Scintillometer readings of 1,200 cps were recorded.

Maximum scintillometer reading of 3,000 cps on mine dump was recorded at west end to left of ore chute in photo (a). Background at this site is about 70 cps.

The road at adit level descends to the east. The road at loadout level descends to west.

The deposit occurs in the upper Westwater Canyon member. Top foot or so of the host sandstone contains abundant macerated carbonized plant fragments. The mineralization is immediately below carbonaceous zone in a coarse grained sandstone that is free of obvious carbonaceous material (Hilpert, 1969).

The mine was active during the 1951-1961 period. It was operated (for part of the time at least) by the Anaconda Company.

- References: (1) Hilpert, L., 1965, Uranium, in Mineral and Water Resources of New Mexico: New Mexico Bur. of Mines and Mineral Resources, Bull. 87; p. 216.
 (2) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603; p. 41.
 (3) Granger, H. C., 1963, Mineralogy, in Geology and Technology of the

Grants Uranium Region: New Mexico Bur. of Mines and Mineral Resources,
Mem. 15, p. 28, 29.
(4) Field notes, 12/11/79.

* For permission to go on private road contact Mr. Buddy Elkins in
Grants, New Mexico.



Photo (a) Looking northward at the Alta Mine showing upper face with adits, wooden ore chute (center) and lower loadout level.



Photo (b) Looking eastward at the three adits driven in upper face and deteriorating wooden ore chute at right; note range pole at center adit for scale.



Photo (c) Looking northeastward at two adits at west edge of cut; adit at right behind range pole is main adit 50' or more in length.



Photo (d) Looking northeastward at easternmost adit, caved at 12' inside.