

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

Orin J. Anderson

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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	

Date visited 12/11/79

Mine name(s) Billy The Kid & Greer Warren & McCormack County McKinley

Section NE $\frac{1}{2}$  19 Twنش. 14 N R. II W

Quadrangle sheet Thoreau NE 7 $\frac{1}{2}$ '

Mining district \_\_\_\_\_

Elevation 6,960'

Nearest city and/or dwellings Prewitt, 5 miles south

The Billy The Kid and the Greer, Warren, and McCormack are both in the NE $\frac{1}{2}$  sec. 19, however, the Billy The Kid is supposed to be south of the other (Hilpert, 1969). In reality they are probably run together. The location of the Billy the Kid Mine is given on GQ-954 and this location was used as a reference during the present investigation. To reach the workings proceed north of Prewitt 5 miles on the dirt road to the Andrews Ranch and turn right for 3/4 miles to mine.

The mine consists of an area nearly 1,000' E-W, by 300'-600' N-S, that has been extensively prospected by open pits and shallow trenches, (see photos a & b). No deep pits or highwalls really exist, but rather, broad areas of very shallow stripping. Close ups are afforded in photos (c) and (d). A drainage line truncates the workings on the north and a portion of the mine dump rests on the bank of the drainage (photo e).

The deposits occur in Todilto limestone. Secondary oxidized uranium minerals were noted in waste piles and on outcrop. Scintillometer readings ranged up to 1,000 cps, but more often were in the 500-900 cps range. Some ore was mined between 1952-1958 (Hilpert, 1969).

A 200' x 425' quarry in the Todilto limestone exists just north of the mines near the ranch road (ore haulage road). Limestone was quarried here for road metal. It is not radioactive.

- References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 41.  
(2) U.S.G.S., Geologic Map GQ-954.  
(3) Field notes, 12/11/79.



Photo (a) Looking northwestward at stripped and prospected area; note person standing on waste pile at left for scale.

37 Mc 248

320 Mc 249



Photo (b) Looking northeastward at stripped and prospected area.



Photo (c) Close-up of small stripped area; looking south near western end of workings.



Photo (d) Looking northwestward at 10' high waste piles in stripped area near middle of workings; note range pole for scale.



Photo (e) Looking northeastward at north edge of workings showing waste dump on bank of small drainage line.