

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: Bread Springs 7½'

1. NM-146-2-1 Page 33  
Diamond 2 (Largo)

Quad: Church Rock 7½'

1. NM-122-4-1 Page 39  
CD & S (Sec. 35)
2. NM-122-4-2 Page 41  
Foutz #3 (Yellow Jacket)
3. NM-122-4-3 Page 45.  
Foutz 1 and 2
4. NM-122-4-4 Page 48  
William and Reynolds
5. NM-122-4-5 Page 50  
Christenson (Rimrock #2)
6. NM-122-4-6 Page 58  
Santa Fe Christensen (Rimrock #1)

Quad: Dos Lomas 7½'

1. NM-149-4-1 Page 62  
Isabella
2. NM-149-4-2 Page 67  
Spencer Shaft (Centennial)
3. NM-149-4-3 Page 69  
Hogan
4. NM-149-4-4 Page 74  
Gossett Incline (Beacon Hill #23)

5.	NM-149-4-5	Page 78 <sup>77</sup>
	Blue Peak (Garcia 1)	
6.	NM 149-4-6	Page 84 <sup>83</sup>
	Mesa Top 7 & 18 (Malpais Raise)	
7.	NM-149-4-7	Page 93 <sup>92</sup>
	Dog Incline (Dog and Flea)	
8.	NM-149-4-8	Page 99 <sup>98</sup>
	Marquez	
9.	NM-149-4-9	Page 104
	Faith (Westvaco) (Sec. 29)	
10.	NM-149-4-10	Page 109
	Barbara J #3	
11.	NM-149-4-11	Page 112
	Barbara J #1	
12.	NM-149-4-12	Page 114
	Baily and Fife (Rimrock)	
13.	NM-149-4-13	Page 117
	T-20 Shaft (T-9 ore body)	
14.	NM-149-4-14	Page 120
	Flat Top (Flat Top #3 & 4)	
15.	NM-149-4-15	Page 124 ✓
	Roundy Shaft (Rimrock)	
16.	NM-149-4-16	Page 126
	SW $\frac{1}{4}$ 30 Strip	
17.	NM-149-4-17	Page 131
	Sec. 25 Strip Complex	

18.	NM-149-4-18	Page 141
	Sec. 25 Shaft	
19.	NM-149-4-19	Page 144
	NW $\frac{1}{4}$ 25, Decline and Open Pits	
20.	NM-149-4-20	Page 149
	Hanosh	
21.	NM-149-4-21	Page 152
	Sec. 23 and 26 Open Pit	
22.	NM-149-4-22	Page 156
	NE $\frac{1}{4}$ Sec. 36 (Rimrock) Homer Scriven)	
23.	NM-149-4-23	Page 160
	Sec. 31 Open Pit	
24.	NM-149-4-24	Page 163
	Moe No. 4 (Sec. 32)	
25.	NM-149-4-25	Page 165
	Charlotte	

\*Dos Lomas Quad reports #26 - #35 found under Valencia County

Quad: Gallup East 7 $\frac{1}{2}$ '

1.	NM-122-3-1	Page 167
	Hogback (Hogback 3-5)	
2.	NM-122-3-2	Page 171
	Becenti	

Quad: Goat Mountain 7 $\frac{1}{2}$ '

1.	NM-149-2-1	Page 174
	Kermac Sec. 10 (Kermac No. 10)	

Date visited 1/17/80

Mine name(s) Barbara J #1 County McKinley

Section NW $\frac{1}{4}$  NE $\frac{1}{4}$  30 Twنش. 13 N. R. 9 W.

Quadrangle sheet Dos Lomas 7 $\frac{1}{2}$ '

Mining district Poison Canyon Trend

Elevation 6,900'

Nearest city and/or dwellings Ambrosia Lake junction, about 4 miles by road northeast

The Barbara J #1 is located in the NW $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 30 immediately east of the junction of the Poison Canyon and Mesa Top roads. The site is 1/3 mile north of the active Piedre Triste Mine of Todilto Exploration and Development.

The mine consisted of a two compartment vertical shaft, circular in plan with an 81 $\frac{1}{2}$ " inside diameter, more than 400' deep (AEC PED-1, 1959). The shaft has been backfilled and the site partially regraded (see photos a & b). The exact location of the site was impossible to ascertain. Some of the regrading was probably done with low grade ore material as surface counts in the area range up to 1,900 cps. A 30" diameter ventilation shaft and a 10" ventilation pipe remain at the site along with a deteriorating 6' x 6' metal shed (photo a). Immediately to north of shed area is a 12' x 20' concrete slab (not shown).

Several hundred feet to the southeast of the mine shaft is a mine dump area (photo b) with one main pile about 5' high and several additional very small piles 2'-3' high scattered to the north, west, and south. Scintillometer readings on the dumps were generally low, 150-250 cps. A small south flowing intermittent drainage skirts the east edge of the dump (see again photo b).

The Barbara J #1 produced from one medium and several small deposits in the Todilto limestone, (Hilpert, 1969). Initial production was in late 1956 and production through 7/1/58 had totaled 18,086 tons of ore averaging .25% U<sub>3</sub>O<sub>8</sub> (AEC PED-1, 1959). This may represent total production as Hilpert (1969) indicated the mine was inactive after 1957.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 35.
  - (2) Hilpert, L., 1965, Uranium, in Mineral and Water Resources of New Mexico: New Mexico Bur. of Mines and Mineral Resources, Bull. 87, p. 214.
  - (3) U.S. AEC PED-1, 1959, Mine Operation Data Report, GJO/AEC, p. 43 (microfiche only).
  - (4) Field notes, 1/17/80.
  - (5) Field notes, 1/15/80.



Photo (a) Looking north at entrance to incline; shaft slopes off to left at  $30^{\circ}$ .



Photo (b) Looking west into entrance showing  $2\frac{1}{2}'$  high opening that remains; natural processes are filling in portal area. Note scattered waste piles in background behind box cut.