

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 1/31/80

Mine name(s) Hogan County McKinley

Section W $\frac{1}{2}$  SE $\frac{1}{2}$  Sec. 14 Twnsh. 13 N R. 9 W

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

Mining district Poison Canyon Trend-Grants District

Elevation 6,920'

Nearest city and/or dwellings Ambrosia Lake junction, 1 $\frac{1}{2}$  mi. west

The Hogan Mine is located approximately 1 $\frac{1}{2}$  mi. east of Ambrosia Lake junction, 200' N of state highway no. 53 in the SE $\frac{1}{2}$  of sec. 4. The mine was developed in the Poison Canyon sandstone tongue through a 340' deep vertical shaft. The ore body, which is at the northern boundary of the Poison Canyon trend, is not typically elongate southeastward as are others in the trend, and is thought to be comprised of redistributed deposits along the flanks of an anticlinal fold which strikes parallel to the San Mateo fault (Rapaport, 1963). Although not considered a large deposit it was one of the higher grade deposits in the Grants region. It was mined from 1959-1962 by Four Corners Exploration, Inc., with United Western coming in during the late stages with a small interest. Total production is not known.

The mine shaft site is shown in photo (a) with highway no. 53 in the background. The site is level and clean. The reinforced concrete slab over the shaft and one of the head-frame footings are shown in photo (b). At the west edge of the slab a small amount of caving has begun. The shaft was not backfilled because of the possibility of mine rejuvenation. The upper shaft was cross timbered and a 10-15 foot thick concrete plug was poured (Irving Rapaport, oral communication). Scintillometer counts around the shaft site range up to 450 cps, or 9 x background.

Immediately southwest of the shaft is a concrete slab, measuring approximately 30' x 70', that was the site of the hoist and drum and a maintenance shop, (see photo c).

The dump area to the northwest of the mine shaft measures about 220' (N-S) by 120', however, patches within this area contain no waste. It is an area with closely spaced individual conical piles up to 4' high, (see photos d & e). Scintillometer readings recorded on traverse of dump were in the 200-400 cps range.

United Nuclear Corporation has picked up most of the mining claims in sec. 14.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.
  - (2) Rapaport, Irving, 1963, Uranium Deposits of the Poison Canyon Trend, Grants District, in, Geology and Technology of the Grants Uranium Region: New Mexico Bur. of Mines & Mineral Resources, Mem. 15.
  - (3) Irving Rapaport, oral communication, 4/17/80
  - (4) Field notes, 1/31/80

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Photo (a) Looking southwest at Hogan Mine shaft site; note highway no. 53 in background and range pole (center) for scale.



Photo (b) Close-up looking south at concrete slab over the mine shaft. Note head frame footing behind slab to right. A small amount of caving has begun near corner of slab at right. Marquez Mine is visible at center background.



Photo (c) Looking southwest at concrete slab for hoisting equipment and maintenance shop.



Photo (d) View northward at south edge of main dump area; note range pole (center) for scale.

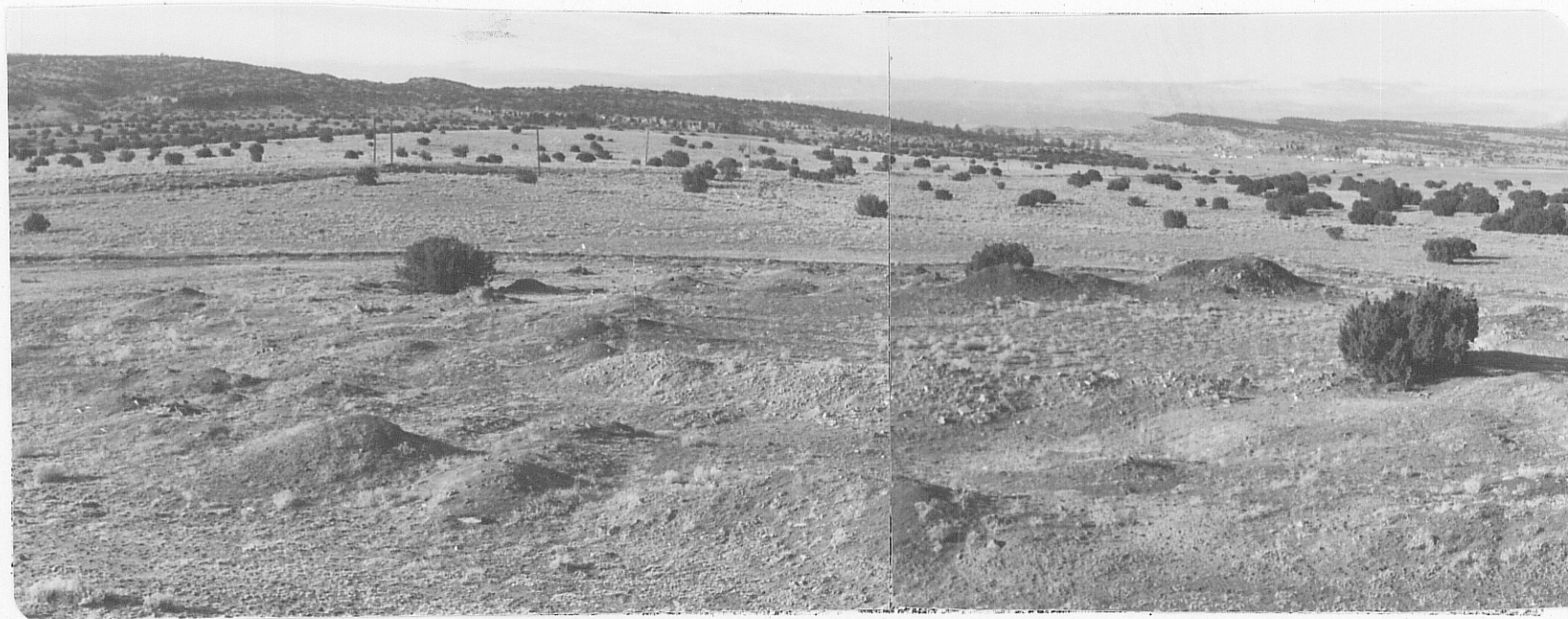


Photo (e) Looking westward showing dump area with small scattered 3'-4' high waste piles; area measures 220' N-S, but there are patches within that have no waste material. Ambrosia Lake junction (numerous light colored buildings) is visible at right in the distance  $1\frac{1}{4}$  mi. away; note range pole at left of center for scale.

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