

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 ⁷⁷
	Blue Peak (Garcia 1)	
6.	NM 149-4-6	Page 84 ⁸³
	Mesa Top 7 & 18 (Malpais Raise)	
7.	NM-149-4-7	Page 93 ⁹²
	Dog Incline (Dog and Flea)	
8.	NM-149-4-8	Page 99 ⁹⁸
	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 1/15/80

Mine name(s) NW $\frac{1}{4}$ 25, Decline and Open Pits County McKinley

Section NW $\frac{1}{4}$ 25 Twنش, 13 N R. 10 W

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

Mining district Poison Canyon Trend

Elevation 6,920'

Nearest city and/or dwellings Single family dwellings, 3/4 miles to west.

The Sec. 25 (NW $\frac{1}{4}$) workings lie immediately east of the Hanosh Mine and just south of the road leading to Haystack Mountain.

The workings are a continuation of those in sec. 26 (Hanosh) and extend from the section line eastward for 1/3 mile to the small drainage that forms a water gap in the Todilto bench in the NW $\frac{1}{4}$ 25. They are mostly open pits and trenches as shown in photos (a) through (c) with the expected assortment of spoil piles and mine dumps. Workings are up to 30' in depth, 100' across, and several hundred feet in length.

At the east edge of the complex is a decline (State Mine Inspector's term for this working) driven eastward at the bottom of a 40' deep box cut (photo d). Decline is timbered, but portal is nearly caved shut (photo e); no attempt was made to enter, but it appears original opening was about 6' x 6'; scintillometer response was 300-400 cps. Approximately 20' to west of the decline is the remains of a cribbed shaft (photo f). It probably represents a collapsed ventilation shaft or escapeway from a lower level working mined through the decline. It is unfenced, and at 22' deep it represents a hazard.

A north-south trending fault down drops the Todilto limestone on the east about 23'. The uranium deposits are in the Todilto limestone, but not associated with the faulting. The deposits were mined during 1952-1964 Hilpert (1969). It is not known for certain whether the decline described herein connects to the working at the sec. 25 shaft, which is less than 1,000' away, but it is likely that it does.

The ore bodies in section 25 are described by McLaughlin, (1963).

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 37.
 - (2) McLughlin, E. D. Jr., 1963, Uranium Deposits in the Todilto limestone of the Grants District, in Geology and Technology of the Grants Uranium Region: New Mexico Bur. of Mines and Mineral Resources, Mem. 15, p. 146.
 - (3) State Mine Inspector's Office, inactive uranium mine file.
 - (4) Field notes, 1/15/80.



Photo (a) Looking NW at 35' deep pit with some "gophering" along the north face; site is just east of sec. 25-26 line. Scintillometer readings ranged up to 1,100 cps.



Photo (b) Looking west at "trench" created by two parallel 18' high waste piles.

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Photo (c) Looking SW at 30' deep, 100' diameter pit about 450' east of sec. 25-26 line; face counts range up to 2,000 cps. Highwall is half limestone, half overburden.



Photo (d) Looking northward into box cut with decline driven eastward at bottom. Close-up of decline is given on next page. Note section 25 head frame in background 1,000' away.

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Photo (e) Close up of decline show in photo (d); present opening is less than 3' high. Note range pole for scale.



Photo (f) Caved vertical shaft 20' west of decline; hole is presently 22' deep. Note portion of range pole at left for scale.

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Addendum: A drainage by-pass was constructed to take the flow around the east edge of the workings and keep it out of the box cut with the decline (photo d). The flow re-enters the original stream bed just 500' south of the box cut, but some of the material used in diverting the stream and perhaps some of the waste material that was placed along its banks later is somewhat radioactive. In the example shown in photo (1) the waste material produced readings of 1,400 cps.



Photo (1) Looking northward at diverted drainage line flanked on west by waste pile.

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