

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 ¼ 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 ¼ 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 7½'

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

Quad: Goat Mountain 7½'

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

Date visited 1/17/80

Mine name(s) Faith (Westvaco) (Sec. 29) County McKinley

Section E $\frac{1}{2}$ W $\frac{1}{2}$ 29 Twنش. 13 N R. 9 W

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

Mining district Poison Canyon

Elevation 6,840'

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

The Faith Mine is located in the E $\frac{1}{2}$ W $\frac{1}{2}$ sec. 29 just 1/3 mile to the west of highway no. 53. Gates are kept locked and permission to go on the property should be obtained from Ranchers Exploration at their Hope Mine office (Mr. Tim Hurley), or from the Albuquerque office (Tele. 344-3542). Ranchers has the section under active lease.

The mine consists of the main shaft on the south bank of a small drainage (photos a through c), and a hoisting shaft about 1,000' to the south (photos d through f).

The main shaft has caved leaving a 25' diam. hole 24'-26' deep (photo b); scintillometer readings at shaft site range up to 500 cps (background = 50-60 cps). Mine dumps are scattered about the site, with small piles to west and southwest of shaft, and on stream bank to north of shaft (photo c) where scintillometer readings of 500 cps (10 x background) were recorded. The small conical piles immediately northwest of the shaft read up to 1,400 cps, but they are 100' back from the stream bank.

The hoisting shaft, about 1,000' south of the main shaft, is covered with a concrete slab with a metal vent at the center (photo d). The shaft is probably about 6' x 8'. Radiation levels are not unusually high at small opening in vent. The dumps associated with the hoisting shaft are (1) an area of low piles and ridges (photo e) extending northwest of the shaft with scintillometer readings of up to 850 cps, and (2) the main dump to the east of the shaft, and visible from the highway that appears large, but in reality is composed of a thin layer of waste forming a veneer on a rock-cored natural topographic feature (photo f). It covers an area of 200' x 300' and scintillometer readings on it range from 300 to 2,600 cps.

The Faith Mine produced from a cluster of deposits in the Todilto limestone, during the 1958-1964 period. A map of the uraniferous zone is provided in McLaughlin (1963). The mine was last registered with the State Mine Inspector's office in February, 1964 with the KSN Company as the operator.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 35.
 - (2) McLaughlin, E. D., 1963, Uranium Deposits of the Todilto Limestone of the Grants District, in Geology and Technology of the Grants Uranium Region: New Mexico Bureau of Mines and Mineral Resources, Mem. 15, p. 144-145.

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- (3) State Mine Inspector's Office, inactive uranium mine file.
- (4) Field notes, 1/17/80.



Photo A Looking SE into main shaft area; shaft is enclosed by fence immediately behind person to right of center; gully along south bank of drainage may be seen at left. Close-ups of shaft and drainage shown on following photos.



Photo B Look NE at caved shaft; enclosing fence is effective for livestock, not for people.



Photo C Looking southeastward down drainage that skirts main shaft area; mine waste perched on edge of bank has gamma valves of 10X background.



Photo D Looking east at hoisting shaft site, 1000' south of main shaft; a raised cylindrical metal lined vent protrudes about 1' above the concrete cover on shaft (arrow).

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Photo E Looking SE at 4' high 200' long mine dump or low grade ore; dump extends NW of hoisting shaft.



Photo F Main dumping area for hoisting shaft; waste forms only veneer on rock cored natural feature.