

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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Open-File Report 148

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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A special thanks is extended to Mr. William Chenoweth of the U.S. Department of Energy, both for his time in the field as well as the claim maps and A.E.C. mine production records he provided. Mr. John Blagbrough provided helpful information about the Chuska district. The editorial assistance of Wyatt Brewster and Lars (Skip) Skotte is gratefully acknowledged.

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.

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)	

2.	NM-149-2-2	Page 178
	Sec. 34	
3.	NM-149-2-3	Page 180
	Sec. 35 Strip (Lost Mine)	
4.	NM-149-2-4	Page 183
	Febco (Small Stake)	
5.	NM-149-2-5	Page 188
	Silver Spur 1 (Silver Spur 5)	
6.	NM-149-2-6	Page 194
	Pat Mine	
7.	NM-149-2-7	Page 197
	Dakota	
8.	NM-149-2-8	Page 199
	Junior	
9.	NM-149-2-9	Page 201
	Sec. 5 (Westvaco) (No. 2)	
10.	NM-149-2-10	Page 202
	Sec. 1 Strip	
11.	NM-149-2-11	Page 204
	Sec. 2 Strip	
<u>Quad: Hosta Butte 7½'</u>		
1.	NM-124-3-1	Page 206
	Blackjack #1	
2.	NM-124-3-2	Page 212
	Mac #2	

Date visited 12/13/79

Mine name(s) Febco (Small Stake) County McKinley

Section S $\frac{1}{2}$, SW $\frac{1}{4}$ 31 Twnsh. 14 N R. 10 W

Quadrangle sheet Goat Mountain 7 $\frac{1}{2}$ '

Mining district Grants

Elevation 7,200'

Nearest city and/or dwellings Single family dwellings, 1 $\frac{1}{2}$ mile S

The mine is located on the north side of small east-west trending drainage line near the south line of sec. 31. It may be reached via the road leading northward from the east side of Haystack Mountain. Proceed northward on this road for approximately 3 3/4 miles; road passes through gate at the sec. 6-sec. 31 line and mine will be visible at that point.

The workings consist of a series of 4 adits driven northward into a coaly carbonaceous, shale zone in basal Dakota sandstone. The westernmost is the largest (photo a) with a 6' x 6' portal; timbering is visible just inside, but adit was not entered. Caving or bulldozing has partially blocked the portal, but with a little effort a man could enter.

The next 3 adits seem to get progressively smaller as indicated by the size of the tailings dumps below them, but caving, or blasting to seal, has blocked the adits to the extent that no one can enter. The 2nd through 4th adits are shown in photos (b) thru (d). Scintillometer readings near the portals of the adits ran to 350 cps. Tailings dumps, shown in photo (e), produced readings of 1,200 cps for largest (westernmost) dump, 800 cps for smaller dumps. Larger dump is about 60' high (see photo f) and fans out to more than 200' wide at the toe.

Mine was opened in 1952 and operated by Febco Mines, Inc. Total period of operation is not known, however, production through July 1, 1958 was listed as 3,912 tons of ore averaging .27% U₃O₈ (AEC PED-1).

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.
 - (2) U.S. AEC PED-1, 1959, Mine Operation Data Report, GJO/AEC, p. 65; (microfiche only).
 - (3) Hilpert, L., 1969, Uranium, in Mineral and Water Resources of New Mexico: New Mexico Bur. of Mines and Mineral Resources, Bull. 87, p. 218.
 - (4) Field notes, 12/13/79.

mc 183



Photo (a) Looking northward at partially caved entrance to westernmost adit at the Febco Mine.

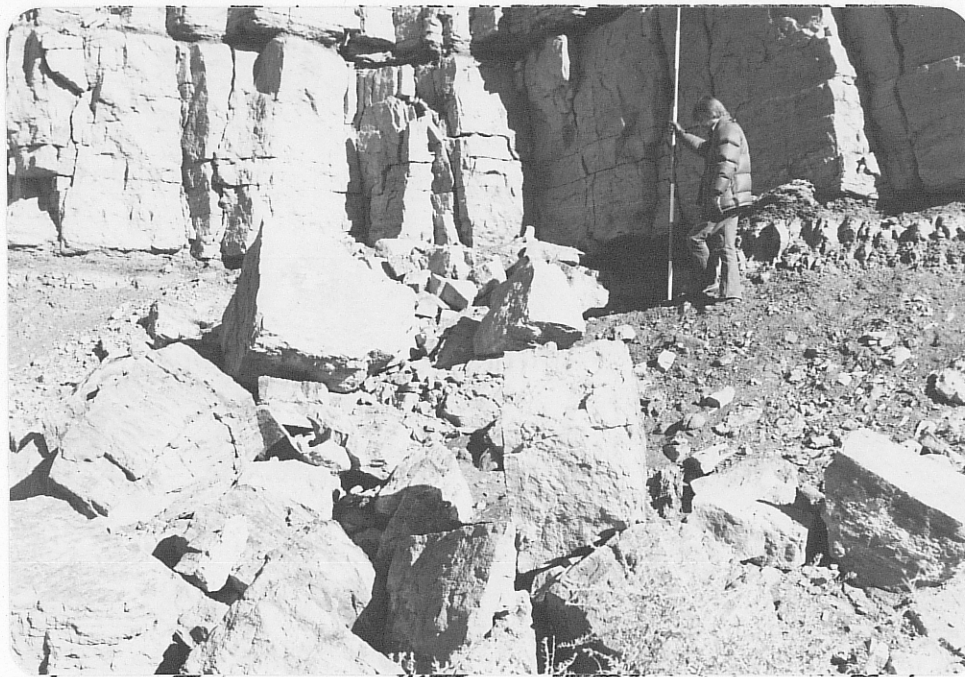


Photo (b) Looking northward at caved entrance to second adit (going eastward) in series of four.

255 Mc 184



Photo (c) Looking northwestward at caved entrance to third adit in series (going eastward).



Photo (d) Looking northward at caved entrance to fourth adit (easternmost) in series of four.



Photo (e) Looking north-northeastward at Febco Mines showing tailings dump from largest adit at left, and the coalesced tailings dumps from the other 3 adits at right. Dump at left is 60' high, but is spread thinly. (For close-up see photo (f)).

M 186

4257



Photo (f) Looking westward at upper surface of largest (western) tailings dump. Note person with range pole for scale.