

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: Mariano Lake 7½'

1. NM-123-4-1 Page 214
Mac #1
2. NM-123-4-2 Page 217
Black Jack #2

Quad: Pinedale 7½'

1. NM-123-3-1 Page 222
Westwater

Quad: San Mateo 7½'

1. NM-150-3-1 Page 224
Rialto (Chill Wills)

*San Mateo Quad report #2 found under Valencia County

Quad: Thoreau NE 7½'

1. NM -148-1-1 Page 230
Alta
2. NM-148-1-2 Page 234
Silver Bit 15 and 18 (Pentada Prospect)
3. NM-148-1-3 Page 237
Francis
4. NM-148-1-4 Page 241
Evelyn
5. NM-148-1-5 Page 247
Billy The Kid and Greer Warren and McCormack

6.	NM-148-1-6	Page 252
	Elkins (Tom Elkins) (Lawrence Elkins)	
7.	NM-148-1-7	Page 255
	Maddox and Teague	
8.	NM-148-1-8	Page 258
	Golver	
9.	NM-148-1-9	Page 260
	Red Top	
10.	NM-148-1-10	Page 262
	Haven (Sec. 21)	
11.	NM-148-1-11	Page 265
	Red Cap Prospect	
12.	NM-148-1-12	Page 267
	Yucca #2	

Date visited 12/11/79

Mine name(s) Evelyn County McKinley
Section NW $\frac{1}{4}$ 9 Twنش. 14. N R. 11 W.
Quadrangle sheet Thoreau NE 7 $\frac{1}{2}$ '
Mining district Smith Lake
Elevation 7,200'
Nearest city and/or dwellings Prewitt, 7 $\frac{1}{2}$ miles S-SW

The Evelyn Mine is located in the NW $\frac{1}{4}$ sec. 9. It may be reached by walking in from the jeep trail that leads to the Francis Mine, or alternatively by following the dirt road southward from the Moe Mine (active) through sec. 4.

The mine workings consist of one "main" adit on the south and 3 more minor ones 250' to the north along the outcrop (see photo a). All are driven westward. The main adit portal measures 7' x 7' and has a wire mesh barrier out front advising no one to enter mine (see photo b). The adit is stable and clean (no roof falls) and goes back at least 300'; maximum scintillometer reading was 350' cps inside. The ground immediately in front of portal gave readings of 1,000 cps.

The north adits are much shorter. The two shown in photo (c) are each about 5' high. They connect about 30' back where the one on the right is worked into an open stope with one rock pillar. Photo (d) is a view inside the adit on the left showing one timber standing by a waste pile. Scintillometer response in these workings was up to 3,500 cps.

The northernmost adit, 50' north of the pair shown in (c) is about 6' high, 6' wide, and goes in about 40' (see photo e). At about 30' inside is a timbered partition that isolates the last 10' length of the workings (photo f). Maximum scintillometer reading along the 30' length was 950 cps.

The dump outside the main adit is shown in photo (g). It is about 40' high with the front face at the angle of repose. Scintillometer readings up to 950 cps recorded on this dump. The one remaining building at the site is also shown in photo (g).

Several 18" diameter metal lined ventilation shafts were found on the mesa top above and west of the entrance to the mine; one of these is shown in photo (h).

The deposit consists of several mineralized bodies, associated with abundant carbonized and macerated plant debris in a sandstone lens in the upper part of the Brushy Basin member of the Morrison fm. (Hilpert, 1969). The scarp into which adits are driven represents the upthrown block of the N trending Bluewater fault.

The deposit was mined from 1953 to 1956 (Hilpert, 1969). The State Mine Inspector's Office last received a registration on the mine in July 1972 with Clark and Company as the operator.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 41.
 - (2) State Mine Inspector's Office, inactive uranium mine file.
 - (3) Field notes, 12/11/79.



Photo (a) View northward at Evelyn Mine site with arrows pointing to the major adits.

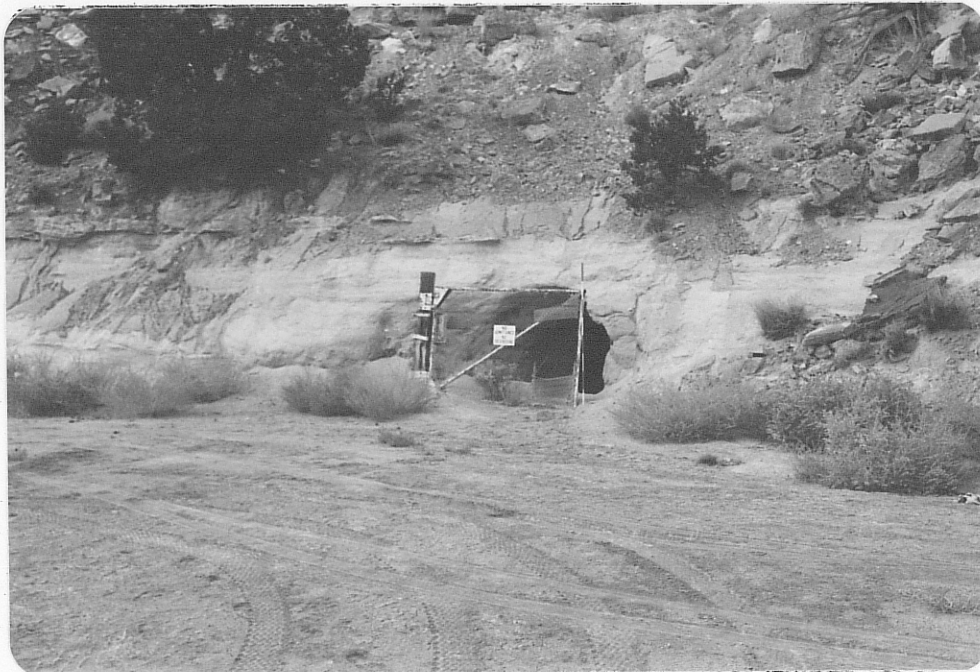


Photo (b) Looking westward at "screened" portal of main adit shown in foreground in photo (a).



Photo (c) Northern adits, 250' from main adit; note range pole at center for scale.

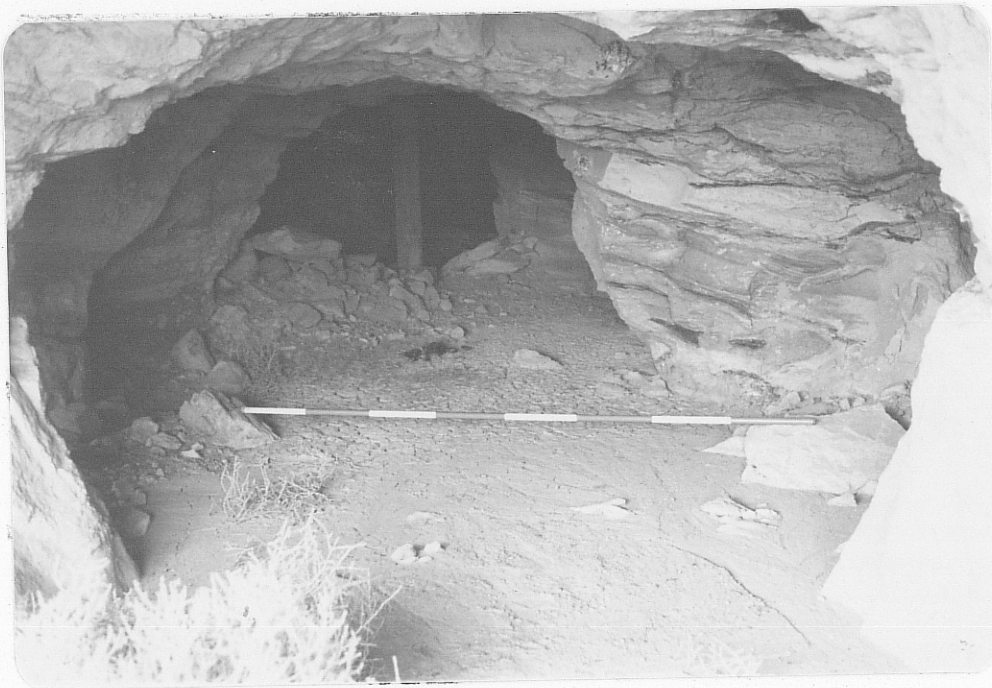


Photo (d) View inside adit at left in photo (c), showing vertical timber; note range pole (crosswise) for scale.

4315 Mc 244

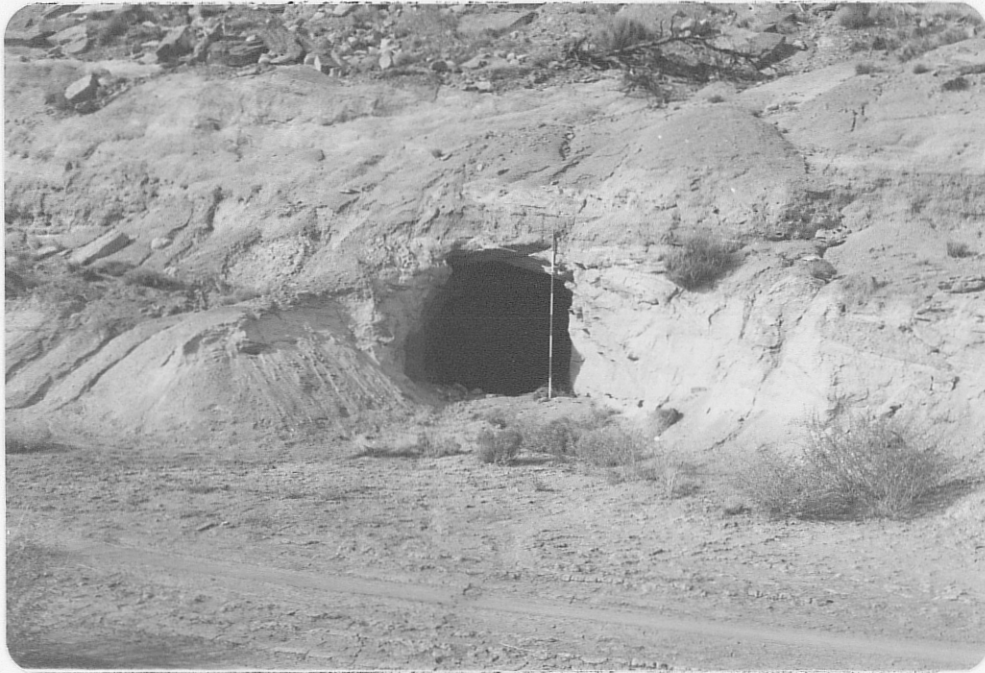


Photo (e) Looking west at northernmost group of adits at Evelyn Mine; note range pole for scale.



Photo (f) Partition 30' inside northernmost adit.

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Photo (g) Looking southward at dump from main adit, with only building on the site shown at center; note person on front face of dump for scale.



Photo (h) 18" diameter ventilation shaft on mesa top above main adit; several more are present in the area.