

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.

Acknowledgments - The writer wishes to thank the following people for their valuable assistance in the field: Lars (Skip) Skotte, Richard Chamberlin, JoAnne Osburn, Mary Ann Anderson, and Cheryl Kyllonen.

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.

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) Francis County McKinley

Section NW $\frac{1}{4}$, NE $\frac{1}{4}$ 8 Twنش. 14 N R. 11 W

Quadrangle sheet Thoreau NE 7 $\frac{1}{2}$ '

Mining district Smith Lake

Elevation 7,250'

Nearest city and/or dwellings Prewitt S 7 mi.

The Francis is located about 3/4 mile southeast of the Alta. The jeep trail ascending the mesa to the east of the Alta Mine becomes impassable part way up and the present investigators walked the remaining distance to the Francis Mine. An alternative way might be to proceed southward on dirt road from the vicinity of the Moe Mine (active), but this road was not attempted.

The Francis workings consist of 3 small adits, one of which is inaccessible. The first is on the east side of a small canyon, and is called the eastern workings (see photos a & b). The adit is 6' high, 4' wide, and goes in about 15' generally east. Scintillometer readings inside were 900-1000 cps. Dump, which is very small gave readings of 90 cps.

The second adit lies immediately across the canyon on the west wall (see photos c & d). It is 6' high, 5' wide at portal and it also goes in about 15'. Maximum scintillometer count inside was 4000 cps. The mine dump gave readings of 275 cps. The third adit lies 150' north of the second on the same side of the canyon, but no dimensions are available as the workings are inaccessible; a ladder which leads from small waste pile at foot of slope 20' up to the workings was not in good condition (see photo e). Judging from the size of the dumps at the other adits this one probably goes in less than 6'-10'.

The deposit consists of several mineralized masses from a few feet up to 80' thick in a sandstone lens in the upper part of the Brushy Basin member of the Morrison fm. (Hilpert, 1969). The sandstone is bleached white and lies immediately beneath the Dakota sandstone.

The mine was worked in 1953 and 1954 (Hilpert, 1969). The State Mine Inspector's Office last registered the mine in July, 1953 with Farris Brothers listed 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.

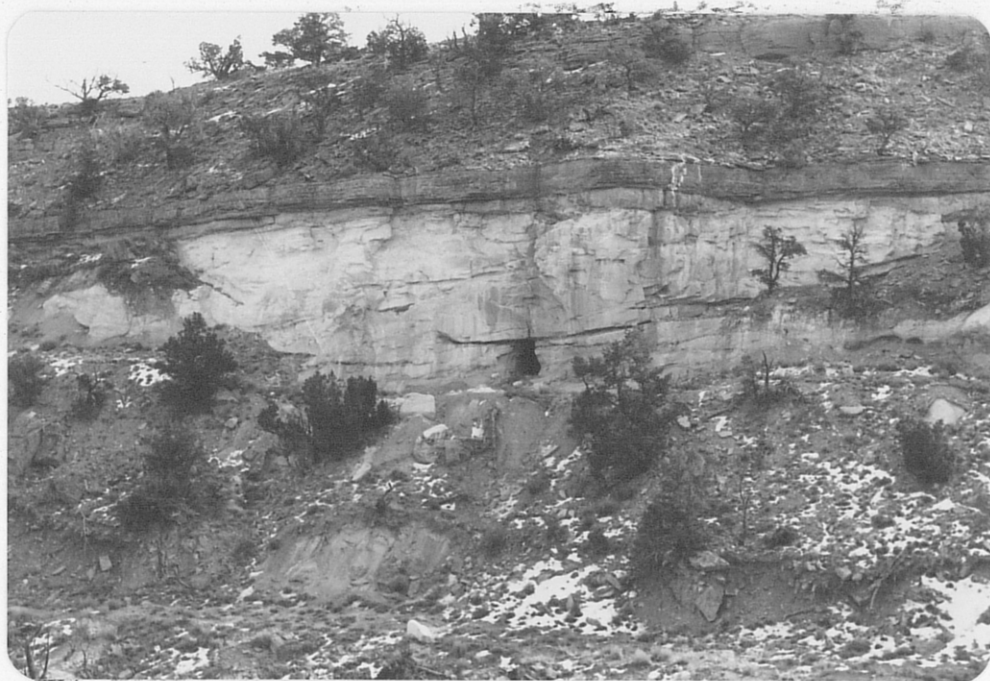


Photo (a) Looking eastward at adit driven into bleached sandstone of upper Brushy Basin member of Morrison fm.; at Francis Mine.

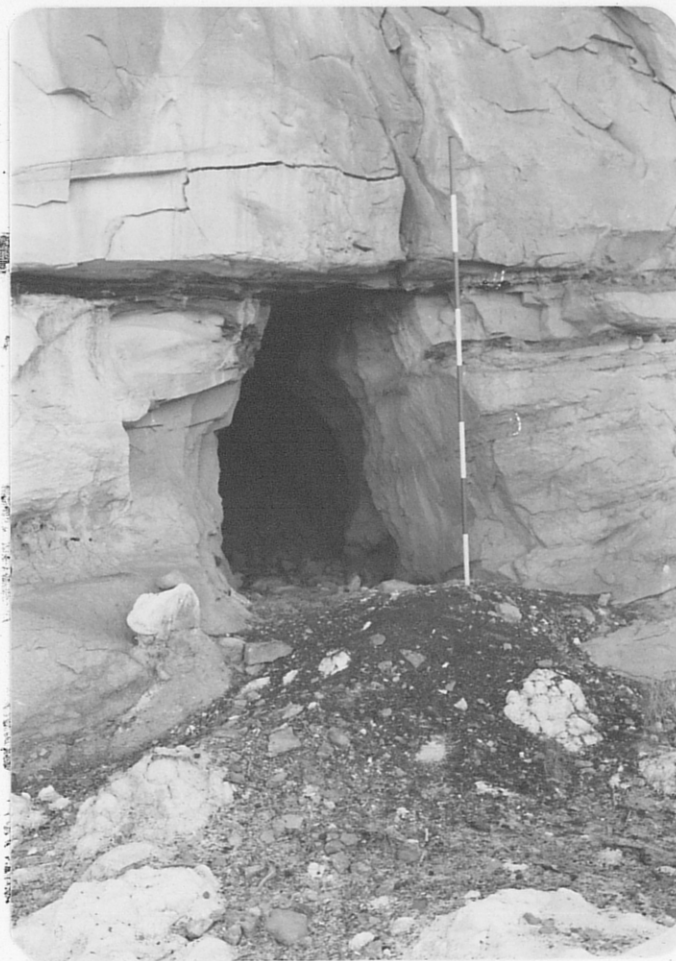


Photo (b) Close-up of adit shown above in (a).



Photo (c) Looking westward at west side of canyon showing small adit (arrow) and mine dump below.

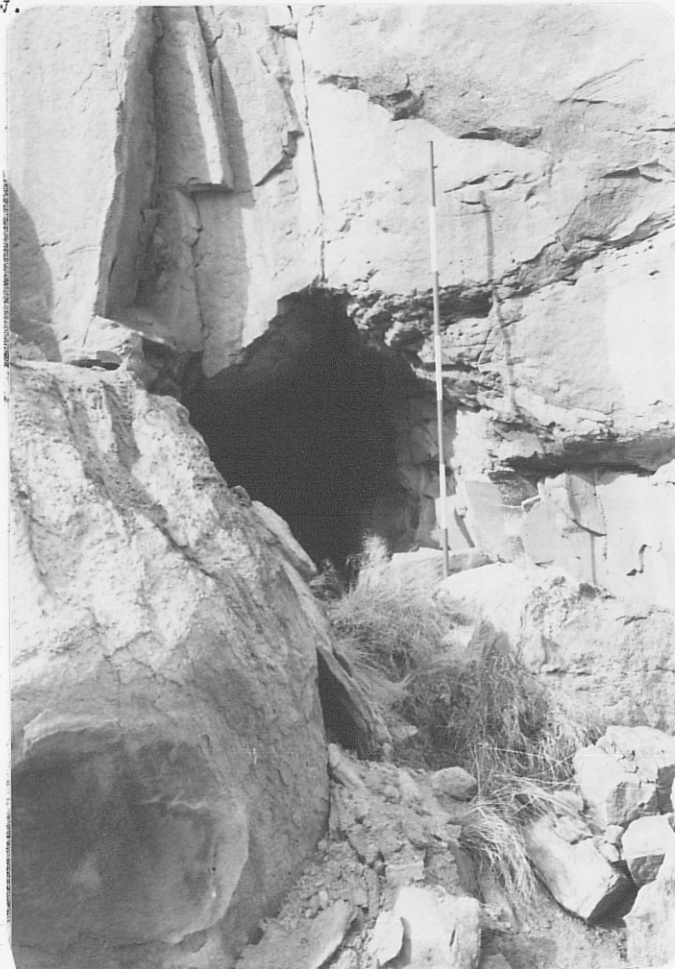


Photo (d) Close-up of adit shown in (c) above.

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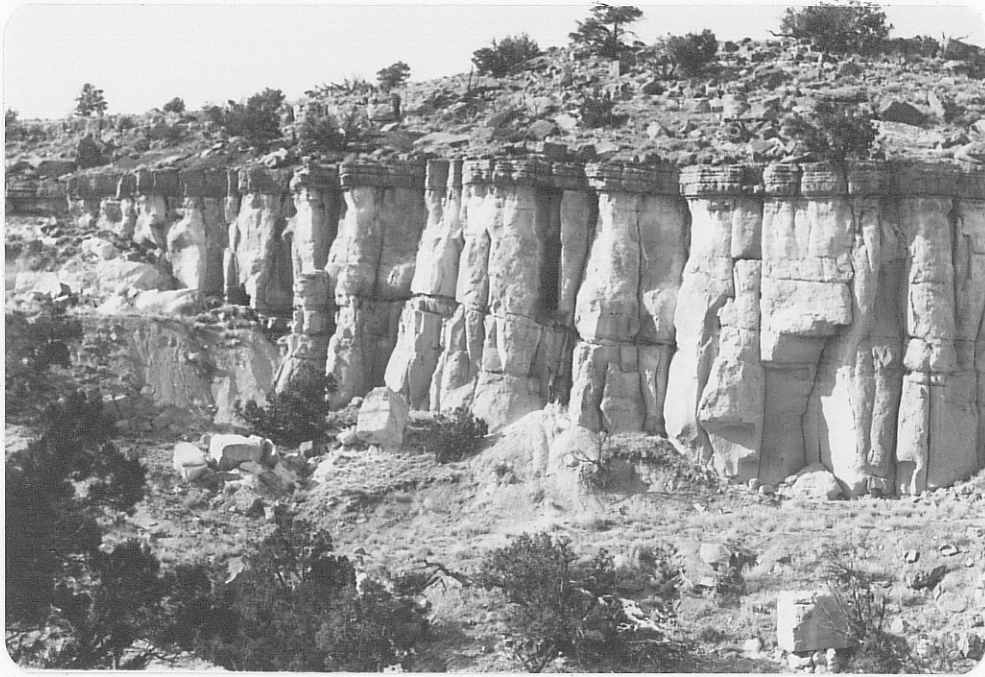


Photo (e) Looking westward at west wall of canyon showing the area where third adit is driven (upper circle) and person below (lower circle) at a crude ladder leading from dump level to adit 20' above.

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