

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

Orin J. Anderson

New Mexico Bureau of Mines and
Mineral Resources
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.

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: Grants 7½'

1. NM-173-1-1 Page 58
Anaconda F-33 (F-33)
2. NM-173-1-2 Page 66
Tom 13 (Tom)
3. NM-173-1-3 Page 68
Lone Pine 3 (Lone Pine)
4. NM-173-1-4 Page 74
Cedar 1 (Yucca) (Falcon?)

Quad: Mesa Gigante 7½'

1. NM-176-3-1 Page 78
Chavez (Canoncito)

Quad: Moquino 7½'

1. NM-175-1-1 Page 80
Woodrow (Woodrow Breccia Pipe)

Quad: San Mateo 7½'

1. NM-150-3-1 Found under McKinley Co; Quad: San Mateo
Rialto (Chill Wills)
2. NM-150-3-2 Page 83
San Mateo

Quad: South Butte 7½'

1. NM-199-2-1 Page 92
Crackpot Mine

Date visited 1/29/80

Mine name(s) Anaconda F-33 (F-33) County Valencia

Section SE $\frac{1}{4}$ 33 and SW $\frac{1}{4}$ 34 Twnsh. 12 N R. 9 W

Quadrangle sheet Grants 7 $\frac{1}{2}$ '

Mining district Mt. Taylor

Elevation 7,000'

Nearest city and/or dwellings Grants, 4 $\frac{1}{2}$ air miles southwest

The F-33 Mine is located on the west slope of East Grants Ridge. It is accessible via the U.S. Forest Service access road that leaves state highway no. 53 at a point .75 mi. north of the UN-HP uranium mill. Travel east on the access road for about 3.6 mi. To the forest boundary, then turn right (south) and follow dirt road to the mine site. The main adit portal is nearly on the Forest Service boundary line.

The mine consists of two adits driven in Todilto limestone, the main one mentioned above, and another approximately $\frac{1}{2}$ mi. NE in sec. 34. As there are no references to a separate working in sec. 34 it is assumed both these are part of the F-33 Mine, and both workings are described herein. The main adit, shown in photo (a), is driven eastward in a zone of recrystallized limestone. The dimensions of portal are not available as it is secured by a steel plate door shown in the close-up in photo (b). Scintillometer reading at a small opening in the door was 2,500 cps. A drilling mud pit at the left of the portal contained some standing water (see water analysis data, table 1). Just east of the mud pit is a claim marker with document showing that a Fred B. Quimby of Grants, N.M. staked a claim called the Power #1 on Nov. 14, 1979. Telephone number given as contact has been taken out of service. Scintillometer readings along face cut just to right of portal were up to 4,000 cps. One building, a 12' x 18' wooden frame shack, remains at the site about 200' to right of portal (see photo c). The mine dump strewn with lumber and other debris is directly west of and in front of the adit. It measures approximately 400' by 100', and extends downslope 50' (see photo d). Yellow uranium mineralization is very apparent on limestone fragments in dump; scintillometer readings range up to 3,500 cps.

The sec. 34 adit is driven generally eastward; portal is sealed by a plate metal door, (see photos e and f). Scintillometer counts around door opening ranged up to 5,000 cps. Dimensions of adit unknown. A 28' x 75' concrete slab remains at the site just to the right of the trench leading to the adit (see photo g). An electric utility line extends in from the west. The mine dump contains mineralized limestone fragments some of which produced maximum deflection on the scintillometer (+10,000 cps); dump measures about 300' (E-W) by 100', and up to 12' high at west end (see photos h and i).

Mine was operated during 1954-59 and again briefly in the early 1970's. It has been inactive since January 1976. Total production is not known.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S. Prof. Paper 603.
 - (2) Hilpert, L., 1965, Uranium section, in, Mineral and Water Resources of New Mexico: New Mexico Bur. of Mines and Mineral Resources, Bull. 87.
 - (3) Kerr, Paul F., and Wilcox, J. T., 1963, Structure and Volcanism, Grants Ridge Area, in, Geology and Technology of the Grants Uranium Region: New Mexico Bur. of Mines and Mineral Resources, Mem. 15.
 - (4) Field notes, 1/29/80.



Photo (a) View east-northeast toward face cut and portal of F-33 Mine; at right is plate metal door sealing entrance to adit. Note recent claim marker at left center.

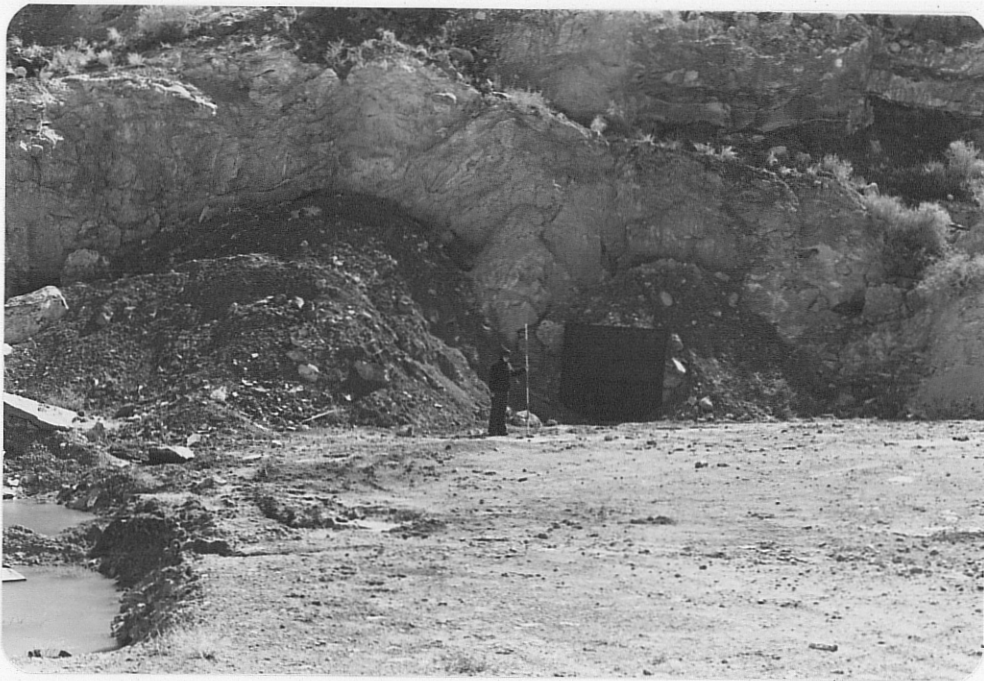


Photo (b) Close up of sealed portal at main adit.

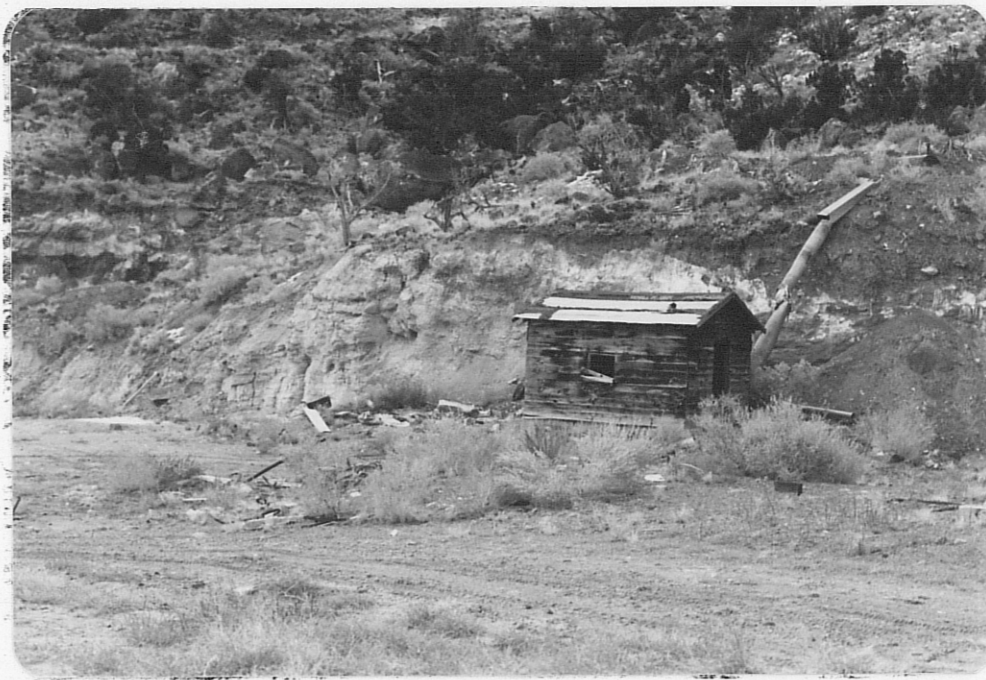


Photo (c) Wooden shack at right of portal of main adit.



Photo (d) Mine dump of main adit; note wooden shack at left and access road cut at upper right.



Photo (e) Looking eastward in trench leading to sec. 34 adit sealed with plate metal door.



Photo (f) Close-up of sec. 34 portal; note range pole in front of metal door for scale.

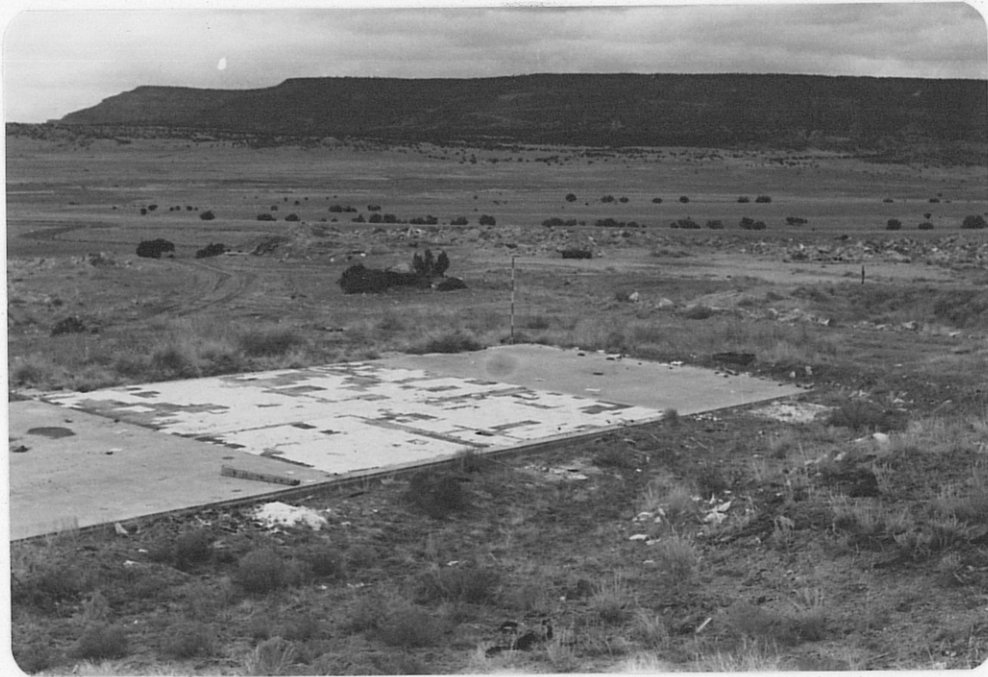


Photo (g) Looking NW at concrete slab near portal of sec. 34 adit.



Photo (h) Looking NW from top of east edge of sec. 34 mine dump; adit is behind viewer. Note range pole at left center for scale.



Photo (i) Looking westward at sec. 34 mine dump; height of dump at far right is about 12'.

4