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: 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) Lone Pine 3 (Lone Pine) County Valencia

Section NE¼ 8 Twnsh. 11 N R. 9 W

Quadrangle sheet Grants 7½

Mining district Mt. Taylor

Elevation 7,250'

Nearest city and/or dwellings Grants, 3 mi. SW

The Lone Pine is located on the north side of Grants Ridge just 3 mi. northeast of the city of Grants. It is accessible by road from either the north or south. From the north take the U.S. Forest Service access road leading eastward from State Highway No. 53 at a point 5.3 mi. north of Milan (or .75 north of the UN-HP mill). Travel eastward for approximately 3.6 mi. to the Forest Service boundary and turn right (south) and follow dirt trails leading past the F-33 mine to Grants Ridge and the mine site. From the south take Lobo Canyon road leading northeastward from Grants for 2 mi., then turn left onto dirt road which climbs the east end of Grants Ridge and then turns westward along north side of the Ridge and leads to mine site. Mine is on Cibola National Forest land.

The mine consists of a timbered load out facility (photo a), two south trending adits, and a powder magazine. A road leads to both the lower, (load-out) level, and the upper (mine) level, although the upper one is no longer passable. The western adit portal is 7' high, 8' wide, with timbering in good condition; one of the doors at the entrance remains in place (see photo b). Inside the adit is clean but a considerable amount of slumping has partially obscurred the entrance. The adit goes in 30' and splits into a right and left fork (see photo c). Each fork continues for at least another 25'-30', but entire length was not explored. Scintillometer readings inside ranged up to 400 cps near the face. The host rock, Todilto limestone does not show as much intra-formational folding here as it does in other deposits. No uranium mineralization is apparent. Camp fires and graffiti indicate periodic visitors.

The second adit is located about 60' to the east. It is likewise well timbered, but caving and slumping at the entrance have nearly sealed it off (see photo d). A glimpse of the interior may be had by peering down through the overhead timbering; tracks indicated someone had recently entered this adit. Length is unknown, but there is no evidence that it connects with the western adit. Scintillometer readings at entrance were 150 cps at the entrance, or about 2 x background.

Approximately 40' east of this adit is a small powder magazine shown in photo (e). The entrance is caved to the extent that only a 2' hole remains and entry would be very difficult. It is perhaps 10'-12' long.

The extent of the mine dump is difficult to determine as it merely veils the material excavated during construction of the lower road. Scintillometer

turn

readings on the dump area were also about 150 cps. A small amount of ore was reportedly mined during 1954-55.

An account of the landslide masses that form an arcuate pattern around Grants Ridge is given in Kerr and Wilcox, 1963.

References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S. Prof. Paper 603.
(2) 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 Bureau of Mines and Mineral Resources, Mem. 15.
(3) Field notes, 1/29/80.

Photo (a) Looking westward at Lone Pine 3 load out facility; note Entrada-Todilto contact at left. Adits are at level of uppermost timbering.

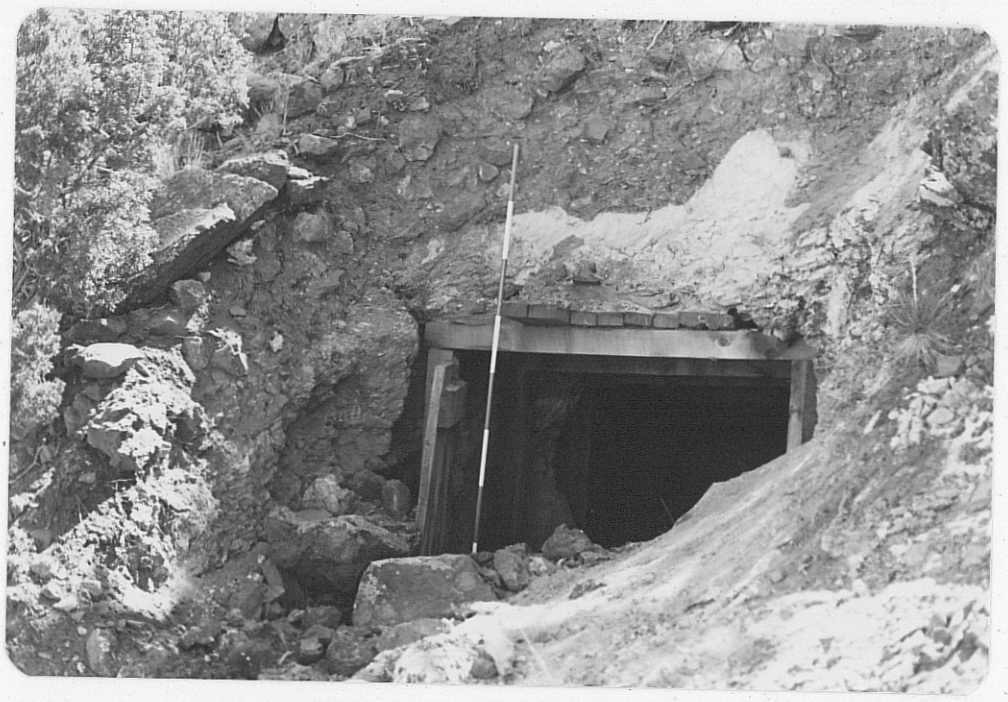

Photo (b) Portal of western adit.

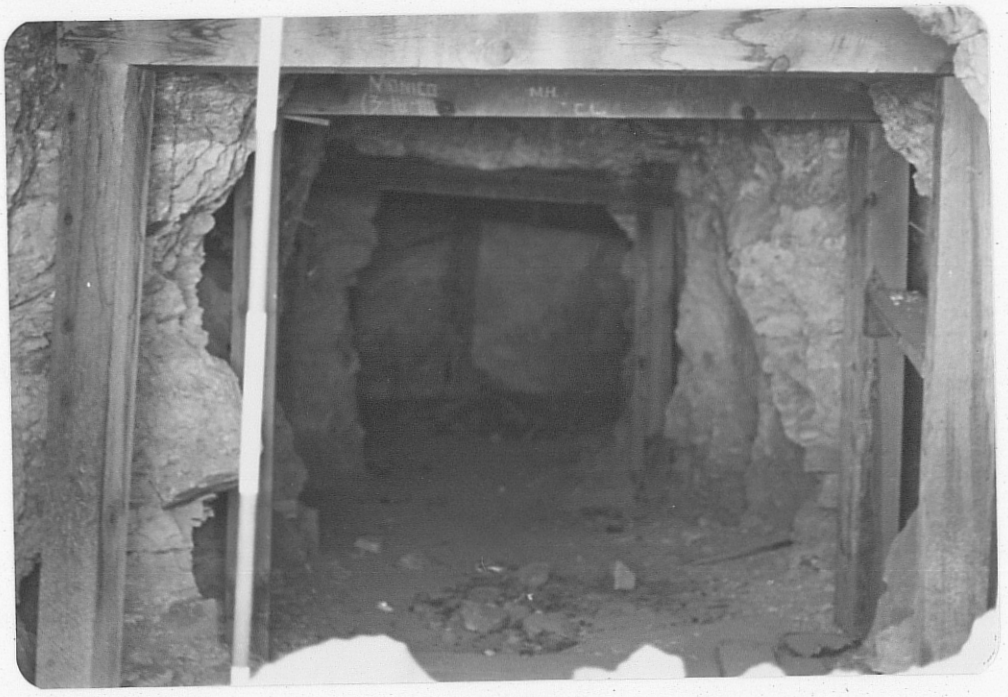

Photo (c) View inside western adit; note timbering, grafitti, campfires, and split into left and right forks at rear.

Photo (e) Caved entrance to Powder Magazine.