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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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

Paisano Prospect

Date visited 5/6/80

Mine name(s) Crackpot Mine County Valencia

Section NW¼, NW¼ 8 Twnsh. 8 N R. 5 W

Quadrangle sheet South Butte 7½'

Mining district South Laguna

Elevation 6,300'

Nearest city and/or dwellings Mesita, 8 miles northeast

The Crackpot is located in the NW¼ sec. 8 on Sharp Point. To reach the workings proceed southward and southwestward on dirt road about 8 miles from the Mesita exit on I-40.

The mine consists of a 120' long open cut, elongate NW-SE, 30' wide at the northwest at entrance ramp, 80' wide at SE where several short adits or gopher holes are driven, and 22' deep (see photo a). The longest of the adits is the 40' one driven in along the crest of an anticline (photo b). Water stands seasonally in this adit. The other underground workings go in no more than 6'-8'. The waste dump lies 250' to the south and is 40' x 90', about 4' high (see photo c).

The deposit is in a NW trending domelike fold in Todilto limestone; closure is about 3'-5' with lesser folds radiating out from dome (Hilpert, 1969). Mineralization is in lower 15' in platy and crinkley zones, and is concentrated near center of dome. Some secondary uranium mineralization is visible on muck piles and faces; much calcite in fracture zones especially on north side of pit. Scintillometer readings in pit ranged up to 2,500 cps; on mine dump up to 1,000 cps.

Hilpert, (1969) stated that ore was mined in 1955. The workings represent one of the Anaconda Companies earliest uranium mining ventures in the area. The geology of the ore deposit plus some information on ore grade is given in Moench (1963, p. 163).

References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 56.
(2) Moench, R. H., 1963, Geologic Limitations on the Age of Uranium Deposits in the Laguna District, in Geology and Technology of the Grants Uranium Region: New Mexico Bur. of Mines and Mineral Resources, Mem. 15; p. 163.
(3) Field notes, 5/6/80.

turn

V-9a

Addendum: Water quality data on sample taken from pond standing in long adit of photo (b).

Conductivity	272 μ mho
pH	8
SO_4	<25 ppm
U_3O_8	0.76 ppm

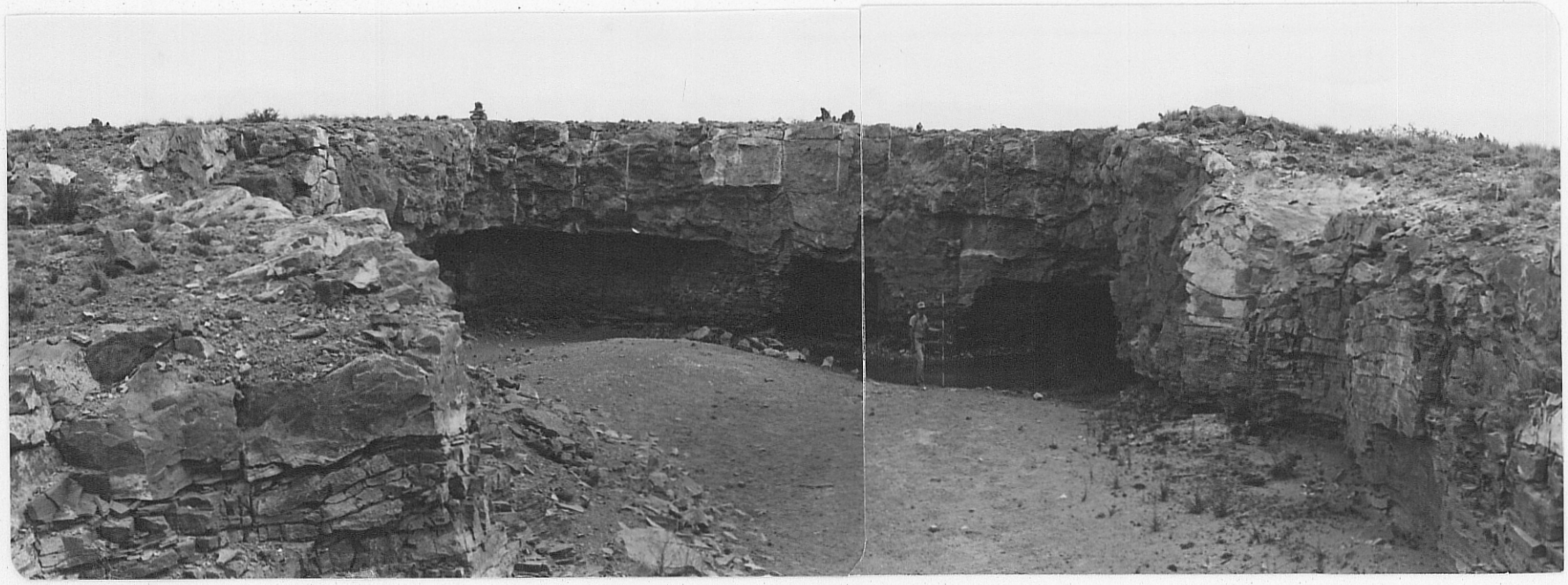

Photo (a) Panorama looking southeastward into 22' deep open pit at Crackpot Mine; several small gopher holes or stub adits are driven into highwall, the one at right shown in greater detail in photo (b).

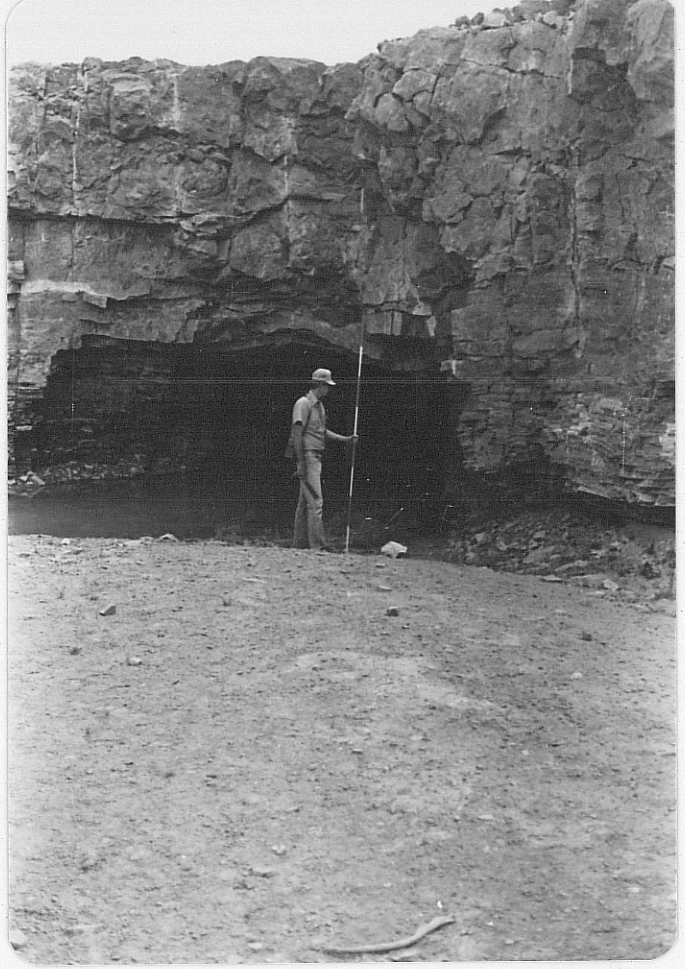

Photo (b) Looking southeastward from floor of open pit into 7' high, 10'-12', adit shown at right in photo (a).

Photo (c) Waste dump, 250' south of open pit, looking south. Note range pole at left for scale.