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.

SOCORRO COUNTY

Date visited 8/14/79

Mine name(s) Lucky Don (Bonanza) County Socorro

Section NE¼ 35 Twnsh. 2 S R. 2 E

Quadrangle sheet Bustos Well 7½'

Mining district Chupadera

Elevation 6,040'

Nearest city and/or dwellings Ranch house, 1½ miles west

The Lucky Don (Bonanza) is located in the NE¼ NE¼ sec. 35 on the west side of a San Andreas limestone ridge. It is accessible by the dirt ranch road that leaves highway no. 380 about 10 miles east of San Antonio. Follow the ranch road northward along the east side of the hogbacks for about 19 miles to sec. 35; look for old wooden loadout facility and tailings dump on right hand side of road (see photos a & b).

The mine consists of a face cut about 170' long on a moderate slope in dense gray limestone of the San Andreas fm. (photo c). A cluster of 4 gopher holes or stub adits have been driven into the face, following small mineralized fracture zones or bedding planes, (photos c, d, and e). Maximum length of underground workings is about 20'; roofs in general appeared stable, but were not closely examined.

The deposit consists of tyuyamunite and possibly carnotite disseminated along fracture and bedding surfaces as intergranular fillings in a tabular zone 300'-400' long, 50' wide, and 35' thick (Hilpert, 1969).

The deposit was examined by AEC geologists in April, 1955. At that time Holly Uranium Corporation owned the property which consisted of 103 claims (RME-160, 1970).

The mine was active during 1955-1956 and again during 1960-63 (Hilpert, 1969). The State Mine Inspector's Office carried the mine as active in the 43rd, 44th, and 45th annual reports of that office. By 1956 the property had been transferred to the Union (Umino)? Company.

Production statistics are being made available in the form of "U.S. Dept. of Energy Ore Production Reports - U.S. Government Contracts, 1948-1970", according to William Chenoweth U.S. Department of Energy (personal communication)

References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603; p. 55.
(2) Hilpert, L., 1965, Uranium, in Mineral and Water Resources of New Mexico: New Mexico Bur. of Mines and Mineral Resources, Bull. 87; p. 223.
(3) U.S. AEC RME-160, 1970, Preliminary Reconnaissance for Uranium in New Mexico, 1950-58; GJO/AEC; p. 202 (microfiche only).

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(4) N. Mex. State Mine Inspector's Office, 1955, 43rd annual report; p. 50.
(5) N. Mex. State Mine Inspector's Office, 1956, 44th annual report; p. 56.
(6) N. Mex. State Mine Inspector's Office, 1957, 45th annual report; p. 49.
(7) N. Mex. State Mine Inspector's Office, inactive uranium mine file.

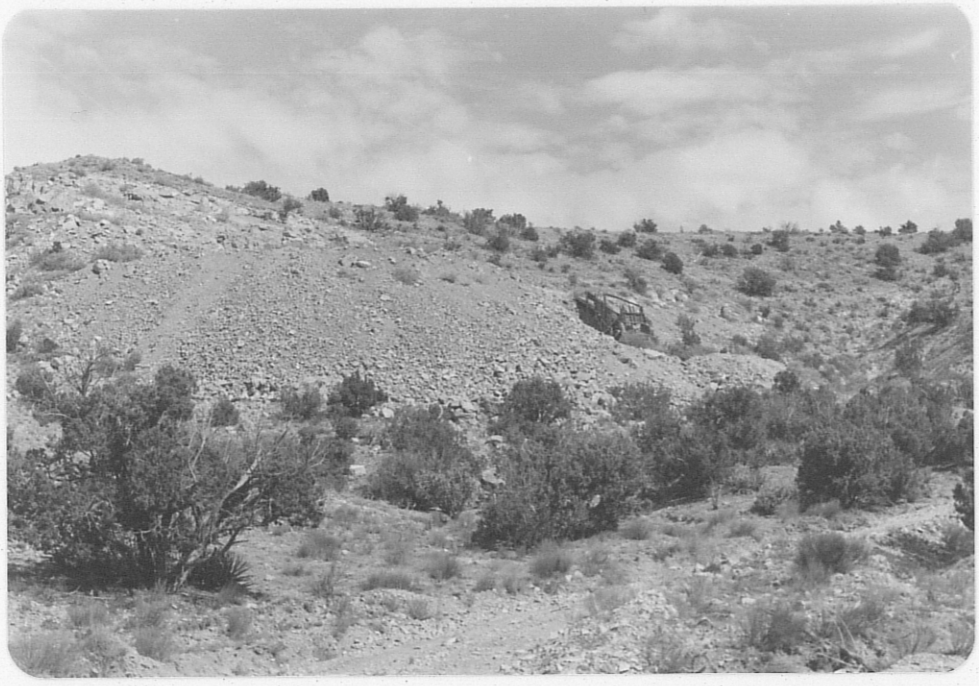

Photo (a) Looking southeastward at mine dump (center and left) and wooden ore chute at Lucky Don Mine; close-up of ore chute shown below.

Photo (b) Looking northward at wooden ore chute and load out area at Lucky Don Mine; note person at claim marker in load out area for scale.

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Photo (c) Looking eastward at open cut showing gopher holes or stub adits driven into face-close ups on following two photographs.

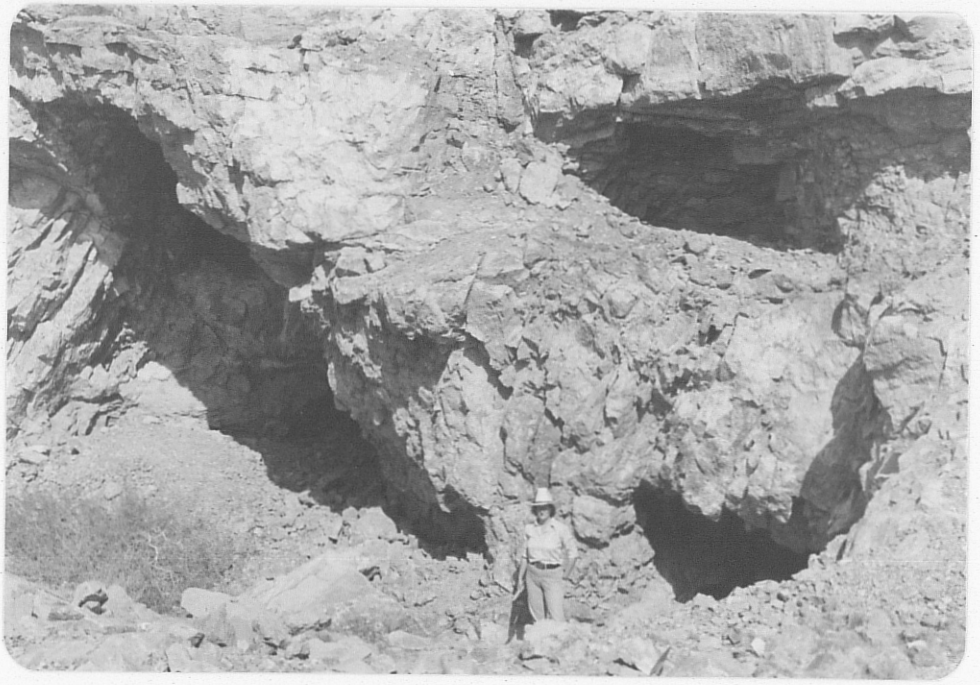

Photo (d) Close-up of gophering shown on face of cut in photo (c). Area at left shown in more detail in photo (e).

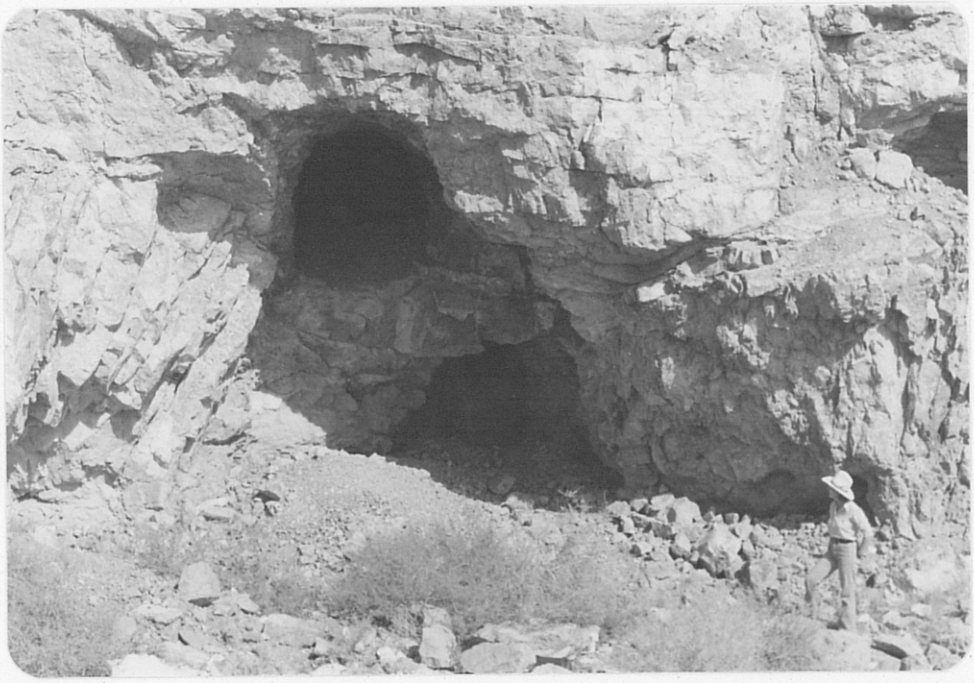

Photo (e) Close-up of gopher holes shown at left in photo (d); note person at lower right for scale.