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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GRANT COUNTY

Quad: Burro Peak 7½'

Quad: White Signal 7½'

Date visited 8/29/79

Mine name(s) Merry Widow County Grant

Section S½ 22 Twnsh. 20 S R. 15 W

Quadrangle sheet Burro Peak 7½'

Mining district White Signal

Elevation 6,140'

Nearest city and/or dwellings White Signal, 1.2 miles east

The Merry Widow shaft is located on the south side of the east-west drainage line in the S½ sec. 22. To reach the site travel westward from White Signal on highway 180 for about ½ mile, then turn right on dirt road and follow it westward to mine; mine is ¼ mile north of highway.

The workings consist of a 6' x 6' vertical shaft open down to about the 40' level. It was originally a 150' deep shaft, one of the deepest in the district (Gillerman, 1964), with levels at 40', 60', 90', and 130' which explored the ore body. Host or country rock is a granite; mineralization has occurred where an east trending fault has cut and displaced two diabase dikes. Ore minerals consist of chalcopyrite, pyrite, hematite, autunite, and torbernite (Gillerman, 1964). Mine was opened in 1910 for gold. Uranium minerals were discovered in the tailings dump in 1919 and subsequently the mine produced most of the radium in the district during the "radium boom" of the 1920's.

The fenced shaft is shown in photo (a). The mine dump and ore chute are shown in photo (b). Some of the trenching done to the south and west of the shaft along the fault zone is shown in photo (c). Mine has not been worked since 1950, although some diamond drilling was done that year (Lovering, 1956). The property has been picked up by UV Industries, a subsidiary of Sharon Steel Corp. (Telephone: 534-2225).

References: (1) Gillerman, Elliot, 1964, Mineral Deposits of Western Grant County, New Mexico, New Mexico Bureau of Mines and Mineral Resources, Bull. 83; p. 94.
(2) Hilpert, L., 1965, Uranium, in Mineral and Water Resources of New Mexico: New Mexico Bureau of Mines and Mineral Resources, Bull. 87, p. 222.
(3) Lovering, G. T., 1956, Radioactive Deposits in New Mexico, U.S.G.S., Bull. 1009-L, p. 329.
(4) Field notes, 8/29/79.

Photo (a) Merry Widow Mine shaft; 6' x 6' shaft is open down to about 40'. Fence is deteriorating but still effective. Sign is no longer legible.

Photo (b) Tailings dump and ore chute just west of shaft, looking west.

Photo (c) Trenching just southwest of Merry Widow shaft exploring mineralization along east trending fault where it cuts and displaces a diabase dike.