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.

*Dos Lomas Quad reports #26 - #35 found under Valencia County

Quad: Gallup East 7½'

Quad: Goat Mountain 7½'

Date visited 12/3/79

Mine name(s) Hogback (Hogback 3-5) County McKinley

Section NE¼ 12 Twnsh. 15 N R. 18 W

Quadrangle sheet Gallup East 7½'

Mining district -

Elevation 6,950'

Nearest city and/or dwellings Gallup, 1½ mi. SW

The Hogback Mine is located approximately 1 mi. north of the new Interstate Highway No. 40 at the point where it crosses the Hogback east of Gallup. The dump is discernible from old U.S. Highway 66.

The workings consist of a 400' decline driven down dip in basal Dakota Sandstone fm., and a N-S trending stripped area which is about 100' by 450'. The decline, shown in photos (a) and (b), has a opening about 12' x 12', is untimbered and collapsed down at 25'. Scintillometer readings up to 900 cps were recorded near the opening at place marked by person in photo (a). The mine dump, shown in photo (c), is about 20' long at crest and extends about 70' downslope at angle of repose.

The strip mine or stripped area lies immediately to the north of the decline and it appears that material was stripped off the dip slope at the right in photo (d) and piled at the left (in the same photo) forming a bench. An additional view of this bench, photo (e), shows the 45° dip slope, and the Gallup trailer park in the background.

The deposit occurs in a carbonaceous coaly shale lens near the base of the Dakota Sandstone. Mineralization is apparently related to thick part of carbonaceous zone which thins away from this deposit (Hilpert, 1969). Deposit was mined from 1952-60 from the open pit; decline was driven to explore southern end of property.

References: (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.
(2) Field notes, 12/3/79.

Photo (a) Looking SW down dip slope at Hogback decline.

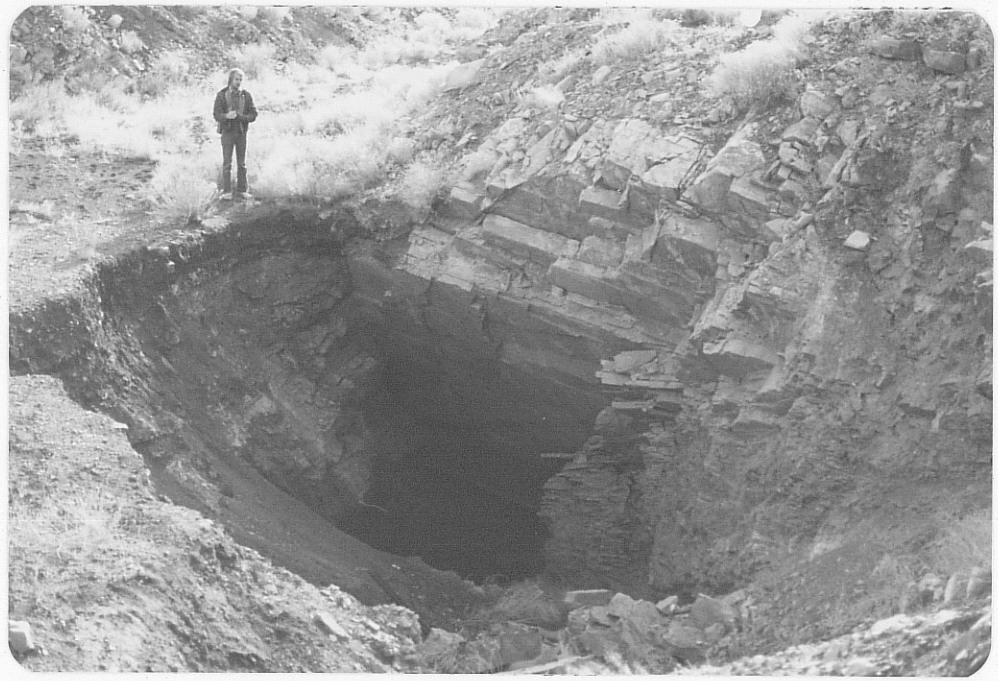

Photo (b) Close-up of decline; caved at 25' down.

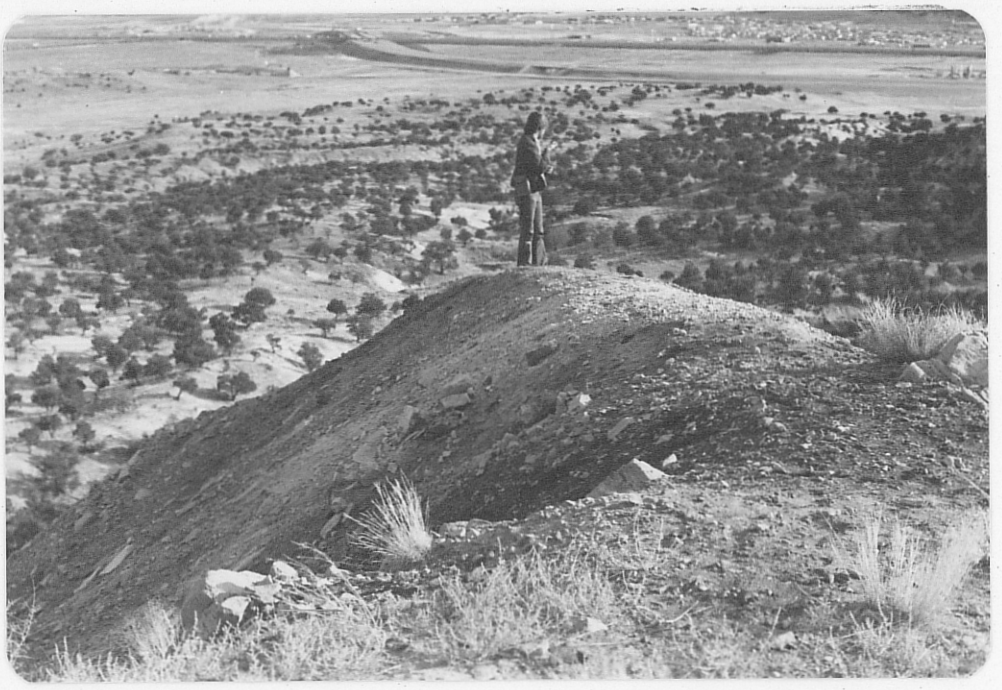

Photo (c) Dump from decline, looking SE; note construction along new I-40 route in background.

Photo (d) Looking north at stripped area. Bench has been constructed by open pit mining on dip slope in basal Dakota Sandstone.

Photo (e) Looking south from bench shown in photo (d). Note dip slope of hogback at left and Gallup trailer park in background.