

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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Open-File Report 148

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.

McKINLEY COUNTY

Quad: Ambrosia Lake 7½'

1. NM-149-1-1 Page 1
Mary No. 1 (Dysart No. 3)
2. NM-149-1-2 Page 5
Dysart #1 (Rio de Oro)
3. NM-149-1-3 Page 9
Dysart #2
4. NM-149-1-4 Page 12
United Western (J and M)
5. NM-149-1-5 Page 16
UN-NP Sec. 32
6. NM-149-1-6 Page 18
Sec. 26 (Ike No. 1)

Quad: Bluewater 7½'

1. NM-149-3-1 Page 21
Red Point Lode
2. NM-149-3-2 Page 24
Williams & Thompson (Sec. 18)
3. NM-149-3-3 Page 29
Sec. 24 (Glen & Edith)

Date Visited 12/14/79

Mine name(s) Williams & Thompson (Sec. 18) County McKinley

Section SW $\frac{1}{4}$ 18 Twنش. 13 N R. 10 W

Quadrangle Sheet Bluewater 7 $\frac{1}{2}$ '

Mining district Ambrosia Lake

Elevation 7,060'

Nearest City and/or dwelling Numerous single family dwellings within 1 mi. radius.

The Williams and Thompson is located in the SW $\frac{1}{4}$ sec. 18 immediately east of the active Todilto Exploration Mine in sec. 13. Mine is indicated on Bluewater quadrangle by a shaft symbol. It is accessible via the Poison Canyon road which leaves highway no. 53 about 10 miles north of Milan; proceed west on Poison Canyon road for about 8 miles to mine.

The mine consists of a shaft, a loadout facility, and a long trench with a decline driven at the end; (see Fig. 1). The shaft has caved (photo a) but a portion of the collar or timbering is still visible in the hole. Present depression is circular in plan and is about 10' deep. The shaft may have been inclined.

The dump, shown in photo (b), is about 60' x 40', 8'-9' high, and is immediately south of the shaft. A deteriorating wooden load out structure is at west edge of dump. A stockpile area for low grade ore lies 100' south of the mine dump, and consists of a cluster of conical piles up to 3' high spread over an area that measures 100' x 100' (see photo c). Scintillometer readings on these piles ranged up to 1,000 cps. The only building structure remaining on the site is a metal shed (photo d) which stands about 350' southwest of the shaft.

Also southwest of the above described workings is a 250' long NW trending trench that descends gently to an open stope (see photo e) with a timbered drift driven NW into the north face (see photo f). Opening is about 4 $\frac{1}{2}$ ' high and 12' wide; length of drift is about 12'. Scintillometer readings in stope near opening to drift were about 150 cps.

The deposits explored at these workings are in basal Todilto limestone. Hilpert (1969) described them as a cluster of medium and small irregularly shaped deposits. Ore was mined during the 1952-1964 period, but probably not continuously.

The State Mine Inspector's Office carried an active registration on this property as late as January, 1967. It was registered as the Section 18 Mine (or Federal Mine) with Cibola Mining as the operator.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 36.
 - (2) State Mine Inspector's Office, inactive uranium mine file.
 - (3) Field notes, 12/14/79.

ms. 24

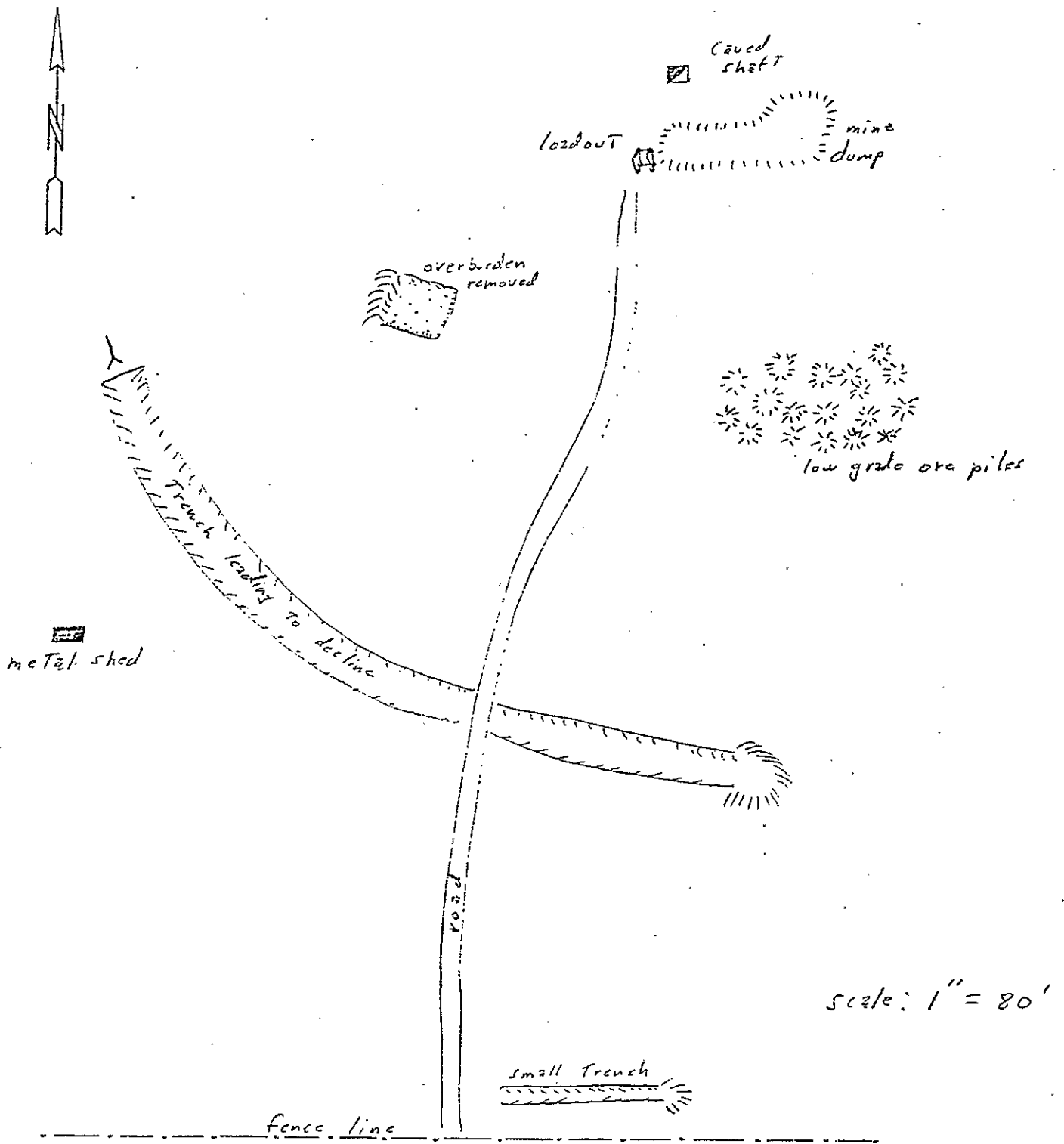


Fig. 1 Diagrammatic sketch of workings at the Williams and Thompson Mine.

ME 24



Photo (a) Looking north at caved shaft; note range pole at right side of shaft for scale.

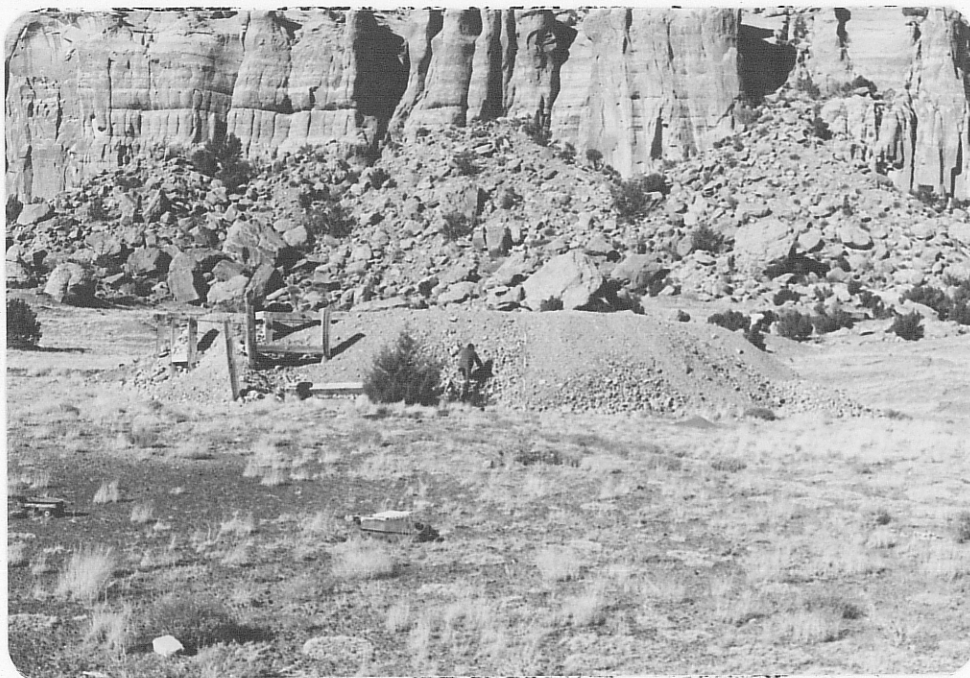


Photo (b) Looking north at mine dump and wooden load out facility at left; note person at center on toe of dump for scale.

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Photo (c) Looking south at low grade ore stock pile area 200' south of the shaft in photo (b); note person at right on pile for scale.



Photo (d) Metal shed about 350' southwest of shaft; note person at left side of shed for scale.

1949 MC 27
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Photo (e) Looking NW into trench with drift at far end; note person standing on floor of trench at upper center.



Photo (f) Drift driven NW at end of trench shown in photo (e); trench terminates in a 25' high open slope, and drift is driven into north face of slope; range pole at center for scale.

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