

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.

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 1/31/80

Mine name(s) Mary No. 1 (Dysart No. 3) County McKinley

Section NW $\frac{1}{4}$  11 Twنش. 14 N R. 10 W

Quadrangle sheet Ambrosia Lake 7 $\frac{1}{2}$ '

Mining district Ambrosia Lake

Elevation 7,100'

Nearest city and/or dwellings Ambrosia Lake Junction, 9 $\frac{1}{2}$  mi. southeast

The Mary No. 1 is located in the NW $\frac{1}{4}$  of sec. 11,  $\frac{1}{2}$  mi. north of the Dysart no. 1 at the very northwest edge of the Ambrosia Lake district. It may be reached via highway 509; from the junction of no. 53 and no. 509 travel northwestward on no. 509 for approximately 10 mi. to the Dysart No. 1 (Rio de Oro) headframe, and then turn right (north) for an additional  $\frac{1}{2}$  mi. to the Mary No. 1 Mine.

The mine consists of vertical shaft, approximately 500' deep, sunk in 1959 on property owned by Stella Dysart, later picked up by Homestake-Sapin partners. The mine collars in Mancos Shale and bottoms in Westwater Canyon sandstone; it produced from several mineralized zones in the upper Westwater Canyon that appear to be fracture controlled. The mine was last registered at the State Mine Inspector's Office in January, 1966.

The shaft has subsequently caved leaving a 75' diameter funnel shaped hole perhaps 75' deep or deeper (see photos a & b). A close up of the lower portion of the hole is shown in photo (c). The shaft site is enclosed with a 6' high wire mesh fence that is nearly 250' long on each side; however, a section along the south side has been damaged and this allows access to the mine shaft. Scintillometer readings around the shaft site range from 400-600 cps; one area along the north fence line up to 1,200 cps. The mine dump extends mainly eastward from the shaft; it is composed of very low, 3'-4' high, scattered conical piles and ridges that extend 600' east of the shaft. Scintillometer readings were in the 600-1500 cps. range in the dump area (see photos d & e). A small powder magazine remains about 700' west of the shaft.

United Nuclear-Homestake Partners representative, Mr. Gary Boyer, has stated that the company now controls the mining interests in sec. 11 and that they consider the property active. When they go back into the Dysart #1 they will work generally northward and will perhaps use the Mary No. 1 shaft for ventilation. Radon gas buildup can be a problem in mine rejuvenation.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603.
  - (2) Gary Boyer, United Nuclear-Homestake Partners representative, oral communication 1/29/80
  - (3) Field notes 1/31/80.

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Photo (a) Looking eastward at caved shaft site showing fence and general debris.



Photo (b) Looking southeastward into caved shaft.

# 74 MC-2



Photo (c) Close-up of lower portion of caved depression where it funnels into the old shaft.



Photo (d) View northward at east fence line of the mine shaft; note small dump at center and right and electric utility line.

H. 75 MS-3



4-210 Mc-4  
Photo (e) Looking northwest at dump (ore stockpile are?) 600' east of the mine shaft which is indicated by arrow at left. Note range pole at center for scale.