

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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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.

VALENCIA COUNTY

Quad: Dos Lomas 7½'

- |     |   |         |
|-----|---|---------|
| 26. | NM-149-4-26                                       | Page 1  |
|     | Double Jerry (Vallejo)                            |         |
| 27. | NM-149-4-27                                       | Page 4  |
|     | Christmas Day                                     |         |
| 28. | NM-149-4-28                                       | Page 8  |
|     | Red Bluff Claims 1,2,3,4,5,9                      |         |
| 29. | NM-149-4-29                                       | Page 15 |
|     | Black Hawk, Bunney, Gay Eagle, Red Bluff, and UDC |         |
| 30. | NM-149-4-30                                       | Page 28 |
|     | Last Chance                                       |         |
| 31. | NM-149-4-31                                       | Page 31 |
|     | Section Nine                                      |         |
| 32. | NM-149-4-32                                       | Page 39 |
|     | Taffy (Bonanza)                                   |         |
| 33. | NM-149-4-33                                       | Page 41 |
|     | La Jara   |         |
| 34. | NM-149-4-34                                       | Page 45 |
|     | Zia   |         |
| 35. | NM-149-4-35                                       | Page 52 |
|     | Linear Prospecting Trenches                       |         |

Quad: Dough Mountain 7½'

- |    |                            |         |
|----|----------------------------|---------|
| 1. | NM-199-1-1                 | Page 54 |
|    | Sandy (South Laguna Mines) |         |

Date visited 3/19-21/80

Mine name(s) Black Hawk, Bunney, Gay Eagle, Red Bluff, County Valencia  
and UDC

Section S $\frac{1}{2}$  Sec. 4 Twنش. 12 N R. 9 W

Quadrangle sheet Dos Lomas 7 $\frac{1}{2}$ '

Mining district Mt. Taylor

Elevation 7,040'

Nearest city and/or dwellings Milan, about 9 miles south. Roundy Ranch is 1 $\frac{1}{2}$  miles southwest, but is not inhabited continuously.

The Black Hawk, Bunney, UDC 1-4, The Gay Eagle, and the Red Bluff Nos. 7, 8, and 10, all in the south  $\frac{1}{2}$  of sec. 4, are described herein, (see Fig. 1). These claims may be reached by traveling north on highway no. 53 for 7.3 miles from the intersection of no. 53 and U.S. no. 66 (2 mi. east of Milan). Then take the Roundy Ranch road northeastward for approximately 3 miles to the top of the mesa in sec. 4.

All of the workings are in the Todilto limestone; most consist of open cuts, pits, or trenches, but at least five adits were driven on the Black Hawk and Bunney Claims. These were often driven along the axis of intraformational folds and are shown in photos 1 through 4 and 6. The full lengths of the adits are not known, but are at least 40'. They appear to be stable even though the limestone is highly fractured along the folds; timbering is generally limited to the portal area. The folds locally have a northwest trend. The southern adits, photos (4) and (6) probably interconnect and one drift extends southward to connect with the open pit shown in photo (7), which is on the Black Hawk Claim. This pit exposes a thin purple fluorite vein on the bench at left foreground in photo (7). The secondary uranium minerals, tyuyamunite, metatyuyamunite, and less commonly, carnotite, were noted on many faces and muck piles, but are not everywhere present. Waste rock piles are numerous along the margins of the cuts, but a particularly large dump exists at the head of a small canyon several hundred feet west of the Black Hawk/Bunney workings (see photo 5). The Black Hawk and Bunney were mined together and no attempt is made to differentiate the two here.

Photos (8) through (12) show overburden, mine dumps, and open cuts here assigned to the Gay Eagle Claim. Photo (8) looks northward at overburden piles up to 20' high with a trench at center. Photos (11) and (12) show the depth and extent of a cut near the southern margin of the claim.

The Red Bluff 7, 8, and 10 workings are shown in photos (13) through (17). Some of the larger and longer cuts occur on the Red Bluff (8) and 10 claims; a discussion of reef structures exposed in one of these cuts is given in Perry (1963). No. 8 and 10 are southward continuations of the Gay Eagle and these three properties were mined together. Initial production date was 1952 and production through July 1, 1958 had totaled 39,284 tons of ore averaging .20% U<sub>3</sub>O<sub>8</sub>.

The operator in 1958 was listed as Floyd Sutton, Jr. The Gay Eagle was last registered with the State Mine Inspector's Office in 1959, but the Red Bluff #10 was registered as late as 1964.

Little if any disturbance was noted on the UDC 1 through 4 Claims. There may have been some minor prospecting on 1 and 2 (see again Fig. 1). The location of the UDC 5 described by Hilpert (1969) is not known.

In 1976 the Black Hawk Claim was restaked by William Coffey who renamed it the Tycoon 2; the Gay Eagle was restaked as the Tycoon 1. More recently the Tycoon 2 has been restaked by Jerome Mason of Albuquerque; he renamed it the New Black Hawk and the claim was filed on January 26, 1980.

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. paper 603.
  - (2) Perry, Bobbie L., 1963, Limestone Reefs as an Ore Control in the Todilto Limestone of the Grants District, in Geology and Technology of the Grants Mineral Region: New Mexico Bur. of Mines and Mineral Resources, Mem. 15, p. 150.
  - (3) U.S. AEC PED-1, 1959, Mine Operation Data Report, GJO/AEC, p. 49. (microfiche only).
  - (4) State Mine Inspector's Office, inactive uranium mine file.
  - (5) Field notes, 3/19/80.

R. 9 W.

33 34

T. 13 N.

T. 12 N.

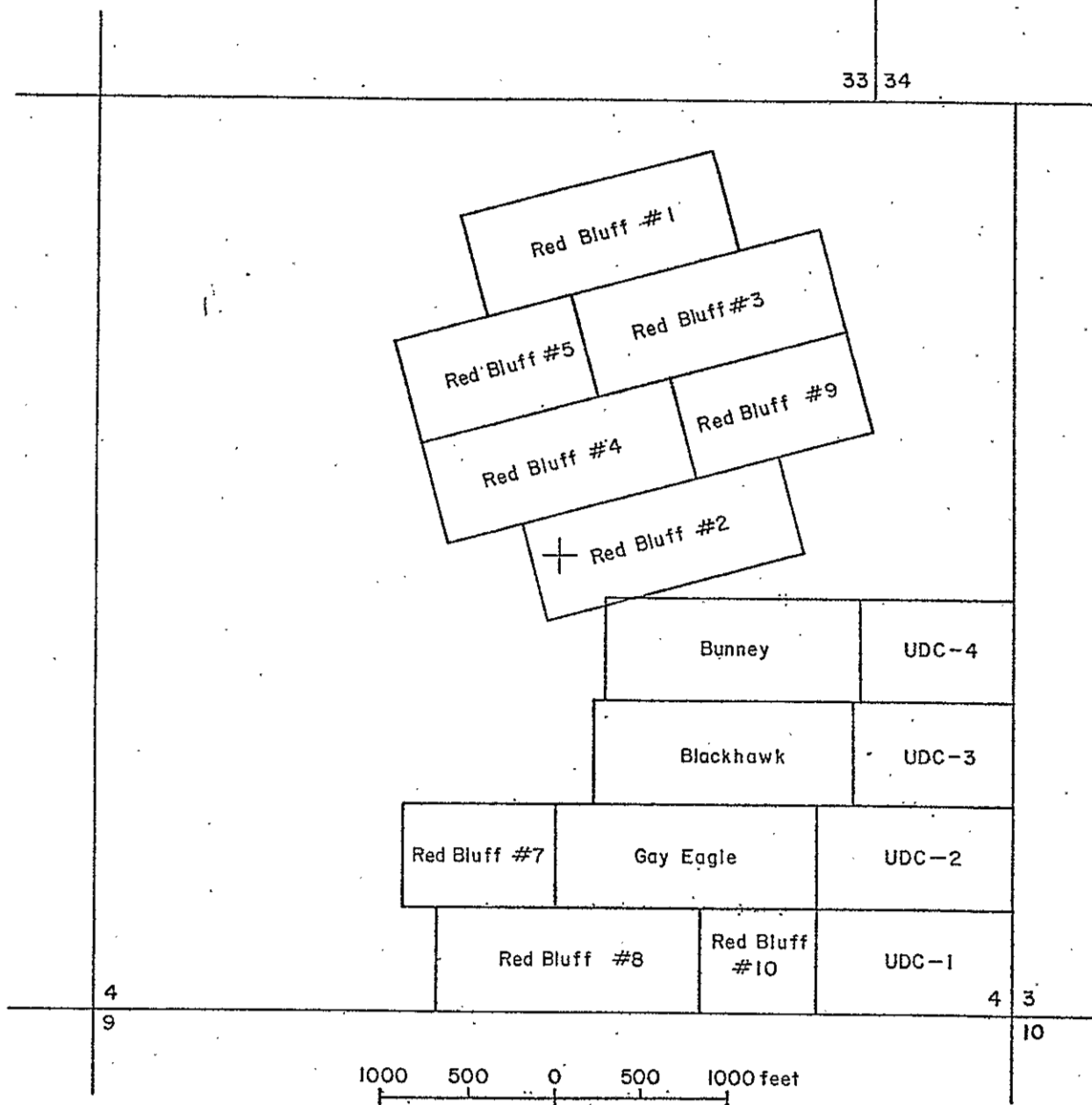


Fig. 1 Sec. 4 mining claims filed in late 1950 and early 1951  
(source: mining claim records, Valencia Co., Courthouse).

Photo (1) Looking northwestward on the Black Hawk and Bunney Claims; a 10'-12' thick aeolian deposit covers the Todilto limestone. The adits are shown in more detail in the following photos.

Photo (2) Close-up of adit shown at left in (1). Adit is 6' high at crest of chevron type fold, and 8' wide. Stub adit at right is hidden from view in (1).

Photo (3) Close-up of adit shown at far right in (1); portal is 5' high, 6' wide. Access road descends at left.

Photo (4) Looking southeastward into adit driven into end of trench shown in lower left corner of (1); portal is 5' high, 10' wide.

Photo (5) Looking northward at one of main dumps from Black Hawk and Bunney workings; waste has been bulldozed into head of small canyon which forms re-entrant in mesa top. Frontal slope is at angle of repose. Scintillometer readings on the mine dumps normally varies between 400-900 cps, occasionally higher. Note person at right for scale.

Photo (6) View from inside adit on Black Hawk Claim; portal is 6' high, 10' wide at base. A drift connects to trench at south shown below in (7).

Photo (7) Looking southward into 12' deep cut in Todilto ls., on Black Hawk Claim. Purple fluorite vein occurs on bench at left.



Photo (8) Looking northward on Gay Eagle Claim; overburden pile at right is 20' high (note range pole at toe of the pile); pile at left is 13' high. One of the trenches is visible at center.



Photo (9) Looking westward at 10' deep trench on Gay Eagle Claim. Trench has filled in considerably with tumbleweed and blow sand and has developed vegetative cover.



Photo (10) Looking northward at overburden pile on Gay Eagle Claim.

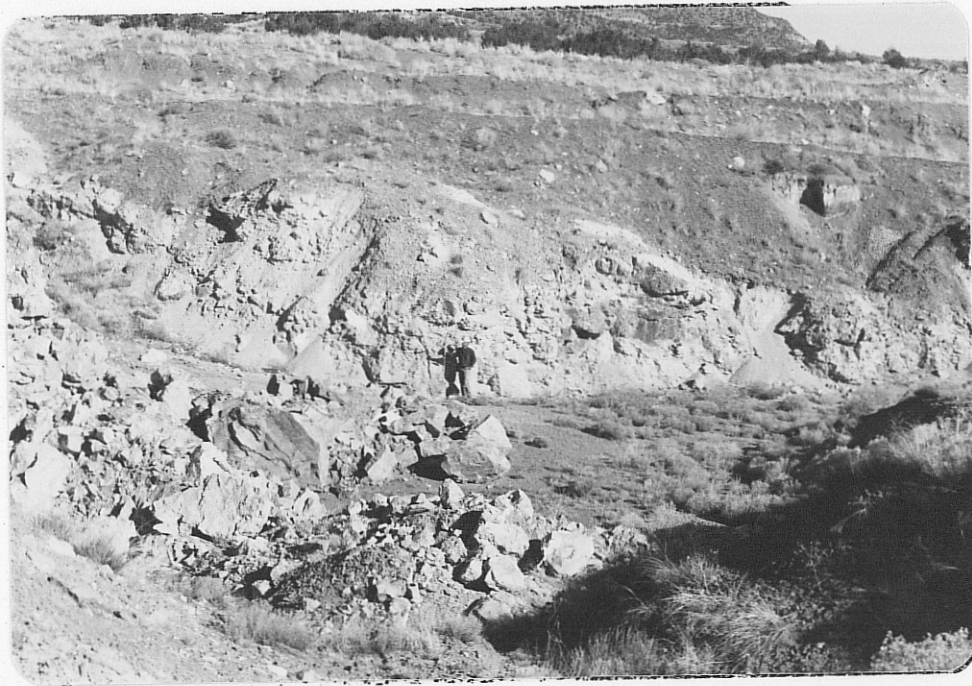


Photo (11) Looking eastward at 15' deep limestone cut on Gay Eagle Claim. Overburden is 15' thick given total depth of nearly 30'.



Photo (12) Southern extension of cut shown in (11) above. Road surface descends to right on bench in background. Note person in center photo for scale.

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Photo (13) Looking westward into trench near west end of Red Bluff No. 7 Clain. Some back filling is evident in this area.



Photo (14) Looking southward into open cut near rim of mesa on Red Bluff No. 7 Clain; note minor fold in Todilto limestone just below person in photo. Dump from a section 9 pit is visible in background.



Photo (15) Looking southeastward on Red Bluff No. 8 toward the sec. 4/9 line (fence line); mine dumps in foreground, overburden pile at left. Person at right of center is standing at entrance to cut shown below in (16).



Photo (16) Looking southeast near the Red Bluff No. 8 and No. 10 boundary. Cut extends nearly 1000' east-northeast and is shown in photo (17). Fence marks the section 4/9 line. A light snow was falling at the time the photo was taken.



Photo (17) Looking eastward into Red Bluff #8 and 10 trench; trench extends east-northeast for 900' across the Red Bluff #10 Claim and is one of the major workings on this group of claims in the south  $\frac{1}{2}$  of sec. 4. Overburden has been placed largely to the north (left). This deposit is a continuation of the Gay Eagle. Note person at bottom of cut for scale.