

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.

Quad: Bread Springs 7½'

1. NM-146-2-1 Page 33
Diamond 2 (Largo)

Quad: Church Rock 7½'

1. NM-122-4-1 Page 39
CD & S (Sec. 35)
2. NM-122-4-2 Page 41
Foutz #3 (Yellow Jacket)
3. NM-122-4-3 Page 45.
Foutz 1 and 2
4. NM-122-4-4 Page 48
William and Reynolds
5. NM-122-4-5 Page 50
Christenson (Rimrock #2)
6. NM-122-4-6 Page 58
Santa Fe Christensen (Rimrock #1)

Quad: Dos Lomas 7½'

1. NM-149-4-1 Page 62
Isabella
2. NM-149-4-2 Page 67
Spencer Shaft (Centennial)
3. NM-149-4-3 Page 69
Hogan
4. NM-149-4-4 Page 74
Gossett Incline (Beacon Hill #23)

5.	NM-149-4-5	Page 78 ⁷⁷
	Blue Peak (Garcia 1)	
6.	NM 149-4-6	Page 84 ⁸³
	Mesa Top 7 & 18 (Malpais Raise)	
7.	NM-149-4-7	Page 93 ⁹²
	Dog Incline (Dog and Flea)	
8.	NM-149-4-8	Page 99 ⁹⁸
	Marquez	
9.	NM-149-4-9	Page 104
	Faith (Westvaco) (Sec. 29)	
10.	NM-149-4-10	Page 109
	Barbara J #3	
11.	NM-149-4-11	Page 112
	Barbara J #1	
12.	NM-149-4-12	Page 114
	Baily and Fife (Rimrock)	
13.	NM-149-4-13	Page 117
	T-20 Shaft (T-9 ore body)	
14.	NM-149-4-14	Page 120
	Flat Top (Flat Top #3 & 4)	
15.	NM-149-4-15	Page 124 ✓
	Roundy Shaft (Rimrock)	
16.	NM-149-4-16	Page 126
	SW $\frac{1}{4}$ 30 Strip	
17.	NM-149-4-17	Page 131
	Sec. 25 Strip Complex	

18.	NM-149-4-18	Page 141
	Sec. 25 Shaft	
19.	NM-149-4-19	Page 144
	NW $\frac{1}{4}$ 25, Decline and Open Pits	
20.	NM-149-4-20	Page 149
	Hanosh	
21.	NM-149-4-21	Page 152
	Sec. 23 and 26 Open Pit	
22.	NM-149-4-22	Page 156
	NE $\frac{1}{4}$ Sec. 36 (Rimrock) Homer Scriven)	
23.	NM-149-4-23	Page 160
	Sec. 31 Open Pit	
24.	NM-149-4-24	Page 163
	Moe No. 4 (Sec. 32)	
25.	NM-149-4-25	Page 165
	Charlotte	

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

Quad: Gallup East 7 $\frac{1}{2}$ '

1.	NM-122-3-1	Page 167
	Hogback (Hogback 3-5)	
2.	NM-122-3-2	Page 171
	Becenti	

Quad: Goat Mountain 7 $\frac{1}{2}$ '

1.	NM-149-2-1	Page 174
	Kermac Sec. 10 (Kermac No. 10)	

Date visited 1/15/80

Mine name(s) Flat Top (Flat Top #3 & 4) County McKinley

Section SE $\frac{1}{4}$ SE $\frac{1}{4}$ 30 Twنش. 13 N R. 9 W

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

Mining district Poison Canyon Trend

Elevation 6,800'

Nearest city and/or dwellings Ambrosia Lake junction, about 3 $\frac{1}{2}$ miles by road to northeast.

The Flat Top is in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30 about $\frac{1}{2}$ mile west of highway no. 53. Mine location is printed on the Dos Lomas 7 $\frac{1}{2}$ ' quadrangle sheet, marked by a shaft symbol.

The mine consists of a 30 $^{\circ}$ incline driven west into Todilto limestone for a total length of 230' (photos a & b). Wooden super-structure at portal is badly deteriorating; a small opening about 2 $\frac{1}{2}$ ' high, 5' wide, remains but workings have nearly filled by natural processes (see photo b). A small box cut was made behind entrance to incline, but slopes on highwalls have grown gentle with time. Gamma radiation at entrance measured 250 cps.

Dump piles are scattered around the site. A few small conical piles may be seen west of the incline, in the background of photo (a). Larger dumps occur north and east of the incline several hundred feet. An area about 50' wide and nearly 200' long has scattered waste dumps in the form of conical piles or short ridges up to 4' high (see photo c). Scintillometer readings on traverse of this dump ranged from 450 to 900 cps.

The mine produced from a medium sized deposit in Todilto limestone during the 1955-64 period (Hilpert, 1969). Production through July 1, 1958 had totaled 30,217 tons of ore averaging 0.22% U₃O₈ (AEC-PED-1, 1959). The State Mine Inspector's office last registered the mine in February, 1968, with Bailey and Fife as the operator.

To give an idea of what Hilpert (1969) means by a "medium" deposit, McLaughlin (1963) stated that the Flat Top deposit is "approximately 420' long with an average width of approximately 170 feet."

- References:
- (1) Hilpert, L., 1969, Uranium Resources of NW New Mexico, U.S.G.S., Prof. Paper 603, p. 35.
 - (2) McLaughlin, E. D., 1963, Uranium Deposits in the Todilto Limestone of the Grants District, in Geology and Technology of Grants Uranium Region: New Mexico Bur. of Mines and Mineral Resources, Mem. 15, p. 147.
 - (3) U.S. AEC PED-1, 1959, Mine Operation Data Report, GJO/AEC, p. 46.
 - (4) State Mine Inspector's Office, inactive uranium mine file.

turn

100 130



Photo A Looking southwest toward mine shaft site; shaft has been backfilled; note 30" diameter metal ventilation shaft just left of center with 10" diameter pipe left of it, and metal shed at far left.



Photo B Looking southward from mine shaft area to mine dump at left; note person on dump for scale. A small drainage flows south through trees at far left in photo.

281
Mc 123

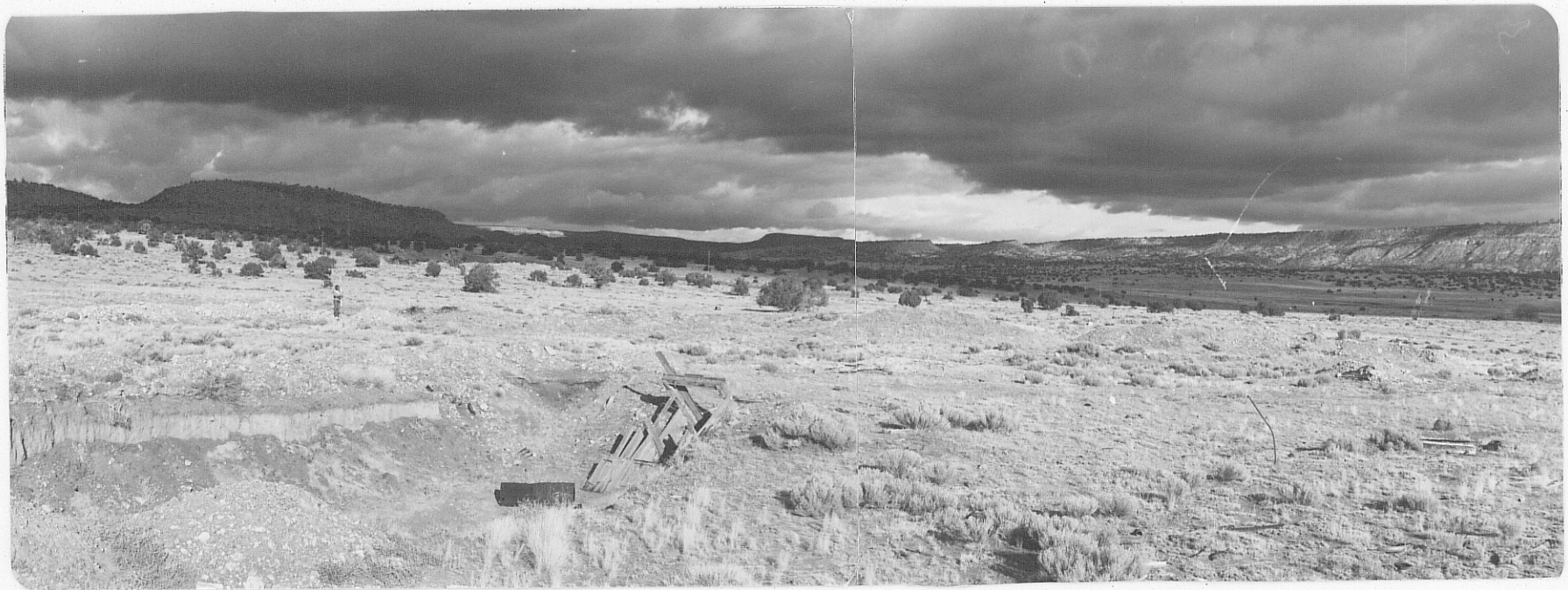


Photo (c) Looking northeastward at Flat Top Mine site showing (1) entrance to 30° incline (wooden framing) going off to left, (2) the small box cut just behind entrance to incline, and (3) scattered waste piles extending from left to right across picture in middle distance, note person at left for scale.