

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

Orin J. Anderson

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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.

Acknowledgments - The writer wishes to thank the following people for their valuable assistance in the field: Lars (Skip) Skotte, Richard Chamberlin, JoAnne Osburn, Mary Ann Anderson, and Cheryl Kyllonen.

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.

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| | KING Tutt #2 (MP-G Sylvania Mining) | |

REFERENCES FOR CARRIZO MINING DISTRICT

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| *Preface to Chuska District Reports | Page 138 141 |
| *Road log to Sanostee Quad. and the Chuska Mining District | Page 141 144 |

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| | Dennet Nezz #1 and #2 | |
| 2. | NM-49-2-2 | Page 150 |
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| | (unnamed) Sec. 8 Adit | |

PREFACE TO EAST CARRIZO DISTRICT REPORTS

The East Carrizo District lies along or within several miles of the Arizona border in townships 29 and 30 N., and ranges 20 and 21 west.

The area is covered on the Pastora Peak and Redrock Valley 15' topographic quadrangles, but is largely unsurveyed. A land net was projected in solely to determine if our locations agreed with those given in other publications such as Hilpert, L., (1969), and does not appear on the East Carrizo District claim maps (after AEC, 1953, Claim Maps, East Carrizo District) that accompany each report.

These claim maps were provided for our use on this project by Mr. William Chenoweth of the U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado. They show access roads, drainage lines, and the claims in the area as of 1953. The only scale they carry is the mile post markers along the New Mexico/Arizona state line.

Orin J. Anderson

*New Mexico Bureau of Mines and Mineral Resources
Socorro, New Mexico
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Mine name(s) VCA Plot #7 (Lower Oak Creek) County San JuanSection (Unsurveyed) Twنش. 29 N R. 21 WQuadrangle sheet Red Rock Valley 15'Mining district East CarrizoElevation 5700'Nearest city and/or dwelling Oak Springs, 1 mi. NW

VCA Plot #7 has a great variety of workings including, open pits, trenches, adits, and inclines. For the most part these lie in the eastern half of the claim, with a cluster of workings in the southeast corner (see claim index map). The plot itself is approximately, 1 mi. long, $\frac{1}{4}$ mi. wide, the western boundary being the Ariz./N.M. state line at the 18 mile post marker; the linear plot has an approximate orientation of $N 52^{\circ} W$, although it is not certain that the north and south boundaries are exactly parallel.

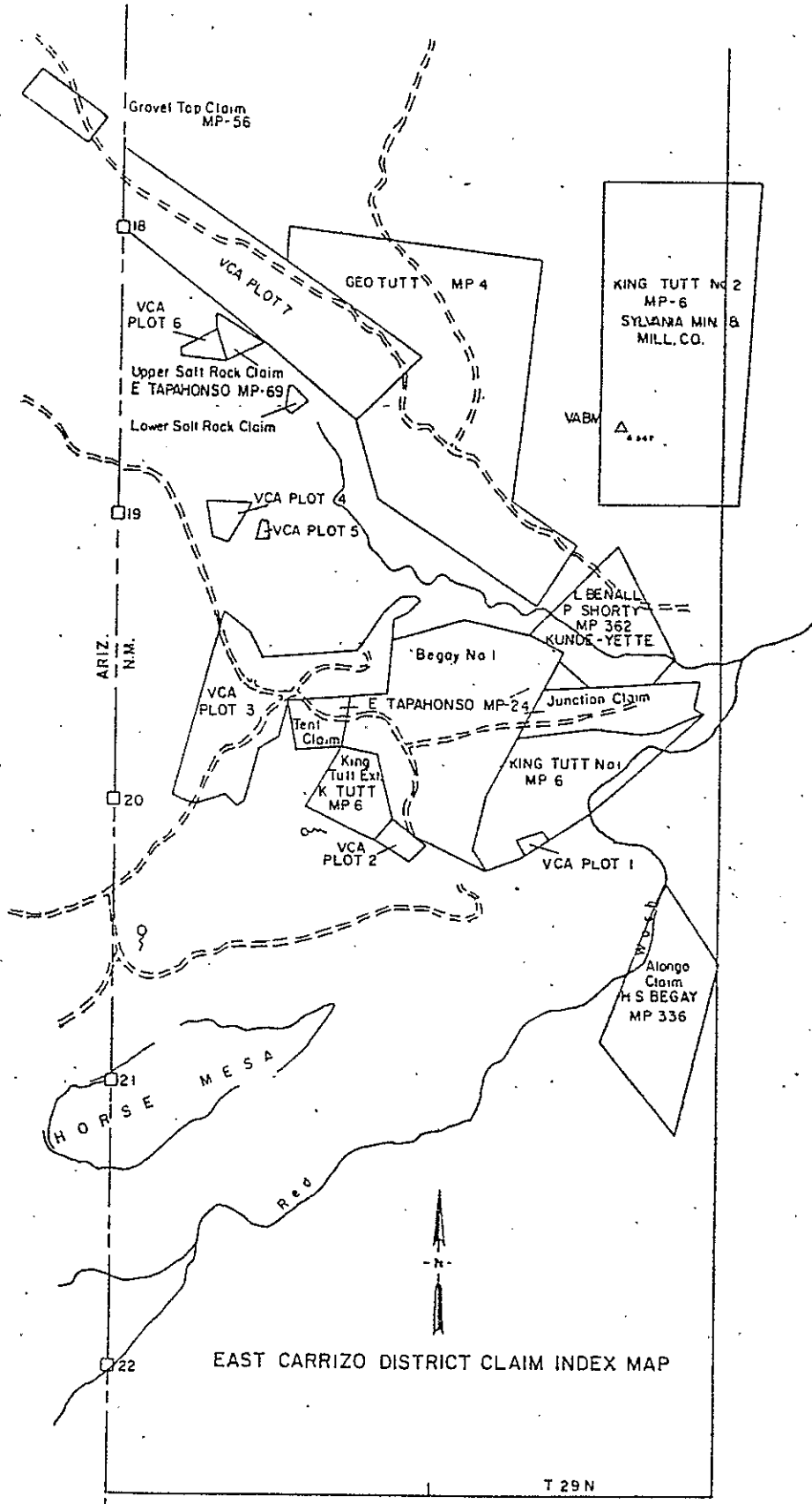
Hilpert, 1969, p. 52, listed the location as uncertain, but it becomes apparent from the AEC claim map that the plot lies mainly in the $S\frac{1}{2}$ sec. 11 with small portions extending into the $E\frac{1}{2}$ Sec. 10 and into the $NE\frac{1}{4}$ of Sec. 14. It more or less parallels the north edge of Oak Spring Wash in Sec. 11 (all section lines are projected).

Photograph (a) offers a representative view of the southeastern edge of the plot, looking due west with the Carrizo Mtns. in the background. At right is upper Terrace level with vehicle for scale; at center is a lower Terrace level (both surfaces in Salt Wash Member) into which Oak Springs Wash is cut; at left is an exhumed volcanic neck which is shown topographically in the $SW\frac{1}{4} SW\frac{1}{4}$ Sec. 11, T. 29 N., R. 21 W., on the Red-rock Valley 15' sheet; and in the foreground is an inclined adit with mine tailings partially spilled over into an arroyo which is tributary to Oak Spring Wash. Photo (b) is a close-up shot of this inclined adit, the portal visible at the end of an 11' deep trench. The remainder of the photographs carry their own descriptions and attempt to show the small and discrete nature of each working along with the unique manner in which waste rock was sometimes stacked by hand labor along small trenches, passageways, or outside small underground workings.

The various workings produced from the Salt Wash member of the Morrison formation during the period from 1954-1959, with some of the sites worked as late as 1961.* It was one of the larger producers on the New Mexico side of the East Carrizo district being surpassed in total U_{308} production only by VCA Plot #3 and the Begay #2. A total of 3,373 tons or ore averaging .26% U_{308} and 138,398 lbs. V_{205} . The U:V ratio is considerably lower here than for many other workings in the district with the exception of the Carrizo #1.

- References: (1) Hilpert L., 1969, Uran. Res. of NW New Mex; USGS
PP. 603, p. 52.
- (2) Chenoweth, W.L., 1980, Historical Review of Uranium-
Vanadium in The Eastern Carrizo Mountains, San Juan
County, New Mexico, U.S. DOE, TM-210.
- (3) AEC-PED-1, 1959, Mine Operation Data Report, p. 151.
- (4) Oral communication with Wm. Chenoweth, U.S. Dept. of
Energy.
- (5) East Carrizo District Claim Index Map, 1953

* Some earlier production, 1942-1944, and perhaps 1948-1950, was in-
cluded with East Reservation Lease production.



EAST CARRIZO DISTRICT CLAIM INDEX MAP

T 29 N
T 28 N



Photo (a) On VCA Plot #7, south side, looking west into valley of Oak Spring Wash; small inclined adit and tailings dump in foreground.



Photo (b) VCA Plot #7, close-up of inclined adit shown in photo (a); looking west.



Photo (c) Looking north at mines and dumps in north-south trending tributary near the corner of VCA Plot #7. Arrow indicates position of adit shown in photo (e).

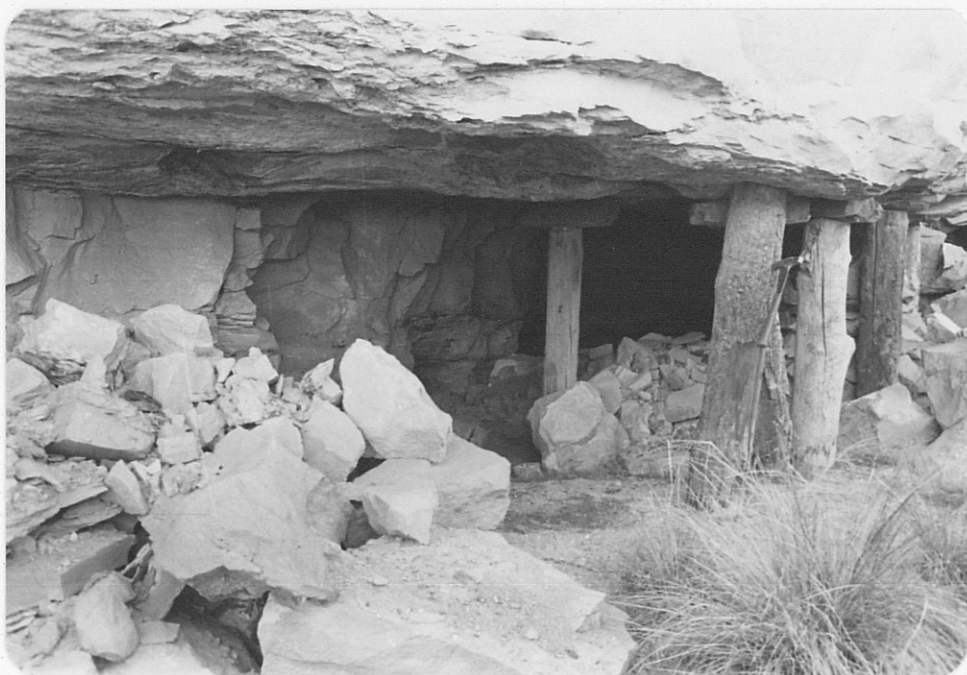


Photo (d) Looking west at small adit in lower left hand corner of photo (c) Rock pick in post for scale. Near the SE corner of VCA Plot #7.

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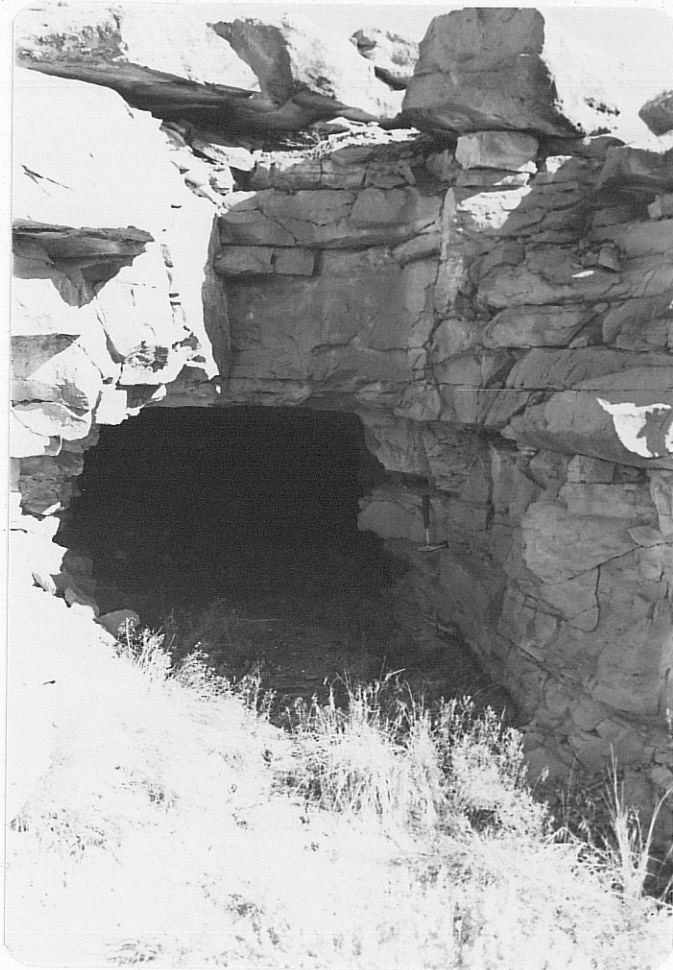


Photo (e) Looking east at small adit in right center of photo (c) near the SE corner of VCA Plot #7. Hammer on right wall for scale.



Photo (f) Looking SW at pit to the west of the workings in photo (c). Location is still in the S-SE corner of the VCA Plot #7. Note stacking of waste rock. Depth of trenching is 5' on left side of photo.



Photo (g) Looking east at workings in photo (f), near the SE corner of VCA Plot #7.



Photo (h) VCA Plot #7, SE side looking W at a small prospecting trench 3' deep, 150' S of adit shown in photo (b); note hammer at upper left for scale.



Photo (i) VCA Plot #7, SE side, looking E at two stub adits (upper one partially concealed by tailings from open cut above); on east side of small N-S tributary to Oak Spring Wash. Adit at lower right is approx. 5' high, 6' W, 12' long; see also photo (j).



Photo (j) VCA Plot #7, SE side, looking N at typical terrain of southside plot #7; tributary to right of vehicle is one referred to in photo (i).



Photo (k) VCA Plot #7, SE side; looking east at tailings pile from rim cuts 300-400' south of photo (i) area. Workings are easily spotted by fan shaped dumps on moderate to steep slopes; note 3'-5' thick lenticular ss beds typical of Salt Wash member.



Photo (L) VCA Plot #7, SE side, looking NE at dump in small re-entrant just visible at right center in photo (k). Dump is over 100' wide, 70' in downslope direction; note truck tire and axle for scale. Scintillometer readings at this site reached 2500 cps. See photo (m) for view from distance.



Photo (m) VCA Plot #7, SE side, looking E; arrow points to tailings dump shown in photo (L). Dumps visible to left correspond to those shown in photo (k).



Photo (n) VCA Plot #7, SE side; looking S toward King Tutt plug in middle distance; drill road on right, Beautiful Mountain in distance just to left of King Tutt plug.



Photo (o) VCA Plot #7, looking N; typical of small scale prospecting near central portion of plot; note hammer at right for scale.



Photo (p) VCA Plot #7, looking NE; typical of small surface prospecting near north central portion of plot #7, just south of access road that leads SE from Oak Spring.