

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

New Mexico Bureau of Mines and
Mineral Resources
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.

Quad: Redrock Valley 15'

1. AZ-40-0-1
VCA Plot #7 (Lower Oak Creek)
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2. AZ-40-0-2
Franks Point (Plot. 6)
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3. AZ-40-0-3
Lower Salt Rock
AZ-40-0-3
Upper Salt Rock
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4. AZ-40-0-4
Williams Point (Plot #4)
Page ~~64~~ 65
5. AZ-40-0-5
Salt Canyon Mines (Salt Canyon Claim)
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- 6-9. AZ-40-0-6 to 9
VCA Plot #3
Page ~~73~~ 76
10. AZ-40-0-10
Tent (Tent Claim)
Page ~~90~~ 91
11. AZ-40-0-11
Begay Incline
Page ~~93~~ 94
12. AZ-40-0-12
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Carrizo #1 (MP-24)
Page ~~100~~ 101
14. AZ-40-0-14
King Tutt Point (VCA Plot #2)
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15. AZ-40-0-15
Begay (Begay #1)
Page ~~111~~ 113

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|-----|-------------------------------------|-------------------------|
| 16. | AZ-40-0-16 | Page 115 118 |
| | Red Wash Point (VCA Plot #1) | |
| 17. | AZ-40-0-17 | Page 119 122 |
| | King Tutt 1 (MPG) | |
| 18. | AZ-40-0-18 | Page 125 128 |
| | Junction | |
| 19. | AZ-40-0-19 | Page 128 131 |
| | Alongo (Alongo Claim) | |
| 20. | AZ-40-0-20 | Page 131 134 |
| | Canyon View (Alongo Claim) | |
| 21. | AZ-40-0-21 | Page 135 138 |
| | 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 |

Quad: Sanostee West 7½'

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|----|------------------------|----------|
| 1. | NM-49-2-1 | Page 148 |
| | Dennet Nezz #1 and #2 | |
| 2. | NM-49-2-2 | Page 150 |
| | Dennet Nezz #3 | |
| 3. | NM-49-2-1001 (unnamed) | Page 151 |
| | (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
June, 1980*

Date Visited 10/24/79 & 11/1/79

Mine name(s) Salt Canyon Mines (Salt Canyon Claim) County San Juan

Section (Unsurveyed) Twنش. 29 N R. 21 W

Quadrangle sheet Red Rock Valley 15'

Mining district East Carrizo

Elevation 5700'

Nearest city and/or dwelling Oak Springs, 1½ mi. NW

The Salt Canyon Mines consist of many small adits located along the sandstone rim on the northeast side of Salt Canyon. The claim map, page 7, indicated by cross hatching the area of the Salt Canyon Mines in the George Tutt MP-4 plot. Some of the workings may extend southeastward as far as the L. Benall and Paul Shorty MP-362. This is quite possible in view of the complex history of the Salt Canyon claims spelled out in a 1960 U.S. Government office memorandum; which is included as an addendum to this report, p. 2. It should be noted that the first paragraph of this memorandum, reference is made to a Paul Shorty having interest in the Salt Canyon claims.

A problem does exist, however, in determining exactly when and where the Salt Canyon workings end and Plot 7 begins. The following photographs all carry their own descriptions and are thought to represent Salt Canyon workings.

The workings are in the Salt Wash member of the Morrison formation. They were operated periodically between 1950-1955, initially by Shorty and Tutt and later by Kennedy and McGee. A total of 93 tons of ore averaging .18% U_3O_8 were produced. The ore contained 331 lbs. U_3O_8 and 4,473 lbs. V_2O_5 . u:v ratio is about 1:9 in these deposits.

- References:
- (1) Chenoweth, W.L., 1980, Historical Review of Uranium-Vanadium in The Eastern Carrizo Mountains, San Juan County, New Mexico, U.S. DOE, TM-210.
 - (2) Hilpert, L., 1969, Uran. Res. of NW New Mex.; USGS pp. 603, p. 51.
 - (3) East Carrizo District Claim Index Map, 1953.

Office Memorandum • UNITED STATES GOVERNMENT

TO : November 24th Files

DATE: November 10, 1960

W. D. Tipton
 FROM : W. D. Tipton, Geological Engineer
 Grants Branch, FED

SUBJECT: FIELD EXAMINATION OF THE SALT CANYON CLAIM, MP #320, (C-729, SECTIONS 11, 12, 13 & 14, T29N, R21W, NMPM, EAST CARRIZO, SHIPROCK DISTRICT) SAN JUAN COUNTY, NEW MEXICO (NAVAJO INDIAN RESERVATION)

PGR:WDT

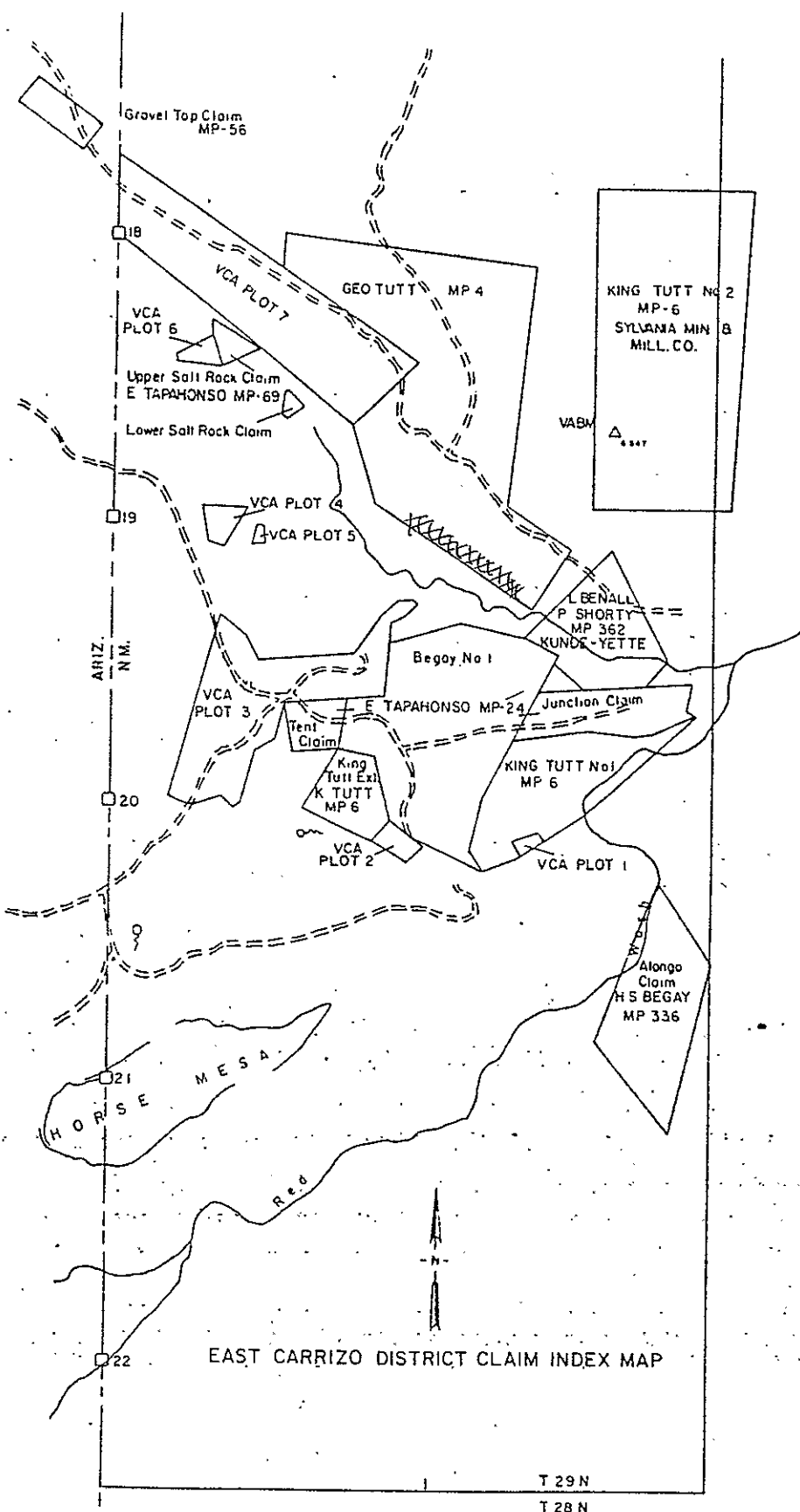
The Salt Canyon Claim was first held by Tony Garnanez (Indian) under MP #1. Garnanez relinquished his interest to King Tutt (Indian) and Paul Shorty (Indian) 2/16/53. MP #74 was issued to King Tutt and Paul Shorty 3/10/53 since other tracts held by Tony Garnanez were included in MP #1. This tract was assigned to Kennedy and McGee Mining Co., 6/9/53. Paul Shorty relinquished his interest in the Salt Canyon claim 3/2/55, then King Tutt applied for a new permit on 3/10/55 upon expiration of the old MP #74. A new permit #320, revised to conform to the legal survey, was issued to King Tutt. The ground covered by MP #320 is essentially the same tract that was included in MP #74, but it is only a part of the tract of MP #1.

There is no uranium ore reserve declaration for the Salt Canyon Claim and Kennedy and McGee stated they have relinquished it to the Navajo Tribal Council.

On July 16, 1960 W. D. Tipton traced the boundaries of the Salt Canyon claim.

On August 26, 1960 W. D. Tipton and W. D. Grundy examined the Salt Canyon claim to evaluate 11/24/58 and current reserves. The mine workings were examined with a differential face scanner. A thin mineralized band 0.3' to 0.5' thick of uranium-vanadium minerals is exposed in the workings. An occasional small patch of ore grade material is in sight but no where is there sufficient ore grade material to constitute an ore reserve.

The mine workings are located along the Salt Wash rim on the northeast side of Salt Canyon. These workings consist of: (1) a rim cut with two northeastward trending shallow adits (15'); (2) a shallow adit (± 20') about 200 feet eastward from the rim cut and an adit with ± 150' of underground development.



EAST CARRIZO DISTRICT CLAIM INDEX MAP

T 29 N
T 28 N



Photo (a) Looking NE with two small tailings piler showing (arrows); near south/southeast edge of claim.



Photo (b) Close-up of dump shown on left in photo a.

Photo (d) Northeastward trending adit several hundred feet east of adit in (c). Portal is 5' x 5' and workings extend back at least 40'. Maximum scintillometer reading in adit = 1000 cps.



Photo (c) Close-up of north trending adit from which waste dump shown in photo b was produced; portal is approx. 6' x 3', adit is at least 50 long. Scintillometer readings averaged 100 cps (or 2x background).





Photo (e) Easternmost workings of Salt Canyon claims; looking NW toward adit opening which is behind the person at right center.



Photo (f) Close-up of adit shown in photo e; opening is 6' high, 8' wide and 10' long; heading nearly due north; maximum scintillometer readings of 1700 cps were obtained. Locale is near southeast corner of claim.



Photo (g) Minor workings near NW corner of Salt Canyon claims. Pit is approx. 6' long and 3' deep; no mineralization noted. Locale is near the boundary with VCA Plot #7, and more than $\frac{1}{2}$ mile N NW of adit and tailings piles shown in photo a.