

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.

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.

SAN JUAN COUNTY

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Quad: Pastora Peak 15'

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King #6 (Jimmy King #6)	
2. AZ-20-0-2	Page 7
Barton & Begay (Beclabito lease)	
3. AZ-20-03	Page 12
Rocky Flats #1	
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John John #1	
6. AZ-20-0-6	Page 23 24
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7. AZ-20-0-7	Page 27 28
Rocky Flats #2	
8. AZ-20-0-8	Page 31 32
Cottonwood Butte Mine (VCA Plot 8)	
9. AZ-20-0-9	Page 37 38
Lone Star (on VCA Plot #9)	

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.

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Mine name(s) Cottonwood Butte Mine (VPA Plot 8) County San Juan Co.Section (Unsurveyed) Twنش. 30 N R. 21 WQuadrangle sheet Pastora Peak 15'Mining district East CarrizoElevation 5,800'Nearest city and/or dwelling Oak Springs, 1½ mi. S.

The workings on Plot 8, called the Cottonwood Butte Mine, actually consist of 3 separate areas. The westernmost near the west end of the plot (see claim index map) is an irregular adit with a 40' long trench leading northward to the entry. The major underground workings, however, lie to the right of the entry and not forward. They extend back 25' in rather open stope form with two pillars left for support aided by some make shift timbering. Maximum scintillometer readings encountered underground were about 2500 cps. Photos a & b attempt to show the entry trench, and adit entrance; photo c shows the mine dump.

The eastern workings lie to the SE of the adit approximately 300' and consist of two open cuts 100' apart. The southern one is about 35' x 15', up to 7' deep, (see photo d). Scintillometer readings averaged about 700 cps. The northern one is somewhat more irregular, may be up to 40' in maximum dimension, and up to 8' deep (see photo e). Scintillometer readings in this cut (near the face) ranged from 500 to 650 cps. The higher readings produced by the black "vanadium stain" being traced by the two people shown in photo f. A slightly raised wheelbarrow run leads to a mine dump for this open cut, (see photo g). The nose of this dump is located directly up slope from a small drainage line (see photo h); scintillometer readings on dump were 150-250 cps., or 3 to 4 times background.

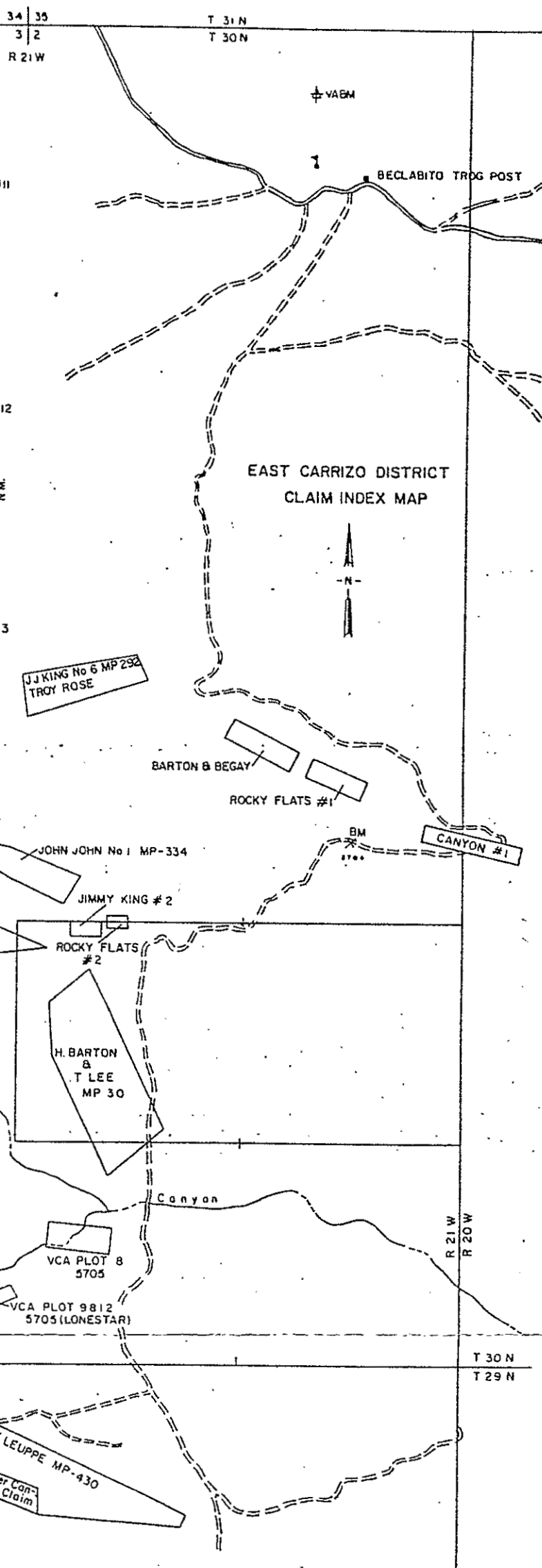
The mine was operated discontinuously from 1950 to 1954 with VCA being the first operator; it was later operated by Alfred Nelson. A total of 250 tons of sandstone ore from the Salt Wash member was produced with an average grade of .25% U_3O_8 , and 3.0% V_2O_5 . The ore contained 1245 lbs. U_3O_8 and 15,013 lbs. of V_2O_5 .*

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, Uranium Resources of NW New Mex.; USGS pp. 603, p.52.

(3) East Carrizo District Claim Index Map, 1953.

* Some earlier production, 1949-50, was included in East Reservation Lease production figures.



J.J. KING No 6 MP-292
TROY ROSE

BARTON & BEGAY
ROCKY FLATS #1

CANYON #1

JOHN JOHN No 1 MP-334

JIMMY KING # 2

C. BEKIS No 1 MP-41
TROY ROSE

ROCKY FLATS #2

H. BARTON & T LEE
MP 30

Canyon

VCA PLOT 8
5705

VCA PLOT 9812
5705 (LONESTAR)

W SELLS
MP-431

Upper & Lower Canyon Claims
CATO SELLS MP-56

Upper Canyon Claims
PETTIGREW
MP-337
(Leroy MP-522)

Lower Canyon Claim
E LEUPPE MP-430

55-33



Photo (a) Cottonwood Butte adit; looking NE.



Photo (b) Cottonwood Butte adit; looking NE.

447 SJ-34



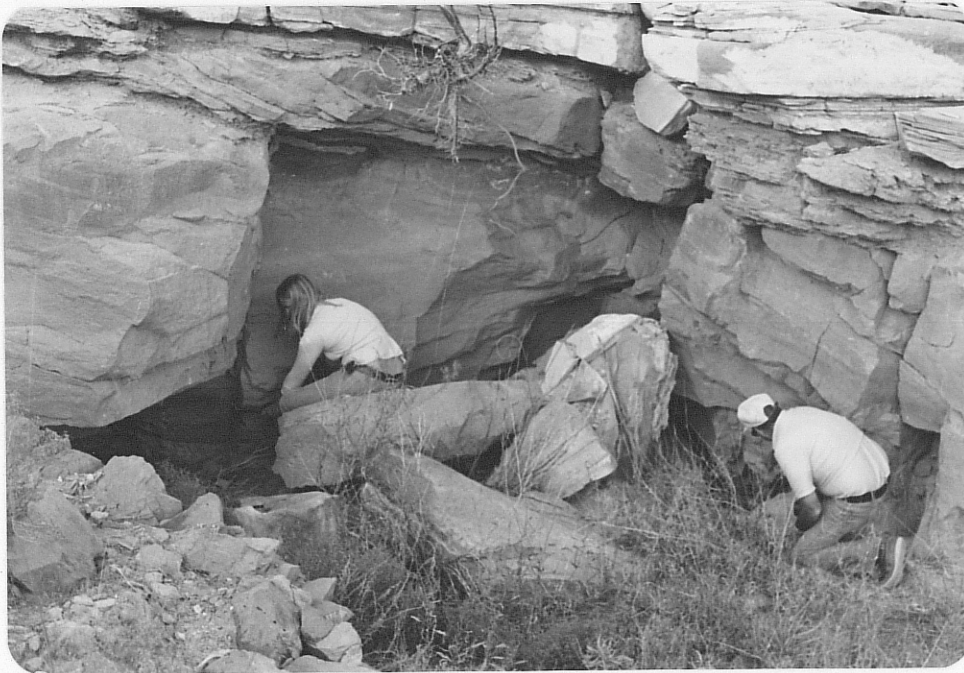
Photo (c) Mine dump, Cottonwood Butte adit.



Photo (d) Open cut, part of Cottonwood Butte workings.



Photo (e) Open cut, part of Cottonwood Butte workings.



Part (f) Close-up of open cut shown in e; note dark staining being traced at left.



Photo (g) Wheelbarrow run from open cut in foreground to dump in distance.

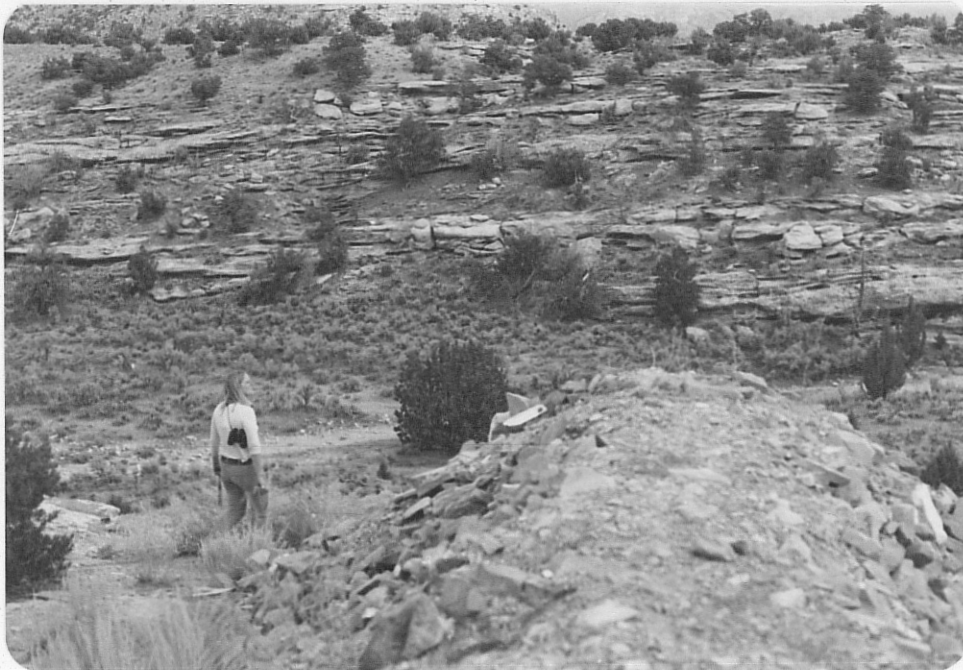


Photo (h) Nose of dump showing drainage line below.