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KJS  
SNB

File

# **DEPCO, Inc.**

## **MINERALS DIVISION**

MEMO TO: J. B. Imswiler

DATE: January 22, 1980

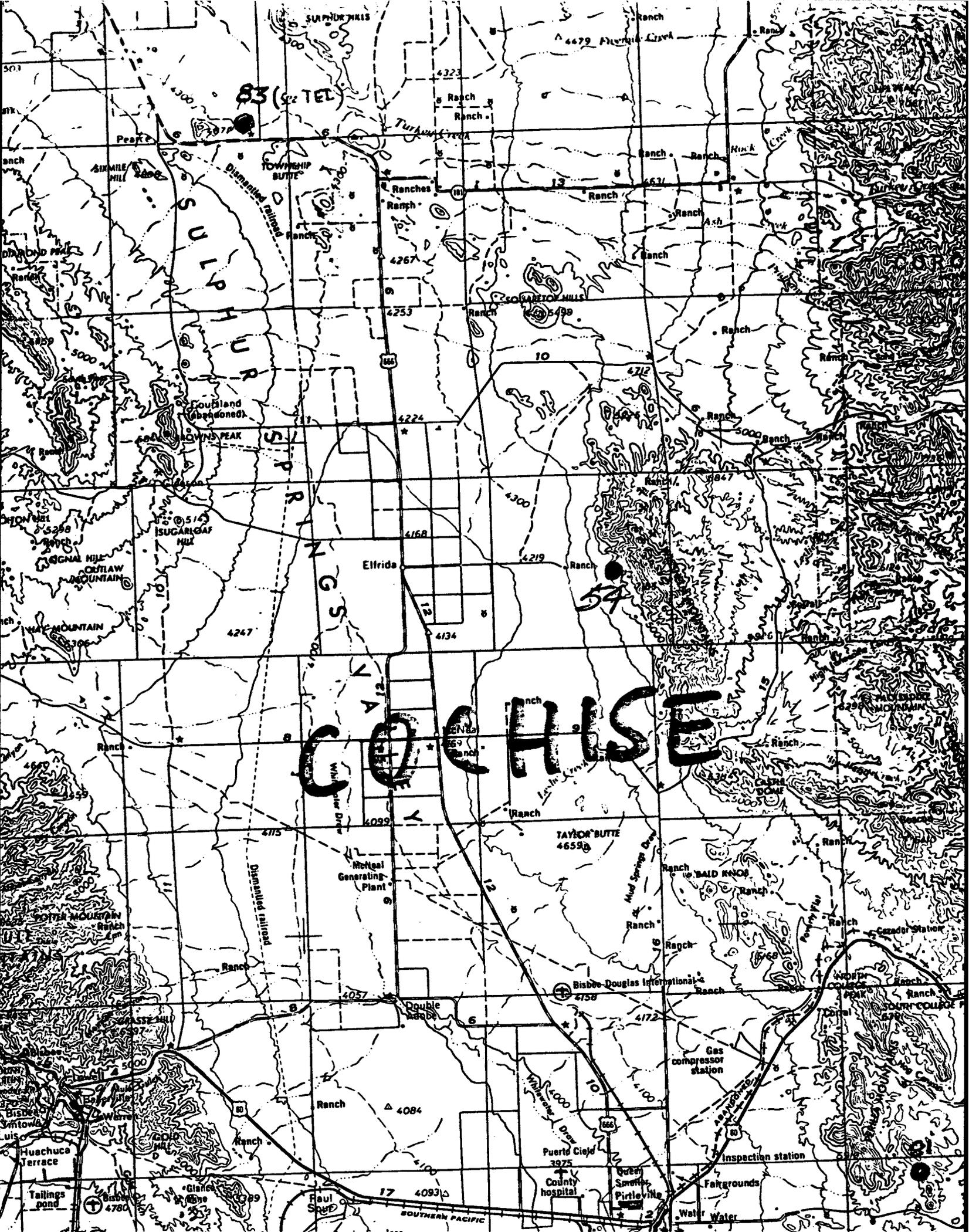
FROM: N. L. Archbold

SUBJECT: Notes on Little Mike Claims or Thompson Property, Cochise County, Arizona  
(See PRR 54 - Douglas 1° x 2° Sheet)

Location: Described in PRR as being seven miles east of Elfrida, Arizona.  
Probably in sec. 23, T. 20 S., R. 27 E.

Geology: I looked for this prospect but didn't find the actual spot described. There are numerous old roads in the area with dozer cuts and prospects that explore a contact between carbonate rocks and intrusive granitic rocks. The carbonates are metamorphosed with local, weak development of tactites. The granitic rocks are unmineralized and unaltered.

My brief recon indicates there is little of economic interest in the area; however, the slopes are steep and poorly exposed. I do not see justification for further work.



83 (TEL)

# COCHISE

McNeal  
Generating  
Plant

Taylor Butte  
4659

Bisbee-Douglas International  
4758

Puerto Blanco  
3975  
County  
hospital

Queen Switzer  
Pirtleville

Paul  
Shed

4093

Fairgrounds

Water Water

SOUTHERN PACIFIC

~~DOUGLASS~~  
~~FILE~~

546  
~~24~~

FILE A-3

PRELIMINARY RECONNAISSANCE REPORT

EXAMINED BY R. A. Miller and R. L. Robison  
DATE(S) EXAMINED 7/20/55

2. STATE Arizona COUNTY Cochise

DISTRICT Swishhelm

NEAREST TOWN Elfrida

PROPERTY Little Mike Group  
(Five Claims)

1. SAMPLES

NUMEER	TYPE AND WIDTH	RADIOACTIVITY
NONE		

LOCATION:  
SEC 22, 23 T. 20 S. R. 27 E

3. TYPE OF EXAMINATION:  
Surface Radiometric

4. DIRECTIONS TO DEPOSIT: Claims are located 7 mi. E of Elfrida on Em Bar Bee Road.

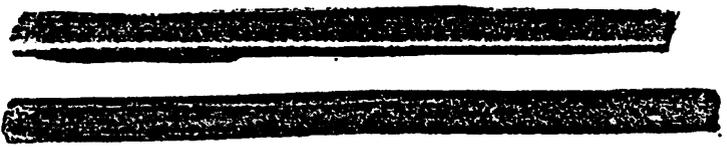
5. OWNER OR OPERATOR: M. C. Thompson  
ADDRESS: Box 206, Elfrida, Arizona

6. MINE OR PROPERTY HISTORY, PRODUCTION AND WORKINGS: Several location shafts and prospect pits.

7. RADIOACTIVITY: B.G. 0.02 - 0.03 MR/hr.  
Max. 0.60 MR/hr.

8. DESCRIPTION OF DEPOSIT (*Discuss under: A. Topography, B. Geology, C. Mineralogy*)

- A. Low foothills.
- B. Quartz monzonite with alaskite dikes.
- C. Euxenite, mica, hematite, beryl.



11. PROOF OF OWNERSHIP RECEIVED? No  
PERMISSION TO PUBLISH RECEIVED? No

13. OTHER INVESTIGATIONS:

12. MAP: None

None

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# **DEPCO, Inc.**

## **MINERALS DIVISION**

**MEMO TO:** J. B. Imswiler

**DATE:** January 18, 1980

**FROM:** N. L. Archbold

**SUBJECT:** Notes on Last Chance Claims or Elsworth Property, Cochise County, Arizona  
(See PRR #81 - Douglas 1° x 2° Sheet)

**Location:** As described in PRR 81, but I'm not certain I found the actual prospect which is described as "30-foot drift with 20-foot crosscut". Sec. 4, T. 24 S., R. 29 E.

**Geology:** I located small prospect on south side of canyon in area described in PRR. Host rock is rhyolite with alteration or tuffaceous intrusion that trends S 70° W in zone about eight feet wide. Gamma radiation detected up to 750 cps. Prospect itself is of no interest.

General geology shows rhyolite, tuff, andesite and basalt in area. Relationships appear complex with faulting and tilting. Many fractures in volcanics show bleaching. Most rocks range up to 200 cps background.

Small prospect on opposite side of canyon about 1200 feet NNE from radioactive occurrence is in white tuff below basalt cap and shows only 100 cps.

**Recommendations:** This might be a volcanic center that merits mapping and close examination, but I see no obvious possibility for a major uranium deposit here.



Douglas

81

FILE A-P-269

PRELIMINARY RECONNAISSANCE REPORT

EXAMINED BY R. L. Robison  
DATE(S) EXAMINED 1/4/55

2. STATE Arizona COUNTY Cochise

DISTRICT Douglas

NEAREST TOWN Douglas

PROPERTY Last Chance Claims

LOCATION: 345  
SEC. 4 T. 24 S R. 29 E

1. SAMPLES NUMBER	TYPE AND WIDTH	RADIOACTIVITY
A-3304-A	Select from prospect pit	$eU_{38}$ .010
A-3304-B	Select sample	.022

3. TYPE OF EXAMINATION:

Surface Radiometric

4. DIRECTIONS TO DEPOSIT: Follow road E from Douglas past Douglas Union High School for 7.4 mi., then turn L and proceed 1.5 mi. to Elsworth Ranch. Property is 0.5 mi. down canyon to E.

5. OWNER OR OPERATOR: Earl Elsworth  
ADDRESS: Box 534, Douglas, Arizona

6. MINE OR PROPERTY HISTORY, PRODUCTION AND WORKINGS: One 30' drift with 20' X-cut, Several prospect pits.

7. RADIOACTIVITY: B.G. .015 MR/hr.  
Max. .15 MR/hr.

8. DESCRIPTION OF DEPOSIT (Discuss under: A. Topography, B. Geology, C. Mineralogy)

- A. Steep-sided, round-topped hills of moderate relief.
- B. The mineralization occurs in zones of altered rhyolite.
- C. A small amount of uranophane was noted on fracture surfaces.

11. PROOF OF OWNERSHIP RECEIVED? No  
PERMISSION TO PUBLISH RECEIVED? No

13. OTHER INVESTIGATIONS:

12. MAP:

*Cochise Co.  
Arizona*

# **DEPCO, Inc.**

## **MINERALS DIVISION**

MEMO TO: J. B. Imswiler

DATE: January 18, 1980

FROM: N. L. Archbold

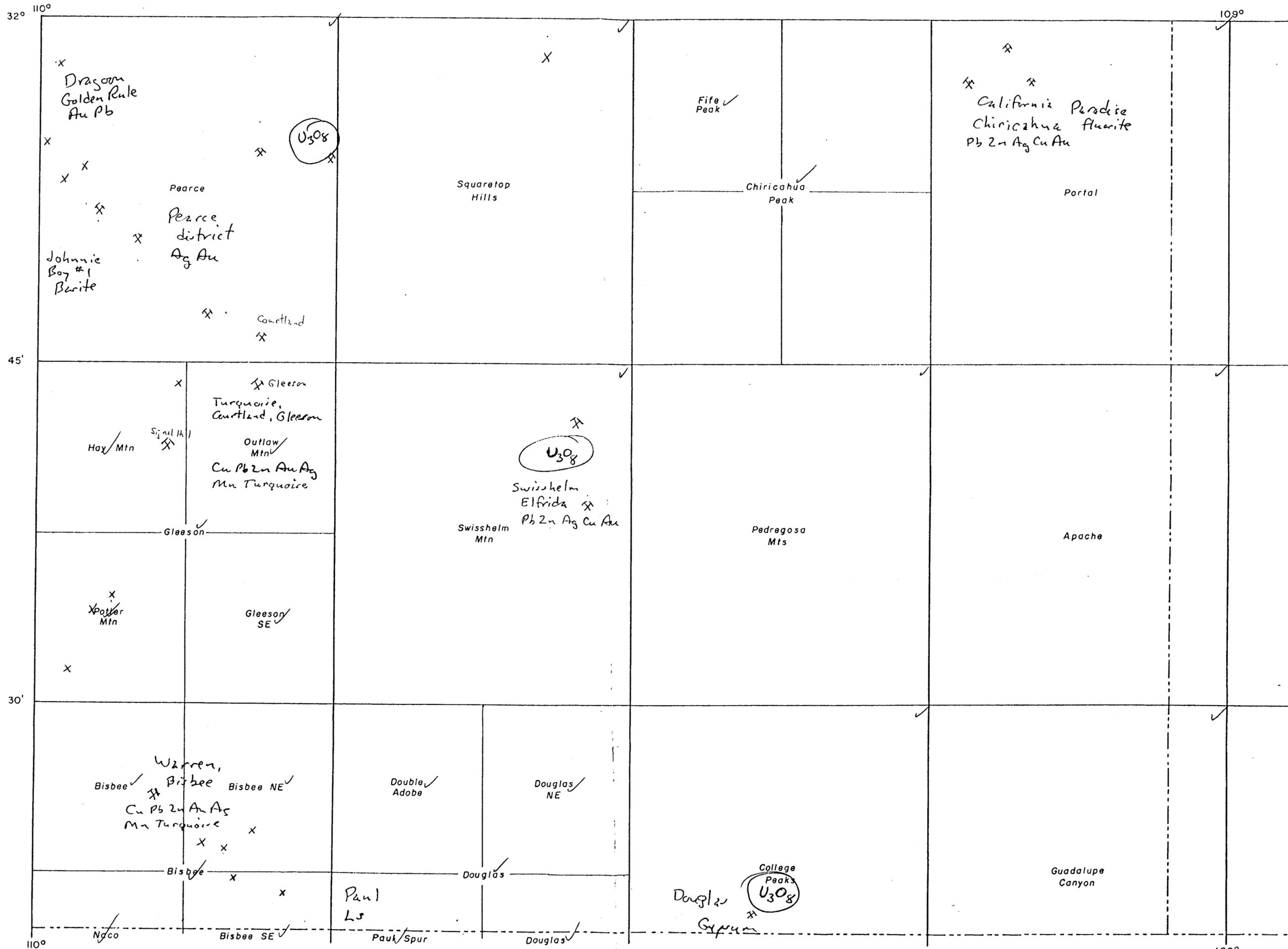
SUBJECT: Summary Notes on Douglas 1° x 2° Sheet, Arizona and New Mexico

### Radioactive Occurrences

1. Occidental Mine, Fremont District: Up to 1400 cps in jasperoid associated with replacement Pb-Zn-Ag in limestone. Of no interest unless my samples 29556 and 29557 show gold values.
2. Boles Prospect (PRR 3961): I did not locate the actual prospect along a shear in massive rhyolite. Geology in area doesn't look good for major uranium deposit. Background was 100 cps.
3. PRR 3960: I'm not certain I found actual outcrops. Local agglomerate layers in rhyolite give slightly higher radioactivity - up to 130 cps. Area is probably not worth further effort, although PRR reports show up to 0.13% eU<sub>3</sub>O<sub>8</sub>.
4. Elsworth Property (PRR 81): Up to 750 cps in shear and tuffaceous dike(?) in Tertiary rhyolite. Doesn't look worth further effort.
5. Little Mike Claims (PRR 54): I did not find reported radioactive occurrence. Prospects in the area are along intrusive contact with carbonate, but I found no unusual radioactivity in prospects.
6. Blue Jeep Claims (PRR 83): Uranium on minor shear in Tertiary volcanics is of little interest. My samples 29545 through 29555 might show interesting precious metal values along sizeable, associated breccia zone in Tertiary volcanics with fluorite.

### General Recommendations

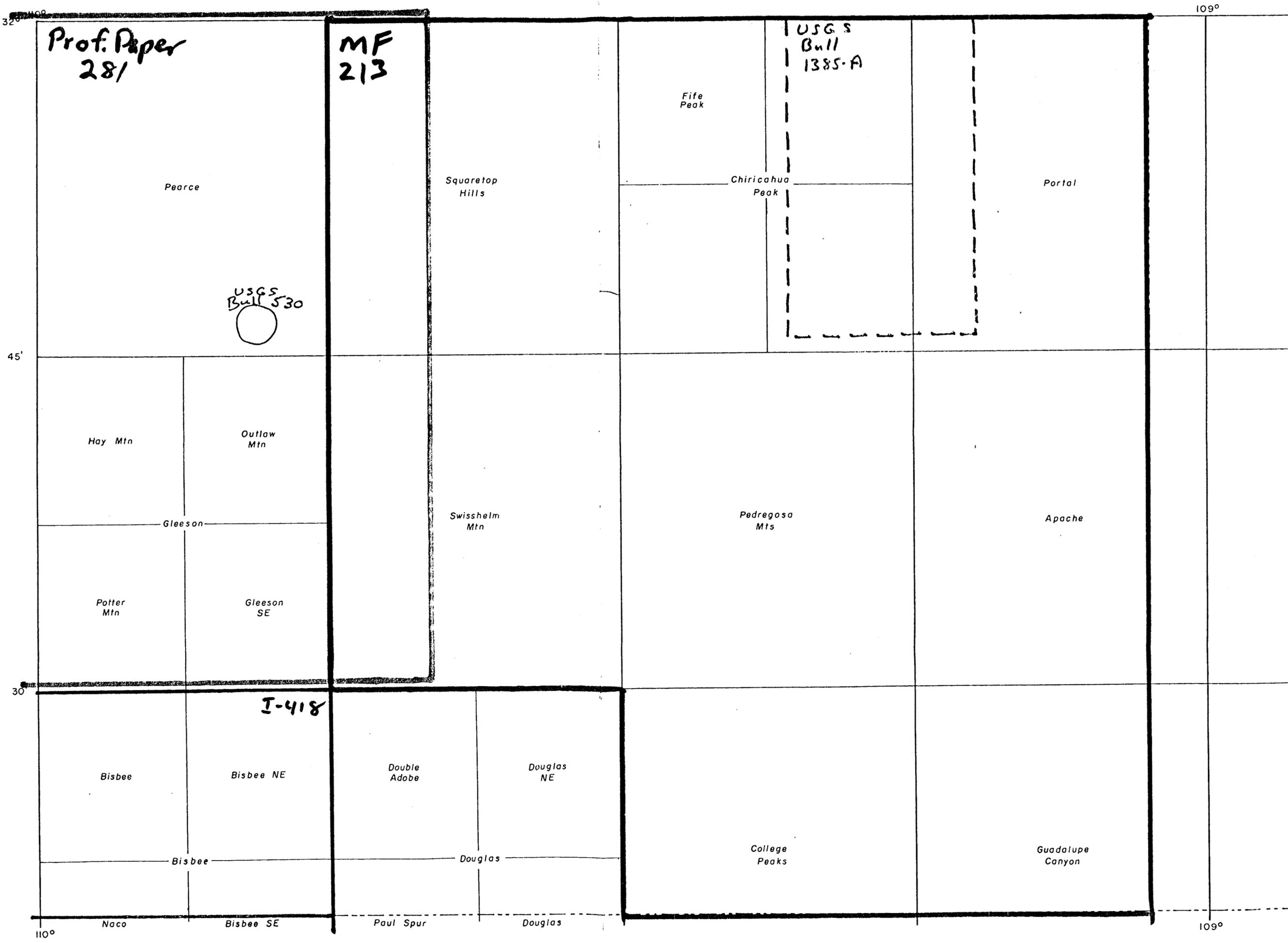
I see no reason to concentrate any efforts on the Douglas 1° x 2° sheet as a result of my reconnaissance of the PRR's.



Arizona side of Douglas 1x2 sheet district + P.R.R. location

- See also  
 1. GSA Memoir 38 - Cretaceous  
 2. Geol. Map Cochise Co.  
 3. Ariz Bur. Miner Bull 123 - Courtland-Gleeson area - OP

Arizona side of Douglas 1°x2° sheet  
 Geologic Reference + quadr



TEI-440, 1954<sup>180</sup>

Crooks Gap

Yellow uranium minerals occur in sec. 32, T. 28 N., R. 92 W., in arkosic conglomeratic sandstone in the lower Eocene rocks on the east side of Crooks Gap. The locality has been examined by geologists of the AEC. Minerals were observed in places through a section of about 75 feet of rocks, but are concentrated adjacent to carbonaceous shale partings, carbonized wood fragments, and in highly ferruginous zones. The mineral was identified as phosphuranylite ( $\text{Ca}_3(\text{UO}_2)_5(\text{PO}_4)_4(\text{OH})_4 \cdot 2\text{H}_2\text{O}$ ), and a selected sample contains 0.17 eU. The uranium-bearing zone is about 200 feet above the base of a sequence of brown and gray coarse clastic rocks, chiefly arkosic sandstones containing lenses of giant granite boulders, variegated claystones, and carbonaceous shale, the total thickness of which is more than 1,000 feet. A sample of water from a spring, likewise in sec. 32, T. 28 N., R. 92 W., contained 250 ppb of U. The uranium appears to have been deposited in many places where there are concentrations of carbonized wood fragments, carbonaceous shale partings, or very ferruginous sandstones.

Southwest district  
by R. B. Raup

Arizona

No significant radioactivity was detected in the Victorio district, Luna Co., N. Mex., and the Organ district, Dona Ana Co., N. Mex. Radioactive materials were studied in 3 other districts in Arizona and New Mexico:

Pearce district, Cochise Co., Arizona

Anomalous radioactivity was detected at Fluorine Hill,  $2\frac{1}{2}$  miles east of Pearce, in secs. 33 and 34, T. 17 S., R. 25 E. The hill is composed

1125  
138  
(140)

mainly of partly silicified rhyolite porphyry; narrow discontinuous fractures cut the rhyolite and are stained by iron minerals. Small prospect pits have been dug where the fractures are filled with calcite and hematite.

The rhyolite porphyry is slightly radioactive throughout, a representative sample of the rock containing 0.008 percent eU. The only increase in radioactivity was detected at a prospect pit on the south side of the hill near the crest where a narrow carbonate vein that contains a small amount of dark-purple fluorite and flecks of uranophane or autunite is exposed. A grab sample of vein material contains 0.11 percent U.

Black Rock district, Yavapai Co., Ariz.

The Abe Lincoln mine in the Black Rock district is in the SW $\frac{1}{4}$  sec. 11, T. 8 N., R. 3 W., (unsurveyed) and is 1 $\frac{1}{4}$  miles by road northwest of Wickenburg, Arizona. The Abe Lincoln vein system occupies a northeast-trending fault zone in a pre-Cambrian (?) gneiss-schist complex intruded by granite and dikes of felsite, trachite porphyry, and basalt. Chalcopyrite is the chief ore mineral with subordinate azurite, chalcocite, and malachite. The gangue minerals are principally pyrite, quartz, calcite, purple fluorite, and limonite. Some specimens of vein material on the dumps contain a secondary yellow uranium mineral which, in one specimen, was identified by X-ray methods as schoepite ( $4\text{UO}_3 \cdot 9\text{H}_2\text{O}$ ?); pitchblende may be present. Samples from the dumps ranged from 0.074 percent to 0.46 percent U. Samples of radioactive material in place could not be obtained inasmuch as most of the mine workings are caved and flooded.

Radioactive material was found also on the Bracken property 1 mile west of the Abe Lincoln mine. Samples from the northwest-trending quartz vein on