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04/29/91

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: DURANIUM

ALTERNATE NAMES:

SANTA CRUZ COUNTY MILS NUMBER: 101A

LOCATION: TOWNSHIP 20 S RANGE 14 E SECTION 19 QUARTER N2
LATITUDE: N 31DEG 40MIN 21SEC LONGITUDE: W 110DEG 55MIN 55SEC
TOPO MAP NAME: MOUNT WRIGHTSON - 15 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:

URANIUM

BIBLIOGRAPHY:

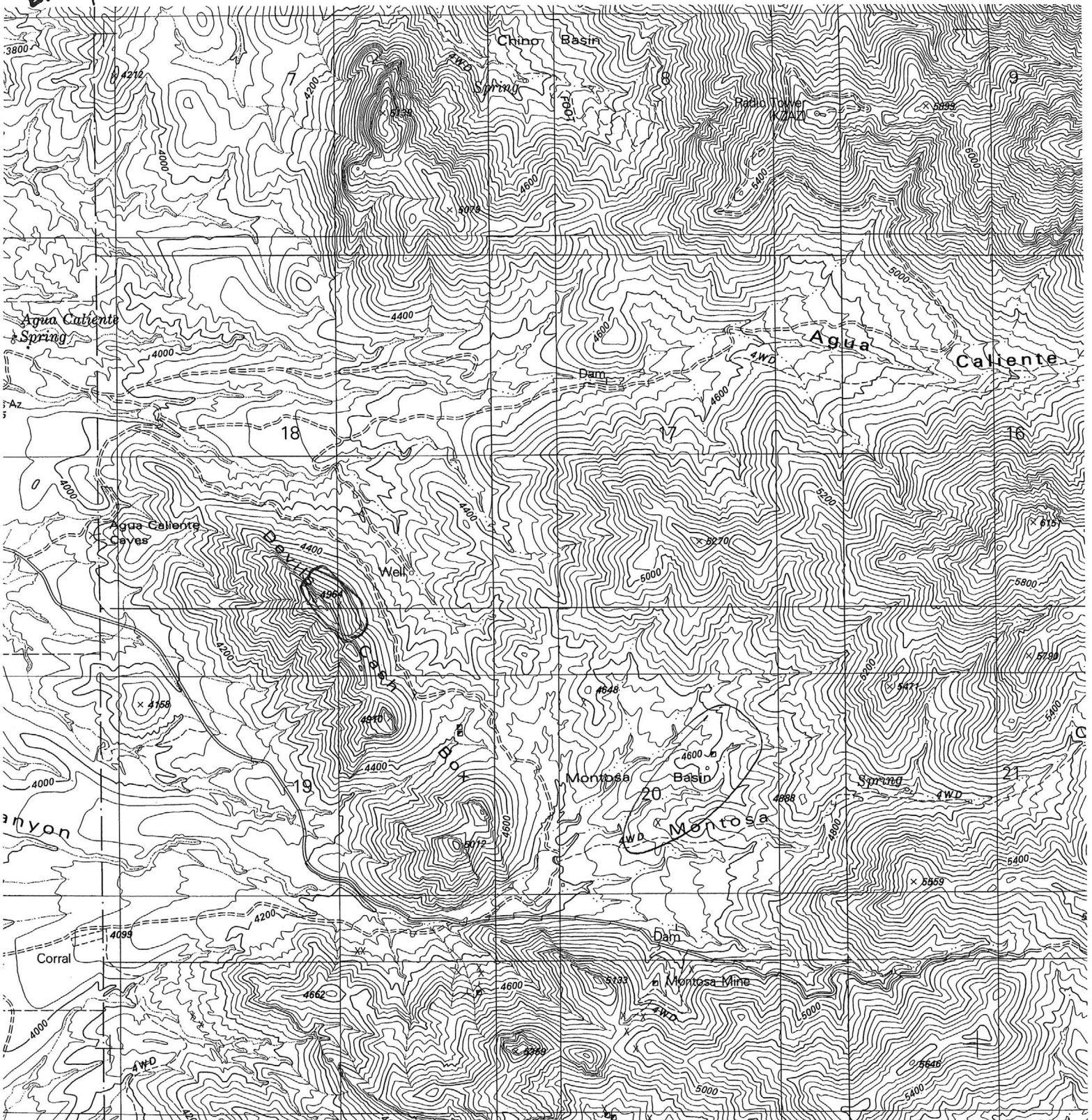
USAEC 172-489, SANTA CRUZ CO. PRELIM. RECONN.
REPORT P. 18
ADMMR DURANIUM CLAIMS FILE

1 GEO PLATE IN FILE

MT. HOPKINS 7.5' MIN. T205 R14E

UNCERTAIN LOCATION - SITES BELOW NEED TO BE CHECKED
NEAR MT. WILKINSON WILDERNESS BOUNDARY. FK-2-2009

FS
BNDM



ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

MM 1517 Kasolite

SANTA CRUZ COUNTY

DURANIUM MINE

MILS # 101A

O-AKA

Durantium Claims file

PRELIMINARY RECONNAISSANCE REPORT

FILE A-285

EXAMINED BY R. L. Robison
DATE(S) EXAMINED 12/1/54

2. STATE Arizona COUNTY Santa Cruz

DISTRICT Old Baldy

1. SAMPLES

NUMBER	TYPE AND WEIGHT	RADIOACTIVITY
		<u>0U₃O₈</u>
8737	Grab sample from location pit	.792
8738	Select sample from hot spot	2.378
8739	Grab sample from hot spot	.054

NEAREST TOWN Amado

PROPERTY Durand Claims

LOCATION:
SEC. 20 T. 20 S. R. 13 E.

3. TYPE OF EXAMINATION:

Surface Radiometric

4. DIRECTIONS TO DEPOSIT: Going S from Tucson on US 89, turn L just past the Amado Post Office and store and follow road for 1.0 mi., turn R on Rex Ranch Road; at .5 mi. turn L and cross RR tracks; go .2 mi. and take L fork through gate; go .5 mi. and take L fork; go .4 mi. and take R fork immediately after going through gate. USFS Camp is 1.2 mi. farther. Property is 100 yds. S. of RR OPERATOR: to E of road 1.5 mi. past National Forest force.

ADDRESS: J. R. Nadeau, 641 Calle Antonia, Tucson, Arizona

5. MINE OR PROPERTY HISTORY, PRODUCTION AND WORKINGS: One small prospect pit.

7. RADIOACTIVITY: B.G. 20 cps.
Max. 3800 cps.

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

- A. Rolling mountain foothills with deep gulleys.
- B. Faulted altered sediments striking E-W and dipping approximately 45° S. One horizon appears to be an arkosite sandstone within a conglomerate which may be at the base of the cretaceous. Ore body is about 12' wide by 100' long by 4' thick.
- C. Ore horizon is an altered arkose containing kaolinite, uranophane and autunite.

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

12. MAP:

None

13. OTHER INVESTIGATIONS:

None

14. ADDITIONAL INFORMATION:

Property is now in litigation.

15. SUPPLEMENTARY RECONNAISSANCE
REPORT TO FOLLOW: None

PRELIMINARY RECONNAISSANCE REPORT

FILE A-2-235

EXAMINED BY B. L. Robison

2. STATE Arizona COUNTY Santa Cruz

DATE(S) EXAMINED: 12/1/54

DISTRICT Old Boley

1. SAMPLES

NUMBER	TYPE AND WITH	RADIOACTIVITY
		<u>6U₃O₈</u>
8737	Grab sample from location pit	<u>.792</u>
8738	Select sample from hot spot	<u>2.378</u>
8739	Grab sample from hot spot	<u>.054</u>

NEAREST TOWN Amado

PROPERTY Duration Claims

LOCATION:
SEC 20 T. 20 S R. 13 E

3. TYPE OF EXAMINATION

Surface Radioactive

4. DIRECTIONS TO DEPOSIT: Going S from Tucson on US 89, turn L just past the Amado Post Office and store and follow road for 1.0 mi., turn R on Rex Ranch Road; at .5 mi. turn L and cross RR tracks; go .2 mi. and take L fork through gate; go 1.5 mi. and take L fork; go .5 mi. and take L fork immediately after going through gate; US 89 is 1.5 mi. farther. Property is 100 yds. S. OWNER OR OPERATOR: to E of road 1.5 mi. past National Forest fence.
ADDRESS: J. R. Nadeau, Old Calle Antonia, Tucson, Arizona

5. MINE OR PROPERTY HISTORY, PRODUCTION AND WORKINGS: One small prospect pit.

7. RADIOACTIVITY: B.O. 20 cps.
Mas. 3800 cps.

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

- A. Rolling mountain foothills with deep gulleys.
- B. Faulted altered sediments striking E-W and dipping approximately 15° S. Ore horizon appears to be an arkosite sandstone within a conglomerate which may be at the base of the cretaceous. Ore body is about 12' wide by 100' long by 4' thick.
- C. Ore horizon is an altered arkose containing kaolinite, uranophane and autunite.

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

12. MAP:

None

13. OTHER INVESTIGATION:

None

14. ADDITIONAL INFORMATION:

Property is now in litigation.

15. SUPPLEMENTARY RECONNAISSANCE
REPORT IS FOLLOWING

13,
DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine *Amado* ✓ DURANIUM claims

Date 5-14-57 and 7-12-57

District (Old Baldy) Santa Cruz County

Engineer AXEL L. JOHNSON

Subject: visit to property (subsequent visits have found no one present) 6 Mi E of Amado

Owners: Otho V. Kinsley, Kinsley, Arizona

Lessees & Operators: ✓ Santa Cruz Uranium Co, 422 Newhouse Hotel, Salt Lake City, Utah

✓ Louis Larsen - President ✓ Jerry Phillips - Mine Mgr., Amado

Principal Minerals: Uranium ore in the form of Kasolite

Present Mining Activity: Working with Allis Chalmers HD 5 Bulldozer. (loading ore for shipment to Cutter Depot) (Bulldozer broken down on 5-16 visit)
(stockpiling 7-21-57 visit)

Milling and Marketing Facilities 5-16-57: Shipping to gov't buying station at Cutter
7-12-57: Stockpiling - 2 men working

Past History and Production: Claims located by a Mr. Montel, sometime about Nov or Dec 1954., owned jointly with Mr. Montel & Mr. Kinsley. Utah Construction did some drilling on the property shortly afterwards on option from Mr. Kinsley.
property tied up in litigation until recently.
40 tons is reported to have been shipped to Cutter by present operators.

Mine Workings: 1-open cut - 75-ft long (E&W) 12 to 15 ft wide and 6 to 10 ft deep. One recent churn drill hole visible about 50 ft south of the open cut. Several old churn drill holes (drilled ;by Utah Construction Co) in the area.

Present Mining Operations: Open pit mining operations in a small area in the open cut described above. Allis Chalmers HD 5 Bulldozer used in this work. Ore produced loaded on trucks and shipped to Cutter.

Proposed Plans: Plans are to do some diamond drilling in the area.

References :

AEC 172489 p. 10 Duranium claims

ABM Bull 180 p. 289

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine **DURANIUM claims**

Date **5-14-57 and 7-12-57**

District **(Old Baldy) Santa Cruz County**

Engineer **AXEL L. JOHNSON**

Subject: **visit to property (subsequent visits have found no one present) 6 MI E of Amado**

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Lessees & Operators: Santa Cruz Uranium Co, 422 Newhouse Hotel, Salt Lake City, Utah
Louis Larson - President Jerry Phillips - Mine Mgr., Amado

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Present Mining Operations: Open pit mining operations in a small area in the open cut describe above. Allis Chalmers HD 5 Bulldozer used in this work. Ore produced loaded on trucks and shipped to Cutter.

Proposed Plans: Plans are to do some diamond drilling in the area.

Eight holes had been drilled in the vicinity of the open cut. The copy of the drill log did not show at what depth the radioactivity was encountered.

Copy
Drill Log
Santa Cruz Property

(Drilling in immediate area of mine since May 1, 1957)

Hole No.	Depth Feet	RM Reading %U ₃ O ₈	Remarks
1	210	0.02-0.10	
2	130	0.00-0.05	
3	200	0.00-0.07	
4	165	0.00-0.02	
5	40	0.00-0.00	Needs to be cored
6	60	0.00-0.00	Caved in needs mud
7	160	0.00-0.04	
8	140	0.00-0.00	
9	110	0.01-0.09	
10	150	0.00-0.00	Drillsite 150' south of entrance gate to Santa Cruz property, in wash. Heater Claims. Broke through limestone into soft shale and limonite. Hole located 1 mile northwest of mine on road to Amado.
11	150	0.00-0.00	Directly $\frac{1}{4}$ mile west of hole #10 No break in limestone

Four samples were taken at the uranium prospect.

It is doubtful that this property can sustain even a small, profitable uranium mining operation.

Lead Prospect

About 1 mile, by trail, NE of the uranium cut several shallow, previously existing workings expose seams and small masses of specular hematite. The hematite is disseminated throughout a 15-20 foot wide zone which occurs in a northwesterly trending, steeply dipping calcareous shale bed. The hematite mineralization extends at least 1200 feet to the NW where it terminates against a massive, grey limestone.

Some minor copper staining was noted in a small portion of the outcrop. One random chip sample was taken.

The iron deposit is not sufficient in quantity or grade to justify its operation as an iron producer alone.

Respectfully,

Mike Price

cc: Smithson
Cox
JGR
MP

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA



November 6, 1957

Mr. Lewis H. Larsen
P. O. Box 2254
Salt Lake City, Utah

Dear Mr. Larsen:

The brown crystals associated with the kasolite in the Duranium property have been examined by the United States Geological Survey. The x-ray pattern corresponds to that of cerussite, although the spacings are slightly larger. A spectrographic analysis of both the kasolite and the cerussite are as follows:

	Cerussite	Kasolite
Over 10%	Pb	Si U
1-10%	Si	Pb
.1-1%	Fe Mg Al	Fe Mg Al Cu

Our Mr. Flagg is not satisfied that the crystals are cerussite and wants to do a little more work on them when he recovers from the effect of a bad fall.

I hope that the Annie Laurie is working out to your satisfaction. We recently learned that there is reference to the Annie Laurie in A.E.C. Research Report RMD-590. You no doubt have copy of A.E.C. Report RMD-677, 1951, "Annie Laurie Prospect, Santa Cruz County, Arizona" by R.J.Wright. If not, it is obtainable from the Office of Technical Services, U. S. Department of Commerce, Washington, 25, D.C. RMD-590 may be had from the same source. The prices are not listed and have to be obtained from Washington.

Yours very truly,

FRANK P. KNIGHT,
Director.

FK:lp

cc: Mr. Phillips

Mr. Phillips:

The dark minerals in the quartz sample you gave me are hematite and amphibole. I suggest that you send it to the Arizona Bureau of Mines, University Station, Tucson, Arizona for a gold assay. This Department does no assay or spectrographic work.

MINE

Laboratory Assay Record

Date_____

U_{308}

[illegible]

SANTA CRUZ URANIUM CO.
Santa Cruz Co. Arizona

ASSAYS

De Montel Prospect

Wyo. Scaler

Assay No	U ₃ O ₈ %	Pb %	Ag oz	Cd %	Fe %	
2984	0.00	0.12	0.05	Nil		Low-grade pile 30-40' Uranium prospect
2985	0.00	0.15	0.05	Nil		Main open cut radioactive shear
2986	0.01	0.15	0.05	Nil		Muck grab 6' 3" pile Low-grade
2987	0.00	0.30	0.05	0.006		Muck grab 2' 3" pile ore
2988			Nil	Nil	18.42	Lead prospect

Red Shaly Siltstone

Thin Bedded Limestone

Sheet Jointed Grey
Arkasic Sandstone

Red Siltstone

Closely sheet jointed

Massive Limestone

Arkasic

Red Shaly Siltstone

Arkasic Sandstone

Red shaly siltstone

Red Siltstone

Med. to Thin bedded Limestone

limonite stained Arkasic Sandstone

AGUA CALIENTE - MONTE ROSA CANYON

Red shale, siltstone

SANTA GRUE URANIUM CO.
DE MONTAL PROSPECT
SANTA GRUE CO. ARIZONA
SCALE 1" = 50'

FROM MAP OF S. GRANT HARNES (1911)
M.P. 11-30-65