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Richard E. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

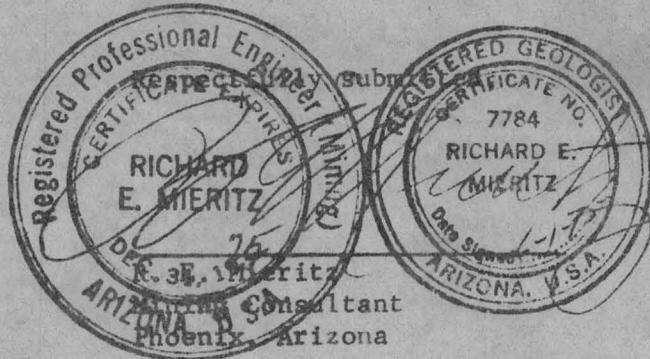
GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

June 1, 1975

LETTER OF CERTIFICATION

I, Richard E. Mieritz of 1634 W. Hazelwood Street, #2, Phoenix, Maricopa County, Arizona, do hereby certify that:

- (1) I am a mining engineer, graduated from the University of Wisconsin with the degree of Bachelor of Science in 1939.
- (2) I have practised my profession continuously since then, receiving my Arizona State Registration as a Mining Engineer in 1956 and my Arizona State Registration as a Geologist in 1970, being a member in good standing.
- (3) The report to which this letter is attached and part of, has been prepared on the basis of personal observations on and of the property, on the writer's general knowledge of the area and the review and study of available factual data.
- (4) I have no direct nor indirect interest in the property.
- (5) I have no direct nor indirect interest, nor do I expect to receive any interest, direct or indirect in the properties or the securities of Host Ventures Ltd., Vancouver, B. C., Canada, or its affiliates.



A
GEOLOGICAL EVALUATION

and

EXPLORATION

REPORT

on the

RED BLUFF URANIUM PROPERTY

Gila County, Arizona

by

**Richard E. Mieritz
Mining Consultant
Phoenix, Arizona**

June 1, 1975

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INCLUDED EXHIBITS:

- Map No. 1 - Index Map, Portion of Arizona
- Map No. 2 - General Geologic Map, Portion of Gila County, Arizona
- Map No. 3 - Claim Map
- Map No. 4 - Surface Geology Map, Red Bluff Claims
- Map No. 5 - Drill Hole Location Map, Red Bluff Claims
- Map No. 6 - Sample Location Map, Red Bluff Claims
- Map No. 7 - Drill Hole Location Map, Red Bluff Claims

INTRODUCTION:

At the request of and authorization by Mr. Hans Dietmann, Host Ventures Ltd., Vancouver, B.C., Canada, the writer field examined the Red Bluff uranium claims, Gila County, Arizona, on May 25 and 26, 1975, accompanied in part by the property owner, Mr. Charles Marshall, Phoenix, Arizona.

The writer also studied the available data as collected by Mr. Marshall from the U.S. Atomic Energy Commission (AEC), the U.S. Geological Survey, the U.S. Forest Service and independent consultants. This ensuing report is based on the above information and findings as well as on the writer's geologic knowledge of uranium mineralization in Arizona and particularly the general area of the property.

PROPERTY, LOCATION and ACCESSIBILITY:

The Red Bluff uranium property includes thirty three (33) unpatented standard lode mining claims held by right of location. Annual assessment work is up to date and the claims should be of good legal status.

The claims of the group and their recording information are:

<u>Claim</u> <u>Name</u>	<u>Recorded in</u> <u>Docket - Page</u>	
Red Bluff No. 7	49	201
Red Bluff No. 8	49	202
Red Bluff No. 9	49	202
Red Bluff No. 3	49	390
Rainbow No. 1	49	479
Rainbow No. 2	49	479
Rainbow No. 3	52	115
Walnut Lode No. 1 (formerly Red Bluff No. 5)	335	861
Walnut Lode No. 2 (formerly Red Bluff No. 4)	335	862
Walnut Lode No. 3 (formerly Red Bluff No. 6)	335	863
Red Bluff No. 16	377	533
Red Bluff No. 17	377	534
Red Bluff No. 18	377	535
Red Bluff No. 19	377	536
Red Bluff No. 20	377	537
Red Bluff No. 21	377	538
Red Bluff No. 22	377	539
Red Bluff No. 23	377	540
Red Bluff No. 24	377	541
Red Bluff No. 25	377	542
Red Bluff No. 26	377	543
Red Bluff No. 27	377	544
Red Bluff No. 28	377	545
Red Bluff No. 29	377	546
Red Bluff No. 30	377	547
Red Bluff No. 31	377	548
Red Bluff No. 32	377	549
Red Bluff No. 33	377	550
Red Bluff No. 34	377	551

Red Bluff No. 11 (Amended)	2	521
Red Bluff No. 12 (Amended)	2	522
Red Bluff No. 13 (Amended)	2	523
Red Bluff No. 10 (Amended)	3	112

The 33 claims have an approximate effective 600 acres as shown on Map No. 3 - Claim Map.

The property is located approximately 26 airline miles north-northwest of Globe, Arizona, in Sections 31 and 32 of T. 5 N., R. 14 E., G. & S. R. B. & M. in Gila County. The property is also approximately 6 airline miles north of the eastern end of Roosevelt Lake and the Gila River. (See Maps No. 1 and 2.)

Automobile travel to the property from Phoenix, Miami-Globe area is possible. Using the junction of U.S. Highway 60 and State Route 88 (between Miami and Globe) as a starting point, travel north on State Route 88 for 15.4 miles to a junction with State-County Route 288. Turn right at this "Y" junction onto route 288 and travel 18.1 miles to an access road on the right which is about the center of the property. After traveling 4.5 miles on route 288, the Gila River is crossed by a narrow bridge at the east end of Roosevelt Lake. Route 288, to Young, becomes gravel 2.1 miles beyond the bridge, thus, 8.5 miles of gravel road to the mine access road junction on the right (near mile post 273.) (See Maps No. 1, 2 and 3.) Subordinate mine roads (not shown on Map No. 3) branch from the "main" mine road shown on Map No. 3, and lead to the mine and mineralized area on Walnut claims Nos. 1, 2 and 3.

HISTORY, DEVELOPMENT and PRODUCTION:

Mr. Carl Larson was the original discoverer of uranium mineralization in Gila County in year 1950 when he located the Red Bluff claims. Through his own prospecting and exploration, he proved significant occurrences of uranium mineralization which attracted the attention of the U.S. AEC and the U.S.C.S., as well as others. In subsequent years, several companies had options to purchase the property, carried forward for a short period, but returned the property to the owners due to lack of funds or depressed market. Since then, Mr. Larson passed on and the property is now in the hands of Mr. Charles Marshall, an attorney in Phoenix, Arizona.

In year 1960, the Larsons made application to patent three lode claims, Red Bluff Nos. 4, 5 and 6. After much trial work, and objection by the Forest Service, the patent was denied by the Bureau of Land Management. The timing of the application was adverse, because the interest in and price of uranium had dropped to a low level, then about \$5.00 per pound, and with having to ship crude ore long distances, the U.S. Forest Service showed an uneconomical situation at that time. This is their own interpretation of our old mining claim patenting laws, not the original intent of the laws. The Government's interpretation still exists, but the economics are very favorable now and shall be for many years to come, which precludes no problems as regards future patent applications for a sincere mining operator.

As can be seen from Maps No. 5, 6 and 7, considerable underground development, wagon drilling, diamond drilling and sampling has been done. Most of this exploration work (wagon and diamond drilling, plus some sampling) was completed by the U.S.G.S. for the AEC. The results of this exploration are covered in detail in U.S.G.S. Bulletin 1046 (Schwartz & Kinnison), U.S.G.S. Circular 137 and the AEC Report of Mineral Examination (RME 2062). Sampling of the underground and surface workings were also completed by the U.S. Forest Service mining engineers and by Still and Still, Consultants, during the contested patent application hearings. Uranium Corp. of America completed 4,000 feet of drilling, most of which is shown on Map No. 7 - Drill Hole Location Map.

The writer has compiled and used the pertinent factual information from all these sources for the preparation of this report and the included Maps. Credit is therefore given to the above mentioned publications and sources. The herein conclusions, recommendations, geologic considerations, etc., are, however, those of the writer.

Production-wise, the Larsons shipped approximately 500 tons crude ore to the Anaconda Mill (Bluewater, New Mexico) during the years 1950-53. This ore contained an average of 0.38% (7.6 lbs.) U_3O_8 for which the AEC paid \$16,160.-- regular price and \$12,664.-- as bonus. In 1954, Sierra Ancha Mining Company, a subsidiary of the Pittston Company of New York, lacking in mine development and operation experience, shipped 2,584 tons of 0.18% (3.6 lbs.) U_3O_8 to Bluewater, New Mexico, 515 tons of 0.12% (2.4 lbs.) U_3O_8 to Cutter, Arizona buying station (AEC) and 357 tons of 0.09% (1.8 lbs.) U_3O_8 . Only the 515 ton shipment was paid for. The two other shipments were below contract grade or below minimum limit (0.10%).

It appears the total of 3,950 tons of ore (Larson and Sierra Ancha Mining) were mined from the underground workings on the Walnut Lode No. 1 and 3 claims. (See Map Nos. 5 and 6.)

GEOLOGY and MINERALIZATION:

The rocks in the area include the Precambrian limestone - locally divided into the upper and lower members which are separated by a thin layer of Precambrian basalt, the Dripping Springs quartzite, again divided into the upper and lower members, and Devonian diabase which has intruded, broken, shattered, misplaced and faulted the early sediments and basalt. (See Map No. 4 - Surface Geology Map.)

Uranium mineralization in the area appears to favor the upper member of the Dripping Springs quartzite formation. Several uranium minerals are perhaps present, carnotite, autunite, uraninite, but could well be hidden or disguised by accompanying iron limonites. Thorium and vanadium are also present because some "Geiger" hot spots were void of uranium.

The U.S.G.S. classifies the uranium mineralization in the Warm Spring area of the property as the "West side" and "East side." The AEC states

-quote, "In the west block (Pl. 8) ore bodies are vertically tabular and are generally coincident with N.70°W. fractures. The host rock consists of bleached and iron stained siltstone and very fine grained quartzite." "In the east block (Pl. 9) results from drilling indicate that the ore may be horizontally tabular and elongate along the dike" (diabase mass along the N.20°E., 70°W. dipping fault forming Warm Spring canyon and causing a reverse vertical displacement of about 250 feet in the stratigraphic position of the sediments. (See Map No. 4 - Surface Geology Map.) "The ore appears to be localized in three favorable stratigraphic intervals but locally crosses bedding."

It appears that two modes of uranium mineralization are present - structure control for the west block and bedding for the east block. The west block is near surface - the east block at depth; covered with rock formations, thus two different type targets, two different types exploration and development required, two different types mining required.

A true, concentrated effort to determine the reason for being and origin of the uranium mineralization must be made as possible guides to exploration and development of additional ore and the "proving" of existing "indicated" and/or "inferred" ore in both blocks.

One criteria the writer observed during his examination of the property was the presence of the typical yellow-green limonite (after pyrite) where uranium values were noted. Other minor limonites after base metals were also distinguishable in areas of uranium mineralization.

ORE RESERVES:

As can be seen on Maps No. 5, 6, and 7, much exploration as surface and underground diamond drilling, surface wagon drilling and "mine working" sampling has been completed. Much of this was completed by the U.S.G.S. and AEC and mostly on the East block. Detailed calculations, with block dimensions and grade are shown in AEC's Report RME 2062. The writer here takes the liberty to summarize these calculations as follows:

West block

Indicated ore, Adits 4,5,6,7 and 9	714 tons @ 0.27% (5.4 lbs.) U ₃ O ₈
Inferred ore, Adits 4, 5 and zone between Adits 5 and 6	372 tons @ 0.16% (3.2 lbs.) U ₃ O ₈
	<hr/>
	1,086 tons @ 0.23% (4.6 lbs.) U ₃ O ₈

East block

Indicated ore, upper middle and lower ore bodies	26,601 tons @ 0.21% (4.2 lbs.) U ₃ O ₈
Inferred ore, upper, middle and lower ore bodies	5,542 tons @ 0.18% (3.6 lbs.) U ₃ O ₈
	<hr/>
	32,143 tons @ 0.20% (4.0 lbs.) U ₃ O ₈

In addition to the above, others have submitted low grade ore reserves in the West block - west and southwest of the present workings - covering the small hill between the workings and route 288 (gravel highway to Young) - as being 300,000 tons of uraniferous mineralized material having

about 0.06 to 0.10% (1.2 to 2.0 lbs.) U_3O_8 .

The above surmise no doubt is the result of the published information in the U.S.G.S. Bulletin 1046 and Circular 137 wherein open pit plans are shown in Plates 46 and 1 respectively. A radioactive survey had been completed and the resulting tonnage and grade calculated from the results of the survey and the basis for the open pit plan.

Please note that the writer has used pounds of U_3O_8 per ton figures on the included Maps rather than percent of U_3O_8 as it is just a bit easier thinking when relating pounds per ton to dollars per ton rather than percent per ton to dollars per ten.

METALLURGY:

In the information available to the writer was some information regarding the metallurgy of the Red Bluff uranium ore. There are no identifying marks as to the origin of the information, but judging from its contents and wording, it is assumed that the work was completed by the U.S.G.S. The entire information is herewith quoted verbatim:

"Our research department has recently completed some metallurgical tests on the bulk samples which we took from your stockpile last _____ with the following results:

Head Assays:	<u>%U3O8</u>	<u>%V2O5</u>	<u>%S</u>	<u>%CaO</u>	<u>%Insol</u>	<u>%SO4</u>
Lot 23212 (Low grade broken ore near main cut.)	.054 (1.1 lbs.)	nil	1.2	.15	85.7	nil
Lot 23213 (Highgrade stockpile)	.846 (17.0 lbs.)	nil	2.7	.05	84.1	nil

Test for amenability to treatment by the caustic leach process to be used in the Bluewater plant near Grants, New Mexico:

%U3O8 Extracted from Ore

Lowgrade Lot 23212 -----48.1%

Highgrade Lot 23213-----40.8%

Test for amenability to treatment by the acid leach method:

%U3O8 Extracted from Ore

Lowgrade Lot 23212 -----86.1%

Highgrade Lot 23213-----94.6%

It is obvious that the Red Bluff ore is amenable to the acid leach - even the very low grade ore - with high recovery rates.

POTENTIAL ORE RESERVES:

The ore reserves, 33,000 and 300,000 tons as projected by the U.S.G.S. has an "in place" value of some \$7-8,000,000.-- at the current price of \$18.00 per pound of U_3O_8 .

Additional areas of uranium mineralization are likely in the upper member of the Dripping Springs quartzite northwest of the present mine area and southwest of the quartzite-dibase contact. Similar conditions could exist at depth in the quartzite exposures of the East block - example, hole 21 shown on Map No. 7 - Drill Hole Location Map, which encountered 20 feet of 0.345% (6.9 lbs.) U_3O_8 , from 215 to 235 feet including 5 feet (225-230 feet) of 0.615% (12.3 lbs.) U_3O_8 . This drill hole is about 900 feet south of the mineralization in Adit #12.

The area of potential is great, consequently the ore potential is also great, basically because of the geologic conditions which exist within most of the claims and which is basically virgin, unprospected territory.

EXPLORATION REQUIREMENTS and COSTS:

As indicated earlier in the report, there are two exploration targets of interest - the West block and the East block. The entire exposure of the Dripping Springs quartzite northwest of the mine area is also a target for exploration.

The writer is of the opinion that the low-grade ore potential should be drilled on a close spaced grid pattern to prove or disprove the existence of the 300,000 plus tons of reserve and at the same time complete a radioactive survey on grid lines over the outcropping Dripping Springs quartzite northwest of the mine area to determine the existence of any other potential targets of near surface locations requiring future exploration. The above suggested exploration could be a Phase I program and if successful would have the effect of moving forward towards an operation of limited capacity as well as justifying further exploration of newly found targets in the West block and deeper exploration of the East block in the area between D.H. 21 and Adit #12, all as part of a Phase II program.

An estimated cost to complete the initial exploratory program as outlined above is:

Phase I

Radioactive survey - on ground - area N.W. of mine area, including supervision, traveling expenses, etc.	\$20,000.--
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(Continued on following page)

50-75 foot drill holes @ \$9.--/foot
including contract drilling price,
supervision, traveling expenses,
assaying, etc. \$33,750.--

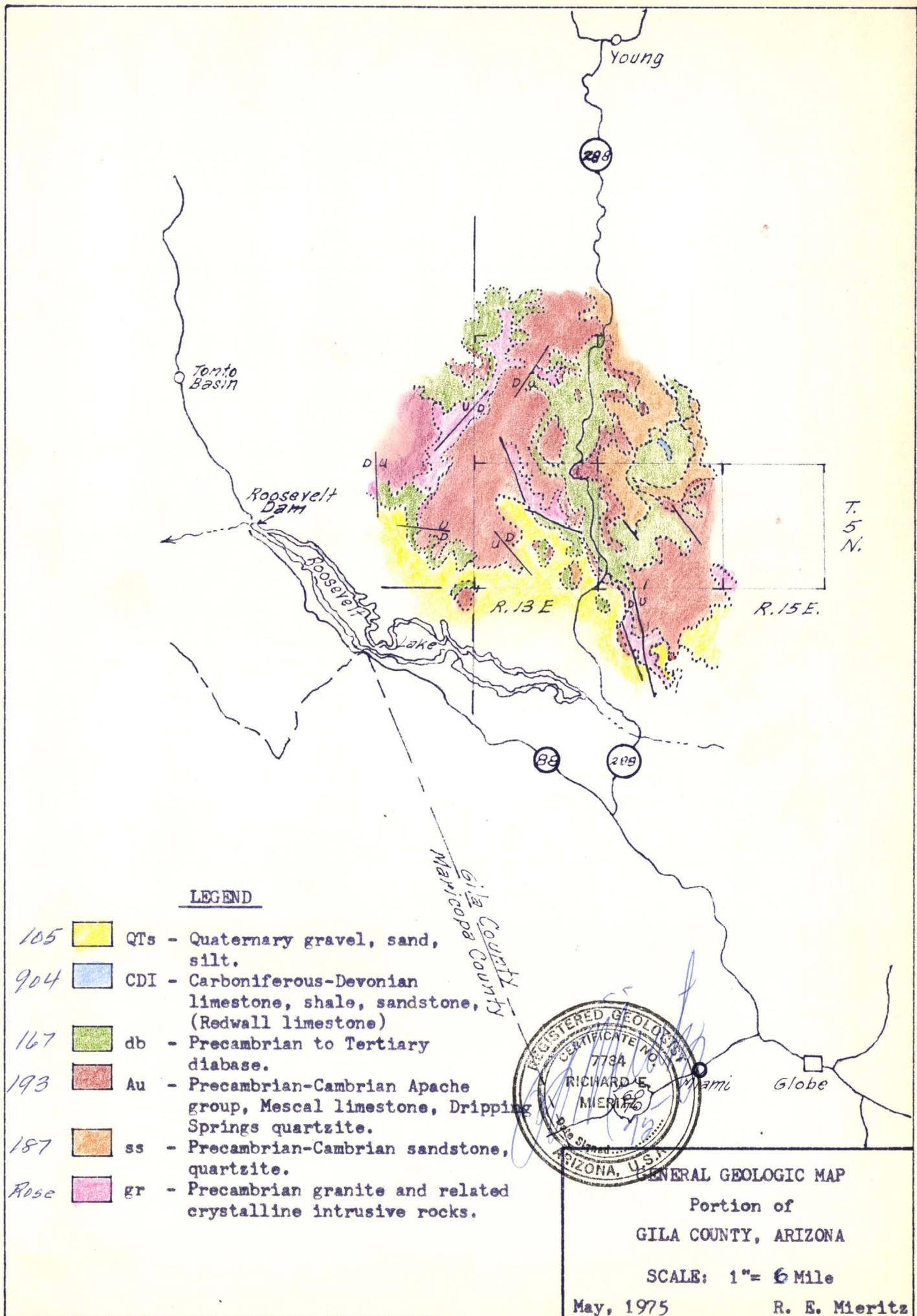
Total estimated costs \$53,750.--

A Phase II program including a feasibility study, metallurgical testing
for mill design and exploration as outlined above could require expend-
itures in excess of \$200,000.--.

Respectfully submitted,

R. E. MERITZ
Mining Consultant
Phoenix, Arizona

June 1, 1975



LEGEND

- 105 QTs - Quaternary gravel, sand, silt.
- 904 CDI - Carboniferous-Devonian limestone, shale, sandstone, (Redwall limestone)
- 167 db - Precambrian to Tertiary diabase.
- 193 Au - Precambrian-Cambrian Apache group, Mescal limestone, Dripping Springs quartzite.
- 187 ss - Precambrian-Cambrian sandstone, quartzite.
- Rose gr - Precambrian granite and related crystalline intrusive rocks.



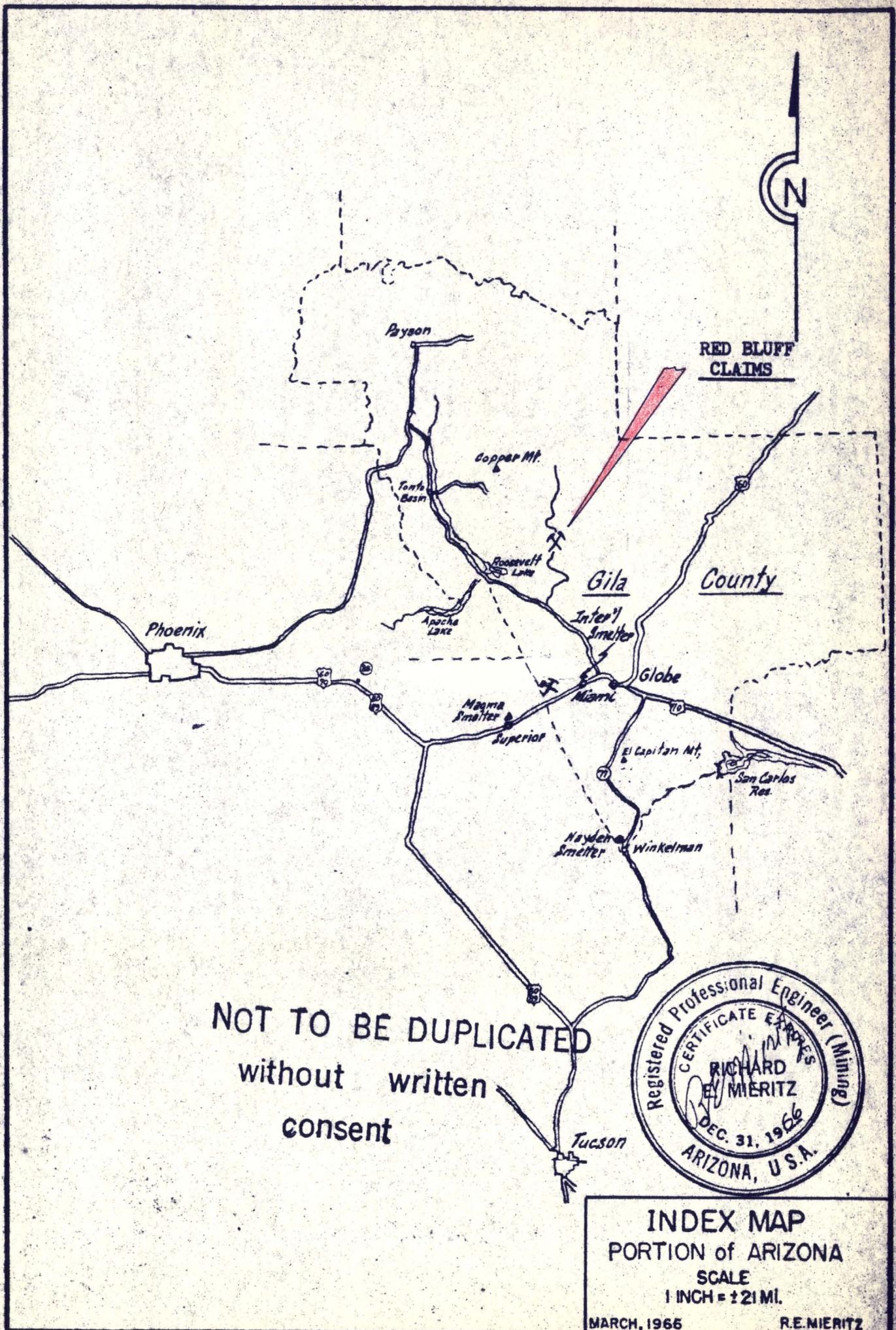
GENERAL GEOLOGIC MAP
 Portion of
 GILA COUNTY, ARIZONA

SCALE: 1" = 6 Mile

May, 1975

R. E. Mieritz

MAP No. 2



**RED BLUFF
CLAIMS**

Gila County

Phoenix

Globe

Miami

Magma Smelter

Superior

El Capitan Mt.

San Carlos Res.

Hayden Smelter

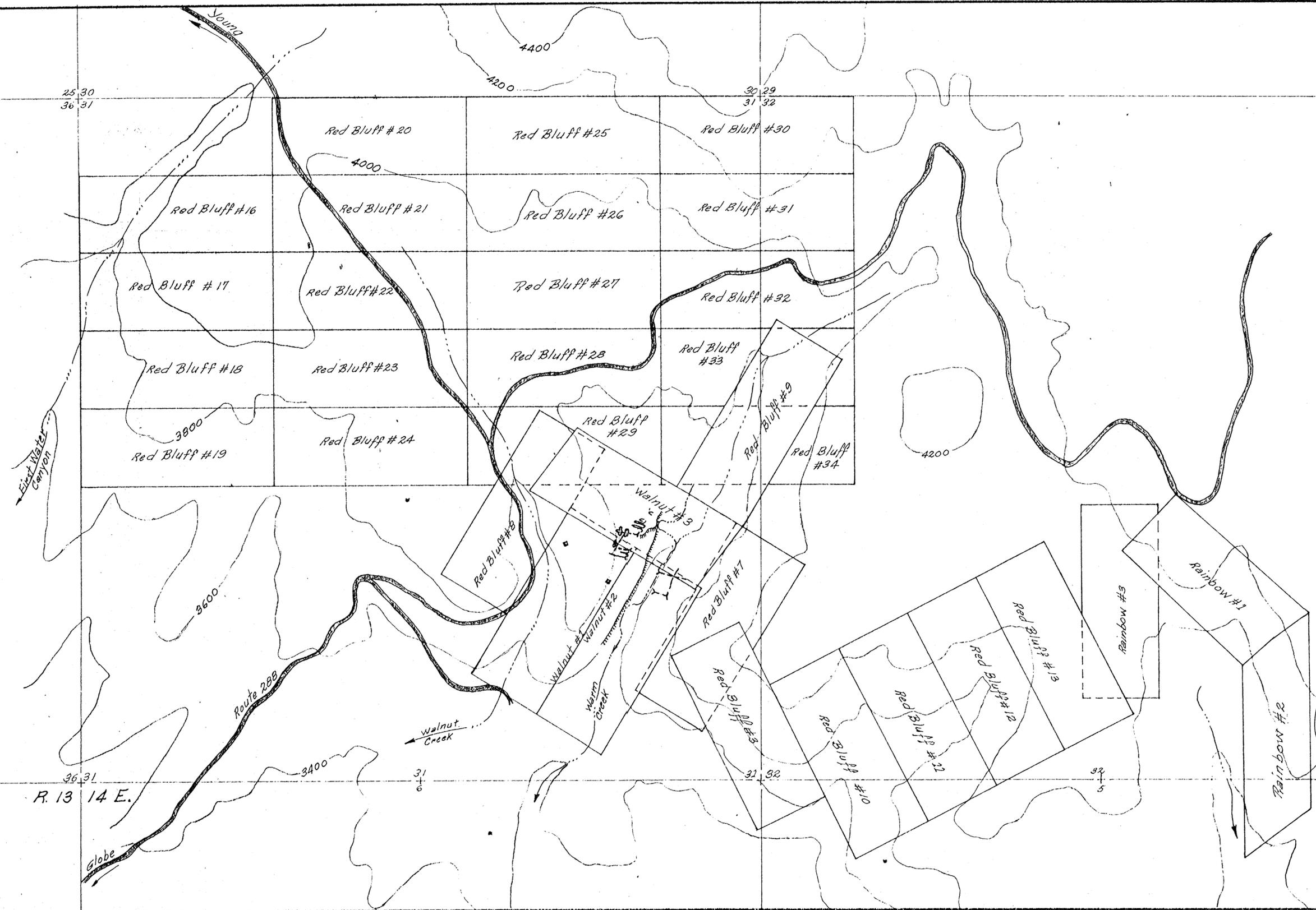
Winkelman

Tucson

NOT TO BE DUPLICATED
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consent



INDEX MAP
PORTION of ARIZONA
SCALE
1 INCH = 21 MI.
MARCH, 1966 R.E. MIERITZ
MAP No. 2



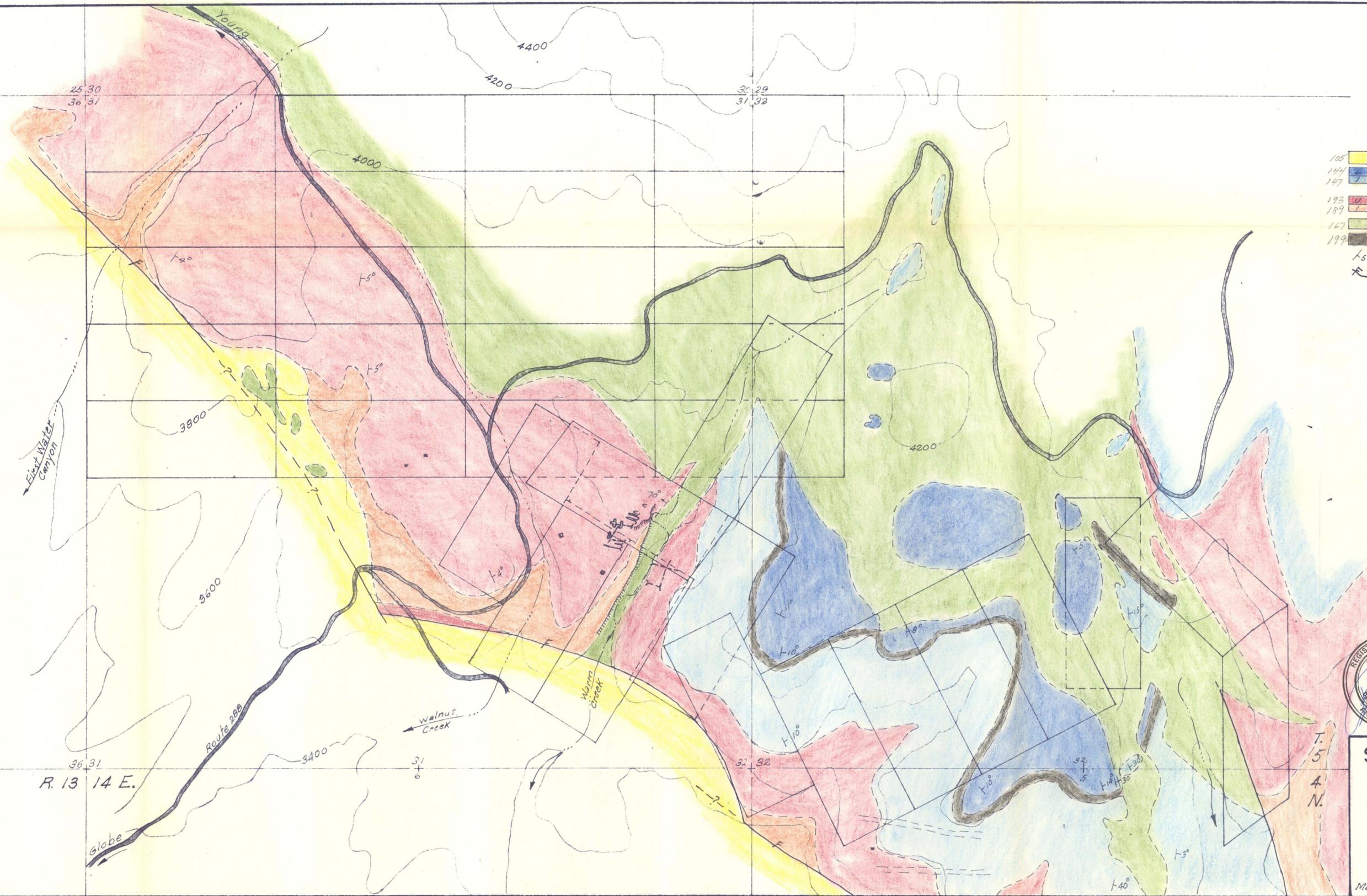
T. 5
4
N.

CLAIM MAP
RED BLUFF CLAIMS
 Gila County, Arizona

Scale: 1"=500 ft.
 0' 500' 1000' 1500'

May, 1975

R. E. Mieritz



LEGEND

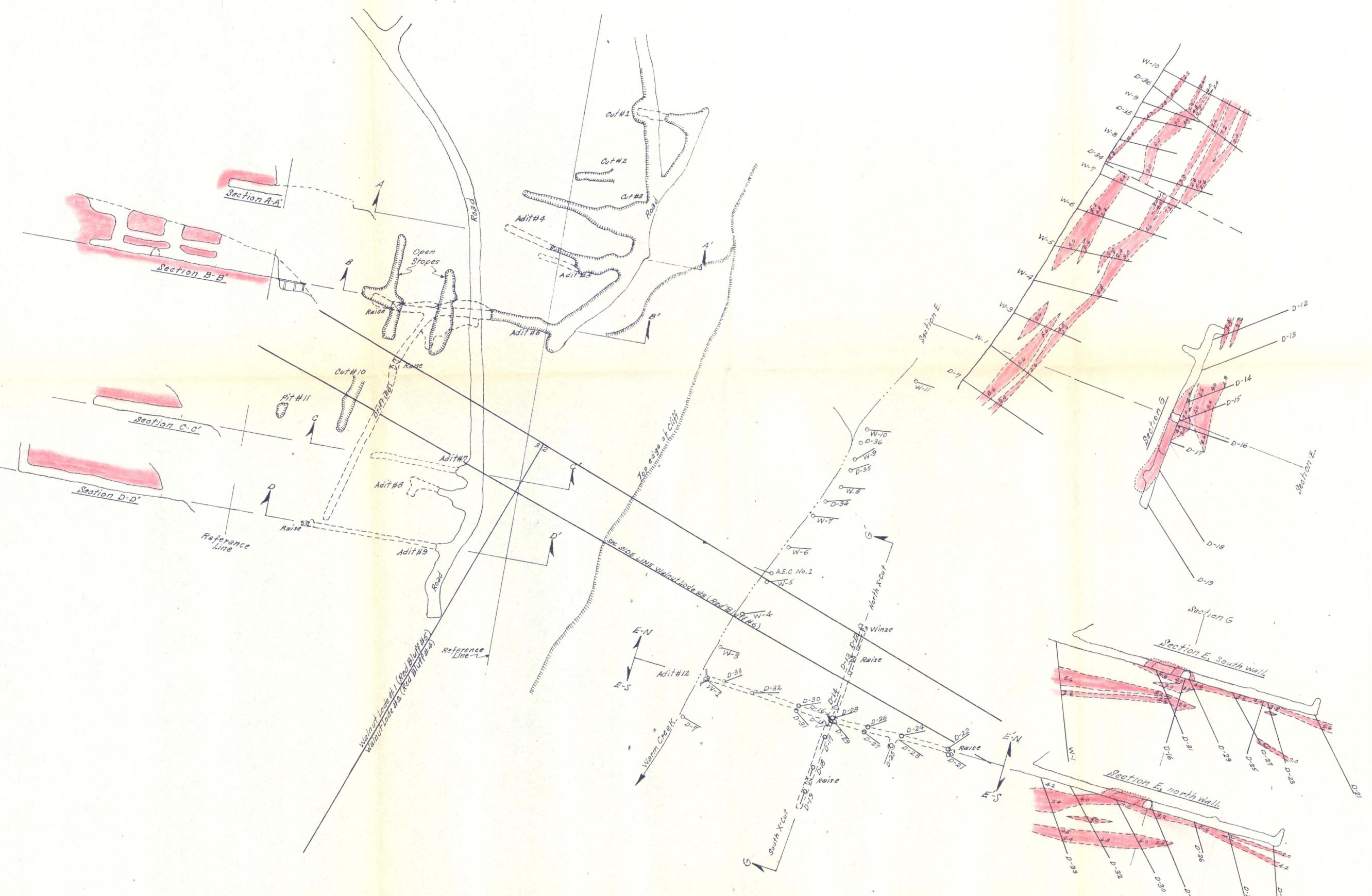
- 105 Tqg - Tertiary-Quaternary gravel.
- 144 pEm - Precambrian Mescal limestone (upper, lower).
- 147 pEd - Precambrian Dripping Spring quartzite (upper, lower).
- 193 d - Devonian diabase.
- 189 pEb - Precambrian basalt.
- 167
- 199
- T-5° Dip and strike of bedding.
- F-- Fault.



SURFACE GEOLOGY MAP
RED BLUFF CLAIMS
 Gila County, Arizona

Scale: 1"=500 ft
 0 500' 1000' 1500'

May, 1975 R.E. Mieritz



NOTE
 W-8 denotes wagon drill hole.
 D-26 denotes diamond drill hole.



DRILL HOLE LOCATION MAP
RED BLUFF CLAIMS
 Gila County, Arizona

Scale: 1" = 40 ft.

0 40' 80' 120'

May, 1975 R.E. Mieritz



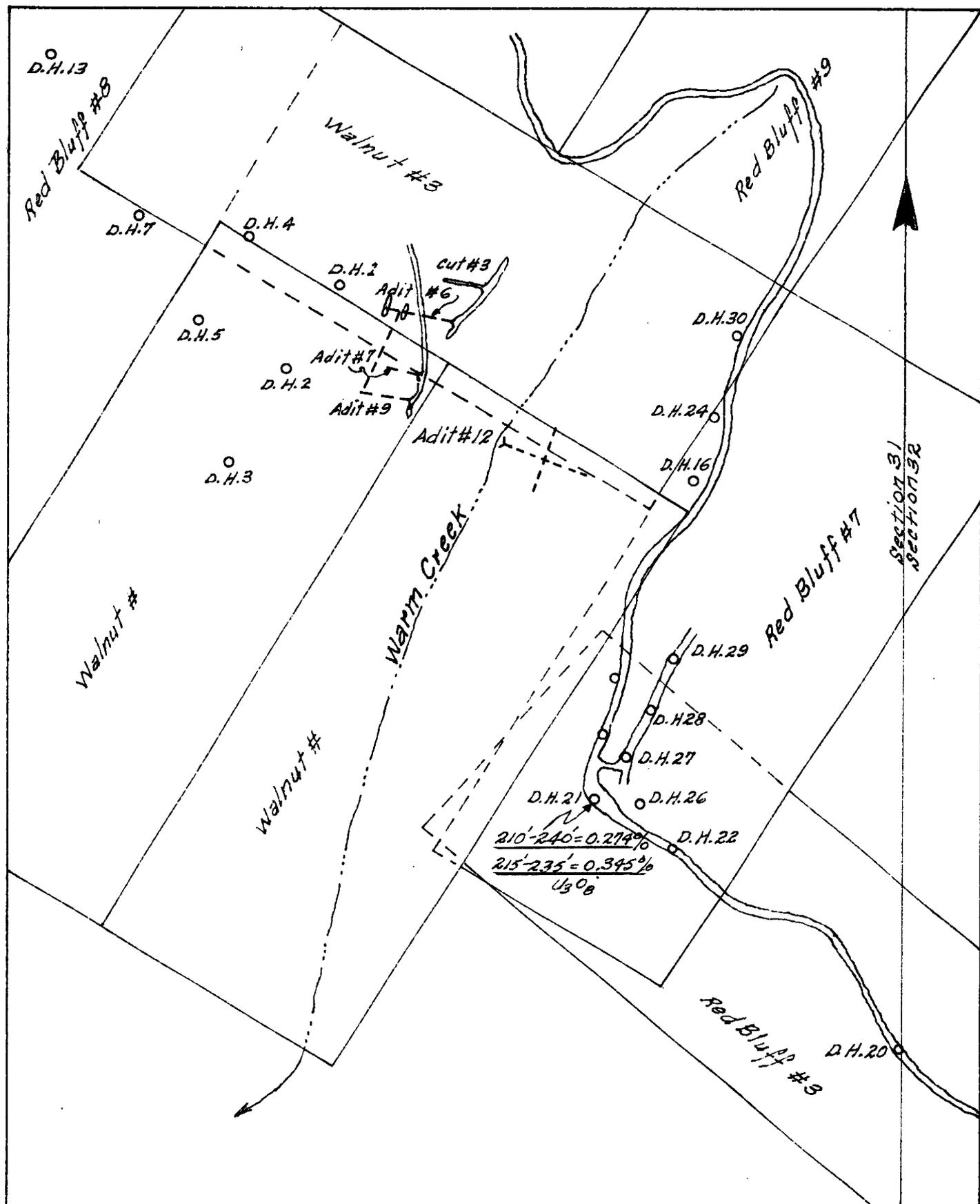
SAMPLE LOCATION MAP
RED BLUFF CLAIMS
 Gila County, Arizona

Scale: 1" = 40 ft.

0 40' 80' 120'

May, 1915

R.E. Mieritz



DRILL HOLE LOCATION MAP
 RED BLUFF CLAIMS
 Gila County, Arizona
 SCALE: 1" = 300 Ft.
 0 100' 200' 300' 600'
 May, 1975 R. E. Mieritz

MAP N²¹⁷

June 6, 1975

Mr. Hans Dietmann
Host Ventures Ltd.
Suite 505
850 W. Hastings Street
Vancouver, B. C., Canada

Dear Mr. Dietmann:

Have today received Host Ventures Ltd. check #158 in the amount of \$469.44 representing the balance owing as shown on my June 1, 1975 invoice.

With deep appreciation, I thank you kindly for your prompt attention.

Mr. Marshall, owner of the property, had requested of me a copy of the report. He was advised that I could not do that unless I had written permission from the client. Assuming compliance to his request, I prepared one extra copy of the report which I am holding in abeyance until such written authorization has been received. Although Mr. Marshall advised me of your verbal consent to him, I would appreciate written advise from you and when same has been received, I shall present a copy of the report to Mr. Marshall.

Sincerely,

Richard E. Mieritz

REM/cm