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(120)
Item 2

PAT PROSPECT, SIMPSON PARK MOUNTAINS

EUREKA COUNTY, NEVADA

INTRODUCTION

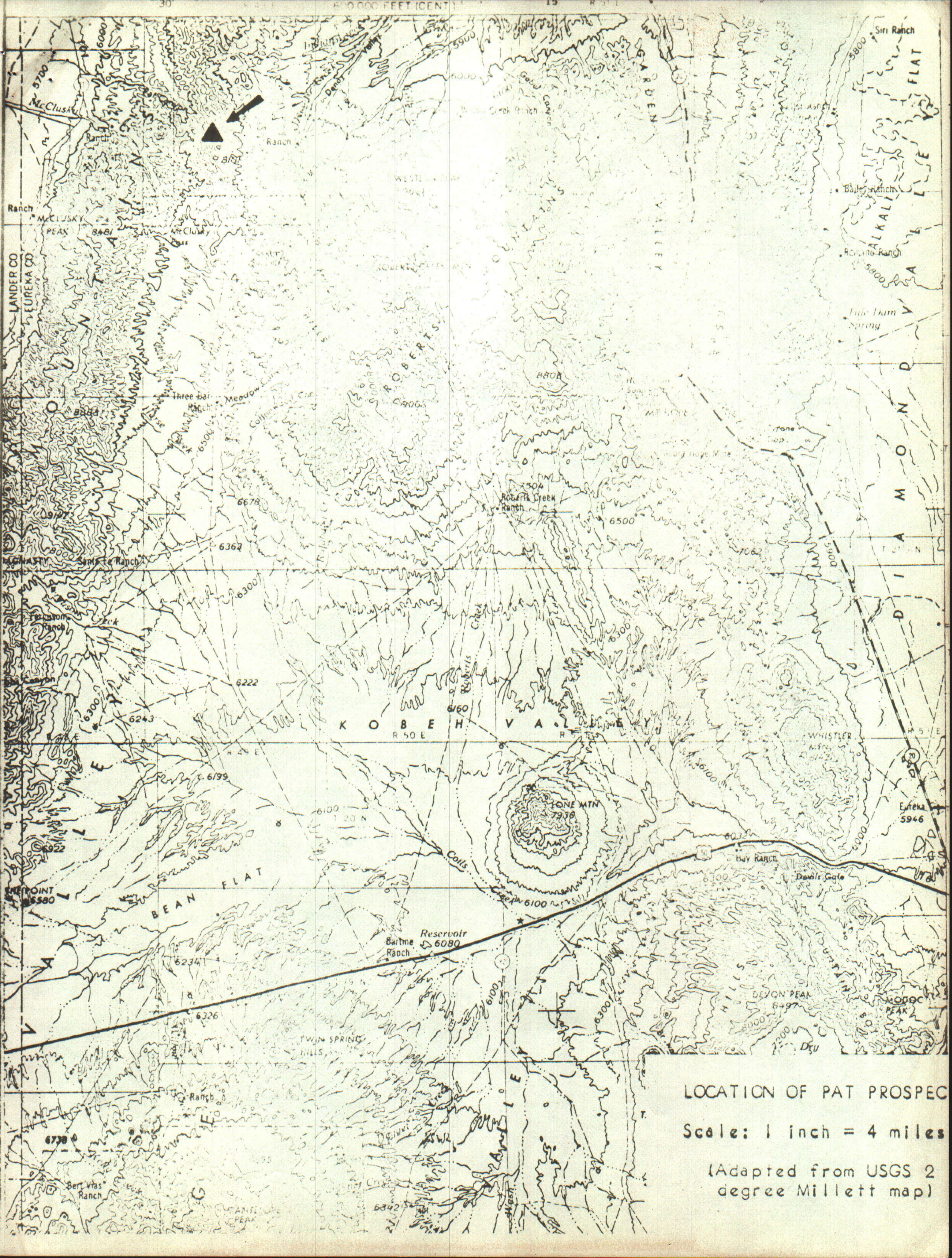
The Pat prospect was discovered June 17, 1966, by Lyle F. Campbell. It was the result of reconnaissance soil sampling of the Tonkin window using a modification of Bloom's technique for cold extractable heavy metals and Lemaire's field detector for mercury.

LOCATION

The Pat prospect is located in Section 20, Township 24 North, Range 49 East, at the north end of the Simpson Park Mountains. The best approach to the claims is through the Bauman Ranch, shown on U.S.G.S. Walti Hot Springs Quadrangle. The ranch is about 49 miles south of Beowawe and 48 miles north of Austin and one mile east of Nevada 21. Drive through the Bauman Ranch corrals and about 1.4 miles east to a poor dirt road turning off to the left. Follow this road about three miles to the Tonkin window and the center of the Pat group.

MINING HISTORY

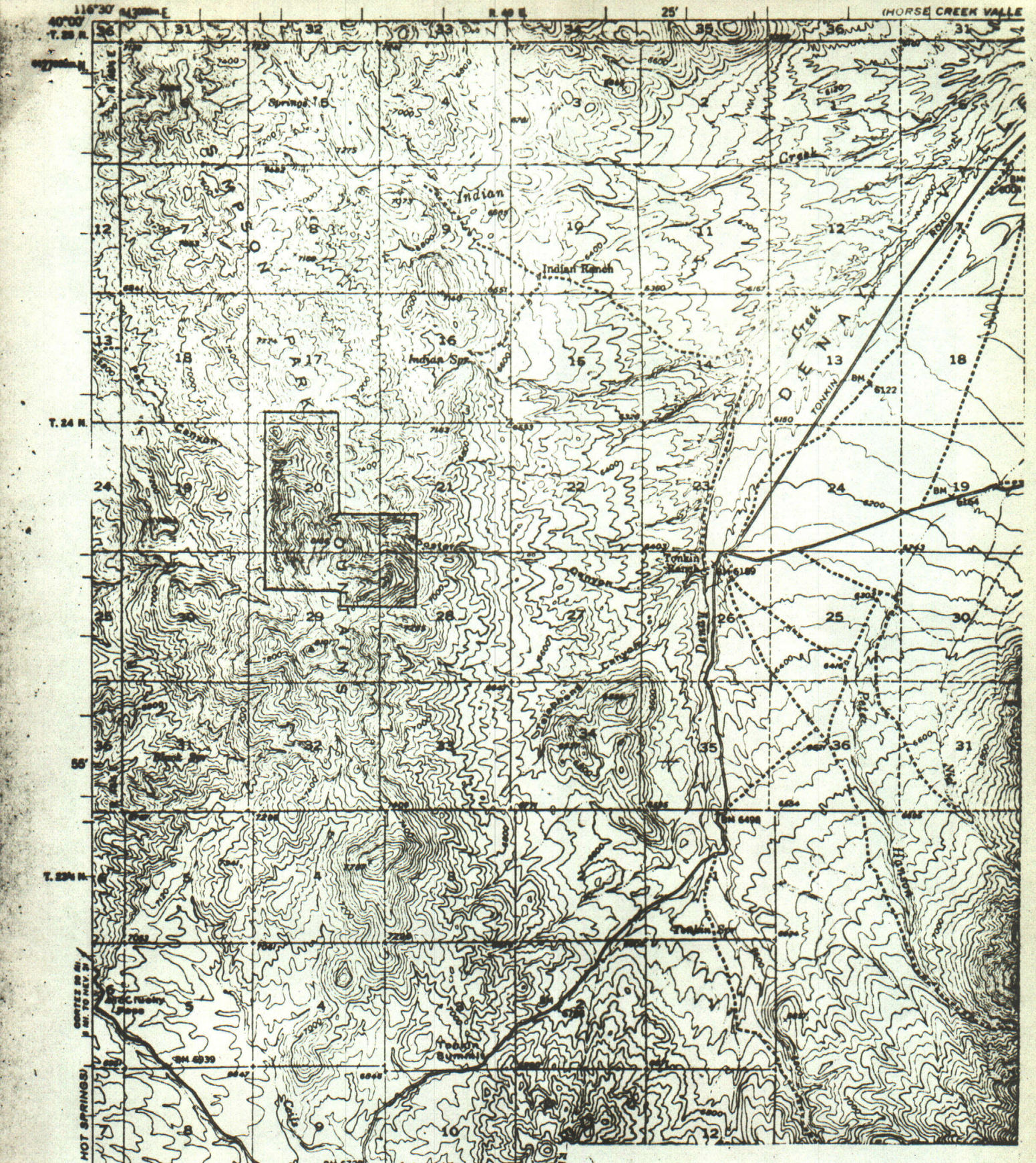
In the process of locating and sampling the Pat claims, the area was well traversed on foot. No old diggings or prospect pits were found. No doubt the



LOCATION OF PAT PROSPEC

Scale: 1 inch = 4 miles

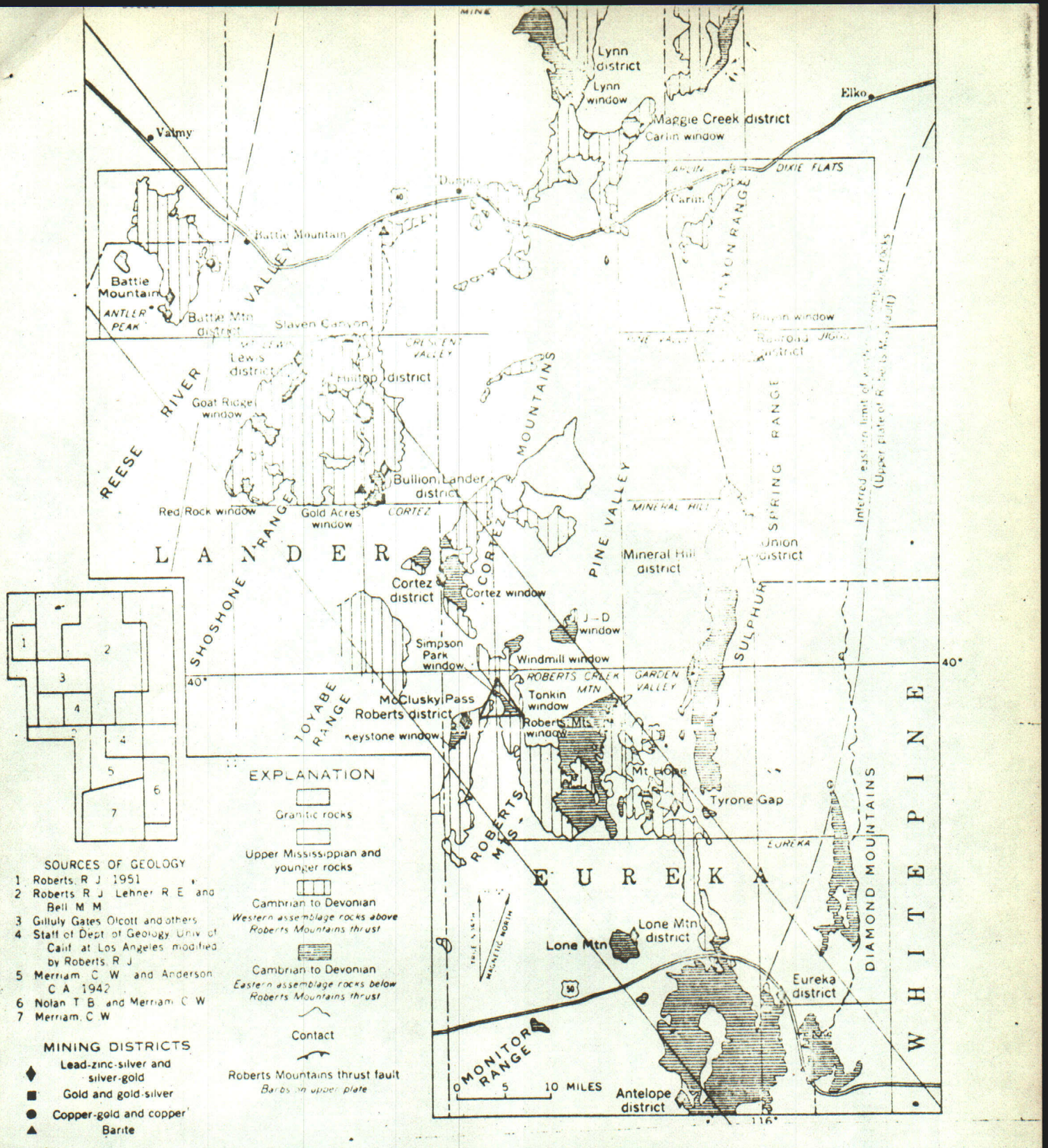
(Adapted from USGS 2 degree Millett map)



LOCATION of PAT CLAIMS

Scale: 1 inch = 1 mile

(Adapted from U.S.G.S. Roberts Creek Mountain Quadrangle)



Map showing Battle Mountain-Eureka alinement of carbonate windows and mining districts. (after Roberts, 1964)

area was thoroughly prospected following the discovery of the Cortez district, 14 miles north, in 1863. Although the Pat area is extremely altered, the disseminated gold is unrecognizable in the hand specimen, and no other metallic minerals detectable to the naked eye are present.

LAND STATUS

After discovery, a search of B.L.M. records revealed the land was public domain open to mineral entry. No patents have been issued. The first 10 claims were located in June, 1966, and the final increment in October, 1966. The group consists of 36 contiguous claims. Assessment work has been completed and affidavit filed for the assessment year ending September 1, 1968.

MINERALIZATION

The discovery rock came from a small outcrop of jasperoid on the north nose of the highest ridge in the Tonkin window. Trace element analyses by Rocky Mountain Geochemical Corporation were as follows: (in ppm)

Au	13*
Ag	9
Cu	80
Zn	5700
Pb	35
As	490

Sample for Pat Dump

Using the Lemaire field mercury detector, the rock showed 12 ppm mercury.

* using the current "official" price of $35.00 per ounce of gold, one part per million gold is practically equivalent to .03 ounces per ton, or $1.00 per ton.

To verify the presence of gold, selective grab samples on 5 ft. centers were taken of the jasperoid outcrop. Assaying was done by Crismon and Nichols.

Sample No.	Au oz/ton	Au ppm
14	0.15	5.1
15	0.31	10.6
16	0.10	3.4
17	0.29	8.2
18	0.09	3.1
19	0.17	5.8
20	0.36	12.3
21	0.17	5.8
22	0.17	5.8
23	0.06	2.0
24	0.40	13.6
25	0.07	2.4
26	0.31	10.5
27	0.01	0.3
28	0.34	11.6
29	0.36	12.3

Bulldozer trenches were dug at some of the more altered appearing spots in the claim group as a part of the original location work. Samples were taken of altered rhyolite and diabase (?) dike rock and limestone in these trenches. One in ten showed detectable gold, analyzed by Skyline Labs, Inc., as follows:

Sample No.	Au (ppm)
793-R	.25
802-R	.45
805-R	.15
808-R	.15
809-R	1.1
810-R	.28
815-R	.70
820-R-C	.10
832-R	.12
838-R	.30
847-R	.10

These results are considered especially significant. Although of considerably

lower magnitude, they verify the gold anomaly in rocks other than jasperoid.

About 4,000 feet southeast of the jasperoid discovery rock, five grab samples of silicified siltstone (?) in an iron stained fault zone were analyzed by Skyline Labs. Three of these showed detectable gold as follows:

Sample No.	Au (ppm)
859-R	.45
860-R	.30
861-R	3.5

Further grab sampling of outcrops in this area should be undertaken.

EXPLORATION

Homestake Mining Company had a lease on this property for one year. They did extensive soil and rock sampling, a geologic map of the area, and a limited amount of drilling. Anomalous gold was detected in the soil sampling. Their drilling disclosed anomalous gold in the southeast corner of the claim block. In the writer's opinion, their work enhanced the value of the prospect as a potential Carlin or Cortez type ore body. Records of the work done by Homestake are in the writer's possession.

DISCUSSION

Intense alteration and structural deformation in the area plus the significant gold anomalies in various localities of the claim group and in various types of rock are encouraging. The Pat prospect has potential as a low grade disseminated gold deposit. Published information regarding occurrence and genesis of Carlin

and Cortez type ore bodies is still sparse. However, it appears that the ideal combination of conditions involves a host rock which is permeable and reactive, such as the rocks of parts of the Roberts Mountain Formation. At this writing, there is insufficient experience with disseminated gold ore bodies to dismiss any gold anomaly found in or near the Roberts Mountain thrust fault in either the upper or lower plate. Presumably ideal conditions for a commercial disseminated gold deposit could occur in many places in the stratigraphic column in north-central Nevada.

Lyle F. Campbell