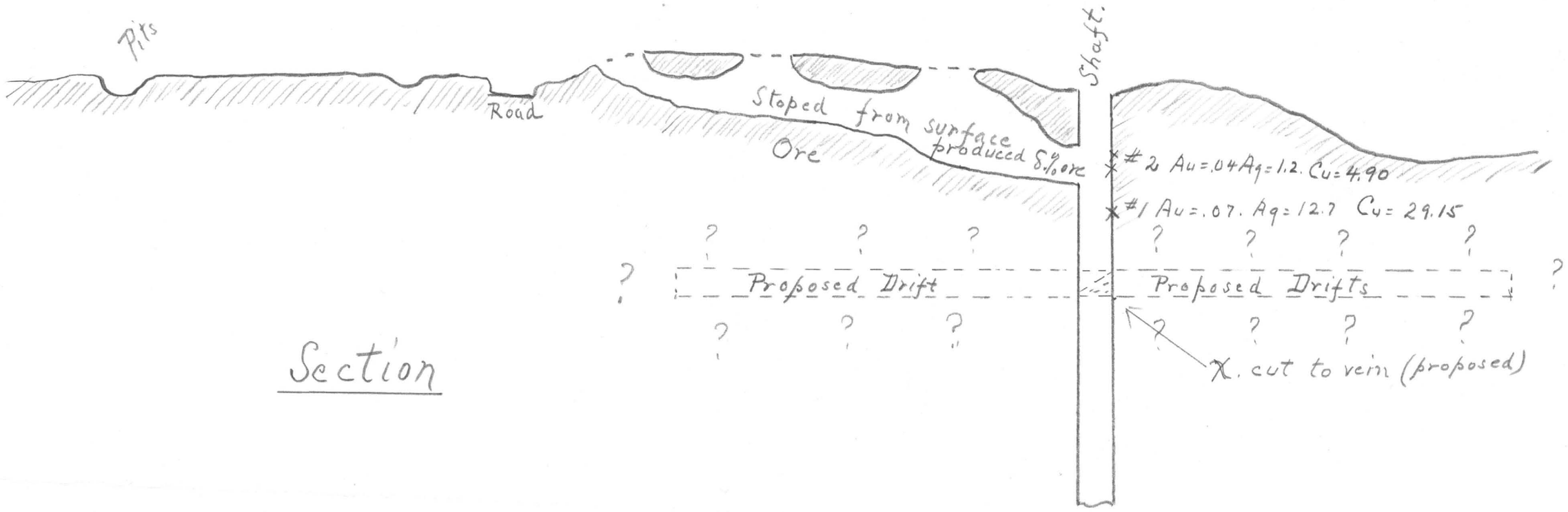
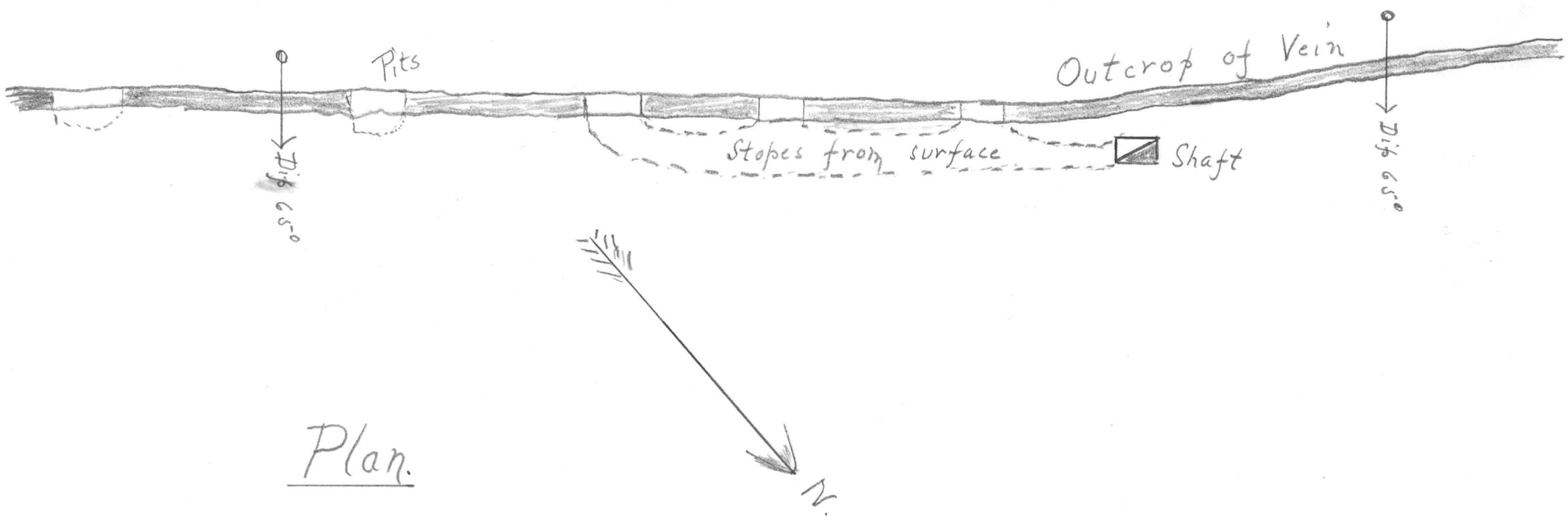


Section



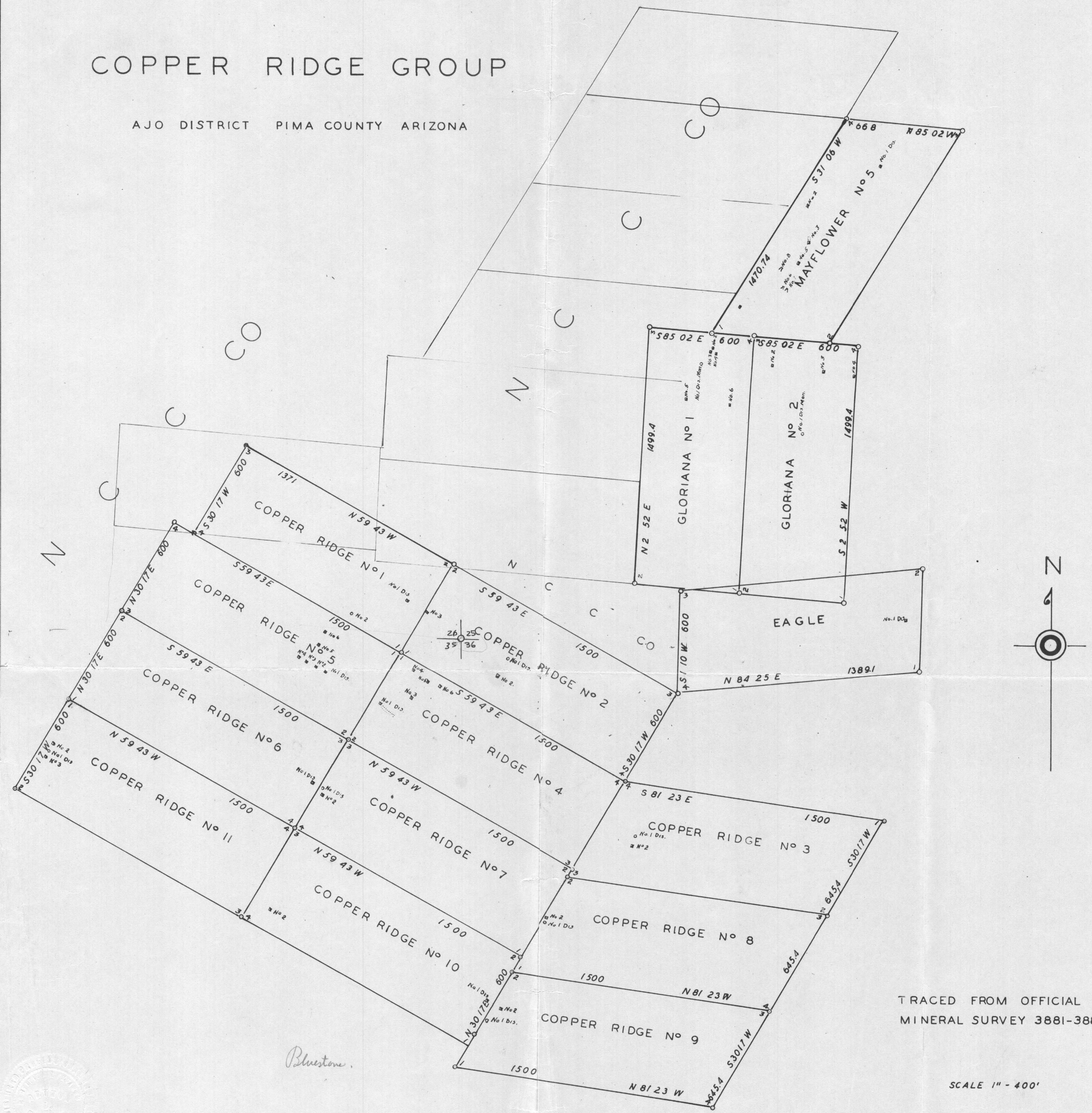
Plan.

Copper Ledge Ex. (b)

Sketch of Copper Ridge Workings
Scale 1" = 30'

COPPER RIDGE GROUP

AJO DISTRICT PIMA COUNTY ARIZONA

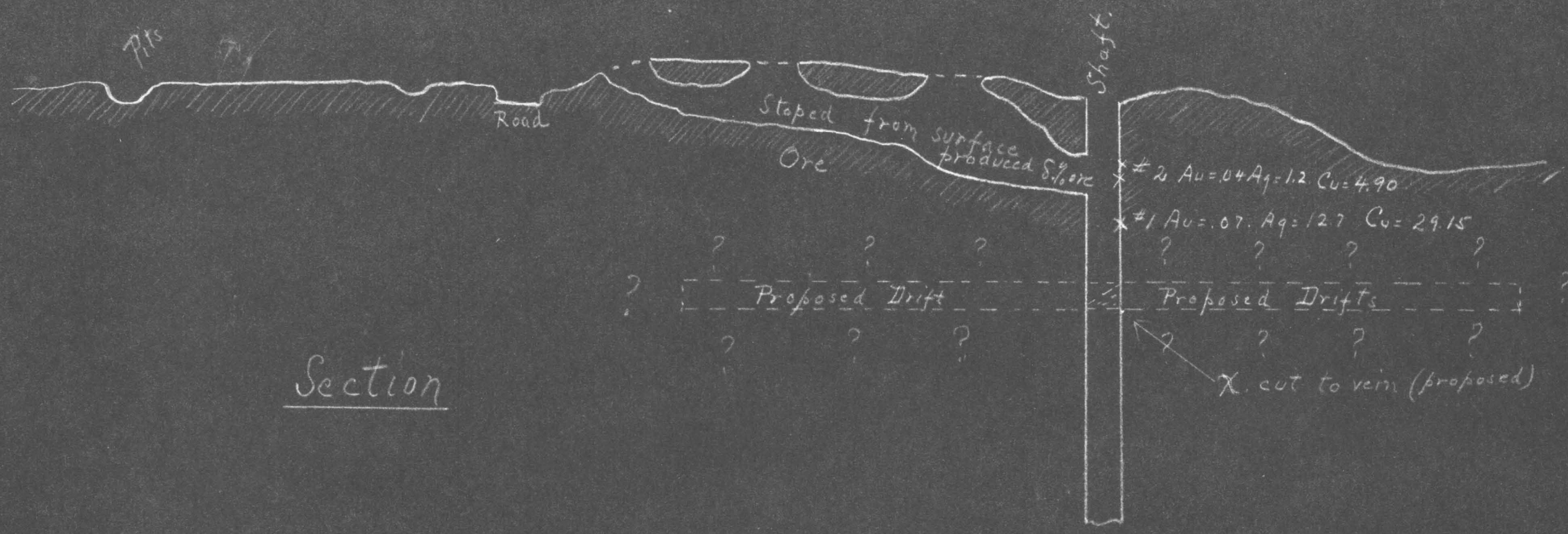


TRACED FROM OFFICIAL PLAT
MINERAL SURVEY 3881-3881 1/2

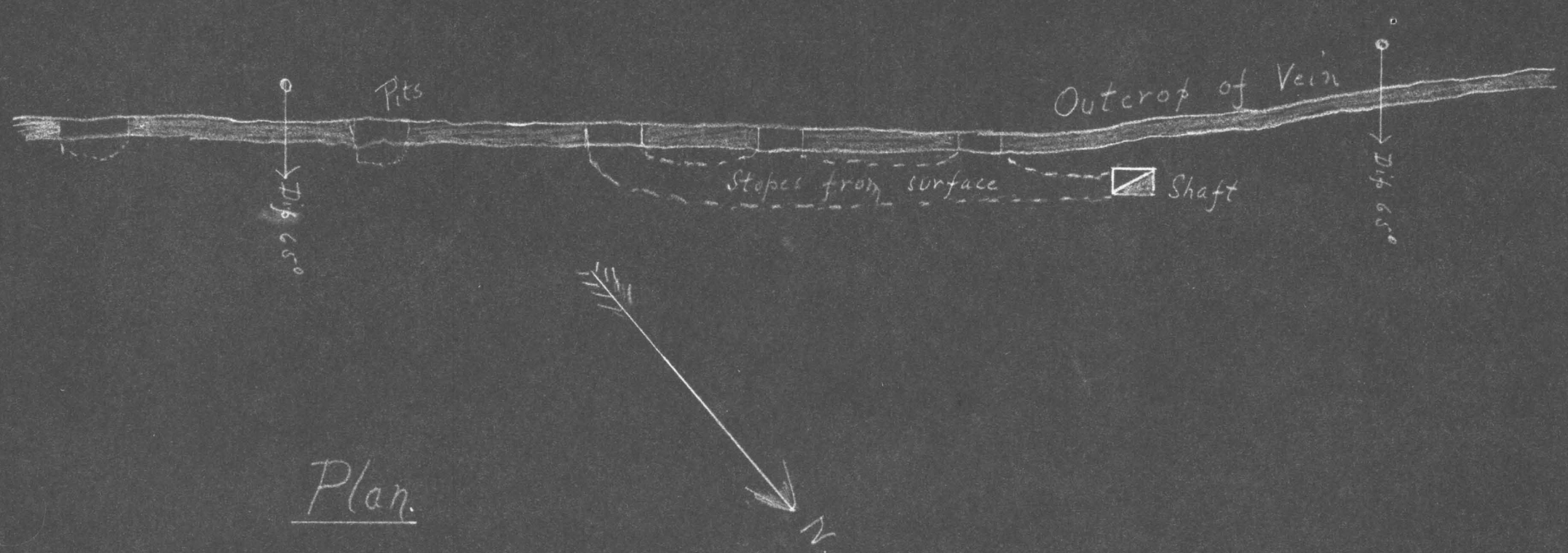
SCALE 1" - 400'

1938

Encl #8.(a)



Section



Plan.

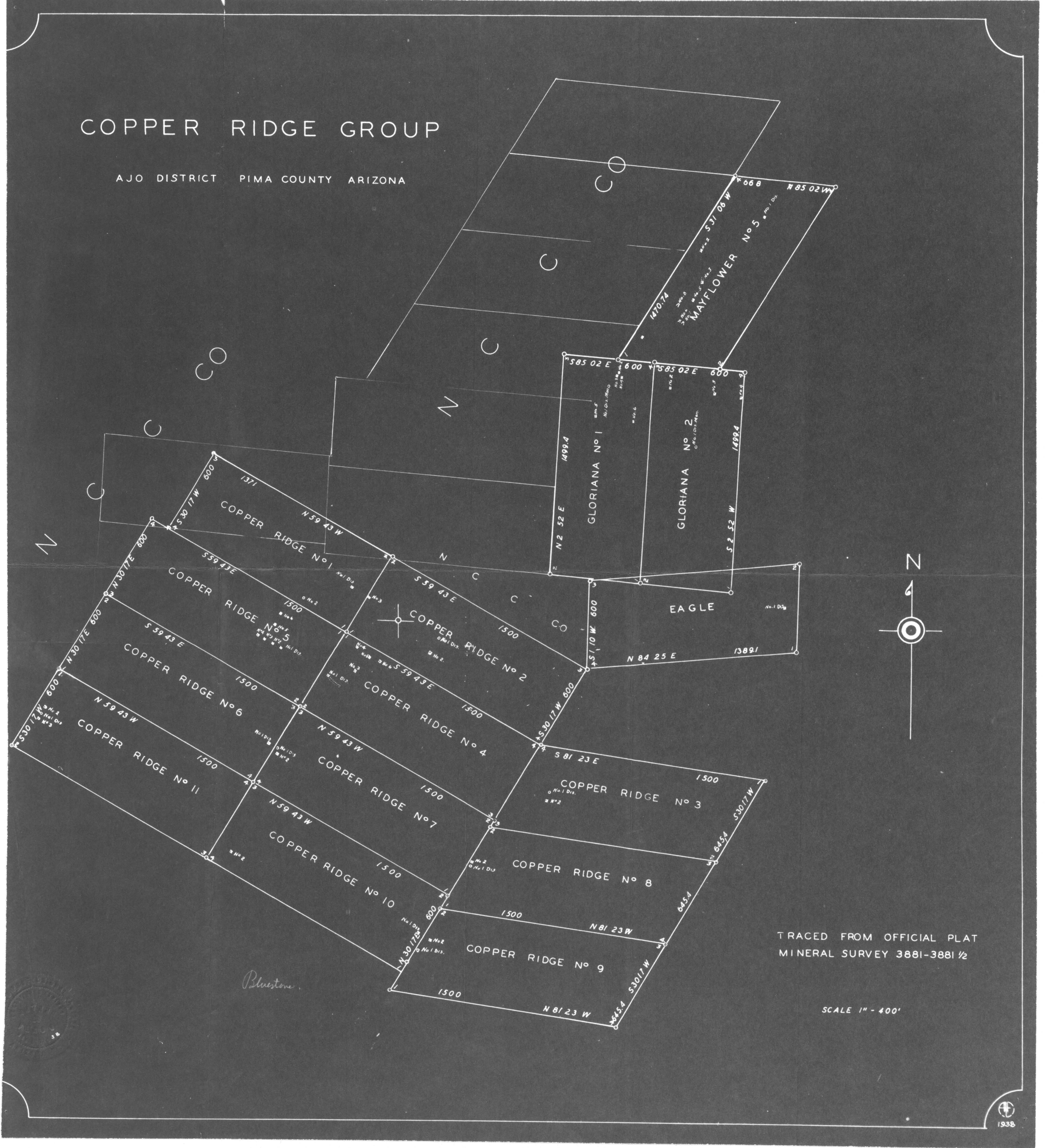
Copper Ledge Ex. (b)

Sketch of Copper Ridge Workings
Scale 1" = 30'

(Fig #8 7)

COPPER RIDGE GROUP

AJO DISTRICT PIMA COUNTY ARIZONA



Copper Ledge

Copper Ridge

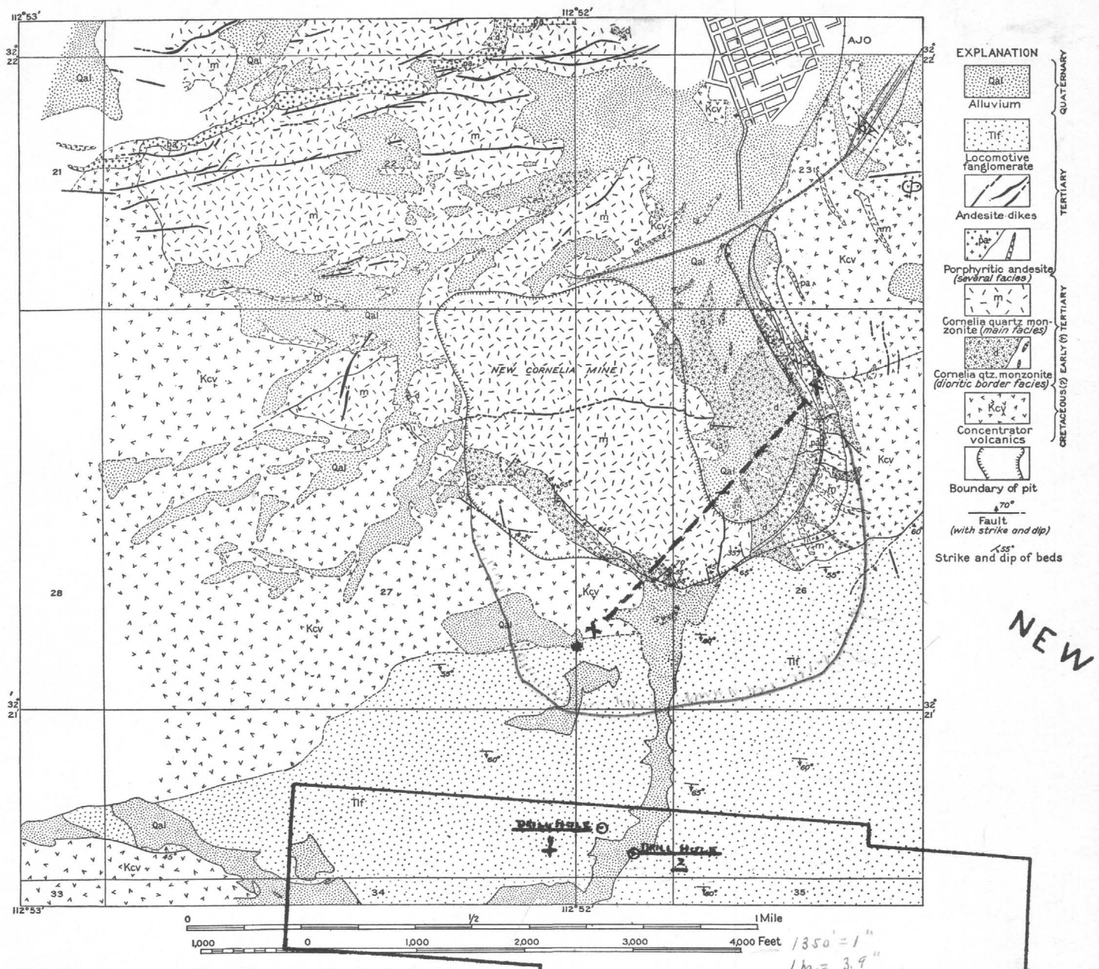


Plate III.—Geologic map of the mining area of the Ajo district, Arizona.

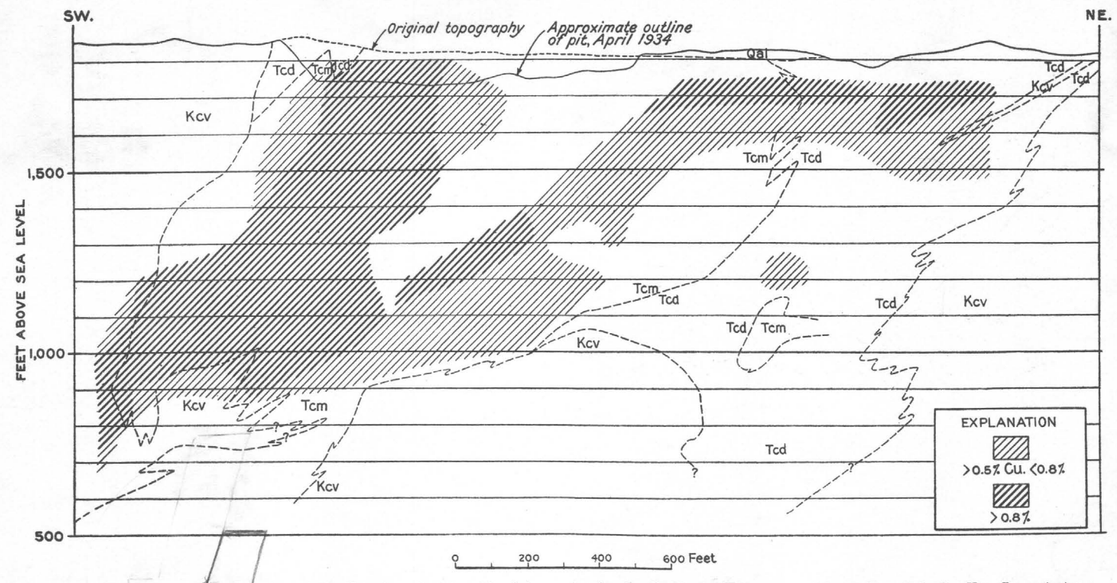
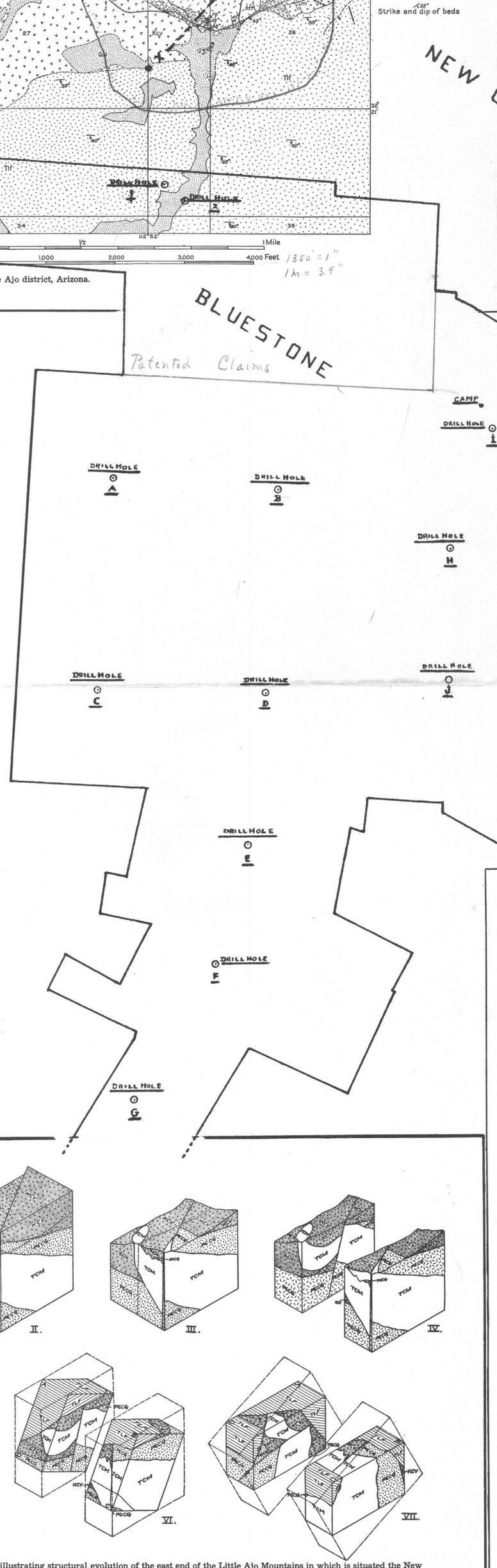


Plate IV.—Northeast cross section through the New Cornelia mine, Ajo, Arizona, showing the distribution of the ore and the geology at depth. *Kcv*, Concentrator volcanics; *Tcd*, dioritic facies of Cornelia quartz monzonite; *Tcm*, Cornelia quartz monzonite; *Qal*, alluvium.



* X-X' Added By H.A.S.

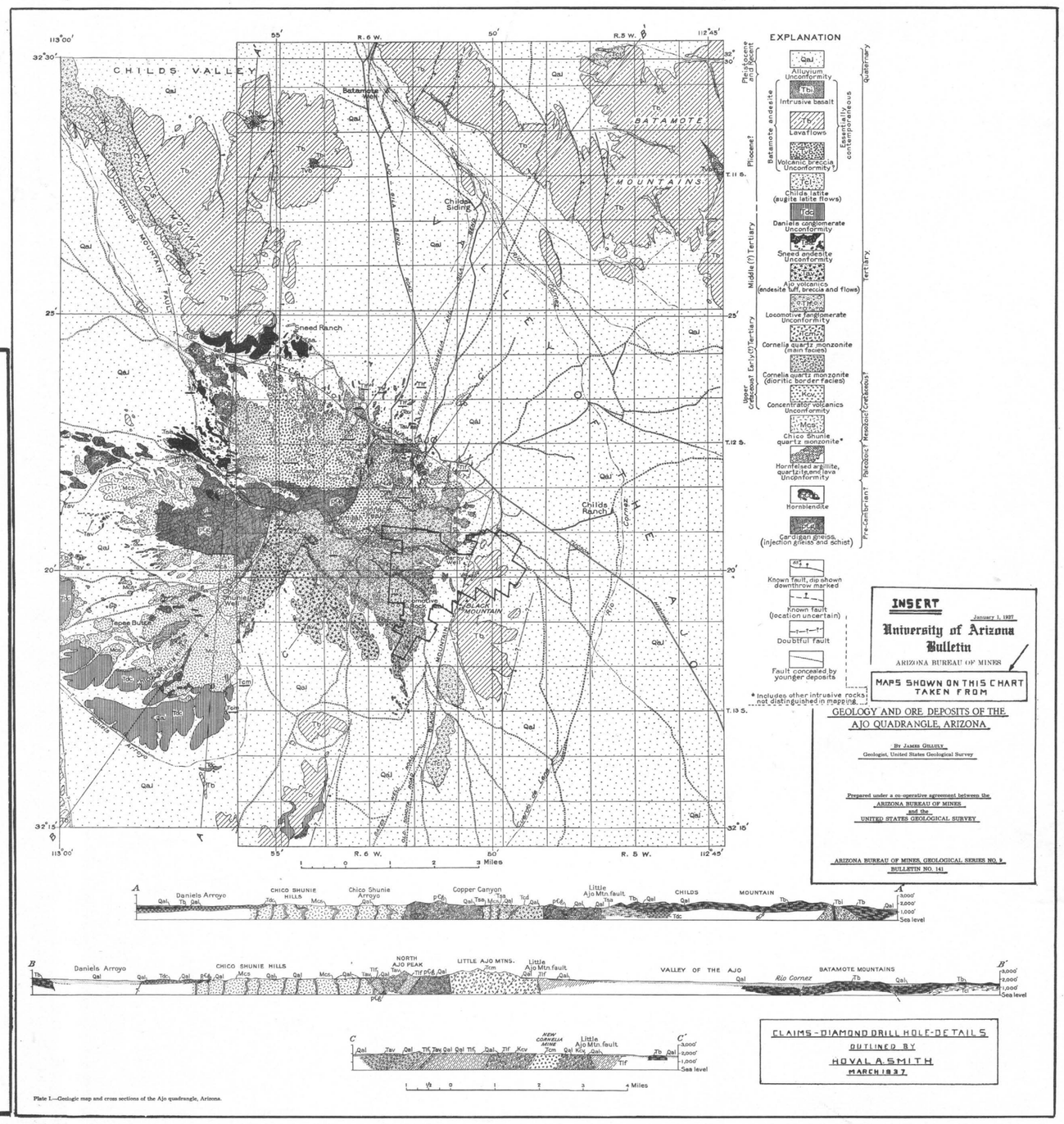


Plate I.—Geologic map and cross sections of the Ajo quadrangle, Arizona.

INSERT

January 1, 1927

University of Arizona Bulletin

ARIZONA BUREAU OF MINES

MAPS SHOWN ON THIS CHART TAKEN FROM

GEOLOGY AND ORE DEPOSITS OF THE AJO QUADRANGLE, ARIZONA

By James Gilluly

Geologist, United States Geological Survey

Prepared under a co-operative agreement between the ARIZONA BUREAU OF MINES and the UNITED STATES GEOLOGICAL SURVEY

ARIZONA BUREAU OF MINES, GEOLOGICAL SERIES NO. 9
BULLETIN NO. 141

CLAIMS - DIAMOND DRILL HOLE - DETAILS
OUTLINED BY
HOVAL A. SMITH
MARCH 1937

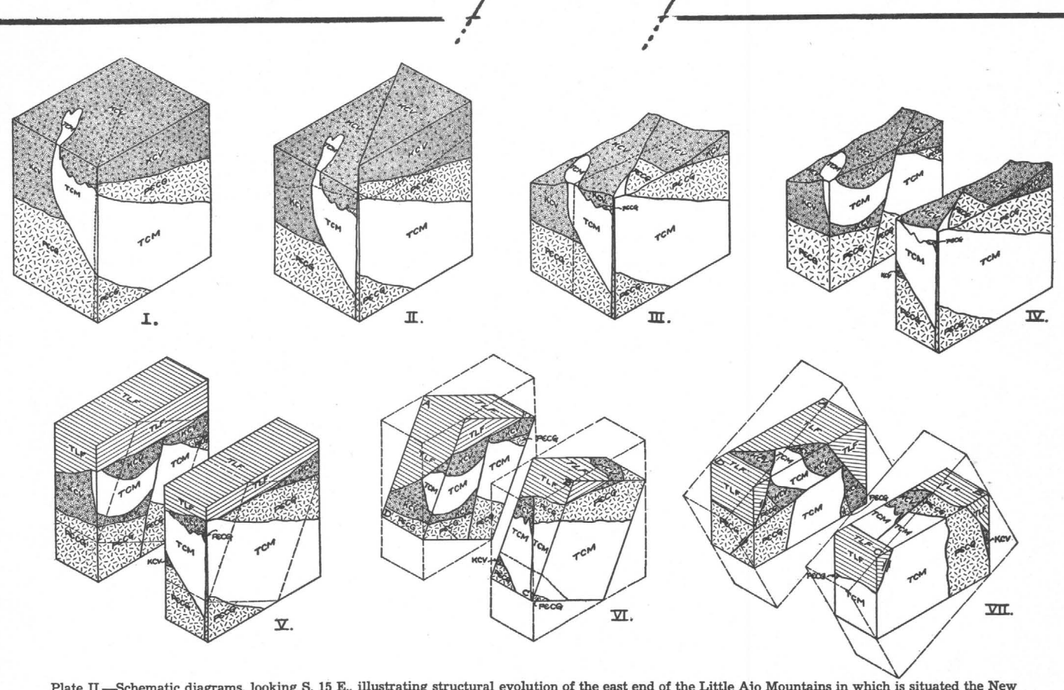


Plate II.—Schematic diagrams, looking S. 15 E., illustrating structural evolution of the east end of the Little Ajo Mountains in which is situated the New Cornelia mine. Legend for all blocks: *PECD*, Cardigan gneiss; *KCV*, Concentrator volcanics; *TCM*, Cornelia quartz monzonite; *TLF*, Locomotive fanglomerate.

I. Structural relations following the intrusion of the Cornelia quartz monzonite. The dashed line marks the course of the Gibson Arroyo fault, not yet developed.

II. Relations following the displacement on the Gibson Arroyo fault, arbitrarily assumed to be a dip-slip normal fault with a throw of 4,000 feet. The dashed line indicates the approximate extent of erosion prior to the deposition of the Locomotive fanglomerate.

III. Conditions following the erosion of the area prior to the deposition of the Locomotive fanglomerate. The dashed line indicates the place where the block is cut in two in later diagrams.

IV. Block of Diagram III split in half in order to show the structure at depth in the center of the area.

V. Blocks of Diagram IV after deposition of the Locomotive fanglomerate. The dashed lines outline the inscribed blocks shown in diagrams VI and VII.

VI. Same relations as in Diagram V except that the geology is shown on the inscribed blocks of that diagram. These inscribed blocks are so oriented that after tilting on the Little Ajo Mountain fault (the position of which is indicated by the heavy dashed line) the faces *ABCD*, which here appear in their original attitude, will become horizontal.

VII. Present conditions, after tilting on the Little Ajo mountain fault. Somewhat generalized, with topography not shown. The face *ABCD* is horizontal. *TCM* on top of the left-hand block marks the size of the New Cornelia mine.

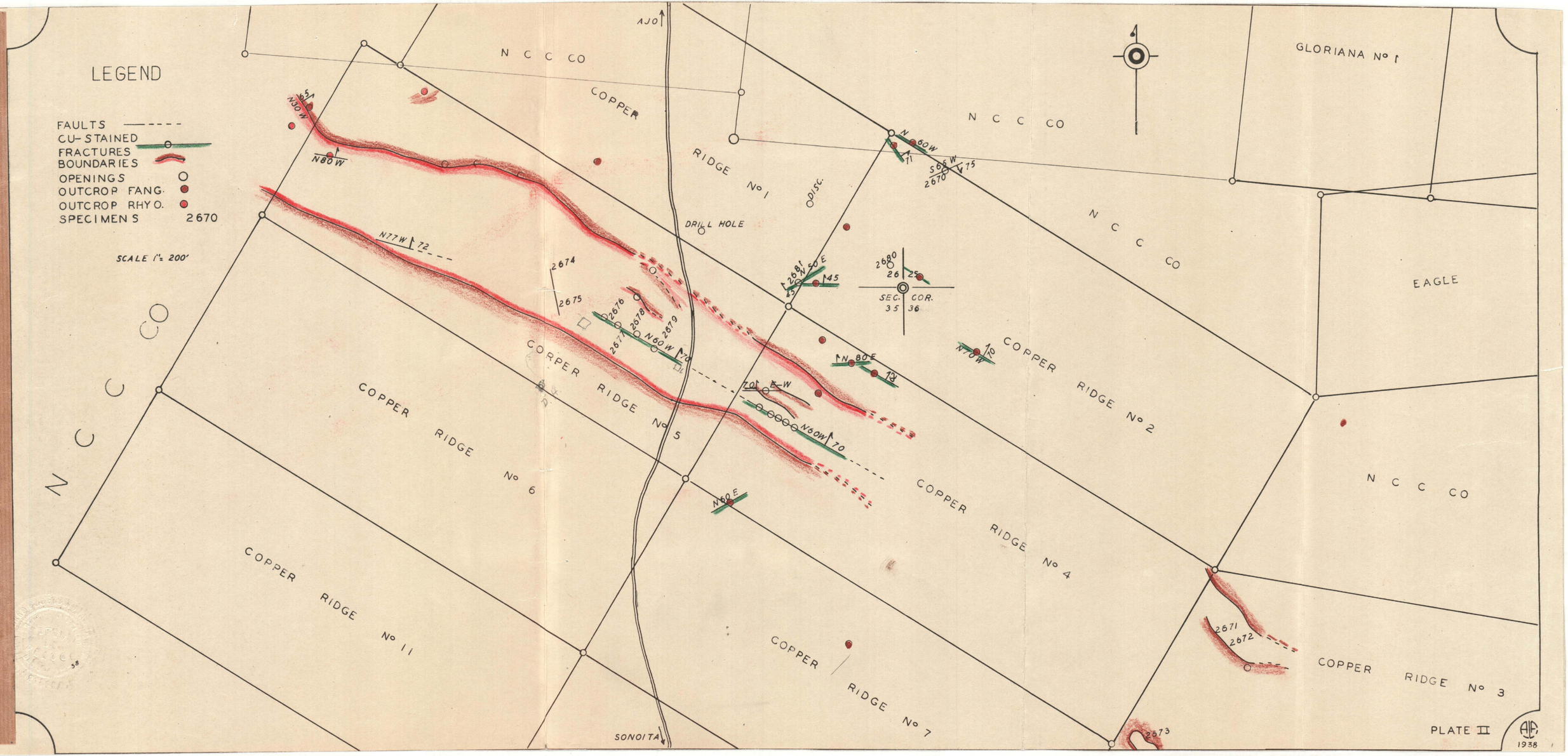
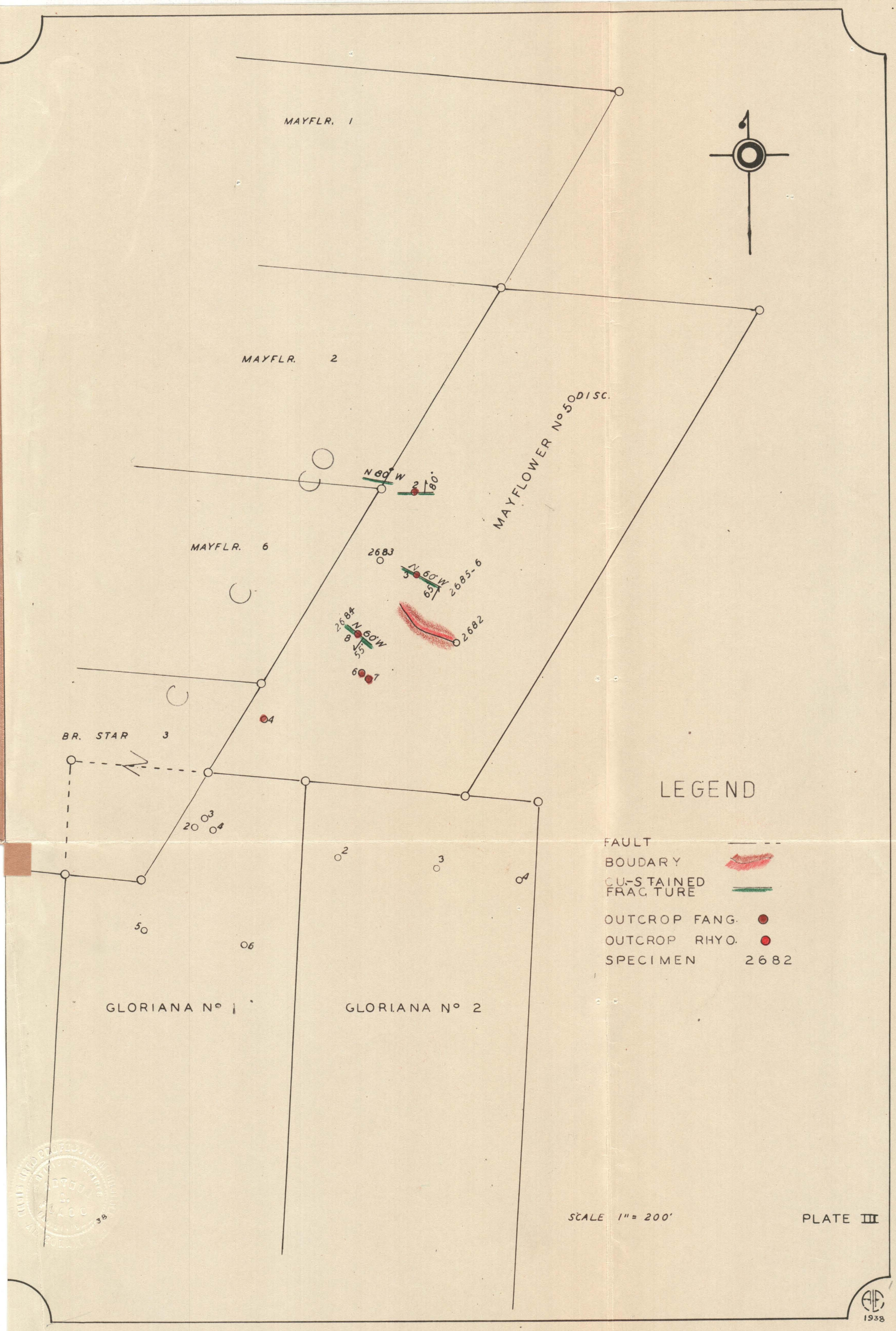


PLATE II

1938


MAYFLR. 1
MAYFLR. 2
MAYFLOWER No 50 DISC.
N 80° W
2
80°
MAYFLR. 6
2683
N 60° W
3
65°
2685-6
2684
N 60° W
8
55°
2682
6
7
4
BR. STAR 3
2
3
4
5
6
2
3
4
LEGEND
FAULT
BOUDARY
CU-STAINED FRACTURE
OUTCROP FANG.
OUTCROP RHYO.
SPECIMEN 2682
GLORIANA No 1
GLORIANA No 2
SCALE 1" = 200'
PLATE III
1938