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Plates

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This is a section from the 1962 NMGS Fall Field Conference Guidebook.

Annual NMGS Fall Field Conference Guidebooks

Every fall since 1950, the New Mexico Geological Society (NMGS) has held an annual Fall Field Conference that explores some region of New Mexico (or surrounding states). Always well attended, these conferences provide a guidebook to participants. Besides detailed road logs, the guidebooks contain many well written, edited, and peer-reviewed geoscience papers. These books have set the national standard for geologic guidebooks and are an essential geologic reference for anyone working in or around New Mexico.

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R.16E. R.17E. R.18E. R.19E. R.20E. R.21E. R.22E.

T.16N.

T.15N.

T.14N.

T.13N.

T.12N.

DRAINAGE MAP OF THE VICINITY OF THE HOLBROOK ANTICLINE NAVAJO COUNTY, ARIZONA

Carl W. Bahr July 1962

0 2000 4000 8000 12000 16000 20000 24000 28000 FEET

0 1 2 3 4 5 6 MILES

LEGEND

External Drainage

Internal Drainage

R Reversed Drainage

Areas of Numerous Sinks

Approximate Outline of Area of Solution-Derived Internal Drainage

5900' 5900 Foot Topographic Contour

J. A. EISELE McCauley No. 1 4231

PAN AMERICAN Aztec A-1 3936

PAN AMERICAN Aztec A-1 4003

Approximate Surface Axis

UNION-CONOCO Aztec No. 1 3850

HOLBROOK 3775

HOPI 2420

WINDRIVER 2160

UNION-CONOCO New Mexico No. 1 3609

ADAMANA 3387

Holbrook

Dry Lake

CAL-OIL State 1-A T.D. 2947

5900'

ZENIFF

L. JOHNSON Aztec Trust 3737

L. Lockhart 3750

L. Lockhart 3754 Aztec No. 1

P.D. LYNCH Aztec No. 1 3140

Anticline

SNOWFLAKE

TAYLOR

PIERCE WASH

DAY WASH

COTTONWOOD CRK.

NMBGMR Map No. 13547

R.16E. R.17E. R.18E. R.19E. R.20E. R.21E. R.22E.

T.16N.

T.15N.

T.14N.

T.13N.

T.12N.

GENERALIZED AREAL GEOLOGIC MAP OF THE HOLBROOK ANTICLINE AND VICINITY NAVAJO COUNTY, ARIZONA

Carl W. Bahr

July 1962

0 2000 4000 8000 12000 16000 20000 24000 28000 FEET

0 1 2 3 4 5 6 MILES

LEGEND

QUATERNARY	Qal	Alluvium
	Qg	Terrace gravels
	Qv	Volcanic Flows
TRIASSIC	Trc	Chinle Fm.
	Trm	Moenkopi Fm.
PERMIAN	Pk	Kaibab Fm.
	Pc	Coconino Ss.

Approximate Surface Axis

Holbrook Anticline

J.A. EISELE McCauley No. 4231

PAN AMERICAN Aztec B-1 3936

PAN AMERICAN Aztec A-1 4003

UNION-CONOCO Aztec No.1 3850

HOLBROOK 3775

HOPI 2420

WINDRIVER 2160

UNION-CONOCO New Mexico No.1 3609

ADAMANA 3387

Dry Lake

CAL-OIL State 1-A T.D. 2947

ZENIFF

L. JOHNSON Aztec Trust. 3737

L. Lockhart Aztec No.1 3734

P.D LYNCH Aztec No.1 3140

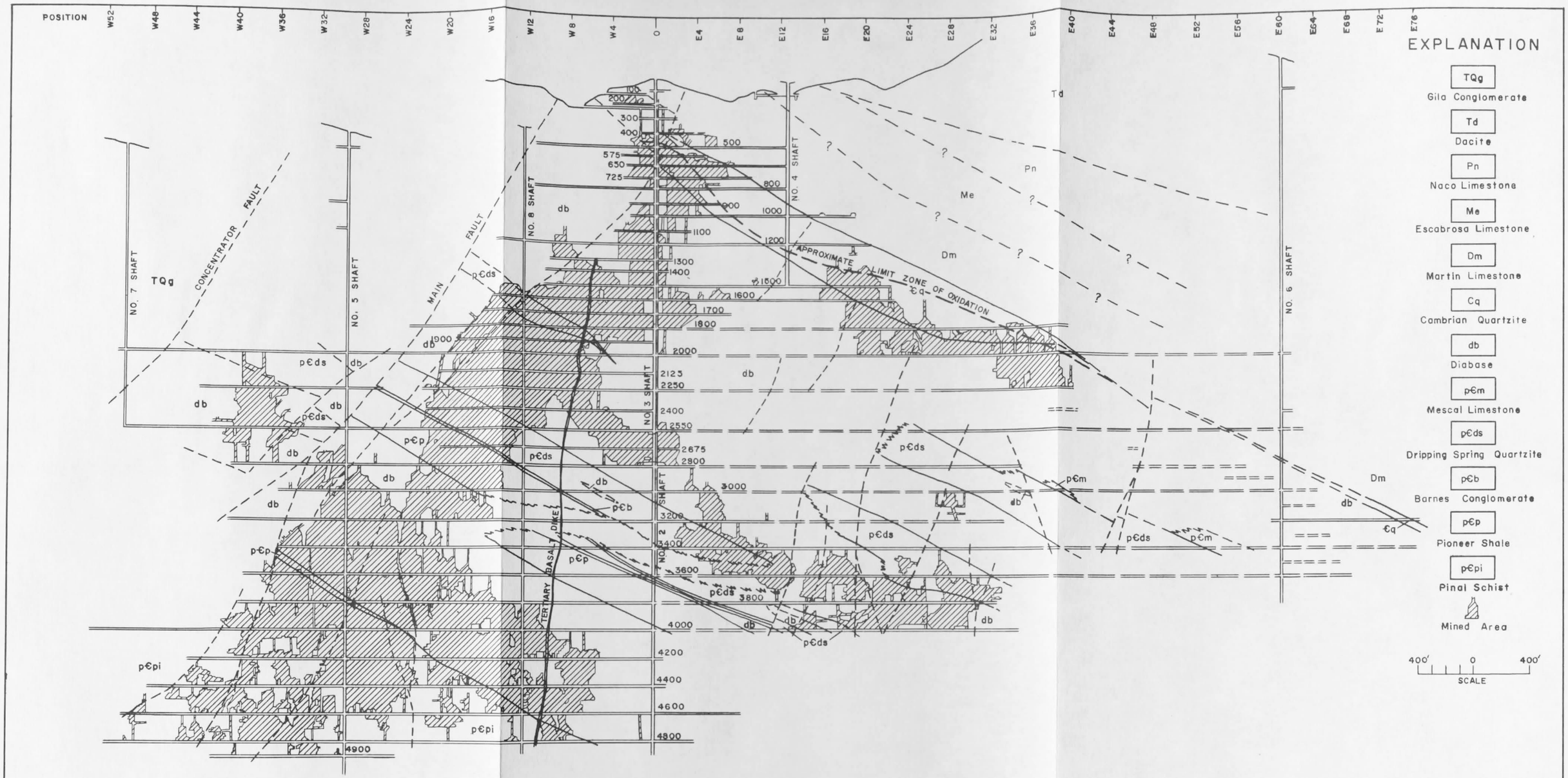
SNOWFLAKE

TAYLOR

NMBGMR Map No. 13546

GEOLOGY OF THE MAGMA VEIN, NORTH WALL

VERTICAL PROJECTION ON AN EAST–WEST SECTION



NMBGMR Map No. 13544

AFTER SHORT, REVISED

Hammer and Webster–Superior Area

REGIONAL STRUCTURAL–STRATIGRAPHIC SECTION

EAST-CENTRAL ARIZONA TO WEST-CENTRAL NEW MEXICO

WEST-SOUTHWEST — SOUTHEAST — SOUTHWEST — SOUTH — NORTHEAST — SOUTHEAST — NORTH-NORTHEAST — EAST-SOUTHEAST — SOUTHEAST — NORTHEAST — EAST — NORTHEAST

GEN'L PET. 1-14 CREAGER STATE 6-19N-23E 5720 — PAINTED DESERT — EASTERN 1 SANTA FE 35-21N-26E 6060 — EASTERN 3 SANTA FE 9-19N-27E 5890 — RIO PUERCO — KERR-McGEE 1 HORTENSTEIN 23-18N-25E 5597 — PAN-AMER 1-A NMALC 12-13N-25E 5868 — ARGO 1 STATE 22-15N-29E 5760 — SKELLY 1 GOESLING 27-3N-21W 6372 — SKELLY 1-M. TEEL 7-2N-19W 6691 — SKELLY 1 C. TEEL 27-4N-19W 6558 — HUCKLEBERRY 1 HUCKLEBERRY FEDERAL 11-2N-16W 7109 — SPANEL-HEINZE 1-H SF 9617 HICKMAN 27-4N-11W 7412 — QUAT. — CACHOM MESA — SPANEL-HEINZE 1 SF 9609 COW SPRINGS 19-4N-9W 7420 — SPANEL-HEINZE 1-M SF 9612 HALF DOME 5-5N-7W 7486

+7000 +6000 +5000 +4000 +3000 +2000

T.D. 1616 — T.D. 2933 — T.D. 3432 — T.D. 3454 — T.D. 3680 — T.D. 2637 — T.D. 2597 — T.D. 2365 — T.D. 1140 — T.D. 1198 — T.D. 5642 — T.D. 5397 — T.D. 5010

TRIASSIC: CHINLE, SHINARUMP, MOENKOPI

PERMIAN: COCONINO, UPPER SUPAI "A", SUPAI EVAPORITES, SUPAI SALT, UPPER SUPAI "B", FORT APACHE "B", SUPAI, MIDDLE SUPAI "C", FORT APACHE "C", LOWER SUPAI "D", PROBABLE TOP OF PENNSYLVANIAN, LOWER MARINE SUPAI "E", NACO, UPPER NACO, LOWER NACO, KAIBAB, KAIBAB-SAN ANDRES, COCONINO-GLORIETA, SUPAI SALT AND INTERBEDDED EVAPORITES, UPPER SUPAI "A"-YESO, FORT APACHE "A", UPPER SUPAI "B"-YESO, MIDDLE SUPAI "C"-ABO, LOWER SUPAI "D", LOWER NON-MARINE SUPAI "E", UPPER YESO, MIDDLE YESO, YESO EVAPORITES, LOWER YESO, ABO, SAN ANDRES, GLORIETA, YESO, YESO LOS VALLOS, MESETA BLANCA, RED TANKS

PENNSYLVANIAN: MADERA, SANDIA

PRECAMBRIAN

CRETACEOUS: DAKOTA

TRIASSIC: CHINLE

JURASSIC: QUATERNARY, TERTIARY, CREVASSE CANYON, UPPER GALLUP, D-CROSS TONGUE OF MANCOS, LOWER GALLUP, MANCOS, UPPER TRES HERMANOS, LOWER TRES HERMANOS, DAKOTA

TRIASSIC: CHINLE

PERMIAN: MOENKOPI, SAN ANDRES, GLORIETA, YESO, YESO LOS VALLOS, MESETA BLANCA, ABO, RED TANKS

PENNSYLVANIAN: MADERA, SANDIA

PRECAMBRIAN

SCALES

VERTICAL EXAGGERATION 105.5

VERTICAL: 20, 60, 100 — 0, 200, 400, 600, 800 FEET

HORIZONTAL: 0 1 2 4 6 8 MILES

EQUIVALENT POSITION OF ZUNI BASIN

EQUIVALENT POSITION OF ZUNI BASIN

MOGOLLON SLOPE — ZUNI POSITIVE — ZUNI BASIN

TRI-COUNTY HORST

APPROXIMATE LOCATION OF HICKMAN FAULT (NOT SHOWN ON CROSS-SECTION) THROW 300 FEET OR LESS DOWN TO WEST, NORMAL

CATRON MONOCLINE — LUCERO SHELF

ARIZONA | NEW MEXICO

WENGERD

NMBGMR Map No. 13548

EXPLANATION

TERTIARY and QUATERNARY

- Qal / Qt — Alluvium / Talus
- UNCONFORMITY
- QTg — Gila Conglomerate
- QTb — Basalt

TERTIARY

- Tlv — Later Volcanic Rocks
- UNCONFORMITY
- Td — Dacite
- qmp — Quartz monzonite porphyry
- Tev — Earlier Volcanic Rocks
- Tw — Whitetail Conglomerate
- UNCONFORMITY

MESOZOIC (?)

- dp — Diorite porphyry
- qd — Quartz diorite
- UNCONFORMITY

PALEOZOIC

- Pl — Limestone and dolomite
- DISCONFORMITY
- €q — Rocks of Cambrian Age
- UNCONFORMITY

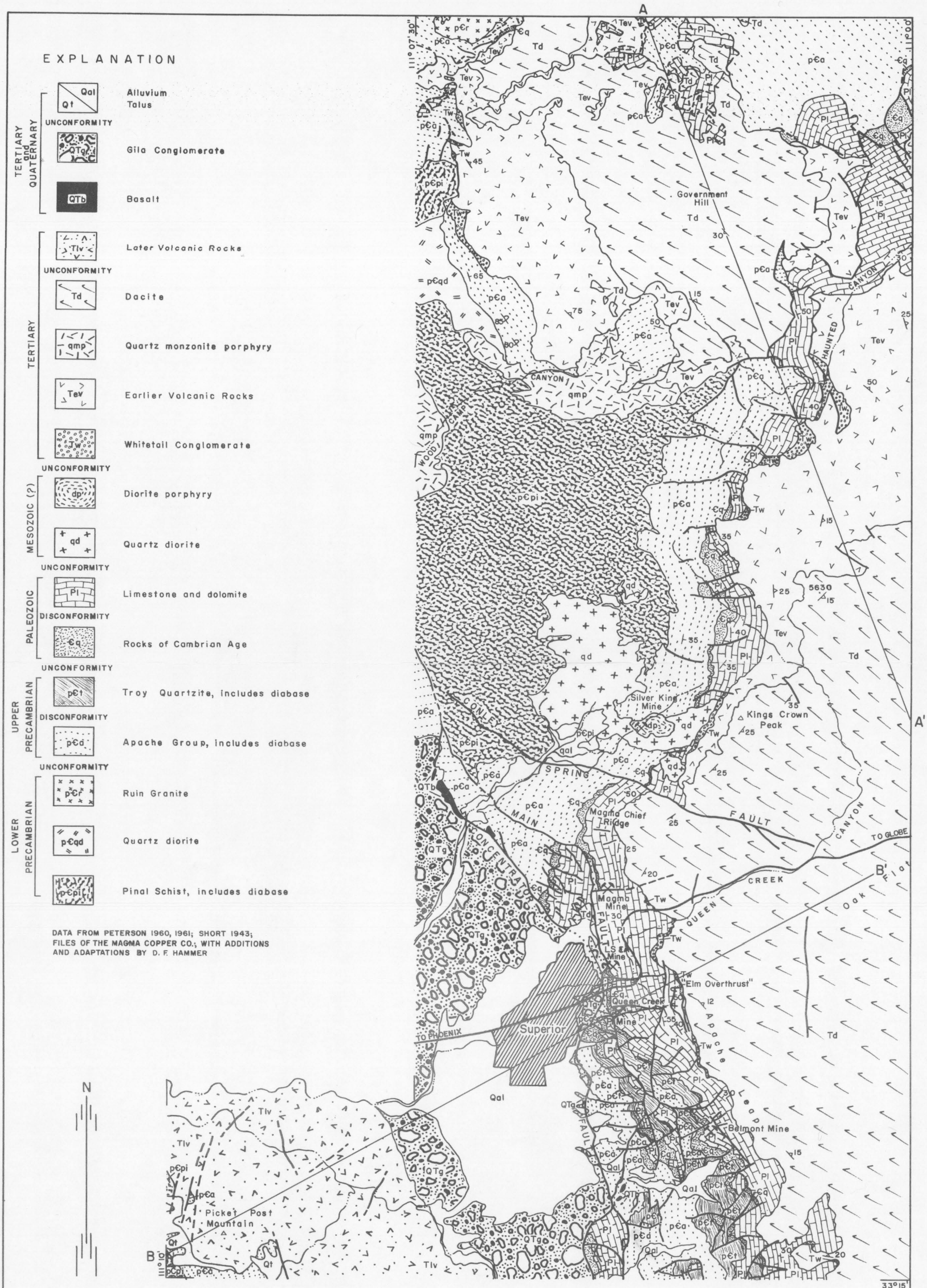
UPPER PRECAMBRIAN

- p€t — Troy Quartzite, includes diabase
- DISCONFORMITY
- p€a — Apache Group, includes diabase
- UNCONFORMITY

LOWER PRECAMBRIAN

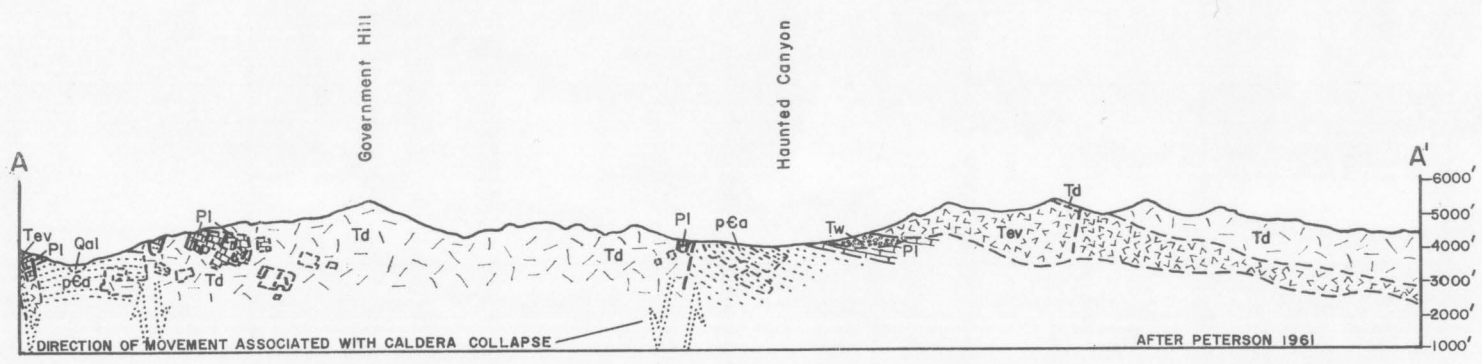
- p€r — Ruin Granite
- p€qd — Quartz diorite
- p€pi — Pinal Schist, includes diabase

DATA FROM PETERSON 1960, 1961; SHORT 1943; FILES OF THE MAGMA COPPER CO.; WITH ADDITIONS AND ADAPTATIONS BY D. F. HAMMER



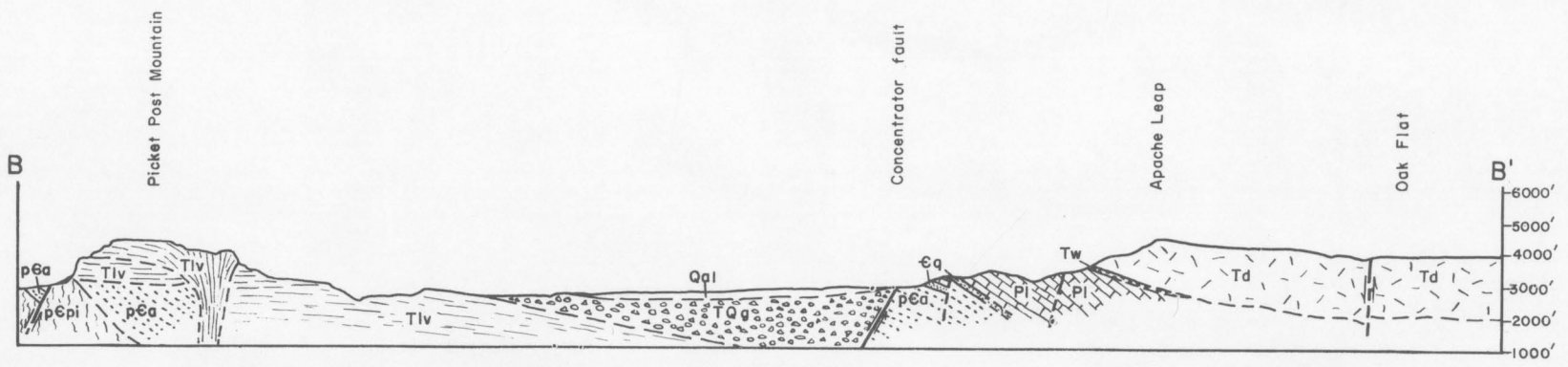
GENERALIZED GEOLOGIC MAP OF PART OF THE SUPERIOR AREA, PINAL COUNTY, ARIZONA

1 0 1 2 3 4 MILES



GEOLOGIC SECTION THROUGH PETERSON'S PROPOSED CALDERA

Looking N 70° E



GEOLOGIC SECTION THROUGH THE SUPERIOR BASIN

Looking N 30° W

NMBGMR Map No. 13545