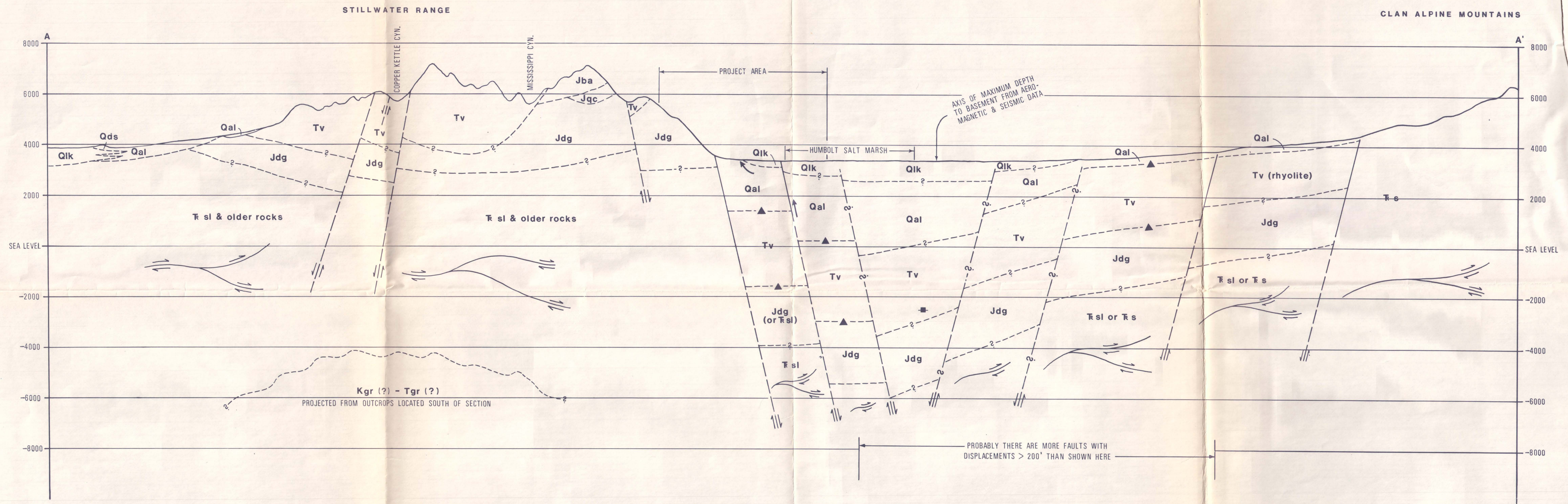




PLATE 1
DIXIE VALLEY, NEVADA
LOCATION & TOPOGRAPHY
OF QUEST LEASEHOLD & VICINITY



Horizontal scale 1 inch = 1 mile
 Vertical scale 1 inch = 2000 ft.

Vertical exaggeration 2.6 : 1
 (Note - Faults are assumed to have 60-degree dip, which appears as 77 degrees in this section).

--- LEGEND ---

- ▲ Depths indicated by nearby seismic refraction profiles
- Maximum depth to magnetic basement
- diagrammatic indication of probable thrusting in Triassic section

- Qal** - Quaternary alluvial materials, chiefly fan gravels
- QIK** - Quaternary lake deposits
- Tv** - Late Tertiary volcanics, chiefly Miocene (12 to 27 m.y. old) rhyolite to rhyodacite flows and tuffs
- Jba** - Upper Jurassic basalt

- Jqc** - Quartz arenite
- Jdg** - Upper Jurassic gabbroic and dioritic rocks *
- T sl** - Upper Triassic slate and phyllite *
- T s** - Upper Triassic siltstone and mudstone *

* See attached detailed description of these basement units

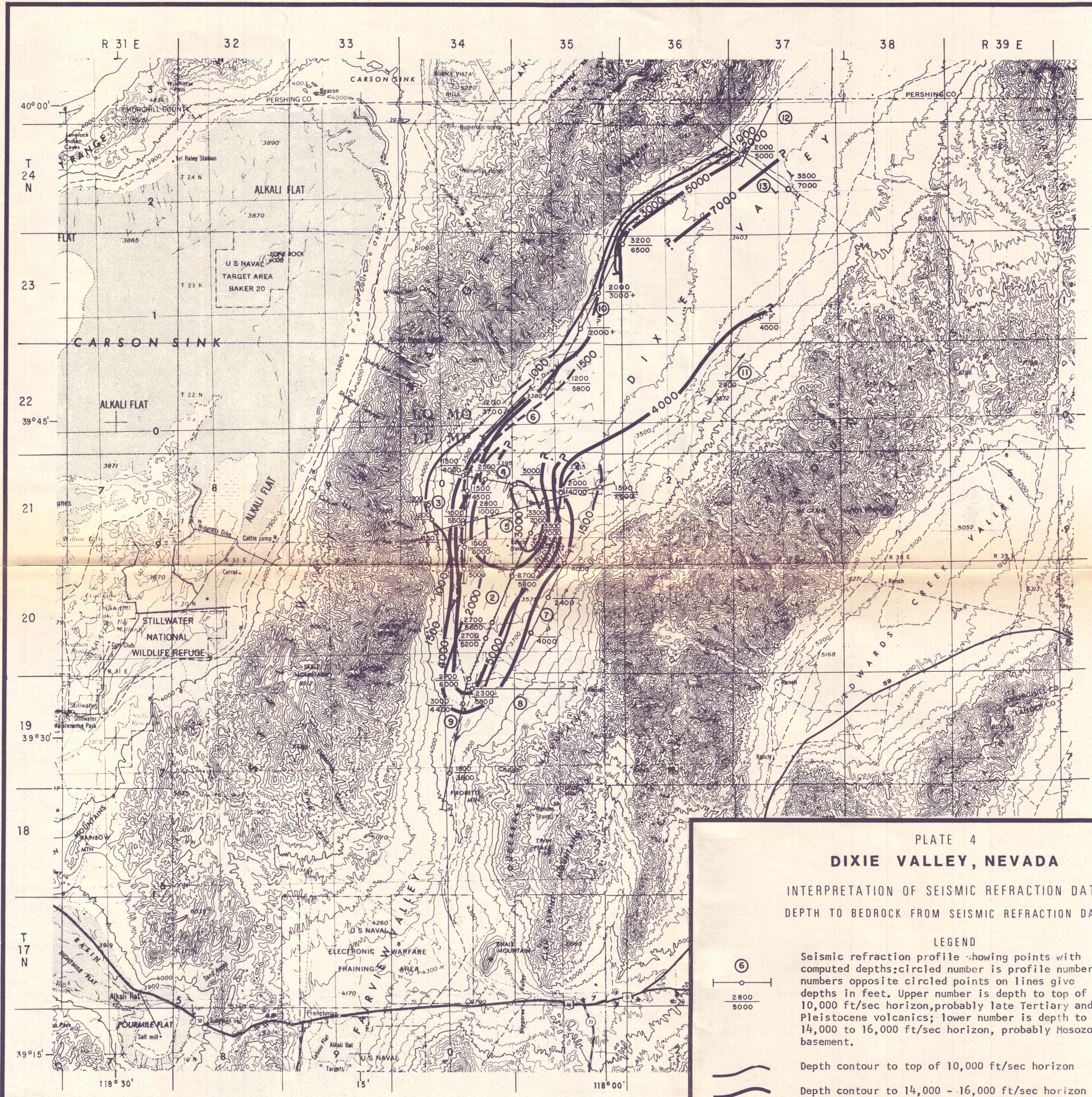
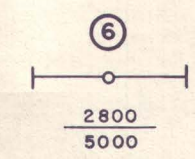


PLATE 4
DIXIE VALLEY, NEVADA

INTERPRETATION OF SEISMIC REFRACTION DATA
 DEPTH TO BEDROCK FROM SEISMIC REFRACTION DATA

LEGEND



Seismic refraction profile showing points with computed depths; circled number is profile number; numbers opposite circled points on lines give depths in feet. Upper number is depth to top of 10,000 ft/sec horizon, probably late Tertiary and Pleistocene volcanics; lower number is depth to 14,000 to 16,000 ft/sec horizon, probably Mesozoic basement.



Depth contour to top of 10,000 ft/sec horizon
 Depth contour to 14,000 - 16,000 ft/sec horizon

Data from L.J.Meister, 1967

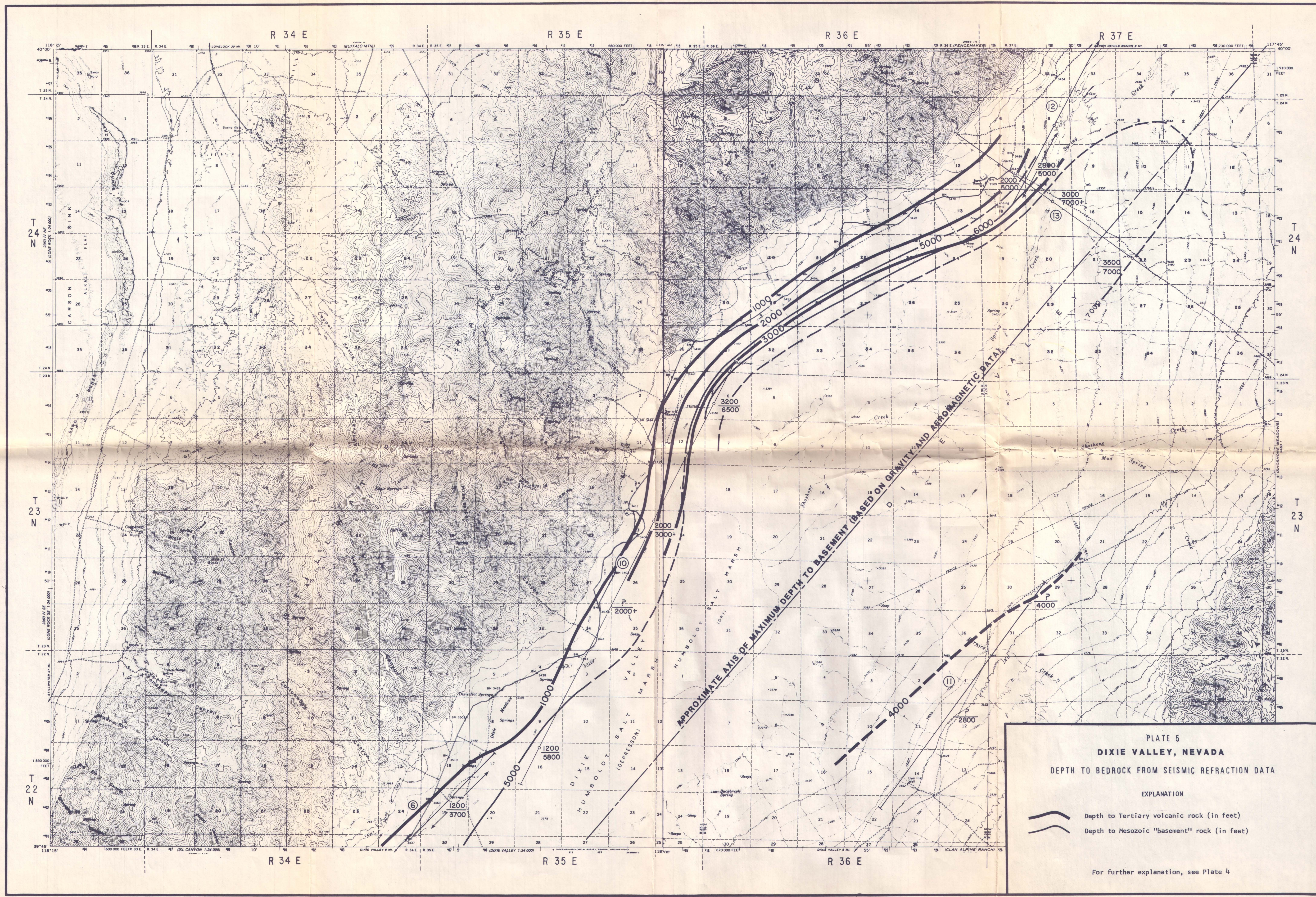



PLATE 5
DIXIE VALLEY, NEVADA
 DEPTH TO BEDROCK FROM SEISMIC REFRACTION DATA
 EXPLANATION


 ——— Depth to Tertiary volcanic rock (in feet)
 ——— Depth to Mesozoic "basement" rock (in feet)
 For further explanation, see Plate 4

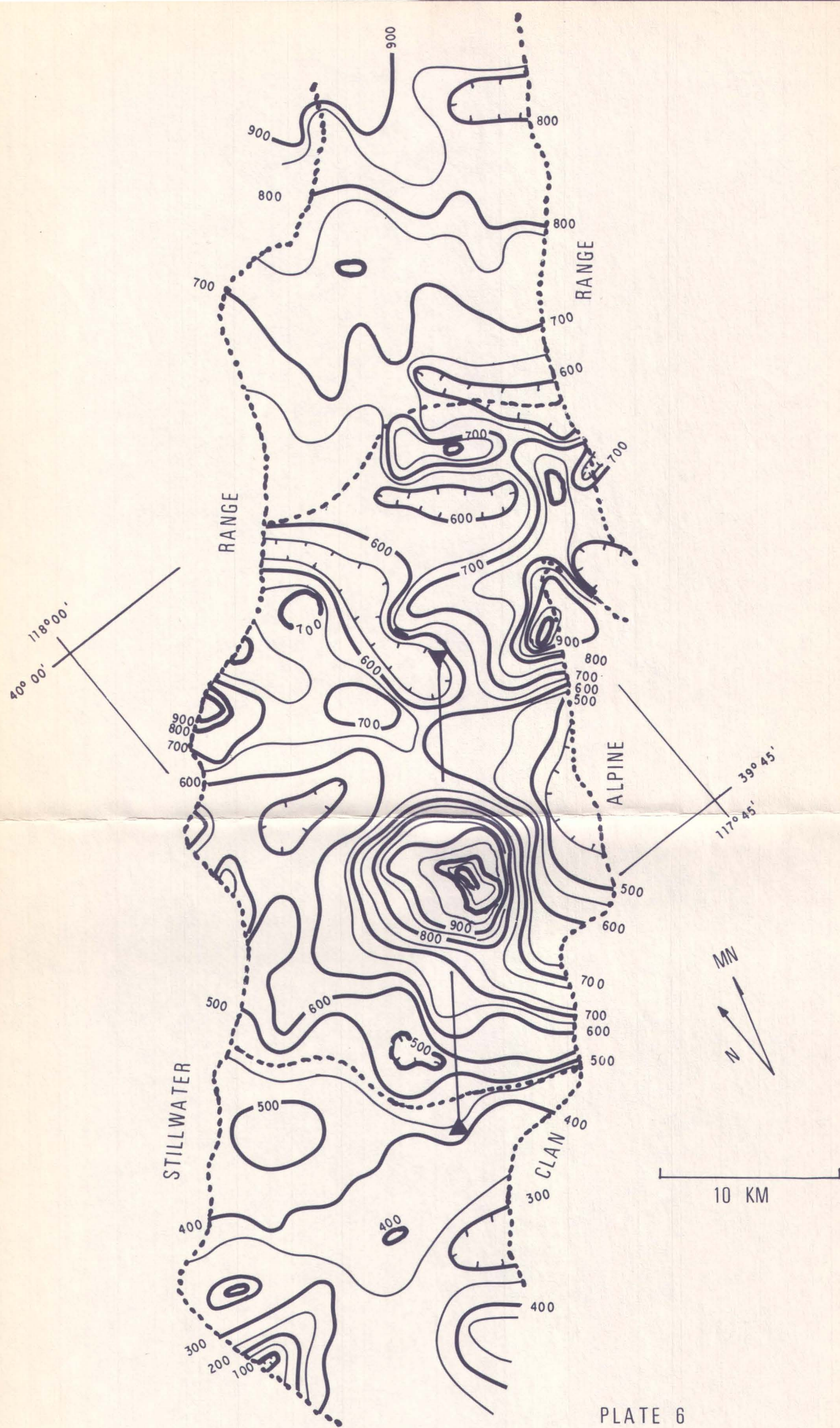


PLATE 6

DIXIE VALLEY, NEVADA

AEROMAGNETIC TOTAL INTENSITY ANOMALY

Barometric Elevation: 4200 ft.
 Contour Interval: 50 gammas

(from Thomas Smith, 1967)

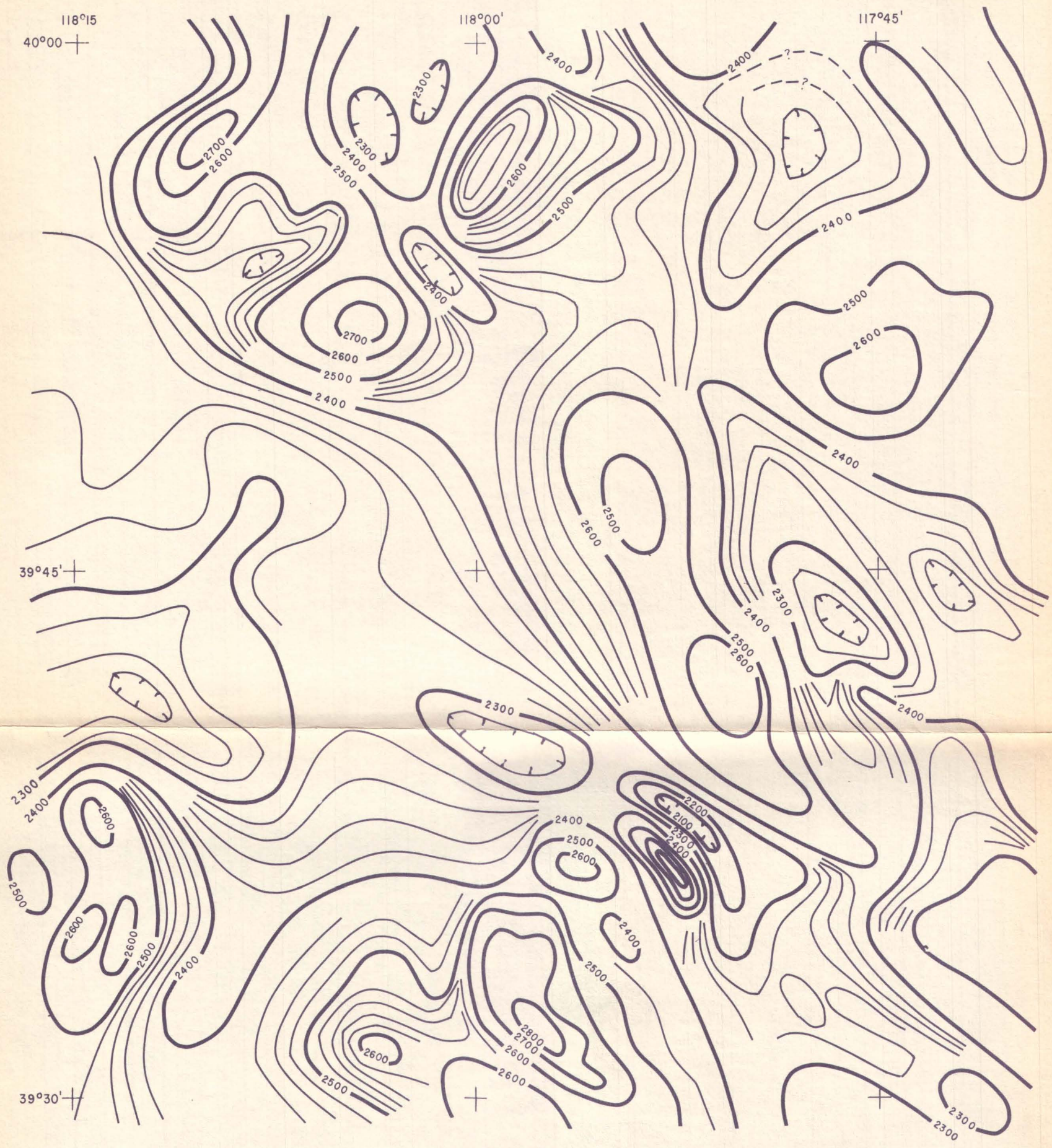


PLATE 8

DIXIE VALLEY, NEVADA
AEROMAGNETIC MAP

Barometric Elevation 9000 Ft.
USGS open file, 1972

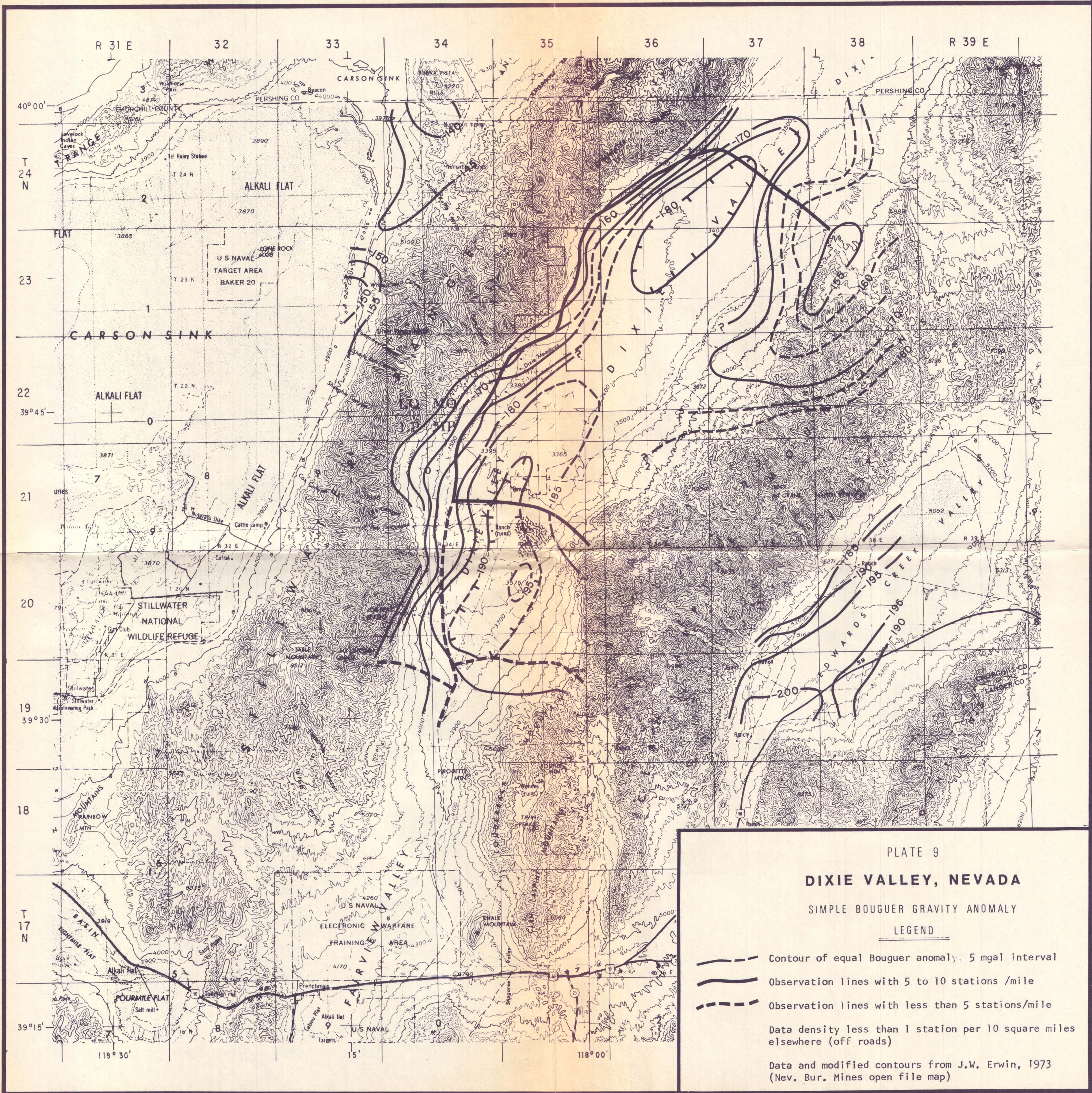



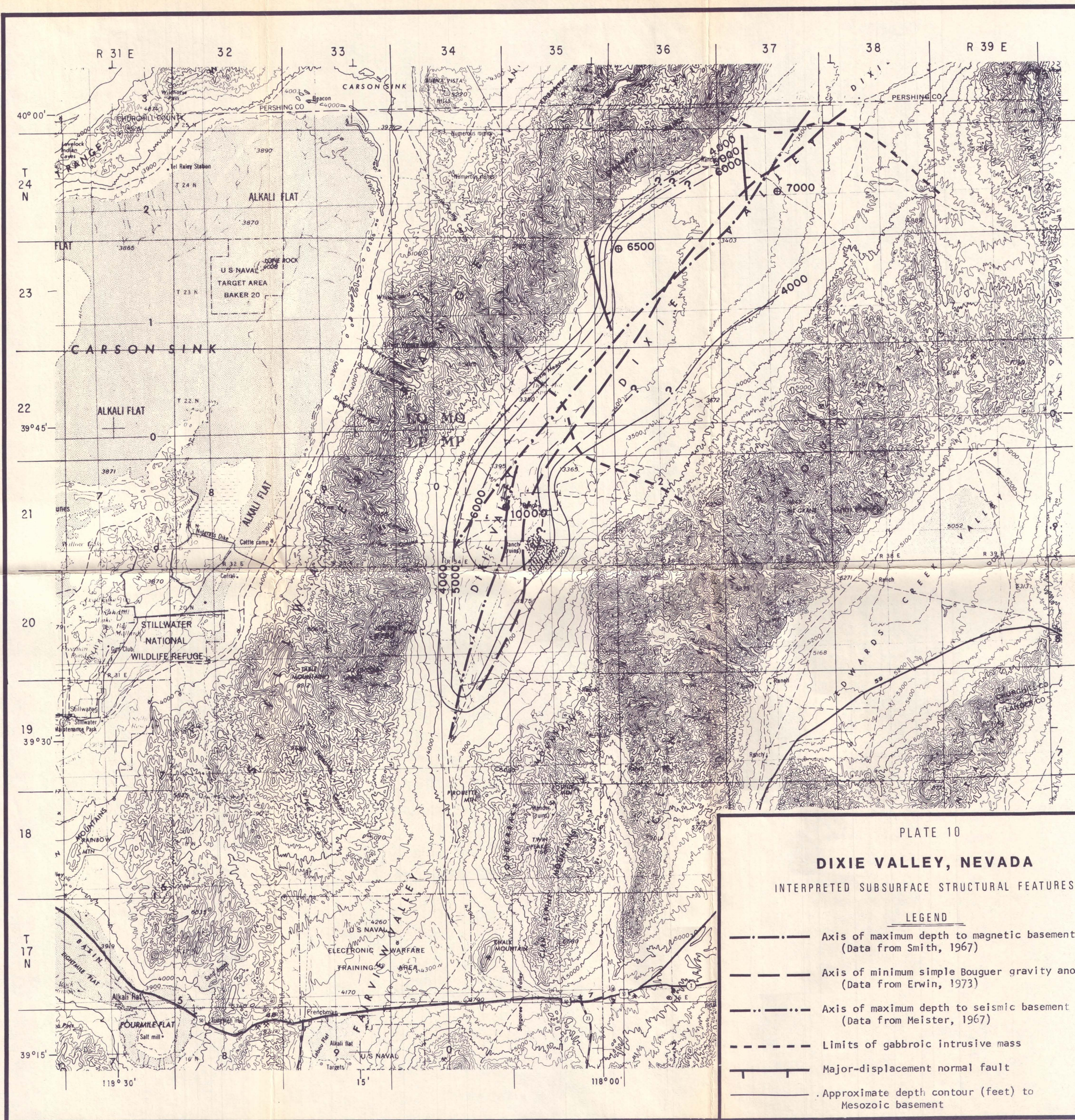


PLATE 9
DIXIE VALLEY, NEVADA

SIMPLE BOUGUER GRAVITY ANOMALY

LEGEND

-  Contour of equal Bouguer anomaly, 5 mgal interval
-  Observation lines with 5 to 10 stations /mile
-  Observation lines with less than 5 stations/mile
- Data density less than 1 station per 10 square miles elsewhere (off roads)
- Data and modified contours from J.W. Erwin, 1973 (Nev. Bur. Mines open file map)



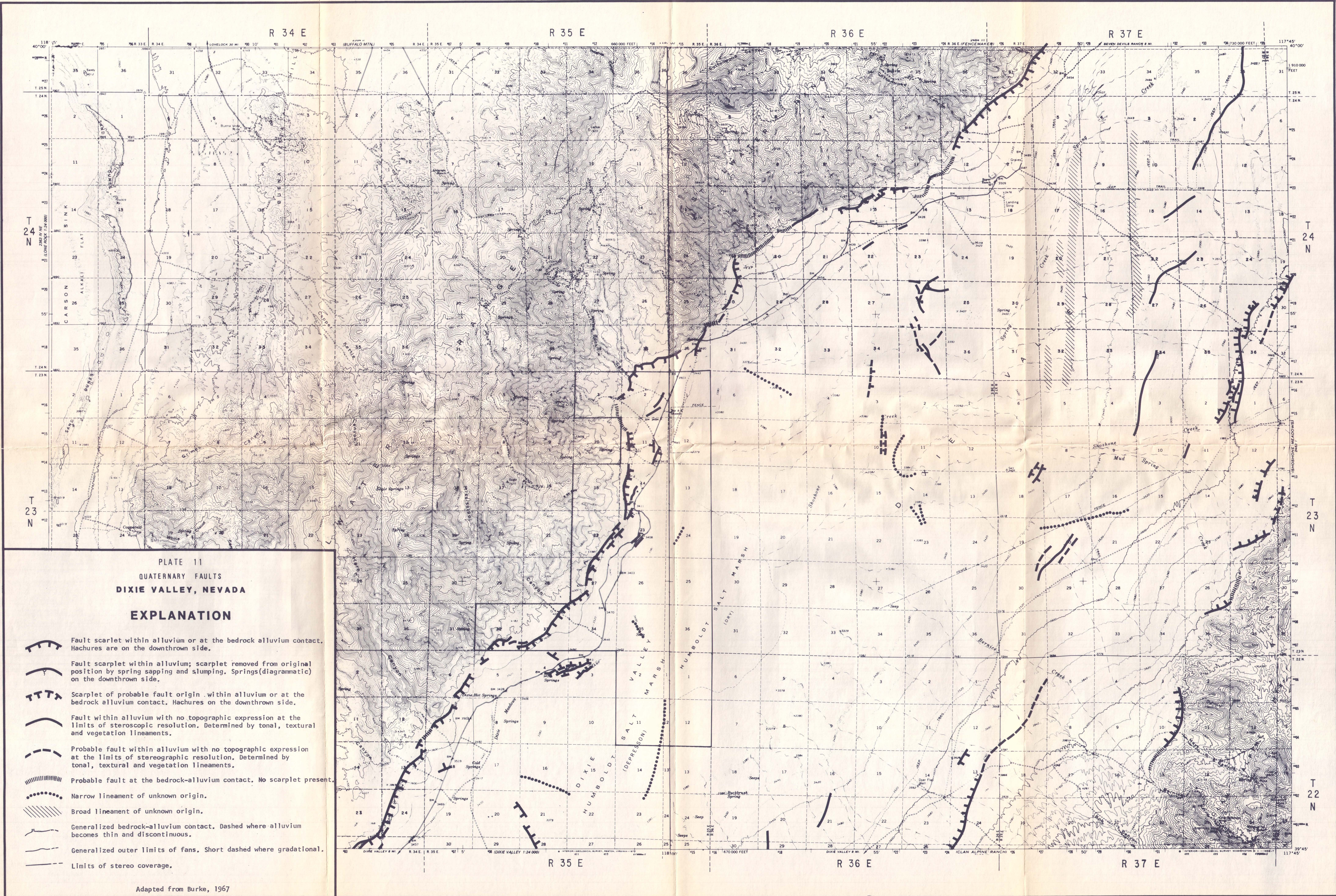







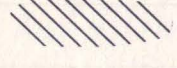

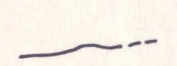
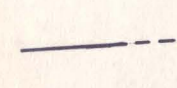


PLATE 11
 QUATERNARY FAULTS
 DIXIE VALLEY, NEVADA
 EXPLANATION

-  Fault scarplet within alluvium or at the bedrock alluvium contact. Hachures are on the downthrown side.
-  Fault scarplet within alluvium; scarplet removed from original position by spring sapping and slumping. Springs (diagrammatic) on the downthrown side.
-  Scarplet of probable fault origin within alluvium or at the bedrock alluvium contact. Hachures on the downthrown side.
-  Fault within alluvium with no topographic expression at the limits of stereoscopic resolution. Determined by tonal, textural and vegetation lineaments.
-  Probable fault within alluvium with no topographic expression at the limits of stereographic resolution. Determined by tonal, textural and vegetation lineaments.
-  Probable fault at the bedrock-alluvium contact. No scarplet present.
-  Narrow lineament of unknown origin.
-  Broad lineament of unknown origin.
-  Generalized bedrock-alluvium contact. Dashed where alluvium becomes thin and discontinuous.
-  Generalized outer limits of fans. Short dashed where gradational.
-  Limits of stereo coverage.

Adapted from Burke, 1967

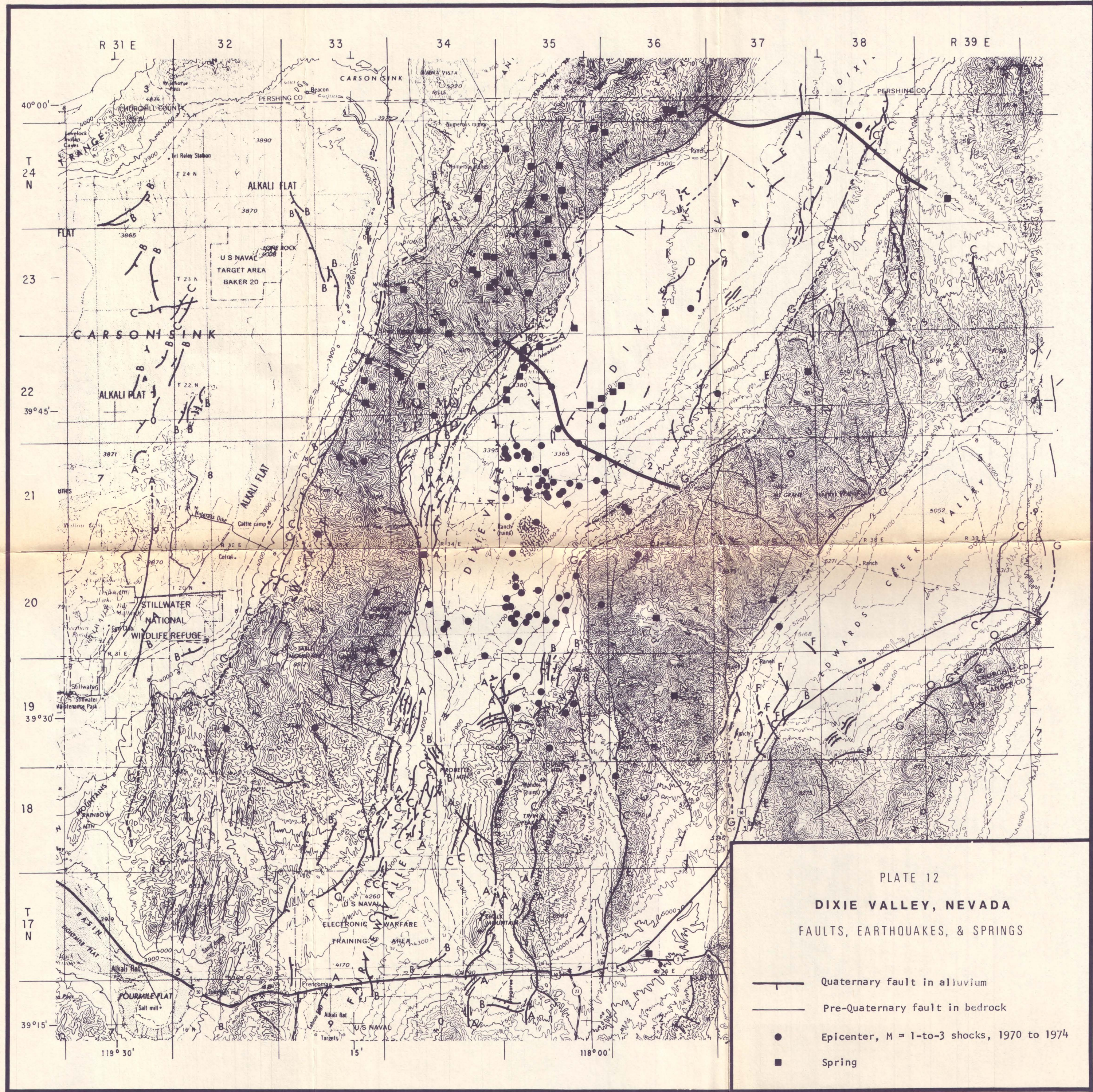


PLATE 12
DIXIE VALLEY, NEVADA
 FAULTS, EARTHQUAKES, & SPRINGS

- Quaternary fault in alluvium
- Pre-Quaternary fault in bedrock
- Epicenter, M = 1-to-3 shocks, 1970 to 1974
- Spring

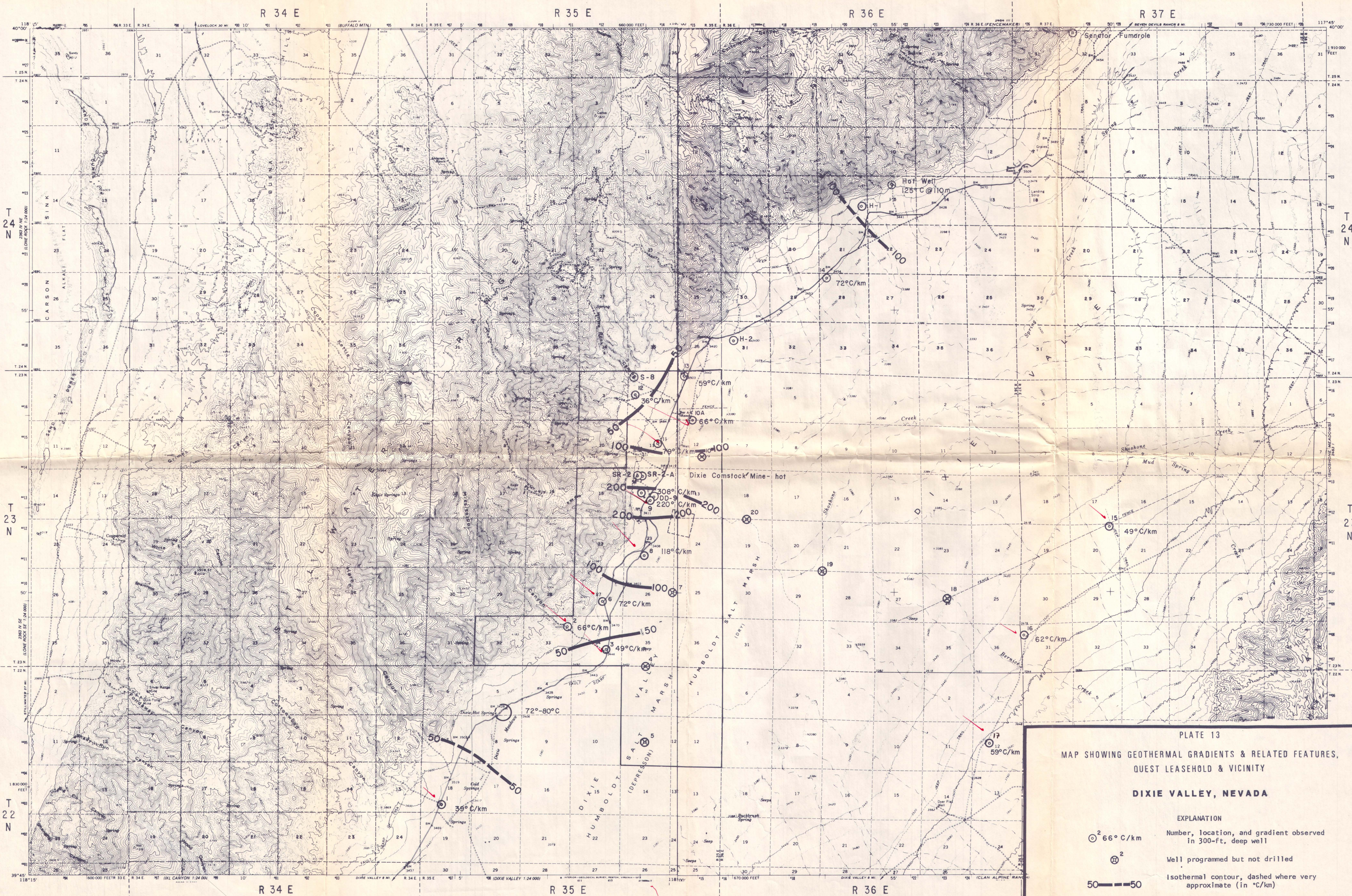
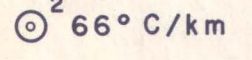

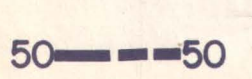
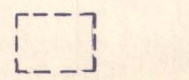


PLATE 13
 MAP SHOWING GEOTHERMAL GRADIENTS & RELATED FEATURES,
 QUEST LEASEHOLD & VICINITY

DIXIE VALLEY, NEVADA

EXPLANATION

- 
 Number, location, and gradient observed in 300-ft. deep well
- 
 Well programmed but not drilled
- 
 Isothermal contour, dashed where very approximate (in °C/km)
- 
 Location of two proposed 1500-ft. test wells