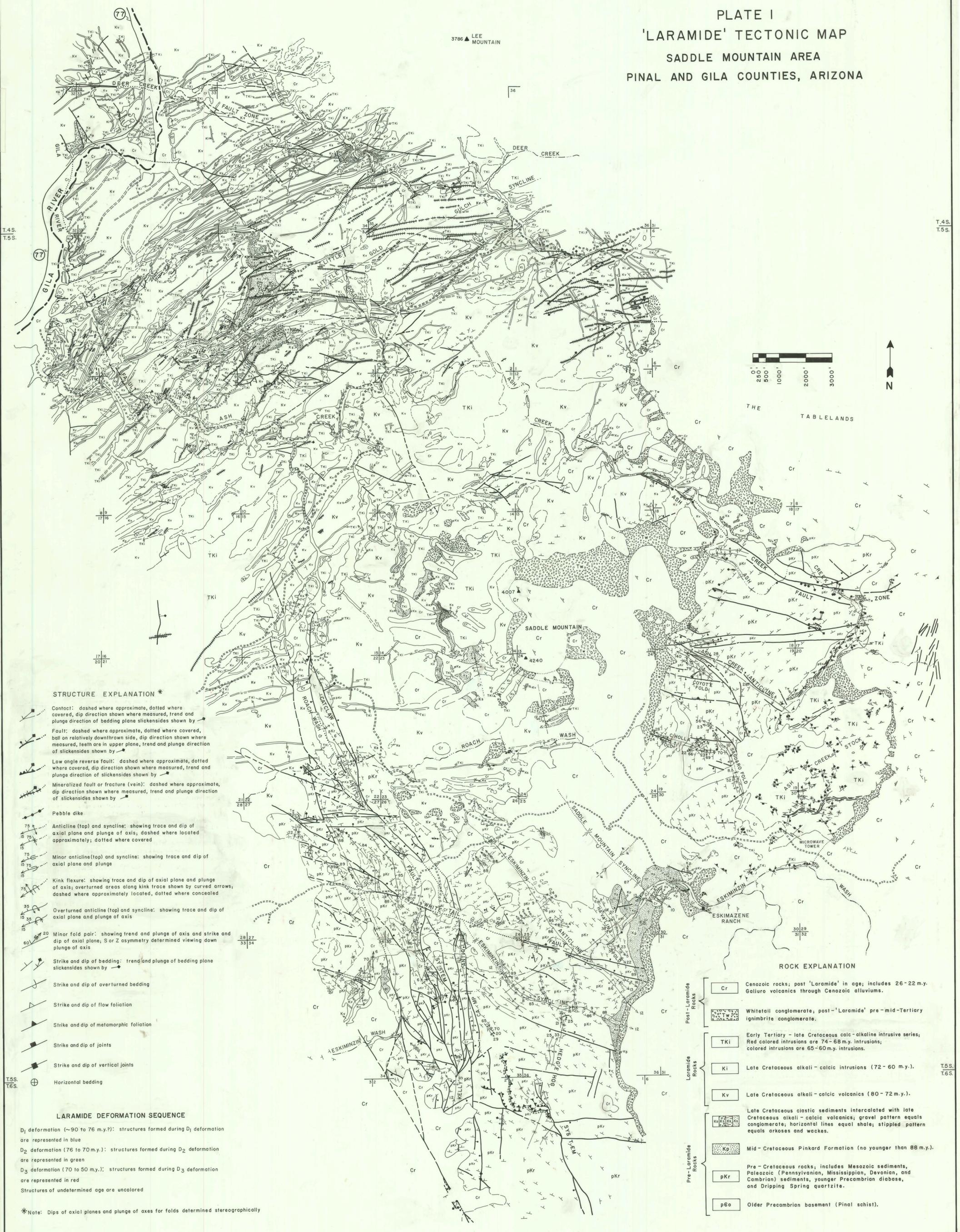


PLATE I 'LARAMIDE' TECTONIC MAP SADDLE MOUNTAIN AREA PINAL AND GILA COUNTIES, ARIZONA



T.4S.
T.5S.

T.4S.
T.5S.



STRUCTURE EXPLANATION *

- Contact: dashed where approximate, dotted where covered, dip direction shown where measured, trend and plunge direction of bedding plane slickensides shown by
- Fault: dashed where approximate, dotted where covered, ball on relatively downthrown side, dip direction shown where measured, teeth are in upper plane, trend and plunge direction of slickensides shown by
- Low angle reverse fault: dashed where approximate, dotted where covered, dip direction shown where measured, trend and plunge direction of slickensides shown by
- Mineralized fault or fracture (vein): dashed where approximate, dip direction shown where measured, trend and plunge direction of slickensides shown by
- Pebble dike
- Anticline (top) and syncline: showing trace and dip of axial plane and plunge of axis; dashed where located approximately; dotted where covered
- Minor anticline (top) and syncline: showing trace and dip of axial plane and plunge
- Kink flexure: showing trace and dip of axial plane and plunge of axis; overturned areas along kink trace shown by curved arrows; dashed where approximately located, dotted where concealed
- Overturned anticline (top) and syncline: showing trace and dip of axial plane and plunge of axis
- Minor fold pair: showing trend and plunge of axis and strike and dip of axial plane; S or Z asymmetry determined viewing down plunge of axis
- Strike and dip of bedding: trend and plunge of bedding plane slickensides shown by
- Strike and dip of overturned bedding
- Strike and dip of flow foliation
- Strike and dip of metamorphic foliation
- Strike and dip of joints
- Strike and dip of vertical joints
- Horizontal bedding

LARAMIDE DEFORMATION SEQUENCE

- D₁ deformation (~90 to 76 m.y.): structures formed during D₁ deformation are represented in blue
- D₂ deformation (76 to 70 m.y.): structures formed during D₂ deformation are represented in green
- D₃ deformation (70 to 50 m.y.): structures formed during D₃ deformation are represented in red
- Structures of undetermined age are uncolored

*Note: Dips of axial planes and plunge of axes for folds determined stereographically

ROCK EXPLANATION

- Post-Laramide Rocks**
 - Cr Cenozoic rocks; post 'Laramide' in age; includes 26-22 m.y. Galiuro volcanics through Cenozoic alluviums.
 - Whitetail conglomerate, post-'Laramide' pre-mid-Tertiary ignimbrite conglomerate.
- Laramide Rocks**
 - TKi Early Tertiary - late Cretaceous calc-alkaline intrusive series; Red colored intrusions are 74-68 m.y. intrusions; colored intrusions are 65-60 m.y. intrusions.
 - Ki Late Cretaceous alkali-calcic intrusions (72-60 m.y.).
 - Kv Late Cretaceous alkali-calcic volcanics (80-72 m.y.).
 - Late Cretaceous clastic sediments intercalated with late Cretaceous alkali-calcic volcanics; gravel pattern equals conglomerate; horizontal lines equal shale; stippled pattern equals arkoses and wacks.
- Pre-Laramide Rocks**
 - Kp Mid-Cretaceous Pinkard Formation (no younger than 88 m.y.).
 - pKr Pre-Cretaceous rocks; includes Mesozoic sediments, Paleozoic (Pennsylvanian, Mississippian, Devonian, and Cambrian) sediments, younger Precambrian diabase, and Dripping Spring quartzite.
 - p60 Older Precambrian basement (Pinal schist).

T.5S.
T.6S.