WHITE SAGE FLAT

DOG VALLEY

Pavant Thrust

Red Ridge Thrust

Baker Canyon

Gravel Pit

Prospect

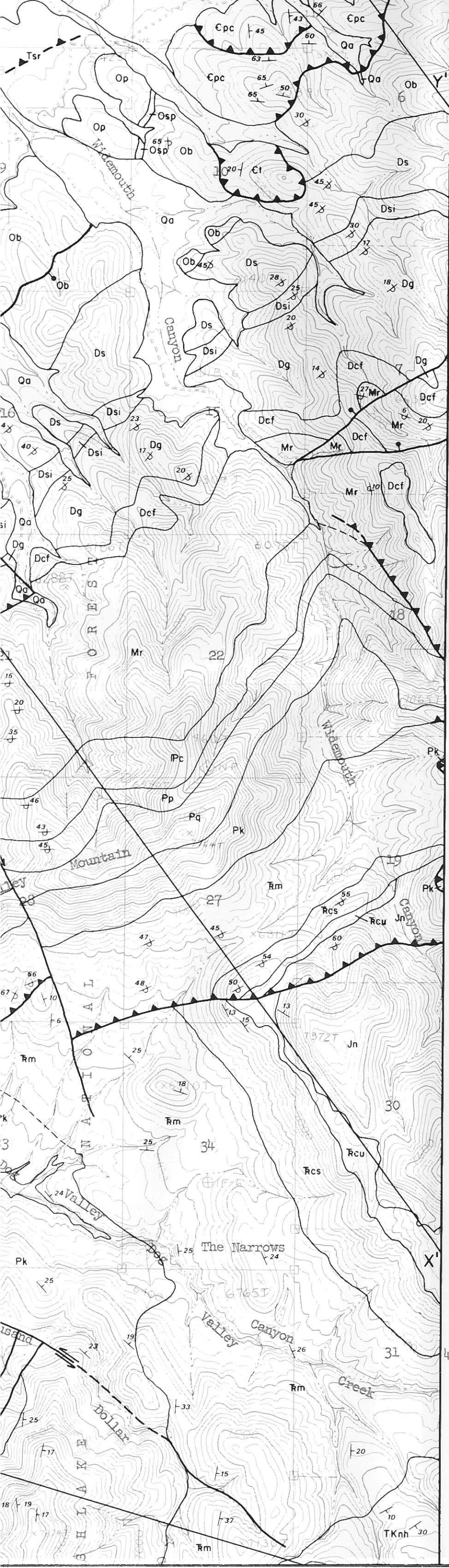
Corral

42°30"

40°

T.24 S.

T.25 S.



EXPLANATION

Qa — ALLUVIUM (Recent) -- Unconsolidated boulders, cobbles, pebbles, sand, and clay of varied composition.

Tsr — SEVIER RIVER FORMATION (Tertiary) -- Consolidated and semi-consolidated pebble and boulder conglomerate of varied composition; also some thin sandstones and siltstones; abundant volcanic clasts in the conglomerate.

Tv — VOLCANIC ROCKS UNDIVIDED (Tertiary) -- Volcanic rocks of varied composition.

TKnh — NORTH HORN FORMATION (Cretaceous - Tertiary) -- Conglomerate with Paleozoic and Mesozoic sedimentary cobbles and pebbles in a red to gray matrix; pink micritic dolomites and limestones at the top with interbedded fine-grained, pink sandstones and white bentonitic shales; no volcanic cobbles; 550± m thick.

UNCONFORMITY

Jn — NAVAJO SANDSTONE (Jurassic) -- Brick red to white, fine-grained, crossbedded, massive sandstone; 100% quartz, frosted grains; 345 m thick.

UNCONFORMITY

CHINLE FORMATION (Triassic)

Trcu — UPPER MEMBER -- Maroon, red, purple, and green siltstones and shales; very thin bedded; abundant calcite nodules: forms soil and rubble-covered slope; 21 m thick.

Trcs — SHINARUMP CONGLOMERATE MEMBER -- Light brown, fluvial sandstone, gritstone, and pebble conglomerate; grains and clasts of quartz, quartzite, and chert; forms rounded ledges and cliffs; petrified wood; 97.5 m thick.

UNCONFORMITY

Trm — MOENKOPI FORMATION (Triassic) -- Red and green, thin-bedded siltstones and shales; ripplemarks, crossbeds, and mudcracks; Base: fossiliferous, greenish gray limestone unit contains abundant Meekoceras ammonoids. Middle: fossiliferous, gray limestones contain Pentacrinus whitei: 646.5 m thick.

UNCONFORMITY

Pk — KAIBAB LIMESTONE (Permian) -- Base: medium to light gray, fine-grained, cherty dolomite; medium to thin bedded, few fossils. Middle: medium gray to brown, coarse-grained, cherty, fossiliferous limestone; brachiopods, sponges, bryozoans, and crinoids. Upper: medium gray to brown, sandy dolomites, dolomitic sandstones, and chert; no fossils; 353 m thick.

UNCONFORMITY

Pq — QUEANTOWEAP SANDSTONE (Permian) -- Varigated pink, purple, orange brown, brown, gray, and white, fine-grained sandstone; clean with well-rounded grains; forms blocky talus-covered slopes with few ledges; 249 m thick.

UNCONFORMITY

Pp — PAKOON DOLOMITE (Permian) -- Pinkish brown to medium grayish brown, fine-grained dolomite; some minor chert; clear calcite blebs and nodules; basal conglomerate with corals in chert cobbles; 135.5 m thick.

UNCONFORMITY

Pc — CALLVILLE LIMESTONE (Pennsylvanian) -- Medium to light gray, cherty, dolomitic limestones and dolomites; chert - white; medium to thick bedded; Fusulina; 164 m thick.

UNCONFORMITY

Mr — REDWALL LIMESTONE (Mississippian) --UNIT A: Pinkish gray, fine-grained, basal dolomite with interbedded limestones; abundant rugose corals and crinoids. UNIT B: Dark gray to light gray and brown, fine-grained, fossiliferous limestones; thin bedded, cherty, distinct hydrocarbon odor on fresh fracture, brachiopods, Fenestellid bryozoans, and crinoids. UNIT C: Light to medium brown, fine-grained sandstone; crossbedded; interbedded limestones; Lithostrontionella and Syringopora in limestone at top of formation; 471 m thick.

UNCONFORMITY

Dcf — COVE FORT QUARTZITE (Devonian) -- Light pink, pinkish gray, light brown, medium-grained quartzite; highly fractured and re-silicified; quartz grains can be seen on fresh and weathered surfaces; interbedded pinkish gray, fine-grained dolomite in middle of formation; 48.5 m thick.

Dg — GUILMETTE FORMATION (Devonian) -- Medium to dark gray to medium brown, fine-grained, sandy dolomite; few interbedded quartzite layers; "twiggy" bodies and Coenites; 174.5 m thick.

Dsi — SIMONSON DOLOMITE (Devonian) -- Light gray to light brown, medium-to coarse-grained, "sugary" dolomite; thinly laminated; thin bedded; 55.5 m thick.

Ds — SEVY DOLOMITE (Devonian) -- Very light gray to white, dense, micritic dolomite; very fine grained sandstone at top; fossiliferous shaley section 30 m from base, contains Cephalaspis fish fragments; medium to thick bedded; 216.5 m thick.

UNCONFORMITY

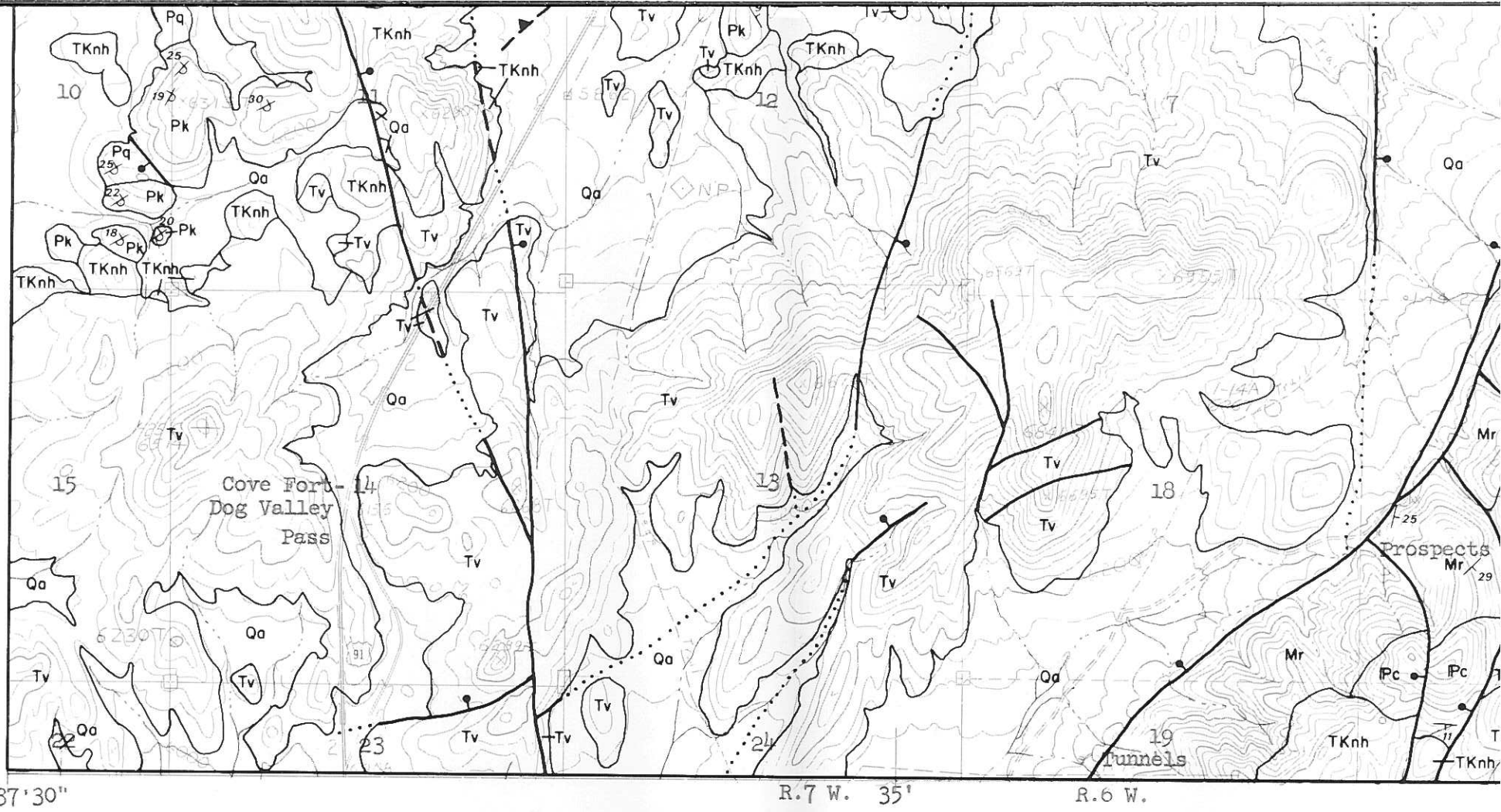
Ob — BLUEBELL DOLOMITE (Ordovician-Silurian) -- Dark gray, fine-grained, cherty dolomite; algal mat stromatolite structures in chert; few rugose corals; 172.5 m thick.

UNCONFORMITY

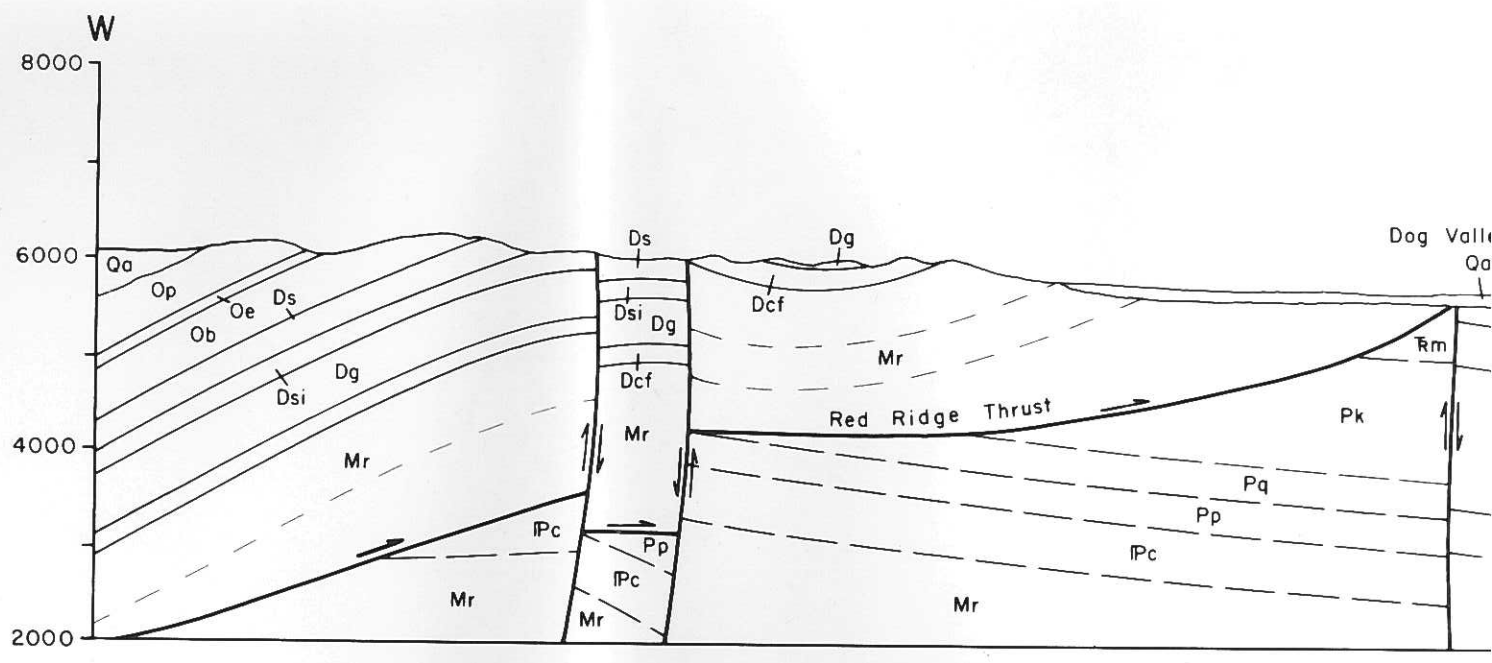
Oe — EUREKA QUARTZITE (Ordovician) -- White to light pink quartzite; highly fractured and re-silicified; forms resistant ledge or quartzite rubble covered slope; 45 m thick.

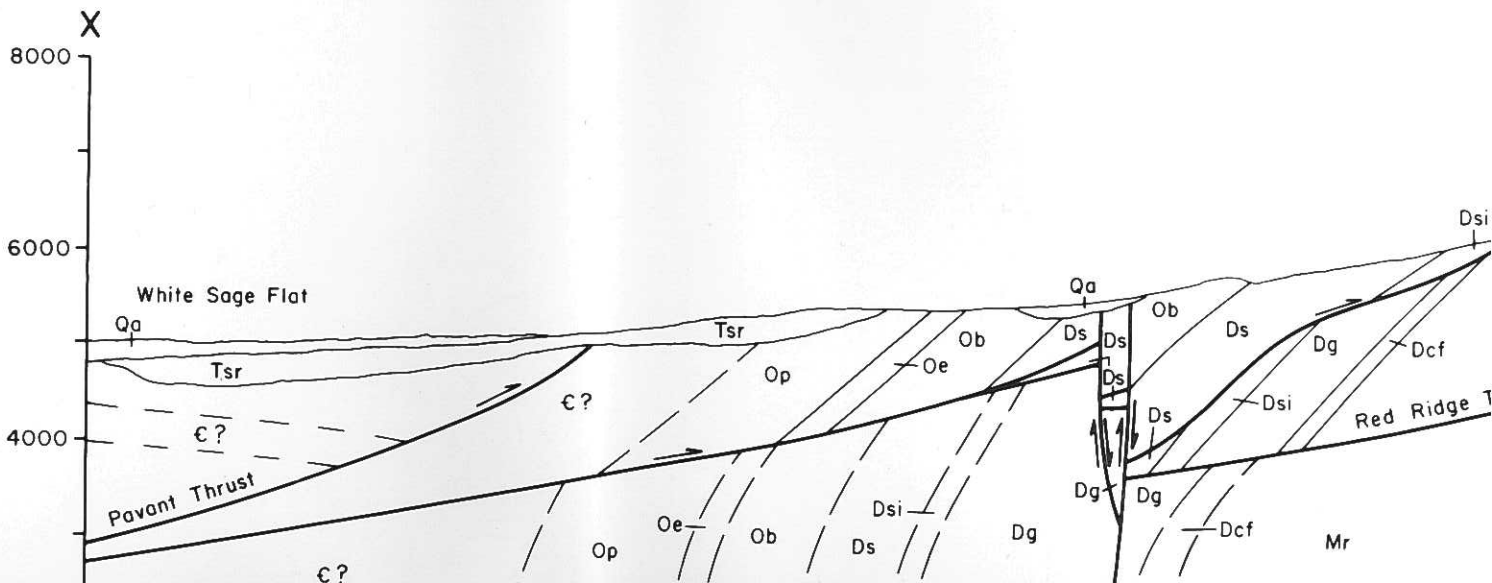
Op — POGONIP GROUP (Ordovician) -- Medium gray, fine grained limestone and limestone intraformational conglomerate; occasional cherty and sandy layers; top of formation is orange to yellowish orange shales with thin interbedded purplish gray, fossiliferous limestones; Orthid brachiopods, trilobite fragments, gastropods, crinoids, and worm trails; 343 m thick.

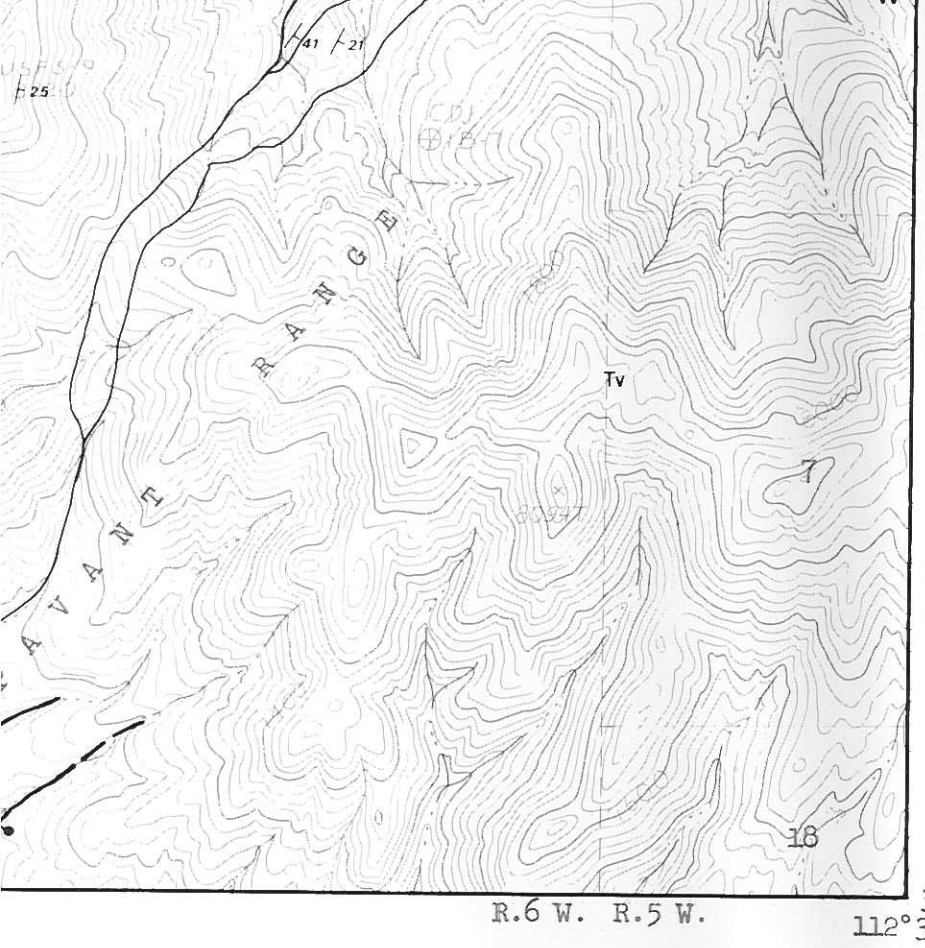
THRUST



Geology
Southern Pavan







€u CAMBRIAN ROCKS UNDIVIDED -- Medium gray limestones and dolomites; Glossopleura in thin limestone and shaley units at base; 125 m thick.

€p PIOCHE FORMATION (Cambrian) -- LOWER MEMBER: Olive green to greenish gray phyllitic shale; thin interbedded quartzites and dolomites; Skolithos tubes and worm burrows; 59 m thick. TATOW MEMBER: Mottled, bluish gray limestone; Chancelloria eros sponge spicules and trilobite fragments; greenish gray thin-bedded, miceous shale; ripplemarks and worm burrows; blue gray massive dolomite; weathers light brown; meringue weathering; 27.4 m thick.

€t TINTIC QUARTZITE (Cambrian) -- White, light pink, and purple indurated quartzite; crossbedded; few thin lenticular pebble conglomerate layers; glauconite near the top; highly fractured and re-silicified; 172 m thick.

SYMBOLS

Strike and dip of beds

Strike and dip of overturned beds

Strike of vertical beds

Strike of horizontal beds

Depositional contact, dashed where approximately located

Strike-slip fault, dashed where approximately located

Thrust fault, dashed where approximately located, dotted where concealed, sawteeth on upper plate

Normal fault, dashed where approximately located, dotted where concealed, ball on downthrown block

H

E LOCATION

Valley Area,
Millard County, Utah

avis