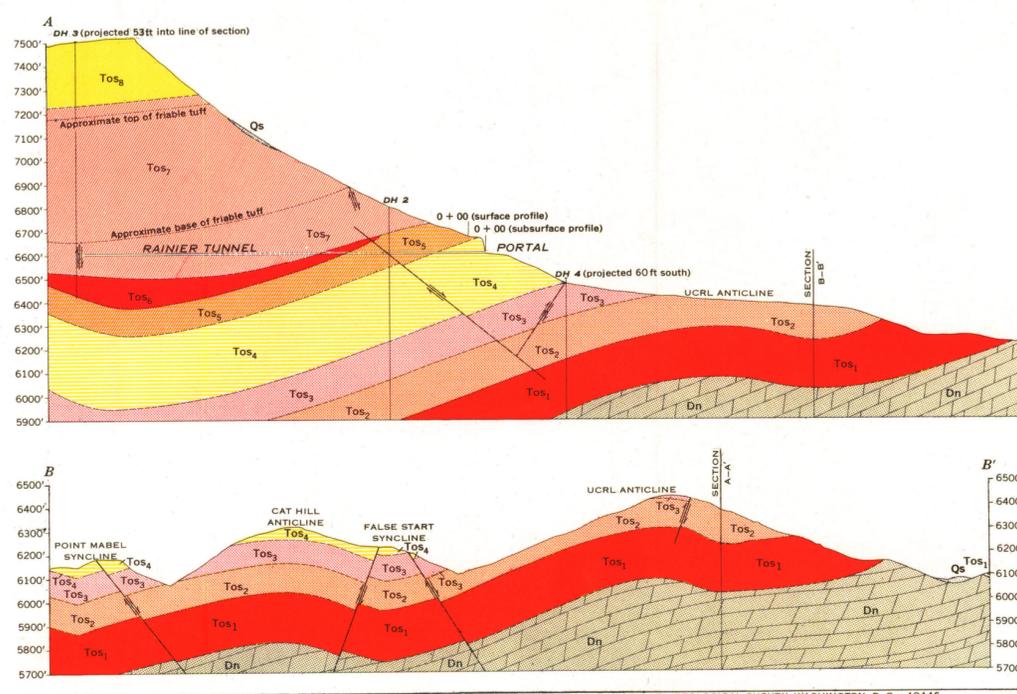


**EXPLANATION**

- |   |   |
|---|---|
| <p><b>Recent</b></p> <p><b>Quaternary</b></p>               | <p><b>Qs</b><br/>Surficial deposit<br/>Colluvium and alluvium.<br/>Mostly coarse boulders,<br/>poorly sorted rubble, but<br/>includes fine sand on<br/>Rainier Mesa west of<br/>Point Mabel</p>   |
| <p><b>Miocene (?) or younger</b></p> <p><b>Tertiary</b></p> | <p><b>Tos8</b><br/>Unit 8<br/>Tuff, welded; about 270 feet<br/>thick; rhyolite to quartz<br/>latite. Forms rimrock of<br/>mesa</p> <p><b>Tos7</b><br/>Unit 7<br/>Tuff, bedded; about 720 feet<br/>thick; mostly loosely ce-<br/>mented and "sandy," but<br/>upper 25 feet is moderately<br/>well-cemented pumiceous<br/>tuff-breccia. Lower 40 to<br/>100 feet forms prominent<br/>but discontinuous outcrop.<br/>Unconformity at base</p> <p><b>Tos6</b><br/>Unit 6<br/>Tuff, welded; maximum<br/>thickness about 125 feet;<br/>lenticular and disconti-<br/>nuous. Unconformity at<br/>base. Forms cliff or ledge</p> <p><b>Tos5</b><br/>Unit 5<br/>Tuff, bedded; about 125 feet<br/>thick; light yellow green<br/>pumiceous and light<br/>weight; forms prominent<br/>outcrop</p> <p><b>Tos4</b><br/>Unit 4<br/>Tuff, bedded; about 285 to<br/>360 feet thick; light gray<br/>to buff; a few pink beds,<br/>especially toward top.<br/>Generally compact; forms<br/>low cliffs and ledges</p> <p><b>Tos3</b><br/>Unit 3<br/>Tuff, bedded; about 140 feet<br/>thick; prominent red beds<br/>at top and base; pink to<br/>buff interbeds, good ledge<br/>former</p> <p><b>Wt</b><br/>Unit 2<br/>Tuff, bedded; about 125 feet<br/>thick; mostly light gray<br/>to buff but contains a few<br/>thin pink, lavender, to<br/>brown beds. Forms low<br/>ledges. Contains welded<br/>tuff lens, wt, in northeast<br/>part of area</p> <p><b>Tos1</b><br/>Unit 1<br/>Tuff, bedded; about 210 feet<br/>thick; mostly purplish to<br/>pinkish red. Prominent<br/>ledges top and base. Lo-<br/>cally a basal conglomerate<br/>5 feet thick</p> |
| <p><b>Middle Devonian</b></p> <p><b>Devonian</b></p>        | <p><b>Dn</b><br/>Nevada formation<br/>Dolomite, medium- to dark-<br/>gray hard dense crystal-<br/>line. Thickness undeter-<br/>mined in this area</p>   |



- Geologic boundary  
Dashed where approximately located; dotted  
where concealed
- Fault, showing dip and amount of throw,  
in feet  
Dashed where approximately located; dotted  
where concealed. U, upthrown side; D, down-  
thrown side
- Inferred fault
- Anticline, showing axis and  
direction of plunge  
Dashed where approximately located; dotted  
where concealed
- Syncline, showing axis and direction  
of plunge  
Dashed where approximately located; dotted  
where concealed
- Minor anticline, showing direction and  
amount of plunge
- Minor syncline, showing direction and  
amount of plunge
- Strike and dip of beds
- Strike and dip of joints
- Strike of vertical joints
- Trends of lineaments  
Plotted photogrammetrically. Probably mostly  
joints but may include some faults
- Portal of tunnel  
DH 4  
Drill hole

Geology annotated on air photographs and plotted by multiplex.  
Topography by Hycon Aerial Surveys, Inc.

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—10446

Geology mapped by R. Hansen and W. Lemke, 1957

**GEOLOGIC MAP AND SECTIONS OF THE RAINIER TUNNEL AREA, NEVADA TEST SITE**

