

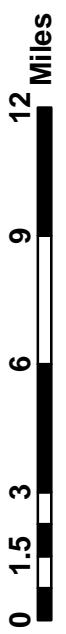
Geologic Cross Section Lines
 A-A', B-B', and C-C' are modified from Mack (1960)

Locations of wells used for the development of geologic cross sections

- **Faults**
- **Rivers, Creeks**
- **Surface Water Bodies**
- **Glacier**

Surface Geology

Geological Period	Surface Geology	Igneous and Meta-igneous Rocks
Cenozoic	Quaternary t Dredge and mine tailings Q Alluvium Qls Landslide deposits Qt Terrace deposits Qg Glacial deposits	Quaternary Qv Pleistocene Volcanic rocks <small>Pluto's Cave Basalt has been identified as Pleistocene, +/- 100,000 - 300,000 ybp (rocks of the High Cascade Volcanics)</small> Qvs Volcanic rocks of Shasta Valley <small>Identified by Crandell et. al. (1989) as a Volcanic Debris Avalanche (+/- 350,000 ybp)</small>
	Tertiary Tc Tertiary continental deposits Kh Hornbrook Formation	Pv Pliocene volcanic rocks <small>(rocks of the High Cascade Volcanics)</small> Tv Western Cascade Volcanics
Mesozoic	Klamath Mountain Terranes Mzd Cbg Dkn Dc Dsq Smc SOd	Eastern Klamath Terrane Mzd Plutonic dioritic rocks Cbg Bragdon Formation Dkn Kennett Formation Dc Copley Greenstone Dsq Gazelle Formation Smc Moffett Creek Formation SOd Duzel Formation
	Western Paleozoic Belt MzPz Undifferentiated metasedimentary rocks MzPz ms metavolcanoclastic sedimentary rocks MzPz mv metavolcanic rocks MzPz s metasedimentary rocks MzPz st metasedimentary rocks MzPz tv metasedimentary rocks	Triassic Belt MzPz s Stuart Fork Formation
Paleozoic	Central Metamorphic Belt Pza Abrams Mica Schist	Antelope Mountain Quartzite Oam Gabbroic and dioritic rocks Qgp Trinity Peridotite Op

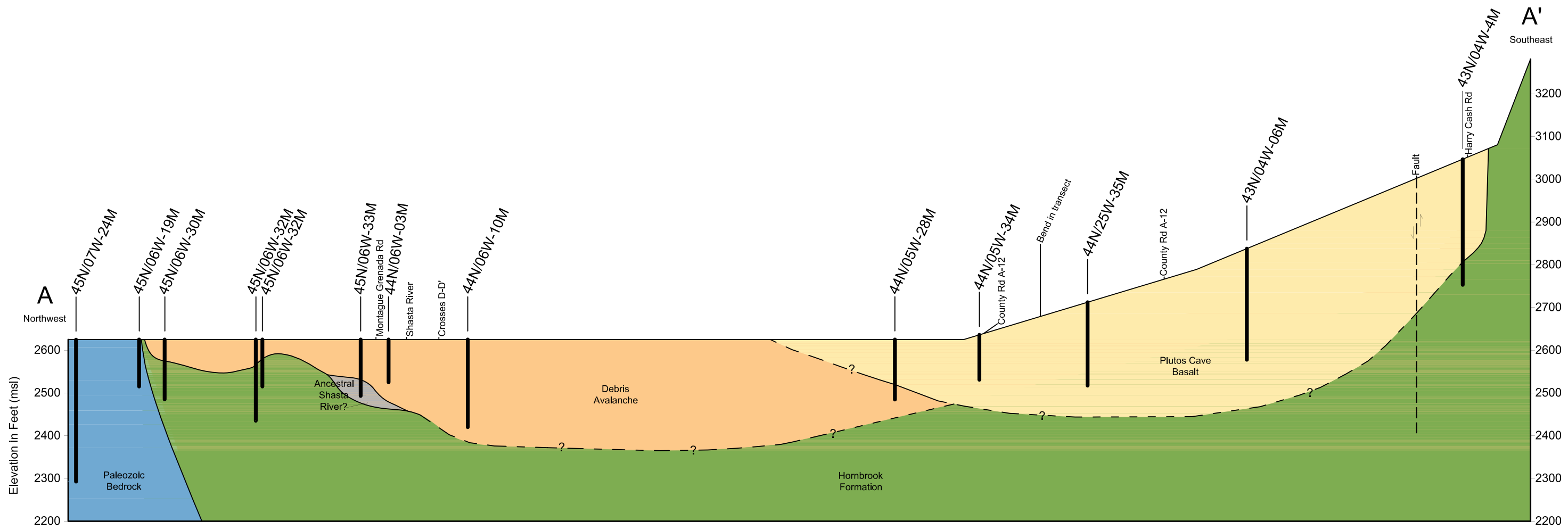


Areal Geology and Geologic Cross Sections
 Shasta Valley, California

California Department of Water Resources - Northern District
 2440 Main St.
 Red Bluff, CA 96080

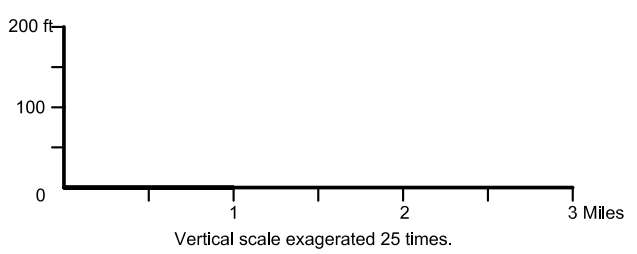
Mack, 1960. Geology and Groundwater Features of Shasta Valley, Siskiyou County California. Water Supply Paper 1484. United States Geological Survey.
 Wagner, et al. 1987. Geologic Map Series, Weed Quadrangle - Map No. 4A (Geology), Sheet 1 of 4. California Division of Mines and Geology.
 Crandell, 1987. Gigantic Debris Avalanche of Pleistocene Age From Ancestral Mount Shasta Volcano, California, and Debris Avalanche Hazard Zonation. Bulletin 1861. United States Geological Survey.


Surface topology shown without vertical exaggeration.

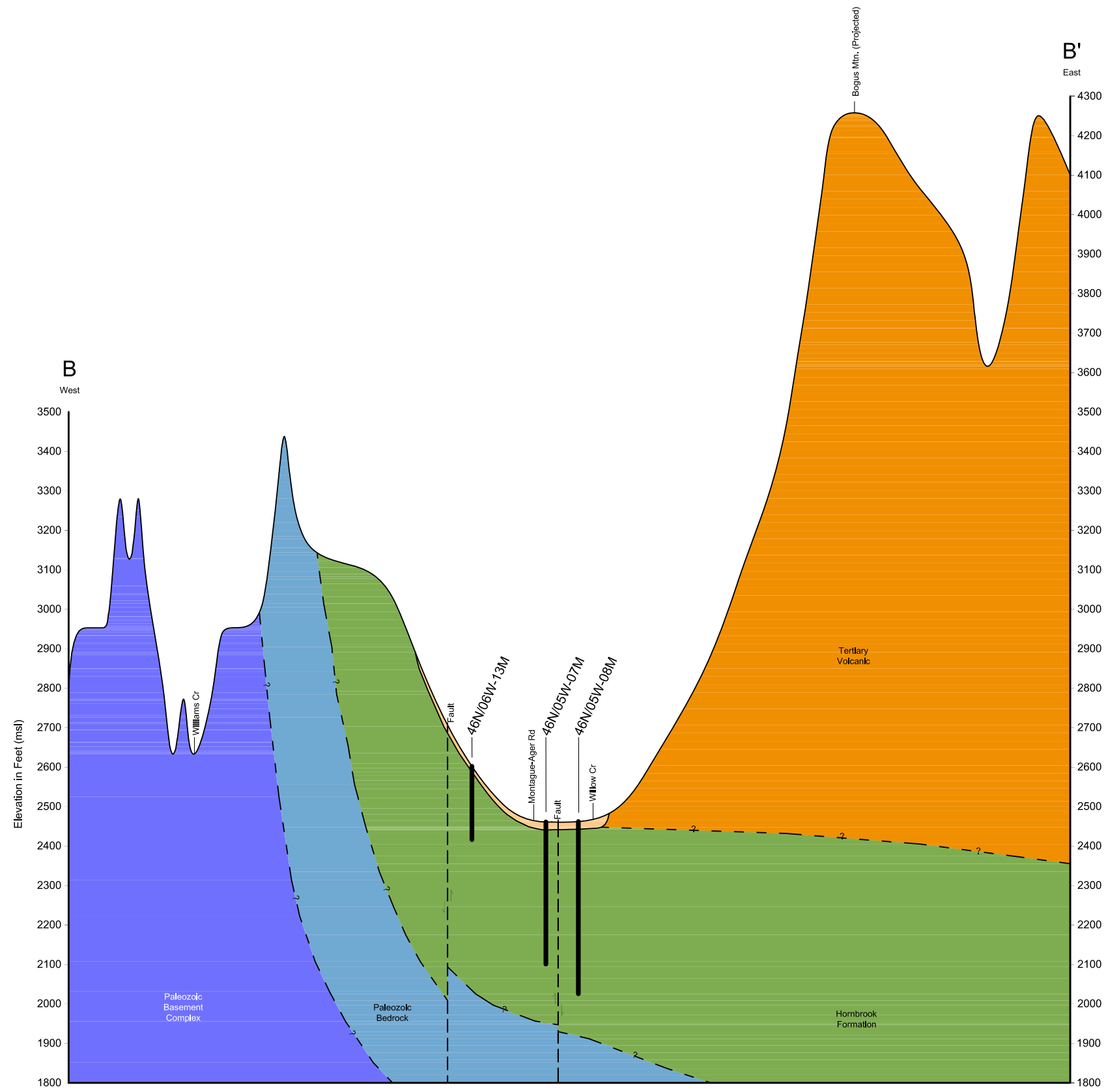
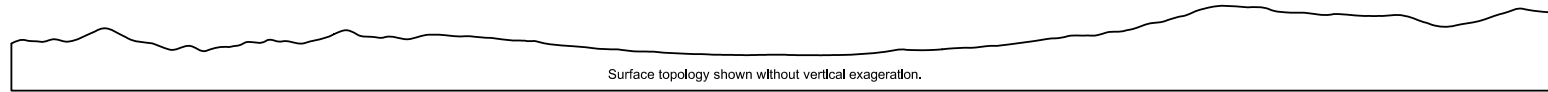


WELL NOTATION
46N/06W-13M- ---- State well number

- Plutos Cave Basalt
- Debris Avalanche
- Buried Gravel Deposit (Ancestral Shasta River?)
- Hornbrook
- Paleozoic Bedrock

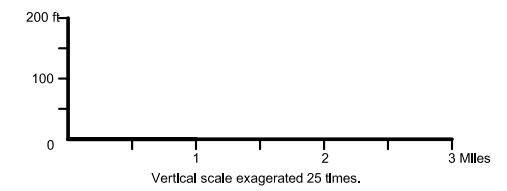


	Geologic Section A-A' Shasta Valley, California
	California Department of Water Resources- Northern District 2440 Main St. Red Bluff, Ca 96080 December 1, 2005



WELL NOTATION
46N/06W-13M - - - State well number

- Debris Avalanche
- Tertiary Volcanic
- Hornbrook
- Paleozoic Bedrock
- Basement Complex Paleozoic



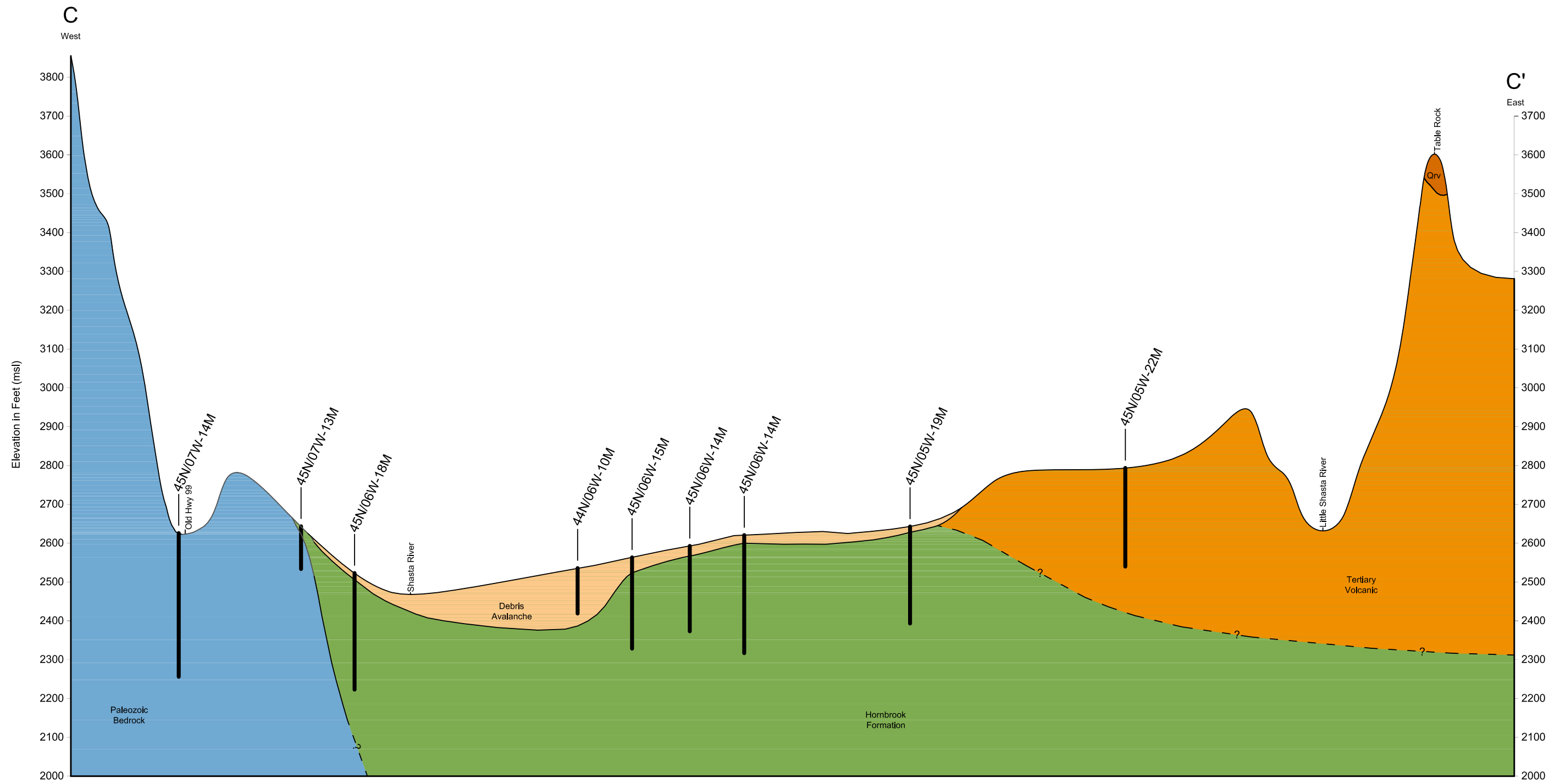
Geologic Section B-B'

Shasta Valley, California

December 1, 2005

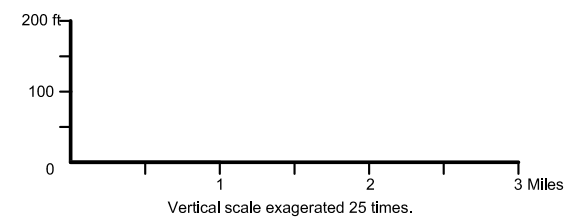
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Red Bluff, Ca 96080

Surface topology shown without vertical exaggeration.



WELL NOTATION
46N/06W-13M---- State well number

- Quarternary Recent Volcanic
- Debris Avalanche
- Tertiary Volcanic
- Hornbrook
- Paleozoic Bedrock

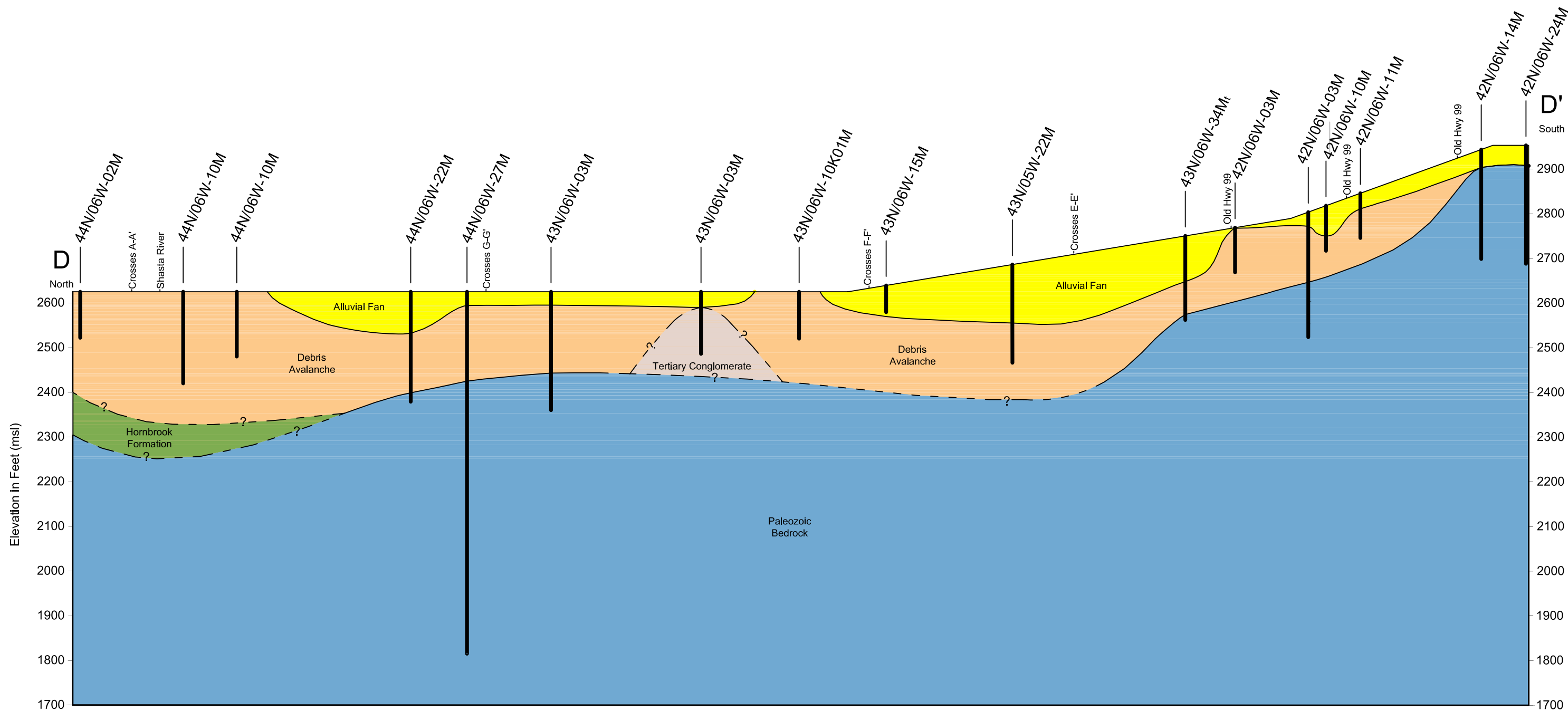


Geologic Section C-C'

Shasta Valley, California

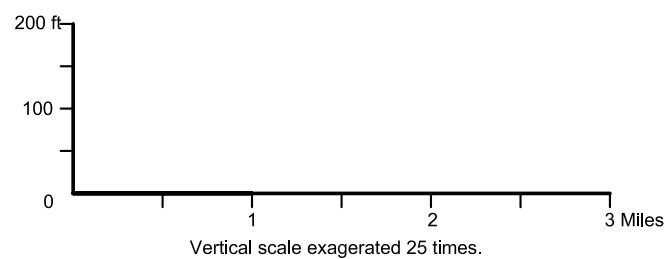
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Red Bluff, Ca 96080

Surface topology shown without vertical exaggeration.



WELL NOTATION
46N/06W-13M----- State well number

- Alluvium
- Debris Avalanche
- Tertiary Conglomerate
- Paleozoic Bedrock
- Hornbrook

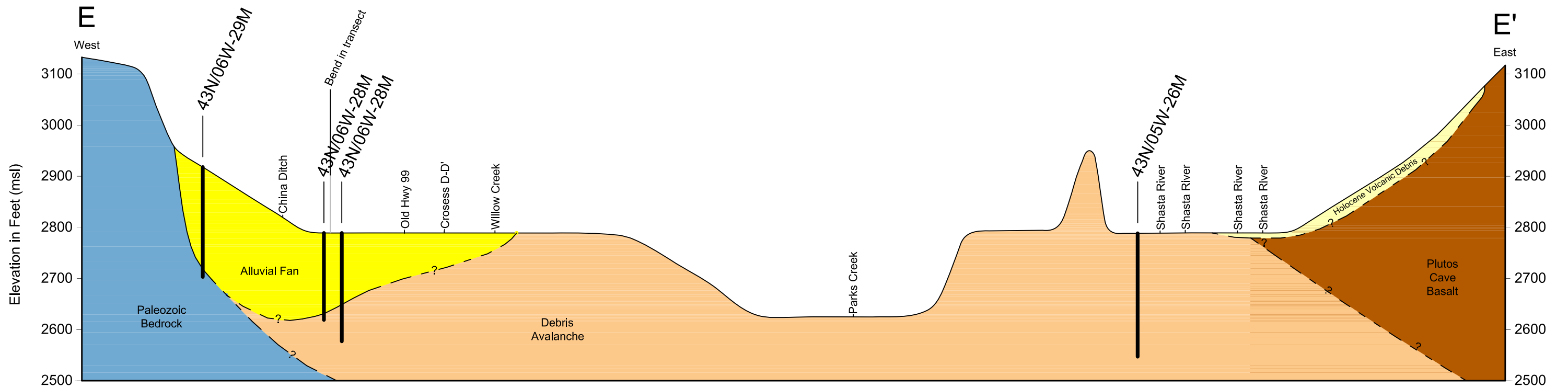
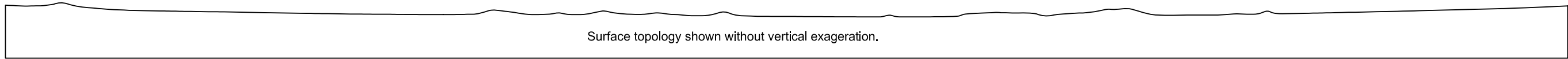


Geologic Section D-D'

Shasta Valley, California

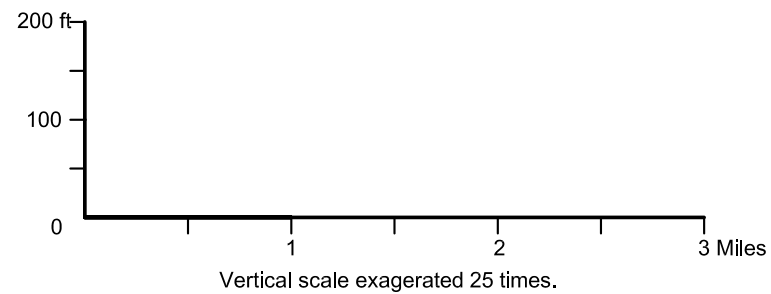
December 1, 2005

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WELL NOTATION
46N/06W-13M----- State well number

- Alluvial Fan
- Holocene Volcanic Debris
- Plutos Cave Basalt
- Debris Avalanche
- Paleozoic Bedrock

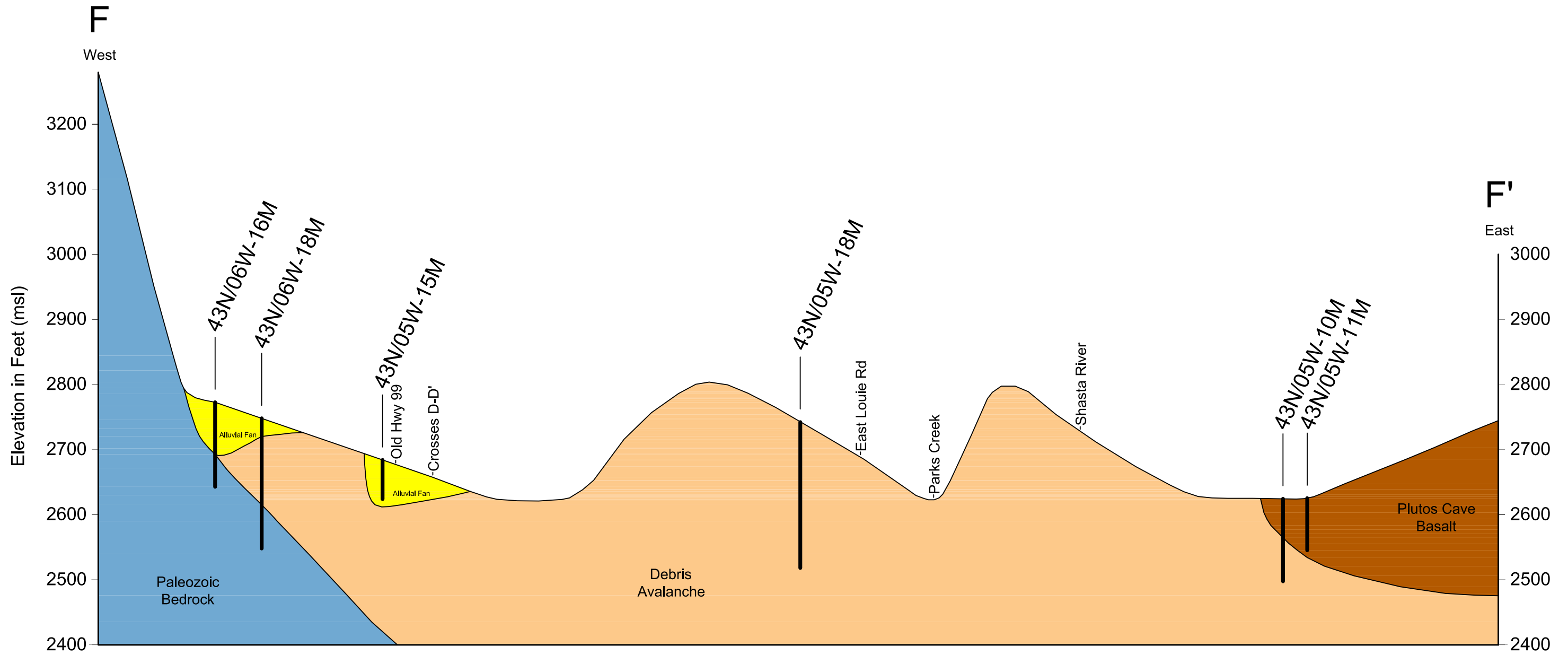


Geologic Section E-E'
Shasta Valley, California

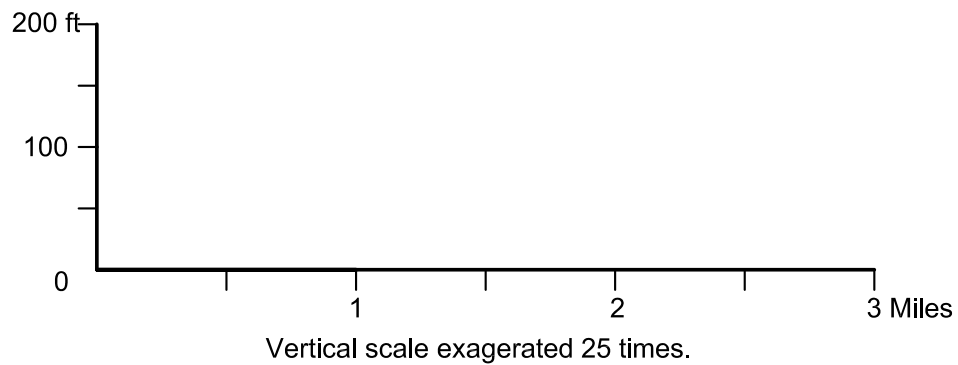
December 1, 2005

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Surface topology shown without vertical exaggeration.



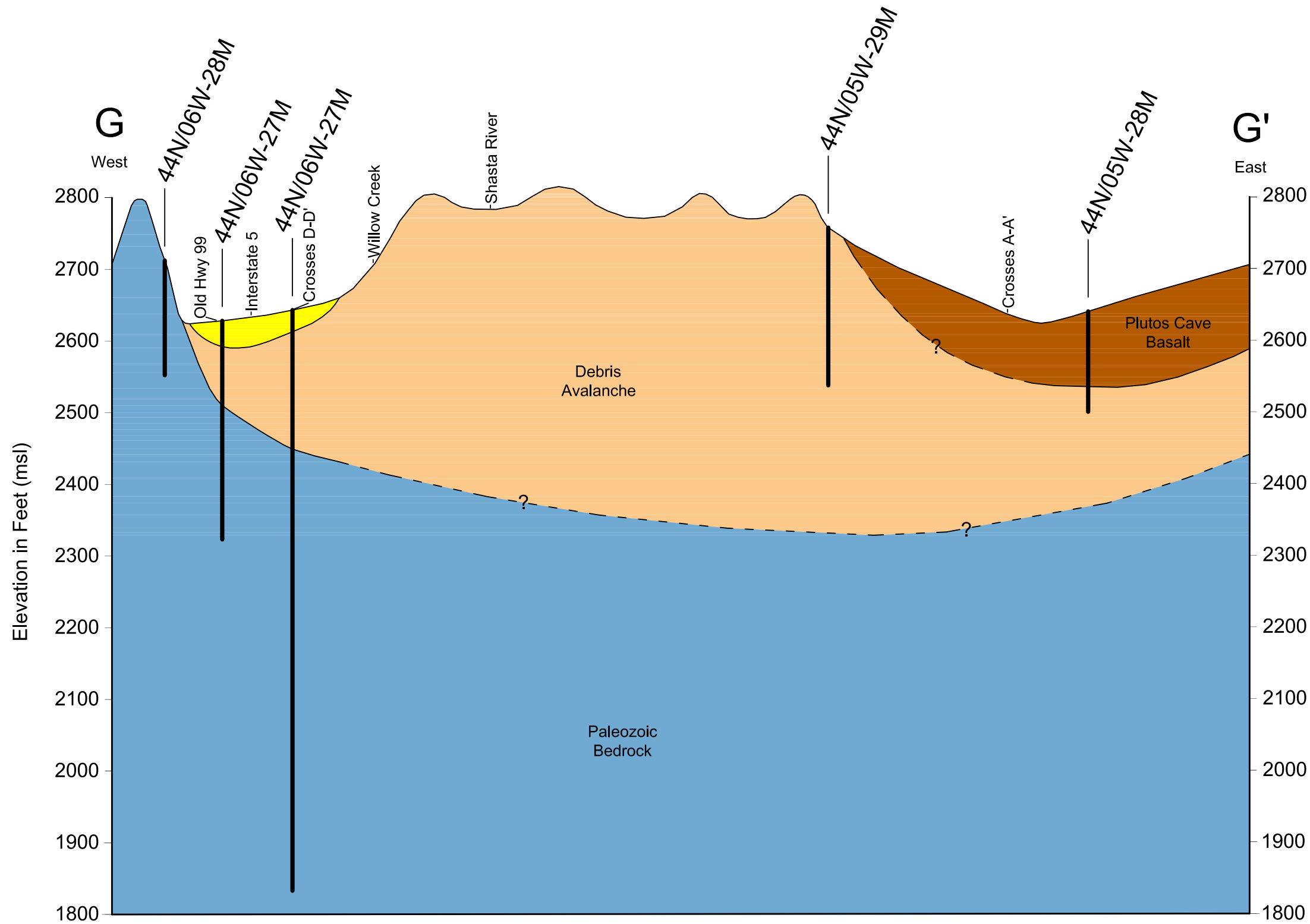
- Alluvial Fan
- Plutos Cave Basalt
- Debris Avalanche
- Paleozoic Bedrock



WELL NOTATION
 46N/06W-13M- - - - State well number

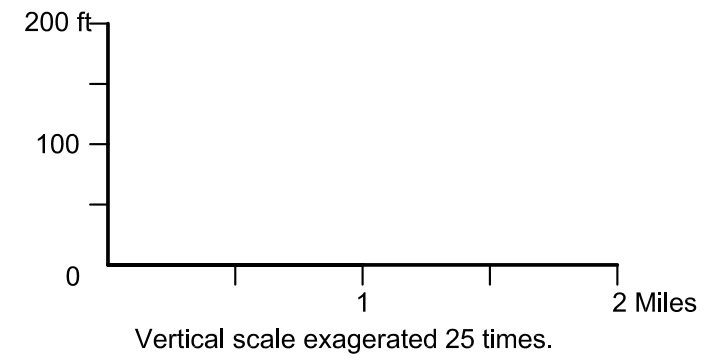
	Geologic Section F-F'
	Shasta Valley, California
December 1, 2005	California Department of Water Resources- Northern District 2440 Main St. Red Bluff, Ca 96080


Surface topology shown without vertical exaggeration.



WELL NOTATION
 46N/06W-13M- - - State well number

- Alluvium
- Plutos Cave Basalt
- Debris Avalanche
- Paleozoic Bedrock





Geologic Section G-G'

Shasta Valley, California

December 1, 2005

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