

QUAT

TERTIARY

CRETACEOUS

Quaternary Deposits:
Undifferentiated fluvial and eolian deposits.

Younger Tertiary Rocks:
Undifferentiated fluvial and volcanic deposits.

Denver Basin Group Sequence D2:
Terrestrial deposits sourced by alluvial fans, coarse-grained arkosic facies are shaded yellow, fine-grained overbank deposits are shaded pink. Coarse-grain deposits dominate the west side of the basin in a similar fashion to the underlying fans.

Denver Basin Group Sequence D1:
Terrestrial deposits sourced by alluvial fans, coarse-grained arkosic and andesitic, or mixed, facies are shaded yellow; fine-grained overbank deposits are shaded dark brown, coarser-grained overbank deposits are shaded lighter brown. Basal Anasaphe Conglomerate and andesitic Pikeview Formation are tan.

Laramie Formation:
Terrestrial coastal plain deposits. Shale is shaded green, fluvial sand lenses are shaded yellow. Coal is common near the base.

Fox Hills Sandstone:
Beach to lower shoreline deposits. Fine-grained sands intertongue with the Laramie Formation above and the marine Pierre Shale below.

Pierre Shale:
Marine shale with occasional marine sand and silt.

Geologic Boundaries

Conformable Boundary

Unconformable Boundary

Intermediate Boundary

Geophysical Log Traces and Completion Details

Well identification, DWR permit number for water wells, DWR Unique Well identification for un-permitted wells, PS number for Bijou Creek exploration boreholes, and API number for oil and gas wells.

Deep Resistivity (MHOS)
LINEAR SCALE: 0-100 CUTOFF = 8.00

Shallow Resistivity (MHOS)
LINEAR SCALE: 0-100 CUTOFF = 8.00

Resistance (MM)
LINEAR SCALE: 0-100 CUTOFF = 25

Completed interval from Division of Water Resources well records

A vertical line indicates wells without digitized log traces used for depth control at cross-section edges

Note on Facies Correlations

Coarser-grained clastic facies, as interpreted from higher resistivity values on the well logs, have been given solid yellow shading. In places where coarser-grained facies are laterally correlative, the solid yellow shading was extended between neighboring wells to indicate lateral continuity. These can be individual clastic beds and lenses, or thicker intervals of amalgamated facies. In the case where no obvious lateral correlation could be made between adjoining wells, individual sand bodies were drawn in as solid yellow lens-shaped polygons, centered on the log track. It is important to note that horizontal dimension is not implied by the polygon size. The areas between wells are filled with transparent lens-shaped polygons to show inferred clastic lenses of variable thicknesses and correlation lengths that can be present at any depth.

Location Map

Structural Cross-section Scales

Vertical Scale
0 1000 2000 3000 4000 5000 6000 7000 8000
Horizontal Scale
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
Vertical Exaggeration: 16.4 X
Exaggerated Dip
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

DENVER BASIN CROSS-SECTIONS
EAST-WEST SECTION J-J'
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COLORADO
DEPARTMENT OF
NATURAL
RESOURCES

COLORADO
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SURVEY

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