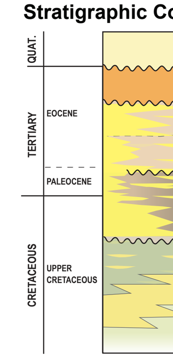
COLORADO GEOLOGICAL SURVEY
DEPARTMENT OF NATURAL RESOURCES
DENVER, COLORADO

Structural Cross-Section Legend

Stratigraphic Column



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 Arapahoe 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 shoreface 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

Surface Mapped Geologic Units of the Dawson Group

- Td — Dawson Arkose: arkosic sandstone and claystone facies (Bryant et.al., 1981)
- Tda — Dawson Arkose (Thorson, 2011)
- TKda — Dawson and Arapahoe Formations (Trimble and Machette, 1979)
- TKd — Denver Formation (Trimble and Machette, 1979)
- TKda — Dawson and Arapahoe Formations (Trimble and Machette, 1979)
- TKdac — Dawson and Arapahoe Formations (Colton, 1978)

Geophysical Log Traces and Completion Details

56358-F — 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 (M/M)
LINEAR SCALE: 0-100 CUTOFF = 25

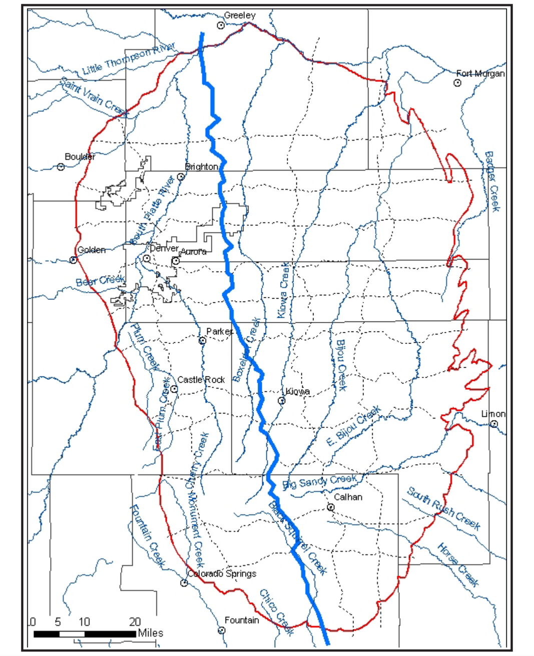
Completed interval from Division of Water Resources well records

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. Finer-grained facies, as interpreted from lower resistivity values have been given darker shading. In places where coarser-grained facies are laterally correlative, the solid yellow shading connects between neighboring wells to indicate lateral continuity. These can be individual clastic beds and lenses, or intervals of amalgamated, coarse-grained facies. In cases where lateral correlation could not be made with confidence between adjoining wells, individual sand bodies are depicted as solid yellow lens-shaped polygons. Horizontal dimension is not implied by the polygon size. Areas between wells filled with transparent lens-shaped polygons indicate that lenses of clastic material of variable thicknesses and lateral extent may be present at any depth.

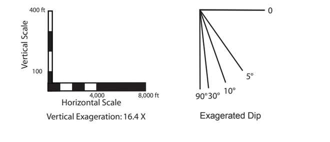
Location Map



M
North

M'
South

Structural Cross-section Scales



DENVER BASIN CROSS-SECTIONS
NORTH-SOUTH SECTION M-M'

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2011

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