COLORADO GEOLOGICAL SURVEY
DEPARTMENT OF NATURAL RESOURCES
DENVER, COLORADO



## Structural Cross-Section Legend

### Stratigraphic Column

| Period | Epoch | Unit |
|---|---|---|
| QUAT. | | **Quaternary Deposits:** Undifferentiated fluvial and eolian deposits. |
| TERTIARY | | **Younger Tertiary Rocks:** Undifferentiated fluvial and volcanic deposits. |
| TERTIARY | EOCENE | **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. |
| TERTIARY | PALEOCENE | **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. |
| CRETACEOUS | UPPER CRETACEOUS | **Laramie Formation:** Terrestrial coastal plain deposits. Shale is shaded green, fluvial sand lenses are shaded yellow. Coal is common near the base. |
| CRETACEOUS | UPPER CRETACEOUS | **Fox Hills Sandstone:** Beach to lower shoreface deposits. Fine-grained sands intertongue with the Laramie Formation above and the marine Pierre Shale below. |
| CRETACEOUS | UPPER CRETACEOUS | **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)
- TKd s — Dawson Formation (Scott et al., 1978)
- TKdl — Dawson Arkose: fine-grained sandstone, shale, and lignite facies (Bryant et al., 1981)

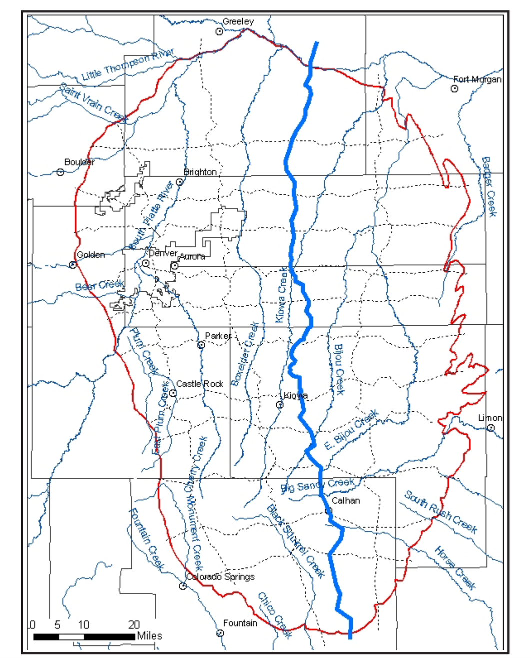
### Geophysical Log Traces and Completion Details

- 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

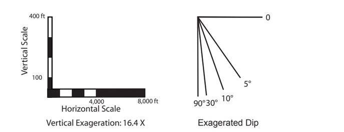
### Note on Facies Correlations

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



### Structural Cross-section Scales



# DENVER BASIN CROSS-SECTIONS
## NORTH-SOUTH SECTION N-N'

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2011

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