

## **Relationship of Marine Sandstones, Coals, and Fluvial Architecture, Mesaverde Group, Piceance Basin, Colorado**

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Fluvial and marine sandstones of the Williams Fork Formation in Mamm Creek Field in the southern Piceance Basin are prolific gas reservoirs. The relationship of the marine sandstones in the lower Williams Fork to time-equivalent coals and fluvial sandstones can be determined using the abundant well control that exists as a result of 10- and 20-acre density drilling.

Transgressive episodes in the lower part of the Williams Fork can be correlated landward to time-equivalent laterally extensive coals. Fluvial sandstone-rich intervals between the laterally extensive coals can be correlated seaward to periods of shoreline progradation. Syn-depositional structural movement affected Williams Fork deposition. Landward pinchouts of marine sandstones and abrupt changes in the thickness and number of coals were controlled by faults that were active during Williams Fork deposition.