PRE-MEETING FIELD TRIP #2

BOOK CLIFFS ILES FORMATION OF THE MESAVERDE GROUP NEAR GRAND JUNCTION WITH IMPLICATIONS FOR HYDROCARBON DEVELOPMENT

DATE: September 12th (1 day).

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DESCRIPTION: The Hunter Canyon area of the Book Cliffs provides an excellent opportunity to compare well-exposed marine and nonmarine rocks of the Iles Formation of the Mesaverde Group with nearby well log data. This part of the Book Cliffs is located on the southwestern flank of the Piceance Basin, one of the major gas-producing basins in the US. The same units exposed in outcrop along Hunter Canyon are productive in wells less than two miles to the north in Hunter Canyon field. Furthermore, Cozzette and Corcoran are productive throughout the Piceance Basin.

Compartmentalization within shoreface and deltaic reservoirs is key to trapping gas in the Iles Formation of the southern Piceance Basin. There are two types of reservoirs: 1) compartmentalized gas-saturated Corcoran and Cozzette sandstones, and 2) continuous mostly water-saturated Rollins sandstones. Compartmentalized sandstones are interpreted to have been deposited during a time of relatively low accommodation with relatively low sediment supply while more connected sandstones were deposited during a time of relatively high accommodation and a much higher sediment supply. The compartmentalization is due to 1) location within the overall parasequence stacking pattern; 2) facies variability within the deltaic and wave-dominated deposits; and 3) further partitioning due to the superposition of multiple types of erosion surfaces ultimately related to low accommodation rates. The continuous sandstones are more connected because they were deposited during times when rates of progradation were more regular and overall accommodation and sedimentation were higher.

ITINERARY: This one-day field trip will begin and end at the Two Rivers Convention Center in Grand Junction. We will first head to Hunter Canyon, 15 miles northwest of Grand Junction, and walk through the section from the Mancos to the Rollins comparing the facies observed in outcrop to the productive intervals on well logs in nearby Hunter Canyon field. We will then drive to nearby Coal Gulch and compare and contrast the same intervals in a more proximal setting.

PARTICIPANT LIMIT: 27

FEE: TBD includes transportation (van), box lunch, healthy snacks, bottle water, and extensive fieldtrip guide.