

Post-Convention Field Trip #3: New Developments in Rocky Mountain Structural Geology

Date: Thursday, June 30.
Leaders: Scott Larson, El Paso E&P Company, and Eric Erslev, University of Wyoming.
Itinerary: One day trip in the Fort Collins and Cheyenne area. Departs from Little America Resort, Cheyenne, Wyoming at 8:00 am
Fees: \$95; after May 25th \$130
Limit: 20

Description: This trip will focus on New Developments in Rocky Mountain Structural Geology, from Crustal-Scale Laramide Folding and Transpression during Horizontal Compression to Post-Laramide Fracturing Impacting Niobrara Formation Production. The trip will first ascend to the crest of the southern Laramie Range where new crustal-scale seismic data on regional Laramide arch development will be discussed. Then we'll head south to the NE-trending Grayback Monocline and present fault and paleomagnetic data supporting a transpressive model of folding. At the scenic Red Mountain Ranch, we will hike through the stunning Sand Creek Anticline and present voluminous fault and extensional fracture data for the region. Our final stop will visit fractured outcrops of the Laramie & Fox Hills formations, discuss the post-Laramide development of the Ogalalla Formation, which defines the Gangplank, and summarize the area's tectonics with special references to current Niobrara and uranium resource plays.