

Geologic and Geophysical Summary for North Custer Mountain Exploratory Unit documentation:

The proposed 4½ section North Custer Mountain State Exploratory Unit will encompass the entirety of an Atoka carbonate buildup which Devon interprets on 3D seismic data. Enclosed maps, seismic, and cross sections depict the geometry and composition of the Atoka Clastics interval within which the Atoka builds up.

Seismic data does not image the Atoka buildup directly, but shows an anomalous increase in the thickness of the Atoka Clastics interval within which the carbonate buildup occurs. Nearby wells penetrate the Atoka Clastics interval, with total thicknesses of 140 – 181 feet. These wells have isolated thin limestone stringers, but no indication of the interpreted buildup nearby. The buildup has a maximum thickness greater than 600 feet, and is prospective where the interpreted interval is at least twice as thick as in nearby wells, an area defined by the 400-foot contour. The anomaly trends north-south for 4½ miles and is about ½ mile wide.

A larger scale example of a similar Atoka buildup is about 4 miles west of the Custer Mountain buildup, where the Antelope Ridge buildup trends north-south for 15 miles, and is about 1½ - 2 miles wide.

The boundary of the proposed North Custer Mountain Exploratory Unit has been drawn to include all 320-acre spacing units which could test the prospective Atoka anomaly.

The proposed Keller 4 State #1 location will test the mapped anomaly where it is interpreted to be about 600 feet thick. Devon proposes to drill this wildcat well deep enough to test secondary objectives in the Morrow formation.

BEFORE THE
OIL CONSERVATION DIVISION
Case 13501 Exhibit No. **E**
Submitted By:
Devon Energy Production Co.
Hearing Date: June 2, 2005