

Seismic Horizons (con't.)

The Paleocene L. balmei (unconformity) seismic horizon, and map horizon, is based on Palynologic zonation as well as a marked increase in interval velocity from 7,000 feet per second to 8,300 feet per second. Above and below this horizon, the section consists of interbedded sandstone and shale. The intra-Paleocene L. balmei unconformity seismic horizon is well illustrated on seismic line WB-82-32, Figure 16, at approximately 0.850 seconds. Truncation of beds below this reflector is shown. Above and below this horizon, the section consists of interbedded sandstone and shale.

The Upper Cretaceous seismic horizon, and map horizon, is based on Palynologic zonation. Above and below this horizon, the section consists of interbedded massive sandstone and lesser amounts of shale.

The intra-Upper Cretaceous unconformity seismic horizon, and map horizon, marks the top of a massive carbonaceous shale section beginning at 4,492 feet in the Durroon #1 well. It is recognized regionally. A significant reduction of the interval velocity from 9,200 feet per second down to 8,000 feet per second marks this boundary.

The mid-Cretaceous unconformity seismic horizon, and map horizon, marks the boundary, in this well, between the potential reservoir quality sandstone above and the non-reservoir quality sandstone below. The former being porous and permeable, while the later being lithic sandstone with an abundant clay matrix and silica cement. This reflector is recognizable and mappable over a large area, however, it may not always represent the unconformable boundary between reservoir and non-reservoir sandstones.