

Arkoma- Woodford Depth Imaging Project

AGT (**Advanced Geophysical Technology**) in collaboration with **Corterra Energy**, will be giving a presentation reviewing the Depth processing of 3D data over an ongoing Woodford drilling project in the Arkoma Basin. The purpose of this project was to address issues such as:

- Significant structural and stratigraphic issues (Arkoma basin)
 1. Structural throw close to 1,000 feet in areas.
 2. Complicated fault geometry.
 3. Significant wedging of the shallow Atoka.
 4. Stratigraphic thickening and thinning of the Woodford unconformity.
- Limited well control hinders geology, geosteering, and geophysical efforts:
 1. Only 7 wells in the initial 3D that penetrated the Woodford and Viola.
 2. Three sonic logs, none of them in the deep down-thrown fault blocks.
- PSTM data often disagreed with geosteering results.
- Moderate anisotropy yielded PSTM gathers with enough residual move-out to make pre-stack analysis, such as AVO and elastic impedance, unreliable.

The presentation will compare the Depth Imaging product that was produced by AGT to the existing PSTM processing. Before and after examples of the data will be shown with the actual drill bit path hi-lighted to illustrate how well the drilling stayed in zone. Well tie differences up and down the section will also be compared. This is an exercise that not only led to the proper steering of lateral wells, but also led to some interesting surprises as well.