

# AGS .stl Store

## Simplified Southeastern Alberta 3D Geological Model 3D Print

In 2017, a high-resolution 43-layer 3D geological model was created in Petrel software representing a portion of the subsurface geology in southeastern Alberta. The model was built to support a scientific study examining closure strategies for wells producing from the Medicine Hat and Alderson (Milk River) gas zones in the Southeast Alberta Management Unit (AER Commingling Order 7490).

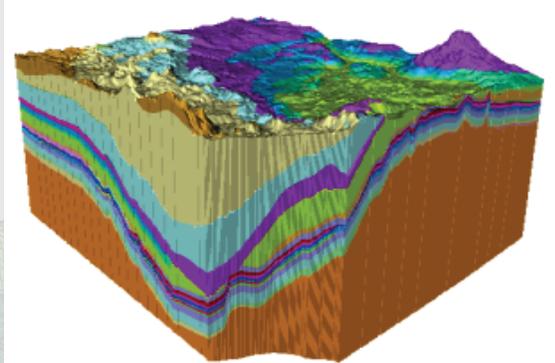
The high-resolution model was converted to a simplified 7-layer model. The layers were exported to STL-format files for 3D printing.

**Vertical exaggeration:** 50x

**Number of layers:** 7

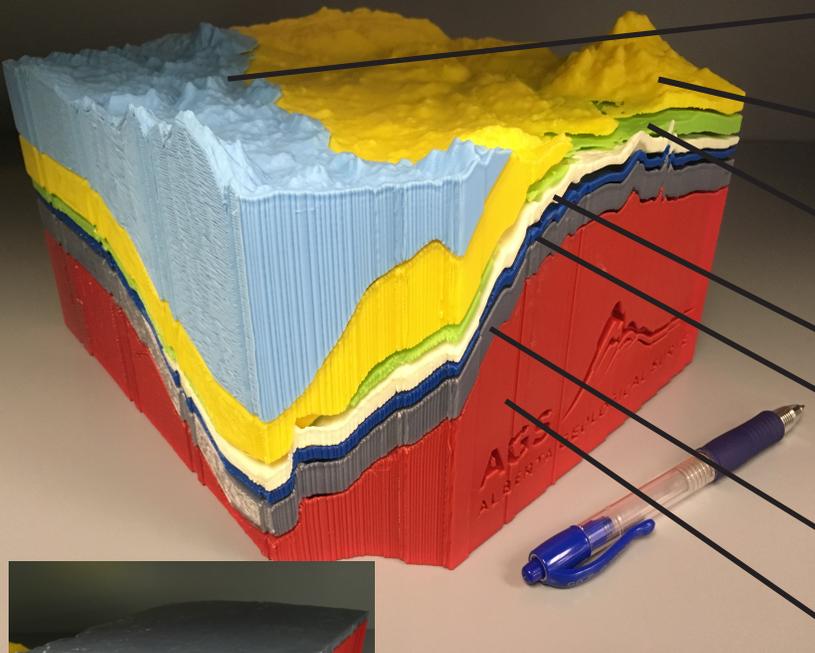
**Actual geospatial representation:** ~300 km x ~300 km x ~3.5 km depth

**Amount of filament required:** Layer 1: 30650 mm, Layer 2: 72450 mm, Layer 3: 57190 mm, Layer 4: 31260 mm, Layer 5: 54700 mm, Layer 6: 73800 mm, Layer 7: 189900 mm



**Original 43-layer Petrel model**

### Simplified 7-layer model 3D printed



**Eagle Butte astrobleme (impact structure)**

### Layers/Intervals:

- 1) Paskapoo, Scollard, and Horseshoe Canyon formations and equivalents (light blue)
- 2) Bearpaw Formation and Belly River Group (yellow)
- 3) Lea Park Formation including Alderson Member (green)
- 4) Milk River Formation (cream)
- 5) First White Specks and Medicine Hat members (dark blue)
- 6) Verger Member to top of Bow Island and Viking formations (grey)
- 7) Bow Island and Viking formations to arbitrary flat base of 2200 m below sea level (red)