EXPLANATION

- 100 Thickness from top basal Oil Creek sandstone to top Bromide

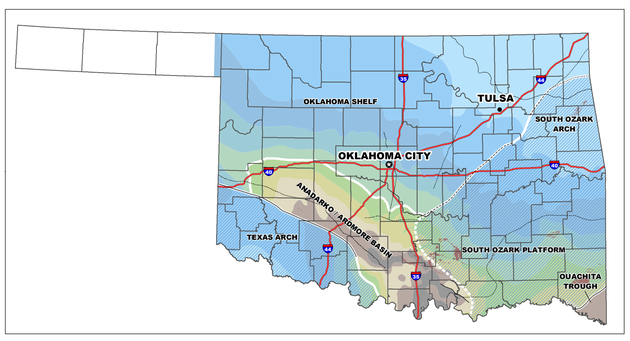
Producing well:

- Bromide / Tulip Creek
- McLish
- Birdseye
- Oil Creek
- Arbuckle
- Simpson Undifferentiated
- Type section
- Roadcut
- Hinge fault (white line under faults indicates depositional boundary)
- Lineament
- Late fault zone
- Subrop contact
- Shallow water limestone deposited in the South Ozark Platform and Texas Arch provinces
- Simpson / Viola outcrop

Simpson interval thickness (ft):

- 0–200
- 200–400
- 400–600
- 600–800
- 800–1,000
- 1,000–1,200
- 1,200–1,400
- 1,400–1,700
- 1,700–2,000
- >2,000

*The thickness is reconstructed in absence of well control and in truncated sections.



Names and borders of depositional provinces are in white; tectonic provinces in black italics. Positions of hinges and lineaments separating depositional provinces may be similar to some of the faults shown on the Viola structure map, for example, the Meers Fault (shown on Plate 15) more closely approximates the position of the Anadarko Basin/Texas Arch Hinge than the Mountain View Fault. Shallow-water deposits are blue and thicker deep-water deposits in green and brown. The depositional limit of the Simpson in northeastern Oklahoma is unknown due to post-depositional erosion but it is assumed to have once extended farther northeast from present-day truncated limit of the Simpson (dashed line). Simpson formations are colored-coded to production; names of oil and gas fields can be found in Boyd (2002a) and Pritchett (2015).

PLATE 2
SIMPSON ISOPACH MAP FROM THE TOP OF THE BASAL OIL CREEK SANDSTONE TO TOP OF THE BROMIDE

Raymond Suhm

2016

SCALE 1:750 000

0 10 20 30 40 50 MILES
0 10 20 30 40 50 KILOMETERS

Albers Equal Area Conic projection; North American Datum of 1983 (NAD83)