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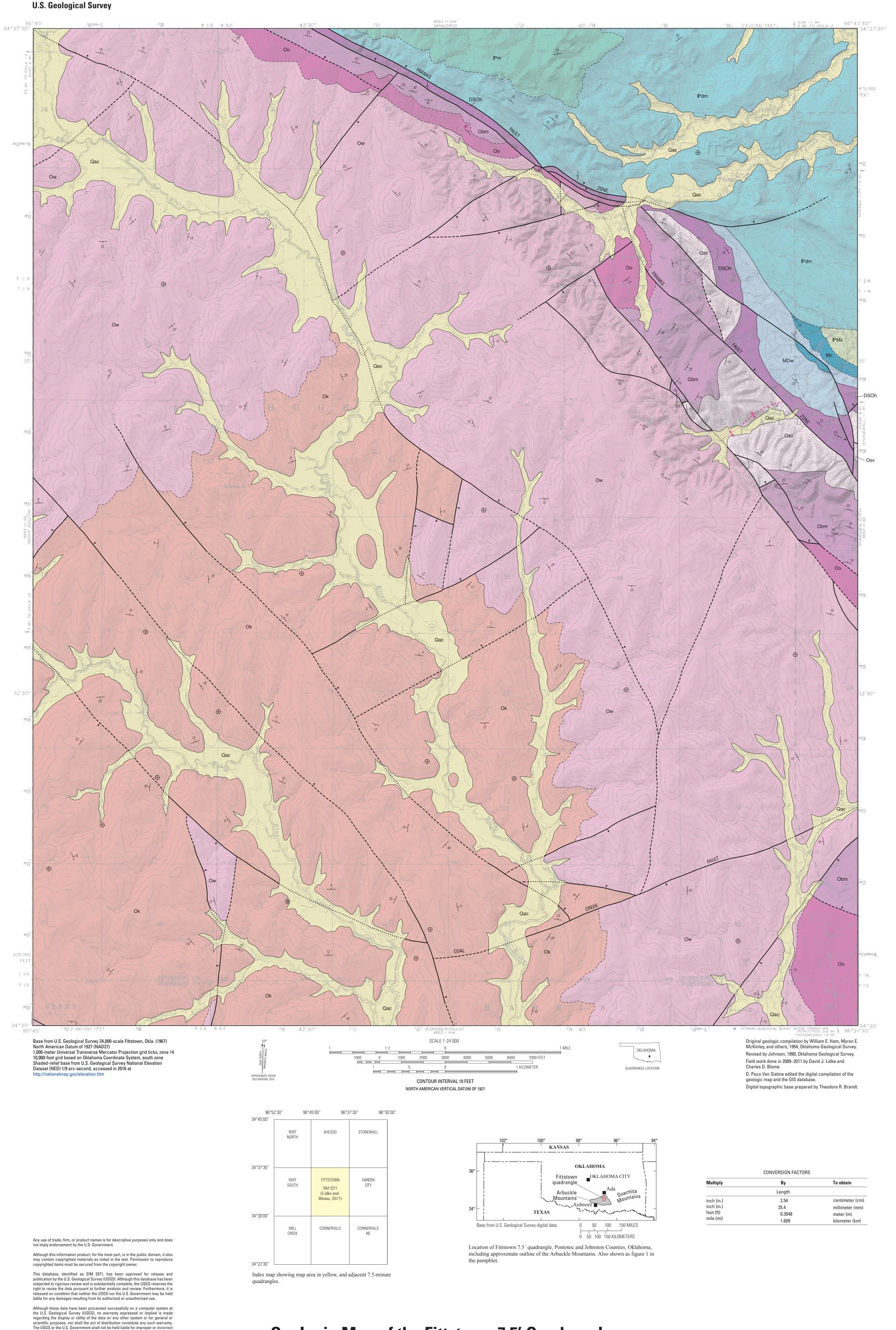
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MISSISSIPPIAN DEVONIAN SILURIAN ORDOVICIAN Exposure of Hart limestone (informal) of the Desmoinesian Boggy Formation about 10 miles northeast of the map area in the region of the Lawrence uplift. LIST OF MAP UNITS [See accompanying pamphlet for description of map units. Colors on the map may appear darker due to the hillshade transparency] ALLUVIUM AND COLLUVIUM Alluvium and colluvium, undifferentiated (Quaternary) SEDIMENTARY ROCKS Missourian Series formations, undifferentiated (Upper Pennsylvanian, Missourian) Francis Formation **Seminole Formation** Desmoinesian Series formations, undifferentiated (Middle Pennsylvanian, Desmoinesian) **Holdenville Formation** Limestone conglomerate that is common in Desmoinesian rocks in the northeast part of the Wewoka Formation map area. Also shown as figure 9 in the pamphlet. **Boggy Formation** Savanna Formation **McAlester Formation** Springer Group (Lower Pennsylvanian to Upper Mississippian, Morrowan to Chesterian) Caney Shale (Upper to Middle Mississippian, Chesterian to Meramecian) Welden Limestone and Woodford Shale, undifferentiated (Lower Mississippian, Kinderhookian to Devonian) Welden Limestone (Lower Mississippian, Kinderhookian) Hunton Group, undifferentiated (Lower Devonian to Upper Ordovician, Cincinnatian) Frisco Formation (Lower Devonian) **Bois d'Arc Formation (Lower Devonian)** Haragan Formation (Lower Devonian) Henryhouse Formation (Silurian) Clarita Formation (Silurian) **Cochrane Formation (Silurian) Keel Formation (Upper Ordovician, Cincinnatian)** Osv Sylvan Shale and Viola Group, undifferentiated (Upper Ordovician, Cincinnatian) Viola Group **Welling Formation** Contact of dark-weathering, wavy-bedded limestone of the Viola Group overlying Viola Springs Formation white-weathering, tabular-bedded, micritic limestone of Bromide Formation (Simpson Group) along Highway 377 near the central part of the eastern map border. Simpson Group (Middle Ordovician) Bromide and McLish Formations, undifferentiated **Bromide Formation McLish Formation** Oil Creek Formation Arbuckle Group, upper part (Lower Ordovician) **West Spring Creek Formation Kindblade Formation EXPLANATION** ———— Contact—Dashed where inferred and dotted where concealed Fault—Dashed where inferred and dotted where concealed; ball and bar on apparent down-Syncline—Dashed where inferred and dotted where concealed Horizontal bedding Vertical bedding Inclined bedding—Showing strike and dip Solution cavities and box work breccia in fine-grained sandstone of West Spring Creek Formation (Arbuckle Group) in the central part of the map area. Sandstone beds occur but are uncommon within this formation in the map area.

CORRELATION OF MAP UNITS

> QUATERNARY

PENNSYLVANIAN

ALLUVIUM AND COLLUVIUM

SEDIMENTARY ROCKS

Geologic Map of the Fittstown 7.5' Quadrangle, Pontotoc and Johnston Counties, Oklahoma

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Or visit the Geosciences and Environmental Change Science Center Web site at http://gec.cr.usgs.gov/

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2 4 6 8 10 MILES

VERTICAL EXAGGERATION X5

EXPLANATION

Generalized geologic sketch map and cross section of the northeastern Arbuckle Mountains, Oklahoma, including outline of the Fittstown 7.5' quadrangle map area

Simpson Group (Middle Ordovician)

Arbuckle and Timbered Hills Group

(in red). Modified from Christenson and others (their fig. 7, 2011) with geology based on Cederstrand (1996). Also shown as figure 4 in the pamphlet.

Proterozoic igneous and metamorphic

anticline

Base from U.S. Geological Survey digital data

Permian and Pennsylvanian units

Mississippian-Middle Ordovician

SEA LEVEL

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Geology modified from Cederstrand, 1996

graben

— SEA LEVEL

Franks

fault zone

 $A \longrightarrow A'$ Line of section

Relative fault motion