



**EXPLANATION**

"Radioactive"—radioactive precipitates of surface;  
 "nonradioactive"—no radioactive precipitates of surface; "abnormal"—abnormal deflections on gamma-ray logs; "normal"—normal deflections on gamma-ray logs

● "Radioactive" oil well  
 ○ "Nonradioactive" oil well  
 \* "Radioactive" gas well  
 \* "Nonradioactive" gas well  
 ▲ "Radioactive" separator tank  
 ▲ "Nonradioactive" separator tank  
 ⊙ "Abnormal" gamma-ray log, "radioactive" oil well  
 ⊙ "Abnormal" gamma-ray log, "nonradioactive" oil well  
 ⊙ "Normal" gamma-ray log, "radioactive" oil well  
 ⊙ "Normal" gamma-ray log, "nonradioactive" oil well

D Douglas group } PENNSYLVANIAN  
 KC Kansas City group }  
 S Simpson group } ORDOVICIAN  
 A Arbuckle group } ORDOVICIAN AND CAMBRIAN

Nomenclature of reservoir rocks  
 ● 6-A.0.38(2)  
 ▲ 23-0.21(0)

Index number; reservoir rocks, percent equivalent U<sub>3</sub>O<sub>8</sub>, meter reading on field counter, well location  
 ▲ 23-0.21(0)

Map number, percent equivalent U<sub>3</sub>O<sub>8</sub>, meter reading on field counter, tank location  
 ▲ 23-0.21(0)

Original production from "Arbuckle" dolomite, now plugged back to Kansas City group

Approximate area in which Pennsylvanian rocks lie unconformably on Ordovician rocks

Pre-Pennsylvanian fault, approximately located  
 U<sub>1</sub> upthrown side; U<sub>2</sub> downthrown side

Structure contours of top of the Ordovician rocks. Dashed where approximately located

See table 6 for analytical data of precipitate and fluid samples from this field

TRUE NORTH  
 MAGNETIC NORTH  
 APPROXIMATE DECLINATION

Base map through the courtesy of the Cities Service Oil Co.

Compiled by Garland B. Gott and James W. Hill  
 April 1950  
 Structural information taken from G. F. Berry Jr. and R. A. Harper, Augusta field, Butler County, Kans., fig. 5, p. 221, in Structure of typical American oil fields, Am. Assoc. Petroleum Geologists, vol. 3, 1948

RADIOACTIVITY AND STRUCTURE OF THE AUGUSTA FIELD, BUTLER COUNTY, KANSAS

Contour interval 50 feet  
 Datum is sea level