GEOLOGIC MAP OF THE BLACK DOG AREA OSAGE COUNTY, OKLAHOMA

by

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M.S., 1956

Plate 1



INDEX MAP OF OKLAHOMA SHOWING LOCATION OF BLACK DOG AREA

R 9 E R 10 E R 11 E R 12 E

T 22 N

T 21 N

T 20 N

R 8 E

SKIATOOK

OSAGE

PRUE

PAWNEE COUNTY

TULSA COUNTY

SUBURB OF TULSA

SHELL LAKE

Arkansas River

Missouri, Kansas & Texas

Verdigris River

Hominy Creek

Bird Creek

Skiatook Creek

Bird Creek Valley

Missouri Valley

EXPLANATION

PENNSYLVANIAN SYSTEM — QUATERNARY

Missouri series — Virgil series — Douglas group — Shawnee group

Oklahoma — Missouri — Skiatook group

Qal — ALLUVIUM (Clay, silt and sand on flood plains of present streams)

Qt — TERRACE AND TERRACE DEPOSITS (Clay, silt and sand mostly of residual origin)

Pvsu — Pvka — Pvsl — Pvw — Pvsk — Pvsl — Pvco — Pvch — Pv — Pvco — Pvch — VERDIGRIS FORMATION (Maroon and gray shales, buff, thin sandstones and some local thin limestones, containing the following mapped members:
Tehuana sandstone (Pvsu)
Keystone shale (Pvka)
Lenapah limestone (Pvl)
Upper sandstone bed (Pvsl)
Lower sandstone bed (Pvsl)
Wynona sandstone (Pvw)
Upper sandstone bed (Pvsk)
Lower sandstone bed (Pvsk)
Coofeden sandstone (Pvco)
Kihekt sandstone (Pvh)
Checkerville sandstone (Pvch))

Pl — Pcb — TALLANT FORMATION (Gray and maroon shales, buff, thin siltstones and buff to tan sandstones, with Pawhuska limestone and Bluejacket sandstone member (Pcb) at base)

Pbw — Pbs — BURGESS FORMATION (Gray-blue and maroon shales, thin to massive buff sandstones, and thin limestone, containing at base the Burgess sandstone member (Pbs) and near top the Wildhorse limestone (Pbw))

Pw — Pwsc — WANN FORMATION (Blue-gray, locally calcareous shales and thin to massive, buff sandstones, containing at base the Bartlesville sandstone member (Pwsc) in upper part)

Pch — Pcf — ISLA FORMATION, CHANUTE EQUIVALENT
DENNY FORMATION (Isla formation: gray to light pink, dense to flinty crystalline limestone, containing at base the Nodaway shale member (Pch), middle dark gray shale of the Hoyle Creek member and lower thin, calcareous sandstone of the Big Heverage member included in the Isla formation of the Chanute formation (Pch))
Chanute formation: dark gray, clay shales, thin limestones, and thin sandstones and thin coal beds, unfossiliferous (Pch)
Denny formation: thin beds of gray to brown, argillaceous limestone and calcareous shales, with thin coal beds at base of formation mapped (Pch), upper part of formation includes to the lower part of Chanute formation (Pch)

Pb — Pbo — WILLIS BAY FORMATION and BOULDERING FORMATION (Willis Bay formation: dark-colored, locally fossiliferous shales, siltstones, sandstones to persistent sandstone and a local thin limestone. The base of the sandstone zones mapped (Pbo and Pbo))
Bigheverage formation: gray, dense limestone and argillaceous, sandy limestone (Pb))

Pcf — Pcfv — COFFEYVILLE FORMATION (Gray-blue shale, buff siltstone, thin coal and a persistent sandstone zone (Pcfv) near top)

Fault — Dashed where inferred D, downthrown side U, upthrown side

Paved road

Improved road

Permanent stream

Intermittent stream

School

Church

Cemetery

Airport

Quarry

0 1 2 MILES

378.76 Oko C.191g C.3 plate 1

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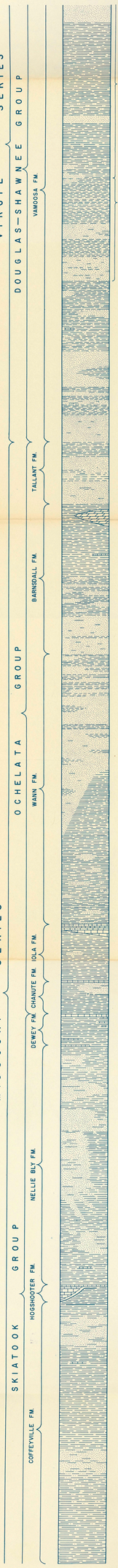

LEGEND



limestone
sandy limestone
dolomite
grey or black shale
maroon shale
sandy shale
sandstone
shaly sandstone
coal

SCALE

0 feet
25
50

COMPOSITE SECTION

OF THE

UPPER PENNSYLVANIAN ROCKS

IN THE

BLACK DOG AREA

OSAGE COUNTY, OKLAHOMA

JOSEPH B. CARL M.S., 1956

PLATE II