HAPPY STAR NORTH

HAPPY STAR NORTHEAST

TONKAWA

BILLINGS EAST

TONKAWA SOUTH

BILLINGS TOWNSITE

WHITE ROCK SOUTHEAST

BILLINGS

BILLINGS WEST

ECHO EAST

CERES SOUTH

RED ROCK

RED ROCK WEST

RED ROCK EAST

RED ROCK SOUTHWEST

LIBERTY NORTHEAST

LIBERTY EAST

LIBERTY

MARATHON NORTHEAST

OTOE CITY

OTOE CITY EAST

ANTELOPE

POLO WEST

POLO

FOURDEE

FOURDEE EAST

SUMNER NORTHEAST

POLO SOUTH

POLO SOUTHEAST

SAMS NORTH

PERRY NORTHWEST

SAMS

GANSEL

SUMNER SOUTHEAST

MORRISON A

MORRISON EAST

SAMS SOUTHWEST

LUCIEN NORTH

LUCIEN NORTHEAST

PERRY

PERRY SOUTHEAST

LONE ELM NORTHWEST

LONE ELM

GANSEL SOUTH

PERRY SOUTHWEST

LONE ELM SOUTH

LUCIEN

ORLANDO

EXPLANATION

3550

Structure contour, in feet, of top of Viola Limestone; dashed where Viola is absent; contour interval, 50 feet; hachures indicate structurally low areas.

Oil field
(not all fields shown)

Area where Viola Limestone is absent

SUBSURFACE STRUCTURE MAP OF NOBLE COUNTY, OKLAHOMA

By

John W. Shelton and William A. Jenkins

1979

SCALE 1:63,360

1 0.5 0 1 2 3 4 MILES

1 0.5 0 1 2 3 4 KILOMETERS

Cartographic preparation by Oklahoma Geological Survey