

(G) #1 Kimel; Empire Oil Co.; NWc, NW 4-29-2W; Sedgwick Co., Kansas.
 Tops: Miss. Ls. - 3648' Tops (Lee, 1940) Cowley ? - 3648
 Kind. - 4005' Burl. - 3700

3649' - no specimens.
 3650' - no specimens.
 3651' - no specimens.
 3652' - no specimens.
 3653' - no specimens.
 3654' - no specimens.
 3655' - no specimens.
 3656' - no specimens.

3657'
 (10) Gnathodus texanus
 (3) Taphrognathus varians
 (2) Ligonodina
 (1) Roundya ?

3658'
 (1) ?????

3659'
 (38) Gnathodus texanus
 (4) Taphrognathus varians
 (1) Synprioniodina
 (1) Neoprioniodus tulensis ?
 (1) Neoprioniodus loxus ?
 (4) Ligonodina
 (1) Hindeodella
 (1) ?????

3660'
 (28) Gnathodus texanus
 (1) Gnathodus semiglaber ??
 (6) Taphrognathus varians
 (4) Neoprioniodus
 (2) Ligonodina
 (4) Lonchodina ??

3661'
 (7) Gnathodus texanus
 (3) Taphrognathus varians
 (3) Ligonodina levis
 (2) Neoprioniodus
 (3) ?????

3663'
 (9) Gnathodus texanus
 (3) Gnathodus antetexanus ?
 (1) Gnathodus semiglaber ?
 (5) Roundya ?
 (1) Ligonodina
 (2) Lonchodina ?
 (5) ?????

3664'
 (1) Gnathodus texanus ?
 (1) ?????

3665'
 (4) Gnathodus texanus

3666'
 (5) Gnathodus texanus
 (1) Neoprioniodus
 (1) ?????

3667'
 (2) Gnathodus antetexanus ?
 (1) Ligonodina
 (1) Roundya ?
 (1) ?????

3668'
 (3) Gnathodus texanus
 (1) Ozarkodina
 (1) ?????

3669'
 (4) Gnathodus texanus
 (2) Synprioniodina ?

3670'
 (1) Taphrognathus varians

3671'
 (6) Gnathodus texanus

3672'
 (3) Gnathodus texanus
 (1) Ligonodina levis
 (1) Synprioniodina ?

3673'
 (4) Gnathodus texanus
 (1) Ligonodina

W. A. R. 3662'

K. Colv. (4) Gnathodus texanus
 (1) Ligonodina
 (3) Lonchodina ??
 (2) ?????

3673¹

- (2) Gnathodus texanus
- (1) Taphrognathus varians
- (1) fragment

3674¹

- (35) Gnathodus texanus
- (1) Gnathodus semiglaber ?
- (1) Taphrognathus varians
- (3) Ligonodina levis
- (2) Neoprioniodus
- (2) Roundya ?
- (2) ???? ?
- (1) fragment

3675¹

- (9) Gnathodus texanus
- (2) Taphrognathus varians
- (1) Ligonodina levis
- (0) Ozarkodina
- (1) Synprioniodina
- (1) Lonchodina ?

3676¹

- (10) Gnathodus texanus
- (1) Taphrognathus varians
- (1) Neoprioniodus
- (1) Spathognathodus
- (1) ???? ?
- (2) fragments

3677¹

- (12) Gnathodus texanus
- (3) Taphrognathus varians
- (1) Synprioniodina
- (2) Neoprioniodus
- (1) Roundya ?

3678¹

- (7) Gnathodus texanus
- (1) Taphrognathus varians
- (1) Neoprioniodus
- (3) Ligonodina
- (2) Synprioniodina
- (1) Hindeodella

3679-80¹ - no specimens.3680¹

- (3) Gnathodus texanus
- (1) ???? ?

3680-81¹

- (2) Gnathodus texanus
- (1) Synprioniodina

3681¹ - no specimens.3682¹ - no specimens.3684¹ - no specimens.3685¹

- (1) Gnathodus texanus
- (1) Taphrognathus varians

3686¹

- (1) Ligonodina levis

3687¹ - no specimens.3688¹ - no specimens.3689¹

- (1) Gnathodus texanus
- (1) Taphrognathus varians

3690¹

- (1) Gnathodus texanus

3706¹ - no specimens.3707¹

- (1) Gnathodus texanus

3708¹

- (2) Hindeodella
- (1) Spathognathodus

3709¹

- (4) Gnathodus texanus
- (1) Gnathodus antetexanus ?
- (4) ???? ?

3710¹

- (1) Ozarkodina
- (1) Hindeodella

3711¹

- (1) Gnathodus fragment
- (1) fragment

3712¹

- (2) Gnathodus texanus
- (1) Spathognathodus ?
- (2) ???? ?

3713¹

- (9) Gnathodus texanus
- (2) Gnathodus antetexanus ?
- (3) Spathognathodus ?
- (2) ???? ?

3714'
(15) Gnathodus texanus
(1) Hindeodelia
(1) ????

3715'
(1) Gnathodus texanus
(3) Spathognathodus

3716'
(1) Gnathodus texanus

TOTALS: 54 samples
399 specimens.

EMPIRE NO 1 KIMEL in sec. 4, T. 29, R. 2 W. SEDGWICK

3645 to 3648 Pennsylv. black shale 50 % Also green clay and
maroon shale.

TOP MISSISS. @ 3648 - 2282

CIRC. 3652 LIMY CHERT comes in. It has a dull white base
with large areas of brown granular limest.

CIRC 65 Same limy chert Top speckld. chert @ 3665
69 Speckld. chert. It is white or grey with small spots of
black, green and grey

3700 Same chert to here Top C.XL. @ 3700

05 New Ls. It is c. xl. & grainy CRINOIDAL, wh. & brn.

45 Same

50 New Ls. It is granular and white accompanied by chert
which is a very dull white opq. or tripolitic

90 Same Ls.

3800 Same Ls. with BLUE CHERT

30 " " " " "

40 The c. xl. Ls. is coming back

70 Ls. c.xl. to here

TOP OF LIMY CHERT @ 3870

80 Limy chert It is dirty grey color with small brown spots

3900 Same

20 Same

TOP CHATTANOOGA @ 4005 (Scout top)

4015 S K I P in samples

25 Black shale Dull black. (Some lithog Ls. caving from above)

4100 Same black shale

TOP WILCOX 4100 (or higher ?) 4094 Scout-2728

07 First trace of sandstone. It is DOLOMITIC medium grained
qtz rounded pebbles imbedded in dolomite rhombs
The dol. constitutes about 30 % of the mass
CLUSTERS shows OIL STAIN

21. Sandstone slowly increasing to 10 %

31 Same sandstone to here.

31 TOTAL DEPTH.

Notes: The c. xl. Ls. at 3700 to 3870
is part of a BIOHERM. This same bioherm condition
can be traced through Sedgwick county in a number
of other wells.

Location NWc NW. 3-18-37 4-22-37 DRY

Rotary all the way. Samples not particularly good.

M. #1 Kimel, Empire Oil and Refining Co.; NWc NW
sec. 4, T. 29 S., R. 2 W.; Sedgwick County, Kansas (Fig.
16).

The core record of this well places the top of the
Mississippi Limestone at a depth of 3648 feet. Lee (1940)
identified the Cowley Formation from the depths of 3665
to 3700 feet, followed beneath by the Burlington Formation.
The recovered conodont fauna identifies the portion called
"Mississippi Limestone" as early Meramecian in age, of
Warsaw equivalence. The upper portion of the Cowley Form-
ation from the depths of 3665 to 3690 feet is late Osagian
in age, Keokuk equivalence, this determination based on
the presence of Gnathodus antetexanus Rexroad and Scott
and G. semiglaber (Bischoff) along with G. texanus Roundy
and Taphrognathus varians Branson and Mehl. The core from
the depth of 3707 to 3716 feet is considered to be of
Burlington equivalence, early Osagian age, because of the
total absence of T. varians.

Are these not
also absent
in Keokuk??