

(T) #1 L. P. Helmley; Sinclair Oil & Gas; SW, SW, SE 3-35-10W.
Barber Co., Kansas.

Tops: Miss. - 4710'

Maq. - 5083'

Vi. - 5149'

4716-17' - no specimens.

all wasen
4717-19'

- (24) Gnathodus texanus
- (7) Taphrognathus varians
- (1) Neoprioniodus
- (1) Ligonodina
- (2) Synprioniodina
- (1) Ozarkodina
- (3) ????

4719-21' - no specimens.

4721-23' - no specimens.

4723-25'

- (4) Gnathodus texanus
- (1) Taphrognathus fragments
- (1) Hibbardella
- (1) Neoprioniodus
- (1) Ligonodina
- (2) ????
- (1) fragment

4725-27'

- (5) Gnathodus texanus
- (3) Taphrognathus varians
- (1) Synprioniodina
- (1) Ligonodina
- (1) Neoprioniodus
- (3) ????

4727-28'

- (7) Gnathodus texanus
- (3) Taphrognathus varians
- (3) Spathognathodus
- (2) Ligonodina levis
- (1) Synprioniodina
- (2) ????

4728-29'

- (5) Gnathodus texanus
- (1) Taphrognathus varians
- (1) Hindeodella
- (1) ????
- (3) fragments

4729-32'

- (3) Gnathodus texanus
- (3) Taphrognathus varians
- (2) Synprioniodina
- (2) Spathognathodus
- (1) fragment

4732-35'

- (16) Gnathodus texanus
- (11) Taphrognathus varians
- (4) Spathognathodus
- (1) Ligonodina levis

4735-37'

- (9) Gnathodus texanus
- (1) Taphrognathus varians
- (2) Roundya or Ligonodina
- (2) Spathognathodus

4737-38'

- (5) Gnathodus texanus
- (1) Taphrognathus varians
- (2) Spathognathodus
- (1) ????

4738-39'

- (1) Ligonodina
- (1) Ozarkodina ?

4739-41'

- (5) Gnathodus texanus
- (1) Taphrognathus varians
- (1) Spathognathodus
- (1) Hibbardella ortha

4742-44'

- (7) Gnathodus texanus
- (3) Taphrognathus varians
- (1) Spathognathodus
- (1) Neoprioniodus loxus
- (2) Dactrognathus ??

4744-46'

- (1) Spathognathodus

4746-49'

- (3) Gnathodus texanus

4749-52'

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

4752-56'

- (1) Taphrognathus varians

4756-59'

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

4760-61'

- (1) Gnathodus texanus

4759-62' - no specimens.

4762-65'

- (1) Gnathodus texanus
- (1) Taphrognathus varians
- (1) Neoprioniodus tulensis ?
- (1) ?????

~~4765-69'~~

4765-69'

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

4769-72'

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

4772-74'

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

4774-75'

- (1) Gnathodus texanus

4775-78' - no specimens

4778-80'

- (1) Gnathodus texanus

4780-82' - no specimens.

4782-85' - no specimens.

4785-88'

- (1) Bactrognathus ?

4788-91' - no specimens.

4791-93'

- (1) Gnathodus semiglaber ?
- (1) ~~Bactrognathus~~ Ligonodina levi

4793-96'

- (2) Gnathodus texanus

4796-99' - no specimens.

4799-4801' - no specimens.

4801-03' - no specimens.

4803-05' - no specimens.

TOTALS: 36 samples
227 specimens.

Sinclair Oil and Gas Co.: No. 1 L. P. Helmley; SW SW SE, 3-35-10W,
Barber County

4716-20'

Apatognathus? n. sp. A
Gnathodus texanus
Lonchodina paraclarki
Neoprioniodus loxus
Ozarkodina recta
Taphrognathus varians

4721-25'

Gnathodus texanus
Hibbardella ortha
Hindeodella sp. ind.
Lonchodina paraclarki
Neoprioniodus tulensis
Taphrognathus varians

4726-30'

Apatognathus? n. sp. A
Gnathodus texanus
Hindeodella sp. ind.
Ligonodina levis
Lonchodina paraclarki
Neoprioniodus sp. cf.
N. cassilaris
N. loxus
N.? inclinatus
Spathognathodus cristula
Taphrognathus varians

4731-35'

Gnathodus texanus
Ligonodina levis
Spathognathodus cristula
Taphrognathus varians

4736-40'

Gnathodus texanus
Ligonodina levis
Lonchodina paraclarki
Spathognathodus cristula
Taphrognathus varians

4741-45'

Gnathodus texanus
Lonchodina paraclaviger
Neoprioniodus loxus
Spathognathodus cristula
Taphrognathus varians

4746-50'

Gnathodus texanus
Spathognathodus cristula

4751-55'

Gnathodus texanus
Ligonodina levis
Taphrognathus varians

4756-60'

Apatognathus? n. sp. A
Gnathodus texanus

4761-65'

Apatognathus? n. sp. A
Gnathodus texanus
Neoprioniodus tulensis
Taphrognathus varians

4766-70'

Gnathodus texanus
Spathognathodus cristula
Taphrognathus varians

4771-75'

Gnathodus texanus
Lonchodina paraclarki
Spathognathodus cristula
Synprioniodina laxilabrum
Taphrognathus varians

4776-80'

Gnathodus texanus

4791-95'

Gnathodus texanus
Ligonodina levis

		<u>Gnathodus texanus</u>	<u>Hibbardella higginsii</u>	<u>H. ortha</u>	<u>Hindeodella sp. ind.</u>	<u>Ligonodina levis</u>	<u>Lonchodina paraciariki</u>	<u>L. paraciariki</u>	<u>Neoprioniodus sp.</u> <u>cf. N. cassilaris</u>	<u>N. loxus</u>	<u>N. tulensis</u>	<u>N. ? inclinatus</u>	<u>Ozarkodina recta</u>	<u>Spathognathodus cristula</u>	<u>Synprioniodina laxilabrum</u>	<u>Taphrognathus varians</u>	
4716		X	-	-	-	-	X	-	-	X	-	-	X	-	-	X	
4720		X	-	X	X	-	X	-	-	-	X	-	-	-	-	X	
		X	-	-	X	X	X	-	X	X	-	X	-	X	-	X	
		X	-	-	-	X	-	-	-	-	-	-	-	X	-	X	
		X	X	-	-	X	X	-	-	-	-	-	-	X	-	X	
4740		X	-	-	-	-	-	X	-	X	-	-	-	X	-	X	
		X	-	-	-	-	-	-	-	-	-	-	-	X	-	X	
		X	-	-	-	X	-	-	-	-	-	-	-	-	-	X	
		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4760		X	-	-	-	-	-	-	-	-	X	-	-	-	-	X	
		X	-	-	-	-	-	-	-	-	-	-	-	X	-	X	
		X	-	-	-	-	X	-	-	-	-	-	-	X	X	X	
		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4780		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		X	-	-	-	X	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4800		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4805		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Figure 14. #1 L. P. Helmley, elevation 1286 feet. Stratigraphic interval sampled and conodont species recovered.

K. #1 L. P. Helmley; Sinclair Oil and Gas Co.; SW
SW SE sec. 3, T. 35 S., R. 10 W.; Barber County, Kansas
(Fig. 14).

The top card places the top of the Mississippian Sys-
tem at a depth of 4710 feet, no specific units identified.

The recovery of numerous Gnathodus texanus and common
Taphrognathus varians places the entire core within the
lower portion of the T. varians - Apatognathus? Assemblage
Zone, equivalent to the Warsaw Formation.

to 4775?