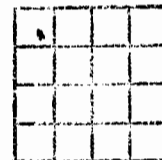


3-24-24W
County Hodgeman

KANSAS

Total Depth. 5233
Comm. 8-9-51 Comp. 9-6-51
Shot or Tracer.
Contractor. Spoer Drlg.
Issued. 5-24-52



CASING:
10" 300' cem. w/200 sx.
5 1/2" 5226 cem. w/300 sx.

Elevation. 2478 D.F.

Production. KFL 3000 bbls.

Figures indicate Bottom of Formations.

surface clay	100
shale & shells	165
sand	185
shale & shells	300
red bed, shale & s hells	955
red bed & shale	1100
sand	1290
shale & red bed	1447
shale & shells	1600
anhyd.	1635
shale & shells	2040
shale, salt & shells	2200
shale, lime & shells	2330
shale & lime	2595
shale & lime shells	2477
shale & lime	2646
shale & lime strks	2735
shale & lime	4114
li o	4135
lime & shale	4194
lime	4337
lime & shale	4470
lime	4589 ?
lime & shale	4589 ?
lime	4635
lime & chert	4666
lime	4820
cherty lime	4870
lime	4886

lime cherty	4993
lime	5030
lime & chert	5172
lime, sand & chert	5190
lime & cherty	5230
lime & cherty	5233
Total Depth	

Tops: R.B.	
Anhyd.	1600
He bner	3948
Toronto	3964
Lansing-K.C.	4023
Marmaton	4408
Congl.	4645
Mississippian	4678
Viola	5045
Simpson	5160
Granite wash	5225

C
O
P
YG. W. Speer
710 Petroleum Building
Wichita, Kansas
September 11, 1951Mr. M. B. Armer,
Wichita, Kansas#4 Schroeder
SEc NW NW Sec. 3-24S-24W.,
Hodgman Co., Kan.

Dear Mr. Armer:

In regard to the above captioned well, I wish to submit the following information.

SURFACE ELEVATION: 2480 K.B.; 2478 D.F., 2475 ground.

FORMATION TOPS : (as measured from kelly bushing)

Anhydrite	1600	(- 880)
Heebner	3948	(-1468)
Toronto	3964	(-1484)
Lansing - Kansas City	4023	(-1543)
Marmaton	4408	(-1928)
Conglomerate	4645	(-2165)
Mississippi lime	4678	(-2198)
Kinderhook (Gilmore city)	4988	(-2508)
(Choteau)	5028	
Viola	5045	(-2565)
Simpson	5160	(-2680)
Quartzite	5225	(-2745)
Rotary total depth	5230	(-2750)
5 $\frac{1}{2}$ " casing cemented with 300 sacks	5226	(-2746)

OIL SHOW: (As measured from K.B.)

In Conglomerate 4651 - 4660 Chert, white, opaque, some tripolitic, fair to poor porosity, slight odor, some free oil, fair saturation. (Producing zone in Shell-Springer well)
ZONE SHOULD BE TESTED.

In Mississippi dolomite 4678 - 4685 Dolomitic lime, white crystalline some poor porosity, fair saturation, some free oil.
 Slight odor. **ZONE SHOULD BE TESTED.**

Cored diamond head core barrel from 4685 to 4715 and from 4715 to 4745. 100% recovery.

4685 - 4689 Dolomitic lime, gray, dense, fine crystalline, scattered spotted stain.
 4689 - 4693 Dolomite, light gray, fine crystalline, fair crystalline porosity, free oil. **ZONE SHOULD BE TESTED.**
 4693 - 4698 Dolomite, gray, dense, fine crystalline.
 4698 - 4702 Dolomite, gray, medium crystalline, fair vugular and crystalline porosity, some free oil. **ZONE SHOULD BE TESTED.**
 4702 - 4710 Dolomite, dense, fine crystalline.
 4710 - 4713 Dolomite, gray, medium fine crystalline, good vugular porosity, gassy, bleeding heavy black oil, possibly trace of water.
 4713 - 4715 Dolomite, gray, free crystalline, some green and gray shale seams.
 4715 - 4745 Dolomite, gray, free crystalline, no shows.

- 4880 Sample caught at this depth contained considerable saturated dolomite; however a trip for a new bit was made at 4872 and 55 feet of hole had to be reamed. No stains were observed in samples before trip, and there was not enough lapsed time between the time the new bit was on bottom and the 4880 sample was caught for cuttings of new hole to reach the surface. I believe the staining showing in the sample @ 4880 was material from up the hole pushed down ahead of the bit when the trip was made and circulated up while reaming.

3-24-24 W
Schroeder #4
Hodgeman Co.

However, there is a possibility this material was in place and before ultimate abandonment of well, should be reviewed in light of any additional information available at that time, and zone should be watched in any other wells that might be drilled deeper.

4966 - 4970 Dolomitic lime, buff to gray, coarse crystalline, sucrose, good porosity, tracespotted oil stain.

Halliburton Drill stem test 4256 - 4993; tool open 1 hour, recovered 580 feet water; BHP 1460# in 15 minutes.

In Quartzite 5227 - 5230 Quartzite, included phenocrists of feldspar, biotite, hornblende - a few pieces good vesicular porosity, little free oil, fair saturation, no odor.

REMARKS

On top of the Mississippi Dolomite, the #4 Schroeder was 26 feet lower than #1 Schroeder, 20 feet lower than #2, and 6 feet lower than #3. This does not show true structural comparisons, however, as the old Mississippian surface was subjected to considerable erosion and part of the so-called Conglomerate in #4 Schroeder was undoubtedly originally Mississippian material.

The oil show indicated above in the Conglomerate is in the same type of material that produces in the Shell-Springer, 10 miles to the north. From the amount of free oil observed in the samples, this zone should prove commercial in the #4 Schroeder, and definitely should be tested before abandonment of the well.

Both from sample examination and Core Lab analysis, the zones indicated above in the Mississippi dolomite from 4678 to 4710 should prove commercial, and will undoubtedly result in a well comparable to the others on the lease.

This well was drilled directly from the Simpson formation into Quartzite, with the normally expected 650 feet of Arbuckle formation completely missing. I doubt if the show of oil in the Quartzite will be commercial, but it is certainly encouraging for the prospects of finding production in the Arbuckle on the flanks of this Pre-Cambrian feature.

Yours truly,

(Signed) G. W. Speer.