

JOHN O. FARMER, INC.  
P. O. BOX 352  
RUSSELL, KANSAS

GEOLOGIC REPORT

JOHN O. FARMER, INC., & BRADEN DRILLING CO.

NO. 1 HOUSTON

C NW NW Sec. 17, T. 8 S., R. 31 W.  
Thomas County, Kansas

JOHN O. FARMER, INC.  
P. O. BOX 352  
RUSSELL, KANSAS

RICHARD G. SMITH

PETROLEUM GEOLOGIST

301 BEACON BLDG.  
WICHITA 2, KANSAS

RESIDENCE  
2934 EUCLID

OFF. AM 5-9626  
RES. WH 3-0703

November 20, 1959

John O. Farmer, Inc.  
370 W. Wichita  
Russell, Kansas

Braden Drilling Co.  
Union National Building  
Wichita, Kansas

Re: John O. Farmer, Inc., &  
Braden Drilling Co.  
No. 1 Houston  
C NW NW Sec. 17, T. 8s, R. 31w  
Thomas County, Kansas

Gentlemen:

The following is my interpretation of the geological data derived from the samples, drilling time log, drill stem test, and Welox electrical log on the Houston No. 1.

<u>Formation</u>	<u>Sample Tops</u>	<u>Welox Tops</u>
Topeka	3933 ( -884)	3940 ( -891)
Heebner	4113 (-1064)	4113 (-1064)
Toronto	4131 (-1082)	4134 (-1085)
Lansing-Kansas City	4143 (-1094)	4150 (-1101)
Base Kansas City	4430 (-1381)	4420 (-1371)
Cherokee	4594 (-1545)	4594 (-1545)
Mississippian	4724 (-1675)	4710 (-1661)
Rotary Total Depth	4825 (-1776)	4825 (-1776)

REGIONAL STRUCTURAL CORRELATIONS:

<u>Formation</u>	<u>J. O. Farmer No. 1 Houston C NW NW 17-8s-31w D - A</u>	<u>Natural G. &amp; O. No. 1 Drew SE SE NW 25-7s-31w D - A</u>	<u>General Crude No. 1 Bremenkamp NE NE SW 36-8s-32w D - A</u>
Topeka	-891		-807
Heebner	-1064	-1034	-978
Lansing-Kansas City	-1101	-1059	-1017
Cherokee	-1545	-1433	-1457
Mississippian	-1661	-1629	-1572
Total Depth	-1776	-1668	-2244

SHOWS OF OIL AND/OR GAS:

Maple Hill - Tarkio Zones:

- 3798-3800 Limestone; dark gray, finely crystalline, shaley; poor intercryst-  
3810-3812 alline and pin-hole porosity; black dead oil staining; no free  
oil; no fluorescence. Recommended not testing this zone.

Topeka Zones:

- 3988-3994 Limestone; gray finely crystalline, scattered good pin-hole porosity;  
no shows of oil and/or gas observed.
- 4042-4048 Limestone; gray finely crystalline; scattered vuggy porosity;  
no shows of oil and/or gas observed.
- 4084-4097 Limestone; cream, medium crystalline; chalky; vuggy porosity;  
no shows of oil and/or gas observed.

Toronto Zone:

- 4131-4136 Limestone; gray to cream, medium crystalline; fair to good vuggy  
porosity; no shows of oil and/or gas observed.

Lansing-Kansas City Zones:

- 4150-4156 Limestone; gray to cream, medium crystalline; fossiliferous; oolitic;  
poorly developed oolitic to good vuggy porosity; no shows of  
oil and/or gas observed.
- 4241-4247 Limestone; gray fine to medium crystalline; scattered vuggy porosity;  
no shows of oil and/or gas observed.
- 4293-4297 Limestone; gray to light tan, fine to medium crystalline, white  
chert; scattered poor intercrystalline porosity; no shows of oil  
and/or gas observed.
- 4320-4328 Limestone; gray to light tan finely crystalline; chalky; scattered  
poor oil staining; no free oil, no fluorescence.
- 4345-4348 Limestone; white to gray, fine to medium crystalline; scattered  
vuggy porosity; trace light free oil; scattered spotted oil stain-  
ing and fluorescence. Recommended testing the two above zones.
- No. 1 drill stem test, 4320-4365, tool open 45 minutes, weak blow for 2  
minutes; recovered 3 feet drilling mud with no shows; ICIP (20 minutes)  
70 p.s.i., IFP 0; FFP 0; FBHP 0 (20 minutes).

4380-4385 Limestone; gray - white, fine to medium crystalline; chalky; soft intercrystalline porosity; no shows oil and/or gas observed.

Marmaton Zones:

4460-4465 Limestone; pink and orange-white, medium to coarsely crystalline; fair porosity; no shows oil and/or gas observed.

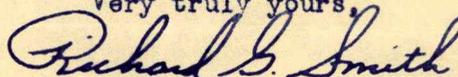
Mississippian Zones:

4744-4752 Dolomite; light tan finely crystalline and sucrosic; soft intercrystalline porosity; no shows of oil and/or gas observed.

In view of the absence of commercial showings of oil being indicated in the potentially productive horizon, it was recommended and approval granted for the No. 1 Houston to be plugged as dry and abandoned.

All measurements were taken from the kelly bushing, and Welex measurements of tops, zones, and total depth are taken as correct.

Very truly yours,



RICHARD G. SMITH  
Petroleum Geologist

RGS/cs