

Brungardt Oil & Leasing Company
Splawn #1
NW NE SW, Section 23-12S-13W
Russell County, Kansas

5 1/2" PRODUCTION CASING SET

CONTRACTOR: Shields Drilling Company
COMMENCED: 7-8-91
COMPLETED: 7-15-91
ELEVATION: 1628' K.B., 1617' D.F., 1615' G.L.
CASING PROGRAM: Surface: 8 5/8" @ 628' w/325 sx.
Production: 5 1/2" @ 3100'
MEASUREMENTS: All depths measured from the
Kelly Bushing.
DRILLING TIME: One (1) foot drilling time
recorded by geolograph, surface
to the R.T.D.
SAMPLES: Samples saved 2150' to the R.T.D.
ELECTRIC LOG: By Great Guns, Radiation-Guard Log.
FORMATION TESTING: There were two (2) drill stem tests
run by Swift Formation Testers.

<u>FORMATION</u>	<u>ELECTRIC LOG DEPTH</u>	<u>SUB-SEA DATUM</u>
Anhydrite	617	+1003
Grand Haven	2176	-556
Dover	2203	-583
Tarkio Limestone	2253	-633
Topeka	2523	-903
Heebner	2755	-1135
Toronto	2773	-1153
Douglas	2785	-1165
Lansing	2814	-1194
Base Kansas City	3066	-1446
Rotary Total Depth	3100	-1480
Electric Log Total Depth	3101	-1481

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(All tops and zone determinations were corrected to the electric log engineer's measurements.)

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

LANSING SECTION
2838-2840

Limestone, buff to tan, finely crystalline, oolitic, spotty poor pinpoint porosity, fair scattered light stain. Slight show of free oil and faint odor in wet samples.
(Perforate)

2853-2863

Limestone, gray to cream, oocastic, good oocastic porosity, good scattered light stain and saturation. Good show of free oil and odor in wet samples.
(Perforate)

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DRILL STEM TEST #1 2820-2863

Open: I.F. 45"
 F.F. 45"

Blow: Fair - Thru out

Recovery: 60' of gas in the pipe
 210' of oil and gas cut mud
 45% gas 20% oil 25% mud 10% H₂O
 120' of slightly oil and gas cut
 watery mud.

Pressures: ISIP 572 psi
 FSIP 555 psi
 IFP 58-109 psi
 FFP 134-168 psi
 HSH 1495-1480 psi

2924-2938

Limestone, white, oocastic, good
oocastic porosity, fair spotty
light stain. Show of free oil and
fair odor in wet samples.

DRILL STEM TEST #2 2918-2930

Open: I.F. 45"
 F.F. 45"

Blow: Weak

Recovery: 125' of muddy water

Pressures: ISIP 1189 psi
 FSIP 1083 psi
 IFP 17-33 psi
 FFP 30-67 psi
 HSH 1533-1518 psi

3001-3010

Limestone, gray, oocastic, cherty,
fair to good oocastic porosity
(barren). No shows of oil.

3014-3018

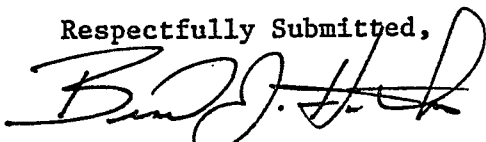
Limestone, white, oocastic, good
oocastic porosity, trace of rare
stain (1-2 pieces). No free oil or
odor in wet samples.

ROTARY LOG TOTAL DEPTH 3100 (-1480)
ELECTRIC LOG TOTAL DEPTH 3101 (-1481)

Recommendations: It was recommended that 5 1/2" production casing be
set and cemented at 3100', one (1) foot off bottom, and the following
zones to be tested.

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|------------|-----------------------|
| 1. Lansing | 2854-2856 (Perforate) |
| | 2838-2840 (Perforate) |

Respectfully Submitted,



Brad J. Hutchison