

# **Robert C. Lewellyn**

*Consulting Petroleum Geologist*

P. O. Box 609  
Kechi, KS 67067-0609  
Office 316-744-2567  
Cell 316-518-0495  
Fax 209-396-2988  
boblewellyn@yahoo.com

## **GEOLOGICAL REPORT**

### **Larson Operating Company**

Eitel No. 1-16  
2310' FSL & 1980' FEL Sec. 16-17S-28W  
Lane County, Kansas

CONTRACTOR: H D Drilling, LLC  
SPUDDED: December 18, 2007  
DRILLING COMPLETED: January 02, 2008  
SURFACE CASING: 8 5/8" @ 256 KBM/175 sx.  
ELECTRIC LOGS: Log-Tech DIL CDN MEL BHCS  
ELEVATIONS: 2763 KB 2758 GL

### **FORMATION TOPS (Electric Log):**

Anhydrite	2125 (+ 638)
Base Anhydrite	2156 (+ 607)
Heebner Shale	3913 (-1150)
Lansing-Kansas City Group	3951 (-1188)
Muncie Creek Shale	4115 (-1352)
Stark Shale	4207 (-1444)
Hushpuckney shale	4246 (-1483)
Base Kansas City	4287 (-1524)
Marmaton	4324 (-1561)
Altamont	4355 (-1592)
Pawnee	4401 (-1638)
Myrick Station	4421 (-1658)
Fort Scott	4456 (-1693)
Cherokee	4479 (-1716)
Mississippian	4549 (-1786)
Electric Log Total Depth	4630 (-1867)

**CONFIDENTIAL**  
APR 09 2008  
KCC

Samples were examined microscopically from 3800 to Rotary Total Depth. Samples were examined wet and dry and samples from potentially productive zones were viewed under a fluoroscope and checked for oil cut. Following is a description of zones of interest, Drill Stem Tests, etc. For a complete lithologic description of all formations, refer to the sample log in the back pages of this report.

Lansing-Kansas City Zones:

3956-3959 (A Zone)

Limestone, buff to tan, dense to finely crystalline, some cream, chalky, some lithographic lime near base of zone, zone is mostly tight with no show of oil.

3982-3986 (B Zone)

Limestone, buff to tan, dense, some finely crystalline, much cream chalky, zone is mostly tight, no show of oil.

4002-4030 (C-D Zone)

Limestone, buff to tan, dense with cream chalky, some light gray chert, fresh, sub-translucent, zone is tight, no show of oil.

4036-4039 (E Zone)

Limestone, buff to tan, dense to finely crystalline, slightly fossiliferous, much cream chalky limestone, zone is mostly tight, no show of oil.

4042-4046 (F Zone)

Limestone, cream to buff, finely crystalline and chalky, slightly fossiliferous, some dense limestone, zone is mostly tight, no show of oil.

4067-4073 (G Zone)

Limestone, buff to tan, finely crystalline and finely oolitic, poor to fair ooliticastic porosity, good odor, poor spotted stain, some dead stain, no free oil, no fluorescence, no cut, porosity is 90% barren.

4132-4138 (H Zone)

Limestone, cream to buff, dense to finely crystalline, scattered poor to fair intercrystalline porosity, scattered poor to fair spotted stain, faint fleeting odor, very slight show of free oil, poor fluorescence, poor cut, electric log indicates this zone warrants no further evaluation.

CONFIDENTIAL

APR 09 2008

KCC

4165-4167 (I Zone)

Limestone, buff to tan, dense to finely crystalline, fossiliferous, poor intercrystalline and interfossil porosity, trace of very poor spotted stain, rare very slight show of free oil, no odor, no fluorescence, no cut, zone warrants no further evaluation.

4195-4198 (J Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, partly fossiliferous and oolitic, trace of very poor oolitic porosity, rare trace of very poor spotted stain, no free oil, no odor, no cut, zone is essentially tight and porosity is 95% barren.

4228-4234 (K Zone)

Limestone, cream to buff, dense to finely crystalline, slightly fossiliferous, scattered very poor intercrystalline porosity, rare trace of spotted stain, very slight show of free oil, no odor, no fluorescence, no cut, zone warrants no further evaluation.

4260-4287 (L Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, partly fossiliferous, scattered poor intercrystalline and interfossil porosity, trace of dead stain, no show of live oil.

4287-4324 (Pleasanton)

The Pleasanton section consisted of limestone, cream to buff, some tan, finely crystalline and chalky, mostly tight with rare trace of poor spotted stain, no free oil, no odor, no fluorescence, no cut. Section contains much cream chalky limestone and warrants no further evaluation.

CONFIDENTIAL

APR 09 2008

4324-4355 (Marmaton)

Limestone, cream to buff to tan, chalky and dense, some brown dense, trace of chert, fossiliferous, fresh, opaque, zone is mostly tight with no shows of oil.

KCC

4355-4395 (Altamont)

Limestone, buff to tan to gray, some mottled, rare trace of poor intercrystalline porosity, trace of very poor spotted stain, very slight show of free oil, no odor, no fluorescence, no cut, lower portion of zone is tight, zone warrants no further evaluation.

4401-4418 (Pawnee)

Limestone, buff to tan, some brown, dense to finely crystalline, trace of very poor scattered vugular porosity with rare trace of very poor spotted stain, no free oil, no odor, no fluorescence, no cut, zone warrants no further evaluation.

4421-4451 (Myrick Station)

Limestone, tan, some brown, dense to finely crystalline, slightly fossiliferous, trace of very poor light spotted stain in tight limestone, no free oil, no odor, no fluorescence, no cut, zone warrants no further evaluation.

4456-4479 (Fort Scott)

Limestone, tan to brown, dense, trace of dense-oolitic, zone is mostly tight with a trace of poor spotted stain, very slight show of free oil, no odor, no fluorescence, no cut. Lower section is Limestone, tan to brown, dense, some finely crystalline, trace of oolitic, poor intercrystalline porosity, trace poor light spotted stain, no free oil, no odor, no fluorescence, no cut. Zone warrants no further evaluation.

4479-4517 (Cherokee)

This section consisted of limestones, buff to tan and brown, mostly tight with no shows of oil.

4517-4539 (Johnson Zone)

Limestone, buff, some tan, dense to finely crystalline, slightly fossiliferous, zone is mostly tight with no shows of oil.

CONFIDENTIAL  
APR 09 2008

4539-4545 (Cherokee sand)

Sand, light gray, calcareous, very fine grained, well sorted, well cemented, trace of friable with good spotted to saturated stain, fair show of free oil, good odor, fair fluorescence, fair cut, zone is thin and appears to have little or no reservoir quality. Zone warrants no further evaluation

KCC

4549-4554 (Mississippian)

Limestone, cream to buff, dense to finely crystalline and chalky, flaky, mostly tight with no show of oil.

4554-4566

Dolomite, gray to buff, finely crystalline, poor to fair intercrystalline porosity, trace of fair vugular porosity, fair to good spotted stain, good show of free oil, fair odor, fair fluorescence, fair to good cut.

Drill Stem Test No. 1

4535-4560

Open 15 minutes, shut in 30 minutes, open 15 minutes, shut in 30 minutes; weak quarter-inch blow, died in 12 minutes, no blow on second flow period. Recovered 10 feet of mud. ISIP 1180# FSIP 1135# IFP 15-19# FFP 21-26# IHP 2213# FHP 2176# BHT 120 degrees.

4566-4630

The remainder of the Mississippian consisted of buff to tan tight dolomites, alternating with zones of poor intercrystalline porosity. Scattered very poor spotted stain was present in the upper portion of this interval, but no free oil, no odor, no fluorescence and no cut were present. No further evaluation is warranted in the Mississippian.

4630

Rotary Total Depth

Conclusions and Recommendations:

Sample examination, drill stem testing, and electric logging revealed no zones of possible commercial production of oil or gas in the No. 1-16 Eitel. It was therefore recommended that this well be plugged and abandoned.

Respectfully submitted,

Robert C. Lewellyn  
Petroleum Geologist

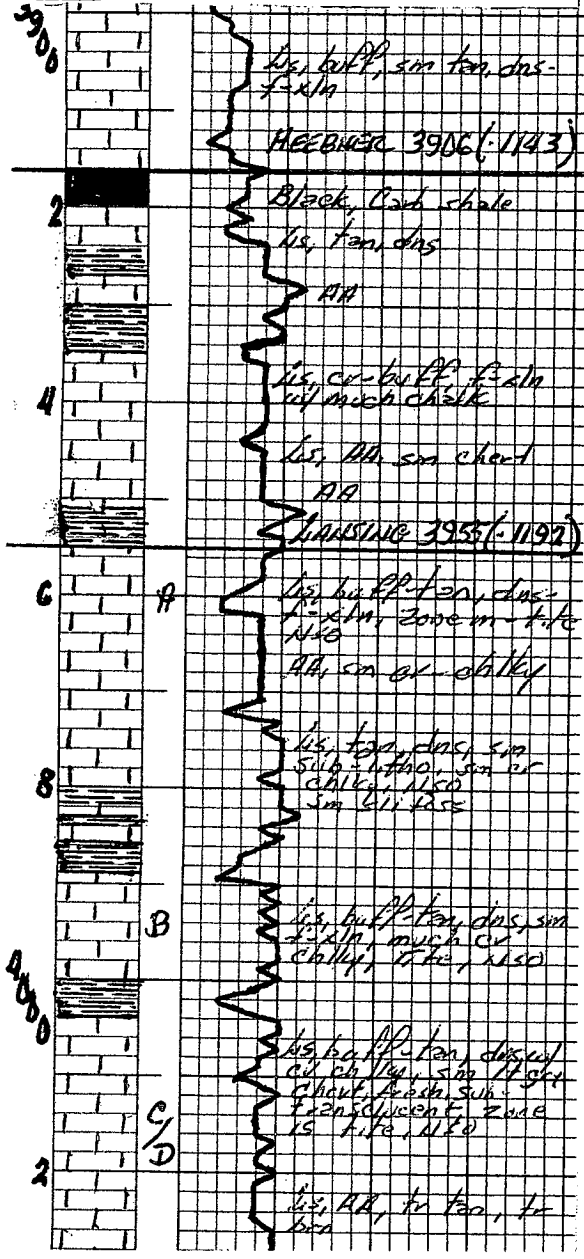
RCL:me

CONFIDENTIAL  
APR 19 2003  
KCC

STATE <b>KANSAS</b>	COMPANY <b>LARSON ENGINEERING INC.</b>
COUNTY <b>LANE</b>	FARM <b>EITEL</b>
BLOCK <b>16</b>	WELL NO. <b>1-16</b>
SEC. <b>16</b>	SURVEY <b>2310 FSL &amp; 1980 FEL</b>
T <b>175</b>	B <b>28W</b>
TOTAL DEPTH <b>4630</b>	
CONTRACTOR <b>H D Drilling, LLC</b>	
COMMENCED <b>12-18-07</b>	
COMPLETED <b>01-02-08</b>	
REMARKS	
ALTITUDE <b>2763 KB</b>	
PRODUCTION <b>D &amp; A</b>	
CASING RECORD <b>Robert C. Jewellyn - Coal</b>	
<b>8 5/8" @ 256 KBM / 175 ft</b>	

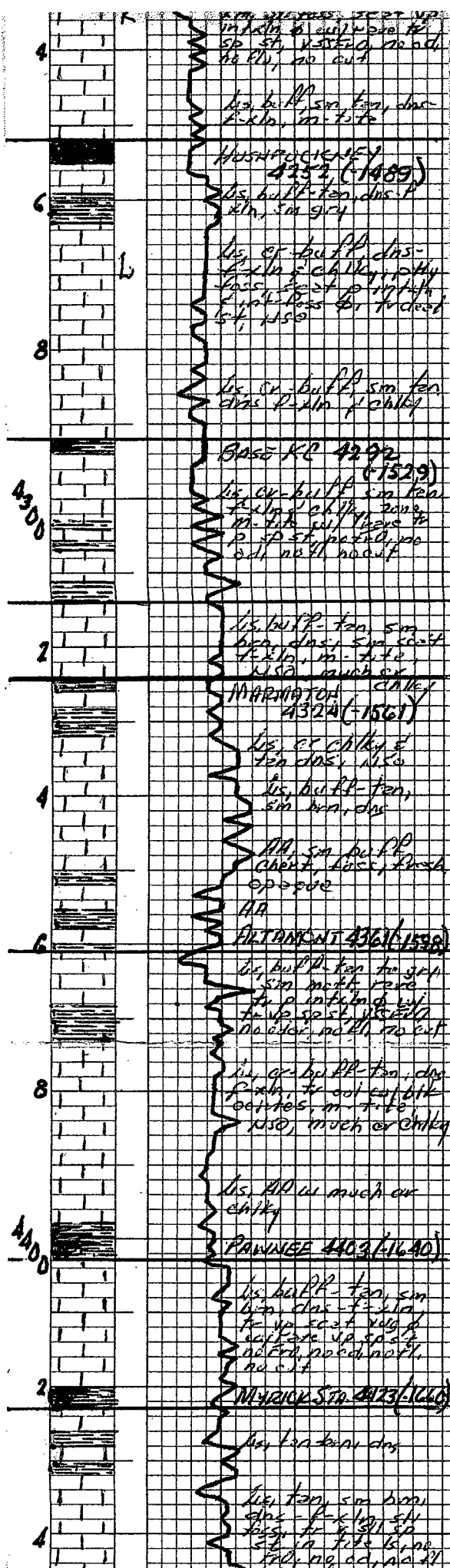
SHOT QUARTS BETWEEN

TIME RATE SCALE: 1/10" = MINUTES



CONFIDENTIAL  
APR 09 2008  
KCC





CONFIDENTIAL  
 APR 09 2008  
 KCC

