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GEOLOGICAL REPORT

Larson Engineering, Inc.

Neeley No. 1-8
747' FSL & 1099 FEL Sec. 8-19S-30W
Lane County, Kansas

CONTRACTOR:

H D Drilling, LLC

SPUDDED:

January 12, 2008

DRILLING COMPLETED:

January 23, 2008

SURFACE CASING:

8 5/8" @ 251 KBM/175 sx,

ELECTRIC LOGS:

Log-Tech DIL CNL/CDL MEL

ELEVATIONS:

2904 KB 2899 GL

FORMATION TOPS (Electric Log):

Anhydrite	2201 (+ 703)
Base Anhydrite	2259 (+ 645)
Heebner Shale	3935 (-1031)
Lansing-Kansas City Group	3976 (-1072)
Muncie Creek Shale	4163 (-1259)
Stark Shale	4272 (-1368)
Hushpuckney shale	4309 (-1405)
Base Kansas City	4349 (-1445)
Altamont	4392 (-1488)
Pawnee	4473 (-1569)
Myrick Station	4495 (-1591)
Fort Scott	4517 (-1613)
Cherokee	4541 (-1637)
Mississippian	4600 (-1696)
Electric Log Total Depth	4666 (-1762)

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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:

3976-4010 (A Zone)

Limestone, buff to tan, dense to finely crystalline, some scattered oolitic, some cream chalky, zone is mostly tight with a rare trace of very poor intercrystalline porosity, no show of oil.

4017-4012 (B Zone)

Limestone, cream to buff, finely crystalline and chalky, slightly fossiliferous, scattered poor intercrystalline and interfossil porosity, no show of oil.

4038-4067 (C/D Zone)

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Limestone, cream to buff, dense and chalky to finely crystalline, zone is mostly tight with trace of very poor intercrystalline porosity, no shows of oil. Some scattered light gray chert.

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4069-4086 (E Zone)

Limestone, cream to buff, some tan, dense to finely crystalline, some chalky, slightly fossiliferous, poor intercrystalline porosity, trace of dead stain, no shows of live oil, no fluorescence, no cut.

4089-4094 (F Zone)

Limestone, buff to tan, dense to finely crystalline, scattered poor to fair intercrystalline porosity, partly oolitic with poor ooliticastic porosity, trace of dead stain, no shows of live oil, no stain, odor, fluorescence, or cut. Trace of gray chert.

4104-4117 (G Zone)

Limestone, buff to tan, finely crystalline and oolitic, fair to good ooliticastic porosity, no show of oil.

4178-4182 (H Zone)

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Limestone, buff to tan, finely crystalline, slightly fossiliferous, poor to fair intercrystalline and interfossil porosity, scattered poor spotted stain, slight show of free oil, faint odor, poor fluorescence, fair cut.

Drill Stem Test No. 1

4157-4188

15-30-30-60; quarter-inch blow built to $\frac{3}{4}$ inch blow on first flow; quarter-inch blow, died in 22 minutes on second flow; recovered 30 feet of slightly water cut mud (10% water, 90% mud). ISIP 931# FSIP 926# IFP 14-24# FFP 26-39# IHP 2091# FHP 2082# BHT 117 degrees.

4218-4228 (I Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, scattered poor intercrystalline porosity with considerable tight limestone, much chalky, one or two pieces with poor spotted stain, no odor, no free oil, no fluorescence, no cut, trace of dead stain.

4245-4257 (J Zone)

Limestone, buff, some gray, fine to medium crystalline and coarsely oolitic, fair to good oolitic porosity, no shows of oil.

4275-4309 (K Zone)

Limestone, cream to buff, dense to finely crystalline with much chalky, slightly fossiliferous, trace of scattered poor intercrystalline porosity, no show of oil.

4312-4316 (Middle Creek Zone)

Limestone, buff to tan, dense, tight, no show of oil.

4318-4330 (L Zone)

Limestone, cream to buff to tan, dense to finely crystalline, chalky, scattered poor vugular and intercrystalline porosity, trace of scattered dead stain, no show of live oil, some scattered calcite crystal overgrowth.

4349-4383 (Pleasanton Zone)

Limestone, buff to tan and brown, dense to sub-lithographic, some finely crystalline with scattered very poor intercrystalline porosity to mostly tight, no show of oil.

4417-4422 (Altamont Zone)

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Limestone, cream to buff, finely crystalline, slightly fossiliferous, slightly oolitic, poor to fair intercrystalline and interfossil porosity, poor to fair spotted stain, slight show of free oil, faint odor, poor fluorescence, fair cut, some dense lime with stain on fracture faces.

Drill Stem Test No. 2

4400-4424

15-30-30-60; blow off bottom in 11 minutes on initial flow, blow off bottom in 17 minutes on final flow. Recovered 150 feet of water cut mud (10% water, 90% mud), 330 feet of mud cut water (90% water, 10% mud), 30 feet of mud. ISIP 1064# FSIP 1056# IFP 20-137# FFP 140-247# IHP 2195# FHP 2189# BHT 134 degrees.

4473-4492 (Pawnee Zone)

Limestone, buff to tan, some mottled, dense to finely crystalline, scattered poor intercrystalline and vugular porosity, trace of poor spotted stain, very slight show of free oil, faint fleeting odor, poor fluorescence, poor cut.

4495-4512 (Myrick Station Zone)

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Limestone, brown, dense, some sub-lithographic, scattered finely crystalline, zone is mostly tight with scattered very poor stain on fracture faces, no free oil, no odor, no fluorescence, no cut.

4517-4541 (Fort Scott Zone)

Limestone, buff to tan, some brown, dense to finely crystalline and partly oolitic, poor to fair intercrystalline and interoolitic porosity, poor spotted stain, very slight show of free oil, faint fleeting odor, poor fluorescence, poor cut.

4574-4597 (Johnson Zone)

Limestone, buff to tan, dense to finely crystalline, trace of very poor intercrystalline porosity, scattered poor spotted stain, very slight show of free oil, faint, questionable odor, no fluorescence, poor cut, trace of tight oolitic limestone.

Drill Stem Test No. 3

4450-4590

Misrun, packer failed.

Drill Stem Test No. 4

4475-4590

15-30-30-60; blow built to 1 ½ inches on first flow; built to quarter-inch blow on second flow, died in 28 minutes. Recovered 60 feet of oil spotted mud. ISIP 770# FSIP 823# IFP 36-37# FFP 41-43# IHP 2253# FHP 2246# BHT 125 degrees.

4600-4666 (Mississippian Zone)

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Limestone, cream to buff, dense and chalky to finely crystalline, friable, flaky and brittle, very slightly glauconitic, traces of very poor scattered intercrystalline porosity to tight limestone throughout section; top two or three feet contains slight stain and very slight show of free oil with questionable fleeting odor, no fluorescence, no cut and considerable dead stain in tight limestone. Mississippian warrants no further evaluation.

4666

Rotary Total Depth

Conclusions and Recommendations:

Sample examination, drill stem testing, and electric logging revealed no zones of possible commercial production in the No. 1-8 Neeley. It was therefore recommended, and permission granted for the No. 1-8 Neeley to be plugged and abandoned.

Respectfully submitted,

Robert C. Lewellyn
Petroleum Geologist

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CASING RECORD

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TIME RATE SCALE: 1/10" = MINUTES
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Knockhill! AEO, 8 1-800-331-7290

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STARK 4271 (-136')

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Dr. Aufp-fundus

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