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ORIGINAL

JERRY J. DRISCOLL OIL INVESTMENTS, INC.
18337 15th Road
Russell, Kansas 67665

GEOLOGICAL REPORT

Borell No. 2
100' W of NW-NE-SE
Section 32, Twp. 14 South,
Rge. 12 West
Russell County, Kansas

15-167-23119

July 17, 1996

Jerry J. Driscoll Oil Investments, Inc.
18337 15th Road
Russell, Kansas 67665

ORIGINAL

GEOLOGICAL REPORT:

Borell No. 2
100' W of NW-NE-SE
32-14S-12W
Russell County, Kansas

DRILLING CONTRACTOR:

Vonfeldt Drilling Co. Rig. 1
Russell, Kansas 67665

DRILLING COMMENCED:

July 11, 1996

DRILLING COMPLETED:

July 16, 1996

CASING RECORD:

8/ 5/8 set at 658' with 175 sx.
5 1/2 set at 3212' with 100 sx.

DRILLING TIME:

By Geolograph.
1 foot intervals plotted and
recorded from 2400' to 3220'
R.T.D.

SAMPLES:

10 foot intervals from 2550' to
3220' R.T.D.

DRILL STEM TESTS:

3 by Superior Testers
Great Bend, Kansas

LOGS:

Radiation Guard Log W/SP
ELI Wireline Services
Hays, Kansas 67601

MUD TYPE:

Chemical Mud

ELEVATION:

American Elevation, Inc.
Kelly Bushing 1725'
Ground Level 1720'
Measurements from K.B.

15-167-23119

FORMATION TOPS

<u>FORMATION</u>	<u>SAMPLE TOP</u>	<u>LOG TOP</u>	<u>MINUS DATUM</u>
Anhydrite	652	652	+1073
Base Anhydrite	670	674	+1051
Topeka	2557	2554	-829
Heehner	2791	2789	-1064
Toronto	2807	2807	-1082
Doulgas	2822	2820	-1095
Brown Lime	2876	2874	-1149
Lansing-Kansas City	2886	2887	-1162
Base-Kansas City	3146	3144	-1419
Gorham Sand	3165	3165	-1440
Rotary Total Depth	3220	3221	-1496

Lithology: Zones of Interest

NOTE: All sample descriptions have been corrected to the log measurements.

Lansing-Kansas City 2887 (-1162)

2890-93

A Zone

LS;

White to buff, crystalline to poor fossil porosity with a trace of stain. No free oil but faint odor.

Tested by D.S.T. No. 1

2910-20

C Zone

LS;

White to buff, fair oolitic and oolitic porosity with scattered light stain. Show of free oil and fair odor.

Tested by D.S.T. No. 1

2958-62

F Zone

LS;

White, fair fossil porosity with light stain. Trace of chert. Show of free oil and fair odor.

Tested by D.S.T. No. 2

2973-79
G Zone

LS; White to buff, fair to poor oolitic and oolitic porosity with light spotty stain. Show of free oil and fair odor. 98% barren porosity.

3043-46
I Zone

LS; White to buff, poor crystalline to slightly fossil porosity with a trace of stain. No free oil or odor.

3063-65
J Zone

LS; Buff, slight oolitic porosity, also chalky. No show.

Base-Kansas City 3144 (-1419)

Gorham Sand 3165 (-1440)
3165-71

SS; White to transparent sand clusters, rounded to subrounded, fair porosity with light stain. Show of free oil and fair odor.

Tested by D.S.T. No 3

3171-77

Dol; White, fine to medium crystalline dolomite with included Quartz grains. Very slight show of free oil and fair odor.

3177-3220

Dol; White, fine to medium crystalline, some fair barren porosity. Included Quartz grains throughout. No free oil but faint odor.

DRILL STEM TESTS

Drill Stem Test No. 1 2881-2920 A,B,C Zone

Time Interval: 45-45-30-30

Blow: 1st Open - weak building to 3 1/2"
2nd Open - weak decreasing to a surface blow

Recovery:

50 feet of heavy mud with spots of oil
40 feet of muddy water with spots of oil

90 feet of total fluid

Pressures:

IHMP: 1430#	IFP: 88# - 44#
ISIP: 66#	FFP: 55# - 55#
FSIP: 77#	BHT: 98 F
FHMP: 1408#	

Mud Properties: Viscosity: 46 Weight: 8.6 Water loss: 6.8

Drill Stem Test No. 2 2934-2967 F Zone

Time Interval: 45-45-45-45

Blow: 1st Open - fair, built to 11" in 20 min.
2nd Open - fair, built to 7"

Recovery:

100 feet of slightly oil cut muddy water
440 feet of muddy water

540 feet of total fluid

Pressures:

IHMP: 1463#	IFP: 88# - 110#
ISIP: 508#	FFP: 165# - 198#
FSIP: 386#	BHT: 99 F
FHMP: 1441#	

Mud Properties: Viscosity: 46 Weight: 8.6 Water loss: 8.6

DRILL STEM TESTS CON'T

Drill Stem Test No. 3 3152-3172 (Straddle)

Time Interval: 15-30-15-30

Blow: 1st Open - strong, bottom of bucket in 1 min.
2nd Open - strong, bottom of bucket in 1 min.

Recovery:

180 feet of heavy oil and gas cut watery oil
180 feet of water and slight mud cut oil
180 feet of watery slight mud and gas cut oil
1000 feet of heavy oil and gas cut water
500 feet of gas and oil cut water
340 feet of oil cut water
60 feet of water with a scum of oil
60 feet of thick heavy mud
2500 feet of total fluid

Pressures:

IHMP: 1627#	IFP: 298# -651#
ISIP: 1057#	FFP: 717# -969#
FSIP: 1057#	BHT: 102 F
FHMP: 1551#	

Mud Properties: Viscosity: 54 Weight: 8.9 Water loss: 8.4

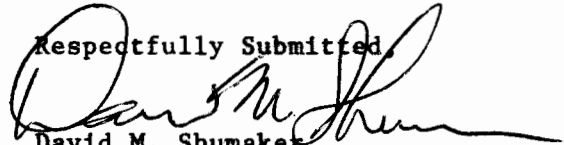
REMARKS AND RECOMMENDATIONS

The Borell No. 2 ran 2 feet higher than the Borell No. 1 (50' W of C-E/2 NE-SE) when comparing the Lansing tops. Shows of oil were logged and tested in the A, C, and F Zones. Drill stem test results indicate a depleted reservoir. I would not recommend perforating the Lansing-Kansas City.

The Gorham Sand datum of -1440 is some 5 feet higher than the Borell No. 1. Fair to poor shows were logged in the top 6 feet of the Sand but were not tested initially. After drilling more hole and looking at the samples, it was decided to make more rat hole and log the Gorham Sand-Arbuckle section. The Sand section looked very good and a straddle test was recommended. The test recovered 2500' feet of fluid with varied amounts of oil and water being recovered, good bottom hole pressures were noted along with good flow pressures. It was recommended that 5 1/2 casing be set through the Sand section with completion to be made through perforation. Completion through the perms could be a problem as the Sand may take a great deal of cement back in the formation.

DMS/das

Respectfully Submitted,



David M. Shumaker
Petroleum Geologist