

ORIGINAL

Mai Oil Operations, Inc.  
4514 Cole. Ave. Ste. 804 LB 30  
Dallas, Texas 75205

GEOLOGICAL REPORT

Johnson No. 1  
S/2-NW-NW-SE  
Section 25, Twp. 11 South  
Rge. 19 West  
Ellis County, Kansas

RECEIVED  
STATE DEPT. OF REVENUE

SEP 14 2000

COMPTROLLER OF REVENUE  
STATE DEPT. OF REVENUE

July 15, 2000

DRILL STEM TESTS

Drill Stem Test No. 1 3102-3130 Topeka

Time Interval: 45-45-45-45

Blow: First Open - weak 14" to 2" blow

Second Open - weak 2" blow

Recovery: 5 feet of oil

125 feet of slightly oil cut muddy water

130 feet of total fluid (2% oil, 78% water, 20% mud)

Pressures:

IHMP: 1484#

IFP: 33# - 44#

ISIP: 462#

FFP: 66# - 77#

FSIP: 571#

BHT: 102 F

FHMP: 1463#

Mud Properties:      Viscosity: 48      Weight: 9.6      Water loss: 9.6

Drill Stem Test No. 2 3418-45      Lansing-Kansas City

Time Interval: 45-45-45-45

Blow: First Open - weak 1/2" to 1" blow throughout

Second Open - weak 1" blow throughout

Recovery: 60 feet of gas in pipe

10 feet of oil

95 feet of slightly oil cut watery mud

105 feet of total fluid (2% oil, 45% water, 53% mud)

Pressures:

IHMP: 1722#

IFP: 55# - 66#

ISIP: 767#

FFP: 77# - 77#

FSIP: 767#

BHT: 104 F

FHMP: 1712#

Mud Properties:      Viscosity: 56      Weight: 9.4      Water loss: 10.8

DRILL STEM TESTS CONT

Drill Stem Test No. 3 3576-3645 Simpson

Time Interval: 45-45-45-45

Blow: First Open - weak - died in 20 min.

Second Open - no blow

Recovery:

10 feet of mud- with a show of oil

10 feet of total fluid

Pressures:

IHMP: 1809#

IFP: 55# - 55#

ISIP: 220#

FFP: 77# - 77#

FSIP: 176#

BHT: 107 F

FHMP: 1798#

Mud Properties: Viscosity: 47 Weight: 9.4 Water loss: 9.4

Drill Stem Tests No. 4 Arbuckle

Time Interval: 30-30-10

Blow: First Open - weak 1/2" blow died in 26 min.

Second Open - no blow

Recovery: 15 feet of mud

15 feet of total fluid

Pressures:

IHMP: 1755#

IFP: 66# - 66#

ISIP: 517#

FFP: 66# - 66#

FSIP: N.A.

BHT: 109 F

FHMP: 1722#

Mud Properties: Viscosity: 47 Weight: 9.4 Water loss: 9.4

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GEOLOGICAL REPORT:

Johnson No. 1  
S/2-NW-NW-NE  
25-11S-19W  
Ellis County, Kansas

CONTRACTOR:

Vonfeldt Drilling Co. Rig. No. 1  
Russell, Kansas 67665

DRILLING COMMENCED:

July 3, 2000

DRILLING COMPLETED:

July 12, 2000

CASING RECORD:

8 5/8 set at 267'.  
No production casing.

DRILL TIME:

By Geolograph.  
1' intervals plotted and recorded  
from 2900' to 3680' R.T.D.

SAMPLES:

10' intervals from 3000' to 3688'  
R.T.D.

LOGS:

Radiation Guard Log & Sonic  
Log-ELI Wireline Service  
Hays, Kansas 67601

DRILL STEM TESTS:

4 by Trilobite Testing LLC  
Hays, Kansas 67601

MUD:

Chemical Mud  
Andy's Mud & Chemical  
Hays, Kansas 67601

ELEVATION:

Central Kansas Surveying  
& Mapping Inc.  
Kelly Bushing 2083'  
Measurements from K.B.

FORMATION TOPS  
(R-Guard Log-Gamma-Ray)

<u>FORMATION</u>	<u>SAMPLE DEPTH</u>	<u>LOG DATUM</u>
*Anhydrite	1412	1408 +675
*Base-Anhydrite	1444	1440 +643
Topeka	3085	3082 -999
Heebner	3313	3307 -1224
Toronto	3332	3328 -1245
Lansing-Kansas City	3355	3350 -1267
Base-Kansas City	3577	3577 -1494
Simpson	3636	3634 -1551
Arbuckle	3650	3654 -1571
Rotary Total Depth	3680	3670 -1587
*Drillers Tops		

Lithology: Zones of Interest

NOTE: All sample descriptions are corrected to log measurements.

Topeka 3082-Top (-999)

3110-16

LS; White to buff, crystalline slightly granular porosity with light stain. Show of light free oil and faint odor.

Tested by D.S.T. No. 1

Toronto 3328 (-1245)

3328-30

LS; White, fine crystalline and dense. Cherty.

Lansing-Kansas City 3350 (-1267)

3349-50

A Zone

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

## Lithology: Page 2

3382-84 B Zone	LS;	White, fine crystalline dense to slightly chalky porosity with no show. Slightly oolitic.
3406-08 C Zone	LS;	White, fine crystalline, dense to slightly chalky. Slightly oolitic. No show.
3431-34 F Zone	LS;	White, fossil crystalline porosity with light stain. Very slight show of free oil and faint odor.

Tested by D.S.T. No. 2

3440-42 G Zone	LS;	White, fine crystalline and slightly oolitic with no show.
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Tested by D.S.T. No. 2

3482-84 H Zone	LS;	White to light gray, fine crystalline and dense cherty. No show.
3503-06 I Zone	LS;	White, fine crystalline and chalky. Poor porosity with no show.
3513-18 J Zone	LS;	White, chalky fossil porosity with a trace of stain. No free oil or odor.
3543-46 K Zone	LS;	White, fine crystalline and chalky, slightly fossiliferous. No free oil or odor.
3569-70 L Zone	LS;	Buff, very fine crystalline and dense. No show.

Base-Kansas City 3577 (-1494)

Simpson 3634 (-1551)

3636-45	Dol;	White, poor medium crystalline porosity with heavy dark stain. Good show of heavy free oil.
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Tested by D.S.T. No. 3 &amp; No. 4

Lithology: Page 3

3646-49	Dol;	White, poor crystalline porosity with some included green shale and some coarse sand grains. Trace of very heavy free oil and poor odor.
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Tested by D.S.T. No. 4

Arbuckle 3654 (-1571)

3654-57	Dol;	White, fair medium crystalline porosity with light to dark stain. Dark free oil-much lighter than in the Simpson. Fair odor.
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Tested by D.S.T. No. 4

3658-67	Dol;	Buff, poor crystalline porosity with spotty dark stain. Very slight show of free oil. Odor decreasing.
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3658-80	Dol;	Buff, poor fine to medium crystalline porosity with spotty stain. 80% barren porosity. Very slight show of free oil and poor odor.
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Rotary Total Depth 3680 (-1597)

Log Total Depth 3670 (-1587)

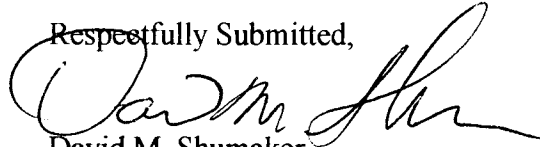
## REMARKS AND RECOMMENDATIONS

The Mai Oil Operations Johnson No. 1 ran almost flat with the Liberty Operations Johnson No. 3 located at the SW-NE-NW, 36-11-19W when considering the Arbuckle tops. The Lansing top of -1267 was some 7 feet higher than the Liberty Johnson No. 3.

The Topeka, and the F zone were tested with non-commercial amounts of oil being recovered.

The Simpson and Arbuckle were both tested with negative results. Relatively low structural position as well as poor porosity and permeability resulted in very poor recovery on the drill stem tests. Since there were no commercial tests noted and no other commercial shows noted, it was recommended that the Johnson No. 1 be plugged and completed as a dry hole.

DMS/das

Respectfully Submitted,  
  
David M. Shumaker  
Petroleum Geologist