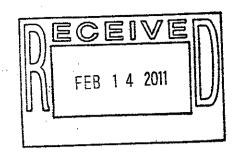
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Abarta Oil & Gas Co. Inc. Hoffman #\ \ \ \ \ NE-SW-NW-SW (1970' FSL & 345' FWL) Section 18-16s-11w Barton County, Kansas Page 1



# 5 1/2" Production Casing Set

Contractor:

Royal Drilling Company (rig # 2)

Commenced:

January 21, 2011

Completed:

January 27, 2011

Elevation:

1895' K.B; 1883 D.F; 1878' G.L.

Casing program:

Surface; 8 5/8" @ 735'

Production; 5 1/2" @3315'

Sample:

Samples saved and examined 2600' to the Rotary Total Depth.

**Drilling time:** 

One (1) foot drilling time recorded and kept 2600 ft to the Rotary Total

Depth.

Measurements:

All depths measured from the Kelly Bushing.

**Drill Stem Tests:** 

There were two (2) Drill Stem Tests ran by Trilobite Testing.

Electric Log:

By Log Tech; Dual Induction, Dual Compensated Porosity Log,

Microresistivity and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	731	+1154
Base Anhydrite	758	+1127
Topeka	2654	-769
Heebner	2938	-1053
Toronto	2954	-1069
Douglas	2968	-1083
Brown Lime	3031	-1146
Lansing	3049	-1164
Base Kansas City	3299	-1414
Arbuckle(samples)	3314	-1429
Rotary Total Depth	3318	-1433
Log Total Depth	3314	-1429

(All tops and zones corrected to Electric Log measurements).

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

### **TOPEKA SECTION**

2660-2666' Limestone; cream, gray, finely crystalline, few fossiliferous, poor

visible porosity, dense, no show.

2714-2720' Limestone; gray, finely crystalline, slightly fossiliferous, plus gray,

fossiliferous boney chert, no show.

Abarta Oil & Gas Co. Inc.

Hoffman #1

NE-SW-NW-SW (1970' FSL & 345' FWL)

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2883-2889'

Limestone; cream, sub comoldic, few collitic, chalky, poor visible

porosity, brown spotty stain, no show of free oil and no odor in

fresh sample.

2900-2910'

Limestone; cream, light gray, finely crystalline, chalky, poor

visible porosity, no show.

### TORONTO SECTION

2958-2966'

Limestone: cream, white, finely crystalline, slightly dolomitic.

black to dark brown stain, no show of free oil and no odor in

fresh sample.

### LANSING SECTION

3049-3054

Limestone; cream, finely crystalline, chalky, poor visible porosity,

no show.

3076-3086'

Limestone; gray, finely crystalline, poorly developed porosity.

trace stain, trace of free oil and no odor in fresh samples.

3093-3103'

Limestone; cream, finely crystalline, chalky, poor intercrystalline

type porosity, trace brown stain, trace of free oil and no odor in

fresh samples.

3120-3126

Limestone; cream, gray, fine and medium crystalline.

fossiliferous/oolitic, chalky, no shows.

3140-3156

Limestone; cream, white, oolitic, oomoldic, fair to good oomoldic

porosity (barren).

3183-3190'

Limestone: cream, buff, finely crystalline, chalky I part, poorly

developed porosity, trace brown stain, no show of free oil and no

odor in fresh samples.

3215-3221'

Limestone; tan, cream, oolitic, oomoldic, chalky in part, fair to

good oomoldic porosity, fair brown stain, show of free oil and fair

odor in fresh samples.

### **Drill Stem Test #1**

3172-3242'

Times:

30-45-30-45

Blow:

Strong

Recovery:

3150' gas in pipe

124' gassy oil cut mud

(40% gas, 30% oil, 30% mud)

201' muddy gassy oil

(50% oil, 30% gas, 20% mud)

Pressures: ISIP

688

psi

FSIP

psi

670 IFP 16-83

psi

FFP 110-141

HSH 1557-1522

psi psi

3256-3270'

Limestone; cream, light gray, finely crystalline, chalky, poorly

developed porosity, no show, plus white chalk.

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3285-3294"

Limestone; tan, finely crystalline, dense.

# **ARBUCKLE SECTION**

3314-3318'

Dolomite; cream, gray, medium to coarse crystalline, fair intercrystalline porosity, spotty golden brown stain, show of free oil and faint odor in fresh samples.

# **Drill Stem Test #2**

3290-3318'

Times:

30-30-30-30

Blow:

Strong, gas to surface 2nd opening, T.S.T.M.

Recovery:

1508' clean gassy oil

(65% gas, 35% oil)

156' heavy oil gas cut watery mud (70% oil, 20% gas, 5% water, 5% mud)

30' oil and gas cut muddy water

(505 water, 20% gas, 20% oil, 10% mud)

Pressures: ISIP

786

psi

FSIP 786

psi

IFP 106-439 psi

FFP

428-621 HSH 1635-1596

psi psi

Rotary Total Depth

3318 (-1433)

Log Total Depth

3314 (-1429)

## Recommendations:

5 1/2" production casing was set and cemented at 3315' (three foot off bottom) and the Hoffman #2 should be completed in the Arbuckle Dolomite by "open hole" completion methods before abandonment. The Lansing 'J' zone (3216-3222) should be perforated and tested.

Respectfully submitted:

Joshua R. Austin,

Petroleum Geologist