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Mai Oil Operations Axman-Stoss Unit #1 NE-NW-NE-SE (2480' FSL & 980' FEL) Section 7-17s-14w Barton County, Kansas Page 1

#### **Dry and Abandoned**

Contractor:

Southwind Drilling Co. (Rig #3)

Commenced:

December 14, 2013

Completed:

December 20, 2013

Elevation:

1963' K.B; 1961' D.F; 1955' G.L.

Casing program:

Surface; 8 5/8" @ 941'

Production; none.

Sample:

Samples saved and examined 2800' to the Rotary Total Depth.

**Drilling time:** 

One (1) foot drilling time recorded and kept 2800 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 Co.

**Electric Log:** 

None.

| <u>Formation</u>            | Log Depth | Sub-Sea Datum |
|-----------------------------|-----------|---------------|
| Anhydrite                   | 938       | +1025         |
| Base Anhydrite              | 965       | +998          |
| Heebner                     | 3140      | -1177         |
| Toronto                     | 3152      | -1189         |
| Douglas                     | 3172      | -1209         |
| Brown Lime                  | 3207      | -1244         |
| Lansing Samples saved and a | 3222      | -1259         |
| Arbuckle                    | 3484      | -1521         |
| Rotary Total Depth          | 3497      | -1534         |

(All top and zone determination were made from a correlation of Electric Log measurements).

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

### **TOPEKA SECTION**

3062-3078'

Limestone; tan, cream, fine and medium crystalline slightly

dolomitic, poor intercrystalline type porosity, no shows.

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3092-3100'

Limestone; cream, white, light gray, finely crystalline,

fossiliferous, trace spotty stain, no free oil and no odor in fresh

samples.

#### **TORONTO SECTION**

3152-3162'

Limestone; white, cream, finely crystalline, few fossiliferous, chalky, poor pinpoint porosity, trace poor stain, no free oil and no odor.

#### LANSING SECTION

3222-3228'

Limestone; white, cream, finely crystalline, oolitic/fossiliferous,

chalky, poor visible porosity, plus white/cream, chert.

3240-3248'

Limestone; cream, tan, finely crystalline, oolitic, poor porosity,

chalky in part, plus chert as above.

3273-3280'

Limestone; cream, white, finely crystalline, oolitic, chalky, poor

porosity, no shows.

3298-3306'

Limestone; cream, white, tan, finely crystalline, oolitic, oomoldic,

poor to fair oomoldic porosity, golden brown stain, show of free

oil and faint odor in fresh samples.

**Drill Stem Test #1** 

3260-3305'

Times:

30-45-45-60

Blow:

Strong

Recovery:

90' thin watery mud finely crystalline, oolid sity, plus white/cream, cheri

180' muddy water

Pressures:

ISIP 576

psi y crystalline.

FSIP 559

psi above.

IFP 21-83 psi

FFP 85-150

HSH 1606-1597

psi ely crystalline, colltic, chally psi

3348-3353'

Limestone; cream, white, tan, finely crystalline, few

oolitic/fossiliferous, slightly chalky, poor visible porosity, no

shows.

3376-3386'

Limestone; cream, tan, finely crystalline, few fossiliferous,

chalky, poorly develop porosity, spotty brown stain, no show of

free oil and no door.

3400-3410'

Limestone; cream, white, finely crystalline, dense.

## CONGLOMERATE SECTION

3438-3484'

Varied colored chert in matrix of varied colored shale.

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#### ARBUCKLE SECTION

3484-3497'

Dolomite; white/cream, fine and medium crystalline, poor to fair intercrystalline to fine vuggy porosity, scattered stain,trace free oil and faint odor in fresh samples

### **Drill Stem Test #2**

3414-3497'

Times:

15-45-15-45

Blow:

**Strong** 

Recovery:

2450' muddy water

Pressures: ISIP

1130

psi

**FSIP 1151** 

psi

IFP

881-1054

psi

**FFP** 

1072-1130

HSH 1726-1686

psi psi

**Rotary Total Depth** 

3497

#### Recommendations:

The Mai Oil Operations, Axman-Stoss Unit #1 was plugged and abandoned at the Rotary Total Depth 3497.

Respectfully submitted;

Kurt Talbott,

Petroleum Geologist