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Mai Oil Operations
KLC #1
NE-NW-SW-SE (1250' FSL & 2250' FSL)
Section 23-13s-14w
Russell County, Kansas

Dry and Abandoned

Contractor: Southwind Drilling Co. (Rig #3)

Commenced: December 6, 2013

Completed: December 12, 2013

Elevation: 1848' K.B; 1846' D.F; 1840' G.L.

Casing program: Surface; 8 5/8" @ 420'
Production; none.

Sample: Samples saved and examined 2300' to the Rotary Total Depth.

Drilling time: One (1) foot drilling time recorded and kept 2300 ft to the Rotary Total Depth.

Measurements: All depths measured from the Kelly Bushing.

Formation Tests: There were three (3) Drill Stem Test ran by Trilobite Testing.

Electric Log: None.

Formation	Sample Depth	Sub-Sea Datum
Anhydrite	864	+984
Base Anhydrite	898	+950
Grand Haven	2380	-532
1st Tarkio Sand	2394	-546
Dover	2404	-556
2nd Tarkio Sand	2412	-564
Toronto	2516	-668
Lansing	2970	-1122
Base Kansas City	3006	-1158
Conglomerate	3261	-1413
Arbuckle	3285	-1437
Rotary Total Depth	3303	-1455

(All top and zone determinations were made from a correlation of Drilling Time Log and Sample Analysis).

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

1ST TARKIO SAND SECTION

2394-2400' Sand; white, clear, fine grained, friable, silty in part, no shows.

2ND TARKIO SAND SECTION

2412-2422' Sand; white/green, very fine grained, poorly developed, no shows.

TOPEKA SECTION

2900-2910' Limestone; tan, finely crystalline, chalky, poorly developed porosity, trace brown stain, trace of free oil and no odor in fresh samples.

TORONTO SECTION

2972-2980' Limestone; white, cream, finely crystalline, chalky in part, scattered pinpoint porosity, golden brown stain, no show of free oil and questionable odor in fresh samples.

LANSING SECTION

3008-3014' Limestone; white, finely crystalline, scattered pinpoint porosity, light brown stain, no show of free oil and faint odor in fresh samples.

3027-3032' Limestone; cream, white, oolitic, fair porosity, good stain and saturation, show of free oil and faint odor in fresh samples.

3050-3057' Limestone; gray, oomoldic, scattered oomoldic/vuggy type porosity, brown stain, show of free oil and odor in fresh samples.

Drill Stem Test #1 3017-3060'

Times: **30-30-45-60**

Blow: **Fair**

Recovery: **124' gas in pipe**
15' gassy oil
57' muddy water with oil spots

Pressures:

ISIP	**508**	**psi**
FSIP	**505**	**psi**
IFP	**13-23**	**psi**
FFP	**28-39**	**psi**
HSH	**1551-1408**	**psi**

3080-3086' Limestone; gray, white, oolitic, chalky, poor brown stain, no show of free oil and no odor.

3093-3100' Limestone; white, chalky, poorly developed porosity, no shows.

3103-3118' Limestone; cream, white, tan, oomoldic, fair oomoldic porosity, chalky, no shows, plus white chert.

3148-3156' Limestone; white, gray, finely crystalline, chalky, dense, no show and questionable odor in fresh samples.

3166-3174' Limestone; gray, white, chalky, no shows.

3190-3194' Limestone; white, cream, slightly fossiliferous, poorly developed porosity, trace iron pyrite.

3215-3224' Limestone; white, oolitic/fossiliferous, chalky, trace stain, trace of free oil and questionable odor in fresh samples.

ARBUCKLE SECTION

3285-3292' Dolomite; gray, finely crystalline, sucrosic, dense, trace black stain, no show of free oil and no odor.

3293-3303' Dolomite; as above, plus white/gray, finely crystalline, sucrosic, dolomite, scattered porosity, few sandy, trace iron pyrite, black tarry stain, no free oil and no odor in fresh samples.

Drill Stem Test #2 3244-3303'

Times: **20-20-20-20**

Blow: **Strong**

Recovery: **1922' muddy water**

Pressures:

ISIP	**1100**	**psi**
FSIP	**1096**	**psi**
IFP	**141-565**	**psi**
FFP	**570-857**	**psi**
HSH	**1679-1589**	**psi**

Rotary Total Depth **3303**

Recommendations:
The KLC #1 was plugged and abandoned at the Rotary Total Depth 3303.

Respectfully submitted;

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Petroleum Geologist

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