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Empire Energy E & P, LLC
Solomon Boxberger #14
1669' FNL & 980' FWL
Section 10-14s-14w
Russell County, Kansas
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5 1/2" Production Casing Set

Contractor: American Eagle Drilling Company (Rig #3)
Commenced: June 2, 2011
Completed: June 7, 2011
Elevation: 1845' K.B; 1843 D.F; 1840' G.L.
Casing program: Surface; 8 5/8" @ 867'
Production; 5 1/2" @ 3349'
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.
Drill Stem Tests: None.
Electric Log: By Superior Well Services; Dual Induction, Compensated Neutron/Density, Micro and Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	831	+1014
Grand Haven	2366	-521
1 st Tarkio Sand	2377	-532
Dover	2393	-548
2 nd Tarkio Sand	2403	-558
Tarkio Lime	2437	-592
Willard Shale	2457	-612
Elmont	2497	-652
Scranton Shale	2575	-730
Howard	2639	-794
Severy Shale	2681	-836
Topeka	2699	-854
Heebner	2931	-1086
Toronto	2950	-1105
Lansing	2991	-1146
Base Kansas City	3194	-1349
Reagan Sand	3251	-1406
Granite Wash	3311	-1466
Rotary Total Depth	3350	-1505
Log Total Depth	3344	-1499

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

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

TOPEKA SECTION

- 2736-2742' Limestone; gray, chalky, trace black stain, no show of free oil and no odor in fresh samples.
- 2828-2846' Limestone; white, granular, scattered pinpoint porosity, golden brown stain, trace of free oil and no odor in fresh samples.
- 2853-2870' Limestone; gray, white, fossiliferous/oolitic, fair porosity, golden brown and brown stain, trace free oil and faint odor in fresh samples.
- 2880-2908' Limestone; as above, granular, chalky, spotty brown stain, trace of free oil and questionable odor in fresh samples.

TORONTO SECTION

- 2950-2964' Limestone; gray and cream, finely crystalline, scattered porosity, pinpoint, light brown stain, trace of free oil and no odor in fresh samples.

LANSING SECTION

- 2991-3002' Limestone; white, cream, slightly fossiliferous, scattered porosity, brown stain/saturation, show of free oil and questionable odor in fresh samples.
- 3012-3018' Limestone; white, finely crystalline, finely oolitic, chalky, brown stain, weak show of free oil and no odor in fresh samples.
- 3030-3048' Limestone; gray, brown, sub oomoldic, fossiliferous, dark brown stain, trace of free oil and faint odor in fresh samples.
- 3062-3068' Limestone; white, fossiliferous, chalky, poor visible porosity, questionable stain, no show of free oil and no odor in fresh samples.
- 3075-3083' Limestone; gray/tan, oolitic, sub oomoldic, chalky, trace stain, poor show of free oil and no odor in fresh samples.
- 3087-3106' Limestone; cream, oolitic, oomoldic, good oomoldic and vuggy type porosity, fair stain, show of free oil and odor in fresh samples.
- 3137-3148' Limestone; white, gray, sub oomoldic, fossiliferous, porosity, poor stain.
- 3151-3168' Limestone; white, highly oolitic, chalky, fair porosity, golden brown stain, show of free oil and faint odor in fresh samples.
- 3176-3182' Limestone; gray and white, oolitic, sub oomoldic, chalky increasingly cherty, poor visible porosity, fair stain and saturation, show of free oil and odor in fresh samples.

MARMATON SECTION

- 3210-3224' Limestone; gray and white, finely crystalline, fossiliferous, chalky, cherty, poor visible porosity, no shows.

REAGAN SECTION

- 3251-3266' Sand; white, clear, very fine grained, sub rounded, good sorting, friable, fair to good intergranular porosity, golden brown stain and saturation, show of free oil and fair odor in fresh samples.
- 3266-3294' Sand; clear, pink, very fine grained, sub rounded, friable, fair porosity, trace stain, show of free oil and questionable odor in fresh samples.
- 3294-3311' Sand; as above, fair to good porosity, few medium and coarse grained, gray and brown stain, show of free oil and strong odor in fresh samples.

GRANITE WASH SECTION

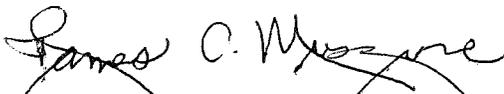
- 3311-3350' Granite; pink and red, gray and white to clear angular quartz, sub rounded, loose quartz grains and varied colored micas.

Rotary Total Depth 3350 (-1505)
Log Total Depth 3344 (-1499)

Recommendations:

5 1/2" production casing was set and cemented at 3349'.

Respectfully submitted;


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