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**ORIGINAL**

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Double Eagle Exploration Inc.  
Thielen #1  
75' North, SW-NW-SW; Section 36-13s-12w  
Russell County, Kansas  
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**RECEIVED**  
KANSAS CORPORATION COMMISSION

**DEC 20 2001**

CONSERVATION DIVISION  
WICHITA, KS

**4 1/2" Production Casing Set**

36-13-12w

**Contractor:** L.D. Drilling Company (Rig #1)

**Commenced:** April 13, 2001

**Completed:** April 19, 2001

**Elevation:** 1785' K.B.; 1783' D.F.; 1780' G. L.

**Casing Program:** Surface; 8 5/8" @ 373'  
Production; 4 1/2" @ 3139'

**Samples:** Samples saved and examined 2100' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 2100' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Formation Testing:** There were two (2) Drill Stem Tests ran by Diamond Testing.

**Electric Log:** By Log Tech; Radiation Guard Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	666	+1119
Grand Haven	2231	-446
1 <sup>st</sup> Tarkio Sand	2241	-456
Dover	2253	-468
2 <sup>nd</sup> Tarkio Sand	2265	-480
Tarkio Lime	2307	-522
3 <sup>rd</sup> Tarkio Sand	2339	-554
Elmont	2368	-583
Howard	2510	-725
Topeka	2547	-762
Heebner	2618	-1033
Toronto	2836	-1051
Douglas	2854	-1069
Lansing	2900	-1115
Base Kansas City	3183	-1398
Rotary Total Depth	3205	-1420
Log Total Depth	3207	-1422

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

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.****1<sup>ST</sup> TARKIO SAND SECTION**

2241-2247 Sand; gray, very fine grained, micaceous, shaley, poorly developed porosity, abundant iron pyrite, no shows.

**2<sup>nd</sup> TARKIO SAND SECTION**

2265-2280' Sand; gray to grayish green, very fine grained, sub rounded to sub angular, friable, fair to good intergranular porosity, no stain, questionable gas bubbles, no shows.

**3<sup>RD</sup> TARKIO SAND SECTION**

2339-2351' Sand; gray, sub rounded to sub angular, micaceous, shaley, scattered porosity, no shows.

**TOPEKA SECTION**

2548-2553' Limestone; tan to gray, finely crystalline, fossiliferous in part, poorly developed porosity, no shows.

2582-2590' Limestone; as above, plus dark gray to gray, fine to medium crystalline, dolomitic, no shows.

2592-2610' Limestone; gray to white, fine to medium crystalline, slightly cherty, no shows.

2614-2630' Limestone; as above, plus, tan, finely crystalline, sucrosic, dolomitic limestone.

2694-2706' Limestone; gray to tan, finely crystalline, slightly granular, increasingly chalky, no shows.

2750-2764' Limestone; gray to tan, finely crystalline, granular, scattered intercrystalline to pinpoint porosity, no shows, plus gray to tan chert.

2778-2795' Limestone; gray to white, fossiliferous, chalky, trace black to dark brown stain, show of free oil (tarry-black) and no odor in fresh samples.

2796-2806' Limestone; as above, barren.

**TORONTO SECTION**

2838-2850' Limestone; white fossiliferous, chalky, trace brown to black spotty stain, no show of free oil or odor in fresh samples.

**DOUGLAS SECTION**

2868-2878' Sand; gray, very fine grained, micaceous, shaley in part, friable, no shows.

**LANSING SECTION**

2900-2904' Limestone; tan to brown, finely crystalline, fossiliferous cherty, no shows.

2914-2918' Limestone; tan, fossiliferous, oolitic, oocastic, good fossil cast to oocastic porosity, fair to good golden brown stain and saturation, trace of free oil and fair odor in fresh samples.

**Drill Stem Test #1** **2906-2927'**

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

**Blow:** Weak to fair

**Recovery:** 90' gas in pipe  
 20' oil and gas cut mud

**Pressures:** ISIP 228 psi  
 FSIP 231 psi  
 IFP 12-12 psi  
 FFP 10-16 psi  
 HSH 1401-1393 psi

2924-2932' Limestone; white, oolitic, chalky, poor porosity, no shows.

2936-2948' Limestone; white to gray, oocastic, good oocastic porosity, spotty brown stain and saturation, show of free oil (gassy) and fair odor in fresh samples.

2950-2956' Limestone; tan to gray, fossiliferous in part (chalky) poor visible porosity, no shows.

**Drill Stem Test #2** **2931-2961'**

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

**Blow:** Fair

**Recovery:** 125' muddy water

**Pressures:** ISIP 901 psi  
 FSIP 886 psi  
 IFP 12-42 psi  
 FFP 43-73 psi  
 HSH 1414-1388 psi

2967-2973' Limestone; tan to brown, oolitic, oocastic, fair oocastic porosity, trace spotty stain, no show of free oil or odor in fresh samples.

2975-2978' Limestone; gray to tan, highly oolitic, slightly cherty, dense.

2994-2999' Limestone; white to cream, oolitic, scattered porosity, golden brown stain, show of free oil and faint odor in fresh samples.

3004-3010' Limestone; tan, oocastic, good oocastic porosity, fair brown to golden brown stain, show of free oil (gassy) and fair odor in fresh samples.

3010-3024' Limestone; as above, spotty stain and saturation, show of free oil and faint odor in fresh samples.

3054-3062' Limestone; white to cream, oolitic, sub oocastic, chalky, trace stain, no show of free oil, and questionable odor in fresh samples.

3071-3080' Limestone; gray to tan, fossiliferous, cherty in part (dense) trace gray chert.

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- 3088-3101' Limestone; gray to white, oocastic, good oocastic porosity, chalky in part, poor spotty stain, no show of free oil or odor in fresh samples.
- 3128-3134' Limestone; tan to gray, oolitic, fossiliferous, scattered fossil cast to pinpoint to vuggy type porosity, chalky in part, trace dull gray to spotty light brown stain, no show of free oil or odor in fresh samples, gray to white chert.
- 3164-3171' Limestone; gray to white, fossiliferous, chalky, plus white to gray, highly fossiliferous, cherty, limestone and chert.

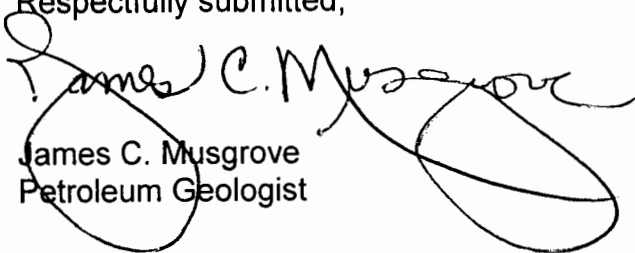
**Base Kansas City 3183 (-1398)**  
**Rotary Total Depth 3205 (-1420)**  
**Log Total Depth 3207 (-1422)**

**Recommendations:**

It was recommended by all parties involved to set and cement 4 ½" production casing at 3139' and the following zones should be perforated in the Thielen #1.

1. Lansing 2914-2918 perforate

Respectfully submitted;

  
James C. Musgrove  
Petroleum Geologist