

15-19s-14w

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Globe Operating Company
Essmiller #1
C-W/2-SW-SE; Section 15-19s-14w
Barton County, Kansas
Page No. 1

15-009-24867-00-00

660 FSL 1650 FWL

4 1/2" Production Casing Set

Contractor: Discovery Drilling Company (Rig #2)

Commenced: September 26, 2005

Completed: October 2, 2005

Elevation: 1886' K.B.; 1884' D.F.; 1878' G.L.

Casing Program: Surface; 8 5/8" @ 825'
Production; 4 1/2" @ 1900'

Samples: Samples saved and examined 1800' to the Rotary Total Depth.

Drilling Time: One (1) foot drilling time recorded and kept 1800' to the Rotary Total Depth.

Measurements: All depths measured from the Kelly Bushing.

Formation Testing: There was three (3) Drill Stem Tests ran by Diamond Testers.

Electric Log: By Log Tech; Dual Induction and Dual Compensated Porosity Log.

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<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	830	+1069
Herington	1716	+170
Winfield	1770	+116
Neva	2231	-345
Red Eagle	2297	-411
Tarkio	2588	-702
Topeka	2783	-896
Heebner	3116	-1230
Toronto	3133	-1247
Douglas	3148	-1262
Brown Lime	3209	-1323
Lansing	3221	-1335
Base Kansas City	3433	-1547
Conglomerate	3451	-1565
Conglomerate Sand	3471	-1585
Rotary Total Depth	3580	-1694
Log Total Depth	3580	-1694

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

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

HERINGTON SECTION

- 1716-1730' Dolomite; dark gray, finely crystalline, sucrosic, scattered pinpoint porosity, (gas detector not on location, no wet samples, caught)
- 1730-1750' Dolomite; as above, fair pinpoint and vuggy type porosity (no gas detector - no wet samples).

WINFIELD SECTION

- 1770-1780' Dolomite; buff, sucrosic, finely crystalline, scattered intercrystalline to pinpoint and few vuggy type porosity, trace gray, boney chert.
- 1780-1800' Dolomite and chert; as above.

Remarks: Gas Detector on location and working at 1822 feet.

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NEVA SECTION

- 2233-2250' Limestone; white, cream, oolitic, fossiliferous, chalky, trace gray tan, granular, dolomitic, limestone (no gas kicks).

RED EAGLE SECTION

- 2296-2320' Limestone; white, gray, cream, fossiliferous in part, slightly chalky, poor visible porosity, trace pale yellow fluorescence. (no gas kick).

TOPEKA SECTION

- 3034-3054' Limestone; cream, tan, finely crystalline, fossiliferous in part, slightly granular, poor visible porosity, plus white and gray chert.
- 3060-3074' Limestone; tan, buff, finely crystalline, few granular, scattered porosity, no shows.

TORONTO SECTION

- 3133-3140' Limestone; tan, buff, finely crystalline, dolomitic, poor visible porosity, trace brown and golden brown stain, no show of free oil and no odor in fresh samples.

LANSING SECTION

- 3223-3230' Limestone; white, tan, finely crystalline, slightly fossiliferous, chalky, spotty brown to golden brown stain, trace of free oil and questionable odor in fresh samples.
- 3236-3246' Limestone; as above, chalky, poor spotty golden brown stain, poor visible porosity.
- 3261-3268' Limestone; cream, gray, slightly fossiliferous/oolitic, chalky, no shows.

Drill Stem Test #1 **3216-3278'**

Times: 30-30-30-30
Blow: Weak
Recovery: 15' oil specked mud

Pressures: ISIP 59 psi
FSIP 41 psi
IFP 20-22 psi
FFP 24-27 psi
HSH 1553-1521 psi

- 3284-3290' Limestone; gray, oolitic, chalky, trace brown and golden brown stain, trace of free oil and no odor in fresh samples.
- 3300-3310' Limestone; as above, trace gray, white, chert, no shows.
- 3310-3322' Limestone; cream, gray, oomoldic, poor visible porosity (barren).
- 3344-3350' Limestone; tan, brown, finely crystalline, slightly fossiliferous, chalky, poor porosity.
- 3359-3366' Limestone; white, gray, oolitic, chalky, trace gray and black stain, no show of free oil and no odor in fresh samples.
- 3376-3380' Limestone; white, gray, fossiliferous, scattered porosity, trace brown and gray stain, trace of free oil and no odor in fresh samples.
- 3410-3419' Limestone; cream, gray, oolitic, scattered pinpoint and vuggy type porosity, trace brown and gray stain, show of free oil and questionable odor in fresh samples.

Drill Stem Test #2 **3336-3420'**

Times: 30-30-30-30
Blow: Weak
Recovery: 20' oil specked mud

Pressures: ISIP 34 psi
FSIP 31 psi
IFP 22-25 psi
FFP 25-27 psi
HSH 1646-1602 psi

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CONGLOMERATE SECTION

- 3451-3468' Limestone; white, gray, chalky, trace rounded sand inclusions, plus gray and white, oolitic chert and red soft shale.
- 3471-3488' Sand; clear, quartzitic, medium to coarse grained, sub rounded, trace chert inclusions, brown and black stain, trace chert, white, cream, few tripolitic, slightly weathered, black stain and loose unconsolidated quartz grains (80 unit gas kick).

Drill Stem Test #3

3429-2490'

Times: 30-45-30-45

Blow: Strong

Recovery: 450' muddy water

Pressures: ISIP 393 psi
FSIP 381 psi
IFP 67-174 psi
FFP 180-231 psi
HSH 1654-1643 psi

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3490-3580' Varied colored oolitic, boney and opaque chert in matrix of blood red and red soft to blocky shale, no shows.

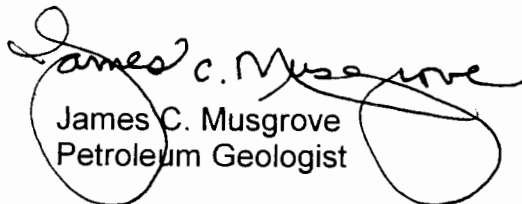
Rotary Total Depth 3580 (-1694)
Log Total Depth 3580 (-1694)

Recommendations:

4 1/2" production casing was set and cemented at 1900' and the following zones should be perforated in the Essmiller #1:

1. Krider 1740-1750 perforate
2. Herington 1718-1728 perforate

Respectfully submitted;


James C. Musgrove
Petroleum Geologist

