

11-18s-7w

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Daystar Petroleum Corp
Newkirk 'E' #1
E/2-SE-SW; Section 11-18s-7w
Rice County, Kansas
Page No. 1

15-159-22521

4 1/2" Production Casing Set

Contractor: Petromark Drilling Company (Rig #2)

Commenced: November 27, 2006

Completed: December 5, 2006

Elevation: 1675' K.B.; 1673' D.F.; 1670' G.L.

Casing Program: Surface; 8 5/8" @ 249'
Production; 4 1/2" @ 3257'

Samples: Samples saved and examined 1000' to the Rotary Total Depth.

Drilling Time: One (1) foot drilling time recorded and kept 1000' to the Rotary Total Depth.

Measurements: All depths measured from the Kelly Bushing.

Formation Testing: There were four (4) Drill Stem Tests ran by Trilobite Testing Inc.

Electric Log: By Log Tech, Dual Induction, Dual Compensated Porosity Log and Micro.

Gas Detector: By Earth Tech

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Herington	1091	+584
Winfield	1137	+538
Towanda	1206	+469
Ft Riley	1246	+429
Florence	1291	+384
Wreford	1393	+282
Council Grove	1431	+244
Funston	1446	+229
Crouse	1471	+204
Bader	1495	+180
Neva	1587	+88
Red Eagle	1636	+39
Foraker	1693	-18
Grand Haven	1868	-193
1 st Tarkio Sand	1886	-211
Dover	1900	-225
Tarkio Lime	1953	-278
3 rd Tarkio Sand	1988	-313
Elmont	2026	-351
Howard	2170	-495
Topeka	2273	-598
Heebner	2549	-874
Toronto	2570	-895
Douglas	2589	-914
Brown Lime	2666	-991

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Lansing	2710	-1035
Stark Shale	2966	-1291
Odessa 'M' Zone	3039	-1364
Base Kansas City	3063	-1388
Conglomerate Sand	3130	-1455
Misener Sand	3171	-1496
Maquoketa	3228	-1553
Rotary Total Depth	3260	-1585
Log Total Depth	3257	-1582
(All tops and zones corrected to Electric Log measurements).		

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

HERINGTON SECTION

1091-1110' Dolomite; tan, gray, finely crystalline, few sucrosic, shaley, poorly developed porosity, no shows.

WINFIELD SECTION

1137-1150' Dolomite; buff, gray, light gray, finely crystalline, sucrosic, scattered pinpoint type porosity, no stain, no fluorescence, no gas bubbles.

1150-1174' Dolomite; gray, finely crystalline, sucrosic, few with fair pin point to intercrystalline porosity, no stain no fluorescence, trace gas bubbles, (30 unit gas kick)

Drill Stem Test #1 1142-1174'

Times: 3-60-55-60

Blow: Weak

Recovery: 20' mud

Pressures:	ISIP	263	psi
	FSIP	93	psi
	IFP	14-19	psi
	FFP	23-27	psi
	HSH	553-545	psi

TOWANDA SECTION

1206-1230' Dolomite; tan, buff, sucrosic, trace limestone, tan, dolomitic, poor visible porosity, no shows, trace white anhydrite.

FT RILEY SECTION

1249-1270' Limestone; buff, gray, finely crystalline, dolomitic, poorly developed porosity, no shows.

FLORENCE SECTION

1291-1330' Limestone; tan, finely crystalline, highly fossiliferous, fair to good intercrystalline and vuggy type porosity, plus loose fossil fragments and white and gray chert.

WREFORD SECTION

- 1393-1410' Limestone; gray, white, slightly fossiliferous, chalky, no fluorescence, no gas bubbles, (13 unit gas increase).
- 1424-1430' Limestone; as above, (20 unit gas increase).

FUNSTON SECTION

- 1448-1451' Limestone; gray, white, finely crystalline, few granular, chalky in part, no fluorescence, no gas bubbles, (48 unit total, 31 unit gas increase).

NEVA SECTION

- 1584-1610' Limestone; tan, gray, finely crystalline, slightly granular, chalky, no shows.

RED EAGLE SECTION

- 1636-1650' Limestone; tan, buff, highly fossiliferous, slightly chalky increasingly cherty, poor visible porosity, no shows.

1ST TARKIO SAND SECTION

- 1881-1893' Sand; gray, grayish green, very fine to medium grained, sub rounded, few sub-angular, fair sorting, friable in part, slightly shaley, no shows (3 unit gas increase).

3RD TARKIO SAND (WILLARD SAND) SECTION

- 1988-1995' Sand; gray, light gray, fine to medium grained, sub rounded, fair to good sorting, micaceous, shaley in part, friable, fair to good intergranular porosity, trace iron pyrite (6 unit gas increase).

HOWARD-TOPEKA SECTION

- 2170-2548' There were several well developed zones of porosity encountered in the drilling of the Howard and Topeka Section but no show of oil and/or gas was noted.

TORONTO SECTION

- 2570-2588' Limestone; gray, white, fossiliferous, chalky, slightly dolomitic, no shows.

DOUGLAS SECTION

- 2603-2632' Sand; maroon, gray, green, very fine grained, micaceous, shaley, few friable, fair intergranular porosity, no shows.

LANSING SECTION

- 2718-2730' Limestone; tan, oomoldic, few oolitic, fair to good oomoldic porosity, trace poor light brown to golden brown stain, trace of free oil (gassy) and fair odor in fresh samples. (236 unit gas kick).

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Drill Stem Test #2 **2718-2730'**

Times: 30-60-60-60

Blow: Weak

Recovery: 10' mud

Pressures: ISIP 1082 psi
FSIP 913 psi
IFP 35-47 psi
FFP 41-43 psi
HSH 1307-1269 psi

(Plugging action on both flow periods)

2764-2772' Limestone; tan, buff, slightly oolitic, poorly developed porosity, no shows.

2786-2794' Limestone; tan, brown/buff, oolitic, oomoldic, fair oomoldic porosity, chalky in part, (barren).

2802-2820' Limestone; white, tan, oolitic, finely oomoldic, good oomoldic porosity, no shows.

2820-2840' Limestone; as above, trace white chalk.

2840-2860' Limestone; white, cream, tan, oomoldic, good oomoldic porosity, no shows.

2906-2914' Limestone; tan, brown, slightly fossiliferous/oolitic, chalky, no shows.

2931-2950' Limestone; tan, oolitic, slightly cherty, few scattered porosity, no shows.

2976-2990' Limestone; tan, brown, fine to medium crystalline, fossiliferous, trace gray and brown spotty stain, no show of free oil or odor in fresh samples.

3014-3024' Limestone; tan, brown, oolitic/fossiliferous, slightly chalky, few with sparry calcite replacement in some porosity, no shows.

ODESSA 'M' ZONE SECTION

3039-3046' Limestone; white, cream, fossiliferous, chalky, brown and gray stain, show of free oil and questionable odor.

Drill Stem Test #3 3035-3055'

Times: 30-60-60-60

Blow: Weak

Recovery: 2' mud (Trace oil < 1% oil)

Pressures:	ISIP	18	psi
	FSIP	16	psi
	IFP	23-12	psi
	FFP	17-13	psi
	HSH	1460-1450	psi

3052-3060' Limestone; light gray, cream, finely crystalline, few granular, few cherty.

CONGLOMERATE SECTION

3131-3141' Sand; clear, white, fine and medium grained, sub rounded, friable, fair porosity, spotty stain, show of free oil and no odor in fresh samples.

MISENER SECTION

3171-3176' Sand; clear, gray, fine and medium grained, sub rounded, few sub angular, friable, fair porosity, brown stain, show of free oil and faint odor.

3176-3195' Sand; clear, gray, very fine grained, sub rounded, sub angular, good sorting, friable, good intergranular porosity, good stain and saturation, good show of free oil and good odor in fresh samples.

Drill Stem Test #4 3177-3195'

Times: 30-60-60-60

Blow: Weak to fair (8")

Recovery: 40' gas in pipe
20' slightly oil cut watery mud
(5% oil, 20% water, 75% mud)
187' muddy water (scum of oil)

Pressures:	ISIP	930	psi
	FSIP	906	psi
	IFP	20-82	psi
	FFP	74-120	psi
	HSH	1566-1523	psi

3195-3228' Sand; as above, trace green shale inclusions.

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MAQUOKETA SECTION

3228-3250' Dolomite; gray, light gray, shaley, dense.

3250-3257' Dolomite; as above, trace gray shale.

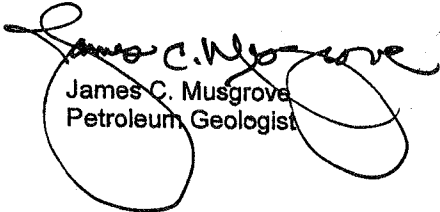
Rotary Total Depth 3260

Log Total Depth 3257

Recommendations, On the basis of the favorable log analysis, it was recommended by all parties involved to set and cement 4 1/2" production casing at 3257' and the following zones be tested in the Newkirk E #1

- 1) Misener Sand 3171-3190 perforate
- 2) Lansing 'B' zone 2718-2722 perforate

Respectfully submitted;


James C. Musgrove
Petroleum Geologist