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Hallwood Petroleum Corporation
Wolf #7
NW-NE-NW; Section 4-13s-17w
Ellis County, Kansas
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5 1/2" PRODUCTION CASING SET

CONTRACTOR: Allen Drilling Company (Rig #3)

COMMENCED: 10-20-94

COMPLETED: 10-29-94

ELEVATIONS: 2076' K.B.; 2073' D.F.; 2071' G.L.

SAMPLES: Samples saved and examined 2500' to the Rotary Total Depth.

DRILLING TIME: One (1) foot drilling time recorded and kept 2500' to the Rotary Total Depth.

MEASUREMENTS: All depths measured from the Kelly Bushing.

ELECTRIC LOG: By Halliburton Logging Services; Dual Induction Laterolog, Compensated Density Dual Spaced Neutron Log, and Computer Analyzed Log.

FORMATION TESTING: There were six (6) drill stem tests ran by Trilobite Testing, L.L.C.

<u>FORMATION</u>	<u>ELECTRIC LOG DEPTH</u>	<u>SUB-SEA DATUM</u>
Anhydrite	1264	+ 812
Tarkio Lime	2839	- 763
Howard	2962	- 886
Topeka	3019	- 943
Heebner	3274	-1198
Toronto	3293	-1217
Lansing	3319	-1243
Base Kansas City	3554	-1478
Arbuckle	3581	-1505
Rotary Total Depth	3680	-1604
Log Total Depth	3680	-1604

(All tops and zones corrected to Electric Log Measurements)

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

TARKIO SECTION

2792-2798' Sand; very fine grained, micaceous, glauconitic, argillaceous, friable, fair porosity, no shows.

2811-2820' Sand; as above, increasingly "dirty" no shows.

2865-2876' Sand; very fine grained, sub-rounded, sub-angular, fair sorting, micaceous, friable, poor visible porosity, no shows.

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TOPEKA SECTION

3019-3026'	Limestone; cream to tan, finely crystalline, few fossiliferous, poor visible porosity, no shows.
3040-3050'	Limestone; tan, finely crystalline, poorly developed porosity, no shows.
3050-3060'	Limestone; as above, no shows.
3067-3077'	Limestone; gray to tan, cherty in part, poor porosity, no shows.
3090-3100'	Limestone; gray to tan, finely crystalline, cherty in part, no shows.
3155-3162'	Limestone; cream to gray, chalky, poor porosity, no shows.
3164-3184'	Limestone; gray to tan, highly cherty, dense, no shows.
3210-3220'	Limestone; cream to tan, finely crystalline, slightly granular, poor porosity, no shows.
3220-3230'	Limestone; as above.
3236-3242'	Limestone; cream to tan, fossiliferous, poor visible porosity, trace spotty stain, no show of free oil or odor in fresh samples.
3250-3265'	Limestone; gray to cream, granular, chalky in part, scattered stain, show of free oil and no odor in fresh samples.

TORONTO SECTION

3293-3300'	Limestone; cream to tan, few fossiliferous, poor porosity, trace spotty stain, trace of free oil and no odor in fresh samples.
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LANSING SECTION

3319-3326'	Limestone; gray, fossiliferous, fair vuggy type porosity, fair stain and saturation, weak show of free oil and no odor in fresh samples.
3344-3354'	Limestone; tan to gray, medium crystalline, poor visible porosity, spotty golden brown to brown stain, show of free oil and no odor in fresh samples.
3364-3370'	Limestone; tan, finely crystalline, few fossiliferous, poor porosity, trace stain, no show of free oil or odor in fresh samples.
3373-3379'	Limestone; as above.

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DRILL STEM TEST - #1 3323-3384'
Times: 30-30-30-30

Blow: Weak (died in 10 minutes)

Recovery: 5' mud

Pressures:	ISIP	39	psi
	FSIP	49	psi
	IFP	29-29	psi
	FFP	29-39	psi
	HSH	1746-1686	psi

- | | |
|------------|---|
| 3389-3395' | Limestone; gray, fossiliferous (oolitic), fair porosity, good stain and saturation, fair show of free oil and good odor in fresh samples. |
| 3403-3407' | Limestone; tan, highly oolitic, fair porosity, fair to good stain, trace of free oil, and faint odor in fresh samples. |
| 3407-3419' | Limestone; gray, oocastic, good oocastic porosity, good stain and saturation, good show of free oil and strong odor in fresh samples. |

DRILL STEM TEST - #2 3382-3422'
Times: 30-45-45-60

Blow: Weak to fair

Recovery: 60' gas in pipe
5' heavy oil cut mud (20% oil, 80% mud)
110' watery mud (30% water, 70% mud)

Pressures:	ISIP	177	psi
	FSIP	177	psi
	IFP	29-39	psi
	FFP	59-68	psi
	HSH	1816-1736	psi

- | | |
|------------|--|
| 3453-3460' | Limestone; cream, oolitic, poor porosity, trace poor stain, no show of free oil or odor in fresh samples. |
| 3478-3482' | Limestone; cream to white, oolitic, poor visible porosity, trace stain, no show of free oil or odor in fresh samples. |
| 3499-3505' | Limestone; gray to white, oocastic, fair oocastic porosity, spotty to even dark brown to golden brown stain, show of free oil and faint odor in fresh samples. |

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3520-3530' Limestone; gray to cream, fossiliferous, poor visible porosity, scattered stain, weak show of free oil and no odor in fresh samples.

3541-3546 Limestone; white, oolitic, chalky, black stain, show of free oil (heavy) black, no odor in fresh samples.

DRILL STEM TEST - #3 3484-3550'

Times: 30-30-30-30

Blow: Weak (died in 10 minutes)

**Recovery: 10' oil specked mud
(good show of free oil on top of tool)**

Pressures:	ISIP	78	psi
	FSIP	59	psi
	IFP	39-39	psi
	FFP	39-39	psi
	HSH	1876-1786	psi

CONGLOMERATE SECTION

3571-3581' Chert; gray to amber, boney plus varied colored soft shale.

ARBUCKLE SECTION

3582-3584' Dolomite; white to gray, medium crystalline, cherty, dense, trace stain, no show of free oil or odor in fresh samples.

3584-3589' Dolomite; cream to gray, medium crystalline, scattered porosity (poor) trace stain, weak show of free oil and no odor in fresh samples.

3589-3595' Dolomite; cream to tan, finely crystalline, sucrosic, scattered intercrystalline to pin point porosity, show of free oil and questionable odor in fresh samples.

DRILL STEM TEST - #4 3582-3595'

misrun - plugged tool

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DRILL STEM TEST - #5 3548-3595'
Times: 15-15-15-15

Blow: Weak (surface)

Recovery: 5' mud with few oil spots

Pressures: ISIP - *
FSIP 59 psi
IFP - * psi
FFP 39-39 psi
HSH 1886-1836 psi

(Initial flow & shut in - plugged, flush tool on FFP)

3595-3599'	Dolomite; tan to beige, dense, plus trace dolomite, as above, questionable odor.
3599-3601'	Dolomite; tan to gray, sucrosic, scattered porosity, fair stain and saturation, show of free oil and good odor in fresh samples.
3601-3604'	Dolomite; tan to buff, finely crystalline, poor pin point to intercrystalline porosity, good stain to 100% saturation, fair show of free oil and good odor in fresh samples plus white oolitic-oocastic, dolomite and trace pyrite.

DRILL STEM TEST - #6 3595-3604'
Times: 30-30-30-30

Blow: Very weak

**Recovery: 9' mud
1' clean oil**

Pressures: ISIP 49 psi
FSIP 49 psi
IFP 29-29 psi
FFP 29-29 psi
HSH 1916-1886 psi

3604-3620'	Dolomite; as above, decreasing stain and saturation, show of free oil and fair odor in fresh samples. Abundant white to pink dense Dolomite.
3620-3630'	Dolomite; as above, plus white gray oolitic cherty, trace gray oocastic Dolomite, good stain and saturation, weak show of free oil and decreasing odor in fresh samples.

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3640-3650'	Dolomite; white to tan, cherty, dense, trace stain and saturation, weak show of free oil and faint odor in fresh samples. Plus white oolitic opaque chert.
3650-3660'	Dolomite; buff, finely crystalline, dense, plus white boney oolitic chert, no show.
3660-3670'	Dolomite; gray, dense, barren plus white to gray opaque chert.
3670-3680'	Dolomite; tan, white, pink, finely crystalline, dense, plus white opaque chert, no show.

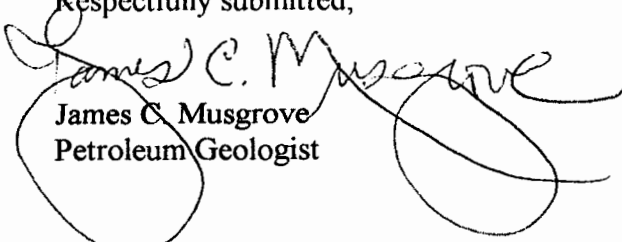
ROTARY TOTAL DEPTH	3680'	(-1604)
LOG TOTAL DEPTH	3680'	(-1604)

RECOMMENDATIONS

On the basis of the favorable structural position and the positive Electric Log calculations, it was recommended by all parties involved to set and cement 5 1/2" production casing at 3679' (one foot off bottom) and the following zones be tested thru perforations in the Wolf #7:

1) Arbuckle	3611-3613'	perforate
2) Arbuckle	3593-3604'	perforate
3) Lansing	3499-3504'	perforate
4) Lansing	3478-3481'	perforate
5) Lansing	3407-3481'	perforate
6) Lansing	3389-3394'	perforate
7) Lansing	3347-3354'	perforate
8) Topeka	3262-3266'	perforate

Respectfully submitted,


James C. Musgrove
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