29-11-17w

# GEOLOGICAL REPORT

CHAMPLIN PETROLEUM COMPANY
HADLEY "B" #9
100 Ft. South of SE NE SW SECTION 29-11S-17W
ELLIS COUNTY, KANSAS

Report by:

RAYMOND M. GOODIN

Geologist

CHAMPLIN PETROLEUM COMPANY
HADLEY "B" #9
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ELLIS COUNTY, KANSAS

## D A T A  S H E E T

| | |
|---|---|
| Elevation: | 2107 G.L.; 2109 D.F.; 2112 K.B. |
| Operator: | Champlin Petroleum Company |
| Contractor: | Red Tiger Drilling Company Rig #5 |
| Spud Date: | 6-21-69 |
| Under Surface: | 6-21-69 |
| Completion Date of Rotary: | 6-30-69 |
| Rotary Total Depth: | 3624 |
| Log Total Depth: | 3624 |

## DRILL STEM TESTS

| Formation | Number |
|---|---|
| Topeka | 1 |
| Lansing Kansas City | 2 |
| Arbuckle | 1 |

## CORES

None

## SURVEYS

Welex: Radiation Guard, Frac. Finder Caliper

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## G E O L O G Y

The following information is the interpretation of samples, time log and electric log on the captioned well. The measurements are from the derrick floor elevation of 2109.

| Formation | Samples and Drilling Time | | Electric Log | |
|---|---|---|---|---|
| Anhydrite | 1332-1371 (+777+738) | | | |
| Topeka | 3047 | - 938 | 3047 | - 938 |
| Queen Hill | 3209 | -1100 | 3208 | -1099 |
| Heebner | 3277 | -1168 | 3279 | -1170 |
| Toronto | 3298 | -1189 | 3300 | -1191 |
| Lansing Kansas City | 3324 | -1215 | 3326 | -1217 |
| Base Kansas City | 3581 | -1472 | 3581 | -1472 |
| Arbuckle | 3609 | -1500 | 3610 | -1501 |
| Rotary Total Depth | 3624 | -1515 | | |
| Log Total Depth | | | 3624 | -1515 |

Electric log measurements will be used for the following intervals:

| | Porosity | Water |
|---|---|---|
| Topeka 3047 -938 | | |
| Zone 3242 to 3244 | 14 % | 100% |
| 3244 to 3246 | 5% | 100% |

Fine crystalline and chalky lime, poor crystalline porosity, no free oil, can break oil, trace of edge staining.

#1 Drill Stem Test 3240 to 3250 (Drillers)

Open 10 minutes, shut in 60 minutes
Open 20 minutes, shut in 40 minutes
Weak blow, second opening no blow
Rec. 5 feet mud, no oil
I.B.H.P. 1018# F.B.H.P. 943#
I.F.P. 18# F.F.P. 18#
I. Hyd.P. 1783# F. Hyd.P. 1765# Temp. 100°

Toronto 3300 -1191 Does not calculate

White fine crystalline chalky lime, poor spotted crystalline porosity, trace of stain, no free oil, no odor.

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| | Porosity | Water |
|---|---|---|
| Lansing Kansas City 3326 -1217 | | |
| "A" - no development | | |
| "B" 3351 -1242 | | |
| 3352 to 3354 | 9% | 79% |

Fine crystalline lime, poor to fair spotted pinpoint crystalline and vugular porosity, spotted to even stain, small show free oil, no odor

#2 Drill Stem Test 3335 to 3365 (Drillers)

Open 5 minutes, shut in 30 minutes
Open 30 minutes, shut in 60 minutes
Very weak blow, dead 10 minutes of second opening
Recovered 15 feet slightly oil cut mud
I.B.H.P. 995# F.B.H.P. 908#
I.F.P. 25# F.F.P. 32#
I.Hyd.P. 1791# F.Hyd.P. 1789# Temp. 102°

"C" - not developed

| | | |
|---|---|---|
| "D" 3371 -1262 | | |
| 3372 to 3374 | 11% | 70% |
| 3374 to 3376 | 8% | 88% |

"E" - not developed

| | | |
|---|---|---|
| "F" 3396 -1287 | | |
| 3396 to 3398 | 13% | 45% |
| 3398 to 3400 | 11% | 48% |

Fine crystalline fossiliferous oolitic, poor crystalline and oolitic porosity, spotted stain to even stain, trace of saturation, fair odor, small show of free oil.

| | | |
|---|---|---|
| "G" 3406 -1297 | | |
| 3408 to 3410 | 13% | 88% |
| 3410 to 3412 | 8% | 100% |

Fine crystalline and oolitic, very cherty, fair vugular and oolitic porosity, some fracture porosity residue (gilsonite) in porosity, no free oil, slight odor.

#3 Drill Stem Test 3384 to 3412 (Drillers)

Open 5 minutes, shut in 60 minutes
Open 50 minutes, shut in 60 minutes
Weak blow first opening; second opening no blow, flush, no help

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| | Porosity | Water |
|---|---|---|

(#3 Drill Stem Test continued:)

Flush second time, weak blow 20 minutes
Recovered 74 feet mud
I.B.H.P. 685# F.B.H.P. 329#
I.F.P. 27# F.F.P. 62#
I.Hyd.P. 1837# F.Hyd.P. 1810#

"G" Prime 3416 -1307
3417 to 3420 — 11% — 60%
3420 to 3424 — 8% — 49%
Oolicastic and oolitic, fair to good porosity, good even stain, light saturation, good odor, some oolicasts, no porosity, no stain.

"H" 3456 -1347 — Does not calculate
Fine crystalline and fossiliferous lime, very poor porosity, no free oil, no odor.

"I" 3483 -1374
3484 to 3486 — 9% — 90%
Buff fine crystalline lime, buff opaque chert, very poor crystalline porosity, trace of stain.

"J" 3501 -1392 — Does not calculate
Fine crystalline and slightly oolitic lime, very scattered trace of stain, very poor porosity, no free oil, no odor.

"K" 3527 -1418 — Does not calculate
Fine crystalline lime, much chalk, trace of poor crystalline porosity, trace of stain.

"L" 3549 -1440 — Does not calculate
White to buff fine crystalline lime, no porosity.

"M" 3570 -1461 — Does not calculate
Fine crystalline chalky lime, no porosity.

Base Kansas City 3581 -1472
3581 to 3598 - red gray green waxy shale
3598 to 3610 - apple green waxy shale

Arbuckle 3610 -1501
3612 to 3614 — 14% — 70%
3610 to 3615
Fine to medium crystalline dolomite, good stain to saturation, small show of fair pinpoint crys-

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| | Porosity | Water |
|---|---|---|

talline and vugular porosity, good odor, good show of free oil.

#4 Drill Stem Test 3580 to 3615

Open 5 minutes, shut in 60 minutes
Open 30 minutes, shut in 60 minutes
Weak blow 5 minutes, no blow second opening
Recovered 5 feet mud, no show oil
I.B.H.P. 369# F.B.H.P. 160#
I.F.P. 36-39# F.F.P. 37-37#
I.Hyd.P. 2053 F.Hyd.P. 2017# Temp. 105°

3614 to 3618 22% 58%
3615 to 3620
Fine to medium crystalline dolomite, poor crystalline porosity, trace of oolicastic dolomite, fair stain to saturation, some fine crystalline dense dolomite, no show, fair odor, small show of free oil.

3620 to 3624
Fine crystalline dolomite, poor crystalline porosity, fair odor, small show of free oil, light stain to saturation, some fine crystalline dense dolomite, no show oil.

RECOMMENDATION:

On the basis of the above information taken from samples, time log, radiation guard log and the frac. finder log, it was recommended that the Hadley "B" #9 be plugged and abandoned.

Respectfully submitted,

Raymond M. Goodin

RAYMOND M. GOODIN

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SE NE SW SECTION 29-11S-17W
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| DEPTH | TIME | | | | COMMENTS |
|---|---|---|---|---|---|
| 3000 - 3020 | 1-1-2-1-2 | 2-1-2-2-1 | 2-2-1-2-2 | 2-2-1-2-2 | |
| 3040 | 1-2-1-2-2 | 2-3-2-1-2 | 3-2-3-2-4 | 3-3-2-2-3 | |
| 3060 | 2-2-3-2-2 | 2-2-3-4-4 | 4-4-3-4-2 | 2-2-3-2-3 | |
| 3080 | 2-3-3-3-3 | 3-3-3-4-2 | 3-4-3-4-3 | 4-4-3-4-4 | |
| 3100 | 4-3-3-3-3 | 2-3-2-3-4 | 3-2-4-4-4 | 4-3-3-2-3 | |
| 3100 - 3120 | 2-3-4-3-3 | 4-3-5-5-4 | 3-4-4-4-3 | 4-3-4-3-3 | |
| 3140 | 3-3-4-4-4 | 3-5-4-4-4 | 4-4-5-4-5 | 5-5-4-3-3 | Vis. 41 Wt.10.2 @ 3126 |
| 3160 | 3-3-2-2-2 | 2-2-2-3-2 | 3-3-4-4-4 | 4-6-6-5-3 | Vis. 39 Wt. 10.3 @ 3155 |
| 3180 | 4-4-5-5-5 | 4-5-5-7-8 | 7-7-6-7-3 | 5-7-8-9-8 | Vis. 42 Wt. 10.3 @ 3178 |
| 3200 | 7-8-7-6-4 | 6-6-6-5-6 | 7-10-8-10-10 | 9-6-4-4-5 | |
| 3200 - 3220 | 3-4-5-6-5 | 5-5-8-8-4 | 4-4-3-7-6 | 6-6-7-6-2 | Trip @ 3218 |
| 3240 | 4-6-6-4-4 | 5-4-4-6-5 | 4-3-5-5-4 | 5-5-5-5-5 | Vis. 41 Wt.10.3 @ 3235 |
| 3260 | 3-8-3-2-4 | 4-4-3-3-3 | 2-4-3-5-4 | 4-4-3-4-5 | Mixing Mud 3237-3244 CFS 3250 |
| 3280 | 3-5-4-4-4 | 5-5-4-5-6 | 4-4-5-5-4 | 5-5-4-4-6 | Vis. 40 Wt.10.1 @ 3271 |
| 3300 | 4-10-11-5-5 | 6-5-6-4-5 | 5-6-5-6-4 | 6-5-6-5-5 | |
| 3300 - 3320 | 4-4-5-6-5 | 6-6-6-4-7 | 5-6-7-7-5 | 7-6-7-6-4 | CFS 3308 Vis. 39 Wt.10.2 @ 3314 |
| 3340 | 6-7-7-5-6 | 7-5-6-7-5 | 3-7-11-8-9 | 5-5-5-5-5 | Mixing Mud 3332-34 CFS 3340 |
| 3360 | 4-5-5-5-6 | 6-6-6-6-5 | 6-5-6-6-5 | 5-6-7-6-7 | |
| 3380 | 6-6-7-6-6 | 5-5-5-4-5 | 3-4-3-4-4 | 4-4-4-5-5 | CFS 3365 Vis. 40 Wt.10.2 @ 3365 |
| 3400 | 5-6-5-5-5 | 4-4-5-4-3 | 3-6-3-4-4 | 4-4-5-3-5 | Vis. 39 Wt.10 @ 3371 Mixing Mud 3376-3382 CFS 3385 Vis. 40 Wt. 10.2 @ 3394 CFS 3400 |
| 3400 - 3420 | 5-4-5-4-6 | 4-4-5-3-3 | 4-4-5-2-6 | 4-4-2-3-2 | CFS 3420 CFS 3421 Vis. 40 Wt. |
| 3440 | 2-4-4-5-4 | 5-6-6-6-6 | 6-6-5-3-4 | 5-6-6-6-7 | 10.2 @ 3429 Vis. 40 Vt.10.1 @ |
| 3460 | 6-7-5-4-5 | 4-4-3-5-6 | 4-3-4-4-5 | 5-4-7-6-4 | 3439 |
| 3480 | 5-5-6-6-6 | 4-4-6-7-8 | 11-8-7-9-5 | 10-8-7-6-6 | CFS 3465 Vis. 40 Wt.10.2 @ 3480 |
| 3500 | 6-6-5-6-7 | 7-7-8-7-7 | 6-7-5-5-4 | 7-7-3-5-6 | Vis. 42 Wt.10.2 @ 3487 CFS 3490 |
| 3500 - 3520 | 5-6-9-9-8 | 8-9-7-5-8 | 7-7-5-7-7 | 8-4-8-7-5 | CFS 3512 Vis. 41 Wt.10.2 @ 3512 |
| 3540 | 6-5-5-6-7 | 7-5-7-8-6 | 6-7-8-8-8 | 7-6-6-7-7 | CFS 3540 |
| 3560 | 8-9-6-6-6 | 5-5-6-6-6 | 6-8-10-6-7 | 7-7-7-6-9 | Vis. 41 Wt.10.1 @ 3544 |
| 3580 | 6-7-6-6-6 | 5-5-5-6-6 | 5-6-7-7-8 | 5-6-7-7-6 | Vis. 43 Wt.10.2 @ 3577 |
| 3600 | 7-4-4-5-6 | 6-5-6-5-3 | 4-5-10-10-7 | 5-6-8-8-9 | CFS 3596 |
| 3600 - 3620 | 8-9-8-8-6 | 7-6-6-6-5 | 5-6-6-6-5 | 4-4-4-4-5 | CFS 3604 SR 3614 Vis. 44 Wt. |
| 3624 | 5-7-6-7 | | | | 10.4 @ 3615 SR 3617-19 CFS 3620 CFS 3624 - TD |