



# Musgrove

Petroleum Geology  
212 Main Street, Claflin KS

## NOTES

Company: Pauley Oil

Lease: Sarah #1

Location: E2-W2-NW-NW (660' FNL & 495' FWL)

Sec: 15 Twsp: 16S Rge: 10W

County: Ellsworth State: Kansas

Field: Progress

KB: 1886' GL: 1876'

Contractor: Southwind Drilling, Inc. (Rig #1)

Spud: 02/13/2017 Comp: 02/19/2017

RTD: 3500' LTD: 3503'

Mud Up: 2700' Type Mud: Chemical

API #: 15-053-21350-00-00

Samples Saved From: 2800' to RTD

Drilling Time Kept From: 2800' to RTD

Samples Examined From: 2800' to RTD

Geological Supervision from: 2800' to RTD

Geologist on Well: Jim Musgrove

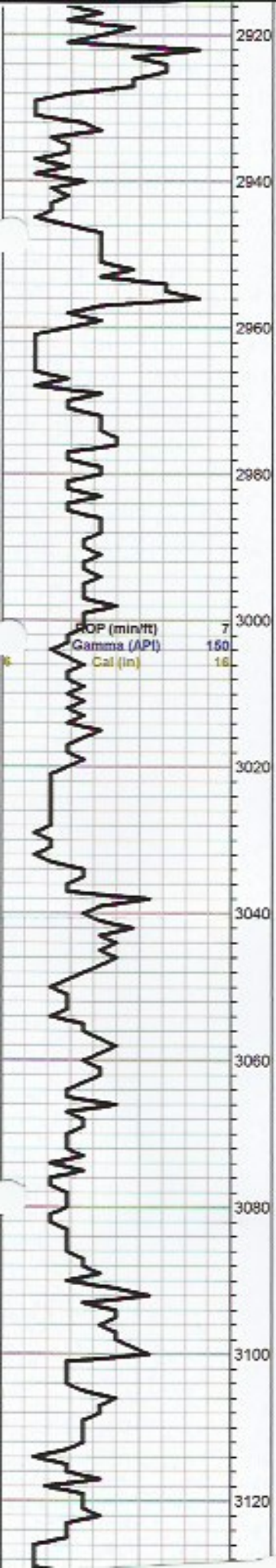
Surface Casing: 8 5/8" @ 408'

Production Casing: 5 1/2" @ 3495'

Electronic Surveys: Logged by : Gemeni Wireline, CDNL, DIL







**Heebner 2928.0 (-1042.0)**

Black carb shale  
 LS, tan, fxl, dense, no shows  
 Sh, gry, gryish,

**Toronto 2946.0 (-1060.0)**

LS, tan, foss, dense no shows

**Douglas 2959.0 (-1079.0)**

Sh, maroon, greenish, rusty, brown, silty

Sh, a/a, tr. vfg, mica, silty, sand

Sh, a/a

ditto a/a

**Brown Lime 3037.0 (-1151.0)**

LS, tan, brown, slightly cherty (dense)  
 Sh, gry, gryish, green

**Lansing 3055.0 (-1169.0)**

LS, white, cream, fxl, dolomitic in pts, no shows

Sh, gry, green, black

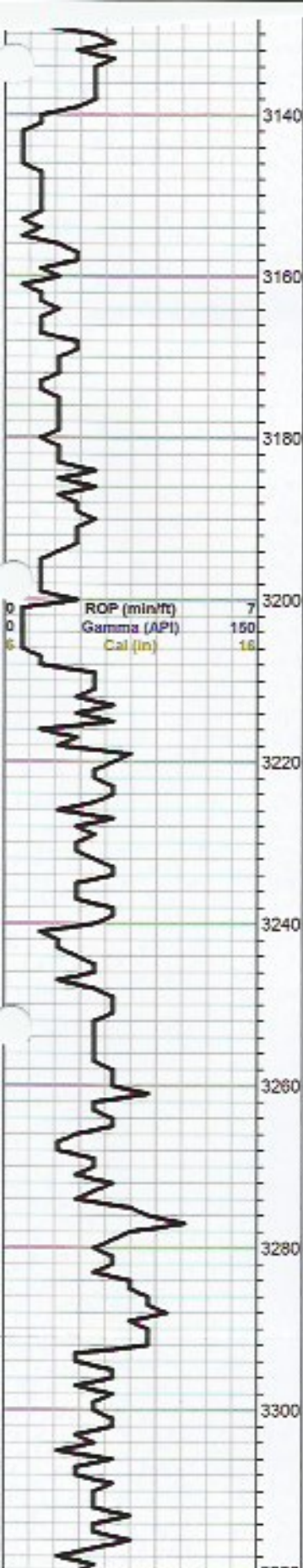
LS, gry, sub oom chalky, cherty, poor visible porosity

Sh, gry, blk

LS, gry, tan, foss, chalky, poorly developed, no shows

○ LS, gry, highly ool, chalky, tr. black stain, nsfo, or odor

|   |                   |     |
|---|-------------------|-----|
| 0 | Total Gas (units) | 100 |
| 0 | C1 (units)        | 100 |
| 0 | C2 (units)        | 100 |
| 0 | C3 (units)        | 100 |
| 0 | C4 (units)        | 100 |



LS, white, cream, sub oom, scattered oom porosity (barren)

LS, tan, gry, ool in pts, oom, chalky, tr. light brown stain, nsfo, no odor

LS, a/a, chalky, fr-good oom porosity, no shows

LS, white, gry, chalky, poor visible porosity

Sh, black carb, plus tr. gry cherts

LS, white, oom, good oom porosity, (barren)

Sh, gry, green

LS, gry, white, oom, sub oom, chalky, no shows, no odor

LS, tan, gry, ool, oom, fair oom porosity (barren)

LS, gry, fxl, slightly cherty (dense)

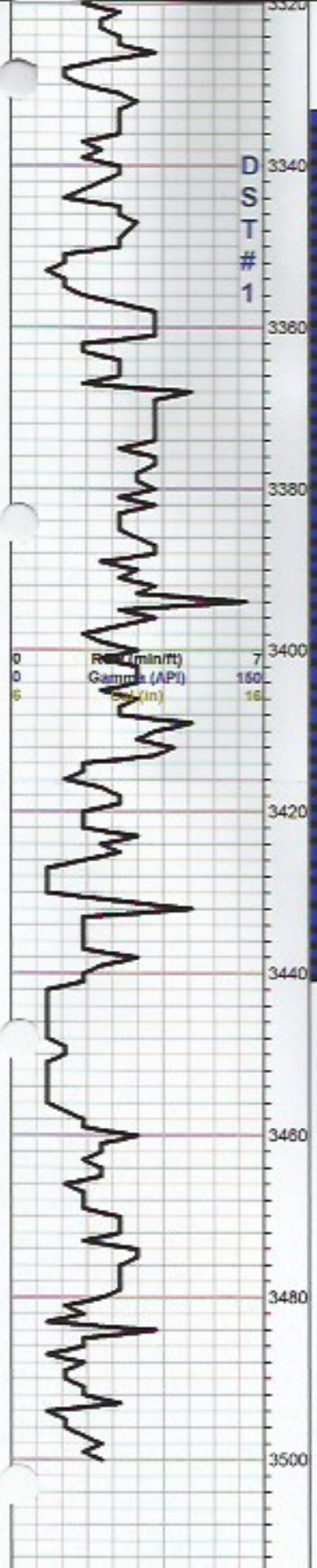
Sh, black carb

LS, white, gry, ool, foss, chalky, tr. cherty, poor visible porosity

Sh, black carb

LS, white, gry, tan, chalky in parts (dense)

|   |                   |     |
|---|-------------------|-----|
| 0 | Total Gas (units) | 100 |
| 0 | C1 (units)        | 100 |
| 0 | C2 (units)        | 100 |
| 0 | C3 (units)        | 100 |
| 0 | C4 (units)        | 100 |



**Base Kansas City 3327.0 (-1441.0)**

Sh, gry, dark gry

LS, gry, foss, chalky

Sh, gry, pk gry (soft)

Sh, V.C.

LS, gry, highly foss, chalky, poor visible porosity, no shows

**Conglomerate 3370.0 (-1488.0)**

Sh, maroon, pk, greenish, soft, slug, tr. LS, white, chalky, glauc.

Tr. maroon, tinted LS, plus white, vfg sd, plus brick red cherts

Tr. amber, yellow, white, cherts, plus Sd. white, clear, vfg, sub rounded, poor visible porosity, no shows

**Simpson 3415.0 (-1529.0)**

Sd. pk, maroon, greenish tinted

Sh, blue green, subwaxy shale

Sd. white, green, vfg, poorly developed

**Arbuckle 3434.0 (-1548.0)**

Dol. tan, f-med xln, no shows

Dol. tan, gry, white, f-med xln, scattered inxln porosity, tr. brown stain, sfo, faint odor

Dol. xl - fr inxln porosity, few glauc. nsfo

Dol. white, tan, med xln, fair INXLN porosity, chalky, nsfo tr. pyrite, nsfo, tr. white chert

Dol. tan, sub oom, fxl, few cherty, poor visible porosity, no shows

Dol. a/a, few pk, fxl, tr. yellow oom dol. no shows

**RTD 3500.0 (-1614.0)**

**LTD 3503.0 (-1617.0)**

**DST#1 3333-3440**

15-30-45-60

1st Open:  
Strong Blow BOB 2 mins.

2nd Open:  
Strong Blow BOB 3 mins.

Recovery:  
210' OCMW  
(20%O, 30%M, 50%W)

180' OCW  
(20%O, 30%M, 70%W)

180' OCW  
(20%O, 7%M, 72%W)

180' OCW  
(15%O, 6%M, 79%W)

180' OCW  
(12%O, 5%M, 83%W)

300' OCW  
(12%O, 3%M, 85%W)

120' W  
(W/ Tr. Oil < 1%)

Pressures  
ISIP 1176 psi  
FSIP 1180 psi  
IFP 135-317 psi  
FFP 332-663 psi  
HSH 1726-1619 psi