



Musgrove

Petroleum Geology
212 Main Street, Claflin KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Pauley Oil
 LEASE Harlow #1-30
 FIELD Schlessiger
 LOCATION SE- NW-NW-SW (2187' FSL & 558' FWL)
 SEC 30 TWSP 16S RGE 10W
 COUNTY ELLISWORTH STATE Kansas

ELEVATIONS

KB 1888'
 DF _____
 GL 1879'
 Measurements Are All
 From KB

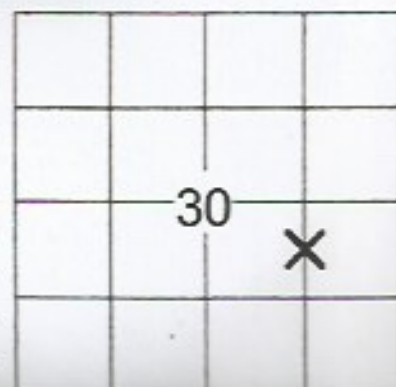
CONTRACTOR Southwind Drilling (Rig #2)
 SPUD 09/13/2018 COMP 09/19/2018
 RTD 3450' LTD 3450'
 MUD UP 2817' TYPE MUD Chemical

CASING
 SURFACE 8 5/8"@388'
 PRODUCTION 5 1/2"@3448

ELECTRICAL SURVEYS
 PIONEER;
 CNL/CDL, DIL/BHCS, MICRO

SAMPLES SAVED FROM 2700' TO RTD
 DRILLING TIME KEPT FROM 2700' TO RTD
 SAMPLES EXAMINED FROM 2700' TO RTD
 GEOLOGICAL SUPERVISION FROM 2700' TO RTD
 GEOLOGIST ON WELL Jim Musgrove

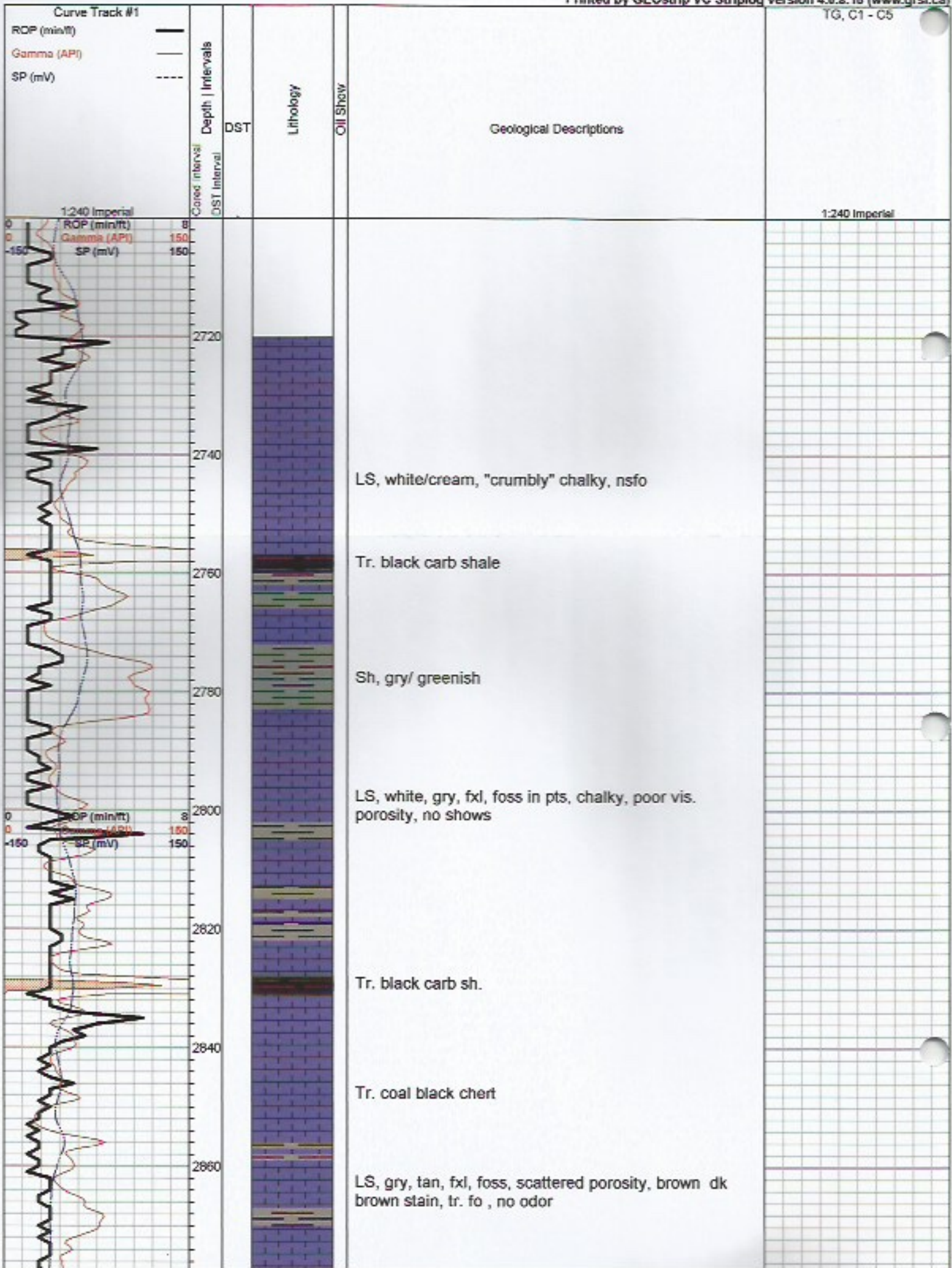
FORMATION TOPS	LOG		SAMPLES	
Anhydrite	679	+1209		
Base Anhydrite	706	+1182		
Heebner	2912	-1024	2914	-1024
Toronto	2931	-1043	2934	-1046
Brown Lime	3014	-1126	3015	-1127
Lansing	3026	-1138	3030	-1142
Base Kansas City	3306	-1418	3310	-1422
Arbuckle	3340	-1452	3341	-1453
RTD	3450	-1562	3450	-1562
LTD	3450	-1562	3450	-1562

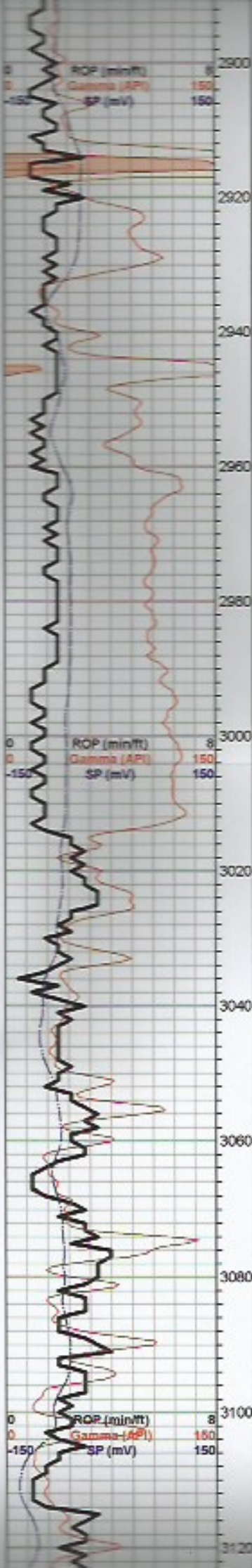


- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

||| tool pipe

TG, C1 - C5





LS, white, fxl, chalky, scattered p.p. porosity, blk stain, nsfo, ??? odor

Heebner 2914.0 (-1026.0)

Sh, black carb

Sh, gry, gryish green

Toronto 2934.0 (-1046.0)

LS, white/ gry, fxl, few med xin, foss, tr. brown / blk stain, nsfo, no odor

Douglas 2949.0 (0.0)

Sh, gry/ gryish green, silty, mica

Sh, a/a, tr. sd. gry/ gryish green vfg. friable, scattered porosity, mica in pts

Sh, a/a

Brown Lime 3015.0 (-1127.0)

LS, tan, brown, fxl, slgithly cherty (dense)

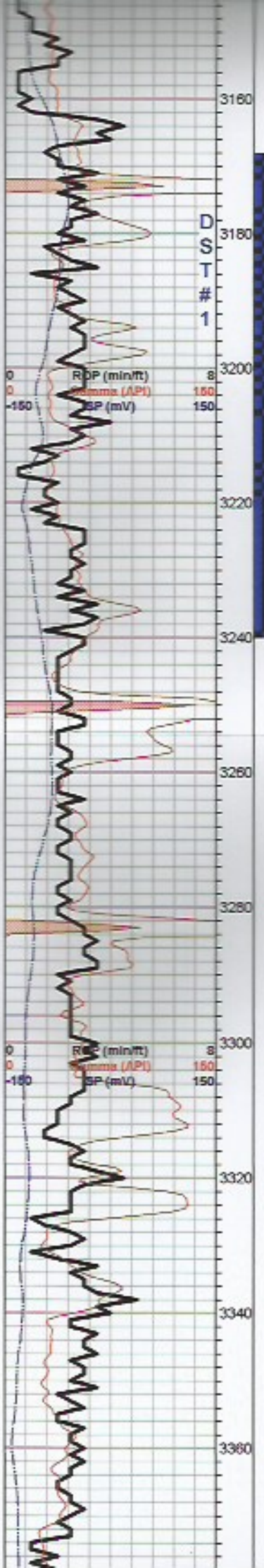
Lansing 3030.0 (-1142.0)

LS, white, gry, foss, sub oom in pt, blk / bm stain, tr.sfo, ??? odor

LS, gry, tan, ool, oom, poor - fair oom/ vuggy porosity, tr. brown stain, sfo, show of gas bubbles, ??? odor

LS, a/a

LS, gry, ool, poorly developed tr. brown, / golden bm stain, two (2) w/ tr. fo, no odor



○ a/a, tr. stain/ sfo,(???) cavings from above)

Tr. gry/ black carb Sh

○ LS, gry, white, tan, ool, sub oom, poorly developed tr. stain, wk sfo, no odor, tr. bm stain, tr. fo. no odor

○ LS, white, ool, scattered porosity, brown golden sfo, faint odor

○ LS, white, gry, ool, chalky, tr. stain, tr. fo. no odor

○ LS, white, ool, scattered porosity, brown to golden brown sfo ft. odor

LS, gry, white, chalky, poor vis. porosity, no shows, no odor

Sh, black carb

LS, tan, gry, chalky, ---> inc. cherty, no shows

LS, a/a

Sh, black carb

○ LS, gry, white, tan, fxl, chalky in pt, few foss, tr. bm stain, nsfo, no odor

BKC 3310.0 (-1422.0)

Sh, gry, green

LS, white/ gry, dense, no shows

Tr. gry, white, ool cherty

Arbuckle 3341.0 (-1453.0)

Dol. tan, fxl, few suc. poor porosity, no shows

Dol. tan, beige, f-med xln, poor vis. porosity (barren)

Dol. gry, white, f- medxln, few suc. poorly developed porosity

○ Dol. gry, white, f-med xln, scattered porosity, tr. stain, tr. fo, ft. odor

DST#1 3175-3240
30-30-45-60

1st Open:
BOB 13 mins.

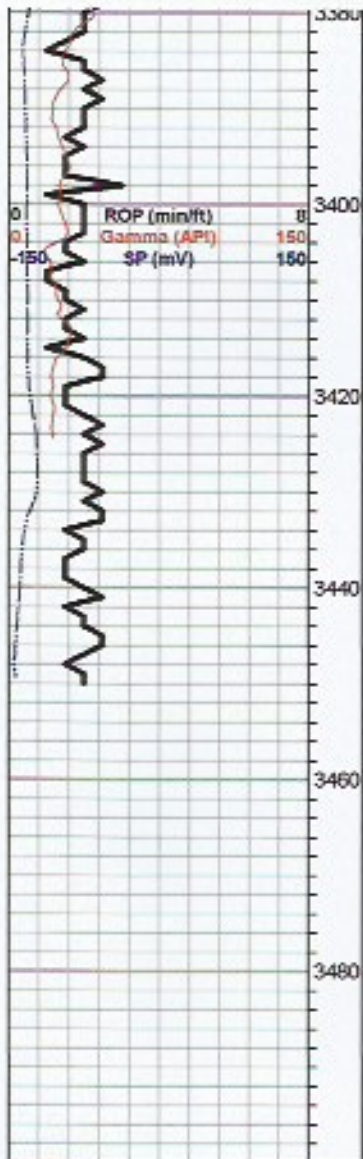
2nd Open:
BOB 20 sec.

Recovery:
710' GIP

45' HOCM
(30%O, 70%M)

65' HOCM
(40%O, 60%M)

Pressures:
ISIP 474 psi
FSIP 751 psi
IFP 13-35 psi
FFP 37-56 psi
HSH 1505-1501 psi



● Dol. cream, white, med xln, fair inxln porosity, brn spotty stain, sfo, faint or

○ Dol. tan, oom, scattered porosity, tr. stain, nsfo, no odor

○ Dol. cream, white, med xln, fair inxln porosity, brn spotty stain, sfo, ft. odor

○ Dol. tan, oom, scattered porosity, tr. stain, nsfo, no odor

○ Dol. tan, fxl, few med xln, suc. dense, abund. tan & gry ool chert, no shows

Dol. a/a, + gry / white boney chert

Dol., white, tan, f- med xln, few w/ chalky luster, no shows

RTD 3450.0 (-1562.0)

LTD 3450.0 (-1562.0)

