



Mudgrove

PETROLEUM CORPORATION
Clafin, Kansas

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY RJM CO.
 LEASE Morgenstern #3
 FIELD Hosington East
 LOCATION NW-NE-NW (330' FNL & 1600' FWL)
 SEC 26 TWSP 17S RGE 13W
 COUNTY Barton STATE Kansas

ELEVATIONS
 KB 1858'
 DF _____
 GL 1849'
 Measurements Are All
 From KB

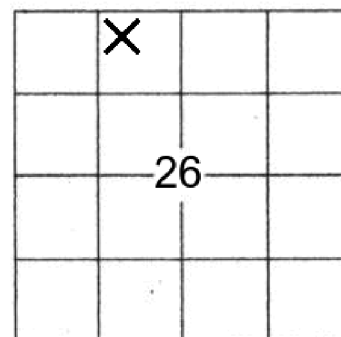
CONTRACTOR Southwind Drilling co. (Rig #3)
 SPUD 07/15/2019 COMP 07/21/2019
 RTD 3423' LTD 3424'
 MUD UP 2700' TYPE MUD Chemical

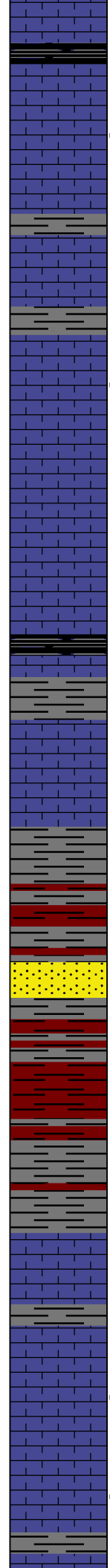
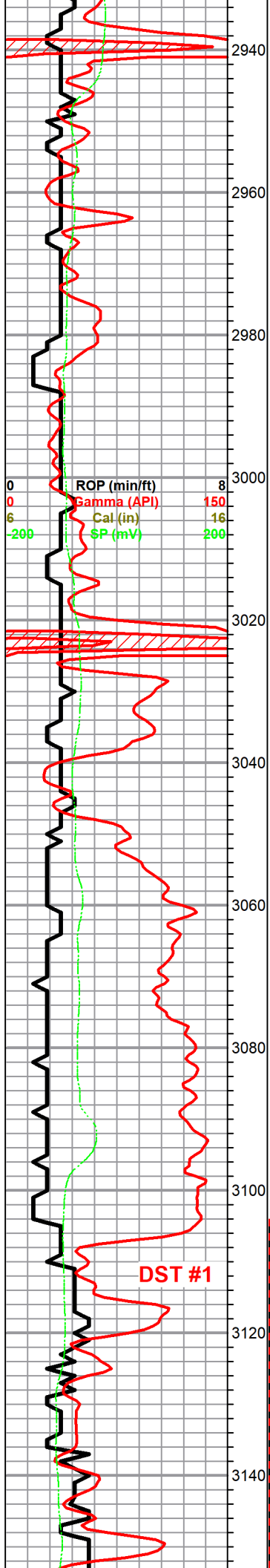
CASING
 SURFACE 8 5/8"@334'
 PRODUCTION 5 1/2"@3420'

ELECTRICAL SURVEYS
 ELI; DIL, MEL,
 CDL/CNL

SAMPLES SAVED FROM 2800' TO RTD
 DRILLING TIME KEPT FROM 2800' TO RTD
 SAMPLES EXAMINED FROM 2800' TO RTD
 GEOLOGICAL SUPERVISION FROM 2836' TO RTD
 GEOLOGIST ON WELL Wyatt Urban

FORMATION TOPS	LOG	SAMPLES
Anhydrite	NOT FOUND	RTD 3423 (-1565)
Heebner	3020 (-1162)	LTD 3424 (-1566)
Toronto	3038 (-1180)	
Douglas	3048 (-1190)	
Brown Lime	3106 (-1248)	
Lansing	3120 (-1262)	
Muncie Cr. Sh.	3253 (-1395)	
BKC	3354 (-1496)	
Arbuckle	3361 (-1503)	





Sh, black carb

LS, tan, buff, few foss, poor vis. porosity, v. chalky, tr. brn spty stain, nsfo, tr. pyrite

LS, tan, buff, foss, poor p.p. porosity, sl. chalky,

LS, tan, buff, foss, scattered vuggy---> p.p. porosity, chalky, tr. blk stain, nsfo, no odor

LS, tan, white, fxl, dense, poor vis. porosity, no shows, tr. white, opaque chert

HEEBNER 3018.0 (-1160.0)

Sh, black carb

TORONTO 3036.0 (-1178.0)

LS, gry, tan, few foss, p.p. type porosity, chalky, tr. brn stain, nsfo, ??? odor

LS, tan, brn, sl. dol., tr. brn stain, nsfo, no odor

DOUGLAS 3045.0 (-1187.0)

Sh, gry, aqua green, brn silty

Sh, gry, greenish, sd. f- med grain, good inner gran, porosity, - friable mica, no shows

Sh, gry, aqua green, soft, silty, no true sands

BROWN LIME 3104.0 (-1246.0)

LS, brn fxl, dense, cherty, no shows,

slug sh. gry, slity, soft, no shows

LANSING 3120.0 (-1262.0)

LS, tan, cram, fxl, poor p.p. por., v. chalky in pts, tr. sfo, no odor

LS, a/a, foss/ool, sl. dol. in pts, . poor scattered p.p. porosity, tr. brn stain, nsfo, tr. dk gry, & tan, foss chert,

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

DST#1 3104-3195'
 30-45-45-45

1st Open :
 good 1 1/2" blow
 building to BOB 3.5
 mins.

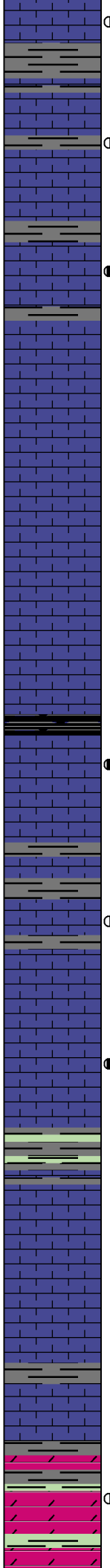
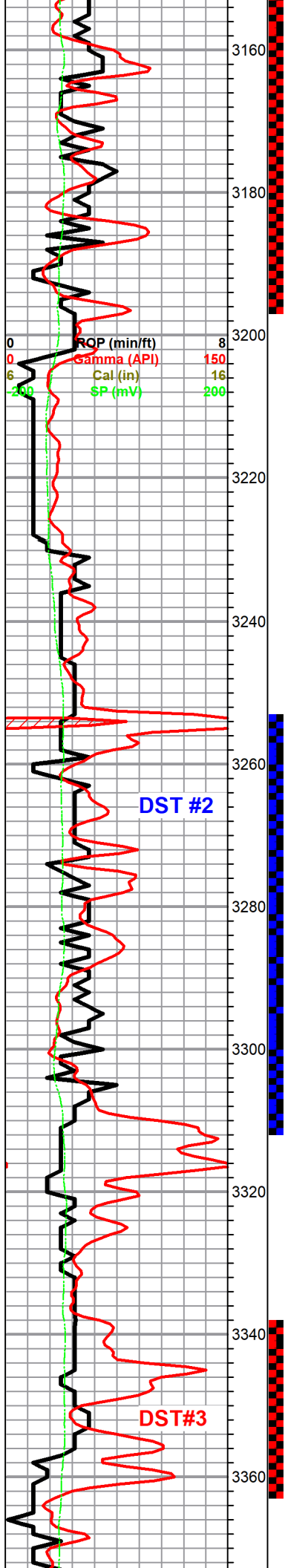
2nd Open:
 BOB 5.5 mins

Recovery:
 1635' GIP
 30' OCGM
 (37%G, 26%O, 37%
 M)

190' MCGCO
 (24%G, 53%O, 23%
 M)

325 SLMCGCO
 (10%G, 87%O,)

Pressures:
 ISIP 816 psi
 FSIP 793 psi
 IFP 31-145 psi



LS, tan, fxl, poor p.p. porosity, sl chalky, tr. dk brn stain, spty dk brn sfo (weak), faint odor

LS, tan, few foss, poor vis. porosity, tr. stain, weak sfo, no odor

LS, tan, cream, fair p.p. ---> vuggy type porosity, poor spty brn stain, lt. sfo., faint odor, (Show & odor increased in 40 min cfs sample)

LS, tan, oom, good vuggy oom porosity, no shows, barren

LS, tan, oom, good vuggy porosity, sl. chalky no shows a/a, tr. pyrite

LS, tan, brn, fxl, dense, poor vis. porosity, cherty, no shows

Sh, black carb

LS, tan, oom, vuggy oom porosity, tr. brn stain, /sat, golden brn sfo, faint odor

tr. sh, gry, silty

LS, white, tan, ool/ foss, poor p.p. porosity, tr. brn stain, v. wk sat/ wk spty sfo, chalky in pts

LS, white/ cream, f- xln med scattered vuggy porosity sl. chalky, brn spty stain, sfo, faint---> ??? odor

Sh, gry, greenish, maroon

LS, white, cream, fxl dense, poor vis. porosity, no shows

LS, tan, buff, fxl dense, poor porosity, sl. cherty, no shows

Sh, gry, dk gry few grey aqua green, **BKC 3346.0 (-1488.0)**

Sh, gry, dk gry, aqua green **ARBUCKLE 3356.0 (-1498.0)**

Dol, white, f- med xln, suc. good inxln porosity, spty dark brn spty stain, spty sfo, odor in broken samples.

Tr. gry/ greenish sh.

FFP 148-219 psi
HSH 1456-14356

3200 sample-
1st sample After DST#1
found (1) LS, tan
sdy/dolomitic, good
inxln porosity,
bleeding dark brn oil
& vis. gas bubbles,
could not find
another sample in
cups.

3260'-3300

Free oil covering all
samples. Outside
contamination in sample
prep station

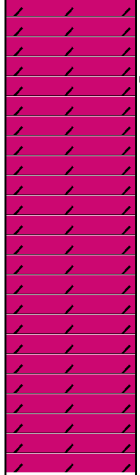
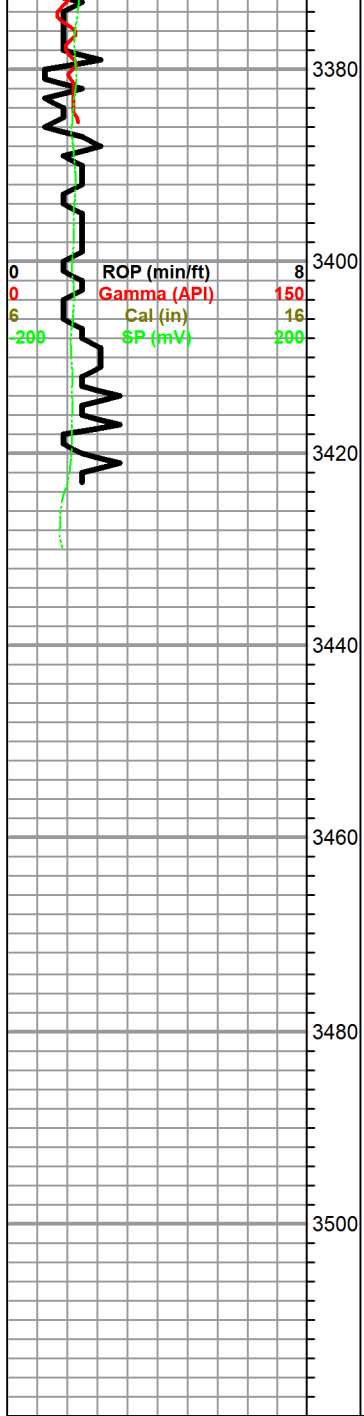
DST#2 3253-3310
30-30-45-45

1st Open:
fair 7.25" building
blow

2nd Open:
Surface blow built to
7.5"

Recovery:
30' GIP
5' Clean Gassy Oil
63' SLOGCMW
(20%G, 10%O, 40%W
30%M)

Pressures:
ISIP: 827 psi
FSIP 817 psi
IFP 18-32 psi
FFP 36-819 psi



● Dol, white, cherty, poor vis. porosity, tr. blk stain, nsfo, tr. pyrite

Dol. white, f- med xln , scatt p.p. ---> vuggy type porosity, fair inxln porosity, n/sfo, no odor

Dol, white, tan, suc. fair scattered p.p. porosity , tr. white, trans chert , nsfo,no odor , tr. pyrite

RTD 3423.0 (-1565.0)

LTD 3424.0 (-1566.0)

DST #3 3337-63

30-30-30-30

1st open :

WK blow

Recovery:

20' sl WCOCM
(10%O, 5%W,85%M)

Pressures:

ISIP 929 psi
FSIP 834 psi
IFP 19-20 psi
FFP 21-24 psi

