

# Musgrove

**PETROLEUM CORPORATION**  
Cliflin, Kansas

## GEOLOGIST'S REPORT

### DRILLING TIME AND SAMPLE LOG

COMPANY <u>C&amp;K Operating</u>	ELEVATIONS
LEASE <u>Cynthia Reimann # 5</u>	KB <u>1931'</u>
FIELD <u>Kraft Prusa</u>	DF _____
LOCATION <u>SW-NE-NE-SF</u>	GL <u>1926'</u>
SEC <u>33</u> TWSP <u>16S</u> RGE <u>11W</u>	Measurements Are All From <u>KB</u>
COUNTY <u>Barton</u> STATE <u>Kansas</u>	
CONTRACTOR <u>W.W Drilling (Rig #8)</u>	CASING SURFACE <u>8 5/8"@420'</u>
SPUD <u>12/03/2018</u> COMP <u>12/12/2018</u>	PRODUCTION <u>None</u>
RTD <u>3500'</u> LTD <u>3498'</u>	ELECTRICAL SURVEYS by ELI; DIL, CNL/CDL Micro, Sonic
MUD UP <u>2500' +</u> TYPE MUD <u>Chemical</u>	







SAMPLES SAVED FROM <u>2700'</u>	TO <u>RTD</u>
DRILLING TIME KEPT FROM <u>2700'</u>	TO <u>RTD</u>
SAMPLES EXAMINED FROM <u>2700'</u>	TO <u>RTD</u>
GEOLOGICAL SUPERVISION FROM <u>2800'</u>	TO <u>RTD</u>
GEOLOGIST ON WELL <u>Jim Musgrove</u>	

FORMATION TOPS	LOG	<del>SAMPLES</del>
Anhydrite	744 (+1187)	Regan Sd. 3469 -1538
Base Anhydrite	773 (+1158)	RTD 3500 -1569
Heebner	2997 (-1066)	LTD 3498 -1567
Toronto	3013 (-1028)	
Douglas	3028 (-1097)	
Brown Lime	3095 (-1164)	
Lansing	3108 (-1177)	





	33		
			X

Base Kansas City	3358	(-1427)				
Arbuckle	3383	(-1452)				

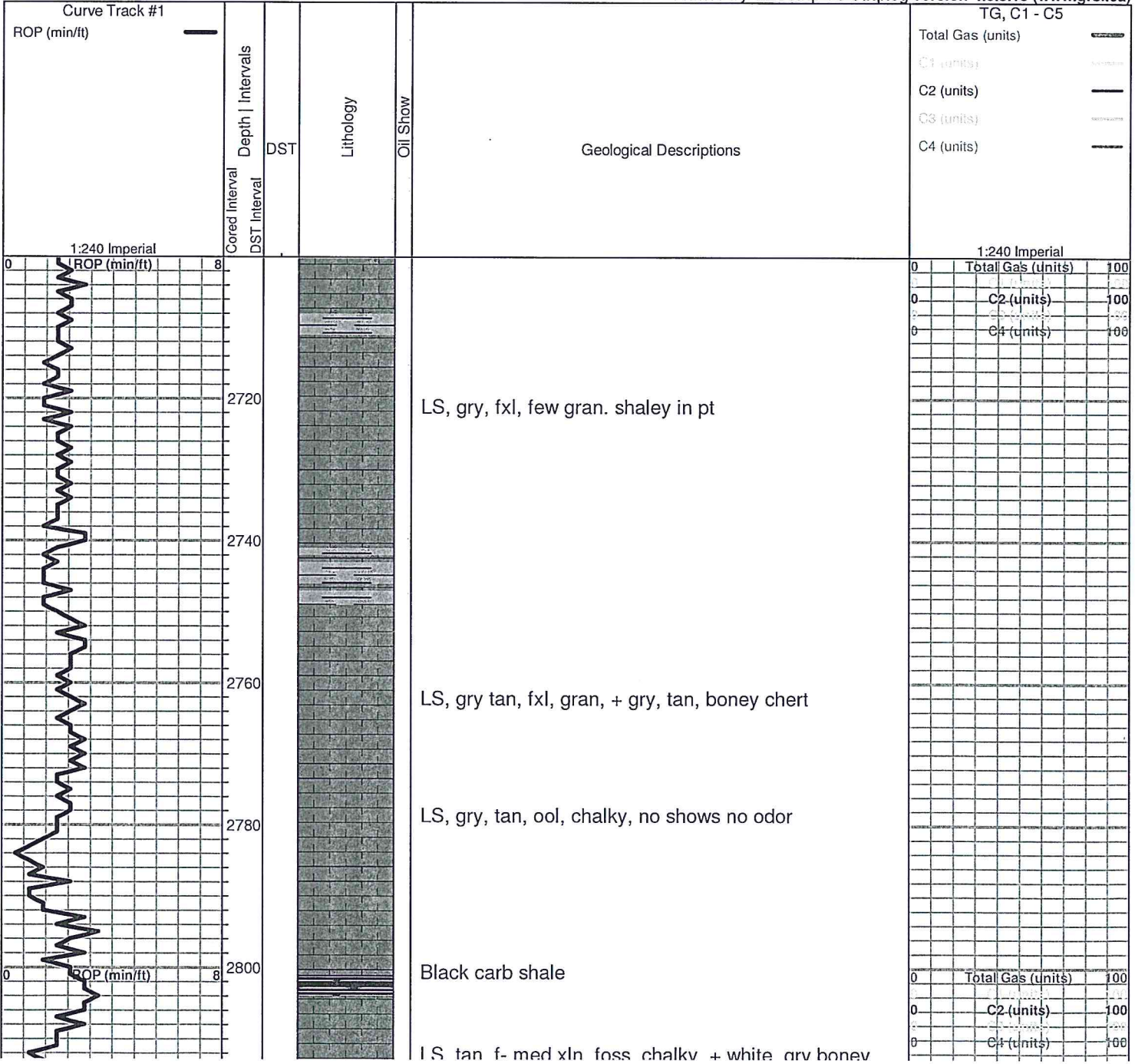
**ROCK TYPES**

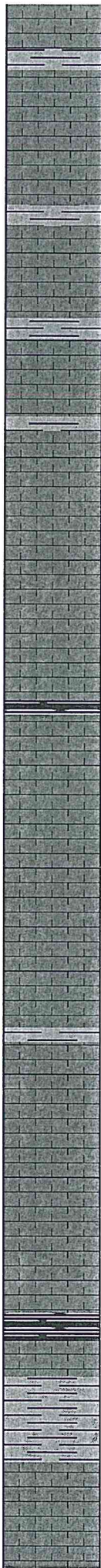
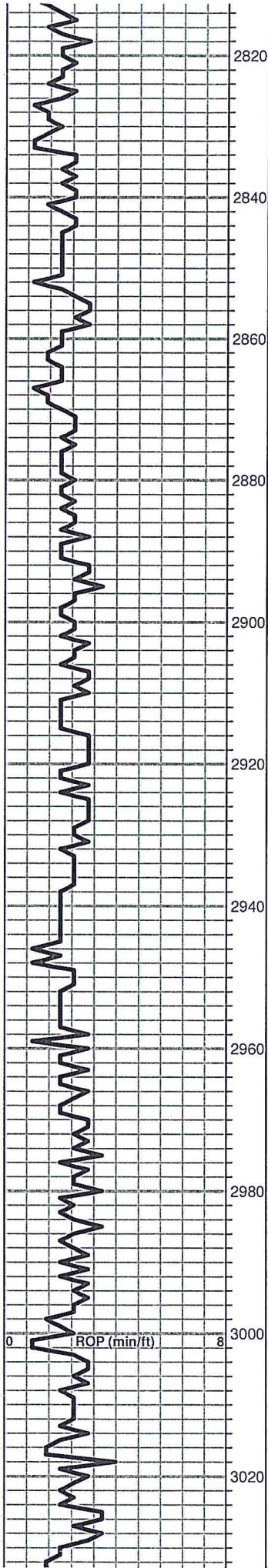
 Dolprim	 shale, grn	 Carbon Sh
 Lmst fw<7	 shale, gry	 Meta

**OTHER SYMBOLS**

<b>Oil Show</b>	<b>DST</b>
● Good Show	 DST Int
● Fair Show	 DST alt
○ Poor Show	 Core
○ Spotted or Trace	 tail pipe
○ Questionable Str	
D Dead Oil Str	
■ Fluorescence	
* Gas	

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)





LS, tan, med xnl, foss, chalky, white, gry boney chert

Sh, gry, soft

LS, gry, fxl, few gran shaley in pt.

LS, white, cream, chalky, dense

LS, gry, tan, fxl, gran. + gry/ tan, boney chert

LS, gry, tan, ol, chalky, no shows

LS, white, cream, fxl, foss, in pt, poor vis. porosity, no shows

Sh. black carb

○ LS, white, chalky, poorly develeoped, tr. brown stain, nsfo

tr. gry/ blk chert

○ LS, white, cream, chalky, poorly developed, porosity, tr. brn stn nsfo

○ LS, tan, fxl, few foss, cherty in pts, tr. brn stain poss fractured cherty nsfo, no odor

tr. white chert

**Heebner 2997.0 (-1066.0)**

Sh, black carb a/a

Sh, gry, silty

**Toronto 3018.0 (-1087.0)**

○ LS, white, cream, foss, chalky, scattered porosity, tr. brn stain/ sat., nsfo, ft. odor

Poor samples

Poor Samples

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

Douglas 3032.0 (-1101.0)

V.c. gry, gryish green silty shale,

Sh, gry, greenish, silty

Sh, gry, silty

Brown Lime 3098.0 (-1167.0)

LS, brown/ tan, fxl, slightly cherty (dense)

Sh, gry , gryish green

Lansing 3114.0 (-1183.0)

○ LS, white/ gry, sub oom, chalky, tr. brn stain, nsfo, no odor

LS, gry, foss, slightly cherty, poor porosity, (dense)

○ LS, white, foss/ ool, chalky in pt, dk brown - blk stain, nsfo, no odor

LS, tan, cream, fxl, chalky, cherty, tr. tan opaque chert

LS, tan, ool, chlky in pt, (dense)

tr. gry chert

LS, tan, oom, good oom porosity, no shows, + white, chalk

a/a, + white chalk

LS, tan, gry, slightly cherty (dense)

Slug black carb sh.

DST#1 3103-  
3209  
30-30-45-45

**1st Open:**  
**Blow; Strong**  
**BOB 1.5 mins**

**2nd Open:**  
**BOB 5 mins.**

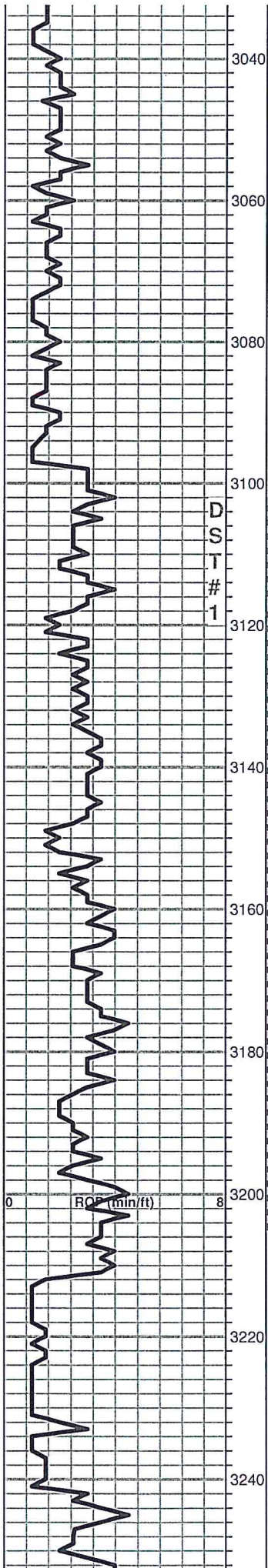
**Recovery:**  
**199' GIP**

**242' SL OCMW**  
**(5%G, 1%O, 10%W,**  
**84%M)**

**650' VSOCMW**  
**(1%O, 87%W, 12%**  
**M)**

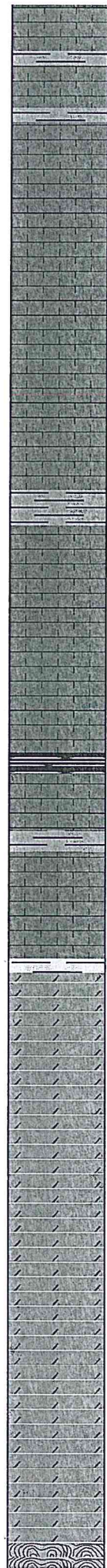
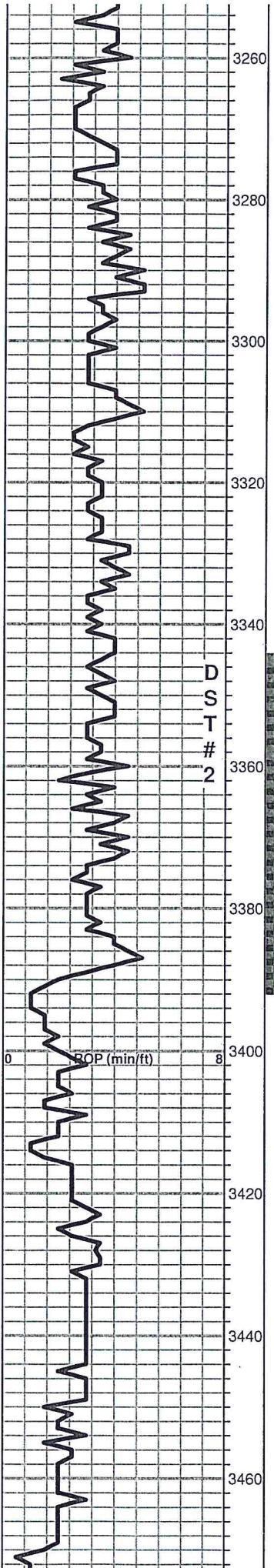
**Pressures:**  
**ISIP 593psi**  
**FSIP 53-255 psi**  
**FFP 259-415 psi**  
**HSH 1483-1484 psi**

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



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1

ROP (min/ft)



LS, white, gry, few foss, chalky, poo vis. porosity

LS, gry, white, ool, chalky, tr. brown stain, nsfo, no odor

LS, tan, ool, foss, dense poorly developed porosity

LS, white, cream, sub oom, chalky, poor vis. porosity, tr. gry-blk (dead) stain, nsfo, no odor

LS, white, gry, chalky (dense)

LS, tan, gry, fxl, few gran. chalky

LS, tan, fxl, slightly cherty poor porosity, no shows

**BKC 3360.0 (-1423.0)**

Sh, black carb

LS, gry/ tan, cherty, + gry opaque chert

LS, a/a

**Arbuckle 3385.0 (-1454.0)**

Dol. white/ cream, med coarse xl, fair - good inxln porosity, tr. brn stain, SFO, faint -fair odor

Dol, a/a , fair- good inxln porosity, tr. brown stain, sfo, odor

Dol, white, cream, fxl, sandy in pt, tr. brn stain, nsfo, faint odor

Dol, white, tan, fxl, few sandy, slightly cherty, poor vis. porosity, nsfo, faint odor

Dol, white, tan, fxl, increase in sand fair porosity, no shows

Dol a/a highly sandy, fair porosity, no shows

**Regan Sd. 3469.0 (-1538.0)**

Sd, clear white etc, sub rounded, friable, fair inner

**DST#2 3344-3390**

30-30-30-30

1st Open:  
BOB 6.5 mins

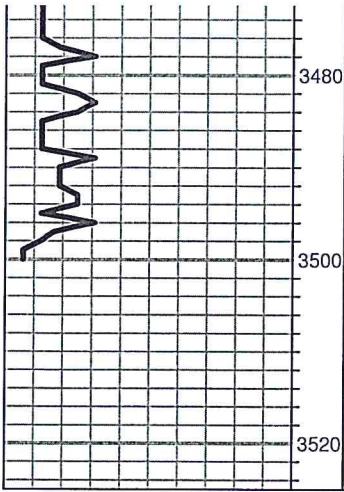
2nd Open:  
BOB 9.5 mins.

Recovery  
1' clean oil  
253' SI. OCMW  
(2%O, 65%W, 33%  
M)

252' VSOCMW  
1%O, 49%W, 50%M)

189' Muddy Water

Pressures:  
ISIP 1074 psi  
FSIP 1073 psi  
IFP 16-219 psi



Sd, clear white qtz, sub rounded, friable, fair in gran. porosity, tr. brn stain, nsfo, faint odor

a/a, dolomitic no shows

Dol, tan, pk, fxl, sandy in pt, no shows

Sd. white, clear, qtz, sub rounded friable, fair in gran. porosity, tr. pyrite inclusions.

**RTD 3500.0 (-1569.0)**

FFP 221-347 psi  
HSH 1627-1623 psi

