



# Musgrove

**PETROLEUM CORPORATION**  
Clofflin, Kansas

## NOTES

Company: Pauley Oil

Lease: Rachel #1

Field: Stoltenberg

Location: SW-NE-SE-SE(680' FSL & 380' FEL)

Sec: 16 Twsp: 16S Rge: 10W

County: Ellsworth State: Kansas

KB: 1905' GL: 1892'

API #: 15-053-21299-00-00

Contractor: Ninnescah Drilling, LLC

Spud: 01/16/2014 Comp: 01/20/2014

RTD: 3410'

Mud Up: 2500' Type Mud: Chemical

Samples Saved From: 2650' to RTD

Drilling Time Kept From: 2650' to RTD

Samples Examined From: 2650' to RTD

Geological Supervision from: 2650' to RTD

Geologist on Well: Wyatt Urban

Surface Casing: 8 5/8 @ 426'

Electronic Surveys: None

## Pauley Oil well comparison sheet

	DRILLING WELL				COMPARISON WELL				COMPARISON WELL			
	Pauley Oil- Rachel #1				J. S. TOMLINSON - #1 Kozisek				SID TOMLINSON- #2 Kozisek			
	SW-NE-SE-SE 16-16S-10W				SW-SE-SE 16-16S-10W				SE-NW-SE-SE 16-16S-10W			
	1905 KB				1902 KB		Structural Relationship		1907 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Topsoil		1905										
Bedrock	2913	-1014			2893	-1011	-3		2912	-1025	11	
Tronzoite		1905										
Druggies	2944	-1040										
Brown Lize	3025	-1120			2999	-1117	-3		3017	-1130	10	
Lavelling	3038	-1133			3014	-1132	-1		3031	-1144	11	
SEC	3039	-1434										
Arbuckle	3423	-1494			3338	-1456	-42		3371	-1484	-14	
RTD	3410	-1505										
LTD												

### ROCK TYPES

Dolprim	Lmst fw>7	Lmst fw<7	shale, gry	shale, red
Lmst fw<7	shale, gm	Carbon Sh	Ss	

### ACCESSORIES

FOSSIL  
◊ Coite

TEXTURE  
FX Finexn



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CORPORATION**  
Cleffin, Kansas

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	Pauley Oil- Rachel #1				J. F. TOMLINSON - #1 Korisek				SID TOMLINSON- #2 Korisek				
	SW-NE-SE-SE 16-16S-10W				SW-SE-SE 16-16S-10W				SE-SW-SE-SE 16-16S-10W				
	1905 KB			1982 KB			Structural Relationship		1987 KB			Structural Relationship	
	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	
Flint Hills		1905											
Shinarump	2919	-1024			2893	-1011	-3		2912	-1025	11		
Decorah		1905											
Longlake	2946	-1040											
Brown Linn	3025	-1120			2999	-1117	-3		3017	-1130	10		
Lansing	3138	-1133			3014	-1132	-1		3031	-1144	11		
NSC	3239	-1434											
Arbuckle	3403	-1490			3338	-1456	-42		3371	-1484	-14		
RTD	3410	-1505											
LTD													

### ROCK TYPES

Dolprim	Lmst fw>	shale, gry	shale, red
Lmst fw<7	shale, grn	Carbon Sh	Ss

### ACCESSORIES

#### FOSSIL

◊ Oolite

#### TEXTURE

EX Finegrn

ACCESSORIES

FOSSIL  
 ◇ Oolite

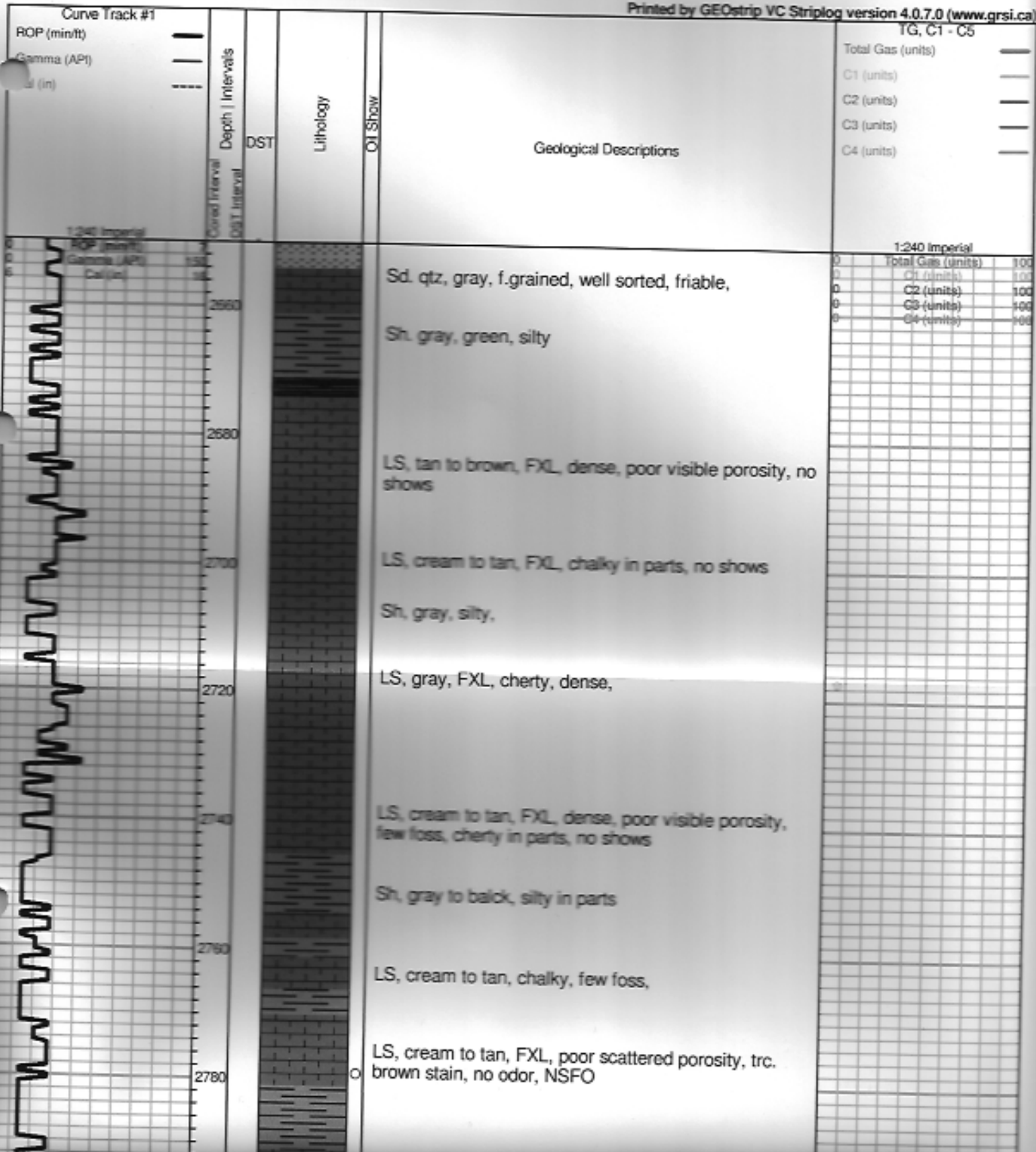
TEXTURE  
 FX Finexln

OTHER SYMBOLS

- Oil Show**
- Good Show
  - Fair Show
  - Poor Show
  - Spotted or Trace
  - Questionable Stn
  - Dead Oil Stn
  - Fluorescence
  - \* Gas

- DST**
- DST Int
  - DST alt
  - ▨ Core
  - || tail pipe

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FOSSIL  
 ◊ Oolite

TEXTURE  
 FX Finedn

OTHER SYMBOLS

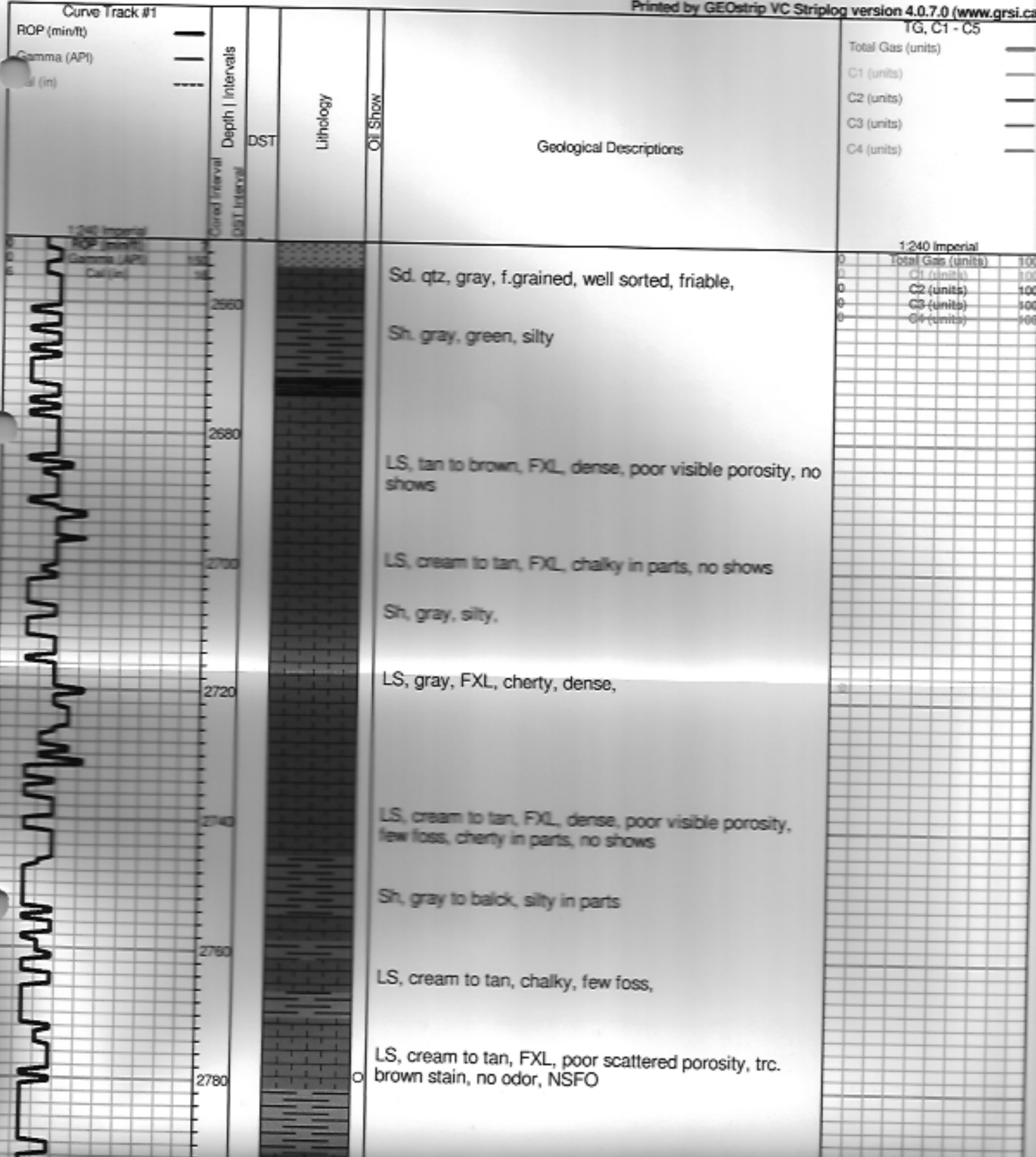
Oil Show

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Str
- D Dead Oil Str
- Fluorescence
- \* Gas

DST

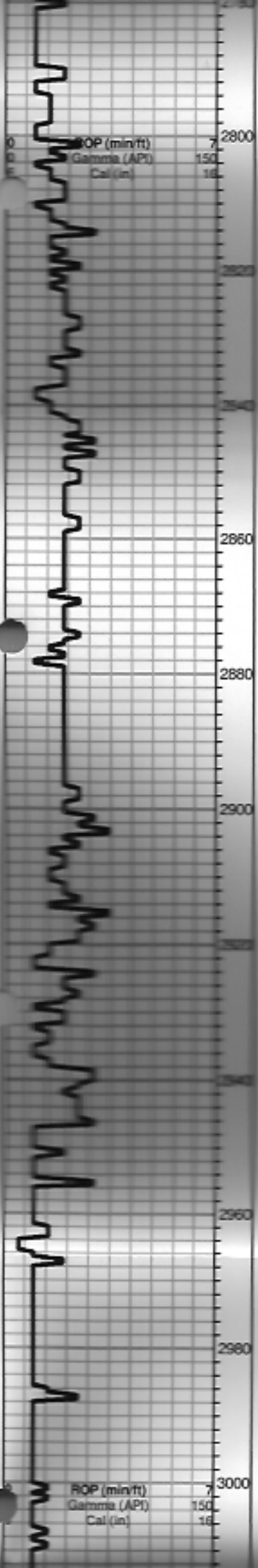
- DST Int
- DST alt
- Core
- || tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)



TG, C1 - C5	
Total Gas (units)	---
C1 (units)	---
C2 (units)	---
C3 (units)	---
C4 (units)	---

1:240 Imperial	
Total Gas (units)	100
C1 (units)	100
C2 (units)	100
C3 (units)	100
C4 (units)	100



LS, tan, FXL, ool, foss, poor scattered porosity, cherty in parts, no shows

LS, tan, poor scattered porosity, few foss, trc. lt. brown stain, NSFO, no odor

LS, cream to tan, FXL, foss, poor scattered porosity, no shows

LS, gray to tan, mottled, FXL, dense, no visible porosity,

Sh. gray, silty,

LS, tan, FXL, poor scattered porosity, trc. SFO, lt. black stain, no odor

LS, cream to white, chalky, poor scattered porosity

**HEEBNER 2919 (-1014)**

Black carb shale

Sh. gray, greenish, silty, waxy in parts

LS, cream to tan, FXL, poor scattered porosity, no shows

(? LS, cream, poor scattered porosity, SFO, no odor, trc. black stain)

**Douglas 2946 (-1041)**

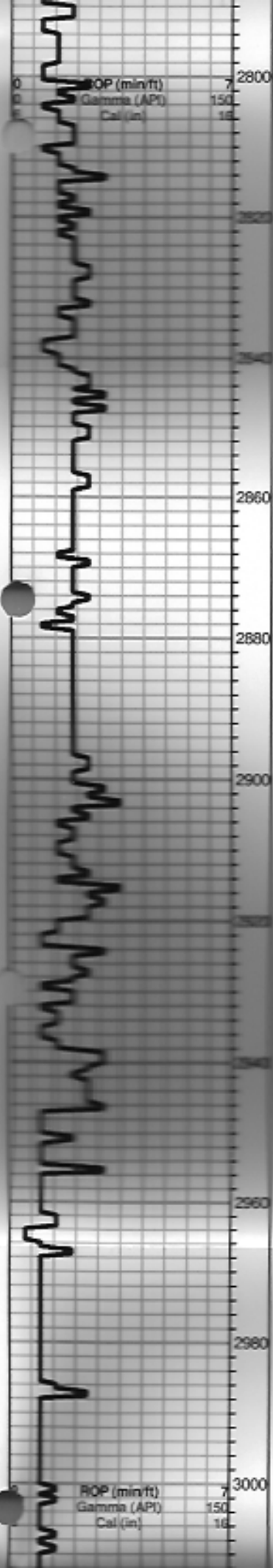
Sh. gray, black, maroon

Sh. gray, maroon, soft

Sh. gray, black, maroon, greenish

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

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



LS, tan, FXL, ool, foss, poor scattered porosity, cherty in parts, no shows

LS, tan, poor scattered porosity, few foss, trc. lt. brown stain, NSFO, no odor

LS, cream to tan, FXL, foss, poor scattered porosity, no shows

LS, gray to tan, mottled, FXL, dense, no visible porosity,

Sh. gray, silty,

LS, tan, FXL, poor scattered porosity, trc. SFO, lt. black stain, no odor

LS, cream to white, chalky, poor scattered porosity

**HEEBNER 2919 (-1014)**  
Black carb shale

Sh. gray, greenish, silty, waxy in parts

LS, cream to tan, FXL, poor scattered porosity, no shows

(LS, cream, poor scattered porosity, SFO, no odor, trc. black stain)

**Douglas 2946 (-1041)**

Sh. gray, black, maroon

Sh. gray, maroon, soft

Sh, gray, black, maroon, greenish

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

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

Sh, gray, greenish, maroon, soft, silty,

**BROWN LIME 3025 (-1120)**

LS, tan to brown, FXL, few foss, poor visible porosity, dense

**LANSING 3038 (-1133)**

LS, cream to tan, FXL, no visible porosity, dense, cherty in parts

LS, cream to tan, chalky, few foss, poor INXLN porosity, no shows

LS, cream to tan, FXL, chalky, trace chert, ool, no visible porosity, no shows

LS, cream to tan, foss, poor scattered porosity, no shows

Black carb shale

LS, tan, ool, chalky, good vuggy porosity, no shows,

LS, tan, chalky, good vuggy porosity, barren

LS, A/A, trc LS, gry to black mottled, FXL, dense, poor scattered porosity, cherty in parts

LS, tan to cream, chalky poor scattered porosity, no shows

LS, cream to tan, FXL, cherty, dense, trc gray shales silty

LS, cream to boney white, FXL, dense, no visible porosity, cherty in parts, no shows

LS, A/A, trace black carb shale

LS, gray to tan, mottled, FXL, chalky, poor visible porosity, trace brown stain, WSPD, no odor

LS, cream, ool, FXL, dense, cherty, no visible porosity, trace black carb shale no shows

LS, A/A, trace gray, green, maroon shale, silty,

LS, gray, FXL, dense, poor visible porosity, no shows

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

CFS 20-40-60  
11:54PM 1/19/2014

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

Sh, gray, greenish, maroon, soft, silty,

**BROWN LIME 3025 (-1120)**

LS, tan to brown, FXL, few foss, poor visible porosity, dense

**LANSING 3038 (-1133)**

LS, cream to tan, FXL, no visible porosity, dense, cherty in parts

LS, cream to tan, chalky, few foss, poor INXLN porosity, no shows

LS, cream to tan, FXL, chalky, trace chert, ool, no visible porosity, no shows

LS, cream to tan, foss, poor scattered porosity, no shows

Black carb shale

LS, tan, ool, chalky, good vuggy porosity, no shows,

LS, tan, chalky, good vuggy porosity, barren

LS, A/A, trc LS, gry to black mottled, FXL, dense, poor scattered porosity, cherty in parts

LS, tan to cream, chalky poor scattered porosity, no shows

LS, cream to tan, FXL, cherty, dense, trc gray shales silty

LS, cream to boney white, FXL, dense, no visible porosity, cherty in parts, no shows

LS, A/A, trace black carb shale

LS, gray to tan, mottled, FXL, chalky, poor visible porosity, trace brown stain, NSFD, no odor

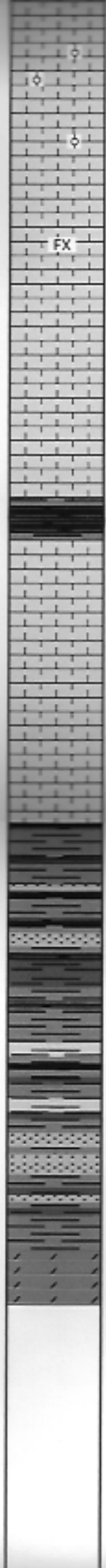
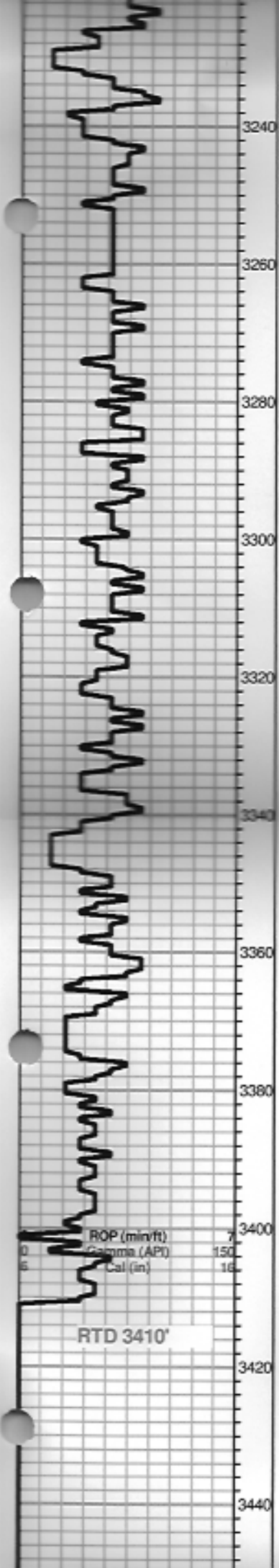
LS, cream, ool, FXL, dense, cherty, no visible porosity, trace black carb shale no shows

LS, A/A, trace gray, green, maroon shale, silty,

CFS 20-40-60  
11:54PM 1/19/2014

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





LS, gray, FXL, dense, poor visible porosity, no shows, trc. black and gray shale

LS, tan, ool, good vuggy porosity, chalky, no shows

LS, tan, gray, white, FXL, dense, poor visible porosity, few foss, no shows

LS, gray, FXL, chalky in parts, trace black shale

LS, cream to white, ool, poorly developed dense, cherty, poor visible porosity, no shows

LS, A/A, trc, black gray shales,

LS, cream to tan, FXL, dense, cherty, poor visible porosity, no shows

LS, tan to brown, FXL, dense, poor visible porosity, no shows

Sh gray, silty, soft, Trc, ool, chert

Trc. yello opaque, chert,

Sh. aqua green, LS, cream to tan, ool, chalky, poorly developed,

Trc. gray sand F.grain, rounded, well sorted, no shows

Sh. maroon, soft shale, congl.

Sh. gray to greenish, sub waxey sh.

vfg. sand,qtz, well sorted, fair I.G. porosity

Tr. VFG. gray sand, trace feldspar inclusions

**Arbuckle 3403 (-1498)**

dol, tan to cream, FXL, slightly cherty, dense,

CFS 20-40-60

CFS 20-40-60

CFS 20-40-60

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

LS, gray, FXL, dense, poor visible porosity, no shows, trc. black and gray shale

LS, tan, ool, good vuggy porosity, chalky, no shows

LS, tan, gray, white, FXL, dense, poor visible porosity, few foss, no shows

LS, gray, FXL, chalky in parts, trace black shale

LS, cream to white, ool, poorly developed dense, cherty, poor visible porosity, no shows

LS, A/A, trc, black gray shales,

LS, cream to tan, FXL, dense, cherty, poor visible porosity, no shows

LS, tan to brown, FXL, dense, poor visible porosity, no shows

Sh gray, silty, soft, Trc, ool, chert

Trc. yello opaque, chert,

Sh. aqua green, LS, cream to tan, ool, chalky, poorly developed,

CFS 20-40-60

Trc. gray sand F.grain, rounded, well sorted, no shows

Sh. maroon, soft shale, congl.

CFS 20-40-60

Sh. gray to greenish, sub waxey sh.

CFS 20-40-60

vfg. sand,qtz, well sorted, fair I.G. porosity

Tr. VFG. gray sand, trace feldspar inclusions

**Arbuckle 3403 (-1498)**

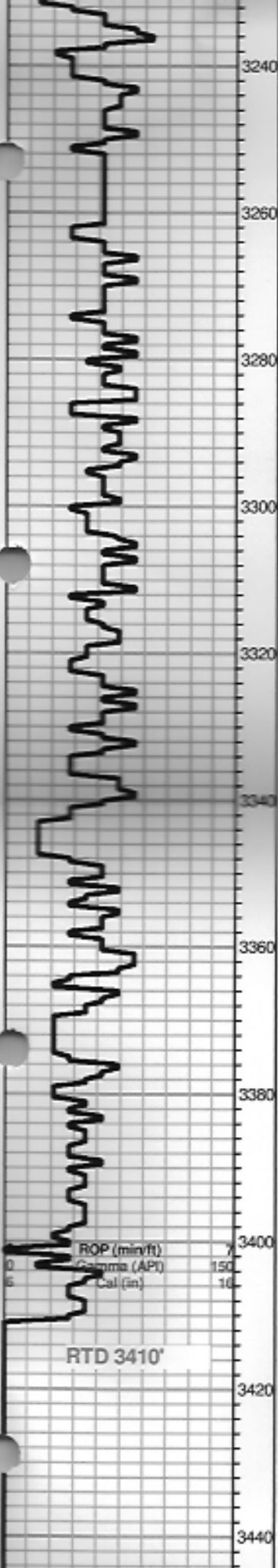
dol, tan to cream, FXL, slightly cherty, dense,

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

3240  
3260  
3280  
3300  
3320  
3340  
3360  
3380  
3400  
3420  
3440

ROP (min/ft)  
Gamma (API) 150  
Cal (in) 16

RTD 3410'



LS, gray, FXL, dense, poor visible porosity, no shows, trc. black and gray shale  
LS, tan, ool, good vuggy porosity, chalky, no shows  
LS, tan, gray, white, FXL, dense, poor visible porosity, few foss, no shows  
LS, gray, FXL, chalky in parts, trace black shale  
LS, cream to white, ool, poorly developed dense, cherty, poor visible porosity, no shows  
LS, A/A, trc, black gray shales,  
LS, cream to tan, FXL, dense, cherty, poor visible porosity, no shows  
LS, tan to brown, FXL, dense, poor visible porosity, no shows  
Sh gray, silty, soft, Trc, ool, chert  
Trc. yello opaque, chert,  
Sh. aqua green, LS, cream to tan, ool, chalky, poorly developed,  
Trc. gray sand F.grain, rounded, well sorted, no shows  
Sh. maroon, soft shale, congl.  
Sh. gray to greenish, sub waxey sh.  
vfg. sand,qtz, well sorted, fair I.G. porosity  
Tr. VFG. gray sand, trace feldspar inclusions  
**Arbuckle 3403 (-1498)**  
dol, tan to cream, FXL, slightly cherty, dense,

