



Musgrove

**PETROLEUM
CORPORATION**
Claflin, Kansas

Geologist's Report

Company: **Blue Ridge Petroleum Corporation**

Lease: **Lakota #6-9**

Field: **Gunsmoke**

Location: **SW-NW-NE-NW (380 FNL & 1577' FWL)**

Sec: **9** Twsp: **27S** Rge: **24W**

County: **Ford** State: **Kansas**

GL: **2466'** KB: **2478'**

Contractor: **Southwind Drilling Company Rig #70**

Spud: **2-18-13** Comp: **3-13-13**

RTD: **5099'** LTD: **5102'**

Mud Up: Type Mud: **Chemical/displaced**

Samples Saved From: **3800' To RTD**

Drilling Time Kept From: **3800' To RTD**

Samples Examined From: **3800' To RTD**

Geological Supervision From: **4175' to RTD**

Geologist on Well: **K. Talbott**

Surface Casing: **8 5/8"@ 430'**



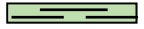






Production Casing: **5 1/2" set and cemented**

Electronic Surveys: **By Nabors: CNL/CDL, DIL, MEL**

	Blue Ridge Petroleum				Blue Ridge		
	Lakota #1				Cheyenne #3-9		
	SW-NW-NE-NW Sec. 9-T275-R24W				SW-NE-SW-NE Sec.9-T275-R24W		
KB	2478				2484		
Formation	Sample	Sub-sea	E-Log	Sub-Sea	Log	Sub-sea	
Heebner	4146	-1668	4148	-1670	4160	-1676	
Lansing	4259	-1781	4256	-1778	4272	-1788	
Stark Shale	4586	-2108	4584	-2106	4592	-2108	
Base KC	4717	-2239	4716	-2238	4726	-2242	
Marmaton	4747	-2269			4754	-2270	
Pawnee	4800	-2322	4800	-2322	4808	-2324	



Ft Scott	4836	-2358	4841	-2363	4843	-2359
Cherokee	4850	-2372	4852	-2374	4861	-2377
Morrow Shale	4963	-2485	4962	-2484	4958	-2474
Morrow Sand	4974	-2496	3790	-1312	4978	-2494
Miss Chert		2478	3917	-1439	4998	-2514
Mississippian	5012	-2534	4998	-2520	5010	-2526
Miss Spergen						
RTD	5099	-2621	5102	-2624	5100	-2616

ROCK TYPES

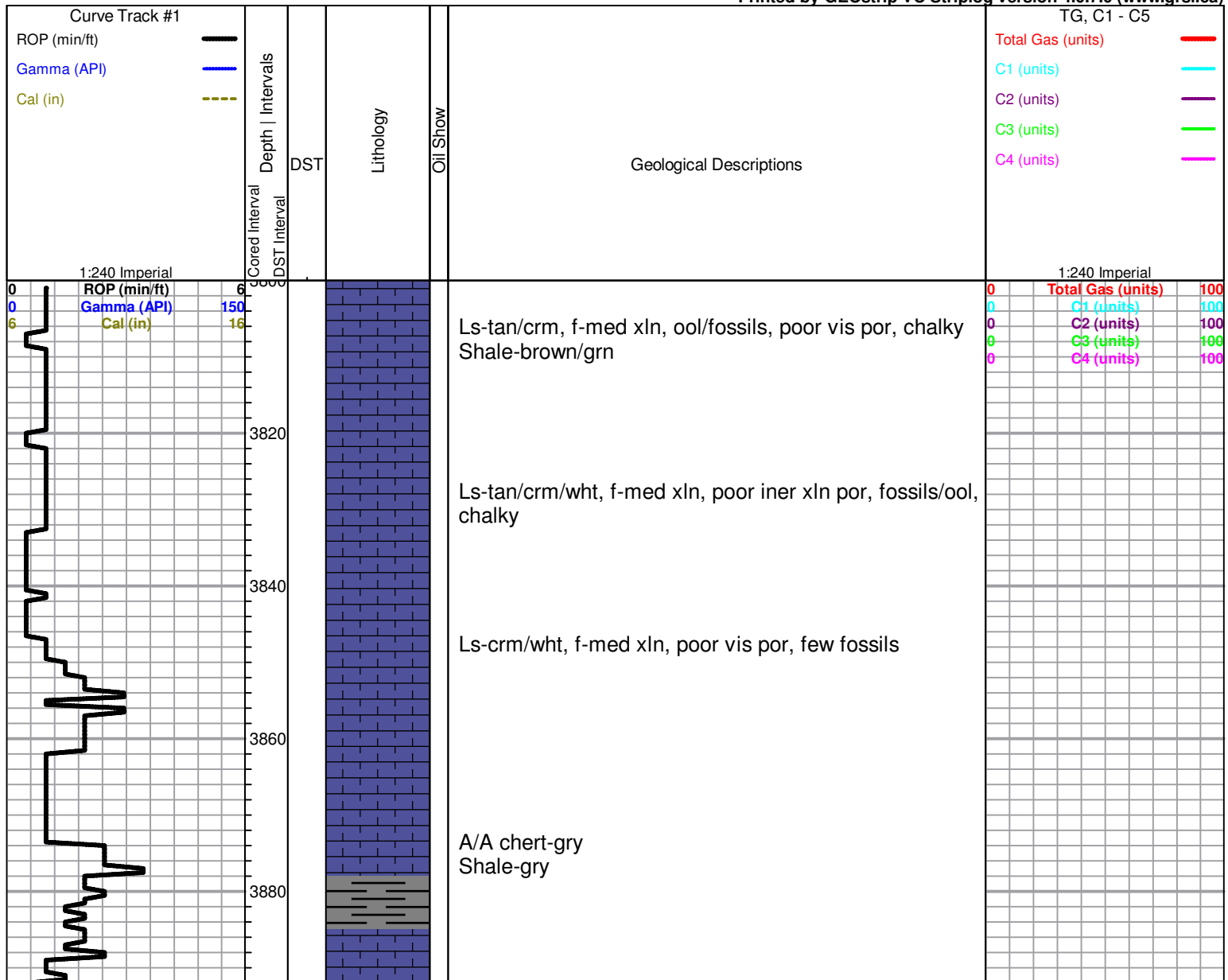
 Cht vari	 Dolsec	 shale, grn	 Carbon Sh	 Ss
 Dolprim	 Lmst fw<7	 shale, gry	 Shcol	

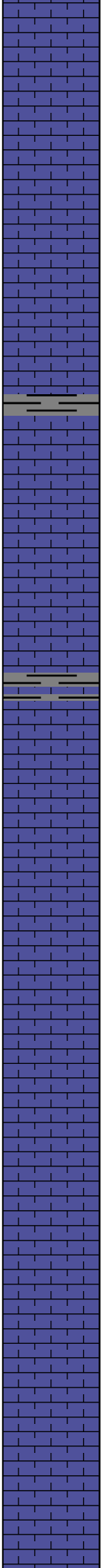
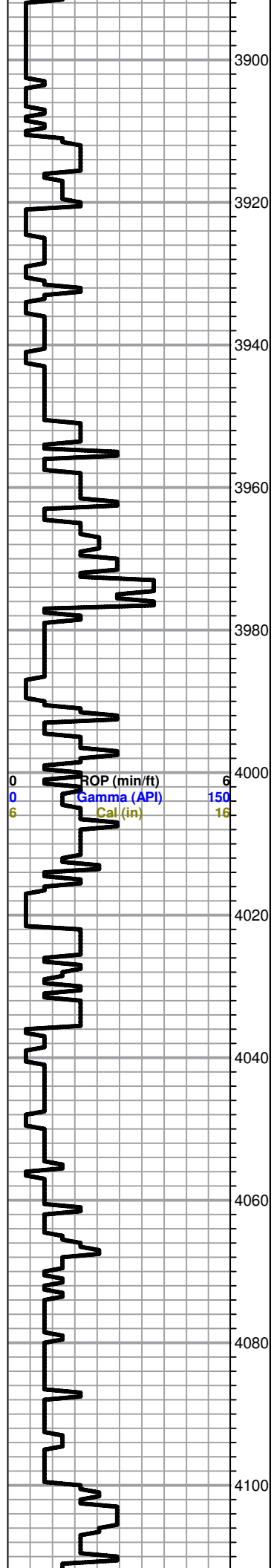
OTHER SYMBOLS

DST

-  DST Int
-  DST alt

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





3900 Ls-crm/buf, f-med xln, poor inver xln por

3920 Ls-crm/tan/grym f-med xln, granular, poor iner xln por, cherty, chalky

3940 A/A

3960 Ls-crm/tan, fxln, ool, scattered poof-fair iner ool to sub oom por, chalky

3980 Ls-crm/wht, fxln, few fossils, poor/fair iner xln to iner ool por, chalky, cherty
Shale- gry/grn

4000 Ls-crm/tan, fxln, ool, scattered oom por, chalky

4020 Ls-crm/tan, fxln, dense, poor iner xln por

4040 Ls-crm/tan, fxln, chalky, poor vis por

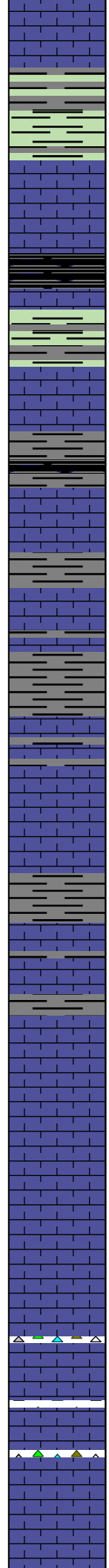
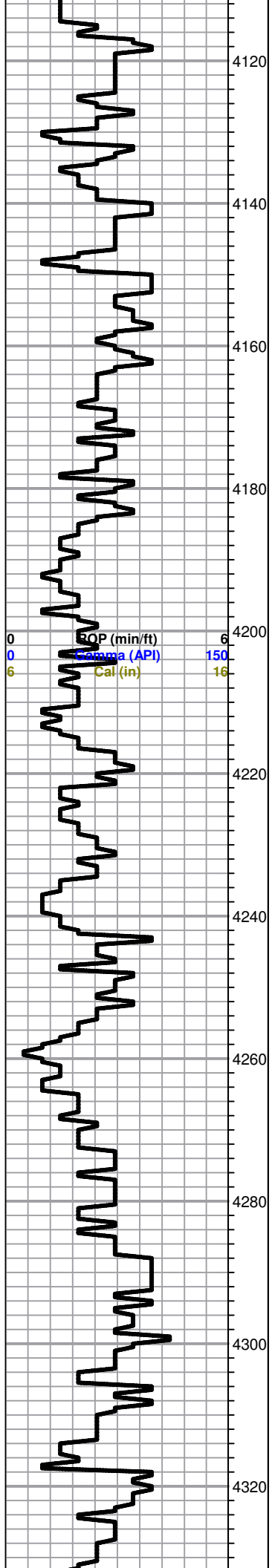
4060 Ls-crm/tan, fxln, fossils, poor iner xln to iner part por, cahlky, no vis shows

4080 A/A

4100 A/A

Ls-crm/gry ,fxln, dense, poor vis por, chalky

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



A?A

Shale- gry/grn/brwn

Heebner 4146.0 (-1668.0) 0.0

Black carbon shale

Shale-gry/grn

Ls-gry/crm, fxln, fossils/ool poor iner xln por,
Shale-gry/brwn abundant

Shale-A/A

A/A

Ls-crm/tan/wht, fxln, poor iner xln por, chalky
Shale- A/A

Shale-gry/brwn/grn

Lansing 4259.0 (-1781.0) 0.0

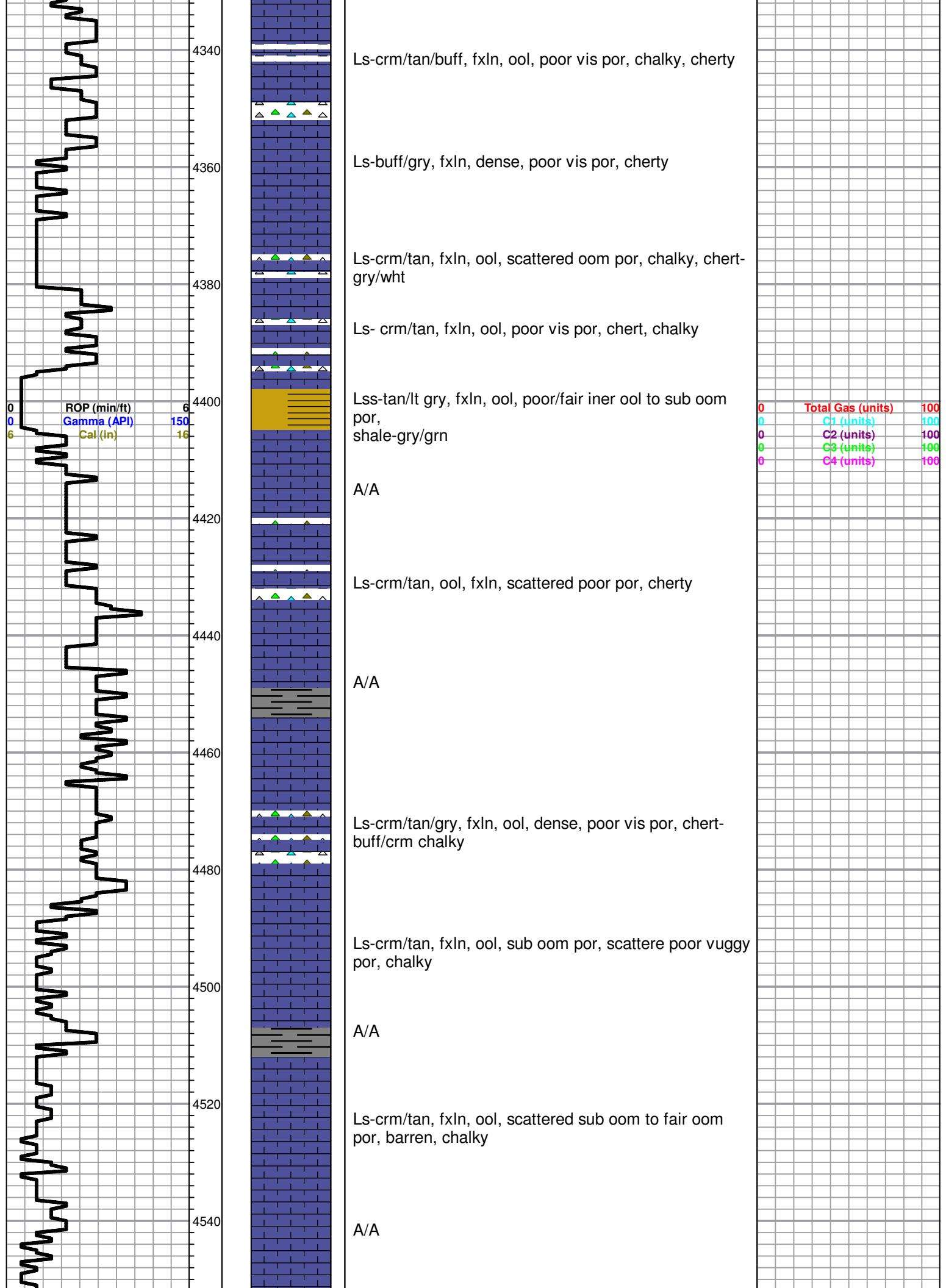
Ls-crm/tan, fxln, poor vis por, chert- crm/gry, chalky

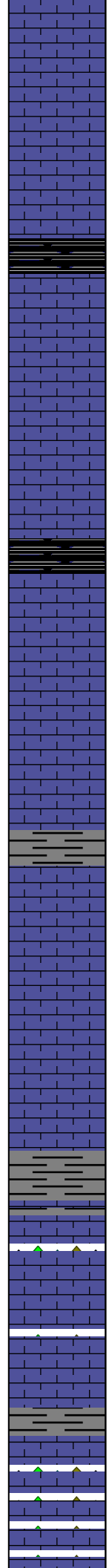
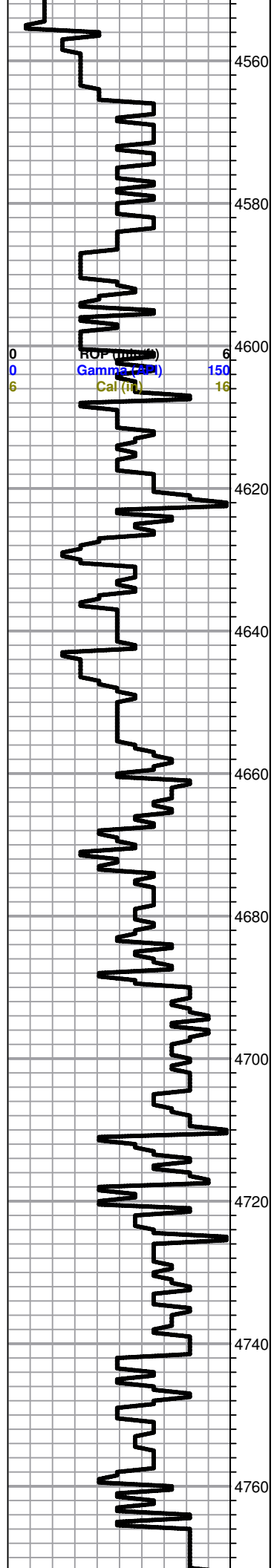
A/A scattered iner xln por

Ls-crm/tan, fxln, ool, poor vis por, chalky, cherty

Ls-crm/wht/ lt gry, flxn, slightly ool, poor iner xln por

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





Ls-crm/tan, fxln, ool, poor/fair oom por, barren, chalky

Ls-crm/tan/buff, fxln, poor vis por, chety- chalky

Stark 4586.0 (-2108.0) 0.0

Shale-black carbon

Ls-crm/tan, fxln, fossils/ool, scattered sub oom por,

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

Ls-crm/tan, fxln, ool, poor/fair oom por, barren, chalky

Shale-black carbon

Ls-tan/buff/gry, fxln, slightly ool, dense

Ls-crm/tan/lt gry, fxln, poor vis por, chalky

A/A

Ls-gry/buff, fxln, ool, dense, poor vis por, cherty-gry/tan

A/A Shale-gry

Base Kansas City 4717.0 (-2239.0) 0.0

Shale-gry/blk/grn
 Ls-crm/tan, scattered por, chalky

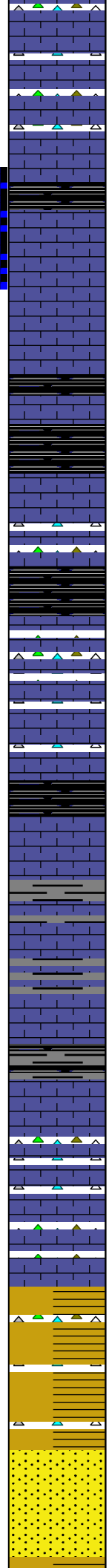
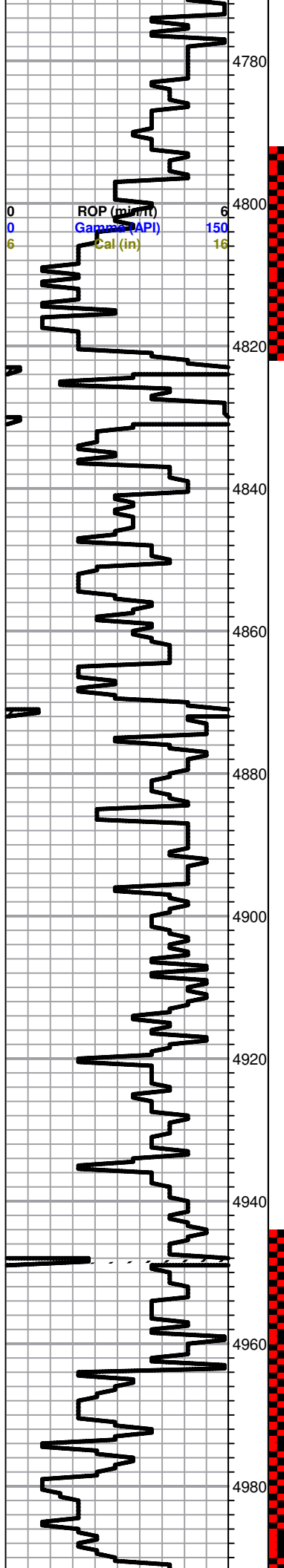
Ls-gry, fxln, few fossils, dense, poor vis pro

Marmaton 4747.0 (-2269.0) 0.0

Ls-crm/wht/gry, fxln, few fossils, scattered poor por,

Ls-A/A- cherty

**DST #1 4791-4820
 30-45-60-90**



A/A

Pawnee 4800.0 (-2322.0) 0.0

Black carbon shale

Ls-crm/wht/tan, fxln, ool, poor iner xln to iner ool por, trace golden brown stains, TrSFO, faint odor

Black carbon shale

Ft. Scott 4836.0 (-2358.0) 0.0

Black carbon shale

Ls-crm/tan, fxln, ool, poor vis por, chert-tan

Cherokee 4850.0 (-2372.0) 0.0

Black carbon shale

Ls-tan/crm/lt gry, fossils/ool, scattered por, cherty

A/A Black carbon shale

Shale-blk/blk carbon/gry/grn

A/A

Black carbon

Ls-crm/buff/gry, fxln, poor vis por, ool, chalky, cherty

Ls-crm/buff/gry, fxln, slightly ool, poor vis pro, chalky, cherty

Morrow Shale 4963.0 (-2485.0) 0.0

Shale-grn/mar/blk

Morrow Sand 4974.0 (-2496.0) 0.0

Sand-vf-fine grained, poor iner gran. por, golden brown stains, SFO, sand grains in sampe tray

IF: BOB 2 Min
ISI: Surface Return

Recovery:
180' MCW
(25%*m*, 75%*w*)
380' OWCGM
(5%*w*, 5%*o*, 15%*g*, 75%*m*)
300' OCGM
(10%*o*, 25%*g*, 65%*m*)
200' VSli OCGM
(trace oil, 15%*g*, 85%*M*)

Pressures:
ISIP 1153 psi
FSIP 1173 psi
IFP 397-368 psi
FFP 371-466 psi
HSH 2411-2346 psi

DST #4 4794-4810
30-45-60-90
IF: BOB 19 min
ISI: Weak Surface

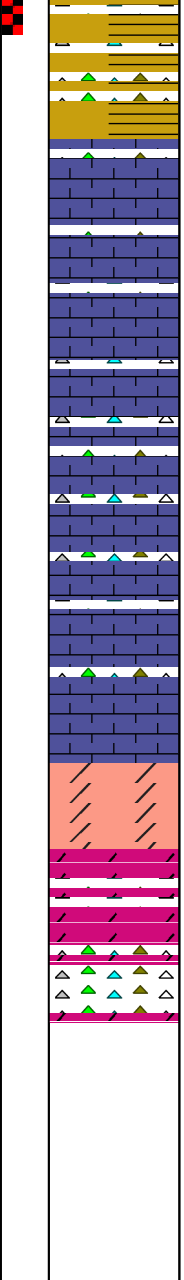
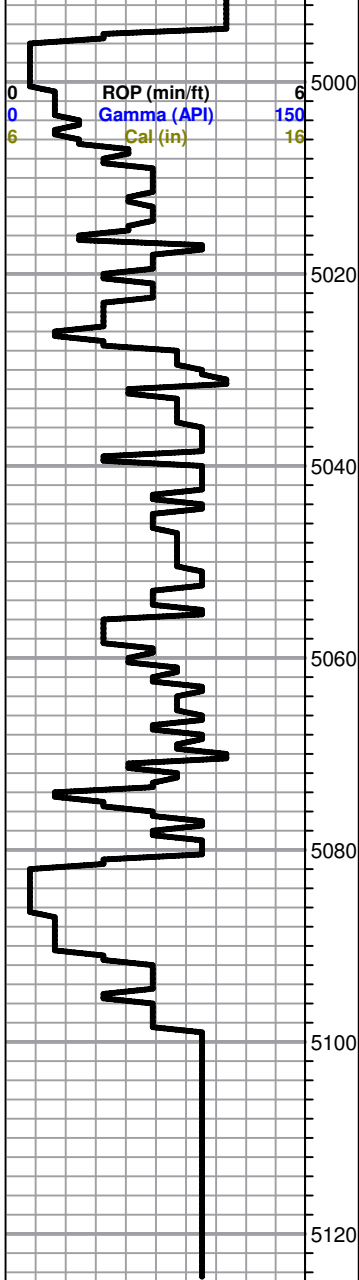
Recovery:
125' V Sli OCMW
(Trace Oil, 20%*m*, 80%*w*)
65' OCMW
(10%*o*, 30%*w*, 60%*m*)
60' WCOW
(5%*w*, 25%*o*, 70%*m*)
10' Clean Oil
Pressures:
ISIP 1177 psi
FSIP 1173 psi
IFP 20-64 psi
FFP 67-129 psi
HSH 2447-2259 psi

DST #2 4944-4986
Hit a Bridge

DST #3 4944-4986
30-45-60-90
IF: BOB 12 min
ISI: Weak Return

Recovery:
1265' Gas in Pipe
25' VSli OCM
(Trace Oil 100 % mud)

Pressures:
ISIP 729 psi
FSIP 947 psi
IFP 12-13 psi
FFP 12-15 psi
HSH 2514-2462 psi



Shale-gry/grn/mar/blk-firm

Miss 5012.0 (0.0) 0.0

Ls-wht/crm/tan, fxln, few fossils, poor scattered por, chert-boney wht/crm

A/A slightly chalky

A/A chert-tan/crm/boney wht

Ls-crm/wht, fxln, few fossils, poor scattered por, chert-A/A chalky

A/A slightly dolomitic

Dol-Tan/gry/buff, f-med xln, scattered por, no vis shows

A/A chert-boney wht/crm/tan

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