


OPERATOR

Company: RAMA Operating Company, Inc.
 Address: 101 S. Main ST
 Stafford, Kansas 67578

Contact Geologist:
 Contact Phone Nbr: 620-234-5191
 Well Name: Ruthie 'T' 1-26
 Location: 8 5/8" @ 311'
 Pool:
 State: Kansas, Stafford County

API: 15-185-23830-00-00
 Field: Leiss Southeast
 Country: USA




Joshua R. Austin

Petroleum Geologist

report for

RAMA Operating CO., Inc



Scale 1:240 Imperial

Well Name:	Ruthie 'T' 1-26	
Surface Location:	8 5/8" @ 311'	
Bottom Location:		
API:	15-185-23830-00-00	
License Number:		
Spud Date:	9/4/2013	Time: 7:30 PM
Region:	N/2-NE-SE-NE Sec 26-25s-13w	
Drilling Completed:	9/10/2013	Time: 2:50 AM
Surface Coordinates:	1,620' From North Line & 330' From East Line	
Bottom Hole Coordinates:		
Ground Elevation:	1912.00ft	
K.B. Elevation:	1925.00ft	
Logged Interval:	3000.00ft	To: 3980.00ft
Total Depth:	3980.00ft	
Formation:	Lansing	
Drilling Fluid Type:	Chemical mud displaced at 3093'	

SURFACE CO-ORDINATES

Well Type:	Vertical	
Longitude:		Latitude:
N/S Co-ord:	1,620' From North Line	
E/W Co-ord:	330' From East Line	

LOGGED BY

Company:	Joshua R. Austin, Petroleum Geologist
Address:	732 NE 110th Ave Stafford, KS 67578
Phone Nbr:	620-546-3960
Logged By:	Geologist
Name:	Josh Austin

CONTRACTOR

Contractor:	Sterling Drilling Company	
Rig #:	5	
Rig Type:	mud rotary	
Spud Date:	9/4/2013	Time: 7:30 PM
TD Date:	9/10/2013	Time: 2:50 AM
Rig Release:		Time:

ELEVATIONS

K.B. Elevation: 1925.00ft
K.B. to Ground: 13.00ft

Ground Elevation: 1912.00ft

NOTES

On the basis of the positive structural position, and after reviewing the electric logs it was recommended by all parties involved in the Ruthie 'T' 1-26 to run 5 1/2" production casing to further test the Lansing zones

RAMA Operating Co., Inc. well comparison sheet

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
Ruthie 'T' 1-26					R Russell #1				Russell A 1			
					NW-SW-NW 25-25-13w				26-25-13w			
1925 KB					1916 KB		Structural Relationship		1920 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	3469	-1544	3470	-1545	3468	-1552	8	7	3474	-1554	10	9
Toronto	3484	-1559	3486	-1561	3487	-1571	12	10	3494	-1574	15	13
Douglas	3502	-1577	3502	-1577	3503	-1587	10	10	3515	-1595	18	18
Brown Lime	3628	-1703	3624	-1699	3620	-1704	1	5	3626	-1706	3	7
Lansing	3656	-1731	3654	-1729	3646	-1730	-1	1	3655	-1735	4	6
Base KC	3942	-2017	3940	-2015	3934	-2018	1	3				
Total Depth	3980	-2055	3980	-2055	4255	-2339			3920	-2000		



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co Inc

26-25-13 Stafford Co

101 S Main St
Stafford Ks

Ruthie T #1-26

ATTN: Josh Austin

Job Ticket: 52428

DST#: 1

Test Start: 2013.09.08 @ 21:57:02

GENERAL INFORMATION:

Formation: **Lansing J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:38:02

Time Test Ended: 07:12:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Staats

Unit No: 47

Interval: 3862.00 ft (KB) To 3885.00 ft (KB) (TVD)

Reference Elevations: 1925.00 ft (KB)

Total Depth: 3885.00 ft (KB) (TVD)

1912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8676

Outside

Press@RunDepth: 132.26 psig @ 3863.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.08 End Date: 2013.09.09

Last Calib.: 2013.09.09

Start Time: 21:57:07 End Time: 07:12:02

Time On Btm: 2013.09.09 @ 02:35:17

Time Off Btm: 2013.09.09 @ 05:10:47

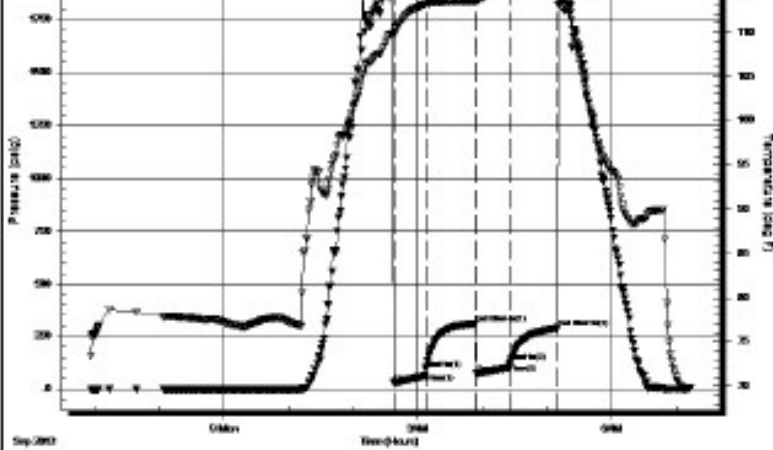
TEST COMMENT: IF: Strong blow BOB 1 min
IS: No blow back
FF: Strong blow BOB 2 min GTS 4 min TSTM
FSI: Weak blow back 3"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation



0	1853.88	109.73	Initial Hydro-static
3	30.70	110.00	Open To Flow (1)
33	95.83	113.19	Shut-in(1)
78	312.04	113.51	End Shut-in(1)
79	75.55	113.47	Open To Flow (2)
111	132.26	114.80	Shut-in(2)
154	289.90	114.90	End Shut-in(2)
156	1866.97	115.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3866" GIP	0.00
120.00	O,W,M 1%oil 9%water 90%mud	0.59
120.00	O,G,M,W 1%oil 4%mud 5%gas 90%wat	0.59

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co Inc

101 S Main St
Stafford Ks

ATTN: Josh Austin

26-25-13 Stafford Co

Ruthie T #1-26

Job Ticket: 52429

DST#: 2

Test Start: 2013.09.09 @ 10:25:20

GENERAL INFORMATION:

Formation: **Lansing H-I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:09:20

Time Test Ended: 17:47:50

Test Type: Conventional Straddle (Reset)

Tester: Chris Staats

Unit No: 47

Interval: 3790.00 ft (KB) To 3862.00 ft (KB) (TVD)

Total Depth: 3885.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches -hole Condition: Fair

Reference Elevations: 1925.00 ft (KB)

1912.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8676

Outside

Press@RunDepth: 175.61 psig @ 3791.00 ft (KB)

Start Date: 2013.09.09 End Date: 2013.09.09

Start Time: 10:25:25 End Time: 17:47:49

Capacity: 8000.00 psig

Last Calib.: 2013.09.09

Time On Btm: 2013.09.09 @ 13:05:50

Time Off Btm: 2013.09.09 @ 15:40:35

TEST COMMENT:

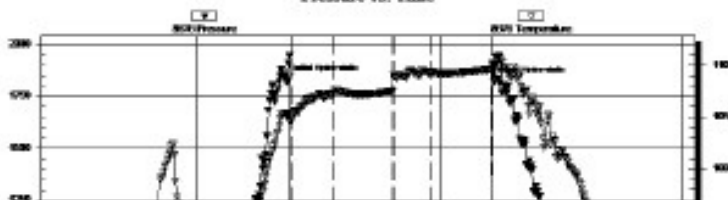
IF: Fair blow 8"

IS: No blow back

FF: Weak blow 3"

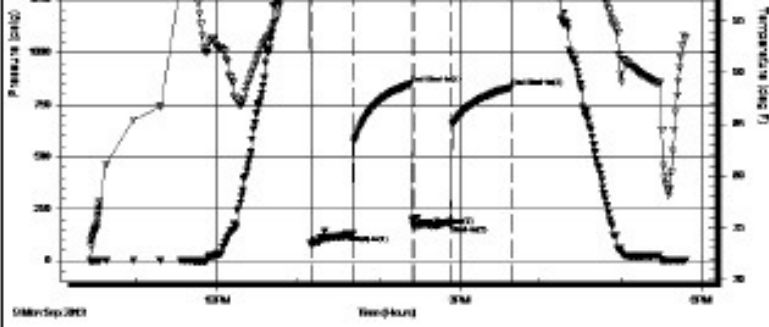
FSI: No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1825.67	105.38	Initial Hydro-static
4	85.14	104.53	Open To Flow (1)
35	129.54	107.00	Shut-in(1)
78	949.14	107.42	End Shut-in(1)



70	840.14	107.42	End Shut-in(1)
80	169.24	108.92	Open To Flow (2)
108	175.61	109.21	Shut-in(2)
153	832.49	109.58	End Shut-in(2)
155	1818.98	109.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	MUD 100%	1.18

* Recovery from multiple tests

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

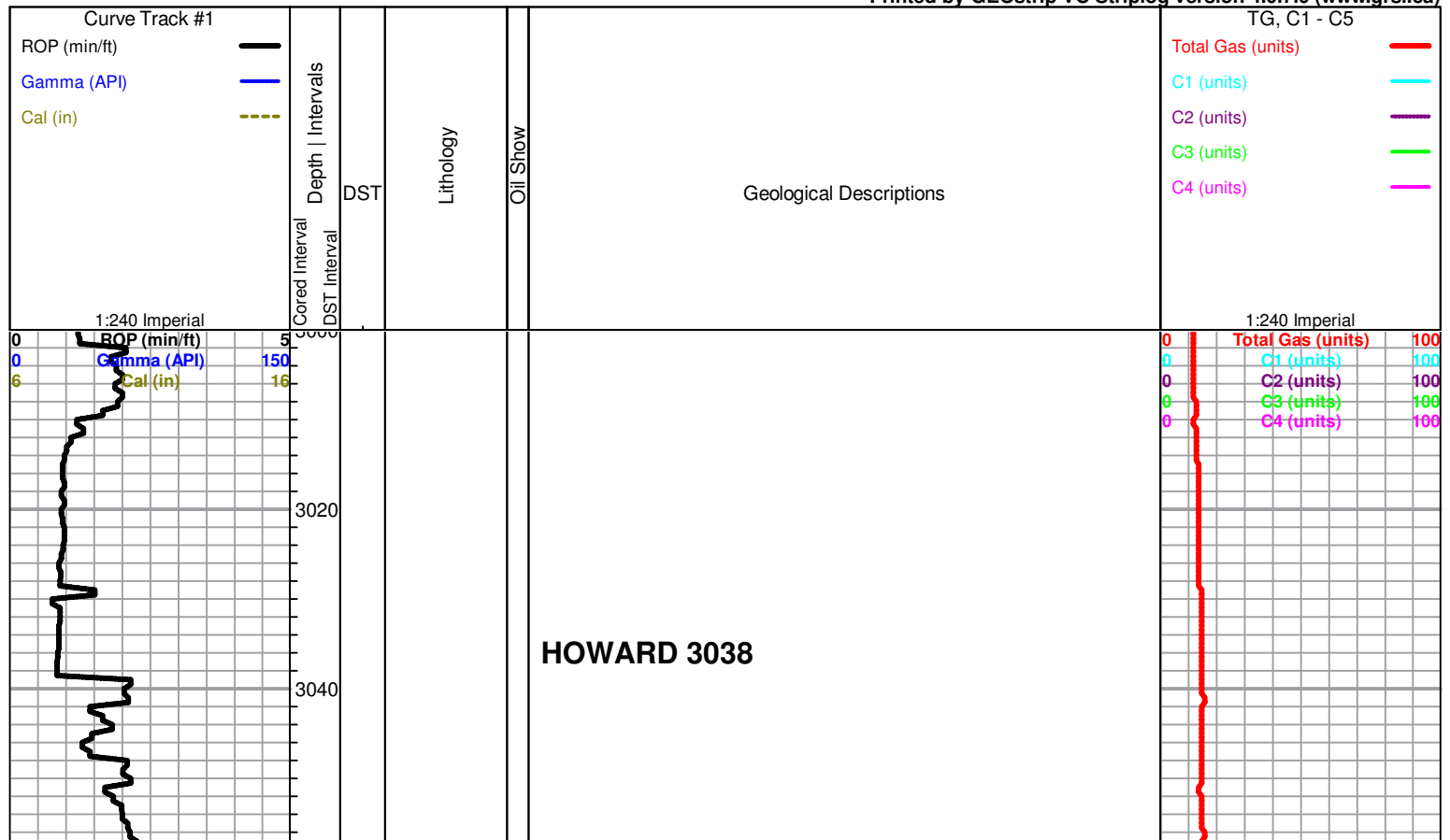
ROCK TYPES

Lmst fw7>
 shale, gry
 Carbon Sh
 Ss

OTHER SYMBOLS

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

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



3060
3080
3100
3120
3140
3160
3180
3200
3220
3240
3260

SEVERY

TOPEKA 3136

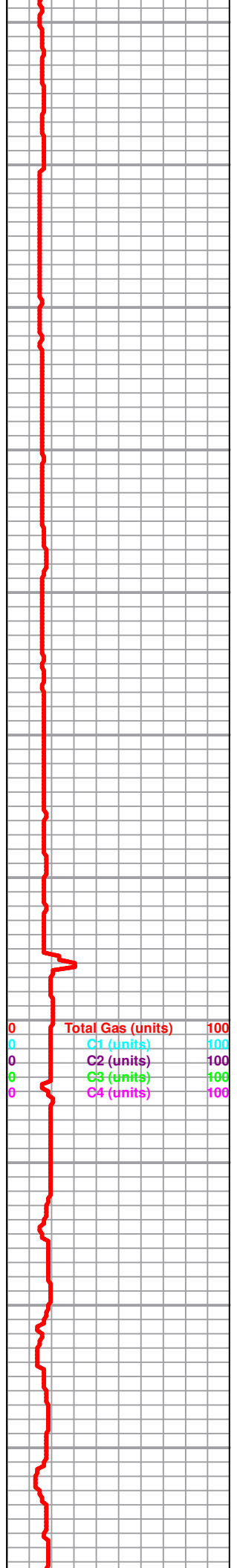
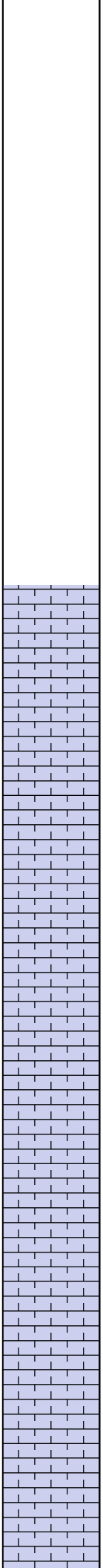
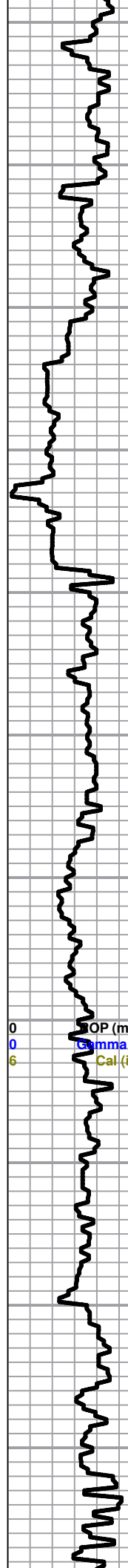
Wet and Dry Samples started

Limestone; cream-buff, fine-medium xln,
sandy/granular, poor visible porosity, no
shows, fossiliferous-oolitic, no shows

Limestone; as above

0 5
0 150
6 16
OP (min/ft)
Gamma (API)
Cal (in)

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



3280
3300
3320
3340
3360
3380
3400
3420
3440
3460
3480

grey-black Shale

Limestone; cream, fine xln, chalky, dense, plus grey-white Chert

Limestone; as above few granular pieces, no shows

Limestone; tan-cream, fine-medium xln, granular, dense, oolitic in part, no shows, plus white, translucent, grey Chert

Limestone; cream-buff, fine-medium xln, slightly fossiliferous, dense, plus grey-white boney Chert

Limestone; cream, fine xln, chalky, few cherty pieces, trace Limestone; tan, sucrosic, dolomitic in part, trace brown stain, NSFO, no odor

grey-green shale

Limestone; cream, fossiliferous, dense, slightly cherty, trace lt. grey boney Chert

HEEBNER 3469 (-1544)

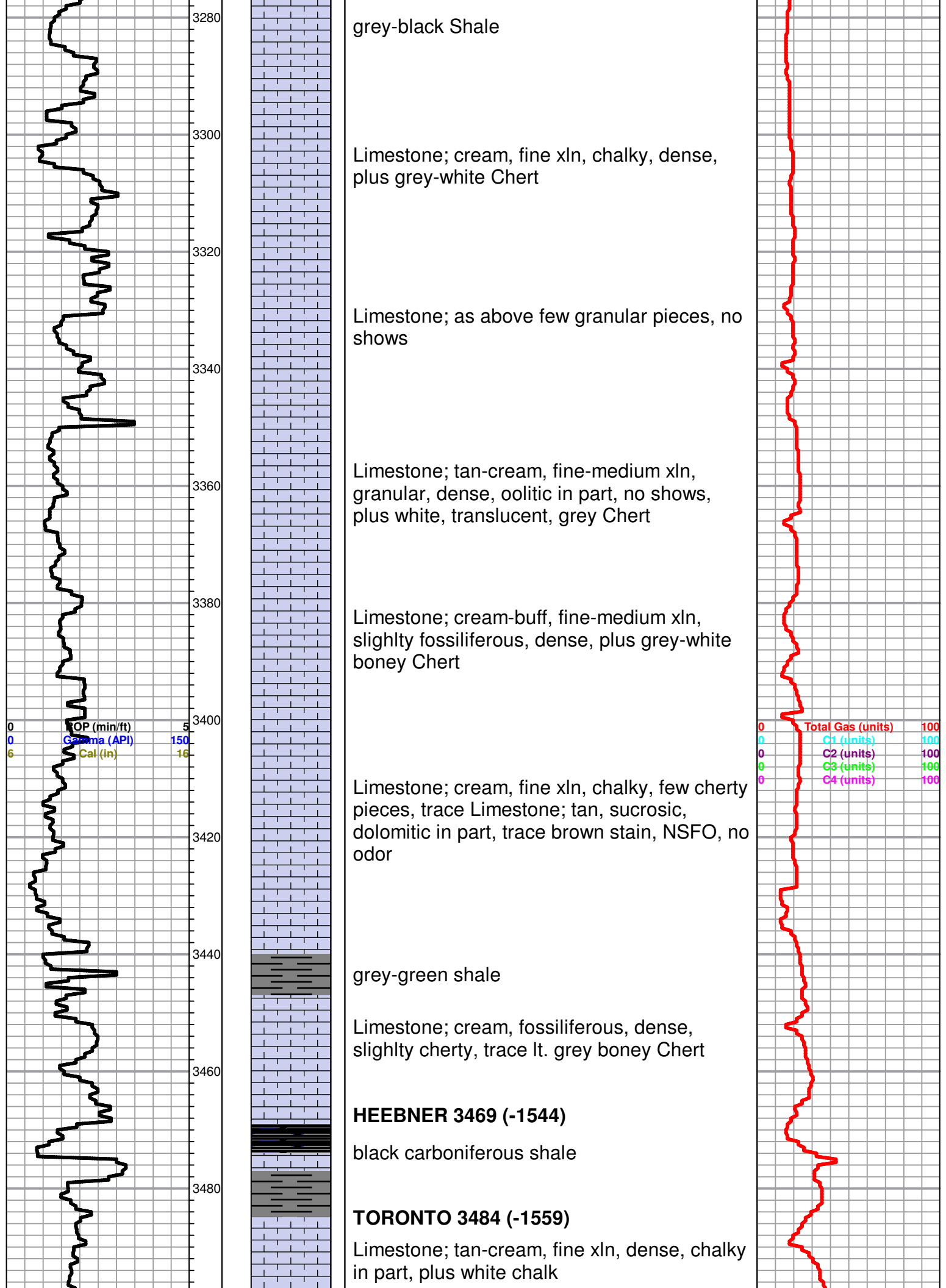
black carboniferous shale

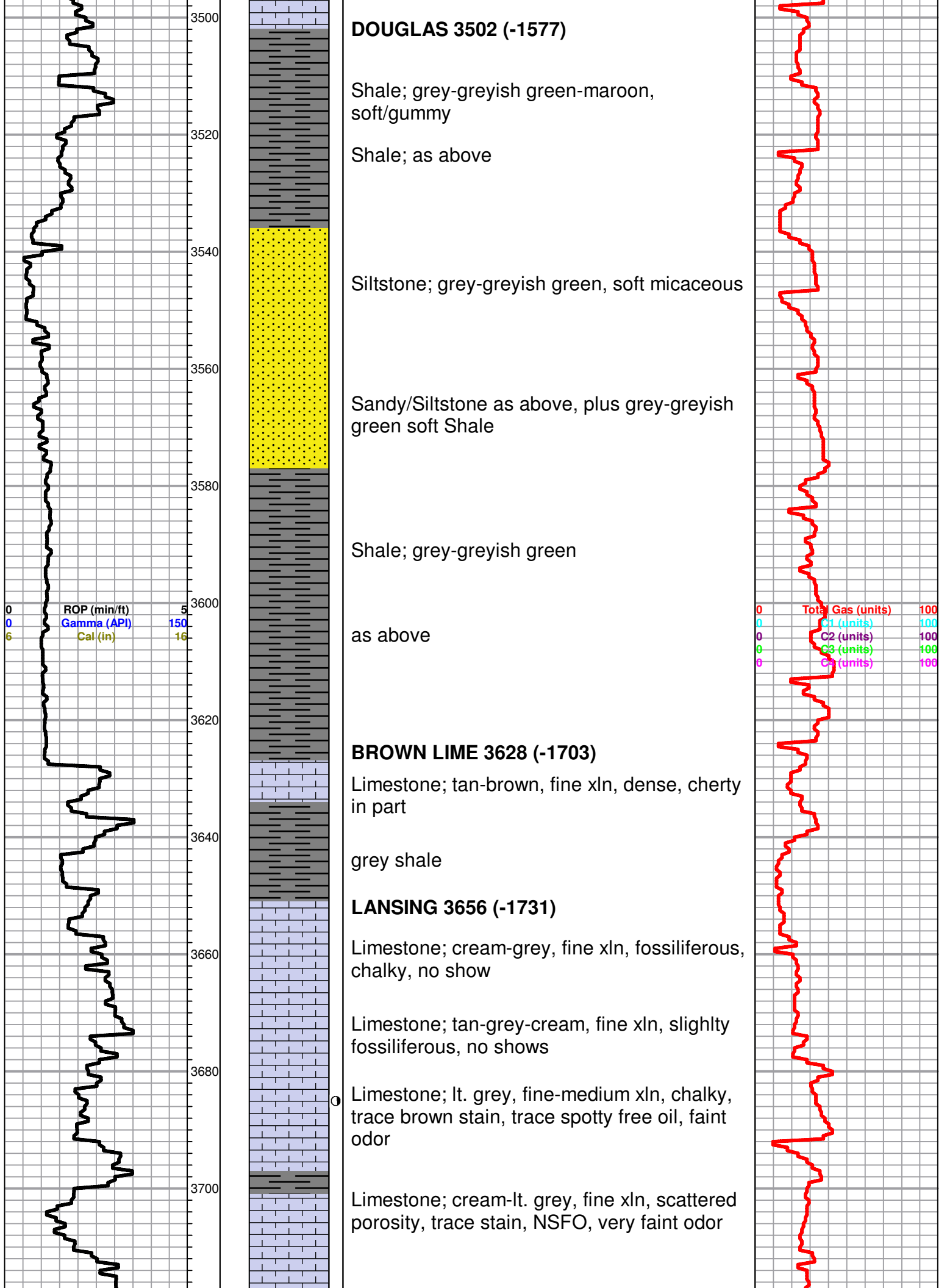
TORONTO 3484 (-1559)

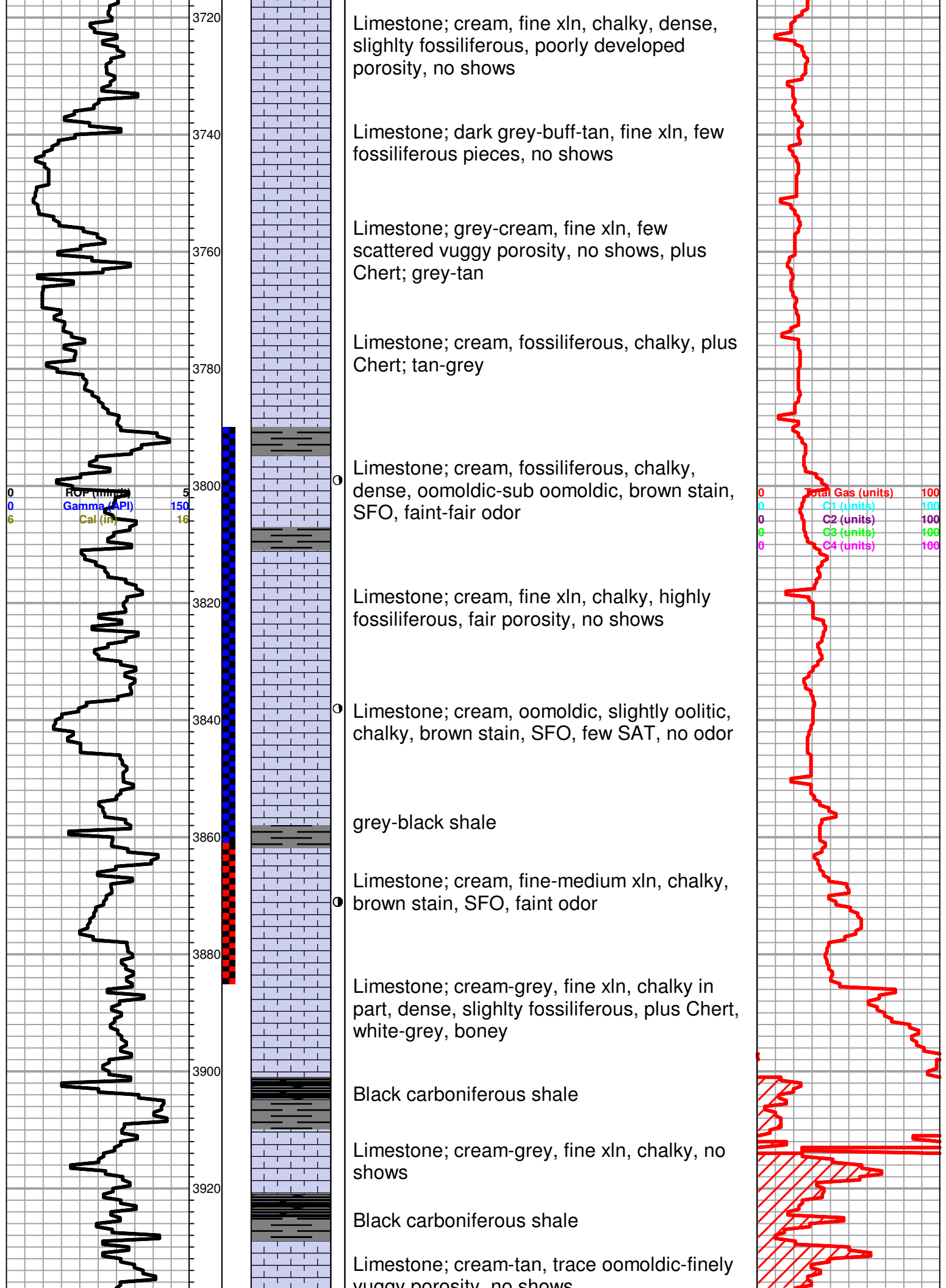
Limestone; tan-cream, fine xln, dense, chalky in part, plus white chalk

OP (min/ft) 5
Gamma (API) 150
Cal (in) 16

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







vuggy porosity, no shows

BASE KANSAS CITY 2942 (-2017)

Black carboniferous shale

Shale; black-grey-greyish green-maroon

Limestone; cream, fine xln, chalky,
fossiliferous in part, plus boney Chert

ROTARY TOTAL DEPTH 3980 (-2055)

