



Joshua R. Austin

Petroleum Geologist

report for

RAMA Operating CO., Inc



COMPANY: RAMA Operating Company, Inc.

LEASE: Goss #1-17

FIELD: Zenith-Peace Creek

LOCATION: Se-Nw-NW-NW (335' FNL & 595' FWL)

SEC: 17 **TWSP:** 24s **RGE:** 11w

COUNTY: Stafford **STATE:** Kansas

KB: 1843' **GL:** 1834'

API # 15-185-23872-00-00

CONTRACTOR: Sterling Drilling (rig #4)

Spud: 04/28/2014 **Comp:** 05/04/2014

RTD: 4060' **LTD:** 4057'

Mud Up: 2771' **Type Mud:** Chemical

Samples Saved From: 2900'-RTD

Drilling Time Kept From: 2900' - RTD

Samples Examined From: 2900' - RTD

Geological Supervision From: 3150' to RTD

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 295'

Production Casing: 5 1/2" @ 4058'

Electronic Surveys: By Pioneer Energy Services

NOTES

On the basis of the positive structural position, drill stem test and after evaluating the electric logs, it was recommended by all parties involved in the Goss #1-17 to run 5 1/2" production casing to further test the Viola and Lansing zones.

RAMA Operating Co., Inc.

well comparison sheet

DRILLING WELL

COMPARISON WELL

COMPARISON WELL

Goss #1-17 Se-Nw-Nw-Nw Sec. 17 Twp. 24s Rge 11w					Kelly #1 C-Ne-SW Sec. 8 Twp. 24s Rge 11w				Piepmeier Sw-Sw-Nw Sec. 17 Twp. 24s Rge 11w			
1843 KB					1828 KB				1841 KB			
					Structural Relationship				Structural Relationship			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	3241	-1398	3238	-1395	3210	-1382	-16	-13	3248	-1407	9	12
Toronto	3255	-1412	3252	-1409	3230	-1402	-10	-7	3263	-1422	10	13
Douglas	3274	-1431	3271	-1428	3248	-1420	-11	-8	3285	-1444	13	16
Brown Lime	3392	-1549	3389	-1546	3374	-1546	-3	0	3401	-1560	11	14
Lansing	3420	-1577	3418	-1575	3396	-1568	-9	-7	3431	-1590	13	15
Kinderhook	3765	-1922	3763	-1920	3738	-1910	-12	-10				
Misener Sand	3794	-1951	3790	-1947	3751	-1923	-28	-24				
Viola	3820	-1977	3816	-1973	3770	-1942	-35	-31	3840	-1999	22	26
Simpson Shale	3959	-2116	3932	-2089					3961	-2120	4	31
Simpson Sand	3959	-2116	3955	-2112								
Arbuckle	3999	-2156	3995	-2152					4024	-2183	27	31
Total Depth	4060	-2217	4057	-2214	3830	-2002			4039	-2198	-19	-16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Rama Operating Co. Inc.

17-24s-11w Stafford Ks.

101 S. Main St.
Stafford Ks. 67578

Goss #1-17

Job Ticket: 54206

DST#: 1

ATTN: Josh Austin

Test Start: 2014.05.03 @ 05:30:33

GENERAL INFORMATION:

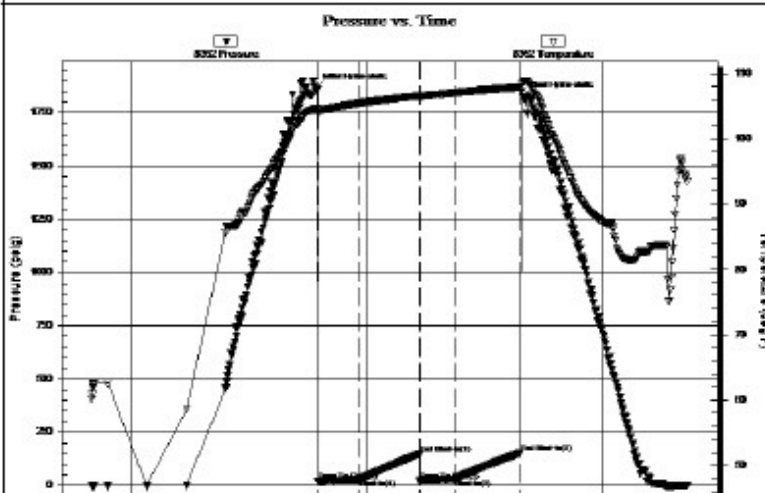
Formation: Viola
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:22:33
 Time Test Ended: 13:04:18
 Interval: 3748.00 ft (KB) To 3828.00 ft (KB) (TVD)
 Total Depth: 3828.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gary Pevoteaux
 Unit No: 56
 Reference Elevations: 1843.00 ft (KB)
 1834.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8352

Outside

Press@RunDepth: 29.92 psig @ 3749.00 ft (KB)
 Start Date: 2014.05.03 End Date: 2014.05.03
 Start Time: 05:30:38 End Time: 13:04:17
 Capacity: 8000.00 psig
 Last Calib.: 2014.05.03
 Time On Btrnt: 2014.05.03 @ 08:20:48
 Time Off Btrnt: 2014.05.03 @ 10:59:03

TEST COMMENT: IF:Weak blow . 1/2 - 2".
 IS:No blow .
 FF:Weak blow . 2 - 5".
 FS:No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1865.20	104.56	Initial Hydro-static
2	19.63	103.64	Open To Flow (1)
35	29.14	105.43	Shut-In(1)
80	148.72	106.54	End Shut-In(1)
80	20.52	106.46	Open To Flow (2)
107	29.92	107.04	Shut-In(2)
157	153.24	107.88	End Shut-In(2)
159	1827.11	108.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud w /o specs	0.17
0.00	300 ft. of GIP	0.00

Gas Rates

Chole (inches)	Pressure (psig)	Gas Rate (Mcf/d)



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Rama Operating Co. Inc.

17-24s-11w Stafford Ks.

101 S. Main St.
Stafford Ks. 67578

Goss #1-17

Job Ticket: 54207

DST#: 2

ATTN: Josh Austin

Test Start: 2014.05.03 @ 20:34:35

GENERAL INFORMATION:

Formation: Viola
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:39:50
 Time Test Ended: 03:30:20

Test Type: Conventional Bottom Hole (Reset)
 Tester: Gary Pevoteaux
 Unit No: 56

Interval: 3828.00 ft (KB) To 3850.00 ft (KB) (TVD)
 Total Depth: 3850.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1843.00 ft (KB)
 1834.00 ft (CF)
 KB to GRVCF: 9.00 ft

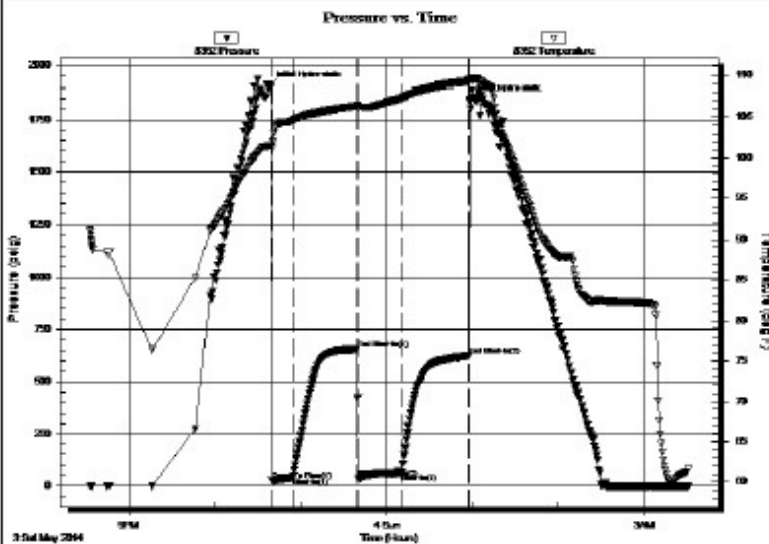
Serial #: 8352

Outside

Press@RunDepth: 60.09 psig @ 3829.00 ft (KB)
 Start Date: 2014.05.03 End Date: 2014.05.04
 Start Time: 20:34:40 End Time: 03:30:19

Capacity: 8000.00 psig
 Last Calib.: 2014.05.04
 Time On Btm: 2014.05.03 @ 22:38:35
 Time Off Btm: 2014.05.04 @ 00:58:20

TEST COMMENT: IF: Strong blow . B.O.B. in 50 secs.
 IS: No blow .
 FF: Strong blow . B.O.B. in 5 secs.
 FS: No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1900.75	101.51	Initial Hydro-static
2	26.09	101.18	Open To Flow (1)
16	39.89	104.57	Shut-In(1)
61	654.15	106.37	End Shut-In(1)
62	37.63	106.18	Open To Flow (2)
92	60.09	107.27	Shut-In(2)
139	624.50	109.23	End Shut-In(2)
140	1836.98	109.41	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
60.00	GOCMW 48%g 18%o 14%m 20%w	0.30
80.00	GOCWM 14%g 7%o 18%w 61%m	0.39
0.00	2480 ft.of GIP	0.00

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

* Recovery from multiple tests

ROCK TYPES

 Cht	 Lmst fw7>	 shale, gry	 shale, red	 Sltst
 Dolsec	 shale, grn	 Carbon Sh	 Ss	

ACCESSORIES

MINERAL

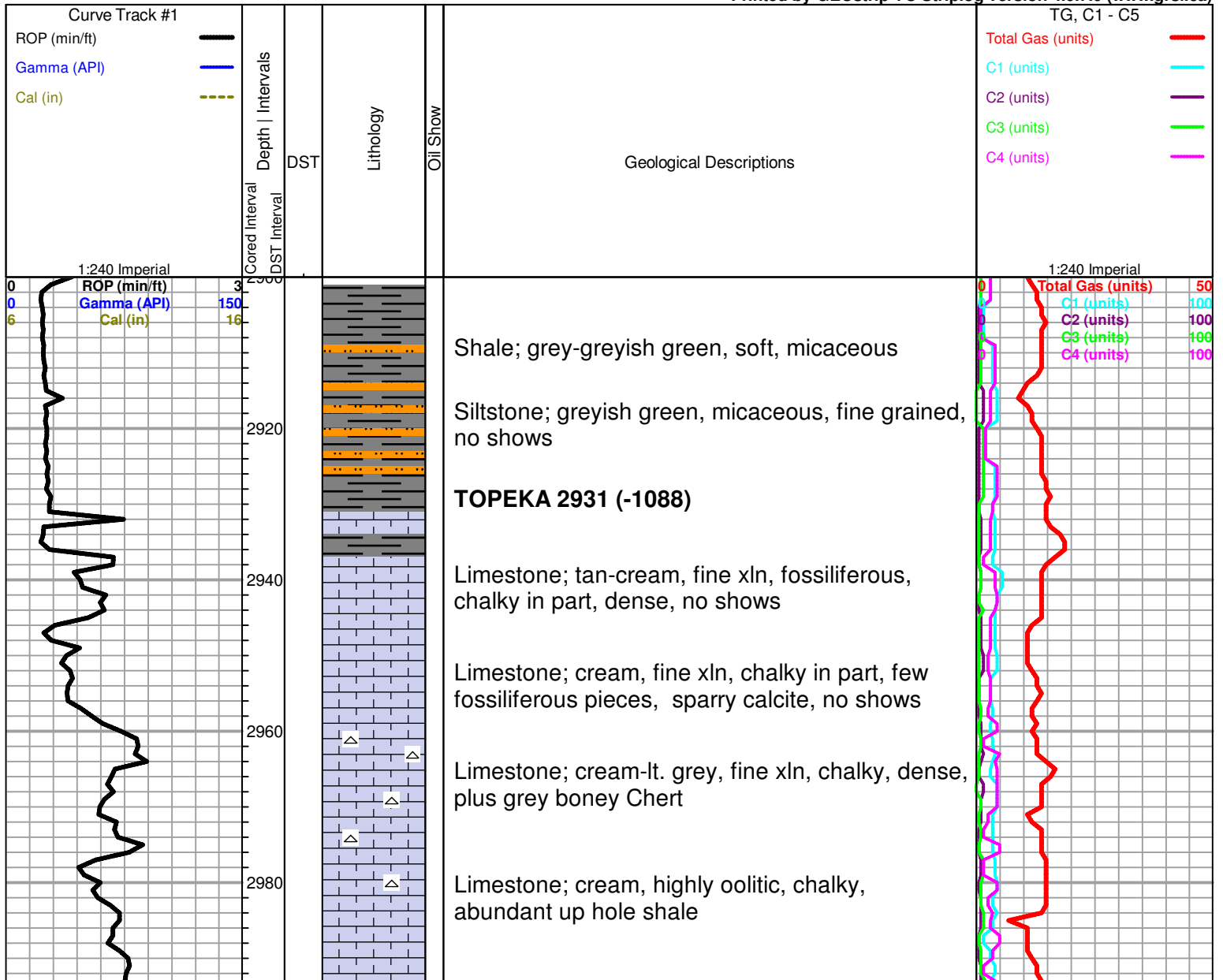
△ Chert White

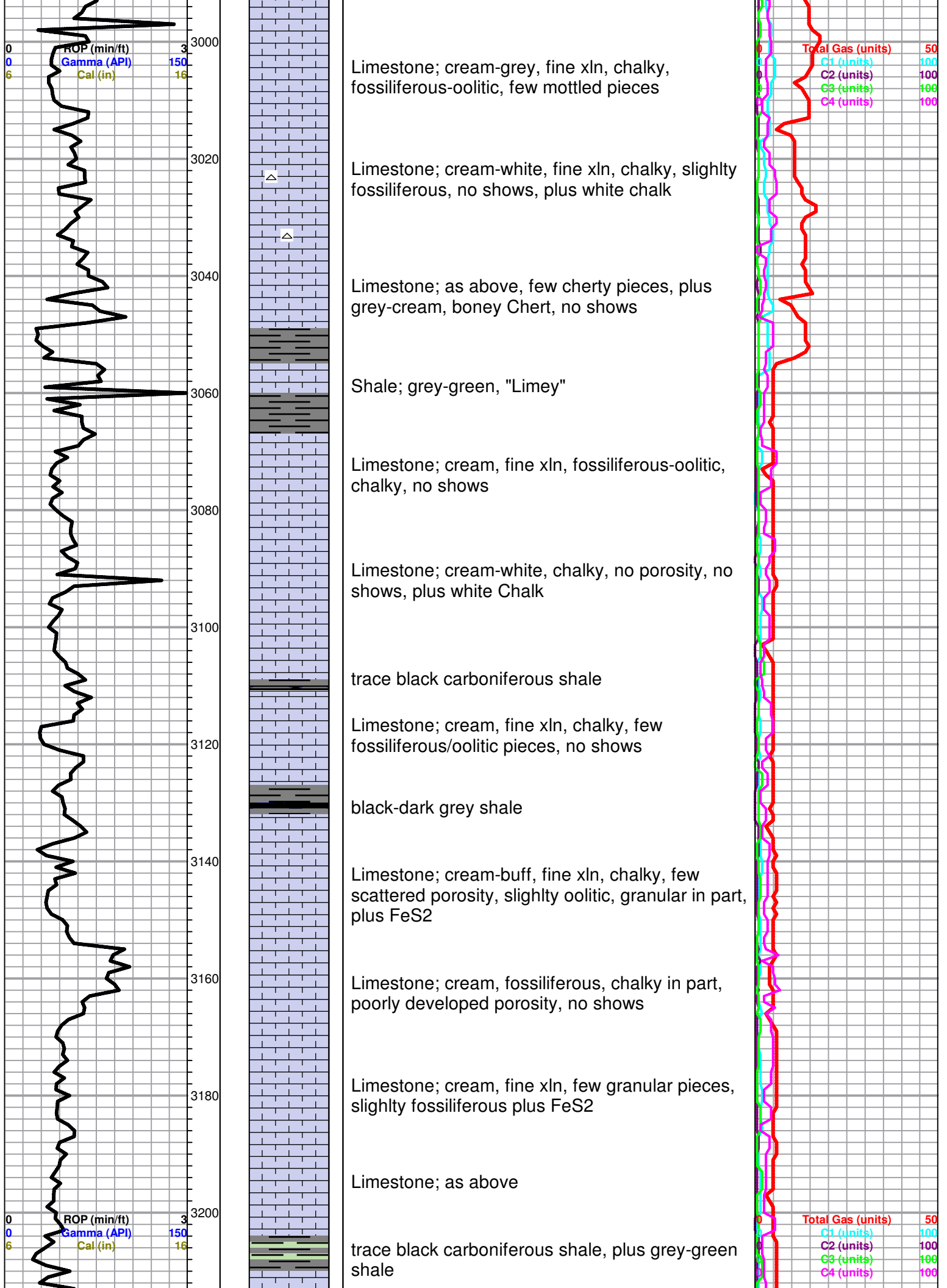
OTHER SYMBOLS

DST

■ DST Int
 ■ DST alt
 ■ Core
 || tail pipe

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





3220
3240
3260
3280
3300
3320
3340
3360
3380
3400
3420

Limestone; cream-tan, fine xln, chalky in part, dense, few scattered ixl porosity, no shows

HEEBNER 3241 (-1398)

Black Carboniferous Shale

grey-green Shale

TORONTO 3255 (-1412)

Limestone; cream-lt. grey, fine xln, chalky, few scattered pin point-ixl type porosity, no shows

DOUGLAS 3274 (-1431)

Shale; brick red-grey-green, silty in part, few micaceous pieces

Shale; grey-greyish green, silty, few micaceous pieces, plus trace Siltstone; greyish green, fine grained, poor porosity, no shows

Siltstone and Shale as above

Siltstone; grey-greyish green, very fine-fine grained, poorly developed porosity, slightly micaceous, no shows

Siltstone and grey silty, micaceous; Shale as above

Shale; grey-dark grey, micaceous in part

as above

BROWN LIME 3392 (-1549)

Limestone; buff-cream-tan, fine xln, dense, cherty, few fossiliferous pieces

Shale; grey-green

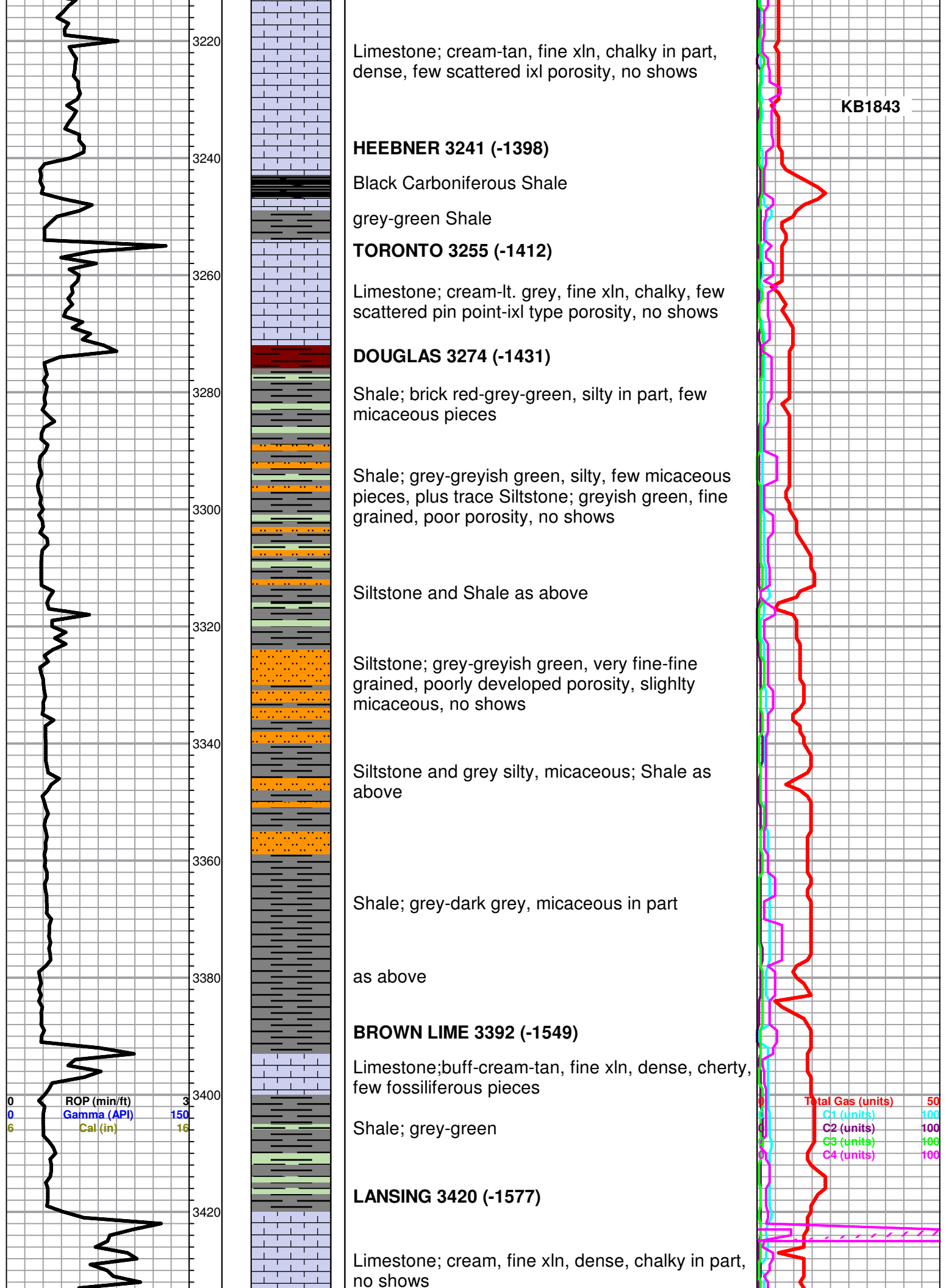
LANSING 3420 (-1577)

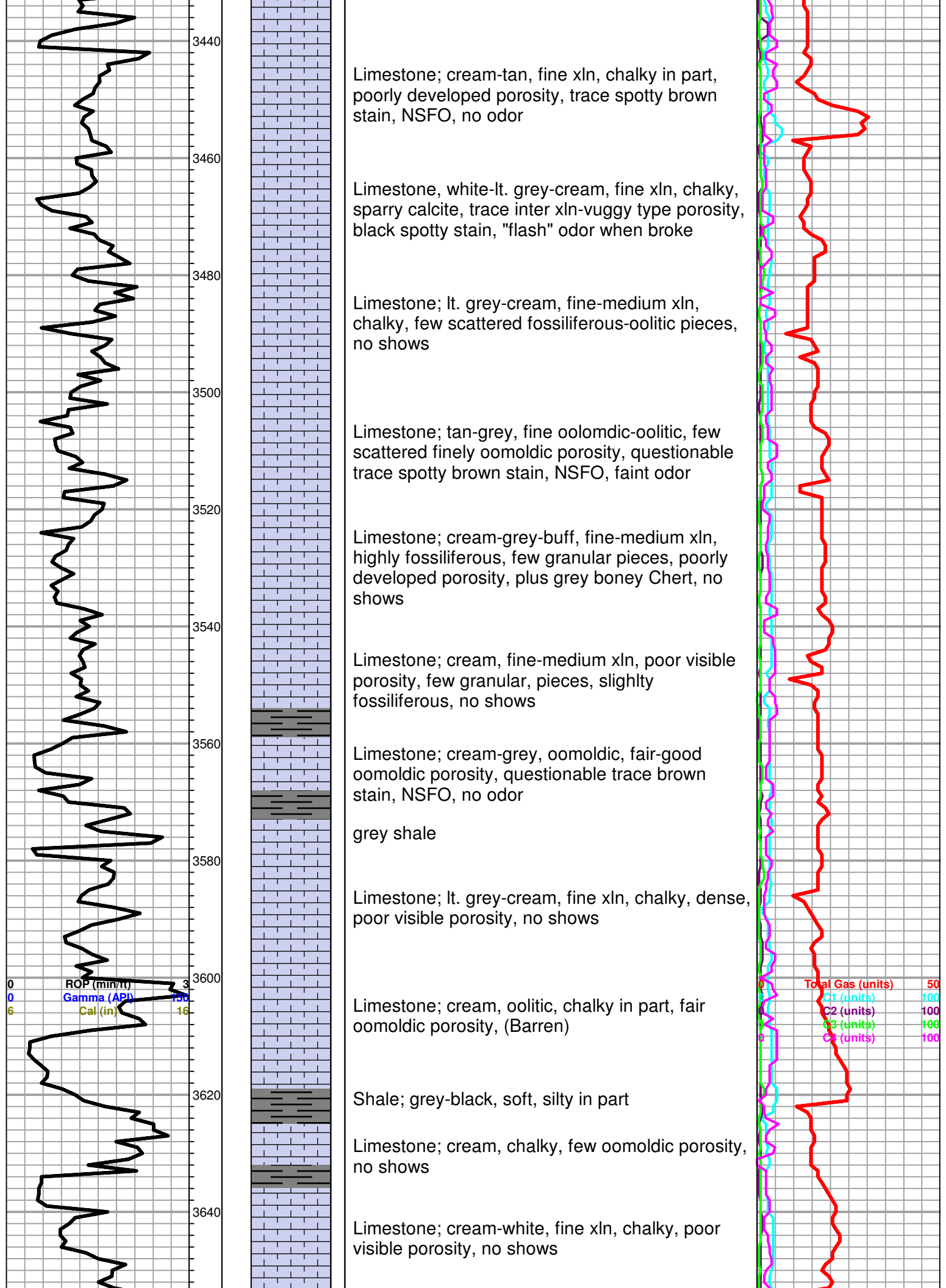
Limestone; cream, fine xln, dense, chalky in part, no shows

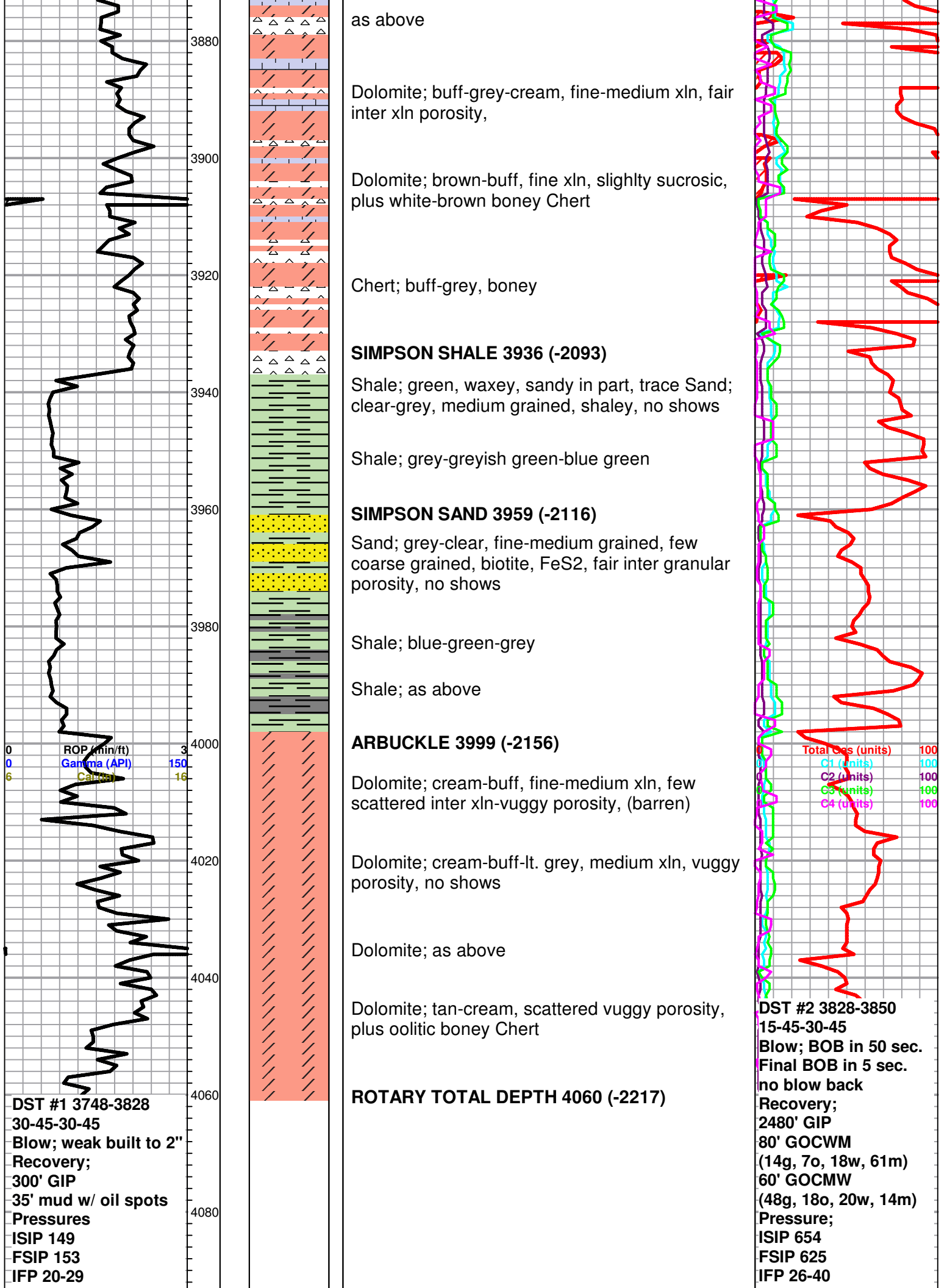
KB1843

ROP (min/ft) 3
Gamma (API) 150
Cal (in) 16

Total Gas (units) 50
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100







FFP 21-30
HSH 1865-1827

FFP 38-60
HSH 1901-1937