



# Joshua R. Austin

## Petroleum Geologist

report for



### Lebsack Oil Production, Inc.

COMPANY: LEBSACK OIL PRODUCTION INC.

LEASE: North River # 7

FIELD: GROVE

SURFACE LOCATION:

SEC: 27 TWSP: 20s RGE: 10w

COUNTY: RICE STATE: KANSAS

KB: 1733' GL: 1722'

API # 15-159-22838-00-00

CONTRACTOR: STERLING DRILLING COMPANY (Rig #4)

Spud: 02-03-2017

Comp: 02-09-2017

RTD: 3310'

LTD: 3312'

Mud Up: 2603'

Type Mud: Chemical was displaced

Samples Saved From: 2400' to RTD

Geological Supervision From: 2750' to RTD

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 275'

Production Casing: 5 1/2" @ 3408'

#### NOTES

On the basis of the positive structural position and after reviewing the electric logs, it was recommended by all parties involved in the North River #7 to run 5 1/2" production casing to further test the Lansing 'F' zone. If the Lansing zone is not productive, casing was set 60' into the Arbuckle to make a salt water disposal well.

## Lebsack Oil Production Inc. well comparison sheet

DRILLING WELL	COMPARISON WELL	COMPARISON WELL	COMPARISON WELL
North River 7	North River 1	North River 6	Grove #1

1733 KB					1729 KB				1729 KB				1724 KB			
					Structural Relationship				Structural Relationship				Structural Relationship			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Howard	2446	-713	2447	-714	2448	-719	6	5	2443	-714	1	0	2441	-717	4	3
Topeka	2545	-812	2546	-813	2546	-817	5	4	2544	-815	3	2	2538	-814	2	1
Heebner	2830	-1097	2828	-1095	2830	-1101	4	6	2830	-1101	4	6	2820	-1096	-1	1
Douglas	2854	-1121	2853	-1120	2853	-1124	3	4	2853	-1124	3	4	2846	-1122	1	2
Brown Lime	2965	-1232	2965	-1232	2965	-1236	4	4	2966	-1237	5	5	2954	-1230	-2	-2
Lansing	2978	-1245	2978	-1245	2988	-1259	14	14	2982	-1253	8	8	2976	-1252	7	7
"F" Zone	3060	-1327	3060	-1327									3052	-1328	1	1
Viola	3254	-1521	3257	-1524									3252	-1528	7	4
Simpson Sand	3301	-1568	N/A	N/A									3295	-1571	3	N/A
Arbuckle	3346	-1613	N/A	N/A									3341	-1617	4	N/A
Total Depth	3410	-1677			3137	-1408			3249	-1520			3362	-1638		



**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Lebsack Oil Production Inc.

**27/20S/10W/Rice**

PO Box 354  
Chase Kansas 67524

**North River #7**

Job Ticket: 63699

**DST#: 1**

ATTN: Josh Austin

Test Start: 2017.02.07 @ 05:12:00

### GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:04:00

Time Test Ended: 12:13:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/50

Interval: **3056.00 ft (KB) To 3076.00 ft (KB) (TVD)**

Total Depth: 3076.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Fair

Reference Elevations: 1733.00 ft (KB)

1722.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 8521**

**Inside**

Press@RunDepth: 58.92 psig @ 3072.00 ft (KB)

Start Date: 2017.02.07

End Date: 2017.02.07

Start Time: 05:12:05

End Time: 12:12:59

Capacity: 8000.00 psig

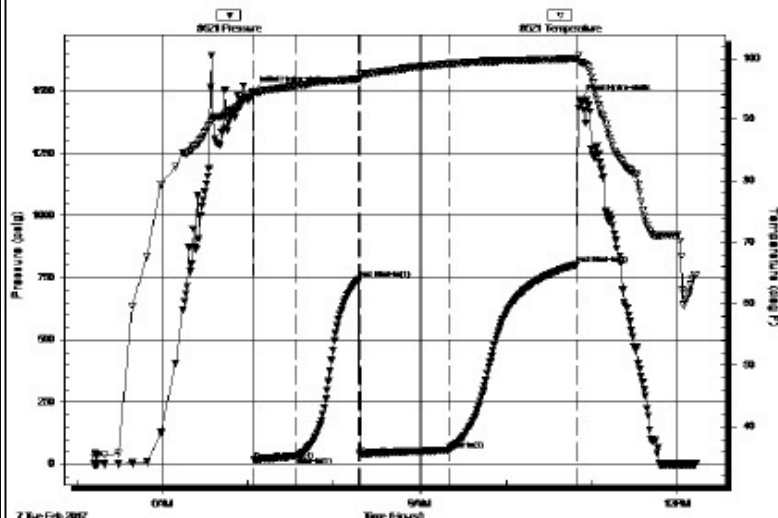
Last Calib.: 2017.02.07

Time On Btn: 2017.02.07 @ 07:03:30

Time Off Btn: 2017.02.07 @ 10:51:30

TEST COMMENT: I.F. 30 Minutes/Blow built to 5 inches  
 I.S.I. 45 Minutes/No blow back  
 F.F. 60 Minutes/Blow built to 7 inches  
 F.S.I. 90 Minutes/No blow back

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1500.29	94.61	Initial Hydro-static
1	17.13	94.45	Open To Flow (1)
31	32.05	95.58	Shut-In(1)
74	744.10	96.60	End Shut-In(1)
76	38.27	97.30	Open To Flow (2)
136	58.92	99.11	Shut-In(2)
226	804.12	99.91	End Shut-In(2)
228	1466.32	99.46	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)

### Gas Rates

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

90.00	Oil spotted Muddy Water	0.44
0.00	Mud 45% Water 55%	0.00
0.00	157 feet of gas in pipe	0.00



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Lebsack Oil Production Inc.

**27/20S/10W/Rice**

PO Box 354  
Chase Kansas 67524

**North River #7**

Job Ticket: 63700

**DST#: 2**

ATTN: Josh Austin

Test Start: 2017.02.08 @ 05:17:00

### GENERAL INFORMATION:

Formation: **Simpson Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:58:30

Time Test Ended: 10:36:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/50

Interval: **3270.00 ft (KB) To 3310.00 ft (KB) (TVD)**

Total Depth: 3310.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Fair

Reference Elevations: 1733.00 ft (KB)

1722.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 8521**

**Inside**

Press@RunDepth: 224.28 psig @ 3306.00 ft (KB)

Start Date: 2017.02.08

End Date: 2017.02.08

Start Time: 05:17:05

End Time: 10:36:29

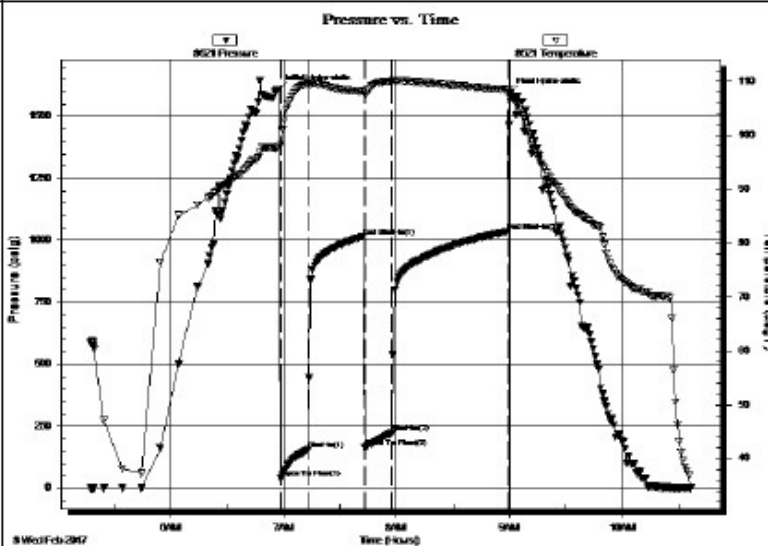
Capacity: 8000.00 psig

Last Calib.: 2017.02.08

Time On Btn: 2017.02.08 @ 06:57:30

Time Off Btn: 2017.02.08 @ 09:00:00

TEST COMMENT: I.F. 15 Minutes/Blow built to BOB in 6 minutes  
 I.S.I. 30 Minutes/Surface blow back  
 F.F. 15 Minutes/Blow built to BOB in 7 minutes 30 seconds  
 F.S.I. 60 Minutes/No blow back



### PRESSURE SUMMARY

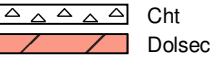
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1609.29	97.90	Initial Hydro-static
1	41.24	98.13	Open To Flow (1)
16	156.39	109.49	Shut-In(1)
45	1015.85	108.04	End Shut-In(1)
46	163.12	107.60	Open To Flow (2)
61	224.28	109.99	Shut-In(2)
121	1035.35	108.39	End Shut-In(2)
123	1594.17	107.05	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
472.00	Muddy Water/ Mud 10% Water 90%	4.66

### Gas Rates

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



**ROCK TYPES**

**MINERAL**  
△ Chert White

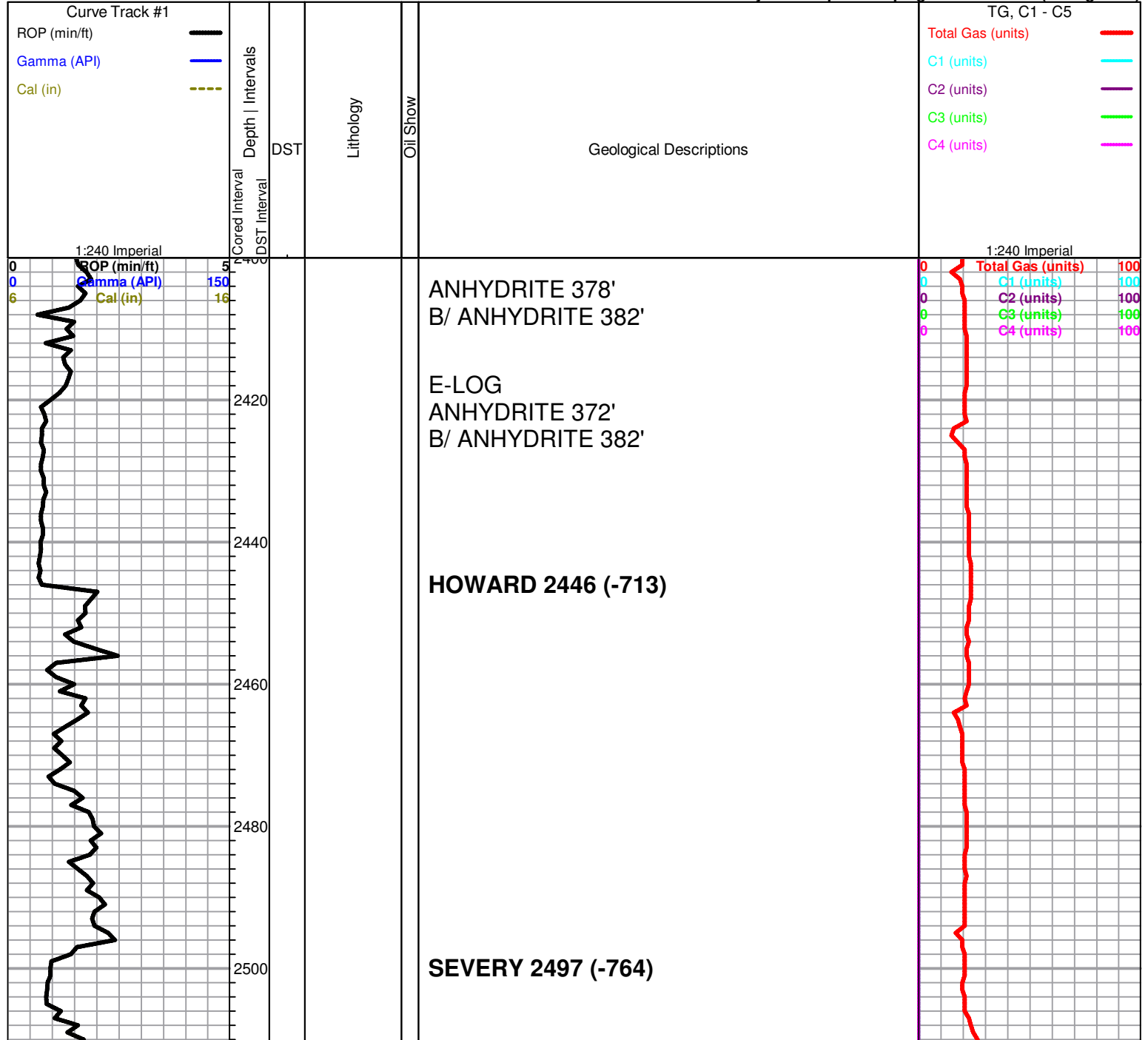
**FOSSIL**  
🪨 Oomoldic

**ACCESSORIES**

**OTHER SYMBOLS**

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

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

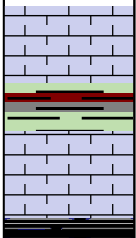


TOPEKA 2545 (-812)

2520  
2540  
2560  
2580  
2600  
2620  
2640  
2660  
2680  
2700  
2720

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

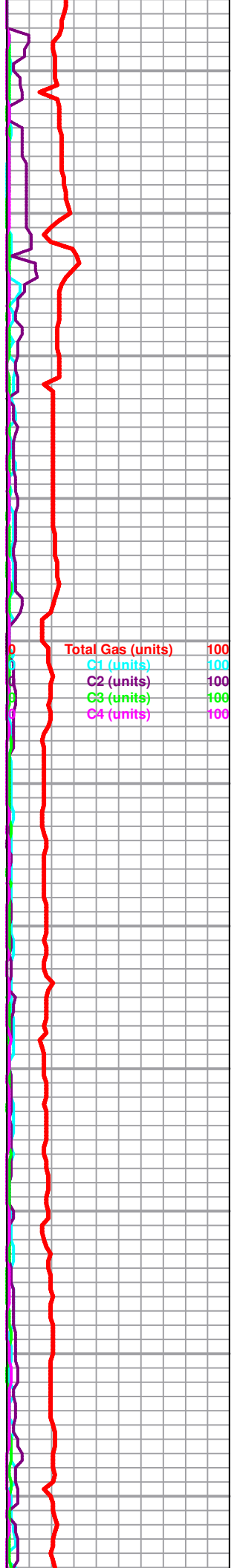
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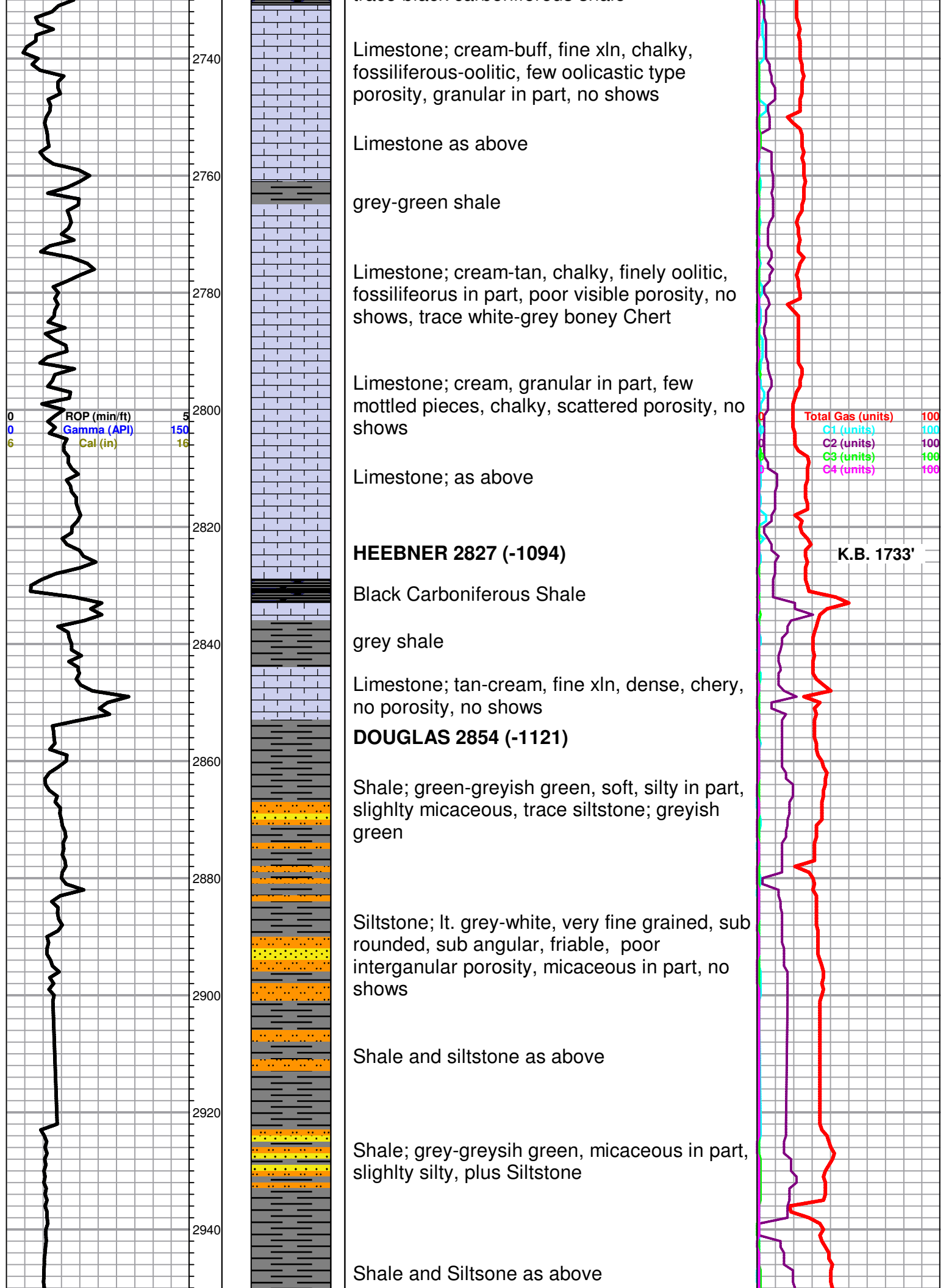


trace black carboniferous shale

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

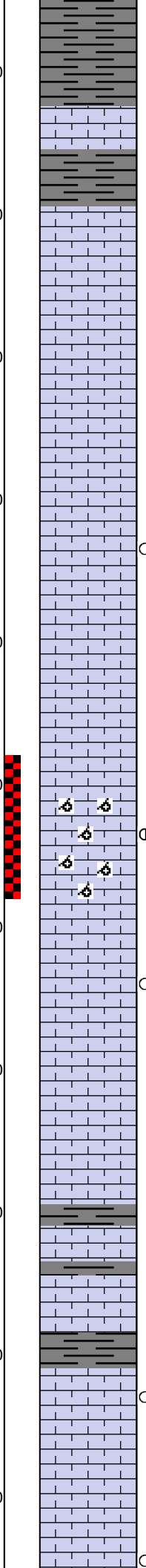
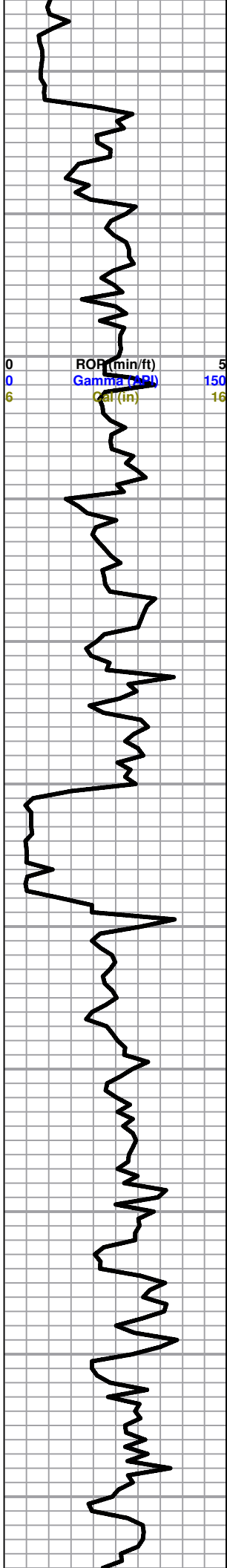
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2960  
2980  
3000  
3020  
3040  
3060  
3080  
3100  
3120  
3140  
3160

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



**BROWN LIME 2965 (-1232)**

Limestone; buff-grey, fine xln, fossiliferous, cherty, dense

**LANSING 2978 (-1245)**

Limestone; cream, buff-tan, highly oolitic in part, poor porosity, no shows

Limestone; cream-tan, fine xln, chalky in part, fossiliferous-oolitic, fair oolitic porosity, no shows

Limestone; cream-buff, fine xln, dense in part, fossiliferous, poor visible porosity, no shows

Limestone; grey-cream, fine xln, oolitic, dense in part, fair vuggy-oolitic porosity, lt brown stain, slight SFO, faint-fair odor

Limestone; cream-lt. grey, fine xln, chalky, dense, no shows

Limestone; as above, trace oolitic porosity, brown stain, trace free oil

**'F' ZONE 3060 (-1327)**

Limestone; cream-tan, oolitic, fair oomoldic porosity, brown stain, spotty SFO, fair-good odor (600 unit gas kick)

Limestone; cream, fine xln, finely oolitic, chalky in part, poor visible porosity, trace spotty brown stain, spotty SFO, faint odor

Limestone; buff-cream, fine xln, dense, poor porosity,

Limestone; cream-lt. grey, fine xln, chalky, dense, few fossiliferous/oolitic pieces, cherty in part, no visible porosity, no shows, plus white chalk

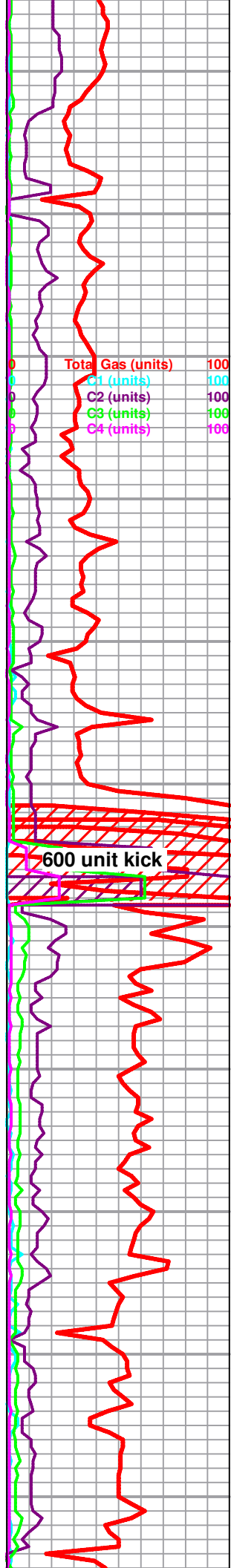
Shale; grey-black

Limestone; cream-white-lt. grey, fine xln, chalky, slightly fossiliferous, trace black "dead oil" staining, NSFO, no odor

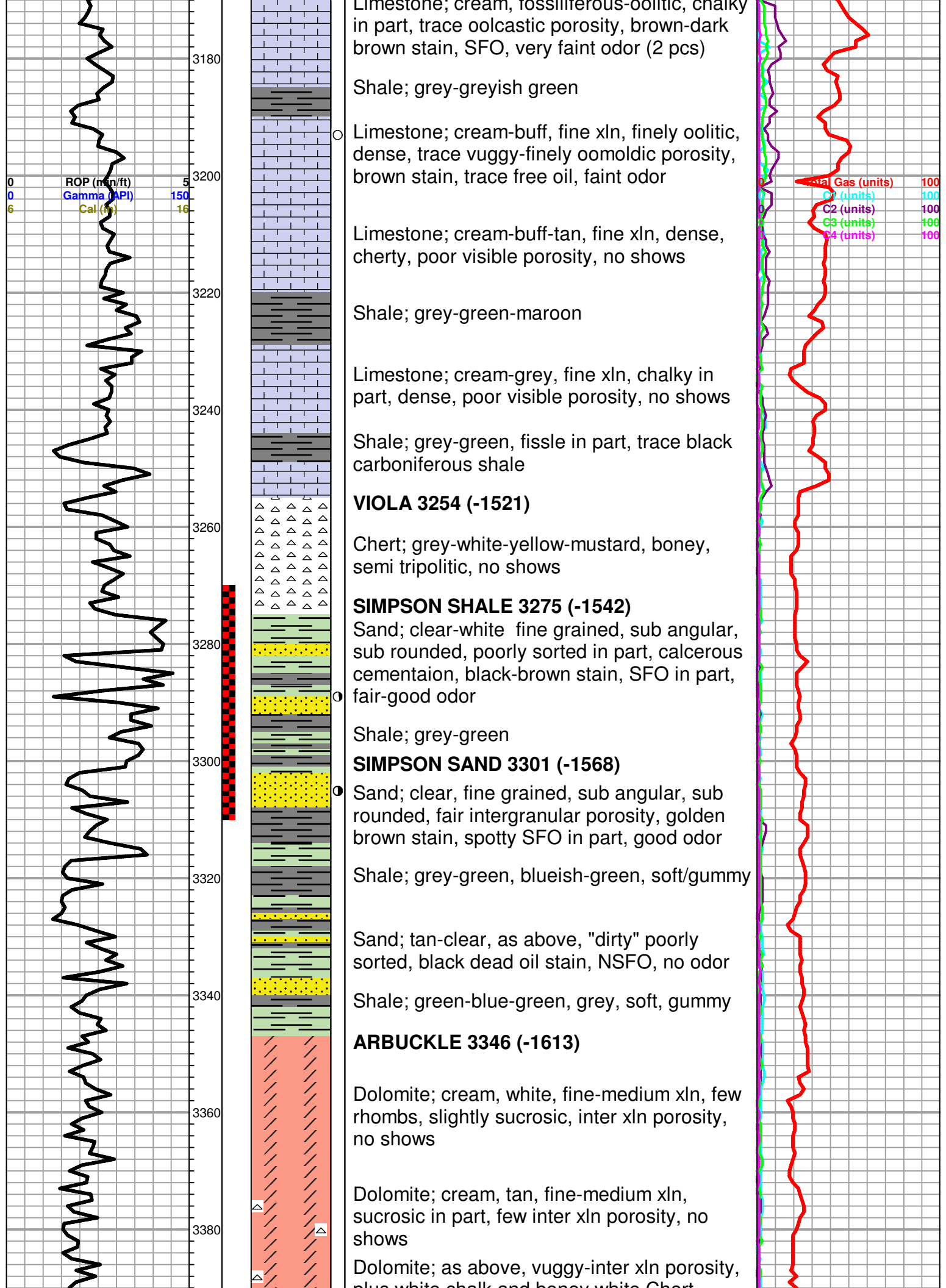
Limestone; cream-white, chalky, fossiliferous in part, poorly developed porosity, no shows

Limestone; cream, fossiliferous oolitic, chalky

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

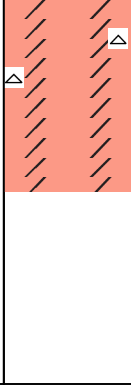
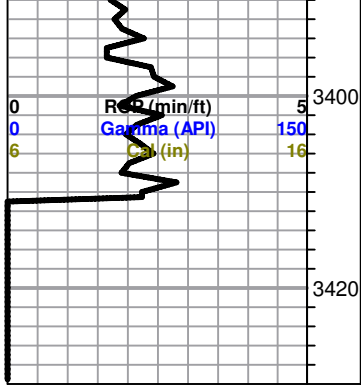


600 unit kick





plus white crack and bone white chert



Dolomite; cream, tan, fine-medium xln, inter xln porosity, plus FeS2, no shows

**ROTARY TOTAL DEPTH 3410 (-1677)**

