



Joshua R. Austin

Petroleum Geologist

report for



Lebsack Oil Production, Inc.

COMPANY: Lebsack Oil Production, Inc.

LEASE: Garden City #9-12

FIELD: West Damme Ext.

LOCATION: 335' FNL & 335' FEL (Sw-Ne-Ne-Ne)

SEC: 12 TWSP: 22s RGE: 34w

COUNTY: Finney STATE: Kansas

KB: 2917 GL: 2904'

API # 15-055-22463-00-00

CONTRACTOR: Sterling Drilling Company (rig #5)

Spud: 11/01/2017 Comp: 11/08/2017

RTD: 4860' LTD: 4864'

Mud Up: 3400' Type Mud: Chemical was displaced

Samples Saved From: 3600' to RTD.

Drilling Time Kept From: 3600' to RTD.

Samples Examined From: 3600' to RTD.

Geological Supervision From: 3850' to RTD.

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 478'

Production Casing: None

Electronic Surveys: Halliburton

NOTES

Lebsack Oil Production, Inc. well comparison sheet

DRILLING WELL

Garden City #9-12

COMPARISON WELL

Garden City #2-7

COMPARISON WELL

Garden City #5-12

| | | | | | Structural Relationship | | | | Structural Relationship | | | |
|------------------|--------|---------|------|---------|-------------------------|---------|--------|-----|-------------------------|---------|--------|-----|
| 2917 KB | | | | | 2916 KB | | | | 2917 KB | | | |
| Formation | Sample | Sub-Sea | Log | Sub-Sea | Log | Sub-Sea | Sample | Log | Log | Sub-Sea | Sample | Log |
| Anhydrite | 2030 | 887 | | | 2030 | 886 | 1 | | 2027 | 890 | -3 | |
| B/ Anhydrite | 2045 | 872 | | | 2042 | 874 | -2 | | 2038 | 879 | -7 | |
| Heebner | 3800 | -883 | 3802 | -885 | 3807 | -891 | 8 | 6 | 3794 | -877 | -6 | -8 |
| Toronto | 3812 | -895 | 3814 | -897 | 3818 | -902 | 7 | 5 | 3810 | -893 | -2 | -4 |
| Lansing | 3894 | -977 | 3894 | -977 | 3906 | -990 | 13 | 13 | 3888 | -971 | -6 | -6 |
| base porosity | 4161 | -1244 | 4164 | -1247 | 4163 | -1247 | 3 | 0 | 4156 | -1239 | -5 | -8 |
| Base KC | 4311 | -1394 | 4311 | -1394 | 4308 | -1392 | -2 | -2 | 4308 | -1391 | -3 | -3 |
| Marmaton | 4345 | -1428 | 4338 | -1421 | 4336 | -1420 | -8 | -1 | 4335 | -1418 | -10 | -3 |
| Pawnee | 4415 | -1498 | 4420 | -1503 | 4412 | -1496 | -2 | -7 | 4416 | -1499 | 1 | -4 |
| Ft. Scott | 4447 | -1530 | 4448 | -1531 | 4445 | -1529 | -1 | -2 | 4441 | -1524 | -6 | -7 |
| Cherokee Sh. | 4460 | -1543 | 4461 | -1544 | 4449 | -1533 | -10 | -11 | 4453 | -1536 | -7 | -8 |
| Morrow Shale | 4637 | -1720 | 4648 | -1731 | 4626 | -1710 | -10 | -21 | 4634 | -1717 | -3 | -14 |
| Ero. Mississippi | 4738 | -1821 | 4742 | -1825 | 4682 | -1766 | -55 | -59 | 4710 | -1793 | -28 | -32 |
| RTD | 4860 | -1943 | | | 4860 | -1944 | | | 4860 | -1943 | | |
| LTD | 4864 | -1947 | | | 4858 | -1942 | | | 4866 | -1949 | | |



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Lebsack Oil Production

12-22s-34w Finney Ks

P.O. Box 354
Chase, Ks 67524

Garden City 9-12

ATTN: Josh Austin

Job Ticket: 64267

DST#: 1

Test Start: 2017.11.04 @ 19:18:06

GENERAL INFORMATION:

Formation: Pawnee

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:02:36

Time Test Ended: 21:50:06

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 79

Interval: 4400.00 ft (KB) To 4430.00 ft (KB) (TVD)

Total Depth: 4430.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2917.00 ft (KB)

2904.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8166

Outside

Press@RunDepth: psig @ 4401.00 ft (KB)

Start Date: 2017.11.04

End Date: 2017.11.04

Capacity: 8000.00 psig

Last Calib.: 2017.11.04

Start Time: 19:18:11

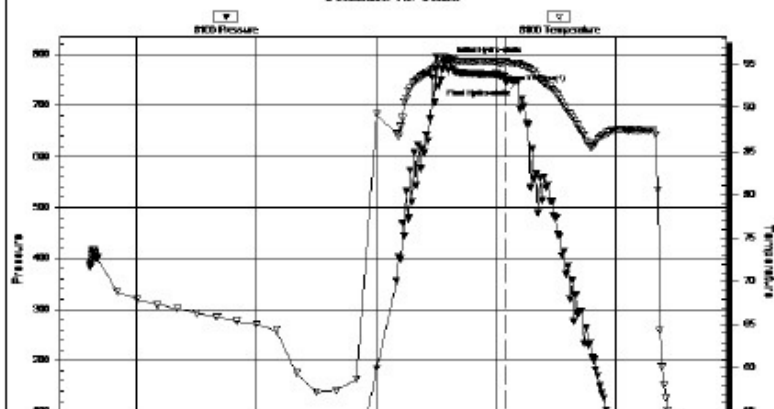
End Time: 21:50:06

Time On Btn: 2017.11.04 @ 20:48:36

Time Off Btn: 2017.11.04 @ 21:05:36

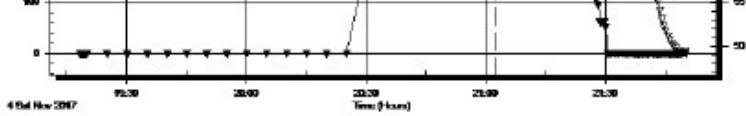
TEST COMMENT: Hit a Bridge on the way to bottom At 1586

Pressure vs. Time



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 785.48 | 95.53 | Initial Hydro-static |
| 14 | 743.63 | 95.19 | Open To Flow (1) |
| 17 | 747.38 | 95.10 | Final Hydro-static |



Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Lebsack Oil Production

12-22s-34w Finney Ks

P.O. Box 354
Chase, Ks 67524

Garden City 9-12

ATTN: Josh Austin

Job Ticket: 64268

DST#: 2

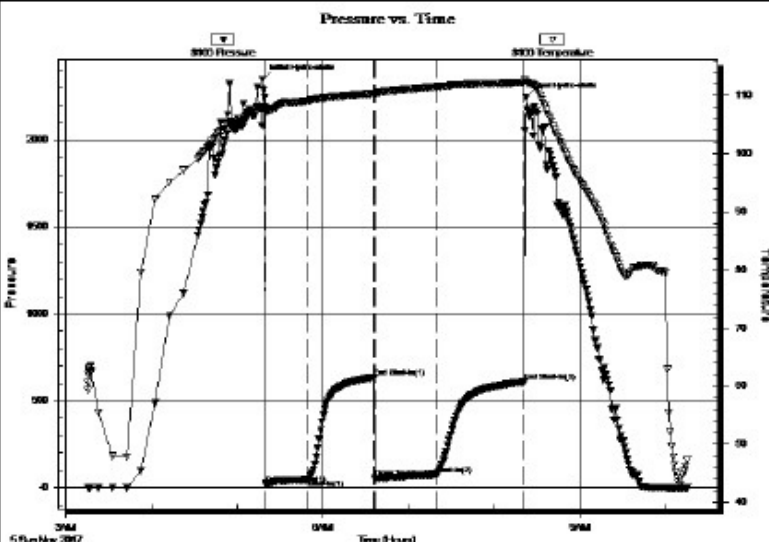
Test Start: 2017.11.05 @ 03:15:16

GENERAL INFORMATION:

Formation: Pawnee
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:19:46
 Time Test Ended: 10:15:46
 Interval: 4400.00 ft (KB) To 4430.00 ft (KB) (TVD)
 Total Depth: 4430.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brandon Turley
 Unit No: 79
 Reference Elevations: 2917.00 ft (KB)
 2904.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8166 Outside
 Press@RunDepth: 71.77 psig @ 4401.00 ft (KB)
 Start Date: 2017.11.05 End Date: 2017.11.05
 Start Time: 03:15:21 End Time: 10:15:45
 Capacity: 8000.00 psig
 Last Calib.: 2017.11.05
 Time On Btn: 2017.11.05 @ 05:17:46
 Time Off Btn: 2017.11.05 @ 08:22:16

TEST COMMENT: IF: 1/4 blow built to 4.
 IS: No return.
 FF: Surface blow built to 4.
 FS: No return.



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2347.79 | 107.83 | Initial Hydro-static |
| 2 | 20.81 | 107.36 | Open To Flow (1) |
| 32 | 47.55 | 109.19 | Shut-In(1) |
| 78 | 634.70 | 110.43 | End Shut-In(1) |
| 79 | 55.79 | 110.24 | Open To Flow (2) |
| 122 | 71.77 | 111.57 | Shut-In(2) |
| 183 | 607.53 | 112.27 | End Shut-In(2) |
| 185 | 2243.86 | 112.37 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 60.00 | nw 50%w 50%m | 0.30 |
| 61.00 | ocm 10%o 90%m | 0.30 |
| 5.00 | free oil 100%0 | 0.07 |
| 0.00 | 63 GIP | 0.00 |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Lebsack Oil Production

12-22s-34w Finney Ks

P.O. Box 354
Chase, Ks 67524

Garden City 9-12

Job Ticket: 64269

DST#: 3

ATTN: Josh Austin

Test Start: 2017.11.06 @ 14:56:04

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 16:55:04

Time Test Ended: 21:48:04

Test Type: **Conventional Bottom Hole (Reset)**

Tester: **Brandon Turley**

Unit No: **79**

Interval: **4615.00 ft (KB) To 4683.00 ft (KB) (TVD)**

Total Depth: **4683.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2917.00 ft (KB)**

2904.00 ft (CF)

KB to GR/CF: **13.00 ft**

Serial #: 8166

Outside

Press@RunDepth: **77.93 psig @ 4616.00 ft (KB)**

Start Date: **2017.11.06**

End Date: **2017.11.06**

Start Time: **14:56:09**

End Time: **21:48:03**

Capacity: **8000.00 psig**

Last Calib.: **2017.11.06**

Time On Btm: **2017.11.06 @ 16:53:34**

Time Off Btm: **2017.11.06 @ 19:23:34**

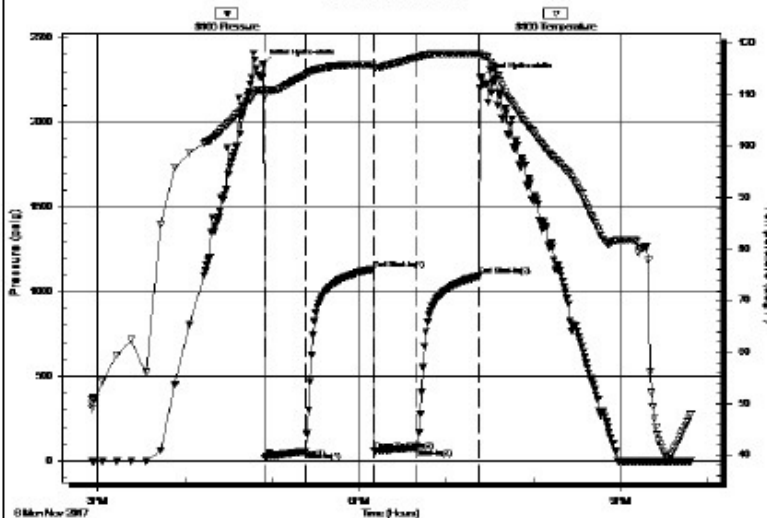
TEST COMMENT: IF: 1/4 blow built to 3.

IS: No return.

FF: Surface blow built to 1.

FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

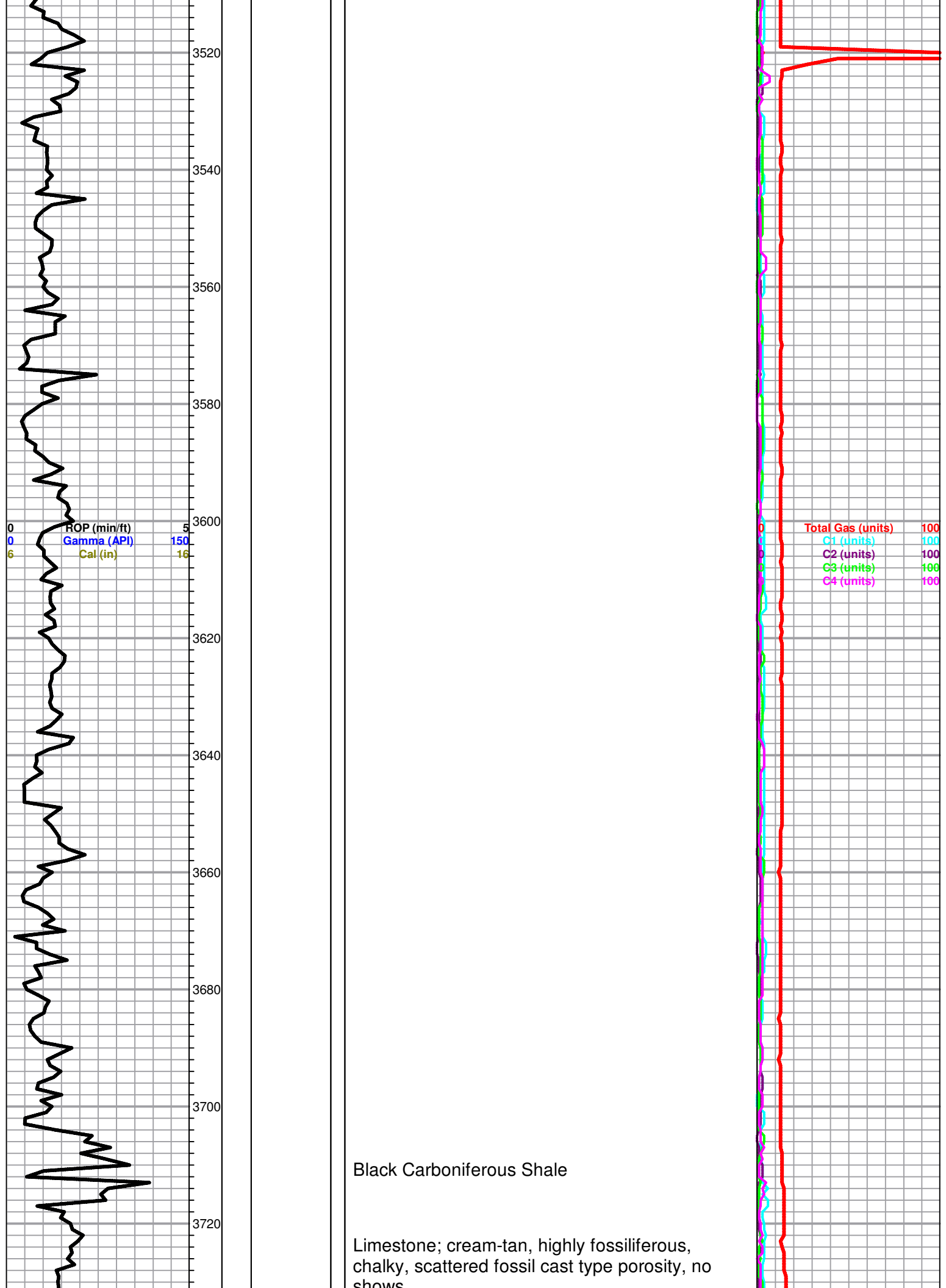
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2341.82 | 110.91 | Initial Hydro-static |
| 2 | 21.19 | 109.88 | Open To Flow (1) |
| 30 | 57.93 | 113.83 | Shut-In(1) |
| 76 | 1132.92 | 115.73 | End Shut-In(1) |
| 77 | 62.29 | 115.33 | Open To Flow (2) |
| 106 | 77.93 | 117.16 | Shut-In(2) |
| 149 | 1091.78 | 117.91 | End Shut-In(2) |
| 150 | 2264.84 | 117.57 | Final Hydro-static |

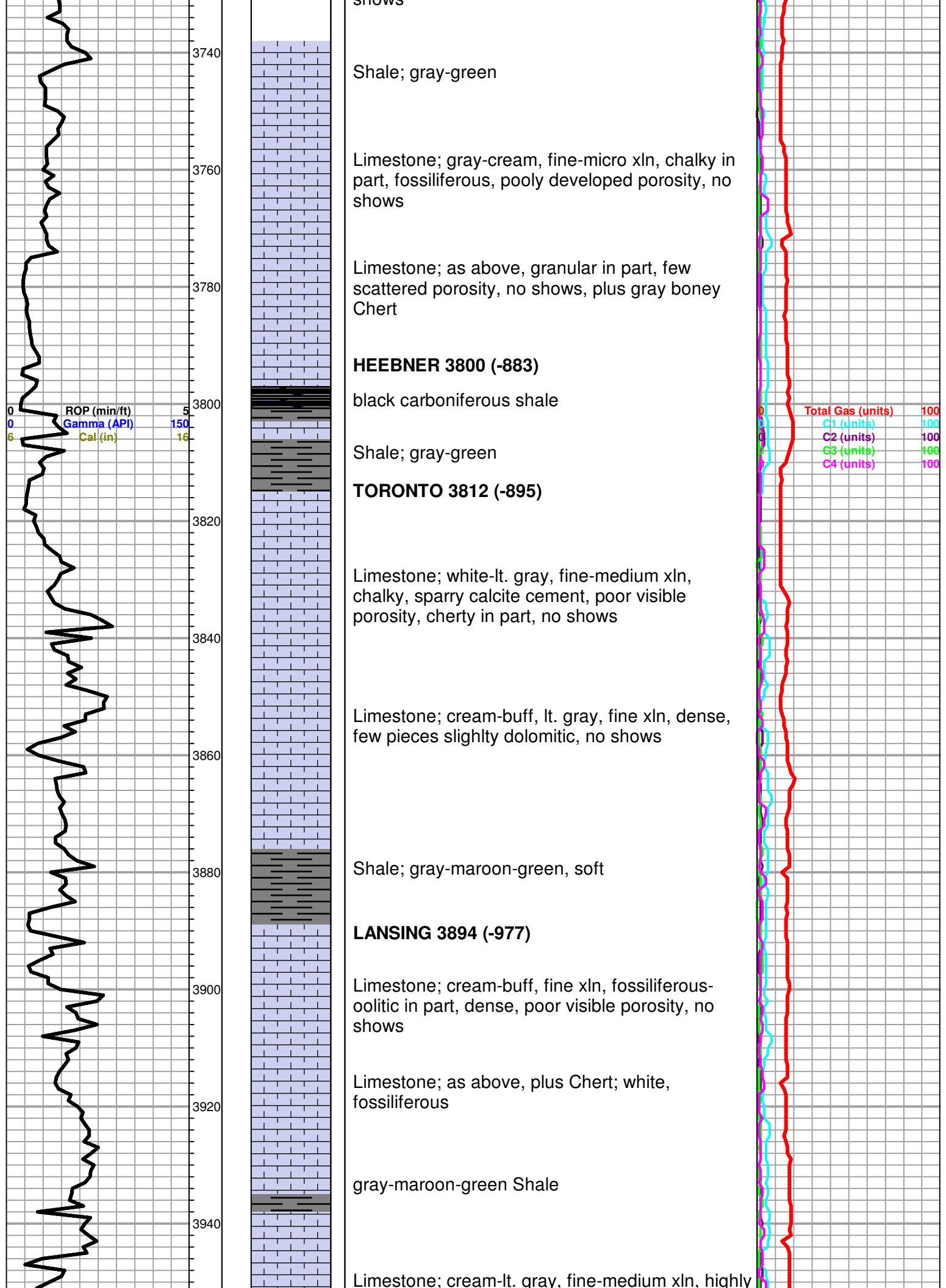
Recovery

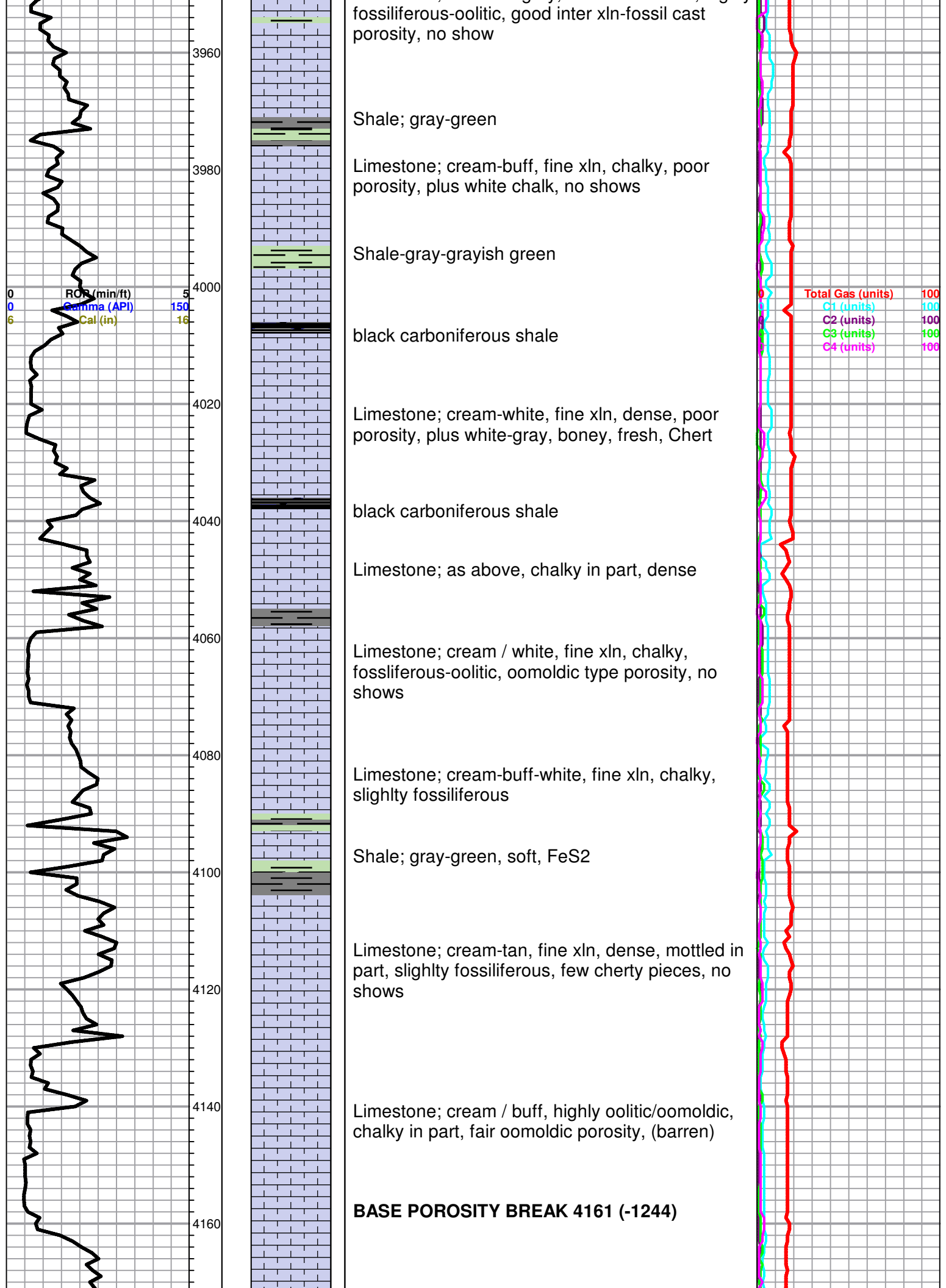
| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
|-------------|-------------|--------------|

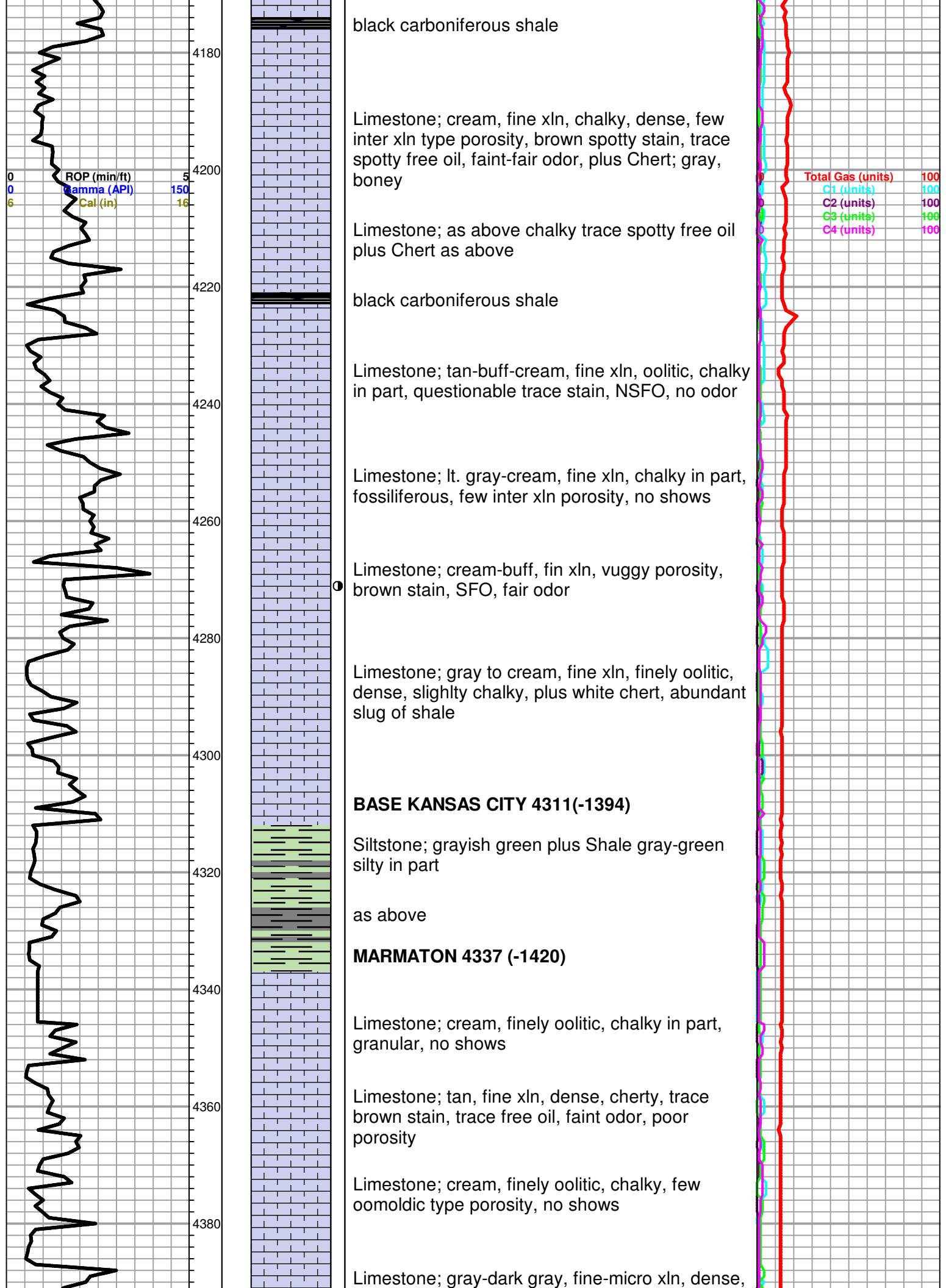
Gas Rates

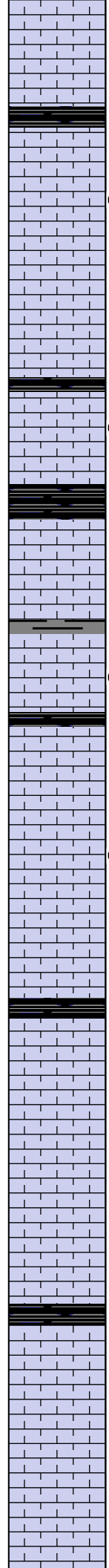
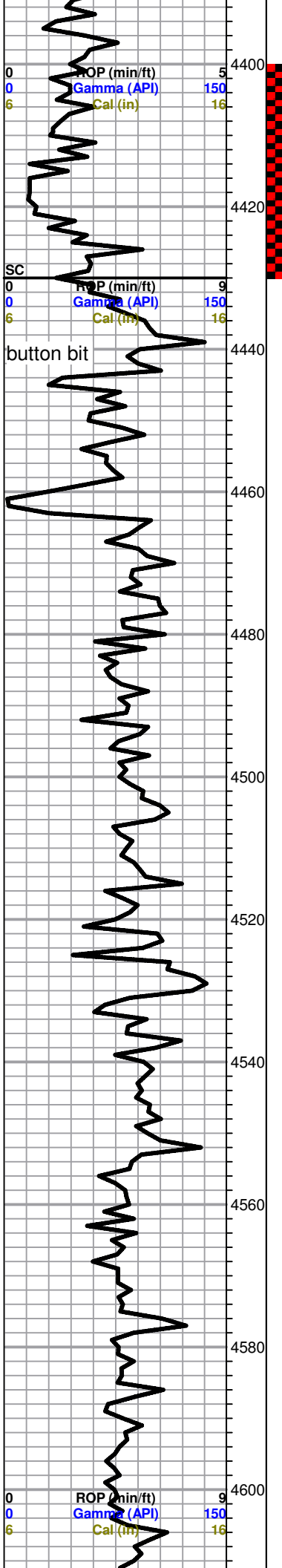
| | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|--|----------------|-----------------|------------------|
|--|----------------|-----------------|------------------|











slightly cherty, poor porosity, no shows

black carboniferous shale

PAWNEE 4415 (-1498)
Limestone; cream, tan, fine xln, slightly fossiliferous, fair inter xln porosity, brown stain, trace free oil, faint odor

Limestone; tan-buff, fine xln, dense, cherty in part, few fossiliferous pieces, no shows

FT. SCOTT 4447 (-1530)
Limestone; cream-buff, fossiliferous, inter xln porosity, cherty, brown stain, spotty free oil, no odor

CHEROKEE SHALE 4460 (-1543)
black carboniferous shale

Limestone; cream-tan, finely oolitic, dense, plus Chert; amber-white, boney

Limestone; cream-white, finely oolitic, questionable trace spotty free oil.

black carboniferous shale

Limestone; cream-tan, fine xln, dense, cherty, poor visible porosity, Chert; amber-gray-white

Sand; clear-gray, glauconitic, "dirty", poorly sorted, fair intergranular porosity, trace dark brown stain, SFO, good odor when sample broke

black carboniferous shale

Limestone; cream-lt. gray, fine xln, slightly fossiliferous, dense, poor porosity, no shows

Limestone; as above plus white chalk

black carboniferous shale

Limestone; cream, fine-medium xln, chalky

ATOKA 4578
Limestone; tan-buff-biege, fine-micro xln, dense, cherty, trace brown stain, NSFO, faint odor when sample broke

Limestone; as above

