



# Joshua R. Austin

## Petroleum Geologist

report for



### Lebsack Oil Production, Inc.

COMPANY: Lebsack Oil Production, Inc.

LEASE: Horton #2- 11

FIELD: Tanker

LOCATION: 2302' FSL & 2300' FWL (SW-NE-NE-SW)

SEC: 11 TWSP: 22s RGE: 34w

COUNTY: Finney STATE: Kansas

KB: 2936' GL: 2925'

API # 15-055-22439-00-00

CONTRACTOR: Sterling Drilling Company (rig #5)

Spud: 10/11/2016 Comp: 10/19/2016

RTD: 4900' LTD: 4896'

Mud Up: 3400' Type Mud: Chemical was displaced

Samples Saved From: 3700' to RTD.

Drilling Time Kept From: 3700' to RTD.

Samples Examined From: 3700' to RTD.

Geological Supervision From: 3850' to RTD.

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 435'

Production Casing: NONE

Electronic Surveys: HALLIBURTON

#### NOTES

On the basis of the low structural position, drill stem test and after reviewing the electric logs, it was recommended by all parties involved in the Horton 2-11 be plugged and abandoned at the rotary total depth.

## Lebsack Oil Production, Inc. well comparison sheet

DRILLING WELL

COMPARISON WELL

COMPARISON WELL







### Recovery

Length (ft)	Description	Volume (bbl)
62.00	mud 100% <sub>m</sub>	0.30

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Lebsack Oil Production Inc.

**11-22-34 Finney Co KS**

P.O.Box 354  
Chase Ks 67524

**Horton 2-11**

Job Ticket: 65623      **DST#: 2**

ATTN: Josh Austin

Test Start: 2016.10.17 @ 12:43:15

### GENERAL INFORMATION:

Formation: **Morrow Sand**  
 Deviated: No Whipstock:      ft (KB)  
 Time Tool Opened: 14:31:54  
 Time Test Ended: 19:40:39

Test Type: Conventional Bottom Hole (Reset)  
 Tester: **Mike Roberts**  
 Unit No: 81

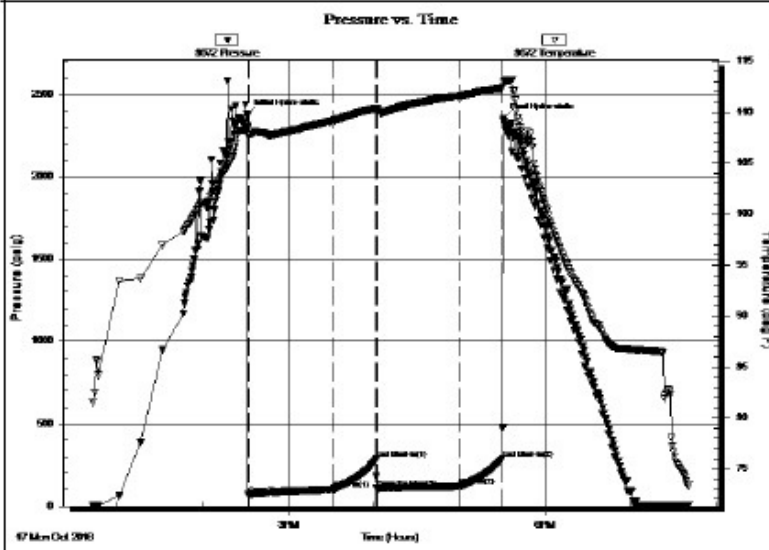
Interval: **4670.00 ft (KB) To 4742.00 ft (KB) (TVD)**  
 Total Depth: **4742.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair

Reference Elevations: **2936.00 ft (KB)**  
**2927.00 ft (CF)**  
 KB to GR/CF: **9.00 ft**

**Serial #: 8672**      **Inside**  
 Press@RunDepth: **118.34 psig @ 4708.00 ft (KB)**  
 Start Date: **2016.10.17**      End Date: **2016.10.17**  
 Start Time: **12:43:15**      End Time: **19:40:39**

Capacity: **8000.00 psig**  
 Last Calib.: **2016.10.17**  
 Time On Btm: **2016.10.17 @ 14:31:24**  
 Time Off Btm: **2016.10.17 @ 17:30:39**

TEST COMMENT: IF:Built to 5" blow  
 IS:No return blow  
 FF:Built to 6" blow  
 FS:No return blow



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2374.50	108.35	Initial Hydro-static
1	67.90	107.74	Open To Flow (1)
61	101.54	109.17	Shut-In(1)
90	283.03	110.36	End Shut-In(1)
91	107.17	110.31	Open To Flow (2)
149	118.34	111.56	Shut-In(2)
179	286.50	112.32	End Shut-In(2)
180	2349.08	112.96	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
138.00	gcom 10%g 40%o 50%m	0.68
69.00	ocm 50%o 50%m	0.34
20.00	ocm 20%o 80%m	0.27

\* Recovery from multiple tests

### Gas Rates

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

## DRILL STEM TEST REPORT

Lebsack Oil Production Inc.

11-22-34 Finney Co KS

P.O.Box 354  
Chase Ks 67524

Horton 2-11

Job Ticket: 65624

DST#: 3

ATTN: Josh Austin

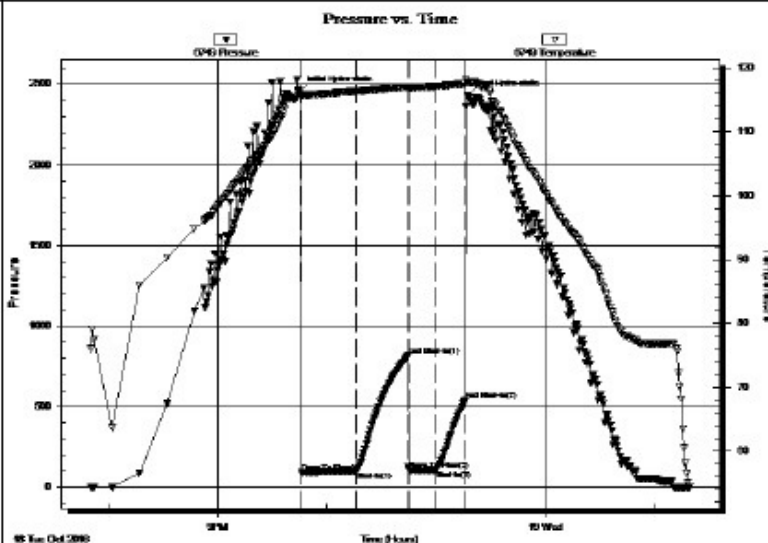
Test Start: 2016.10.18 @ 19:50:15

### GENERAL INFORMATION:

Formation: **Miss**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 21:45:45  
 Time Test Ended: 01:19:30  
 Test Type: **Conventional Bottom Hole (Reset)**  
 Tester: **Mike Roberts**  
 Unit No: **81**  
 Interval: **4746.00 ft (KB) To 4900.00 ft (KB) (TVD)**  
 Total Depth: **4900.00 ft (KB) (TVD)**  
 Reference Elevations: **2936.00 ft (KB)**  
**2927.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
 KB to GR/CF: **9.00 ft**

**Serial #: 6749** Outside  
 Press@RunDepth: **109.64 psig @ 4880.00 ft (KB)**  
 Capacity: **8000.00 psig**  
 Start Date: **2016.10.18** End Date: **2016.10.19** Last Calib.: **2016.10.19**  
 Start Time: **19:50:15** End Time: **01:19:30** Time On Btm: **2016.10.18 @ 21:45:15**  
 Time Off Btm: **2016.10.18 @ 23:17:30**

TEST COMMENT: IF: Built to 3/4" blow  
 IS: No return blow  
 FF: No blow  
 FS: No return blow



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2454.90	116.37	Initial Hydro-static
1	92.99	115.76	Open To Flow (1)
31	102.55	116.33	Shut-In(1)
60	816.06	117.07	End Shut-In(1)
60	105.41	116.88	Open To Flow (2)
75	109.64	117.15	Shut-In(2)
91	538.25	117.51	End Shut-In(2)
93	2431.96	117.77	Final Hydro-static

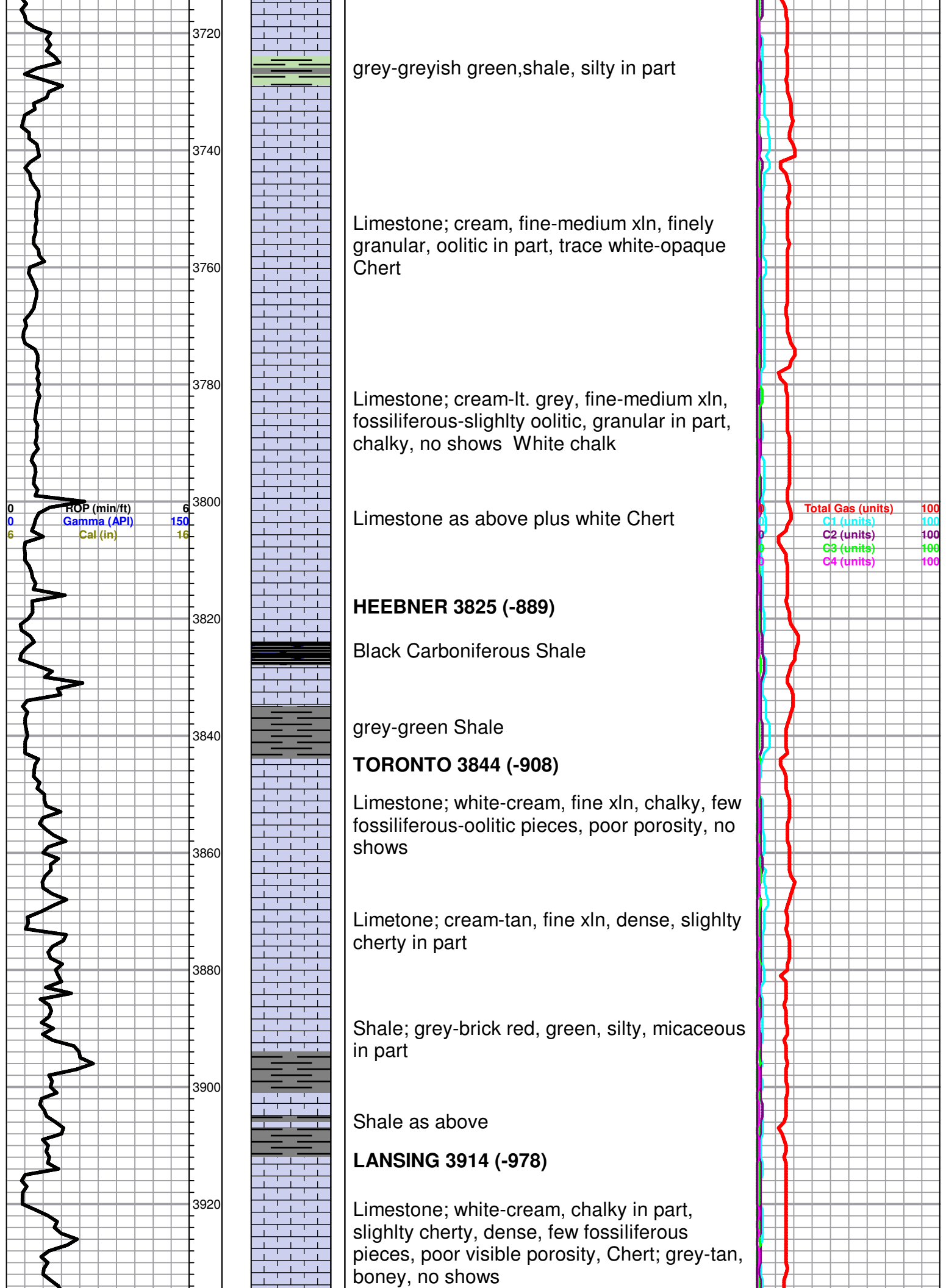
### Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud with oil spots 100%m	0.20

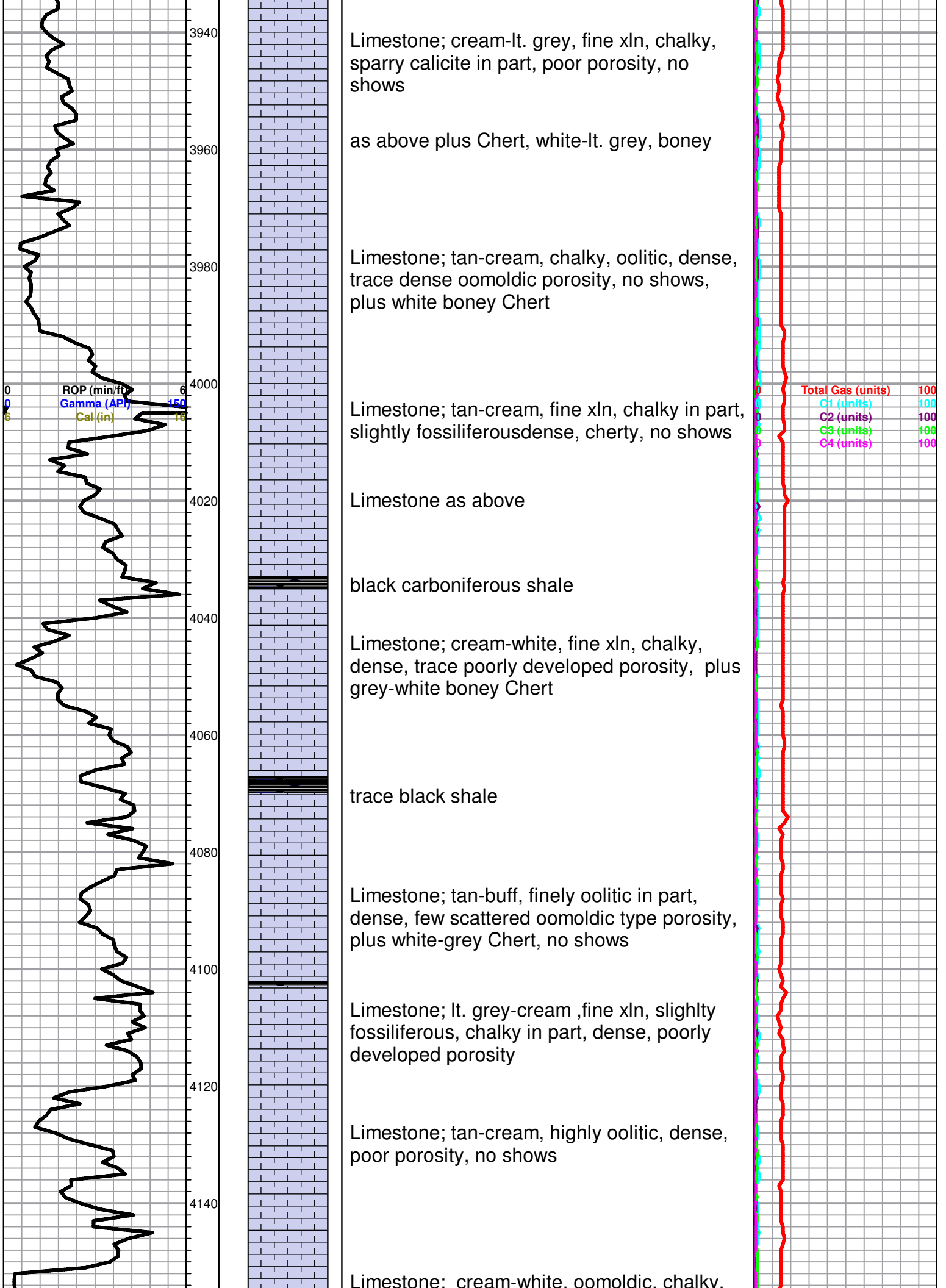
### Gas Rates

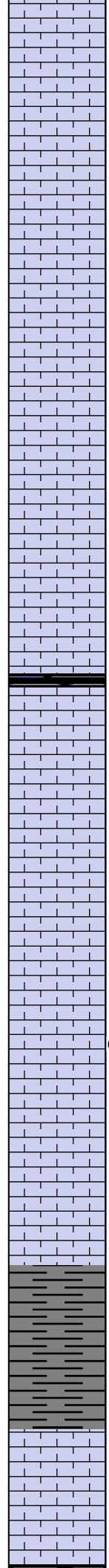
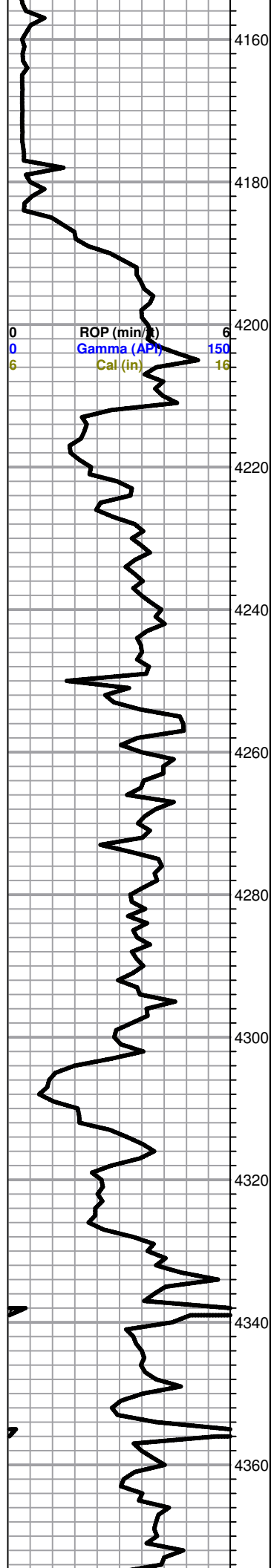
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Limestone; cream-tan, cherty, oolitic, cherty, good oomoldic porosity (barren)

Limestone; as above no shows

**BASE POROSITY BREAK 4188 (-1252)**

Limestone; cream-white, chalky in part, dense, poor visible porosity, no shows plus white chalk

Limestone; cream, oomoldic-oolitic, fair-good oomoldic type porosity, no shows

Limestone; cream-tan-buff, fine xln, dense, cherty, slightly fossiliferous, Chert; tan, white, boney, no shows

Limestone; grey, fine xln, dense, poor visible porosity, no shows

trace black carboniferous shale

Limestone; cream-lt. grey, fine xln, chalky, slightly fossiliferous, dense, plus Chert; smokey grey-tan-white, boney, no shows

Limestone; cream, fine xln, chalky in part, dense, plus few fossiliferous pieces, poor porosity, Chert; grey, boney, slightly fossiliferous, no shows

Limestone, cream, fine-medium xln, slightly oolitic, fair-good fossilcast porosity, spotty brown stain, trace spotty free oil, faint-fair odor

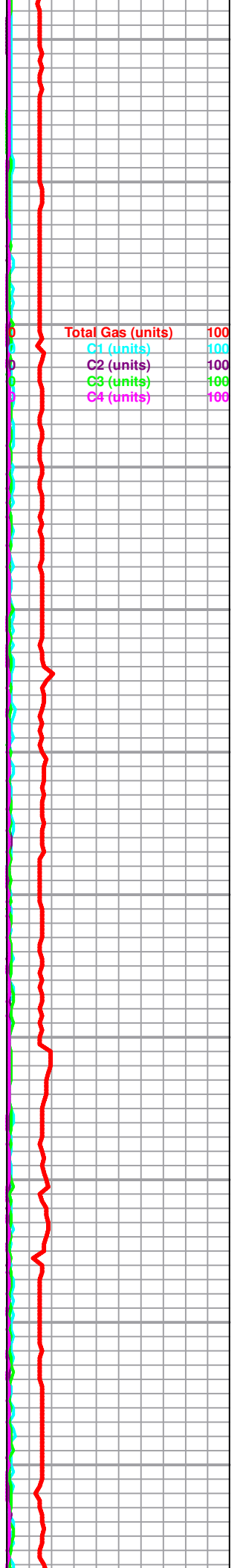
Limestone; cream-tan-lt. grey, fine xln, dense, poorly developed porosity, cherty, no shows

**BASE KANSAS CITY 4333 (-1397)**

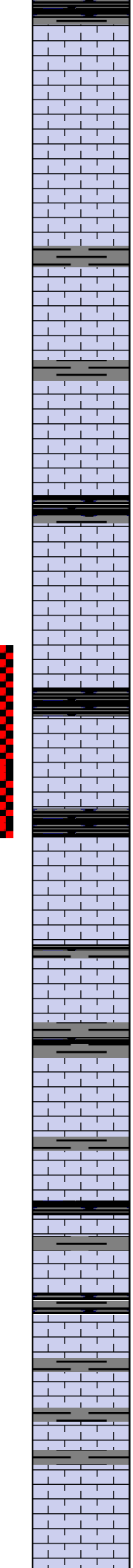
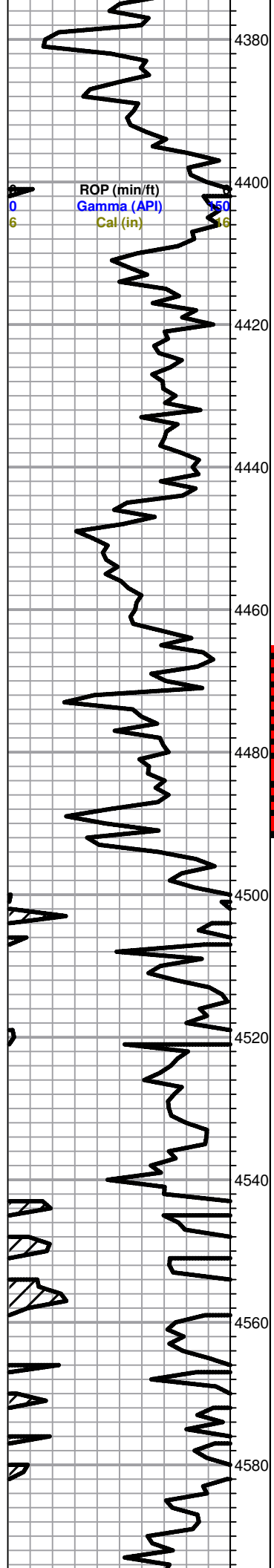
Shale; greyish green silty, plus greyish green siltstone

**MARMATON 4357 (-1421)**

Limestone; cream, fine xln, chalky, oolitic in part, white chalk, no shows







Limestone; cream, fine xln, highly oolitic, dense, good oolitic-fossiliferous porosity, brown stain, spotty free oil, faint-fair odor

Limestone; cream, oolitic, chalky,

Limestone; grey, fine xln, dense, fine oolitic-fossiliferous, chert in part, no visible porosity, no shows

Limestone; cream, white, fine xln, dense, cherty, poor visible porosity, plus Chert; cream-white, fossiliferous

black carboniferous shale  
**PAWNEE 4444 (-1508)**

Limestone; cream-buff, highly oolitic in part dense, poorly developed porosity, no shows

**FT. SCOTT 4475 (-1539)**

Limestone; cream, oolitic, dense, chalky in part, poor porosity, trace spotty brown stain, trace spotty free oil, very faint odor

**CHEROKEE SHALE 4488 (-1552)**

black carboniferous shale

Limestone; buff-cream-grey, fossiliferous, dense, cherty, plus Chert; white-opaque, foss, translucent in part

black carboniferous shale

grey-black shale

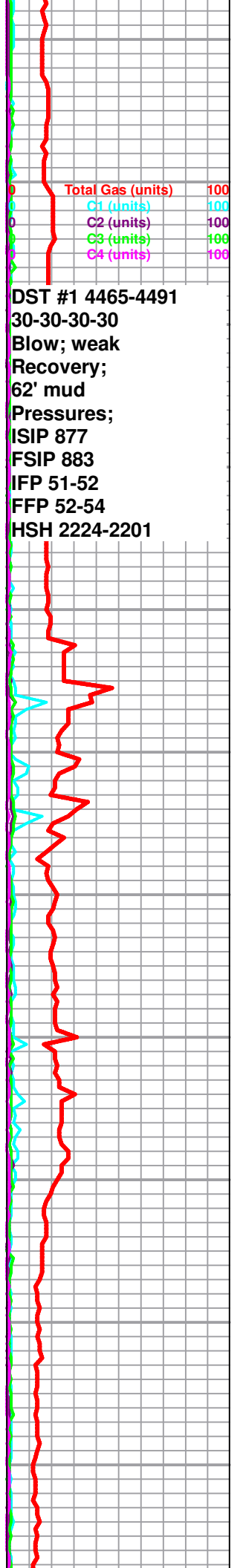
Limestone; cream, fossiliferous, chalky, mottled in part, poor porosity, no shows

Limestone as above plus variety colors of shale and white chalk

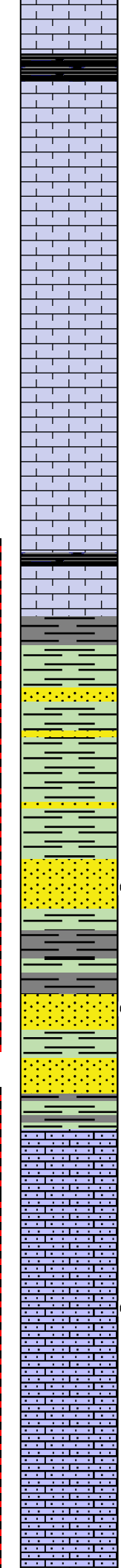
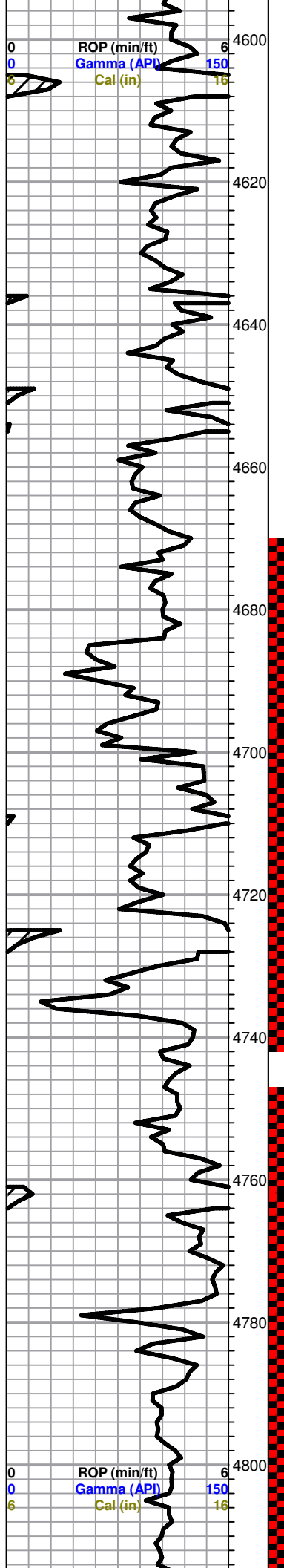
black carboniferous shale

Limestone; tan-cream-buff, fine xln, dense, cherty, poor visible porosity, fossiliferous in part, plus Chert; amber-tan

Limestone; cream-tan, fine xln, dense, slightly oolitic-fossiliferous, cherty in part, plus Chert; white-amber-tan, fossiliferous, boney



**DST #1 4465-4491**  
**30-30-30**  
**Blow; weak**  
**Recovery;**  
**62' mud**  
**Pressures;**  
**ISIP 877**  
**FSIP 883**  
**IFP 51-52**  
**FFP 52-54**  
**HSH 2224-2201**



black carboniferous shale

**ATOKA**

Limestone; cream, fine xln, fossiliferous, chalky, trace intercrystalline porosity, golden brown stain, questionable trace slight spotty SFO (1pcs) faint odor when sample broke

Limestone; buff-tan, fine xln, slightly sucrosic, dolomitic in part, trace golden brown stain, NSFO, faint "flash" odor plus amber-dark grey Chert

Limestone; cream-tan, fine-medium xln, fossiliferous in part, dense, cherty, poor visible porosity, no shows, Chert; smokey grey-amber-tan-black

black carboniferous shale

**MORROW SHALE 4678 (-1742)**

Shale; green, soft, slightly silty, plus Limestone; cream, fine-medium xln, chalky, glauconitic

Shale as above plus, lt grey-greyish green silty, glauconitic in part, few micaceous pieces

Sand; tan, fine-medium grained, calcareous, fair intergranular porosity, lt brown stain, lt spotty SFO (5-6 pcs)

Sand; grey-clear, fine-medium grained, fair intergranular porosity,lt. brown stain, spotty SFO, faint-fair odor trace gas bubbles

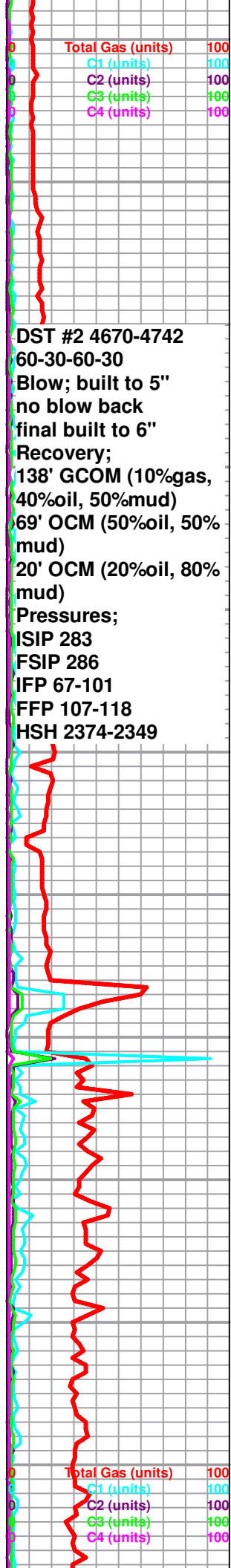
**MISSISSIPPI 4752 (-1816)**

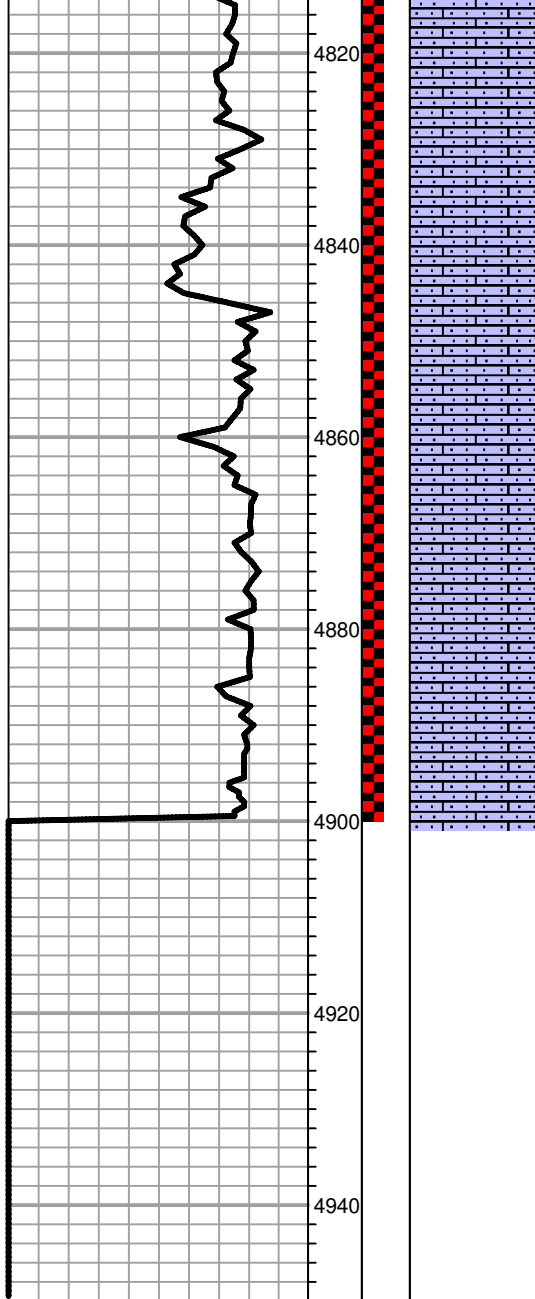
Limestone; white-cream, chalky, granular/sandy, oolitic-finely oolitic, no shows, plus white chalk

Limestone; cream-tan, highly oolitic, few nodules, good oolitic type porosity, brown stain, spotty SFO, no odor

Limestone; cream-lt. grey, highly oolitic, granular/sandy, chalky, no shows, plus Chert; white-smokey grey

Limestone; cream fine medium xln slightly





Limestone, cream, fine-medium xln, slightly oolitic-fossiliferous, poor porosity, no shows plus Chert; lt. grey-translucent

**ST. LOUIS 'C' 4834 (-1898)**

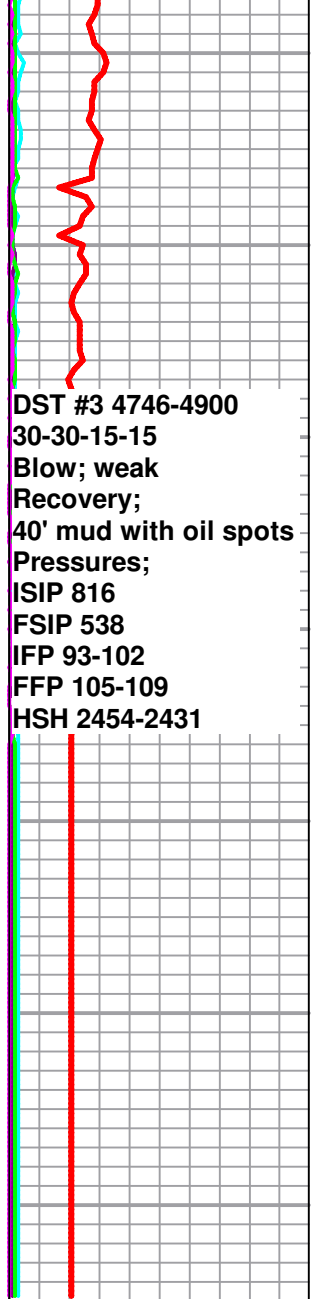
Limestone; cream-buff, fine-medium xln, finely oolitic, chalky in part, dense, poorly developed porosity, no shows

Limestone; white-cream, highly oolitic, fine-medium xln, chalky in part, plus buff-tan Limestone,oolitic, dense, poorly developed porosity, white chalk, no shows

Limestone; cream-white, highly oolitic, granular/sandy, chalky, no shows

Limestone; as above plus Chert; white, boney

**ROTARY TOTAL DEPTH 4900 (-1964)**



**DST #3 4746-4900**  
30-30-15-15  
Blow; weak  
Recovery;  
40' mud with oil spots  
Pressures;  
ISIP 816  
FSIP 538  
IFP 93-102  
FFP 105-109  
HSH 2454-2431