



Home  
(785) 798-3400

# Andrew Stenzel Geologist

Ness City, Kansas



Cell  
(785) 798-5977

## Scale 1:240 (5"=100') Imperial Measured Depth Log

**Well Name:** Fotopoulos Unit #1  
**Well Id:**  
**Location:** Sec. 16-14S-36W (Logan Co)  
**License Number:** 15-109-21523  
**Spud Date:** 9/5/17  
**Surface Coordinates:** 599' FSL & 2571' FEL

**Region:** KANSAS  
**Drilling Completed:** 9/13/17

**Bottom Hole Coordinates:**  
**Ground Elevation (ft):** 3314      **K.B. Elevation (ft):** 3319  
**Logged Interval (ft):** 3500      **To:** TD      **Total Depth (ft):** 4980  
**Formation:**  
**Type of Drilling Fluid:** Mud-Co Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### OPERATOR

**Company:** Palomino Petroleum, Inc.  
**Address:** 4924 SE 84th St.  
Newton, KS 67114

### GEOLOGIST

**Name:** Andrew Stenzel  
**Company:** Petroleum Geologist  
**Address:** 501 S. Franklin  
Ness City, KS 67560

### Drilling Report

9/5/17 MIRU, ran surface casing  
9/6/17 Drilling @ 815'  
9/7/17 Drilling @ 2997'  
9/8/17 Drilling @ 3755'  
9/9/17 Drilling @ 4185'  
9/10/17 Drilling @ 4550', DST #1  
9/11/17 Circulating @ 4682', DST #2  
9/12/17 DST #3  
9/13/17 Ran electric logs, plugged & abandoned

### Services

RIG: WW Drilling, Rig #10

MUD: MUDCO

LOGS: Gemini: CND, DIL, ML, PE, SL

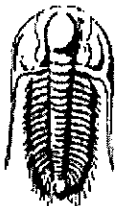
### Casing Record

SURFACE Casing: Ran 5 jts new 8 5/8", 23# casing @ 220', cemented with 165sx common. Cement did circulate, plug down at 6:15pm

PRODUCTION Casing: None

### Formation Tops

Sample Tops		LogTops	
Anhy.	2650 (+669)	Anhy.	2648 (+671)
Base Anhy.	2670 (+649)	Base Anhy.	2668 (+651)
Topeka	3824 (-505)	Topeka	3820 (-501)
Heebner	4053 (-734)	Heebner	4058 (-739)
Toronto	4074 (-755)	Toronto	4074 (-755)
Lansing	4107 (-788)	Lansing	4105 (-786)
Stark Sh	4378 (-1059)	Stark Sh	4380 (-1061)
BKC	4454 (-1135)	BKC	4456 (-1137)
Marmaton	4498 (-1179)	Marmaton	4496 (-1177)
Pawnee	4570 (-1251)	Pawnee	4584 (-1265)
Ft. Scott	4639 (-1320)	Ft. Scott	4644 (-1325)
Cher. Sh	4676 (-1357)	Cher. Sh.	4674 (-1355)
Morrow Sh	4804 (-1485)	Morrow Sh	4805 (-1486)
Miss.	4863 (-1544)	Miss.	4872 (-1553)
RTD	4980 (-1661)	LTD	4981 (-1662)



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Palomino Petroleum

16 14s 36w

4924 SE 84th St.  
New ton, Ks 67114

Fotopoulos Unit #1

Job Ticket: 64220      DST#: 1

ATTN: Andrew Stenzel

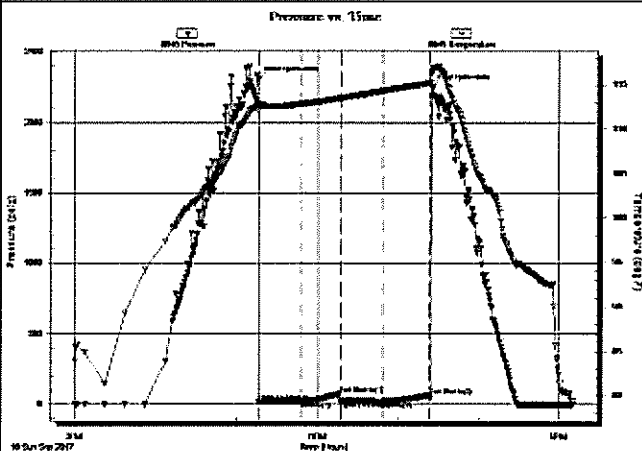
Test Start: 2017.09.10 @ 15:01:00

### GENERAL INFORMATION:

Formation: **Marmaton.**  
 Deviated: No Whipstock      ft (KB)  
 Time Tool Opened: 17:16:45  
 Time Test Ended: 21:10:00  
 Interval: **4474.00 ft (KB) To 4584.00 ft (KB) (TVD)**  
 Total Depth: **4584.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Bradley Walter  
 Unit No: 78  
 Reference Elevations: 3319.00 ft (KB)  
 3314.00 ft (CF)  
 KB to GR/CF: 5.00 ft

Serial #: 8845      Outside  
 Press@RunDepth: 20.25 psig @ 4475.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2017.09.10      End Date: 2017.09.10      Last Callb.: 2017.09.10  
 Start Time: 15:01:05      End Time: 21:09:59      Time On Blmt: 2017.09.10 @ 17:16:30  
 Time Off Blmt: 2017.09.10 @ 19:25:00

TEST COMMENT: IF: 1/4" blow.  
 IS: No return.  
 FF: No blow.  
 FSI: No return.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2305.33	112.85	Initial Hydro-static
1	18.81	112.02	Open To Flow (1)
32	20.68	112.82	Shut-In(1)
61	74.31	113.50	End Shut-In(1)
61	19.52	113.50	Open To Flow (2)
92	20.25	114.30	Shut-In(2)
127	60.73	115.20	End Shut-In(2)
129	2249.76	116.46	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100m (oil spots)	0.05

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum

16-14s-36w

4924 SE 84th St.  
Newton, Ks 67114

Fotopoulos Unit #1

Job Ticket: 64222      DST#:2

ATTN: Andrew Stenzel

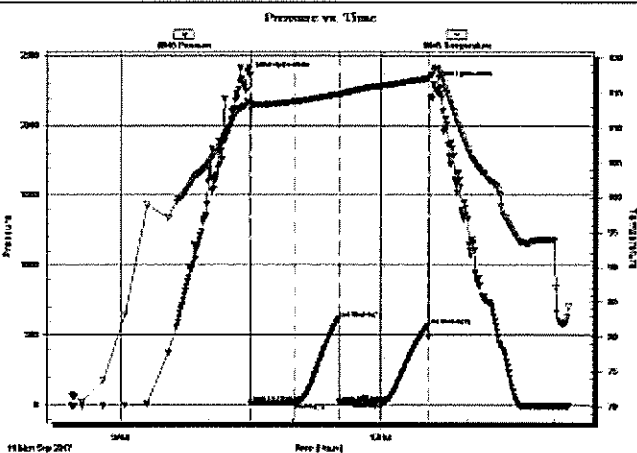
Test Start: 2017.09.11 @ 08:26:00

## GENERAL INFORMATION:

Formation: <b>Ft Scott, Pawnee</b>		
Deviated: <b>No Whipstock</b>	ft (KB)	Test Type: <b>Conventional Bottom Hole (Reset)</b>
Time Tool Opened: <b>10:29:45</b>		Tester: <b>Bradley Walter</b>
Time Test Ended: <b>14:10:00</b>		Unit No: <b>78</b>
Interval: <b>4613.00 ft (KB) To 4682.00 ft (KB) (TVD)</b>		Reference Elevations: <b>3319.00 ft (KB)</b>
Total Depth: <b>4682.00 ft (KB) (TVD)</b>		<b>3314.00 ft (CF)</b>
Hole Diameter: <b>7.88 inches</b>	Hole Condition: <b>Good</b>	KB to GR/CF: <b>5.00 ft</b>

<b>Serial #: 8845</b>	<b>Outside</b>				
Press@RunDepth: <b>22.24 psig @ 4614.00 ft (KB)</b>			Capacity: <b>8000.00 psig</b>		
Start Date: <b>2017.09.11</b>	End Date: <b>2017.09.11</b>		Last Calib.: <b>2017.09.11</b>		
Start Time: <b>08:26:05</b>	End Time: <b>14:09:59</b>		Time On Blmt: <b>2017.09.11 @ 10:29:30</b>		
			Time Off Blmt: <b>2017.09.11 @ 12:36:15</b>		

**TEST COMMENT:** IF: 1/2" blow, Receded to surface.  
 IS: No return.  
 FF: Surface blow, died @ 15 min.  
 FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2381.53	113.87	Initial Hydro-static
1	18.16	112.56	Open To Flow (1)
31	21.19	113.84	Shut-In(1)
62	619.17	114.93	End Shut-In(1)
62	21.70	114.63	Open To Flow (2)
93	22.24	116.14	Shut-In(2)
124	569.50	117.17	End Shut-In(2)
127	2296.75	118.12	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100m (oil spots in tool)	0.05

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum

16 14s 36w

4924 SE 84th St.  
Newton, Ks 67114

Fotopoulos Unit #1

Job Ticket: 64223

DST#: 3

ATTN: Andrew Stenzel

Test Start: 2017.09.12 @ 03:46:00

### GENERAL INFORMATION:

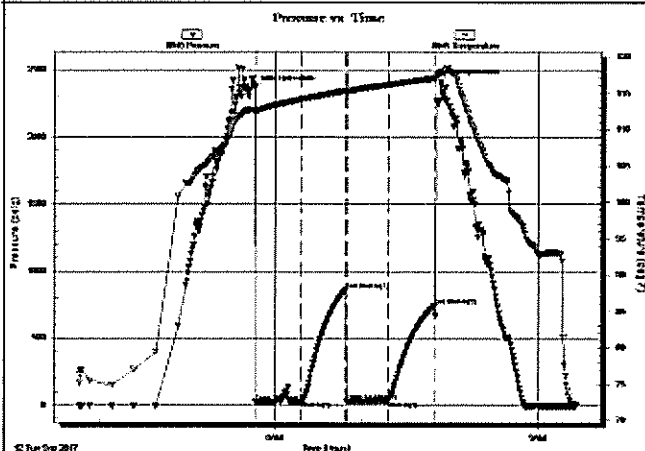
Formation: **Johnson**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:46:30  
 Time Test Ended: 09:26:30  
 Interval: 4668.00 ft (KB) To 4803.00 ft (KB) (TVD)  
 Total Depth: 4803.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Bradley Walter  
 Unit No: 78  
 Reference Elevations: 3319.00 ft (KB)  
 3314.00 ft (CF)  
 KB to GR/CF: 5.00 ft

Serial #: 8845

Outside

Press@RunDepth: 35.48 psig @ 4669.00 ft (KB)  
 Start Date: 2017.09.12 End Date: 2017.09.12  
 Start Time: 03:46:05 End Time: 09:26:29  
 Capacity: 8000.00 psig  
 Last Callb.: 2017.09.12  
 Time On Blm: 2017.09.12 @ 05:46:00  
 Time Off Blm: 2017.09.12 @ 07:53:00

TEST COMMENT: IF: 1" blow.  
 IS: No return.  
 FF: No blow.  
 FSI: No return.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2364.64	112.73	Initial Hydro-static
1	24.11	112.19	Open To Flow (1)
33	30.20	114.15	Shut-in(1)
63	863.40	115.32	End Shut-in(1)
63	32.02	114.94	Open To Flow (2)
92	35.48	116.16	Shut-in(2)
123	744.57	117.04	End Shut-in(2)
127	2403.87	117.93	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
25.00	Mud 100m (oil spots in tool)	0.12

\* Recovery from multiple tests

### Gas Rates

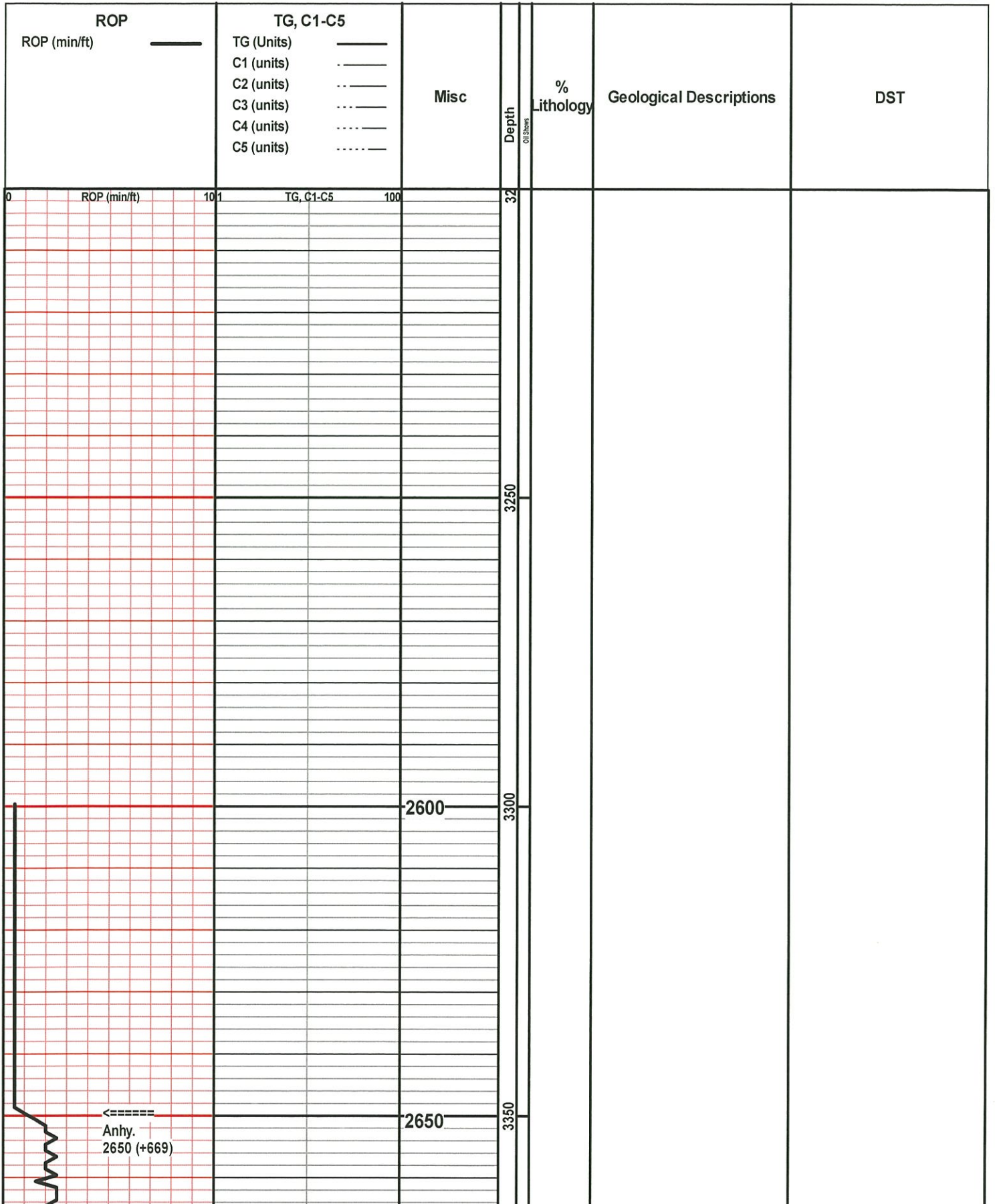
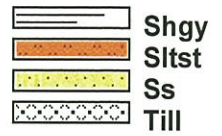
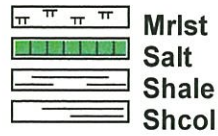
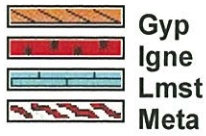
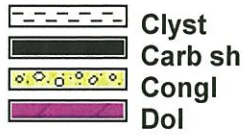
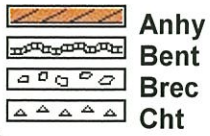
Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 64223

Printed: 2017.09.12 @ 09:50:40

### ROCK TYPES





<=====  
Base Anhy.  
2670 (+649)

ROP (min/ft) 100 100 2700

TG, C1-C5

3400

3450

3500

3550

Sh., brn-rd

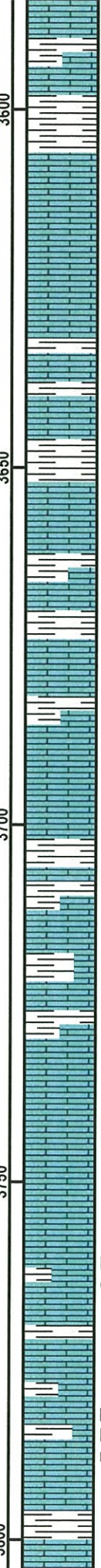
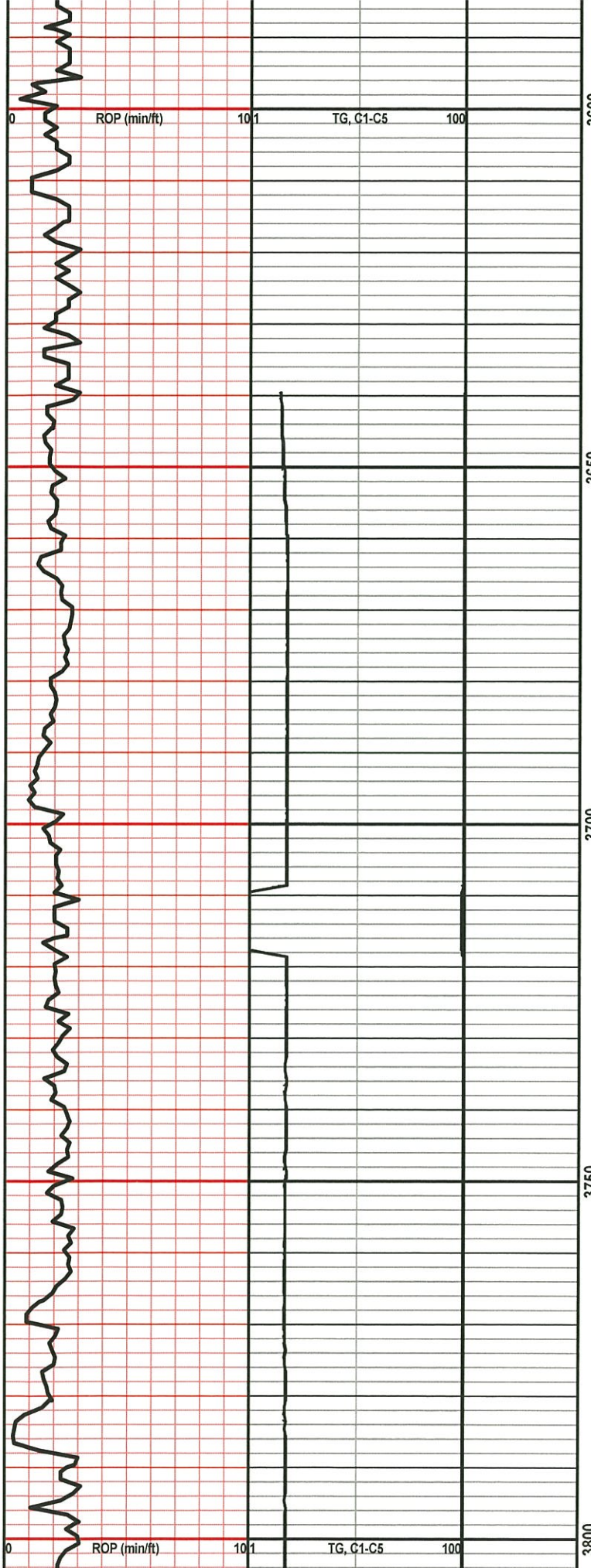
Ls., crm, fnxln, sli fri/soft, ool  
ip, foss, pr introol & foss por,  
ns, no odr, scatt Sh., gy

Ls., lt gy-gy, vfnxln, mod hd,  
foss ip, nvp, ns

Sh., dk gy

Ls., gy-buff, vnxln, mod hd,  
dns, nvp, ns, scatt Sh., dk  
gy-gy

Ls., crm-lt gy, vfnxln, micr ip,  
foss, few pcs w vy pr foss por,  
scatt Sh., gy



Sh., brn-lt grn, scatt Ls., crm, vfnxln, soft, chlky, nvp, ns

Ls., crm-lt gy, fn-vfnxln, mod hd, foss, ool ip, nvp, ns, no odr

Ls., crm-tn, fnxln, mod hd, sub chlky-chlky, foss ip, nvp, ns, scatt Sh., brn, soft

Ls., buff-lt gy, fnxln, sli fri/soft, chlky ip, micr ip, nvp, ns, scatt Sh., gy

Ls., lt gy-gy, vfnxln, mod hd, brittle ip, sub chlky ip, nvp, ns

Sh., dk gy

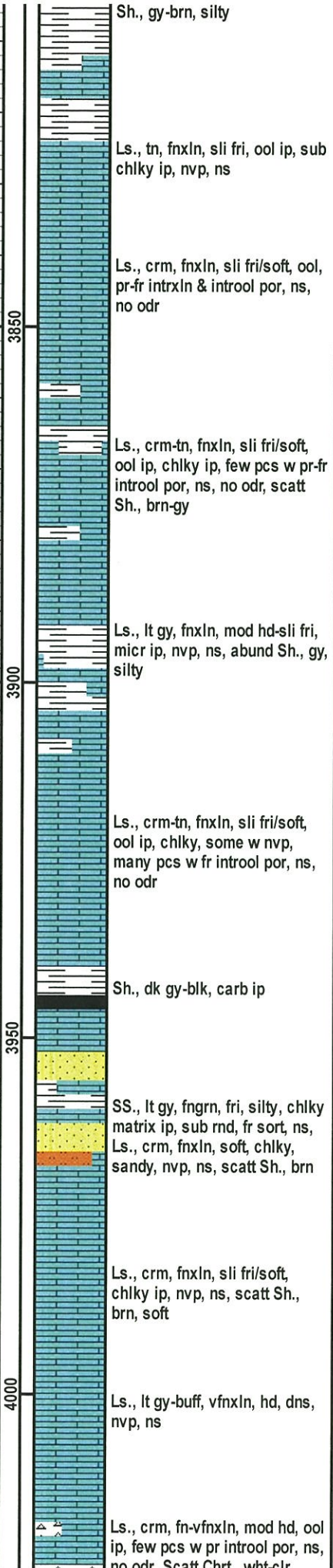
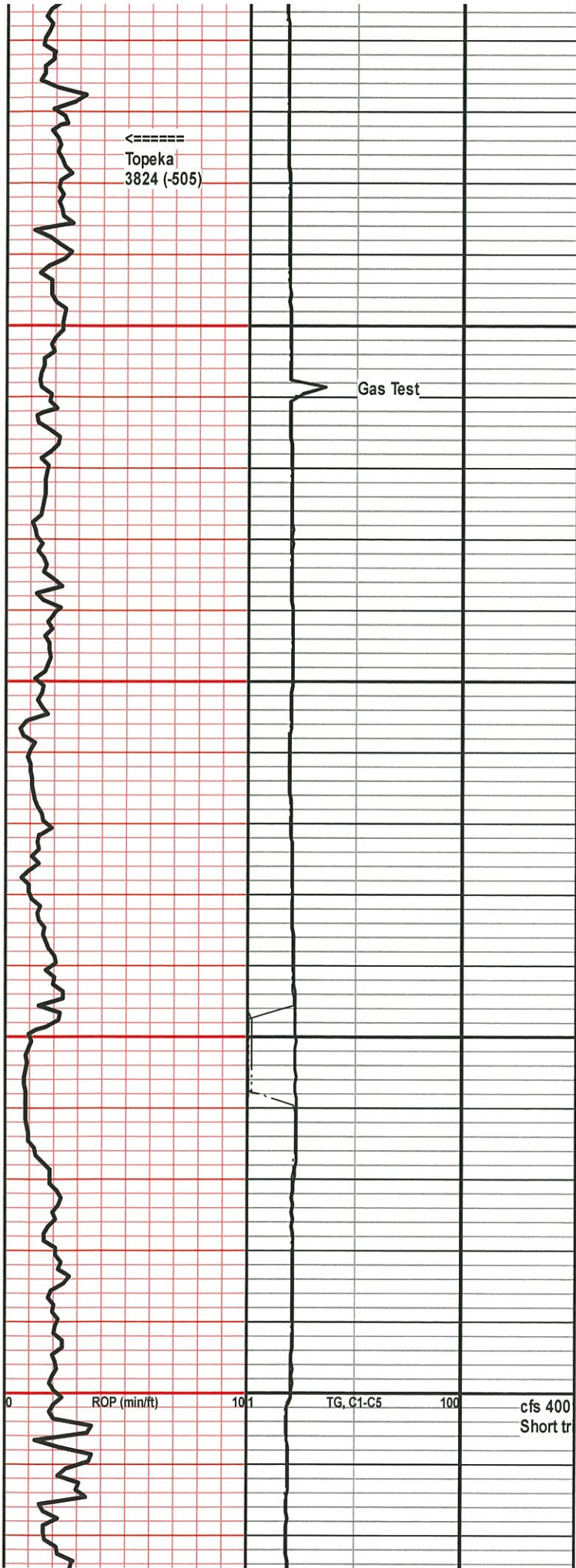
Ls., crm-tn, fnxln, mod hd, foss ip, few pcs w pr intrxln & foss por, ns, no odr, scatt Sh., aa

Ls., crm-lt gy, vfnxln, mod hd, dns, nvp, ns

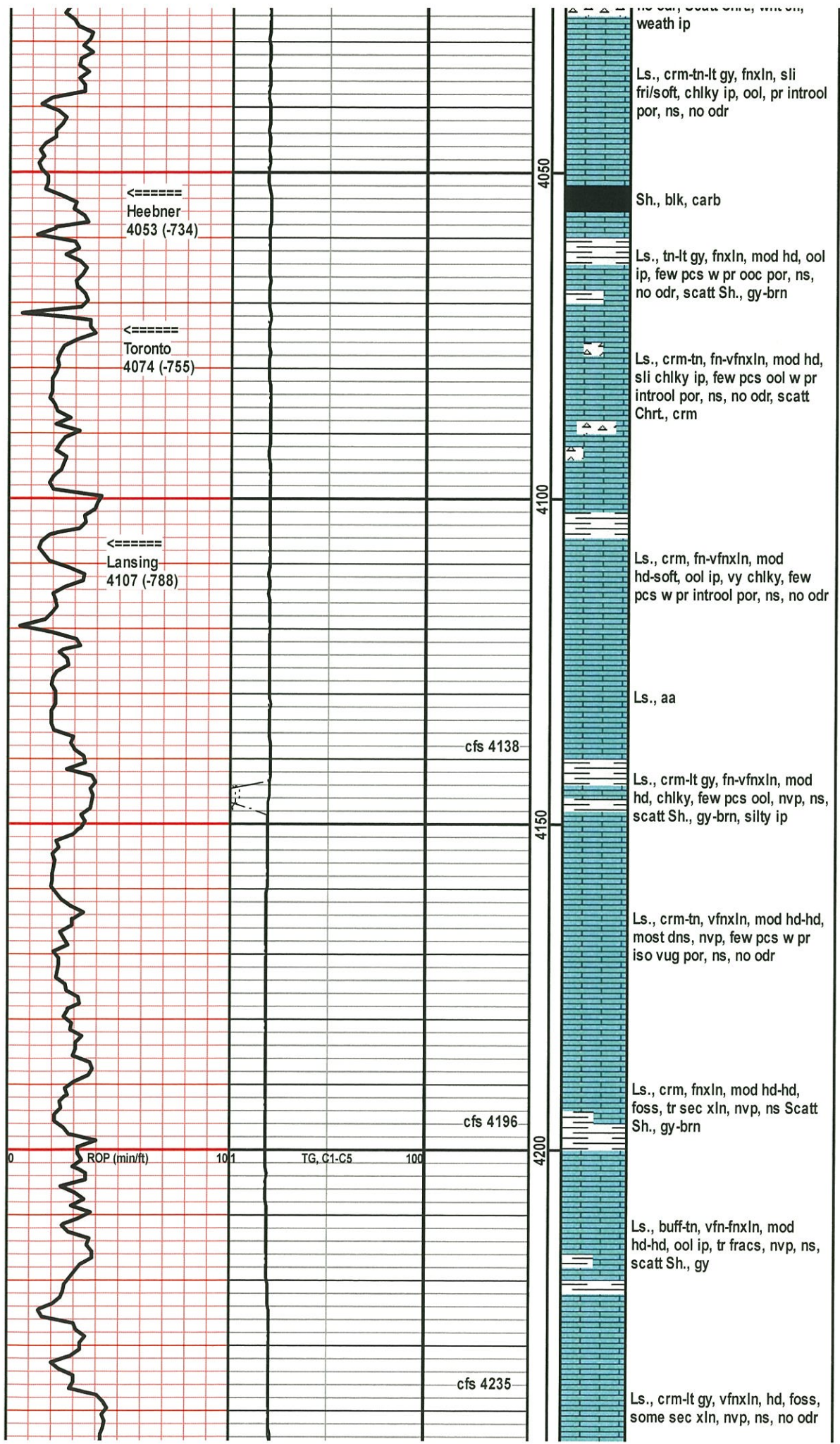
Ls., crm-tn, vfnxln, mod hd-hd, dns, nvp, ns, scatt Sh., gy

Ls., crm-lt gy, fn-vfnxln, mod hd-hd, foss, vy pr iso vug por, ns, no odr, Scatt Sh., brn, soft

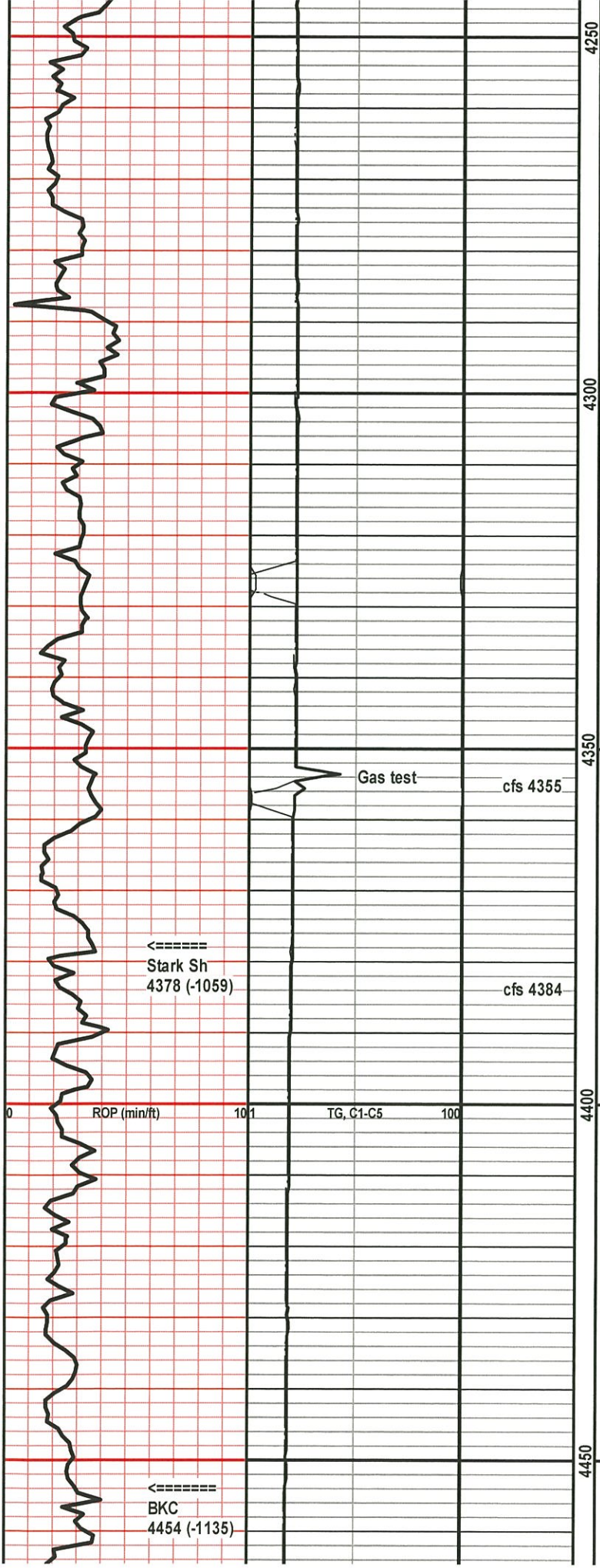




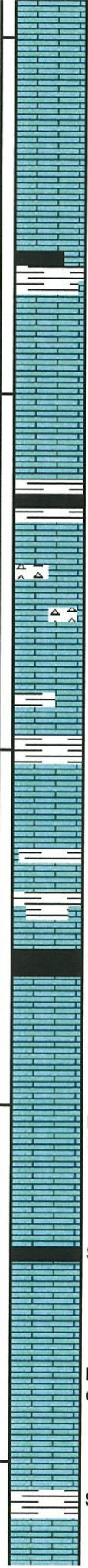








4250  
4300  
4350  
4400  
4450



Ls., crm, vfnxln, mod hd-sli fri, vy chlky, nvp, ns, scatt Chrt, crm, foss, shp, ns

Sh., gy-blk, carb ip, Ls., crm-lt gy, vfnxln, mod hd-sli fri, vy chlky nvp, ns

Ls., tn-lt gy, vfn-fnxln, mod hd, ool ip, foss, most w nvp, few pcs pr introol por, ns, no odr, scatt Chrt, wht, spic, shp

Sh., gy-blk, carb ip

Ls., tn, fnxln, mod hd, foss, chrty incl, nvp, ns, scatt Chrt, crm, foss

Ls., crm-tn, fnxln, sli fri-mod hd, chlky ip, foss, ool ip w pr introol por, ns, no odr, scatt Sh., gy-brn

Gas test cfs 4355

Ls., tn, fnxln, soft, chlky, nvp, ns, no odr, scatt Sh, gy

Ls., crm-lt gy, vfnxln, mod hd, chlky ip, ool, few pcs w vy pr introol por, ns, no odr, Sh., aa

←----- Stark Sh 4378 (-1059)

Sh., blk, carb

cfs 4384

Ls., crm-lt gy, fnxln, soft, vy chlky, nvp, ns

0 ROP (min/ft) 101 TG, C1-C5 100

Ls., tn-lt gy, vfnxln, hd, ool ip, nvp, ns, scatt Sh., gy-dk gy

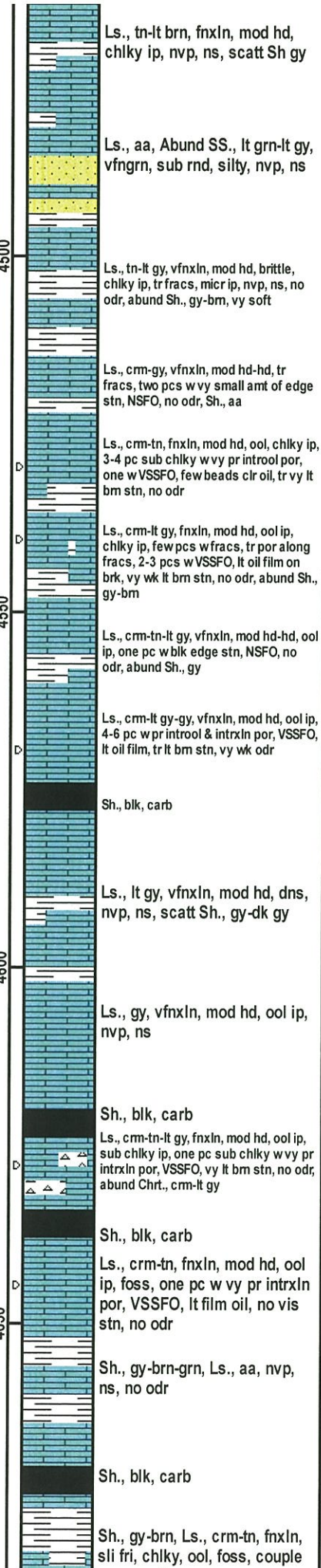
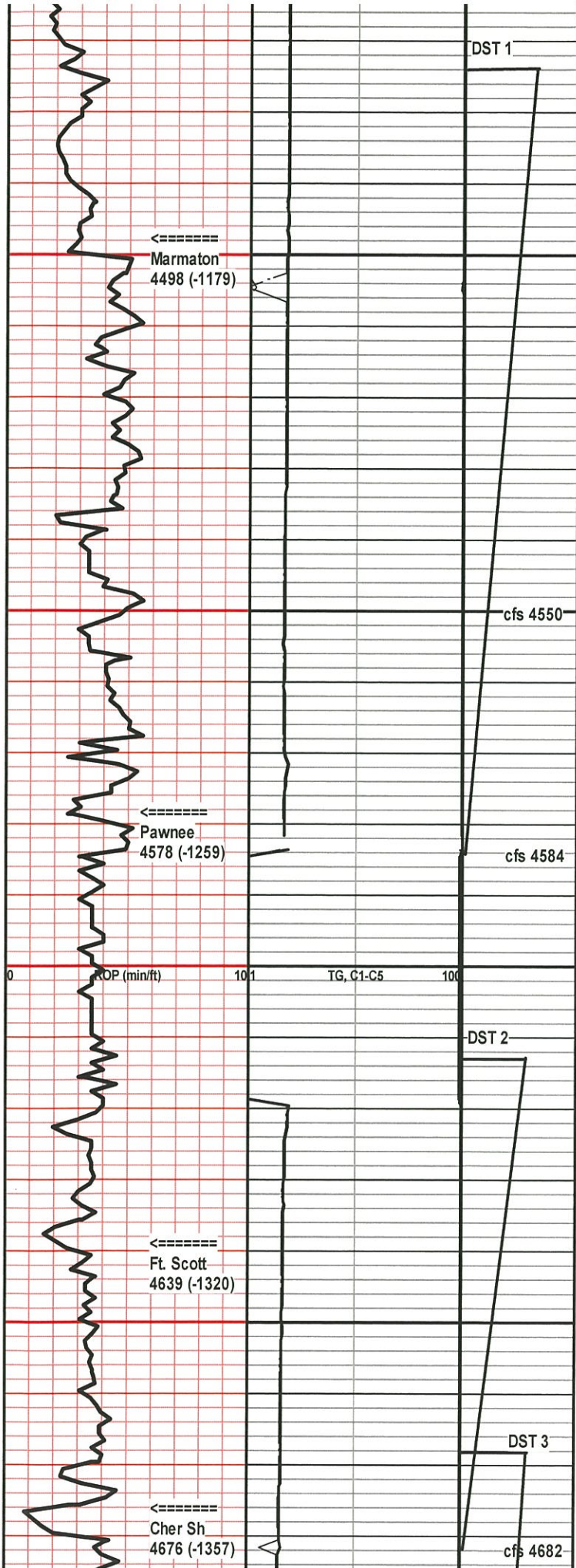
Sh., blk, carb

Ls., crm-lt gy, fnxln, mod hd, chlky ip, ool ip, nvp, ns

←----- BKC 4454 (-1135)

Sh., gy

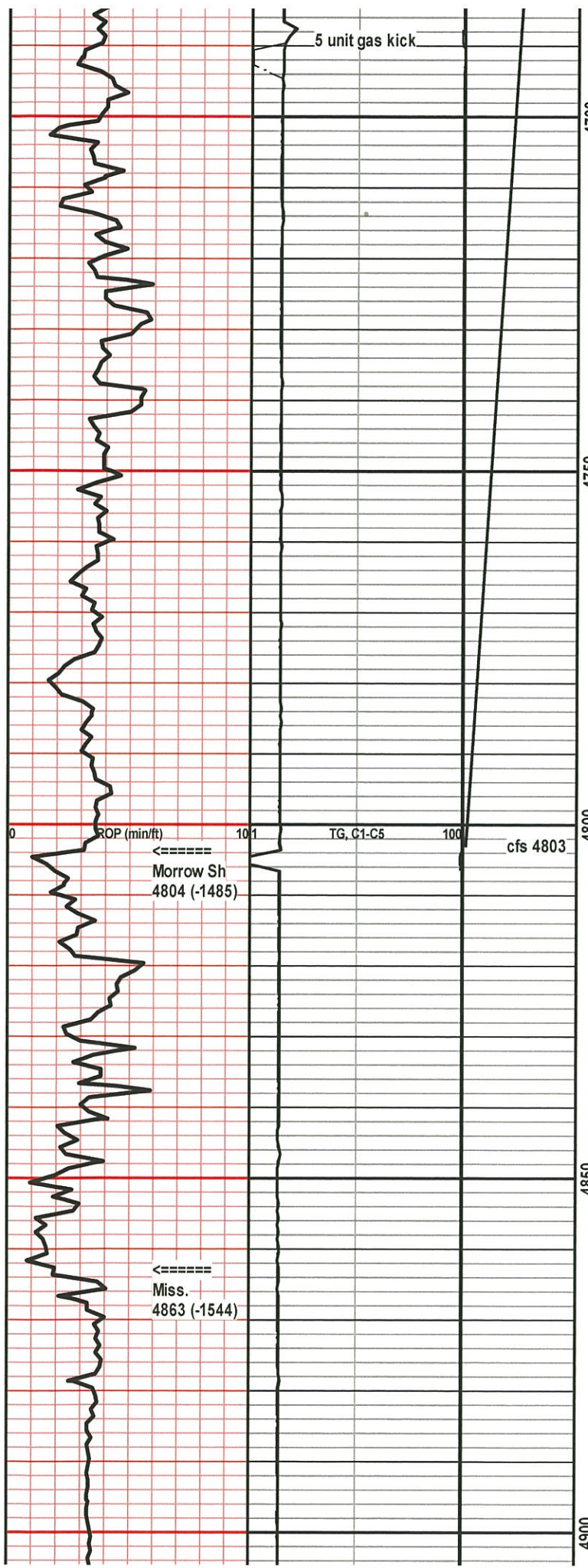




DST 1 4474-4584  
 30-30-30-30  
 IF: 1/4" blow, died in 20 min  
 IS: No blow  
 FF: No blow  
 FS: No blow  
 Recovery: 10' mud w oil spots  
 FP: 19-21; 20-20  
 SIP: 74-61  
 HP: 2305-2250

DST 2 4613-4682  
 30-30-30-30  
 IF: 1/2" blow, receded to surface  
 IS: No blow  
 FF: SB, died in 15 min  
 FS: No blow  
 Recovery: 10' Mud w oil spots  
 FP: 18-21; 22-22  
 SIP: 619-570  
 HP: 2362-2297





pcs w pr iso vug por, ns, no odr

5 unit gas kick

4700

Ls., crm-lt gy, fnxln, mod some sec xln, chlky ip, one pc w vy pr intrxn por, VSSFO, few beads clr oil, no vis stn, vy wk cup odr, Sh., gy-blk-brn

Ls., tn-lt gy, vfnxln, mod hd, ool ip, foss ip, nvp, ns, scatt Chrt., gy-blk, shp, scatt Sh., gy-dk gy

Ls., crm-tn, fnxln, mod hd, some sec xln, couple pcs w vy pr intrxn por, VSSFO, tr vy lt brn stn, no odr

Ls., crm-tn-lt gy, vfn-fnxln, mod hd, foss, nvp, ns, scatt Chrt., tn, spic

Ls., crm-lt gy, fnxln, mod hd, foss, some pr vug & foss cast por, few pcs sli chlky w VSSFO, vy rare blk spot stn, no odr

Ls., crm-tn, vnf-fnxln, mod hd, foss, nvp, ns, no odr, scatt Sh., gy

4750

4800

Sh., vari col, tr pyr, scatt Ls., crm-tn, vfnxln, mod hd, dns, nvp, ns, scatt SS., crm-gy, fn grn, pr sort, chlky abund glauc, nvp, ns

SS., crm-grn, fn grn, fr sort, chlky, abund glauc, nvp, ns, abund Sh., aa

SS., crm, fngrn, fr sort, vy chlky, nvp, abund pyr, ns, Sh., aa, scatt Ls., crm, fnxln, sli fri, sandy ip, nvp, ns

Ls., crm-lt grn, vfnxln, sli fri, sandy, chlky, nvp, ns

4850

Ls., crm-tn, vfnxln, mod hd, sandy ip, nvp, ns, abund Sh., gy-grn, probable slough

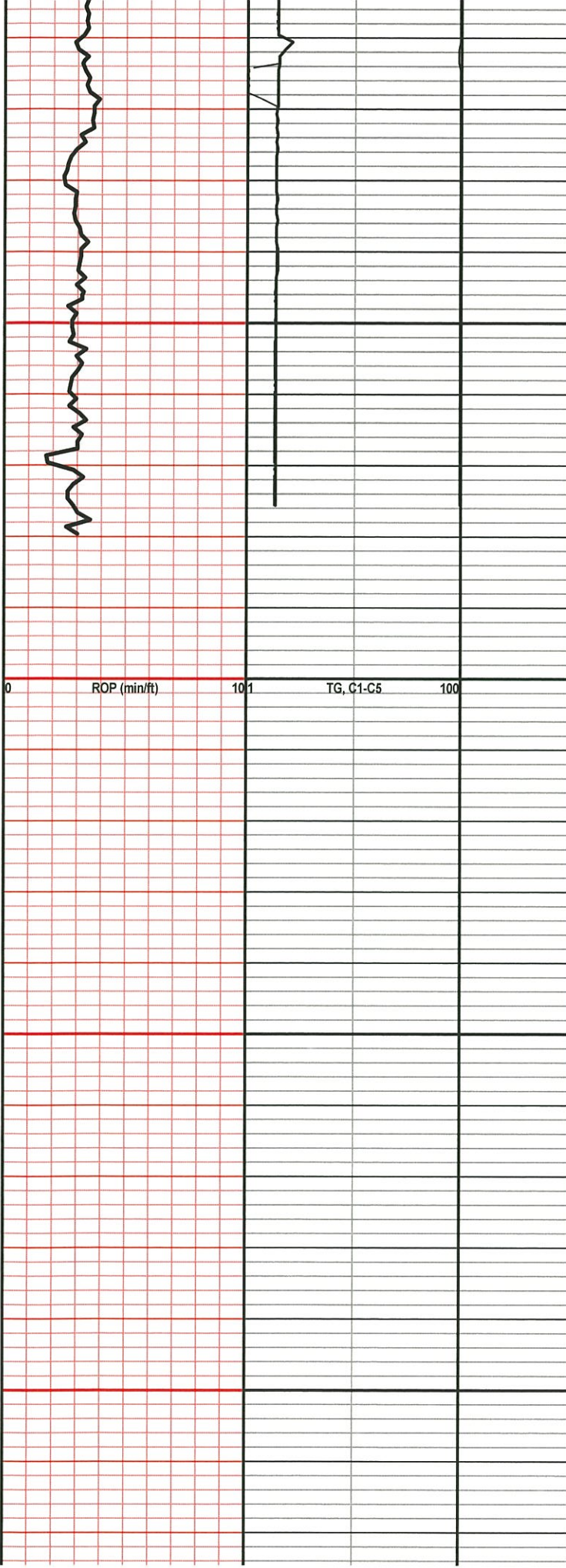
4900

DST #3 4668-4803  
 30-30-30-30  
 IF: Built to 1"  
 IS: No blow  
 FF: No blow  
 FS: No blow

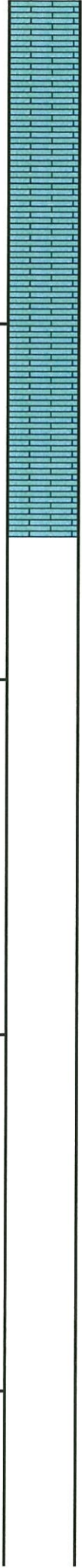
Recovery: 25' Mud w oil spots in tool

FP: 24-30; 32-35  
 SIP: 863-745  
 HP: 2365-2410





4950  
5000  
5050  
5100



Ls. & Sh., aa

Ls., crm, fn-vfnxn, sli fri, chlky ip, nvp, ns, scatt Sh., aa

Ls., aa, incr amt of Sh., aa

00

5150

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