



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: #1 Koehn 6-11  
 Well Id:  
 Location: Sec. 11-20S-34W (Scott Co)  
 License Number: 15-171-21200  
 Spud Date: 5/9/2017  
 Surface Coordinates: 1554' FNL & 1571' FEL  
 Region: KANSAS  
 Drilling Completed: 5/18/17

Bottom Hole  
 Coordinates:  
 Ground Elevation (ft): 3019      K.B. Elevation (ft): 3024  
 Logged Interval (ft): 3700      To: TD      Total Depth (ft): 4925  
 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: Geologist  
Address: 501 S. Franklin  
Ness City, KS 67560

### Misc. Info.

RIG: WW Drilling, Rig #2  
MUD: MUDCO  
LOGS: Haliburton  
TESTER: Trilobite Testing



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum, Inc.

11 20s 34w Scott, Ks

4924 SE 84th St.  
Newton Ks 67114

#1 Koehn 6-11

Job Ticket: 61360

DST#: 1

ATTN: Andrew Stenzel

Test Start: 2017.05.13 @ 23:05:00

### GENERAL INFORMATION:

Formation: LKC - H

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:19:30

Time Test Ended: 05:03:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: 4167.00 ft (KB) To 4208.00 ft (KB) (TVD)

Total Depth: 4208.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3924.00 ft (KB)

3919.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8845

Outside

Press@RunDepth: 28.90 psig @ 4168.00 ft (KB)

Start Date: 2017.05.13

End Date: 2017.05.14

Start Time: 23:05:05

End Time: 05:02:59

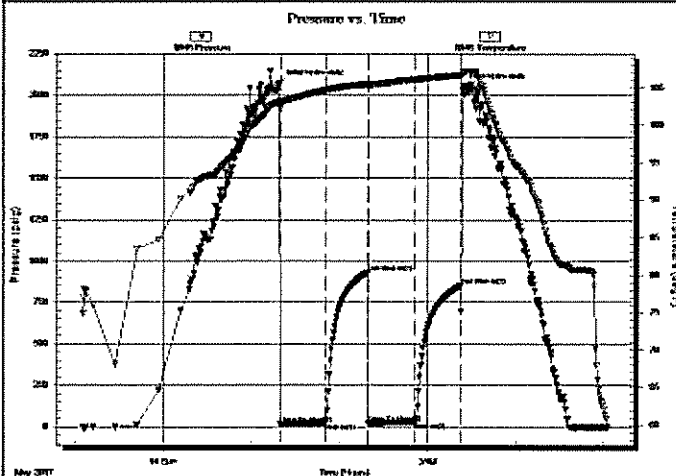
Capacity: 8000.00 psig

Last Calib.: 2017.05.14

Time On Btm: 2017.05.14 @ 01:19:15

Time Off Btm: 2017.05.14 @ 03:23:45

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



### PRESSURE SUMMARY

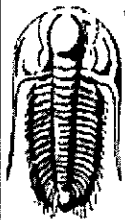
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2070.77	103.30	Initial Hydro-static
1	15.60	102.20	Open To Flow (1)
31	22.23	104.67	Shut-In(1)
60	931.99	105.48	End Shut-In(1)
60	23.59	104.99	Open To Flow (2)
92	28.90	106.07	Shut-In(2)
124	852.12	106.68	End Shut-In(2)
125	2052.37	106.99	Final Hydro-static

### Recovery

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

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Palomino Petroleum, Inc.  
4924 SE 84th St.  
Newton Ks 67114  
ATTN: Andrew Stenzel

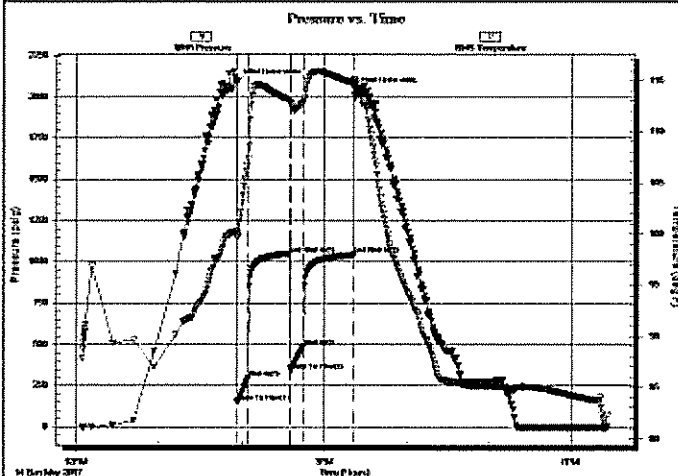
11 20s 34w Scott, Ks  
Koehn 6-11  
Job Ticket: 61361 DST#: 2  
Test Start: 2017.05.14 @ 12:05:00

**GENERAL INFORMATION:**

Formation: **LKC I**  
Deviated: **No Whipstock:** ft (KB)  
Time Tool Opened: **13:57:00**  
Time Test Ended: **18:27:00**  
Test Type: **Conventional Bottom Hole (Reset)**  
Tester: **Bradley Walter**  
Unit No: **78**  
Interval: **4201.00 ft (KB) To 4240.00 ft (KB) (TVD)**  
Reference Elevations: **3924.00 ft (KB)**  
Total Depth: **4240.00 ft (KB) (TVD)** **3919.00 ft (CF)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **5.00 ft**

Serial #: **8845** Outside  
Press@RunDepth: **486.93 psig @ 4202.00 ft (KB)** Capacity: **8000.00 psig**  
Start Date: **2017.05.14** End Date: **2017.05.14** Last Calib.: **2017.05.14**  
Start Time: **12:05:05** End Time: **18:26:59** Time On Btm: **2017.05.14 @ 13:56:30**  
Time Off Btm: **2017.05.14 @ 15:22:15**

TEST COMMENT: IF: BOB @ 45 sec.  
IS: No return.  
FF: BOB @ 75 sec.  
FS: No return.



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2090.36	100.14	Initial Hydro-static
1	150.59	99.64	Open To Flow (1)
9	295.41	107.27	Shut-In(1)
39	1049.94	113.06	End Shut-In(1)
40	341.12	112.83	Open To Flow (2)
49	486.93	112.95	Shut-In(2)
86	1044.52	114.69	End Shut-In(2)
86	2040.25	114.94	Final Hydro-static

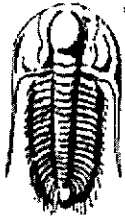
**Recovery**

Length (ft)	Description	Volume (bbl)
1010.00	mcw 5m 95w w/H2S <40ppm	13.07

\* Recovery from multiple tests

**Gas Rates**

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



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TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum, Inc.

11 20s 34w Scott, Ks

4924 SE 84th St.  
Newton Ks 67114

Koehn 6-11

Job Ticket: 61362

DST#: 3

ATTN: Andrew Stenzel

Test Start: 2017.05.15 @ 19:38:00

### GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:37:00

Time Test Ended: 02:42:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: 4410.00 ft (KB) To 4520.00 ft (KB) (TVD)

Total Depth: 4520.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3924.00 ft (KB)

3919.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8845

Outside

Press@RunDepth: 165.50 psig @ 4411.00 ft (KB)

Start Date: 2017.05.15

End Date: 2017.05.16

Start Time: 19:38:05

End Time: 02:42:14

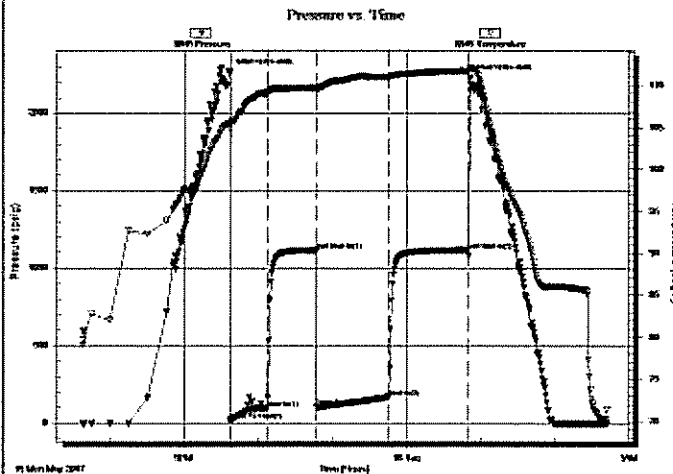
Capacity: 8000.00 psig

Last Calib.: 2017.05.16

Time On Btm: 2017.05.15 @ 21:36:45

Time Off Btm: 2017.05.16 @ 00:51:00

TEST COMMENT: IF: 7 1/2" blow.  
IS: No return.  
FF: BOB @ 50 min.  
FSI: No return.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2264.66	105.51	Initial Hydro-static
1	19.76	104.72	Open To Flow (1)
31	98.15	109.24	Shut-In(1)
70	1117.37	109.78	End Shut-In(1)
71	109.02	109.36	Open To Flow (2)
129	165.50	111.05	Shut-In(2)
193	1117.36	111.76	End Shut-In(2)
195	2229.66	112.15	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
285.00	w cm 40w 60m (of spots)	2.90

\* Recovery from multiple tests

### Gas Rates

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



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# DRILL STEM TEST REPORT

Palomino Petroleum, Inc.

11 20s 34w Scott, Ks

4924 SE 84th St.  
Newton Ks 67114

Koehn 6-11

Job Ticket: 61363

DST#: 4

ATTN: Andrew Stenzel

Test Start: 2017.05.16 @ 12:45:00

## GENERAL INFORMATION:

Formation: **Pawnee, Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:20:15

Time Test Ended: 19:46:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: 4514.00 ft (KB) To 4585.00 ft (KB) (TVD)

Total Depth: 4585.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3924.00 ft (KB)

3919.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8845

Outside

Press@RunDepth: 459.56 psig @ 4515.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.05.16

End Date: 2017.05.16

Last Calib.: 2017.05.16

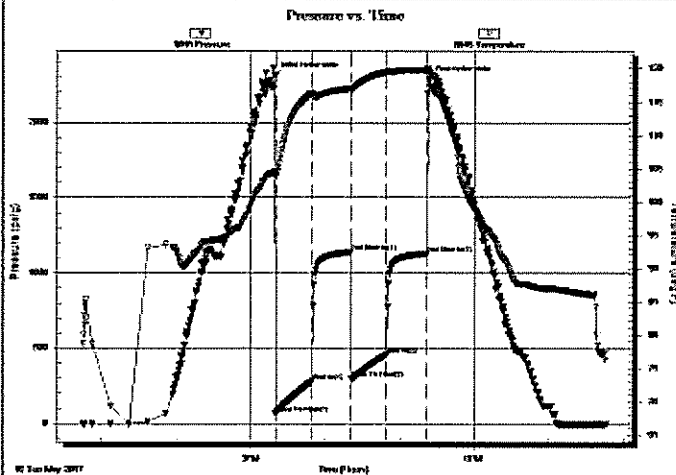
Start Time: 12:45:05

End Time: 19:46:44

Time On Btm: 2017.05.16 @ 15:20:00

Time Off Btm: 2017.05.16 @ 17:23:15

TEST COMMENT: IF: BOB @ 4 min.  
IS: 1/4" return.  
FF: BOB @ 4.5 min.  
FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2311.53	104.50	Initial Hydro-static
1	66.32	103.66	Open To Flow (1)
30	280.74	116.34	Shut-In(1)
61	1139.83	117.02	End Shut-In(1)
61	300.79	116.56	Open To Flow (2)
90	459.56	119.49	Shut-In(2)
122	1129.81	119.73	End Shut-In(2)
124	2288.68	119.42	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
975.00	mcw 3m 97w (oil spots)	12.58

\* Recovery from multiple tests

## Gas Rates

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

### Formation Tops

Sample Tops		LogTops	
Anhy.	2231 (+793)	Anhy.	2155 (+869)
Base Anhy.	2247 (+777)	Base Anhy.	2242 (+782)
Heebner	3919 (-895)	Heebner	3915 (-891)
Lansing	3963 (-939)	Lansing	3958 (-934)
Stark Sh	4284 (-1260)	Stark Sh	4280 (-1256)
BKC	4413 (-1389)	BKC	4412 (-1388)
Marmaton	4487 (-1463)	Marmaton	4439 (-1415)
Pawnee	4518 (-1484)	Pawnee	4514 (-1490)
Ft. Scott	4549 (-1525)	Ft. Scott	4542 (-1518)
Cher. Sh.	4560 (-1536)	Cher. Sh.	4554 (-1530)
Morrow Sh	4736 (-1712)	Morrow Sh	4734 (-1710)
Miss.	4816 (-1792)	Miss.	4818 (-1794)
RTD	4925 (-1901)	LTD	4920 (-1896)

### Drilling Report


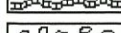
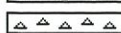
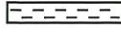

5/9/17 MIRU, Ran surface casing  
 5/10/17 Drilling @ 548'  
 5/11/17 Drilling @ 2475'  
 5/12/17 Drilling @ 3285'  
 5/13/17 Drilling @ 4012', DST #1  
 5/14/17 Circulating to condition hole @ 4208', DST #2  
 5/15/17 Drilling @ 4428', DST #3  
 5/16/17 Drilling @ 4545', DST #4  
 5/17/17 Drilling @ 4686'  
 5/18/17 Ran electric logs, Plugged & Abandoned


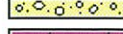




### Comments


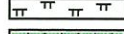
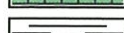
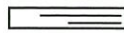


**SURFACE Casing:** Ran 5 jts new 8 5/8", 23# casing @ 218'  
**PRODUCTION Casing:** None


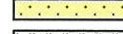
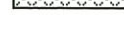
### ROCK TYPES

#### LITHOLOGY


 Anhy  
 Bent  
 Brec  
 Cht  
 Clyst

 Carb sh  
 Congl  
 Dol  
 Gyp  
 Igne  
 Lmst

 Meta  
 Mrlst  
 Salt  
 Shale  
 Shcol  
 Shgy

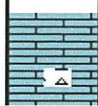
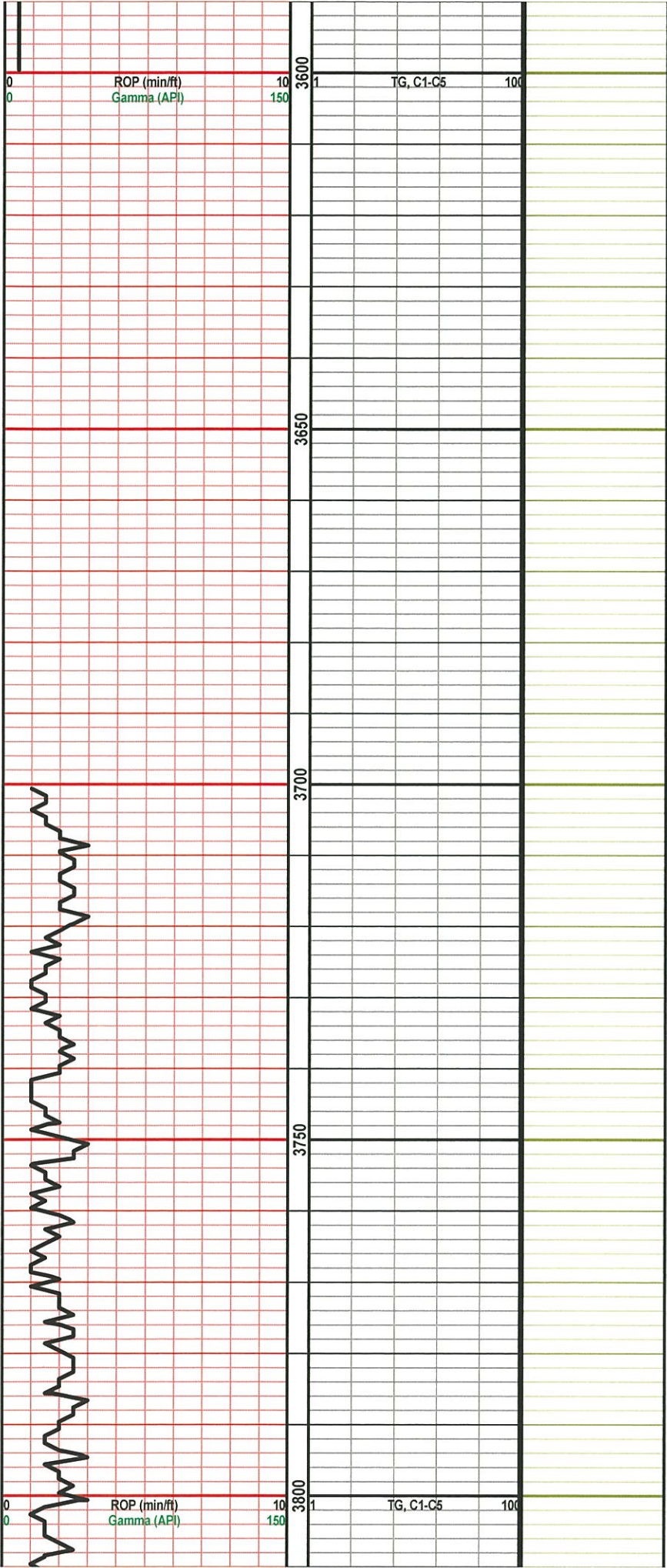
 Slstt  
 Ss  
 Till

 Fair  
 Slight  
 Very slight

**OIL SHOW**  
 Good

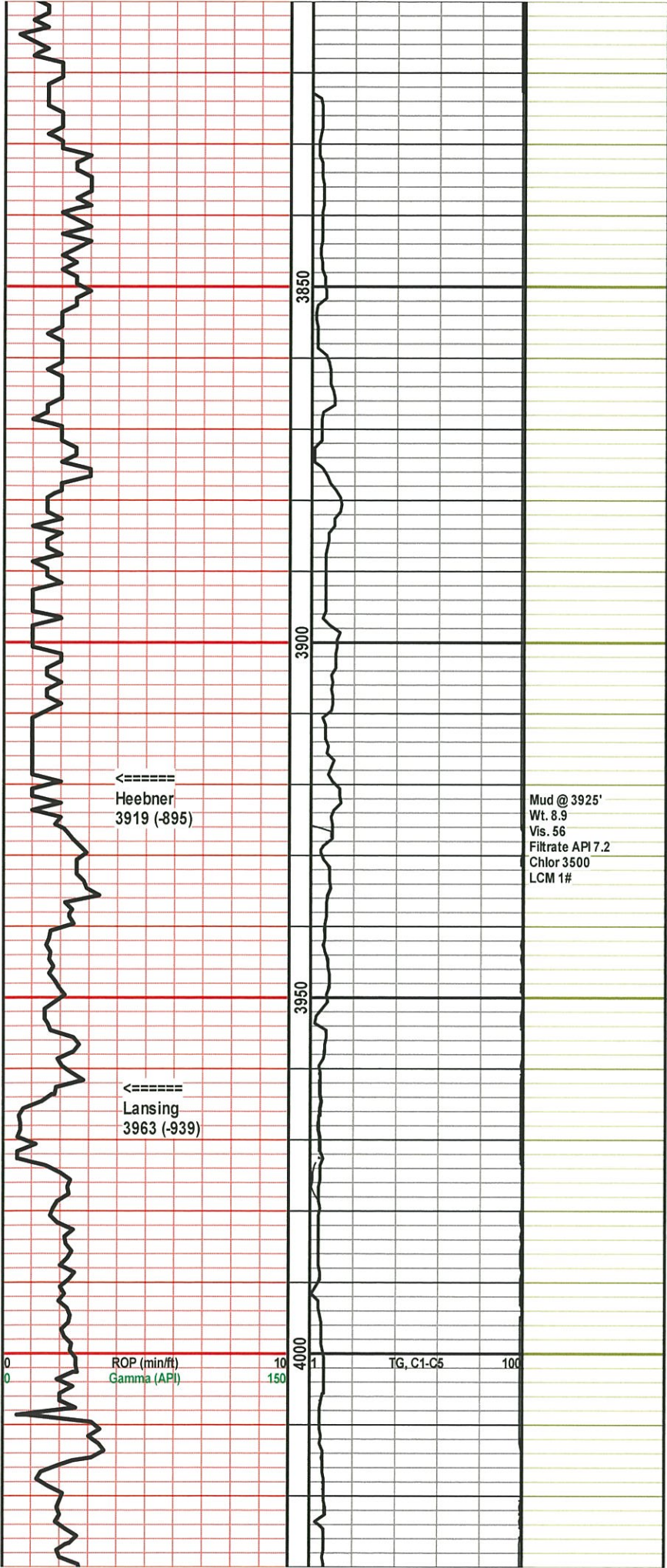






Ls., crm-tn, fnxln, mod hd, chlky ip,





foss, nvp, scatt chrt, crm-opq gy, sli weath, ns

Ls., aa, scatt Sh., gy-brn, silty ip, ns

Ls., tn-lt gy, fnxln, mod hd, sli micr, foss ip, few pcs w vy pr intrxn por, ns, no odr, Sh., aa

Ls., crm-lt gy, fnxln, mod hd/sli fri ip, chlky ip, foss, some sec xln w fr dev calc xls, few pcs w pr intrxn por, ns, no odr

Ls., tn-lt gy-mtld brn ip, fnxln, sli fri, ool ip, sli chlky, foss, pr nvp, ns, scatt Sh., gy-brn

Sh., blk, carb

Ls., tn, fnxln, sli fri, ool ip, chlky, nvp, ns, abund Sh., gy, soft

Ls., crm, fnxln, fri, chlky, some w pr intrxn por, scatt Chrt, crm-tn, shp, ns, no odr, Sh., aa

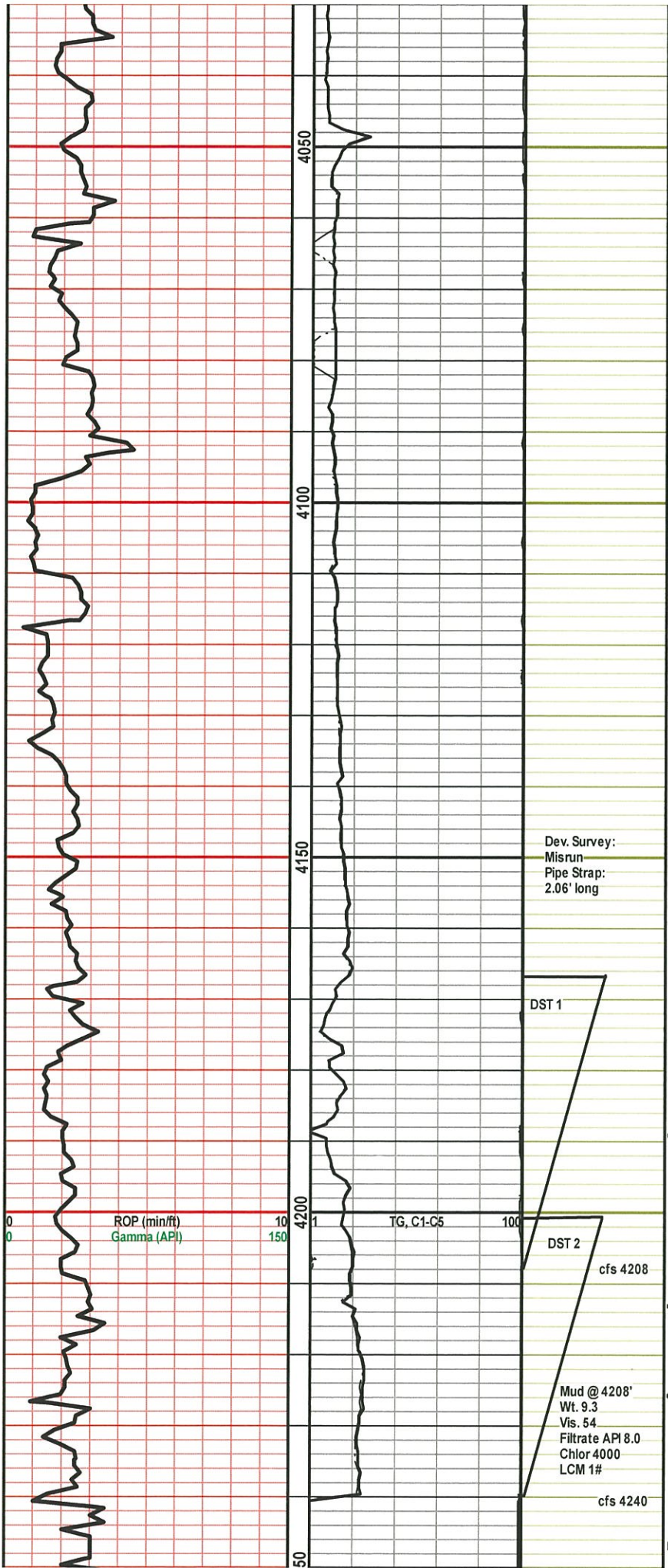
Ls., tn, fnxln, mod hd, ool, pr ooc por ns, no odr

Ls., crm-lt gy, fnxln, mod hd, brittle, tr sec xln, scatt Chrt, crm, shp, nvp, ns, scatt Sh., brn-gy

Sh., gy-brn,

Ls., tn, vfn-fnxln, mod hd, dns, ool ip, nvp, ns, no odr





Ls., aa, Sh., lt gy-brn

Ls., crm-tn, vfnxn, mod hd, brittle, chky ip, nvp, ns

Ls., aa, ns, scatt Sh., brn-gy

Ls., tn, fnxln, mod hd, ool, dk gy ooids, tr sec xln, few pcs w vy pr intrxn por, ns, no odr, Sh., aa

Ls., crm, vfnxn, hd, dns, nvp, ns, no odr, scatt Chrt, crm, shp

Ls., crm, fnxln, sli fri, ool, some w pr introol & occ fr ooc por, ns, no odr

Ls., aa, abund Sh., gy-rd-brn

Ls., crm, fn-vfnxn, mod hd, chky ip, couple pcs w pr iso vug por, ns, no odr

Sh., blk, carb

Ls., crm-lt gy, fnxln, mod hd-sli fri, chky ip, ool ip, scatt pcs w fr intrxn & introol por, FSFO, lt brn spot stn in por, strng odr, Sh., brn-gy

Sh., gy-brn-blk, carb in

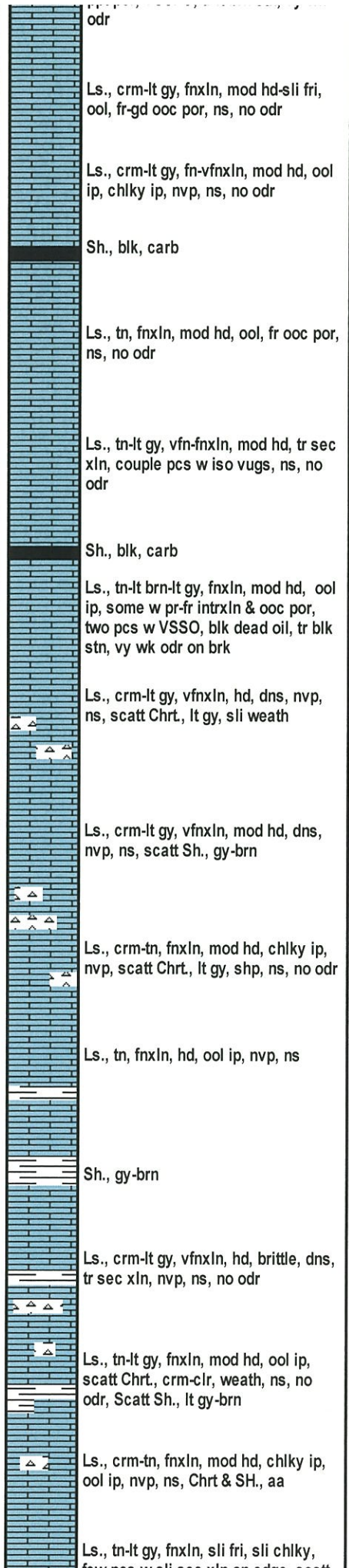
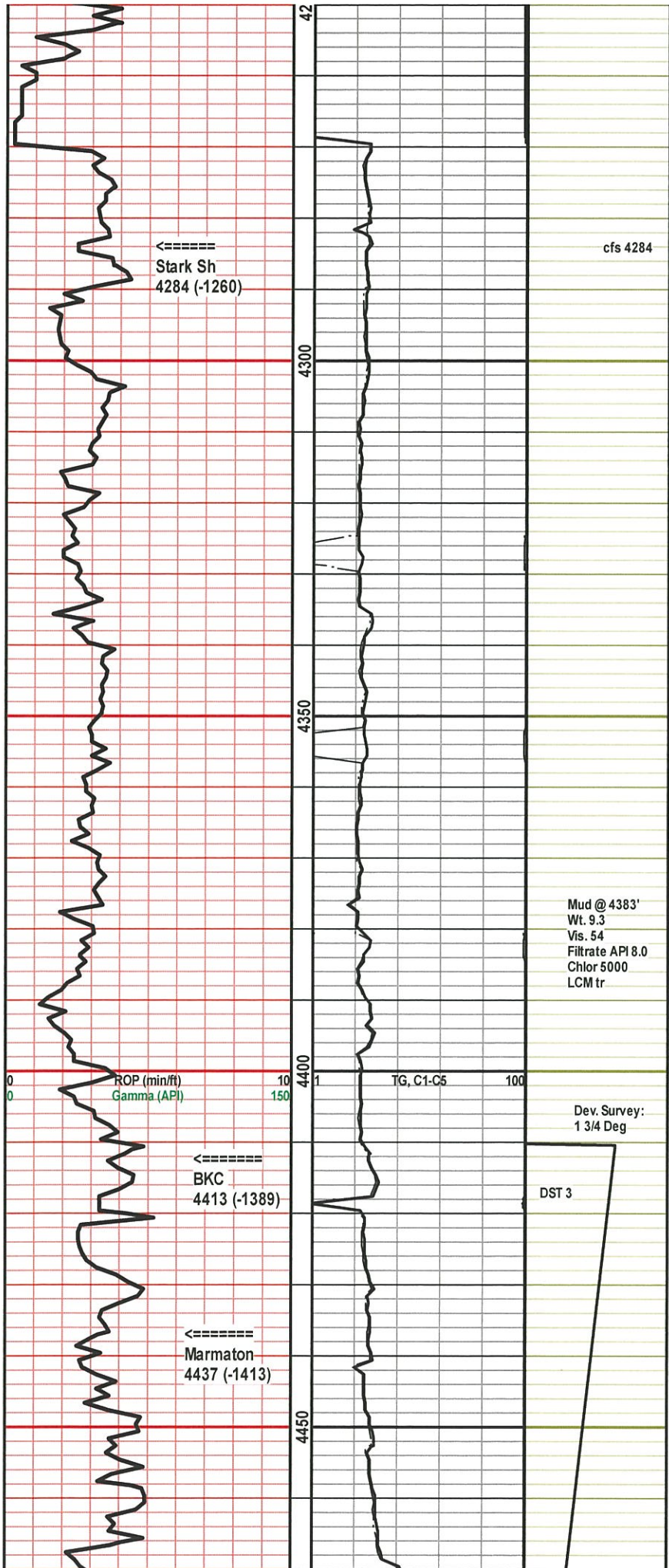
Ls., crm, fnxln, sli fri-mod hd ip, ool ip, some sec xln w fr dev xls, fr intrxn, introol & small vug por, FSFO, abund spot stn, fr odr

Ls., crm, fnxn, mod hd-sli fri ip, ool ip, fr-gd introol & small vug por, GSFO, lt brn spot-sub sat stn, gd odr, scatt Sh., gy-brn

Sh., gy-brn, Ls., crm-tn, vfn-fnxln, mod hd, foss ip, dns, nvp, ns

Ls., crm-lt gy-gy, fnxln, mod hd-hd, ool, vy few pcs w vy pr iso intrxn & oot por. VSSFO. tr lt brn stn. vv wk





Mud @ 4383'  
 Wt. 9.3  
 Vis. 54  
 Filtrate API 8.0  
 Chlor 5000  
 LCM tr

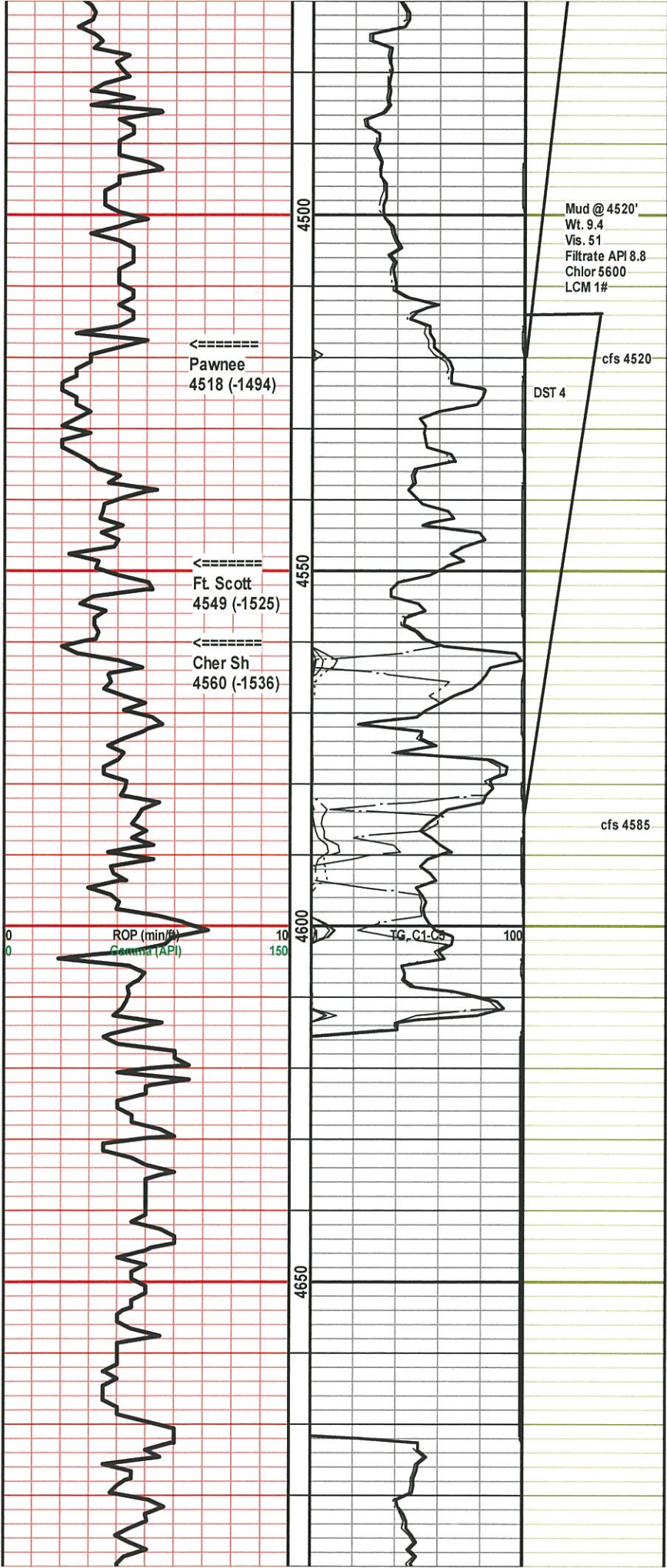
Dev. Survey:  
 1 3/4 Deg

DST 3

ROP (min/ft) 0 10 150  
 Gamma (API) 0 100

TG, C1-C5





few pcs w sh sec Am on edge, scatt  
 pcs w pr intrxn & ppt por, SSFO,  
 abund brn stn, some edge stn, wk  
 cup odr

Ls., crm-tn, fnxln, mod hd-hd, foss,  
 nvp, ns, abund Sh., gy-brn

Ls., gy-crm, fnxln, mod hd, shly ip,  
 few pcs w pr intrxn por, SSFO, rare  
 lt brn stn, vy wk odr on brk, abund  
 Sh., gy

Sh., blk, carb

Ls., crm, fnxln, sli fri, ool, chlky ip, scatt pcs w  
 fr introol & vug por, couple pcs w gd por, FSFO,  
 brn spot-sub sat stn, fr odr, Sh., gy-brn

Ls., tn-lt gy, fn-vfnxn, mod hd, couple pcs w pr  
 ppt & small vug por, SSFO, num gas bub on  
 brk, wk odr, scatt Chrt., lt gy, shp

Sh., blk, carb

Ls., crm-lt gy, fnxln, mod hd, ool ip, some w pr  
 introol, intrxn & ppt por, SSFO, lt brn spot stn,  
 fr odr, some gas bub on brk

Sh., blk, carb

Ls., crm-lt gy, fnxln, hd, ool ip, foss, most w  
 nvp, few pcs w pr intrxn & introol por, VSSFO,  
 rare lt brn stn, wk odr

Ls., crm-tn, fn-vfnxn, mod hd, brittle,  
 chlky ip, nvp, ns, no odr, abund Sh.,  
 gy-brn

Sh., gy-blk, carb ip, Ls., crm,  
 fn-vfnxn, hd, chlky ip, foss, nvp, ns,  
 no odr

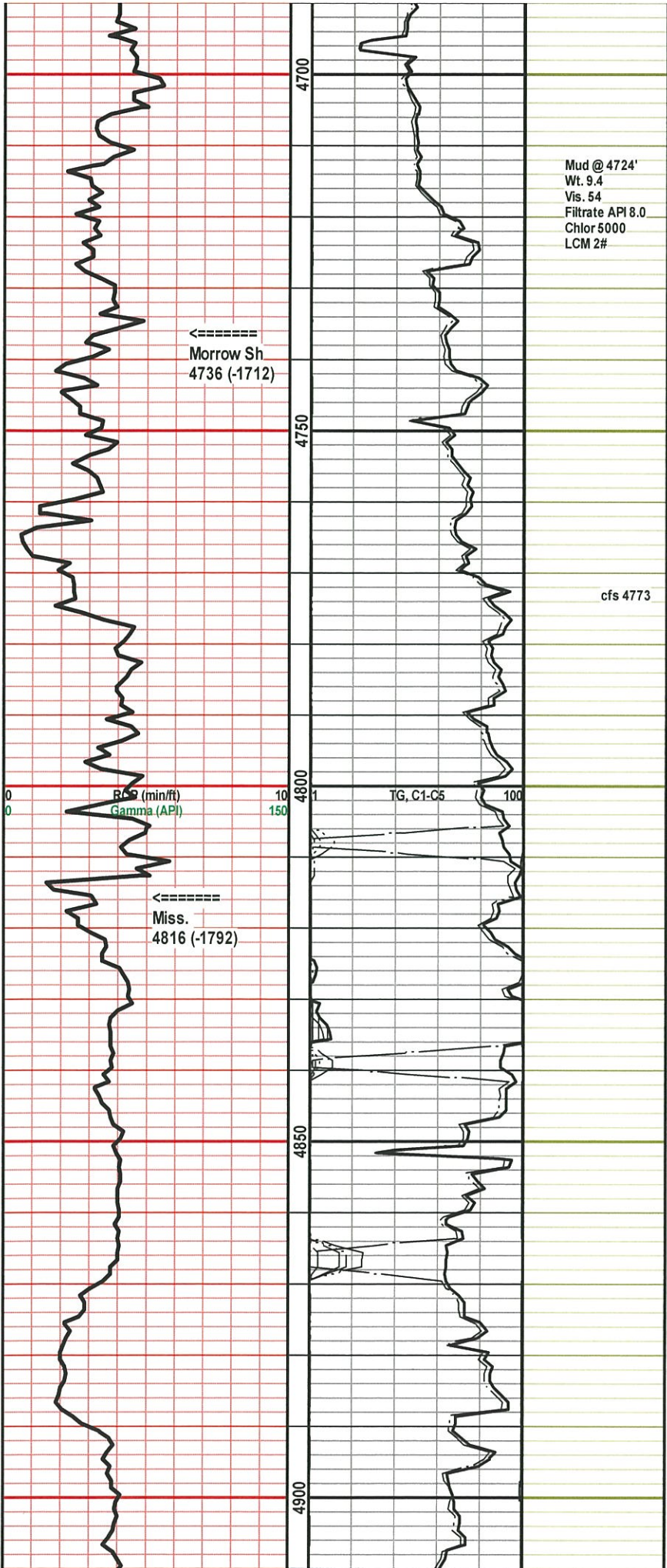
Ls., tn, fnxln, hd, micr ip, foss, nvp,  
 ns, no odr

Ls., crm-tn, vfnxn, hd, dns, nvp, ns,  
 scatt Sh., gy-dk gy

Ls., tn-lt gy, fnxln, mod hd-hd, sli  
 chlky, nvp, ns, scatt Sh., aa, scatt  
 Chrt., tn-brn, spic, weath

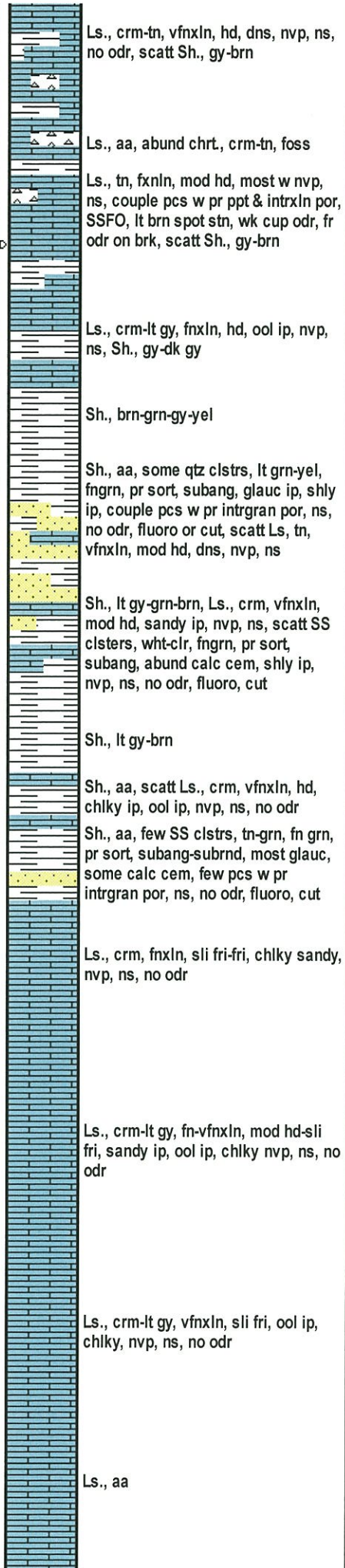
Ls., tn, fnxln, hd, dns, foss ip, nvp,  
 ns, no odr, chrt., aa

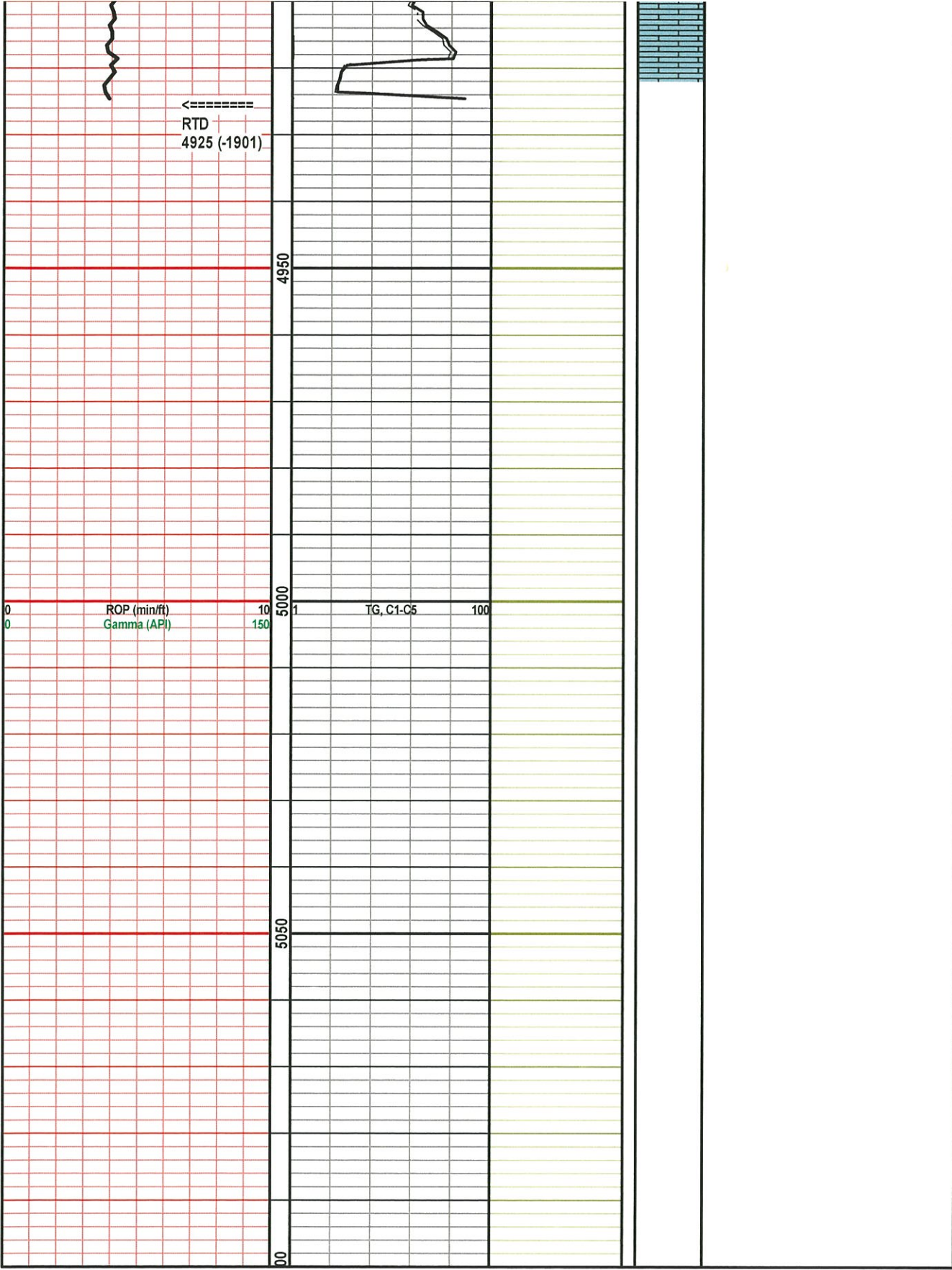




Mud @ 4724'  
 Wt. 9.4  
 Vis. 54  
 Filtrate API 8.0  
 Chlor 5000  
 LCM 2#

cfs 4773





←-----  
RTD  
4925 (-1901)

4950

5000

5050

00

0  
0

ROP (min/ft)  
Gamma (API)

10  
150

1

TG, C1-C5

100

