

# Woolsey Operating Company, LLC

Scale 1:600 (2"=100') Metric  
Measured Depth Log

Well Name: Ricke-Baier #1 H  
Location: Section 31 - Township 33 South - Range 13 West  
License Number: 15-007-23966-01-00 Region: Barber County, KS  
Spud Date: November 13, 2012 Drilling Completed:  
Surface Coordinates: Approx. NW SW SE SE  
450' FSL and 995' FEL  
Bottom Hole Coordinates:  
Ground Elevation (m): 1879' K.B. Elevation (m): 1886'  
Logged Interval (m): 4200' To: Total Depth (m):  
Formation: Oread ----- Woodford  
Type of Drilling Fluid: Chemical Mud, Brine Solution, Flozan  
Printed by HORIZONTAL.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

## OPERATOR

Company: Woolsey Operating Company, LLC  
Address: 125 N. Market Suite 1000  
Wichita, Kansas 67202

## GEOLOGIST

Name: Bill Klaver  
Company: Woolsey Operating Company, LLC  
Address: 125 N. Market Suite 1000  
Wichita, Kansas 67202

### Drilling Info

Gas Detector: Woolsey Operating Co. Gas Trailer #2

Mud System: Mud Co., Brad Bortz, Engineer

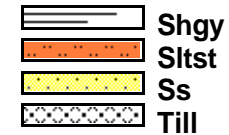
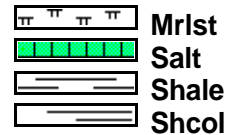
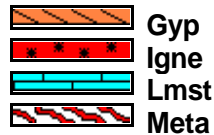
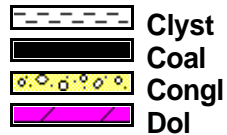
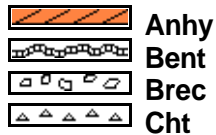
Dan D Drilling Bit Record: 1) 17 1/2" STC RR to 320', 2) 12 1/2" STC RR to 954', 3) 8 3/4" RTC F-1100 PDC out at 4340', 4) 8 3/4" RTC R-24 DPOH out at 5503', 5) 8 3/4" R-24 DPOH out at 5760', 6) 6 1/8" RTC MSH 5162' out at

### Comments

Tool Pusher: Steve Ellington, Relief Pusher: Sammy Fry

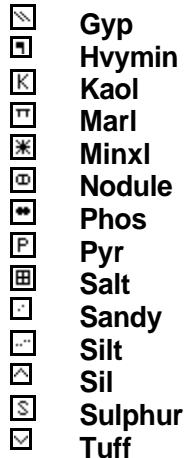
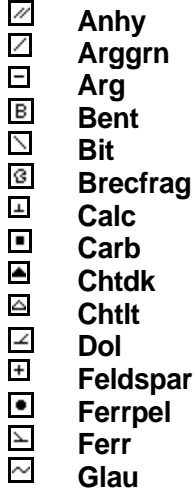
Drillers: (7 day-12 hour tours) Johnny Stone, David Herring, Jeffery Meyers, Terry Stark

### ROCK TYPES

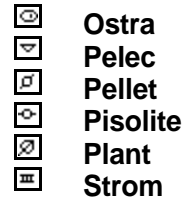
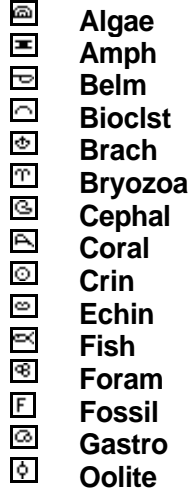


### ACCESSORIES

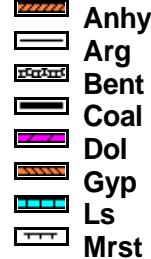
#### MINERAL



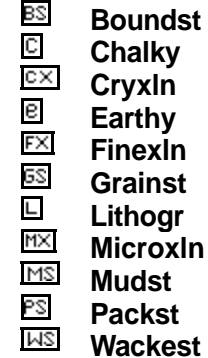
#### FOSSIL



#### STRINGER



#### TEXTURE



**OTHER SYMBOLS**

**POROSITY**

- E Earthy
- F Fenest
- F Fracture
- X Inter
- M Moldic
- O Organic
- P Pinpoint

V Vuggy

**SORTING**

- W Well
- M Moderate
- P Poor

**ROUNDING**

- R Rounded
- S Subrnd
- A Subang
- A Angular

**OIL SHOW**

- E Even

S Spotted

- Q Ques
- D Dead

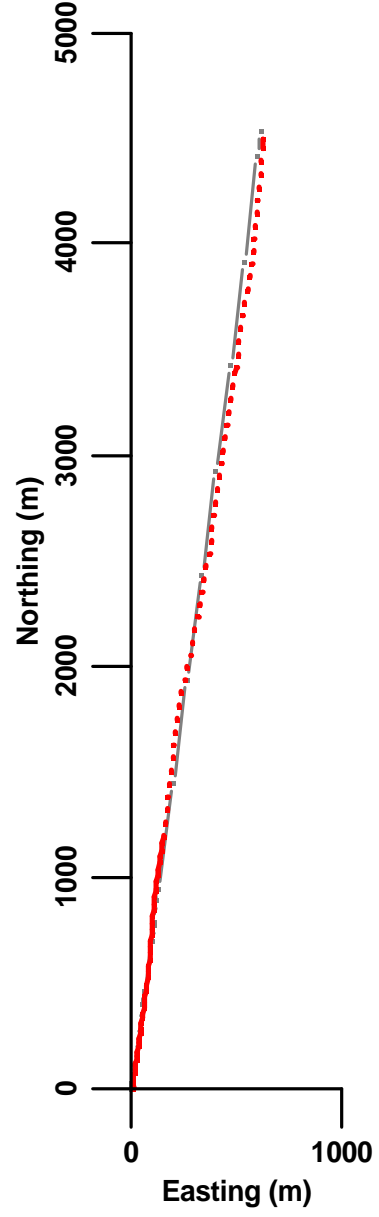
**INTERVAL**

- C Core
- D Dst

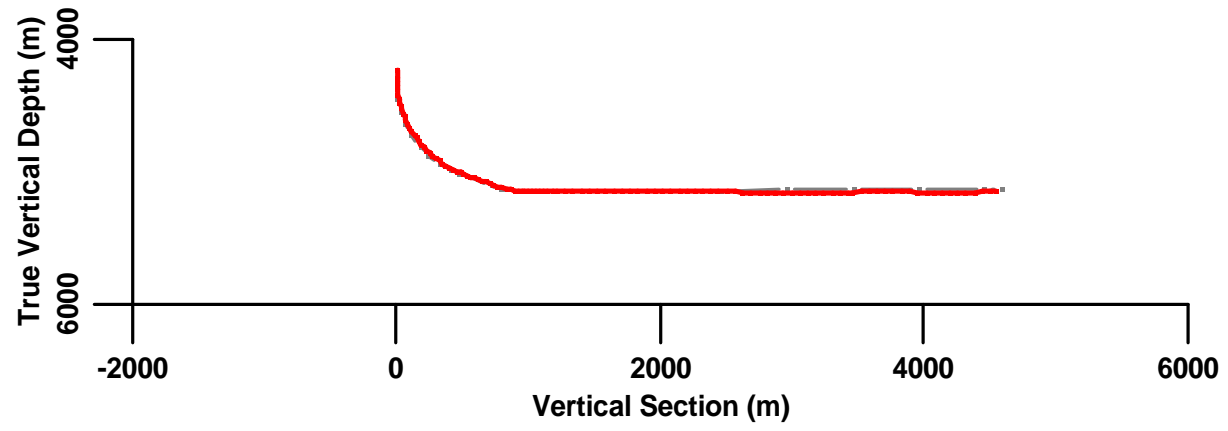
**EVENT**

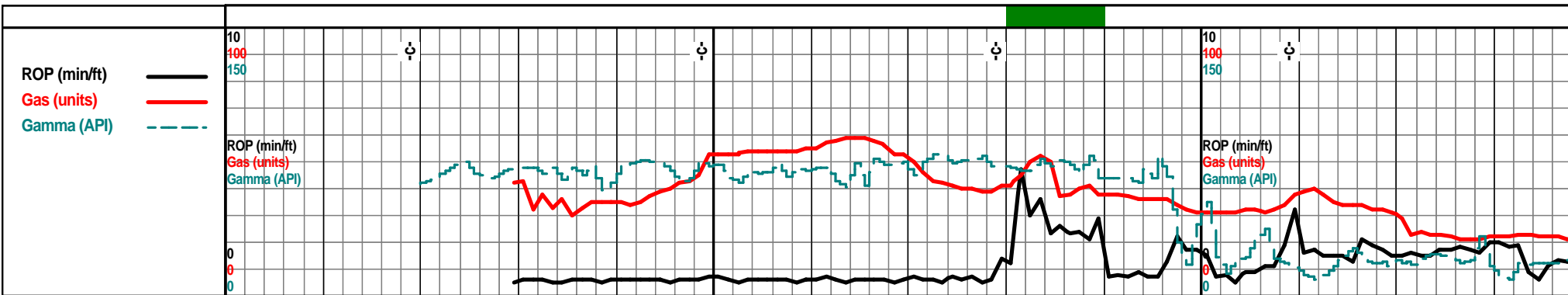
- R Rft
- S Sidewall

# Plan



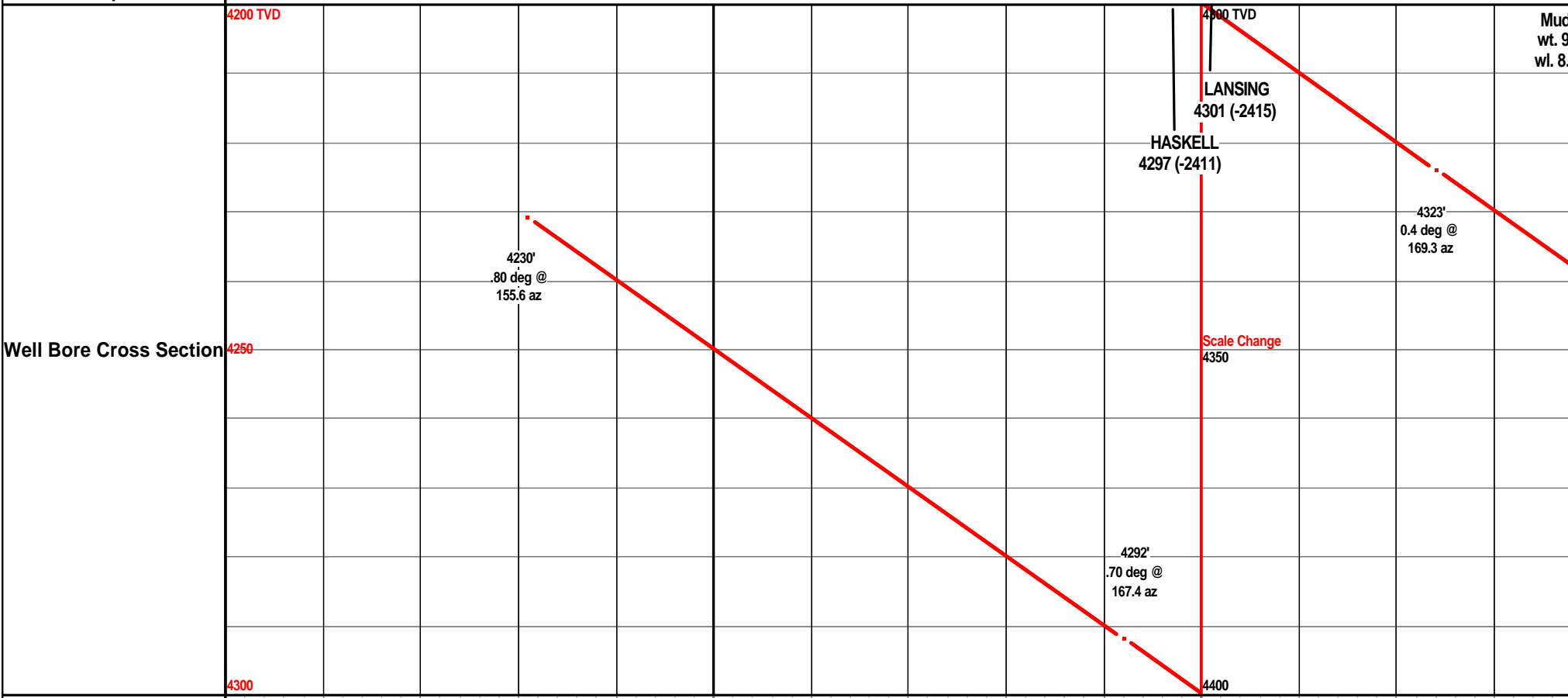
# Elevation





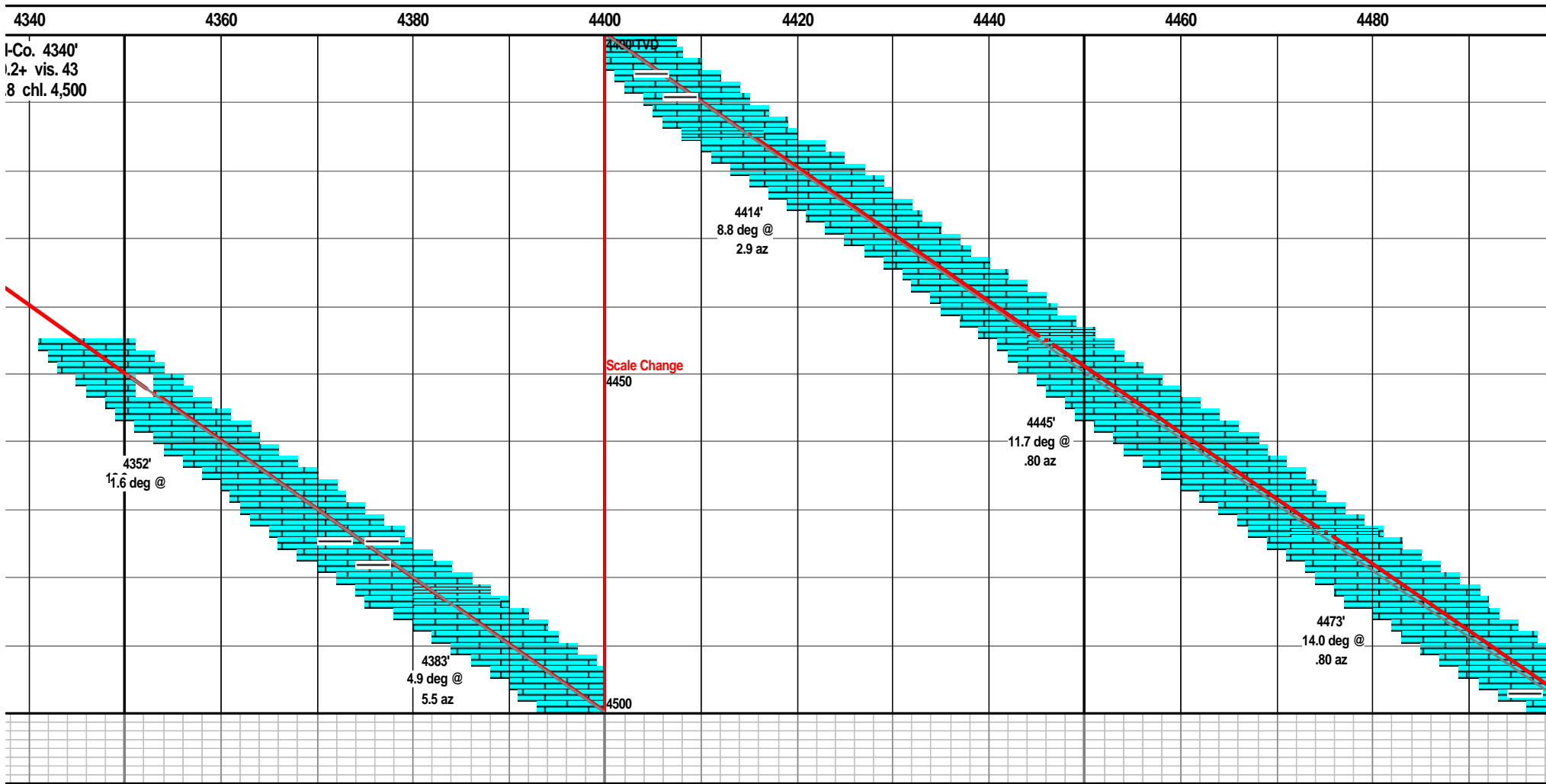
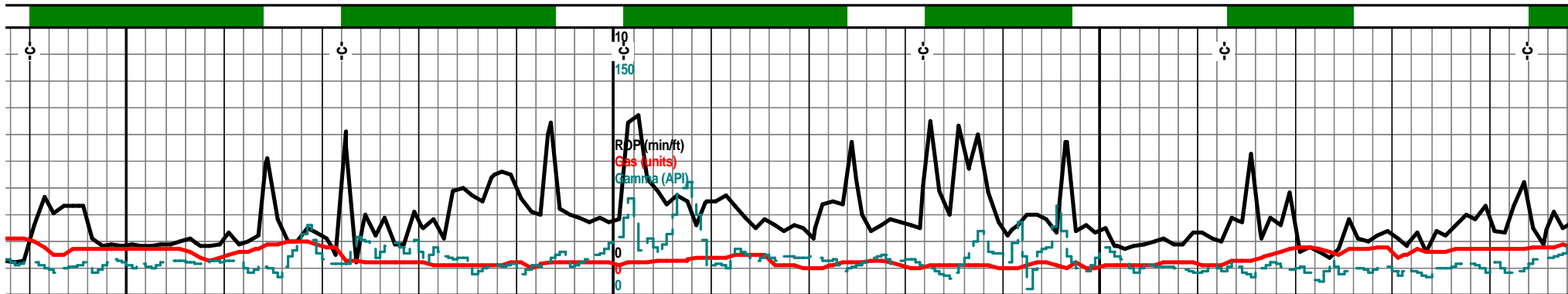
**Oil Shows**

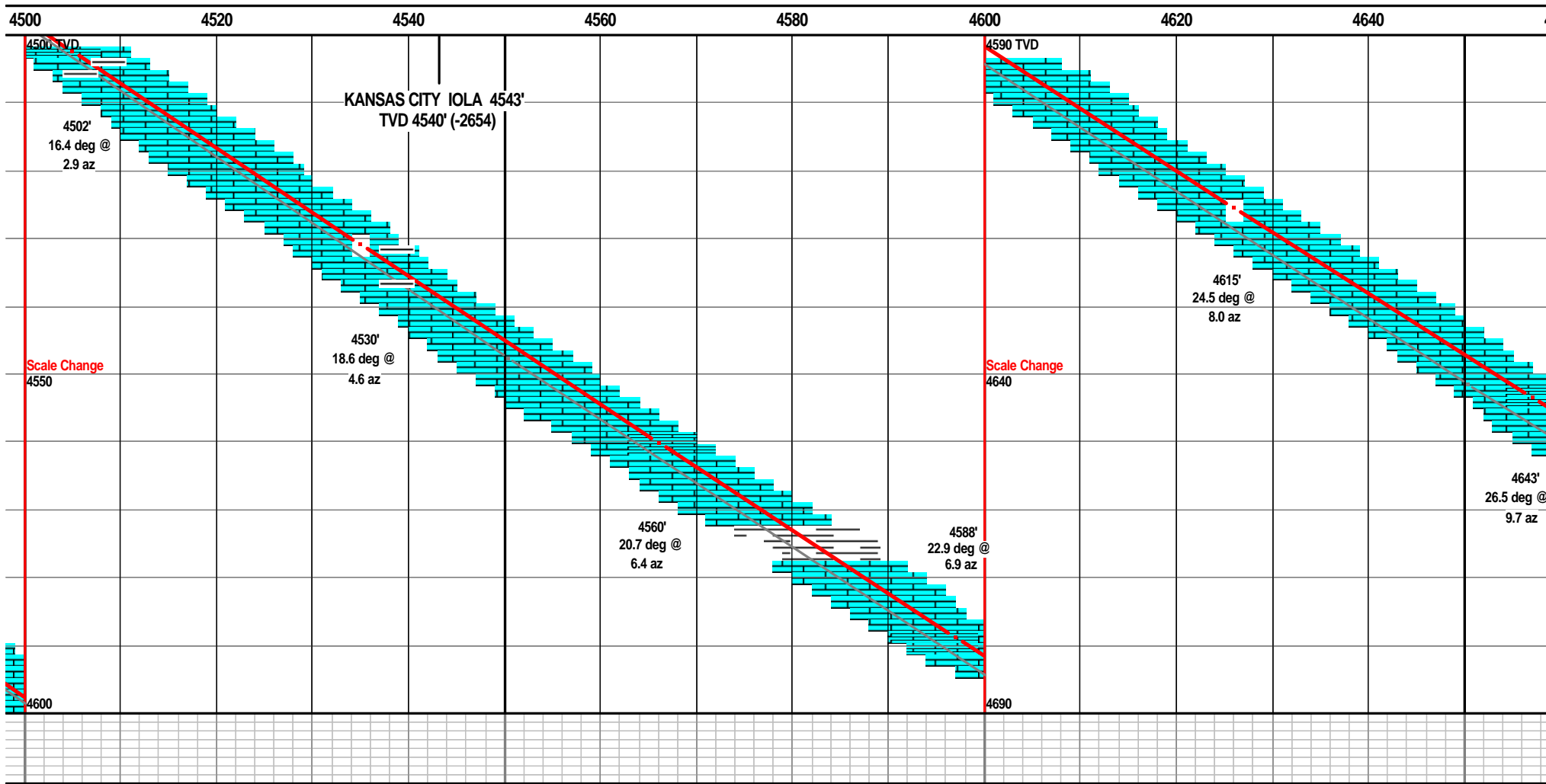
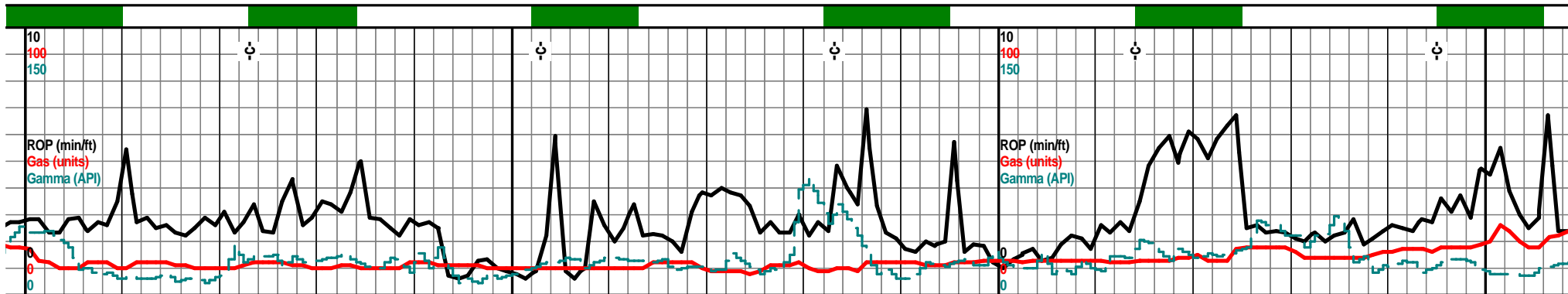
**Depth** 00 4220 4240 4260 4280 4300 4320



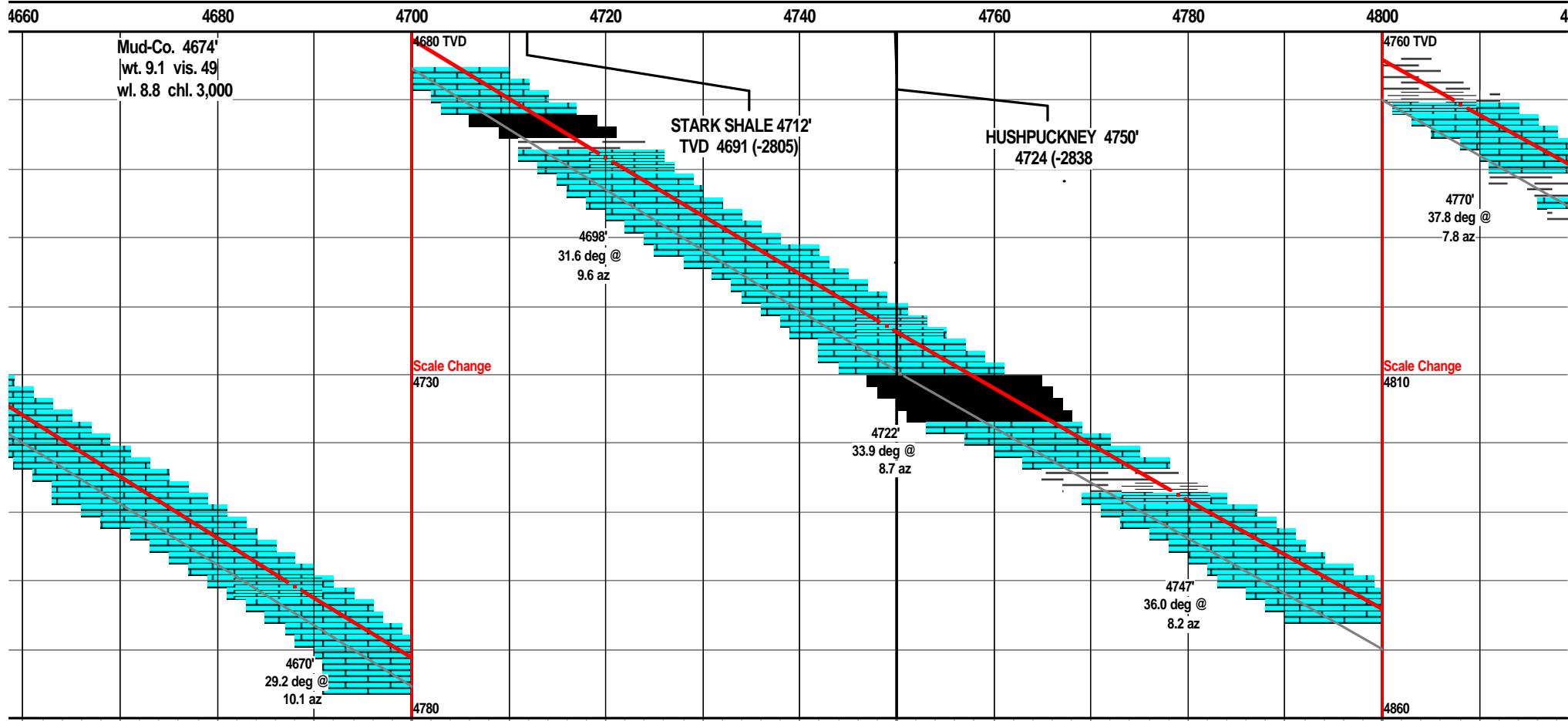
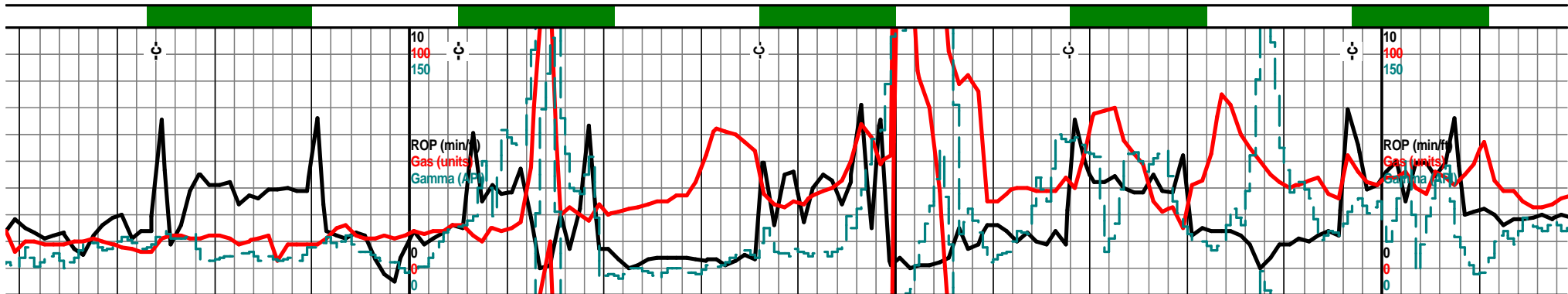
<b>Porosity</b>	24%
	18%
	12%
	6%
<b>Porosity Type</b>	

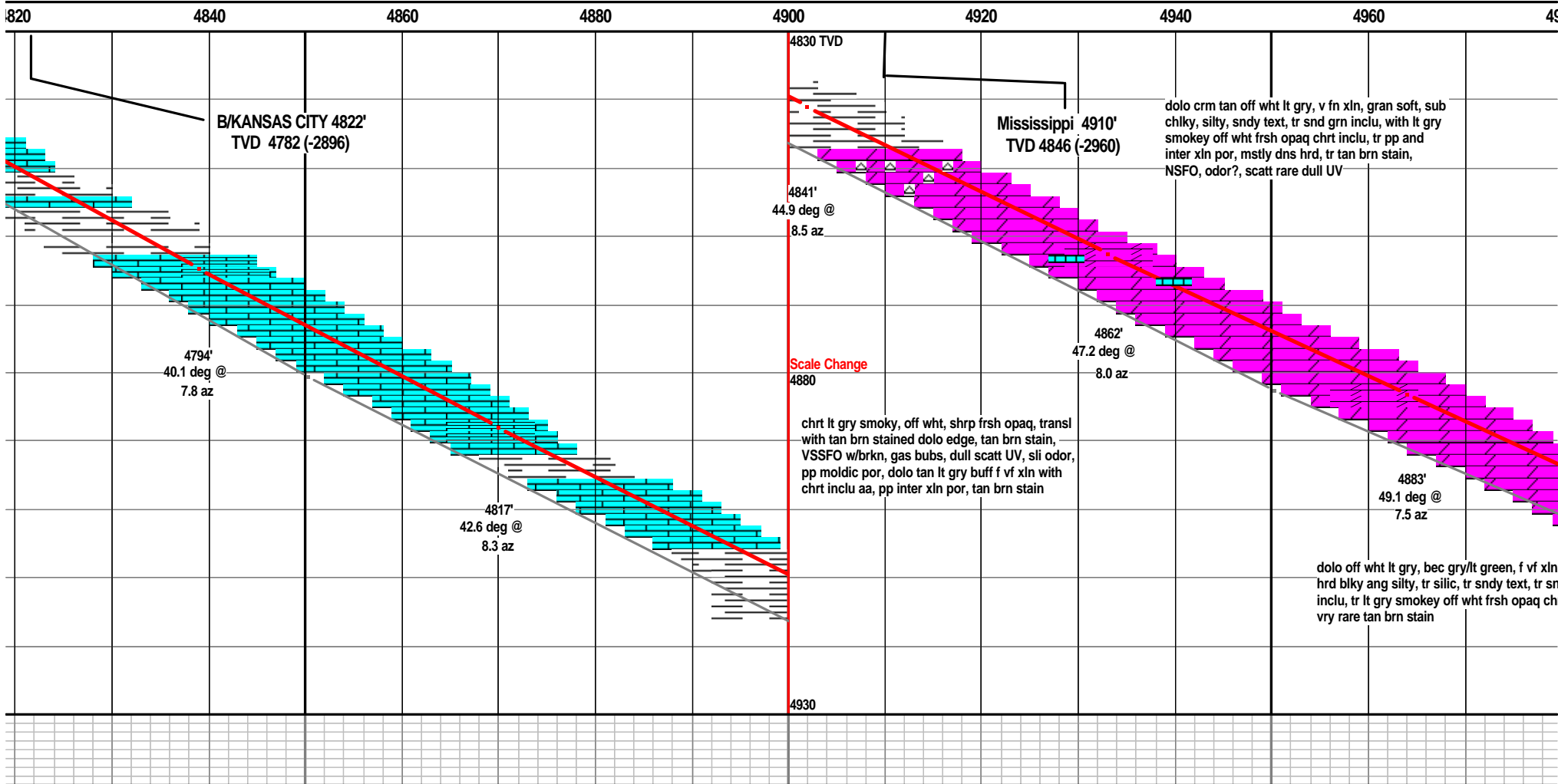
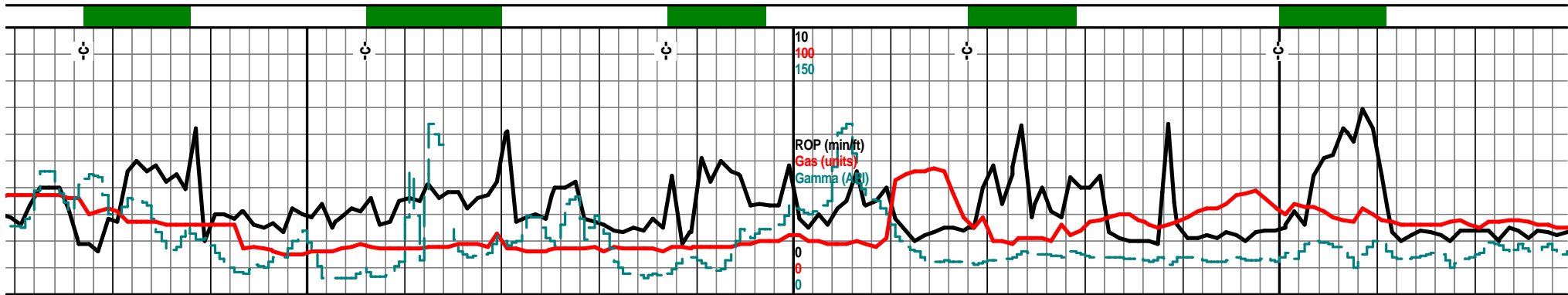
Mud wt. 9 w/ 8.

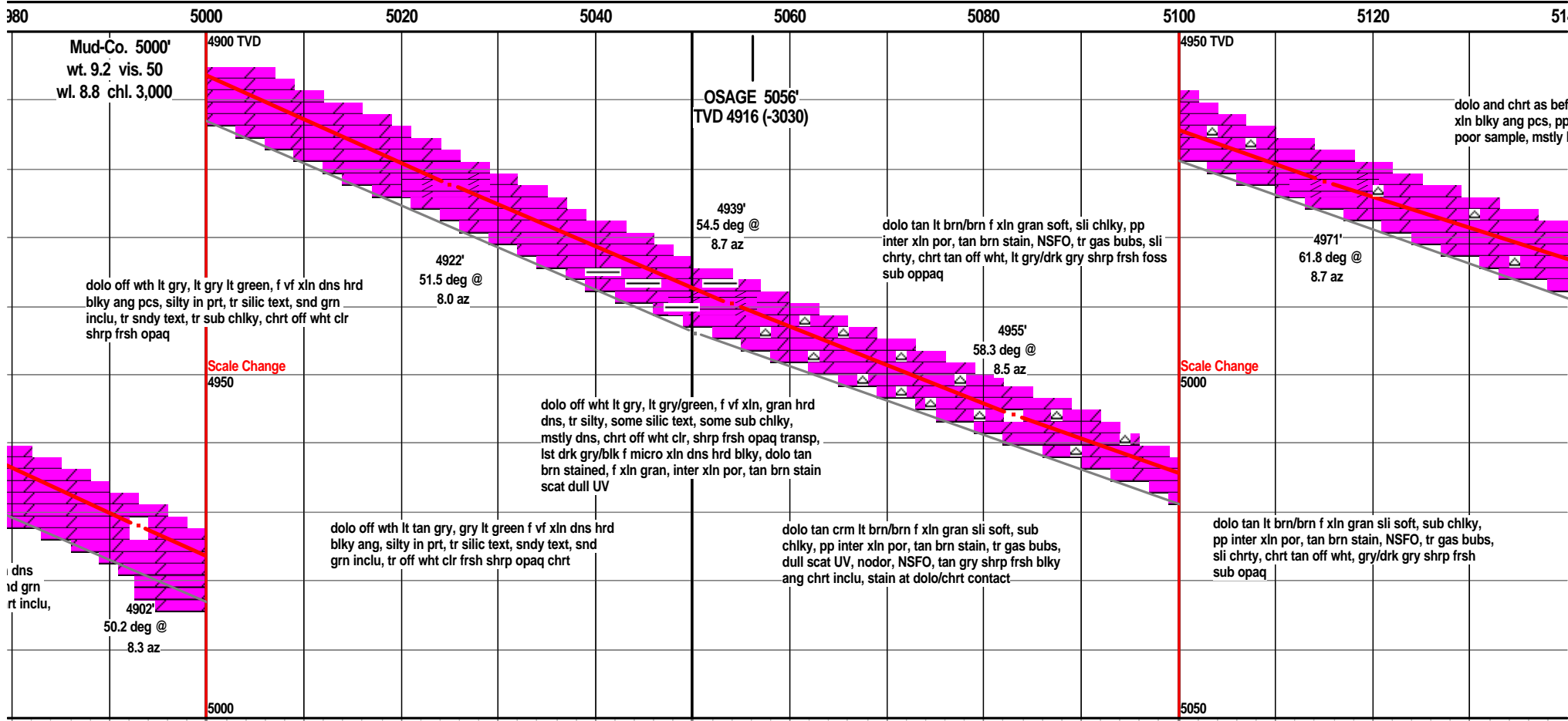
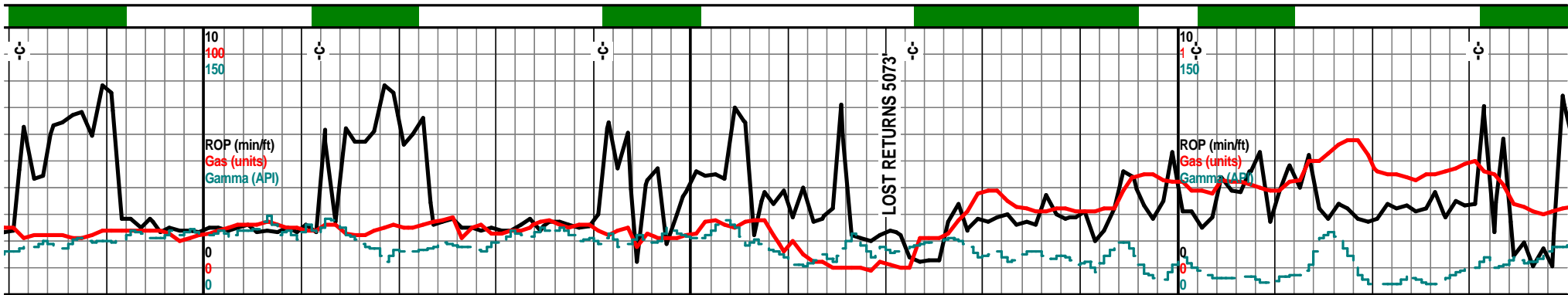


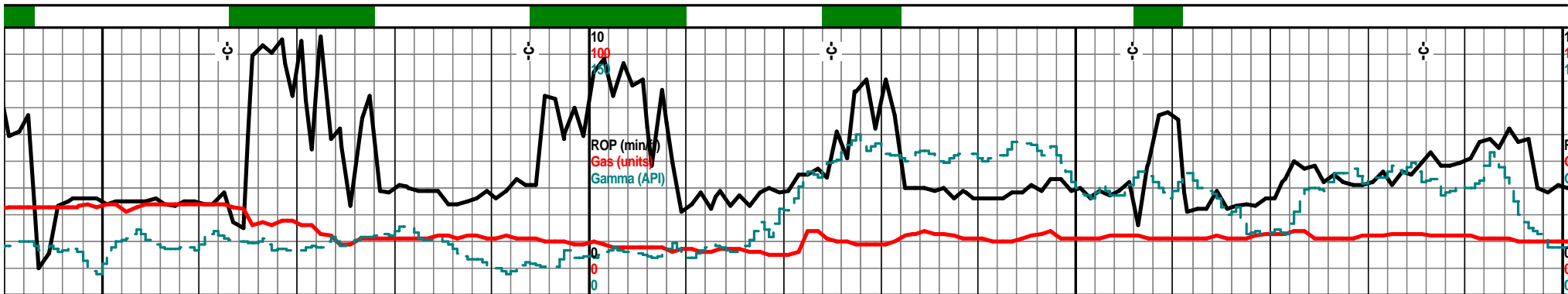




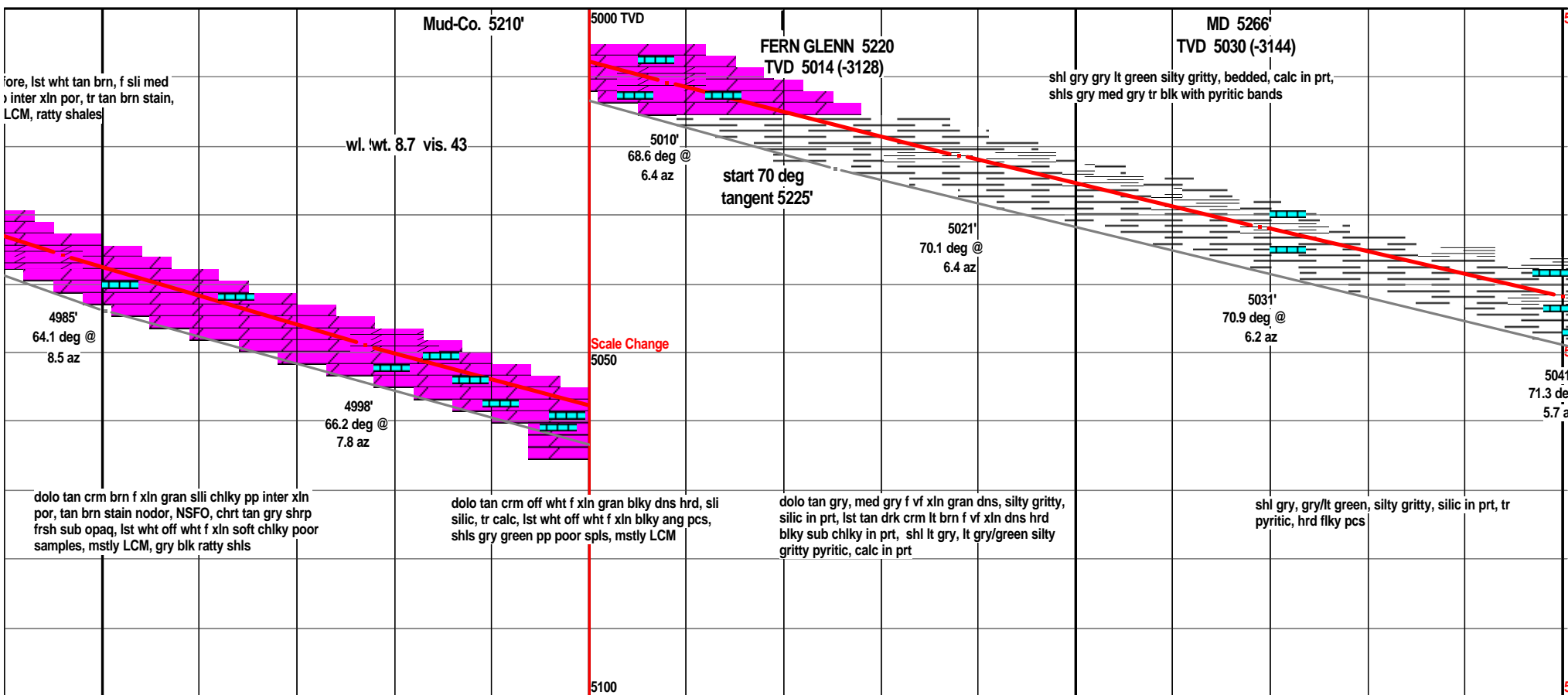


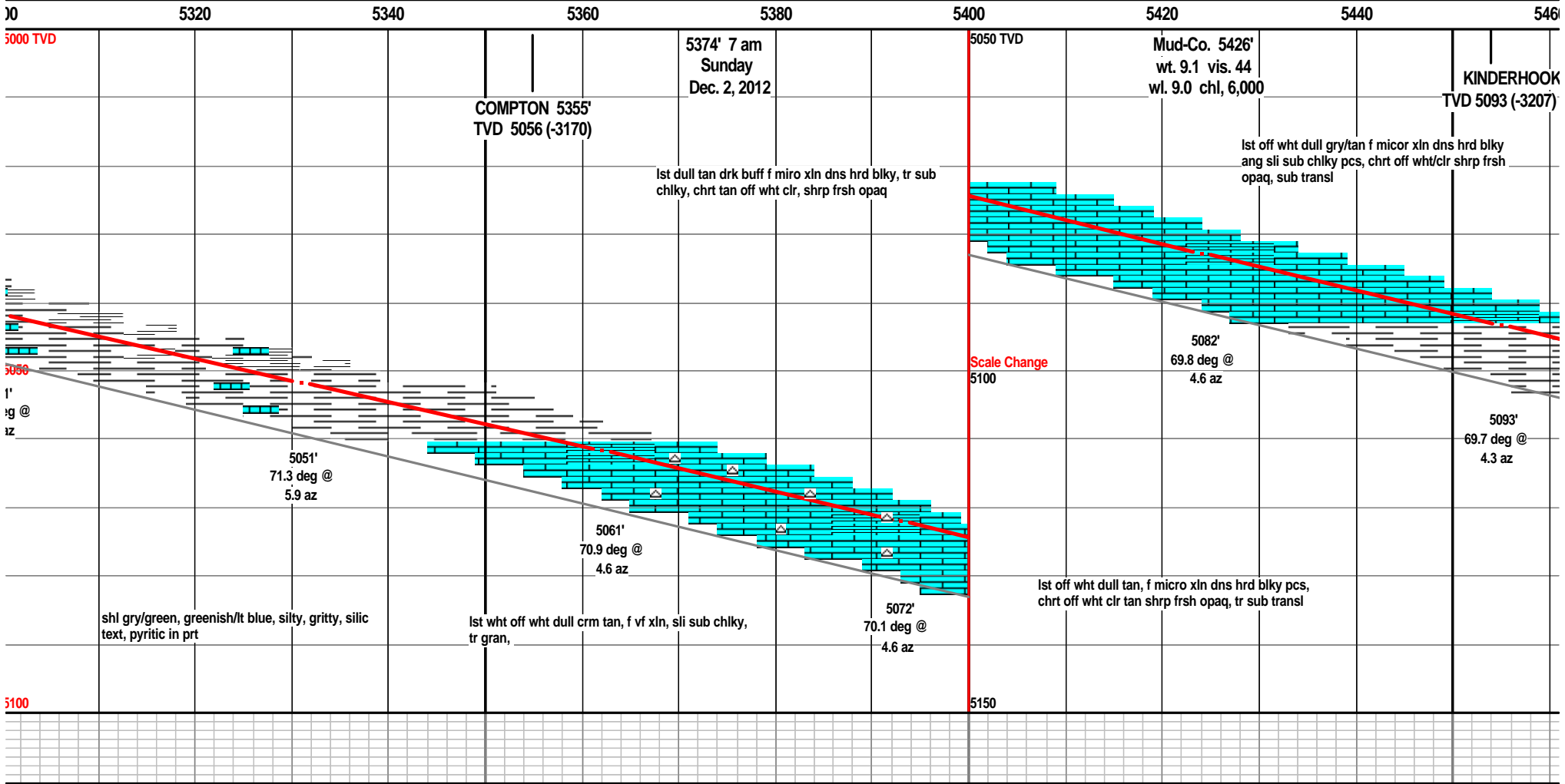
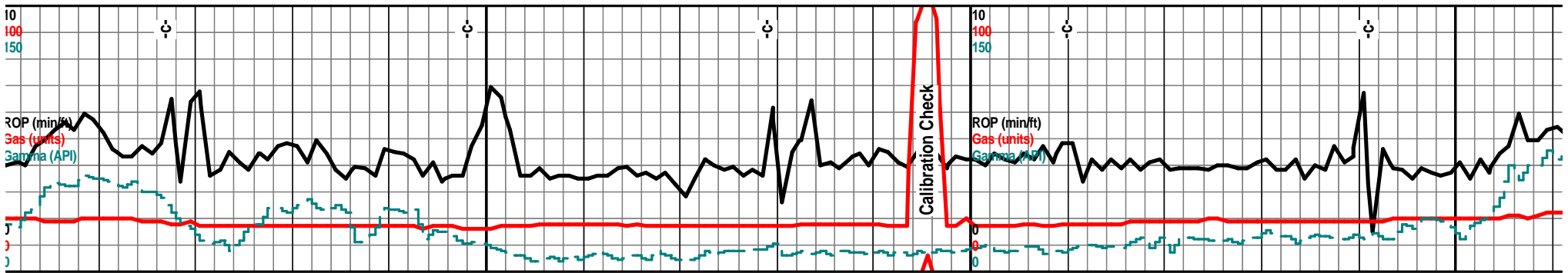


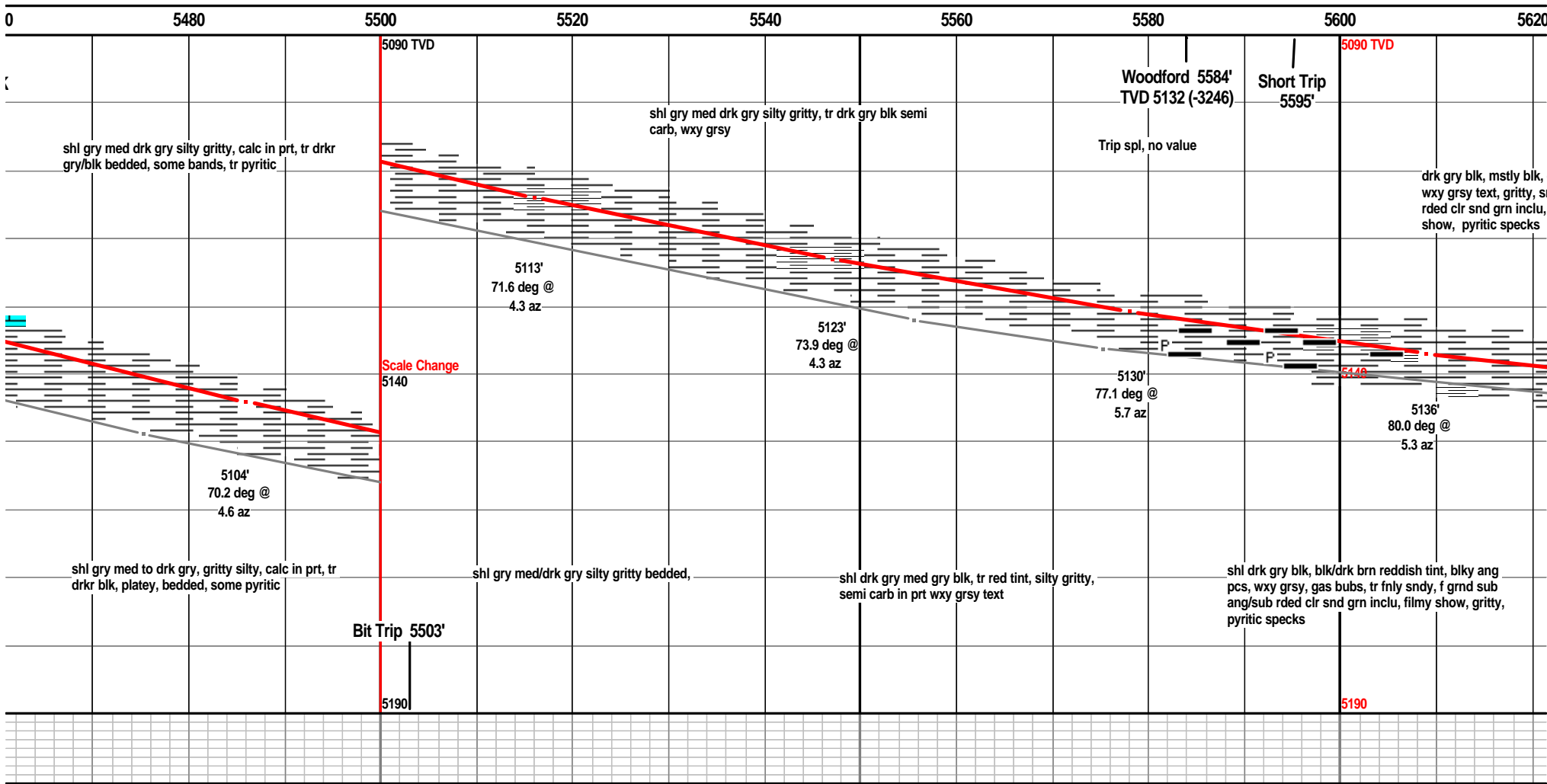
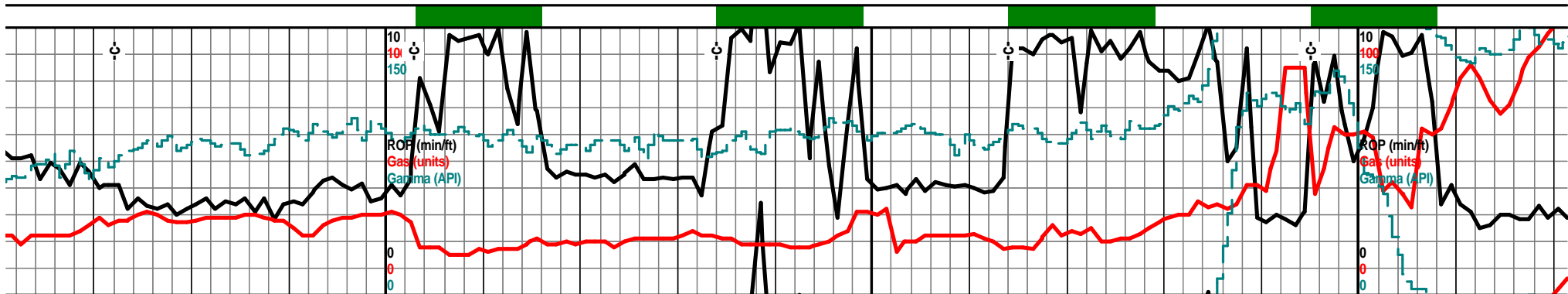


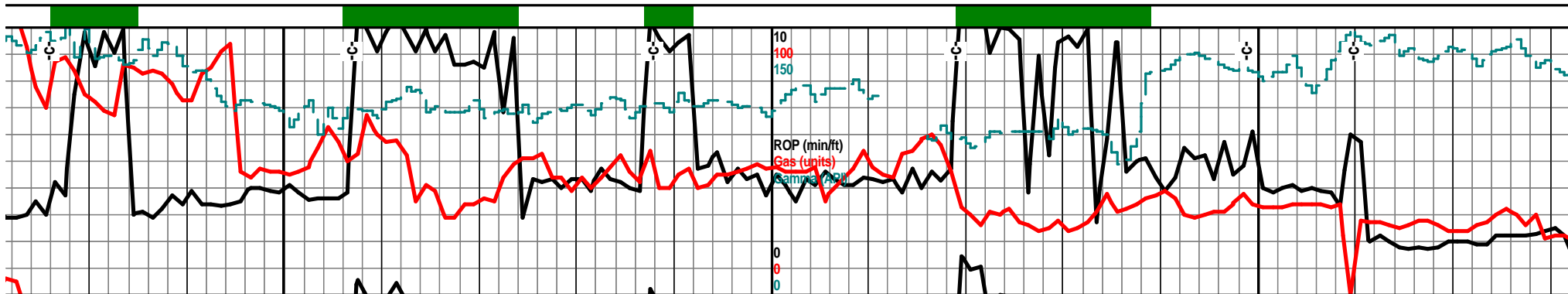


40 5160 5180 5200 5220 5240 5260 5280 530









5640 5660 5680 5700 5720 5740 5760 5780

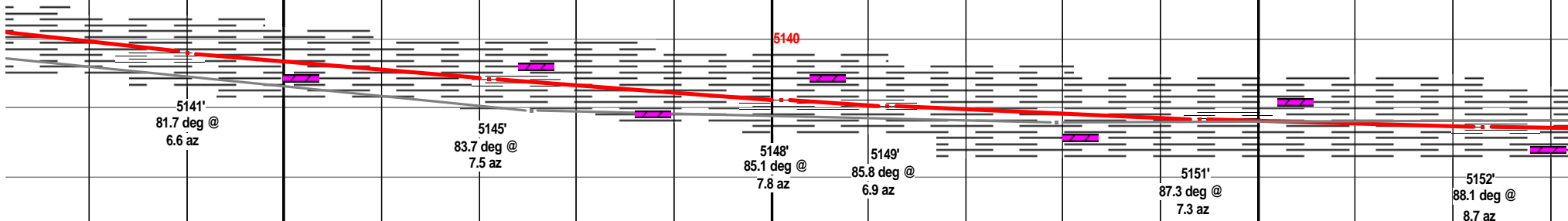
5435' 7am Tuesday Dec. 4, 2012  
 Mud-Co. 5660' wt. 9.1 vis. 52 wl. 9.6 chl. 5,000  
 5090 TVD  
 7" casing depth 5760' Set at 5751' KB

drk reddish tint/blk, carb ndy, f grnd sug ang/sub abun gas bubs, filmy

sltstn drk gry, drk gry blk, blk, carb text in prt, wxy grsy text, silty sndy gritty pyritic, clr/frosted f grnd, sub ang/sub rded snd grn inclu, gas bubs,

sh/sltstn lt gry, med gry, med gry/brn silty gritty, silic text, sndy, vf grnd sub ang/sub rded snd grns, pyritic, beds, platy in prt

sltstn gry med drk gry silty gritty, text, micro/vf grnd sub ang/sub rd inclu

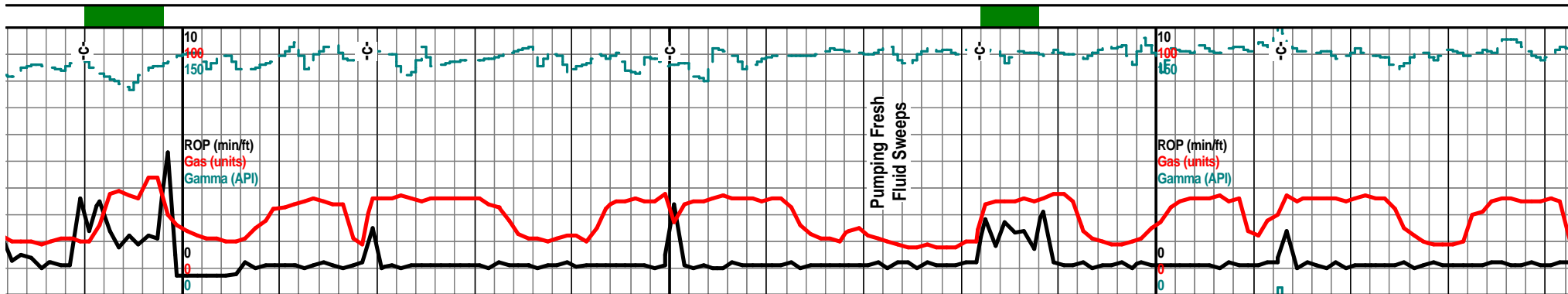


sh/sltstn drk gry blk, blk carb in prt, wxy grsy text, silty sndy, with clr f grnd sub ang/sub rded snd grns, pyritic, gas bubs, filmy show when brkn

sltstn as before, shl lt med gry silic text shls, gritty, silty, pyritic,

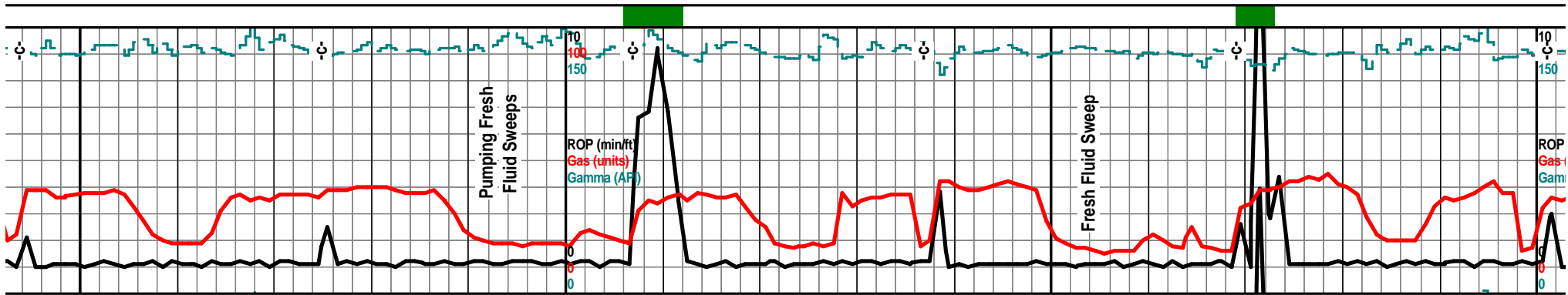
sh/sltstn med tan brn silty gritty, silic in prt, sndy text, vf grnd sub rded/sub ang snd grn inclu, pyritic, tr filmy show, dry stain when brkn

5190



5800		5820		5840		5860		5880		5900		5920		5940	
		5090 TVD								5090 TVD					
silic text, sndy led snd grn		sh/sltstn drk gry, gry/blk, silty gritty, silic text, fnly sndy text, snd grn inclu													
		sltstn gry drk gry, drk gry/blk silty gritty silic text, sndy gritty text, snd grn inclusions, sli pyritic in prt													
		sh/sltstn dkdr ! look, fnly sndy filmy show/stai													
		5140													
		5153' 89.5 deg @ 9.0 az													
		5153' 90.0 deg @ 9.4 az													
		5153' 90.3 deg @ 8.0 az													
		5153' 90.6 deg @ 8.3 az													
		5152' 90.8 deg @ 7.8 az													
sltstn drk gry gry/blk silty gritty, silic text, fnly sndy text		sltstn gry dkr gry sli blk, silty gritty, silic text, sndy gritty text tr pyritic													
		sltstn gry gry/brn blk, silty gritty, silic text, snd gritty, ptritic													
		5190													





5960

5980

6000

6020

6040

6060

6080

6100

5090 TVD

5090

gry brn/blk, silty, gritty, silic text, vf snd grn inclu, some pyritic in

sltstn drk gry/brn, brn/blk, silty gritty, gran silic text, sndy text, pyritic in prt

sh/sltstn drk gry/brn, med brn, silty, gritty, gran, silic text, acid-no, fnly sndy in prt, tr pyritic,

5140

5140

5152'  
91.0 deg @  
7.1 az

5151'  
90.7 deg @  
7.6 az

5150'  
90.4 deg @  
7.3 az

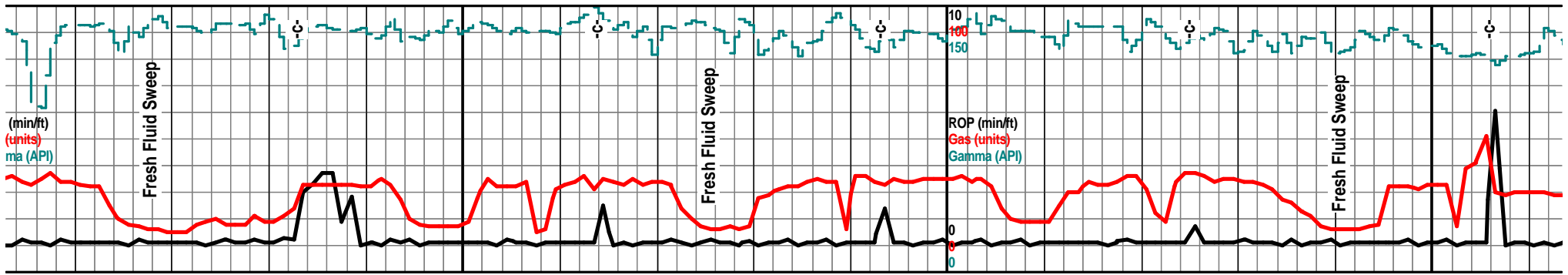
sh/sltstn drk gry, gry/brn, tr gry/blk, silty, gritty gran, silic text, sndy text, vfnly sndy, snd grn inclu

sltstn gry, gry gry/brn, gry blk, silty, gritty, gran, silic text, sndy text, pyritic in prt filmy show/stain

shsltstn med gry, gritty silic text, vfn

5190

5190



6120

6140

6160

6180

6200

6220

6240

6260

TVD

5090 TVD

sltstn drk gry, drk gry/brn, brn/blk, silty gritty, silic sndy gritty text, pyritic in prt filmy stain

sh/sltstn drk gry, drk gry/brn, tr drk brn/blk, silty gritty, sndy gritty silic text, pyritic in prt, vfnly sndy, vf grnd sub and snd grn inclu, filmy show

sltstn drk gry/brn to med brn in prt, silty less sndy, silic text, pyritic

5140

5150'  
89.6 deg @  
7.1 az

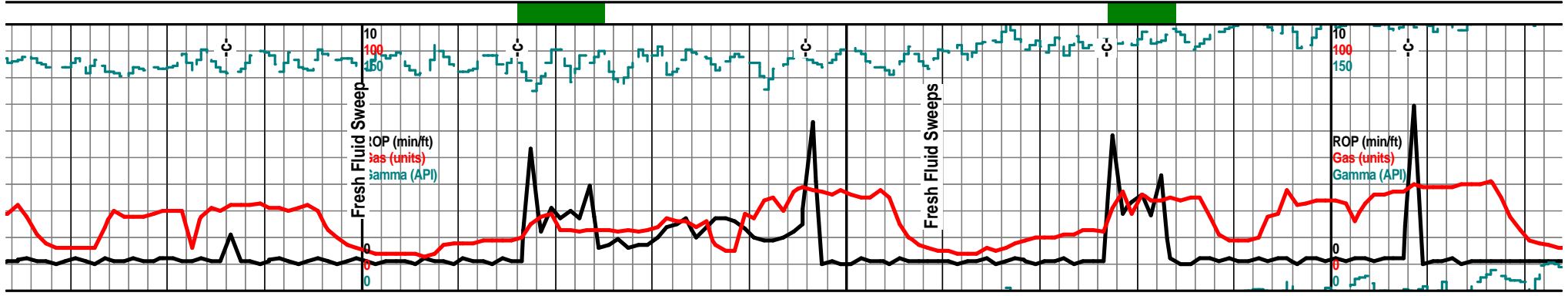
5150'  
90.2 deg @  
6.0 az

med gry brn, brn/blk, silty, ly sndy gritty text, pyritic in prt

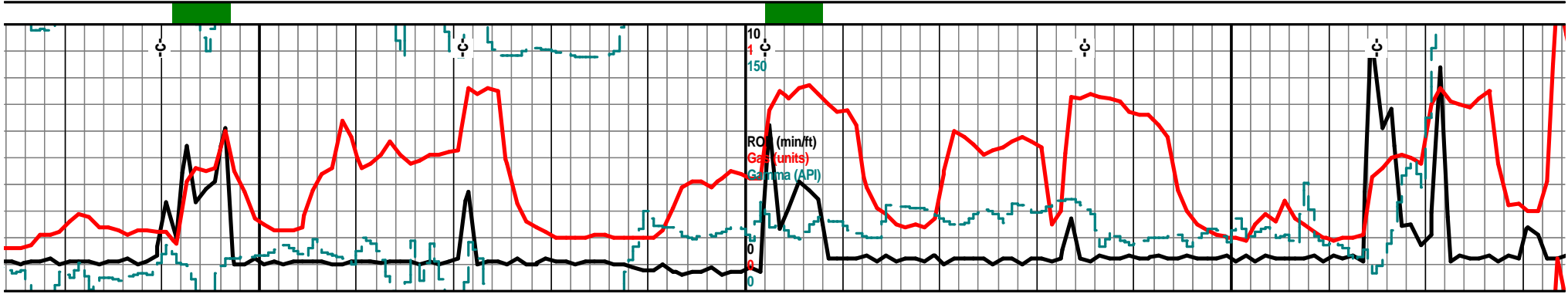
sltstn drk gry, drk gry/brn, tr drk brn/blk, silty gritty, sndy gritty silic text, pyritic in prt, vfnly snd, vf sub ang snd grn inclu

sh/sltstn drk gry, drk gry/brn, drk brn/blk, silty gritty, silty gritty silic text, vfnly sndy text, pyritic in prt

5190



6280	6300	6320	6340	6360	6380	6400	6420
	5090 TVD				6370' 7am Dec. 7, 2012		5090 TVD
gritty,	sltstn/shl med gry, med gry/brn silty gritty, gran silic text, sndy gritty text in prt, some pyritic, soft mushy muddy splstr filmy show/stain rare gas bub				sltstn med gry, med gry/brn silty. gritty, dolo/silic text, some sndy gritty text, vfn snd grn inclu in prt, pyritic in prt		
	5140					5140	
5150' 91.3 deg @ 5.3 az			5149' 90.6 deg @ 5.3 az			5148' 90.1 deg @ 6.0 az	
sltstn drk gry/brn, med brn, silty gritty, gran silic text, pyritic			sh/sltstnl med gry, med gry/brn silty gritty, dolo/silic text, some sndy gritty text, vfn snd grn inclu, pyritic			sltstn gry drk gry/brn silty gritty, gran silic text, soft, mushy, pyritic	
	5190					5190	



6440

6460

6480

6500

6520

6540

6560

6580

5090 TVD

siltstn drk gry/brn silty gritty, silic text, sndy gritty text, soft, gran pyritic, tr filmy show/brkn, rare gas bub

shl, siltstn, drk gry bec drkr gry blk, reddish tint, silty gritty, silic text in prt, incr sndy text, vf grnd snd grn inclu, pyritic, tr odd gas bubs, filmy stain

shl, siltstn, vry drk gry/blk with reddish tint, silty sndy, silic text, clr f grnd sub rded/sug ang snd grn inclu, filmy show, tr gas bub, faint scatt UV

5140

5148'  
90.6 deg @  
8.2 az

5147'  
90.6 deg @  
8.5 az

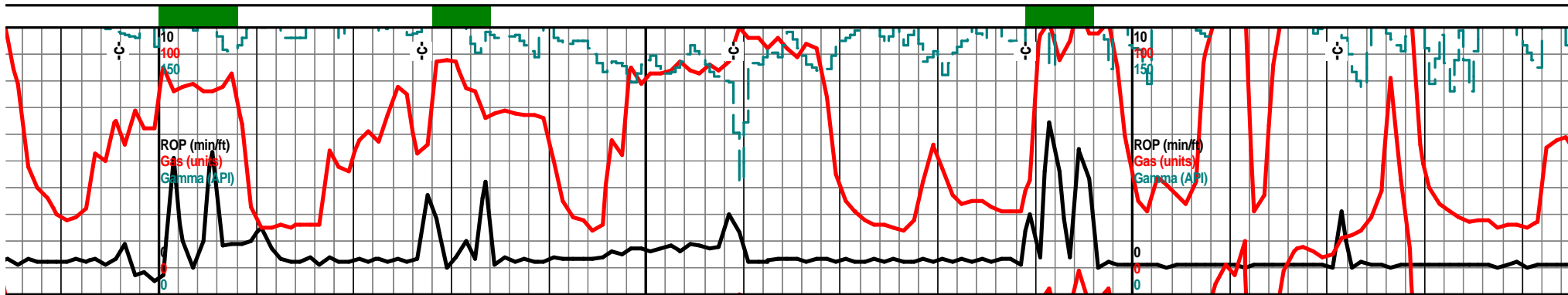
5146'  
90.9 deg @  
9.2 az

sh/siltstn med/drk gry-brn silty gritty, gran silic text, sndy text in prt, pyritic

siltstn drk gry/brn, reddish brn, (brk reddish) silty gritty sndy, silic in prt, pyritic, blk carb flks, tr filmy dry show, tr rare gas bub

shl, siltstn \ gritty, tr sil snd grn inc show,

5190



6600 6620 6640 6660 6680 6700 6720 6740

5090 TVD 6 pm 6690' Friday Dec. 7, 2012 5090 TVD

shl drk gry blk, carb text, wxy grsy pcs, sndy silty gritty, silic text in prt, clr vf grns sub ang snd grn inclu, pyritic in prt filmy show, rare gas bub, faint UV

siltstn drk gry/brn/blk silty gritty, gran silic text, sndy text, pyritic bands, vf sub rded snd grn inclu, rare gas bubs, filmy show, vry faint UV

shl siltstn drk gry brn, reddish brn blk, silty gritty, gran silic text, sndy text, vf grnd sub ang snd grn inclu, filmy show, rare gas bub w/smashed. brkn

5140

5140

5146'  
90.1 deg @  
11.1 az

5146'  
89.8 deg @  
12.0 az

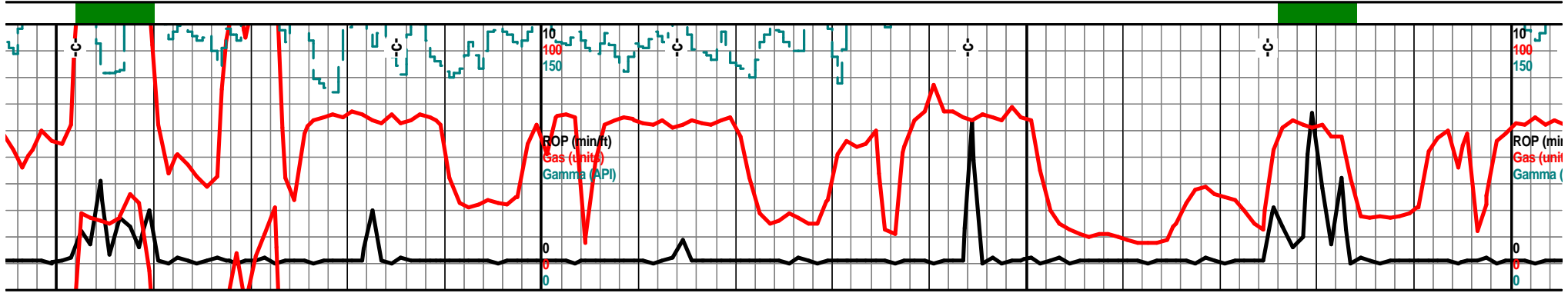
very drk gry, drk gry brn/blk, silty ic text, clr fn grnd sub ang/sub rded :lu, pyritic, tr rare gas bub, tr filmy

sh/siltstn drk gry blk, reddish tint/brkn, silty gritty, gran silic text, sndy in most, vf grnd sub ang snd grain inclu, pyritic bands, bedded, tr rare gas bub/brkn, filmy show

sh/siltstn drk gry blk, drk reddish brn/blk silty gritty, gran silic text, sndy text, snd grn inclu, pyritic, tr rare gas bub w/brkn, filmy stain

5190

5190



6760

6780

6800

6820

6840

6860

6880

6900

5090 TVD

5090 TVL

shl, siltstn drk gry semi blk, drk brn red, reddish  
in prt, w/brkn, silty, gritty gran, some silic test,  
sndy text, filmy brn show,

shl dkr gry. drk gry/reddish brn/blk silty, gritty,  
gran silic text in most, blk carb text, wxy grsy, gas  
bubs, brn slimy dry show

5140

5140

5147'  
88.9 deg @  
12.2 az

5147'  
89.6 drg @  
12.4 az

5148'  
88.6 deg @  
11.8 az

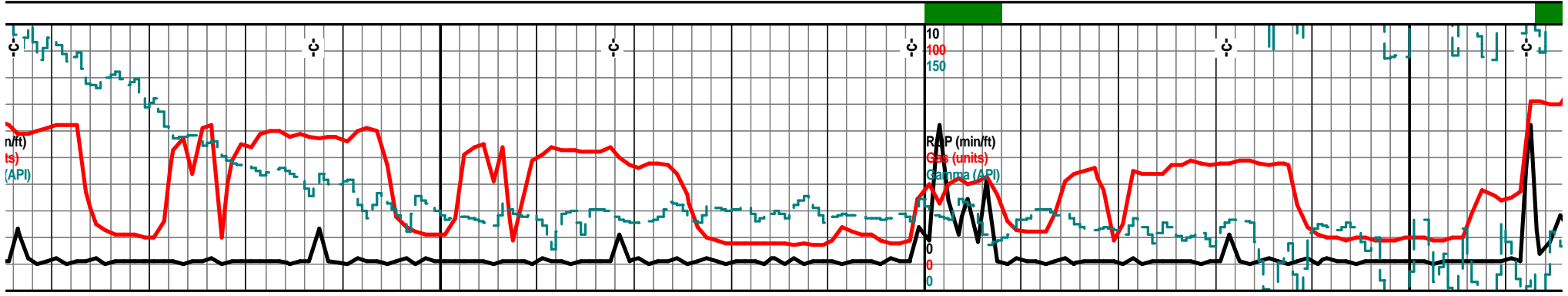
shl, siltstn drk gry, drk brn blk reddish in prt,  
silty, gritty, gran silic text, sndy, snd grn inclu,  
pyritic, filmy show, rare gas bub when crushed

shl gry drk gry blk, blk carb tect wxy grsy, silty,  
gritty, bedded, pyritic, sndy text, gas bubs, filmy  
brn dry show

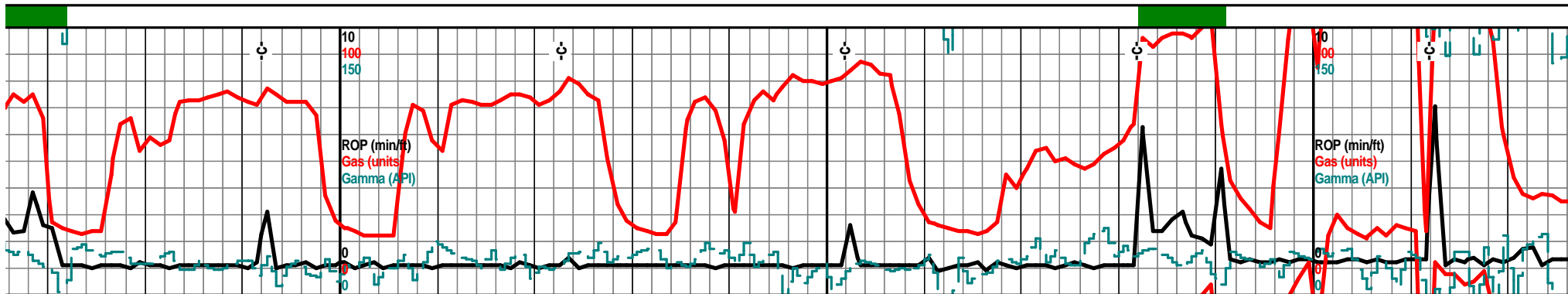
shl, siltstn drk gry, srk  
gritty, gran sil silic tex  
some snd grn inclu, tr

5190

5190

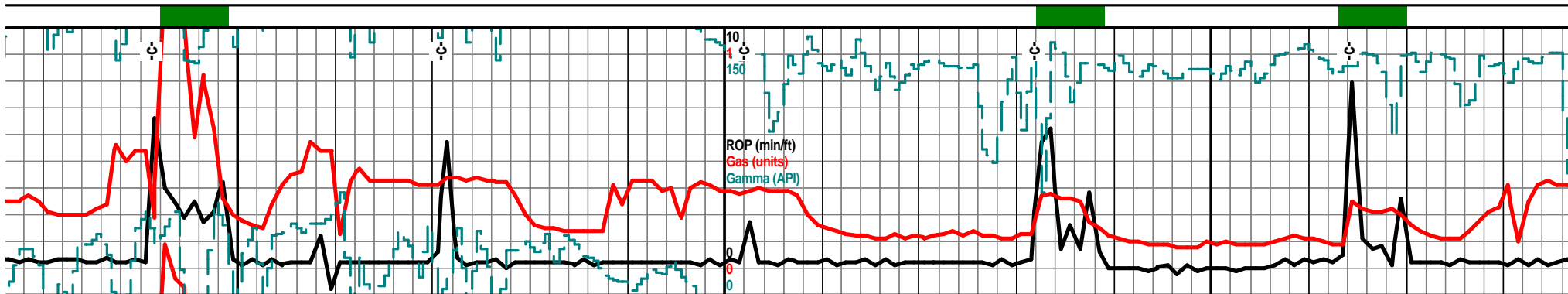


6920	6940	6960	6980	7000	7020	7040	7060
				5090 TVD			
sh/siltstn drk gry/blk, tr with reddish tint, silty gritty, some sndy, sndy grn inclu, gran semi silic text, some carb text, wxy grsy, gas bubs w/brkn, tr filmy show				siltstn drk gry/brn, med brn, silty gritty, gran silic text, sndy in prt, snd grn inclu, pyritic, bedded, tr filmy show, rare gas bub		siltstn/shl, drk gry/brn med silic text, pyritic, sndy text,	
				5140			
				5150' 89.0 deg @ 12.6 az	5151' 89.3 deg @ 11.3 az		
gry/reddish brn/blk, silty, ct, tr blk carb text, pyritic, r gas bubs, rare filmy show		sh/siltstn drk gry brn, silty, gritty, gran silic text, pyritic, sndy gritty in some		siltstn drk gry/brn, med brn, silty gritty, gran silic text, sndy, vf grnd sub ang sud grn inclu, pyritic, filmy show			
				5190			



7080	7100	7120	7140	7160	7180	7200	7220
	5090 TVD					5090 TVD	
		7 am 7120' Saturday Dec. 8, 2012					
brn gritty silty, gran snd grn inclu		shldrck blk wxy grsy, siltstn drk gry brn silty gritty, gran silic text, sndy text, vf grnd sub ang snd grn inclu, pyritic in prt,			shl siltstn drk gry brn, med drk brn, silty gritty, pyritic, some gran silic text, sndy, f vf grn sub ang snd grn inclu, tr gas bubs, rare filmy dry show		
	5140					5140	
5151' 89.9 deg @ 10.1 az			5151' 90.3 deg @ 9.9 az			5151' 89.4 deg @ 9.2 az	
		shl/siltstn drk gry/brn, med drk brn, silty gritty, pyritic, gran silic text, snd grn inclu, filmy show, rare gas bub w/crushed			shl/siltstn drk gry brn, med drk brn, silty gritty, some gran silic text, sndy text, vf grnd sub ang snd gry inclu, pyritic, tr gas bubs, filmy shows rare		siltstn, drk gry/brn, drk brn silty gritty tr sndy, vf grnd sub ang snd grn inclu, tit quartzitic snd clstrs, wht lt gry, fn grnd NS, filmy shows, gas bubs
	5190					5190	





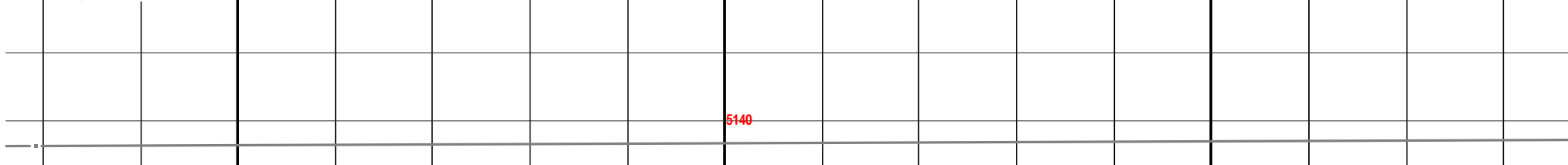
7240 7260 7280 7300 7320 7340 7360 7380

5090 TVD  
Mud-Co. 7255'  
wt. 9.5 vis. 27  
wl. N/C chl. 96,000

siltstn/shl, drk gry brn, med brn, silty gritty vry sndy, vf grnd sub rded snd grn inclu, pyritic, lt gry clear to opaqt quartzitic text sst, loose in tray and bedded with siltstns NS with sst, filmy show, tr gas with other

dolstn, siltstn drk brn reddish brn, silty, gritty, gran silic text, sndy text, f vf grnd sub ang snd grn inclu, pyritic, filmy show, rare vis gas bubs

siltstn med gry/brn silty gritty, silic text, le text, less pyritic content.



5152'  
88.0 deg @  
9.0 az

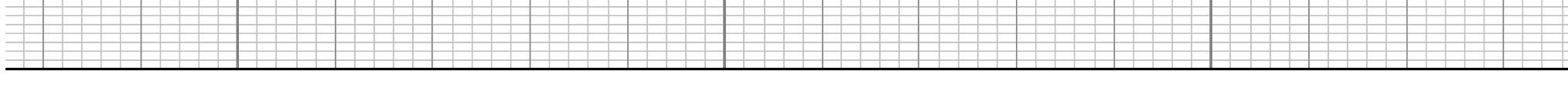
5155'  
87.8 deg @  
9.9 az

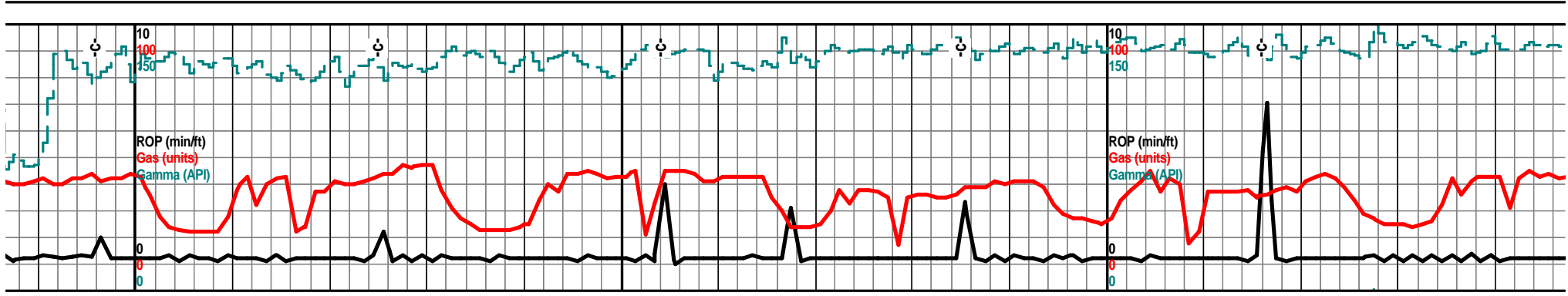
5156'  
88.9 deg @  
7.5 az

silic, vry e dns well cem

siltstn drk gry/brn, drk brn med brn silty gritty vry pyritic, sndy silic text, clr vf grnd sub ang snd grn inclu, filmy show, tr rare gas bub

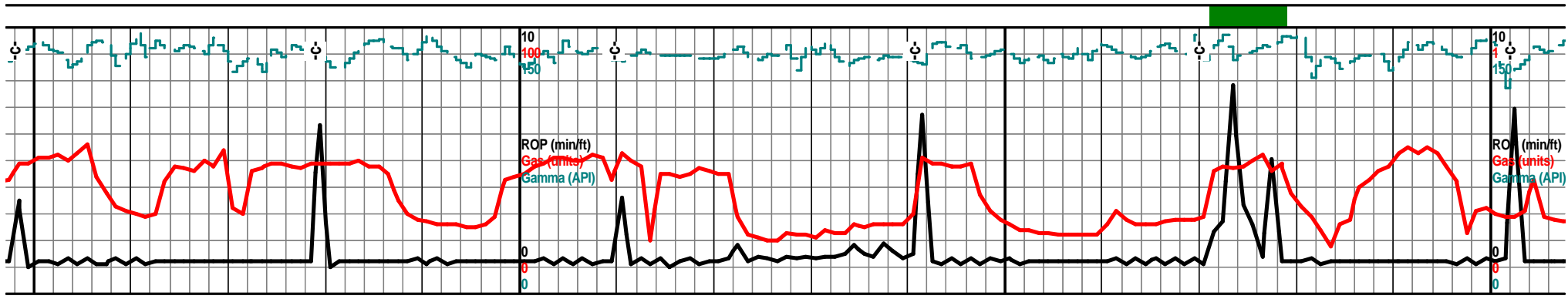
dolstn/siltstn drk brn tr reddish brn silty gritty, gran silic text, sndy text, vf grnd sub ang snd grn inclu, pyritic, filmy show





7400                      7420                      7440                      7460                      7480                      7500                      7520                      7540

	5090 TVD		7433' 5 pm Saturday Dec. 8, 2012				5090 TVD			
ss sndy		dolstrn/siltstn med brn silty gritty, some sndy text, gran silic text, pyritic, vry fnly sndy/gritty text,				dolstrn, siltstn med gry brn, med brn vf grnd, silty gritty gran silic text, some vfnly sndy text, pyritic			dolostn/siltstn med grybrn, gritty, pyritic, dns soft, tr sr	
	5140						5140			
			5157' 89.4 deg @ 6.9 az				5158' 89.7 deg @ 7.8 az			
siltstn drk gry brn silty gritty, gran silic text, tr pyritic, some snd grn inclu, silty shly text				dolstrn/siltstn me brn, med gry brn vf grnd, silty gritty, gran silic text, vry fnly sndy text in prt, pyritic				dolostn/siltstn me gry brn vf grnd fnly silty, pyritic, gran silic text, dns soft, tr filmy show, very rare gas bub/crushed		
	5190						5190			



7560

7580

7600

7620

7640

7660

7680

7700

5090 TVD

5090 TVD

SAMPLES VERY FINE  
MUDDY PASTE

brn vf grnd, silty,  
rdy text,

dolostn'siltstn med gry/brn fn grnd, silty, gritty,  
gran sli sndy silic text, soft, pyritic in prt, rare gas  
bub w/crushed, filmy dry show, floating pcs.

dolo siltstn med/drk gry/brn, med to drk brn, vf  
grnd, silty, gritty, some sndy text in prt, some vf  
grnd sub ang snd grn inclu, pyritic, rare gas bubs  
w/crushed

5140

5140

5158'  
90.2 deg @  
7.3 az

dolostn'siltstn med gry brn, med brn fngrnd silty  
gritty pyritic, gran silic text

5157'  
90.8 deg @  
7.5 az

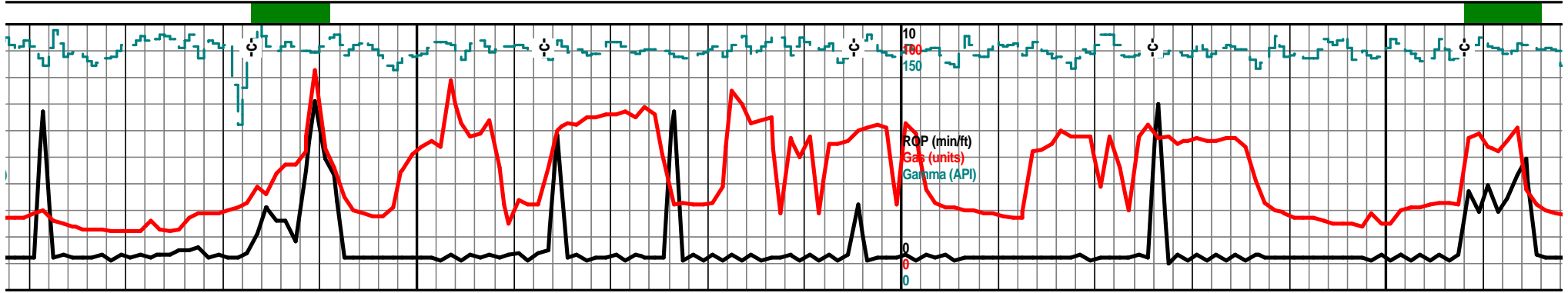
siltstn drk gry brn/ med drk brn vf grnd, silty,  
gritty, gran silic text, some sndy text, vf grnd sub  
ang snd grn inclu, pyritic, loose pyrtic pcs

5157'  
90.5 deg @  
9.0 az

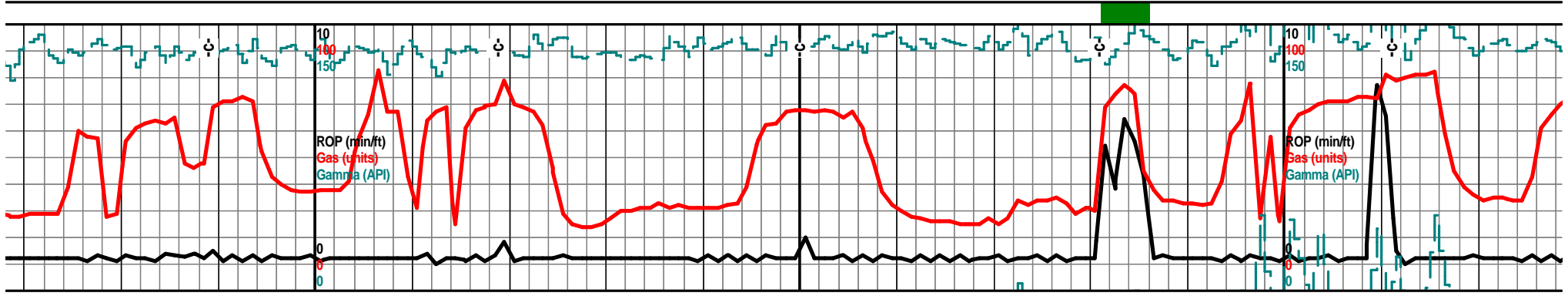
dolo siltstn brn/drk brn  
sndy text in prt, gran s  
sub ang snd grn inclu,  
rare gas bub w/crushe

5190

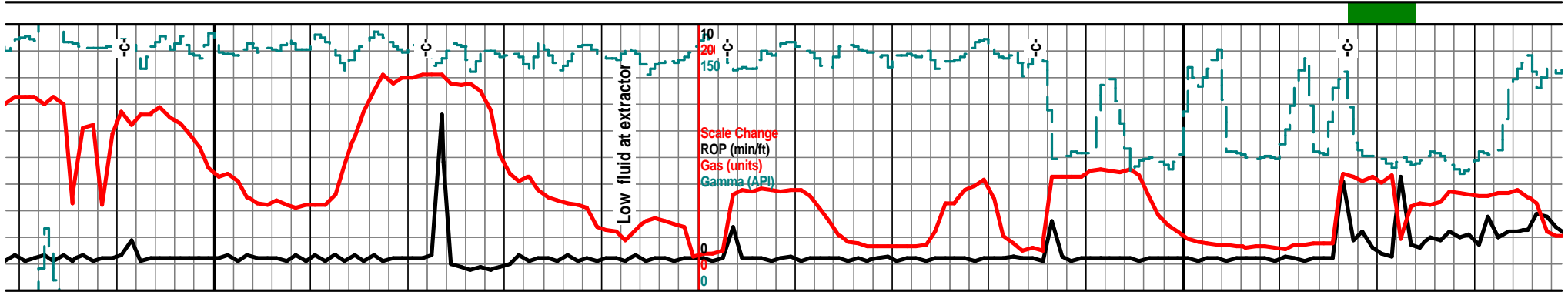
5190



7720	7740	7760	7780	7800	7820	7840	7860
				5090 TVD			
			SAMPLES VERY FINE MUDDY PASTE		7 am 7826' Sunday Dec. 9, 2012		
	dolostn, siltstn vf grnd silty gritty, gran silic text, some pyritic, gran silic text, tr blk carb wxy grsy text, some sndy text with snd grn inclu tr gas bub w/crushed			siltstn, shls, drk gry brn reddish brn vf grnd silty gritty tr blk carb flecks, gran silic text, pyritic, muddy spls, tr rare gas bubs w/crushed, tr filmy show			dolo siltstn reddich brn, drk red brn gritty, gran silic text, blk carg organi pyritic, tr rare gas bubs, tr filmy sho
				5140			
n, vf grnd, silty, gritty, some silic text, some with vf grnd, pyritic, bedded and loose, d							
		5157' 89.8 deg @ 8.7 az			5156' 90.4 deg @ 8.7 az		
			siltstn/shl drk gry brn, drk brn some reddish brn silty, gran, silic text, some with tr blk carb wxy grsy text,			siltstn shl, drk gry brn, med drk reddish brn, vf grnd, silty gritty, gran silic, pyritic, soft tr rare gas bub w/crushed, filmy shows	
				5190			



7880	7900	7920	7940	7960	7980	8000	8020
	5090 TVD					Mud-Co. 7996' wt. 9.5 vis. 29 wl. N/C chl. 96,000	5090 TVD
				SAMPLES VERY FINE MUDDY PASTE			
vf grnd silty ic flecks/beds, w		dolo siltstn dr gry/brn, reddish brn, vf grnd, silty, gritty, gran silic text, blk carb flecks/inclu, pyritic			dolo siltstn drk gry brn, redd/brn, drk brn, vf grnd, silty gritty, some sndy text, vf grnd sub ang snd grns, gran silic text, tr blk carb inclu, tr gas bubs when crushed		
	5140						5140
5156' 89.6 deg @ 8.3 az			5157' 89.7 deg @ 9.4 az			5157' 89.3 deg @ 8.3 az	
		dolo siltstn drk gry/brn, reddish drk brn fn grnd, silty, gritty, gran silic text, blk carb specks/inclu, pyritic		dolo siltstn drk gry brn, reddish brn drk brn, vf grnd silty gritty pyritic, gran silic text, some blk carb inclu, tr gas bub/crushed			siltstn drk gry brn, red/brn drk brn vf grnd silty gritty pyritic, gran silic text, tr sndy text, blk cart inclusions, gas bubs
	5190						5190



8040

8060

8080

8100

8120

8140

8160

8180

Bit-Tool Trip  
8103'

dolstn, siltstn drk gry/brn drk brn vf grnd silty gritty pyritic, gran silic text, blk wxy grsy carb inclu, gas bubs

dolo siltstn drk brn drk reddish brn, vf vgrnd, silty, gritty, tr pyritic, some sndy text, vf grnd sd grn inclu, blk wxy grsy carb chl inclu, gas bubs

dolo siltstn drk brn blk, wxy grsy carb in prt, silty gritty vf grnd try pyritic, gran silic text some blk carb flecks, gas bubs, chrt off wht lt gry smokey color, shrp frsh opaqr pyritic

5140

5158'  
89.6 deg @  
8.5 az

dolo siltstn drk brn bec drkr, f vf grnd, silty gritty, gran silic text, pyritic, blk wxy grsy gassy car shl inclusions, gas bubs w/brkn

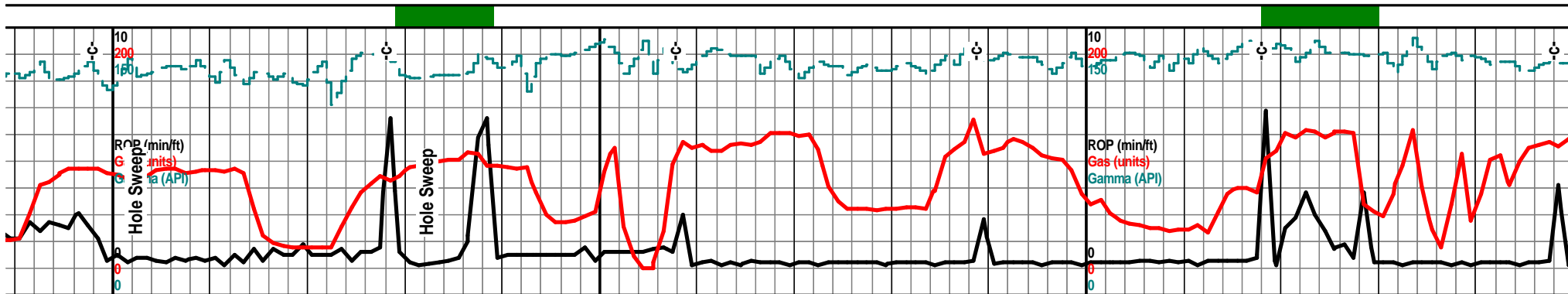
5158'  
90.4 deg @  
8.5 az

dolo siltstn drk gry brn drk brn fn grnd silty gritty, gran silic text, pyritic as before not a change here guys

5157'  
91.0 deg @  
8.2 az

siltstn shl, drk text and blk, tr bubs, chrt lt gr

5190



8200 8220 8240 8260 8280 8300 8320 8340

5090 TVD

siltstn drk brn red brn blk vf gnd silty pyritic, gran dolo silic text, some blk wxy grsy carb text pcs and inclu, gas bubs, chrt off wht lt gry smokey color, shrp frsh opaq,

dolo siltstn drkn gry brn, drk brn vf gnd, silty gritty, gran silic text, pyritic in prt, blk grsy wxy carb shl inclu, gas bubs, filmy show

dolo siltstn drk gry brn , drk gritty pyritic, gran silic text, carb inclu, gas bubs

5140

5140

5156'  
91.6 deg @  
8.3 az

5155'  
91.6 deg @  
7.8 az

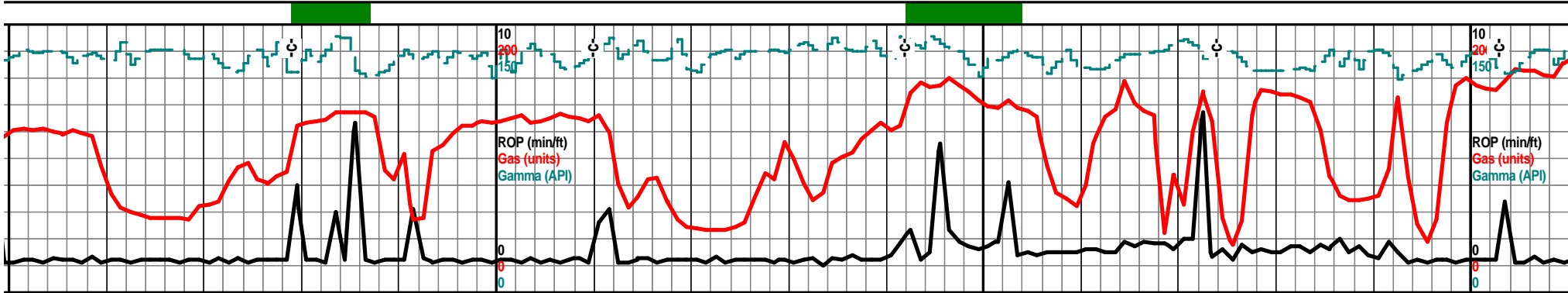
gry vf gnd silty gritty grans silic 'grsy, wxy, semi carb shl. gas y smokey shrp frsh opaq pyritic,

dolo siltstn brn drk brn vf gnd silty gritty gran silic text, sndy gritty in prt, some chrt off wht lt gry smokey shrp frsh pyritic opaq

dolo siltstn drk gry brn, drk brn, vf gnd, silty gritty, pyritic in prt, gran silic text, some blk carb inclu, gas bubs

5190

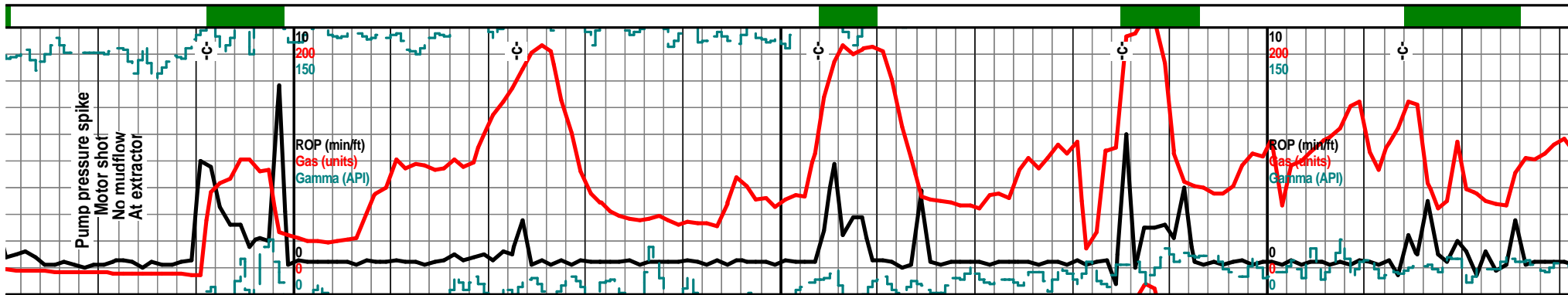
5190



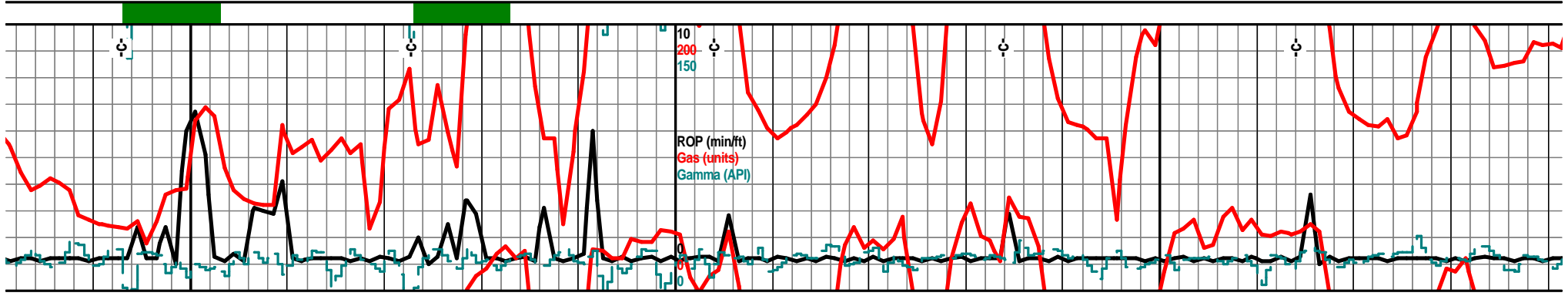
8360	8380	8400	8420	8440	8460	8480	8500
		5090 TVD					5090 TVD
med brn vf grnd silty tr sndy text, some blk		siltstn, shly dolo siltstn, drk gry/blk silty gritty, gran silic text, incr sndy snd grn inclu text, blk carb shls, wxy grsy blkly ang pcs. gas bubs filmy show		SAPMLES FINE PASTE		dolo siltstn drk gry drk gry/blk vf grnd, gritty silty, gran silic text, some pyritic, tr sndy text, vf grnd sub ang snd grn inclu, blk carb wxy grsy inclu gas bubs	
		5140					5140
		5152' 91.1 deg @ 8.9 az			5151' 90.0 deg @ 8.7 az		
dolo siltstn brn dkr brn some reddish color, vfn grnd, silty gritty, gran silic text, bk carb inclu, gas bubs, pyritic, filmy show				dolostn, shls, siltstns, vry drk gry some blkly f grnd silty gritty, some sndy, gran silic text, blk wxy grsy carb, blkly ang pcs, gas bubs		dolo siltstn drk fry drn gry/blk vf gr gran silic text, some pyritic, tr snd t sub ang snd grn inclu, blk wxy grsy gas bubs	
		5190					5190







8680	8700	8720	8740	8760	8780	8800	8820
	5090 TVD					5090 TVD	
	Trip out 8691' Replace motor #2						
ne blk, vf grnd nclu, many		dolo siltstn drk gry, gry/brn vf grnd silty, gritty, gran silic text, blk carb shls, gritty silty, wxy grsy gas bubs			dolo siltstn, drk gry/brn drk brn, silty gritty gran silic text, bedded, and blk silty sli silic carb shl, blky ang pcs, pyritic in prt, good vis gas		
	5140					5140	
							dolo siltstn drk gry brn, drk brn vf grnd silty gritty, silic gran text, shl drk gry blk, wxy grsy blky ang pcs, abun gas bubs
	5159' 86.6 deg @ 8.9 az			5162' 87.7 deg @ 7.3 az			5163' 89.2 deg @ 6.0 az
sample poor, mstly beads and nutplug, dolo siltstn as before			dolo siltstn ddrk gry brn. med brn tr drk brn vf grnd silty gritty gran silic text, much blk carg silty gritty shl pcs, blky ang pcs, wxy grsy text, abun gas bubs				
	5190					5190	



8840                      8860                      8880                      8900                      8920                      8940                      8960                      8980

5090 TVD

dolo siltstn drk gry brn to brn drk brn vf grnd silty  
gritty, gran silic text, blk carb shl, blk carb inclu,  
wxy grsy, abun gas bubs

dolo siltstn drk gry/brn, drk med brn vf grnd silty  
gritty, gran silic text, blk carb inclu, wxy grsy blk  
ang blk carb pcs, abun gas bubs

dolo siltstn drk brn, brn blk, vf grnd silty gritty,  
gran silic text, blk carb inclu, blk carb silty dolo  
text silts, tr wxy grsy text, abun gas bubs, tr filmy  
sfo

dolo siltstn drk gry brn, meb/drk brn vf grnd silty,  
gritty, tr pyitic, gran silic text, blk carb inclu, wxy  
grsy, abun gas bubs

dolo siltstn drk gry brn drk brn vf grnd silty gritty,  
gran silic text, blk carb inclu, blk carb dolo silts, tr  
wxy grsy text, abun gas bubs, filmy SFO, RBSFO  
nodor

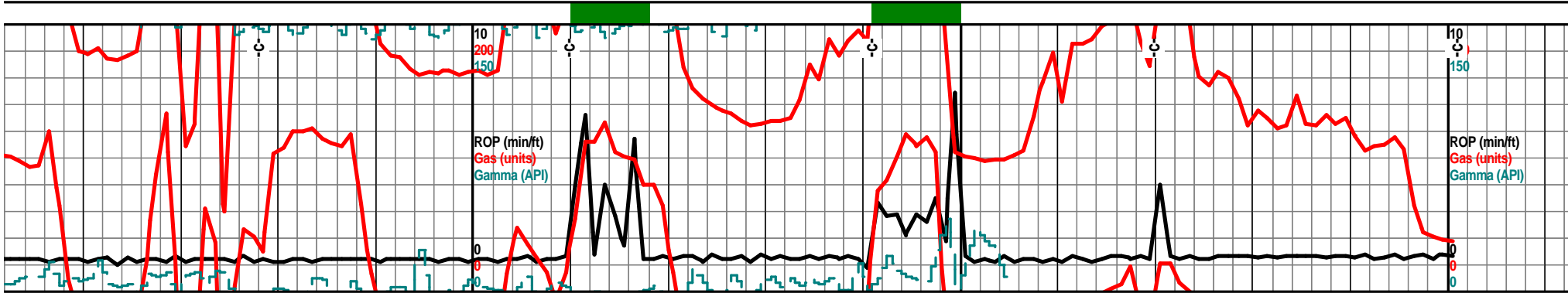
dolo siltstn drk gry  
gritty, gran silic tex  
silty wxy grsy dolo  
sho

5163'  
90.5 deg @  
6.4 az

5163'  
90.8 deg @  
5.0 az

5190





9160	9180	9200	9220	9240	9260	9280	9300
		5090 TVD	7 am 9220' Thursday Dec. 13, 2012	Mud-Co. 9247' wt. 9.4 vis. 30 wl. N/C chl. 118,000			5090 TVD MTD 9301'
v/brn, vf grnd silty pyritic, some blk drkr gas bubs		dolo siltstn drk gry brn, med brn vf grnd silty gritty fnly xln text, gran silic text, much organic fill, blk carb fill, much gas bubs, filmy RBSFO, filmy shows			dolo/siltstns, drk gry brn, drk brn vf grnd, tr vf xln text, silty, gritty, gran silic text, organic text, blk carb silic silts, gas bubs, filmy shows		
		5140					5140
							Projected to 931' 5152' 90.5 deg @ 4.1 az
		5154' 92.9 deg @ 4.3 az			5153' 90.5 deg @ 4.1 az		
dolo siltstn drk gry brn, med brn vf grnd silty gritty, gran silic text, some pyritic, fnly xln in prt, some blk dolo silts, carb in prt, some gas bubs			dolo siltstn drk gry brn drk brn vf grnd, silty gritty, gran silic text, organic fill, carb silts dolostns, wxy grsy, abun gas bubs, filmy show, fine spl pcs floating on sample cup water			dolo/siltstn, drk gry/brn, drk brn vf grnd silty, gritty, gran silic text, some pyritic, organic fill, blk carb silic silts, abun gas bubs	
		5190					5190

