



Company : Apache

Well : Coelacanth-1

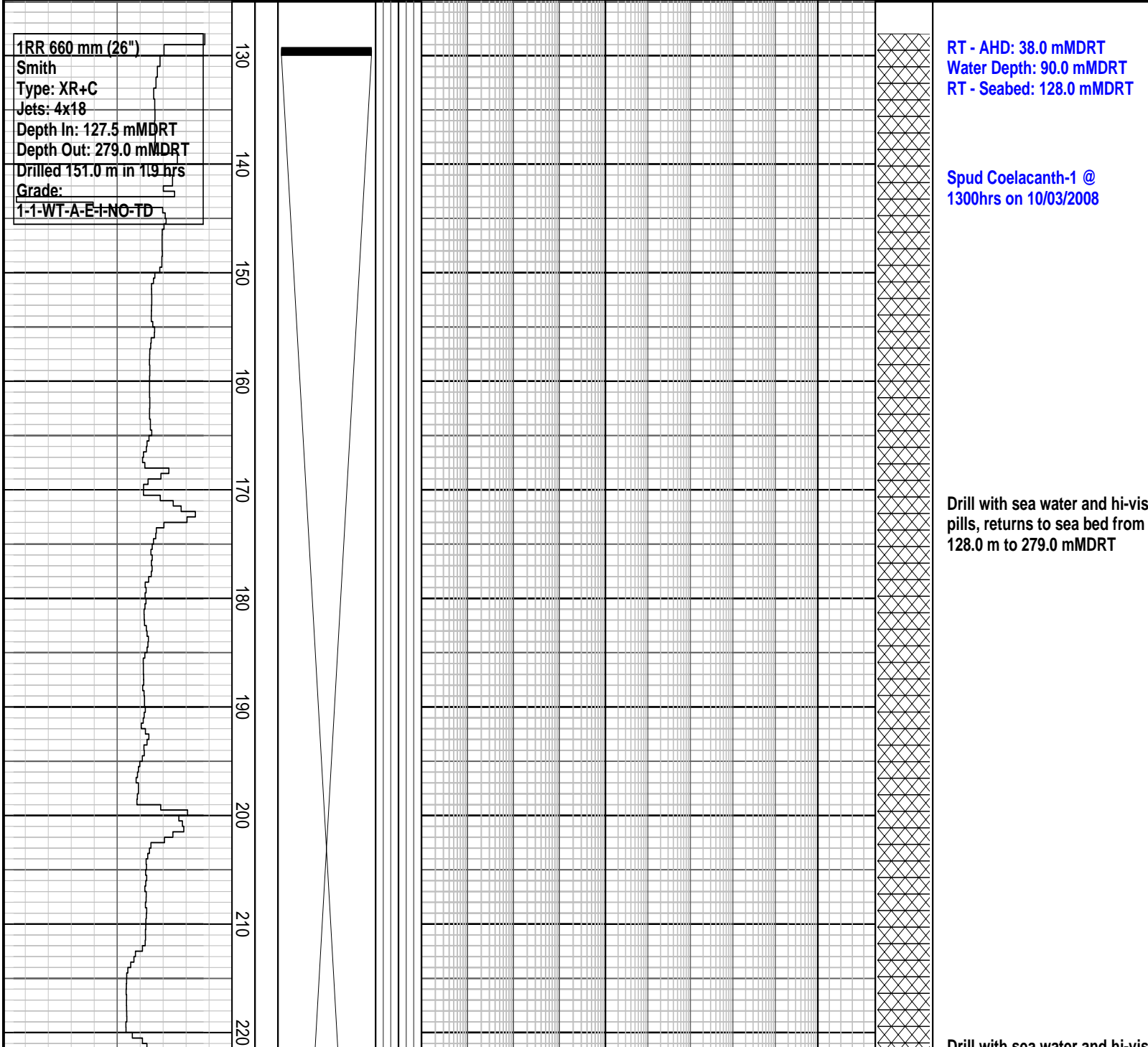
Interval : 125.00 - 2119.48 meters

Created : 19/Mar/2008 6:39:24 AM

INTEQ

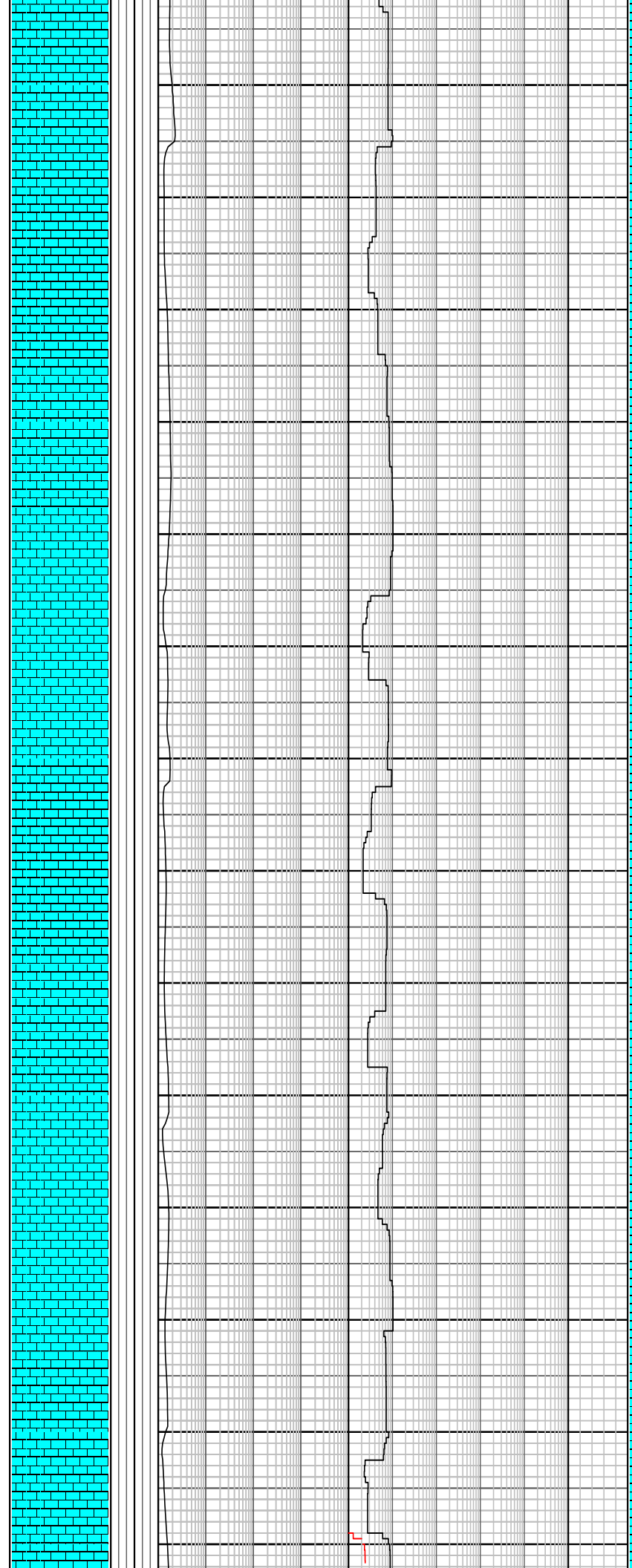
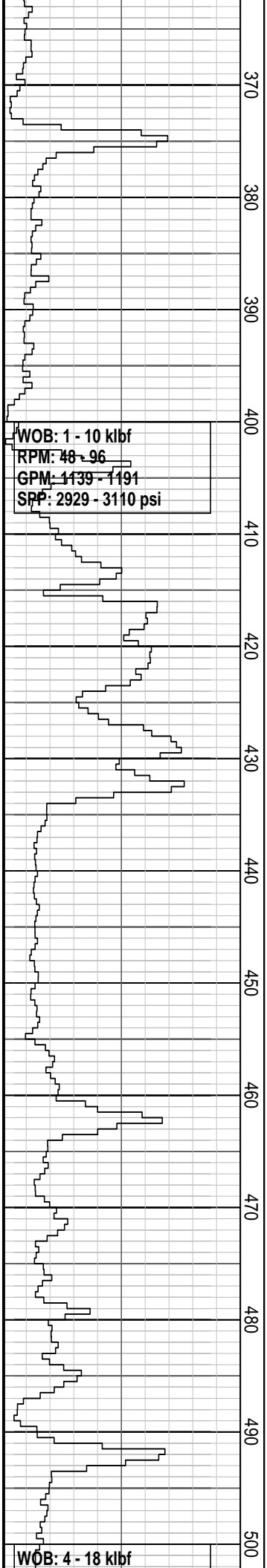
### FORMATION EVALUATION LOG

Drilling Rate		MD meters 1:500	TVDRT meters	Cuttings Lithology	Oil Show	Visual Inferred Porosity	Gas Data		Chromatograph Data		Calcmetry	Interpreted Lithology	Lithology Description
ROP (m/hr)	ROP (m/hr)						Gas Hydrocarbon Avg %	Methane ppm					
200	20						0.01	0.1	1	10	1	100000	
180	40						0.001	Resistivity Shall	10	1	Ethane ppm	100000	
160	60							Ohm.m	1	1	Propane ppm	100000	
140	80							Resistivity Deep	10	1	iso-Butane ppm	100000	
120	100							Ohm.m	1	1	n-Butane ppm	100000	
100	120								1	1	iso-Pentane ppm	100000	
80	140								1	1	n-Pentane ppm	100000	
60	160												
40	180												
20	200												



Drill with sea water and hi-vis





**CALCARENITE:** lt-m gy, lt olv gy, mnr m gy, com foss frags, mod hd-hd, sbblky-blky

**CALCILUTITE:** v lt gy-lt gy, lt bl gy, off wh, mnr lt-m gy, lt brn gy, com foss, tr-rr f qtz grs, frm-mod hd, sbblky-blky

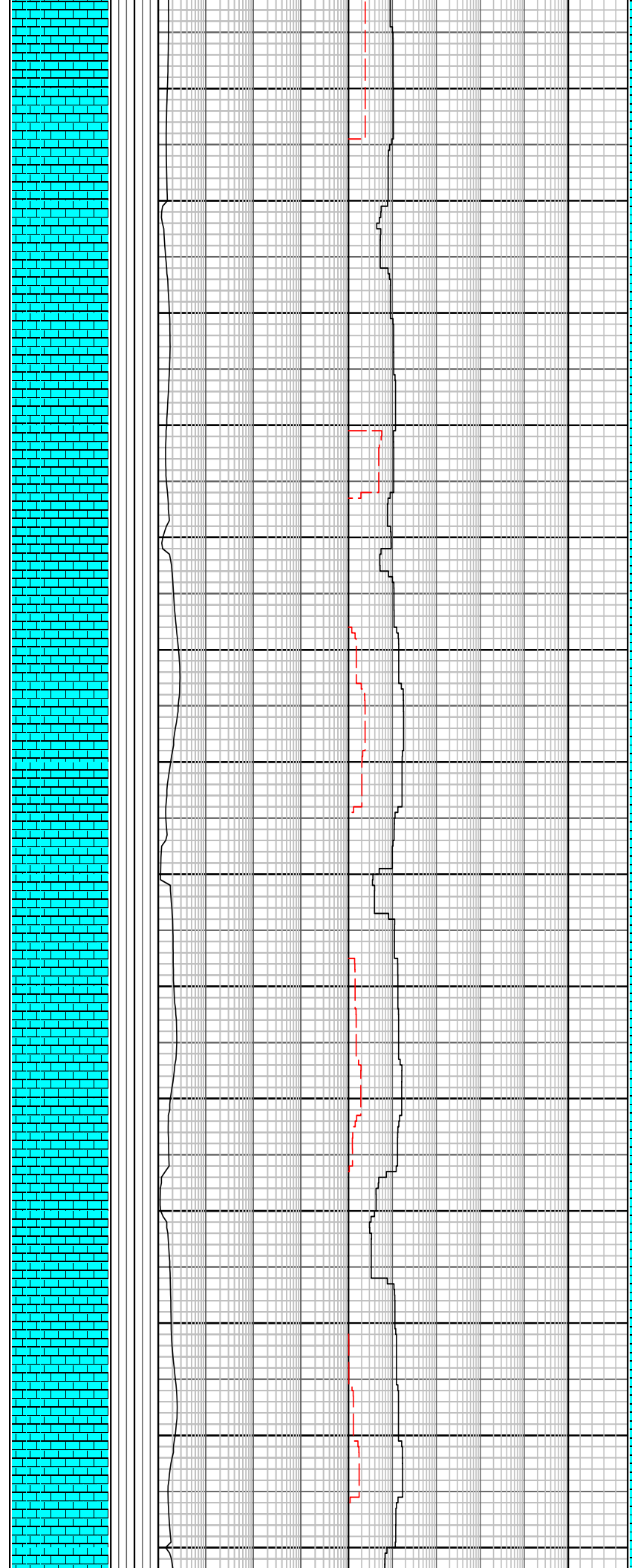
**CALCARENITE:** lt-m gy, lt olv gy, mnr m gy, com foss frags, mod hd-hd, sbblky-blky

**CALCARENITE:** lt-m gy, lt olv

RPM: 96 - 120  
GPM: 1163 - 1191  
SPP: 3041 - 3599 psi

WOB: 7 - 28 klf  
RPM: 112 - 121  
GPM: 1166 - 1168  
SPP: 2885 - 3737 psi

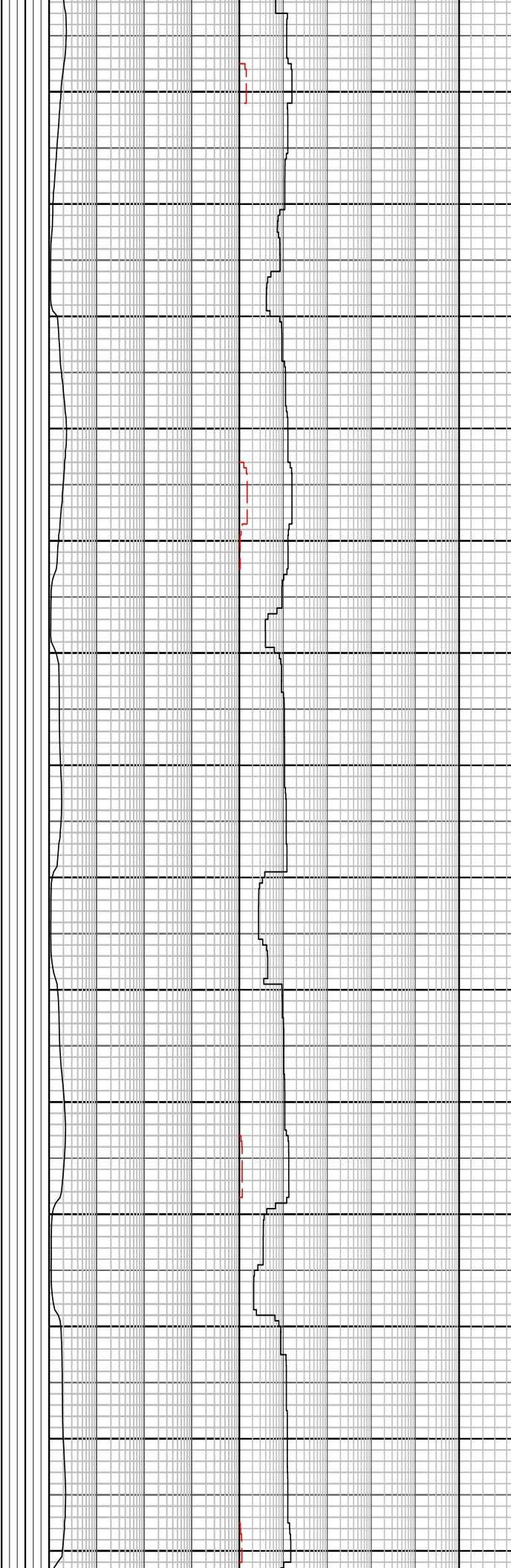
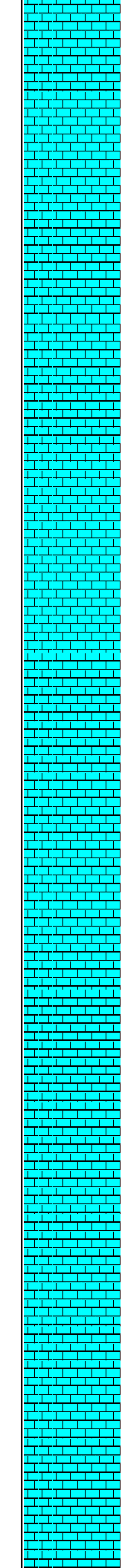
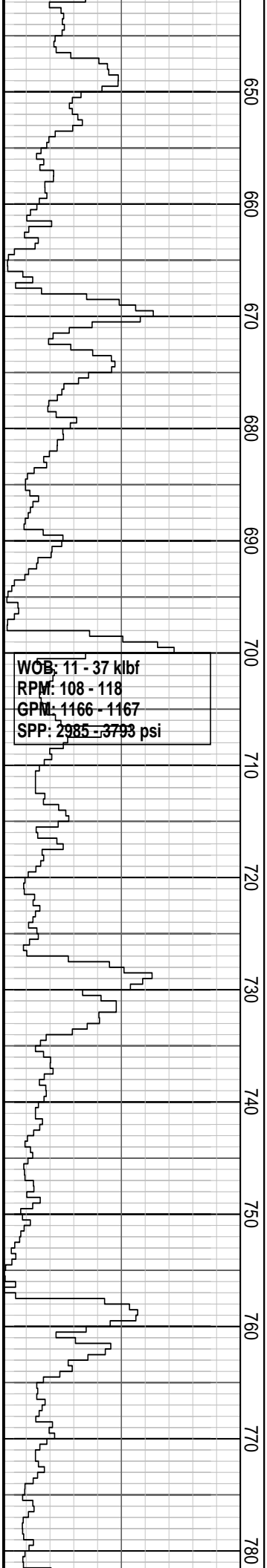
510  
520  
530  
540  
550  
560  
570  
580  
590  
600  
610  
620  
630  
640



gy, mnr m gy, com foss  
frags, mod hd-hd,  
sbbkly-blky

CALCARENITE: lt-m gy, lt olv  
gy, mnr m gy, com foss  
frags, mod hd-hd,  
sbbkly-blky

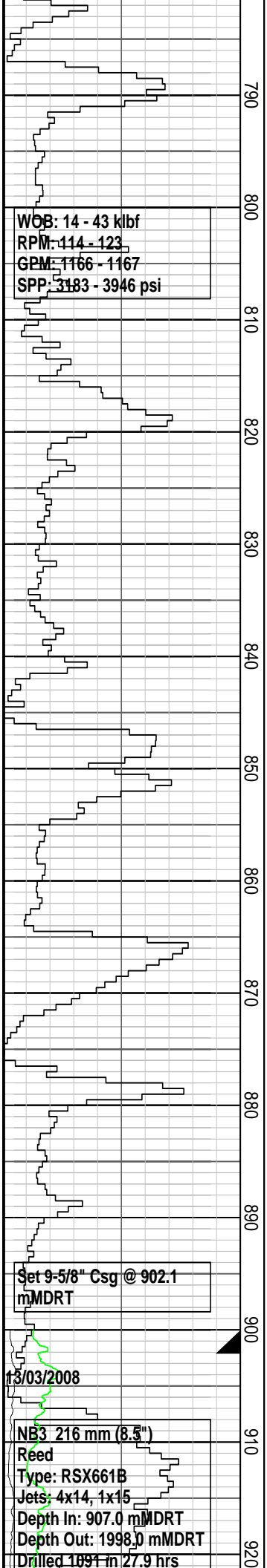
CALCARENITE: lt-m gy, lt-m  
olv, lt brn gy, tr com foss  
frags, com fn-m qtz grs, mod  
hd, sbbkly-blky



**CALCARENITE:** lt-m gy, lt-m olv, lt brn gy, tr com foss frags, com fn-m qtz grs, mod hd, sbblky-blky

**CALCARENITE :** lt-m gy, lt bl gy ,mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbblky-blky

**CALCARENITE :** lt-m gy, pred m gy, lt bl gy, mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbblky-blky

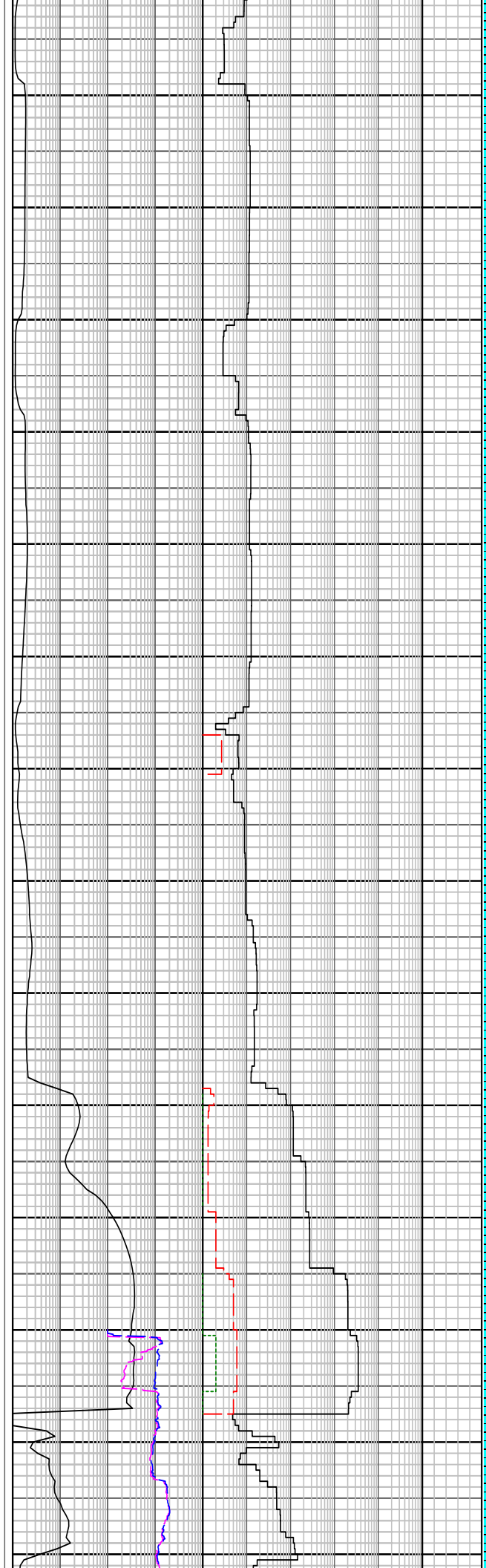


WOB: 14 - 43 klbf  
 RPM: 114 - 123  
 GPM: 1166 - 1167  
 SPP: 3183 - 3946 psi

Set 9-5/8" Csg @ 902.1 mMDRT

13/03/2008

NB3 216 mm (8.5")  
 Reed  
 Type: RSX661B  
 Jets: 4x14, 1x15  
 Depth In: 907.0 mMDRT  
 Depth Out: 1998.0 mMDRT  
 Drilled 1091 m 27.9 hrs



CALCARENITE : lt-m gy, pred m gy, lt bl gy, mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbbiky-blky

MW: 1.15 sg FV: 43  
 PV : 9 YP: 11  
 Gels: 4/9/- pH: 8.00

CALCARENITE : lt-m gy, pred m gy, lt bl gy, mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbbiky-blky

CALCARENITE : lt-m gy, pred m gy, lt bl gy, mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbbiky-blky

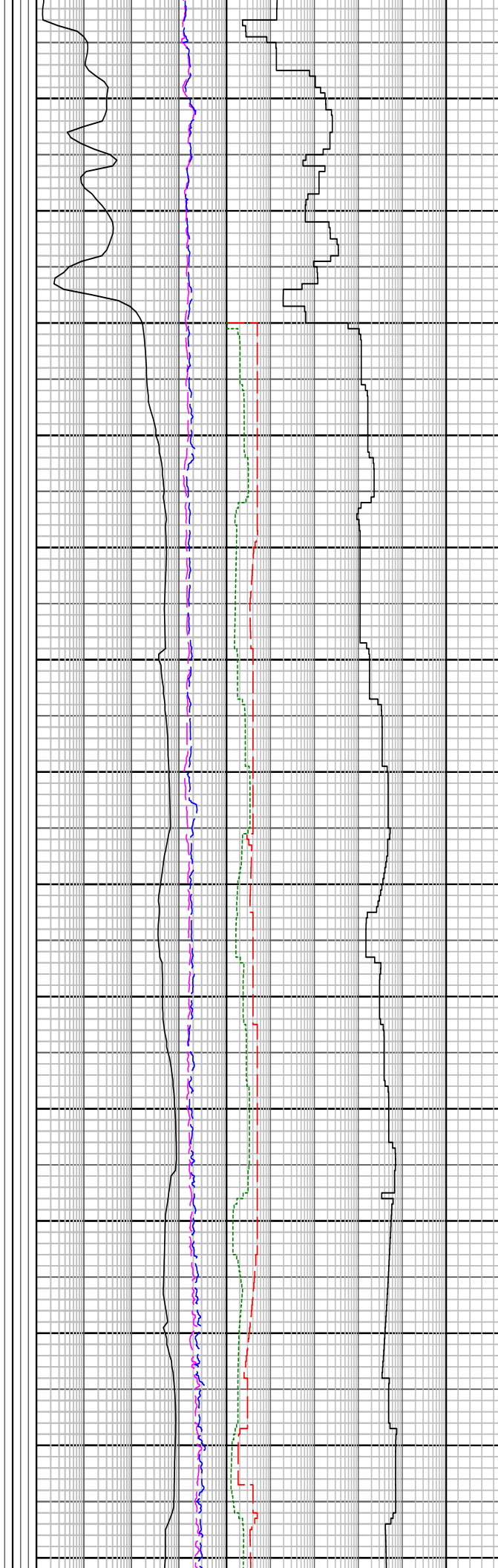
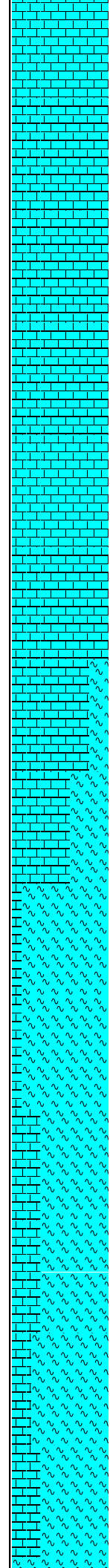
311 mm (12.25") Section TD @ 907.0 mMDRT on 13/03/2008

Grade: X-X-X-x

WOB: 18 - 54 klbf  
RPM: 113 - 123  
GPM: 1155 - 1171  
SPP: 3463 - 3979 psi

WOB: 6 - 63 klbf  
RPM: 37 - 123  
GPM: 446 - 1171  
SPP: 909 - 3900 psi

930  
940  
950  
960  
970  
980  
990  
1000  
1010  
1020  
1030  
1040  
1050  
1060



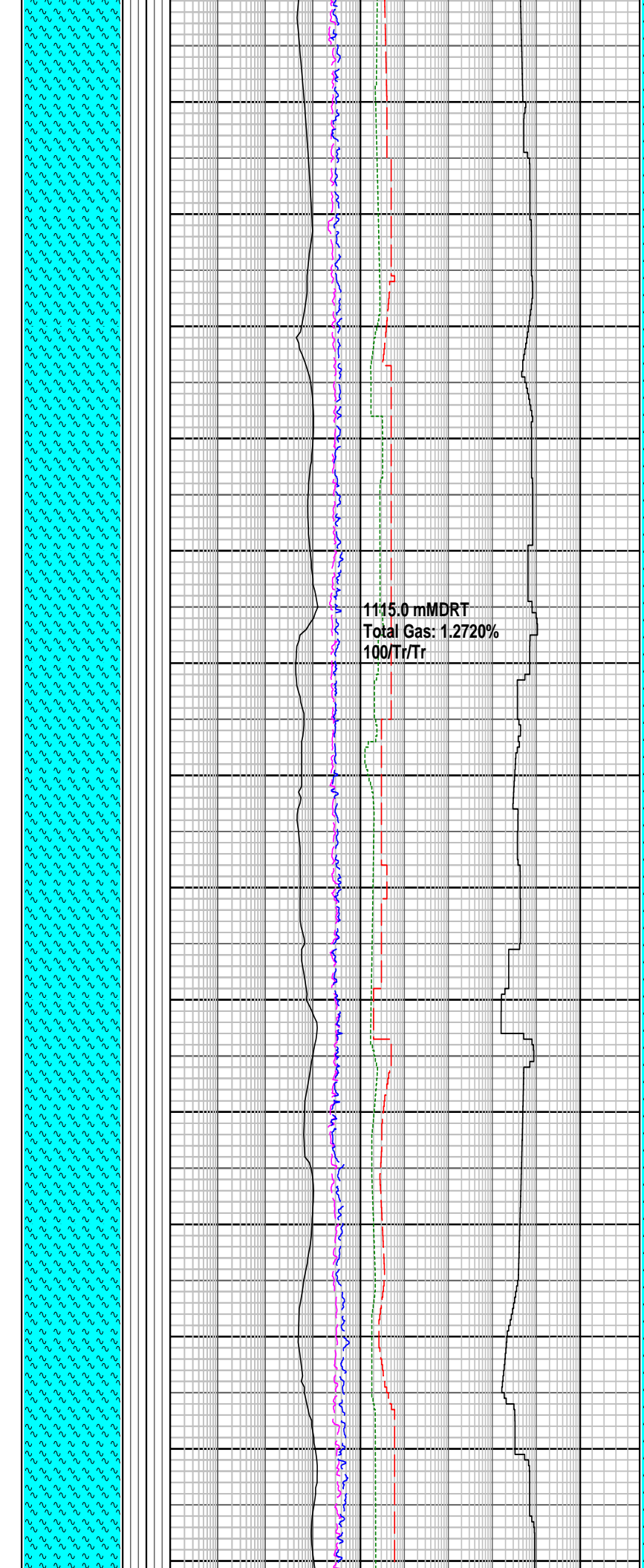
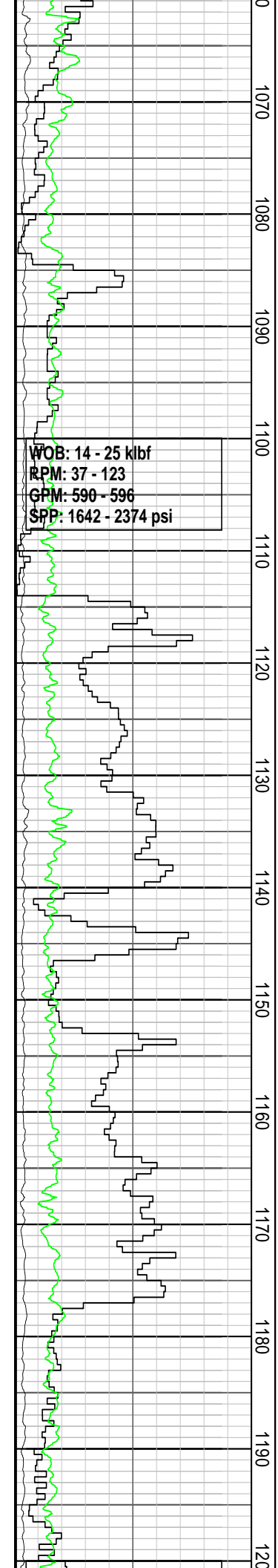
**CALCARENITE** : lt-m gy, pred m gy, lt bl gy, mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbbiky-blky

**MARL**: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbbiky

**CALCARENITE** : lt-m gy, pred m gy, lt bl gy, mnr m dk gy, com v fn-fn qtz grs, com foss frags, mod hd-hd, sbbiky-blky

**MARL**





MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbbly

MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbbly

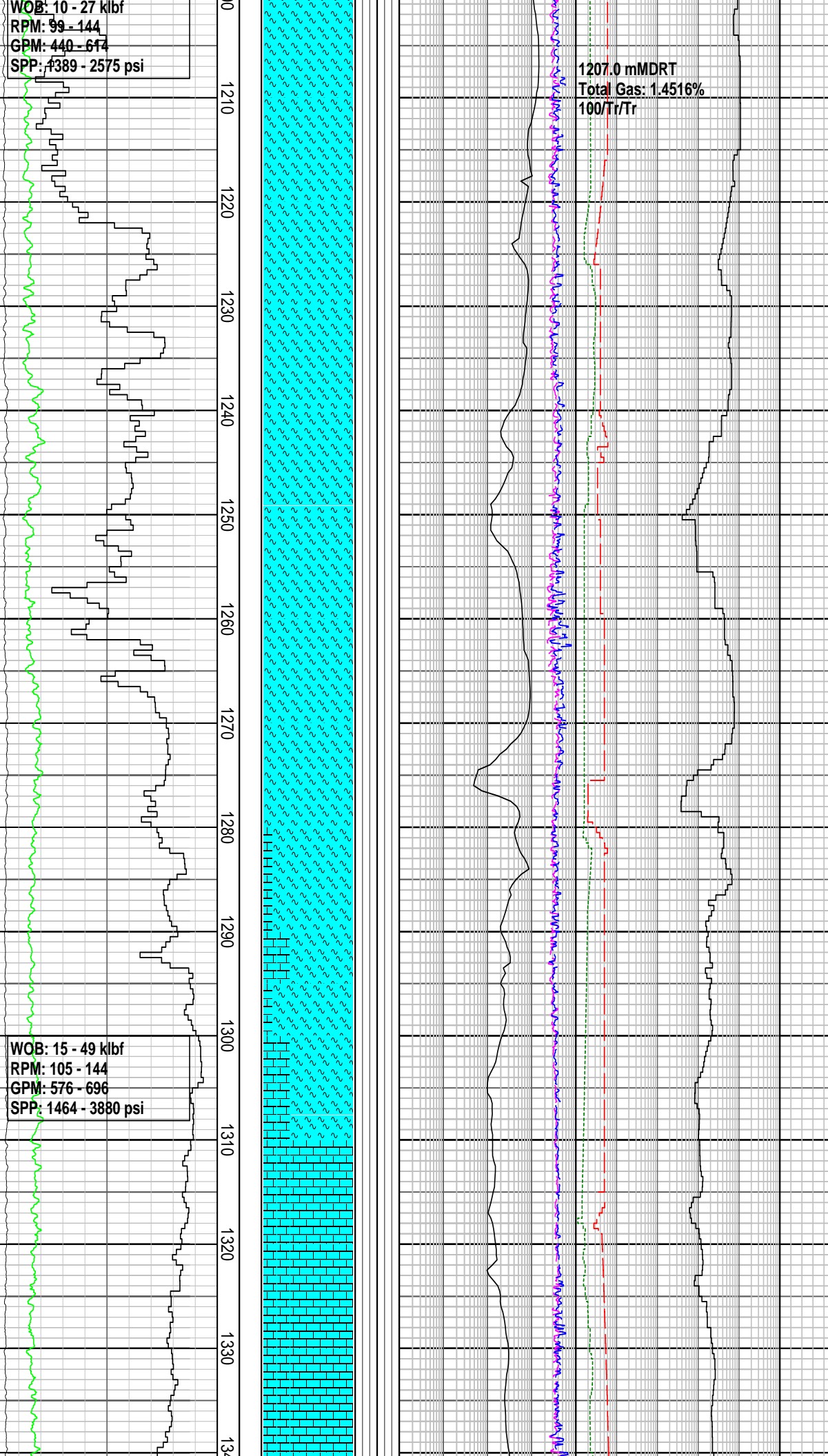
MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbbly



WOB: 10 - 27 klbf  
RPM: 99 - 144  
GPM: 440 - 674  
SPP: 4389 - 2575 psi

WOB: 15 - 49 klbf  
RPM: 105 - 144  
GPM: 576 - 696  
SPP: 1464 - 3880 psi

1207.0 mMDRT  
Total Gas: 1.4516%  
100/Tr/Tr

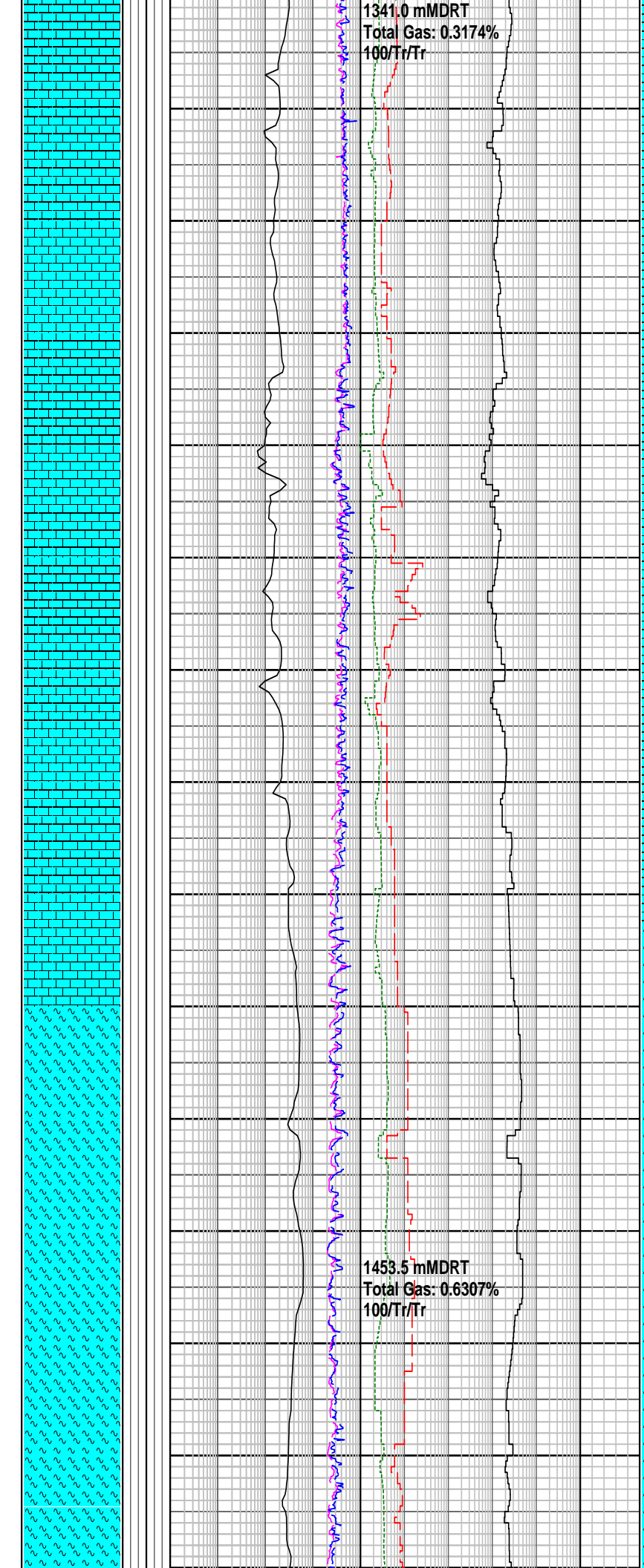
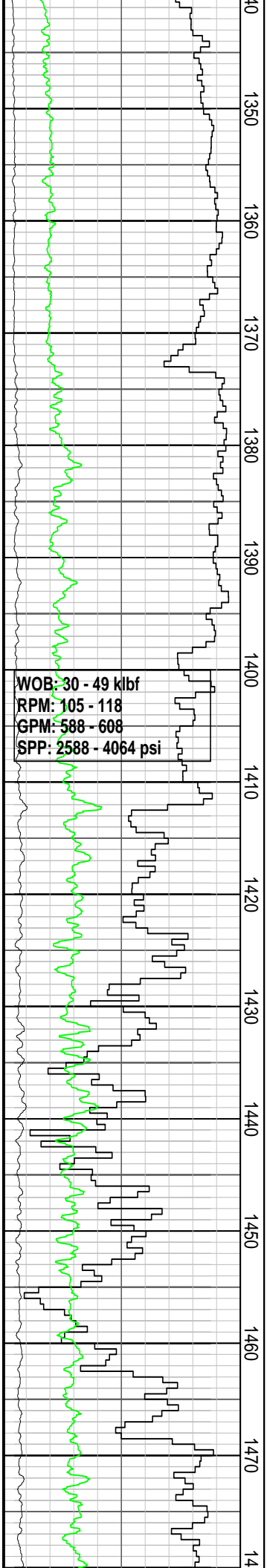


MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbblky

MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbblky

MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp, amor-sbblky

MW: 1.14 sg FV: 58  
PV : 17 YP: 25  
Gels: 10/12/15 pH: 8.90

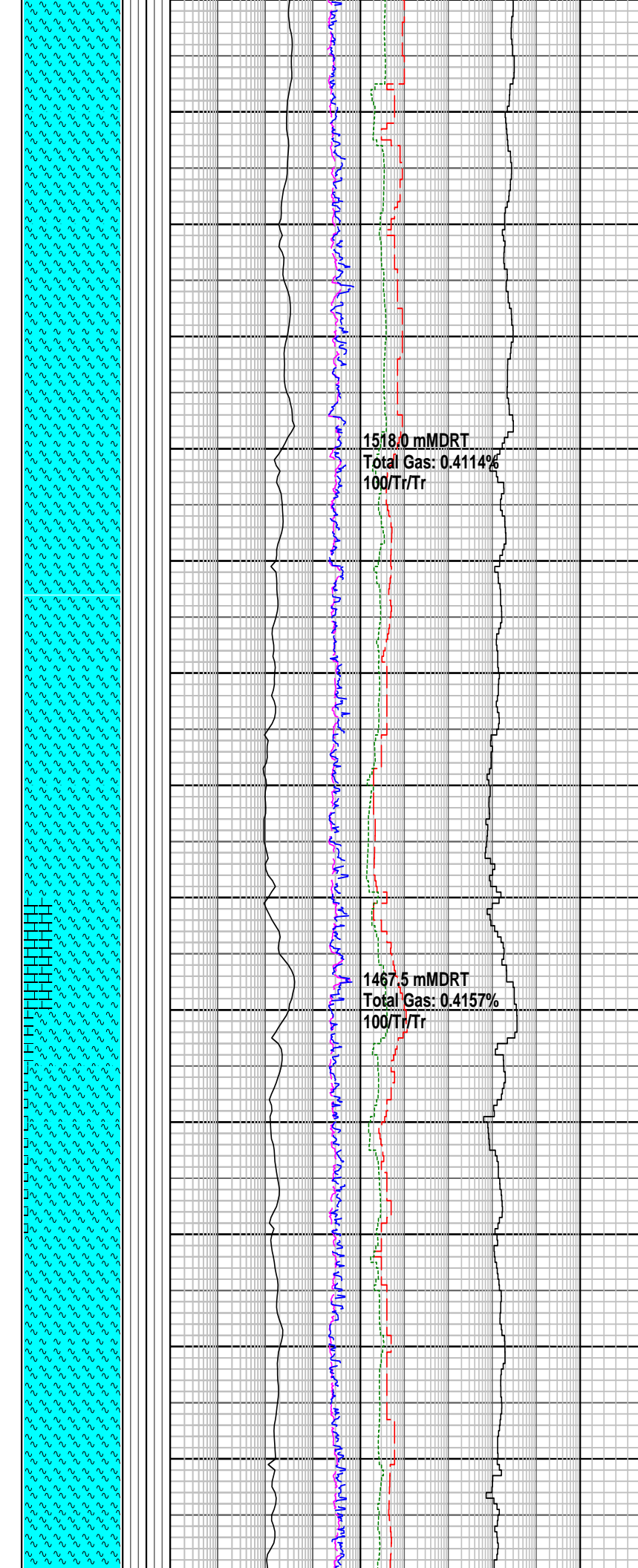
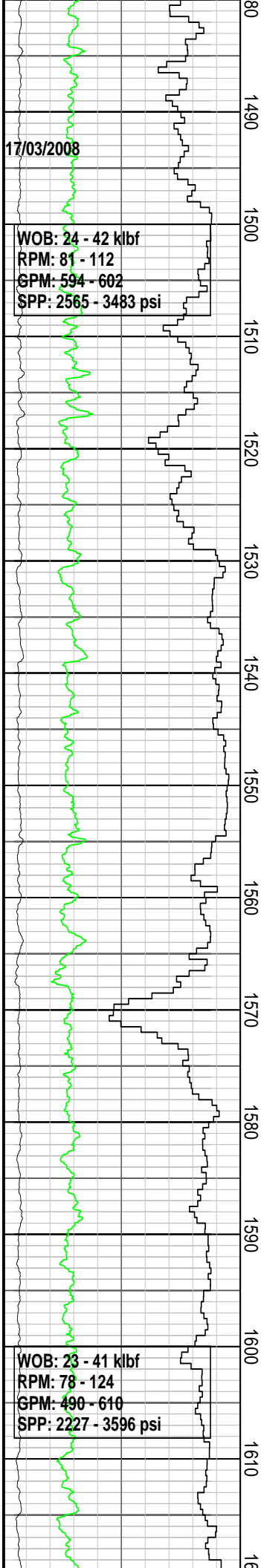


**CALCILUTITE:** pl gy, off wh-pl gy, lt-m brn gy, com carb spks, abd arg, mod hd-disp, sbbkly

**Carbide Run @ 1381mMDRT**  
 Theo: 2070stks. Actual: 2380stks  
 Hole washout = 15.0%

**CALCARENITE:** pl gy, off wh-pl gy, lt-m brn gy, com fn-crs rnd qtz grs, abd arg, com carb spks, mod hd, disp, sbbkly

**CALCILUTITE:** pl-m gy, off wh-pl gy, lt-m brn gy, com carb lam & spks, abd arg, mnr sph qtz grs, mod hd-hd, disp i/p, sbbkly



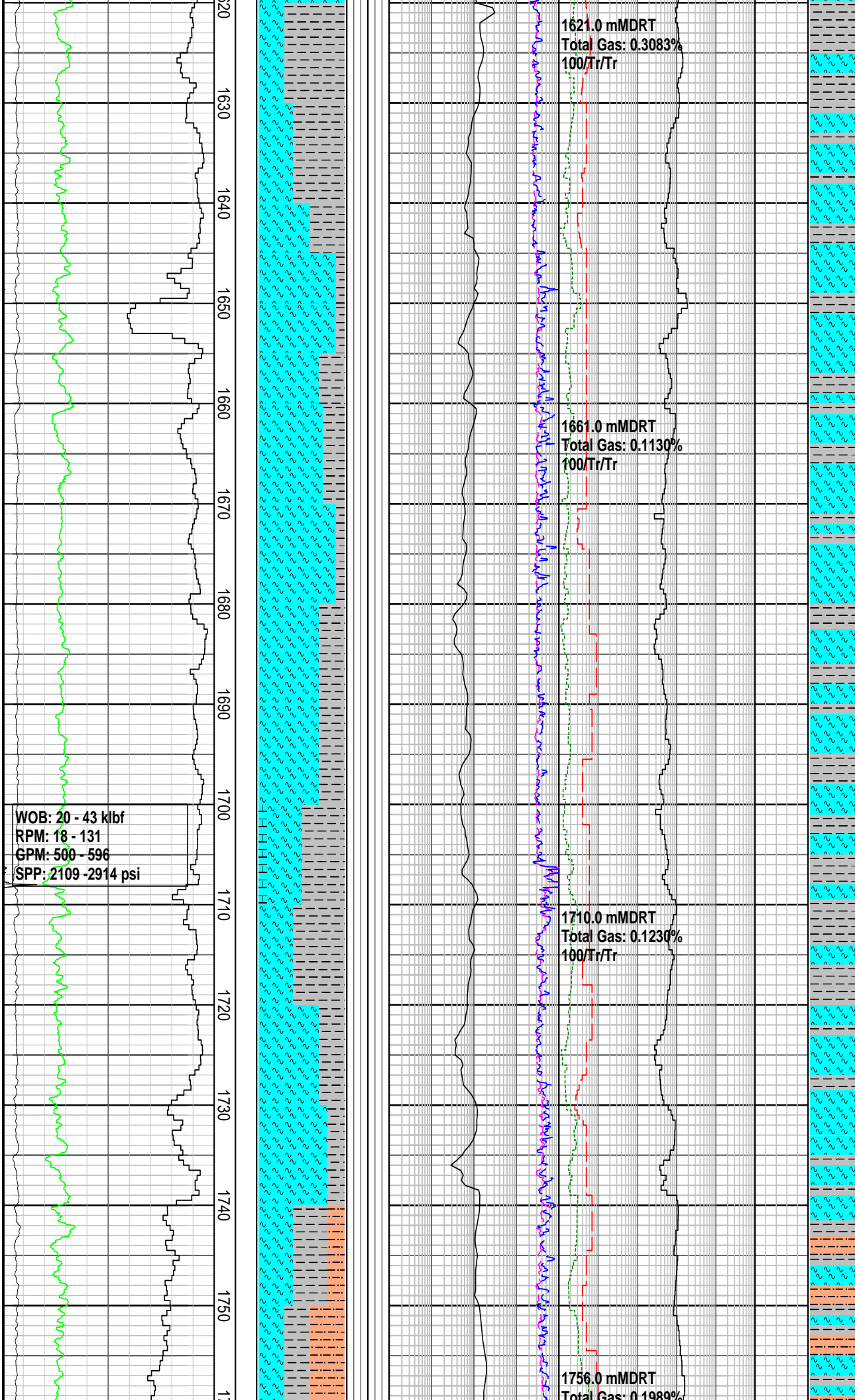
MARL: lt-m gy, m brnsh gy, off wh, abd arg mat, com carb lam & spks, occ lit, mnr fn-med sph qtz grs, loc slit lam & grd to CALCISILTITE, mod hd-hd, sbbly-blky, disp i/p

MARL: pl-med gy, lt brn gy, trnsi i/p, com fn-crs ang-sph qtz grs, com microfos, abd arg mat, mnr-loc com carb lam & spks, mnr nod pyr, frm-hd, sbbly

MARL: pl-m gy, m brn gy, com ool, com microfos, mnr carb spks, occ nod & dissem pyr, frm-mod hd, sbbly

Carbide Run @ 1619mMDRT  
 Theo: 2400stks. Actual: 2750stks

Z/50stks  
Hole washout = 14.6 %



**CALCAREOUS CLAYSTONE:**  
lt gy-lt gn gy, lt olv gy, i/p grd to MARL, tr glauc, r dissemin pyr, tr carb spks & miclams, sft-frm, sbbly

**MARL:** lt-m gy, lt olv gy, grd to CALC CLST, tr glauc, tr dissemin pyr, sft-frm, sbbly

**CALCAREOUS CLAYSTONE:**  
lt-m gy, m olv gy-m dk gy, grd to MARL, tr carb spks, tr dissemin pyr, frm, sbbly

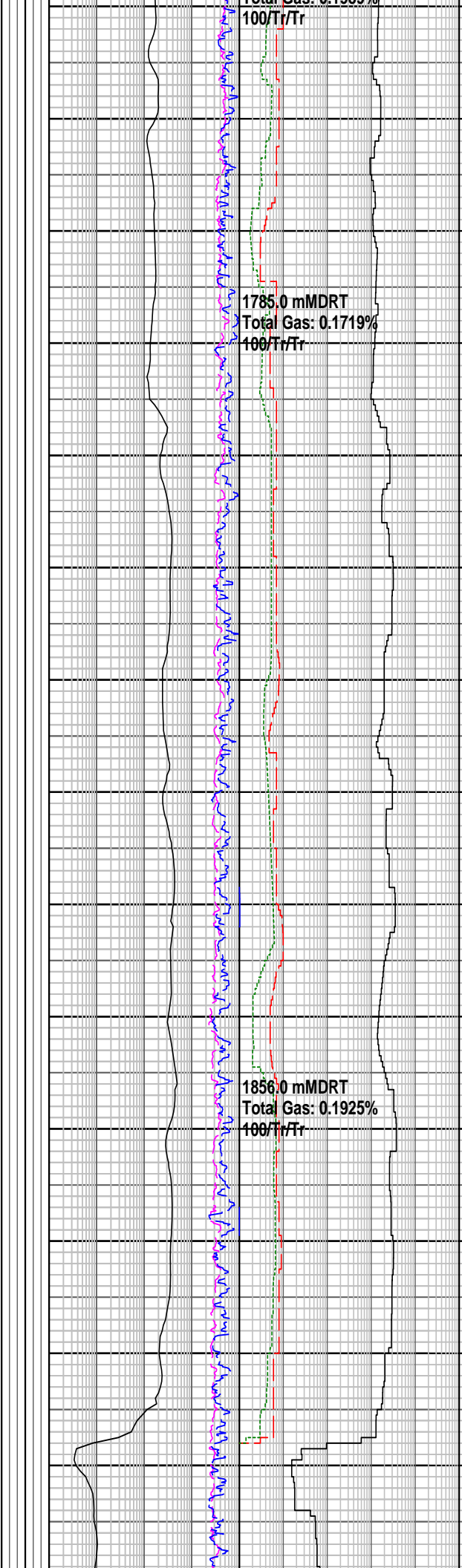
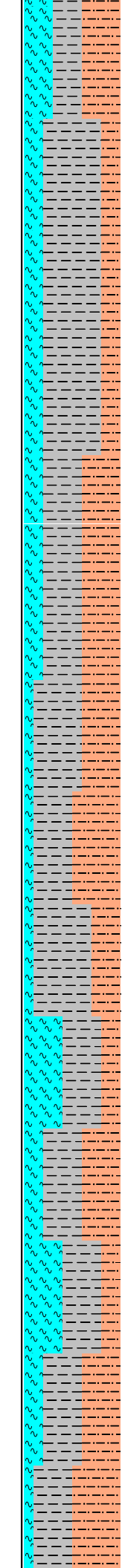
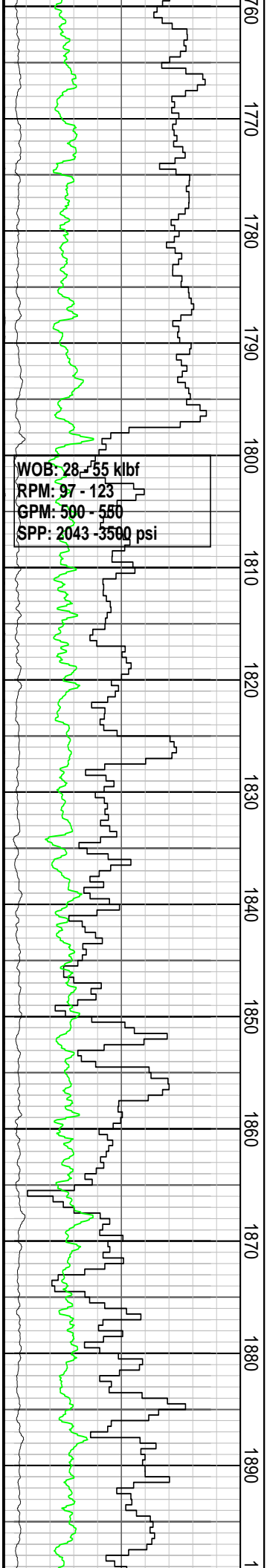
**MARL:** lt-m gy, lt olv gy, grd to CALC CLST, tr glauc, tr dissemin pyr, sft-frm, sbbly

**CALCILUTITE:** wh-v lt gy, tr calc grs, tr foss frags, sf-frm, sbbly

**CALCAREOUS CLAYSTONE:**  
lt-m gy, m olv gy-m dk gy, grd to MARL, tr carb spks, tr dissemin pyr, frm, sbbly

**CALCAREOUS SILTSTONE:**  
wh-lt gy, lt gn gy, sli aren, tr carb spks & mic lam, tr foss frag, sft-frm, i/p mod hd, sbbly





**CALCAREOUS SILTSTONE:**  
 m gy-m gn gy, m olv gy, aren  
 grd calc to SLST, tr carb  
 spks, tr glauc, frm-mod hd,  
 sbblky-blky

**CALCAREOUS CLAYSTONE:**  
 lt-m gy, m olv gy-dk gy, grd  
 to MARL i/p, tr carb spks, tr  
 disse pyr, tr glauc, frm-mod  
 hd, sbblky

**CALCAREOUS SILTSTONE:**  
 m-dk gy, m olv gy tr disse  
 pyr, tr carb spks, mod hd-hd  
 sbblky-blky, i/p sb fis.

**CALCAREOUS CLAYSTONE:**  
 lt-m gy, m olv gy-dk gy, grd  
 to MARL i/p, tr carb spks  
 micr lam, tr disse pyr, tr  
 glauc, frm-mod hd, sbblky

**CALCAREOUS SILTSTONE:**

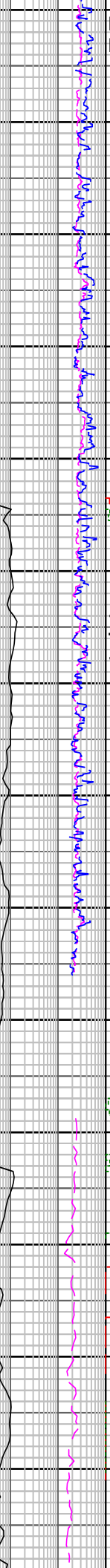
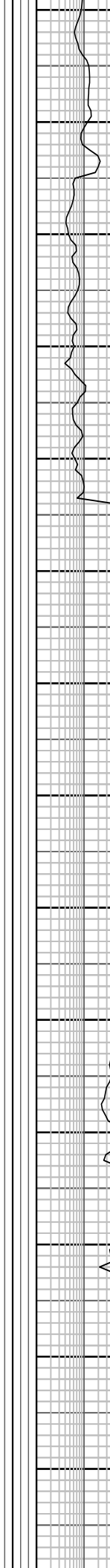
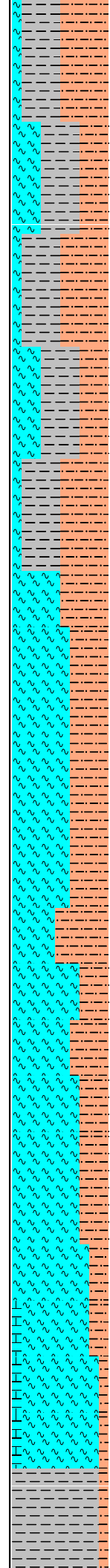
WOB: 27 - 52 klf  
RPM: 118 - 133  
GPM: 549 - 551  
SPP: 2859 - 3907 psi

18/03/2008

4RR 216 mm (8.5")  
Reed  
Type: RSX661B  
Jets: 4x14, 1x15  
Depth In: 1998.0 mMDRT  
Depth Out: xxxx mMDRT  
Drilled xxxx in xx hrs  
Grade: X-X-X-x

WOB: 4 - 52 klf  
RPM: 47 - 123  
GPM: 501 - 602  
SPP: 2157 - 2842 psi

900  
1910  
1920  
1930  
1940  
1950  
1960  
1970  
1980  
1990  
2000  
2010  
2020  
2030



Mud level not at optimum level at Gas Trap

1954.5 mMDRT  
Total Gas: 0.1365%  
100/Tr/Tr

CALCAREOUS SILTSTONE:  
m-m dk gy, m olv gy, tr  
dissem pyr, tr glauc, tr carb  
spks, mod hd, sbblky

MARL: lt-m gy, lt olv gy, grd  
to CALC CLST, tr glauc, tr  
dissem pyr, sft frm, sbblky

MW: 1.18 sg FV: 43  
PV : 8 YP: 20  
Gels: 8/10/13 pH: 9.00

CALCAREOUS SILTSTONE:  
pl-m gy, m brn gy, abd calc  
mat, com microfos & ool, slt  
i/p & loc grd to CALC SLST,  
occ carb mat, frm-hd, disp,  
sbblky

MARL: lt-m gy, lt bl gy, m brn  
i/p, abd calc mat, mnr  
microfos, slt i/p & loc grd to  
CALC SLST, occ carb mat,  
frm-hd, disp, sbblky

MW: 1.17 sg FV: 58  
PV : 17 YP: 26  
Gels: 11/15/22 pH: 9.50

