



Company : Apache

Well : Coelacanth-1

Interval : 123.00 - 1623.18 meters

Created : 17/Mar/2008 5:45:02 AM

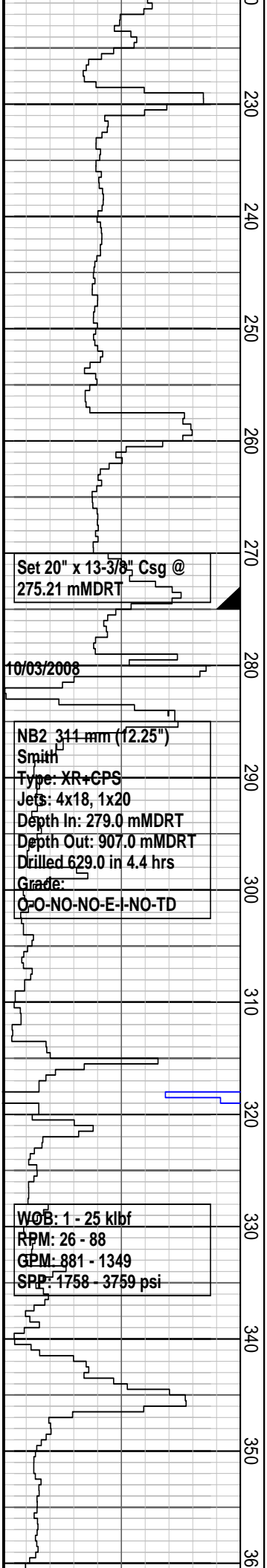
INTEQ

### FORMATION EVALUATION LOG

Drilling Rate		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			
20	20	130				0.01 0.1 1 10	100000			<p>Spud Coelacanth-1 @ 1300hrs on 10/03/2008</p> <p>Drill with sea water and hi-vis pills, returns to sea bed from 128.0 m to 279.0 mMDRT</p> <p>Drill with sea water and hi-vis pills, returns to sea bed from 128.0 m to 279.0 mMDRT</p>
40	40	140				1	100000			
60	60	150				1	100000			
80	80	160				1	100000			
100	100	170				1	100000			
120	120	180				1	100000			
140	140	190				1	100000			
160	160	200				1	100000			
180	180	210				1	100000			
200	200	220				1	100000			

1RR 660 mm (26")  
 Smith  
 Type: XR+C  
 Jets: 4x18  
 Depth In: 127.5 mMDRT  
 Depth Out: 279.0 mMDRT  
 Drilled 151.0 m in 119 hrs  
 Grade:  
 1-1-WT-A-E-I-NO-TD

MW: 1.06 sg FV: 140  
 PV : 13 YP: 56  
 Gels: 44/48/- pH: 9.15



Set 20" x 13-3/8" Csg @ 275.21 mMDRT

10/03/2008

NB2 311 mm (12.25")  
 Smith  
 Type: XR+GPS  
 Jets: 4x18, 1x20  
 Depth In: 279.0 mMDRT  
 Depth Out: 907.0 mMDRT  
 Drilled 629.0 in 4.4 hrs  
 Grade:  
 O-O-NO-NO-E-I-NO-TD

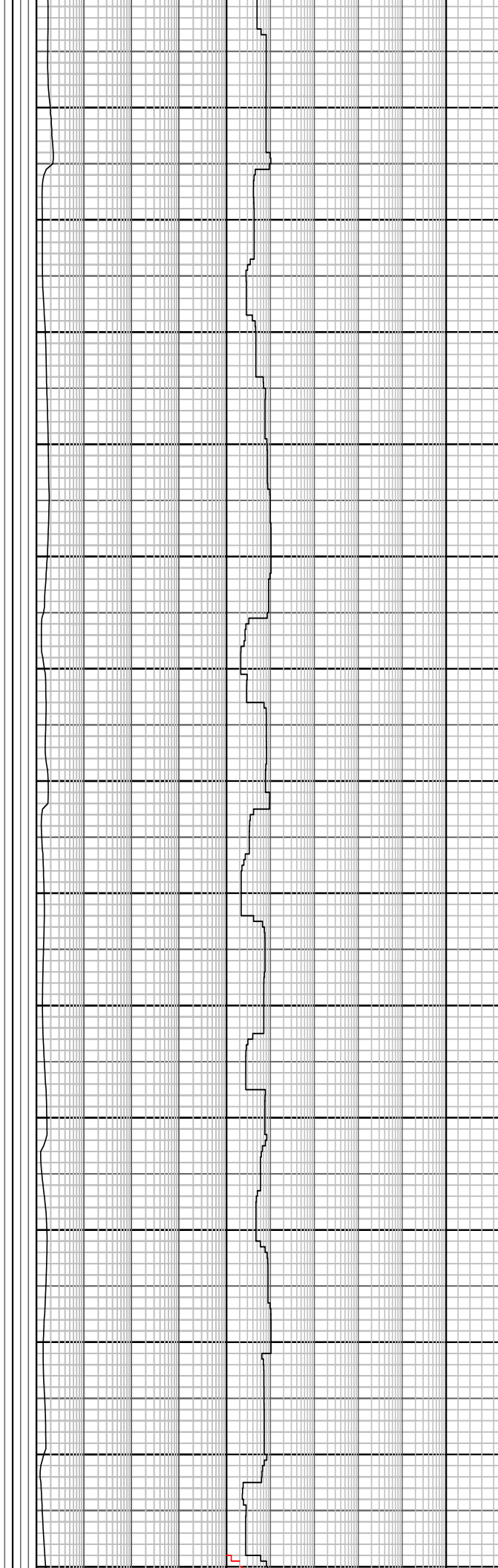
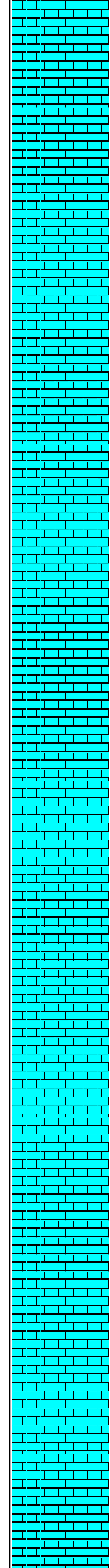
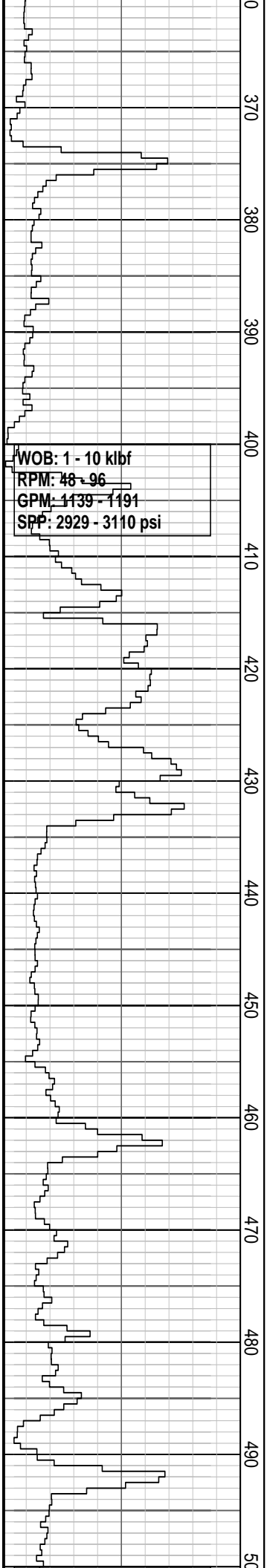
WOB: 1 - 25 kbf  
 RPM: 26 - 88  
 GPM: 881 - 1349  
 SPP: 1758 - 3759 psi

660 mm (26") Section TD @ 279.0 mMDRT on 10/03/2008

**CALCARENITE:** lt-m gry, lt-m bl gry, lt olv gy, tr carb spks, com foss frag, tr v f qtz grs, mod hd- hd, sbbiky-blky

**CALCISILITE:** wh- lt gry, com lt- m gry, com foss, mod hd- hd, sbbiky- blky

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



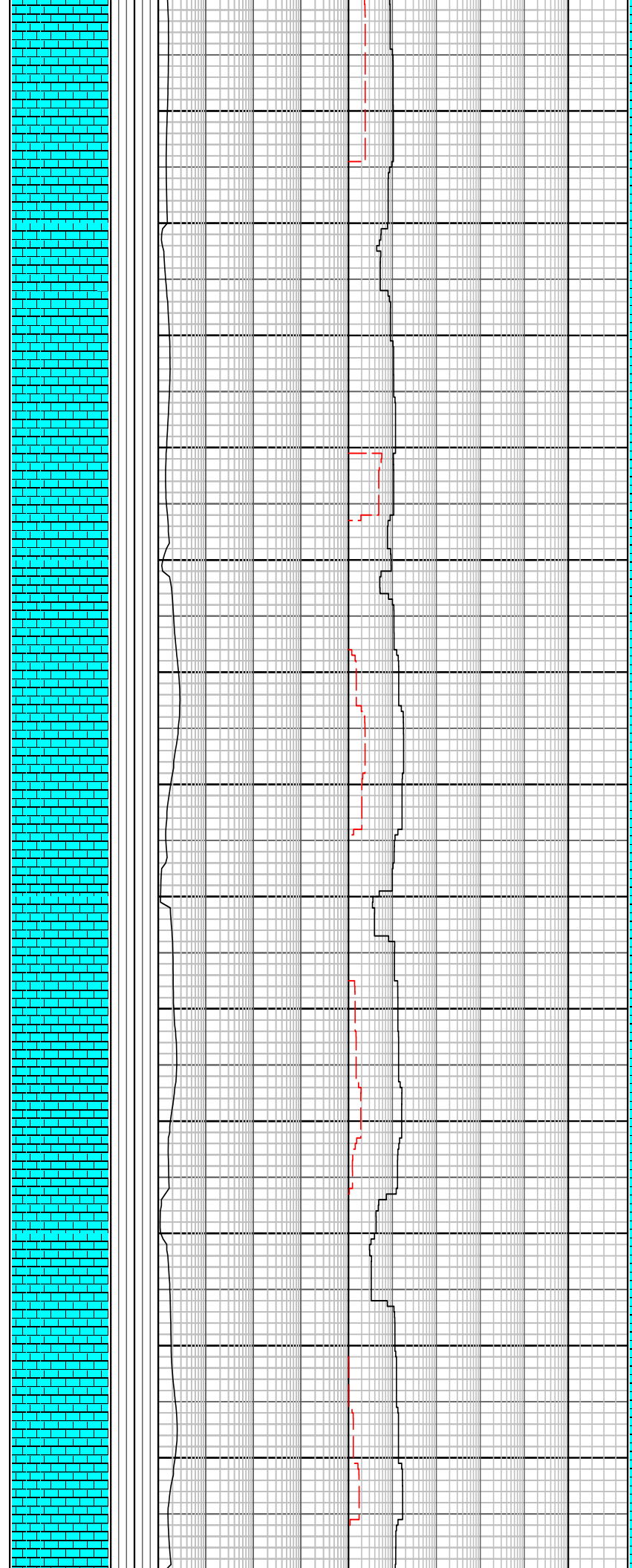
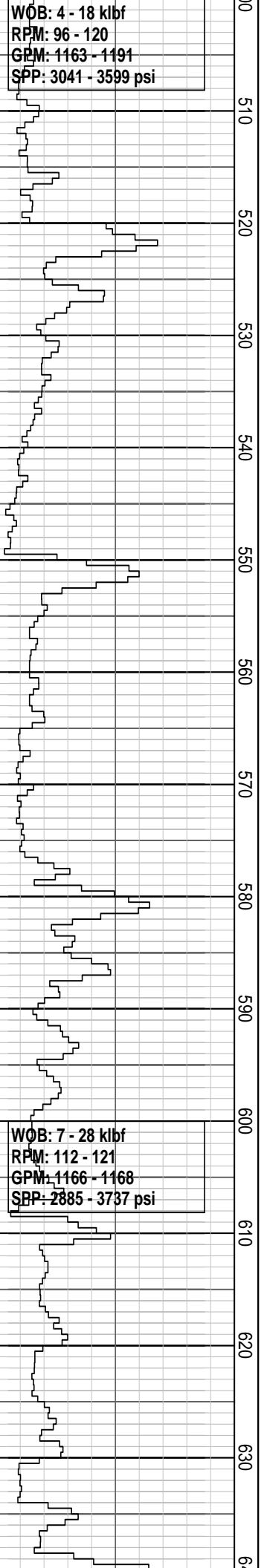
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**CALCILUTITE:** v lt gy- lt gy, lt bl gy, off wh, mnr lt- m gy, lt brn gy, com foss, tr- rr f qtz grs, frm- mod hd, sbbky-blky.

**CALCARENITE:** lt- m gry, lt olv gry, mnr m gry, com foss frags, mod hd-hd, sbbky-blky.

WOB: 4 - 18 klbf  
RPM: 96 - 120  
GPM: 1163 - 1191  
SPP: 3041 - 3599 psi

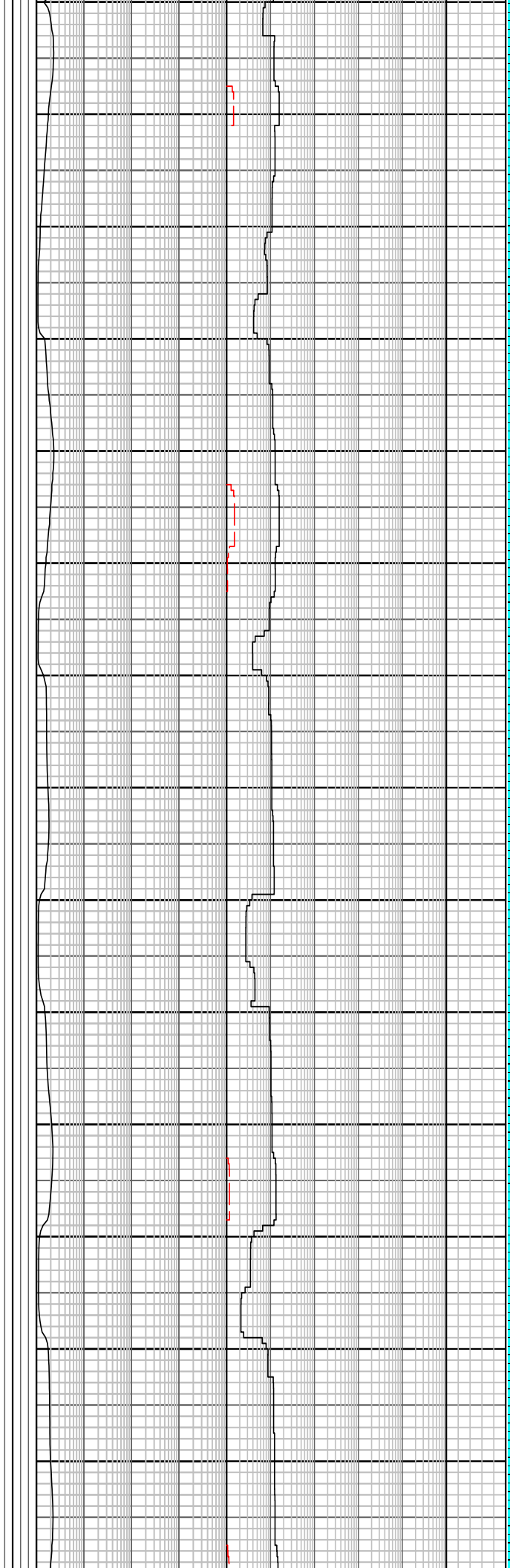
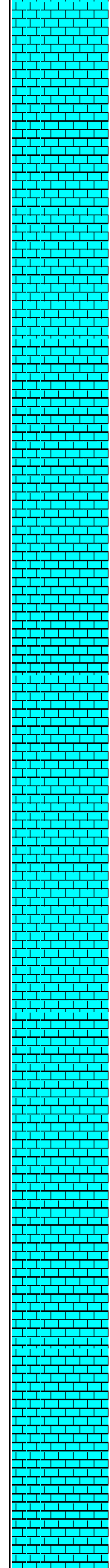
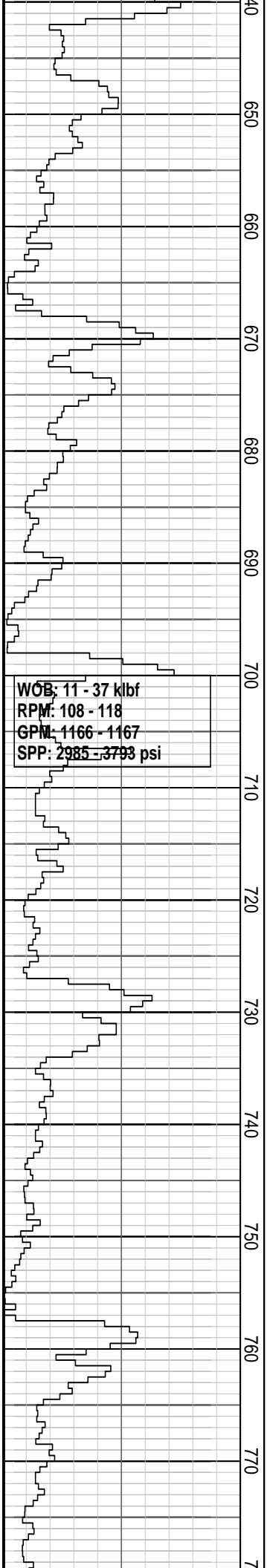
WOB: 7 - 28 klbf  
RPM: 112 - 121  
GPM: 1166 - 1168  
SPP: 2885 - 3737 psi



CALCARENITE: lt- m gry, lt olv gry, mnr m gry, com foss frags, mod hd-hd, sbbiky-blky.

CALCARENITE: lt- m gry, lt olv gry, mnr m gry, com foss frags, mod hd-hd, sbbiky-blky.

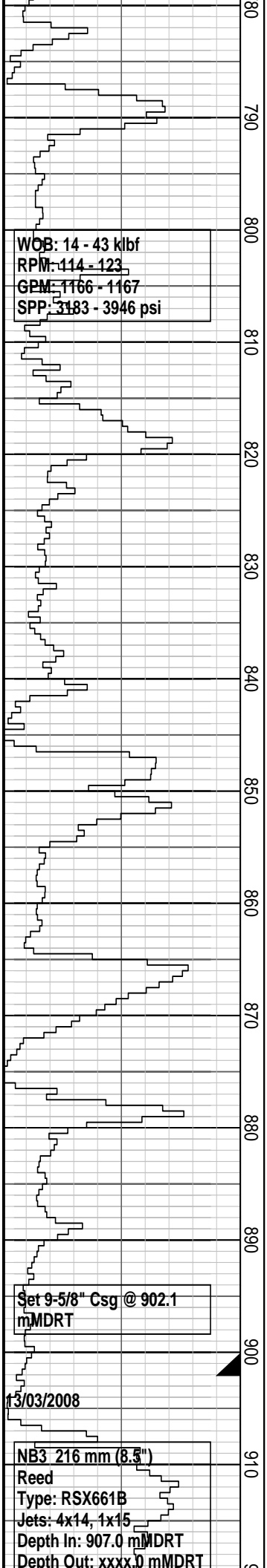
CALCARENITE: lt-m gy, lt-m olv, lt brn gy, tr com foss frags, com fn-m qtz grs, mod hd, sbbiky-blky.



**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 kilbf  
 RPM: 114 - 123  
 GPM: 1166 - 1167  
 SPP: 3183 - 3946 psi

Set 9-5/8" Csg @ 902.1  
 mMDRT

NB3 216 mm (8.5")  
 Reed  
 Type: RSX661B  
 Jets: 4x14, 1x15  
 Depth In: 907.0 mMDRT  
 Depth Out: xxxx.0 mMDRT

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.

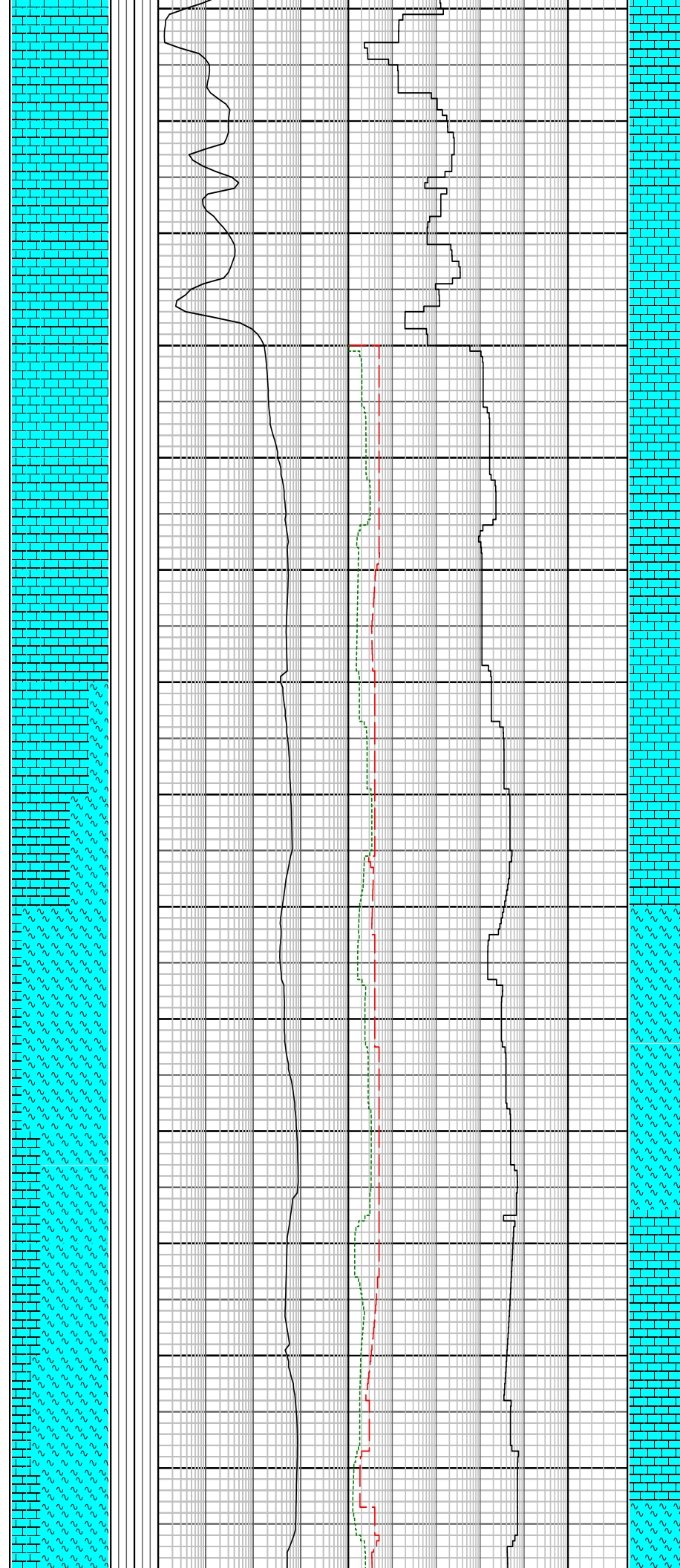
311 mm (12.25") Section TD  
 @ 907.0 mMDRT on  
 13/03/2008

Drilled xxx-in xx hrs  
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

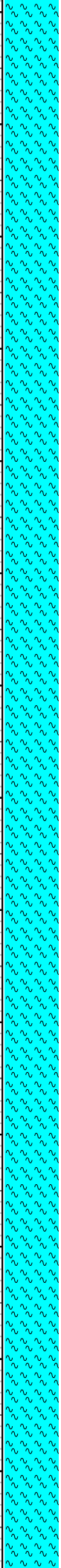
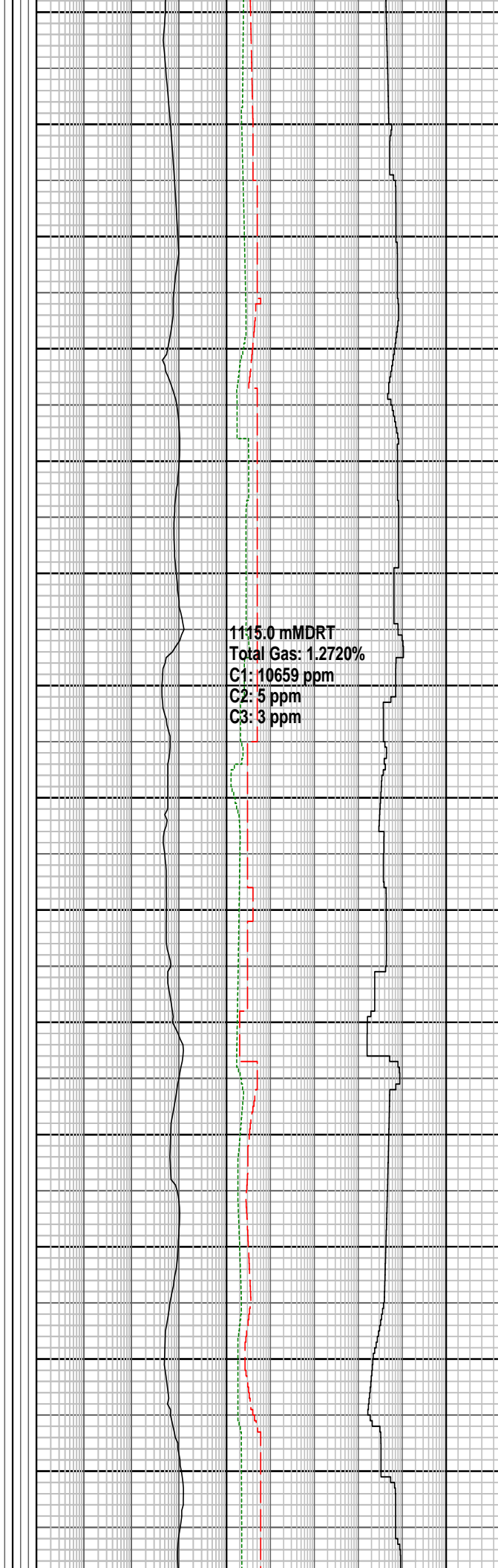
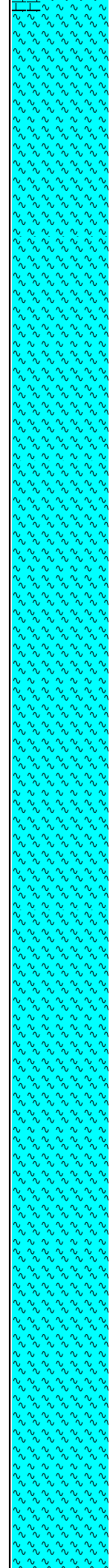
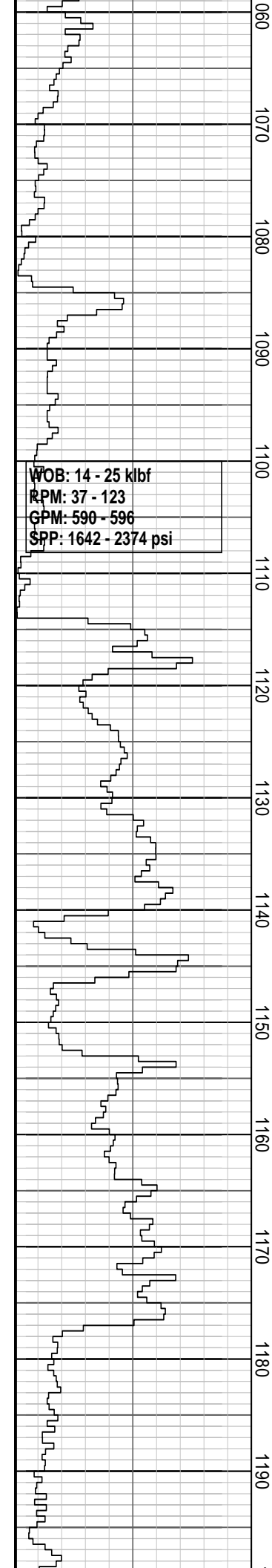
920  
930  
940  
950  
960  
970  
980  
990  
1000  
1010  
1020  
1030  
1040  
1050  
1



**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: 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

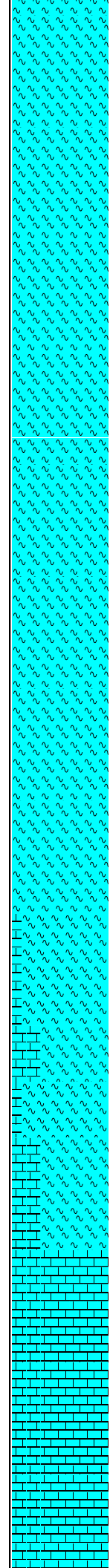
MARL: lt gy-lt gnsh gy, lt brnsh gy-off wh, tr glauc grs, tr carb spks & micr lam, tr v fn qtz & calc grs, sft-disp,amor-sbblky



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

200  
1210  
1220  
1230  
1240  
1250  
1260  
1270  
1280  
1290  
1300  
1310  
1320  
1330



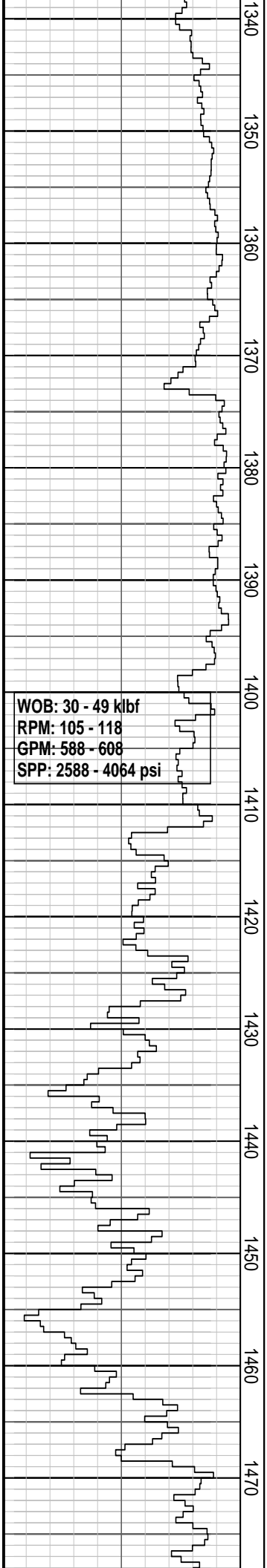
1207.0 mMDRT  
Total Gas: 1.4516%  
C1: 10734 ppm  
C2: 6 ppm  
C3: 2 ppm

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

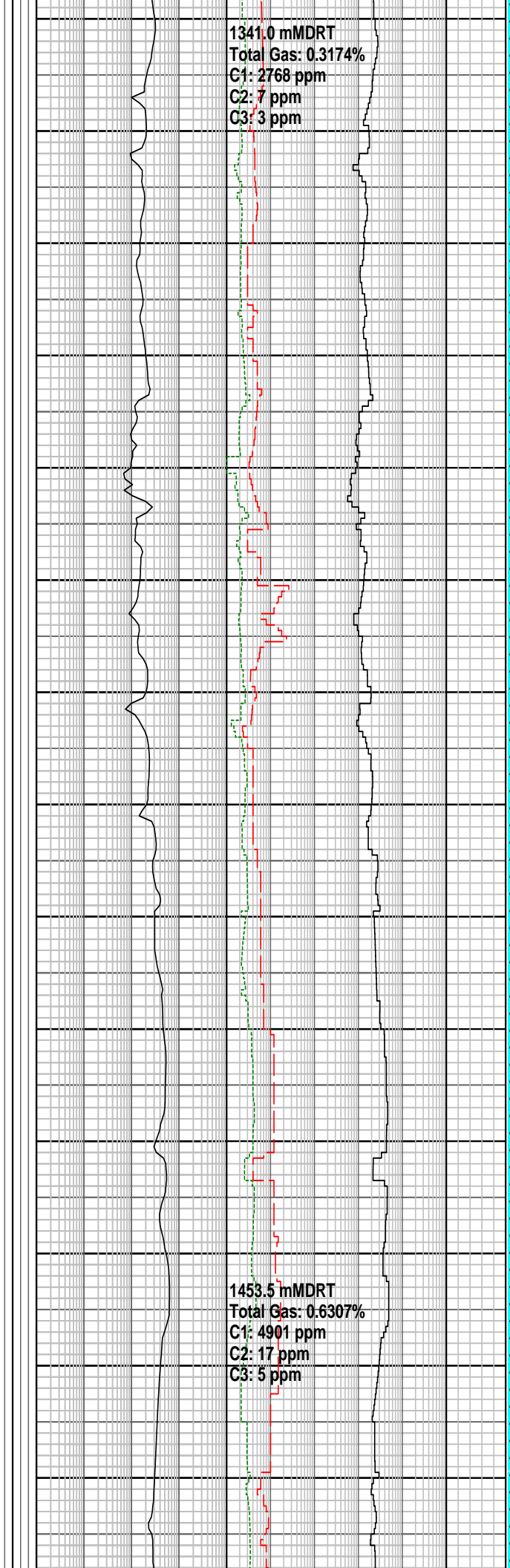
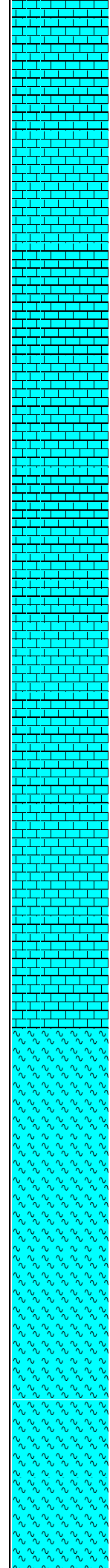
MARL: lt gy-lt gnsh gy, lt  
brnsh gy-off wh, tr glauc grs,  
tr carb spks & micr lam, tr v  
fn qtz & calc grs,  
sft-disp,amor-sbblky

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



**WOB: 30 - 49 klbf**  
**RPM: 105 - 118**  
**GPM: 588 - 608**  
**SPP: 2588 - 4064 psi**



**1341.0 mMDRT**  
**Total Gas: 0.3174%**  
**C1: 2768 ppm**  
**C2: 7 ppm**  
**C3: 3 ppm**

**1453.5 mMDRT**  
**Total Gas: 0.6307%**  
**C1: 4901 ppm**  
**C2: 17 ppm**  
**C3: 5 ppm**

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

**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, sbblky**

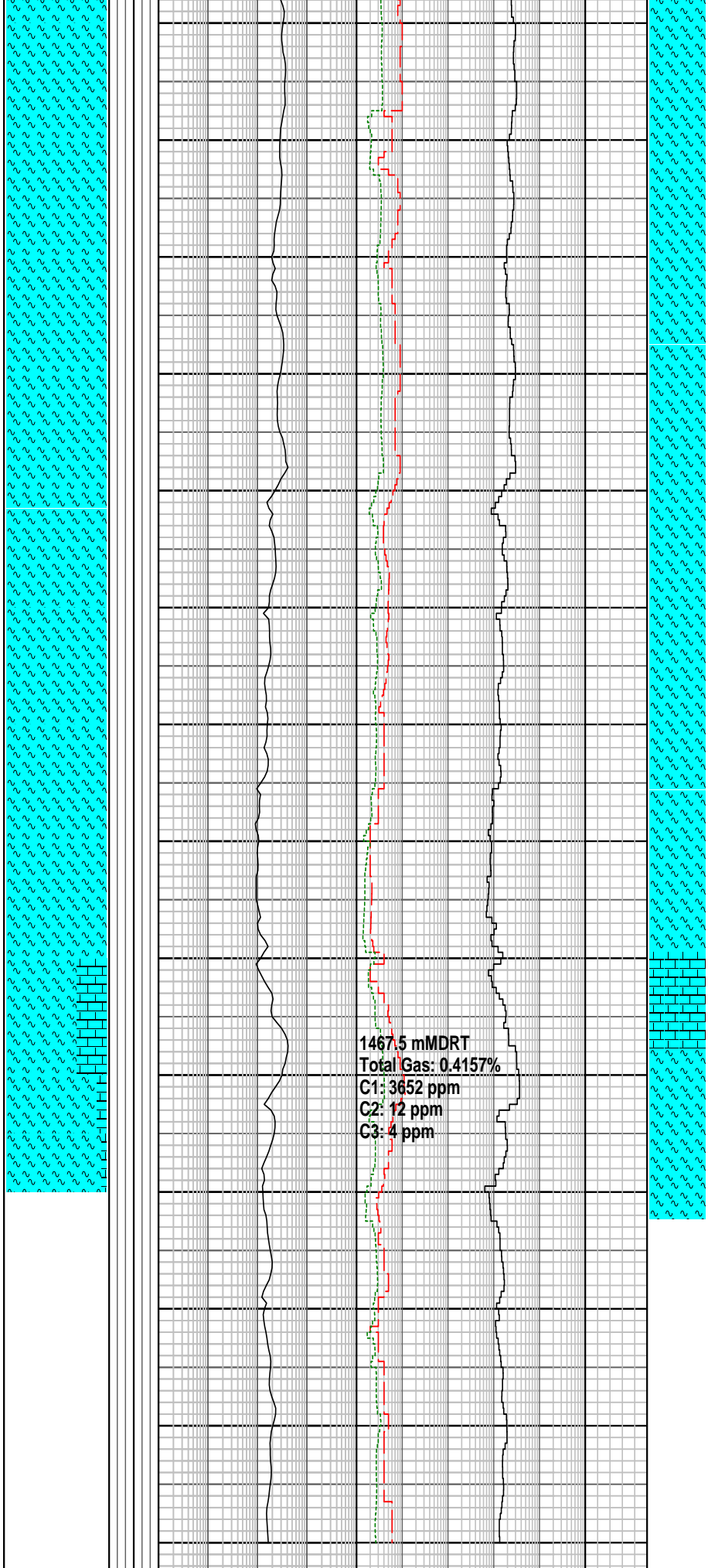
**CALCILUTITE: pl-m gy, off wh-pl gy, lt-m brn gy, com carb lam & spks, abd arg, mnr sph qtz grs, mod hd-hd, disp i/p, sbblky**

17/03/2008

WOB: 24 - 42 kllbf  
RPM: 81 - 112  
GPM: 594 - 602  
SPP: 2565 - 3483 psi

WOB: 23 - 41 kllbf  
RPM: 78 - 124  
GPM: 490 - 610  
SPP: 2227 - 3596 psi

1480  
1490  
1500  
1510  
1520  
1530  
1540  
1550  
1560  
1570  
1580  
1590  
1600  
1610



1467.5 mMDRT  
Total Gas: 0.4157%  
C1: 3652 ppm  
C2: 12 ppm  
C3: 4 ppm

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

# FORMATION EVALUATION LOG

<b>Drilling Rate</b> ROP (m/hr)	20	40	60	80	100	120	140	160	180	200
	220	240	260	280	300	320	340	360	380	400
ROP (m/hr)	20	40	60	80	100	120	140	160	180	200
ROP (m/hr)	220	240	260	280	300	320	340	360	380	400

TVDRT meters  
MD meters 1:500

Cuttings Lithology

Oil Show P F G  
Visual Inferred Porosity P F G

Gas Data			
Gas Hydrocarbon Avg %			
0.01	0.1	1	10

Chromatograph Data		
	Methane ppm	100000
1	Ethane ppm	100000
1	Propane ppm	100000
1	iso-Butane ppm	100000
1	n-Butane ppm	100000
1	iso-Pentane ppm	100000
1	n-Pentane ppm	100000

Calciometry

Interpreted Lithology

Lithology Description