



Company : ROC Oil  
 Well : Basker-7  
 Interval : 145.00 - 3456.20 meters  
 Created : 03/Aug/2009 9:00:18 AM



INTEQ

FORMATION EVALUATION LOG

ROP (m/hr)	CORE	MD meters	CUTTINGS LITHOLOGY	INTERPRETED LITHOLOGY	TOTAL GAS (%)	CHROMATOGRAPH	FLUORESCENCE	CALCIMETRY	LITHOLOGY / REMARKS
					0.1   1   10   100 Resistivity (Deep) 0.1 1000 ohmm	Methane ppm Ethane ppm Propane ppm iso-Butane ppm n-Butane ppm iso-Pentane ppm n-Pentane ppm 100   1000   10000   100000			
ROP BACKUP (m/hr) Gamma Ray API		1:50							
		150							All depth measurements in meters referenced from Rotary Table (RT) RT-AHD = 21.5m Water depth = 154.2mMDRT RT-Seabed = 175.7mMDRT
		160							
		170							Basker-7 spudded at 03:00hrs on 22 July 2009  MD: 175.70m Inc: 0.00° Azi: 150.85° TVD: 175.70m
NB1 Reed Y11C 660mm (26") Jets: 3x22, 1x16 Depth In: 175.7m Depth Out: 210.7m Drilled: 35.0m in 0.5hrs Grade: F-1-NO-N-0-1-WT-TD		180							
		190							Drill with seawater and hi-vis sweeps Returns to Seabed
		200							
		210							Set 762mm (30") x 508mm (20") casing shoe at 209.0mMDRT
22 July 2009 23 July 2009		220							
NB2 Smith XR VCPS 406mm (16") Jets: 3x22, 1x15 Depth In: 210.7m Depth Out: 1061.7m Drilled: 851.0m in 13.9hrs Grade: F-1-NO-S-I-1-WT-TD		230							MD: 226.76m Inc: 0.00° Azi: 128.45° TVD: 226.76m
		240							
		25							

Drill with seawater and hi-vis sweeps

Returns to Seabed  
MD: 255.43m Inc: 0.36°  
Azi: 74.37° TVD: 255.43m

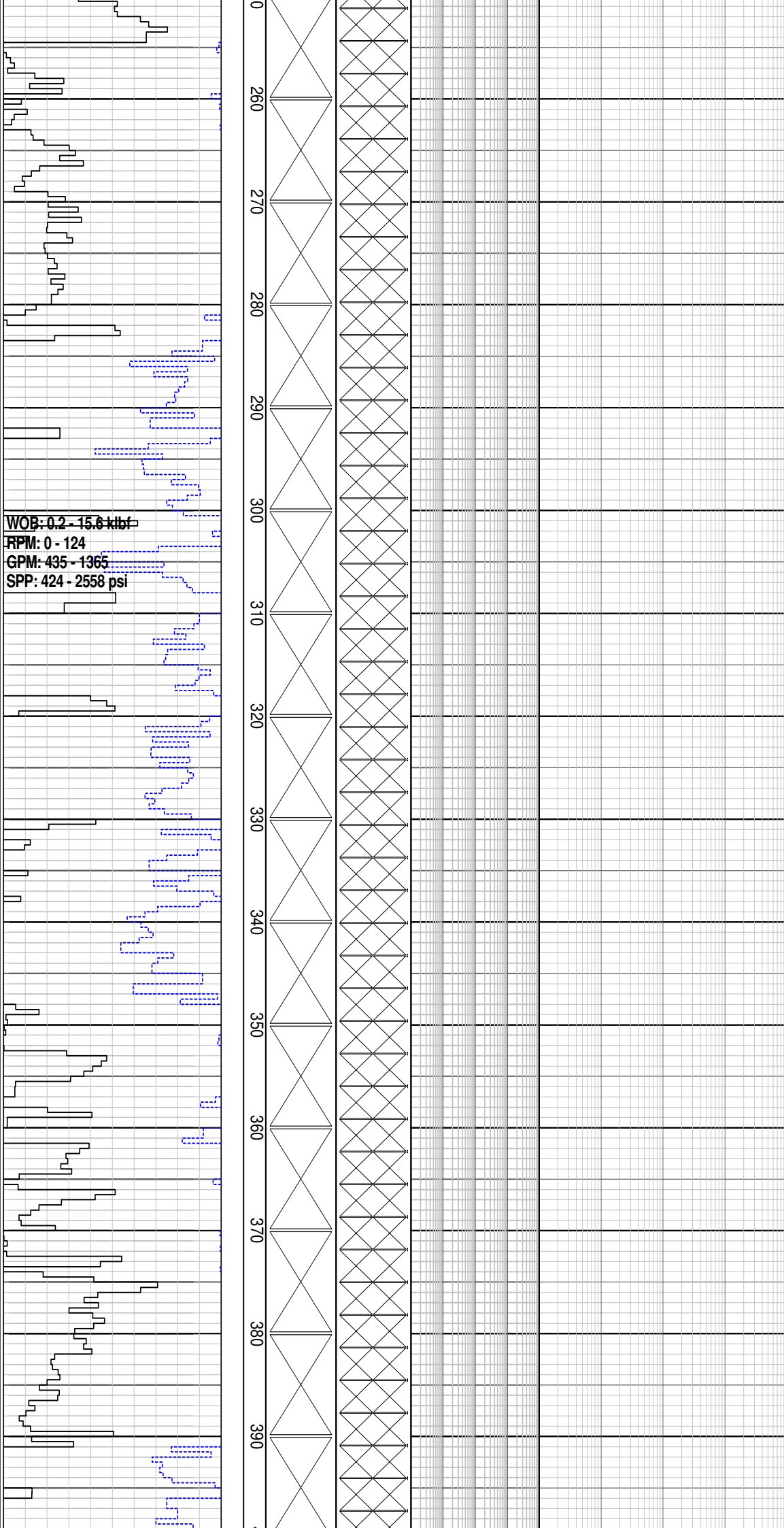
MD: 284.01m Inc: 0.78°  
Azi: 284.01° TVD: 284.01m

MD: 312.87m Inc: 1.11°  
Azi: 151.68° TVD: 312.86m

MD: 342.04m Inc: 1.83°  
Azi: 152.30° TVD: 342.02m

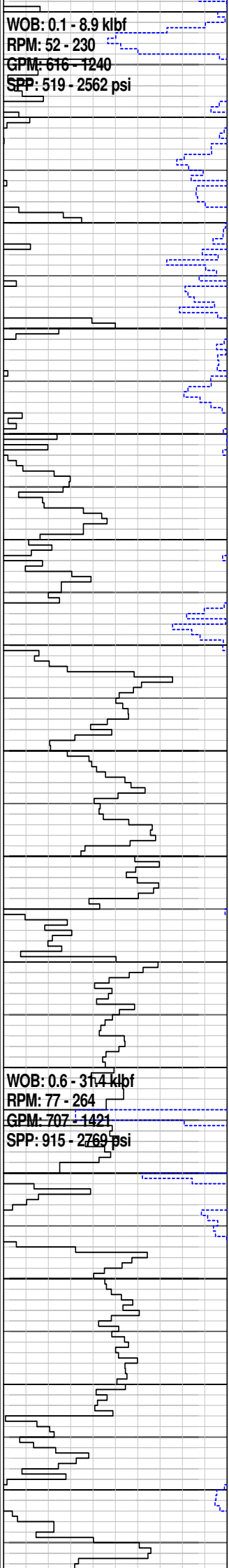
MD: 370.47m Inc: 3.26°  
Azi: 148.51° TVD: 370.43m

Drill with seawater and hi-vis sweeps. Returns to Seabed.



WOB: 0.1 - 8.9 klb  
RPM: 52 - 230  
GPM: 616 - 1240  
SPP: 519 - 2562 psi

WOB: 0.6 - 31.4 klb  
RPM: 77 - 264  
GPM: 707 - 1421  
SPP: 915 - 2769 psi



MD: 399.01m Inc: 4.39°  
Azi: 145.48° TVD: 398.91m

MD: 426.67m Inc: 6.45°  
Azi: 150.06° TVD: 426.44m

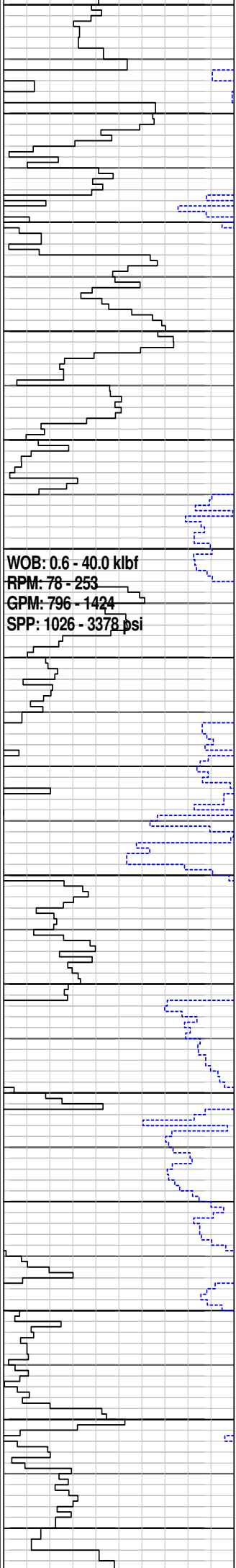
MD: 455.70m Inc: 8.55°  
Azi: 155.30° TVD: 455.22m

MD: 484.37m Inc: 10.63°  
Azi: 155.06° TVD: 483.49m

Drill with seawater and hi-vis  
sweeps. Returns to Seabed.

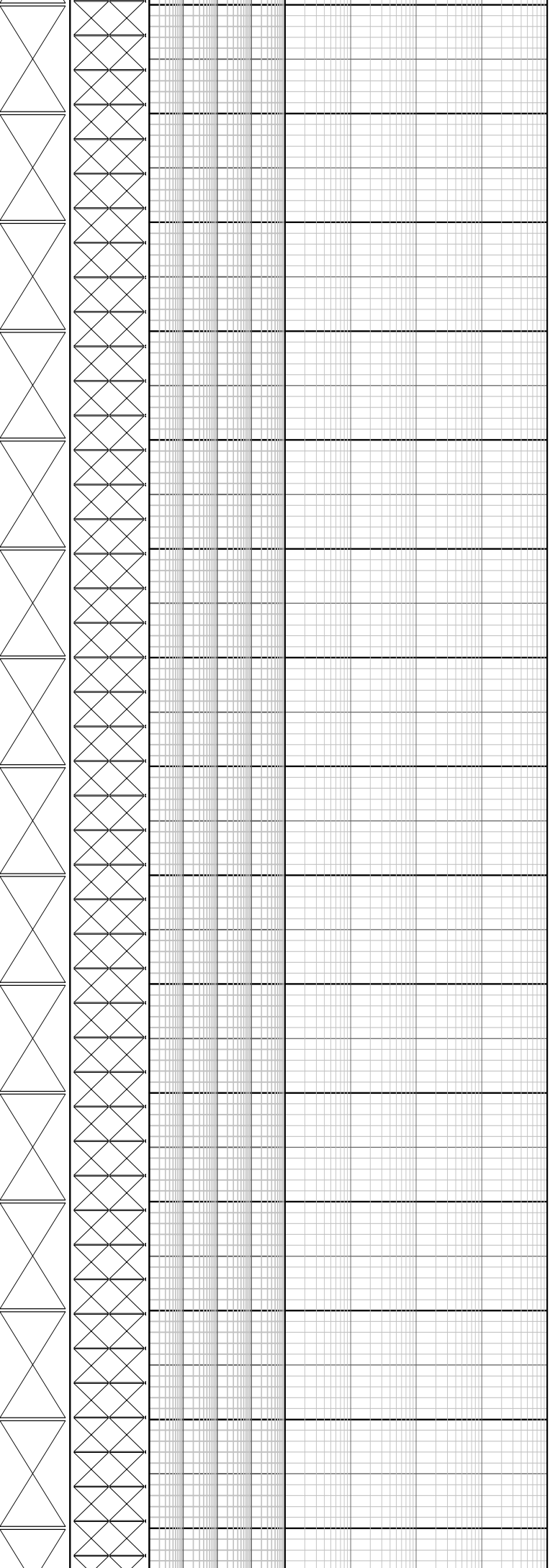
MD: 513.87m Inc: 12.47°  
Azi: 153.23° TVD: 512.39m

MD: 542.49m Inc: 15.01°  
Azi: 150.63° TVD: 540.19m



**WOB: 0.6 - 40.0 klbf**  
**RPM: 78 - 253**  
**GPM: 796 - 1424**  
**SPP: 1026 - 3378 psi**

550  
560  
570  
580  
590  
600  
610  
620  
630  
640  
650  
660  
670  
680  
690



**MD: 572.14m Inc: 17.86°**  
**Azi: 149.10° TVD: 568.62m**

**Drill with seawater and hi-vis sweeps**  
**Returns to Seabed**

**MD: 601.14m Inc: 20.61°**  
**Azi: 150.86° TVD: 596.00m**

**MD: 629.94m Inc: 23.75°**  
**Azi: 150.85° TVD: 622.67m**

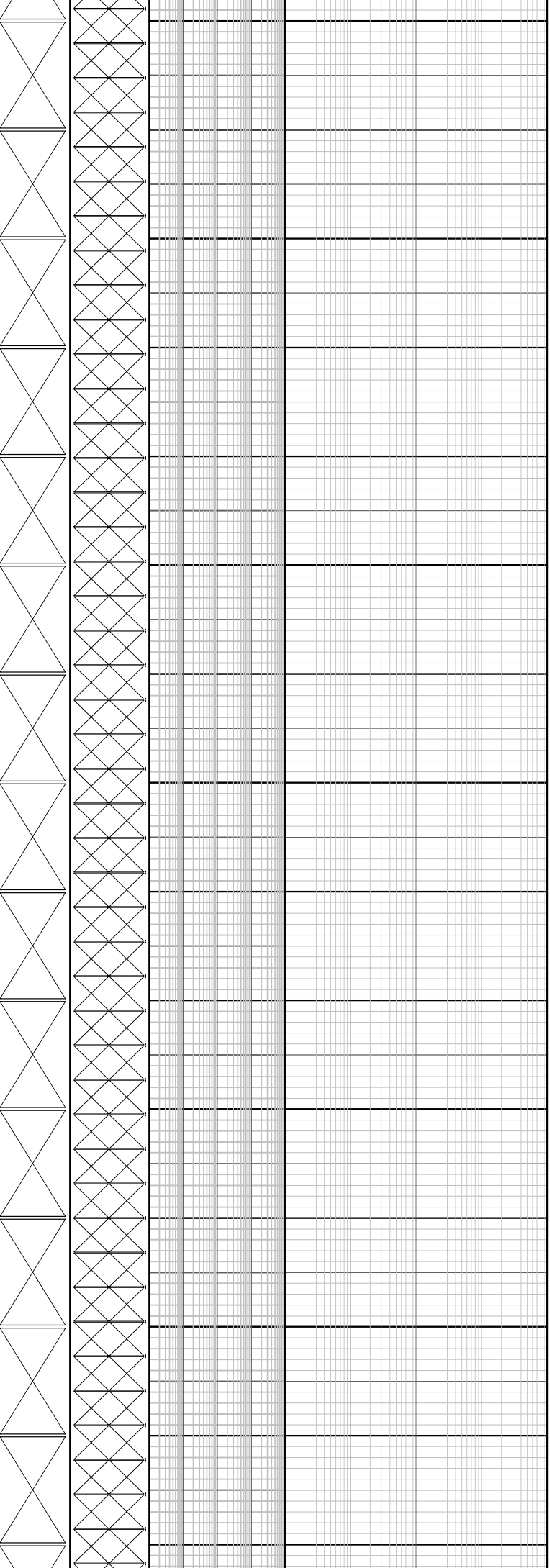
**MD: 657.35m Inc: 27.63°**  
**Azi: 152.02° TVD: 647.36m**

**MD: 686.15m Inc: 28.92°**  
**Azi: 155.03° TVD: 672.72m**

WOB: 2.7 - 43.6 kJbf  
RPM: 84 - 273  
GPM: 851 - 1506  
SPP: 1112 - 3677 psi

WOB: 0.3 - 31.7 kJbf  
RPM: 0 - 122  
GPM: 924 - 1283  
SPP: 2082 - 3735 psi

700  
710  
720  
730  
740  
750  
760  
770  
780  
790  
800  
810  
820  
830  
840



Drill with seawater and hi-vis sweeps  
Returns to Seabed

MD: 714.52m Inc: 30.23°  
Azi: 156.28° TVD: 697.40m

MD: 742.58m Inc: 31.04°  
Azi: 156.67° TVD: 721.54m

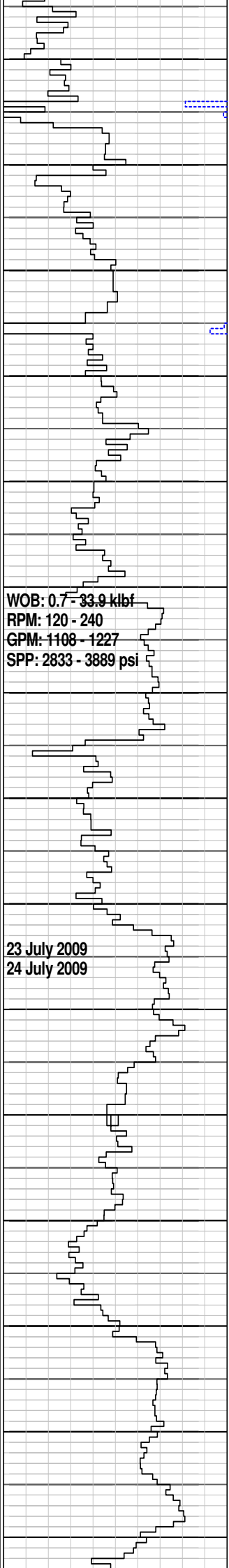
MD: 771.54m Inc: 32.48°  
Azi: 157.40° TVD: 746.17m

Drill with seawater and hi-vis sweeps  
Returns to Seabed

MD: 799.88m Inc: 33.24°  
Azi: 154.47° TVD: 769.98m

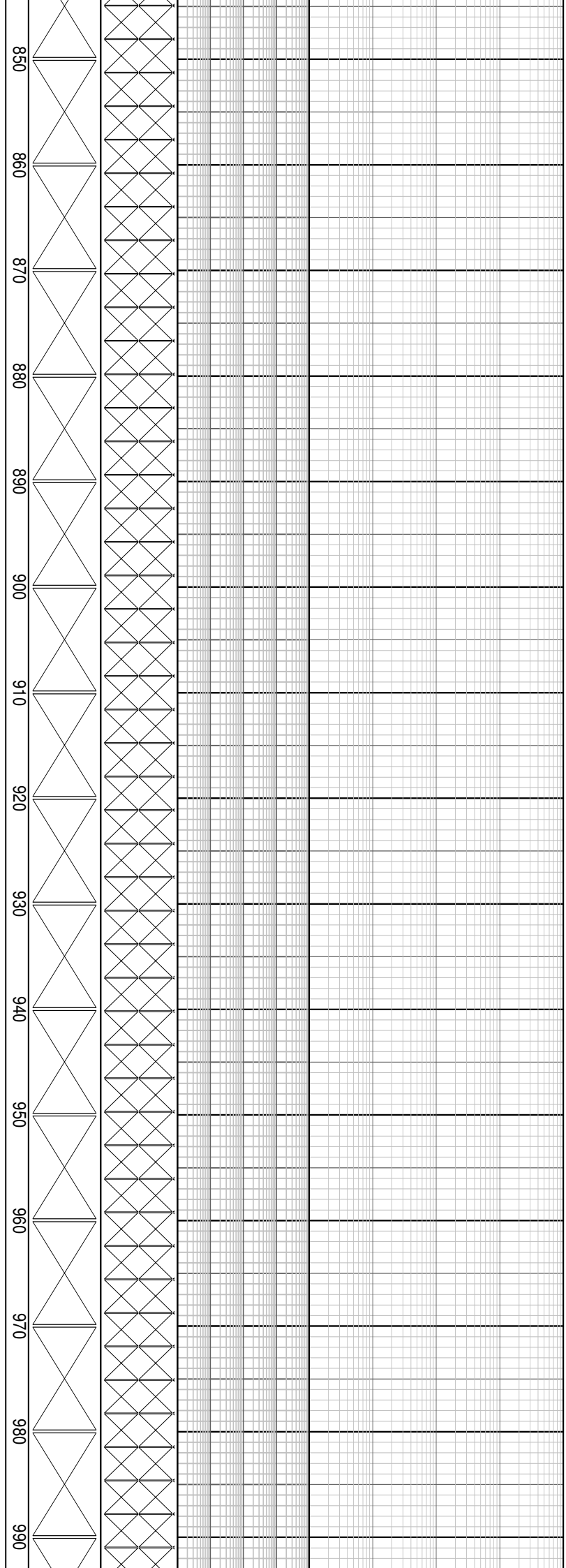
MD: 828.16m Inc: 34.09°  
Azi: 149.77° TVD: 793.52m





WOB: 0.7 - 33.9 kJbf  
 RPM: 120 - 240  
 GPM: 1108 - 1227  
 SPP: 2833 - 3889 psi

23 July 2009  
 24 July 2009



MD: 856.81m Inc: 34.64°  
 Azi: 148.27° TVD: 817.16m

MD: 887.28m Inc: 36.54°  
 Azi: 149.29° TVD: 841.94m

Drill with seawater and hi-vis  
 sweeps  
 Returns to Seabed

MD: 916.73m Inc: 36.73°  
 Azi: 149.63° TVD: 865.58m

MD: 945.11m Inc: 36.90°  
 Azi: 150.11° TVD: 888.28m

MD: 974.40m Inc: 38.19°  
 Azi: 152.01° TVD: 911.49m

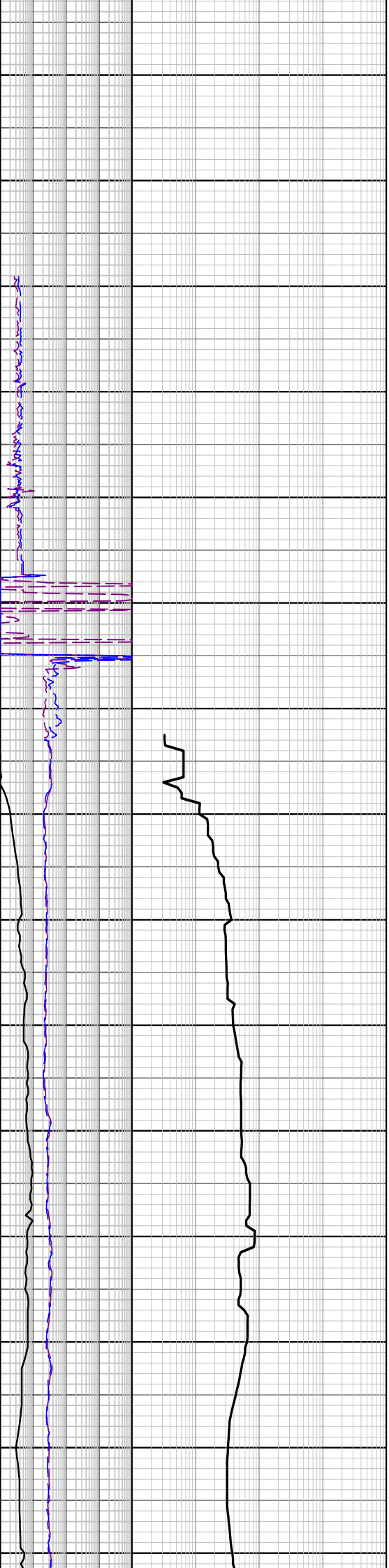
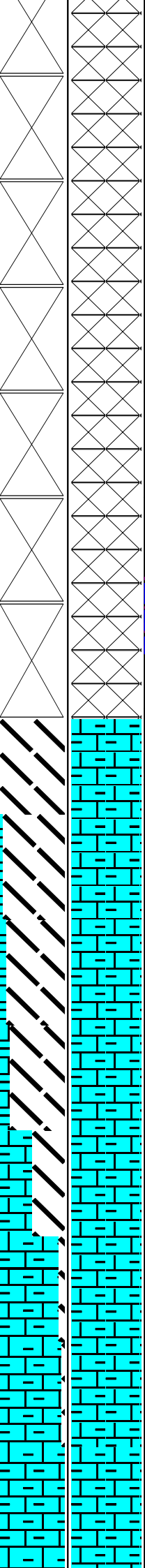
WOB: 0.3 - 45.2 klb  
RPM: 128 - 240  
GPM: 1164 - 1192  
SPP: 3160 - 3760 psi

24 July 2009  
27 July 2009

NB3 Smith MSI 519  
311mm (12-1/4")  
Jets: 2x14.5x15  
Depth In: 1061.7m  
Depth Out: 2918.0m  
Drilled: 1856.3m in 26.9hrs  
Grade: 1-2-CT-S-X-178-FC-PR

WOB: 5.9 - 44.1 klb  
RPM: 84 - 121  
GPM: 865 - 1130  
SPP: 1378 - 2441 psi

1000  
1010  
1020  
1030  
1040  
1050  
1060  
1070  
1080  
1090  
1100  
1110  
1120  
1130  
1140



Drill with seawater and hi-vis sweeps. Returns to Seabed.

MD: 1003.53m Inc: 37.48°  
Azi: 150.94° TVD: 934.50m

MD: 1032.80m Inc: 36.51°  
Azi: 151.41° TVD: 957.88m

Set 340mm (13-3/8") casing shoe at 1056.6mMDRT

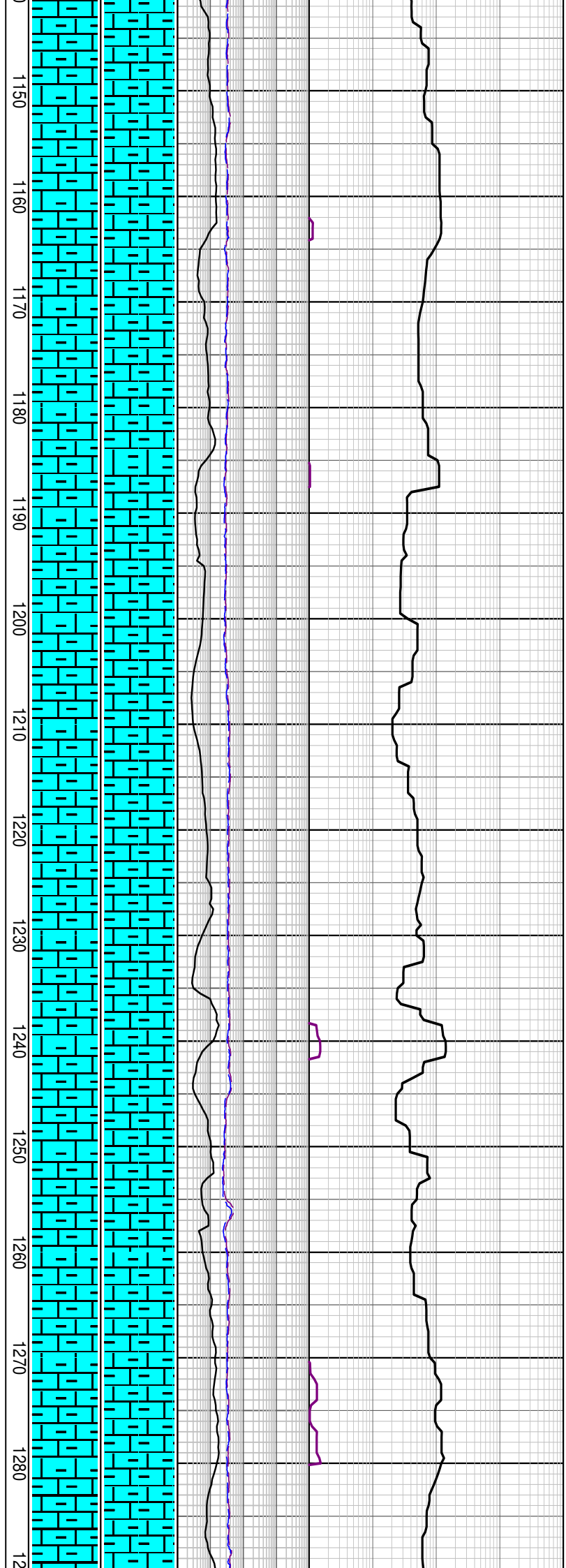
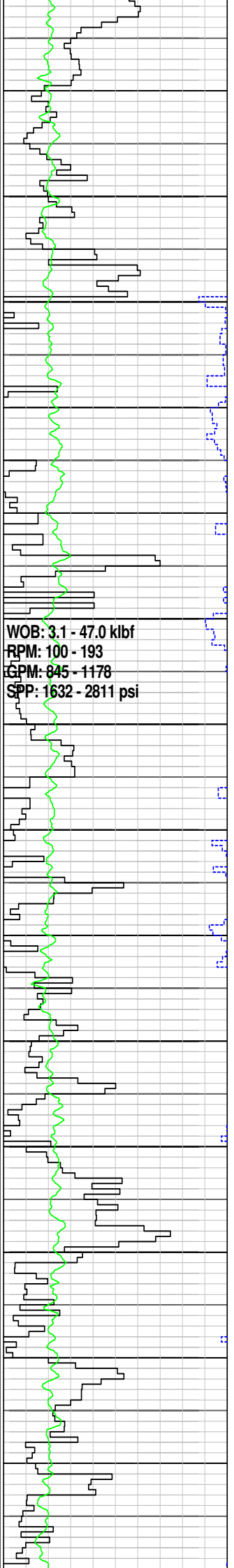
MD: 1060.99m Inc: 36.98°  
Azi: 151.69° TVD: 984.29m

MARL: dom olv gry, com m lt gry-m gry, sft frm, occ mod hd, sbbiky-blky, abd calc cly, tr carb mat, tr v f sd

MW 1.08sg FV 48  
PV/YP 11/19 Gels 6/7/8  
Sol% 5.1 CI 49k

MD: 1118.79m Inc: 38.76°  
Azi: 150.48° TVD: 1029.91m

MARL: dom olv gry, com m lt gry-m gry, frm-mod hd, sbbiky-blky, abd calc cly, tr carb mat



MD: 1148.08m Inc: 38.35°  
 Azi: 150.07° TVD: 1052.82m

MD: 1176.13m Inc: 36.43°  
 Azi: 148.80° TVD: 1075.11m

MARL: dom olv gry, com m lt  
 gry-m gry, frm-mod hd,  
 sbblky-blky, abd calc cly, tr  
 carb mat

MD: 1205.74m Inc: 35.45°  
 Azi: 148.06° TVD: 1099.08m

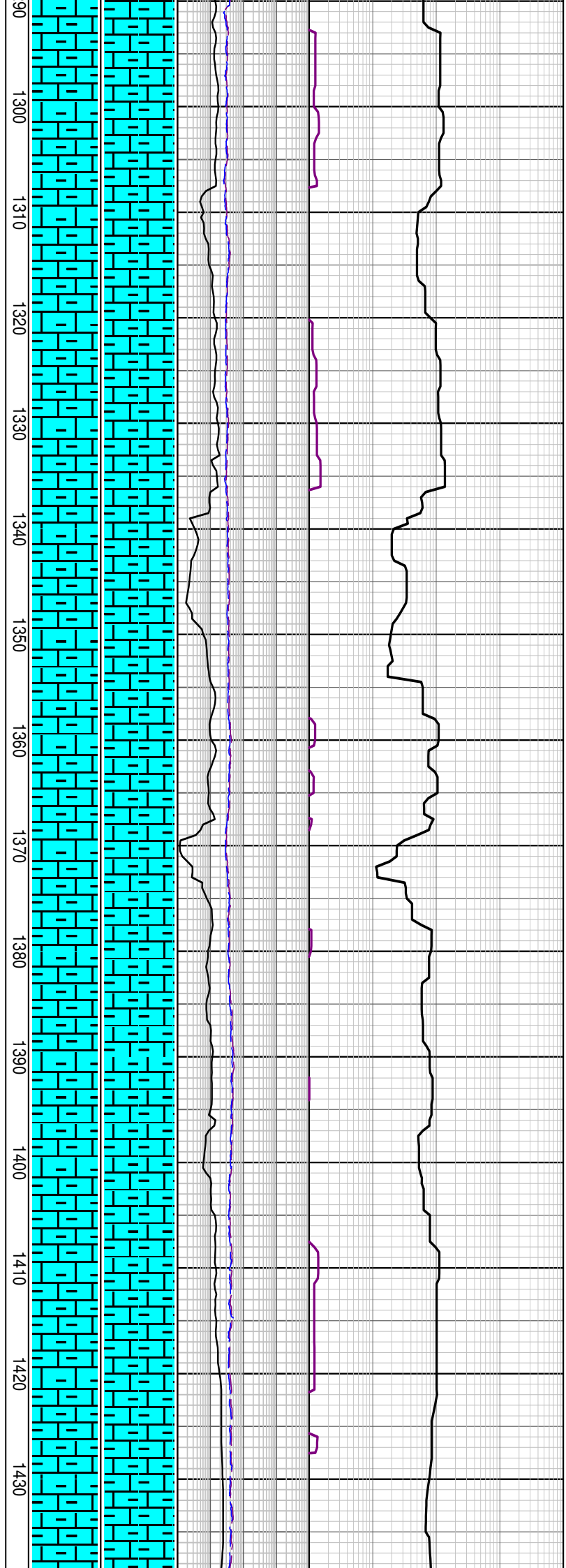
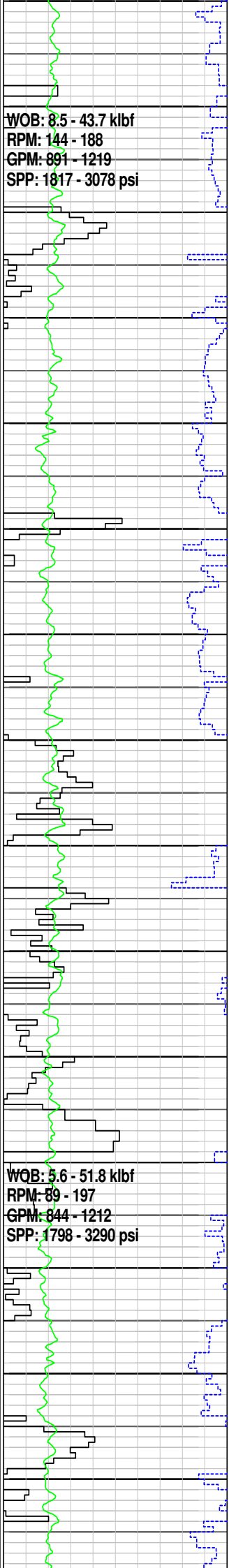
MD: 1234.23m Inc: 35.74°  
 Azi: 147.30° TVD: 1122.25m

MARL: dom olv gry, occ v lt  
 gry-m gry, frm-mod hd,  
 sbblky-blky, abd calc cly, tr  
 sil slt, tr blk lit frag, tr carb  
 spks



WOB: 8.5 - 43.7 klbf  
RPM: 144 - 188  
GPM: 891 - 1219  
SPP: 1817 - 3078 psi

WOB: 5.6 - 51.8 klbf  
RPM: 89 - 197  
GPM: 844 - 1212  
SPP: 1798 - 3290 psi



MD: 1292.39m Inc: 35.16°  
Azi: 148.01° TVD: 1169.62m

MD: 1320.99m Inc: 34.65°  
Azi: 148.19° TVD: 1189.25m

MARL: dom lt olv gry-olv gry,  
occ m gry, frm-mod hd, sft  
i/p, sbblky-blky, abd calc cly,  
tr sil slit, tr blk lit frag, tr carb  
spks

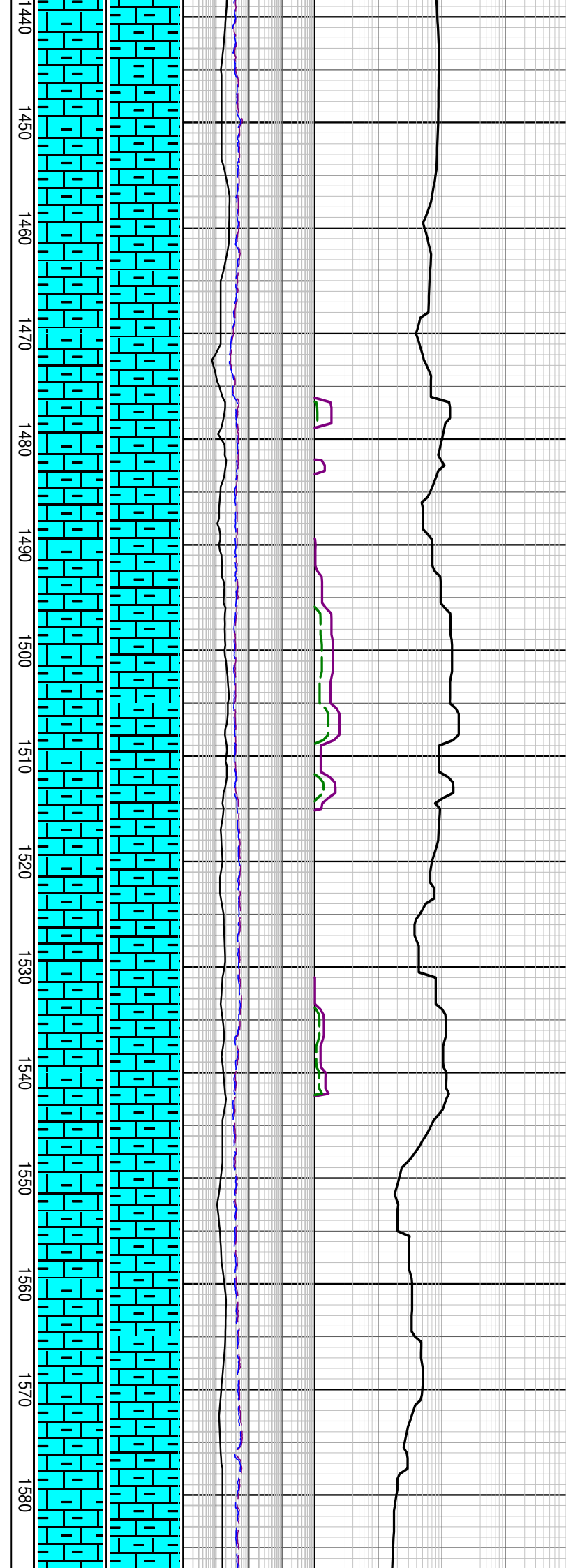
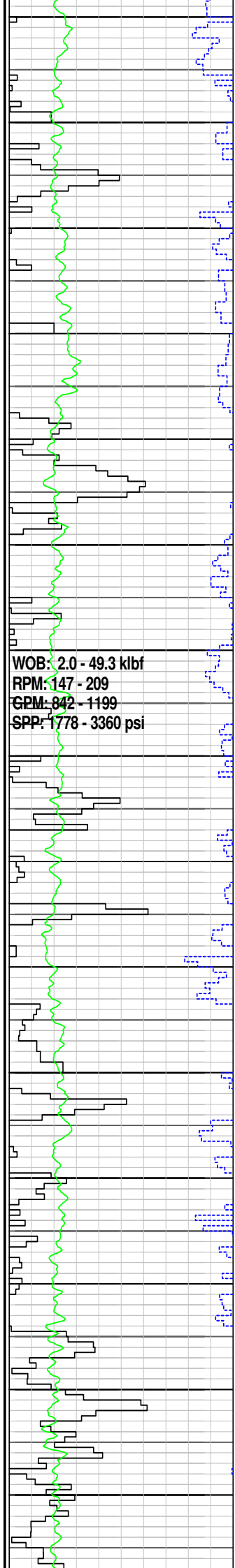
MD: 1350.15m Inc: 35.16°  
Azi: 147.62° TVD: 1213.17m

MD: 1379.29m Inc: 34.46°  
Azi: 147.45° TVD: 1237.10m

MARL: dom lt olv gry-olv gry,  
occ m gry, frm-mod hd, dom  
mod hd, sbblky-blky, abd calc  
cly, tr sil slit, tr-rr carb mat

MD: 1407.09m Inc: 32.86°  
Azi: 146.85° TVD: 1260.24m

MD: 1436.33m Inc: 32.04°

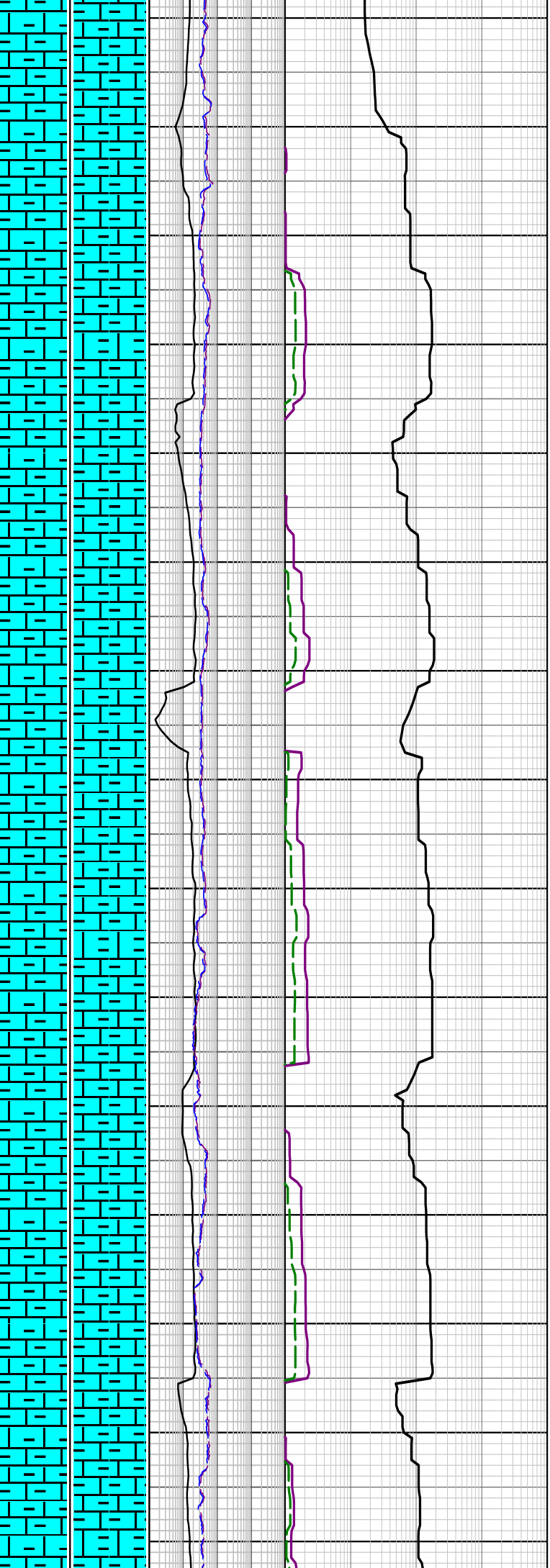


Azi: 146.56° TVD: 1284.91m
MARL: dom lt olv gry-olv gry, occ m gry, frm-mod hd, dom mod hd, sbblky-blky, abd calc cly, tr sil slit, tr-rr carb mat
MD: 1465.22m Inc: 31.37° Azi: 147.89° TVD: 1309.49m
MD: 1493.86m Inc: 32.99° Azi: 152.10° TVD: 1333.72m
MARL: dom m lt gry, frm-mod hd, dom mod hd, sbblky-blky, abd calc cly, tr sil slit, tr-rr carb mat
MD: 1522.57m Inc: 33.53° Azi: 156.05° TVD: 1357.74m
MD: 1551.08m Inc: 33.73° Azi: 156.30° TVD: 1381.48m
MARL: dom m gry-olv gry, occ m lt gry, frm-mod hd, dom mod hd, sbblky-blky, abd calc cly, tr sil slit, tr-rr carb mat
MD: 1579.74m Inc: 33.84° Azi: 153.27° TVD: 1405.29m

WOB: 2.1 - 50.6 klbf  
RPM: 126 - 213  
GPM: 751 - 1203  
SPP: 1827 - 3460 psi

WOB: 5.9 - 49.1 klbf  
RPM: 0 - 210  
GPM: 860 - 1243  
SPP: 2264 - 4122 psi

1590  
1600  
1610  
1620  
1630  
1640  
1650  
1660  
1670  
1680  
1690  
1700  
1710  
1720  
1730



MD: 1608.46m Inc: 35.27°  
Azi: 150.47° TVD: 1428.95m

MARL: dom m gry-olv gry,  
com m lt gry, frm-mod hd,  
dom mod hd, sbblky-blky,  
abd calc cly, tr sil slit, tr-rr  
carb mat

MD: 1637.45m Inc: 36.72°  
Azi: 150.18° TVD: 1452.40m

MD: 1666.26m Inc: 36.12°  
Azi: 150.25° TVD: 1475.59m

MARL: dom m gry-olv gry,  
com m lt gry, frm-mod hd,  
dom mod hd, sbblky-blky,  
abd calc cly, tr sil slit, tr-rr  
carb mat

MD: 1694.89m Inc: 39.06°  
Azi: 149.72° TVD: 1498.72m

MD: 1723.86m Inc: 36.07°  
Azi: 149.77° TVD: 1522.14m

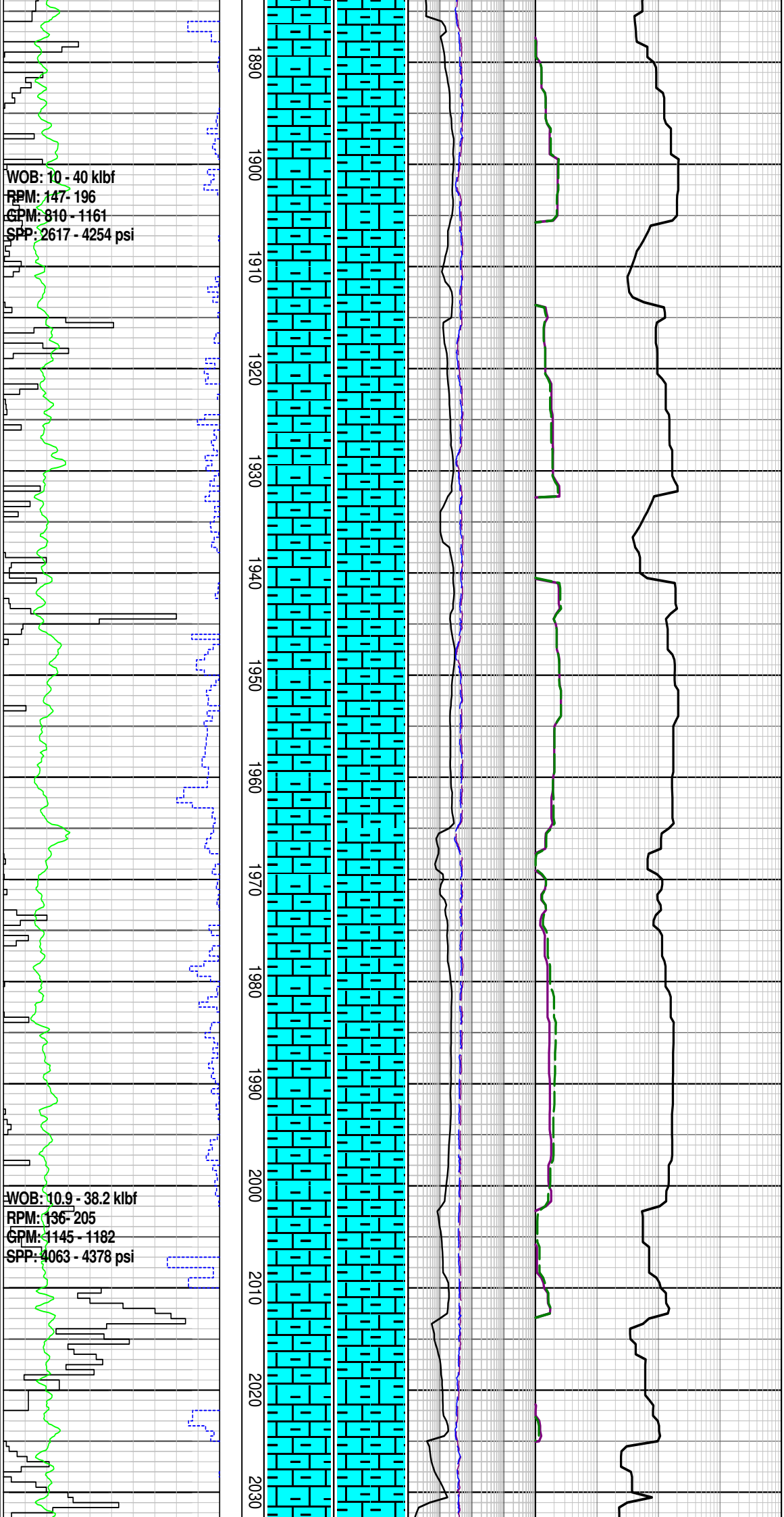
MARL: dom m lt gry-lt olv gry,  
occ m gry, frm-mod hd, dom  
mod hd, sbblkv-blkv, 25-30%



WOB: 10 - 40 kbf  
RPM: 147- 196  
GPM: 810 - 1161  
SPP: 2617 - 4254 psi

WOB: 10.9 - 38.2 kbf  
RPM: 136- 205  
GPM: 1145 - 1182  
SPP: 4063 - 4378 psi

1890  
1900  
1910  
1920  
1930  
1940  
1950  
1960  
1970  
1980  
1990  
2000  
2010  
2020  
2030



MD: 1896.82m Inc: 36.54°  
Azi: 153.07° TVD: 1661.15m

MARL: dom m gry-olv gry, m  
lt gry, sft frm, occ mod hd,  
sbbkly-blky, 25-30% calc cly,  
tr calc slt, tr v f qtz grn, tr  
carb spks, tr blk lith

MD: 1926.08m Inc: 36.62°  
Azi: 152.97° TVD: 1684.65m

MD: 1954.85m Inc: 36.48°  
Azi: 152.04° TVD: 1707.76m

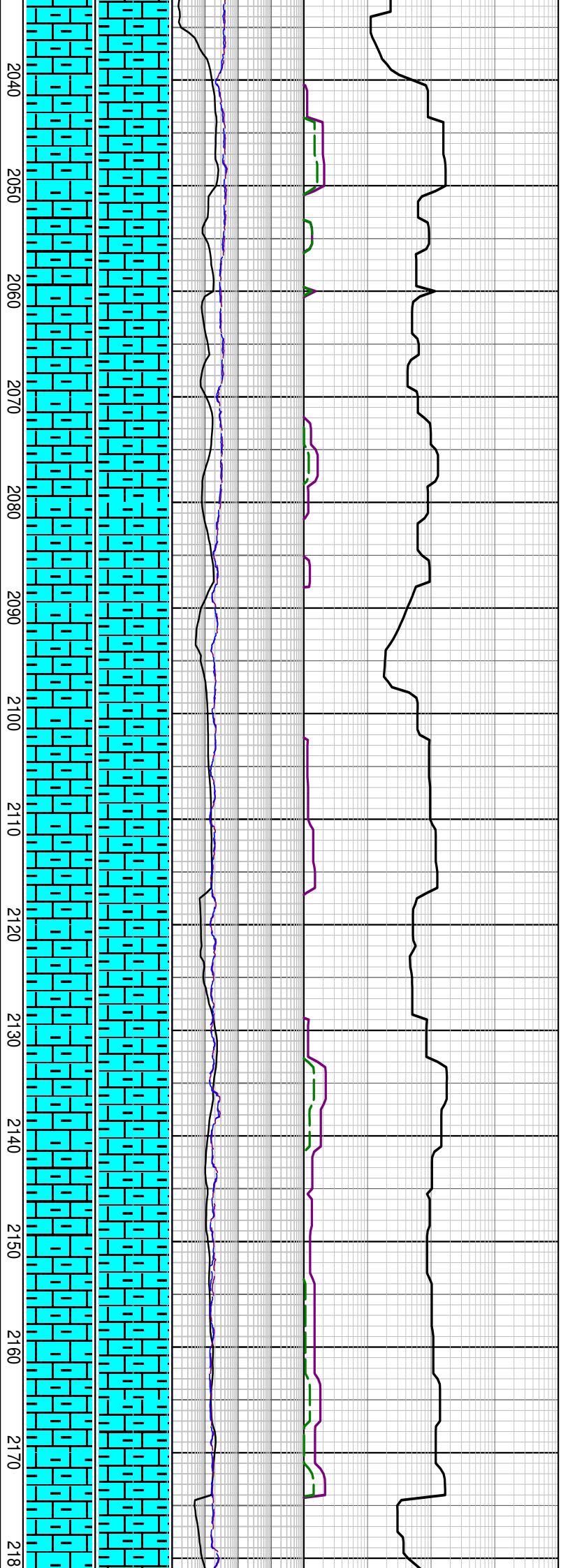
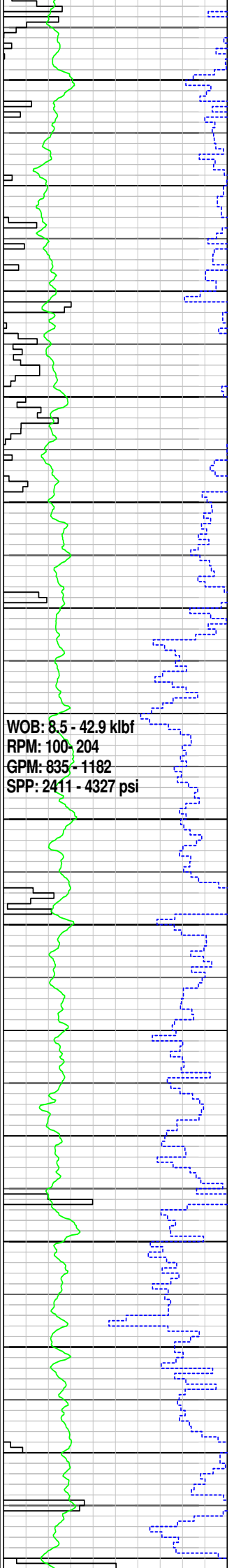
MARL: dom m gry-olv gry, m  
lt gry, sft frm, occ mod hd,  
sbbkly-blky, 25-30% calc cly,  
tr calc slt, tr v f qtz grn, tr pyr,  
tr carb spks, tr blk lith

MD: 1983.67m Inc: 36.20°  
Azi: 151.44° TVD: 1730.98m

MD: 2012.91m Inc: 36.92°  
Azi: 150.95° TVD: 1754.47m

MARL: dom m gry, lt olv  
gry-olv gry, occ m lt gry,  
sft frm, occ mod hd,  
sbbkly-blky, 25-30% calc cly,  
tr calc slt, tr pyr, tr carb spks,  
tr blk lith





MD: 2041.28m Inc: 36.11°  
 Azi: 150.52° TVD: 1777.26m

MD: 2070.25m Inc: 36.28°  
 Azi: 150.15° TVD: 1800.65m

MARL: dom m gry, lt olv  
 gry-olv gry, occ m lt gry,  
 sft-frm, occ mod hd,  
 sbblky-blky, 25-30% calc cly,  
 tr calc slt, tr pyr, tr carb spks,  
 tr blk lith

MD: 2099.29m Inc: 36.98°  
 Azi: 149.86° TVD: 1823.95m

MD: 2127.60m Inc: 37.51°  
 Azi: 149.66° TVD: 1846.48m

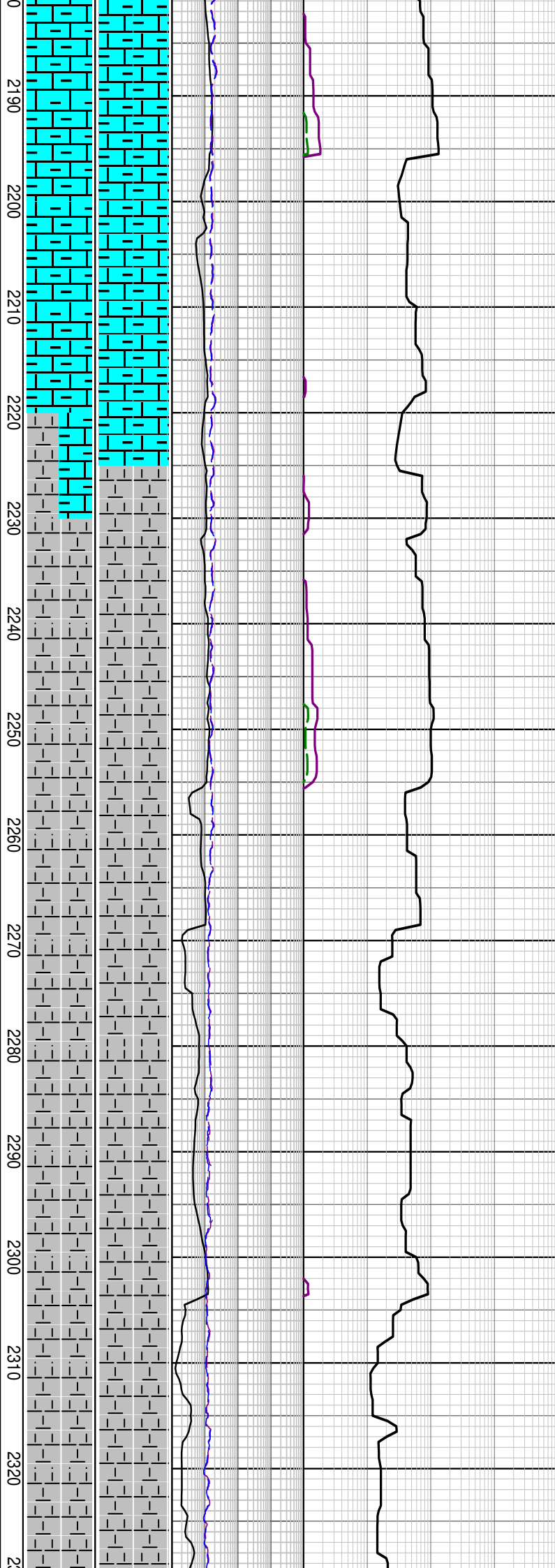
MD: 2156.62m Inc: 37.88°  
 Azi: 149.51° TVD: 1869.44m

MARL: dom pl yelsh brn, olv  
 gry, frm-mod hd, fri i/p, dom  
 mod hd, sbblky-blky, 30-35%  
 calc cly, tr calc slt, tr pyr, tr  
 carb spks, tr blk lith

WOB: 16.7 - 43.8 klbf  
RPM: 136 - 201  
GPM: 1005 - 1168  
SPP: 3401 - 4316 psi

27 July 2009  
28 July 2009

WOB: 15.9 - 32.4 klbf  
RPM: 175 - 240  
GPM: 831 - 1343  
SPP: 2539 - 4252 psi



MD: 2184.65m Inc: 38.11°  
Azi: 149.41° TVD: 1891.53m

MD: 2213.84m Inc: 38.43°  
Azi: 149.62° TVD: 1914.45m

**CALCAREOUS CLAYSTONE:**  
lt gry-m dk gry, mod hd, frm  
i/p, sbblky-blky, 75% calc cly,  
mnr sil slt, tr pyr, tr foram, tr  
glauc

MD: 2242.40m Inc: 38.29°  
Azi: 150.80° TVD: 1936.84m

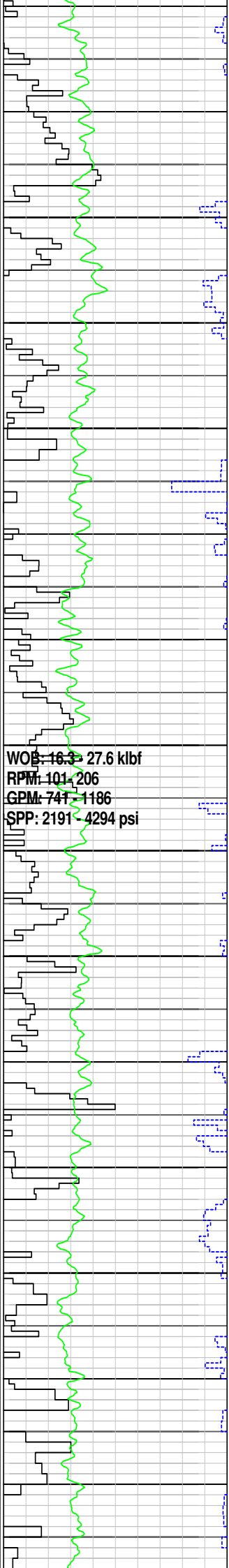
MW 1.15sg FV 52  
PV/YP 16/26 Gels 9/11/13  
Sol% 6.3 CI 38k

MD: 2270.15m Inc: 37.73°  
Azi: 151.59° TVD: 1958.71m

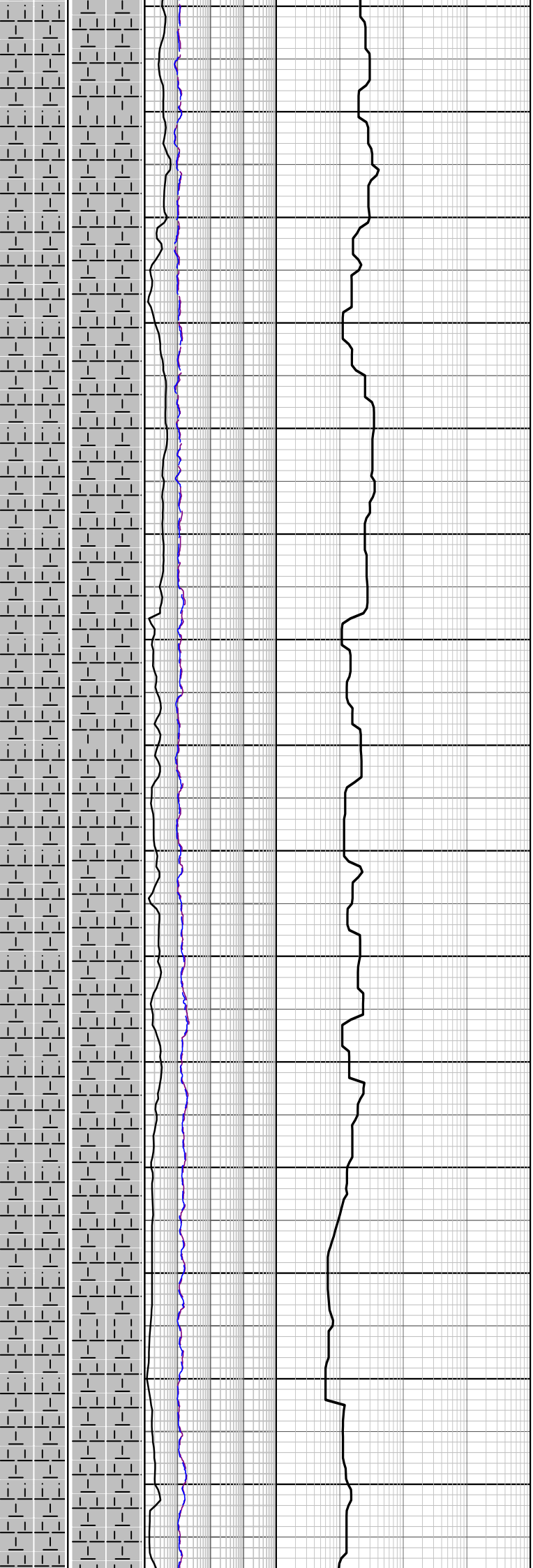
**CALCAREOUS CLAYSTONE:**  
m lt gry-m gry, sft-mod hd,  
sbblky-blky, 60% calc cly,  
mnr sil slt, tr pyr, tr foram, tr  
glauc

MD: 2299.33m Inc: 37.92°  
Azi: 152.77° TVD: 1981.76m

MD: 2328.31m Inc: 37.50°



2330  
2340  
2350  
2360  
2370  
2380  
2390  
2400  
2410  
2420  
2430  
2440  
2450  
2460  
2470



MD: 2323.91m Inc: 37.90°  
 Azi: 152.72° TVD: 2004.69m

**CALCAREOUS CLAYSTONE:**  
 m lt gry-m gry, sft-mod hd,  
 sbblky-blky, 60% calc cly,  
 mn sil slt, tr pyr, tr foram, tr  
 glauc

MD: 2356.86m Inc: 37.14°  
 Azi: 152.63° TVD: 2027.39m

MD: 2385.32m Inc: 36.95°  
 Azi: 152.51° TVD: 2050.11m

**CALCAREOUS CLAYSTONE:**  
 m lt gry-m gry, sft-mod hd,  
 sbblky-blky, 60% calc cly, tr  
 sil slt, tr pyr, tr foram, tr glauc

MD: 2414.74m Inc: 37.37°  
 Azi: 152.25° TVD: 2073.55m

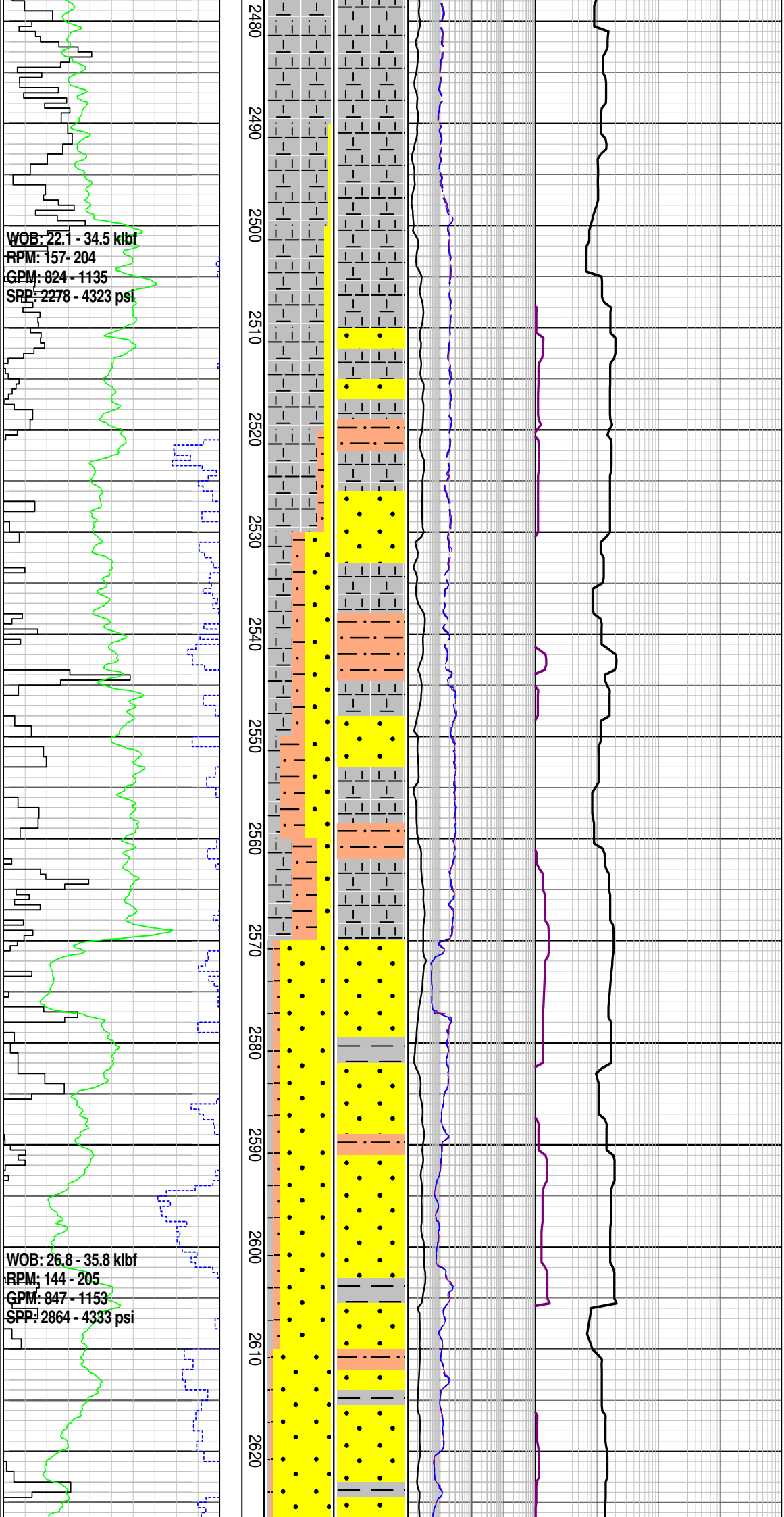
MD: 2443.40m Inc: 37.46°  
 Azi: 152.07° TVD: 2096.32m

**CALCAREOUS CLAYSTONE:**  
 m lt gry-m gry, sft-mod hd,  
 sbblky-blky, 60% calc cly, tr  
 sil slt, tr pyr, tr foram, tr glauc

MD: 2472.38m Inc: 37.14°  
 Azi: 152.42° TVD: 2119.37m

WOB: 22.1 - 34.5 kbf  
 RPM: 157 - 204  
 GPM: 824 - 1135  
 SRP: 2278 - 4323 psi

WOB: 26.8 - 35.8 kbf  
 RPM: 144 - 205  
 GPM: 847 - 1153  
 SPP: 2864 - 4333 psi



**CALCAREOUS CLAYSTONE:**  
 dom m dk gry, sft-mod hd,  
 sbblky-blky, 60% calc cly,  
 tr-abd glauc, mnr slit, tr foram

MD: 2501.29m Inc: 37.25°  
 Azi: 152.68° TVD: 2142.40m

**SANDSTONE:** trnsl, wh-v lt  
 gy, fri, m-crs, pr srt,  
 ang-sbang-sbrndd, tr calc  
 mtrx, 10% glauc, tr pyr, n/s

**SILTSTONE:** m yel brn, lt  
 olv-lt olv blk, sft-frm,  
 blk-sbblky, 10% sil cly, tr  
 pyr, tr c, rr-mnr glauc

MD: 2530.46m Inc: 36.72°  
 Azi: 153.05° TVD: 2165.70m

**CALCAREOUS CLAYSTONE:**  
 dom m dk gry, sft-mod hd,  
 sbblky-blky, 60% calc cly,  
 tr-abd glauc, mnr slit, tr foram

MD: 2559.09m Inc: 37.34°  
 Azi: 152.33° TVD: 2188.55m

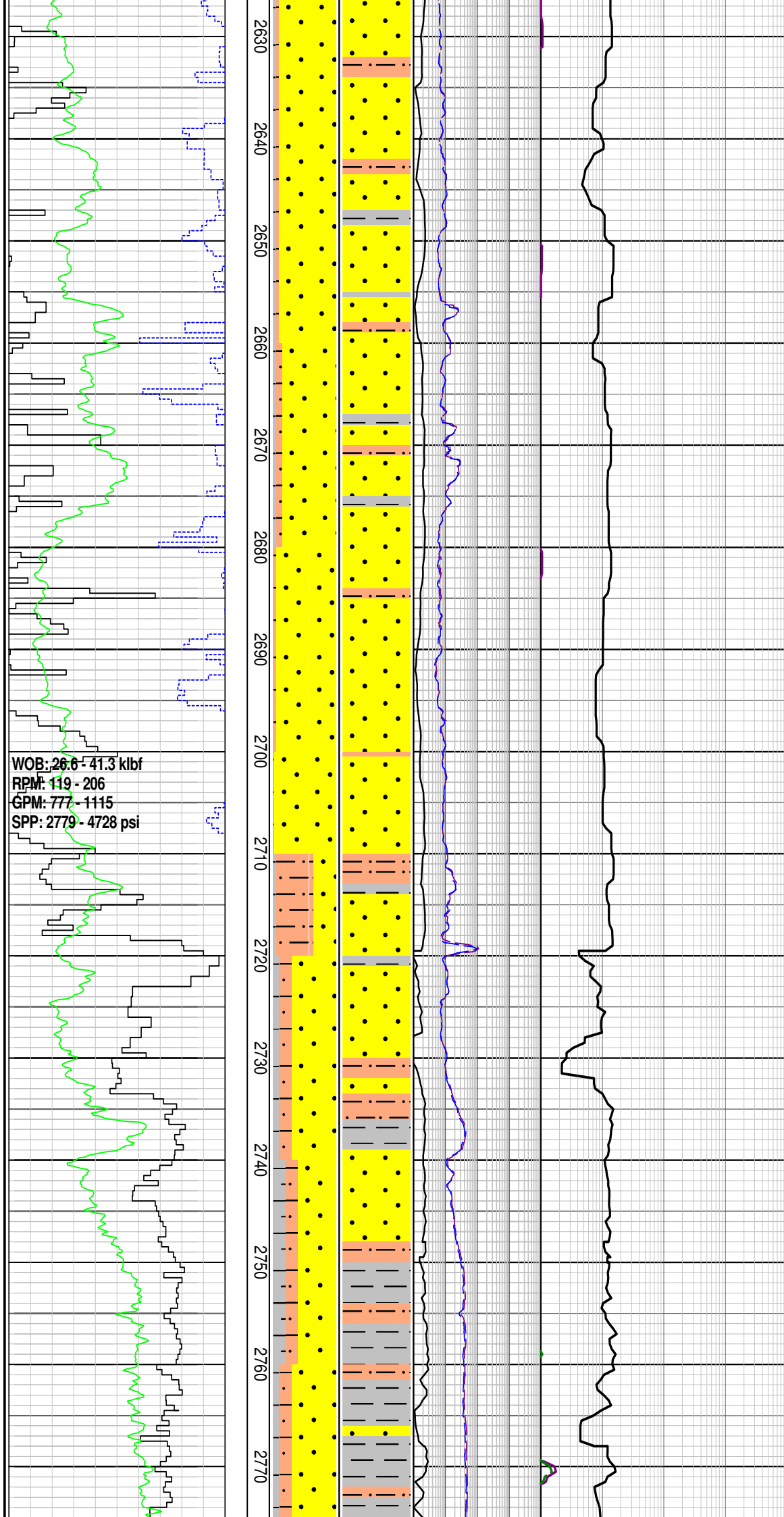
**SANDSTONE:** clr-trnsl, yelsh  
 gry, lse, m-crs, dom crs,  
 pr-mod srt, ang-sbang,  
 elong-sph, tr glauc, tr pyr, gd  
 inf por, n/s

MD: 2587.53m Inc: 37.75°  
 Azi: 151.79° TVD: 2211.11m

**CLAYSTONE:** lt gry-m dk gry,  
 m bish gry, occ grnsh gry,  
 sft-mod hd, sbblky-blky, mnr  
 calc cly, rr calc slit, mnr sil slit,  
 tr pyr, tr glauc, tr carb mat

MD: 2616.24m Inc: 37.16°  
 Azi: 150.34° TVD: 2233.89m

**SANDSTONE:** clr-trnsl, velsh



gry, lse, m-crs, dom crs,  
 pr-mod srt, ang-sbang,  
 elong-sph, tr glauc, tr pyr, gd  
 inf por, n/s

MD: 2644.78m Inc: 37.10°  
 Azi: 148.68° TVD: 2256.65m

SILTSTONE: m yel brn, lt olv  
 gry-olv blk gry, sft frm,  
 blkly-sbblky, mnr sil cly, tr  
 pyr, tr c, rr glauc

MD: 2674.04m Inc: 37.13°  
 Azi: 147.37° TVD: 2279.98m

SANDSTONE: clr-trnsl, yelsh  
 gry, lse, v f-v crs, dom crs,  
 pr-mod srt, sbang-rnnd, sli  
 elong-sph, tr glauc, tr pyr, gd  
 inf por, n/s

MD: 2703.21m Inc: 37.30°  
 Azi: 145.69° TVD: 2303.21m

SILTSTONE: m yel brn, lt olv  
 gry-olv blk, sft frm,  
 sbblky-blky, mnr sil cly, tr  
 pyr, tr c, rr glauc

MD: 2732.96m Inc: 37.28°  
 Azi: 143.89° TVD: 2326.88m

CLAYSTONE: m dk gry, blsh  
 gry, occ grnsh gry, v sft-mod  
 hd, sbblky-blky, mnr calc cly,  
 rr calc slt, mnr sil slt, tr pyr, tr  
 glauc, tr carb mat

MD: 2760.70m Inc: 37.02°  
 Azi: 141.64° TVD: 2348.99m

SANDSTONE: clr-trnsl, yelsh  
 gry, lse, f-crs, pr-mod srt,  
 ang-sbrnnd, tr glauc, tr pyr,  
 gd inf por



WOB: 5.9 - 44.4 klbf  
 RPM: 130 - 205  
 GPM: 824 - 1091  
 SPP: 2807 - 4177 psi

WOB: 9.5 - 44.1 klbf  
 RPM: 129 - 204  
 GPM: 862 - 1064  
 SPP: 3015 - 4349 psi

28 July 2009  
 01 August 2009

2780  
2790  
2800  
2810  
2820  
2830  
2840  
2850  
2860  
2870  
2880  
2890  
2900  
2910  
2920



SILTSTONE: m brn gry, lt olv gry-olv blk, sft frm, sbblky-blky, mnr sil cly, tr pyr, tr c, rr glauc

MD: 2789.97m Inc: 36.48°  
 Azi: 140.97° TVD: 2372.45m

CLAYSTONE: m dk gry, m brn gry, occ grnsh gry, v sft-mod hd, amor-sbblky, mnr calc cly, rr calc slt, mnr sil slt, tr pyr, occ tr glauc, tr carb mat

MD: 2819.09m Inc: 36.62°  
 Azi: 142.39° TVD: 2395.84m

SANDSTONE: clr-trnsl, m dk gry-olv gry, lse, v f-v crs, pr-mod srt, sbang-rndd, tr glauc, tr pyr, tr glauc, gd inf por

MD: 2848.22m Inc: 36.88°  
 Azi: 144.25° TVD: 2419.18m

SILTSTONE: m dk gry, brnsh gry, sft-mod hd, amor-blky, wl srt, sbang, mnr sil cly, tr pyr, tr c, rr glauc

MD: 2876.96m Inc: 37.06°  
 Azi: 144.65° TVD: 2442.14m

SANDSTONE: clr-trnsl, trnsp, wh, lt gry, lse, v f-v crs, pr-mod srt, sbang-sbrndd, sli sph-elong, tr glauc, tr pyr

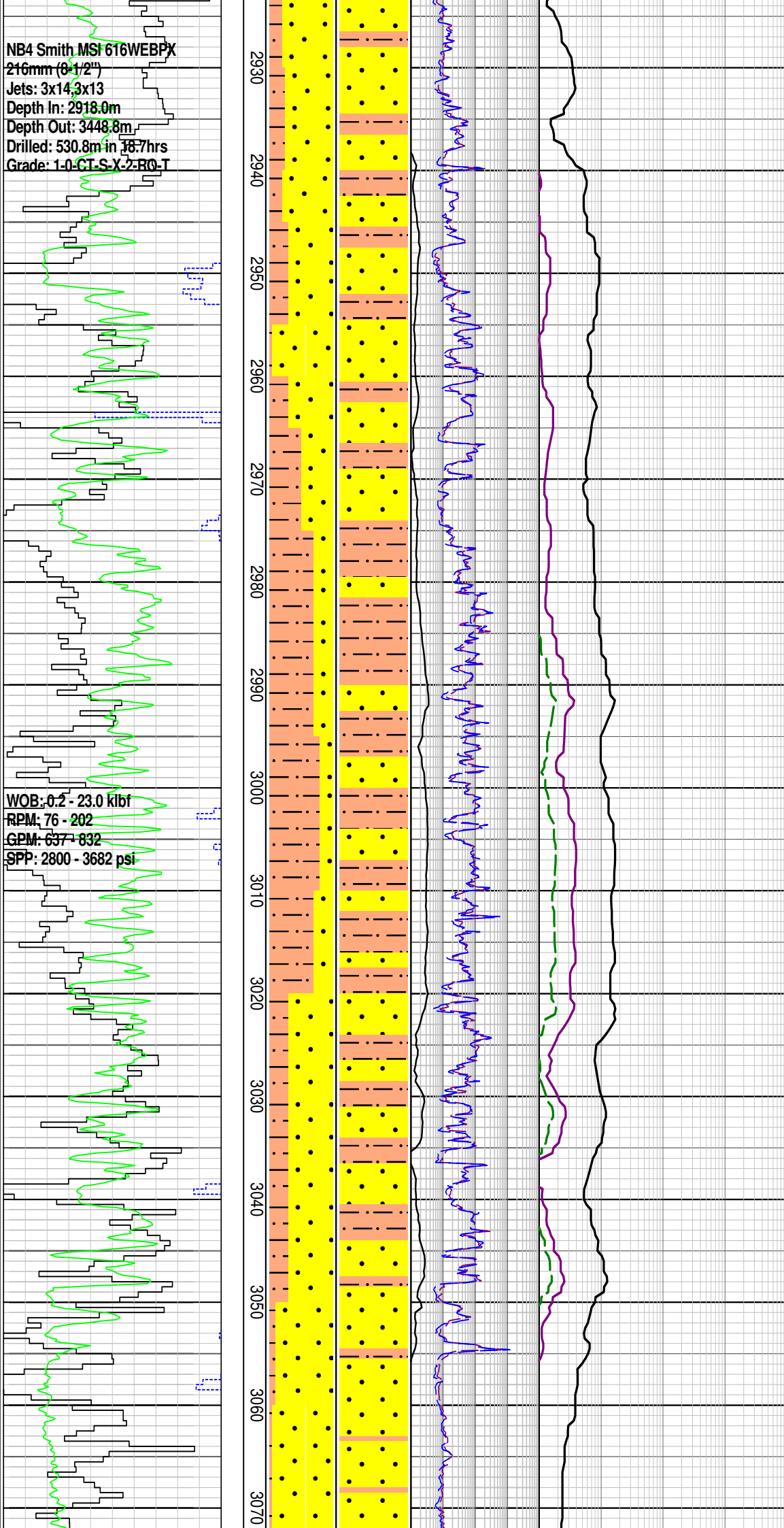
MW 1.15sg FV 51  
 PV/YP 18/26 Gels 10/12/15  
 Sol% 9.6 Cl 48k

Set 244mm (9-5/8") casing shoe at 2910.8mMDRT

MD: 2916.00m Inc: 36.76°  
 Azi: 147.69° TVD: 2473.60m

NB4 Smith MSI 616WEBPX  
 216mm (8 1/2")  
 Jets: 3x14, 3x13  
 Depth In: 2918.0m  
 Depth Out: 3448.8m  
 Drilled: 530.8m in 38.7hrs  
 Grade: 1-0-CT-S-Y-2-RQ-T

WOB: 0.2 - 23.0 kbf  
 RPM: 76 - 202  
 GPM: 637 - 832  
 SPP: 2800 - 3682 psi



SANDSTONE: clr-trnsl, trnsp, wh, lt gry, lse, v f-v crs, pr-mod srt, sbang-sbrnrd, sli sphr-elong, tr glauc, tr pyr, tr glauc

MD: 2945.42m Inc: 37.01°  
 Azi: 148.10° TVD: 2497.10m

SILTSTONE: m dk gry, brnsh gry, sft-mod hd, amor-blky, wl srt, sbang, mnr sil cly, tr pyr, tr c, rr glauc

MD: 2974.04m Inc: 35.23°  
 Azi: 148.79° TVD: 2520.20m

SANDSTONE: trnsl, trnsp, lt-m lt gry, lse, sft, v f-v crs, mod srt, sbang-rnrd, sli sph-elong, tr pyr cmt, mnr wh-lt gry sil cly, tr pyr, pr vis por, n/s

MD: 3002.43m Inc: 31.62°  
 Azi: 147.66° TVD: 2543.90m

SILTSTONE: dk gry, dk brnsh gry-brnsh blk, frm-mod hd, sbblky-blky, mnr sil cly, tr pyr, tr carb frag

MD: 3031.89m Inc: 29.63°  
 Azi: 151.64° TVD: 2569.3m

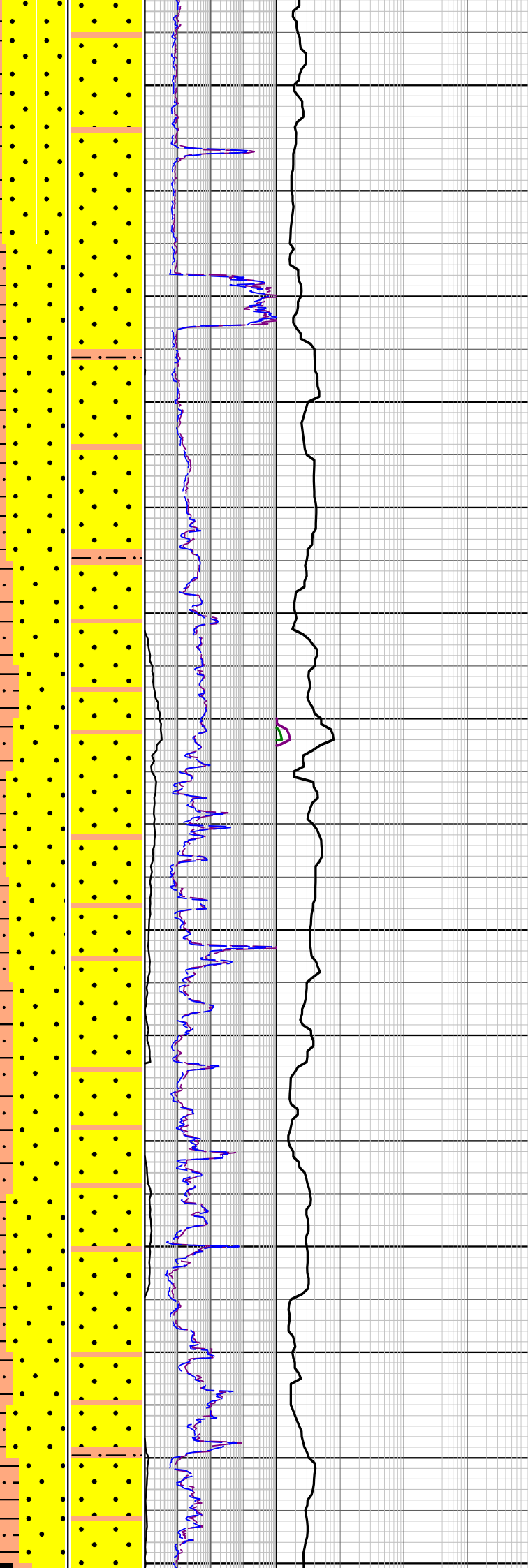
SANDSTONE: clr-trnsp, lse, f-v crs, mod srt, sbang-rnrd, tr pyr, tr carb spks, f-gd inf por, n/s

MD: 3060.42m Inc: 33.83°  
 Azi: 159.35° TVD: 2593.57m

WOB: 1.5 - 43.2 kbf  
RPM: 100 - 203  
GPM: 529 - 751  
SPP: 2144 - 3538 psi

WOB: 2.5 - 30.2 kbf  
RPM: 106 - 204  
GPM: 598 - 794  
SPP: 2701 - 3717 psi

3080  
3090  
3100  
3110  
3120  
3130  
3140  
3150  
3160  
3170  
3180  
3190  
3200  
3210  
3220



SILTSTONE: dk gry, dk brnsh gry-brn blk, frm-mod hd, sbblky-blky, occ sb fis, mnr sil cly, tr pyr, tr carb frag

MD: 3090.15m Inc: 37.81°  
Azi: 160.82° TVD: 2617.68m

SANDSTONE: trnsp, trnsl, v f-f, occ crs-v crs, mod srt, sbang-rnidd, tr carb spks, tr pyr, f-gd inf por, n/s

MD: 3118.97m Inc: 36.08°  
Azi: 156.55° TVD: 2663.01m

SILTSTONE: m dk gry-dk brnsh gry, frm-mod hd, sbblky-blky, mnr sil cly, tr pyr, tr-rr carb frag

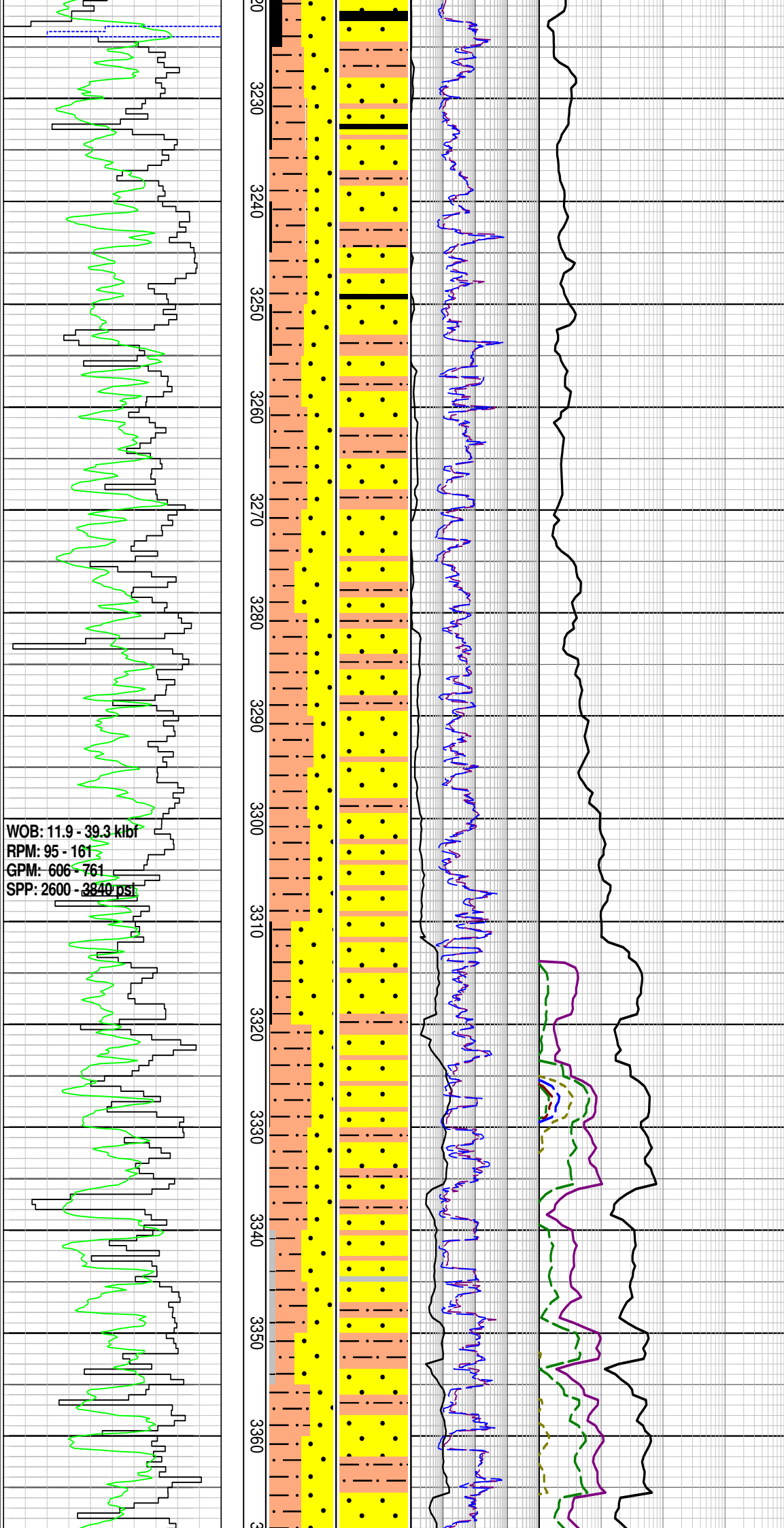
SANDSTONE: trnsp, trnsl, lt-m lt gry, lse, v f, tr v crs, mod srt, sbang-rnidd, mnr wh-lt gry sil cly, tr pyr, f inf por, n/s

MD: 3175.76m Inc: 36.39°  
Azi: 157.79° TVD: 2686.23m

ARGILLACEOUS SILTSTONE: m dk gry, dk brnsh gry-brn blk, frm-mod hd, sbblky-blky, tr pyr, tr-rr carb frag

MD: 3204.32m Inc: 36.69°  
Azi: 156.93° TVD: 2709.17m

SANDSTONE: trnsp, trnsl, lt-med lt gry, lse, v f, tr v crs, mod srt, sbana-rnidd, mnr



...lt gry sil cly, tr pyr, f inf por, n/s

MD: 3233.41m Inc: 36.98°  
 Azi: 151.11° TVD: 2732.46m

COAL: gry blk-blk, frm-mod hd, occ brit, blk, occ sbfiss, dl-sbvit lstr, occ sbconch frac

Run Carbide @ 3251 mMDRT,  
 Hole size = 8.9"

MD: 3262.37m Inc: 36.02°  
 Azi: 152.71° TVD: 2735.74m

ARGILLACEOUS SILTSTONE:  
 m gry-dk gry, dk brnsh gry-brn blk, frm-mod hd, sbblk-blk, mn sil cly, tr pyr, tr-r carb frag, grd to Clst

MD: 3291.18m Inc: 36.12°  
 Azi: 160.61° TVD: 2779.05m

SANDSTONE: trnsl, occ lt-m lt gry, lse, v f-v crs, prly srt, sbang-rndd, tr pyr, tr rk flr, f inf por, n/s

MD: 3320.35m Inc: 36.24°  
 Azi: 159.29° TVD: 2802.59m

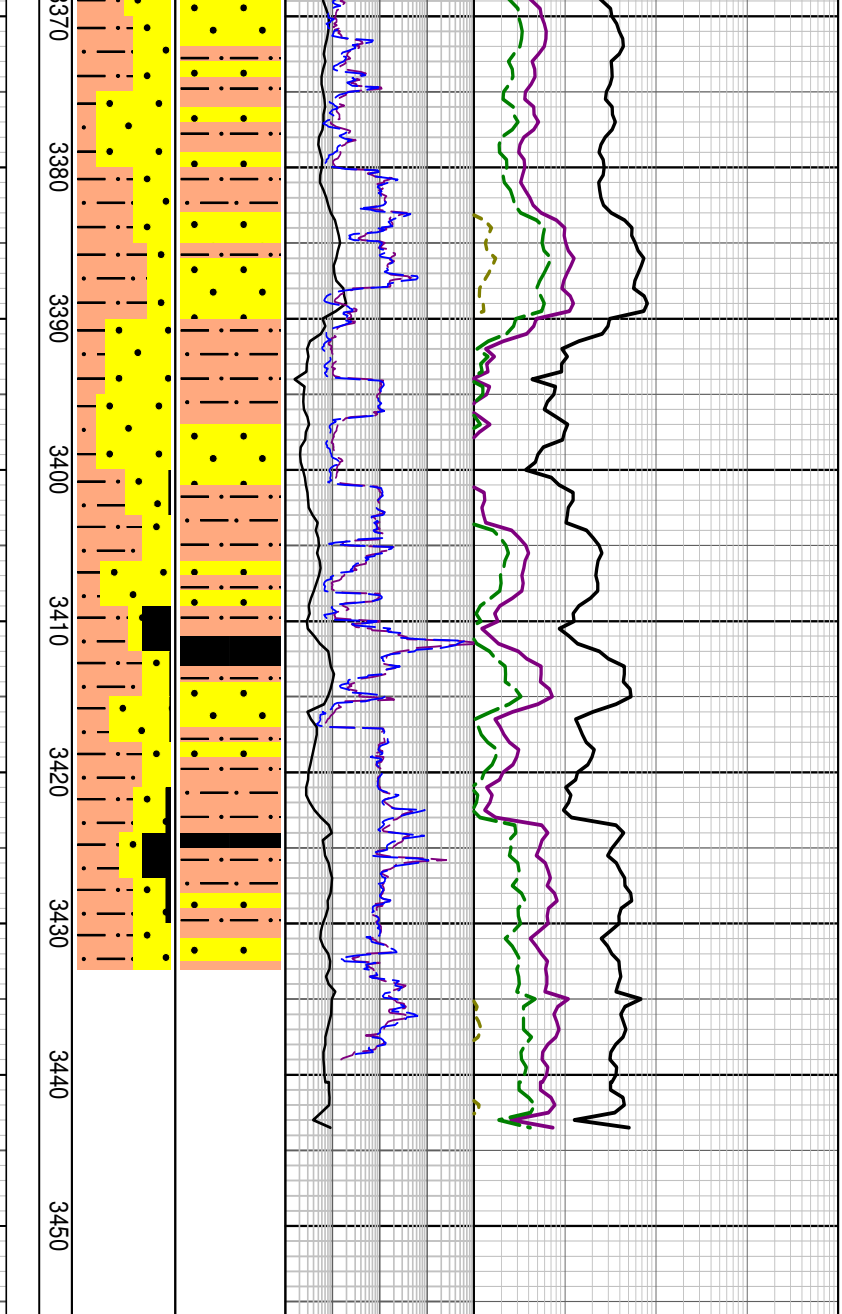
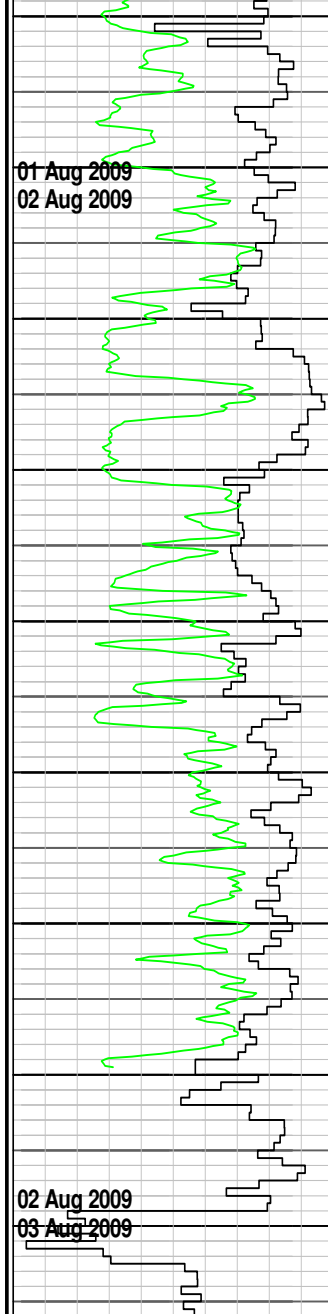
MD: 3333.62m Inc: 36.47°  
 Azi: 158.93° TVD: 2813.27m

CLAYSTONE: brnsh gry-brnsh blk, sft-mod hd, sbblk-blk, occ amor, mn sil slt, tr pyr, tr carb frag

MD: 3349.35m Inc: 36.25°  
 Azi: 157.70° TVD: 2825.94m

ARGILLACEOUS SILTSTONE:  
 dom lt-m gry, occ dk gry, sft frm, exhbly amor sbblk





str-mnt, crmbly, amor-sbbiky, disp, com v f qtz, tr pyr, tr-rr carb frag

MD: 3379.19m Inc: 36.82°  
Azi: 155.23° TVD: 2849.92m

MW 1.13sg FV 49  
PV/YP 14/27 Gels 8/10/11  
Sol% 8.0 CI 47.5k

MD: 3407.07m Inc: 36.55°  
Azi: 156.71° TVD: 2872.27m

COAL: grysh blk-blk, brit-hd, blk, sbfis i/p, dl-vit lstr, occ sbconch frac

SANDSTONE: trns-op, occ v lt gry-m lt gry, lse, f-v crs, dom m-crs, prly srt, sbang-rnnd, sli sph-elong, tr pyr, tr rk flr, pr inf por, n/s

Samples from 3436m to 3448m were not circulated up due to a leak in the derrick gooseneck on the standpipe.

### FORMATION EVALUATION LOG

ROP (m/hr) 100   50 ROP BACKUP (m/hr) 300   200 Gamma Ray 0   200 API	CORE MD meters 1:500	CUTTINGS LITHOLOGY	INTERPRETED LITHOLOGY	TOTAL GAS (%) 0.1   1   10   100 Resistivity (Deep) 0.1   1000 ohmm	CHROMATOGRAPH Methane ppm Ethane ppm Propane ppm iso-Butane ppm n-Butane ppm iso-Pentane ppm n-Pentane ppm 100   1000   10000   100000	FLUORESCENCE P.F.G.	CALCIMETRY LITHOLOGY / REMARKS
				Resistivity (Shallow) 0.1   1000 ohmm			