

MD: 204.75 m  
TVD: 204.7 m

Azi: 355.69°  
Incl: 0.52°

Drill with seawater & Hi-Vis sweeps.  
Returns to seabed 97.0m - 755.0m

MD: 324.05 m  
TVD: 324.6 m

Azi: 189.14°  
Incl: 0.78°

MD: 382.91 m  
TVD: 382.9 m

Azi: 326.57°  
Incl: 0.23°

RPM: 135-138  
GPM: 1165-1195  
SPP: 1280-1860 psi

WOB: 1-17 klbf  
RPM: 135-160  
GPM: 1084-1186  
SPP: 1340-1800 psi

WOB: 12-34 klbf  
RPM: 129-188  
GPM: 1165-1179  
SPP: 1260-1900 psi

410  
420  
430  
440  
450  
460  
470  
480  
490  
500  
510  
520  
530  
540  
550  
560  
570  
580  
590  
600  
610

MD: 412.77 m      Azi: 250.06°  
TVD: 412.7 m      Incl: 0.34°

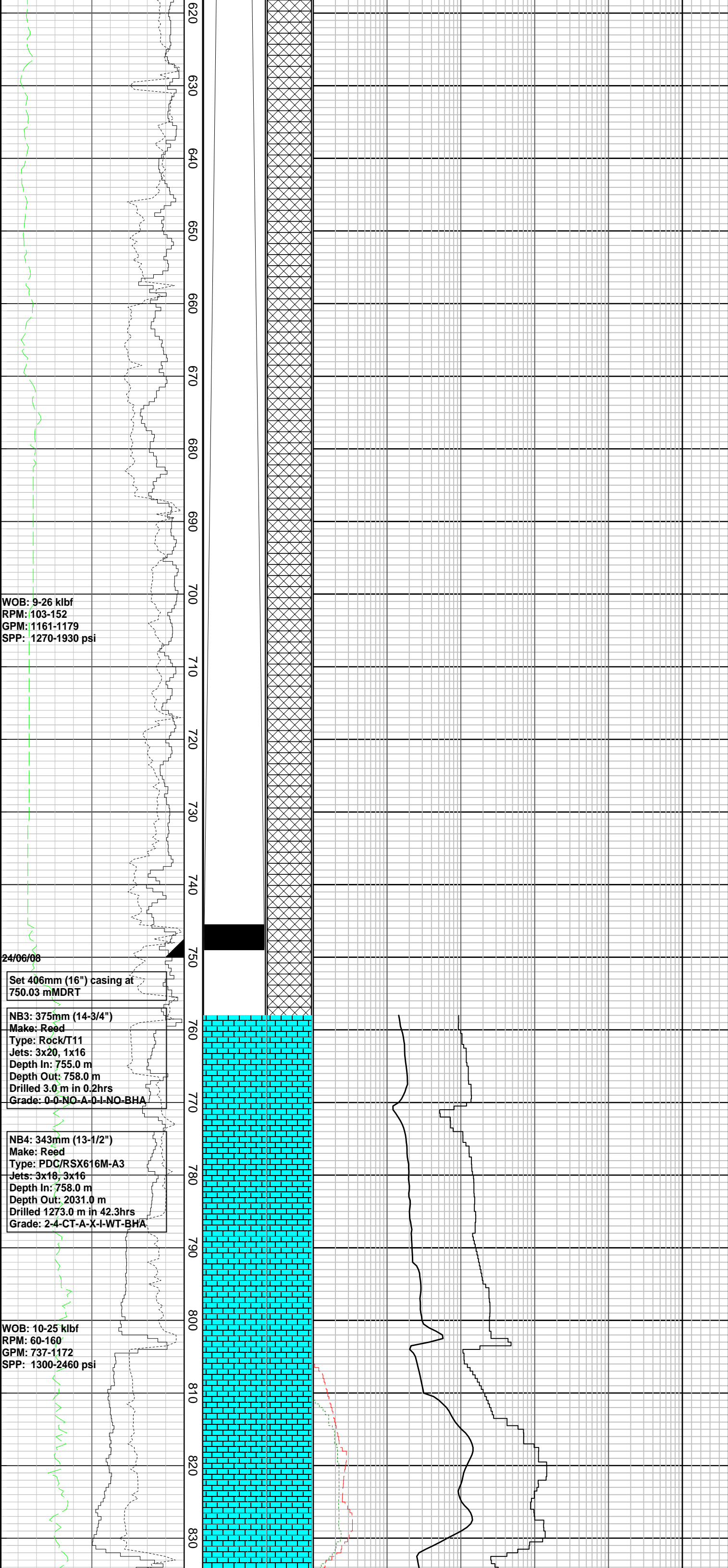
Drill with seawater & Hi-Vis sweeps.  
Returns to seabed 97.0m - 755.0m

MD: 442.90 m      Azi: 118.87°  
TVD: 442.9 m      Incl: 0.19°

Drill with seawater & Hi-Vis sweeps.  
Returns to seabed 97.0m - 755.0m

MD: 531.83 m      Azi: 328.15°  
TVD: 531.8 m      Incl: 0.85°

MD: 563.30 m      Azi: 289.41°  
TVD: 563.3 m      Incl: 0.97°



Drill with seawater & Hi-Vis sweeps.  
Returns to seabed 97.0m - 755.0m

MD: 651.66 m      Azi: 355.43°  
TVD: 651.6 m      Incl: 0.44°

Drill with seawater & Hi-Vis sweeps.  
Returns to seabed 97.0m - 755.0m

MD: 741.14 m      Azi: 334.49°  
TVD: 741.1 m      Incl: 0.59°

MD: 750.39 m      Azi: 327.45°  
TVD: 750.4 m      Incl: 0.71°

22" hole section TD 755.0m

Drill with SBM from 758m to Well TD

LOT @ 758.0m with 8.6 ppg  
EMW: 13.7 ppg @ 650 psi

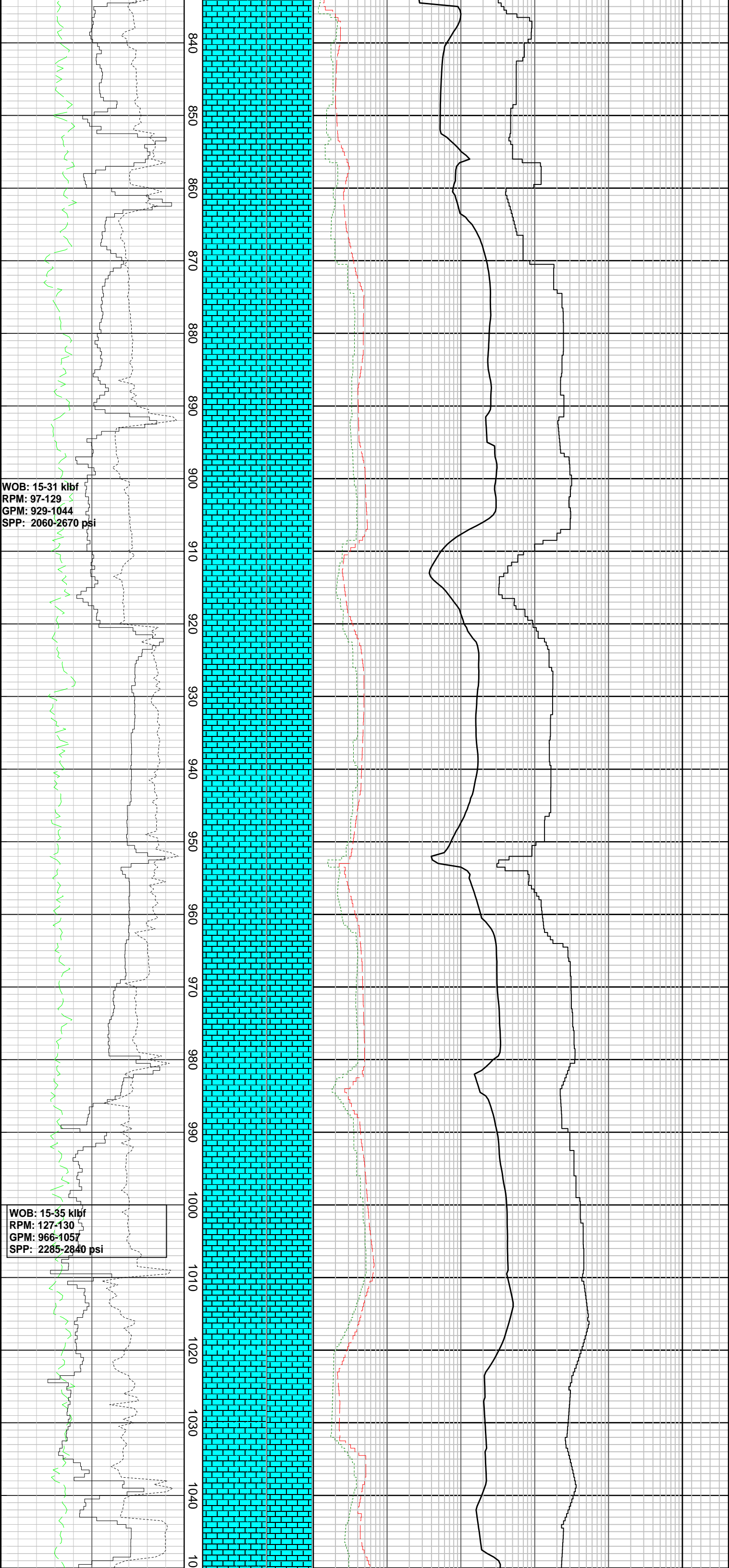
MW: 12.00 ppg      FV: 70  
PV: 31      YP: 14  
Gels: 8/12/14  
O/W: 70.0/30.0

MD: 783.28 m      Azi: 304.12°  
TVD: 783.3 m      Incl: 0.52°

CLCLT: m-dk gy, sft frm, occ hd,  
amor-sbblky, disp, tr vf lse qtz gr

MD: 812.94 m      Azi: 203.29°  
TVD: 812.9 m      Incl: 2.32°

CLCLT: m-dk gy, sft frm, occ hd,  
amor-sbblky, disp, tr vf lse qtz gr



MD: 842.62 m      Azi: 197.90°  
TVD: 842.5 m      Incl: 5.16°

CLCLT: m-dk gy, sft-frm, occ hd,  
amor-sbblky, disp, tr vf lse qtz gr

MD: 872.25 m      Azi: 192.11°  
TVD: 872.0 m      Incl: 7.16°

CLCLT: m-dk gy, sft-frm, occ hd,  
amor-sbblky, disp, tr vf lse qtz gr

MD: 901.94 m      Azi: 183.91°  
TVD: 901.4 m      Incl: 8.22°

CLCLT: m-dk gy, sft-frm, occ hd,  
amor-sbblky, disp, tr vf lse qtz grs

MD: 931.42 m      Azi: 179.91°  
TVD: 930.5 m      Incl: 10.19°

CLCLT: lt-m gy,v sft-sft, amor-sbblky,  
disp, tr vf lse qtz gr

MD: 960.94 m      Azi: 179.75°  
TVD: 959.4 m      Incl: 13.95°

CLCLT: lt m gy, v sft-sft, amor-sbblky,  
disp, tr vf lse qtz gr

MD: 990.68 m      Azi: 178.95°  
TVD: 988.0 m      Incl: 17.52°

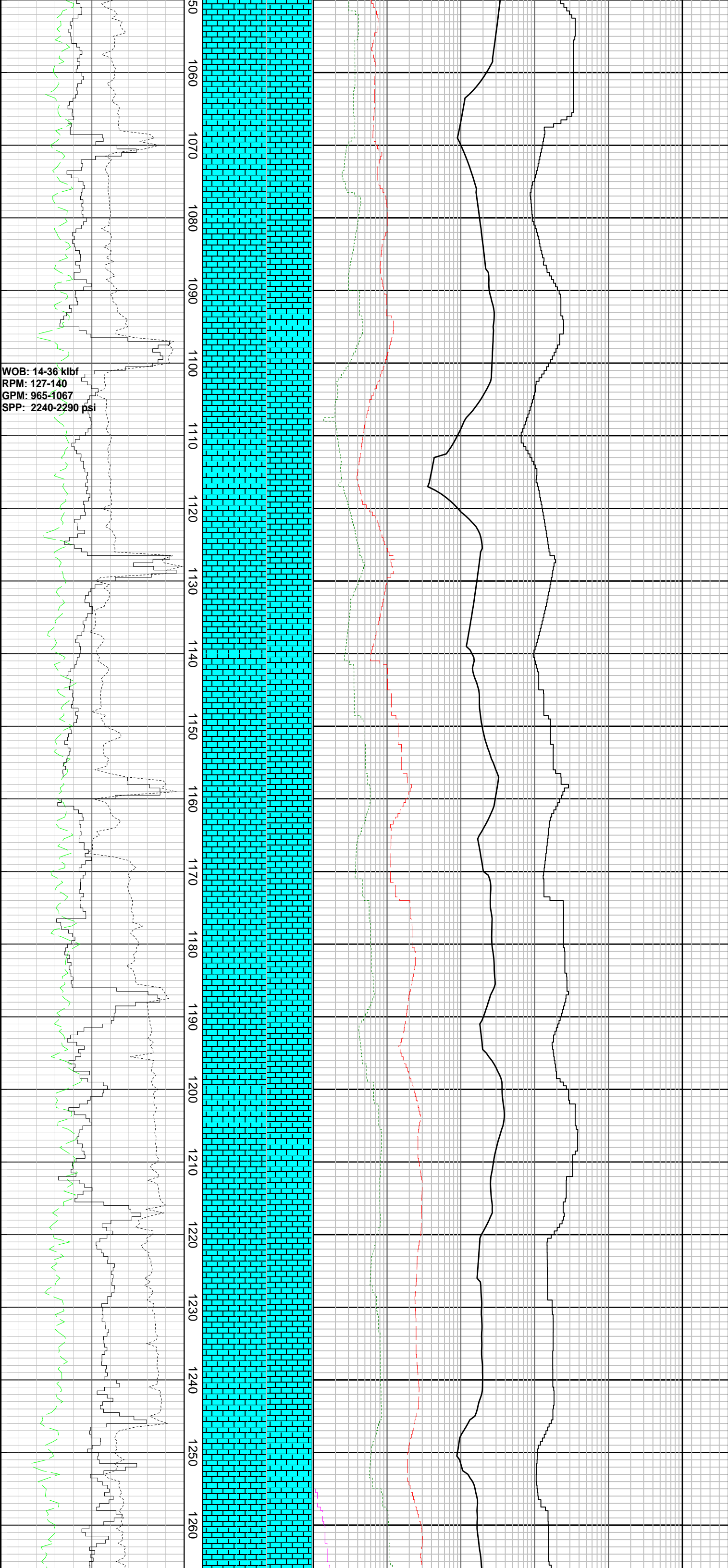
MW: 11.90 ppg      FV: 85  
PV: 32      YP: 24  
Gels: 11/12/12  
O/W:65.0/35.0

CLCLT: lt m gy, v sft-sft, amor-sbblky,  
disp, tr vf lse qtz gr

MD: 1020.40 m      Azi:  
177.48°  
TVD: 1016.0 m      Incl: 20.88°

CLCLT: lt m gy, v sft-sft, amor-sbblky,  
disp, tr vf lse qtz grs





WOB: 14-36 klbf  
RPM: 127-140  
GPM: 965-1067  
SPP: 2240-2290 psi

MD: 1050.8 m	Azi:
176.64°	
TVD: 1043.4 m	Incl: 24.28°

CLCLT: It m gy, v sft-sft, amor-sbblky, disp, tr vf lse qtz gr

MD: 1078.64 m	Azi:
178.42°	
TVD: 1069.3 m	Incl: 25.70°

CLCLT: It m gy, occ wh, v sft-sft, amor-sbblky, disp, tr glau, tr carb spks, tr vf lse qtz gr

MD: 1108.28 m	Azi:
180.79°	
TVD: 1095.9 m	Incl: 26.85°

CLCLT:It m gy, occ wh, v sft-sft, amor-sbblky, disp, tr glau, tr carb spks, tr vf lse qtz gr

MD: 1137.39 m	Azi:
182.43°	
TVD: 1121.8 m	Incl: 27.64°

MD: 1166.97 m	Azi:
183.83°	
TVD: 1147.9 m	Incl: 28.48°

CLCLT: It m gy, occ wh, v sft-sft, amor-sbblky, disp, tr glau, tr carb spks

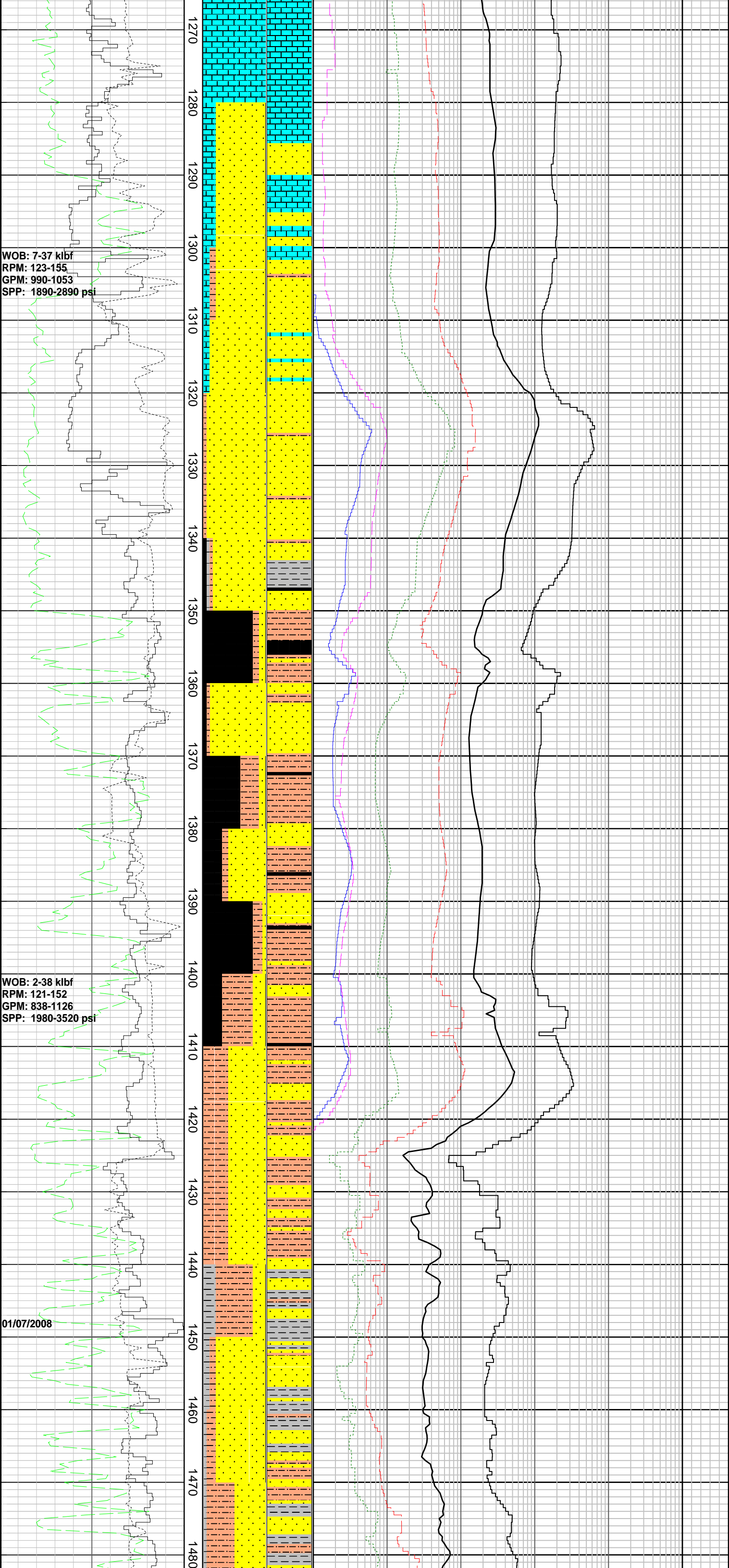
MD: 1196.40 m	Azi:
184.58°	
TVD: 1173.6 m	Incl: 29.46°

CLCLT: It m gy, occ wh, v sft-sft, amor-sbblky, disp, tr glau, tr carb spks, tr vf lse qtz grs

MD: 1225.95 m	Azi: 185.46°
TVD: 1199.3 m	Incl: 30.16°

MW: 11.90 ppg	FV: 76
PV: 35	YP: 33
Gels: 15/19/--	
O/W:67.5/32.5	

CLCLT: It m gy, occ wh, v sft-sft, amor-sbblky, disp, tr glau tr carb spks, tr vf lse qtz gr



MD: 1285.37m      Azi:  
186.70°  
TVD: 1250.8 m      Incl: 30.03°

SST: lse, wh-v lt gy,clr-trnsl gr, occ opq, vf-m, dom f, mod srt, sbang-rndd, qtz w/ mnř fspr & lith, rr agg cmt w/ hd blk-hem min, hd, mnř v crs qtz gr, sbrndd, microxln pyr nod, no shw

MD: 1315.16 m      Azi:  
187.70°  
TVD: 1276.4 m      Incl: 31.09°

SLTST: dk brn gy, frm-mod hd, arg, sl carb, tr pyr

MD: 1344.99 m      Azi:  
187.53°  
TVD: 1302.7 m      Incl: 31.21°

COAL: blk, mod dull, hd, blký

SLTST: dk brn gy, frm-mod hd, arg, sl carb

MD: 1374.68 m      Azi:  
184.92°  
TVD: 1327.4 m      Incl: 30.42°

SST: wh-v lt gy, clr-trnsl gr, occ opq, pred lse, vf-m, dom f, mod srt, sbang-rndd, qtz w/ mnř fspr & lith, fr inf por, no shw

COAL: blk, frm, grđ to carb Slťst

MD: 1404.59 m      Azi: 183.00°  
TVD: 1353.3 m      Incl: 30.04°

SST: wh-v lt gy, clr-trnsl gr, occ opq, pred lse, vf-m, dom f, mod srt, sbang-rndd, qtz w/ mnř fspr & lith, fr inf por, no shw

MW: 12.00 ppg      FV: 78  
PV: 37      YP: 37  
Gels: 15/20/--  
O/W:65.9/34.1

SLTST: dk brn gy, sft-frm, blký-sbbłky, argł, slıly carb, tr pyr

MD: 1433.94 m      Azi: 182.29°  
TVD: 1378.5 m      Incl: 31.67°

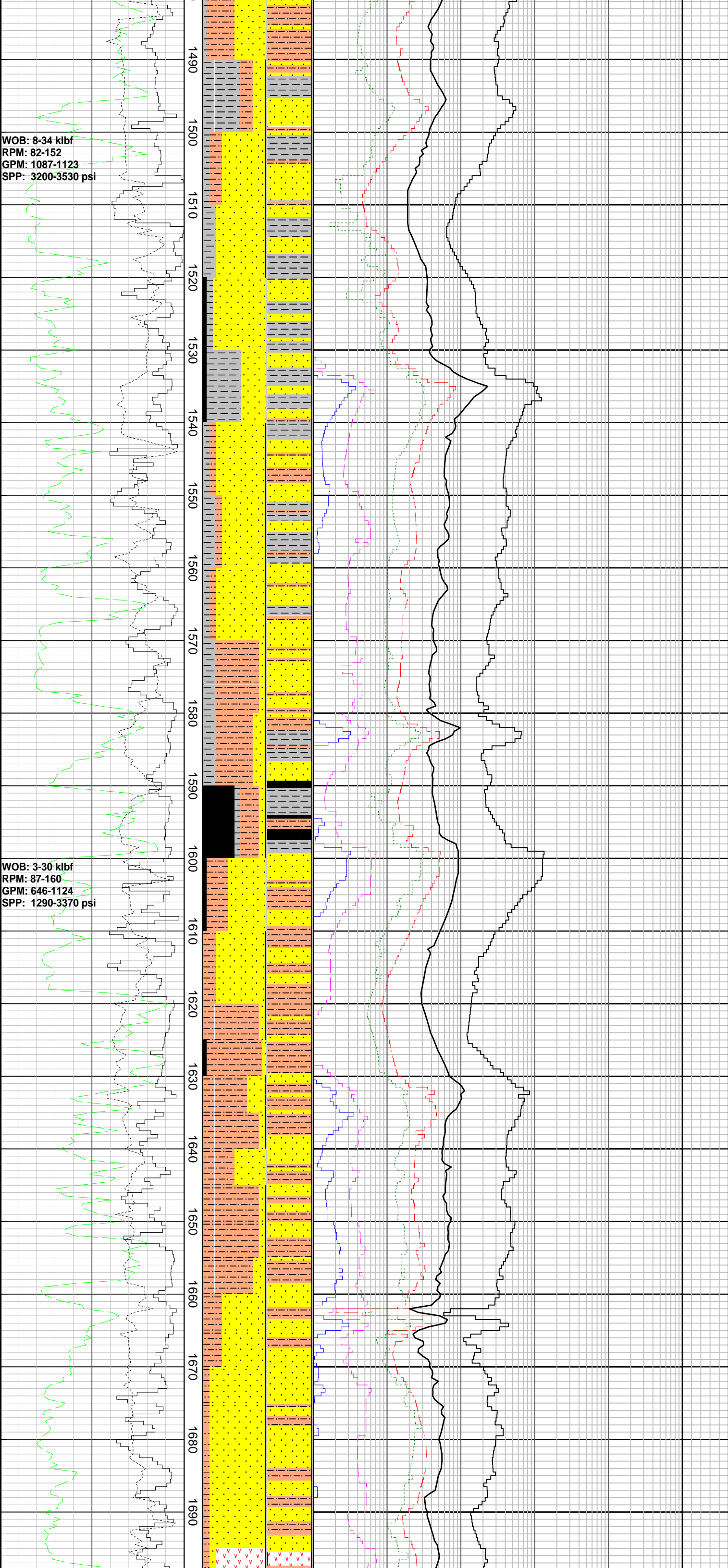
CLYST: wh-lť gy, vsft-sft, amor-sbbłky, disp

SST: wh, trnsp-trnsl, lse qtz gr, vf-v crs, pred f-m, ang-rndd, mod srt, fr inf por, no shw

MD: 1463.79 m      Azi: 181.20°  
TVD: 1404.0 m      Incl: 30.65°

SLTST: dk brn gy, sft-frm, blký-sbbłky, argł, sli carb, tr pyr

CLYST: wh-lť gy, v sft-sft,



amor-sbblky, disp

SST: wh, trnsp-trnsl, lse qtz gr, vf-v crs, pred f-m, ang-rndd, prly srt, fr inf por, no shw

MD: 1493.62 m  
TVD: 1429.8 m

Azi: 180.72°  
Incl: 30.04°

CLYST: wh-lt gy, v sft-sft, amor-sbblky, disp

SST: lse qtz gr, wh-v lt gy, clr-trnsl, occ opq, vf-v crs, rndd-sbrndd, ang i/p, sbsph-sph, mod srt, tr pyr nod, fr inf por, no show

MD: 1523.11m  
TVD: 1455.3 m

Azi: 181.58°  
Incl: 30.08°

SLTST: m dk gy-dk gy, sft-frm, sbblky carb i/p

MD: 1553.11m  
TVD: 1481.2 m

Azi: 181.81°  
Incl: 30.38°

SST: lse qtz gr, wh-v lt gy, clr-trnsl, occ opq, vf-v crs, rndd-sbrndd, ang i/p, sbsph-sph, mod srt, tr nod pyr, fr inf por, no show

MD: 1583.05 m  
TVD: 1507.0 m

Azi:  
183.44°  
Incl: 30.31°

SLTST: m gy-brnsh gy, fri-mod frm, amor-sbblky, com argl mtrx, tr micrxln pyr, mnrcarb frag & lam, grd to Arg Sltst

MD: 1612.84 m  
TVD: 1532.8 m

Azi:  
184.08°  
Incl: 30.34°

COAL: blk-brnsh blk, frm, blk-y-sbblky erthy-sbvit lus, brit

CLYST: m gy-m dk gy, mod frm, amor-sbblky, mnrcarb srt, tr carb frag, non calc

SLTST: m gy-brnsh gy, fri-mod frm, amor-sbblky, com arg mtrx, tr micrxln pyr, mnrcarb frag & lam, grd to Arg Sltst

MD: 1642.12 m  
TVD: 1558.0 m

Azi:  
183.53°  
Incl: 30.48°

SST: wh-v lt gy, dom lse qtz, m-v crs, pred crs, ang-sbang, mnrsbrndd, mod srt, tr sft agg w/ arg mtrx, tr intgran pyr cmt, tr pyr, gd inf por, no shws

MD: 1671.81m  
TVD: 1583.6 m

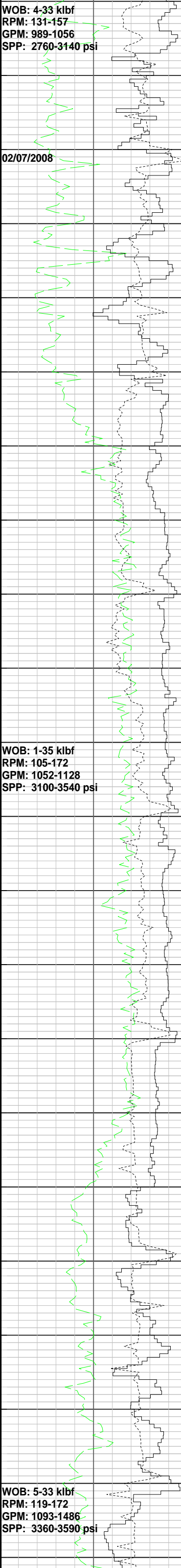
Azi: 182.75°  
Incl: 30.16°

SST: wh-v lt gy, dom lse qtz, tr sft, m-v crs, pred crs, ang-sbang, mnrsbrndd, low-mod spsh, mod srt, tr sft agg w/ arg mtrx, tr intgran pyr cmt, tr pyr, gd inf por, no shws

MW: 12.10 ppg  
PV: 35  
Gels: 14/19/--  
O/W:67.5/32.5

FV: 78  
YP: 36





VOLC: off wh, lt gy-lt gn, speck gy-dk gy, sft-mod frm, occ v sft, sbblky-blky

MD: 1701.38 m      Azi: 181.97°  
TVD: 1609.2 m      Incl: 29.96°

SST: wh-v lt gy, dom lse qtz, tr sft, m-v crs, pred crs, ang-sbang, mnr sbrndd, low-mod spsh, mod srt, tr sft agg w/ arg mtrx, tr intgran pyr cmt, tr pyr, gd inf por, no shws

MD: 1730.84 m      Azi: 182.20°  
TVD: 1634.7m      Incl: 30.49°

VOLC: off wh, lt gy-lt gn, speck gy-dk gy, sft-mod frm, occ v sft, sbblky-blky

MD: 1760.64 m      Azi: 183.16°  
TVD: 1660.4 m      Incl: 30.44°

MD: 1790.34 m      Azi: 183.49°  
TVD: 1686.1 m      Incl: 29.76°

CLYST: m gy-dk gy, dk brnsh gy, mod frm-frm, blky, occ lams, tr pyr, grd to Slst

MD: 1820.04 m      Azi: 183.26°  
TVD: 1711.9 m      Incl: 28.44°

CLYST: m gy-dk gy, dk brnsh gy, occ lt gy, mod frm-frm, occ sft, blky, occ lams, tr pyr, grd to Slst

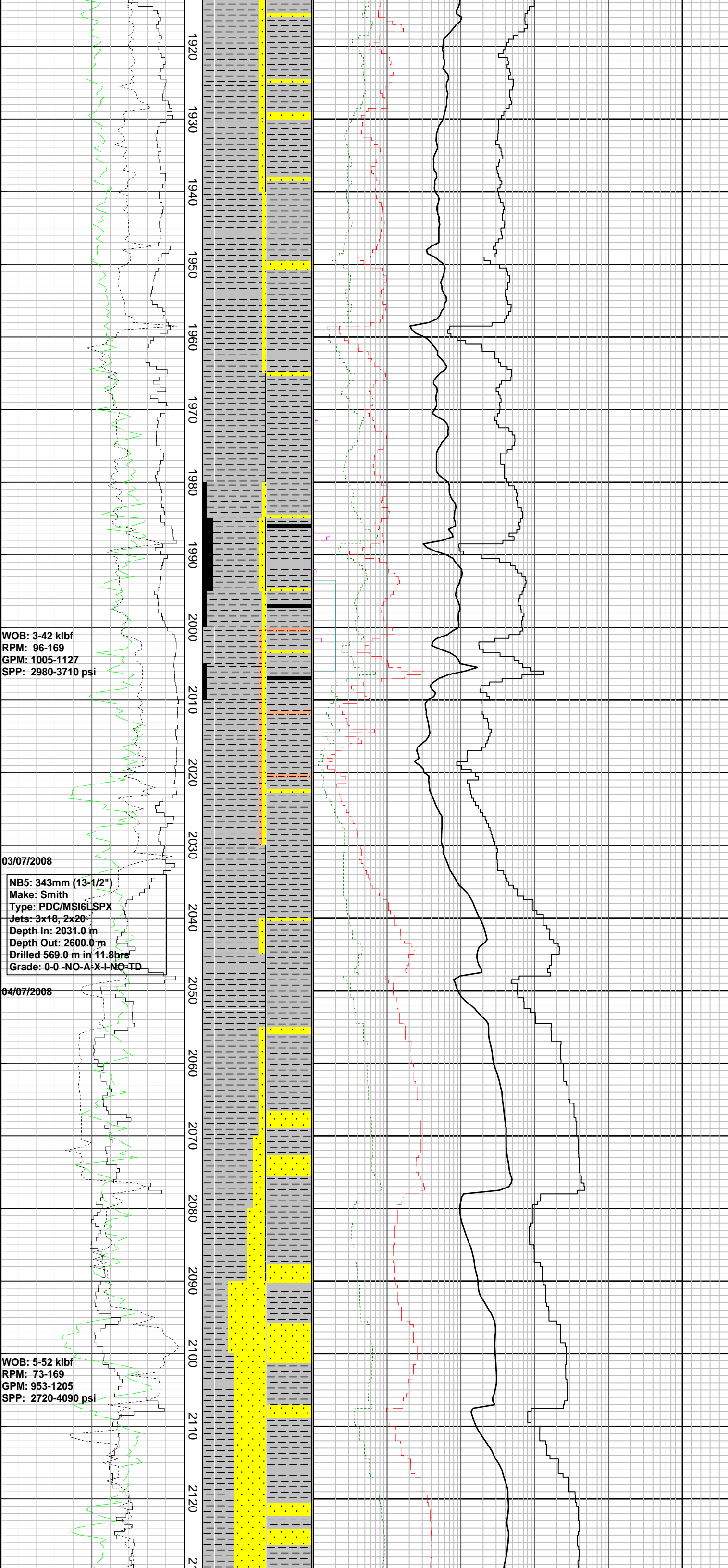
MD: 1849.86 m      Azi: 182.80°  
TVD: 1738.1 m      Incl: 28.05°

SST: wh-v lt gy, trnsl-trnsp, pred lse qtz gr, tr fri, vf-m, mod srt, sbang-rndd, fr inf por, no shw

MD: 1879.39 m      Azi: 182.54°  
TVD: 1764.1m      Incl: 28.44°

SST: wh-v lt gy, trnsl-trnsp, pred lse qtz gr, tr fri, vf-m, mod srt, sbang-rndd, fr inf por, no shw

MD: 1909.08 m      Azi: 181.91°  
TVD: 1790.2 m      Incl: 29.18°



CLYST: m-dk gy, dk brnsh gy, occ lt gy, mod frm-frm, occ sft, blk, occ lams, tr pyr, grd to SLTST

MD: 1938.97 m      Azi: 182.37°  
TVD: 1816.2 m      Incl: 29.25°

CLYST: m gy-m lt gy, sft-frm i/p, blk, tr carb spks, tr pyr nod, grd to Slt Cyst

SST: lse qtz gr, wh-v lt gy, trnsp-trnsl, occ opq, hd-v hd, vf-f, crs i/p, sbang-rndd, sbsphr i/p, mod srt, fr inf por, no shw

MD: 1968.51m      Azi: 181.63°  
TVD: 1842.2 m      Incl: 27.81°

COAL: blk, frm, blk-sbbk, erthy-sbv it lus, brit

SST: lt gy-m lt gy, v lt gy-lt brnsh gy, lse, w/ com fri-frm agg, vf-f gr, sbang-sbrndd, mn rndd, mod-high sph, v wl srt, argl mtr, tr coal frag, pr vis por, no shw

MD: 1998.05 m      Azi:  
181.66°  
TVD: 1868.4 m      Incl: 27.26°

CLYST: m gy-m lt gy, sft-frm i/p, blk, tr carb spks, tr nod pyr, grd to Slt Cyst

MW: 12.00 ppg      FV: 72  
PV: 38      YP: 34  
Gels: 14/19/--  
O/W:70.0/30.0

MD: 2028.03 m      Azi:  
181.70°  
TVD: 1895.1 m      Incl: 26.98°

SST: wh-v lt gy, trnsp-trnsl, occ opq, fri-mod hd, v hd i/p, vf-f, med crs i/p, ang-sbrndd, sbsphr-sphr, mod wl srt, mod calc cmt, pr inf por, no shw

CLYST: lt gy-m gy, bnsh gy, dk gnsh gy, v sft-mod frm,sbbk-bk, tr carb spks, occ lams, tr pyr, grd to Slt Cyst

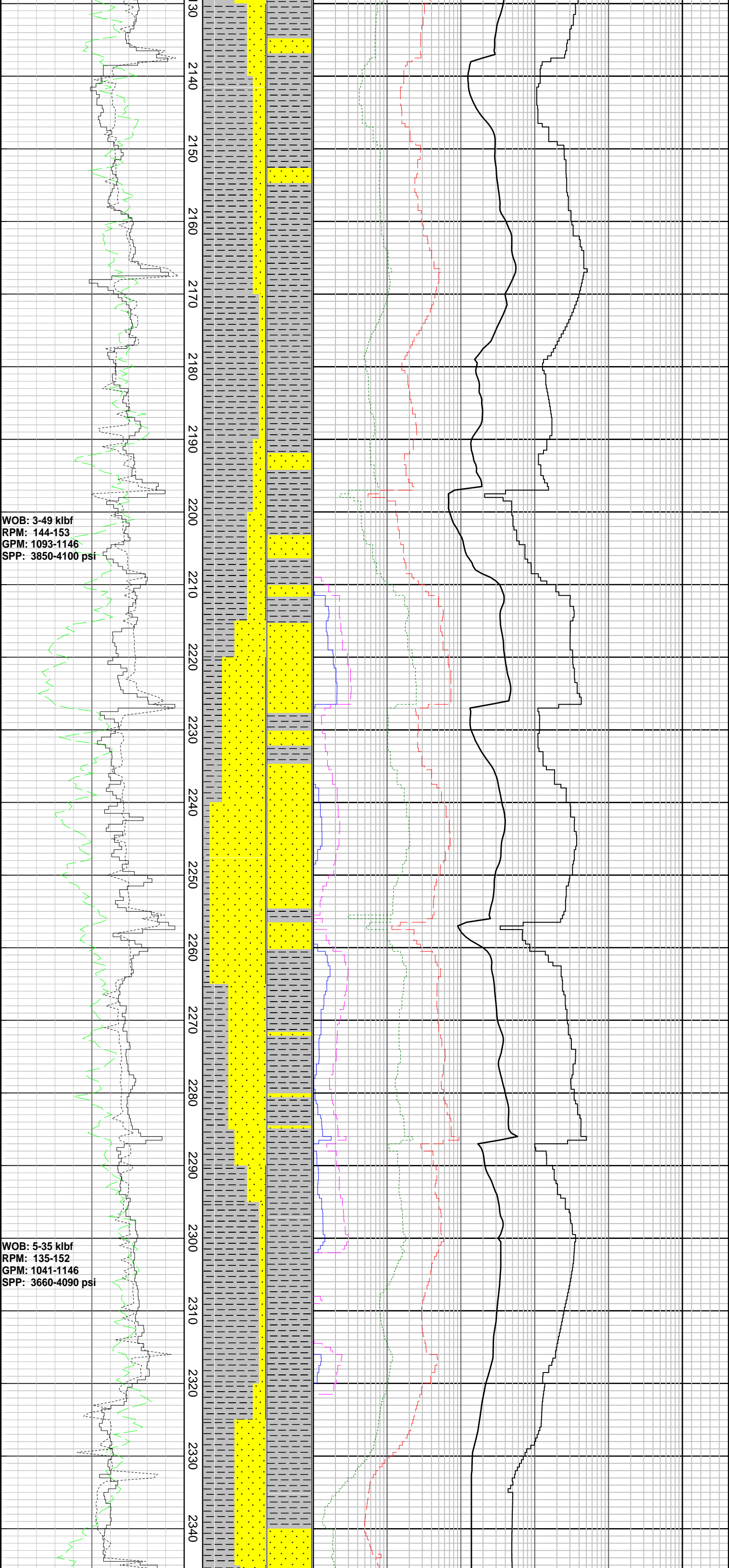
MD: 2057.68 m      Azi:  
184.81°  
TVD: 1921.2 m      Incl: 29.01°

CLYST: lt gy-m gy, bnsh gy, dk gnsh gy, v sft-mod frm,sbbk-bk, tr carb spks, occ lams, tr pyr, grd to Slt Cyst

MD: 2087.27 m      Azi:  
188.03°  
TVD: 1947.1 m      Incl: 29.58°

SST: trnsl-trnsp, wh-v lt gy, lse qtz gr, vf-f, occ m, sb ang-rnd, mod srt, arg mtr, fr inf por, no shw

MD: 2116.78 m      Azi:  
188.02°  
TVD: 1972.7 m      Incl: 29.55°



SST: trnsI-trnsp, wh-v lt gy, lse qtz gr, vf-f, occ m, sb ang-rnd, mod srt, arg mtrx, fr inf por, no shw

MD: 2146.82 m	Azi: 187.12°
TVD: 1998.7 m	Incl: 30.97°

CLYST: dk gy, occ lt-m gy, occ brnsh gy, frm, occ sft-mod frm, sbblky-blky, occ lams, grd to Slst

MD: 2176.36 m	Azi: 185.57°
TVD: 2023.9 m	Incl: 31.76°

SST: trnsI-trnsp, wh-v lt gy, lse qtz gr, vf-f, occ m, sb ang-rnd, mod srt, arg mtrx, fr inf por, no shw

MD: 2206.21 m	Azi: 183.82°
TVD: 2049.3 m	Incl: 31.48°

SST: trnsI-trnsp, wh-v lt gy, lse qtz gr, vf-f, occ m, sb ang-rnd, mod srt, arg mtrx, fr inf por, no shw

MD: 2235.88 m	Azi: 183.41°
TVD: 2074.6 m	Incl: 31.35°

SST: trnsI-trnsp, wh-v lt gy, lse qtz gr, vf-f, occ m, sb ang-rnd, mod srt, arg mtrx, fr inf por, no shw

MD: 2265.38 m	Azi: 184.62°
TVD: 2099.7 m	Incl: 32.11°

CLYST: dk gy, lt gy-m gy, occ brnsh gy, frm, occ sft-mod frm, sbblky-blky, occ carb lams, grd to Slst

MD: 2295.13 m	Azi: 185.04°
TVD: 2125.0 m	Incl: 31.69°

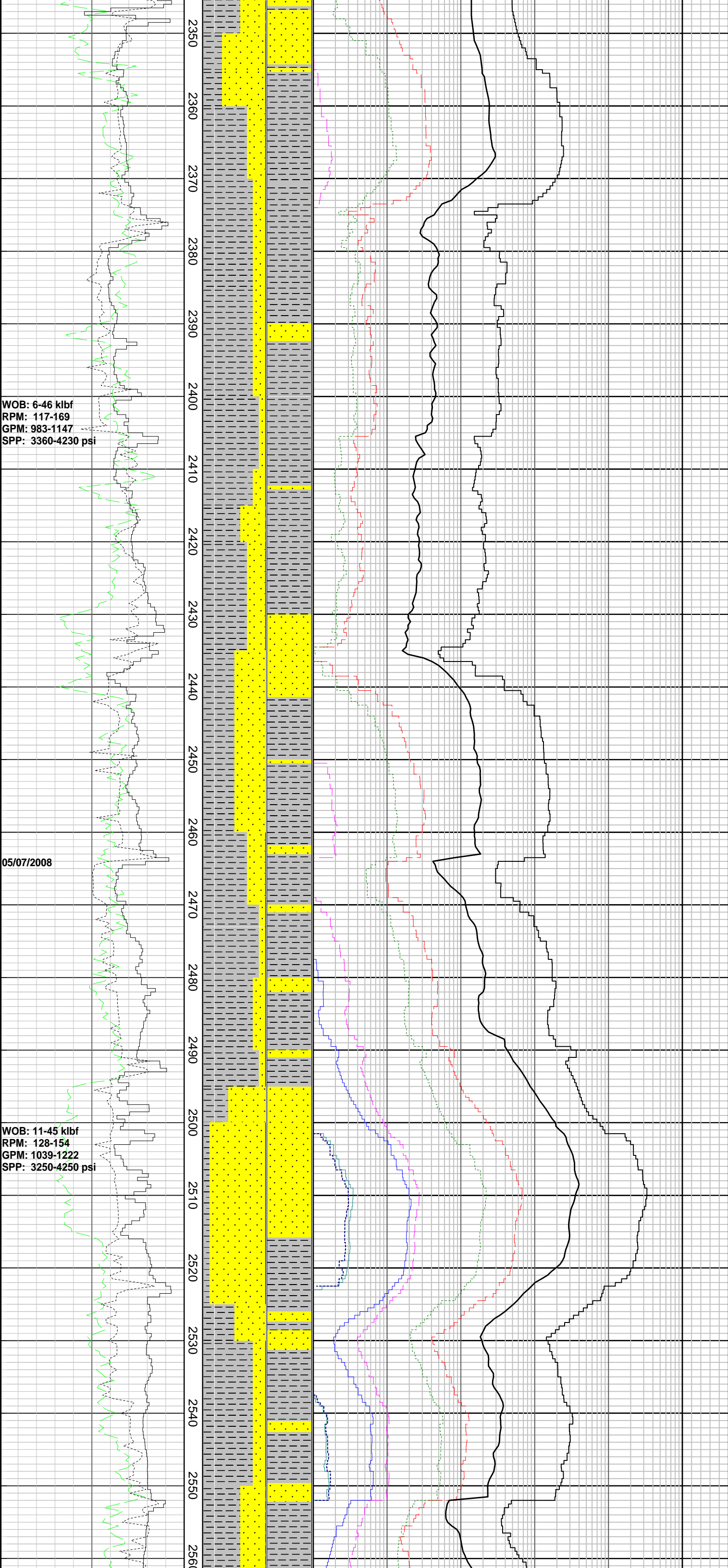
CLYST: m gy-dk gy, occ brnsh gy, mod frm-frm, occ sft-hd, sbblky-blky, occ carb lams, grd to Slst

MD: 2325.11 m	Azi: 184.84°
TVD: 2150.3 m	Incl: 33.21°

SST: trnsI-trnsp, wh-v lt gy, pred lse qtz gr, tr fri, vf-f, occ m-crs, sb ang-rndd, mod-wl srt, arg mtrx, calc cmt, fr vis por, no shw

CLYST: dk gy, occ lt gy-m gy, occ brnsh gy, frm-hd, occ mod frm, sbblky-blky, occ carb lams, grd to Slst





MD: 2355.31 m	Azi:
185.28°	
TVD: 2175.1 m	Incl:
35.92°	

CLYST: dk gy, lt gy-m gy, occ brnsh gy, frm-hd, sbblky-blky, occ carb lams, grd to Slst

MD: 2385.09 m	Azi:
184.07°	
TVD: 2199.1 m	Incl:
36.82°	

CLYST: dk gy, lt gy-m gy, occ brnsh gy, frm-hd, sbblky-blky, occ carb lams, grd to Slst

MW: 12.00 ppg	FV: 84
PV: 41	YP: 38
Gels: 16/19/--	
O/W:70.0/30.0	

MD: 2413.59 m	Azi:
183.21°	
TVD: 2221.8 m	Incl: 37.70°

SST: trnsI-trnsp, wh-off wh, pa gy, pred lse, tr fri, vf-f, occ m, sb ang-rndd, mod-wl srt, arg mtrx, tr calc cmt, fr vis por, no shw

CLYST: dk gy, occ lt gy-m gy, occ brnsh gy, frm-hd, occ mod frm, sbblky-blky, occ carb lams, grd to Slst

SST: trnsI-trnsp, wh-v lt gy, pred lse, tr fri, vf-f, occ m, sb ang-rndd, mod-wl srt, arg mtrx, tr calc cmt, fr vis por, no shw

MD: 2472.44 m	Azi:
182.99°	
TVD: 2266.8 m	Incl:
42.55°	

CLYST: dk gy, occ lt gy-m gy, occ brnsh gy, frm-hd, sbblky-blky, occ carb, lams, grd to Slst

MD: 2502.19 m	Azi:
182.77°	
TVD: 2288.2 m	Incl:
45.34°	

SST: trnsI-trnsp, wh-v lt gy, pred lse, tr fri, vf-f, occ m, sb ang-rndd, mod-wl srt, arg mtrx, tr calc cmt, fr vis por, no shw

MD: 2531.76 m	Azi:
183.24°	
TVD: 2308.4 m	Incl:
48.61°	

CLYST: m gy-dk gy, occ bn gy, mod frm-frm, occ sft, occ hd, sbblky-blky, occ lams, grd to Slst



