Décollement Consulting Inc.

Scale: 5" / 100'
Measured Depth Log

Well Name	State Whitetail O-K-36HNB
Location	SW/SE Section 36, T6N - R62W
State	Colorado
County	Weld
Country	USA
Rig Number	Cade 21
API Number	05-123-38892-00
Region	D.J. Basin
Field	Wattenberg
Spud Date	6/1/2014
Drilling Completed	6/9/2014
Ground Elevation	4,653'
K.B. Elevation	4,670'
Logged Interval	5,800' **To** 10,618'
Total Depth	10,618'
Formation	Niobrara "B" Chalk
Type of Drilling Fluid	Water Based Mud

Operator

Company Bonanza Creek Energy, Inc.

Address 410 17th Street, Suite 1500
Denver, CO 80202

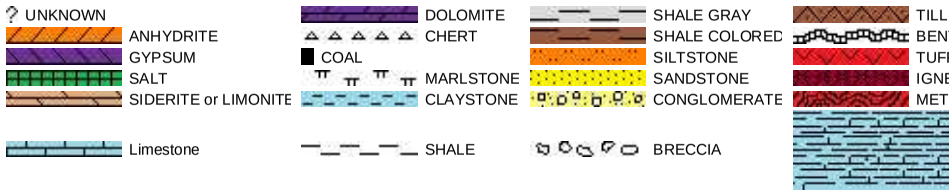
Geologist

Name Dick Brunner / Scott Sawyer

Company Decollement Consulting Inc.

Address 13300 Braun Road
Golden, CO 80401

Rock Types



Accessories

Fossils

- FOSSIL
- GASTROPOD
- ALGAE
- AMPHIPORA
- BELEMNITE
- BIOCLASTIC
- BRACHOIPOD
- BRYOZOA
- CEPHALOPOD
- CORAL
- CRINOID
- ECHINOID
- FISH
- FORAMINIFERA
- OOLITE
- OSTRACOD
- PELECYPOD
- PELLET
- PISOLITE
- PLANT REMAINS
- PLANT SPORES
- SCAPHOPOD
- STROMATOPOROID

Minerals

- ANHYDRITIC
- ARGILLACEOUS
- ARGILLITE GRAIN
- BENTONITE
- BITUMENOUS SUBSTANCE
- BRECCIA FRAGMENTS
- CALCAREOUS
- CARBONACEOUS FLAKES
- CHTDK
- CHTLT
- COAL - THIN BEDS
- DOLOMITIC
- FELDSPAR
- FERRUGINOUS PELLET
- FERRUGINOUS
- GLAUCONITE
- GYPSIFEROUS
- HEAVY MINERAL
- KAOLIN
- MARLSTONE
- MINERAL CRYSTALS
- NODULES
- PHOSPHATE PELLETS
- PYRITE
- SALT CAST
- SANDY
- SILICEOUS
- SILTY
- TUFFACEOUS

Stringer

- ANHYDRITE STRINGER
- BENTONITE STRINGER
- COAL STRINGER
- DOLOMITE STRINGER
- GYPSUM STRINGER
- LIMESTONE STRINGER
- MARLSTONE (CALC) STRG
- MARLSTONE (DOL) STRG
- SANDSTONE STRINGER
- SHALE STRINGER
- SILTSTONE STRINGER

Other Symbols

Oil Show

- DEAD
- EVEN
- QUESTIONABLE
- SPOTTED STAINING

Porosity

- EARTHY
- FENESTRAL
- FRACTURE
- INTERCRYSTALLINE
- INTEROOLITIC
- MOLDIC
- ORGANIC
- PINPOINT
- VUGGY

Engineering

- BIT
- CONNECTION (LEFT)
- CONNECTION (RIGHT)
- CONNECTION GAS
- CORE - LOST
- CORE - RECOVERED
- DST INTERVAL
- FAULT
- FORMATION TOP
- GAS SHOW
- MN DEPTH
- NORMAL FAULT
- OIL SHOW
- OVERTURNED STRATA
- REVERSE FAULT
- SIDEWALL CORE (LEFT)
- SIDEWALL CORE (RIGHT)
- SLIDE
- SURVEY
- TRIP GAS
- WIRELINE TESTED - LEFT
- WIRELINE TESTED - RT

Rounding

- ANGULAR
- ROUNDED
- SUBANG
- SUBRND

Textures

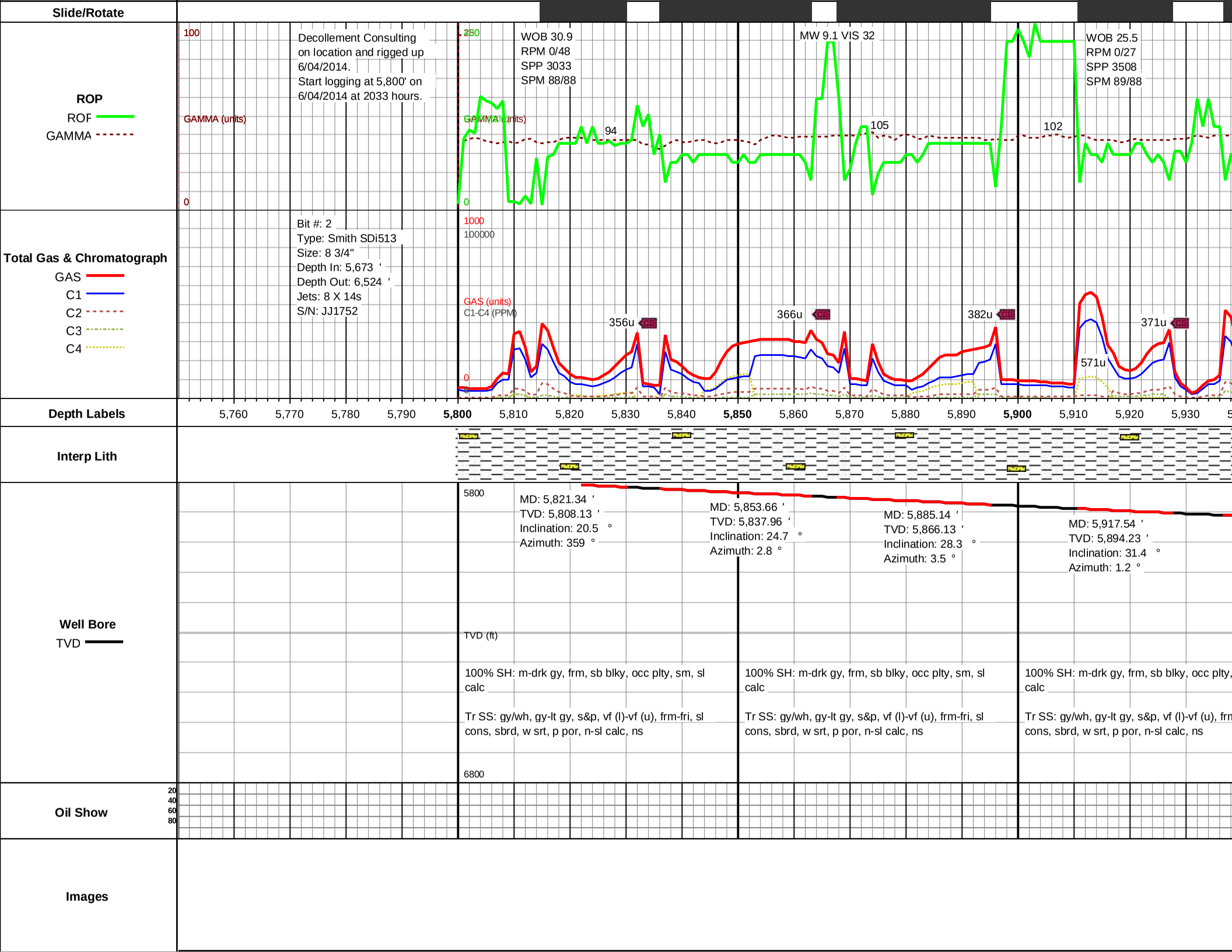
- BOUNDSTONE
- CHALKY
- CRYPTOXLN
- EARTHY
- FINELYXLN
- GRAINSTONE
- LITHOGRAPHIC
- MICROXLN
- MUDSTONE
- PACKSTONE
- WACKESTONE

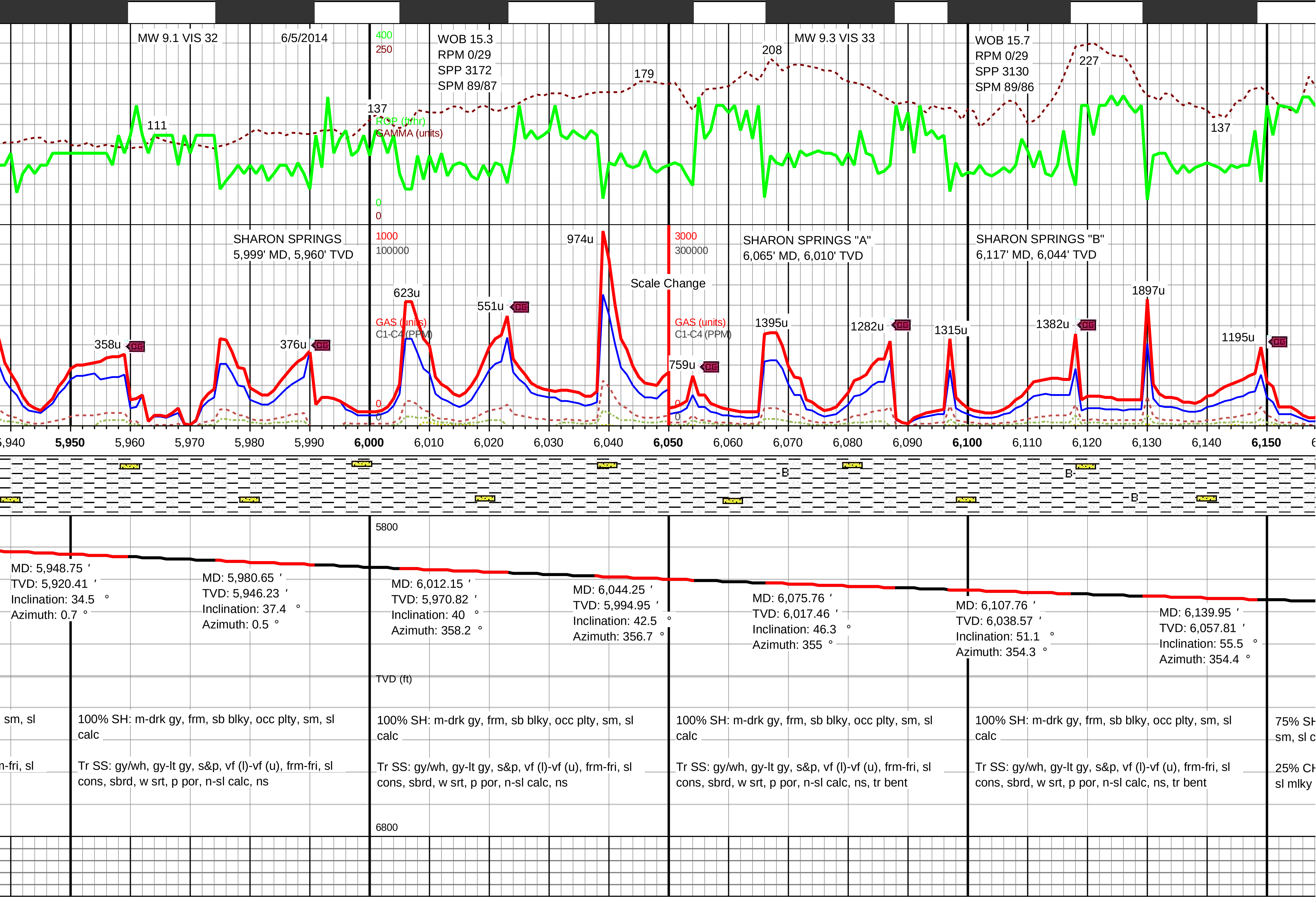
Sorting

- MODERATE
- POOR
- WELL

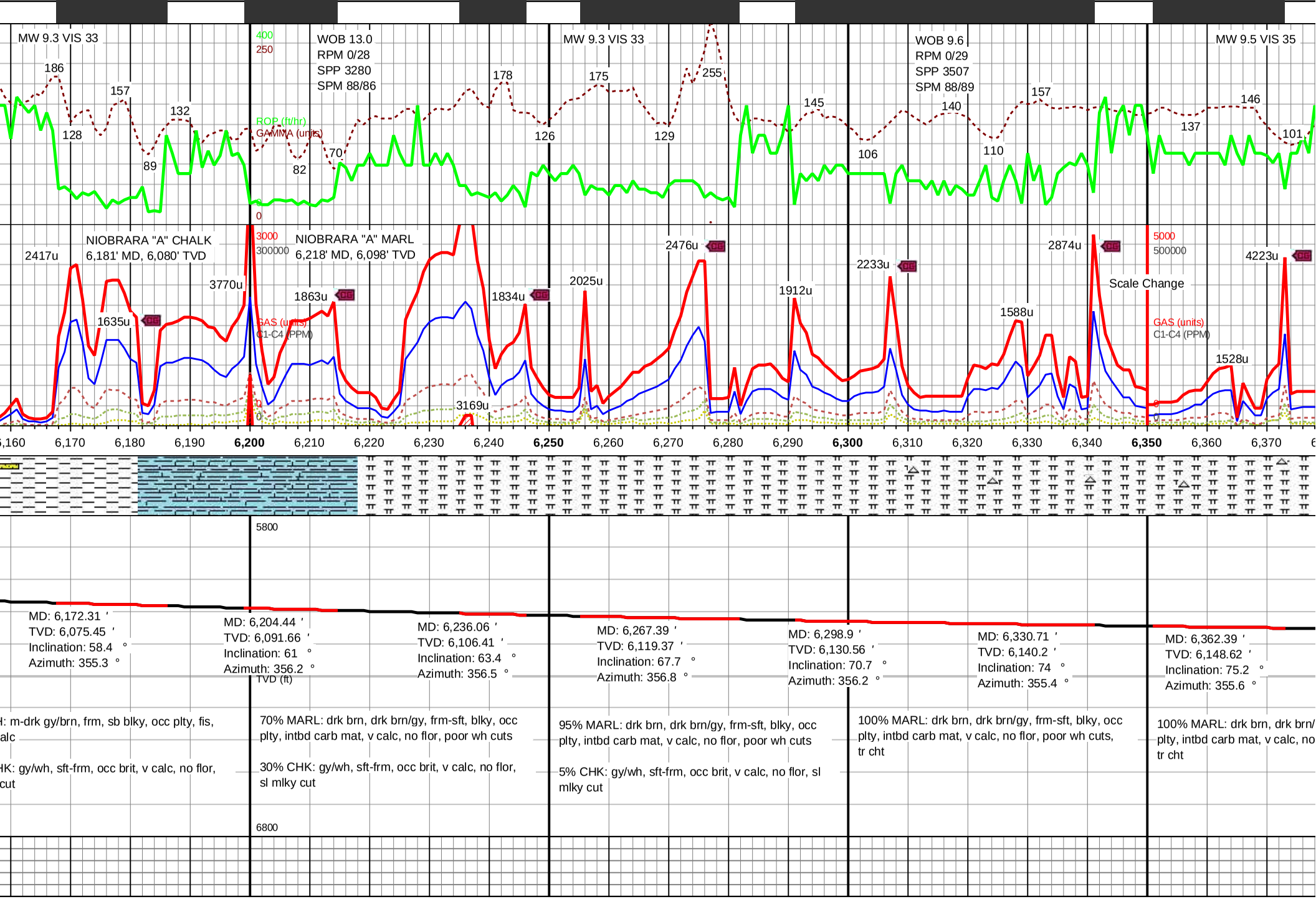
Chalk

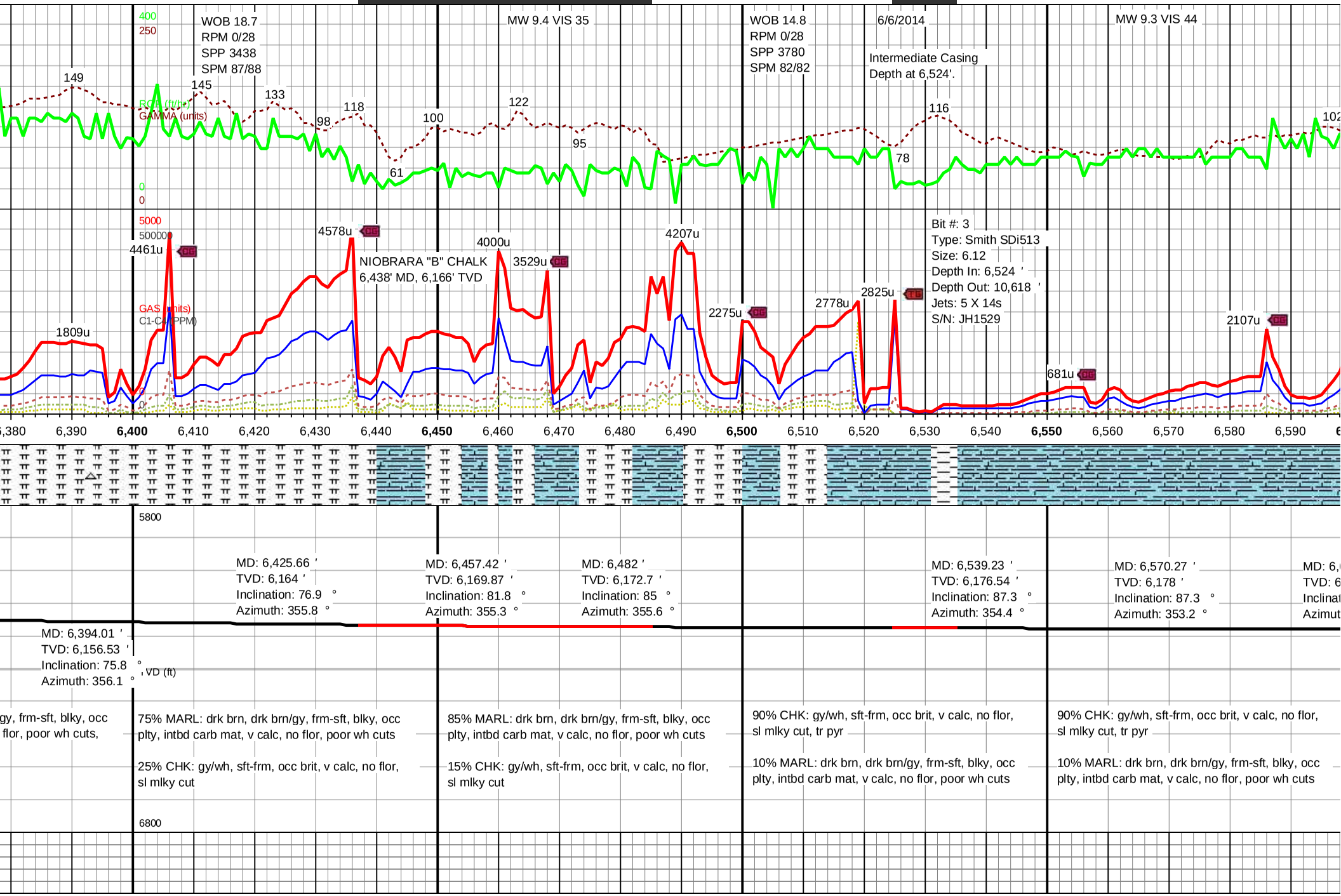
Chalk

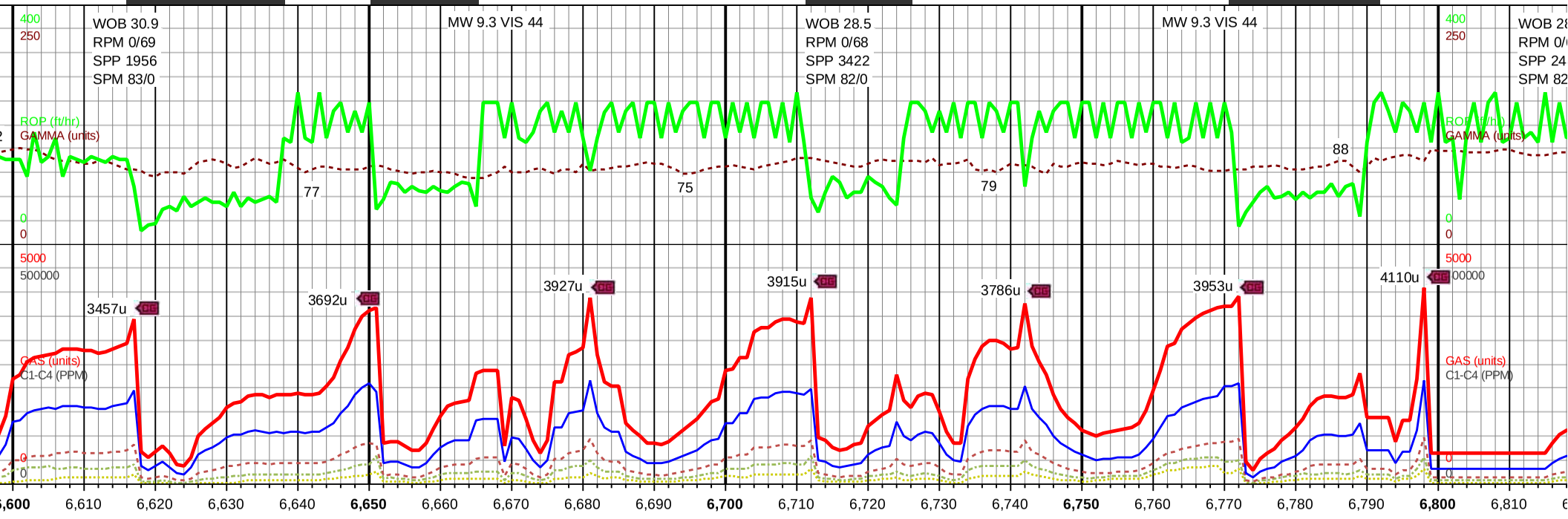

Slide/Rotate
ROP
ROP
GAMMA
100
GAMMA (units)
0
Decollement Consulting
on location and rigged up
6/04/2014.
Start logging at 5,800' on
6/04/2014 at 2033 hours.
250
GAMMA (units)
0
WOB 30.9
RPM 0/48
SPP 3033
SPM 88/88
94
MW 9.1 VIS 32
105
102
WOB 25.5
RPM 0/27
SPP 3508
SPM 89/88
Total Gas & Chromatograph
GAS
C1
C2
C3
C4
Bit #: 2
Type: Smith SDi513
Size: 8 3/4"
Depth In: 5,673 '
Depth Out: 6,524 '
Jets: 8 X 14s
S/N: JJ1752
1000
100000
GAS (units)
C1-C4 (PPM)
0
356u
366u
382u
571u
371u
Depth Labels
5,760
5,770
5,780
5,790
5,800
5,810
5,820
5,830
5,840
5,850
5,860
5,870
5,880
5,890
5,900
5,910
5,920
5,930
Interp Lith
Well Bore
TVD
5800
MD: 5,821.34 '
TVD: 5,808.13 '
Inclination: 20.5 °
Azimuth: 359 °
MD: 5,853.66 '
TVD: 5,837.96 '
Inclination: 24.7 °
Azimuth: 2.8 °
MD: 5,885.14 '
TVD: 5,866.13 '
Inclination: 28.3 °
Azimuth: 3.5 °
MD: 5,917.54 '
TVD: 5,894.23 '
Inclination: 31.4 °
Azimuth: 1.2 °
TVD (ft)
100% SH: m-drk gy, frm, sb blky, occ plty, sm, sl calc
Tr SS: gy/wh, gy-lt gy, s&p, vf (l)-vf (u), frm-fri, sl cons, sbrd, w srt, p por, n-sl calc, ns
6800
Oil Show
20
40
60
80
Images

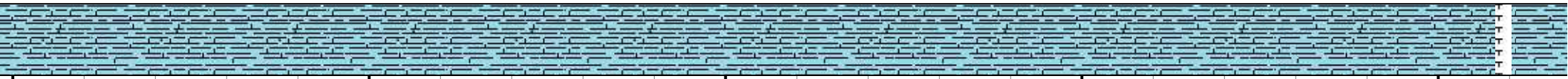


MW 9.1 VIS 32
6/5/2014
WOB 15.3
RPM 0/29
SPP 3172
SPM 89/87
MW 9.3 VIS 33
WOB 15.7
RPM 0/29
SPP 3130
SPM 89/86
111
137
179
208
227
137
400
250
ROP (ft/hr)
GAMMA (units)
0
0
1000
100000
3000
300000
GAS (units)
C1-C4 (PPM)
Scale Change
SHARON SPRINGS
5,999' MD, 5,960' TVD
SHARON SPRINGS "A"
6,065' MD, 6,010' TVD
SHARON SPRINGS "B"
6,117' MD, 6,044' TVD
358u
376u
623u
551u
974u
759u
1395u
1282u
1315u
1382u
1897u
1195u
5,940
5,950
5,960
5,970
5,980
5,990
6,000
6,010
6,020
6,030
6,040
6,050
6,060
6,070
6,080
6,090
6,100
6,110
6,120
6,130
6,140
6,150
B
B
B
5800
TVD (ft)
6800
MD: 5,948.75 '
TVD: 5,920.41 '
Inclination: 34.5 °
Azimuth: 0.7 °
MD: 5,980.65 '
TVD: 5,946.23 '
Inclination: 37.4 °
Azimuth: 0.5 °
MD: 6,012.15 '
TVD: 5,970.82 '
Inclination: 40 °
Azimuth: 358.2 °
MD: 6,044.25 '
TVD: 5,994.95 '
Inclination: 42.5 °
Azimuth: 356.7 °
MD: 6,075.76 '
TVD: 6,017.46 '
Inclination: 46.3 °
Azimuth: 355 °
MD: 6,107.76 '
TVD: 6,038.57 '
Inclination: 51.1 °
Azimuth: 354.3 °
MD: 6,139.95 '
TVD: 6,057.81 '
Inclination: 55.5 °
Azimuth: 354.4 °
sm, sl
n-fri, sl
100% SH: m-drk gy, frm, sb blky, occ plty, sm, sl calc
Tr SS: gy/wh, gy-lt gy, s&p, vf (l)-vf (u), frm-fri, sl cons, sbrd, w srt, p por, n-sl calc, ns
100% SH: m-drk gy, frm, sb blky, occ plty, sm, sl calc
Tr SS: gy/wh, gy-lt gy, s&p, vf (l)-vf (u), frm-fri, sl cons, sbrd, w srt, p por, n-sl calc, ns
100% SH: m-drk gy, frm, sb blky, occ plty, sm, sl calc
Tr SS: gy/wh, gy-lt gy, s&p, vf (l)-vf (u), frm-fri, sl cons, sbrd, w srt, p por, n-sl calc, ns, tr bent
100% SH: m-drk gy, frm, sb blky, occ plty, sm, sl calc
Tr SS: gy/wh, gy-lt gy, s&p, vf (l)-vf (u), frm-fri, sl cons, sbrd, w srt, p por, n-sl calc, ns, tr bent
75% SH
sm, sl c
25% CH
sl mlky


MW 9.3 VIS 33
WOB 13.0
RPM 0/28
SPP 3280
SPM 88/86
MW 9.3 VIS 33
WOB 9.6
RPM 0/29
SPP 3507
SPM 88/89
MW 9.5 VIS 35
ROP (ft/hr)
GAMMA (units)
NIOBRARA "A" CHALK
6,181' MD, 6,080' TVD
NIOBRARA "A" MARL
6,218' MD, 6,098' TVD
Scale Change
GAS (units)
C1-C4 (PPM)
6,200
6,250
6,300
6,350
TVD (ft)
MD: 6,172.31 '
TVD: 6,075.45 '
Inclination: 58.4 °
Azimuth: 355.3 °
MD: 6,204.44 '
TVD: 6,091.66 '
Inclination: 61 °
Azimuth: 356.2 °
MD: 6,236.06 '
TVD: 6,106.41 '
Inclination: 63.4 °
Azimuth: 356.5 °
MD: 6,267.39 '
TVD: 6,119.37 '
Inclination: 67.7 °
Azimuth: 356.8 °
MD: 6,298.9 '
TVD: 6,130.56 '
Inclination: 70.7 °
Azimuth: 356.2 °
MD: 6,330.71 '
TVD: 6,140.2 '
Inclination: 74 °
Azimuth: 355.4 °
MD: 6,362.39 '
TVD: 6,148.62 '
Inclination: 75.2 °
Azimuth: 355.6 °
m-drk gy/brn, frm, sb blky, occ plty, fis,
70% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
30% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut
95% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
5% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut
100% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts, tr cht
100% MARL: drk brn, drk brn/ plty, intbd carb mat, v calc, no tr cht


WOB 18.7
RPM 0/28
SPP 3438
SPM 87/88
MW 9.4 VIS 35
WOB 14.8
RPM 0/28
SPP 3780
SPM 82/82
6/6/2014
Intermediate Casing
Depth at 6,524'.
MW 9.3 VIS 44
ROP (ft/hr)
GAMMA (units)
GAS (units)
C1-C5 (PPM)
NIOBRARA "B" CHALK
6,438' MD, 6,166' TVD
Bit #: 3
Type: Smith SDi513
Size: 6.12
Depth In: 6,524 '
Depth Out: 10,618 '
Jets: 5 X 14s
S/N: JH1529
6,380
6,390
6,400
6,410
6,420
6,430
6,440
6,450
6,460
6,470
6,480
6,490
6,500
6,510
6,520
6,530
6,540
6,550
6,560
6,570
6,580
6,590
MD: 6,394.01 '
TVD: 6,156.53 '
Inclination: 75.8 °
Azimuth: 356.1 °
MD: 6,425.66 '
TVD: 6,164 '
Inclination: 76.9 °
Azimuth: 355.8 °
MD: 6,457.42 '
TVD: 6,169.87 '
Inclination: 81.8 °
Azimuth: 355.3 °
MD: 6,482 '
TVD: 6,172.7 '
Inclination: 85 °
Azimuth: 355.6 °
MD: 6,539.23 '
TVD: 6,176.54 '
Inclination: 87.3 °
Azimuth: 354.4 °
MD: 6,570.27 '
TVD: 6,178 '
Inclination: 87.3 °
Azimuth: 353.2 °
VD (ft)
gy, frm-sft, blky, occ
flor, poor wh cuts,
75% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
25% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut
85% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
15% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut
90% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut, tr pyr
10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
90% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut, tr pyr
10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts





5800

MD: 6,631.28 '
TVD: 6,180.27 '
Inclination: 89.4 °
Azimuth: 353.6 °

MD: 6,661.92 '
TVD: 6,180.35 '
Inclination: 90.3 °
Azimuth: 356 °

MD: 6,693.05 '
TVD: 6,180.02 '
Inclination: 90.9 °
Azimuth: 357.8 °

MD: 6,724.15 '
TVD: 6,179.72 '
Inclination: 90.2 °
Azimuth: 357 °

MD: 6,754.74 '
TVD: 6,179.64 '
Inclination: 90.1 °
Azimuth: 356.5 °

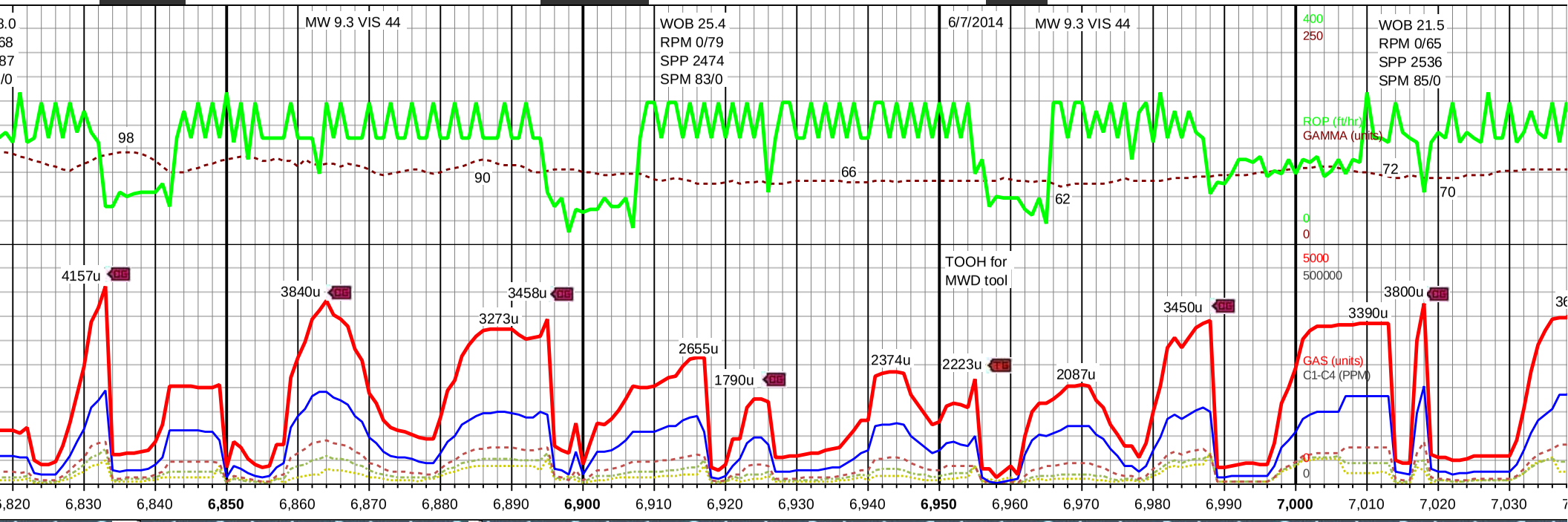
MD: 6,785.72 '
TVD: 6,179.29 '
Inclination: 91.2 °
Azimuth: 0.8 °

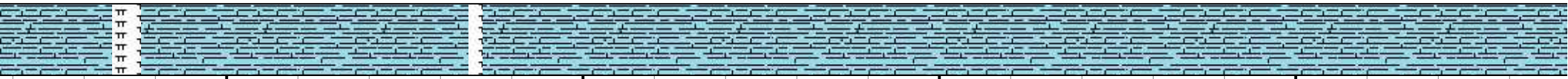
TVD (ft)

100% CHK: gy/wh, sft-frm, occ brit, v calc, no flor, sl mlky cut, tr pyr

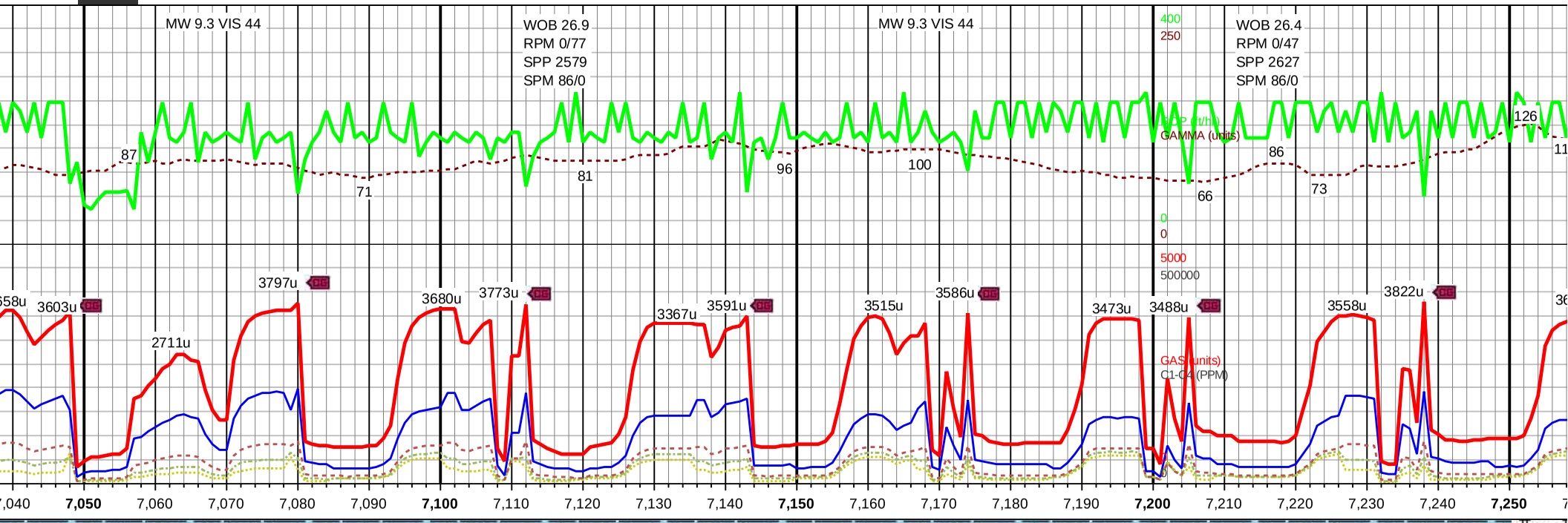
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

6800





MD: 6,847.91 ′ TVD: 6,178.83 ′ Inclination: 88.9 ° Azimuth: 358.7 °	MD: 6,878.55 ′ TVD: 6,179.34 ′ Inclination: 89.2 ° Azimuth: 359.3 °	MD: 6,910.66 ′ TVD: 6,179.59 ′ Inclination: 89.9 ° Azimuth: 0.8 °	MD: 6,941.78 ′ TVD: 6,179.48 ′ Inclination: 90.5 ° Azimuth: 1.5 °	MD: 6,972.76 ′ TVD: 6,179.07 ′ Inclination: 91 ° Azimuth: 3.4 °	MD: 7,003.56 ′ TVD: 6,178.46 ′ Inclination: 91.3 ° Azimuth: 3.3 °	MD: 7,034.2 ′ TVD: 6,177.63 Inclination: 91. Azimuth: 3.5 °
/tan, sft-frm, occ brit, v calc,	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut	TVD (ft) 100% CHK: gy/wh-gy/tan, sft-frm, occ brit, no flor, sl mlky cut	
n, sb blky, occ plty, fis, sm,	5% SH: gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc	5% SH: gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc	5% SH: gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc	5% SH: gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc	Tr SH: gy, lt gy, gy/bl, frm, sb blky, occ plt sm, n-sl calc	
rk brn/gy, frm-sft, blky, occ v calc, no flor, poor wh cuts	Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	Tr MARL: drk brn, drk brn/gy, frm-sft, blky plty, intbd carb mat, v calc, no flor, poor w	



MD: 7,065.62 '
TVD: 6,177.08 '
Inclination: 90.2 °
Azimuth: 2.4 °

MD: 7,097.41 '
TVD: 6,177 '
Inclination: 90.1 °
Azimuth: 2.6 °

MD: 7,129.21 '
TVD: 6,176.86 '
Inclination: 90.4 °
Azimuth: 2.8 °

MD: 7,161.19 '
TVD: 6,176.63 '
Inclination: 90.4 °
Azimuth: 2.3 °

MD: 7,192.72 '
TVD: 6,176.39 '
Inclination: 90.5 °
Azimuth: 2.5 °

5800

MD: 7,224.62 '
TVD: 6,176.08 '
Inclination: 90.6 °
Azimuth: 2.5 °

MD: 7,256.05
TVD: 6,175.7
Inclination: 9
Azimuth: 2.3

, v calc,

y, fis,

, occ
h cuts

95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

5% SH: gy, lt gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut, tr fos frag

5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

Tr SH: gy, lt gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut, tr fos frag

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

Tr SH: gy, lt gy, gy/bl, frm, sb blky, occ plty, fis, sm, n-sl calc

TVD (ft)

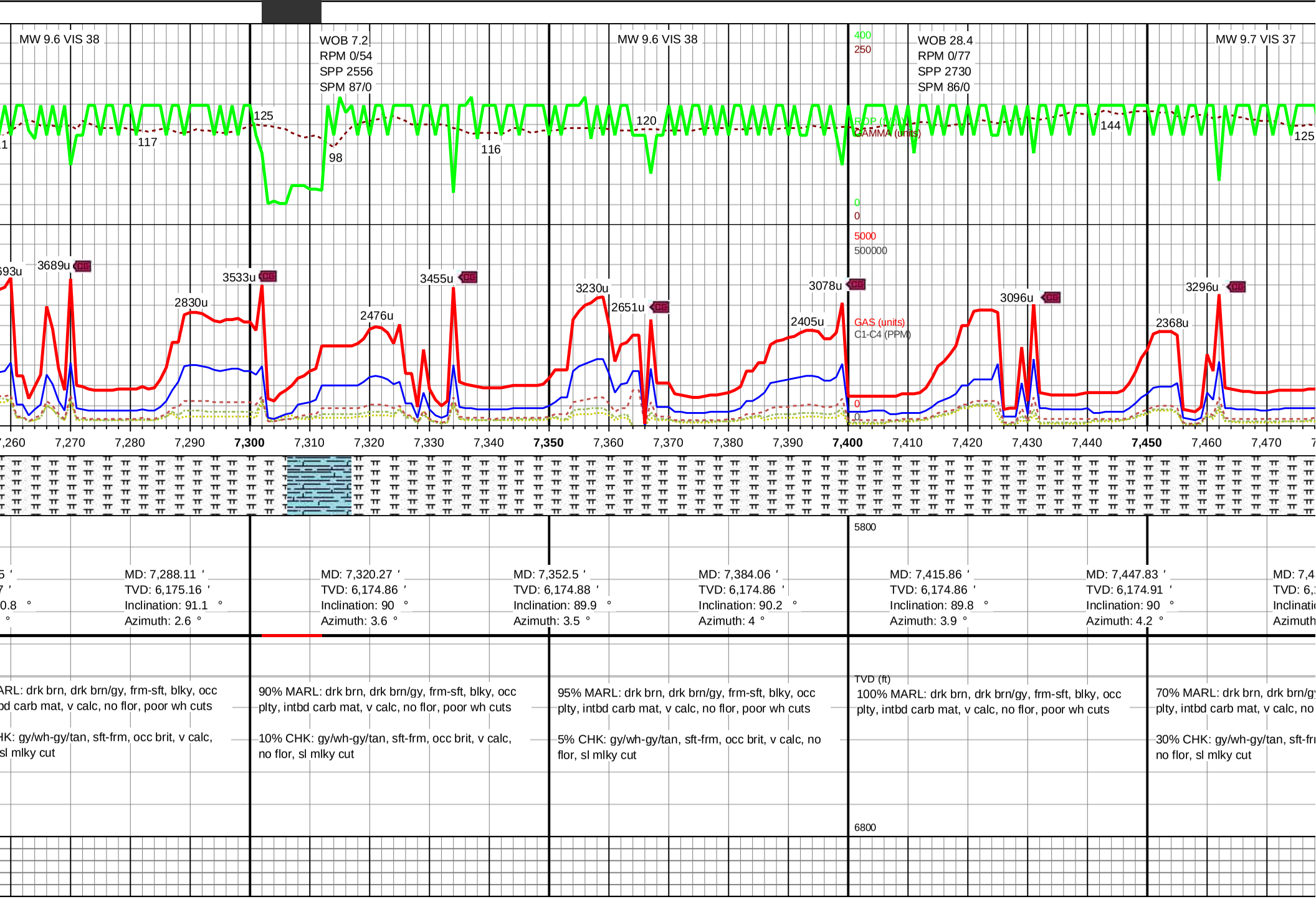
100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut, tr fos frag

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

6800

85% MA
plty, intl

15% CH
no flor,



ARL: drk brn, drk brn/gy, frm-sft, blky, occ bd carb mat, v calc, no flor, poor wh cuts

HK: gy/wh-gy/tan, sft-frm, occ brit, v calc, sl mlky cut

90% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

10% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

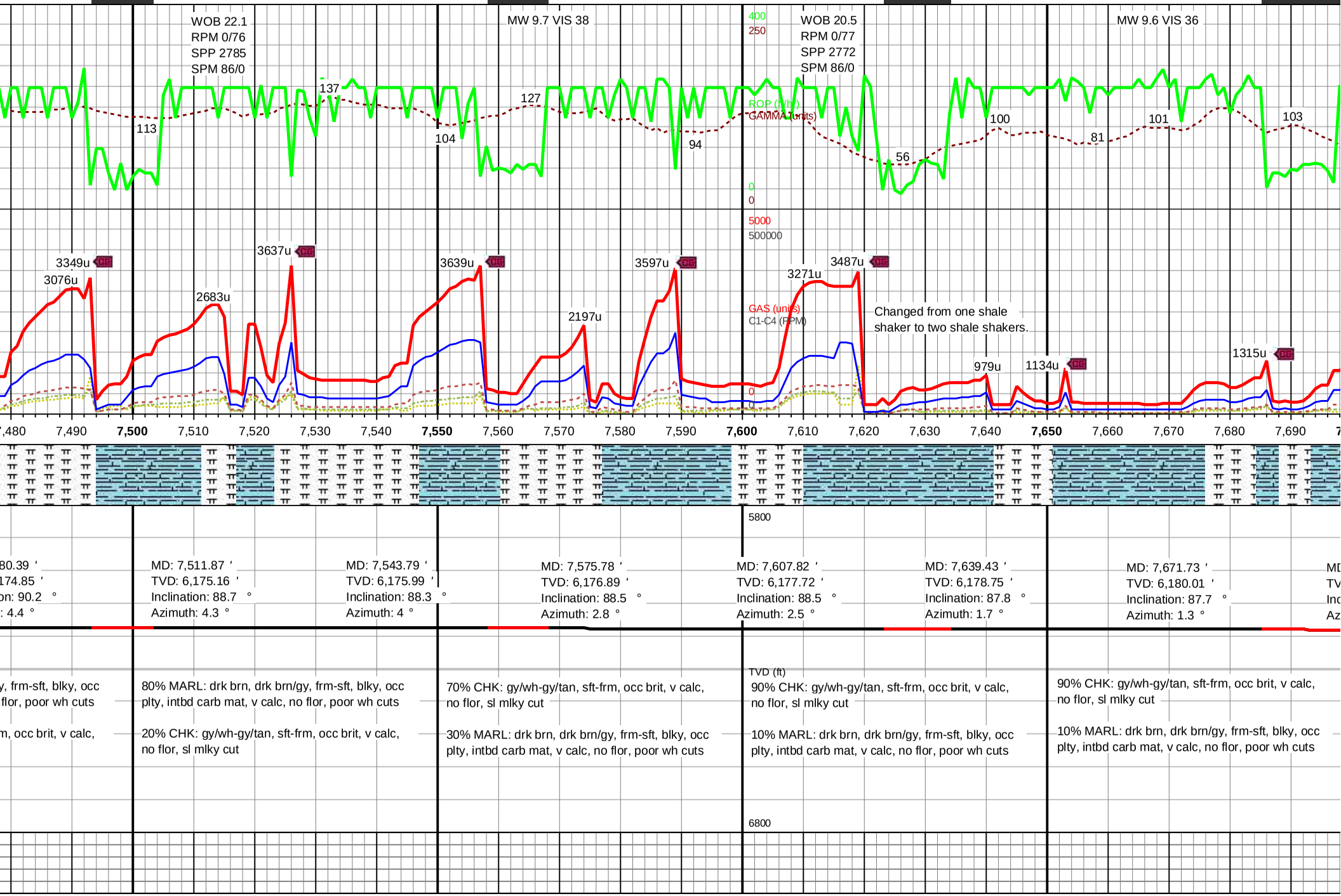
95% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

5% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

100% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

70% MARL: drk brn, drk brn/gy plty, intbd carb mat, v calc, no

30% CHK: gy/wh-gy/tan, sft-fr no flor, sl mlky cut



80.39 '
174.85 '
on: 90.2 °
: 4.4 °

MD: 7,511.87 '
TVD: 6,175.16 '
Inclination: 88.7 °
Azimuth: 4.3 °

MD: 7,543.79 '
TVD: 6,175.99 '
Inclination: 88.3 °
Azimuth: 4 °

MD: 7,575.78 '
TVD: 6,176.89 '
Inclination: 88.5 °
Azimuth: 2.8 °

MD: 7,607.82 '
TVD: 6,177.72 '
Inclination: 88.5 °
Azimuth: 2.5 °

MD: 7,639.43 '
TVD: 6,178.75 '
Inclination: 87.8 °
Azimuth: 1.7 °

MD: 7,671.73 '
TVD: 6,180.01 '
Inclination: 87.7 °
Azimuth: 1.3 °

MD
TV
Inc
Az

y, frm-sft, blky, occ
flor, poor wh cuts

m, occ brit, v calc,

80% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

20% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

70% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

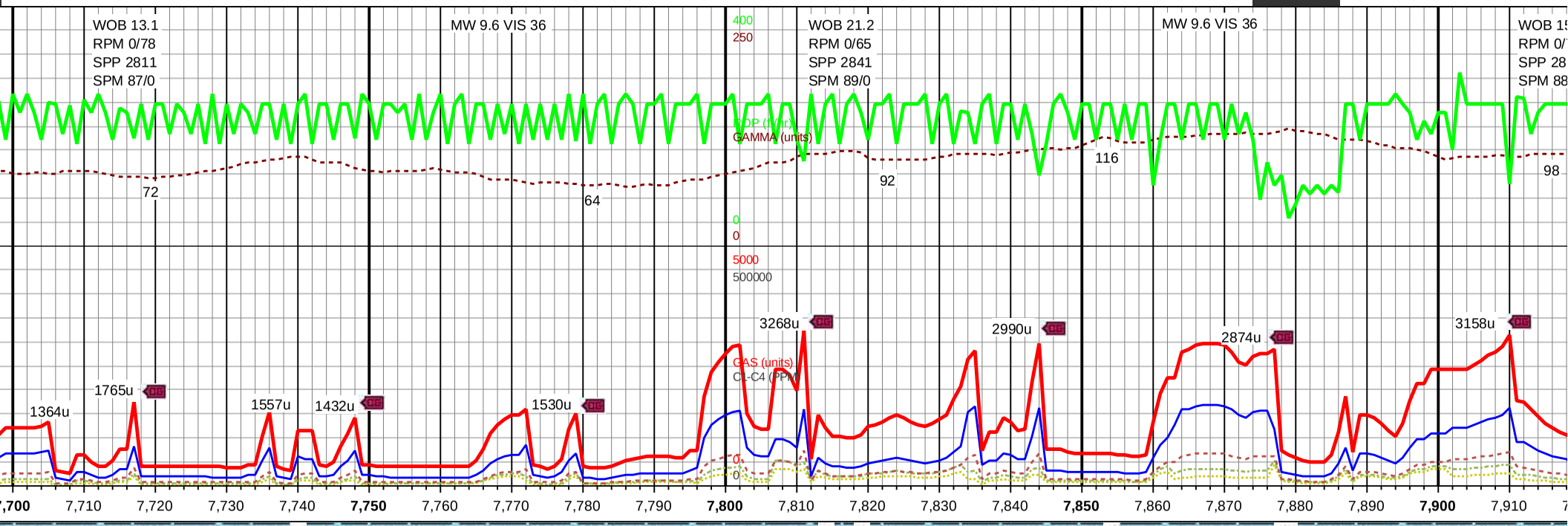
30% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

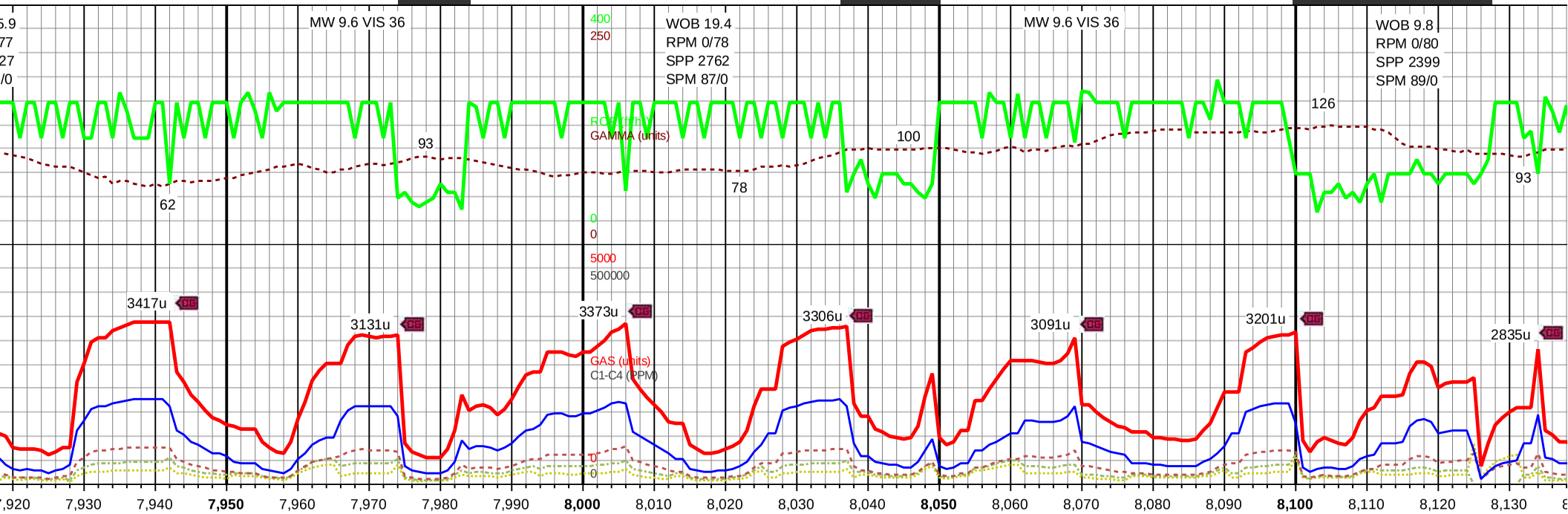
10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

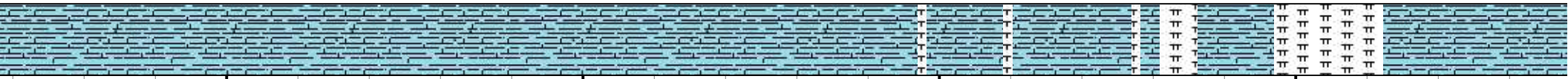
90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

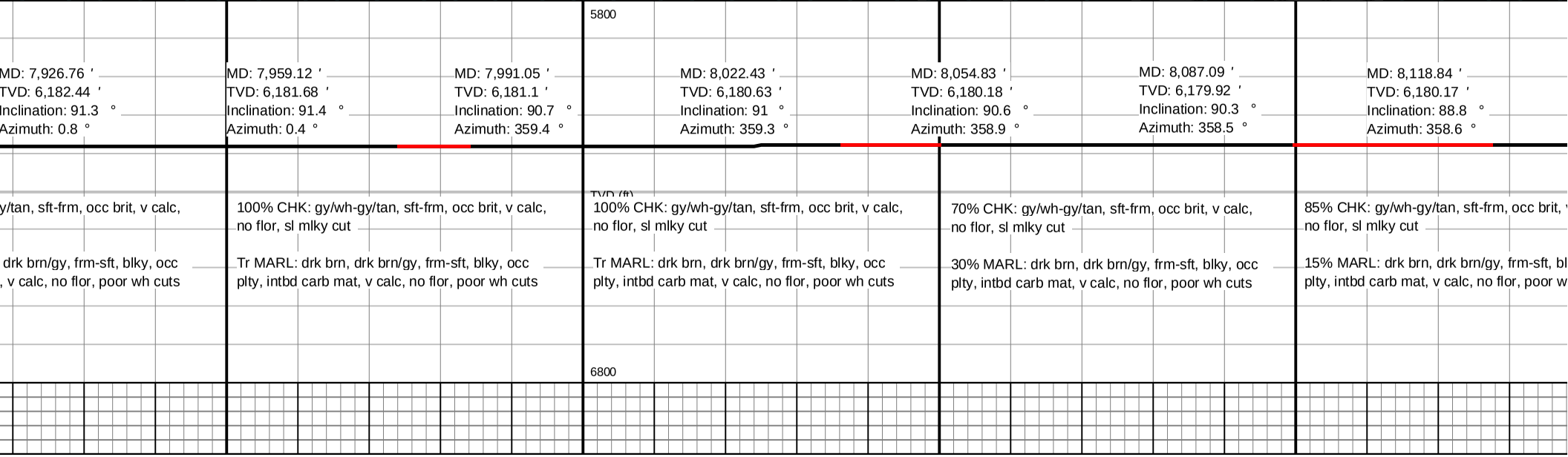
10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts



D: 7,703.91 ′ VD: 6,180.94 ′ clination: 89 ° imuth: 0.2 °	MD: 7,735.44 ′ TVD: 6,181.52 ′ Inclination: 88.9 ° Azimuth: 359.6 °	MD: 7,766.53 ′ TVD: 6,182.06 ′ Inclination: 89.1 ° Azimuth: 0 °	MD: 7,798.58 ′ TVD: 6,182.51 ′ Inclination: 89.3 ° Azimuth: 359.9 °	MD: 7,830.36 ′ TVD: 6,182.92 ′ Inclination: 89.2 ° Azimuth: 359.6 °	MD: 7,862.25 ′ TVD: 6,183.26 ′ Inclination: 89.6 ° Azimuth: 360 °	MD: 7,894.63 ′ TVD: 6,183.09 ′ Inclination: 91 ° Azimuth: 0.6 °
95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	95% CHK: gy/wh-g no flor, sl mlky cut 5% MARL: drk brn, plty, intbd carb mat







MD: 7,926.76 '
TVD: 6,182.44 '
Inclination: 91.3 °
Azimuth: 0.8 °

MD: 7,959.12 '
TVD: 6,181.68 '
Inclination: 91.4 °
Azimuth: 0.4 °

MD: 7,991.05 '
TVD: 6,181.1 '
Inclination: 90.7 °
Azimuth: 359.4 °

MD: 8,022.43 '
TVD: 6,180.63 '
Inclination: 91 °
Azimuth: 359.3 °

MD: 8,054.83 '
TVD: 6,180.18 '
Inclination: 90.6 °
Azimuth: 358.9 °

MD: 8,087.09 '
TVD: 6,179.92 '
Inclination: 90.3 °
Azimuth: 358.5 °

MD: 8,118.84 '
TVD: 6,180.17 '
Inclination: 88.8 °
Azimuth: 358.6 °

y/tan, sft-frm, occ brit, v calc,

drk brn/gy, frm-sft, blky, occ
, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

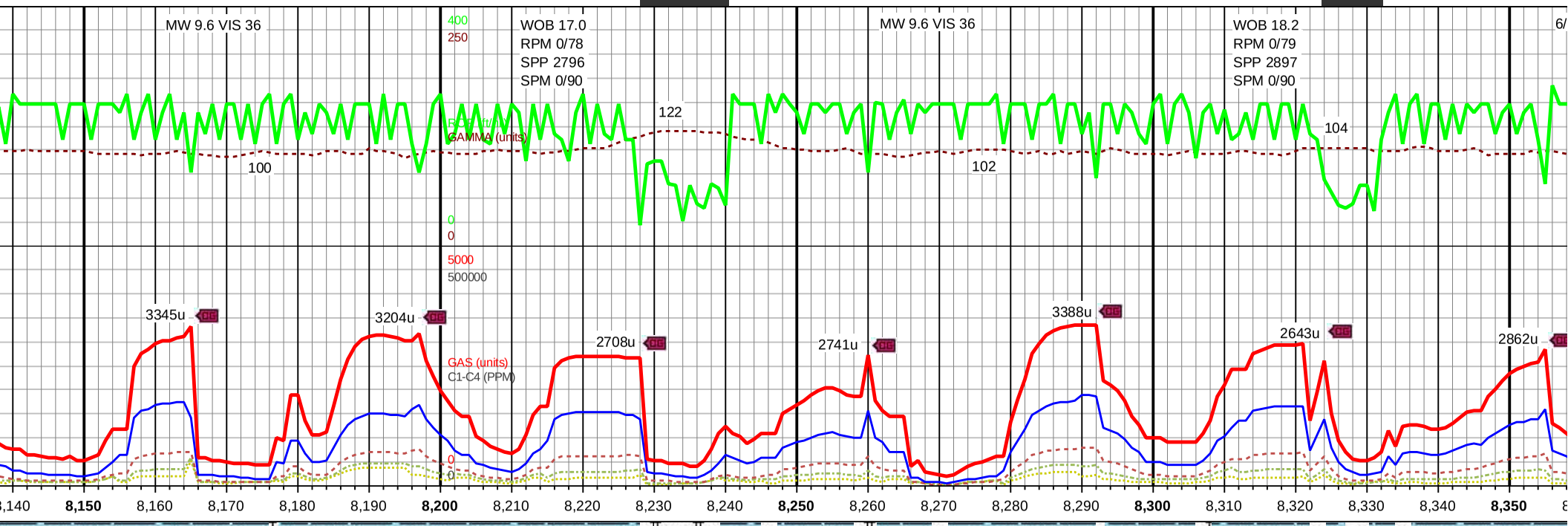
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

70% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

30% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

85% CHK: gy/wh-gy/tan, sft-frm, occ brit, v
no flor, sl mlky cut

15% MARL: drk brn, drk brn/gy, frm-sft, bl
plty, intbd carb mat, v calc, no flor, poor w



5800

MD: 8,150.08 '
TVD: 6,180.66 '
Inclination: 89.4 °
Azimuth: 359.3 °

MD: 8,182.96 '
TVD: 6,180.81 '
Inclination: 90.1 °
Azimuth: 359.2 °

MD: 8,214.3 '
TVD: 6,180.56 '
Inclination: 90.8 °
Azimuth: 359.6 °

MD: 8,245.91 '
TVD: 6,180.59 '
Inclination: 89.1 °
Azimuth: 358.5 °

MD: 8,277.4 '
TVD: 6,180.95 '
Inclination: 89.6 °
Azimuth: 359.3 °

MD: 8,308.81 '
TVD: 6,180.95 '
Inclination: 90.4 °
Azimuth: 359.9 °

MD: 8,341.09 '
TVD: 6,180.98 '
Inclination: 89.5 °
Azimuth: 359.3 °

v calc,

ky, occ
h cuts

95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

70% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

30% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

70% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

30% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

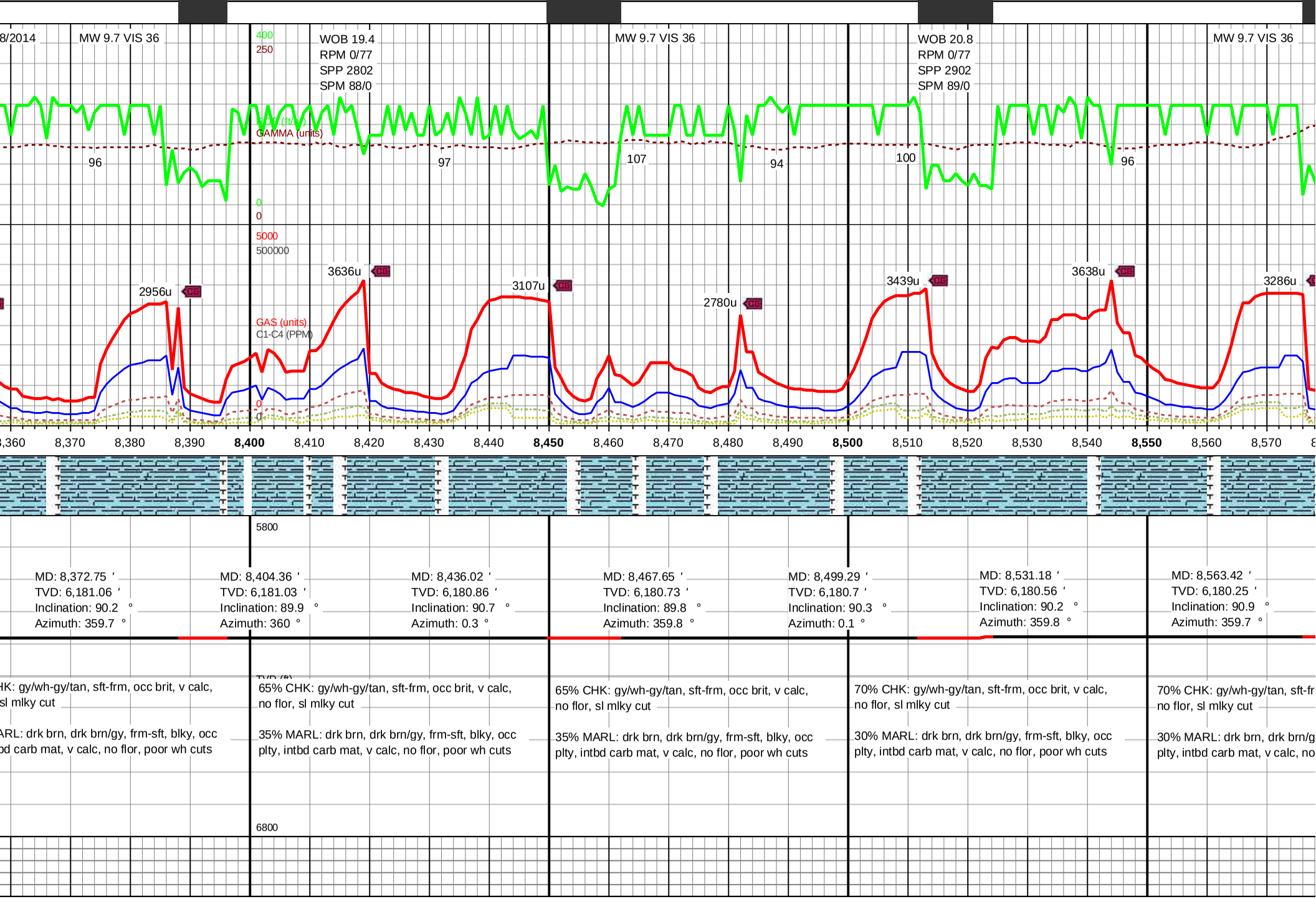
65% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

35% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

70% CH
no flor,

30% MA
plty, intl

6800



MD: 8,372.75 '
TVD: 6,181.06 '
Inclination: 90.2 °
Azimuth: 359.7 °

MD: 8,404.36 '
TVD: 6,181.03 '
Inclination: 89.9 °
Azimuth: 360 °

MD: 8,436.02 '
TVD: 6,180.86 '
Inclination: 90.7 °
Azimuth: 0.3 °

MD: 8,467.65 '
TVD: 6,180.73 '
Inclination: 89.8 °
Azimuth: 359.8 °

MD: 8,499.29 '
TVD: 6,180.7 '
Inclination: 90.3 °
Azimuth: 0.1 °

MD: 8,531.18 '
TVD: 6,180.56 '
Inclination: 90.2 °
Azimuth: 359.8 °

MD: 8,563.42 '
TVD: 6,180.25 '
Inclination: 90.9 °
Azimuth: 359.7 °

HK: gy/wh-gy/tan, sft-frm, occ brit, v calc,
sl mlky cut

ARL: drk brn, drk brn/gy, frm-sft, blky, occ
bd carb mat, v calc, no flor, poor wh cuts

65% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc,
no flor, sl mlky cut

35% MARL: drk brn, drk brn/gy, frm-sft, blky, occ
plty, intbd carb mat, v calc, no flor, poor wh cuts

65% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc,
no flor, sl mlky cut

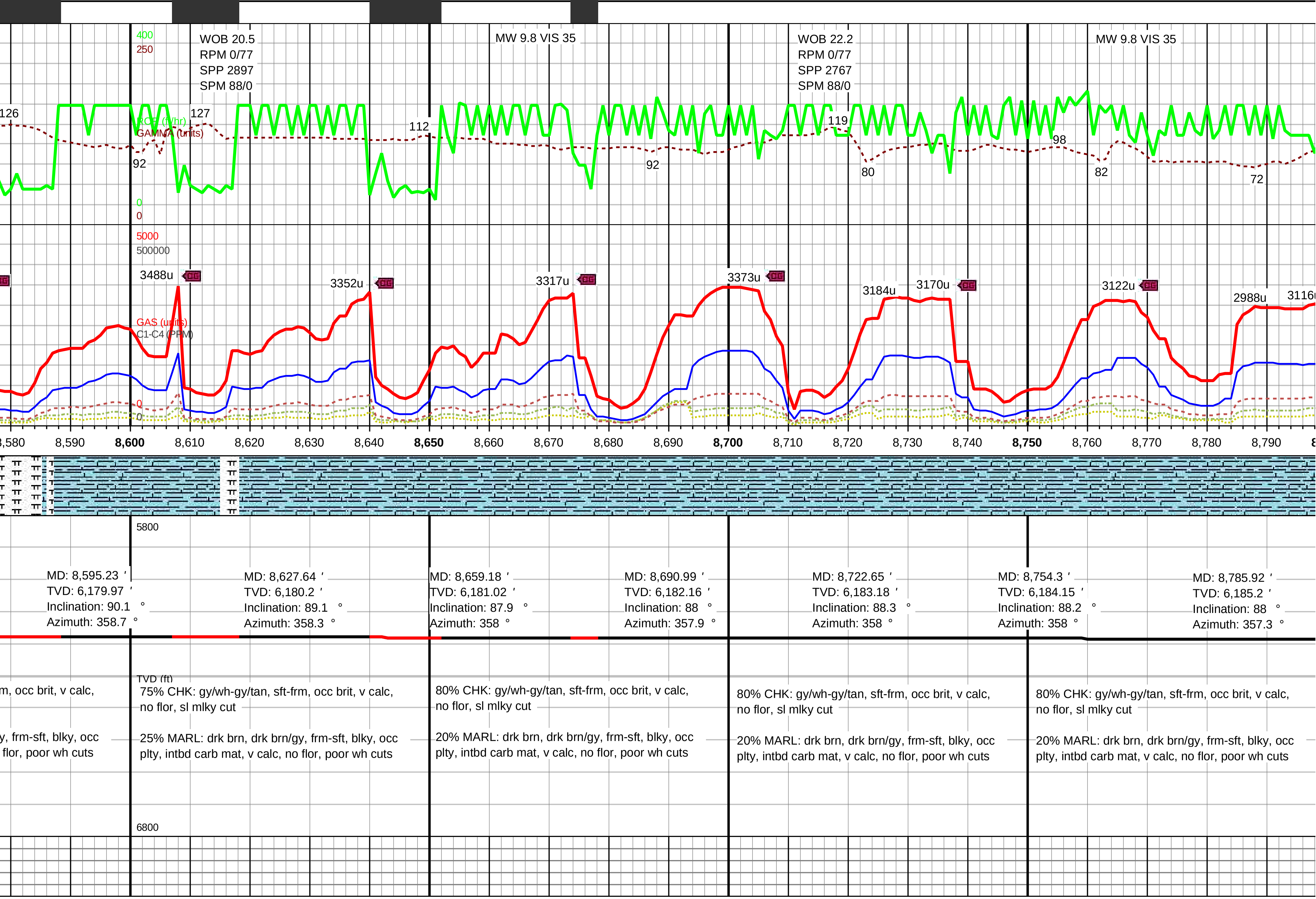
35% MARL: drk brn, drk brn/gy, frm-sft, blky, occ
plty, intbd carb mat, v calc, no flor, poor wh cuts

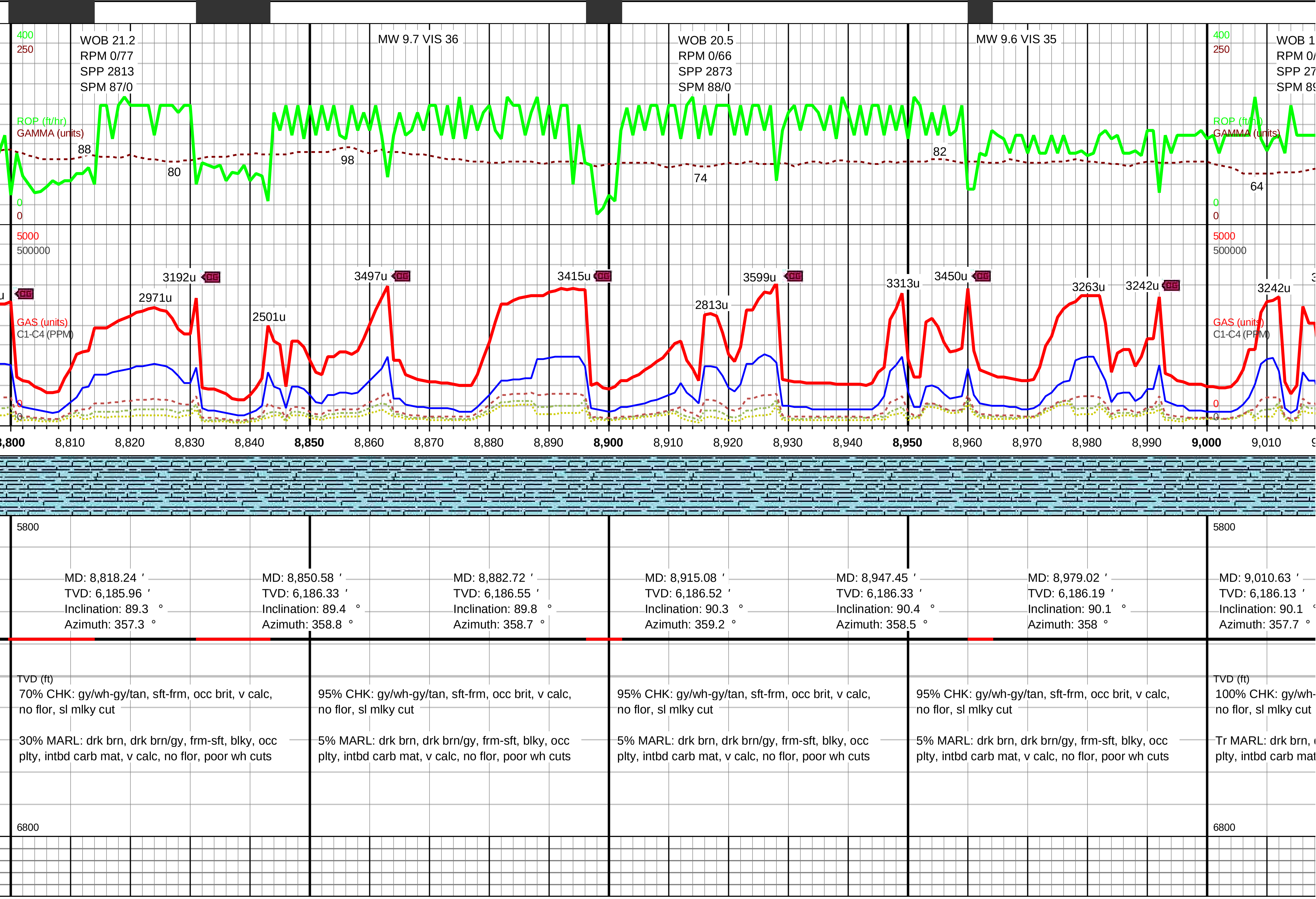
70% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc,
no flor, sl mlky cut

30% MARL: drk brn, drk brn/gy, frm-sft, blky, occ
plty, intbd carb mat, v calc, no flor, poor wh cuts

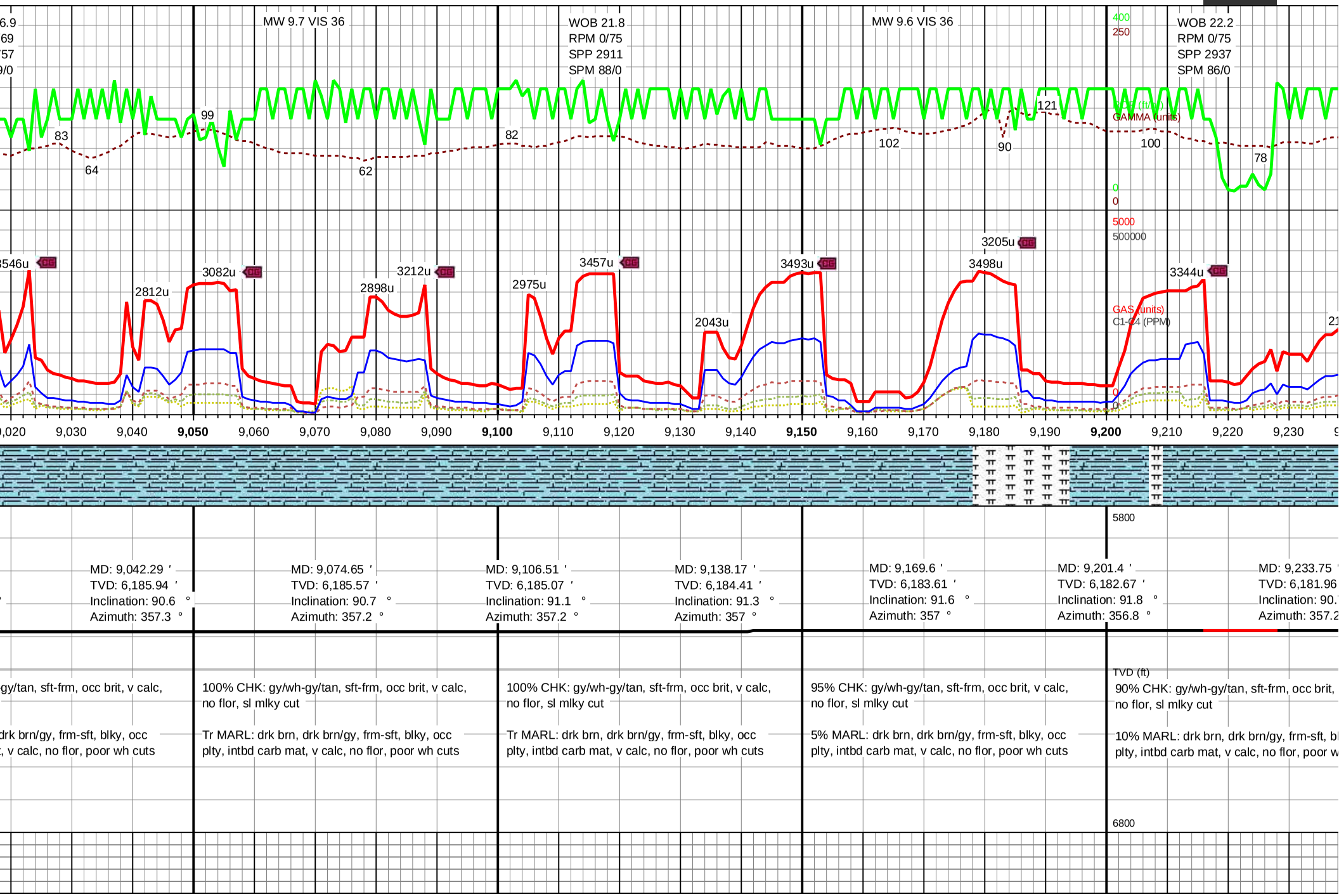
70% CHK: gy/wh-gy/tan, sft-fr
no flor, sl mlky cut

30% MARL: drk brn, drk brn/g
plty, intbd carb mat, v calc, no


WOB 20.5
RPM 0/77
SPP 2897
SPM 88/0
MW 9.8 VIS 35
WOB 22.2
RPM 0/77
SPP 2767
SPM 88/0
MW 9.8 VIS 35
400
250
ROP (ft/hr)
GAMMA (units)
0
0
126
127
92
112
92
119
80
98
82
72
5000
500000
GAS (units)
C1-C4 (PPM)
0
0
3488u
3352u
3317u
3373u
3184u
3170u
3122u
2988u
8,590
8,600
8,610
8,620
8,630
8,640
8,650
8,660
8,670
8,680
8,690
8,700
8,710
8,720
8,730
8,740
8,750
8,760
8,770
8,780
8,790
5800
MD: 8,595.23 ' TVD: 6,179.97 ' Inclination: 90.1 ° Azimuth: 358.7 °
MD: 8,627.64 ' TVD: 6,180.2 ' Inclination: 89.1 ° Azimuth: 358.3 °
MD: 8,659.18 ' TVD: 6,181.02 ' Inclination: 87.9 ° Azimuth: 358 °
MD: 8,690.99 ' TVD: 6,182.16 ' Inclination: 88 ° Azimuth: 357.9 °
MD: 8,722.65 ' TVD: 6,183.18 ' Inclination: 88.3 ° Azimuth: 358 °
MD: 8,754.3 ' TVD: 6,184.15 ' Inclination: 88.2 ° Azimuth: 358 °
MD: 8,785.92 ' TVD: 6,185.2 ' Inclination: 88 ° Azimuth: 357.3 °
TVD (ft)
m, occ brit, v calc,
y, frm-sft, blky, occ
flor, poor wh cuts
75% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
25% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
80% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
20% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
80% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
20% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
80% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
20% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
6800



WOB 21.2
RPM 0/77
SPP 2813
SPM 87/0
MW 9.7 VIS 36
WOB 20.5
RPM 0/66
SPP 2873
SPM 88/0
MW 9.6 VIS 35
ROP (ft/hr)
GAMMA (units)
GAS (units)
C1-C4 (PPM)
3192u
2971u
2501u
3497u
3415u
2813u
3599u
3313u
3450u
3263u
3242u
8,800
8,810
8,820
8,830
8,840
8,850
8,860
8,870
8,880
8,890
8,900
8,910
8,920
8,930
8,940
8,950
8,960
8,970
8,980
8,990
9,000
9,010
MD: 8,818.24 ′
TVD: 6,185.96 ′
Inclination: 89.3 °
Azimuth: 357.3 °
MD: 8,850.58 ′
TVD: 6,186.33 ′
Inclination: 89.4 °
Azimuth: 358.8 °
MD: 8,882.72 ′
TVD: 6,186.55 ′
Inclination: 89.8 °
Azimuth: 358.7 °
MD: 8,915.08 ′
TVD: 6,186.52 ′
Inclination: 90.3 °
Azimuth: 359.2 °
MD: 8,947.45 ′
TVD: 6,186.33 ′
Inclination: 90.4 °
Azimuth: 358.5 °
MD: 8,979.02 ′
TVD: 6,186.19 ′
Inclination: 90.1 °
Azimuth: 358 °
MD: 9,010.63 ′
TVD: 6,186.13 ′
Inclination: 90.1 °
Azimuth: 357.7 °
TVD (ft)
70% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
30% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
100% CHK: gy/wh-
no flor, sl mlky cut
Tr MARL: drk brn,
plty, intbd carb mat



MD: 9,042.29 '
TVD: 6,185.94 '
Inclination: 90.6 °
Azimuth: 357.3 °

MD: 9,074.65 '
TVD: 6,185.57 '
Inclination: 90.7 °
Azimuth: 357.2 °

MD: 9,106.51 '
TVD: 6,185.07 '
Inclination: 91.1 °
Azimuth: 357.2 °

MD: 9,138.17 '
TVD: 6,184.41 '
Inclination: 91.3 °
Azimuth: 357 °

MD: 9,169.6 '
TVD: 6,183.61 '
Inclination: 91.6 °
Azimuth: 357 °

MD: 9,201.4 '
TVD: 6,182.67 '
Inclination: 91.8 °
Azimuth: 356.8 °

MD: 9,233.75 '
TVD: 6,181.96
Inclination: 90.1
Azimuth: 357.2

-gy/tan, sft-frm, occ brit, v calc,

drk brn/gy, frm-sft, blky, occ
, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

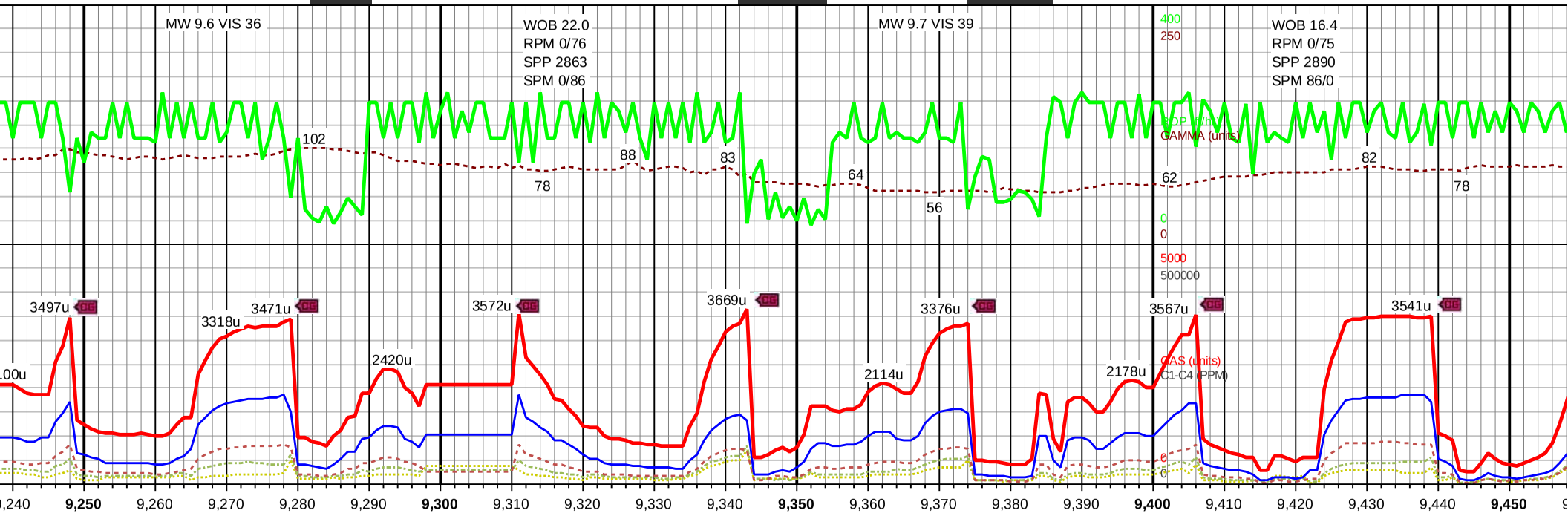
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

90% CHK: gy/wh-gy/tan, sft-frm, occ brit, no flor, sl mlky cut

10% MARL: drk brn, drk brn/gy, frm-sft, bl
plty, intbd carb mat, v calc, no flor, poor w



5800

MD: 9,266.11 '
TVD: 6,181.57 '
Inclination: 90.7 °
Azimuth: 357 °

MD: 9,297.52 '
TVD: 6,181.19 '
Inclination: 90.7 °
Azimuth: 358.1 °

MD: 9,329.16 '
TVD: 6,180.83 '
Inclination: 90.6 °
Azimuth: 357.8 °

MD: 9,360.79 '
TVD: 6,180.5 '
Inclination: 90.6 °
Azimuth: 358.8 °

MD: 9,392.8 '
TVD: 6,180.38 '
Inclination: 89.8 °
Azimuth: 359.6 °

MD: 9,424.4 '
TVD: 6,180.49 '
Inclination: 89.8 °
Azimuth: 359.3 °

MD: 9,456.3
TVD: 6,180.6
Inclination: 8
Azimuth: 358

v calc,

ky, occ
h cuts

90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

TVD (ft)

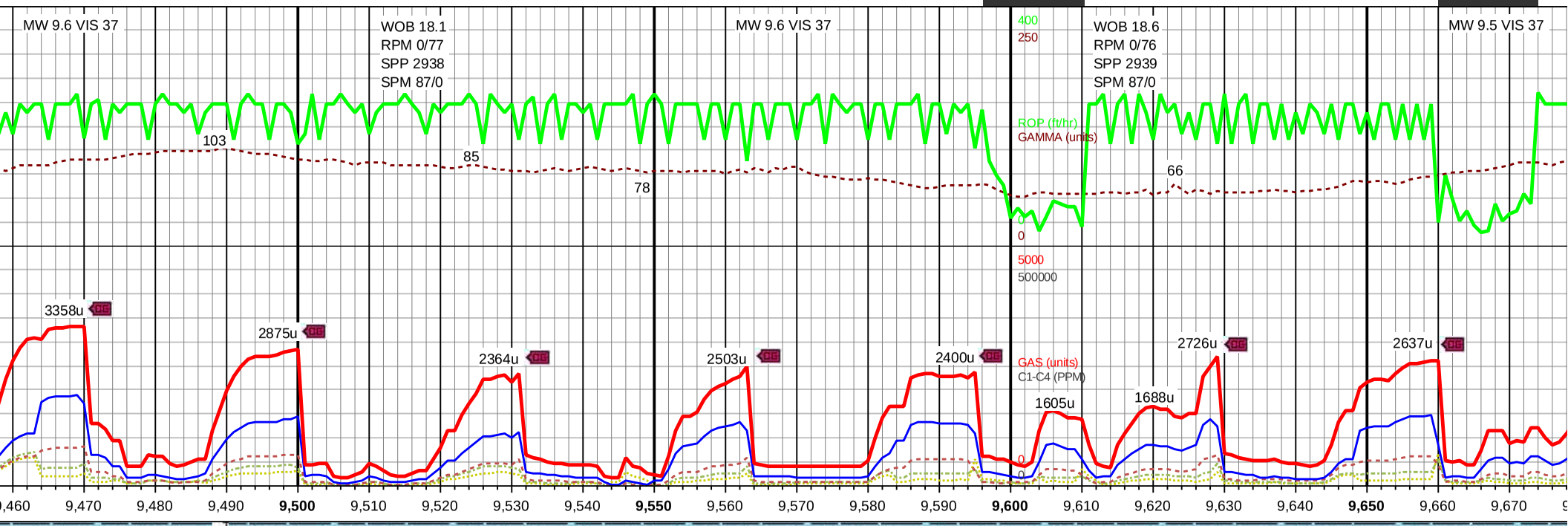
95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

95% CH
no flor,

5% MA
plty, intl

6800



5800

MD: 9,488.47 '
TVD: 6,180.77 '
Inclination: 90 °
Azimuth: 358.5 °

MD: 9,520.72 '
TVD: 6,180.63 '
Inclination: 90.5 °
Azimuth: 358.9 °

MD: 9,552.36 '
TVD: 6,180.38 '
Inclination: 90.4 °
Azimuth: 358.5 °

MD: 9,584.87 '
TVD: 6,180.1 '
Inclination: 90.6 °
Azimuth: 357.9 °

MD: 9,616.49 '
TVD: 6,179.8 '
Inclination: 90.5 °
Azimuth: 359.4 °

MD: 9,678
TVD: 6,17
Inclination
Azimuth: 0

TVD (ft)

90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

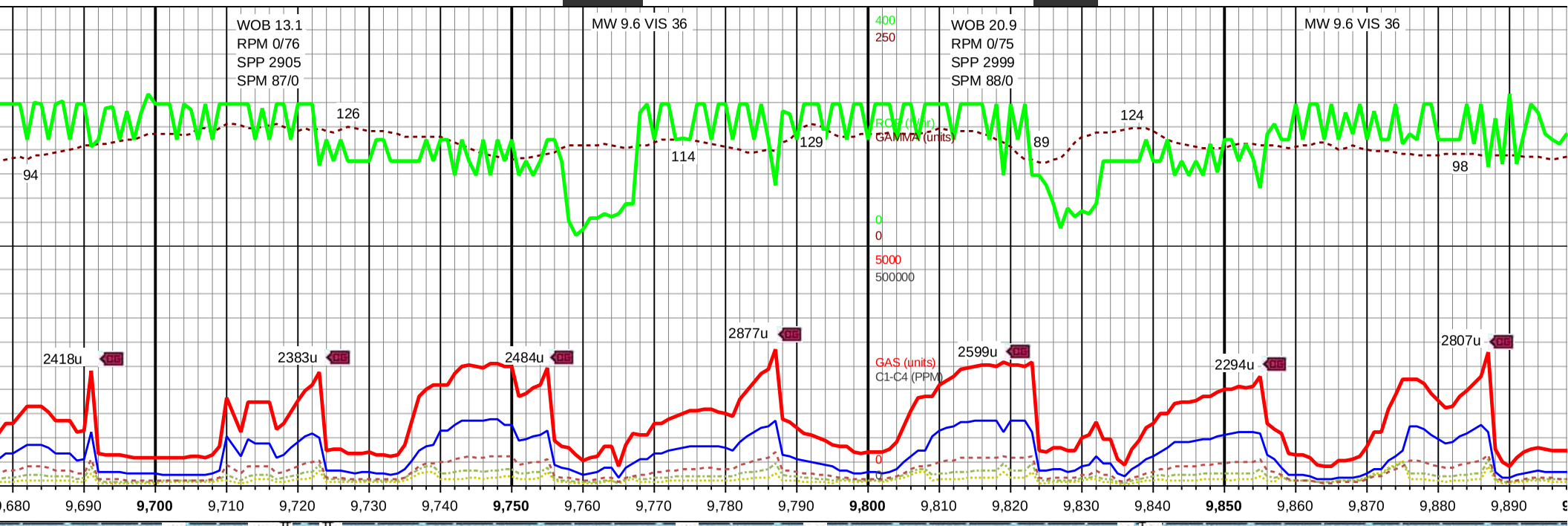
100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

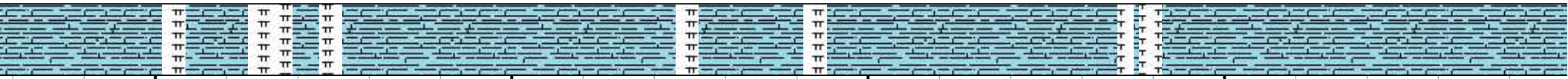
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-f
no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy,
plty, intbd carb mat, v calc, no

6800

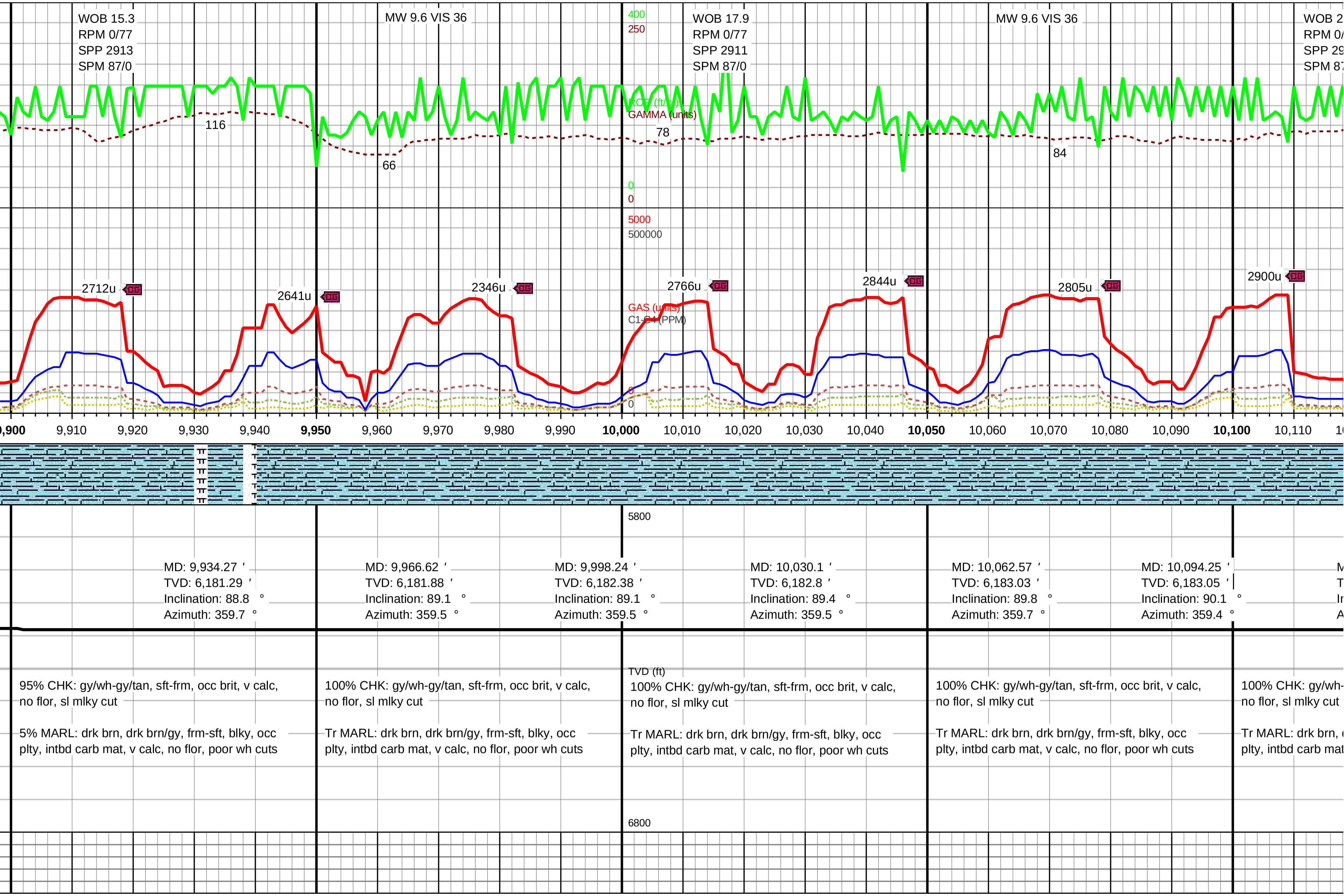




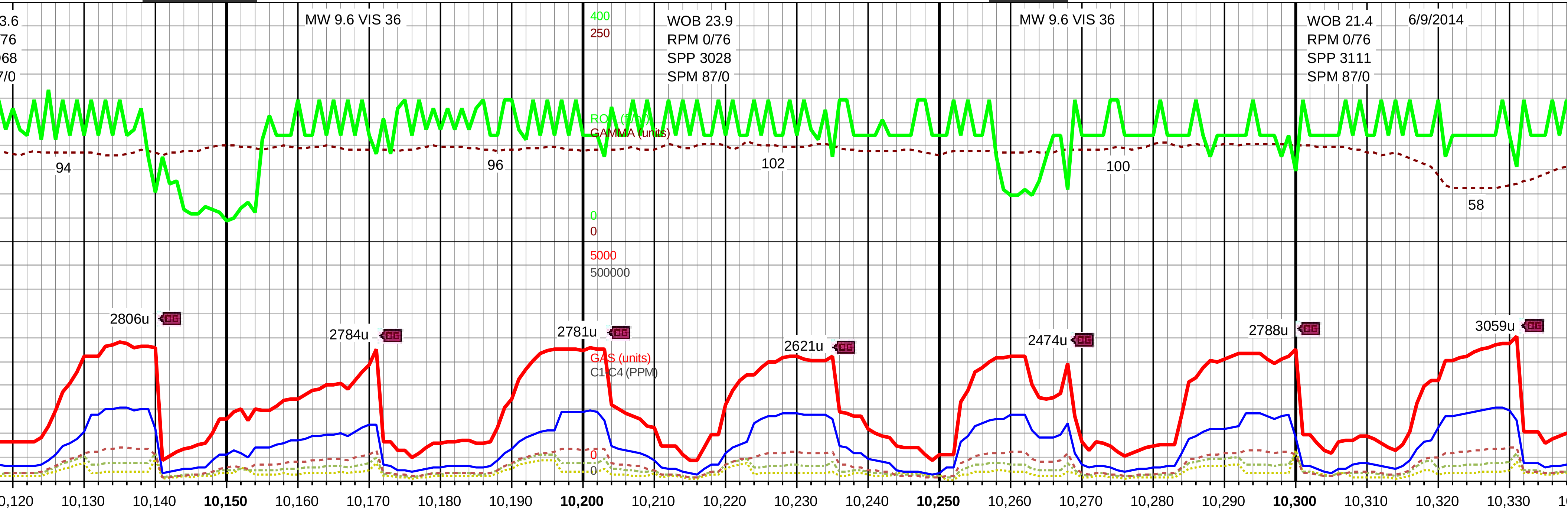
5800

.18 ' 9.26 ' : 90.3 ° .2 °	MD: 9,710.34 ' TVD: 6,178.98 ' Inclination: 90.7 ° Azimuth: 0.6 °	MD: 9,742.34 ' TVD: 6,178.59 ' Inclination: 90.7 ° Azimuth: 0 °	MD: 9,774.55 ' TVD: 6,178.5 ' Inclination: 89.6 ° Azimuth: 0.9 °	MD: 9,805.98 ' TVD: 6,178.72 ' Inclination: 89.6 ° Azimuth: 0.6 °	MD: 9,838.23 ' TVD: 6,179.2 ' Inclination: 88.7 ° Azimuth: 0.3 °	MD: 9,870.12 ' TVD: 6,179.95 ' Inclination: 88.6 ° Azimuth: 359.9 °
rm, occ brit, v calc, rm-sft, blky, occ flor, poor wh cuts	90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	TVD (ft) 95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut 5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts	100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts		

6800



WOB 15.3
RPM 0/77
SPP 2913
SPM 87/0
MW 9.6 VIS 36
WOB 17.9
RPM 0/77
SPP 2911
SPM 87/0
MW 9.6 VIS 36
400
250
ROP (ft/hr)
GAMMA (units)
116
66
78
84
0
0
5000
500000
GAS (units)
C1-C4 (PPM)
2712u
2641u
2346u
2766u
2844u
2805u
2900u
9,900
9,910
9,920
9,930
9,940
9,950
9,960
9,970
9,980
9,990
10,000
10,010
10,020
10,030
10,040
10,050
10,060
10,070
10,080
10,090
10,100
10,110
5800
MD: 9,934.27 '
TVD: 6,181.29 '
Inclination: 88.8 °
Azimuth: 359.7 °
MD: 9,966.62 '
TVD: 6,181.88 '
Inclination: 89.1 °
Azimuth: 359.5 °
MD: 9,998.24 '
TVD: 6,182.38 '
Inclination: 89.1 °
Azimuth: 359.5 °
MD: 10,030.1 '
TVD: 6,182.8 '
Inclination: 89.4 °
Azimuth: 359.5 °
MD: 10,062.57 '
TVD: 6,183.03 '
Inclination: 89.8 °
Azimuth: 359.7 °
MD: 10,094.25 '
TVD: 6,183.05 '
Inclination: 90.1 °
Azimuth: 359.4 °
TVD (ft)
95% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
5% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut
Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts
6800



5800

MD: 10,125.65 '
VD: 6,182.92 '
nclination: 90.4 °
zimuth: 359.5 °

MD: 10,157.27 '
TVD: 6,182.81 '
Inclination: 90 °
Azimuth: 1 °

MD: 10,189.61 '
TVD: 6,182.81 '
Inclination: 90 °
Azimuth: 1.3 °

MD: 10,221.55 '
TVD: 6,182.97 '
Inclination: 89.4 °
Azimuth: 0.4 °

MD: 10,252.96 '
TVD: 6,183.27 '
Inclination: 89.5 °
Azimuth: 0.1 °

MD: 10,285.12 '
TVD: 6,183.58 '
Inclination: 89.4 °
Azimuth: 0 °

MD: 10,316.76 '
TVD: 6,183.94 '
Inclination: 89.3 °
Azimuth: 360 °

TVD (ft)

gy/tan, sft-frm, occ brit, v calc,

drk brn/gy, frm-sft, blky, occ
, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

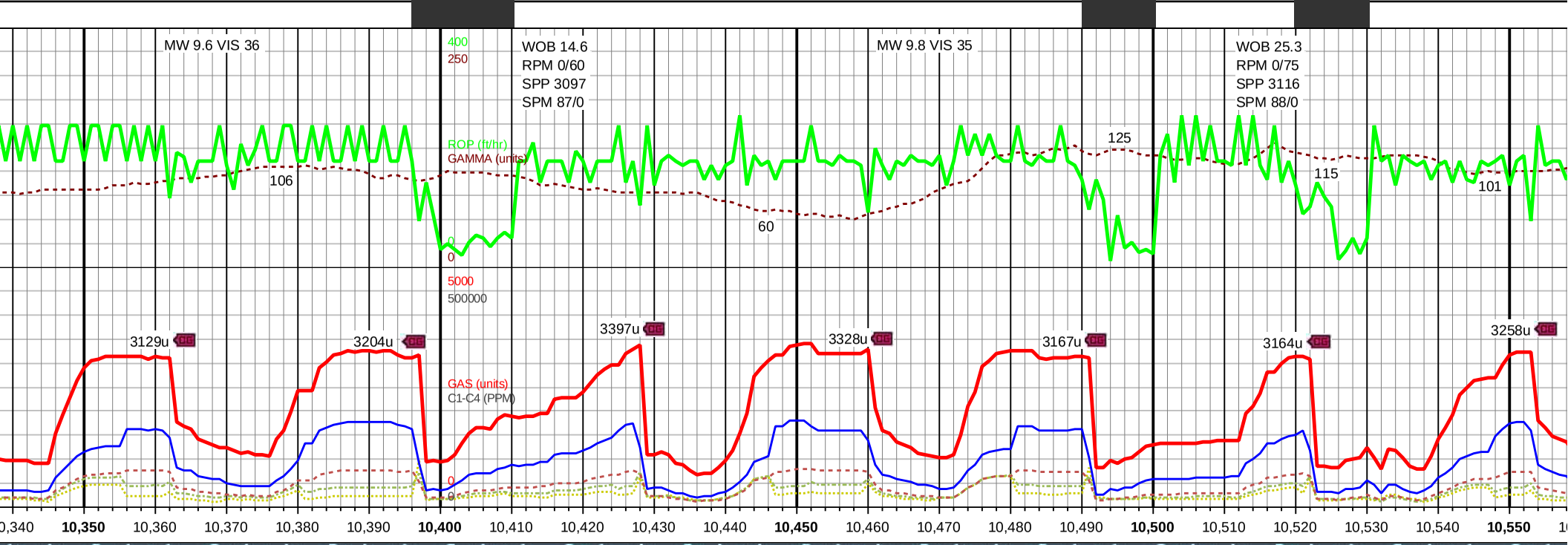
100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit
no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky
plty, intbd carb mat, v calc, no flor, poor w

6800



5800

MD: 10,348.08 '
TVD: 6,184.38 '
Inclination: 89.1 °
Azimuth: 359.3 °

MD: 10,379.92 '
TVD: 6,184.85 '
Inclination: 89.2 °
Azimuth: 359.1 °

MD: 10,412.17 '
TVD: 6,184.77 '
Inclination: 91.1 °
Azimuth: 359.9 °

MD: 10,443.77 '
TVD: 6,184.08 '
Inclination: 91.4 °
Azimuth: 359.7 °

MD: 10,475.82 '
TVD: 6,183.24 '
Inclination: 91.6 °
Azimuth: 359.3 °

MD: 10,507.43 '
TVD: 6,182.63 '
Inclination: 90.6 °
Azimuth: 358.8 °

MD: 10,538.75 '
TVD: 6,182.41 '
Inclination: 90.2 °
Azimuth: 358.9 °

, v calc,

, occ
h cuts

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

TVD (ft)

100% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

Tr MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

90% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

10% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

85% CHK: gy/wh-gy/tan, sft-frm, occ brit, v calc, no flor, sl mlky cut

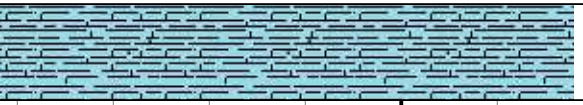
15% MARL: drk brn, drk brn/gy, frm-sft, blky, occ plty, intbd carb mat, v calc, no flor, poor wh cuts

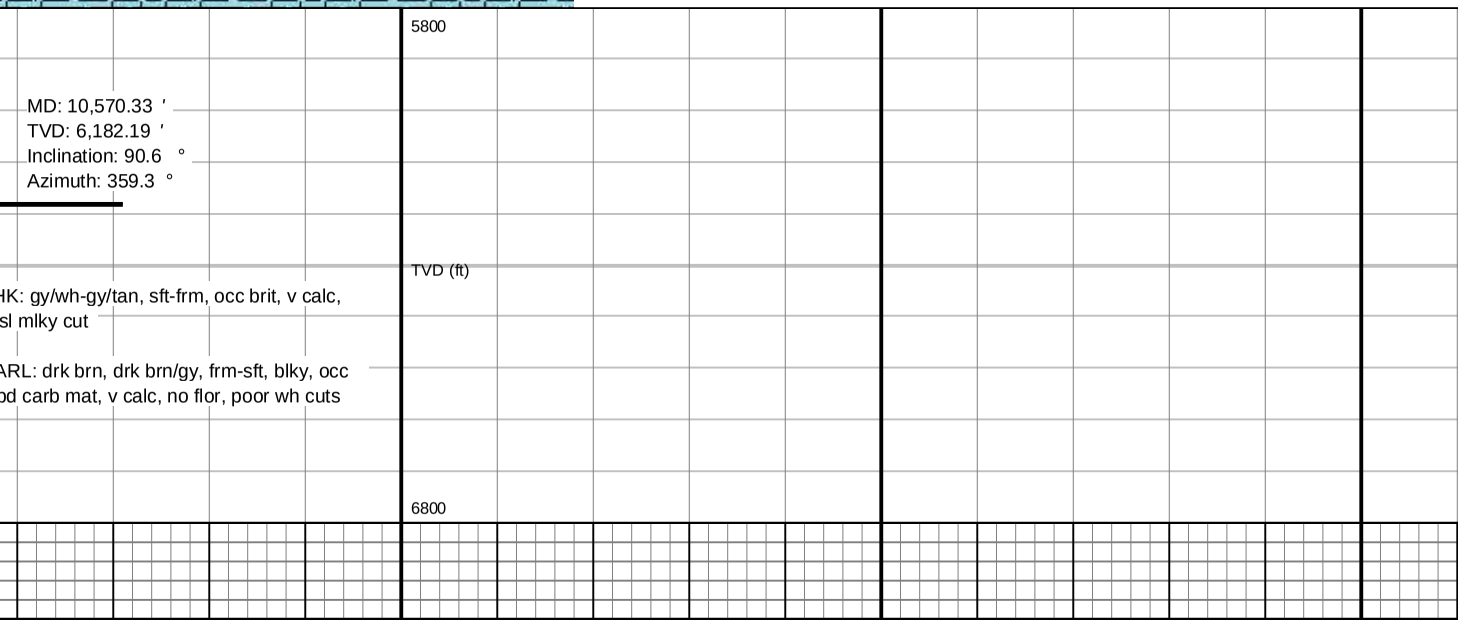
85% CH
no flor,

15% MA
plty, intb

6800


MW 9.8 VIS 35
400
250
WOB 24.4
RPM 0/75
SPP 3028
SPM 88/0
ROP (ft/hr)
GAMMA (units)
106
0
0
5000
500000
TD at 10,618' on
6/9/2014 at 0440 hours.
3202u
3092u
2789u
GAS (units)
C1-C4 (PPM)
THANK YOU FOR CHOOSING
DECOLLEMENT CONSULTING!
0
0
0,560
10,570
10,580
10,590
10,600
10,610
10,620
10,630
10,640
10,650
10,660
10,670
10,680
10,690
10,700
10,7




5800
MD: 10,570.33 '
TVD: 6,182.19 '
Inclination: 90.6 °
Azimuth: 359.3 °
TVD (ft)
HK: gy/wh-gy/tan, sft-frm, occ brit, v calc,
sl mlky cut
ARL: drk brn, drk brn/gy, frm-sft, blky, occ
od carb mat, v calc, no flor, poor wh cuts
6800