

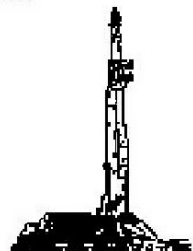
**GOOLSBY BROTHERS**  
and associates, inc.

575 Union Blvd, Suite 208  
Lakewood, CO 80228  
303-945-2860 Office



Geological Wellsite  
Supervision

[www.goolsbybrothers.com](http://www.goolsbybrothers.com)



Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Harvesters State 30N-16B-M  
API: 051234635400  
Location: Section 15, T6N, R66W, Weld County, CO.  
License Number:  
Spud Date: April 15, 2018  
Surface Coordinates: SWNE T6N, R66W Sec 15, 1,613' FNL & 2,333' FEL  
LAT 40.491176 LONG -104.762506  
Bottom Hole Coordinates: NWNW T6N, R66W Sec 16, 150' FNL & 302' FWL (est.)  
Ground Elevation (ft): 4,803'  
Logged Interval (ft): 7,000' To: 14,995'  
Formation: Pierre Shales / Sands, Sharon Springs, Niobrara "B" (Target)  
Type of Drilling Fluid: FW Surface, OBM Curve & Lateral

Region: Wattenberg  
Drilling Completed: April 18, 2018  
K.B. Elevation (ft): 4,823'  
Total Depth (ft): 14,995' DMTD

Printed by HORIZONTAL.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

Company: SRC Energy Inc.  
Address: 1675 Broadway, Suite 2600  
Denver, Colorado 80202  
(720) 616-4300

**GEOLOGIST**

Name: Andrew Krueger & Larry Goolsby  
Company: Goolsby Brothers & Assoc. (GBA), Inc. ([www.goolsbybrothers.com](http://www.goolsbybrothers.com))  
Address: 575 Union Blvd. Suite 208,  
Lakewood CO. 80228  
Tel 303-618-7736

## Logs

PULSE MWD GR from 1,813'-14,982' MD

## Casing

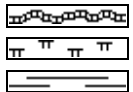
9 5/8" Surface Casing set @ 1,822' MD

5 1/2" Production Casing set @ 14,985' MD

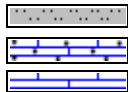
## Comments

- 1) Drilling Contractor: Precision Drilling, Rig #462  
Toolpusher: Cody Teeter, Joseph Credeur
- 2) Company Man: Steve Wilson, Buddy Davis  
Lovell Young, Tony Pershall
- 3) Mud Company : Anchor USA  
Engineer: Tim Pattison, James Eckhardt
- 4) Directional Drilling: Baker Hughes Directional  
Rotary Steerable BHA  
Drillers: Dustin Tissaw, Matthew Leopold
- 5) Gas Equipment: Pason Gas Analyzer (Spectrometer)
- 6) SRC Geologist: Tony Williams

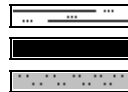
## ROCK TYPES



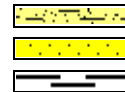
Bent  
Mrlst  
Shale



Sltst  
Carb chalk  
Chalk



Sltly sh  
Coal  
Sltst



Arg\_ss  
Ss  
Carb sh



Ls  
Sltly sh

## ACCESSORIES

### MINERAL

Anhy  
 Arggrn  
 Arg  
 Bent  
 Bit  
 Brecfrag  
 Calc  
 Carb  
 Chtdk  
 Chtlt  
 Dol  
 Feldspar  
 Ferrpel  
 Ferr  
 Glau

Gyp  
 Hvymin  
 Kaol  
 Marl  
 Minxl  
 Nodule  
 Phos  
 Pyr  
 Salt  
 Sandy  
 Silt  
 Sil  
 Sulphur  
 Tuff

### FOSSIL

Algae  
 Amph  
 Belm  
 Bioclst  
 Brach  
 Bryozoa  
 Cephal  
 Coral  
 Crin  
 Echin  
 Fish  
 Foram  
 Fossil  
 Gastro  
 Oolite

Ostra  
 Pelec  
 Pellet  
 Pisolite  
 Plant  
 Strom

### STRINGER

Chlkstg  
 Anhy  
 Arg  
 Bent  
 Coal  
 Dol  
 Gyp  
 Ls

Mrst  
 Sltstgr  
 Ssstgr

### TEXTURE

Boundst  
 Chalky  
 Cryxln  
 Earthy  
 Finexln  
 Grainst  
 Lithogr  
 Microxln  
 Mudst  
 Packst  
 Wackest

## OTHER SYMBOLS

### POROSITY TYPE

Earthy  
 Fenest  
 Fracture  
 Inter  
 Moldic  
 Organic  
 Pinpoint  
 Vuggy

### SORTING

Well  
 Moderate  
 Poor

### ROUNDING

Rounded  
 Subrnd  
 Subang

Angular

### OIL SHOWS

Even  
 Spotted  
 Ques  
 Dead  
 Vspotty  
 near even

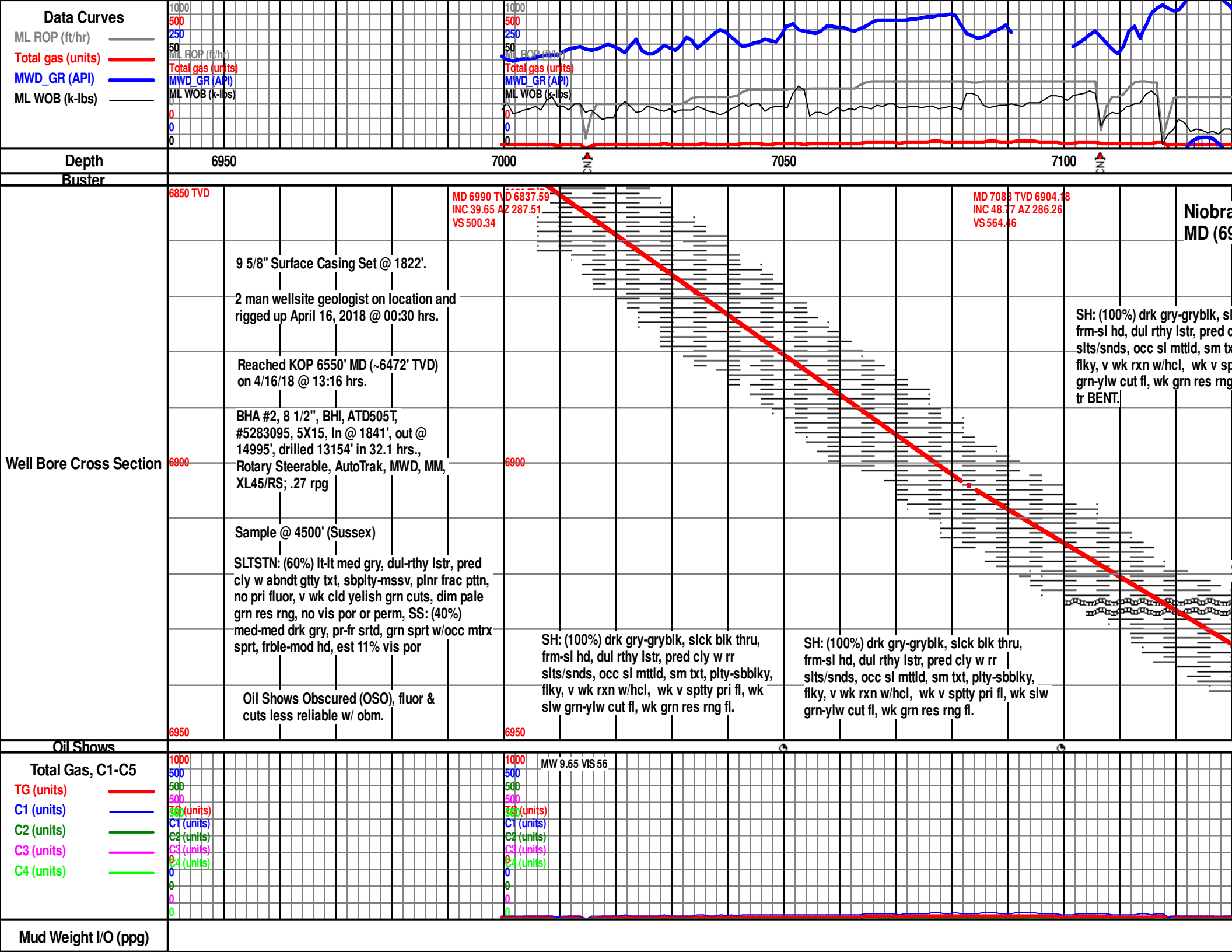
### INTERVALS

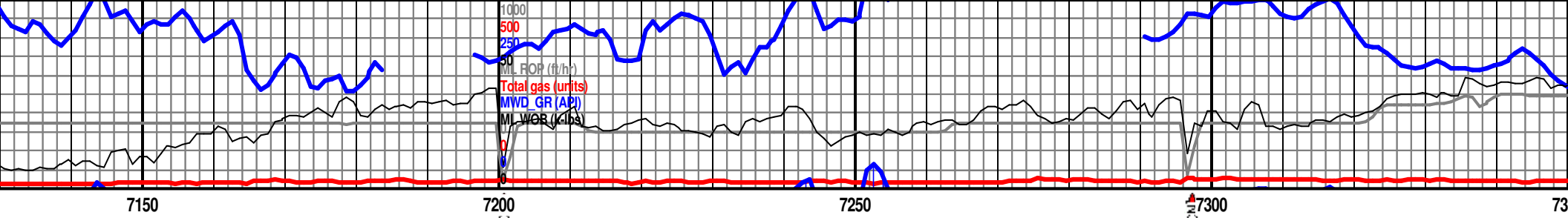
Core  
 Dst

### EVENTS

Casing shoe\_hzl  
 Trip\_point\_1  
 Off bottom  
 conn

Survey(mwd)  
 Survey(red)  
 bit





Niobrara A Chalk @ 7164' MD (6958' TVD)

black blk thru,  
silty w rr  
st, platy-sbbkly,  
spotty pri fl, wk slw  
fl.

MD 7177 TVD 6961.2  
INC 56.49 AZ 283.29  
VS 638.68

MD 7272 TVD 7007.88  
INC 64.69 AZ 274.13  
VS 721.23

Niobrara A Chalk Base @ 7206' MD (6978' TVD)

MRLST: (60%) drk gry-sl blk, sbbkly- sbppty,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu ct  
fl, wk-md grn rsd fl.  
CHLK (40%), tr pryt

Scale Change  
7000

Sharon Springs @ 7116' MD (6926' TVD)

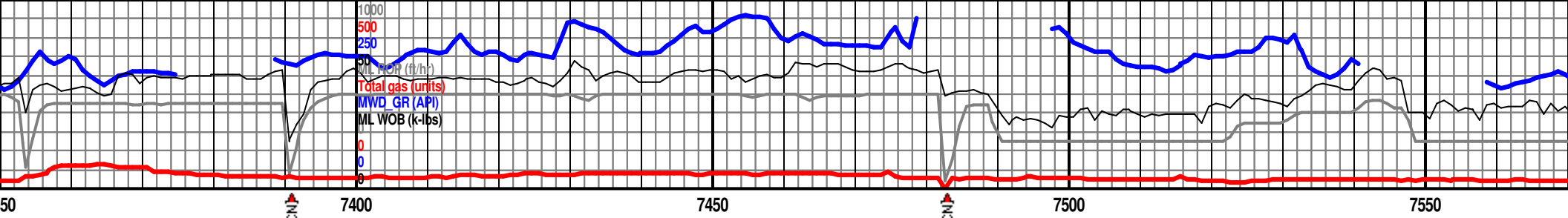
MRLST: (70%) drk gry-sl blk, sbbkly-  
sbppty, occ sl slty, occ grdng twrd chlk,  
mttld lt gry, mod frm, sppty brgt grn pri fl,  
fst md grn blu ct fl, wk-md grn rsd fl.  
CHLK (30%)

MRLST: (70%) drk gry-sl blk, sbbkly-  
sbppty, occ sl slty, occ grdng twrd chlk,  
mttld lt gry, mod frm, sppty brgt grn pri fl,  
fst md grn blu ct fl, wk-md grn rsd fl.  
CHLK (30%)

MRLST: (60%) drk gry-sl blk, sbbkly- sbppty,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu  
ct fl, wk-md grn rsd fl.  
CHLK (40%), tr pryt

1000  
500  
500  
500  
300 (units)  
C1 (units)  
C2 (units)  
C3 (units)  
C4 (units)  
0  
0  
0  
0

Depth 7298'  
MW 9.5  
VIS 70  
PV 21  
YP 12  
Gels 8/12/13  
Fil 28  
Sol 12.5  
O/W 79/21  
CI 32500  
ES 726



MD 7366 TVD 7040.61  
INC 74.52 AZ 270.97  
VS 808.71

MD 7459 TVD 7060.49  
INC 80.78 AZ 271.05  
VS 898.7

MD 7558 TVD 7073.3  
INC 83.42 AZ 270.79  
VS 990.97

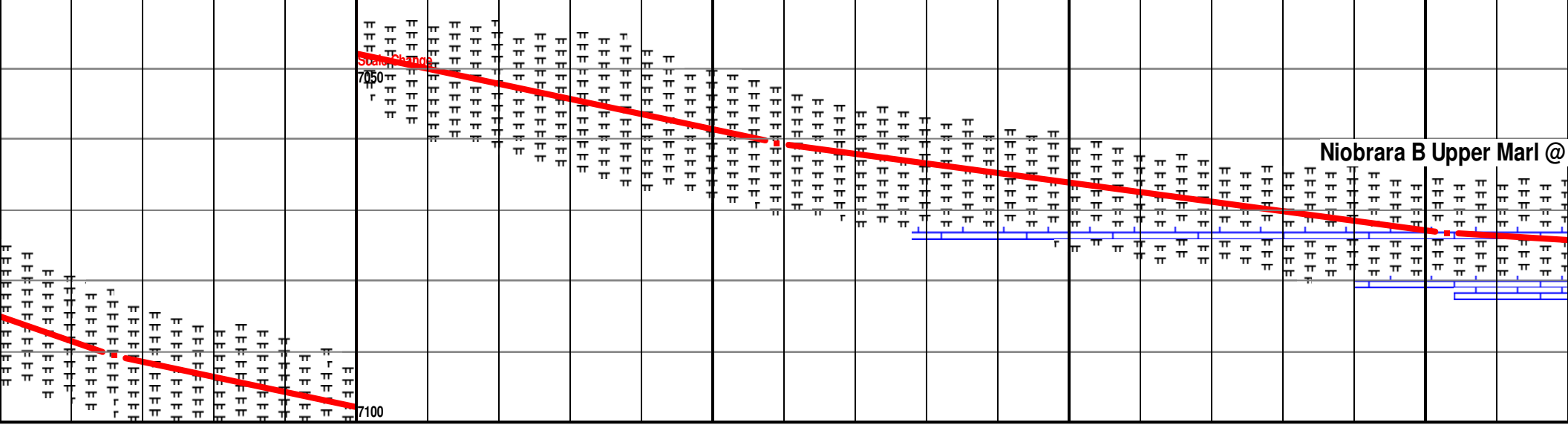
MRLST: (60%) drk gry-sl blk, sbblky- sbpity,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu ct  
fl, wk-md grn rsd fl.  
CHLK (40%), tr pryt

MRLST: (60%) drk gry-sl blk, sbblky- sbpity,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu ct  
fl, wk-md grn rsd fl.  
CHLK (40%)

MRLST: (70%) drk gry-sl blk, sbblky- sbpity,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu ct  
fl, wk-md grn rsd fl.  
CHLK (30%), tr pryt, tr frc fl.

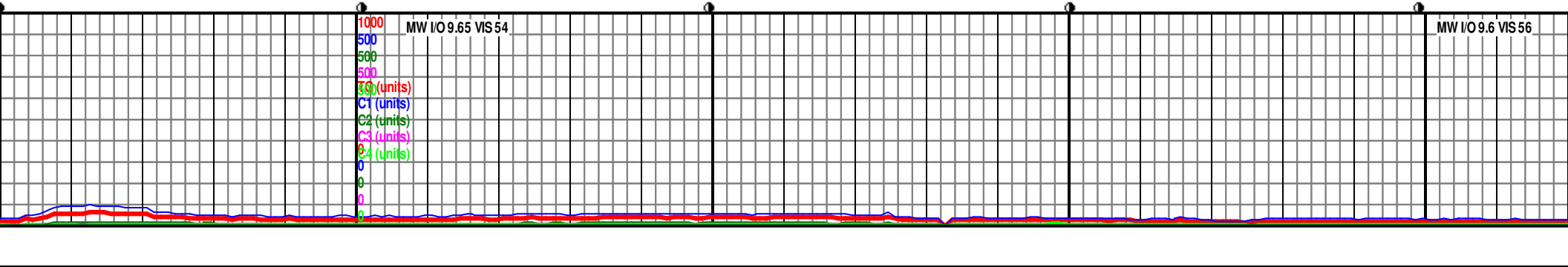
MRLST: (70%) drk gry-sl blk, sbblky- sbpity,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu ct  
fl, wk-md grn rsd fl.  
CHLK (30%), tr pryt, tr frc fl.

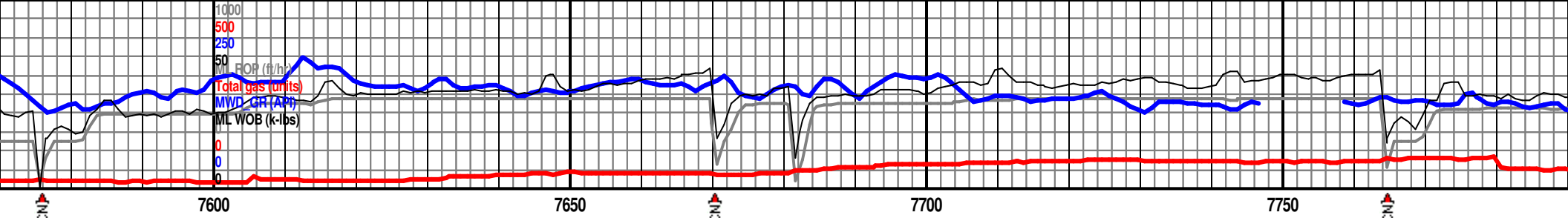
MRLST: (50%) drk gry-sl blk, sbblky- sbpity,  
occ sl slty, occ grdng twrd chlk, mttld lt gry,  
mod frm, sppty brgt grn pri fl, fst md grn blu ct  
fl, wk-md grn rsd fl.  
CHLK (50%), tr pryt, tr frc fl.



MW I/O 9.65 VIS 54  
C1 (units)  
C2 (units)  
C3 (units)  
C4 (units)

MW I/O 9.6 VIS 56





MD 7647 TVD 7078.97  
INC 89.6 AZ 271  
VS 1083.89

MD 7740 TVD 7079.69  
INC 89.51 AZ 271.66  
VS 1176.13

gry-sl blk, sbbiky-sbplty, occ  
twrd chlk, mttld lt gry, mod  
pri fl, fst md grn blu ct fl,  
t, tr bent

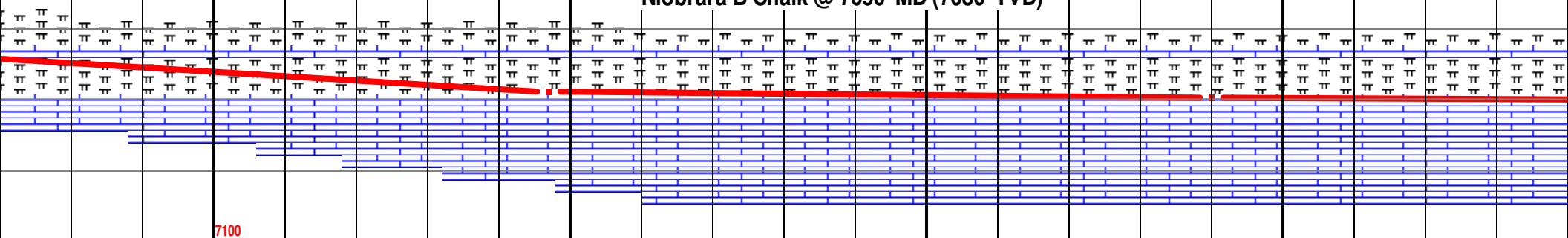
CHLK: (80%) med gry - md drk gry, dul rthy  
lstr, mtt - sl grtty txtr, blk - wdgk ctgs, frm -  
sl hrd, irrg - erthy frctr, crmbly - brttl tncy,,  
spty wk grn pri fl, fst mod grn blu ct fl w/occ  
strmrs, mod grn rsd rng fl.  
MRLSTN (20%)

CHLK: (80%) med gry - md drk gry, dul  
mtt - sl grtty txtr, blk - wdgk ctgs, frm  
irrg - erthy frctr, crmbly - brttl tncy,, sp  
pri fl, fst mod grn blu ct fl w/occ strmrs  
grn rsd rng fl.  
MRLSTN (20%)

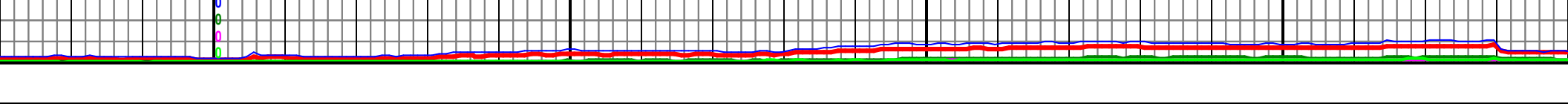
Landed curve section @ 7635' MD on  
4/16/18 @ 18:30 hrs.

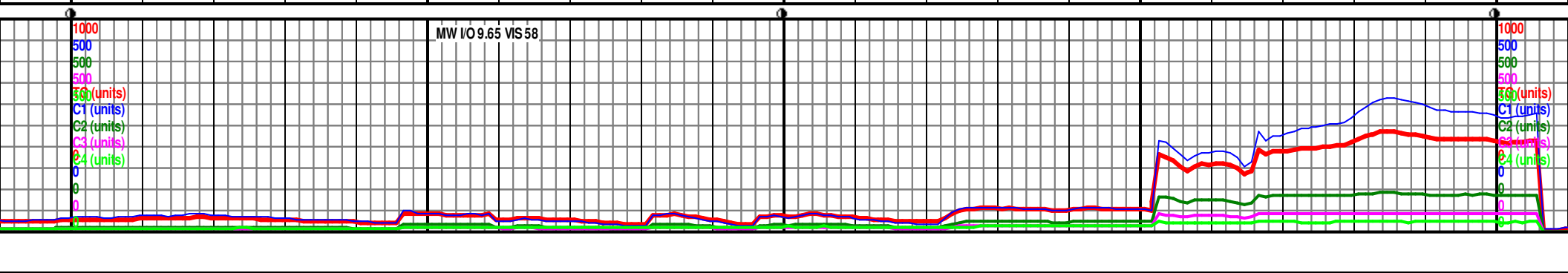
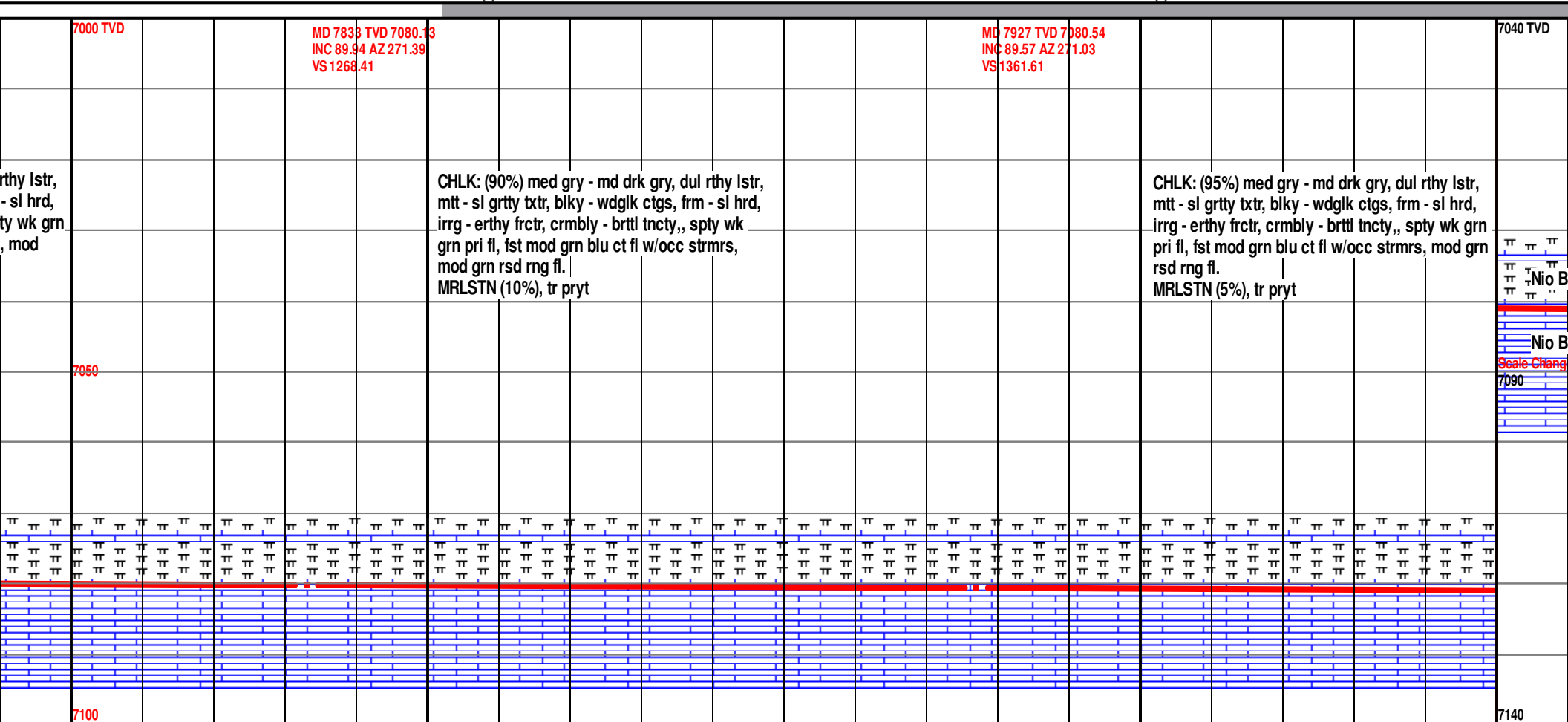
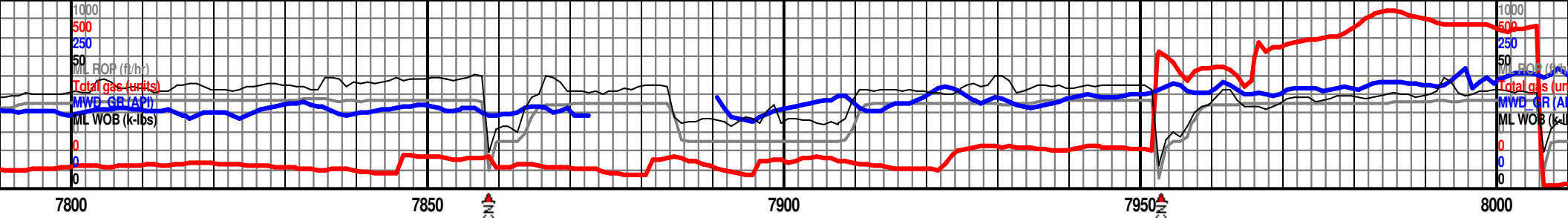
7553' MD (7073' TVD)

Niobrara B Chalk @ 7690' MD (7080' TVD)

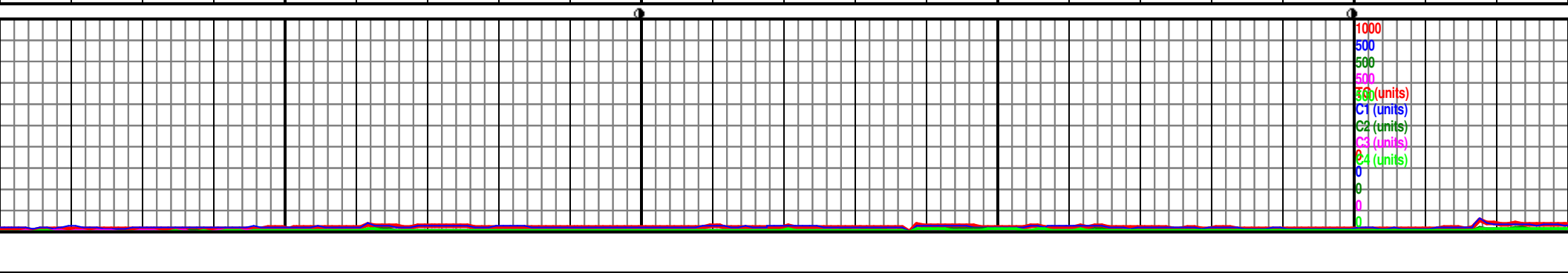
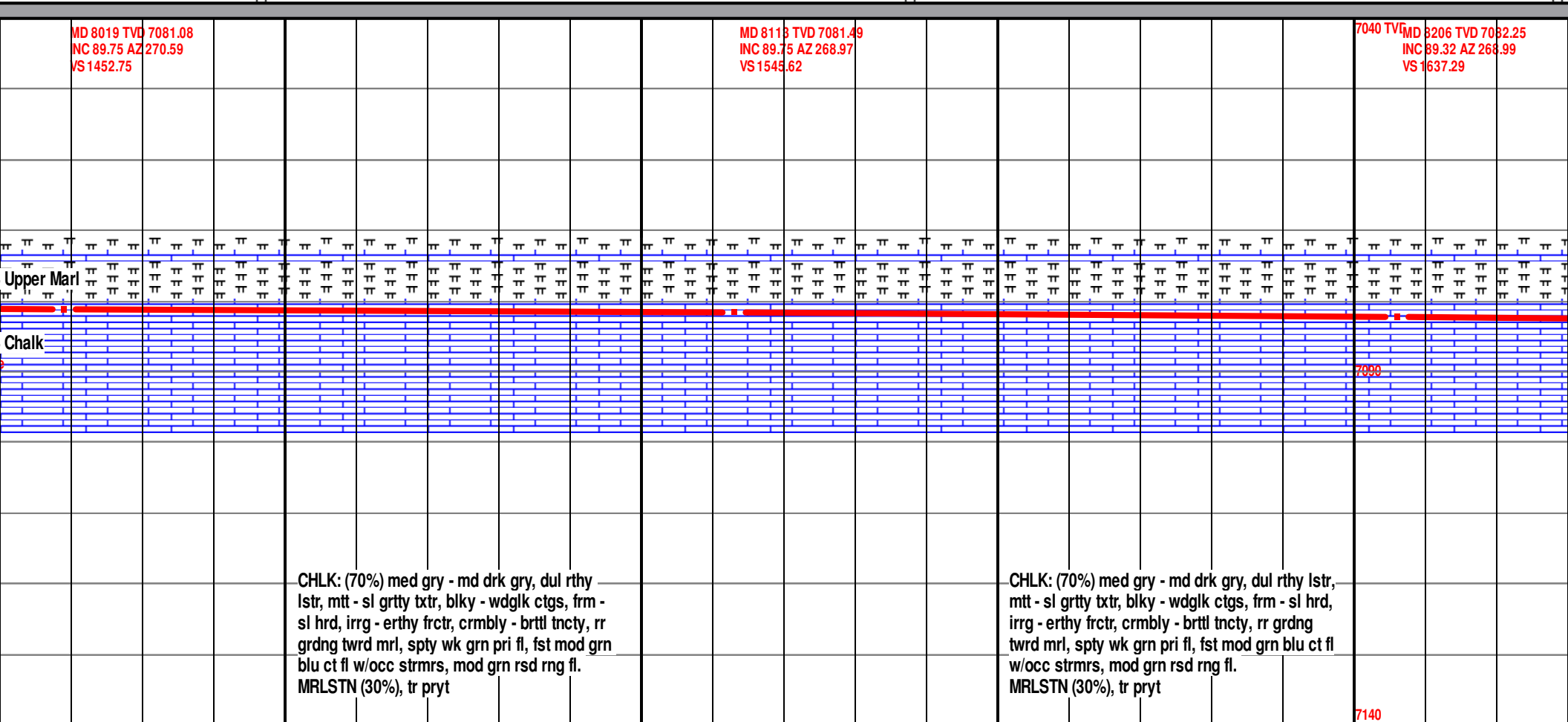


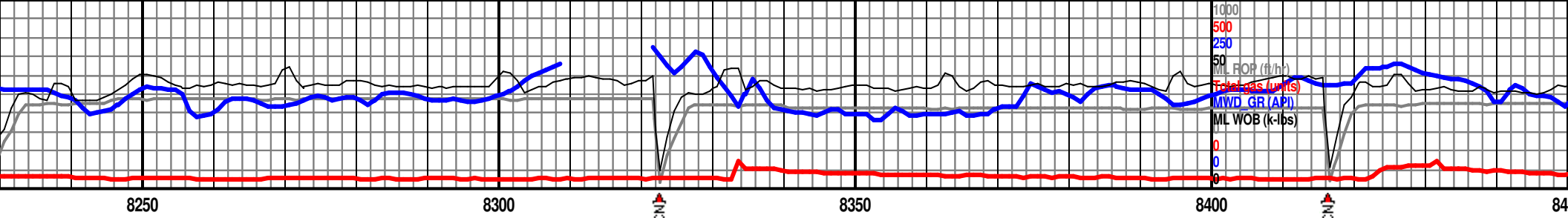
1000  
500  
500  
500  
500  
500 (units)  
C1 (units)  
C2 (units)  
C3 (units)  
C4 (units)

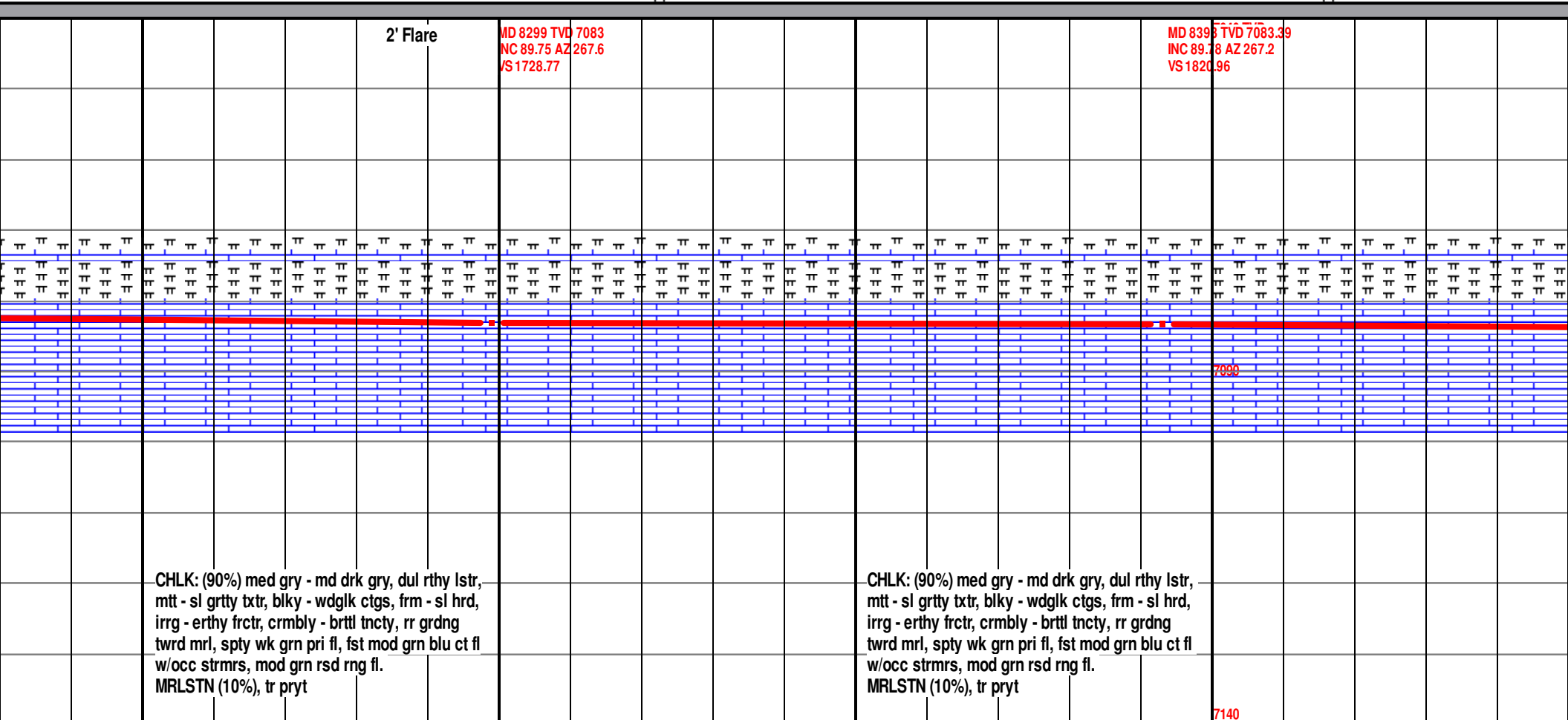


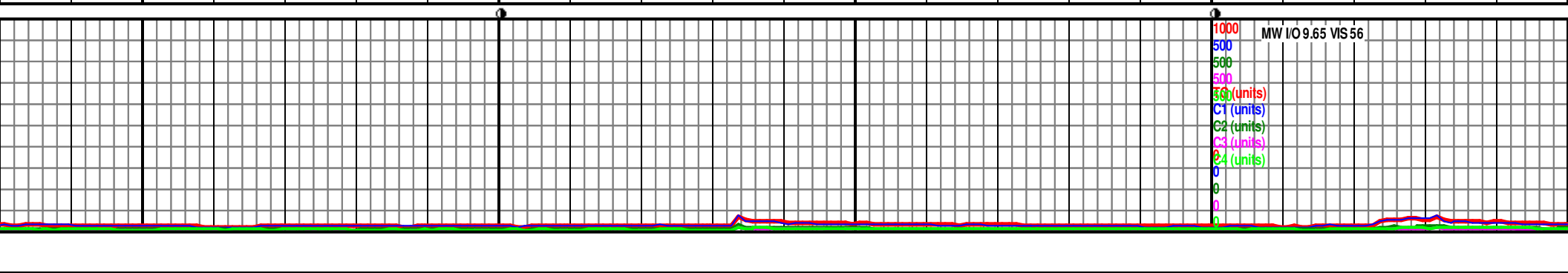


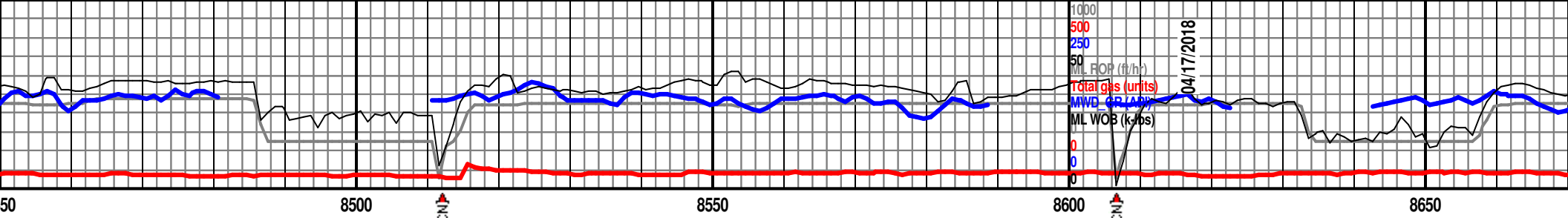




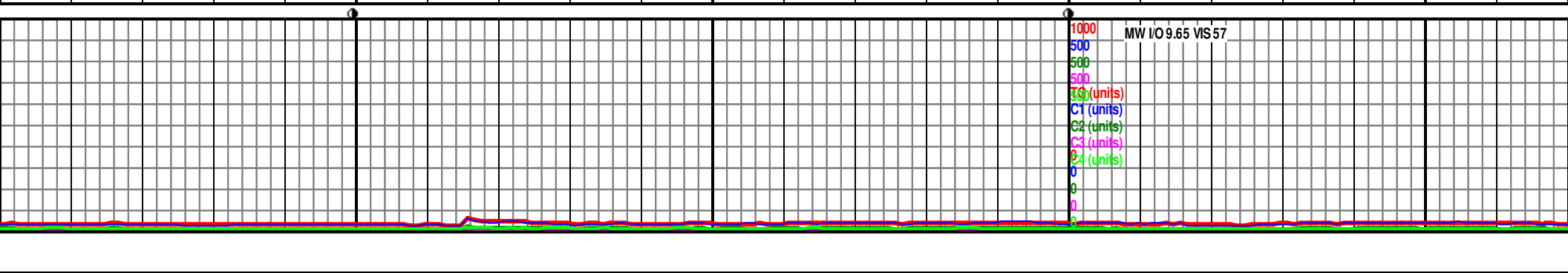


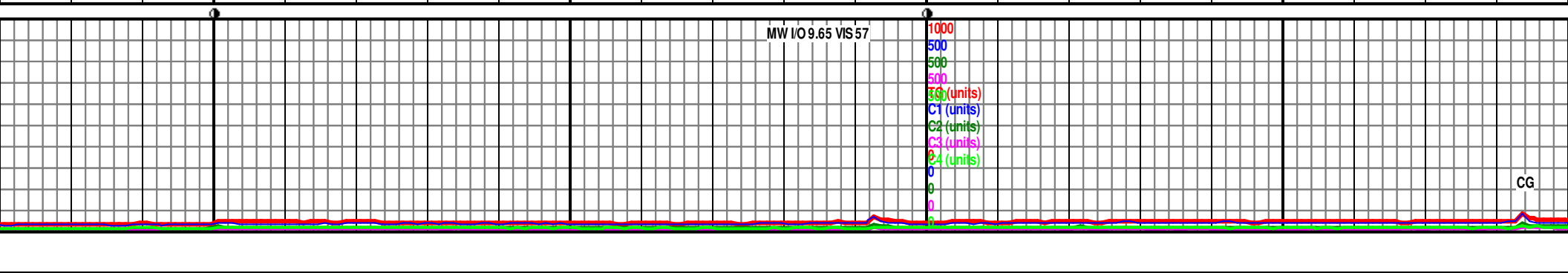
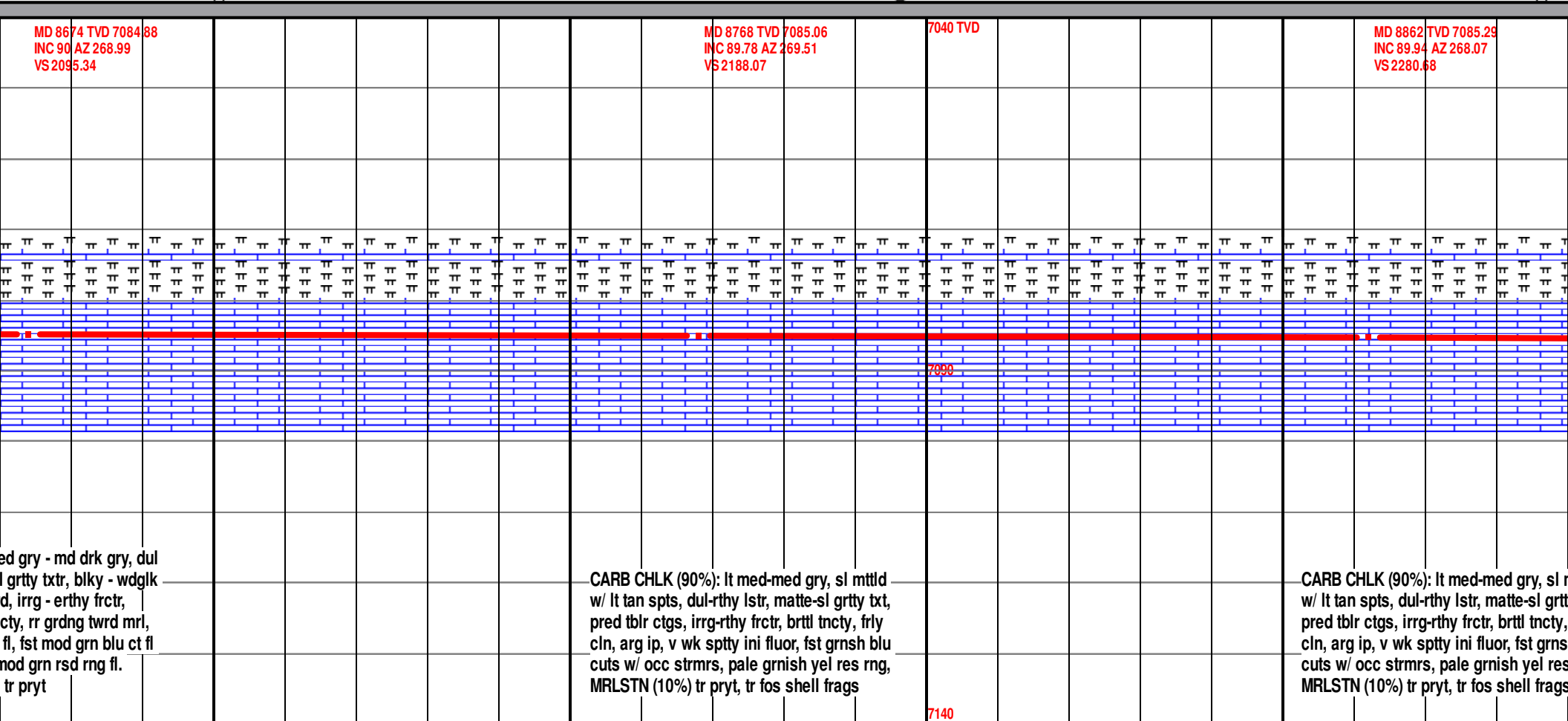
2' Flare										MD 8299 TVD 7083 INC 89.75 AZ 267.6 VS 1728.77										MD 8395 TVD 7083.39 INC 89.78 AZ 267.2 VS 1820.96									
																													
CHLK: (90%) med gry - md drk gry, dul rthy lstr, mtt - sl grtty txtr, blkly - wdgk ctgs, frm - sl hrd, irrg - erthy frctr, crmbly - brttl tncty, rr grdng twrd mrl, spty wk grn pri fl, fst mod grn blu ct fl w/occ strmr, mod grn rsd rng fl. MRLSTN (10%), tr pryt										CHLK: (90%) med gry - md drk gry, dul rthy lstr, mtt - sl grtty txtr, blkly - wdgk ctgs, frm - sl hrd, irrg - erthy frctr, crmbly - brttl tncty, rr grdng twrd mrl, spty wk grn pri fl, fst mod grn blu ct fl w/occ strmr, mod grn rsd rng fl. MRLSTN (10%), tr pryt																			
										7090																			
										7140																			

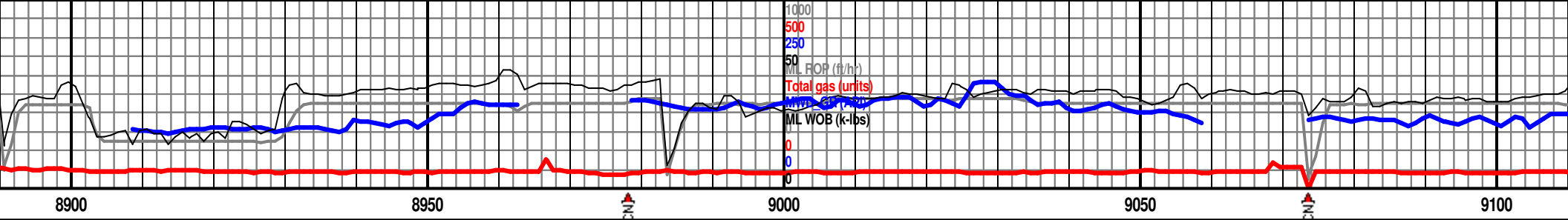




<p>2' Flare</p> <p>MD 8486 TVD 7083.87 INC 89.63 AZ 263.81 VS 1911.87</p>	<p>Nio B Upper Marl</p> <p>Nio B Chalk</p>	<p>MD 8581 TVD 7084.53 INC 89.57 AZ 264.85 VS 2004.31</p> <p>CHLK: (90%) med gry - md drk gry, dul rthy lstr, mtt - sl grtty txtr, blkly - wdgk ctgs, frm - sl hrd, irrg - erthy frctr, crmbly - brttl tncly, rr grdng twrd mrl, spty wk grn pri fl, fst mod grn blu ct fl w/occ strms, mod grn rsd rng fl. MRLSTN (10%), tr pryt</p>	<p>7040 TVD</p> <p>7090</p> <p>7140</p> <p>CHLK: (90%) med gry - md drk gry, dul rthy lstr, mtt - sl grtty txtr, blkly - wdgk ctgs, frm - sl hrd, irrg - erthy frctr, crmbly - brttl tncly, rr grdng twrd mrl, spty wk grn pri fl, fst mod grn blu ct fl w/occ strms, mod grn rsd rng fl. MRLSTN (10%), tr pryt</p>	<p>CHLK: (90%) med gry - md drk gry, dul rthy lstr, mtt - sl grtty txtr, blkly - wdgk ctgs, frm - sl hrd, irrg - erthy frctr, crmbly - brttl tncly, rr grdng twrd mrl, spty wk grn pri fl, fst mod grn blu ct fl w/occ strms, mod grn rsd rng fl. MRLSTN (10%), tr pryt</p>
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MD 8955 TVD 7085.61  
INC 89.66 AZ 268.5  
VS 2372.16

7040 TVD

MD 9050 TVD 7086.2  
INC 89.63 AZ 269.47  
VS 2465.8

mttd  
y txt,  
frly  
h blu  
s rng,  
s

CARB CHLK (85%): lt med-med gry, sl mttld w/  
lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred  
tblr ctgs, irrgr-rthy frctr, brttl nctcy, frly cln, arg  
ip, v wk sptty inl fluor, fst grnsh blu cuts w/  
occ strms, pale grnsh yel res rng, MRLSTN  
(15%) tr pryt, tr fos shell frags

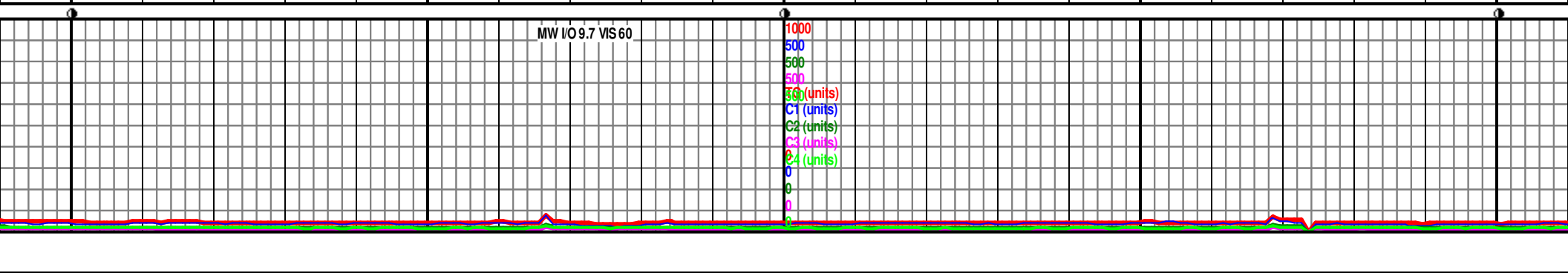
Nio B Upper Marl

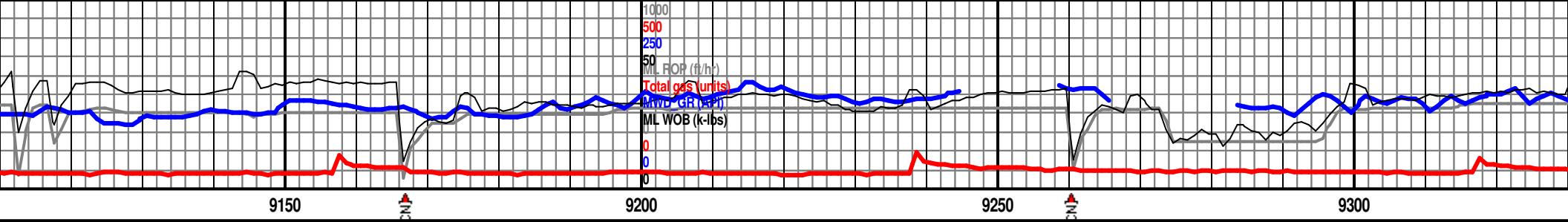
## Nio B Chalk

7090

7140

CARB CHLK (85%): lt-med gry, mltld w  
crmy spks, sbply-sbbly, micrtc, stff &  
frm, sl hd, irreg-hkly frac, brttl - plvrnt  
tncty, fnt spttd ini fluor, no vis stn, dim  
fst strmg grnsh blu cuts, lt grn res  
rng  
MRLSTN (15%), tr ag pryt

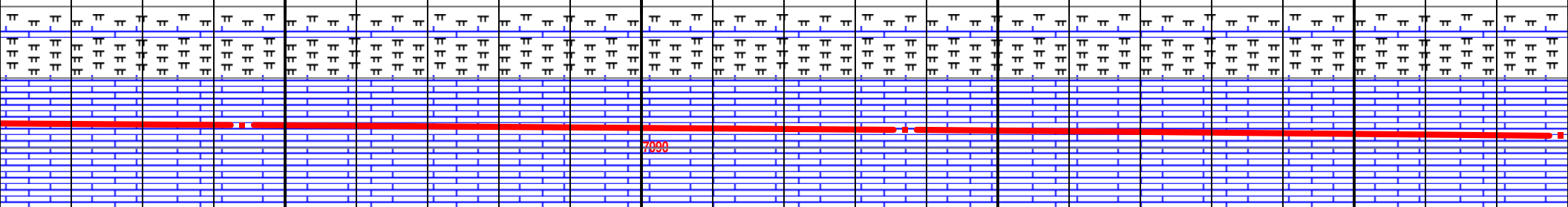




MD 9144 TVD 7086.81  
INC 89.63 AZ 271  
VS 2558.79

7040 TVD

MD 9237 TVD 7087.51  
INC 89.51 AZ 271.97  
VS 2651.05

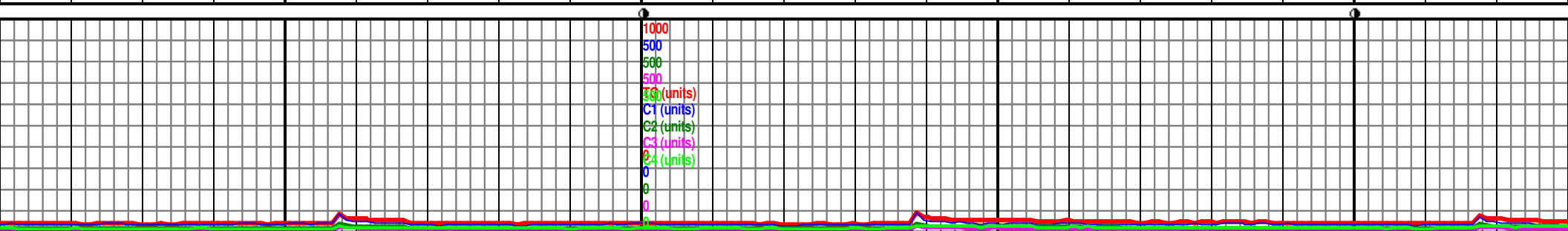


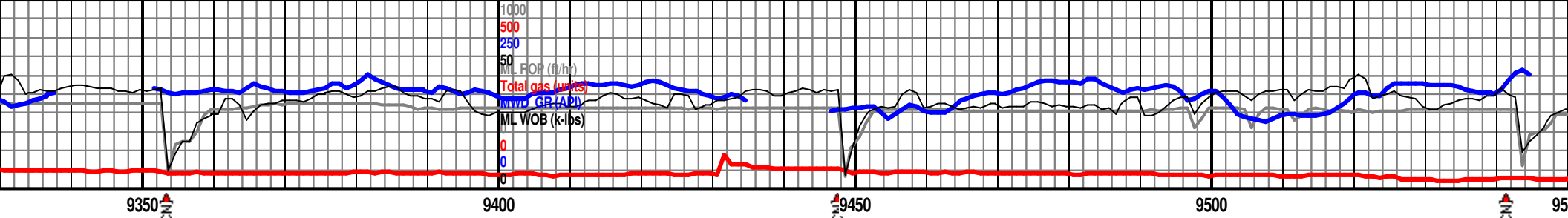
7090

CARB CHLK (95%): lt-lt med gry, micritic,  
dul-rthy lstr, matte-sl grtty txt, mssv-tablr  
ctgs, irrg-hcky frctr, brttl & v crmbly tncty,  
mod cln, sl arg ip, v wk sptty ini fluor, fst  
yel grn cuts w/ occ strmr, pale grnish  
blu res rng, MRLSTN (5%) tr dissim pryt

CARB CHLK (90%): lt-lt med gry, micritic,  
dul-rthy lstr, matte-sl grtty txt, mssv-tablr  
ctgs, irrg-hcky frctr, brttl & v crmbly tncty,  
mod cln, sl arg ip, v wk sptty ini fluor, fst  
yel grn cuts w/ occ strmr, pale grnish blu  
res rng, MRLSTN (10%) tr dissim pryt

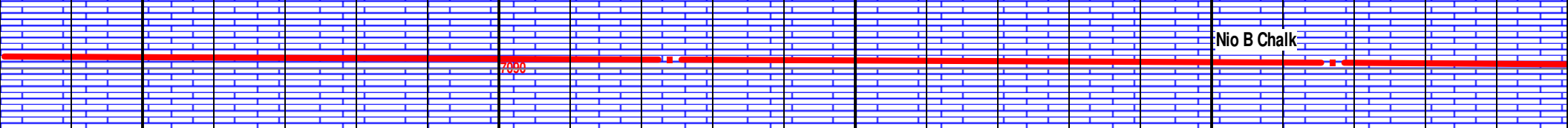
7140





MD 9329 TVD 7088.25 INC 89.57 AZ 272.84 VS 2742.5	7040 TVD	MD 9424 TVD 7088.75 INC 89.82 AZ 271.93 VS 2836.93	MD 9517 TVD 7089.22 INC 89.6 AZ 272.28 VS 2929.32
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Nio B Upper Marl  
 Nio B Chalk



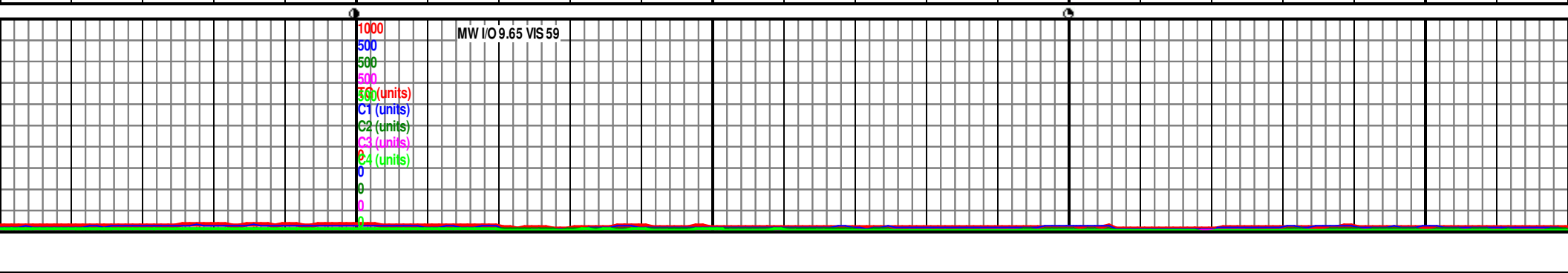
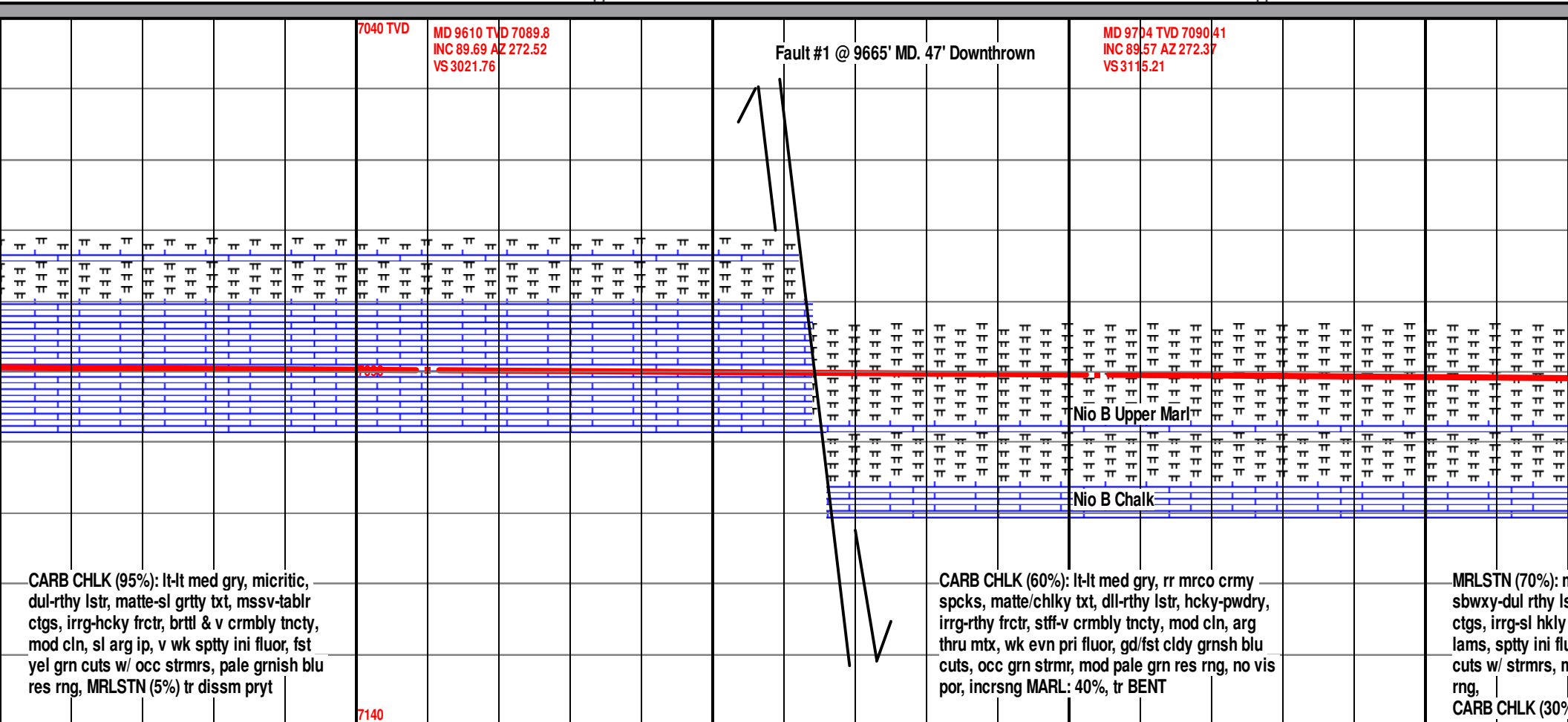
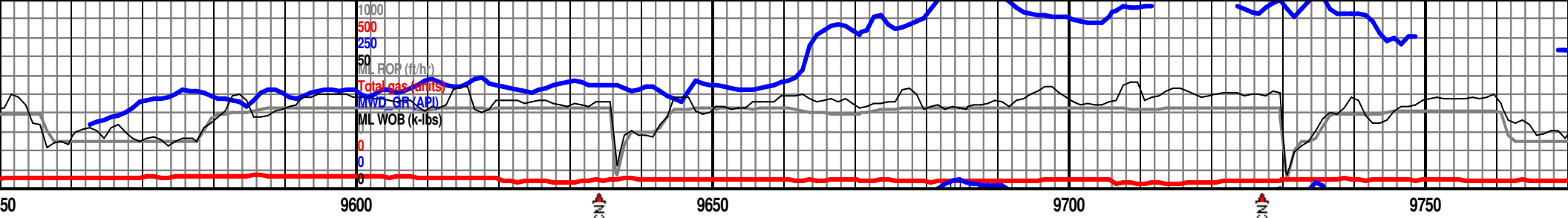
CARB CHLK (90%): lt-med gry, mttld w crmy  
 spks, sbply-sbblky, micrtc, stff & frm, sl hd,  
 irreg-hkly frac, brttl - plvrnt tncy, fnt spttd ini  
 fluor, no vis stn, dim fst strmg grnsh blu  
 cuts, lt grn res rng  
 MRLSTN (10%), tr ag pryt

CARB CHLK (95%): lt-lt med gry, micritic,  
 dul-rthy lstr, matte-sl grtty txt, mssv-tablr  
 ctgs, irrghcky frctr, brttl & v crmbly  
 tncy, mod cln, sl arg ip, v wk spity ini  
 fluor, fst yel grn cuts w/ occ strmrs, pale  
 grnsh blu res rng, MRLSTN (5%) tr  
 dissm pryt

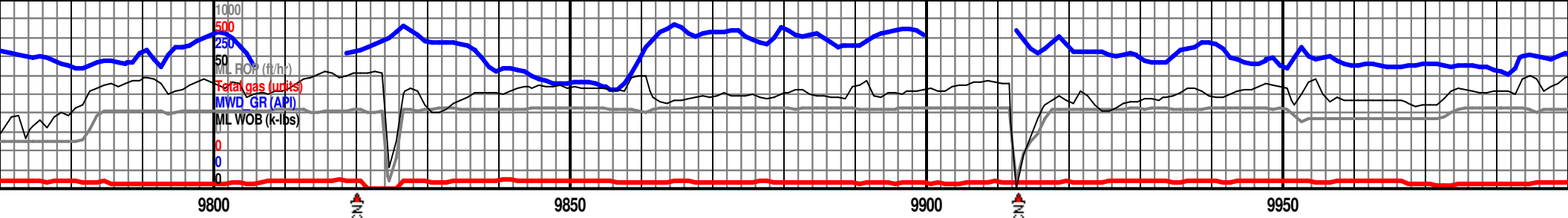
MW I/O 9.65 VIS 62

1000  
 500  
 500  
 500  
 500 (units)  
 C1 (units)  
 C2 (units)  
 C3 (units)  
 C4 (units)





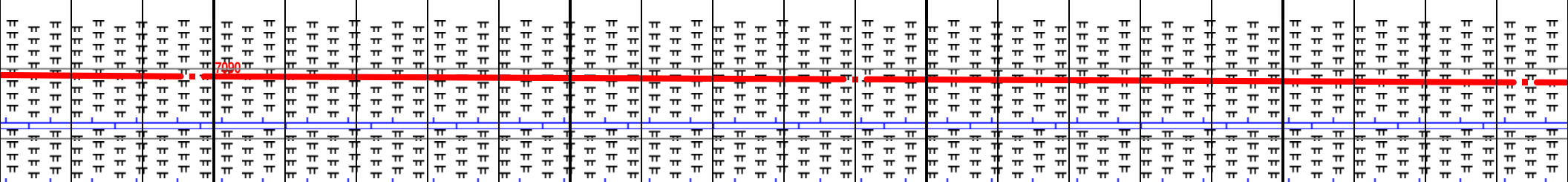




MD 9797 TVD 7091.03  
INC 89.66 AZ 272.66  
VS 3207.67

MD 9890 TVD 7091.48  
INC 89.78 AZ 271.44  
VS 3300.05

MD 99  
INC 89  
VS 339

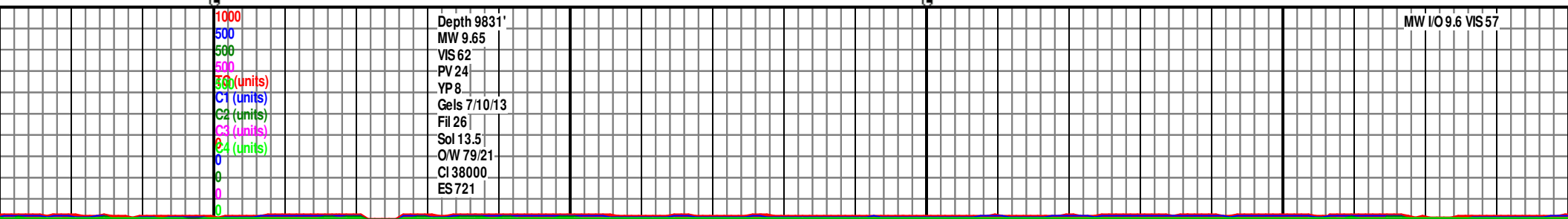


med-med drk gry, frm-hrd,  
str, matte txtr, mssv-wdglk  
frctr, brttl ncty, thn chlky  
or, mod fst mod grnsh blu  
mod-brgt grnsh ylw-grn res  
(%), rr pryt, rr BENT.

MRLSTN: (80%): med drk gry, abndt gryblk, dul  
sbwxy lstr, pred rthy, matte-sm txt, sl fiss,  
sbply-sbblky, frm, irreg frac ptn, CARB CHLK  
(20%): med gry, sl ltr grybrn ip, frm-sl hd, abndt  
crmbng, sl grtty, sbply-sbblky, fnt grn spty ini  
fluor, slw-mod fst grnsh blu cuts, fnt grnsh ylw res  
rng

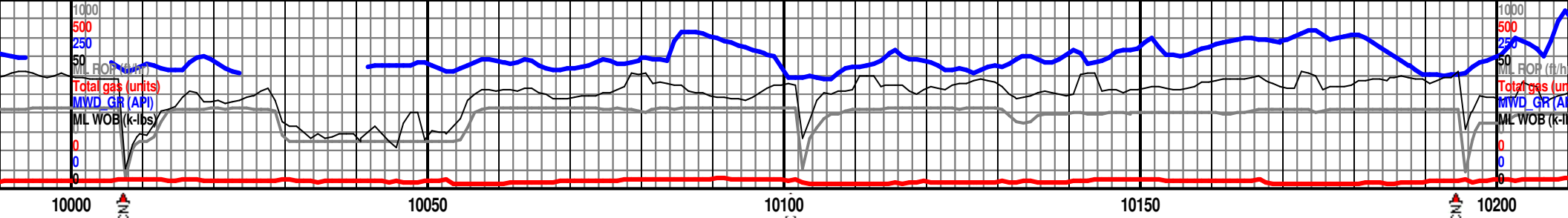
MRLSTN: (80%): drk gry, gryish blk, sl  
fiss, sbwxy, dul lstr, sbply-pty, fr  
calc, CARB CHLK (20%): med gry, sl  
grybrn ip, frm-sl hd, abndt crmbng, s  
grtty, sbply-sbblky, 20% arg fil, no v  
or perm, slw-mod fst grnsh blu cuts  
strmr, dim pale grn res cld

7140

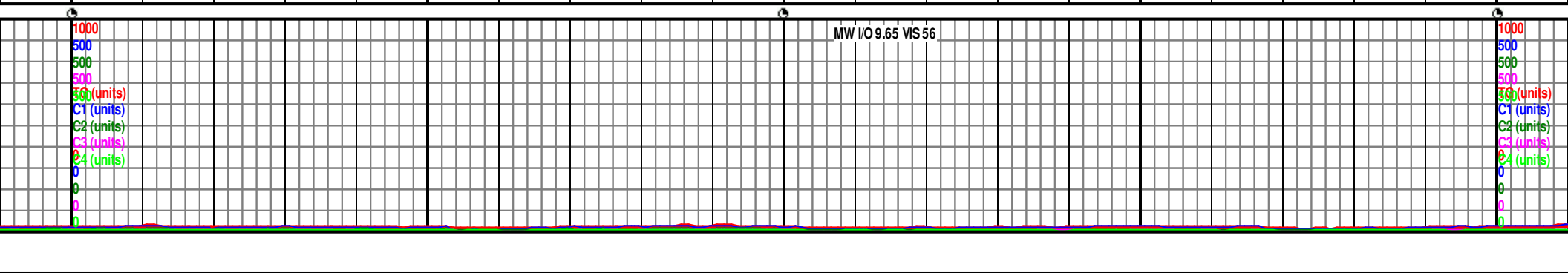


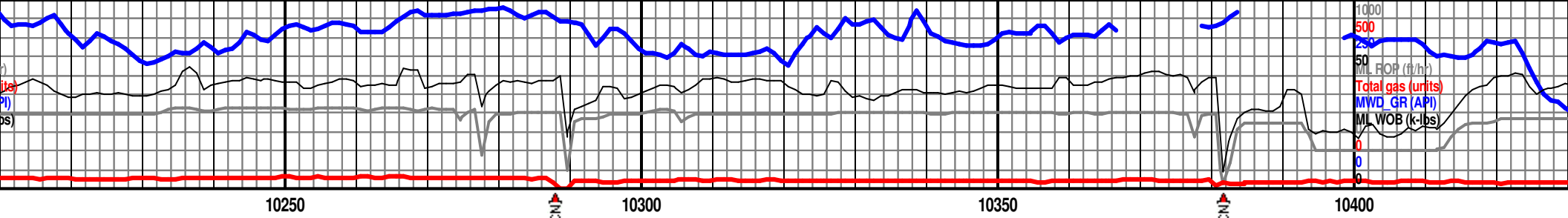
Depth 9831'  
MW 9.65  
VIS 62  
PV 24  
YP 8  
Gels 7/10/13  
Fil 26  
Sol 13.5  
O/W 79/21  
CI 38000  
ES 721

MW I/O 9.6 VIS 57



84 TVD 7091.6 AZ 269.6 VS 3485.9		MD 10078 TVD 7092.44 INC 89.85 AZ 269.43 VS 3485.9		MD 10170 TVD 7092.93 INC 89.54 AZ 269.57 VS 3576.73		7040 TVD	
7090						7090	
rthy, m, ltr, l		MRLSTN: (90%): drk gry, gryish blk, rthy, sl fiss, sbwxy, dul lstr, sbpity-plty, frm, calc, CARB CHLK (10%): med gry, sl ltr grybrn ip, frm-sl hd, abndt crmbng, sl grtty, sbpity-sbblky, 45% arg fil, no vis por or perm, slw-mod fst grnsh blu cuts w/occ strmr, dim pale grn res cld		MRLSTN: (90%) drk gry-blk, sbblky-sbplty, v carb, lmy, calc, slty, frm sft, MRLY CHLK: (10%) med drk-drk gry, sbblky occ wdgk/tab ctngs, v carb & arg, v calc, rthy-chlky, micritic mud sptd mtx, rr mtld, frm-v hd, dim v sppty pale grn ini fluor, mod fst strmgng grn blu cuts, bri grnish yel res rng, tr diss m pyrt		7140	



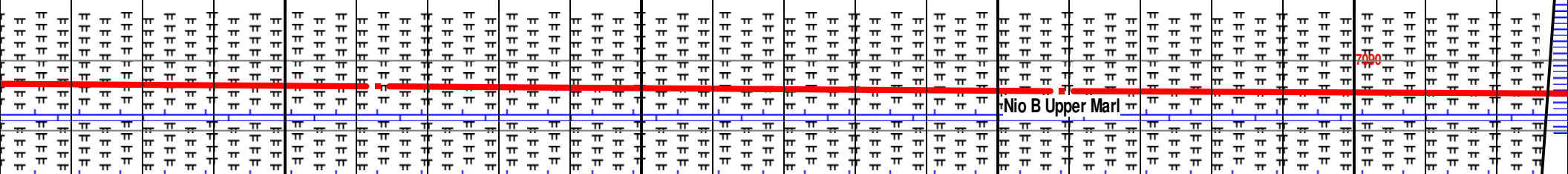


MD 10253 TVD 7093.63  
INC 89.6 AZ 268.87  
VS 3668.47

MD 10359 TVD 7094.25  
INC 89.66 AZ 267.49  
VS 3762.86

7040 TVD

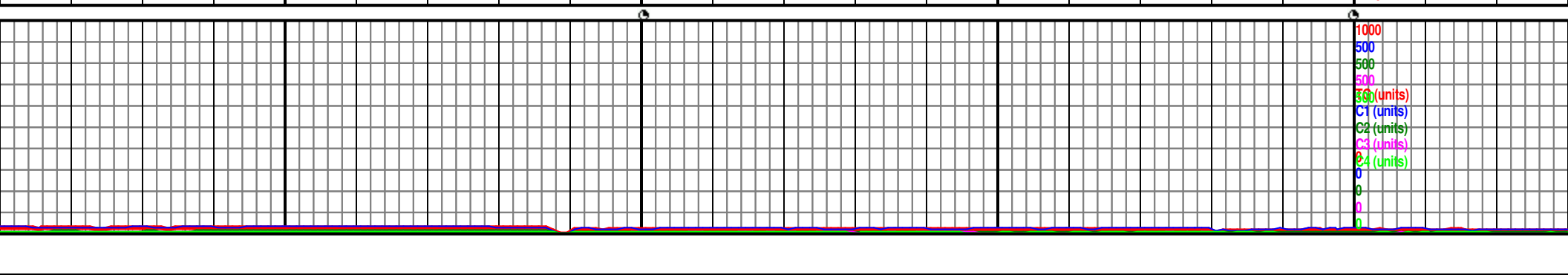
Fault #2 @ 10426' MD. 2



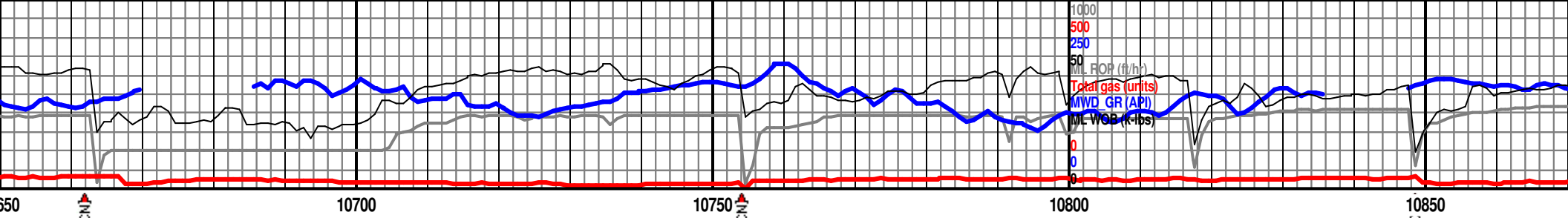
MRLSTN: (85%) drk gry-blk, sbbly-sbply, v carb, lmy, calc, slty, frm sft, MRLY CHLK: (15%) med drk-drk gry, sbbly occ wdgk/tab ctngs, v carb & arg, v calc, rthy-chlky, micritic mud sptd mtx, rr mtld, frm-v hd, dim v spty pale grn ini fluor, mod fst strrng grn blu cuts, bri grnish yel res rng, tr dissn pyrt

MRLSTN (90%): med gryblk, v rthy, sbwxy, wdgk-tab, sl hd yet brttl, micrtc, ghly mtld w drk brwn-blk carb thru ip, CHLK (10%): lt-med gry, mcro sptd w ltr crm spcks, sbply-sbbly, frm, md sptd mtx, no vis perm or por, dim v spty grn pri fluor, mod fst strrng blu cuts, bri grn res rng

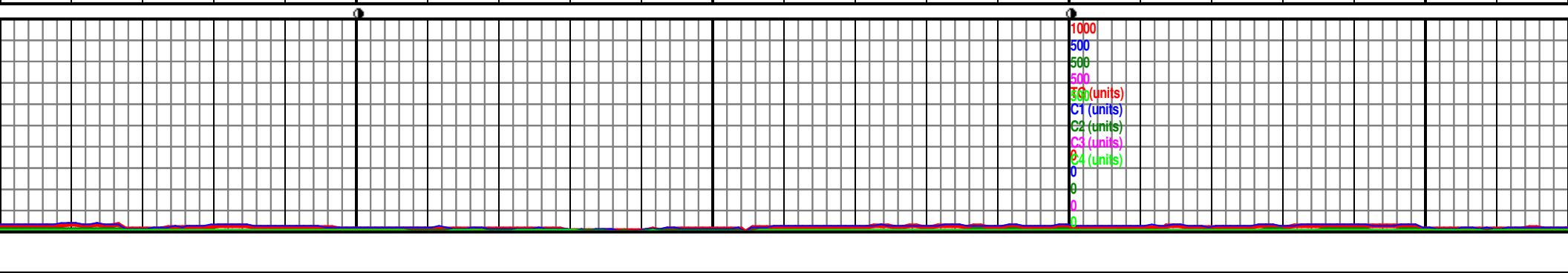
7140



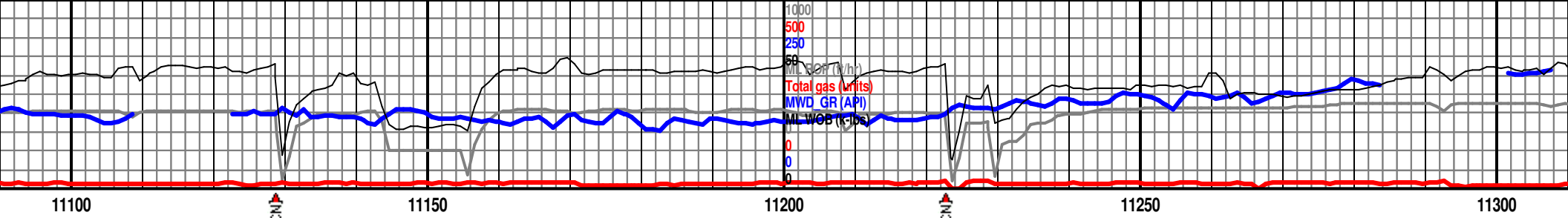




7096.1 67.5	MD 10731 TVD 7095.85 INC 90.77 AZ 268.25 VS 4127.47	7040 TVD	MD 10825 TVD 7094.64 INC 90.71 AZ 267.93 VS 4219.87	
<p>CARB CHLK: (80%) dom med gry, dul rthy txt, blk, sft frm, blk-si tablr, blk carb thru ip, spty wk grn pri fl, fst mod grn blu ct fl w/occ strmr, mod grn rsd rng fl, tr PYR. MRLSTN (20%)</p>		<p>CARB CHLK (85%): lt-lt med gry, occ micro mtlld, sbply-sbblky, micrtc, stff &amp; frm, sl hd, irreg-hkly frac, brttl - plvrnt tncy, gd sptd ini fluor, no vis stn, dim fst strrng grn blu cuts, pale grn res rng MRLSTN (15%), tr diss m pryt</p>		<p>CARB CHLK (80%) ltr tan spcks, matt hcky-pwdry, irrg-r semi cln, mod arg fluor, cldy grnsh b pale grn res rng, p</p>



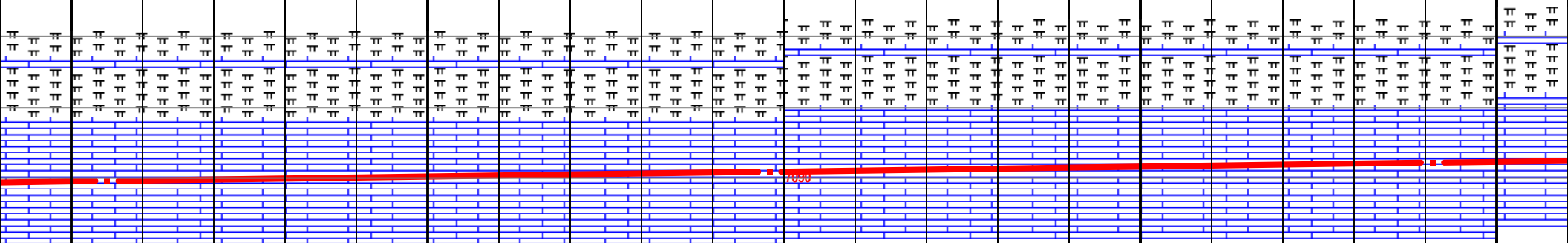




MD 11105 TVD 7090.48  
INC 90.83 AZ 265.59  
VS 4494.31

MD 11198 TVD 7089.13  
INC 90.83 AZ 267.19  
VS 4585.19

MD 11291 TVD 7087.88  
INC 90.71 AZ 270.91  
VS 4676.86

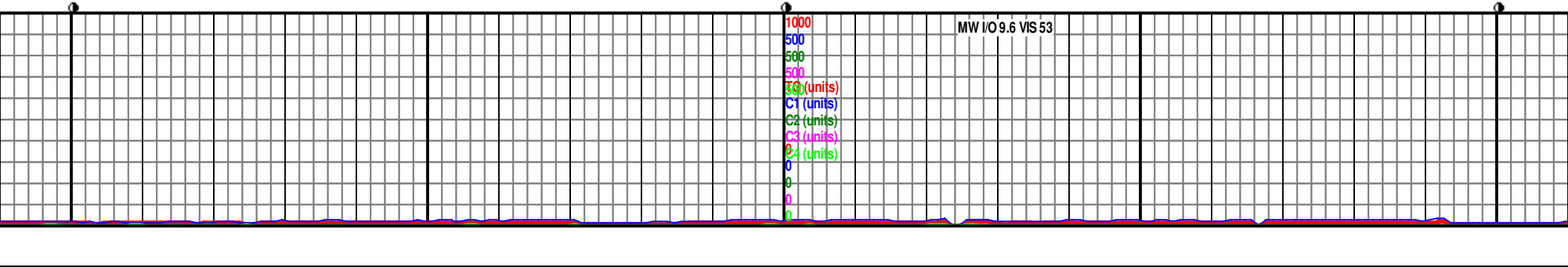


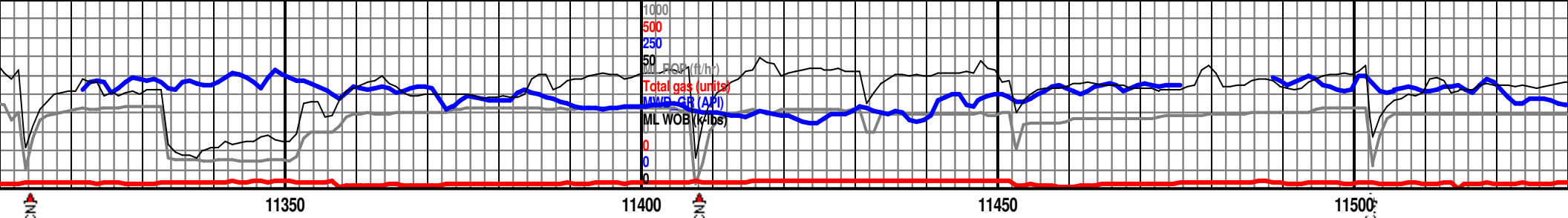
critic,  
-tablr  
y  
ini  
pale

CARB CHLK (95%): lt-med gry, mttld w crmy  
spks, sbply-sbblky, micrtc, stff & frm, sl  
hd, irreg-hkly frac, brttl - plvrnt tncy, fnt  
spttd ini fluor, no vis stn, dim fst strmg  
grnish blu cuts, lt grn res rng  
MRLSTN (5%), tr ag pryt

CARB CHLK (95%): lt-lt med gry, micritic,  
dul-rthy lstr, matte-sl grtty txt, mssv-tablr  
ctgs, irreg-hcky frctr, brttl & v crmbly tncy,  
mod cln, sl arg ip, v wk sptty ini fluor, fst  
yel grn cuts w/ occ strms, pale grnish blu  
res rng, MRLSTN (5%) tr diss m pryt

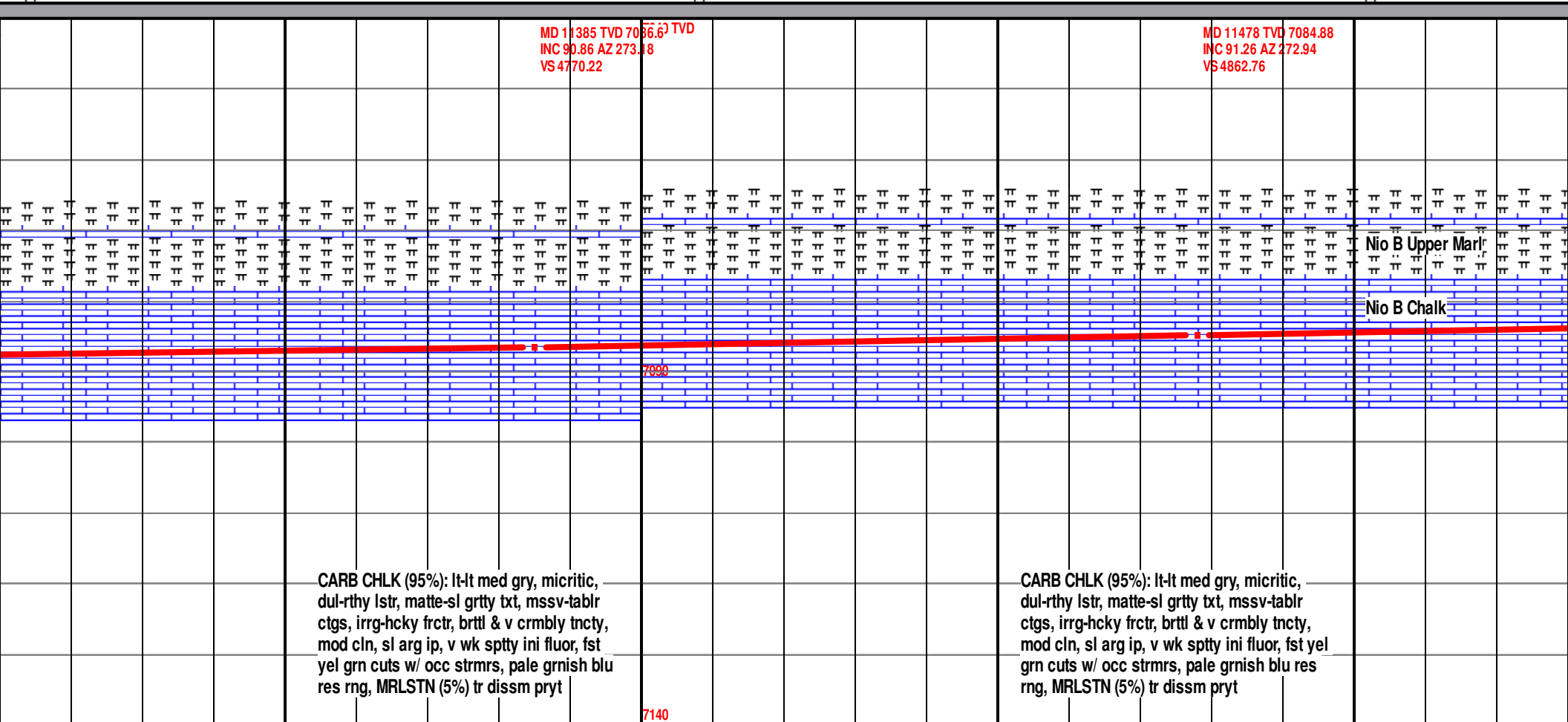
7140





MD 11385 TVD 7066.6  
 INC 90.86 AZ 273.18  
 VS 4770.22

MD 11478 TVD 7084.88  
 INC 91.26 AZ 272.94  
 VS 4862.76

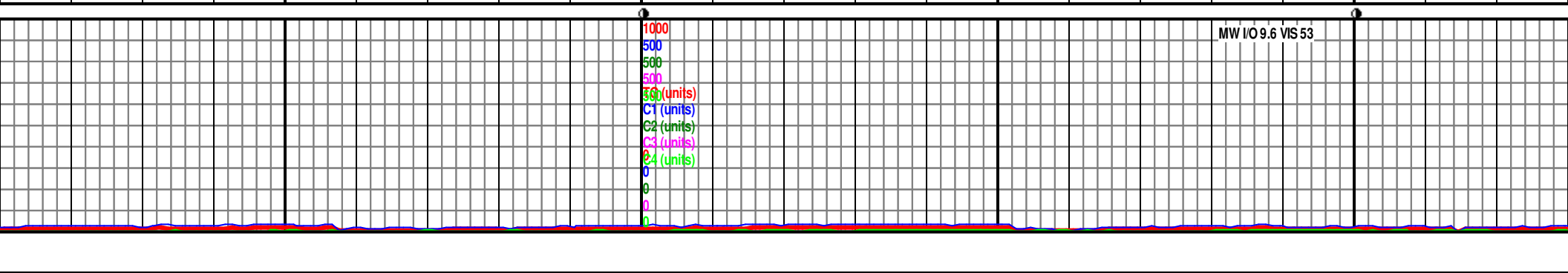


CARB CHLK (95%): lt-lt med gry, micritic, dul-rthy lstr, matte-sl grtty txt, mssv-tablr ctgs, irrg-hcky frctr, brttl & v crmbly tncty, mod cln, sl arg ip, v wk sppty ini fluor, fst yel grn cuts w/ occ strmr, pale grnish blu res rng, MRLSTN (5%) tr dissim pryt

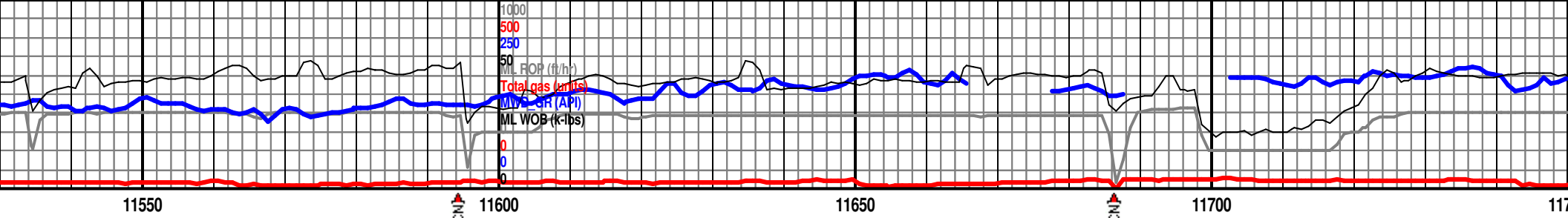
CARB CHLK (95%): lt-lt med gry, micritic, dul-rthy lstr, matte-sl grtty txt, mssv-tablr ctgs, irrg-hcky frctr, brttl & v crmbly tncty, mod cln, sl arg ip, v wk sppty ini fluor, fst yel grn cuts w/ occ strmr, pale grnish blu res rng, MRLSTN (5%) tr dissim pryt

7140

MW I/O 9.6 VIS 53



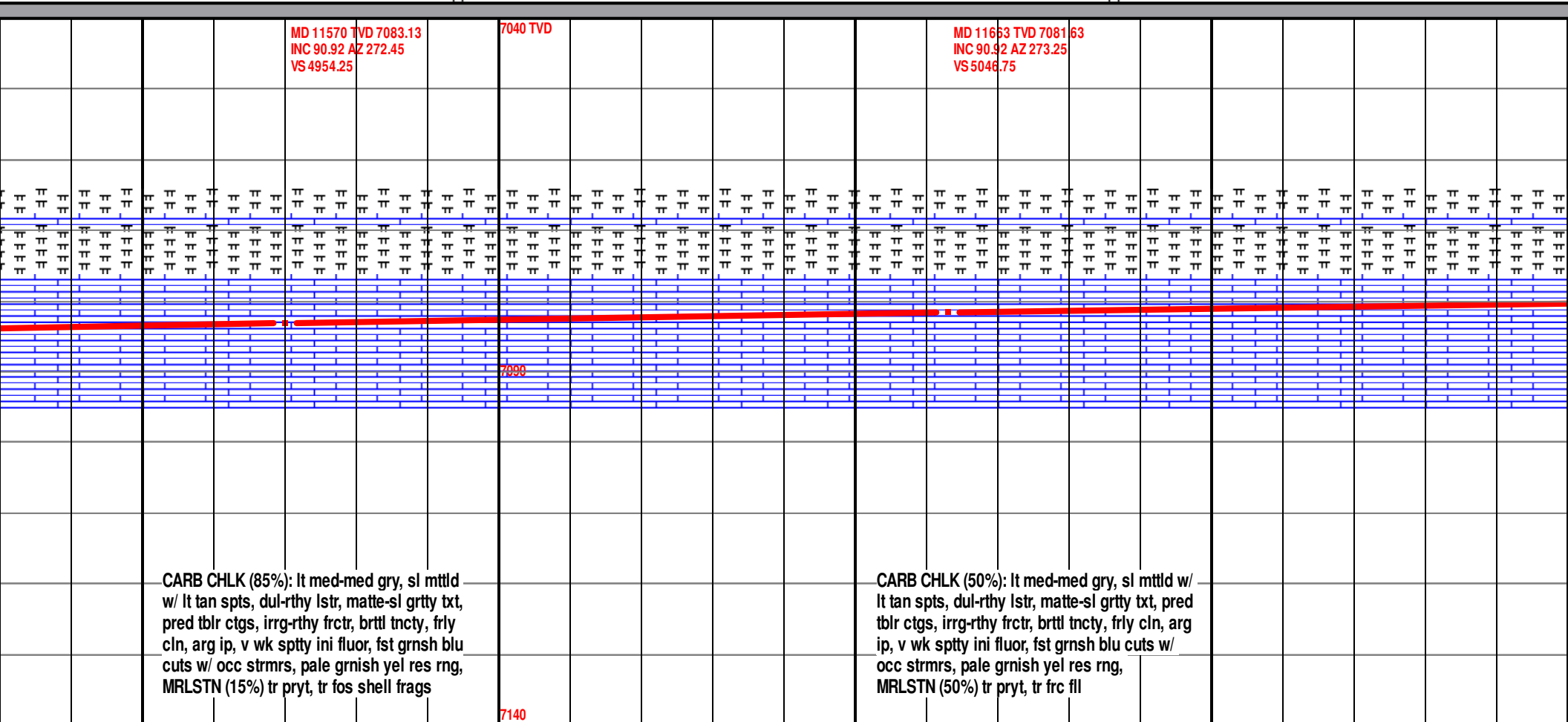




MD 11570 TVD 7083.13  
INC 90.92 AZ 272.45  
VS 4954.25

7040 TVD

MD 11653 TVD 7081.63  
INC 90.92 AZ 273.25  
VS 5046.75

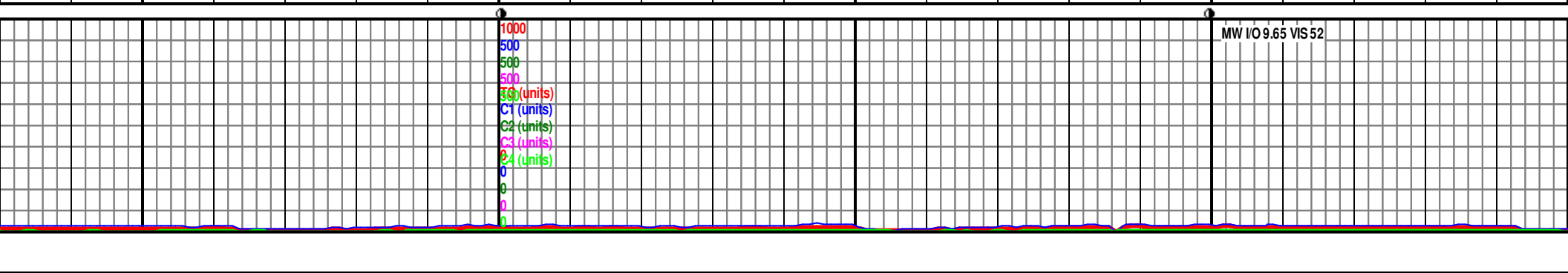


CARB CHLK (85%): lt med-med gry, sl mtlld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrg-rthy frctr, brttl tncty, friy cln, arg ip, v wk sppty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (15%) tr pryt, tr fos shell frags

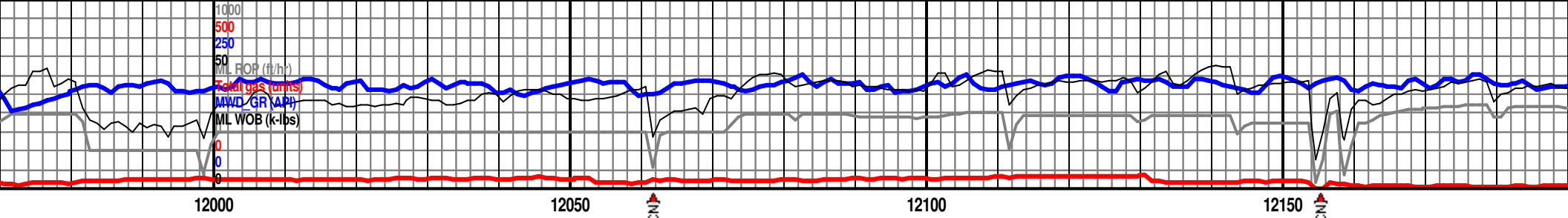
CARB CHLK (50%): lt med-med gry, sl mtlld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrg-rthy frctr, brttl tncty, friy cln, arg ip, v wk sppty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (50%) tr pryt, tr frc fil

7140

MW I/O 9.65 VIS 52







7040 TVD

MD 12036 TVD 7077.41  
INC 90.49 AZ 273.99  
VS 5418.49

MD 12129 TVD 7076.66  
INC 90.43 AZ 268.76  
VS 5510.7

Nio B Upper Marl

Nio B Chalk

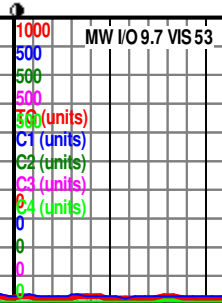
7090

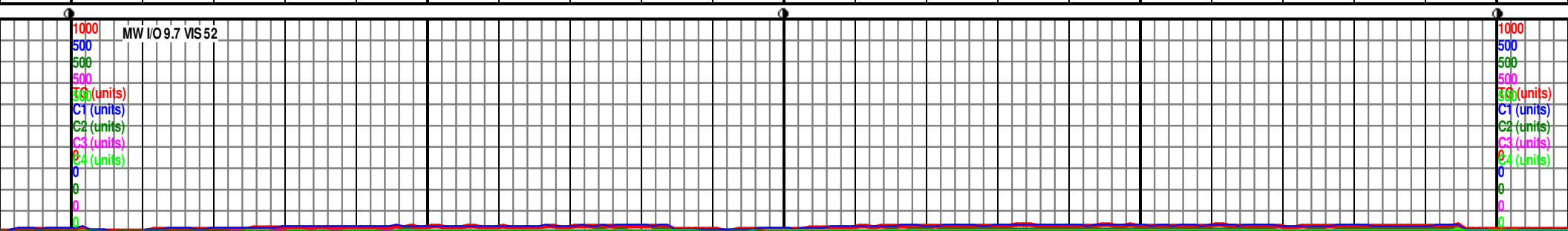
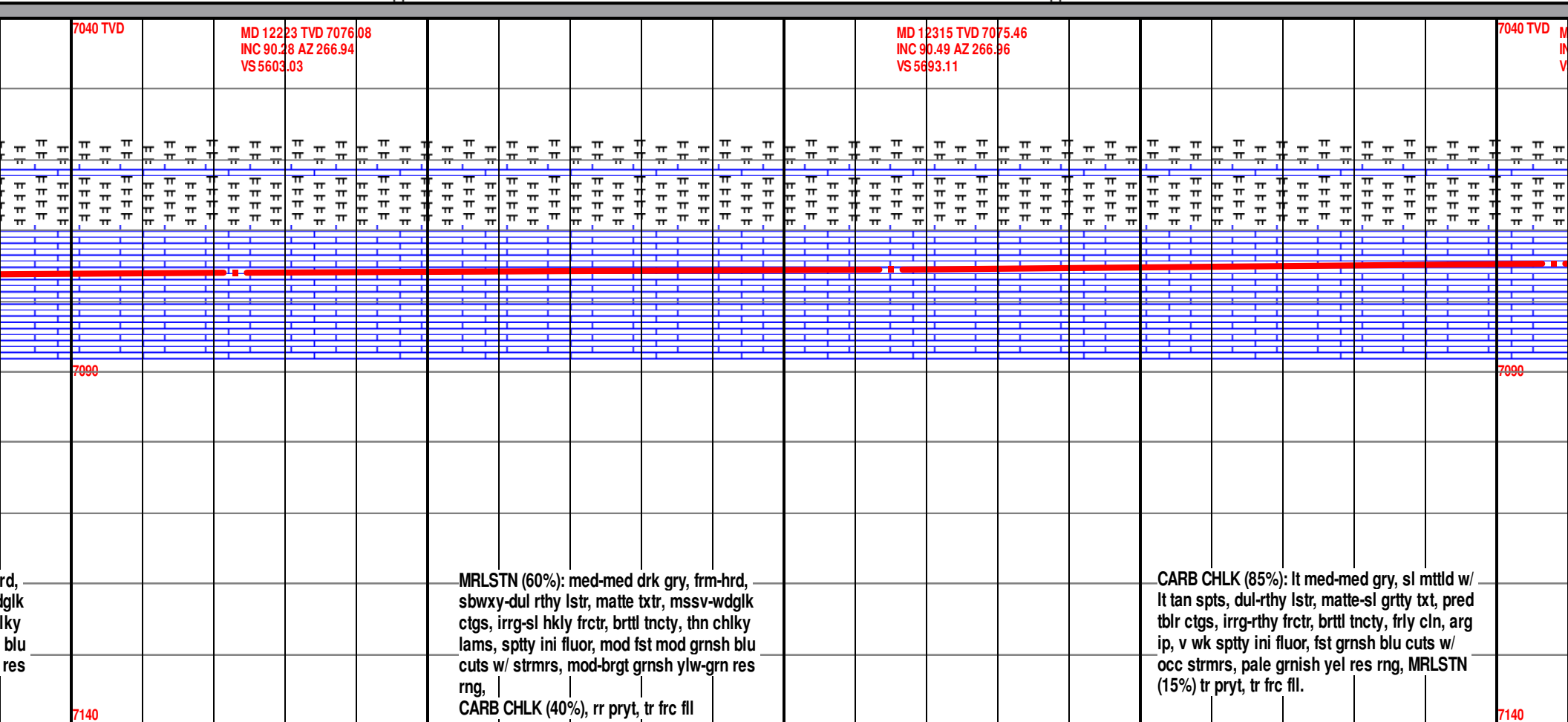
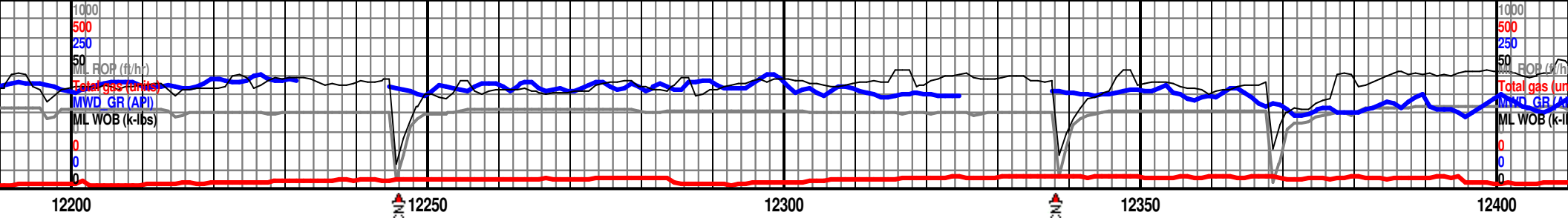
med-med drk gry, frm-hrd,  
str, matte txtr, mssv-wdglk  
frctr, brttl tncty, thn chlky  
lor, mod fst mod grnsh blu  
mod-brgt grnsh ylw-grn res  
, rr pryt, tr frc fil

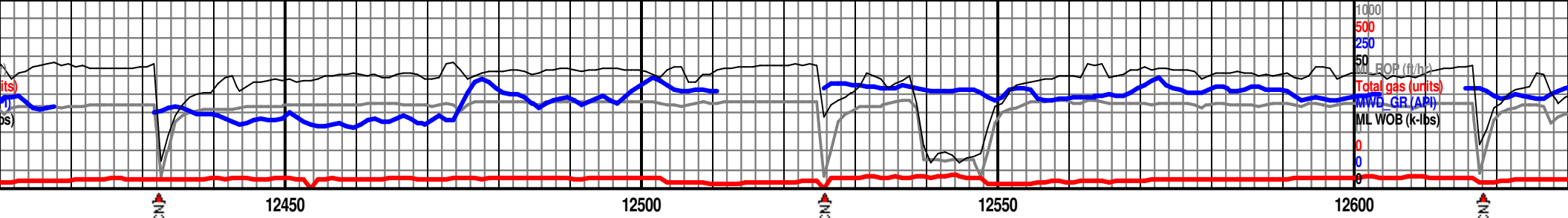
MRLSTN (60%): med-med drk gry, frm-hrd,  
sbwxy-dul rthy lstr, matte txtr, mssv-wdglk  
ctgs, irrgr-sl hkly frctr, brttl tncty, thn chlky  
lams, sppty ini fluor, mod fst mod grnsh blu  
cuts w/ strmr, mod-brgt grnsh ylw-grn res  
rng,  
CARB CHLK (40%), rr pryt, tr frc fil

MRLSTN (60%): med-med drk gry, frm-h  
sbwxy-dul rthy lstr, matte txtr, mssv-w  
ctgs, irrgr-sl hkly frctr, brttl tncty, thn ch  
lams, sppty ini fluor, mod fst mod grnsh  
cuts w/ strmr, mod-brgt grnsh ylw-grn  
rng,  
CARB CHLK (40%), rr pryt, tr frc fil

7140



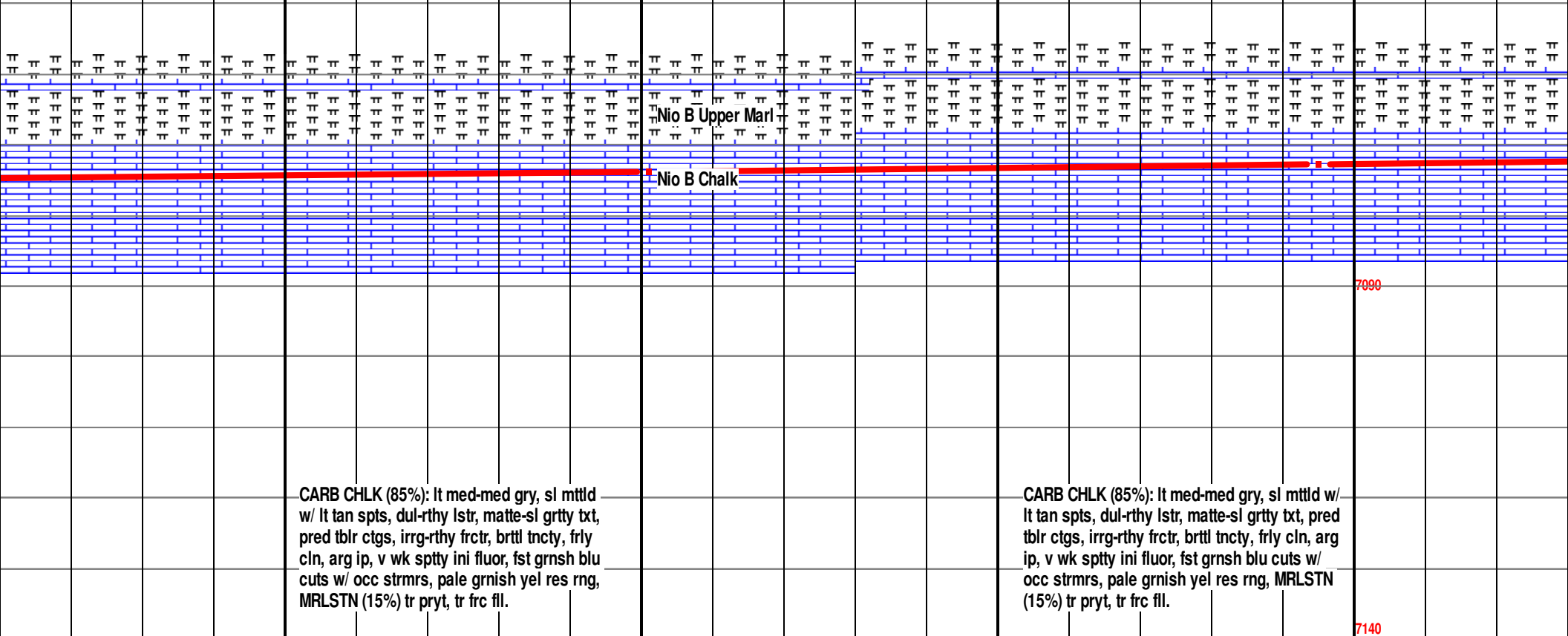




D 12408 TVD 7074.62  
INC 90.55 AZ 266.23  
VS 5784.05

MD 12501 TVD 7073.73  
INC 90.55 AZ 265.63  
VS 5874.76

MD 12595 TVD 7072.72  
INC 90.68 AZ 265.8  
VS 5966.27

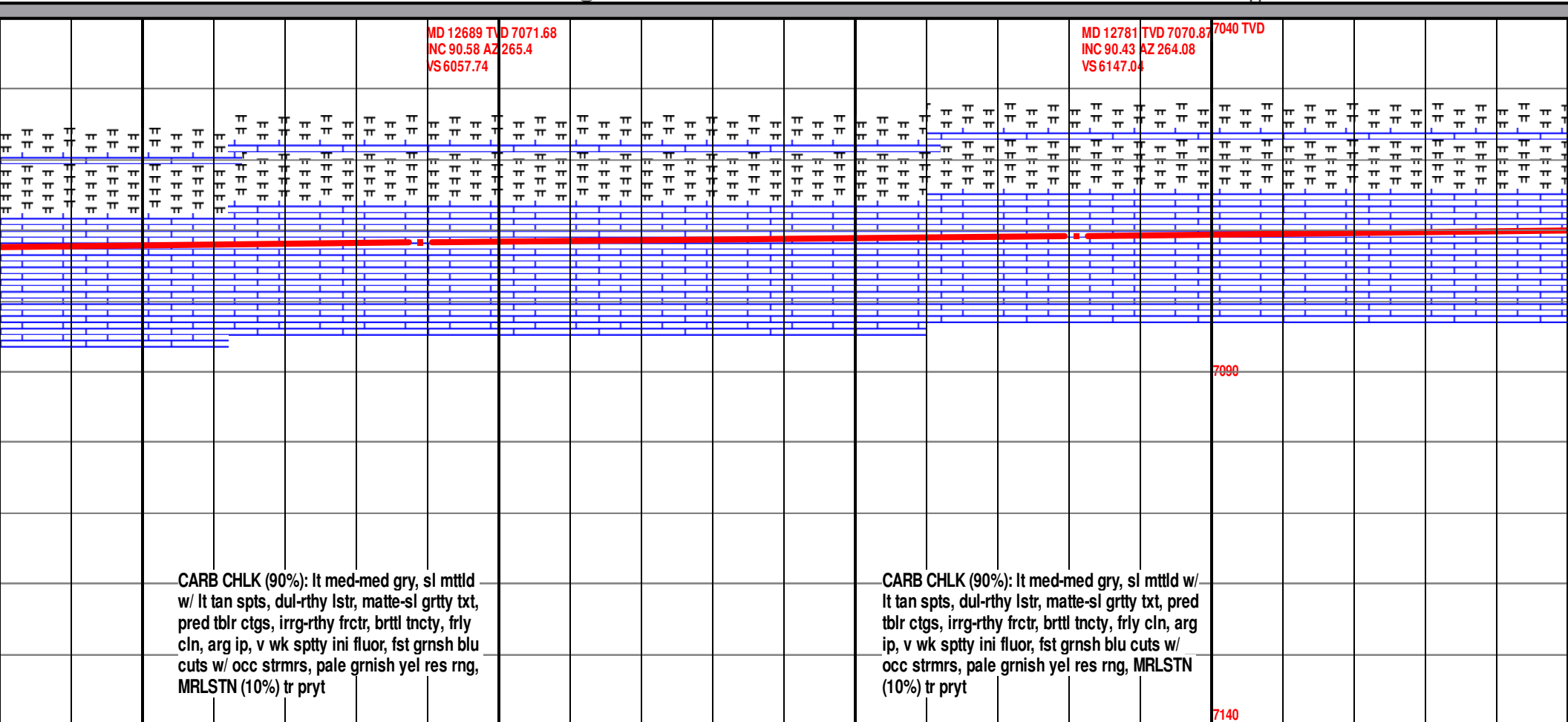
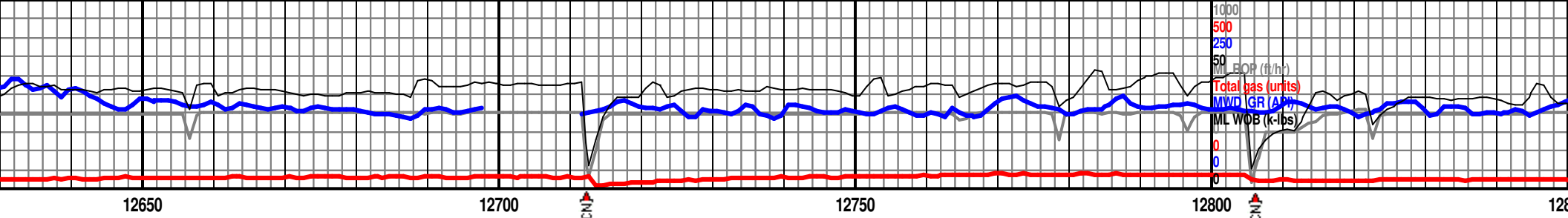


CARB CHLK (85%): lt med-med gry, sl mtlld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrgrthy frctr, brttl tncty, frly cln, arg ip, v wk sppty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (15%) tr pryt, tr frc fil.

CARB CHLK (85%): lt med-med gry, sl mtlld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrgrthy frctr, brttl tncty, frly cln, arg ip, v wk sppty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (15%) tr pryt, tr frc fil.

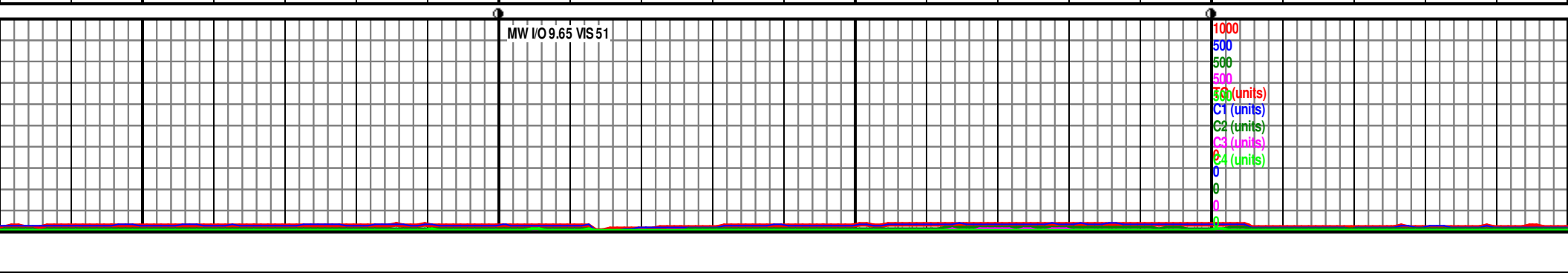
MW IO 9.7 VS 53

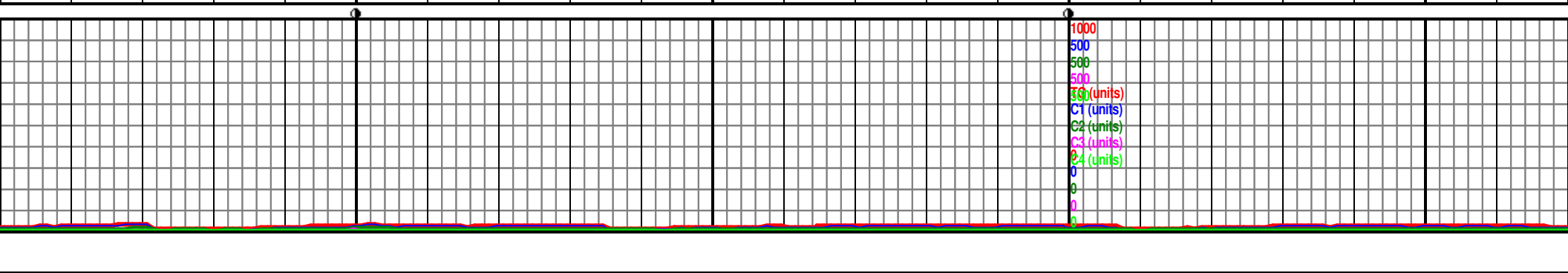
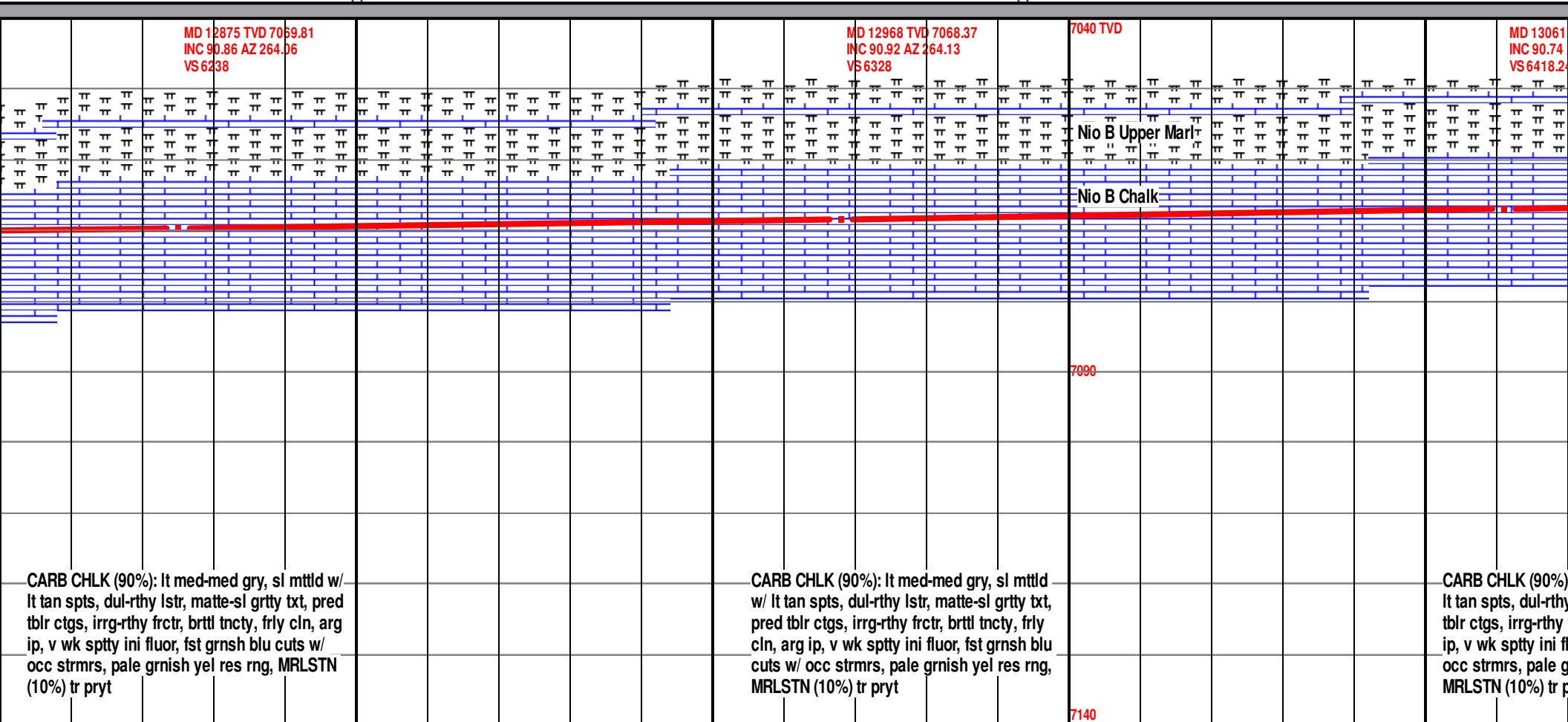
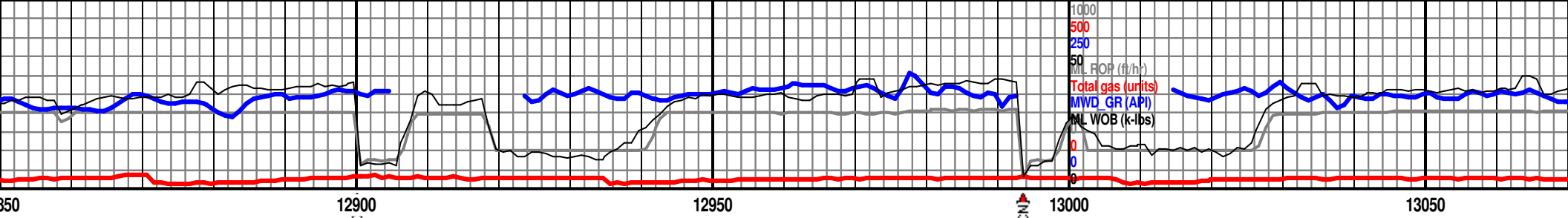
1000  
500  
500  
500  
300 (units)  
C1 (units)  
C2 (units)  
C3 (units)  
C4 (units)  
0  
0  
0  
0

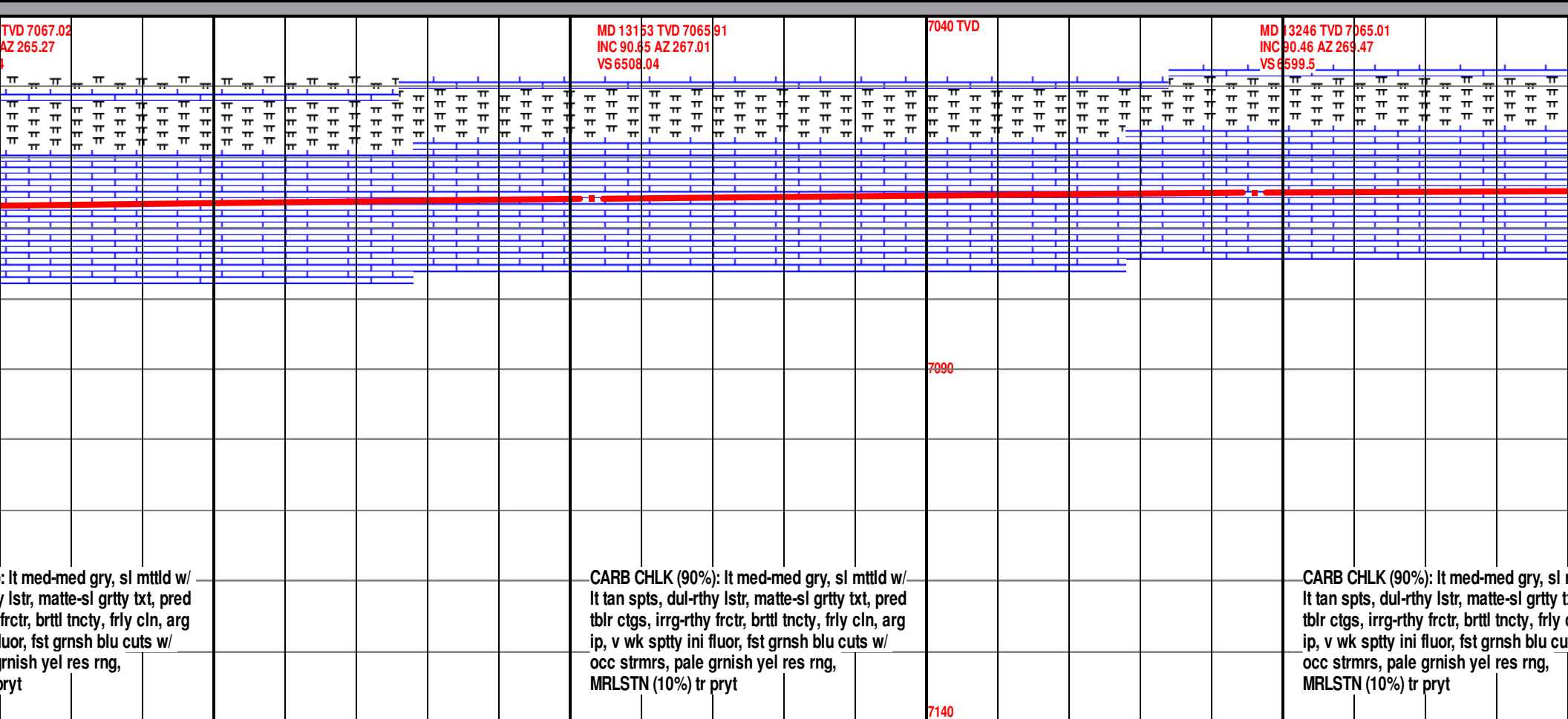


CARB CHLK (90%): lt med-med gry, sl mttld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrg-rthy frctr, brtl tncy, fryl cln, arg ip, v wk spty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (10%) tr pryt

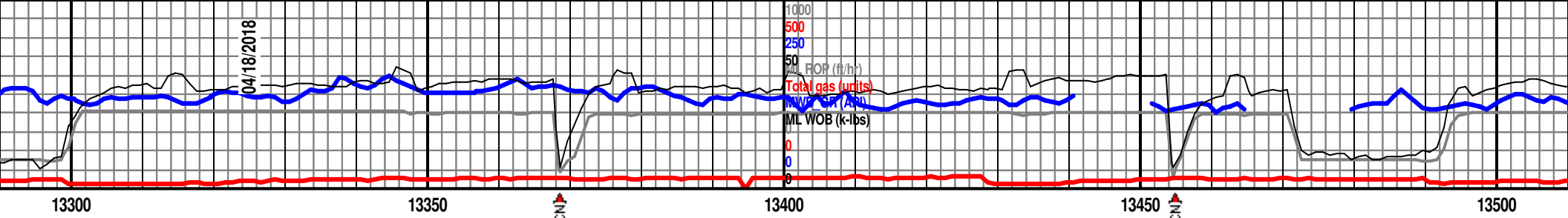
CARB CHLK (90%): lt med-med gry, sl mttld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrg-rthy frctr, brtl tncy, fryl cln, arg ip, v wk spty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (10%) tr pryt



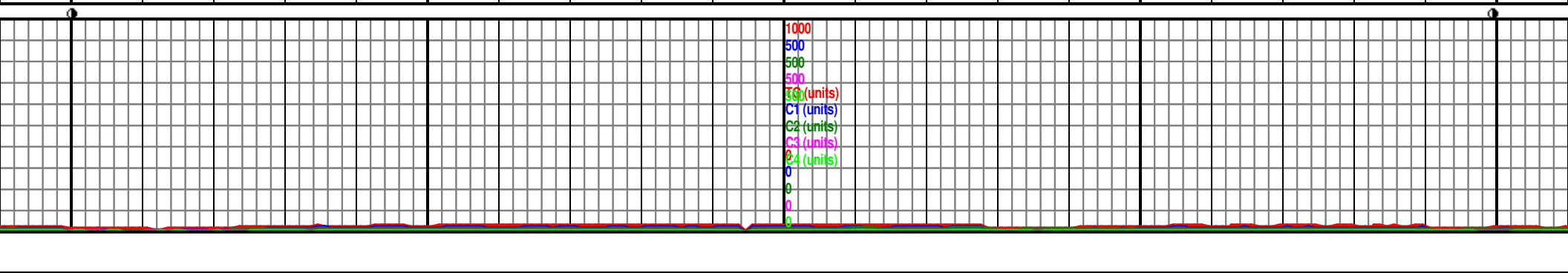


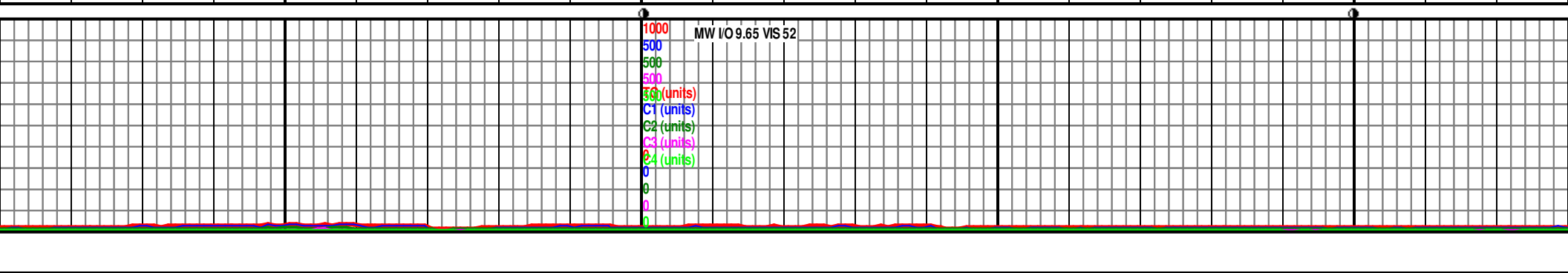
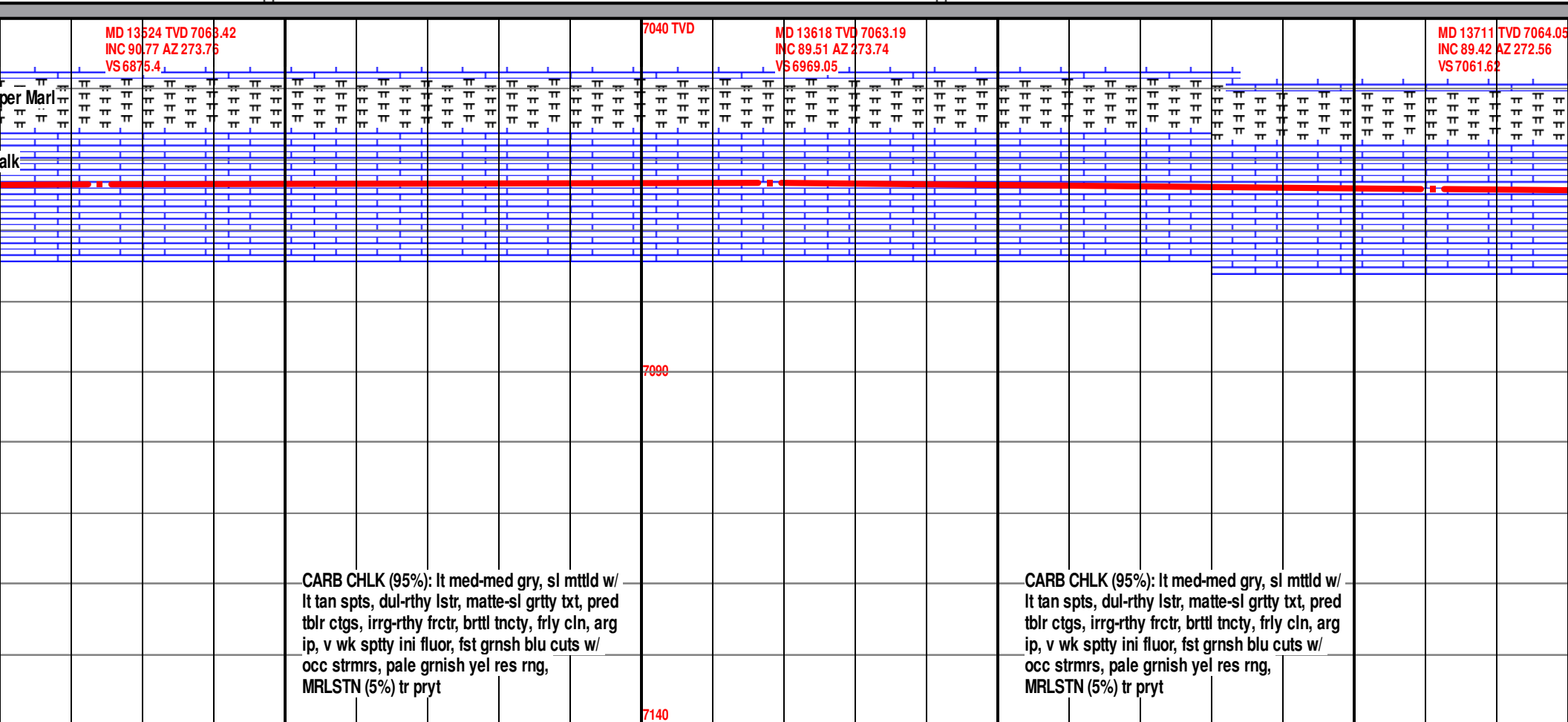
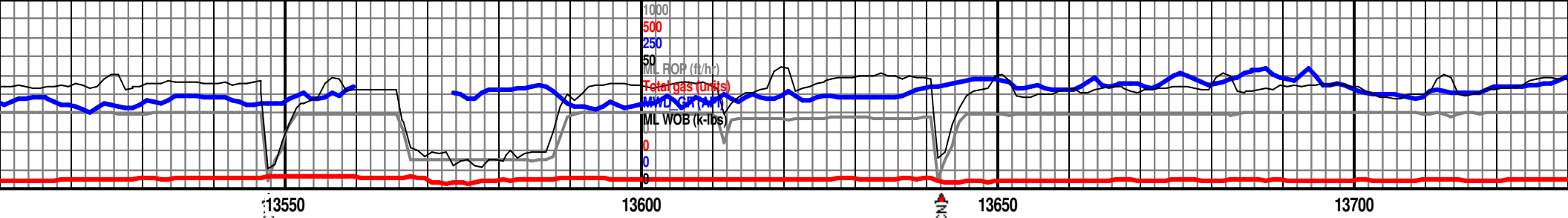


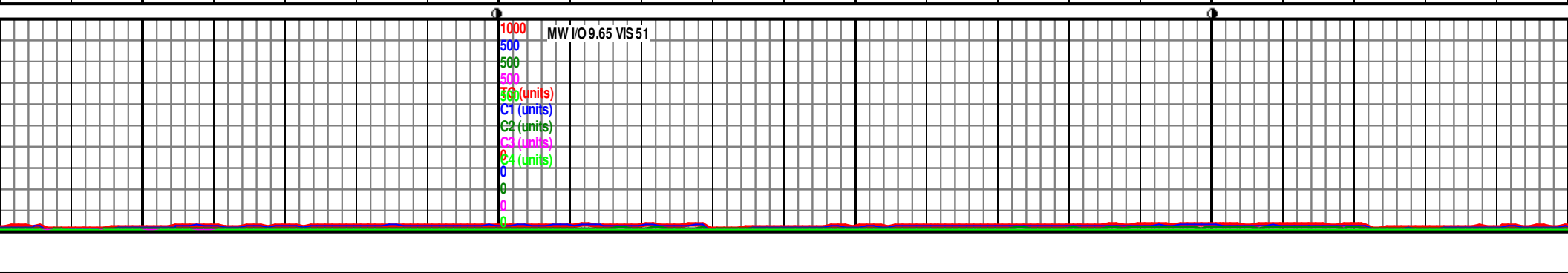
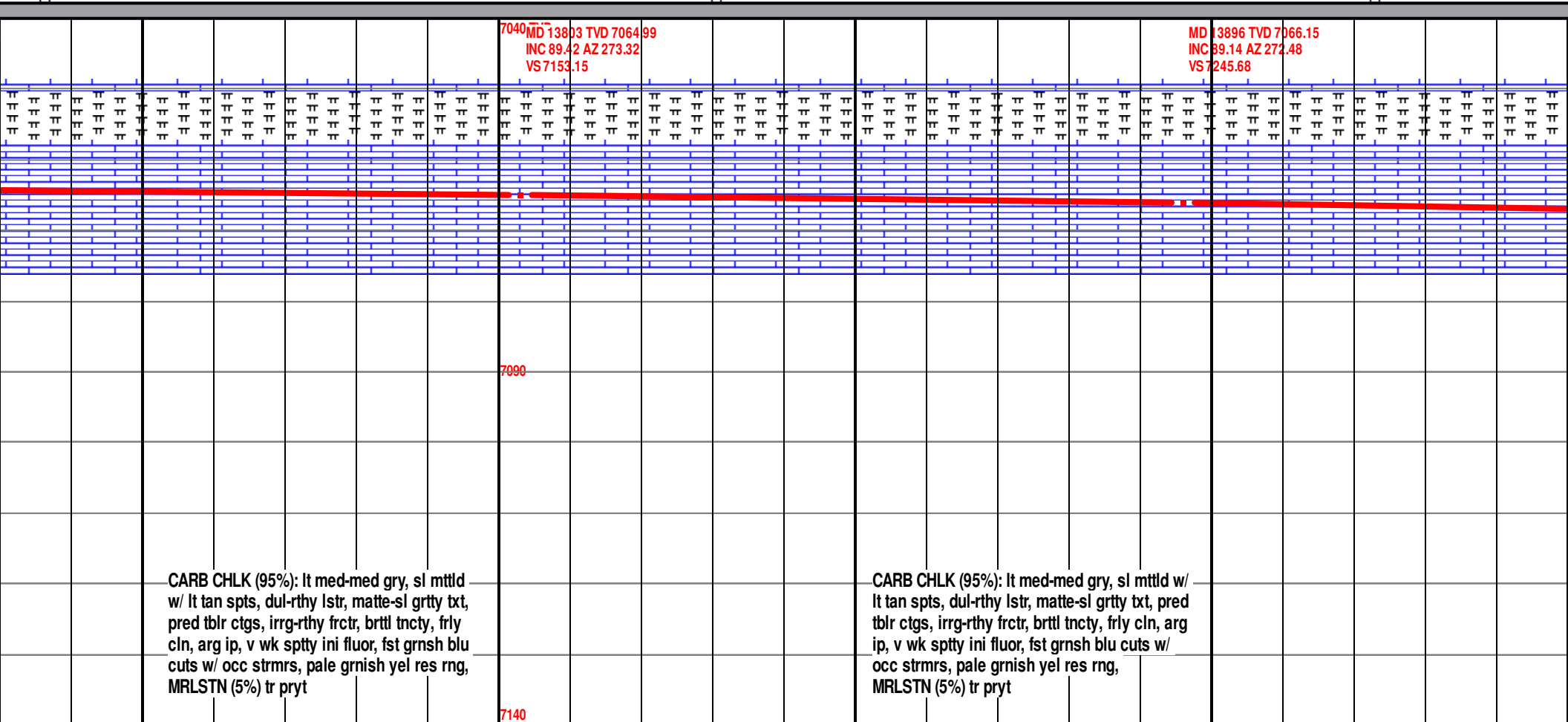
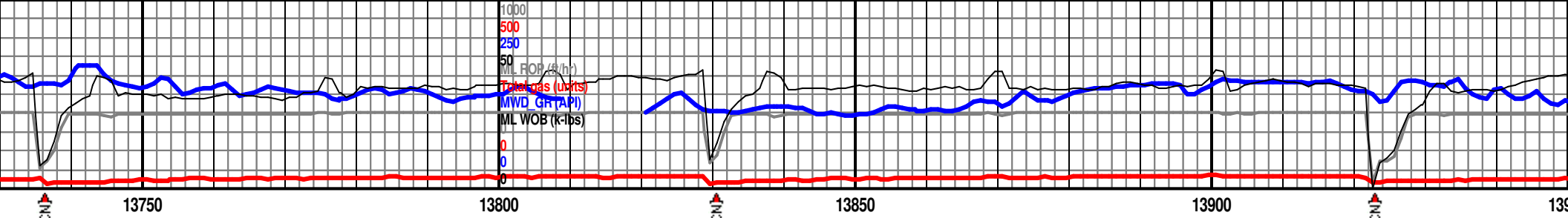


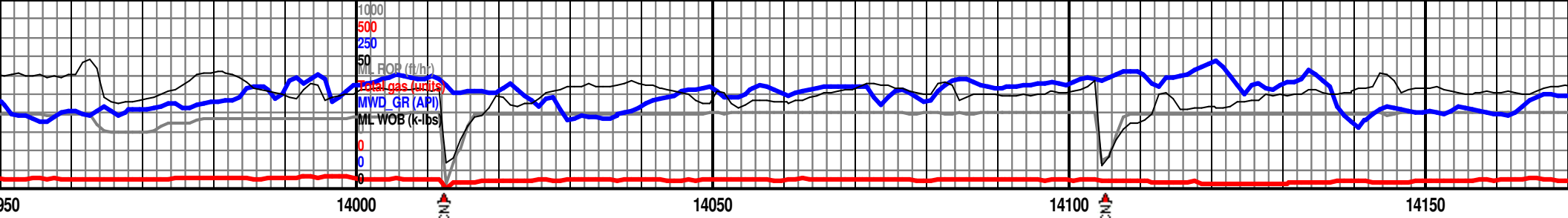


<p>MD 13339 TVD 7064.53 INC 90.12 AZ 270.9 VS 6691.48</p>	<p>7040 TVD</p> <p>MD 13432 TVD 7064.23 INC 90.23 AZ 272.75 VS 6783.81</p>	<p>7090</p>	<p>7140</p>	<p>Nio B Up</p> <p>Nio B Ch</p>
<p>mttld w/ xt, pred cln, arg ts w/</p>	<p>CARB CHLK (90%): lt med-med gry, sl mttld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrg-rthy frctr, brttl tncty, frly cln, arg ip, v wk sptty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (10%) tr pryt</p>		<p>CARB CHLK (95%): lt med-med gry, sl mttld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrg-rthy frctr, brttl tncty, frly cln, arg ip, v wk sptty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (5%) tr pryt</p>	









MD 13989 TVD 7067.68  
INC 88.98 AZ 271.62  
VS 7338.04

MD 14081 TVD 7069.26  
INC 89.05 AZ 271.47  
VS 7429.32

Nio B Upper Marl

Nio B Chalk

7090

7140

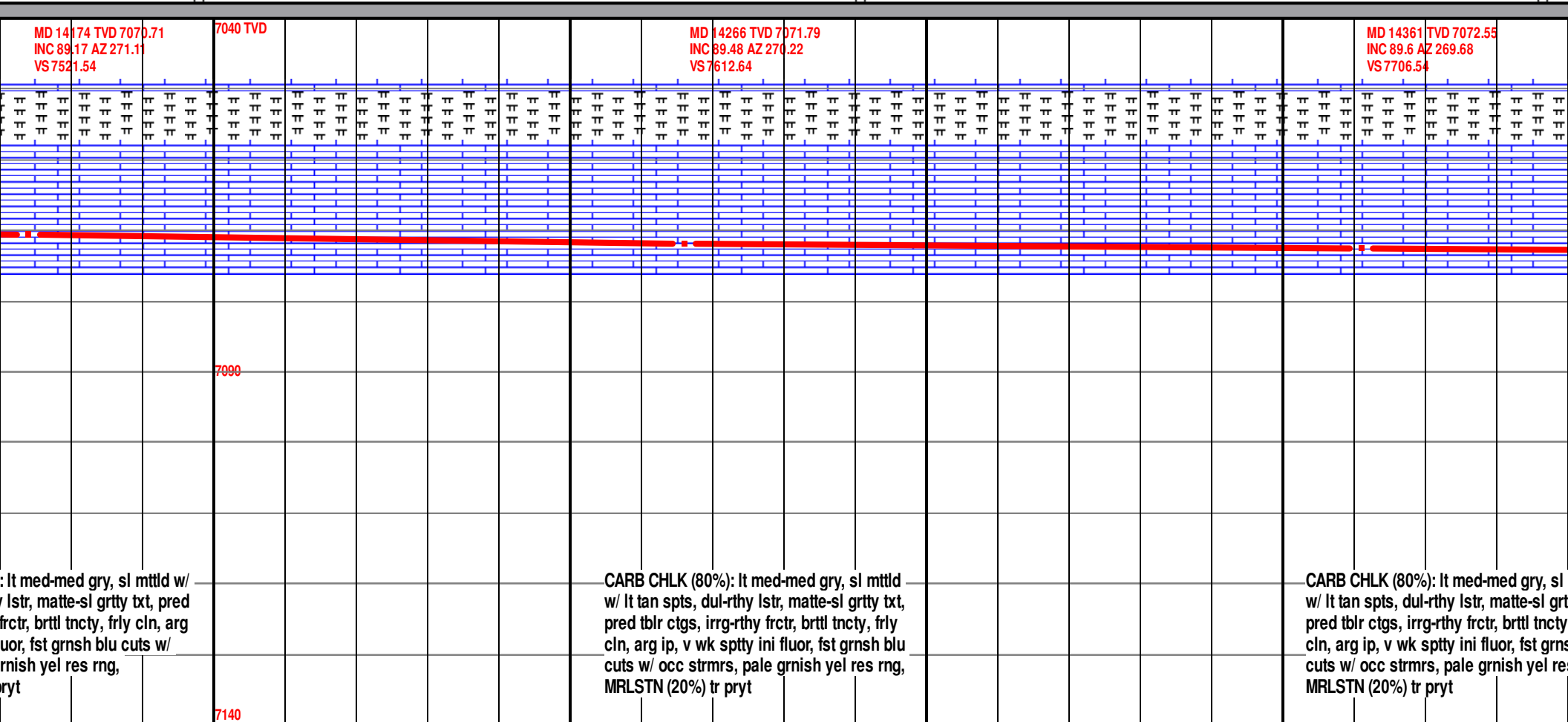
CARB CHLK (95%): lt med-med gry, sl mtld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrgrthy frctr, brttl tncty, friy cln, arg ip, v wk sppty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (5%) tr pryt

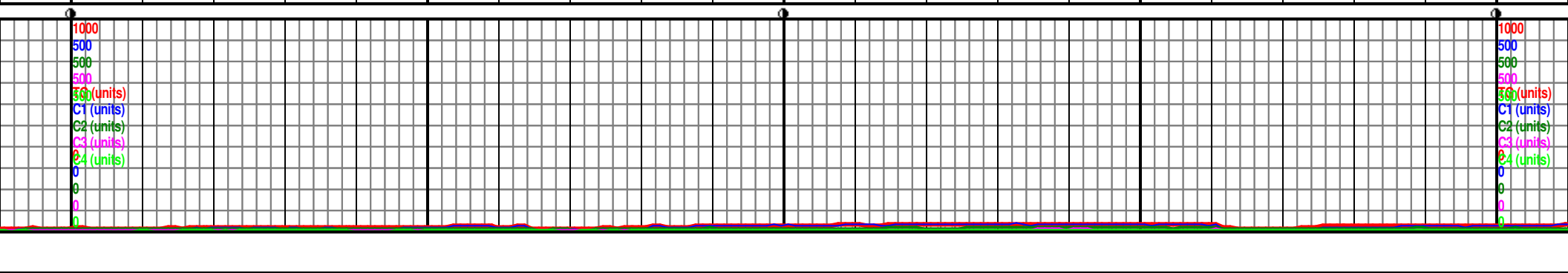
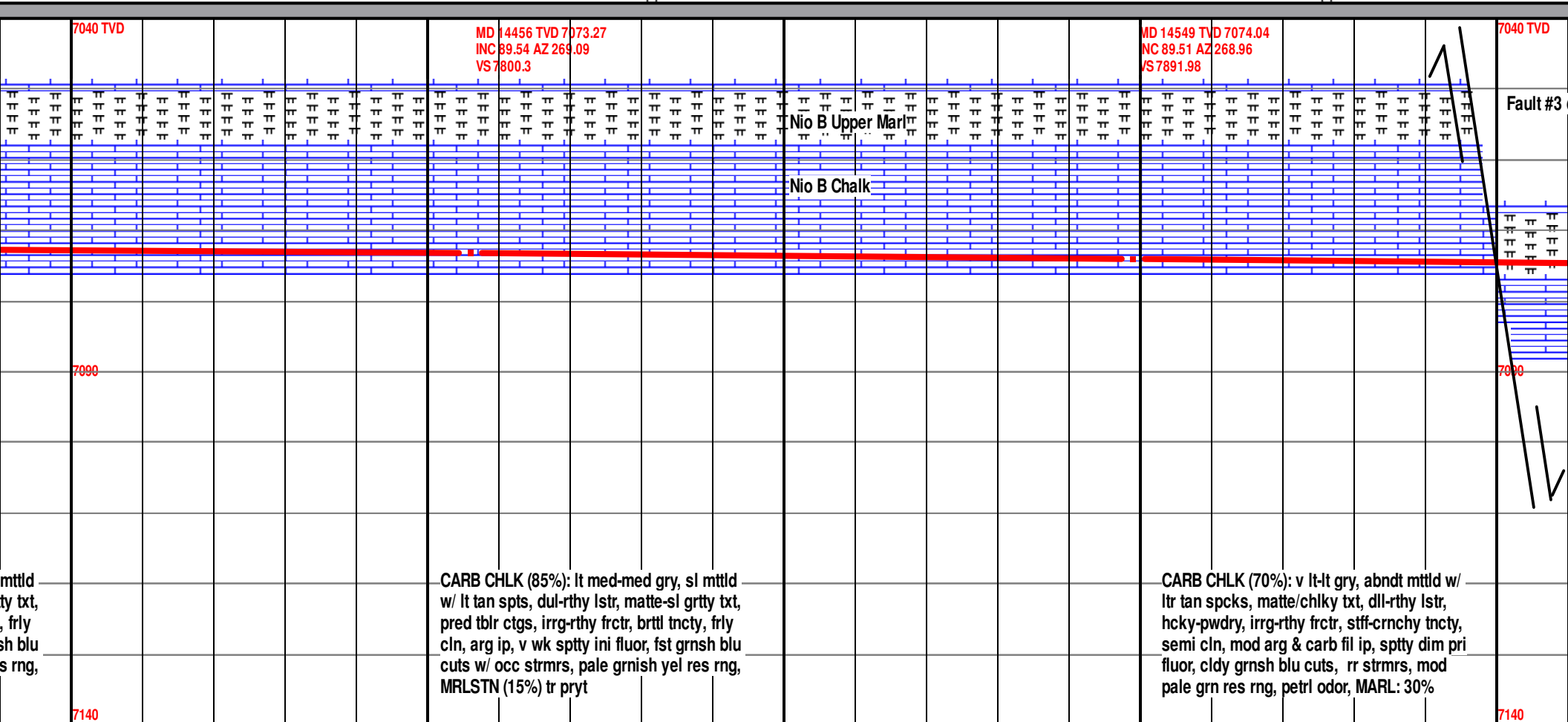
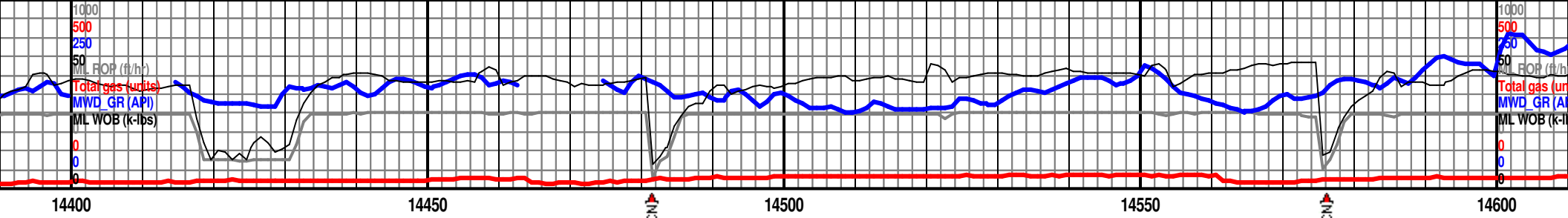
CARB CHLK (95%): lt med-med gry, sl mtld w/ lt tan spts, dul-rthy lstr, matte-sl grtty txt, pred tblr ctgs, irrgrthy frctr, brttl tncty, friy cln, arg ip, v wk sppty ini fluor, fst grnsh blu cuts w/ occ strmr, pale grnsh yel res rng, MRLSTN (5%) tr pryt

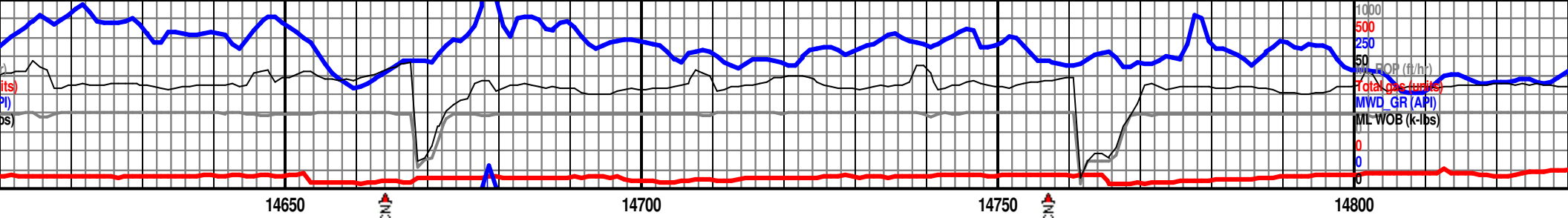
CARB CHLK (90%): lt tan spts, dul-rthy tblr ctgs, irrgrthy ip, v wk sppty ini fl occ strmr, pale g MRLSTN (10%) tr p

MW IO 9.65 VS 56

1000  
500  
500  
500  
500  
300 (units)  
C1 (units)  
C2 (units)  
C3 (units)  
C4 (units)  
0  
0  
0  
0







MD 14641 TVD 7074.85  
INC 89.48 AZ 269.19  
VS 7982.69

@ 14600' MD. 18' Downthrown

Nio B Upper Marl

Nio B Chalk

MRLSTN: (85%): gryblk, abndt drkr gry,  
sbwxy-sbrthy, matte-sm txt, jggd/shrp,  
sbpty-sbblky, frm, irreg frac ptn, CARB  
SH (15%) drk-gryblk, frm-med hd,  
rthy-sbwxy lstr, smth txtr, sbblky-sbpty,  
wdgk ip, irreg frctr ptn, stff-crmbly tcnty,  
non calc

MRLSTN: (75%): drk gry, gryish blk, rthy, sl  
fiss, sbwxy, dul lstr, sbpty-plty, frm, calc,  
CARB CHLK (25%): med gry, sl ltr grybrn ip,  
frm-sl hd, abndt crmbng, sl grtty,  
sbpty-sbblky, 20% arg fil, no vis por or perm,  
slw-mod fst grnsh yel cuts w/occ strmr, fnt  
grnsh ylw res rng

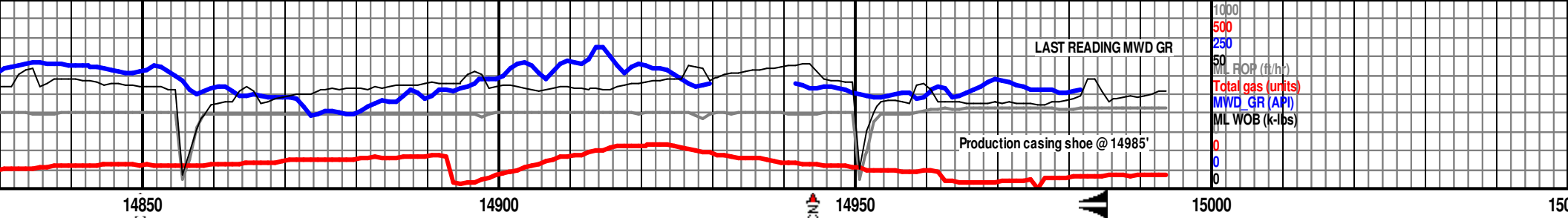
7040 TVD

7090

7140

MW I/O 9.65 VIS 56

1000  
500  
500  
500  
500  
500 (units)  
C1 (units)  
C2 (units)  
C3 (units)  
C4 (units)  
0  
0  
0  
0

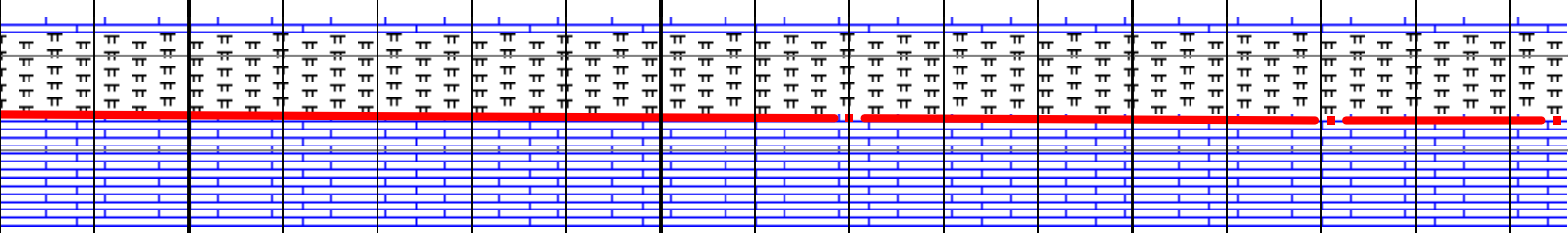


MD 14827 TVD 7076.24  
INC 89.66 AZ 269.34  
VS 8166.19

MD 14920 TVD 7076.7  
INC 89.78 AZ 269.15  
VS 8257.94

MD 14971 TVD 7076.85  
INC 89.88 AZ 267.16  
VS 8308.08

MD 14995 TVD 7076.9  
INC 89.88 AZ 267.16  
VS 8331.6



Reached DMTD of 14,995' MD @ 02:40 hrs. on 04/18/2018

2 man wellsite geologist released from location on April 18, 2018 @ 05:00 hrs.

Circ & Condition Hole, TOO, run casing, cement casing.

7090

BHA #2, 8 1/2", BHI, ATD505T, #5283095, 5X15, In @ 1841', out @ 14995', drilled 13154' in 32.1 hrs., Rotary Steerable, AutoTrak, MWD, MM, XL45/RS; .27 rpg

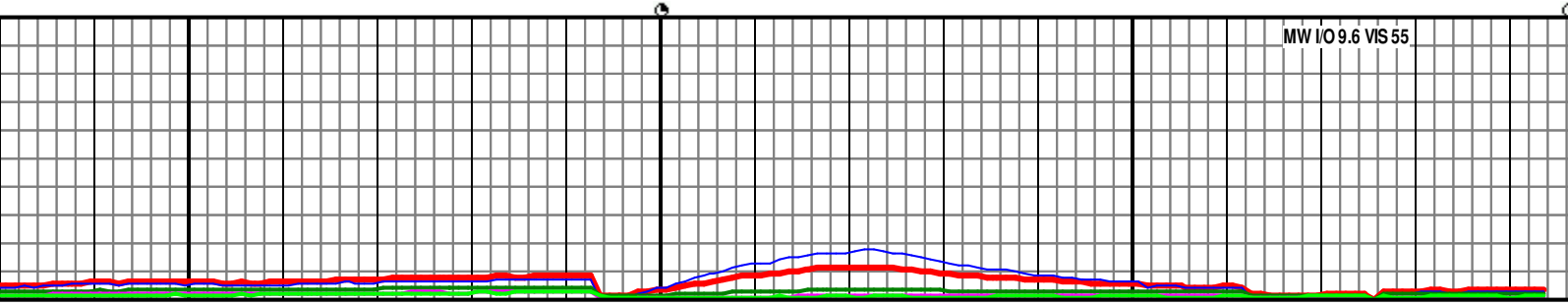
THANK YOU FOR CHOOSING GOOLSBY BROTHERS & ASSOCIATES

Andrew Krueger & Larry Goolsby

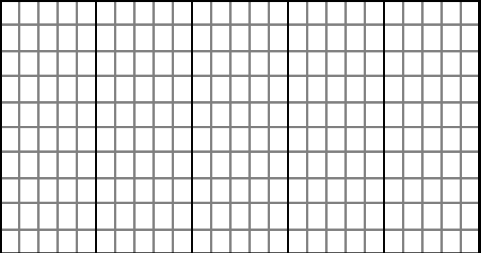
7140

MRLSTN (70%): med drk gry-drk gry, frm-hd, sbwxy-dul rthy lstr, mtt txtr, wdgk ctgs, irrg-sl hcky frctr, brttl tncty, anbd mrco chlk lenses, sppty ini fluor, qck cldy grnsh yel cuts, occ slw strms, brgt grnsh yel res rng, CARB CHLK (30%), tr diss m pyrt

MRLSTN (60%): med drk gry-drk gry, frm-hd, sbwxy-dul rthy lstr, mtt txtr, wdgk ctgs, irrg-sl hcky frctr, brttl tncty, anbd mrco chlk lenses, sppty ini fluor, qck cldy grnsh yel cuts, occ slw strms, brgt grnsh yel res rng, CARB CHLK (40%), tr diss m pyrt







Formation tops picked by Andrew Krueger and Larry Goolsby GBA.				
		MD	TVD	SSD
S Springs		7116'	6926'	-2103'
"A" Chalk		7164'	6958'	-2135'
"A" Chalk Base		7206'	6978'	-2155'
"B" Upper Marl		7553'	7073'	-2250'
"B" Chalk		7690'	7080'	-2257'
Target Heel		7635'	7078'	-2255'
DMTD		14995	7077	-2254'

