

Logs

PULSE MWD GR from 1,836'-14839" MD

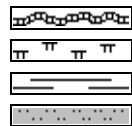
Casing

9 5/8" Surface Casing set @ 1,821' MD
5 1/2" Production Casing set @ 14,844' MD

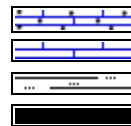
Comments

- 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
- 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

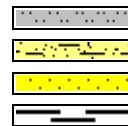
ROCK TYPES



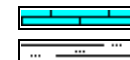
Bent
Mrlst
Shale
Slstst



Carb chalk
Chalk
Slty sh
Coal



Slstst
Arg_ss
Ss
Carb sh



Ls
Slty sh

ACCESSORIES

MINERAL

	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtlit
	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
	Sltstrg
	Ssstrg

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

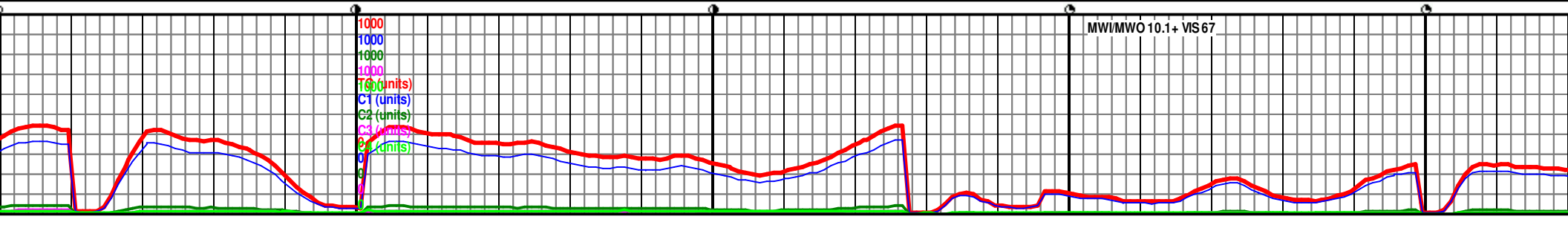
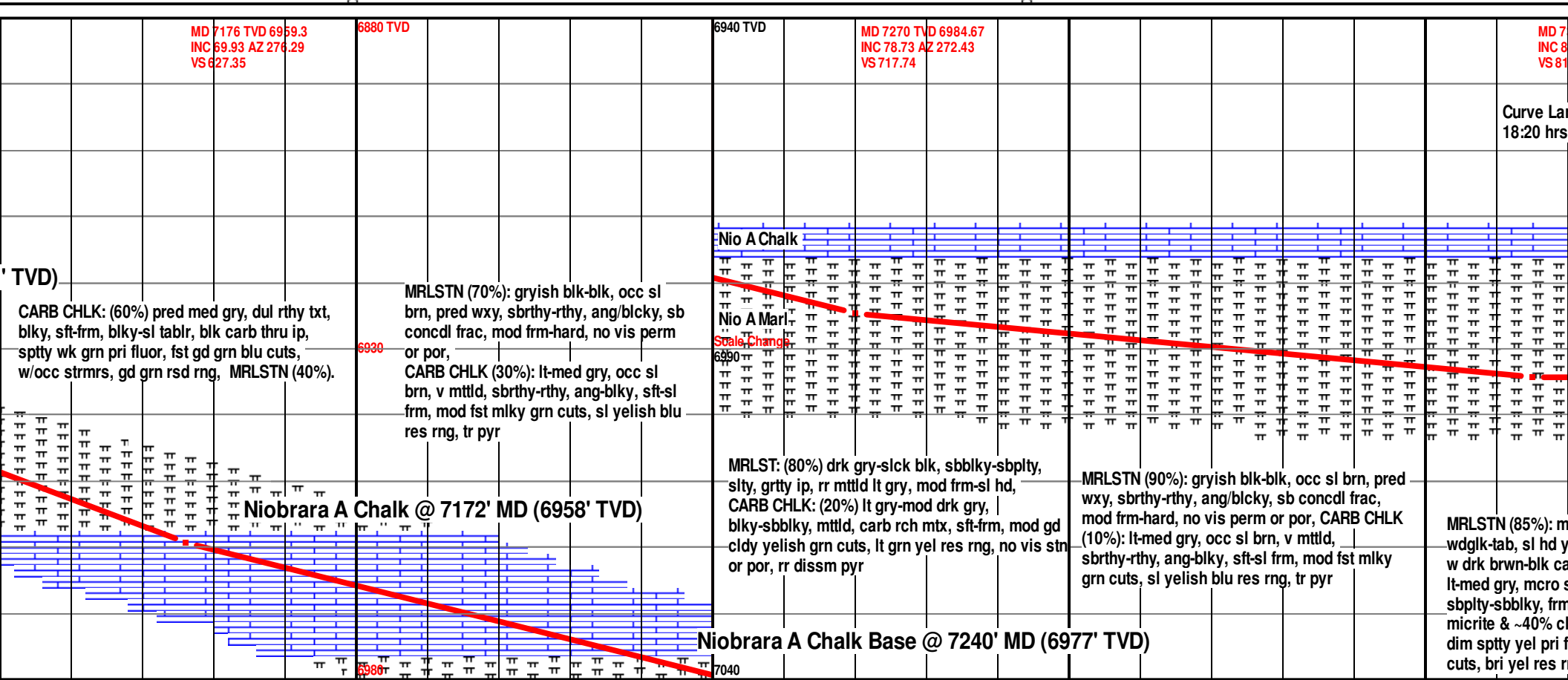
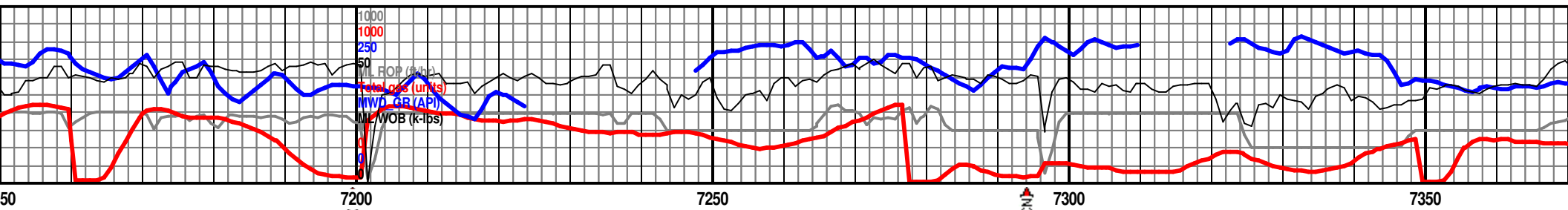
	Even
	Spotted
	Ques
	Dead
	Vspotty
	near even

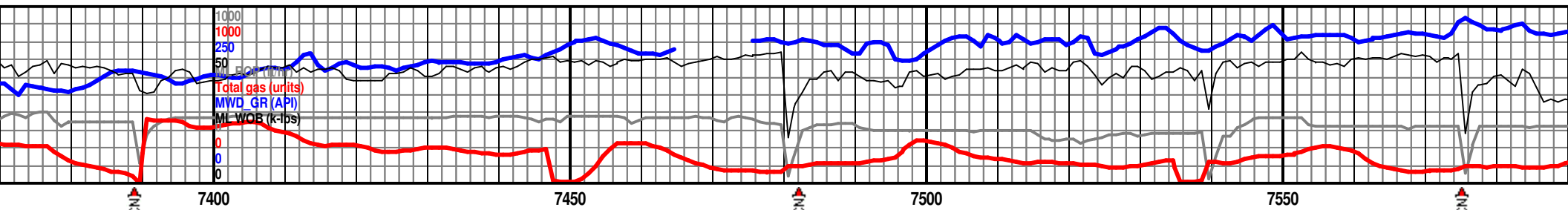
INTERVALS

	Core
	Dst

EVENTS

	Casing shoe_hzl
	Trip_point_1
	Off bottom
	conn
	Survey(mwd)
	Survey(red)
	bit





865 TVD 6994.26
9.66 AZ 270.52
1.97

6940 TVD

MD 7458 TVD 6994.07
INC 90.58 AZ 271.51
VS 904.8

MD 7551 TVD 6993.07
INC 90.65 AZ 271.49
VS 997.67

ended @ 7,389' MD at
on 5/3/18

Start catching 100' samples

Nio A Chalk

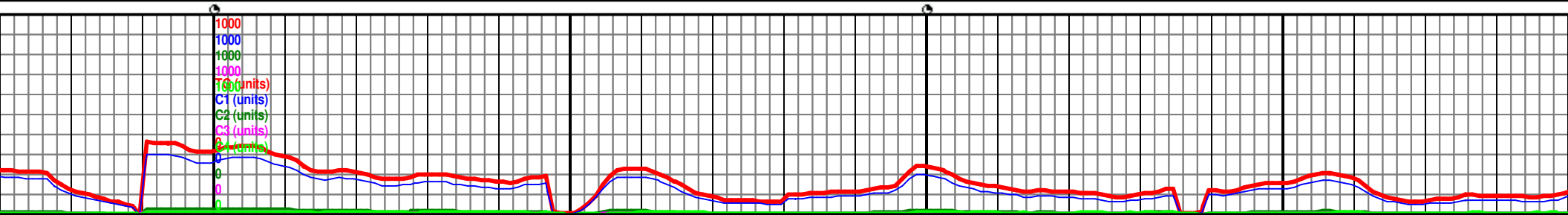
Nio A Marl

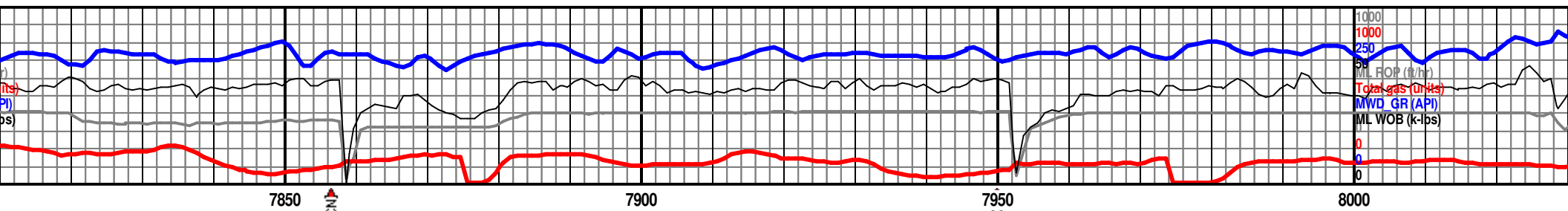
med gryblk, v rthy, sbwxy,
et brtl, micrtc, hghly mntld
rb thru ip, CHLK (15%):
sptd w ltr crm spcks,
a, md sptd mtx, est 60%
y mtx, no vis perm or por,
fluor, mod fst strmg yel
ng

MRLSTN (95%): gryblk-blkish brn,
sbwxy-wxy, rr sbrthy ip, ang/blk,
sbconcdl frac ptn, frm-hd, mict w 20% cly
fld mtx, slw dif yelish grn cuts, wk grn yel
res rng, CARB CHLK (5%): gryblk-blk,
smth, sbwxy-sbrthy, jggd-blky ctnngs,
mod frm-sl hd

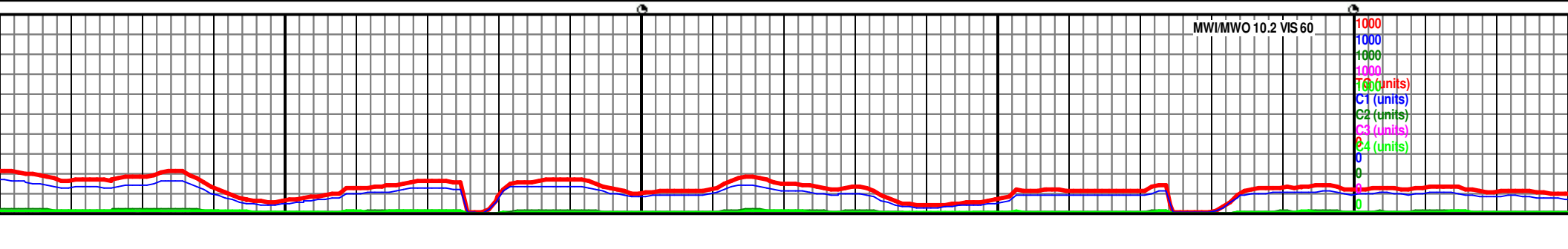
MRLSTN (90%): med drk-drk gry, r
txt, semi wxy ip, jggd-sbblky, frm-
v calc, micritic mud sptd mtx, CAL
CHLK: (10%) lt med gry, dul rthy ls
blk, mod hd-frm, arg w/ ~15% cly
infer chlk por, blk carb thru ip, tr
pyr

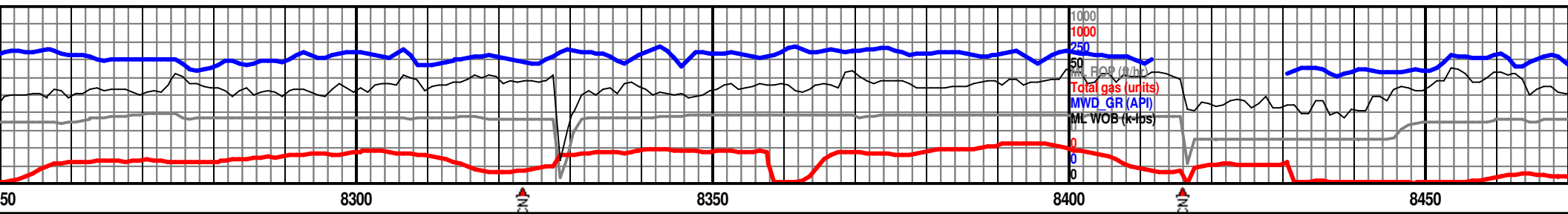
7040





MD 7833 TVD 6989.85 INC 90.62 AZ 268.33 VS 1278.51																				MD 7926 TVD 6988.77 INC 90.71 AZ 268.48 VS 1370.98																				6940 TVD																				MD 8020 TVD INC 90.65 AZ 268.48 VS 1464.46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			





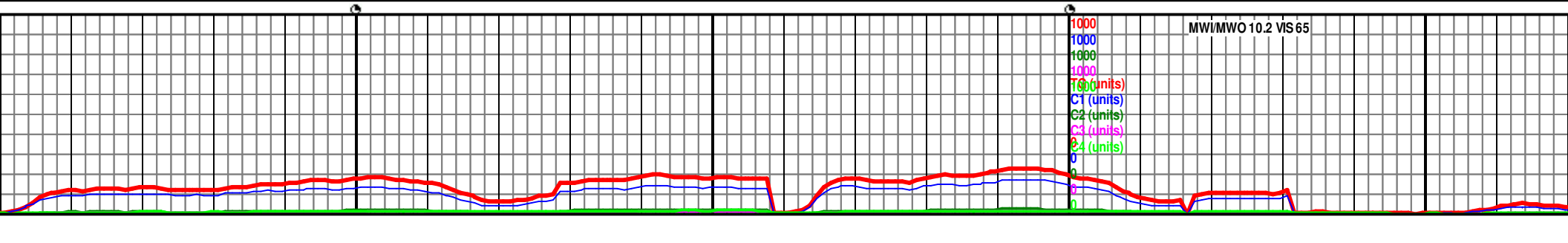
MD 8299 TVD 6984.39
INC 90.65 AZ 268.43
VS 1741.9

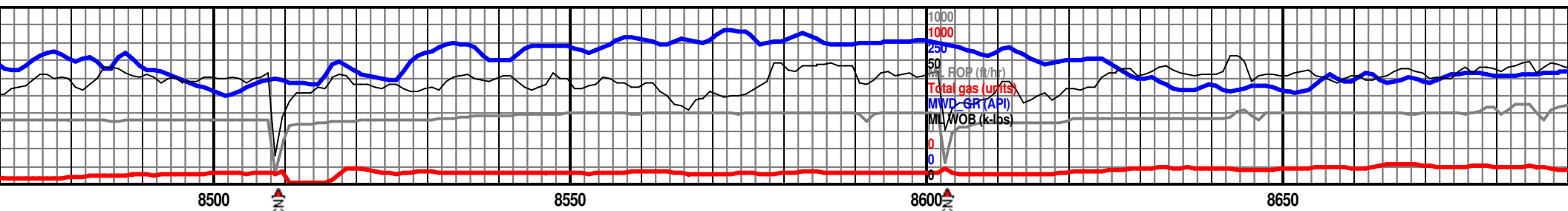
MD 8392 TVD 6983.39
INC 90.54 AZ 269.57
VS 1834.47

On Buster

MRLSTN (95%): med gryblk, v rthy, sbwxy, wdgk-tab, sl hd yet brttl, micrtc, hghly mttld w drk brwn-blk carb thru ip, CHLK (5%): lt-med gry, sbpity-sbbilky, frm, md sptd mtvx, est 60% micrite & ~40% cly mtvx, dim sptty yel pri fluor, mod fst strmgng yel cuts, bri yel res rng									
MRLSTN (95%): med gryblk, v rthy, sbwxy, wdgk-tab, sl hd yet brttl, micrtc, hghly mttld w drk brwn-blk carb thru ip, CHLK (5%): lt-med gry, sbpity-sbbilky, frm, md sptd mtvx, est 60% micrite & ~40% cly mtvx, dim sptty yel pri fluor, mod fst strmgng yel cuts, bri yel res rng									
MRLSTN (95%): sbwxy, wdgk-tab, micrtc, hghly mttld thru ip, CHLK (5%): sbpity-sbbilky, 60% micrite & yel pri fluor, mod fst strmgng yel cuts, bri yel res rng									

7040





MD 8485 TVD 6981.42
INC 88.15 AZ 269.1
VS 1927.08

MD 8579 TVD 6987.7
INC 87.85 AZ 268.13
VS 2020.52

6940 TVD

MD 8674 TVD 6991
INC 87.78 AZ 268.0
VS 2114.86

Nio A Chalk

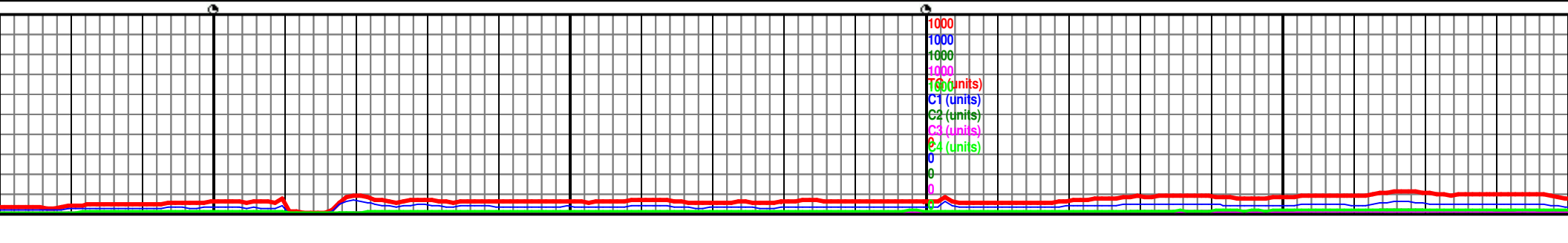
Nio A Marl

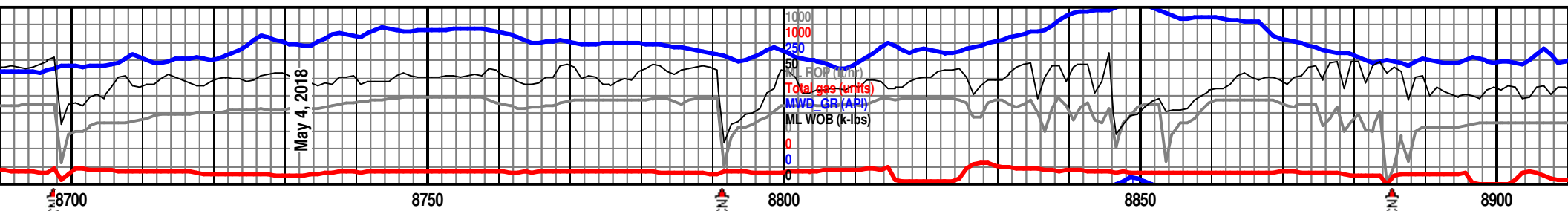
: med gryblk, v rthy,
tab, sl hd yet brtl,
mtld w drk brwn-blk carb
5%): lt-med gry,
frm, md sptd mtz, est
~40% cly mtz, dim sptty
od fst strmg yel cuts,

MRLST: (90%) drk gry-sl blk, sbblky-sbply,
sity, v grtty txt ip, mtld lt gry, mod frm, CARB
CHLK: (10%) lt gry-mod drk gry, blk-sbblky,
mtld, carb rch mtz, sft-frm, cldy w occ
strmg pale yel sl grn cuts, lt grn blu res rng,
no vis stn or por, rr mssv pyr

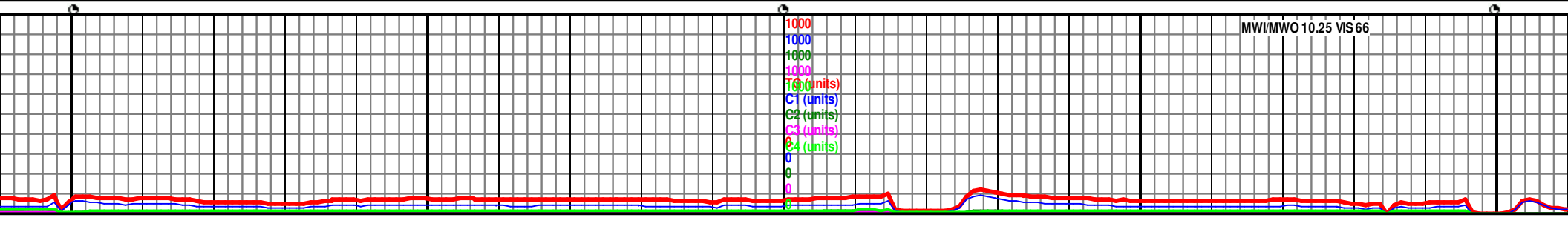
MRLSTN: (90%) drk gry-blk, sbblky-sbply
carb, lmy, calc, slty, frm sft, MRLY CHLK
med drk-drk gry, sbblky occ wdgk/tab
carb & arg, v calc, rthy-chlky, md spttd,
hd, dim v sptty pale grn yel ini fluor, mo
hzy grn blu cuts, bri grnish yel res rng,
dissm pyrt

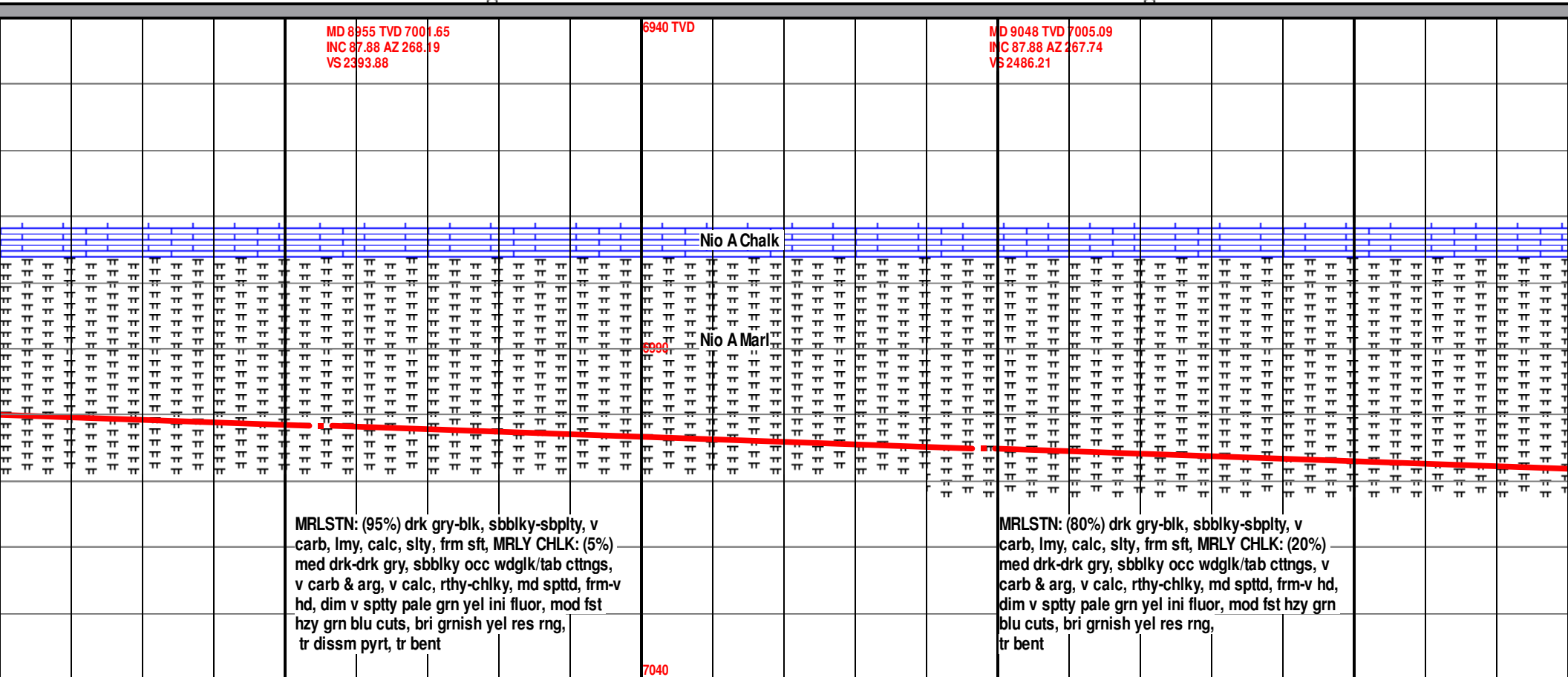
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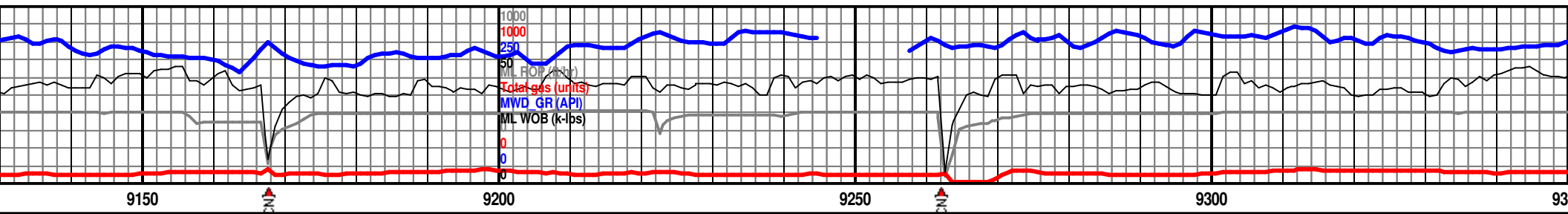




MD 8767 TVD 6994.85 INC 87.88 AZ 247.89 VS 2207.19																								
6940 TVD																								
MD 8861 TVD 6998.25 INC 87.97 AZ 268.11 VS 2300.52																								
MRLSTN: (95%) drk gry, fn smth sbfiss txt, dull rthy lstr, plty splty, frm, incrs v calc w/ est 60% micrite & 40% cly mtx; ARG CHLK: (5%) med gry, chlky txt, sbblky-sbchnky, mod hd, 20% cly mtx, dim v sptty pale grn ini fluor, mod fst strmnng grn blu cuts, bri grnish yel res rng																								
MRLSTN: (95%) drk gry-blk, sbblky-sbplty, v carb, lmy, calc, slty, frm sft, MRLY CHLK: (5%) med drk-drk gry, sbblky occ wdgk/tab cttngs, v carb & arg, v calc, rthy-chlky, md spttd, frm-v hd, dim v sptty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng, tr diss m pyrt																								







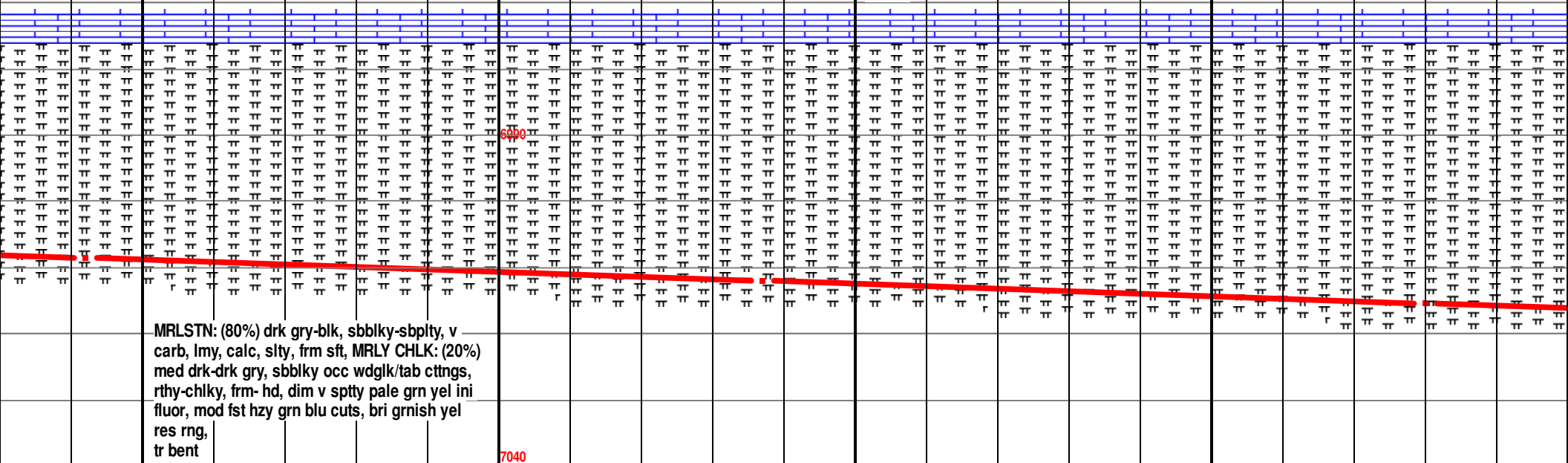
MD 9142 TVD 7008.52
INC 87.94 AZ 267.97
VS 2579.52

6940 TVD

MD 9237 TVD 7011.99
INC 87.88 AZ 268.21
VS 2673.86

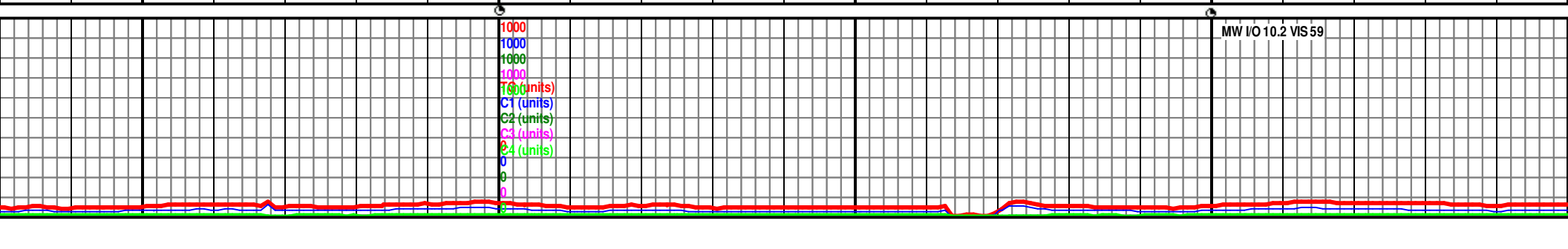
MRLSTN: (80%) drk gry-blk, sbblky-sbplty, v
carb, lmy, calc, slty, frm sft, MRLY CHLK: (20%)
med drk-drk gry, sbblky occ wdgk/tab cttngs,
rthy-chlky, frm- hd, dim v sptty pale grn yel ini
flour, mod fst hzy grn blu cuts, bri grnish yel res
rng,
tr bent

MD 9330 TVD 7015.4
INC 87.91 AZ 268.37
VS 2766.25

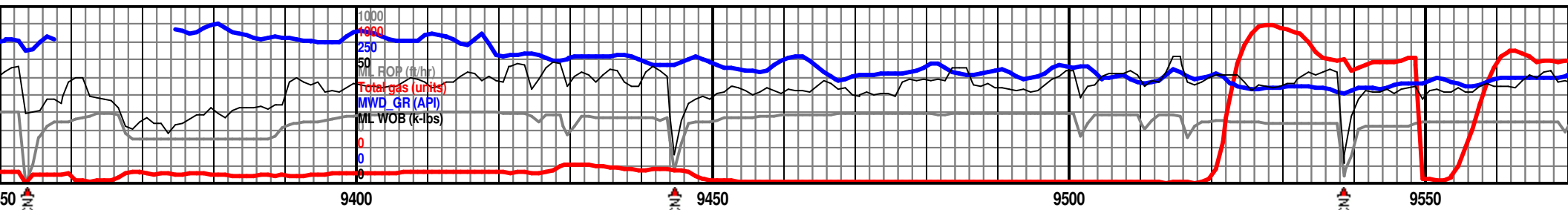


MRLSTN: (80%) drk gry-blk, sbblky-sbplty, v
carb, lmy, calc, slty, frm sft, MRLY CHLK: (20%)
med drk-drk gry, sbblky occ wdgk/tab cttngs,
rthy-chlky, frm- hd, dim v sptty pale grn yel ini
flour, mod fst hzy grn blu cuts, bri grnish yel
res rng,
tr bent

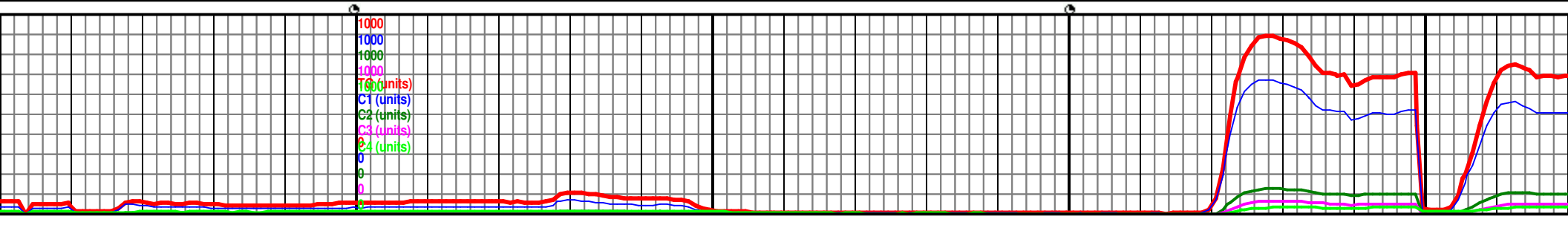
7040

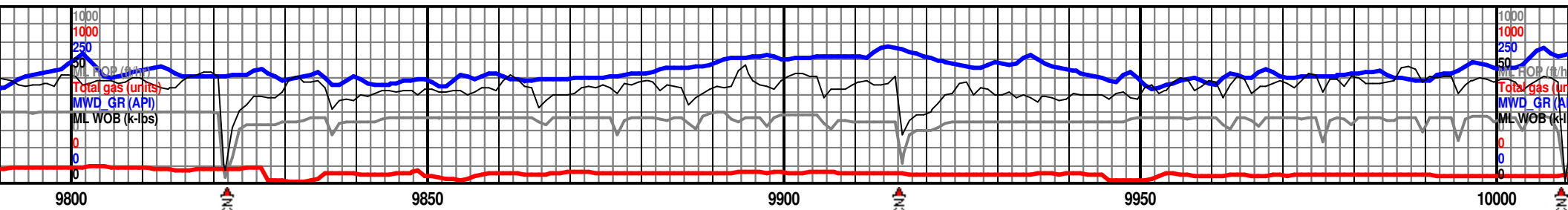





MW I/O 10.2 VIS 59

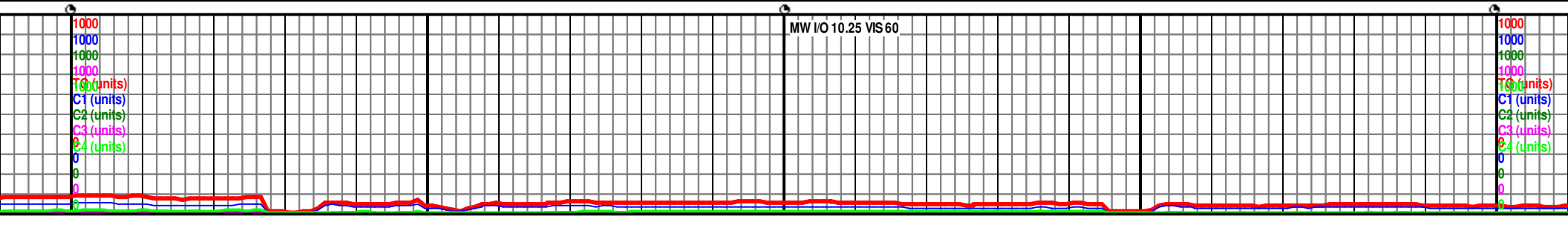


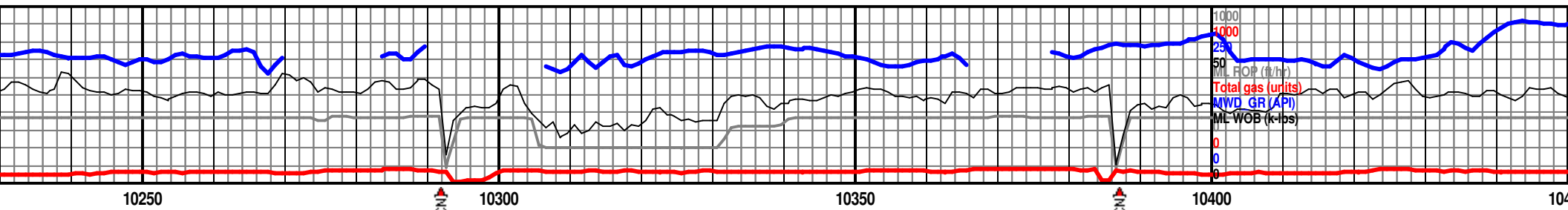
<p>6940 TVD</p> <p>MRLSTN: (90%) drk gry-blk, sbblky-sbplty, v carb, lmy, calc, slty, frm sft, MRLY CHLK: (10%) med drk-drk gry, sbblky occ wdgk/tab ctngs, rthy-chlky, frm- hd, dim v sptty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng, tr bent, tr pryt.</p>	<p>MD 9422 TVD 7018.76 INC 87.91 AZ 268.87 VS 2857.7</p>	<p>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, rthy-chlky, frm- hd, dim v sptty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng, tr bent, tr pryt.</p>	<p>MD 9516 TVD 7022.26 INC 87.82 AZ 269.68 VS 2951.24</p> <p>Nio A Chalk</p>	<p>MRLSTN: (70%) dli - sl shny lstr sb tblr ctgs, irr grdng twrd chlky md - brgt grn bl CHLK(30%), tr p</p>
<p>6990</p>	<p>7040</p>		<p>Nio A Marl</p>	





MD 9796 TVD 7082.36 INC 87.72 AZ 272.09 VS 3230.49																									MD 9890 TVD 7036.1 INC 87.72 AZ 272.18 VS 3324.33																									MD 9988 TVD 7039.7 INC 87.75 AZ 271.69 VS 3417.17																									7000 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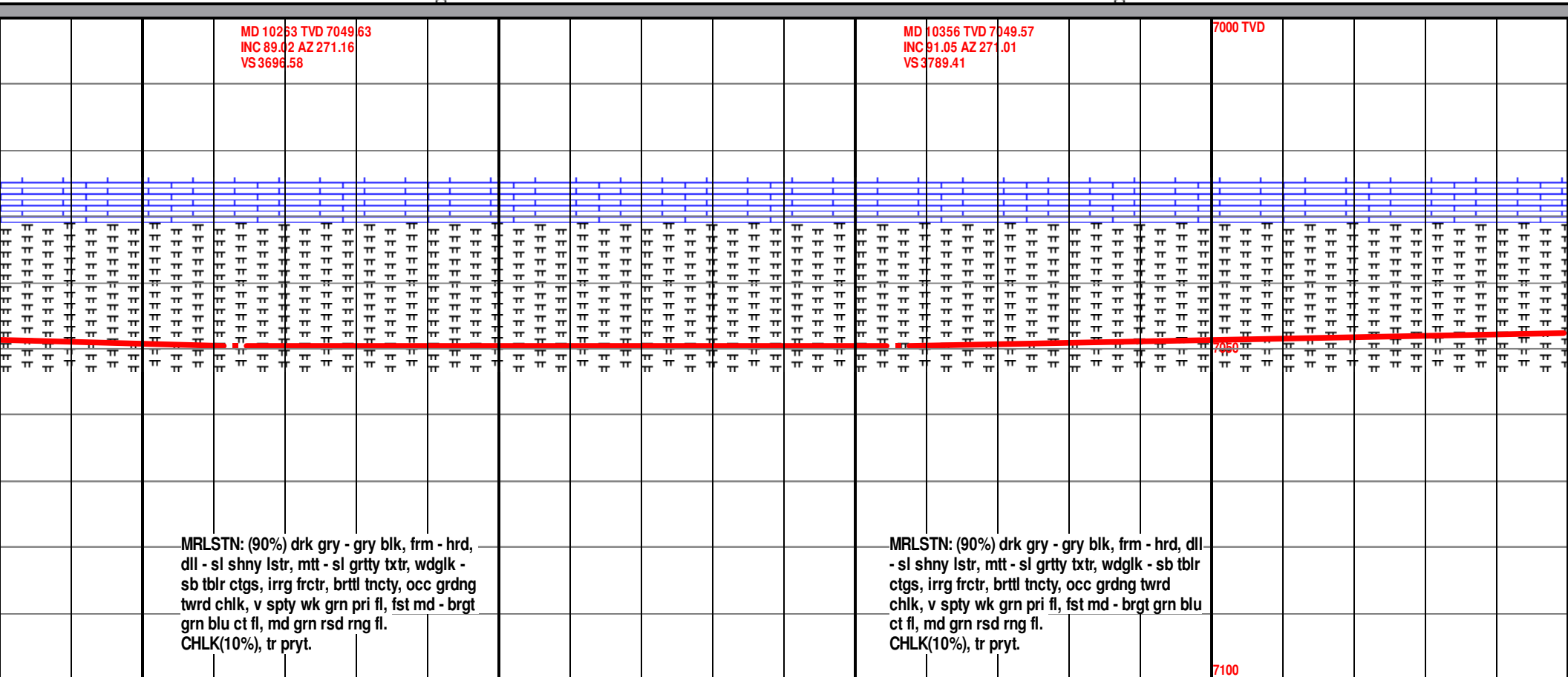




MD 10253 TVD 7049.63
INC 89.02 AZ 271.16
VS 3696.58

MD 10356 TVD 7049.57
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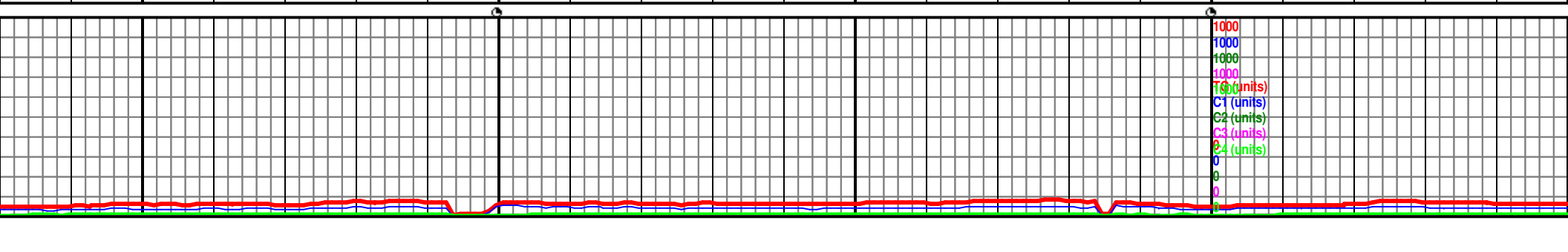
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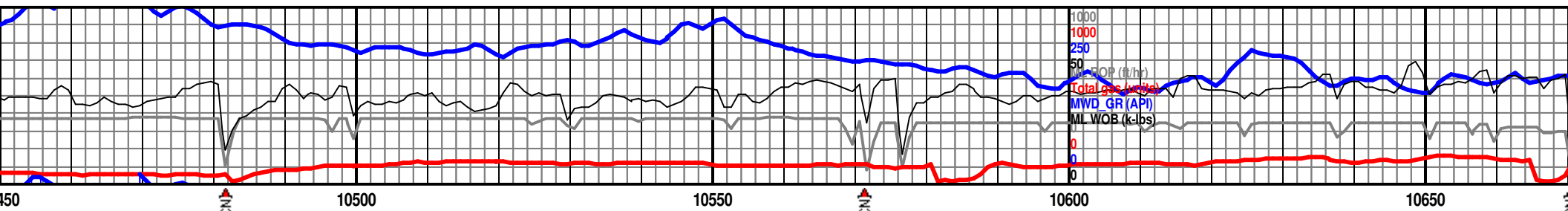


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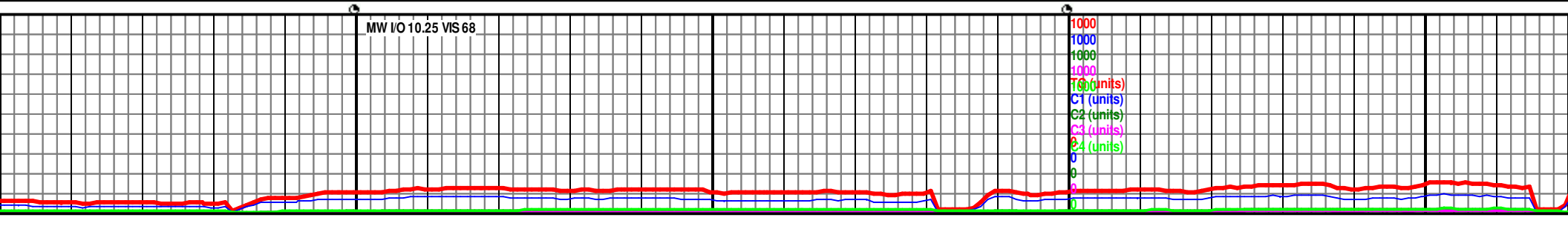
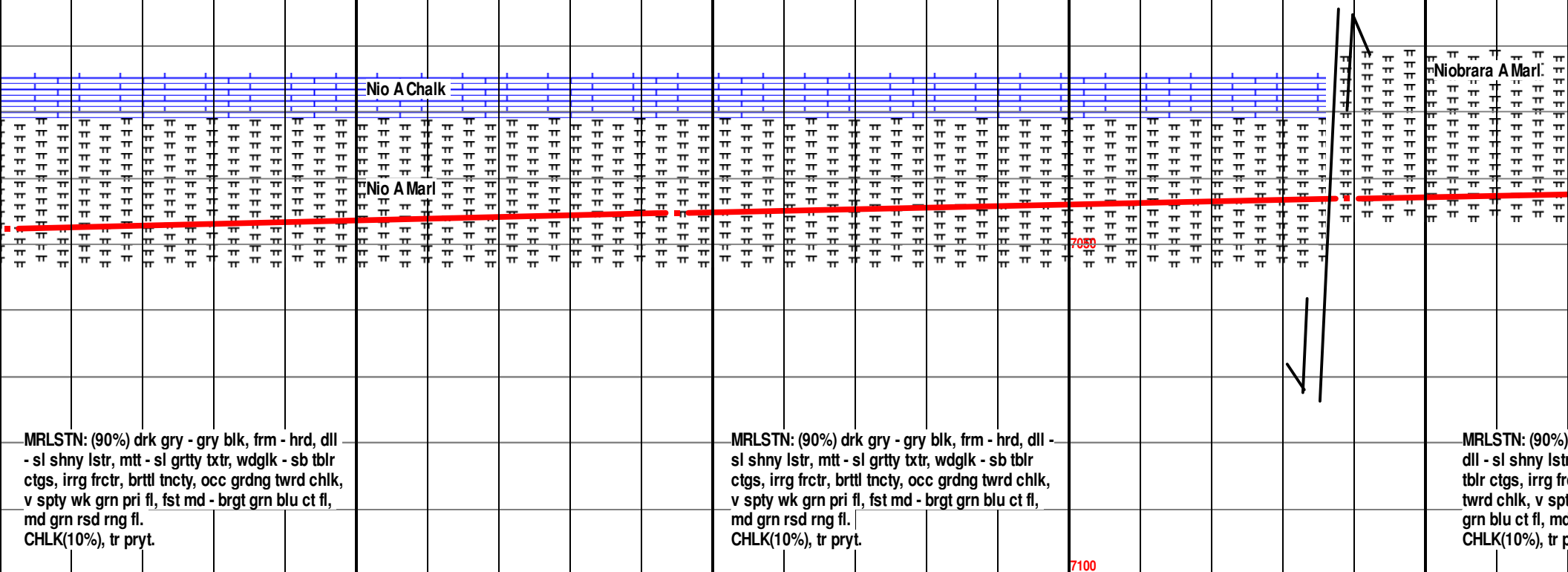
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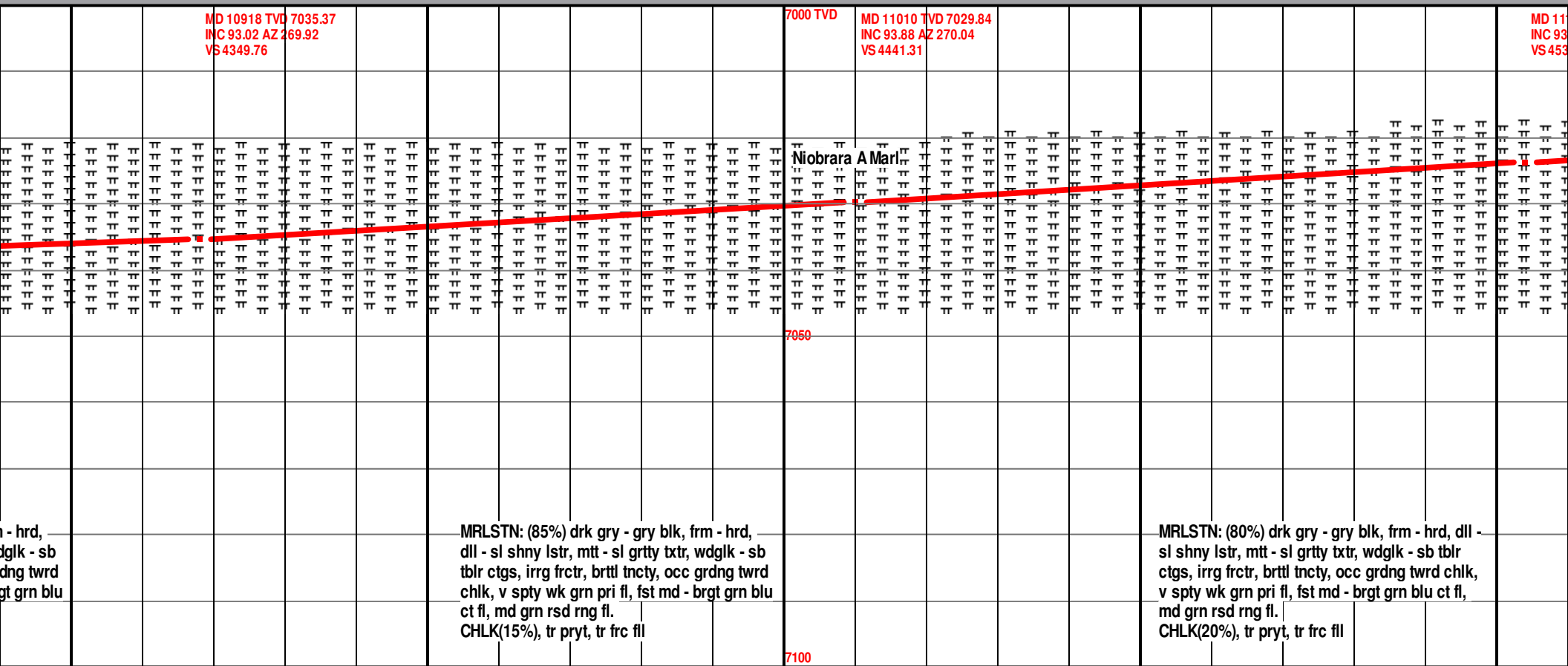
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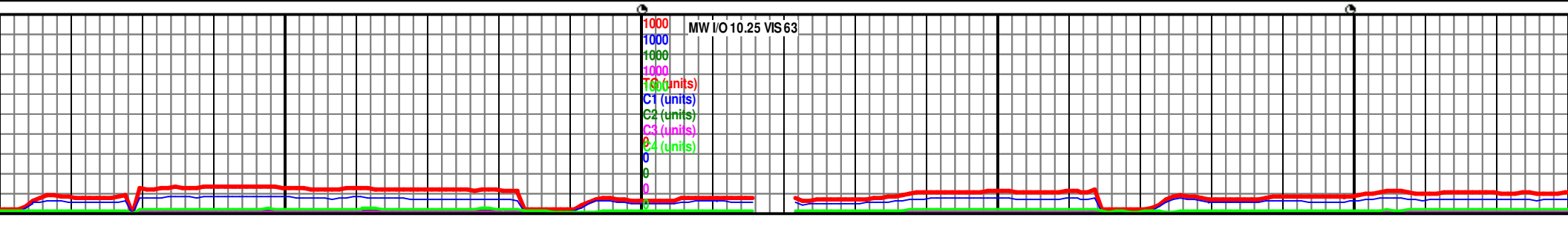
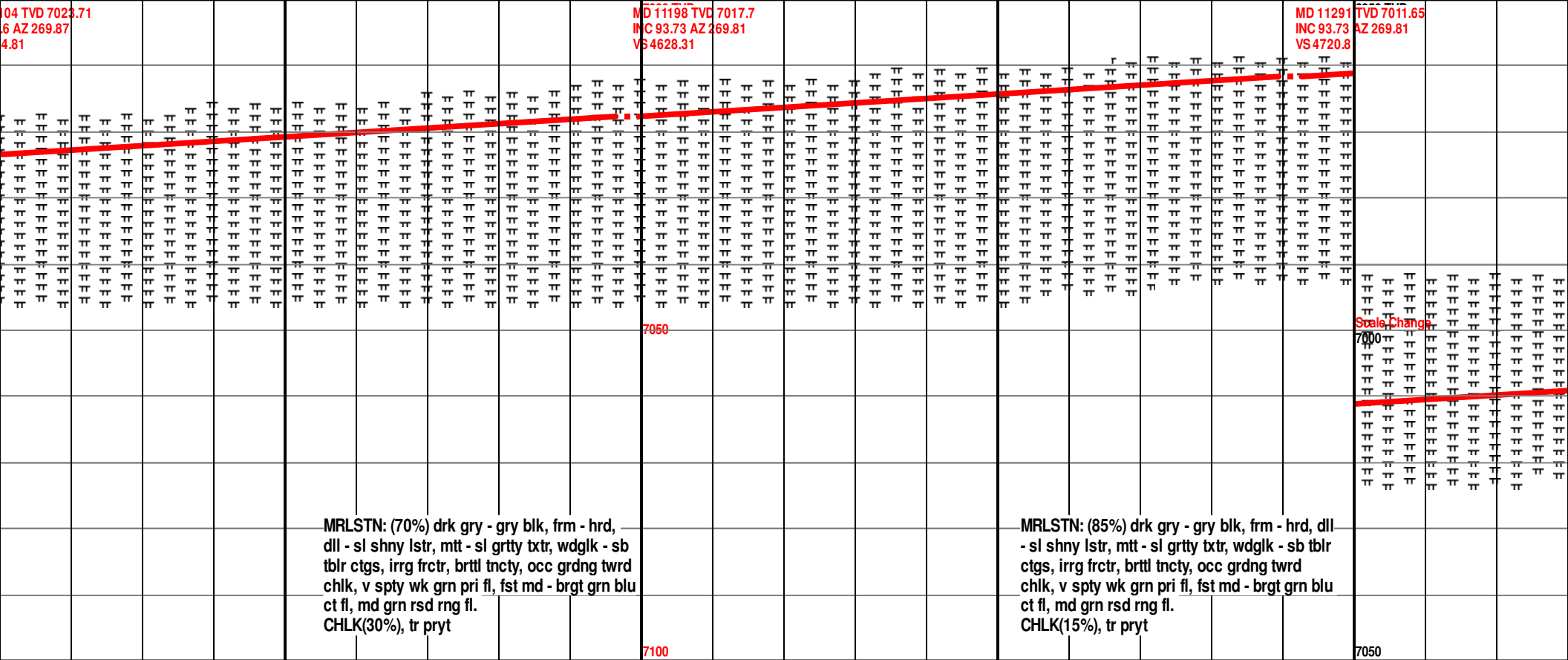
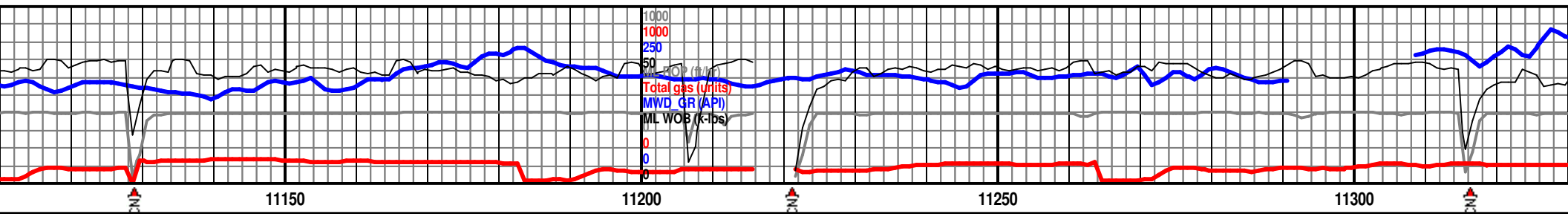


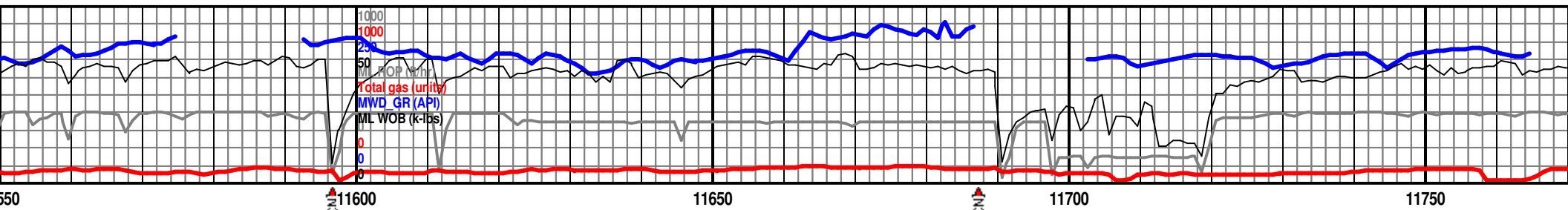


MD 10451 TVD 7047.53 INC 91.42 AZ 270.78 VS 3884.2	MD 10545 TVD 7045.28 INC 91.32 AZ 270.82 VS 3977.95	7000 TVD	MD 10639 TVD 7043.19 INC 91.23 AZ 270.34 VS 4071.67
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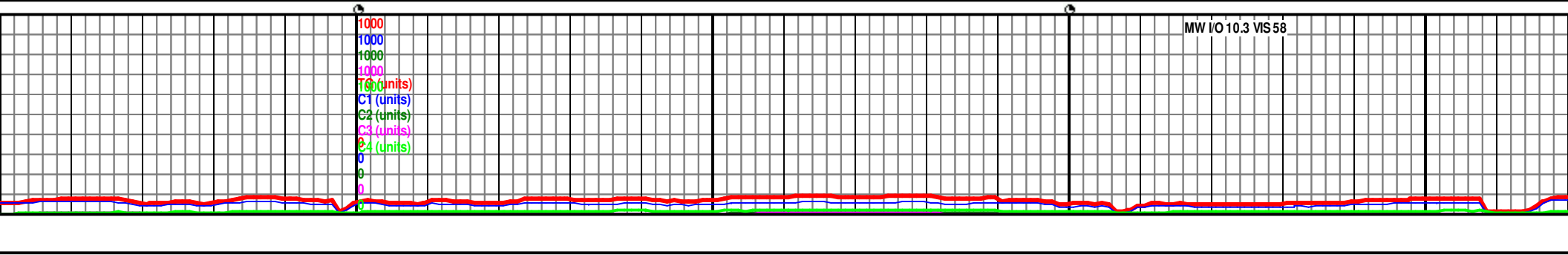


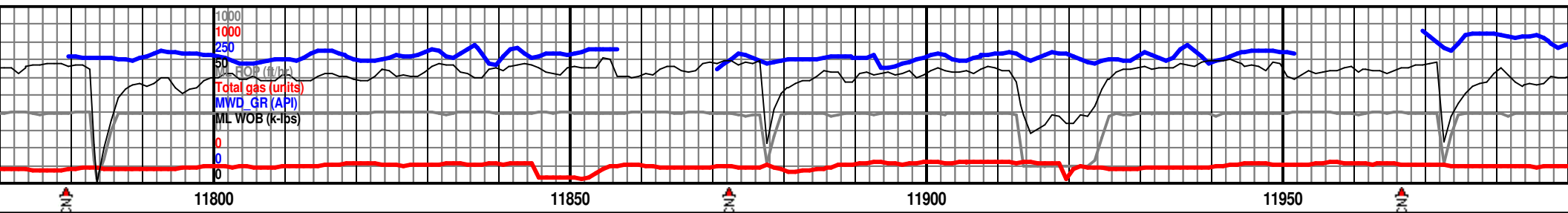






MD 11571 TVD 6993.87 INC 93.57 AZ 269.86 VS 4999.31																														MD 11653 TVD 6988.14 INC 93.57 AZ 270.03 VS 5090.84																														MD 11756 TVD 6988.14 INC 91.2 AZ 269.86 VS 5183.44																													
MRLSTN (70%) drk gry - gry blk, frm - hrd, dll - sl shny lstr, mtt - sl grtty txtr, wdgk - sb tblr ctgs, irrg frctr, brttl tncy, occ grdng twrd chlk, v spty wk grn pri fl, fst md - brgt grn blu ct fl, md grn rsd rng fl. CHLK(30%), tr pryt																														MRLSTN (95%): med gryblk, v rthy, sbwxy, wdgk-tab, sl hd yet brttl, abndt drk brwn-blk carb thru, CARB CHLK (5%): lt-med gry, sbply-sbbly, frm, mud sptd mtx, est 55% micrite & ~45% cly mtx, dim v spty yel pri fluor, mod fst strrng yel cuts, bri yel res rng																														MRLSTN (95%) drk gry, sbwxy, wdgk-tab, sl hd yet brttl, abndt drk brwn-blk carb thru, CARB CHLK (5%): lt-med gry, sbply-sbbly, frm, mud sptd mtx, est 55% micrite & ~45% cly mtx, dim v spty yel pri fluor, mod fst strrng yel cuts, bri yel res rng																													



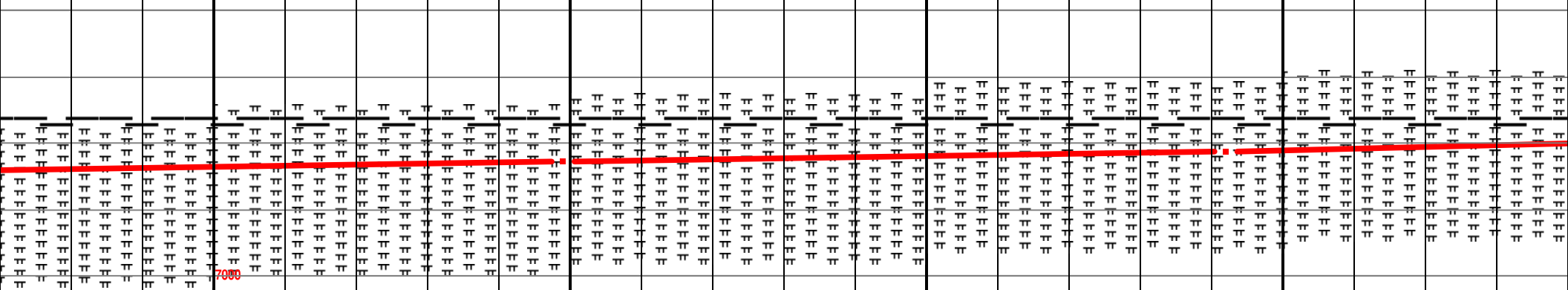


984.27
63

6950 TVD

MD 11849 TVD 6982.75
NC 90.68 AZ 269.44
VS 5276.08

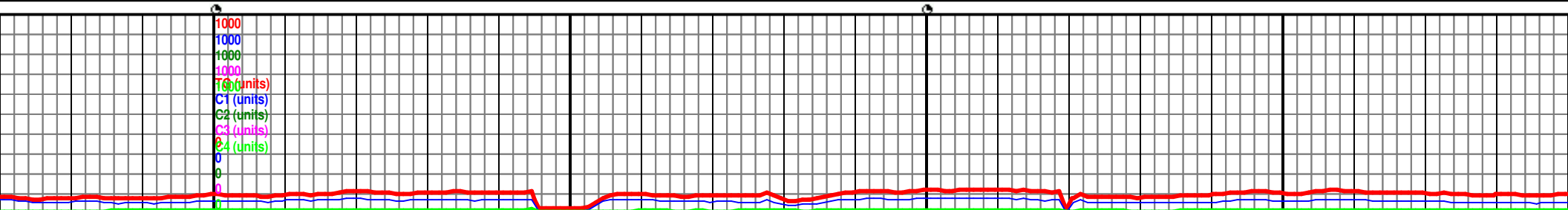
MD 11942 TVD 6981.15
INC 91.24 AZ 268.67
VS 5368.65

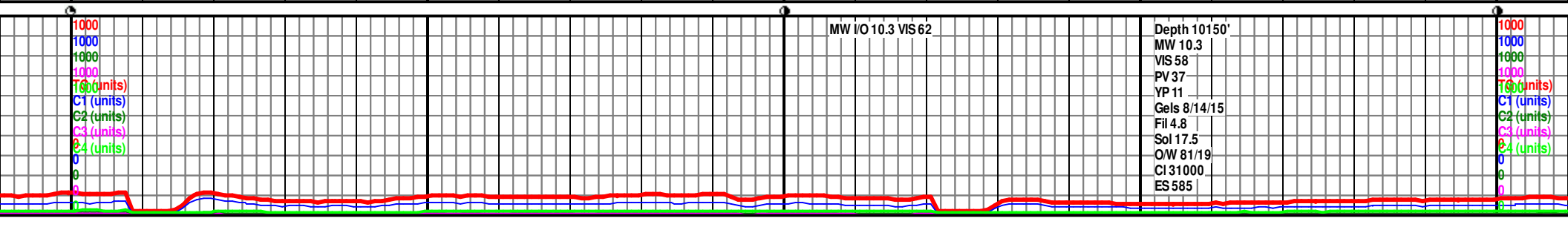
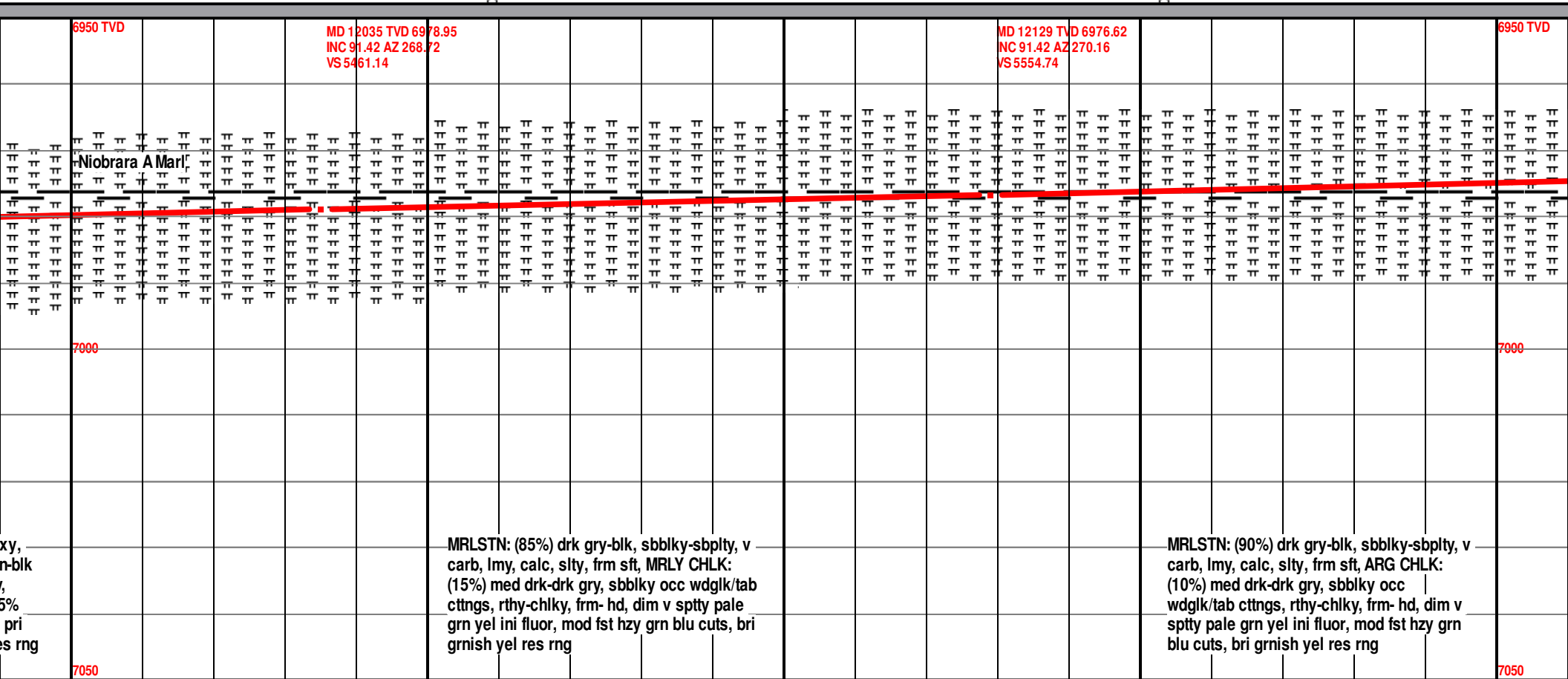
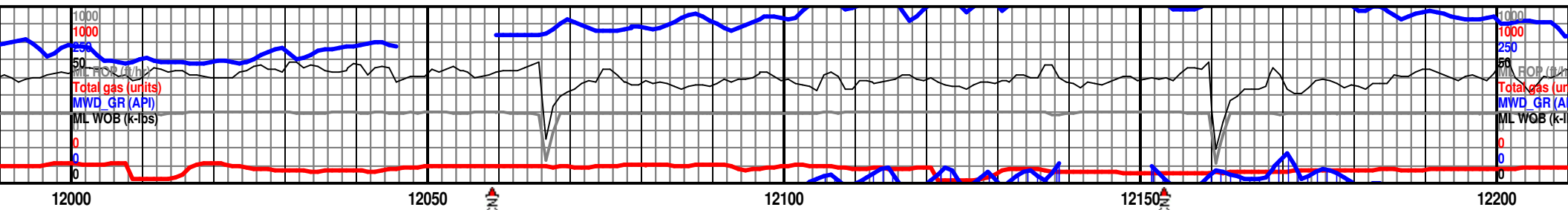


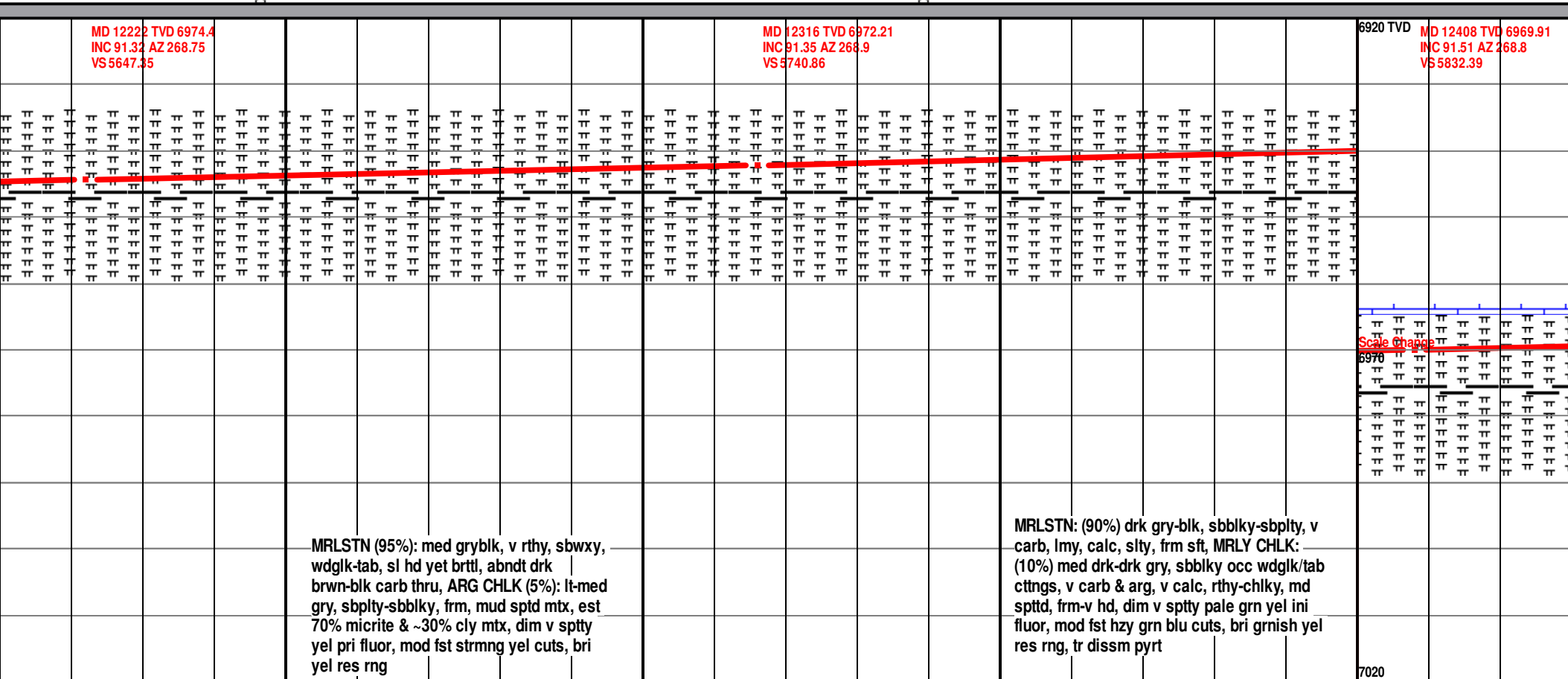
drk gry-blk, sbblky-sbplty, v
ty, frm sft, MRLY CHLK: (5%)
sbblky occ wdgk/tab ctngs,
dim v sppty pale grn yel ini
grn blu cuts, bri grnish yel

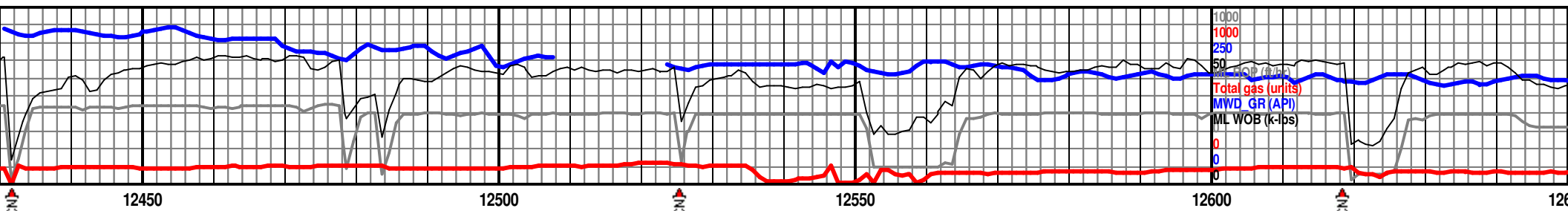
MRLSTN: (95%) drk gry-blk, sbblky-sbplty, v
carb, lmy, calc, slty, frm sft, MRLY CHLK: (5%)
med drk-drk gry, sbblky occ wdgk/tab ctngs, v
carb & arg, v calc, rthy-chlky, md spptd, frm-v
hd, dim v sppty pale grn yel ini fluor, mod fst
hzy grn blu cuts, bri grnish yel res rng, tr dissm
pyrt

MRLSTN (90%): med gryblk, v rthy, sbw
wdgk-tab, sl hd yet brtll, abndt drk brw
carb thru, CARB CHLK (10%): lt-med gry
sbplty-sbblky, frm, mud spptd mtz, est 5
micrite & ~45% cly mtz, dim v sppty yel
fluor, mod fst strmgng yel cuts, bri yel re



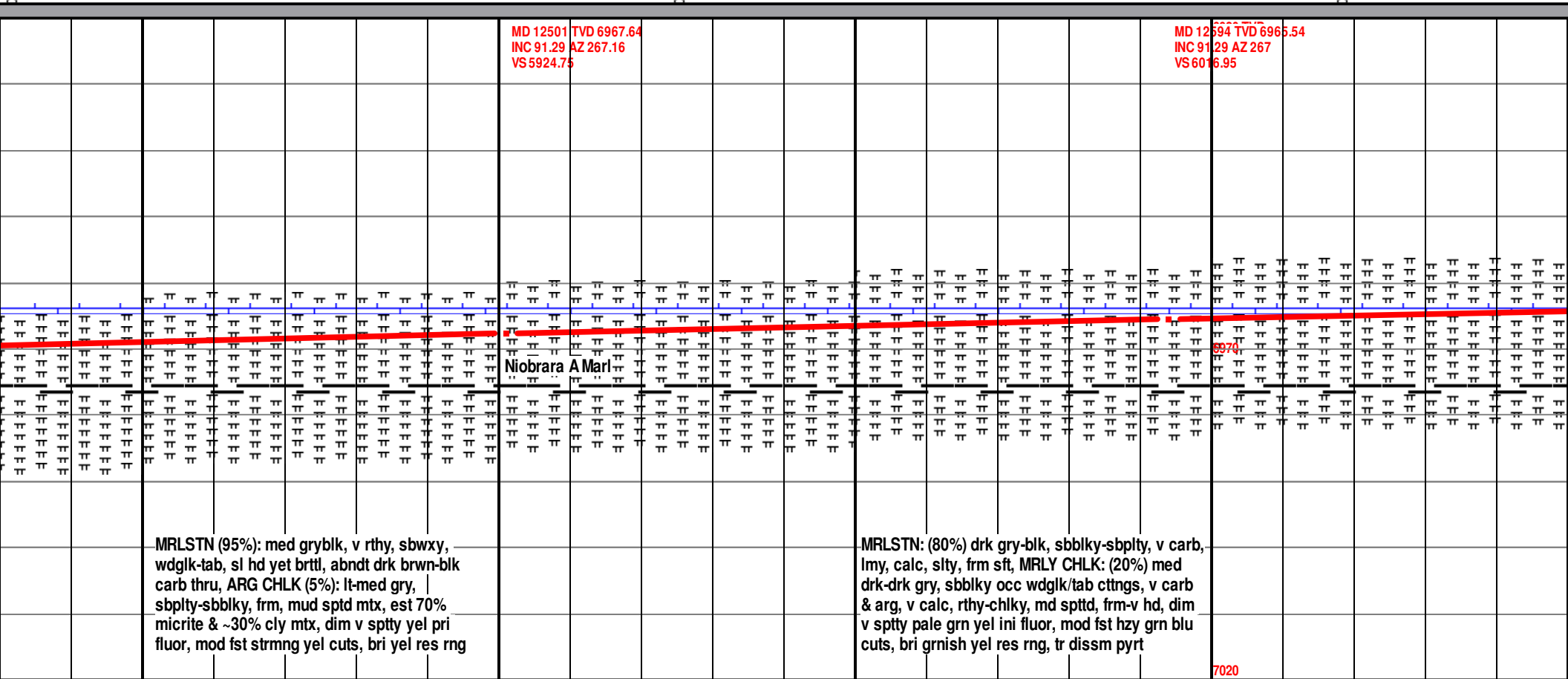






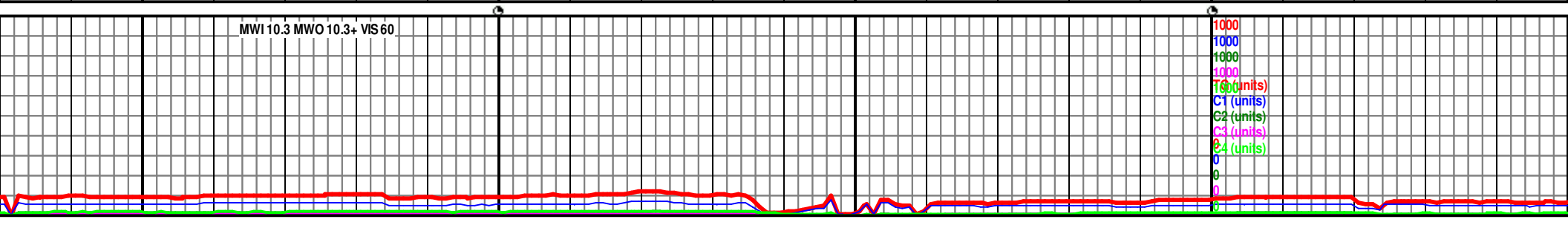
MD 12501 TVD 6967.64
INC 91.29 AZ 267.16
VS 5924.75

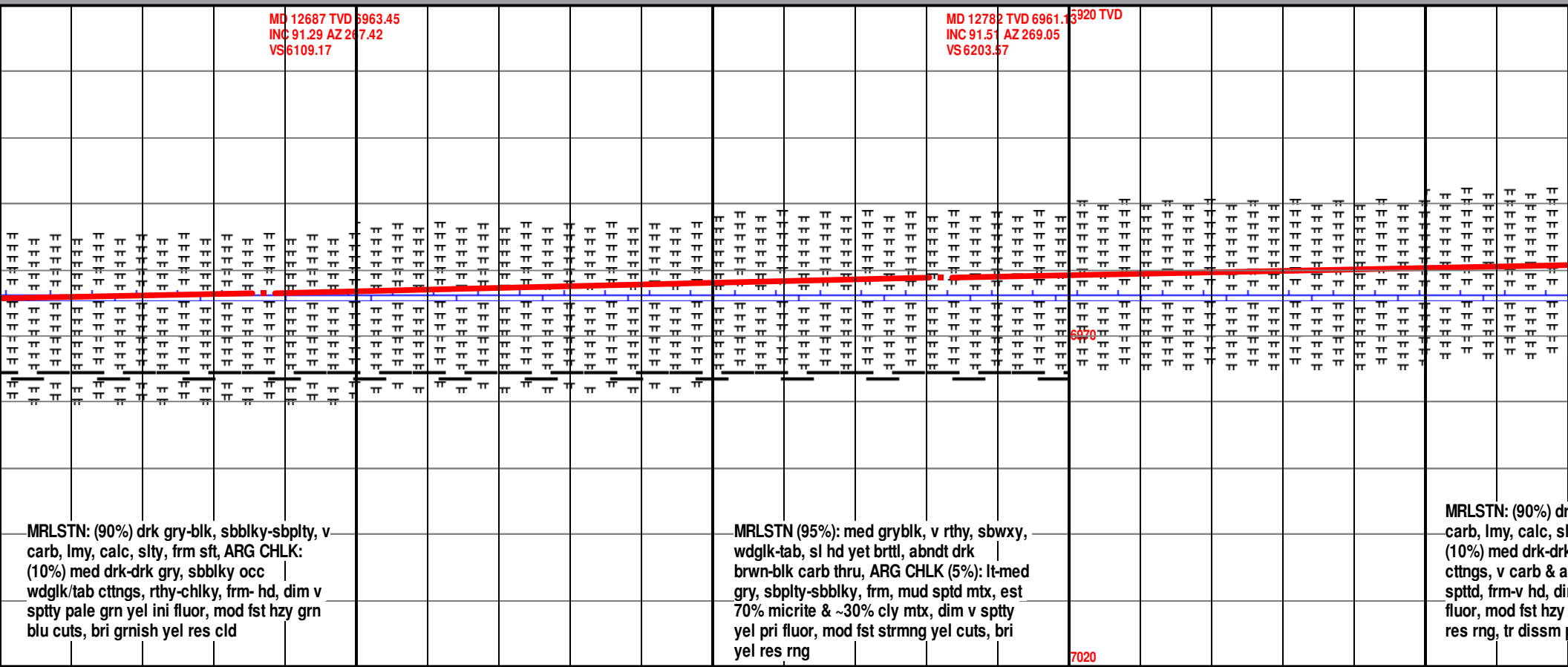
MD 12594 TVD 6965.54
INC 91.29 AZ 267
VS 6016.95

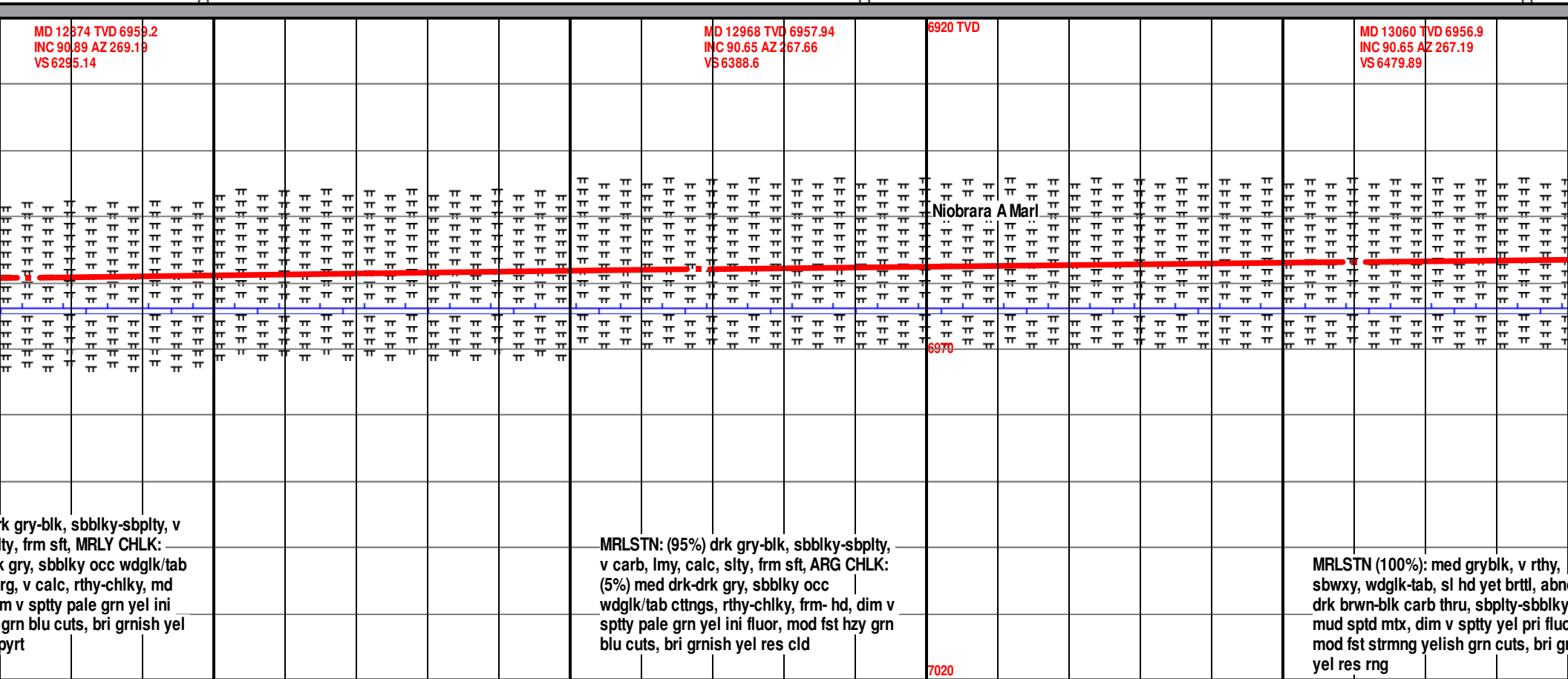


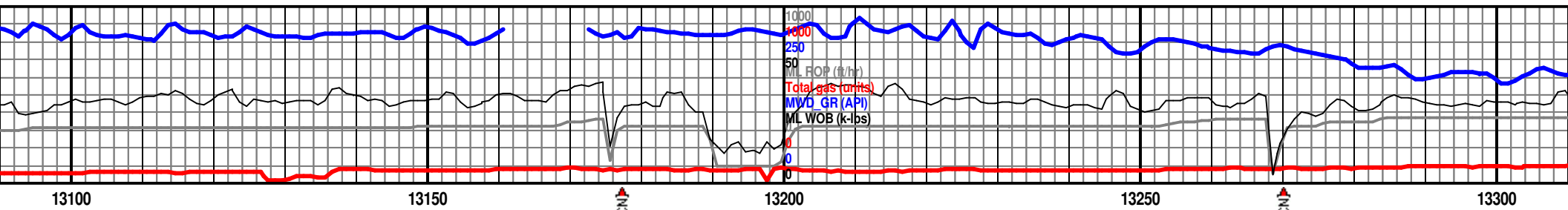
MWI 10.3 MWO 10.3+ VS 60

7020

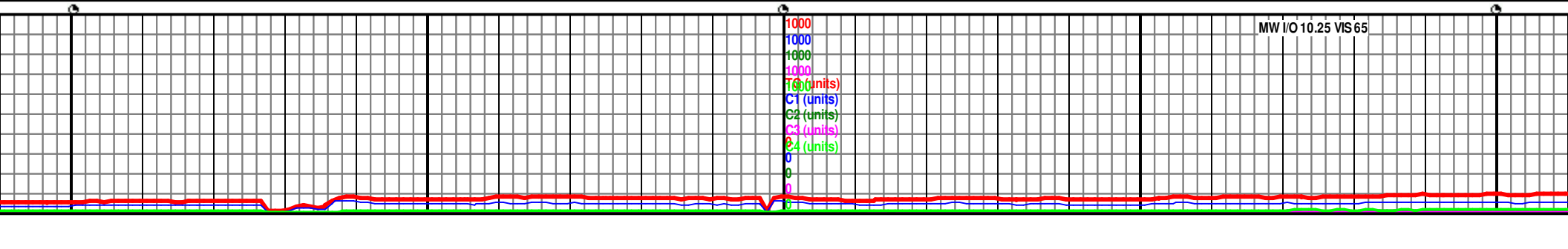




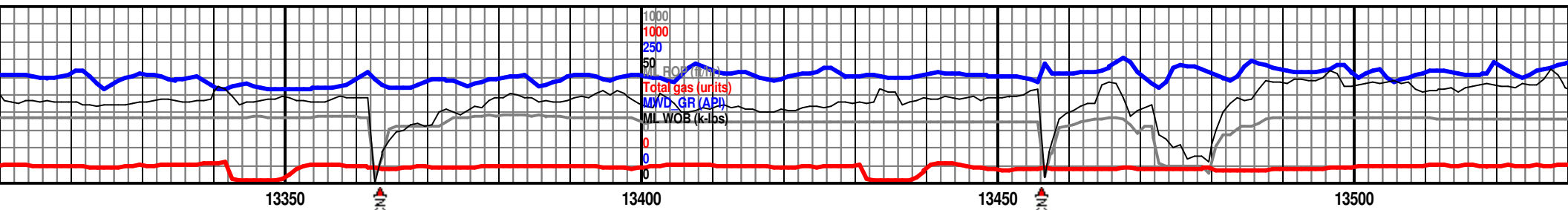




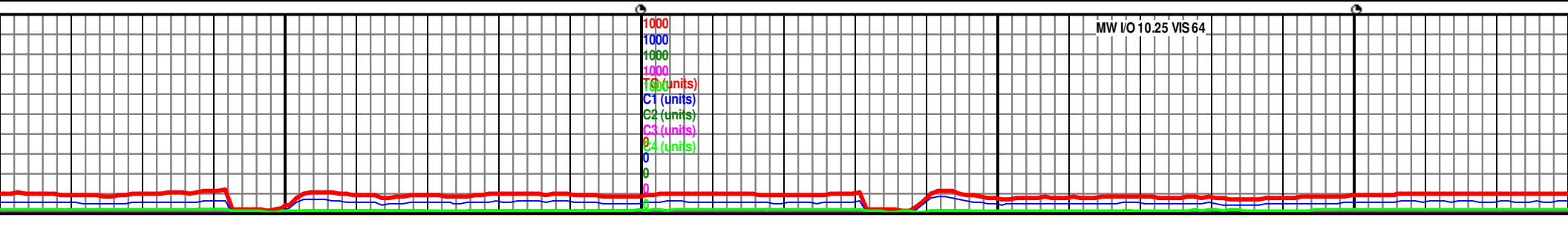
	<p>MD 13153 TVD 6955.84 INC 90.45 AZ 267.2 VS 6572.13</p>	<p>6920 TVD</p>	<p>MD 13246 TVD 6955.52 INC 89.75 AZ 268.03 VS 6664.46</p>
<p>dt c, or, m</p>	<p>MRLSTN (100%): med gryblk, v rthy, sbwxy, wdgk-tab, sl hd yet brtll, abndt drk brwn-blk carb thru, sbply-sbblky, mud sptd mtx, dim v spty yel pri fluor, mod fst strrng yelish grn cuts, bri grn yel res rng</p>	<p>6970</p>	<p>MRLSTN: (85%) drk gry-blk, sbblky-sbply, v carb, lmy, calc, slty, frm sft, MRLY CHLK: (15%) med drk-drk gry, sbblky occ wdgk/tab ctngs, v carb & arg, v calc, rthy-chlky, md sptd, frm-v hd, dim v spty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng, tr dissm pyrt</p>

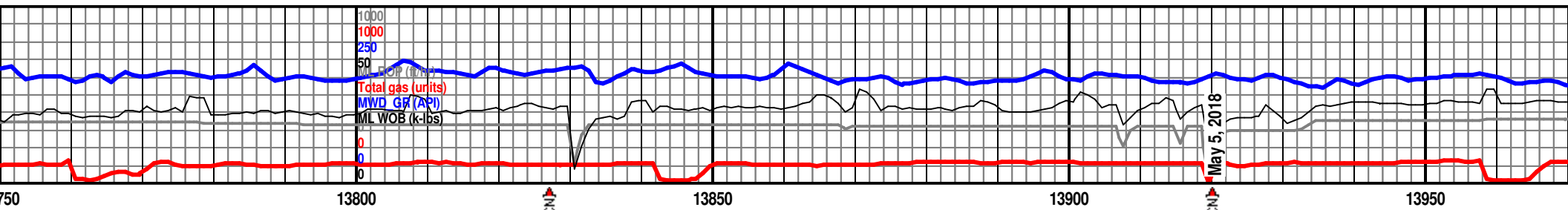


MW I/O 10.25 VIS 65



			MD 13339 TVD 6956.07 INC 89.57 AZ 270.39 VS 6757.05						6920 TVD						MD 13432 TVD 6956.74 INC 89.6 AZ 271.88 VS 6849.88												MD 13432 TVD 6956.74 INC 89.6 AZ 271.88 VS 6849.88						MD 13432 TVD 6956.74 INC 89.6 AZ 271.88 VS 6849.88					

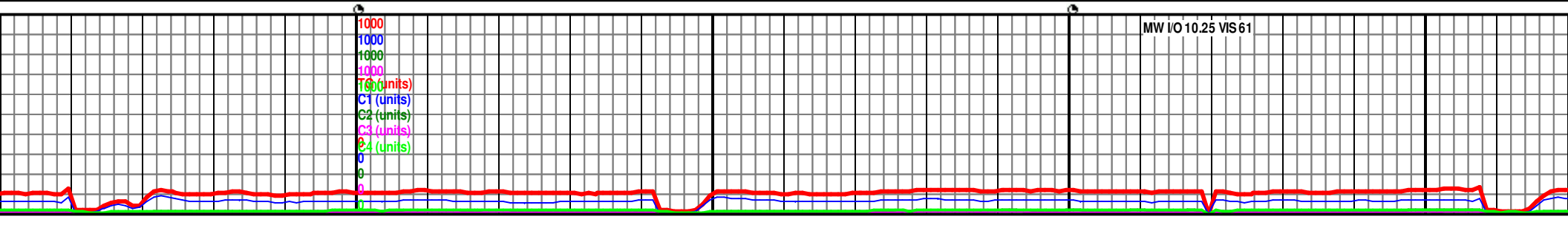


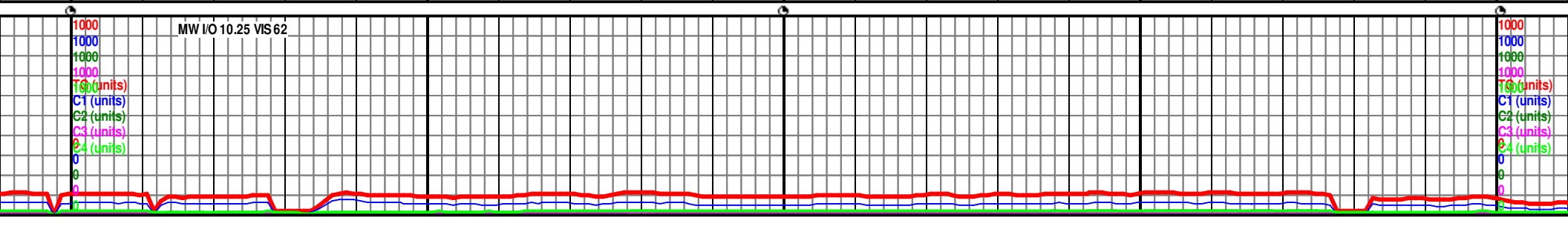
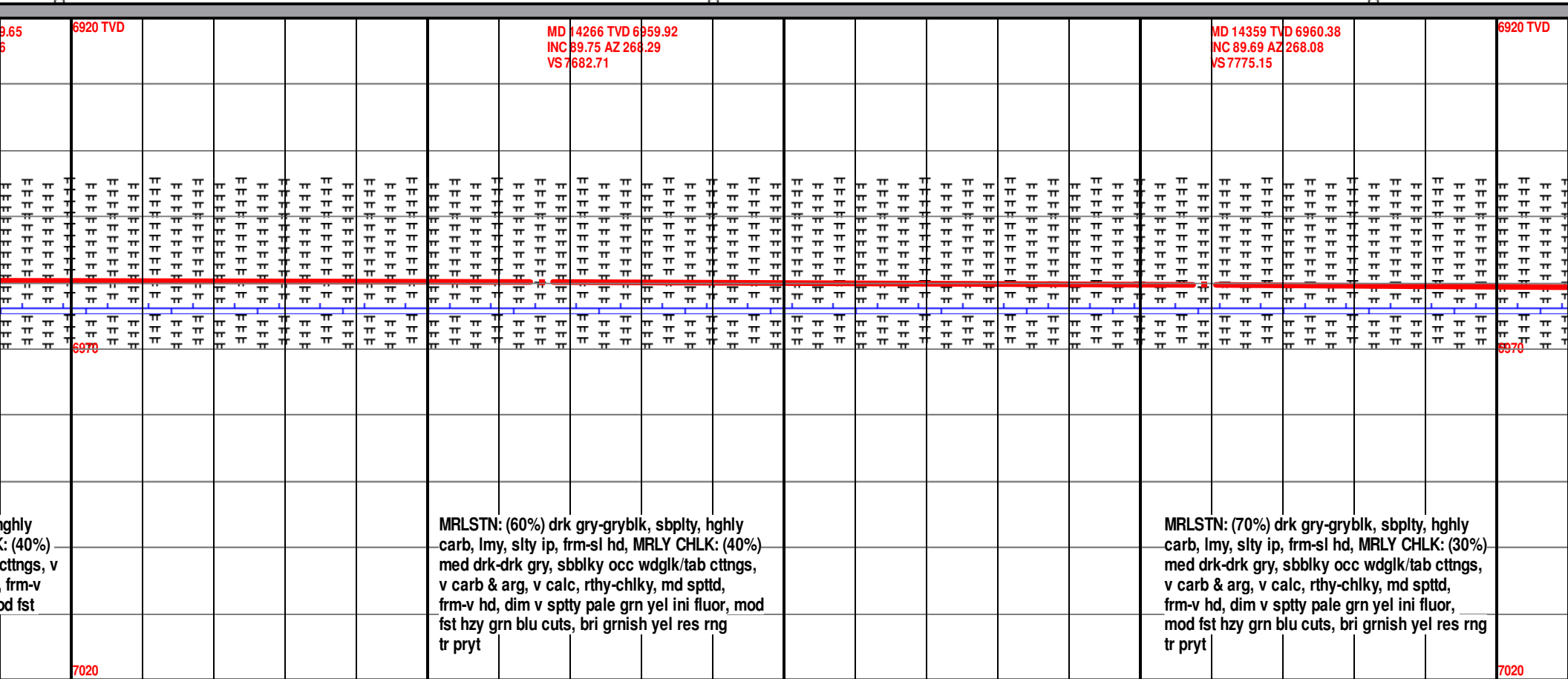
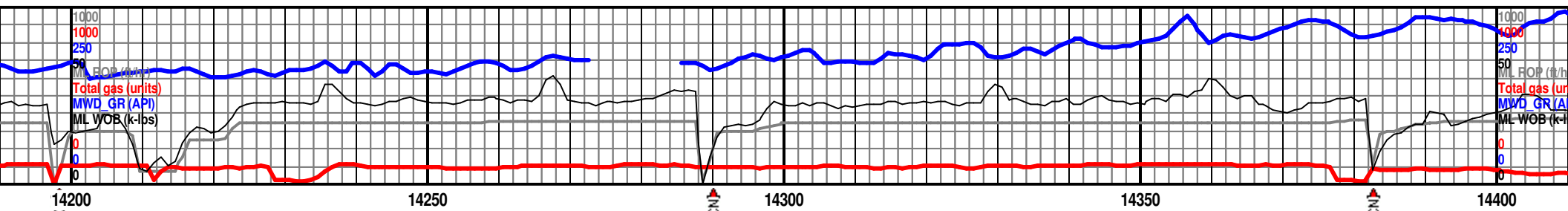


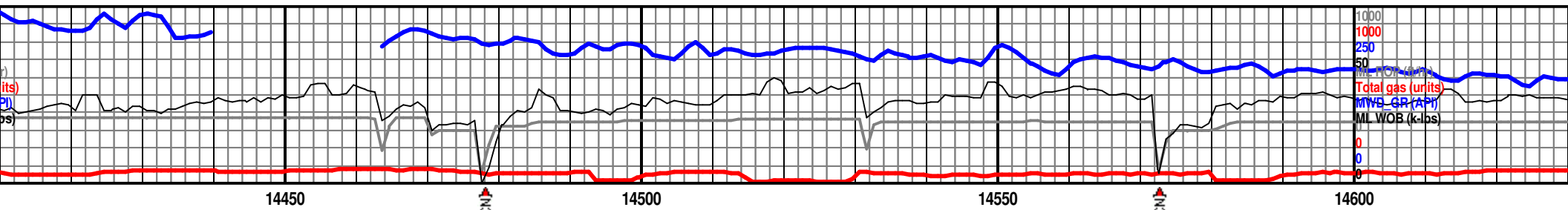
6920 MD 13803 TVD 6958.11
INC 89.75 AZ 274.55
VS 7220.82

MD 13896 TVD 6958.54
INC 89.72 AZ 273.06
VS 7313.81

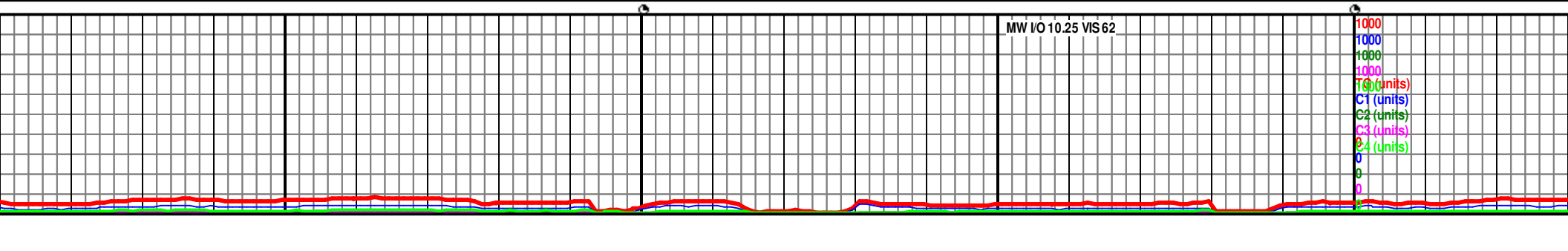
MRLSTN: (95%) drk gry-gryblk, sbply, hghly carb, lmy, slty ip, frm-sl hd, MRLY CHLK: (5%) med drk-drk gry, sbblky occ wdgk/tab ctngs, v carb & arg, v calc, rthy-chlky, md spttd, frm-v hd, dim v sptty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng										MRLSTN: (90%) drk gry-gryblk, sbply, hghly carb, lmy, slty ip, frm-sl hd, MRLY CHLK: (10%) med drk-drk gry, sbblky occ wdgk/tab ctngs, v carb & arg, v calc, rthy-chlky, md spttd, frm-v hd, dim v sptty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng										MRLSTN: (90%) drk gry-gryblk, sbply, hghly carb, lmy, slty ip, frm-sl hd, MRLY CHLK: (10%) med drk-drk gry, sbblky occ wdgk/tab ctngs, v carb & arg, v calc, rthy-chlky, md spttd, frm-v hd, dim v sptty pale grn yel ini fluor, mod fst hzy grn blu cuts, bri grnish yel res rng									
6970																													
7020																													

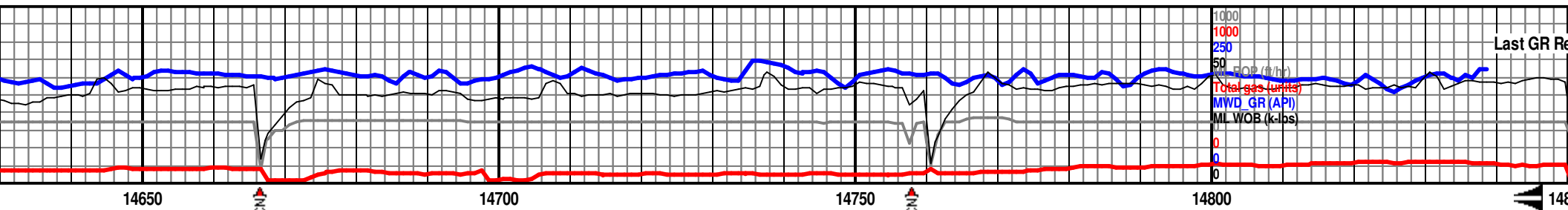




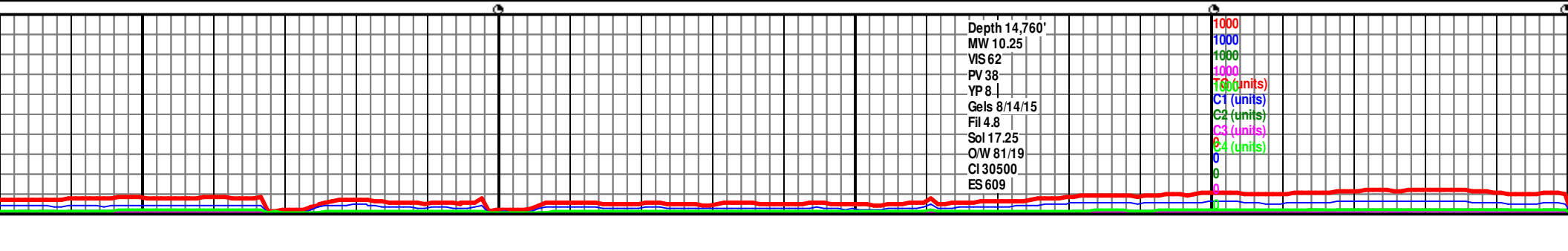


										MD 14454 TVD 6960.92 INC 89.66 AZ 264.02 VS 7869.09																				MD 14548 TVD 6961.34 INC 89.82 AZ 263.65 VS 7961.46																				6920 TVD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							





MD 14641 TVD 6961.74 INC 89.69 AZ 264.47 VS 8052.92										MD 14734 TVD 6962.17 INC 89.78 AZ 266.21 VS 8144.73										6920 TVD										MD 14831 TVD 6962.59 INC 89.72 AZ 267.27 VS 8240.83									



Reading

350

14900

MD 14855 TVD 6962.59
INC 89.72 AZ 267.27
VS 8240.83

BHA #2, 8 1/2", HCC, ATD505T,
#5284134, 5X15, In @ 1836', out @
14,855', drilled 13,019' in 34.8 hrs,
AutoTrak, MWD, MM, XL45/RS; .27 rpg

5 1/2' Production Casing set at 14,844' MD

Reached DMTD of 14,855' MD @ 05:05 hrs on
05/05/2018

PTB

2 man wellsite geologist released from location on
May 5, 2018 @ 07:20 hrs.

Formation tops picked by Andrew Krueger and
Larry Goolsby(GBA).

	MD	TVD	SSD
Sharon Springs	7083'	6921'	-2099'
"A" Chalk	7172'	6958'	-2136'
"A" Chalk Base	7240'	6977'	-2155'
Target Heel	7389'	6994'	-2172'
TOTAL DEPTH	14855	6962'	-2140'

Thank you for choosing Goolsby Brothers and
Associates, Inc.