

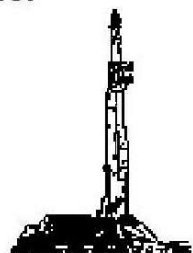
GOOLSBY BROTHERS
and associates, inc.

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



Geological Wellsite
Supervision

www.goolsbybrothers.com



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

Well Name: Sanford 31N-30B-M
API: 051234992900
Location: Section 29, T5N, R66W, Weld County, CO.
License Number:
Spud Date: May 13, 2019
Surface Coordinates: NENW T5N, R66W Sec 29, 771' FNL & 2393' FWL
LAT 40.375638 LONG -104.804372
Bottom Hole Coordinates: NWNW T5N, R66W Sec 30, 1444' FNL & 50' FWL (EST)
Ground Elevation (ft): 4,904'
Logged Interval (ft): 7,050' To: 15,465'
Formation: Pierre Shales/Sands, Sharon Springs, Niobrara B Chalk (Target)
Type of Drilling Fluid: FW Surface, OBM Curve & Lateral

Region: Wattenberg
Drilling Completed: May 16, 2019

K.B. Elevation (ft): 4,924'
Total Depth (ft): 15,465' DMTD

Printed by HorizontalLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

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

GEOLOGIST

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

Logs

PULSE MWD GR from 1,831' - 15,451' MD

Casing

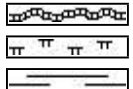
9 5/8" Surface Casing set @ 1,811' MD

5 1/2" Production Casing set @ 15,445' MD

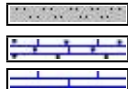
Comments

- 1) Drilling Contractor: Precision Drilling, Rig #462
Toolpusher: Cody Teeter, Joseph Credeur
- 2) Company Man: Calab Ford, 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, Hunter Mendel
- 5) Gas Equipment: Pason Gas Analyzer (Spectrometer)
- 6) SRC Geologist: Tony Williams

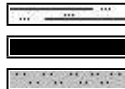
ROCK TYPES



Bent
Mrlst
Shale



Slst
Carb chalk
Chalk



Slty sh
Coal
Slst



Arg_ss
Ss
Carb sh



Ls
Slty 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

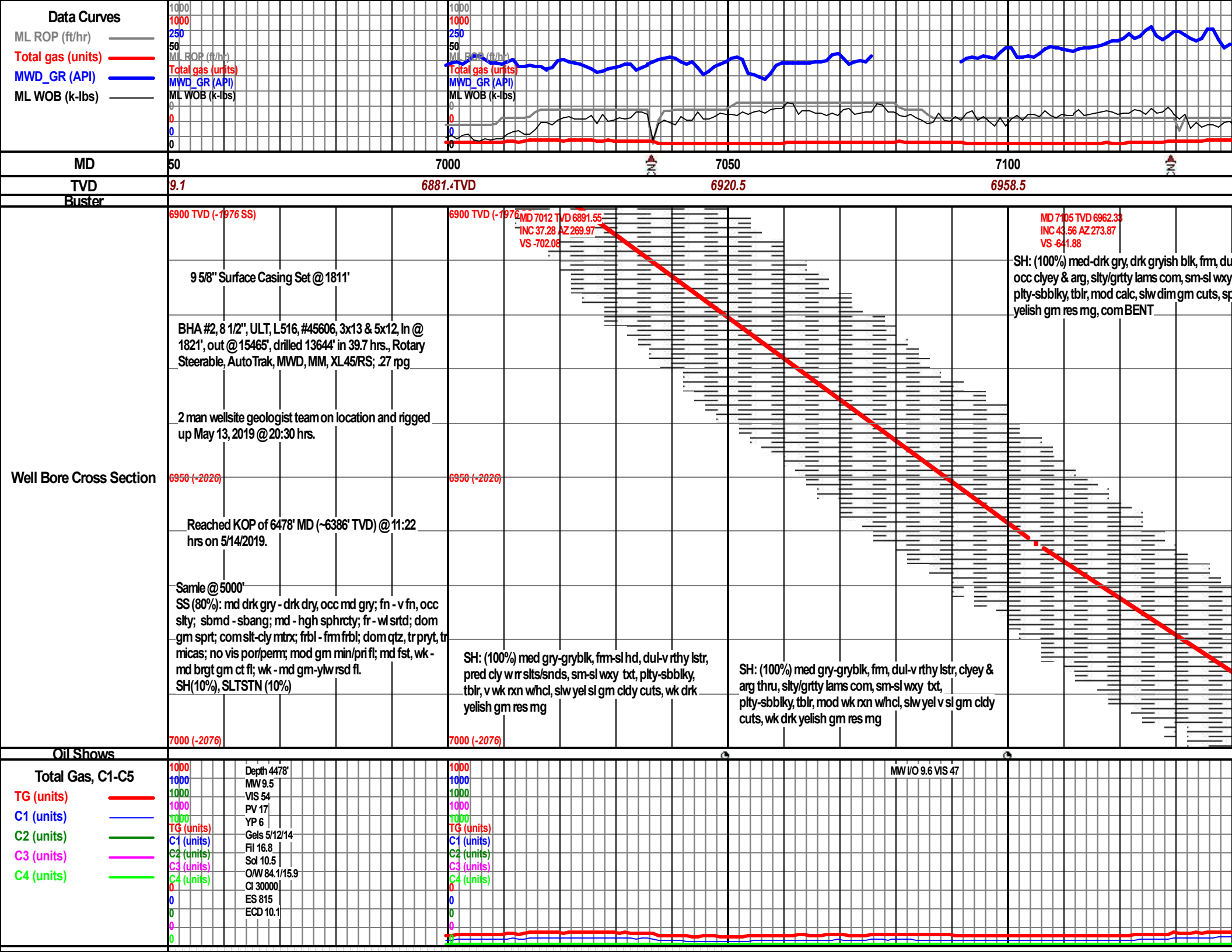
INTERVALS

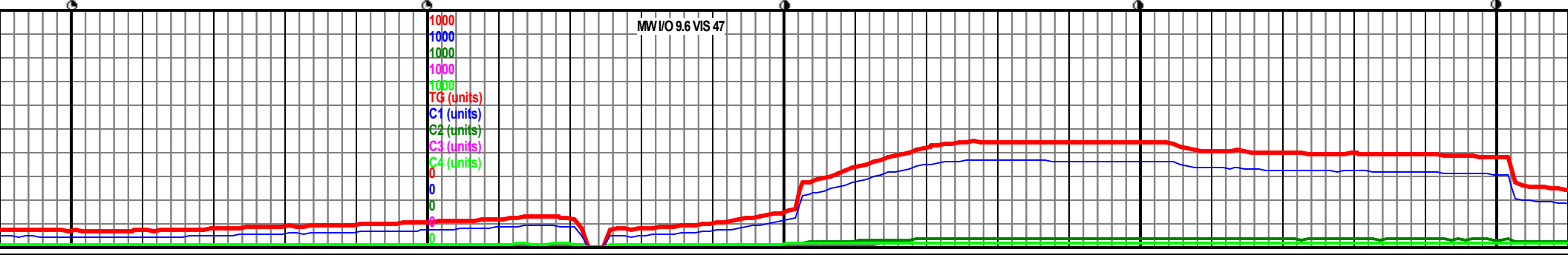
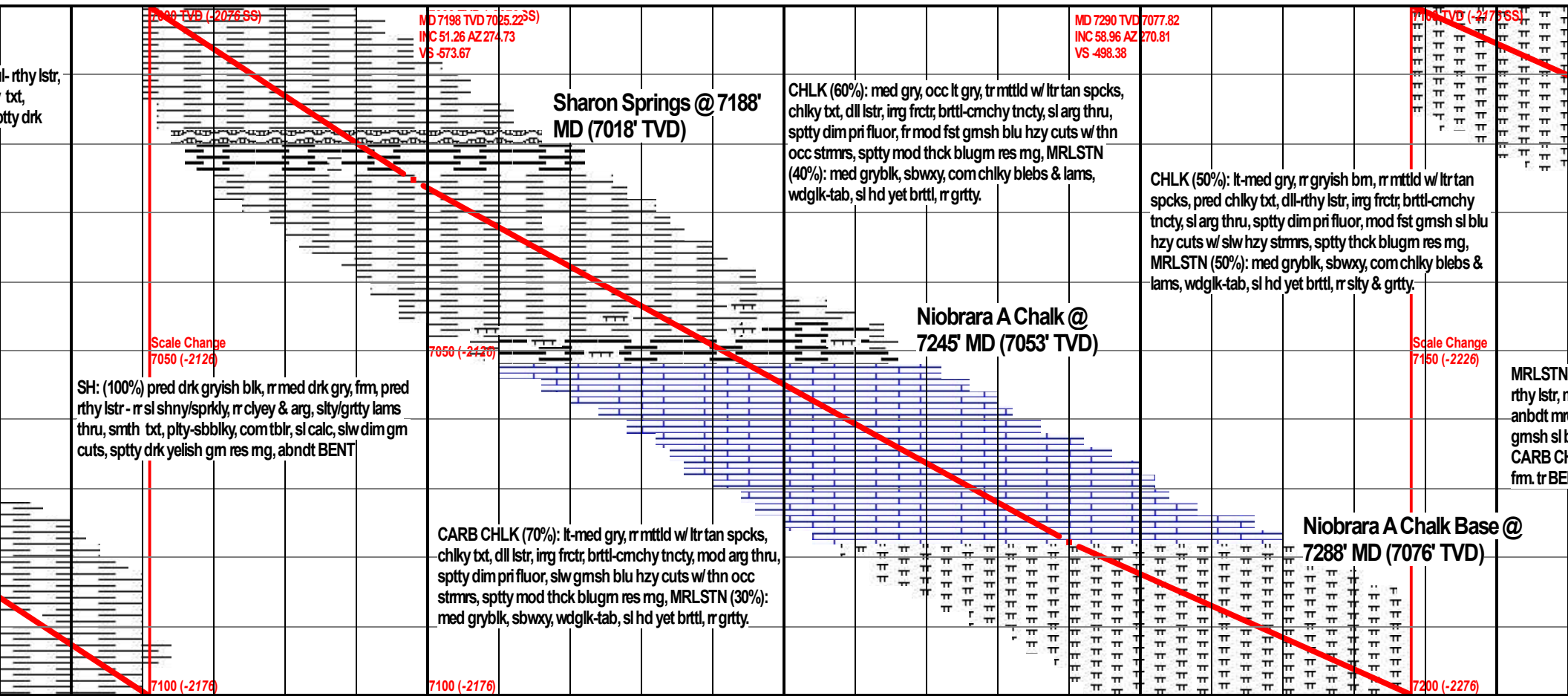
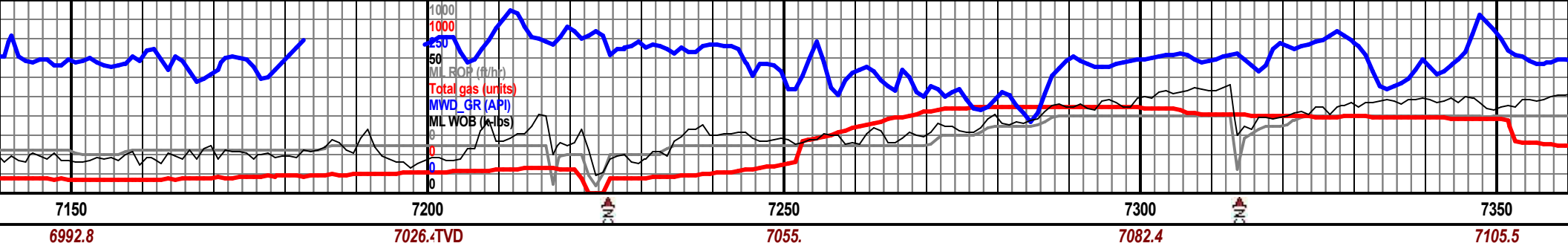
Core
 Dst

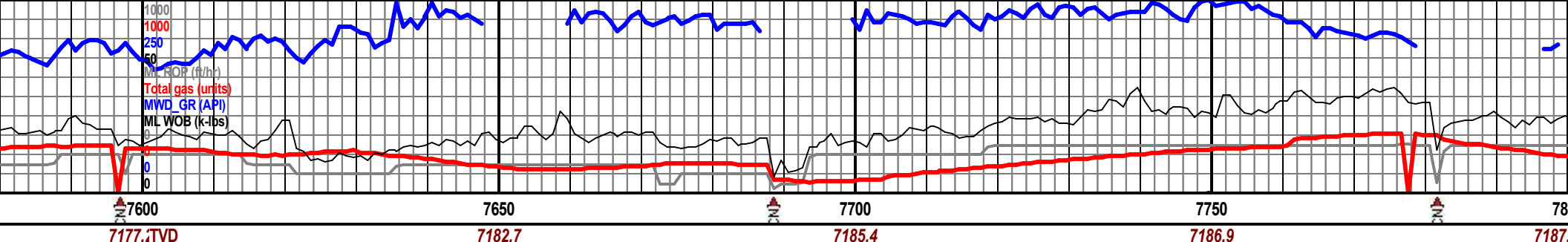
EVENTS

Casing shoe_hzl
 Trip_point_1
 Off bottom
 conn

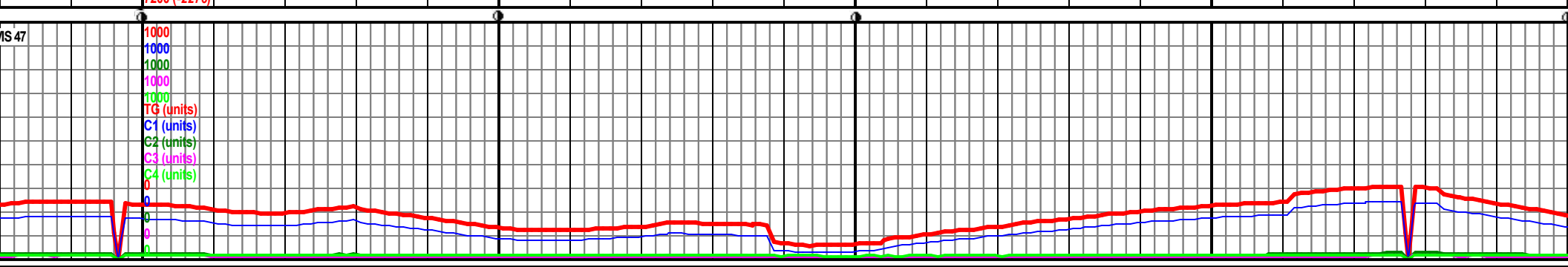
Survey(mwd)
 Survey(red)
 bit

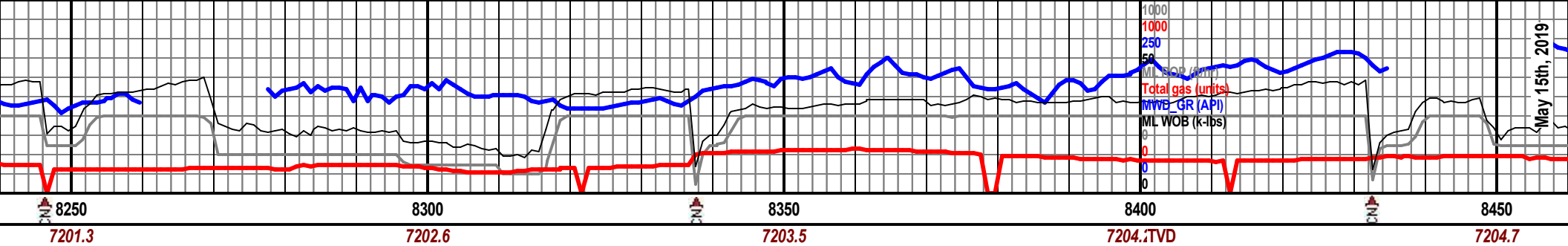




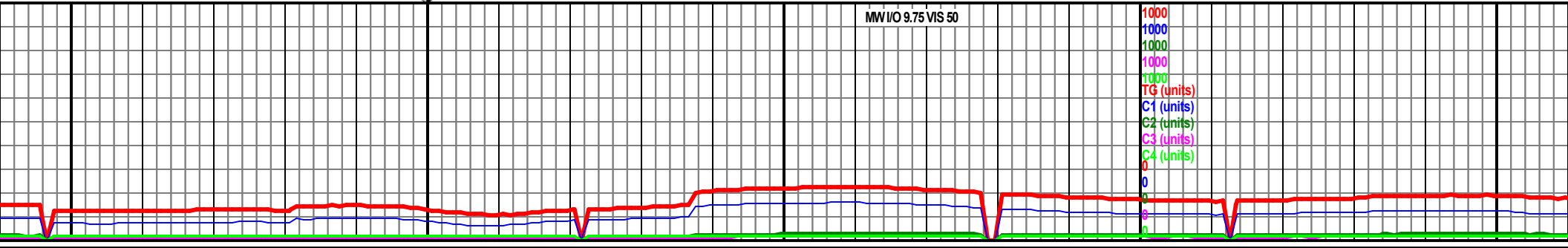


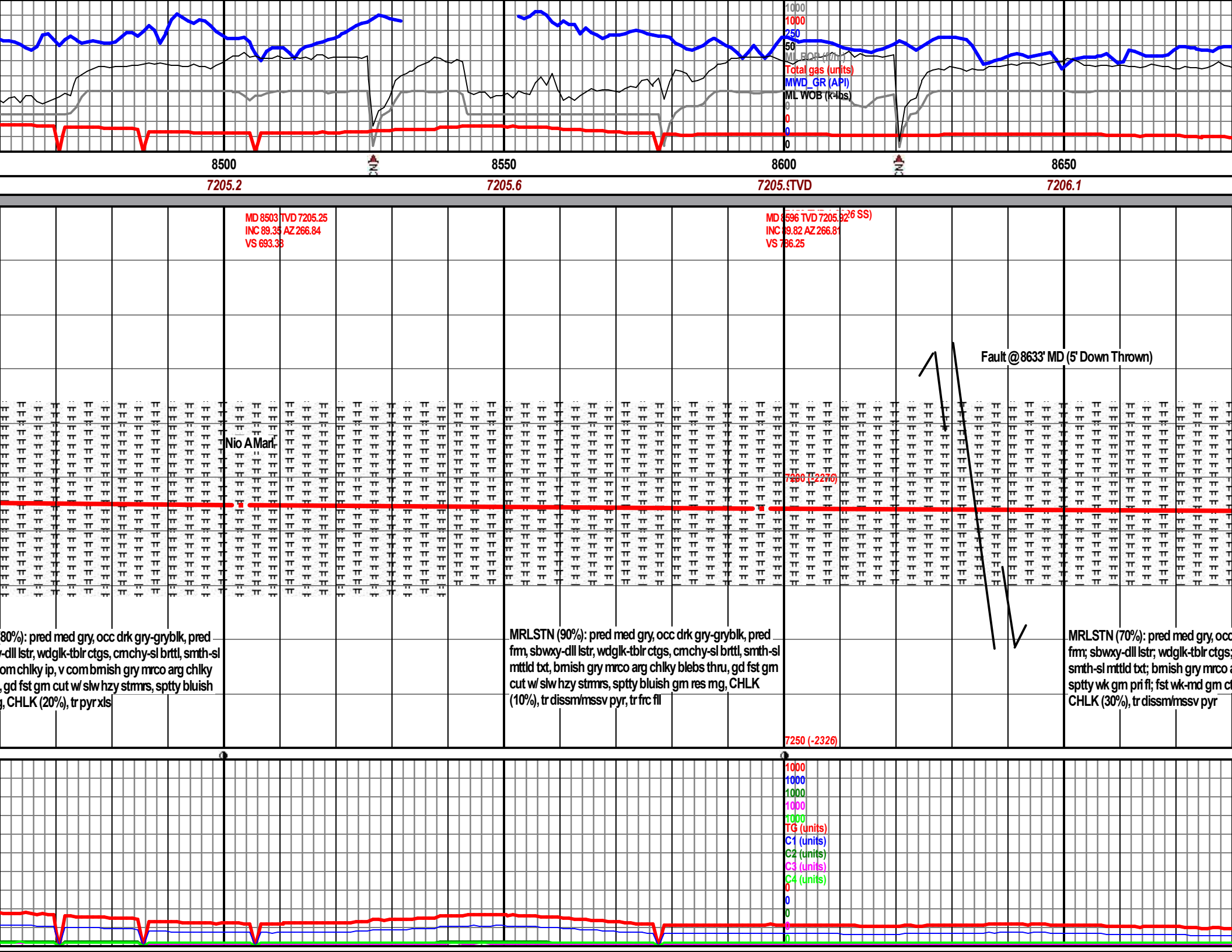
TVD 7174.16 AZ 269.09 2	7100 TVD (-2176 SS)	MD 7666 TVD 7184.47 INC 67.23 AZ 267.39 VS -41.8	MD 7758 TVD 7187.09 INC 89.51 AZ 268.6 VS -50	Begin Circulating through
occ gryblk, frm-mod cmchy-rr sl cmbly t bmish mrco chlk h cuts w/ sl bluish slw mg, CHLK (20%),	MRLSTN (85%): pred med-drk gry, occ gryblk, frm-mod hd, sbwxy-dll lstr, wdgk-tblr ctgs, cmchy-rr sl cmbly tncty, clyey-smth txt, mod arg, com bmish mrco chlk spcks thru, fr sl fst hzy gmish blu cuts w/ slw stmrs, mod thck & bri gmsh blu res mg, CHLK (15%), tr mssv pyr nodes, tr BENT	MRLSTN (90%): med-drk gry, occ gryblk, occ bmish ip, frm-mod hd, sbwxy-dll lstr, wdgk-tblr ctgs, cmchy-rr sl cmbly tncty, clyey-smth txt, mod arg, com bm mrco chlk spcks & blebs thru, mod fst hzy gmish blu cuts w/ slw stmrs, fry thck bluish gm res mg, CHLK (10%), tr mssv pyr nodes		MRLSTN (80%): med-drk gry, occ gryblk, occ bmish ip, frm-mod hd, sbwxy-dll lstr, wdgk-tblr ctgs, cmchy-rr sl cmbly tncty, clyey-smth txt, mod arg, com bm mrco arg chlk spcks & blebs thru, gd fst gm cut w/ thn sl fst hzy bluish stmrs, sppty thck bluish gm res mg, CHLK (20%)
rown)	7150 (-2226)			
Curve Landed @ 7692' MD (7184' TVD) @ 20:20 hrs on 5/14/2019				
IS 47	7200 (-2276)			

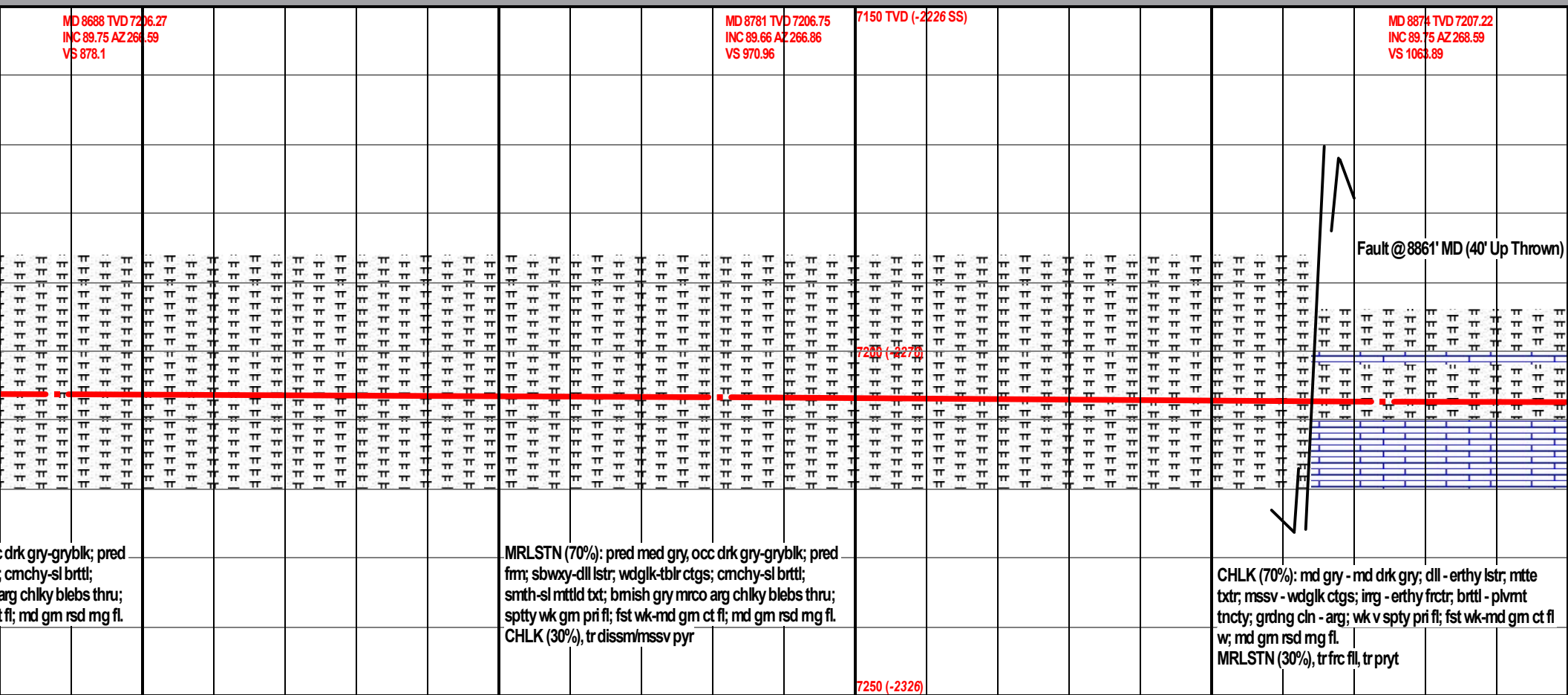


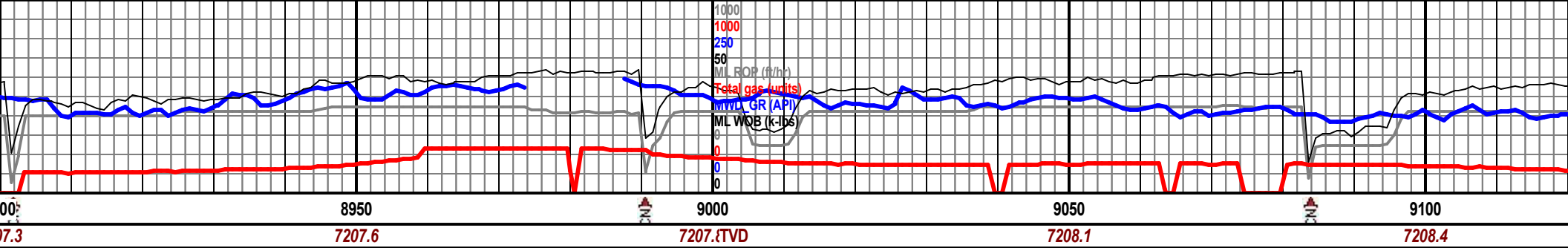


	<p>MD 8315 TVD 7203.05 INC 89.01 AZ 270.11 VS 505.48</p>		<p>7150 TVD (-2) MD 8409 TVD 7204.29 INC 89.48 AZ 268.41 VS 599.46</p>	
<p>MRLSTN (50%): med gry, occ drk gry-gryblk, occ sl bmish ip, frm-sl hrd, sbwxy lstr, wdgk-tblr ctgs, cmchy tncty, smth txt, com chiky ip, abndt bmish gry mrco arg chlk spcks & blebs thru, gd hzy gm cut w/ slw hzy gm sl bluish stmrs, sptty mod thck bluish gm res mg, CHLK (50%), tr mssv pyr nods</p>		<p>MRLSTN (70%): med gry, occ drk gry-gryblk, occ sl bmish ip, frm-sl hrd, sbwxy lstr, wdgk-tblr ctgs, cmchy, smth-sl mttld txt, com chiky ip, abndt bmish gry mrco arg chlk spcks & blebs thru, gd hzy gm cut w/ slw hzy stmrs, sptty sl thck bluish gm res mg, CHLK (30%), tr mssv pyr nods</p>		<p>MRLSTN () frm, sbwxy mttld txt, c blebs thru gm res mg</p>

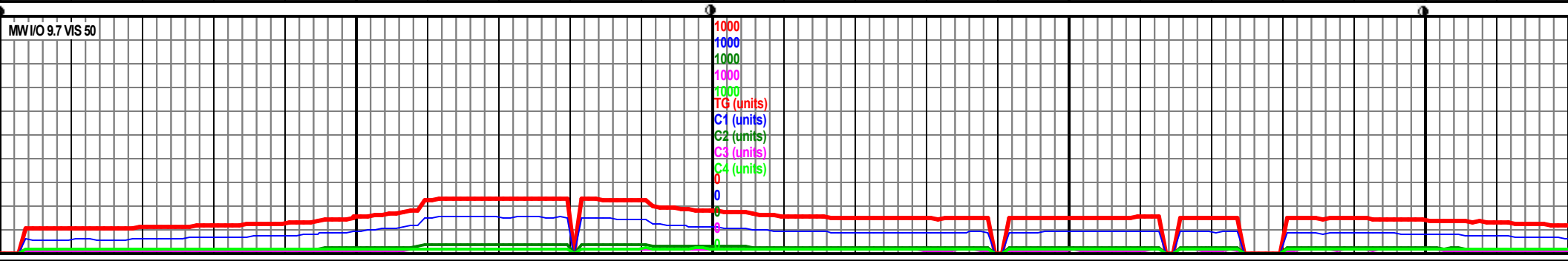


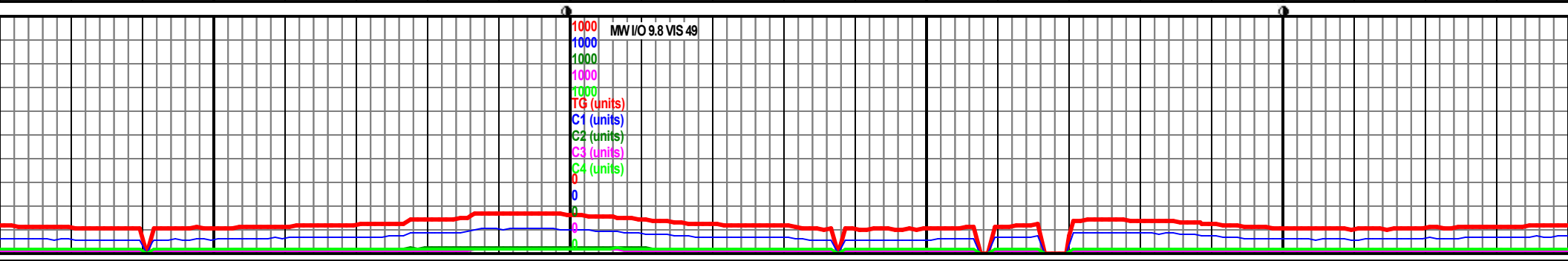
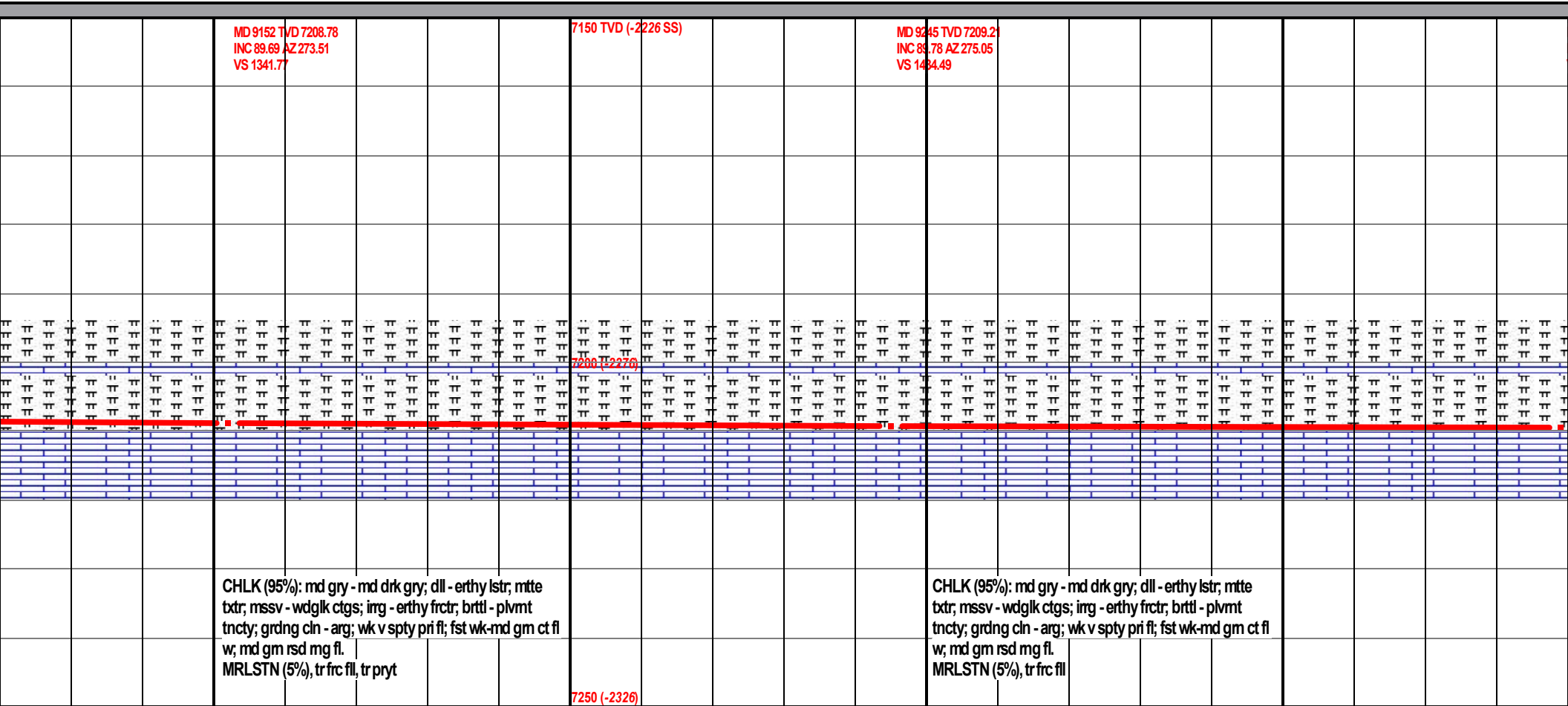


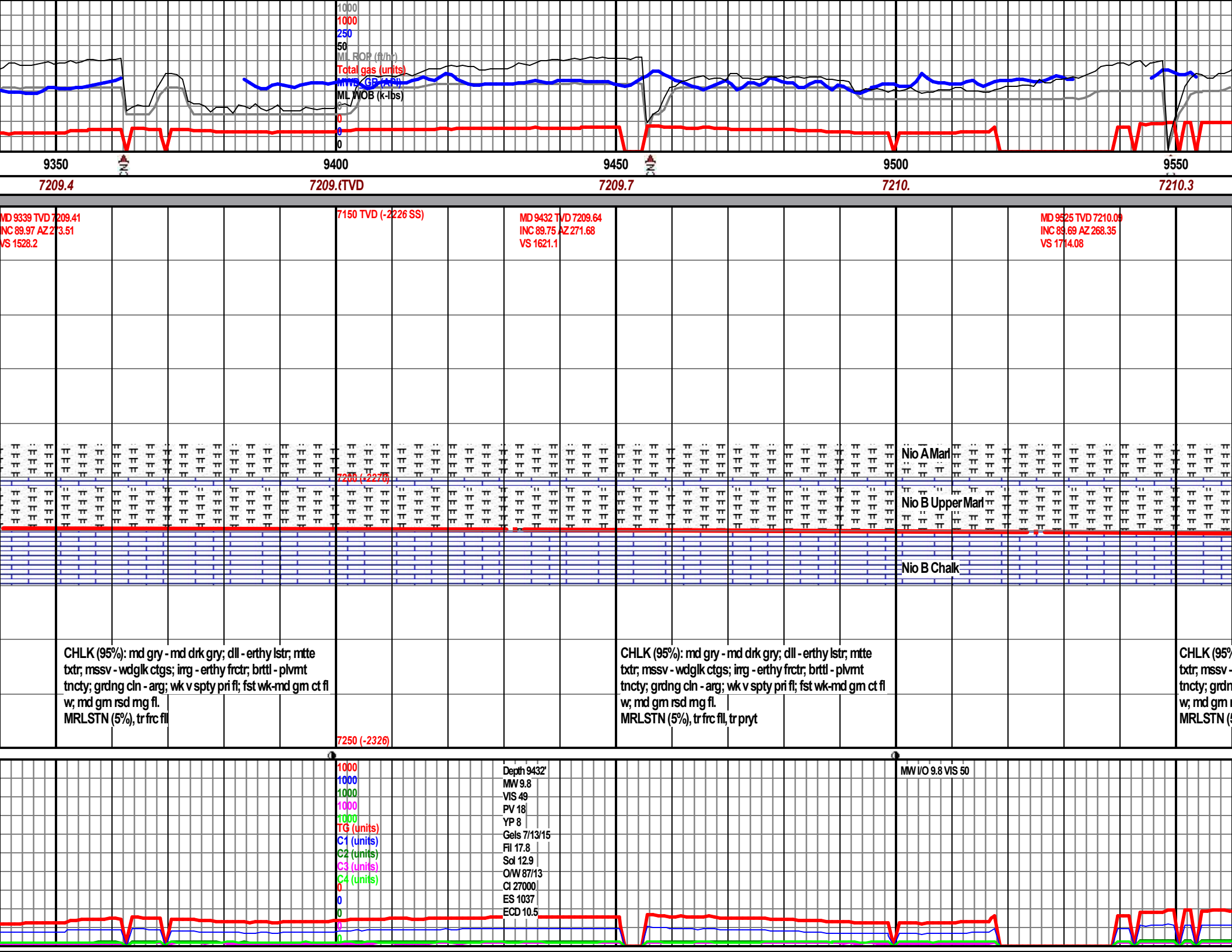


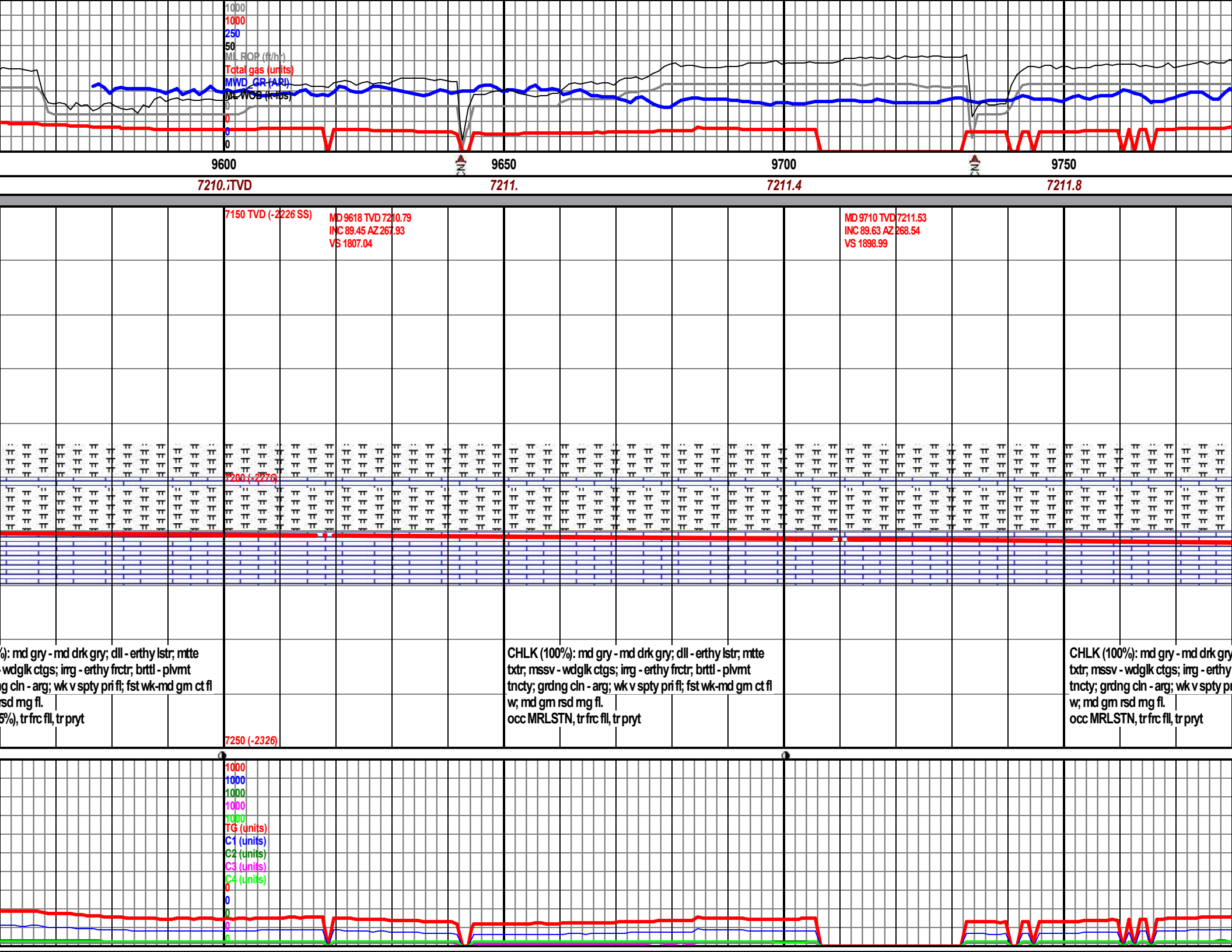


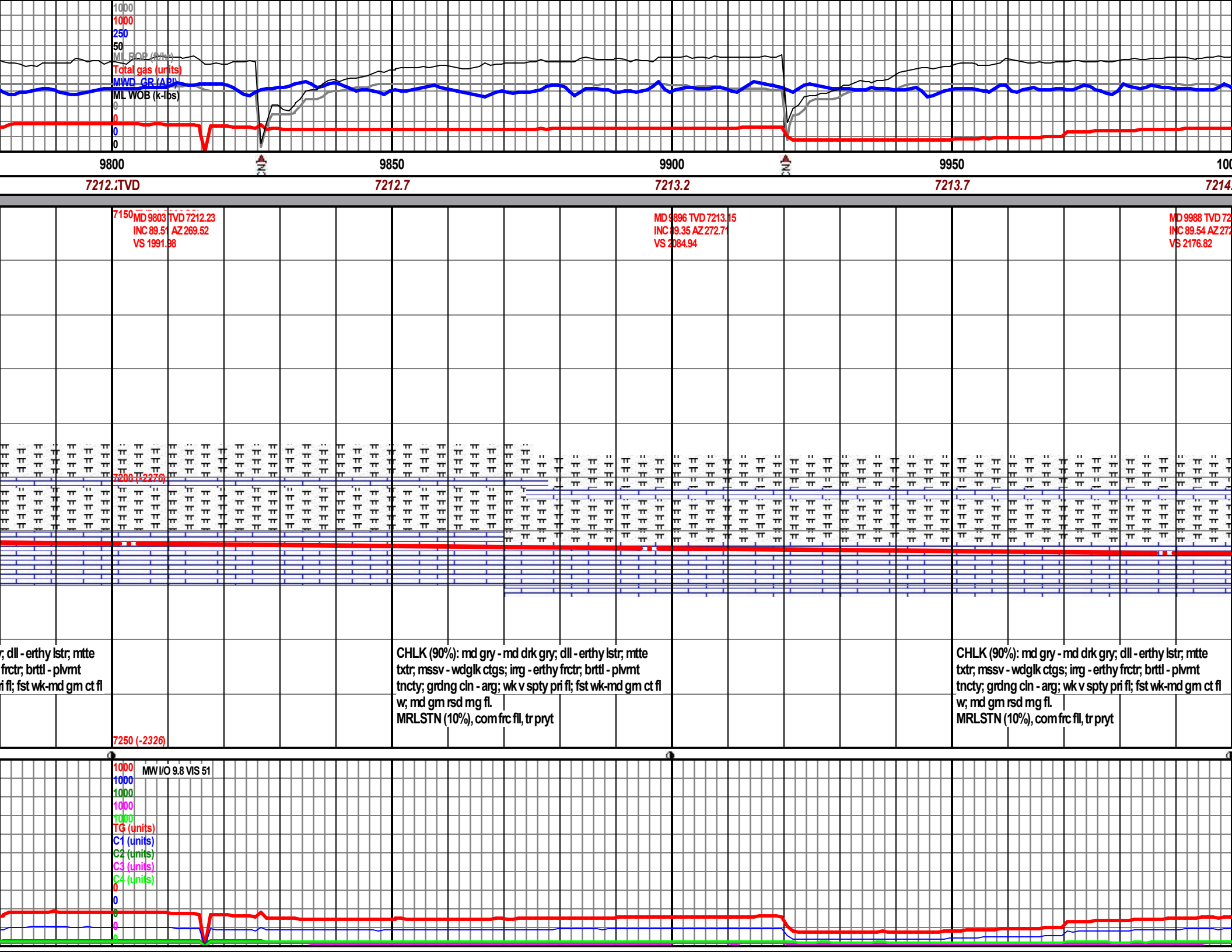
MD 8967 TVD 7207.63 INC 89.75 AZ 270.18 VS 1156.89									
7150 TVD (-2226 SS)									
MD 9060 TVD 7208.18 INC 89.57 AZ 271.48 VS 1249.87									
Nio A Marl									
7208 (-2276)									
Nio B Upper Marl									
Nio B Chalk									
CHLK (80%): md gry - md drk gry; dll - erthy lstr; mitte txtr; mssv - wdgk ctgs; irg - erthy frctr; brtl - plvmt tncty; grng cln - arg; wk v spty pri fl; fst wk-md gm ct fl w; md gm rsd mg fl. MRLSTN (30%), tr frc fl, tr pryt									
7250 (-2326)									
CHLK (95%): md gry - md drk gry; dll - erthy lstr; mitte txtr; mssv - wdgk ctgs; irg - erthy frctr; brtl - plvmt tncty; grng cln - arg; wk v spty pri fl; fst wk-md gm ct fl w; md gm rsd mg fl. MRLSTN (5%), tr frc fl, tr pryt									

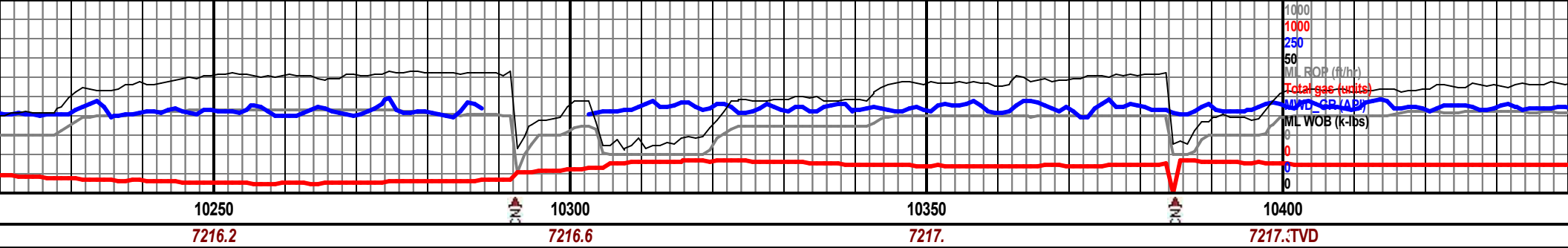




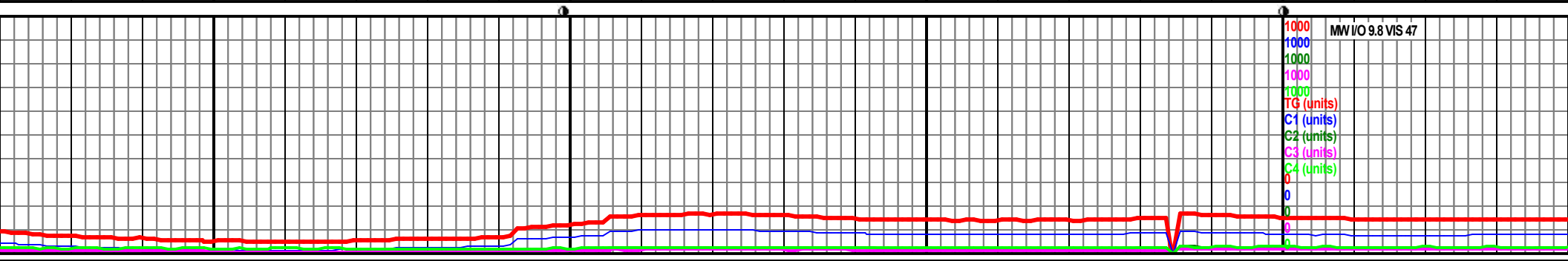


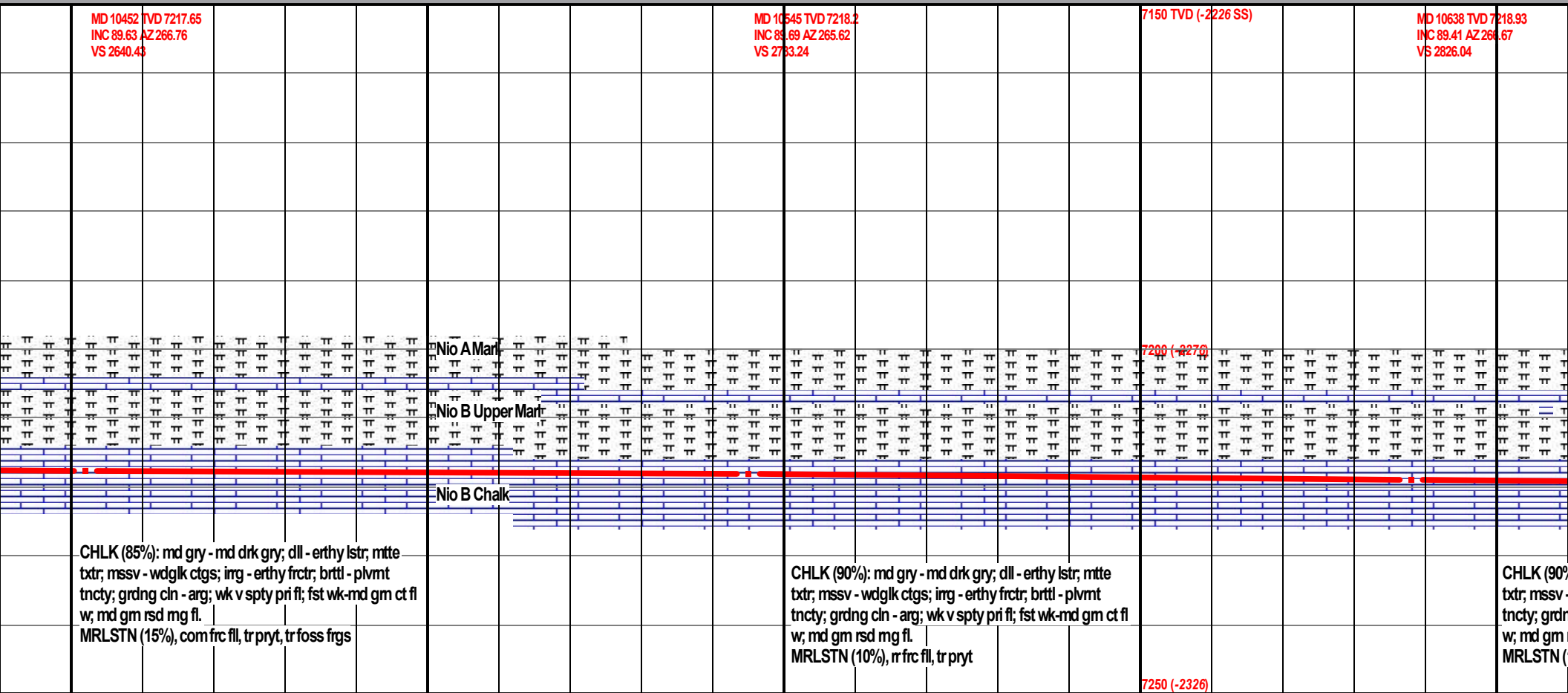


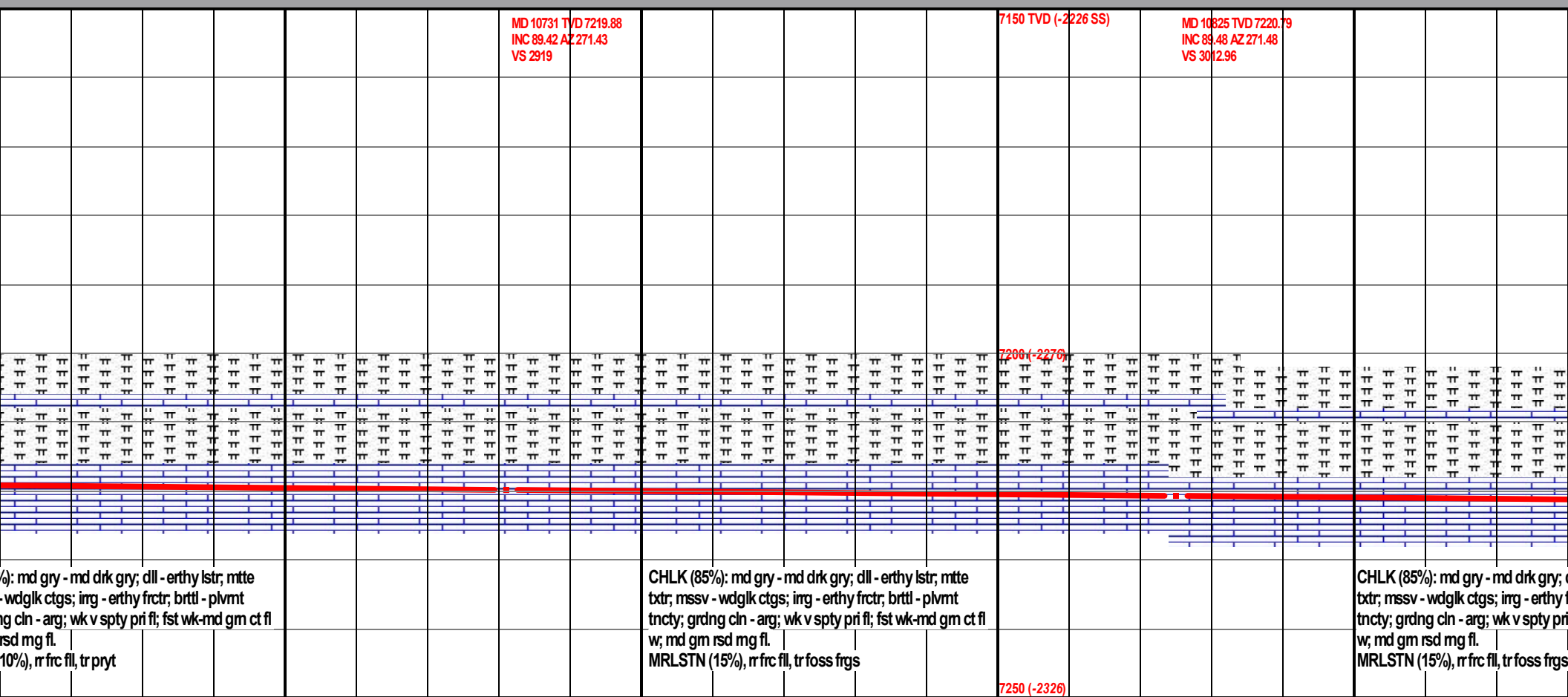


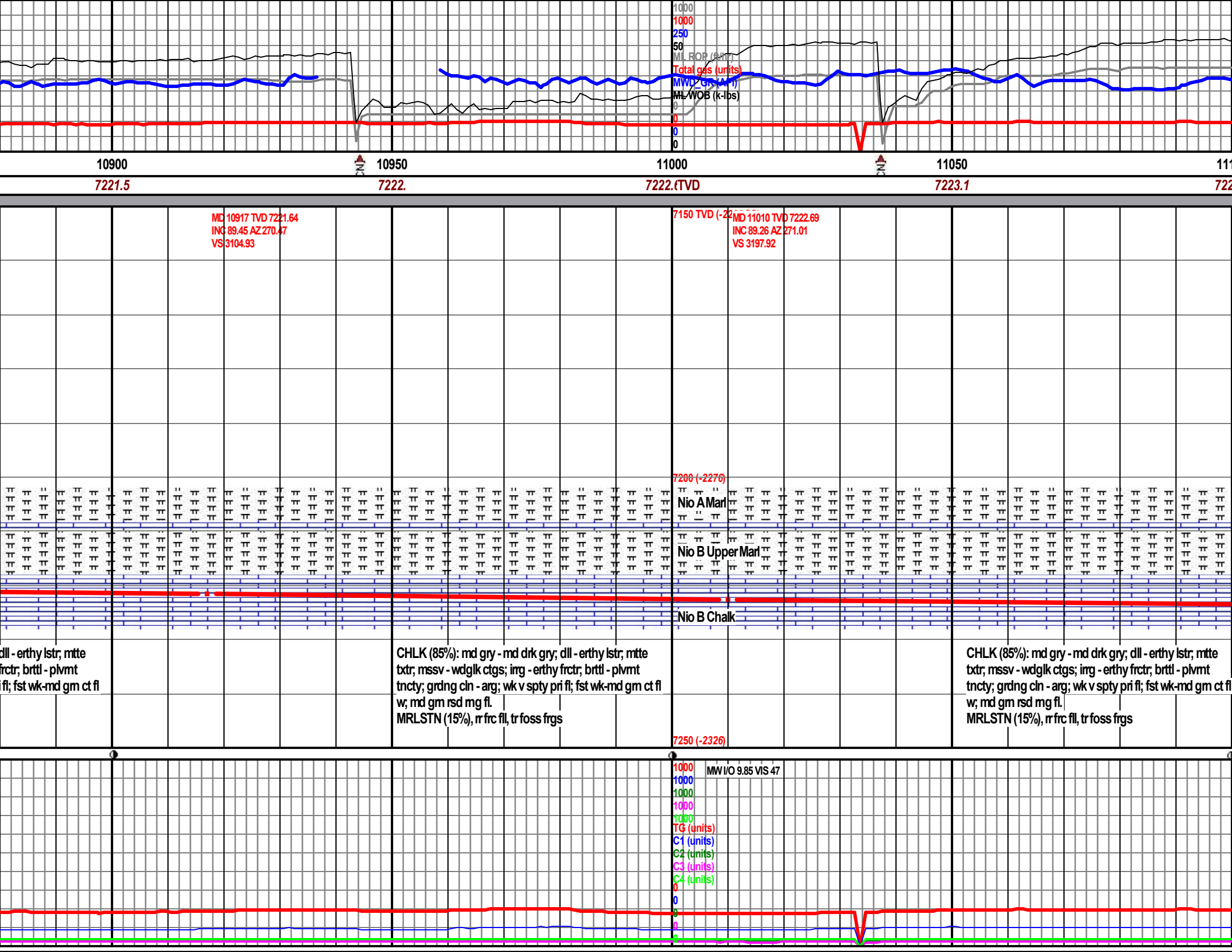


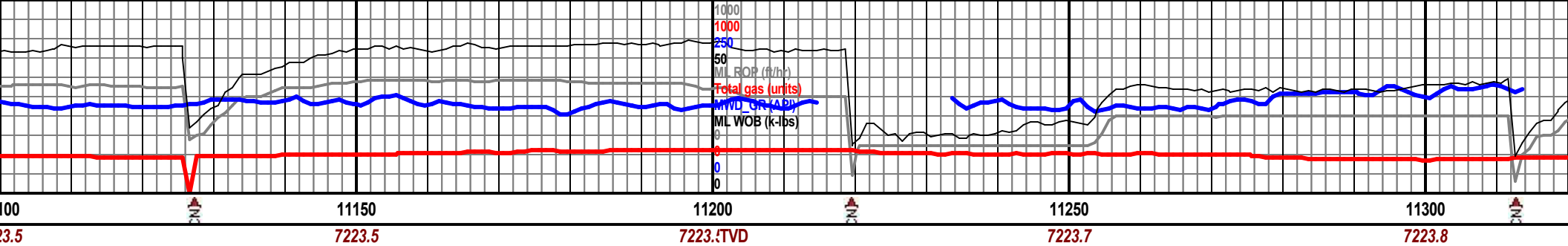
MD 10268 TVD 7216.34 INC 89.54 AZ 267.05 VS 2456.68										MD 10360 TVD 7217.03 INC 89.6 AZ 267.02 VS 2548.56										7150 TVD (-2226 SS)									
CHLK (85%): md gry - md drk gry; dll - erthy lstr; mitte txtr; mssv - wdglik ctgs; irrg - erthy frctr; brttl - plvmt tncty; grdng clin - arg; wk v spty pri fl; fst wk-md gm ct fl w; md gm rsd mg fl. MRLSTN (15%), com frc fl, tr pryt, tr foss frgs										CHLK (85%): md gry - md drk gry; dll - erthy lstr; mitte txtr; mssv - wdglik ctgs; irrg - erthy frctr; brttl - plvmt tncty; grdng clin - arg; wk v spty pri fl; fst wk-md gm ct fl w; md gm rsd mg fl. MRLSTN (15%), com frc fl, tr pryt, tr foss frgs										7480 (-2270) <									











MD 11103 TVD 7223.54
INC 89.68 AZ 271.27
VS 3290.89

MD 11197 TVD 7223.54^{SS}
INC 90.31 AZ 267.7
VS 3384.87

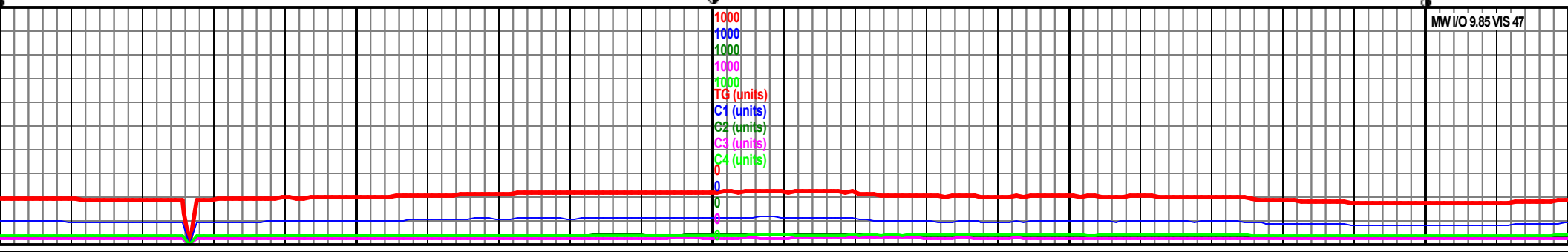
7200 (-2276)

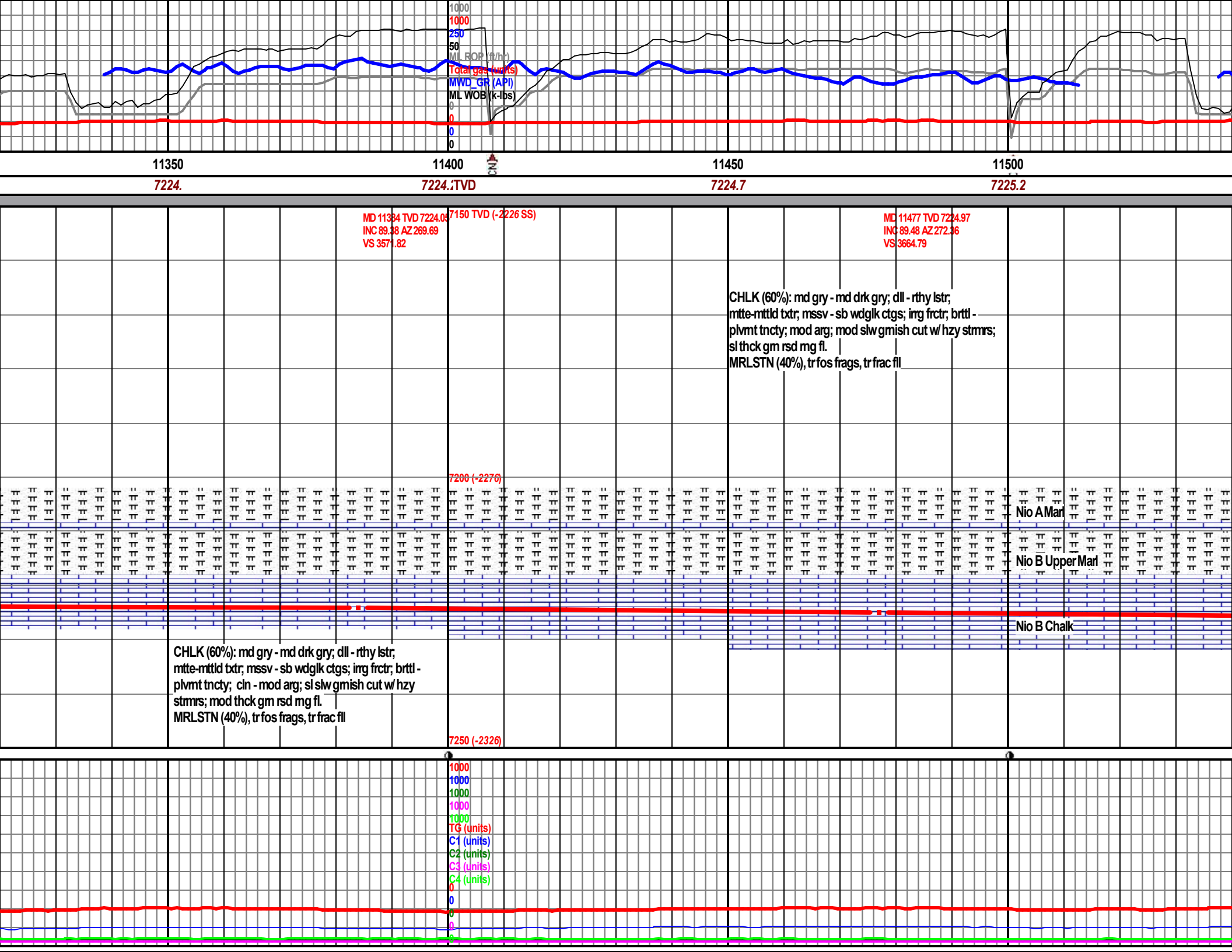
CHLK (75%): md gry - md drk gry; dll - rthy lstr;
mtte-mtld btr; mssv - sb wdgk ctgs; irg - erthy frctr;
brttl - plvmt tncy; grdng cln - arg; wk v spty pri fl; fst wk
gm ct fl w; md gm rsd mg fl.
MRLSTN (25%)

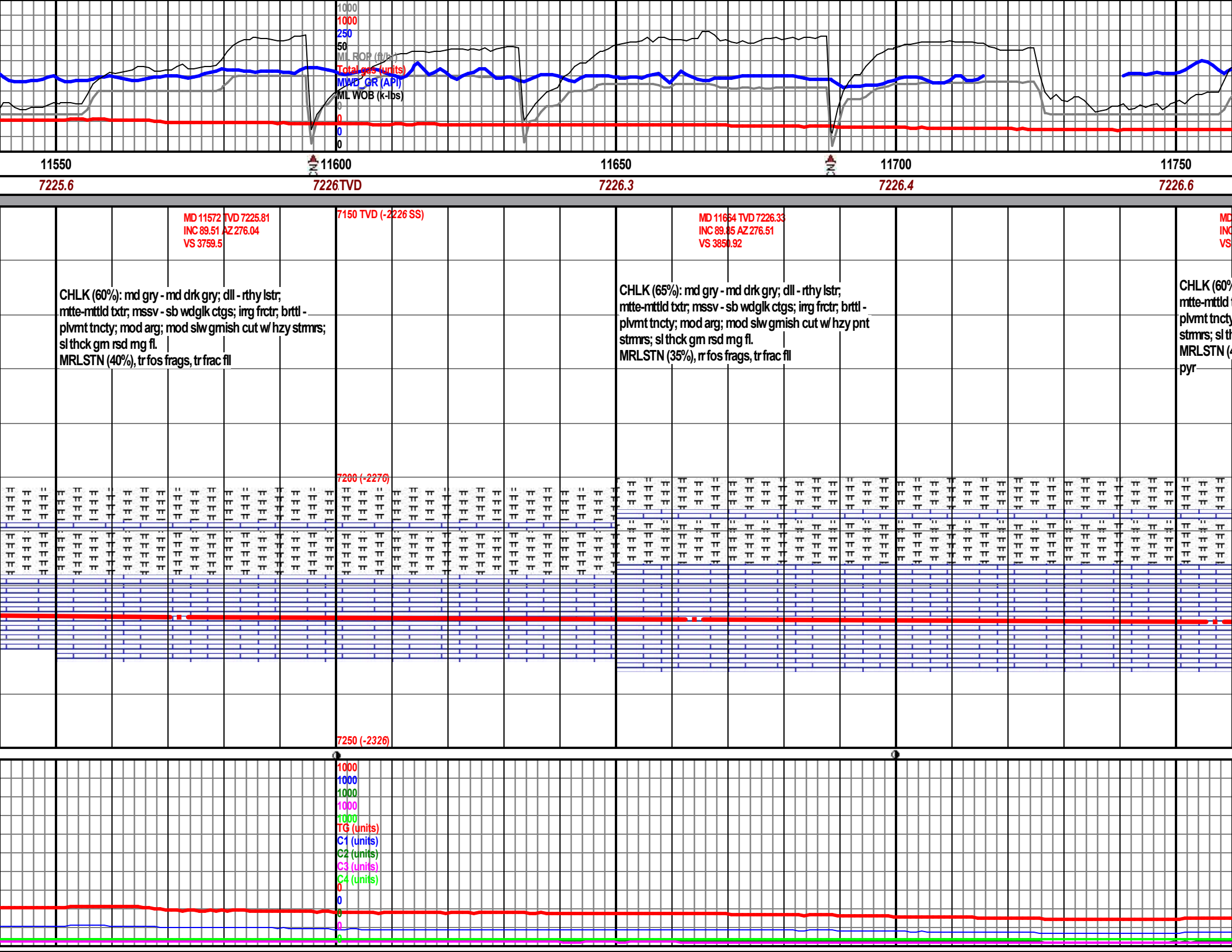
CHLK (75%): md gry - md drk gry; dll - rthy lstr;
mtte-mtld btr; mssv - sb wdgk ctgs; irg frctr; brttl -
plvmt tncy; grdng cln - arg; wk v spty pri fl; mod fst wk
gm ct fl w; md gm rsd mg fl.
MRLSTN (25%), tr frac fl

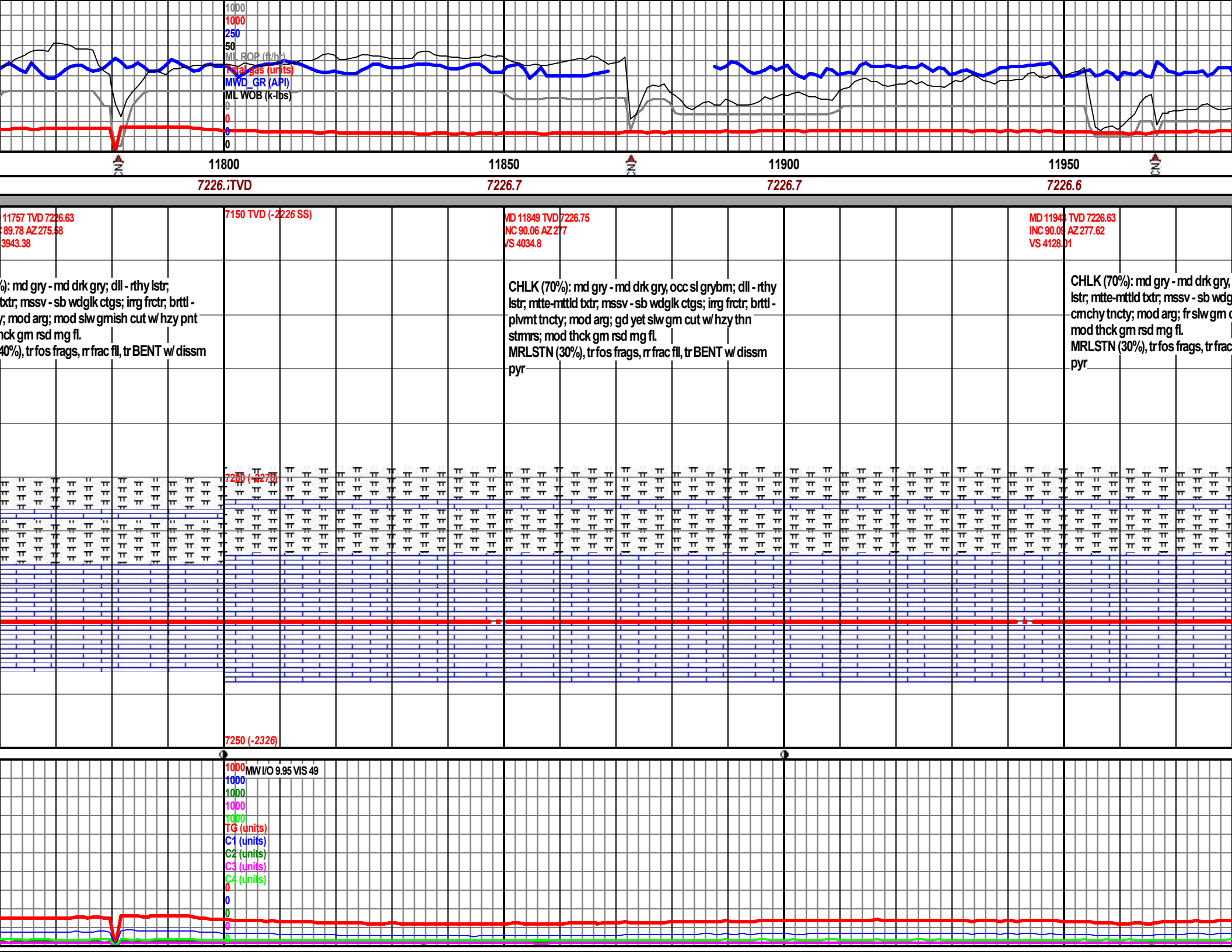
7250 (-2326)

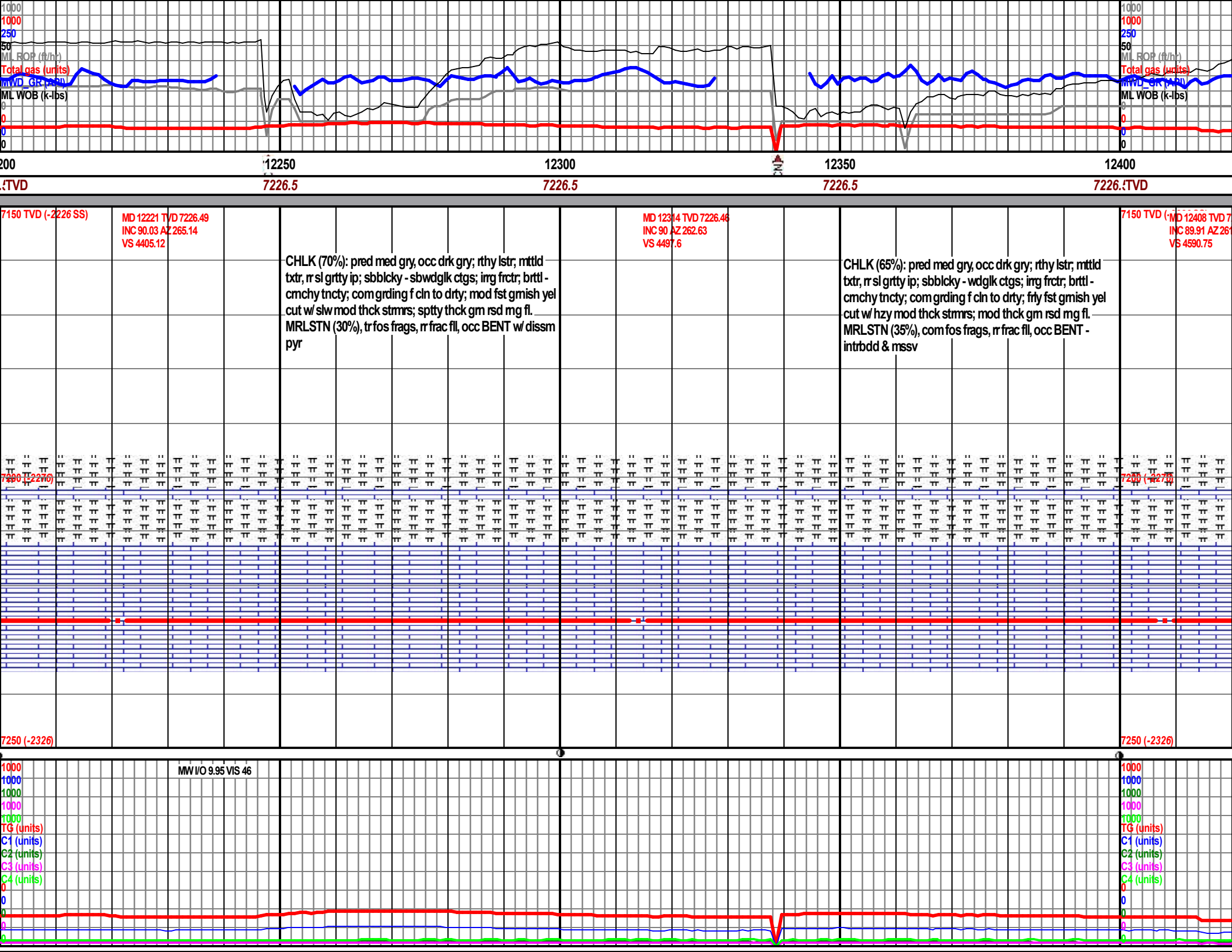
MW I/O 9.85 VIS 47

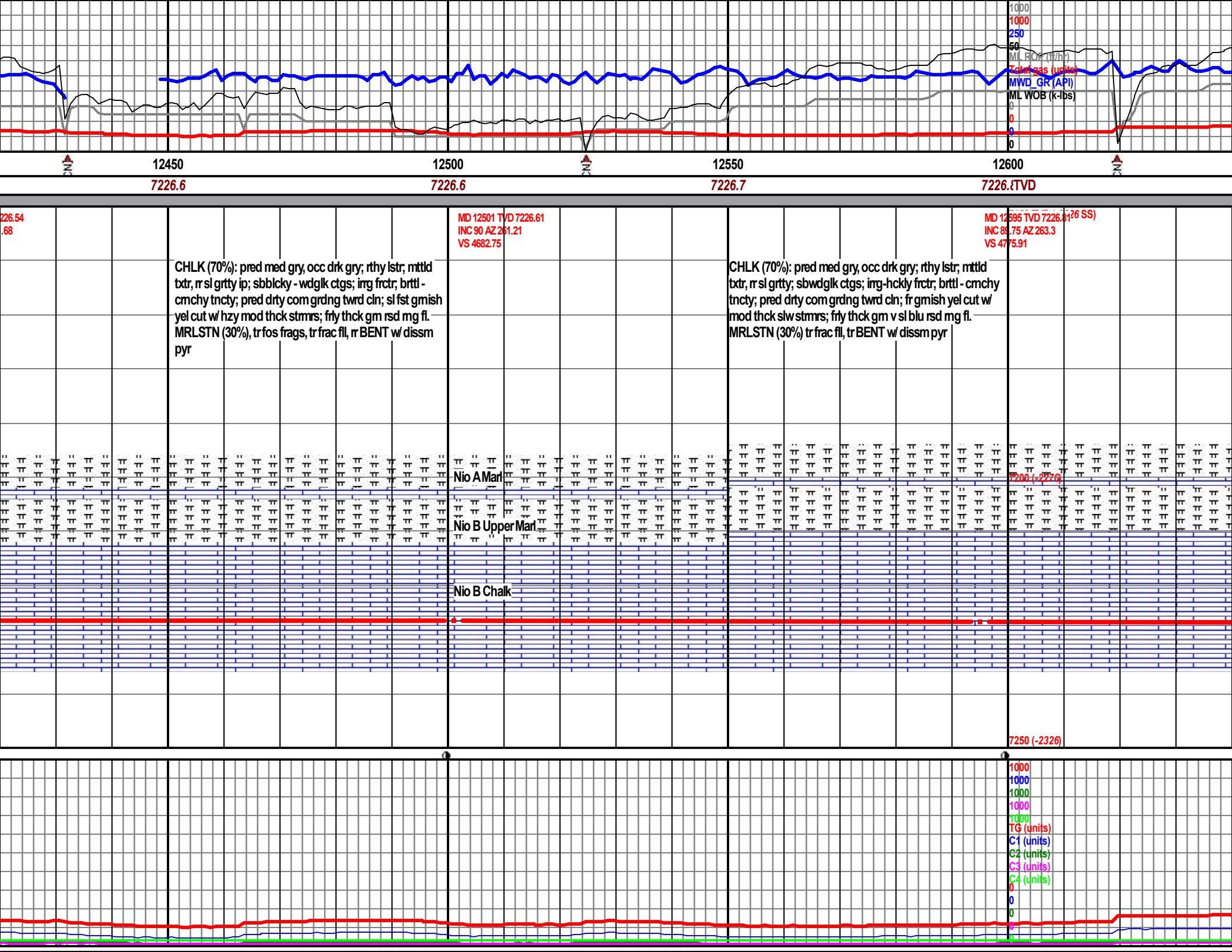


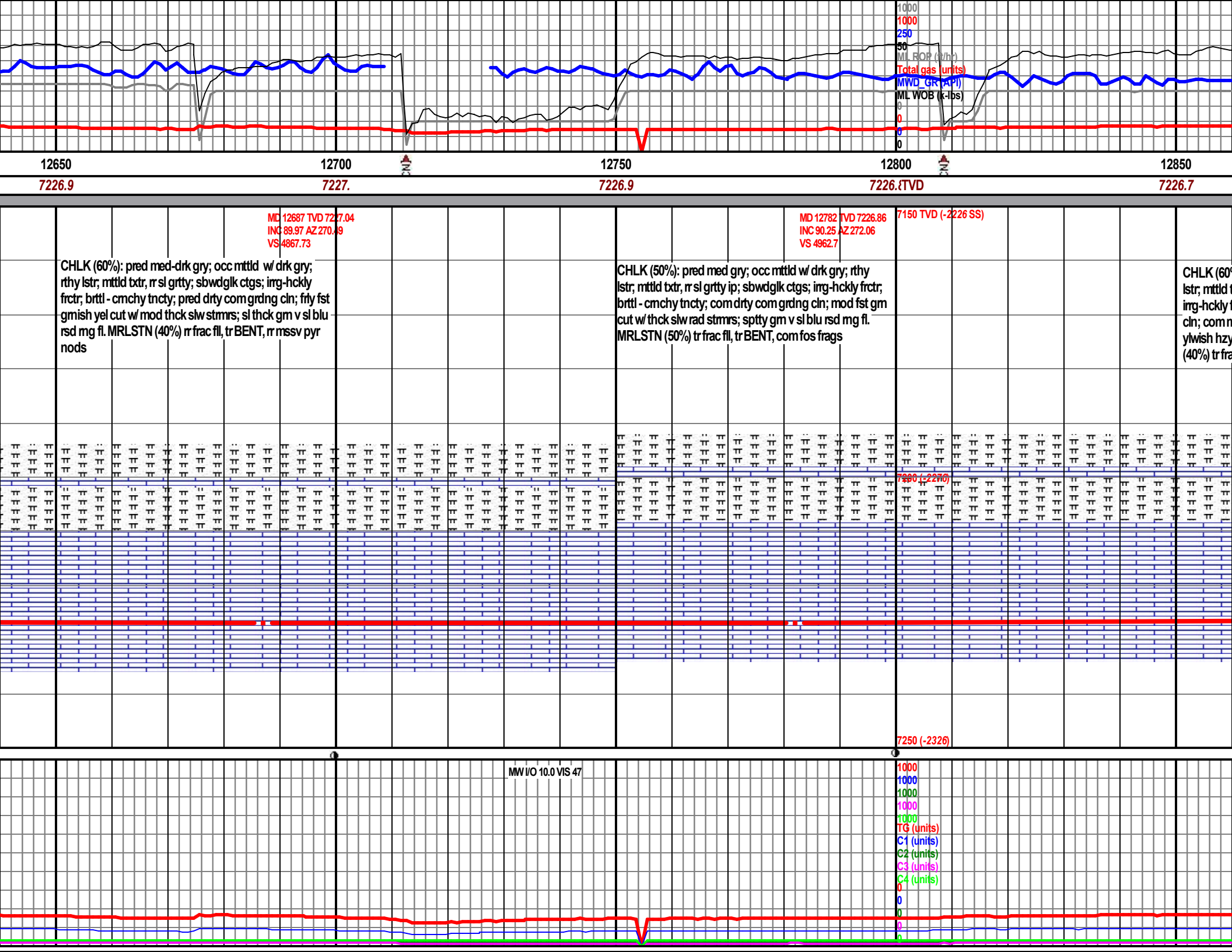


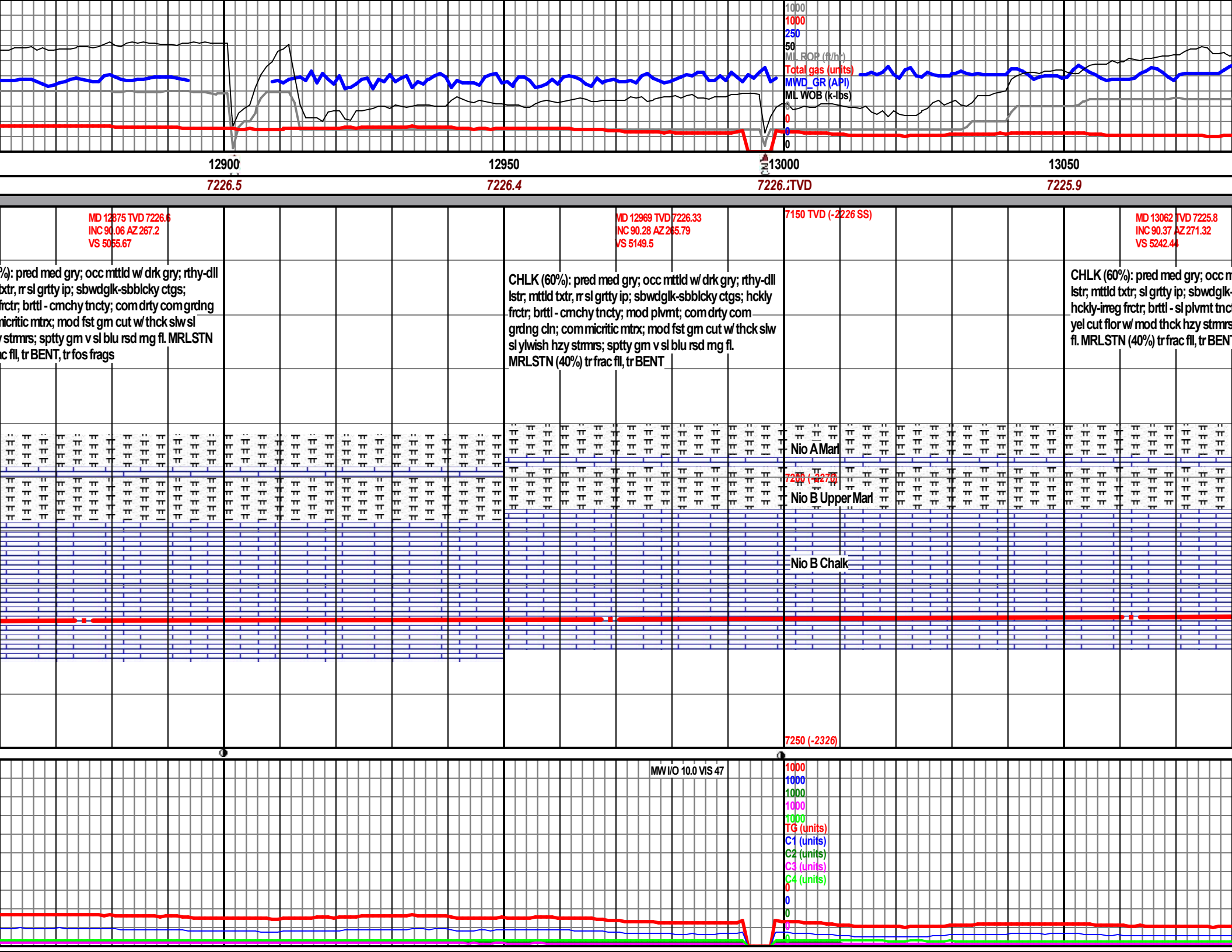


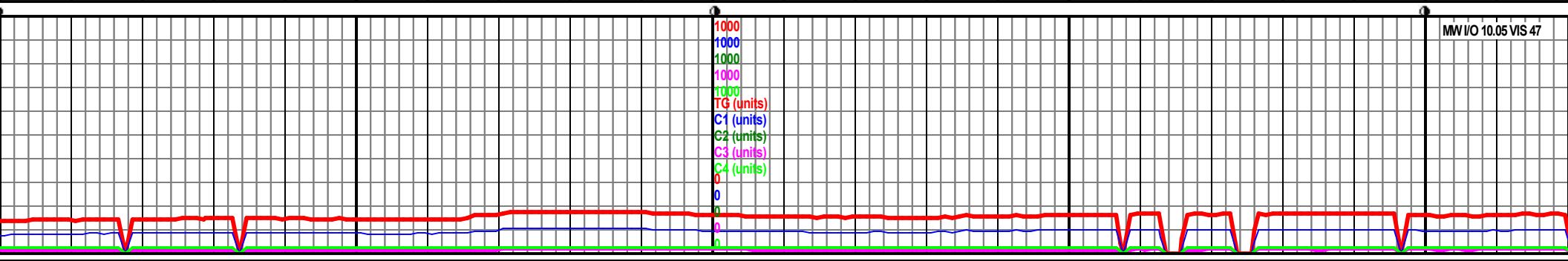
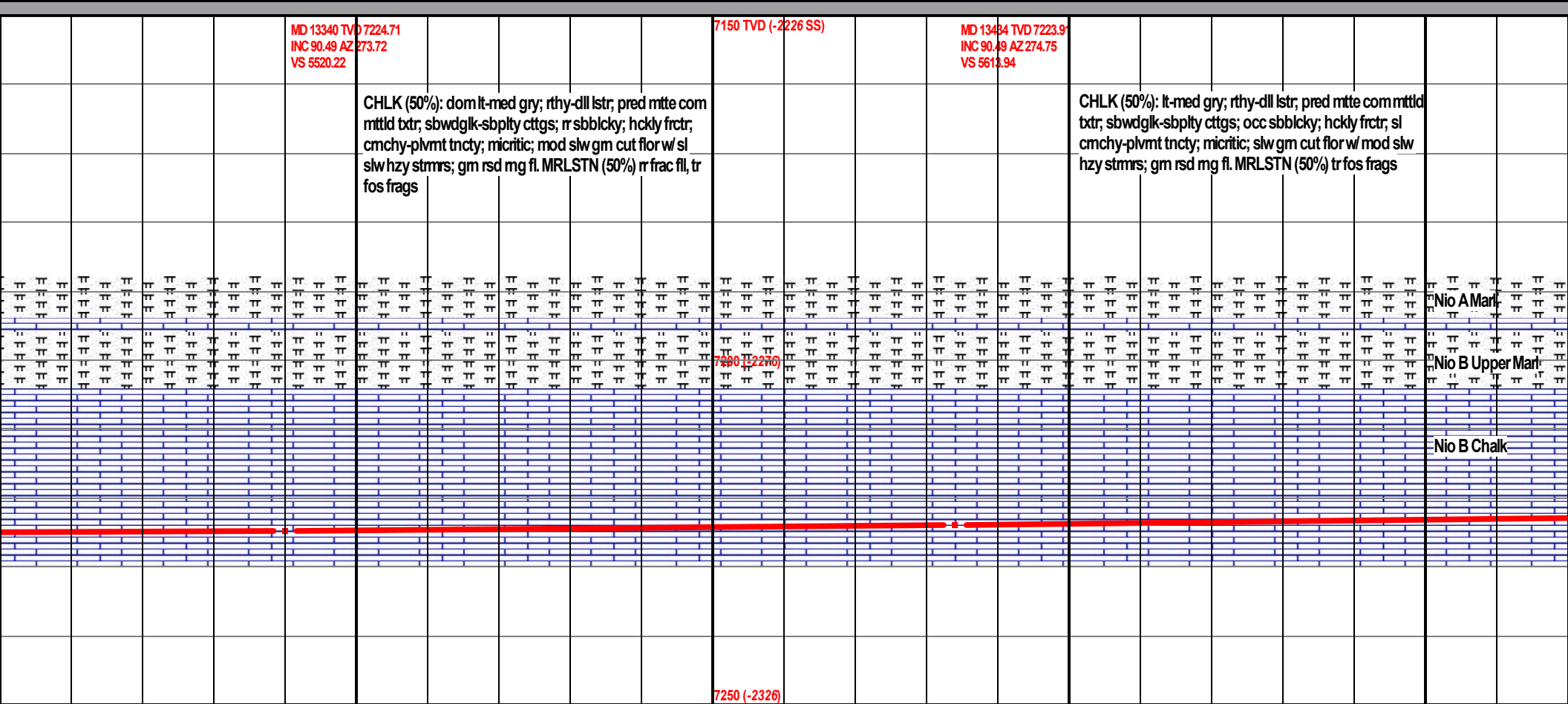
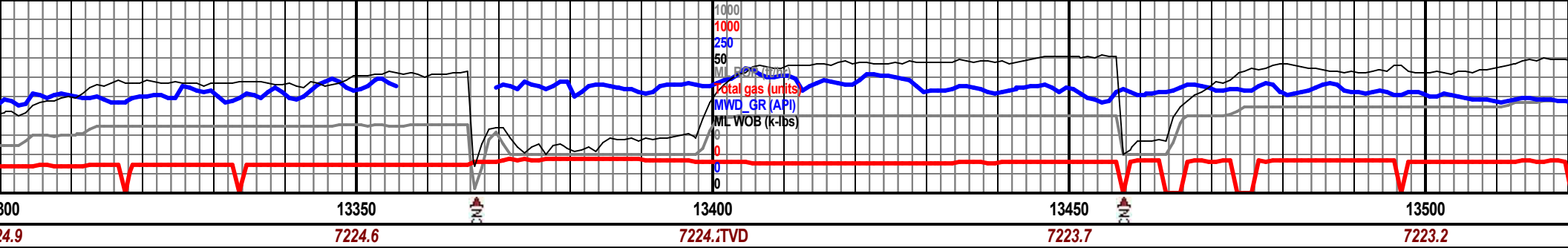


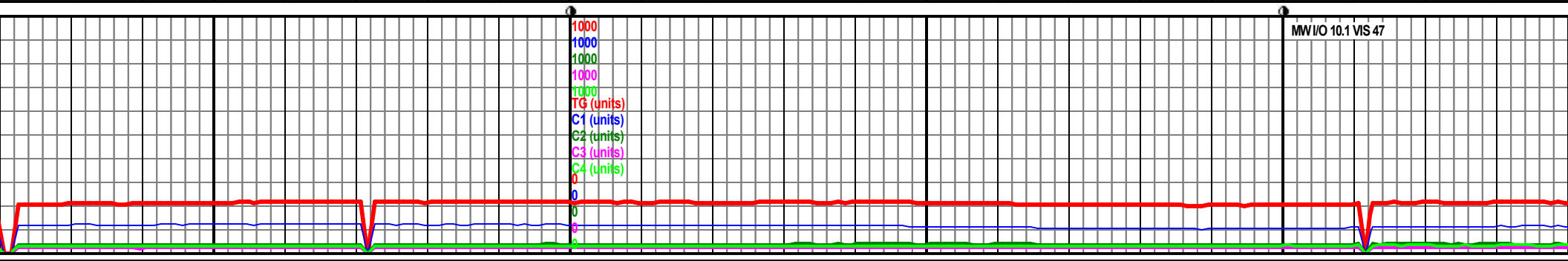
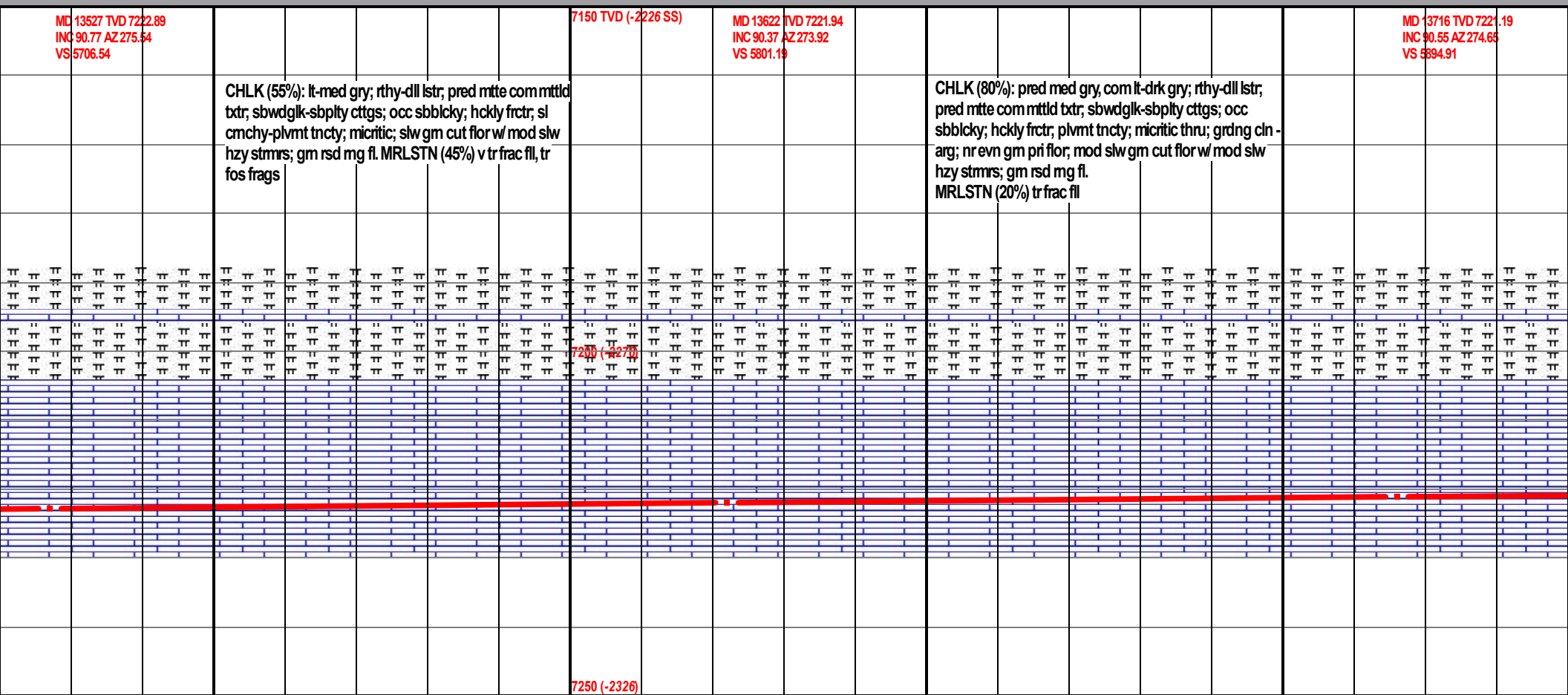


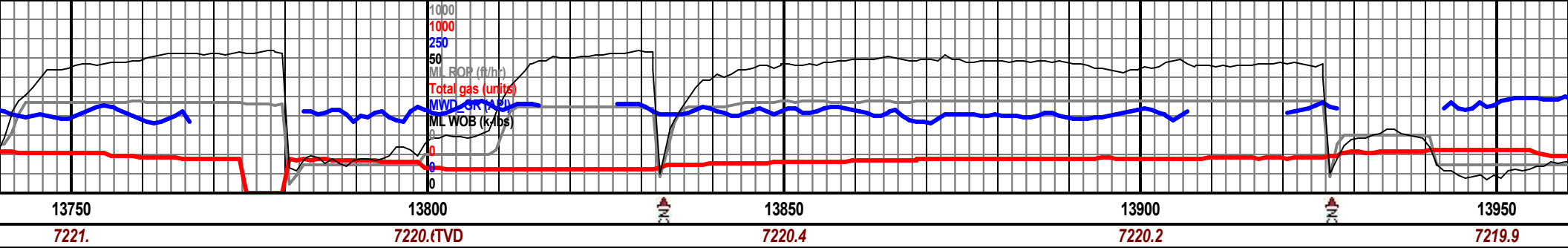




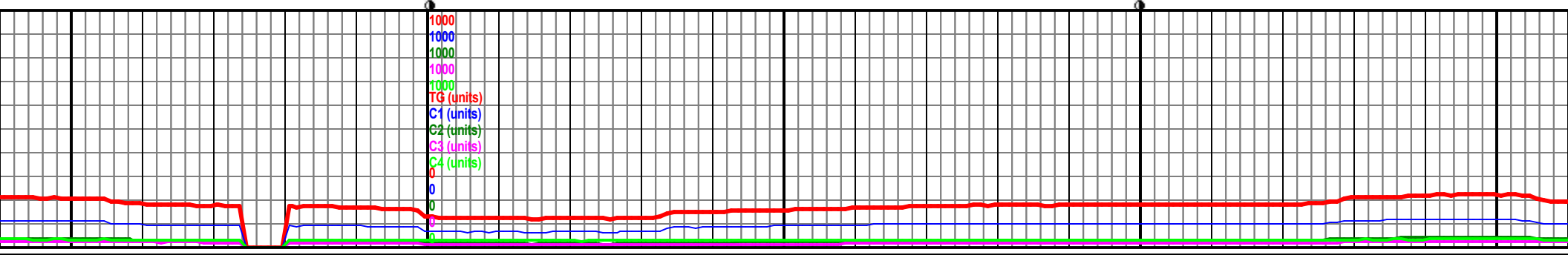


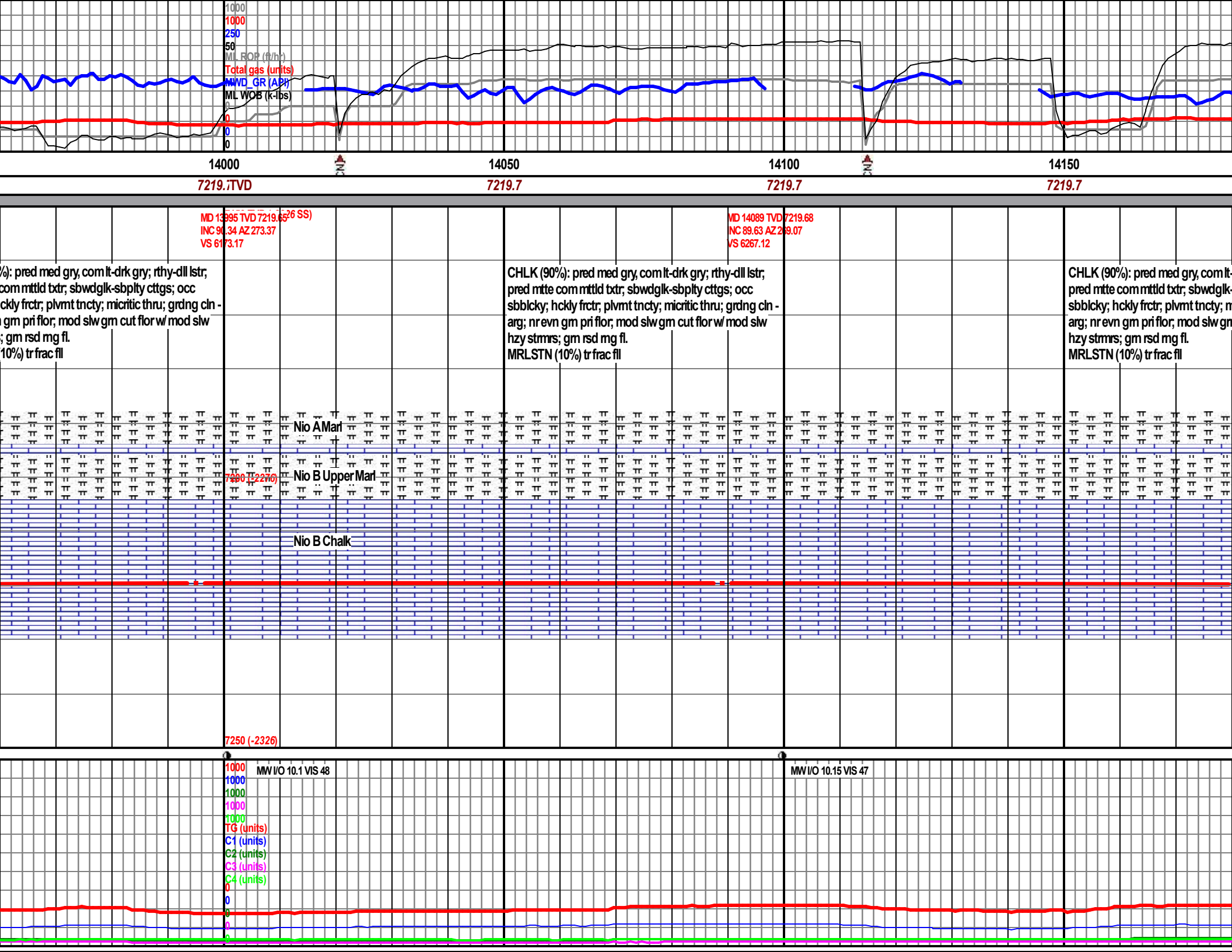


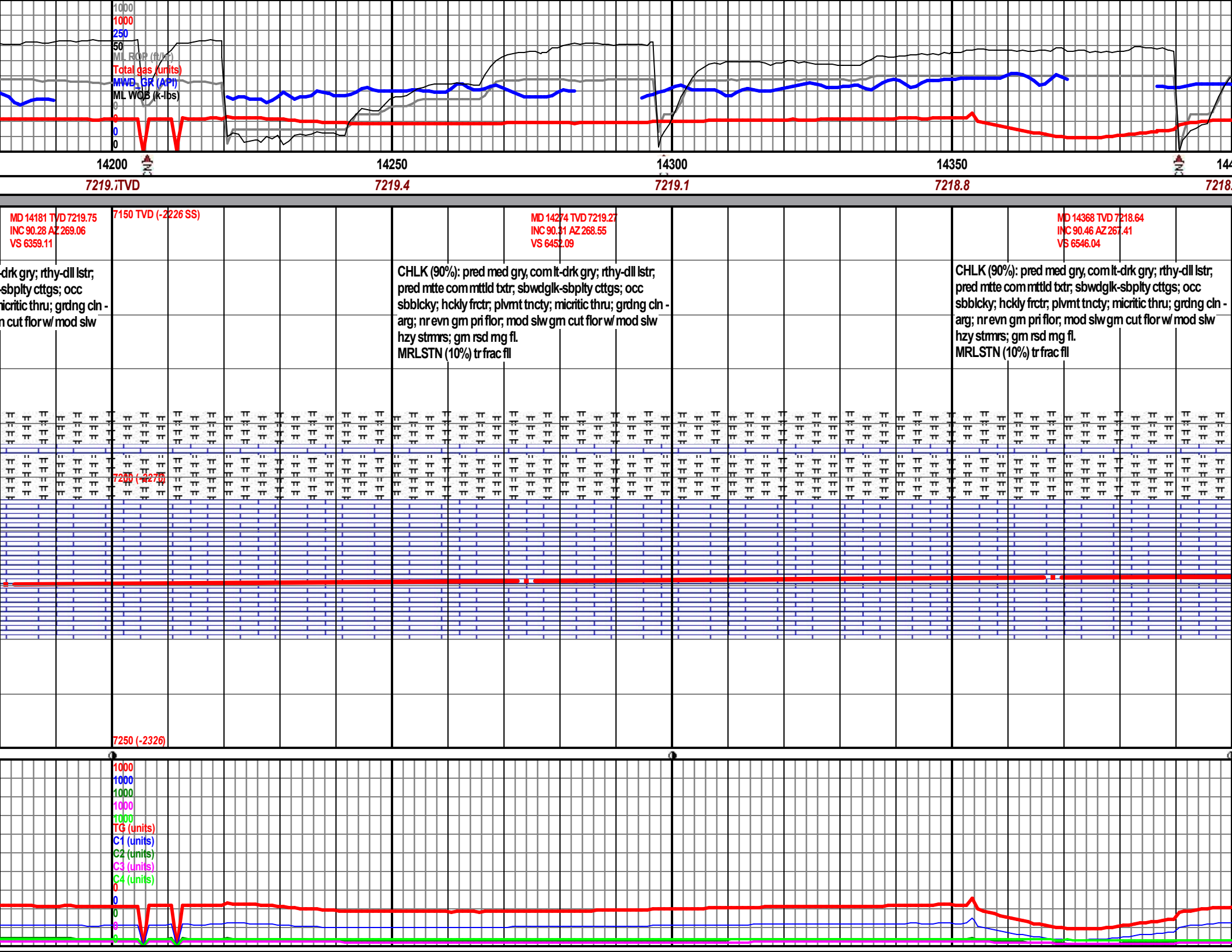


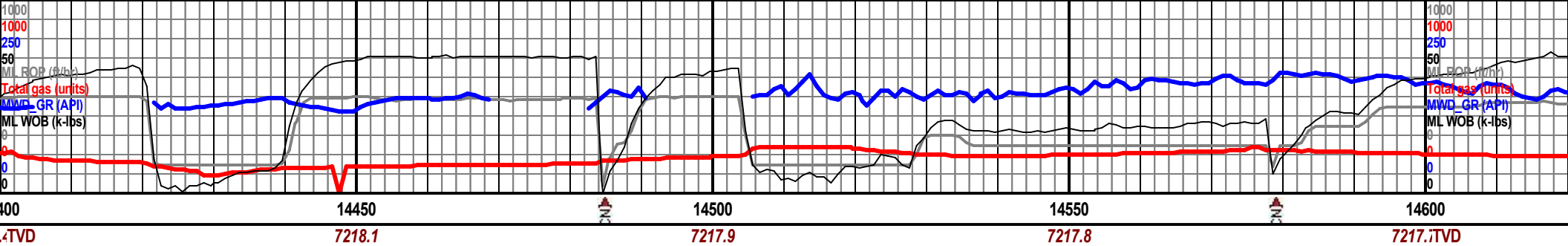


<p>CHLK (80%): pred med gry, com lt-drk gry; rthy-dll lstr; pred mite com mtlld ttr; sbwdgk-sbply ctgs; occ sbbcky; hckly frctr; plvmt tncty; micritic thru; grdng cln - arg; nr evn gm pri flor; mod slw gm cut flor w/ mod slw hzy strms; gm rsd mg fl. MRLSTN (20%) tr frac fl</p>	<p>7150 TVD (-2) MD 13809 TVD 7220.56 INC 90.22 AZ 273.86 VS 5987.63</p>	<p>CHLK (80%): pred med gry, com lt-drk gry; rthy-dll lstr; pred mite com mtlld ttr; sbwdgk-sbply ctgs; occ sbbcky; hckly frctr; plvmt tncty; micritic thru; grdng cln - arg; nr evn gm pri flor; mod slw gm cut flor w/ mod slw hzy strms; gm rsd mg fl. MRLSTN (20%) tr frac fl</p>	<p>MD 13902 TVD 7220.15 INC 90.28 AZ 274.17 VS 6080.39</p>	<p>CHLK (90%): pred mite e sbbcky; h arg; nr evn hzy strms MRLSTN (</p>
<p>7200 (-2276)</p>	<p>7250 (-2326)</p>			

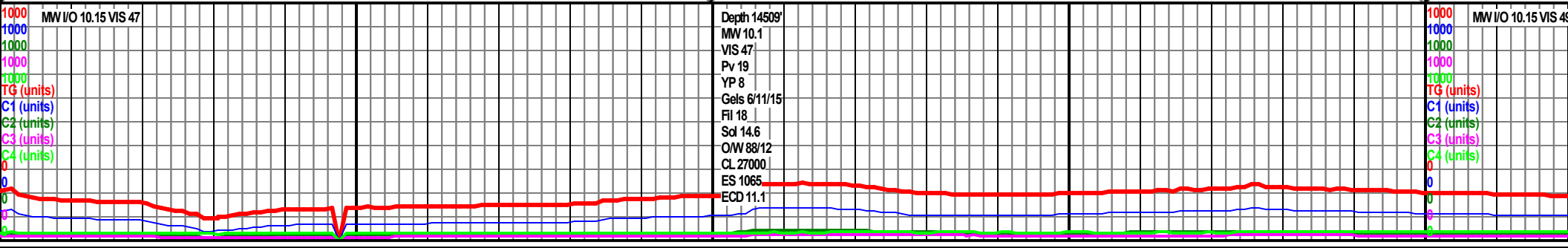


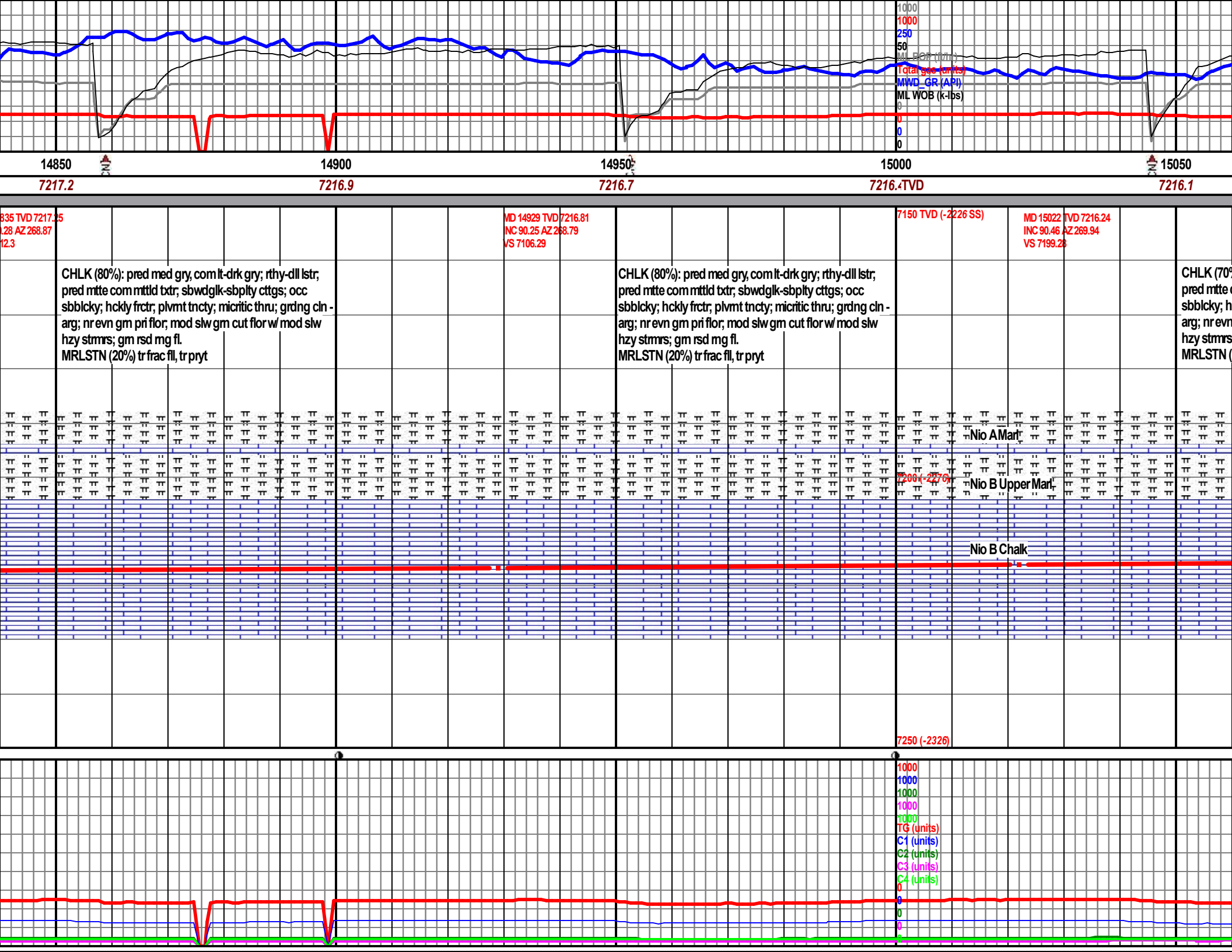


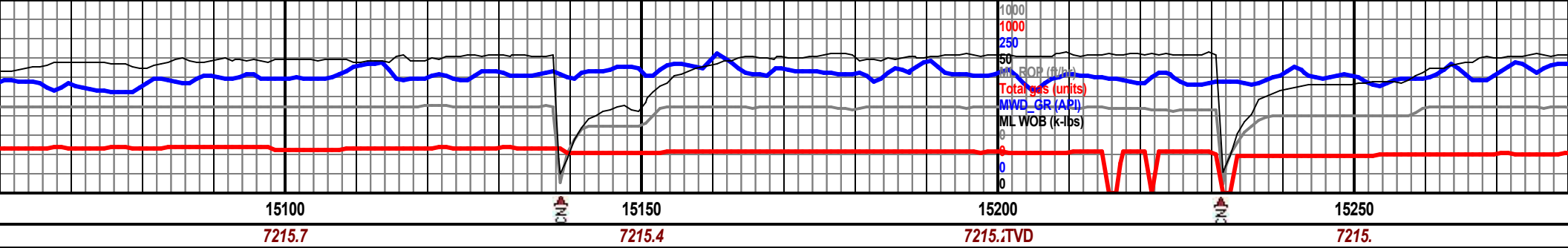




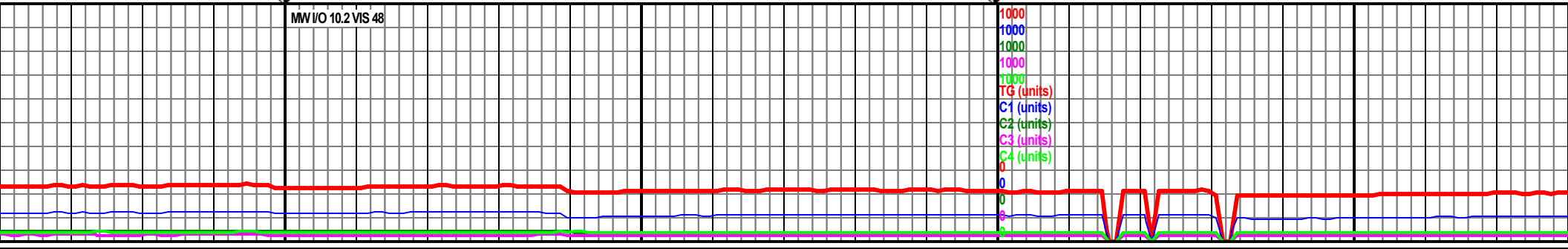
7150 TVD (-2226 SS)								MD 14460 TVD 7218.04 INC 90.28 AZ 265.46 VS 6637.87								MD 14552 TVD 7217.75 INC 90.09 AZ 265.12 VS 6729.57								7150 TVD (-2226 SS)			
								CHLK (90%): pred med gry, com lt-drk gry; rthy-dll lstr; pred mite com mttld ttr; sbwdgk-sbpity ctggs; occ sbbckly; hckly frctr; plvmt tncy; micritic thru; grdng cln - arg; nr evn gm pri flor; mod slw gm cut flor w/ mod slw hzy stmrs; gm rsd mg fl. MRLSTN (10%) tr frac fil, tr pryt								CHLK (90%): pred med gry, com lt-drk gry; rthy-dll lstr; pred mite com mttld ttr; sbwdgk-sbpity ctggs; occ sbbckly; hckly frctr; plvmt tncy; micritic thru; grdng cln - arg; nr evn gm pri flor; mod slw gm cut flor w/ mod slw hzy stmrs; gm rsd mg fl. MRLSTN (10%) tr frac fil, tr pryt											
7200 (-2276)												Nio A Marl								7200 (-2276)							
												Nio B Upper Marl								7200 (-2276)							
												Nio B Chalk															







MD 15114 TVD 7215.62 INC 90.31 AZ 269.18 VS 7291.28										7150 TVD MD 15207 TVD 7215.16 INC 90.25 AZ 268.09 VS 7384.25									
CHLK (60%): pred med gry, com lt-drk gry; rthy-dll lstr; pred mite com mtld ttr; sbwdgk-sbply ctgs; occ sbbcky; hcky frctr; plvmt tncy; micritic thru; grdng cln - arg; nrevn gm pri flor; mod slw gm cut flor w/ mod slw hzy strms; gm rsd mg fl. MRLSTN (40%) tr frac fil, tr pryt										CHLK (60%): pred med gry, com lt-drk gry; rthy-dll lstr; pred mite com mtld ttr; sbwdgk-sbply ctgs; occ sbbcky; hcky frctr; plvmt tncy; micritic thru; grdng cln - arg; nrevn gm pri flor; mod slw gm cut flor w/ mod slw hzy strms; gm rsd mg fl. MRLSTN (40%) tr frac fil, tr pryt									
7480 (-2276)										7250 (-2326)									



5500		
26 hrs on 5/16/2019.		
15,445' MD.		
06, 3x13 & 5x12, In @ 44' in 39.7 hrs., Rotary 1, XL45/RS; 27 rpg		
an Spitzmiller and Andrew		
MD	TVD	SSD
7188'	7018'	-2094'
7245'	7053'	-2129'
7288'	7076'	-2152'
7487'	7154'	-2230'
8174'	7197'	-2273'
N/A	N/A	N/A
7692'	7184'	-2260'
15465	7214	-2290'
ers and Associates.		