

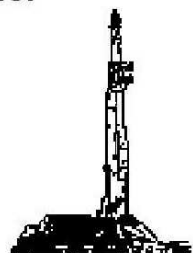
GOOLSBY BROTHERS
and associates, inc.

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: Henrickson Federal 14N-18HZ (Horizontal Hole Section)

Location: Section 7, T3N, R66W, Weld County, CO.

License Number: API: 05-123-37671

Spud Date: September 7, 2013

Surface Coordinates: NESW Sec 7 T3N R66W; 1855' FSL & 2078' FWL

Lat N 40.236910 Long W -104.822441

Bottom Hole Coordinates: SESW Sec 18 T3N R66W; 482' FSL, 2157' FWL

Ground Elevation (ft): 4794'

Logged Interval (ft): 6500'

Formation: Pierre Sands/Shales, Niobrara, Niobrara B Target

Type of Drilling Fluid: Water & Poly to 6,500', LSND 6500'-13923'

K.B. Elevation (ft): 4810'

Total Depth (ft): 13923' DTMD

Region: Wattenberg, DJ Basin

Drilling Completed: September 12, 2013

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

OPERATOR

Company: Kerr-McGee Oil & Gas Onshore LP

Address: Granite Tower - 1099 18th St, Ste 1800

Denver, CO 80202

CO Geologist, John Morgan

GEOLOGIST

Name: Andrew Krueger & Philip Wilcox

Company: Goolsby Brothers & Assoc. (GBA), Inc. (www.goolsbybrothers.com)

Address: 575 Union Blvd.

Suite 208,

Lakewood CO. 80228

E-logs

MWD GR 975' - 13880'

Casing

9 5/8" Surface Casing set @ 975' MD

7" Intermediate Casing set @ 7490'

4 1/2" Production Liner hung 09/14/2013, landed @ 13908'

Comments

1) Drilling Contractor: Xtreme Drilling, Rig #20

Toolpusher: Sijifredo Chaparro

2) Company Man: Charlie Daigle & Tom Kibbe

John Salario & Ricky Carrol

3) Mud Comapny : AES Drilling Fluids

Engineer: Ray Brewer

4) Directional Drilling: Baker Hughes

Pulse Tool

Drillers: Barry Combs, Scott Stanford


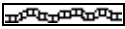
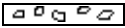

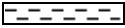
MWD: Greg Dore & David Campbell

5) Gas Equipment: Mudlogging Systems Inc.


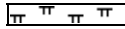

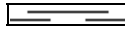
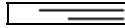
by Terra Services






Redbox # ML-462 & Ratcliff Agitator

ROCK TYPES

 Anhy
 Bent
 Brec
 Cht
 Clyst

 Coal
 Oil sat.
 Congl
 Dol
 Gyp

 Lmst
 Mrlst
 Salt
 Shale
 Shcol

 Shgy
 Ss
 Sltst
 Ss
 Chalk

 Carb sh
 Sltty 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

OIL SHOWS

Even
 Spotted
 Ques
 Dead
 Vspotty

near even

POROSITY TYPE

Earthy
 Fenest
 Fracture

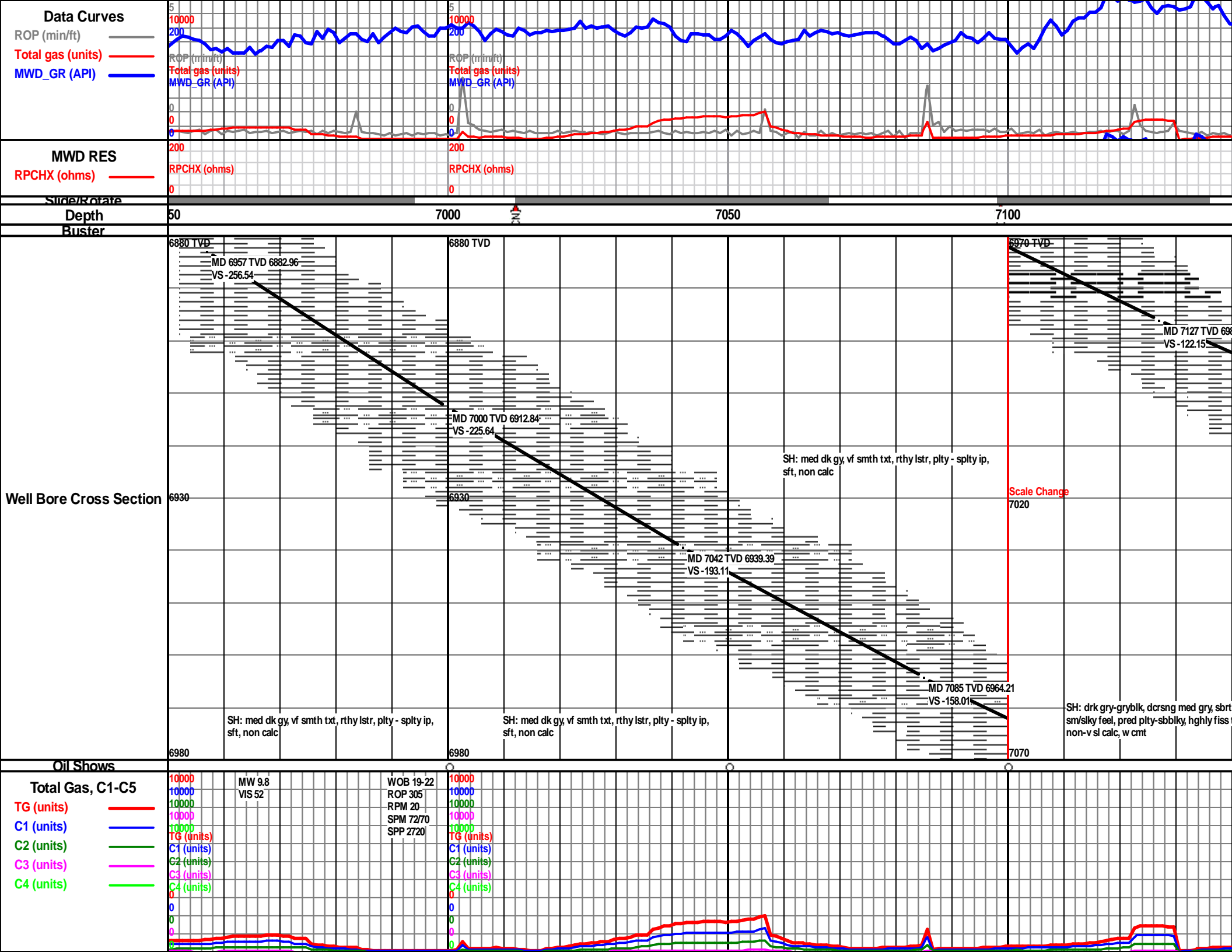
Inter
 Moldic
 Organic
 Pinpoint
 Vuggy

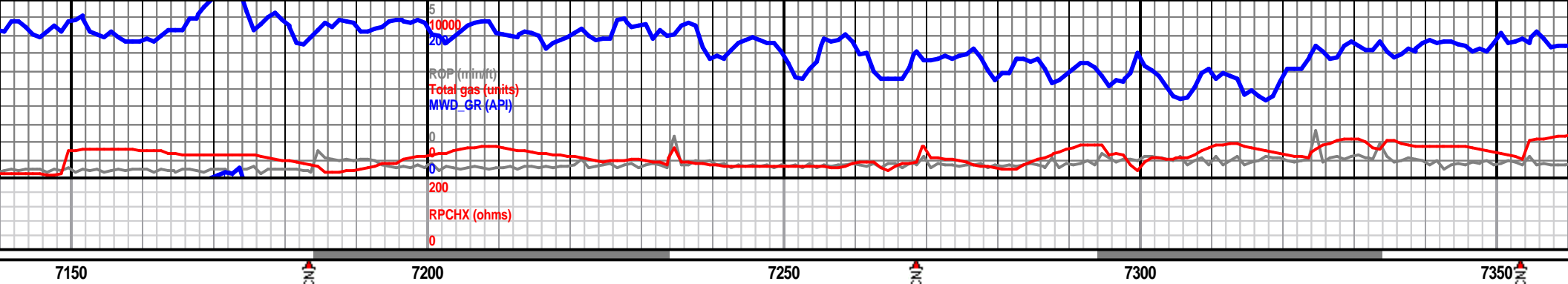
ROUNDING

Rounded
 Subrnd
 Subang
 Angular

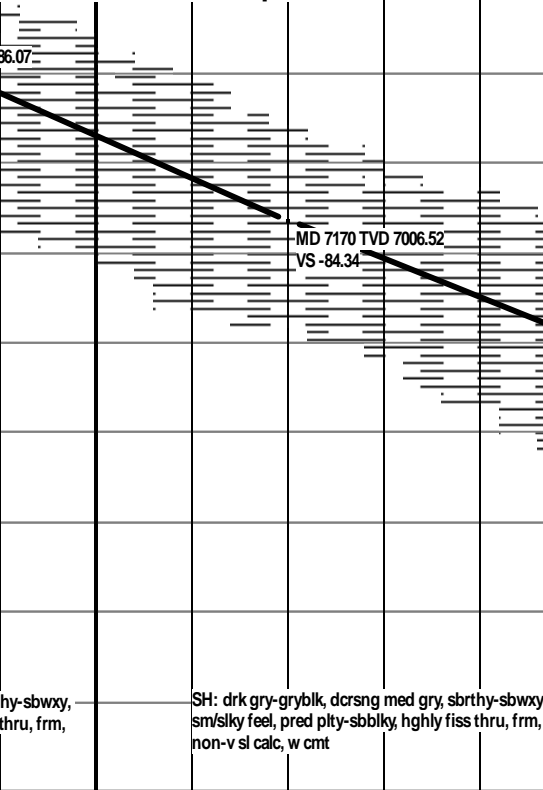
SORTING

Well
 Moderate
 Poor





Sharon Springs Top 7110' MD (6978' TVD) based on GR & samples



6970 TVD

MD 7170 TVD 7006.52
VS -84.34

MD 7212 TVD 7024.34
VS -46.32

Niobrara A Top 7238' MD (7034' TVD) based on GR & samples

CARB CHALK (60%): lt med-med gry, occ drkr gry
ip, abndt mttld w v smll lent tan spcks, pred sbchlky,
sbrthy-sm thru, sbply-pty, abndt shrp/jggd thru, v
frm-hd, micrite w 20% arg mtx, no vis perm or por,
no ini fluor, wk hzy/dif yel cuts, drk yel o res rng, sl o
odor, MARLSTN(40%)

MD 7255 TVD 7039.93
VS -6.25

CARB CHALK (60%): lt med-med gry, occ drkr gry
ip, abndt mttld w v smll lent tan spcks, pred sbchlky,
sbrthy-sm thru, sbply-pty, abndt shrp/jggd thru, v
frm-hd, micrite w 20% arg mtx, no vis perm or por,
no ini fluor, wk hzy/dif yel cuts, drk yel o res rng, sl o
odor, MARLSTN(40%) com SH cgt.

MRLSTN(60%): med drk gry-gryblk, rthy-sbwxy,
sm/slky feel, pred pty, shrp/jggd ctnngs thru, frm &
stff, v calc, w lime cmt, no vis por or perm, inffd
frac por, no pri fluor, no vis cuts, wk v dim cld res yel
cld, SH(20%), CHLK(10%)

MD 7297 TVD 7053.66
VS 33.44

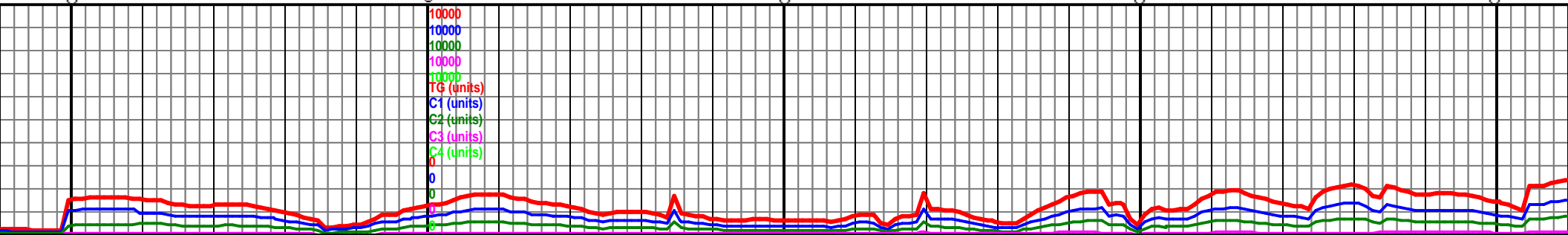
MD 7340 TVD 7065.64
VS 74.72

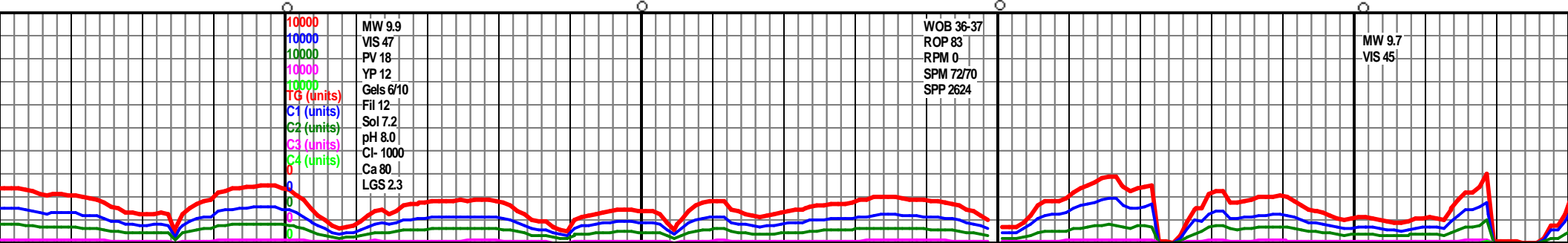
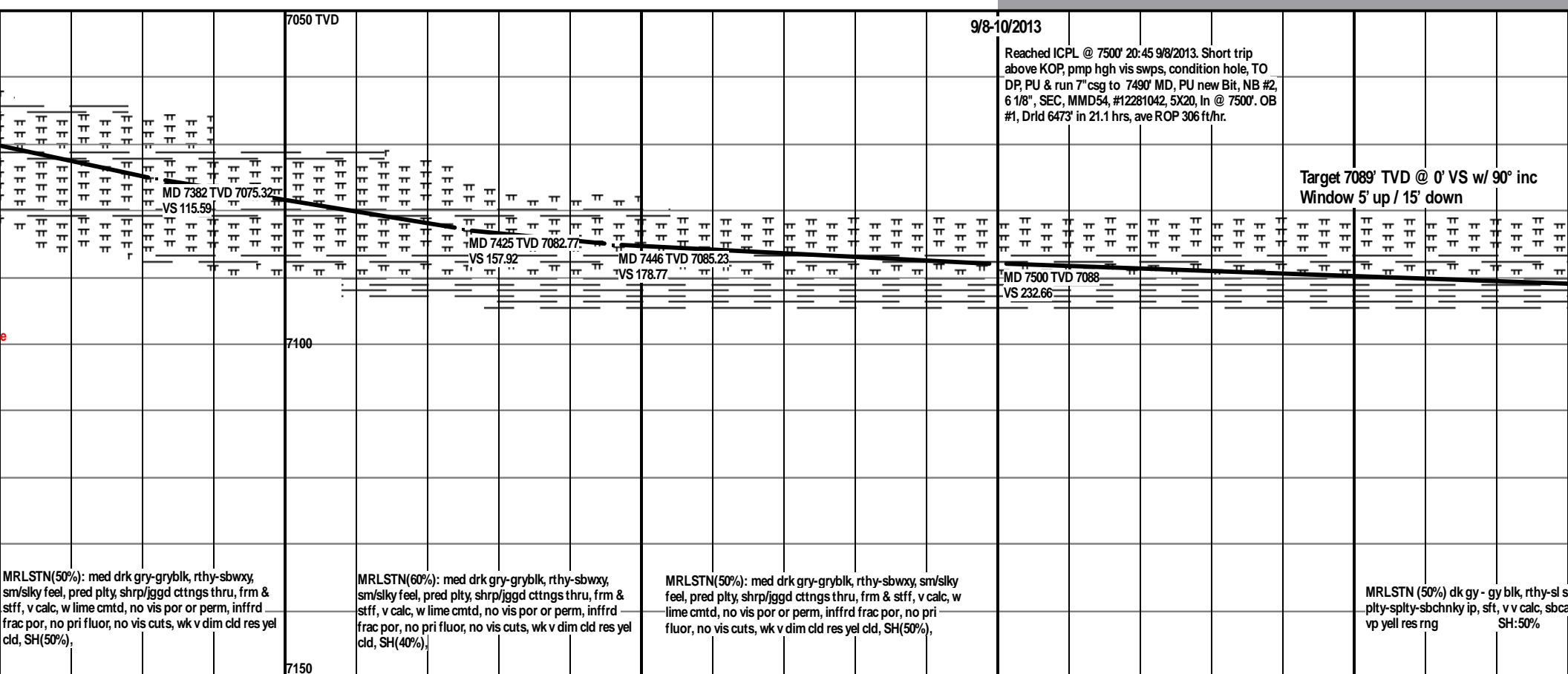
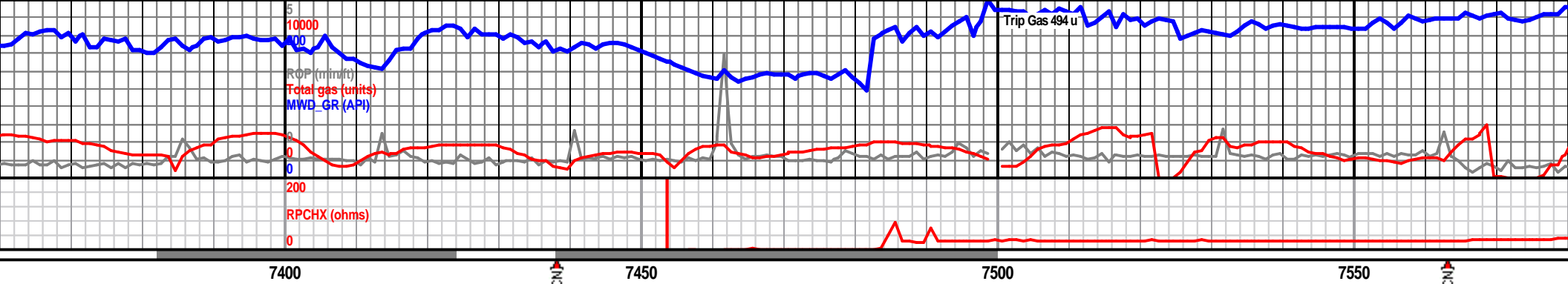
Scale Chang
7100

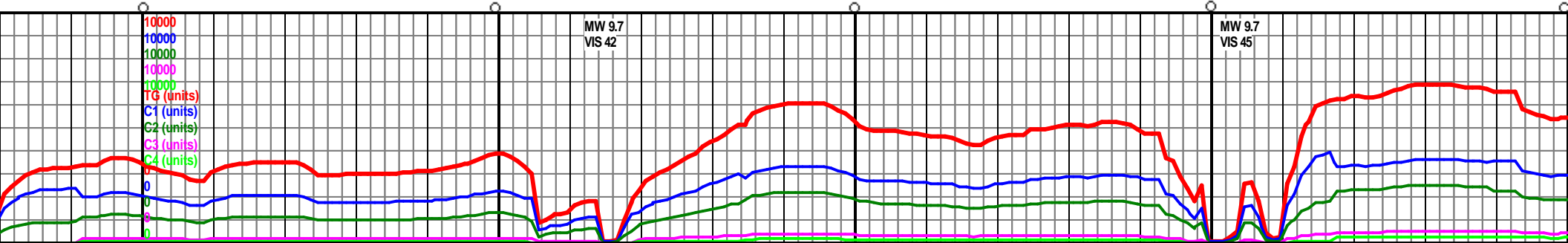
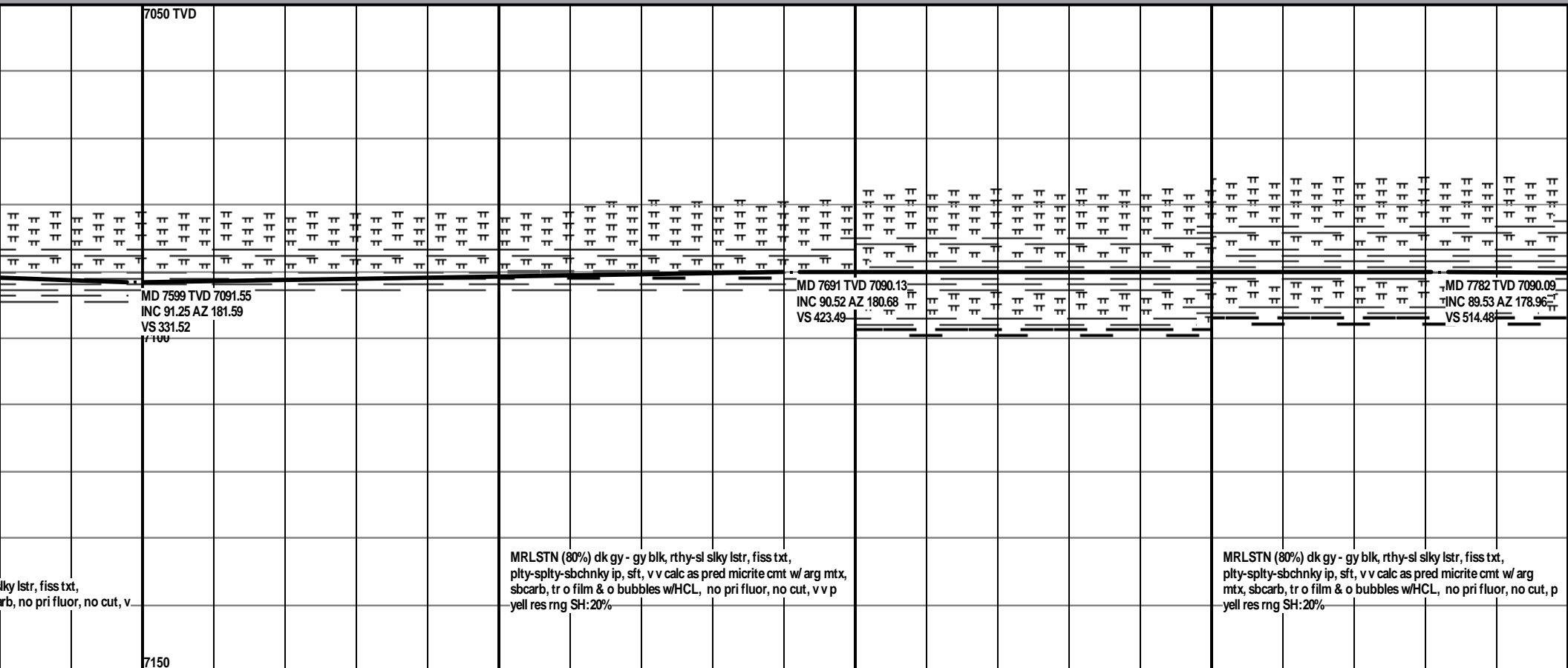
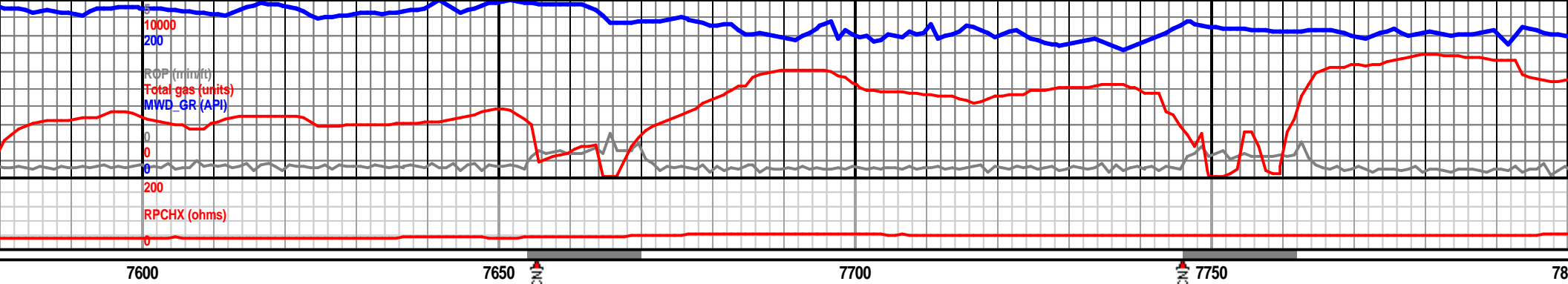
hy-sbwxy,
thru, frm,
SH: drk gry-gryblk, dcrsng med gry, sbrthy-sbwxy,
sm/slky feel, pred pty-sbblky, hghly fiss thru, frm,
non-v sl calc, w cmt

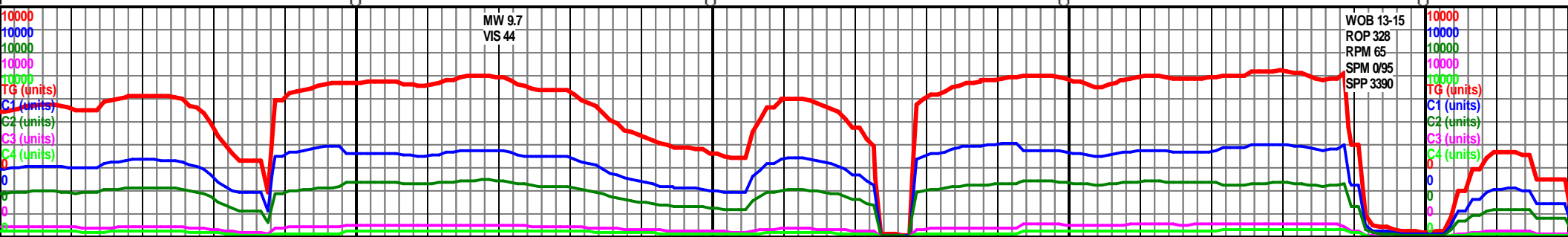
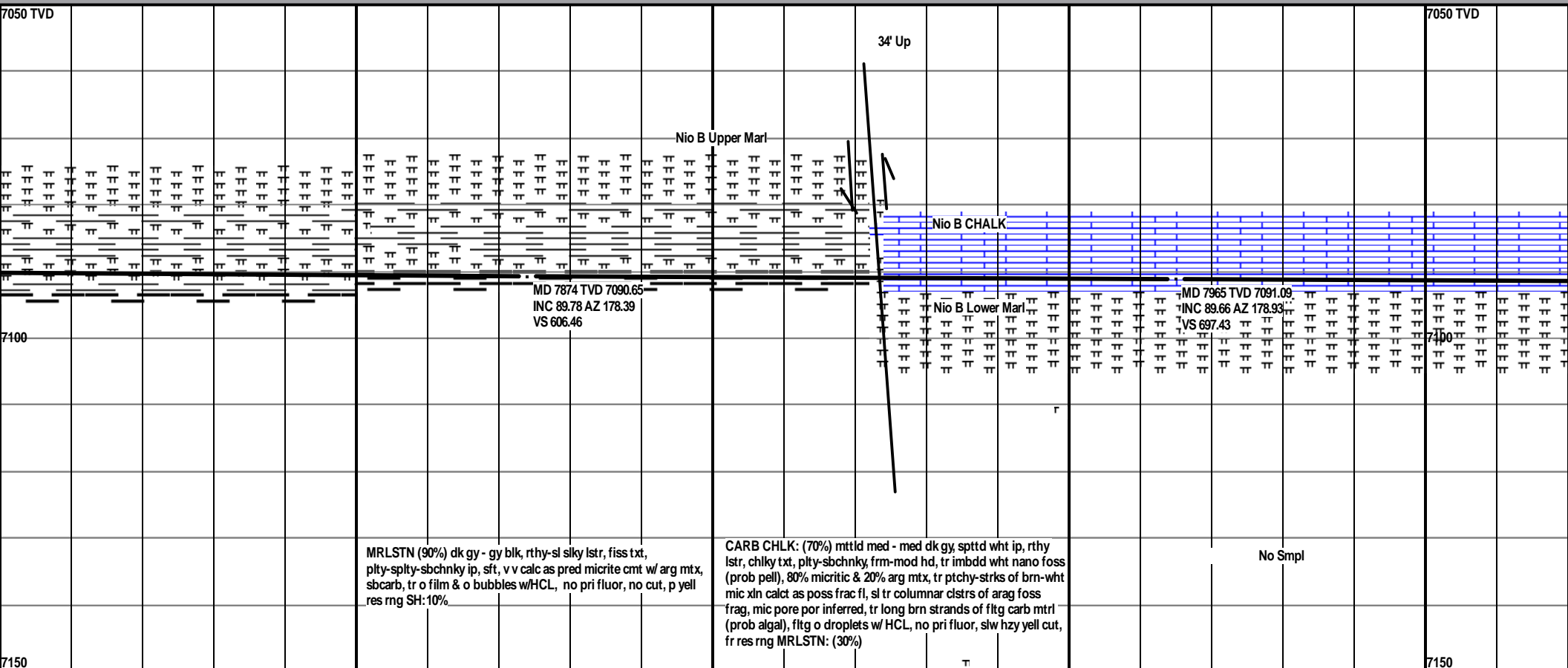
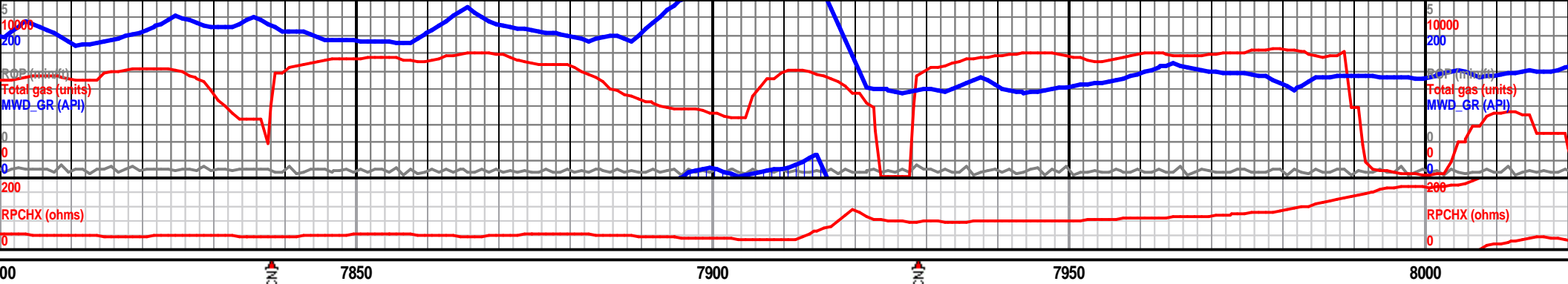
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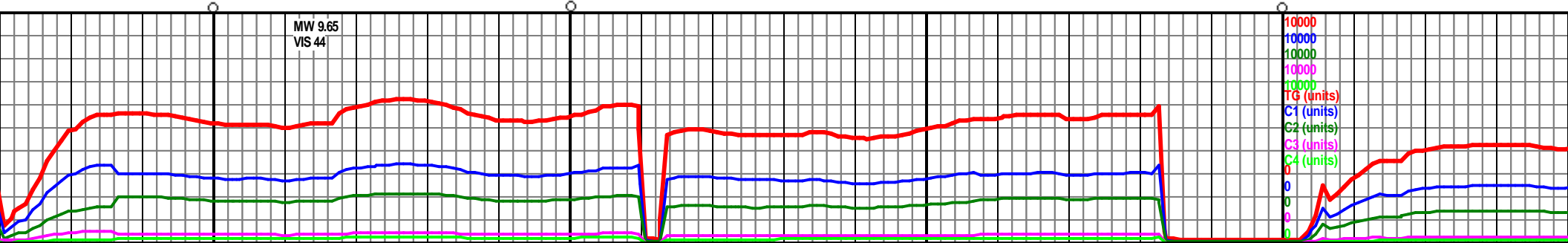
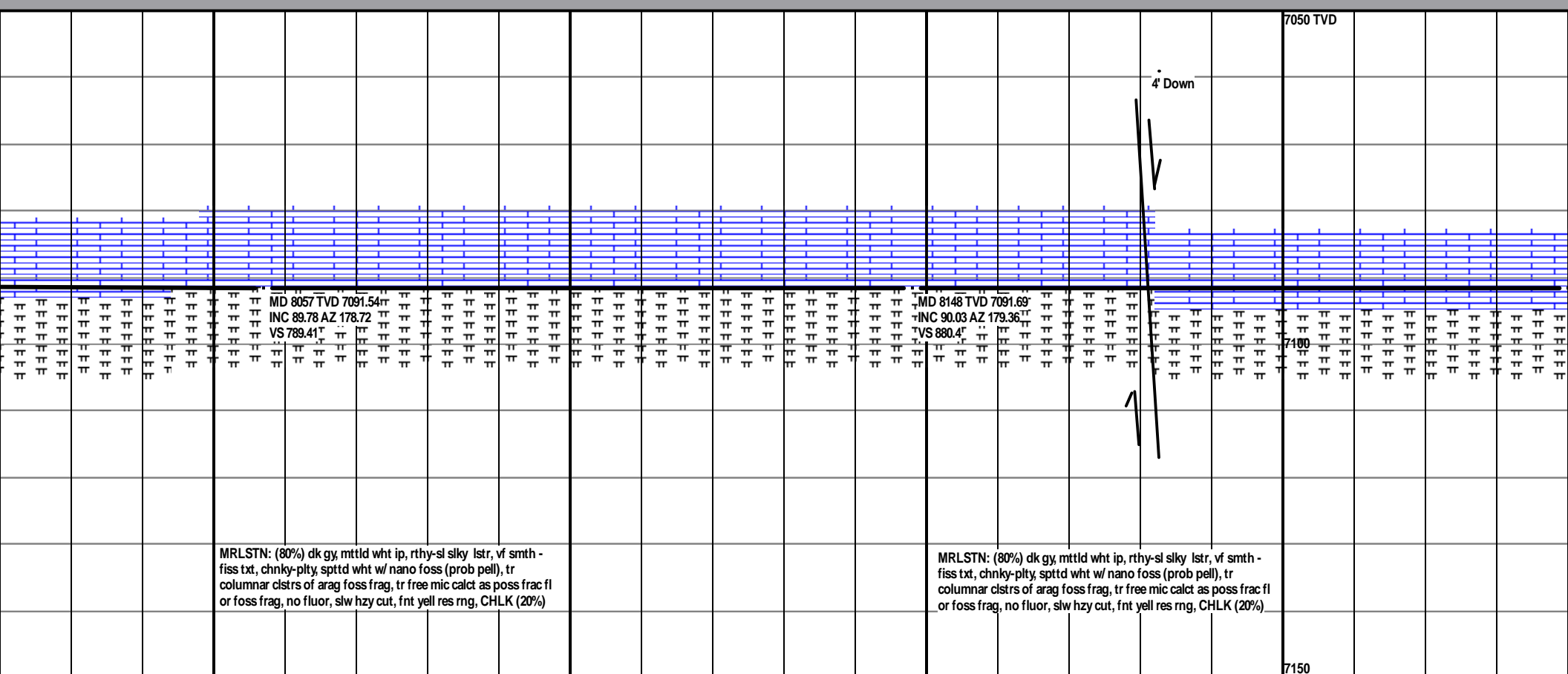
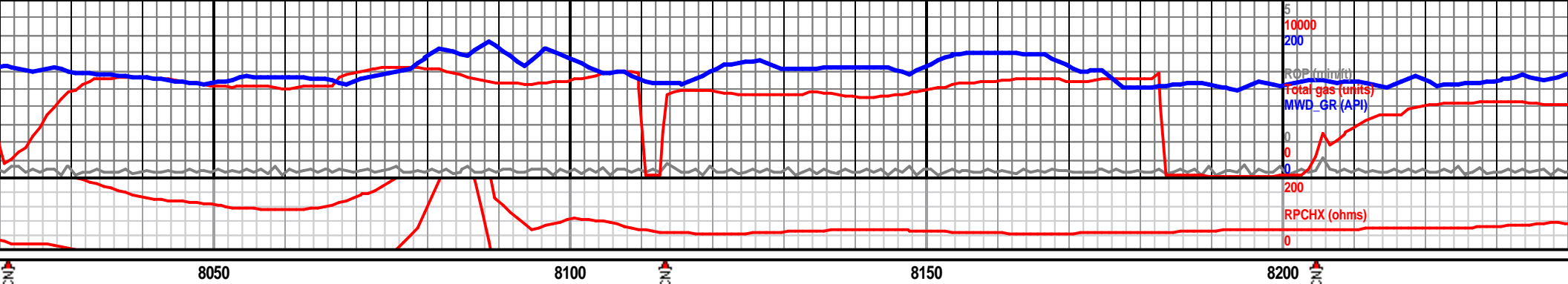
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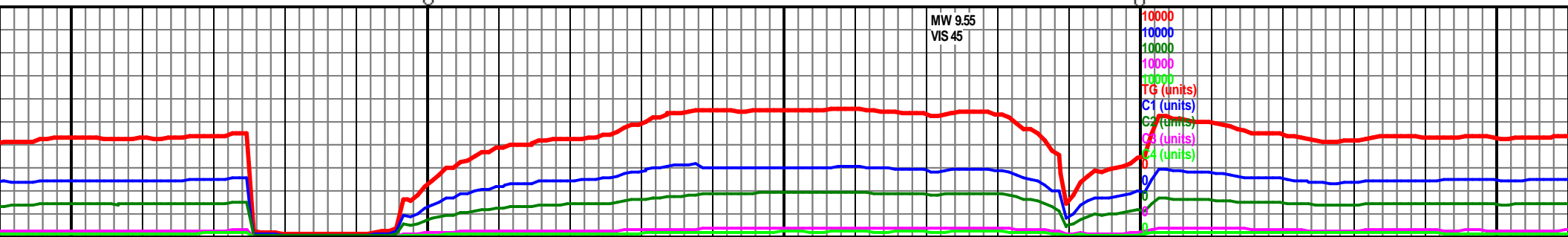
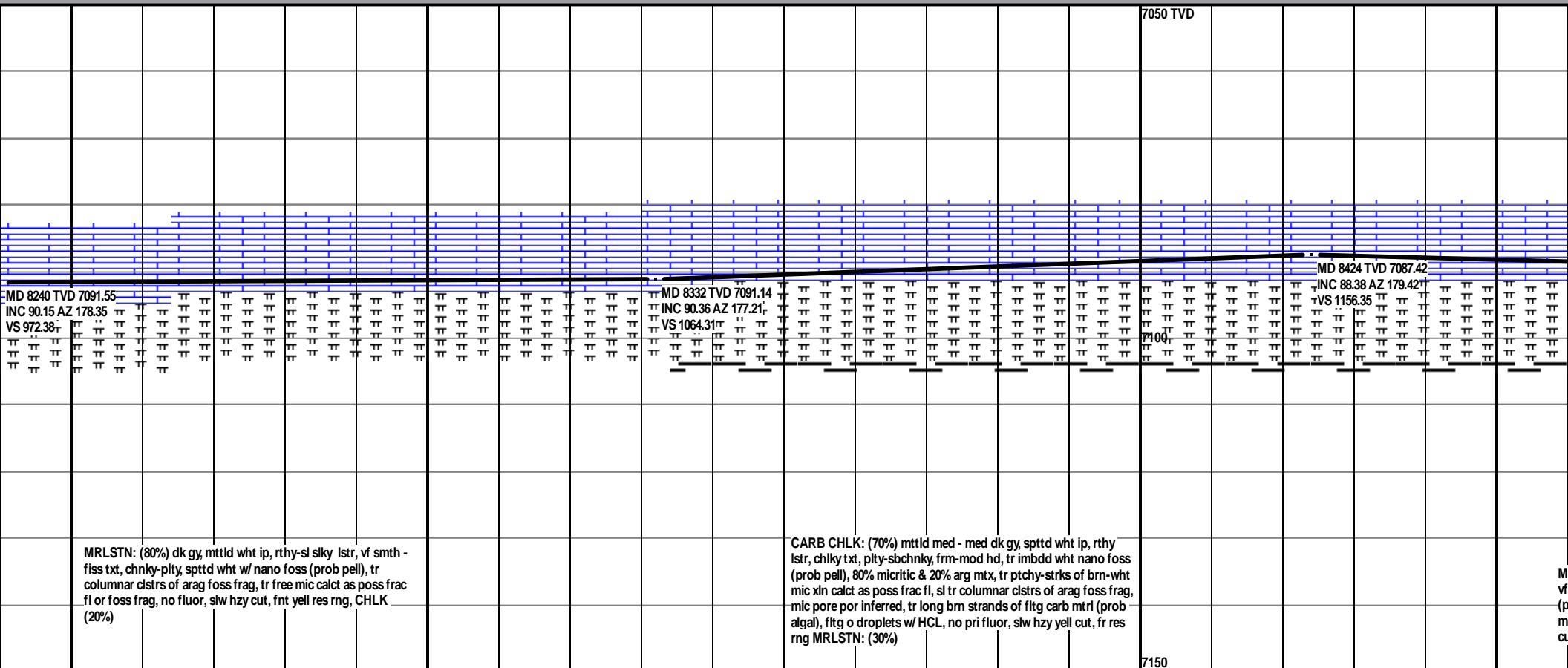
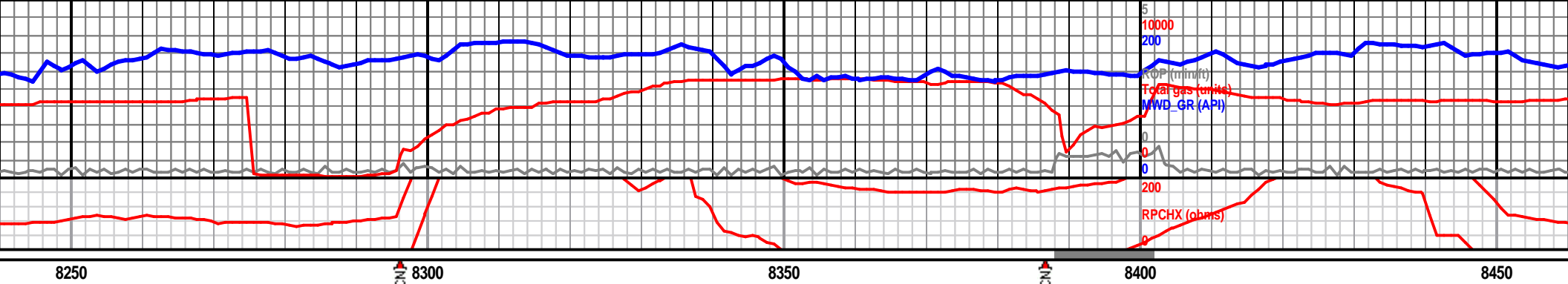


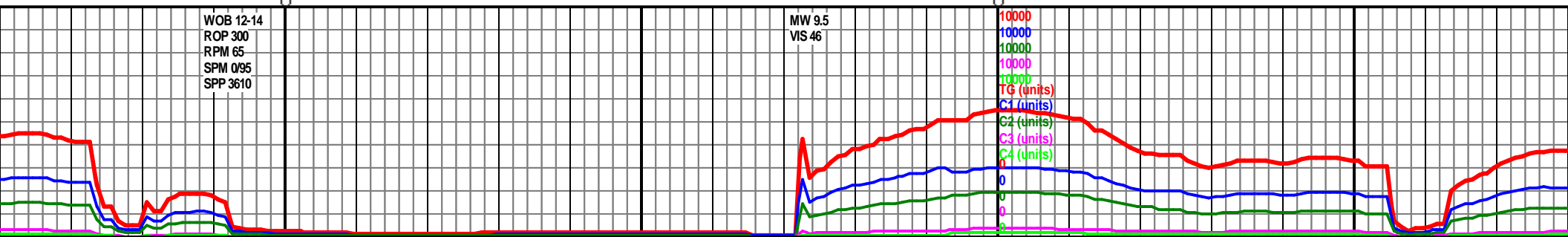
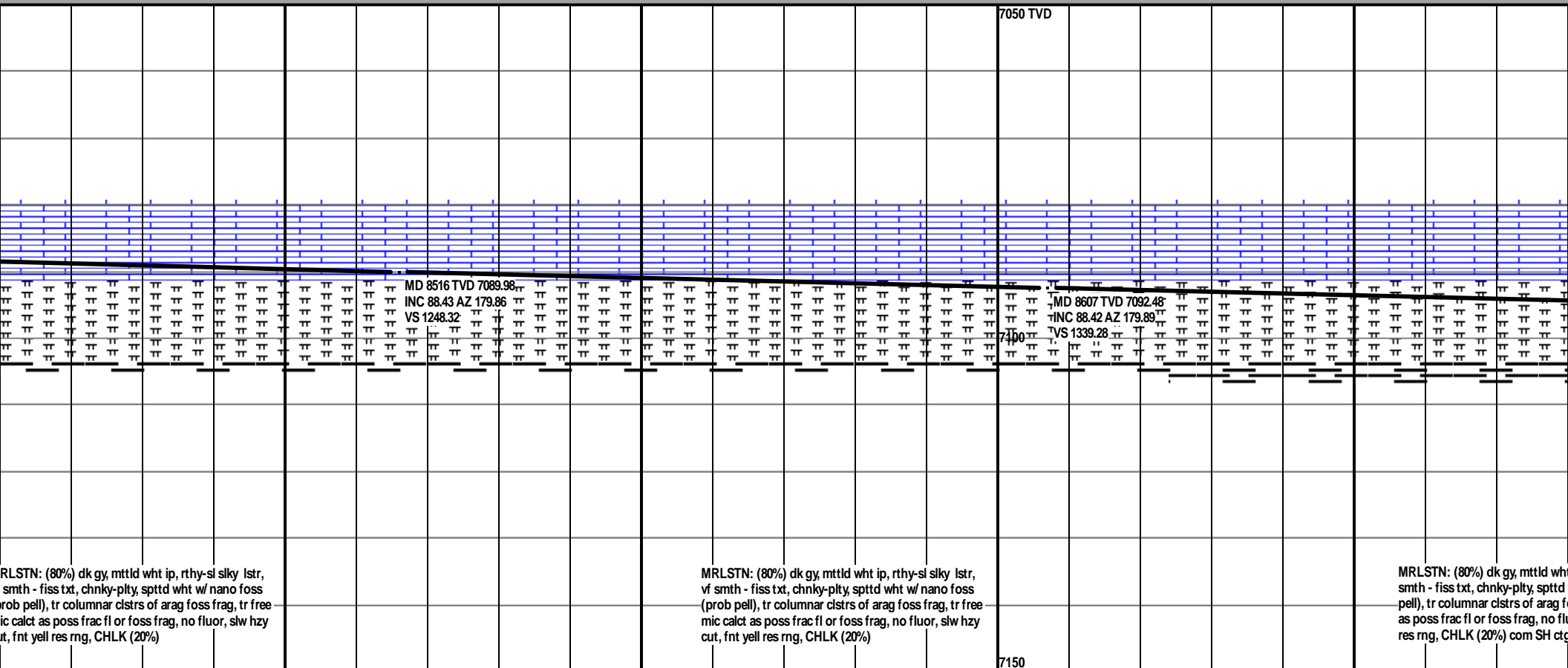
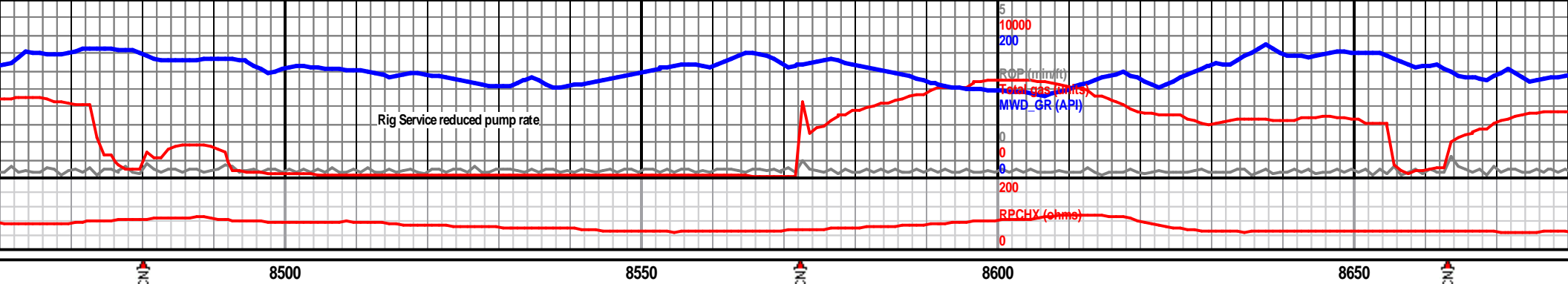


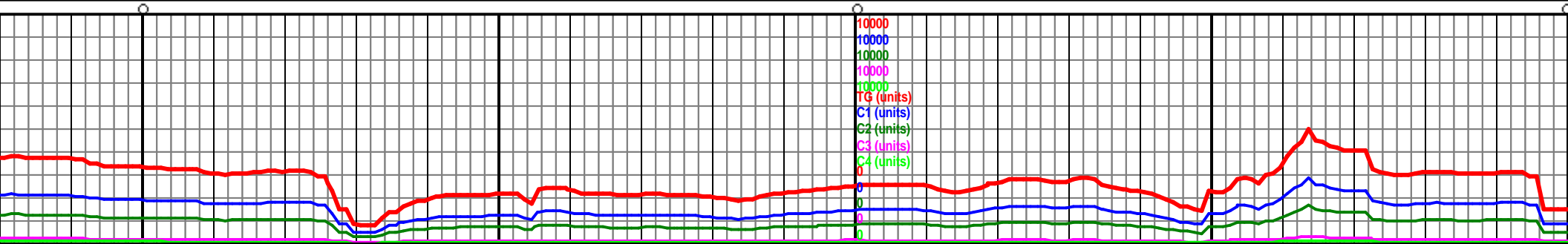
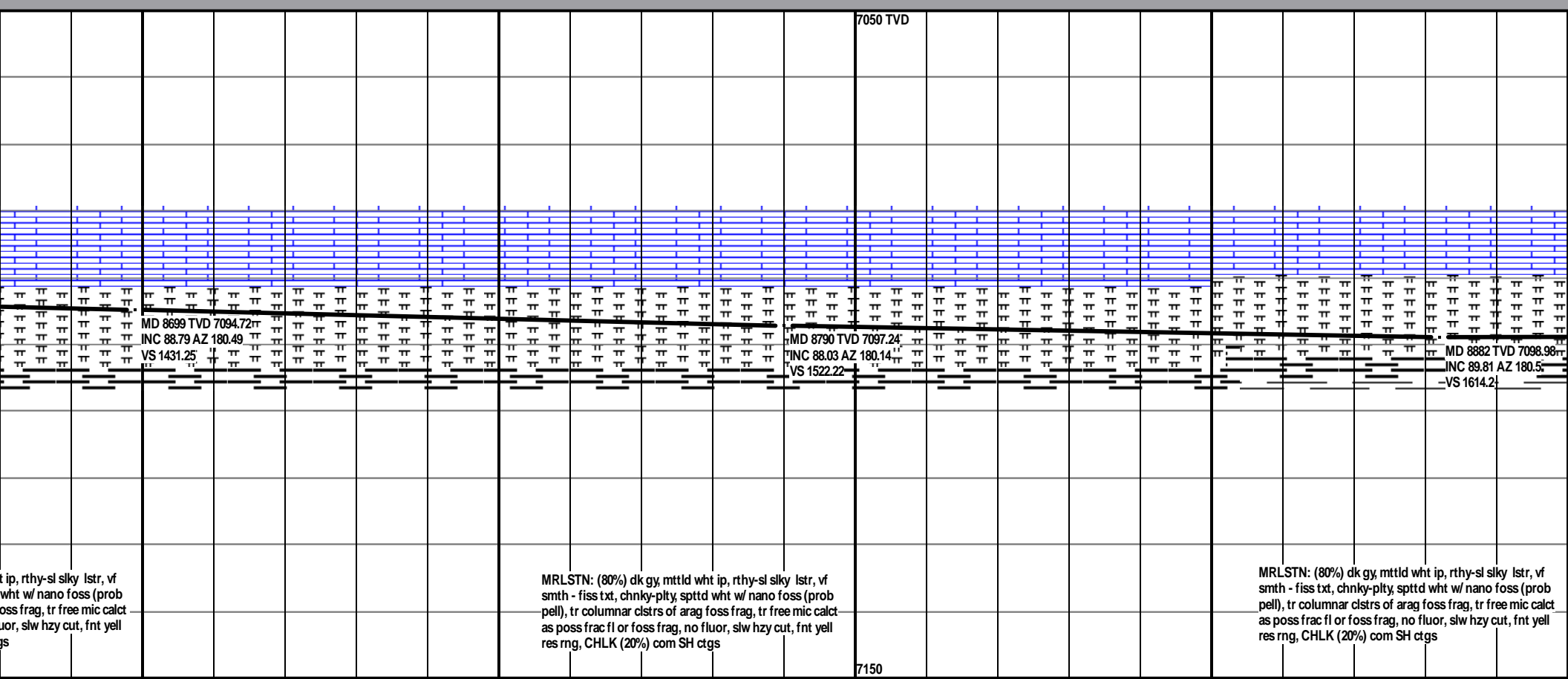
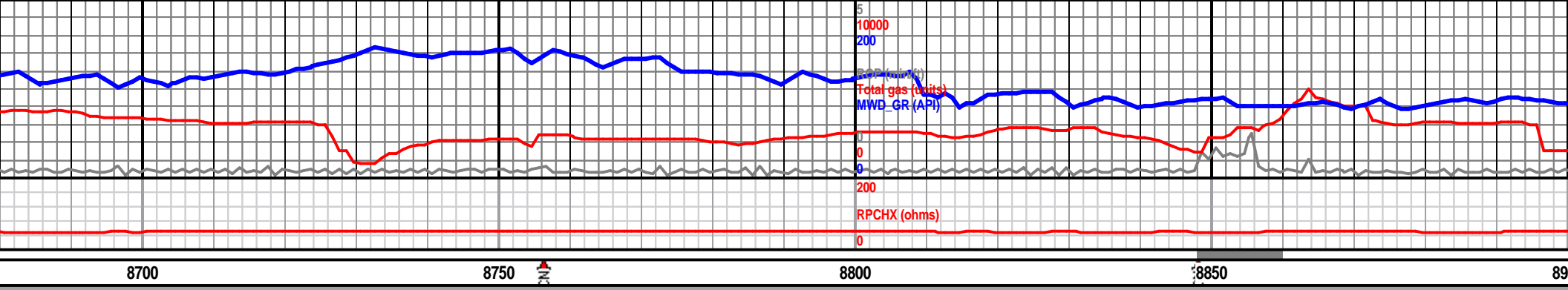


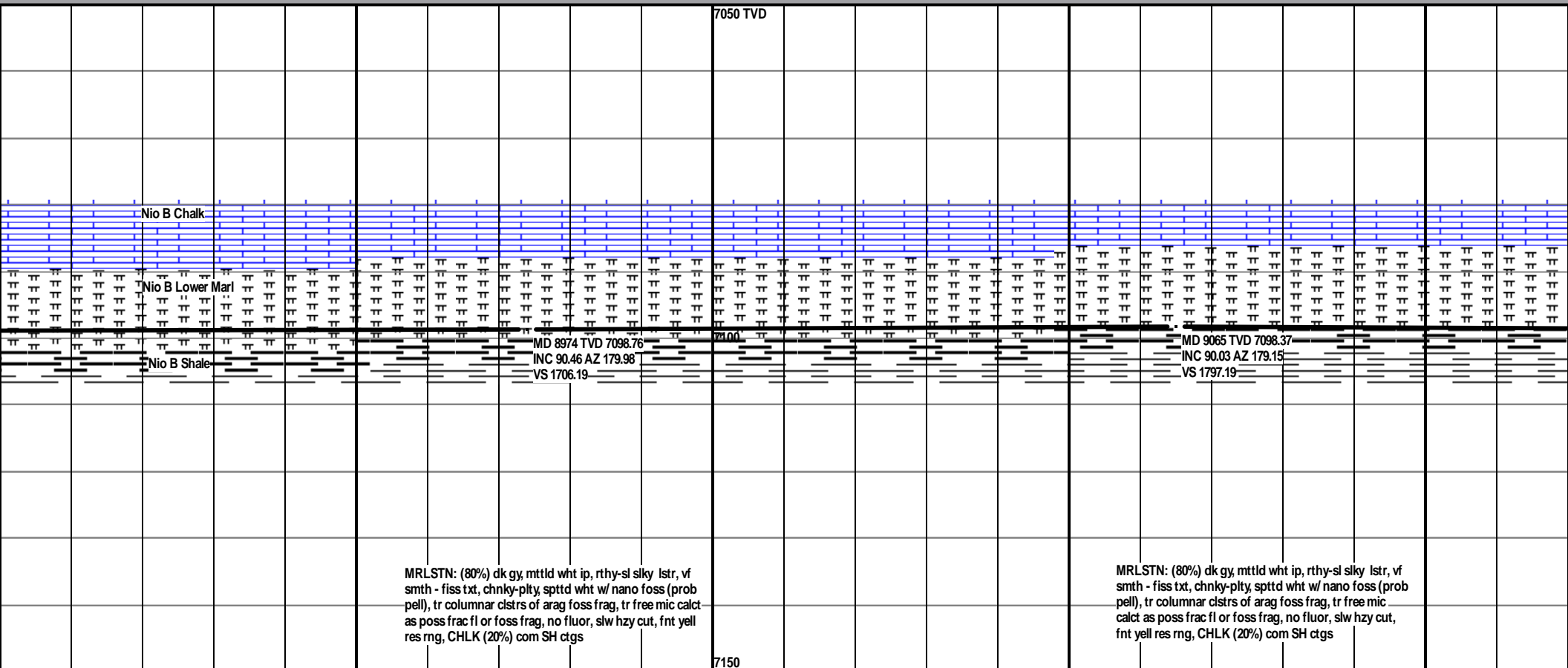
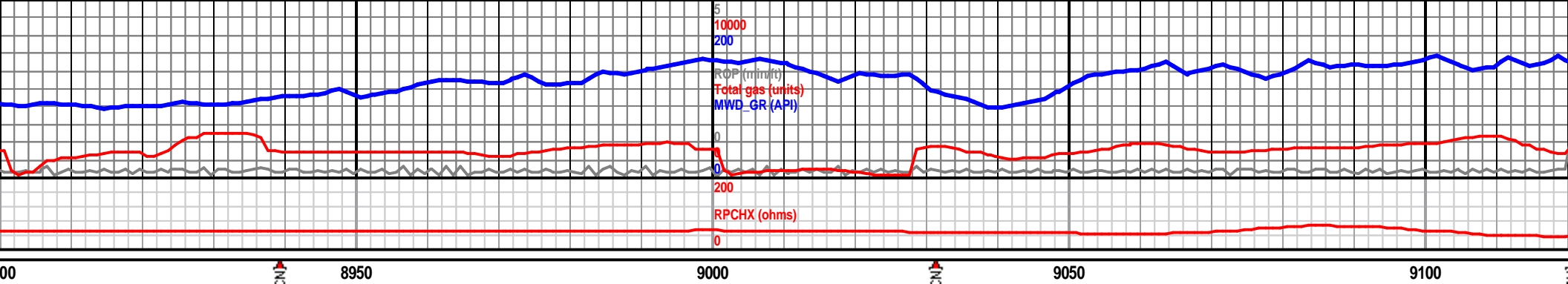






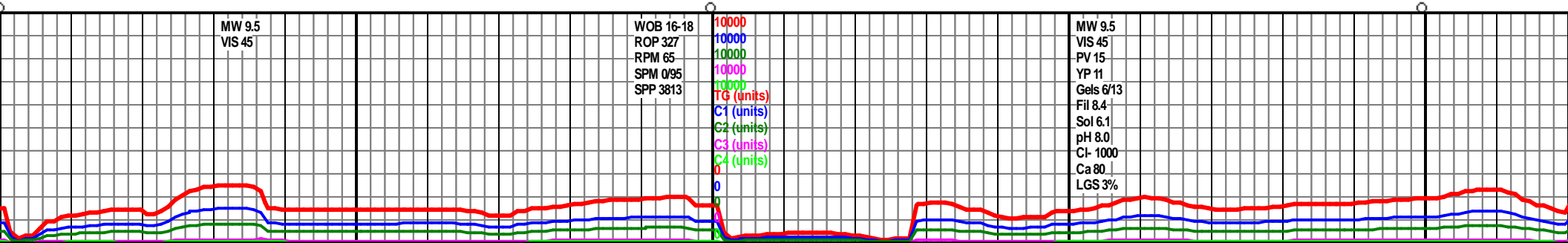


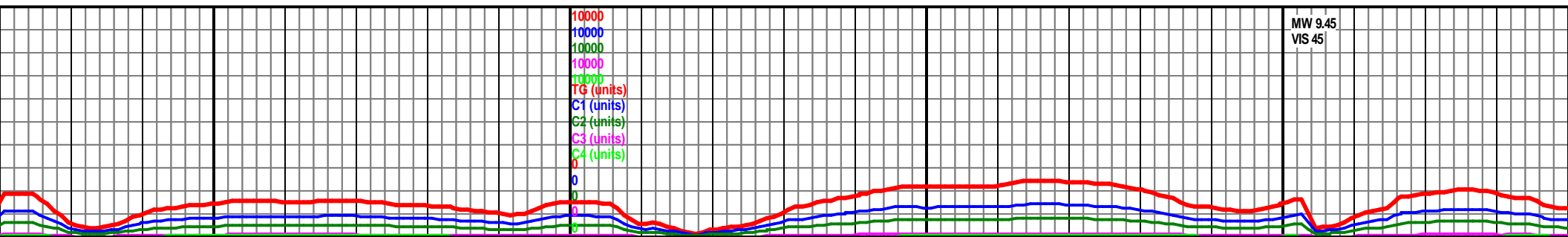
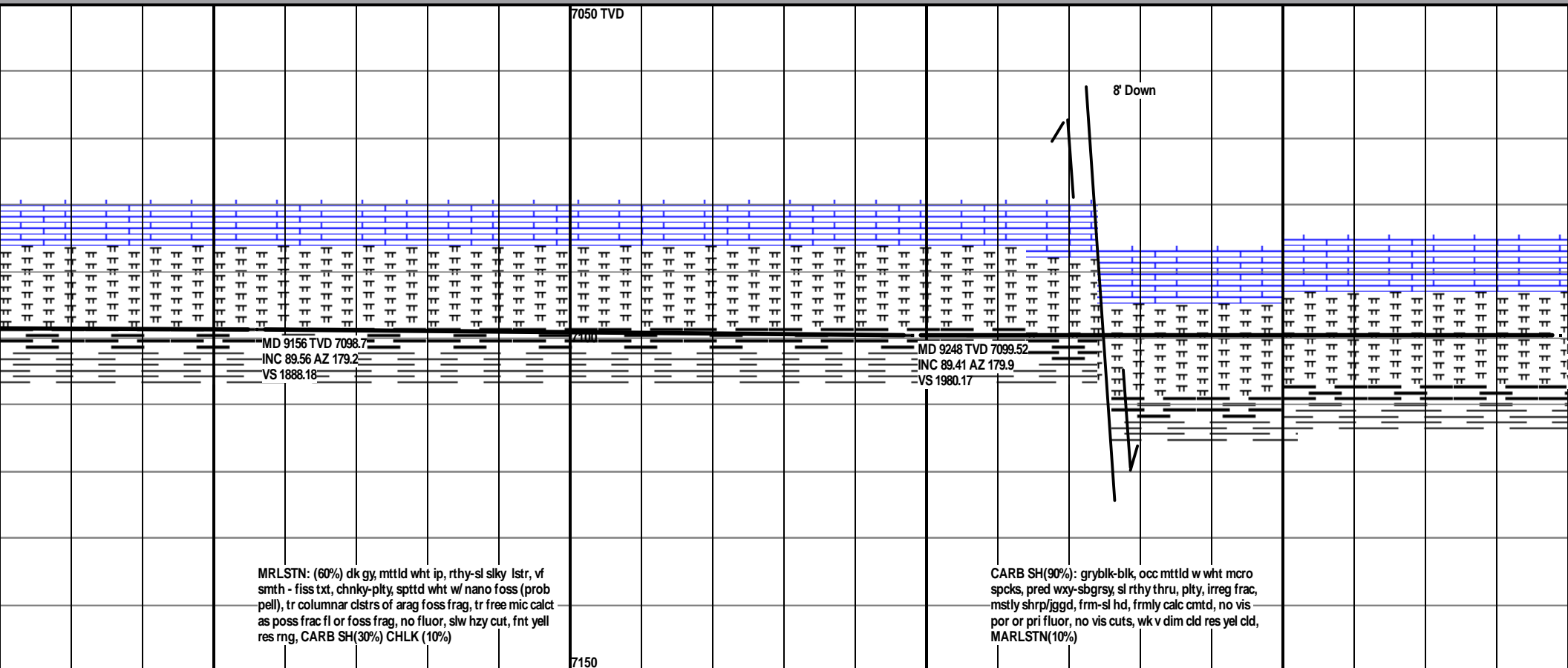
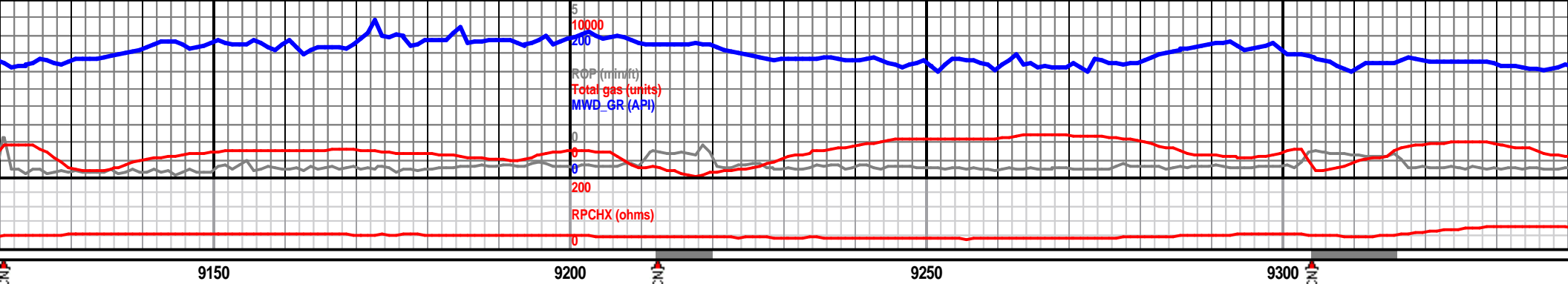


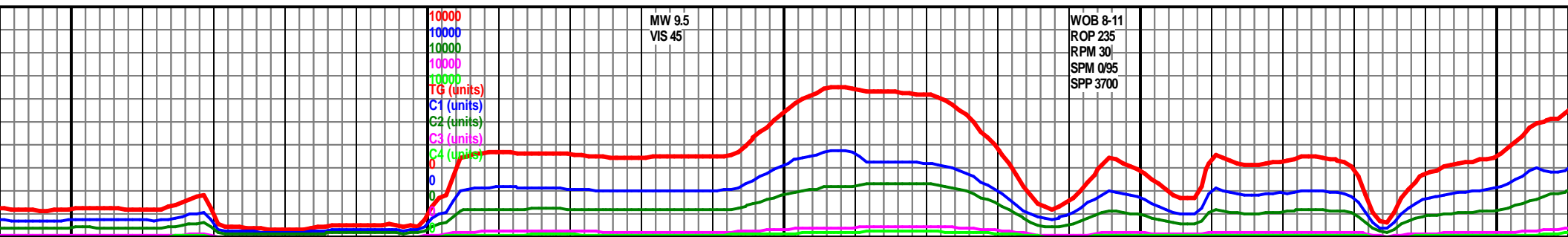
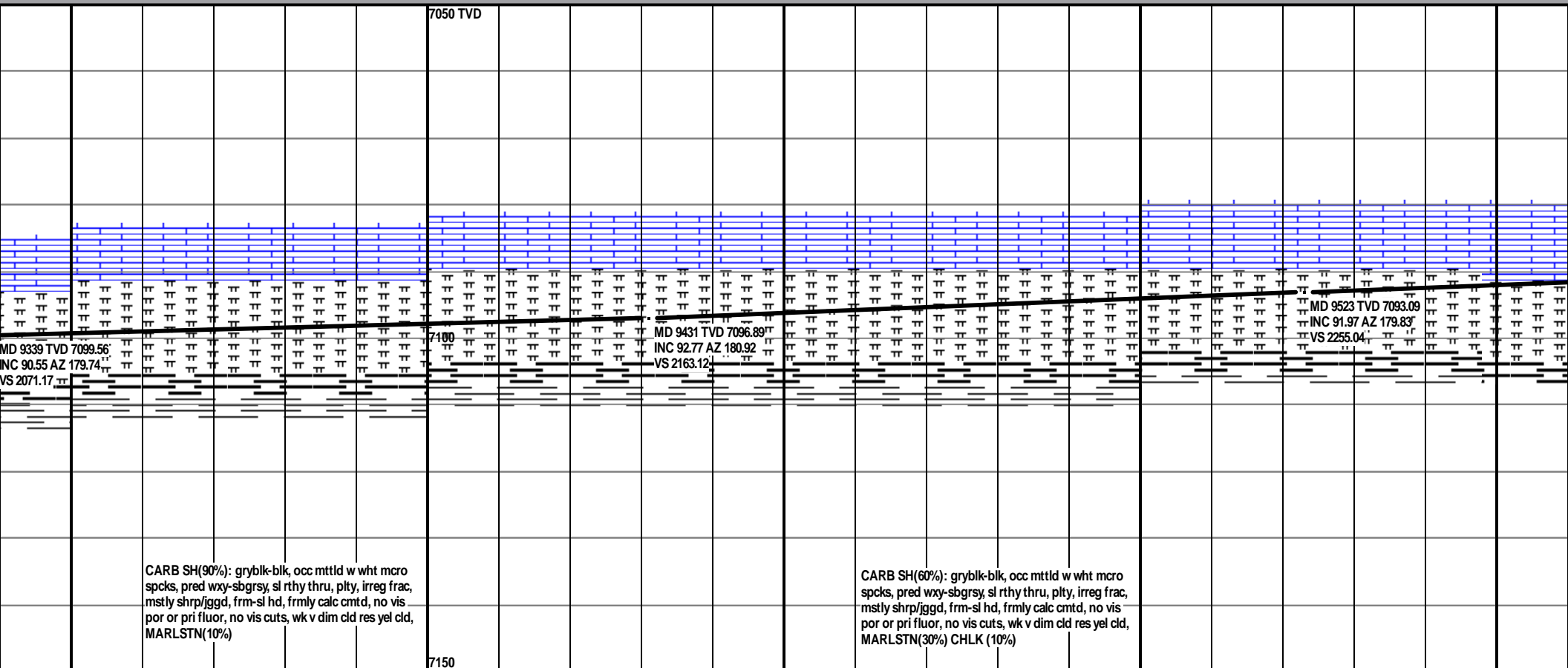
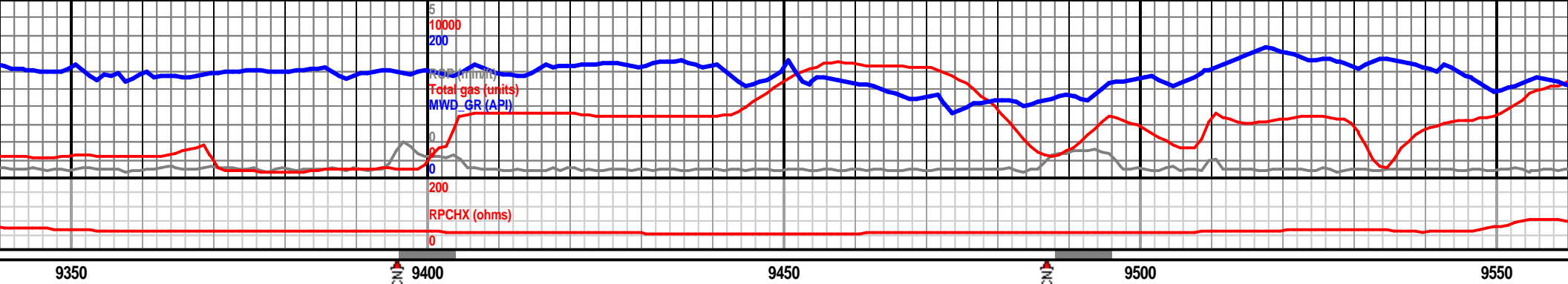


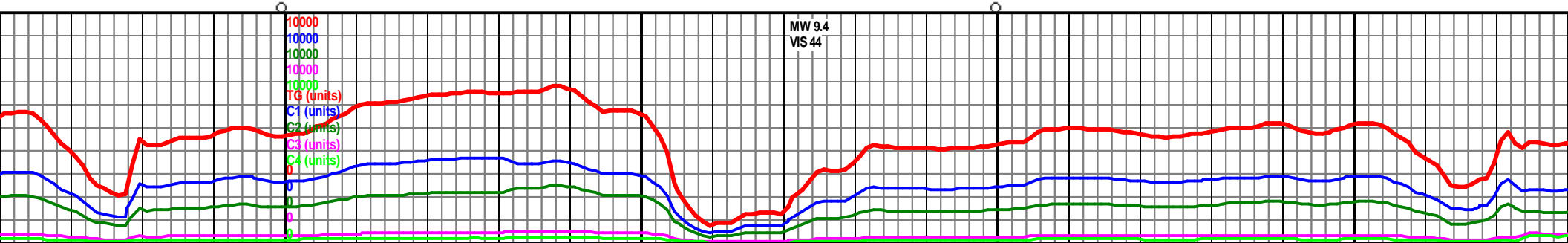
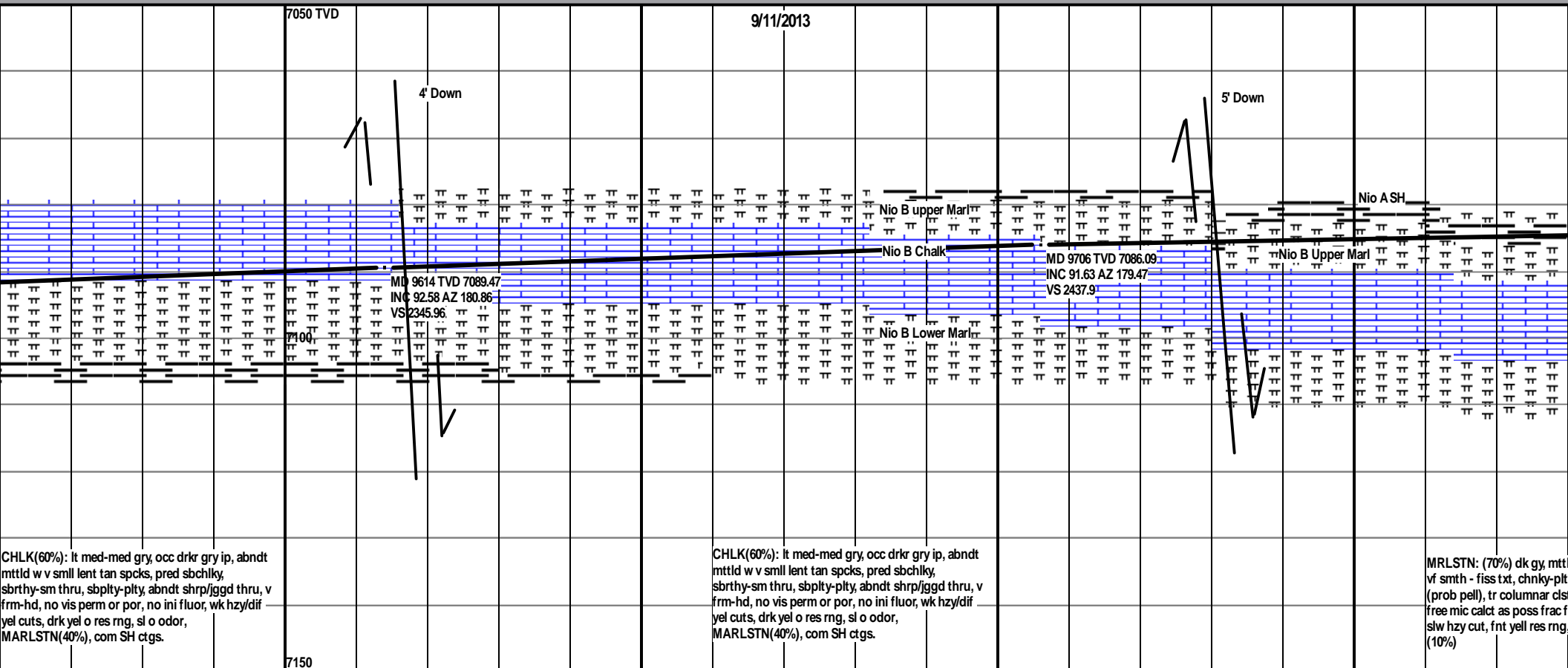
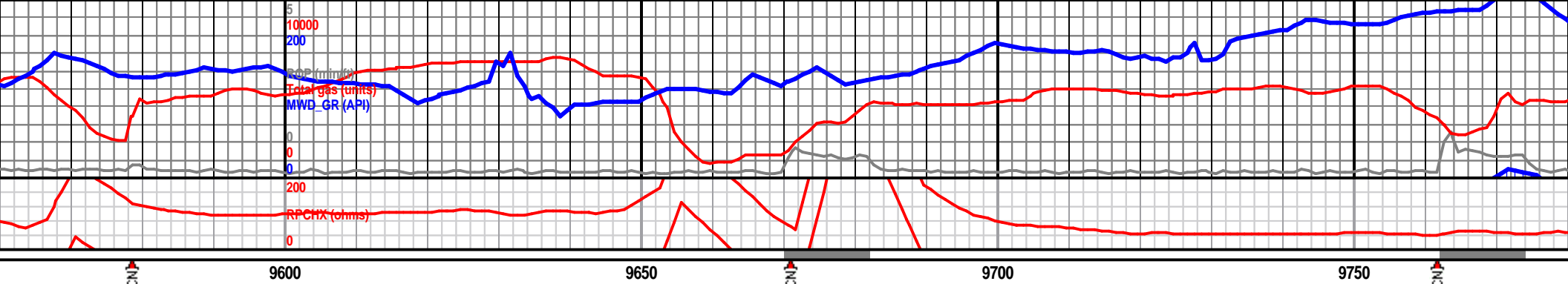
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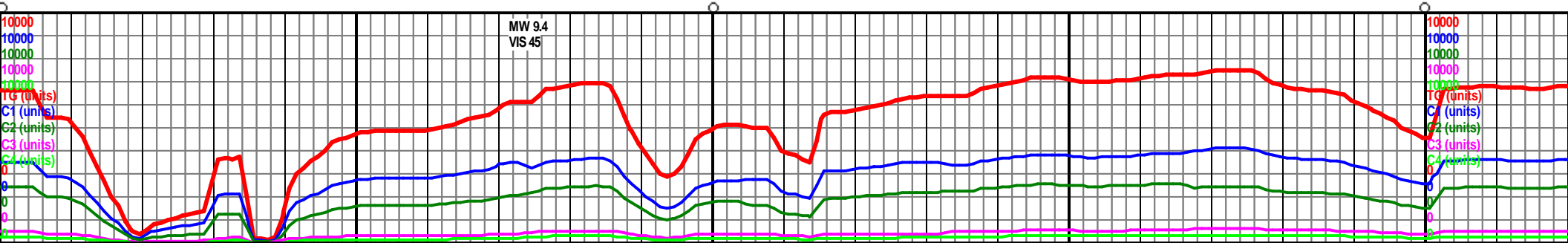
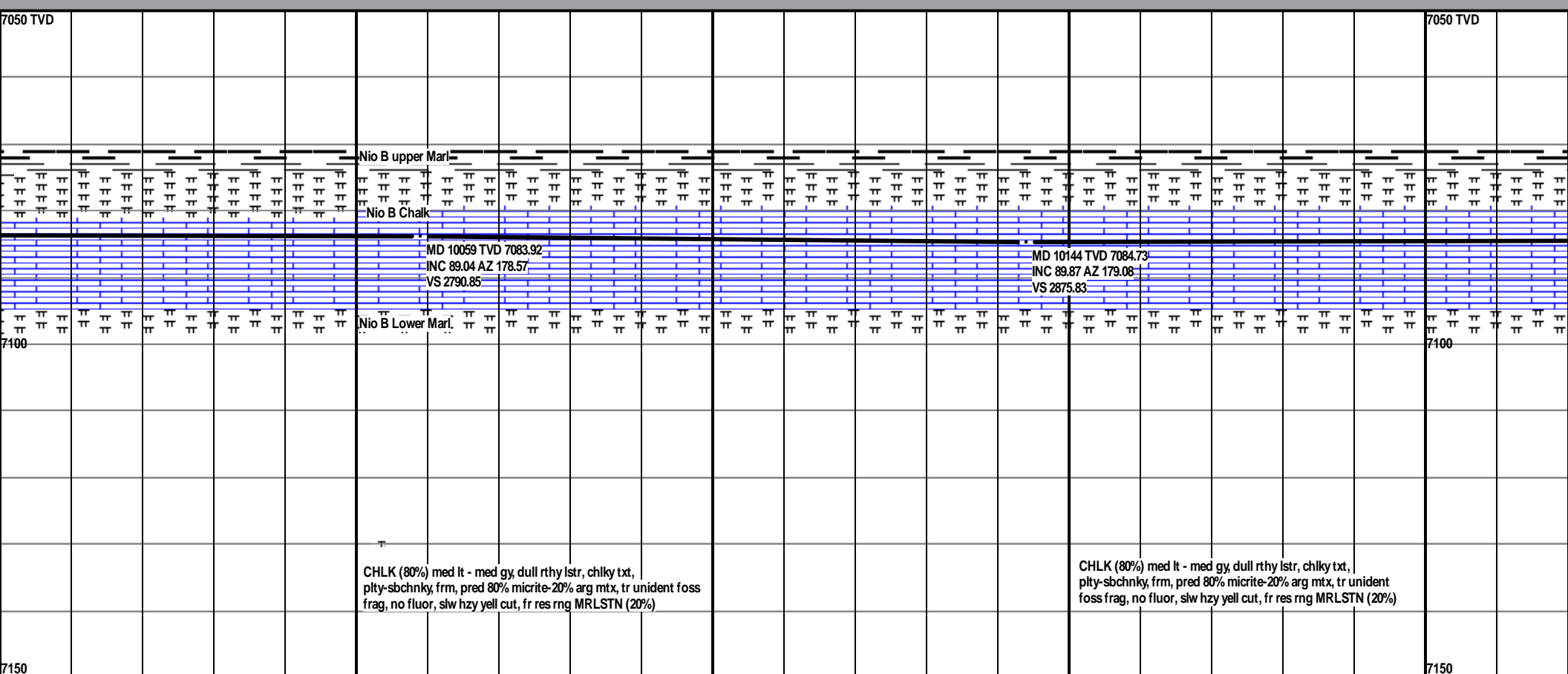
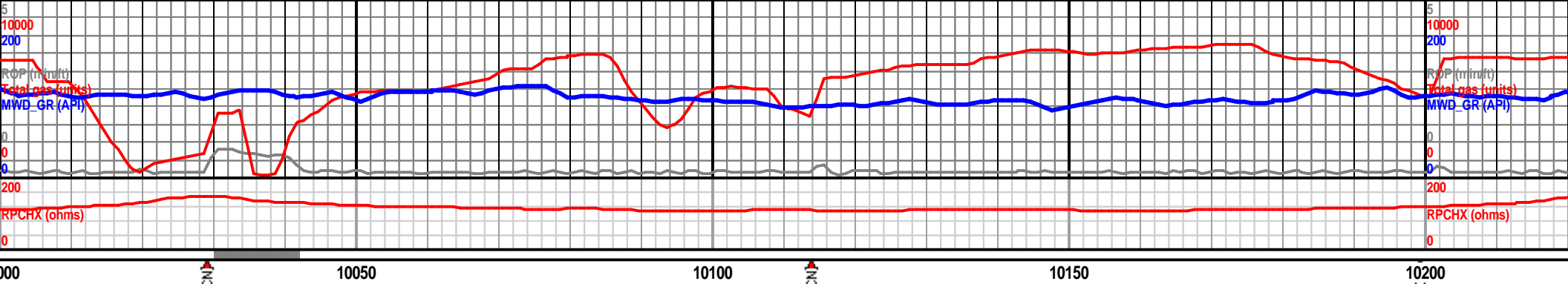
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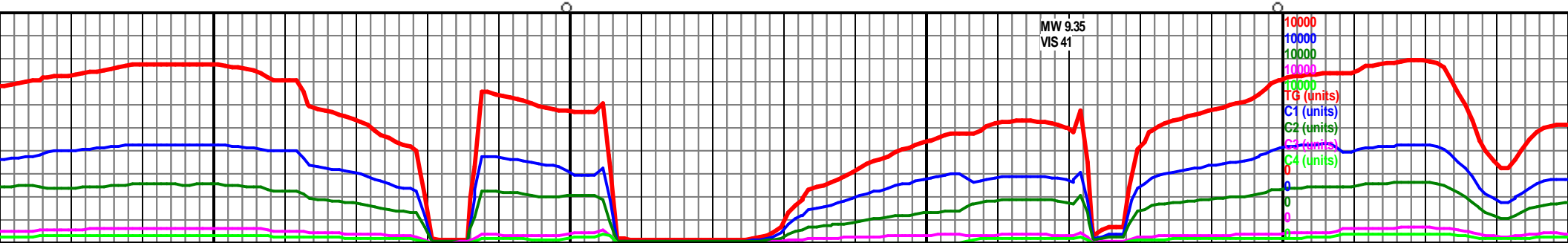
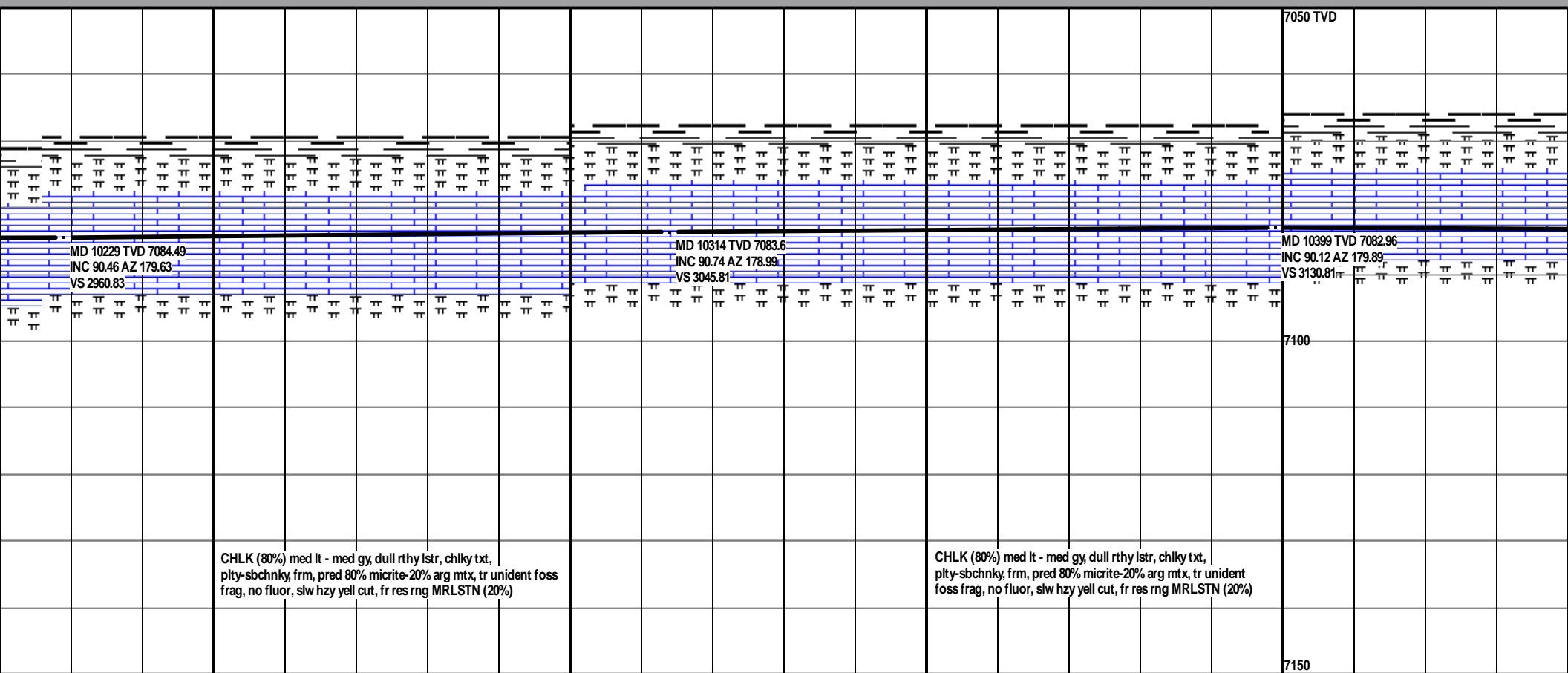
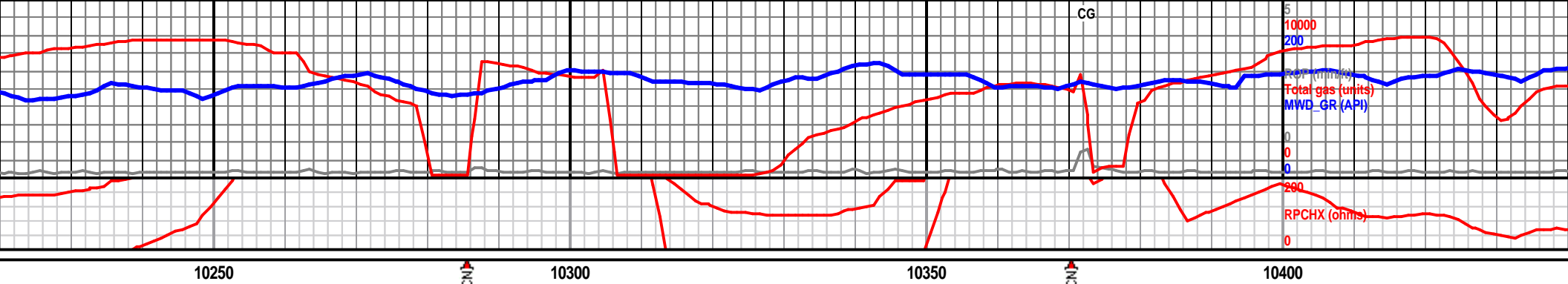


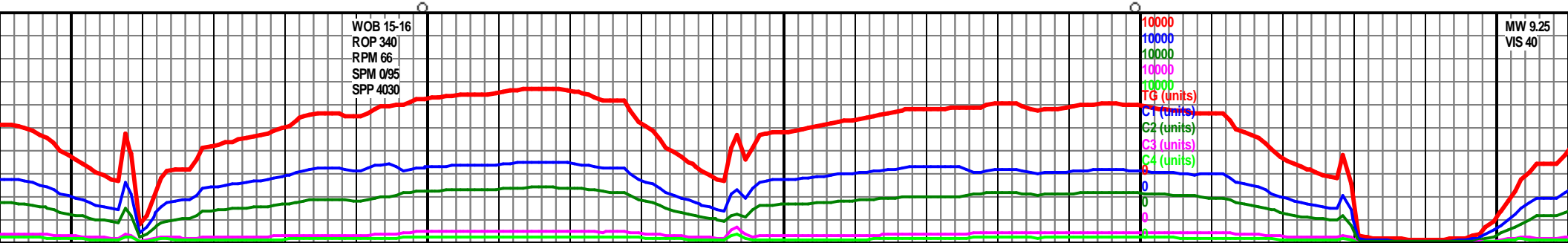
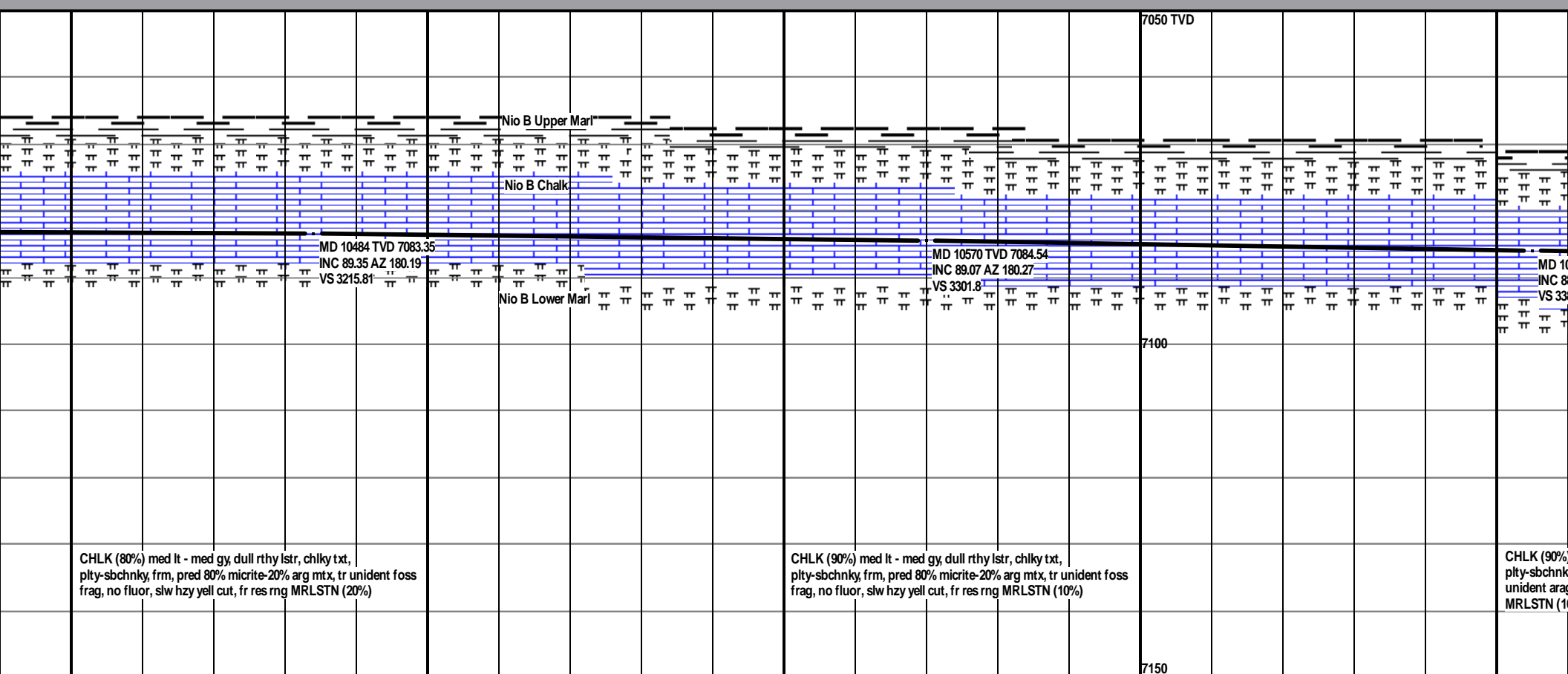
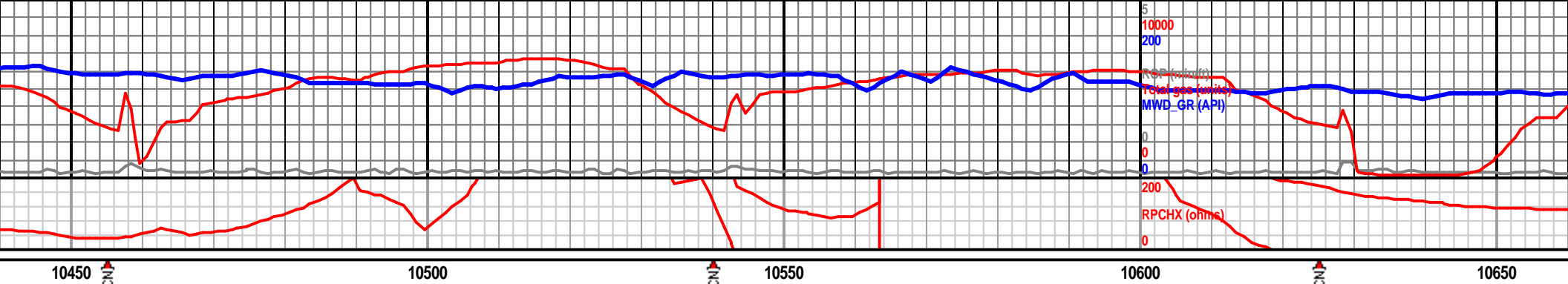


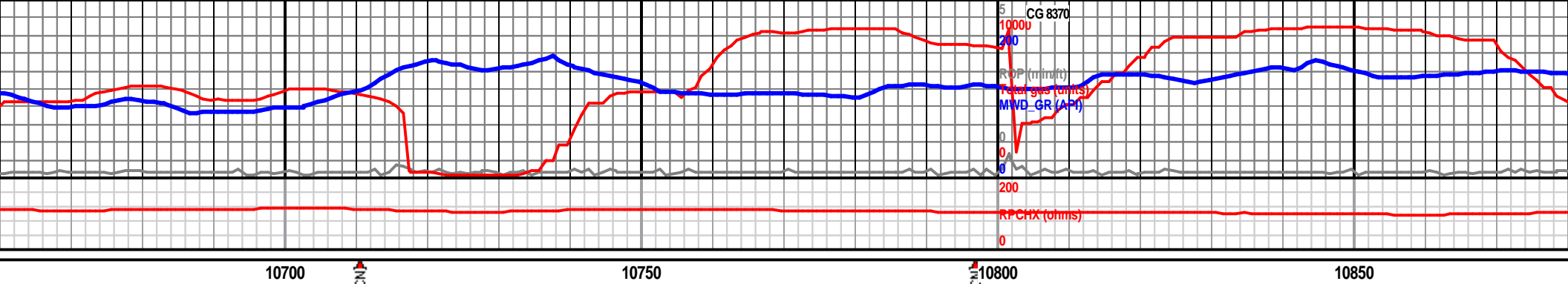




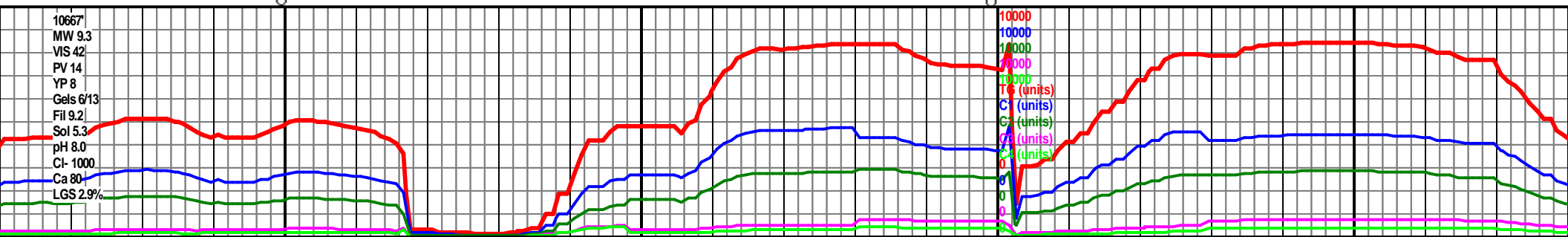


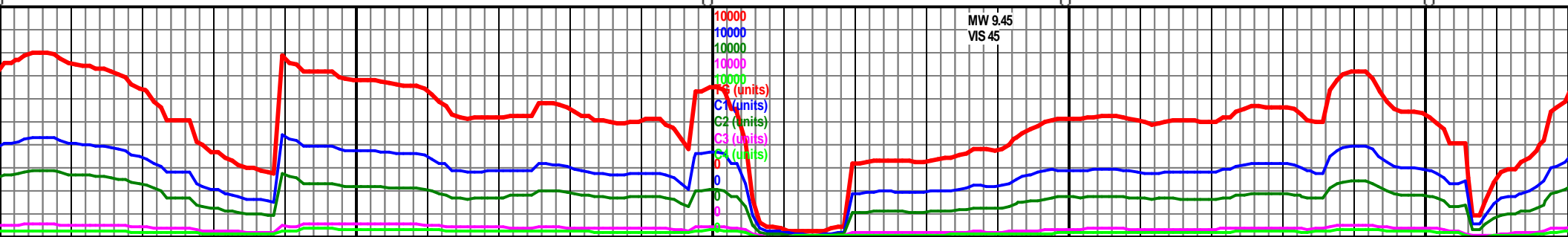
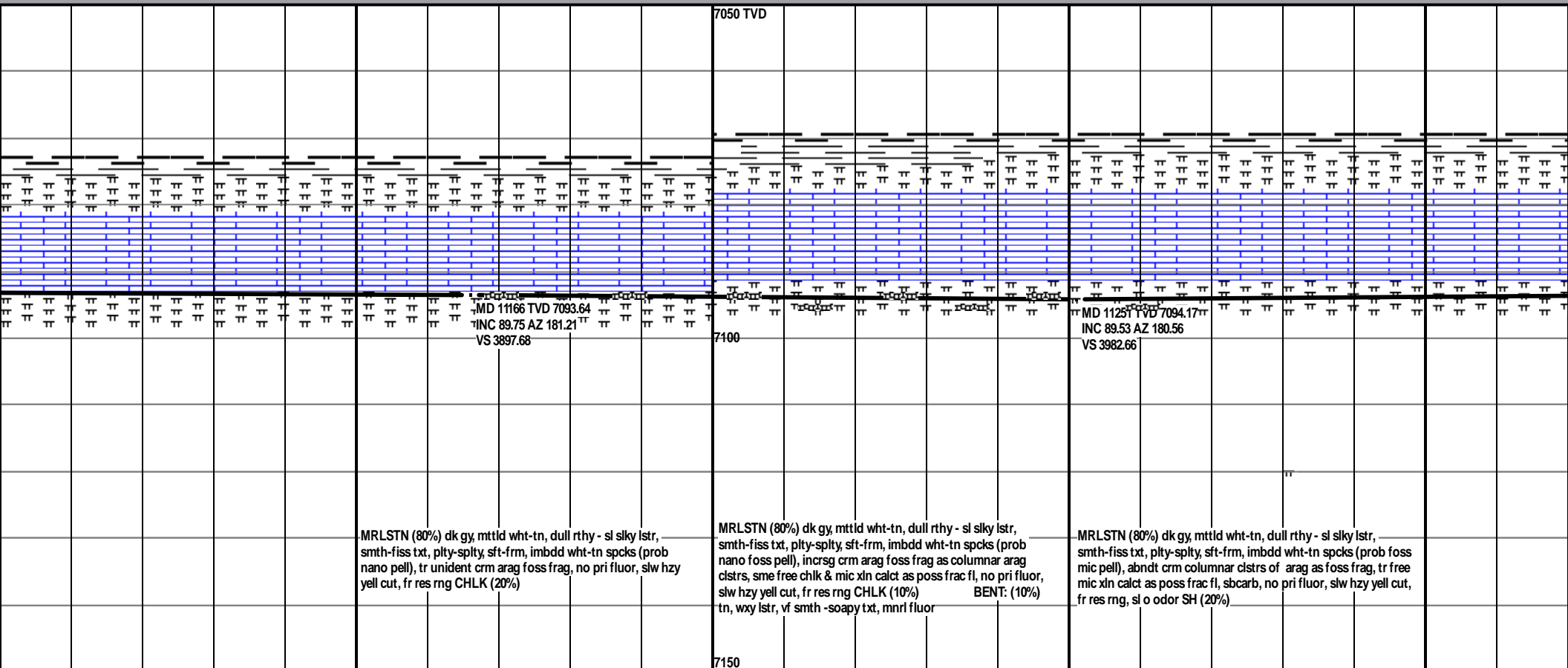
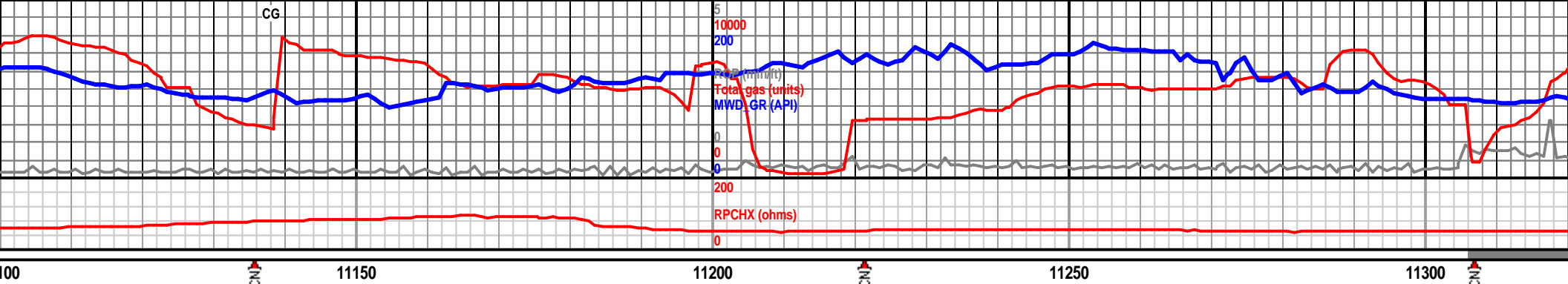


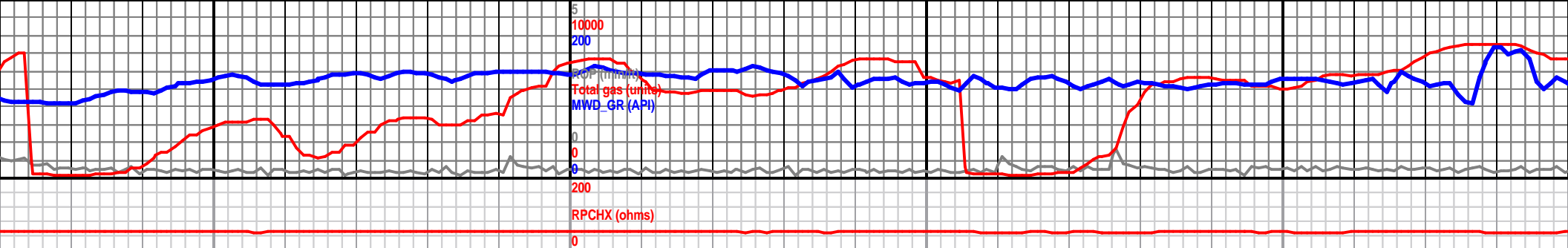




										7050 TVD																			







11350

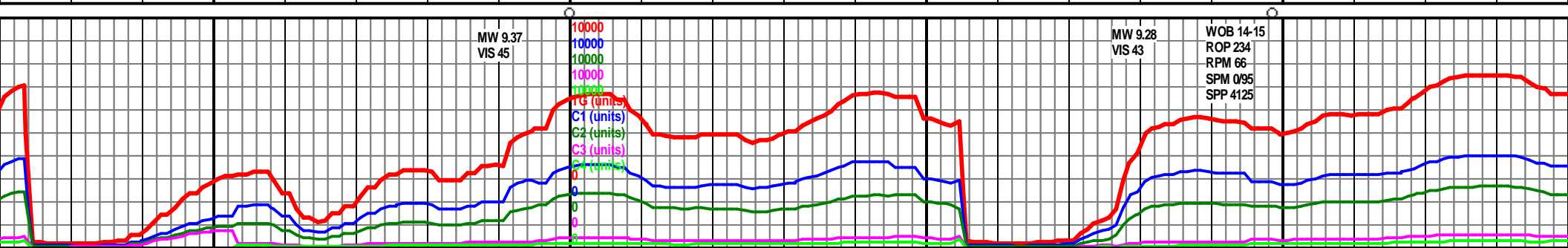
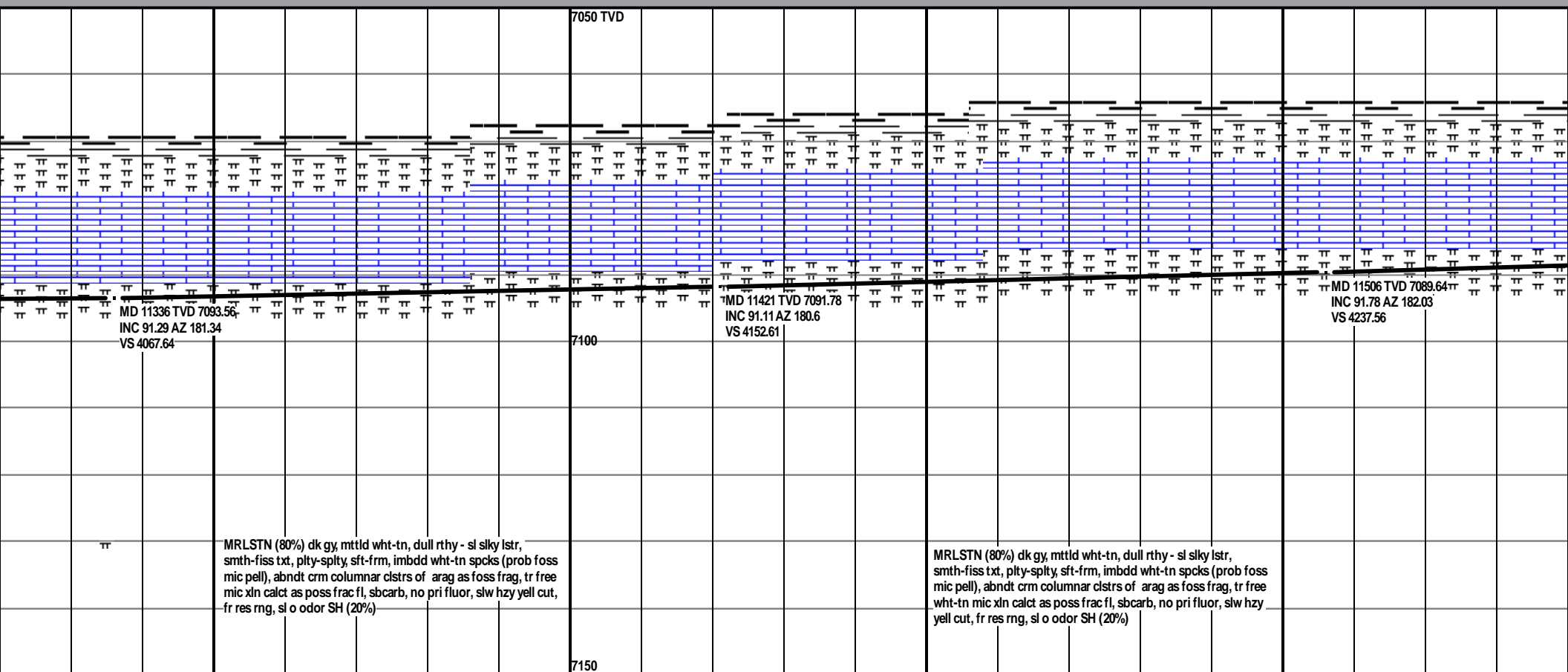


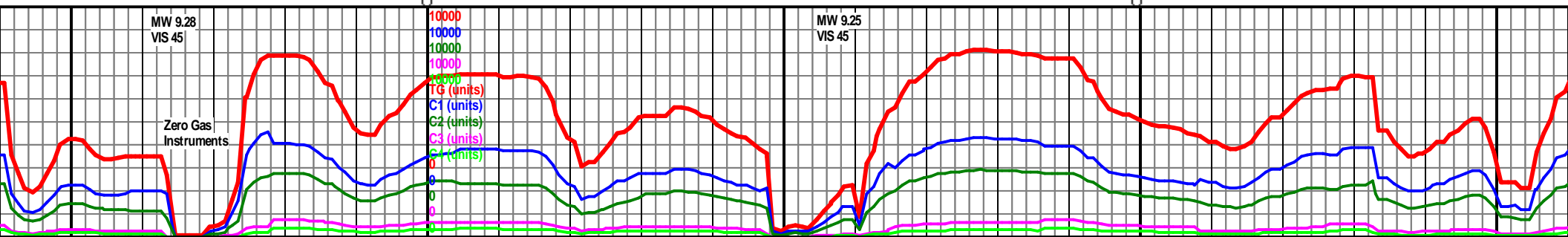
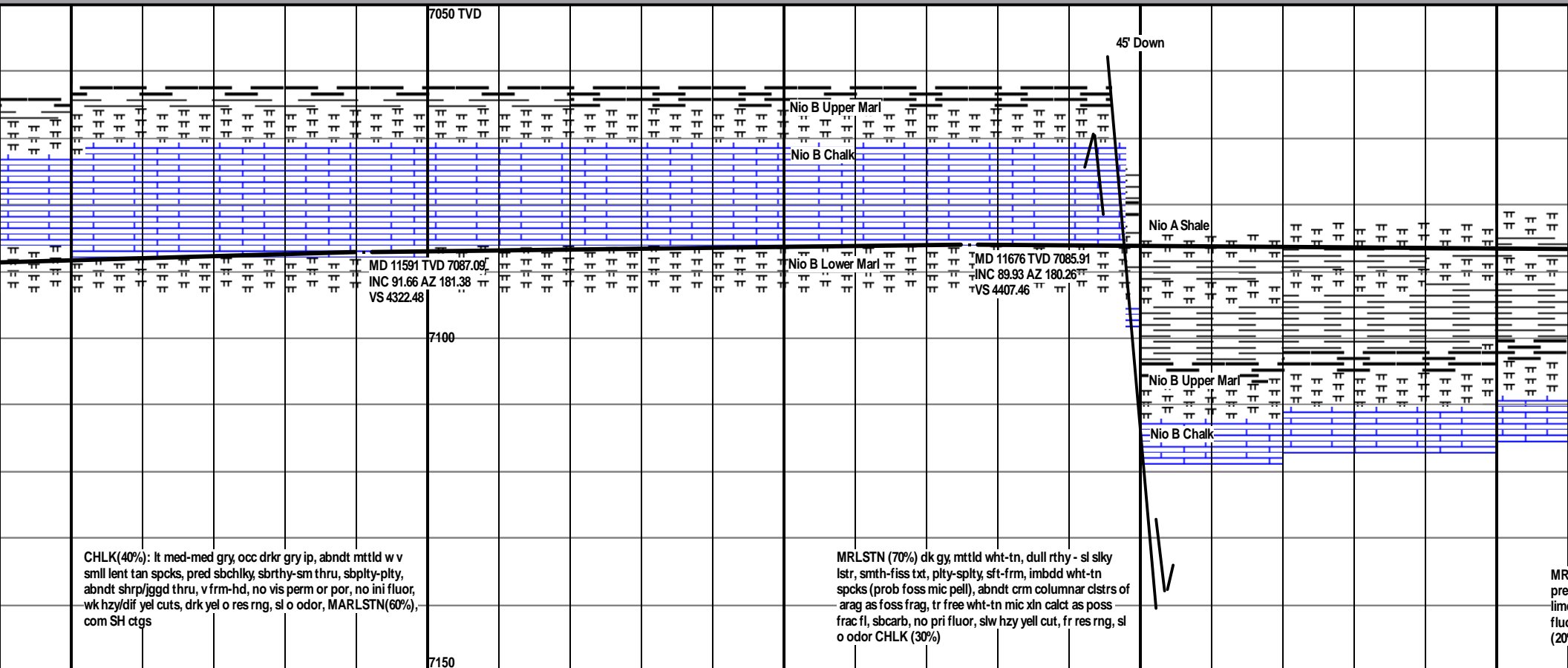
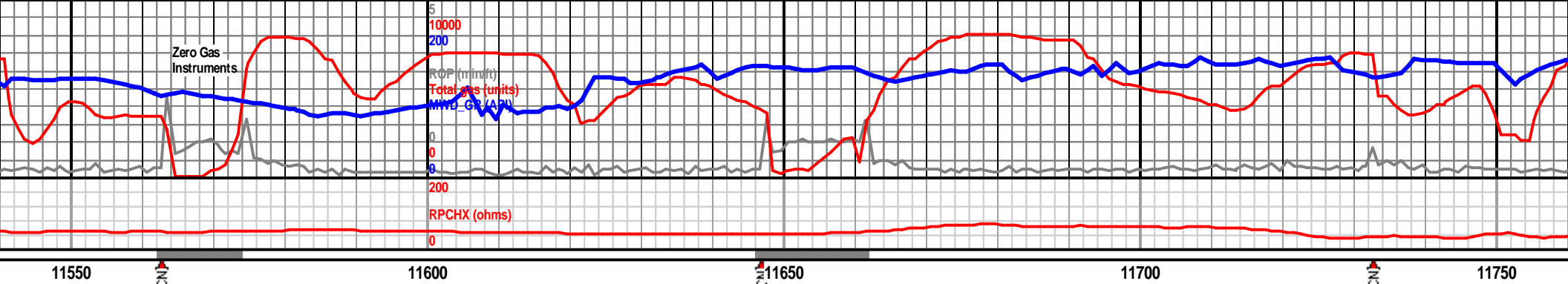
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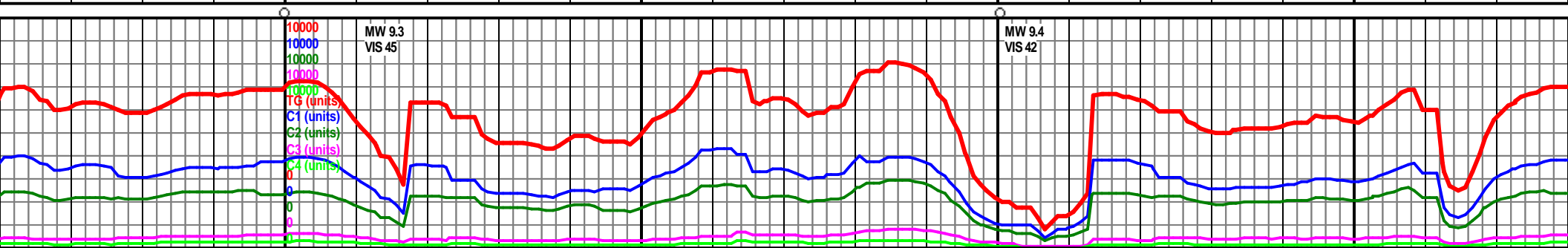
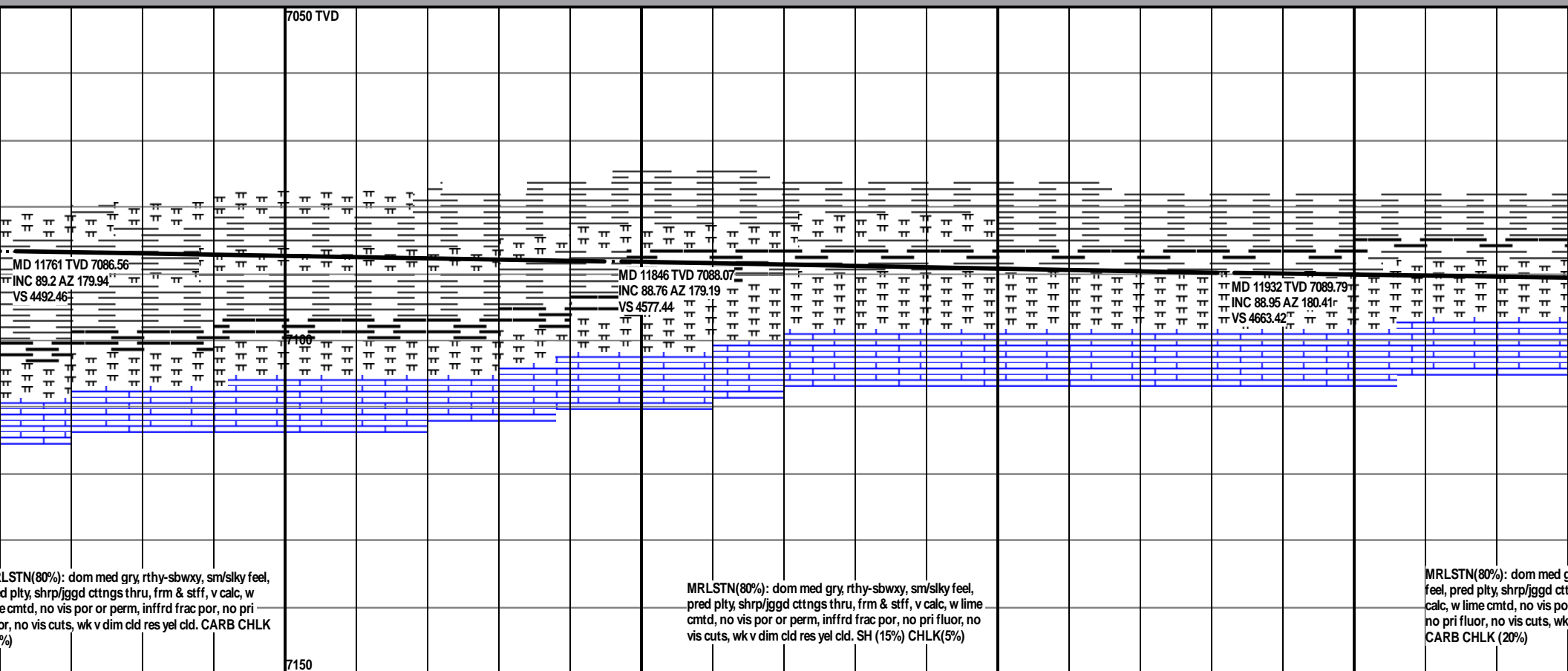
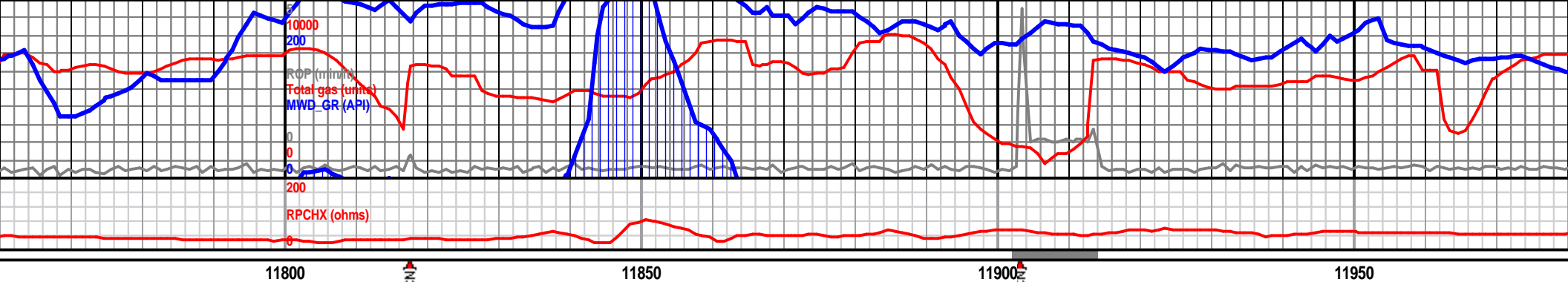
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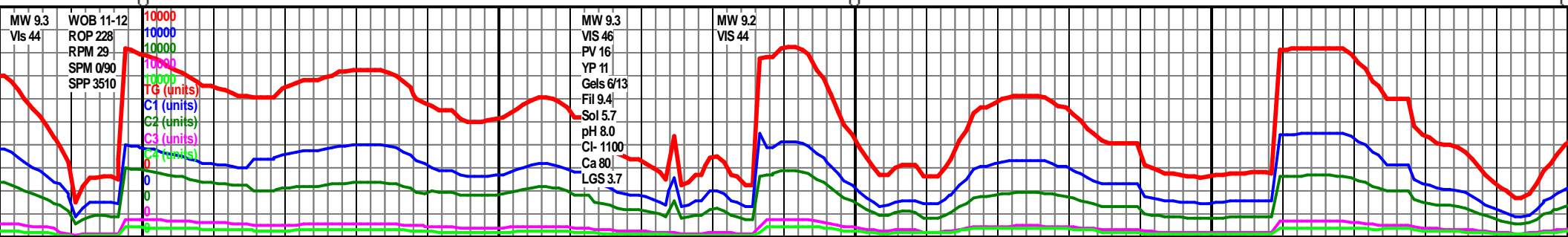
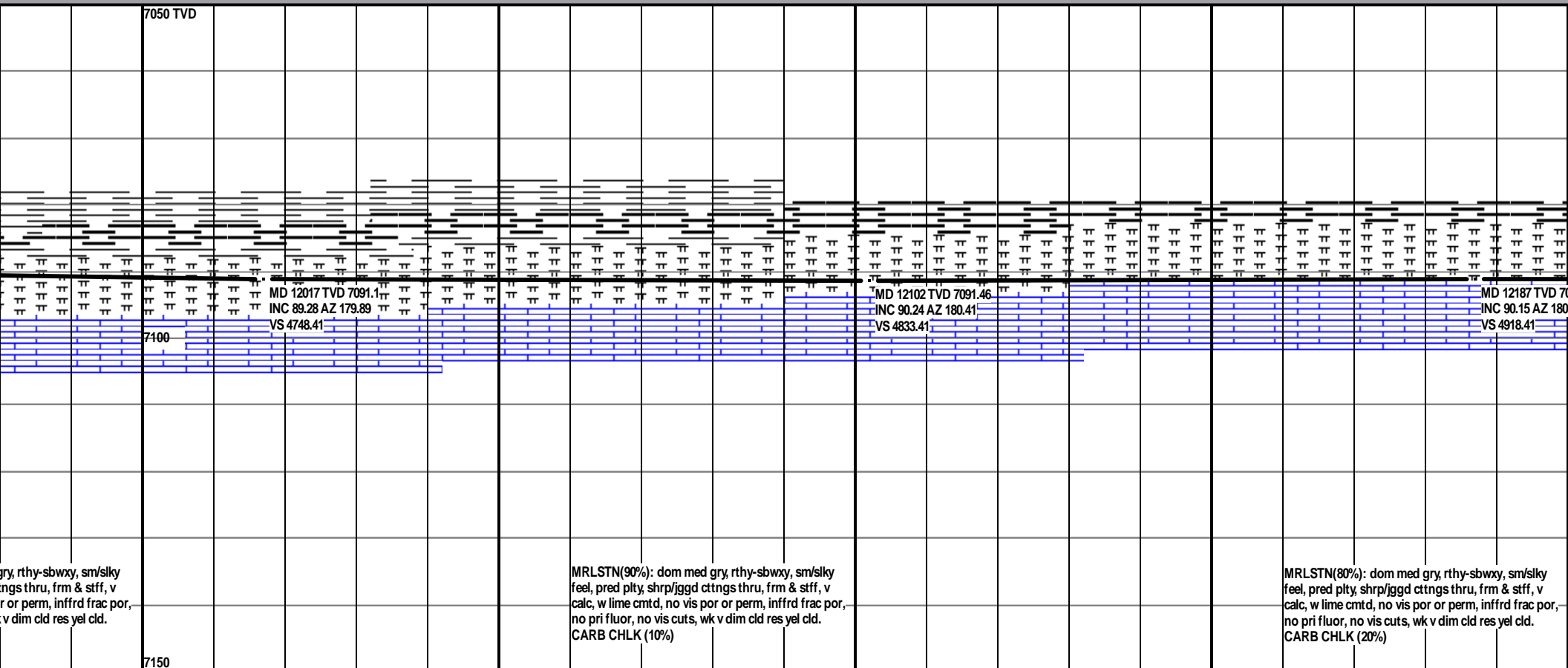
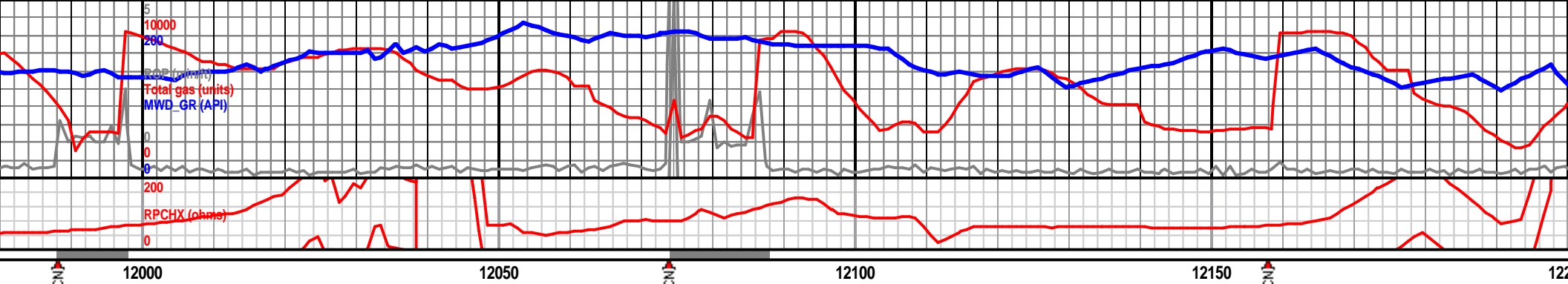


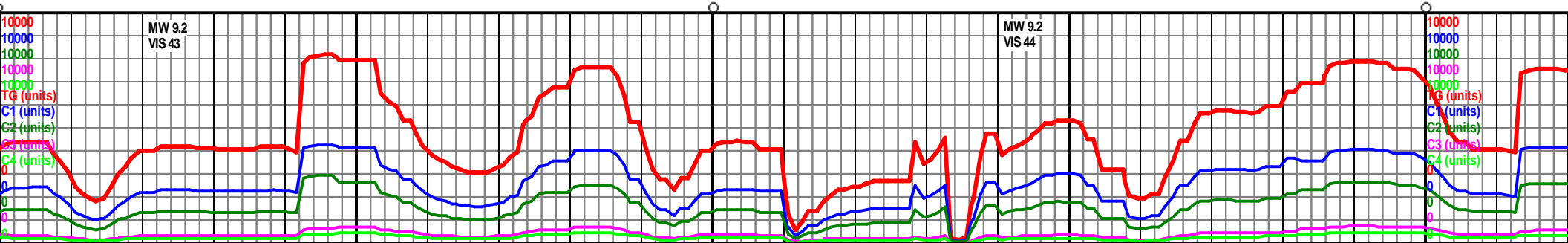
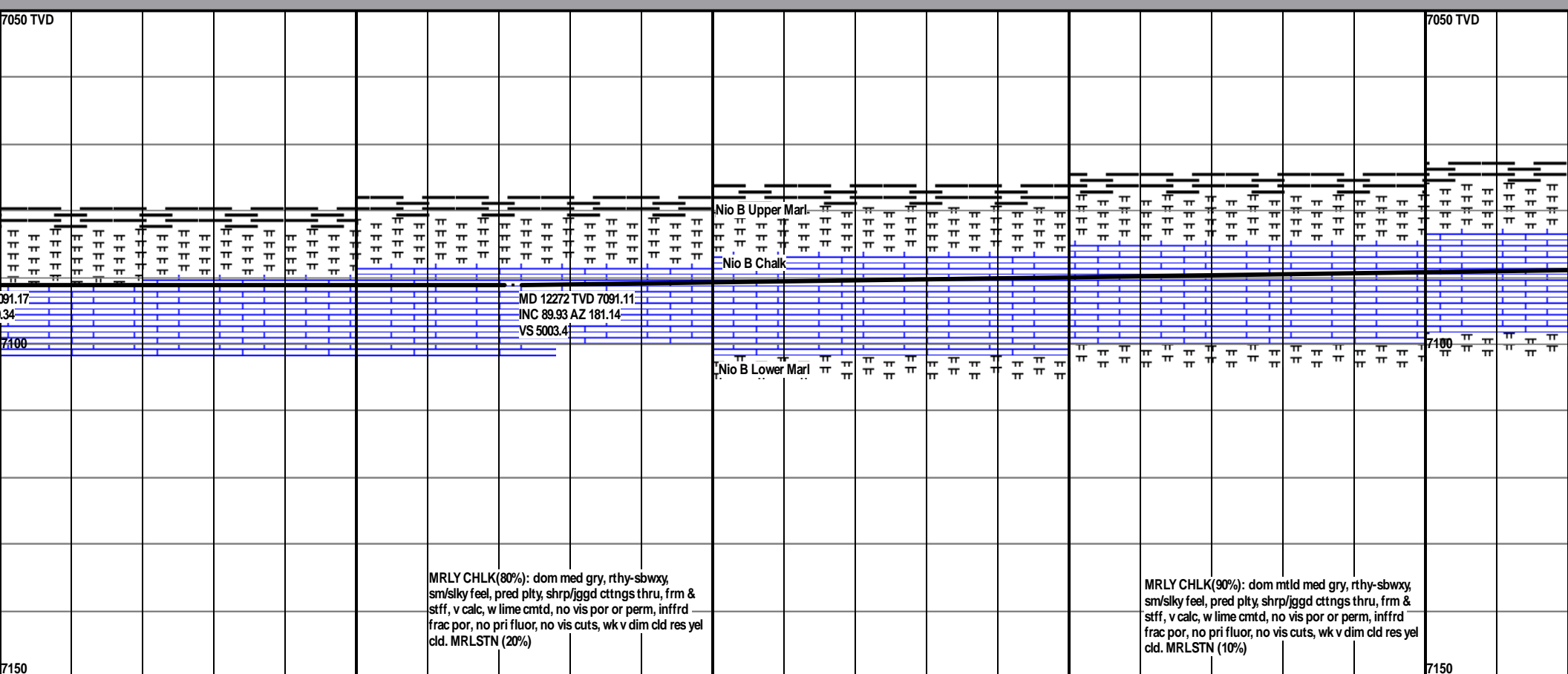
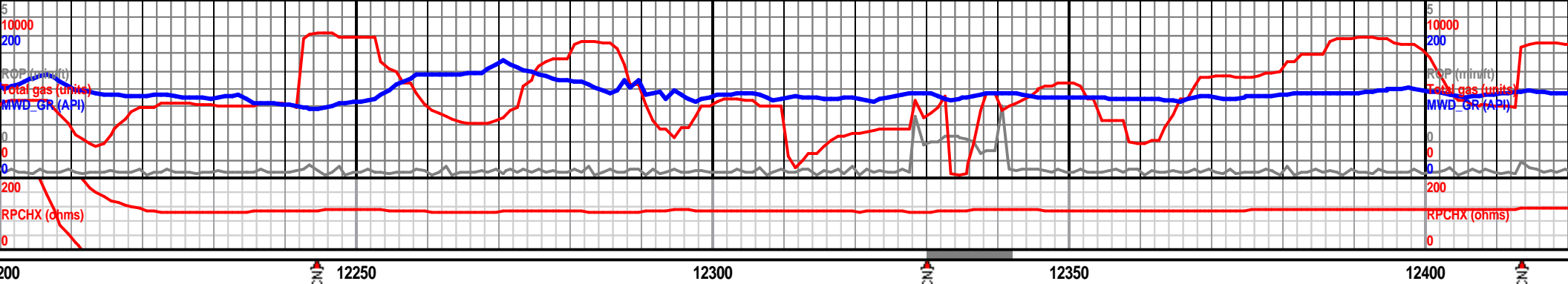
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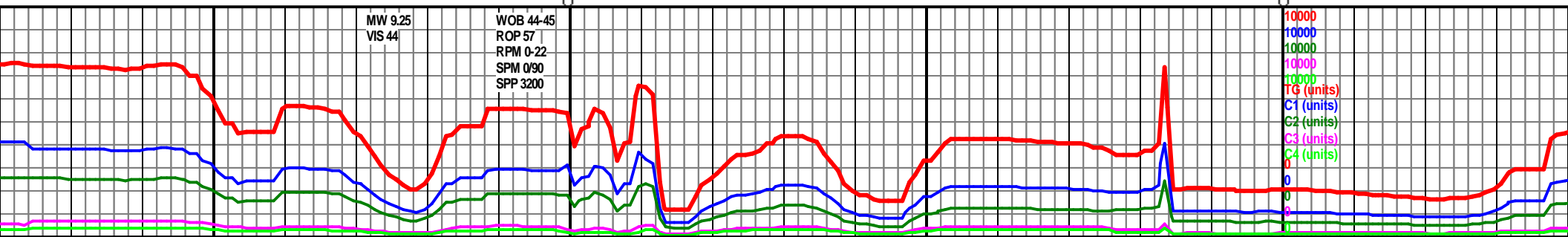
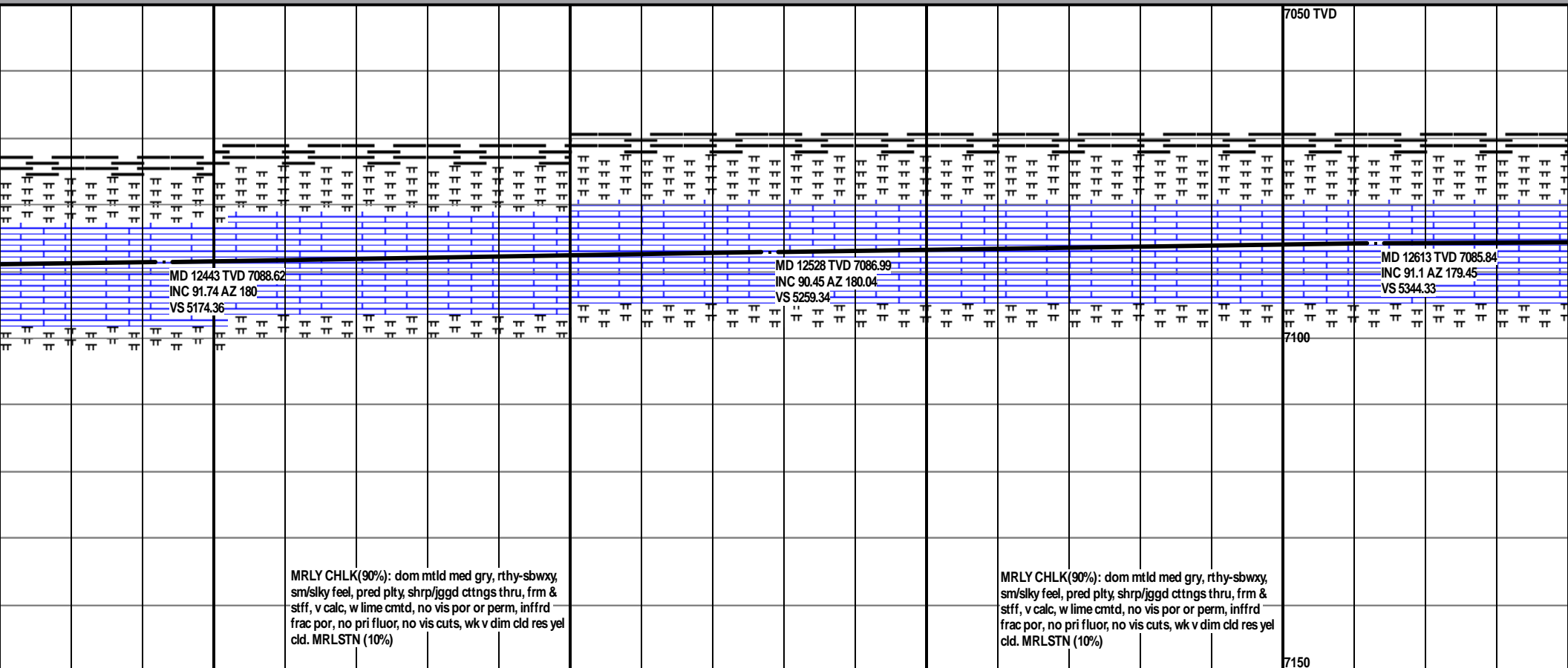
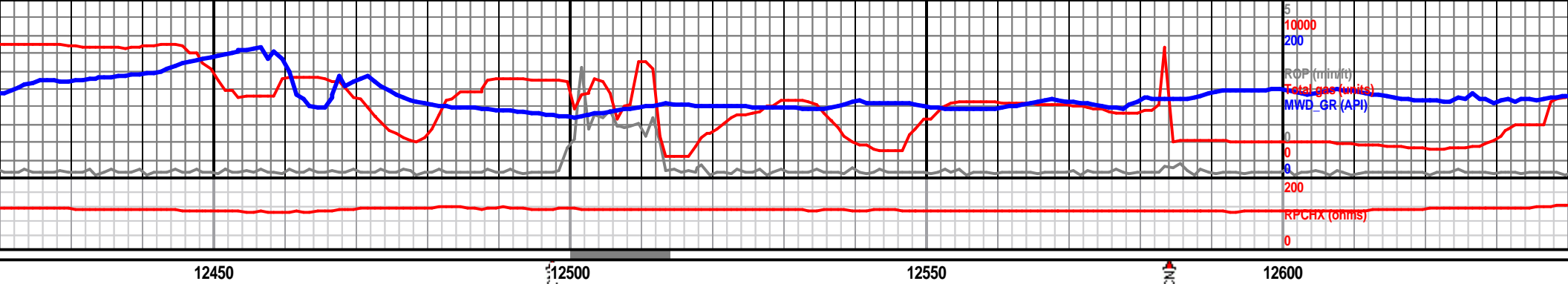


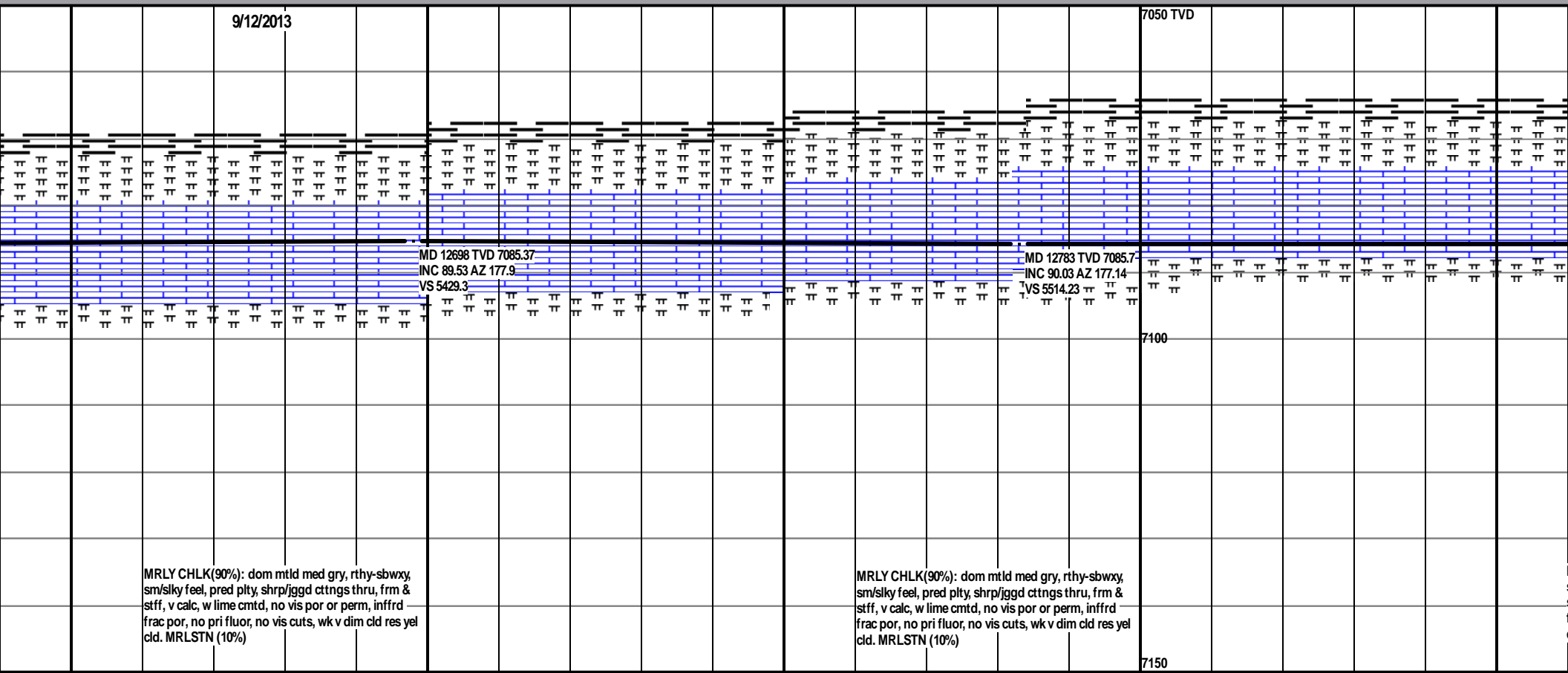


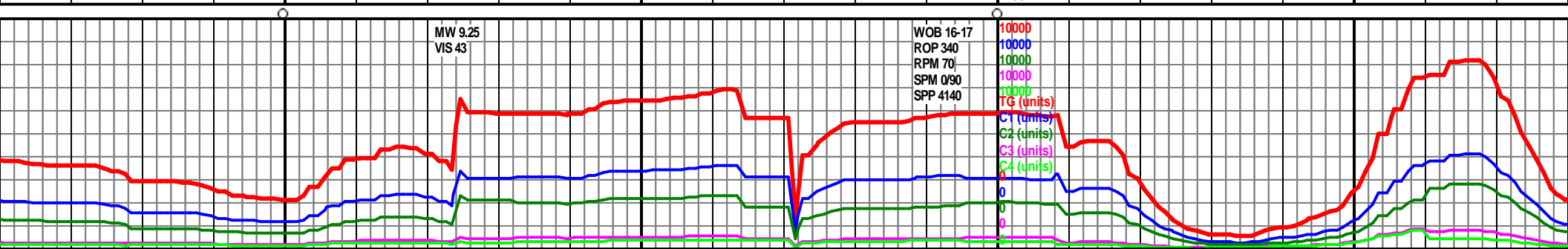
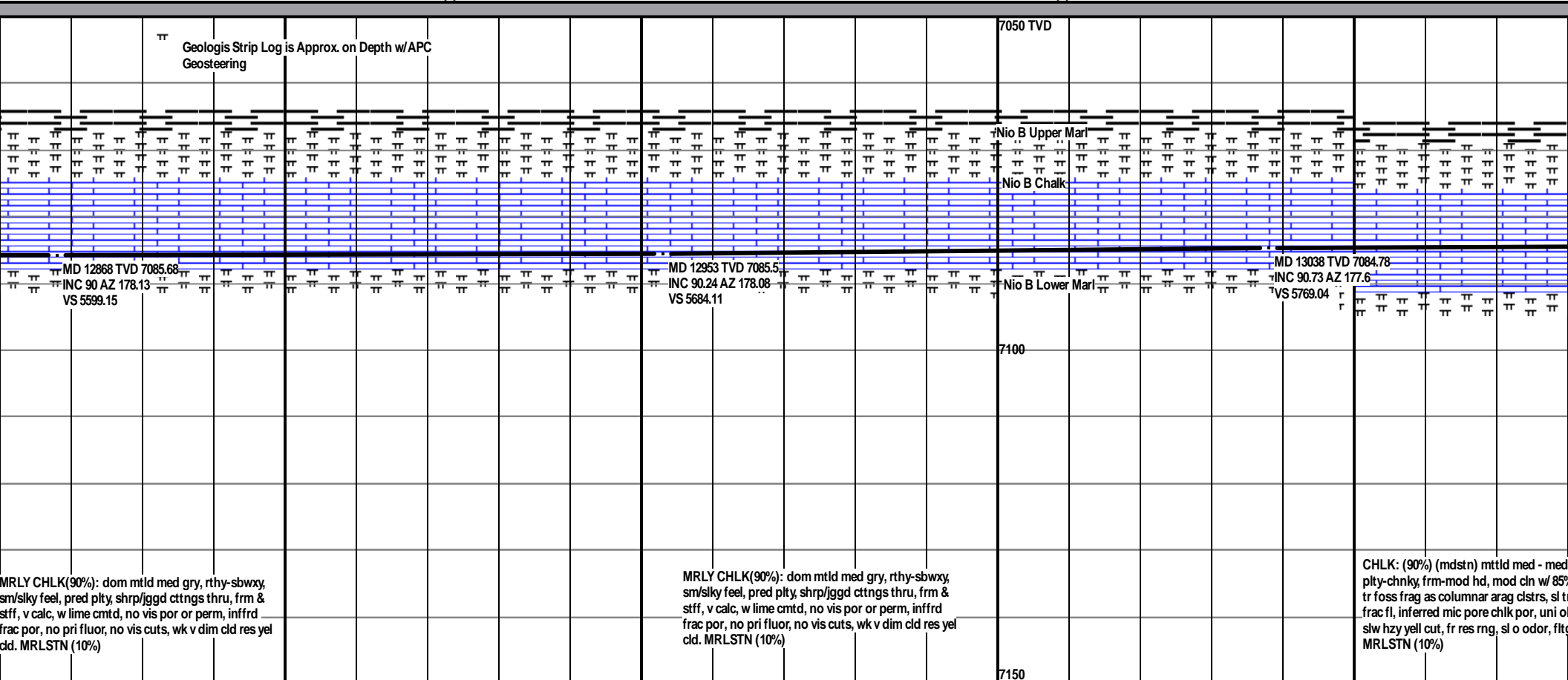
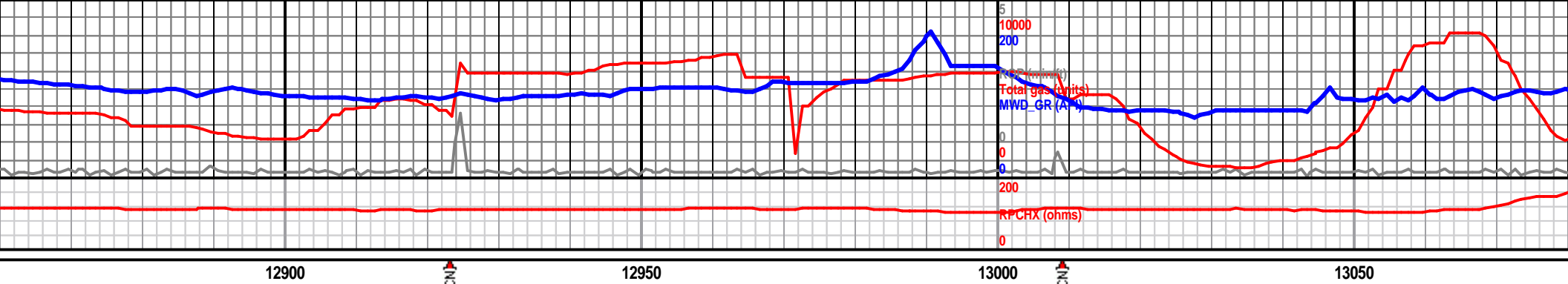


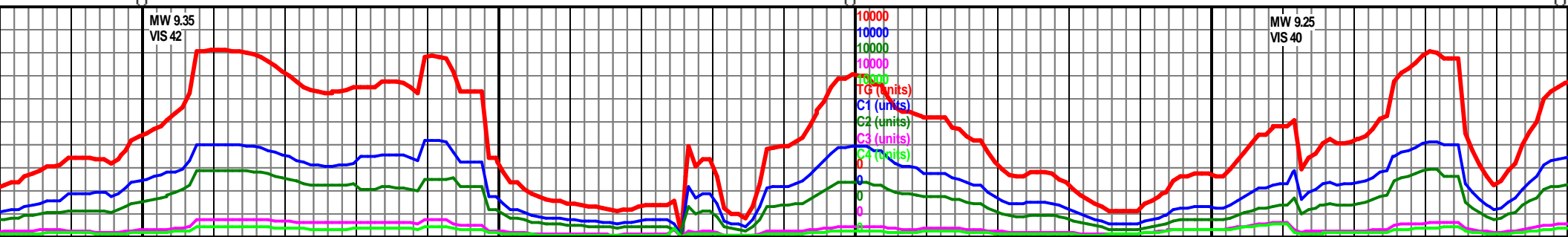
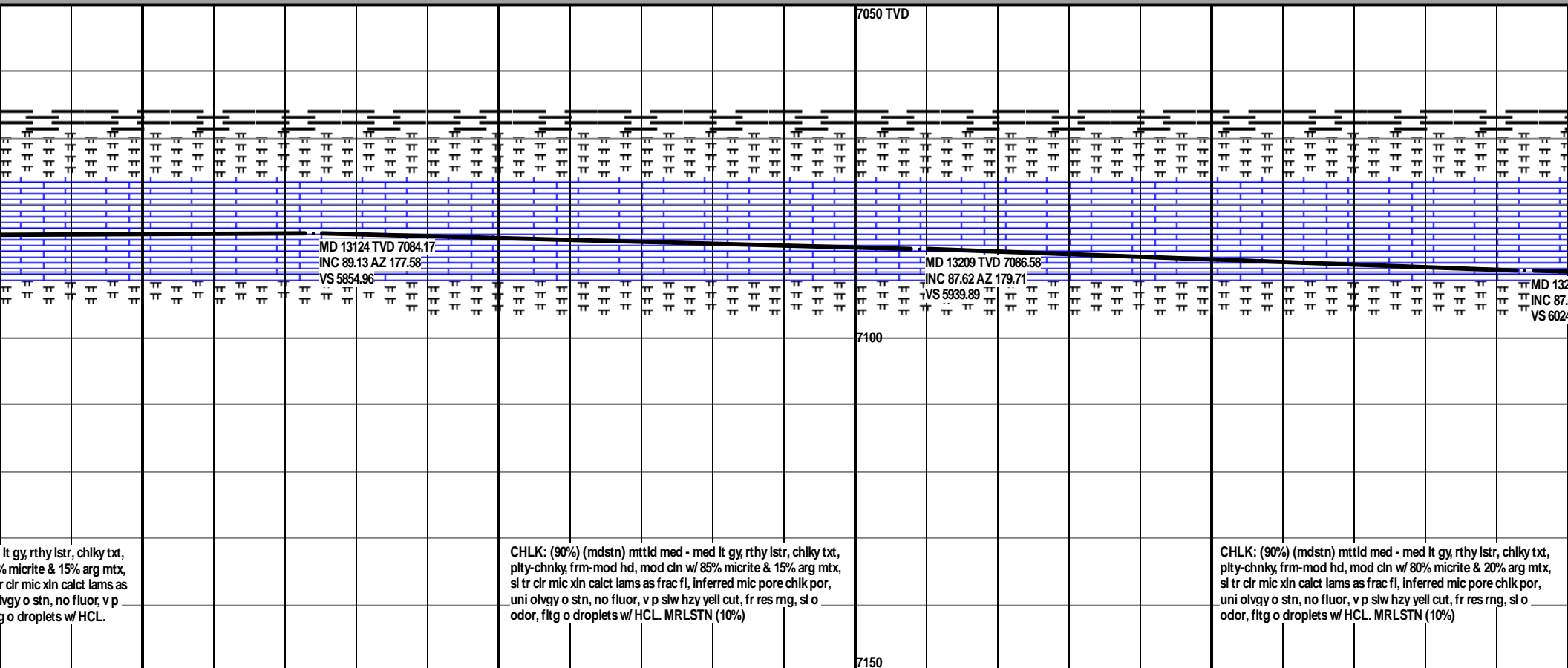
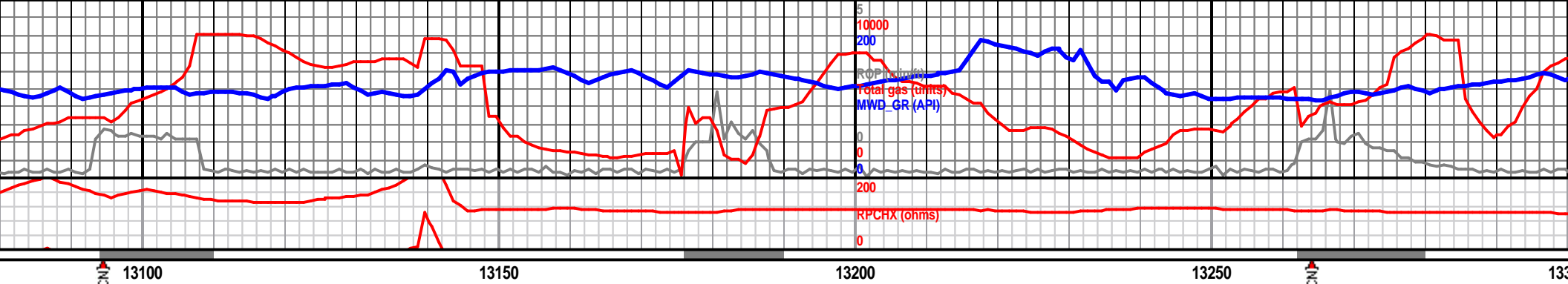


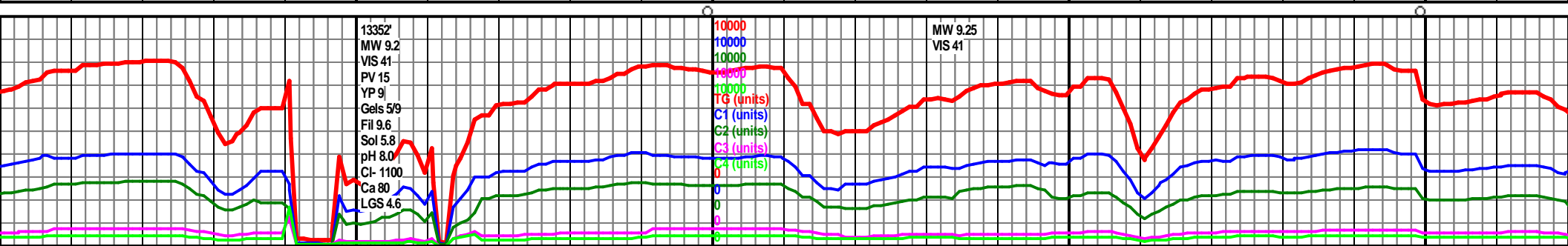
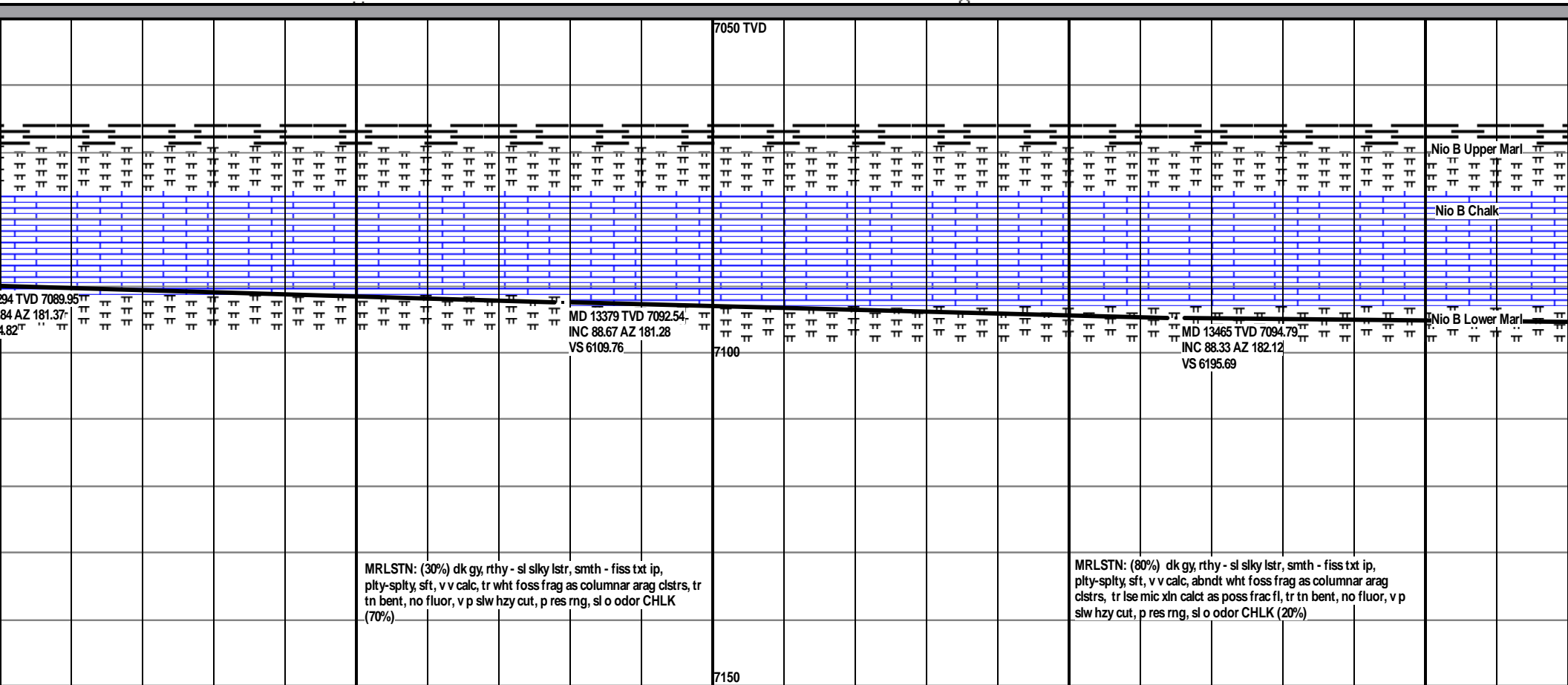


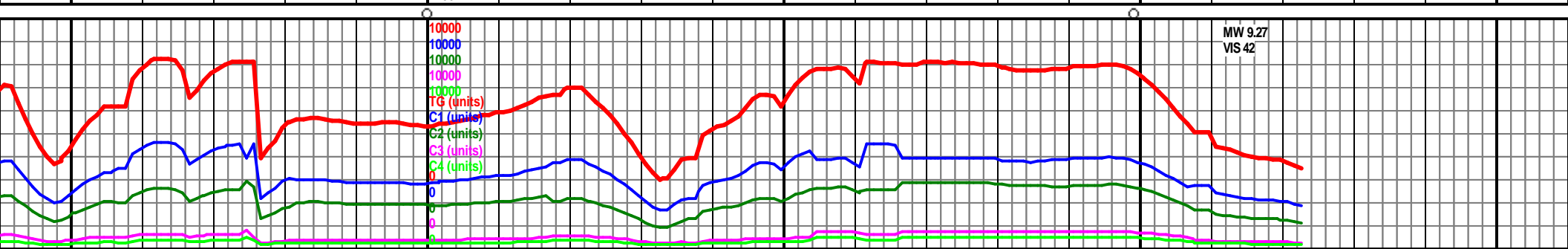
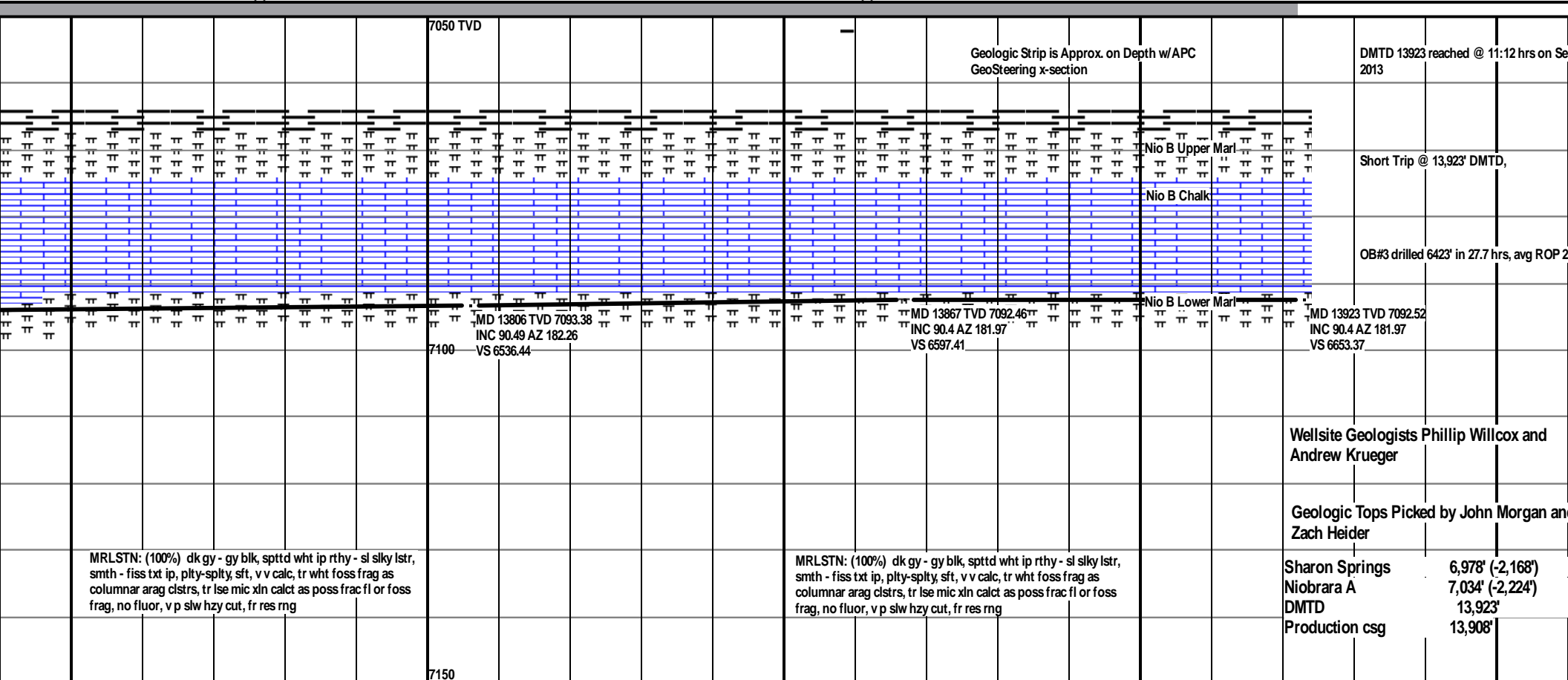
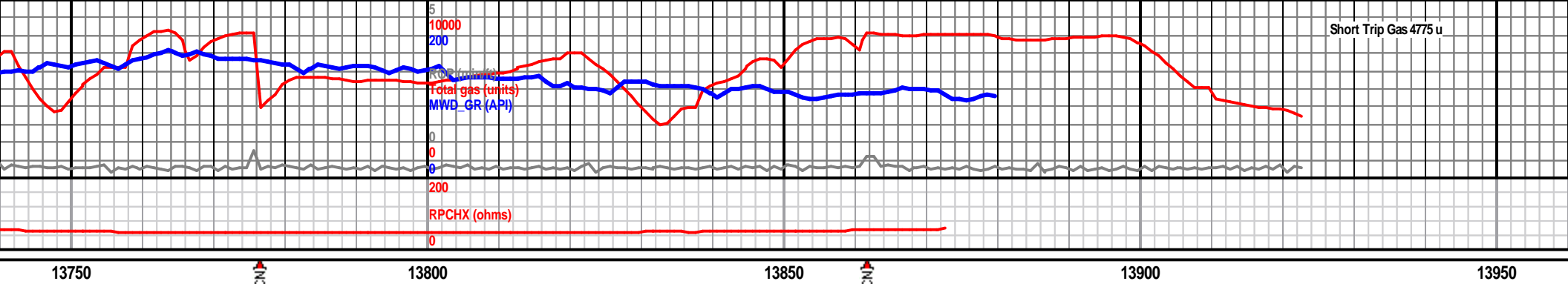












[illegible]