

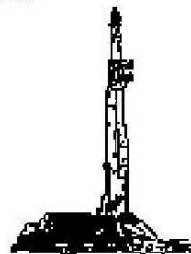
GOOLSBY BROTHERS
and associates, inc.

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: Paragon 9N-31HZ
Location: Section 6 T1N R65W, Weld County, CO.
License Number: API: 051-12338539 /AFE: 2088985
Spud Date: January 13, 2014
Surface Coordinates: 422' FSL & 330' FEL Sec. 6 T1N R65W
Lat: 40.074414 N Long: -104.69832 W
Bottom Hole: 2197' FSL & 750' FEL Sec 31 T2N R65W
Coordinates: Lat:40.093593 N Long:-104.699797
Ground Elevation (ft): 4975' K.B. Elevation (ft): 4992'
Logged Interval (ft): 6600' To: 14227' Total Depth (ft): 14227'
Formation: Niobrara B
Type of Drilling Fluid: LSND (Polymer-Water)

Region: Wattenberg
Drilling Completed: January 22, 2014

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

OPERATOR

Company: Anadarko Petroleum Corporation
Address: Granite Tower - 1099 18th St, Ste 1800
Denver, CO 80202
CO Geologist, Tom Birmingham.

GEOLOGIST

Name: Hank McCroskey/George Bejan
Company: Goolsby Brothers & Assoc. (GBA), Inc. (www.goolsbybrothers.com)
Address: 575 Union Blvd.
Suite 208,
Lakewood CO. 80228

E-logs

MWD Gamma:

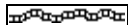
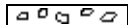

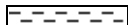


Casing


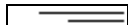




casing: 7", 26# HTP 110 DQX
liner: 4 1/2", 11.6# HTP 110 LTC DQX





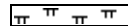
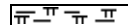
Comments



- 1) **Drilling Contractor:** H&P 311
Pumps 1 & 2: Gardner Denver PZ 11 6" x 11" (.0914 bbl/stk)
Rig Manager: Jack Truett, James Baggett.
Drillers: Michael Munroe, Christopher Moore, Kenneth Jones, Christopher Beckstead.
- 2) **Company Man:** Doug Blair, David Wells
- 3) **Mud Company:** Halliburton, James Steen
- 4) **Directional Drilling:** Scientific Drilling
Directional Drillers: John Noakes, Ian Ensell
MWD: Joshua Denning, Mohamed Sharker.
- 5) **Gas Equipment:** Mudlogging Systems Inc.
by Terra Services
Redbox # ML-419

ROCK TYPES

 Bent
 Brec
 Cht
 Clyst
 Coal
 Anhydrite




















 Shale
 Sh (col)
 Silty sh
 Carb sh
 Carb sh_
 Ss






 Arg ss
 Ss (f gr+)
 Sltst
 Congl
 Mrlst
 Mrlst/sh (intbdd)

 Dol
 Lmst
 Marly limestone
 Arg limestone
 Chalk









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

 Anhy
 Arg
 Bent
 Coal
 Dol







 Ls
 Chlk
 Mrst
 Ss strg
 Sltst strg

TEXTURE







 Boundst
 Chalky
 Cryxln
 Earthy
 Finexln
 Grainst
 Lithogr
 Microxln
 Mudst
 Packst
 Wackest

OTHER SYMBOLS

SAMPLE SHOWS




 Even
 Near even
 Spotted/patchy
 Very spotty
 Questionable
 Dead

POROSITY TYPE

 Earthy
 Fenest
 Fracture
 Inter
 Moldic
 Organic

 Pinpoint
 Vuggy

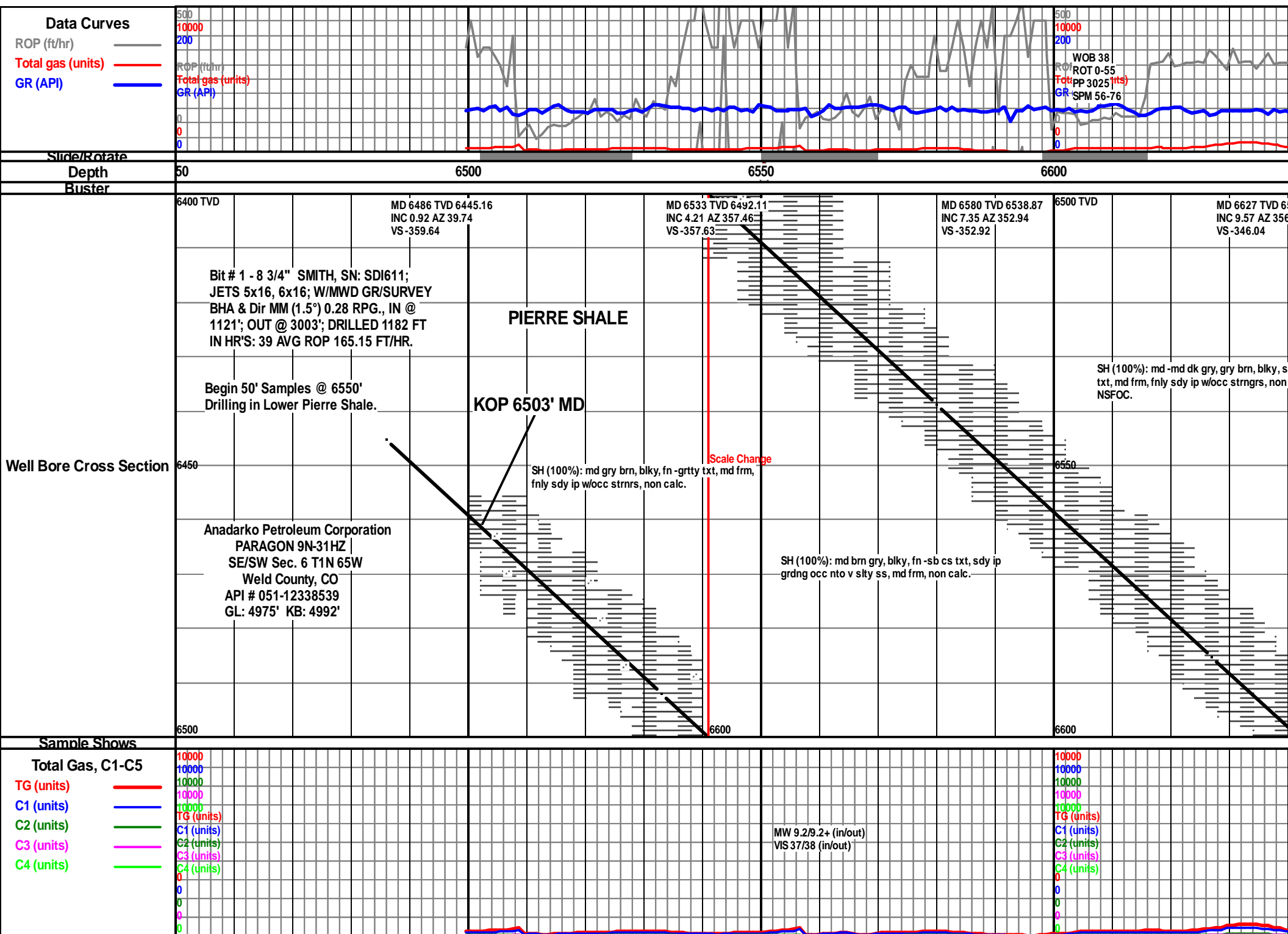
ROUNDING

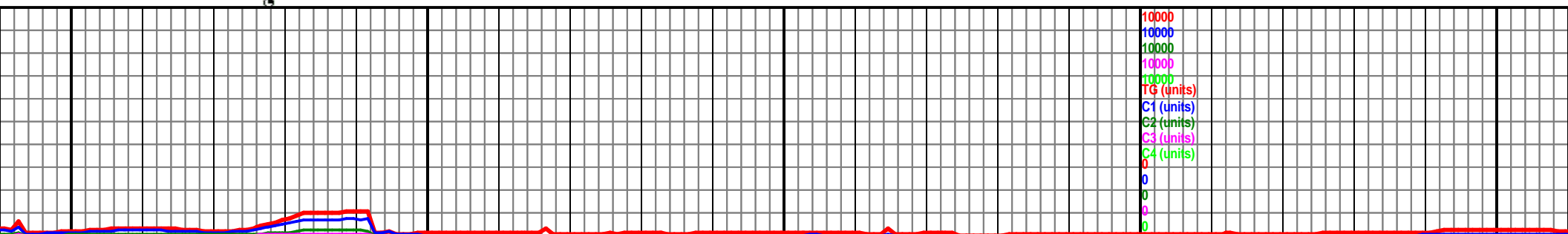
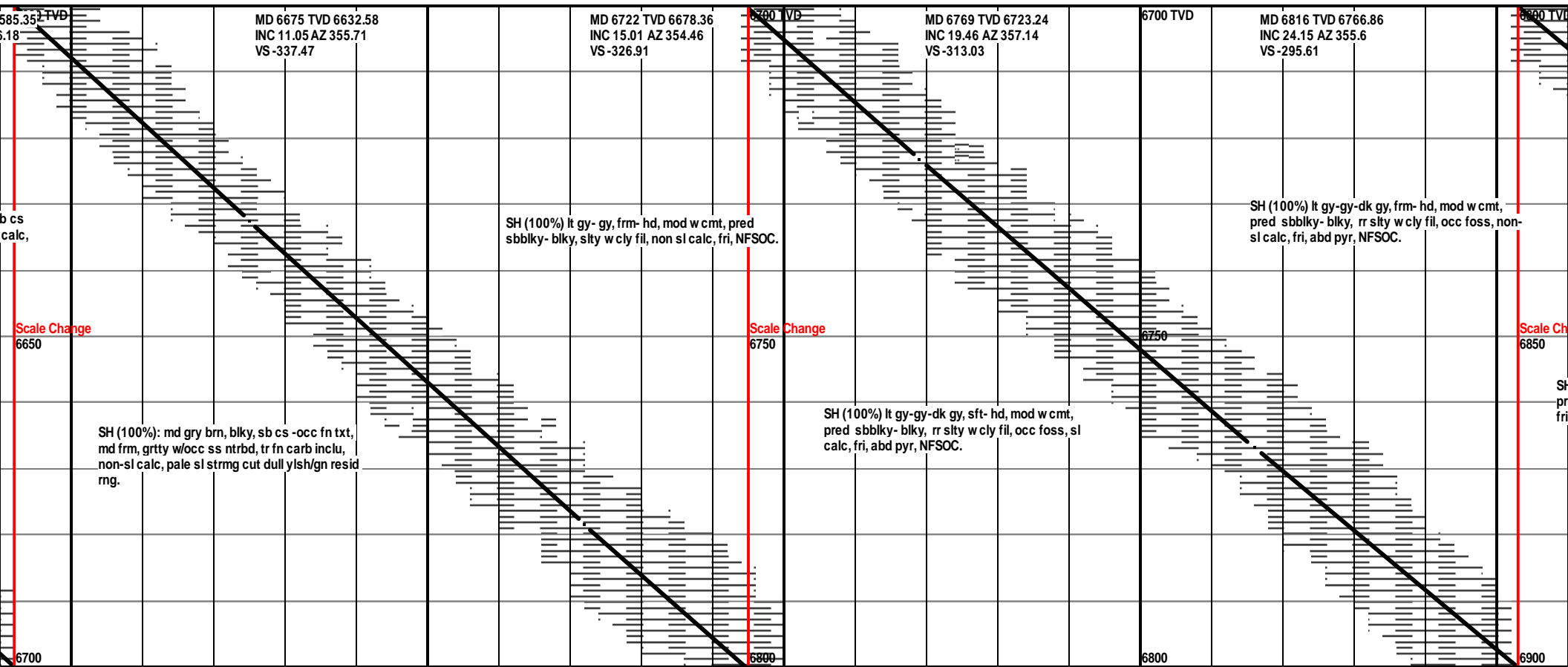
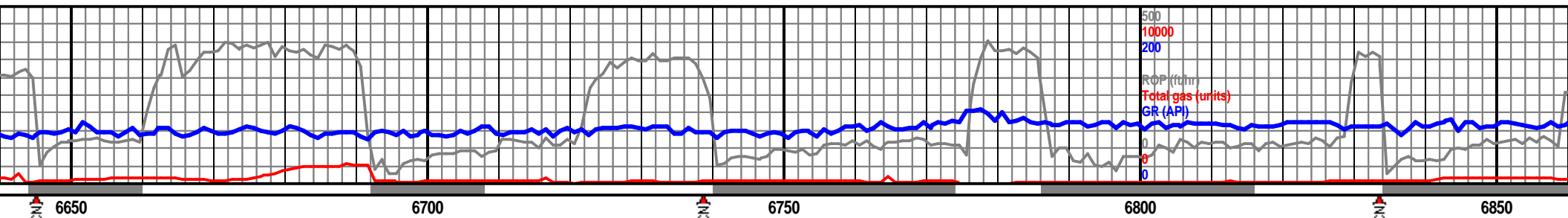
 Rounded
 Subrnd
 Subang

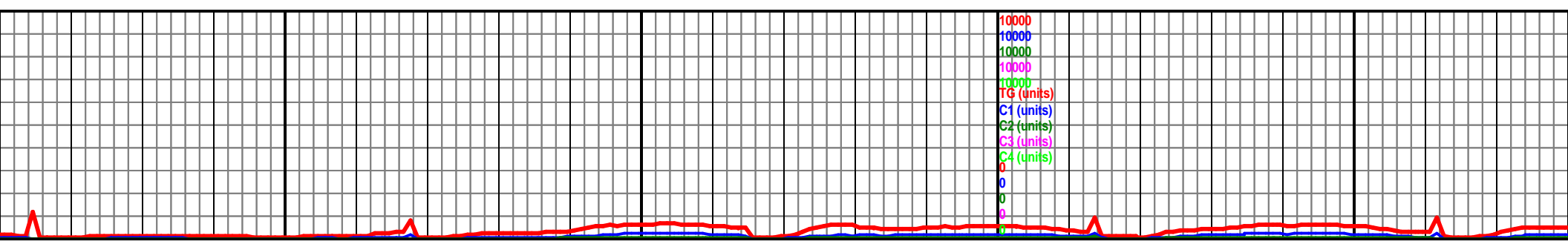
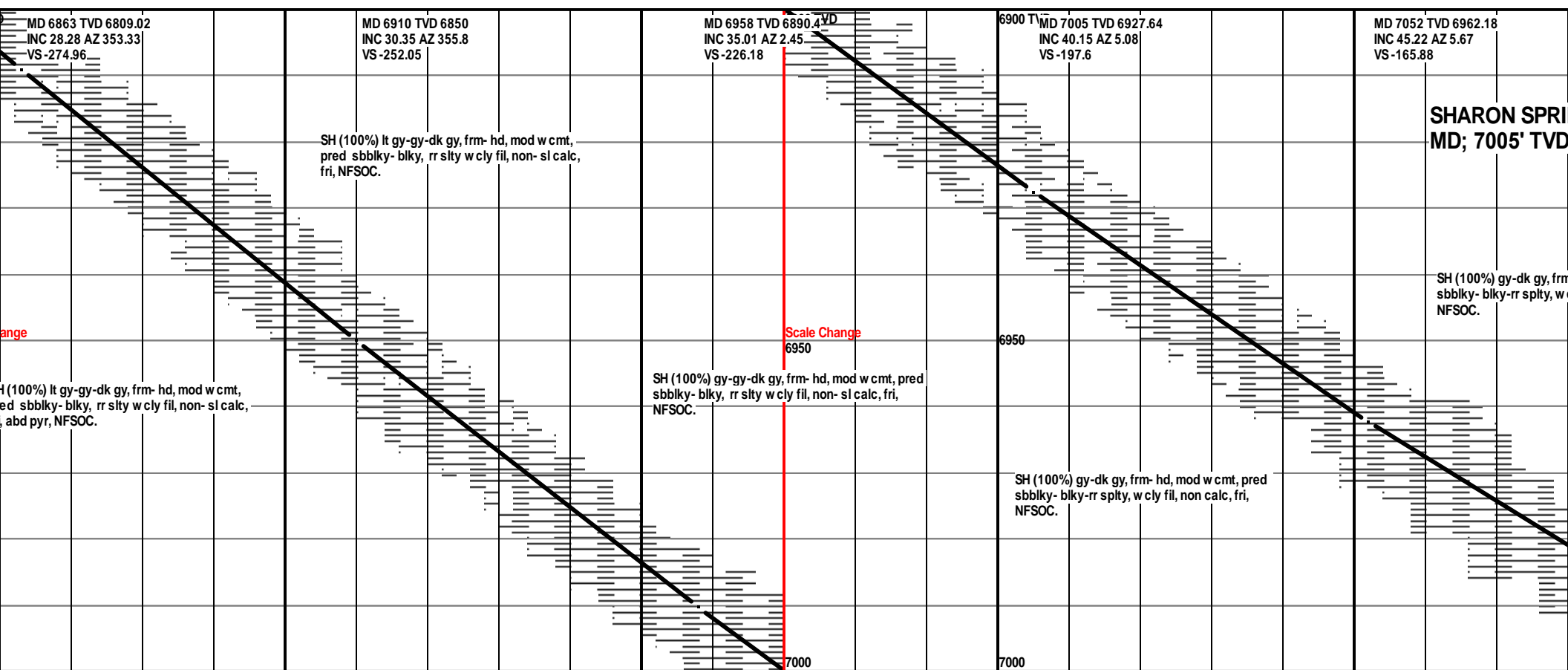
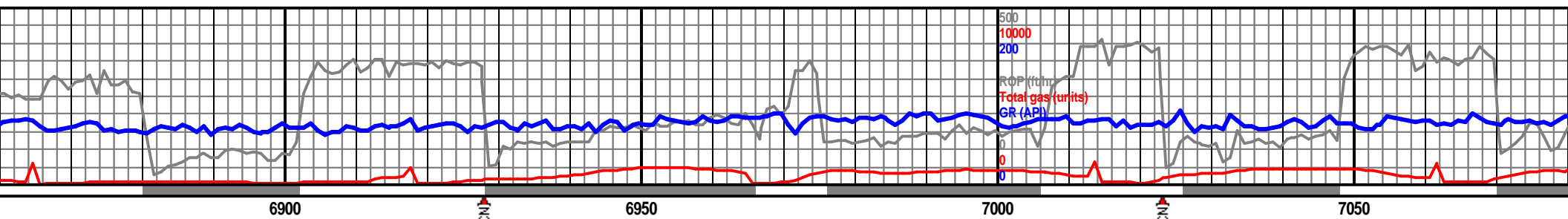
 Angular

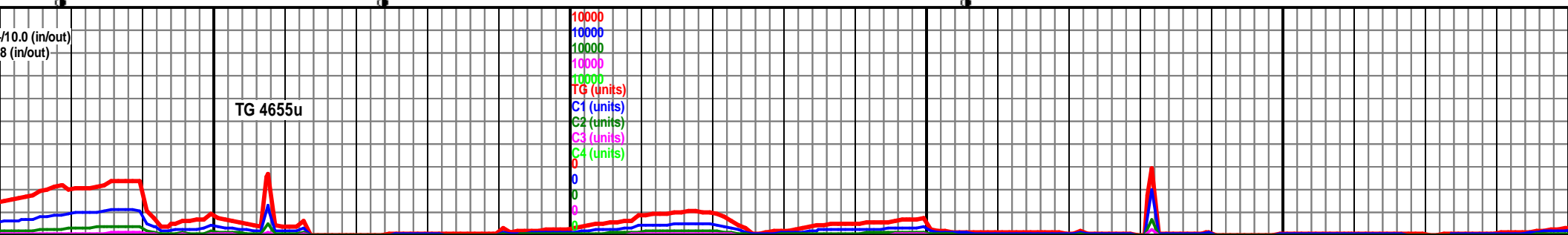
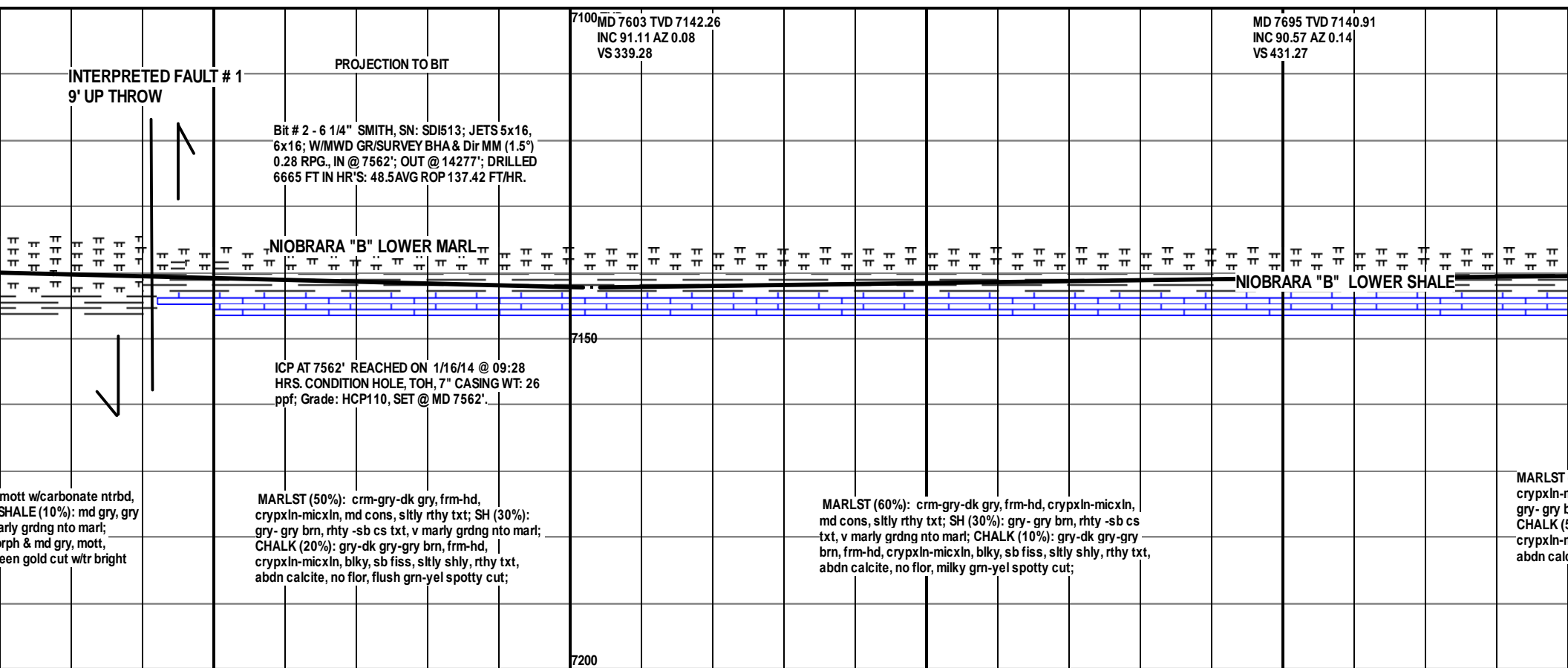
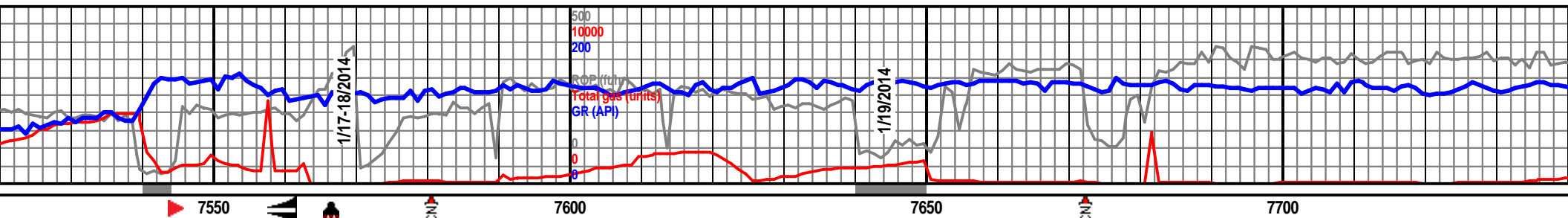
SORTING

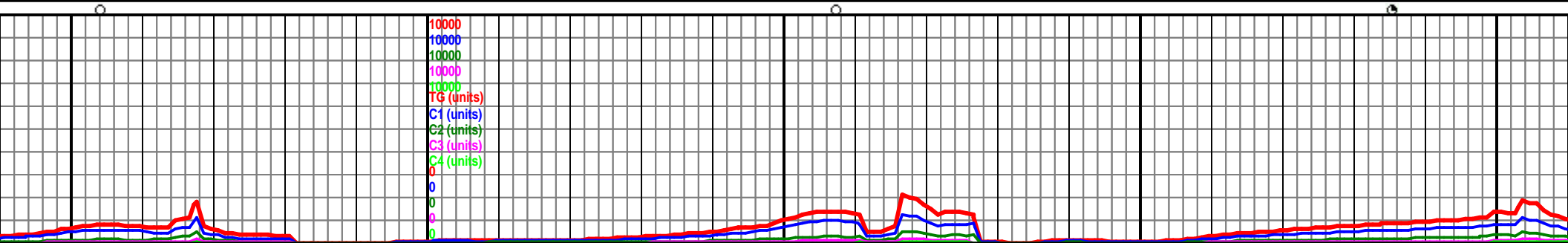
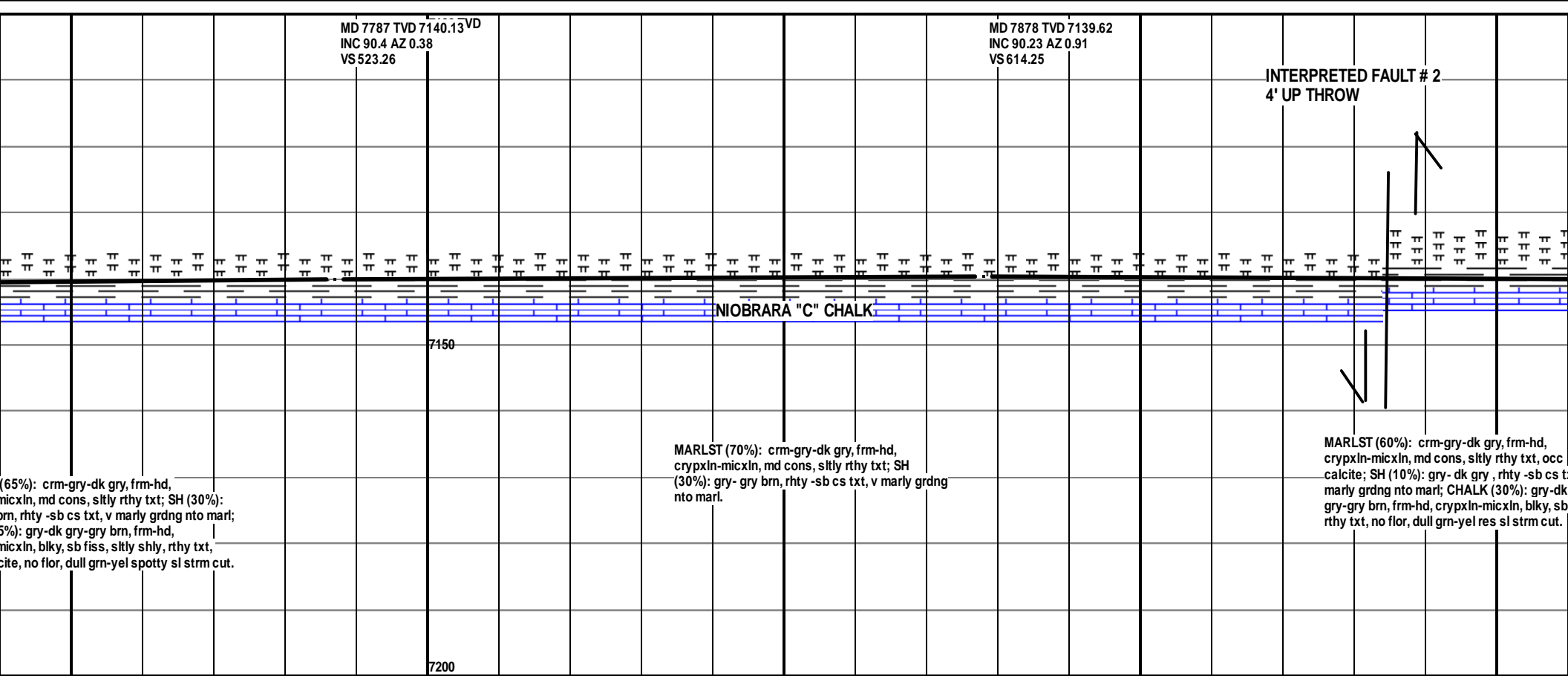
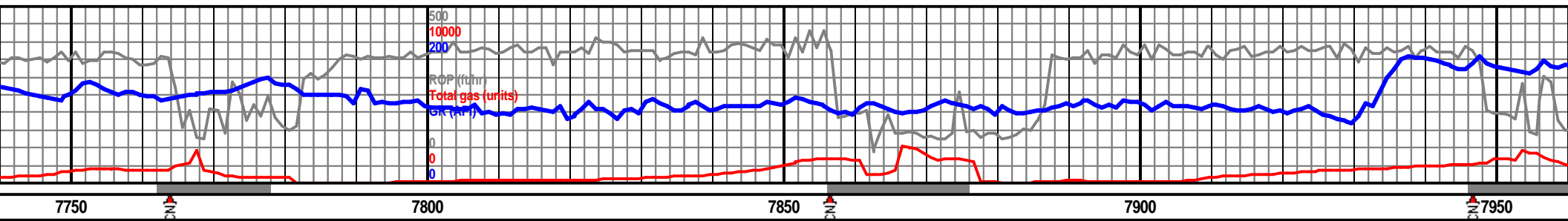
 Well
 Moderate
 Poor

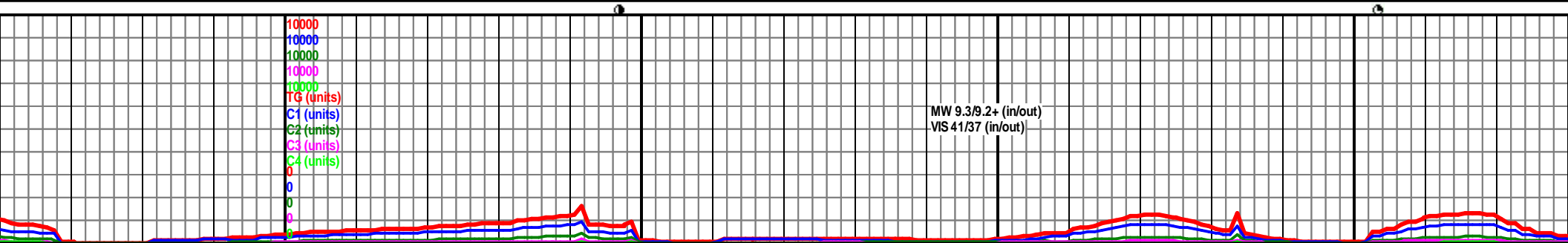
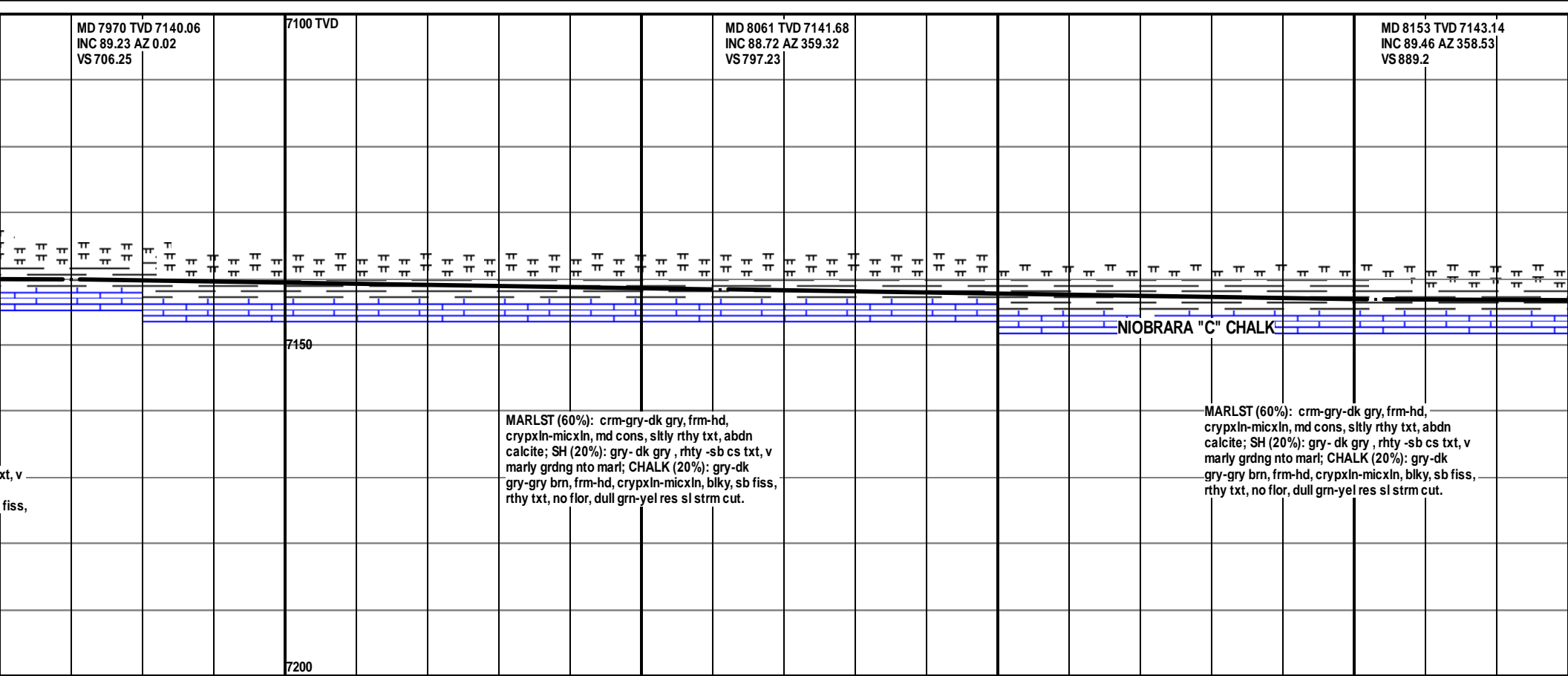
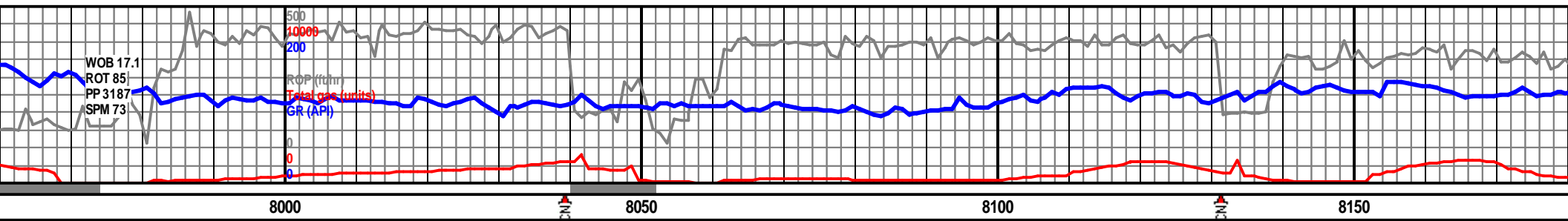


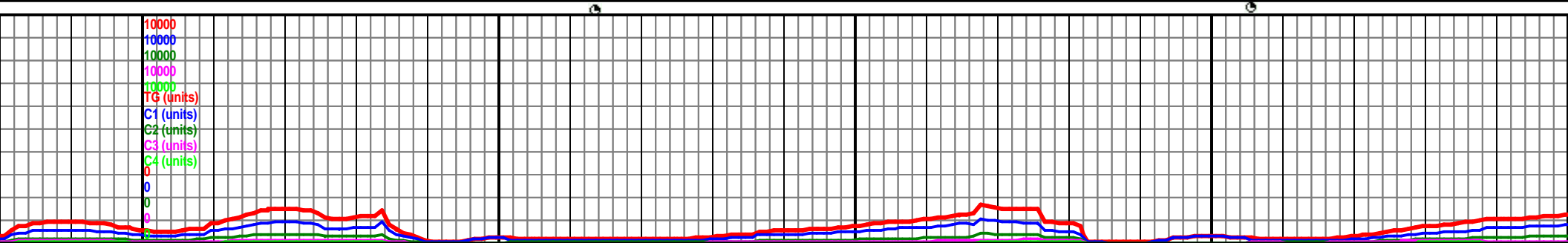
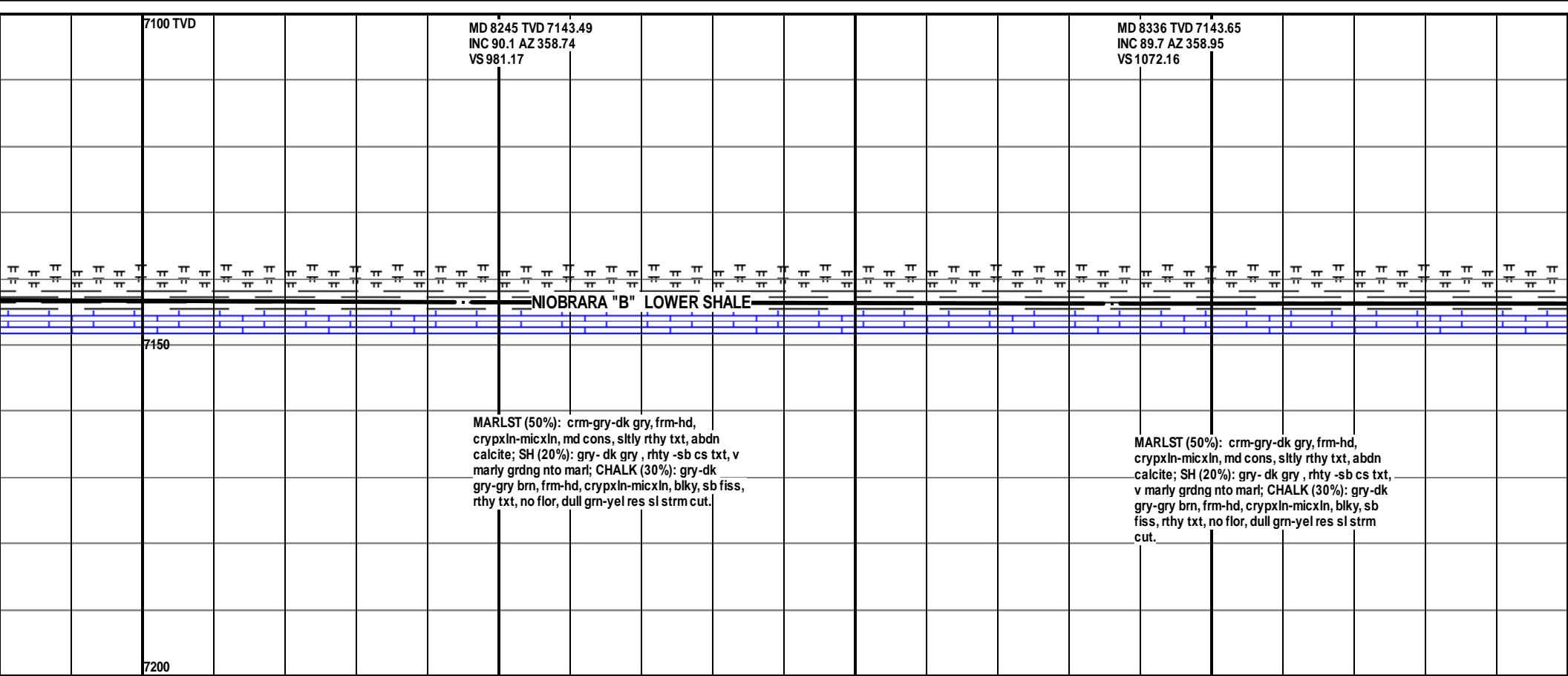
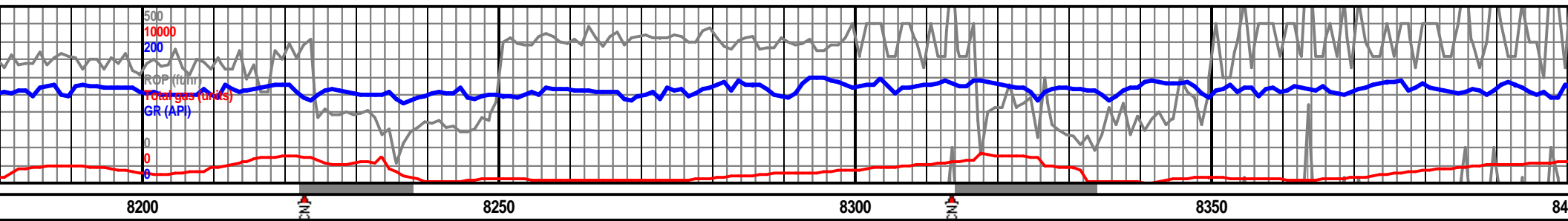


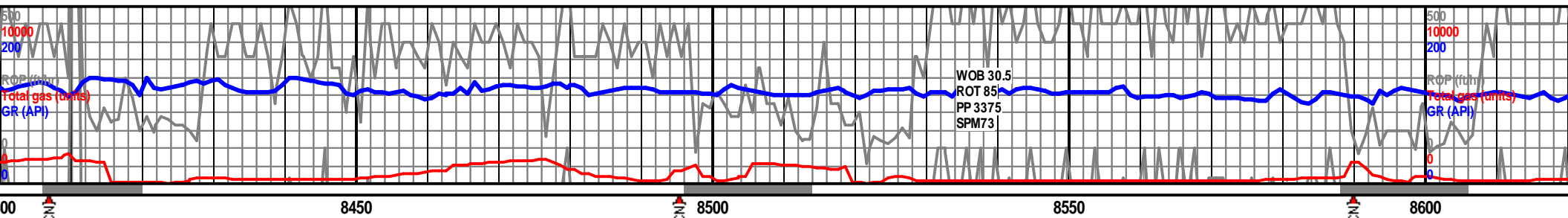












7100 TVD	MD 8428 TVD 7143.76 INC 90.17 AZ 0.62 VS 1164.15	MD 8519 TVD 7143.28 INC 90.44 AZ 0.96 VS 1255.14	7100 TVD	MD 8611 TVD 7143.28 INC 89.6 AZ 0.96 VS 1347.14
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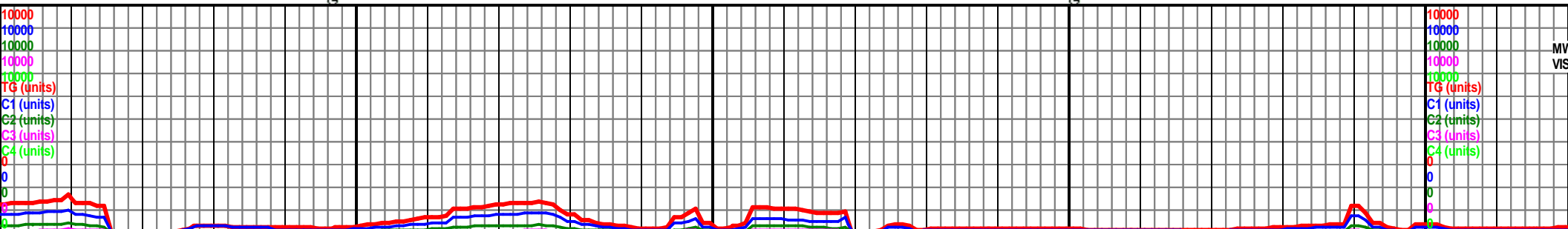
NIORARA "B" LOWER MARL

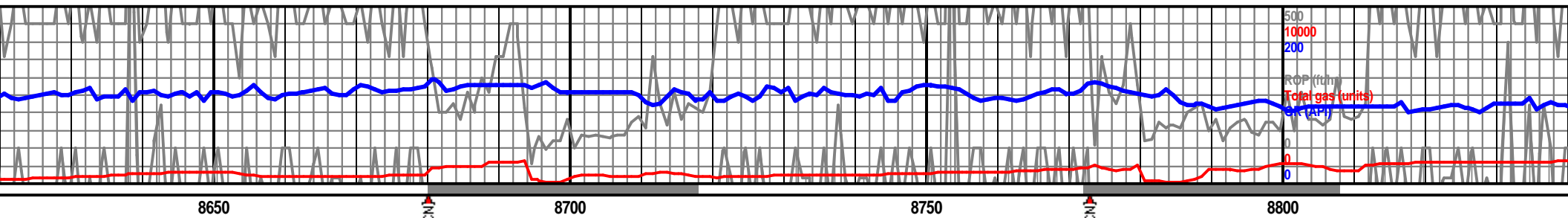
7150

MARL (50%): md dk brn gry mott wht
w/carbonate clay ntrbd, md cons, fnly carb ip,
occ v slty grading nto SHALE (40%): md-dk gry,
blkly sb splnty, cs txt, md frm, sl fiss ip, carb;
CHALK (10%): wh- md gry brn mott & shly, md
frm, fos ip; md diffuse yellow cut w/btr strms.

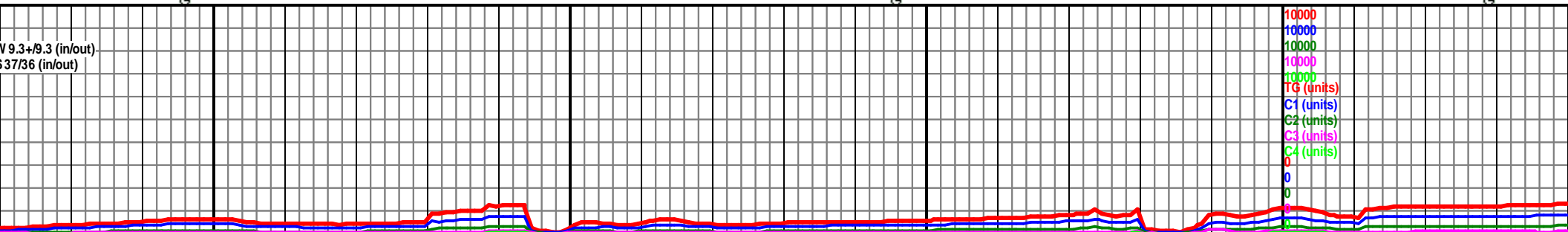
SHALE (40%): md gry, gry brn mott, blkly, cs -rthy
txt, occ sl fiss w/carb intrlam, v calc, clayey ip;
MARL (60%): md gry brn mott wht w/clay inclu,
fnly carb ip, v slty; TR CHALK; tr-p pale yellow
milky cut.

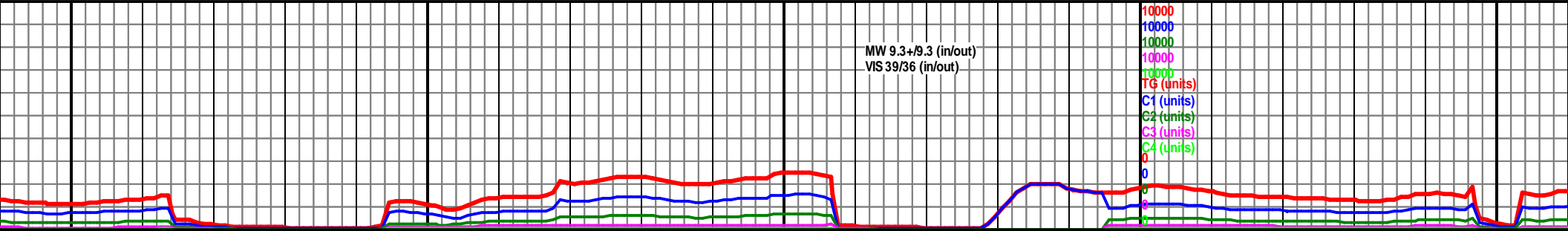
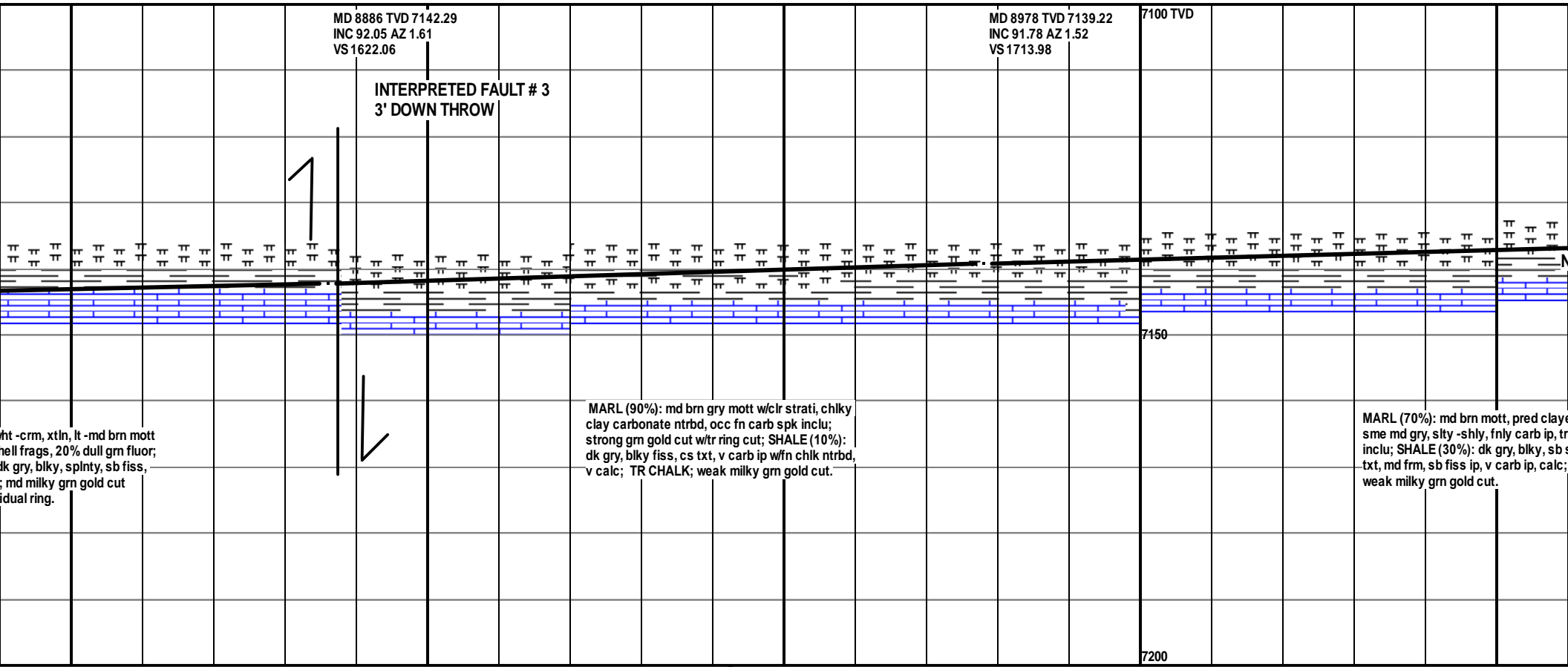
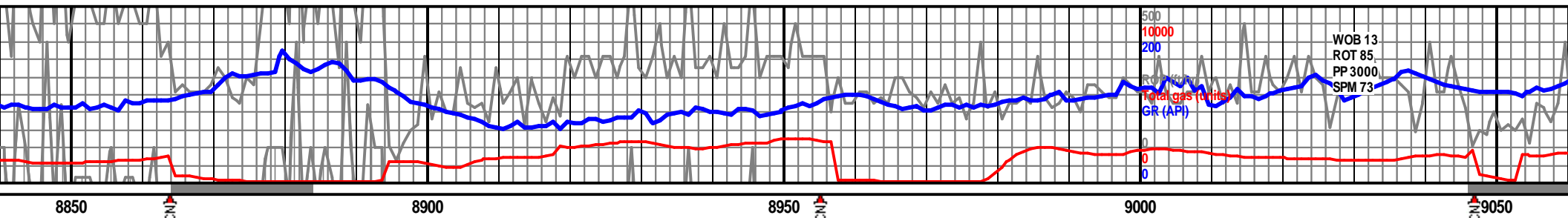
7200

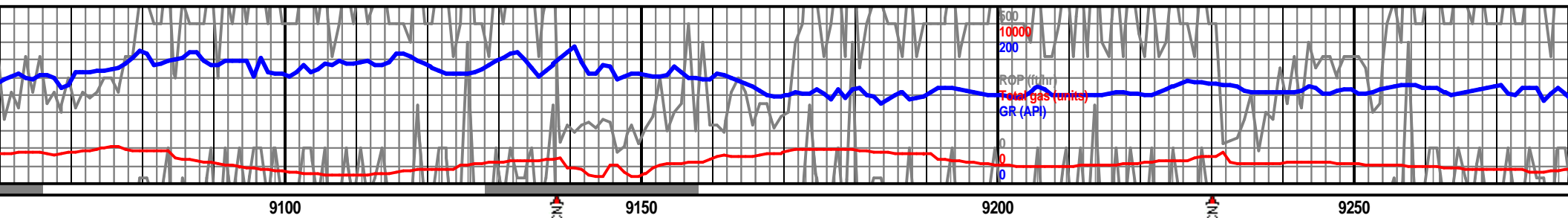




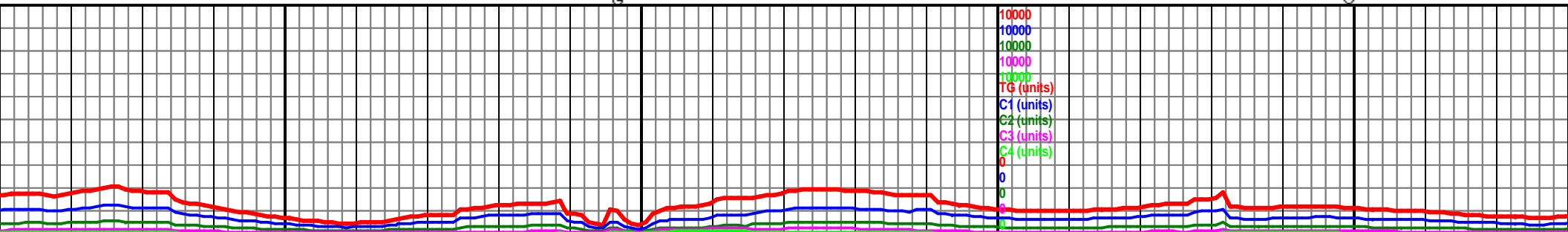
<p>TVD 7143.25 Z 359.02 4</p> <p>SHALE (50%): md-dk gry, blkly, sb splnty, md frm, cs -rhty txt, sl fiss ip, carb, calc; CHALK (40%): wht, crm, lt -md brn gry mott, v slty ip, fos; MARL (10%): md gry brn mott w/clay pellet inclu, v shly; weak diffuse green gold cut.</p>	<p>MD 8702 TVD 7144.24 INC 89.16 AZ 358.9 VS 1438.12</p> <p>CHALK (60%): crm -amorph -sb xtln, lt brn w/wht mott, slty ip, no sig fluor w/o solv; SHALE (40%): md-dk gry, gry brn, blkly, cs txt, sb fiss, carb; TR MARL; fair diffuse grn gold cut w/scat fluor; abndt inoceramus frags.</p>	<p>MD 8794 TVD 7144.43 INC 90.6 AZ 0.62 VS 1530.11</p> <p>CHALK (70%): off w wht, fos ip w/scat sl SHALE (30%): md-c carb, cs txt, md frm w/scat strm & tr res</p>
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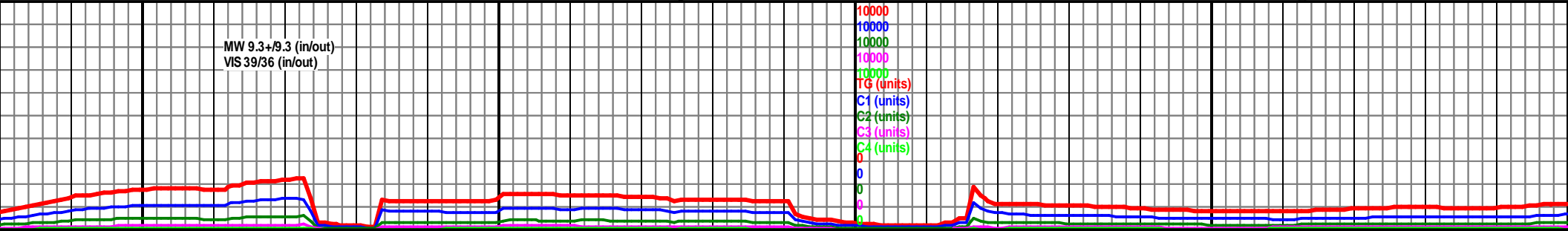
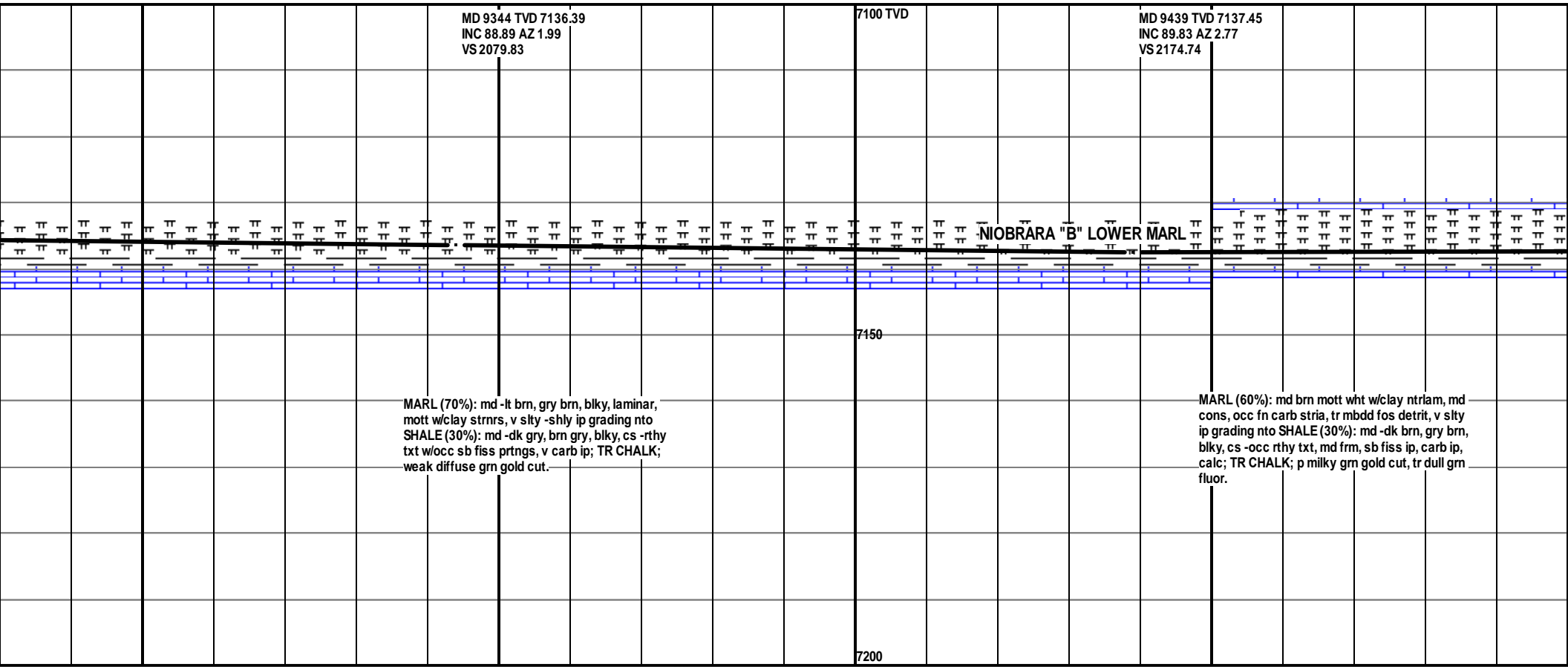
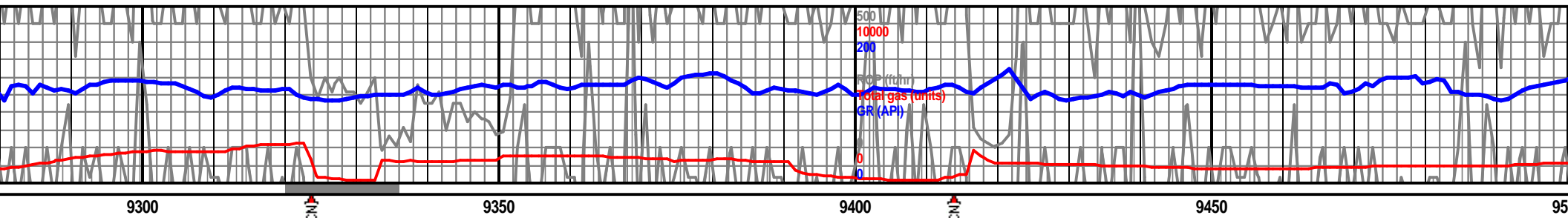


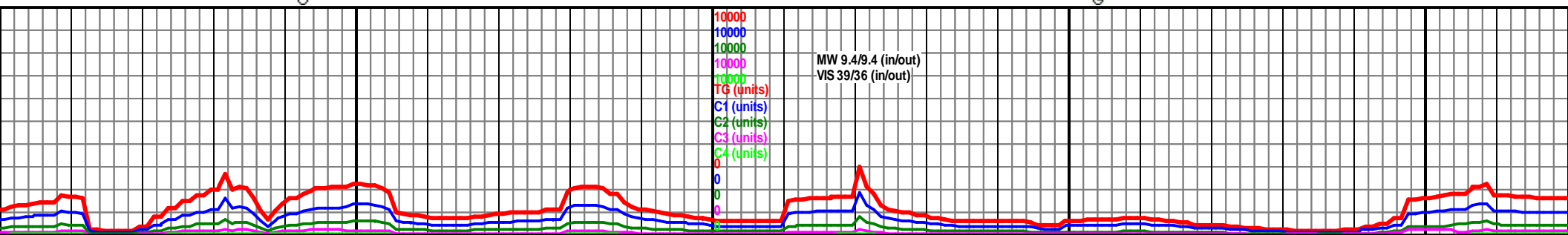
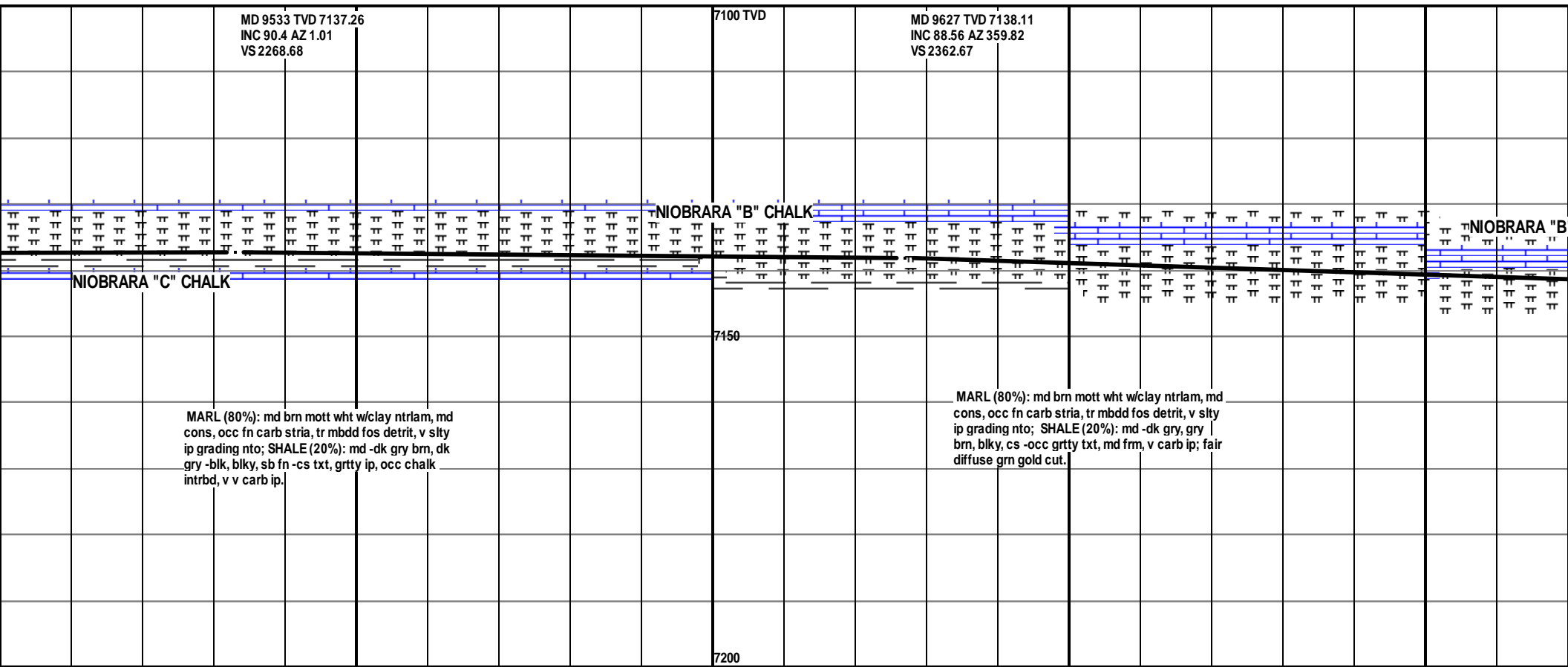
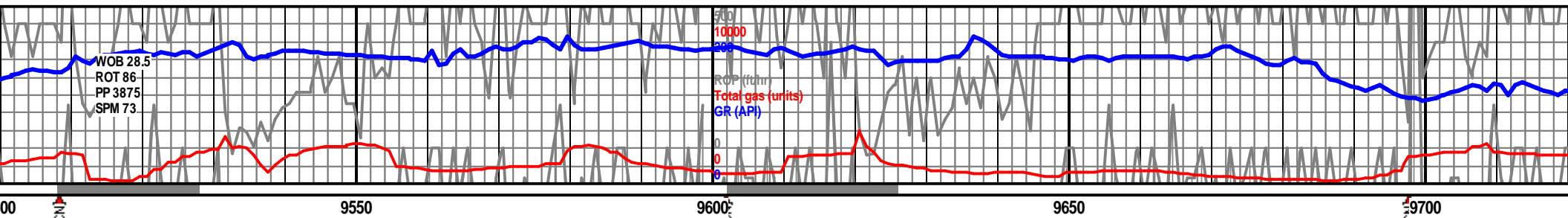


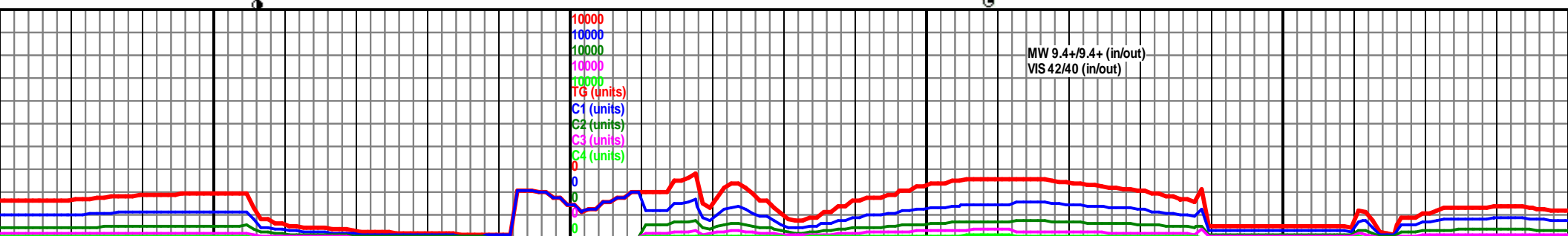
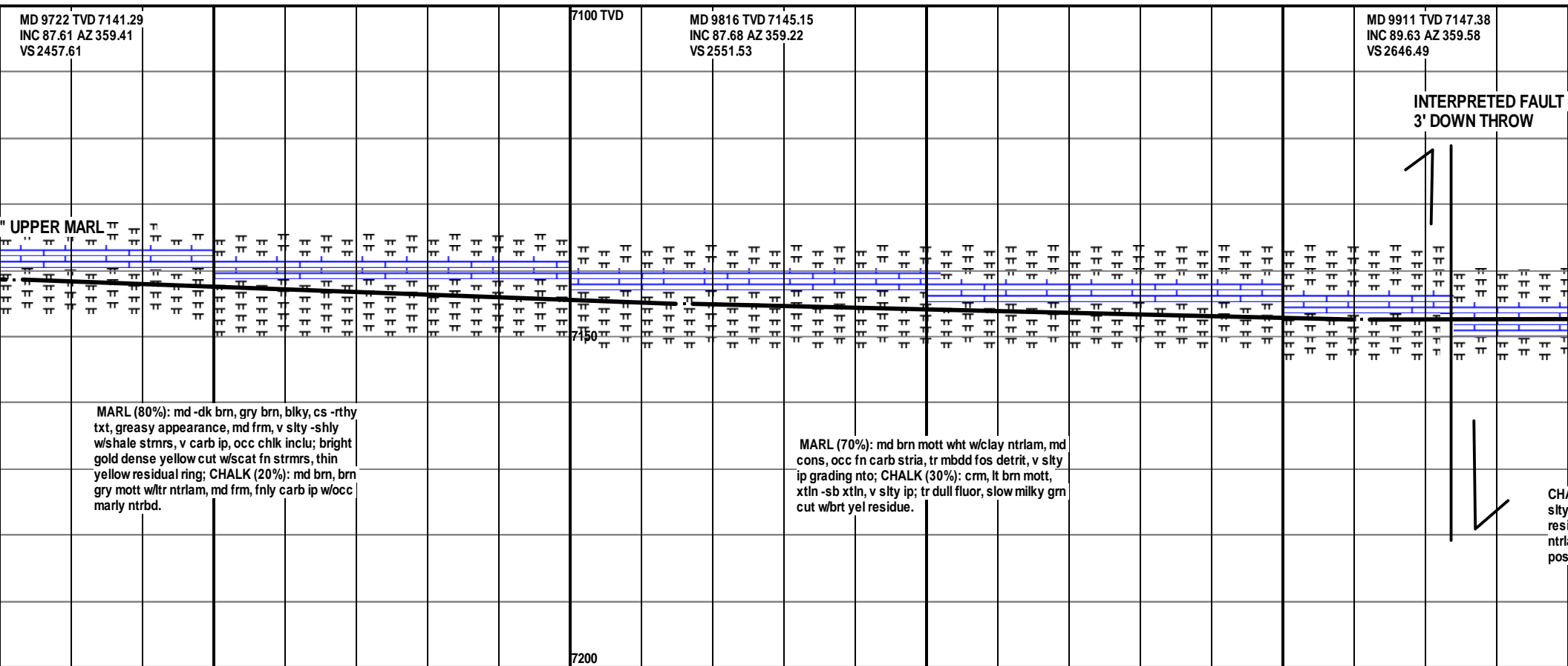
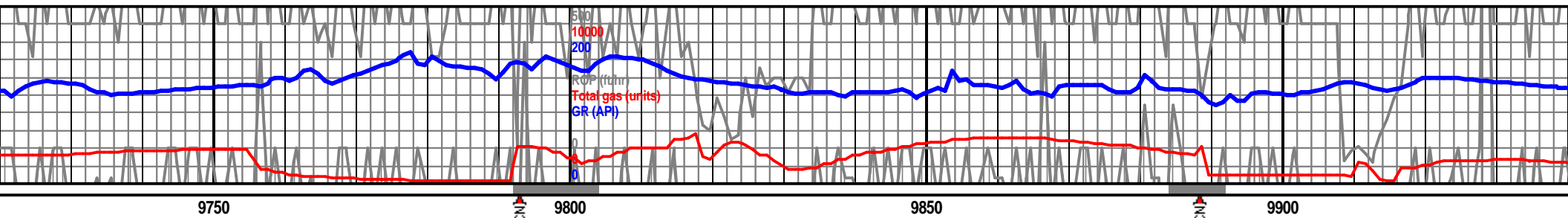


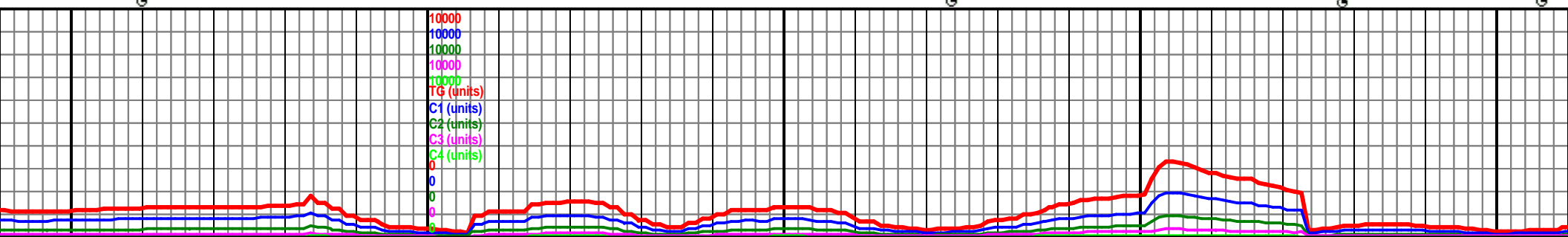
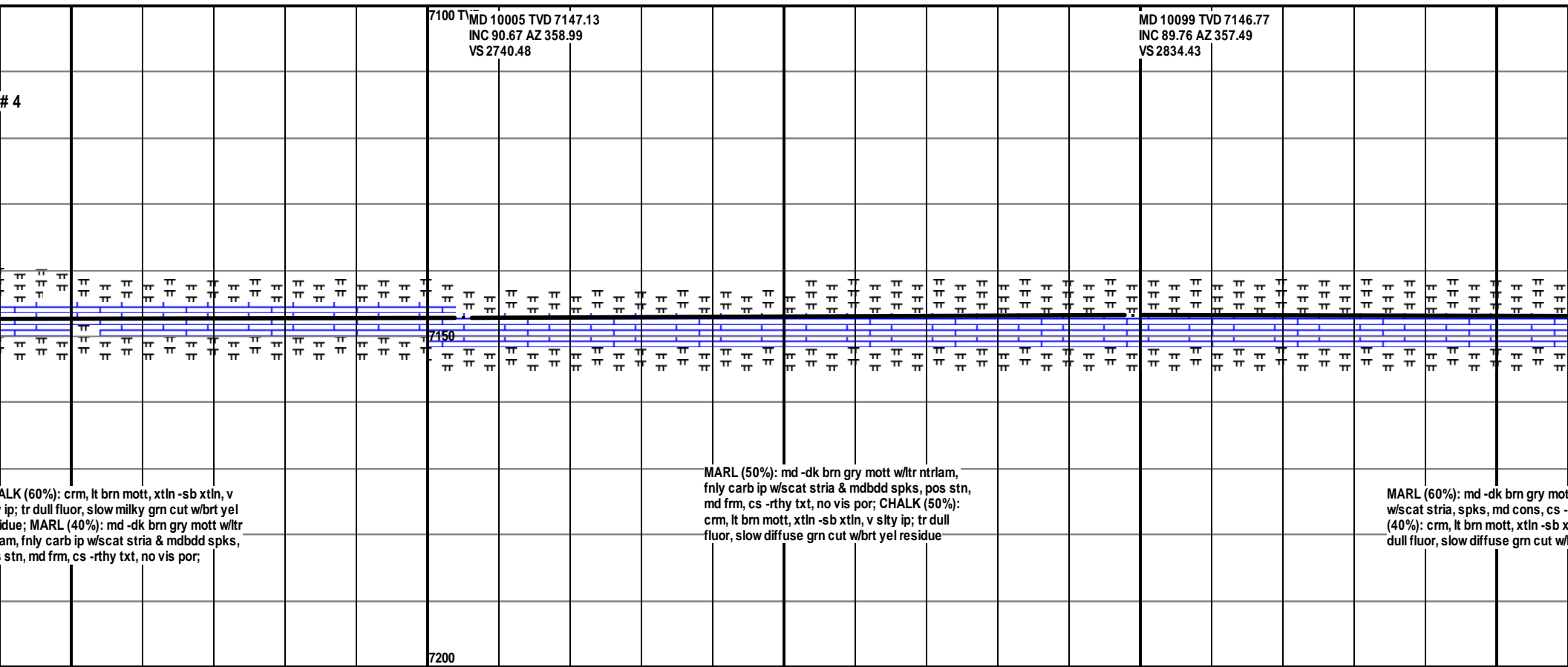
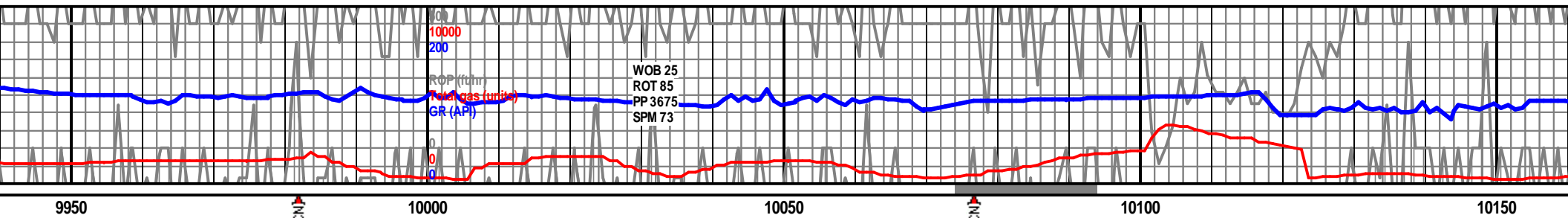
<p>MD 9069 TVD 7136.74 INC 91.34 AZ 1.4 VS 1804.91</p> <p>NIORARA "B" LOWER SHALE</p>		<p>MD 9161 TVD 7135.36 INC 90.37 AZ 1.27 VS 1896.88</p> <p>NIORARA "B" LOWER MARL</p>	<p>7100 TVD</p> <p>7150</p>	<p>MD 9252 TVD 7135.28 INC 89.73 AZ 0.79 VS 1987.86</p>
<p>ey w/lt ntrbd, fos detritus splnty, cs TR CHALK;</p>		<p>MARL (80%): md brn mott, blkly, fn clay ntrlam, carb, md cons, v slty ip; SHALE (20%): md -dk gry, brn gry, blkly, cs txt, md frm, v carb ip; TR wht amorph -sbxtln chlk w/scat shell frags; weak milky grn gold cut.</p>	<p>7200</p>	<p>MARL (70%): md -lt brn, gry brn, blkly, laminar, mott w/clay strnrs, v slty -shly ip grading nto SHALE (30%): md -dk gry, brn gry, blkly, cs -rthy txt w/o cc sb fiss prtngs, v carb ip; TR CHALK; weak diffuse grn gold cut.</p>

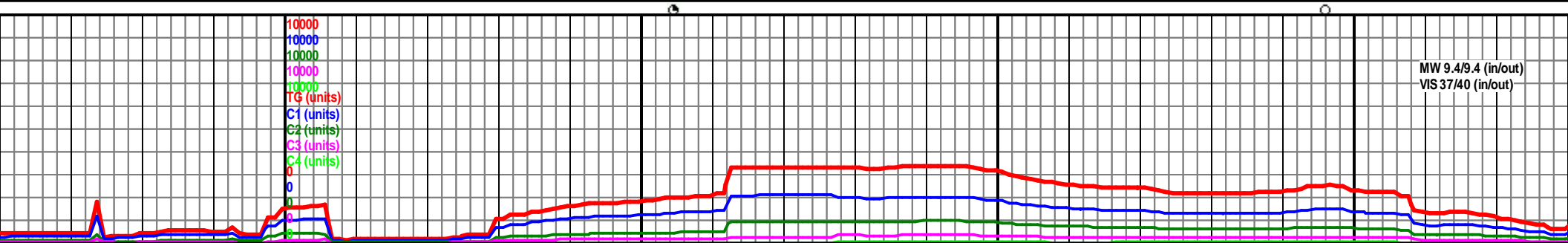
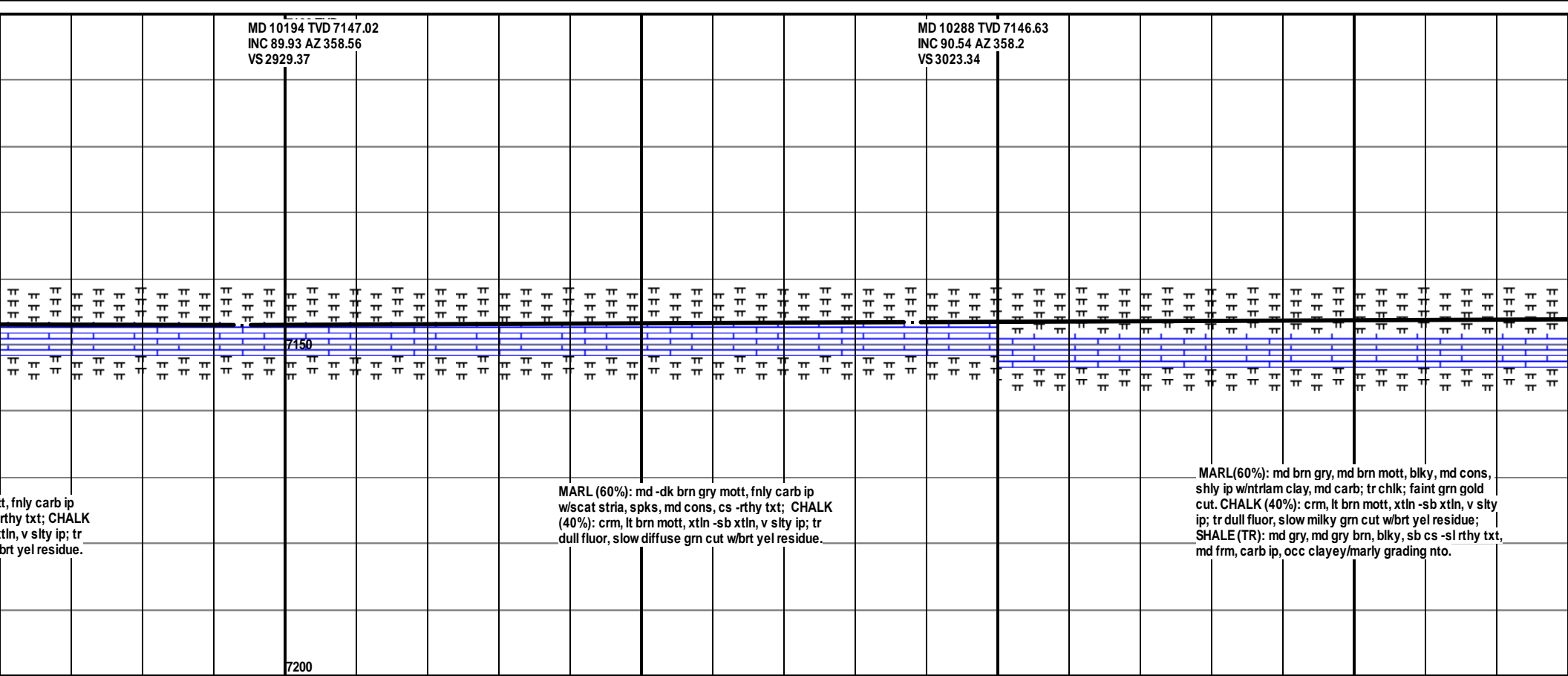
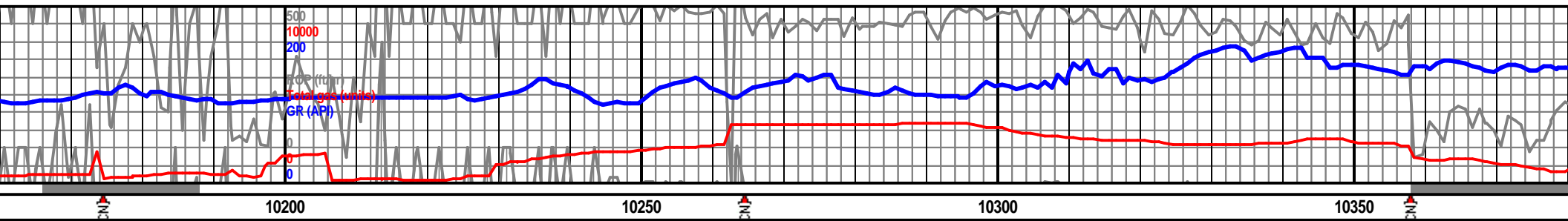




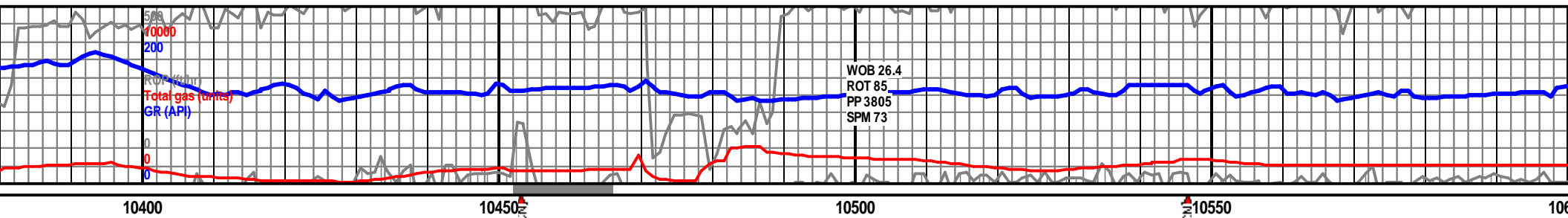




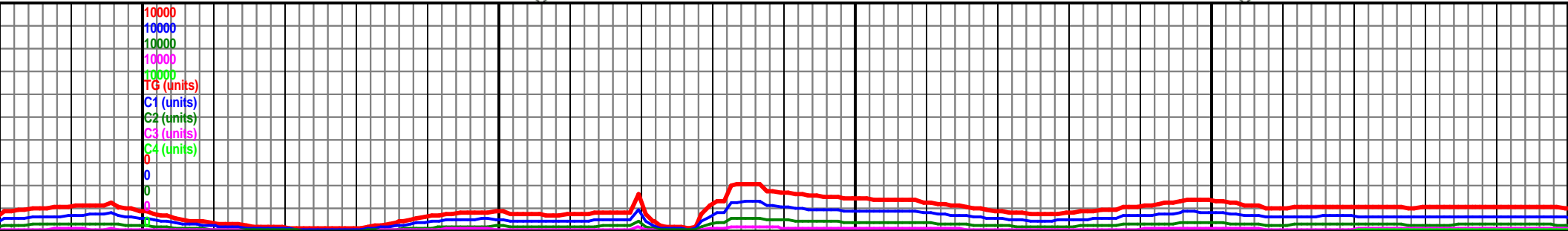


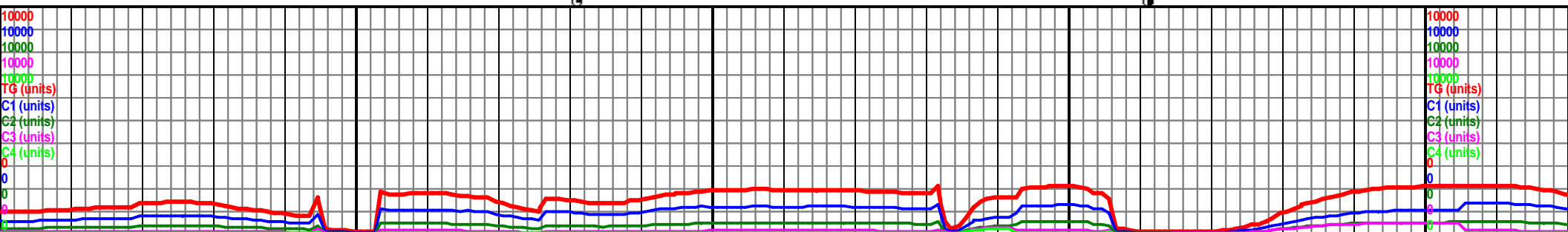
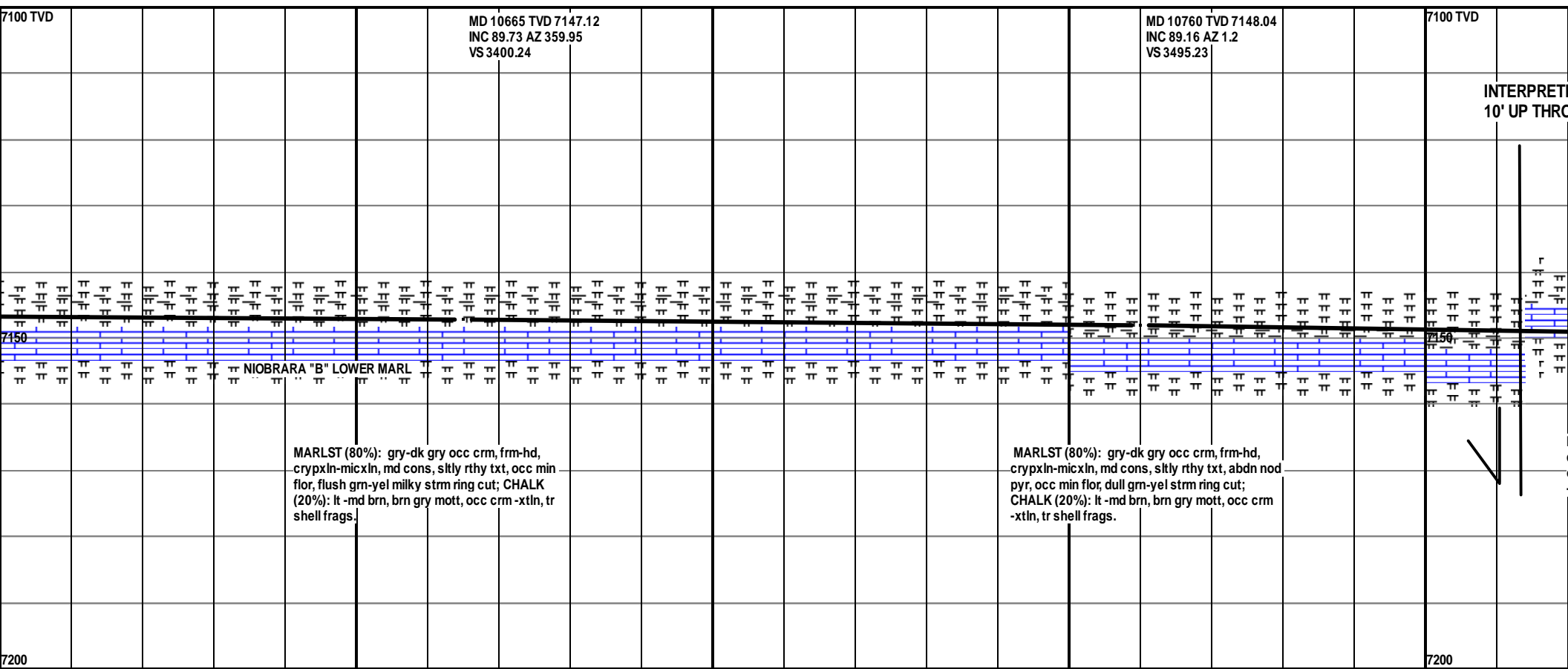
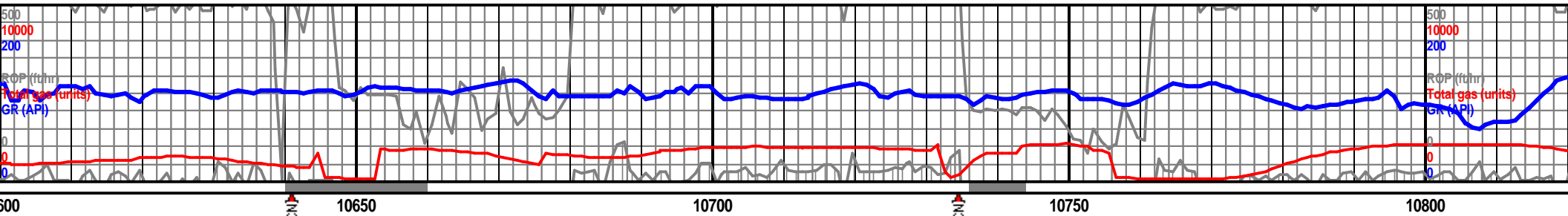


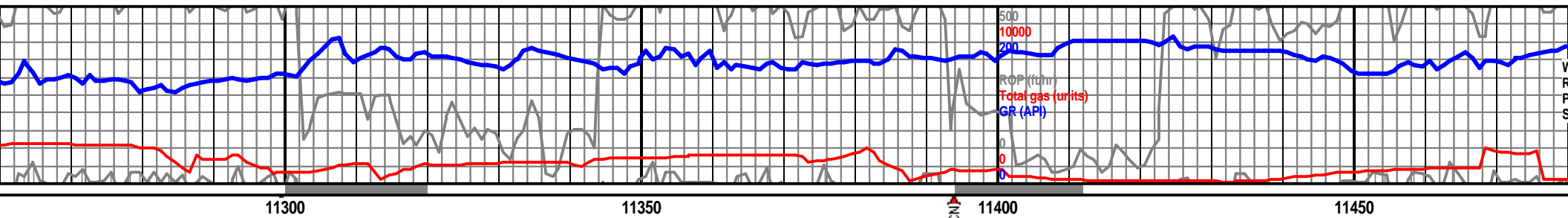
MW 9.4/9.4 (in/out)
VIS 37/40 (in/out)



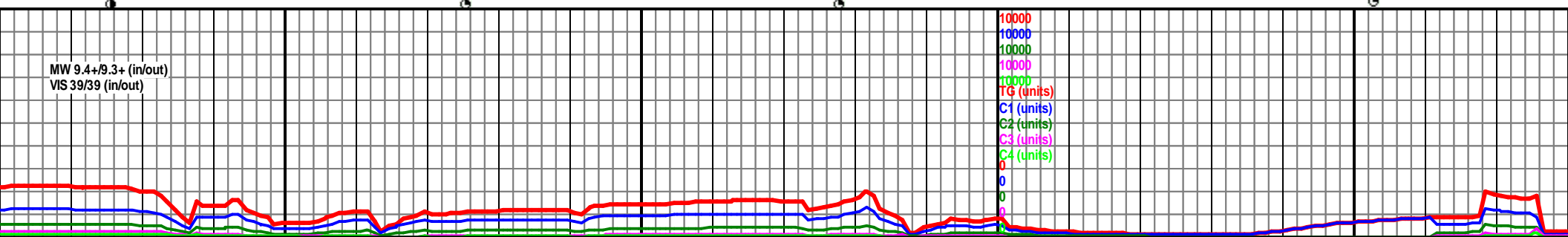
MD 10383 TVD 7146.08 INC 90.13 AZ 359.41 VS 3118.31																				MD 10477 TVD 7146.13 INC 89.8 AZ 358.62 VS 3212.3																														MD 10571 TVD 7146.6 INC 89.63 AZ 358.29 VS 3306.26																																																																																									

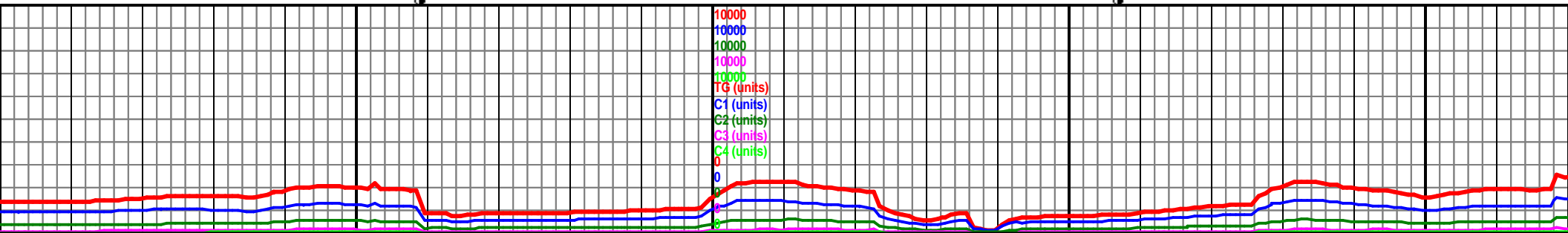
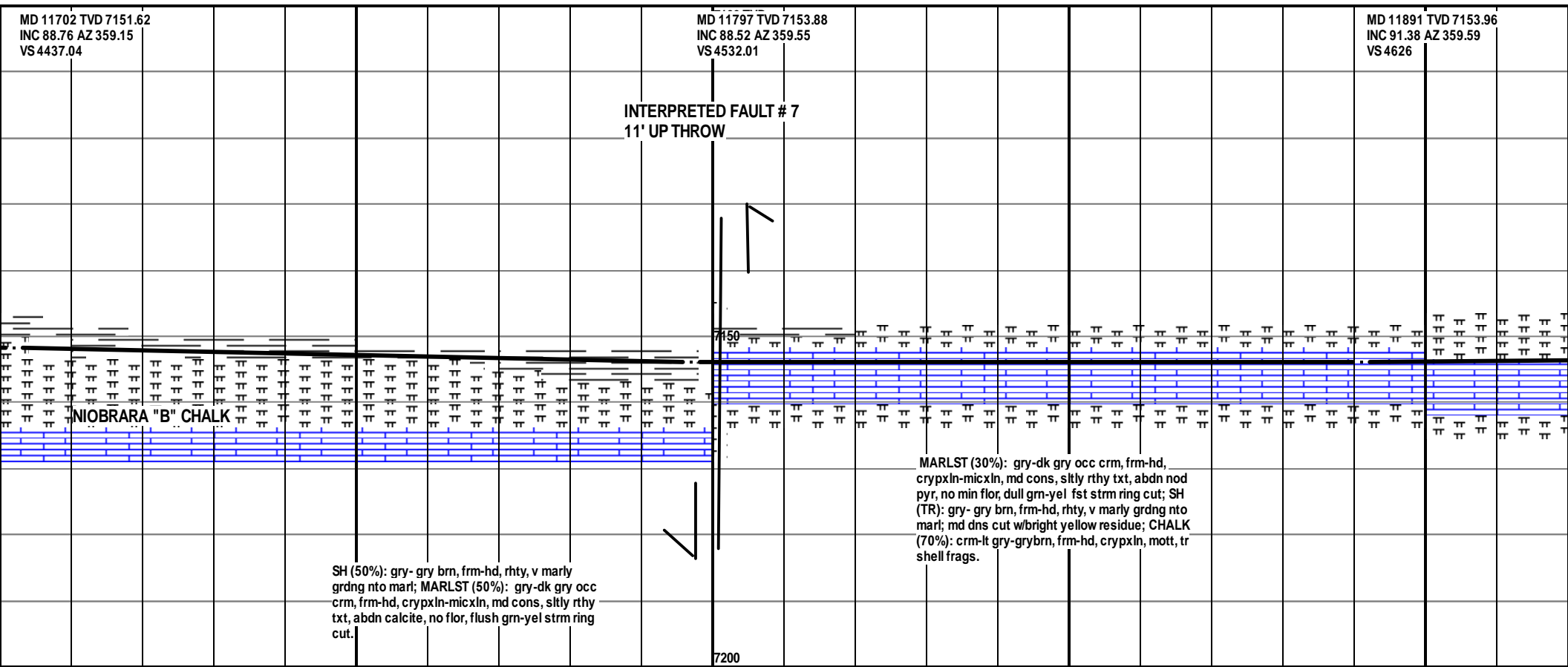
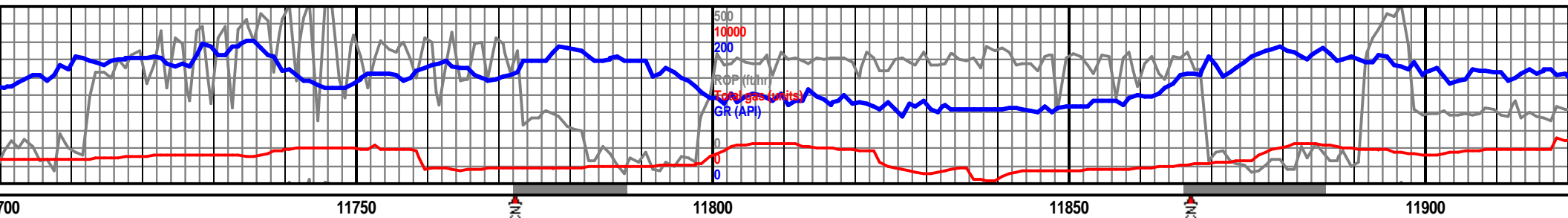


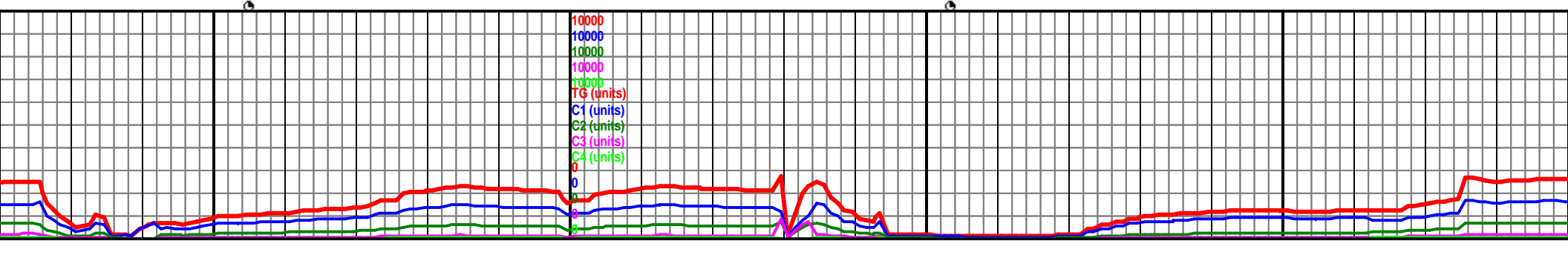
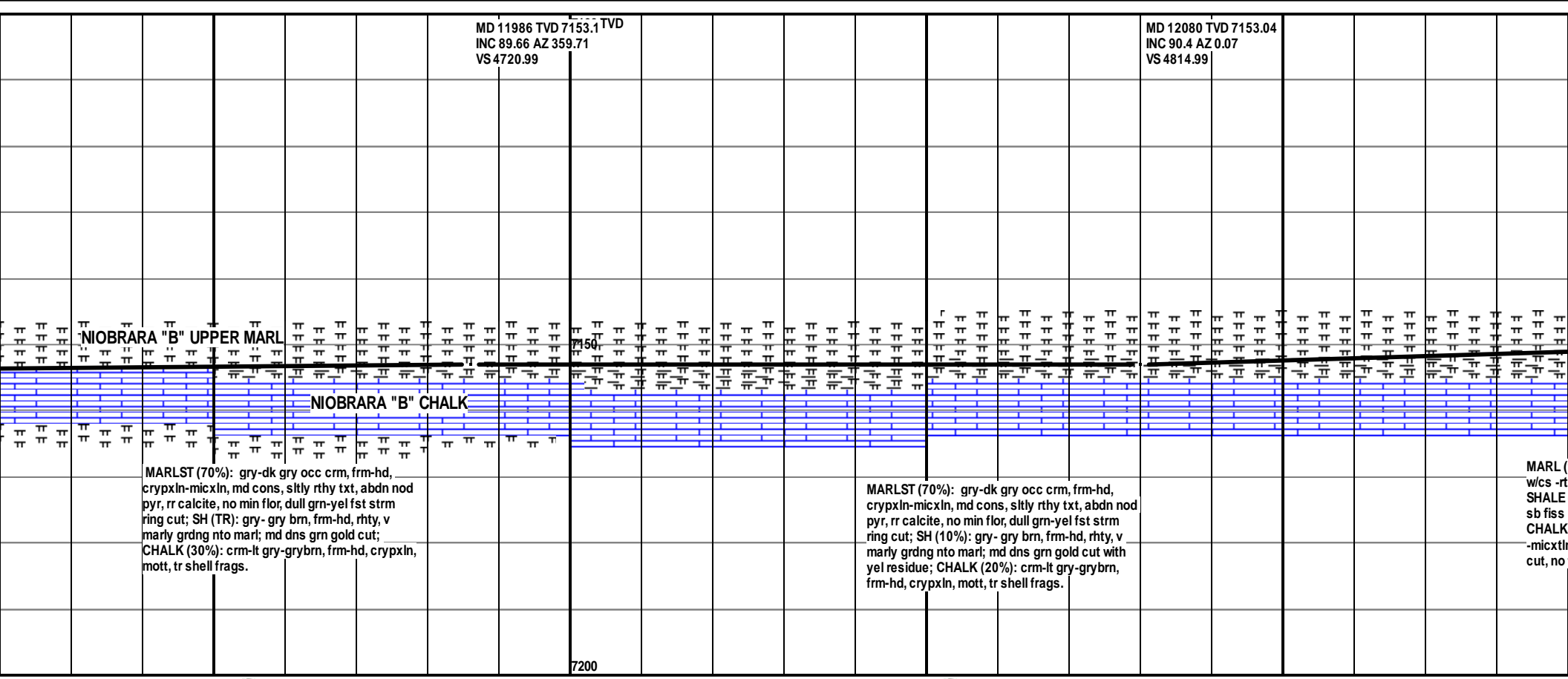
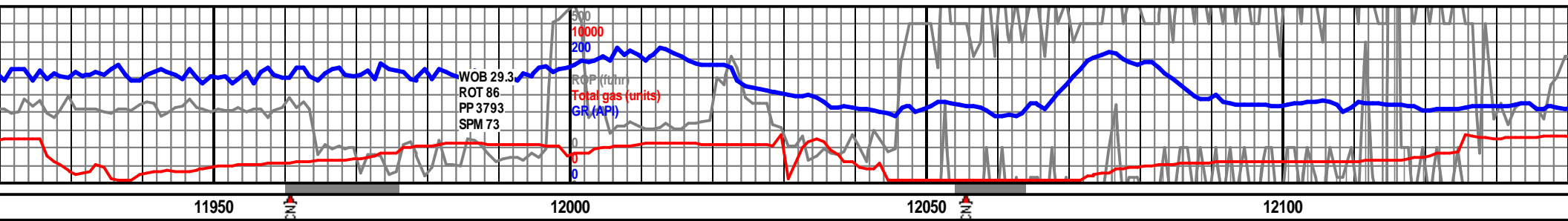


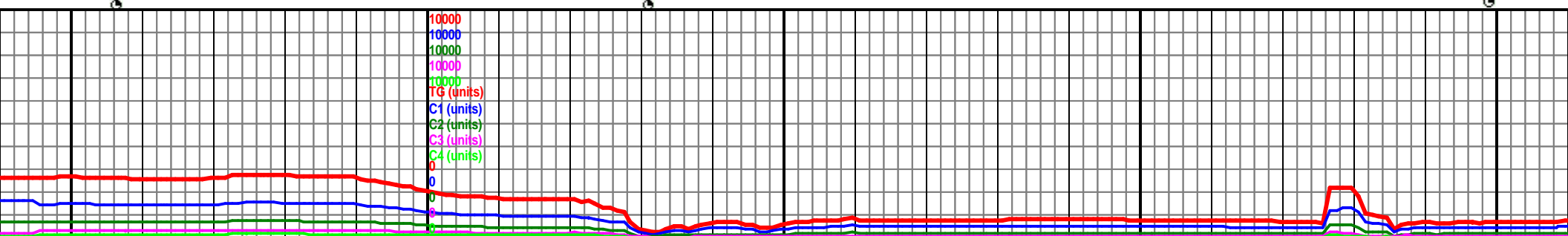
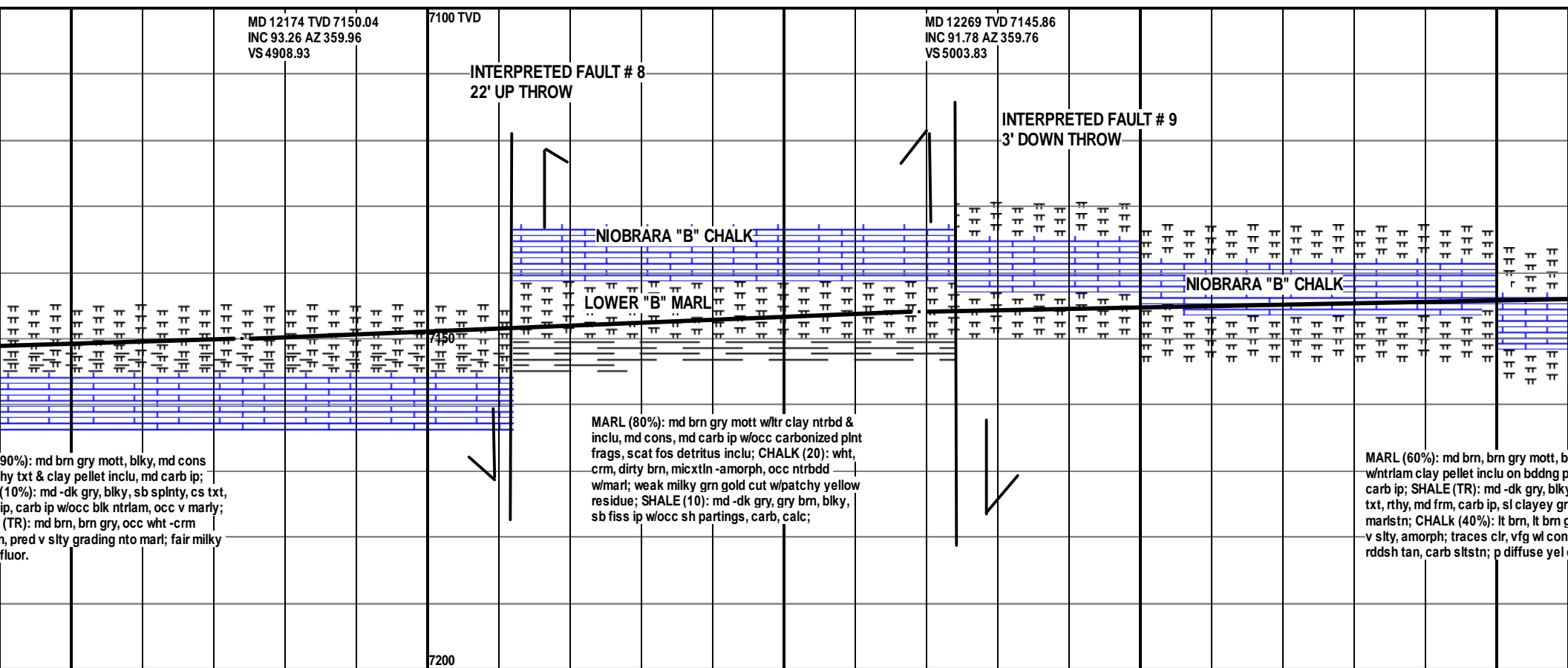
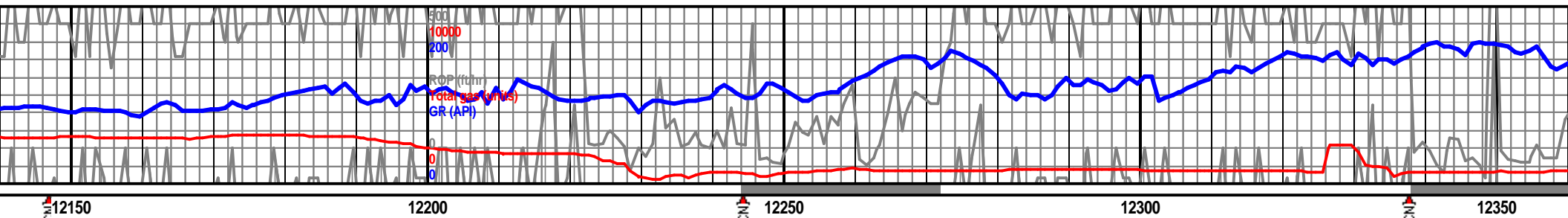


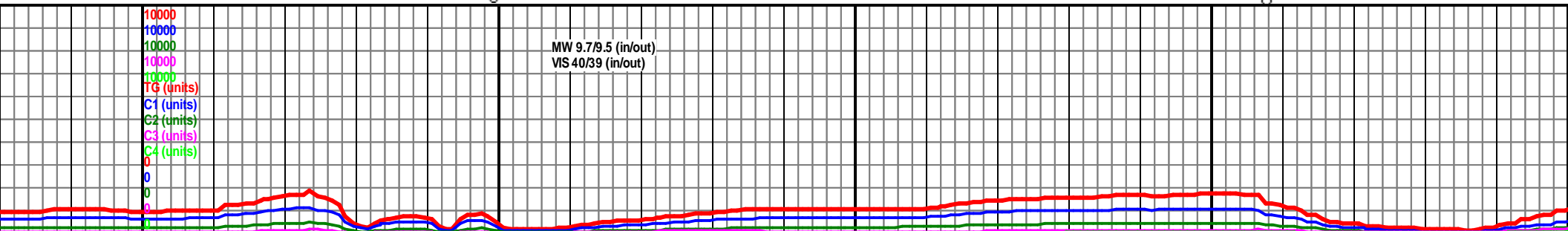
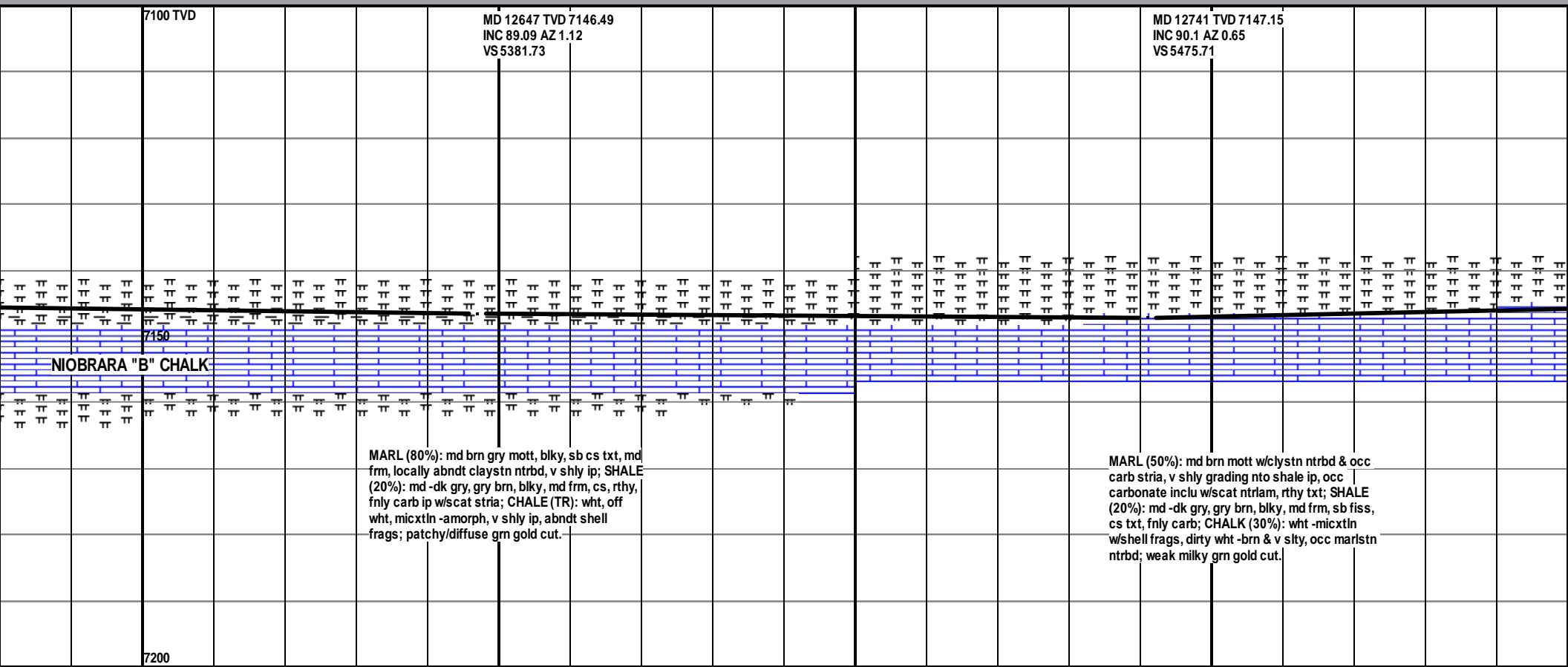
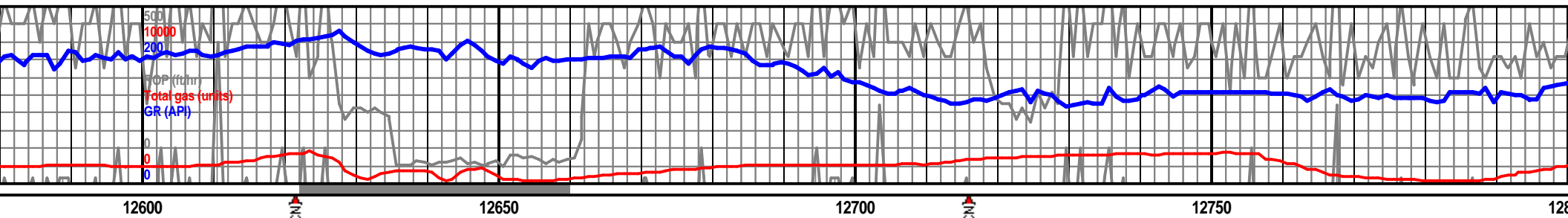
										MD 11325 TVD 7147.46 INC 90.87 AZ 358.14 VS 4060.15										7100 TVD										MD 11420 TVD 7147.29 INC 89.33 AZ 359.87 VS 4155.13																			

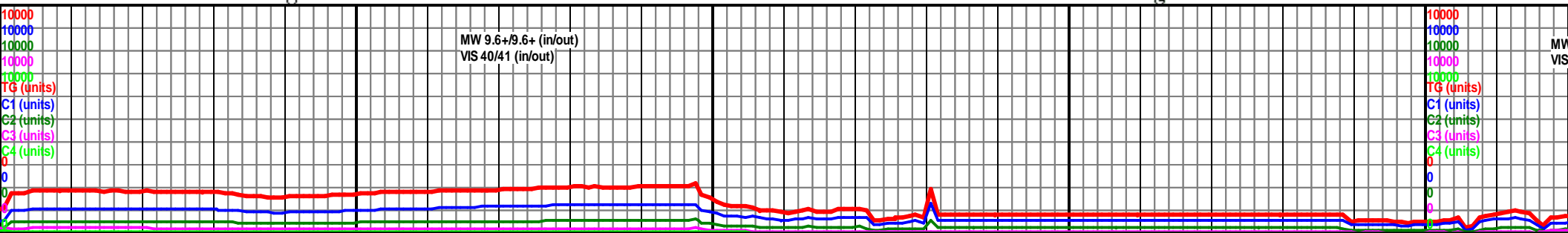
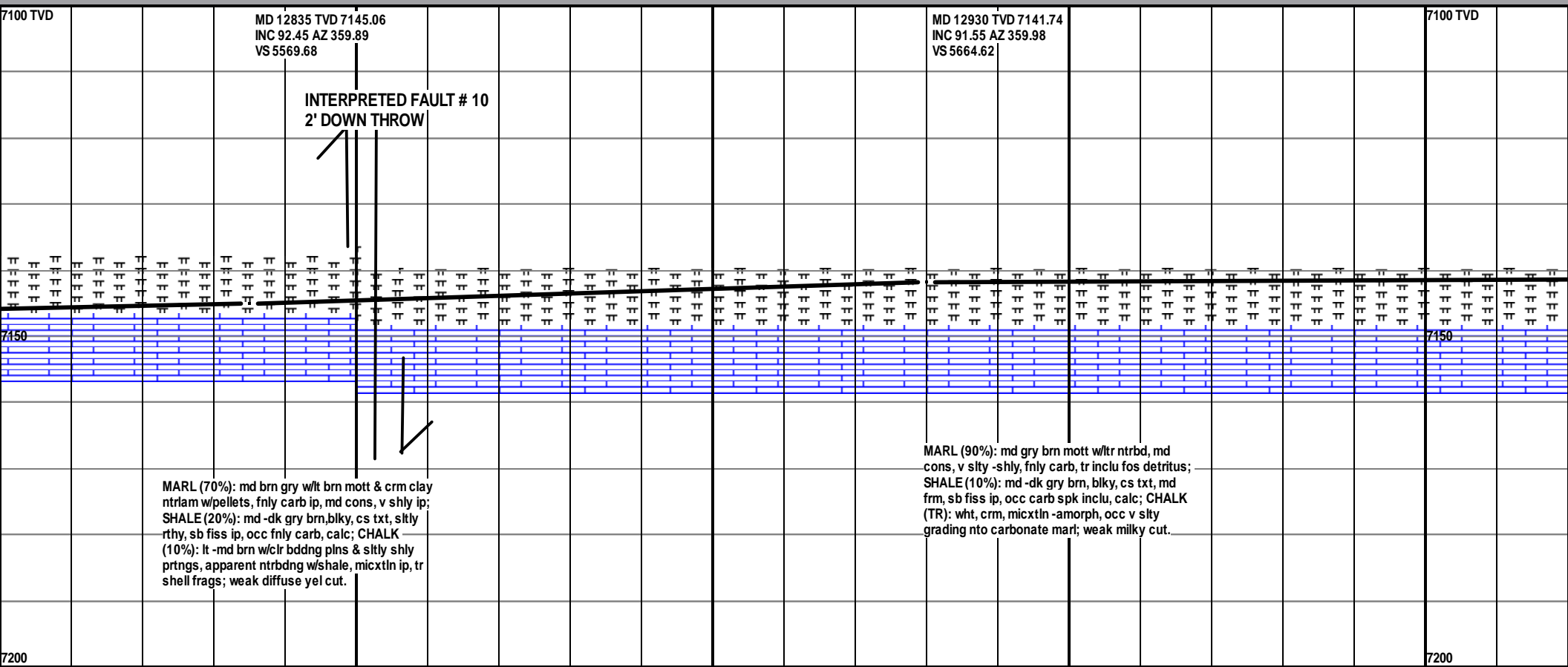
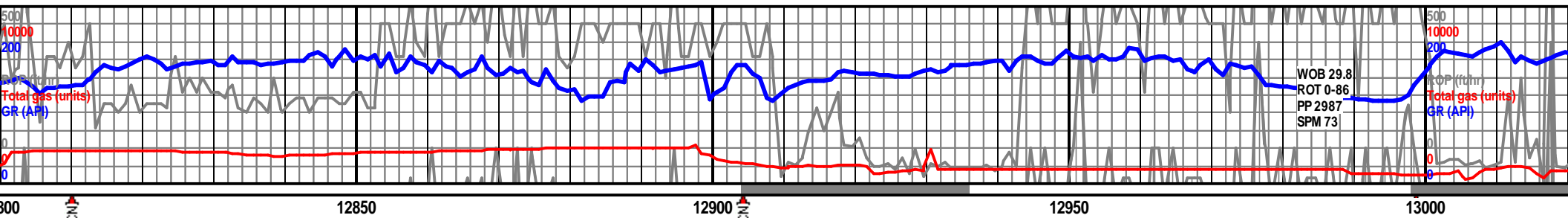


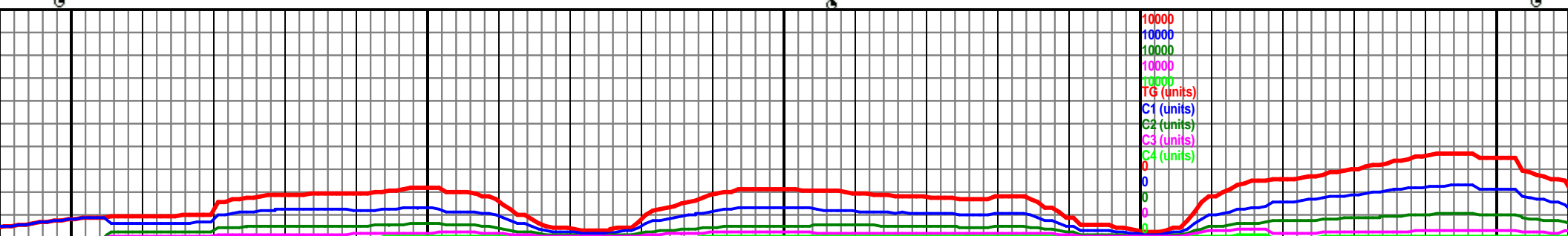
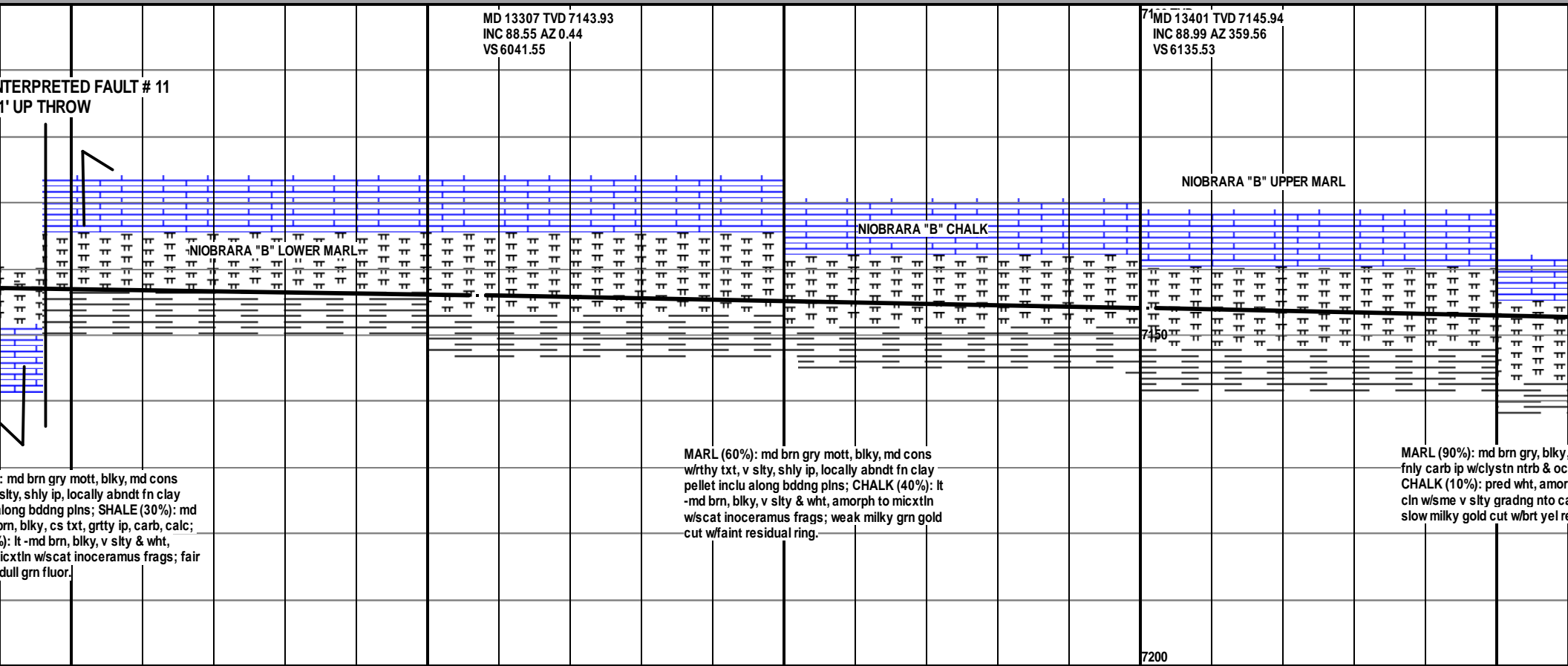
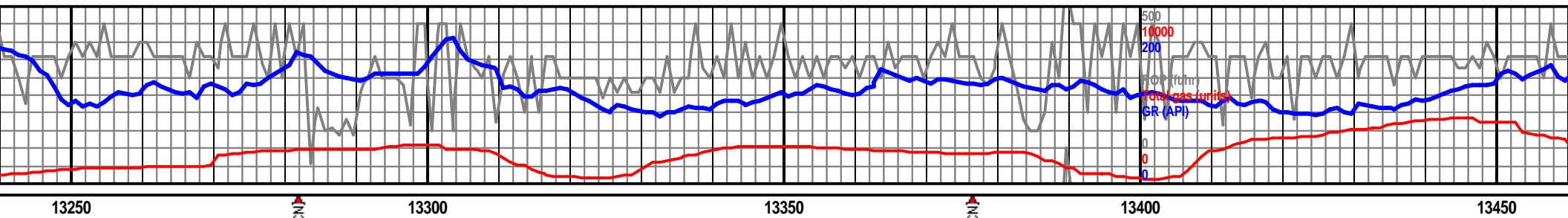


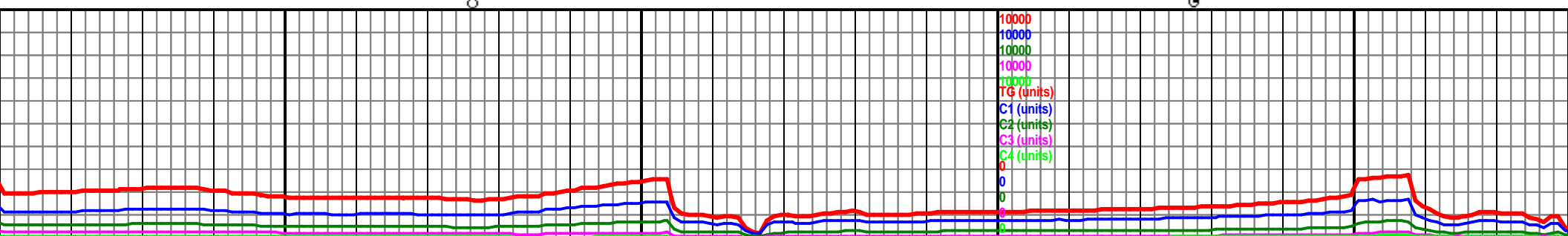
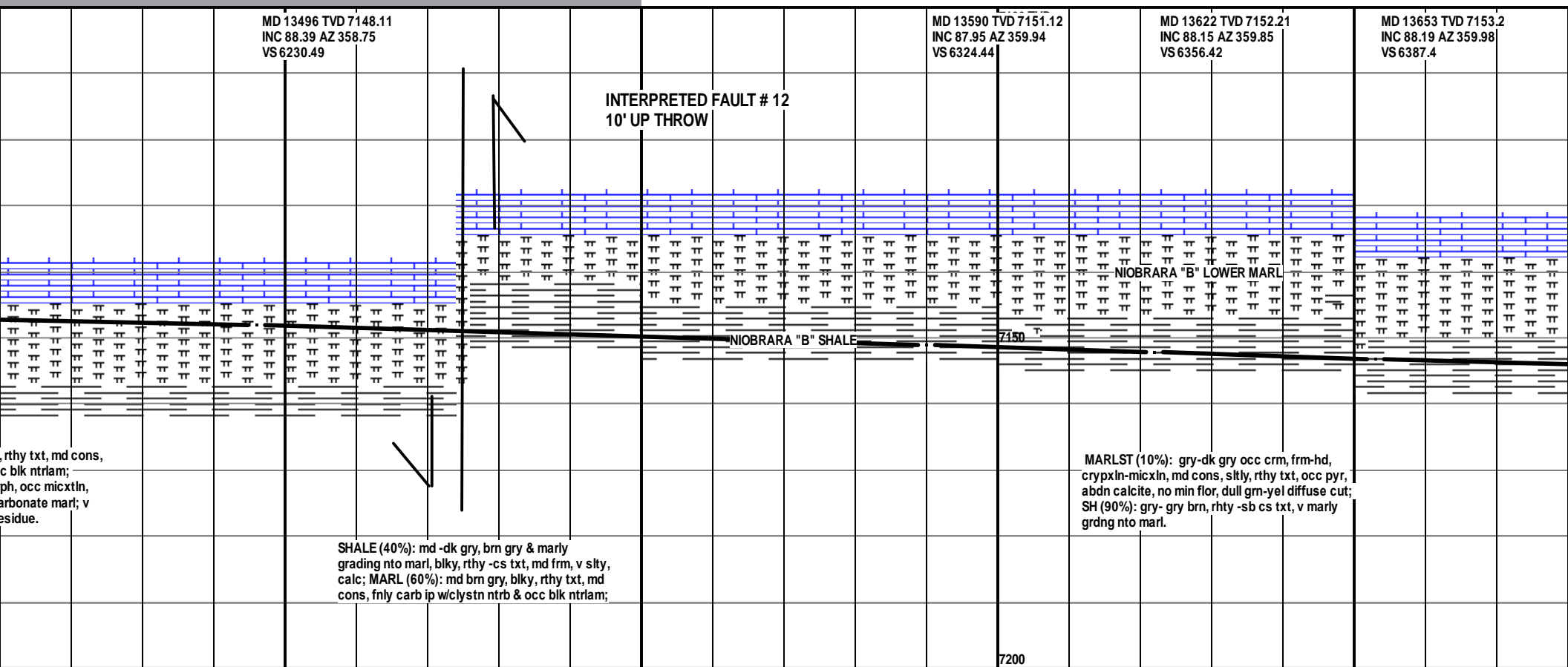
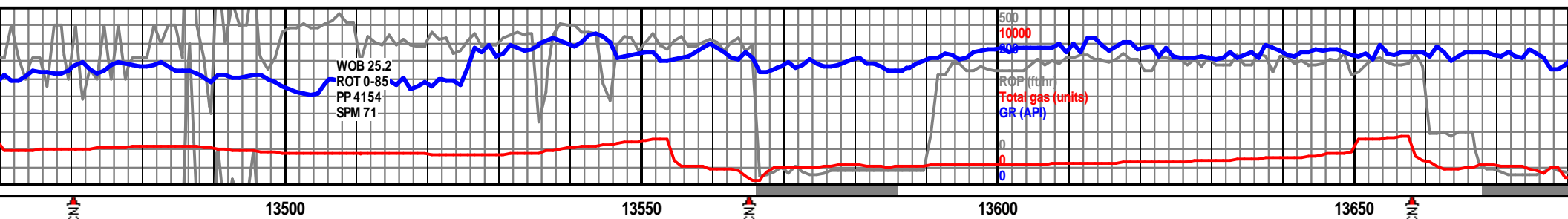


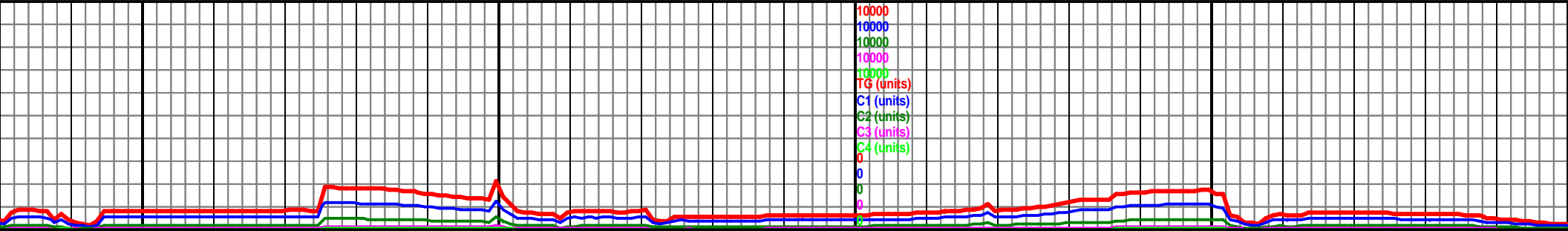
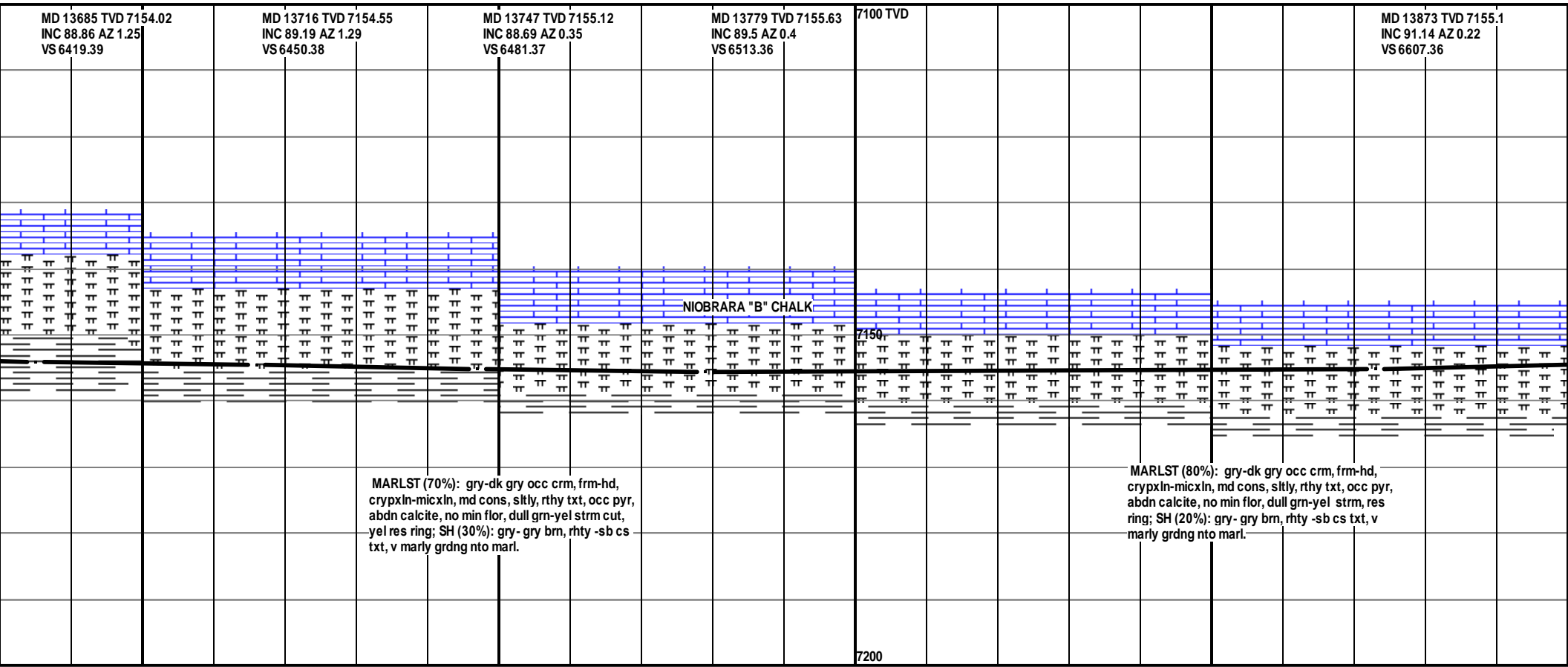
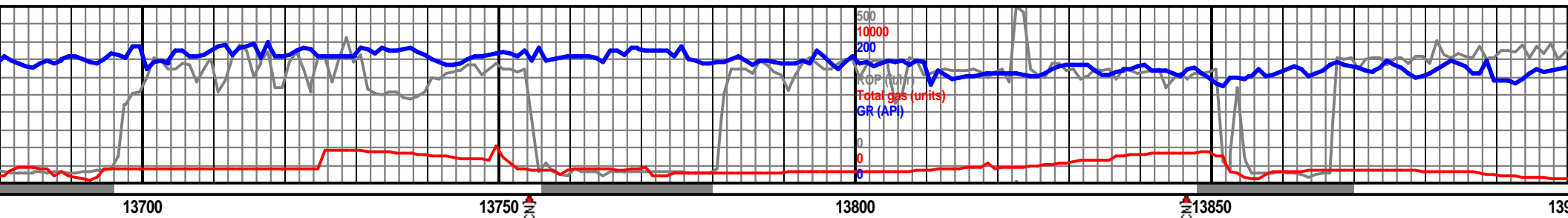


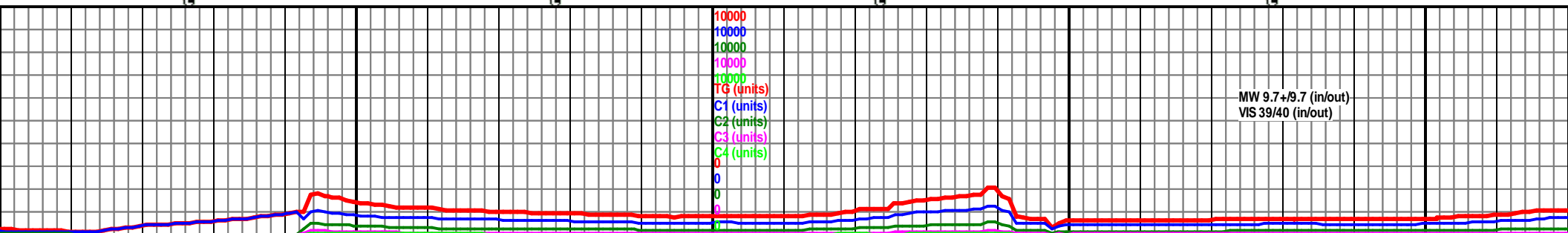
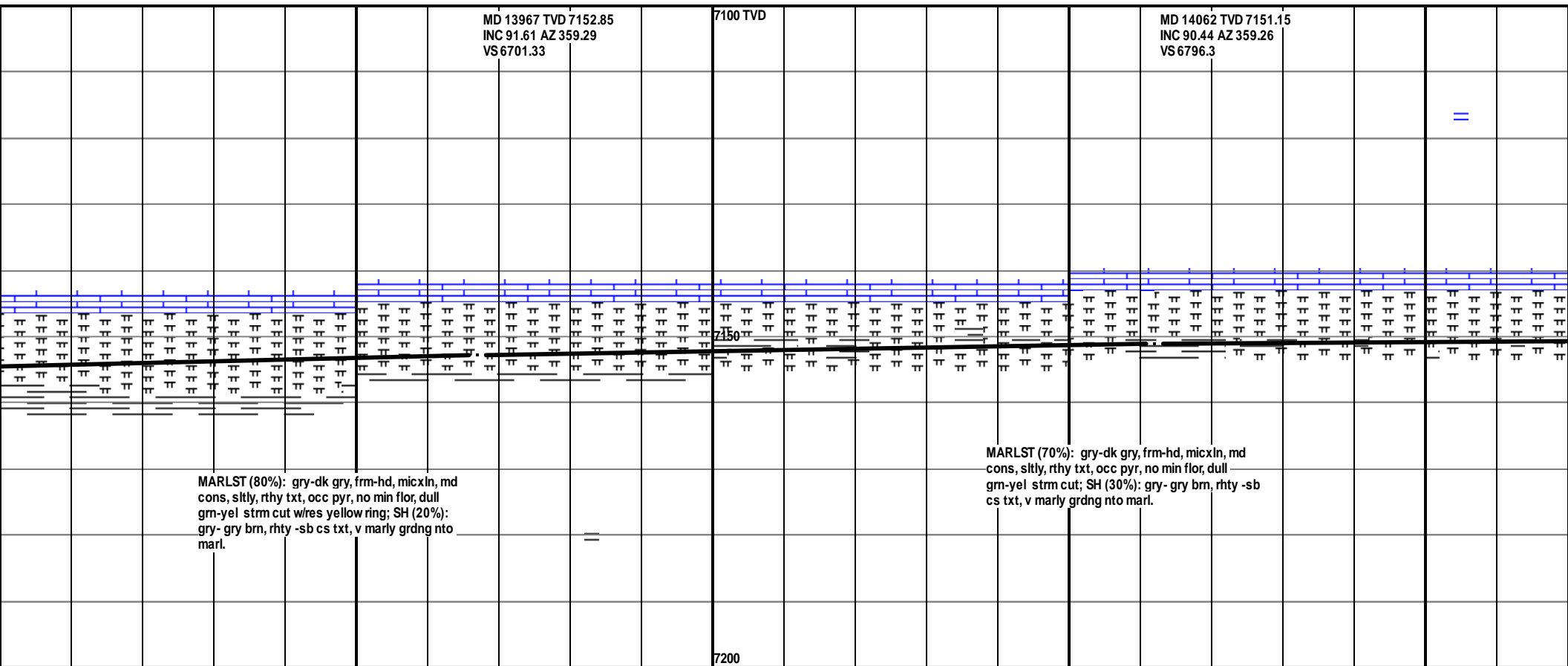
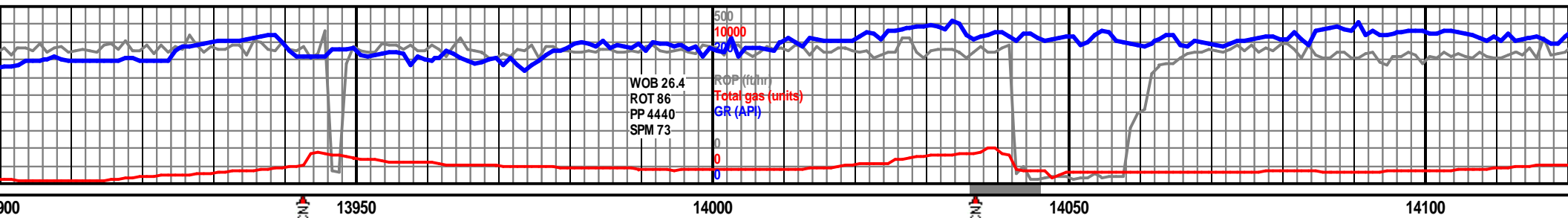


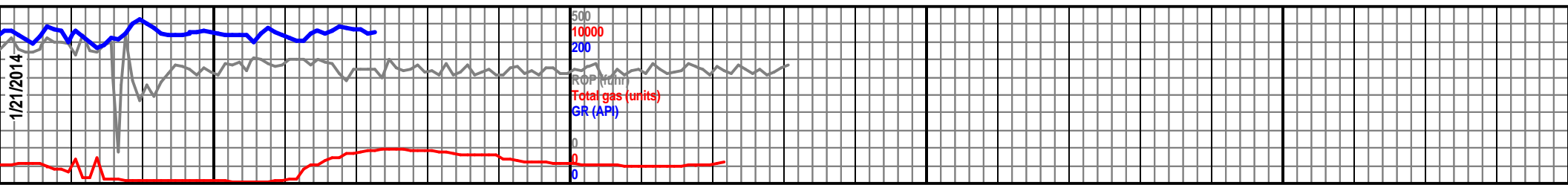












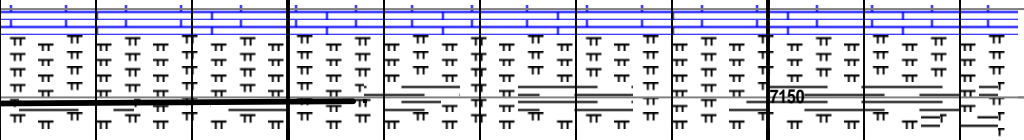
14150 14200 14250 14300

MD 14158 TVD 7150.36
INC 90.5 AZ 359.29
VS 6892.29

7100 TVD

TD @ 14227' REACHED
ON 1/21/14 @ 01:09 HRS

4.5" production liner set at 14212' on
January 23, 2014.



MARLST (70%): gry-dk gry, frm-hd, micxln, md
cons, sltly, rthy txt, occ pyr, no min flor, dull
grn-yel stmm cut; SH (30%): gry- gry brn, rthy -sb
cs txt, v marly grdng nto marl.

CIRCULATE BOTTOM UP
BEFORE TOOH.

(GOOLSBY BROTHERS &
ASSOCIATES)

7200

