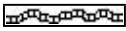

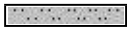
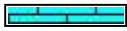


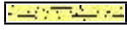

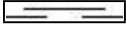
































## Comments

- 1) Drilling Contractor: Precision Drilling, Rig #562  
Pumps 1&2: Rostell F-1600 5" x 12" (.0692 Bbls./stroke)  
Toolpusher: Tyson Westgard
- 2) Company Man: John Martin Meyers  
Kevin Brakovec  
Tim Jones  
Andy Boshard
- 3) Mud Comapny: Anchor USA  
Engineers: Joseph Wood & David Owen & Lyle Fischer
- 4) Directional Drilling: Schlumberger  
Drillers: Ryan Kilian, Aaron Herskind & Dana Ace  
MWD: Kirsten Behla & Schlumberger Remote Operations
- 5) Gas Equipment: Pason Gas Analyzer (Spectrometer)
- 6) SRC Geologist: Nick Argis

## ROCK TYPES









	Bent		Carb chalk		Siltst		Ls
	Mrlst		Chalk		Arg_ss		Silty sh
	Shale		Silty sh		Ss		
	Siltst		Coal		Carb sh		

## ACCESSORIES

<b>MINERAL</b>			Minxl		Crin		Dol
	Anhy		Nodule		Echin		Gyp
	Arggrn		Phos		Fish		Ls
	Arg		Pyr		Foram		Mrst
	Bent		Salt		Fossil		Sltstrg
	Bit		Sandy		Gastro		Ssstrg
	Brecfrag		Silt		Oolite		
	Calc		Sil		Ostra		
	Carb		Sulphur		Pelec		
	Chtdk		Tuff		Pellet		
	Chtlt				Pisolite		
	Dol				Plant		
	Feldspar				Strom		
	Ferrpel						
	Ferr						
	Glau						
	Gyp						
	Hvymin						
	Kaol						
	Marl						

OTHER SYMBOLS





POROSITY TYPE

-  Earthy
-  Fenest
-  Fracture
-  Inter
-  Moldic
-  Organic
-  Pinpoint
-  Vuggy

SORTING

-  Well
-  Moderate
-  Poor

ROUNDING

-  Rounded
-  Subrnd
-  Subang
-  Angular








OIL SHOWS

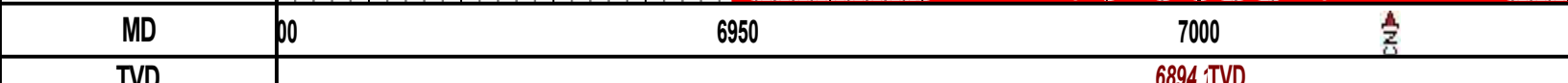
-  Even
-  Spotted
-  Ques
-  Dead
-  Vspotty
-  near even

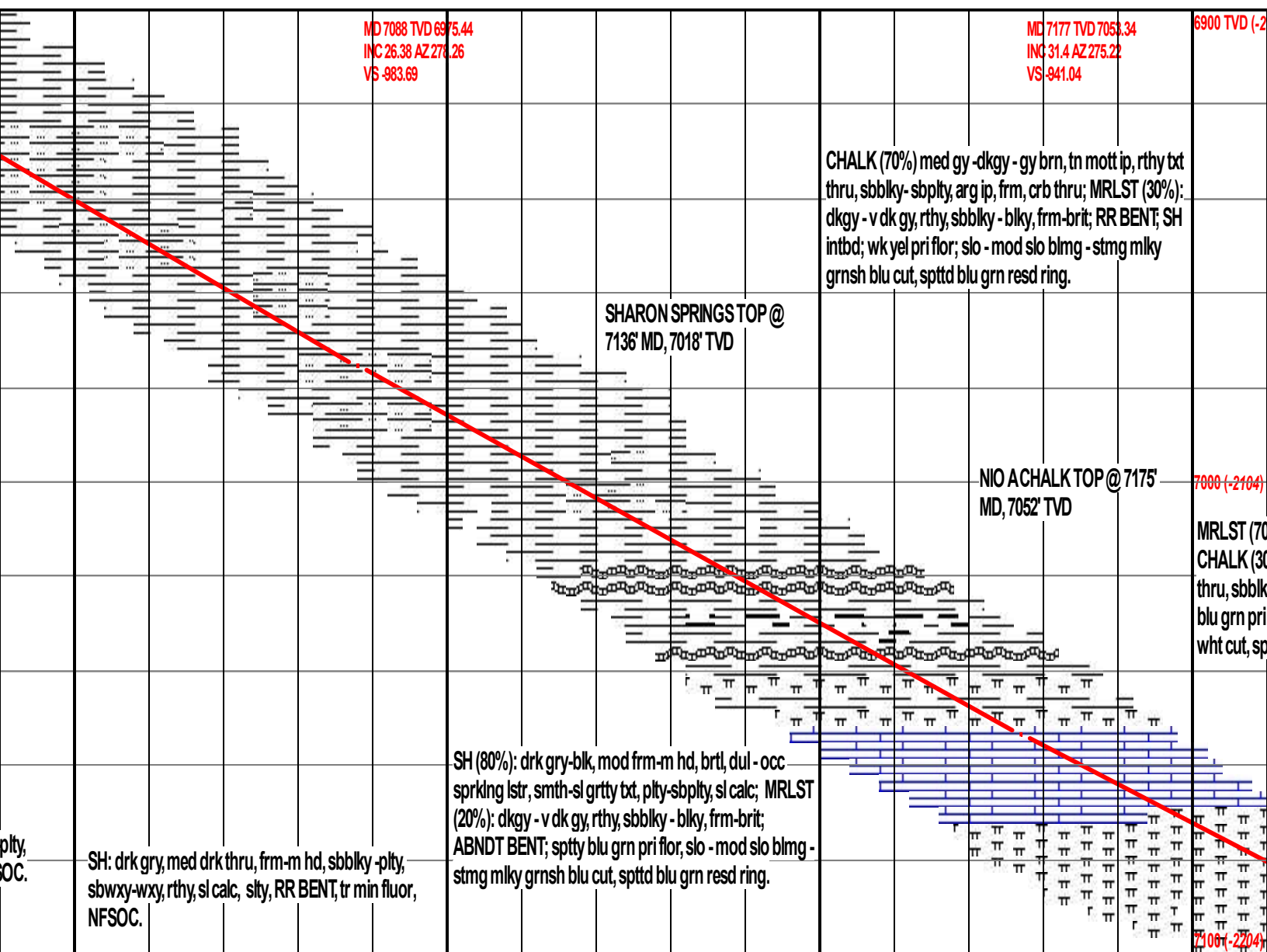
INTERVALS

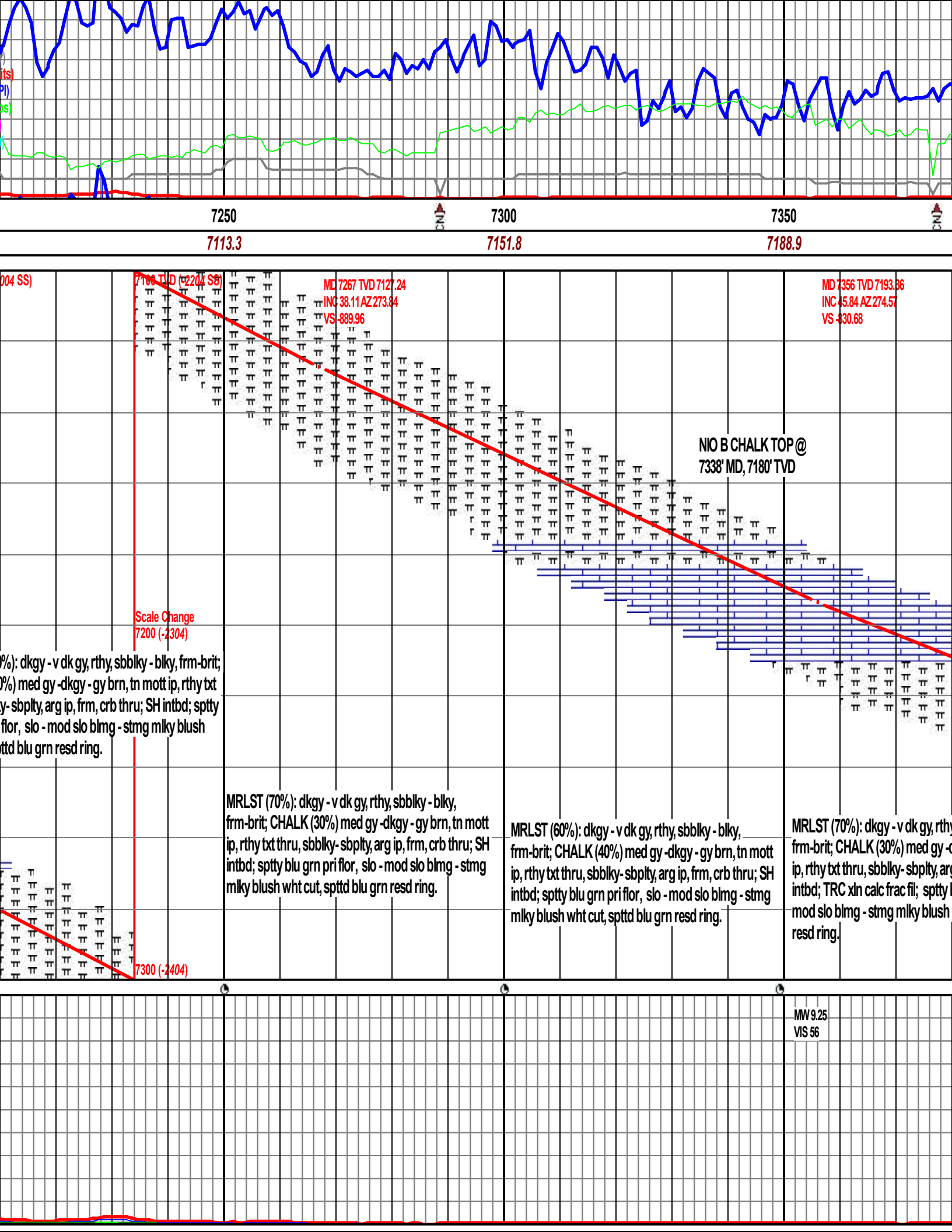
-  Core
-  Dst

EVENTS

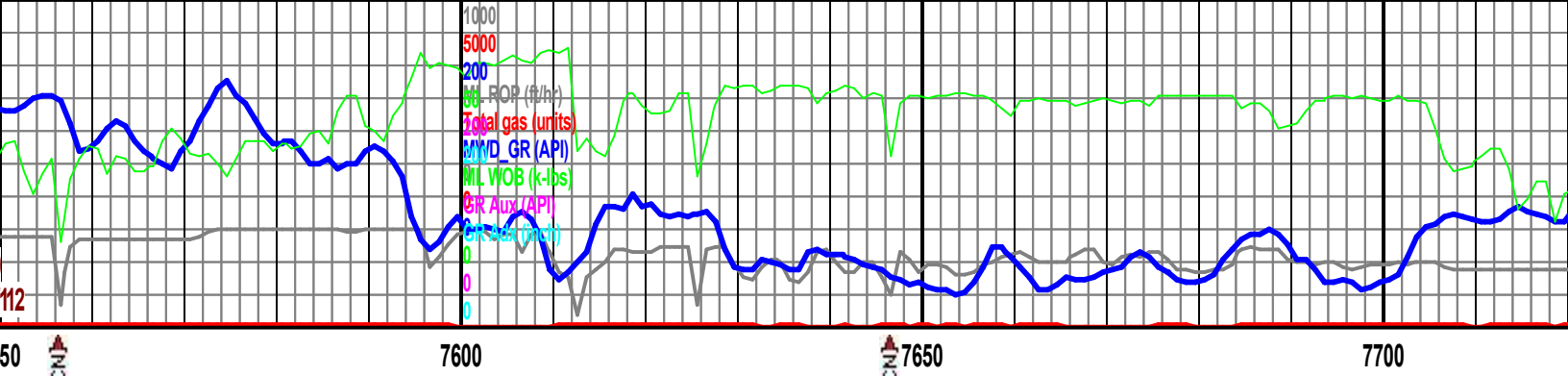
-  Casing shoe\_hzl
-  Trip\_point\_1
-  Off bottom
-  conn
-  Survey(mwd)
-  Survey(red)
-  bit



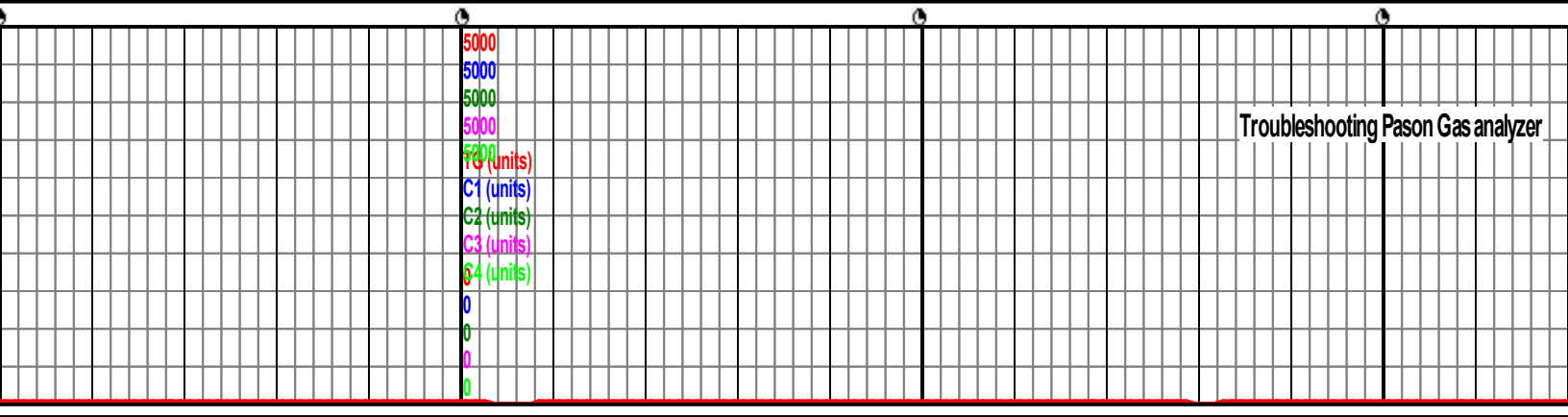
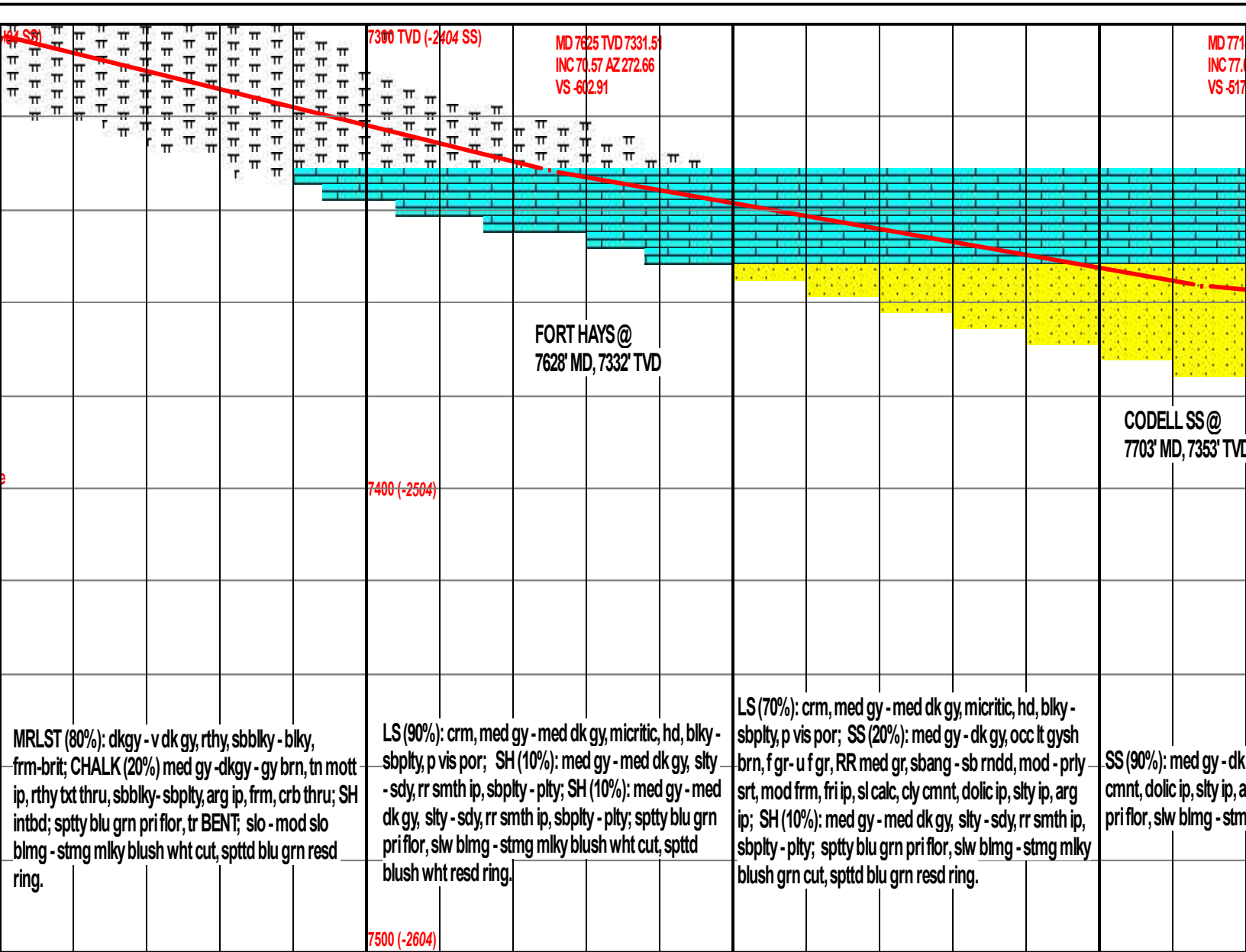




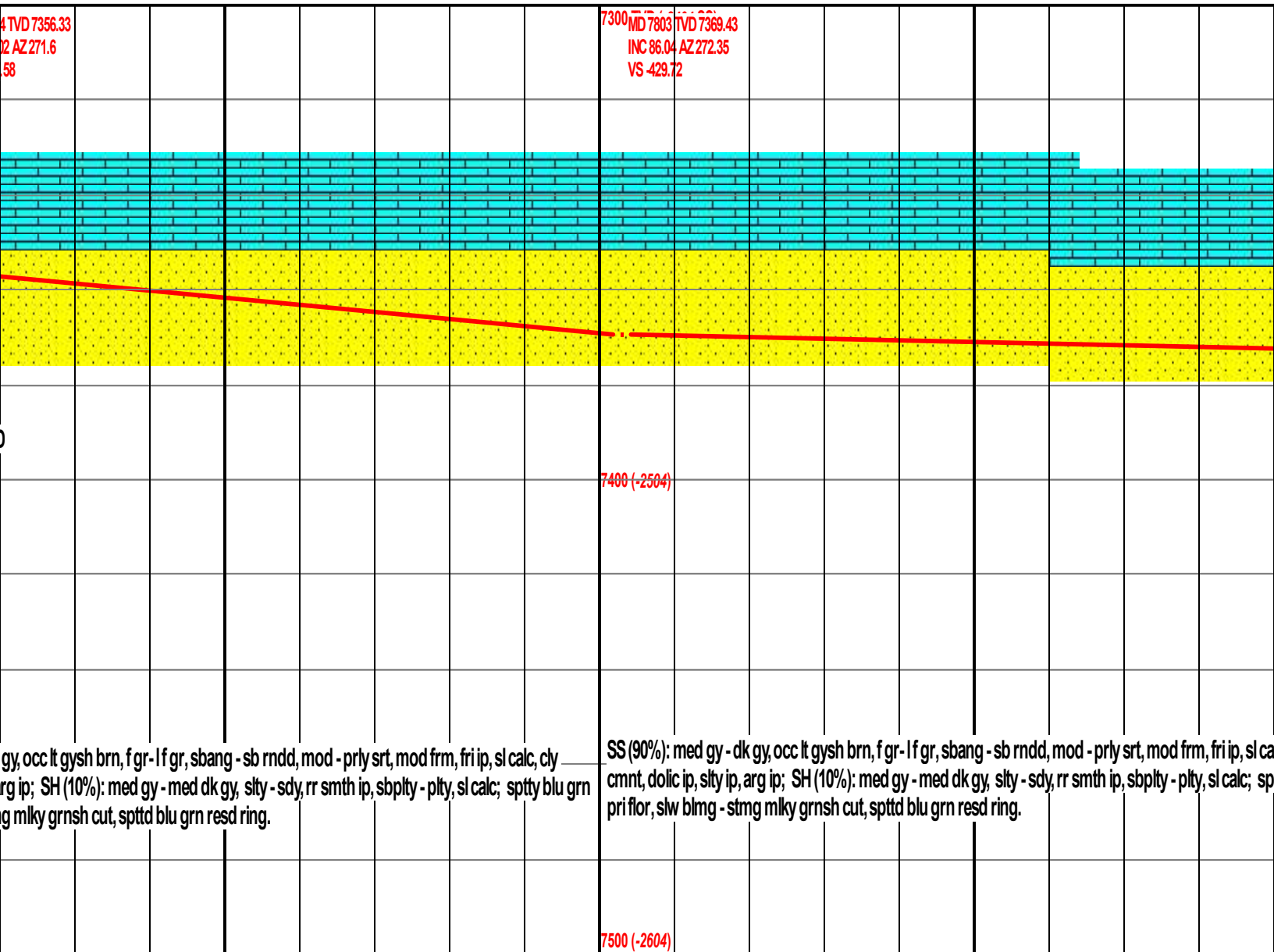


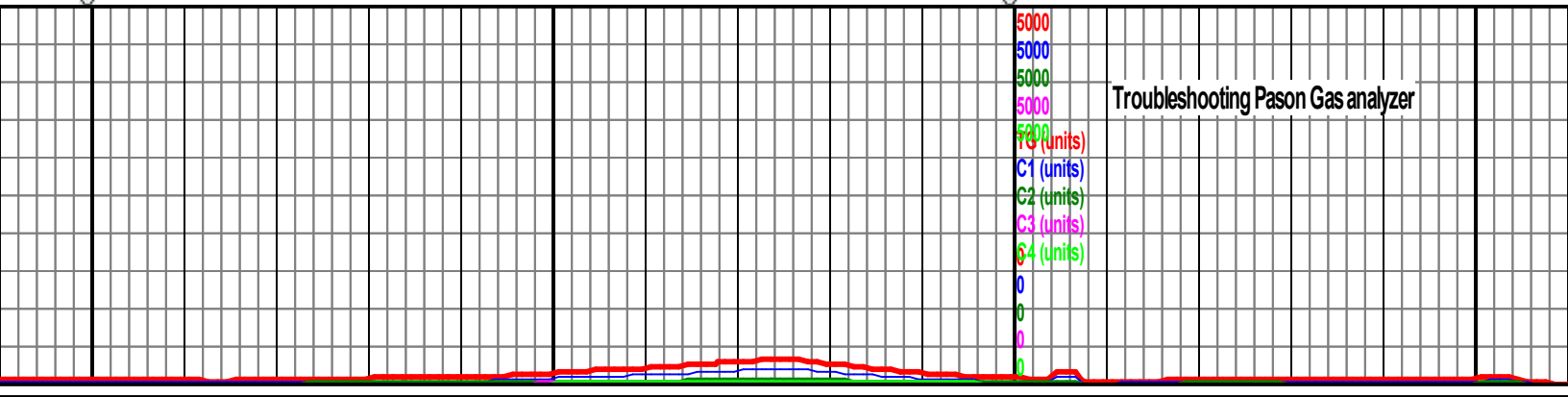
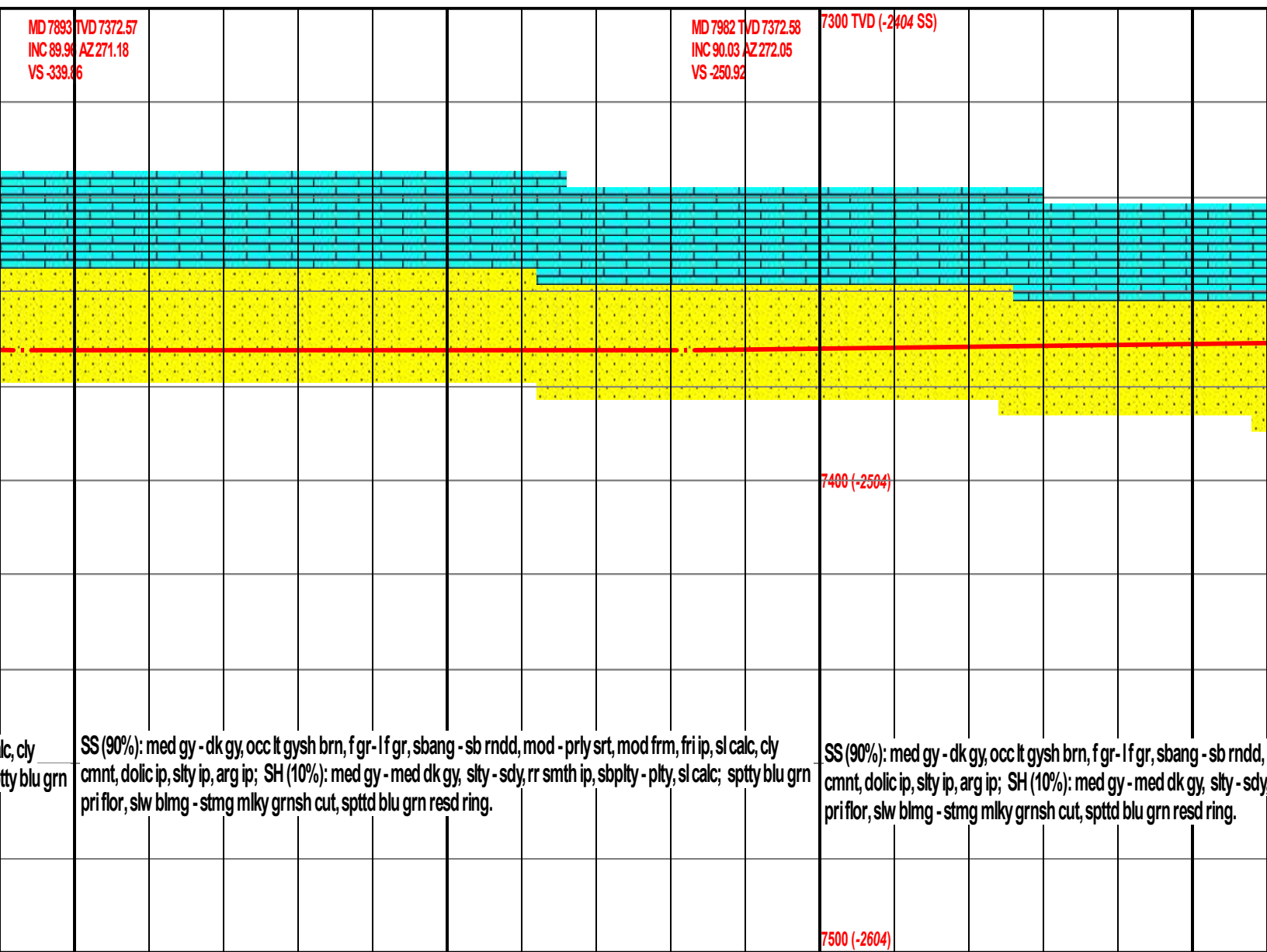
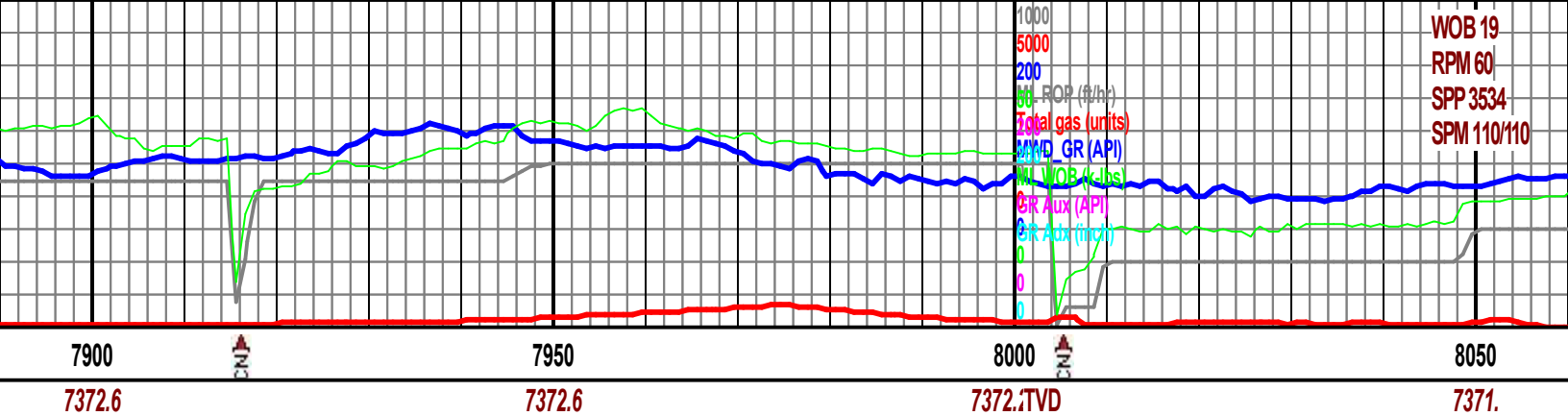


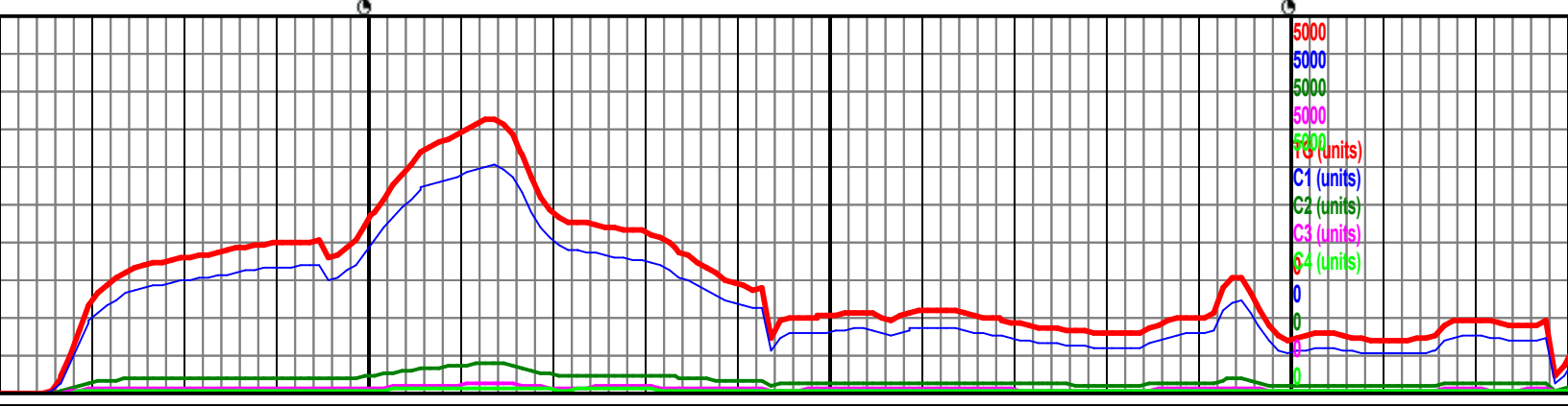
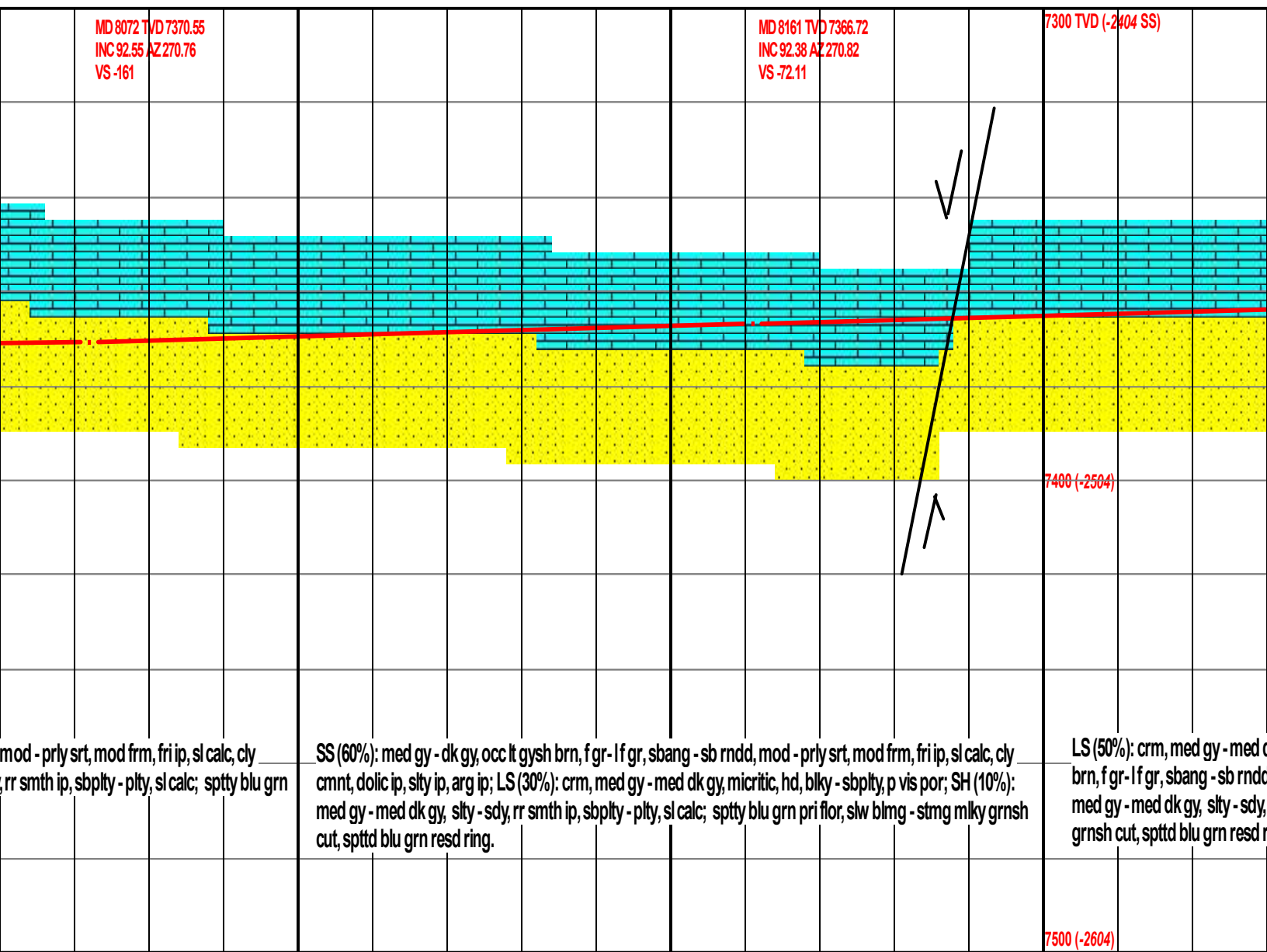
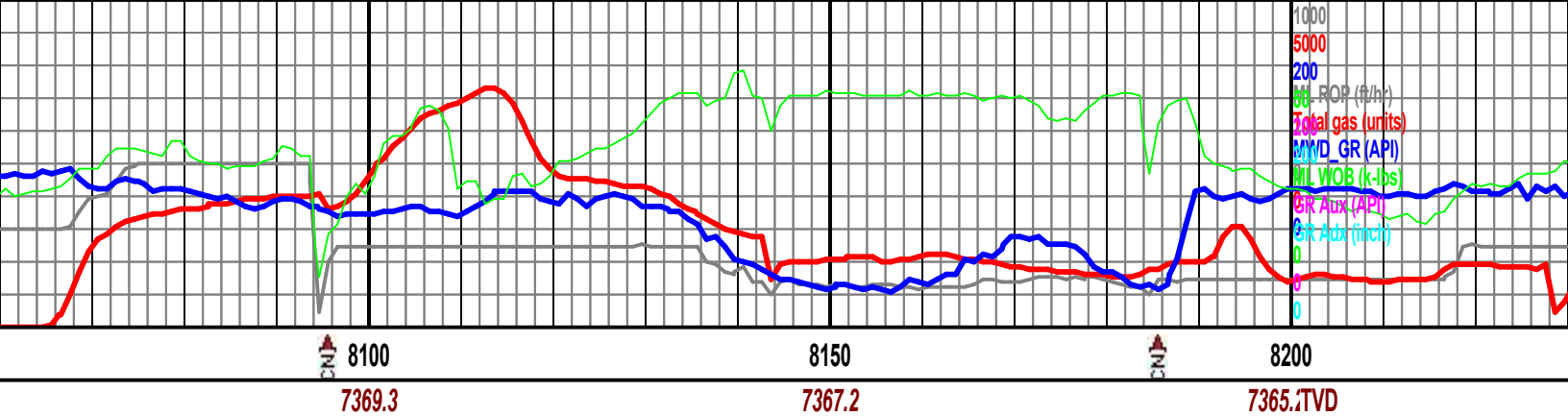
7321.1 TVD 7338.5 7352.4

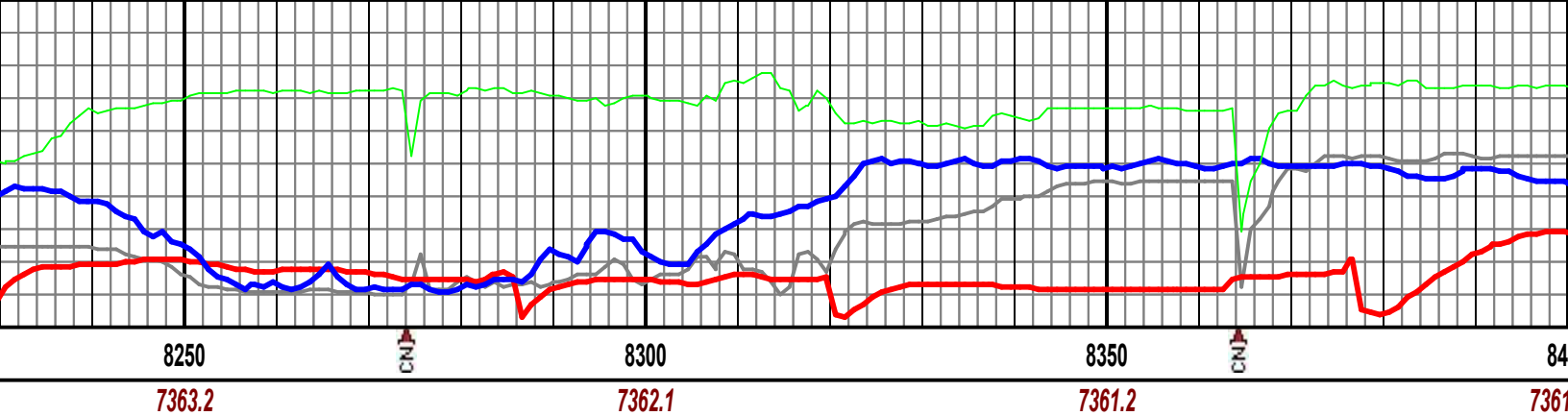






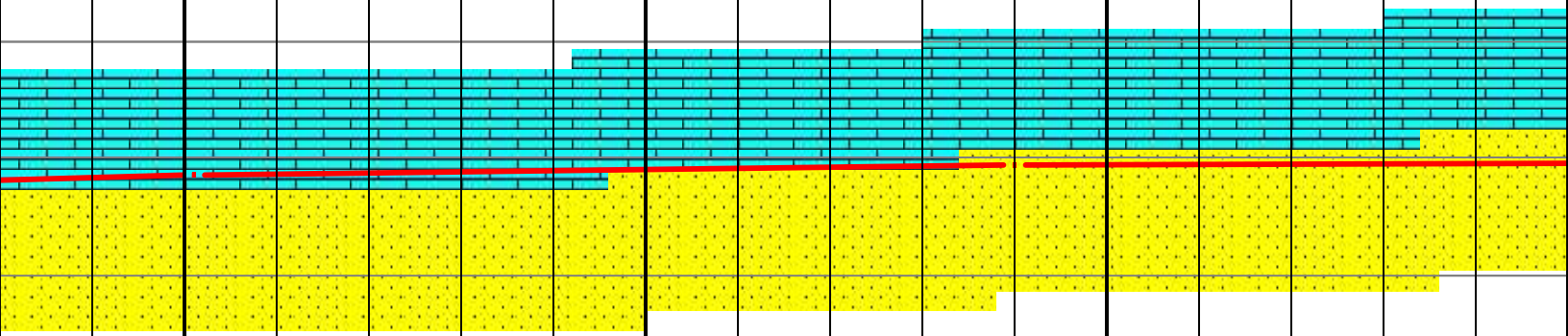






MD 8251 TVD 7363.11  
INC 92.22 AZ 270.75  
VS 17.8

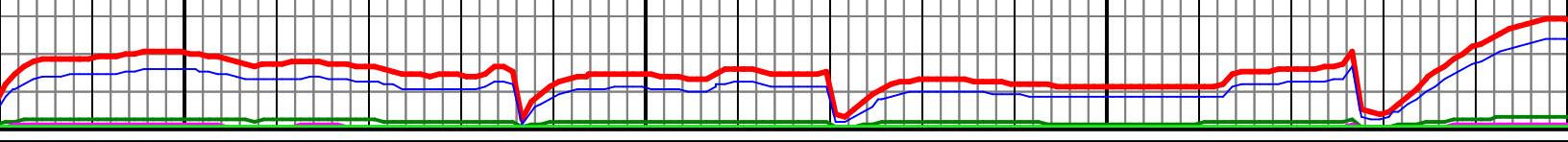
MD 8340 TVD 7361.25  
INC 90.17 AZ 270.75  
VS 106.76

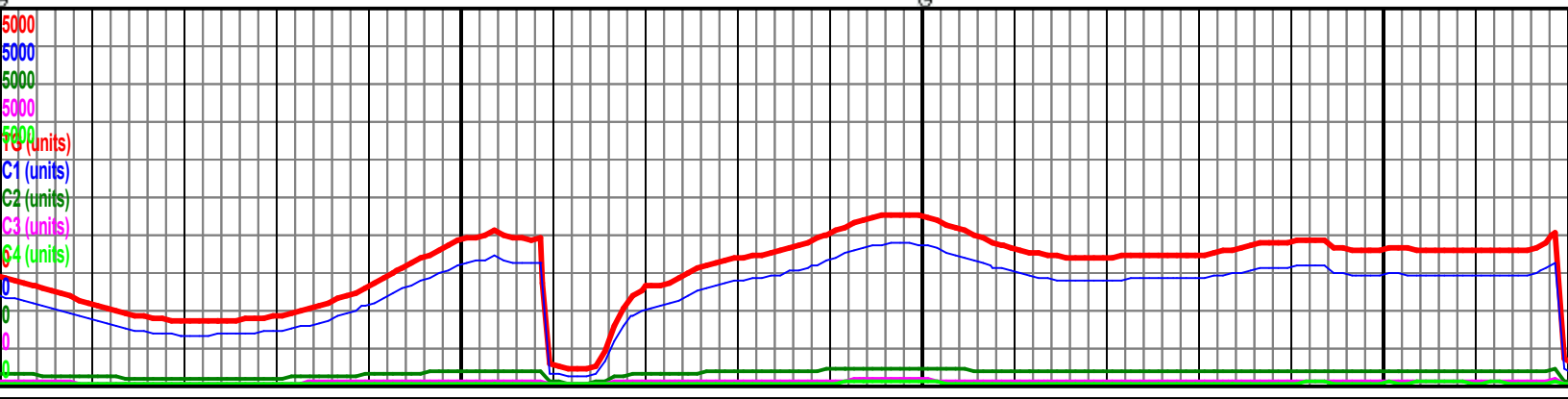
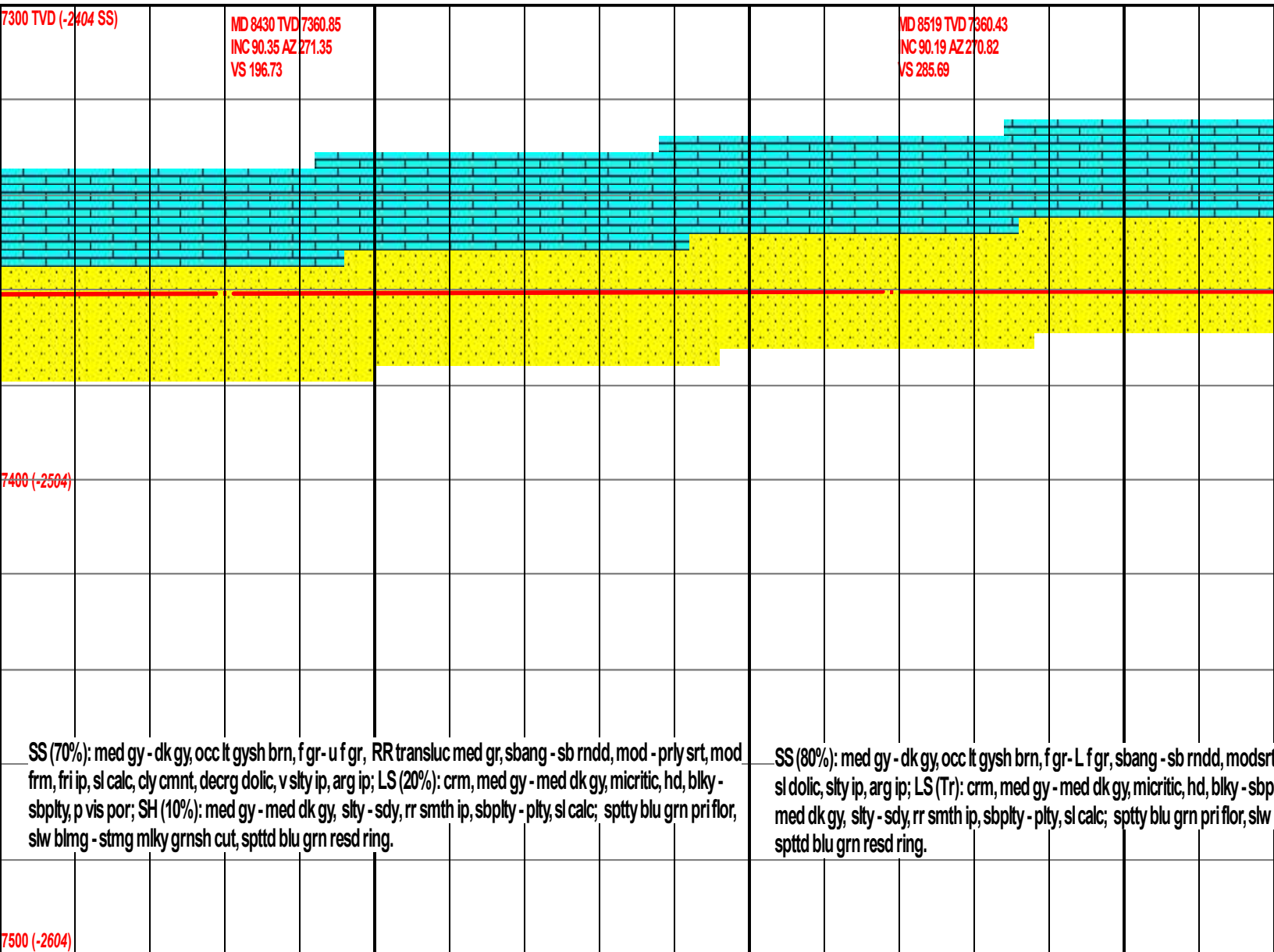
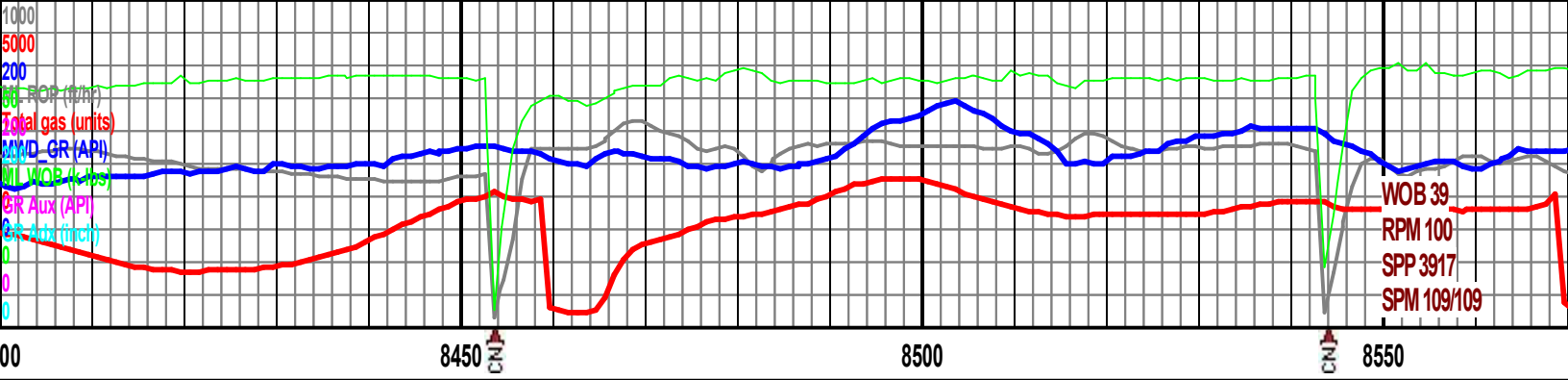


dk gy, micritic, hd, blkly - sbply, p vis por; SS (40%): med gy - dk gy, occ lt gysh  
l, mod - prly srt, mod frm, fri ip, sl calc, cly cmnt, dolc ip, slty ip, arg ip; SH (10%):  
rr smth ip, sbply - ply, sl calc; spty blu grn pri flor, slw blmg - stmg mlky  
ring.

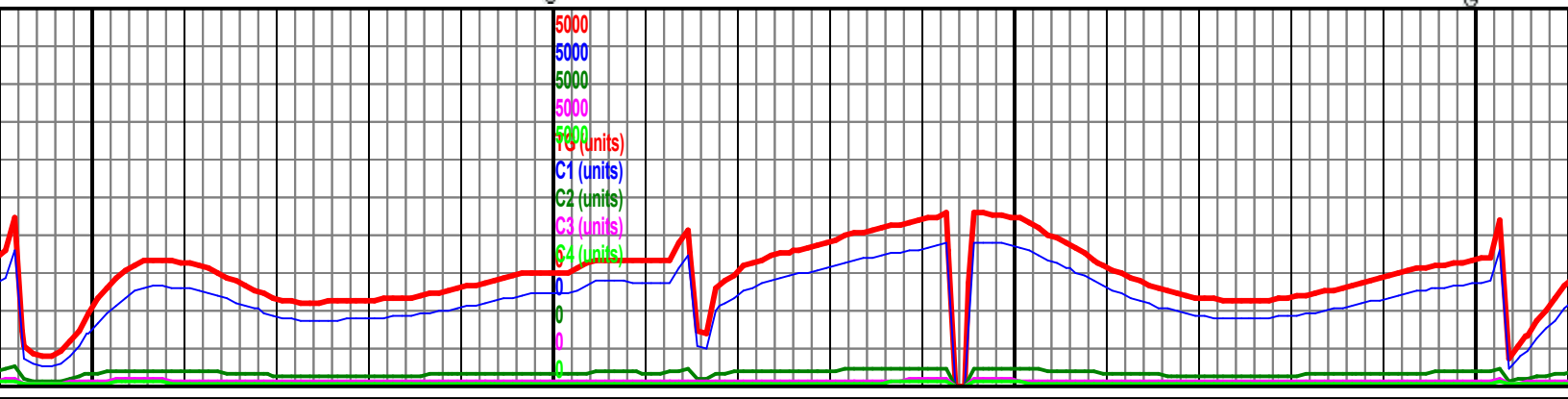
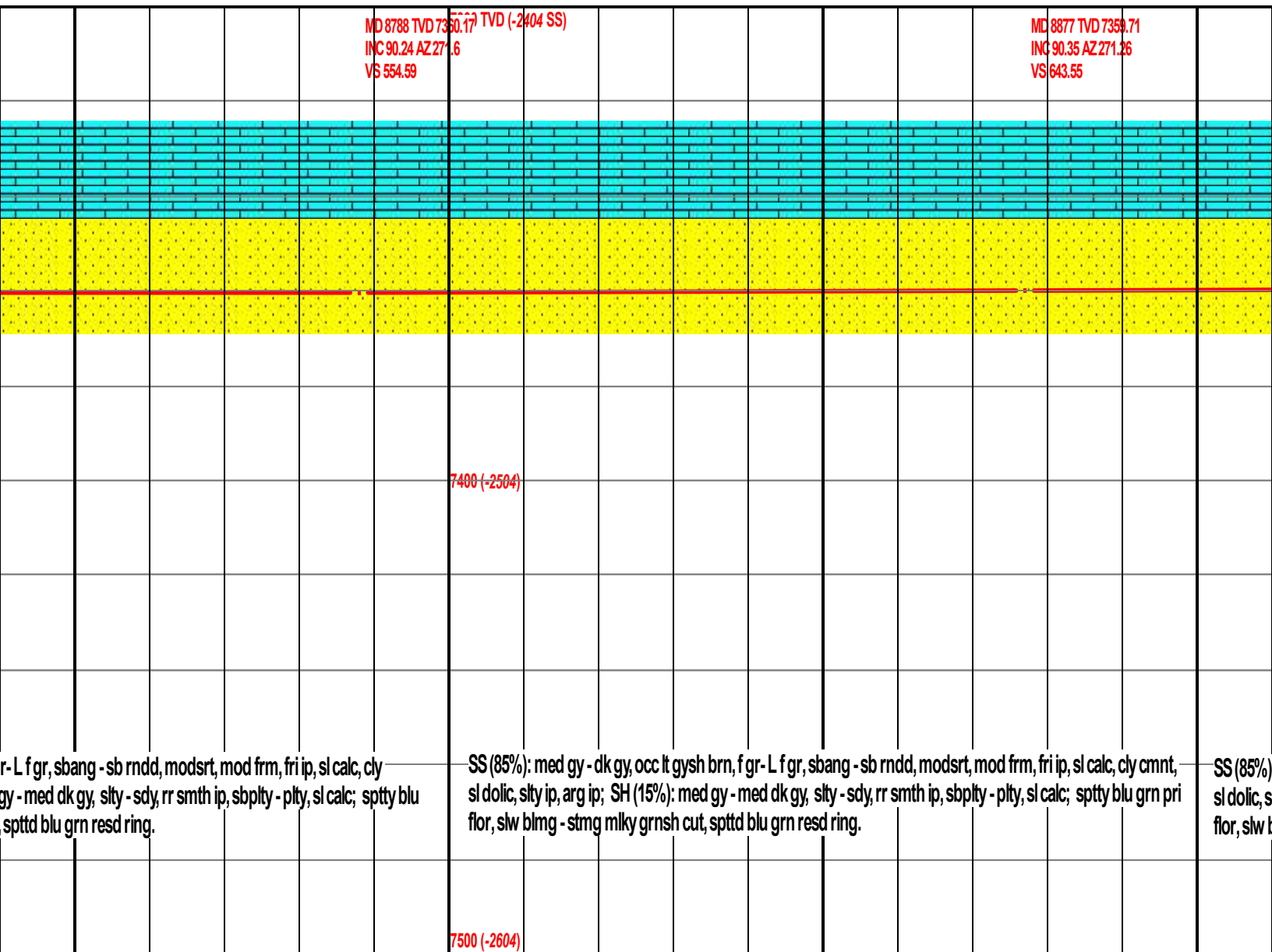
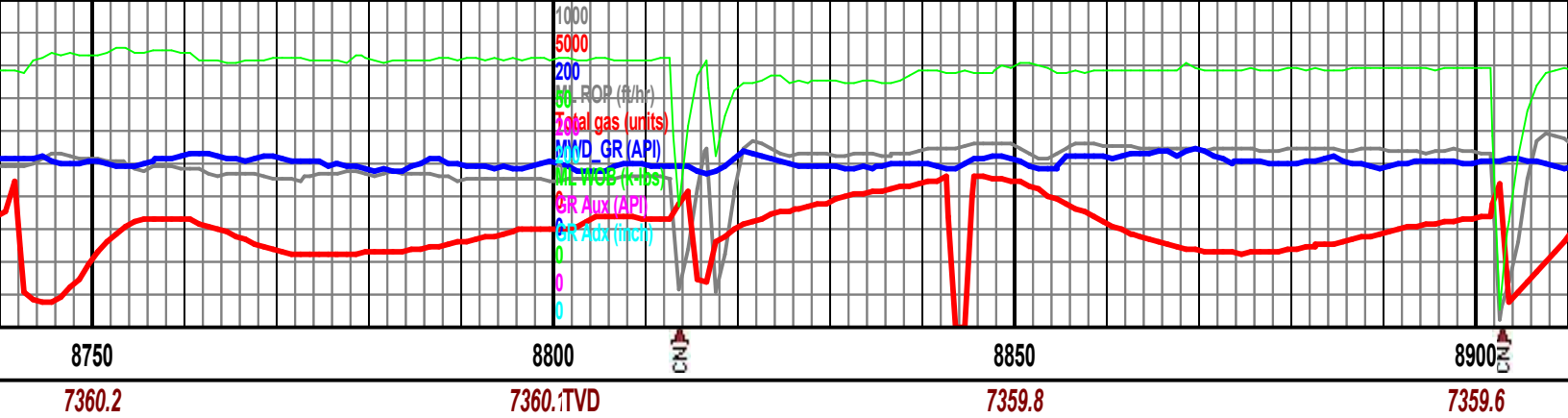
SS (60%): med gy - dk gy, occ lt gysh brn, fgr - u fgr, RR transluc med gr, sbang - sb rndd, mod - prly srt,  
mod frm, fri ip, sl calc, cly cmnt, dolc ip, slty ip, arg ip; LS (30%): crm, med gy - med dk gy, micritic, hd, blkly -  
sbply, p vis por; SH (10%): med gy - med dk gy, slty - sdy, rr smth ip, sbply - ply, sl calc; spty blu grn pri flor,  
slw blmg - stmg mlky grnsh cut, spttd blu grn resd ring.

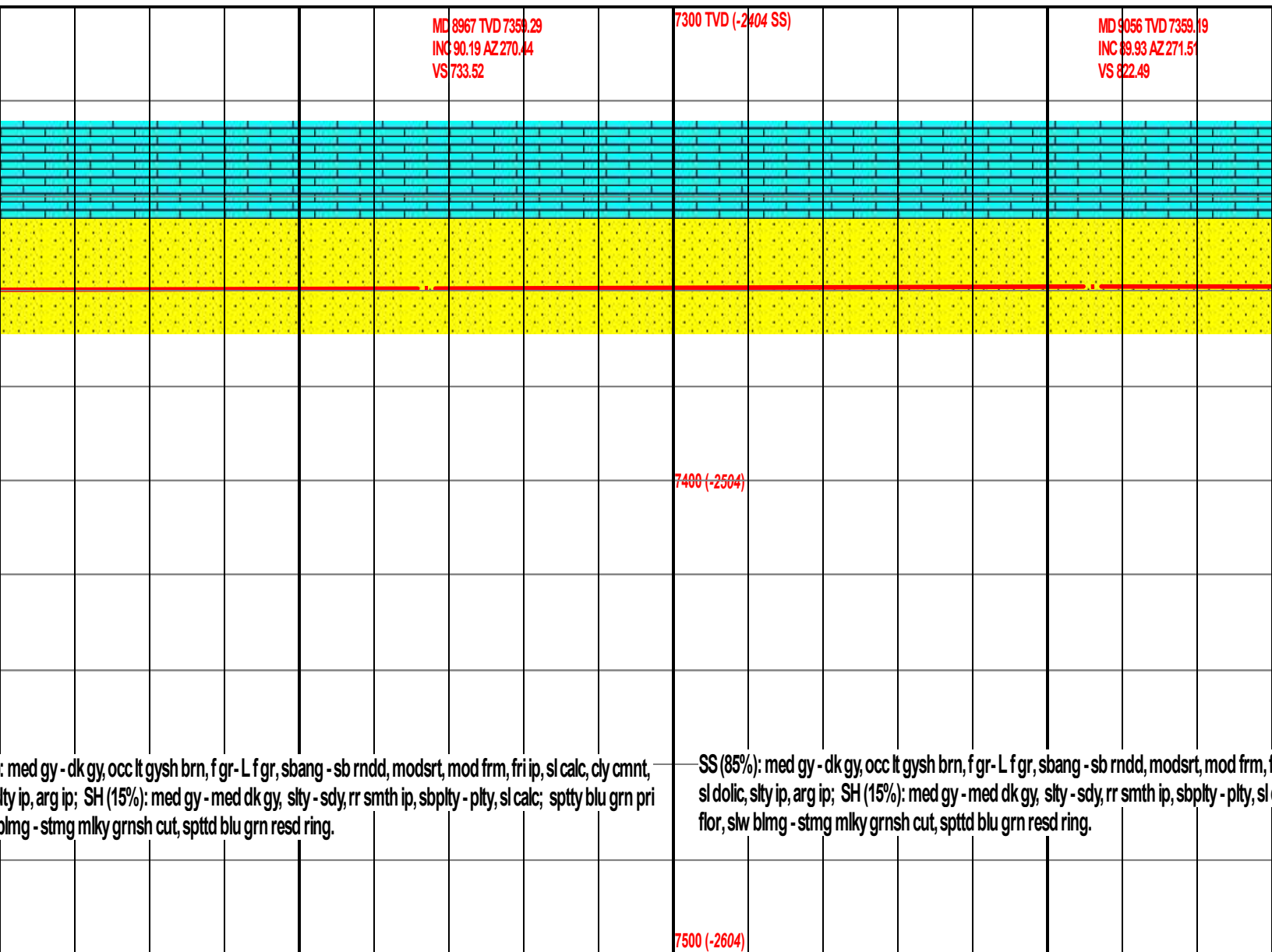
MW9.3  
VIS 56



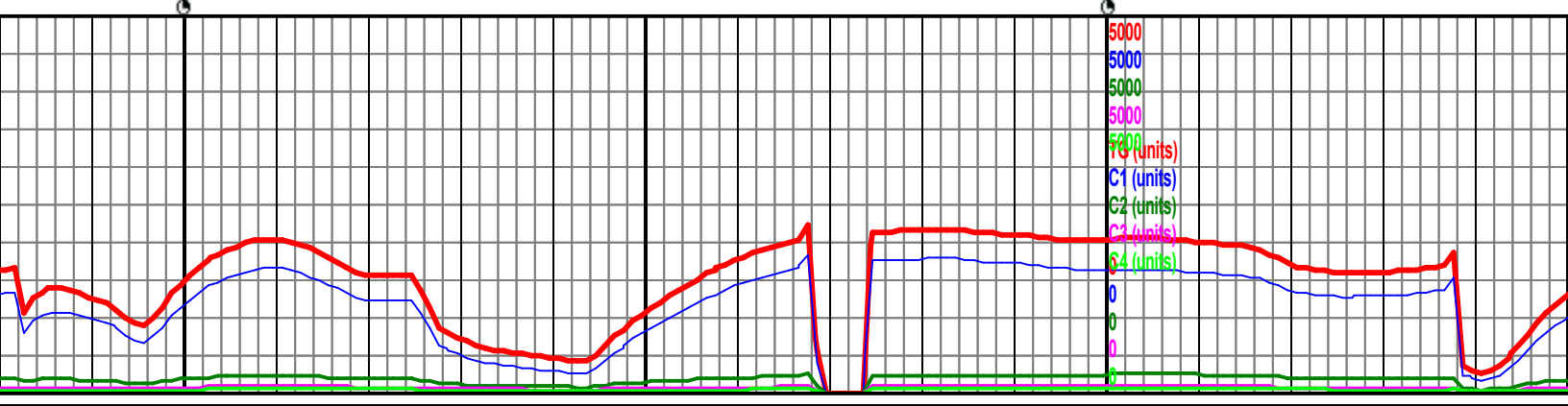
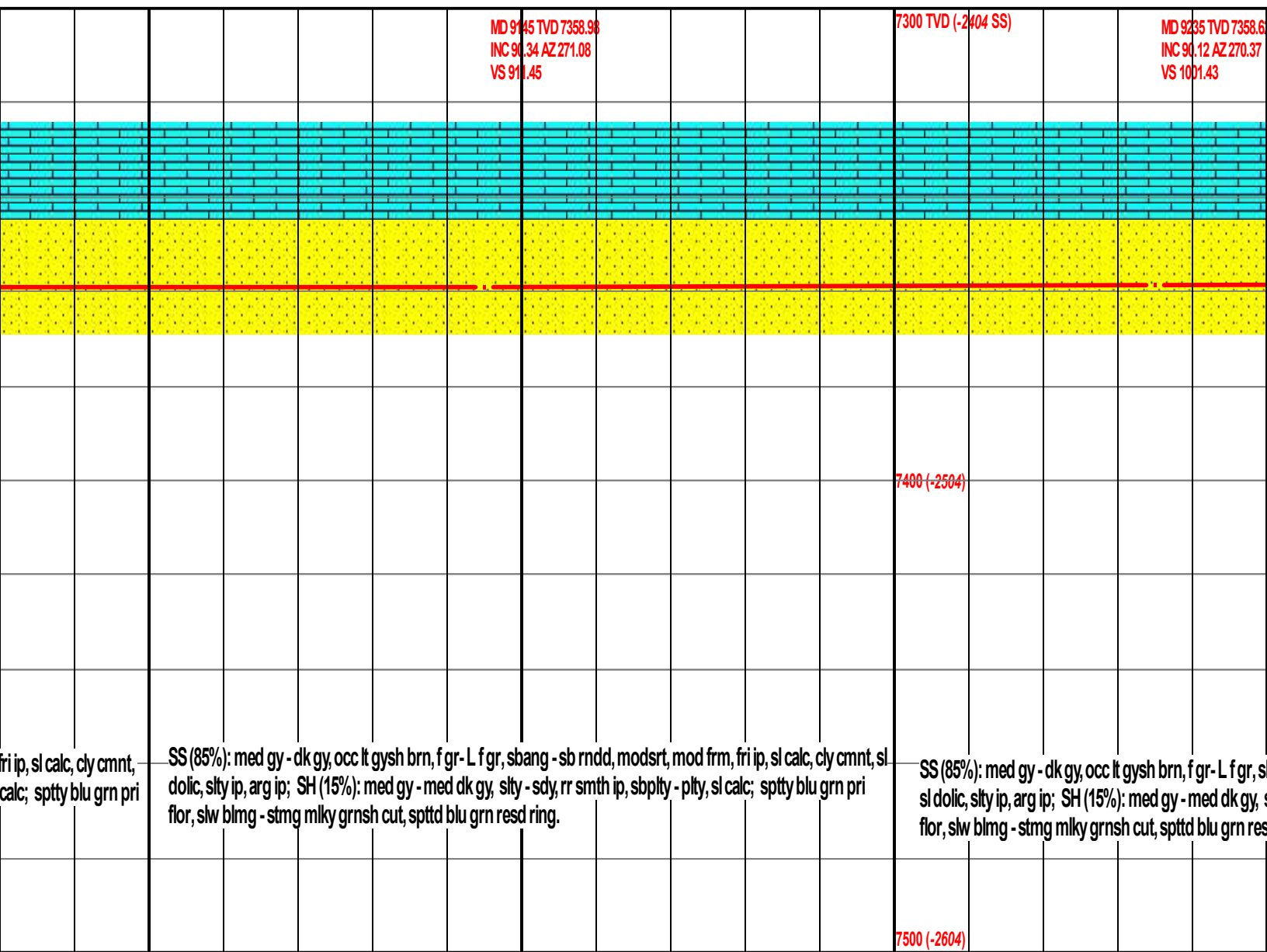
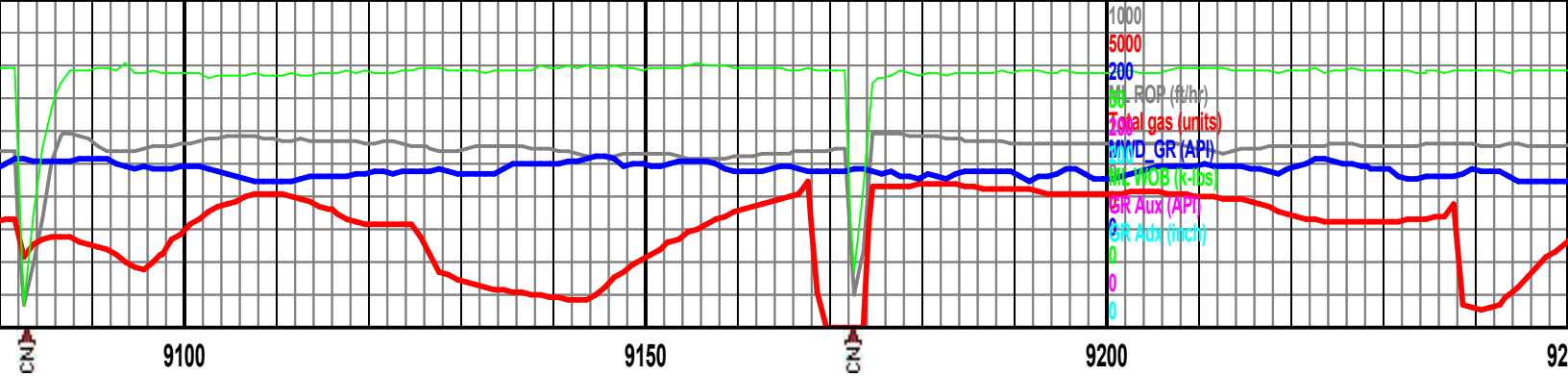


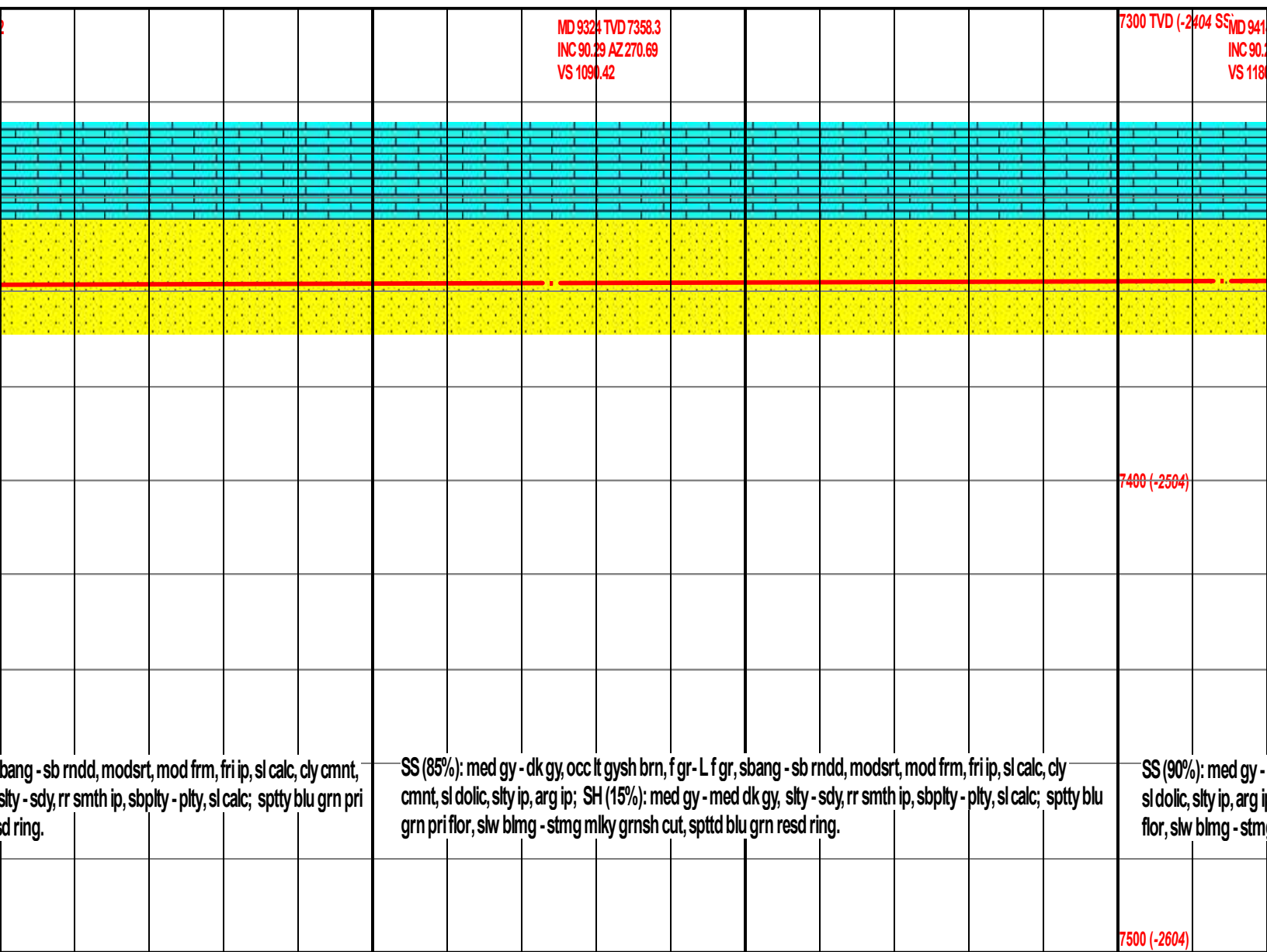


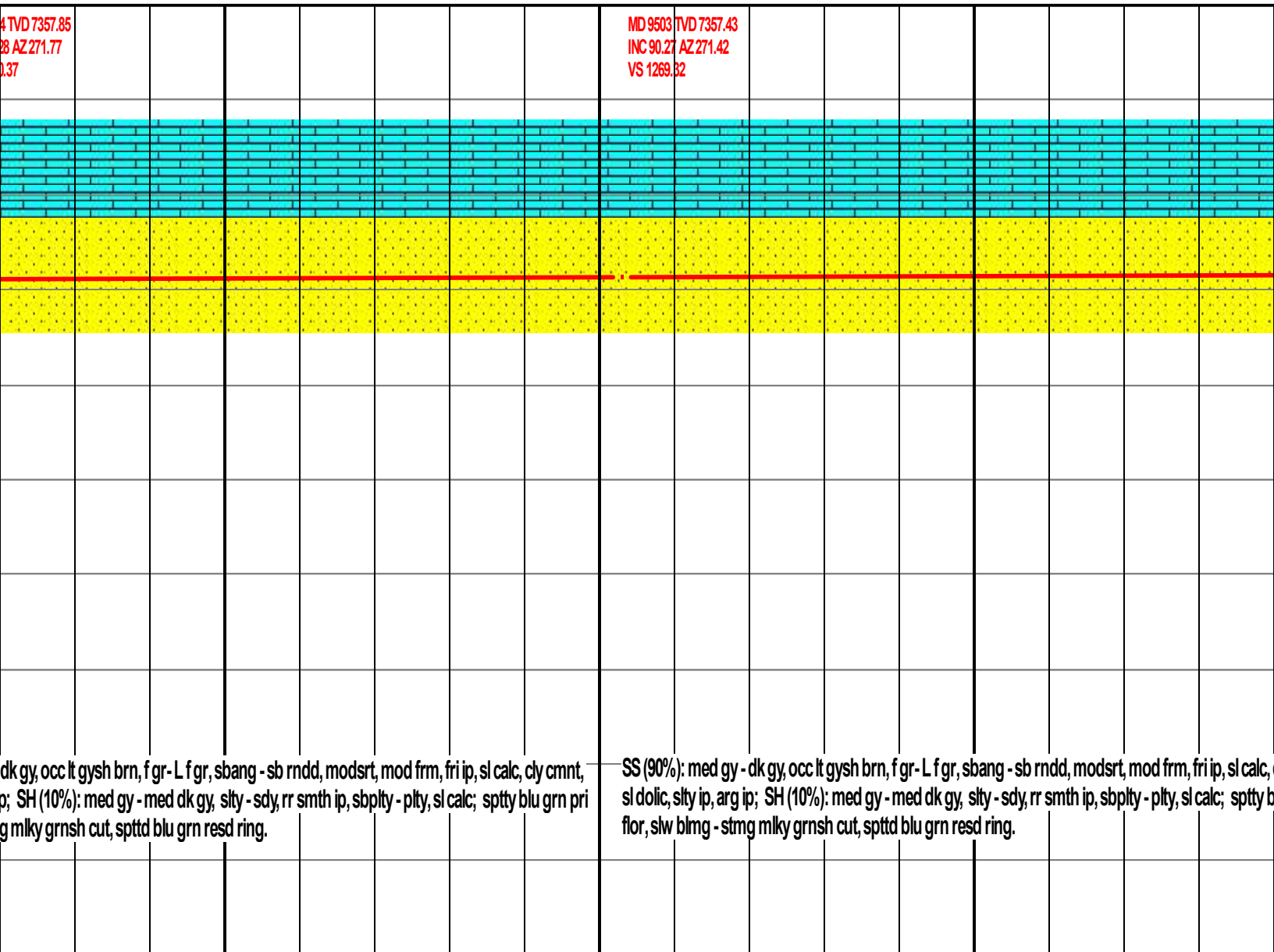


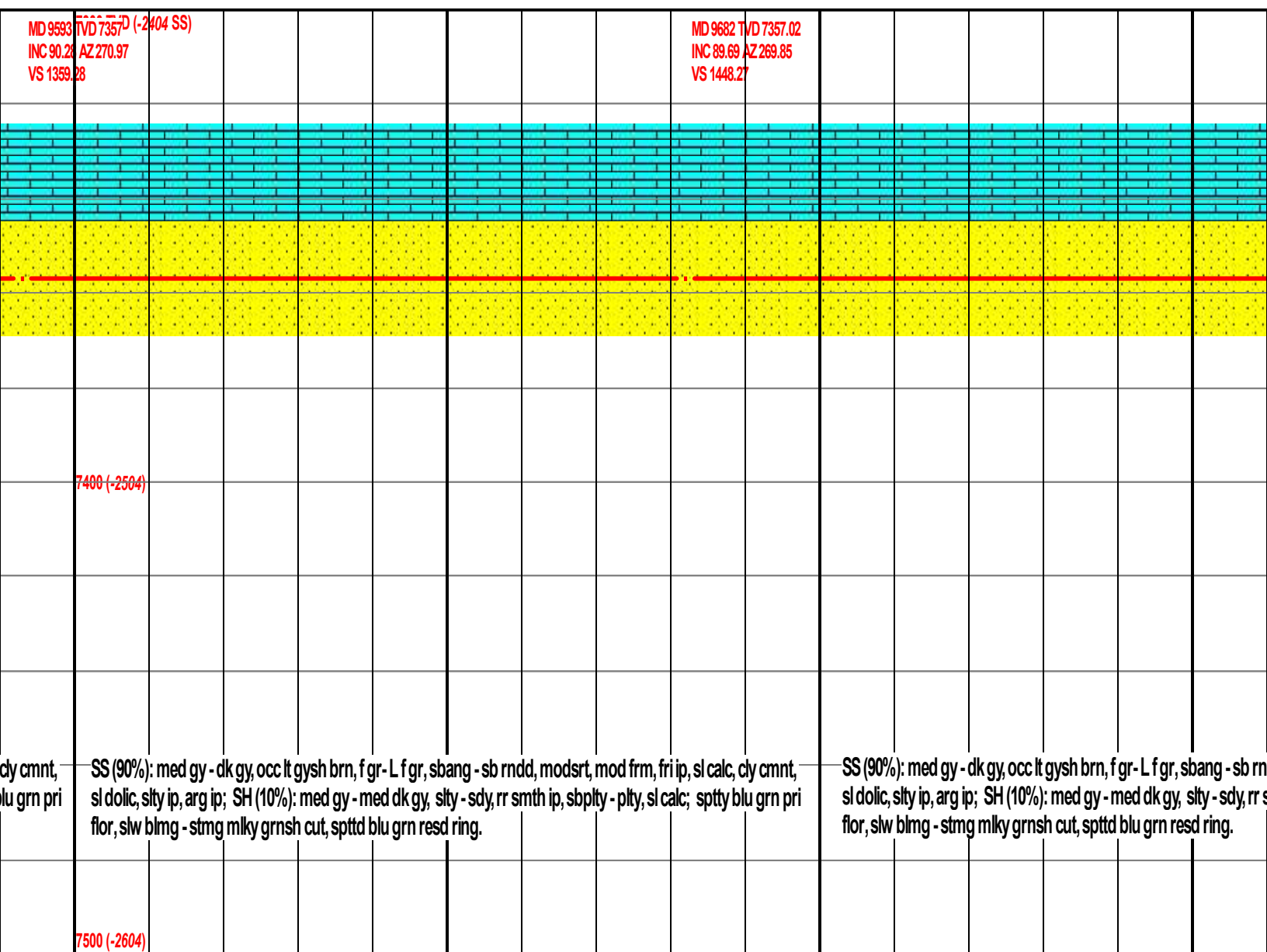


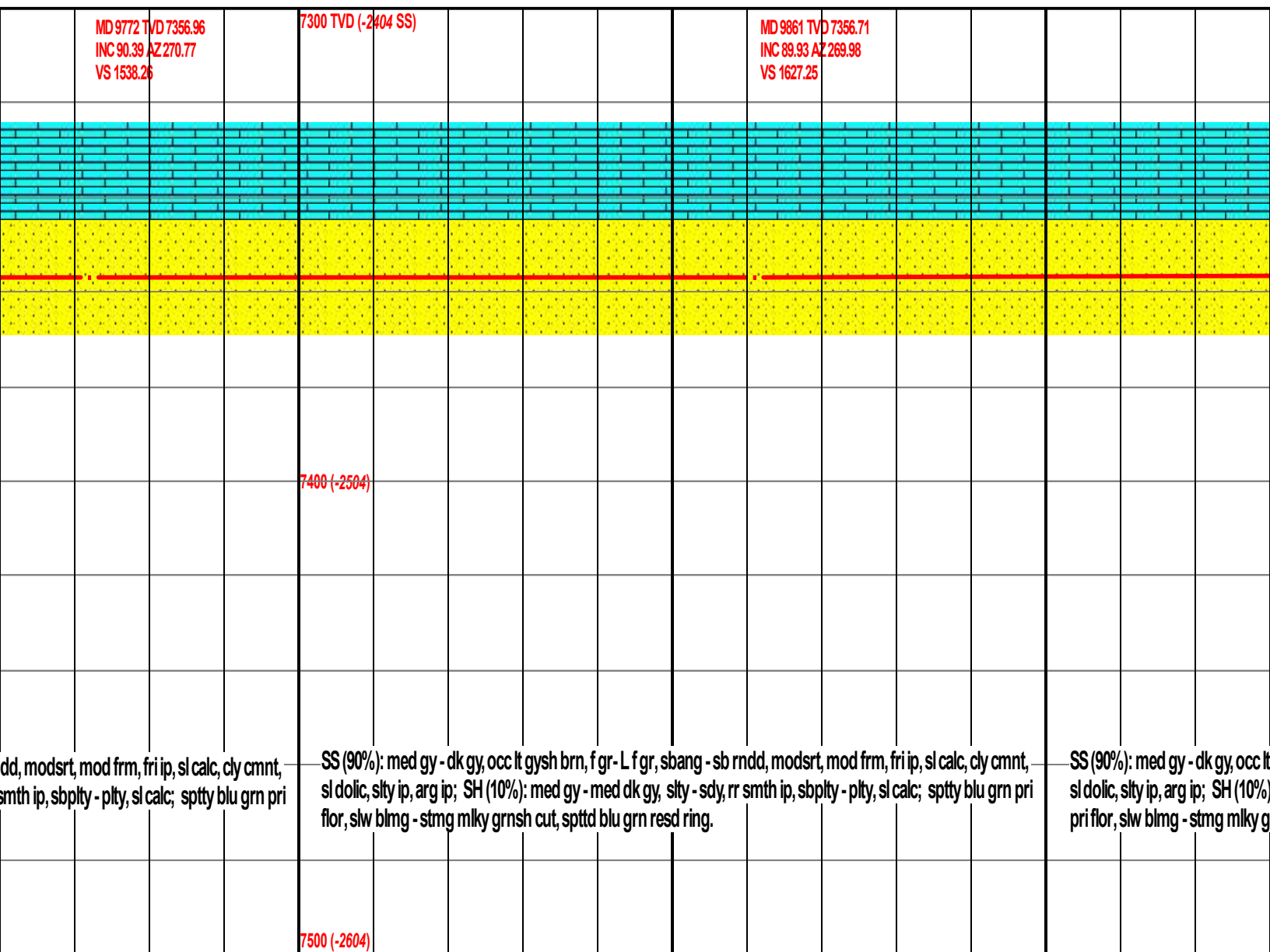


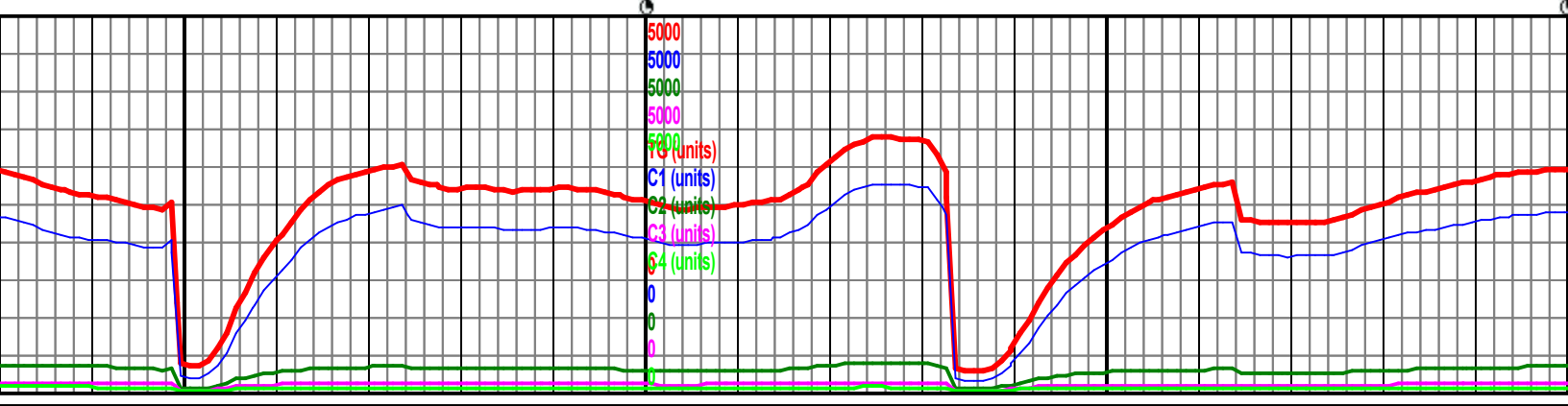
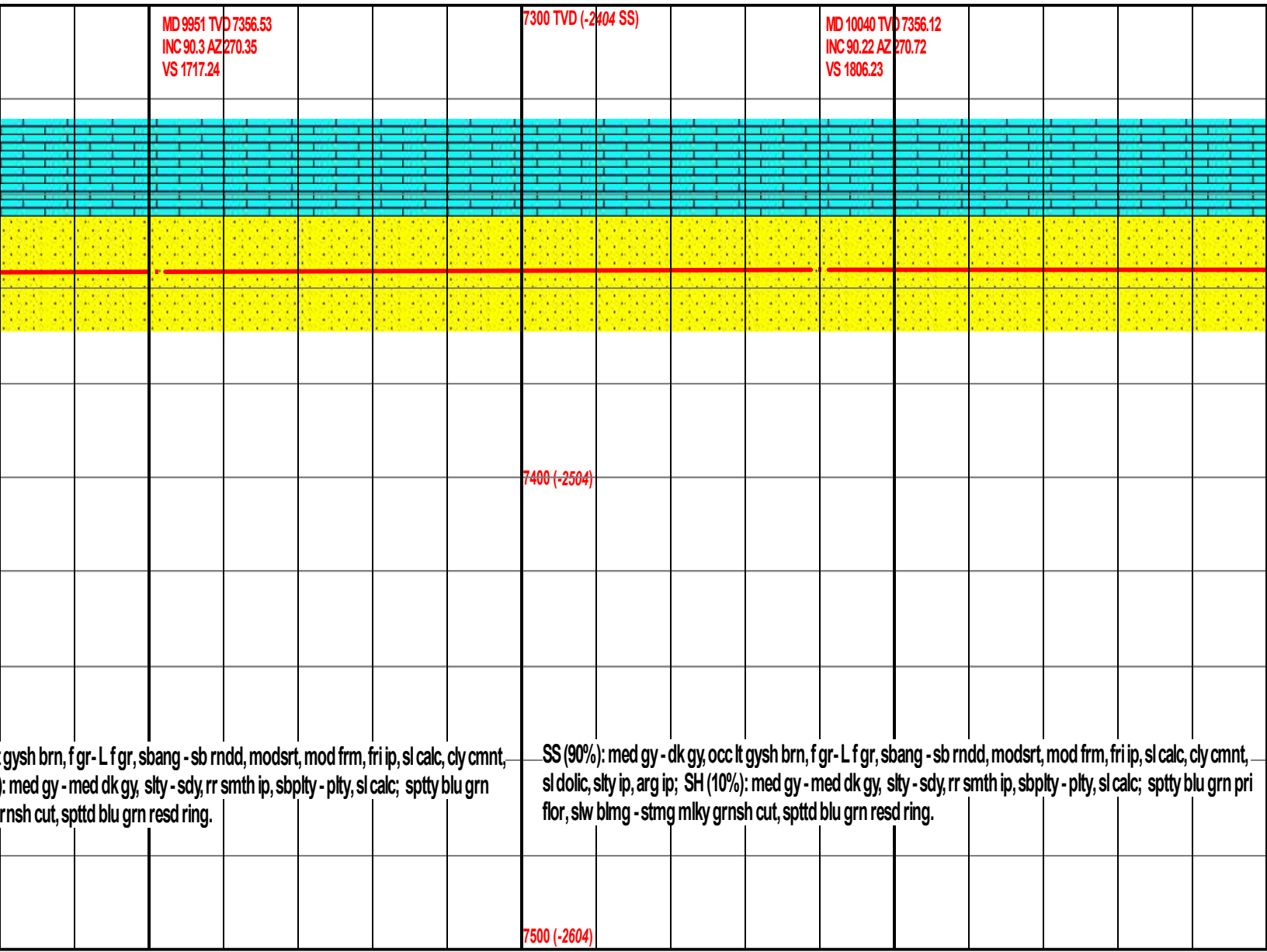
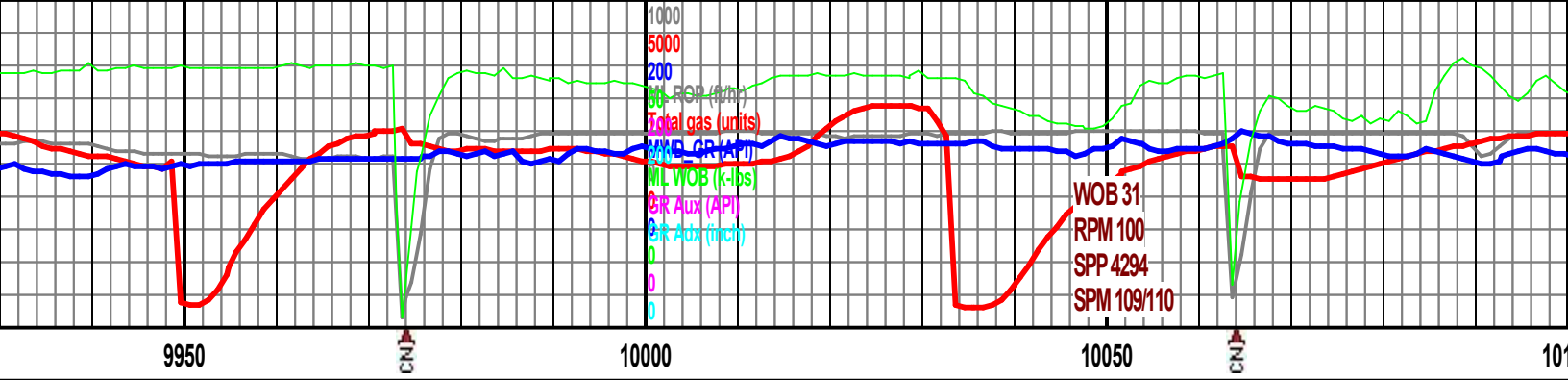








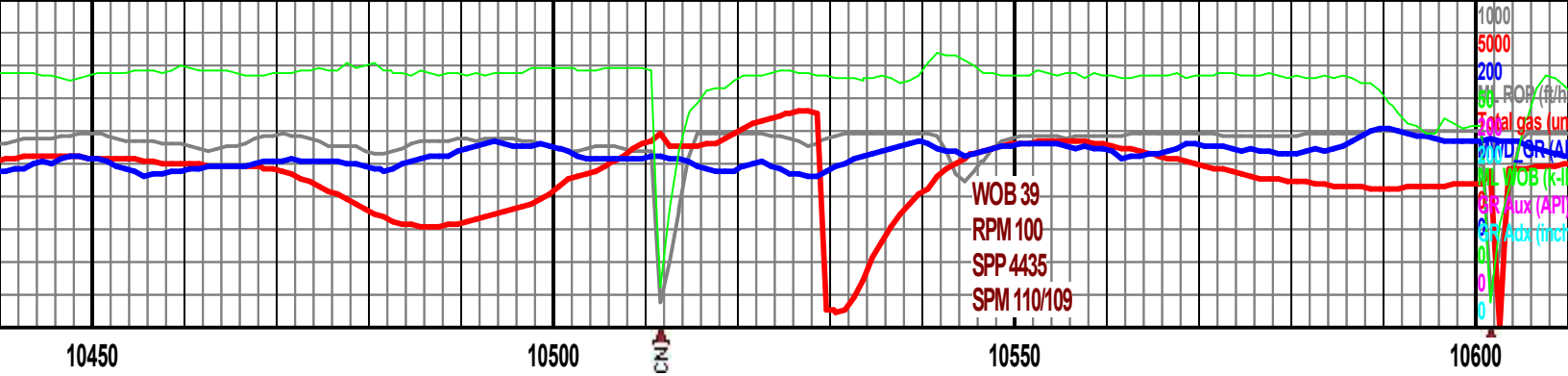










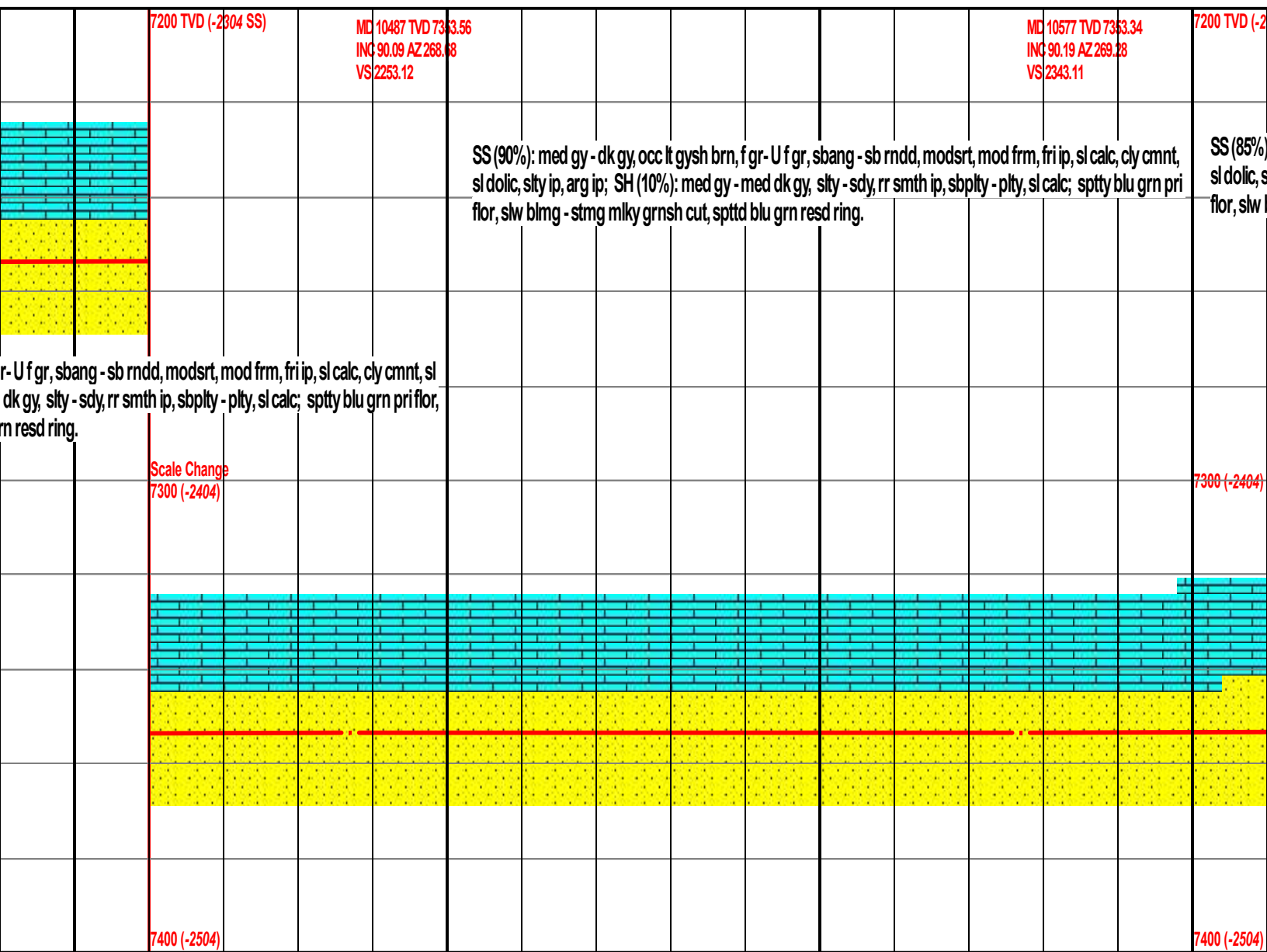


7353.7

7353.5

7353.4

7353.1TVD



7200 TVD (-2304 SS)

MD 10487 TVD 7353.56  
INQ 90.09 AZ 268.68  
VS 2253.12

MD 10577 TVD 7353.34  
INQ 90.19 AZ 269.28  
VS 2343.11

7200 TVD (-2304 SS)

SS (90%): med gy - dk gy, occ lt gysh brn, fgr - U fgr, sbang - sb rncdd, modsr, mod frm, fri ip, sl calc, cly cmnt, sl dolc, stly ip, arg ip; SH (10%): med gy - med dk gy, stly - sdy, rr smth ip, sbply - pty, sl calc; sptty blu grn pri flr, slw blng - strng mlky grnsh cut, spttd blu grn resd ring.

SS (85%)  
sl dolc, s  
flr, slw

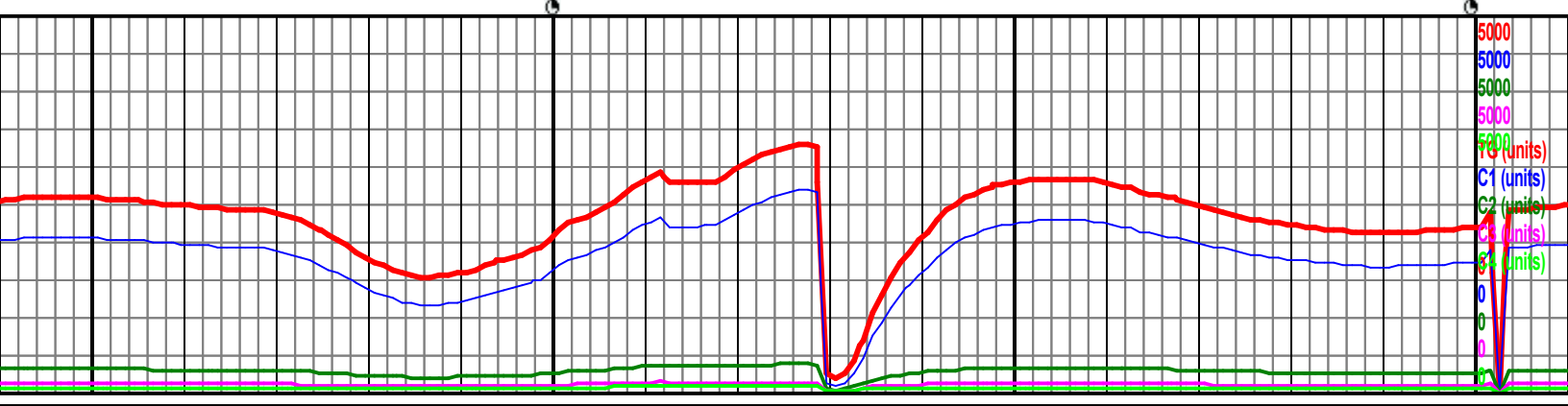
r - U fgr, sbang - sb rncdd, modsr, mod frm, fri ip, sl calc, cly cmnt, sl  
dk gy, stly - sdy, rr smth ip, sbply - pty, sl calc; sptty blu grn pri flr,  
rn resd ring.

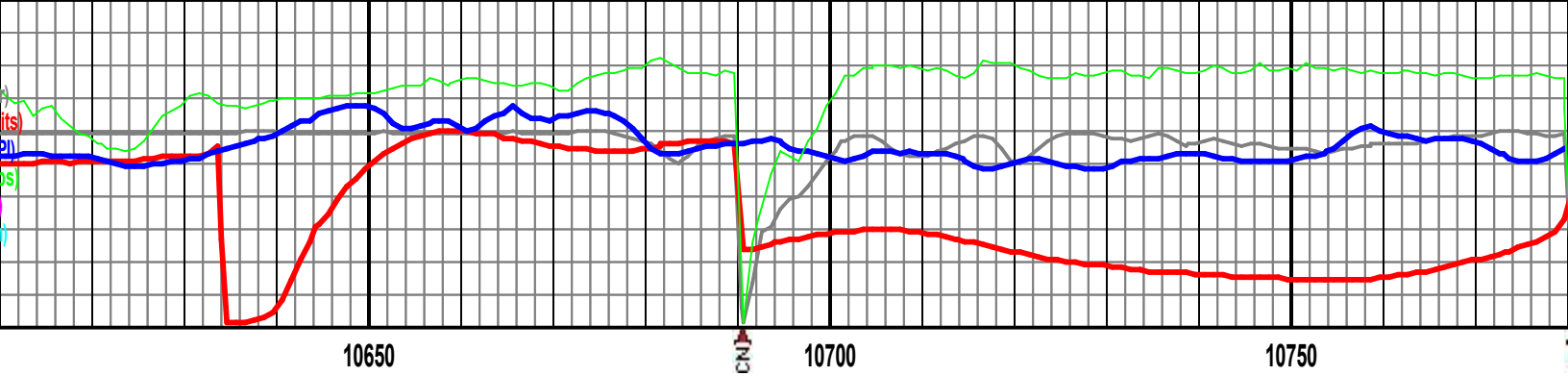
Scale Change  
7300 (-2404)

7300 (-2404)

7400 (-2504)

7400 (-2504)





10650

10700

10750

7352.9

7352.6

7352.3

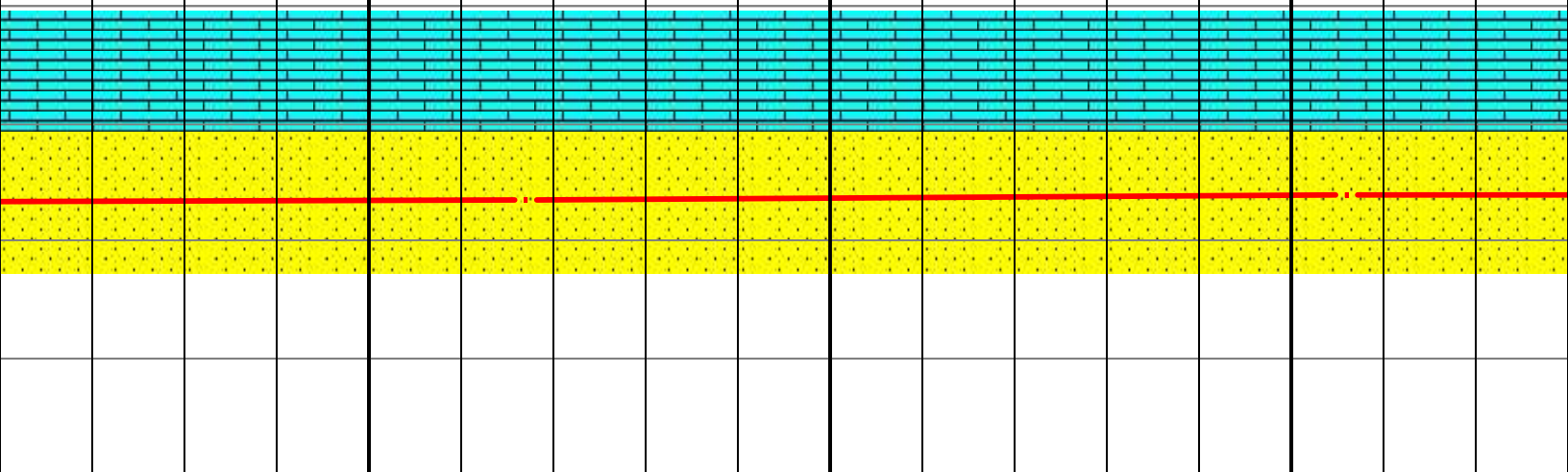
304 SS)

MD 10667 TVD 7352.84  
INC 90.44 AZ 269.97  
VS 2433.11

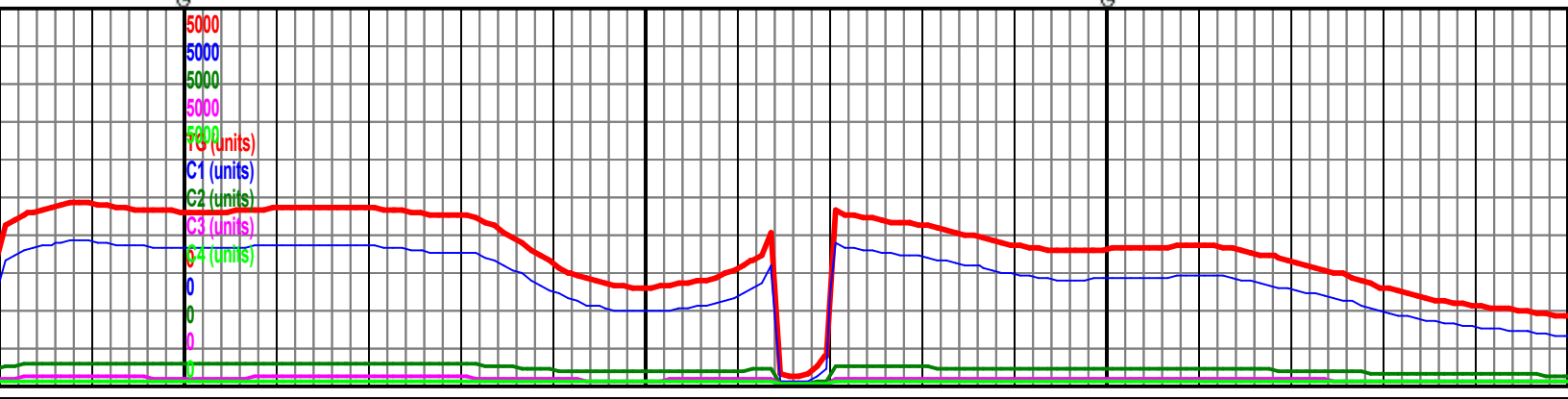
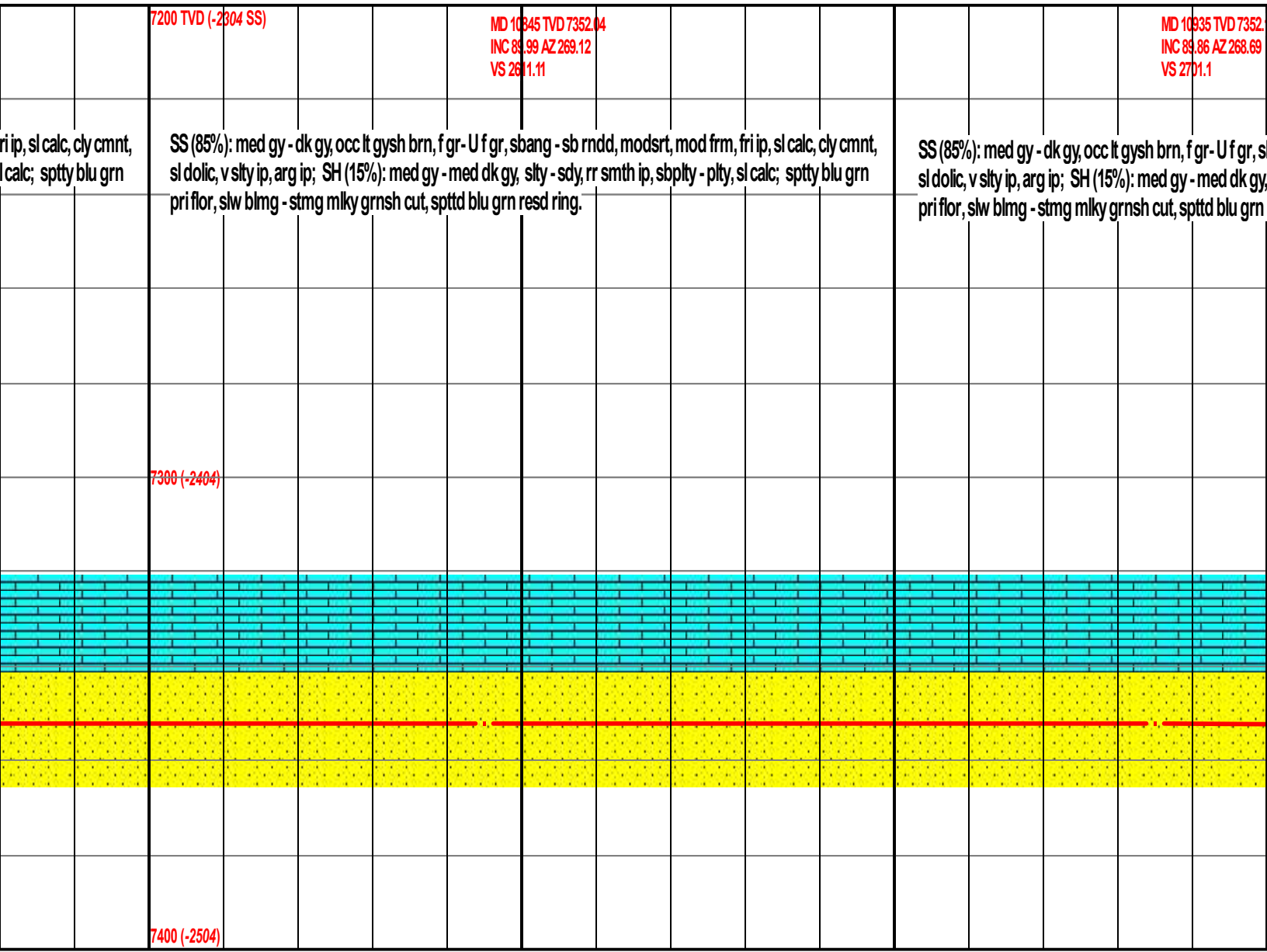
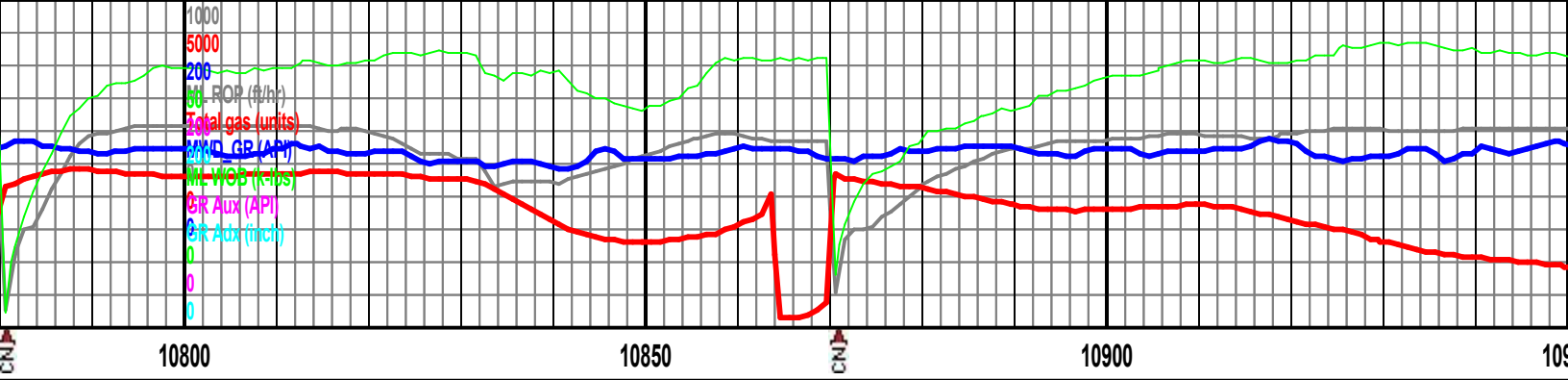
MD 10756 TVD 7352.27  
INC 90.3 AZ 269.49  
VS 2522.11

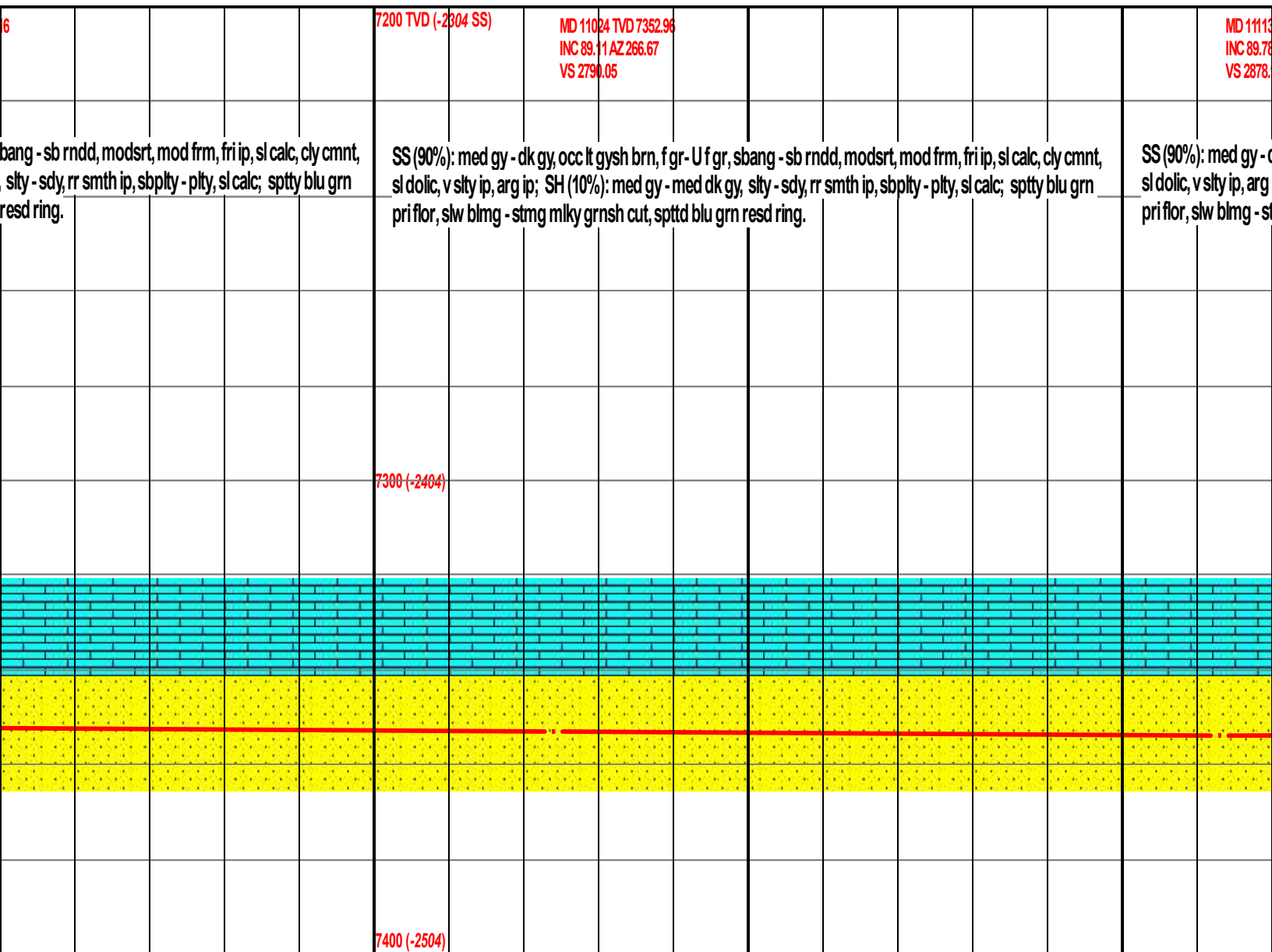
med gy - dk gy, occ lt gysh brn, f gr - U f gr, sbang - sb rndd, modsrt, mod frm, fri ip, sl calc, cly cmnt,  
sly ip, arg ip; SH (15%): med gy - med dk gy, sly - sdy, rr smth ip, sbply - ply, sl calc; spty blu grn pri  
blmg - stmg milky grnsh cut, spttd blu grn resd ring.

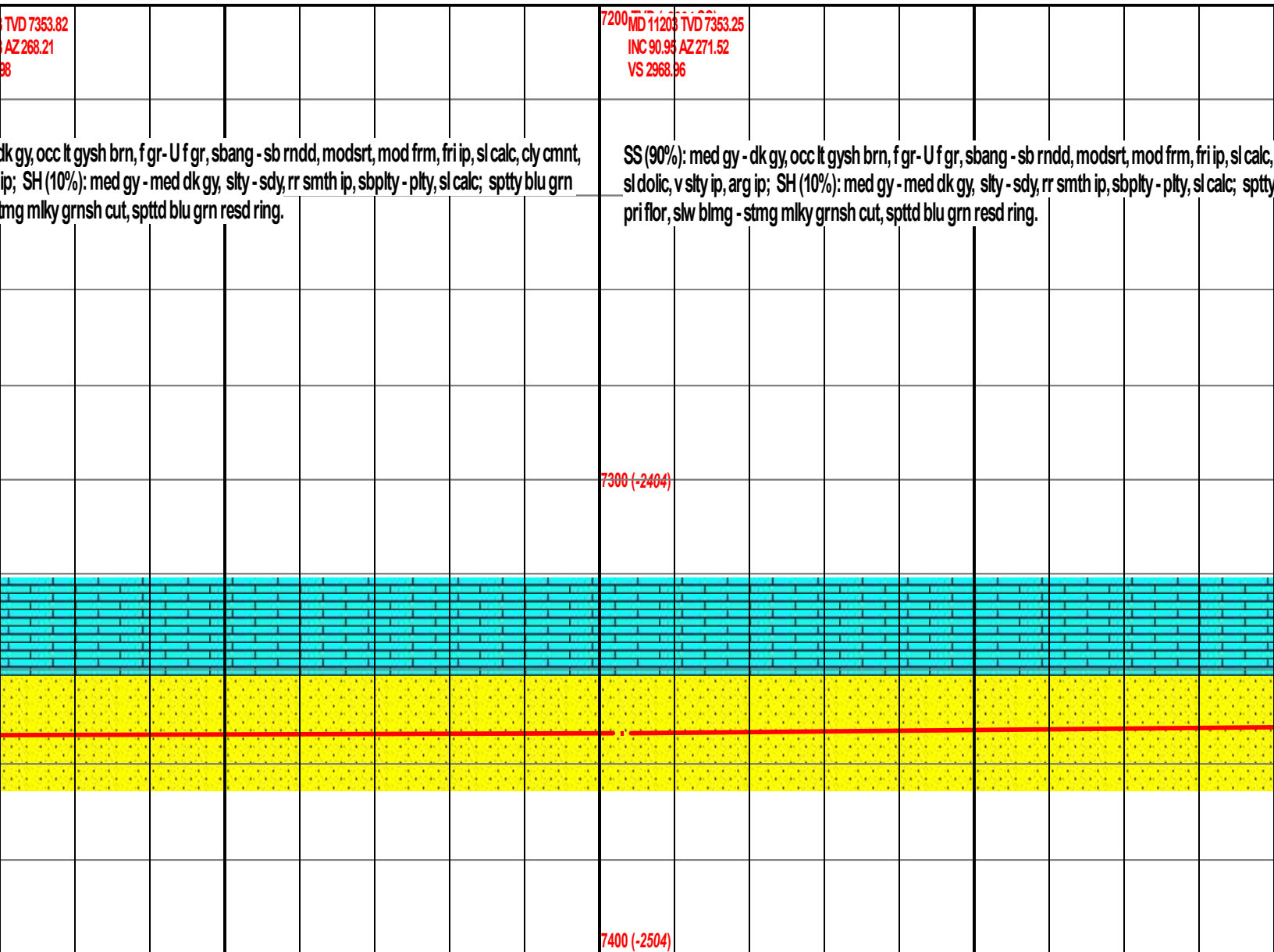
SS (85%): med gy - dk gy, occ lt gysh brn, f gr - U f gr, sbang - sb rndd, modsrt, mod frm, f  
sl dolc, v sly ip, arg ip; SH (15%): med gy - med dk gy, sly - sdy, rr smth ip, sbply - ply, s  
pri flr, slw blmg - stmg milky grnsh cut, spttd blu grn resd ring.

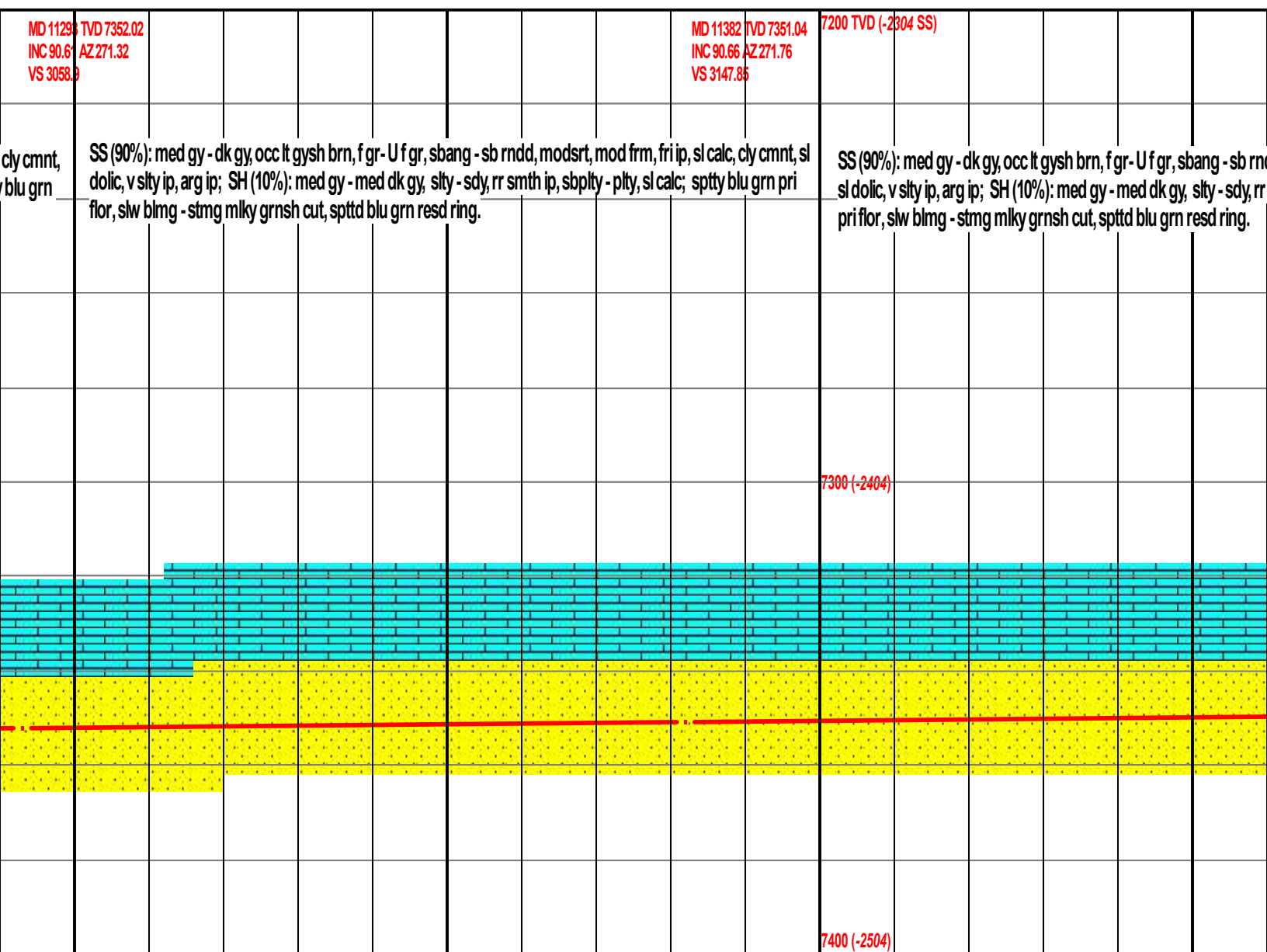


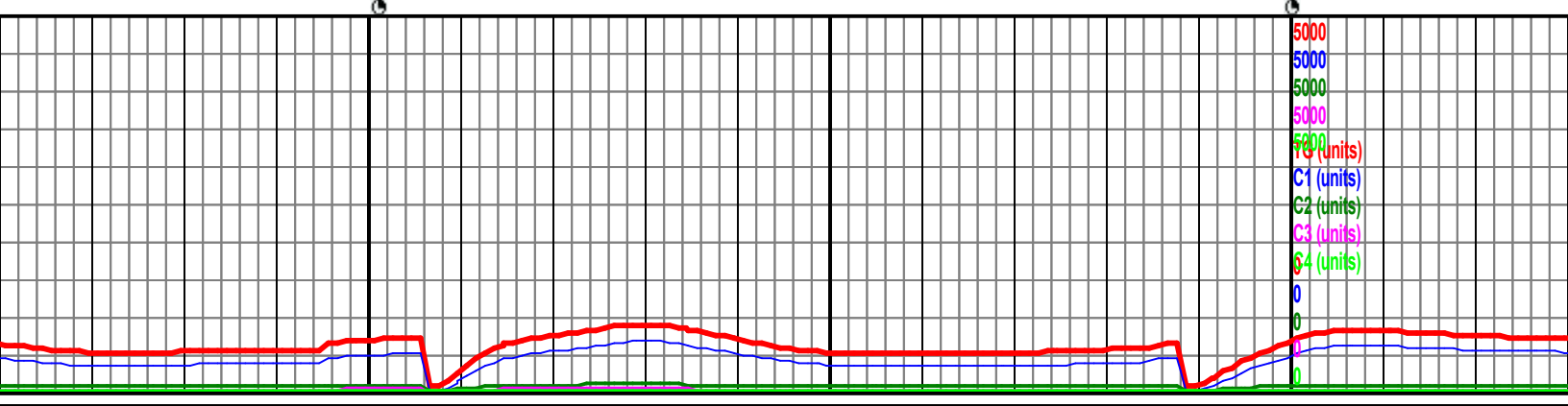
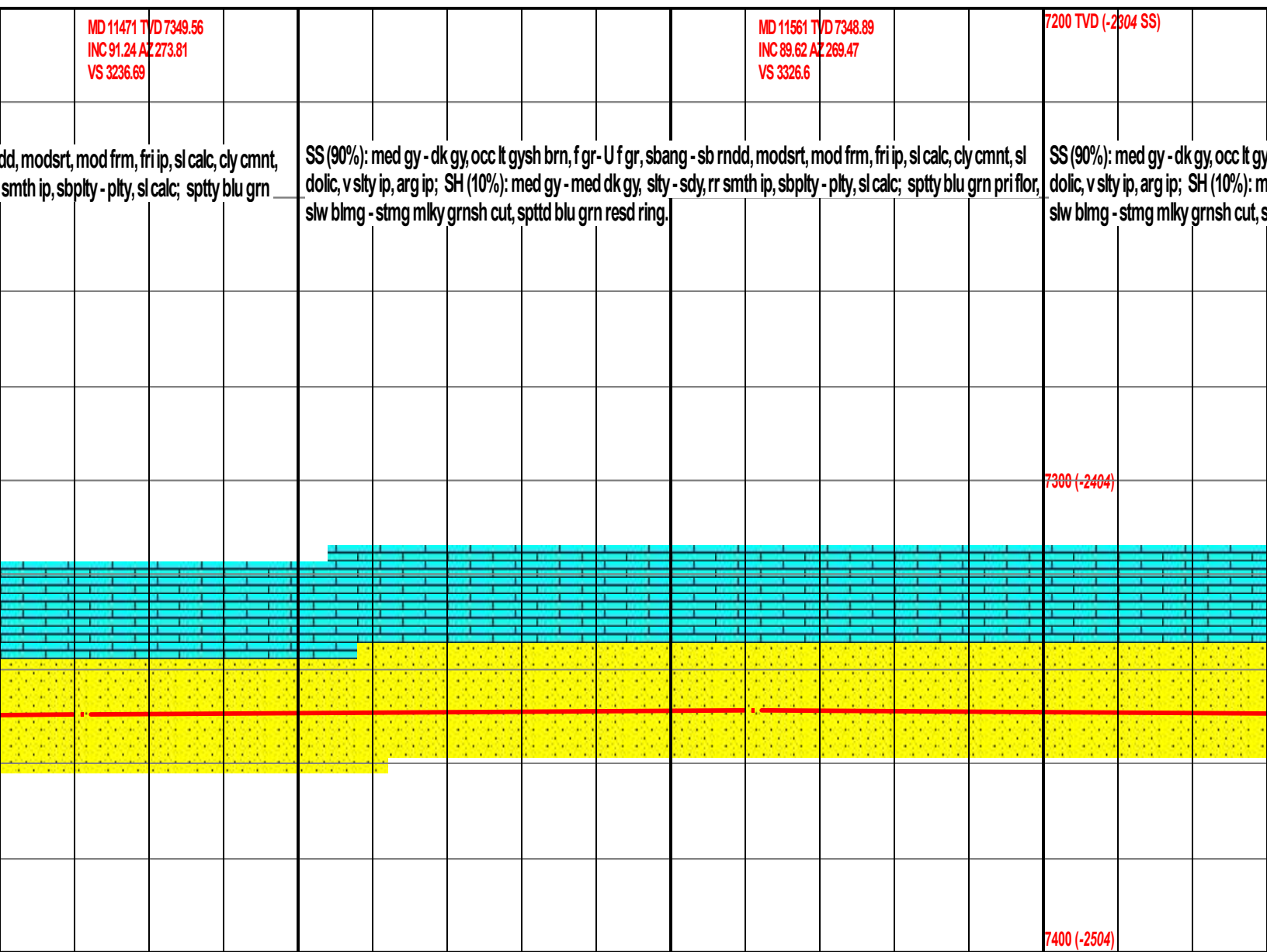
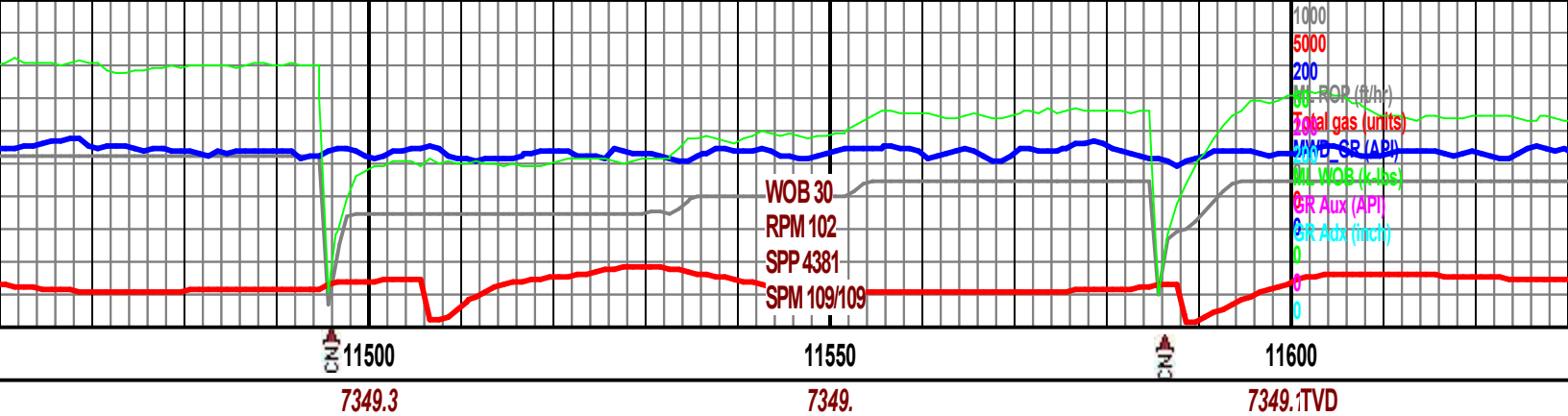
MW 9.55  
VS 61

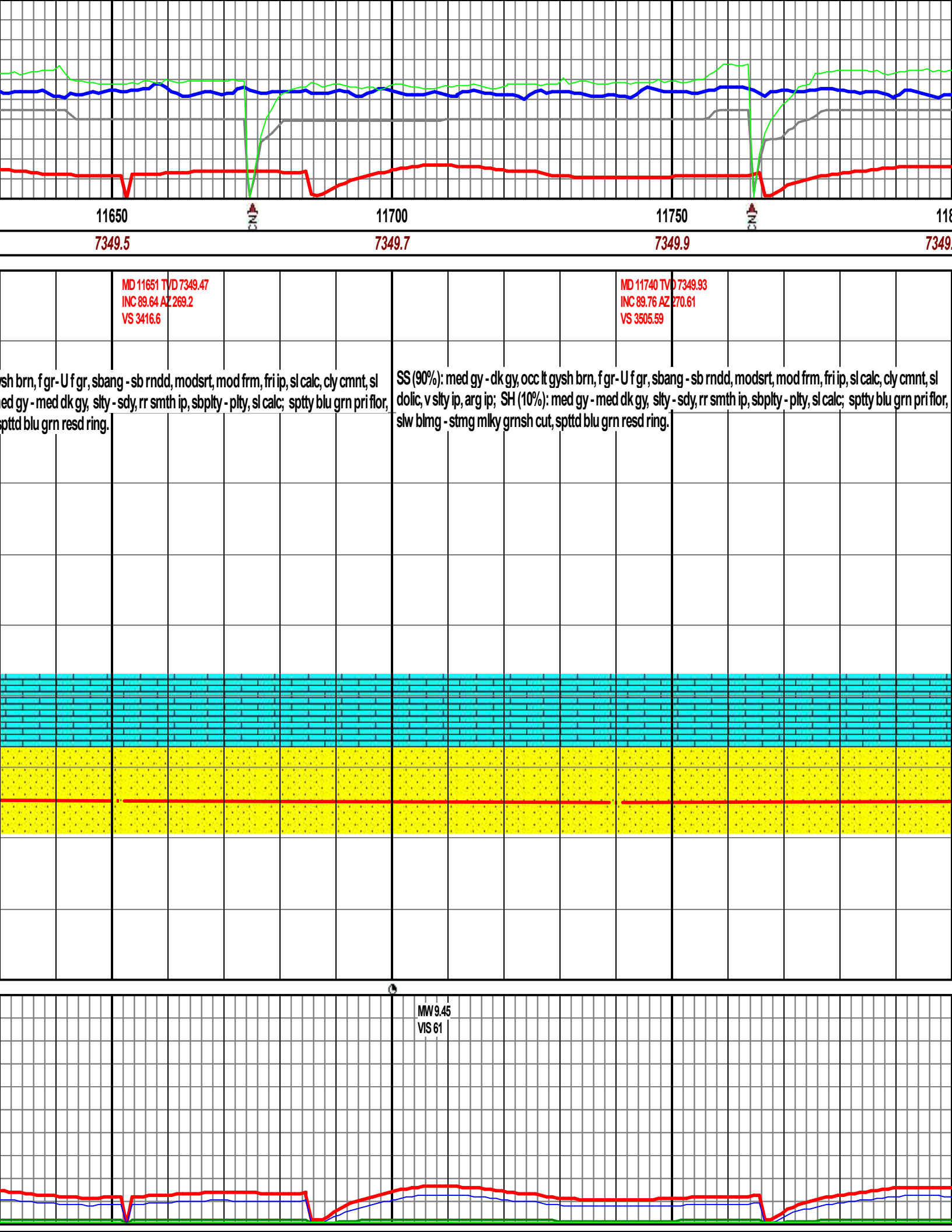








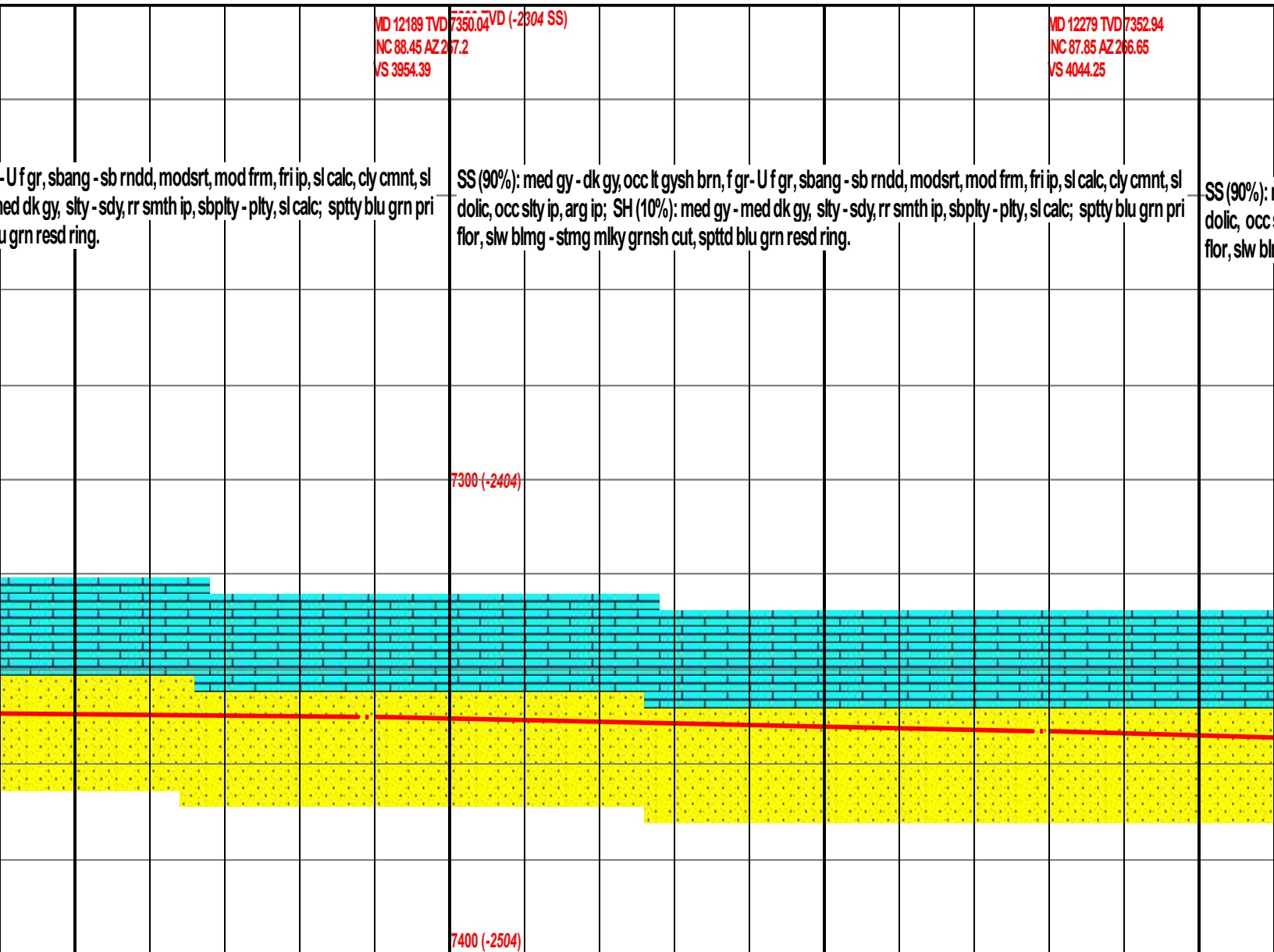


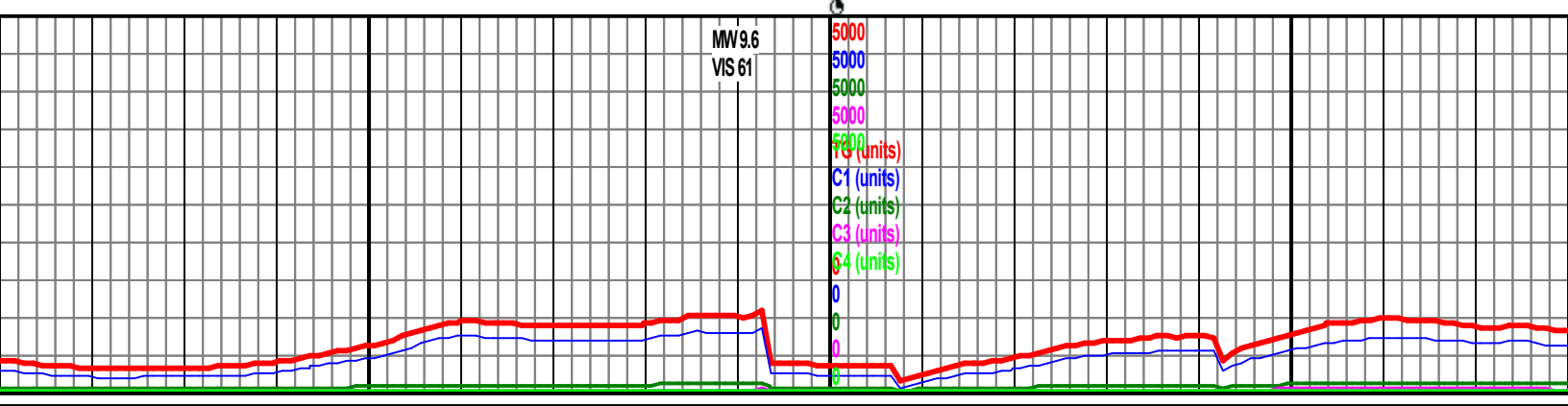
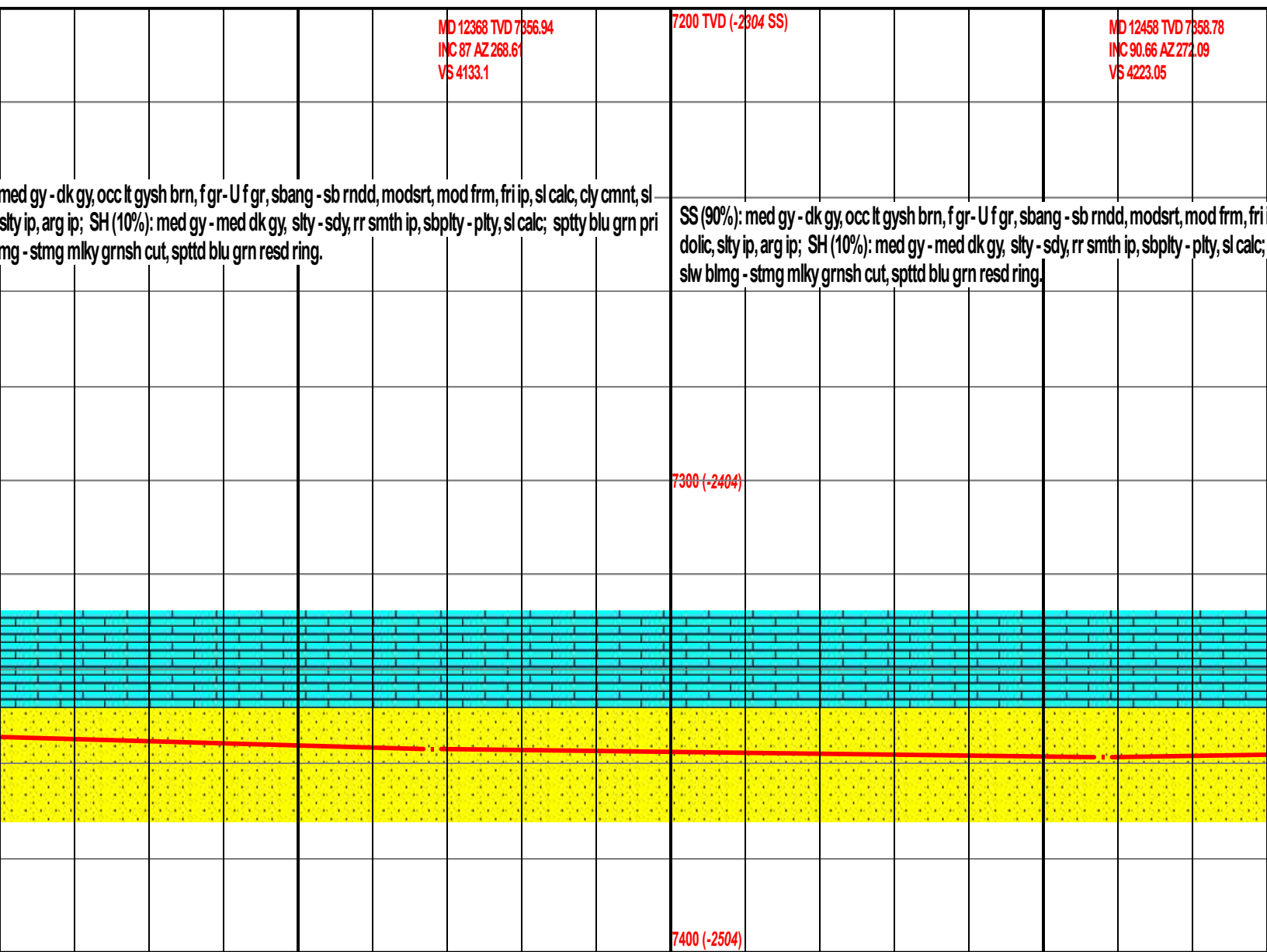
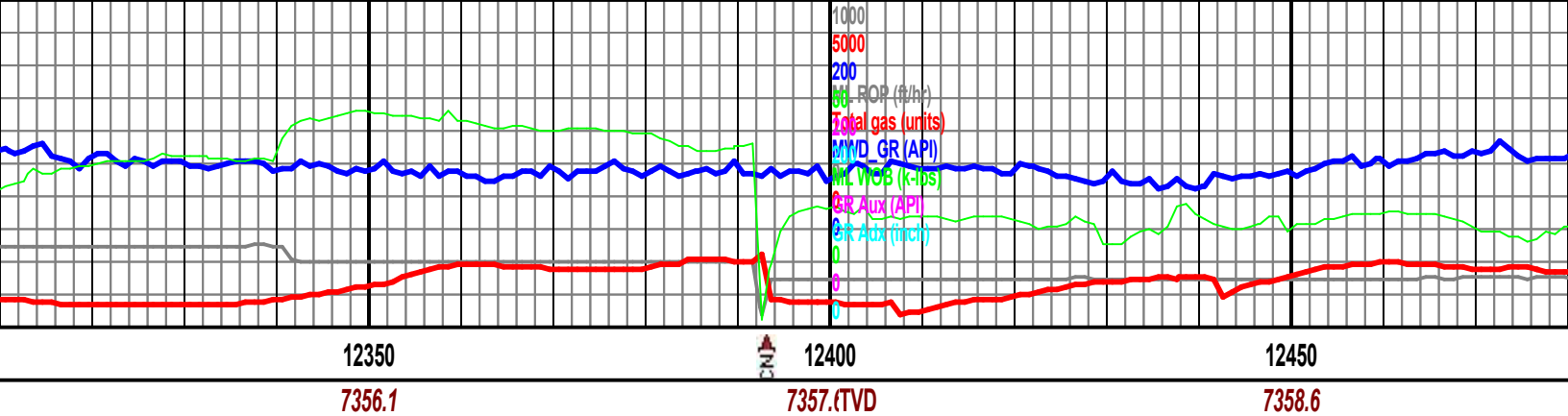


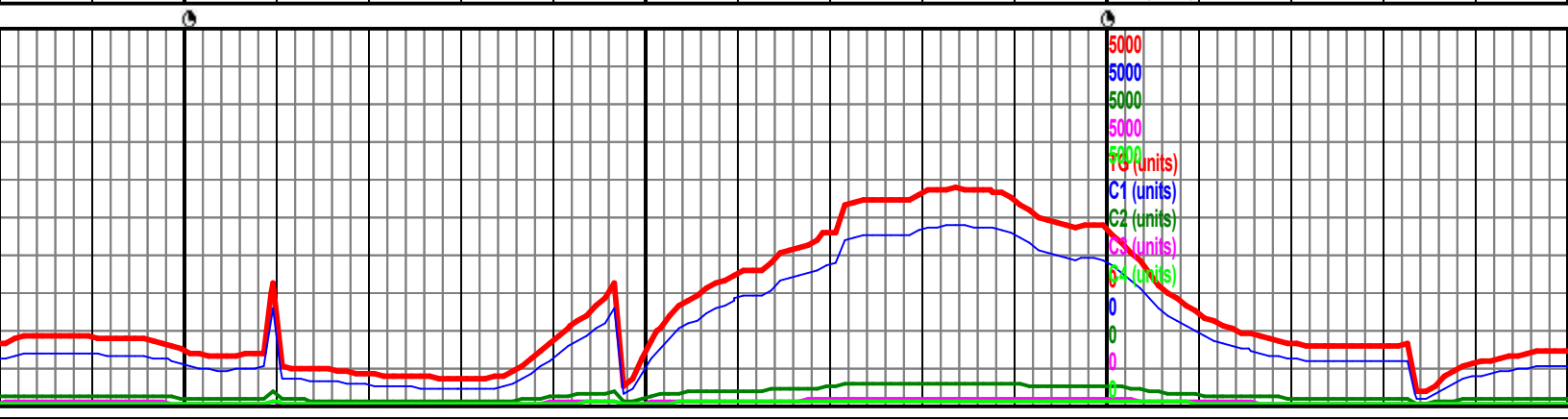
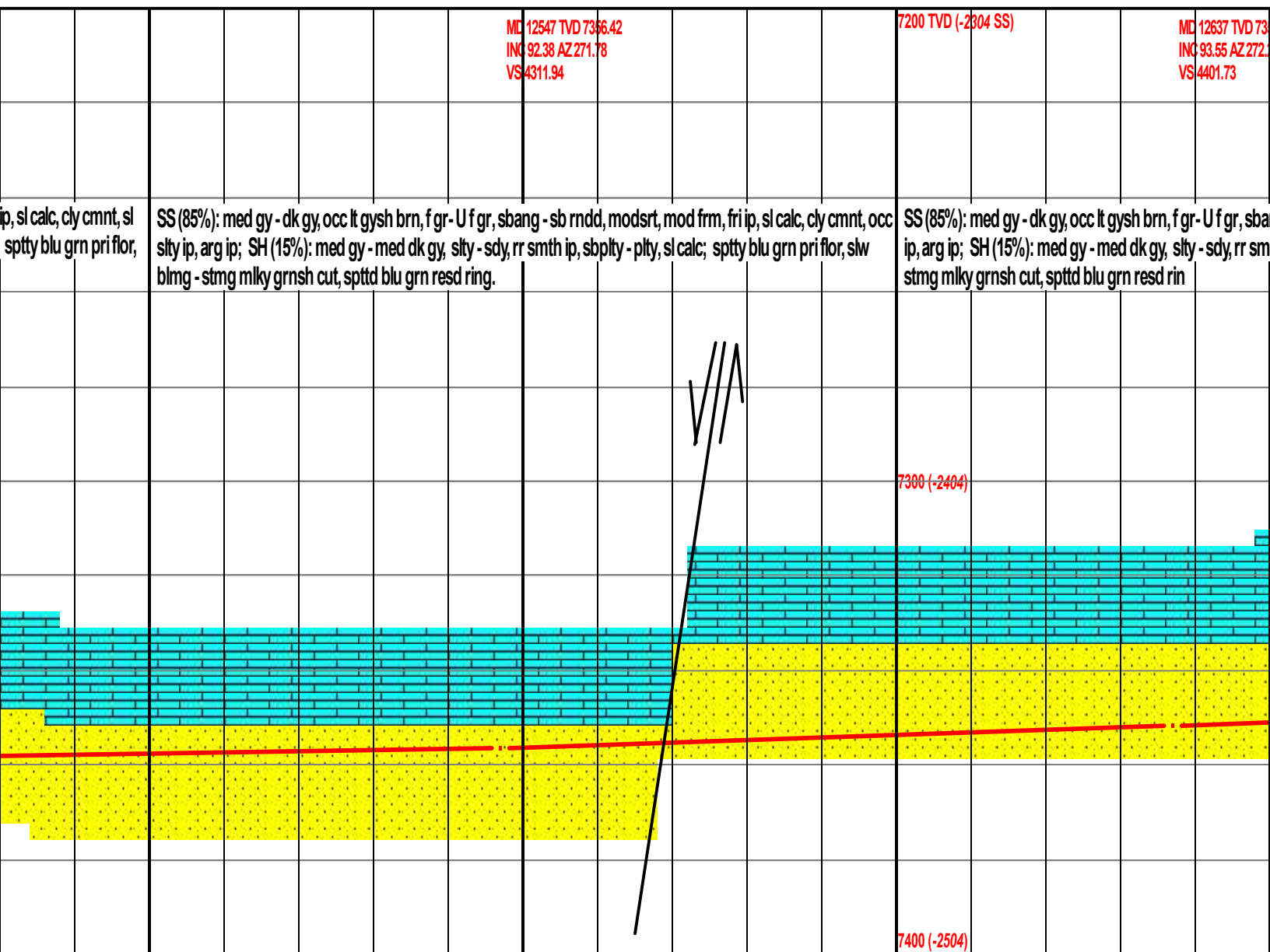


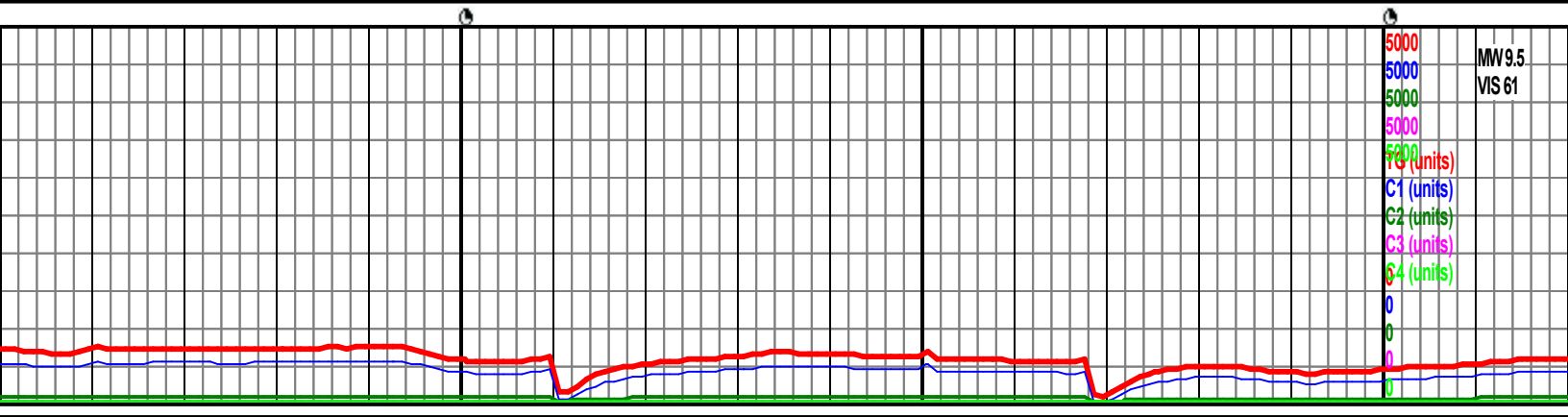
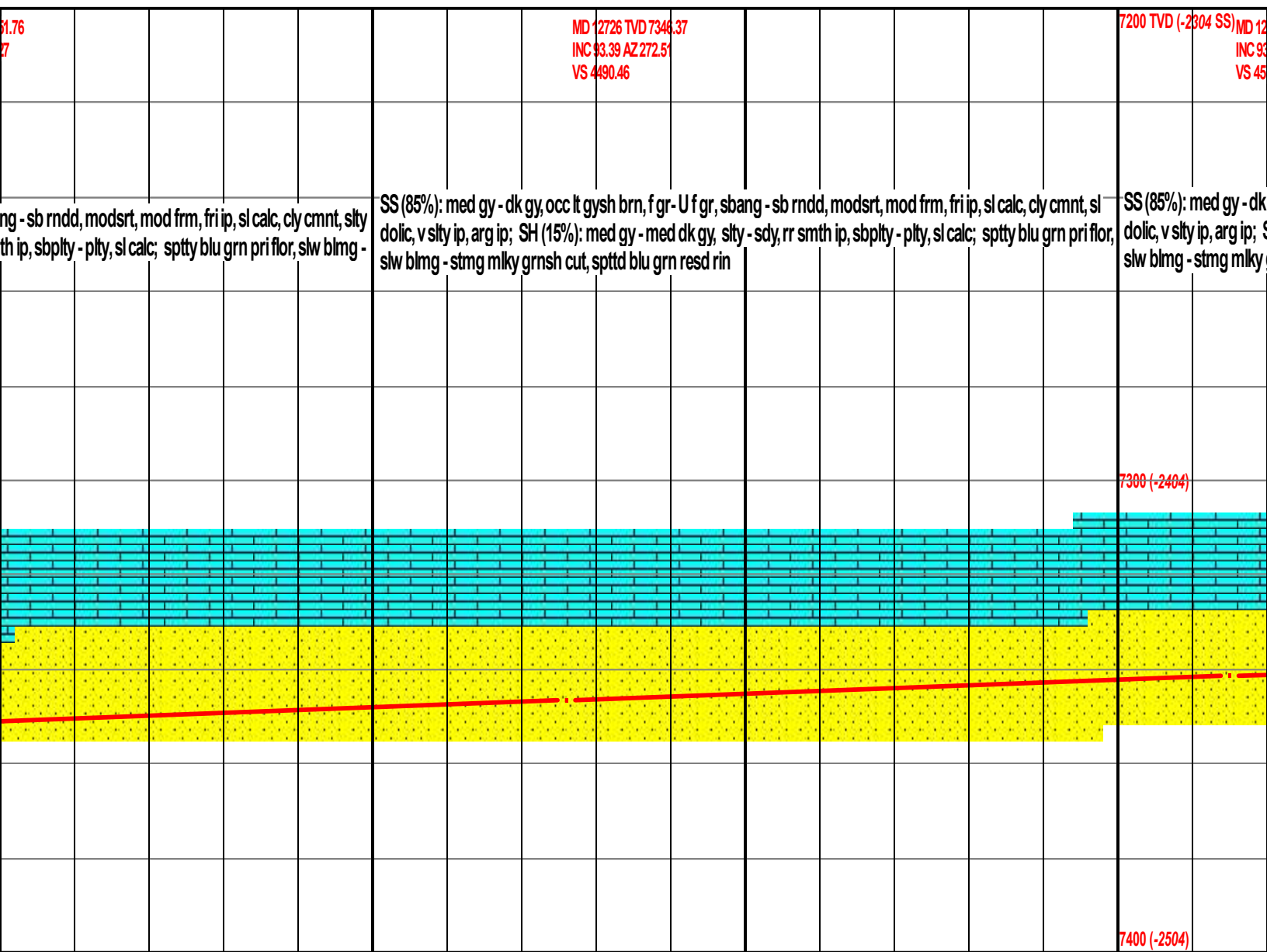


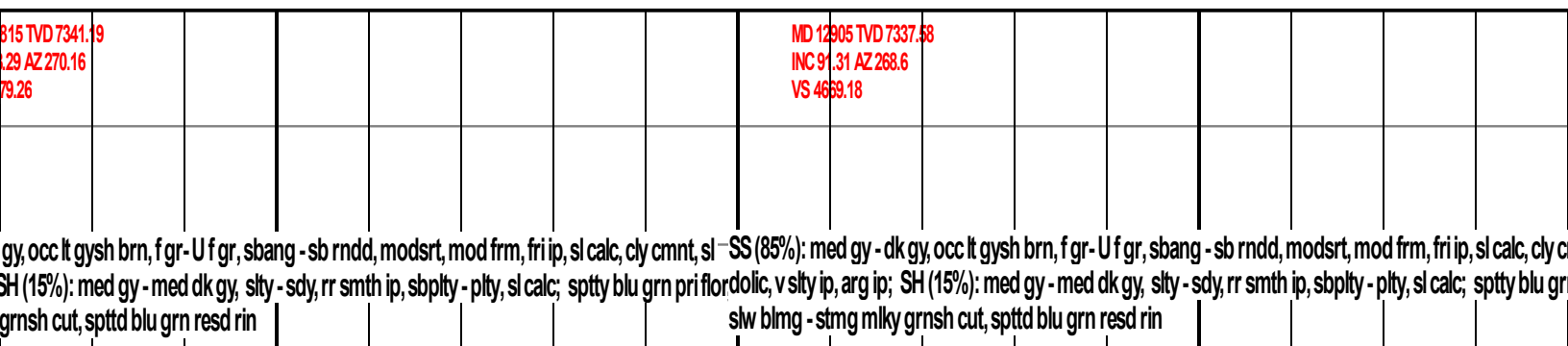


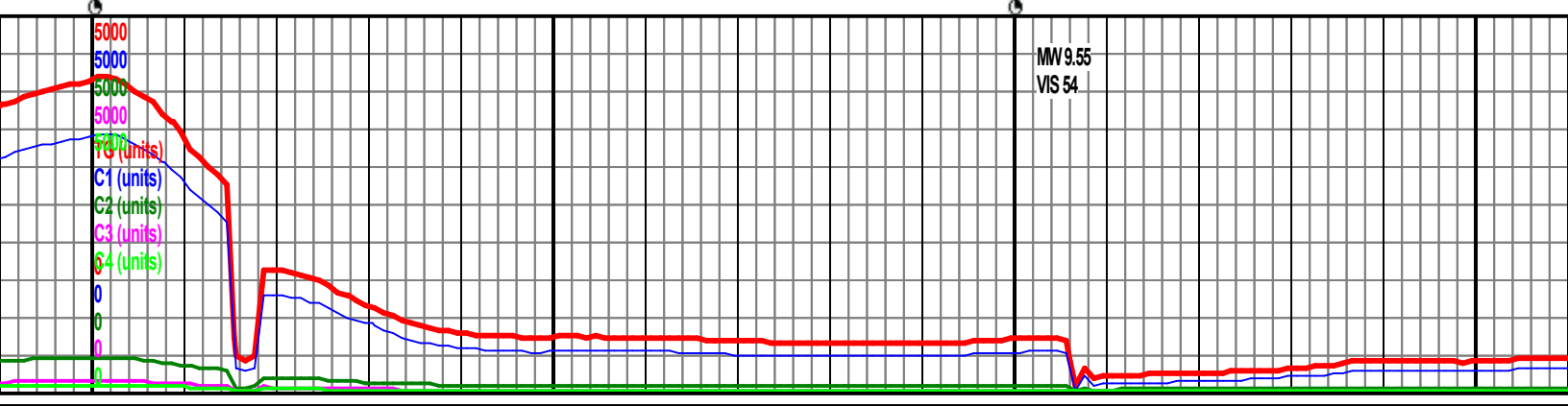
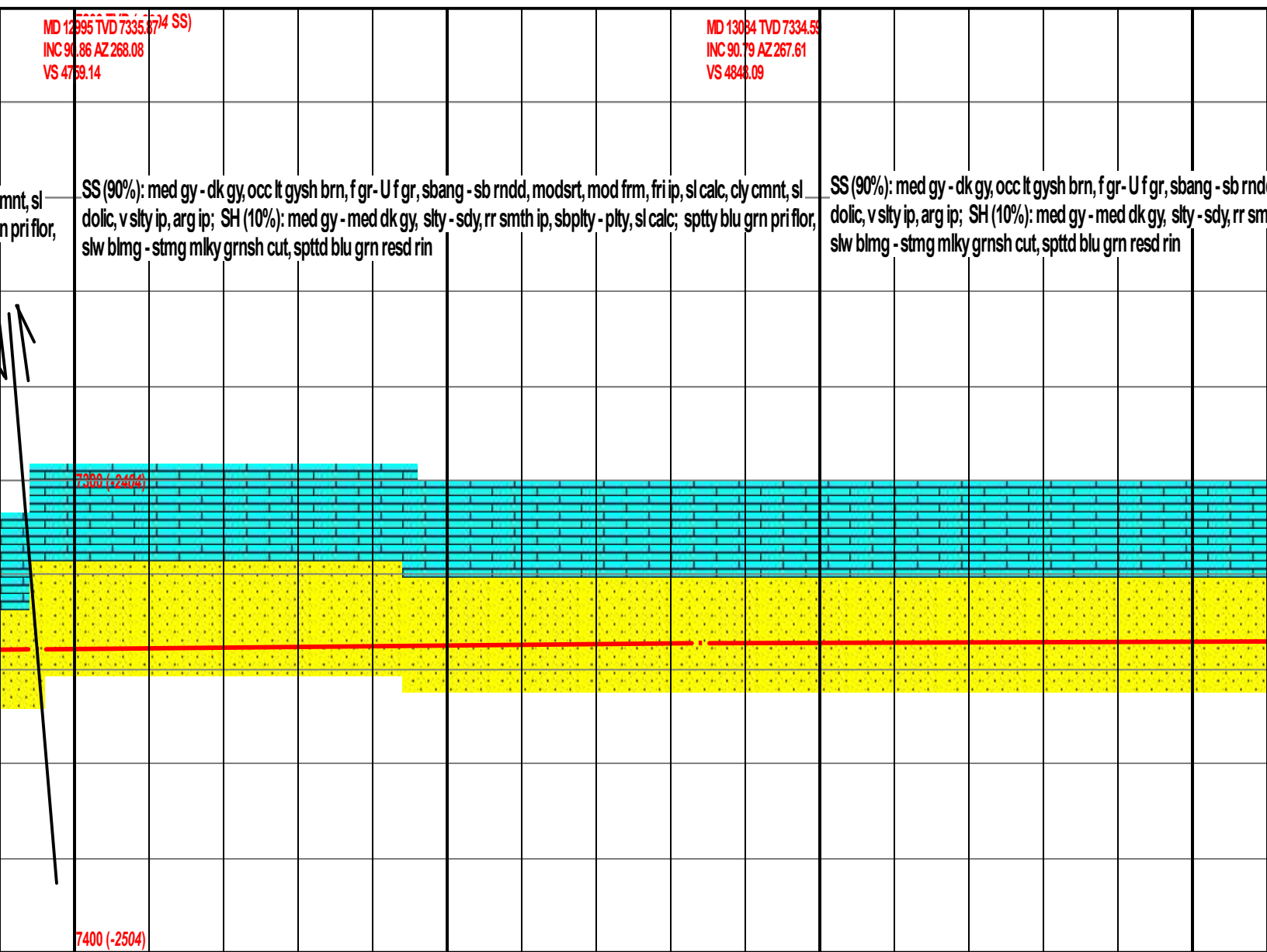
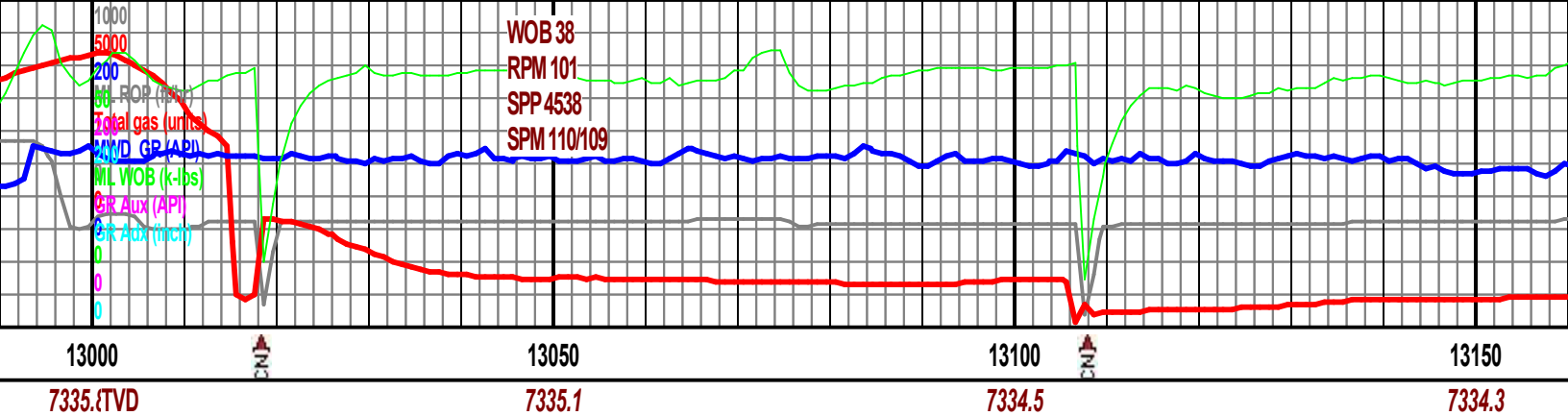




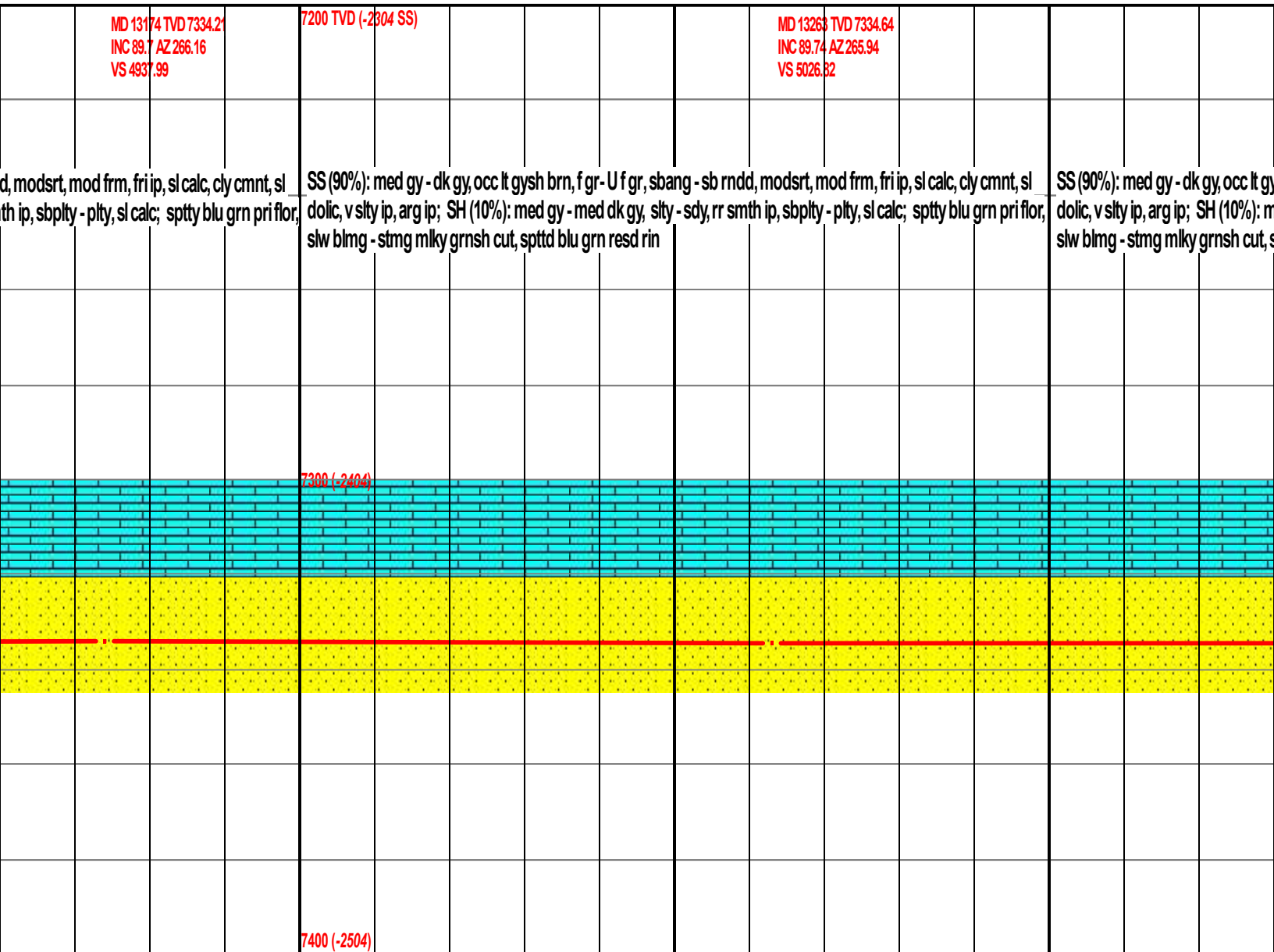


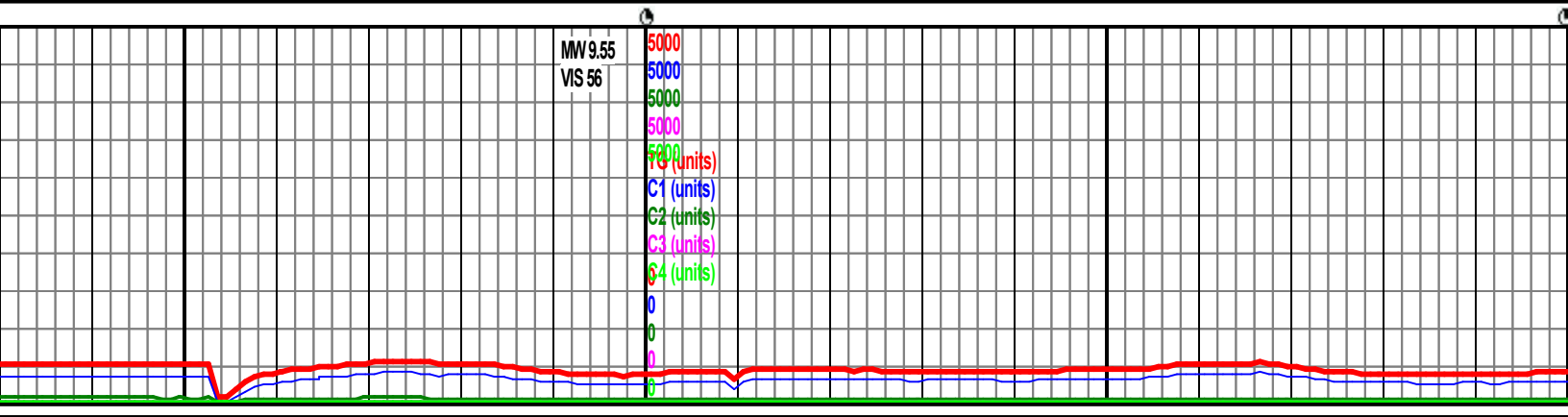
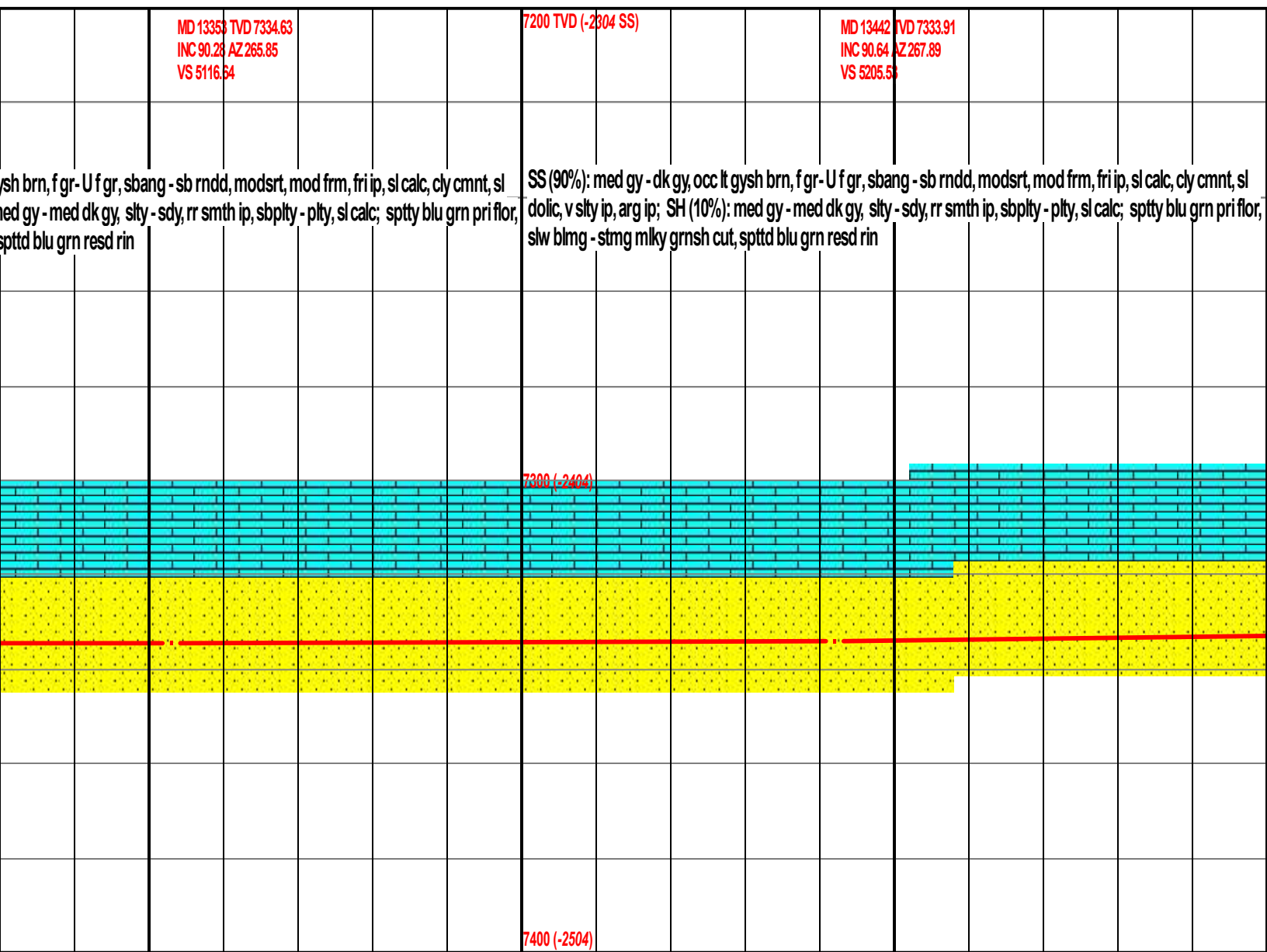


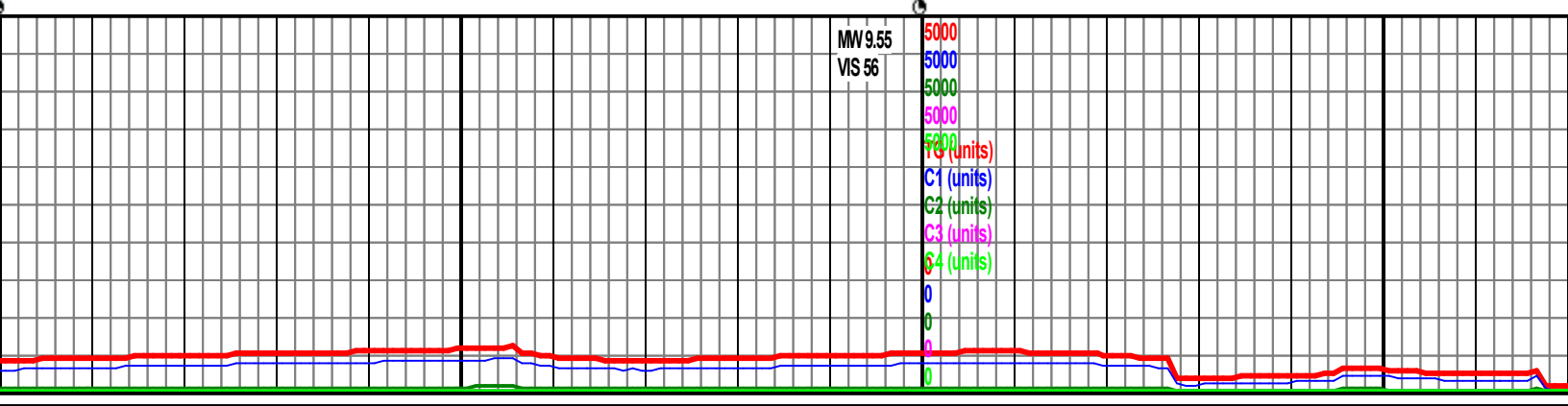
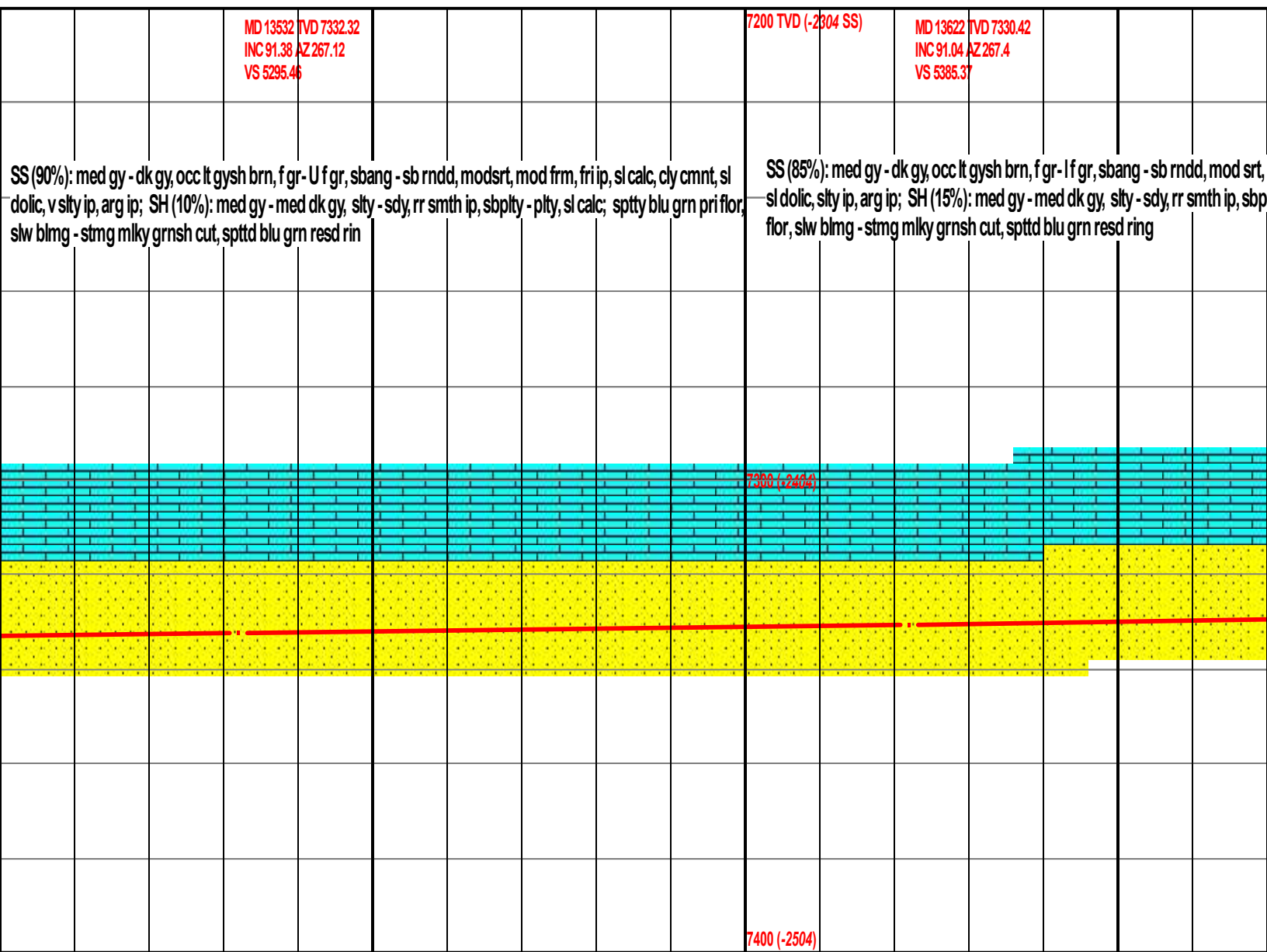
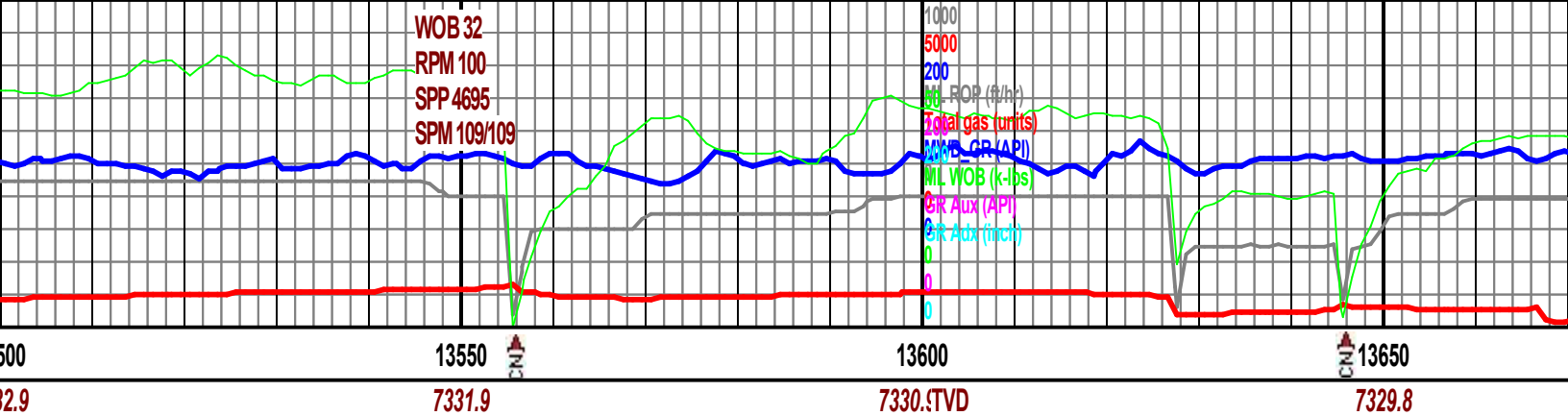


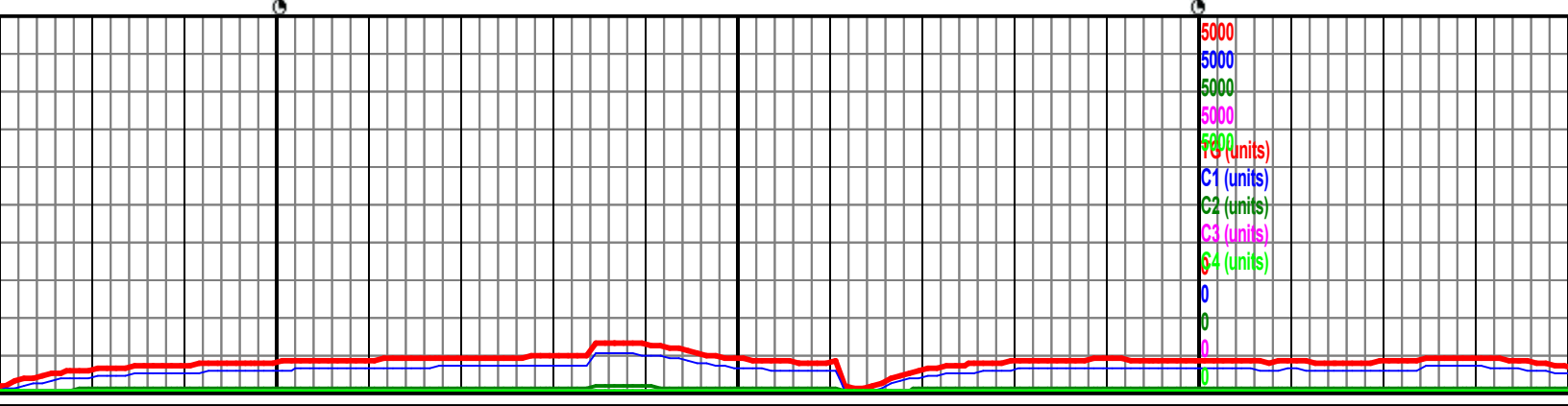
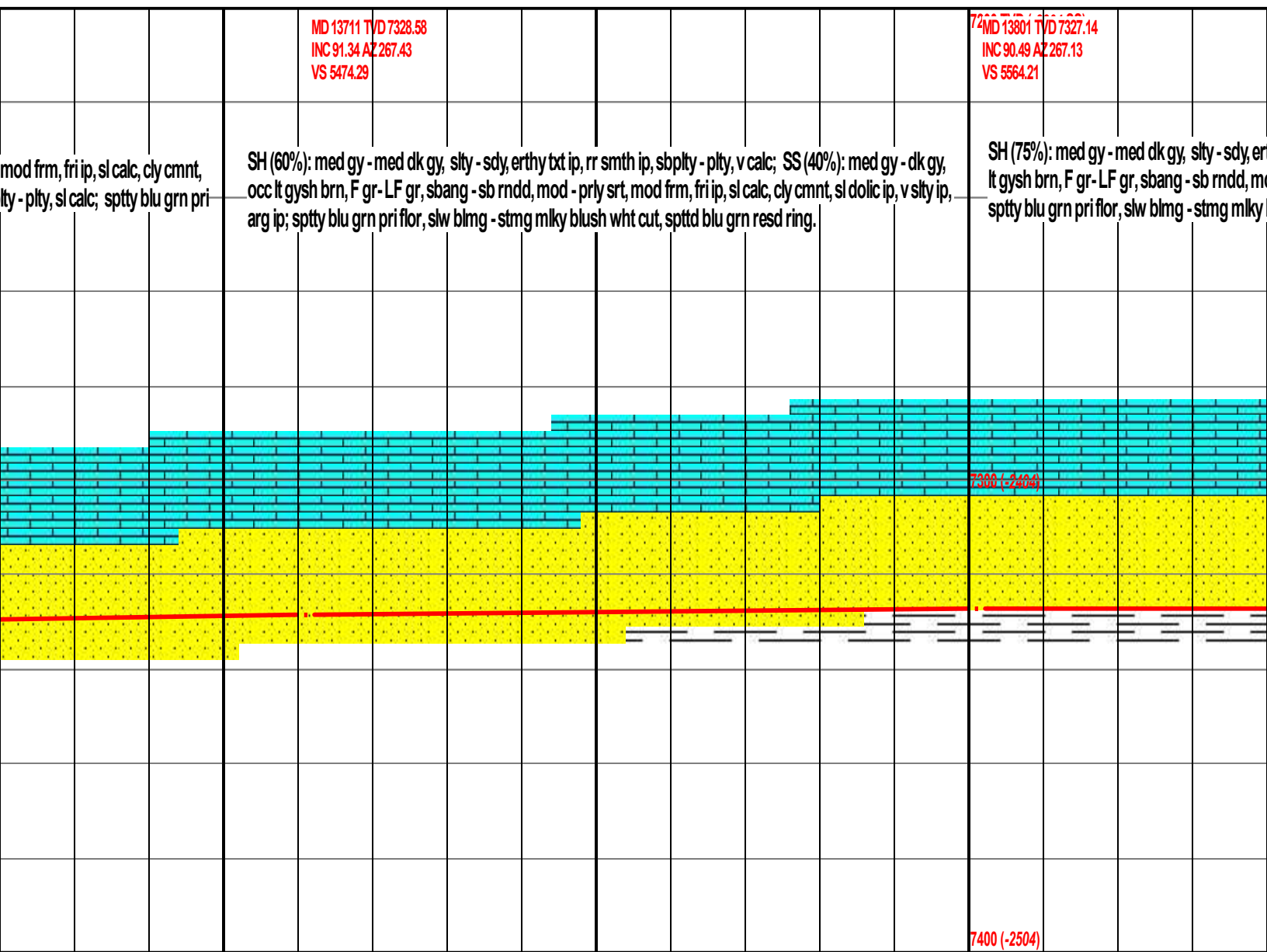
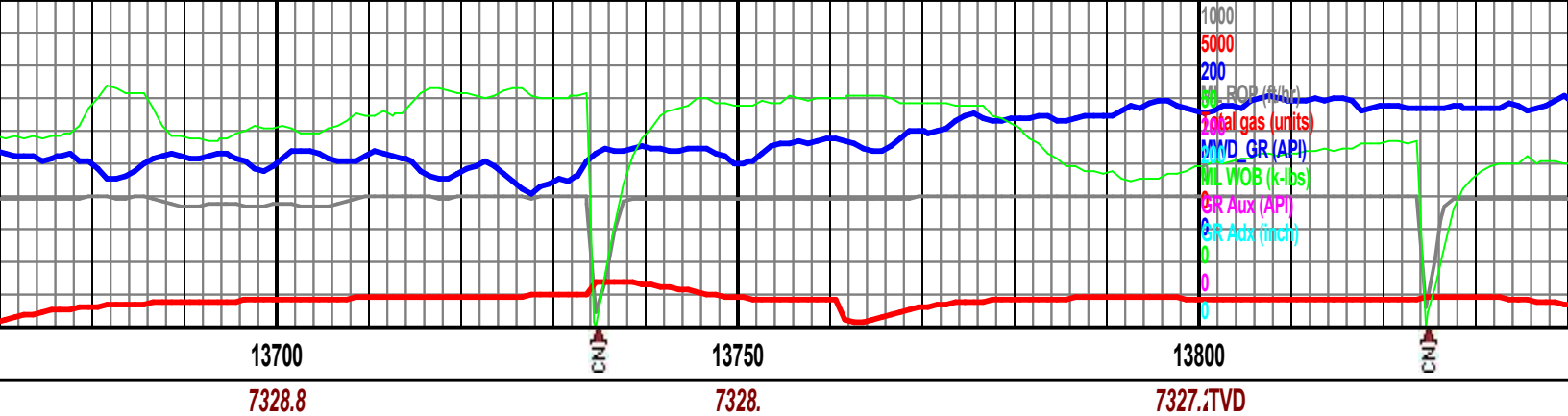




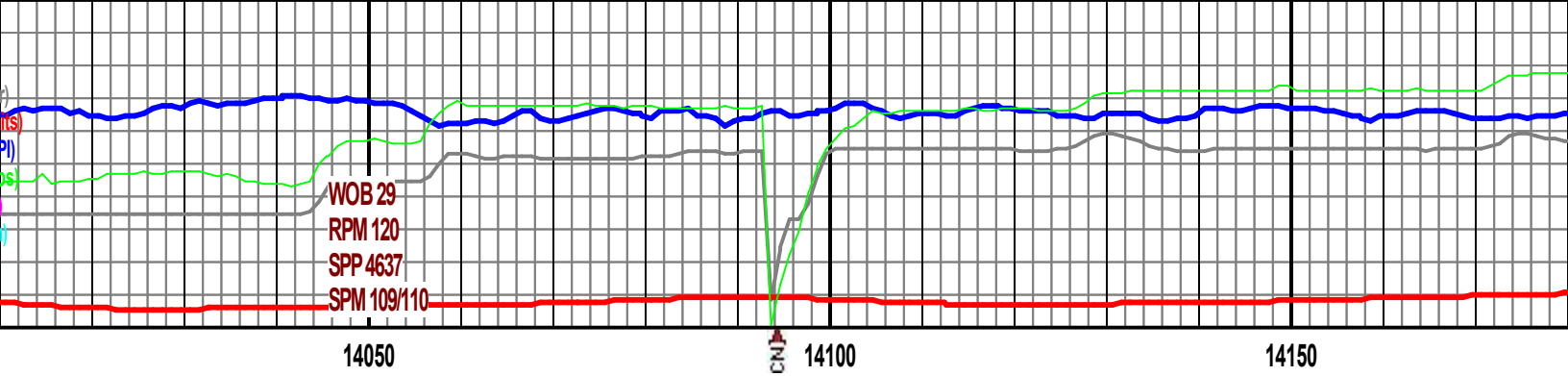






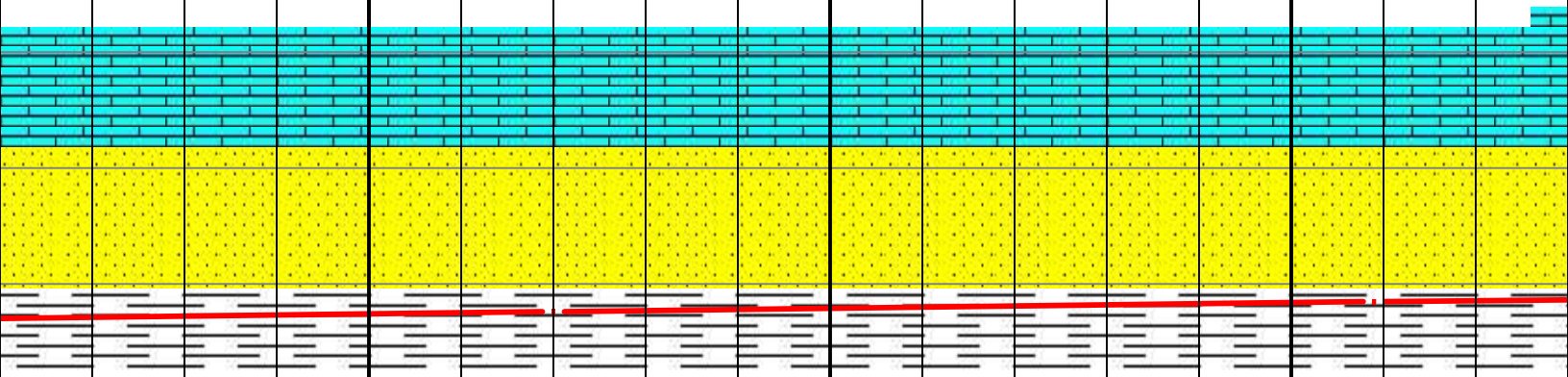




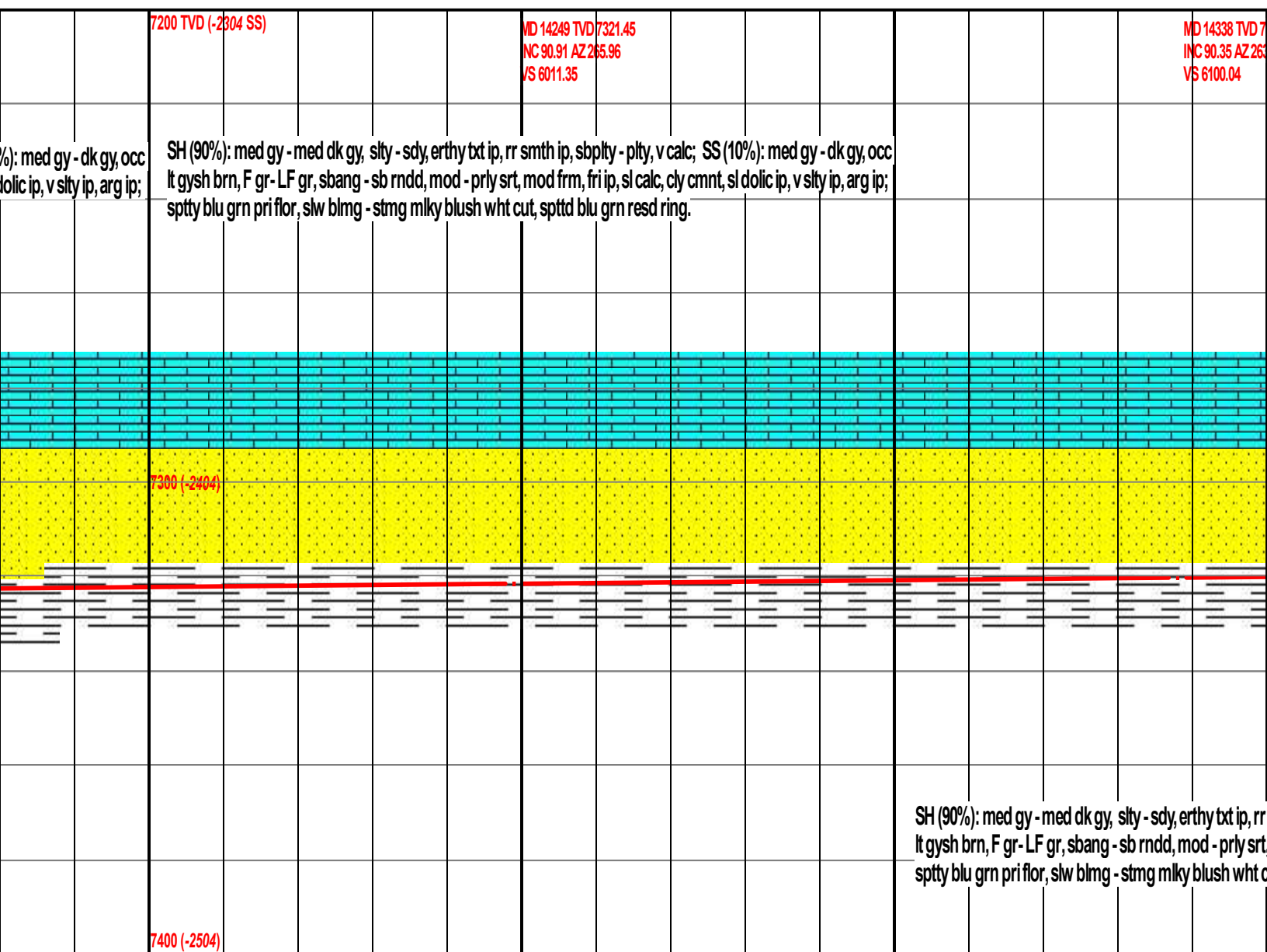


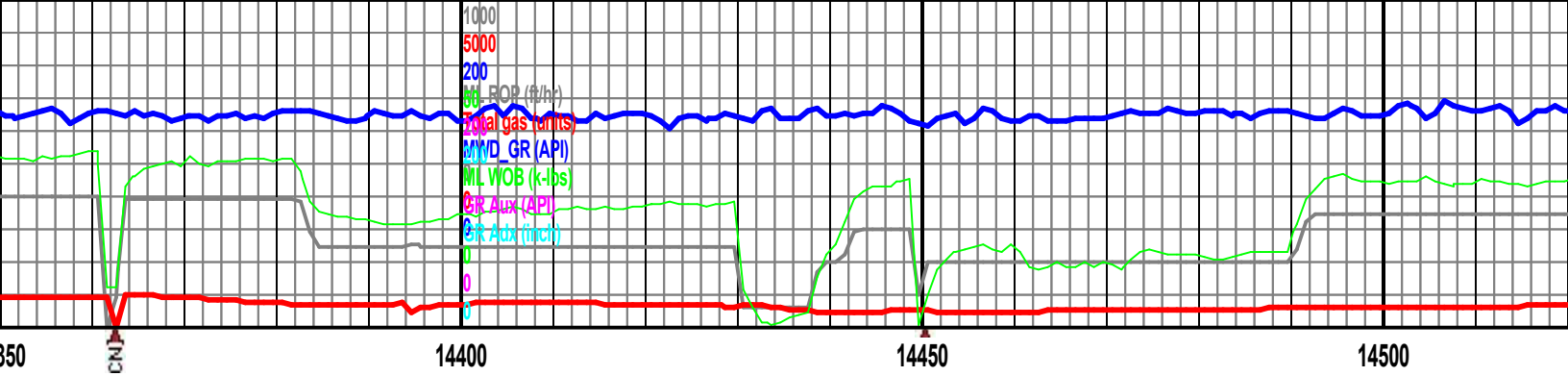
14050 14100 14150  
7324.8 7323.9 7323.2

304 SS)  
MD 14070 TVD 7324.39  
INC 90.68 AZ 267.09  
VS 5832.71  
MD 14159 TVD 7323.02  
INC 91.09 AZ 265.56  
VS 5921.56  
SH (90%): med gy - med dk gy, silty - sdy, erthy txt ip, rr smth ip, sbplty - plty, v calc; SS (15%): med gy - dk gy, occ  
lt gysh brn, F gr - LF gr, sbang - sb rndd, mod - prly srt, mod frm, fri ip, sl calc, cly cmnt, sl dolc ip, v slty ip, arg ip;  
sptty blu grn pri flor, slw blmg - stmg mlky blush wht cut, spttd blu grn resd ring.

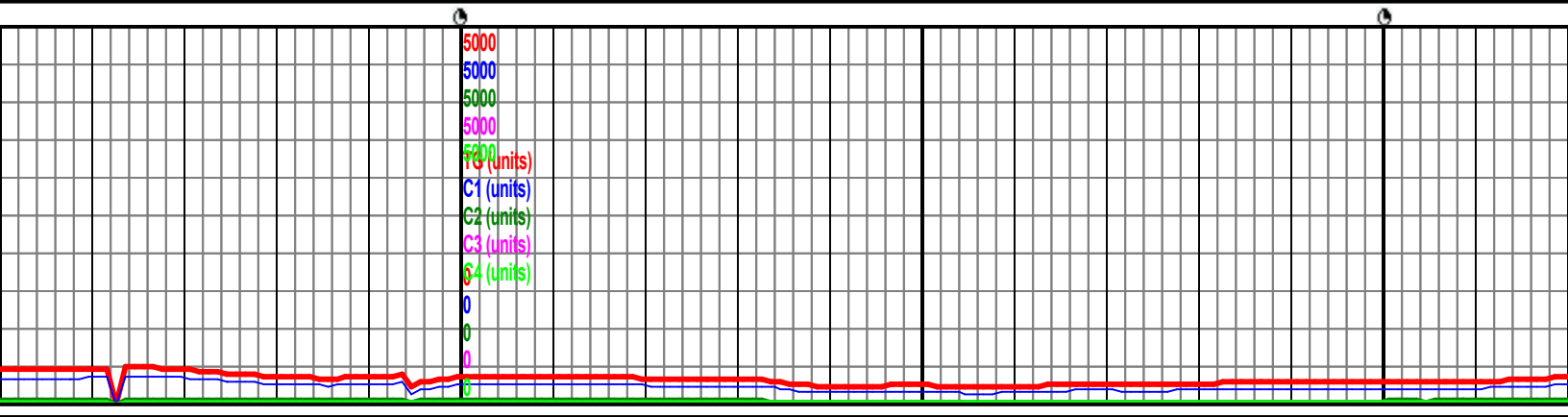
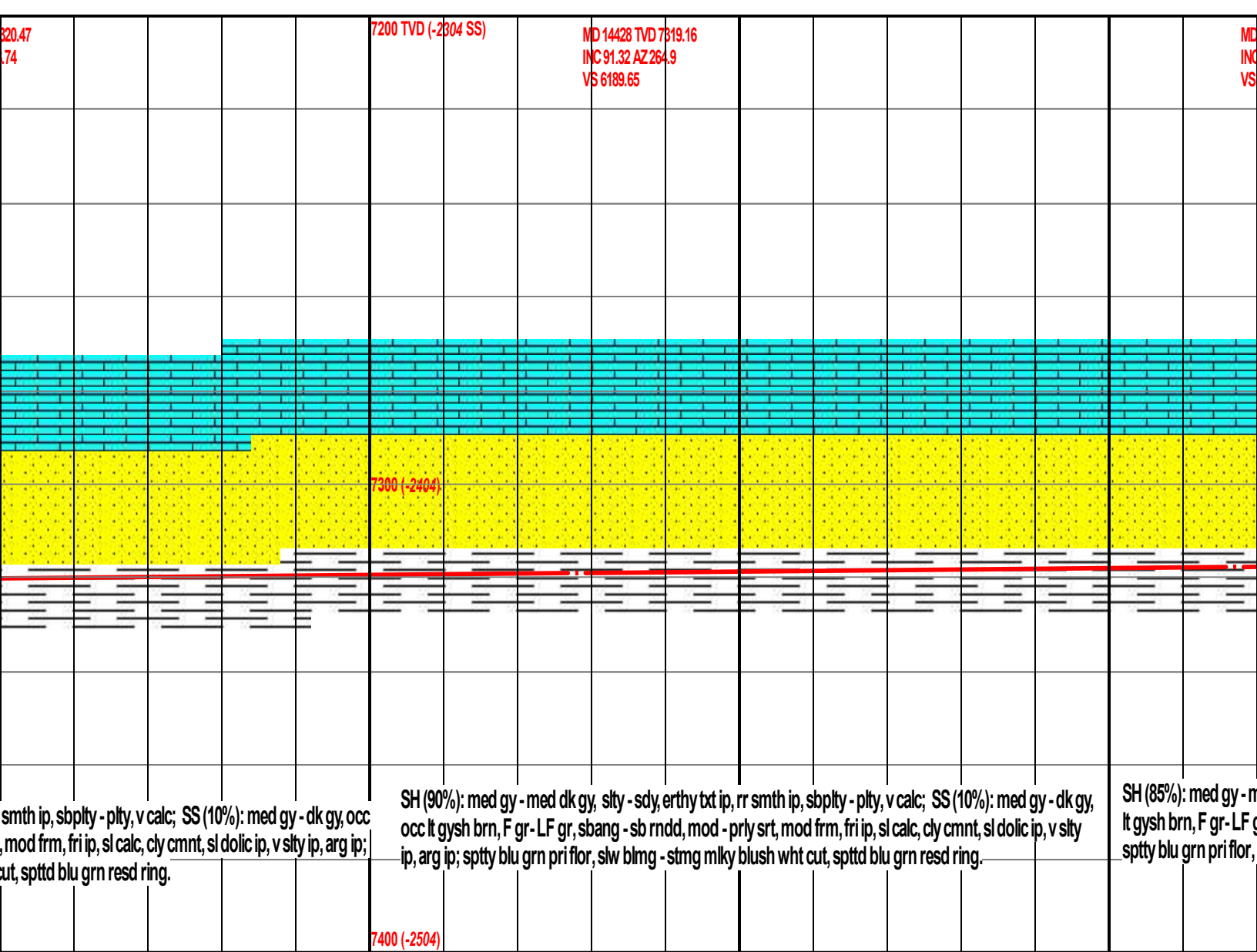


MW 9.6  
VIS 56

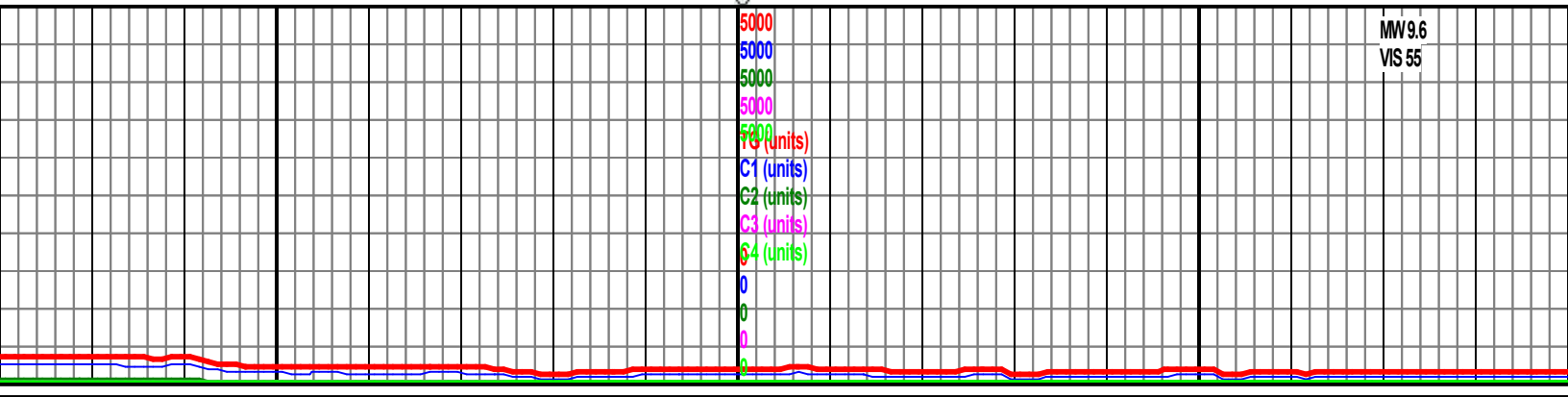
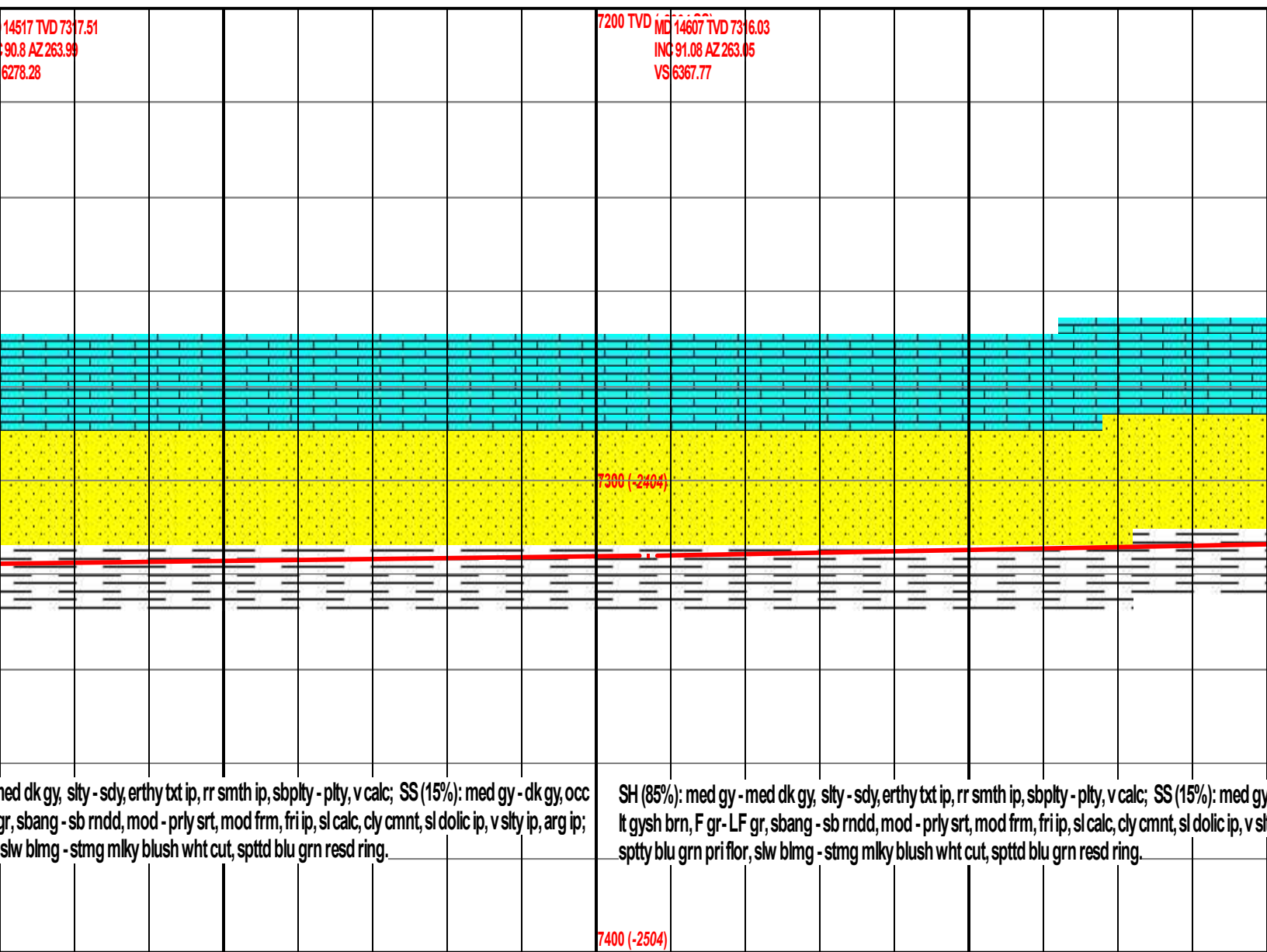
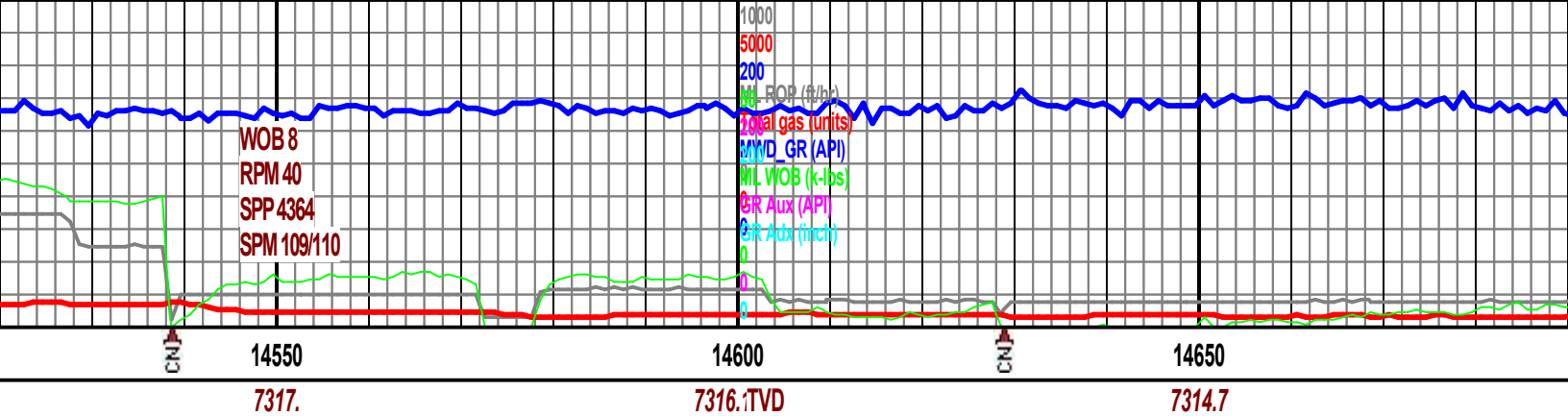


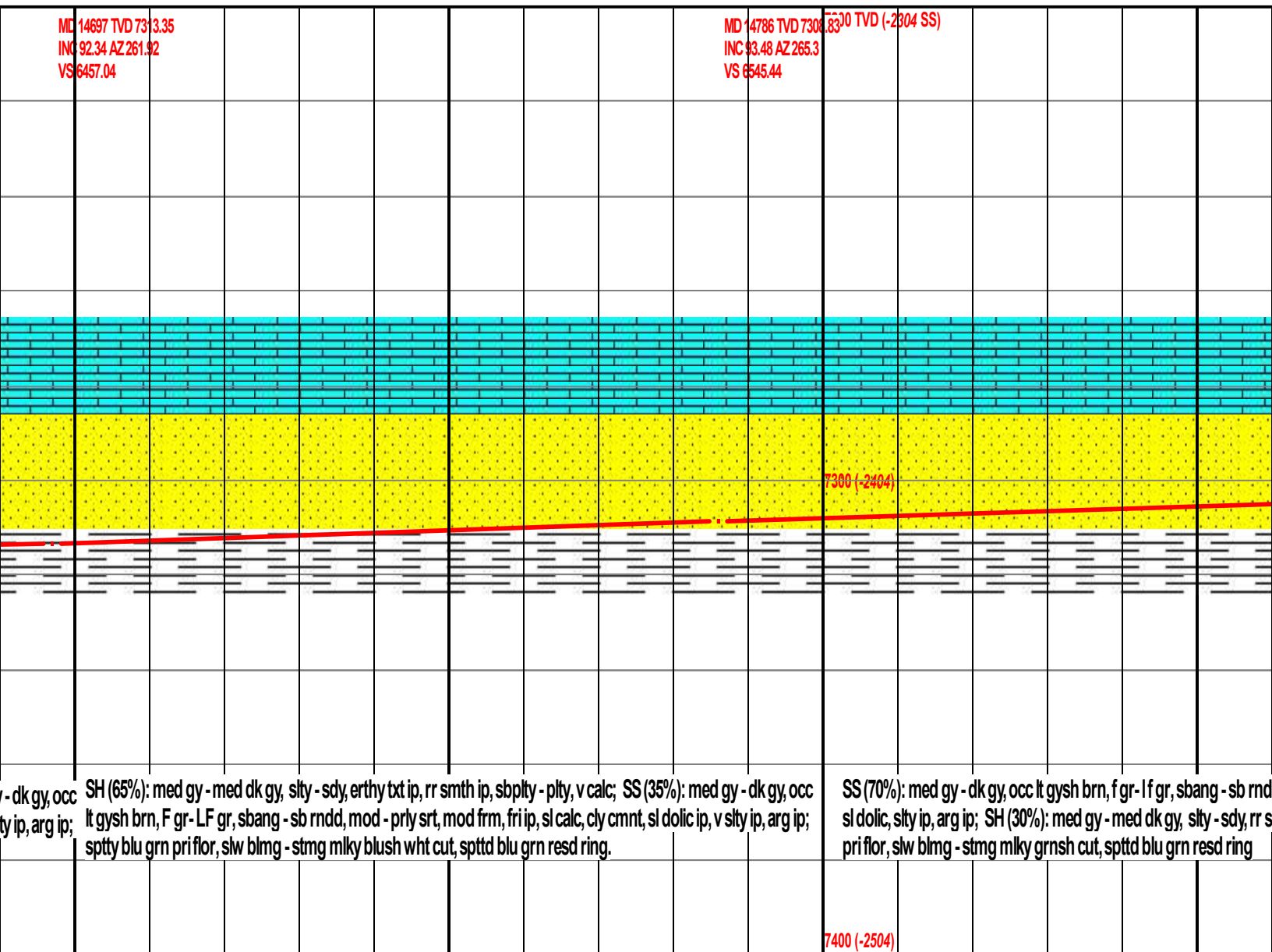


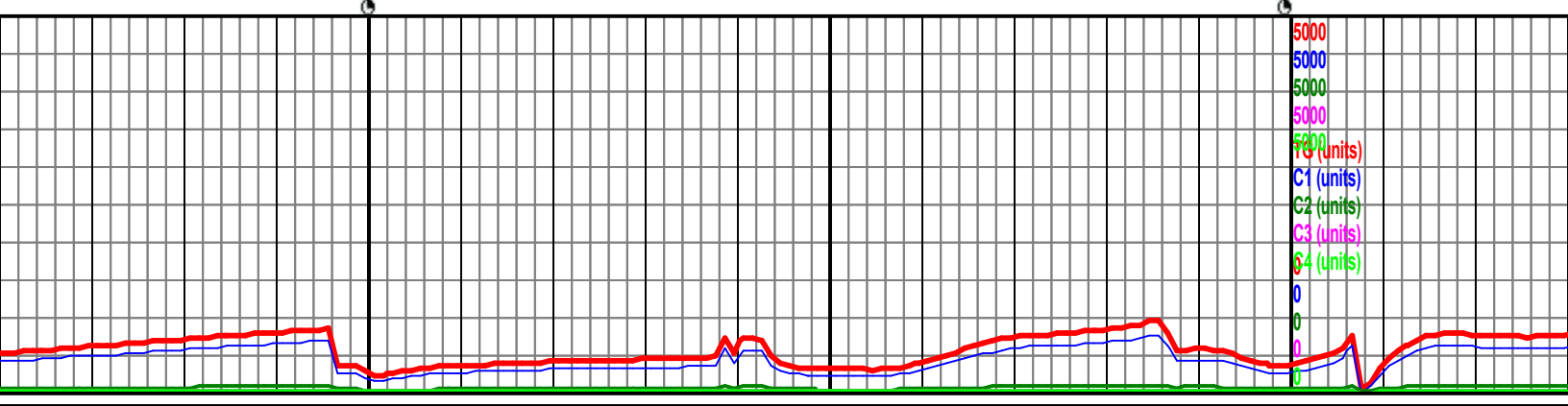
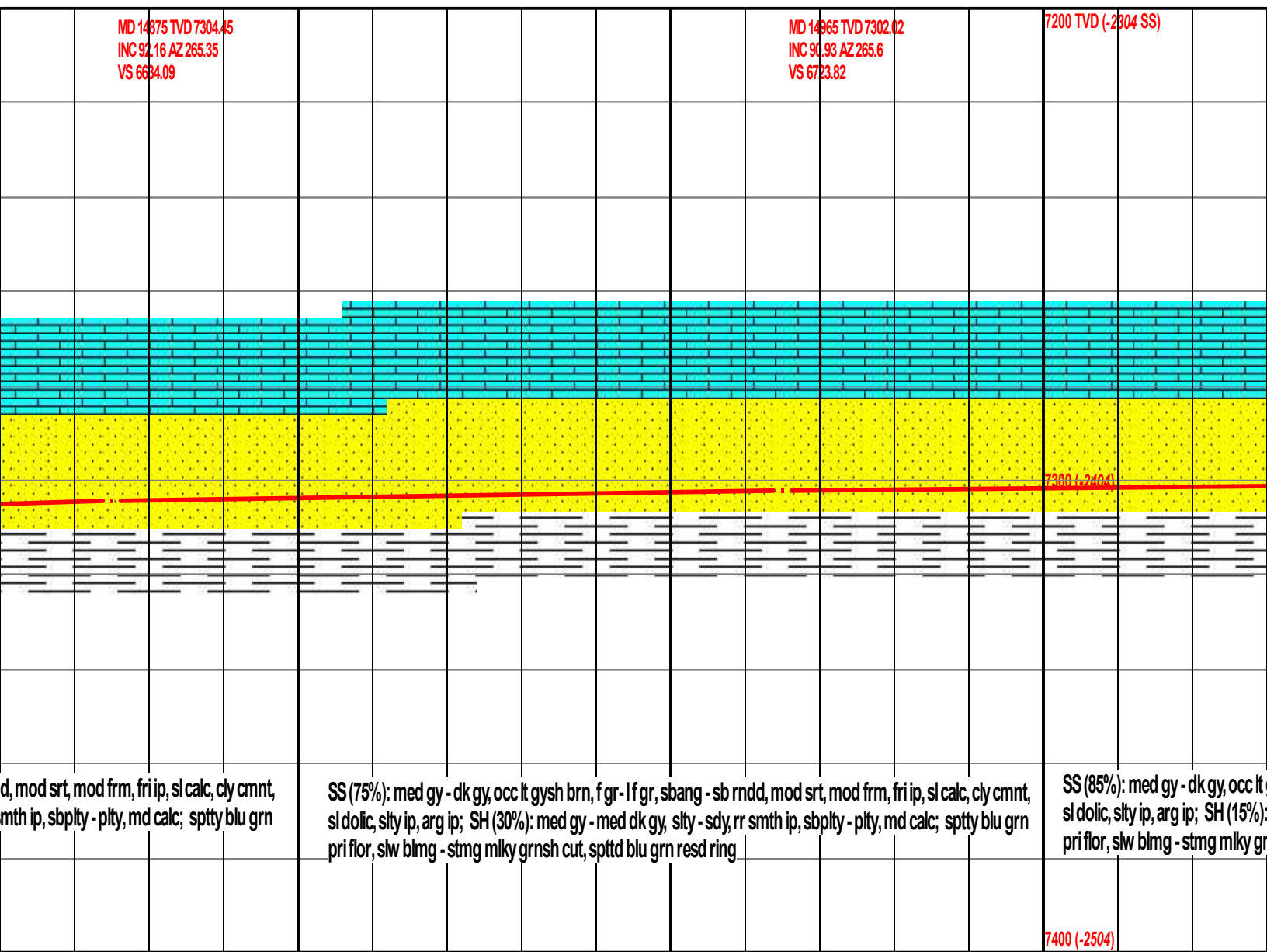
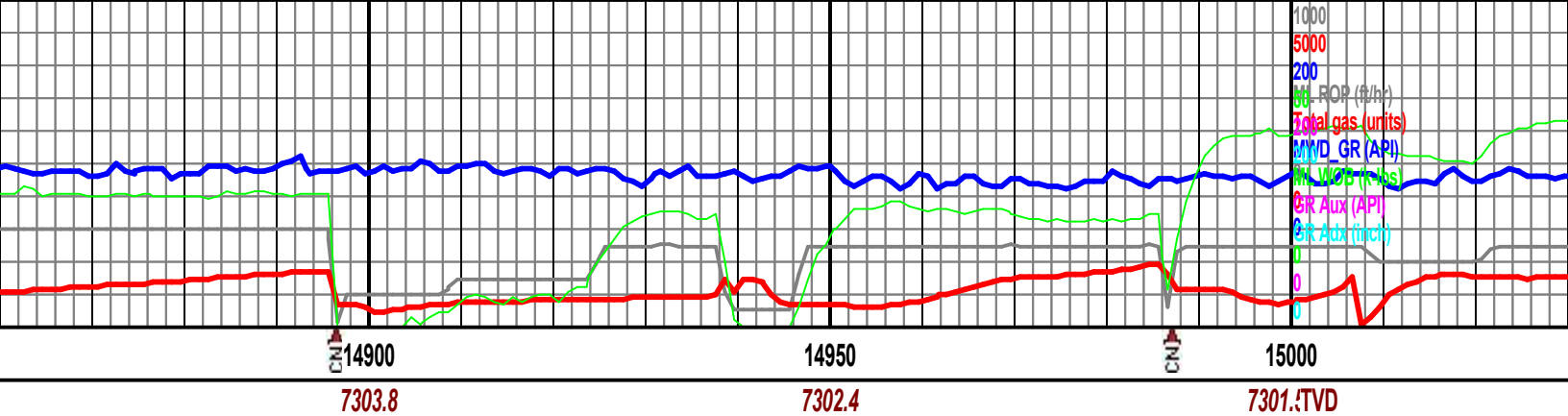
7319.(TVD) 7318.8 7317.8

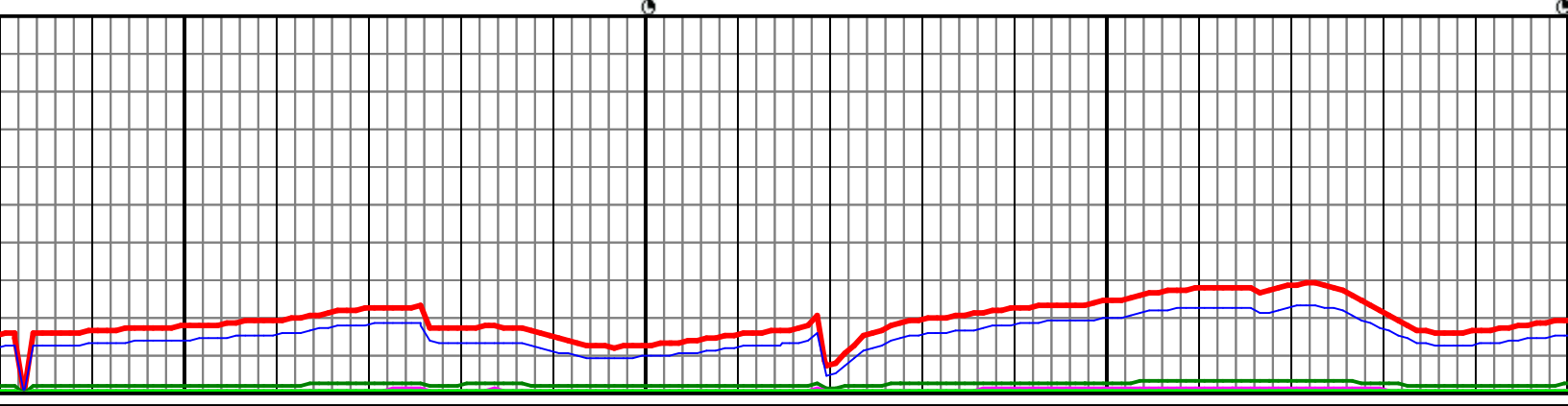
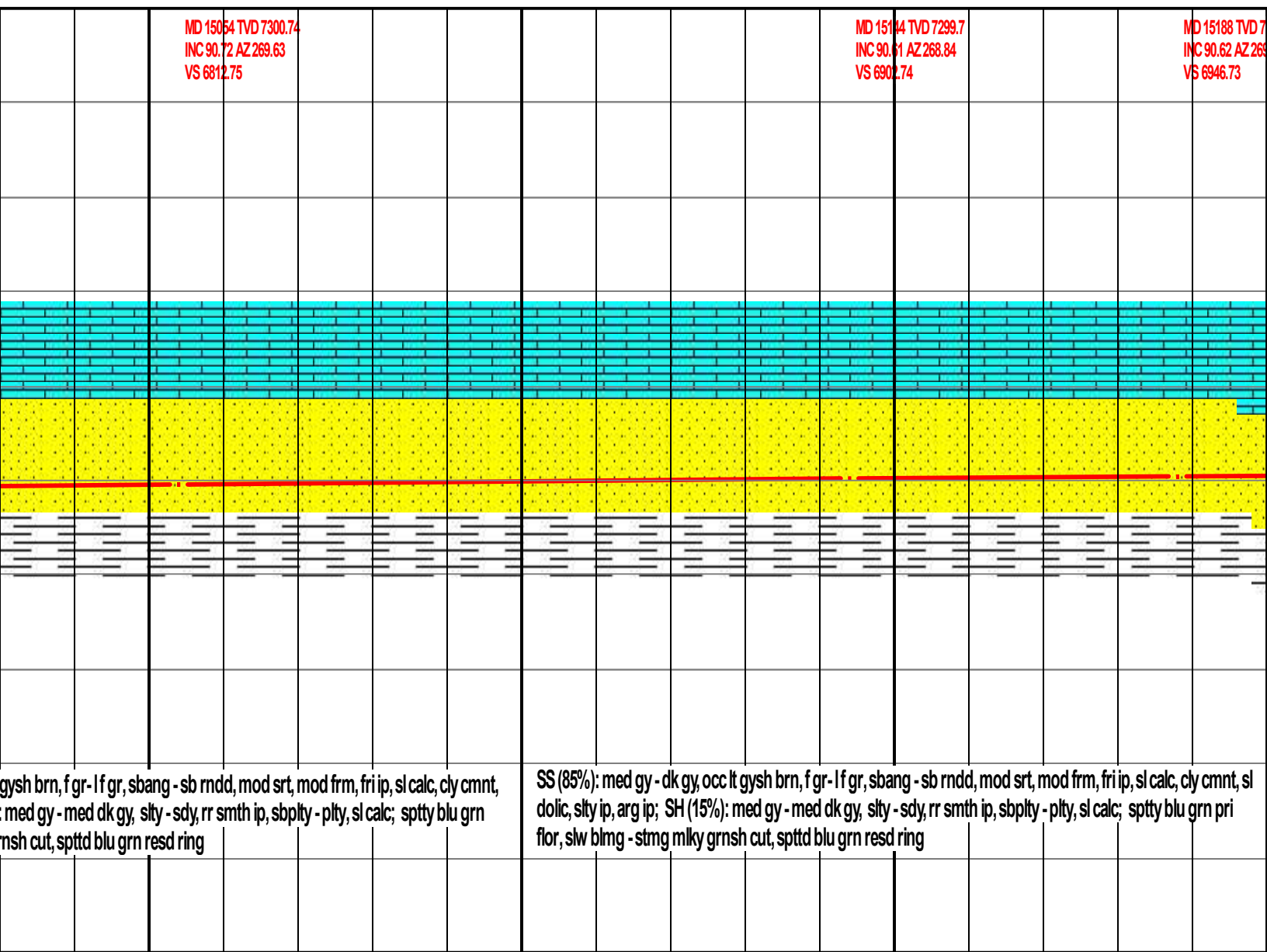
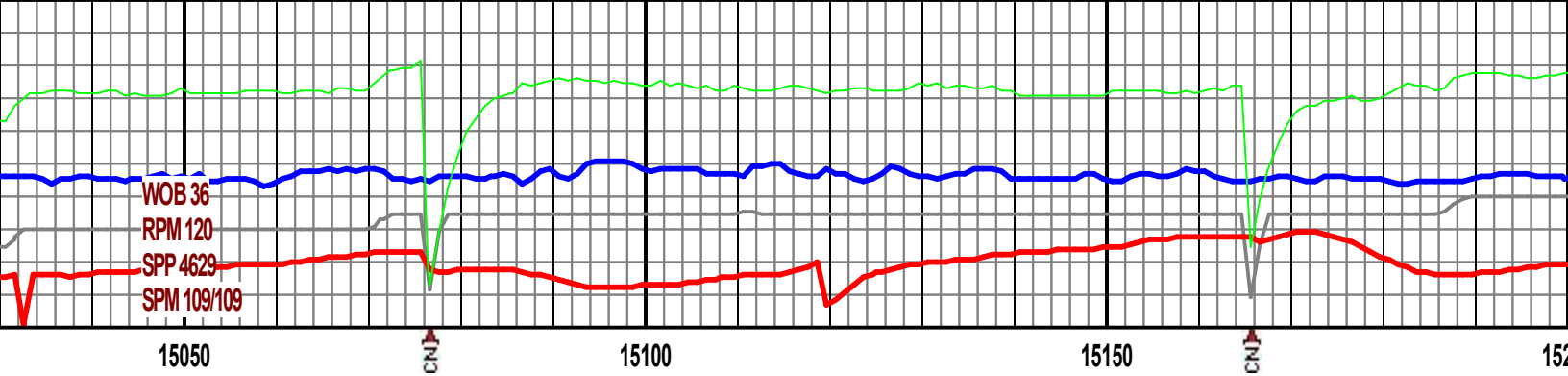


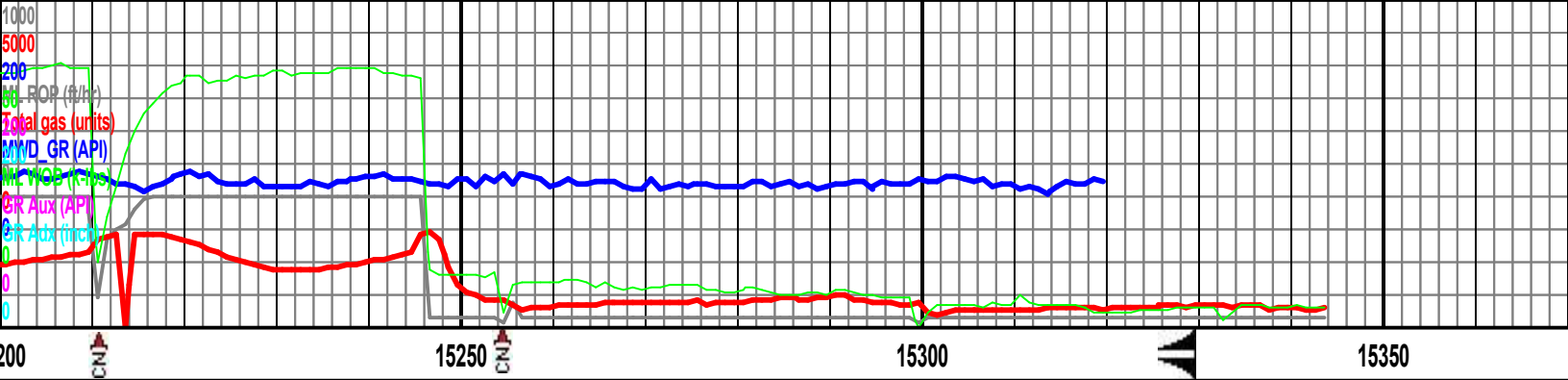








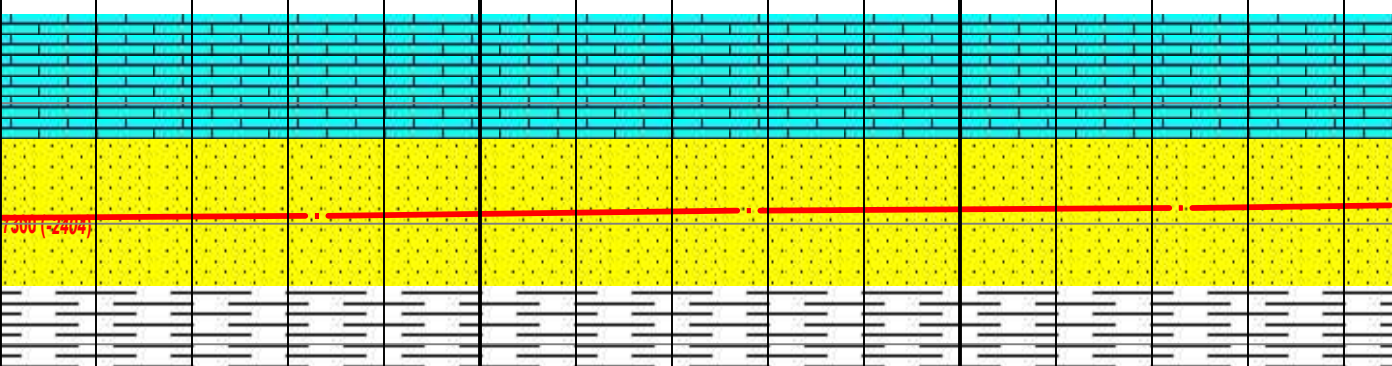




MD 15233 TVD 7298.63 INC 90.88 AZ 269.81 VS 6991.73	MD 15278 TVD 7297.94 INC 90.87 AZ 270.32 VS 7036.72	MD 15323 TVD 7297.26 INC 90.88 AZ 269.96 VS 7081.71	BIT #3, 8.5", SMITH, PDC, J Steerable Directional BHA, 15,346' on 06/08/19, drilled 1
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Reached DMTD @ 15,346'  
June 08, 2019.

Final Survey is Projected to Bit



Formation Top's

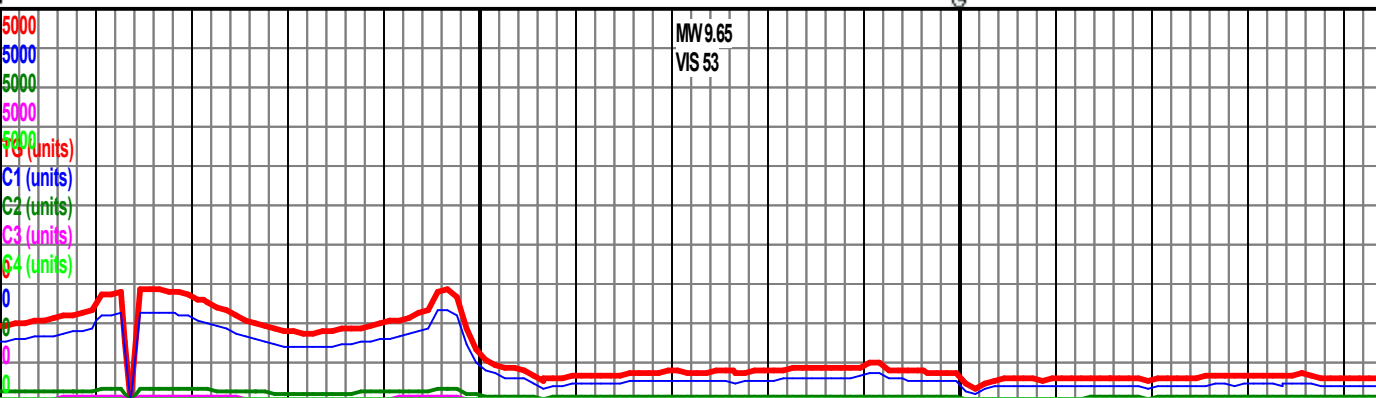
MD

Sharon Springs  
Niobrara A Chalk  
Niobrara B Chalk  
Niobrara C Chalk  
Ft Hays  
Codell  
Target Heel  
Target Toe

SS (85%): med gy - dk gy, occ lt gysh brn, f gr - lf gr, sbang - sb rndd, mod srt, mod frm, fri ip, sl calc, cly cmnt, sl dolc, slty ip, arg ip; SH (15%): med gy - med dk gy, slty - sdy, rr smth ip, sbply - ply, sl calc; sppty blu grn pri flor, slw blmg - stmg mlky grnsh cut, spttd blu grn resd ring.

SS (85%): med gy - dk gy, occ lt gysh brn, f gr - lf gr, sbang - sb rndd, mod srt, mod frm, fri ip, sl calc, cly cmnt, sl dolc, slty ip, arg ip; SH (15%): med gy - med dk gy, slty - sdy, rr smth ip, sbply - ply, sl calc; sppty blu grn pri flor, slw blmg - stmg mlky grnsh cut, spttd blu grn resd ring.

Thank  
Goolsb



MW 9.65  
VIS 53

TV

6 MD		

TVD	SSD	
7136'	7018'	-2122'
7115'	7052'	-2156'
7338'	7180'	-2284'
7432'	7242'	-2346'
7628'	7332'	-2436'
7703'	7353'	-2457'
7952'	7372'	-2476'
15,346'	7297'	-2401'

SSD

You		
Brothers & Assoc. Inc		

A large rectangular grid consisting of 20 columns and 15 rows of small squares, intended for drawing a picture.