

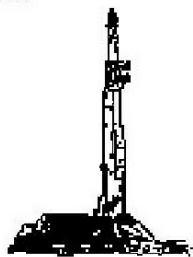
# **GOOLSBY BROTHERS** and associates, inc.

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



Geological Wellsite  
Supervision

[www.goolsbybrothers.com](http://www.goolsbybrothers.com)



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

Well Name: Troudt 40C-23-M-23B-M

API: 051234624300

Location: NE/NW Section 27, T6N R66W, Weld County, CO.

License Number:

Spud Date: Sep 12, 2018

Region: Wattenberg

Drilling Completed: Sep 15, 2018

Surface Coordinates: 760 FNL 1745 FWL NE/NW Sec. 27 T6N R66W

Lat/Long: 40.464592 N/-104.767099 W

Bottom Hole Planned: 332' FSL 510' FEL, Sec. 23, T6N R66W

Coordinates:

Ground Elevation (ft): 4,720'

K.B. Elevation (ft): 4,744'

Logged Interval (ft): 6,900' To: 15,058' Total Depth (ft): 15,058' DMTD

Formation: Codell Sand

Type of Drilling Fluid: OBM (LSND Surface).

Printed by HorizontalLog from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

## **OPERATOR**

Company: SRC Energy, Inc

Geologist: Nick Argis

Address: 1675 Broadway, Suite 2600

Denver, Colorado 80202

(720) 616-4300

## **GEOLOGIST**

Name: Blake Stacey & Tekabe Gedamu

Company: Goolsby Brothers & Assoc. (GBA), Inc. ([www.goolsbybrothers.com](http://www.goolsbybrothers.com))

Address: 575 Union Blvd. Suite 208,

Lakewood CO. 80228

Tel 303-618-7736

## **E-logs**

MWD GR from S.C. to 15,044' MD

## **Casing**

9 5/8" Surface Casing pre set @ 1,851' MD.

5 1/2" Production Liner set @ 15,042' on 9/16/2018.

## Comments

- 1) Drilling Contractor: Precision Drilling, Rig #562  
Pumps 1&2: Rostell F-1600 5" x 12" (.0692 Bbls./stroke)  
Toolpusher: John Martin Meyers, Tyson Westgard.
- 2) Company Man: Kent Priddy  
Kevin Brakovec  
Tim Jones  
Kalib Ford
- 3) Mud Comapny : Anchor USA  
Engineer: Joseph Wood, David Owen
- 4) Directional Drilling: Baker Hughes  
Drillers: Aaron Herskind, Joseph  
MWD: Doug Rusco, Baker Remote Field Operations.
- 5) Gas Equipment: Pason Gas Analyzer (Spectrometer)

## ROCK TYPES

	Bent		Dol		Mrlst_sh (intbdd)		Carb sh
	Cht		Lmst		Shale		Ss
	Clyst		Chalk		Shgy		Sltst
	Oil sat.		Mrlst		Silty sh		

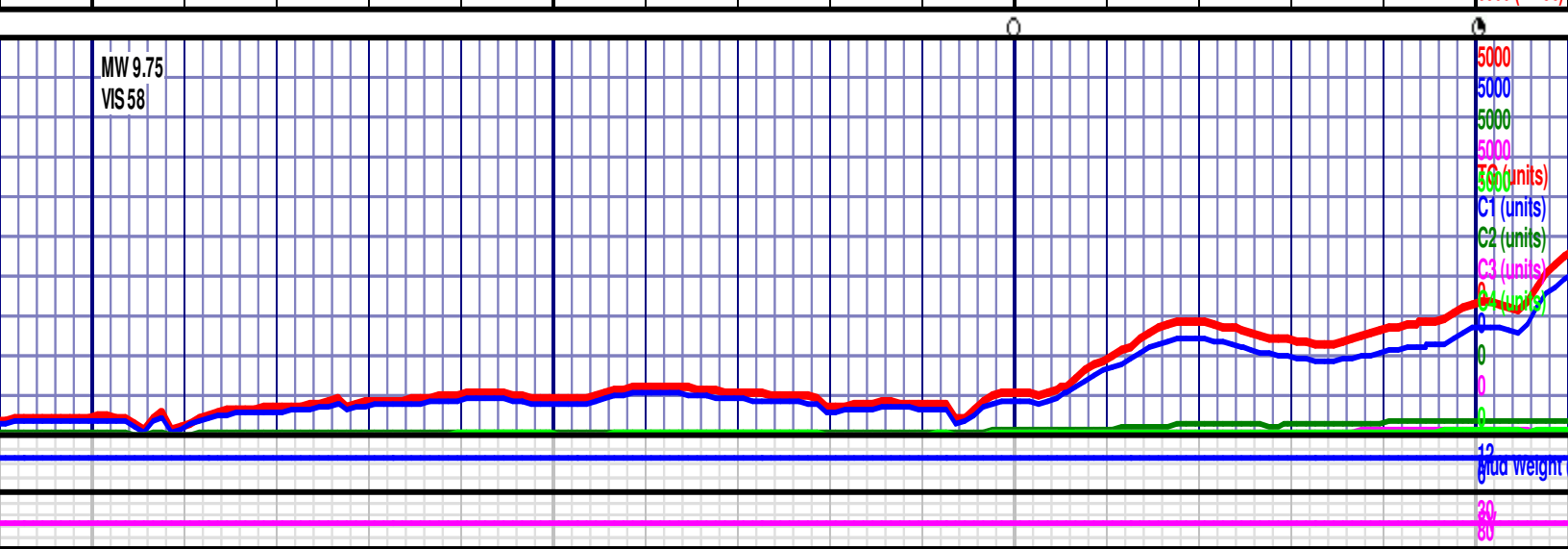
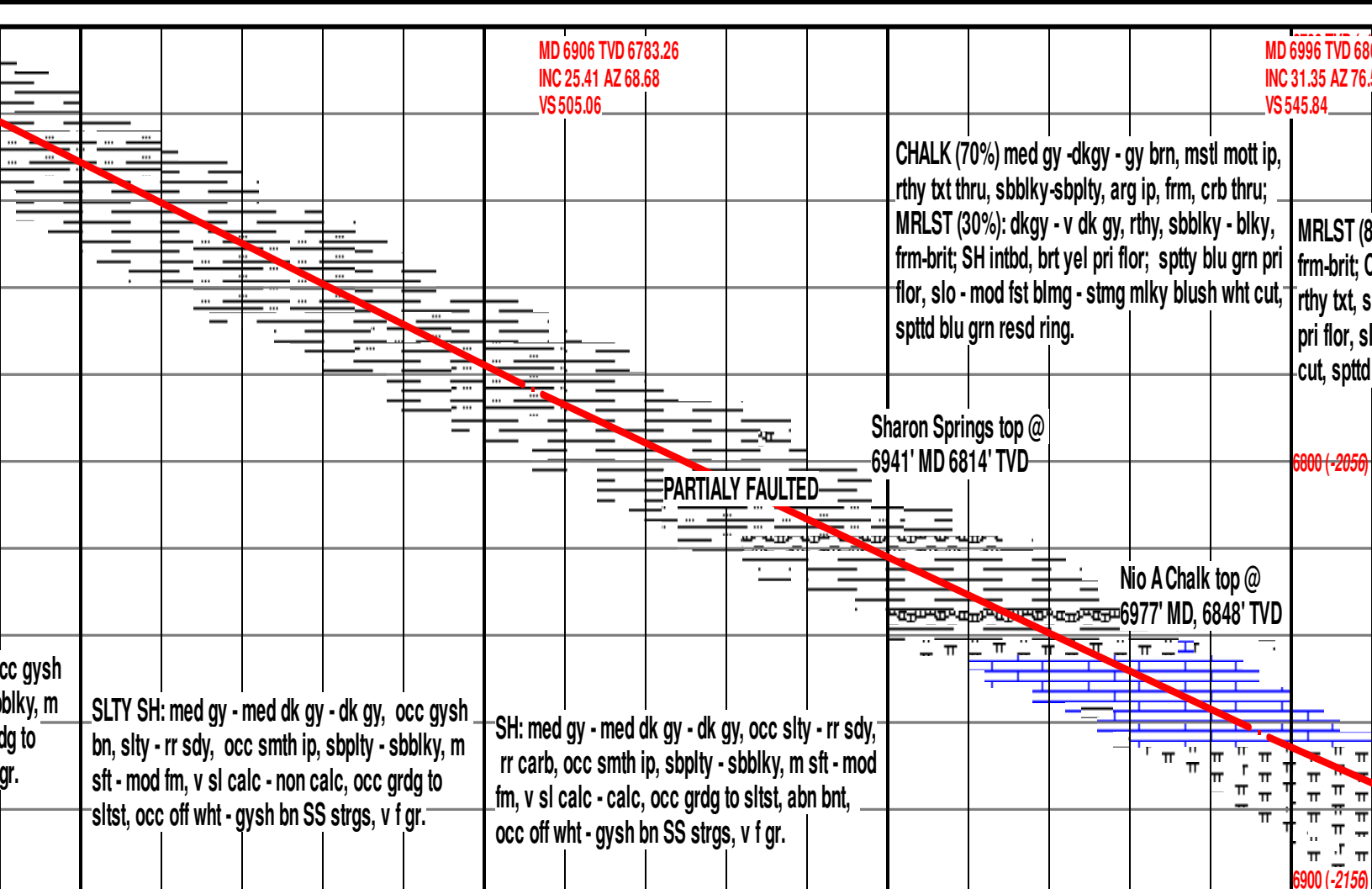
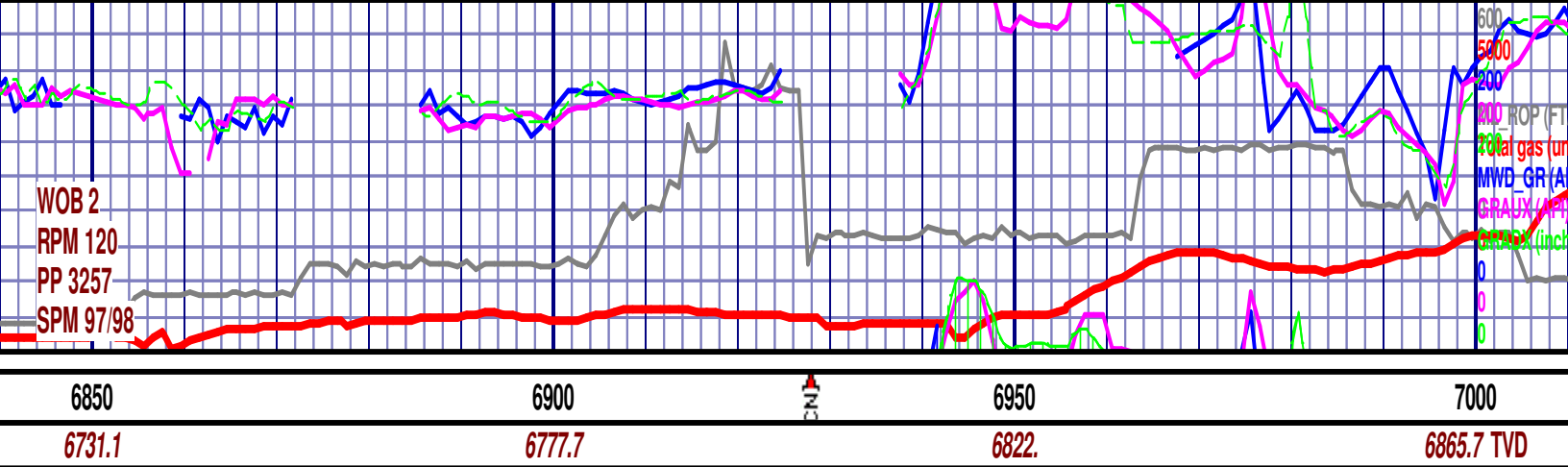
## ACCESSORIES

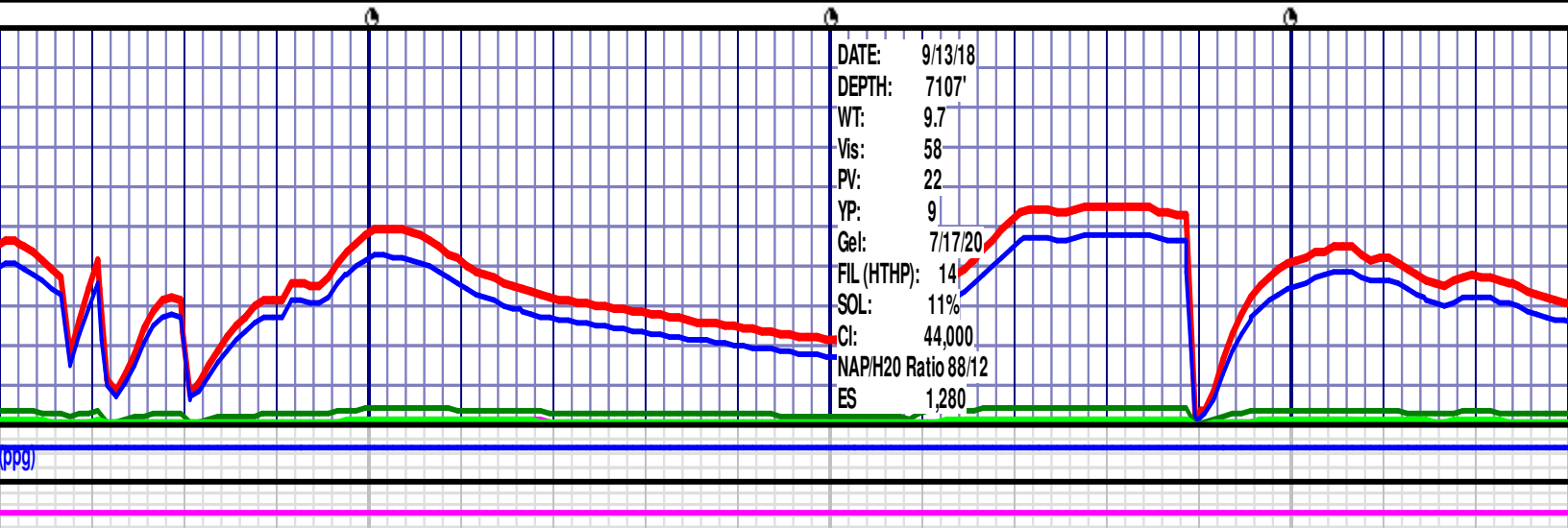
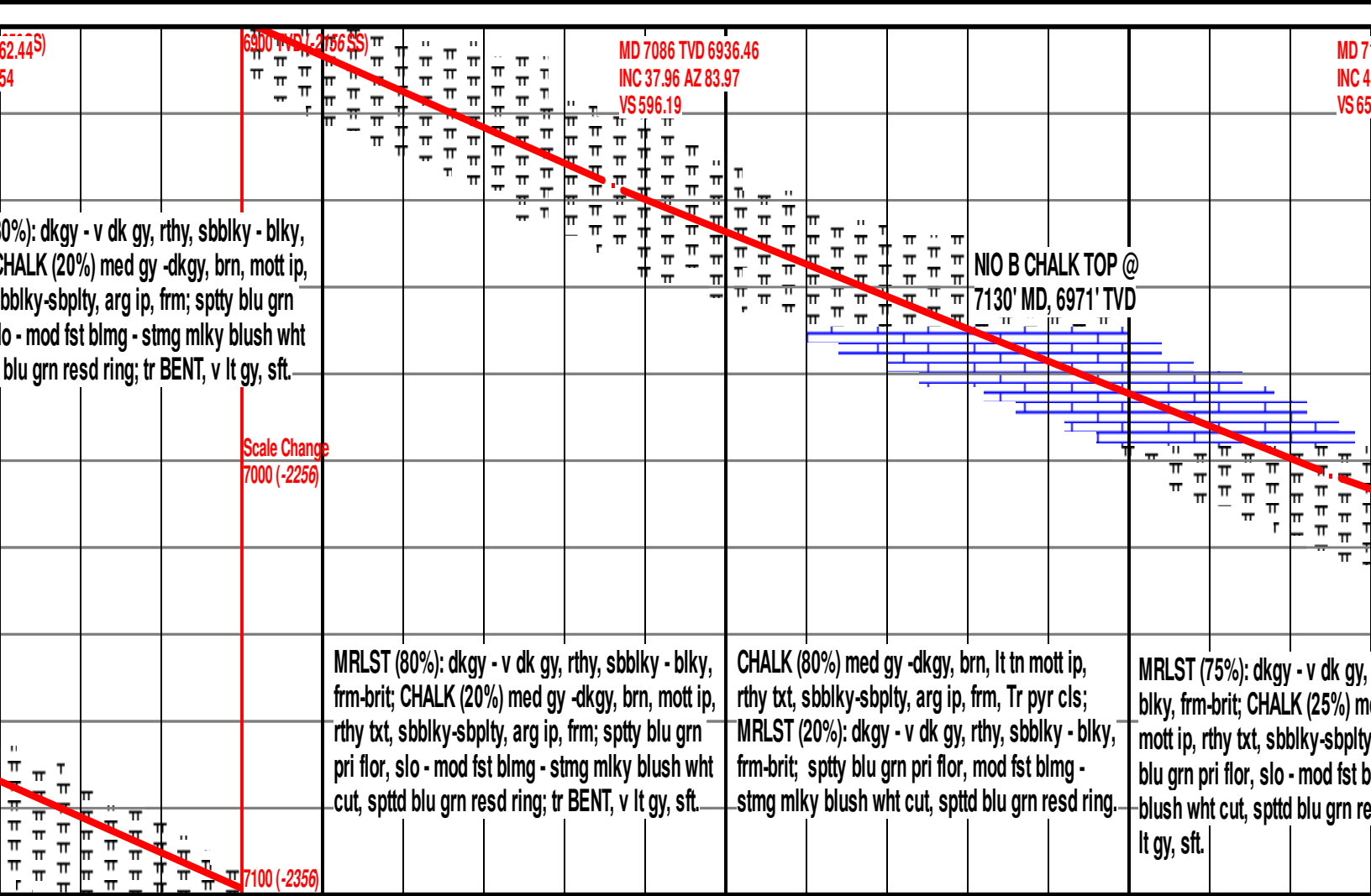
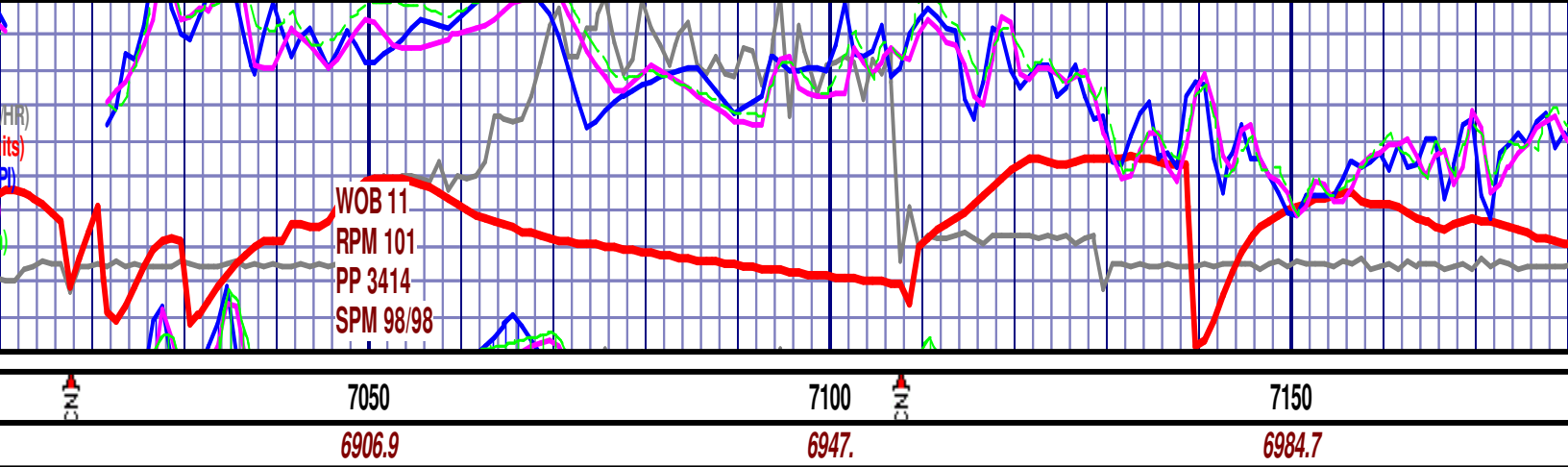
MINERAL							
	Anhy		Marl		Cephal		Bent
	Arggrn		Minxl		Coral		Dol
	Arg		Nodule		Crin		Ls
	Bent		Phos		Echin		Mrst
	Bit		Pyr		Fish		Sltstrg
	Brecfrag		Salt		Foram		Ssstrg
	Calc		Sandy		Fossil	TEXTURE	
	Carb		Silt		Gastro		Boundst
	Chtdk		Sil		Oolite		Chalky
	Chtlt		Sulphur		Ostra		Cryxln
	Dol		Tuff		Pelec		Earthy
	Feldspar	FOSSIL			Pellet		Finexln
	Ferrpel		Algae		Pisolite		Grainst
	Ferr		Amph		Plant		Lithogr
	Glau		Belm		Strom		Microxln
	Gyp		Bioclst	STRINGER			Mudst
	Hvymin		Brach		Chlkstg		Packst
	Kaol		Bryozoa		Arg		Wackest

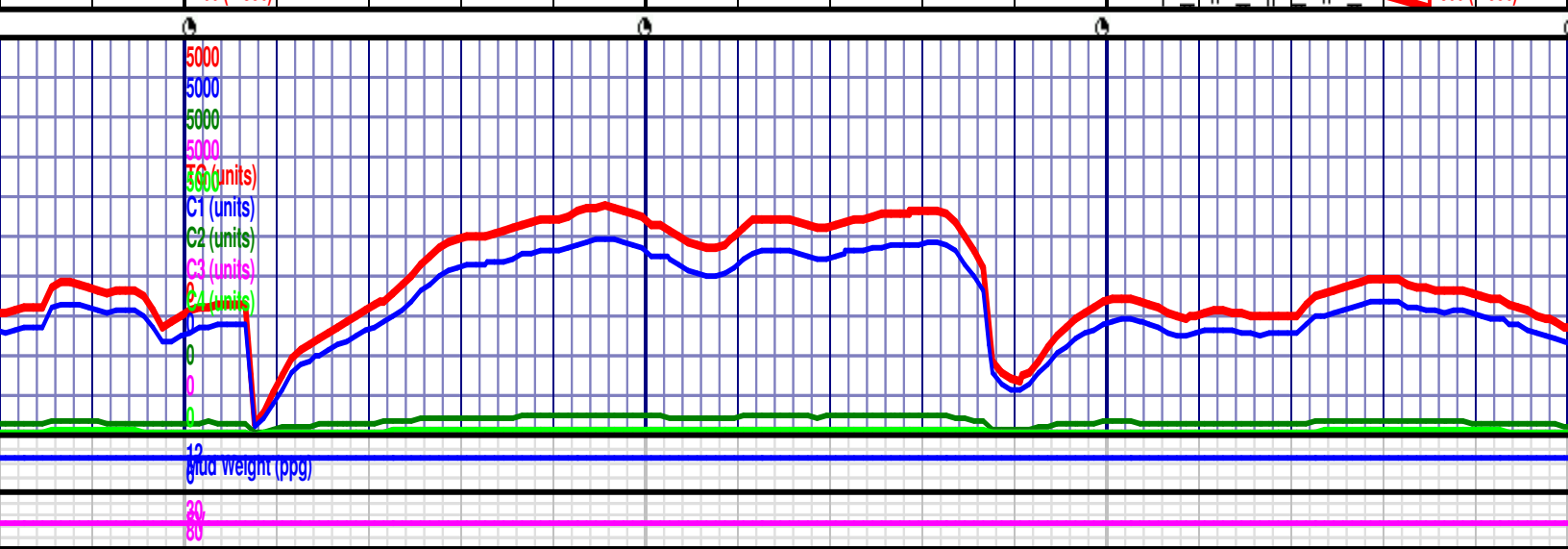
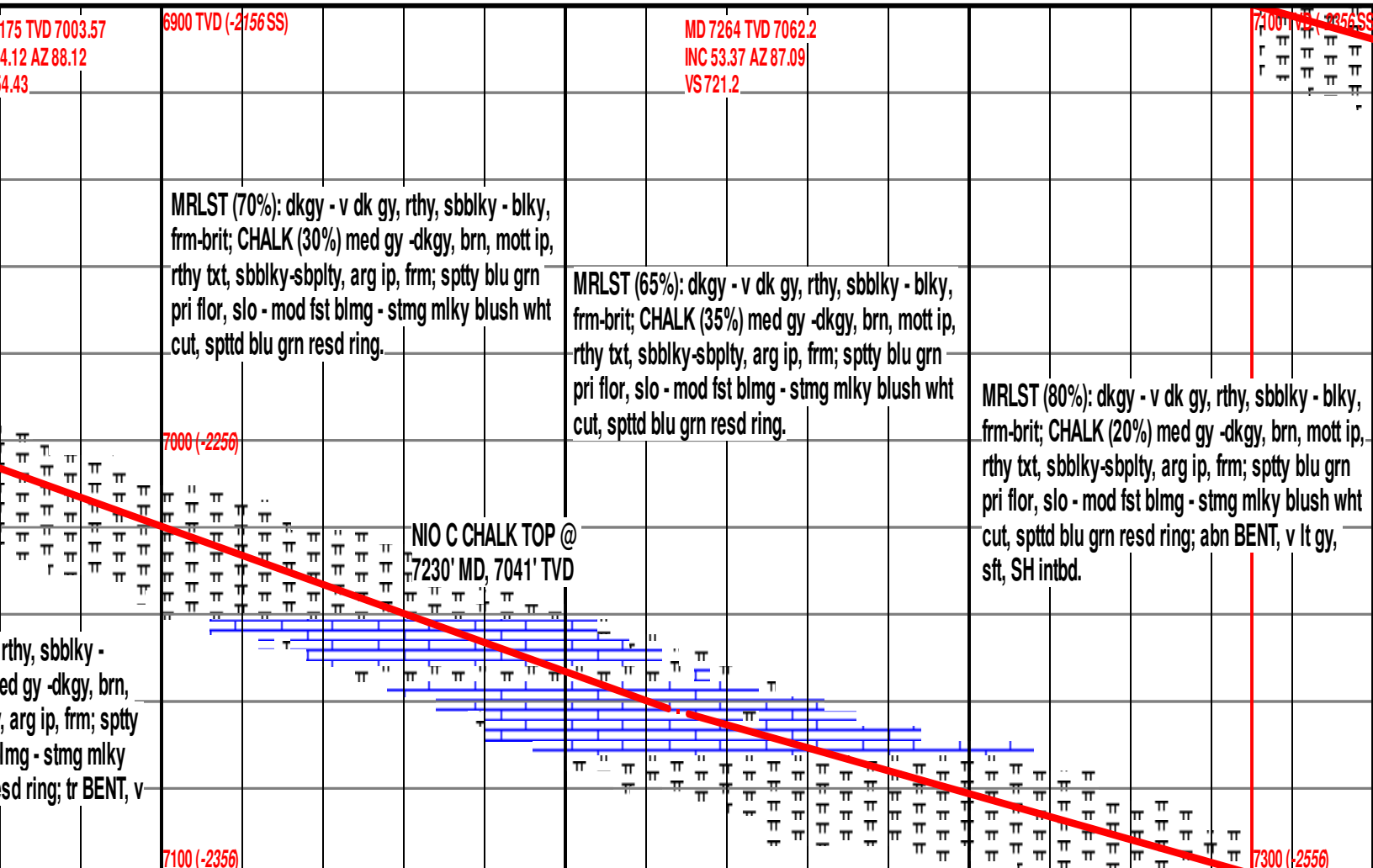
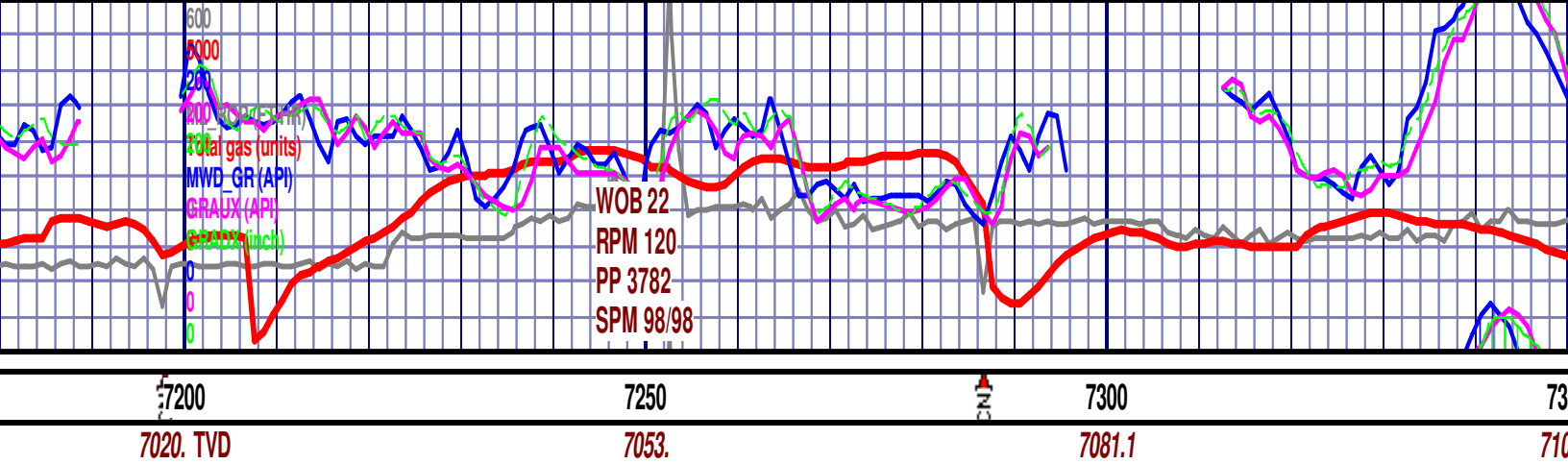
## OTHER SYMBOLS

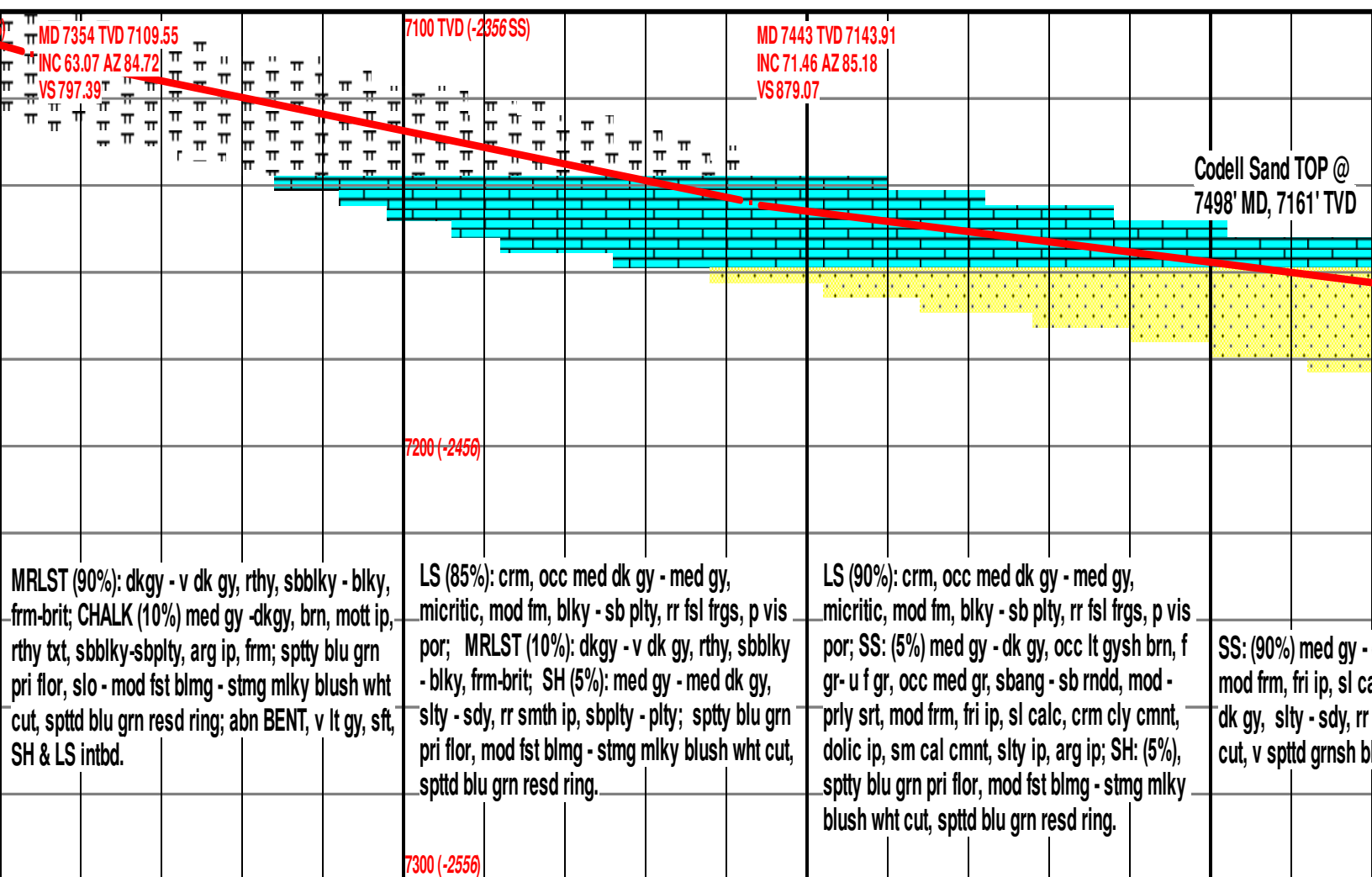
OIL SHOWS		POROSITY TYPE					
	Even		Earthy		Pinpoint		Angular
	Spotted		Fenest		Vuggy	SORTING	
	Ques		Fracture	ROUNDING			Well
	Dead		Inter		Rounded		Moderate
	Vspotty		Moldic		Subrnd		Poor
	near even		Organic		Subang		

Mud Weight	12	12
FV	80	80

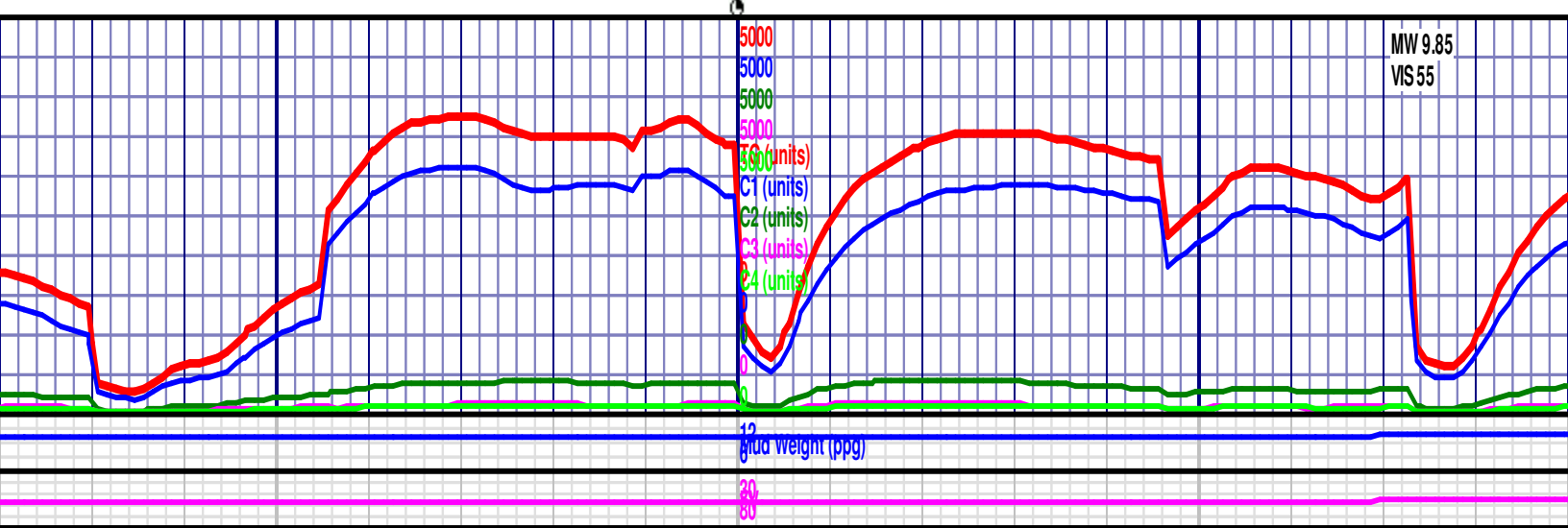
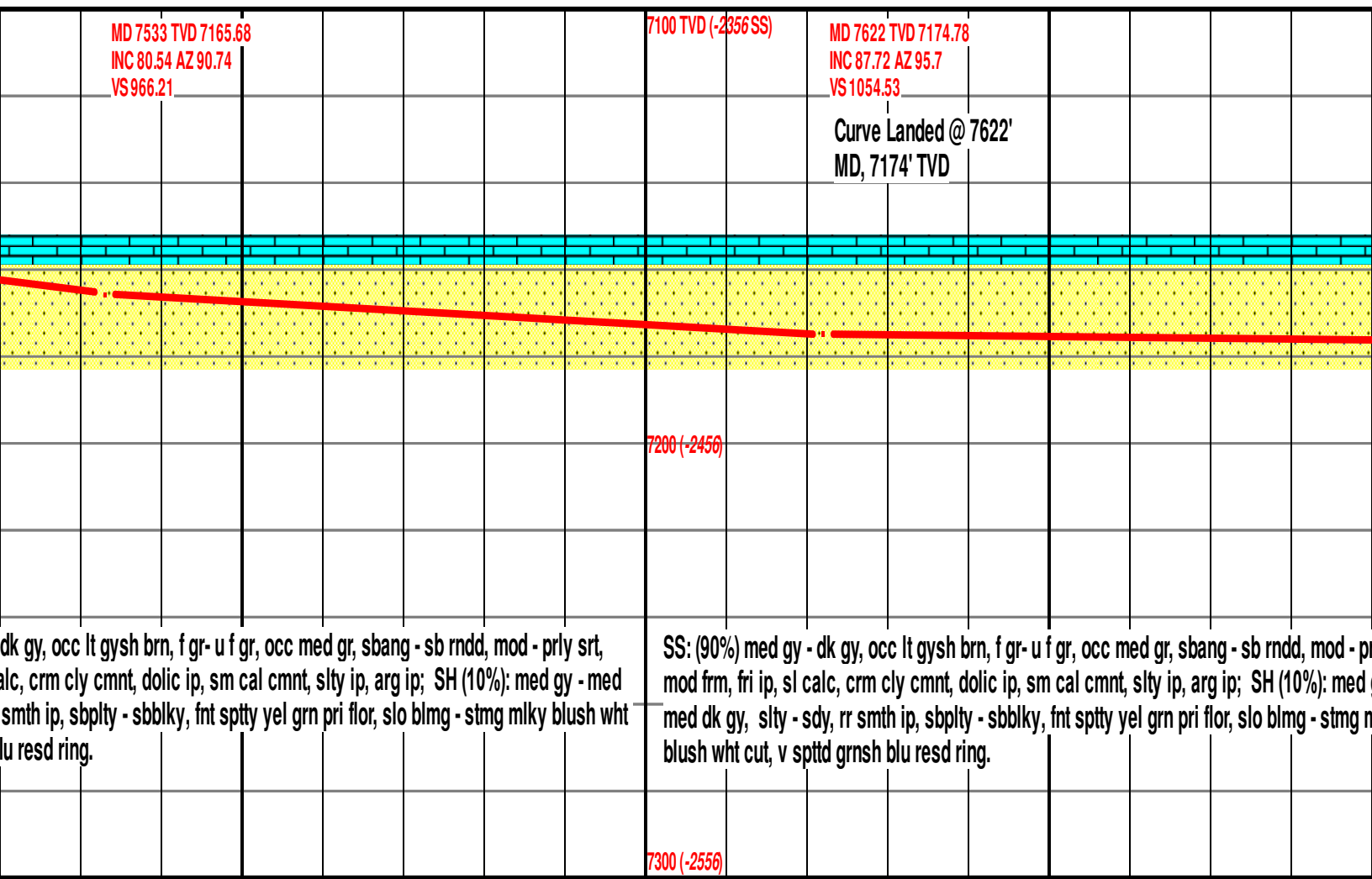
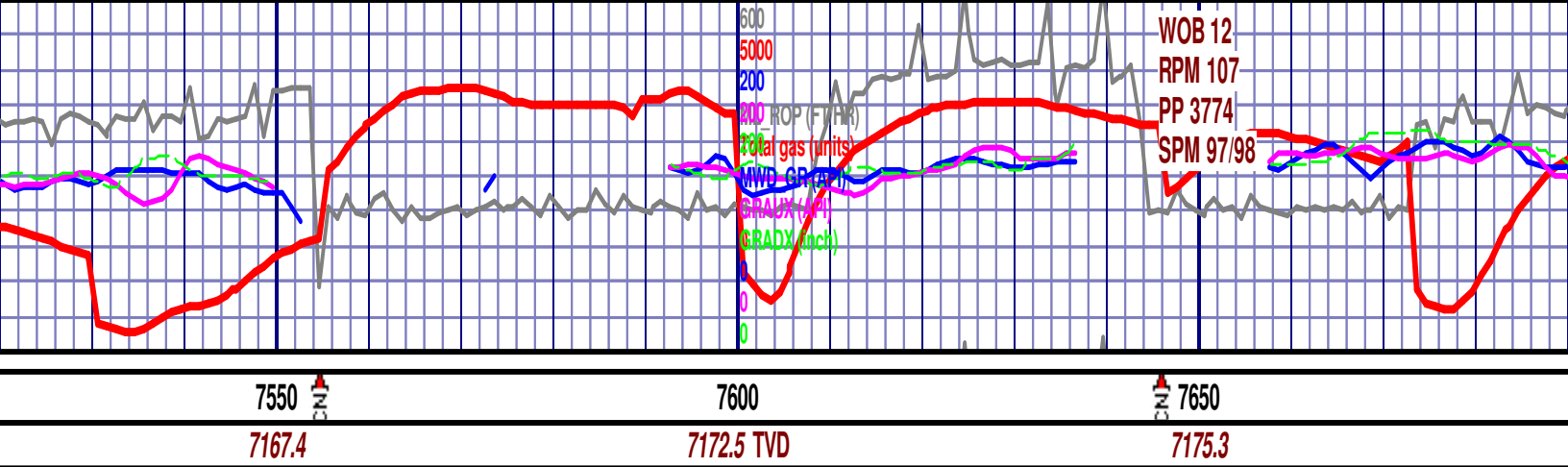




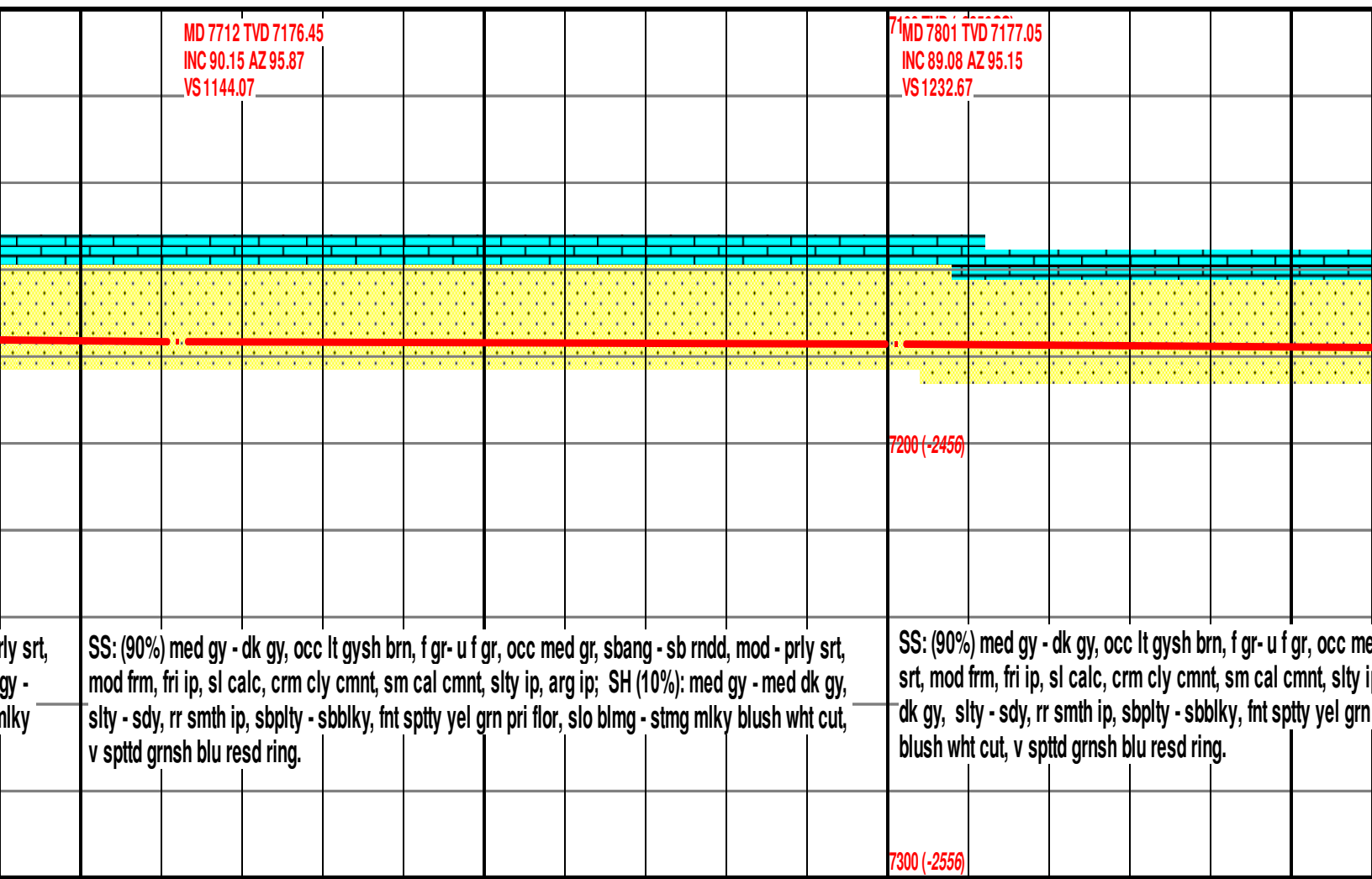
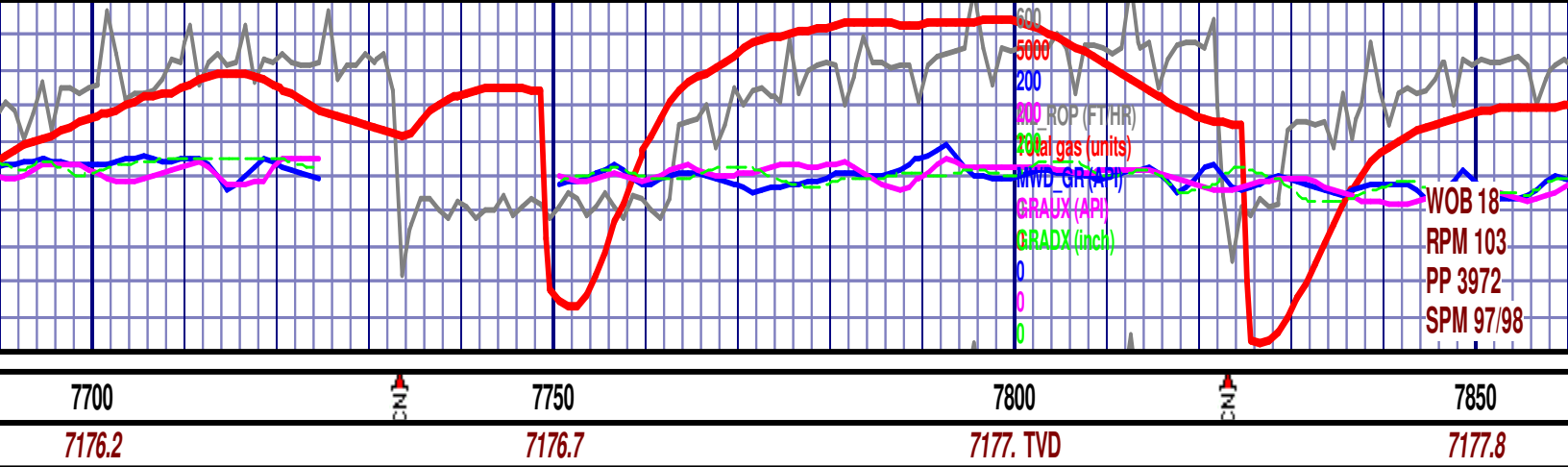






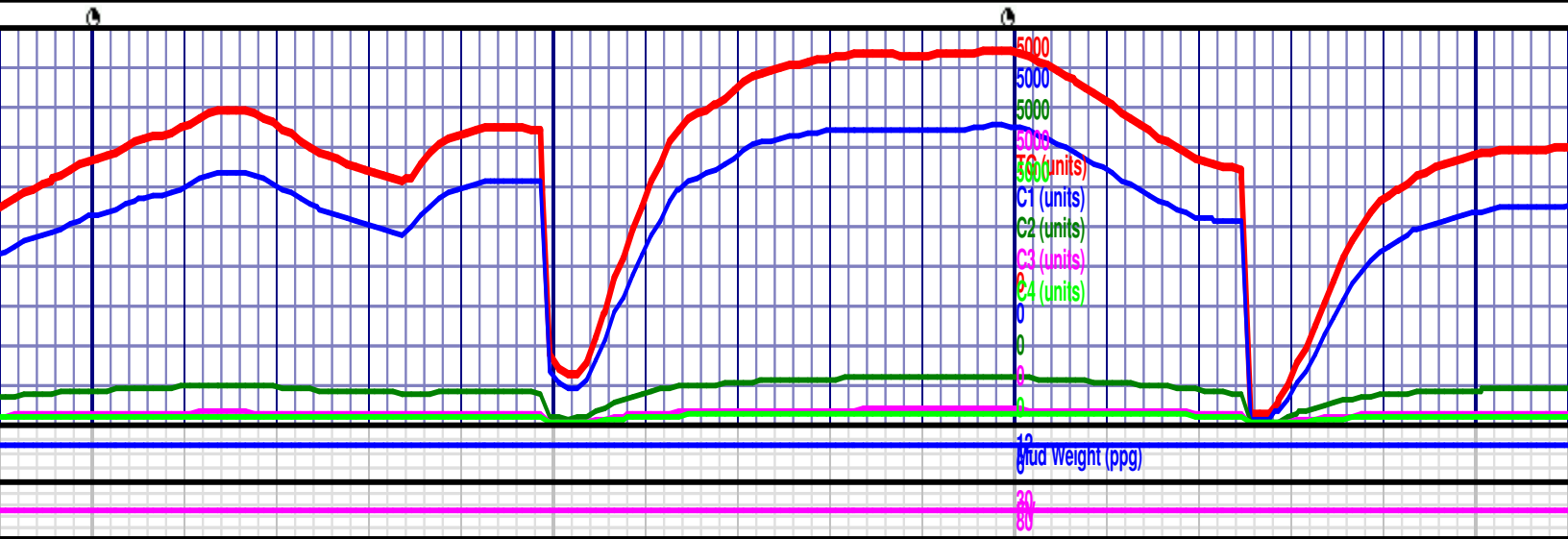


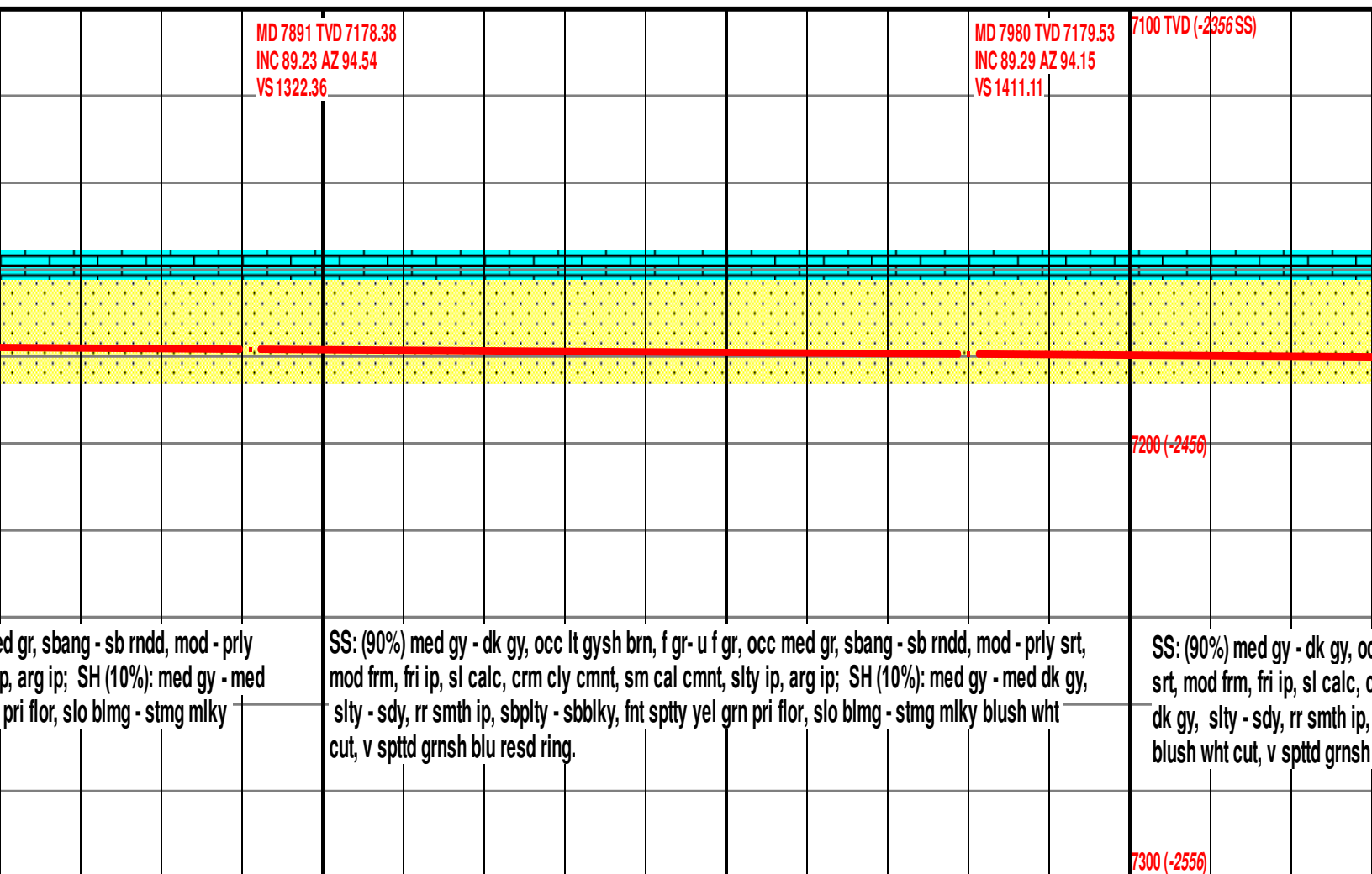


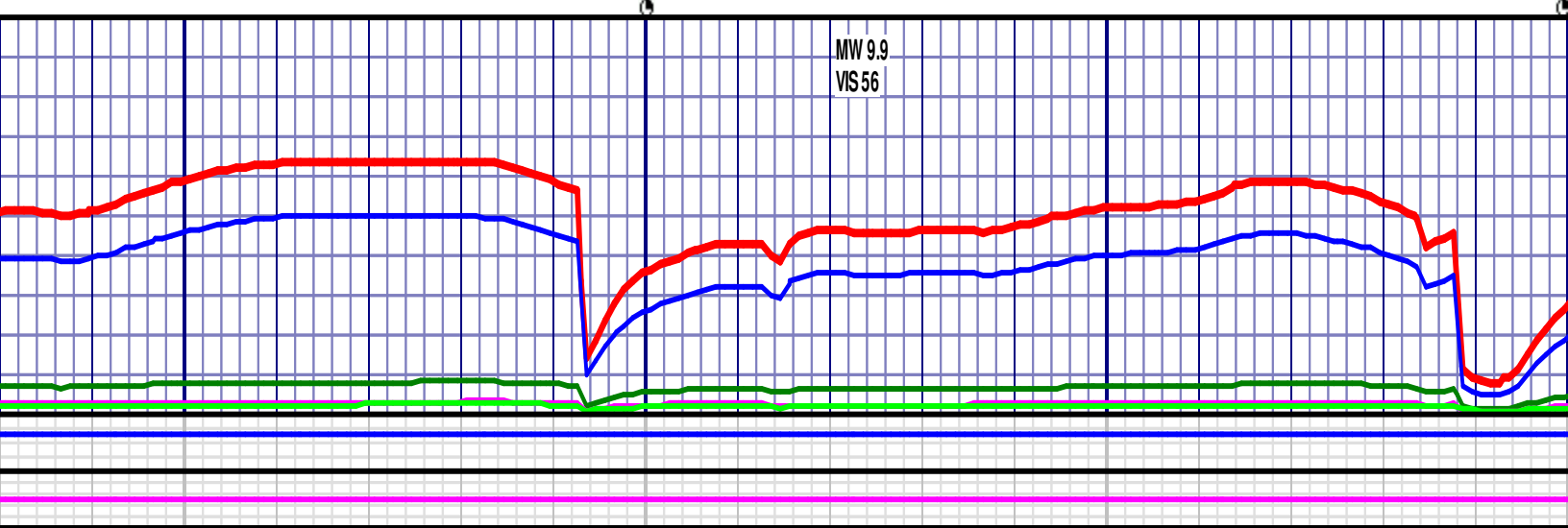
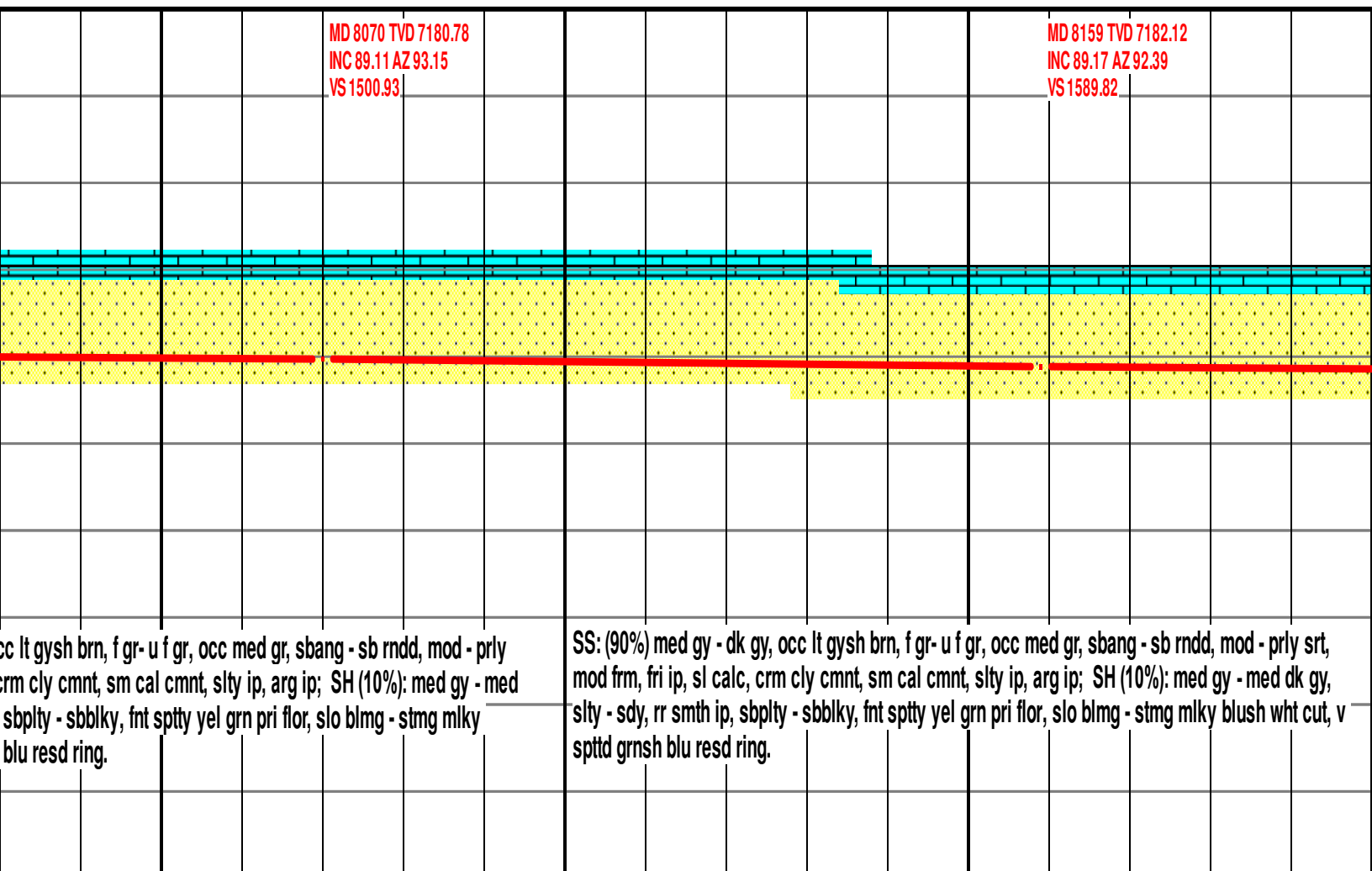
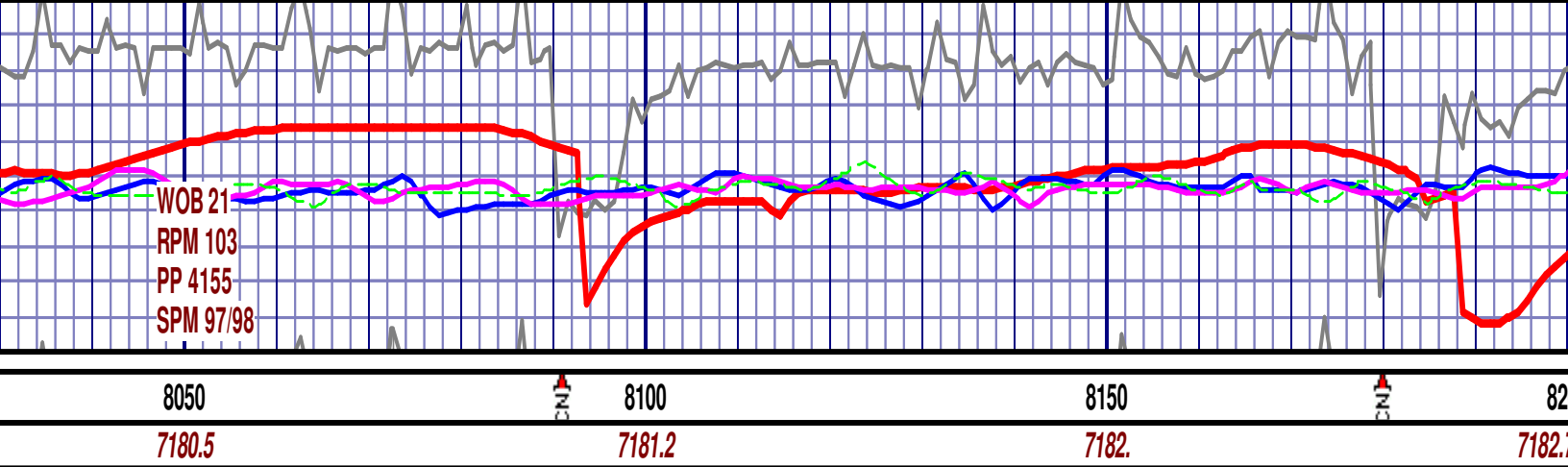


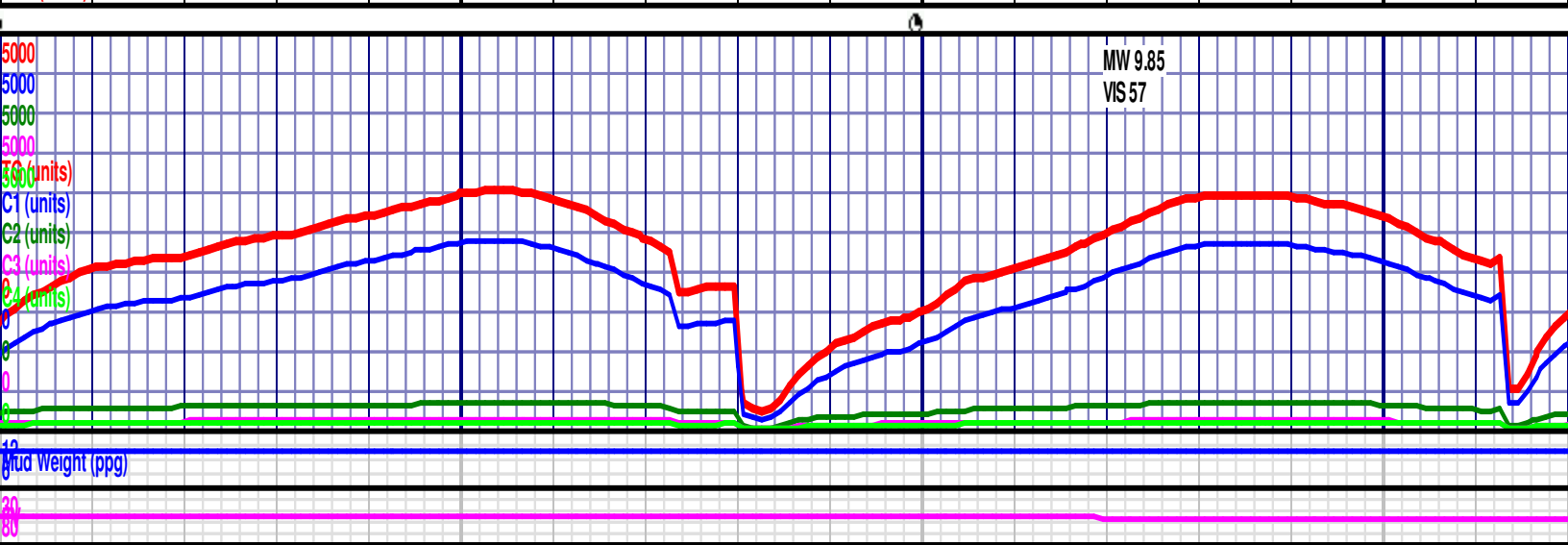
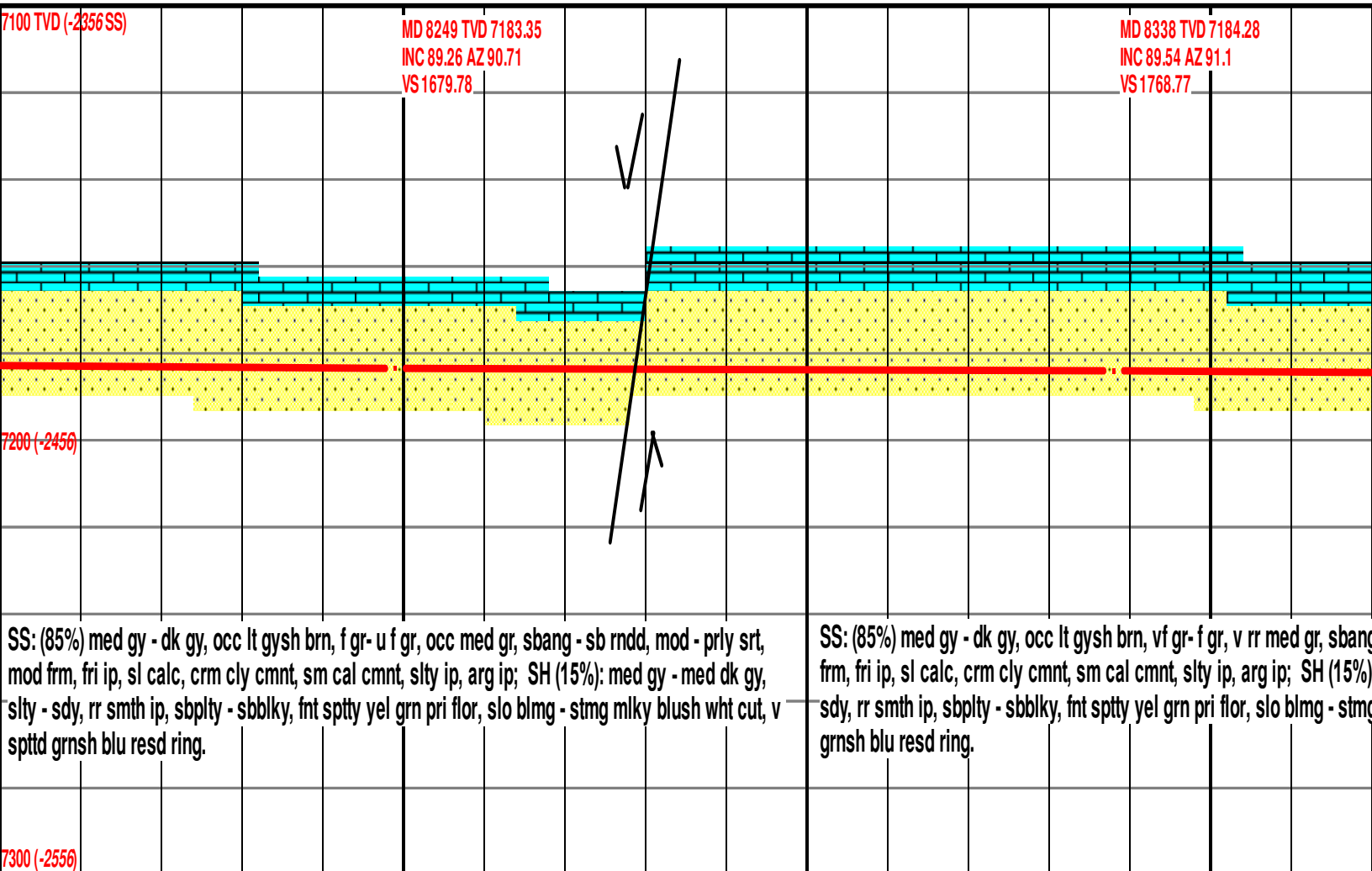
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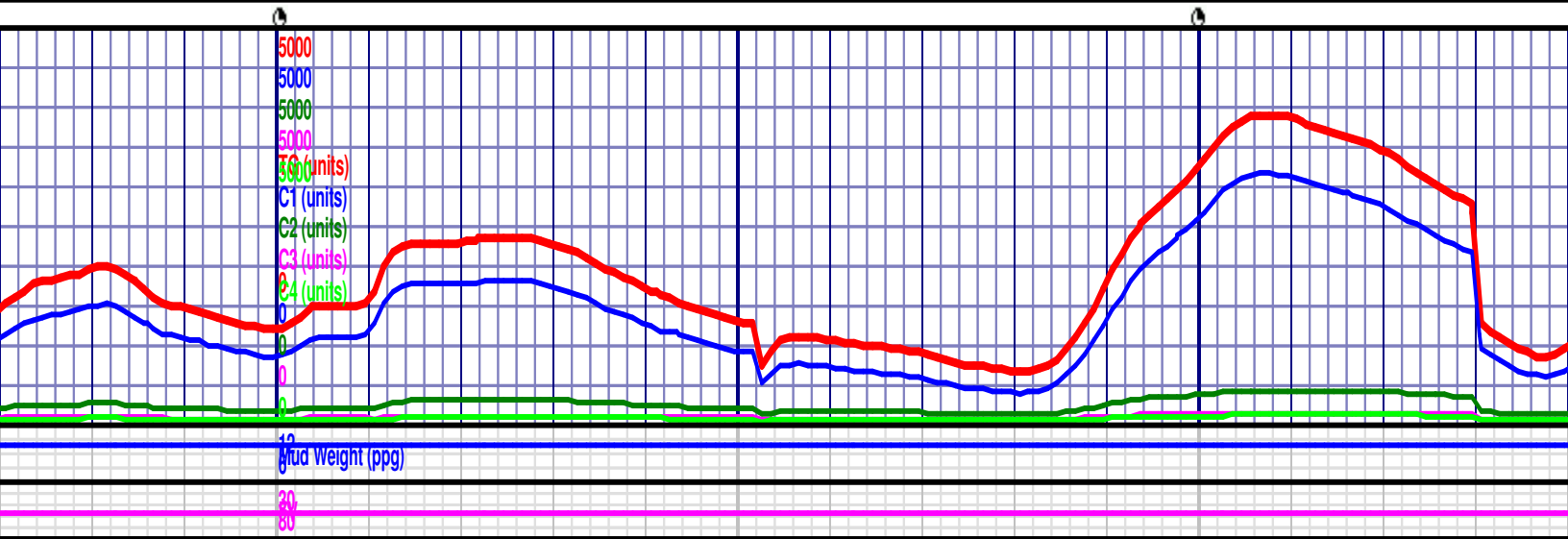
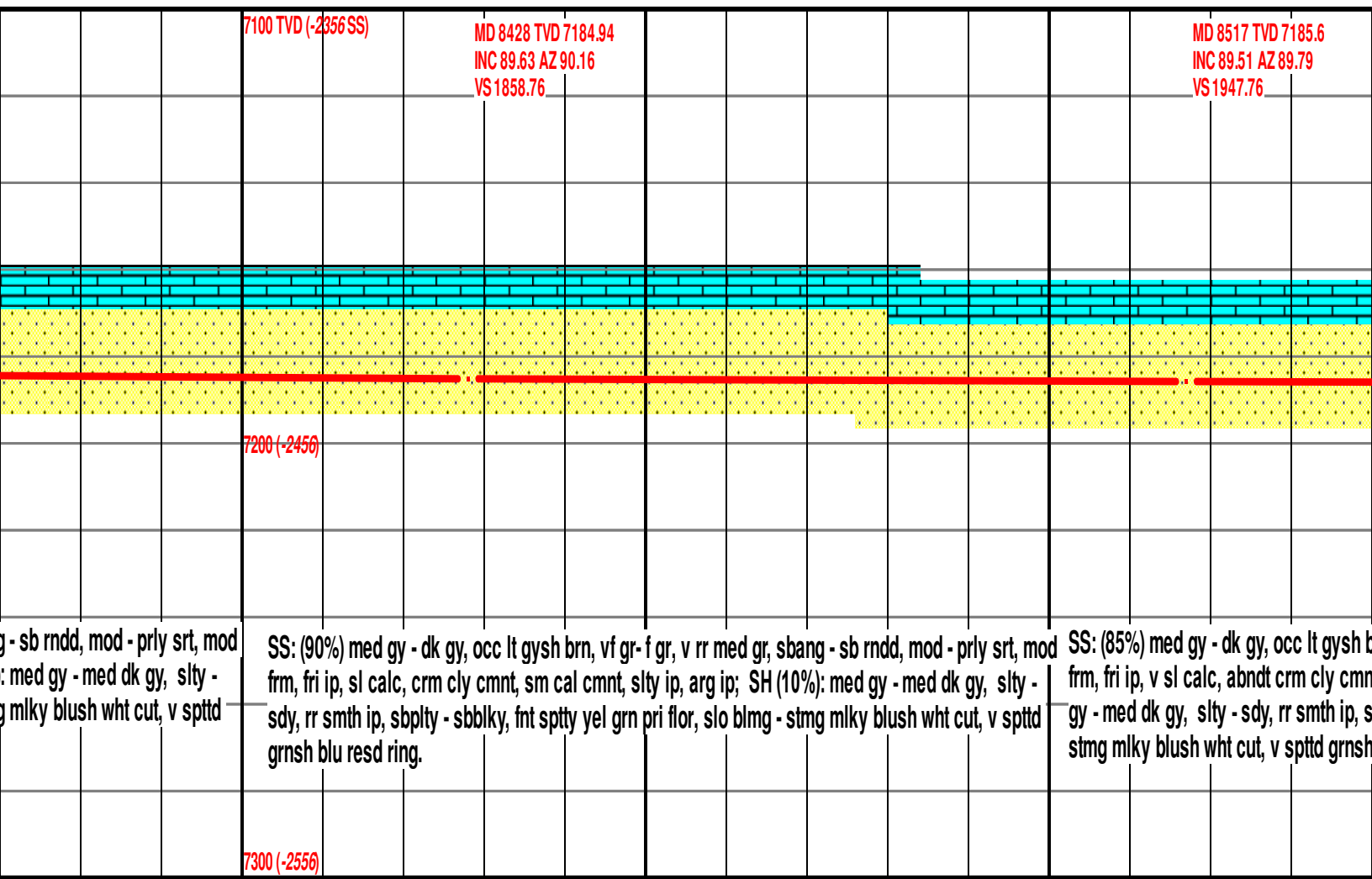
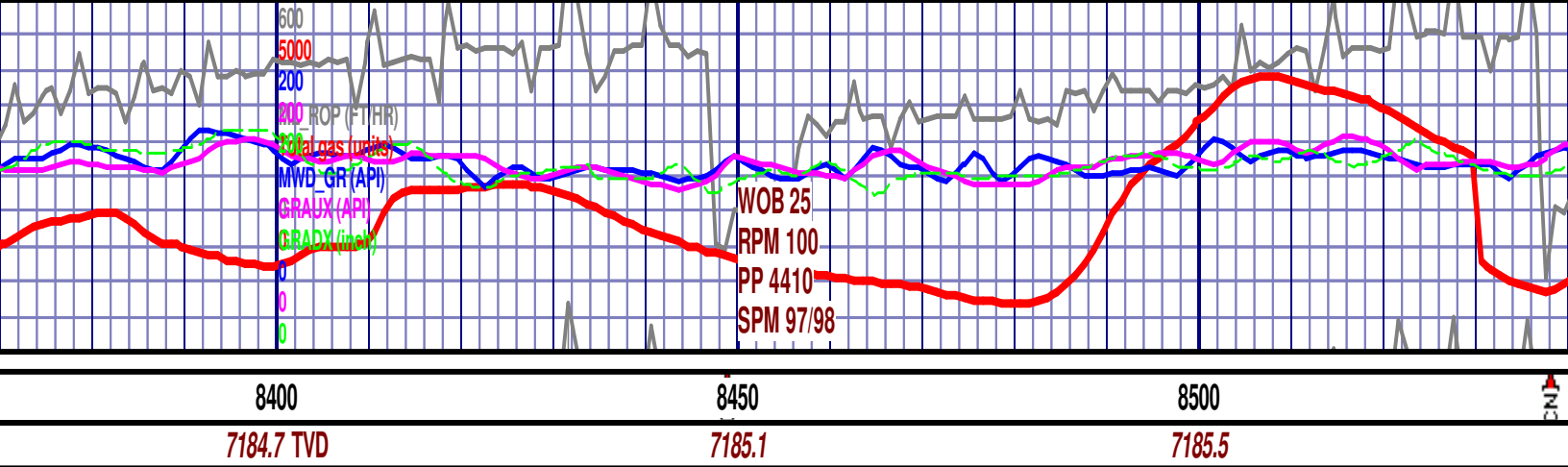
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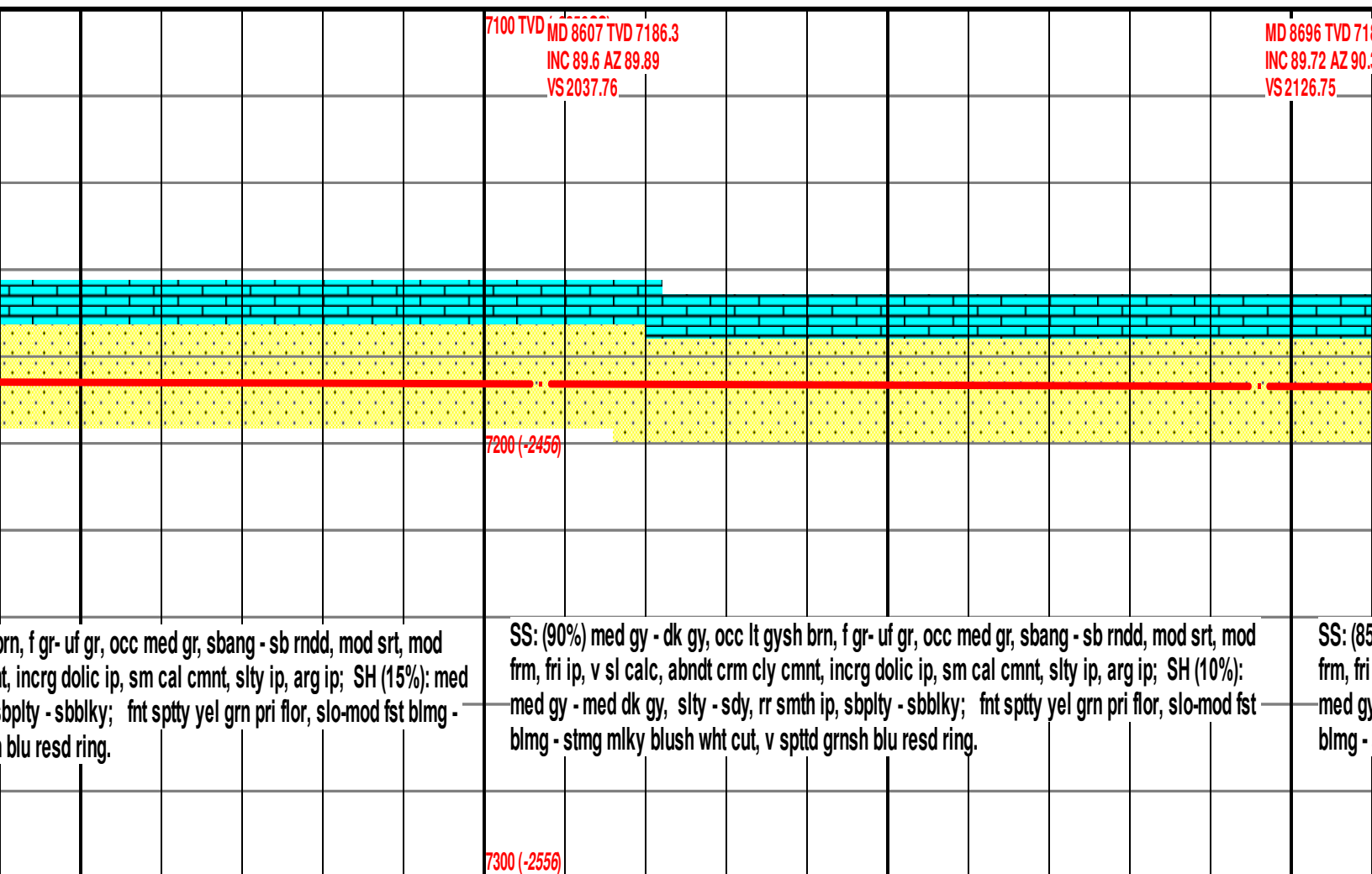


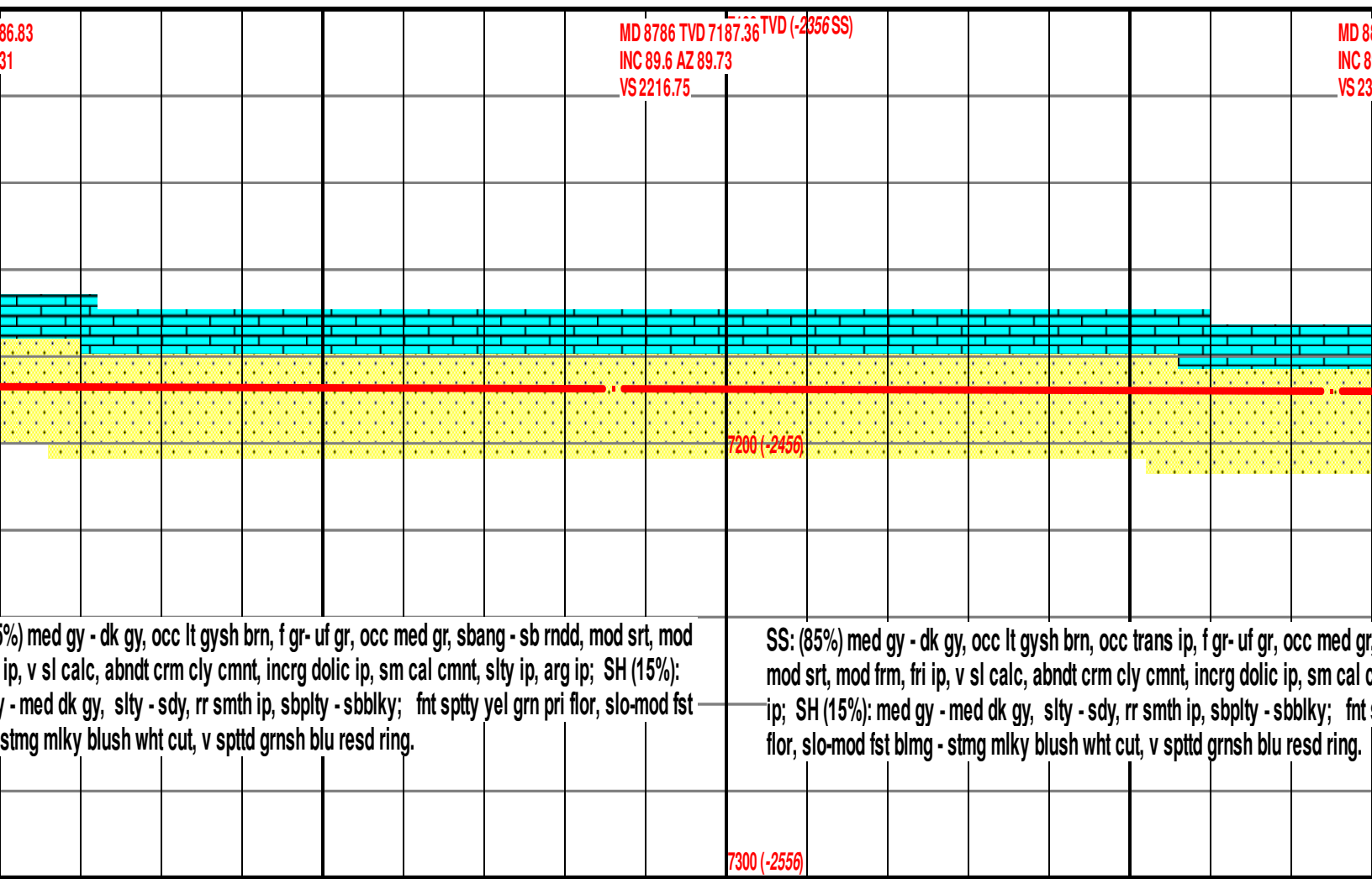
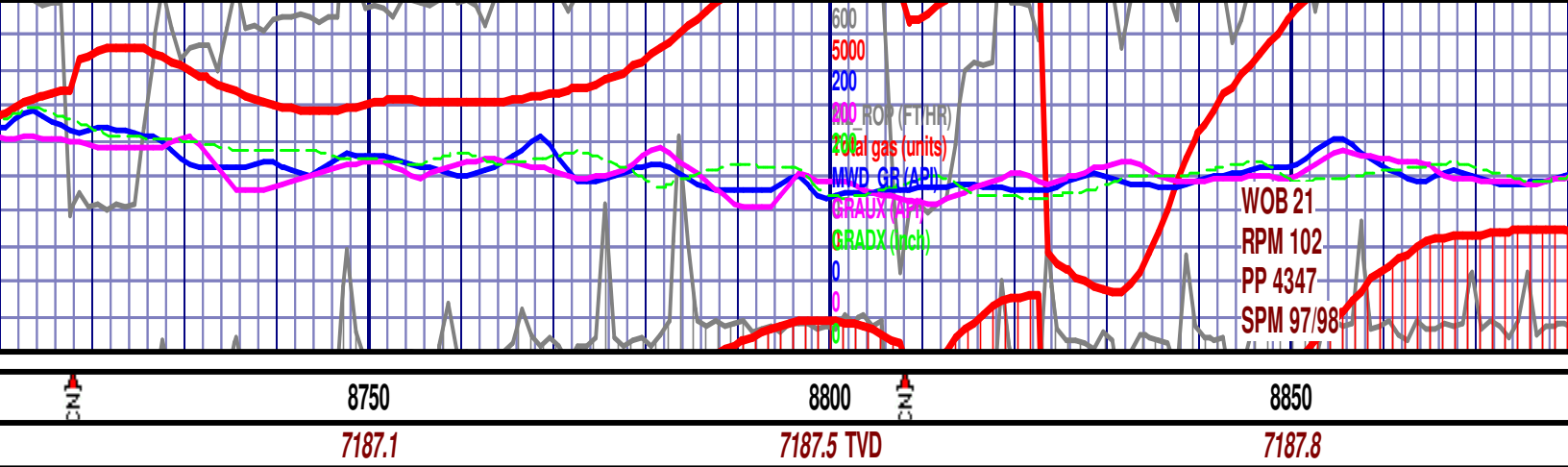






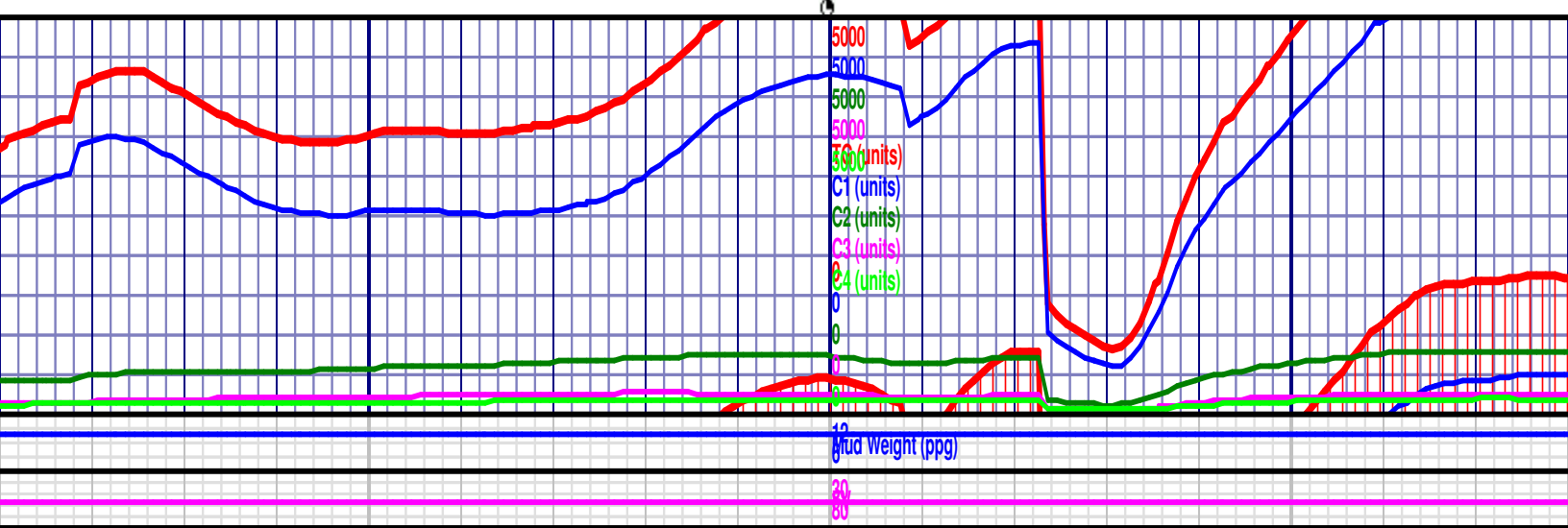




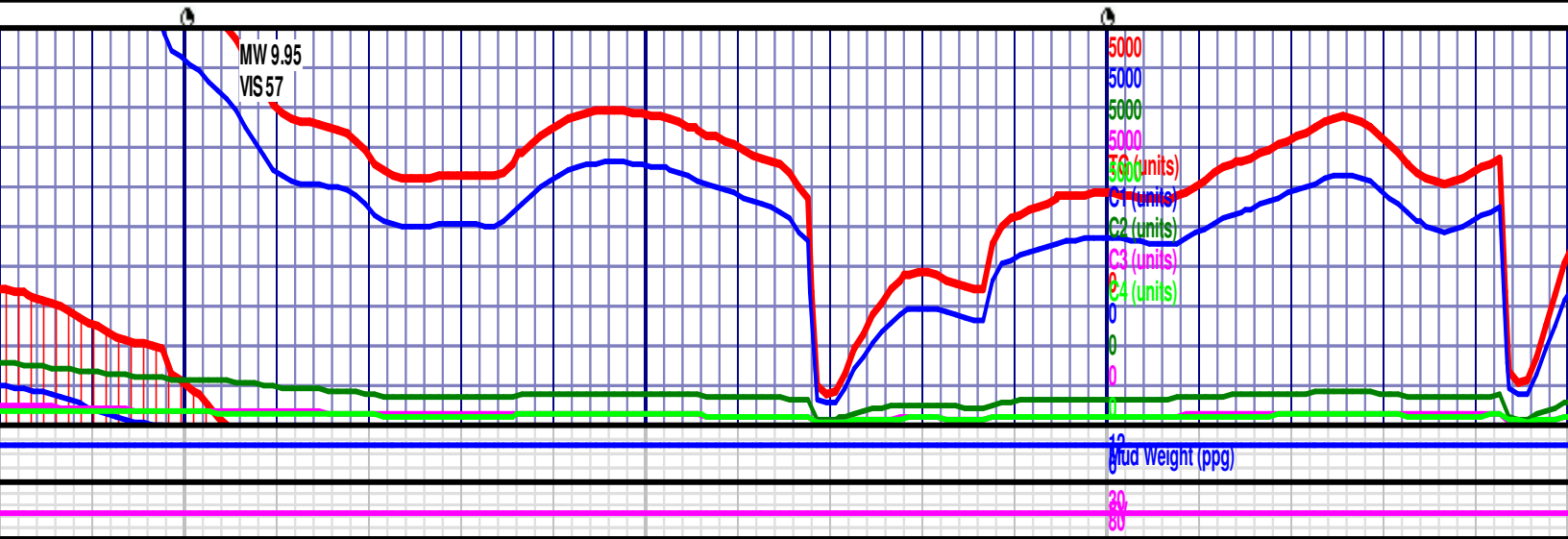
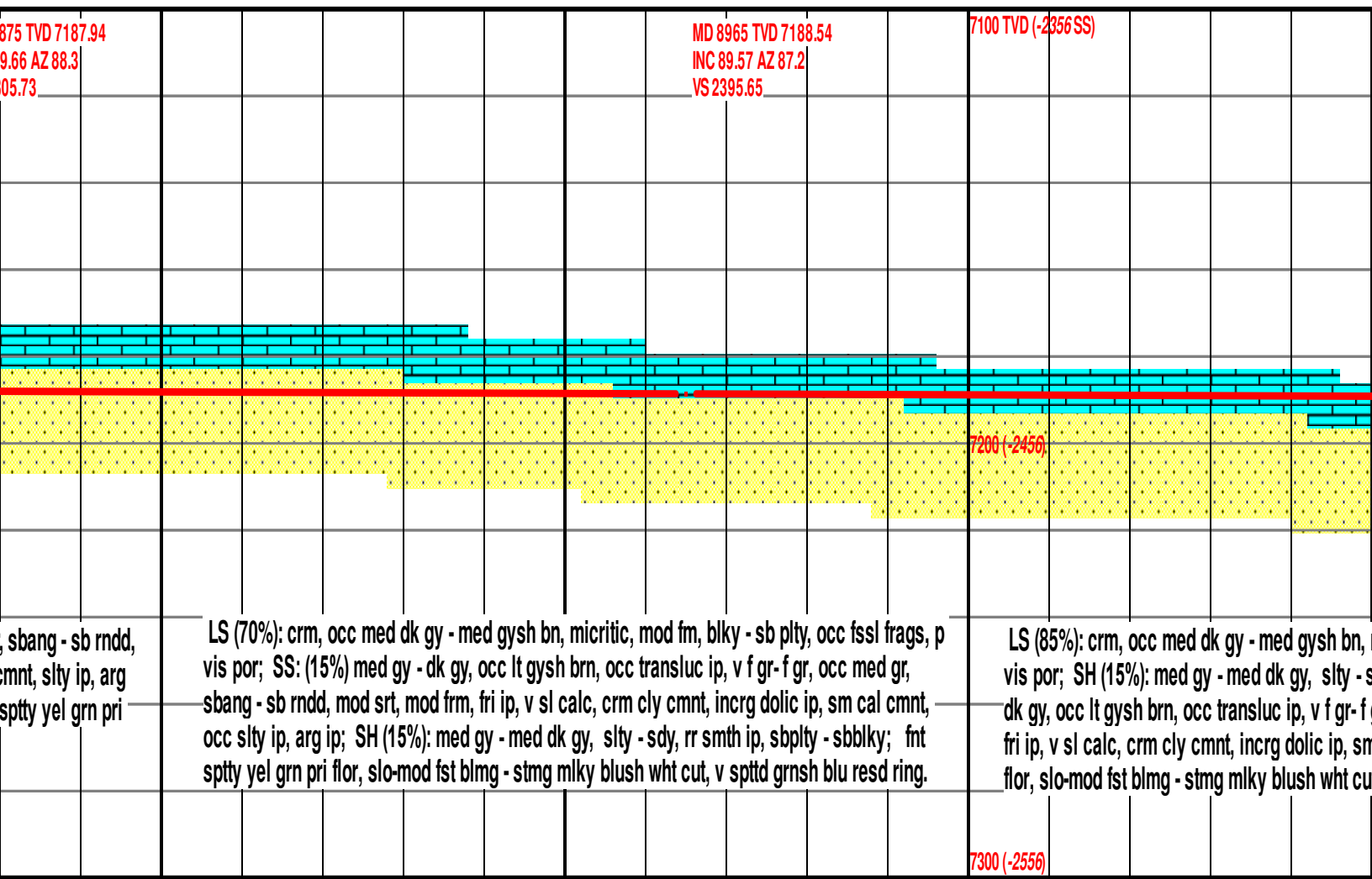
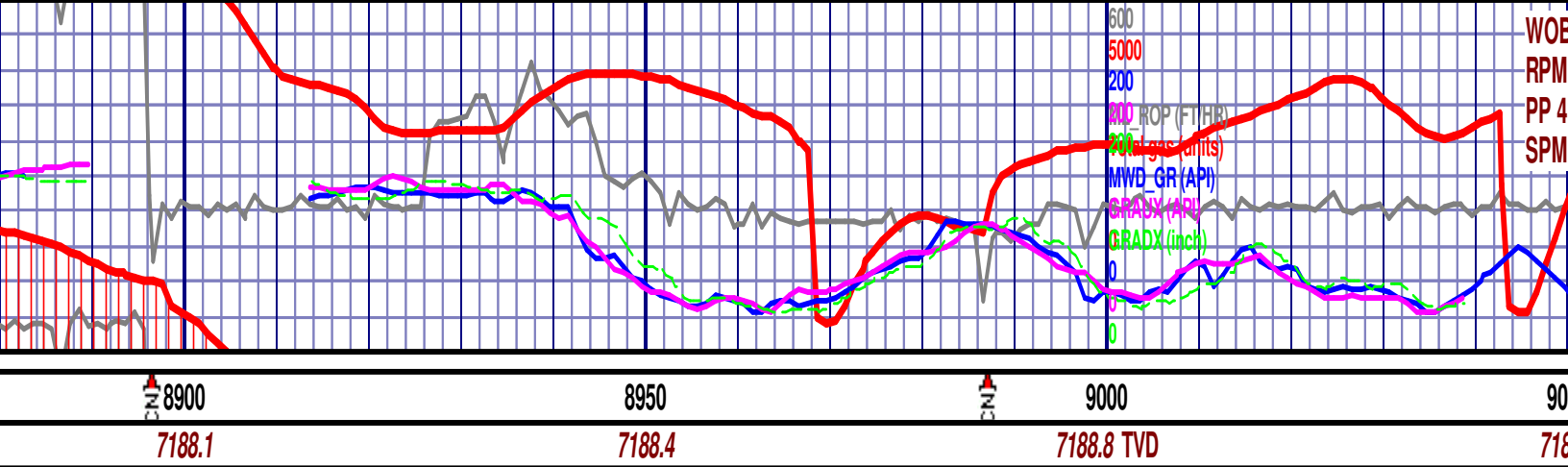


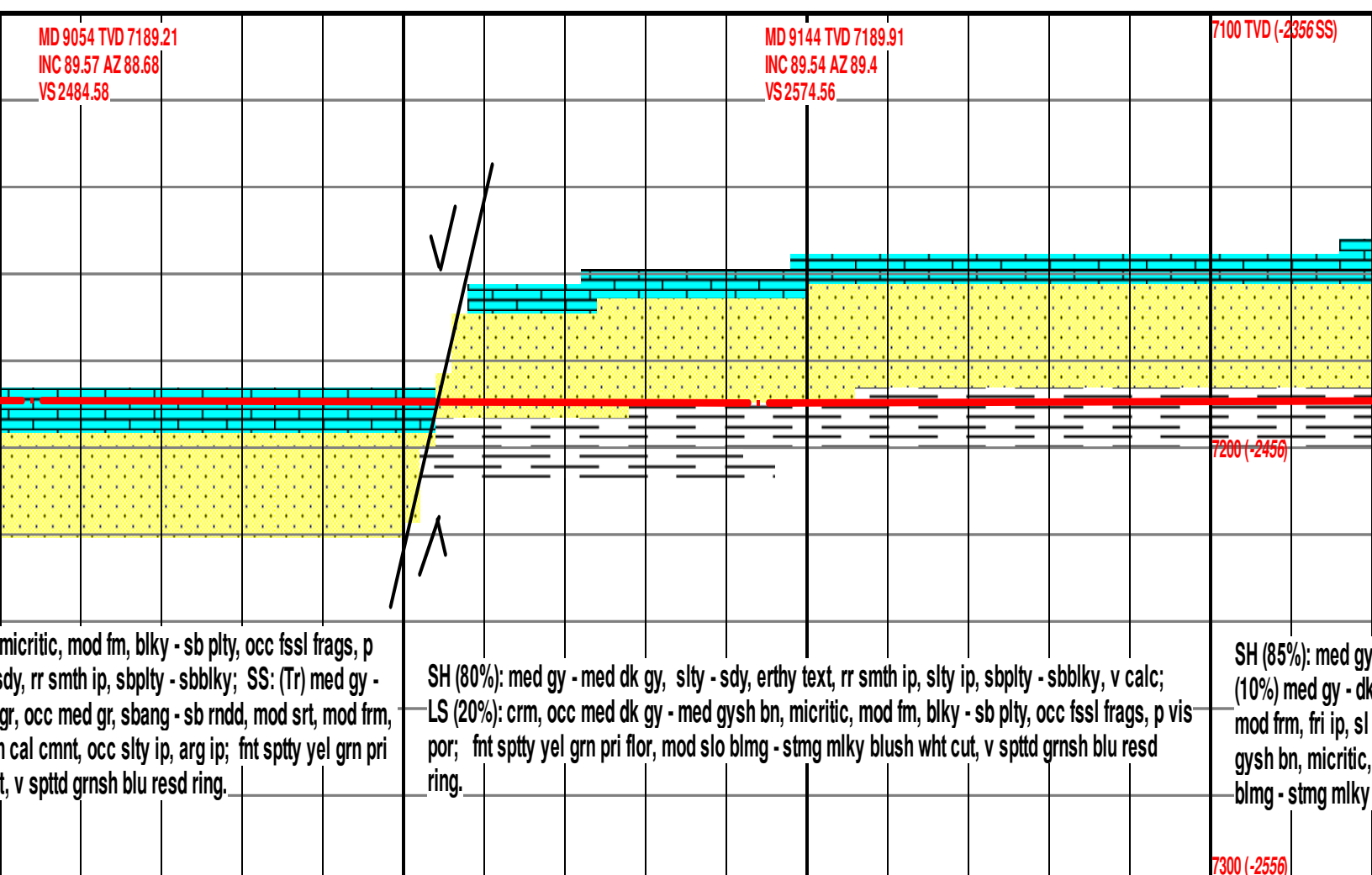
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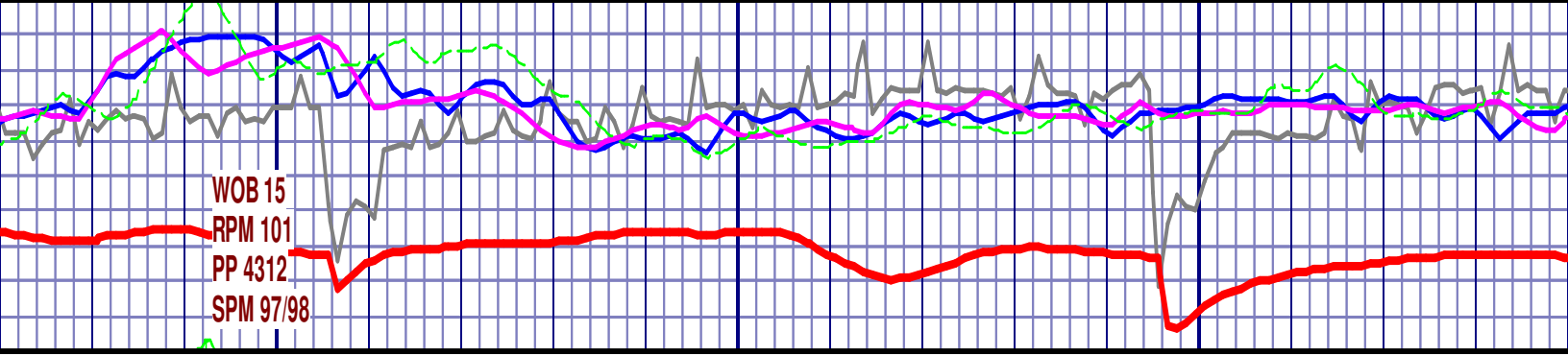
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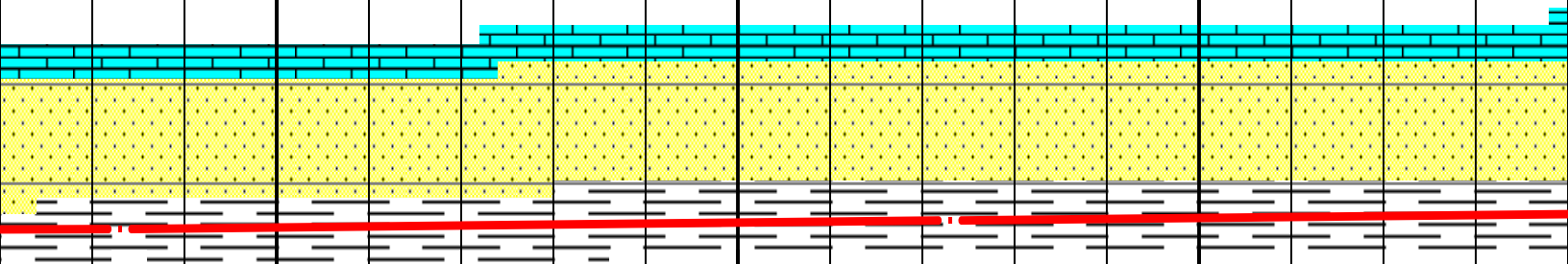
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7189.

9300  
7188.

9350  
7186.9

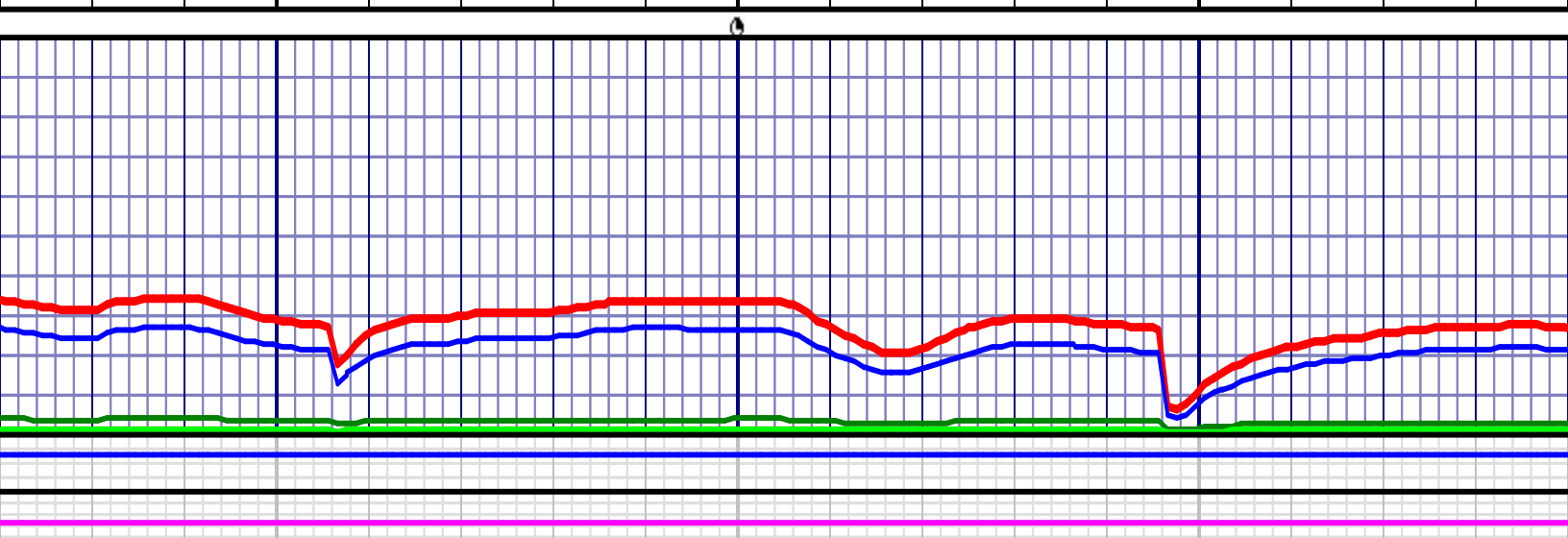
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INC 91.14 AZ 90.26  
VS 2663.55

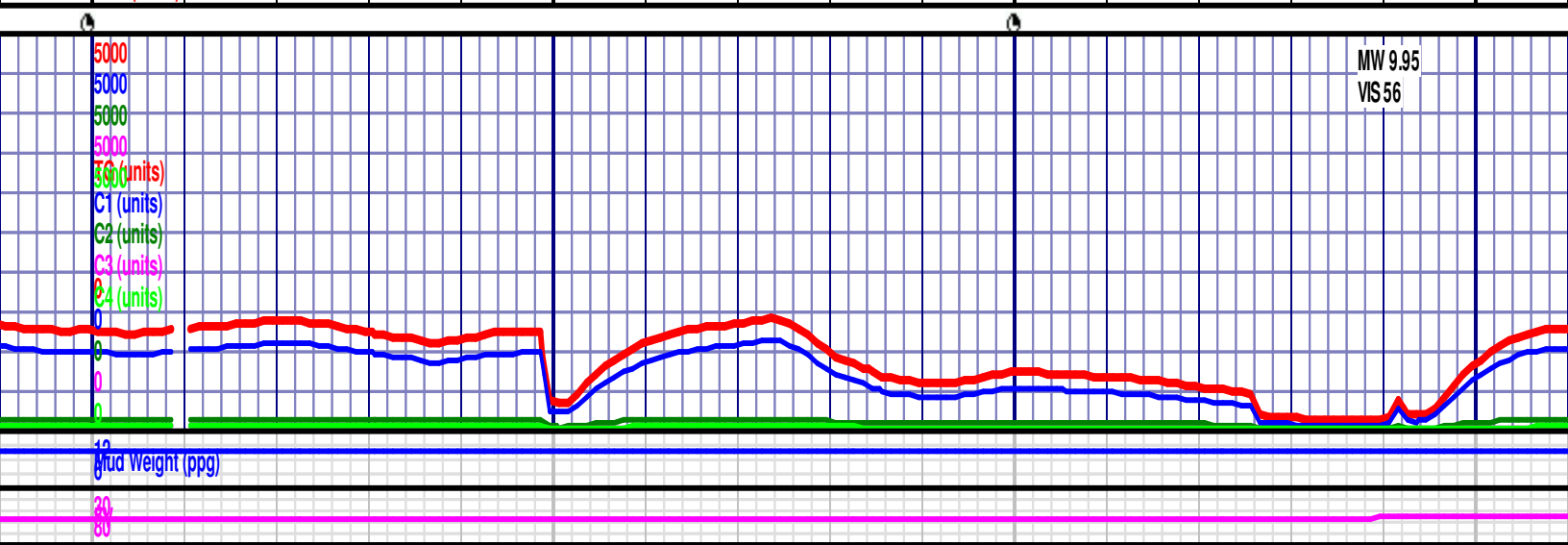
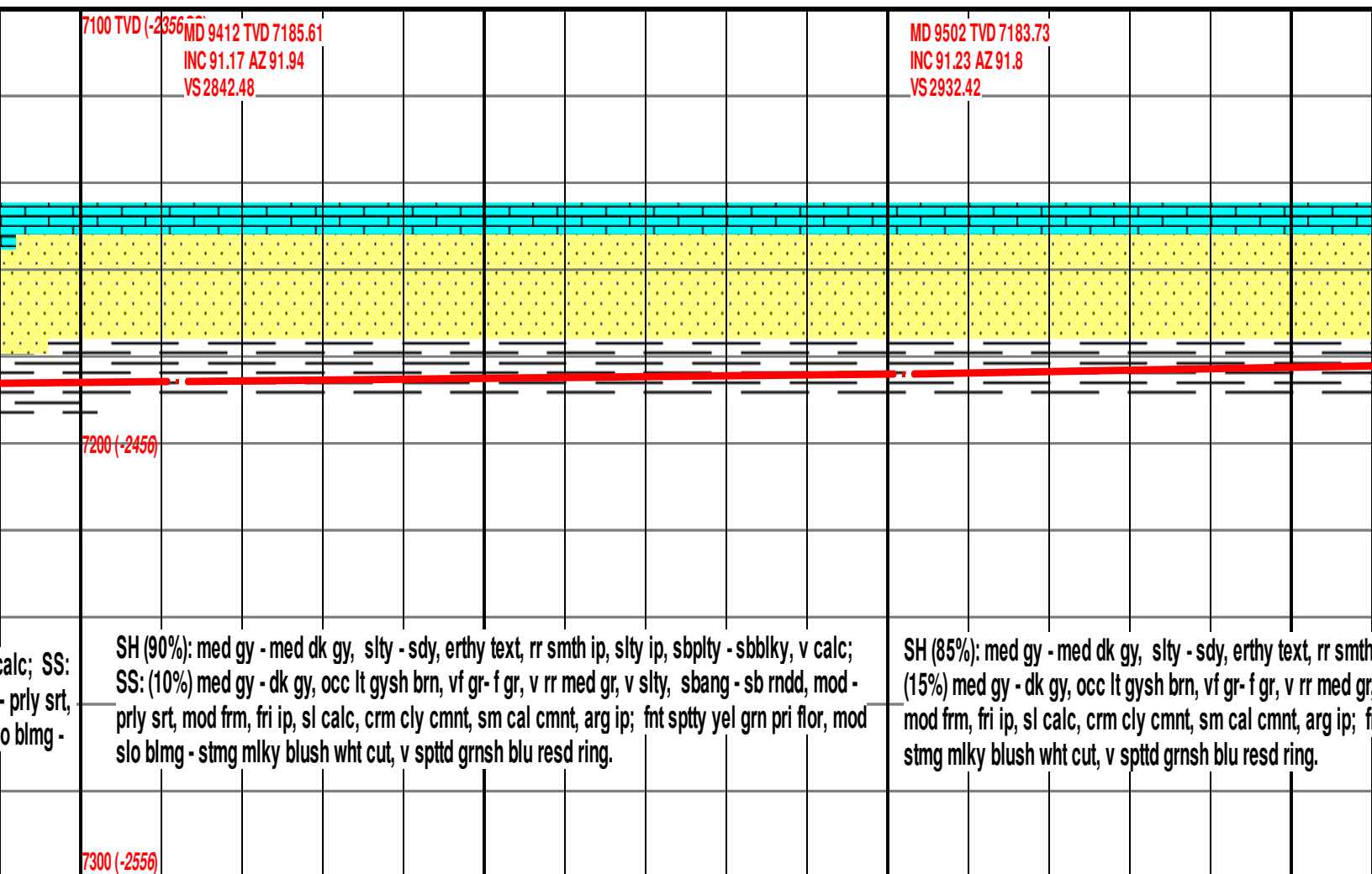
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INC 91.26 AZ 91.16  
VS 2753.53

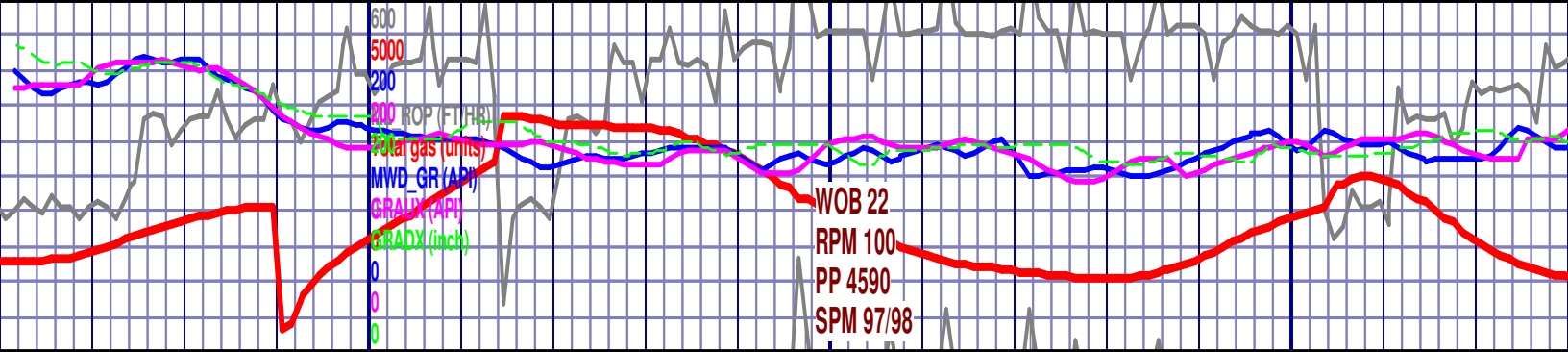


- med dk gy, slty - sdy, erthy text, rr smth ip, slty ip, sbplty - sbblky, v calc; SS:  
gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod - prly srt,  
calc, crm cly cmnt, sm cal cmnt, arg ip; LS (5%): crm, occ med dk gy - med  
mod fm, blkly - sb plty, occ fssl frags, p vis por; fnt sppty yel grn pri flor, mod slo  
blush wht cut, v spttd grnsh blu resd ring.

SH (90%): med gy - med dk gy, slty - sdy, erthy text, rr smth ip, slty ip, sbplty - sbblky, v c  
(10%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod  
mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, arg ip; fnt sppty yel grn pri flor, mod sl  
stmg mlky blush wht cut, v spttd grnsh blu resd ring.







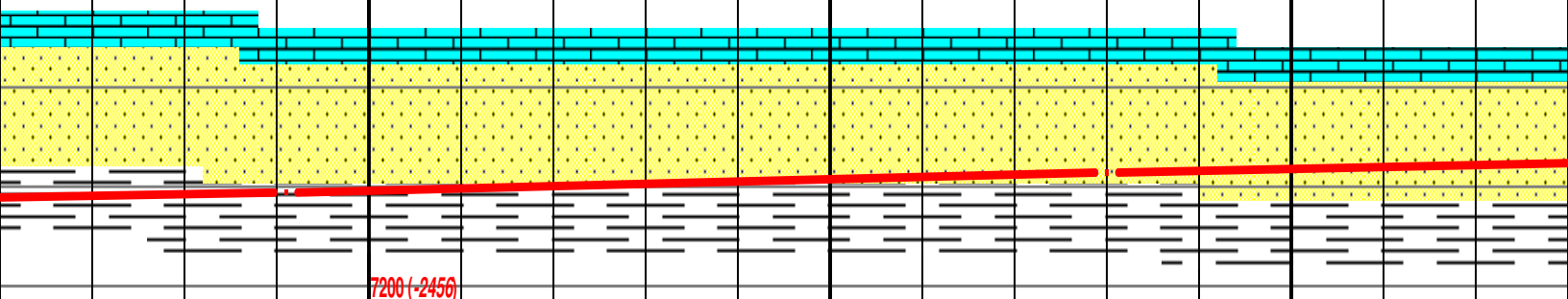
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7180.5 TVD

9650  
7178.4

9700  
7176.4

MD 9591 TVD 7180.86 (356 SS)  
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VS 3021.33

MD 9680 TVD 7177.16  
INC 92.37 AZ 91.26  
VS 3110.23



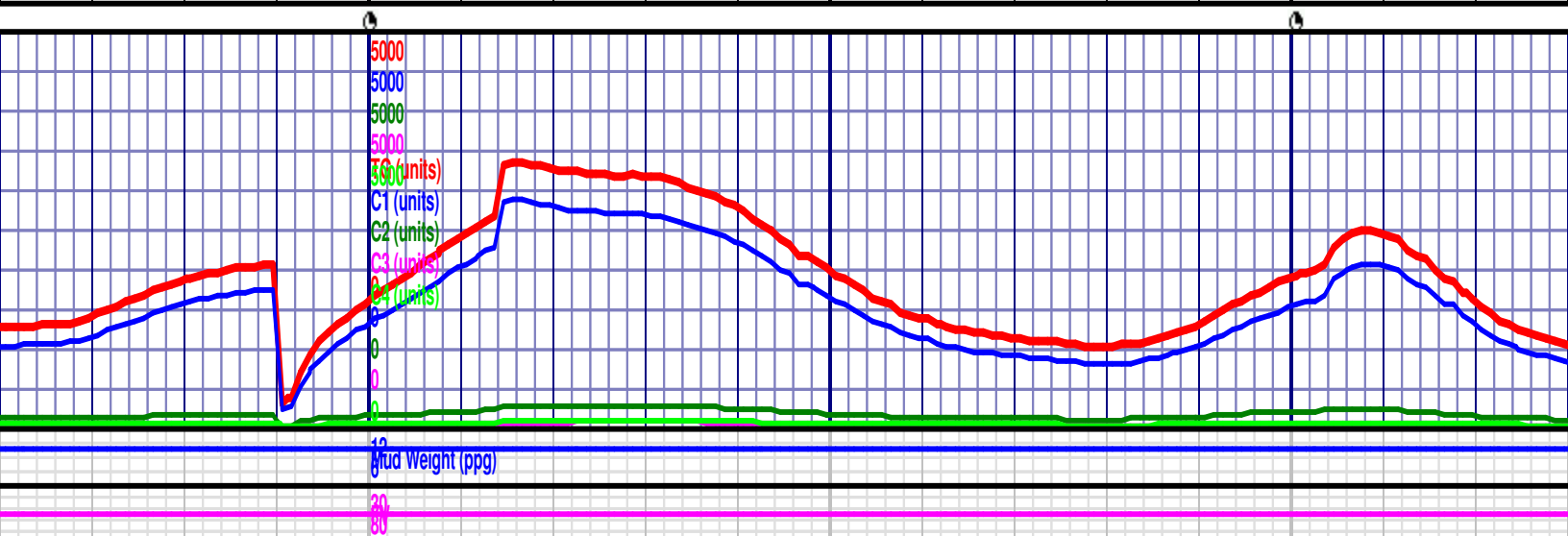
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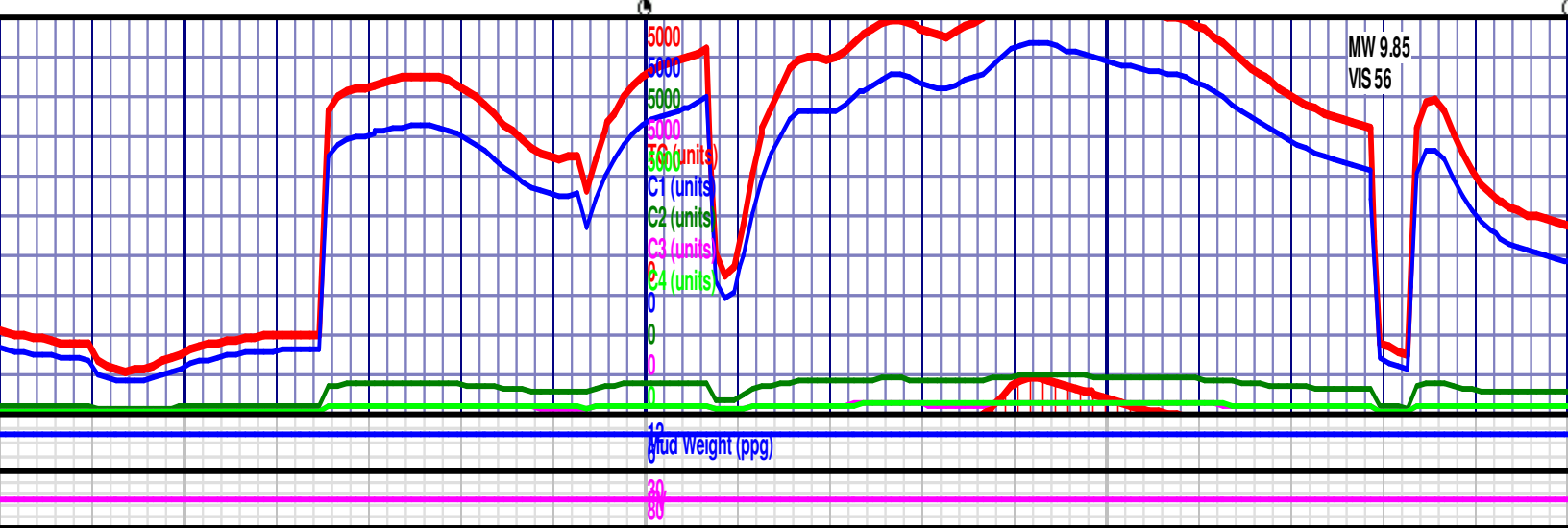
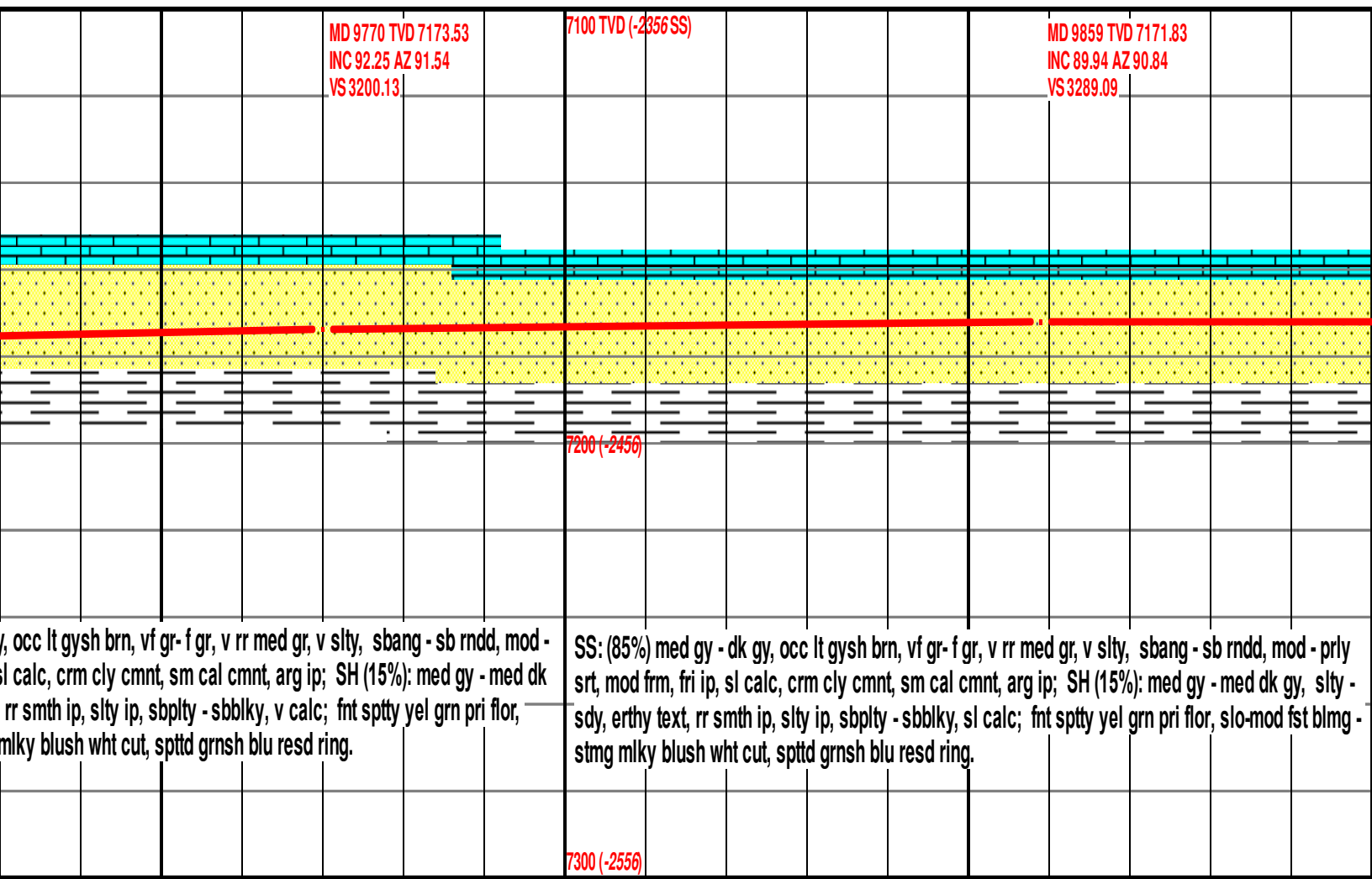
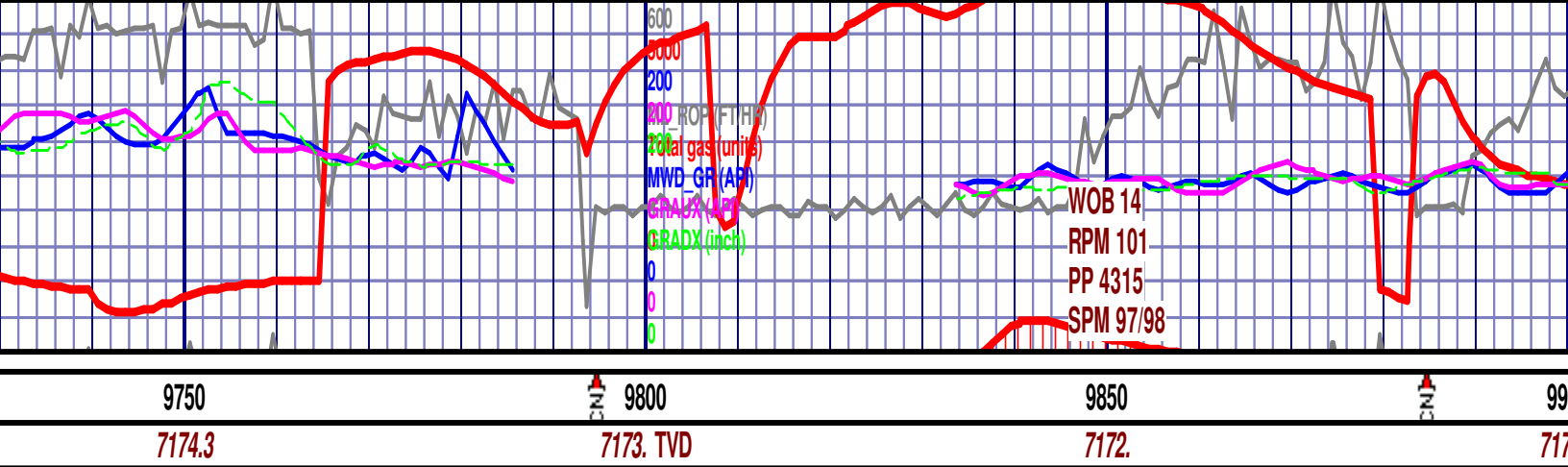
ip, slty ip, sbply - sbbly, v calc; SS:  
v slty, sbang - sb rdd, mod - prly srt,  
nt sppty yel grn pri flor, mod slo blmg -

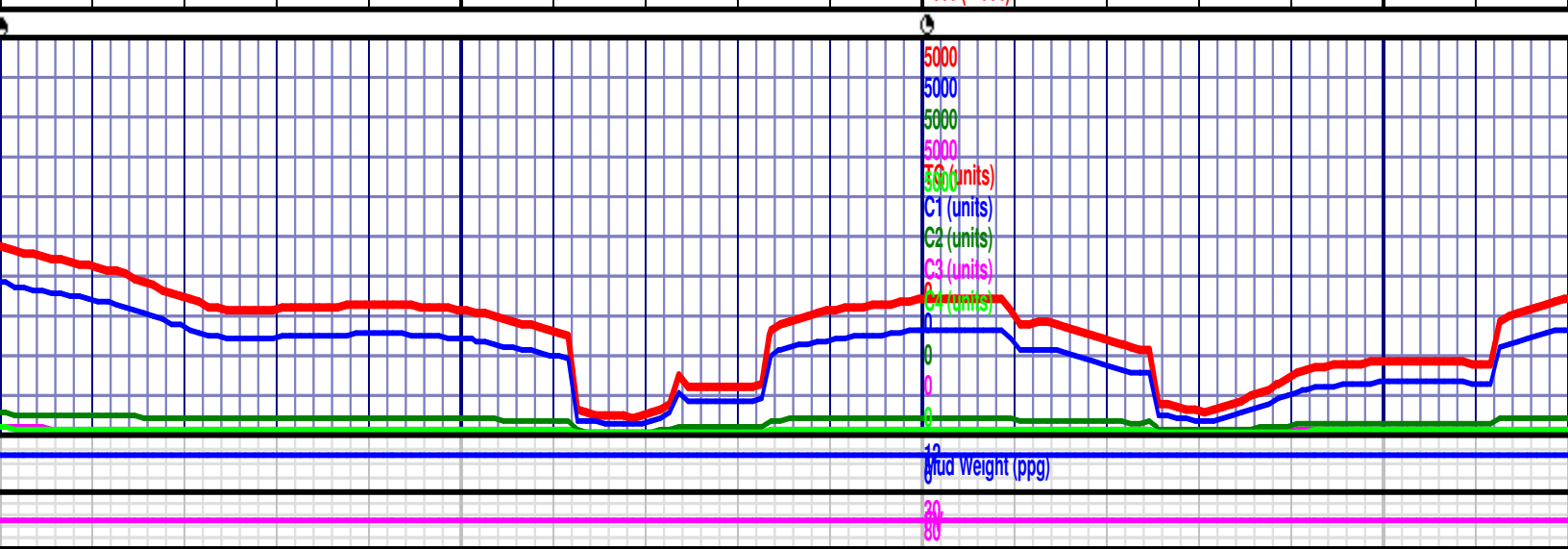
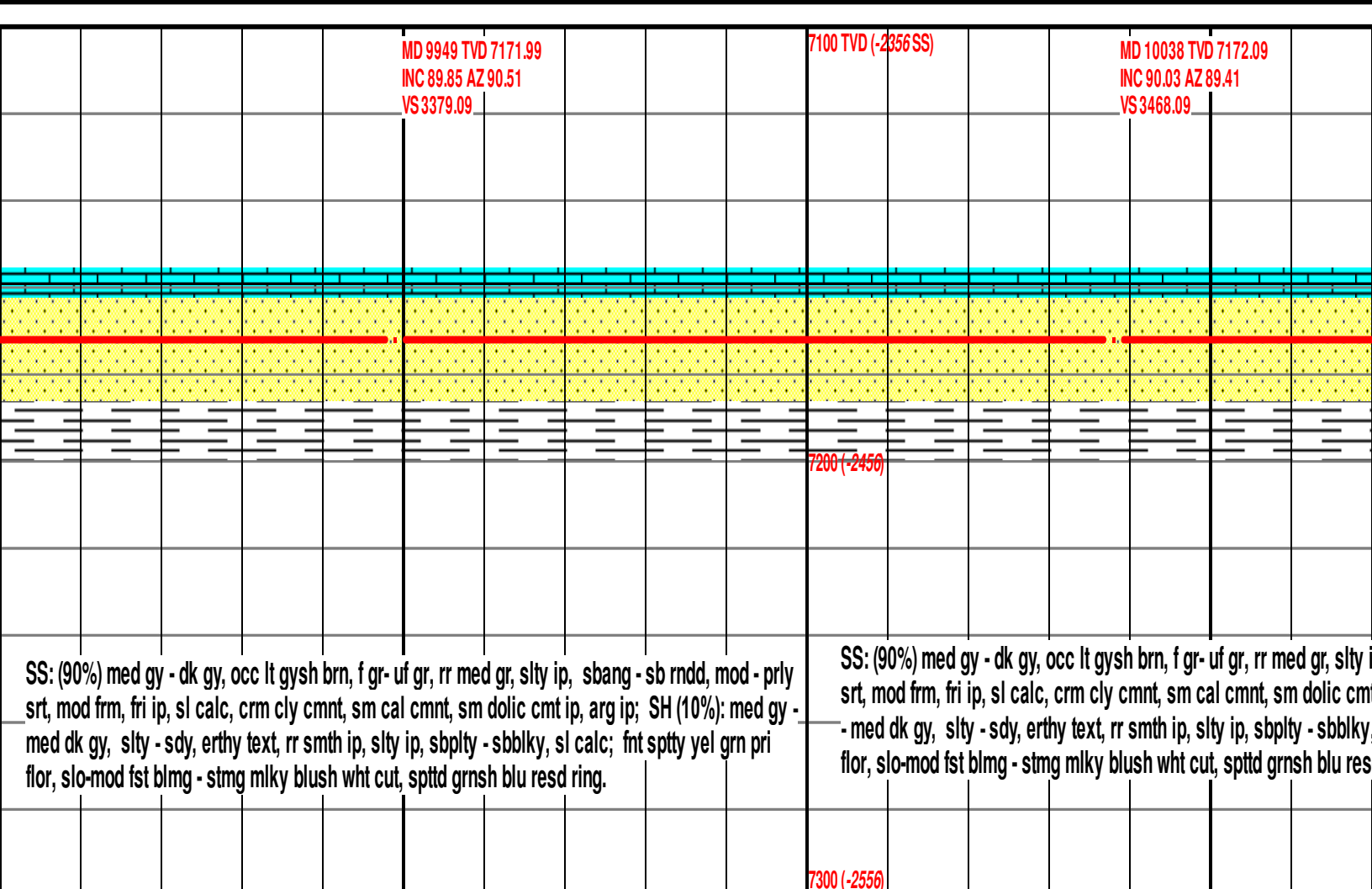
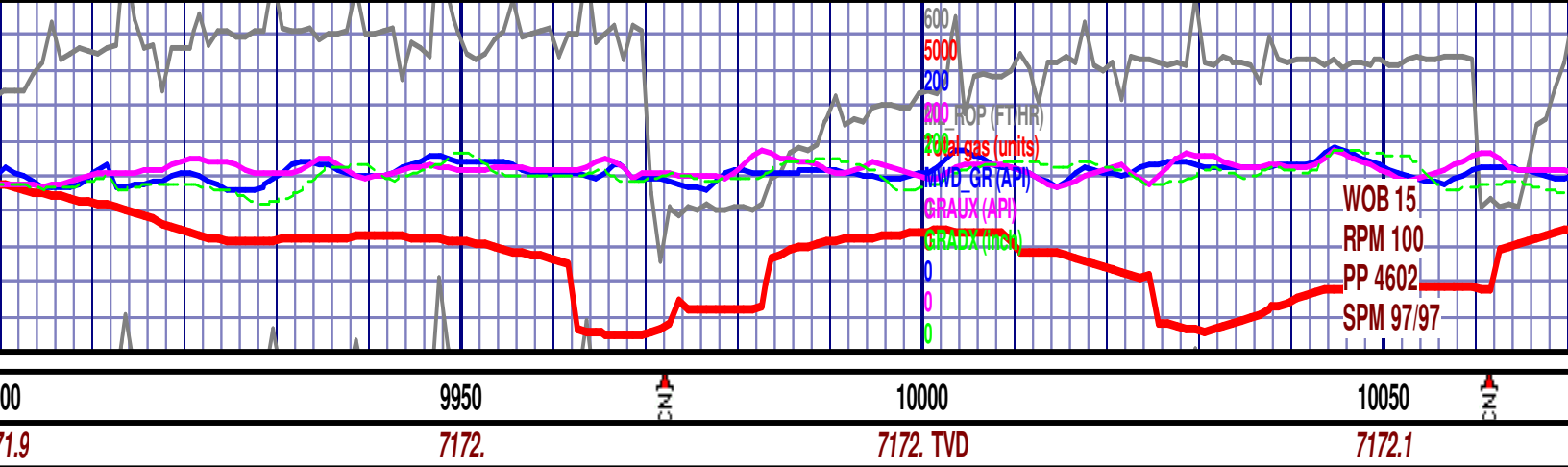
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mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, arg ip; fnt sppty yel grn pri flor, mod slo blmg -  
stmg mlky blush wht cut, v spptd grnsh blu resd ring.

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slo-mod fst blmg - stmg

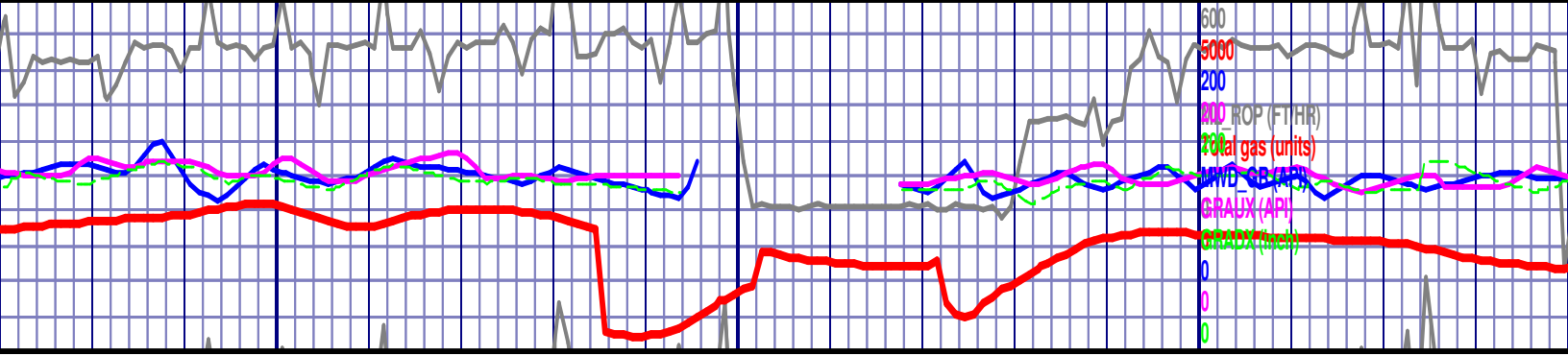
7300 (-2556)











10100

10150

10200

7172.1

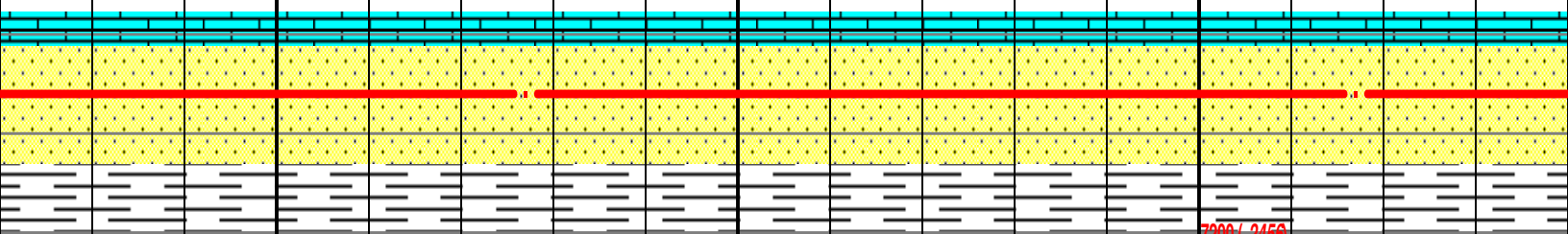
7172.1

7172.1 TVD

MD 10127 TVD 7172.06  
INC 90 AZ 88.36  
VS 3557.07

7100 TVD (-2356 SS)

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INC 90 AZ 86.89  
VS 3646.98



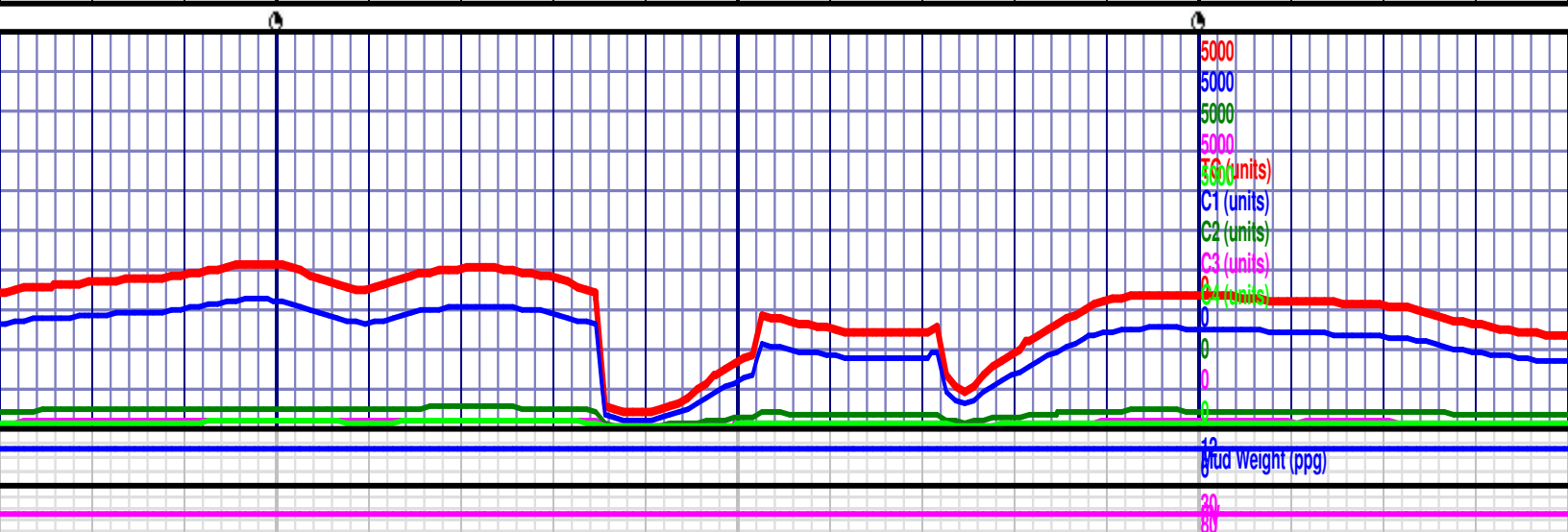
7200 (-2456)

ip, sbang - sb rndd, mod - prly  
t ip, arg ip; SH (10%): med gy  
sl calc; fnt sptty yel grn pri  
d ring.

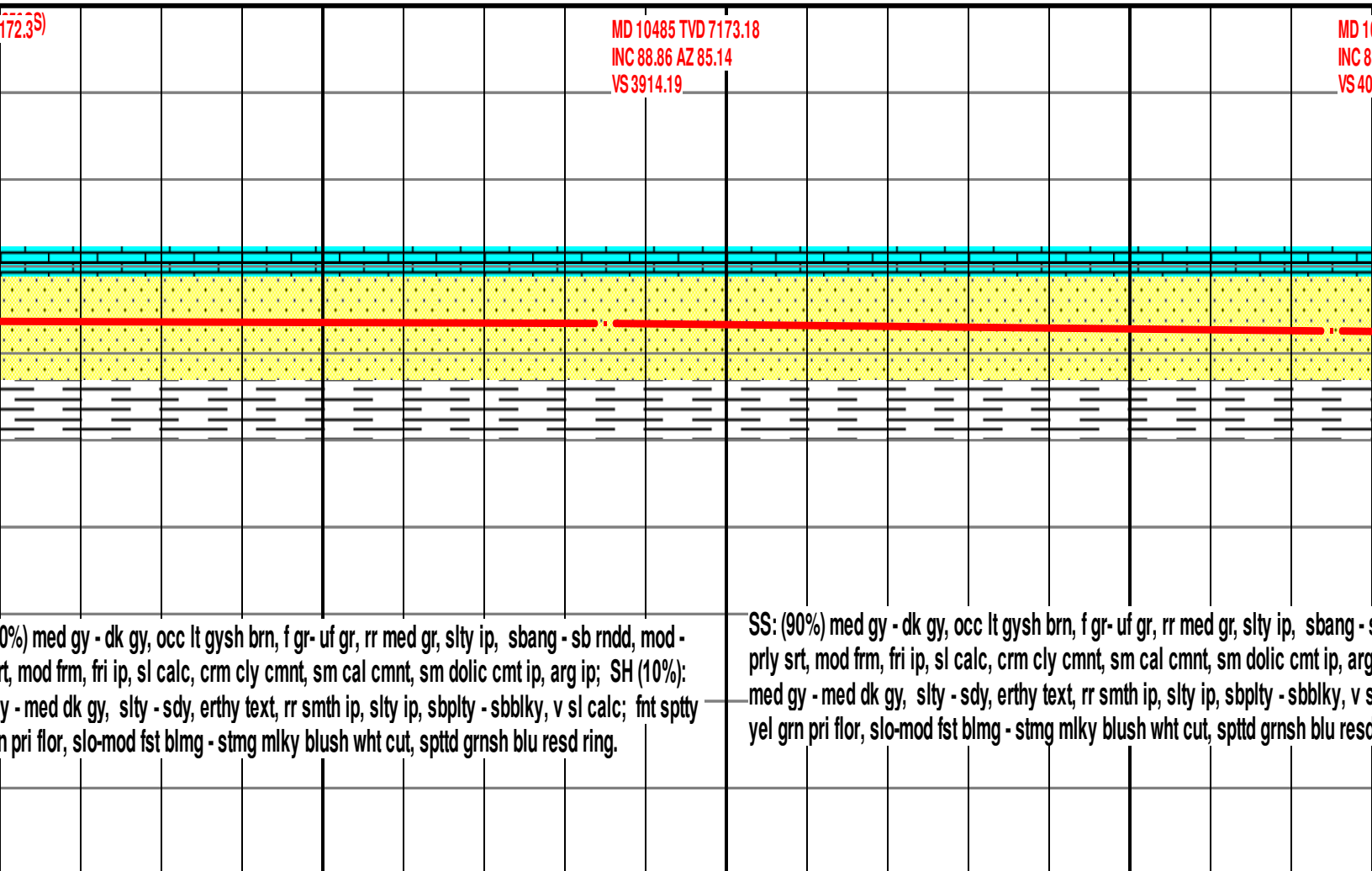
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med dk gy, slty - sdy, erthy text, rr smth ip, slty ip, sbply - sbblky, v sl calc; fnt sptty yel grn pri  
flor, slo-mod fst blmg - stmg milky blush wht cut, spttd grnsh blu resd ring.

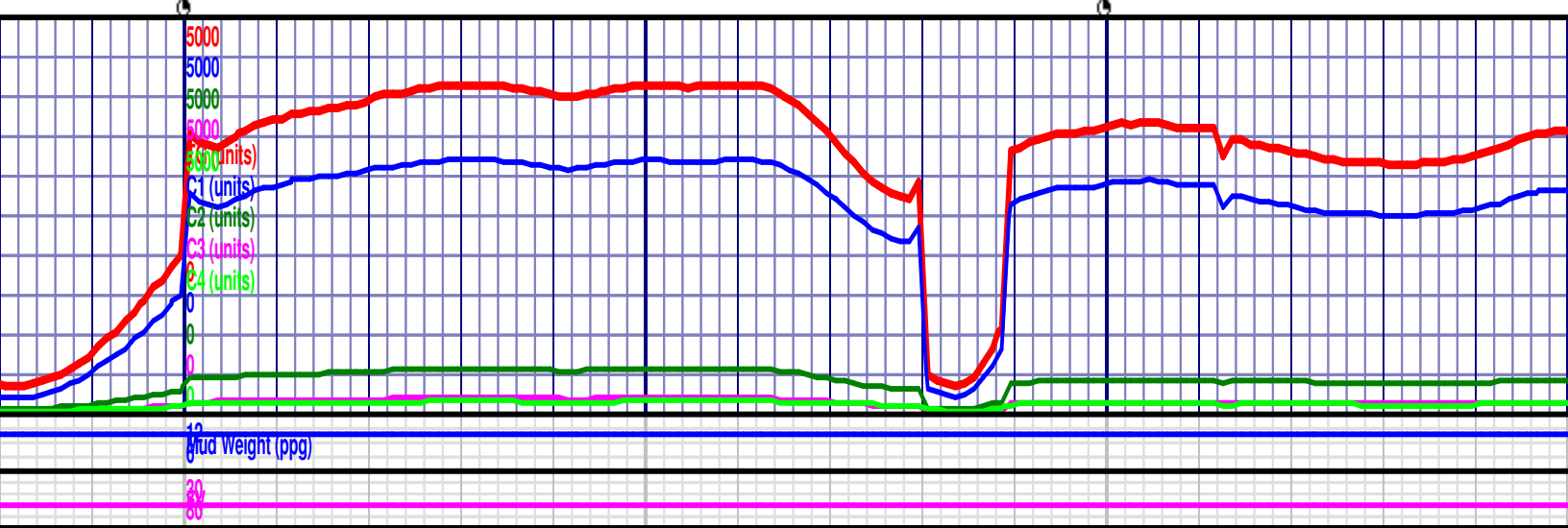
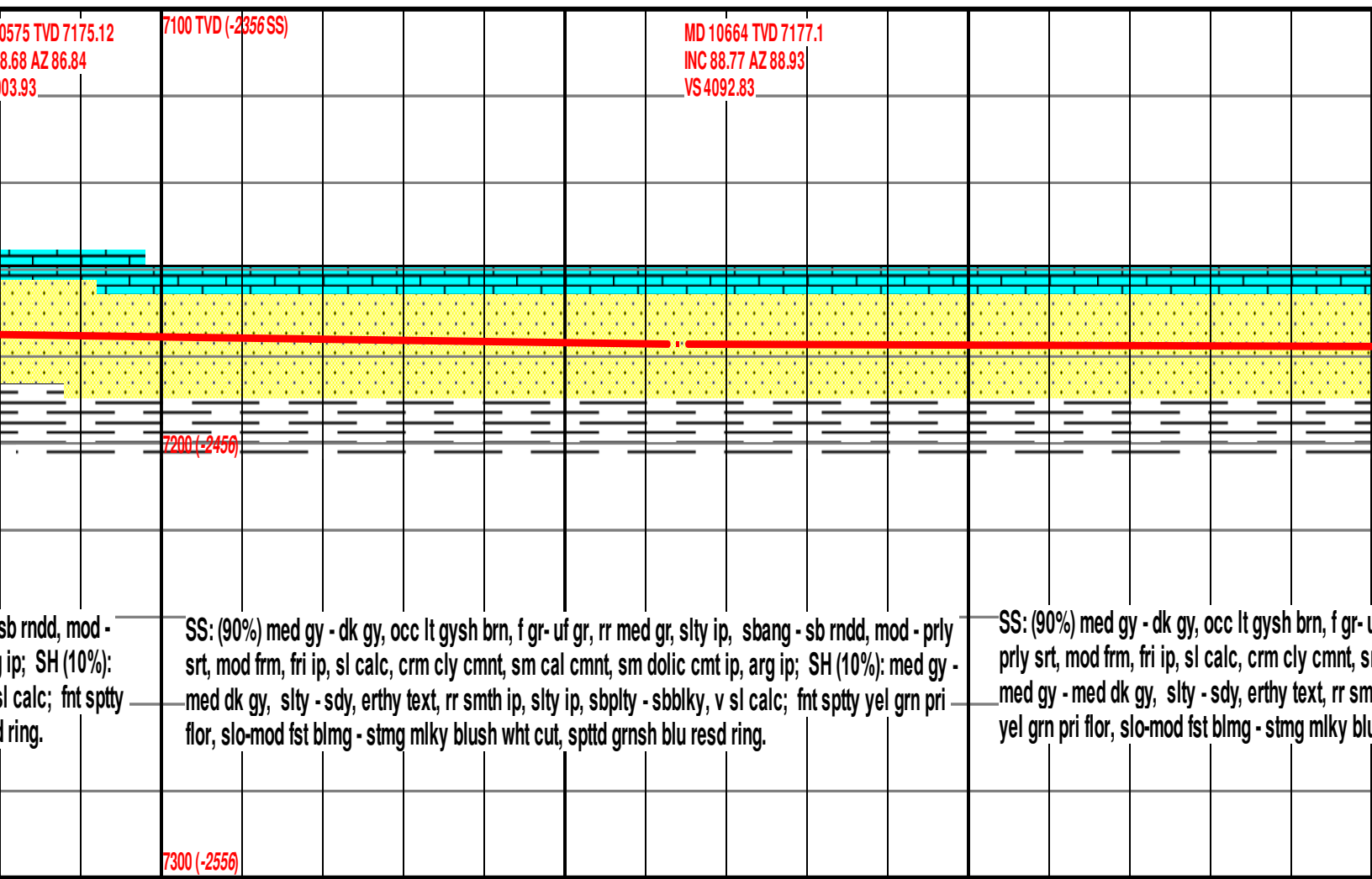
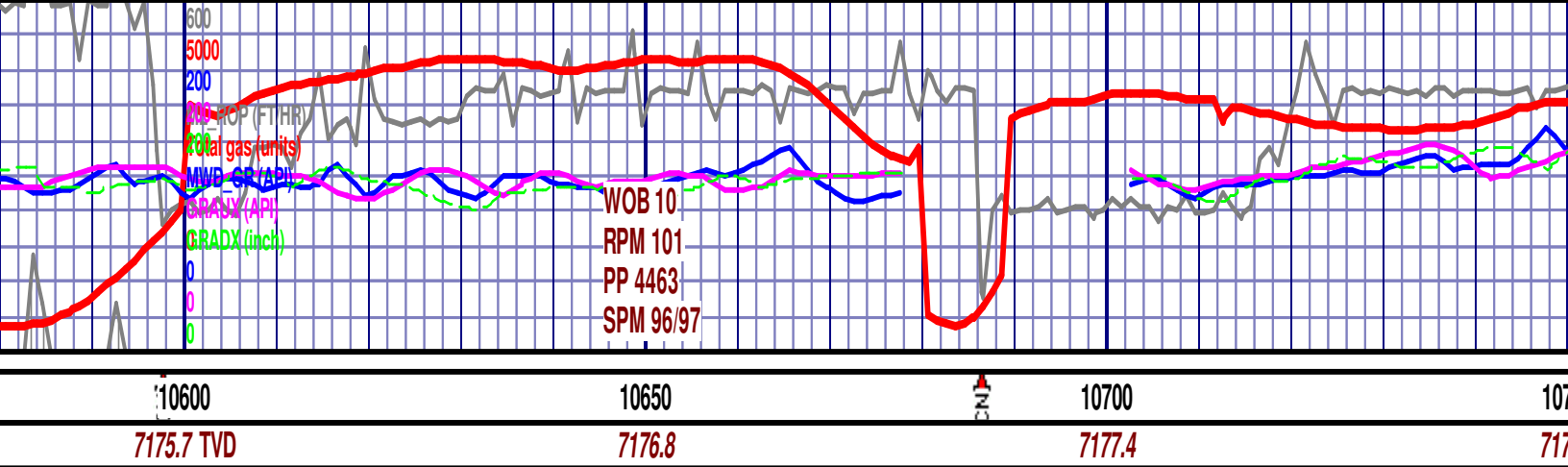
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med dk gy, slty - sdy, erthy text, rr sm  
flor, slo-mod fst blmg - stmg milky blush

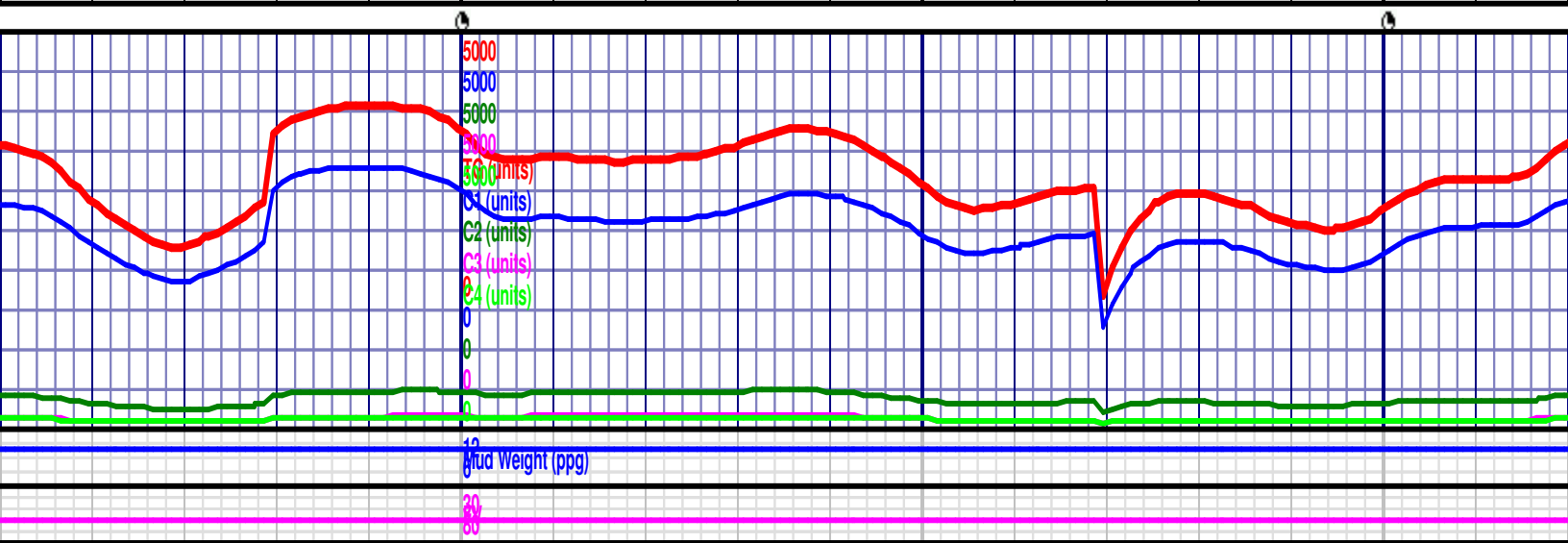
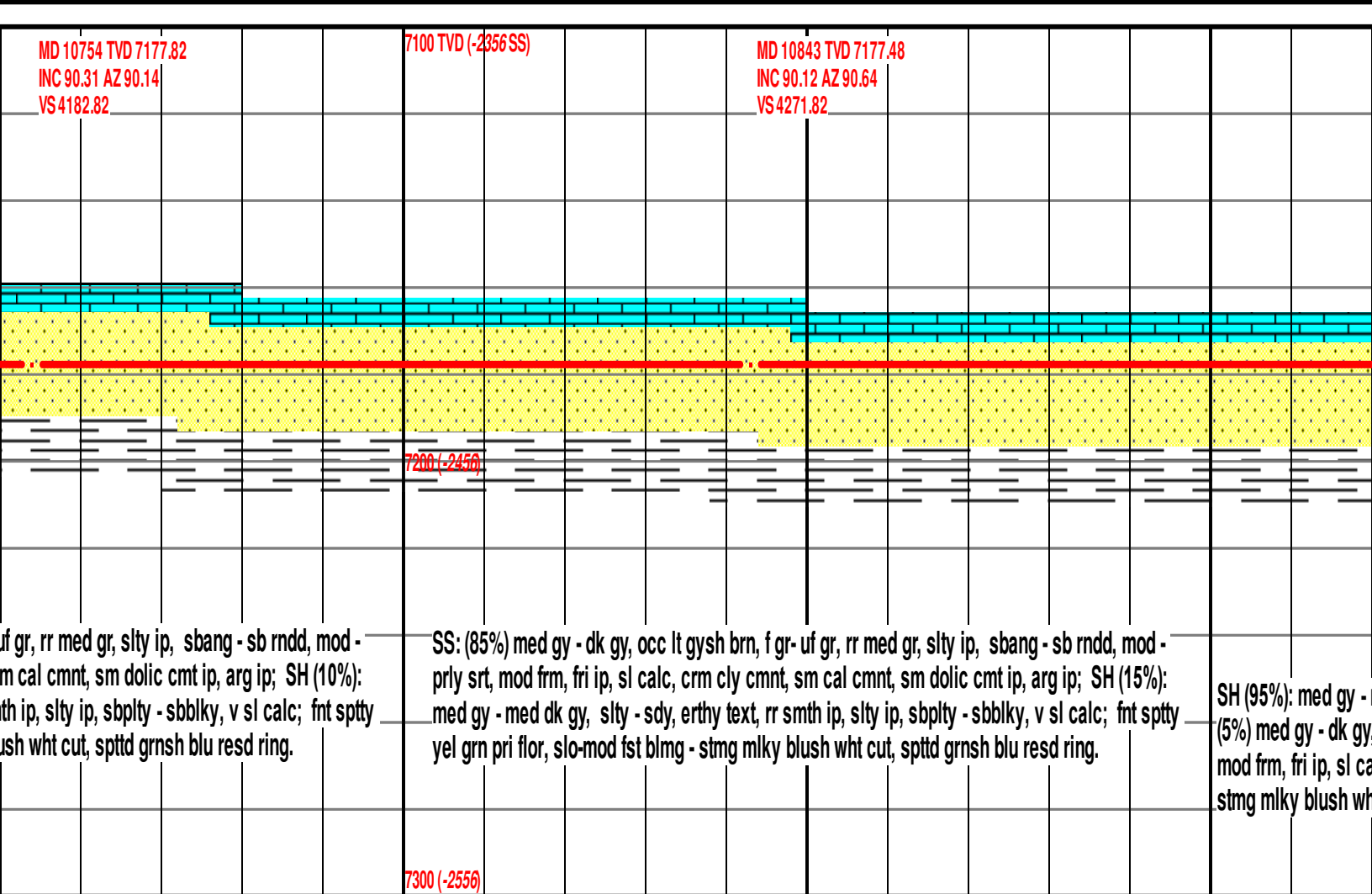
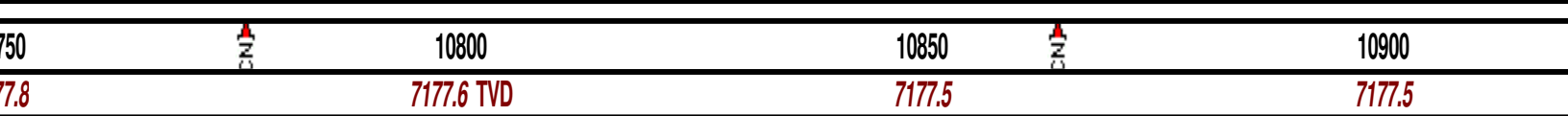
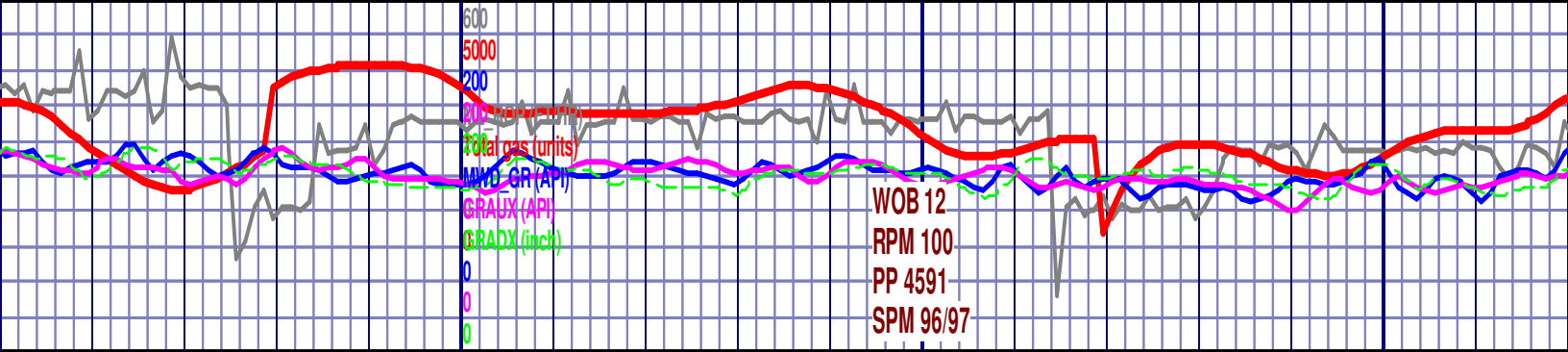
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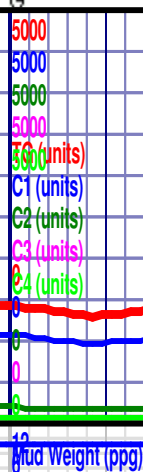


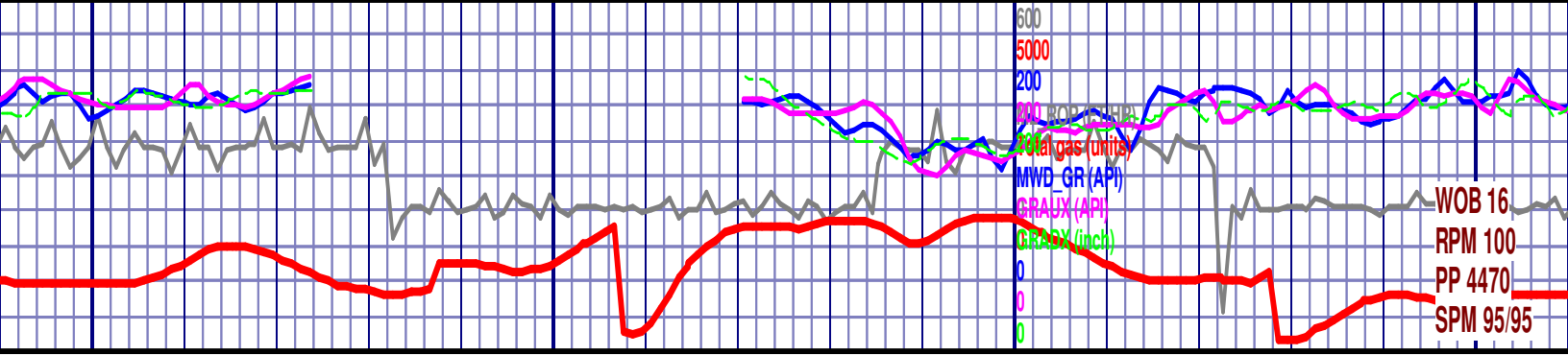








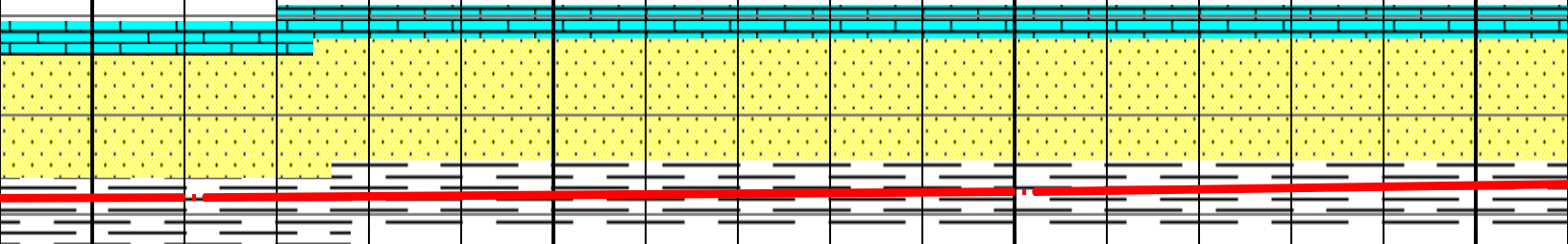




11100 11150 11200 11250  
7176.9 7176.3 7175.6 TVD 7174.2

MD 11111 TVD 7176.83  
INC 90.22 AZ 92.9  
VS 4539.75

MD 11201 TVD 7175.54  
INC 91.42 AZ 94.31  
VS 4629.57

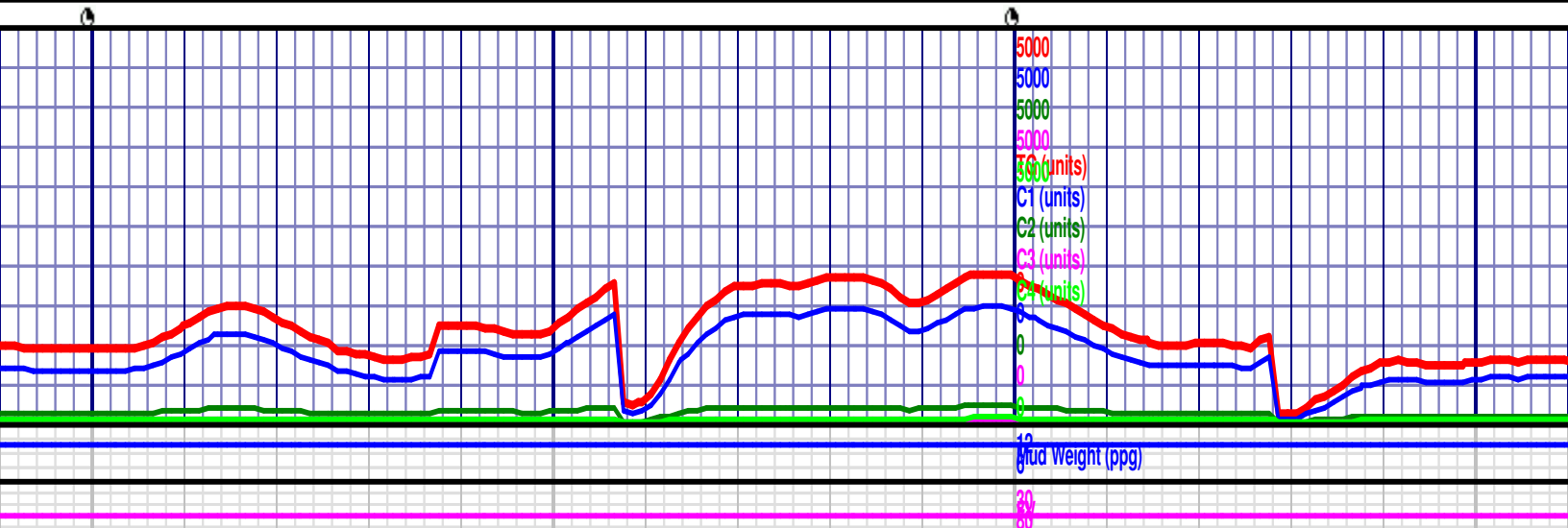


7200 (-2456)

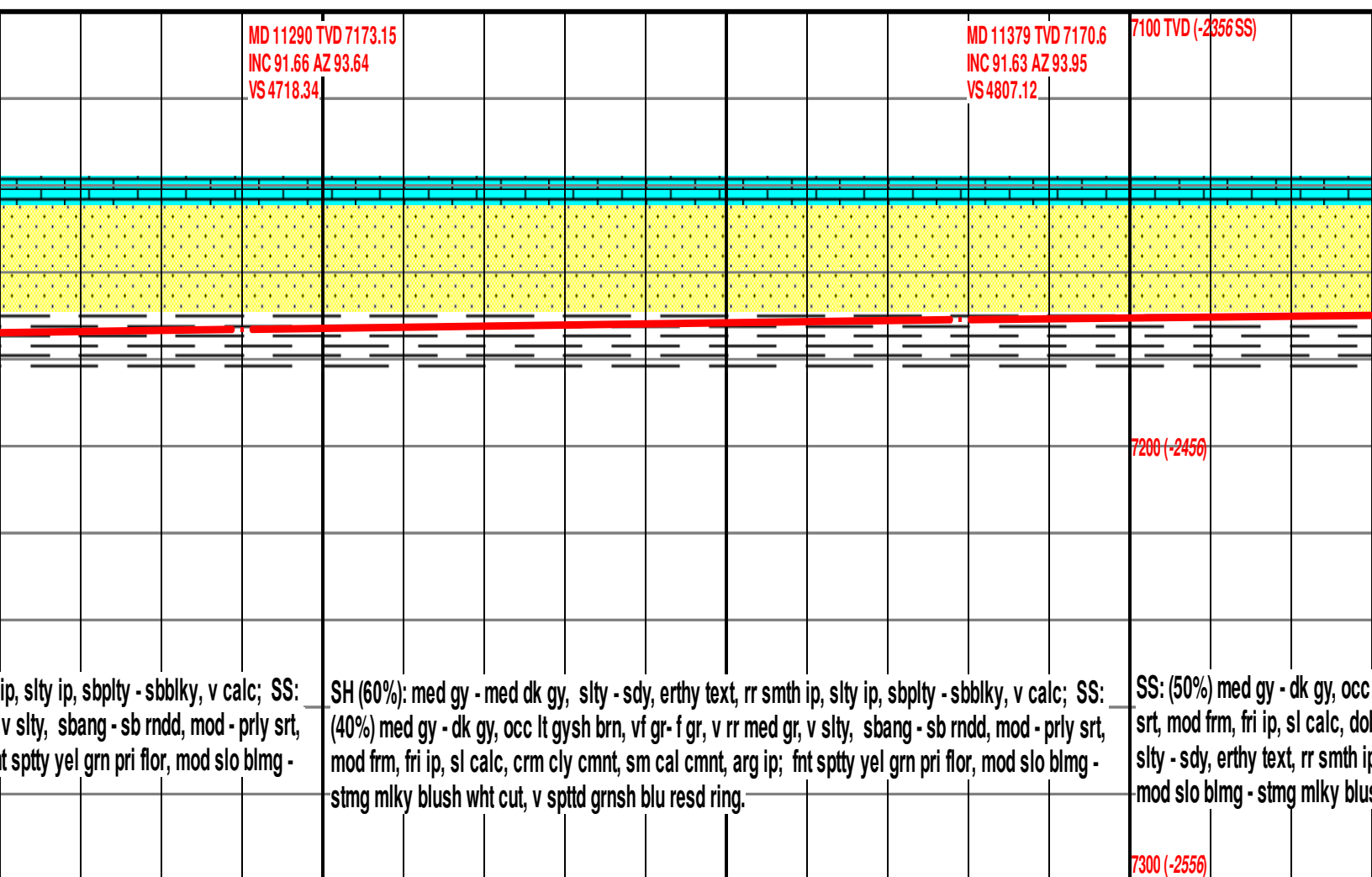
ic; SS: SH (95%): med gy - med dk gy, mstl smth, rr erthy text, rr smth ip, occ slty ip, sbply - sbblky, v calc;  
ly srt, SS: (5%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod - prly  
blmg - srt, mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, arg ip; fnt sppty yel grn pri flor, mod slo blmg  
- stmg mlky blush wht cut, v spstd grnsh blu resd ring.

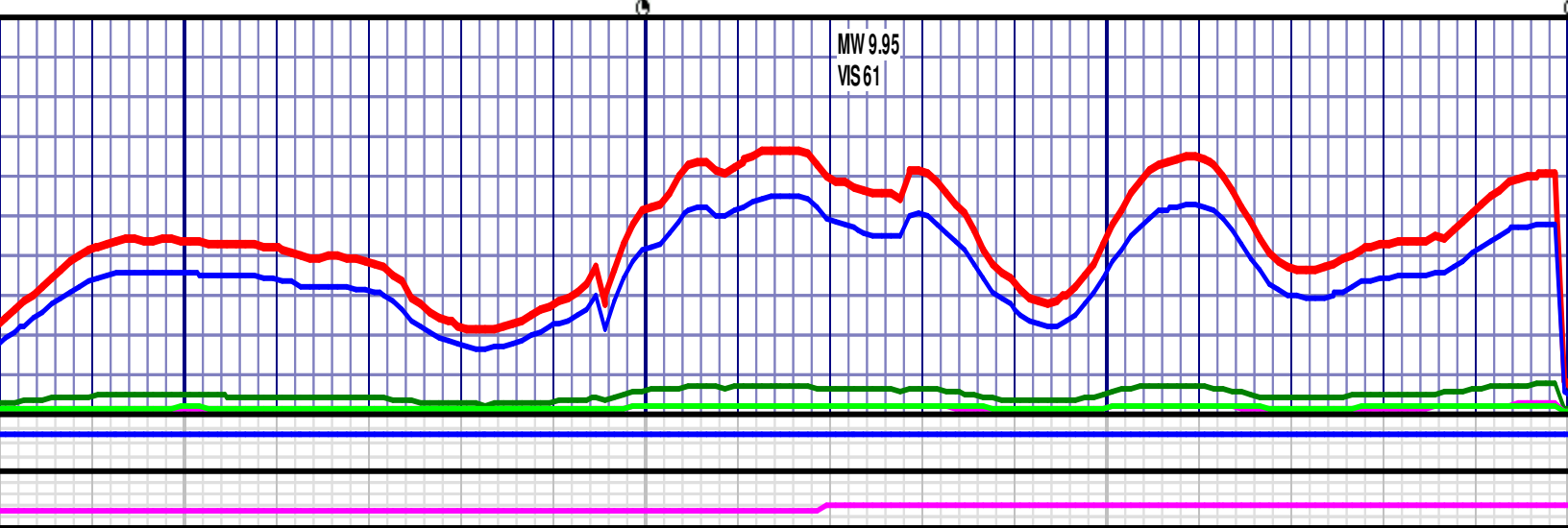
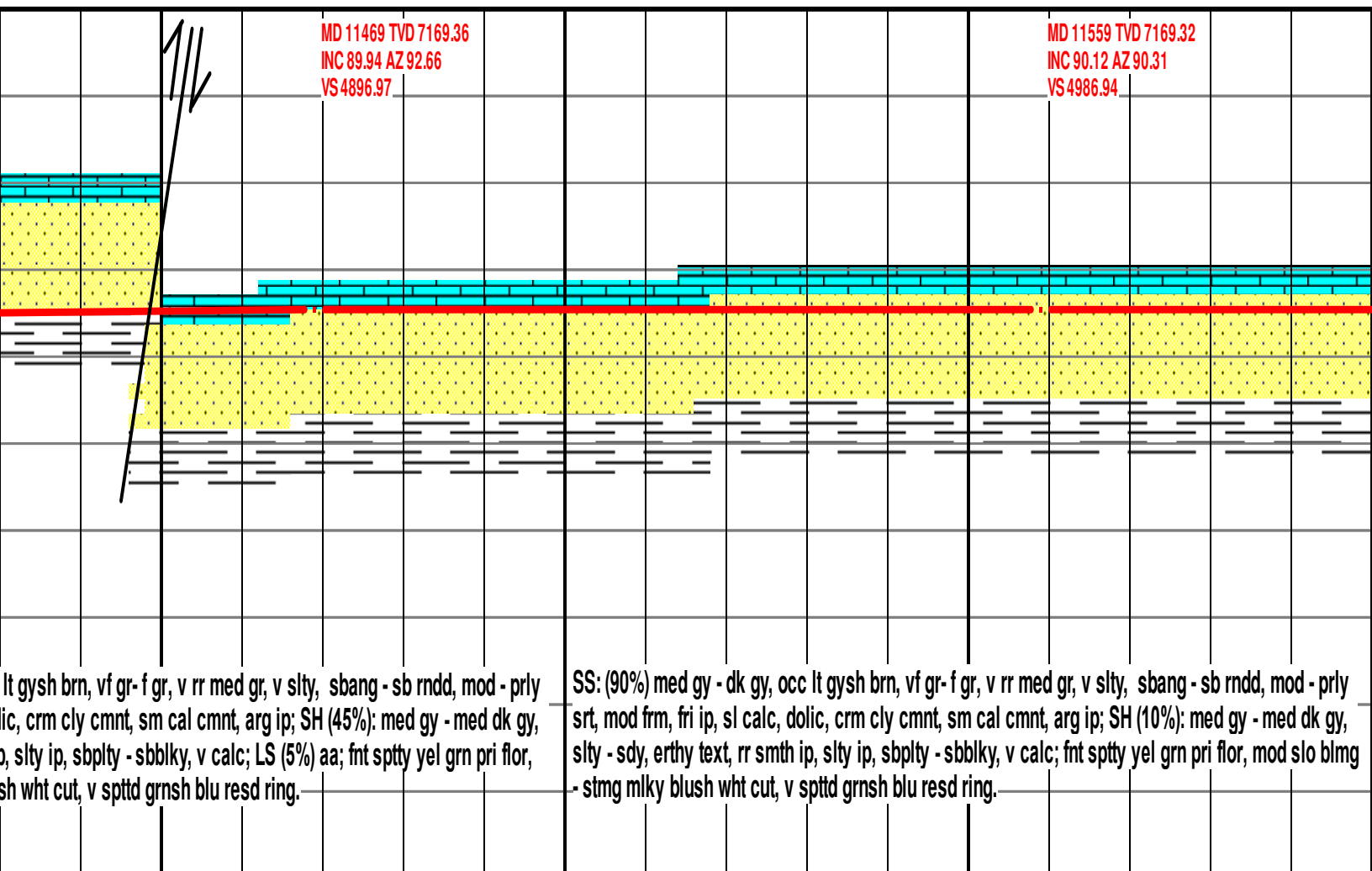
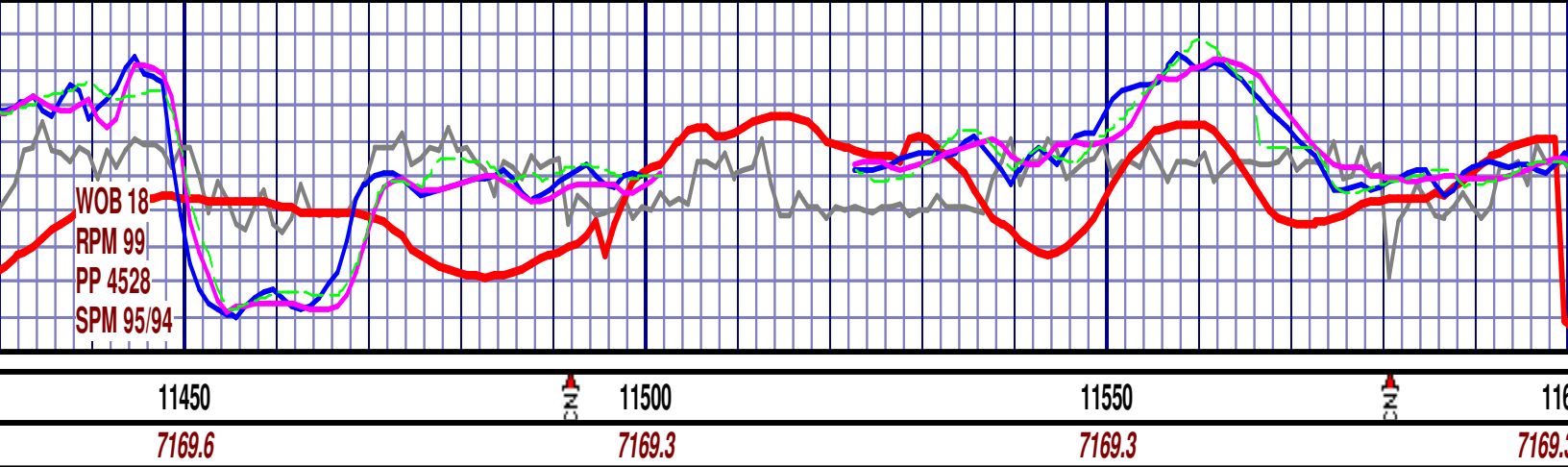
SH (60%): med gy - med dk gy, slty - sdy, erthy text, rr smth  
(40%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr,  
mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, arg ip; fr  
stmg mlky blush wht cut, v spstd grnsh blu resd ring.

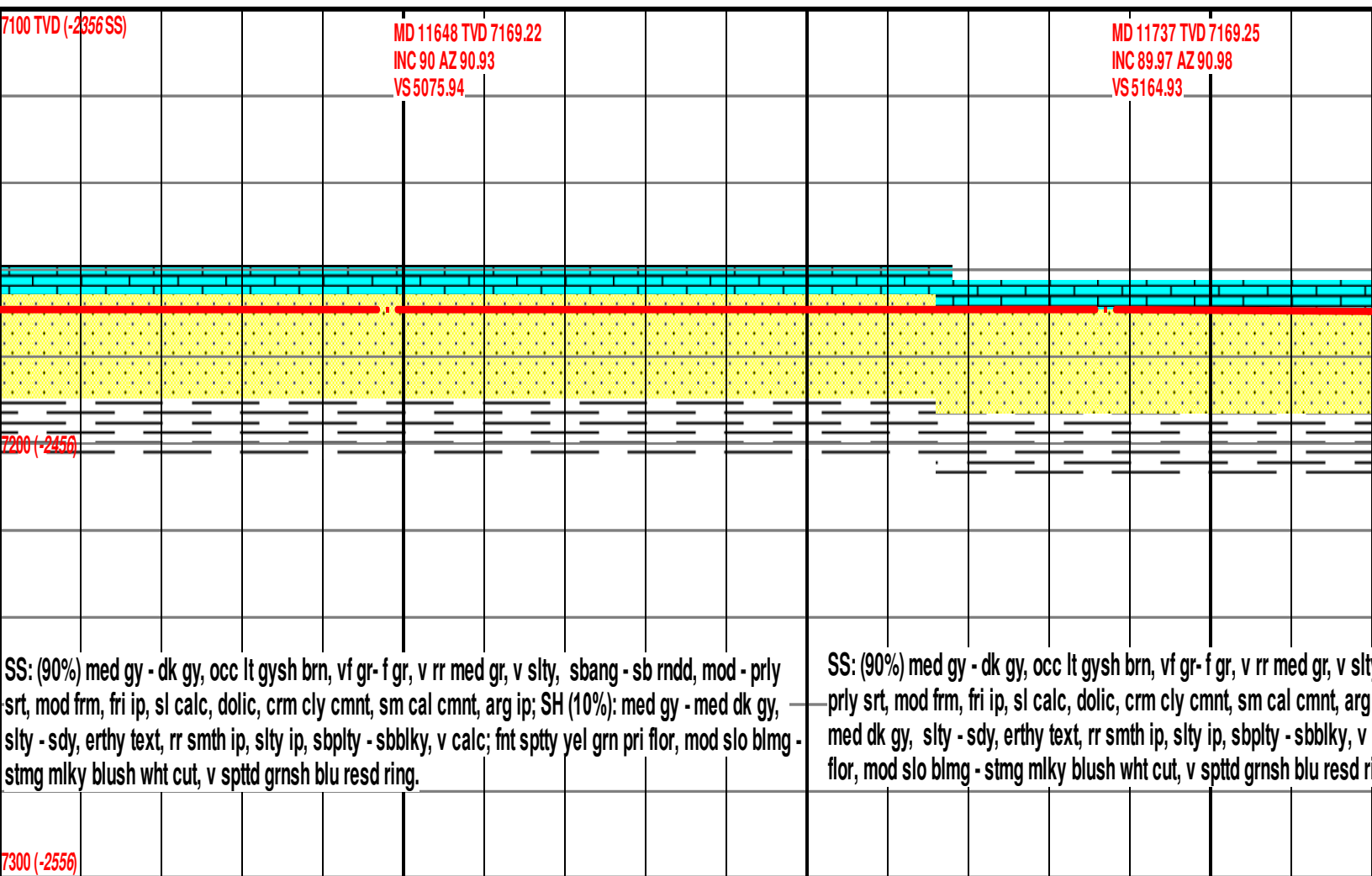
7300 (-2556)



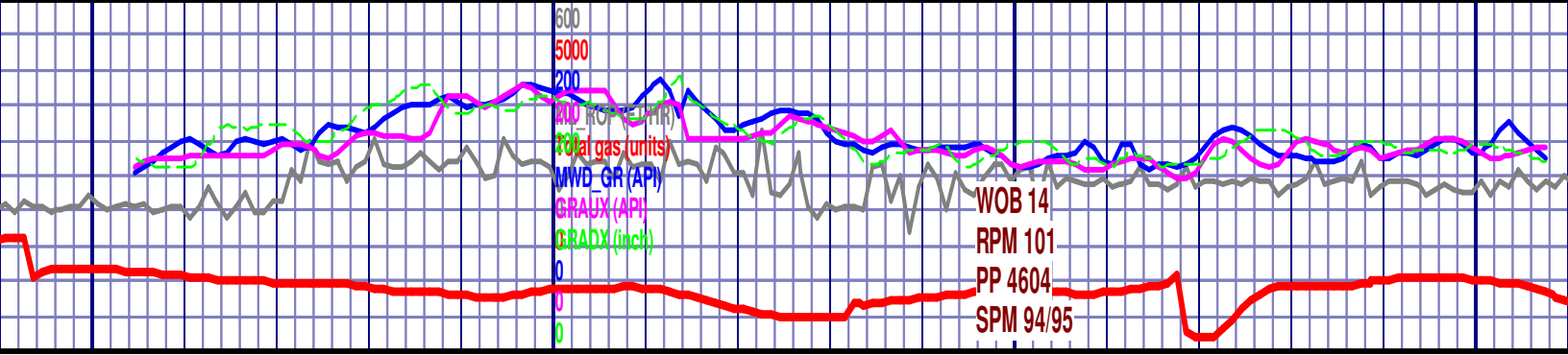












11950

12000

12050

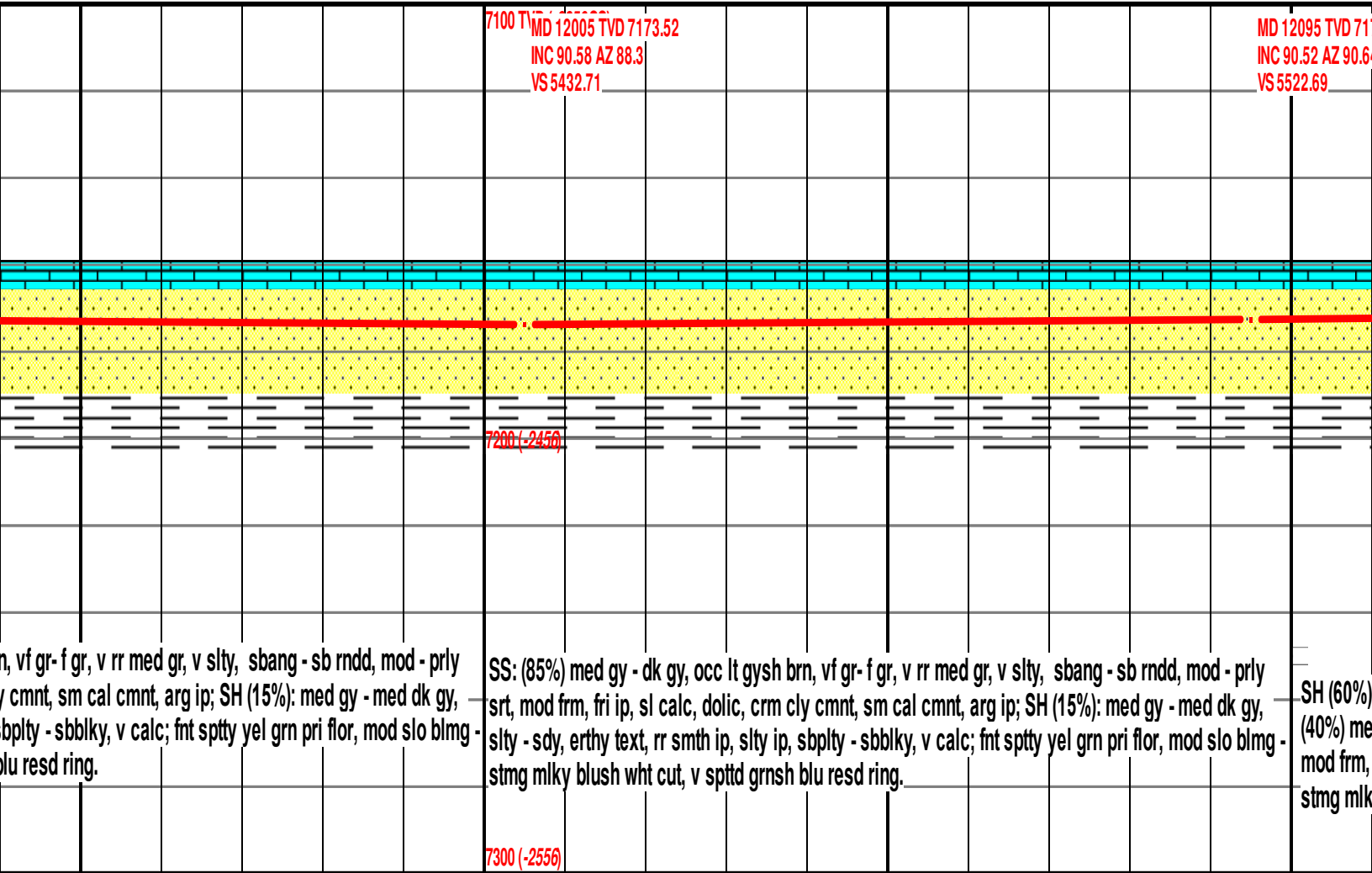
12100

7173.

7173.5 TVD

7173.1

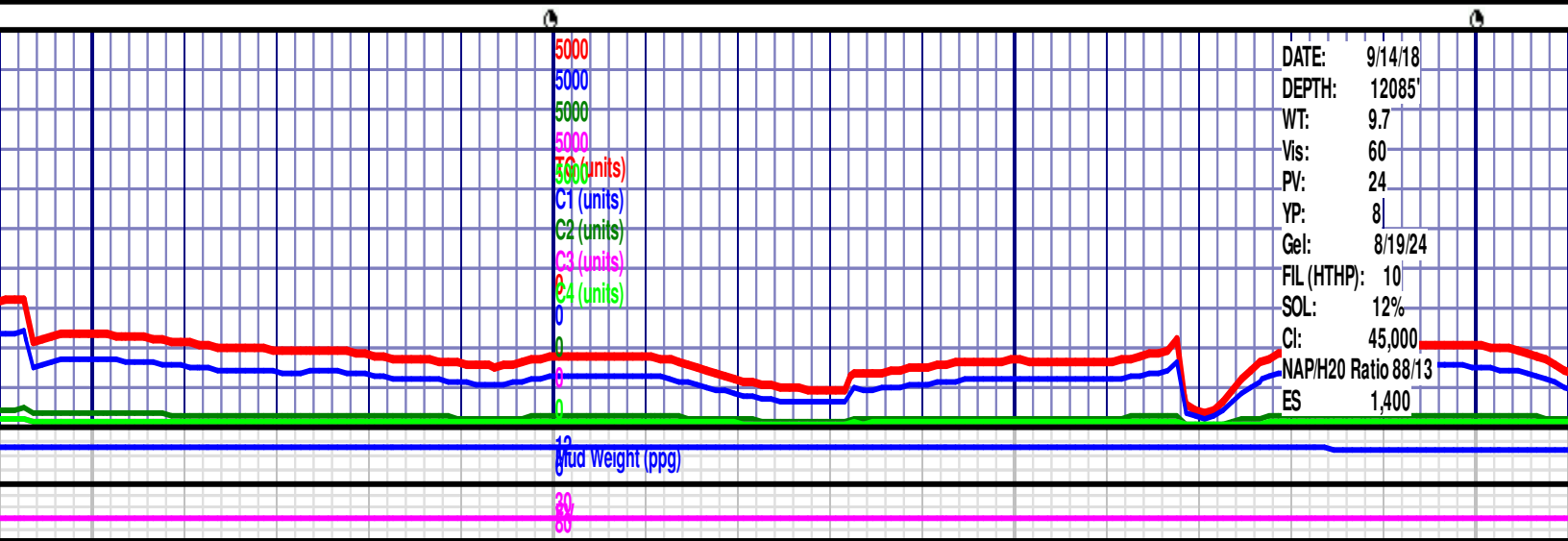
7172.6

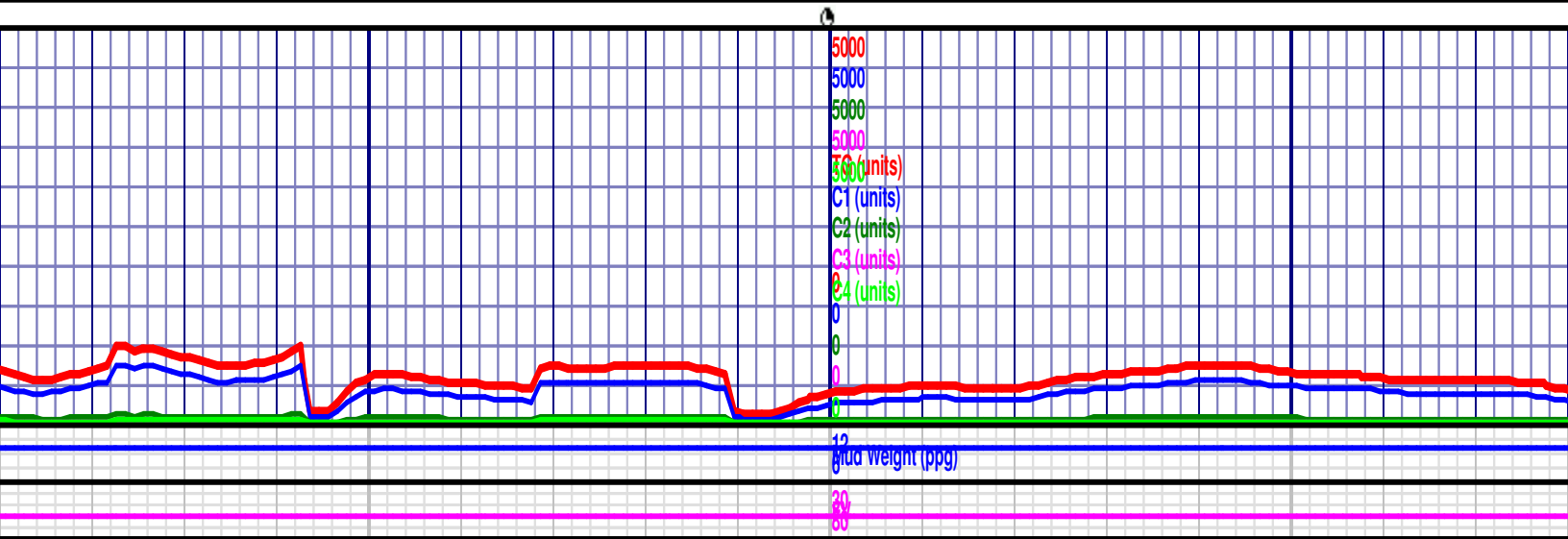
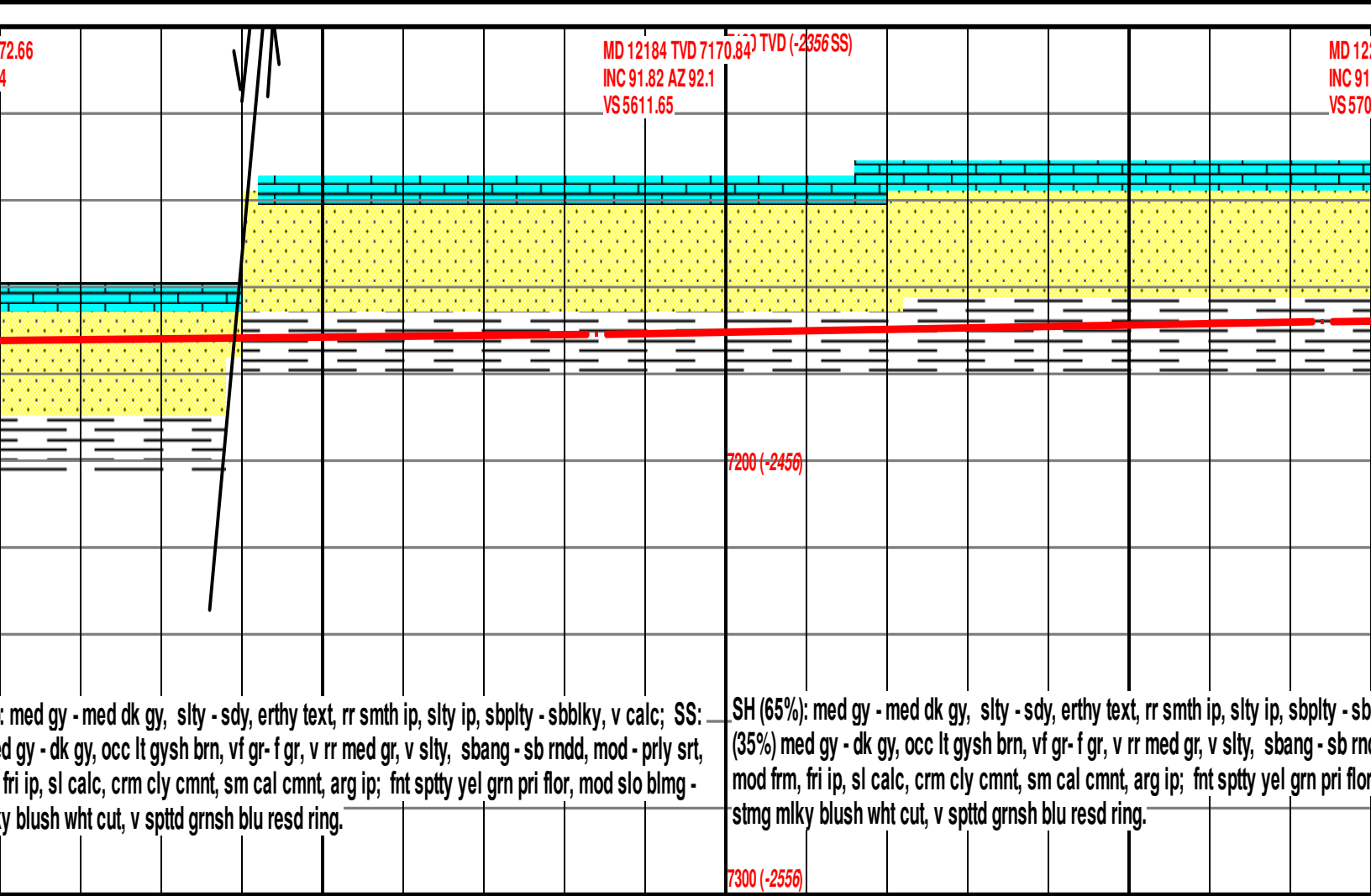
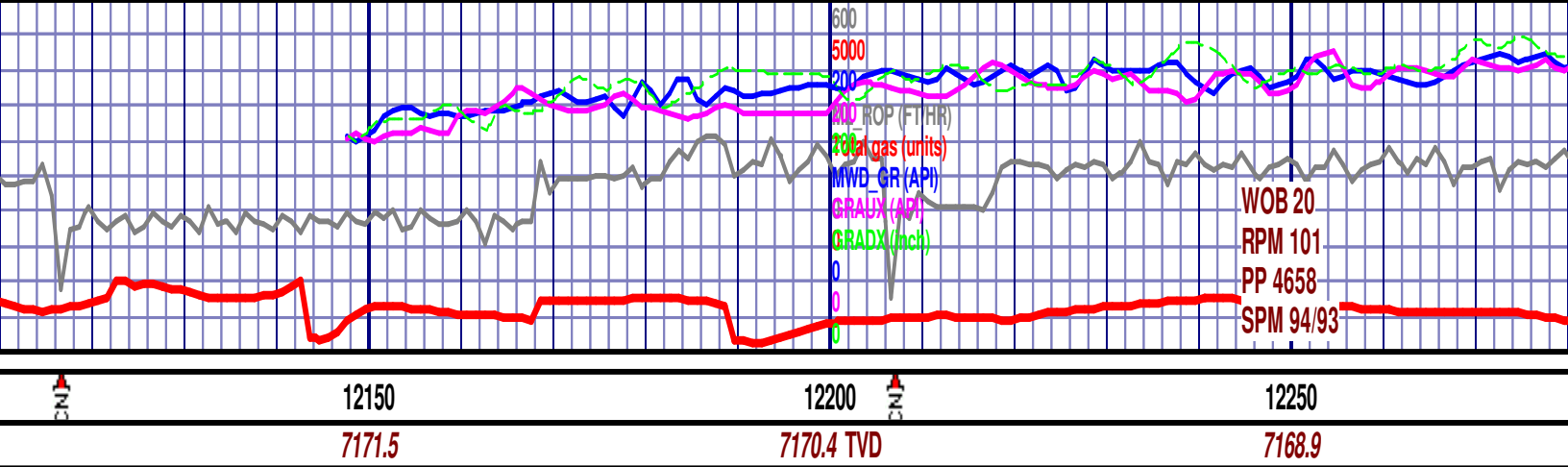


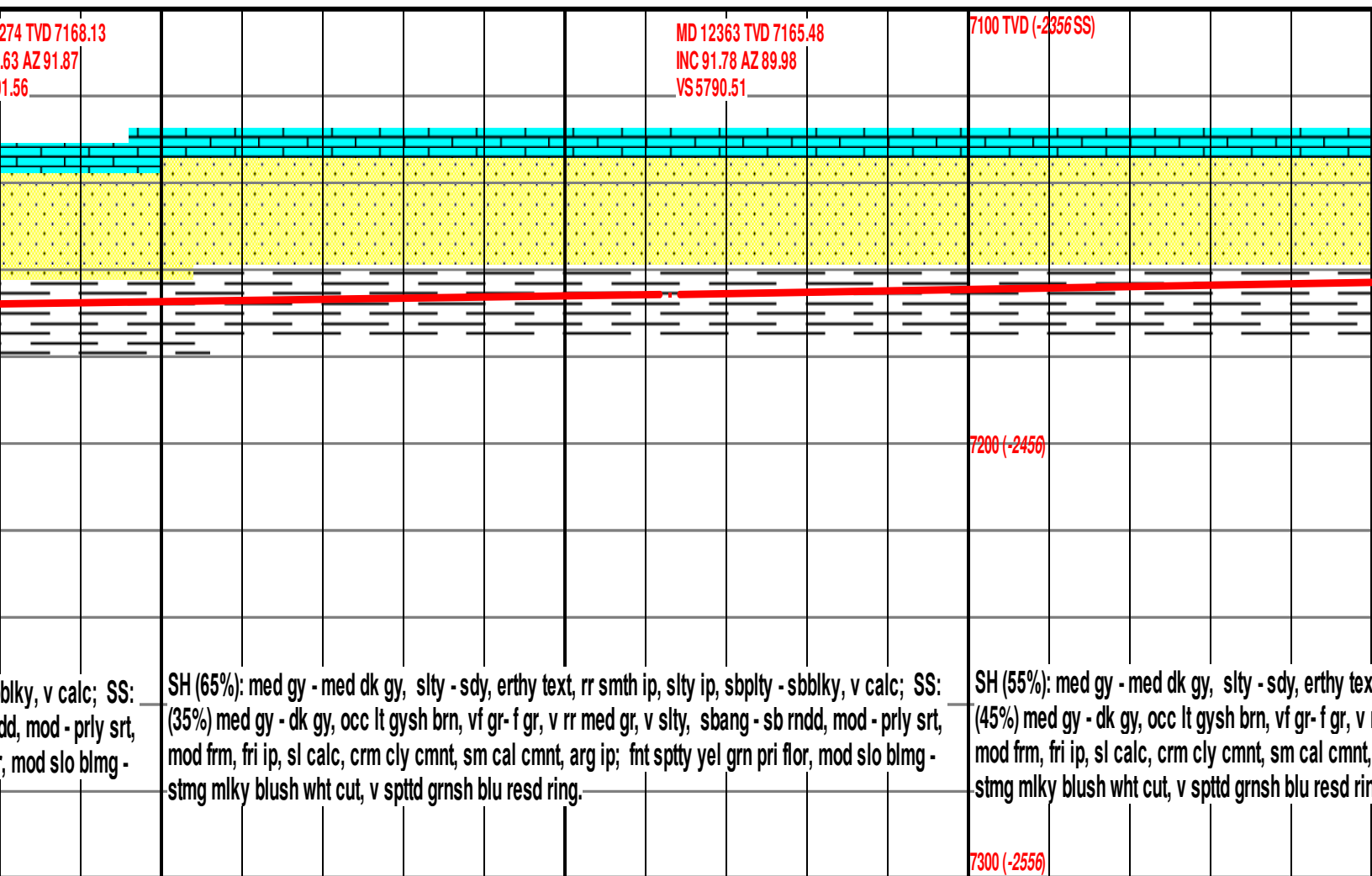
SS: (85%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod - prly  
srt, mod frm, fri ip, sl calc, dolc, crm cly cmnt, sm cal cmnt, arg ip; SH (15%): med gy - med dk gy,  
sbply - sbbly, v calc; fnt spty yel grn pri flor, mod slo blmg -  
stmg mlky blush wht cut, v spttd grnsh blu resd ring.

SS: (85%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod - prly  
srt, mod frm, fri ip, sl calc, dolc, crm cly cmnt, sm cal cmnt, arg ip; SH (15%): med gy - med dk gy,  
sbply - sbbly, v calc; fnt spty yel grn pri flor, mod slo blmg -  
stmg mlky blush wht cut, v spttd grnsh blu resd ring.

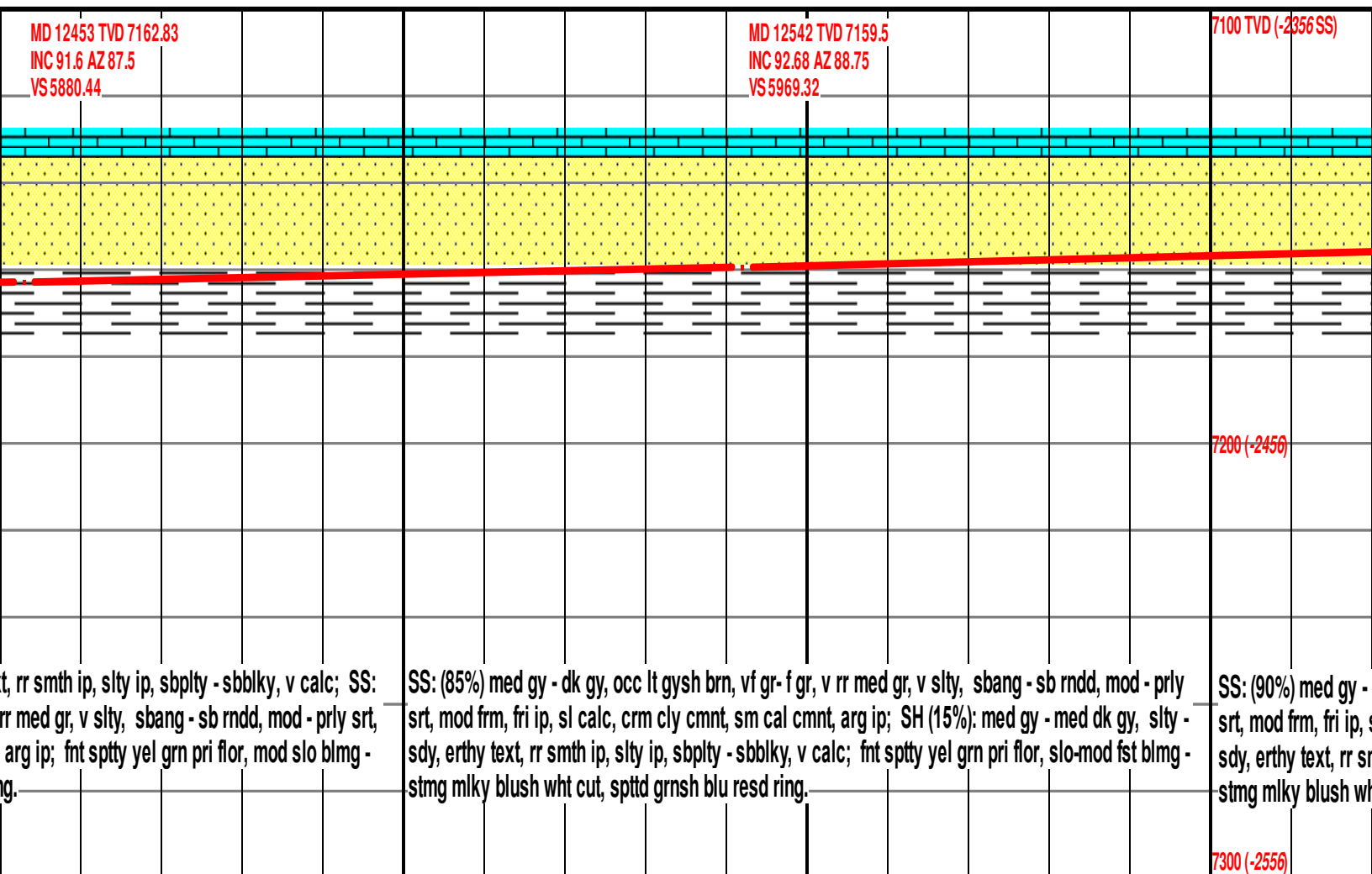
SH (60%)  
(40%) me  
mod frm,  
stmg mlk

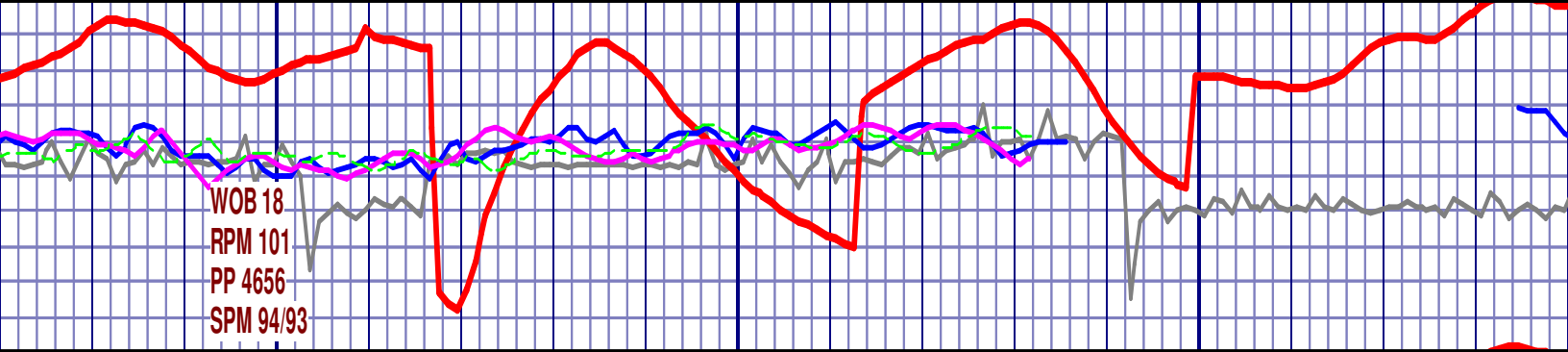












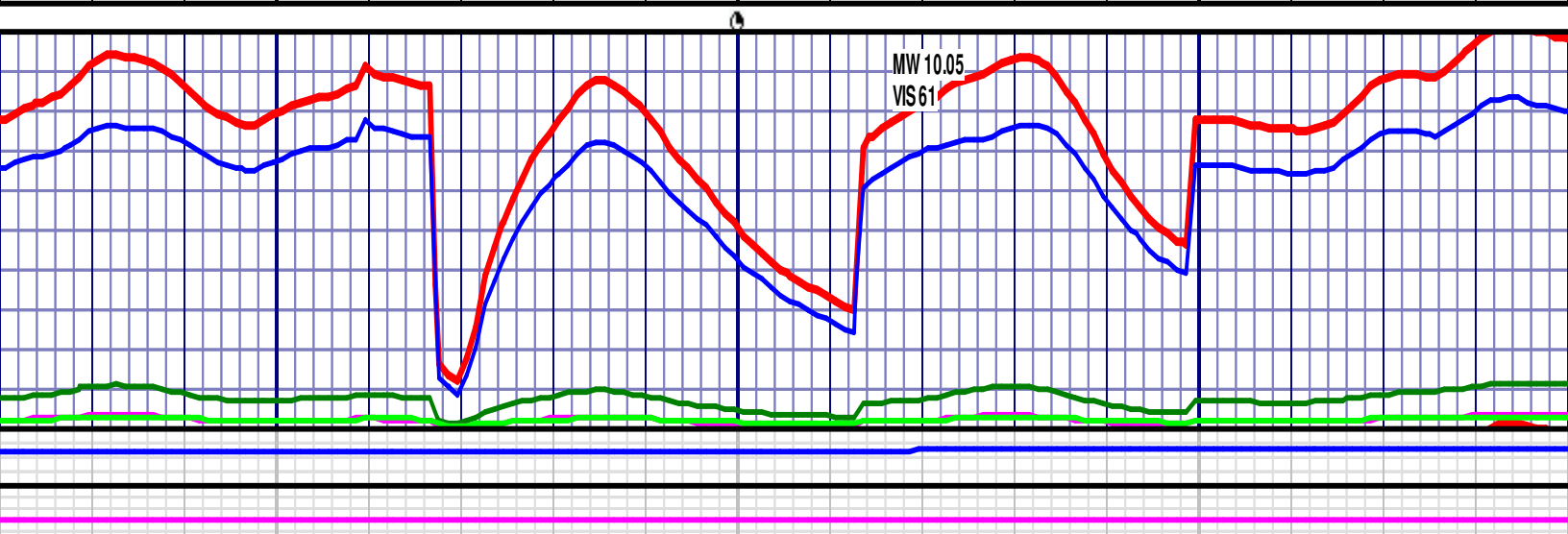
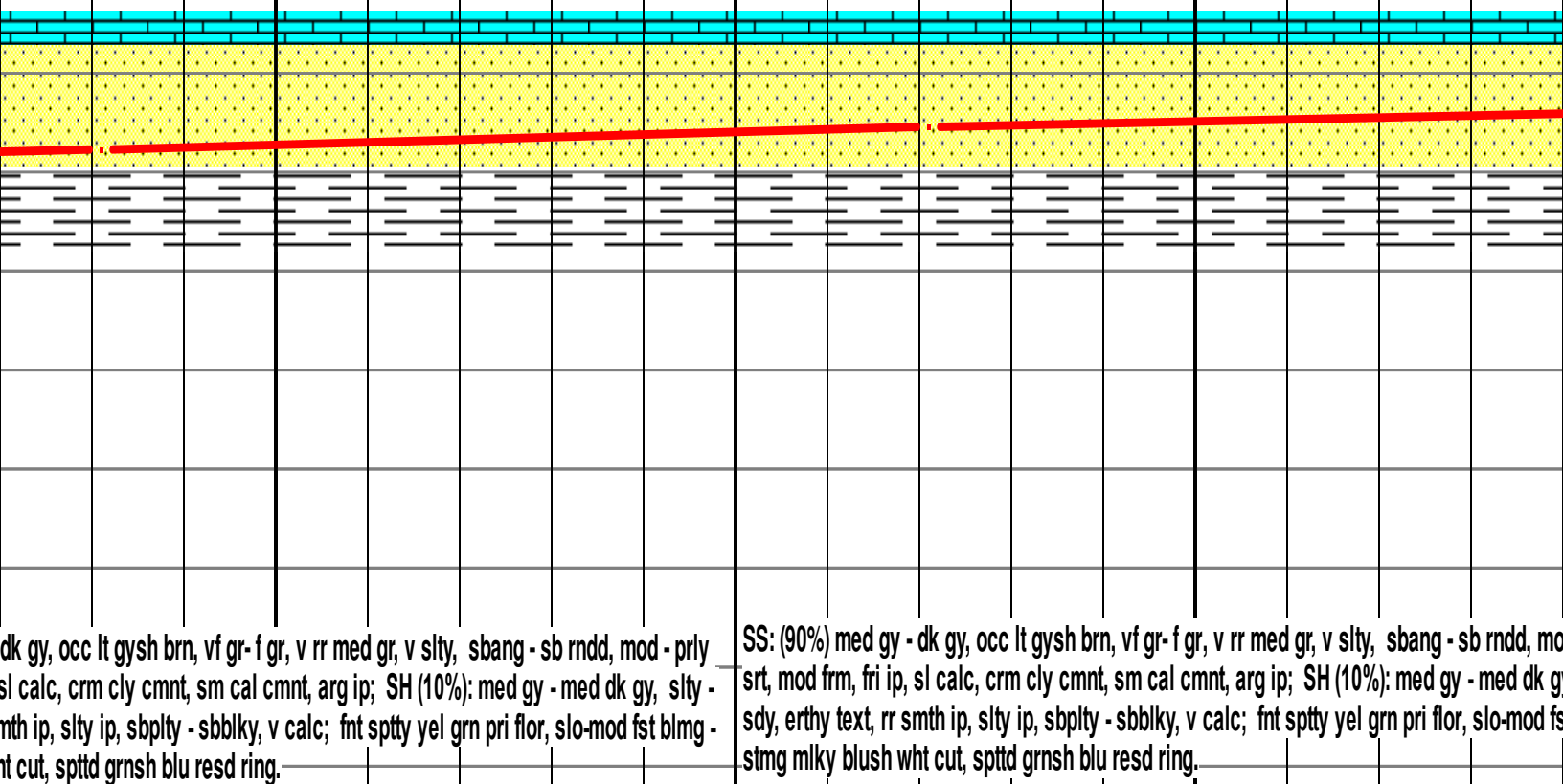
12650  
7154.4

12700  
7152.

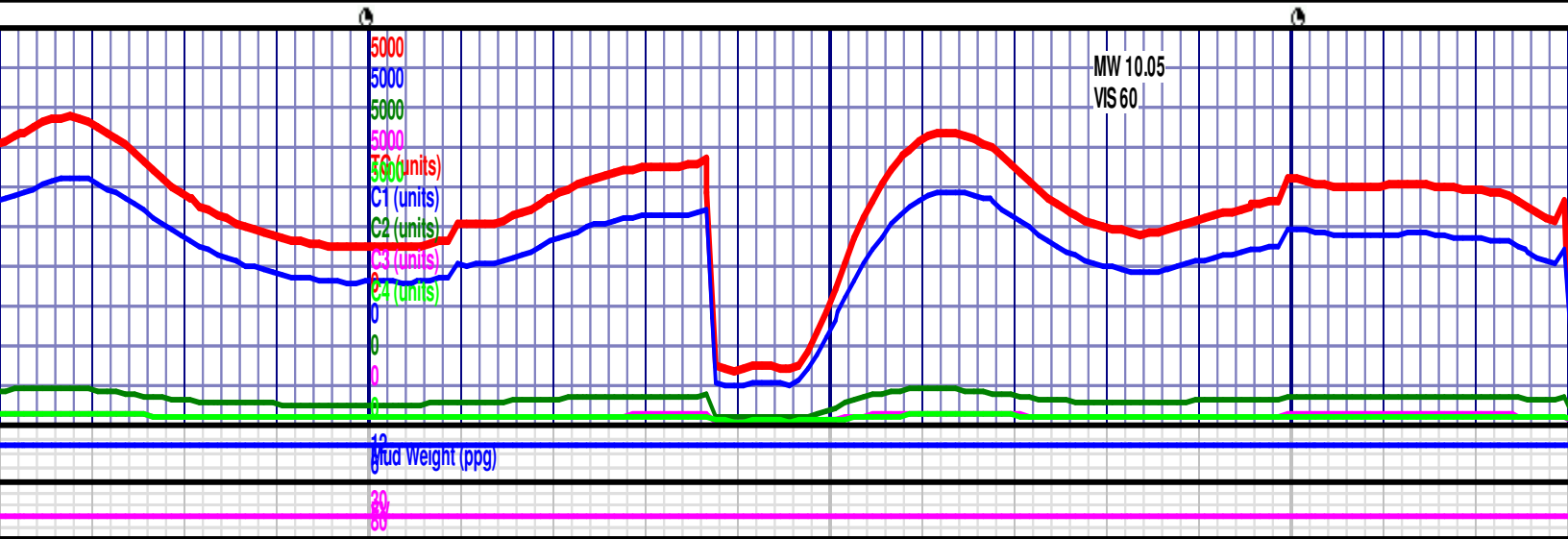
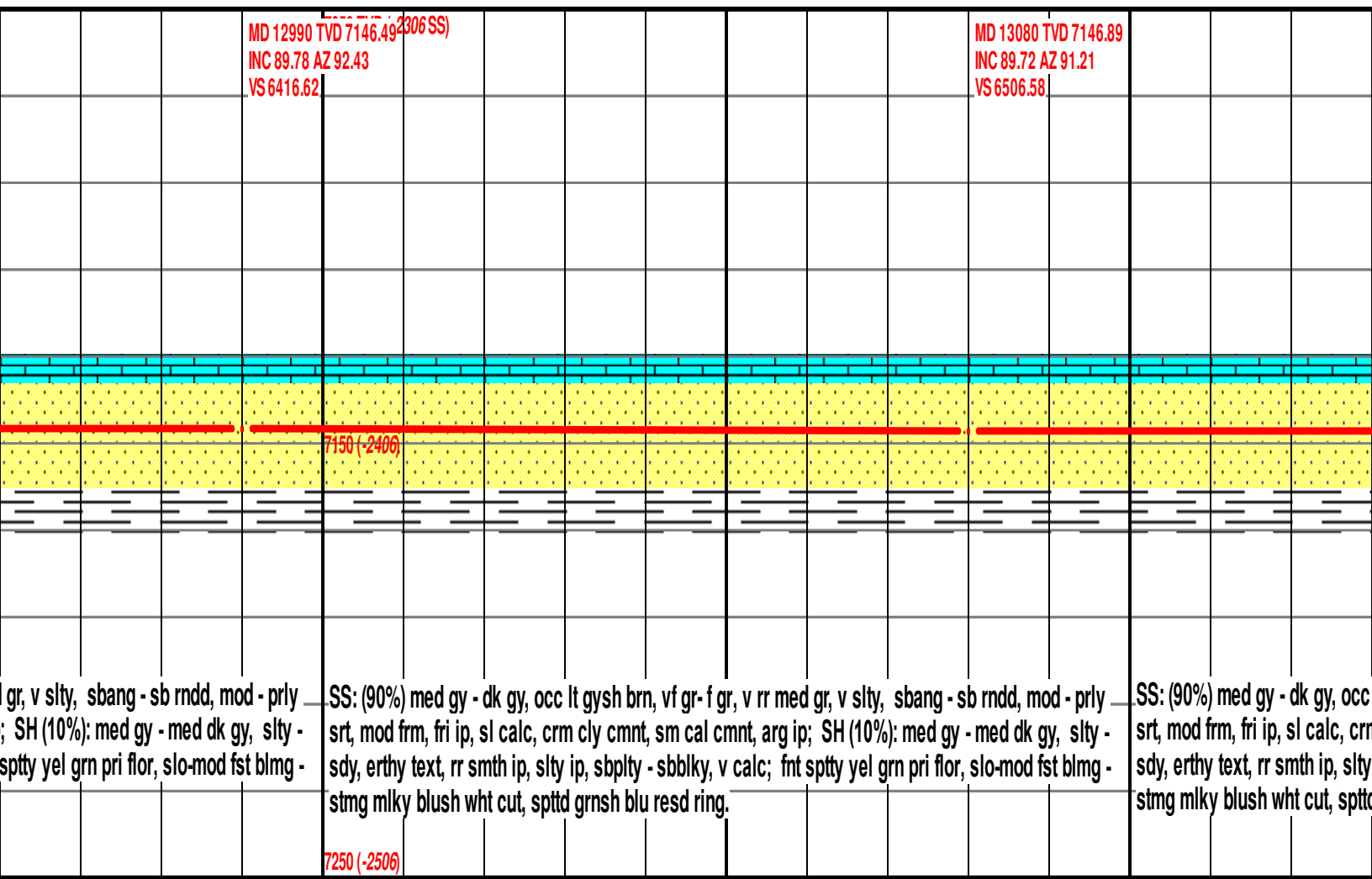
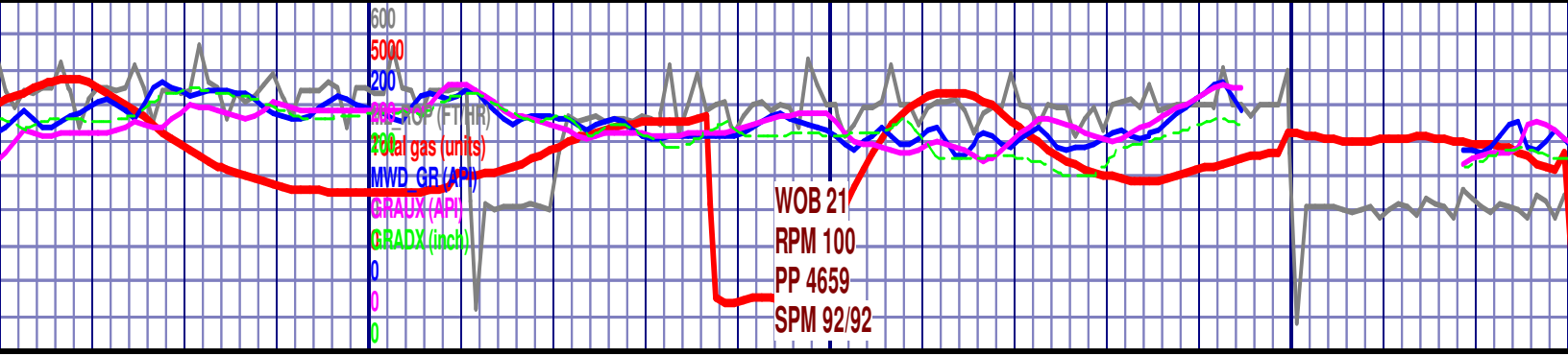
12750  
7149.9

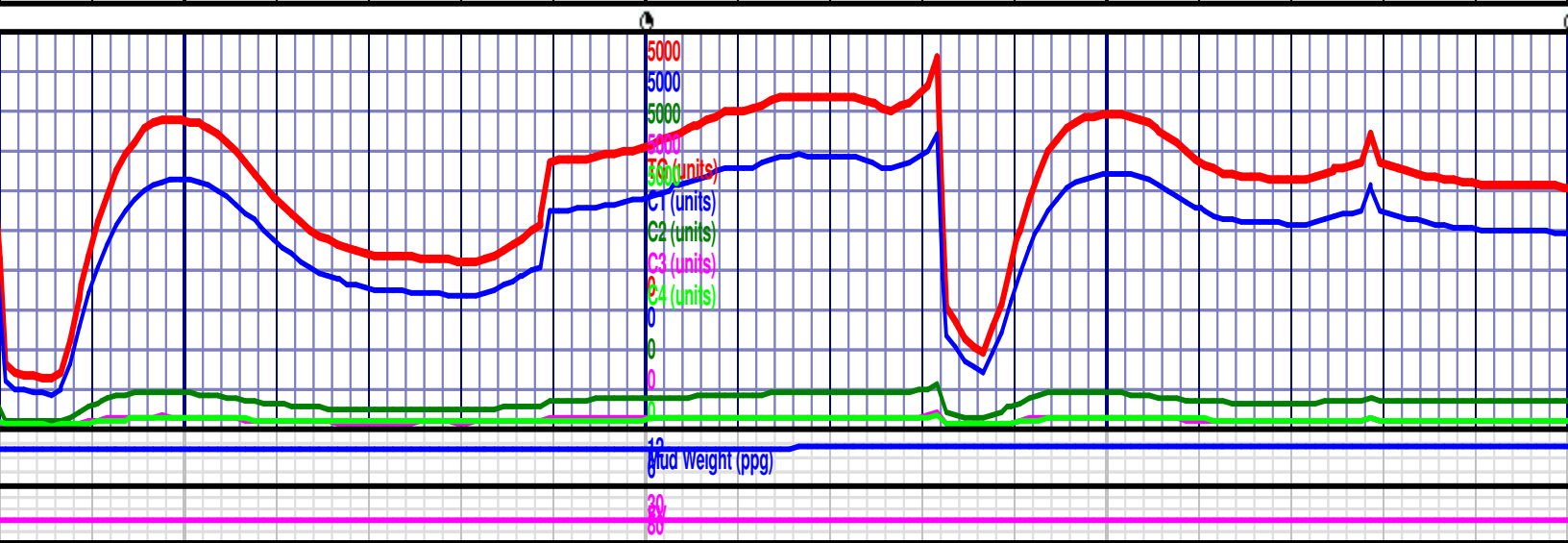
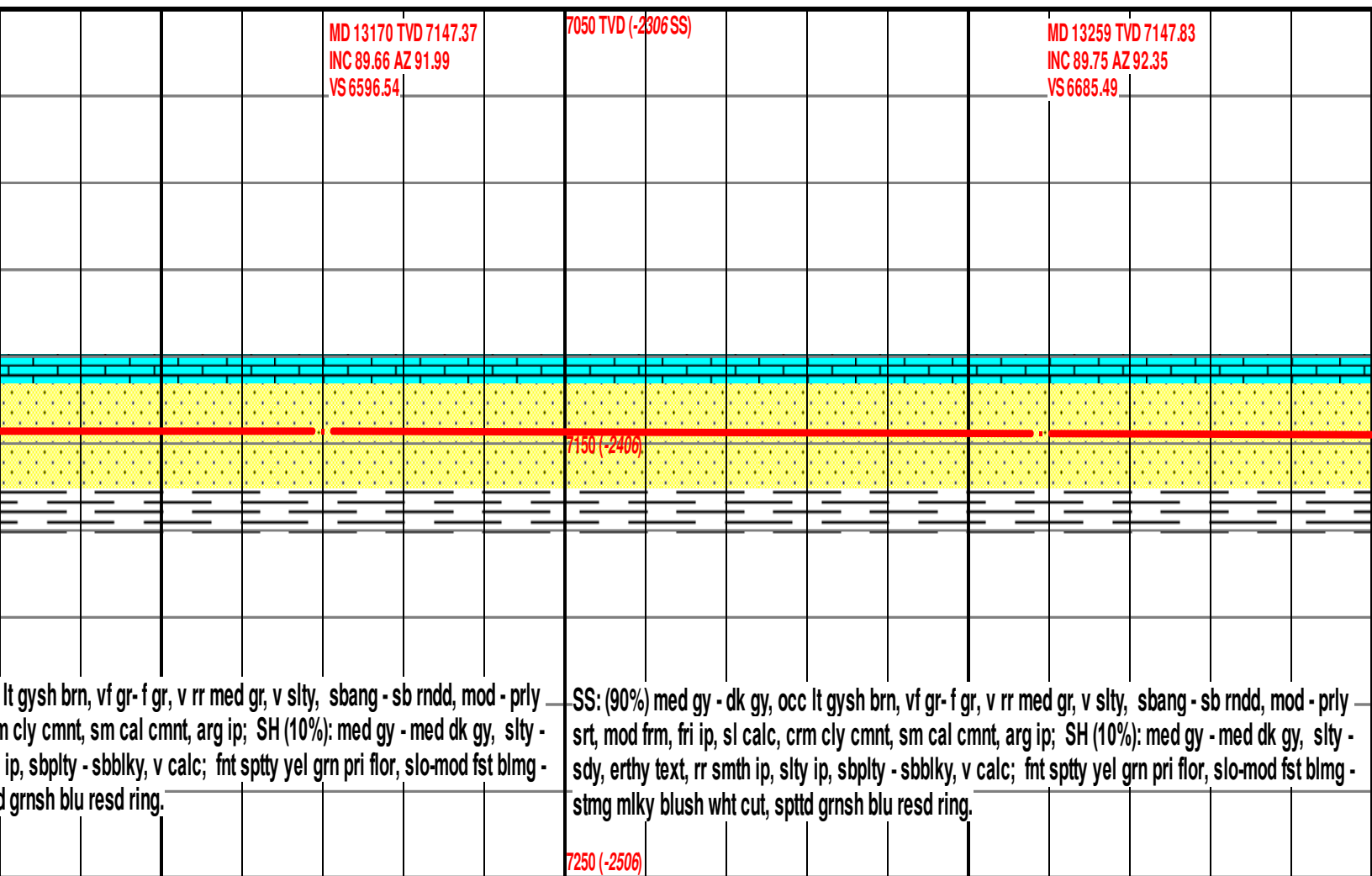
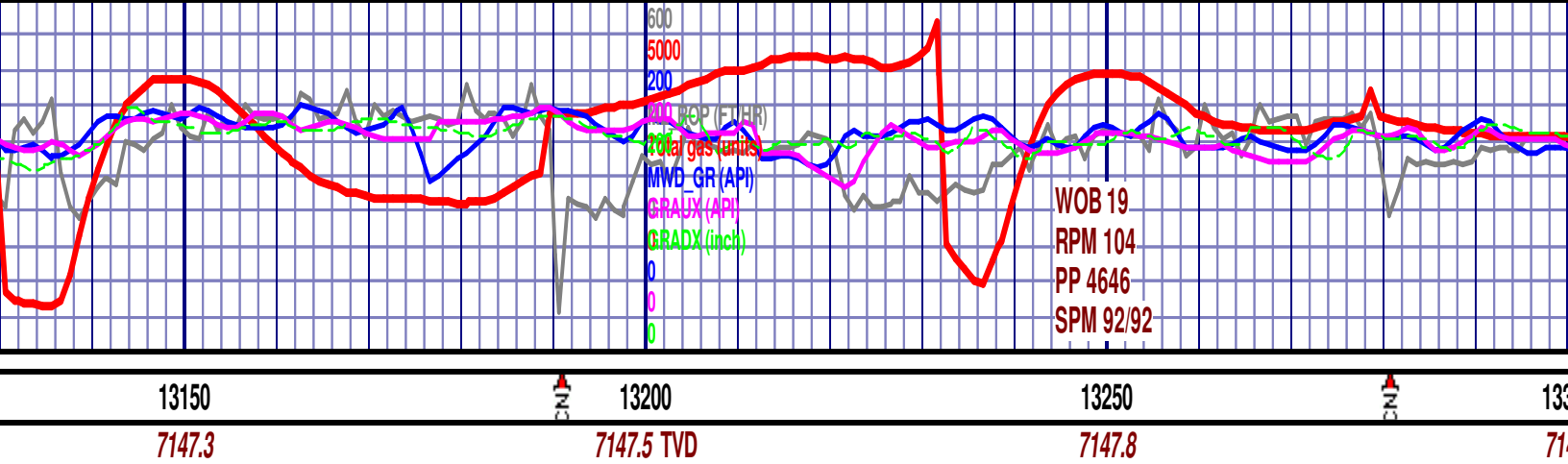
MD 12631 TVD 7155.27  
INC 92.77 AZ 91.02  
VS 6058.21

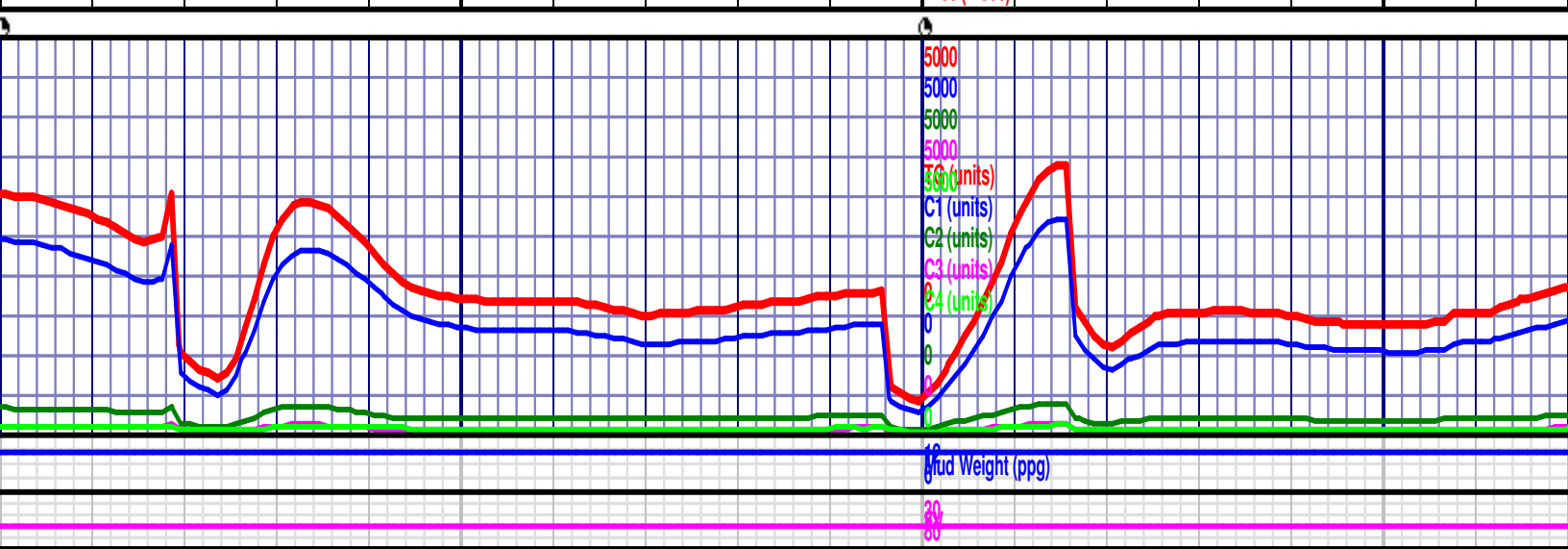
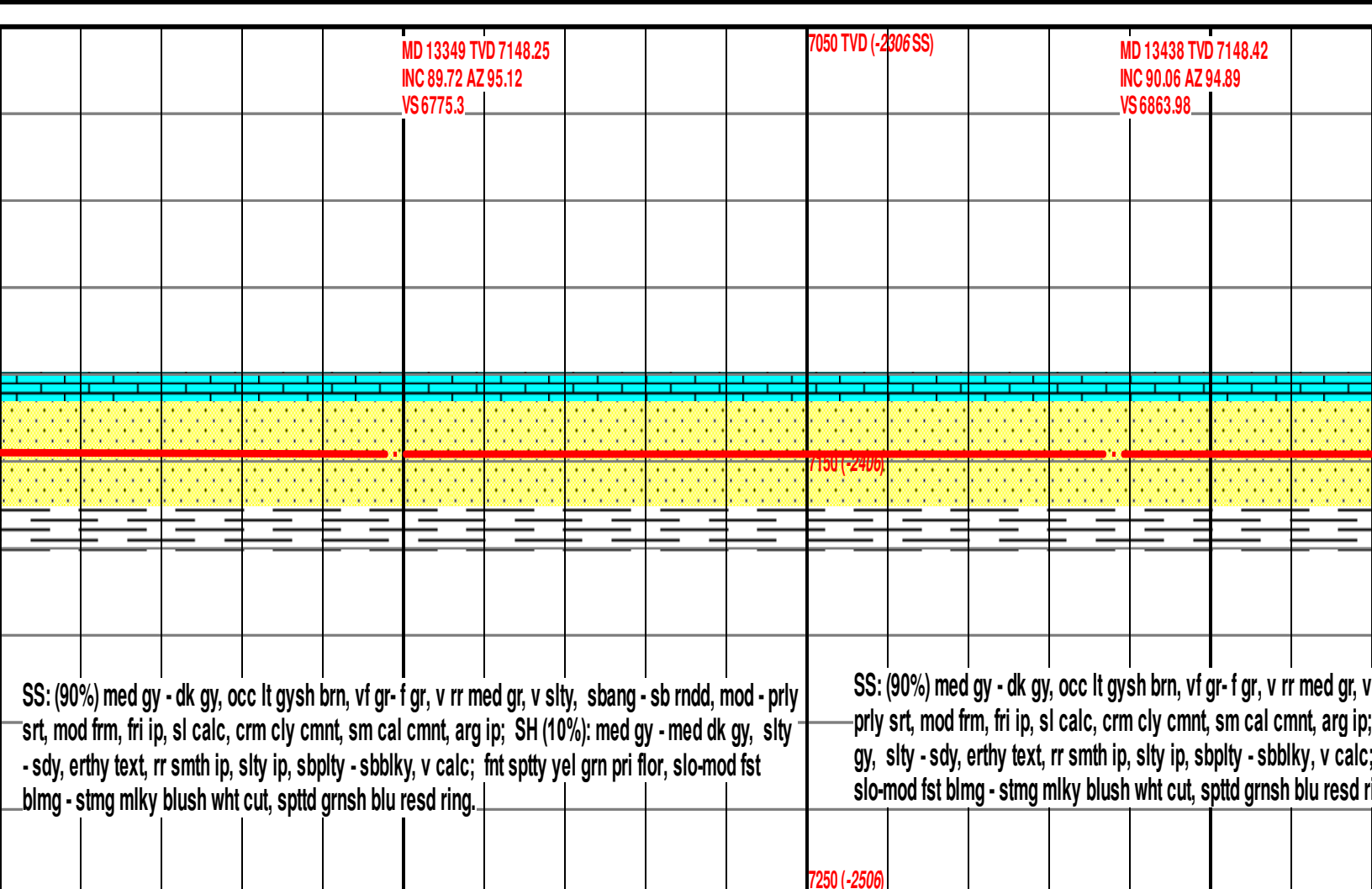
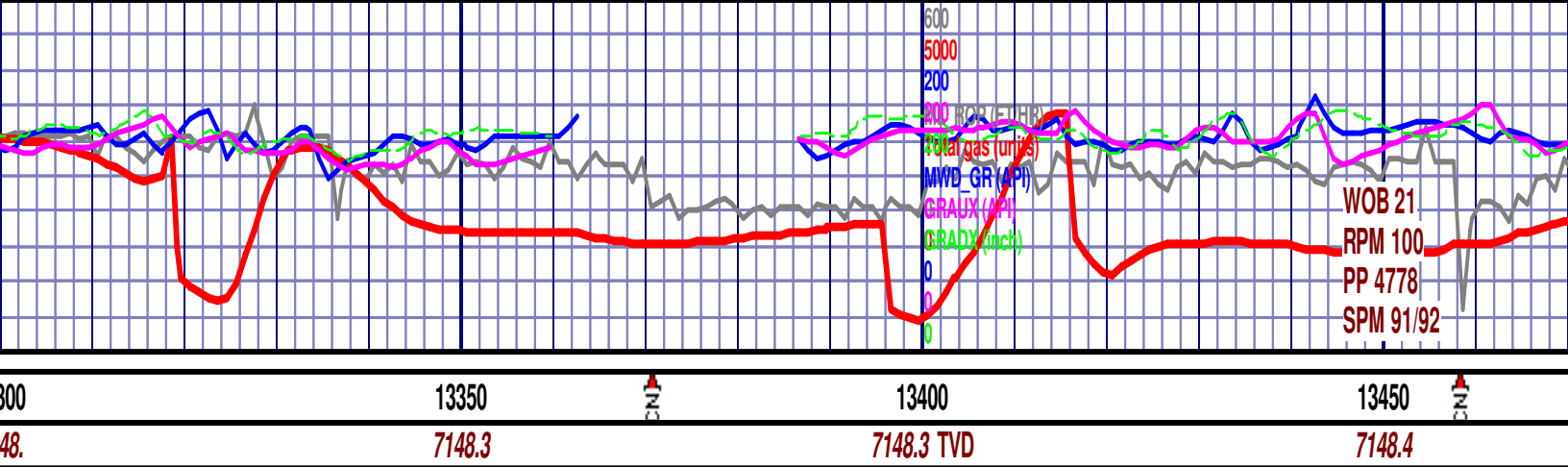
MD 12721 TVD 7150.95  
INC 92.74 AZ 92.58  
VS 6148.07

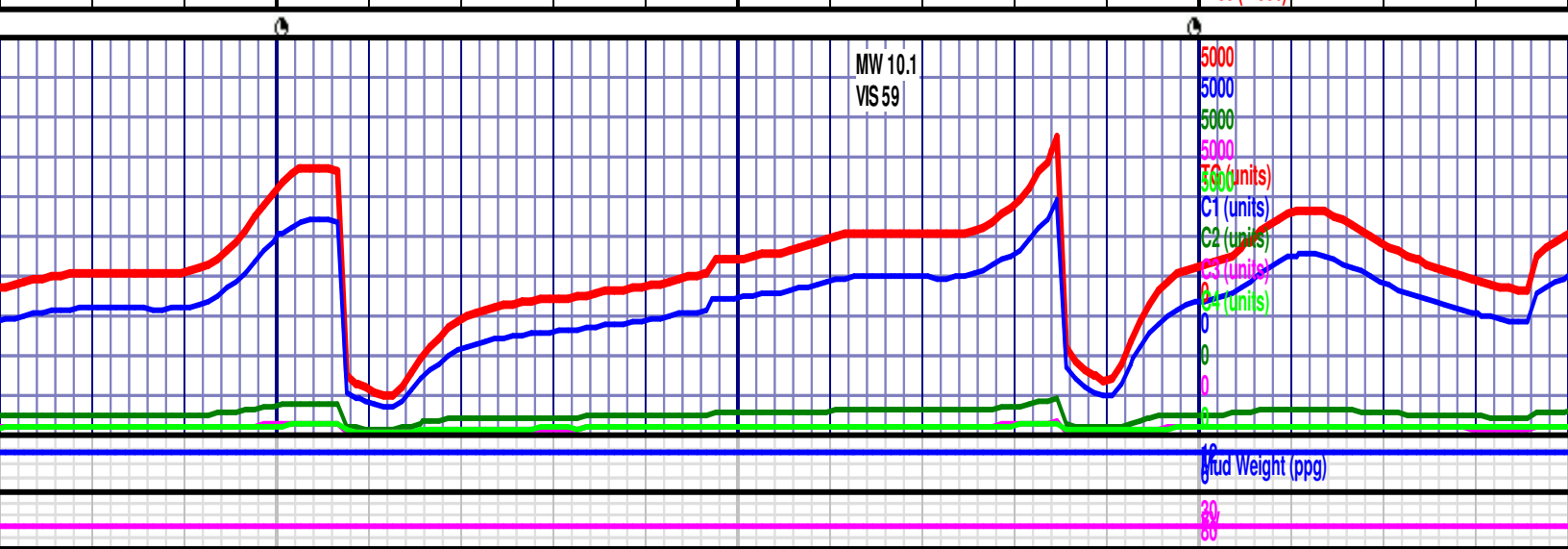
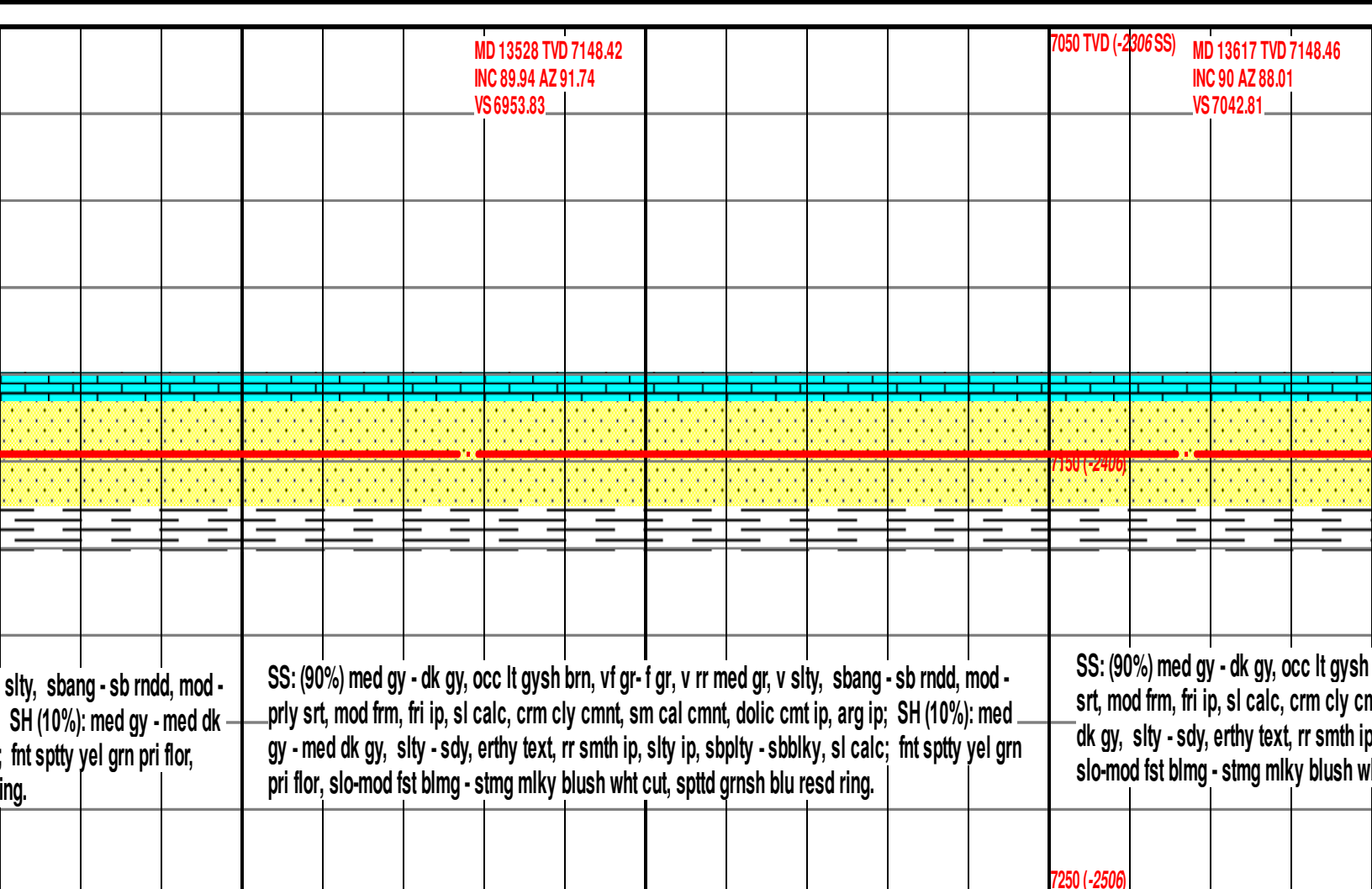
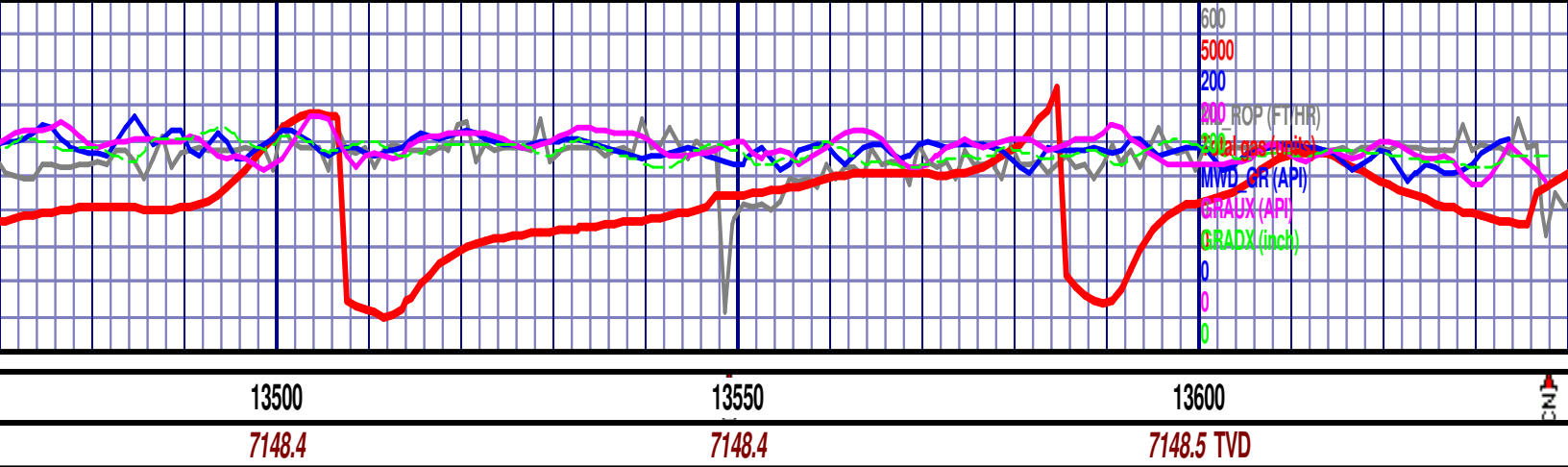


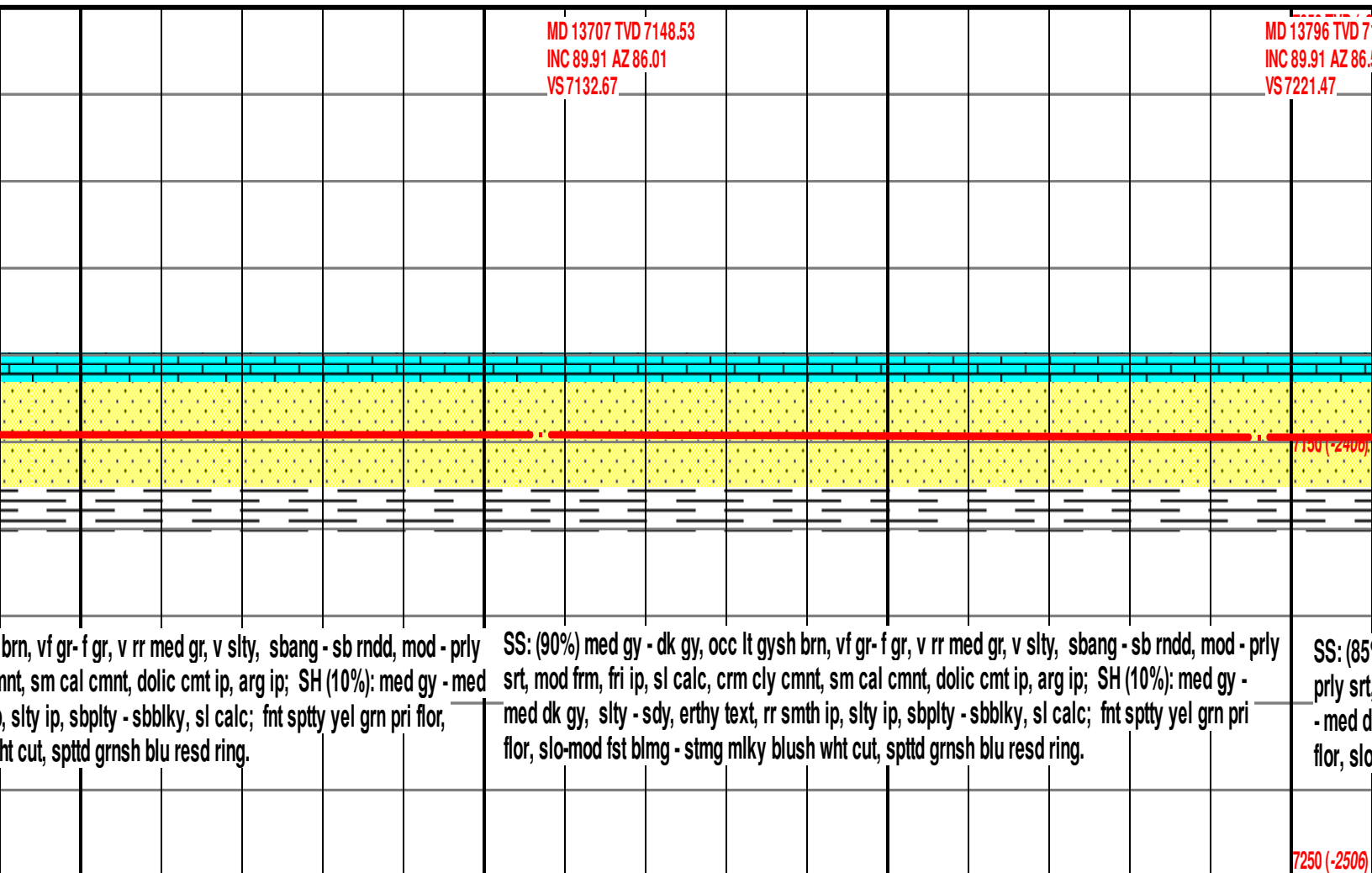




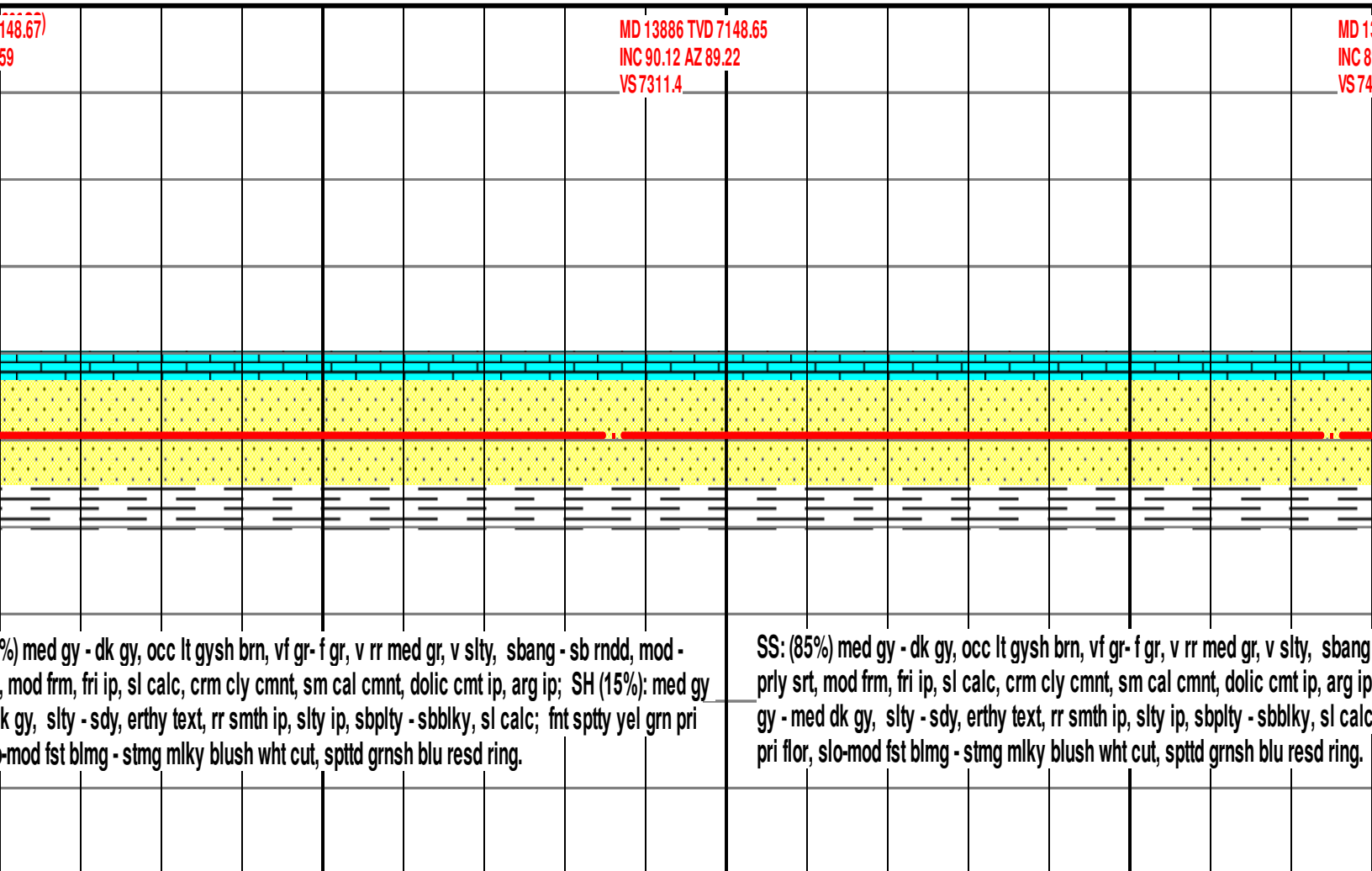


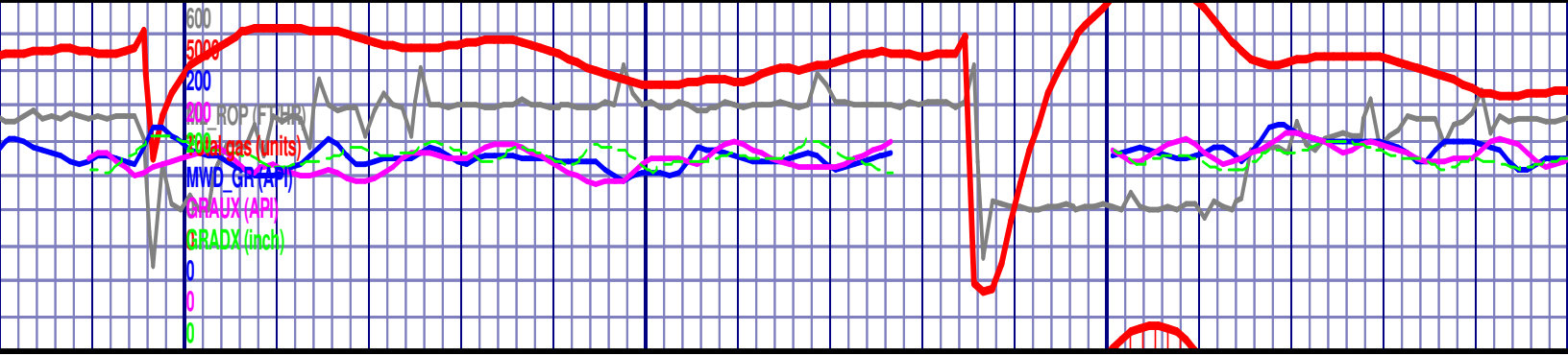










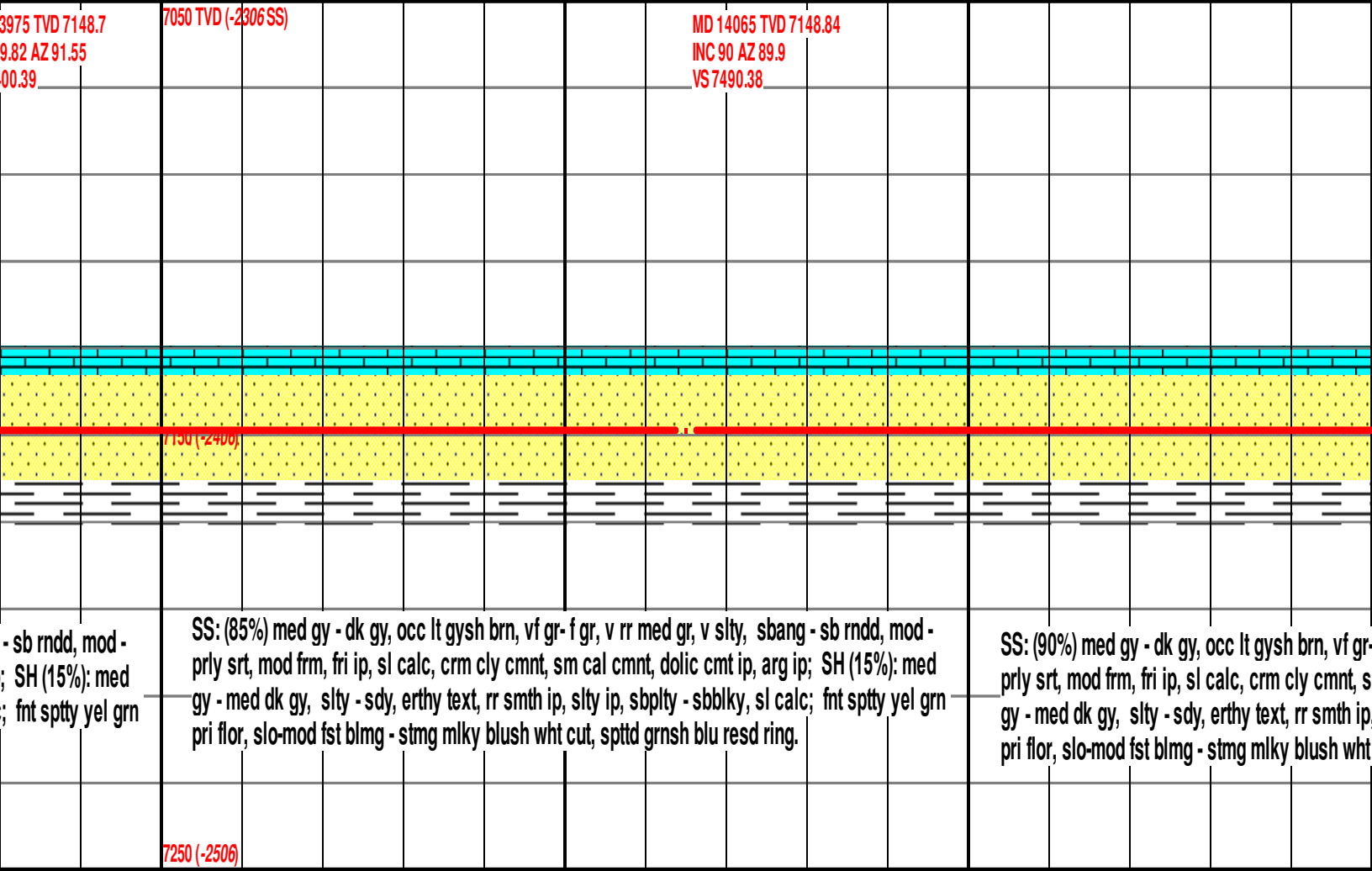


14000  
7148.7 TVD

14050  
7148.8

14100  
7148.9

14150  
7149.0



3975 TVD 7148.7  
9.82 AZ 91.55  
00.39

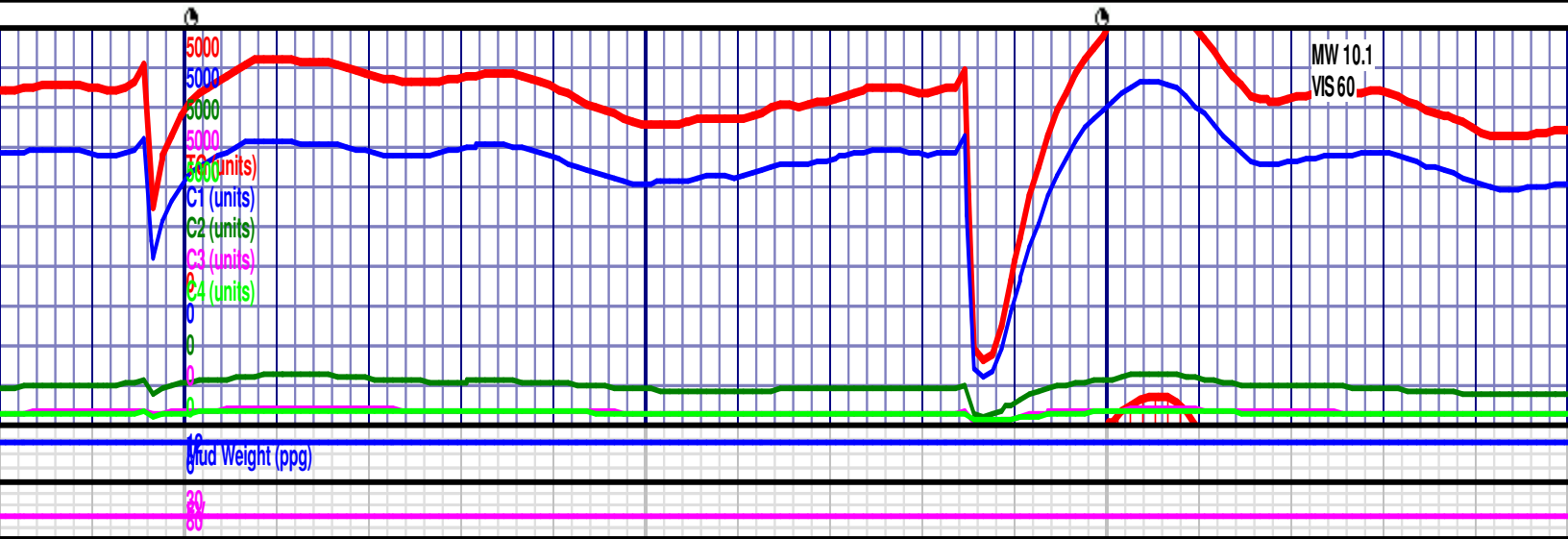
7050 TVD (-2306 SS)

MD 14065 TVD 7148.84  
INC 90 AZ 89.9  
VS 7490.38

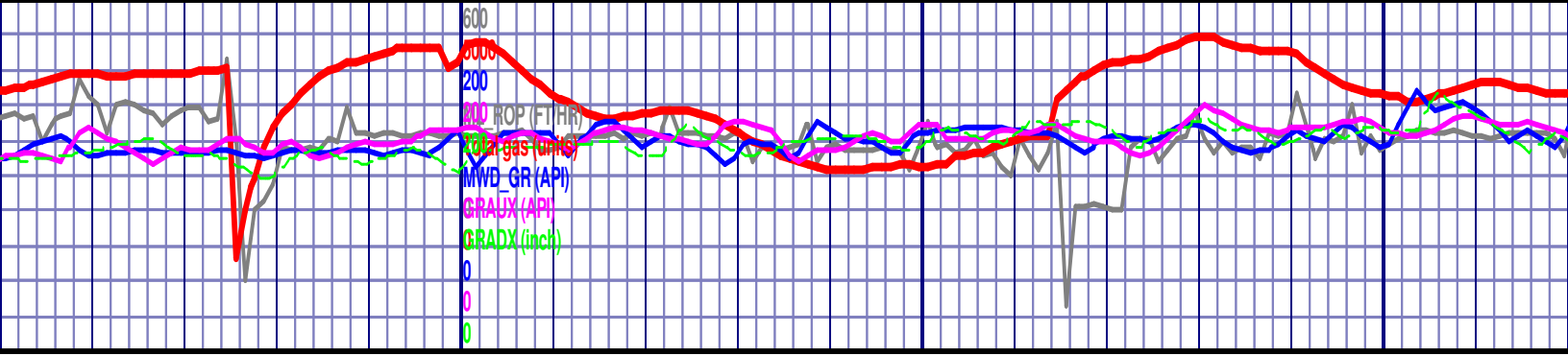
- sb rndd, mod -  
; SH (15%): med  
; fnt sppty yel grn

SS: (85%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod -  
prly srt, mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, dolc cmt ip, arg ip; SH (15%): med  
gy - med dk gy, slty - sdy, erthy text, rr smth ip, slty ip, sbply - sbbly, sl calc; fnt sppty yel grn  
pri flor, slo-mod fst blmg - stmg mlky blush wht cut, spttd grnsh blu resd ring.

SS: (90%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod -  
prly srt, mod frm, fri ip, sl calc, crm cly cmnt, s  
gy - med dk gy, slty - sdy, erthy text, rr smth ip  
pri flor, slo-mod fst blmg - stmg mlky blush wht

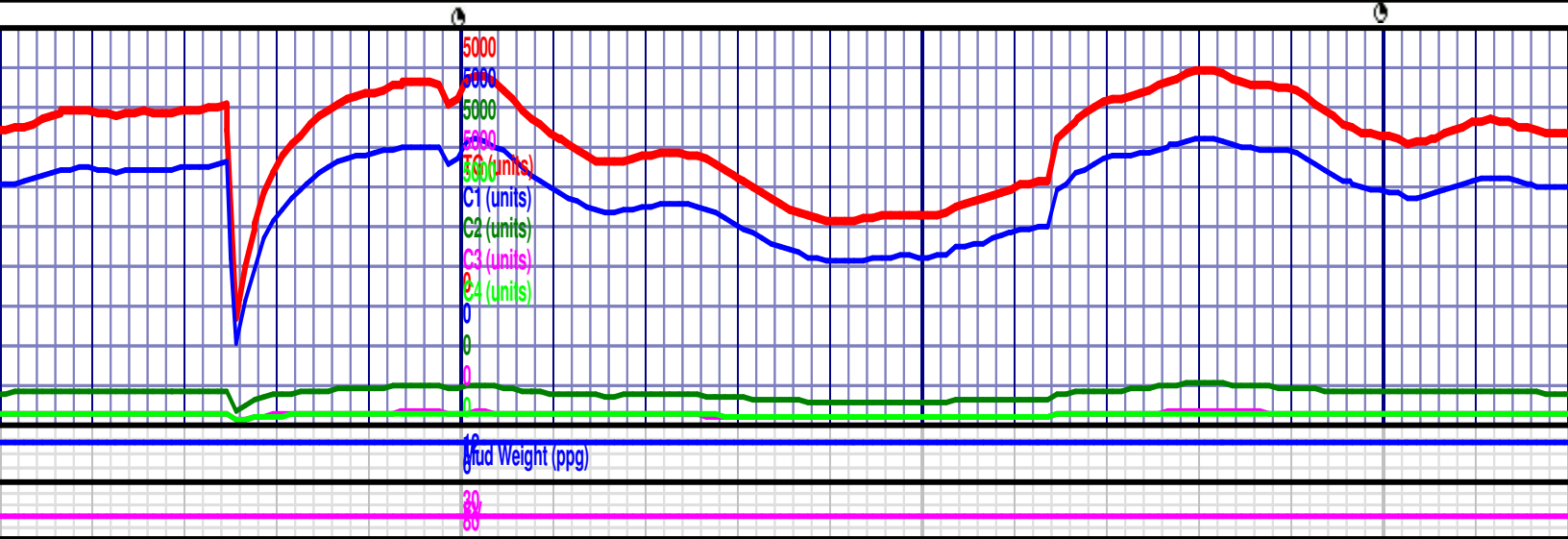


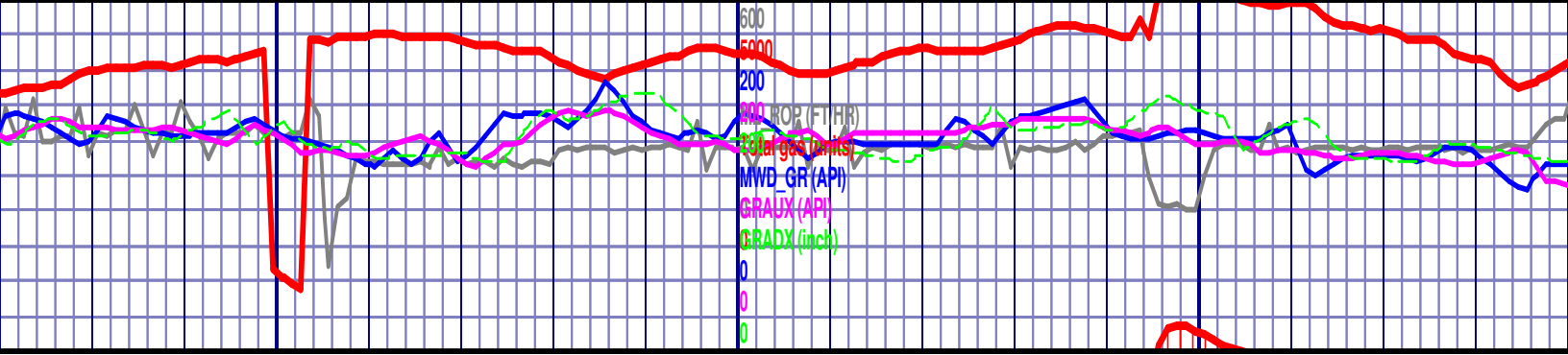
MW 10.1  
VS 60



14150 14200 14250 14300  
19.1 7149.3 TVD 7149.5 7149.6

<p>MD 14154 TVD 7149.08 INC 89.69 AZ 87.5 VS 7579.35</p>	<p>7050 TVD (-2306 SS)</p>	<p>MD 14244 TVD 7149.5 INC 89.78 AZ 85.97 VS 7669.18</p>	
<p>f gr, v rr med gr, v slty, sbang - sb rndd, mod - m cal cmnt, dolc cmt ip, arg ip; SH (10%): med slty ip, sbply - sbbly, sl calc; fnt spty yel grn cut, spttd grnsh blu resd ring.</p>	<p>SS: (90%) med gy - dk gy, occ lt gysh brn, vf gr-f gr, v rr med gr, v slty, sbang - sb rndd, mod - prly srt, mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, dolc cmt ip, arg ip; SH (10%): med gy - med dk gy, slty - sdy, erthy text, rr smth ip, slty ip, sbply - sbbly, sl calc; fnt spty yel grn gri flor, slo-mod fst blmg - stmg mlky blush wht cut, spttd grnsh blu resd ring.</p>		<p>SS: (90%) med gy srt, mod frm, fri ip med dk gy, slty - flor, slo-mod fst b</p>





14350  
7149.7

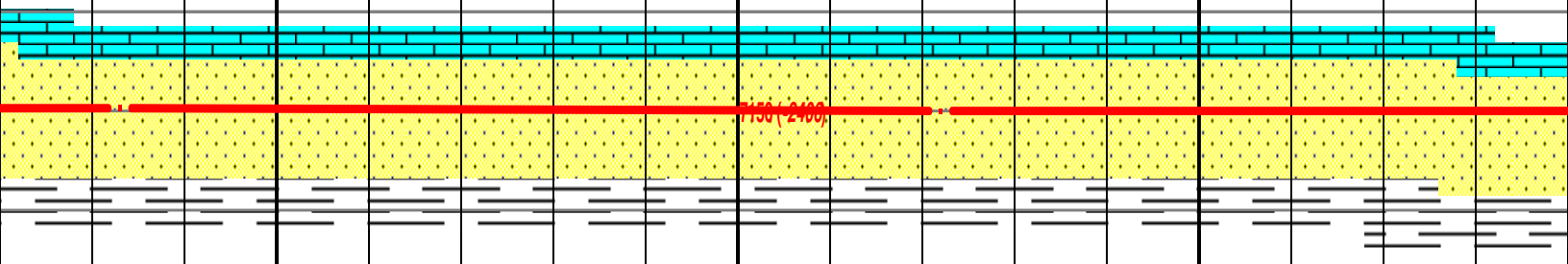
14400  
7149.7 TVD

14450  
7149.8

MD 14333 TVD 7149.64  
INC 90.03 AZ 86.93  
VS 7758

7050 TVD (-2306 SS)

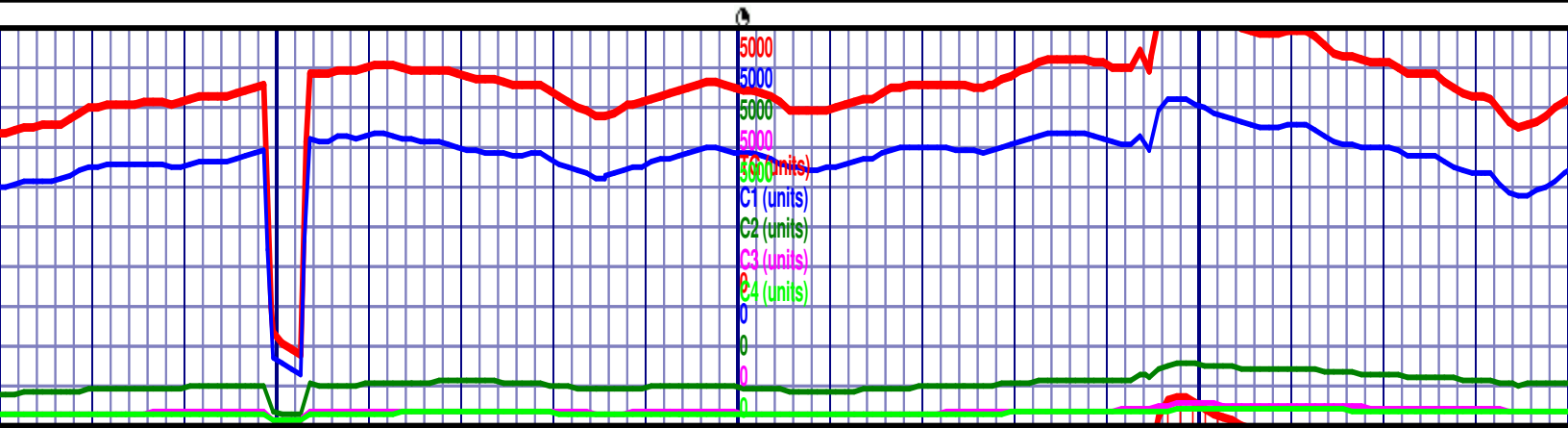
MD 14422 TVD 7149.76  
INC 89.82 AZ 88.24  
VS 7846.91



- dk gy, occ lt gysh brn, f gr-uf gr, rr med gr, v slty, sbang - sb rndd, mod - prly  
o, sl calc, crm cly cmnt, sm cal cmnt, dolc cmt ip, arg ip; SH (10%): med gy -  
sdy, erthy text, rr smth ip, slty ip, sbply - sbblky, sl calc; fnt sppty yel grn pri  
lmg - stmg mlky blush wht cut, spttd grnsh blu resd ring.

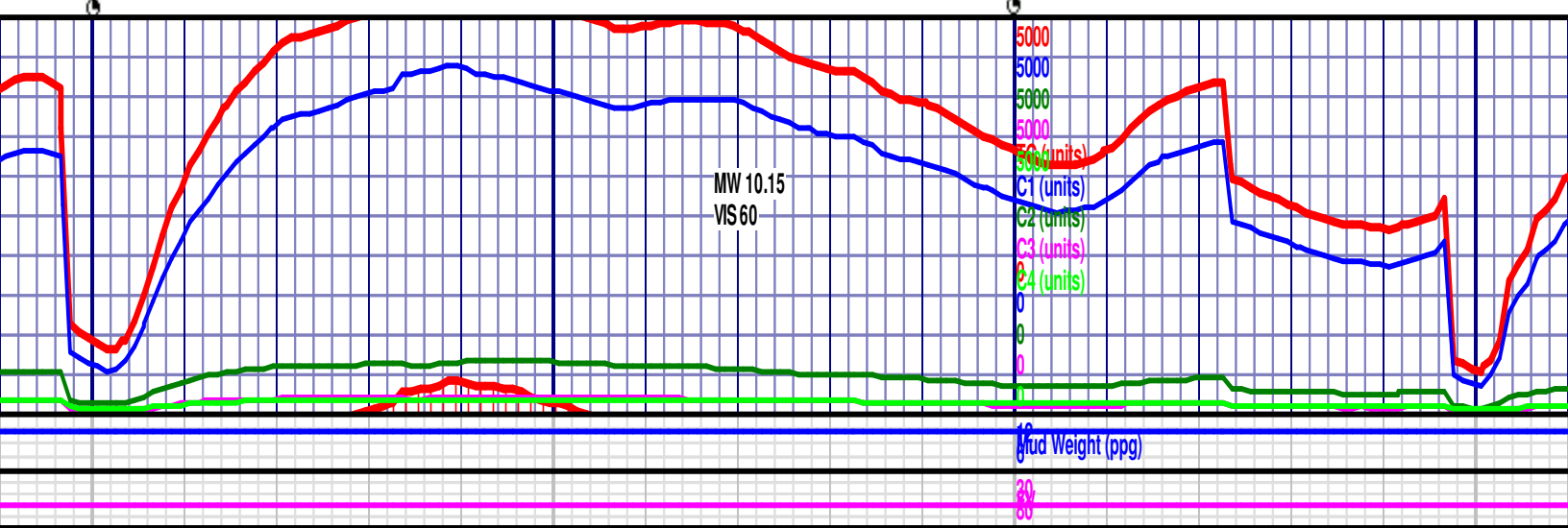
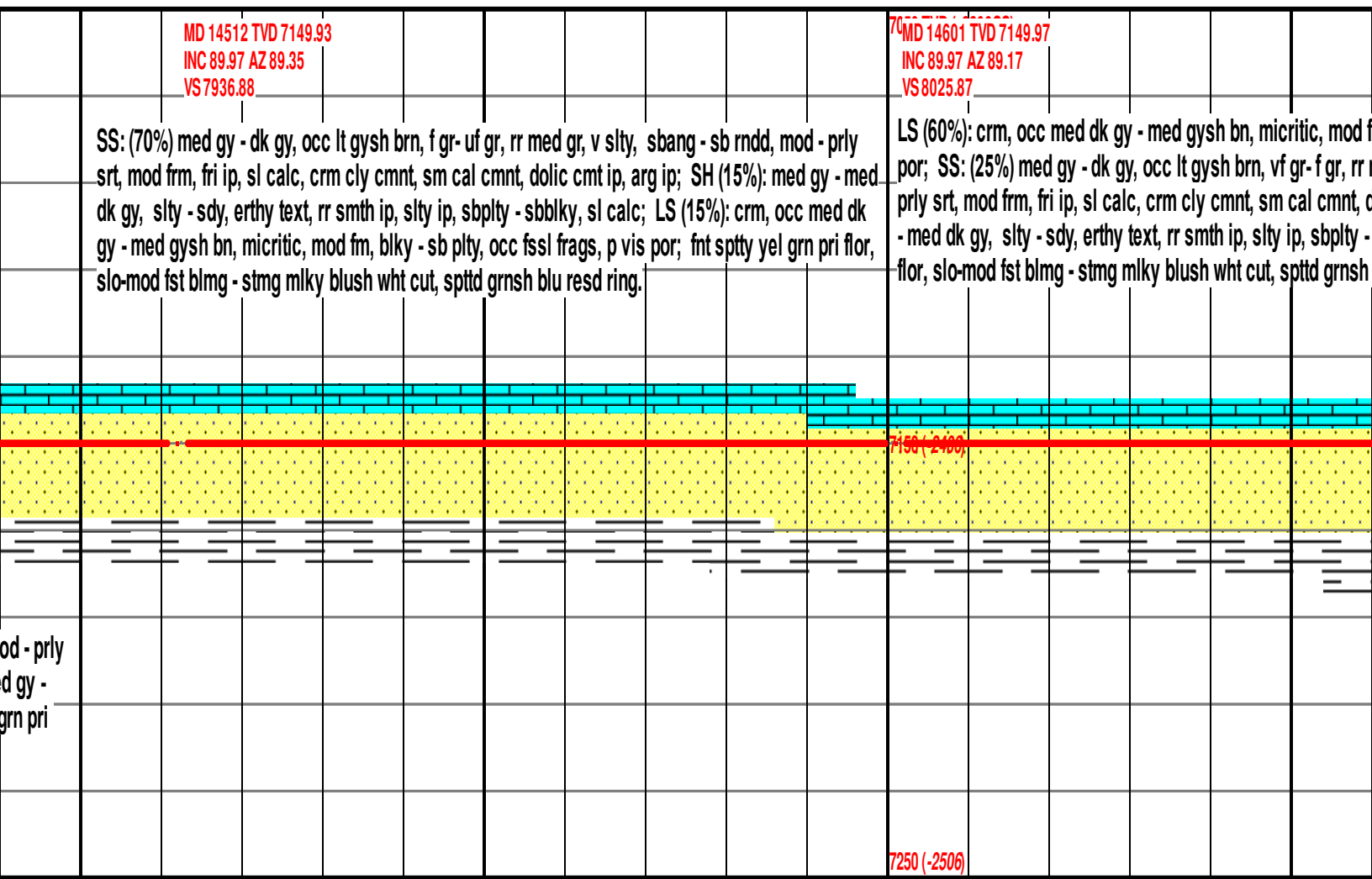
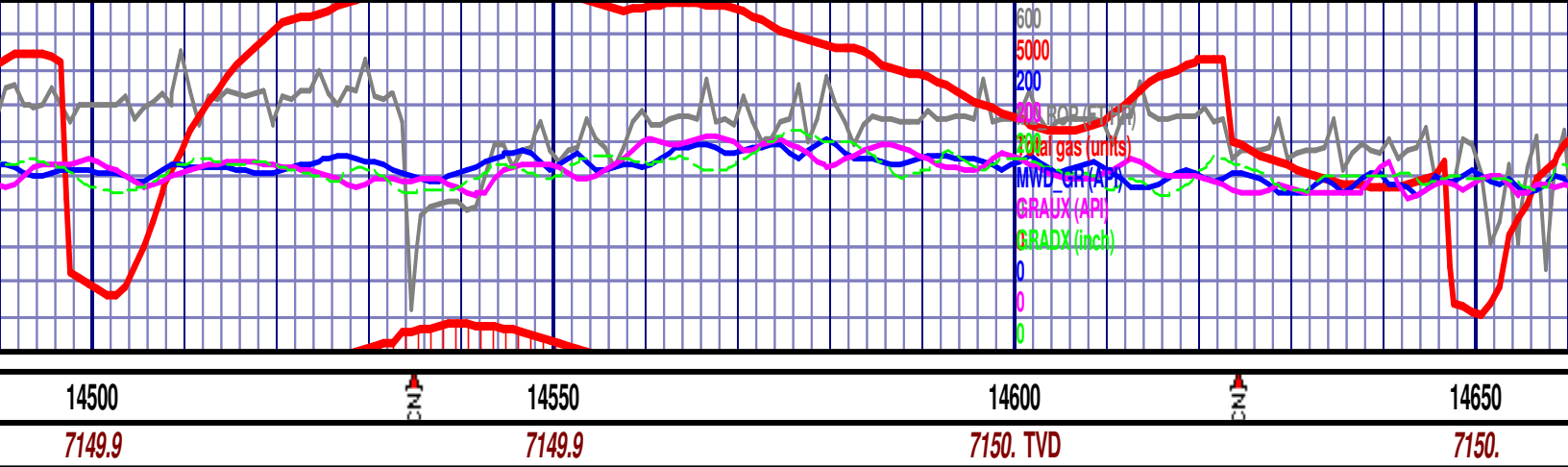
SS: (85%) med gy - dk gy, occ lt gysh brn, f gr-uf gr, rr med gr, v slty, sbang - sb rndd, m  
srt, mod frm, fri ip, sl calc, crm cly cmnt, sm cal cmnt, dolc cmt ip, arg ip; SH (15%): me  
med dk gy, slty - sdy, erthy text, rr smth ip, slty ip, sbply - sbblky, sl calc; fnt sppty yel  
flor, slo-mod fst blmg - stmg mlky blush wht cut, spttd grnsh blu resd ring.

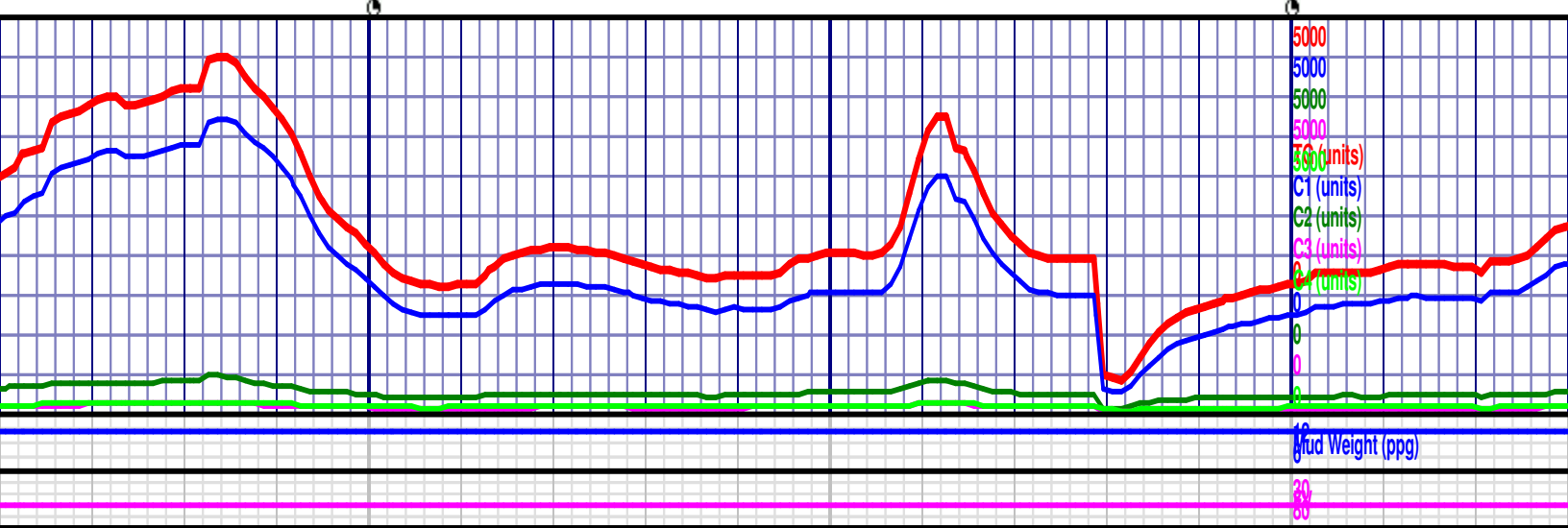
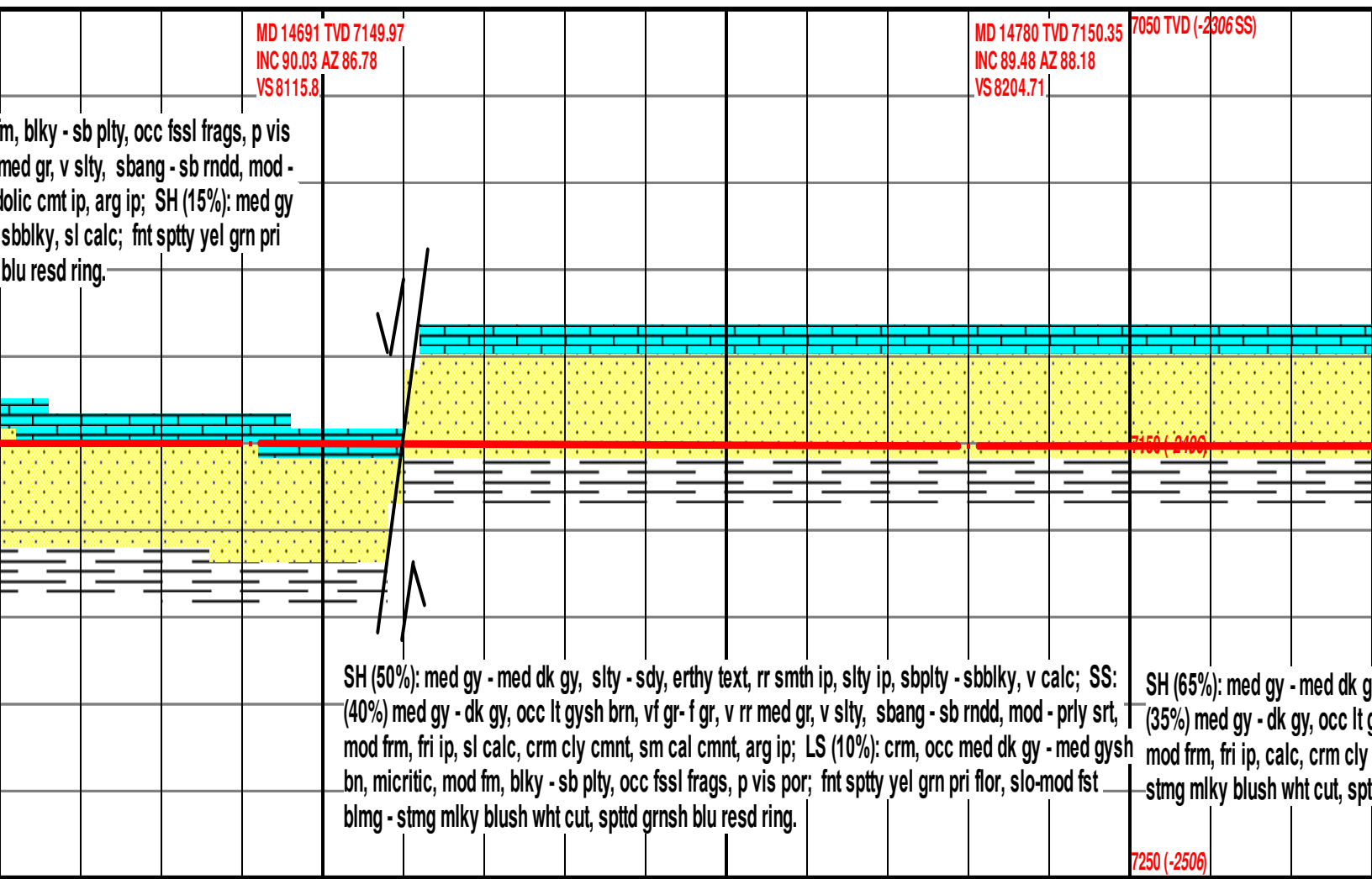
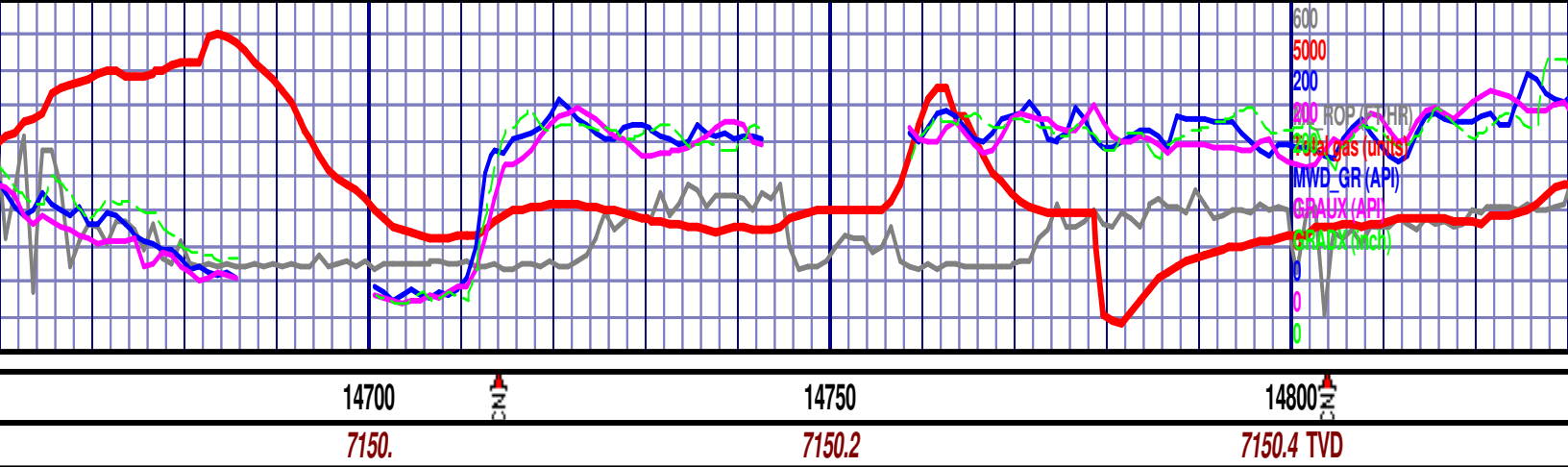
7250 (-2506)

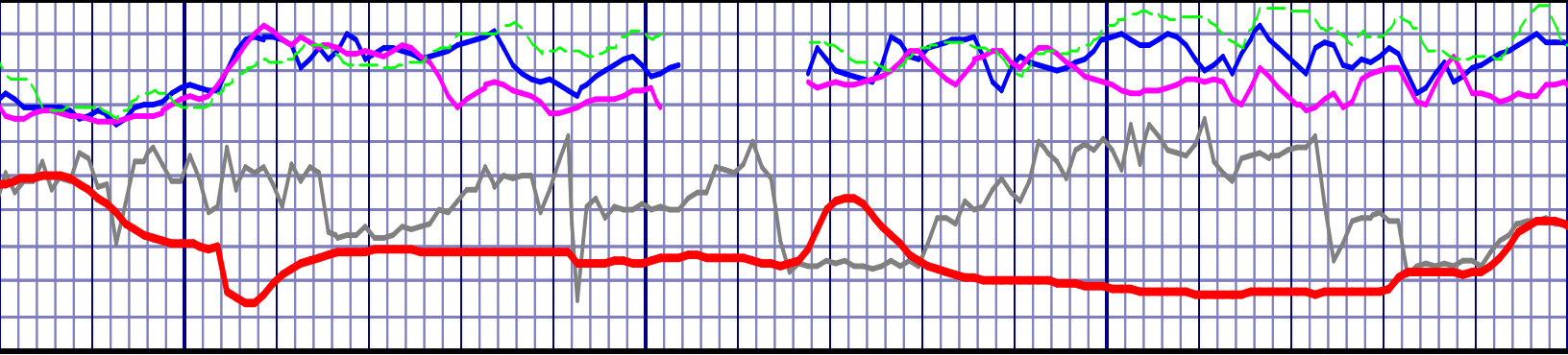


Mud Weight (ppg)

30







14850



14900

14950



15000

7150.6

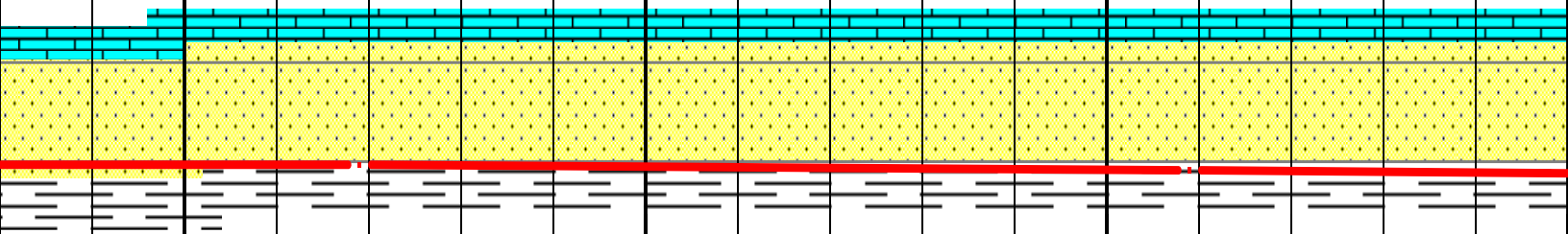
7151.

7151.6

7152.

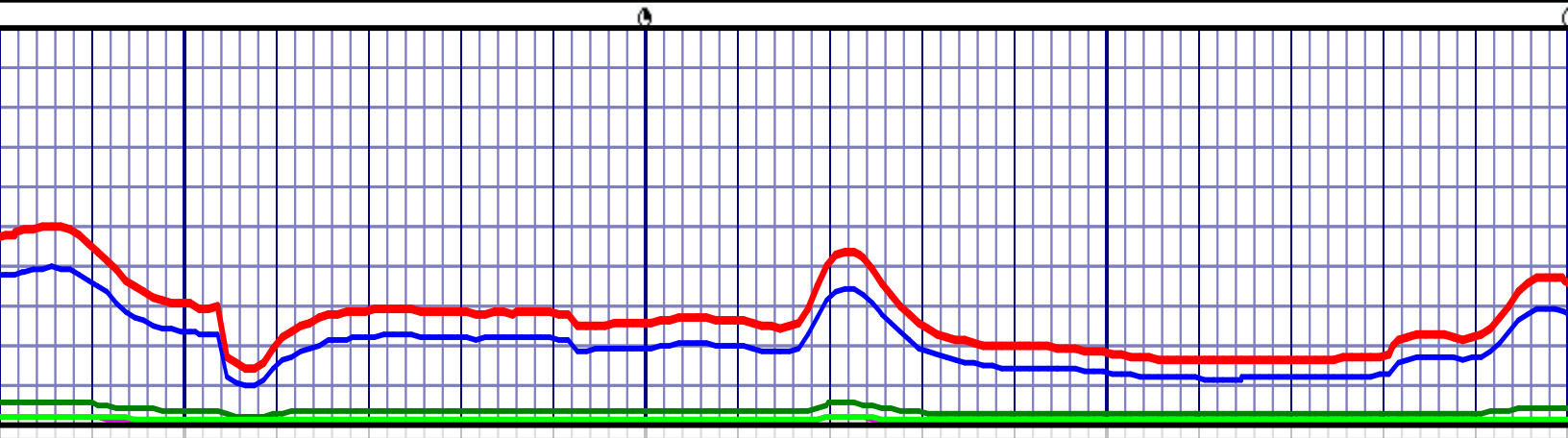
MD 14869 TVD 7150.71  
INC 90.06 AZ 89.84  
VS 8293.68

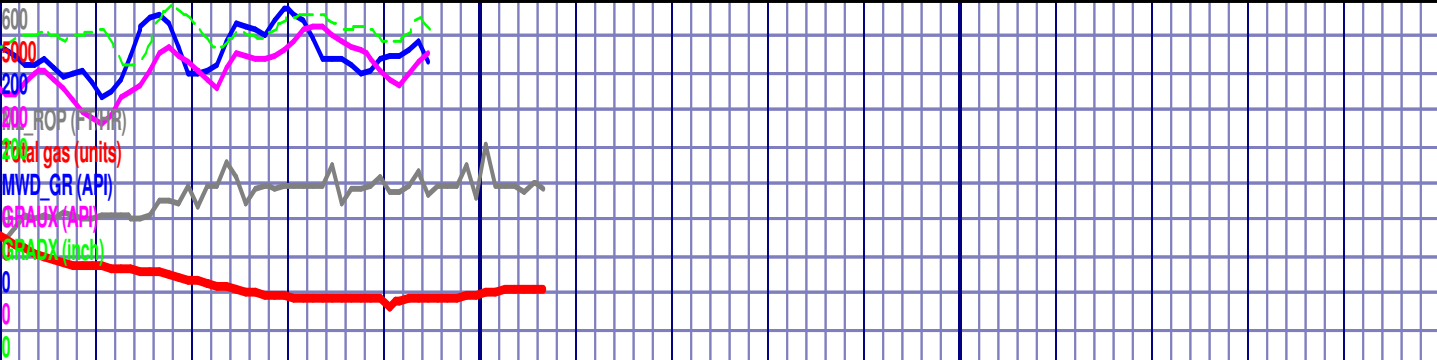
MD 14959 TVD 7151.68  
INC 88.71 AZ 88.06  
VS 8383.65



y, slty - sdy, erthy text, rr smth ip, v slty ip, sbply - sbblky, v calc; SS: gysh brn, vf gr-f gr, v rr med gr, v slty, sbang - sb rdd, mod - prly srt, cmnt, sm cal cmnt, arg ip; fnt spty yel grn pri flor, slo-mod fst blmg - ttd grnsh blu resd ring.

SH (70%): med gy - med dk gy, slty - sdy, erthy text, rr smth ip, v slty ip, sbply - sbblky, v calc; SS: (30%) med gy - dk gy, occ lt gysh brn, vf gr-f gr, v rr med gr, v slty, sbang - sb rdd, mod - prly srt, mod frm, fri ip, calc, crm cly cmnt, sm cal cmnt, arg ip; fnt spty yel grn pri flor, slo-mod fst blmg - stmg mlky blush wht cut, spttd grnsh blu resd ring.





000 15050 15100 15  
 4 TVD 7153.1

7050 TVD (-2306 SS)	MD 15034 TVD 7152.93 INC 89.38 AZ 87.27 VS 8458.57	MD 15058 TVD 7153.19 INC 89.38 AZ 87.27 VS 8482.54	BIT #2, 8.5", HCC, ATD505T, Jets 5x15, SN#: 5289841, Rotary Steerable Directional BHA, IN @ 1851', ON 9/12/18. OUT @ 15,058', on 9/15/18, DRILLED 13,207' IN 39.9 BIT HR.
Final Survey is Projected to Bit			
TD @ 15292' ON SEPT. 15, 2018 @ 0500 HR.			
FORMATION TOP's			
	MD	TVD	SSD
Sharon Springs	6941'	6814'	-2070'
Niobrara A Chalk	6977'	6848'	-2104'
Niobrara B Chalk	7130'	6974'	-2230'
Niobrara C Chalk	7230'	7041'	-2297'
Ft Hays	7423'	7137'	-2393'
Codell	7498'	7161'	-2417'
SH (70%): med gy - med dk gy, slty - sdy, erthy text, rr smth ip, v slty ip, sbply - sbbly, v calc; SS: (30%) med gy - dk gy, occ lt gysh brn, vf gr- f gr, v rr med gr, v slty, sbang - sb rndd, mod - prly srt, mod frm, fri ip, calc, crm cly cmnt, sm cal cmnt, arg ip; fnt sppty yel grn pri flr, slo-mod fst blmg - stmg milky blush wht cut, spttd grnsh blu resd ring.			
Thank You			Goolsby Brothers & Assoc. Inc.

