



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

Well Name: RAZOR 27J-2212B  
Location: NWSW 27-T10N-R58W Weld County, Colorado  
License Number: 05-123-38060  
Spud Date: 8/7/2014  
Surface Coordinates: Lat.: 40.808458 Long.: -103.848206

Region: Redtail Field  
Drilling Completed: 8/14/2014

**Bottom Hole Coordinates:**

Ground Elevation (ft): 4764  
Logged Interval (ft): 5100 To: 13686  
Formation: Pierre, Sharon Springs, Niobrara  
Type of Drilling Fluid: Water Based Mud

K.B. Elevation (ft): 4786  
Total Depth (ft): 13686

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

**OPERATOR**

Company: Whiting Oil & Gas Corp.  
Address: 1700 Broadway Suite 2300  
Denver, CO 80290

**GEOLOGIST**

Name: Craig Dreiling, Camille Warren  
Company: Acme Geologic Consulting  
Address: 108 Berry Street  
Little Rock, AR 72205

## Drilling Company

Frontier  
Rig #26


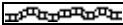
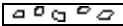


## Gas Detection






Mudlogging Systems, Inc., M Logger, Model TGC, Total Gas and Chromatograph, #328






## Comments






Lithologies and tops at drilled depths, not corrected to elogs. Where the well bore gas is 100% methane, the C1 line is moved to 85% for graphical purposes only.




## ROCK TYPES

 Anhy  
 Bent  
 Brec  
 Cht  
 Clyst
















 Coal  
 Congl  
 Dol  
 Gyp  
 Igne









 Lmst  
 Meta  
 Cyan mrlst  
 Mrlst  
 Salt
















 Shale  
 Shcol  
 Shgy  
 Sltst  
 Ss







 Till  
 Cyan chk  
 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  
 Gyp  
 Ls  
 Mrst

 Sltstrg  
 Ssstrg





**TEXTURE**  
 Boundst  
 Chalky  
 Cryxln  
 Earthy  
 Finexln  
 Grainst  
 Lithogr  
 Microxln  
 Mudst  
 Packst  
 Wackest

OTHER SYMBOLS

**POROSITY**  
 Earthy  
 Fenest  
 Fracture  
 Inter  
 Moldic  
 Organic

 Pinpoint  
 Vuggy

**SORTING**  
 Well  
 Moderate  
 Poor

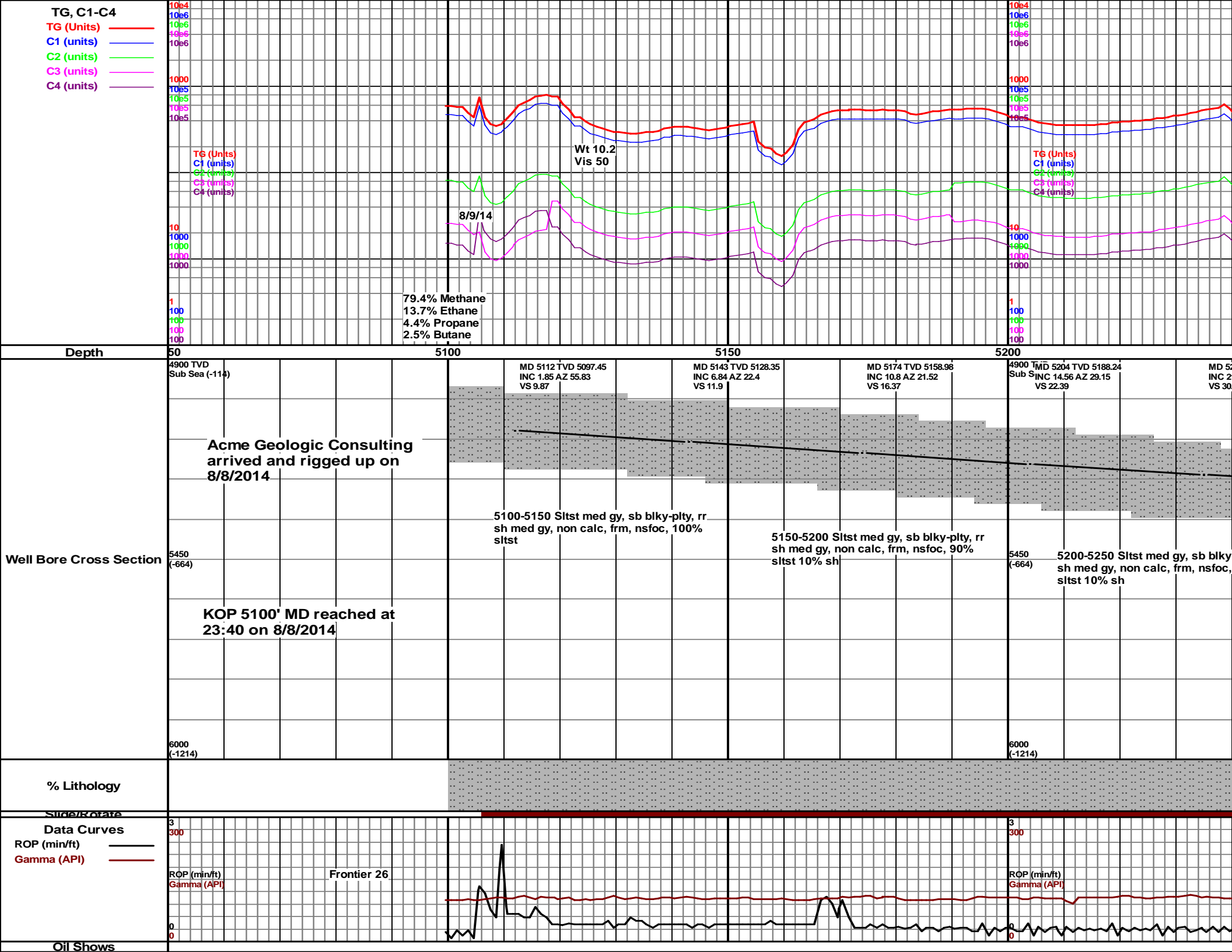
**ROUNDING**  
 Rounded  
 Subrnd  
 Subang  
 Angular

**OIL SHOW**  
 Good  
 Fair  
 Poor

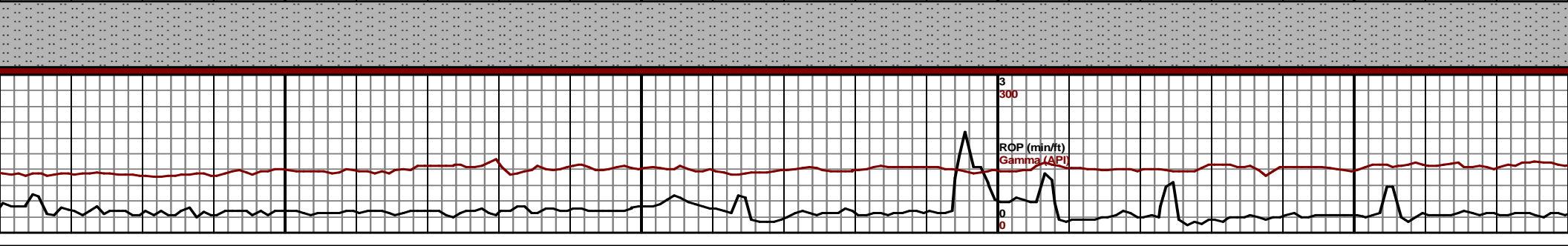
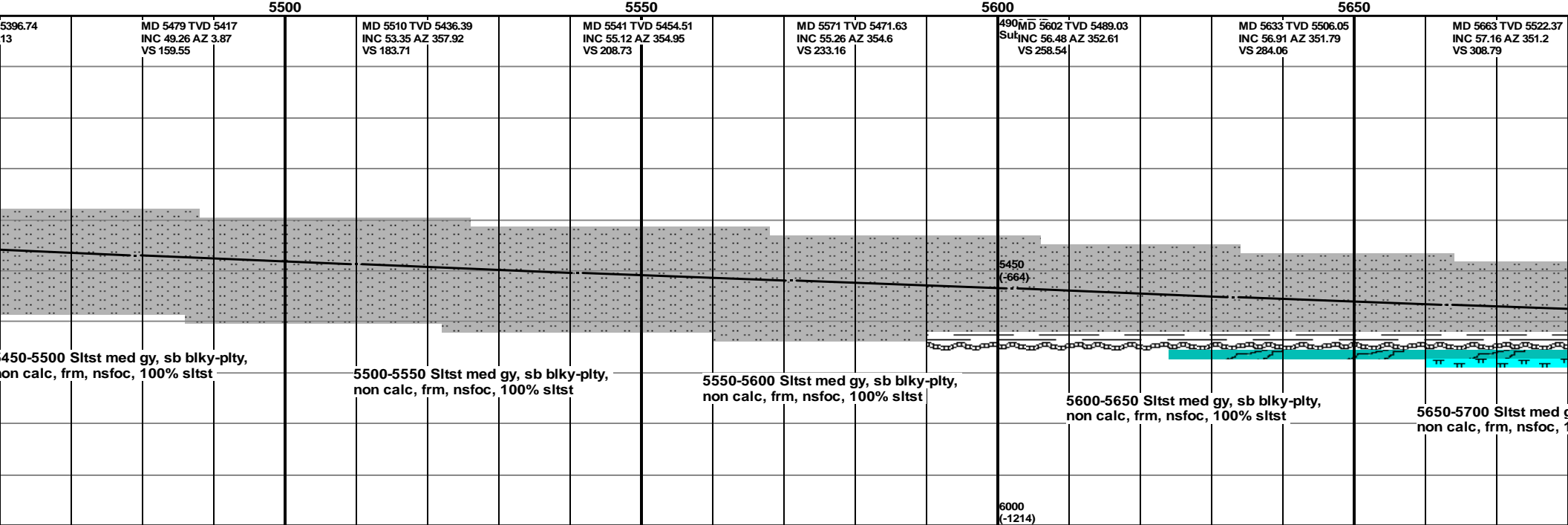
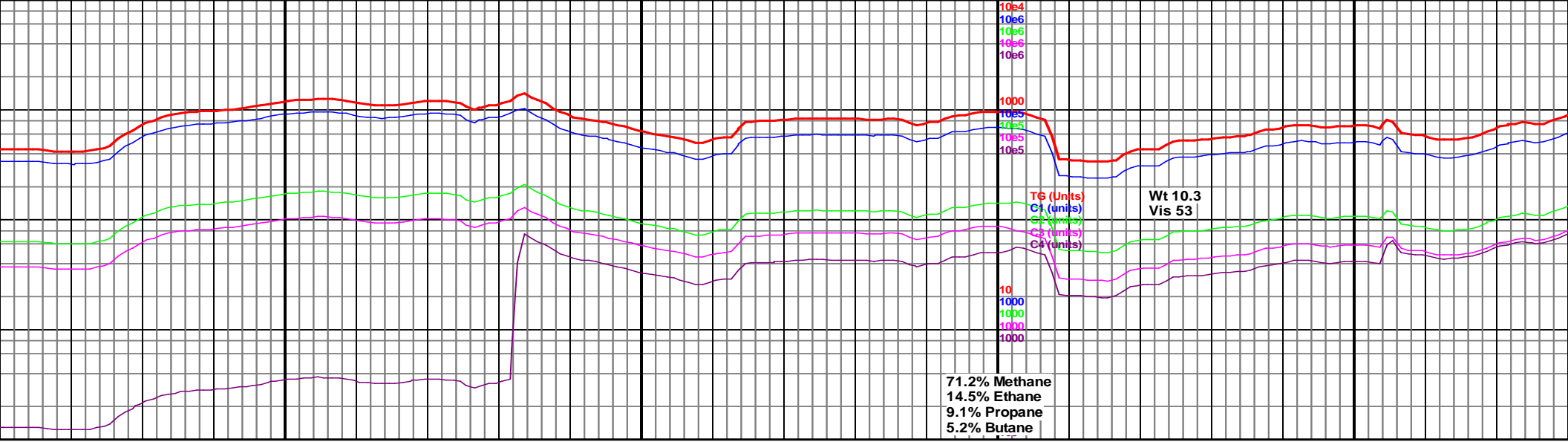
**INTERVAL**  
 Core

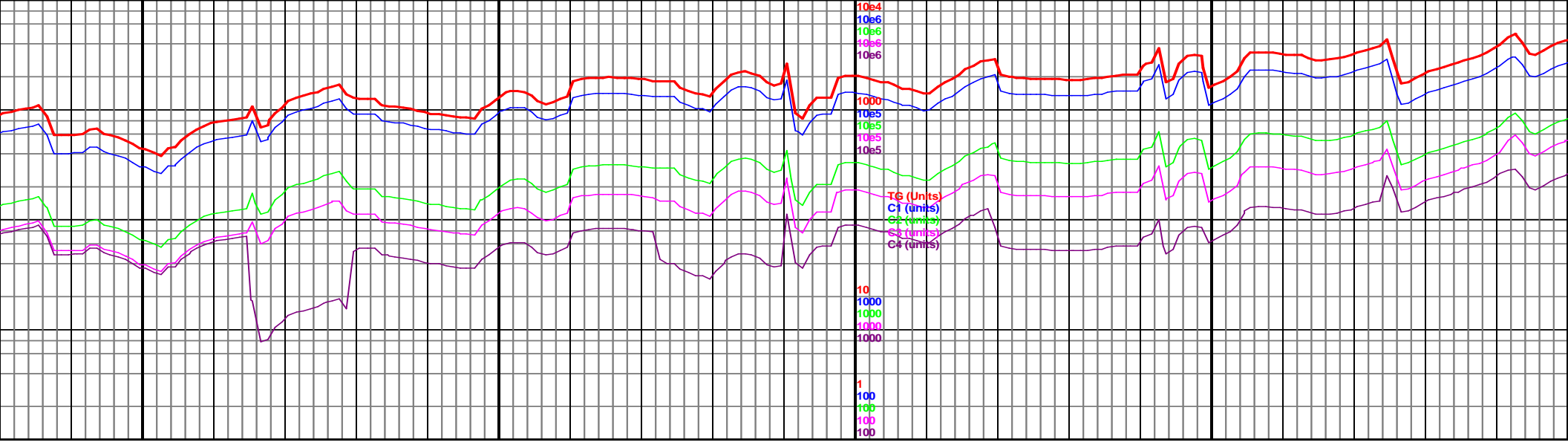
 Dst

**EVENT**  
 Rft  
 Sidewall



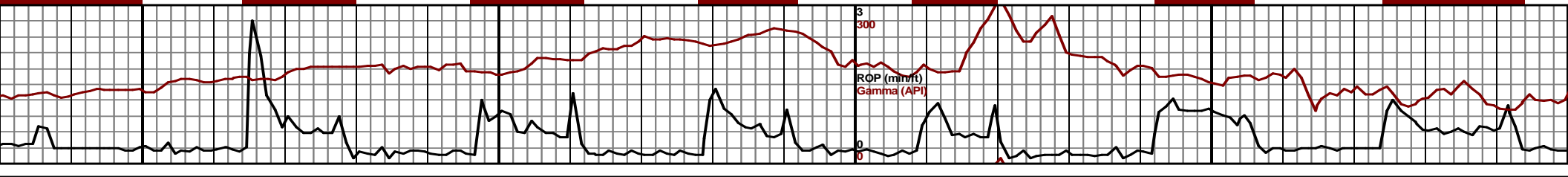
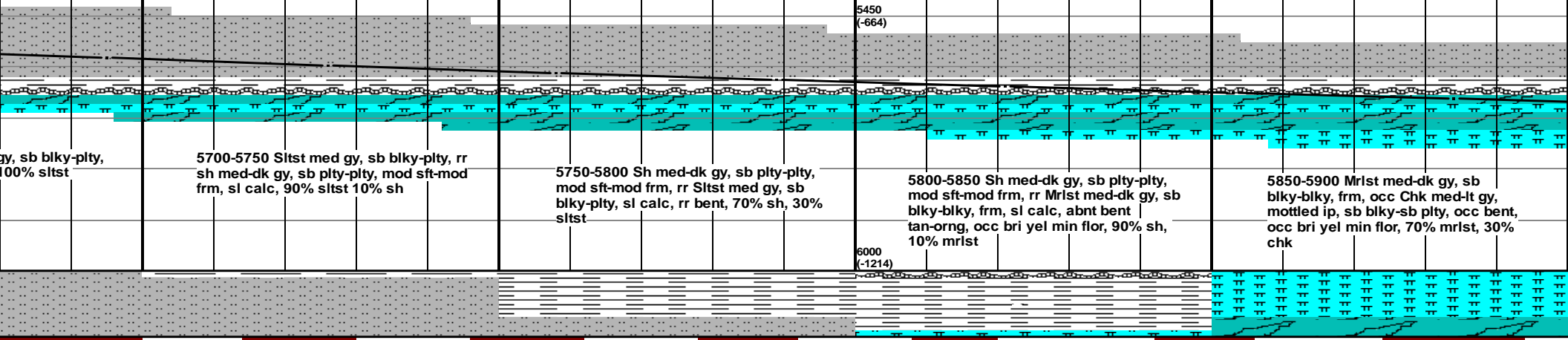


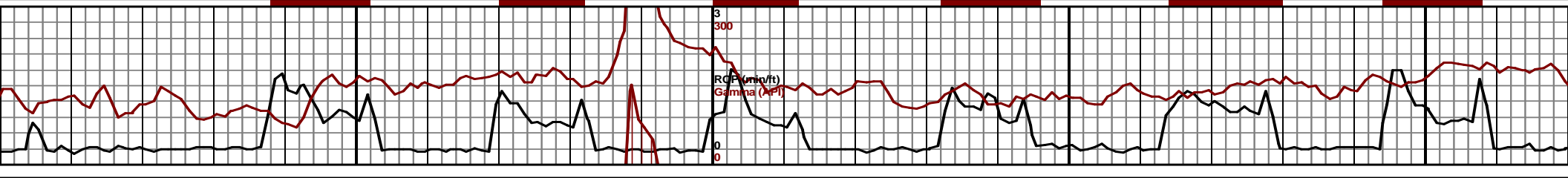
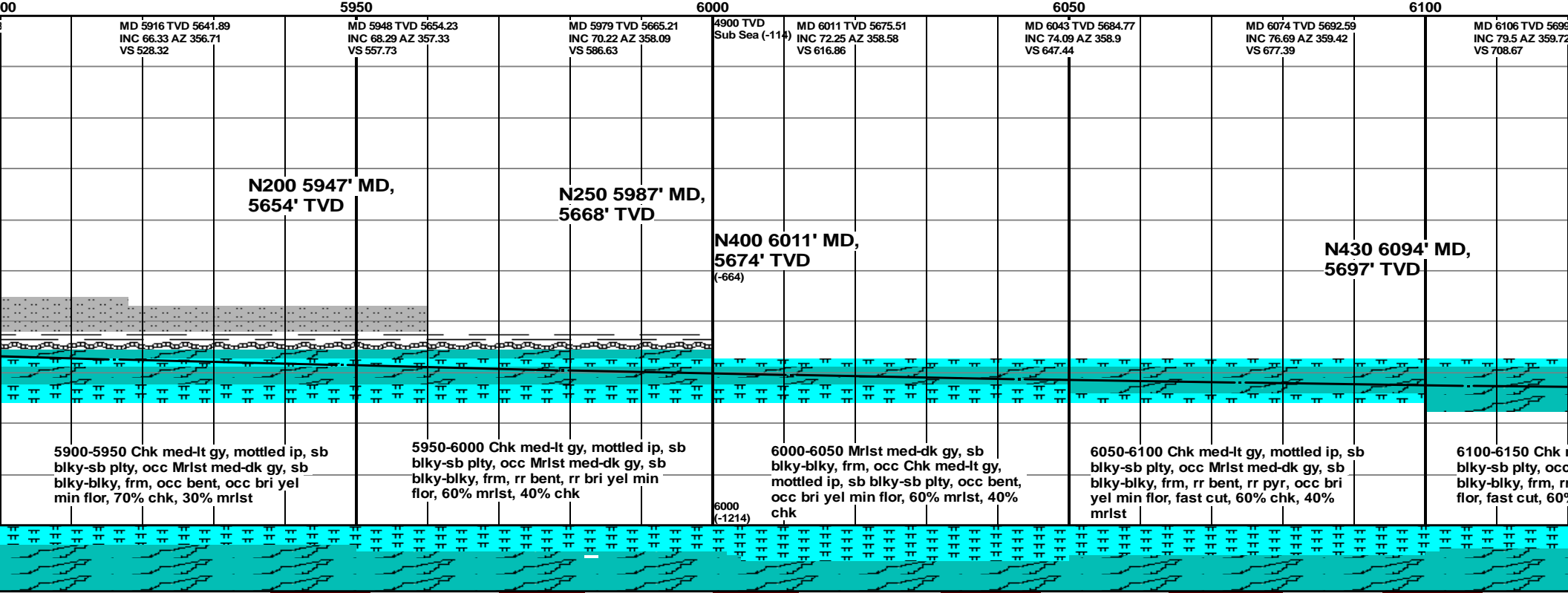
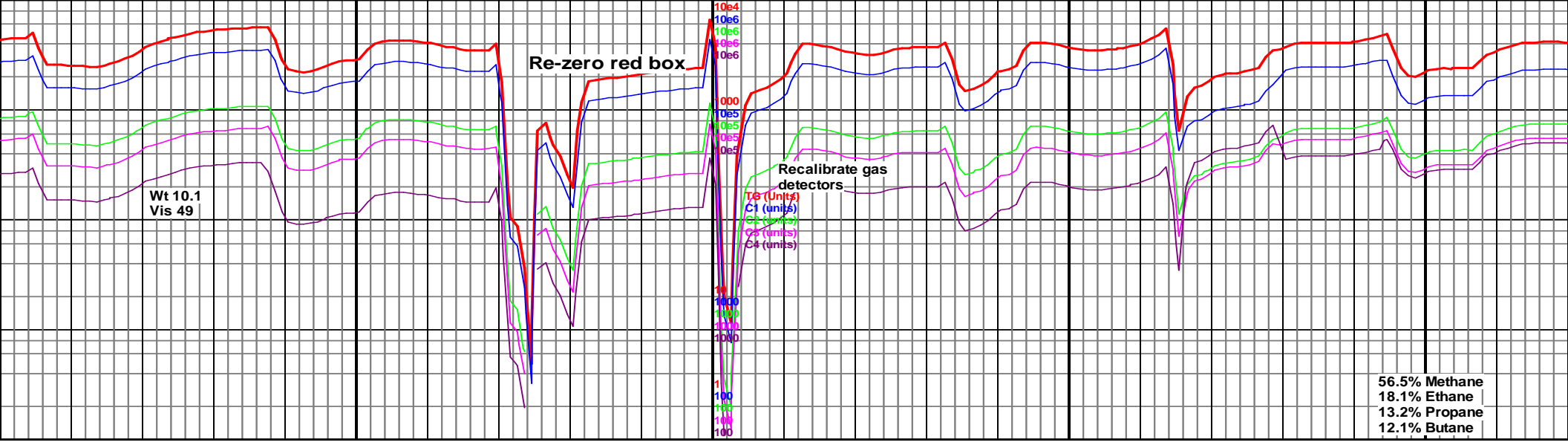




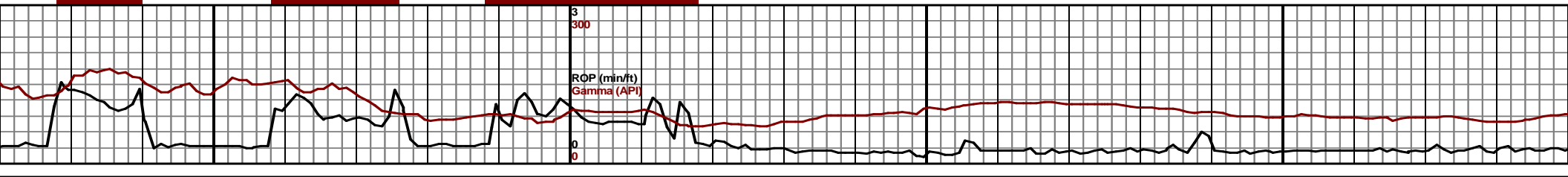
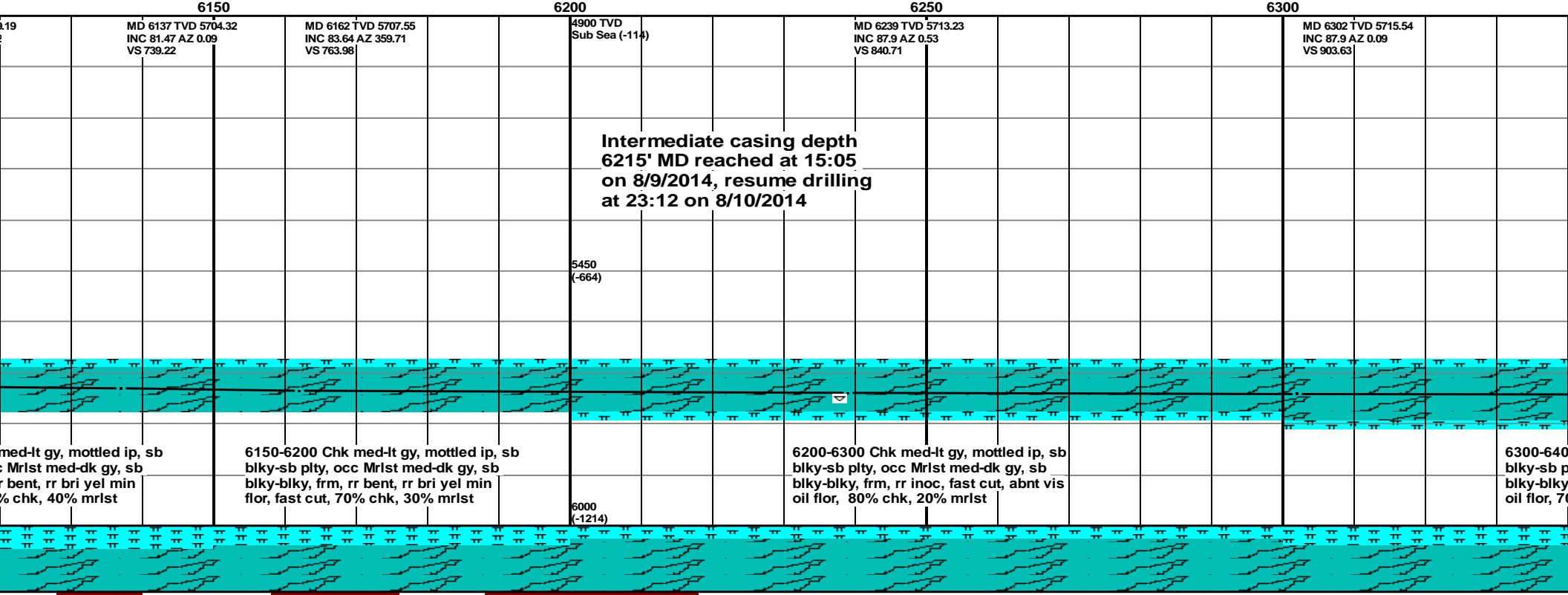
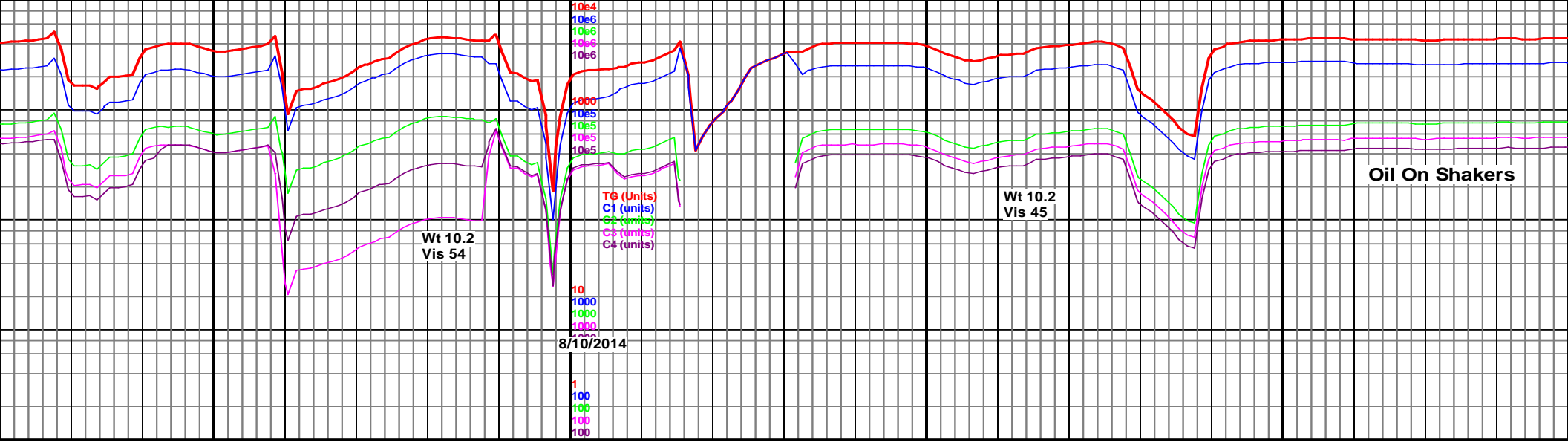
MD 5695 TVD 5539.72 INC 57.19 AZ 350.92 VS 335.18	MD 5726 TVD 5556.13 INC 58.87 AZ 350.8 VS 360.97	MD 5758 TVD 5572.23 INC 60.7 AZ 351.76 VS 388.13	MD 5789 TVD 5587.23 INC 61.46 AZ 352.93 VS 414.86	MD 5821 TVD 5602.15 INC 62.96 AZ 353.2 VS 442.82	MD 5853 TVD 5616.16 INC 65.08 AZ 353.32 VS 471.24	MD 5884 TVD 5628.96 INC 66.08 AZ 355.52 VS 499.21
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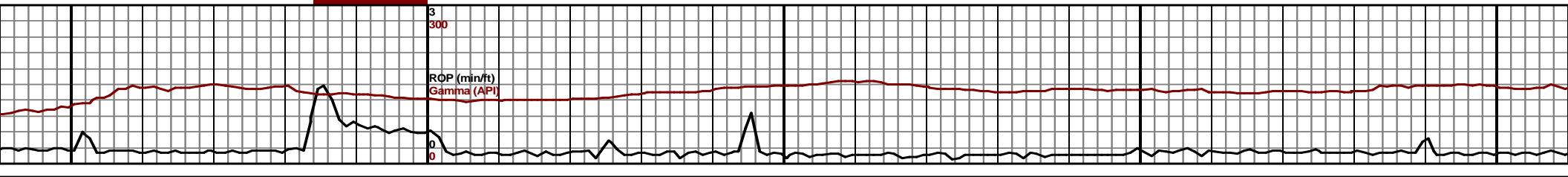
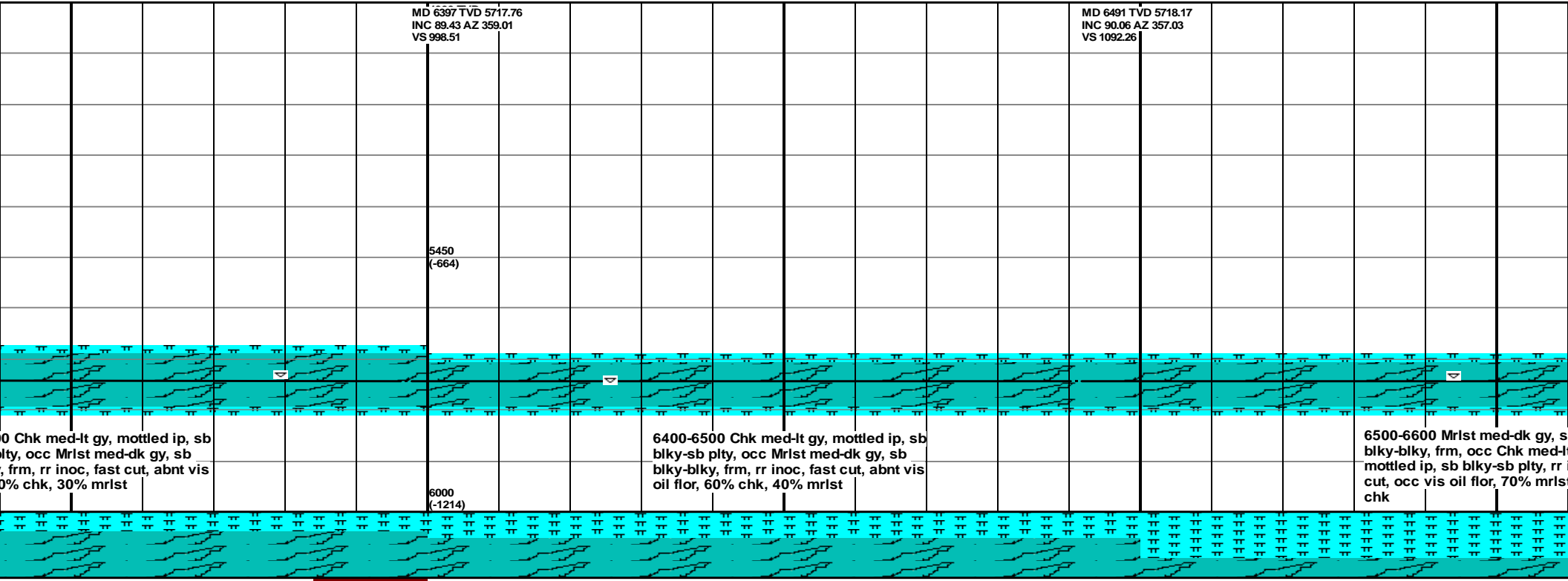
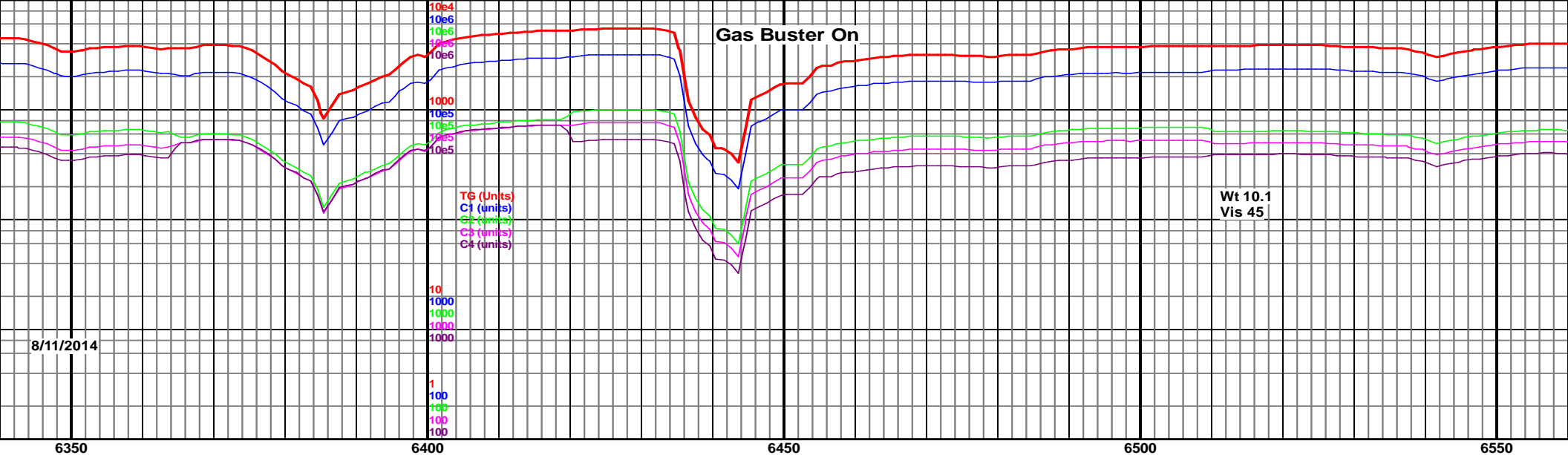
P200 5702' MD, 5543' TVD		P300 5754' MD, 5570' TVD		P350 5796' MD, 5590' TVD		N100 5863' MD, 5620' TVD
				Sharon Springs 5816' MD, 5600' TVD		Niobrara 5828' MD, 5605' TVD

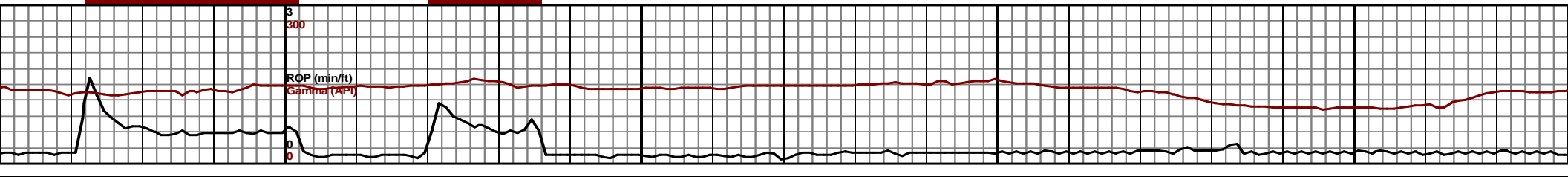
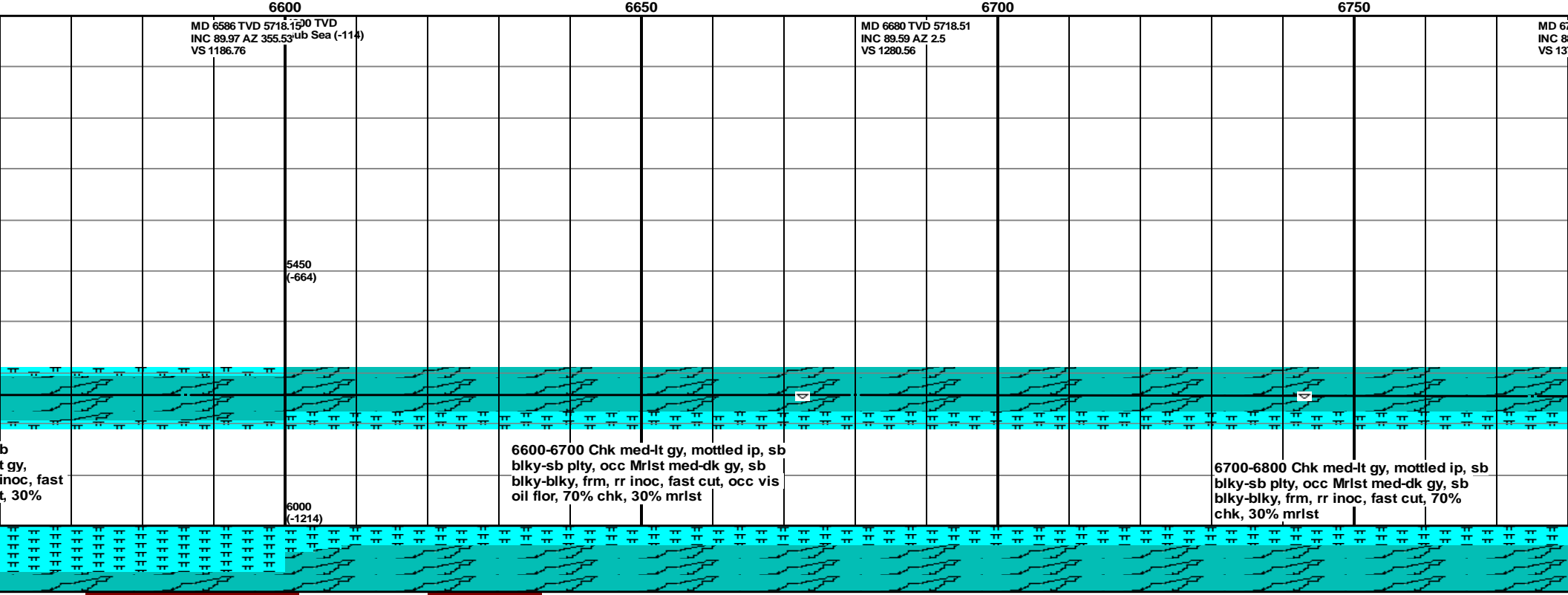
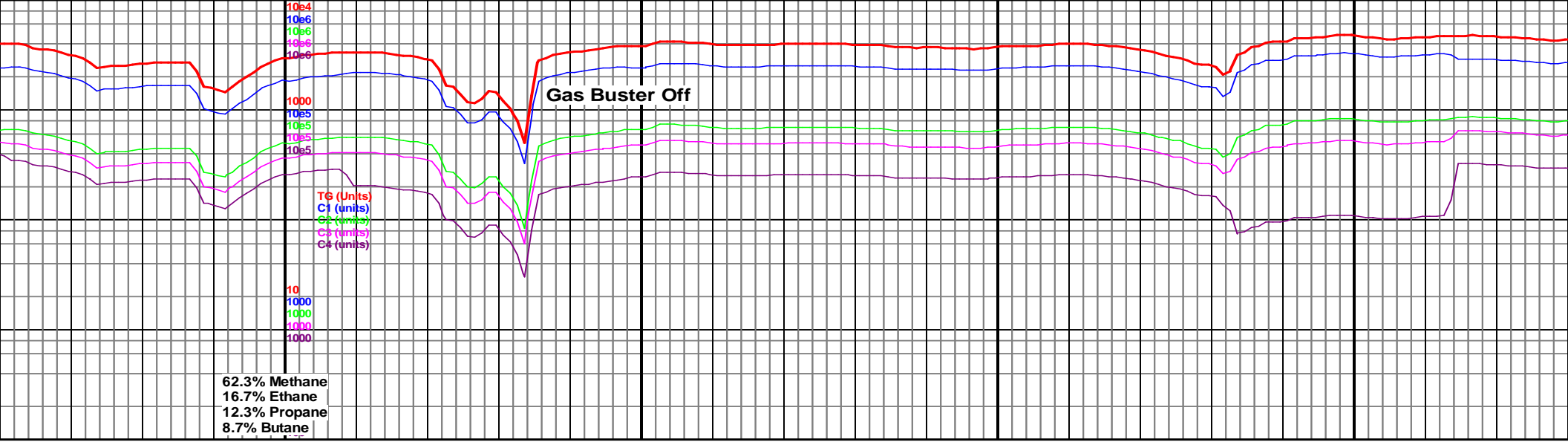


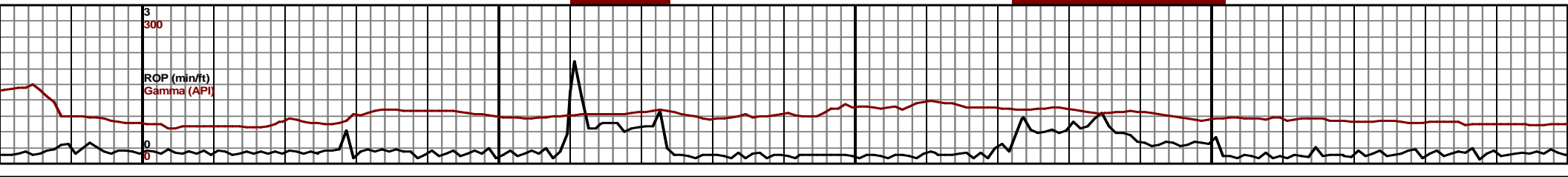
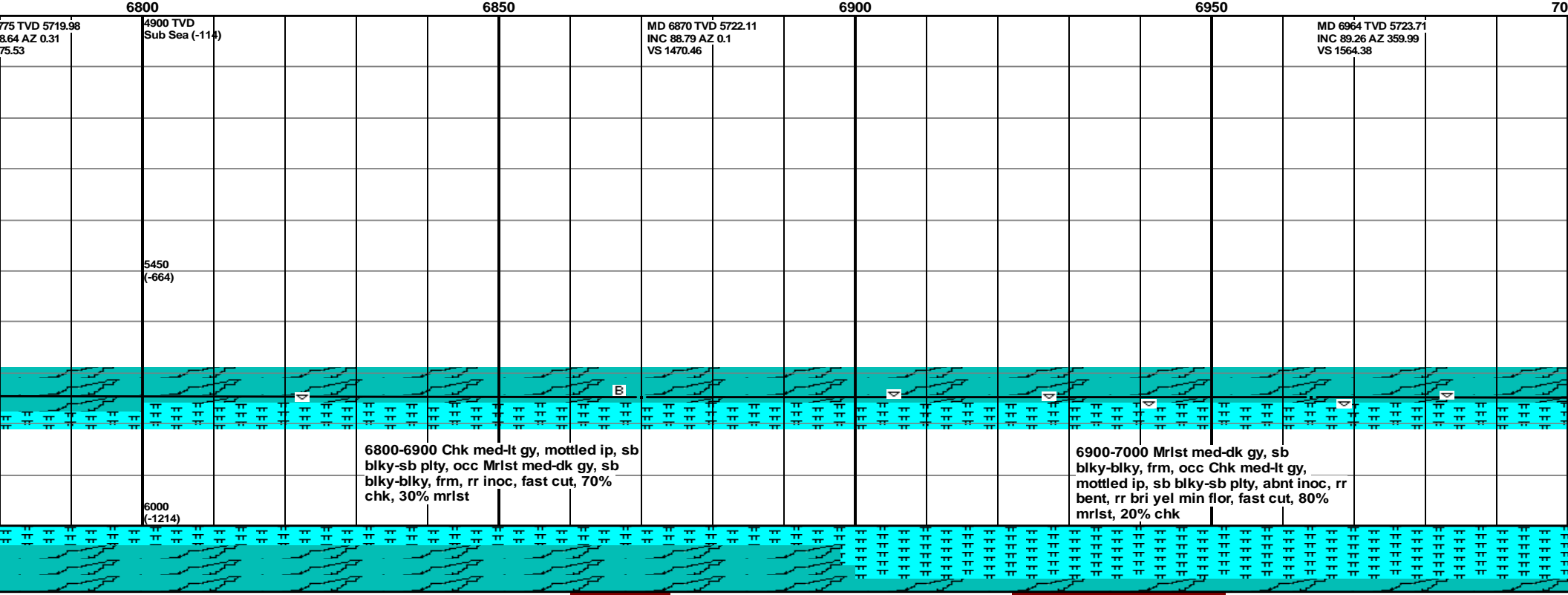
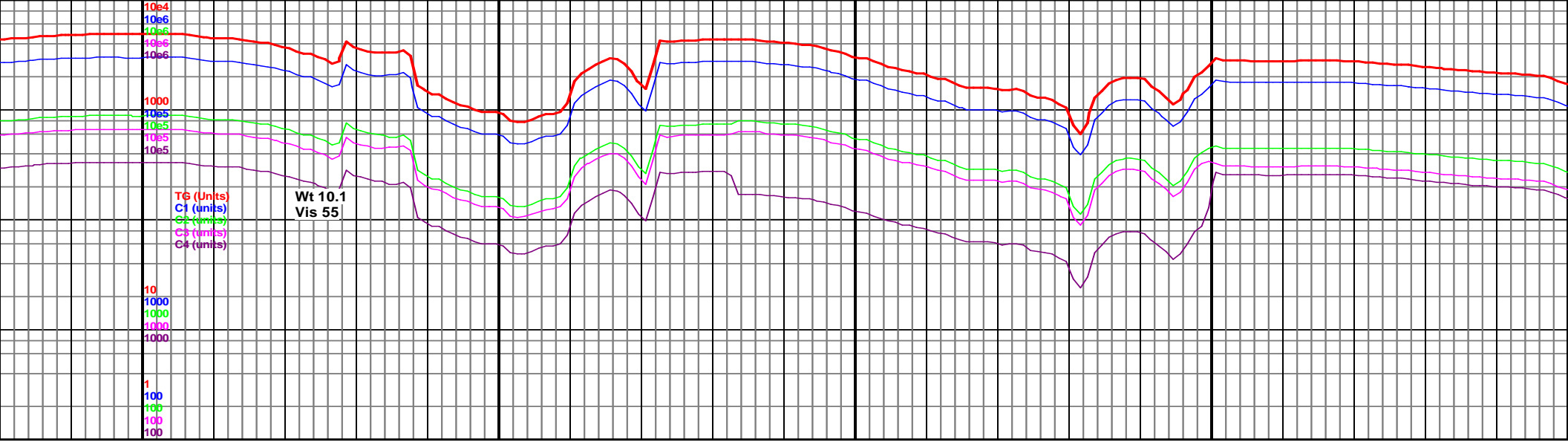


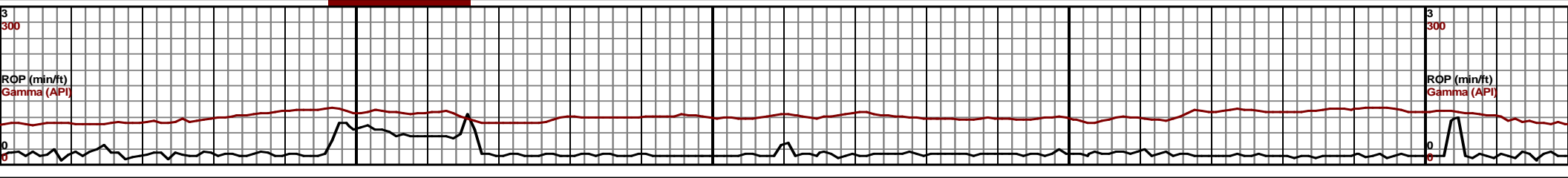
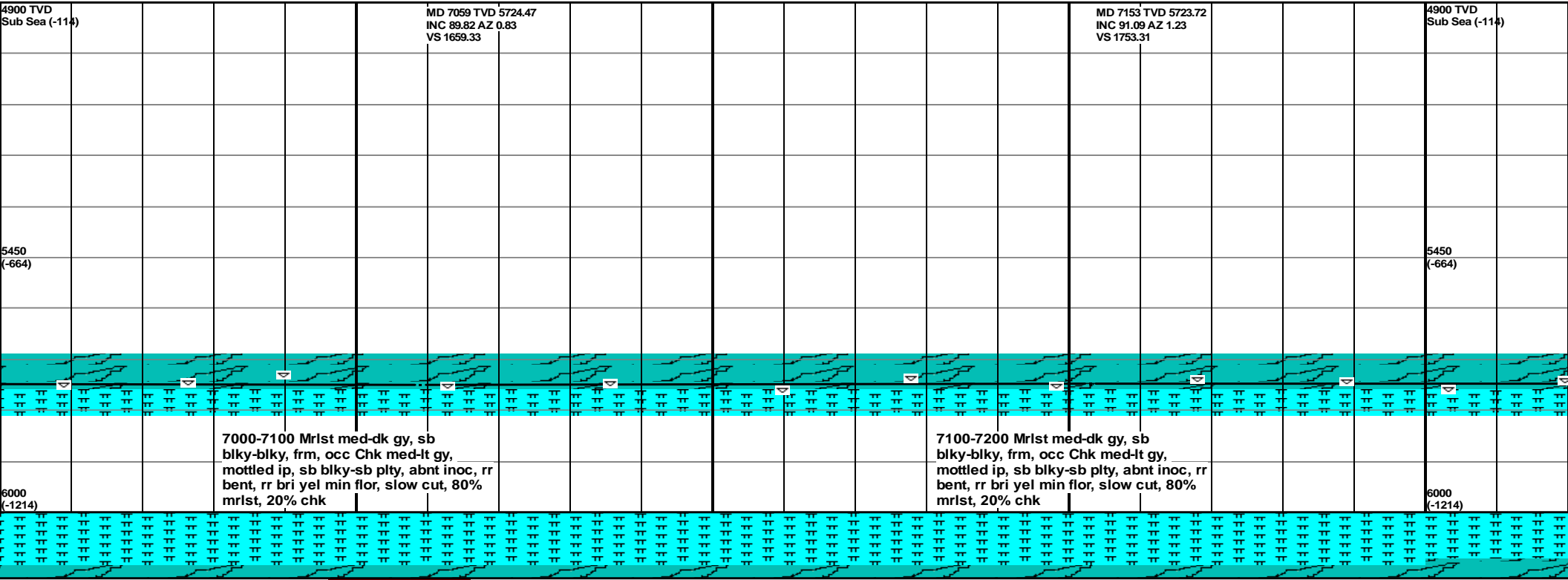
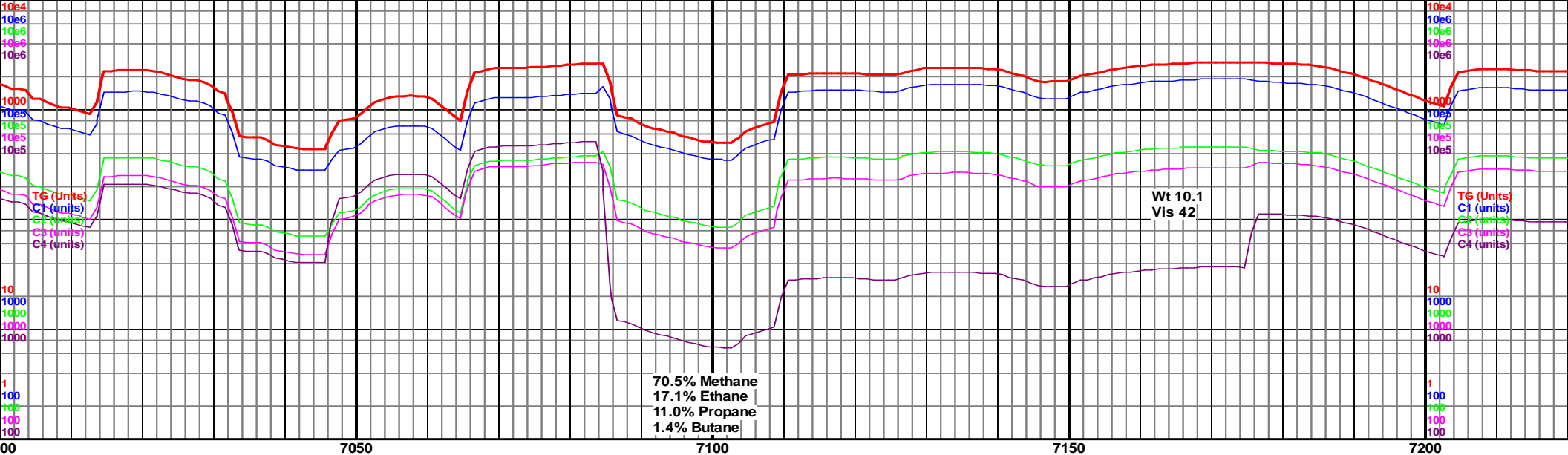




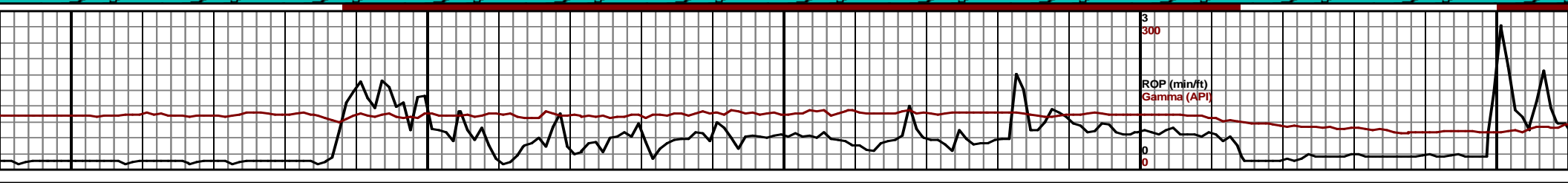
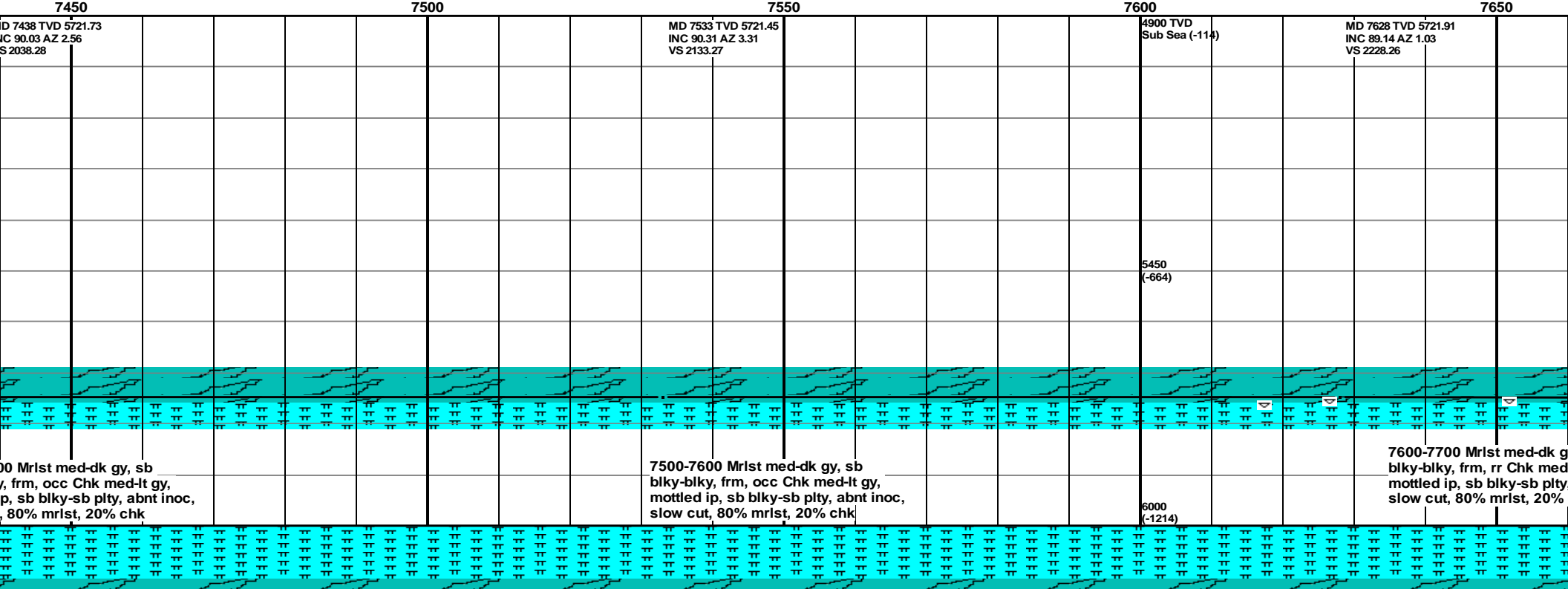
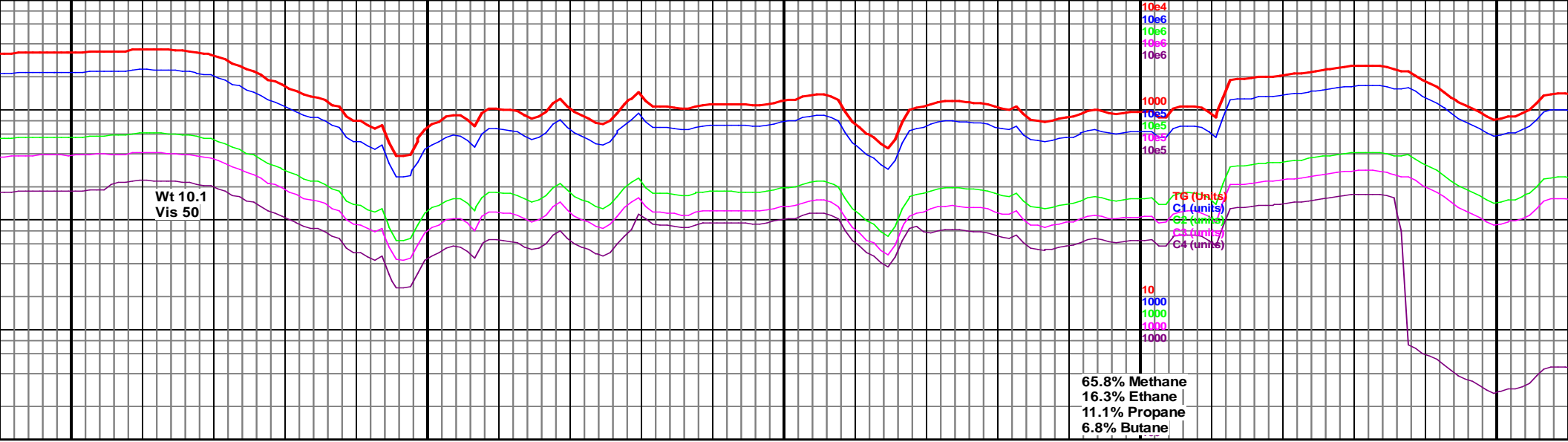


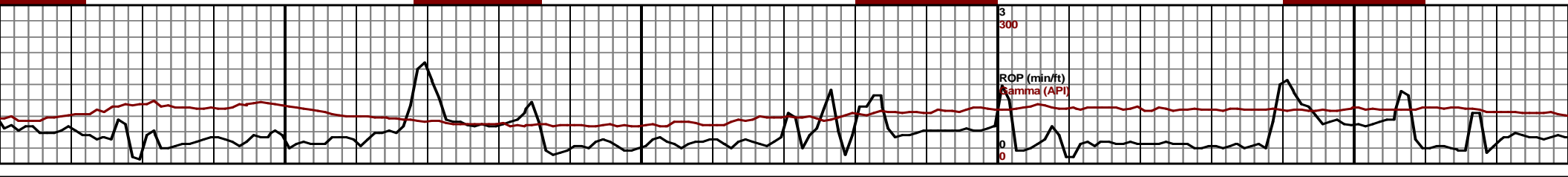
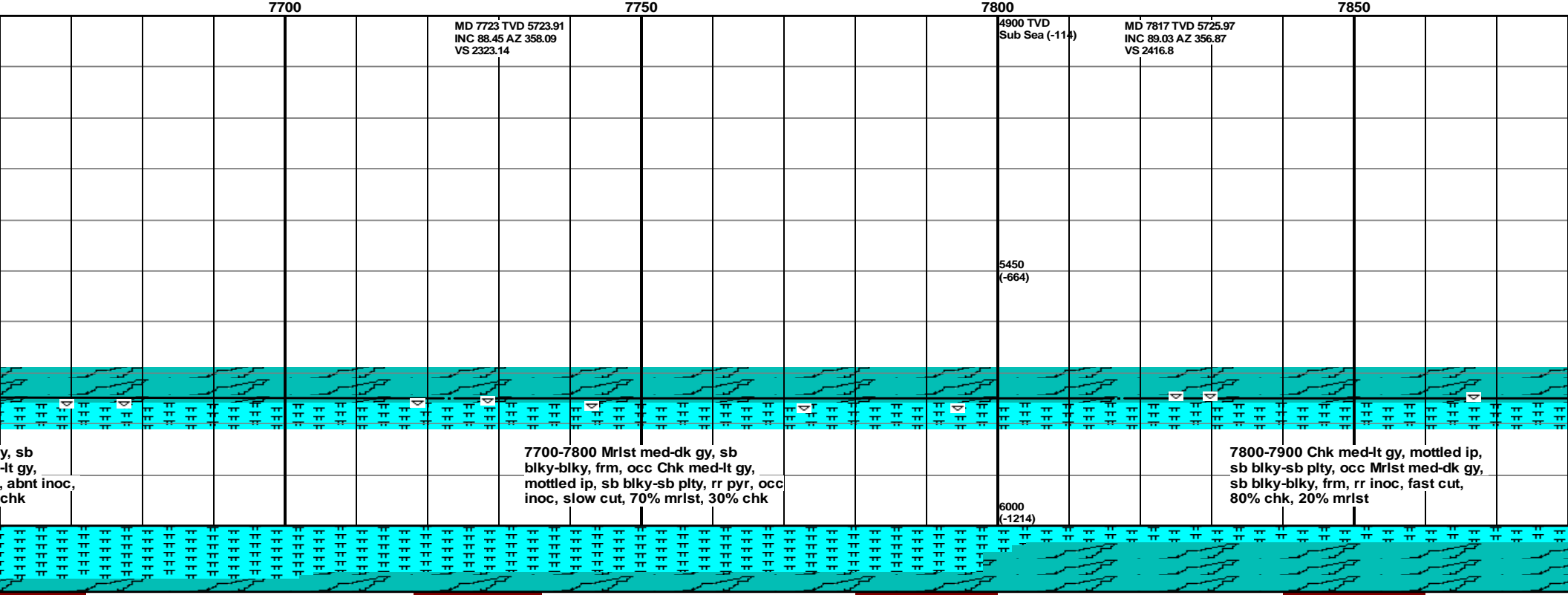
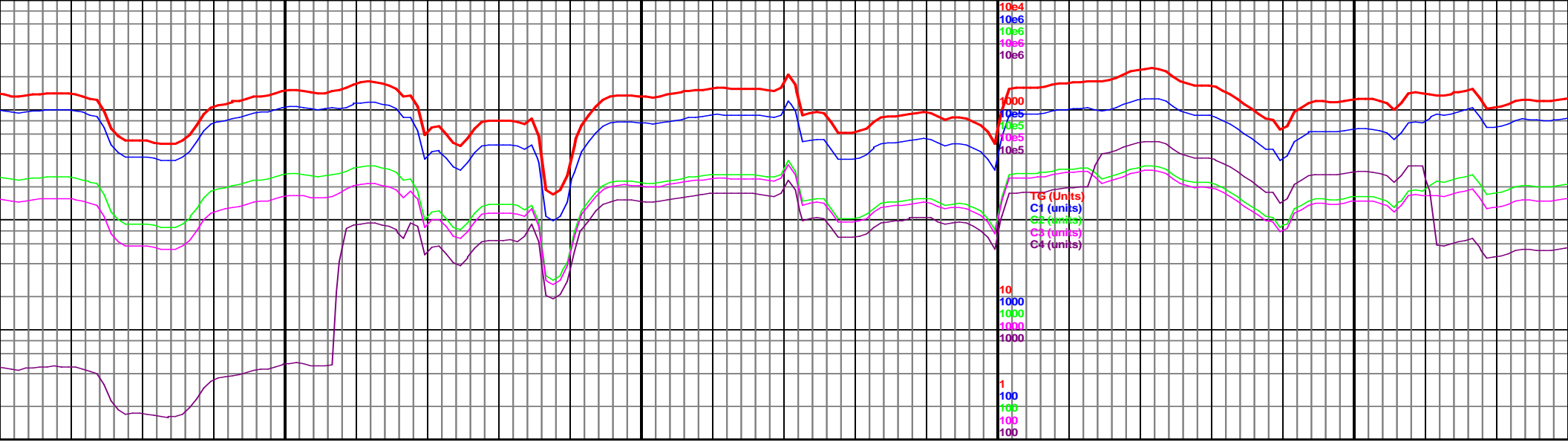




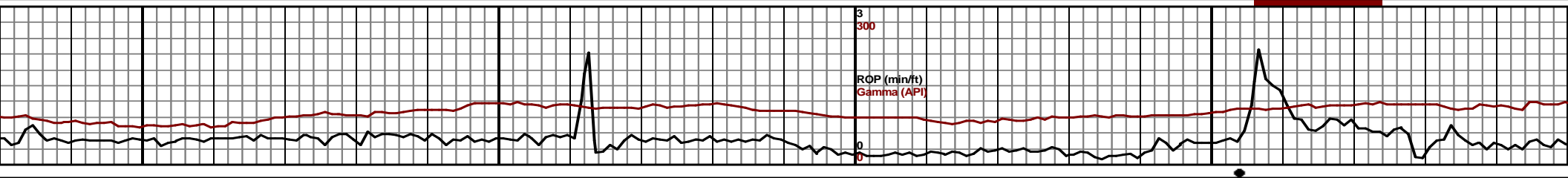
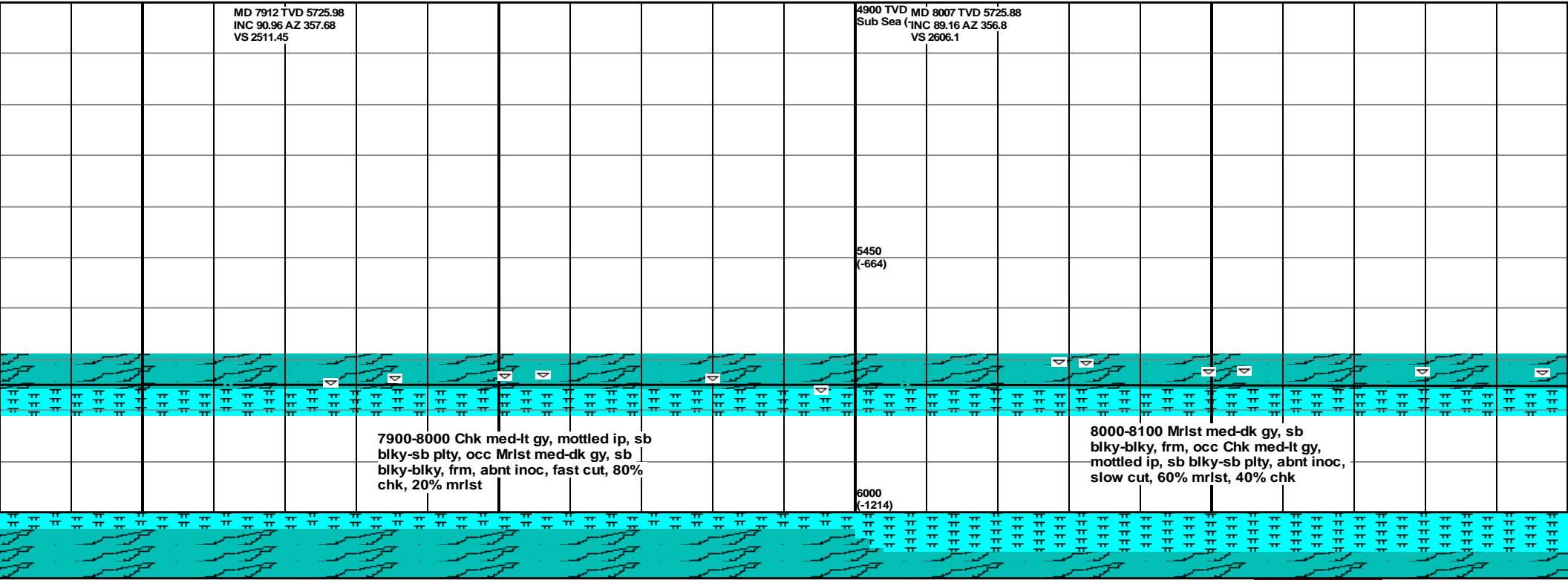
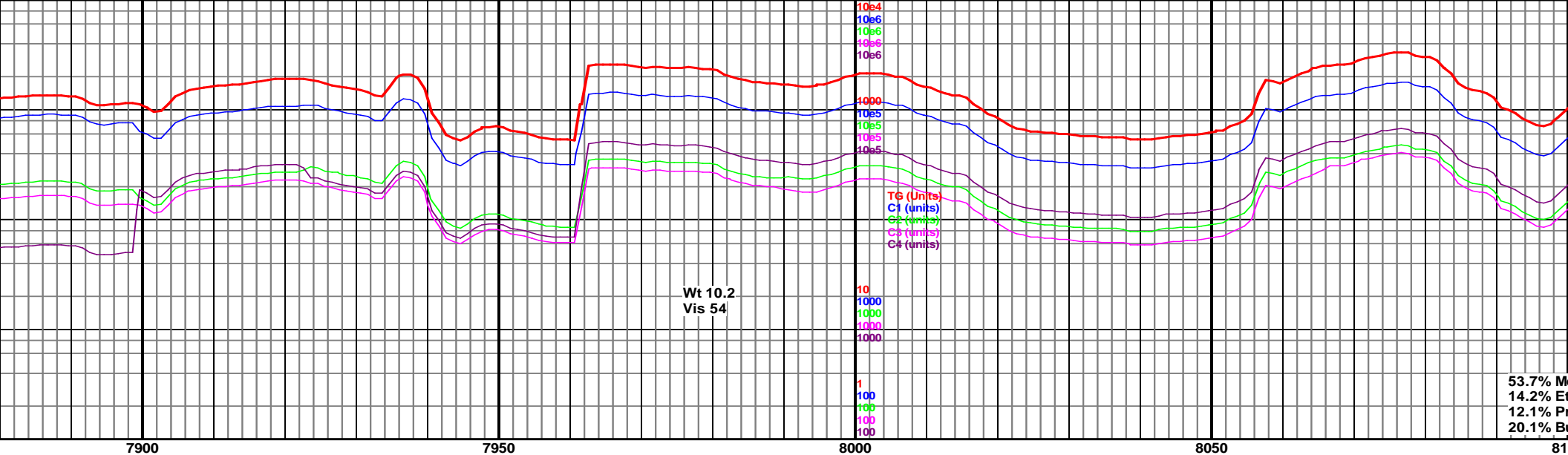


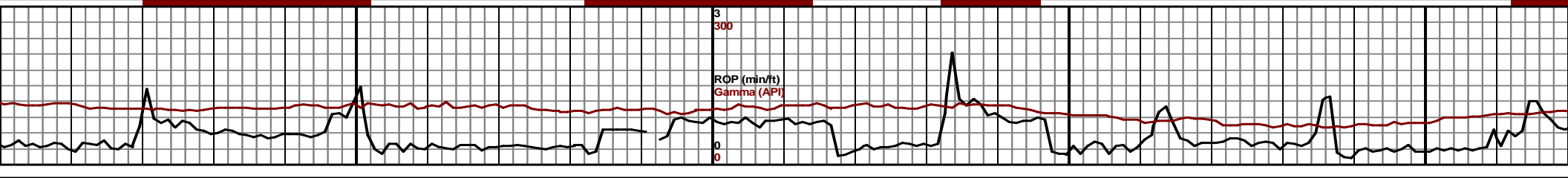
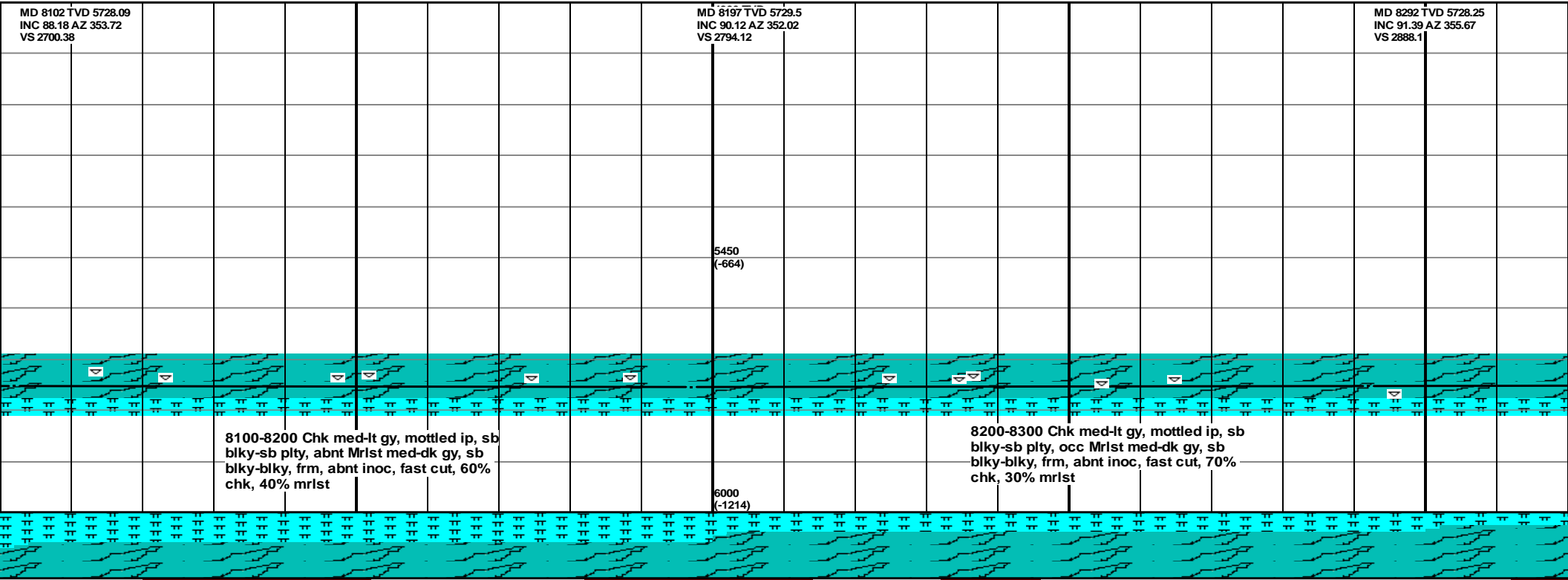
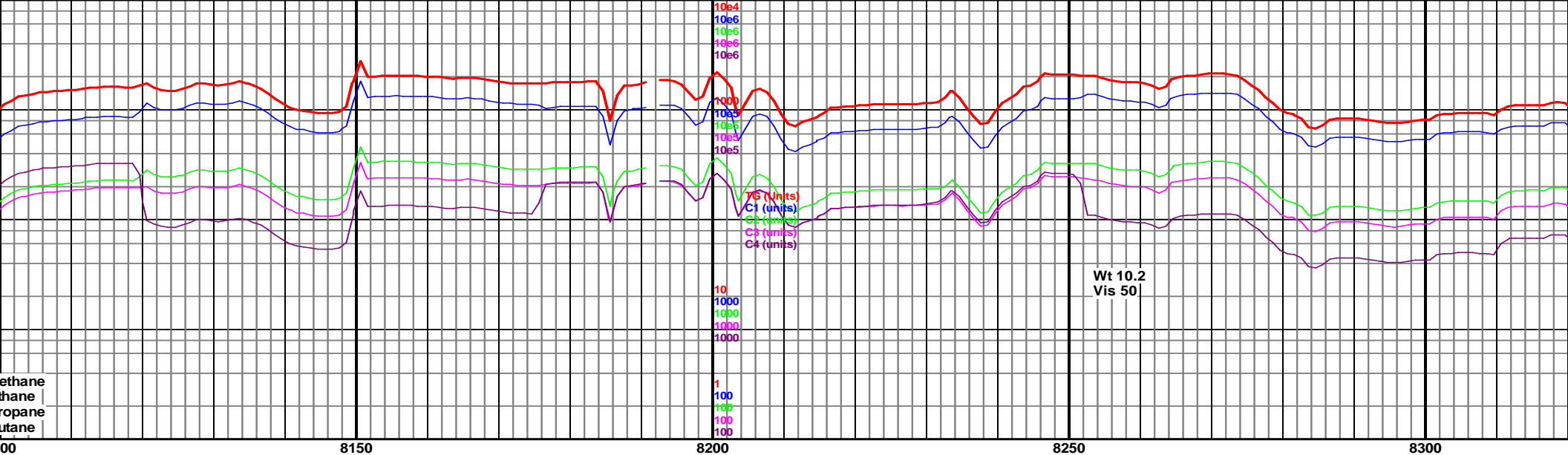




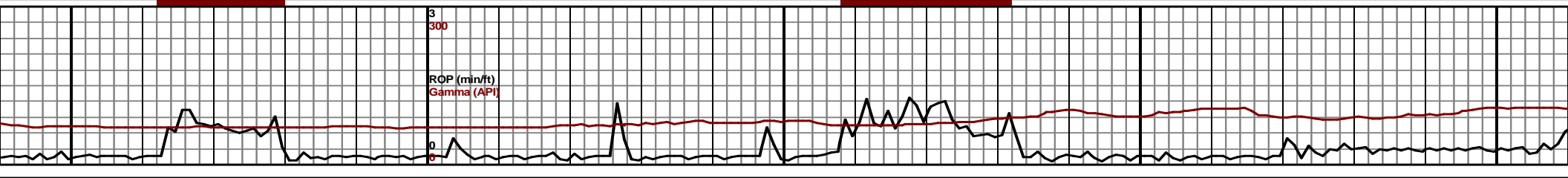
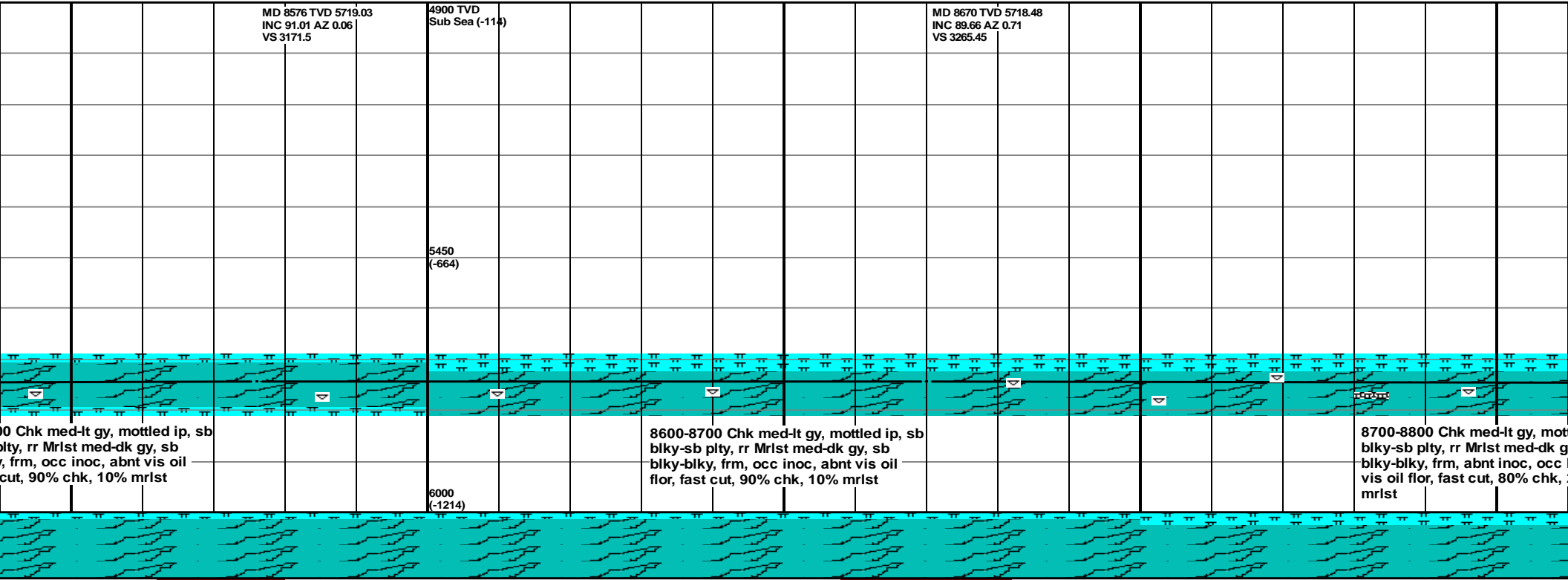
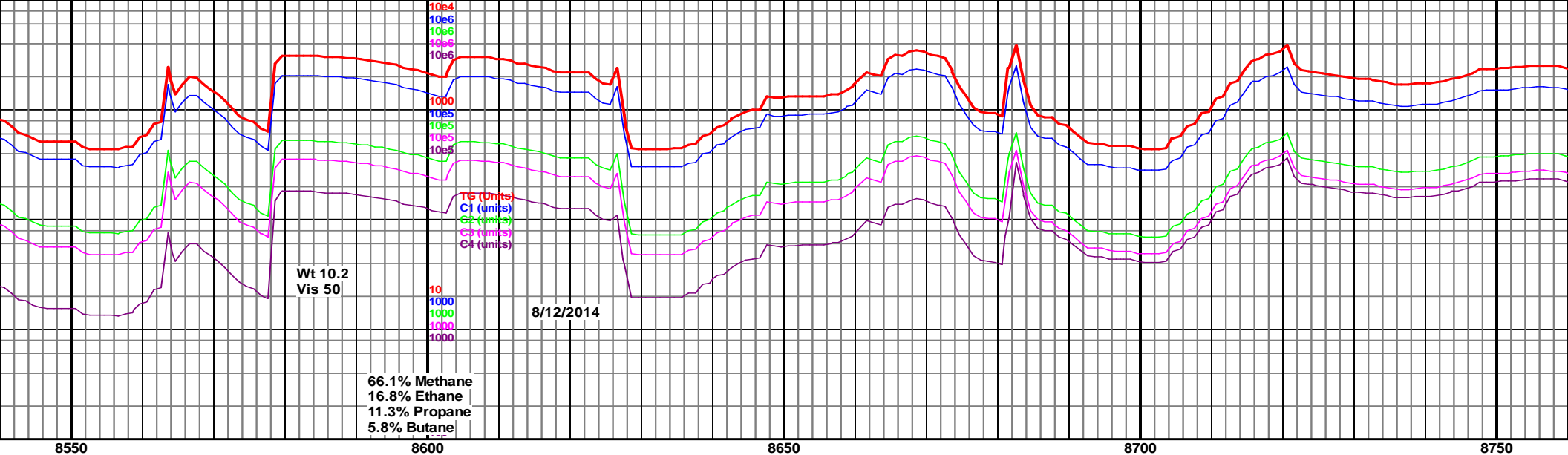


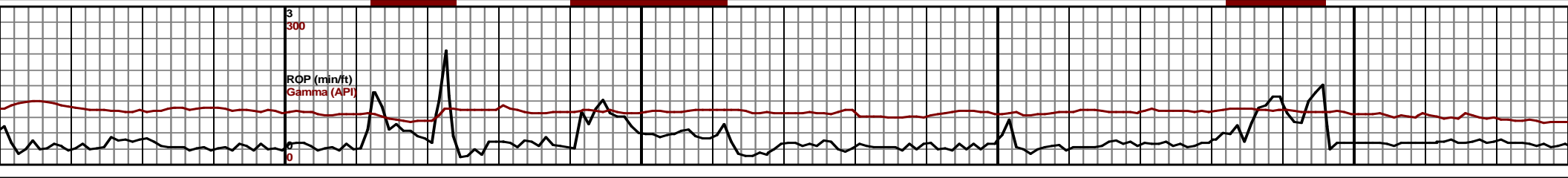
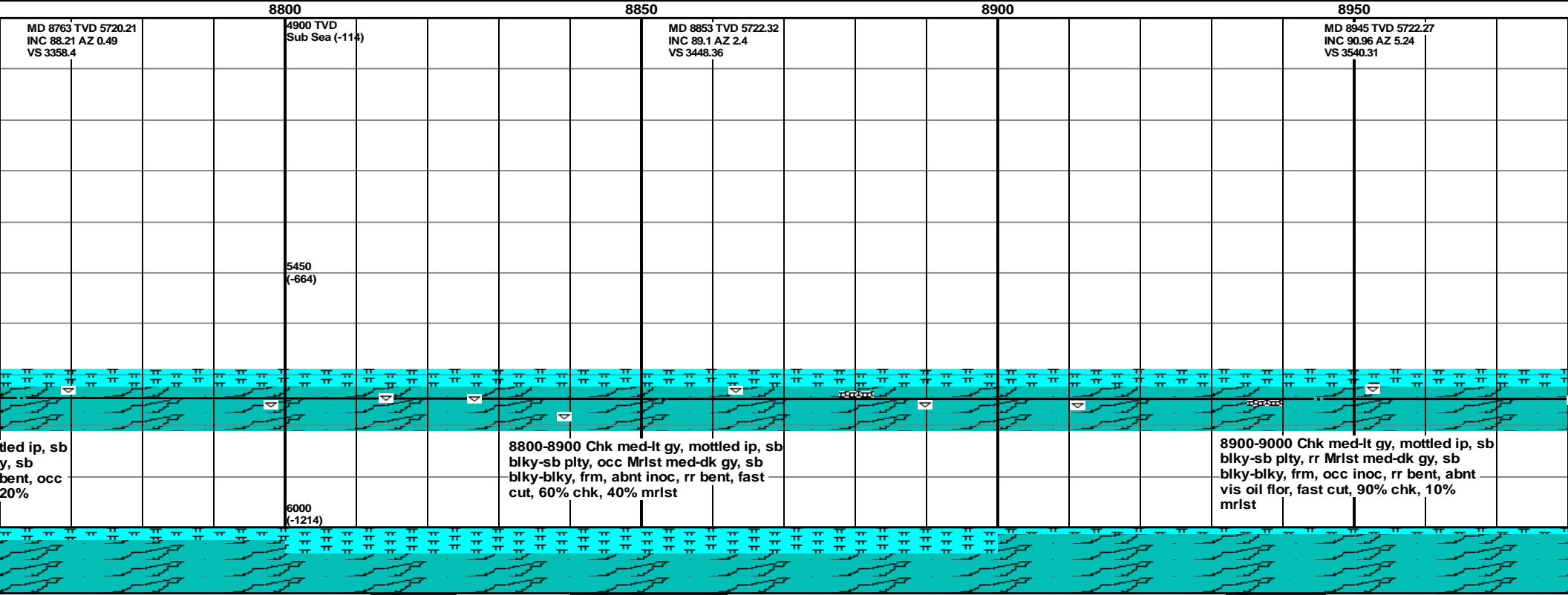
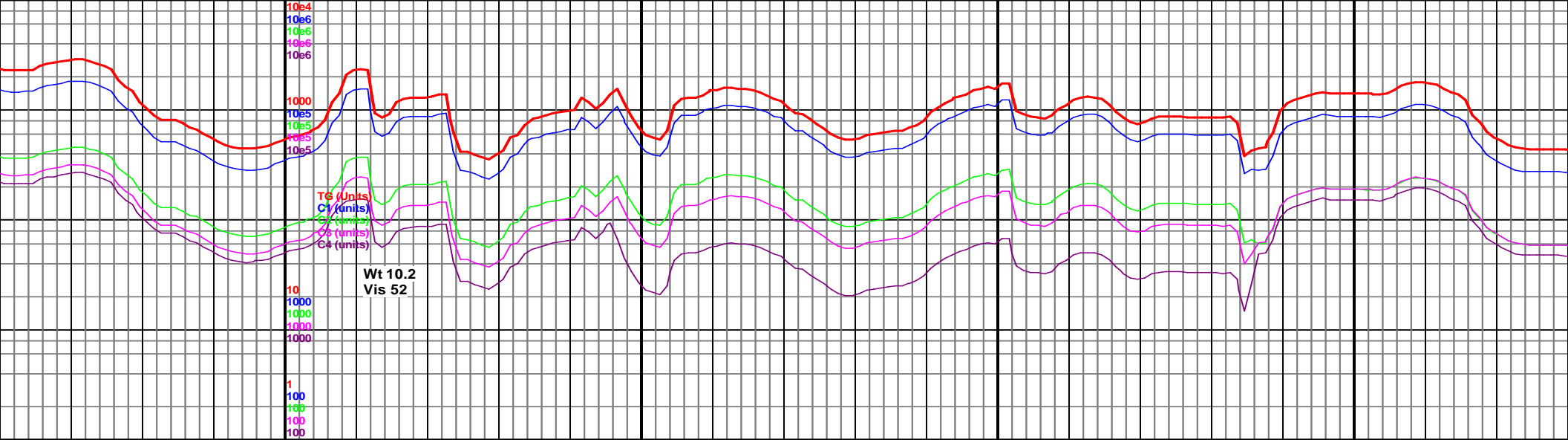


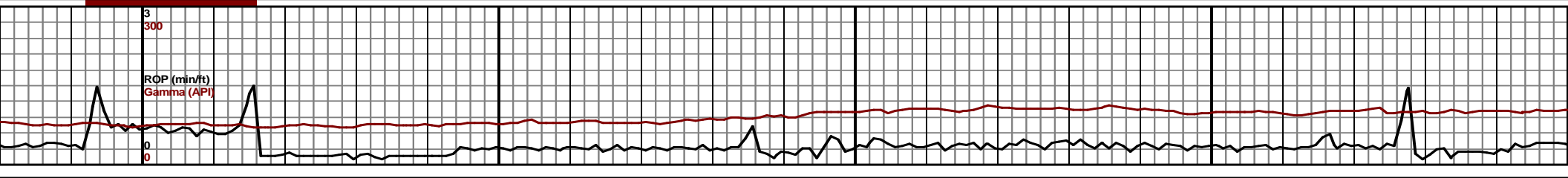
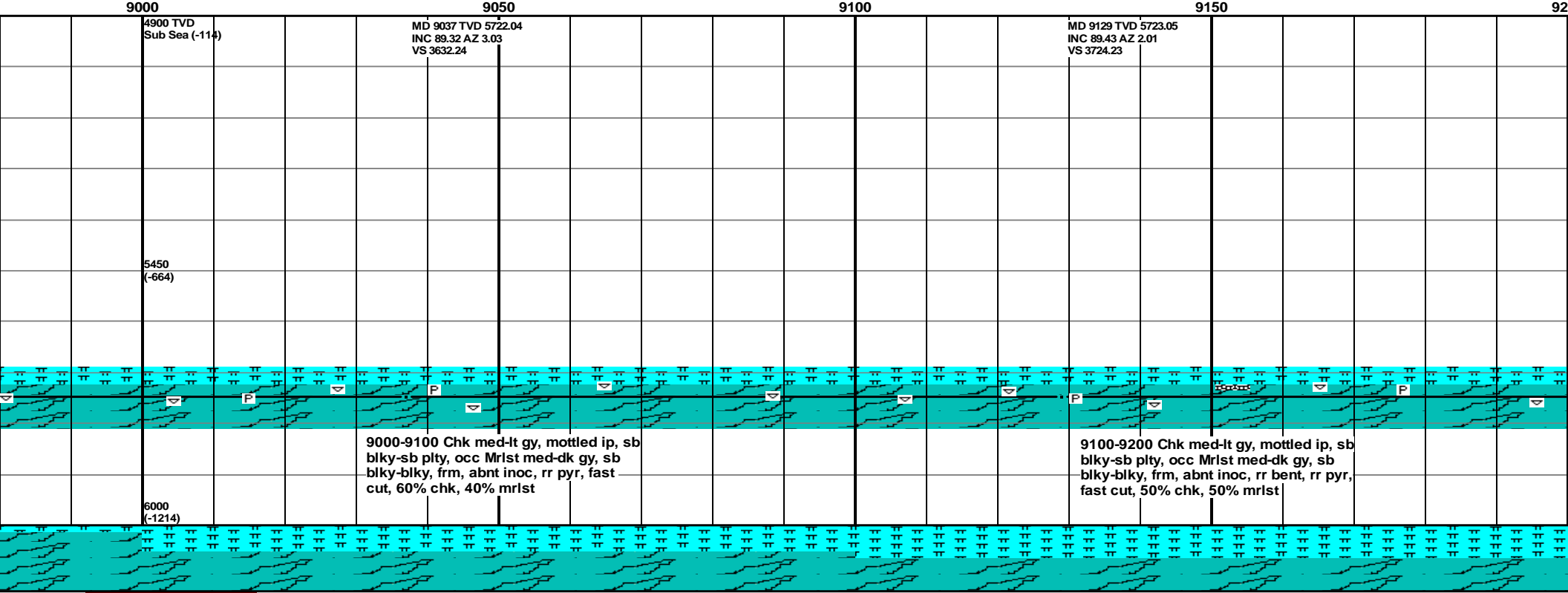
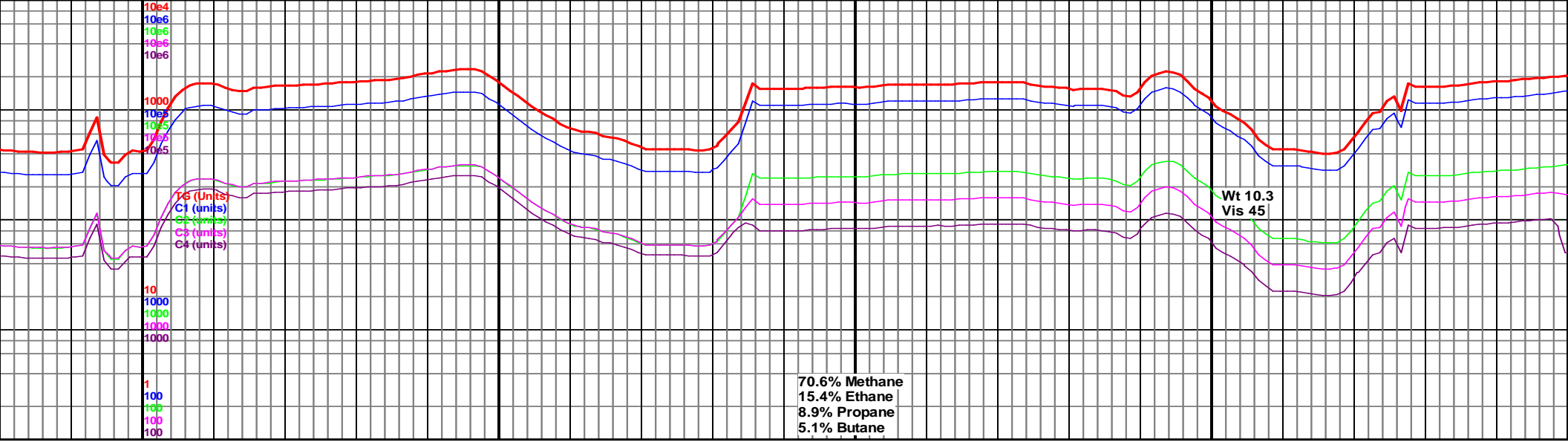


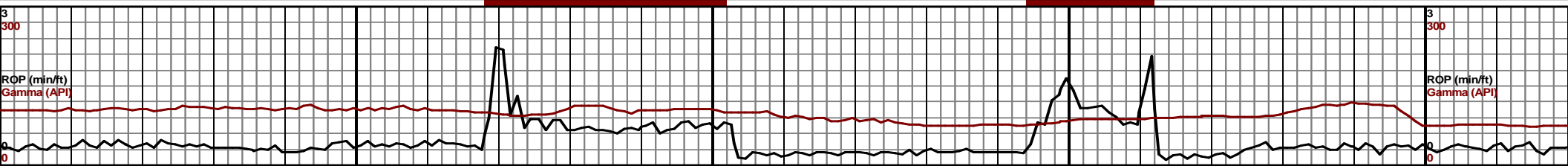
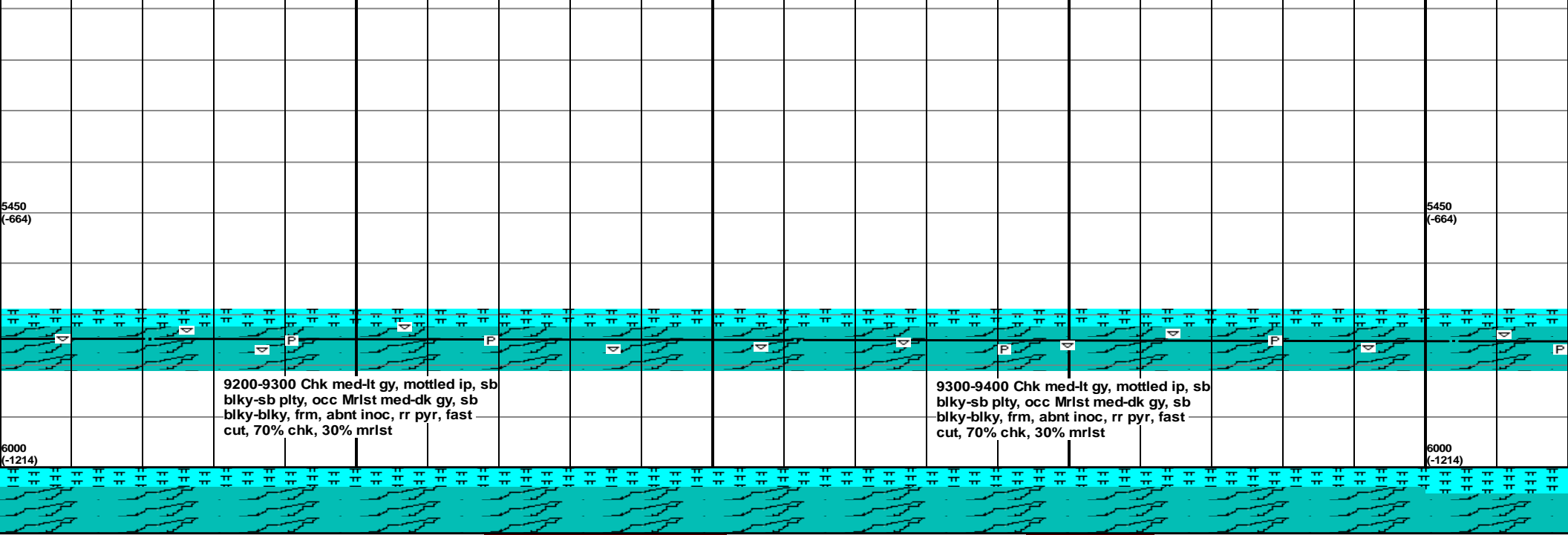
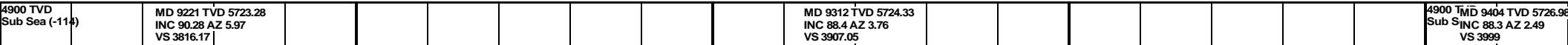
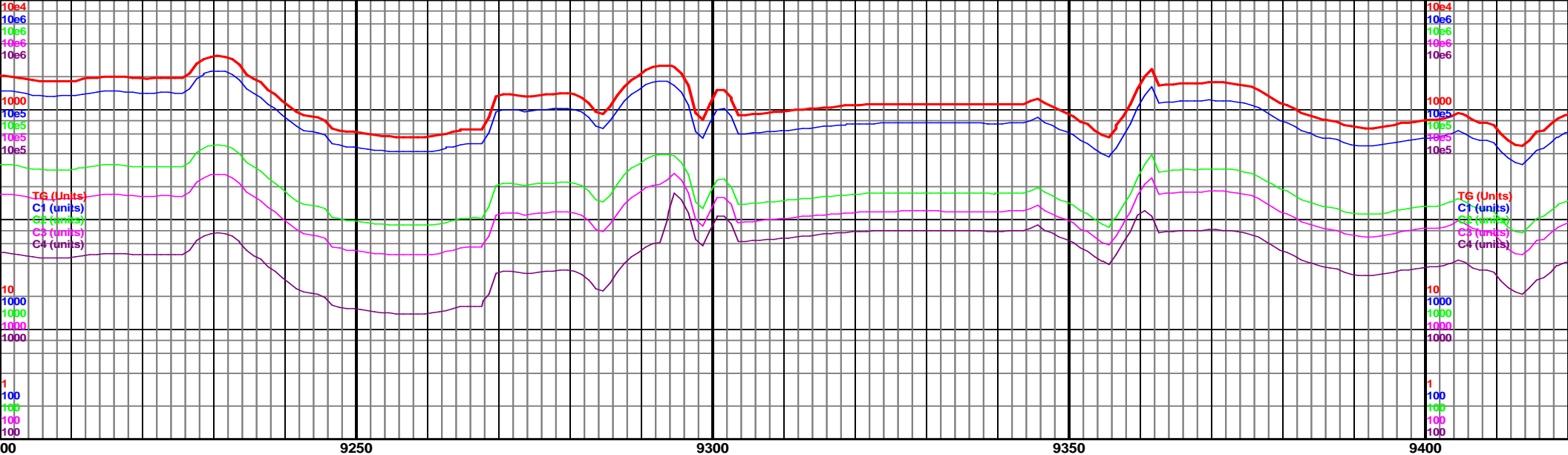


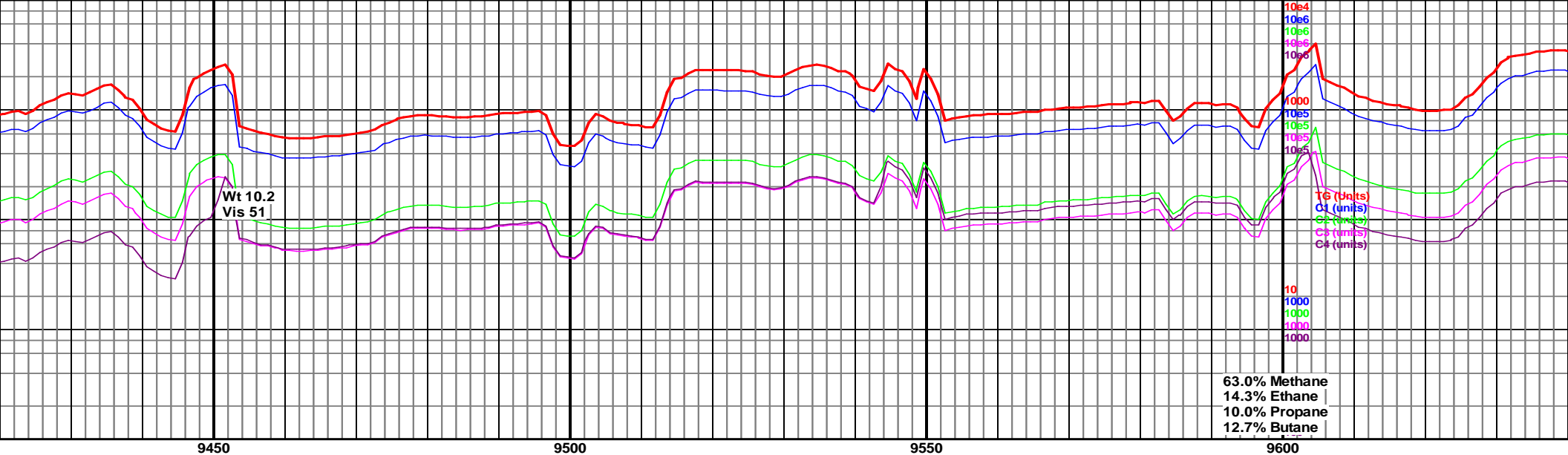












63.0%	Methane
14.3%	Ethane
10.0%	Propane
12.7%	Butane

9450

9500

9550

9600

MD 9496 TVD 5730.4  
INC 87.44 AZ 359.73  
VS 4090.91

MD 9588 TVD 5733.89	TVD
INC 88.21 AZ 357.92	Sea (-114)
VS 4182.68	

9400-9500 Chk med-lt gy, mottled ip, sb  
blky-sb plty, occ Mrlst med-dk gy, sb  
blky-blky, frm, abnt inoc, rr pyr, fast  
cut, 60% chk, 40% mrlst

9500-9600 Chk med-lt gy, mottled ip, sb  
blky-sb plty, occ Mrlst med-dk gy, sb  
blky-blky, frm, abnt inoc, rr pyr, fast  
cut, 70% chk, 30% mrlst

9600-9  
blky-s  
blky-b  
cut, 75

$$\begin{array}{r} 5450 \\ - (-664) \end{array}$$

6000  
(-1214

ROP (min/ft)  
Gamma (API)



