



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

Well Name: RAZOR 26K-3508B
Location: NESW 26-T10N-R58W Weld County, Colorado
License Number: 05-123-37876
Spud Date: 02/7/2014
Surface Coordinates: Lat.: 40.808886 Long.: -103.834286

Region: Redtail Field
Drilling Completed: 02/XX/2014

Bottom Hole Coordinates: Lat.: 40.788022 Long.: -103.832303

Ground Elevation (ft): 4737.5'
Logged Interval (ft): 5100' **To:** 13XXX'
Formation: Pierre, Sharon Springs, Niobrara
Type of Drilling Fluid: Water Based Mud

K.B. Elevation (ft): 4759.5'
Total Depth (ft): 13XXX'

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

OPERATOR

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

GEOLOGIST

Name: Luke Schwantes and Craig Dreiling
Company: Acme Geologic Consulting
Address: 108 Berry Street
Little Rock, AR 72205

Drilling Company

Frontier
Rig #26


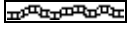
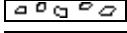
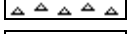
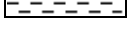
Gas Detection






Mudlogging Systems, Inc., M Logger, Model TGC, Total Gas and Chromatograph, #603




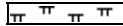

Comments






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


POROSITY
 Earthy
 Fenest
 Fracture
 Inter
 Moldic
 Organic
 Pinpoint




 Vuggy



SORTING
 Well
 Moderate
 Poor

OTHER SYMBOLS

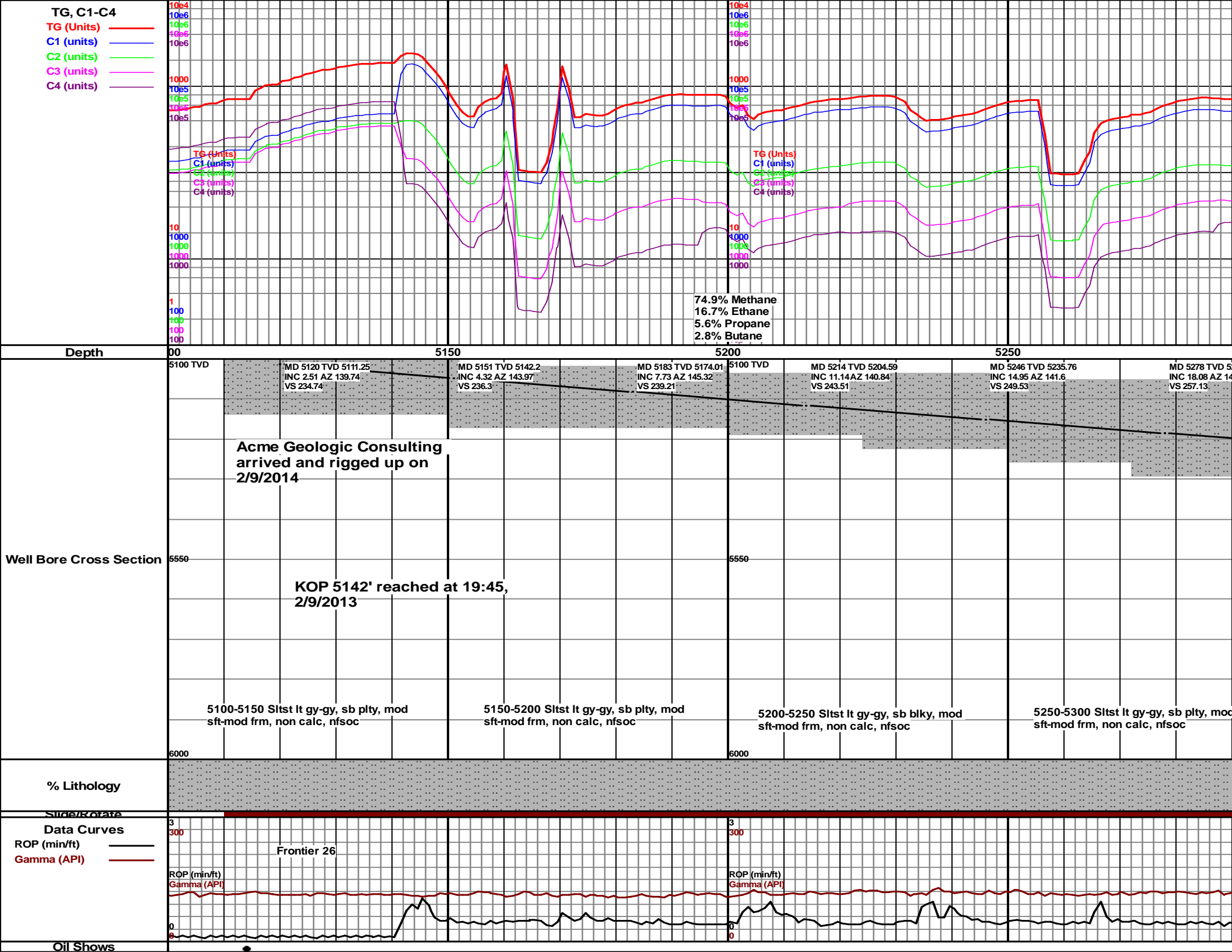
ROUNDING
 Rounded
 Subrnd
 Subang
 Angular

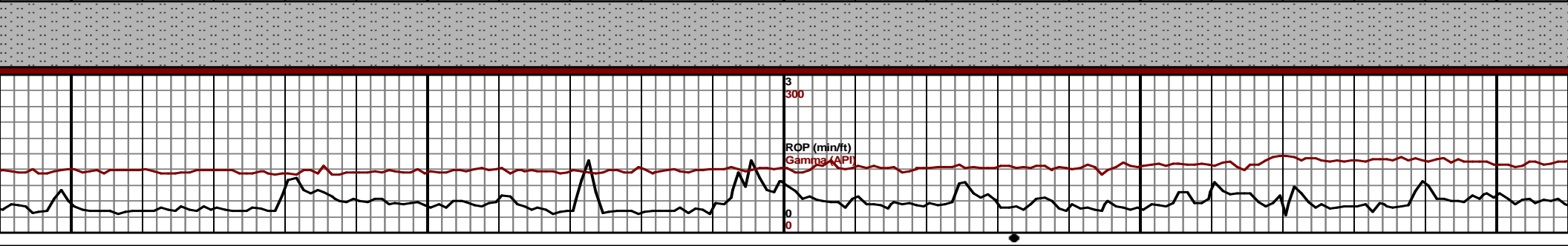
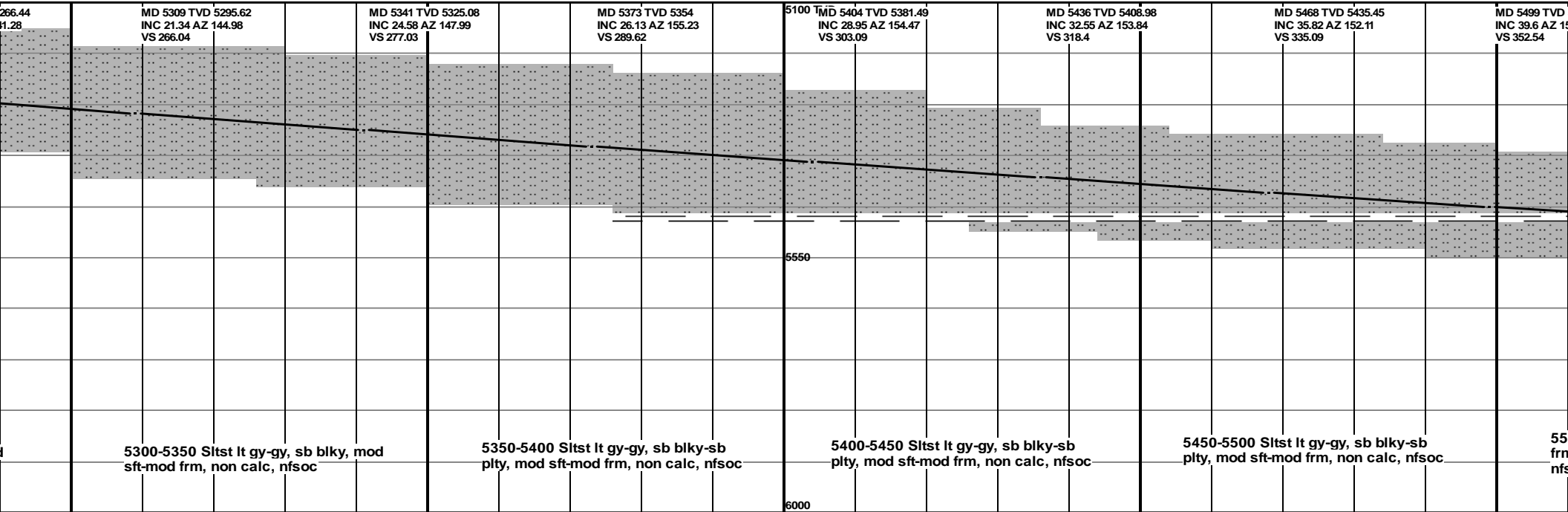
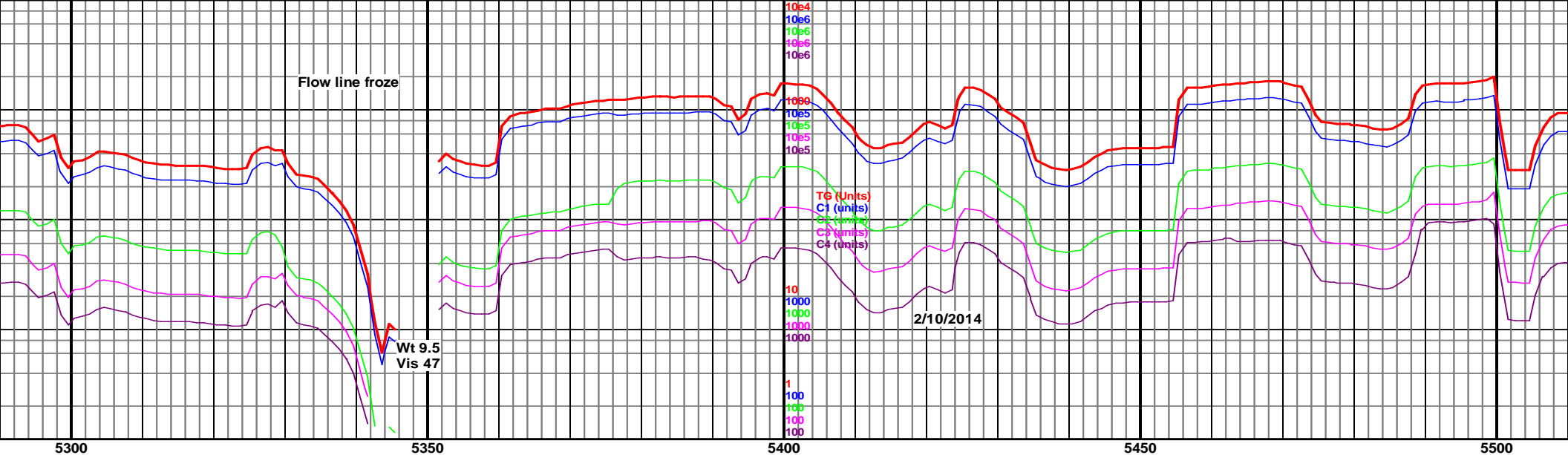
OIL SHOW
 Even

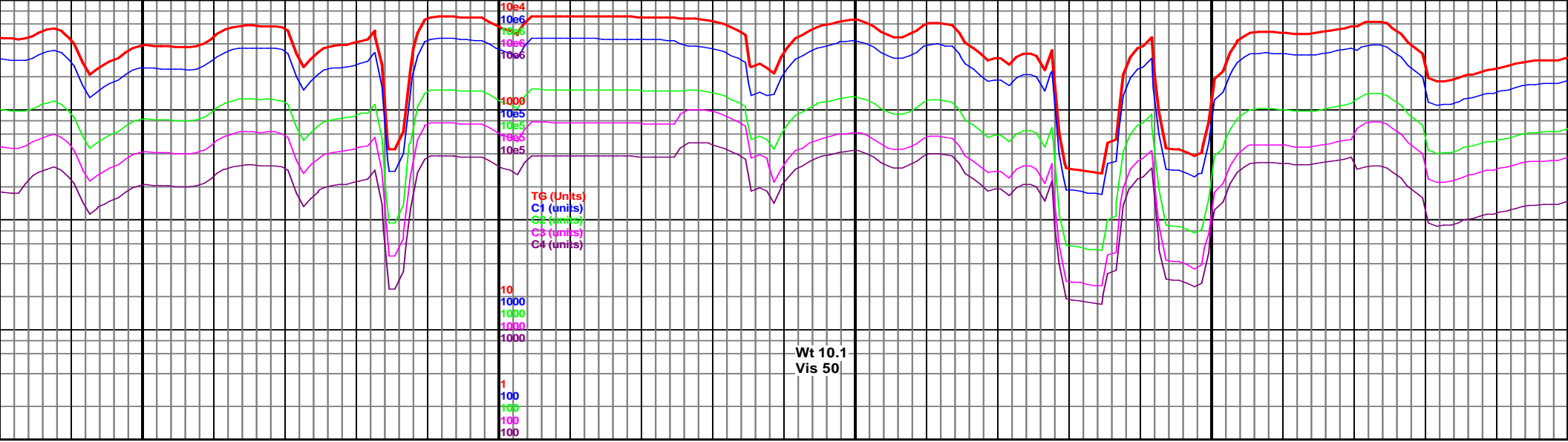
 Spotted
 Ques
 Dead

INTERVAL
 Core
 Dst

EVENT
 Rft
 Sidewall







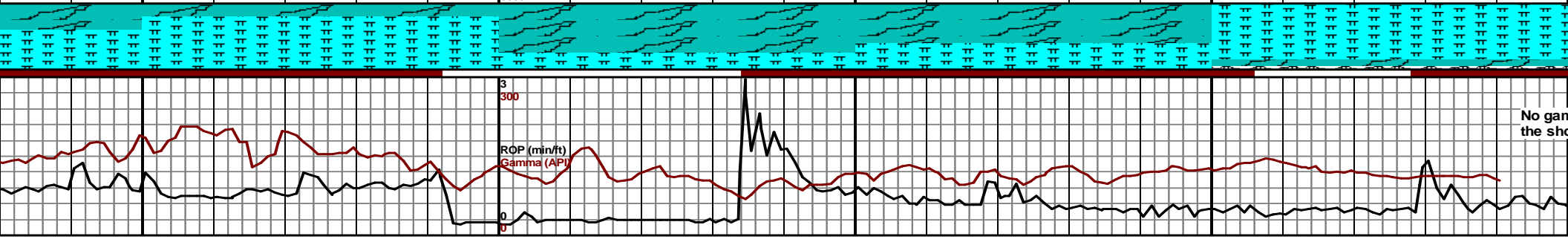
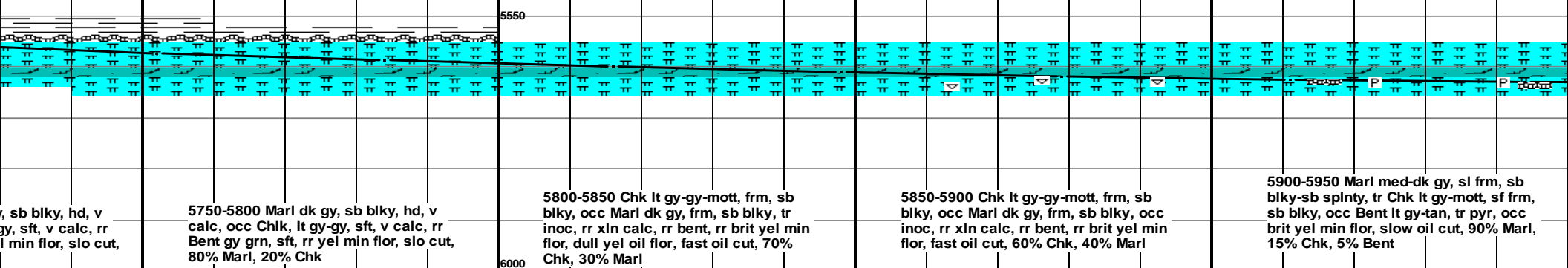
MD 5601 TVD 5601.35 INC 150.49	MD 5752 TVD 5615.03 INC 65.52 AZ 149.64 VS 535.65	MD 5784 TVD 5627.23 INC 69.65 AZ 149.14 VS 562.37	MD 5816 TVD 5638.26 INC 70.01 AZ 149.13 VS 589.45	MD 5848 TVD 5648.62 INC 72.22 AZ 150.63 VS 616.92	MD 5879 TVD 5657.03 INC 76.28 AZ 152.6 VS 644.34	MD 5911 TVD 5663.22 INC 81.43 AZ 154.1 VS 673.56	MD 5943 TVD 5669.41 INC 86.14 AZ 155.1 VS 704.1
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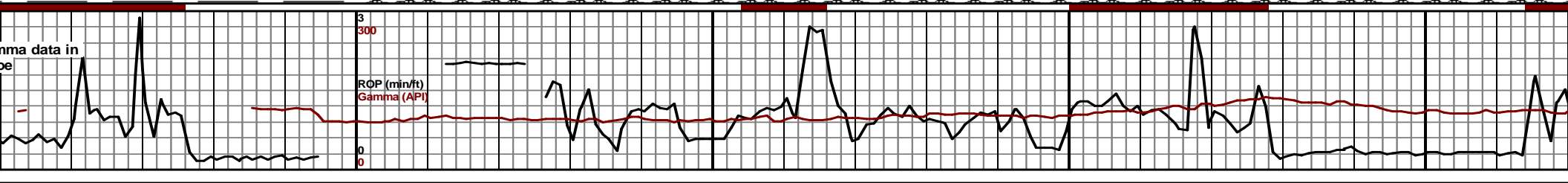
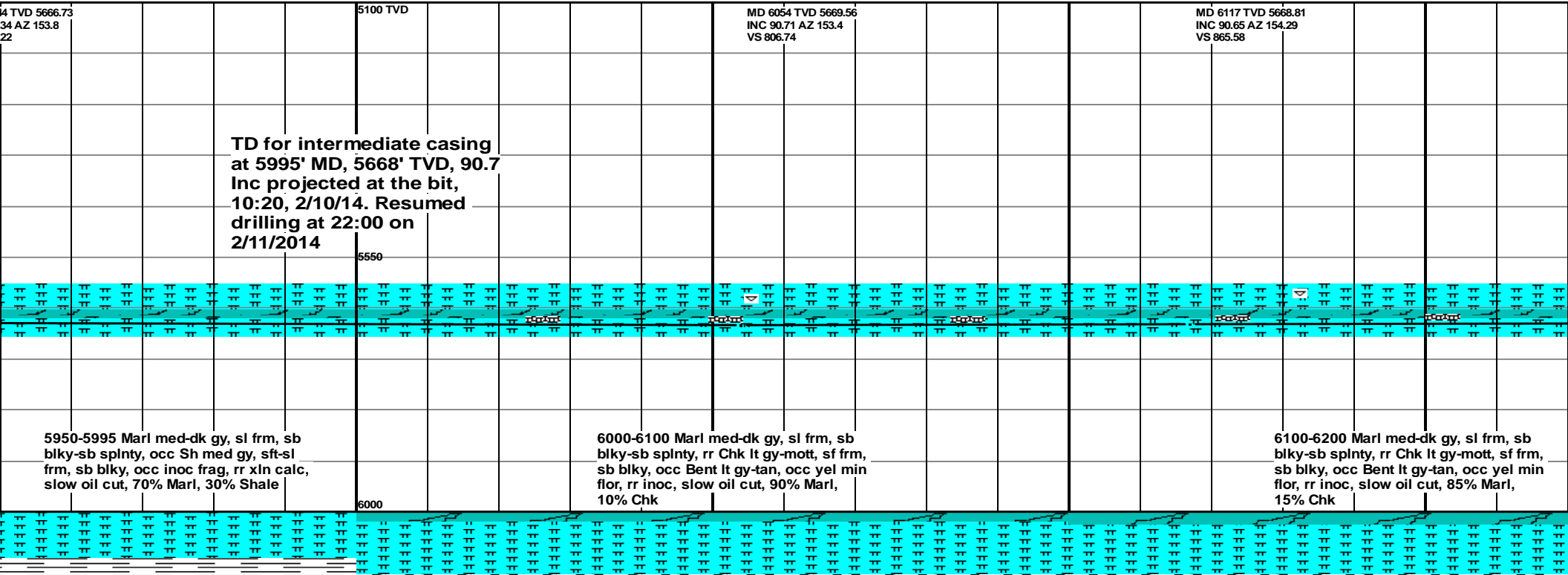
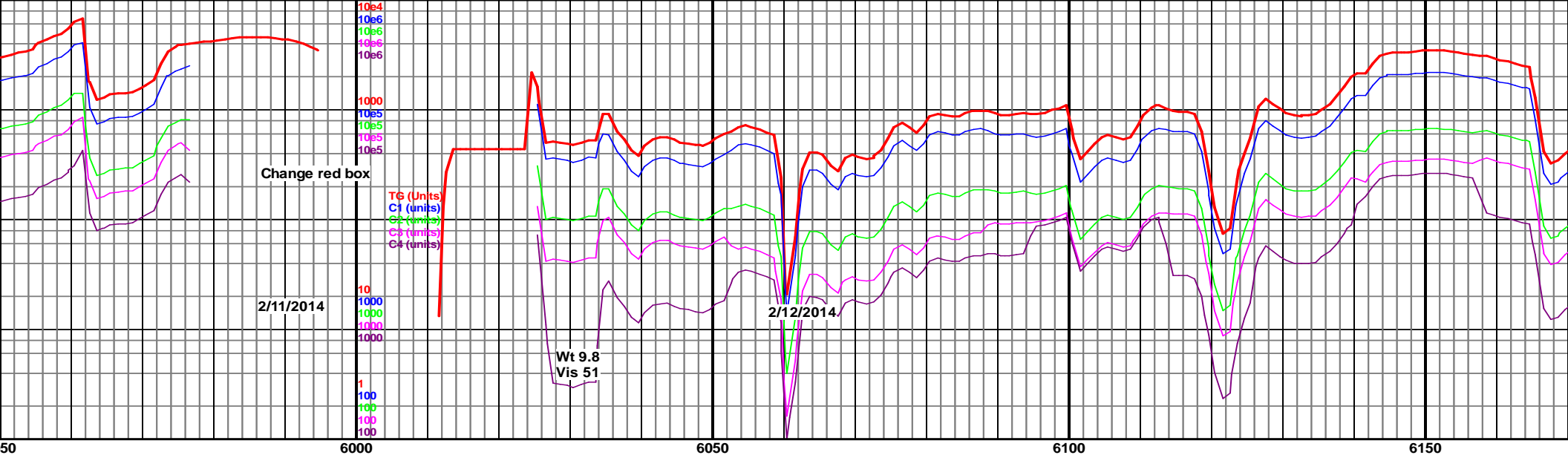
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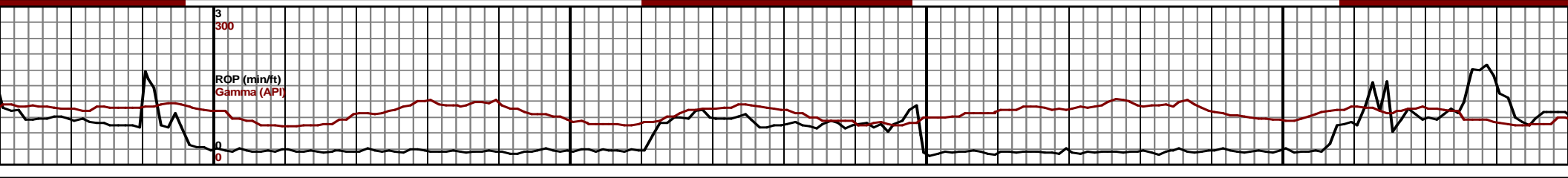
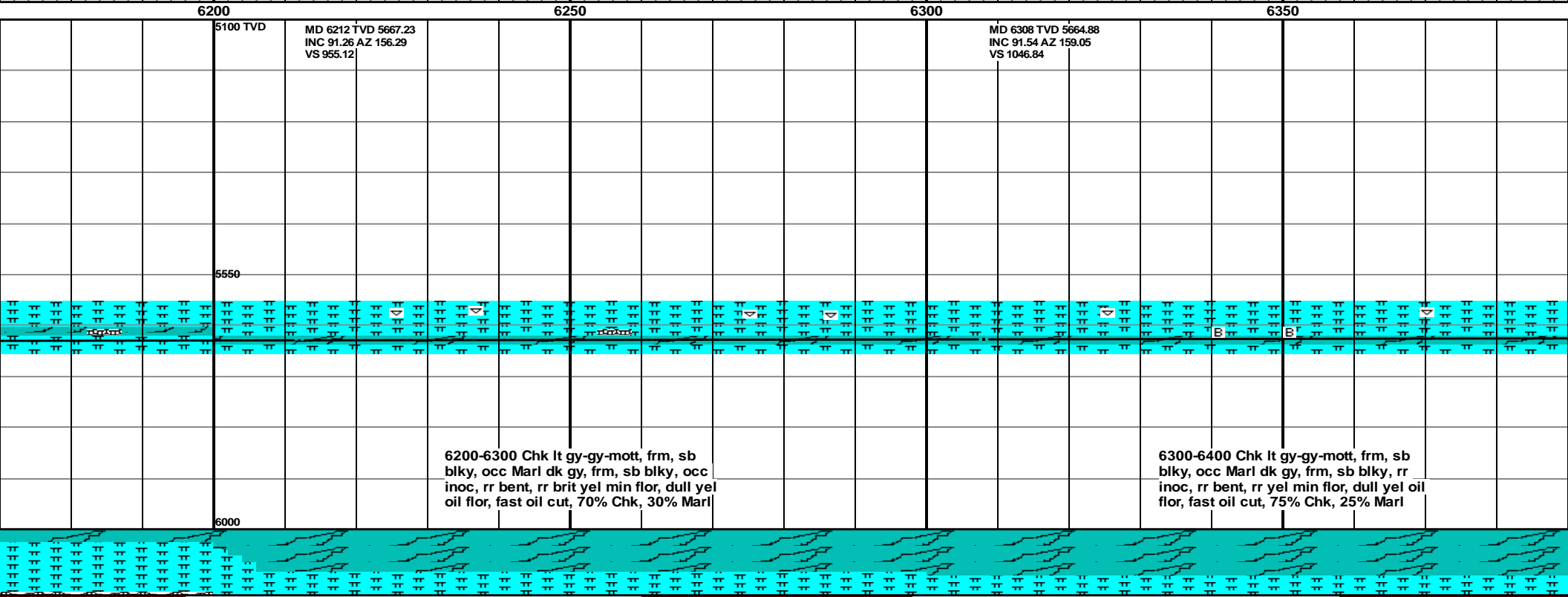
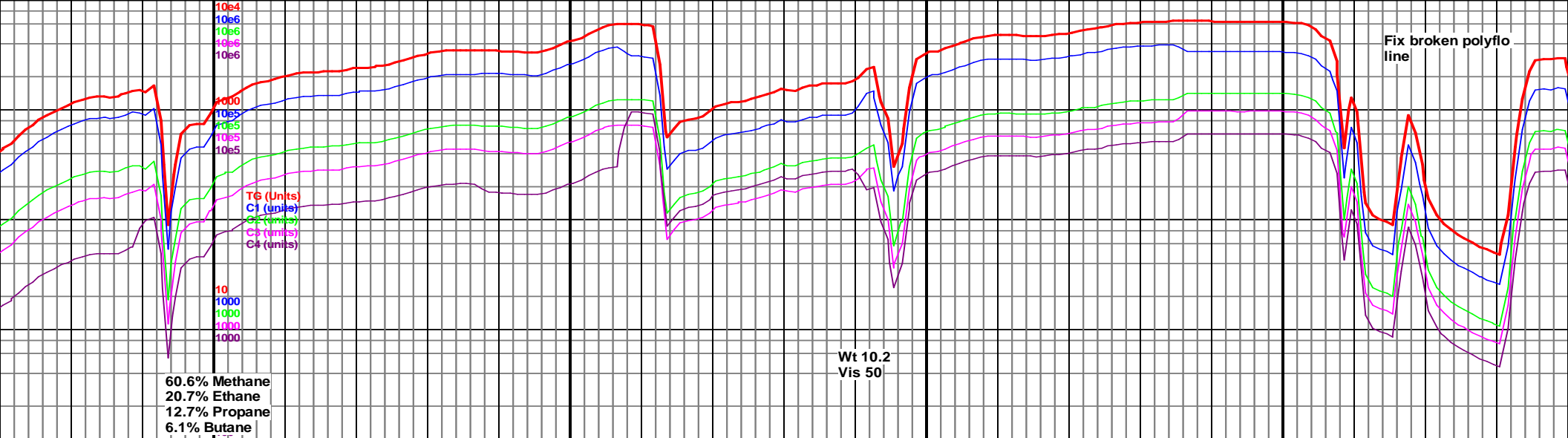
N460 @ 5787' MD, 5628' TVD

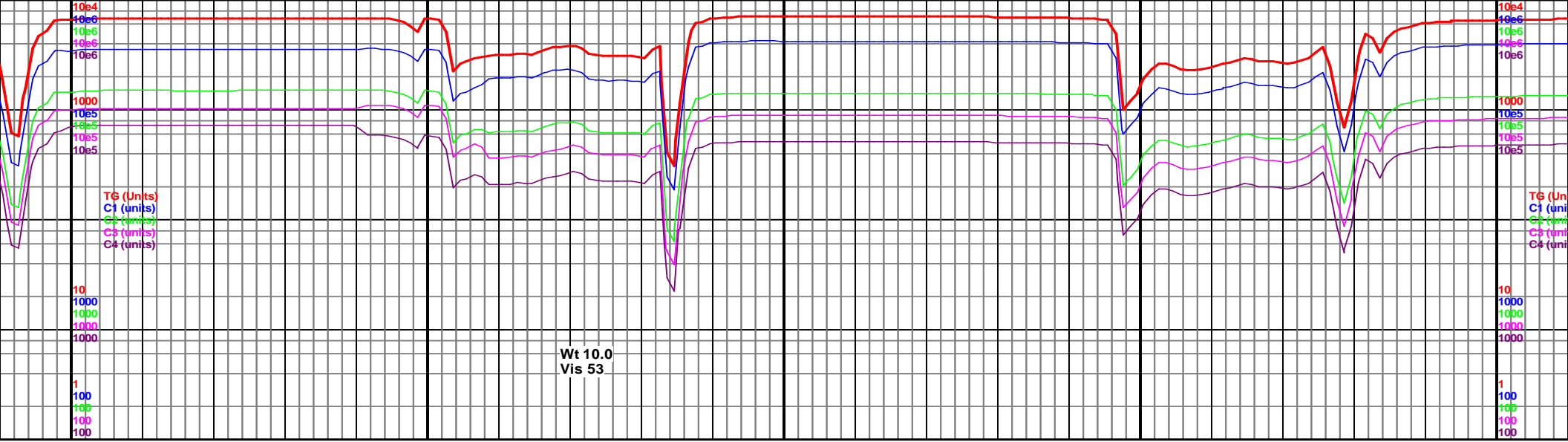
N490 @ 5837' MD, 5645' TVD

N500 @ 5907' MD, 5663' TVD





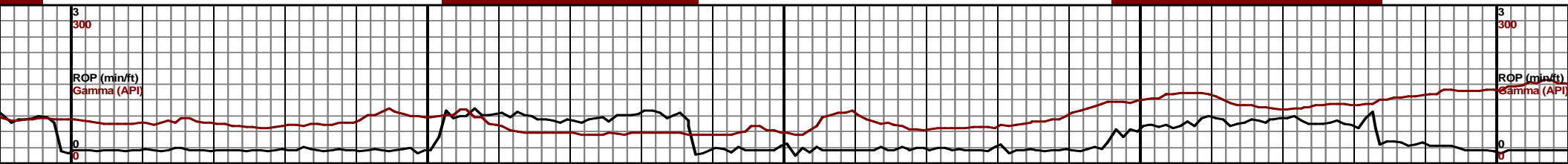


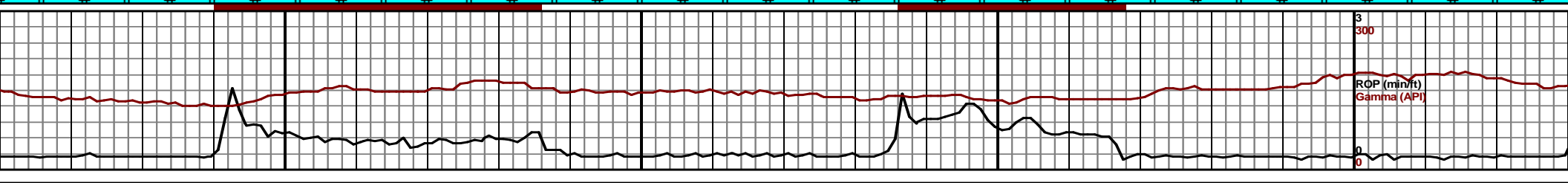
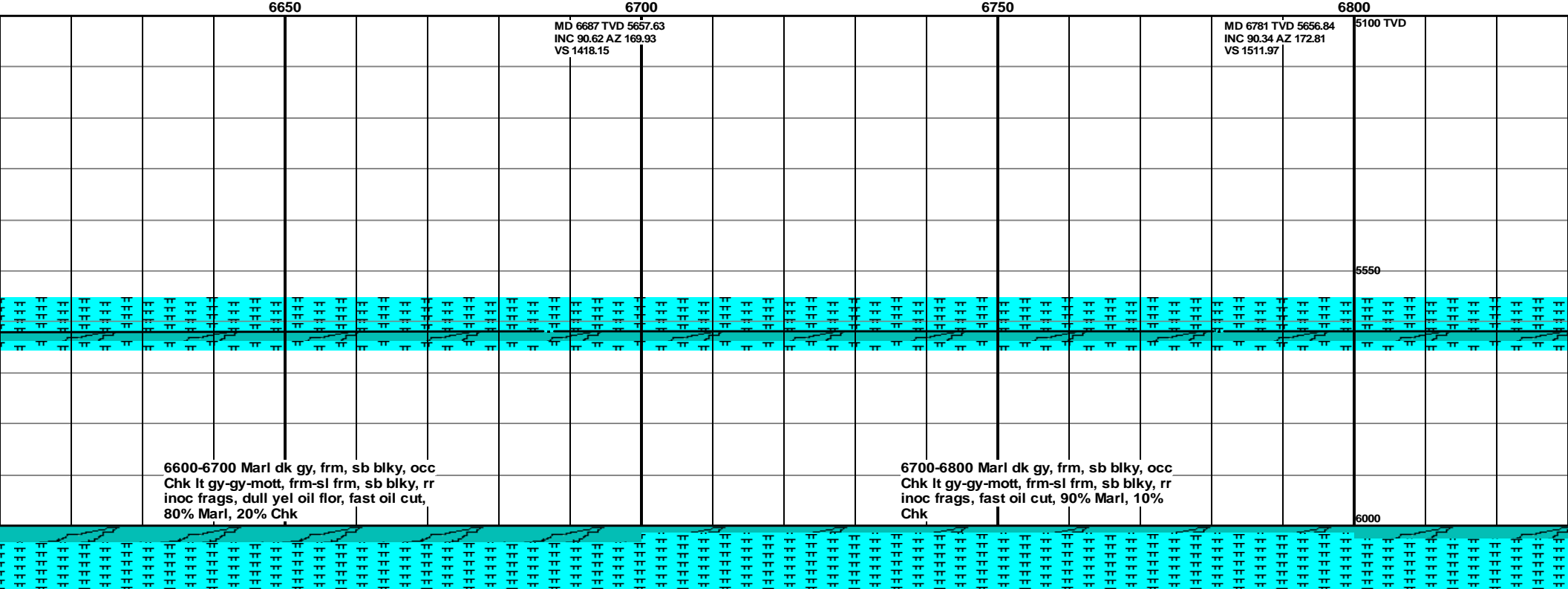
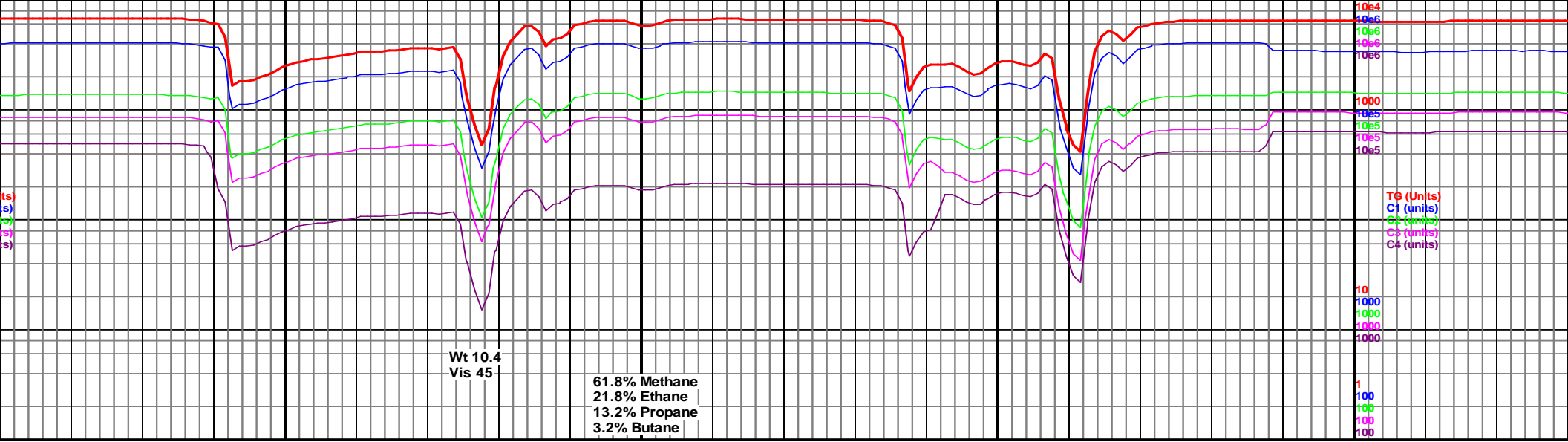


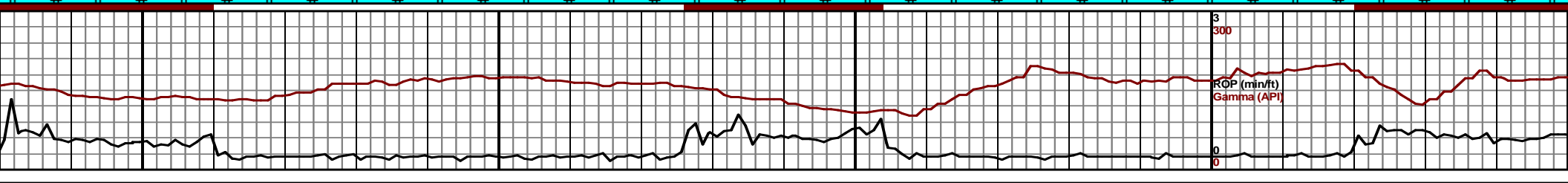
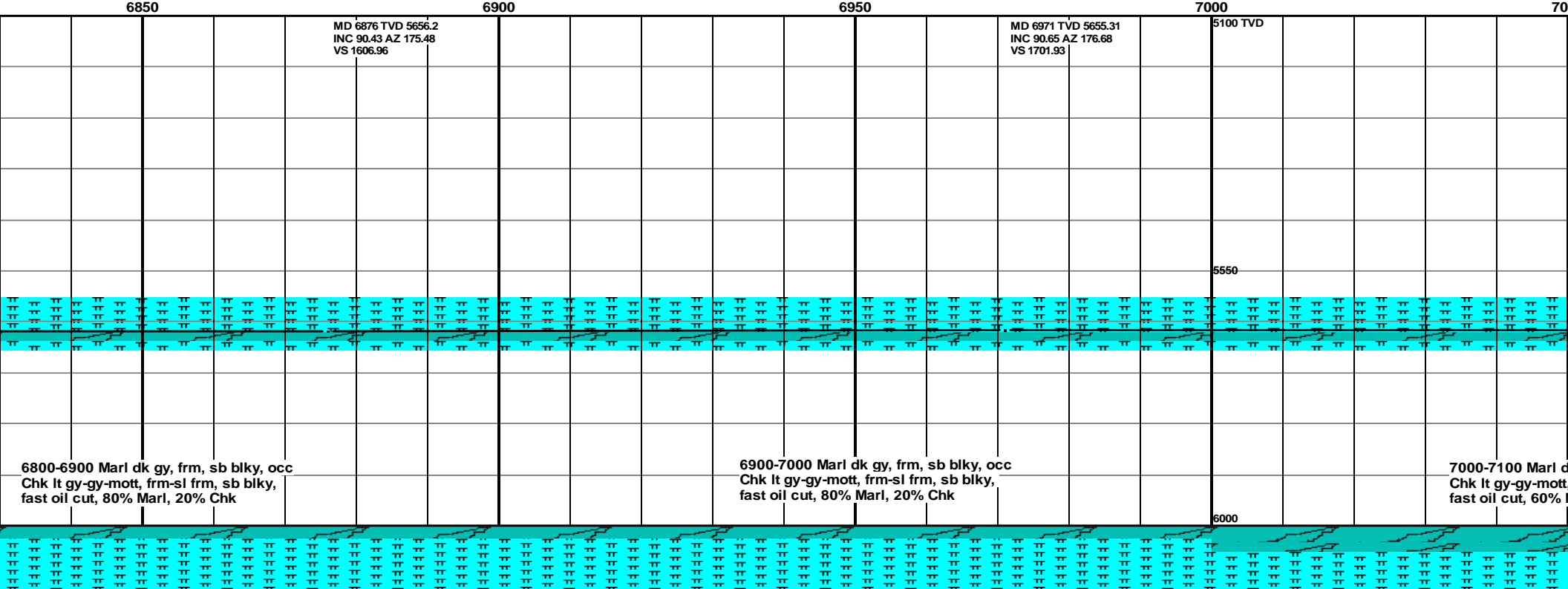
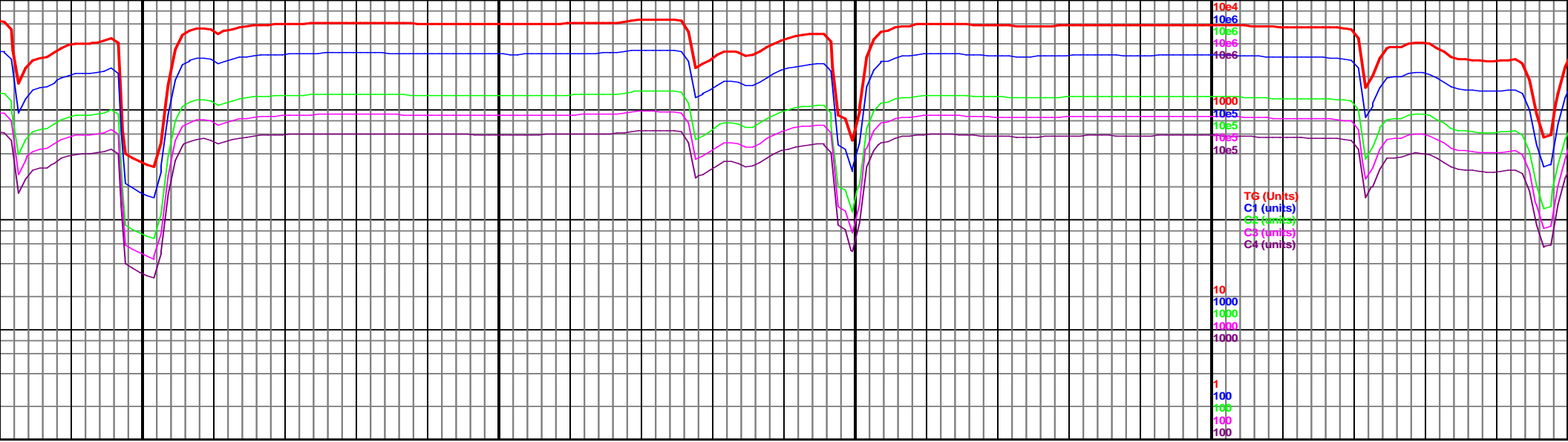
<p>5100 MD 6403 TVD 5661.92 INC 92.04 AZ 161.37 VS 1138.74</p>				<p>MD 6497 TVD 5659.45 INC 90.96 AZ 163.41 VS 1230.52</p>			<p>MD 6592 TVD 5658.4 INC 90.31 AZ 165.22 VS 1323.93</p>
5550							5550
B							

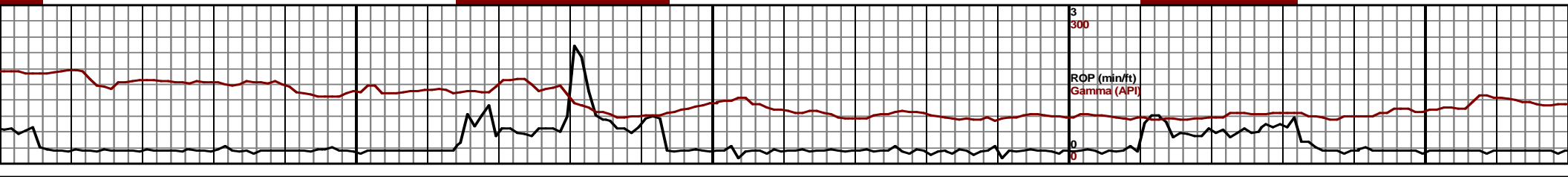
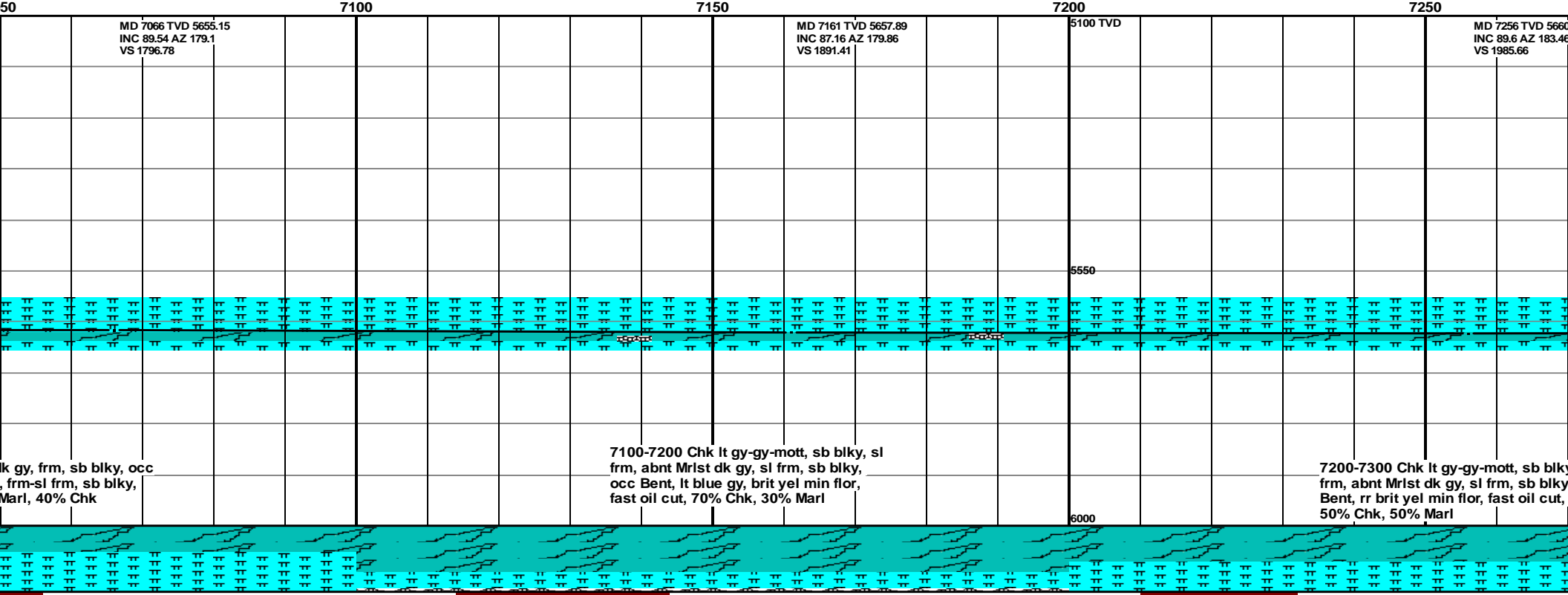
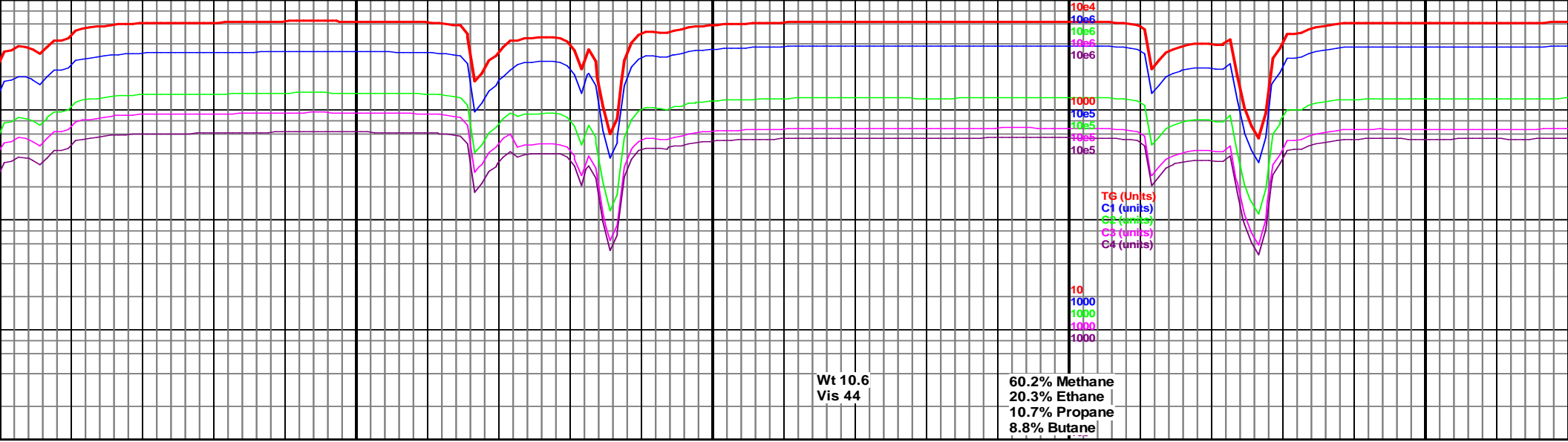
6400-6500 Chk lt gy-gy-mott, frm, sb
blky, rr Marl dk gy, frm, sb blky, rr inoc,
dull yel oil flor, fast oil cut, 80% Chk,
20% Marl

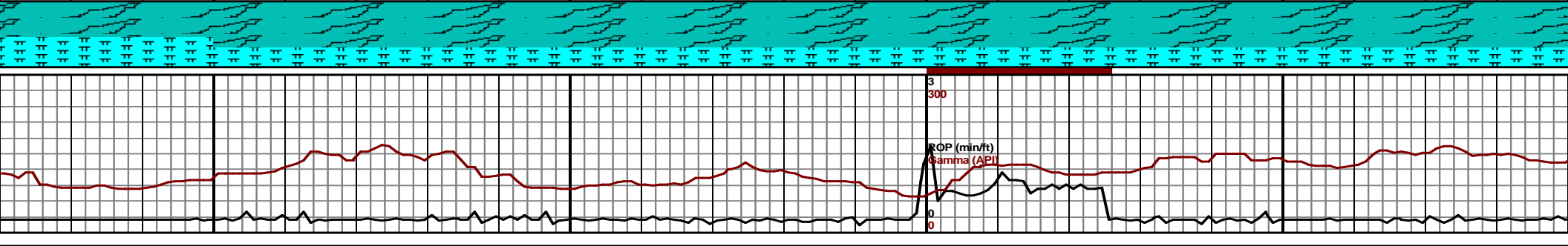
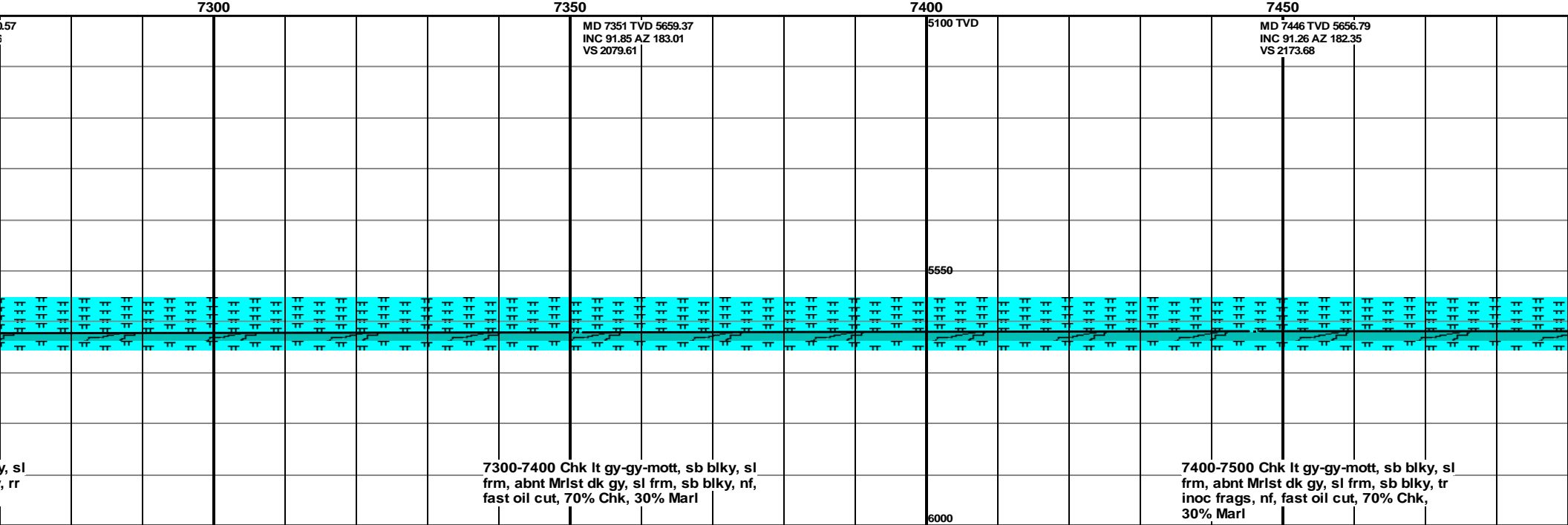
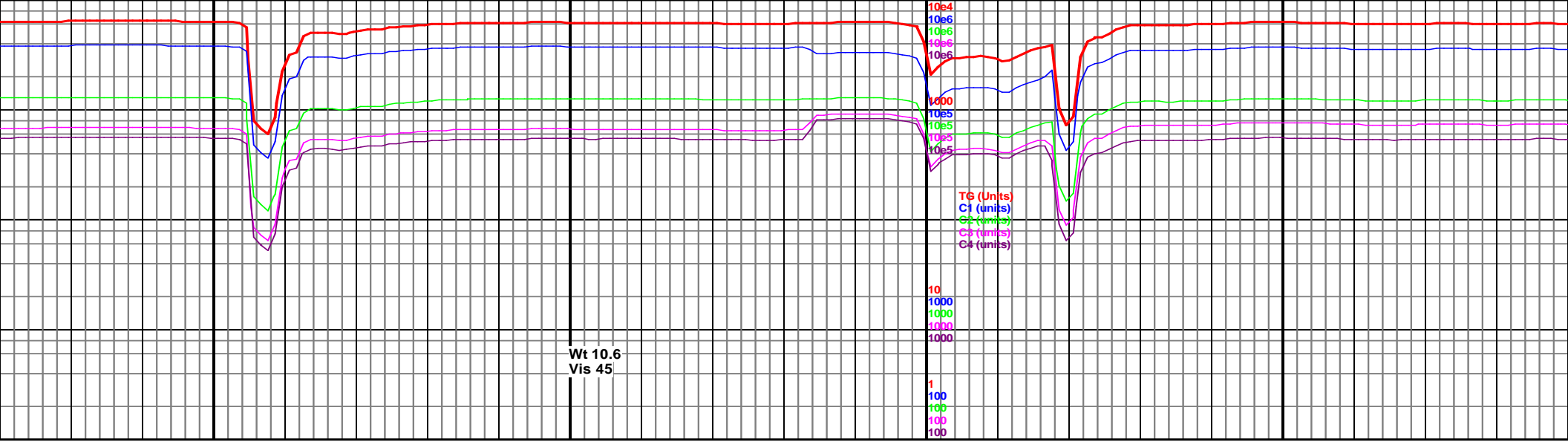
6500-6600 Marl dk gy, frm, sb blky, occ
Chk lt gy-gy-mott, frm-sl frm, sb blky, rr
inoc frags, dull yel oil flor, fast oil cut,
80% Marl, 20% Chk

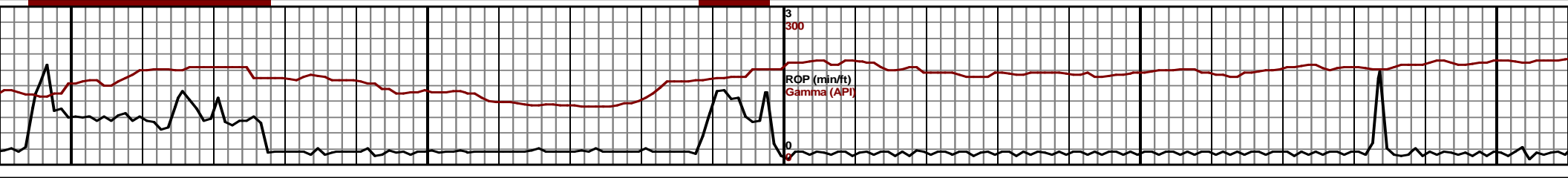
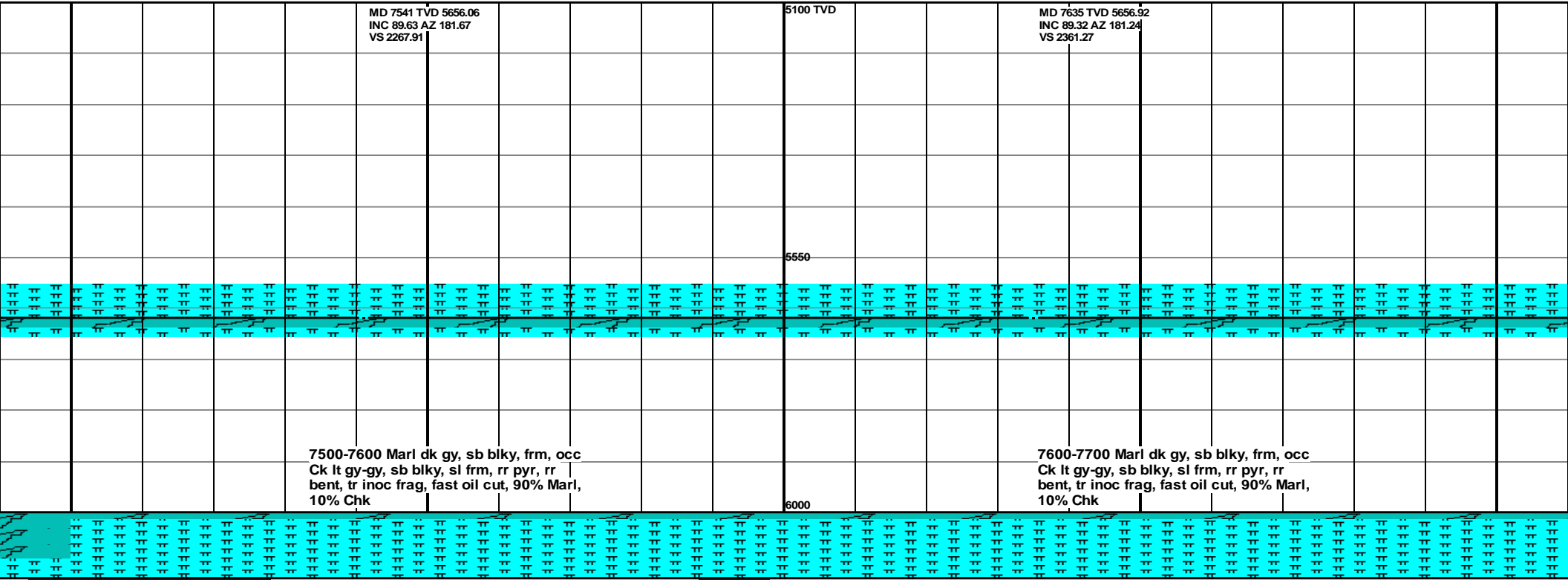
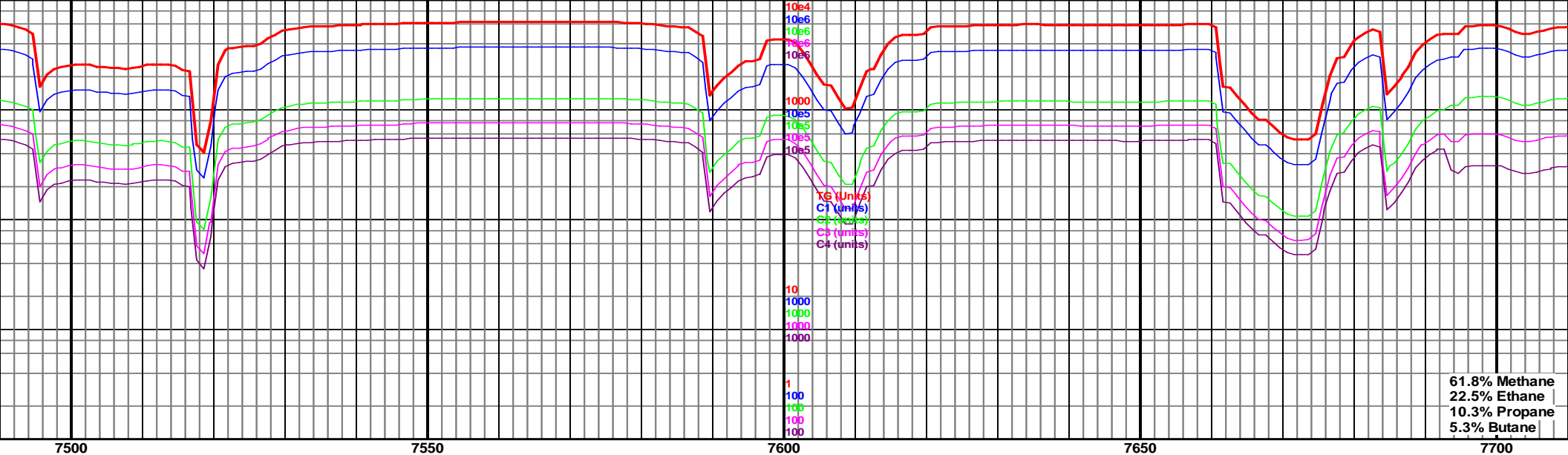


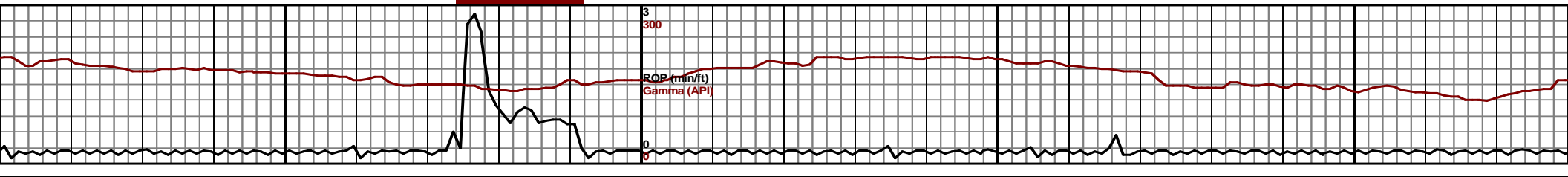
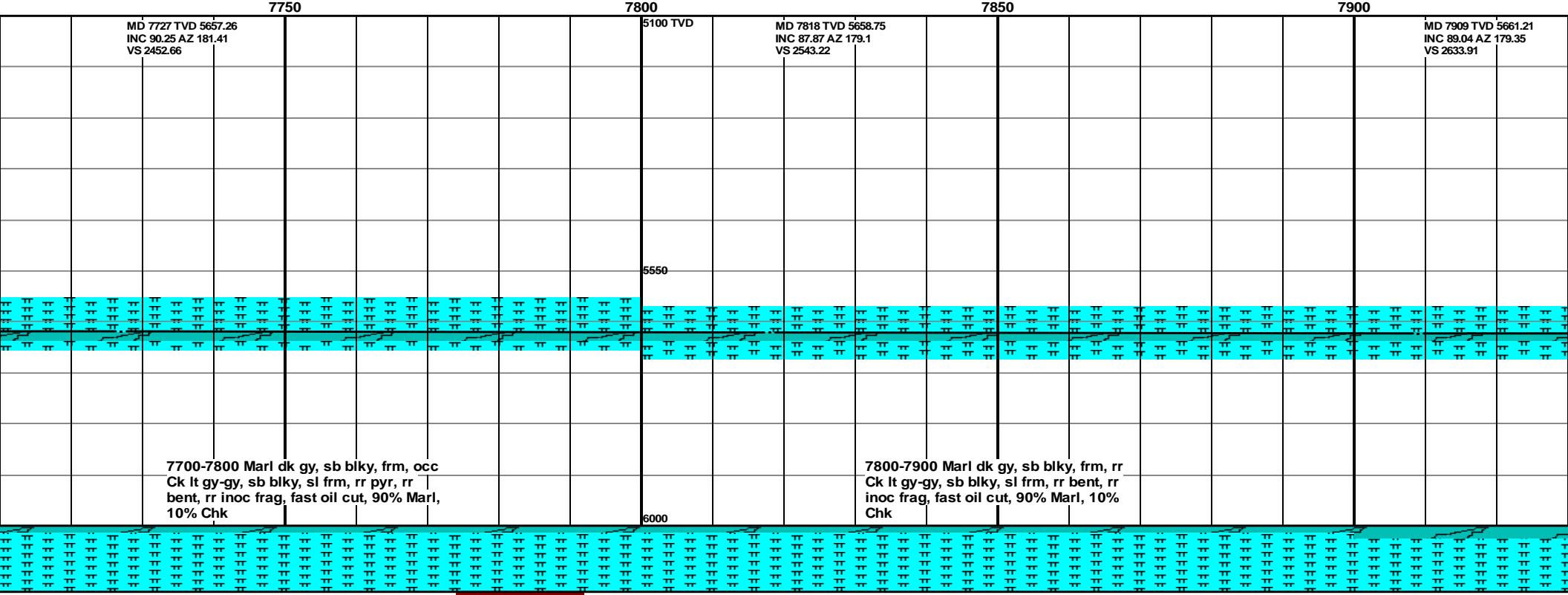
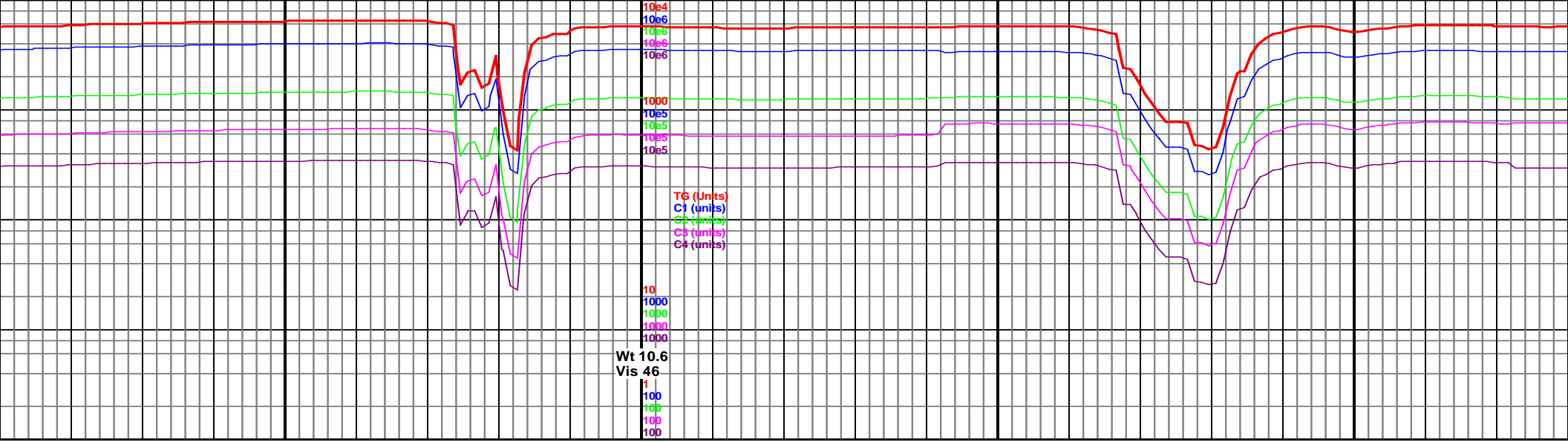


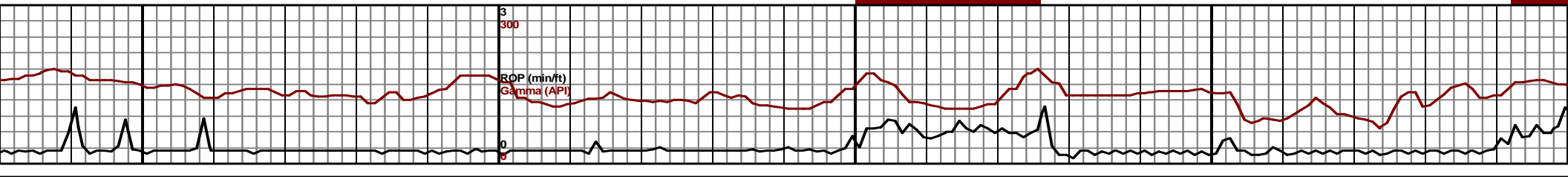
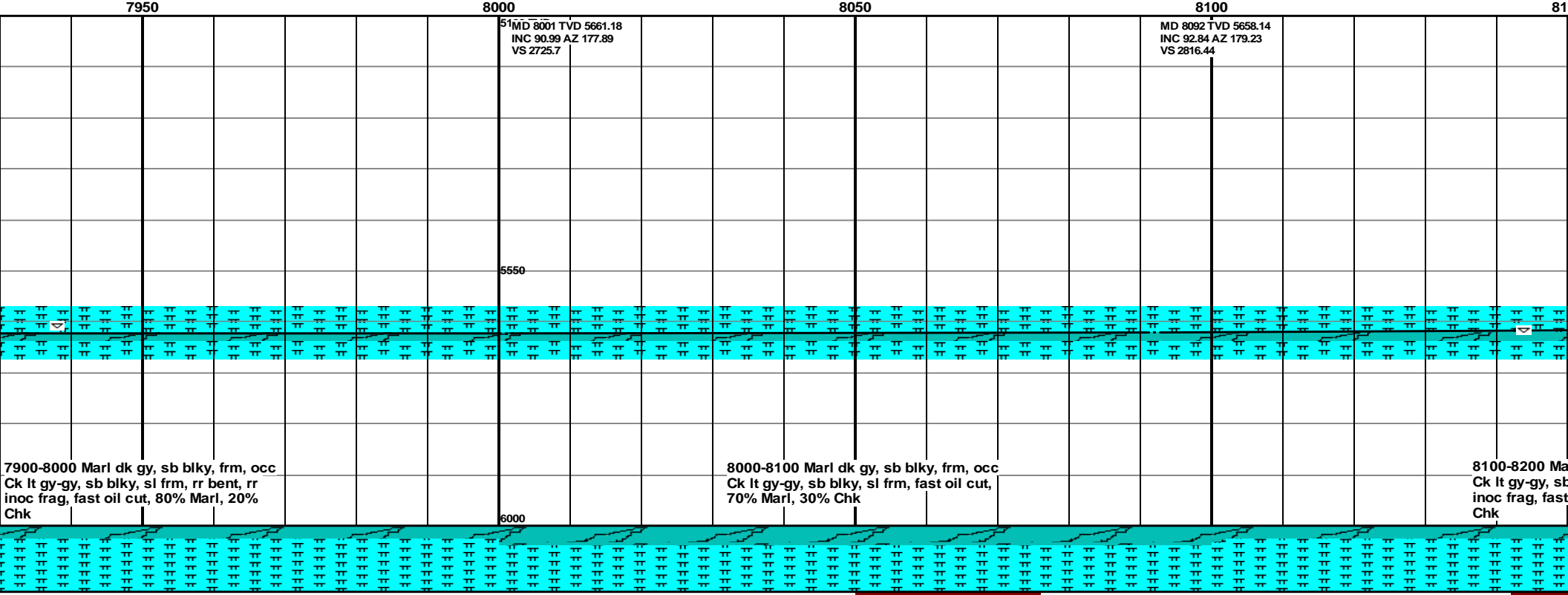
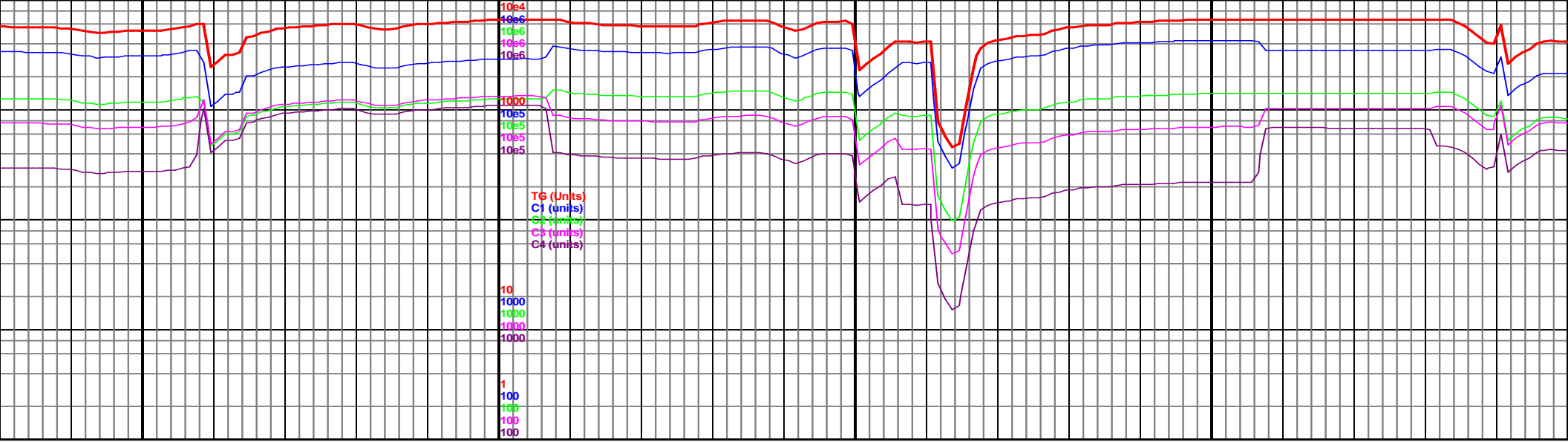


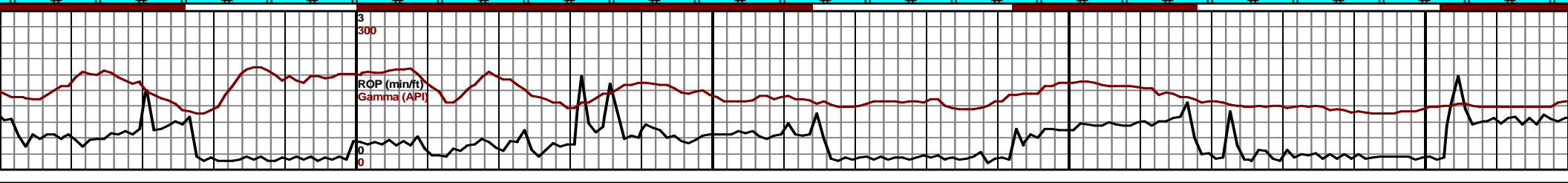
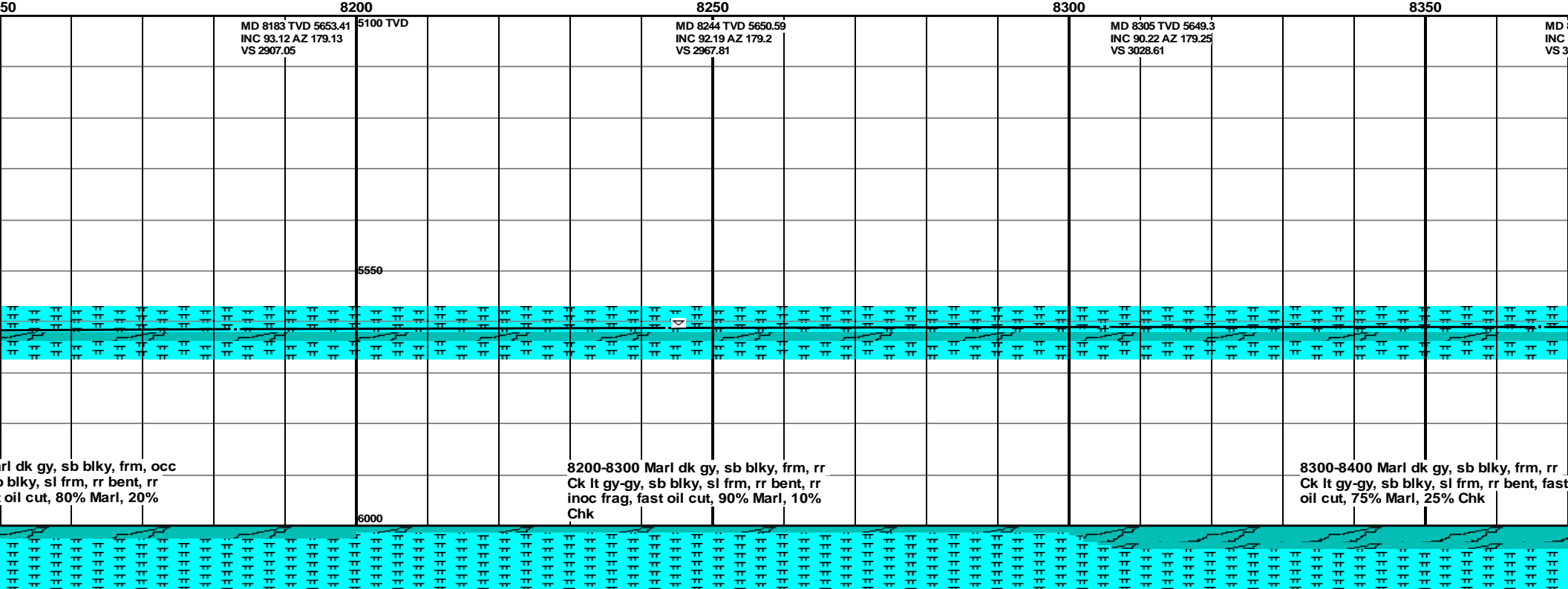
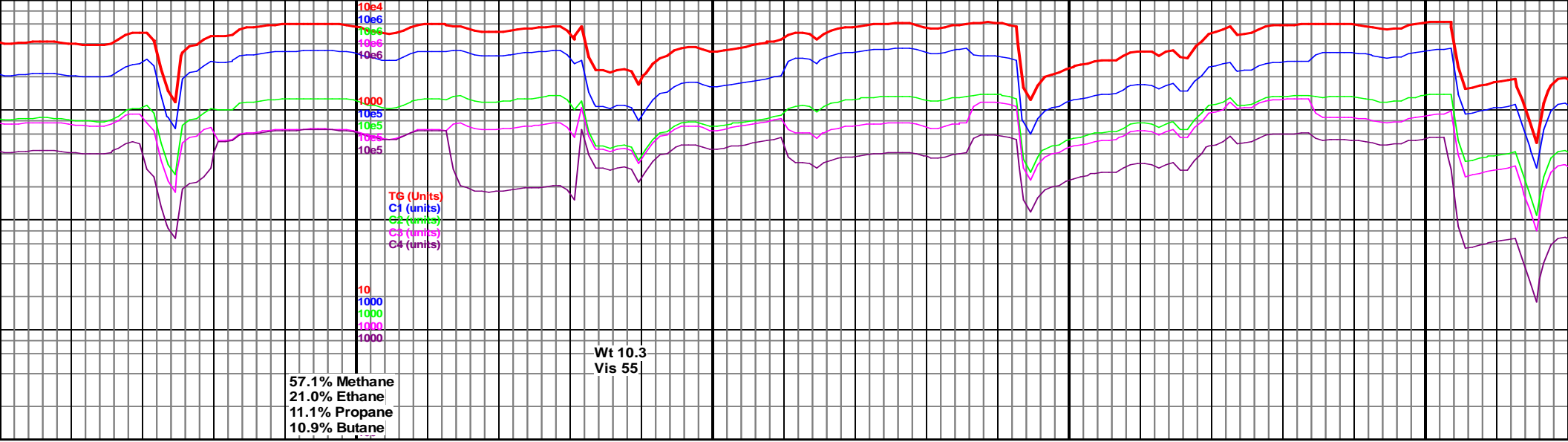


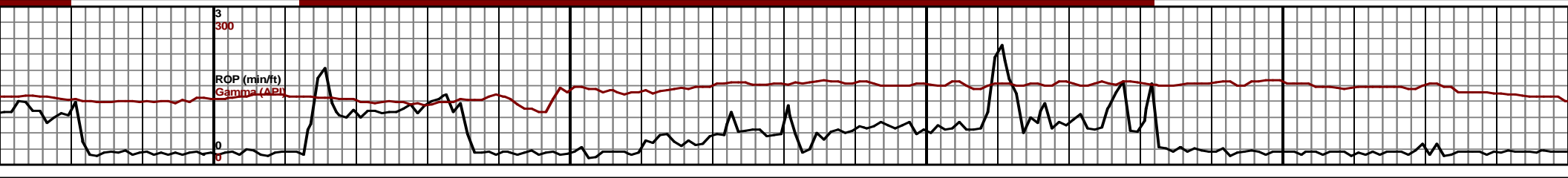
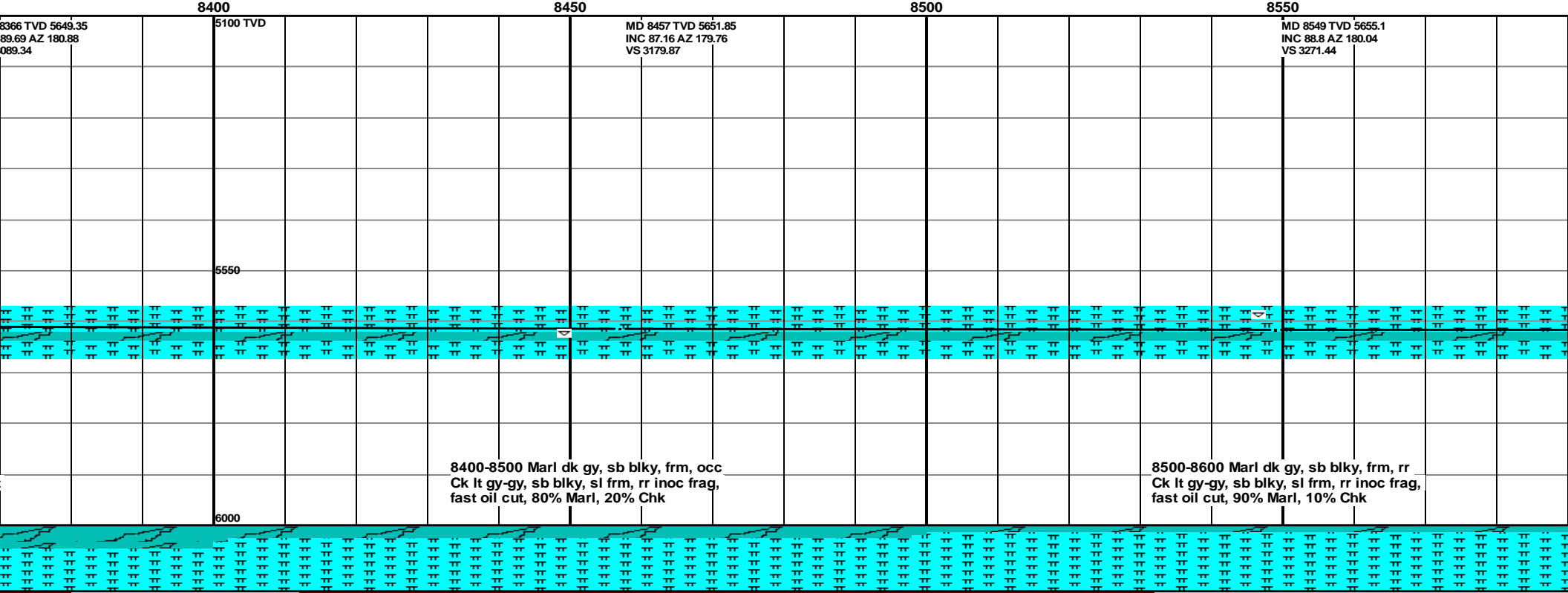
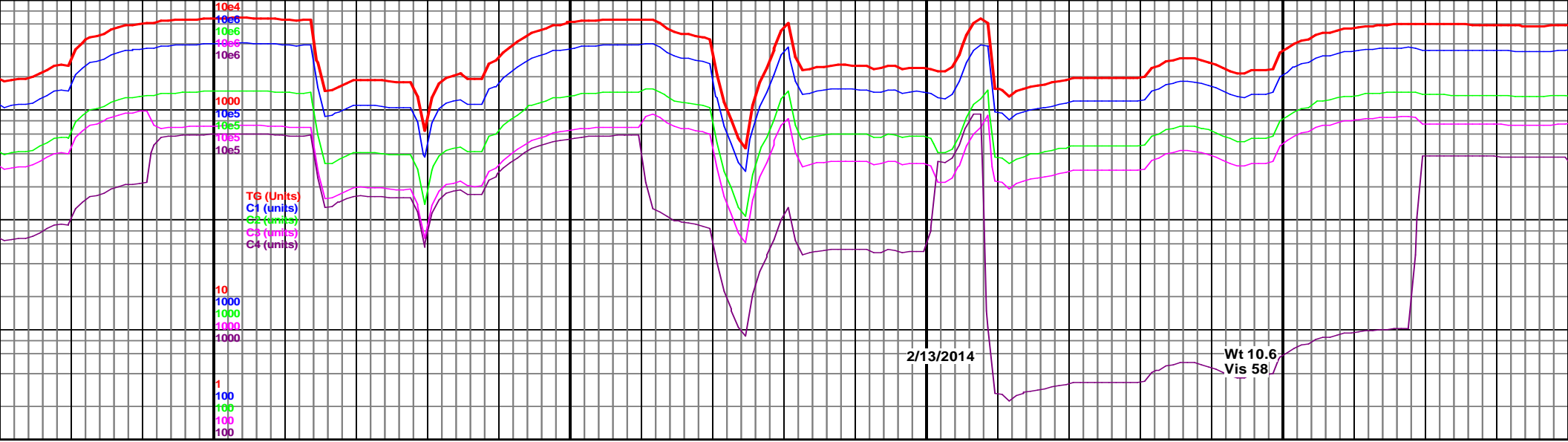


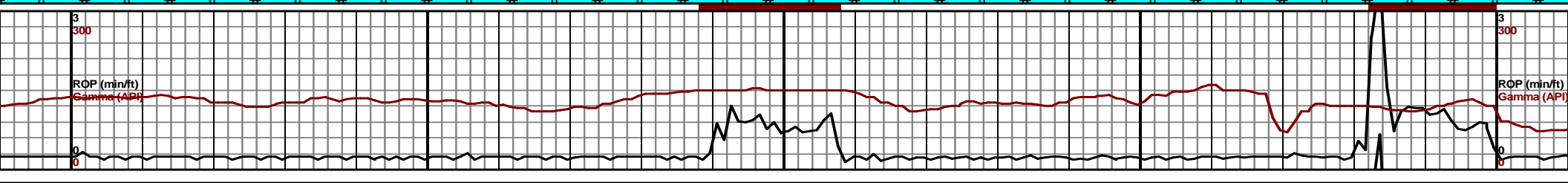
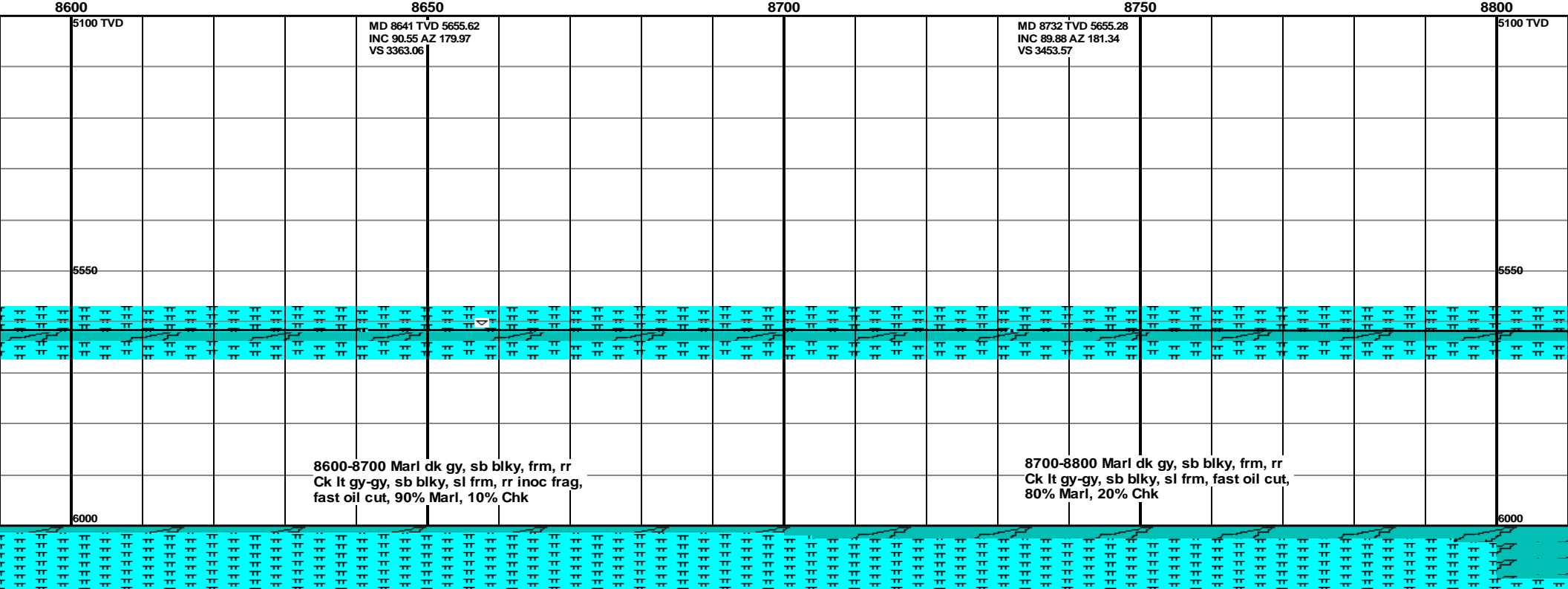
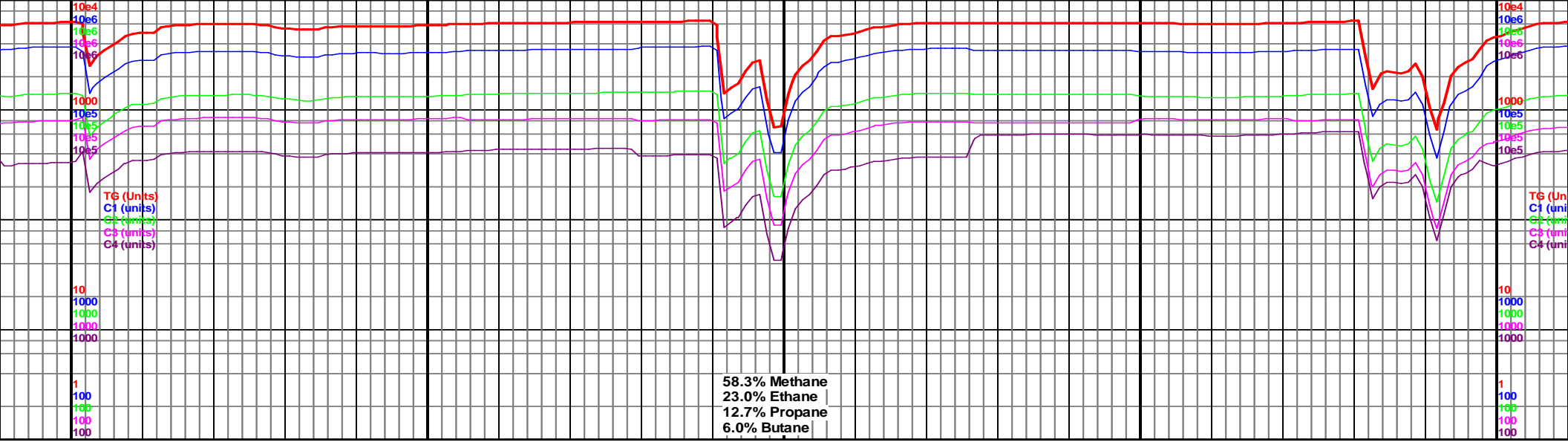


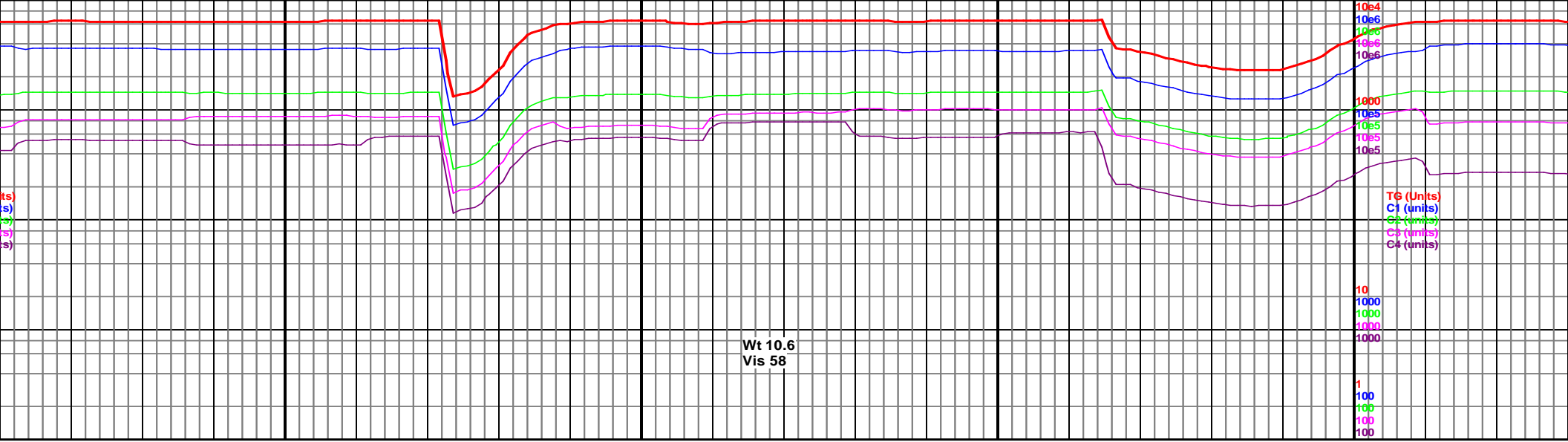




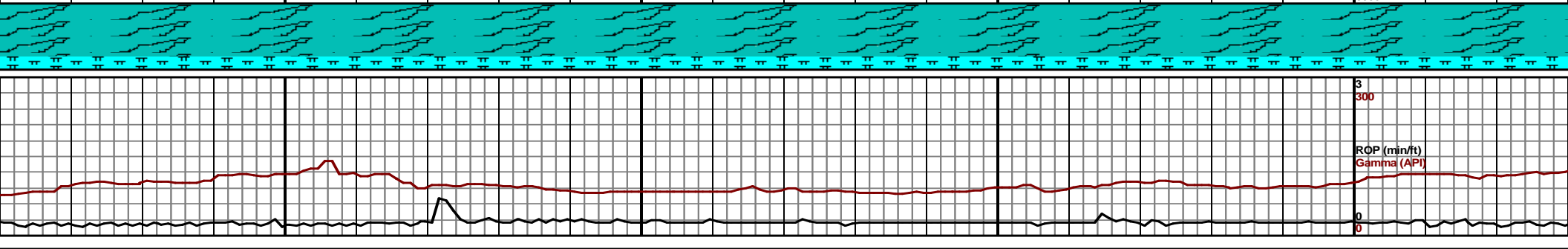


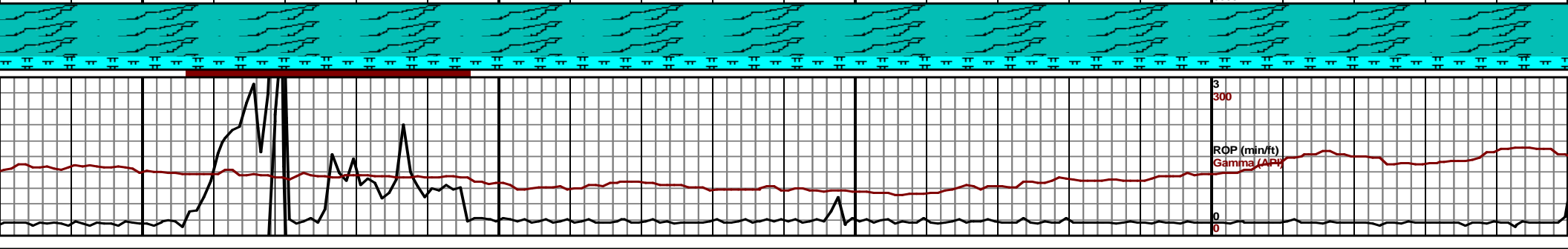
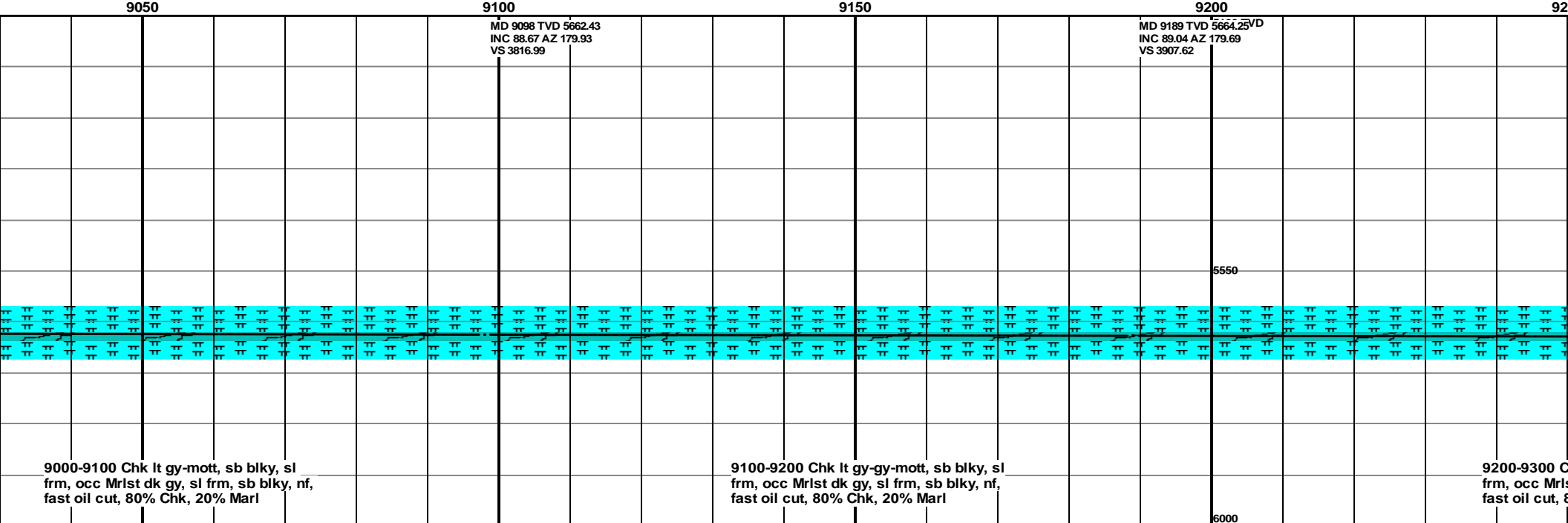
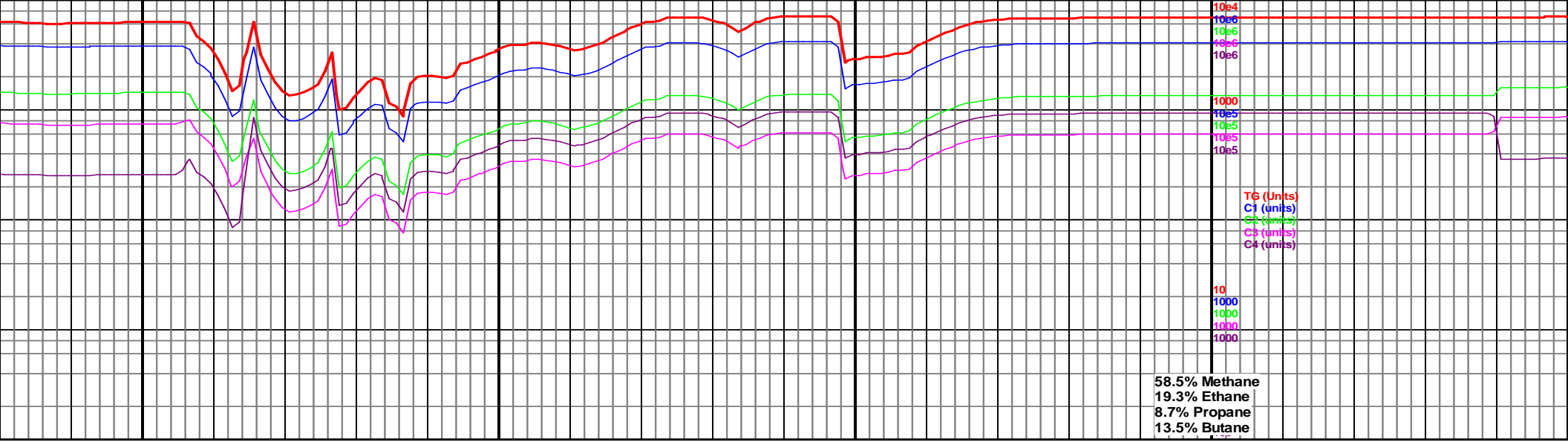


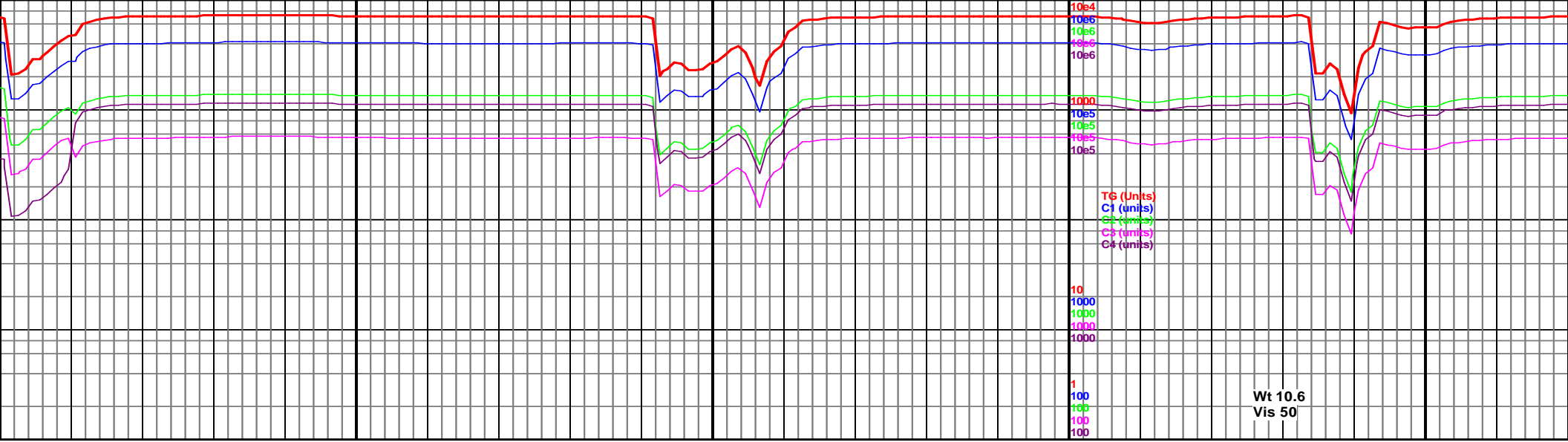




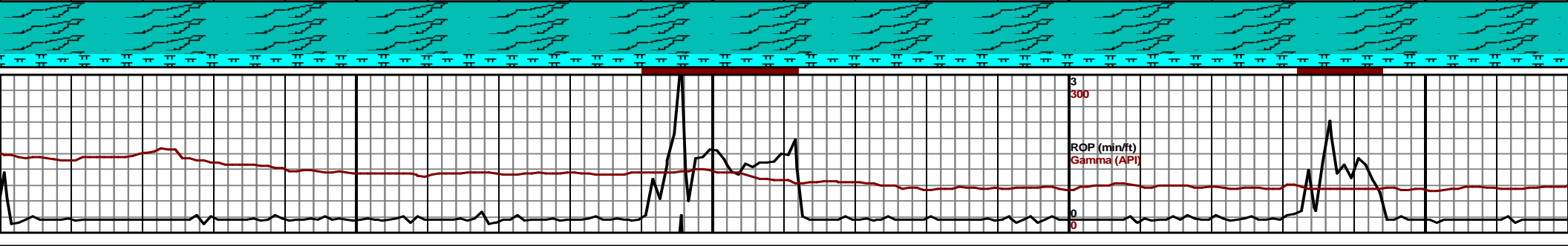
MD 8824 TVD 5657.06 INC 87.87 AZ 181.48 VS 3544.93		MD 8915 TVD 5660.04 INC 88.4 AZ 181.55 VS 3635.26		5100 TVD MD 9007 TVD 5661.35 INC 89.97 AZ 182.12 VS 3726.54
8800-8900 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, nf, fast oil cut, 80% Chk, 20% Marl		8900-9000 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, nf, fast oil cut, 80% Chk, 20% Marl		

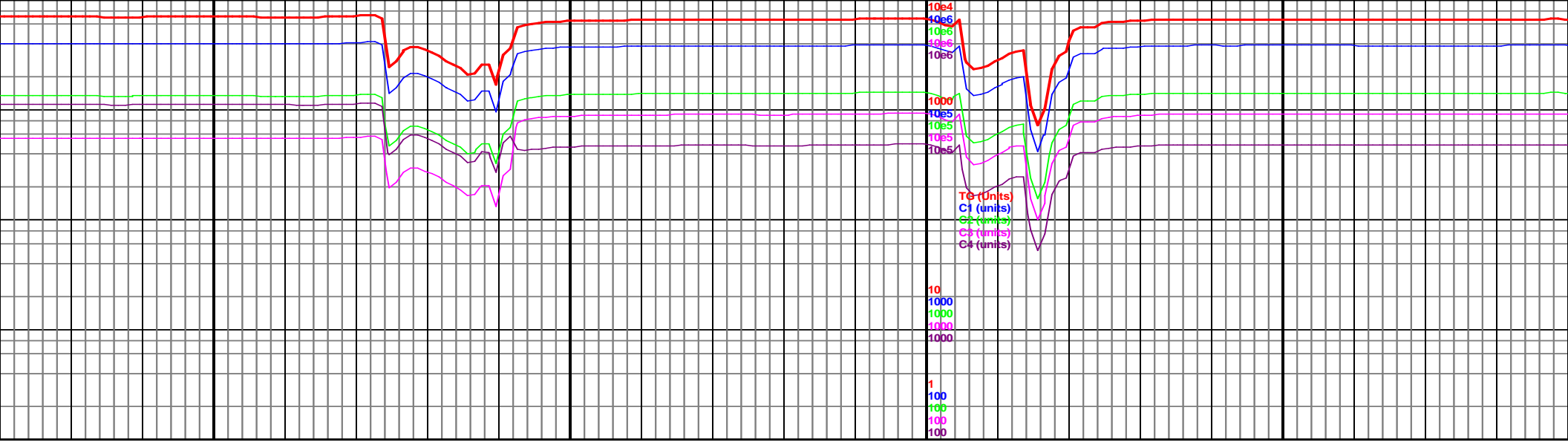




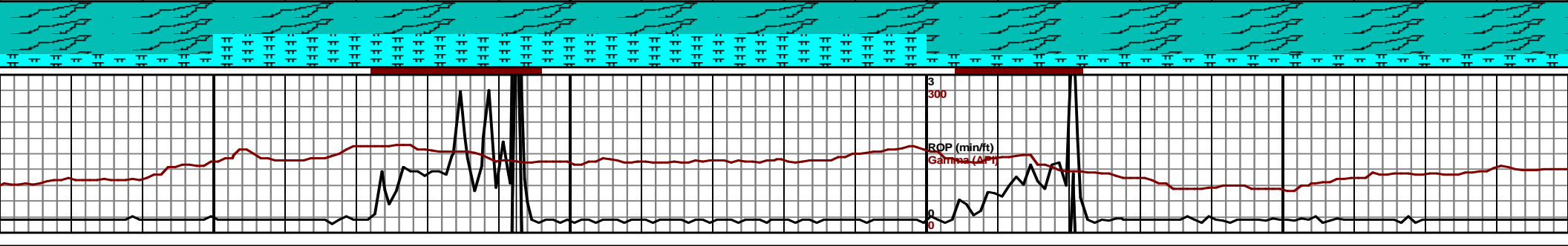


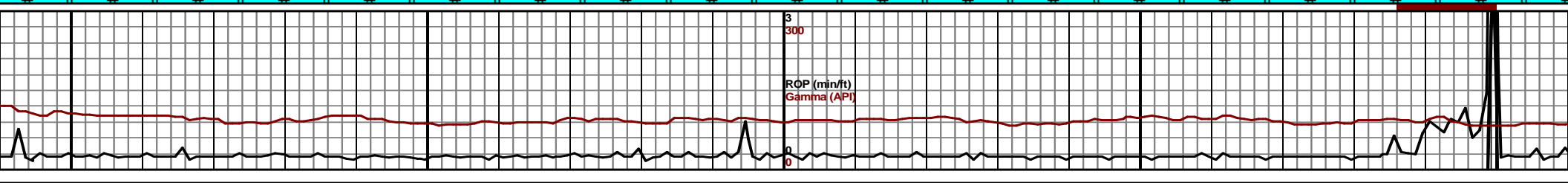
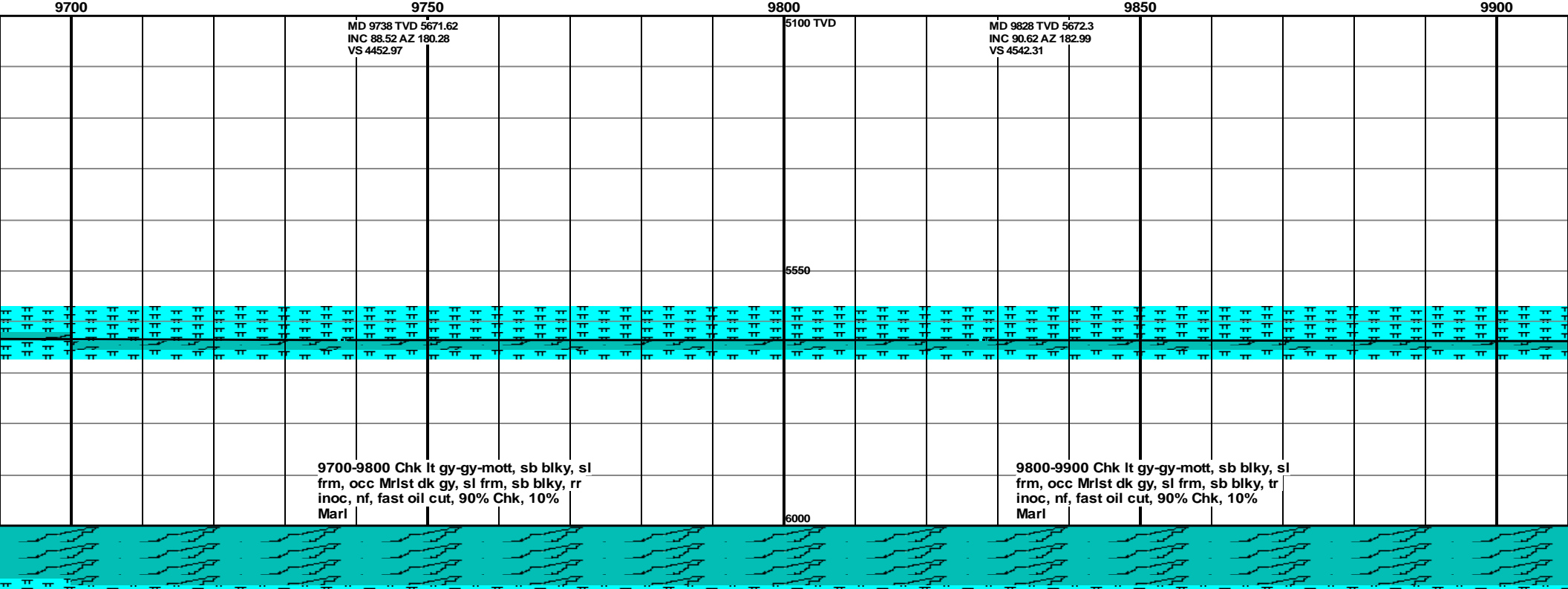
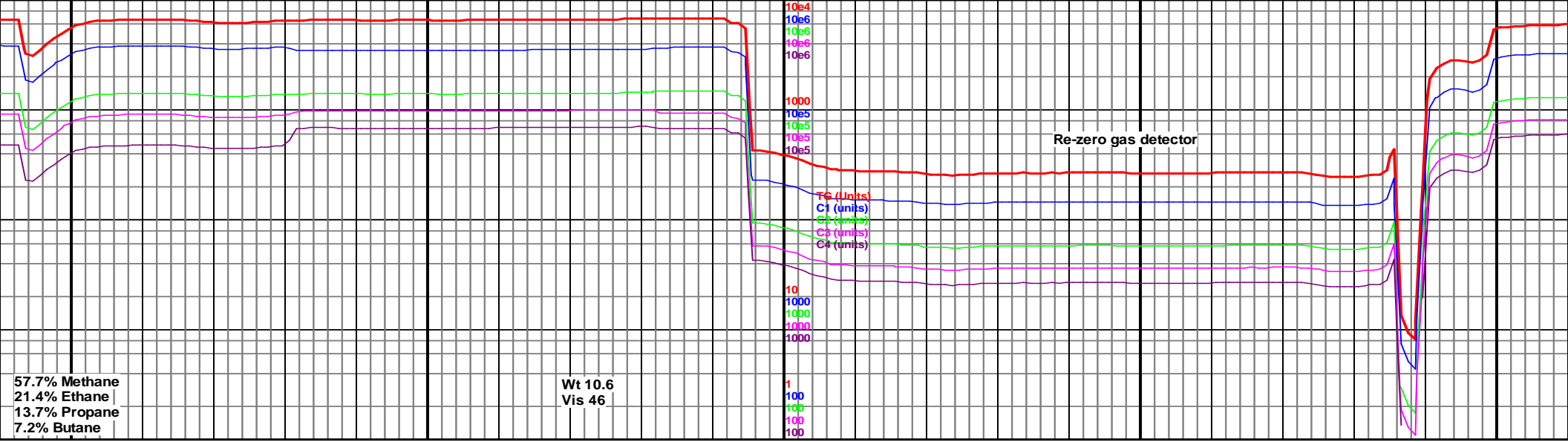
<p>MD 9281 TVD 5665.59 INC 89.29 AZ 179.68 VS 3999.27</p>					<p>MD 9372 TVD 5667.04 INC 88.89 AZ 182.16 VS 4089.73</p>		<p>5100 TVD</p>			<p>MD 9461 TVD 5668.55 INC 88.89 AZ 182.16 VS 4189.73</p>
chk lt gy-gy-mott, sb blk, sl st dk gy, sl frm, sb blk, nf, 80% Chk, 20% Marl							5550			
				9300-9400 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, nf, fast oil cut, 80% Chk, 20% Marl			6000		9400-9500 Chk lt gy-gy-mott, sb blk, frm, occ Mrlst dk gy, sl frm, sb blk, fast oil cut, 80% Chk, 20% Marl	

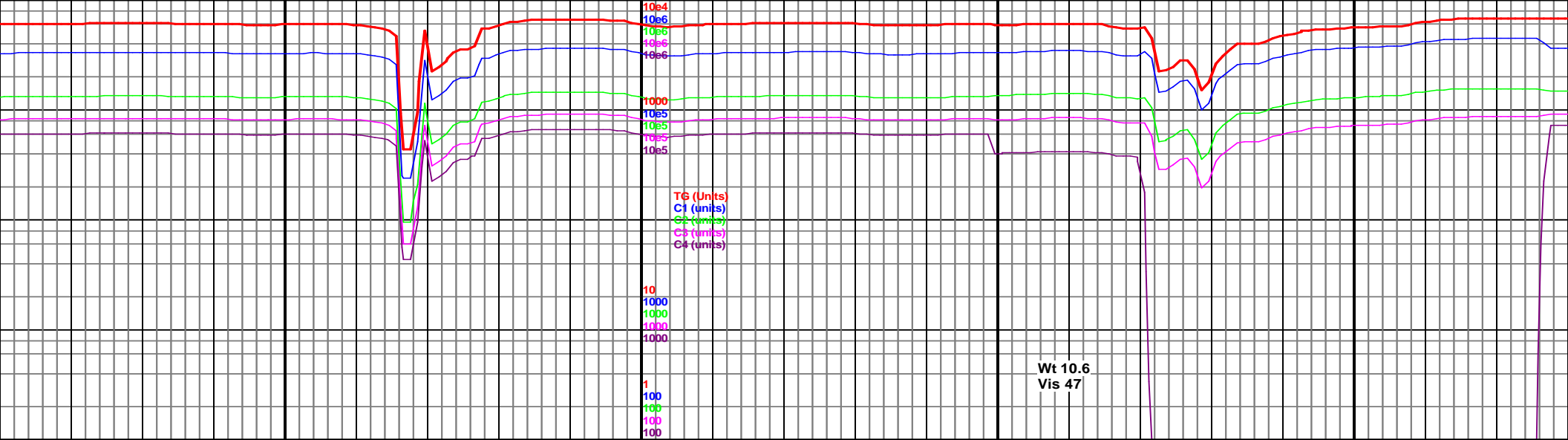




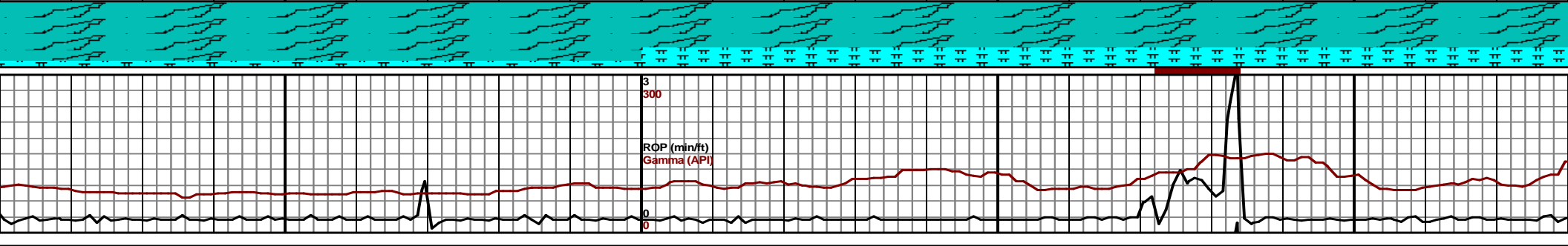
MD 9554 TVD 5667.61 INC 89.91 AZ 182.97 VS 4271.07		MD 9555 TVD 5667.36 INC 89.91 AZ 181.78 VS 4271.07	MD 9646 TVD 5668.93 INC 88.12 AZ 180.71 VS 4361.47
y, sl nf,	9500-9600 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, nf, fast oil cut, 50% Chk, 50% Marl		9600-9700 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, nf, fast oil cut, 80% Chk, 20% Marl

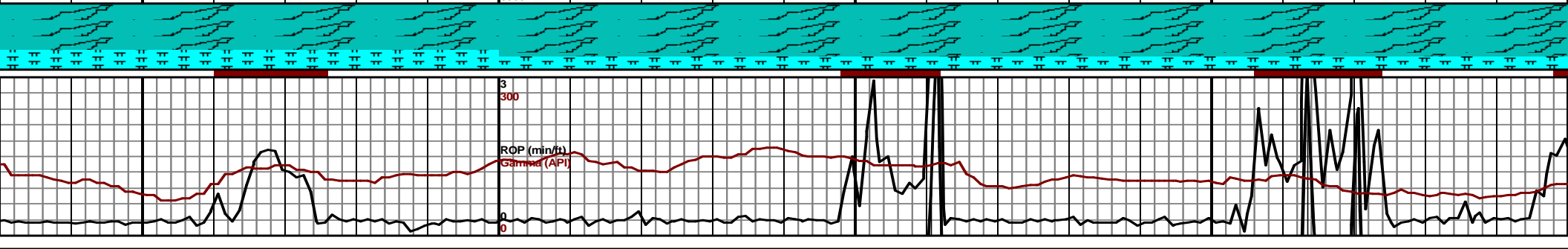
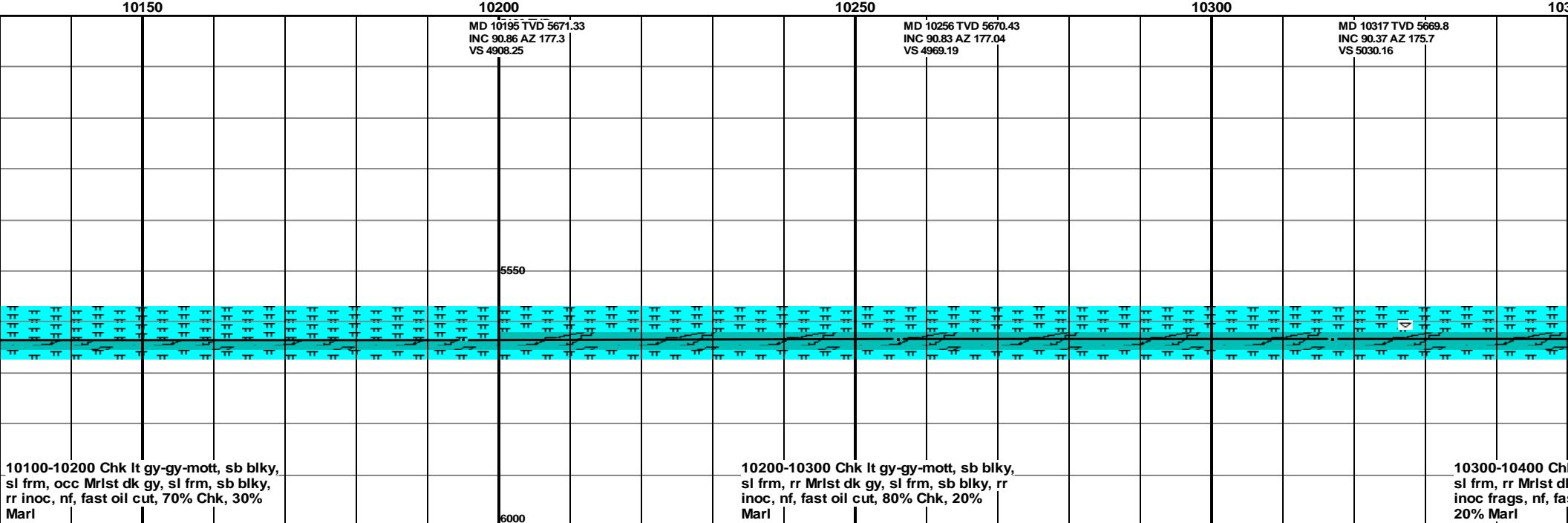
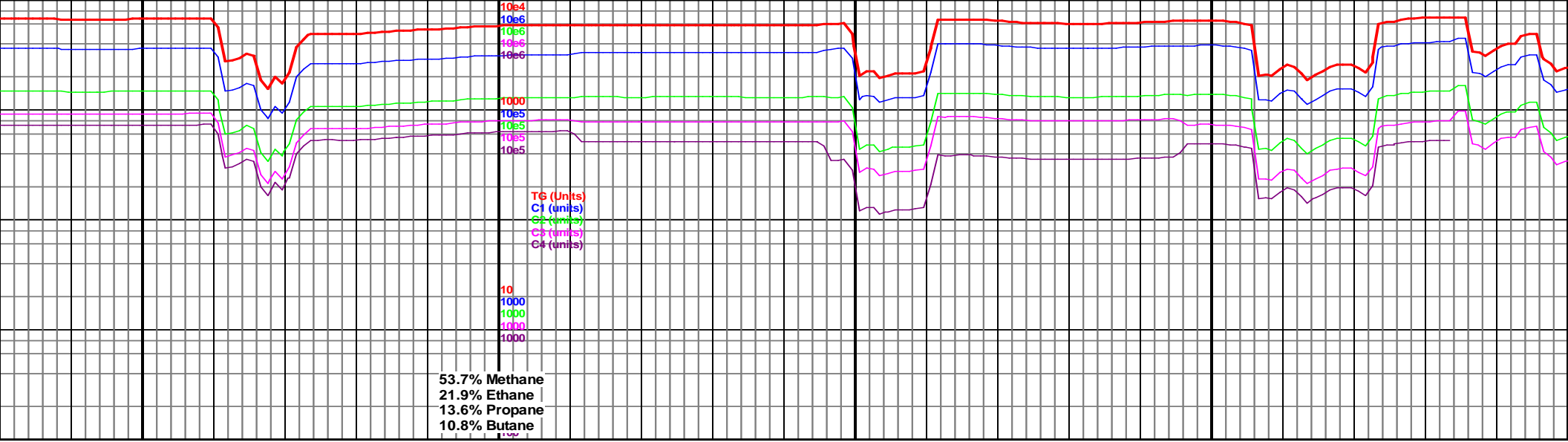


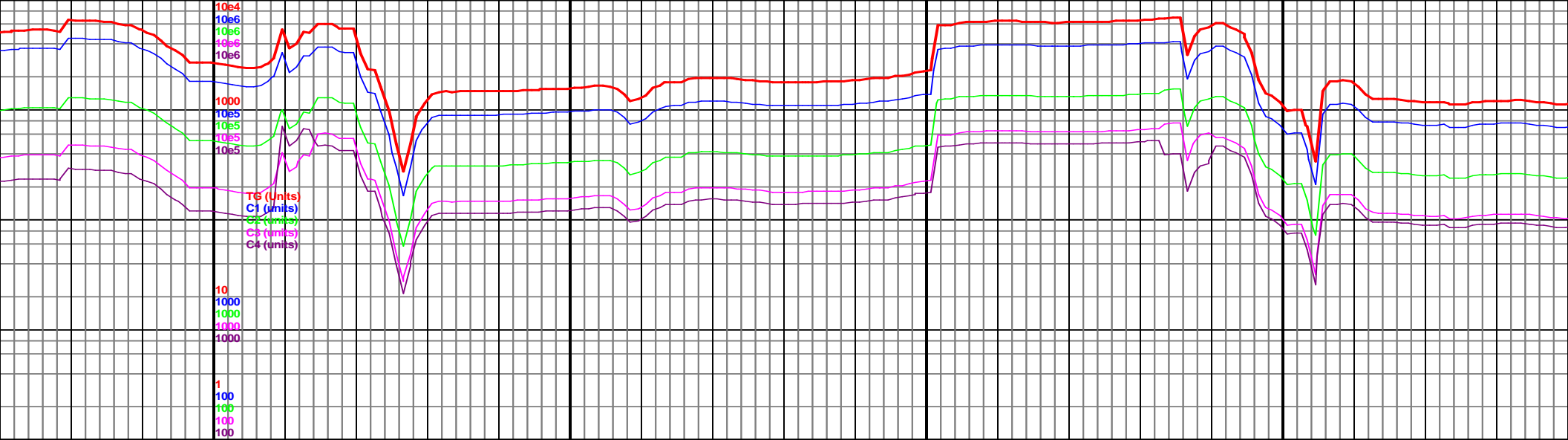




<p>MD 9920 TVD 5673.24 INC 88.21 AZ 177.85 VS 4633.82</p>		<p>MD 10012 TVD 5674.26 INC 90.52 AZ 179.4 VS 4725.6</p>		<p>MD 10103 TVD 5672.94 INC 91.14 AZ 177.89 VS 4816.38</p>
<p>9900-10000 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, tr inoc, nf, fast oil cut, 90% Chk, 10% Marl</p>			<p>10000-10100 Chk lt gy-gy-mott, sb blk, sl frm, occ Mrlst dk gy, sl frm, sb blk, tr inoc, nf, fast oil cut, 70% Chk, 30% Marl</p>	







TVD 5680.32
Z 179.66

10600

5100 TVD

10650

MD 10652 TVD 5682.74
INC 89.08 AZ 178.87
VS 5364.31

10700

10750

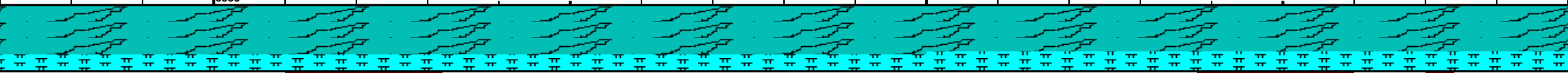
MD 10743 TVD 5683.25
INC 90.28 AZ 179.06
VS 5455.06

5550

6000

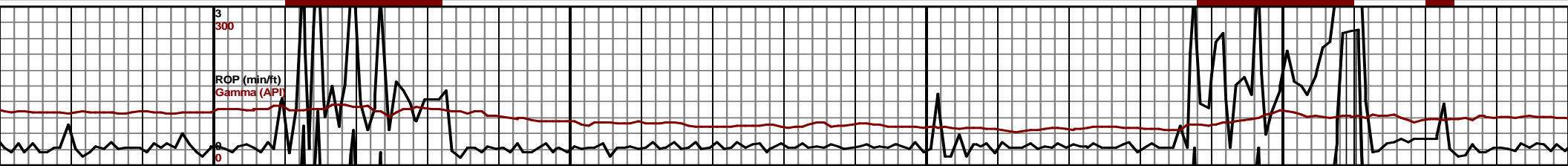
10600-10700 Chk lt gy-gy-mott, sb blk, y,
sl frm, occ Mrlst dk gy, sl frm, sb blk, y,
rr inoc frags, nf, fast oil cut, abnt lcm.
70% Chk, 30% Marl

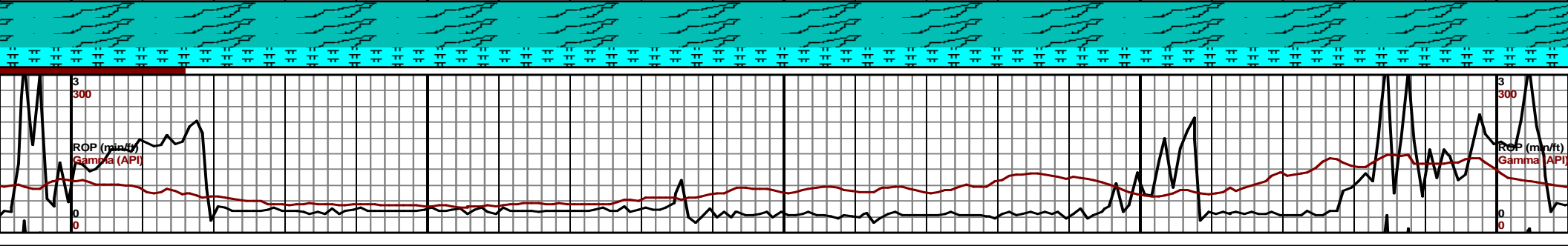
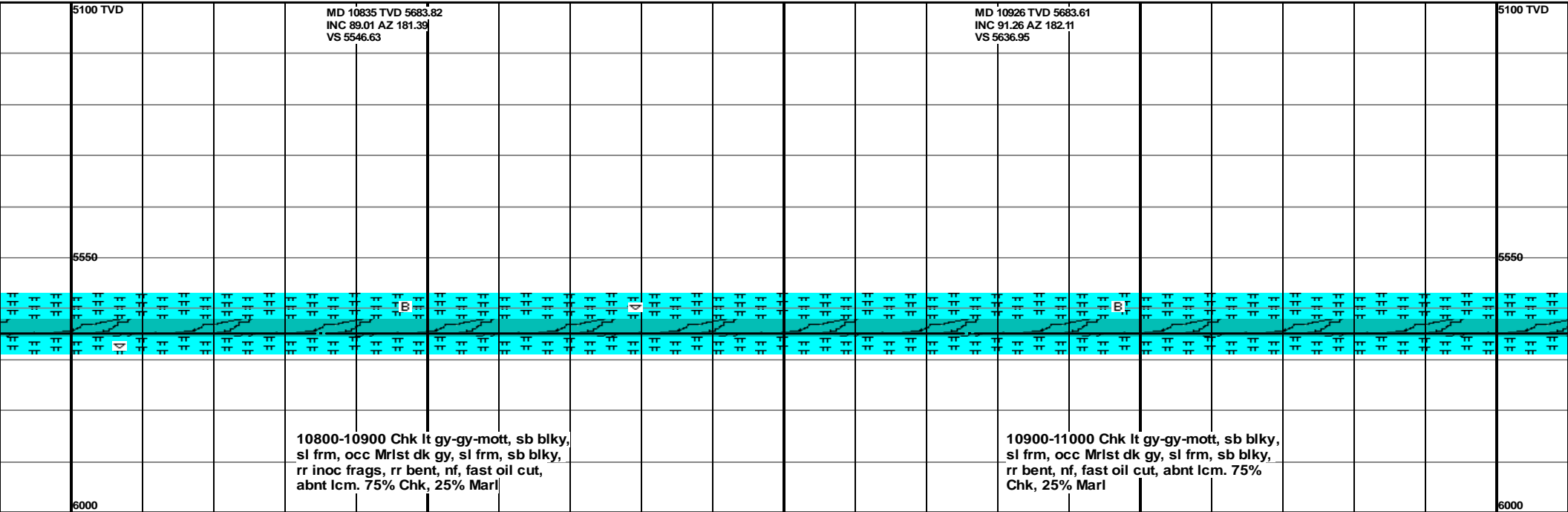
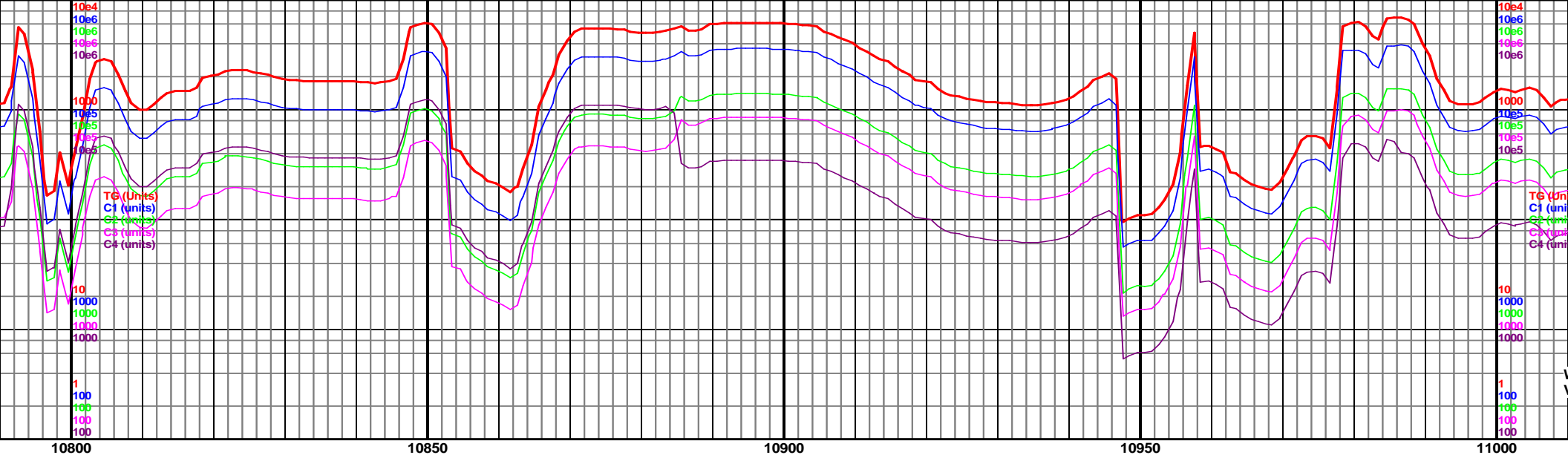
10700-10800 Chk lt gy-gy-mott, sb blk, y,
sl frm, occ Mrlst dk gy, sl frm, sb blk, y,
rr inoc frags, nf, fast oil cut, abnt lcm.
75% Chk, 25% Marl

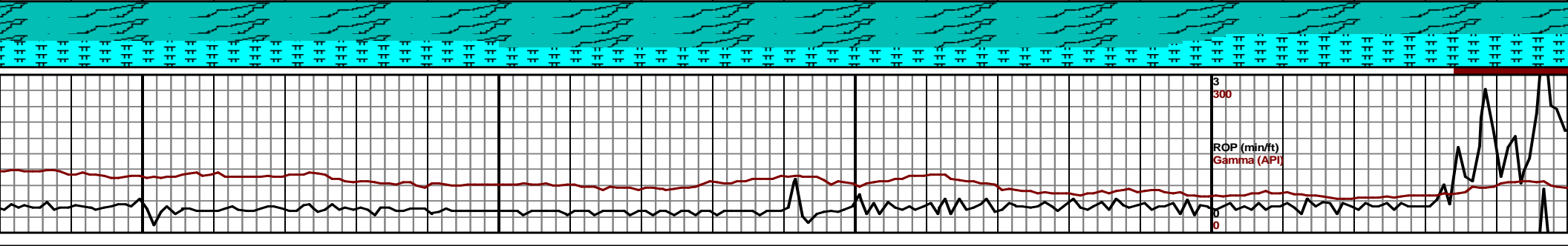
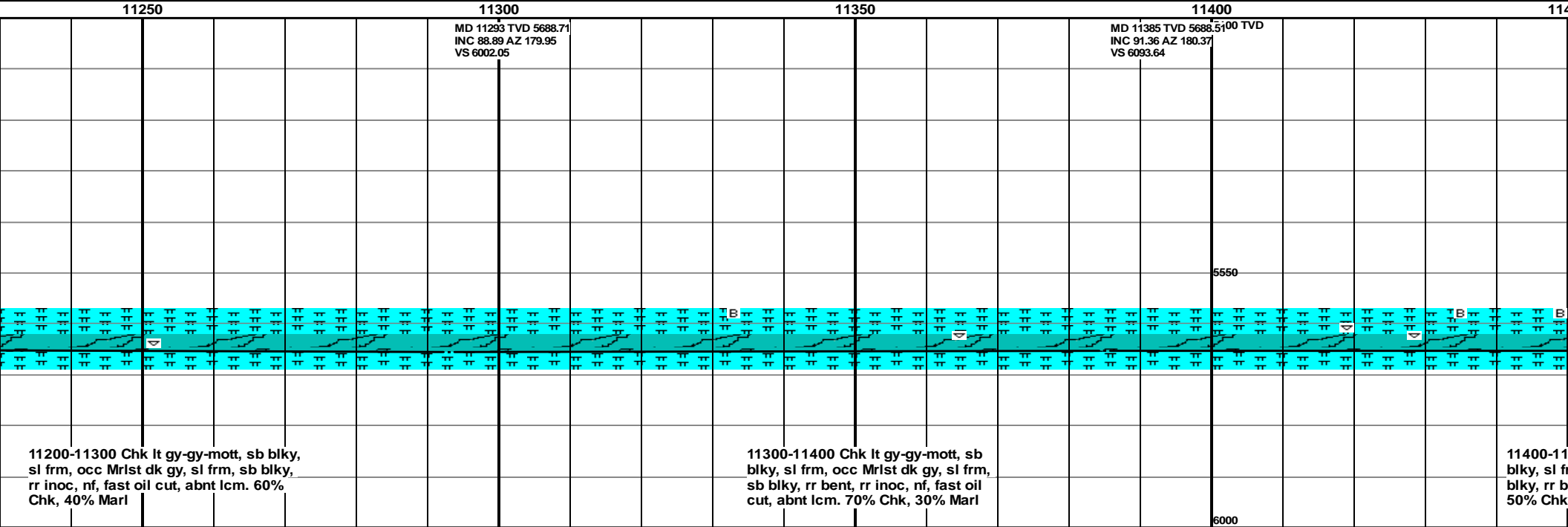
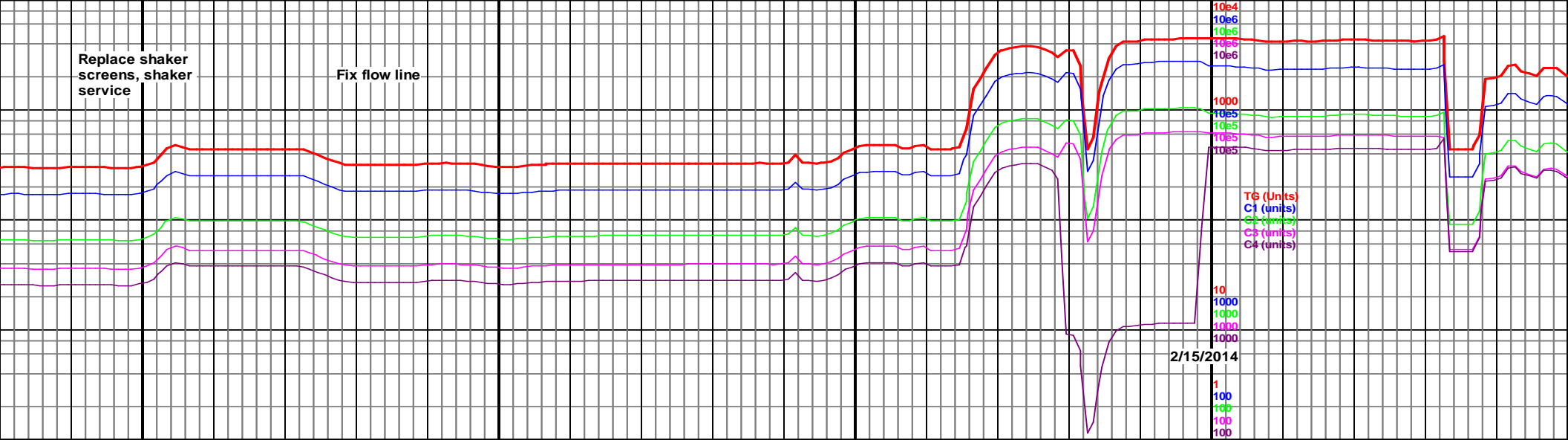


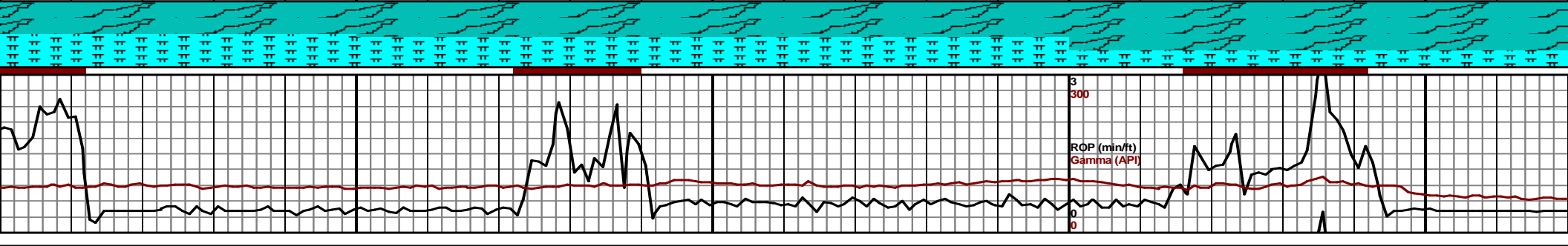
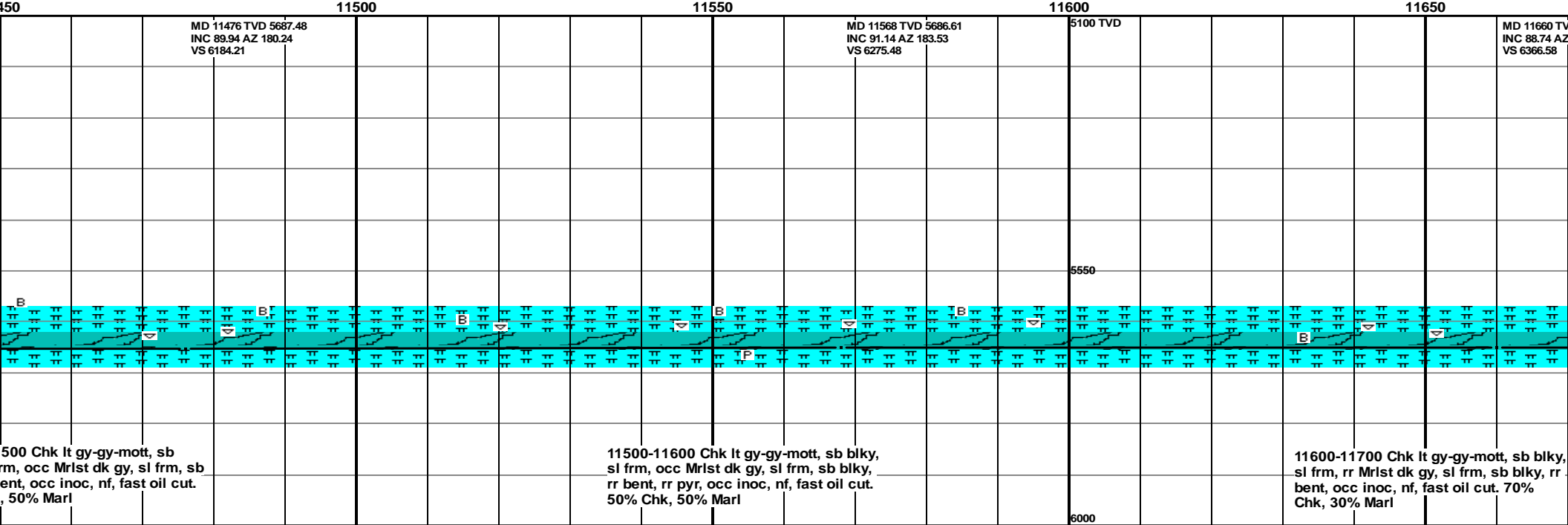
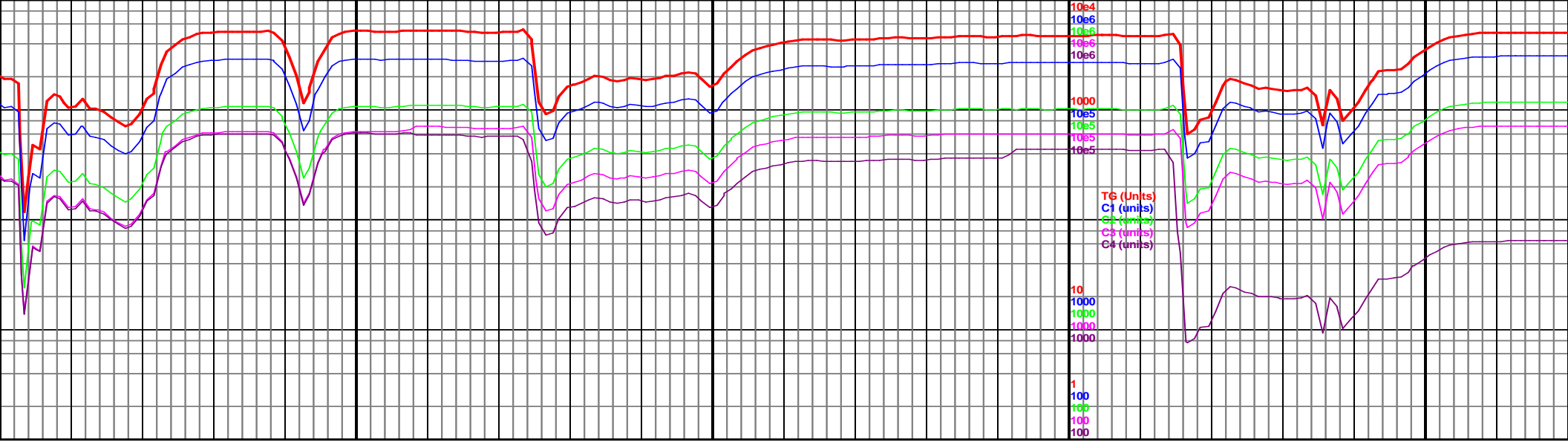
3
300

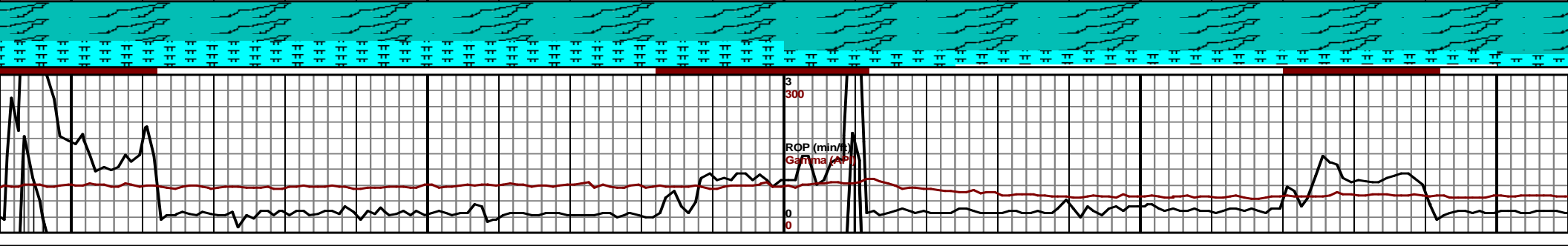
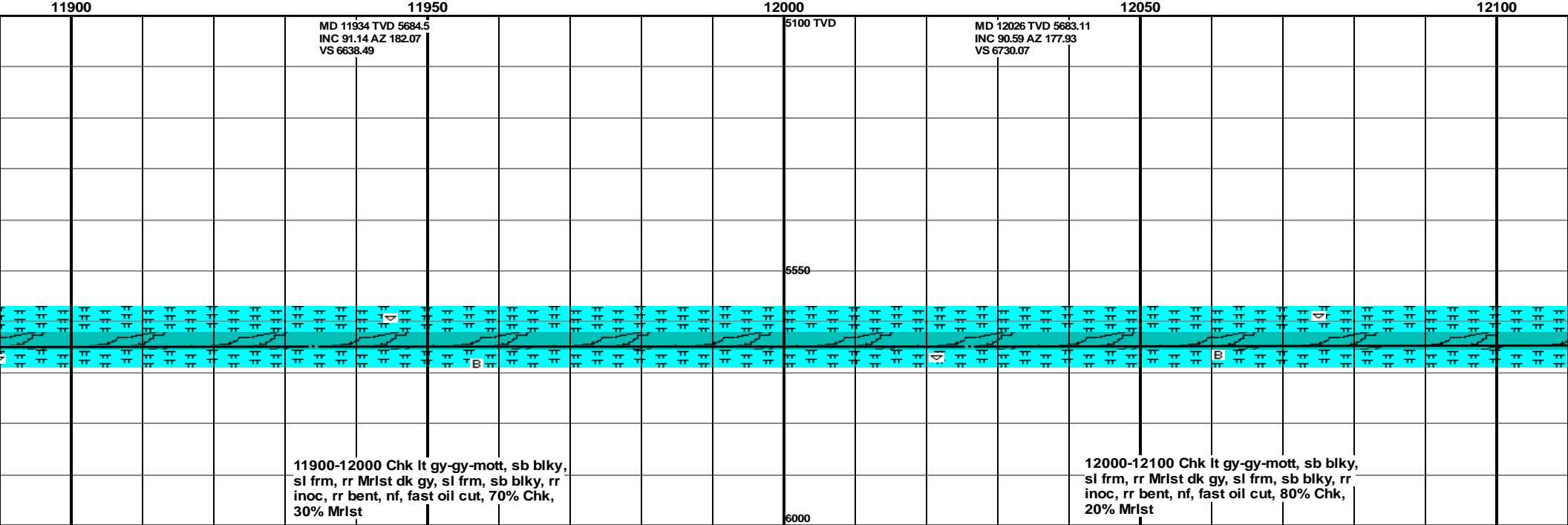
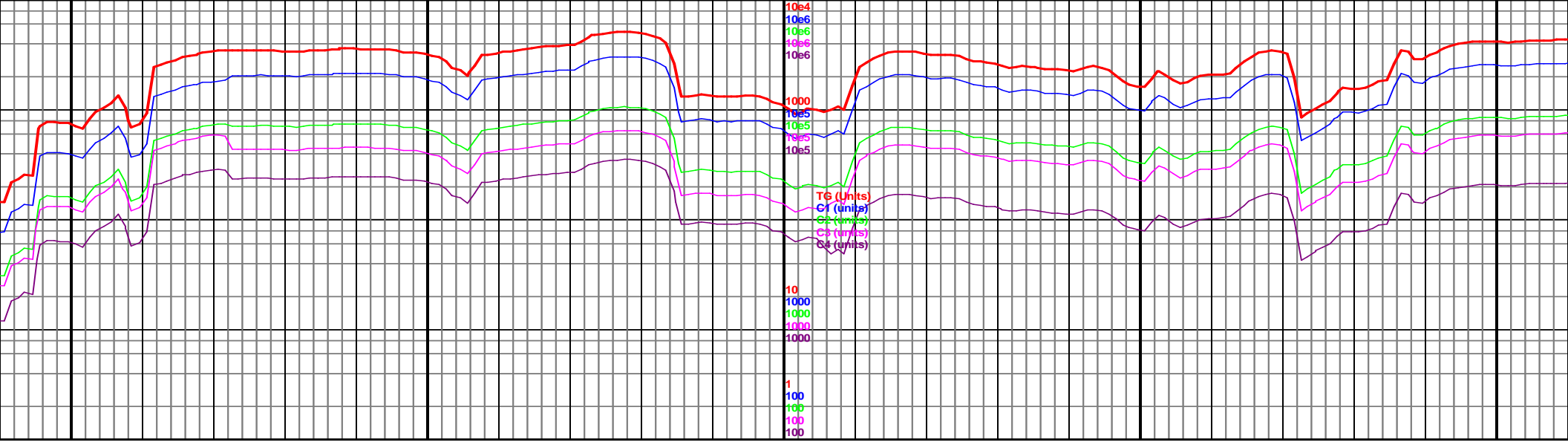
ROP (min/ft)
Gamma (API)

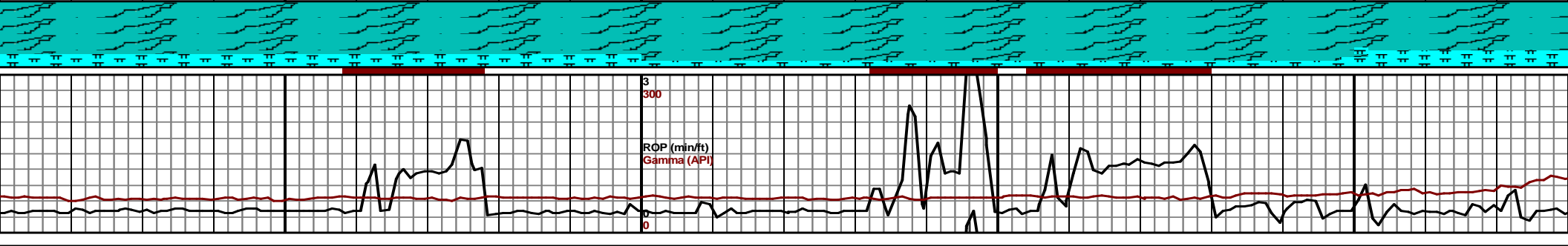
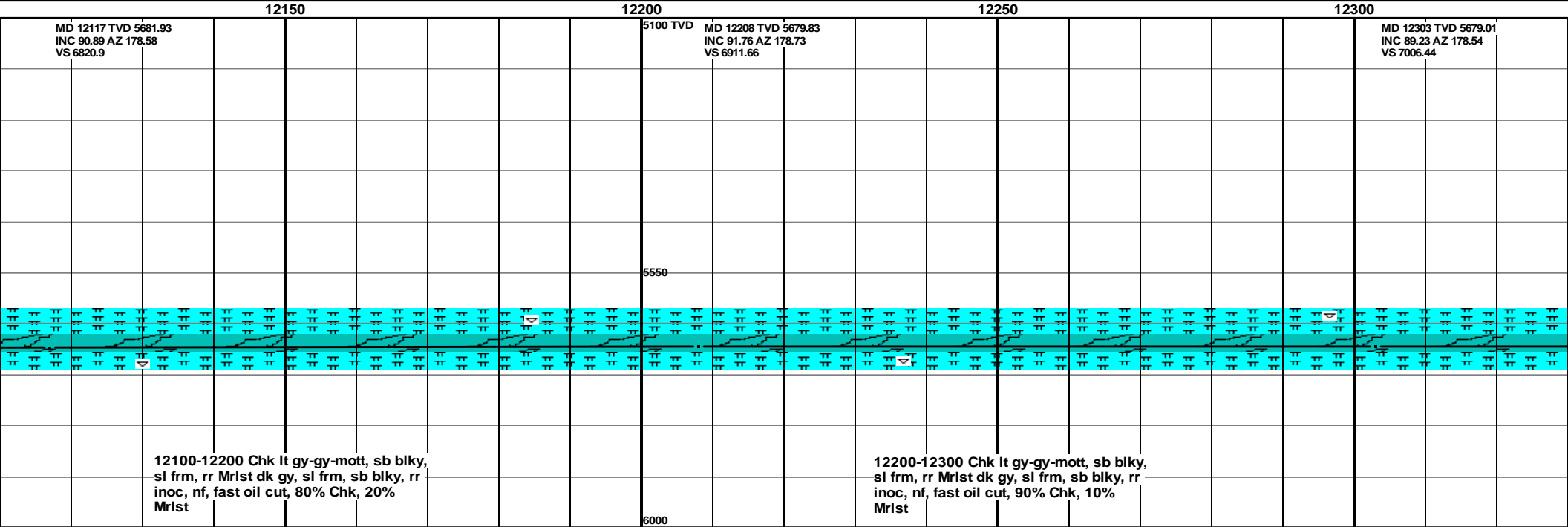
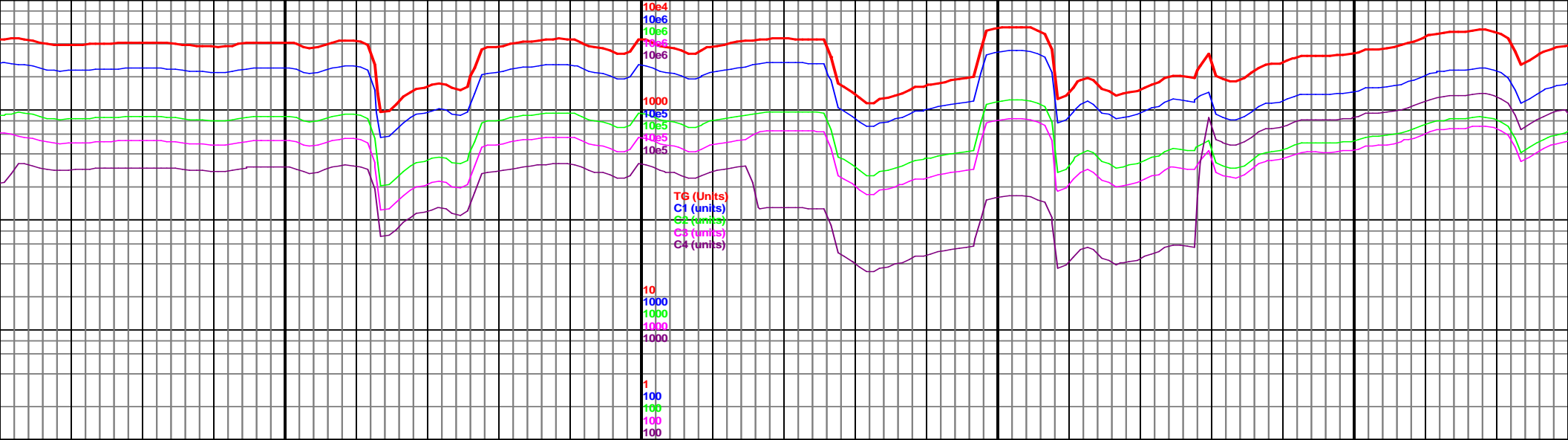


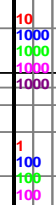








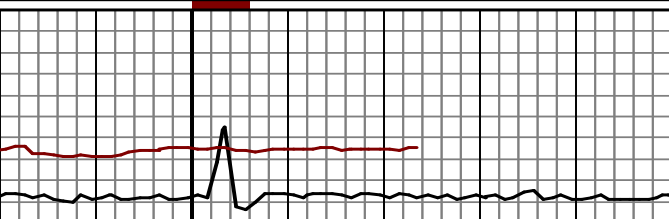


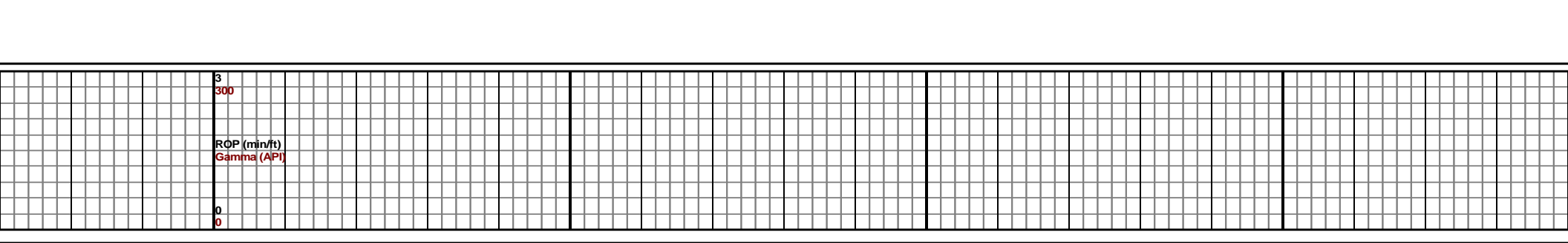
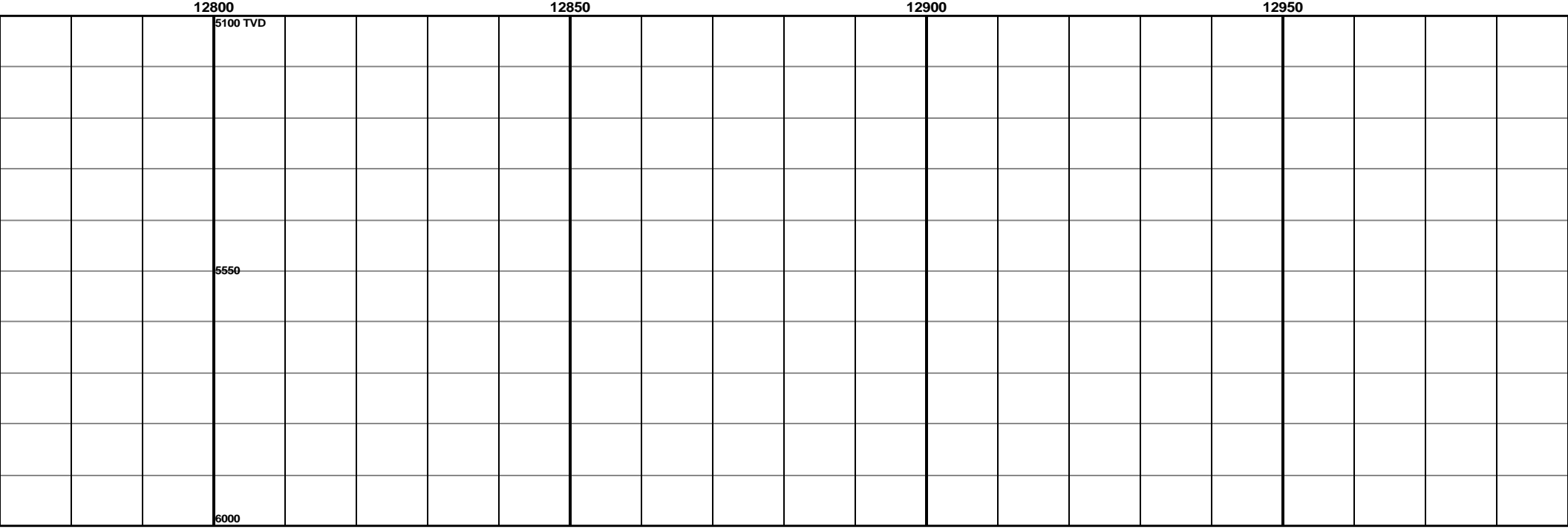
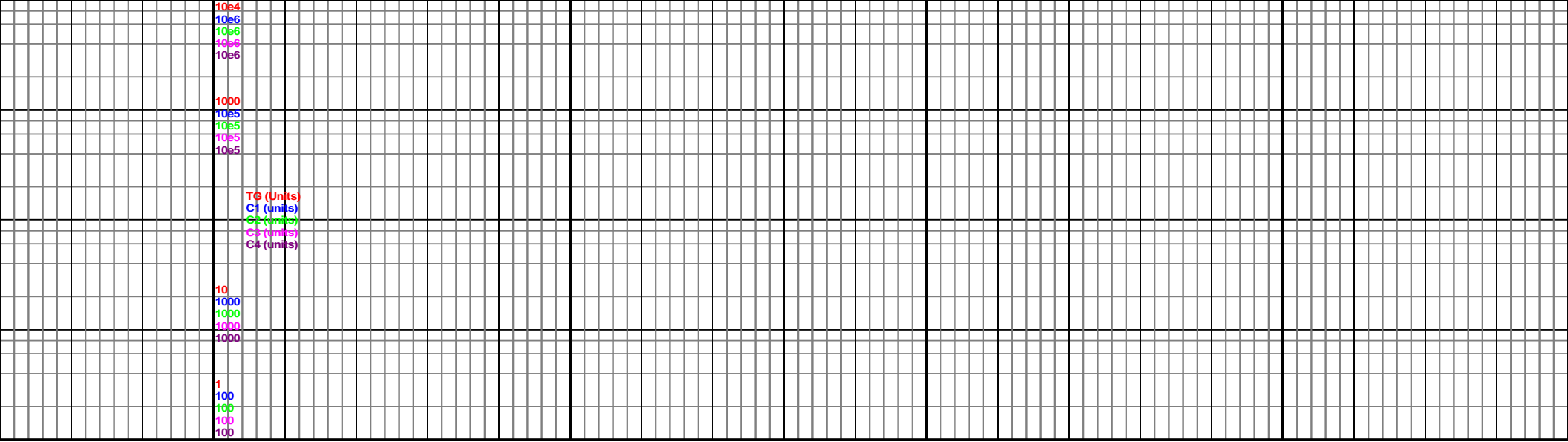


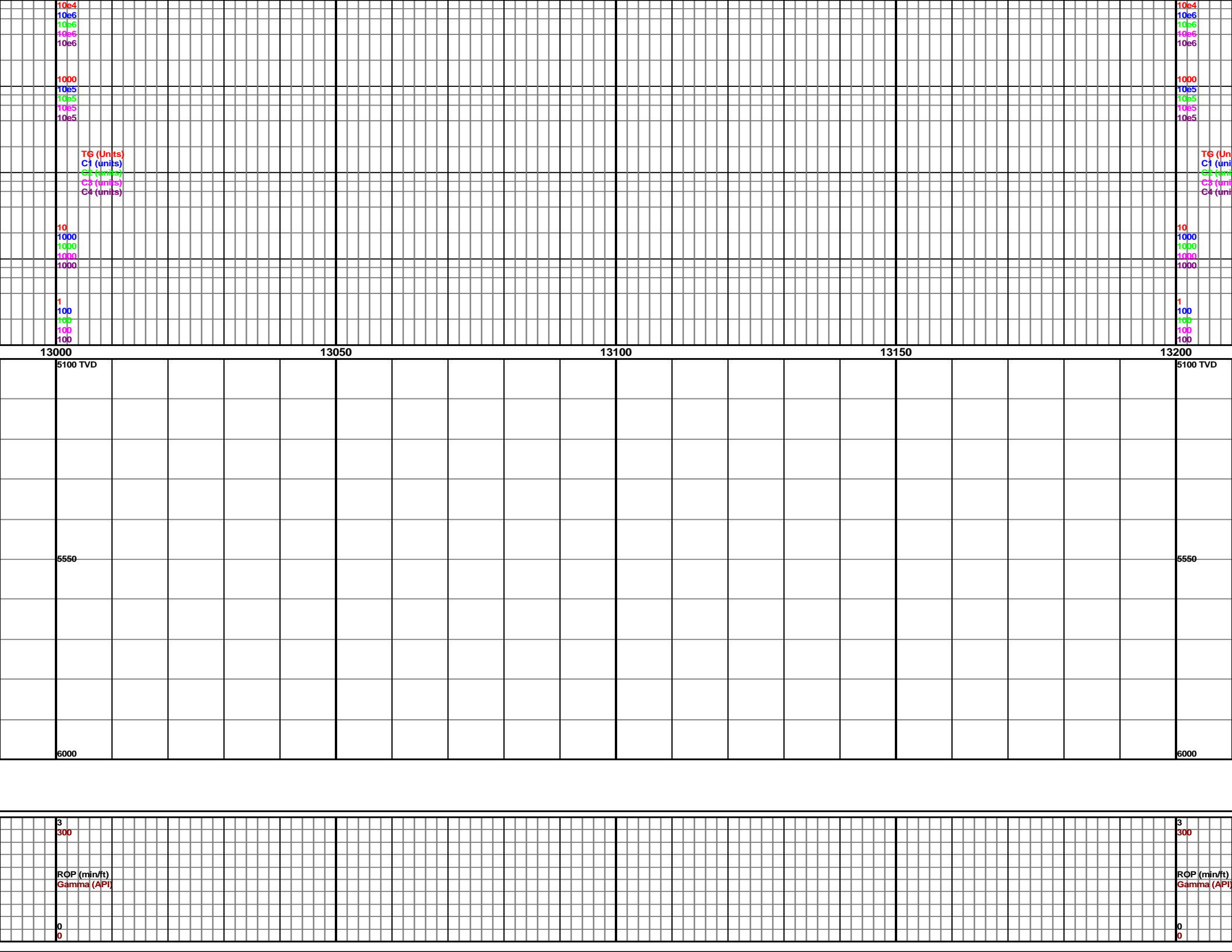
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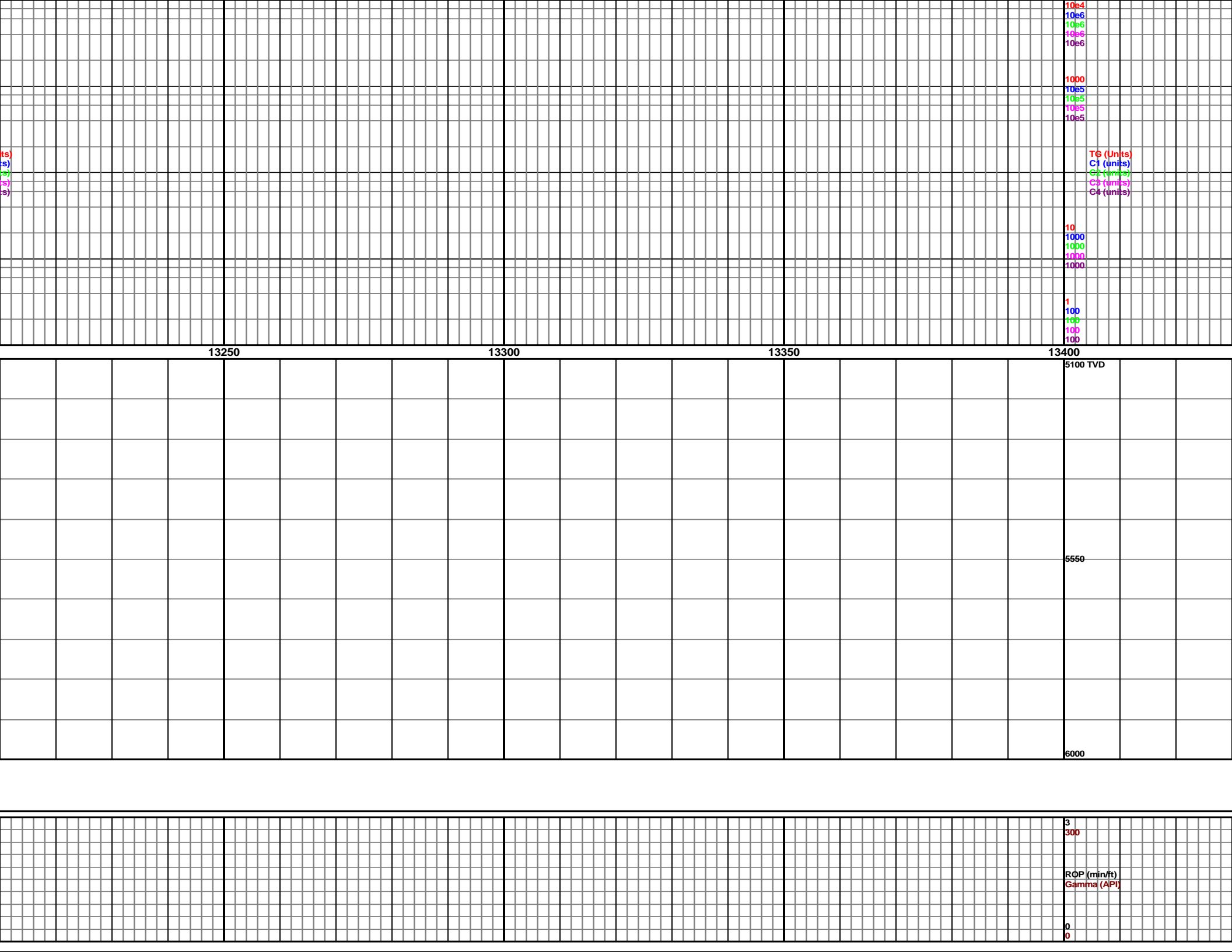
MD 12415 TVD 5678.91
INC 90.37 AZ 178.08
VS 7118.23

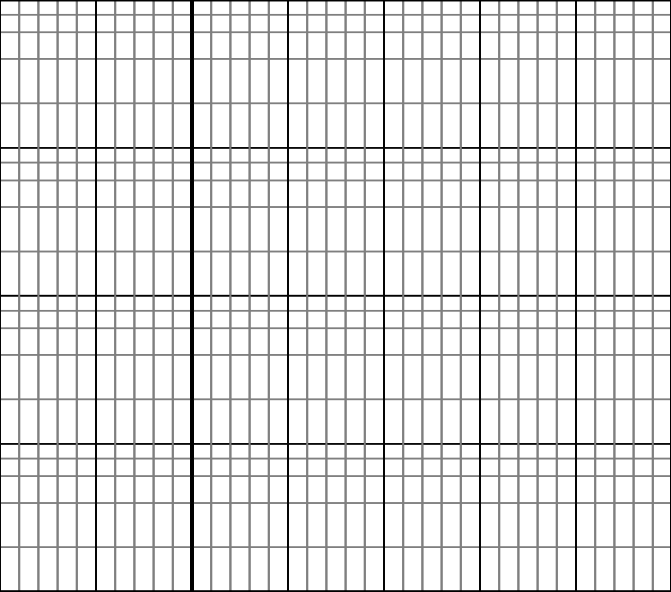
6000

ROP (min/ft)
Gamma (API)









13450

135

[illegible]

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[illegible]