



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

Well Name: Razor Fed 30K-1907
Well Id: 05-123-40209-00
Location: NESW 30-T10N-R58W
License Number: 05-123-40209-00
Spud Date: 6/21/2015
Surface Coordinates: Lat.: 40.808276 Long.: -103.910172

Region: Redtail Field
Drilling Completed: 6/28/2015

Bottom Hole
Coordinates:
Ground Elevation (ft): 4828
Logged Interval (ft): 5187 To: 13788
Formation: Pierre, Sharon Springs, Niobrara A
Type of Drilling Fluid: Water Based Mud

K.B. Elevation (ft): 4849
Total Depth (ft): 13788

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: Todd Nakata, Lauren Roddy
Company: Acme Geologic Consulting
Address: 108 Berry Street
Little Rock, AR 72205

Drilling Company

Unit Drilling Company
Rig 406

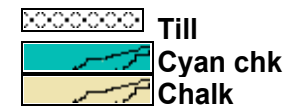
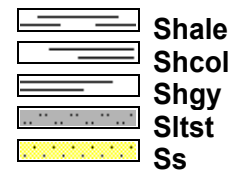
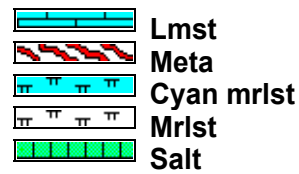
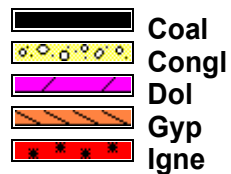
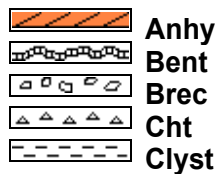
Gas Detection

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

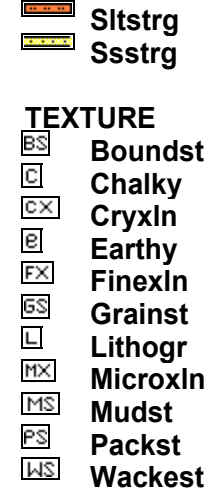
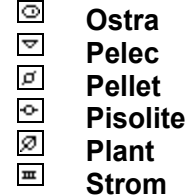
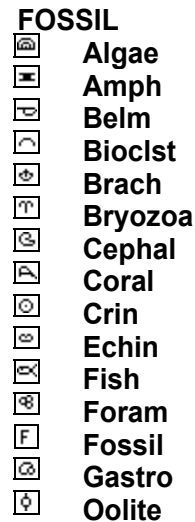
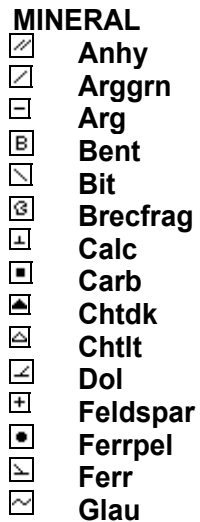
Comments

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



ACCESSORIES



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

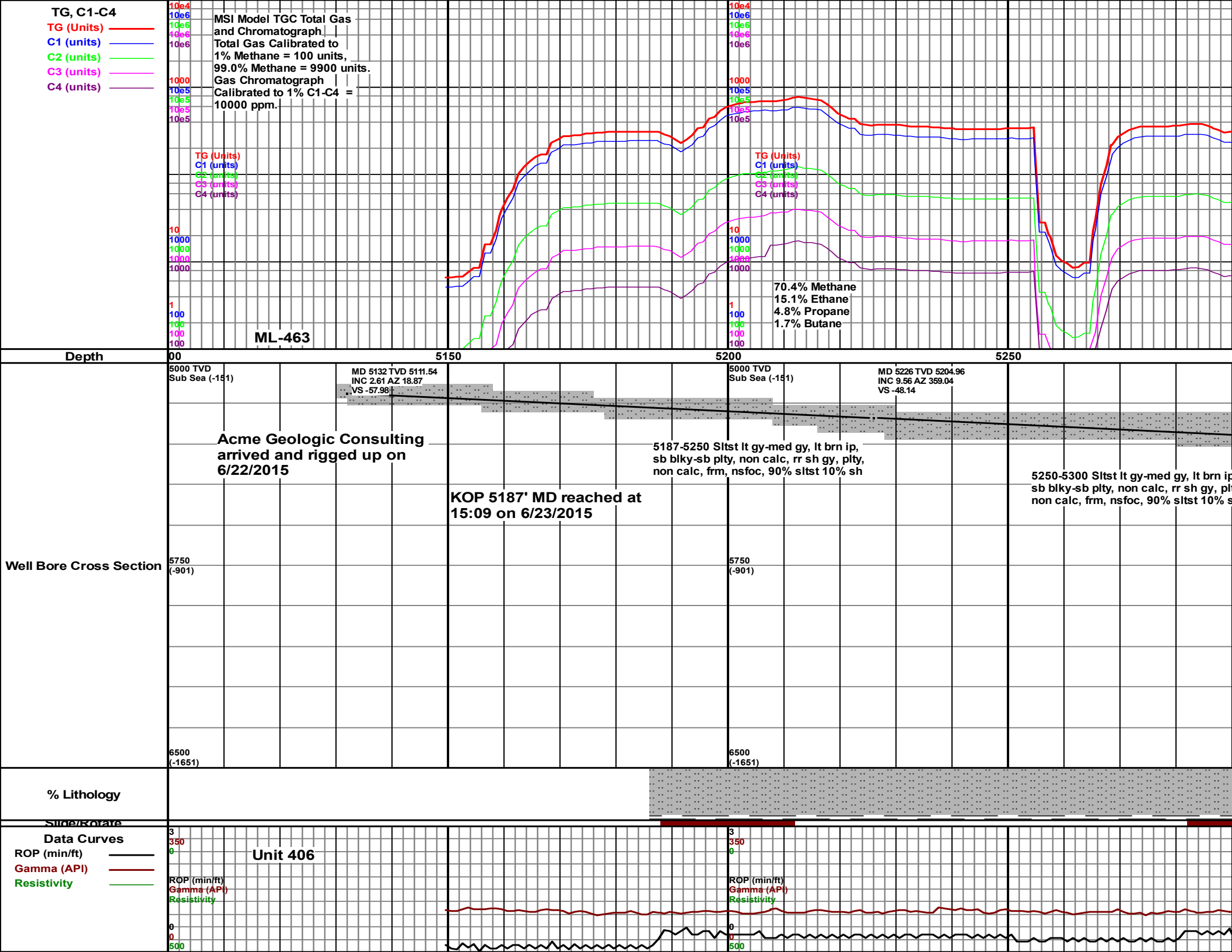
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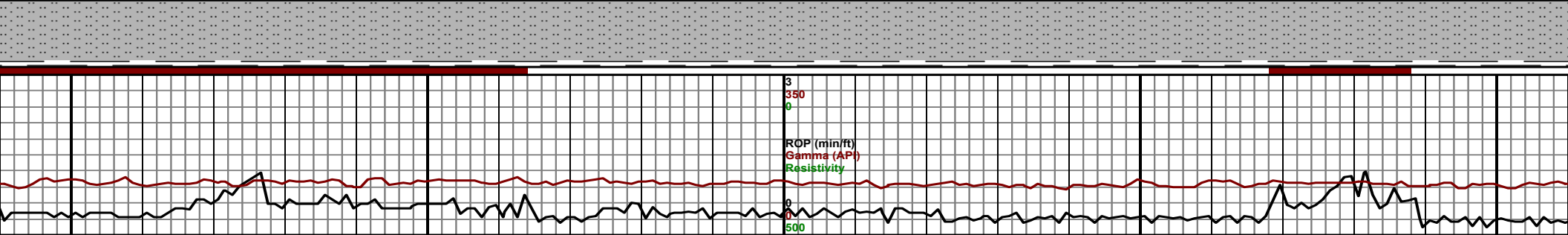
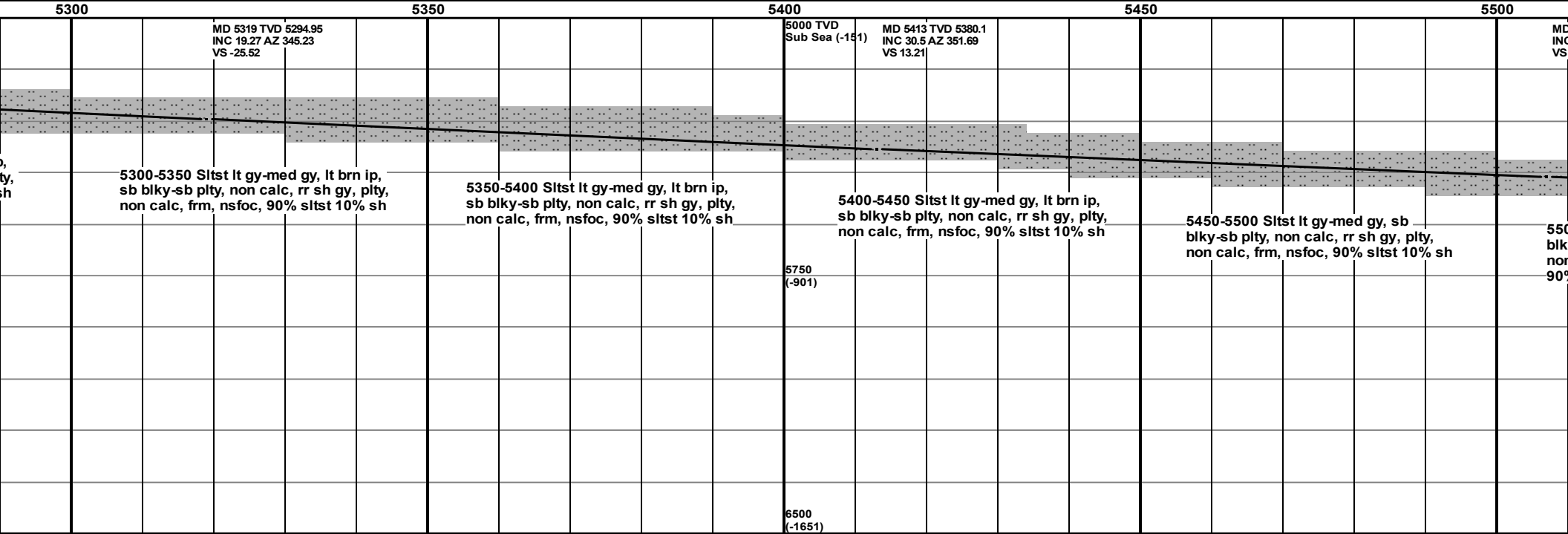
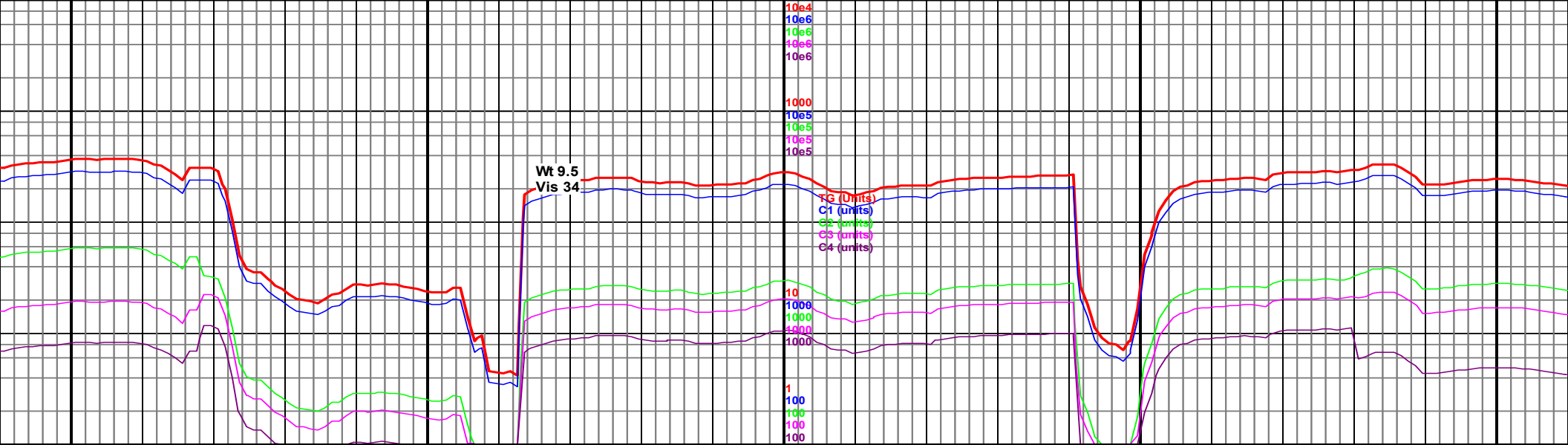


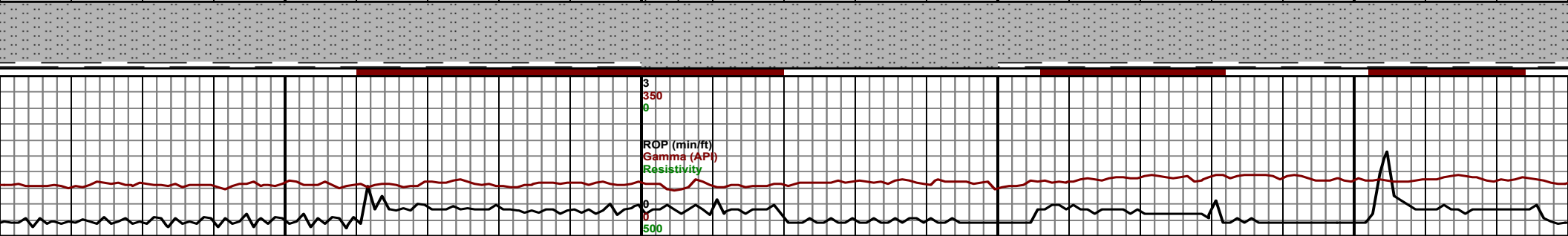
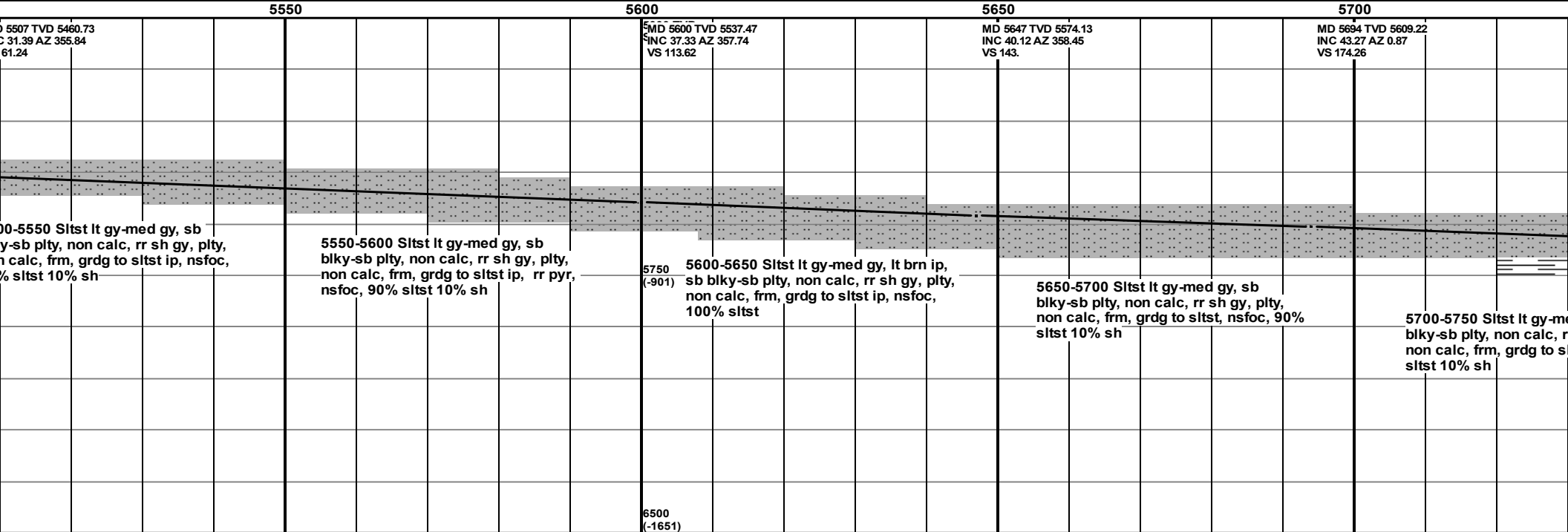
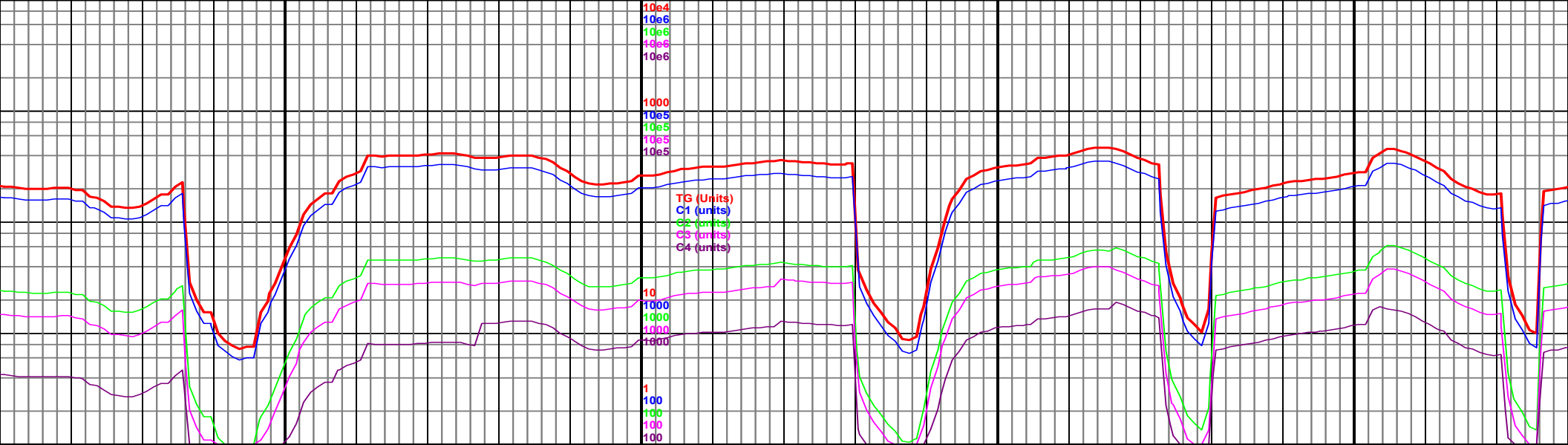
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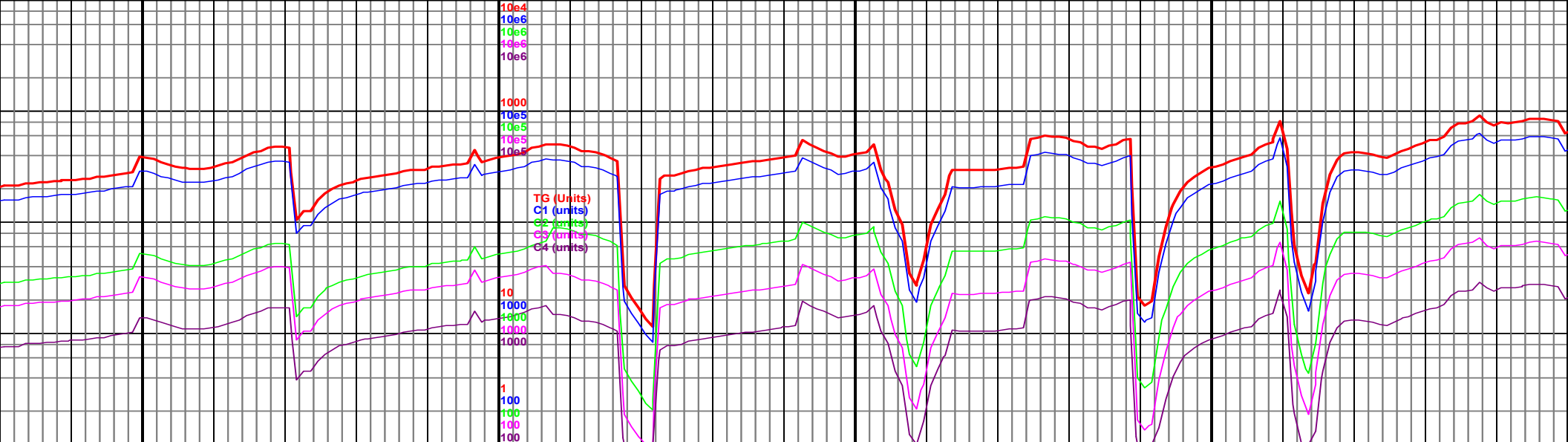


Sidewall

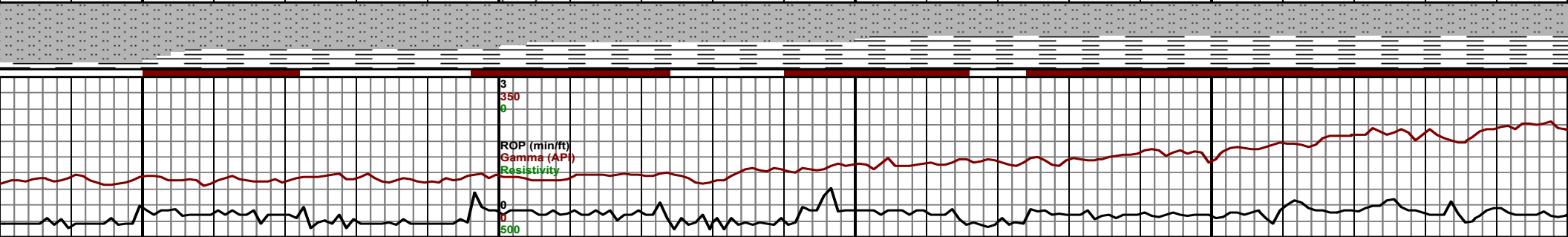


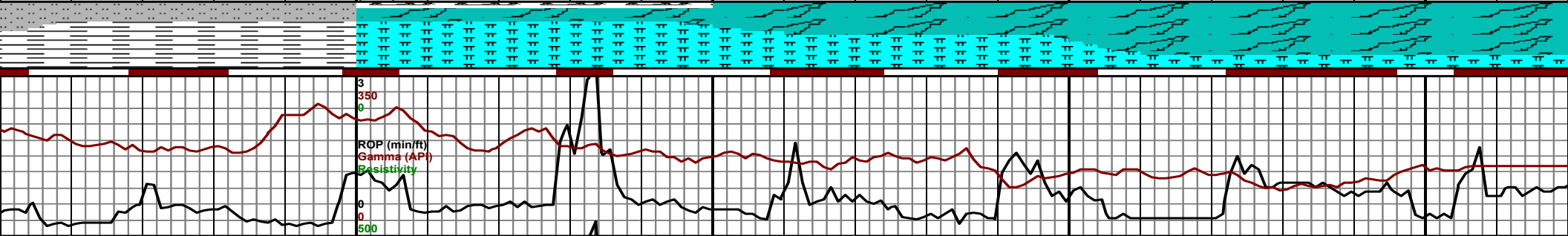
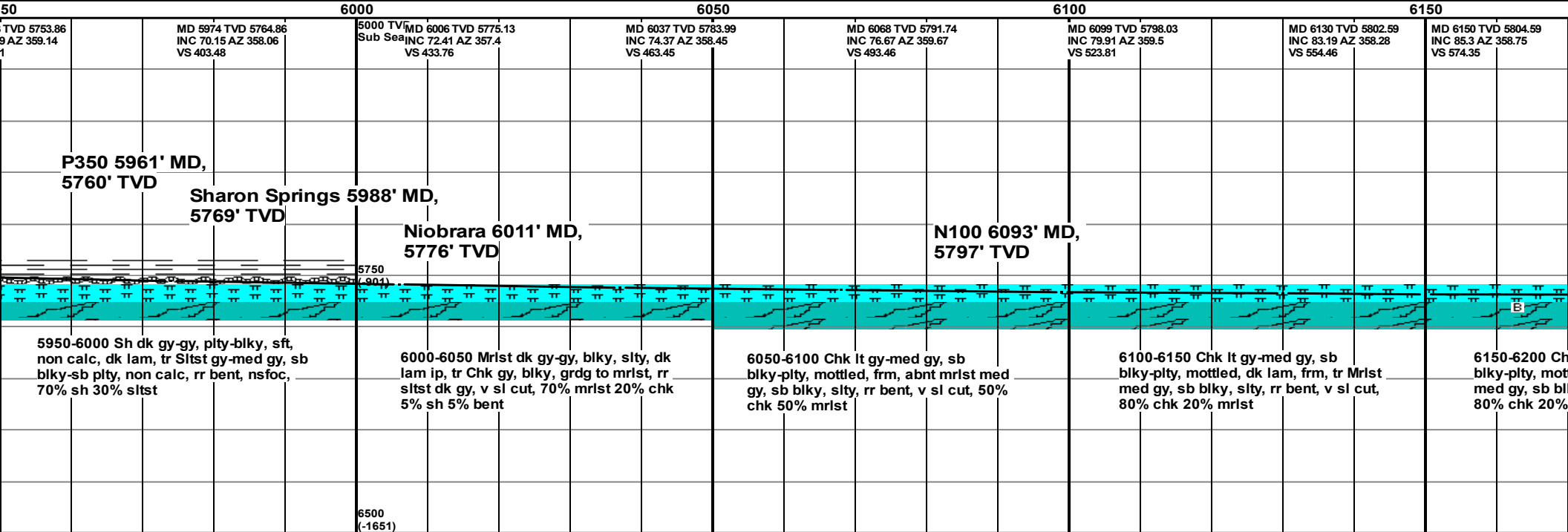
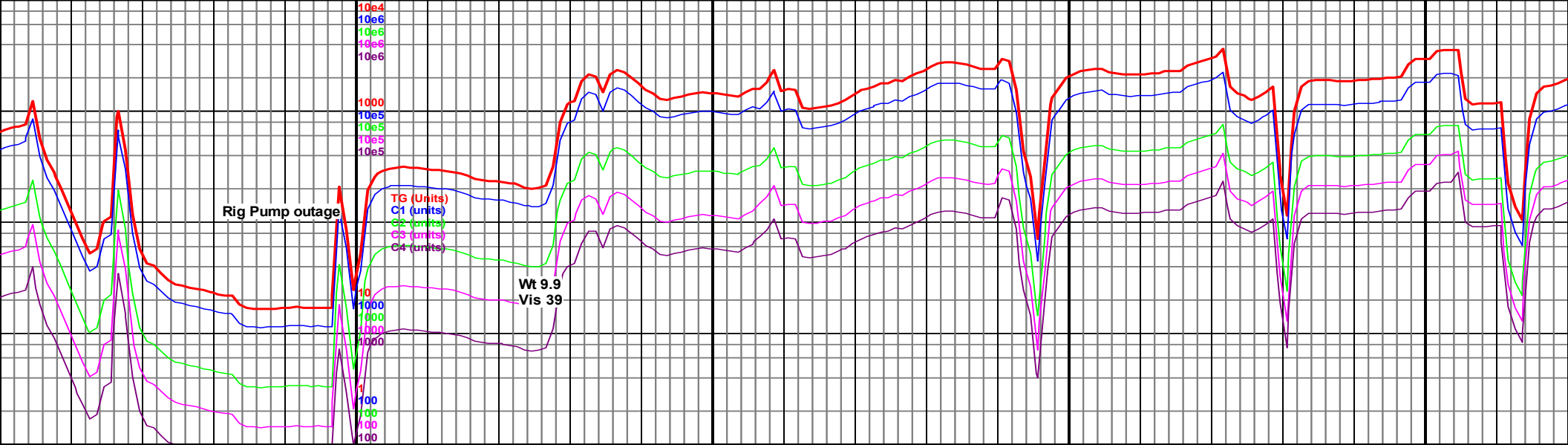


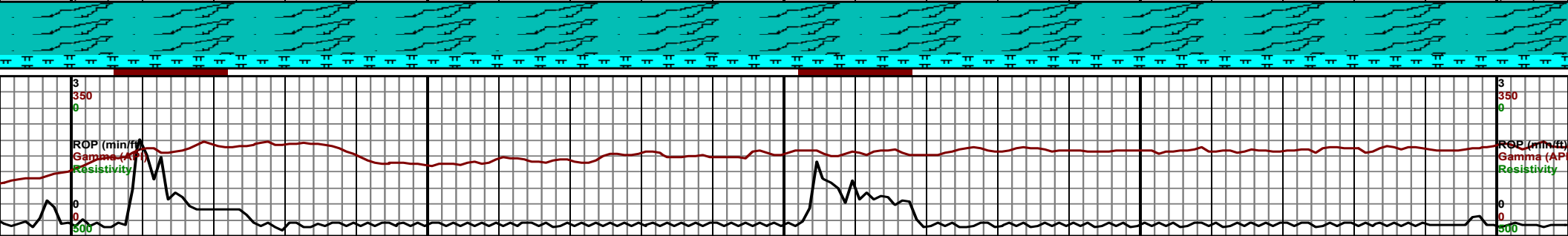
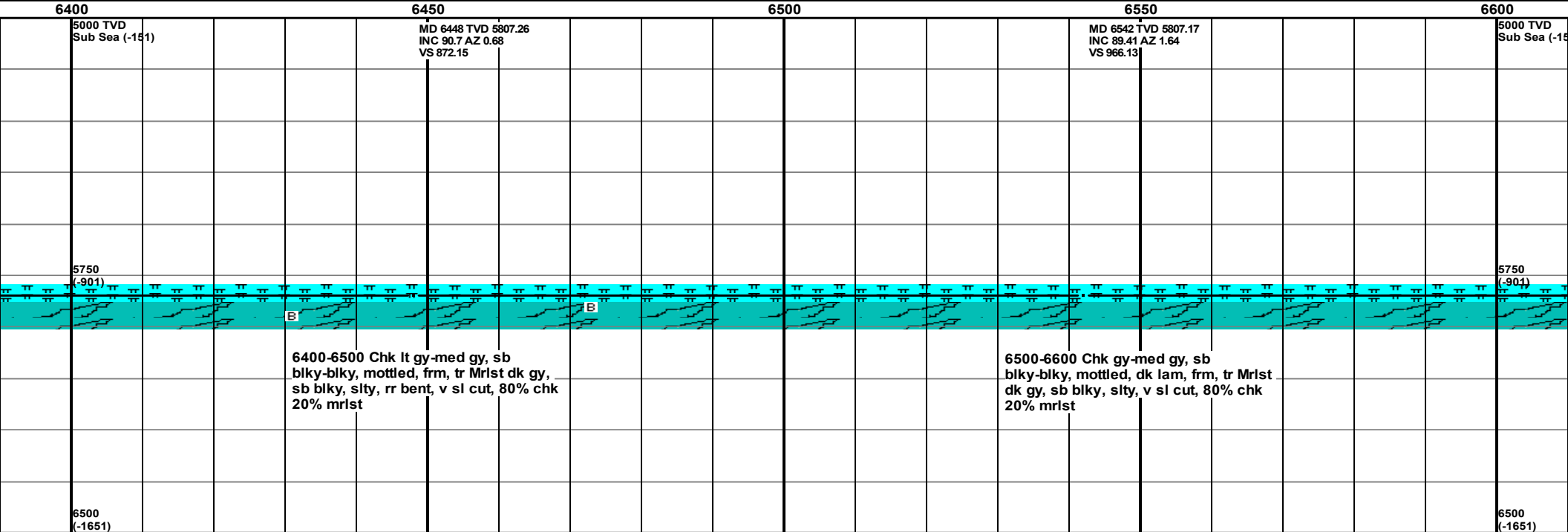
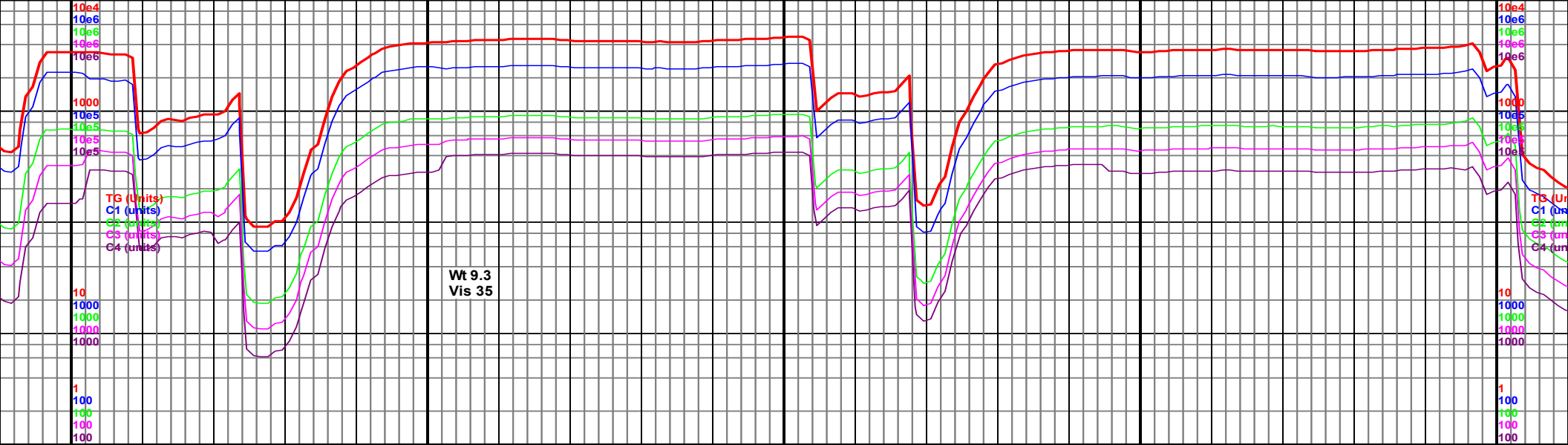


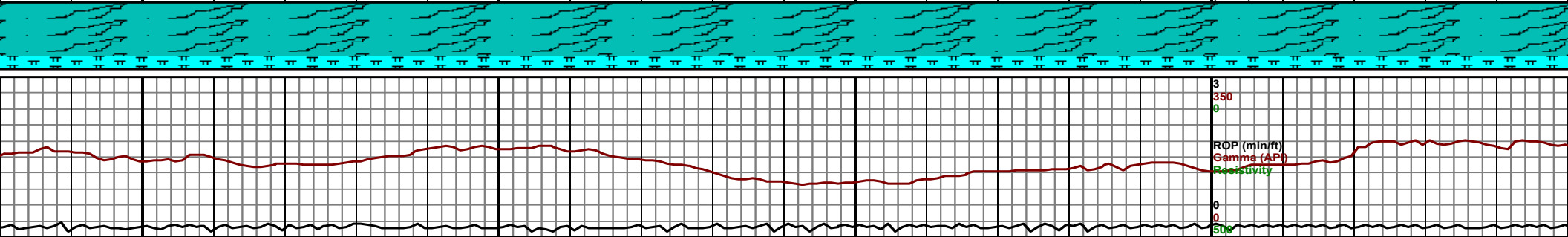
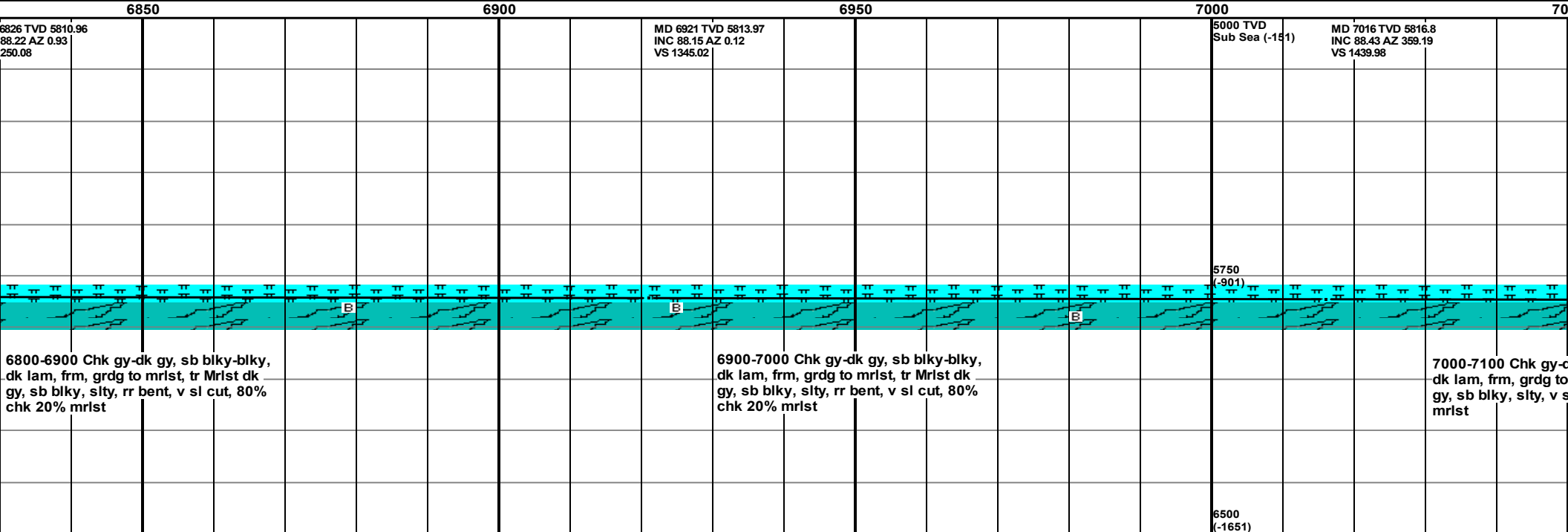
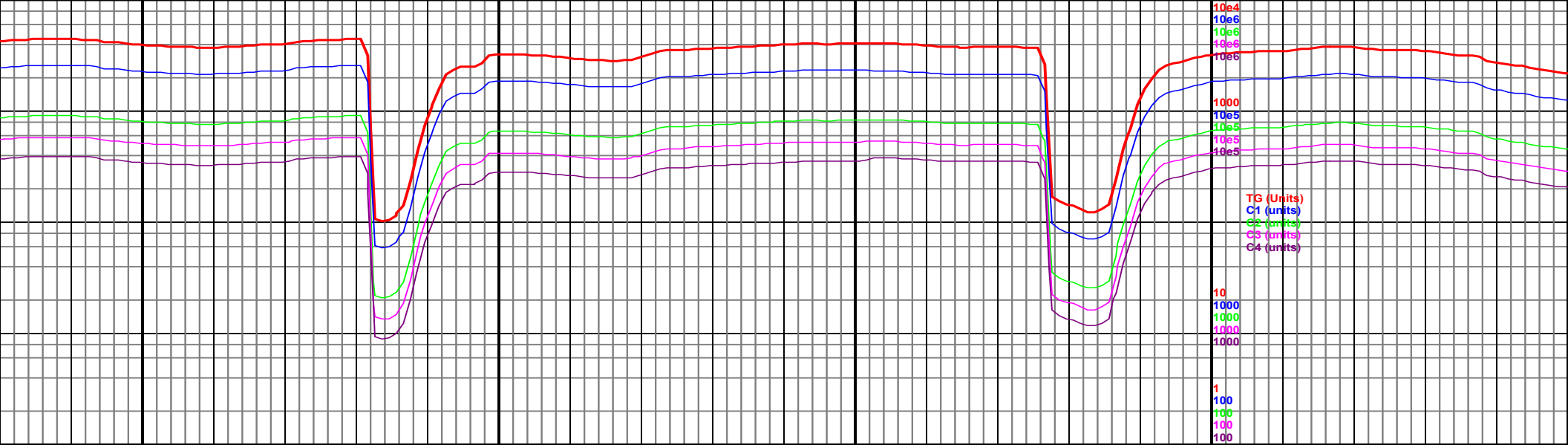


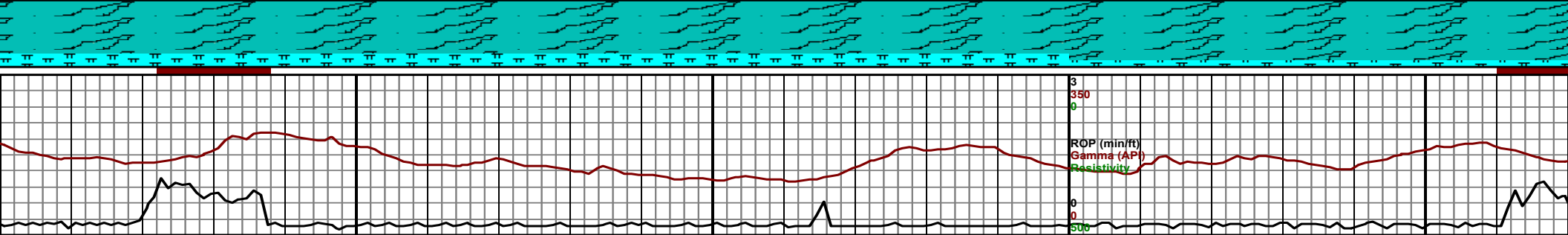
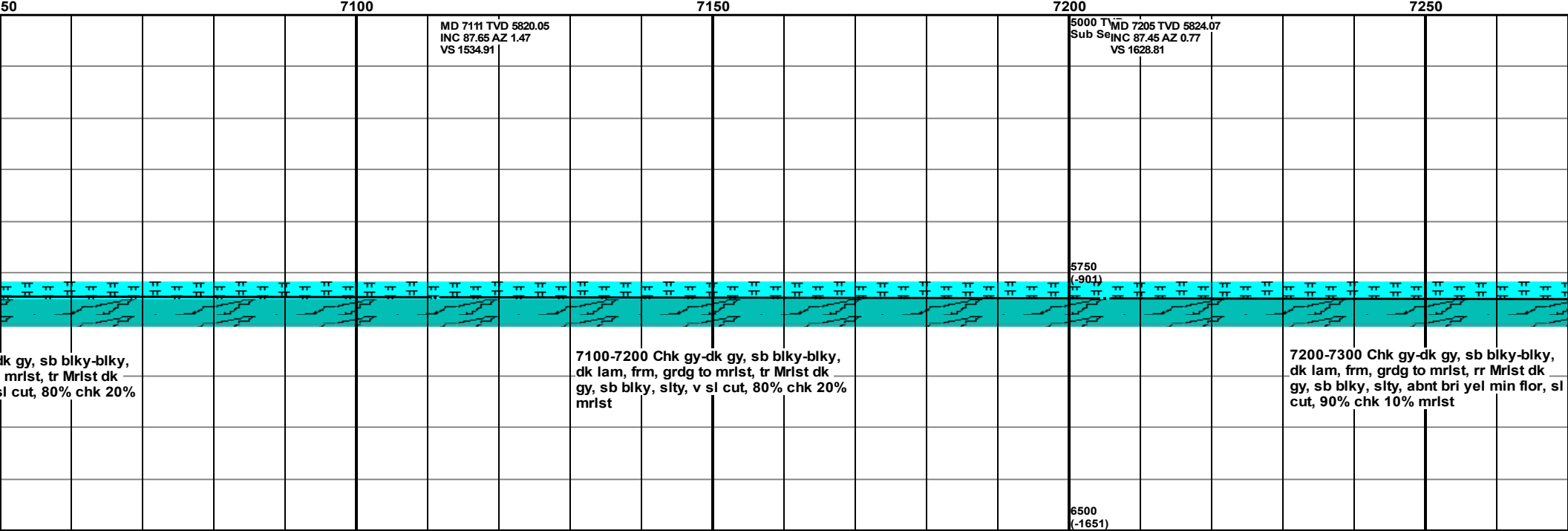
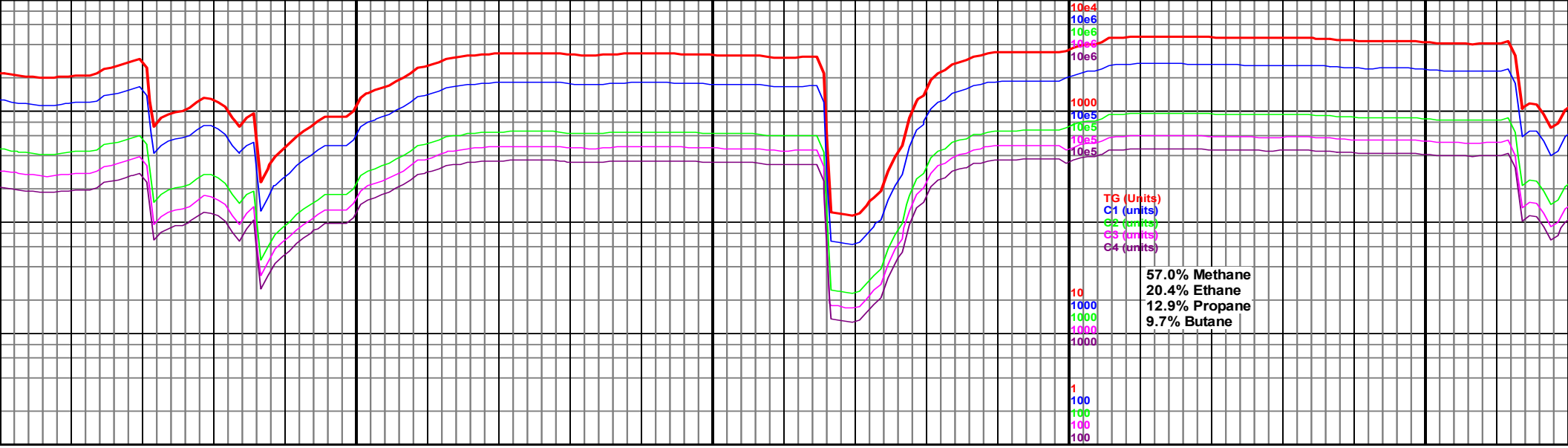
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| | 5750-5800 Slstst lt gy-med gy, sb blky-sb plty, non calc, tr sh gy, plty, non calc, frm, dk lam, nsfoc, 70% slstst 30% sh | | 5800-5850 Slstst lt gy-med gy, sb blky-sb plty, non calc, occ sh gy, plty, non calc, frm, dk lam, nsfoc, 60% slstst 40% sh | 5850-5900 Slstst gy-med gy, sb blky-sb plty, non calc, abnt sh dk gy-gy, plty, non calc, frm, dk lam, nsfoc, 50% slstst 50% sh | | 5900-5950 Slstst gy-med gy, sb blky-sb plty, non calc, abnt sh dk gy-gy, plty, non calc, frm, dk lam, nsfoc, 50% slstst 50% sh | | | |
| ed gy, sb r sh gy, plty, stst, nsfoc, 90% | | | | | | | | | |

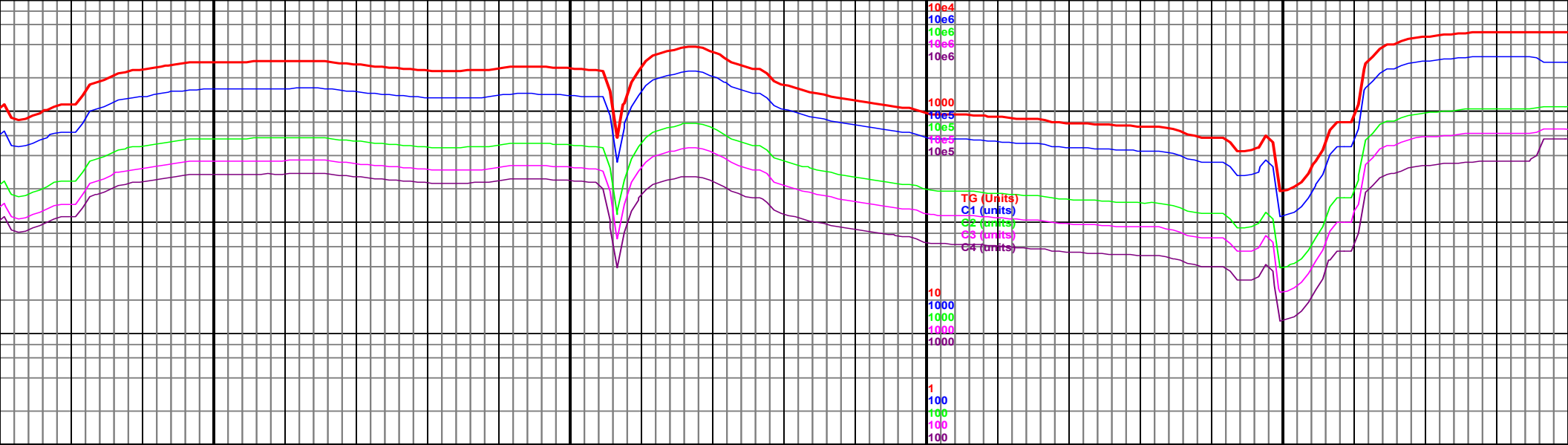












7300

7350

7400

7450

MD 7300 TVD 5827.45
INC 88.47 AZ 2.99
VS 1723.69

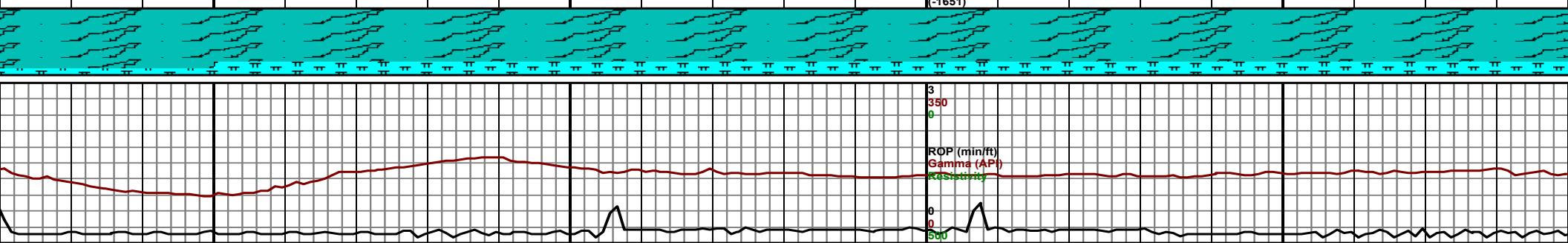
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INC 89.73 AZ 2.19191
VS 1818.58

7300-7400 Chk gy-dk gy, sb blkyl-blky,
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gy, sb blkyl, slty, tr bri yel min flor, sl
cut, 80% chk 20% mrlst

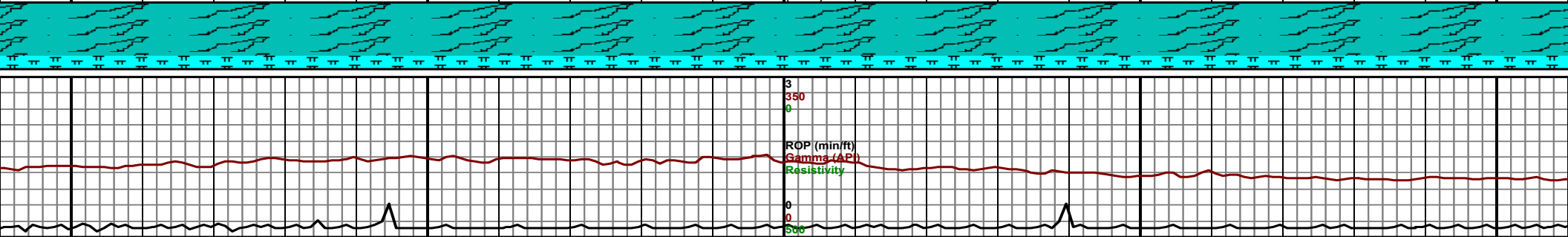
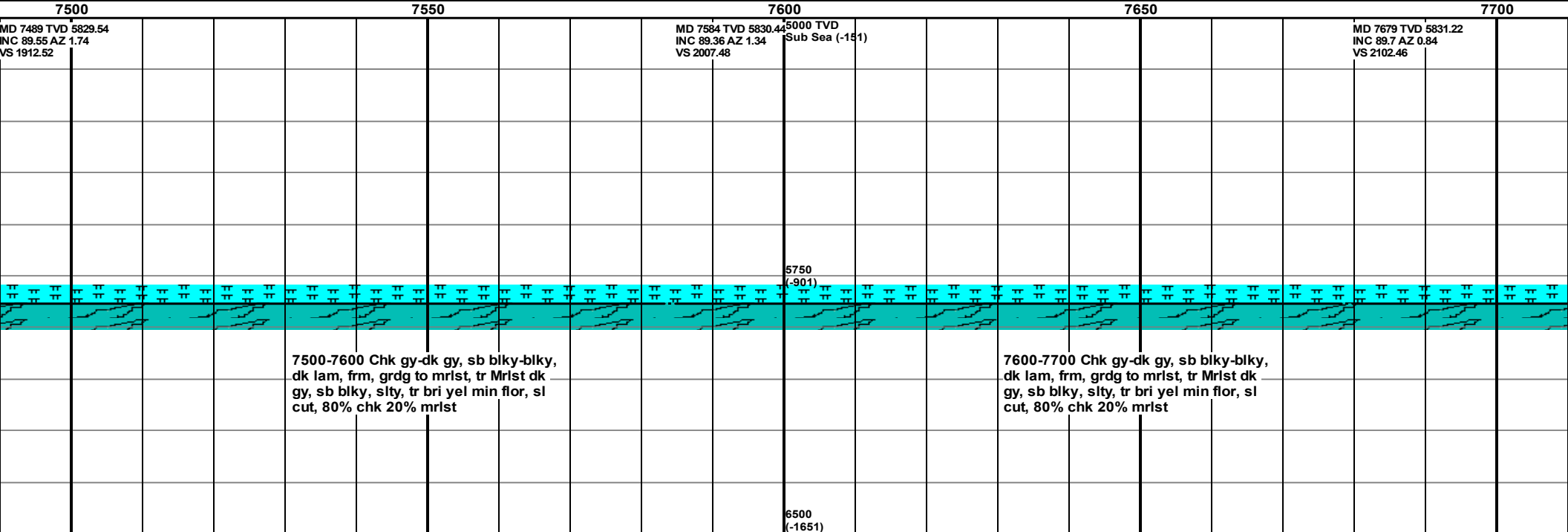
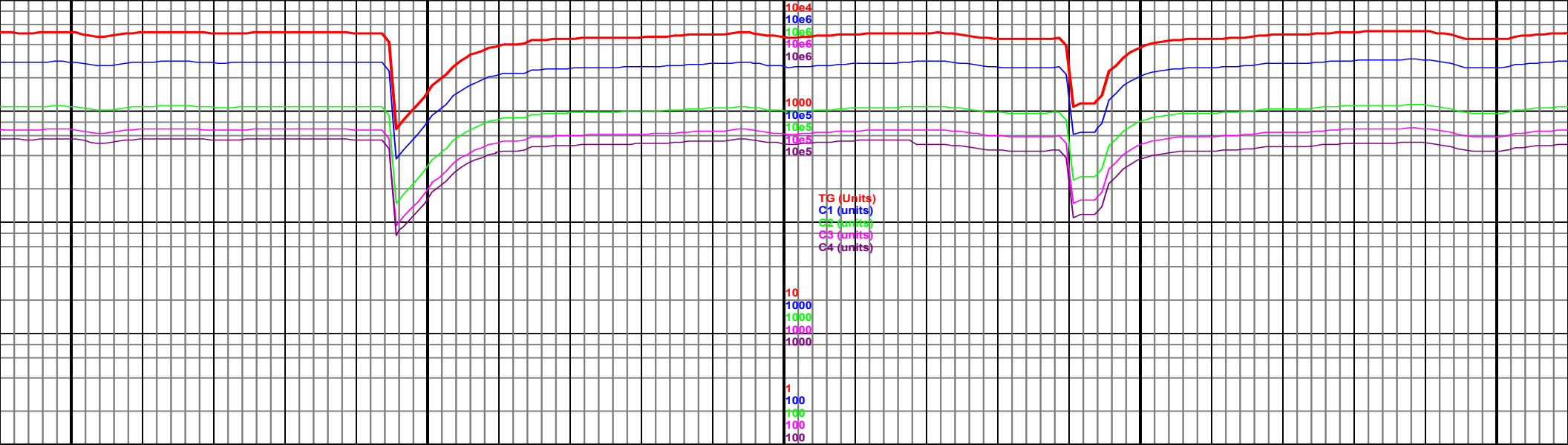
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gy, sb blkyl, slty, tr bri yel min flor, sl
cut, 80% chk 20% mrlst

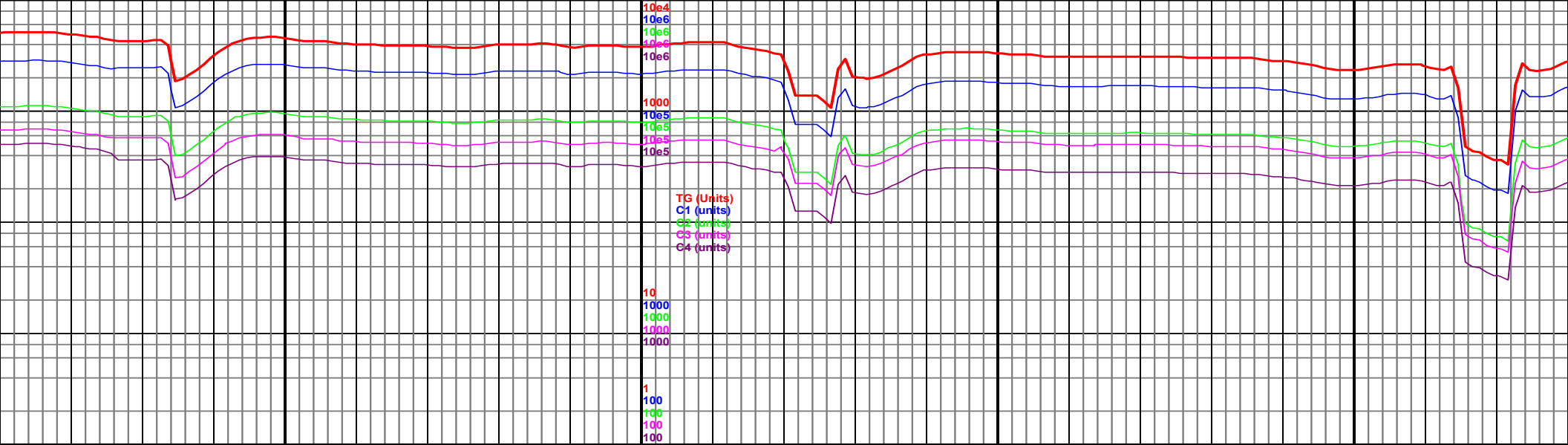
5750
(-901)

6500
(-1651)



ROP (min/ft)
Gamma (API)
Resistivity





7750

7800

7850

7900

MD 7773 TVD 5831.05
INC 90.51 AZ 1.26
VS 2196.45

5000 TVD
Sub Sea (-151)

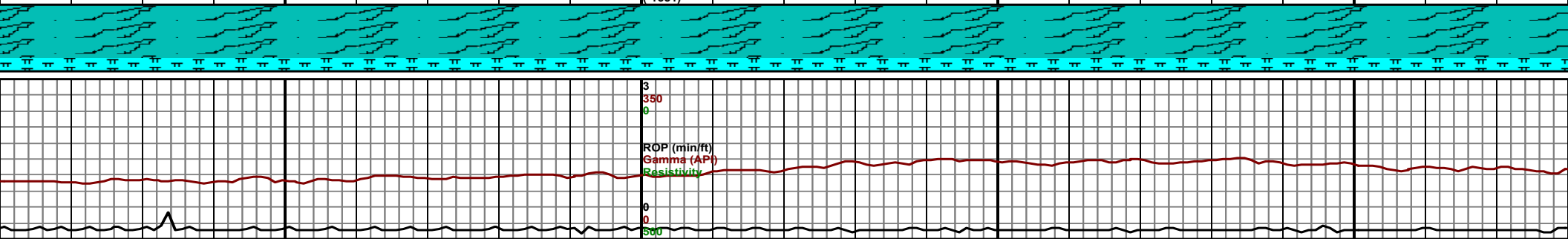
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INC 90.94 AZ 0.89
VS 2291.42

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gy, sb blkyl, slty, tr bri yel min flor, sl
cut, 80% chk 20% mrlst

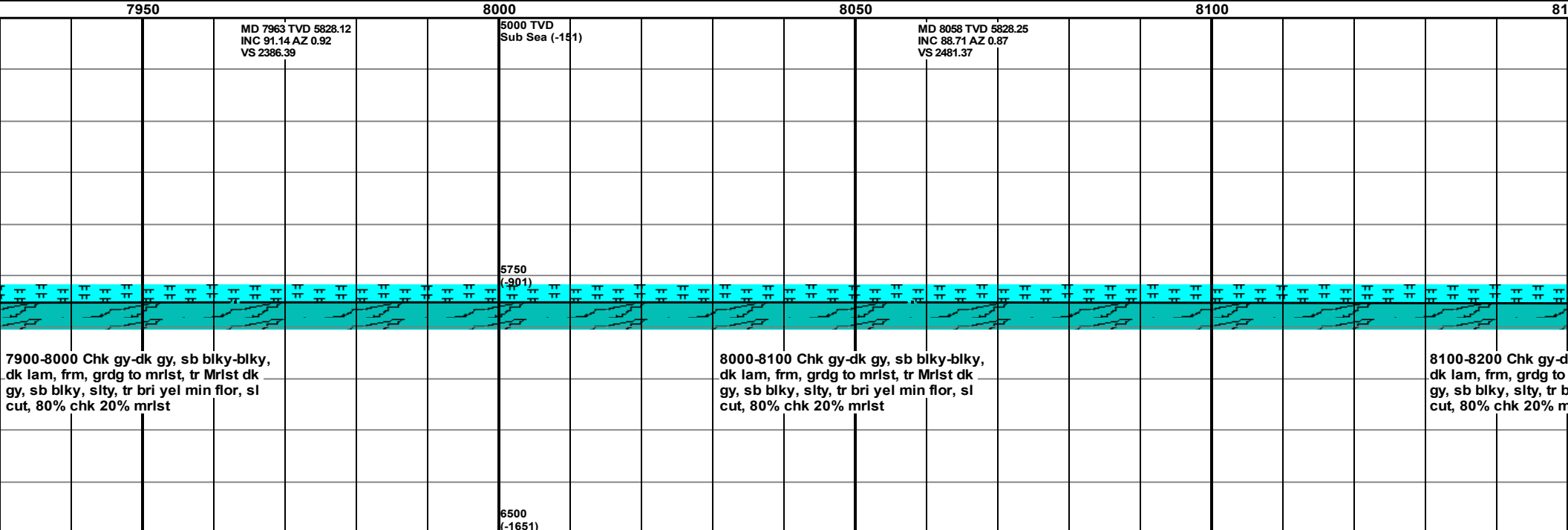
7800-7900 Chk gy-dk gy, sb blkyl-blky,
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gy, sb blkyl, slty, tr bri yel min flor, sl
cut, 80% chk 20% mrlst

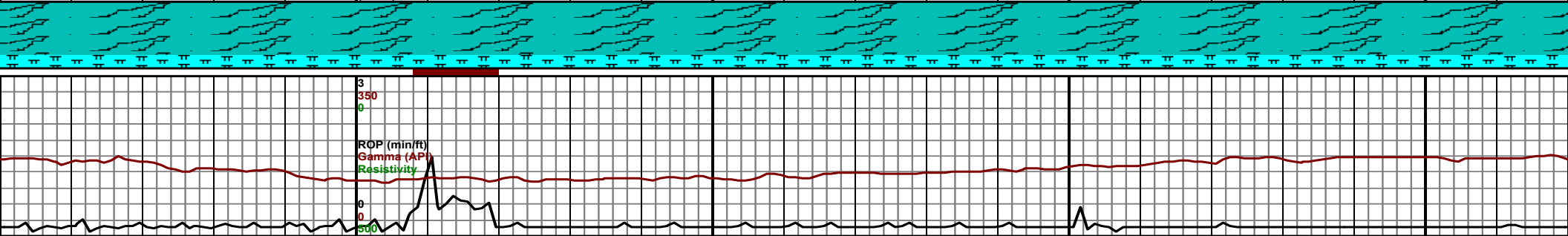
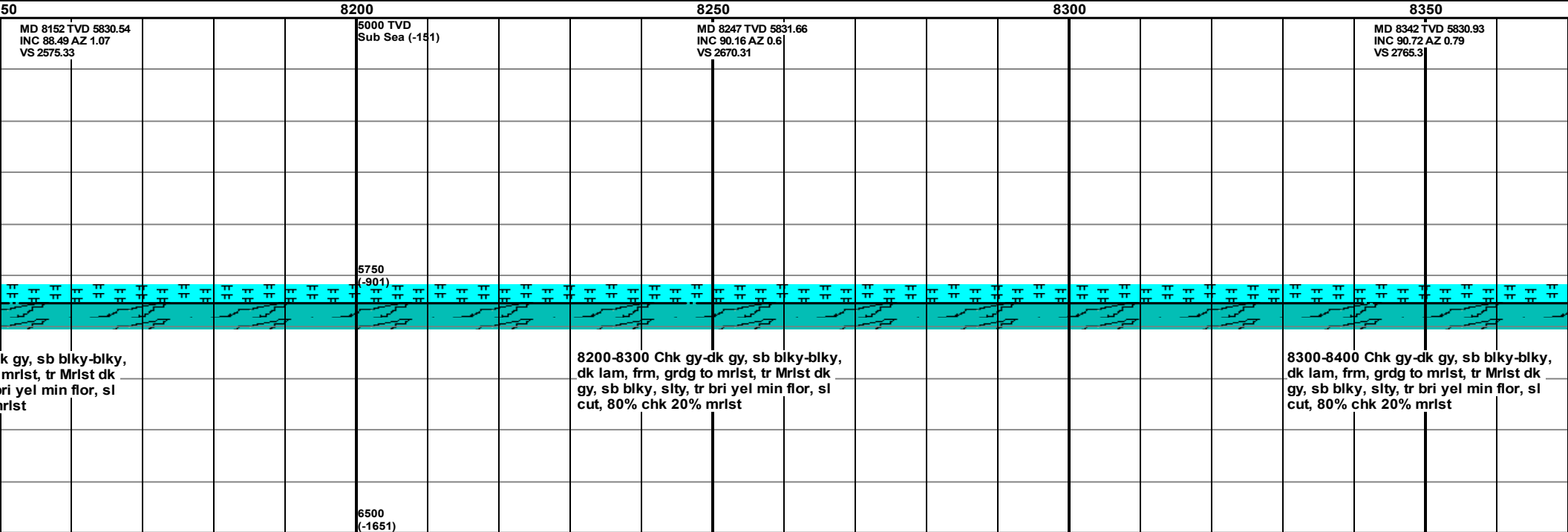
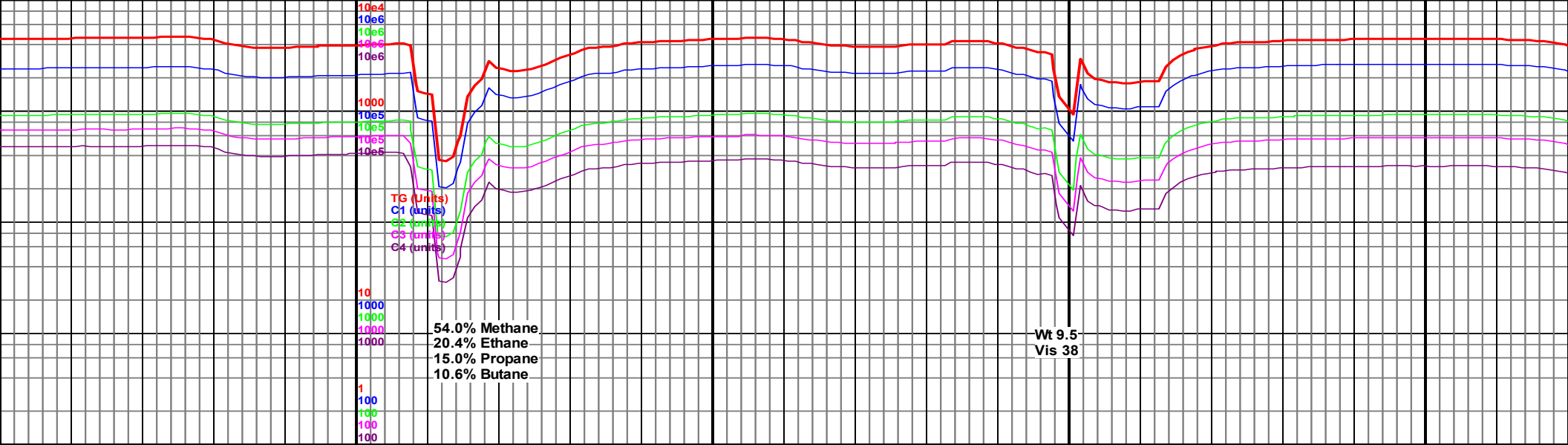
5750
(-304)

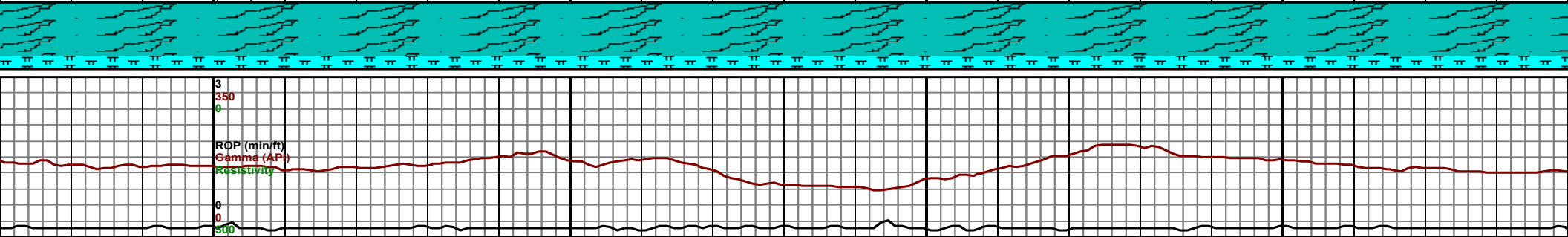
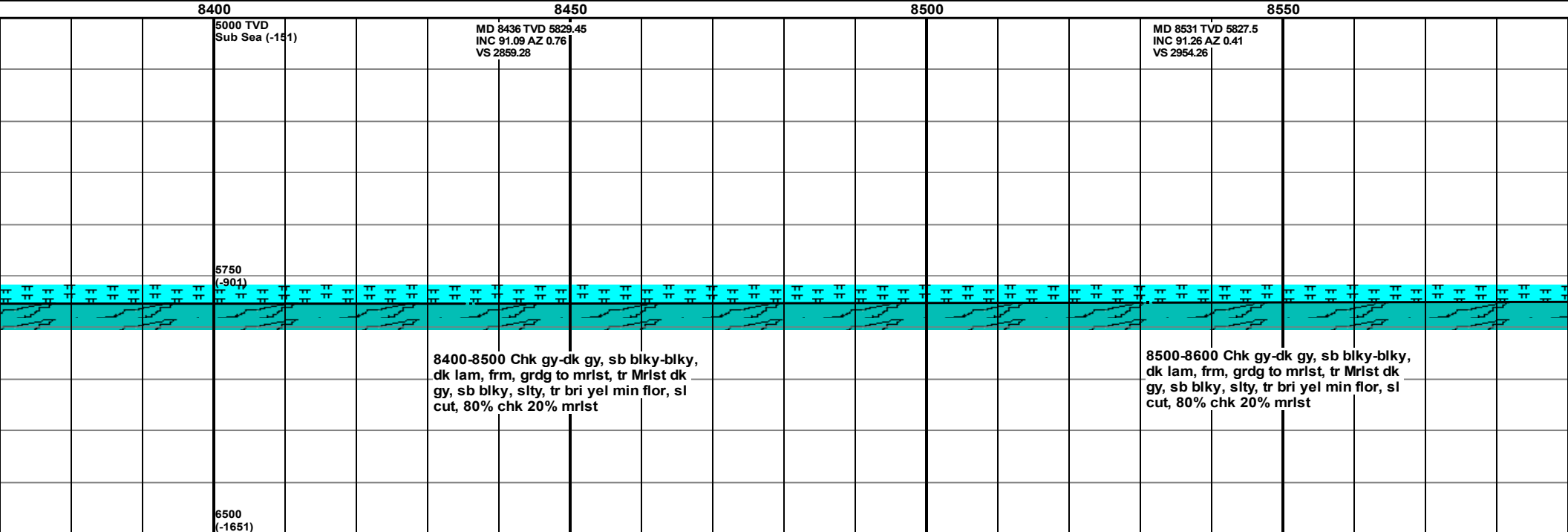
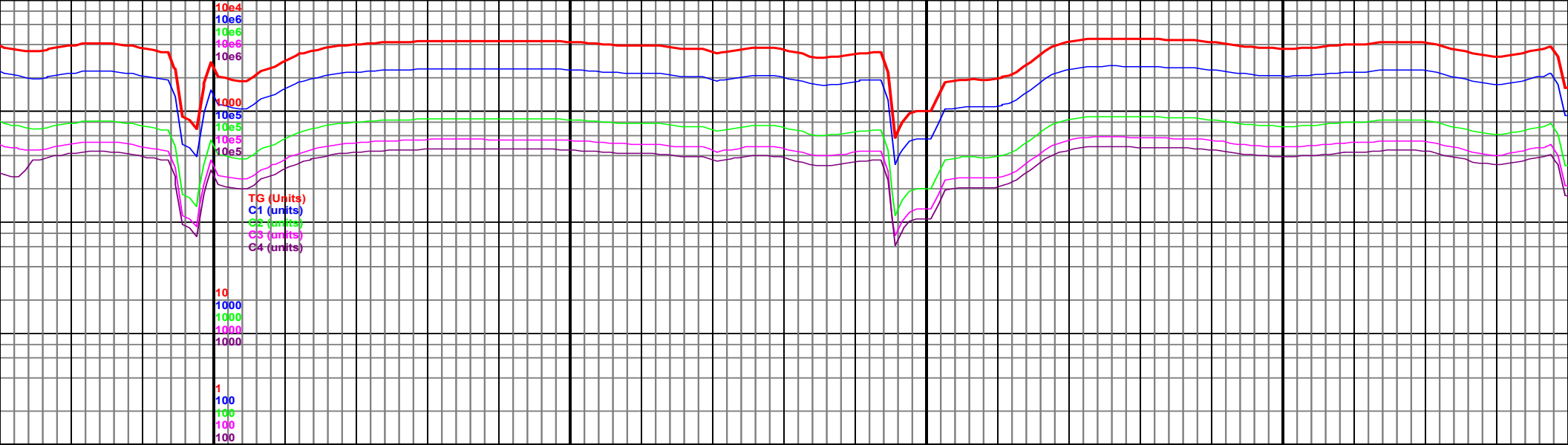
6500
(-1651)

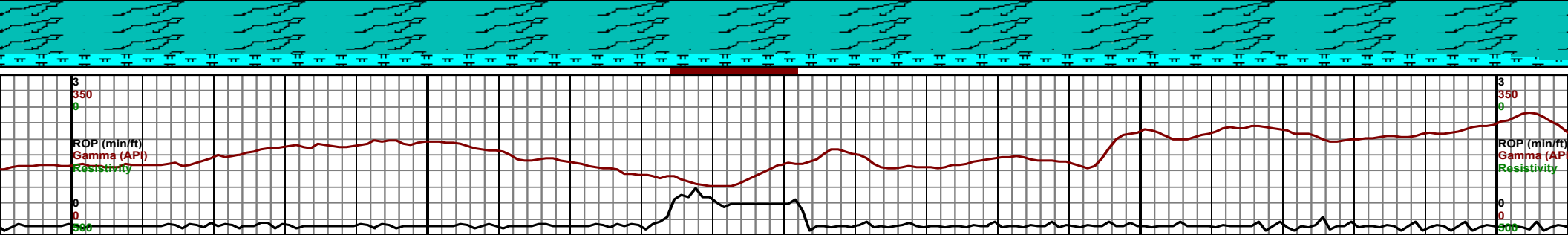
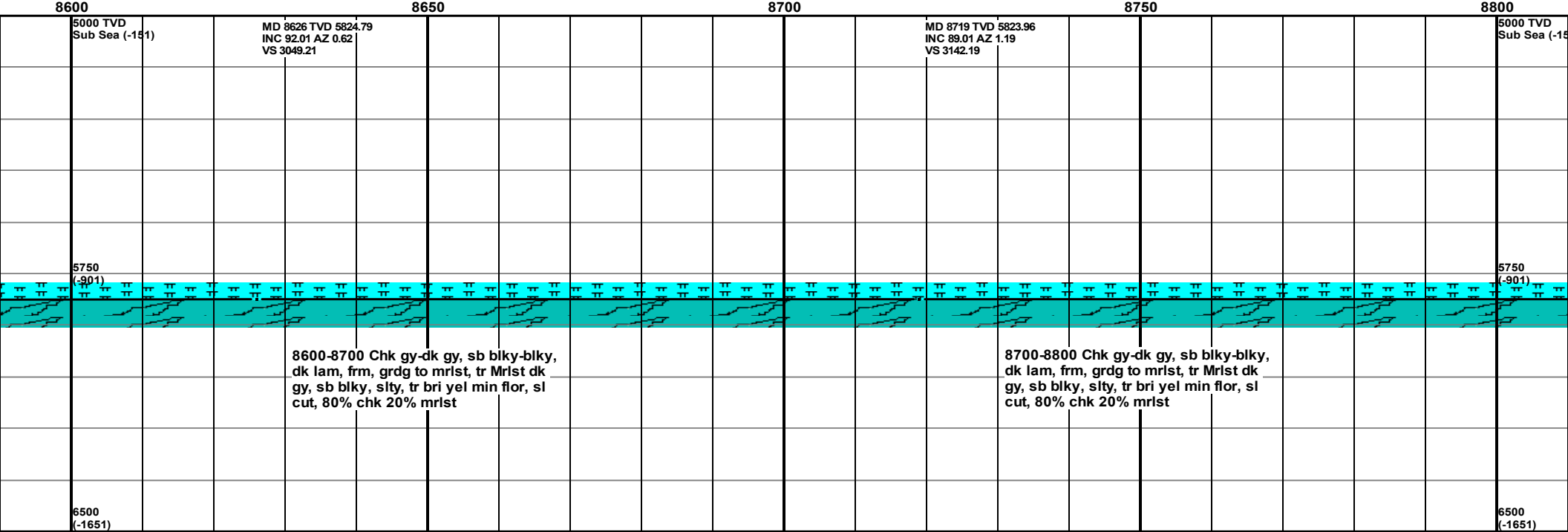
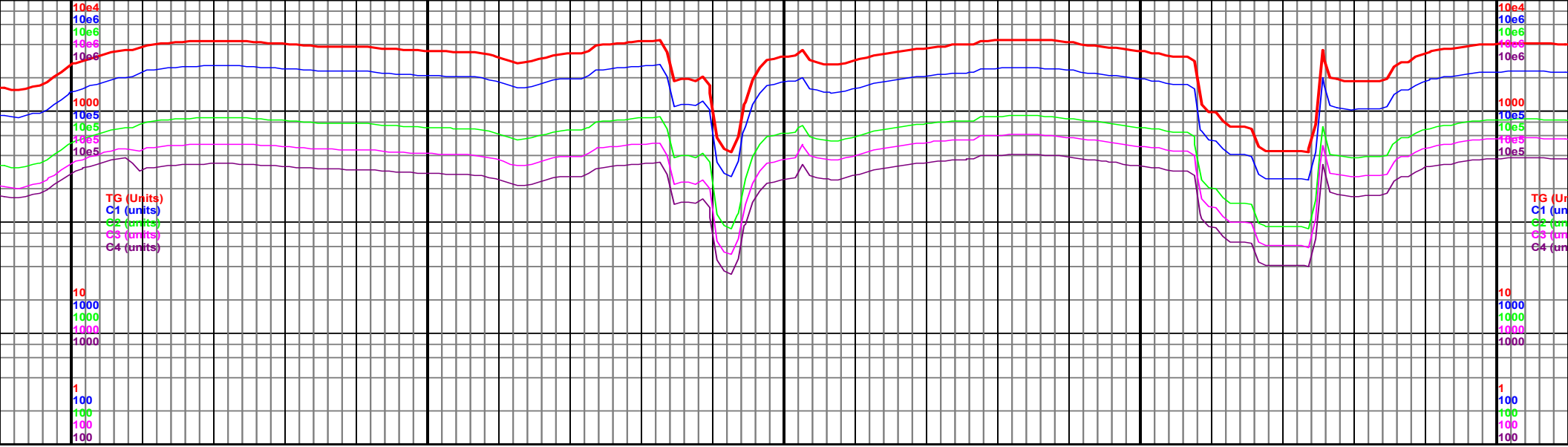


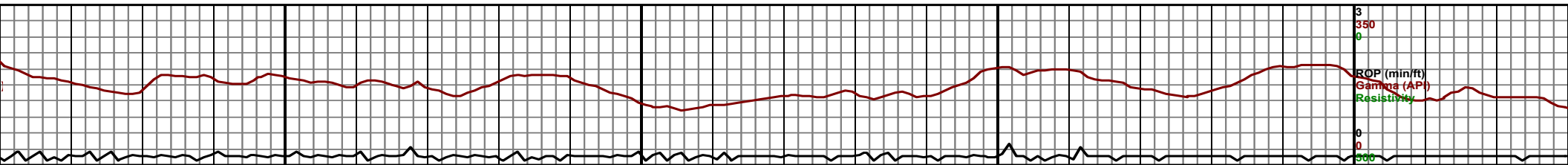
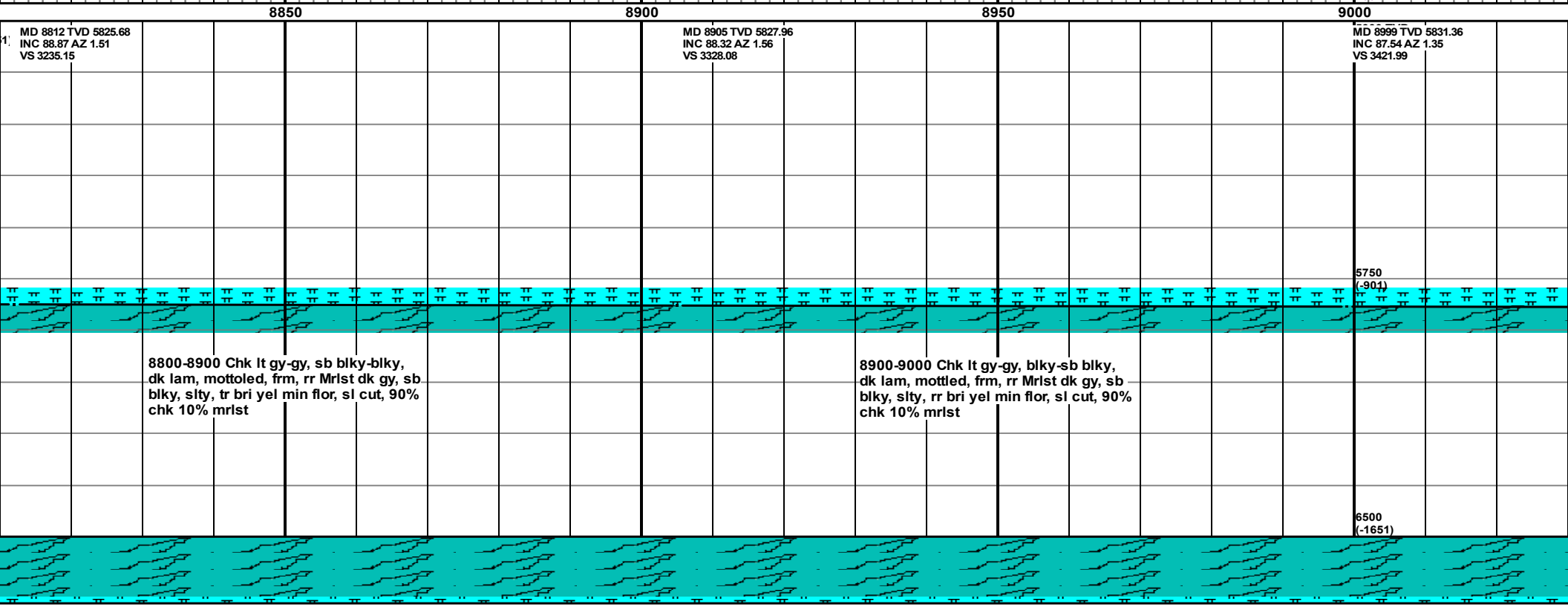
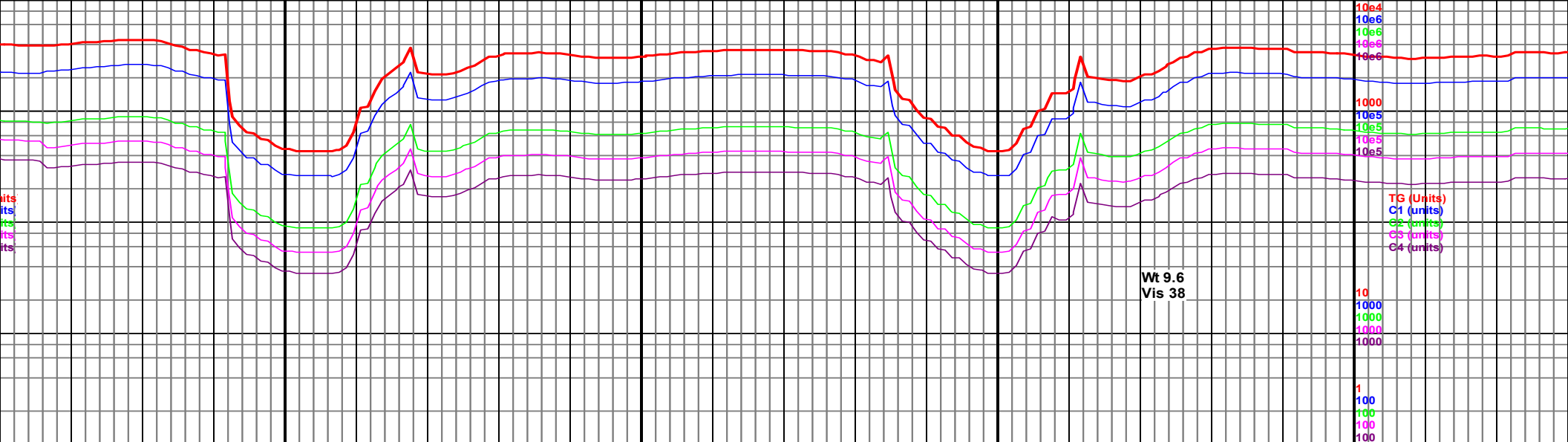
3
350
0
ROP (min/ft)
Gamma (API)
Resistivity
0
0
500

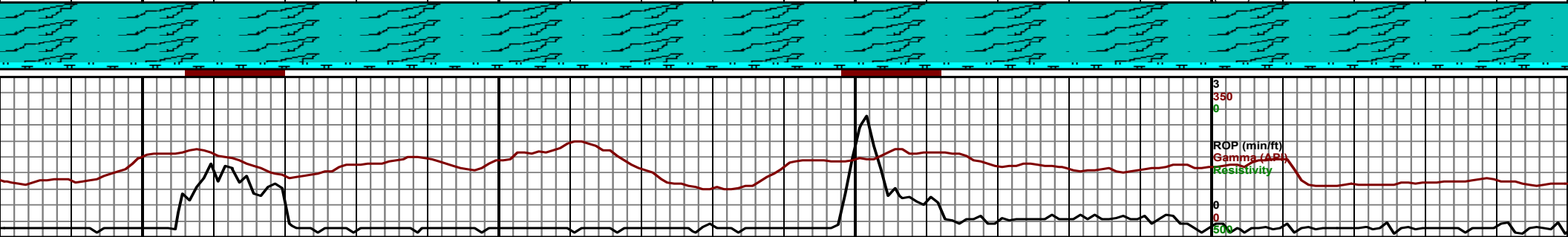
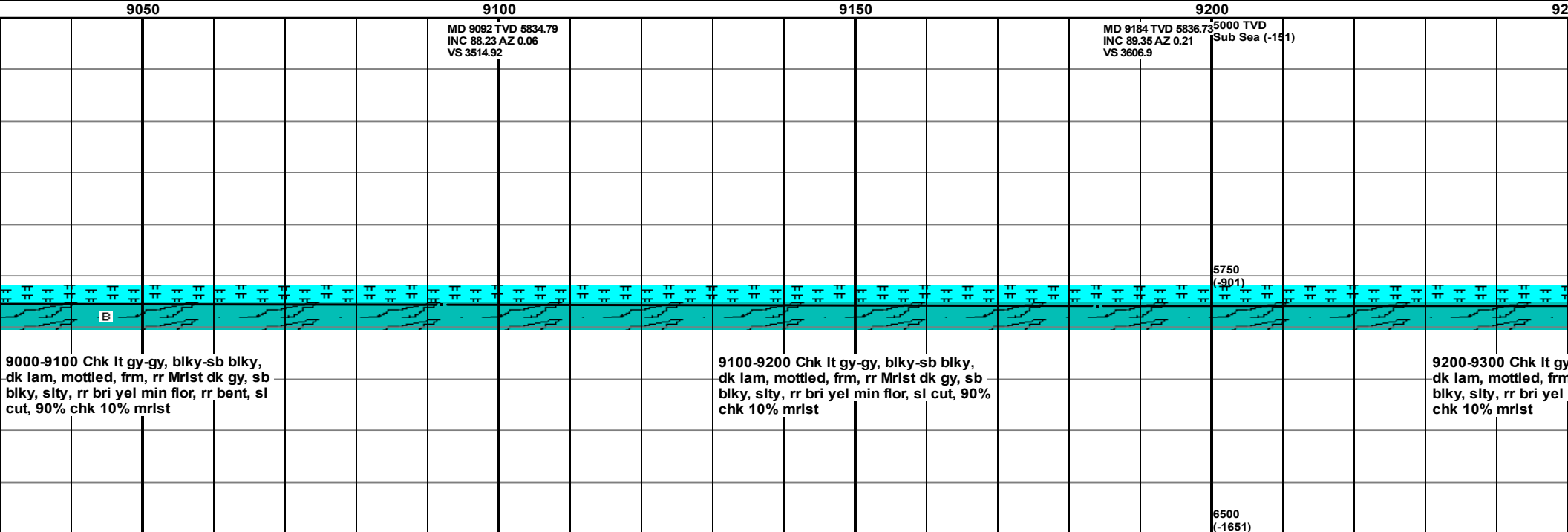
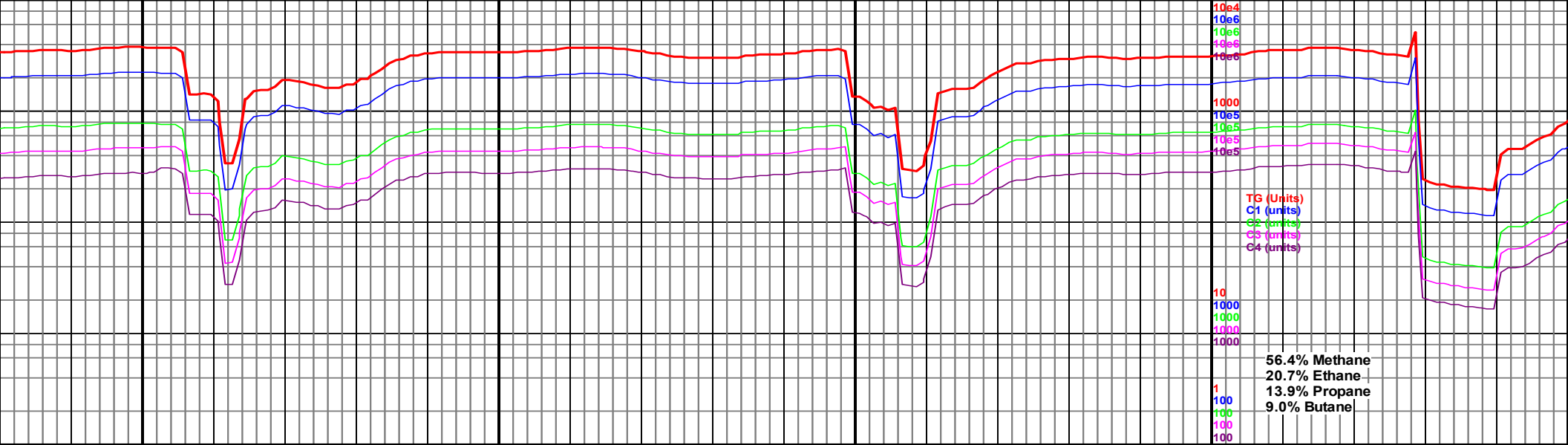


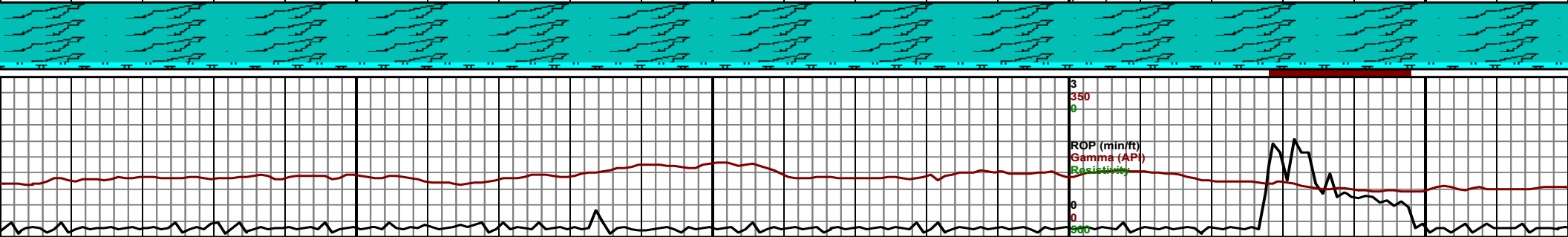
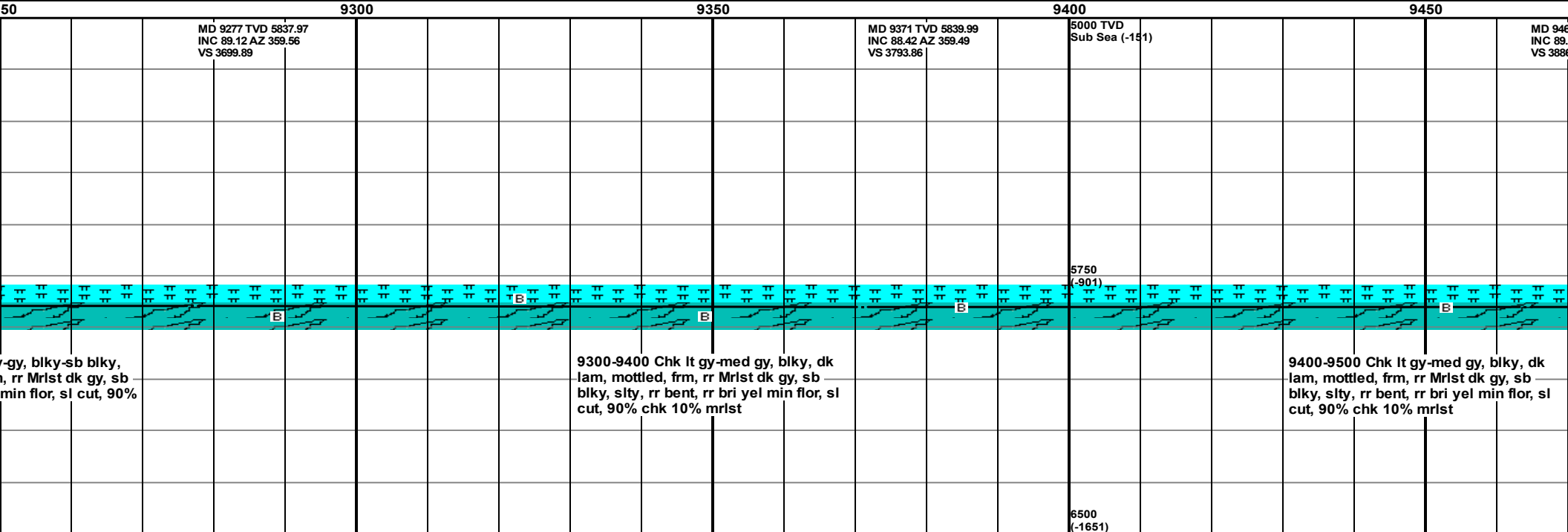
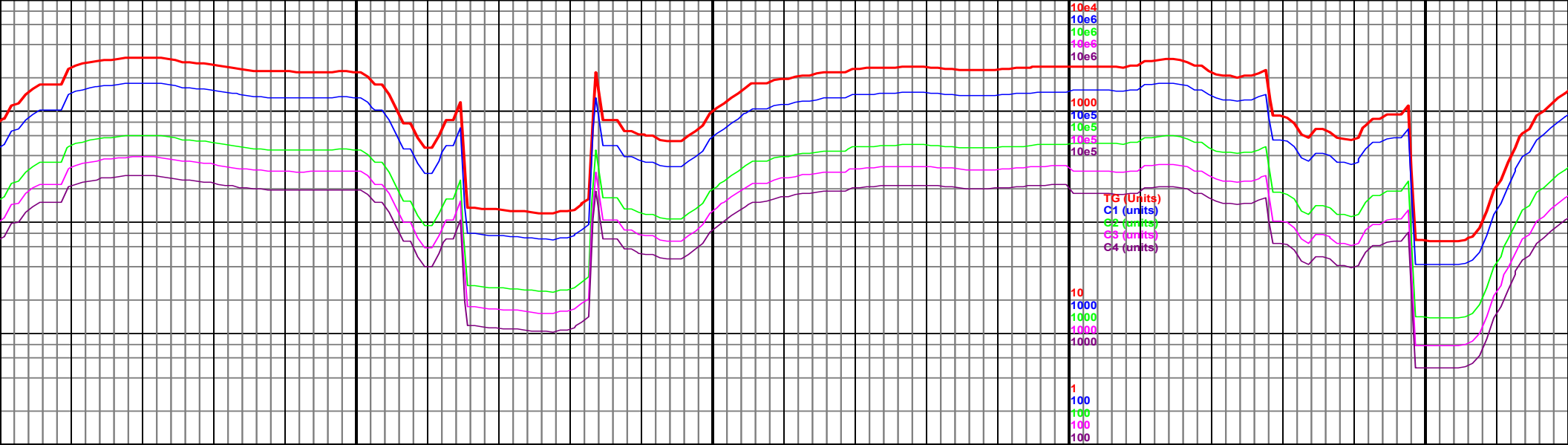


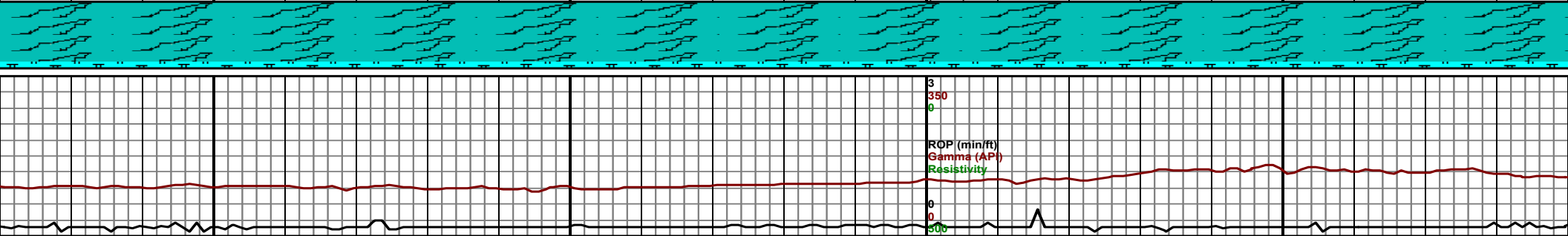
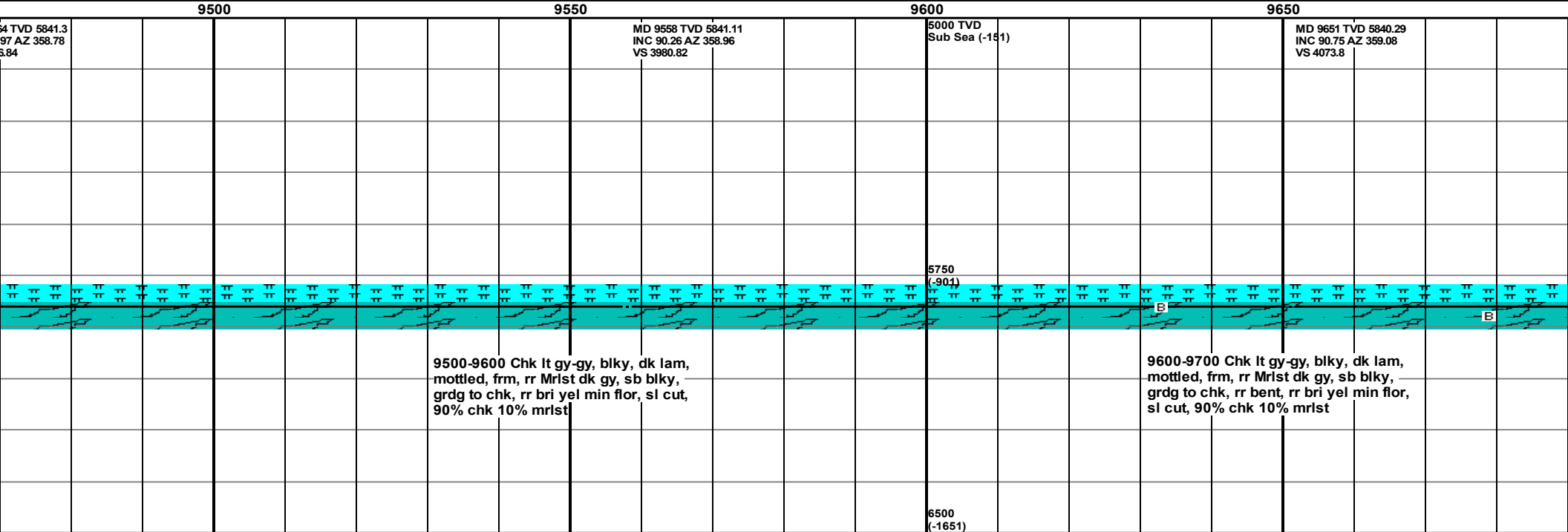
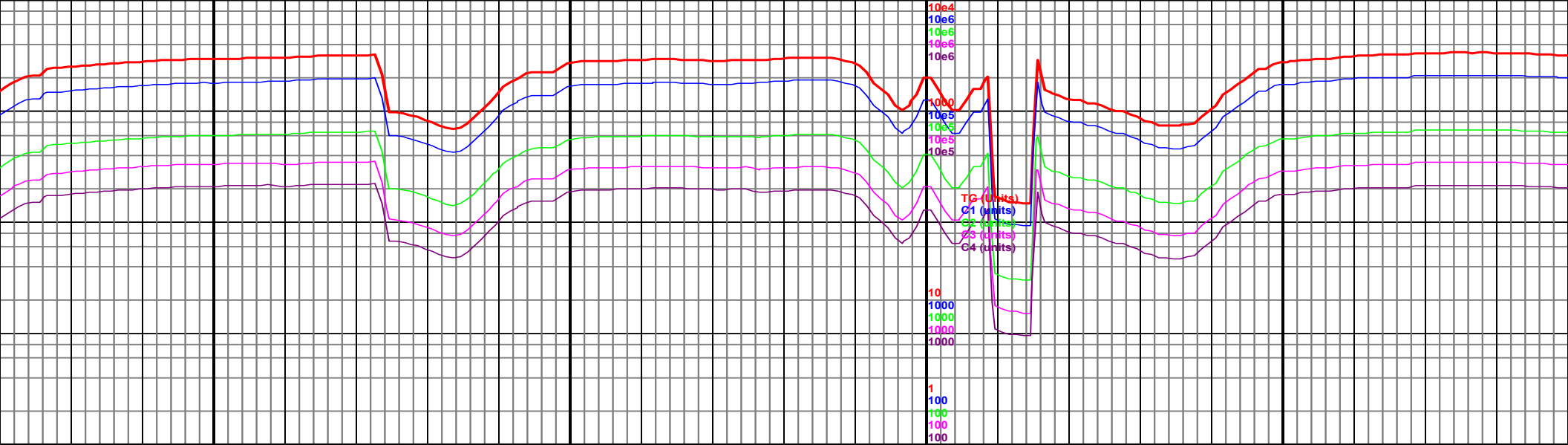


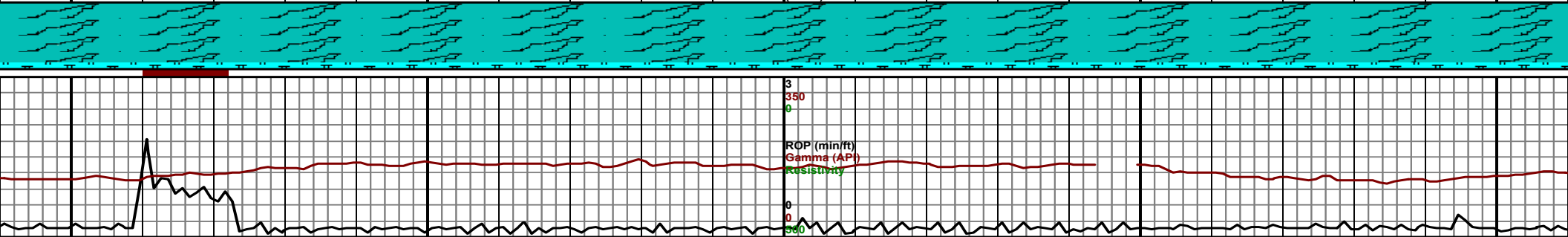
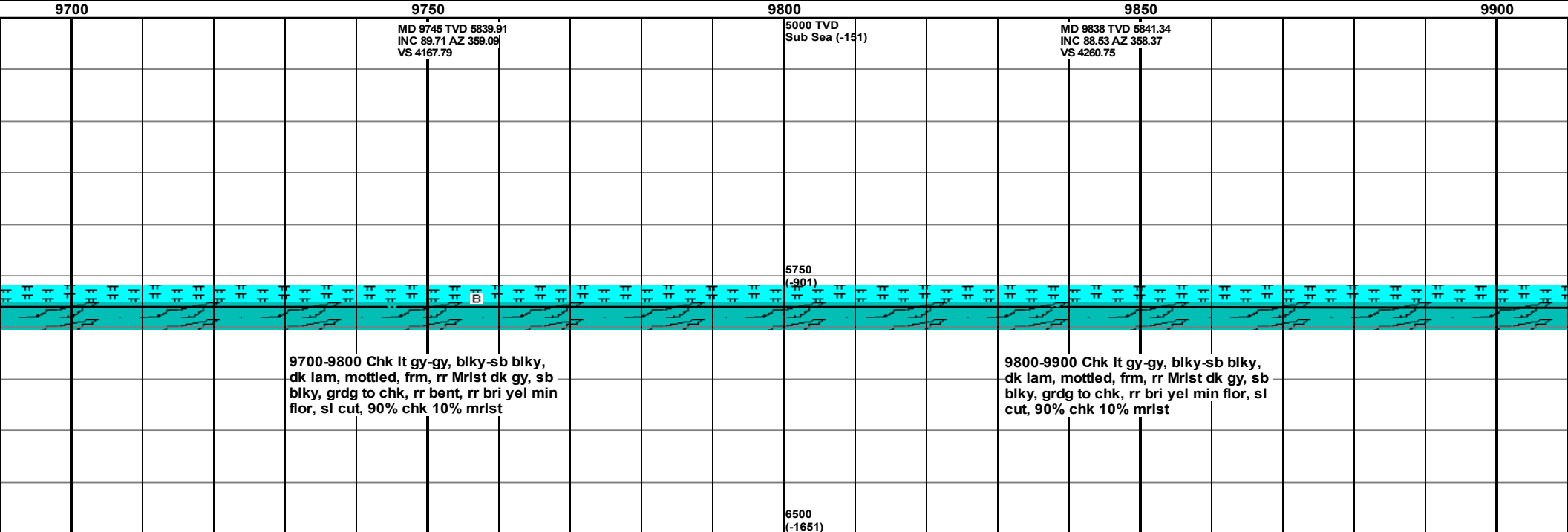
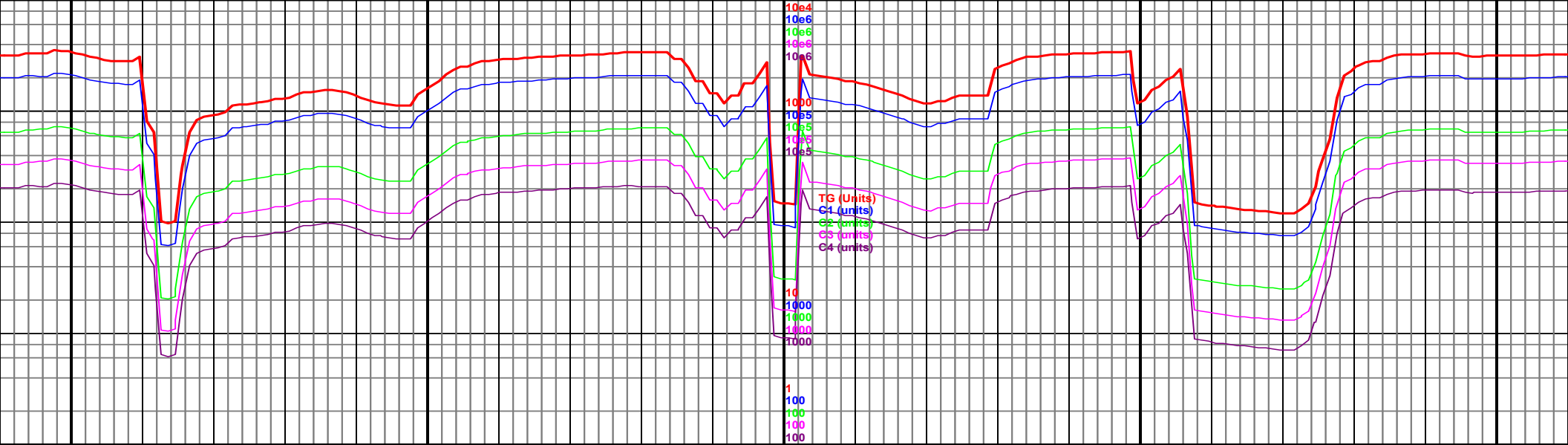


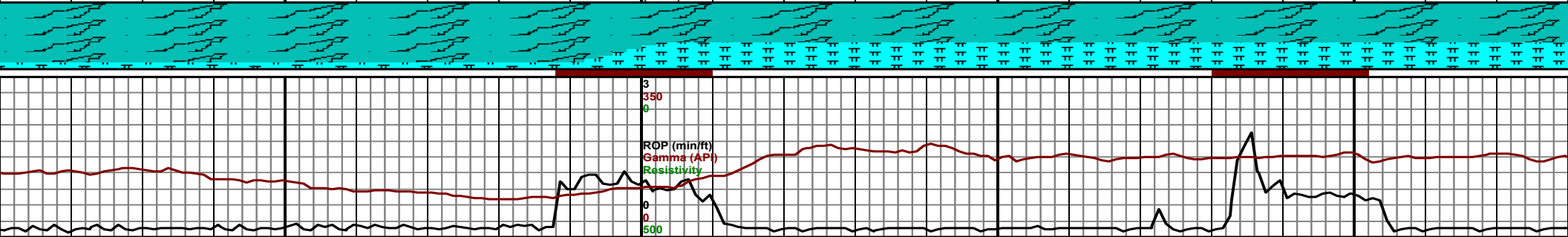
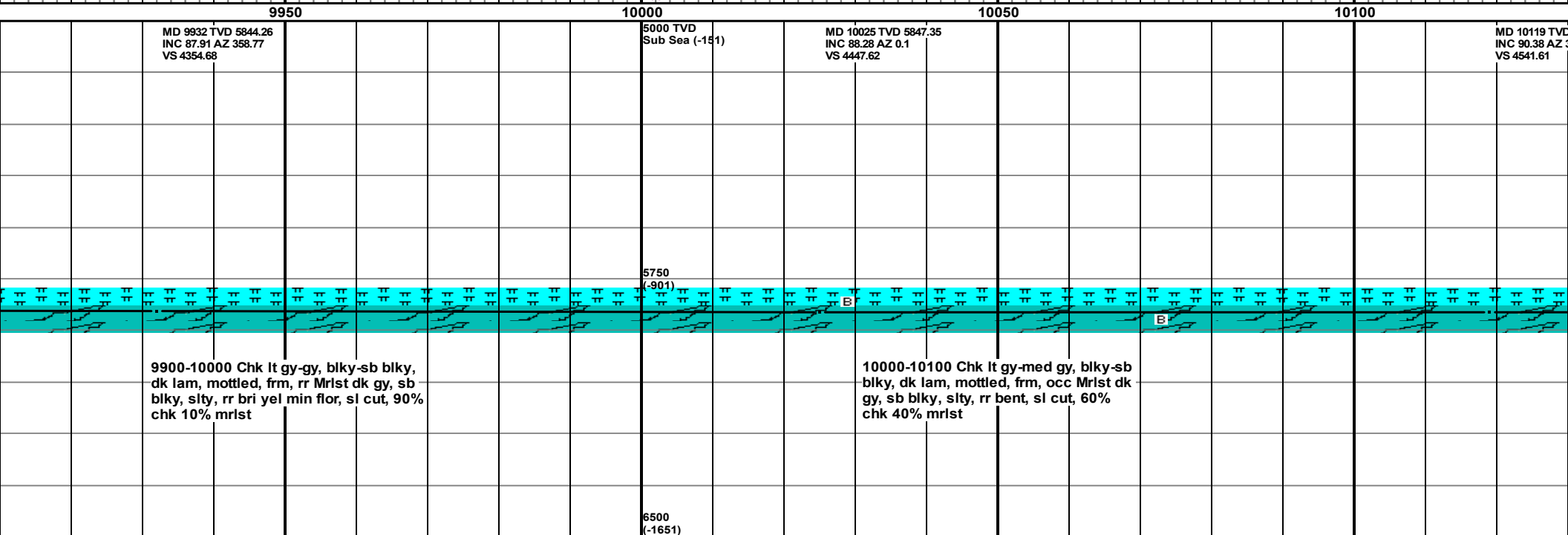
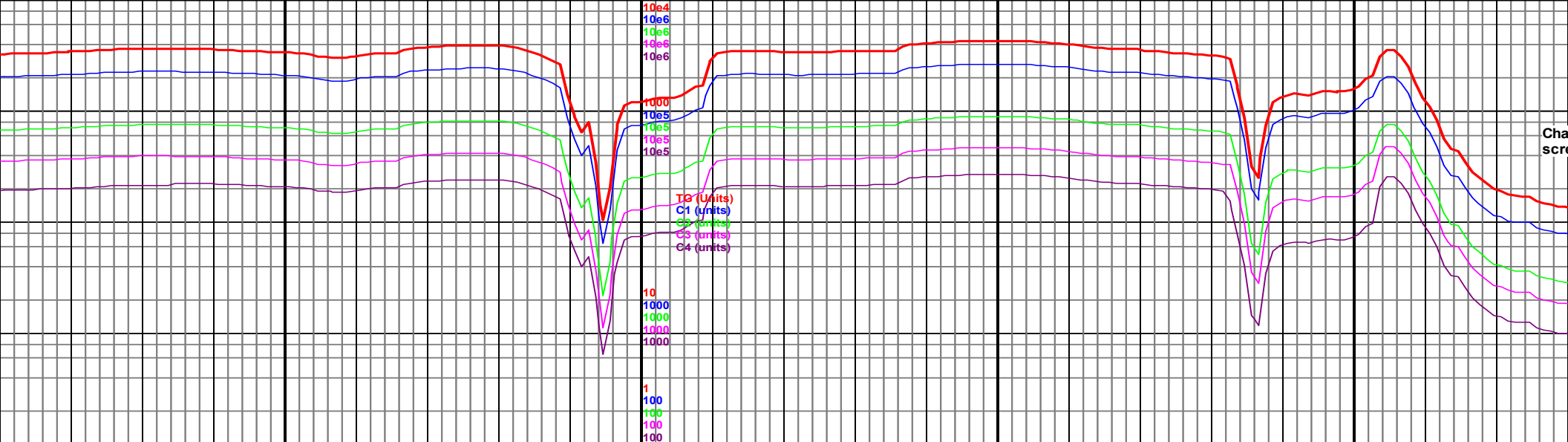


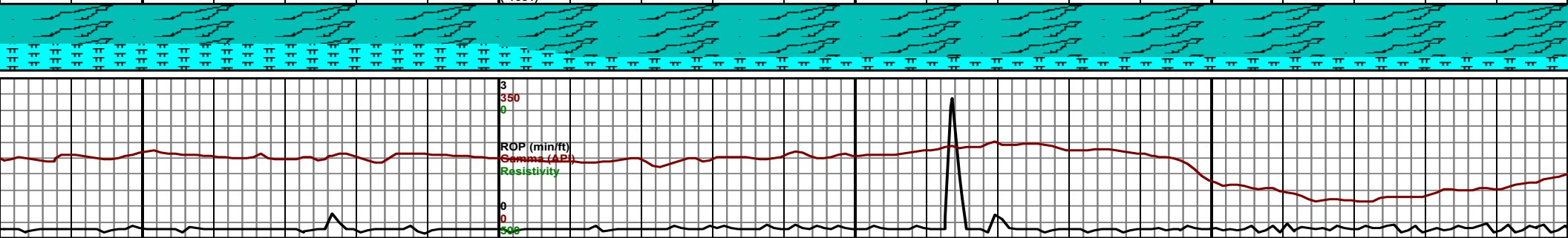
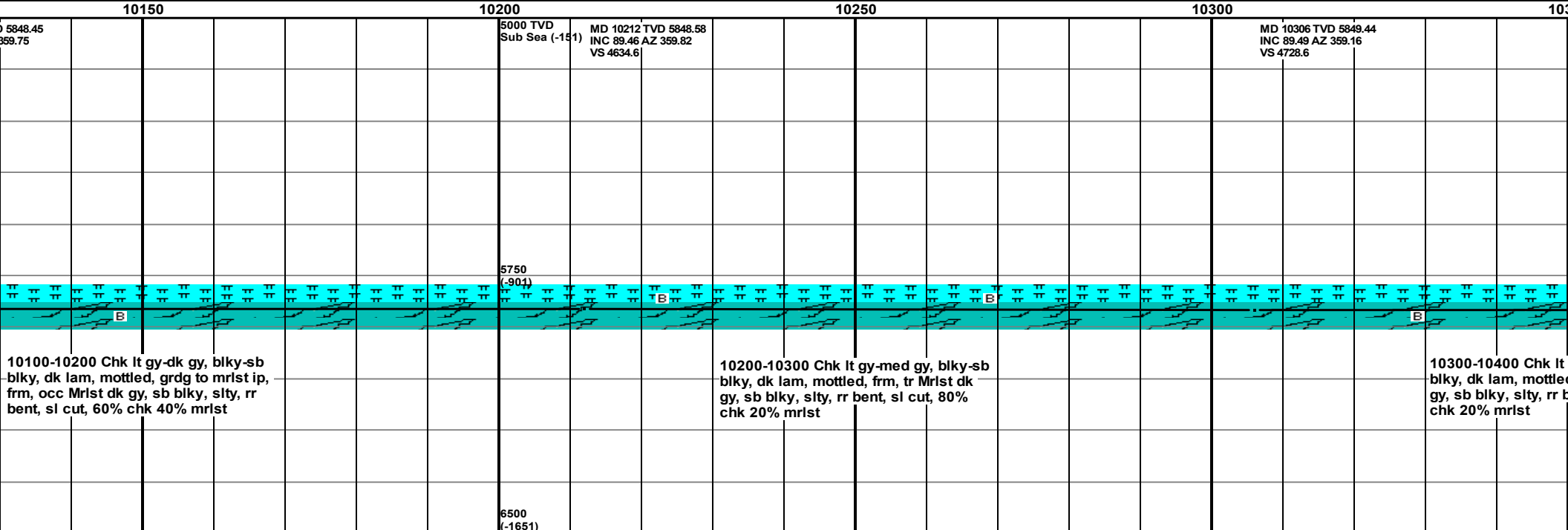
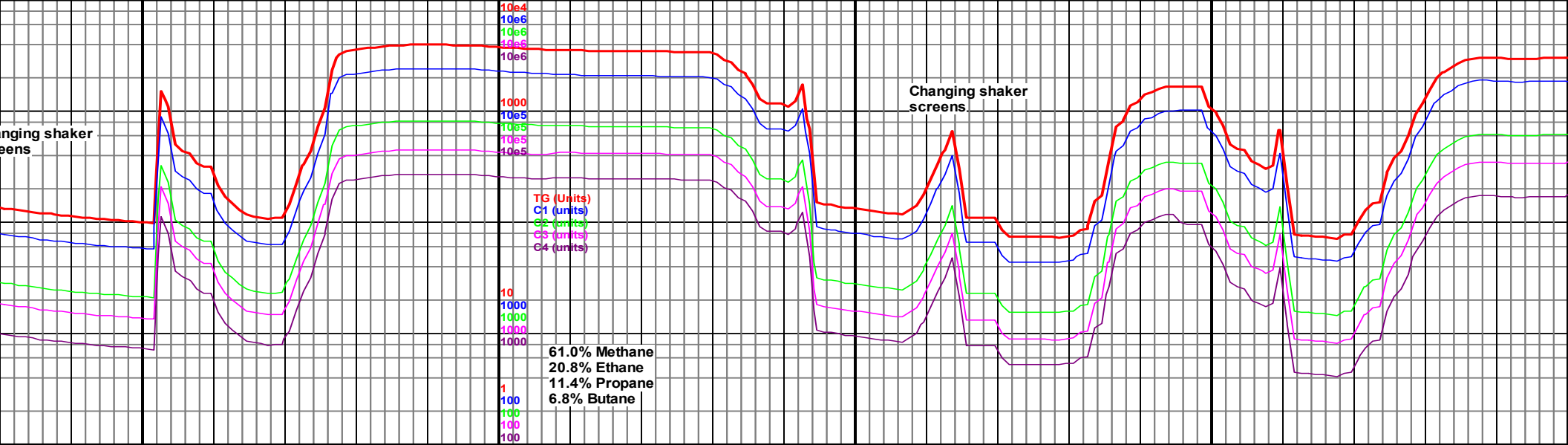


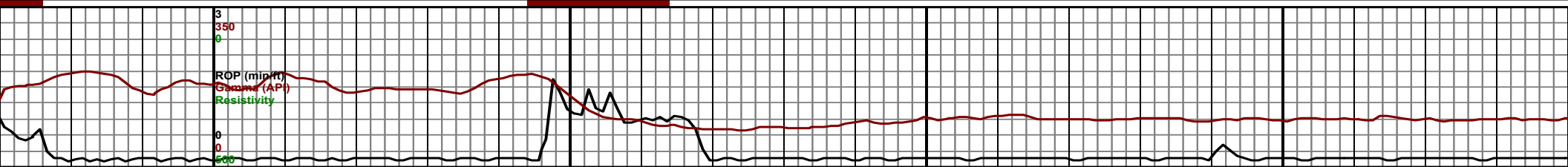
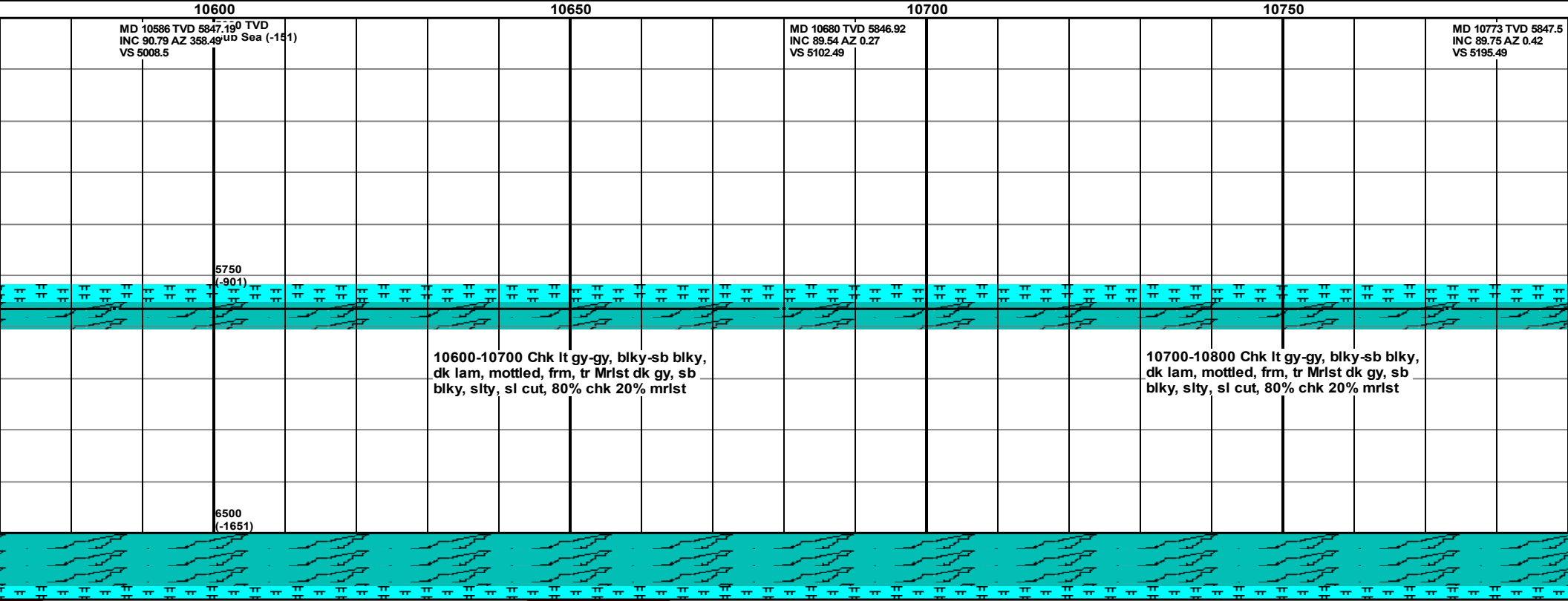
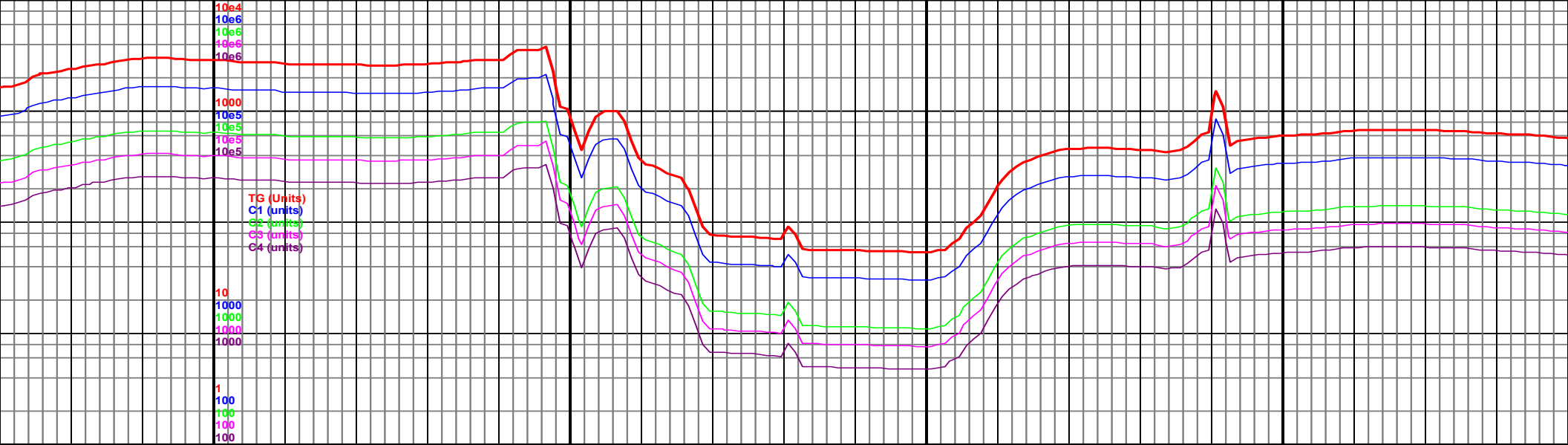


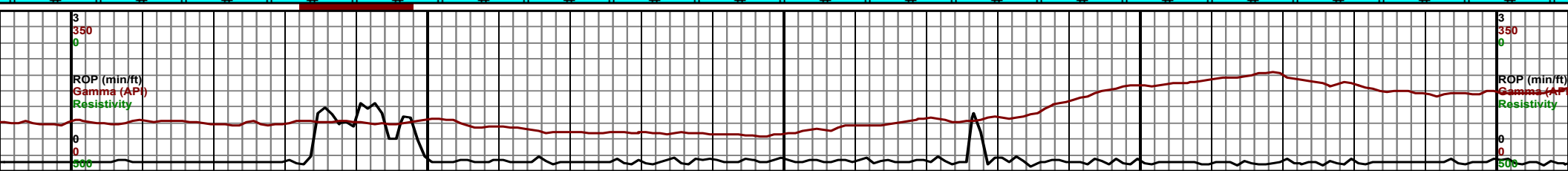
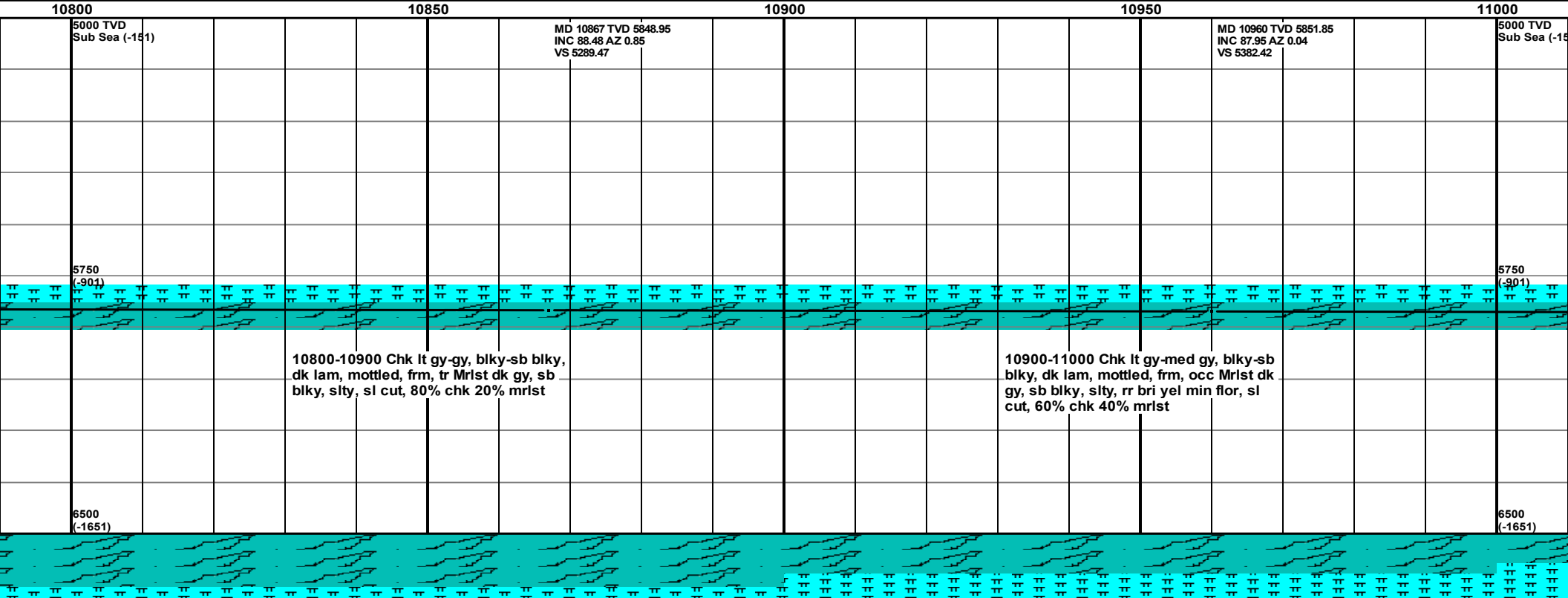
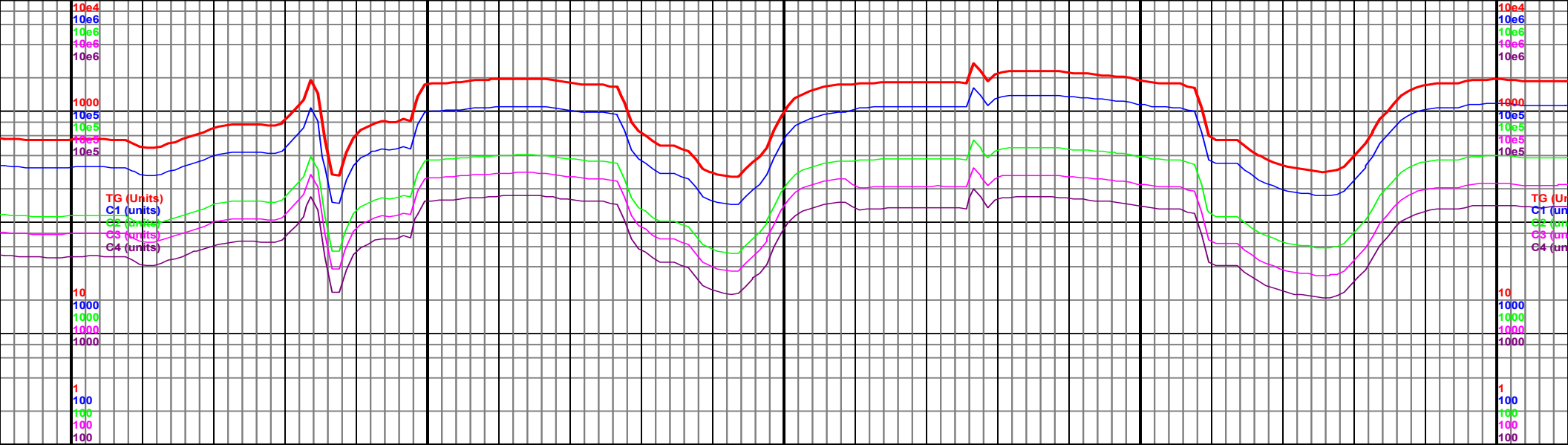


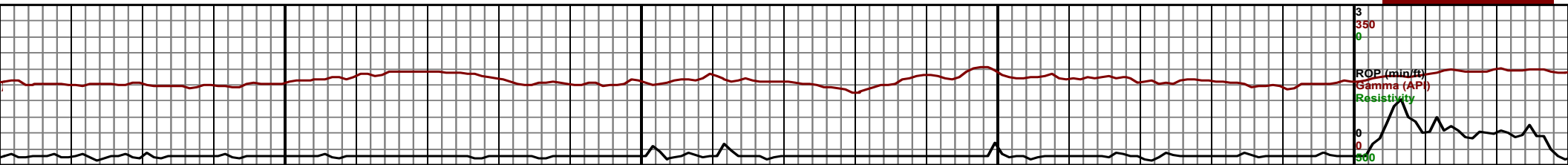
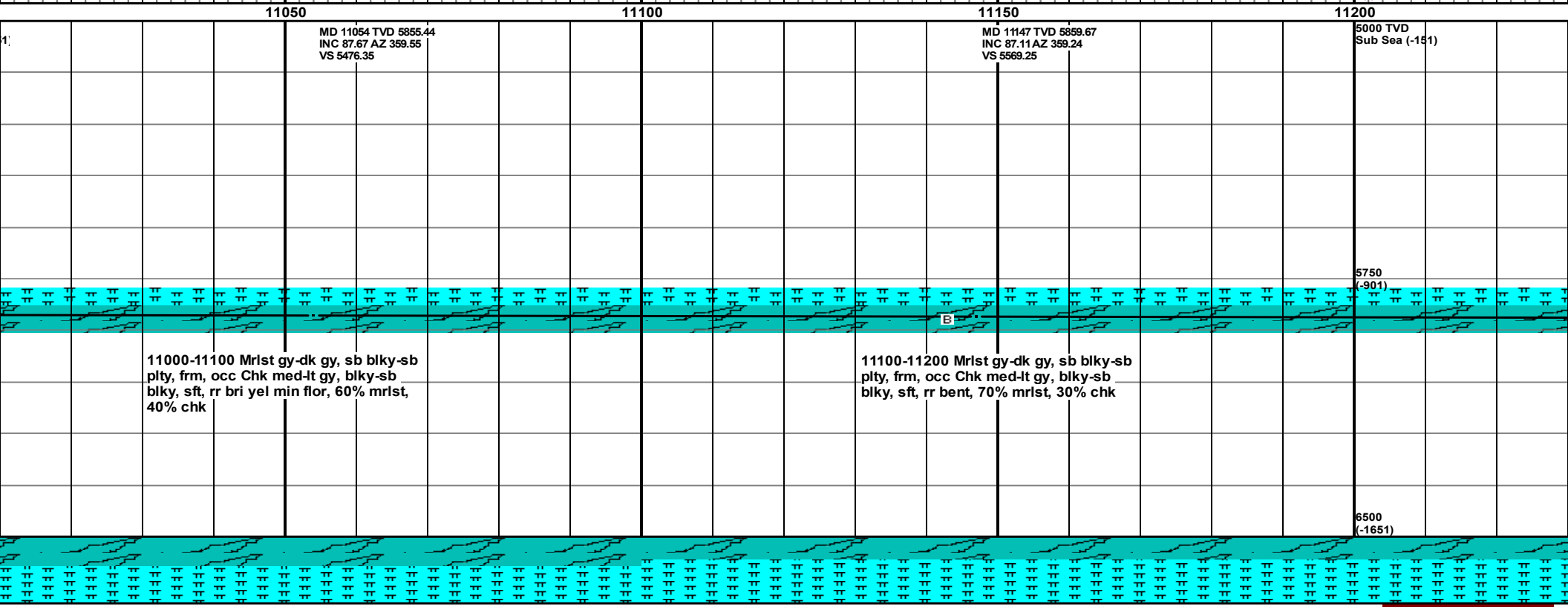
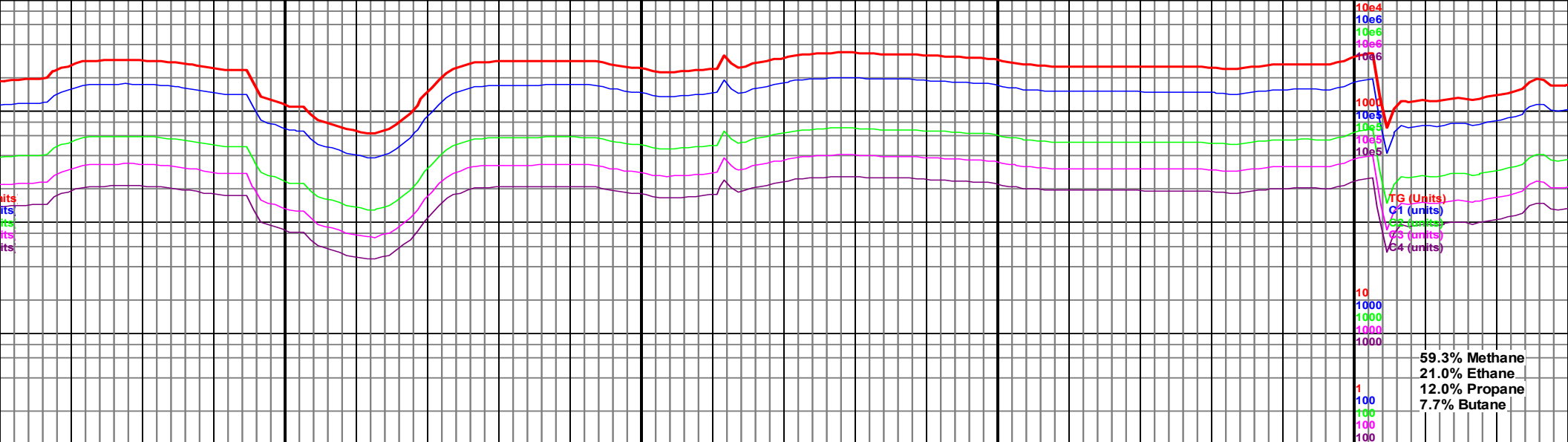


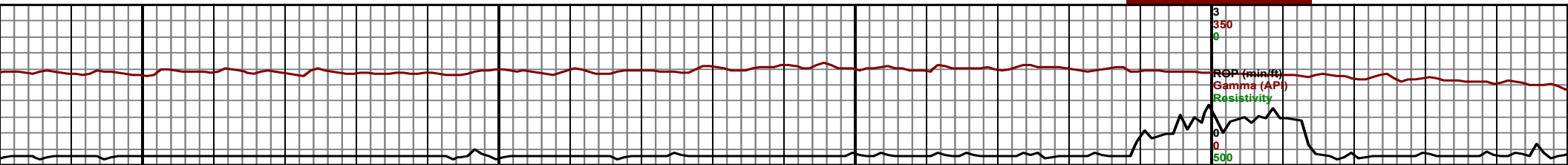
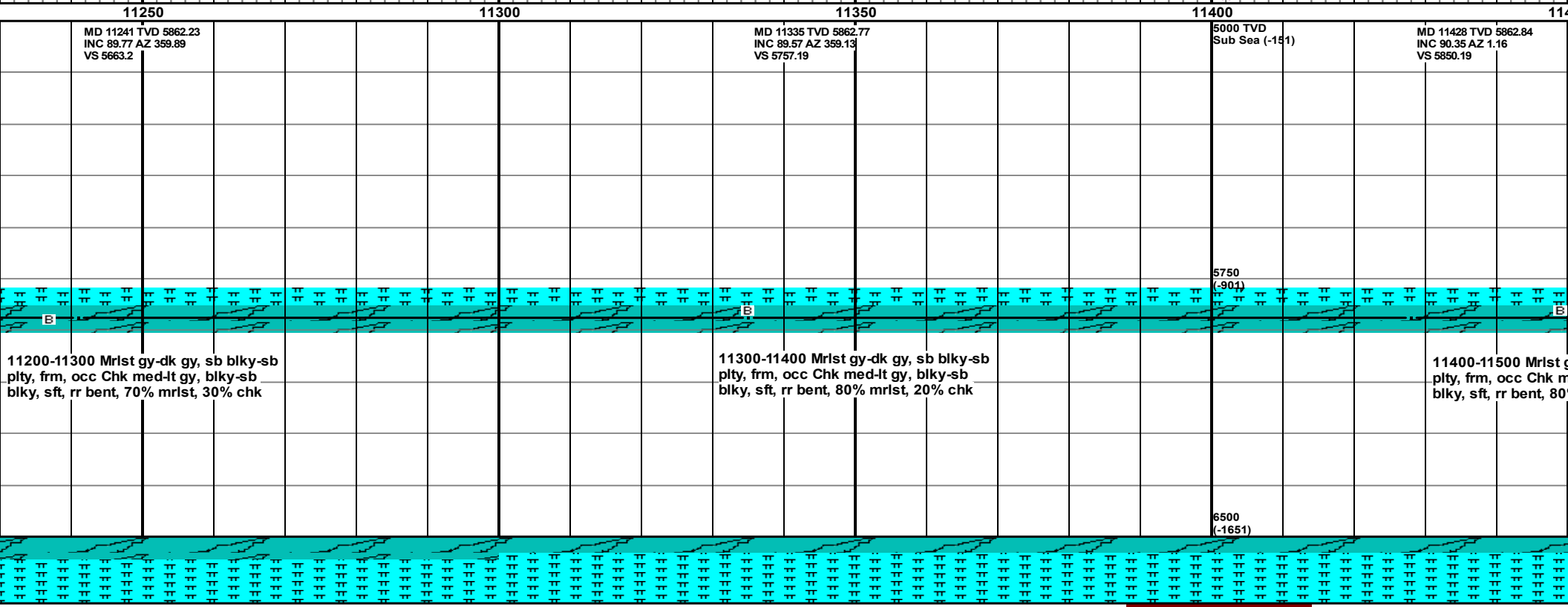
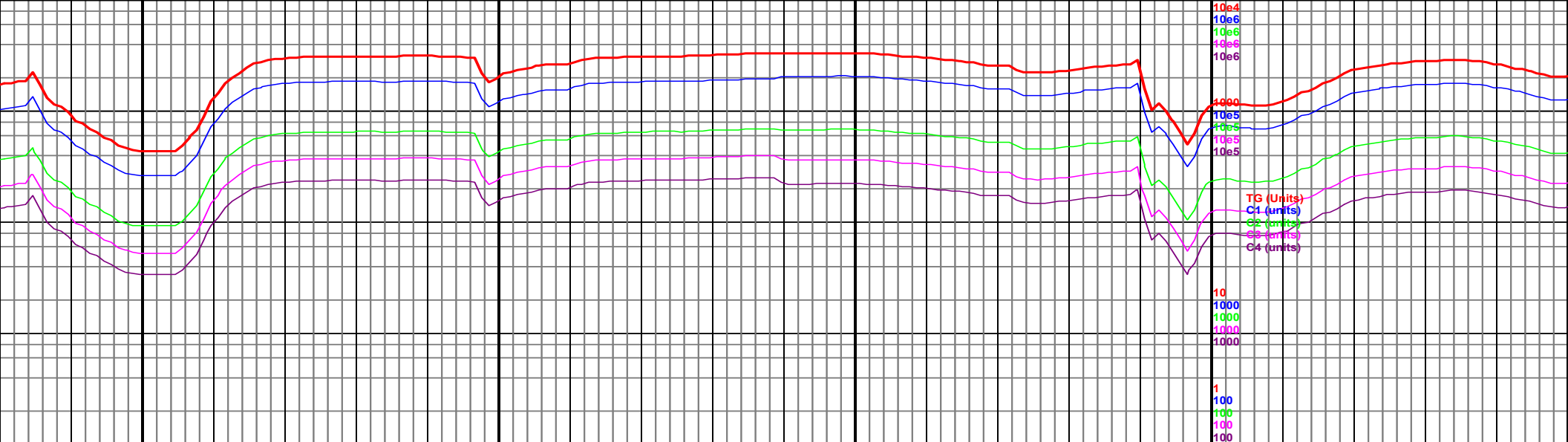


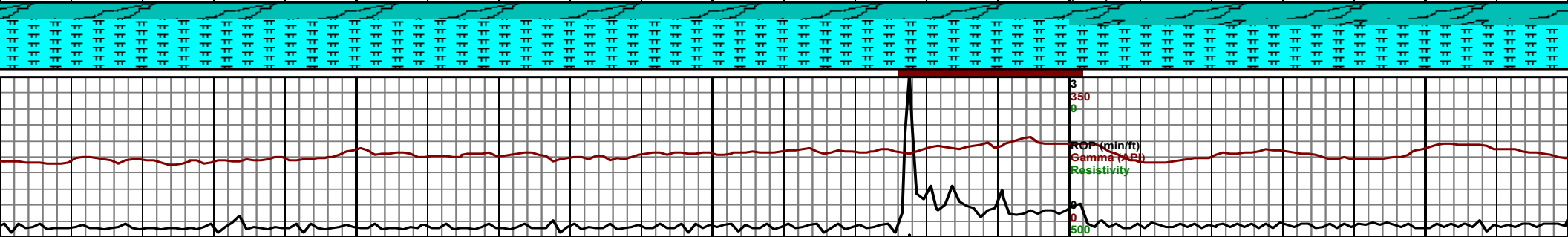
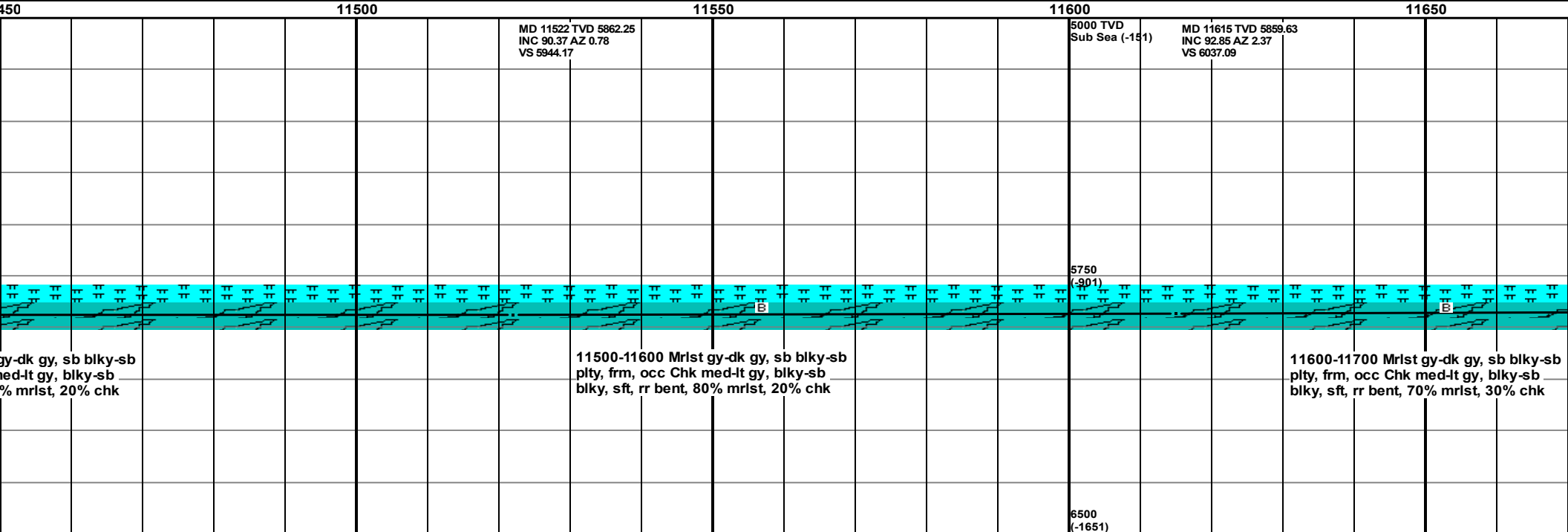
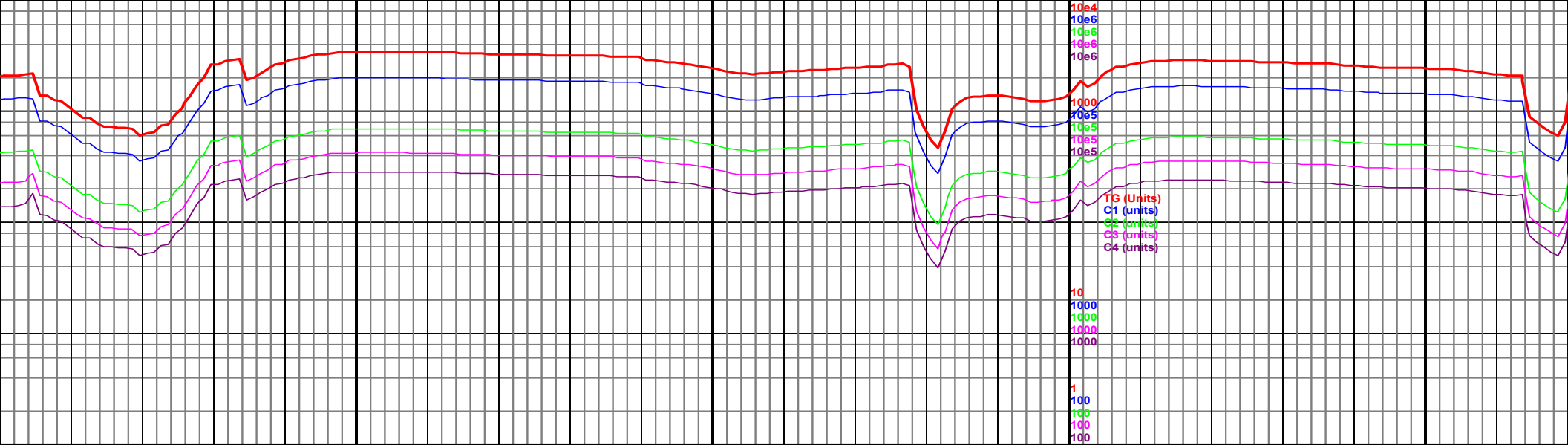


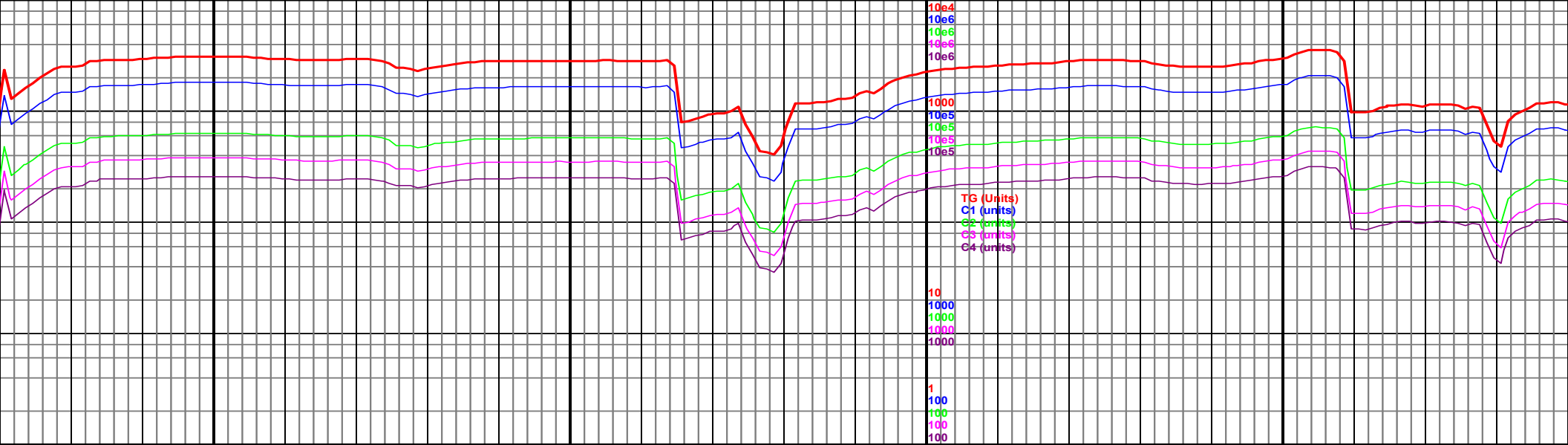












11700

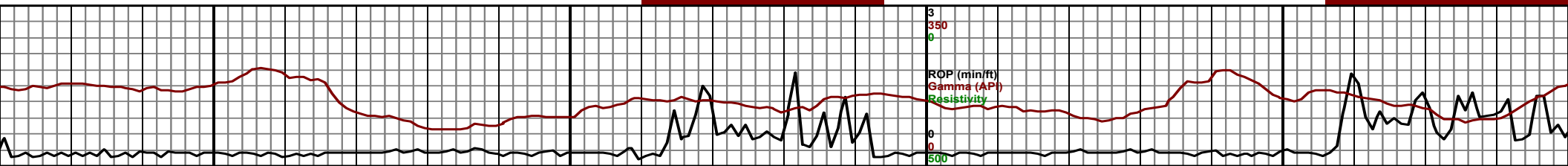
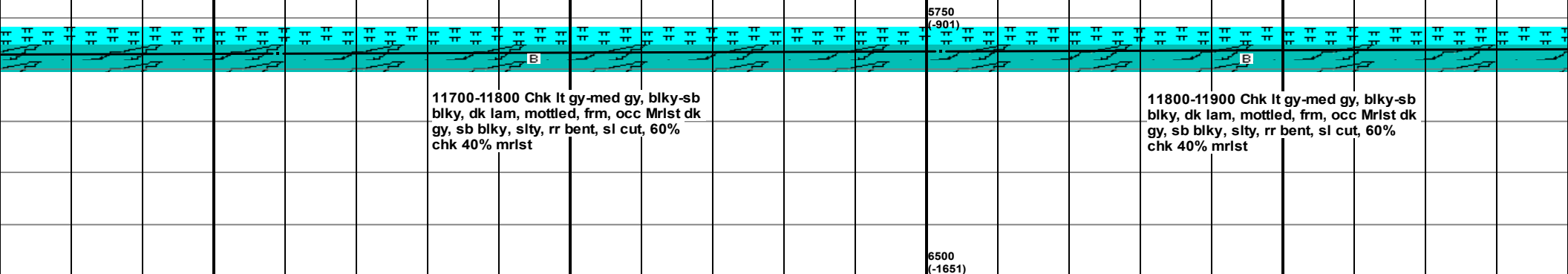
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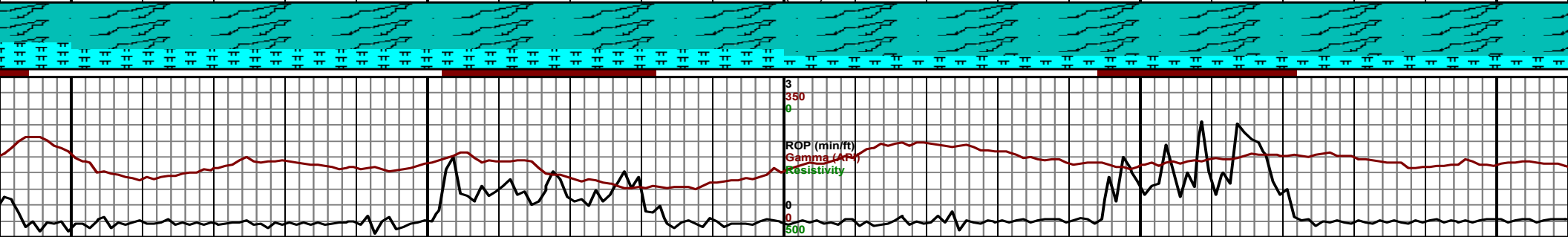
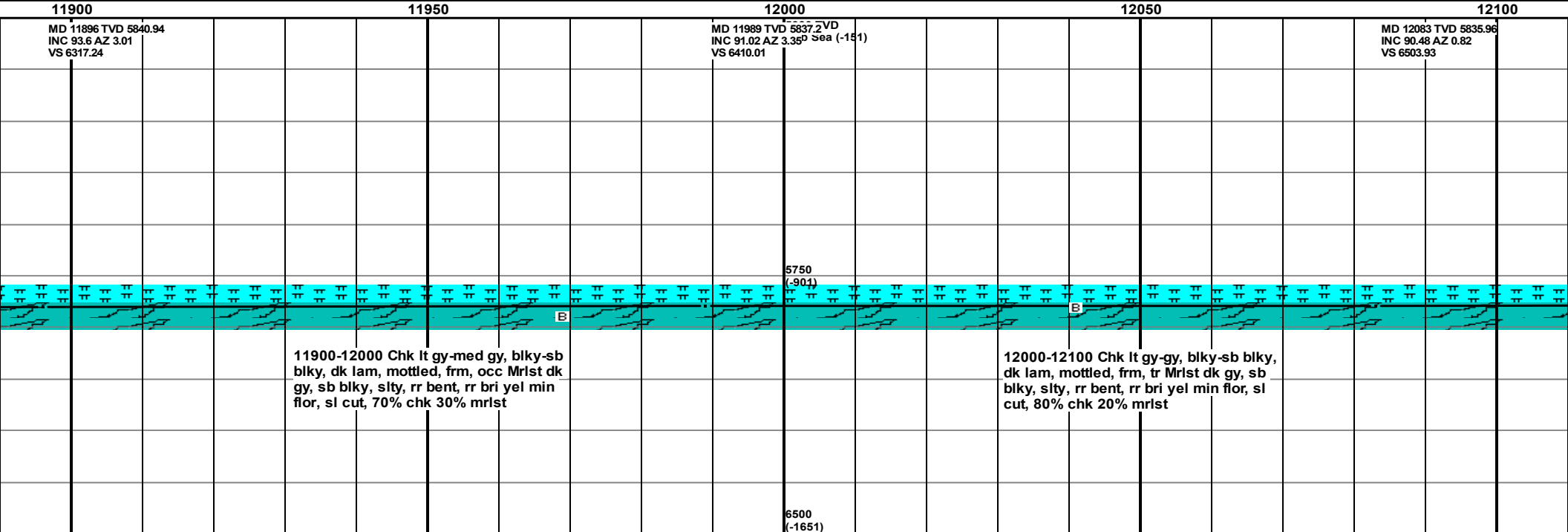
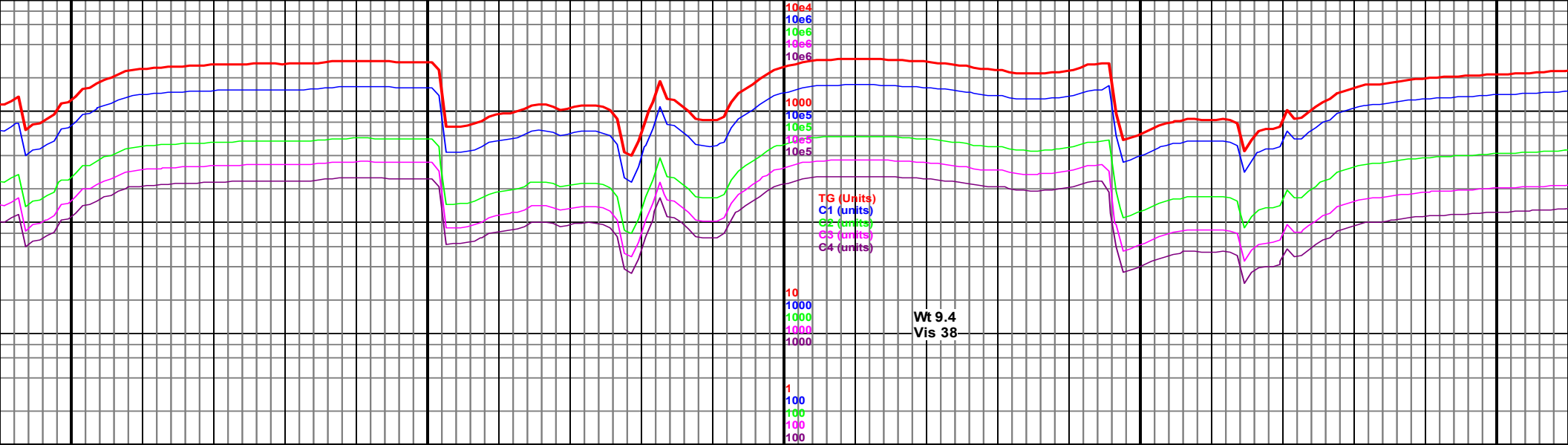
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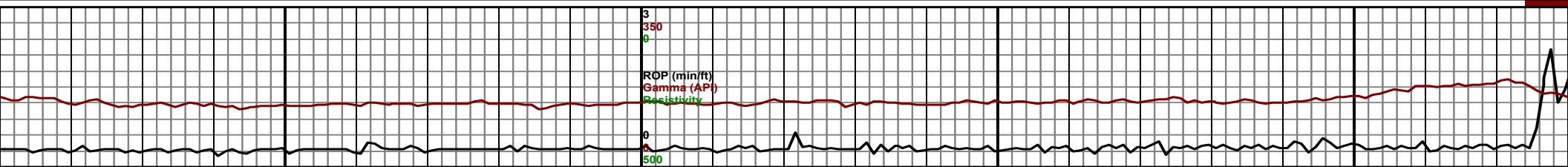
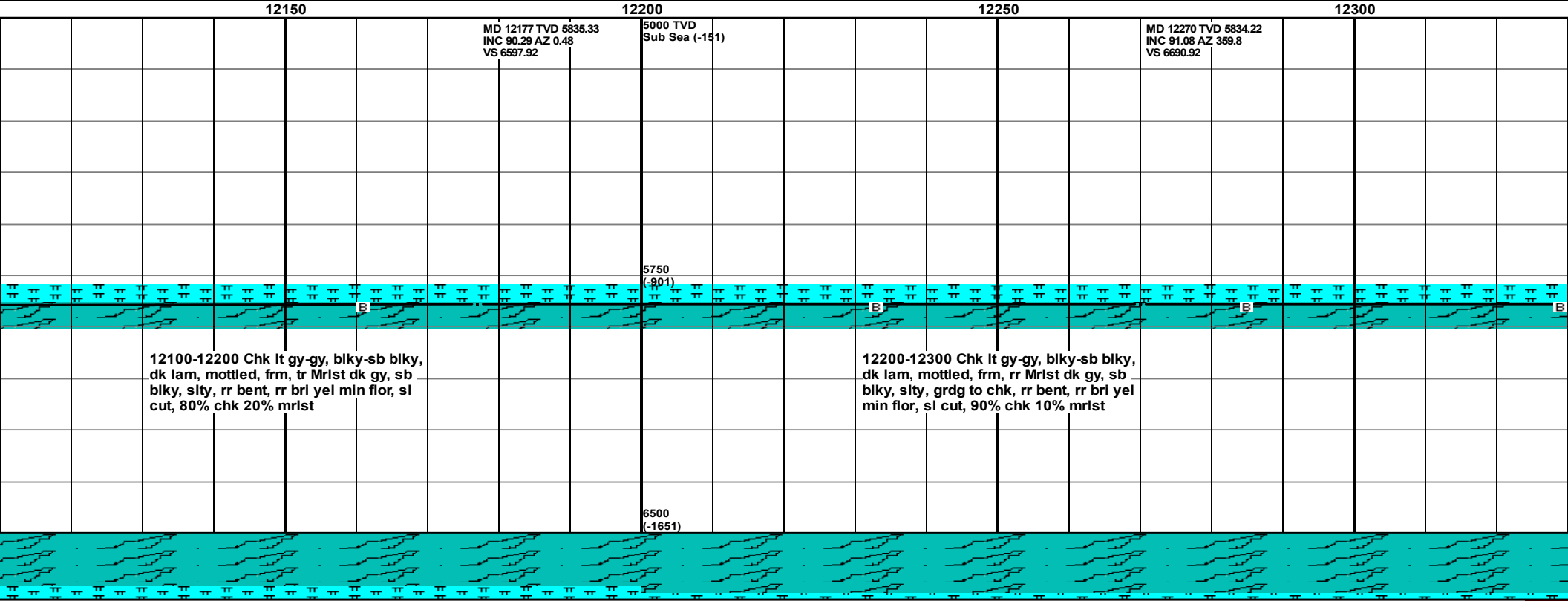
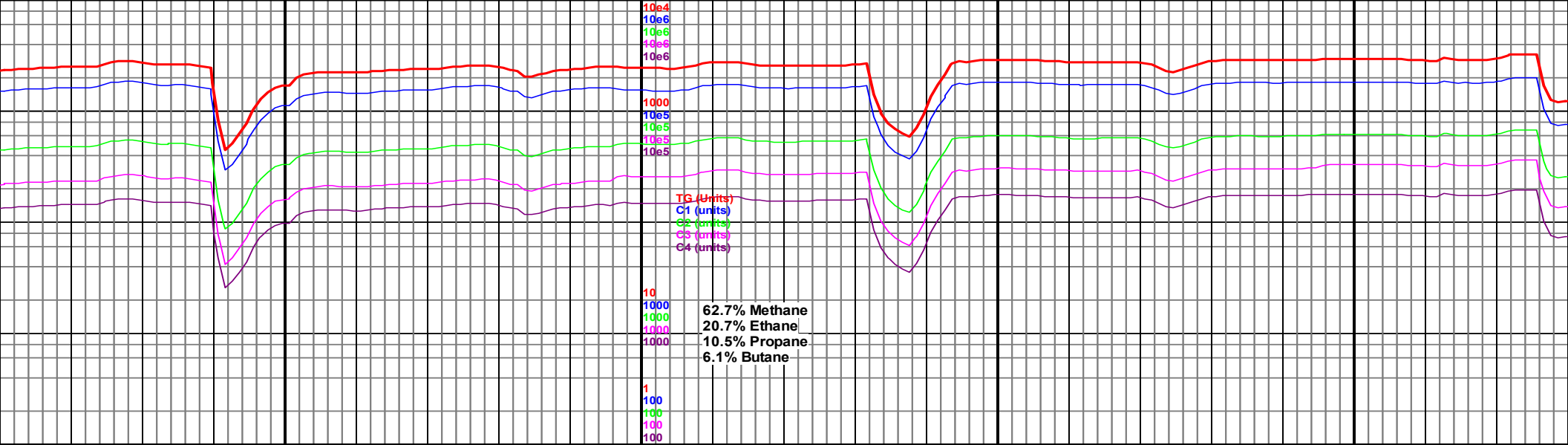
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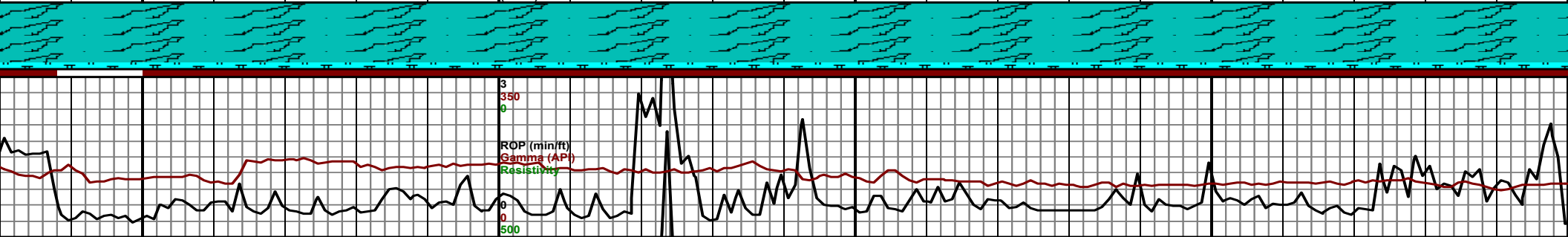
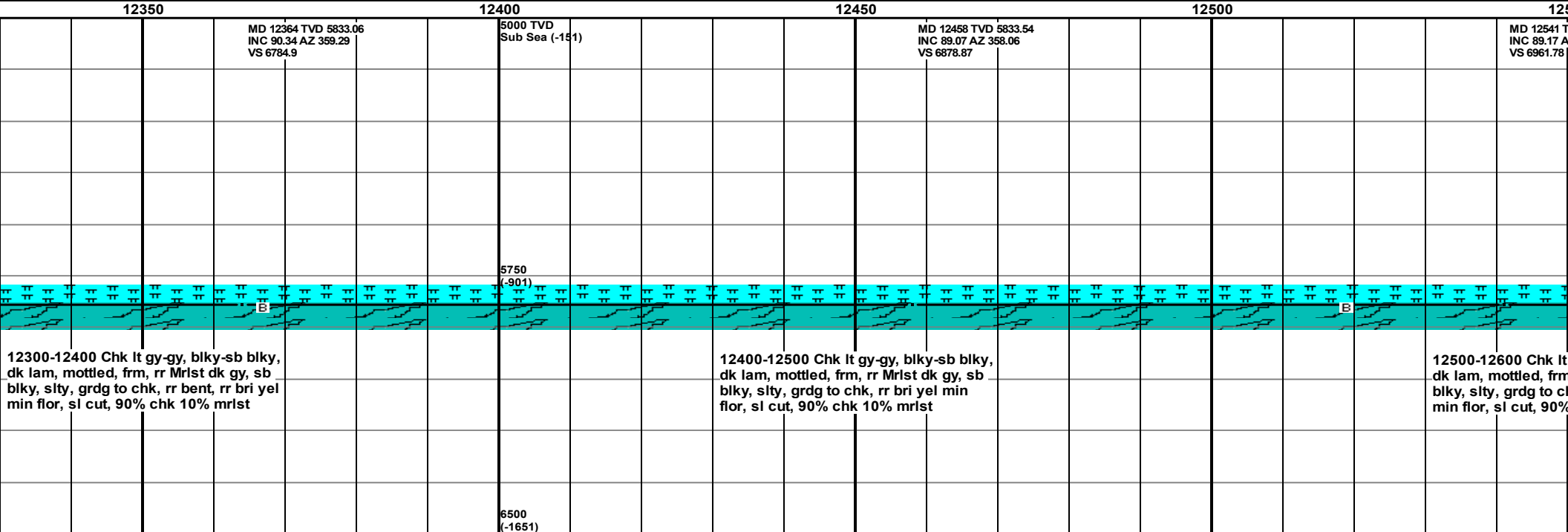
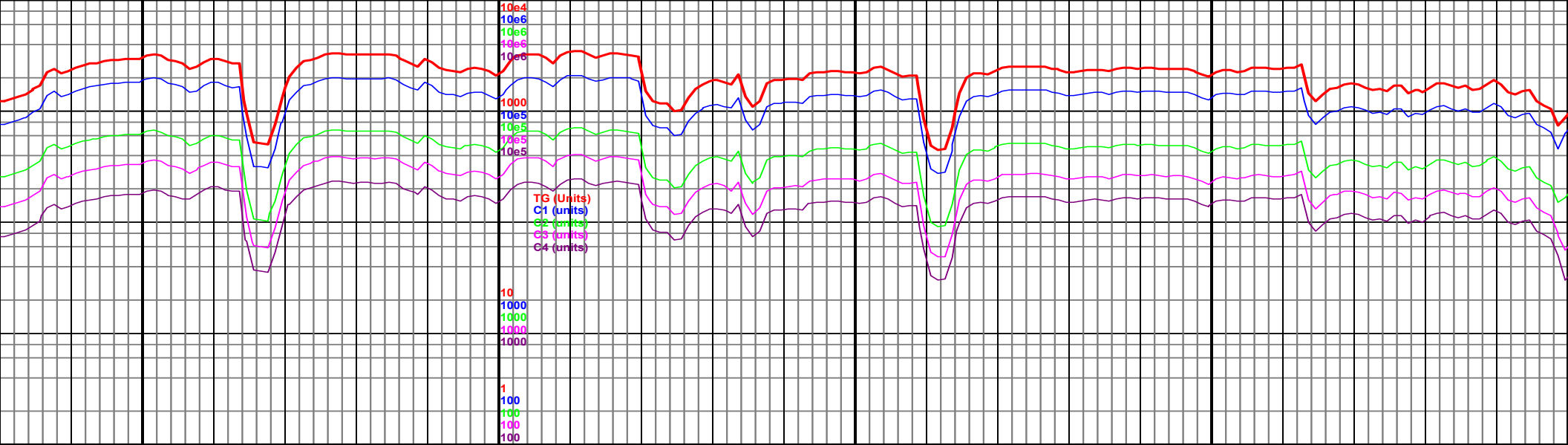
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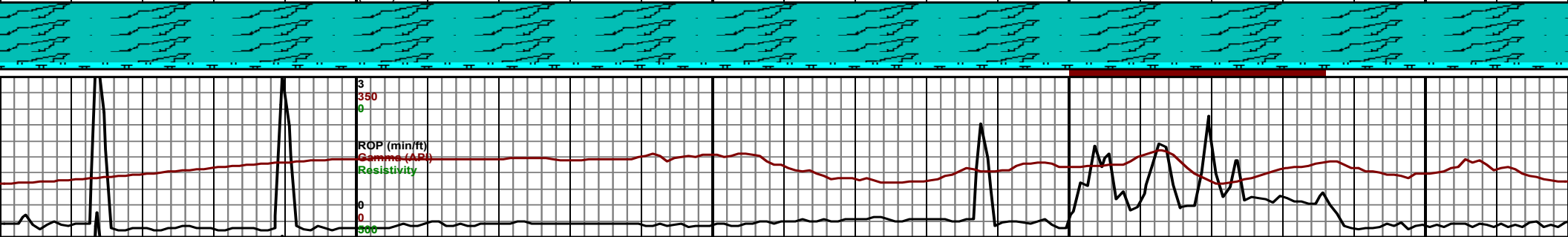
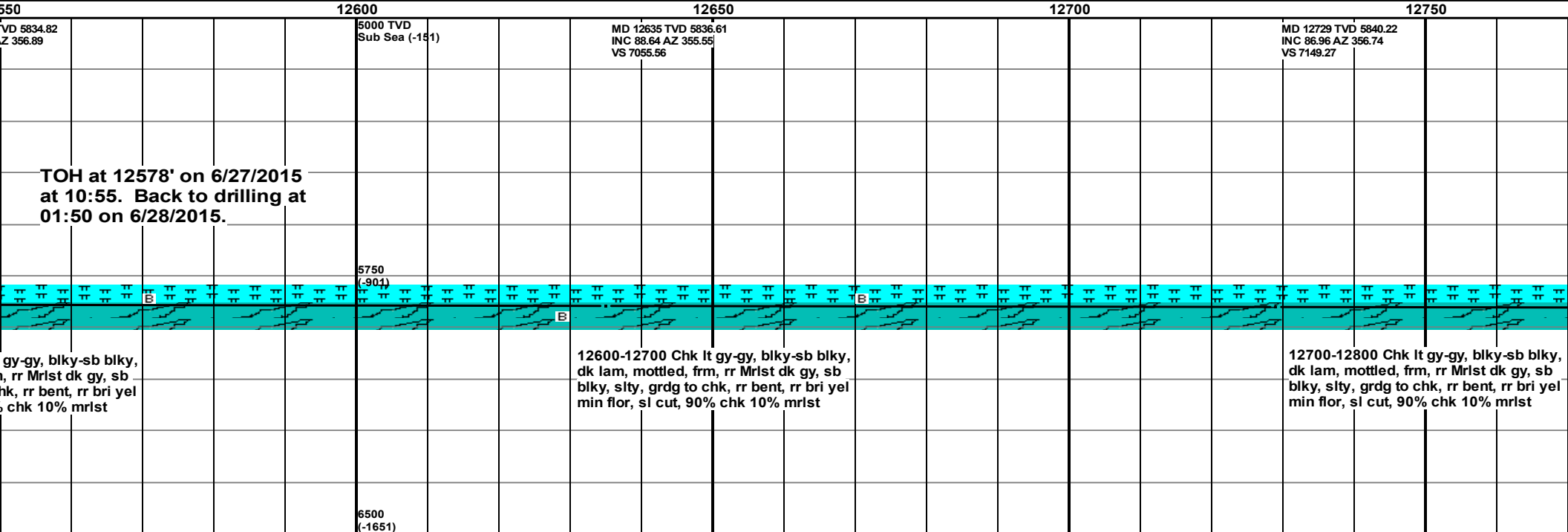
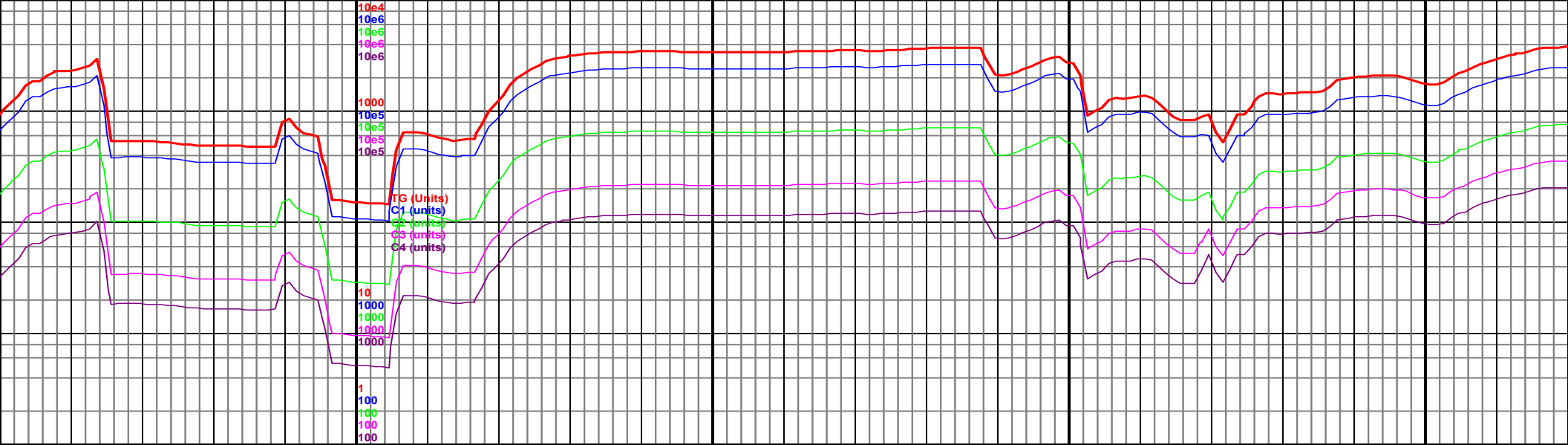
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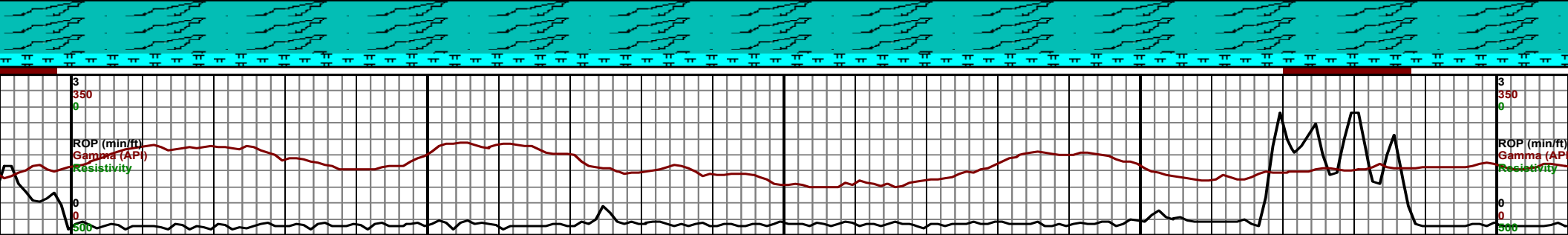
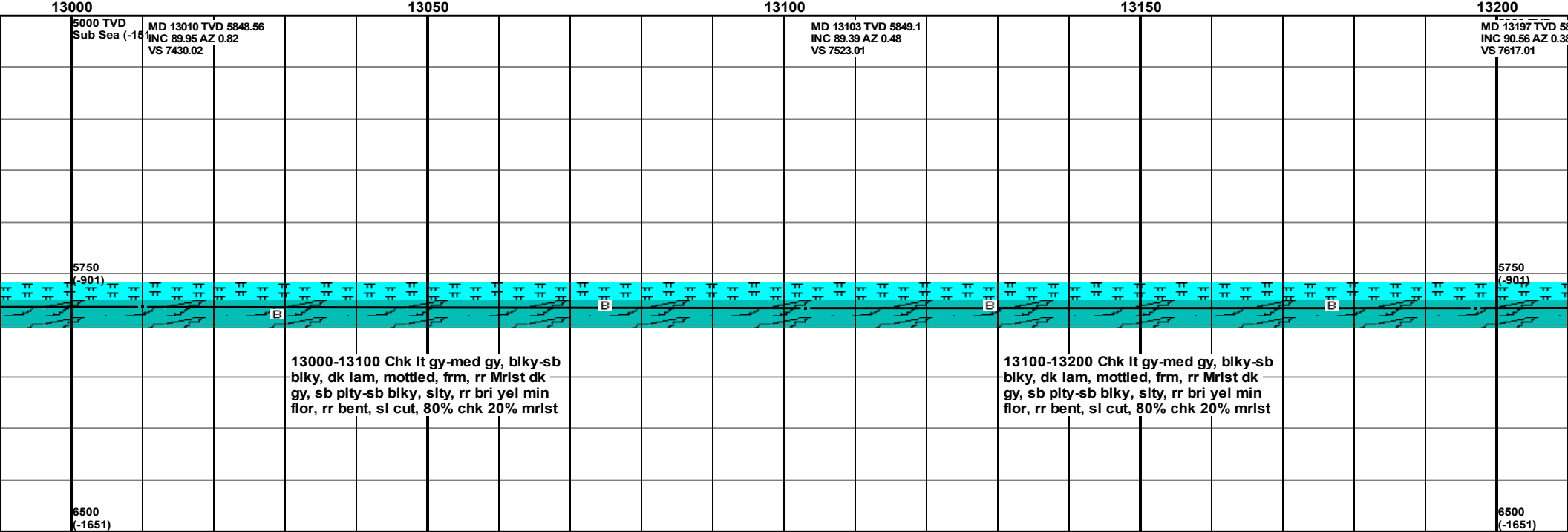
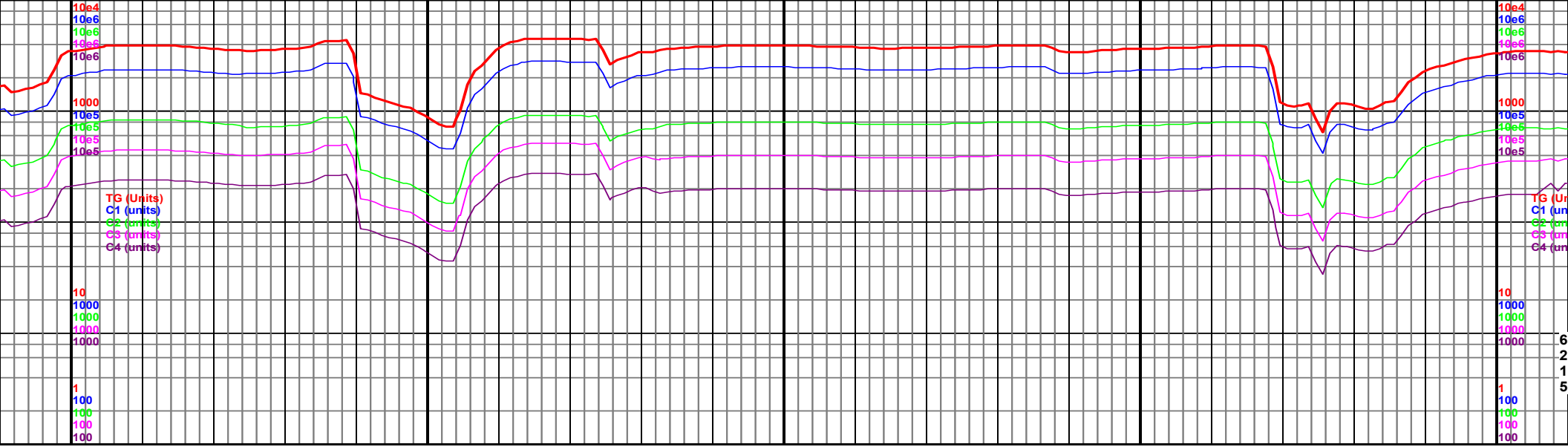


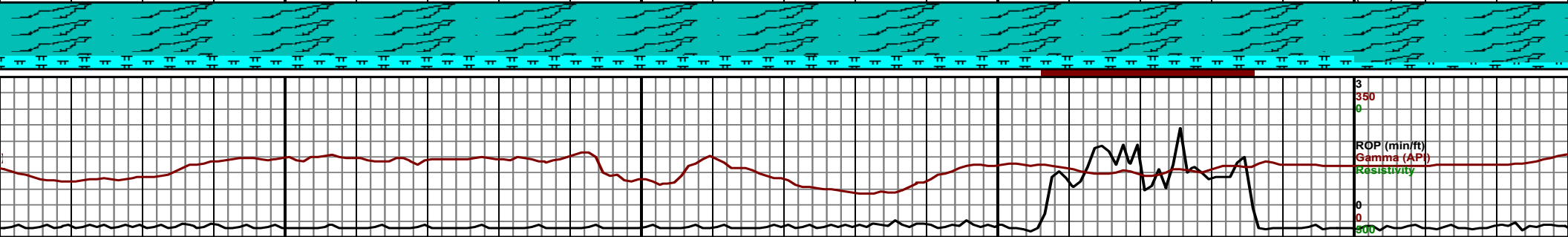
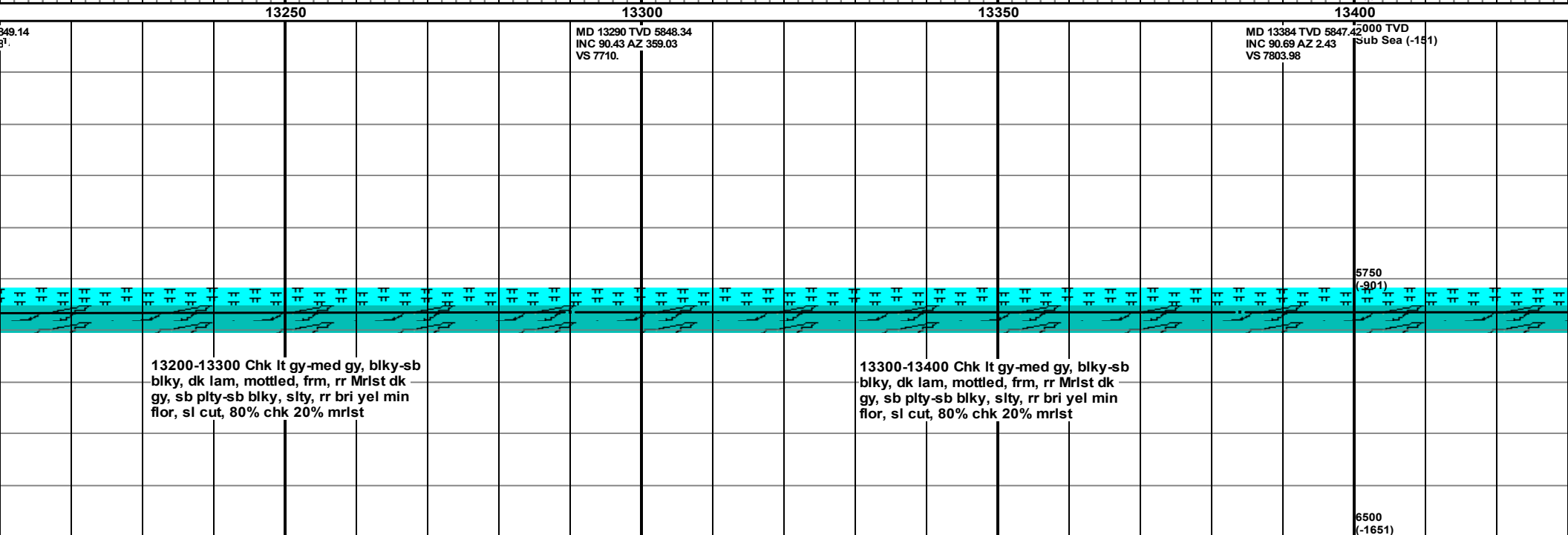
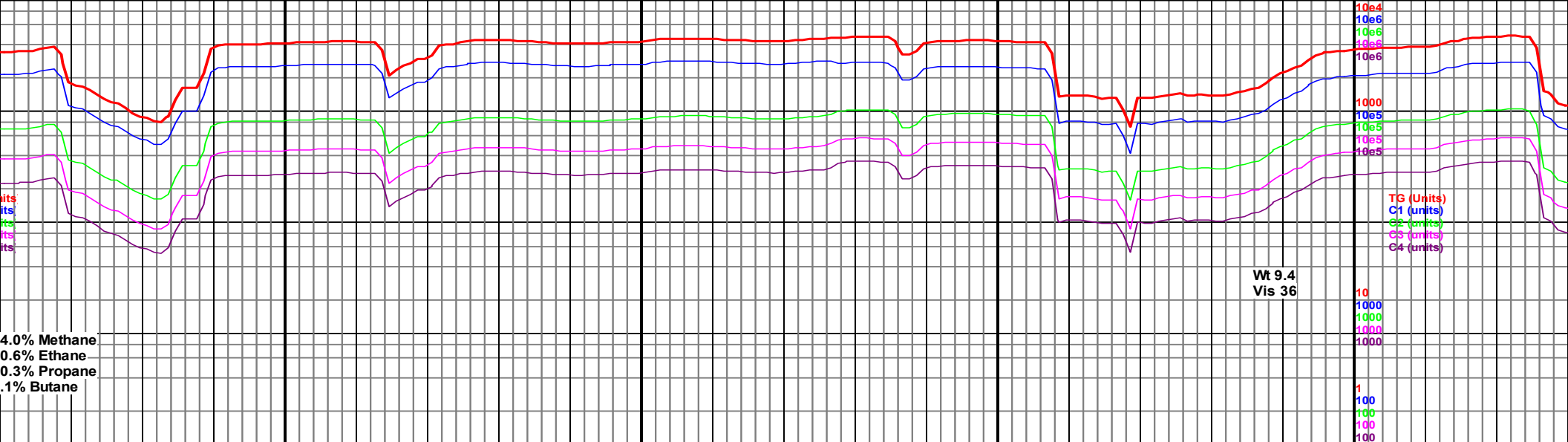


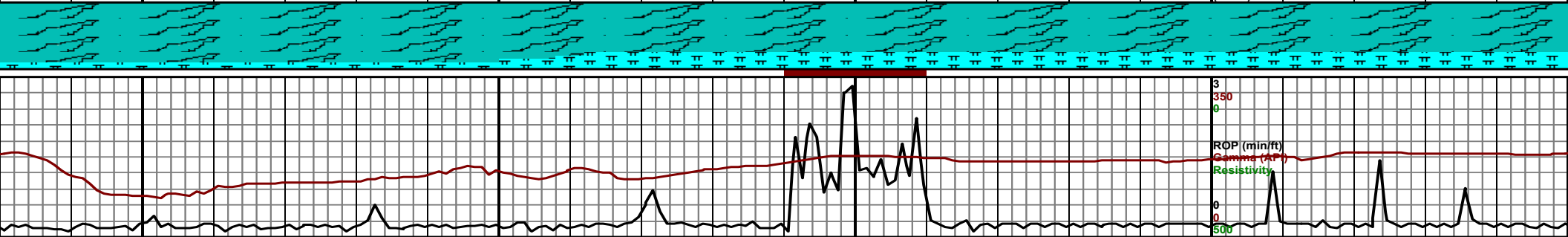
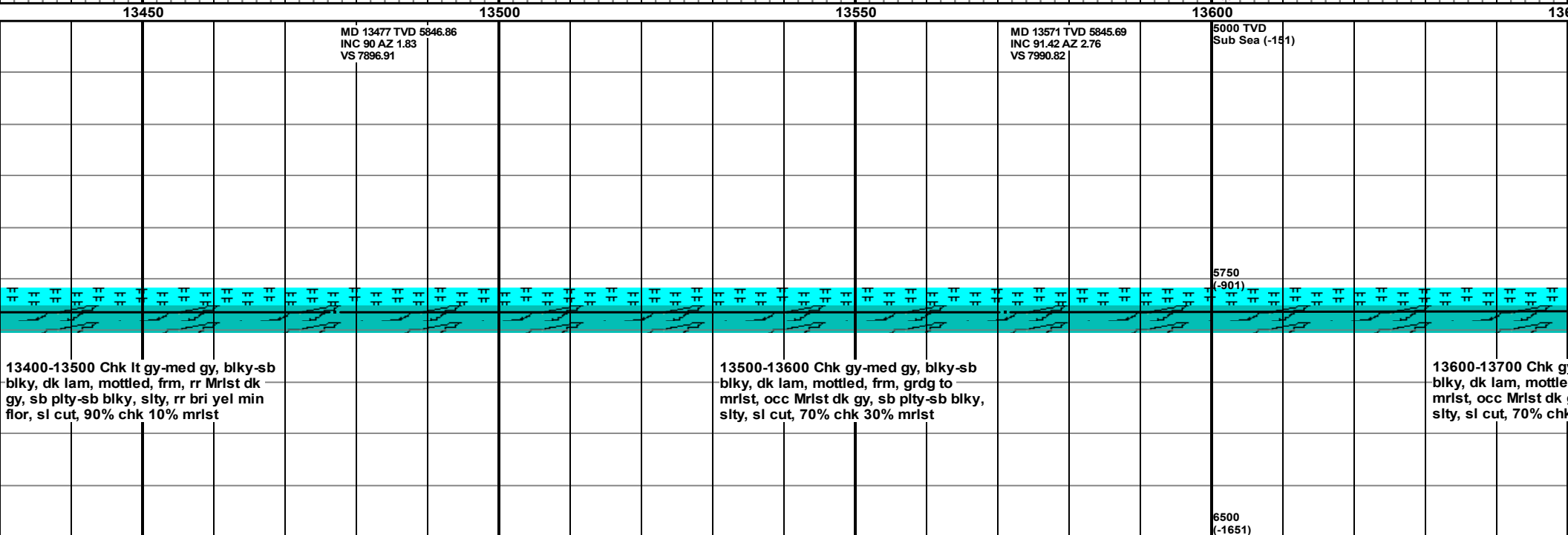
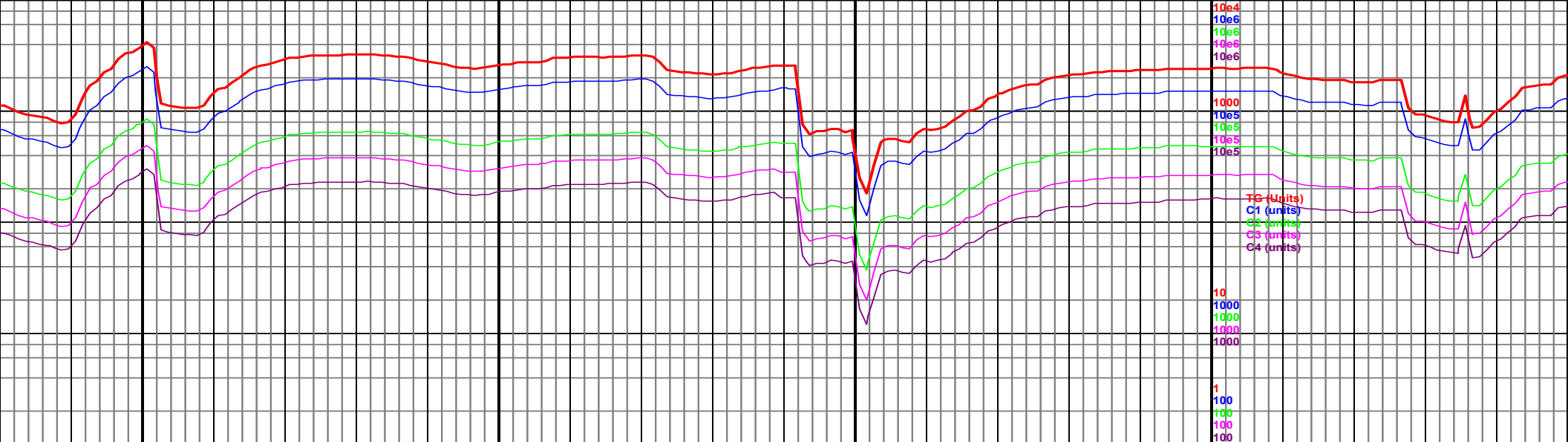


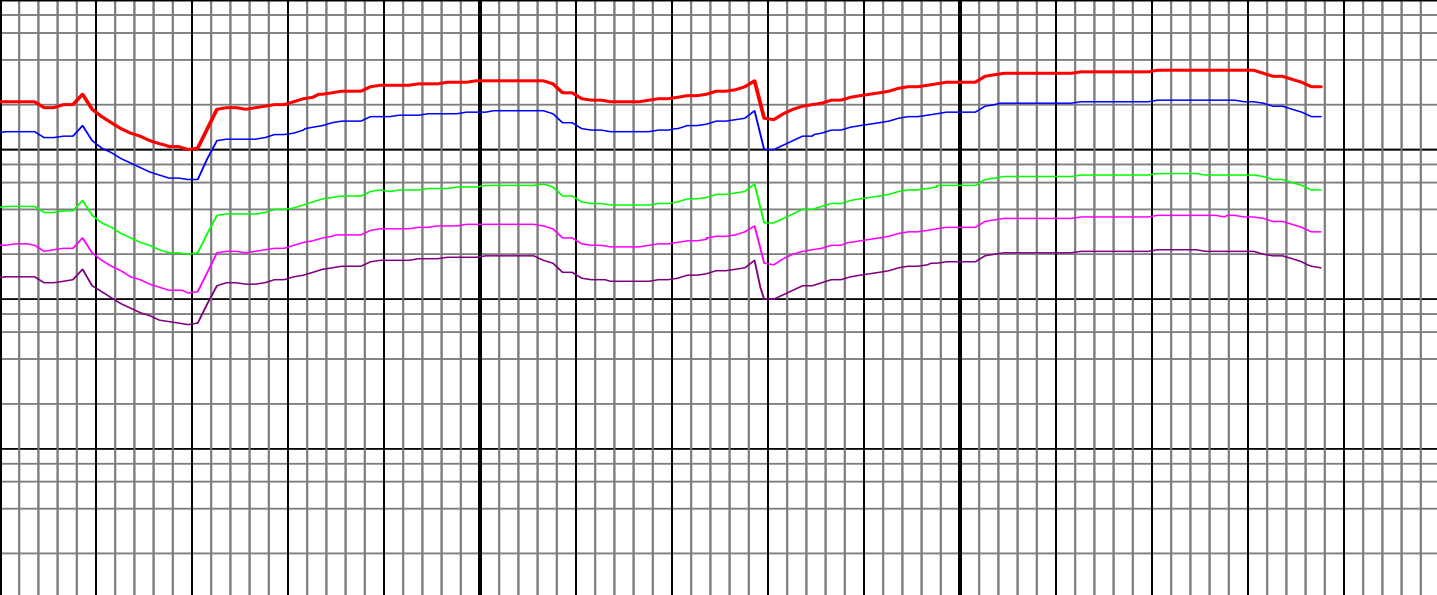












1350 13700 13750 13800

MD 13664 TVD 5843.62
INC 91.14 AZ 2.81
VS 8083.69

MD 13723 TVD 5842.93
INC 90.19 AZ 1.3
VS 8142.65

TD 13788' reached at
13:42 on 6/28/2015

y-med gy, blk-sb
d, frm, grdg to
gy, sb plty-sb blk,
c 30% mrlst

13700-13788 Chk med gy, blk, dk lam,
mottled, frm, grdg to mrlst, occ Mrlst dk
gy, sb plty-sb blk, slty, sl cut, 60%
chk 40% mrlst

