



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

Well Name: Razor 11G-0209A
Well Id: 05-123-38731-00
Location: SWNE 11-T10N-R58W
License Number: 05-123-38731-00
Spud Date: 1/30/2015
Surface Coordinates: Lat.: 40.854244
Long.: -103.829664

Region: Redtail Field
Drilling Completed: 2/6/2015

Bottom Hole
Coordinates:
Ground Elevation (ft): 4976
Logged Interval (ft): 5412 To: 13537
Formation: Niobrara A Chalk
Type of Drilling Fluid: Wate Based Mud

K.B. Elevation (ft): 4993
Total Depth (ft): 13537

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: Eli DenBesten and Mitchell Schneider
Company: Acme Geologic Consulting
Address: 108 Berry Street
Little Rock, AR 72205

Drilling Company


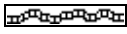
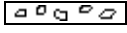
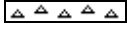
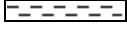
Xtreme Drilling, LLC
Rig #18






Gas Detection



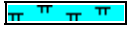
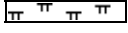

Mudlogging Systems, Inc., M Logger, Model TGC, Total Gas and Chromatograph, #458

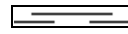
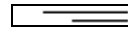
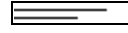


Comments




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

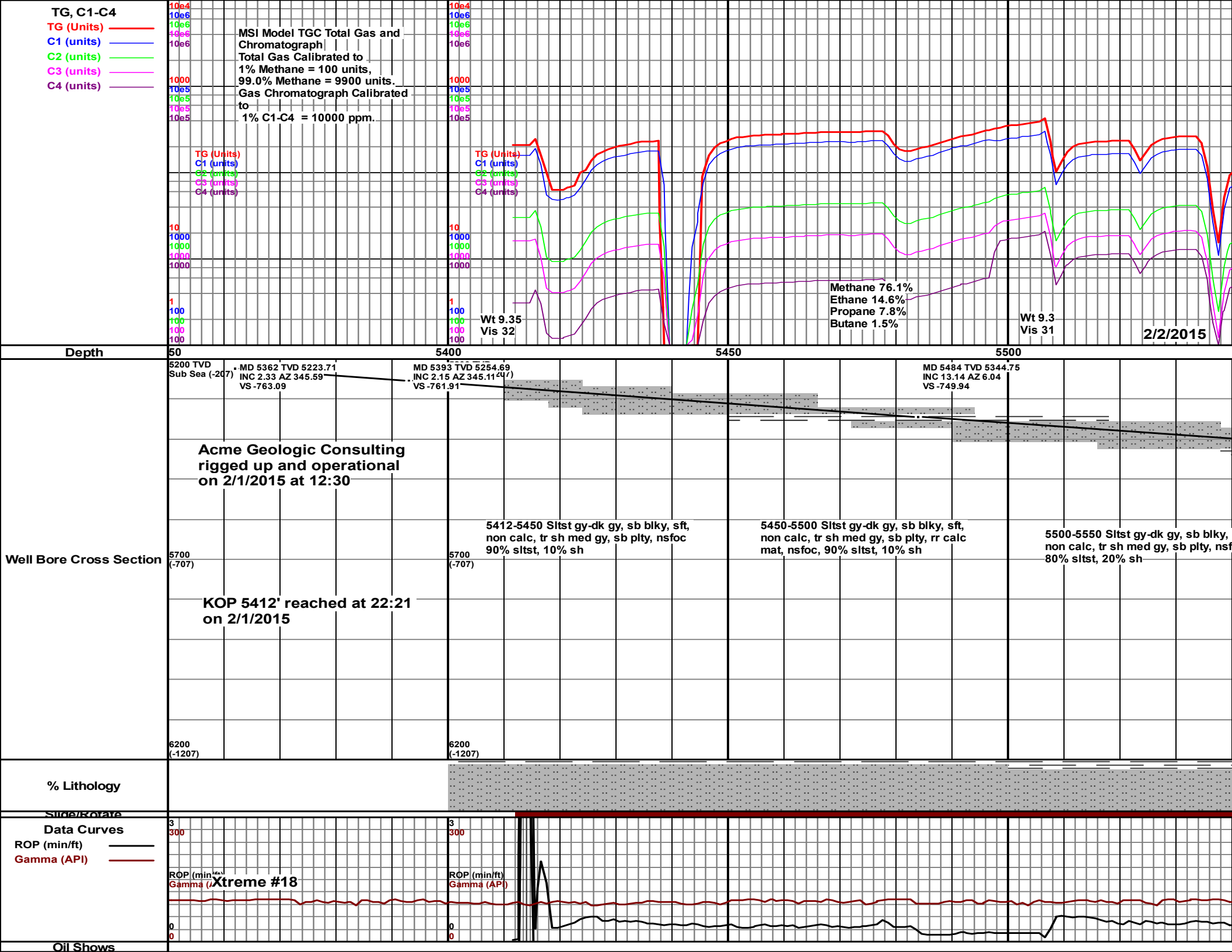
ROUNDING
 Rounded
 Subrnd
 Subang
 Angular

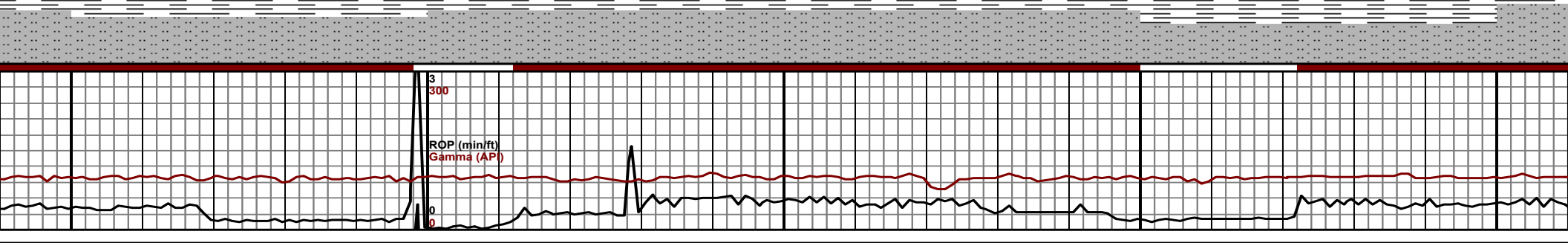
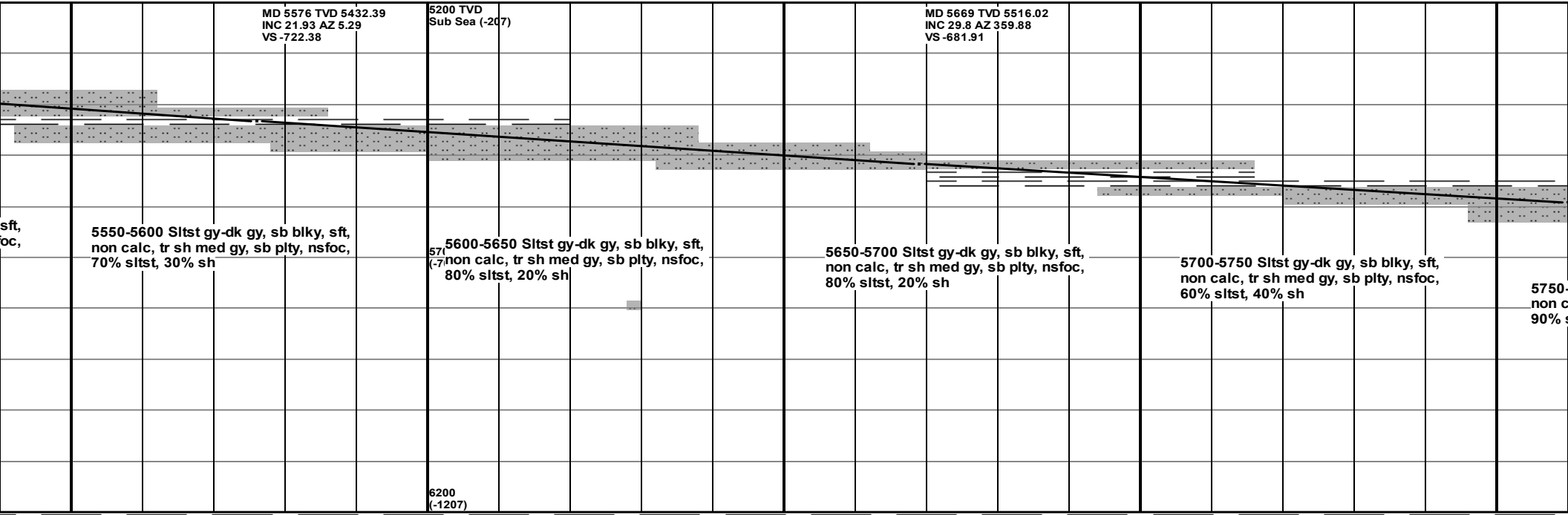
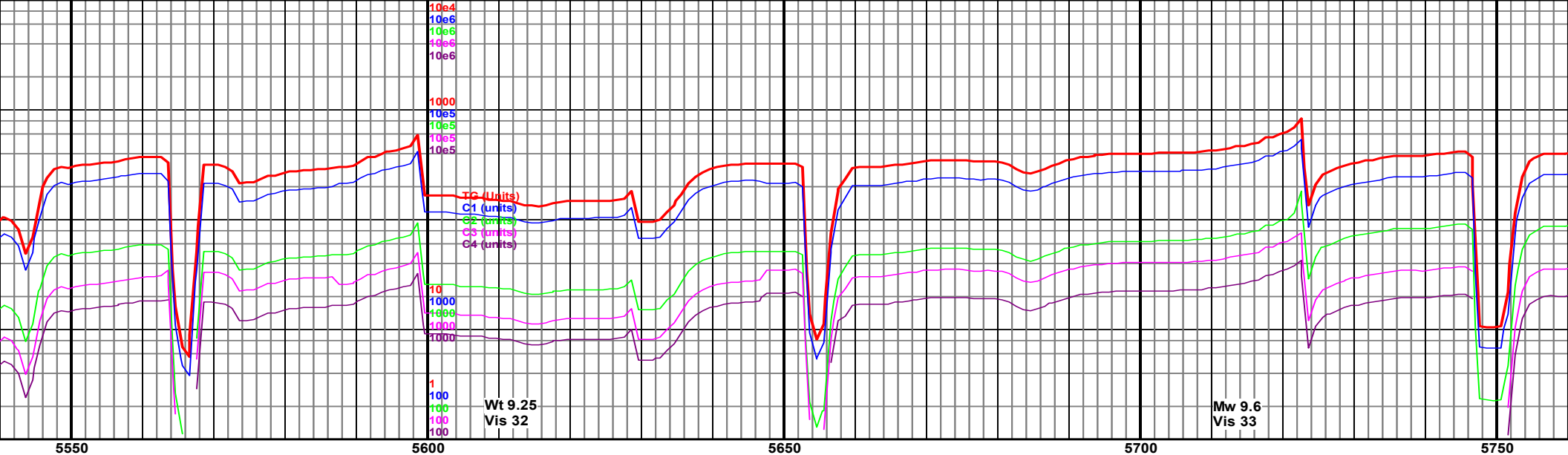
OIL SHOW
 Even

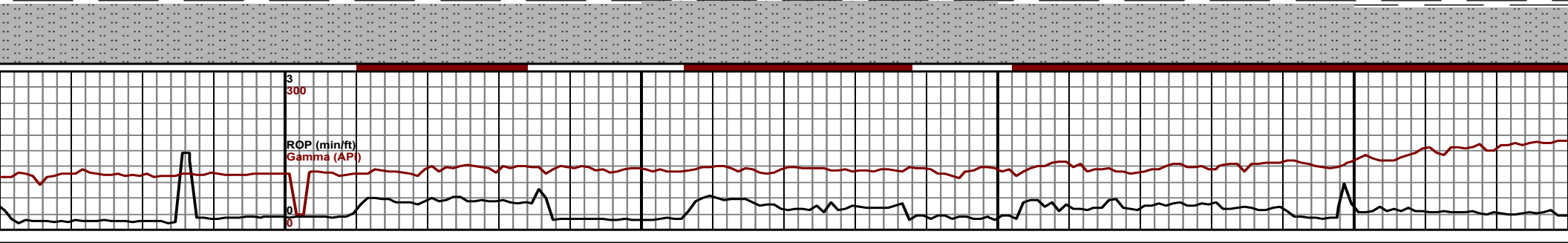
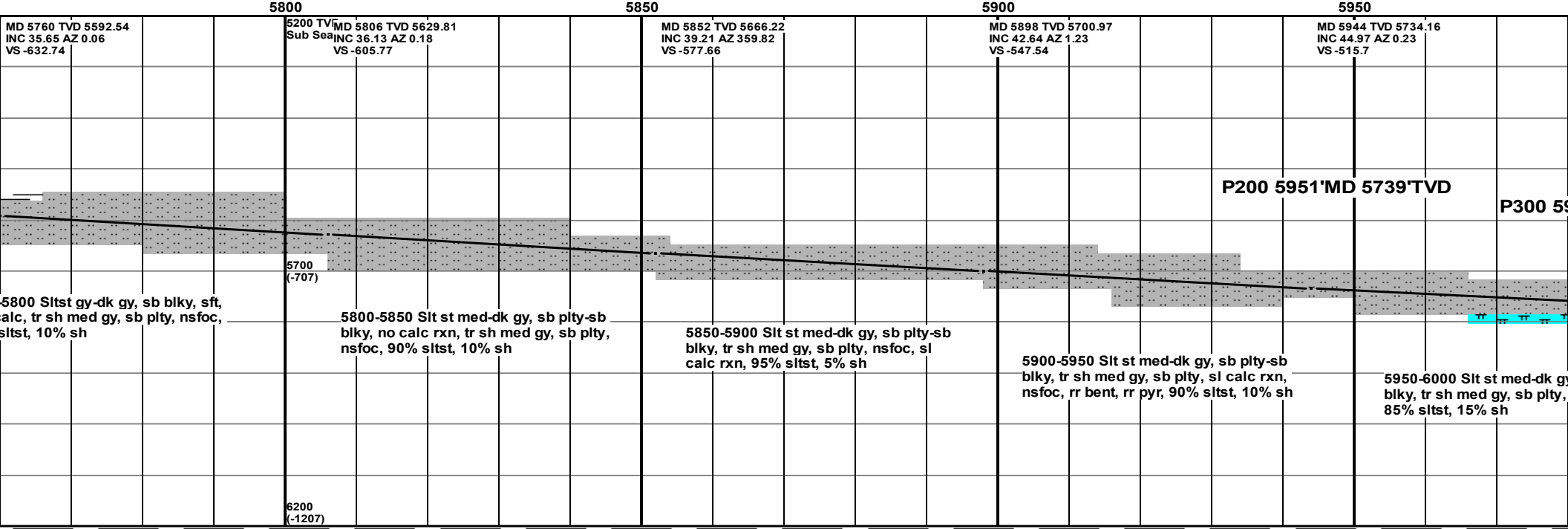
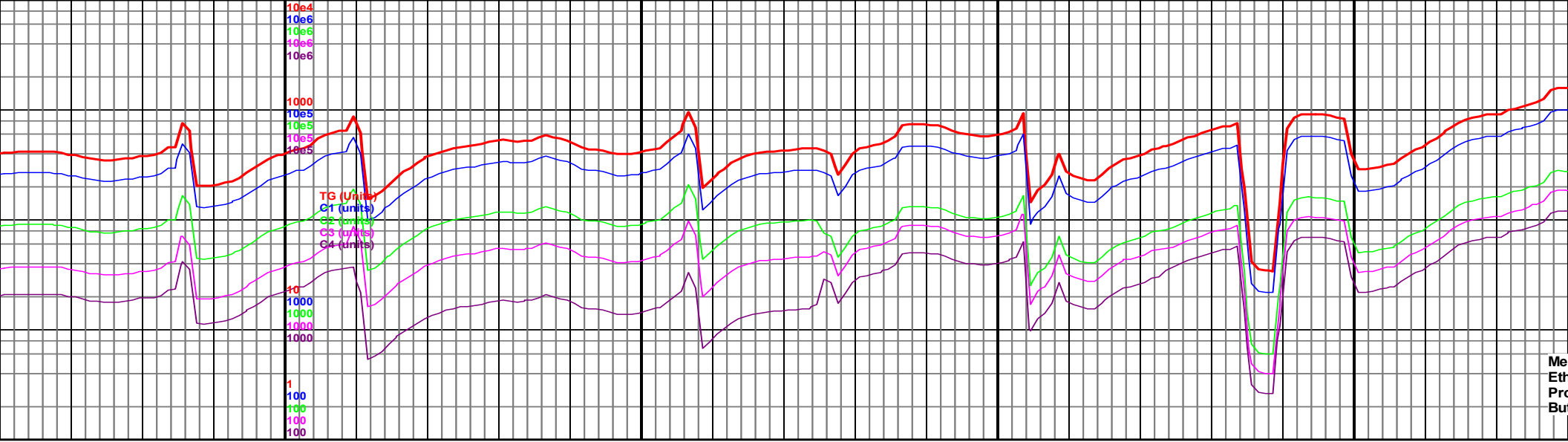
 Spotted
 Ques
 Dead

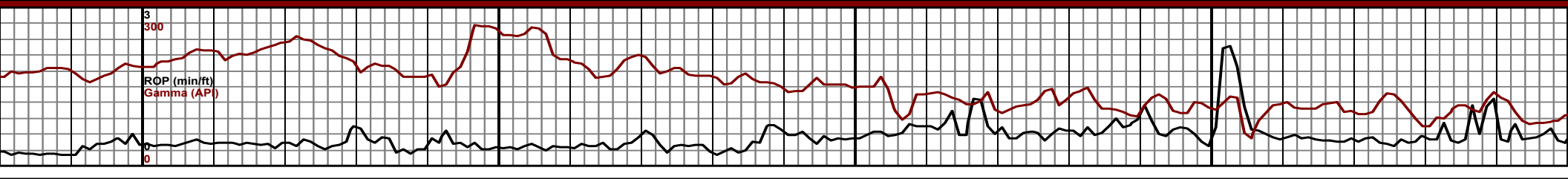
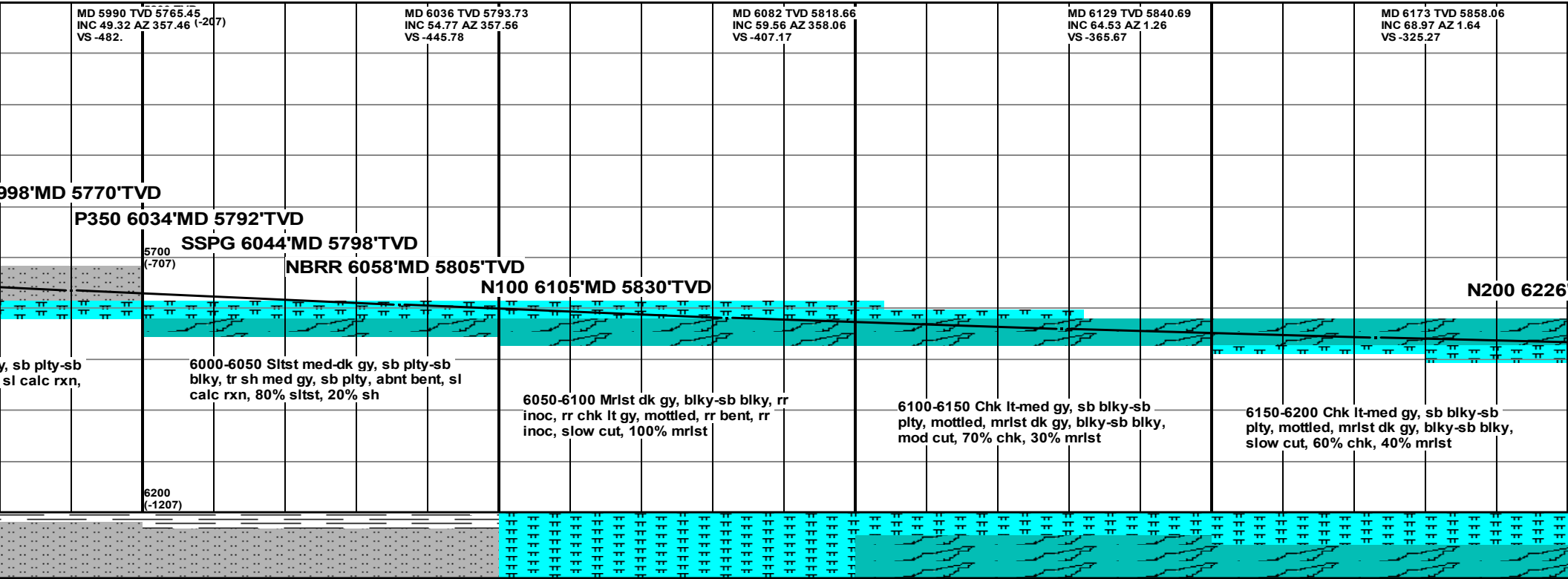
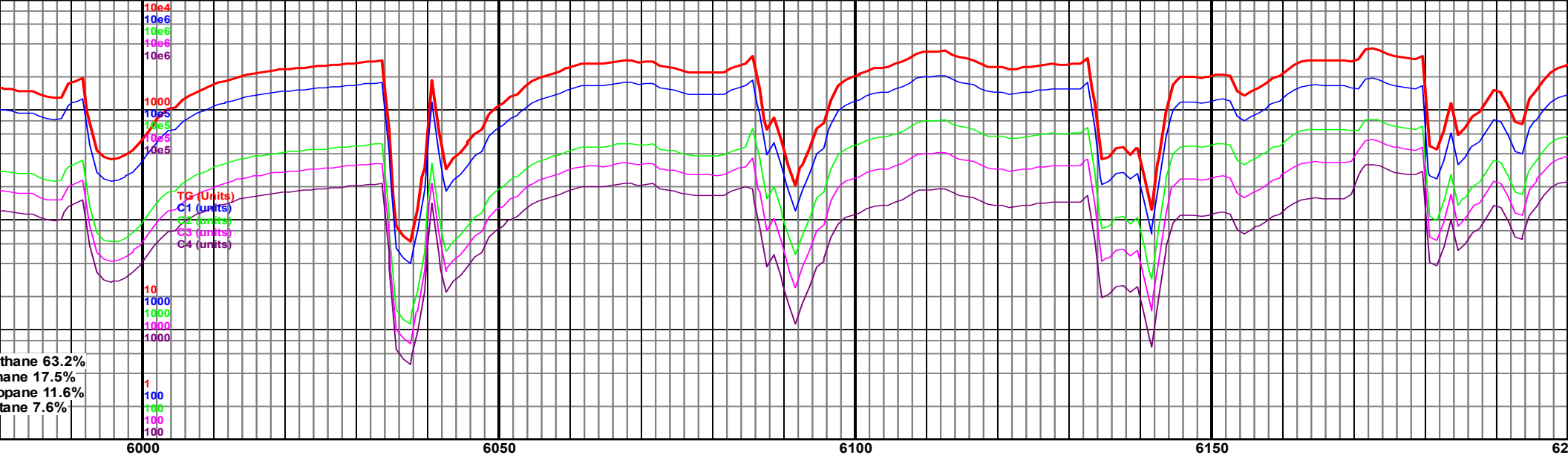
INTERVAL
 Core
 Dst

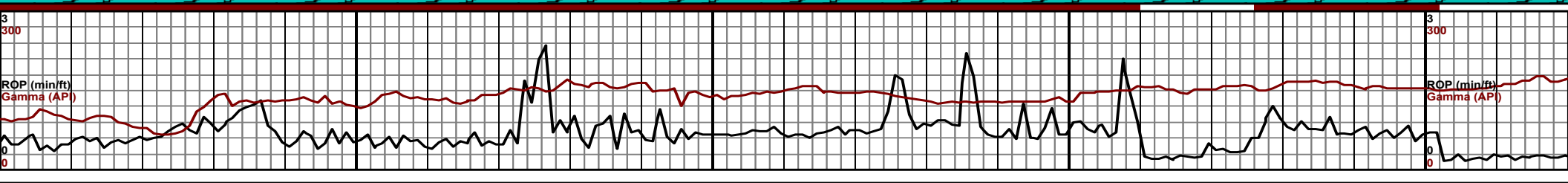
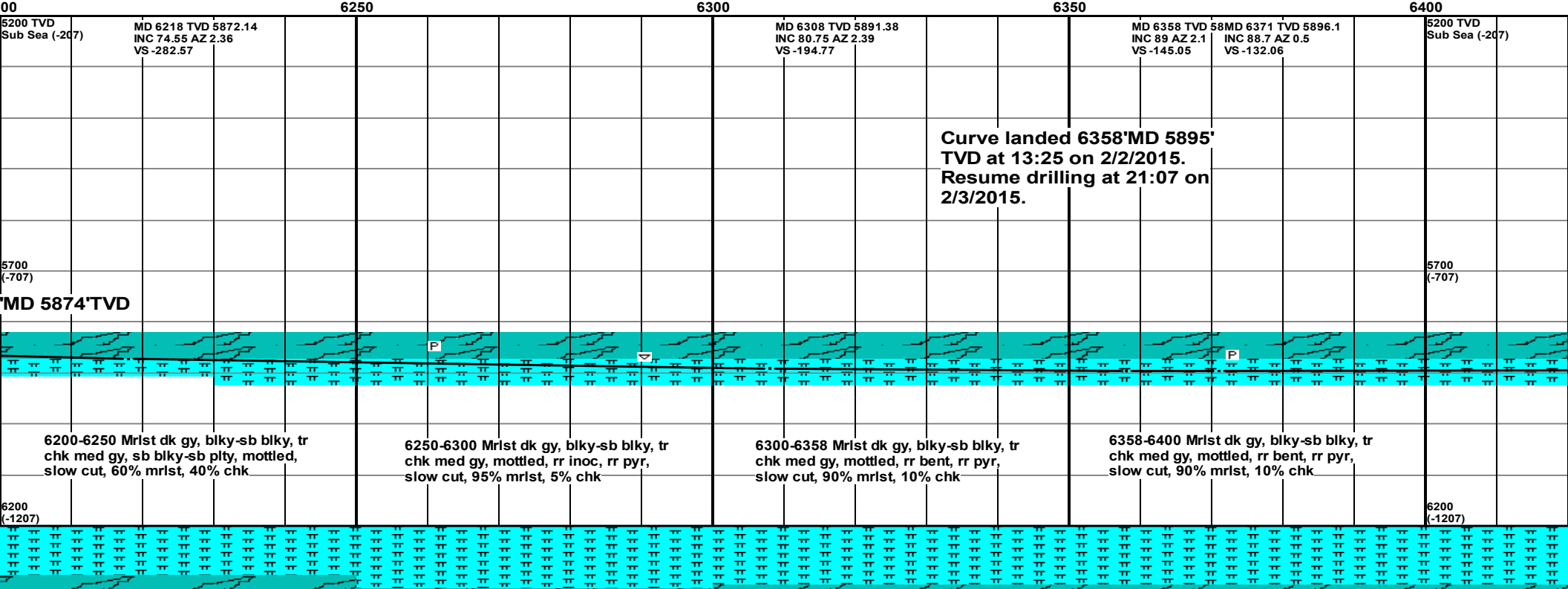
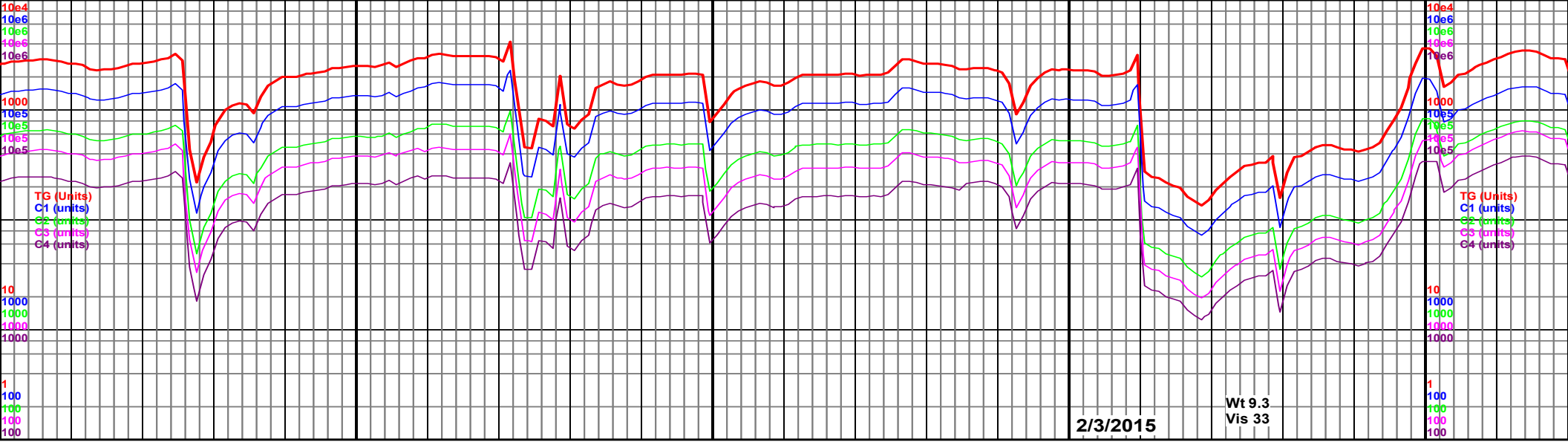
EVENT
 Rft
 Sidewall

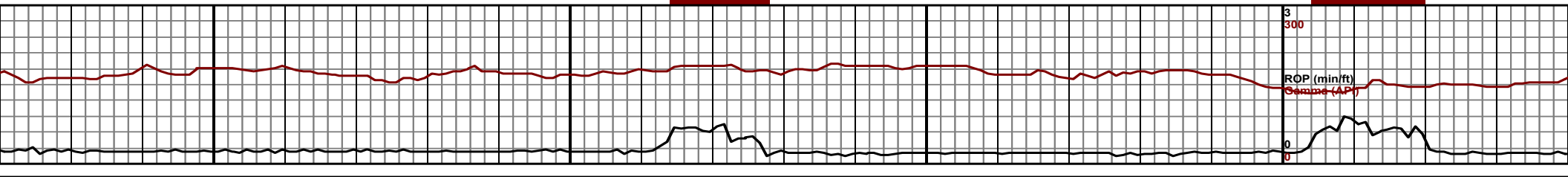
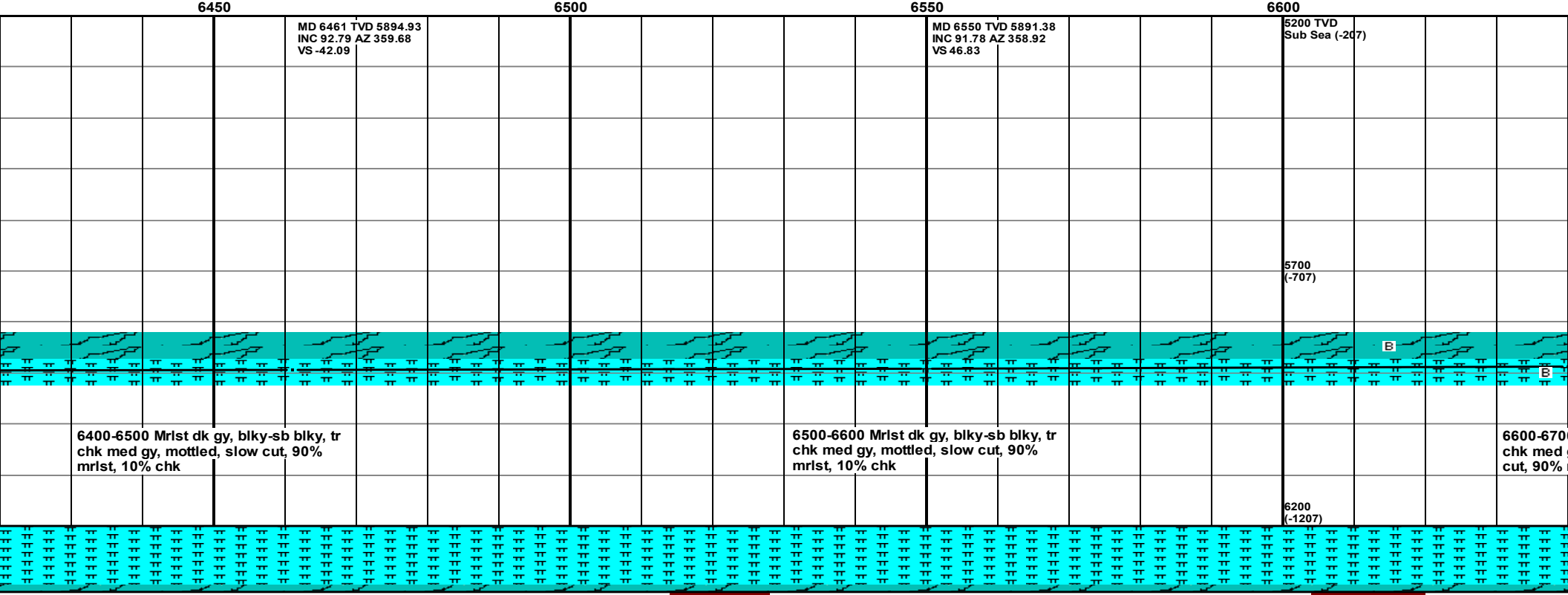
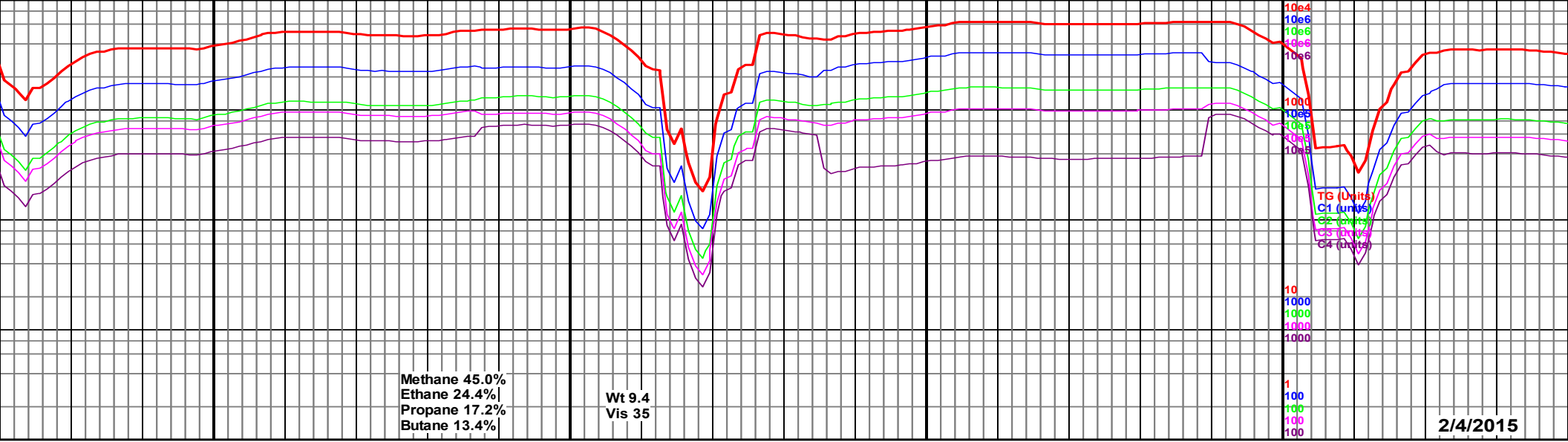


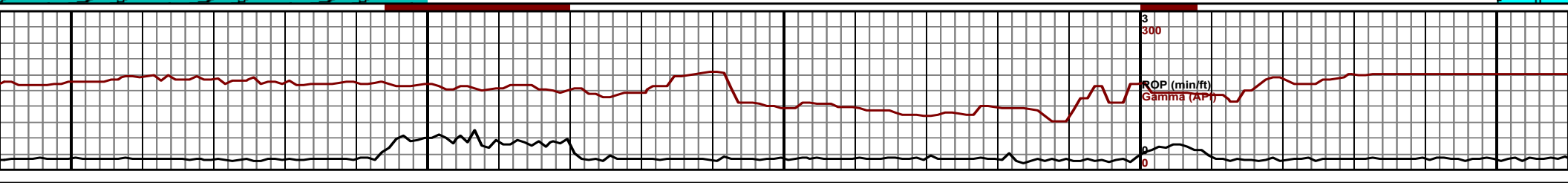
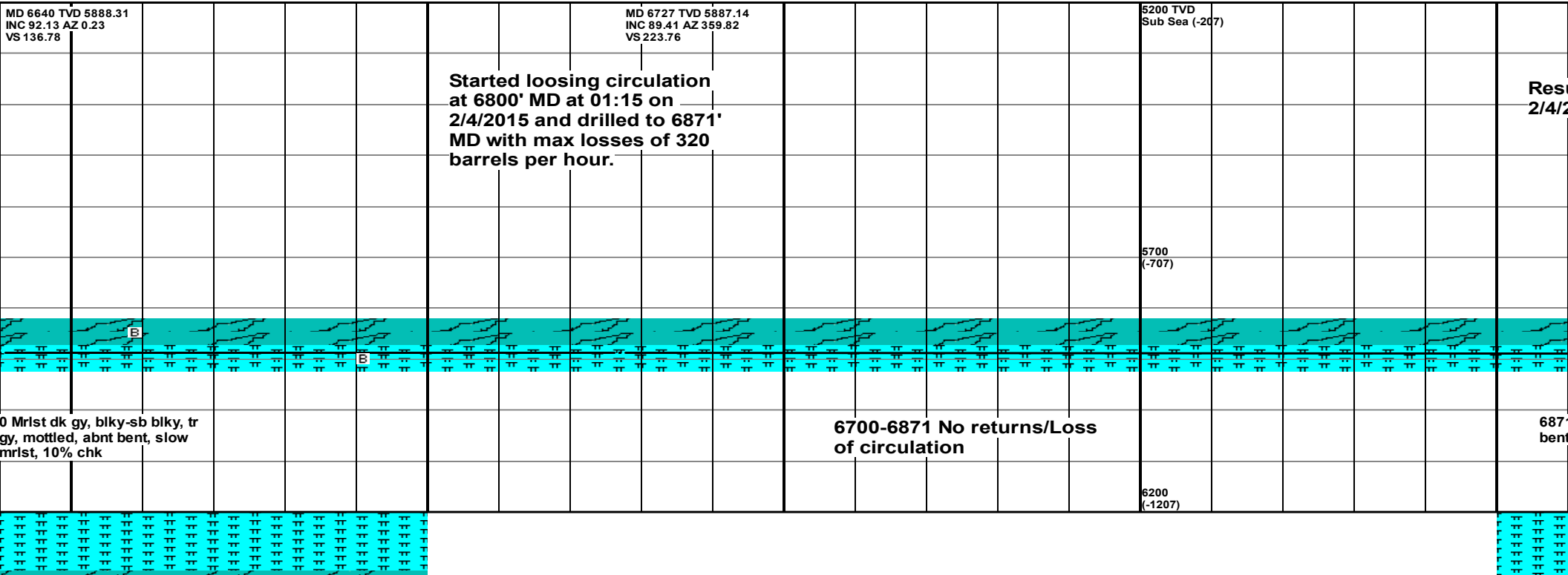
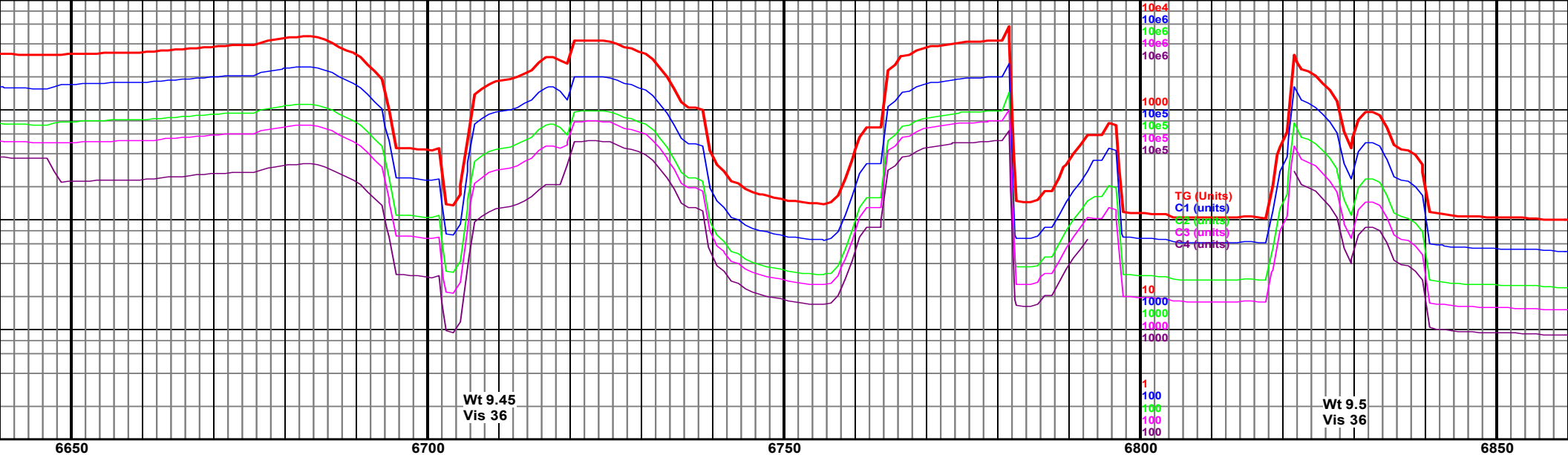


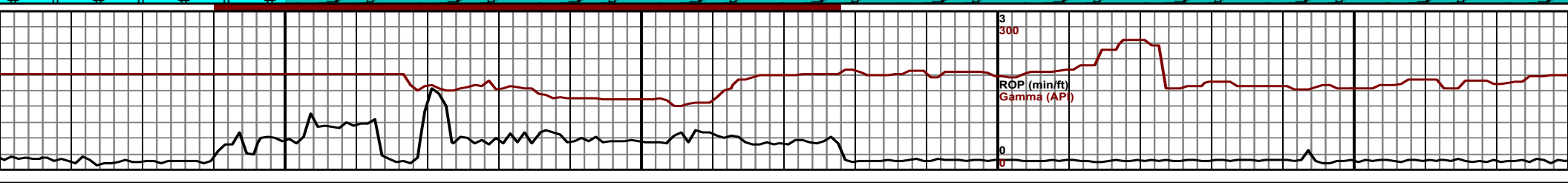
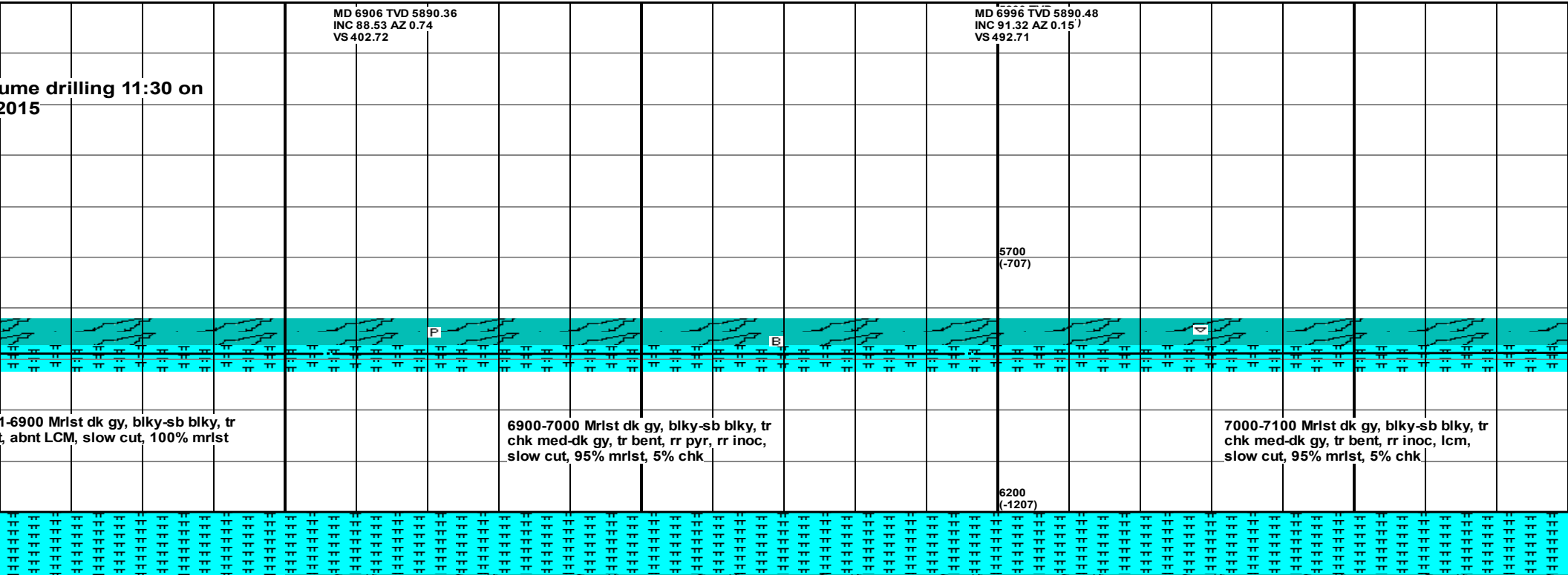
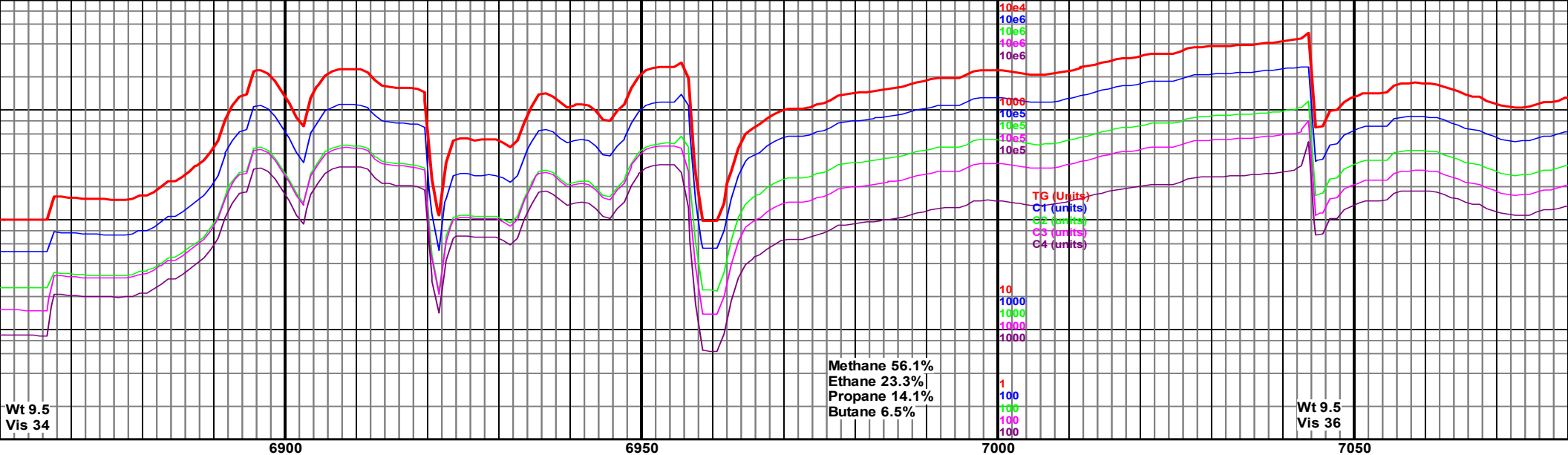


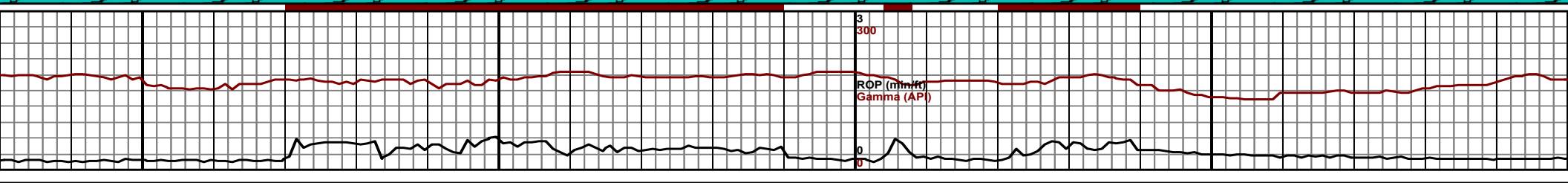
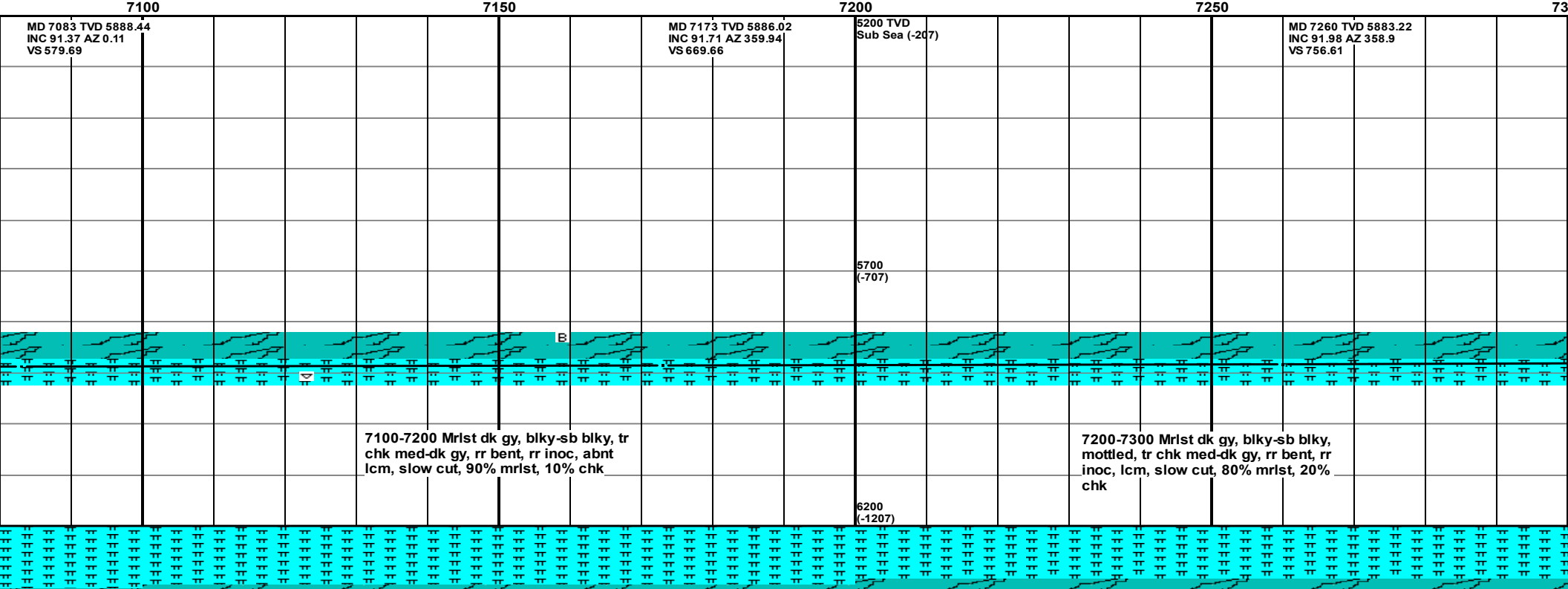
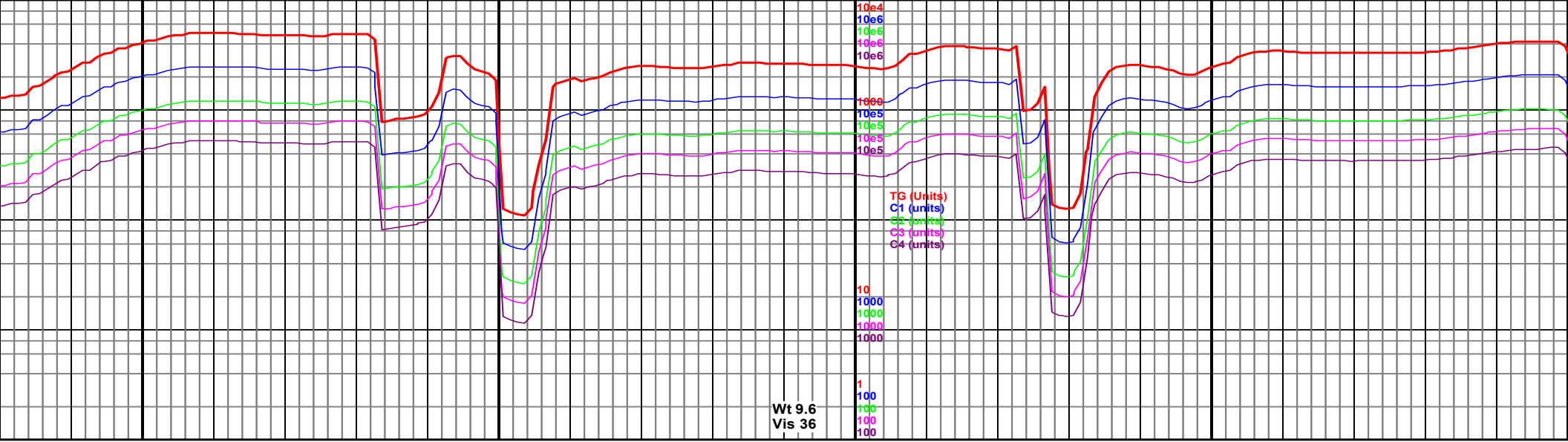


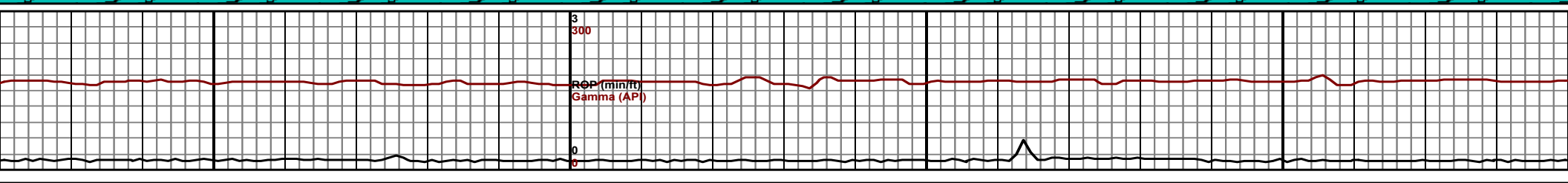
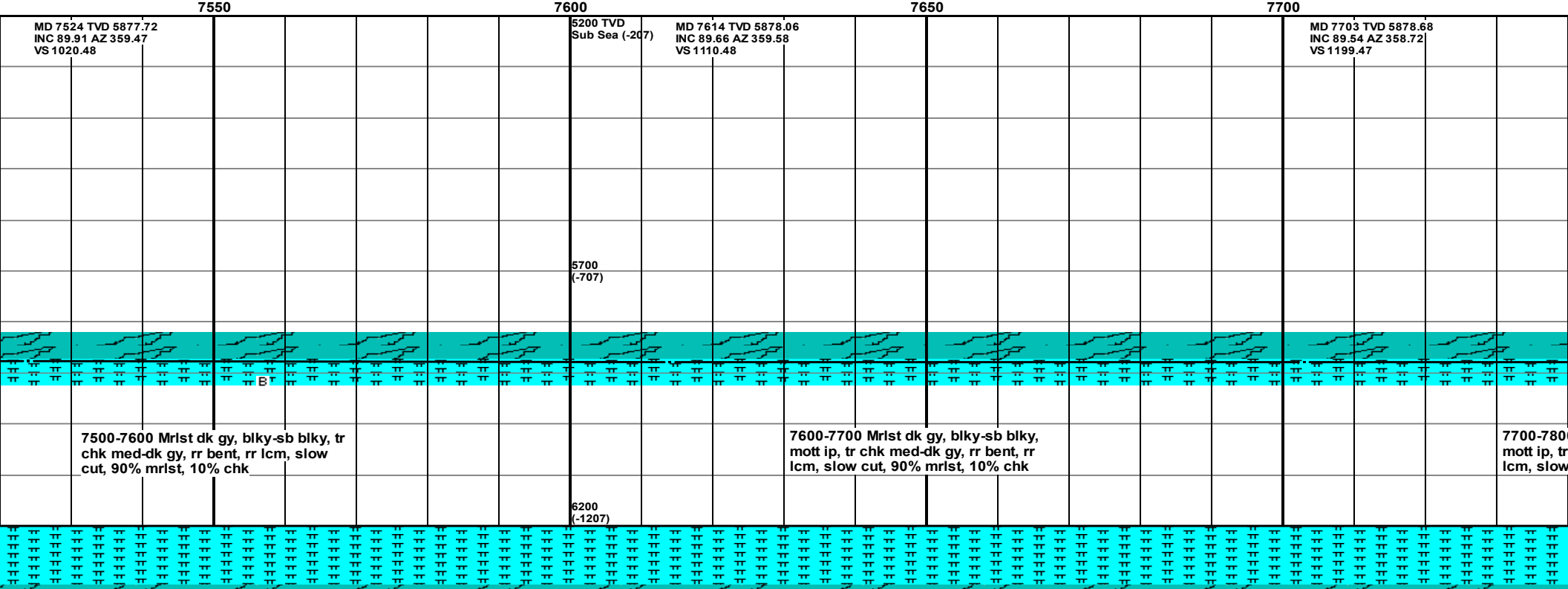
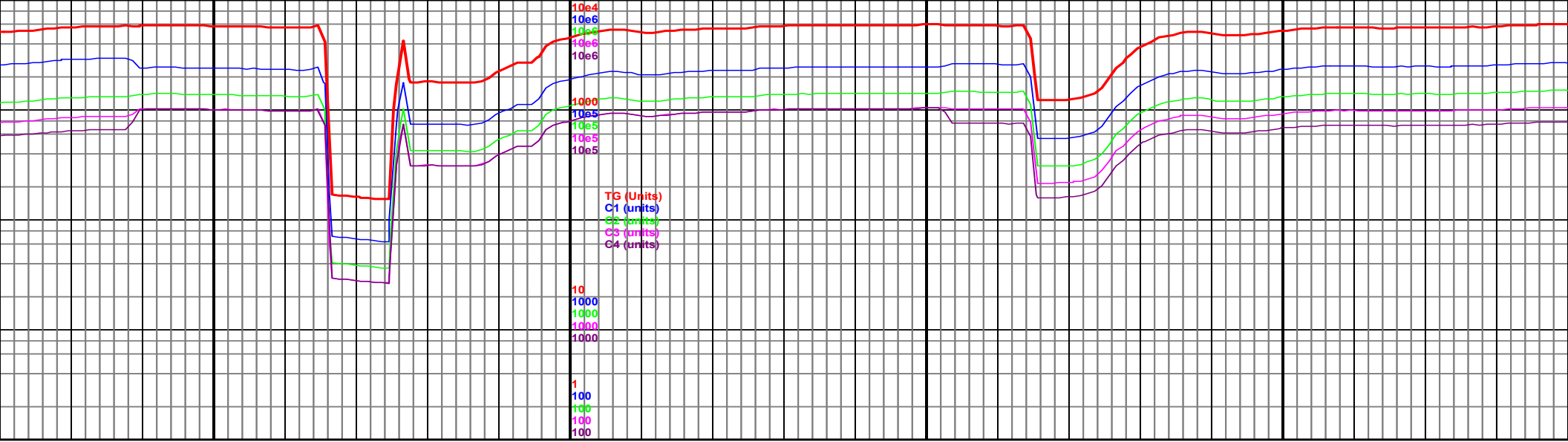


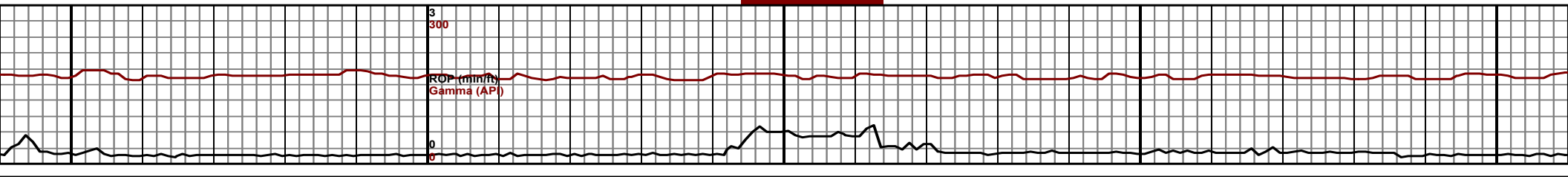
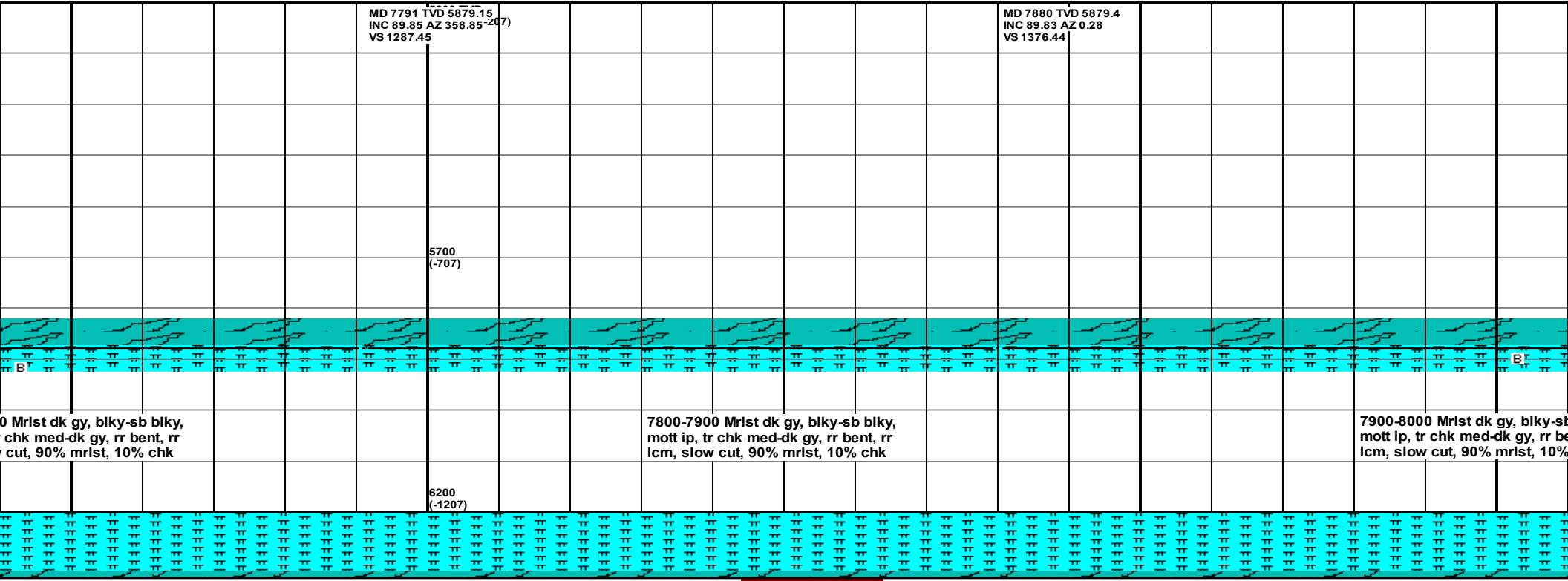
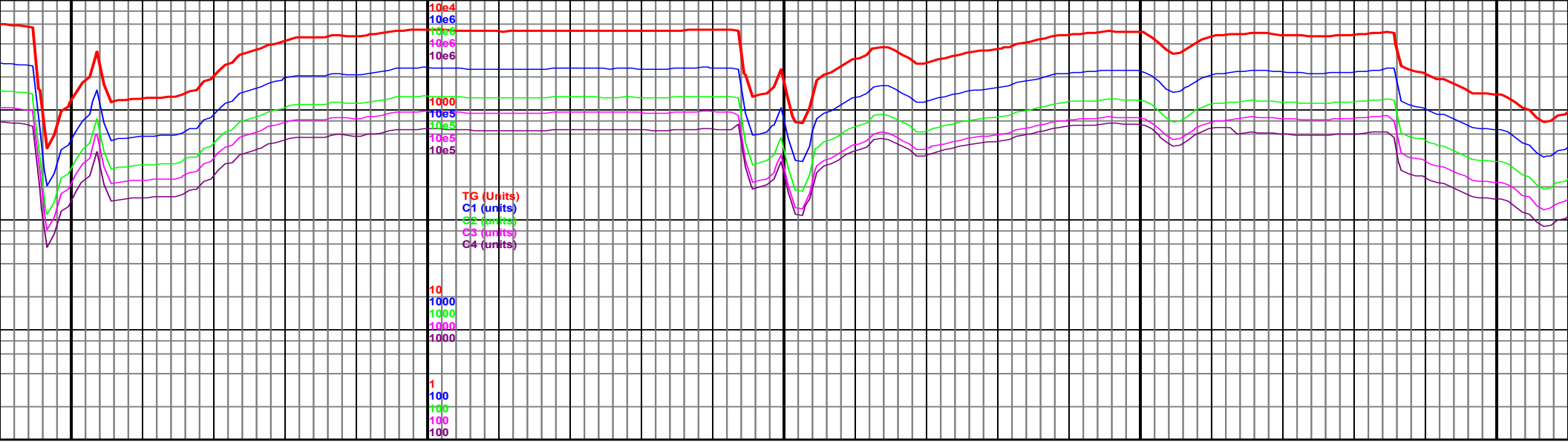


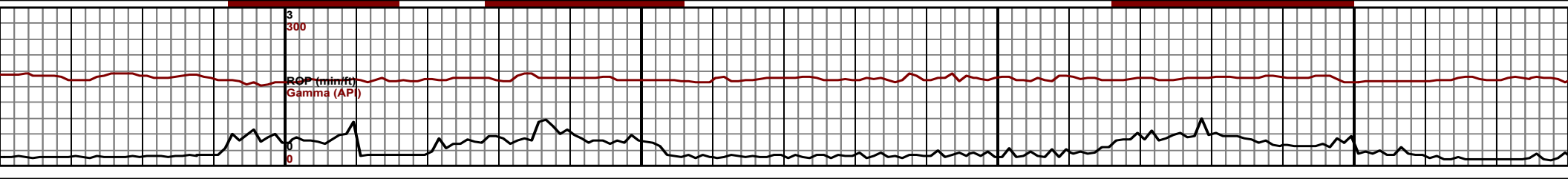
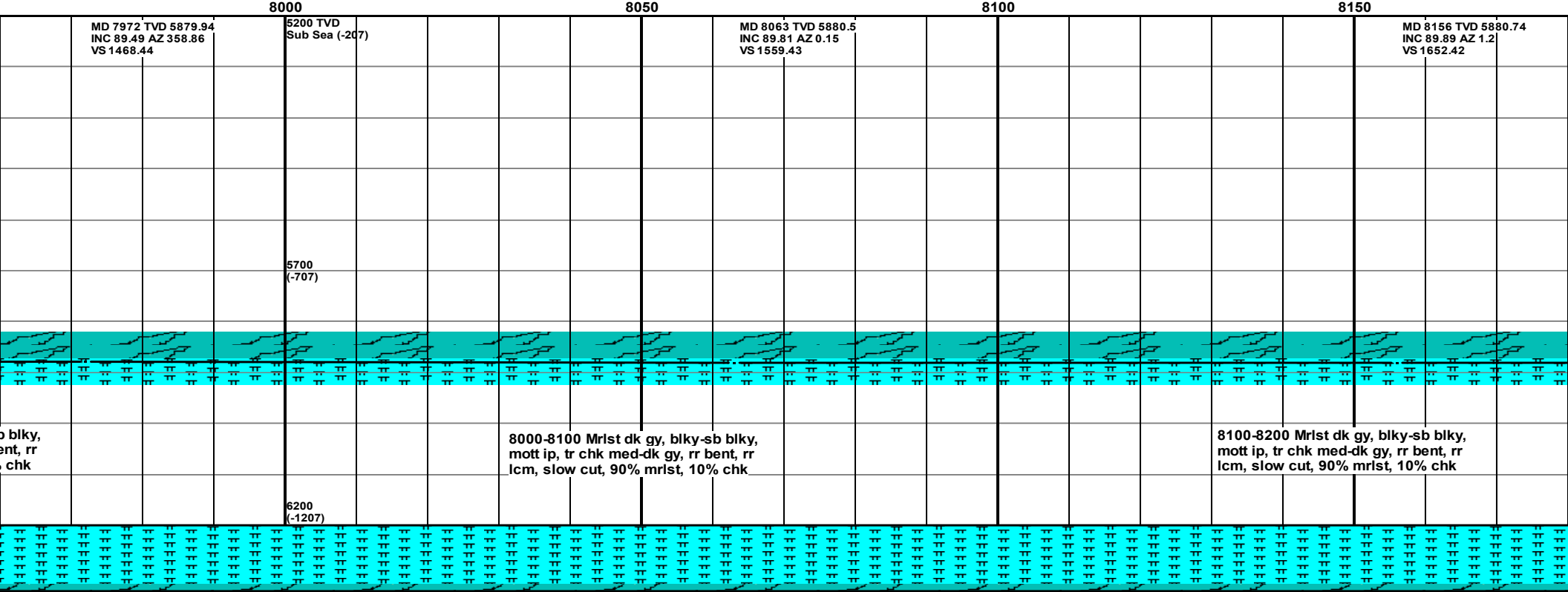
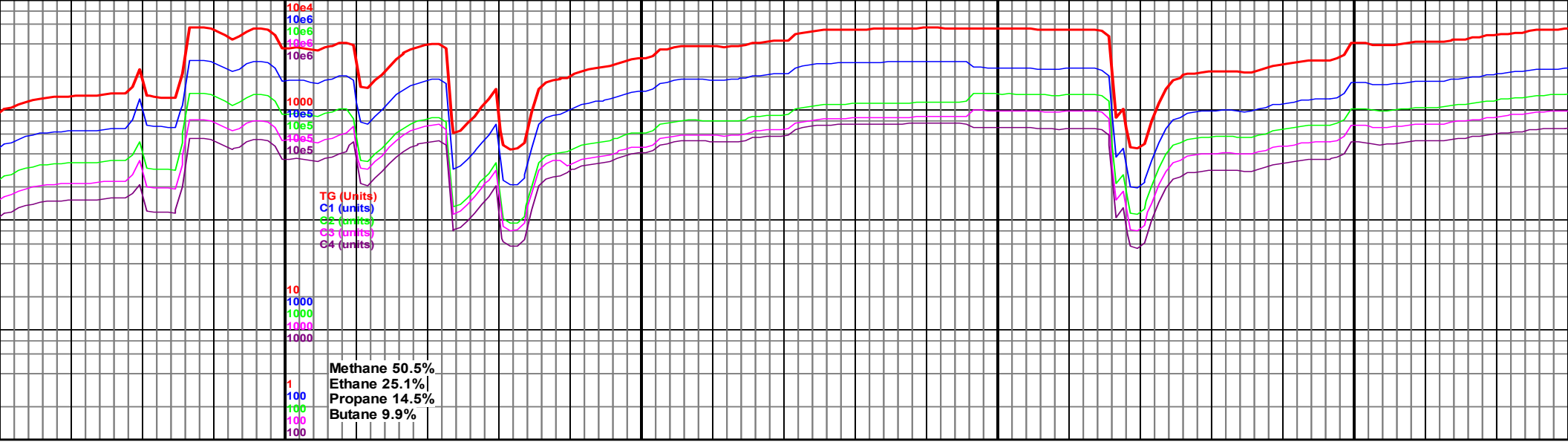


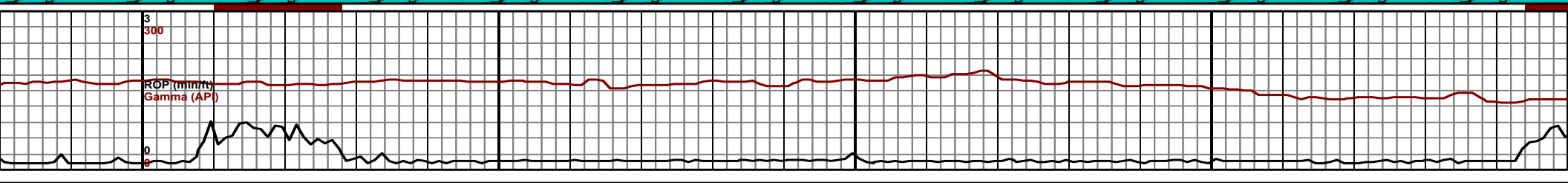
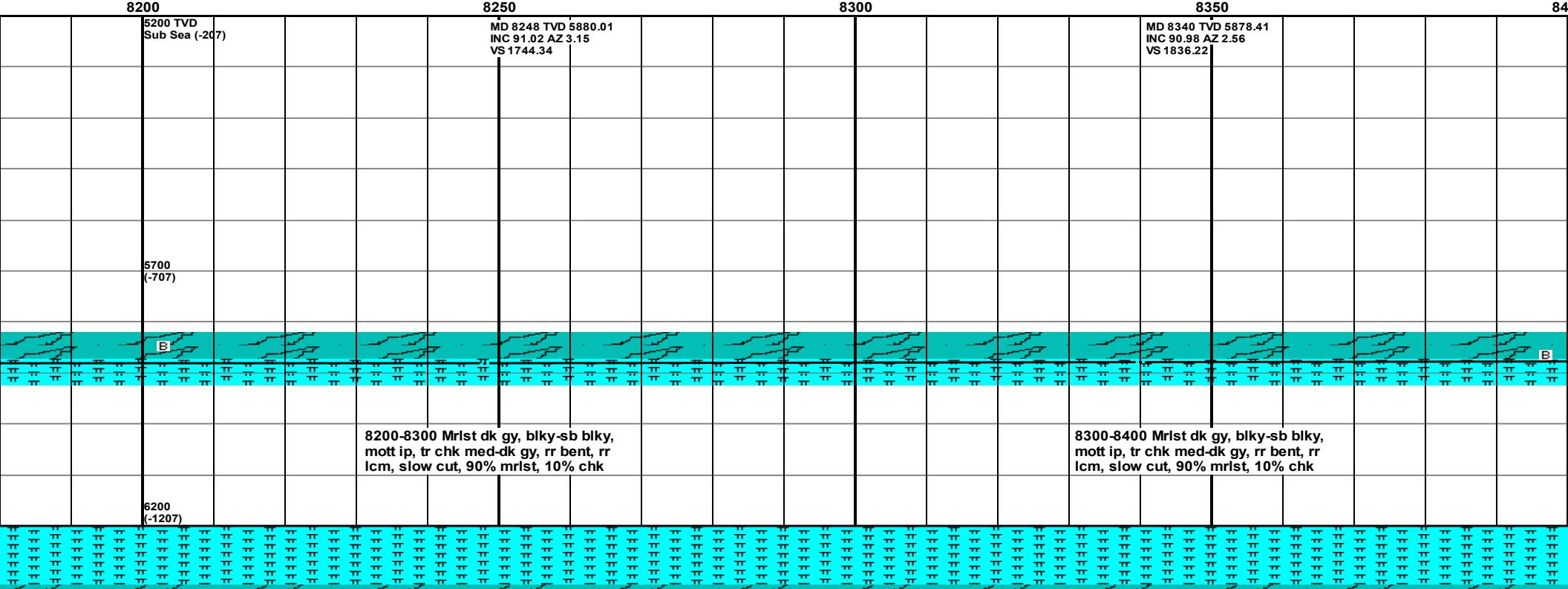
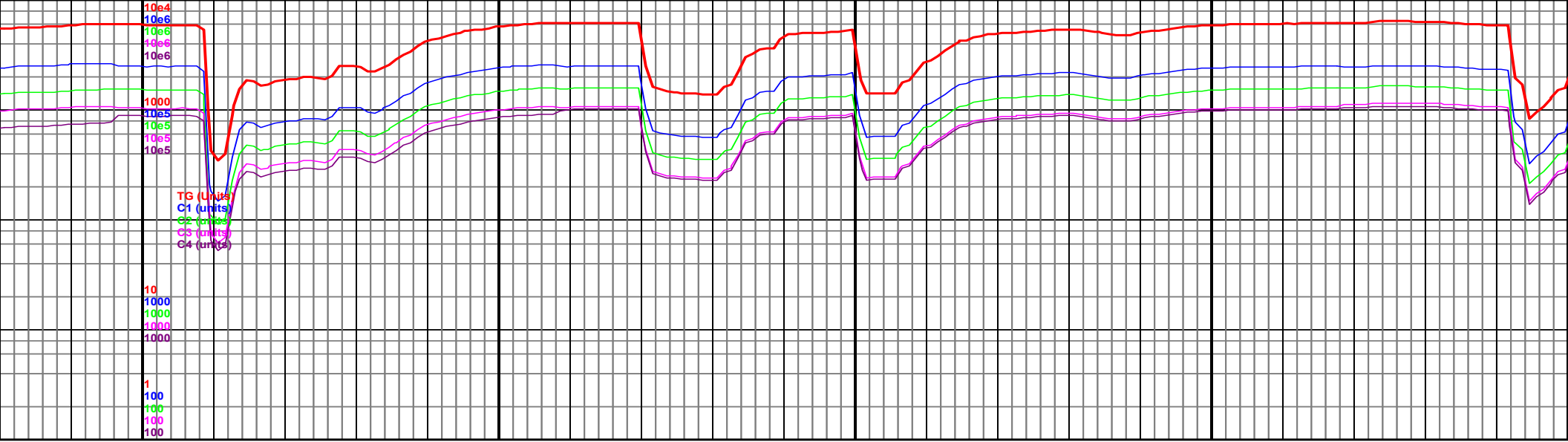


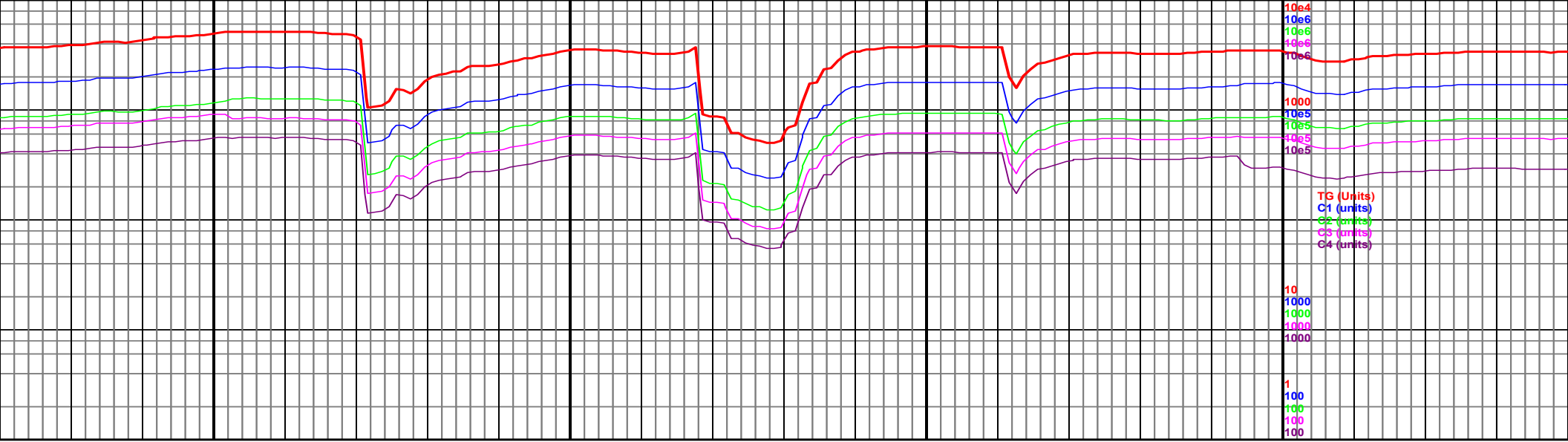










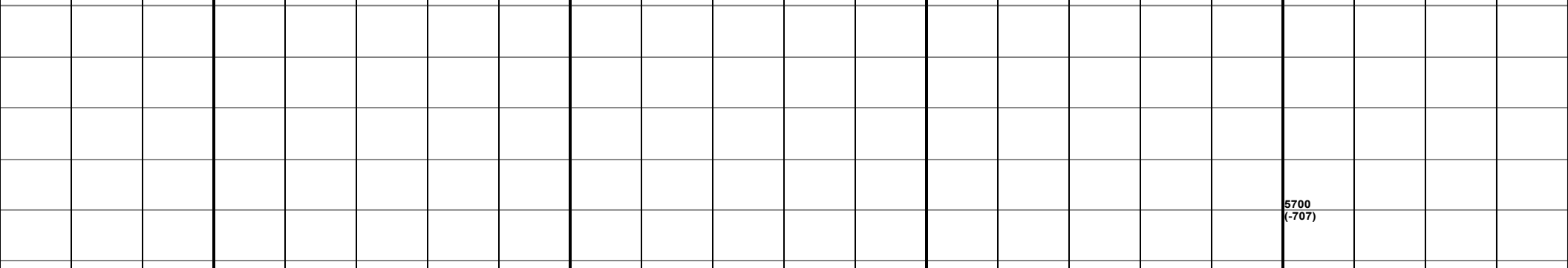


8650 8700 8750 8800

MD 8617 TVD 5876.93
INC 90.18 AZ 2.21
VS 2112.97

MD 8709 TVD 5877.22
INC 89.46 AZ 1.17
VS 2204.93

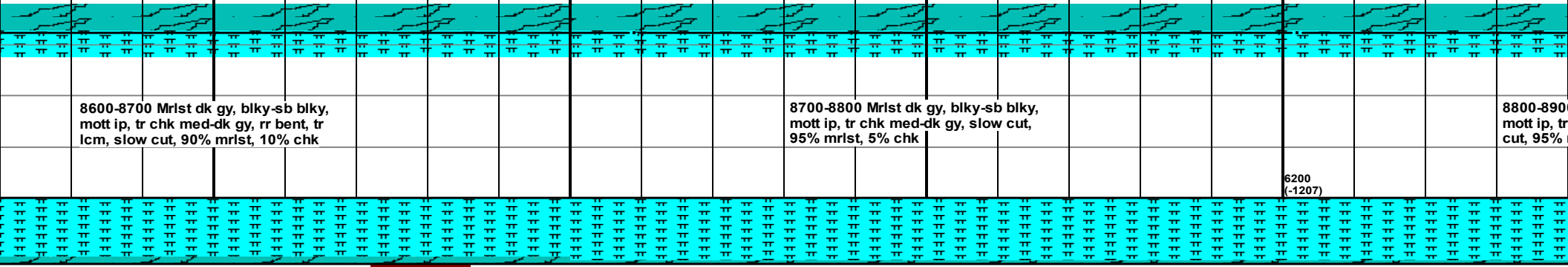
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INC 90.64 AZ 1.71
VS 2297.9



8600-8700 Mrlst dk gy, blk-y-sb blk-y,
mott ip, tr chk med-dk gy, rr bent, tr
lcm, slow cut, 90% mrlst, 10% chk

8700-8800 Mrlst dk gy, blk-y-sb blk-y,
mott ip, tr chk med-dk gy, slow cut,
95% mrlst, 5% chk

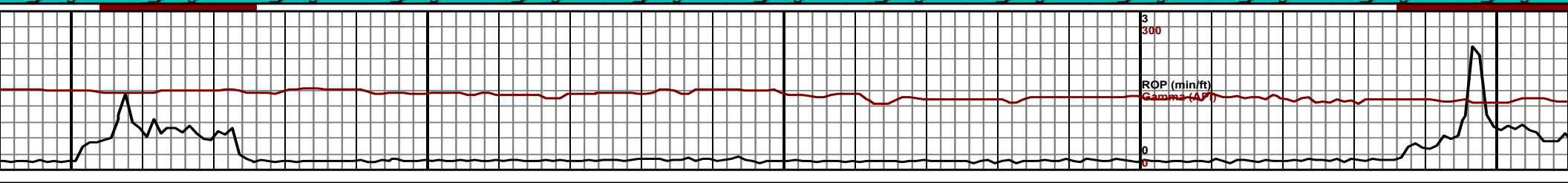
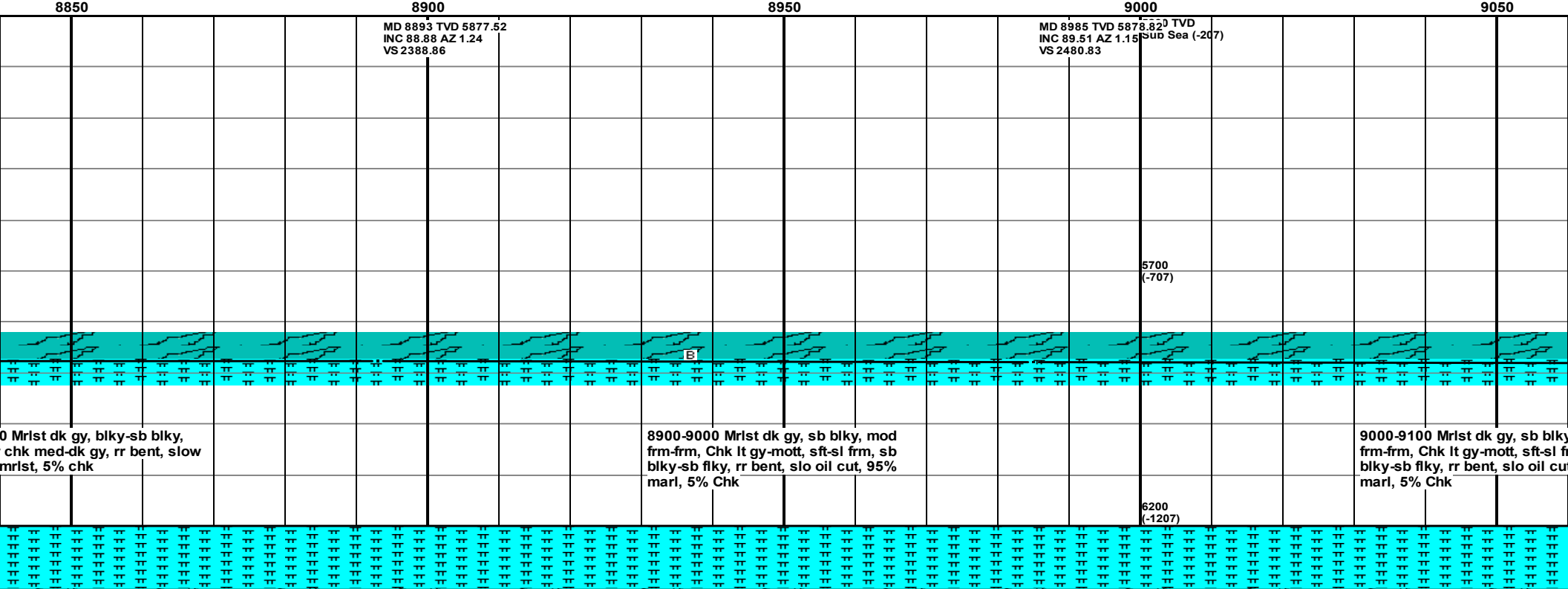
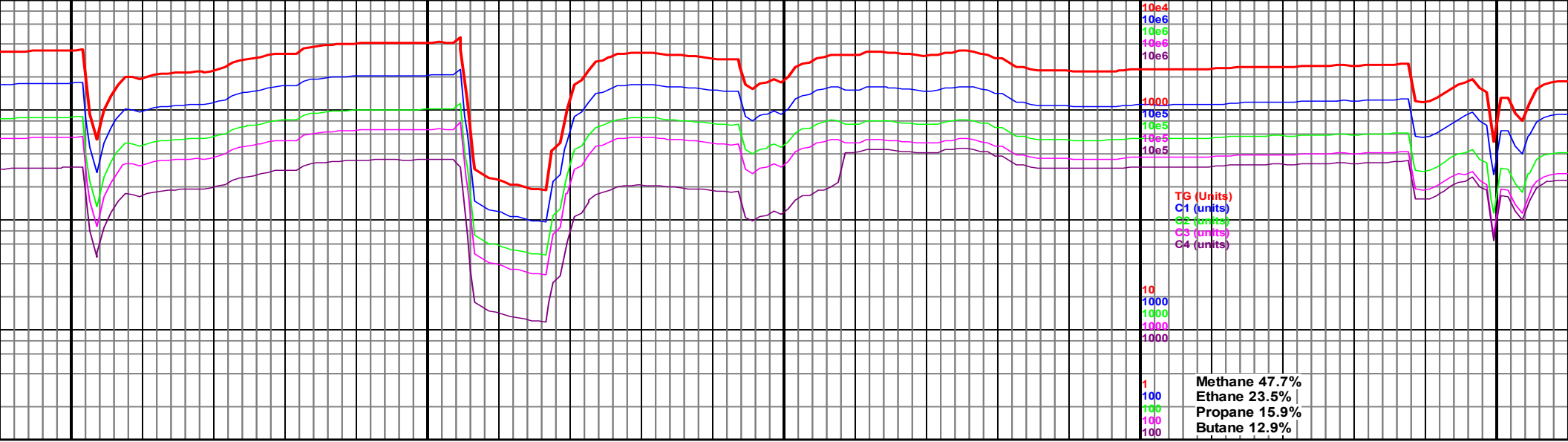
8800-8900
mott ip, tr
cut, 95%

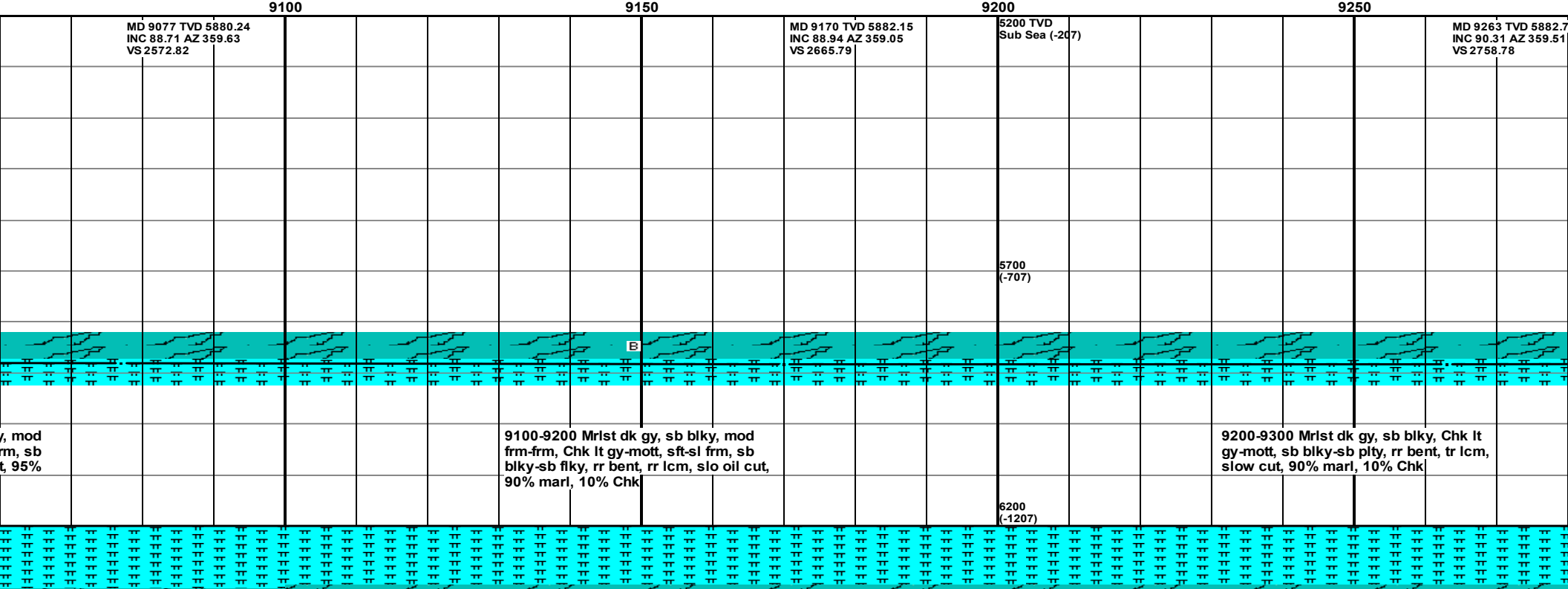
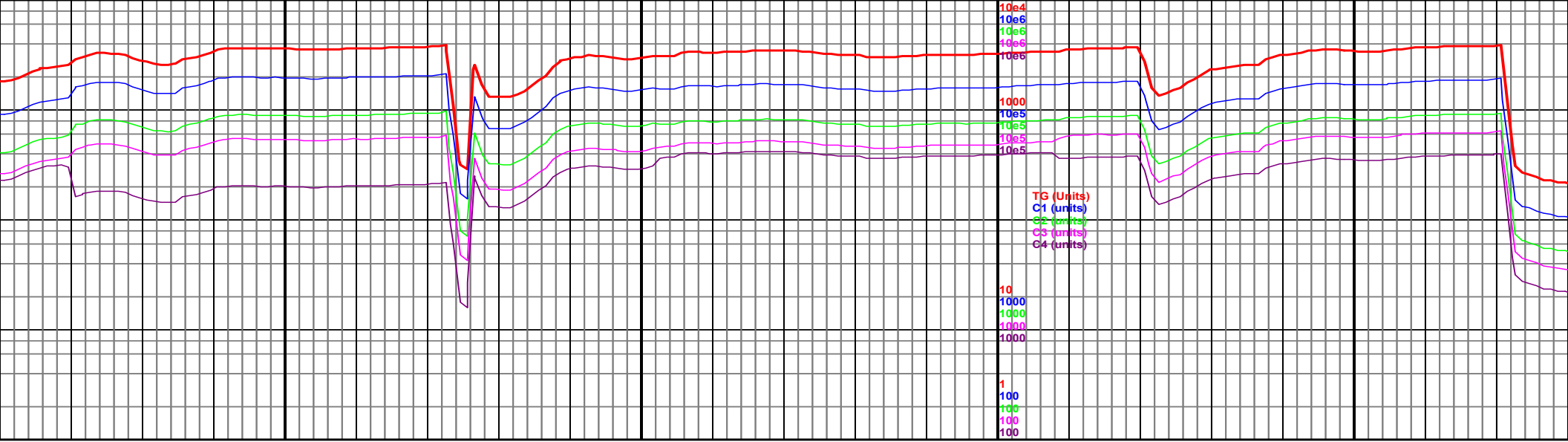


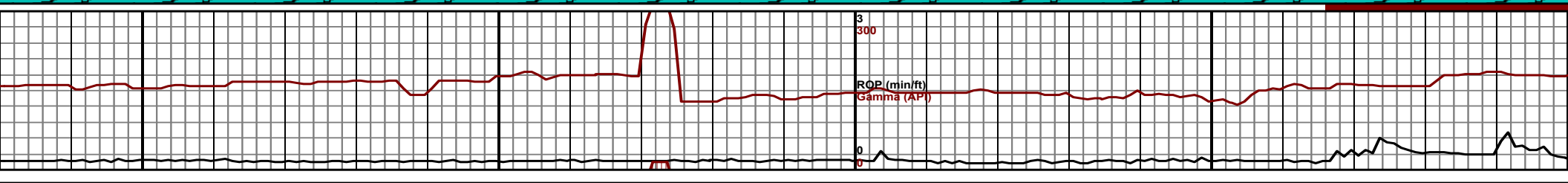
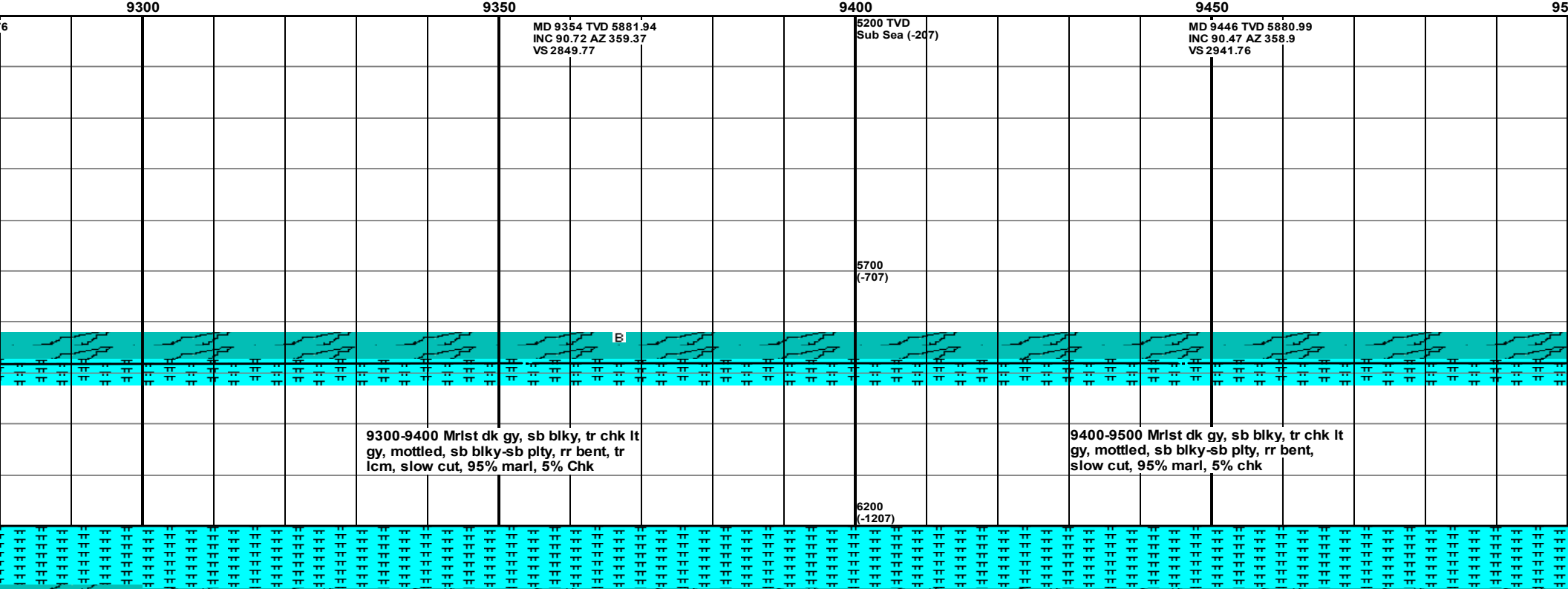
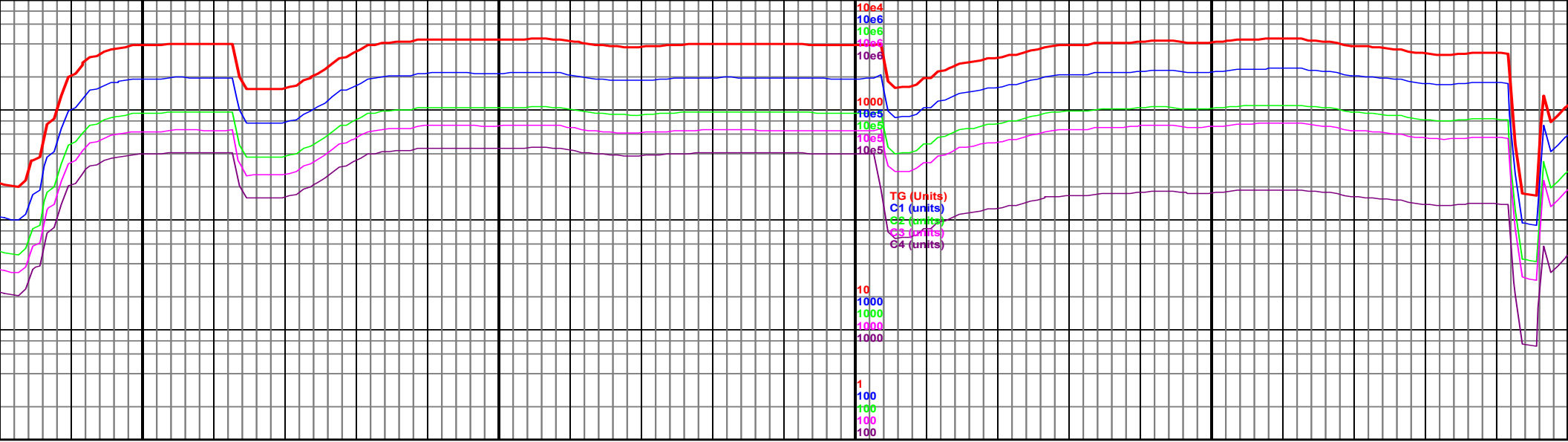
3 300

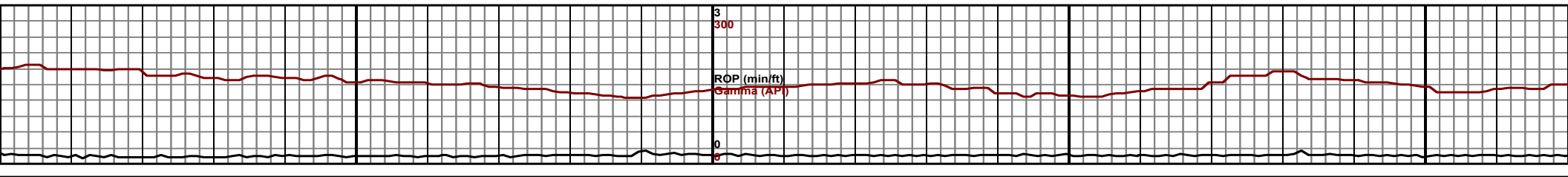
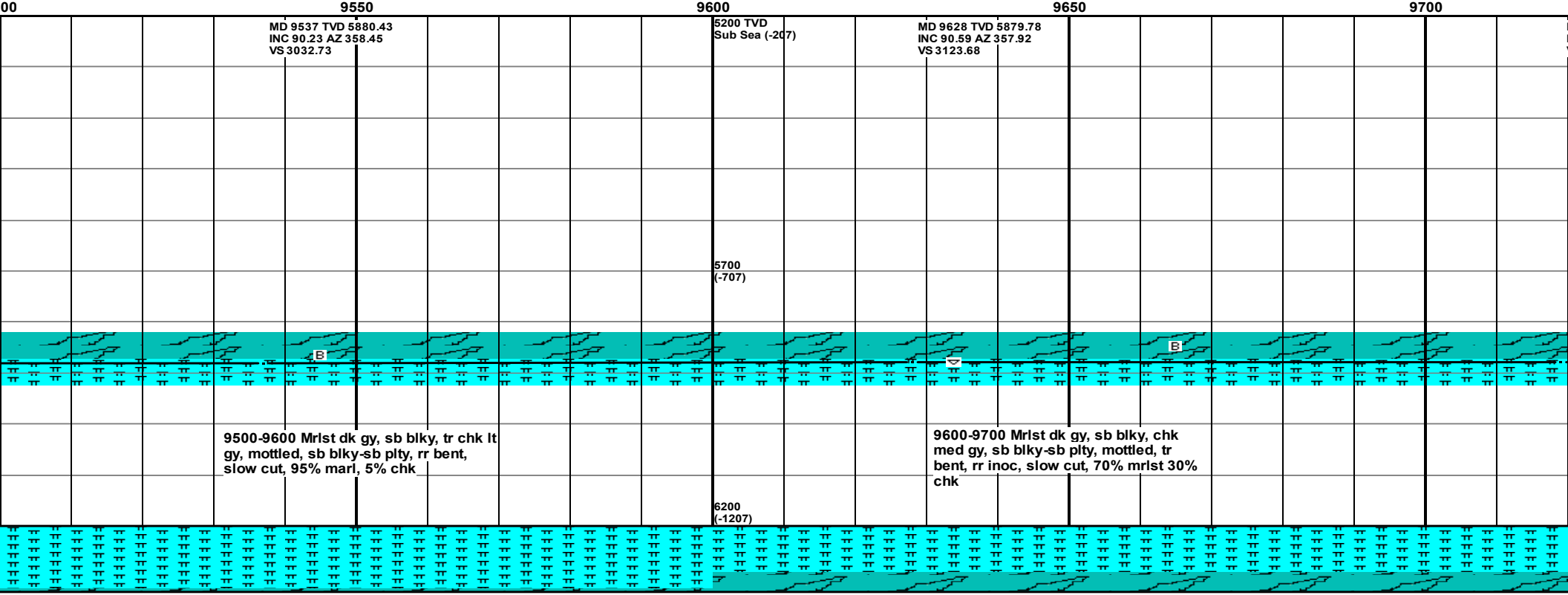
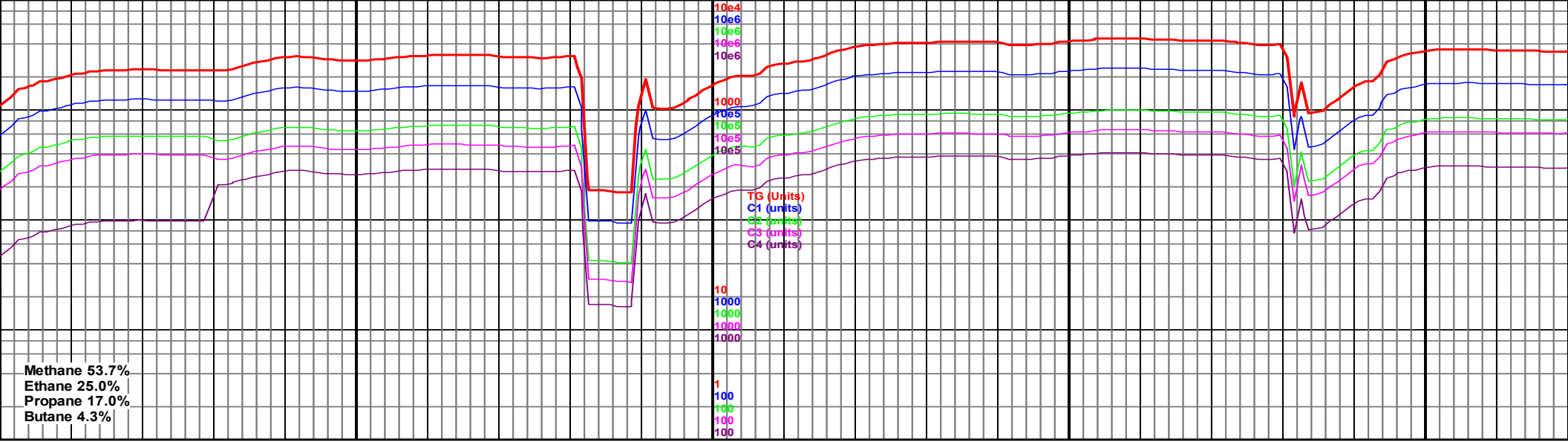
ROP (min/ft)
Gamma (API)

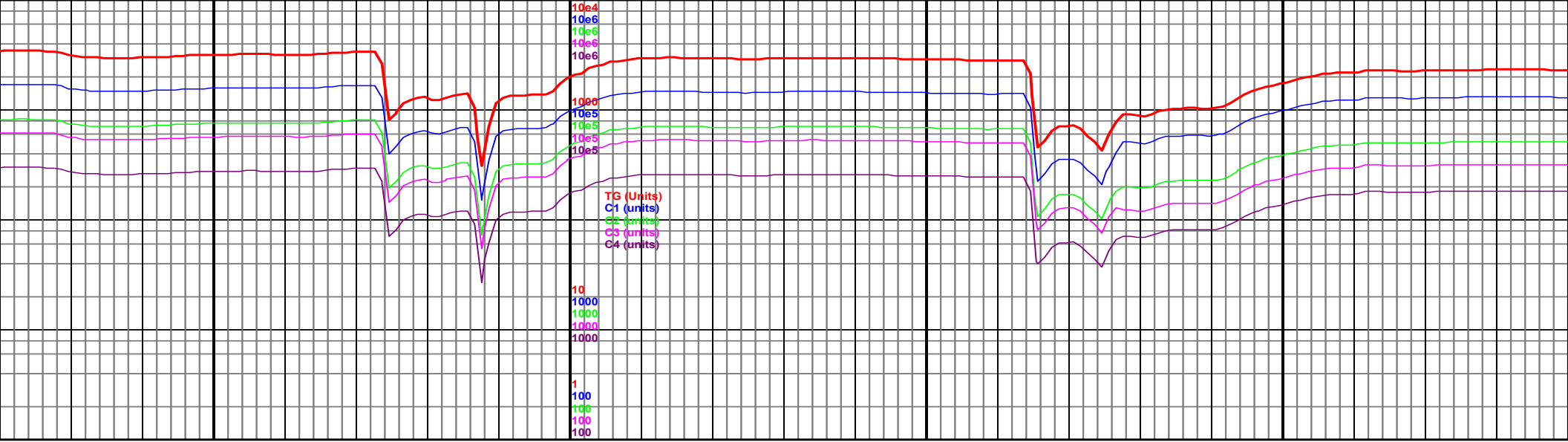
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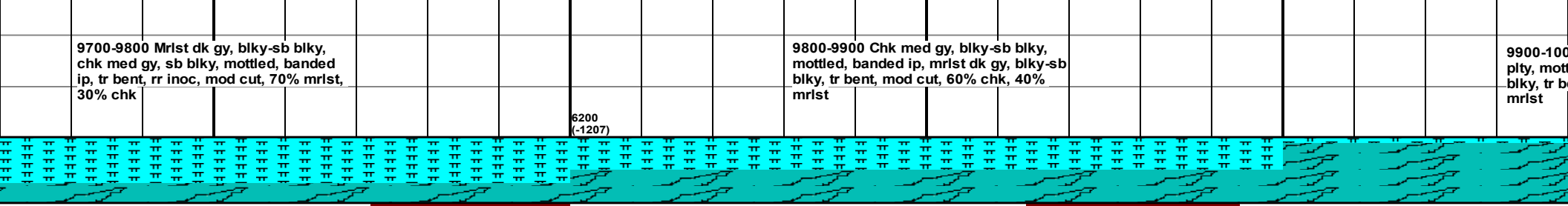
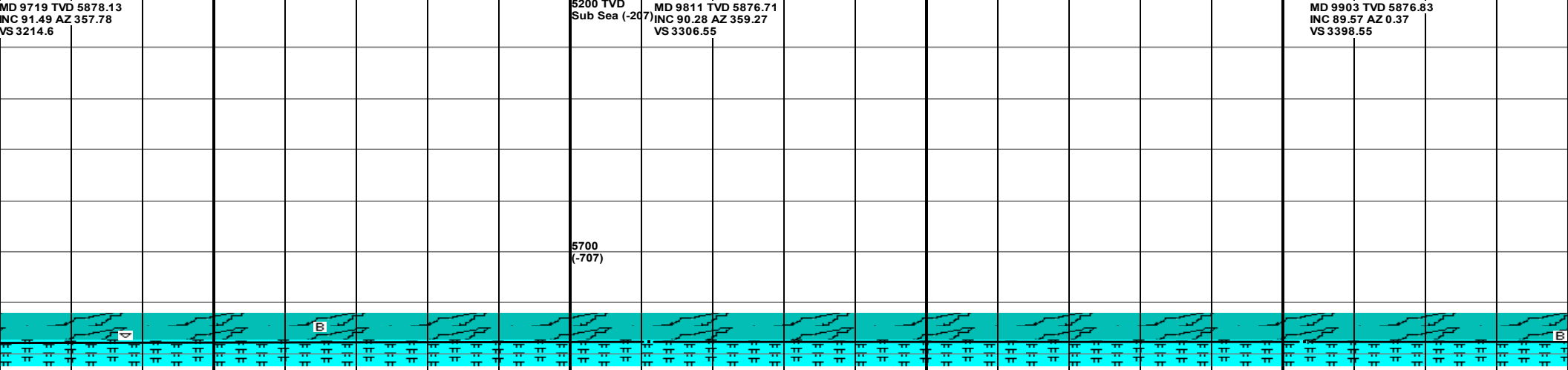


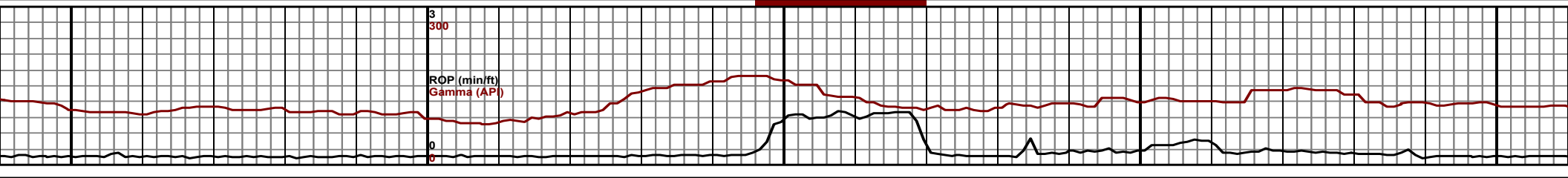
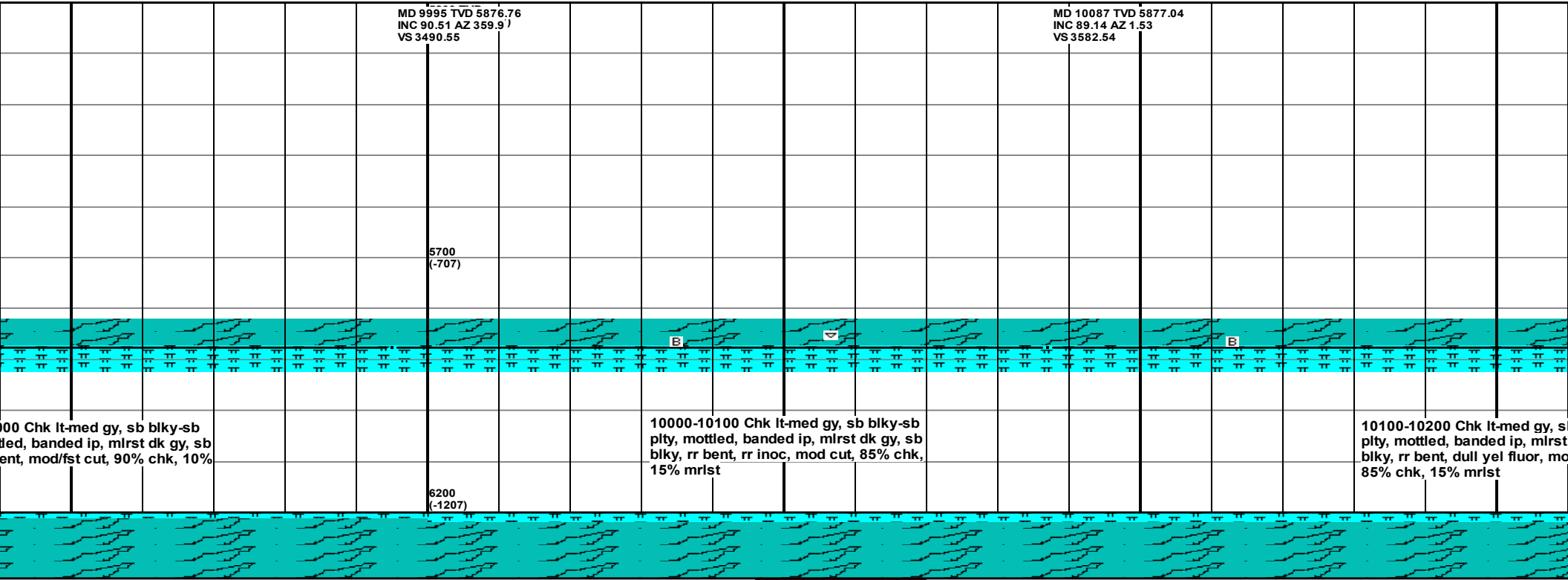
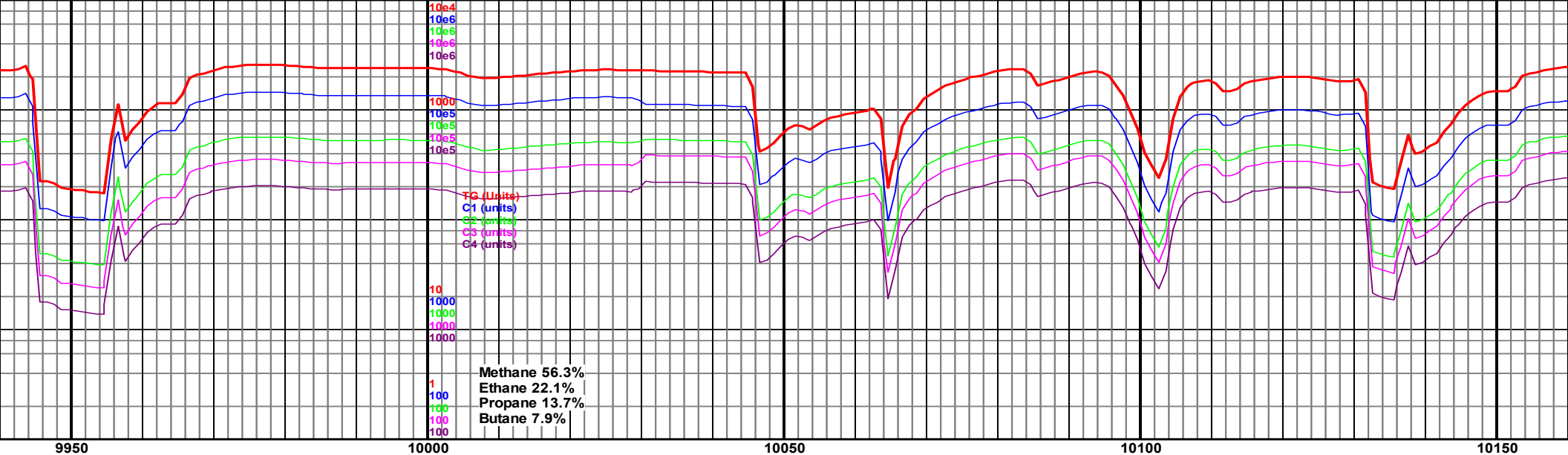


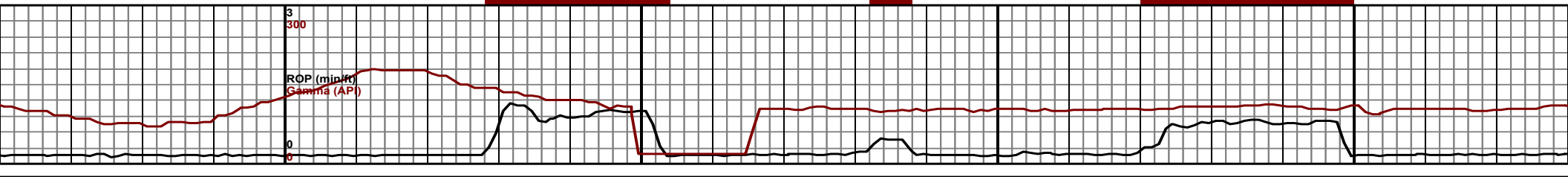
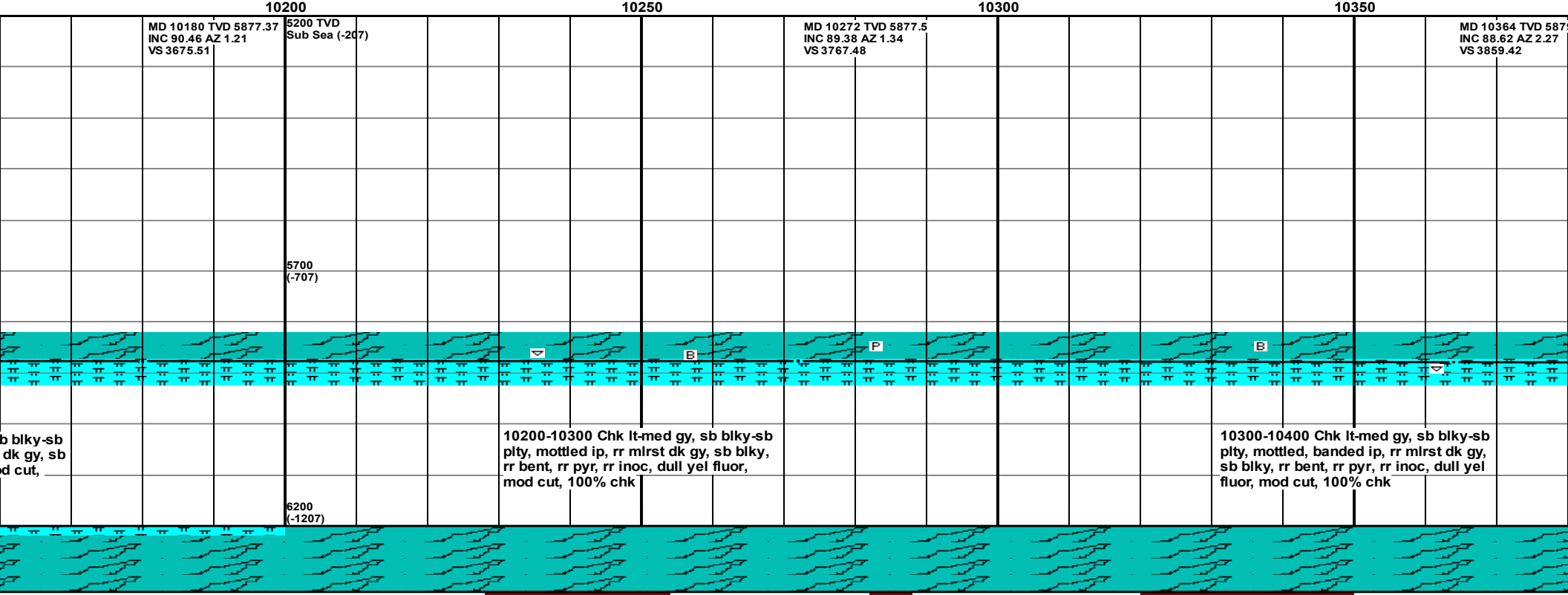
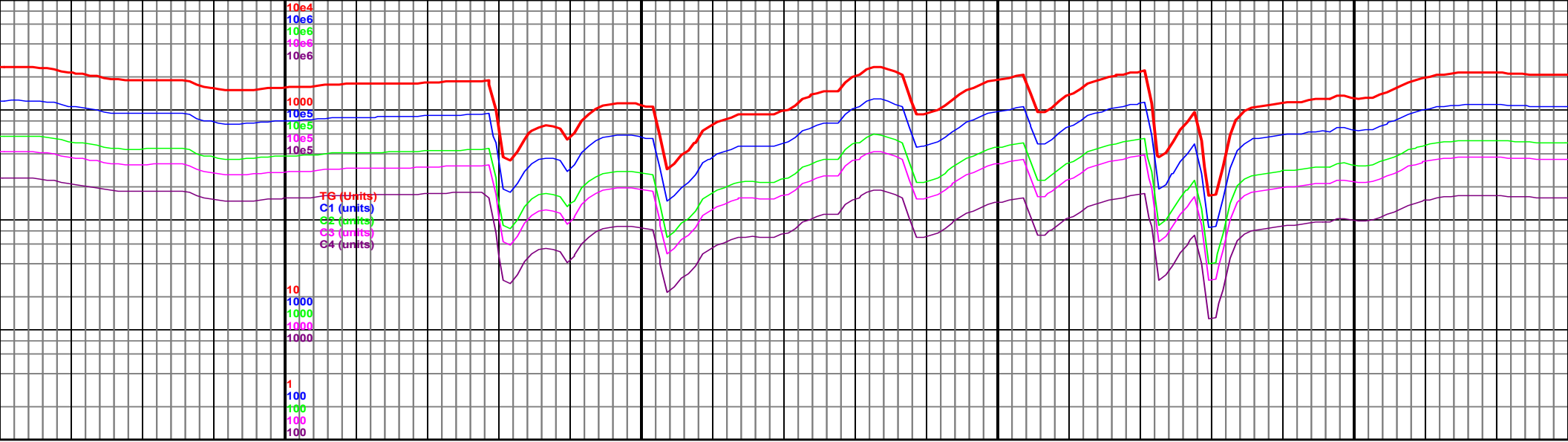
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INC 91.49 AZ 357.78
VS 3214.6

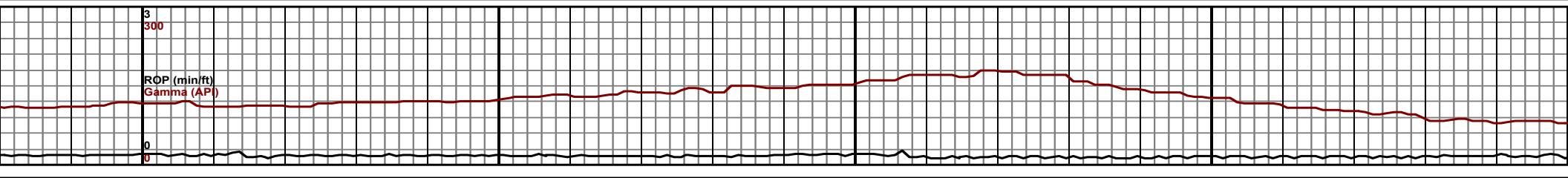
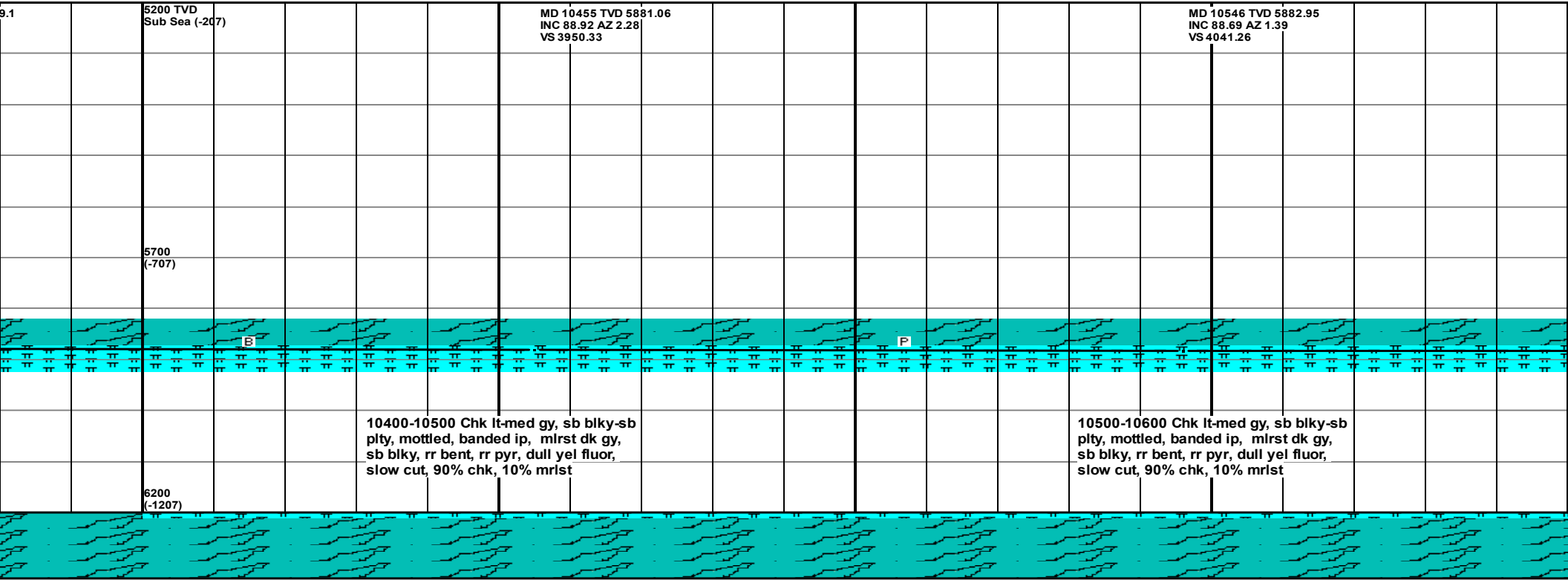
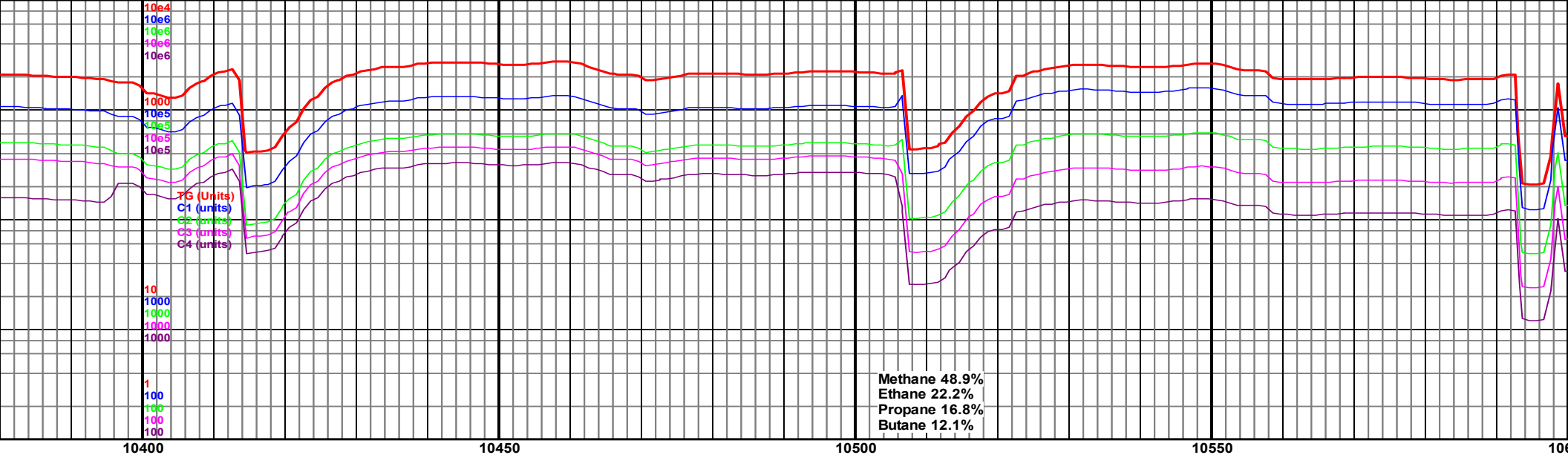
MD 9811 TVD 5876.71
INC 90.28 AZ 359.27
VS 3306.55

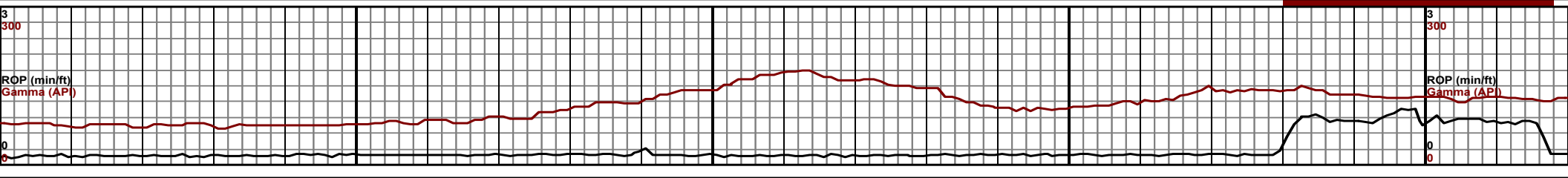
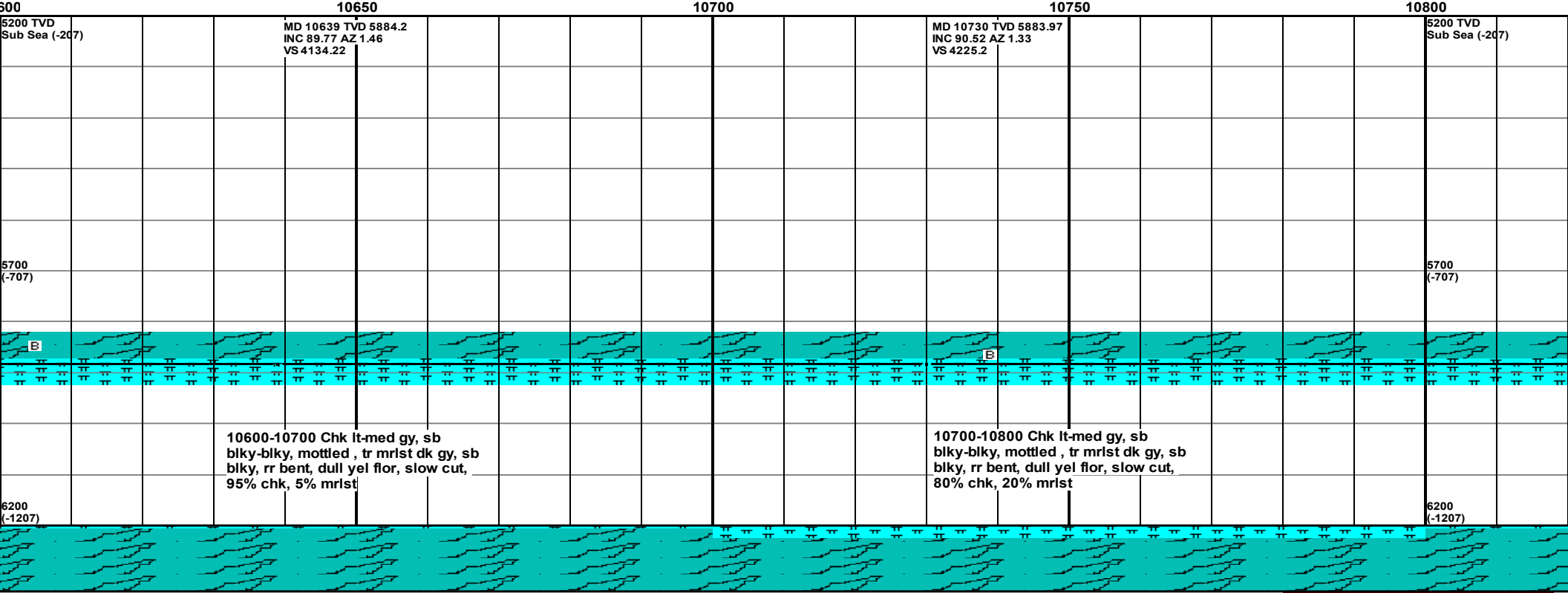
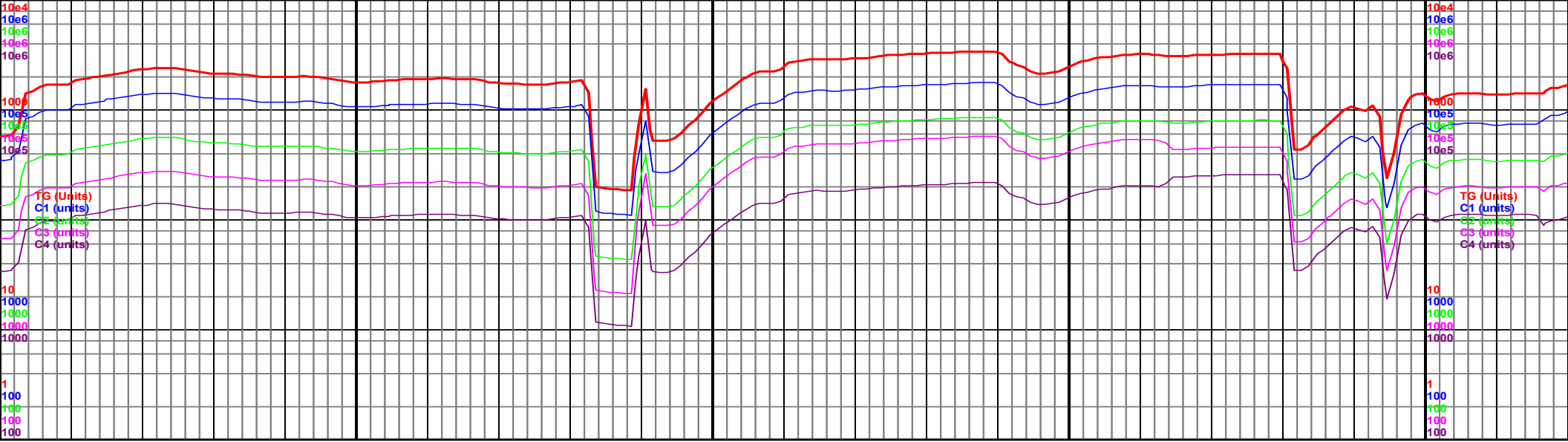
MD 9903 TVD 5876.83
INC 89.57 AZ 0.37
VS 3398.55

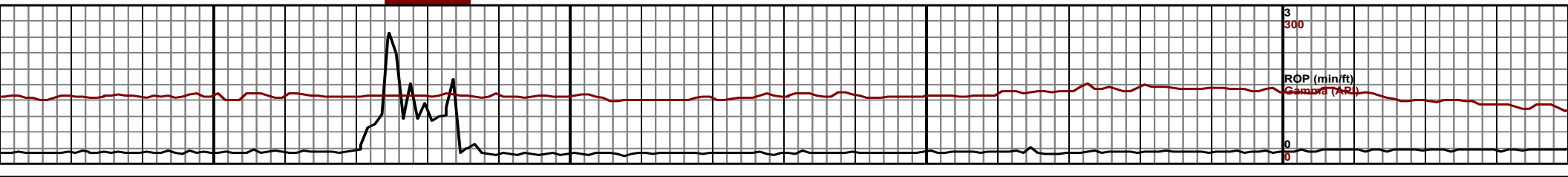
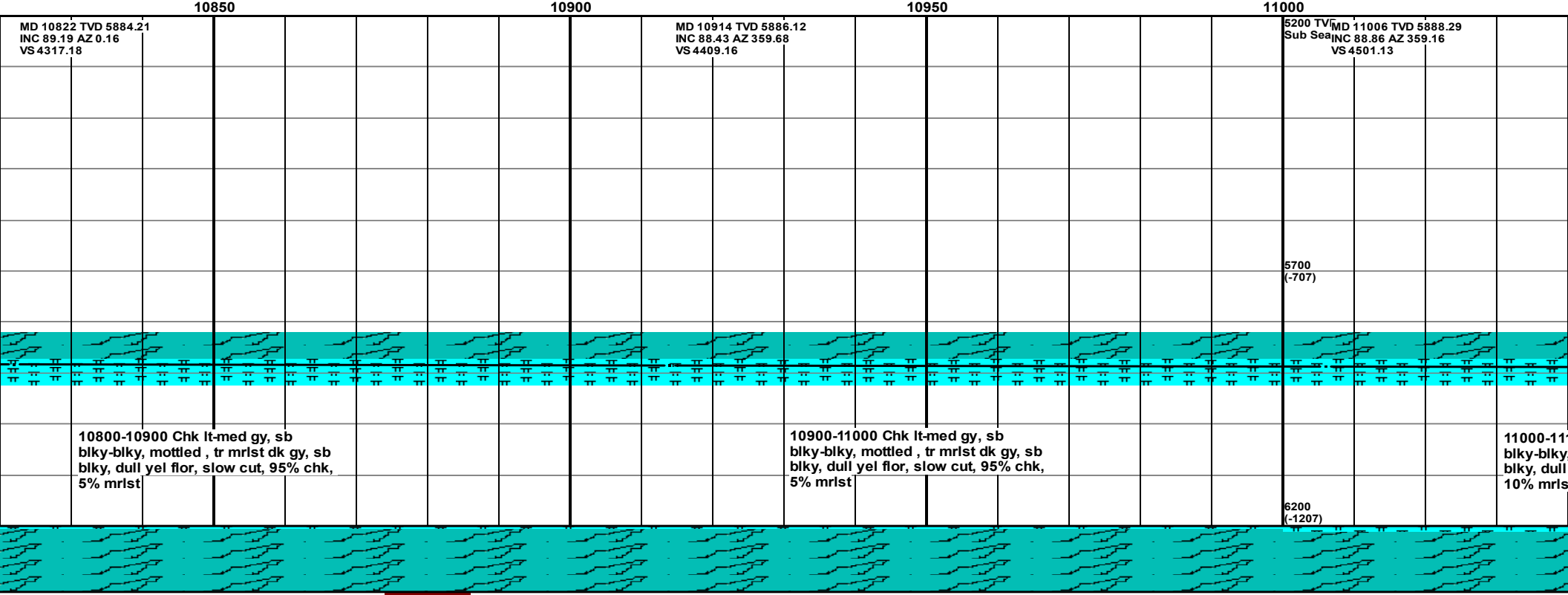
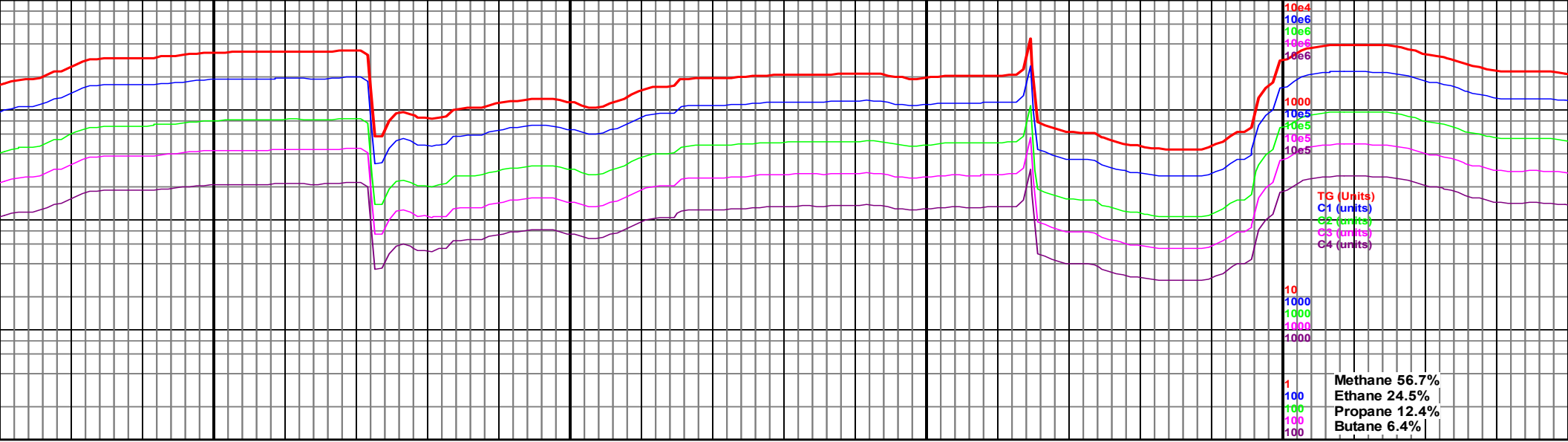


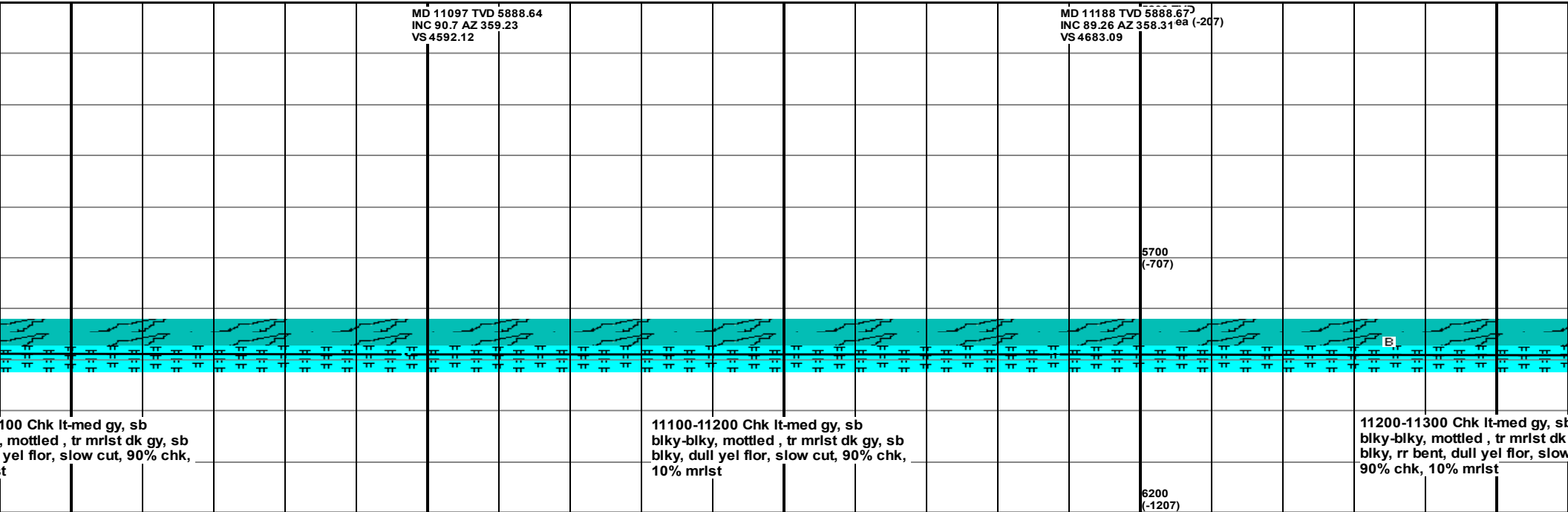
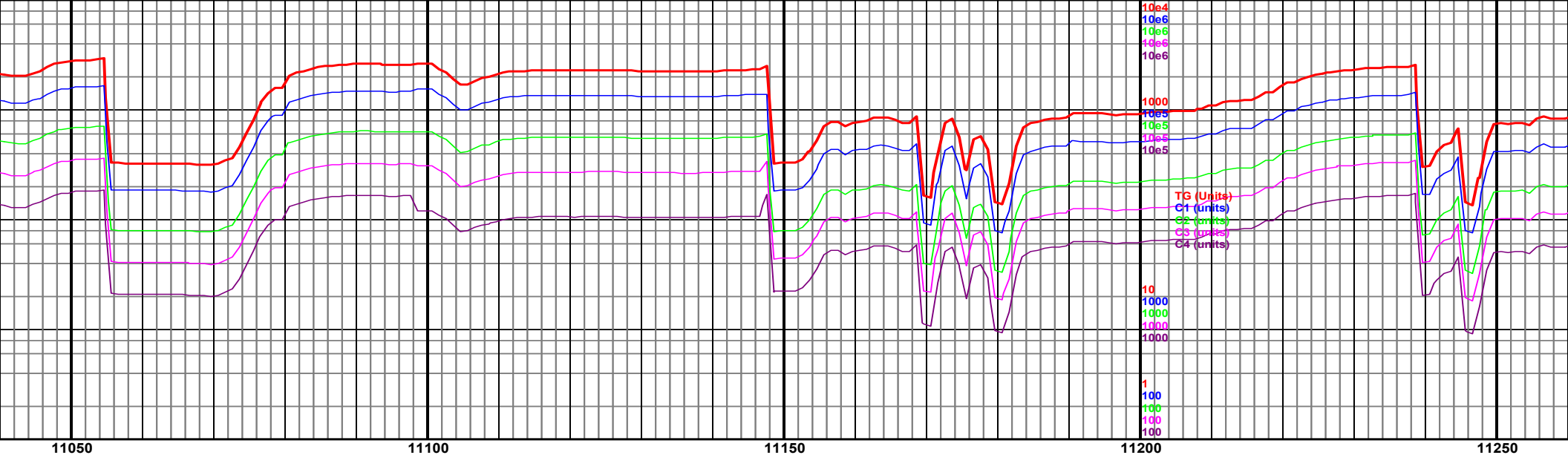








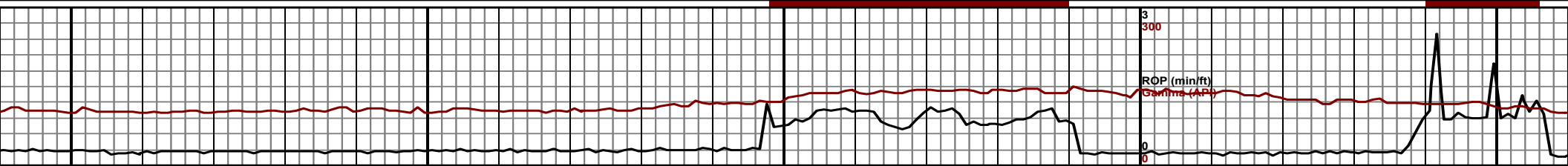


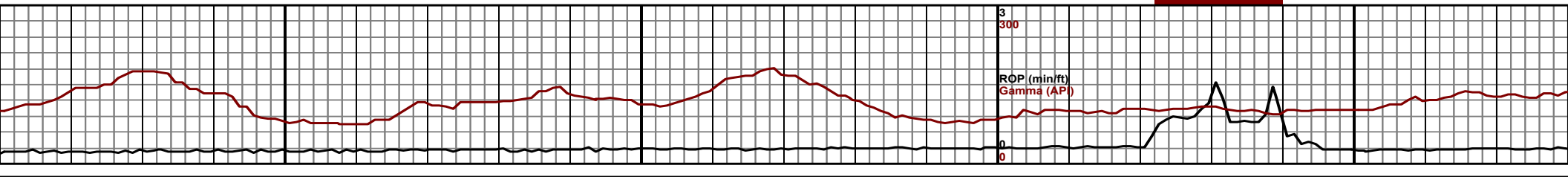
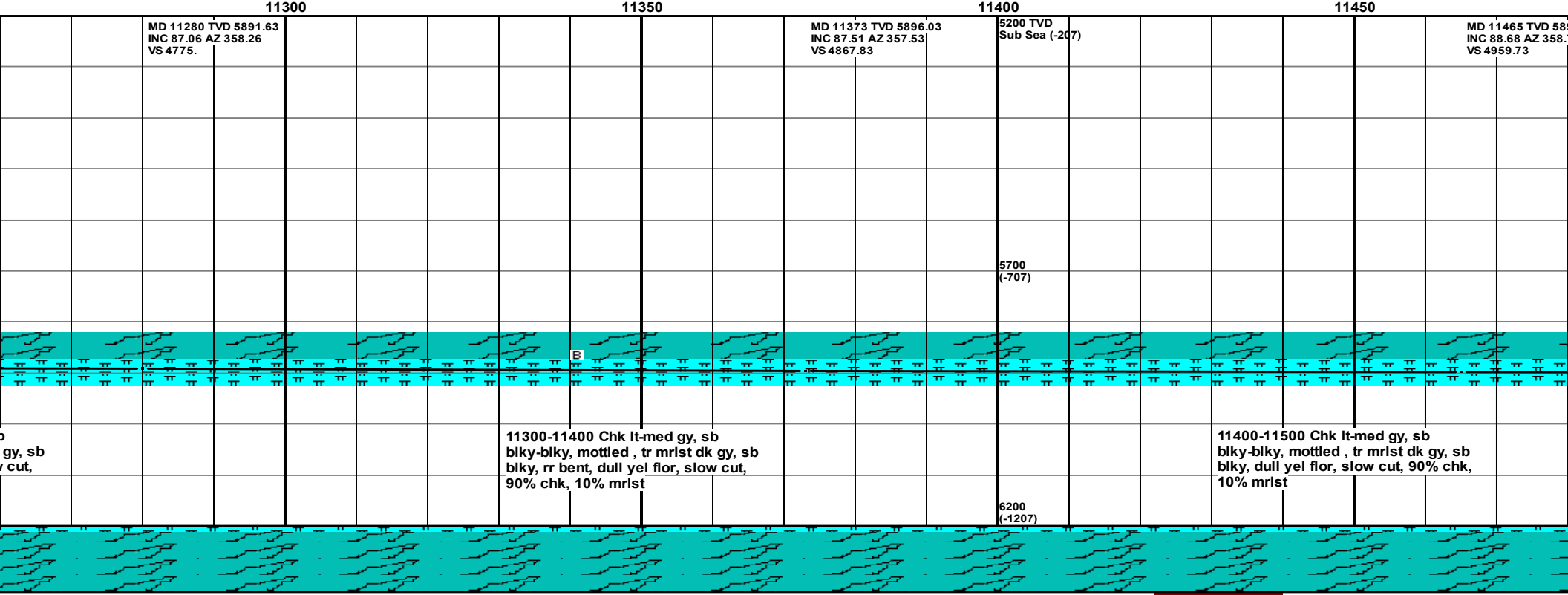
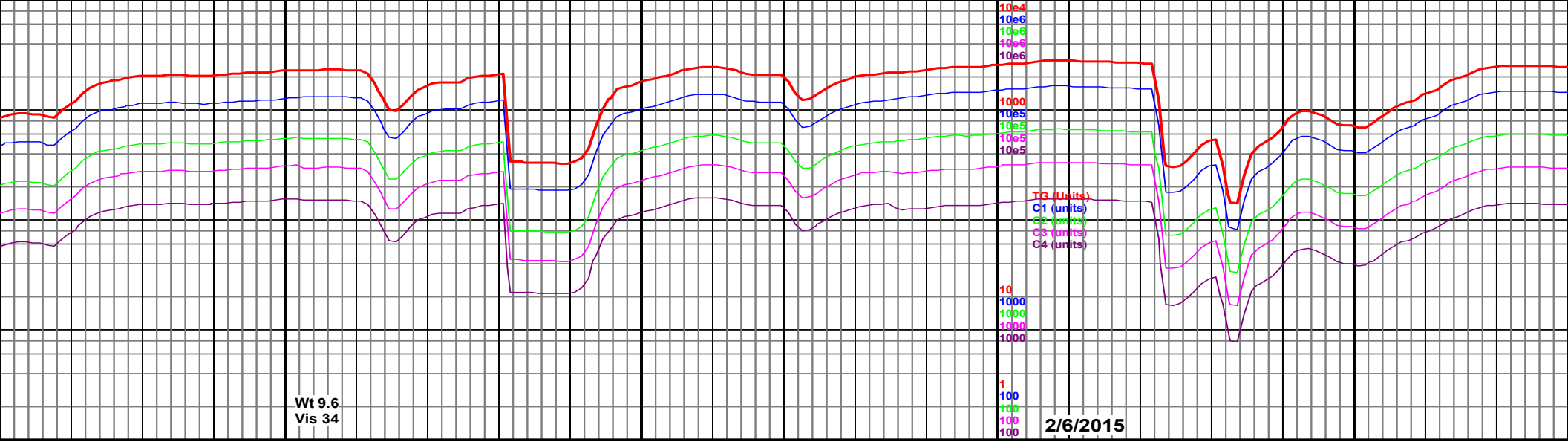


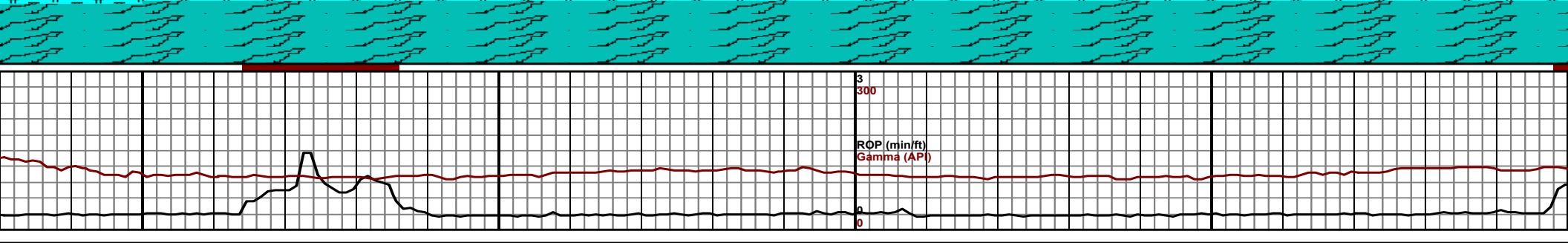
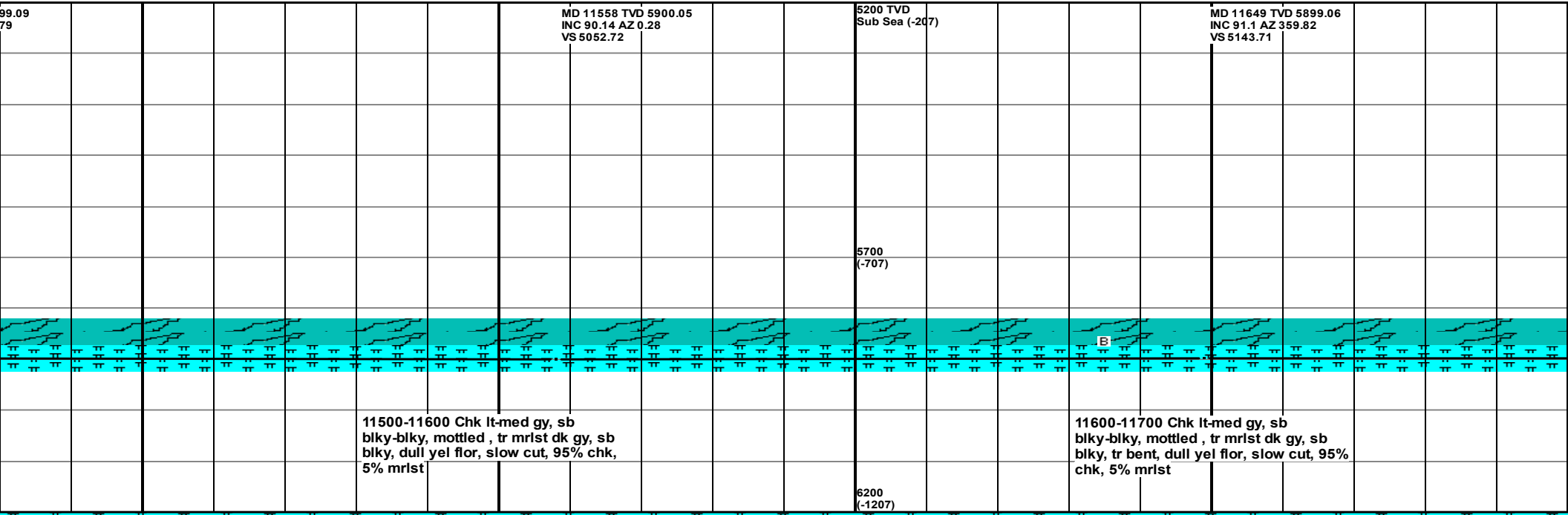
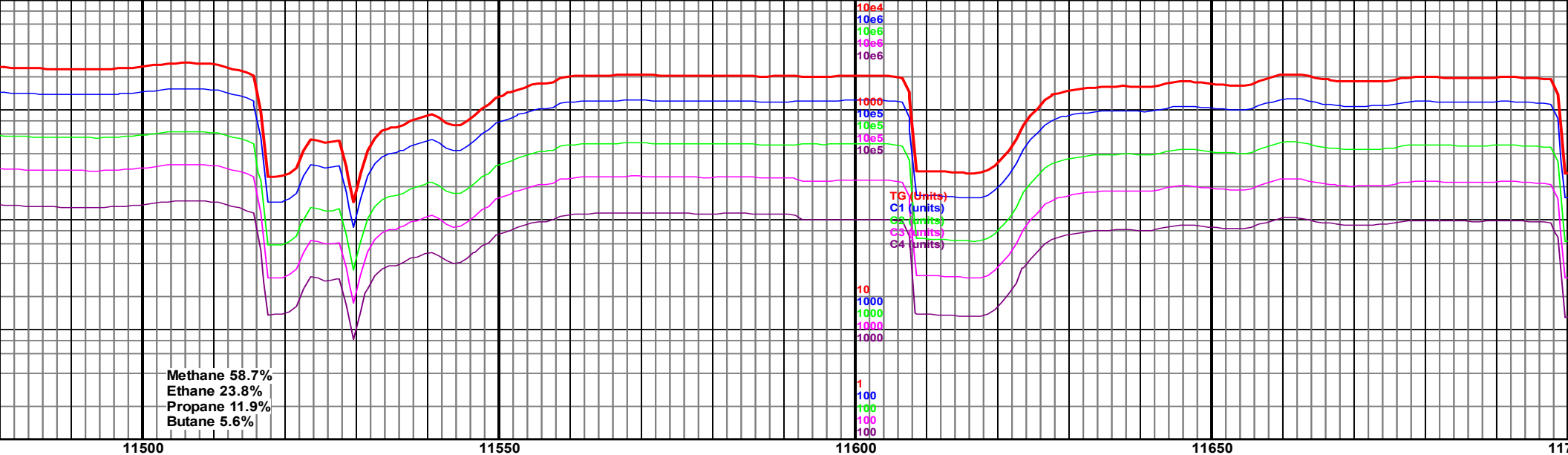
100 Chk lt-med gy, sb
mottled, tr mrlst dk gy, sb
yel flor, slow cut, 90% chk,
t

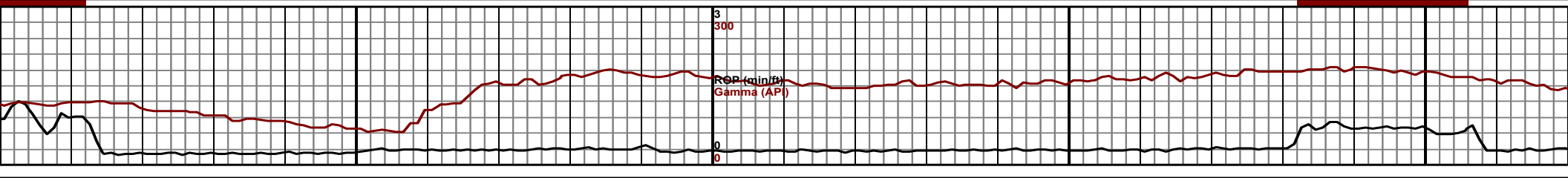
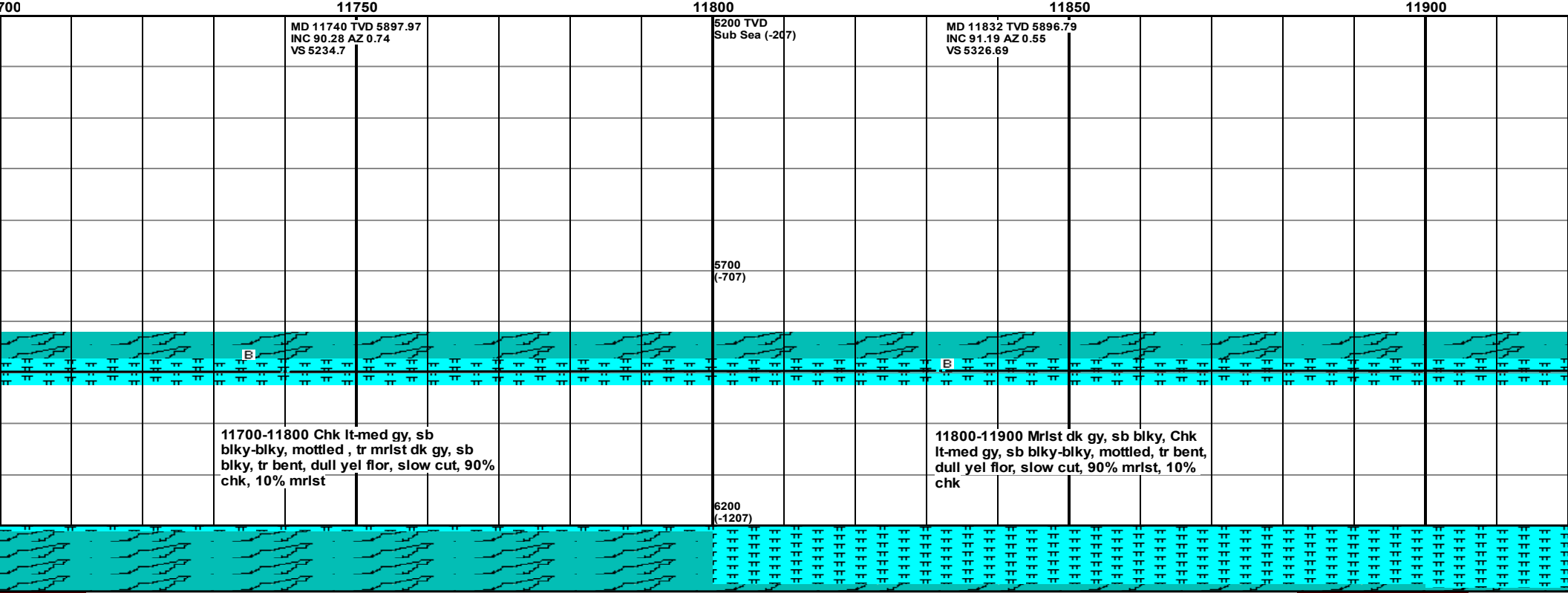
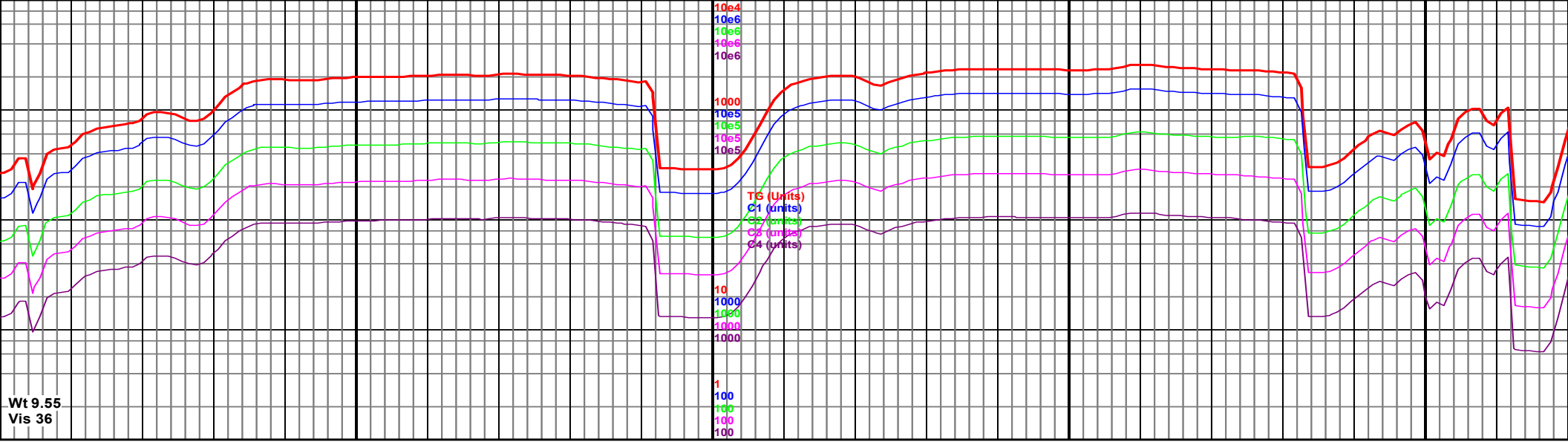
11100-11200 Chk lt-med gy, sb
blky-blky, mottled, tr mrlst dk gy, sb
blky, dull yel flor, slow cut, 90% chk,
10% mrlst

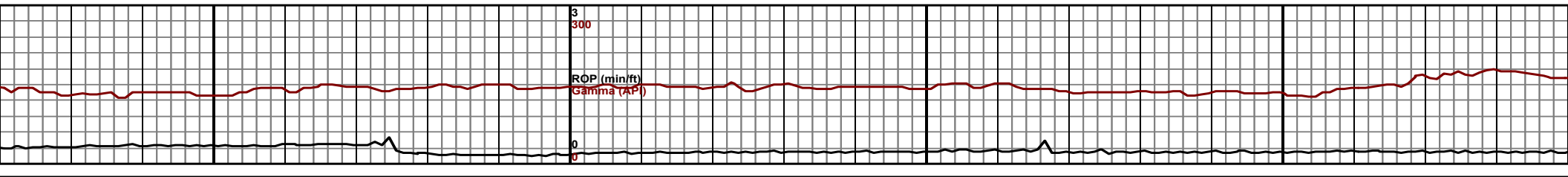
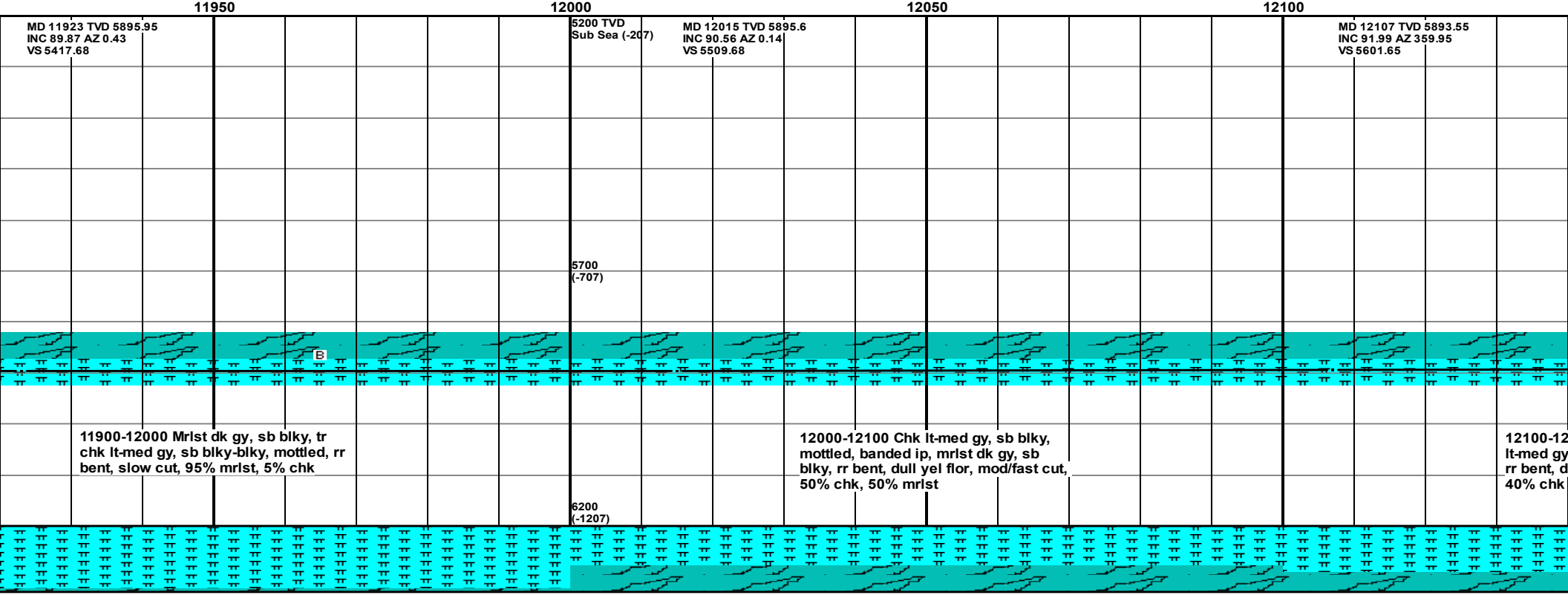
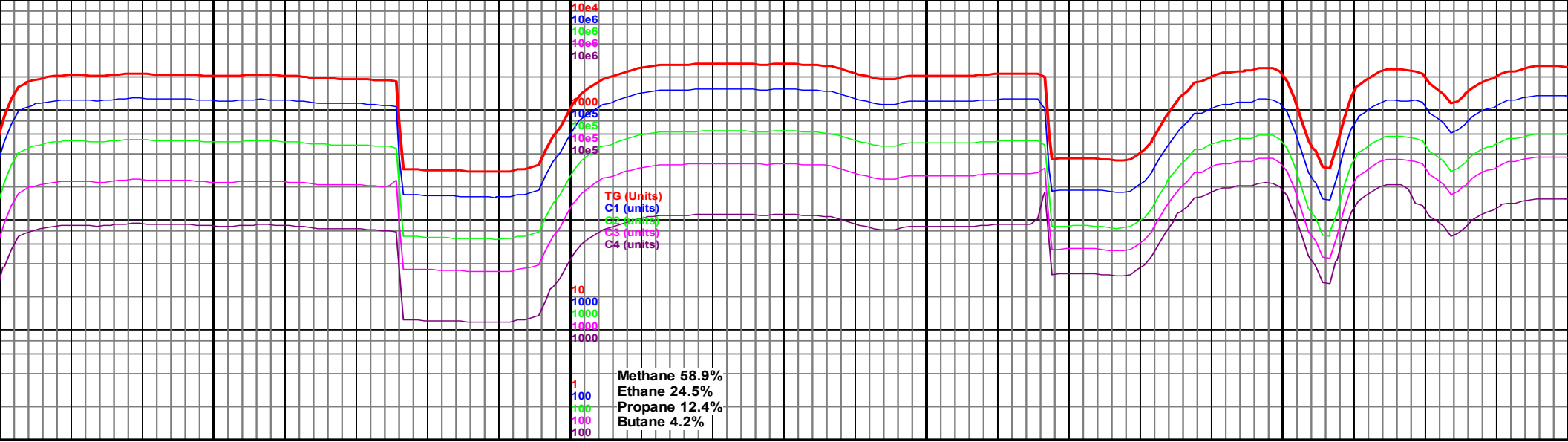
11200-11300 Chk lt-med gy, sb
blky-blky, mottled, tr mrlst dk
blky, rr bent, dull yel flor, slow
90% chk, 10% mrlst

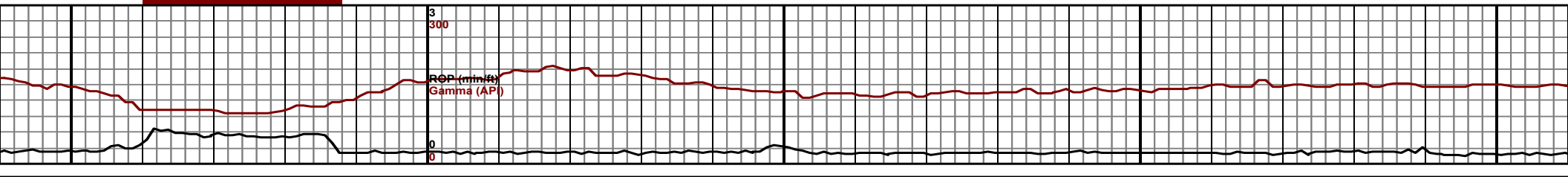
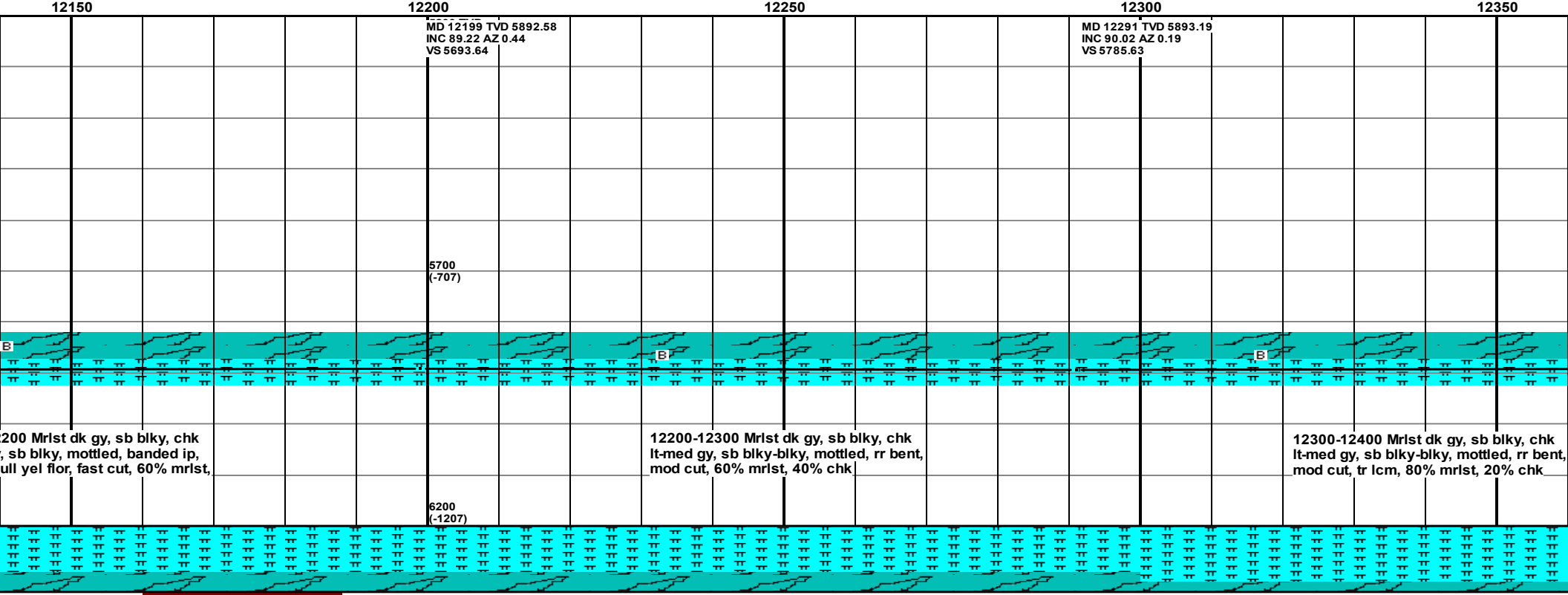
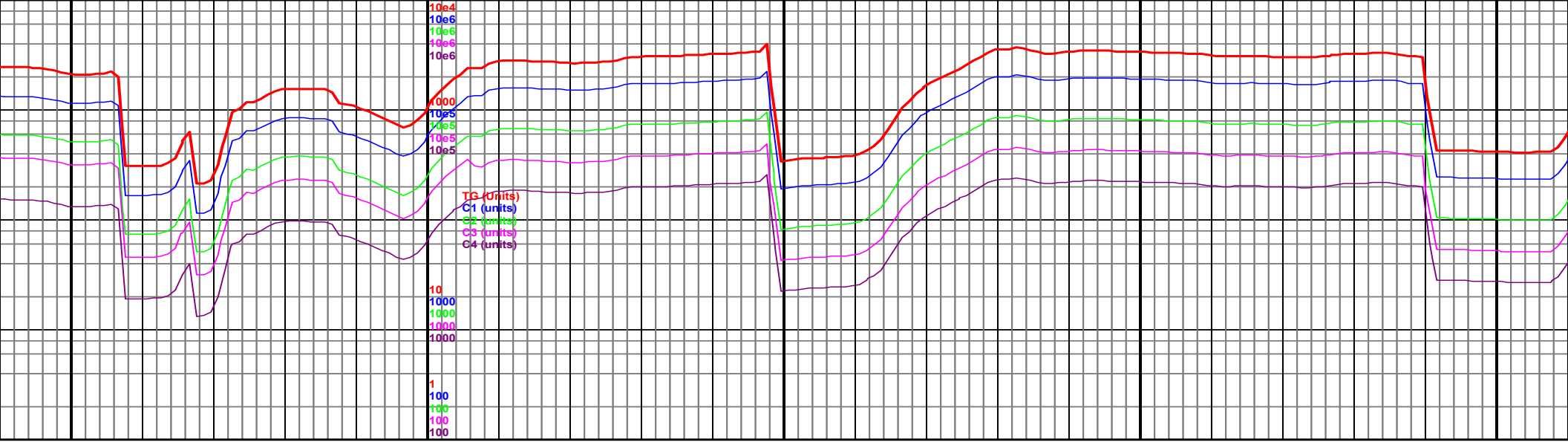


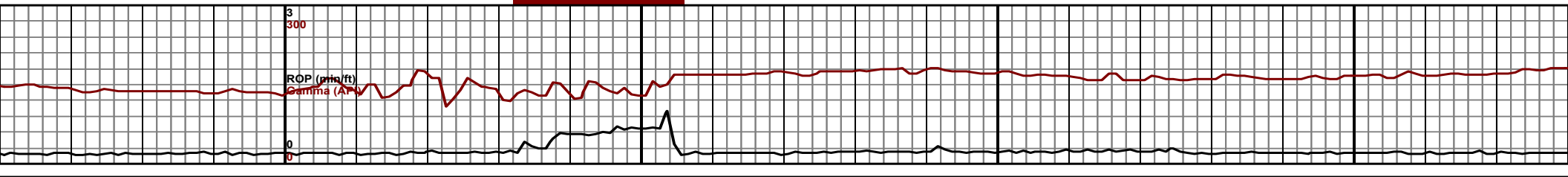
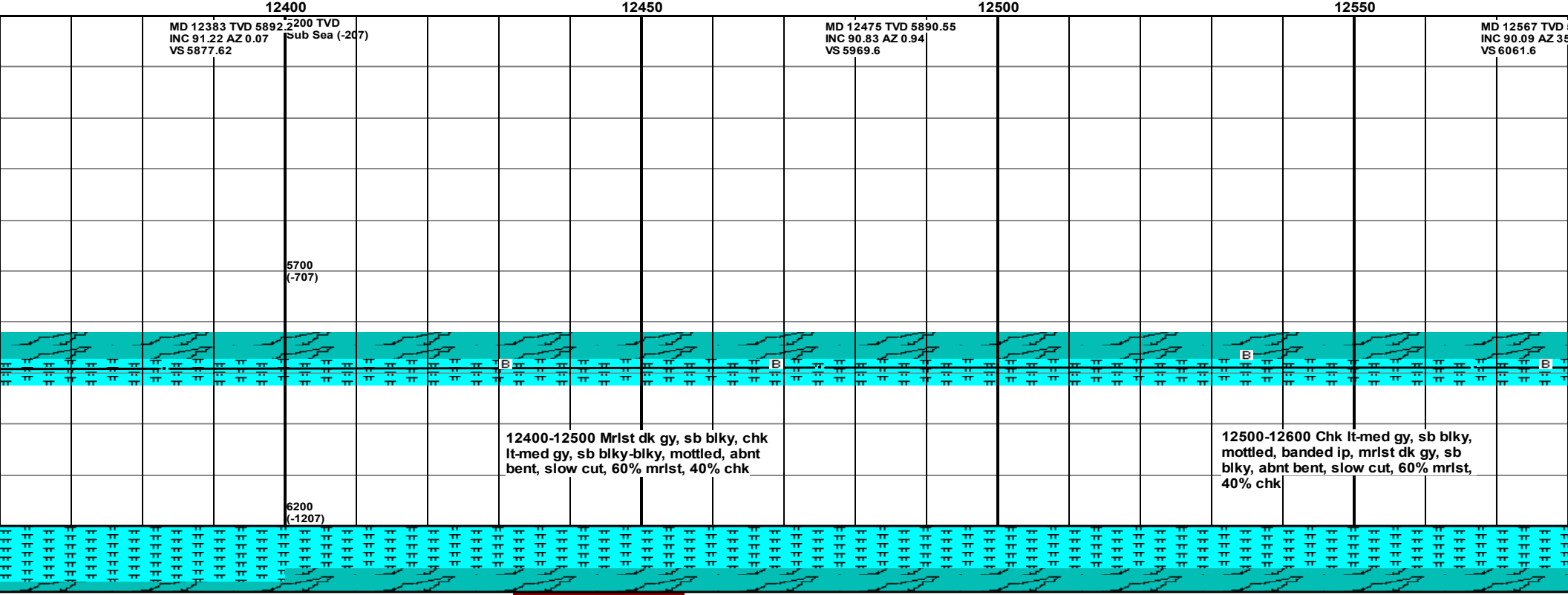
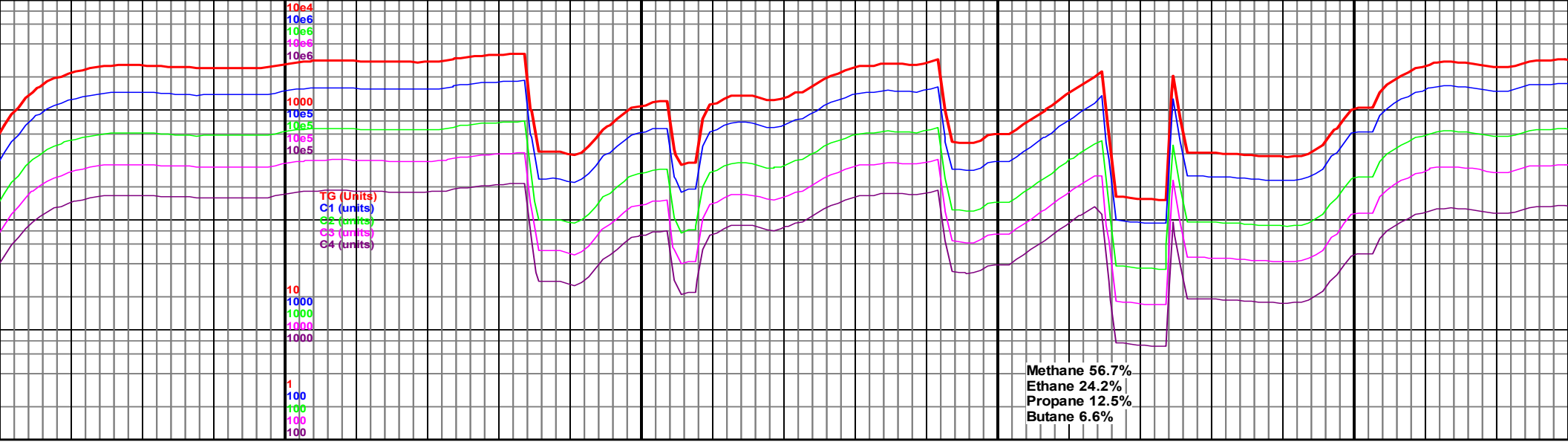


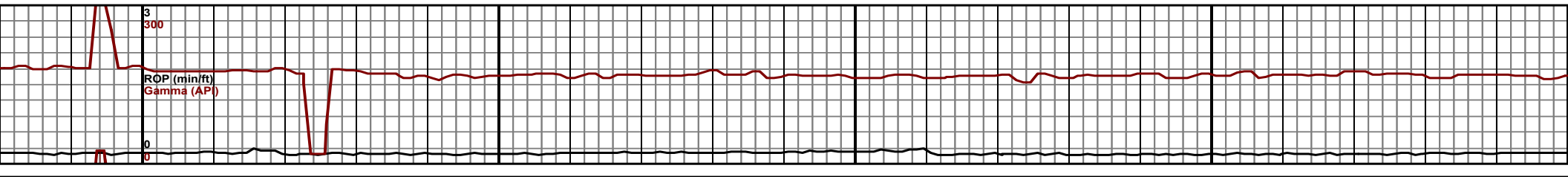
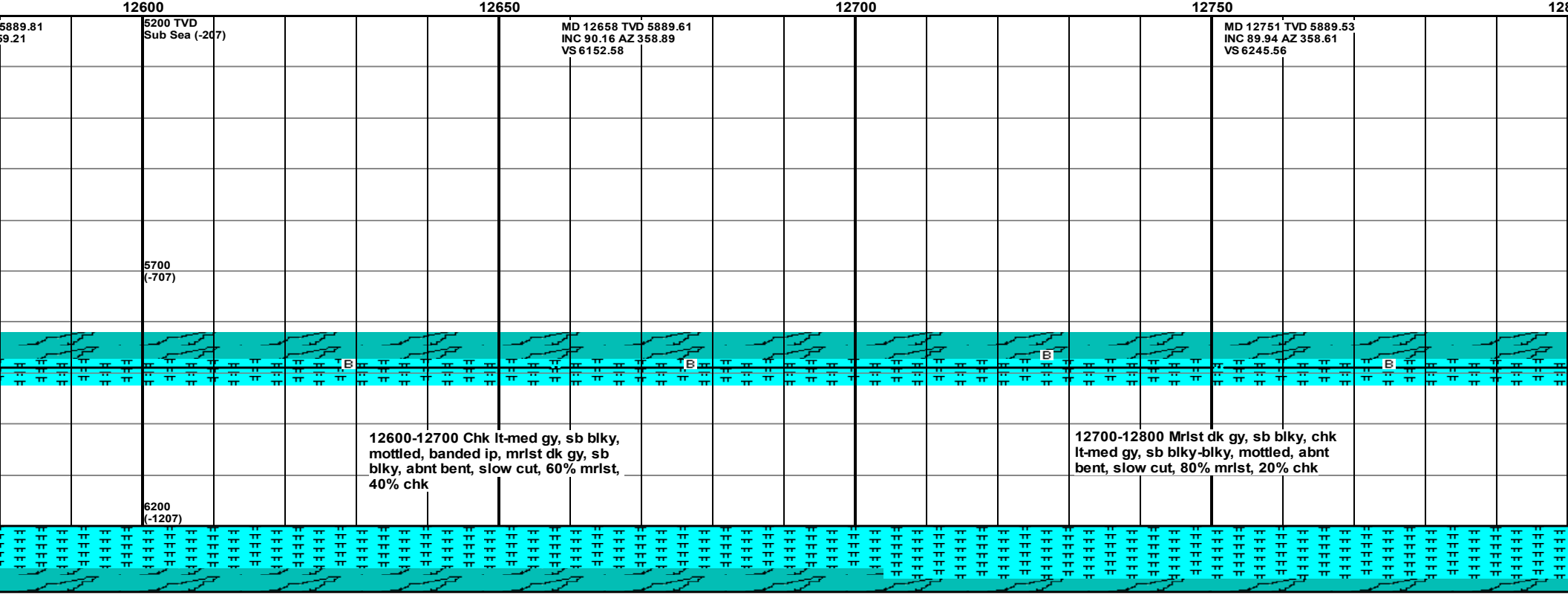
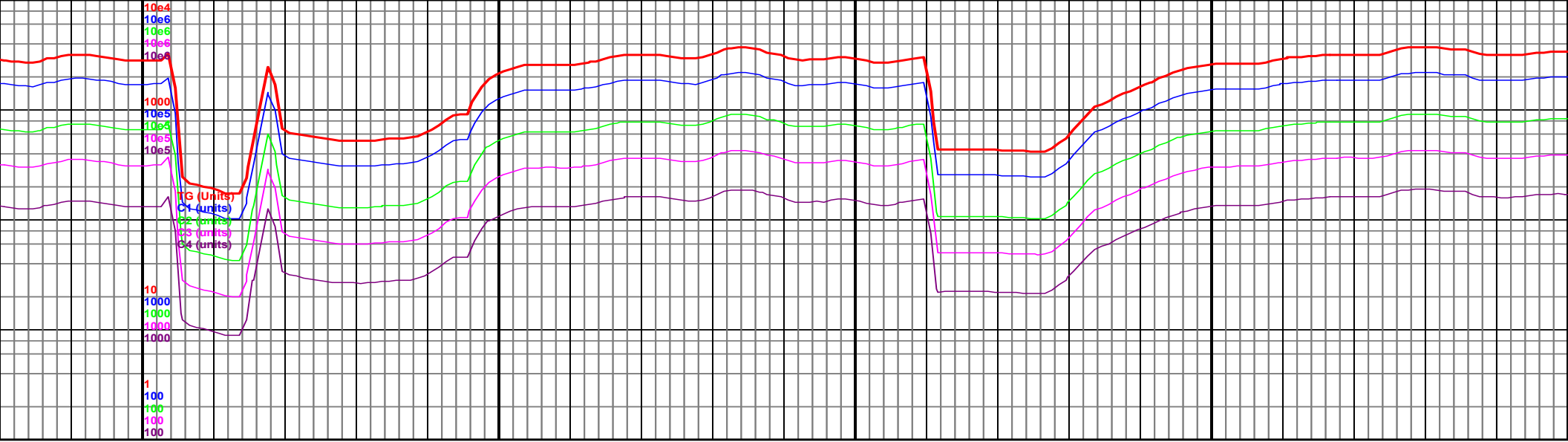


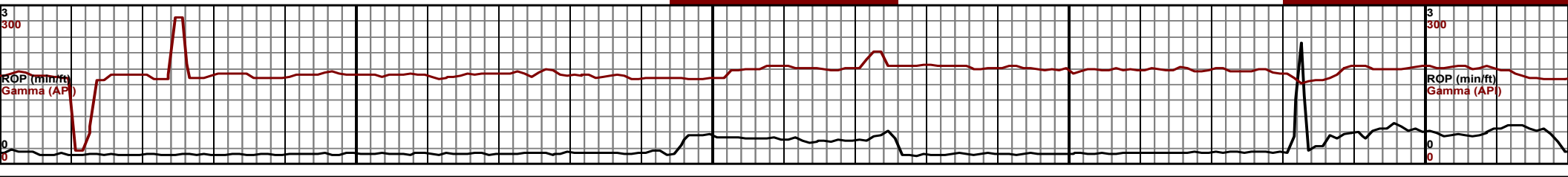
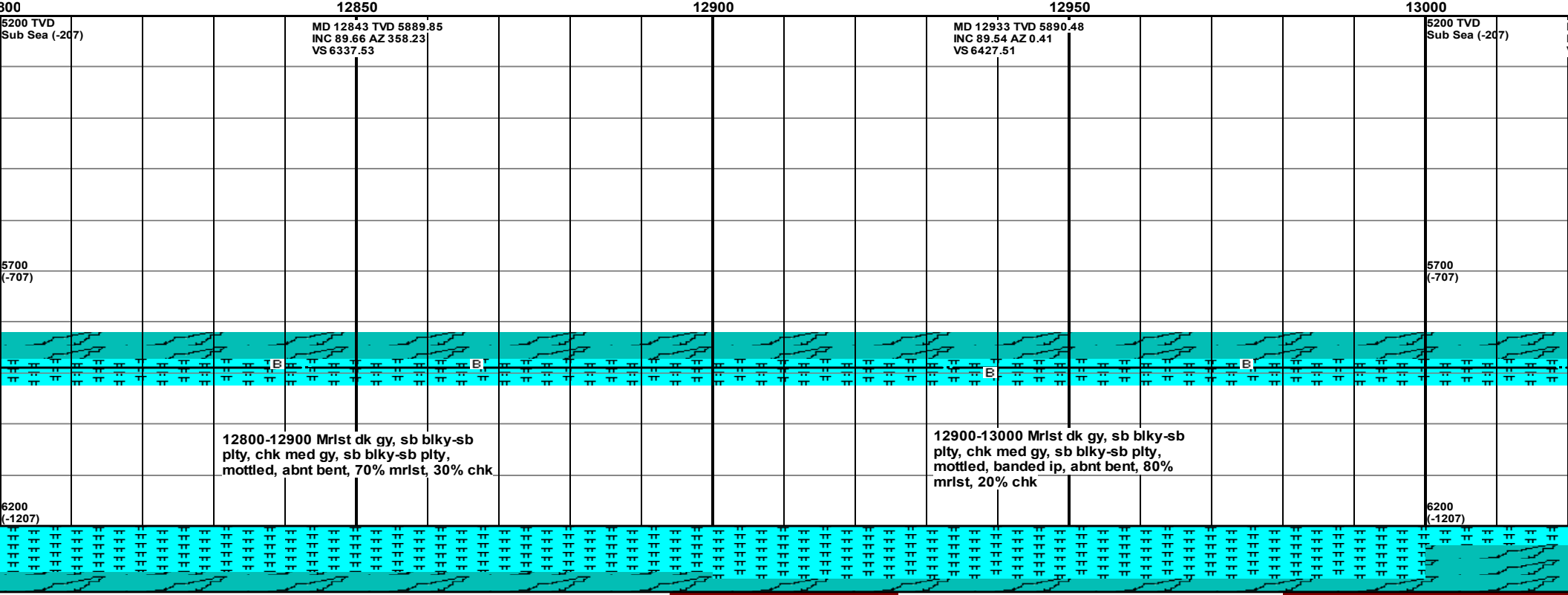
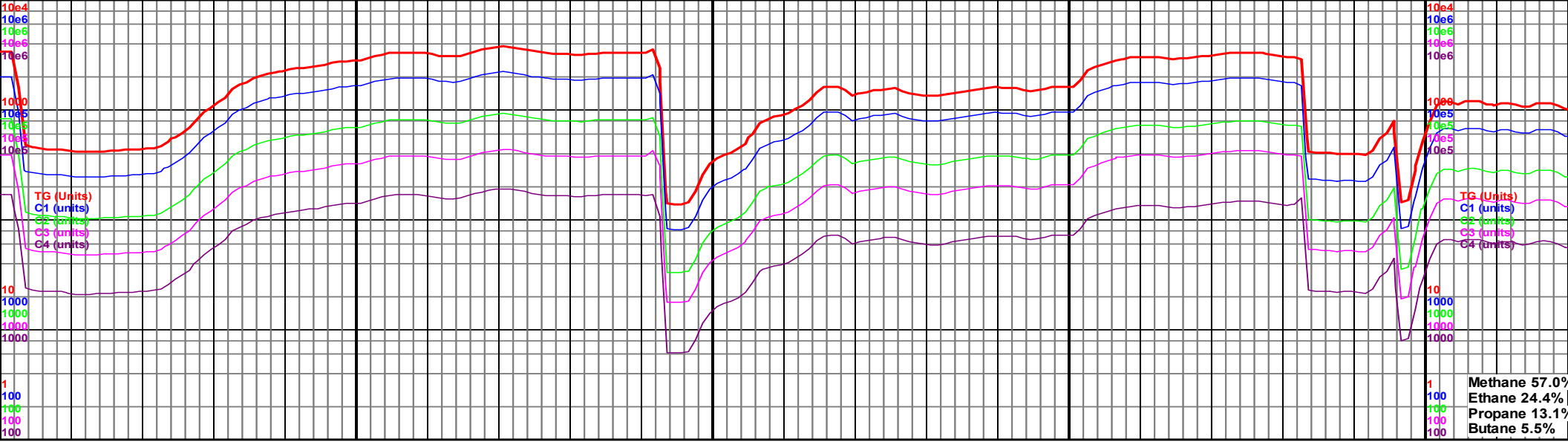


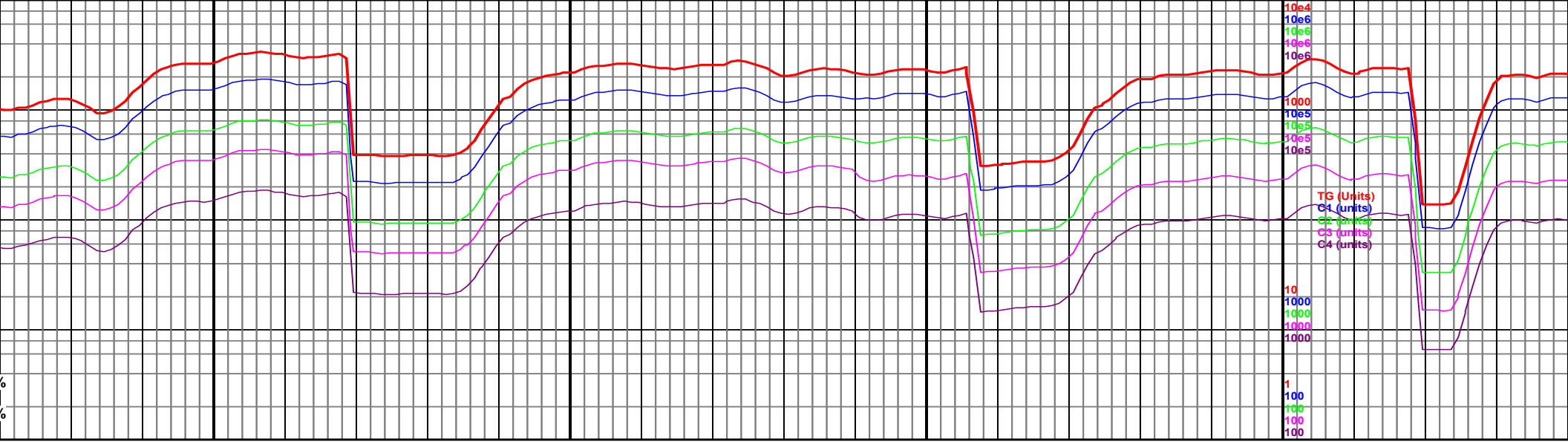








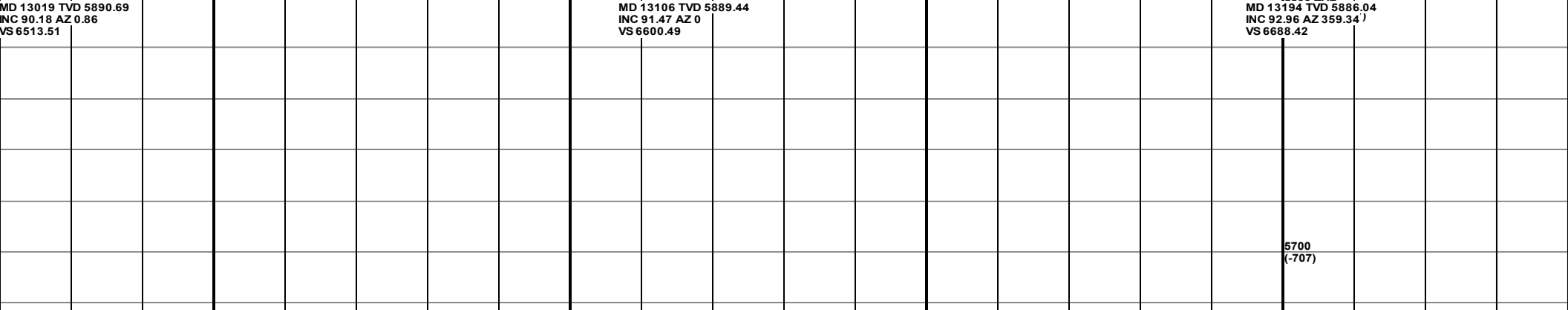




MD 13019 TVD 5890.69
INC 90.18 AZ 0.86
VS 6513.51

MD 13106 TVD 5889.44
INC 91.47 AZ 0
VS 6600.49

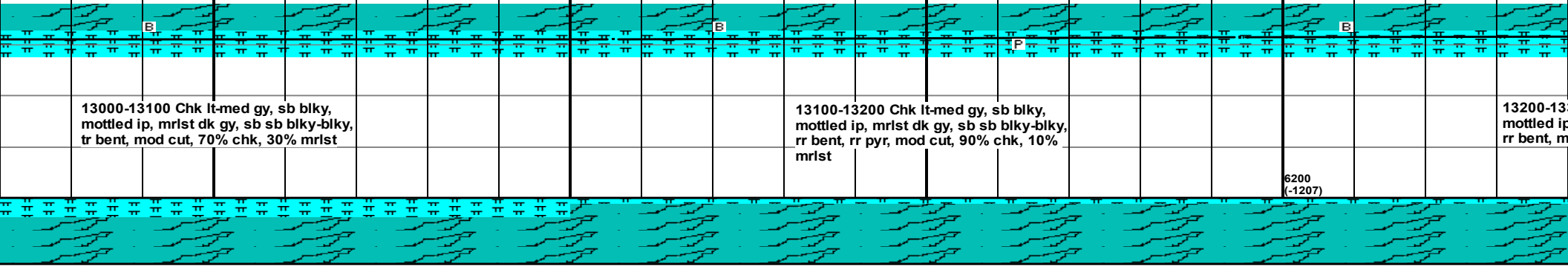
MD 13194 TVD 5886.04
INC 92.96 AZ 359.34
VS 6688.42



13000-13100 Chk lt-med gy, sb blk,
mottled ip, mrlst dk gy, sb sb blk-bkly,
tr bent, mod cut, 70% chk, 30% mrlst

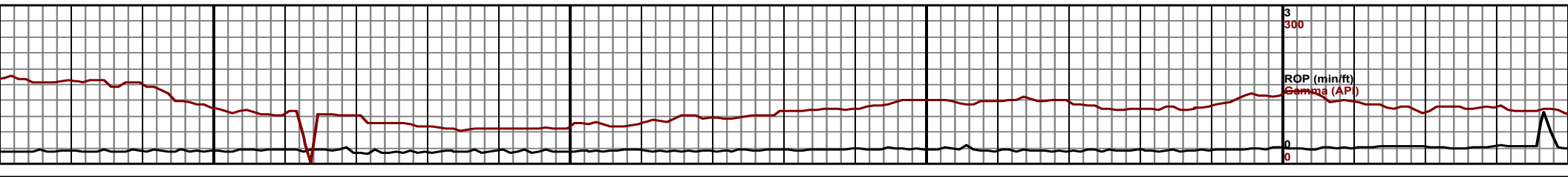
13100-13200 Chk lt-med gy, sb blk,
mottled ip, mrlst dk gy, sb sb blk-bkly,
rr bent, rr pyr, mod cut, 90% chk, 10%
mrlst

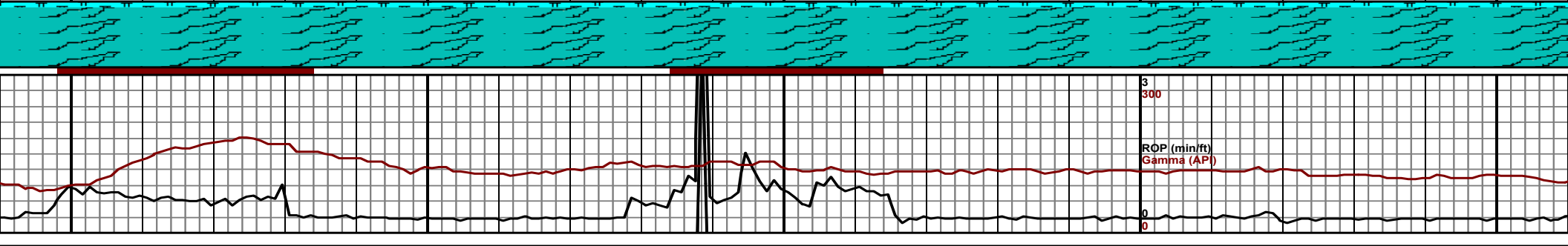
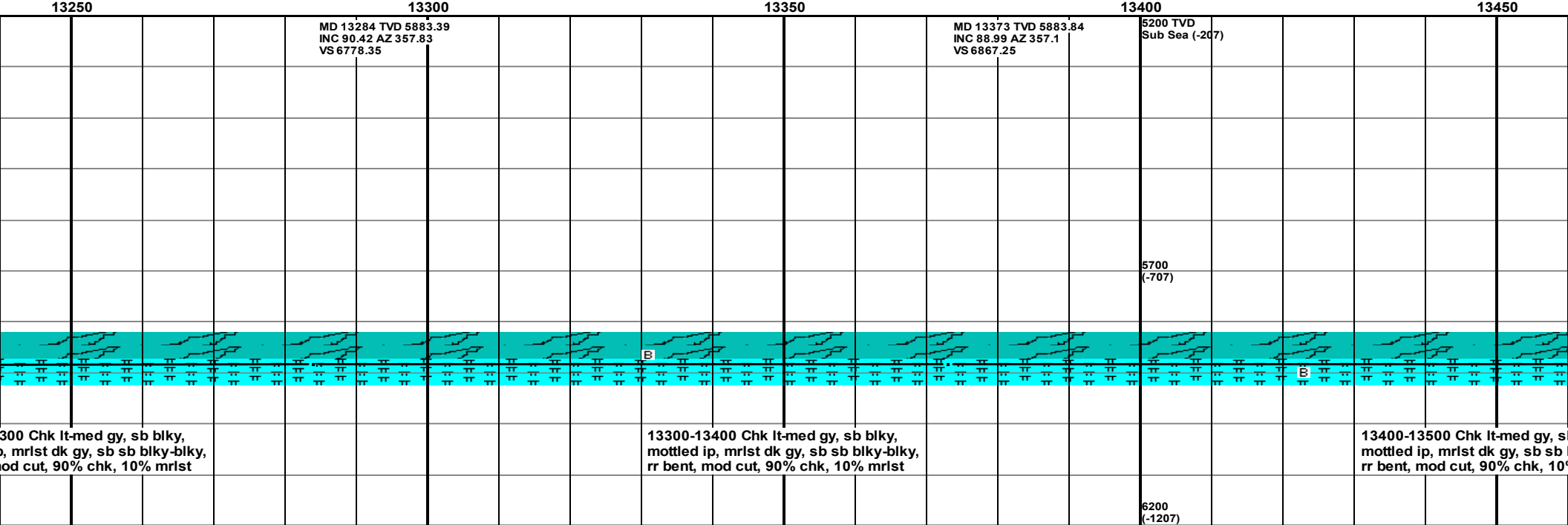
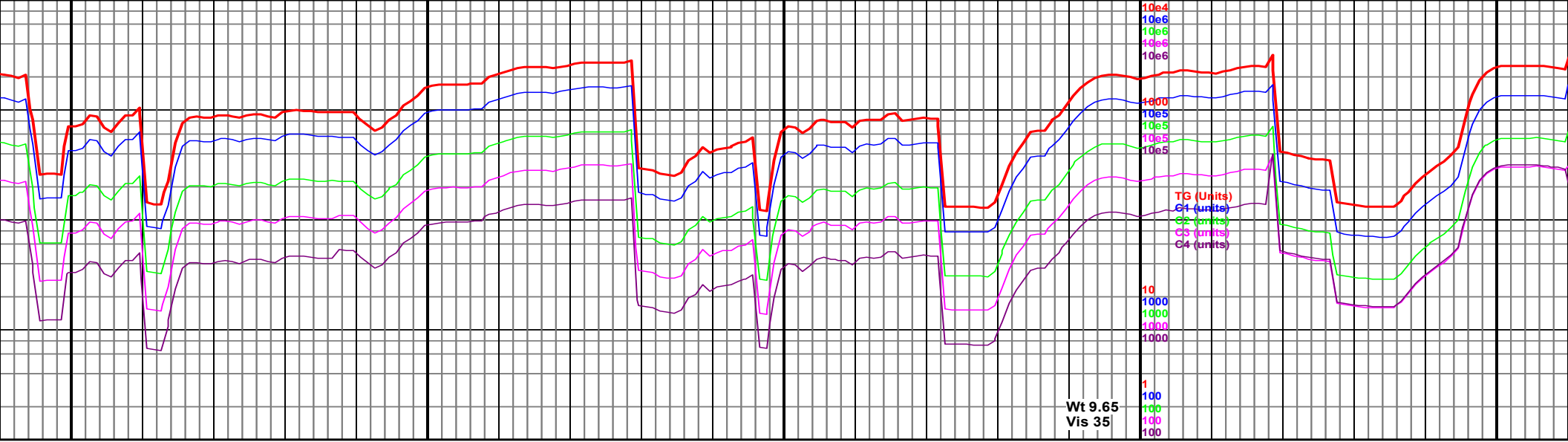
13200-13
mottled ip
rr bent, m

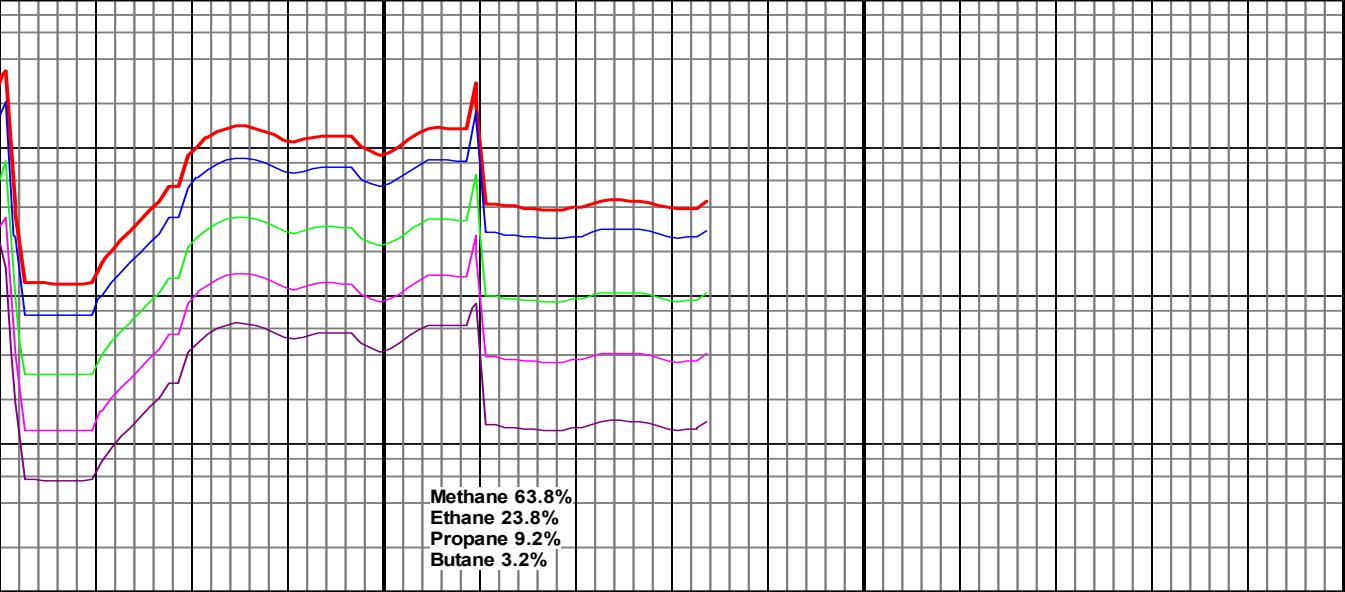


5700
(-707)

6200
(-1207)







13500

13550

13

MD 13487 TVD 5884.04
INC 90.81 AZ 356.98
VS 6981.1

MD 13537 TVD 5883.34
INC 90.81 AZ 356.98
VS 7031.02



TD of 13537' reached at
20:32 on 2/6/2015

sb blk,
blk-biky,
% mlst

13500-13537 Chk lt-med gy, sb blk,
mottled ip, mlst dk gy, sb sb blk-biky,
rr bent, mod cut, 90% chk, 10% mlst

