



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

Well Name: Razor 26L-3502B
Location: NWSW 26-T10N-R58W
License Number: 05-123-37992
Spud Date: 4/16/2014
Surface Coordinates: Lat.: 40.808533 Long.: -103.839411

Region: Redtail Field
Drilling Completed:

Bottom Hole Coordinates: Lat.: 40.789375 Long.: -103.839481

Ground Elevation (ft): 4734
Logged Interval (ft): 5107 **To:**
Formation: Pierre, Sharon Springs, Niobrara B
Type of Drilling Fluid: Water Based Mud

K.B. Elevation (ft): 4751
Total Depth (ft):

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

Drilling Company

Cade Drilling, LLC
Rig #23

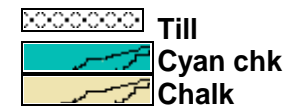
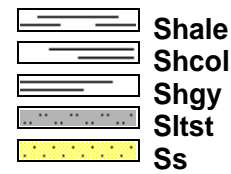
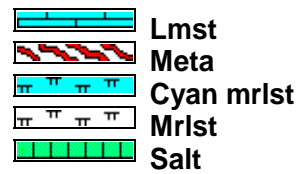
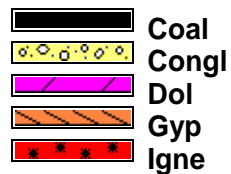
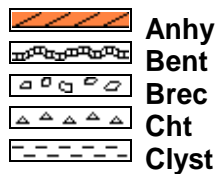
Gas Detection

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

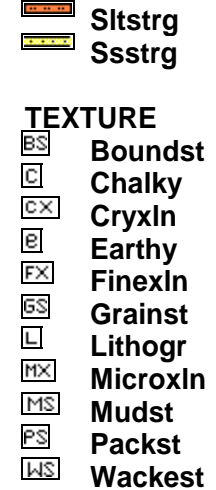
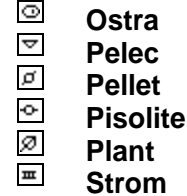
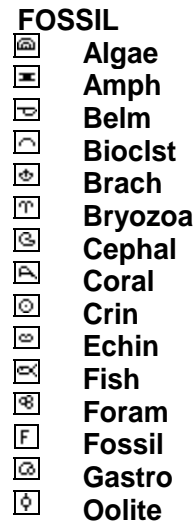
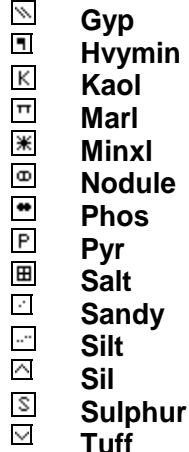
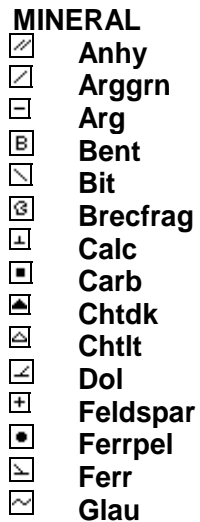
Comments








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

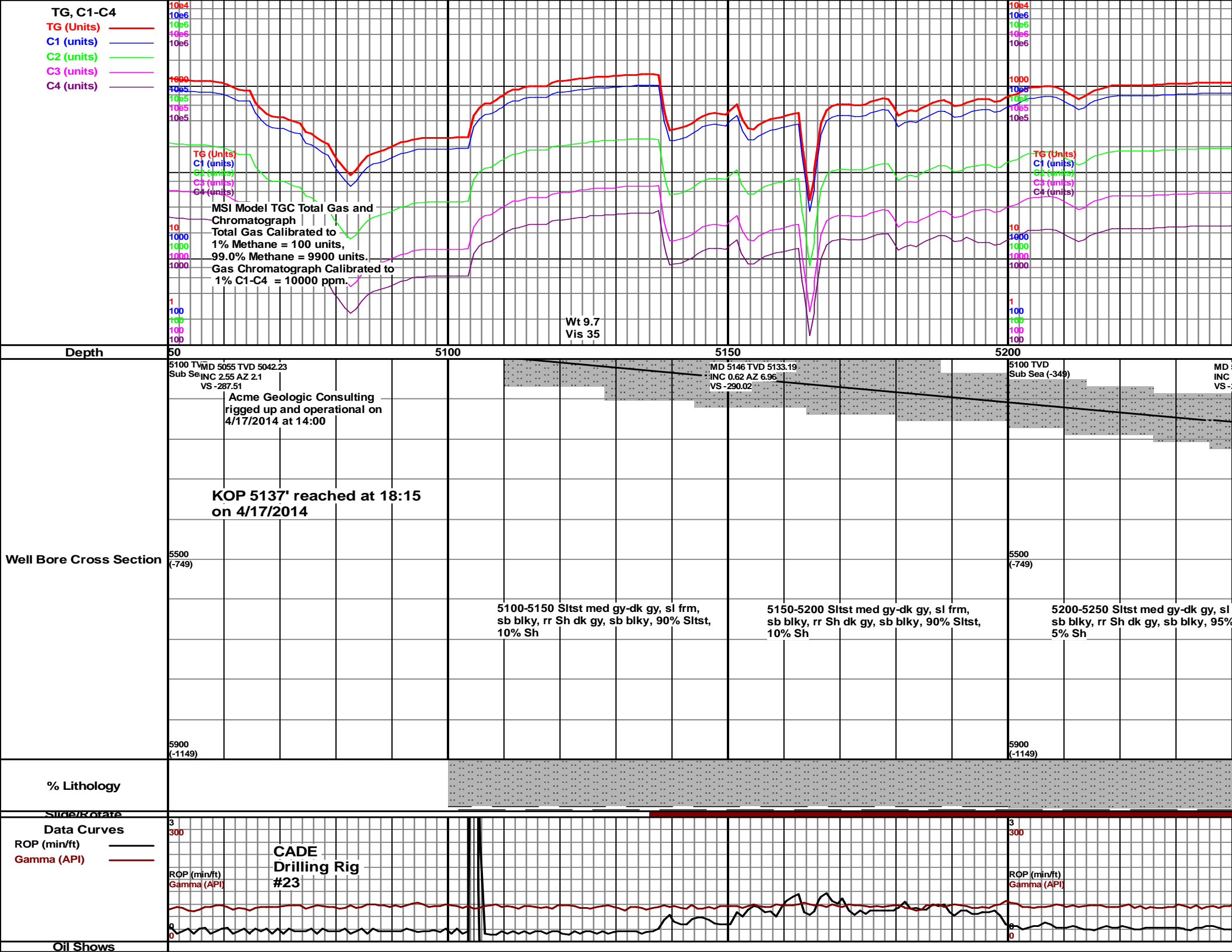
ROUNDING
 Rounded
 Subrnd
 Subang
 Angular

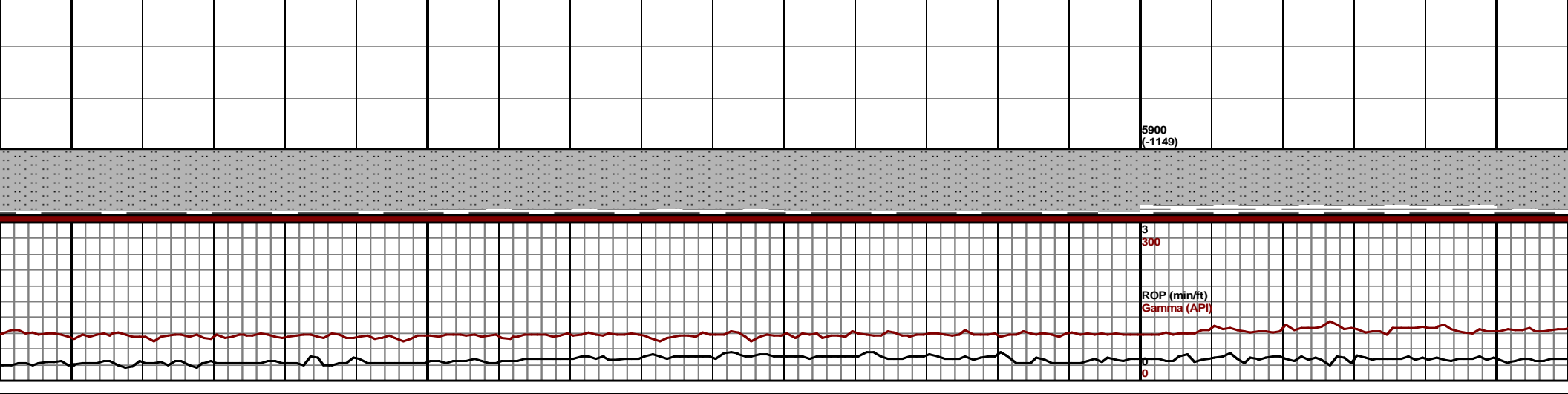
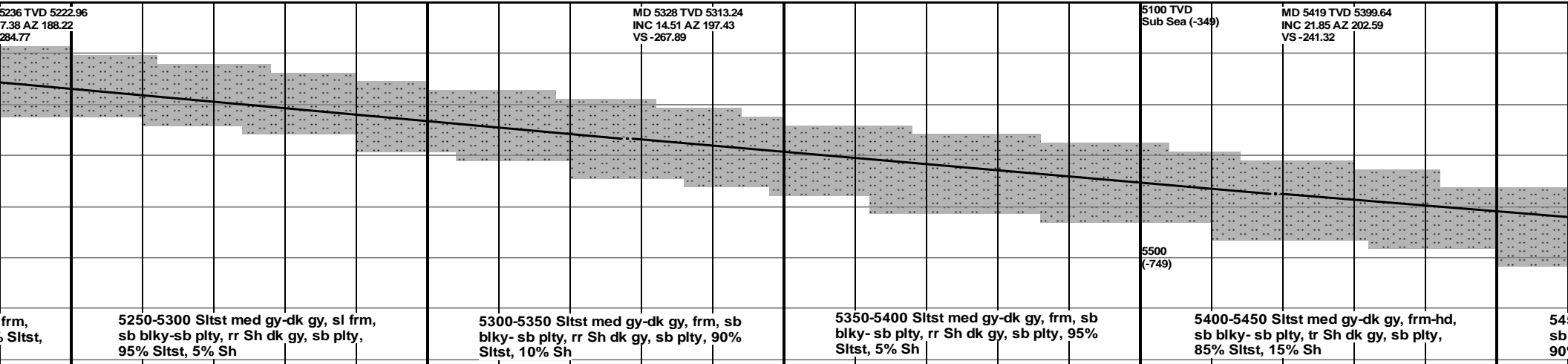
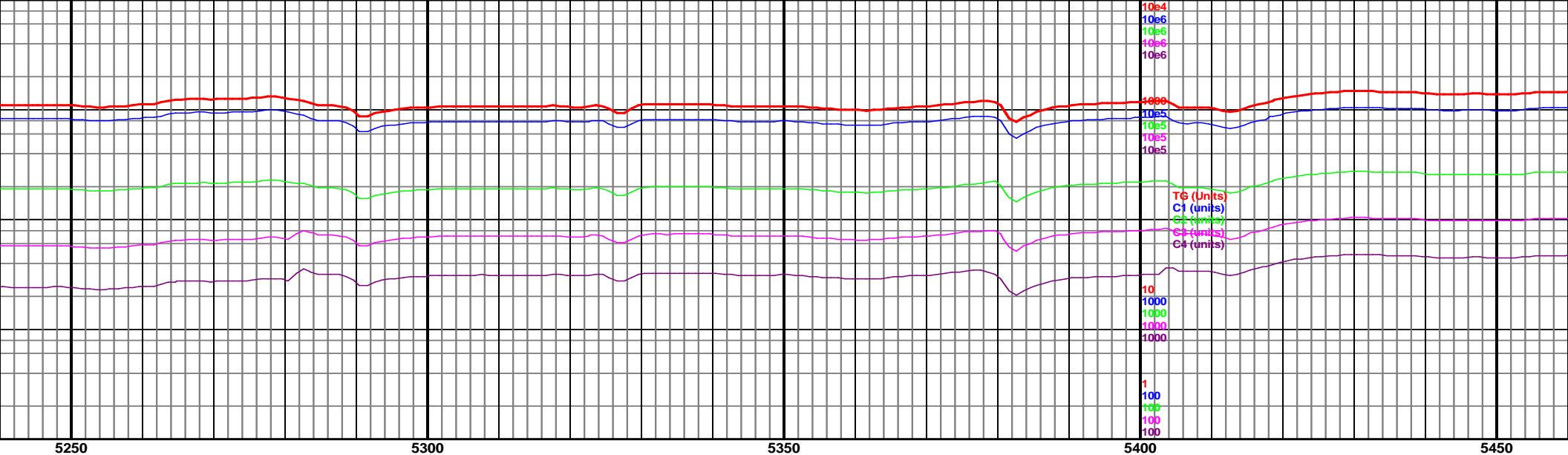
OIL SHOW
 Even

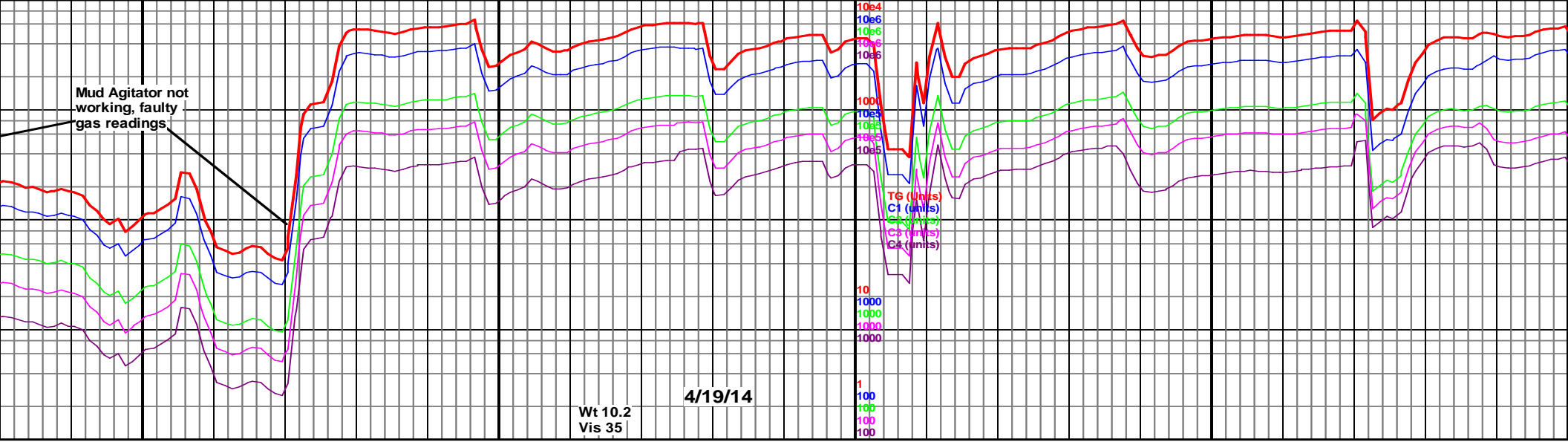
 Spotted
 Ques
 Dead

INTERVAL
 Core
 Dst

EVENT
 Rft
 Sidewall







MD 5686 TVD 5695 INC 47 AZ 210 VS -102.26	MD 5695 TVD 5614 INC 59.56 AZ 204 VS -90.68	MD 5726 TVD 5628.04 INC 66.55 AZ 202.42 VS -65.27	MD 5756 TVD 5638.91 INC 70.95 AZ 200.05 VS -39.18	MD 5786 TVD 5648.03 INC 73.67 AZ 197.85 VS -12.23	MD 5817 TVD 5656.21 INC 75.74 AZ 192.49 VS 16.64	MD 5846 TVD 5663.08 INC 76.88 AZ 186.76 VS 44.42	MD 5876 TVD 5669.35 INC 78.99 AZ 182.82 VS 73.65
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588' MD, 5609' TVD

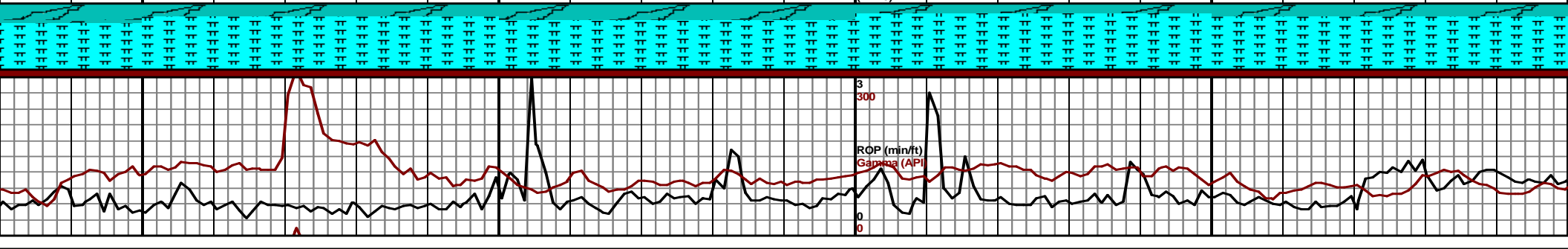
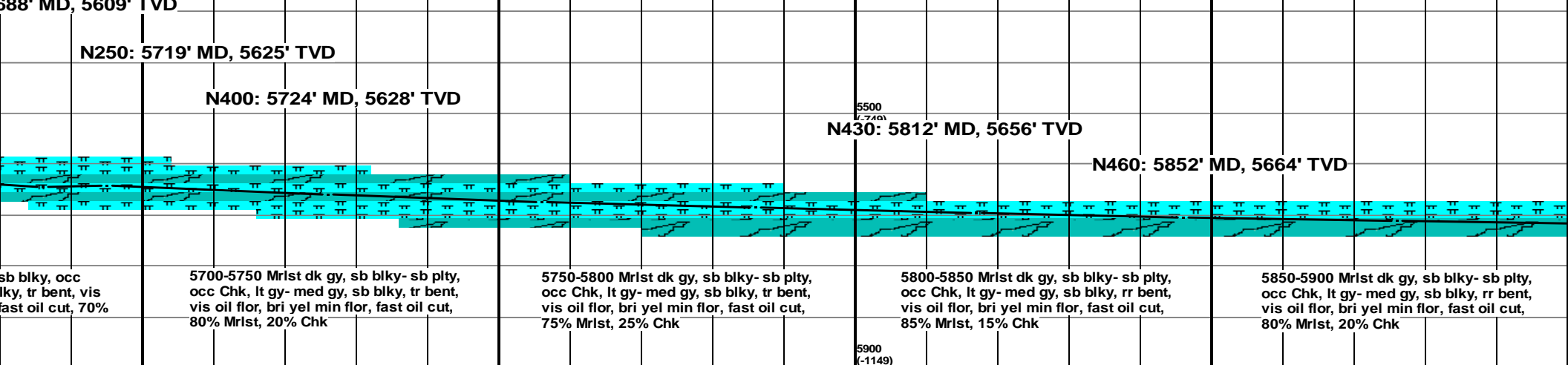
N250: 5719' MD, 5625' TVD

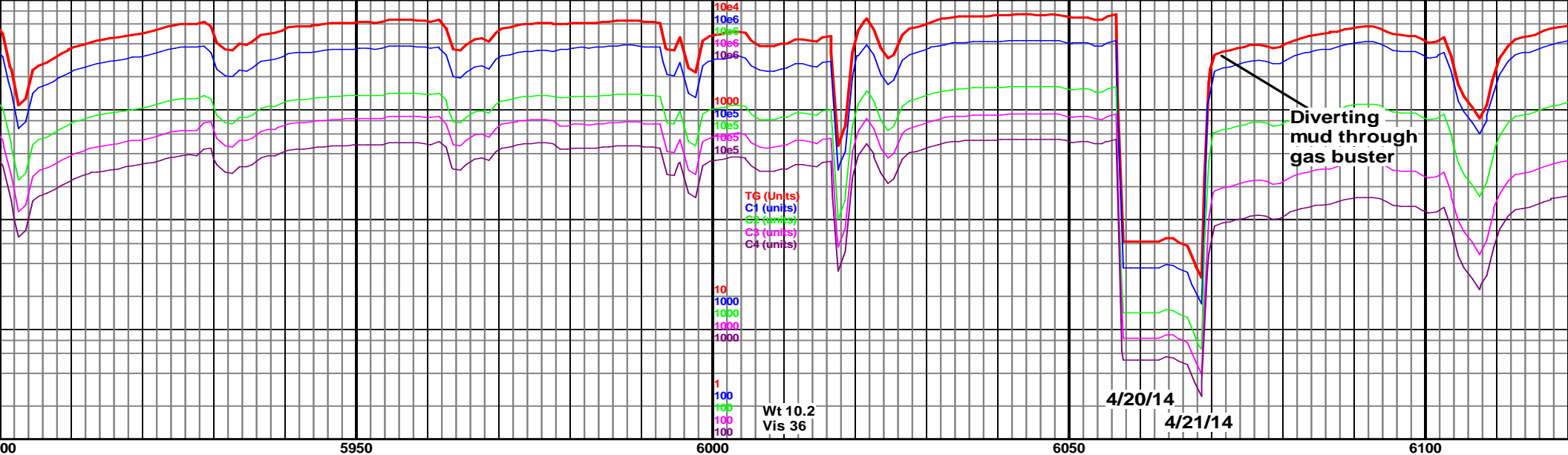
N400: 5724' MD, 5628' TVD

N430: 5812' MD, 5656' TVD

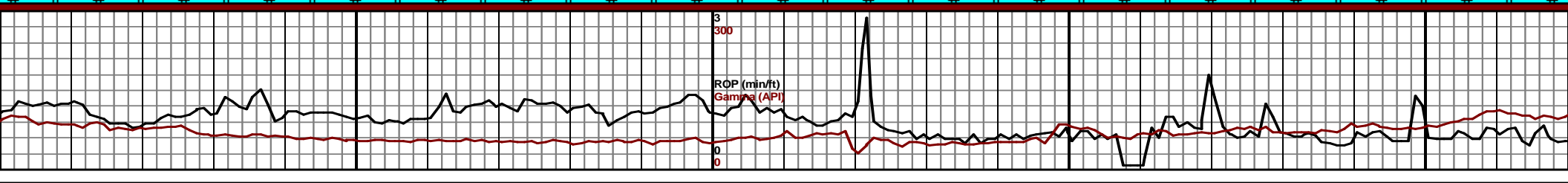
N460: 5852' MD, 5664' TVD

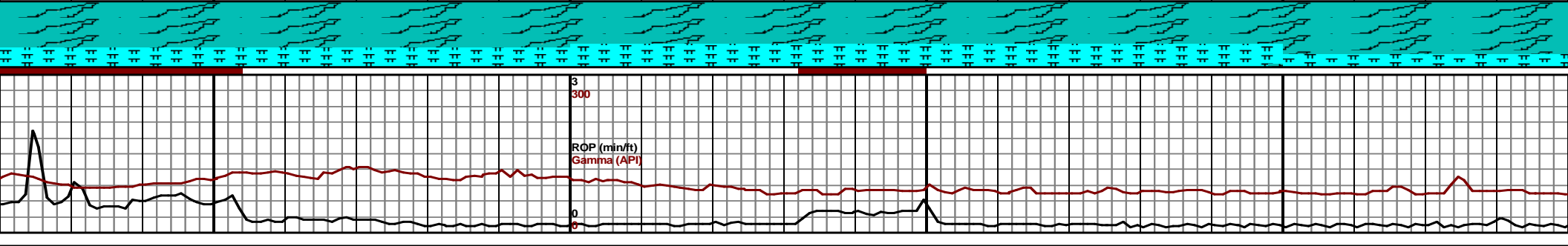
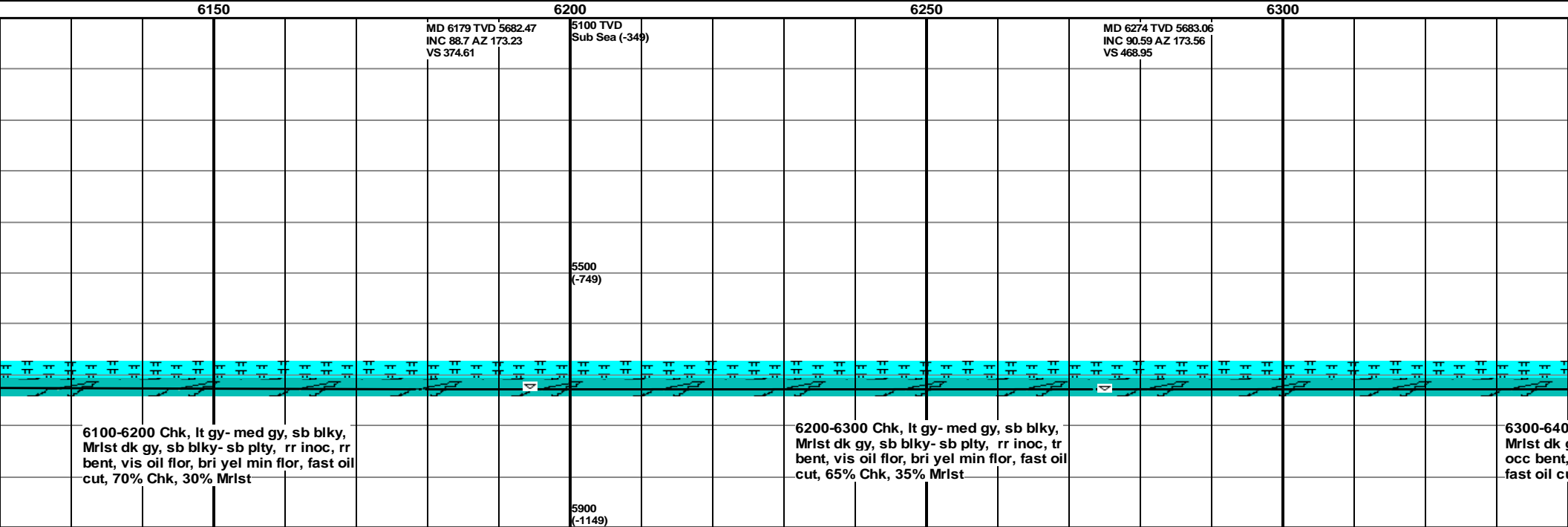
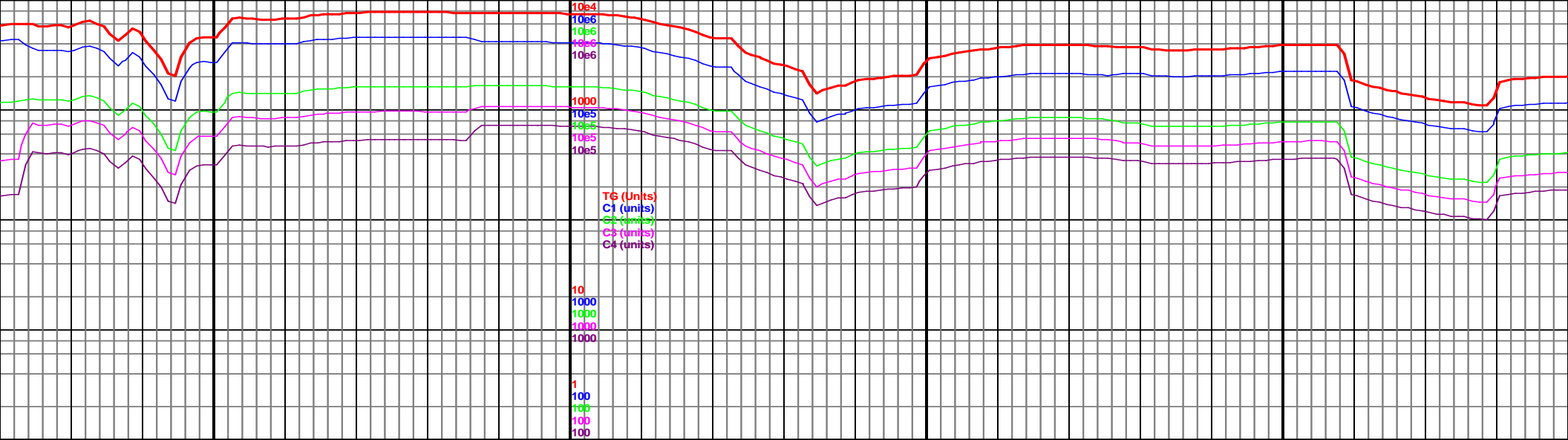
TOH at 5870', 3:45, 4/19/14.
For a less aggressive mud motor. Drilling resumed at 13:54.

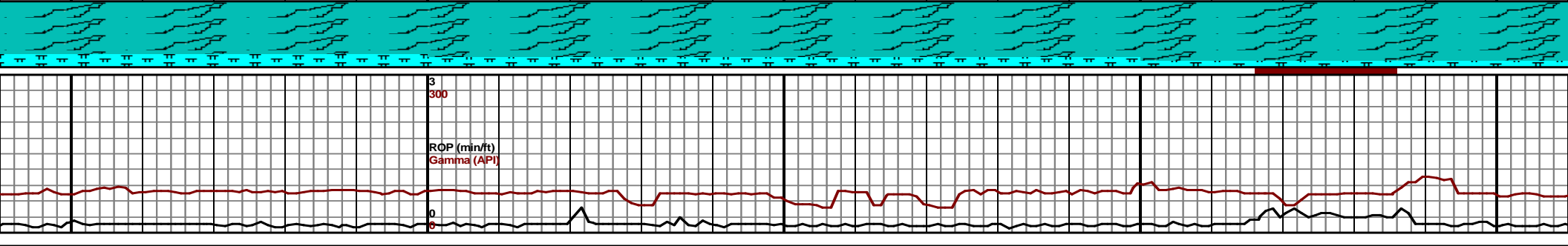
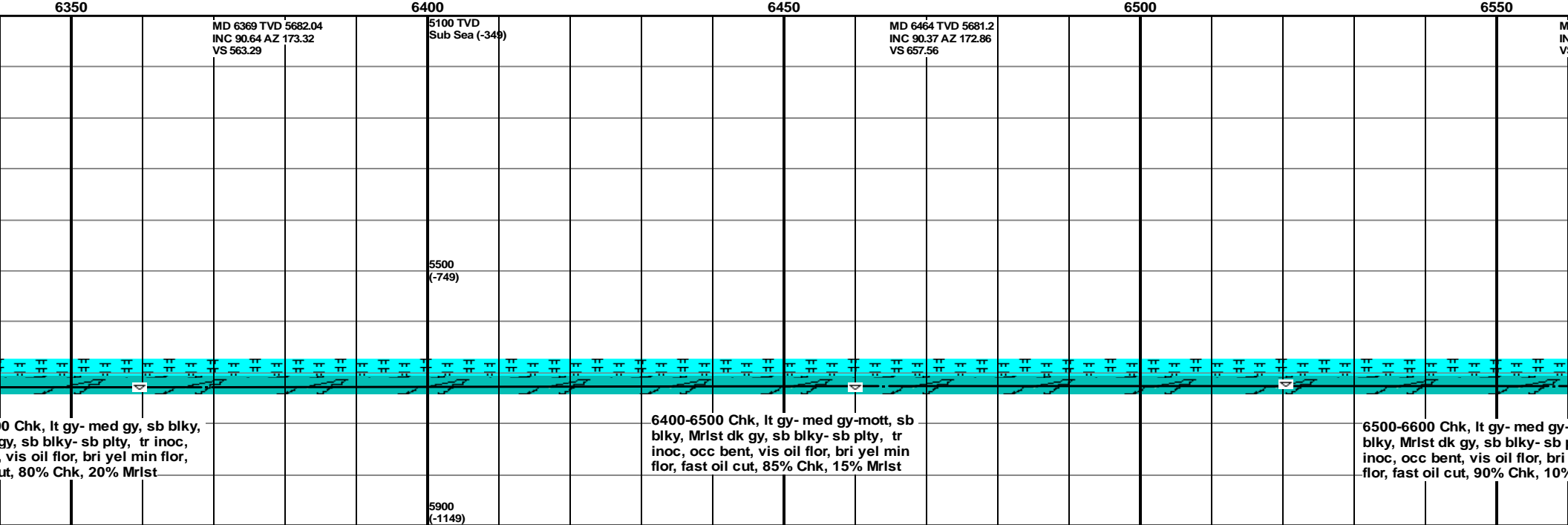
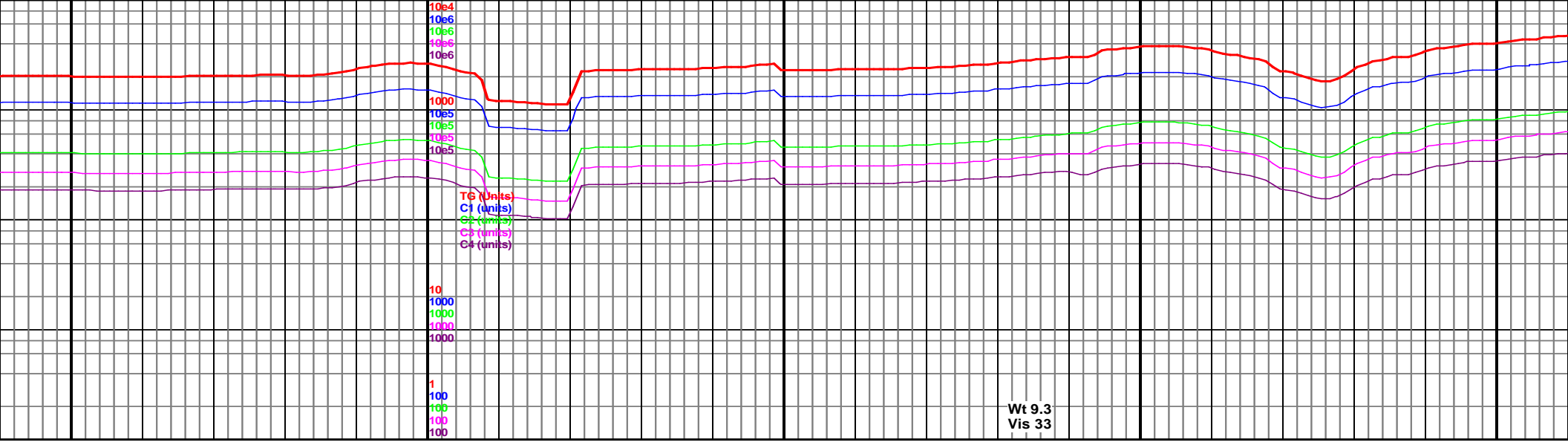


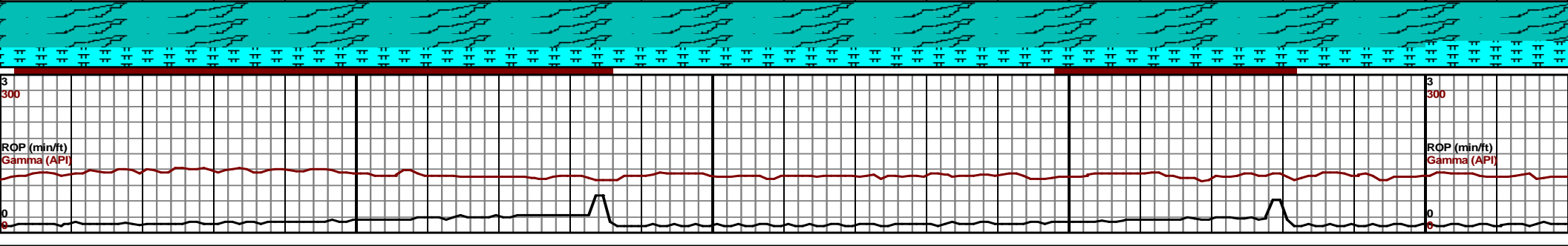
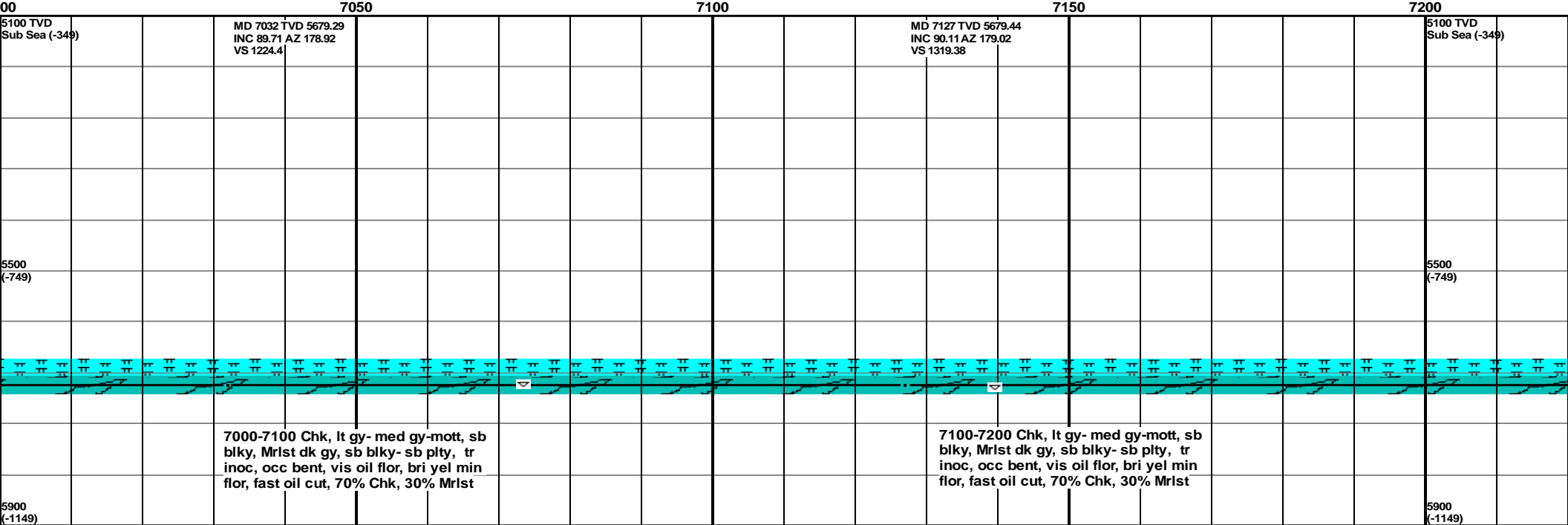
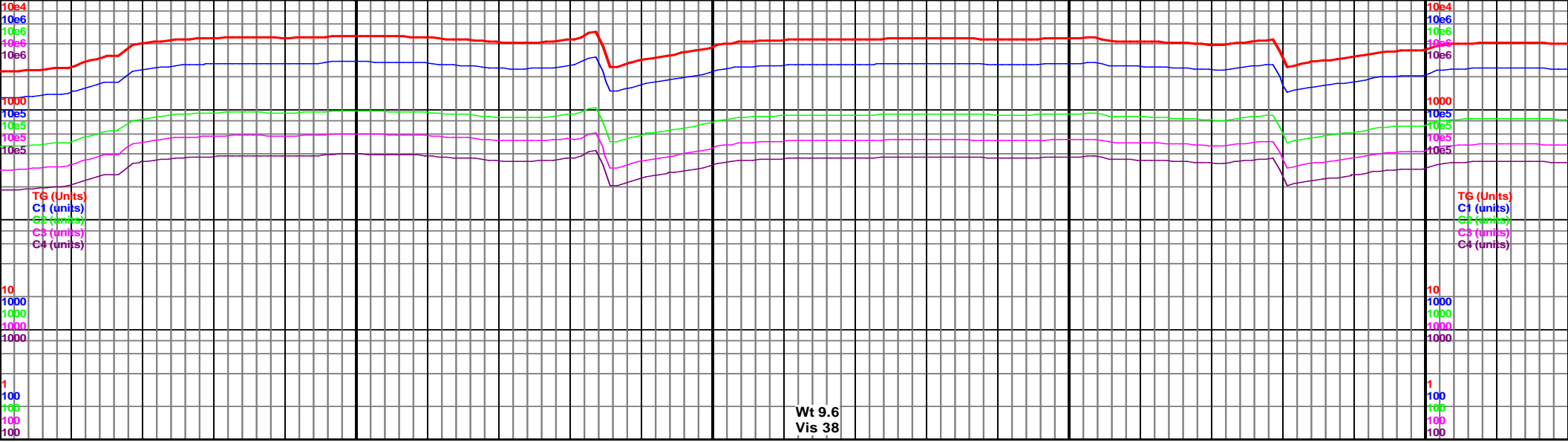


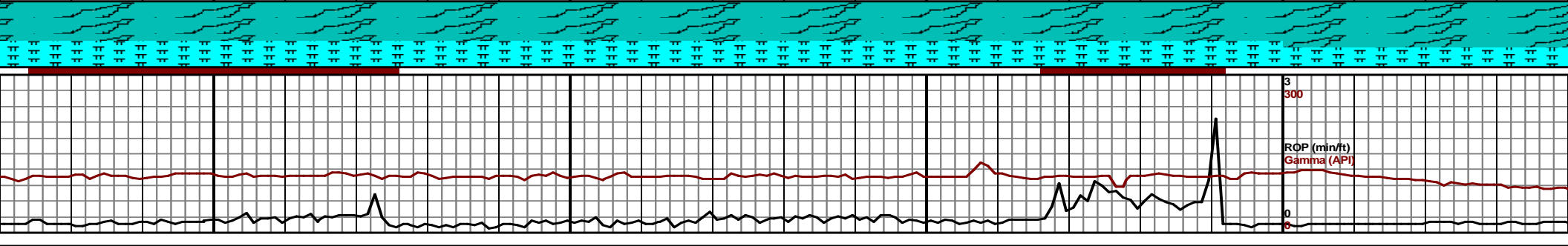
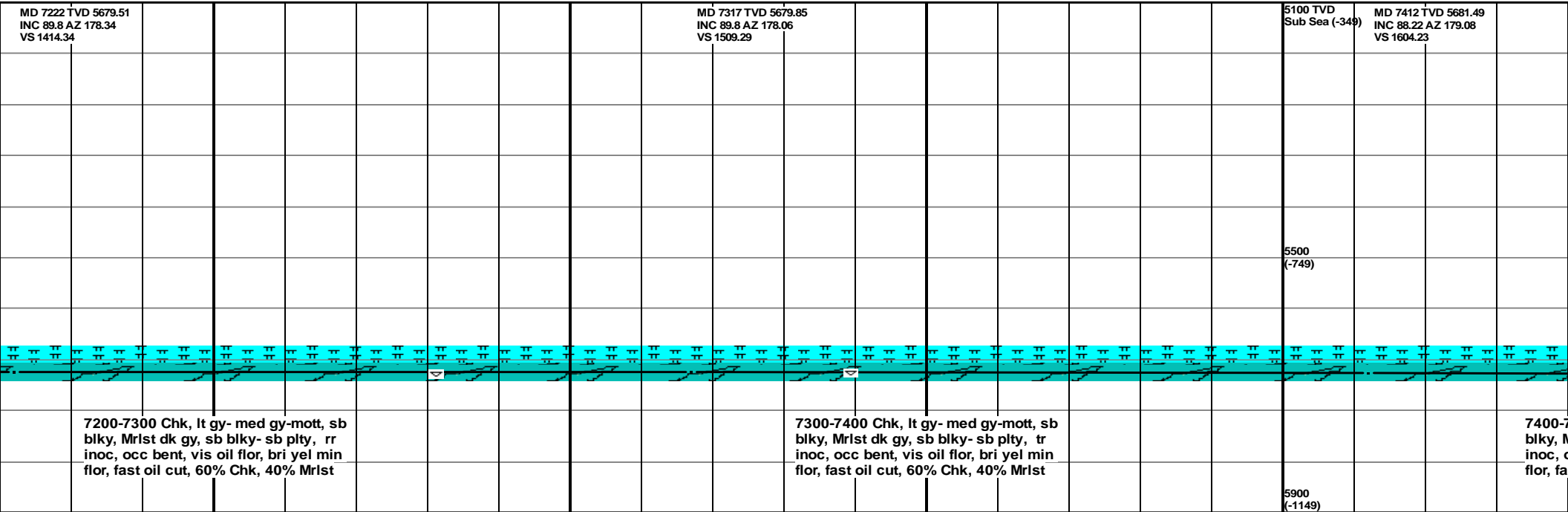
<p>MD 5907 TVD 5674.15 INC 83.21 AZ 181.42 VS 104.25</p>	<p>MD 5937 TVD 5676.56 INC 87.56 AZ 181.06 VS 134.14</p>	<p>MD 5968 TVD 5677.43 INC 89.23 AZ 178.71 VS 165.13</p>	<p>5100 TVD MD 6008 TVD 5678.06 Sub Sea (-3) INC 88.97 AZ 174.23 VS 205.03</p>				<p>MD 6084 TVD 5679.92 INC 88.22 AZ 172.23 VS 280.45</p>
<p>5900-5950 Chk, lt gy- med gy, sb blk, Mrst dk gy, sb blk- sb plty, rr bent, vis oil flr, bri yel min flr, fast oil cut, 90% Chk, 10% Mrst</p>			<p>5950-6000 Chk, lt gy- med gy, sb blk, Mrst dk gy, sb blk- sb plty, rr inoc, rr bent, vis oil flr, bri yel min flr, fast oil cut, 90% Chk, 10% Mrst</p>	<p>6000-6050 Chk, lt gy- med gy, sb blk, Mrst dk gy, sb blk- sb plty, rr inoc, rr bent, vis oil flr, bri yel min flr, fast oil cut, 20% Mrst, 80% Chk</p>		<p>6050-6100 Chk, lt gy- med gy, sb blk, Mrst dk gy, sb blk- sb plty, rr inoc, vis oil flr, bri yel min flr, fast oil cut, 90% Chk, 10% Mrst</p>	

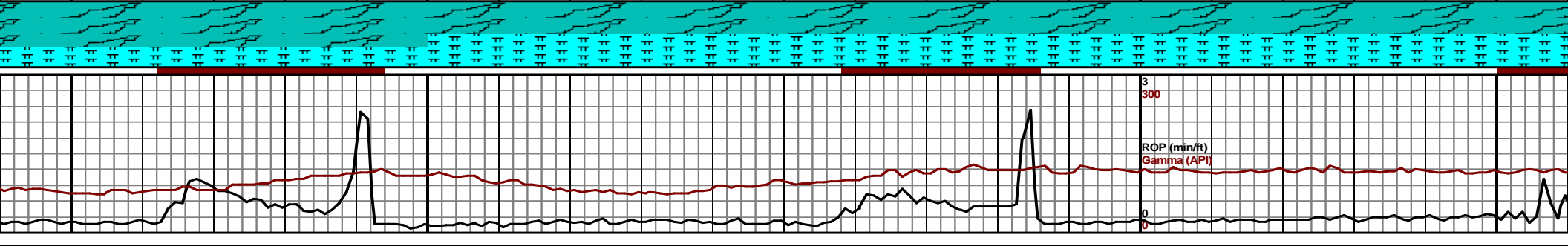
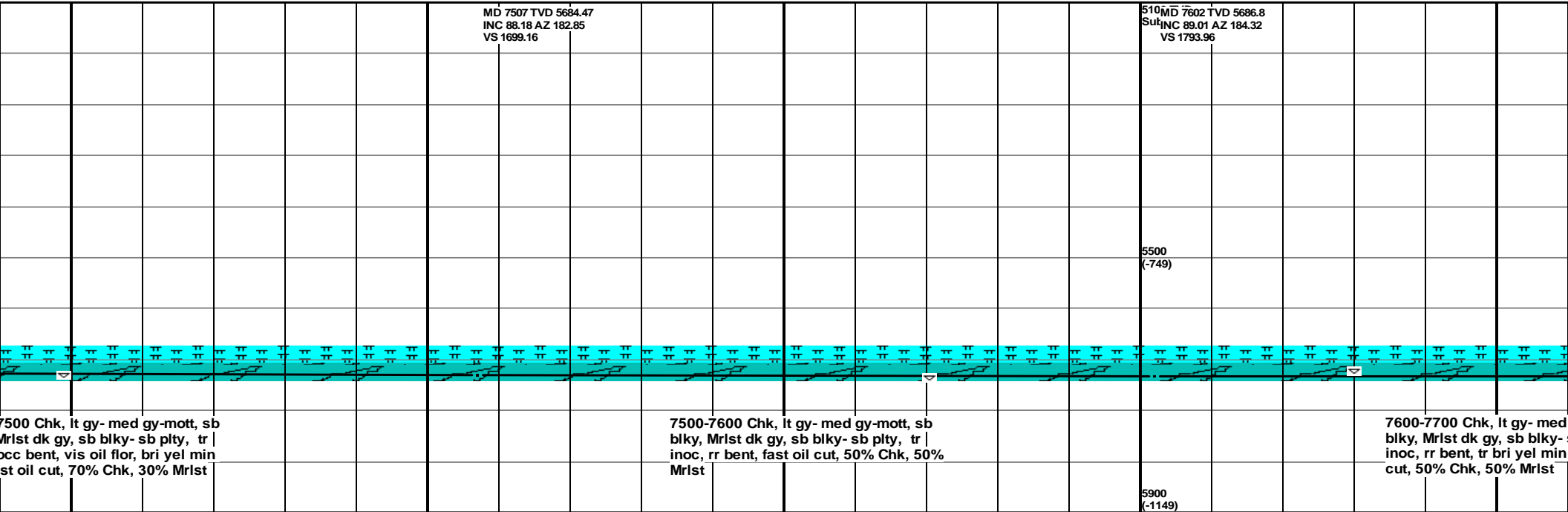
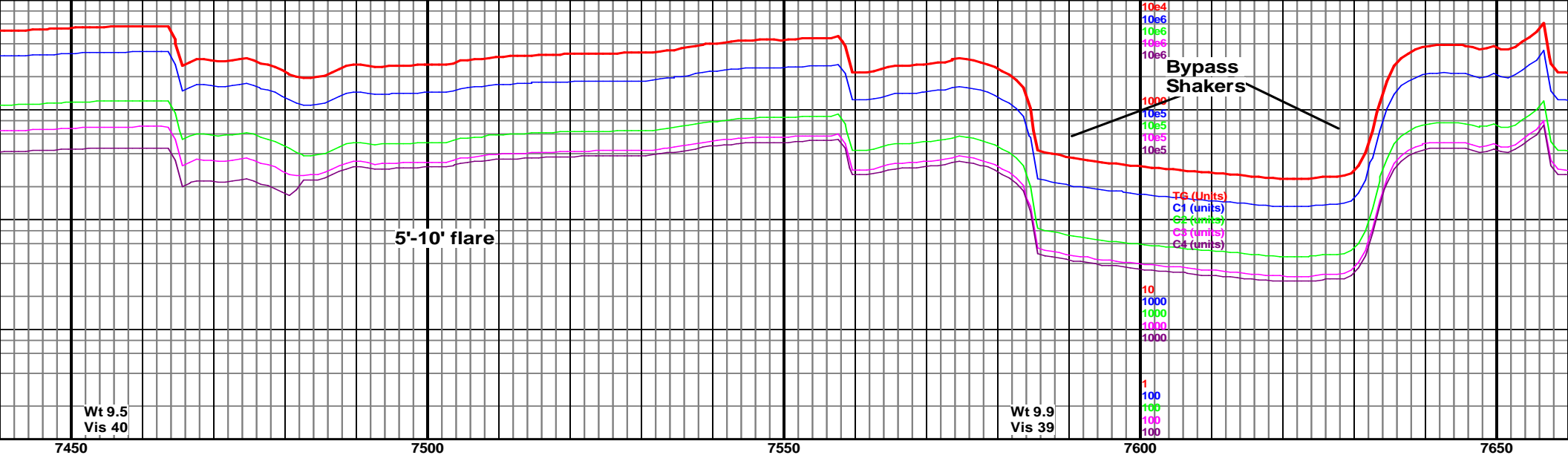


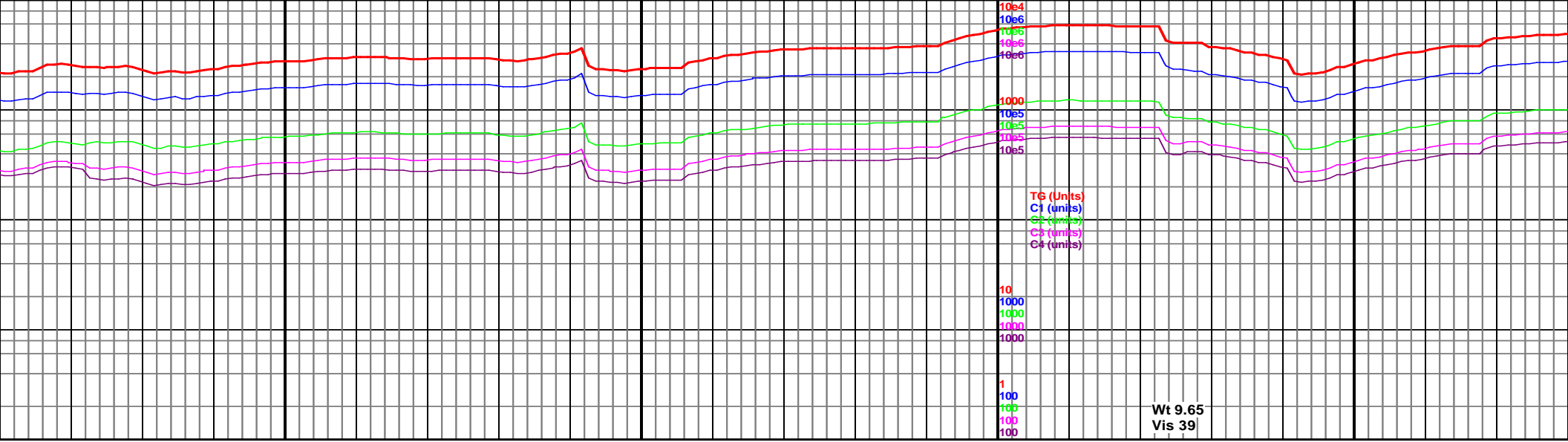












7700
MD 7694 TVD 5686.91
INC 90.86 AZ 184.43
VS 1885.7

7750
MD 7787 TVD 5685.62 TVD
INC 90.73 AZ 184.35 Sub Sea (-349)
VS 1978.46

7850

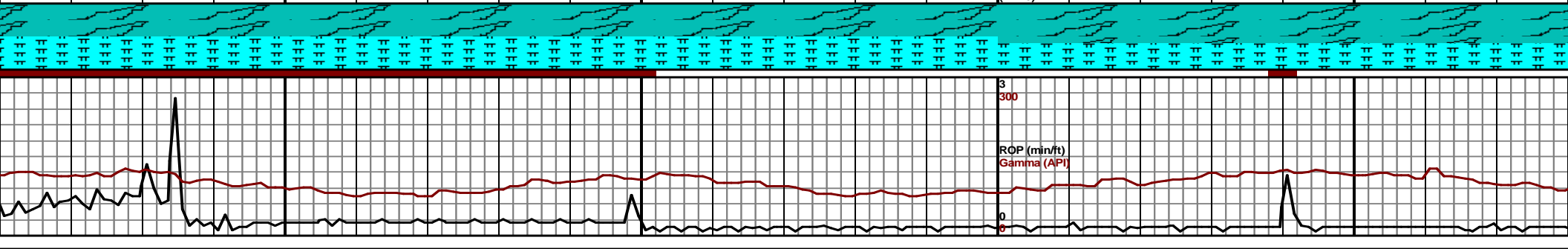
gy-mott, sb
sb plty, tr
flor, sl oil

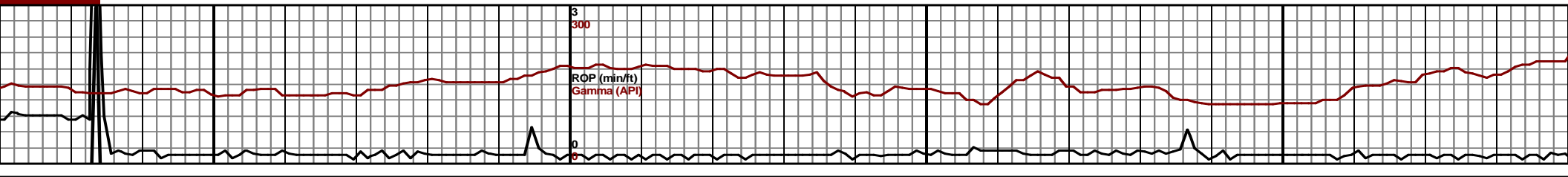
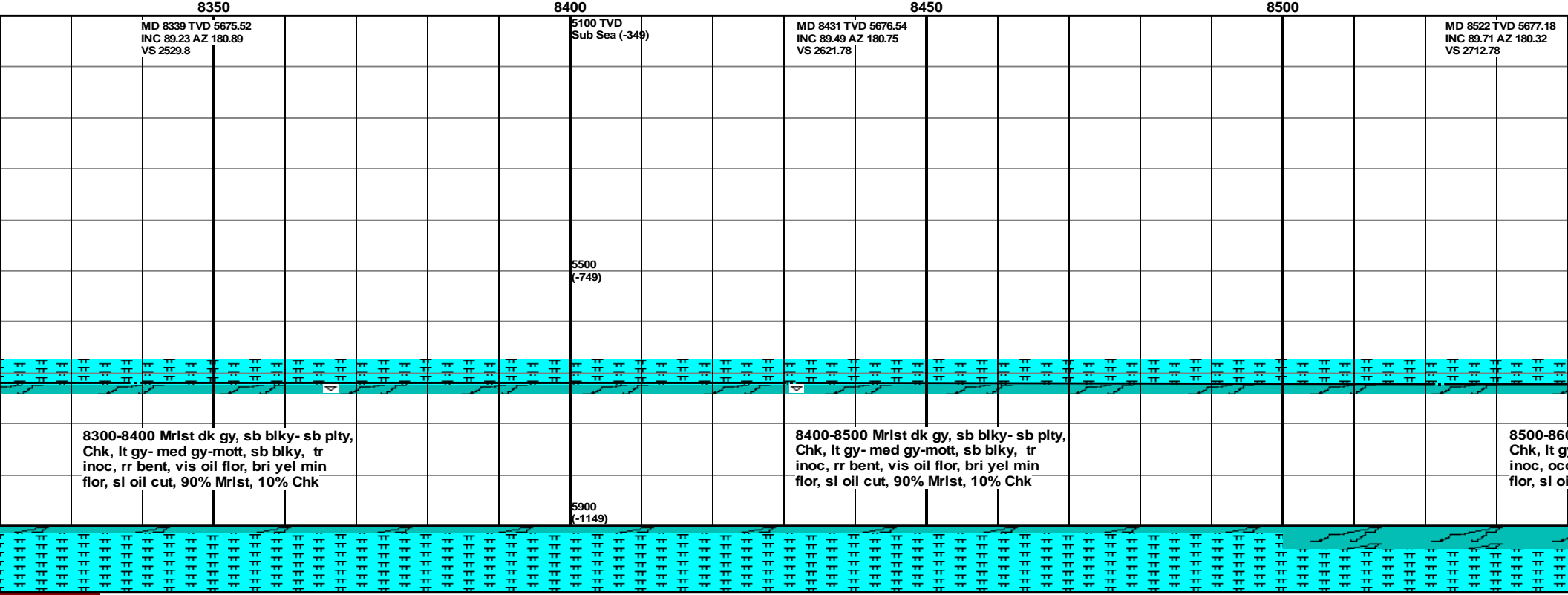
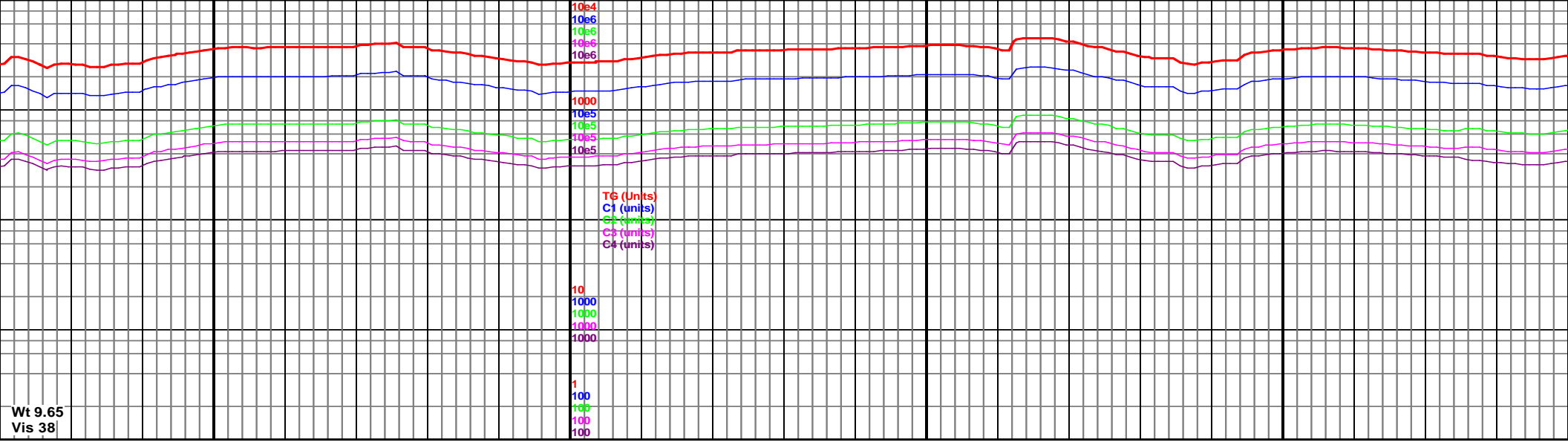
7700-7800 Chk, lt gy- med gy-mott, sb
blky, Mrlst dk gy, sb blky- sb plty, tr
inoc, tr bent, tr bri yel min flor, fst oil
cut, 50% Chk, 50% Mrlst

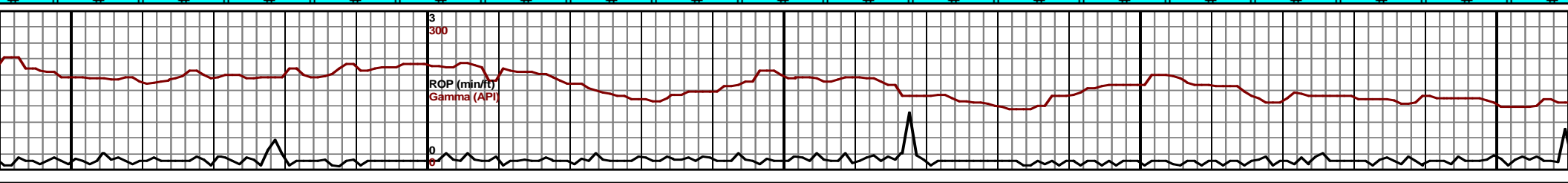
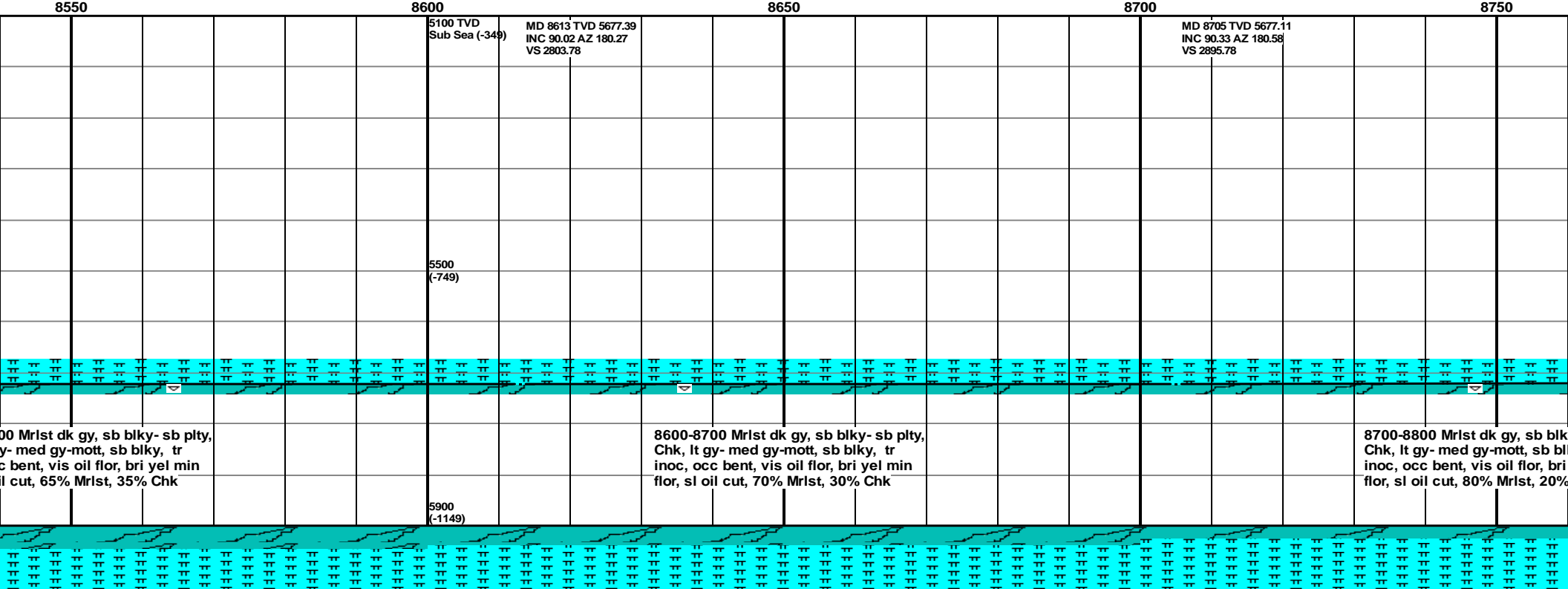
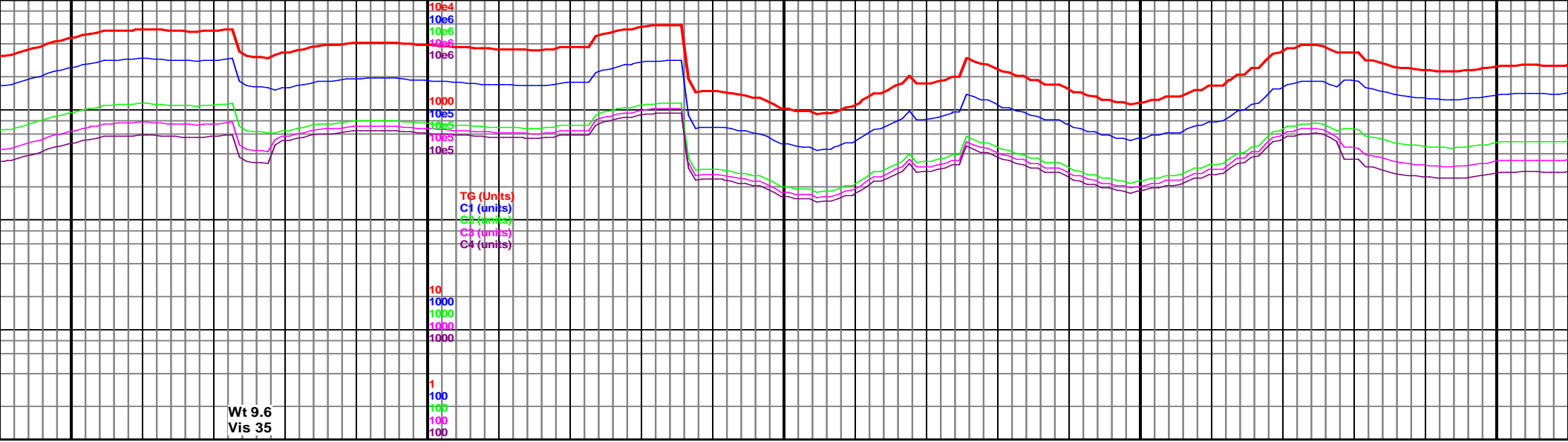
7800-7900 Chk, lt gy- med gy-mott, sb
blky, Mrlst dk gy, sb blky- sb plty, tr
inoc, rr bent, vis oil flor, bri yel min
flor, sl oil cut, 60% Chk, 40% Mrlst

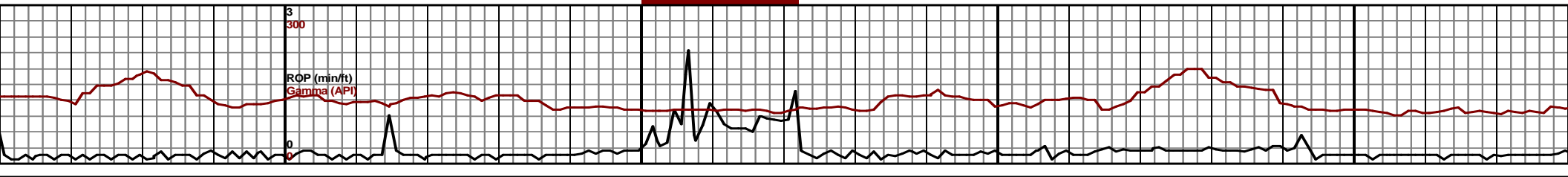
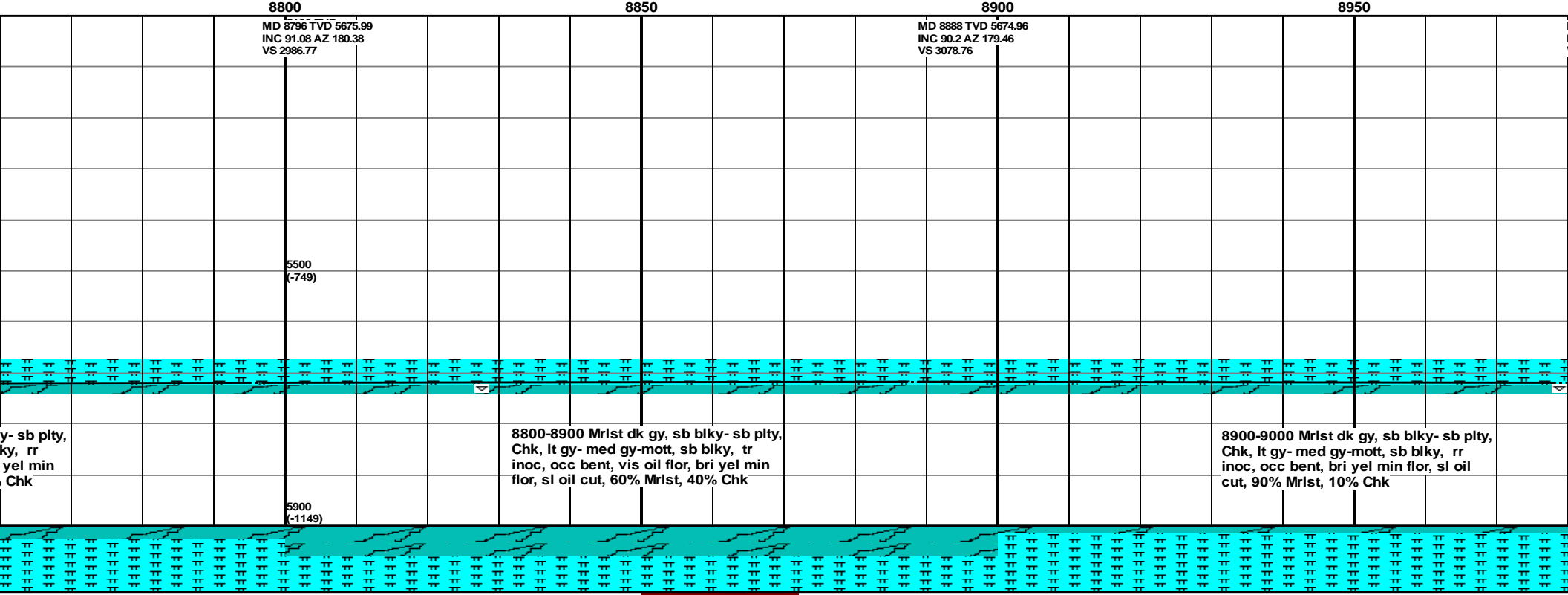
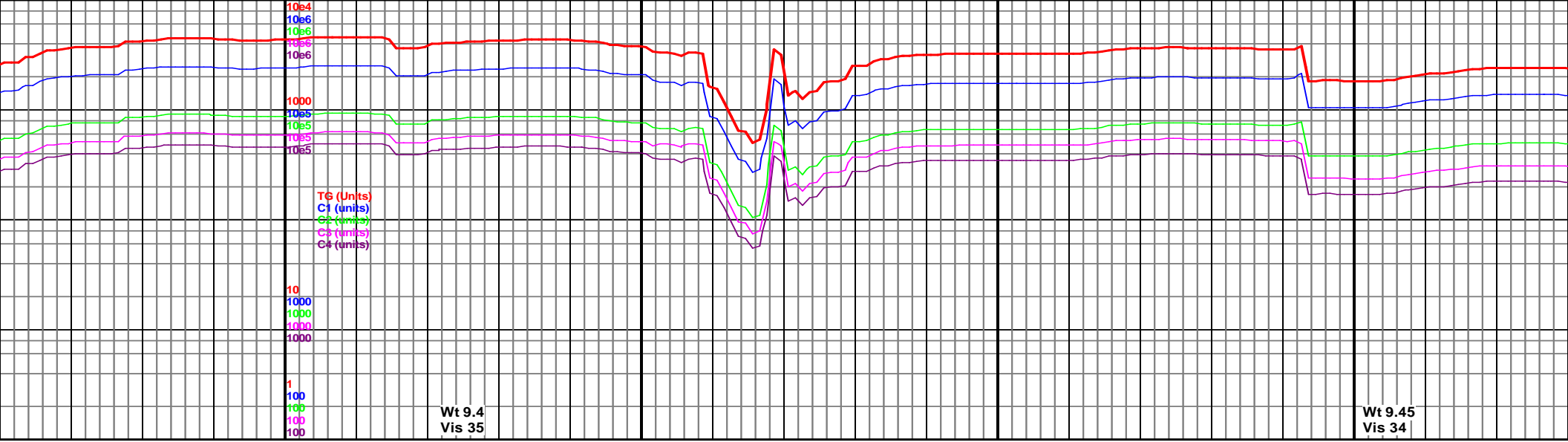
5500
(-749)

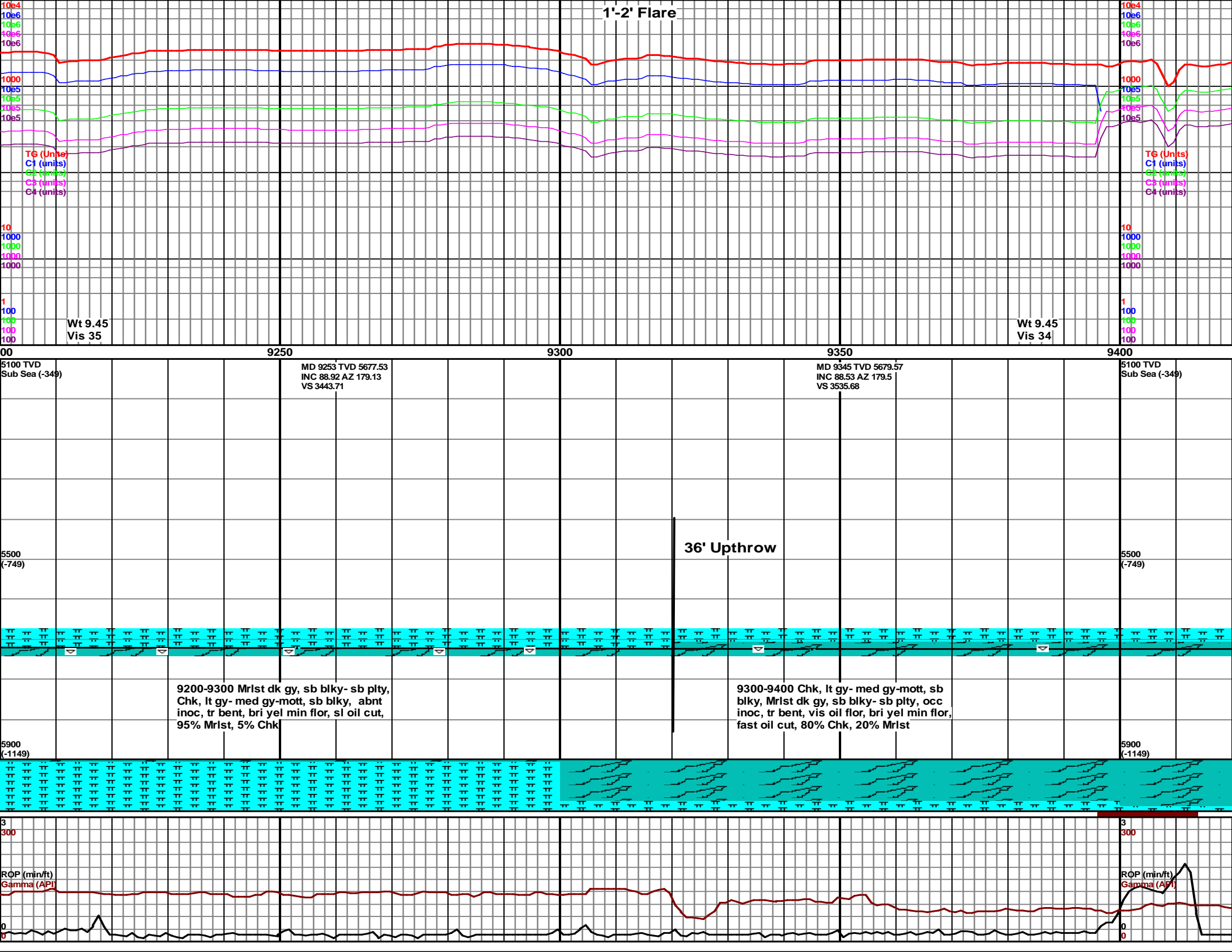
5900
(-1149)



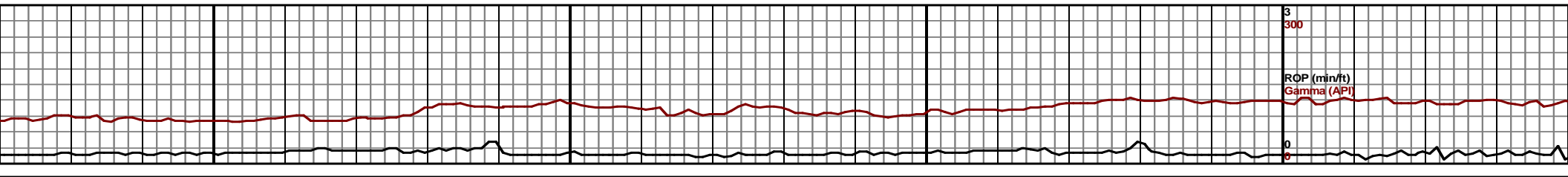
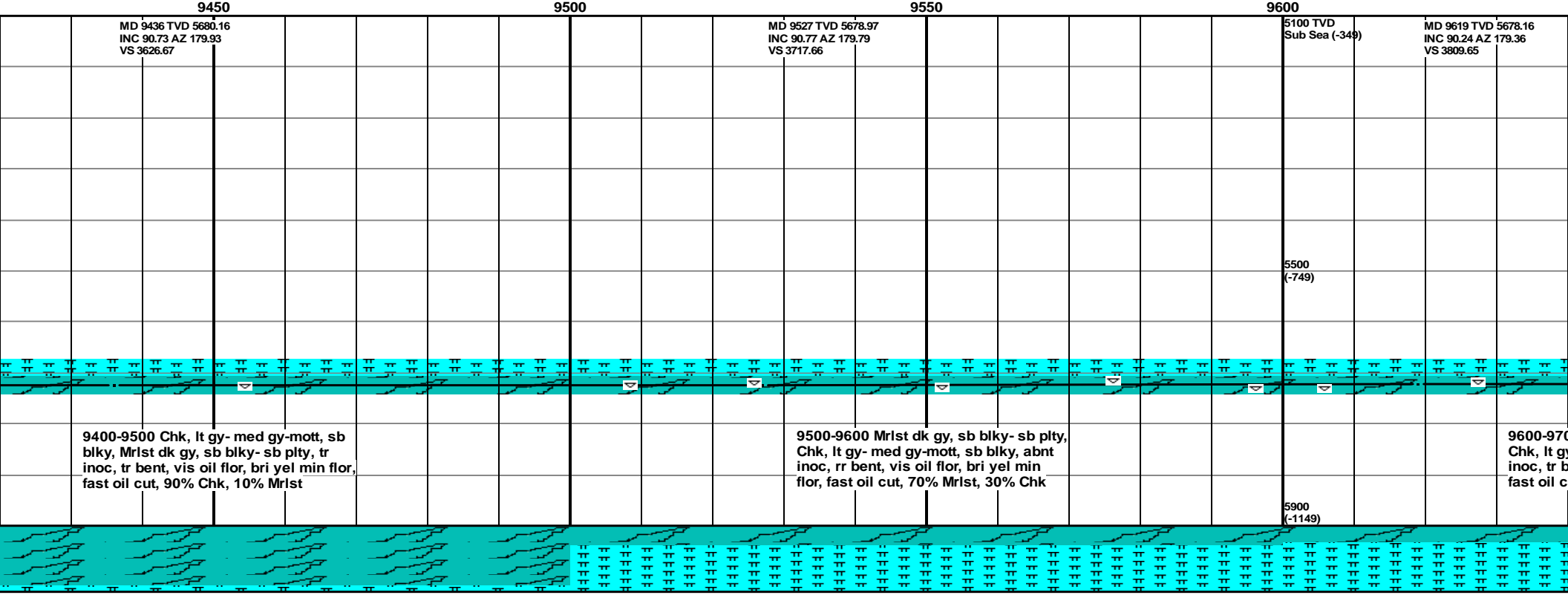
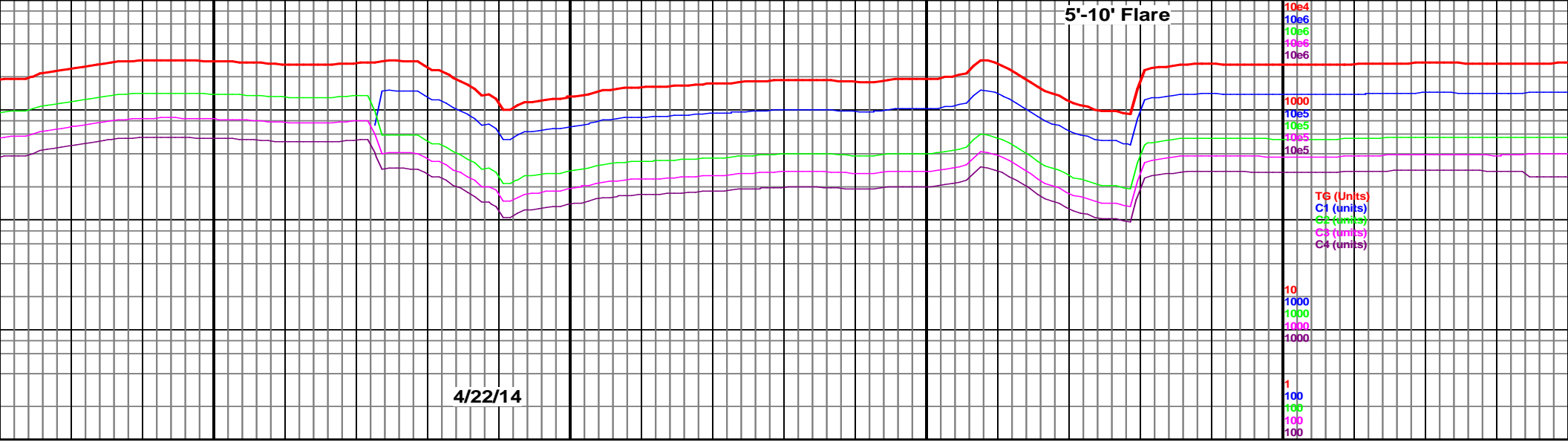




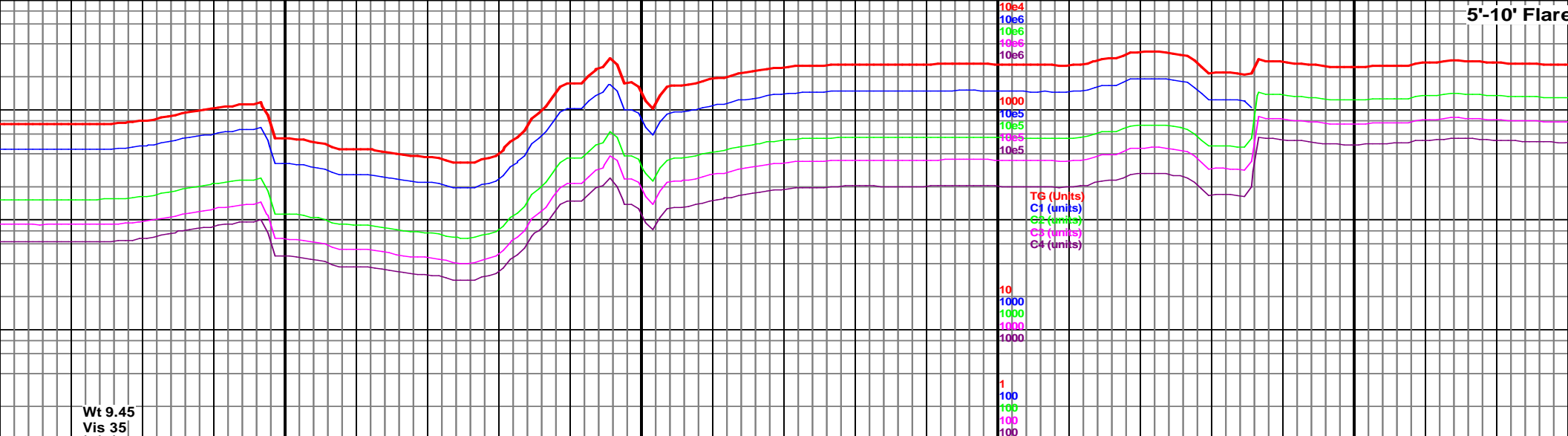




5'-10' Flare



5'-10' Flare

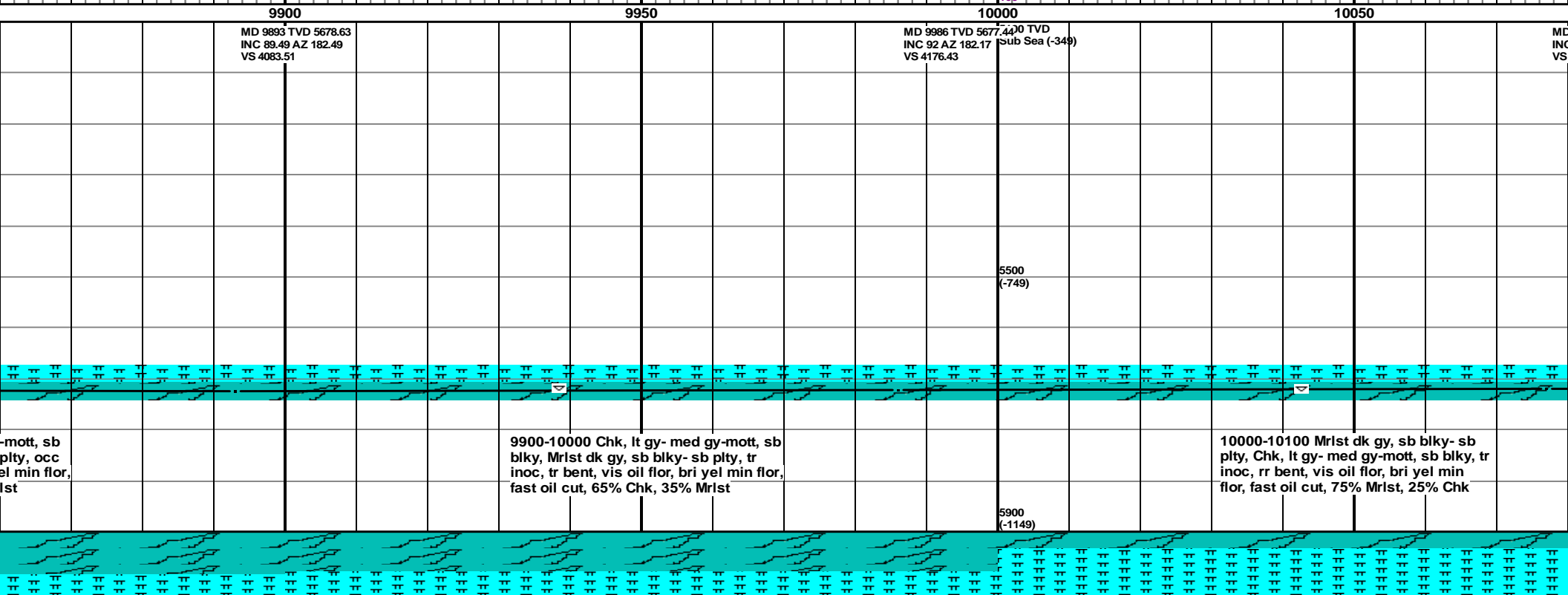


Wt 9.45
Vis 35

9900
MD 9893 TVD 5678.63
INC 89.49 AZ 182.49
VS 4083.51

MD 9986 TVD 5677.44	00 TVD
INC 92 AZ 182.17	Sub Sea (-349)
VS 4176.43	

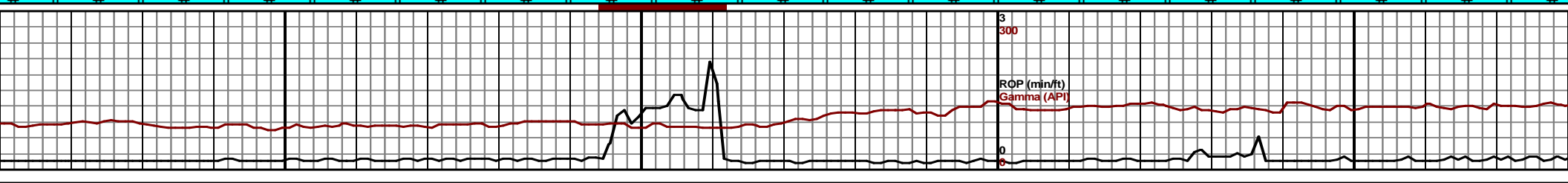
MD
INC
VS



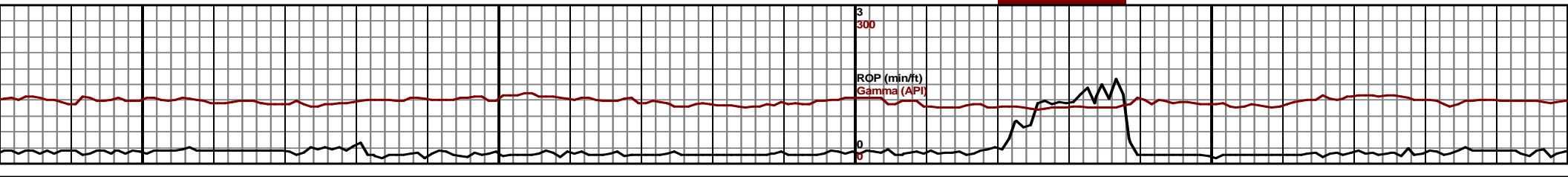
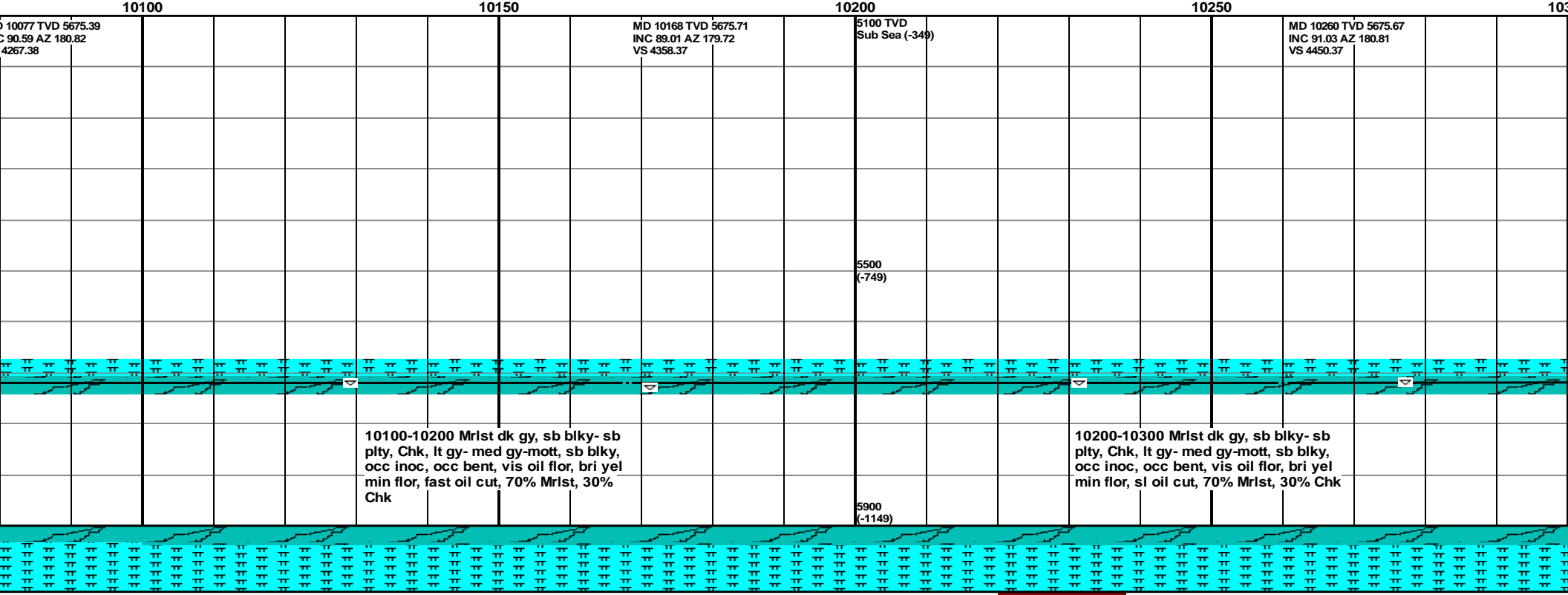
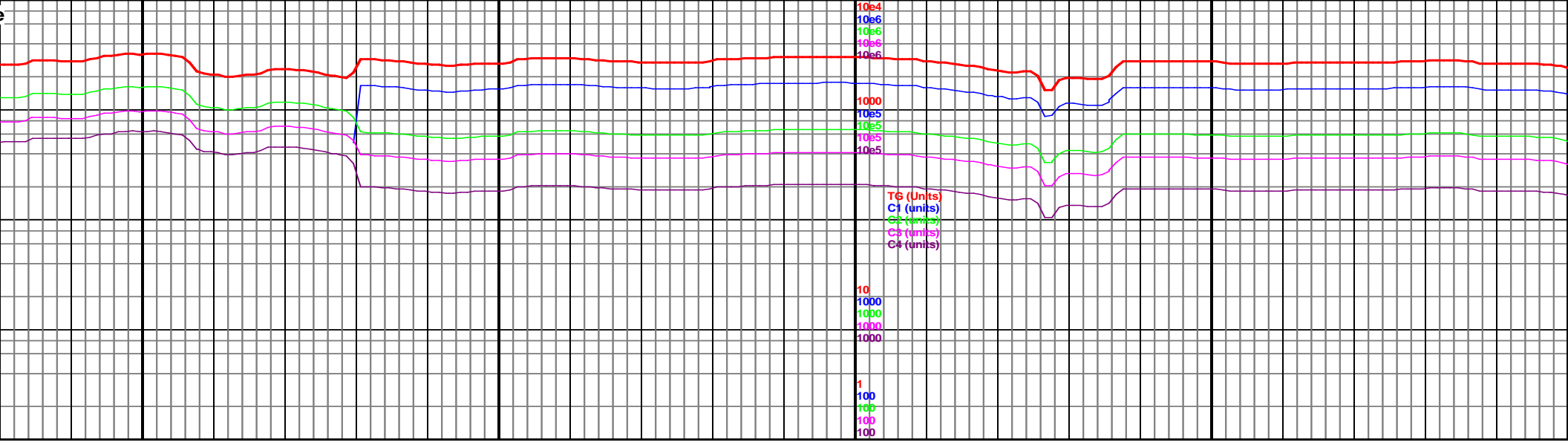
-mott, sb	
plty, occ	
el min flor,	
lst	

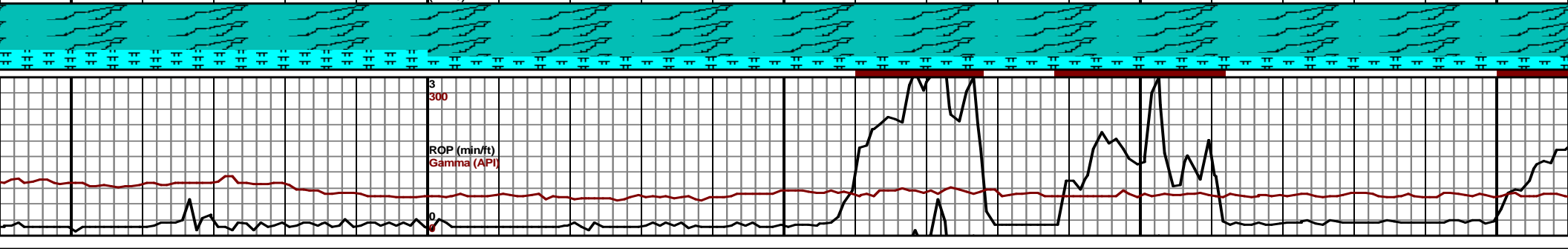
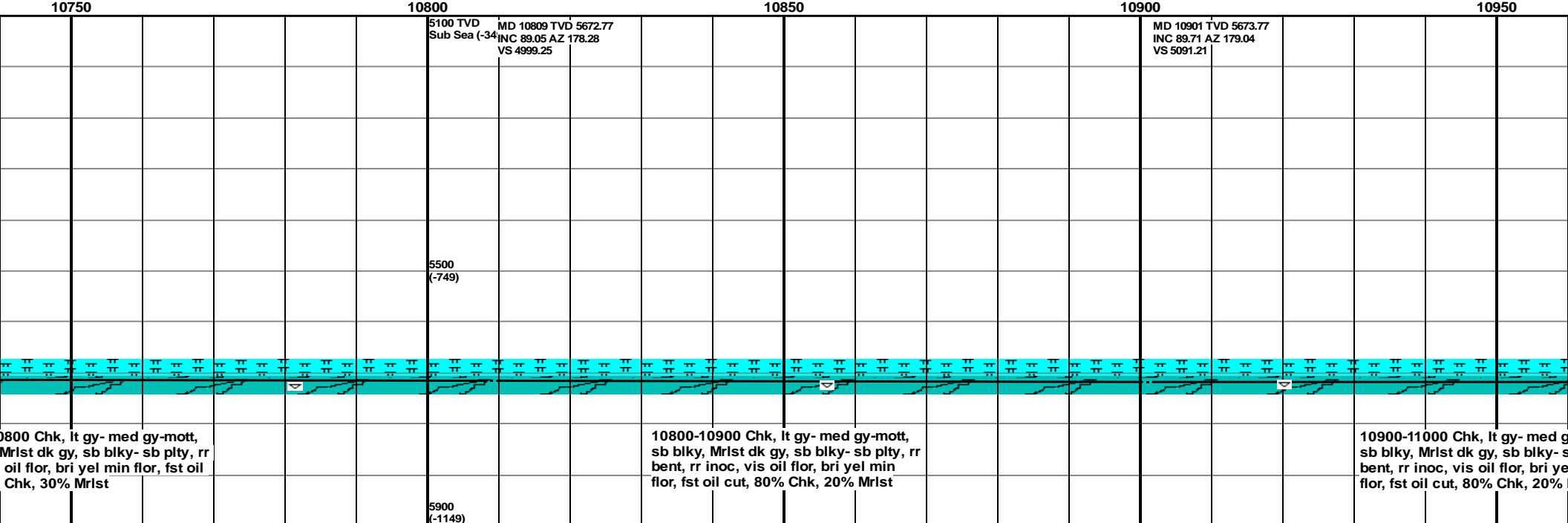
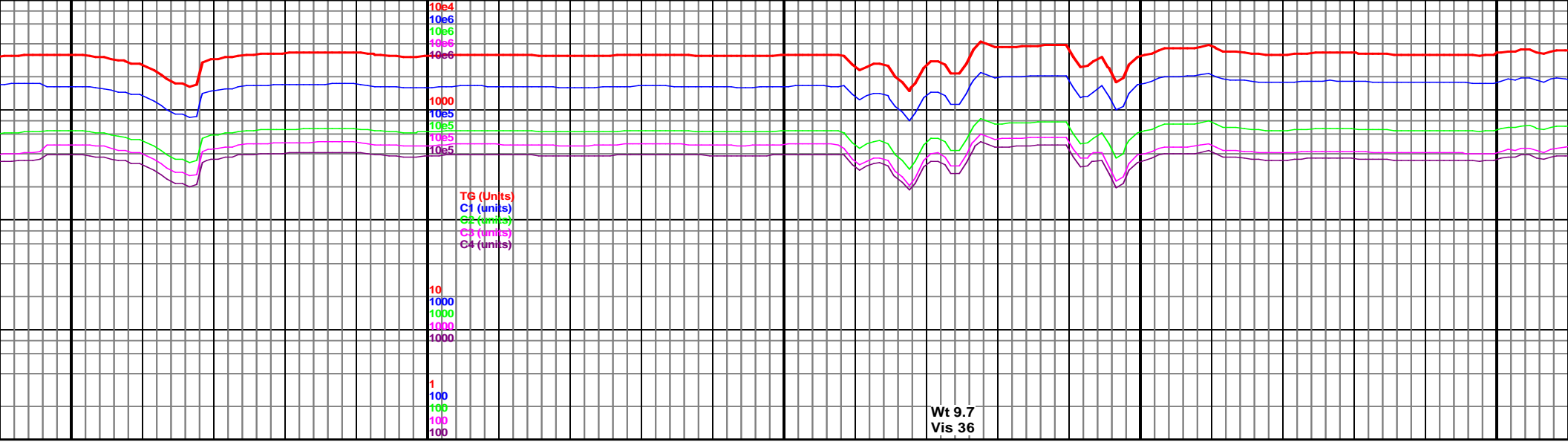
9900-10000 Chk, lt gy- med gy-mott, sb
blky, Mrlst dk gy, sb blky- sb plty, tr
inoc, tr bent, vis oil flor, bri yel min flor,
fast oil cut. 65% Chk. 35% Mrlst

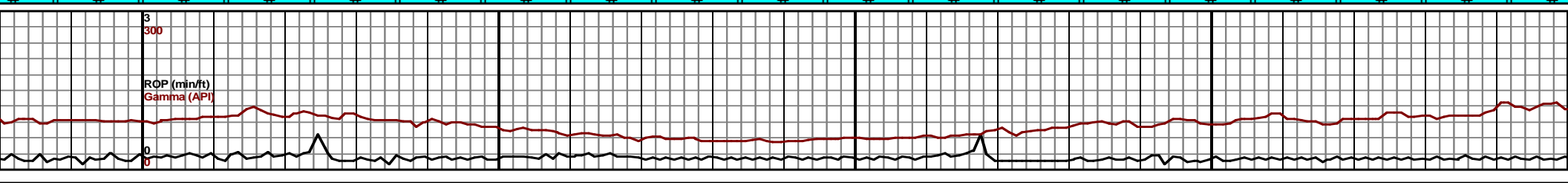
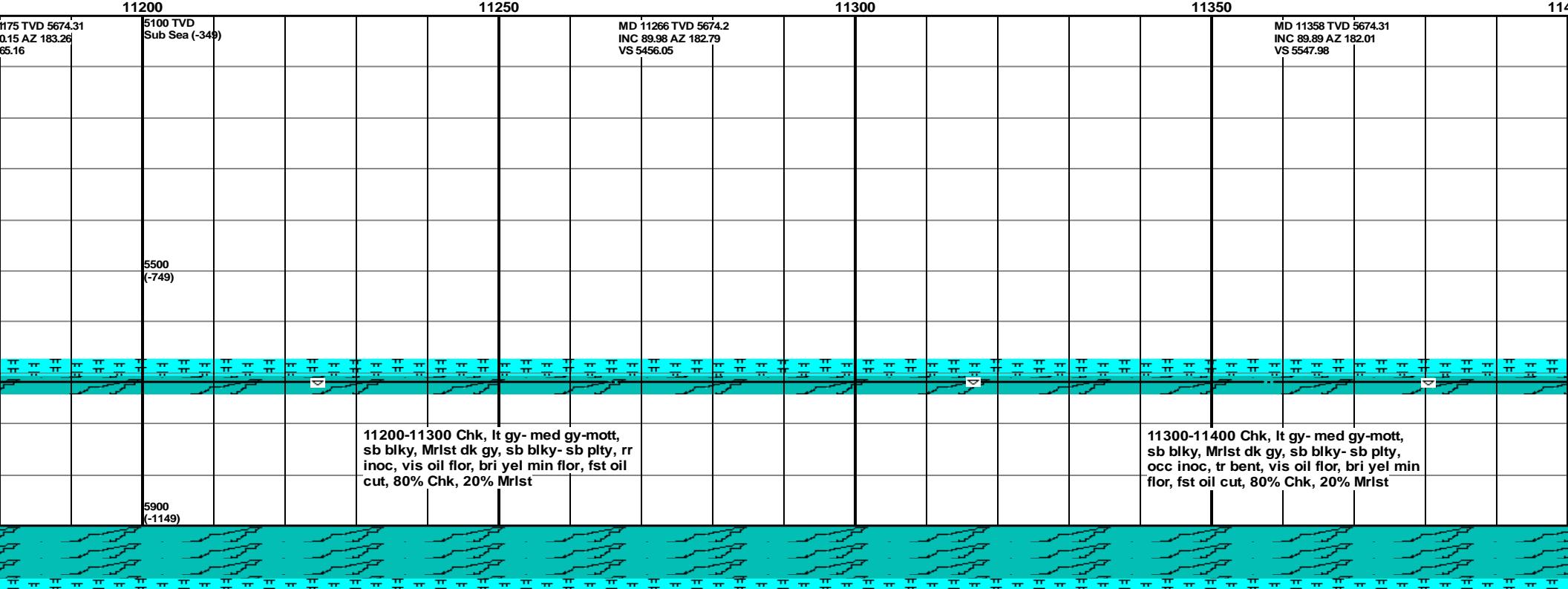
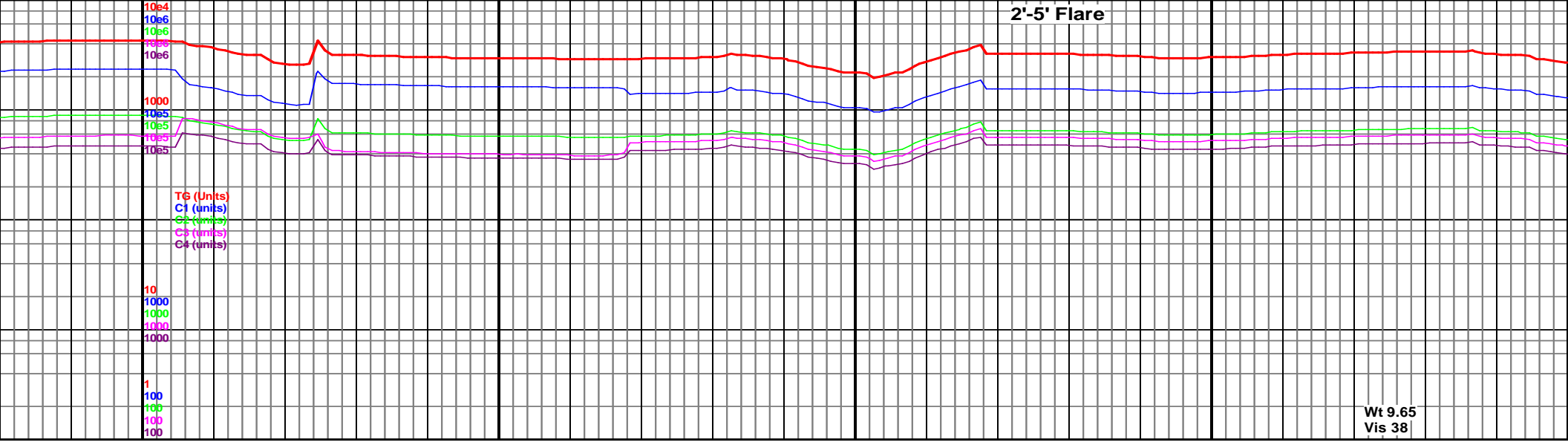
10000-10100	Mrlst dk gy, sb blk- sb ppty, Chk, lt gy- med gy-mott, sb blk, tr inoc, rr bent, vis oil flor, bri yel min flor, fast oil cut, 75% Mrlst, 25% Chk
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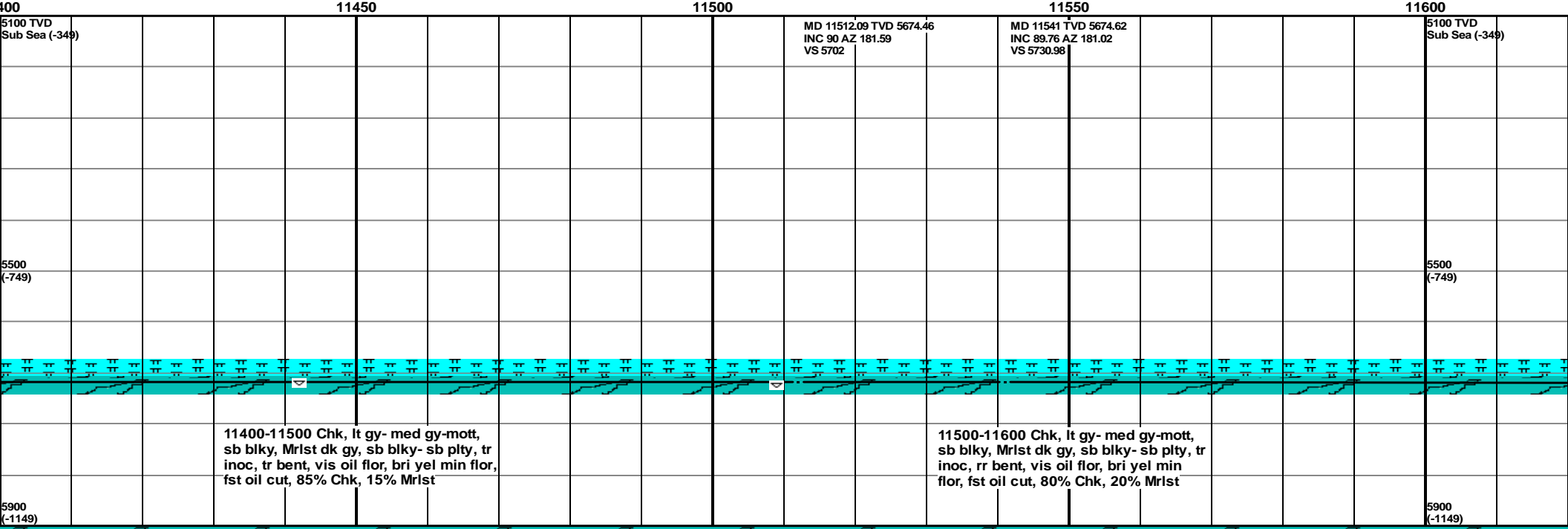
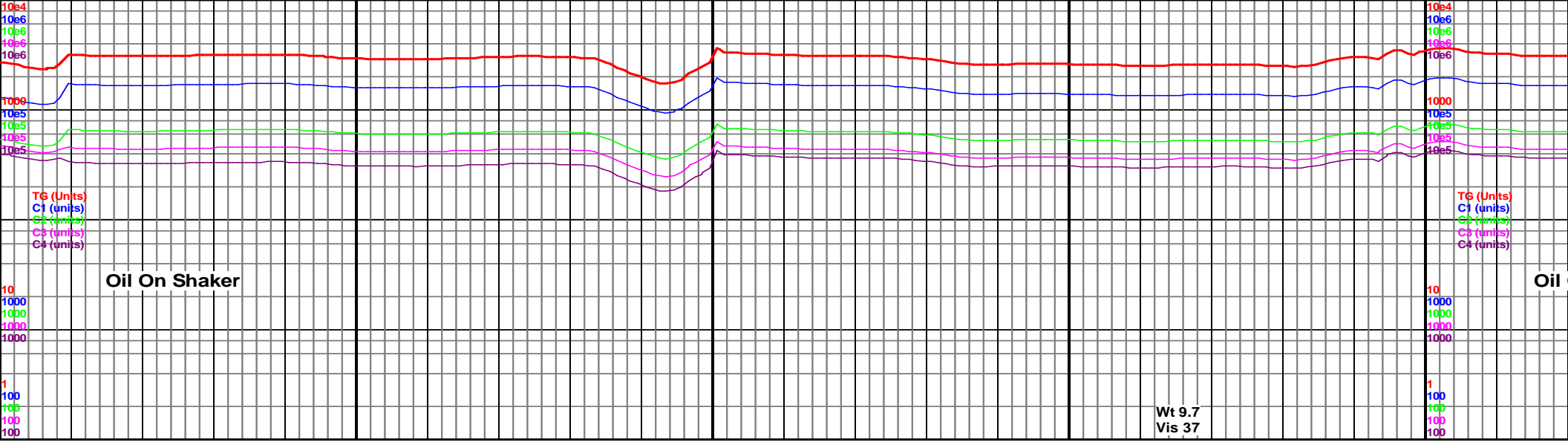
ROP (min/ft)
Gamma (API)

0



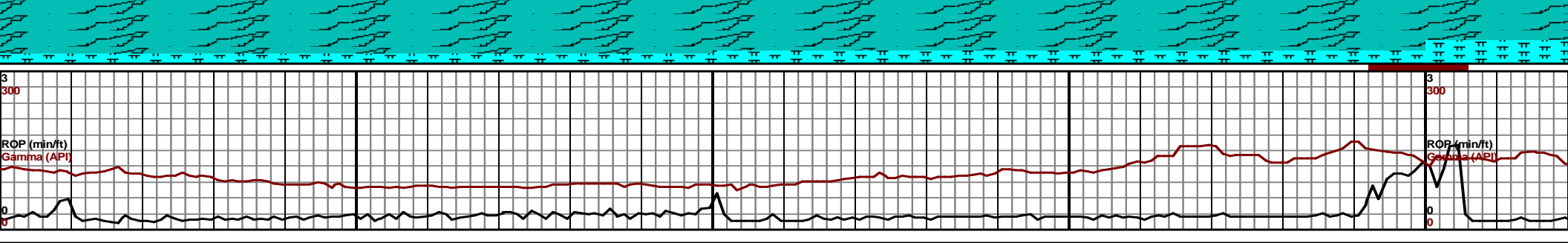


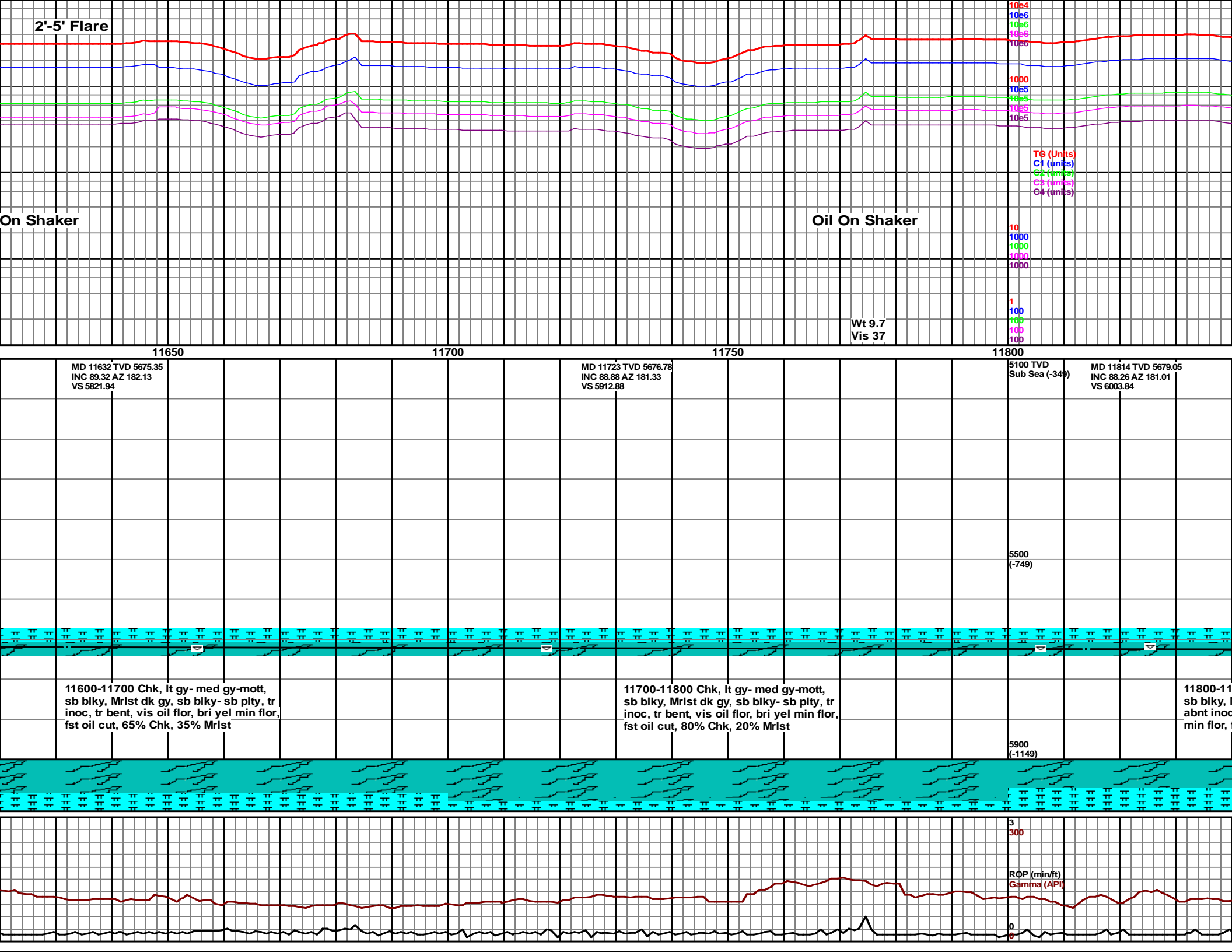


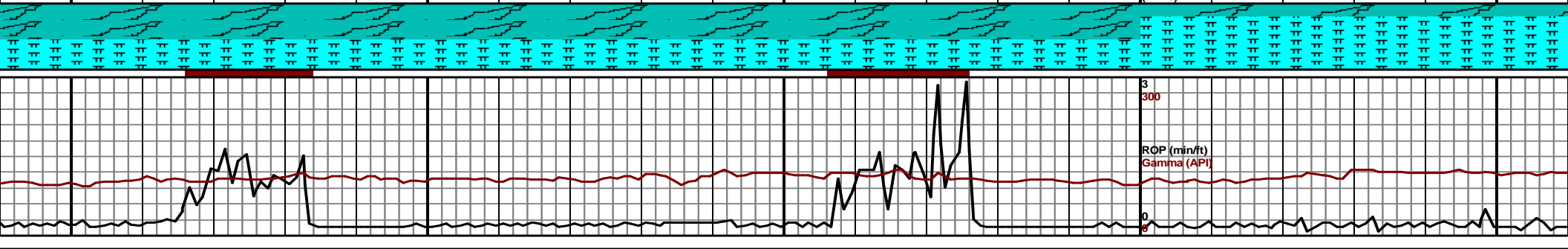
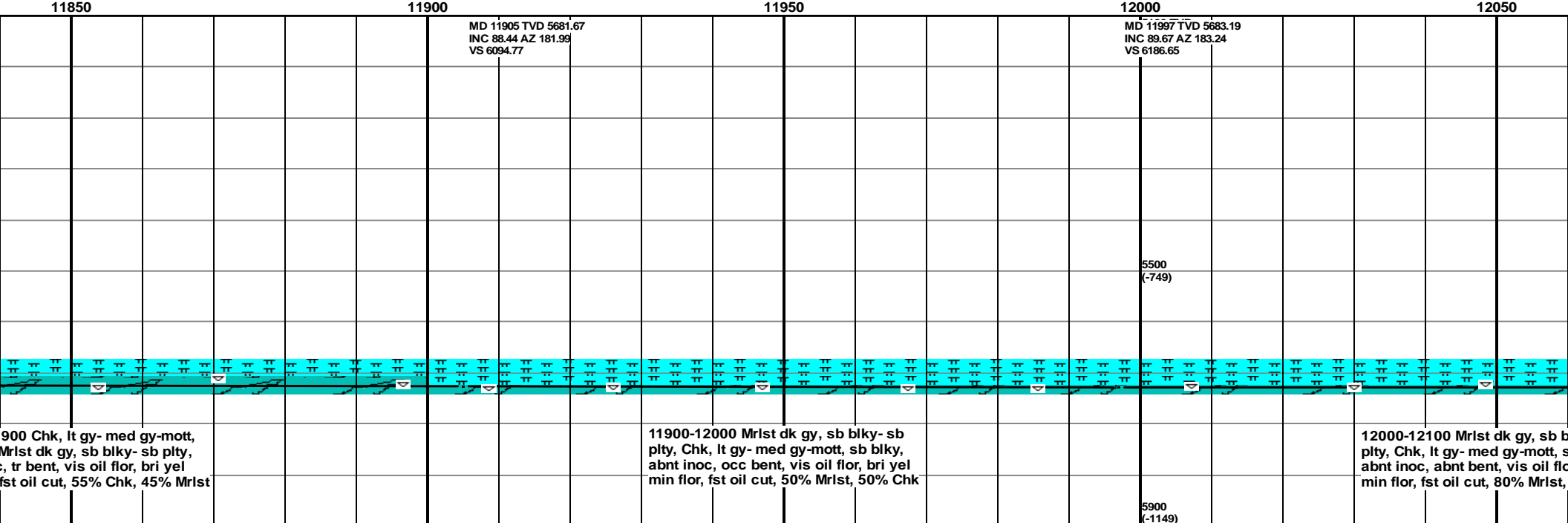
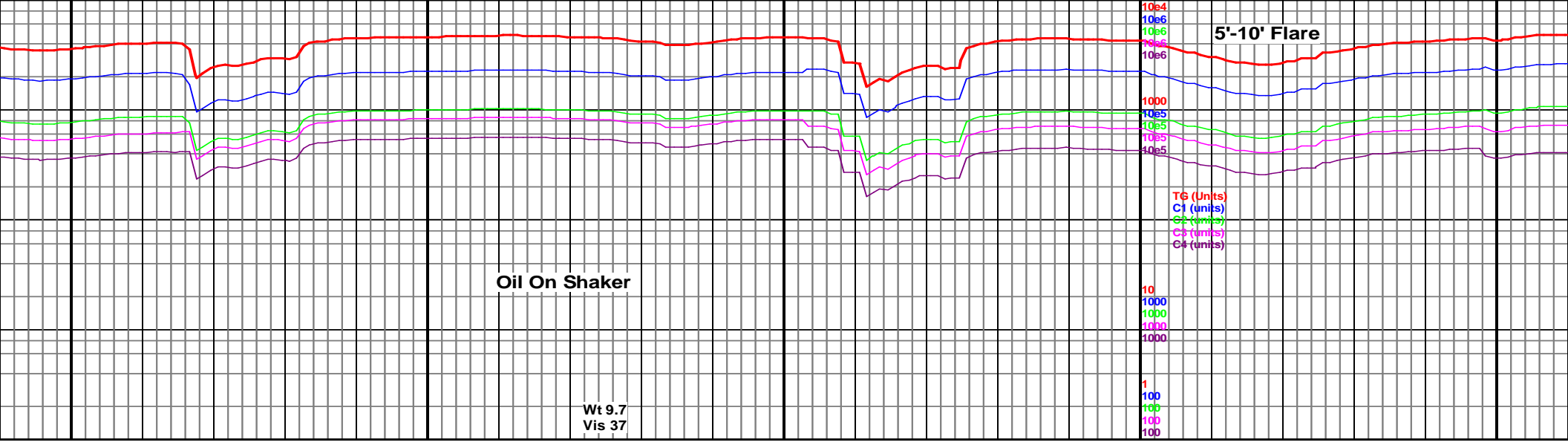


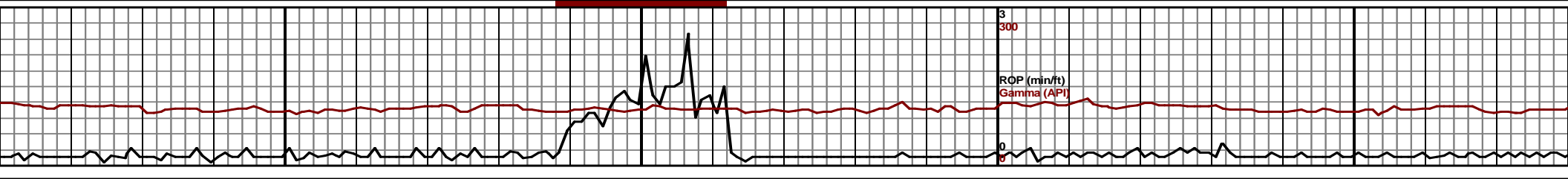
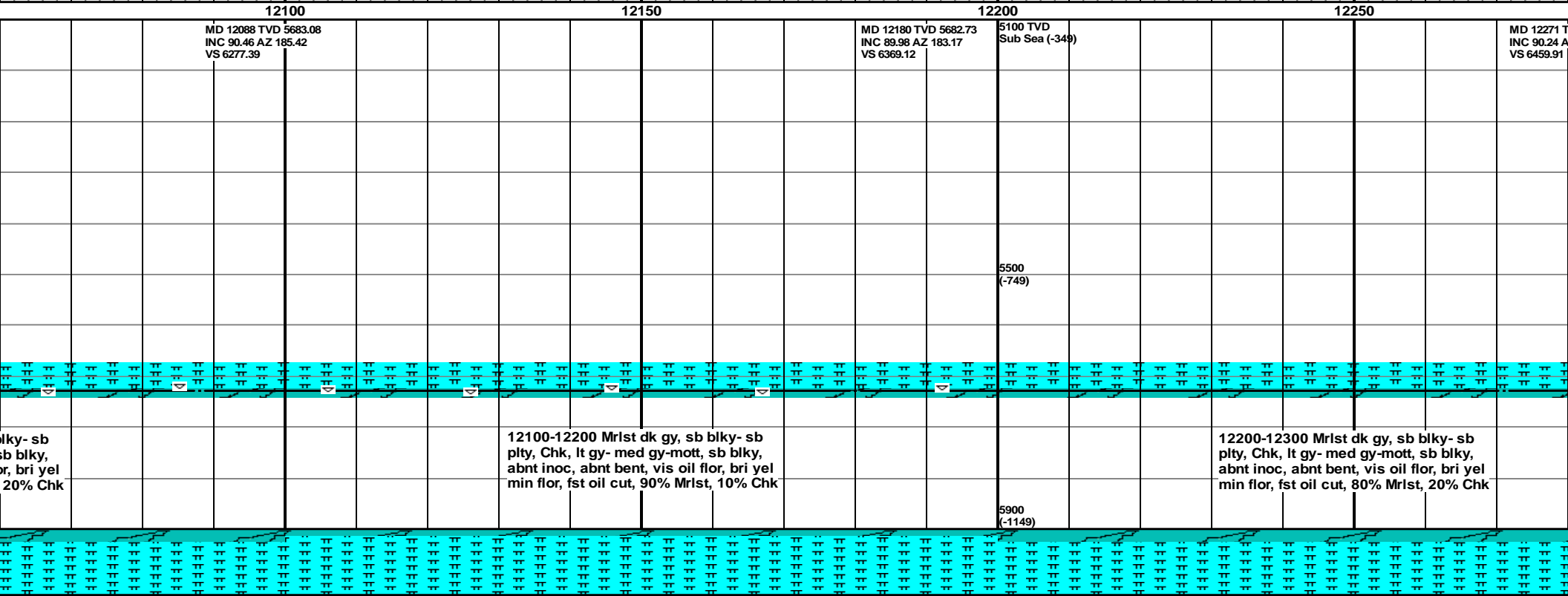
11400-11500 Chk, lt gy- med gy-mott,
sb blk, Mrst dk gy, sb blk- sb plty, tr
inoc, tr bent, vis oil flor, bri yel min flor,
fst oil cut, 85% Chk, 15% Mrst

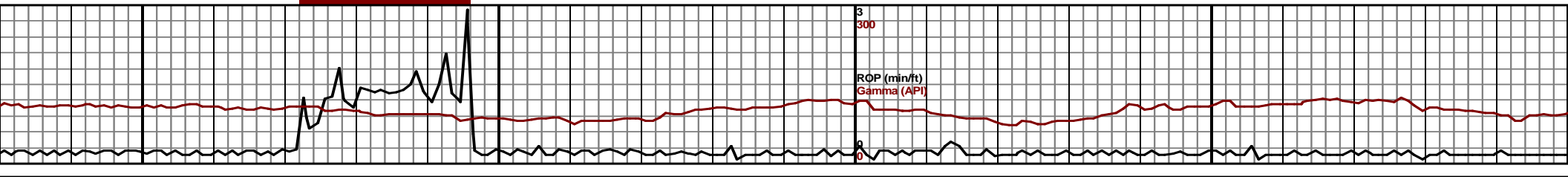
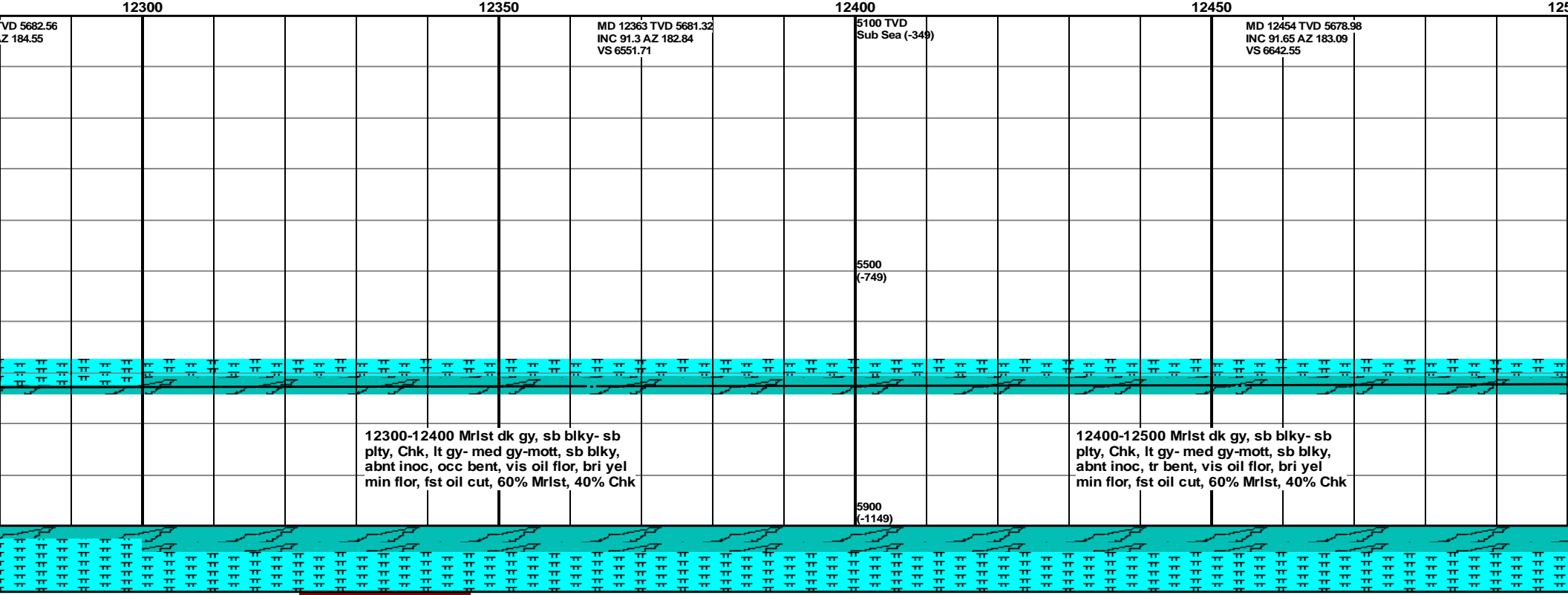
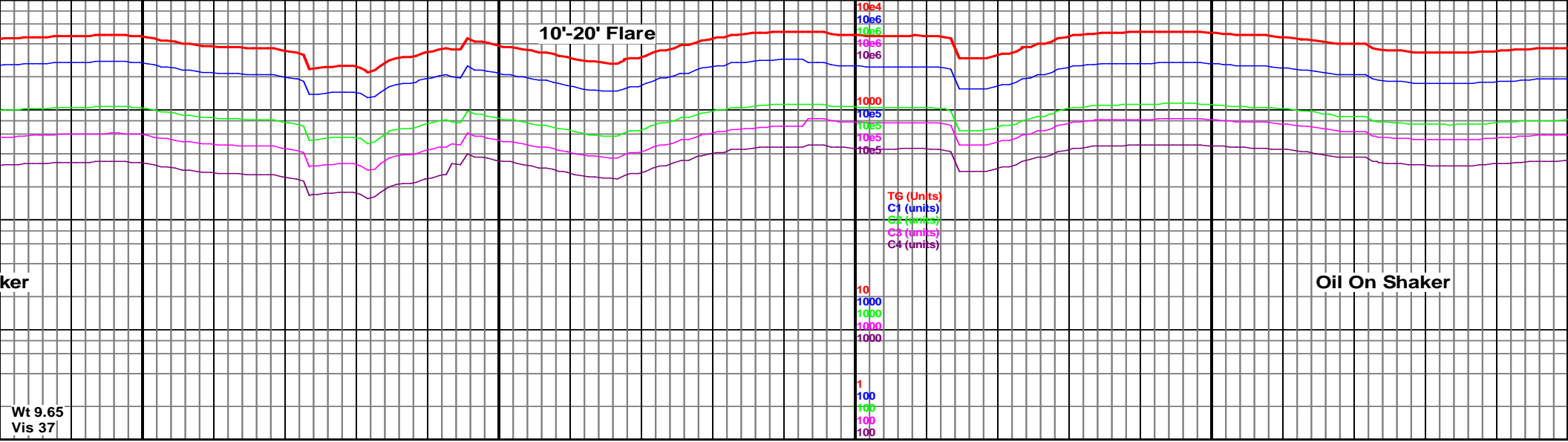
11500-11600 Chk, lt gy- med gy-mott,
sb blk, Mrst dk gy, sb blk- sb plty, tr
inoc, rr bent, vis oil flor, bri yel min
flor, fst oil cut, 80% Chk, 20% Mrst

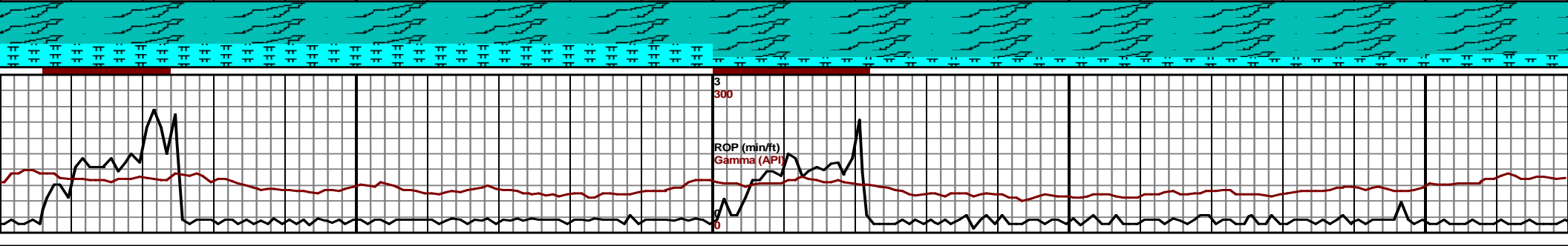
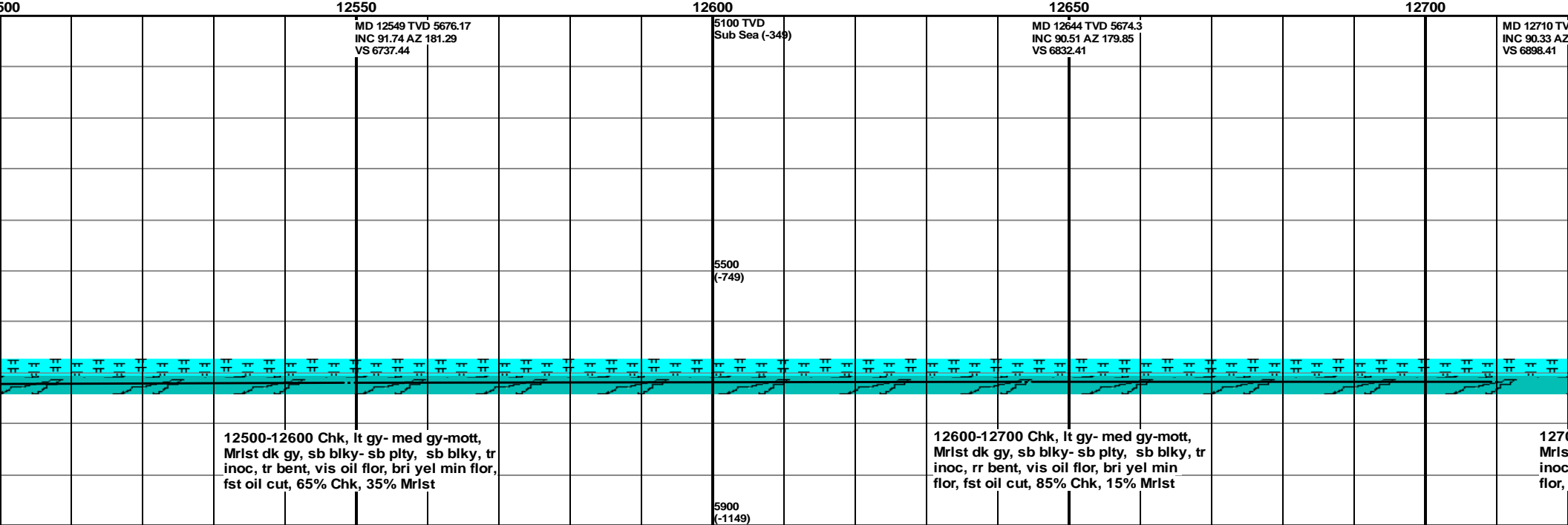
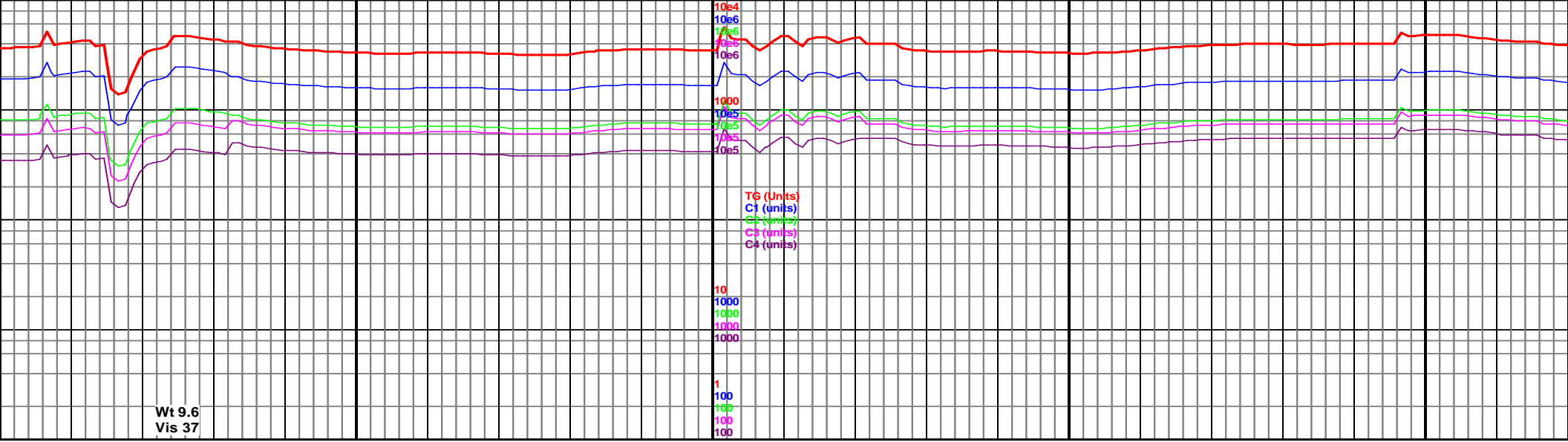




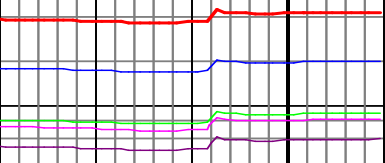








10'-20' Flare



Oil On Shaker

12750

D 5673.82
: 179.48

TD at 12760' MD, 5673.5'
TVD projected at the bit,
05:05, 4/23/14



00-12760 Chk, lt gy- med gy-mott,
t dk gy, sb blk- sb plty, sb blk, tr
, rr bent, vis oil flor, bri yel min
fst oil cut, 80% Chk, 20% Mrlst

