

SUNBURST CONSULTING

A G E O L O G Y S E R V I C E



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GEOSTEERING LOG

WellSight Systems

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

Well Name: Cather #513054
Location: Rosemont 7.5' Quadrangle; Flemington District, Taylor Co. WV
License Number: API#: 47-091-01226
Spud Date: 16 June 2011
Surface Coordinates: Latitude: 39.29188
Longitude: 80.15296
Bottom Hole Coordinates: 4,243.39' North & 1,334.12' West of Surface Location
Ground Elevation (ft): 1183
Logged Interval (ft): 6,640' To: 12,037'
Formation: Middlesex to Marcellus
Type of Drilling Fluid: Air & Water Based Mud

Region: Appalachian Basin
Drilling Completed: 28 June 2011

K.B. Elevation (ft): 1205

Total Depth (ft): 12,037'

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.co




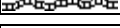
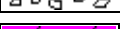

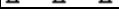
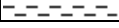








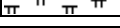

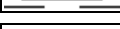
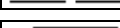
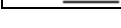



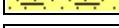

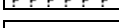
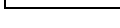
OPERATOR

Company: EQT Production Company
Address: 625 Liberty Ave.
Pittsburgh, PA 15222








































































GEOLOGISTS

Name: Kyle Thomas, Phillip Broache
Company: Sunburst Consulting, Inc.
Address: P.O. Box 51297, Billings, MT 59105
 2150 Harnish Blvd, Billings, MT 59101
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ROCK TYPES

 Anhy  Arg dol  Arg ls  Bent  Brec  Calc dol  Cht	 Clyst  Coal  Congl  Dol  Dol ls  Gyp  Igne	 Ls  Meta  Mrlst  Salt  Shale  Shblk  Shcol	 Shgy  Sltst  Ss  Sssilty  Tuff  Unknown  Blank
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ACCESSORIES

FOSSIL  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite  Ostra  Pelec  Pellet  Pisolite	 Plant  Strom MINERAL  Anhy  Arggrn  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Feldspar  Ferrpel  Ferr  Glau  Gyp	 Hvymn  Kaol  Marl  Minxl  Nodule  Phos  Pyr  Salt  Sandy  Silt  Sil  Sulphur  Tuff STRINGER  Anhy  Arg  Bent  Coal  Dol	 Gyp  Ls  Mrst  Sltstrg  Ssstrg TEXTURE  Boundst  Chalky  Cryxln  Earthy  Finexln  Grainst  Lithogr  Microxln  Mudst  Packst  Wackest
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OTHER SYMBOLS

INTERVALS

- None
- Core
- Dst

EVENTS

- Rft
- Sidewall
- Bit change

OIL SHOWS

- Even
- Spotted
- Ques
- Dead

POROSITY TYPE

- Earthy
- Fenest

- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

- #### ROUNDING
- Rounded

- Subrnd
- Subang
- Angular

SORTING

- Well
- Moderate
- Poor

COMMENTS

COMPANY MAN: Larry Frost, Ken Baun
TOOLPUSHER: Michael Case, Kermit Aultman Jr.
RIG: Patterson 622 UTI

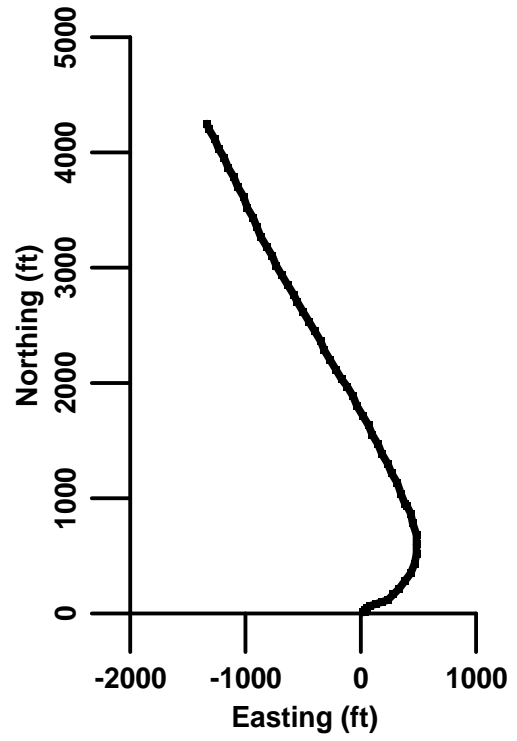
WV FILE #: 7377P513054R (329-47)

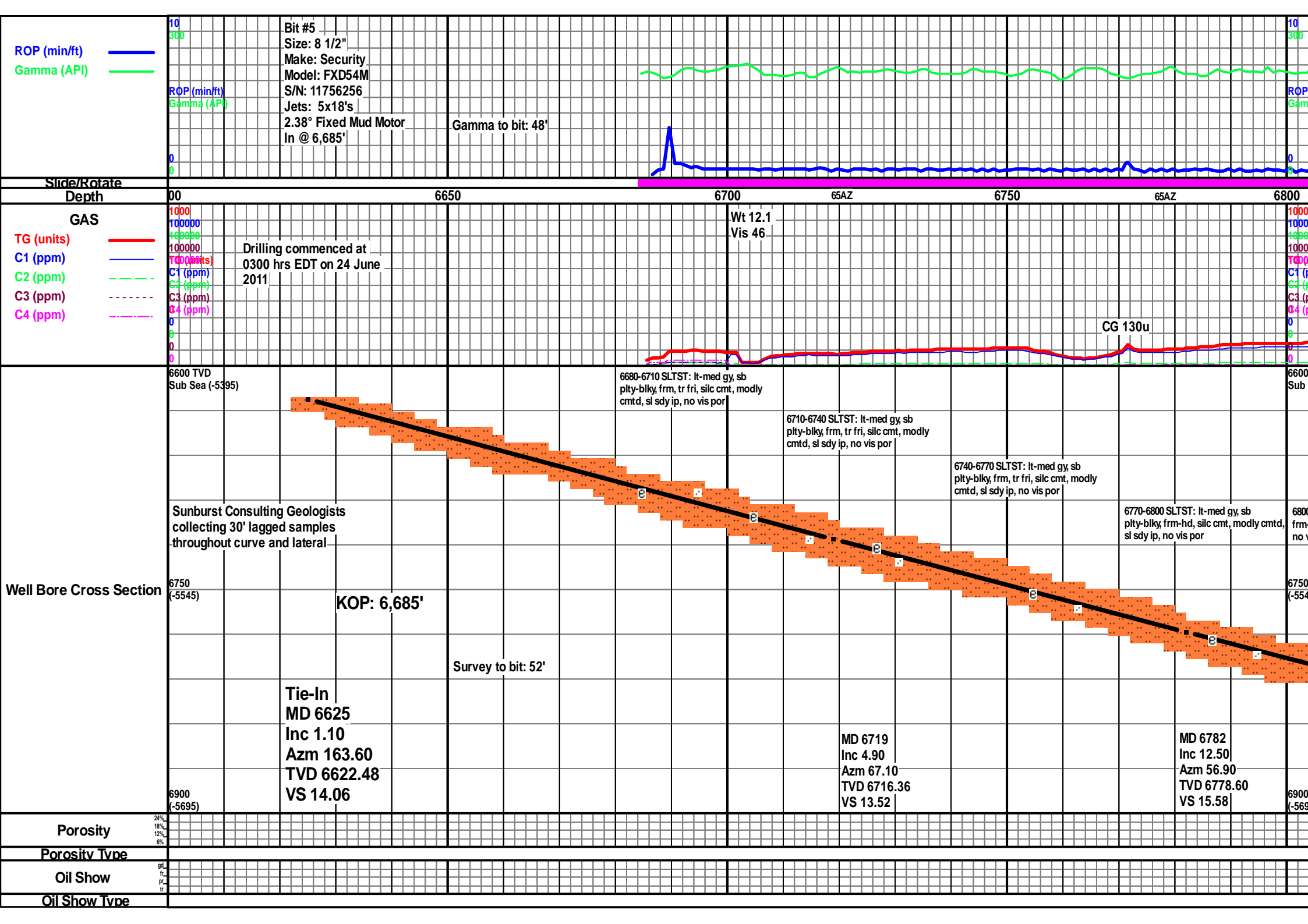
SURFACE CASING: 13 3/8" J-55, 54.5#, set to 1,060'
INTERMEDIATE CASING: 9 5/8" MC-50, 40#, set to 2,850'

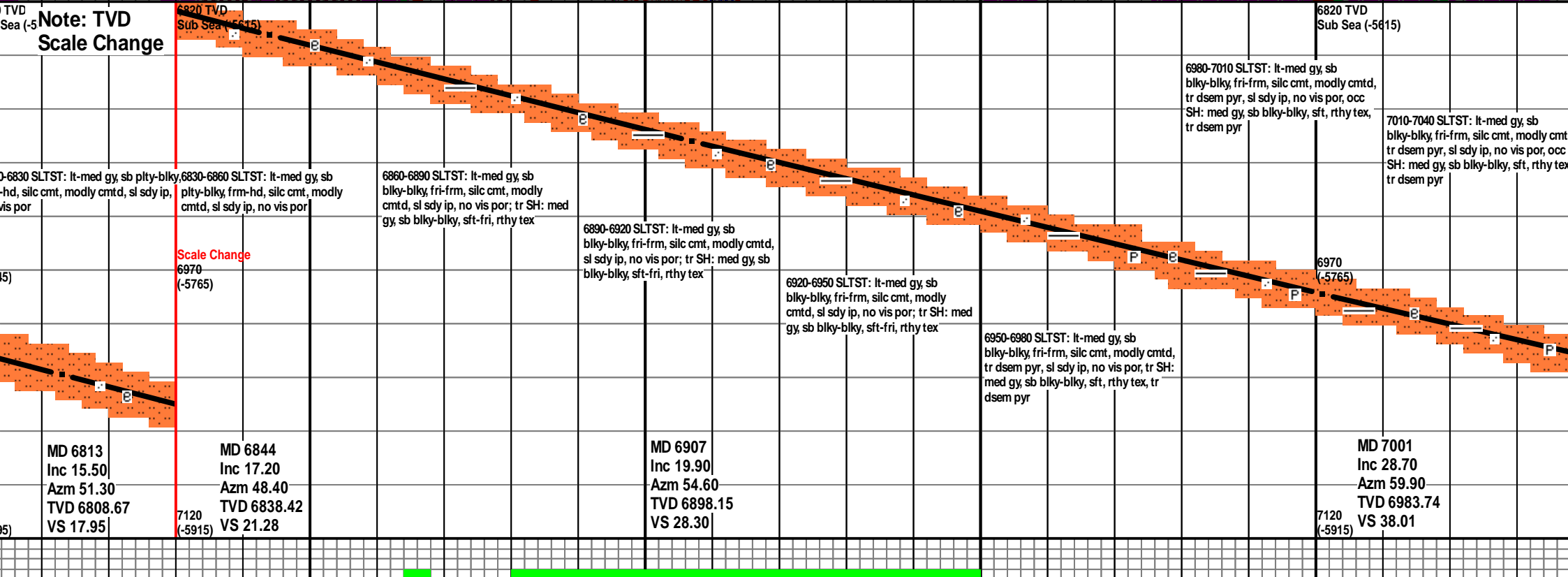
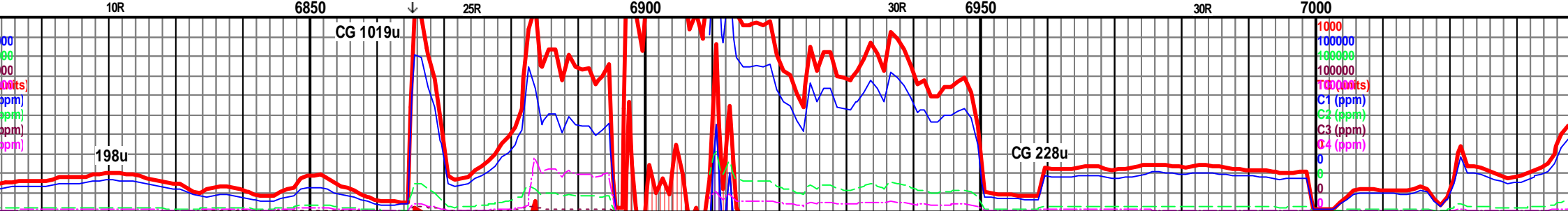
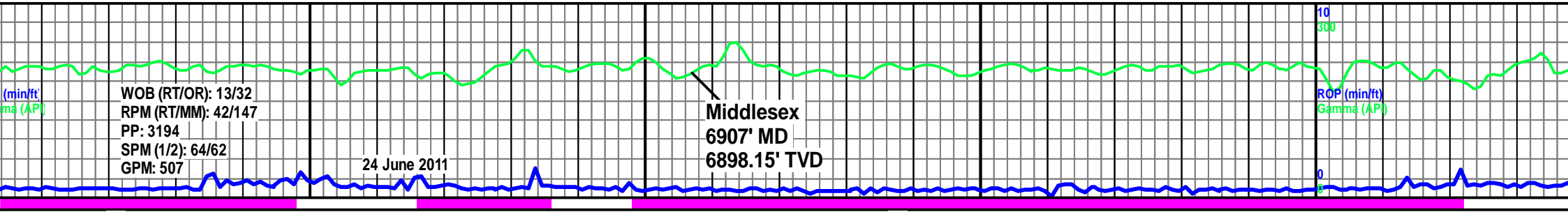
KOP: 6685'

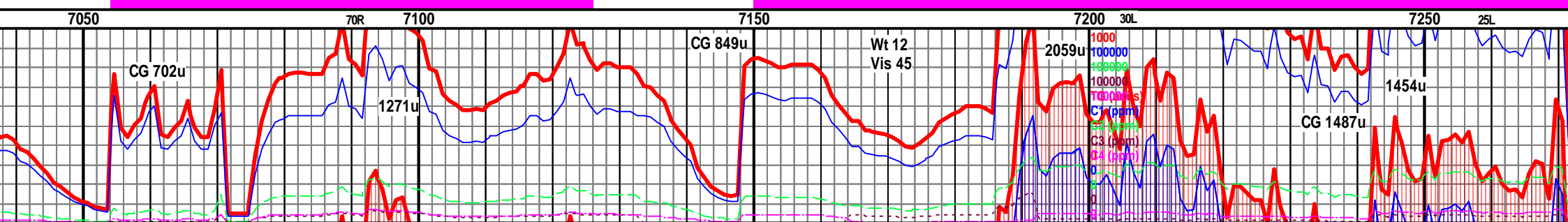
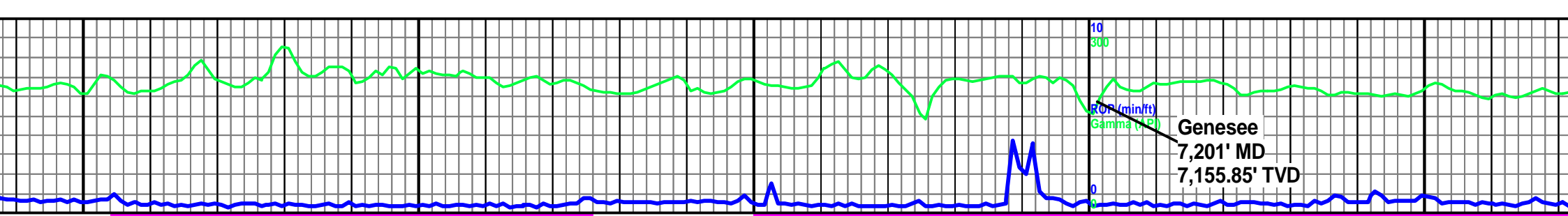
CLOSURE DIRECTION: 342.55°
CLOSURE DISTANCE: 4448.17'

Plan

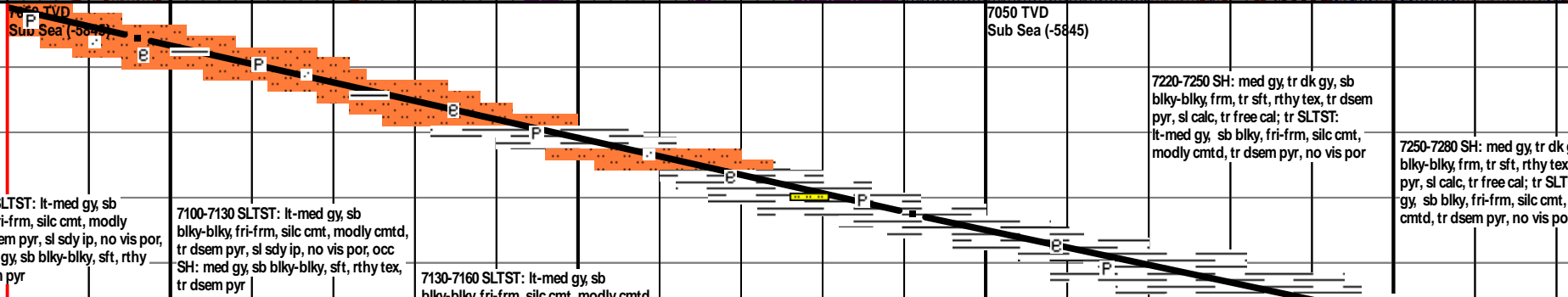








Note: TVD Scale Change



7040-7070 SLTST: lt-med gy, sb blkly-blky, fri-frm, silc cmt, modly cmt, tr dsem pyr, sl sdy ip, no vis por, occ SH: med gy, sb blkly-blky, sft, rthy tex, tr dsem pyr

7070-7100 SLTST: lt-med gy, sb blkly-blky, fri-frm, silc cmt, modly cmt, tr dsem pyr, sl sdy ip, no vis por, rr SH: med gy, sb blkly-blky, sft, rthy tex, tr dsem pyr

7100-7130 SLTST: lt-med gy, sb blkly-blky, fri-frm, silc cmt, modly cmt, tr dsem pyr, sl sdy ip, no vis por, occ SH: med gy, sb blkly-blky, sft, rthy tex, tr dsem pyr

7130-7160 SLTST: lt-med gy, sb blkly-blky, fri-frm, silc cmt, modly cmt, tr dsem pyr, sl sdy ip, no vis por, com SH: med gy, sb blkly-blky, sft, rthy tex, tr dsem pyr

7160-7190 SH: med gy, tr dk gy, sb blkly-blky, frm, tr sft, rthy tex, tr dsem pyr, sl calc, tr free cal; rr SLTST: lt-med gy, sb blkly, fri-frm, silc cmt, modly cmt, tr dsem pyr, no vis por

7190-7220 SH: med gy, tr dk gy, sb blkly-blky, frm, tr sft, rthy tex, tr dsem pyr, sl calc, tr free cal; tr SLTST: lt-med gy, sb blkly, fri-frm, silc cmt, modly cmt, tr dsem pyr, no vis por

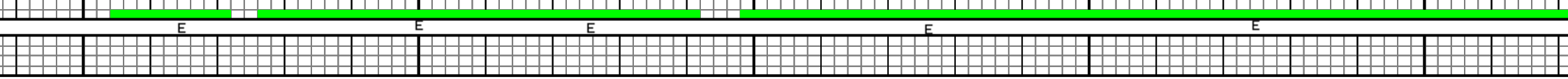
7220-7250 SH: med gy, tr dk gy, sb blkly-blky, frm, tr sft, rthy tex, tr dsem pyr, sl calc, tr free cal; tr SLTST: lt-med gy, sb blkly, fri-frm, silc cmt, modly cmt, tr dsem pyr, no vis por

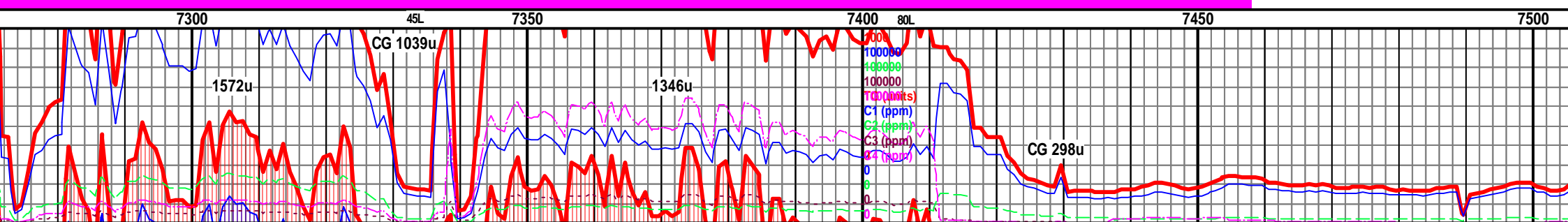
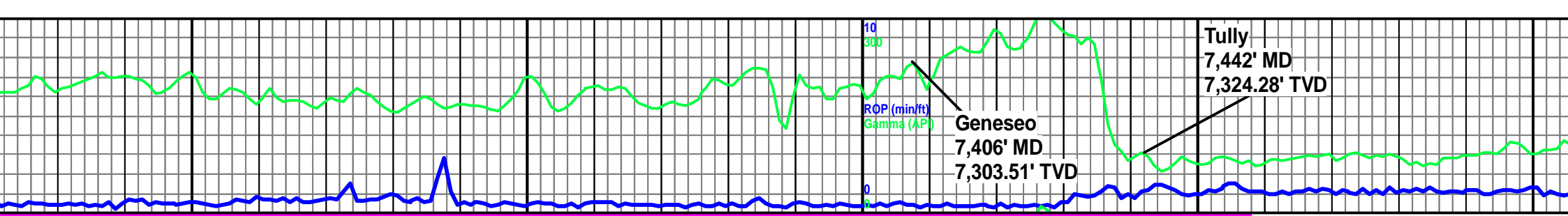
7250-7280 SH: med gy, tr dk gy, sb blkly-blky, frm, tr sft, rthy tex, tr dsem pyr, sl calc, tr free cal; tr SLTST: lt-med gy, sb blkly, fri-frm, silc cmt, modly cmt, tr dsem pyr, no vis por

Scale Change
7200 (-5995)

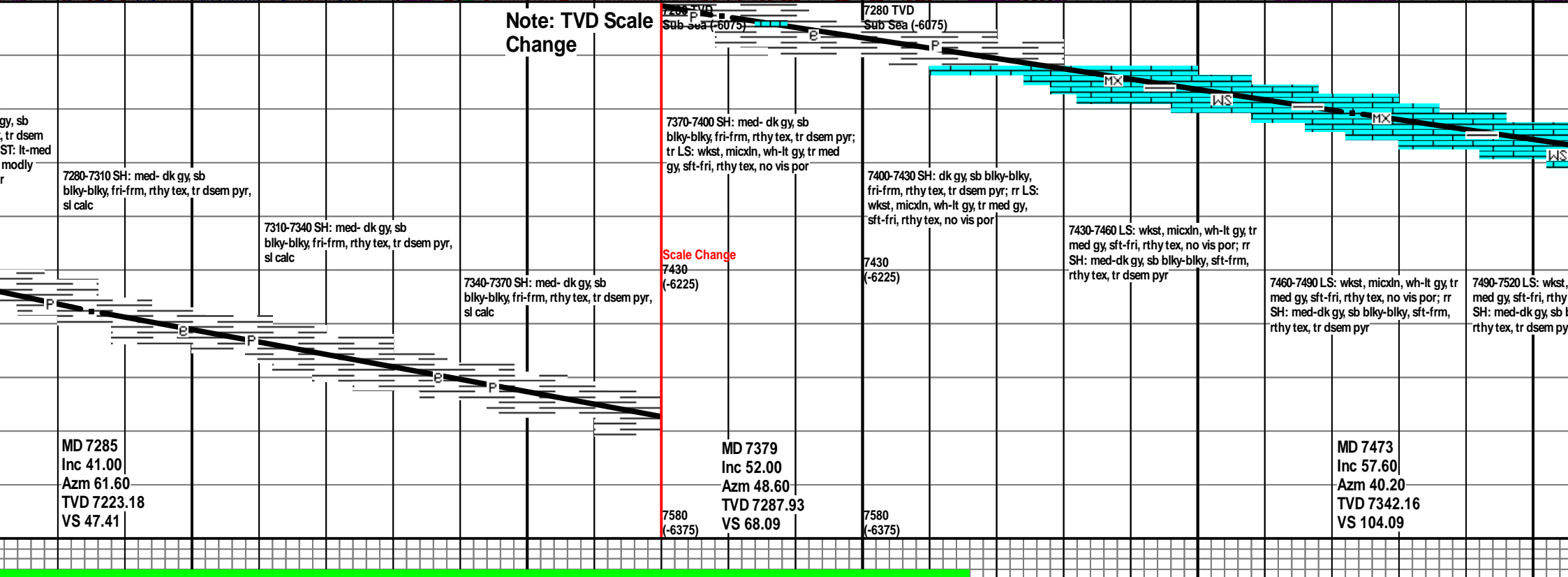
MD 7096
Inc 30.00
Azm 74.10
TVD 7066.65
VS 42.13
7350 (-6145)

MD 7191
Inc 32.50
Azm 71.90
TVD 7147.86
VS 41.53
7350 (-6145)

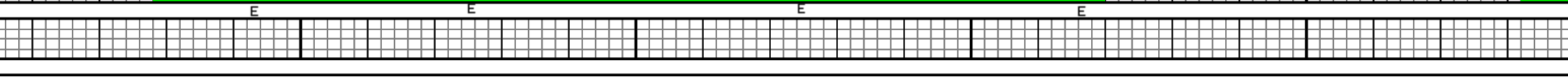
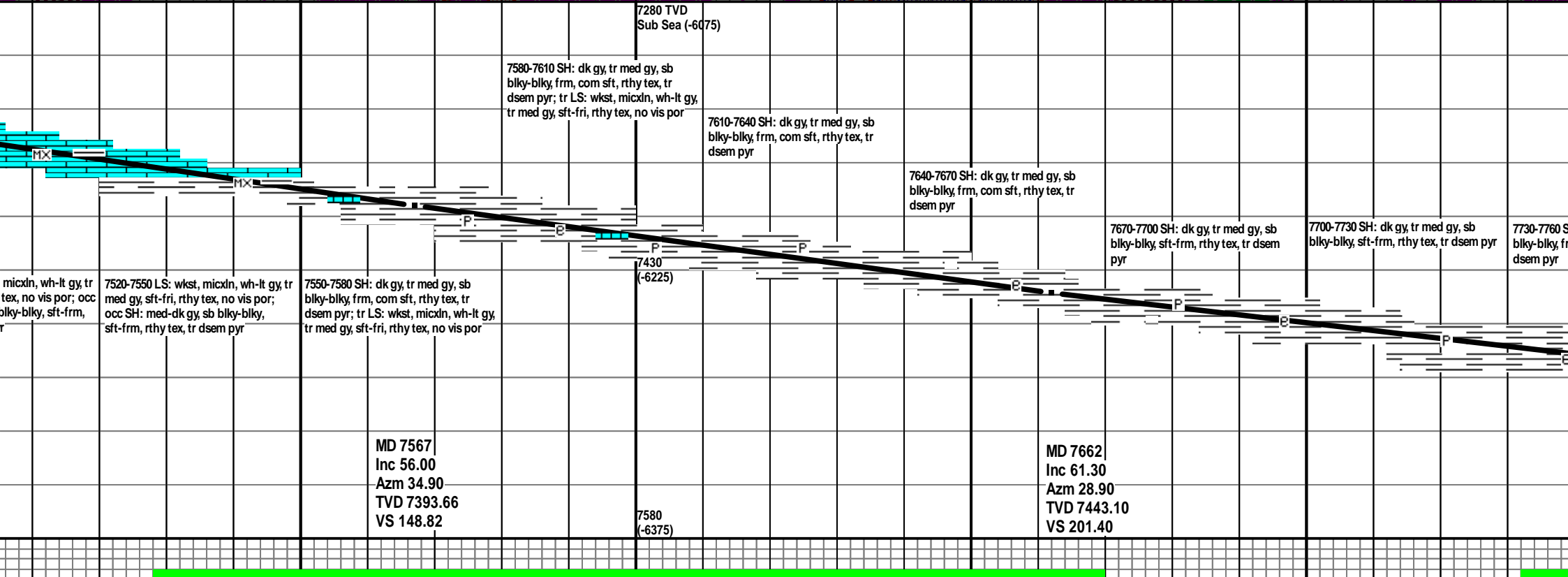
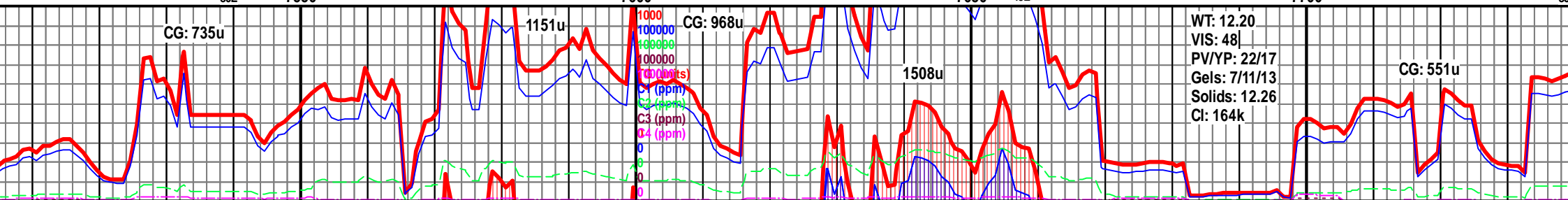
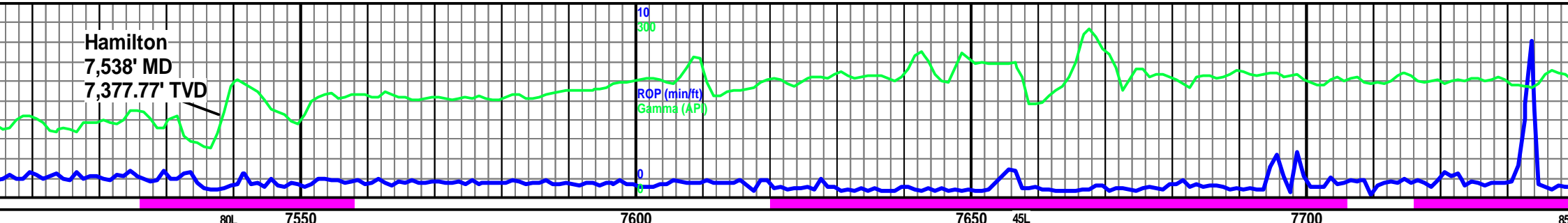


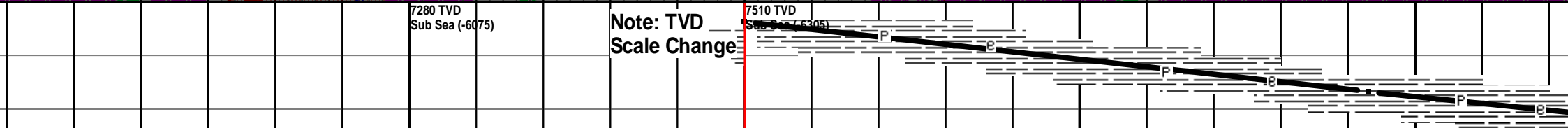
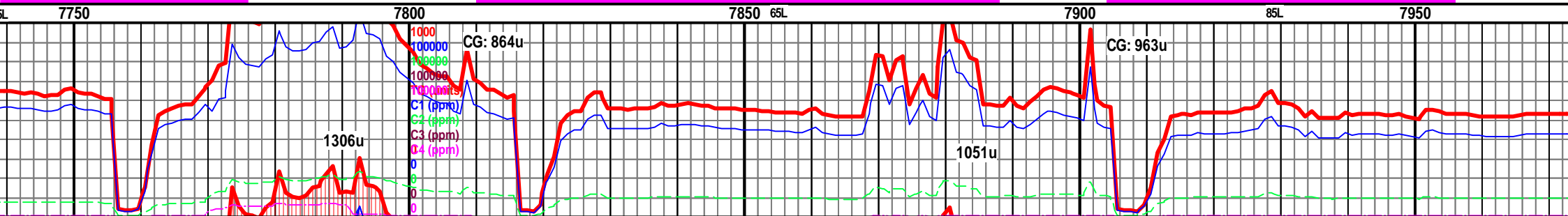
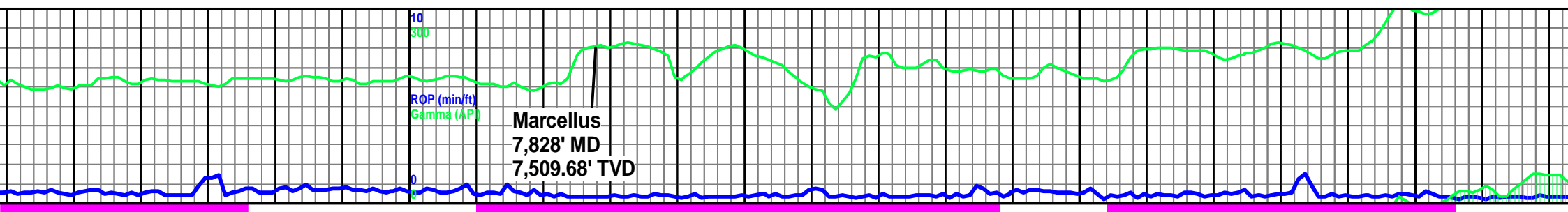


Note: TVD Scale Change



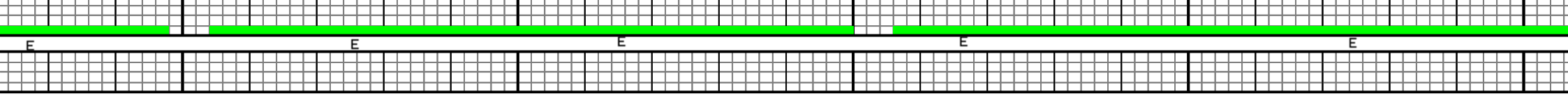
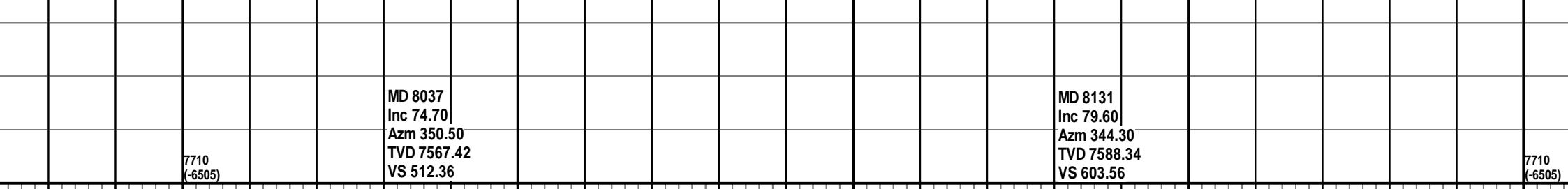
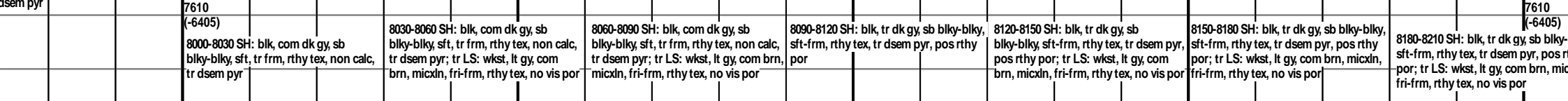
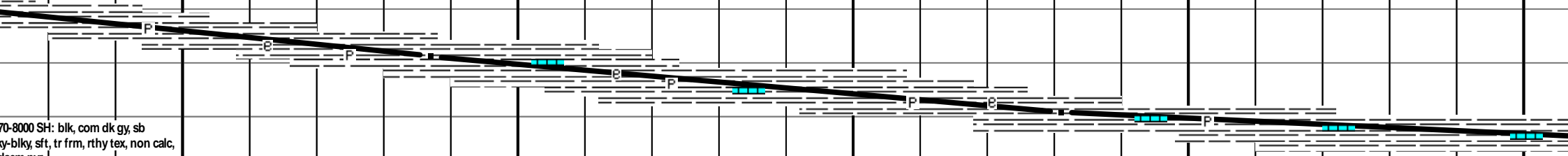
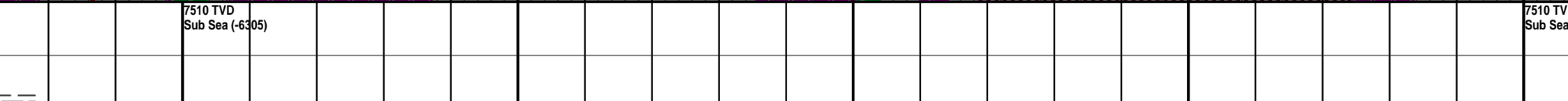
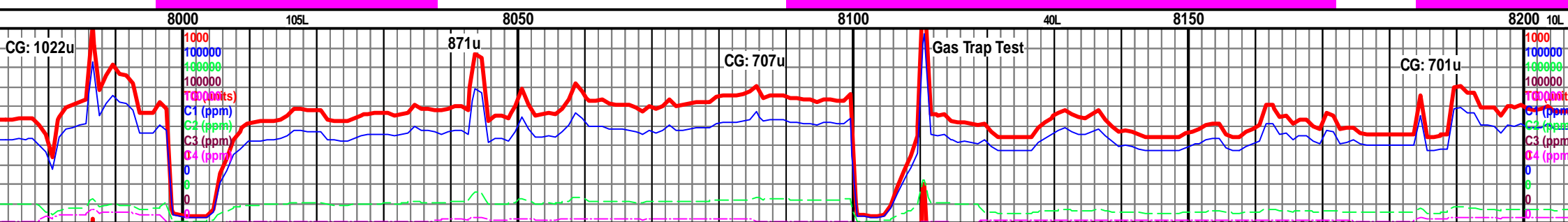
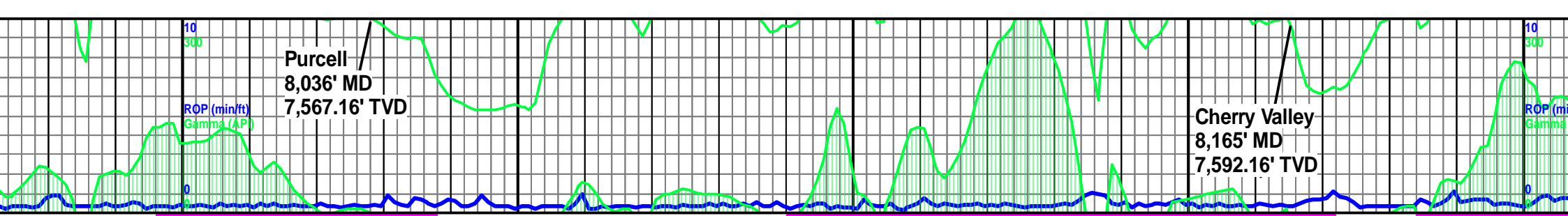
Hamilton
7,538' MD
7,377.77' TVD





SH: dk gy, tr med gy, sb frm, com sft, rthy tex, tr 7760-7790 SH: dk gy-blk, blk- sb blk, sft-frm, rthy tex, tr dsem pyr, non calc 7430 (-6225)	7790-7820 SH: dk gy-blk, blk- sb blk, sft-frm, rthy tex, tr dsem pyr, non calc 7580 (-6375)	7820-7850 SH: blk, tr dk gy, sb blk-blk, sft-frm, rthy tex, non calc, tr dsem pyr	7850-7880 SH: blk, tr dk gy, sb blk-blk, sft-frm, rthy tex, non calc, tr dsem pyr Scale Change 7610 (-6405)	7880-7910 SH: blk, tr dk gy, sb blk-blk, sft-frm, rthy tex, non calc, tr dsem pyr	7910-7940 SH: blk, com dk gy, sb blk-blk, sft, tr frm, rthy tex, non calc, tr dsem pyr	7940-7970 SH: blk, com dk gy, sb blk-blk, sft, tr frm, rthy tex, non calc, tr dsem pyr
MD 7756 Inc 66.80 Azm 18.61 TVD 7484.30 VS 264.68			MD 7850 Inc 72.00 Azm 8.20 TVD 7517.44 VS 339.90			MD 7943 Inc 75.70 Azm 357.4 TVD 7543.38 VS 423.42





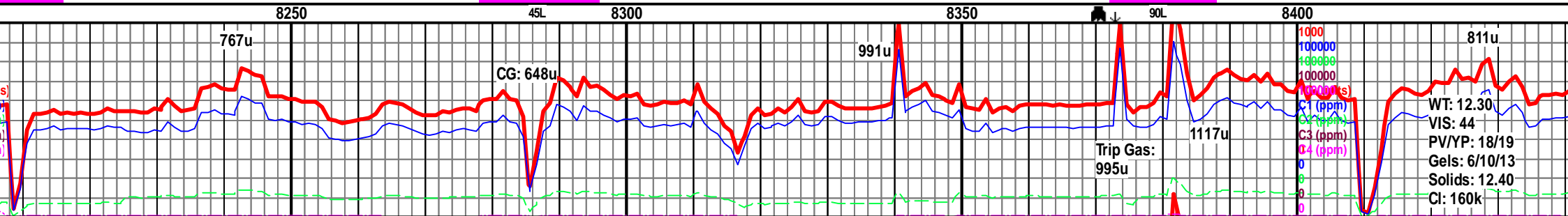
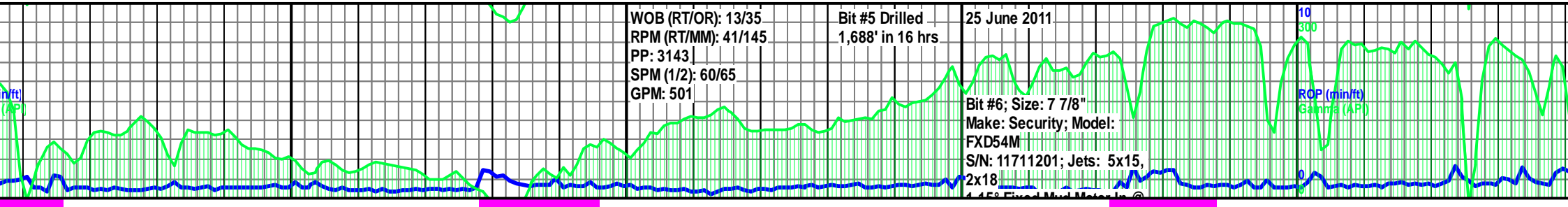
WOB (RT/OR): 13/35
 RPM (RT/MM): 41/145
 PP: 3143
 SPM (1/2): 60/65
 GPM: 501

Bit #5 Drilled
 1,688' in 16 hrs

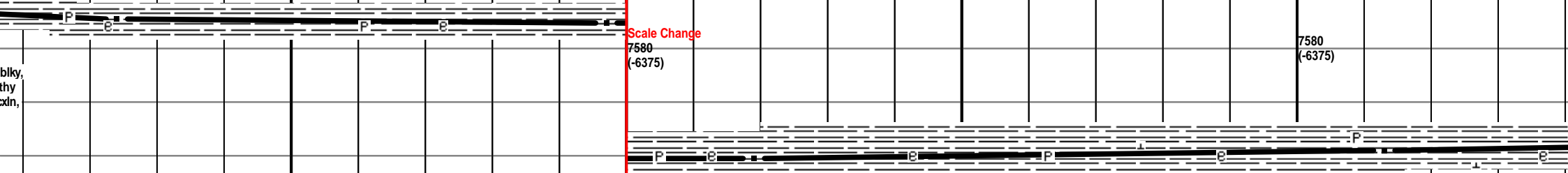
25 June 2011

Bit #6; Size: 7 7/8"
 Make: Security; Model:
 FXD54M
 S/N: 11711201; Jets: 5x15,
 2x18

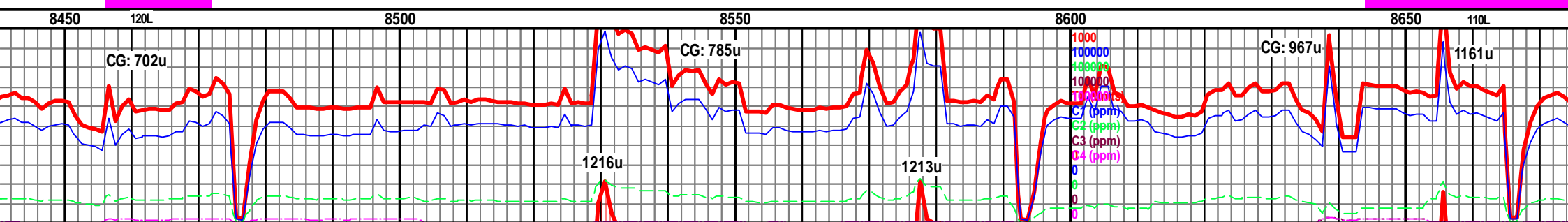
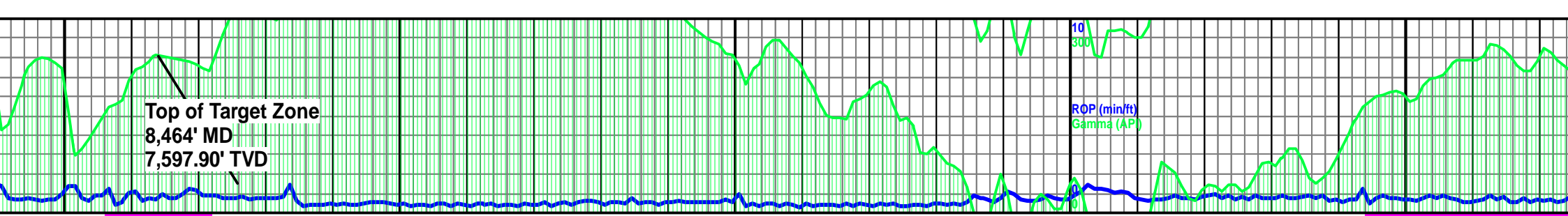
ROP (min/ft)
 Gamma (API)



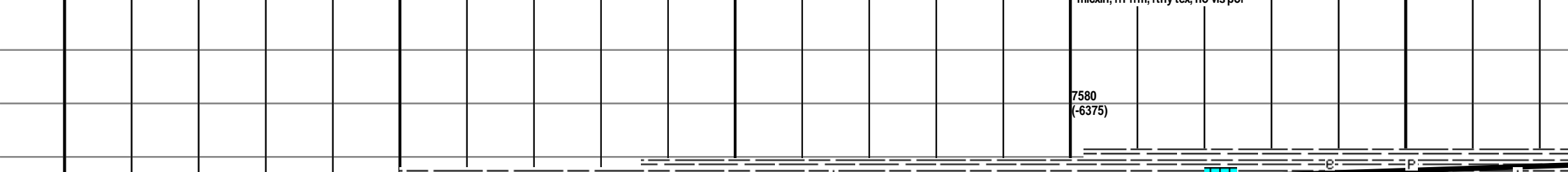
7530 TVD Sub Sea (-6325)	Note: TVD Scale Change		7530 TVD Sub Sea (-6325)	Curve Landed 8,373' MD 7,601' TVD @ 0300 hrs on 25 June 2011	7530 TVD Sub Sea (-6325)		
8210-8240 SH: blk, tr dk gy, sb blk-y-bkly, sft frm, rthy tex, tr dsem pyr, pos rthy por	8240-8270 SH: blk, tr dk gy, sb blk-y-bkly, sft frm, rthy tex, tr dsem pyr, pos rthy por	8270-8300 SH: blk, tr dk gy, sb blk-y-bkly, sft frm, rthy tex, tr dsem pyr, pos rthy por	8300-8330 SH: blk, occ dk gy, sb blk-y-bkly, frm, tr sft, rthy tex, tr dsem pyr, pos rthy por	8330-8360 SH: blk, occ dk gy, sb blk-y-bkly, frm, tr sft, rthy tex, tr dsem pyr, pos rthy por	8360-8390 SH: blk, tr dk gy, sb blk-y-bkly, sft frm, rthy tex, tr dsem pyr, pos rthy por	8390-8420 SH: blk, tr dk gy, sb blk-y-bkly, sft frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	8420-8450 SH: blk, tr dk gy, blk-y-bkly, sft frm, rthy tex, dsem pyr, pos rthy por



MD 8224 Inc 87.50 Azm 338.80 TVD 7598.78 VS 695.85	MD 8297 Inc 89.80 Azm 336.20 TVD 7600.50 VS 768.57	MD 8319 Inc 90.30 Azm 335.70 TVD 7600.48 VS 790.44	MD 8413 Inc 91.60 Azm 335.70 TVD 7598.93 VS 883.81
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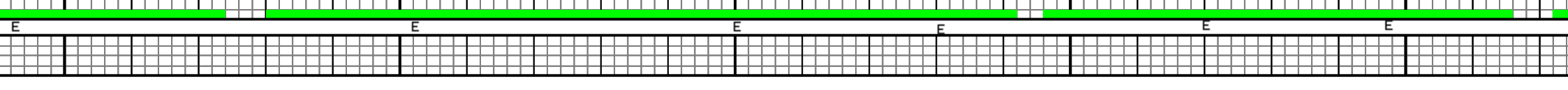
sb sl calc, tr	8450-8480 SH: blk, tr dk gy, sb blk-bkly, sft-frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	8480-8510 SH: blk-tr dk gy, sb blk-bkly, sft, tr frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	8510-8540 SH: blk, tr dk gy, sb blk-bkly, sft-frm, rthy tex, v sl calc, tr cal fld frac, tr dsem pyr, pos rthy por	8540-8570 SH: blk, tr dk gy, sb blk-bkly sft-frm, rthy tex, v sl calc, tr cal fld frac, tr dsem pyr, pos rthy por	8570-8600 SH: blk, sb blk-bkly, frm, tr sft, rthy tex, v sl calc, tr dsem pyr, pos rthy por	8600-8630 SH: blk, sb blk-bkly, frm, tr sft, rthy tex, v sl calc, tr dsem pyr, pos rthy por; tr LS: wkst, lt gy, com brn, micln, fri-frm, rthy tex, no vis por	8630-8660 SH: blk, sb blk-bkly, frm, tr sft, rthy tex, v sl calc, tr dsem pyr, pos rthy por	8660-8690 SH: blk, sft, rthy tex, v sl calc, tr dsem pyr, pos rthy por
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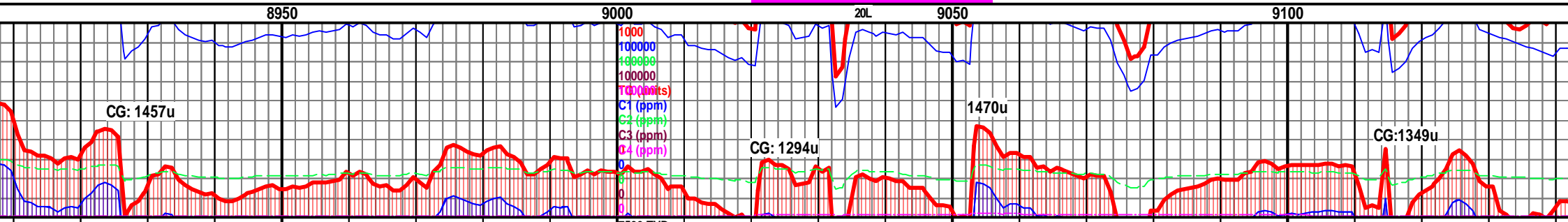
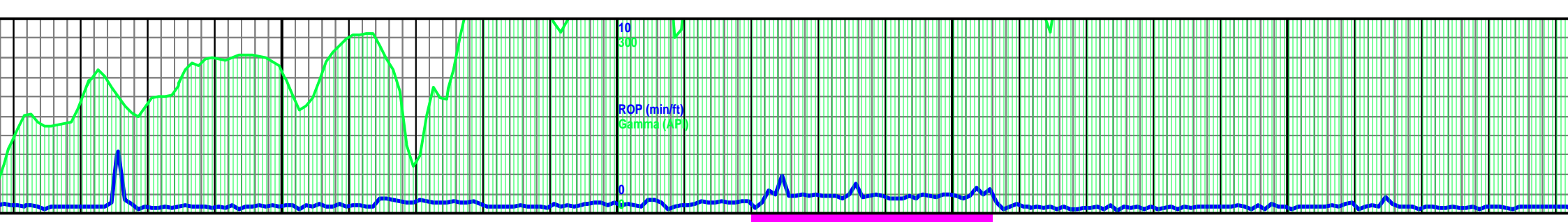


MD 8507
Inc 90.70
Azm 334.50
TVD 7597.04
VS 977.05

MD 8601
Inc 92.40
Azm 335.30
TVD 7594.50
VS 1070.24

7630
(-6425)





7530 TVD
Sub Sea (-6325)

SH: blk, sb blk, sb blk, frm, tr
ex, modly calc, tr dsem &
pos rthy por

8930-8960 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, modly calc, tr dsem &
nodr pyr, pos rthy por

8960-8990 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, modly calc, tr dsem &
nodr pyr, pos rthy por

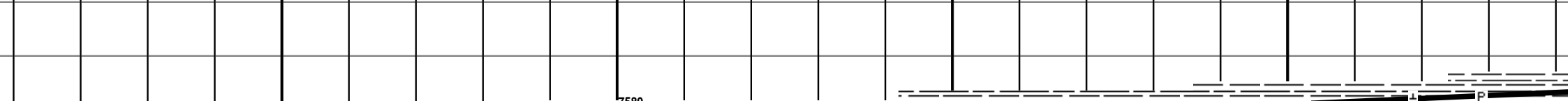
8990-9020 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, modly calc, tr dsem &
nodr pyr, pos rthy por

9020-9050 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, sl calc, tr dsem & nodr
pyr, pos rthy por, tr fr cal

9050-9080 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, modly calc, tr dsem &
nodr pyr, pos rthy por, tr fr cal

9080-9110 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, modly calc, tr dsem &
nodr pyr, pos rthy por, tr fr cal

9110-9140 SH: blk, sb blk, sb blk, frm, tr
sft, rthy tex, modly calc, tr dsem &
nodr pyr, pos rthy por

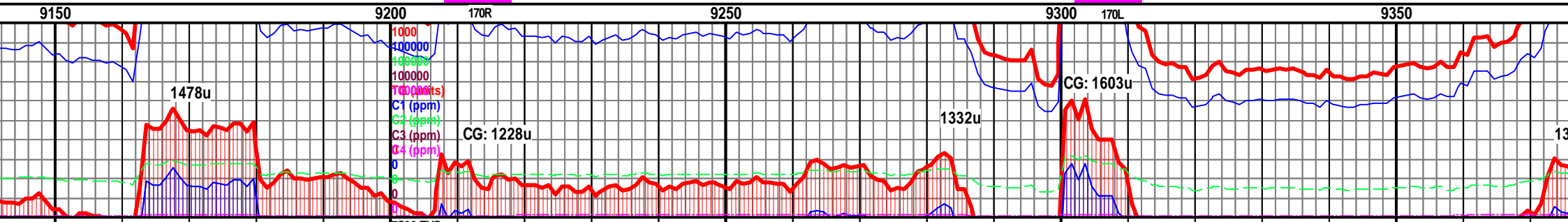
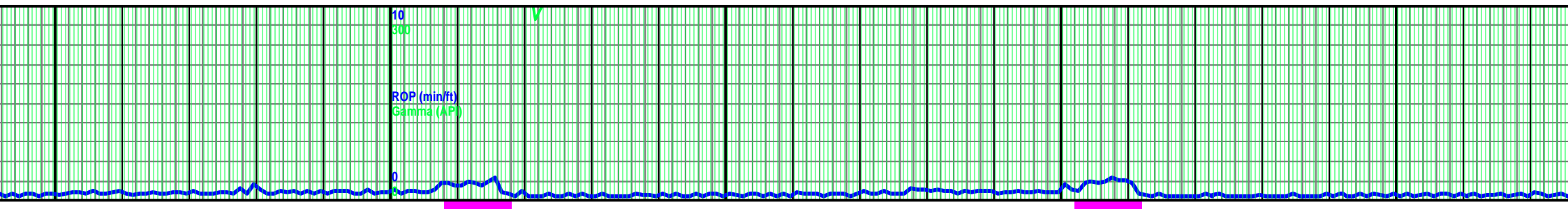


MD 8977
Inc 90.20
Az 332.70
TVD 7583.18
VS 1441.78

7630
(-6425)

MD 9071
Inc 93.10
Az 331.70
TVD 7580.47
VS 1534.28

E E E E E E E E



7530 TVD
Sub Sea (-6325)

140-9170 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

9170-9200 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

9200-9230 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

9230-9260 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

9260-9290 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por



7580
(-6375)

9290-9320 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

9320-9350 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

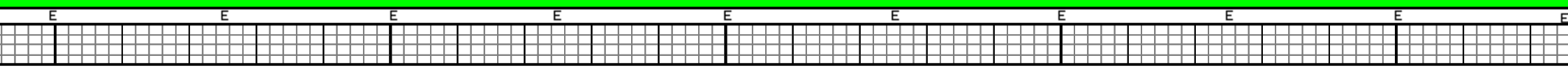
9350-9380 SH: blk, tr med gy, sb
blkly-blky, frm, tr sft, rthy tex, modly
calc, tr dsem & nodr pyr, pos rthy por

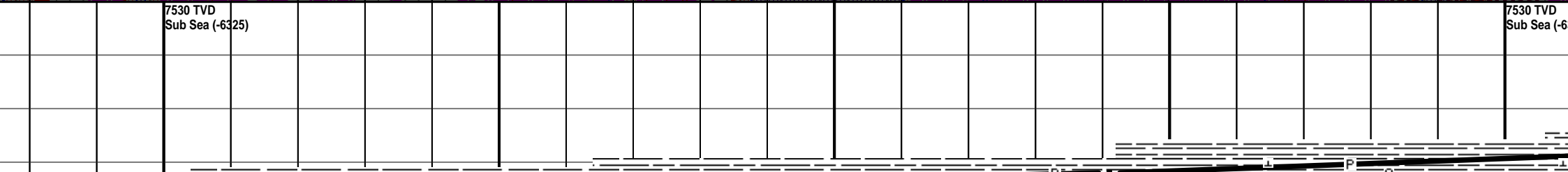
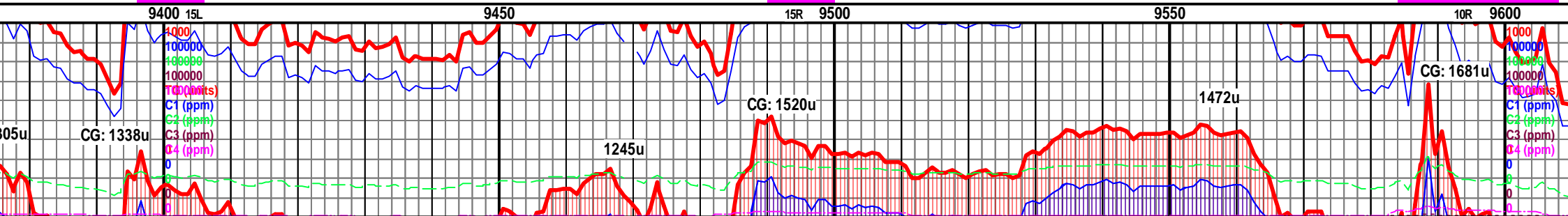
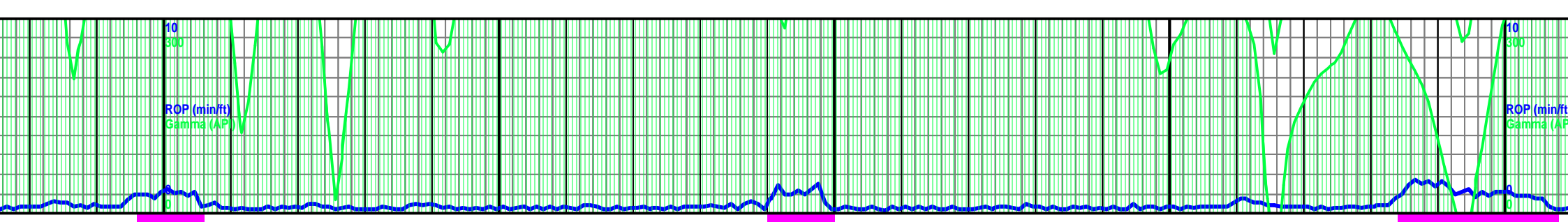
MD 9165
Inc 93.10
Azm 331.10
TVD 7575.39
VS 1626.46

MD 9259
Inc 92.70
Azm 331.70
TVD 7570.63
VS 1718.66

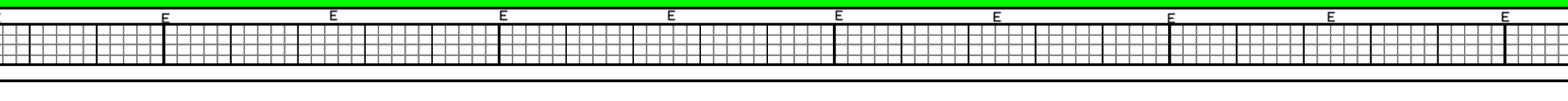
MD 9352
Inc 91.40
Azm 331.00
TVD 7567.31
VS 1809.92

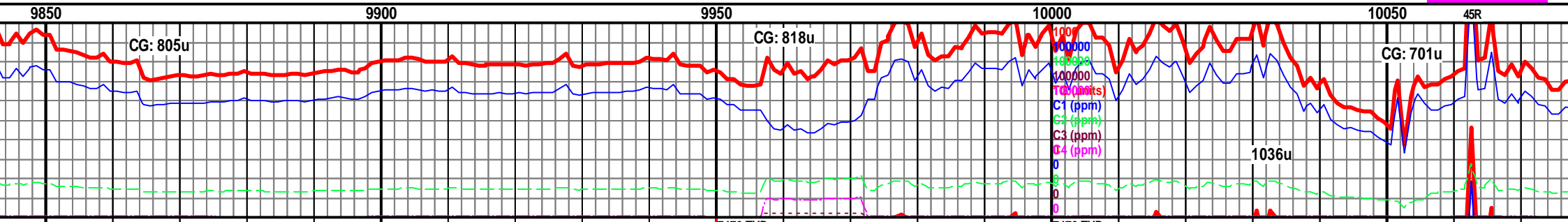
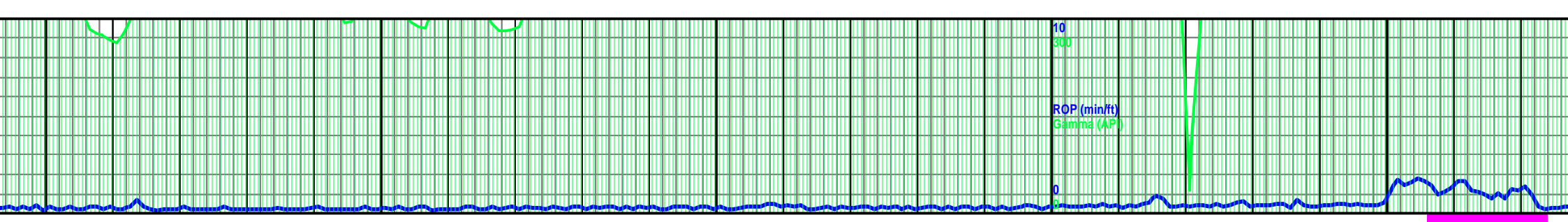
7630
(-6425)





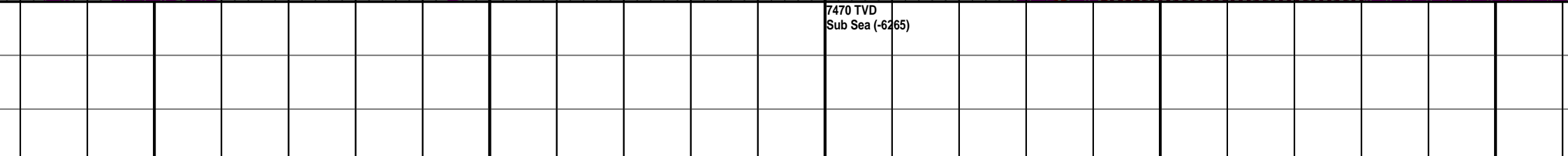
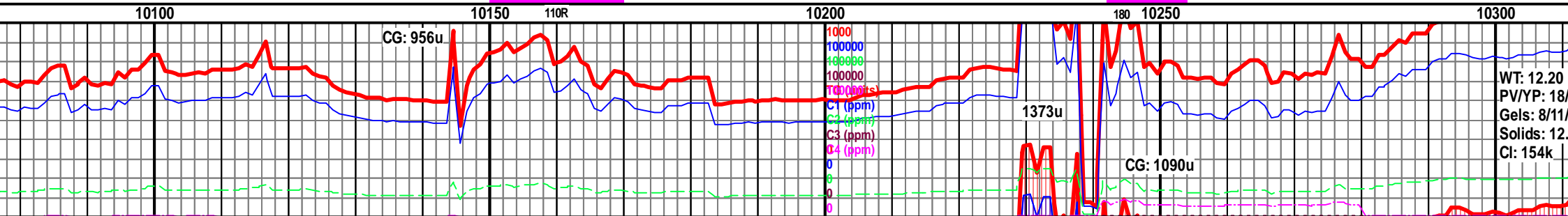
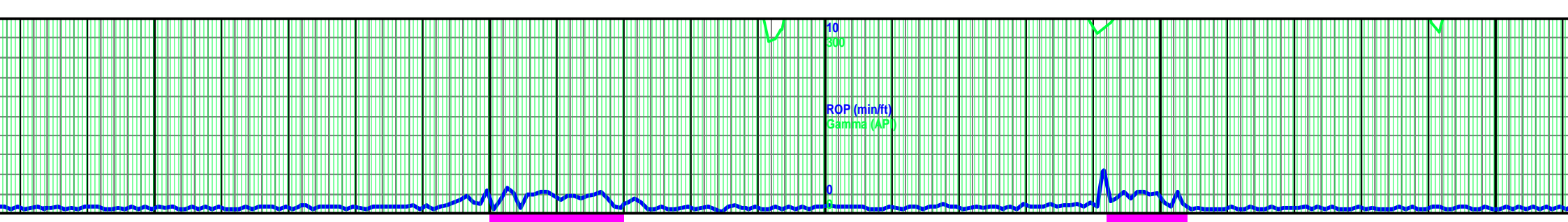
<p>9380-9410 SH: blk, tr med gy, sb blk-ylky, frm, tr sft, rthy tex, modly calc, tr dsem & nodr pyr, pos rthy por</p>	<p>9410-9440 SH: blk, tr med gy, sb blk-ylky, frm, tr sft, rthy tex, modly calc, tr dsem & nodr pyr, pos rthy por</p>	<p>9440-9470 SH: blk, tr med gy, sb blk-ylky, frm, tr sft, rthy tex, modly calc, tr dsem pyr, pos rthy por</p>	<p>9470-9500 SH: blk, tr med gy, sb blk-ylky, frm, tr sft, rthy tex, modly calc, tr dsem pyr, pos rthy por</p>	<p>9500-9530 SH: blk, tr med gy, sb blk-ylky, frm, tr sft, rthy tex, modly calc, tr dsem & nodr pyr, pos rthy por</p>	<p>9530-9560 SH: blk, tr med gy, sb blk-ylky, frm, tr sft, rthy tex, modly calc, tr dsem & nodr pyr, pos rthy por</p>	<p>9560-9590 SH: blk, sb blk-ylky, fri-frm, rthy tex, modly calc, tr dsem & nodr pyr, pos rthy por, rr fr cal</p>	<p>9590-9620 SH: blk, sb blk-ylky, rthy tex, modly calc, tr dsem pyr, pos rthy por, tr fr cal</p>
<p>7580 (-6375)</p>	<p>MD 9447 Inc 91.80 Azm 330.20 TVD 7564.65 VS 1902.92</p>				<p>MD 9541 Inc 91.50 Azm 330.00 TVD 7561.95 VS 1994.77</p>		<p>7580 (-6375)</p>
<p>7630 (-6425)</p>							<p>7630 (-6425)</p>



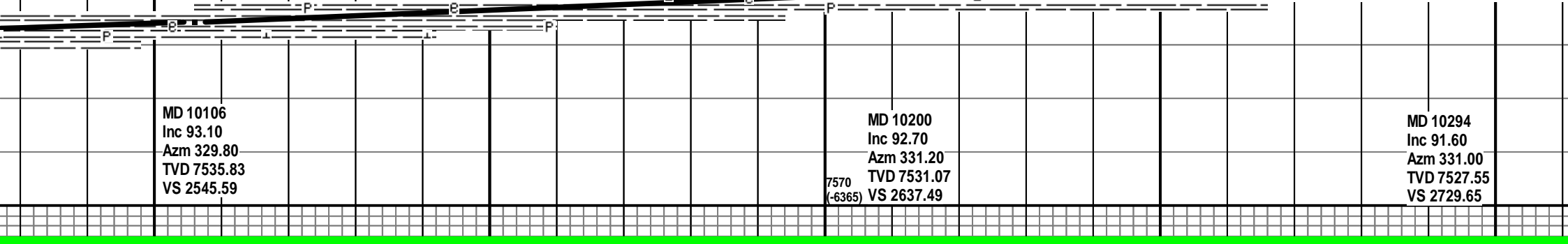


	<p>7470 TVD Sub Sea (-6265)</p> <p>Note: TVD Scale Change</p>	<p>7470 TVD Sub Sea (-6265)</p>	
<p>9860-9890 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem & nodr pyr, pos rthy por</p>	<p>9860-9890 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem & nodr pyr, pos rthy por</p>	<p>9890-9920 SH: blk, sb blk-y-blky, sft-frm, rthy tex, v sl calc, tr dsem pyr, pos rthy por</p>	<p>9920-9950 SH: blk, sb blk-y-blky, sft-frm, rthy tex, v sl calc, tr dsem pyr, pos rthy por</p>
	<p>Scale Change</p> <p>7520 (-6315)</p>	<p>7520 (-6315)</p>	
	<p>MD 9918 Inc 92.00 Azm 329.80 TVD 7542.80 VS 2362.22</p>	<p>7570 (-6365)</p>	<p>MD 10012 Inc 91.70 Azm 329.60 TVD 7539.77 VS 2453.92</p>





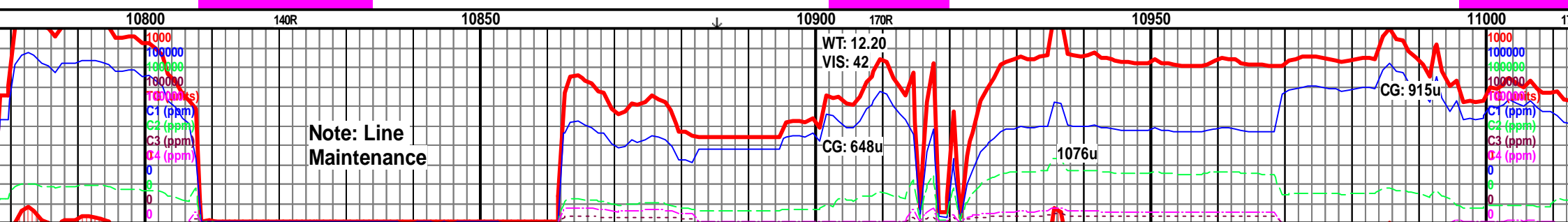
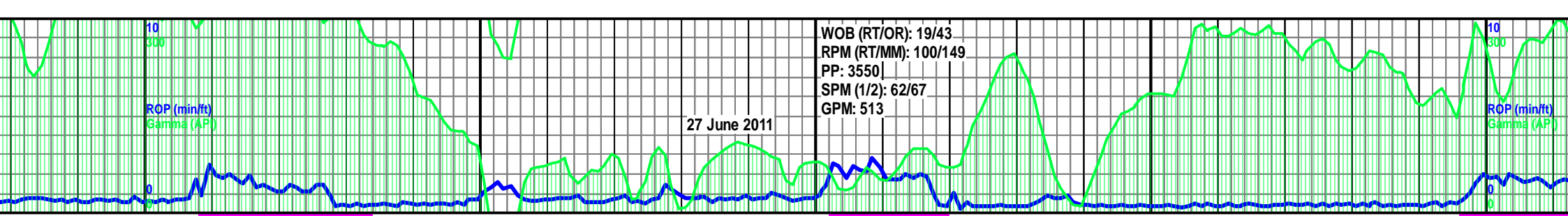
0100 SH: blk, sb blk-y-biky, frm, rthy tex, v sl calc, tr cal fld dsem pyr, pos rthy por	10100-10130 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por	10130-10160 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por	10160-10190 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por	10190-10220 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por	10220-10250 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por	10250-10280 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por	10280-10310 SH: blk, sb blk-y-biky, sft-frm, rthy tex, v sl calc, tr dsem & nodr pyr, pos rthy por
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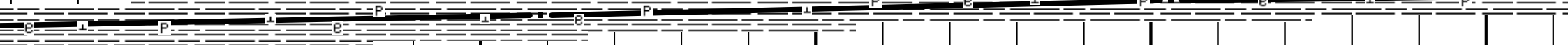
MD 10106
Inc 93.10
Azm 329.80
TVD 7535.83
VS 2545.59

MD 10200
Inc 92.70
Azm 331.20
TVD 7531.07
VS 2637.49

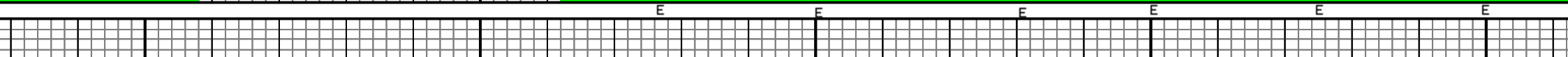
MD 10294
Inc 91.60
Azm 331.00
TVD 7527.55
VS 2729.65

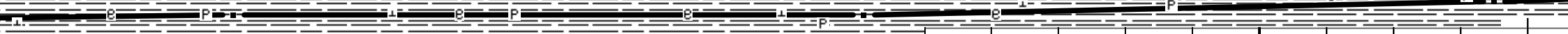
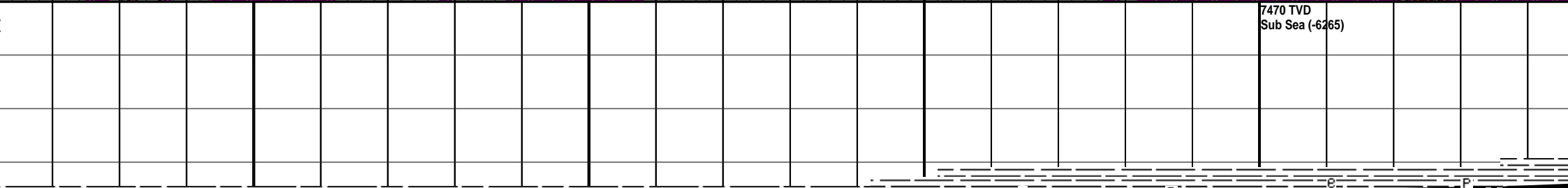
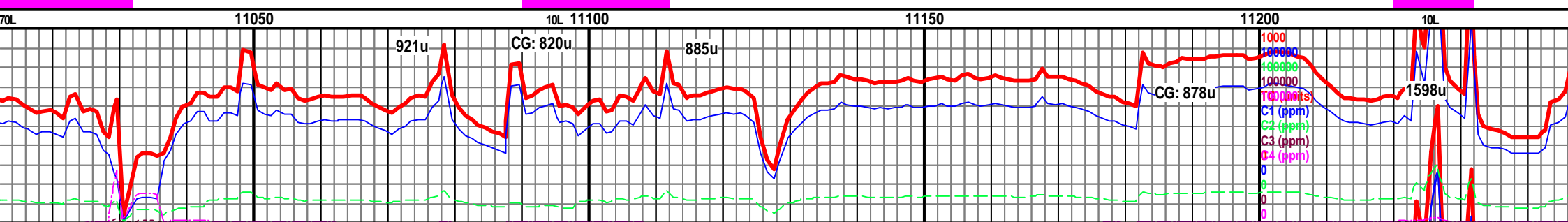
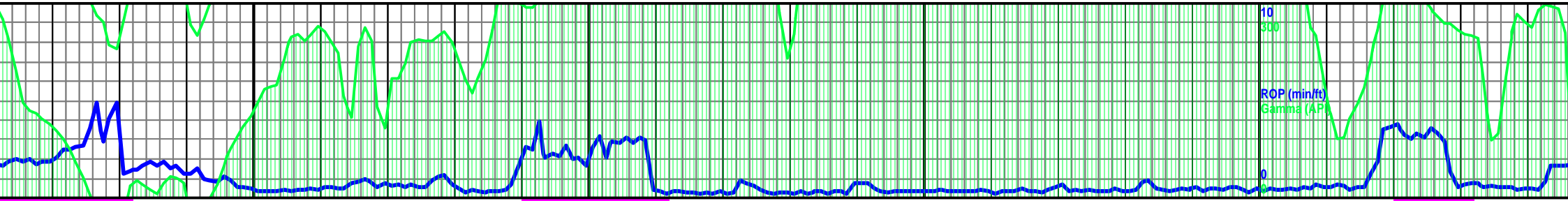


7470 TVD Sub Sea (-6265)										7470 TVD Sub Sea (-6265)
blk-y-blky, tr dsem pyr,	10790-10820 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	10820-10850 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	10850-10880 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem pyr, pos rthy por							

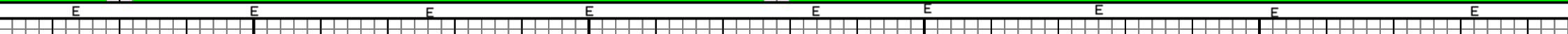


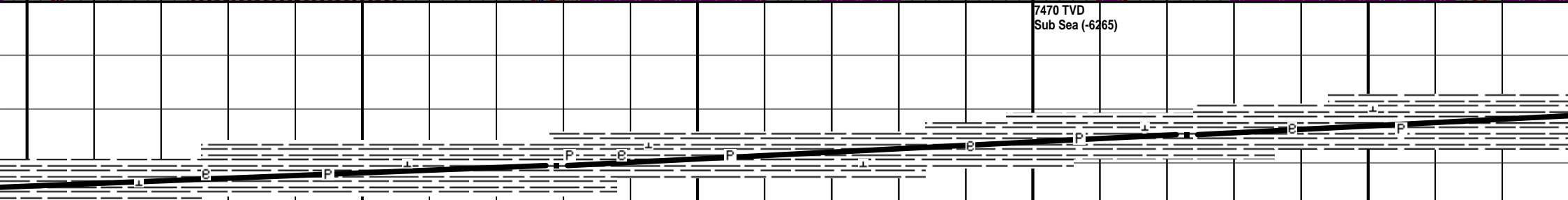
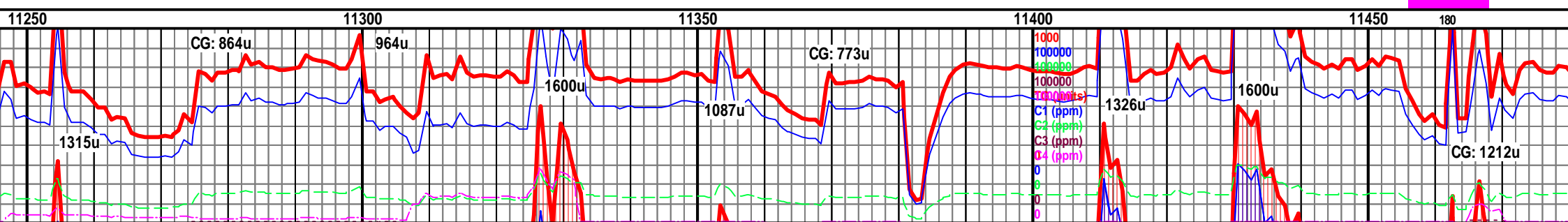
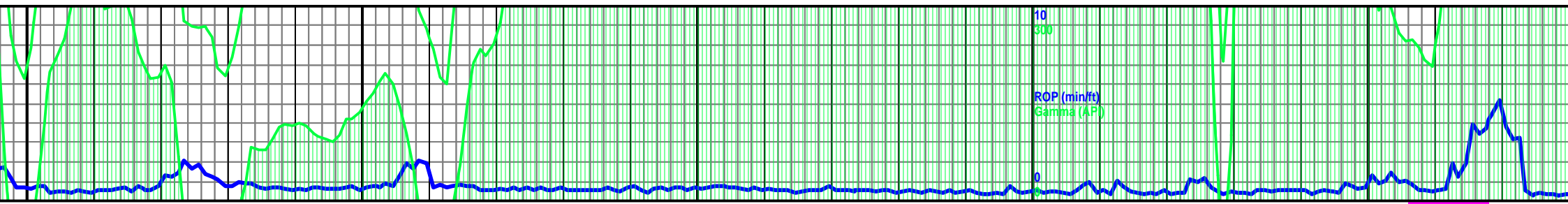
7520 (-6315)										7520 (-6315)
			10880-10910 SH: blk, sb blk-y-blky, fri-frm, rthy tex, modly calc, tr dsem pyr, pos rthy por, tr fr cal	10910-10940 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem & nodr pyr, pos rthy por, tr fr cal	10940-10970 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem & nodr pyr, pos rthy por	10970-11000 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem pyr, pos rthy por				11000-11030 SH: fri-frm, rthy tex, pos rthy por
7570 (-6365)			MD 10859 Inc 91.20 Azm 332.60 TVD 7511.77 VS 3283.47			MD 10953 Inc 92.30 Azm 335.50 TVD 7508.90 VS 3376.45				7570 (-6365)





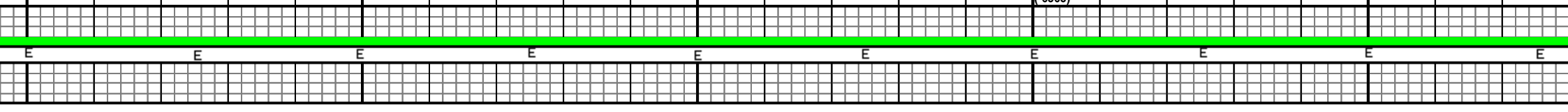
blk, sb blk-y-blky, sl calc, tr dsem pyr,	11030-11060 SH: blk, sb blk-y-blky, fri frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	11060-11090 SH: blk, sb blk-y-blky, fri frm, rthy tex, modly calc, tr dsem pyr, pos rthy por, tr fr cal	11090-11120 SH: blk, sb blk-y-blky, fri frm, rthy tex, sl calc, tr dsem & nodr pyr, pos rthy por	11120-11150 SH: blk, sb blk-y-blky, fri frm, rthy tex, sl calc, tr dsem pyr, pos rthy por	11150-11180 SH: blk, sb blk-y-blky, fri frm, rthy tex, modly calc, tr dsem pyr, pos rthy por, tr fr cal	11180-11210 SH: blk, tr med-dk gy, sb blk-y-blky, sft frm, v sl calc, tr dsem pyr, pos rthy por	11210-11240 SH: blk, tr med-dk gy, sb blk-y-blky, sft frm, v sl calc, tr dsem pyr, pos rthy por	11240-11270 SH: blk, tr med-dk gy, sb blk-y-blky, sft frm, v sl calc, tr dsem pyr, pos rthy por
	MD 111047 Inc 89.40 Azm 334.80 TVD 7507.50 VS 3469.71			MD 11141 Inc 90.70 Azm 333.90 TVD 7507.42 VS 3562.81			MD 11235 Inc 92.20 Azm 333.6 TVD 7505.5 VS 3655.7	

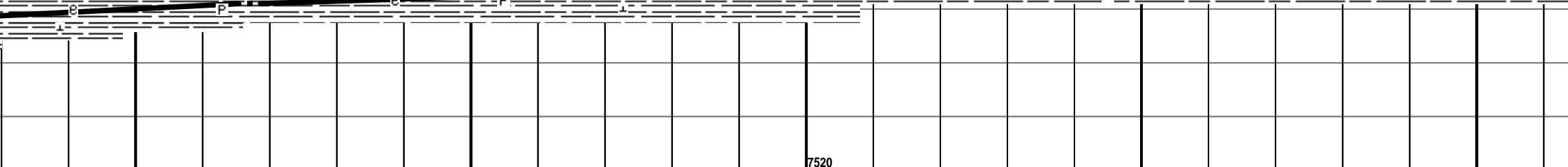
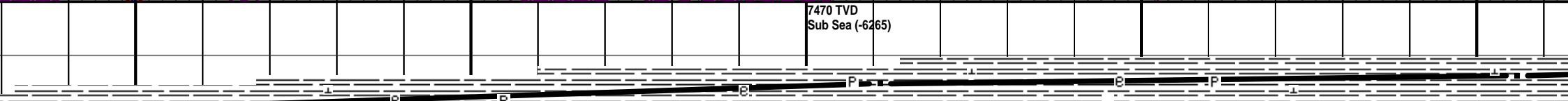
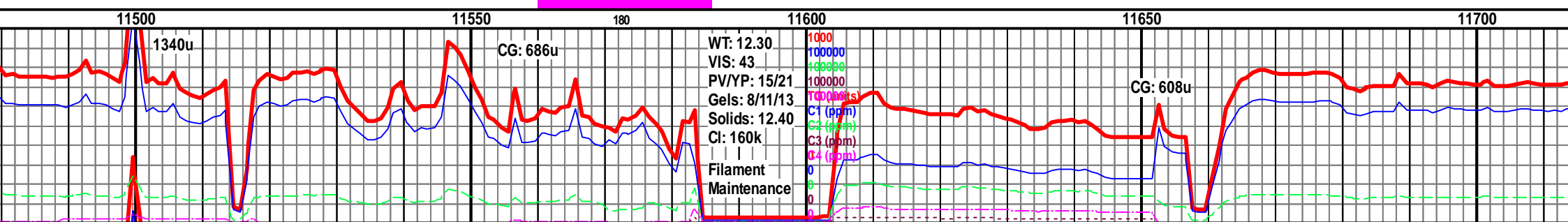
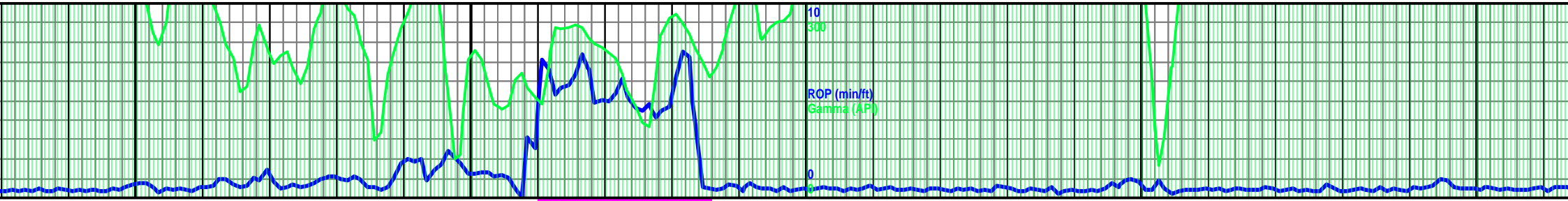




11270 SH: blk, tr med-dk gy, sb blk, sft-frm, sl calc, tr dsem & pyr, pos rthy por	11270-11300 SH: blk, tr med-dk gy, sb blk, sft-frm, sl calc, tr dsem pyr, pos rthy por	11300-11330 SH: blk, tr med-dk gy, sb blk, sft-frm, sl calc, tr dsem pyr, pos rthy por	11330-11360 SH: blk, tr med-dk gy, sb blk, sft-frm, sl calc, tr dsem pyr, pos rthy por	11360-11390 SH: blk, sb blk, sft-frm, rthy tex, sl calc, tr dsem & pyr, pos rthy por	11390-11420 SH: blk, sb blk, sft-frm, rthy tex, sl calc, tr dsem & pyr, pos rthy por	11420-11450 SH: blk, sb blk, sft-frm, rthy tex, sl calc, tr dsem & pyr, pos rthy por	11450-11480 SH: blk, sb blk, sft-frm, rthy tex, sl calc, tr dsem & pyr, pos rthy por
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			MD 11329 Inc 93.40 Azm 333.80 TVD 7500.45 VS 3748.59		7520 (-6315)	MD 11423 Inc 93.60 Azm 333.40 TVD 7494.71 VS 3841.34	
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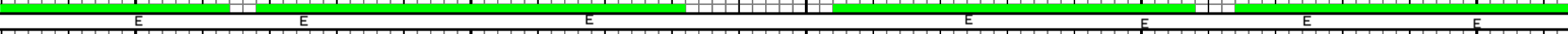


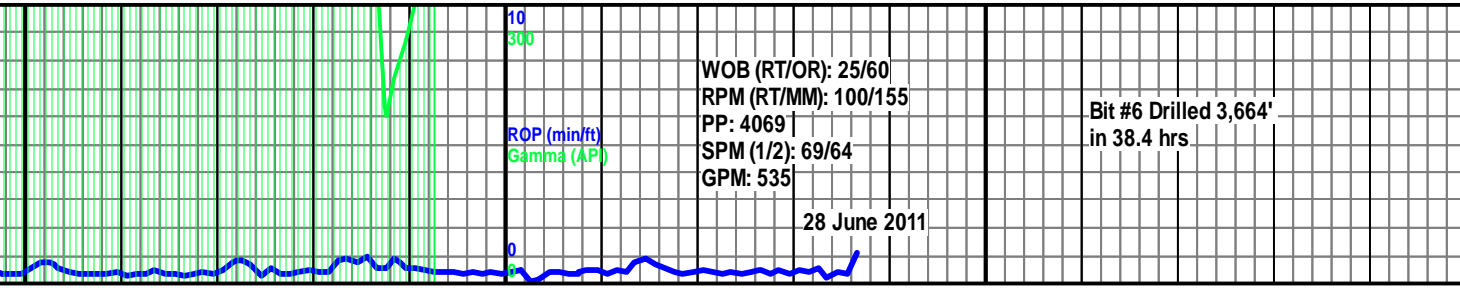
11480-11510 SH: blk, sb blk-y-blky, fri-frm, rthy tex, sl calc, tr dsem & nodr pyr, pos rthy por
 11510-11540 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por
 11540-11570 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por
 11570-11600 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por
 11600-11630 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por
 11630-11660 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por
 11660-11690 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por
 11690-11720 SH: blk, tr med-dk gy, sb blk-y-blky, sft-frm, rthy tex, v calc, tr dsem pyr, pos rthy por

MD 11517
 Inc 93.50
 Azm 334.00
 TVD 7488.89
 VS 3934.12

MD 11611
 Inc 90.80
 Azm 333.60
 TVD 7485.37
 VS 4027.02

MD 11706
 Inc 91.00
 Azm 333.50
 TVD 7483.87
 VS 4120.91

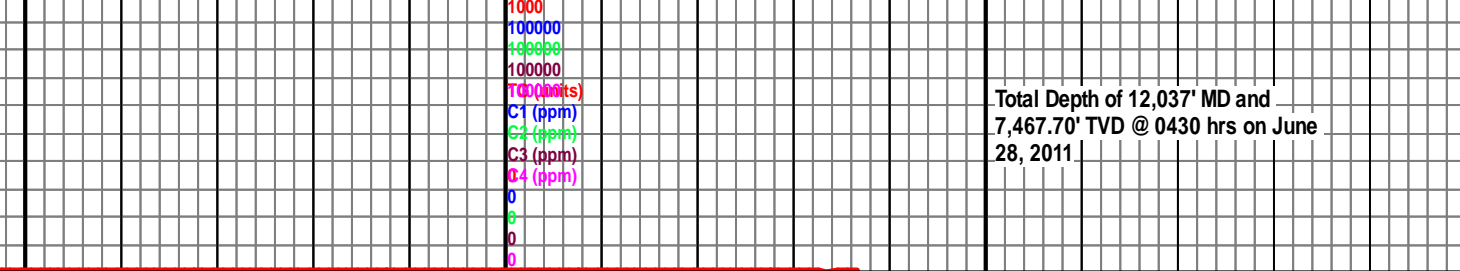




WOB (RT/OR): 25/60
RPM (RT/MM): 100/155
PP: 4069
SPM (1/2): 69/64
GPM: 535

Bit #6 Drilled 3,664'
in 38.4 hrs

11950 12000 12050 12



Total Depth of 12,037' MD and
7,467.70' TVD @ 0430 hrs on June
28, 2011

med-dk gy, sb
tex, sl calc, tr
thy por

11960-11990 SH: blk, tr med-dk gy, sb
blkly-blky, sft-frm, rthy tex, sl calc, tr
dsem & nodr pyr, pos rthy por

11990-12020 SH: blk, tr med-dk gy, sb
blkly-blky, sft-frm, rthy tex, sl calc, tr
dsem & nodr pyr, pos rthy por

12020-12037 SH: blk, tr med-dk gy, sb
blkly-blky, sft-frm, rthy tex, sl calc, tr
dsem & nodr pyr, pos rthy por



Bottom Hole Location:
4,243.39' North & 1,334.12' West of
Surface Location

MD 11989
Inc 93.50
Azm 334.00
TVD 7470.38
VS 4404.66

7520
(-6315)

Projection to Bit:
MD 12037
Inc 93.50
Azm 333.90
TVD 7467.70
VS 4448.11