



## Drilling Company

Cade Drilling, LLC  
Rig 21




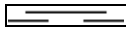




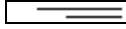

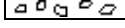


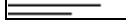
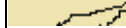


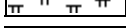

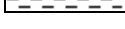


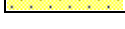
## Gas Detection

Mudlogging Systems, Inc., M Logger, Model TGC, Total Gas and Chromatograph. ML-449





























## Comments

Lithologies and tops at drilled depths, not corrected to elogs. Where the well bore gas is 100% methane, the C1 line is moved to 85% for graphical purposes only.








## ROCK TYPES





 Anhy	 Coal	 Lmst	 Shale	 Till
 Bent	 Congl	 Meta	 Shcol	 Cyan chk
 Brec	 Dol	 Cyan mrlst	 Shgy	 Chalk
 Cht	 Gyp	 Mrlst	 Sltst	
 Clyst	 Igne	 Salt	 Ss	





## ACCESSORIES

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

**OTHER SYMBOLS**

- POROSITY**
-  Earthy
  -  Fenest
  -  Fracture
  -  Inter
  -  Moldic
  -  Organic
  -  Pinpoint

-  Vuggy
- SORTING**
-  Well
  -  Moderate
  -  Poor

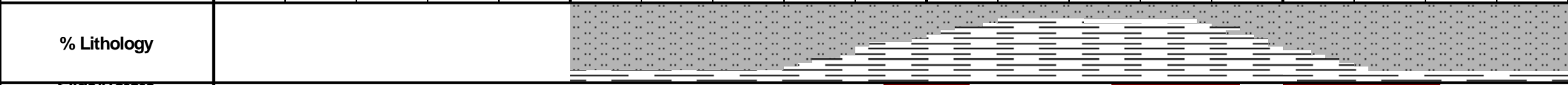
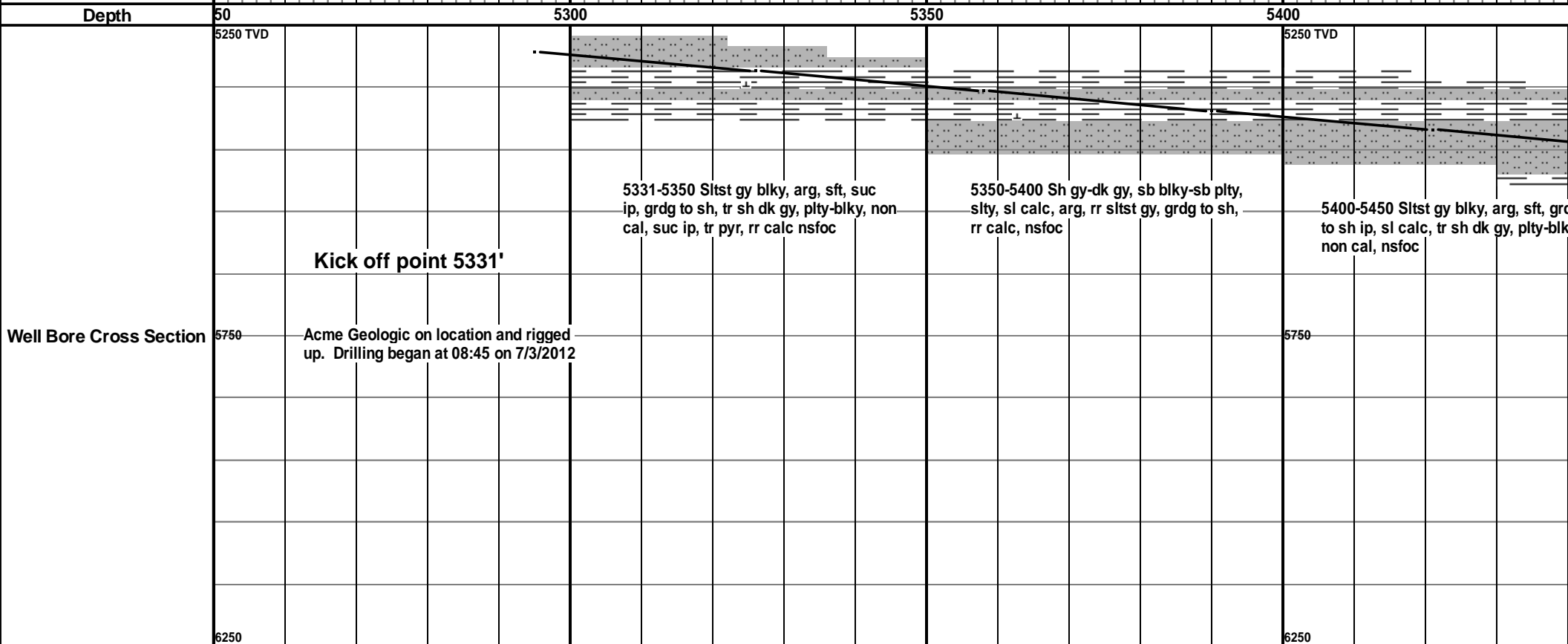
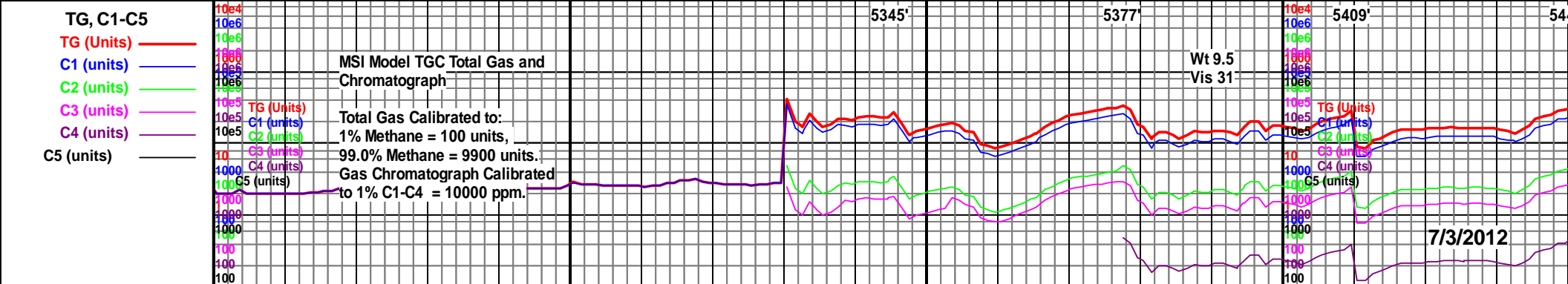
- ROUNDING**
-  Rounded
  -  Subrnd
  -  Subang
  -  Angular

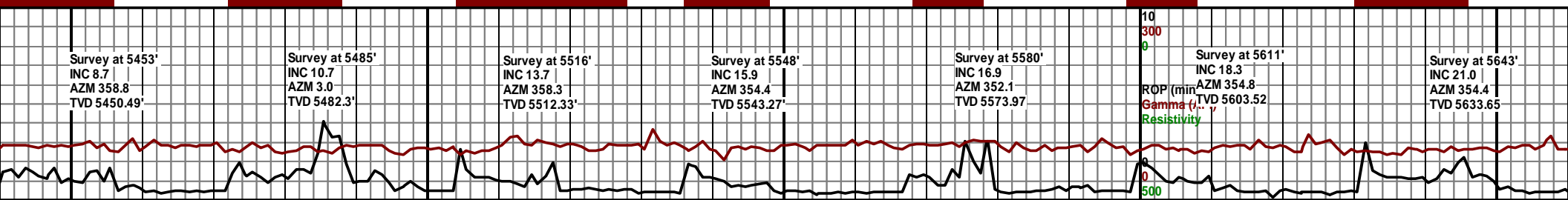
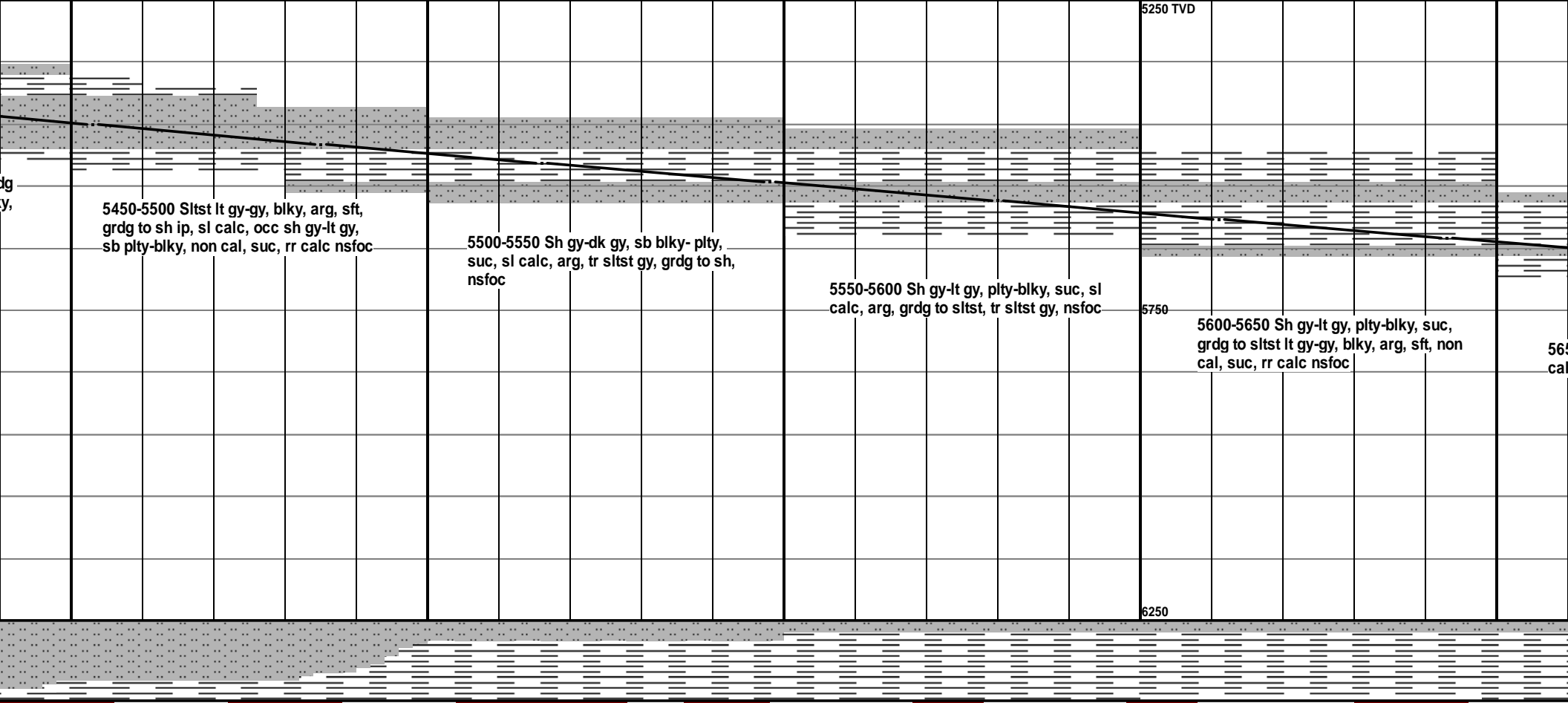
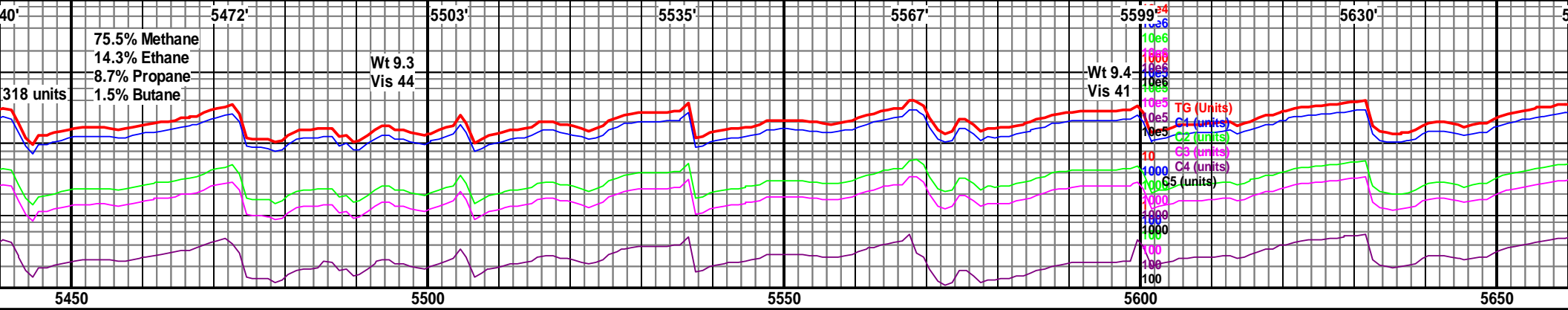
- OIL SHOW**
-  Even

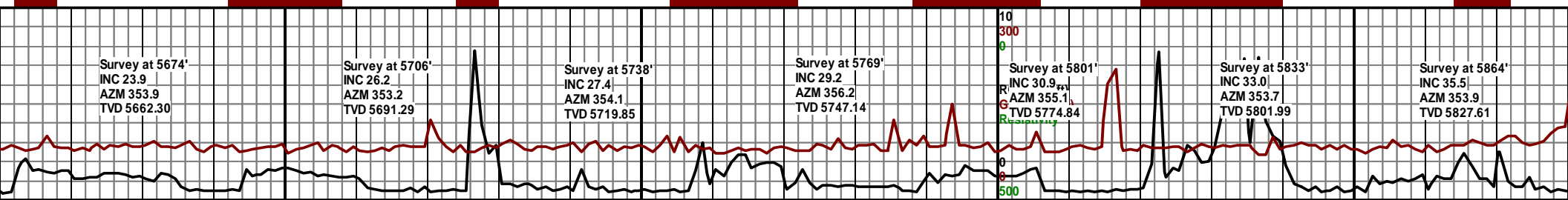
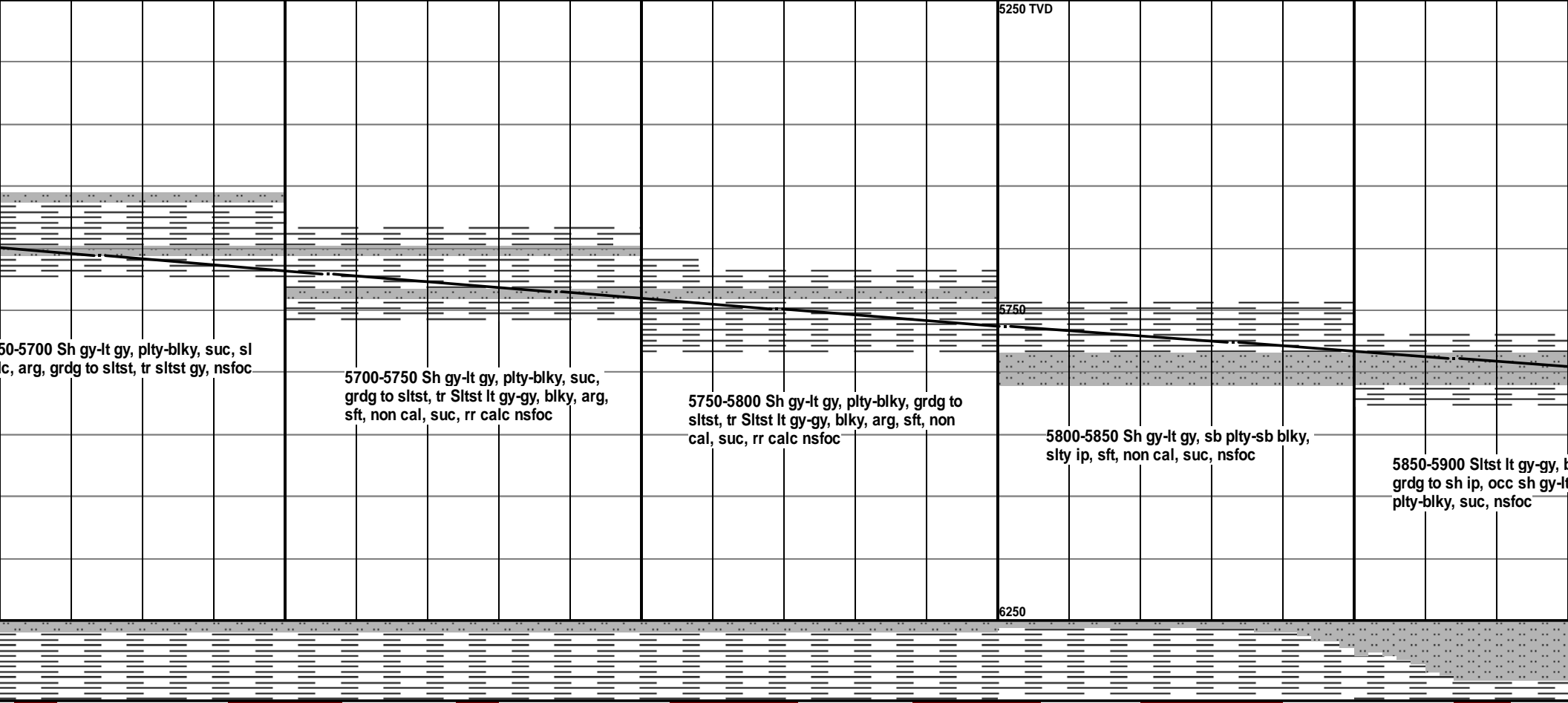
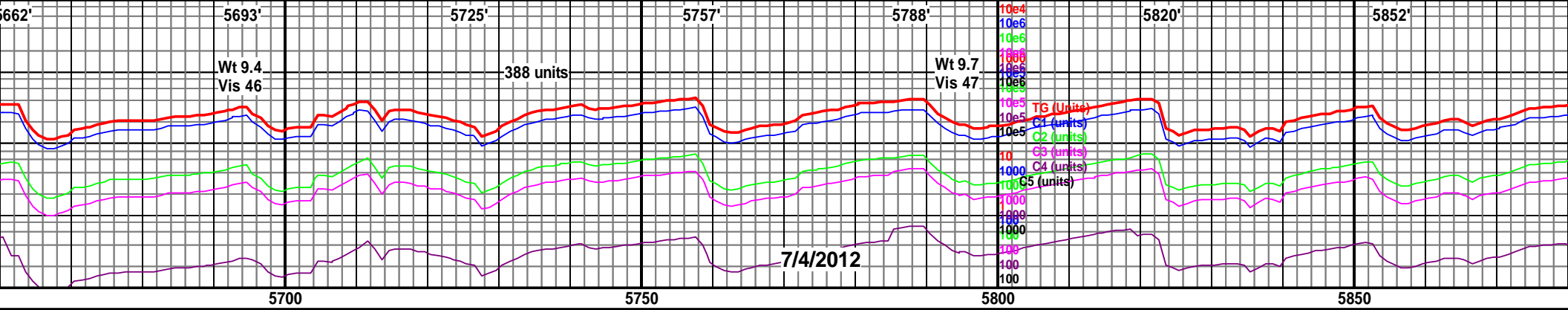
-  Spotted
-  Ques
-  Dead

- INTERVAL**
-  Core
  -  Dst

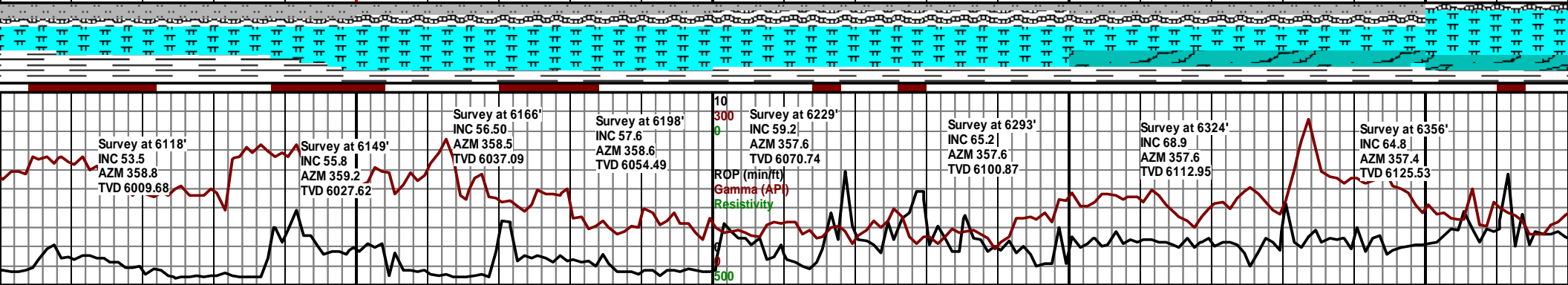
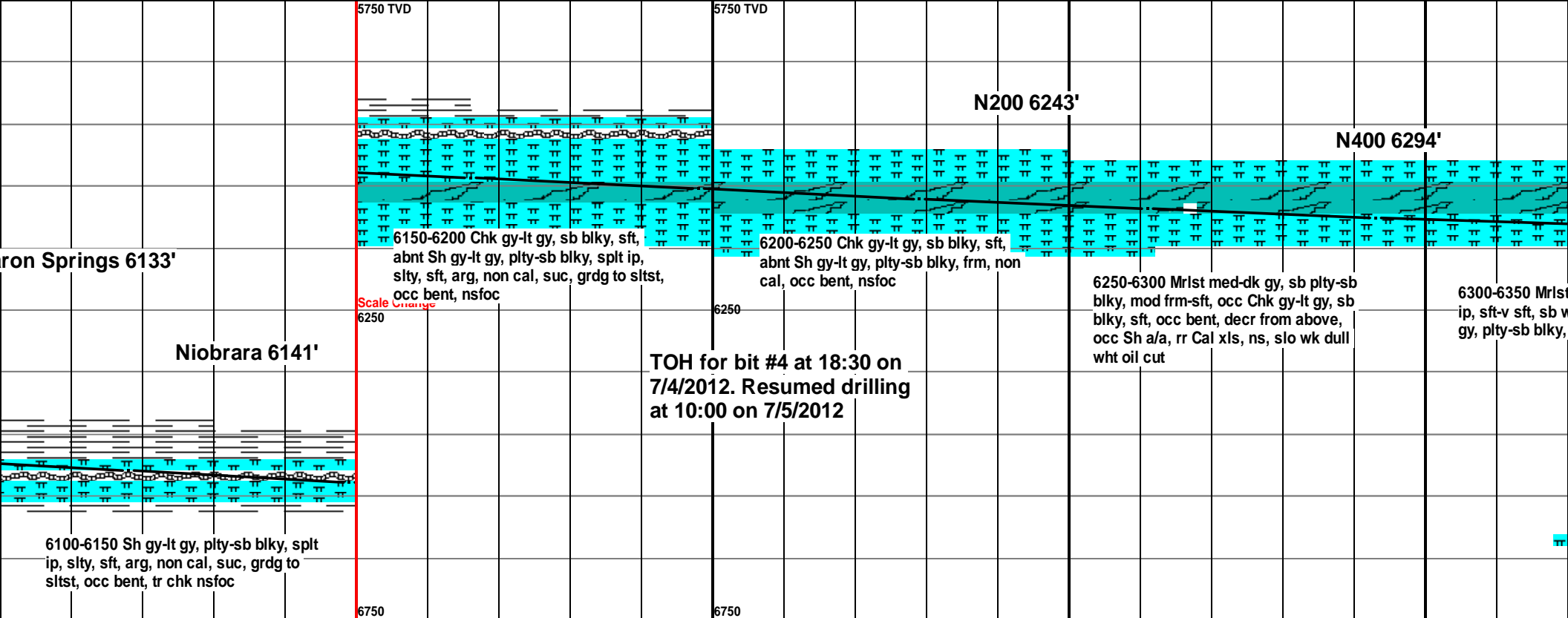
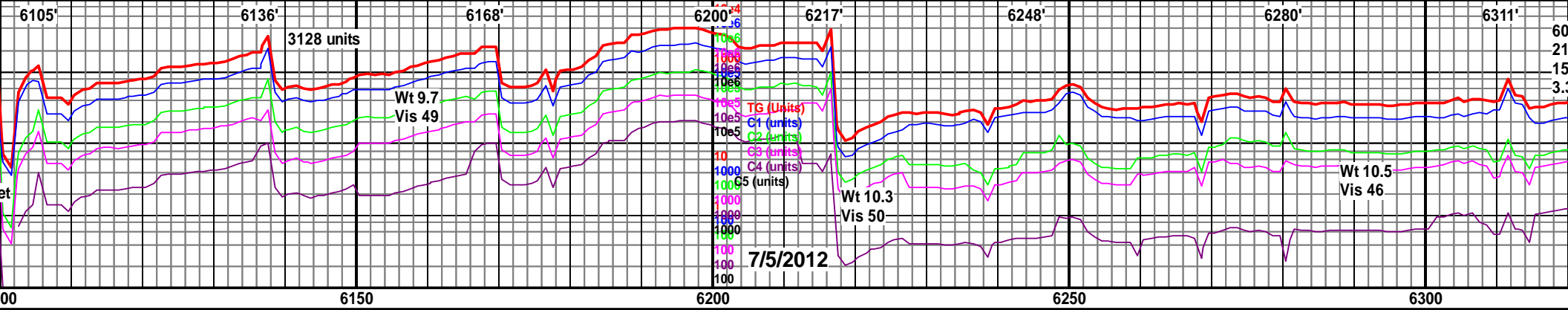
- EVENT**
-  Rft
  -  Sidewall

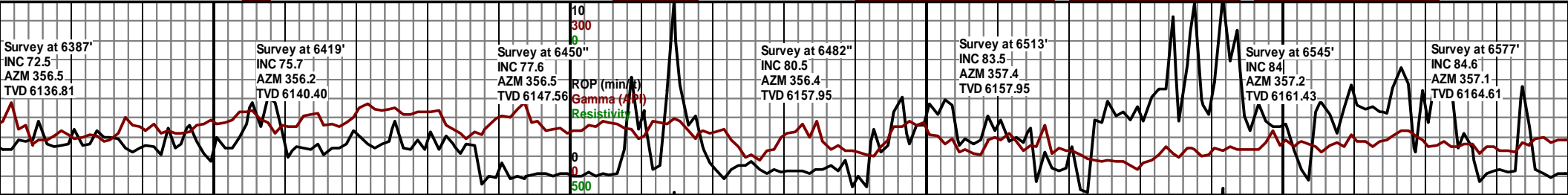
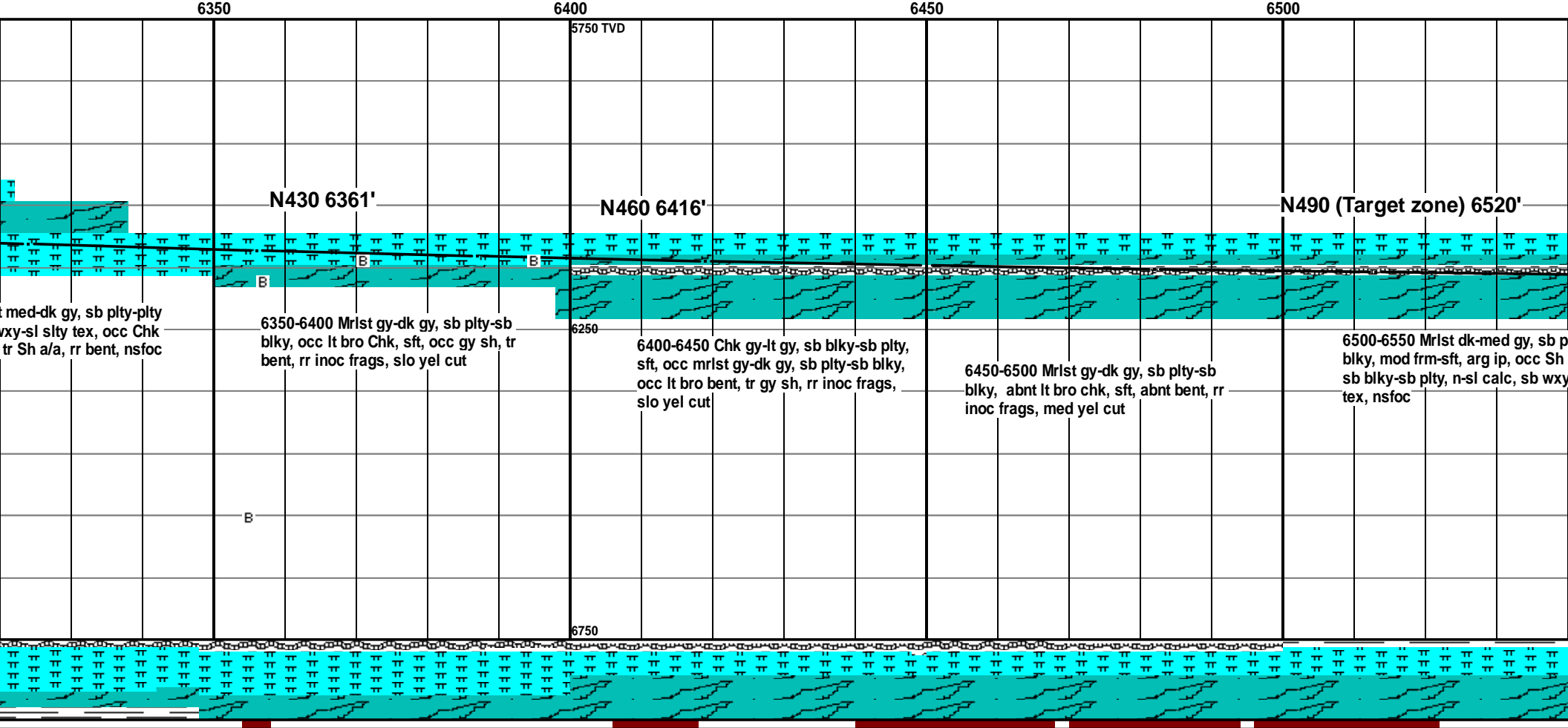
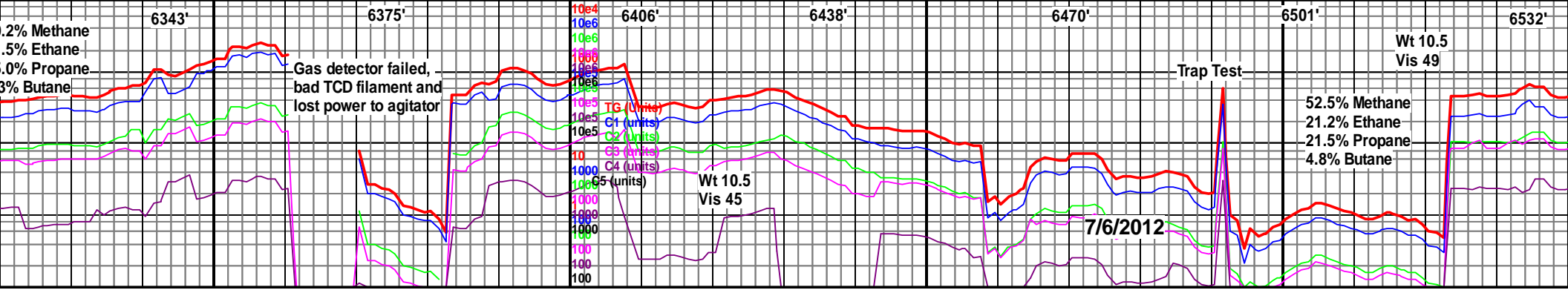


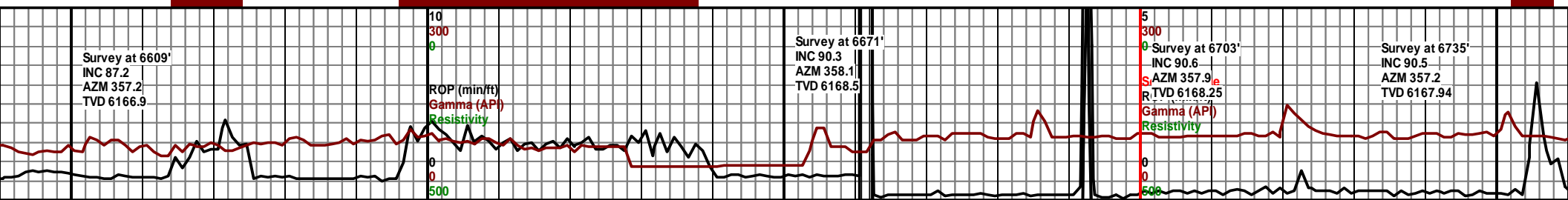
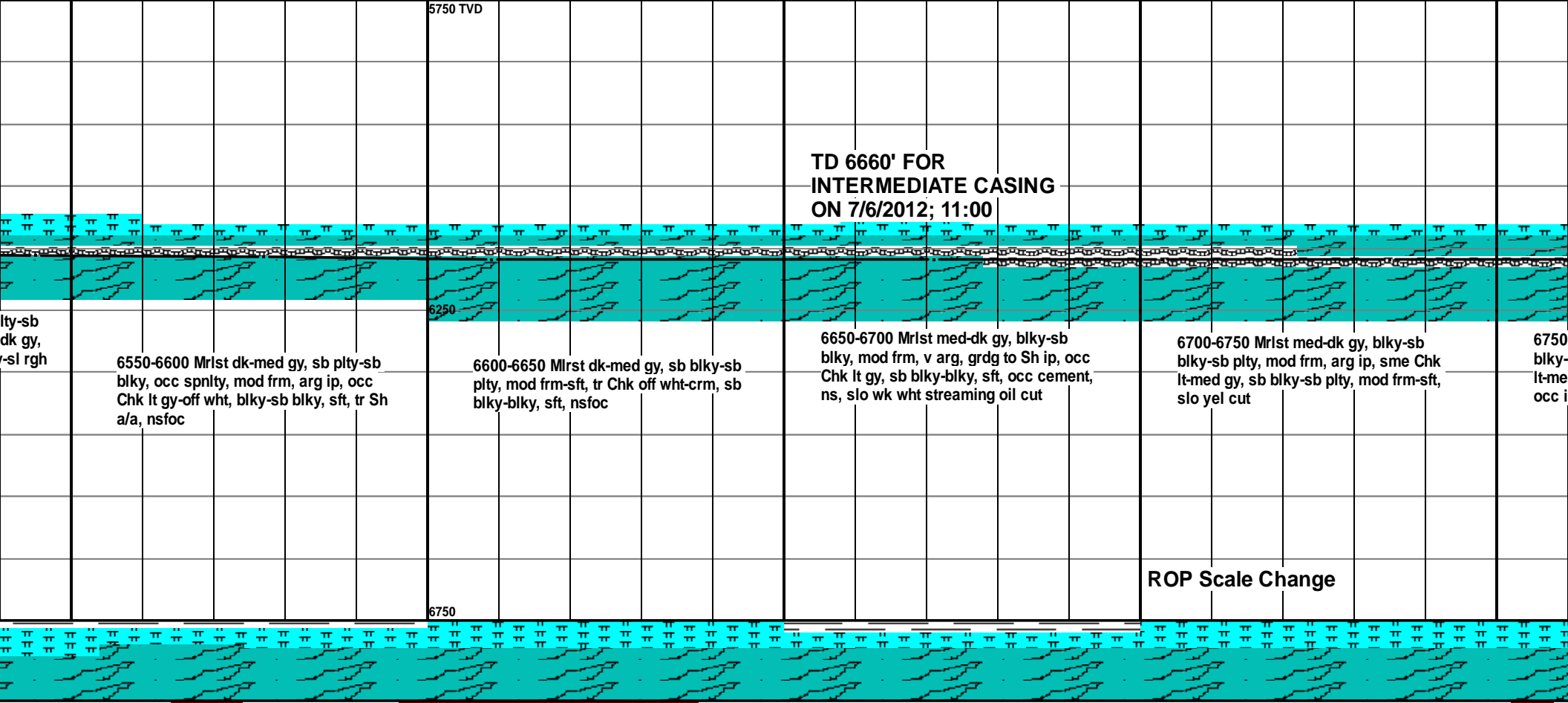
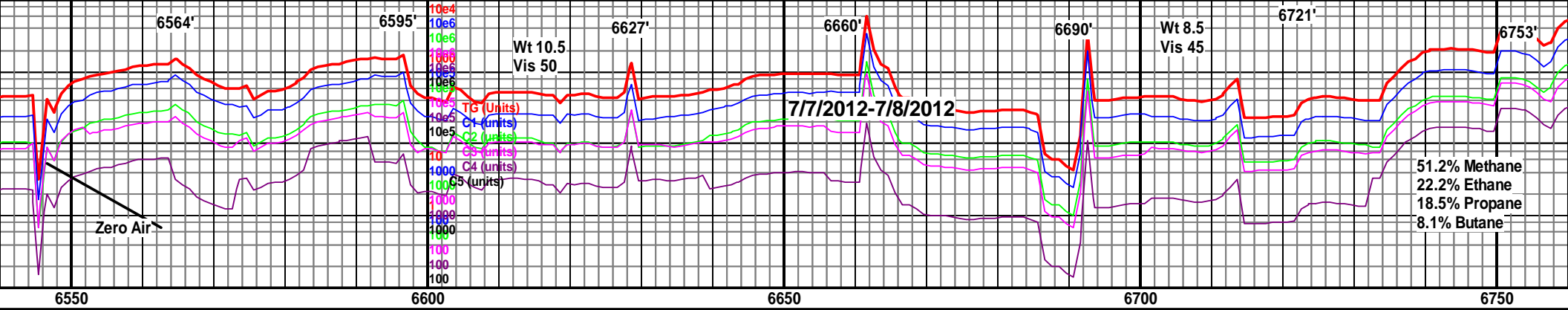


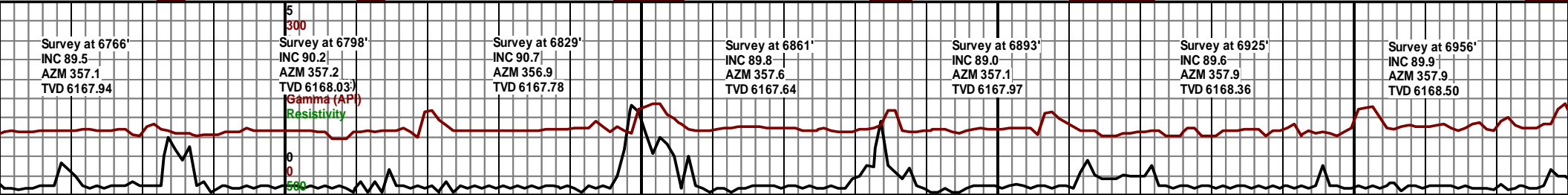
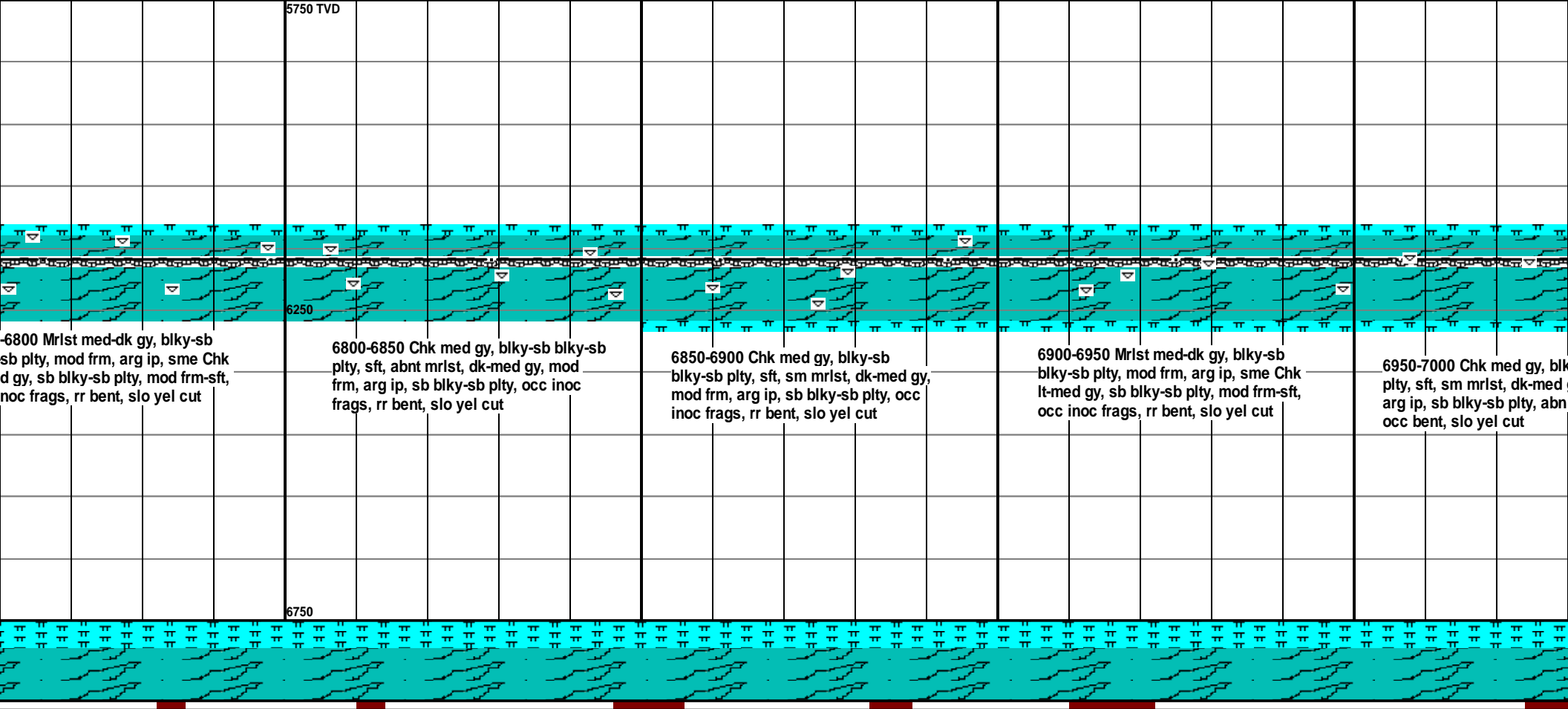
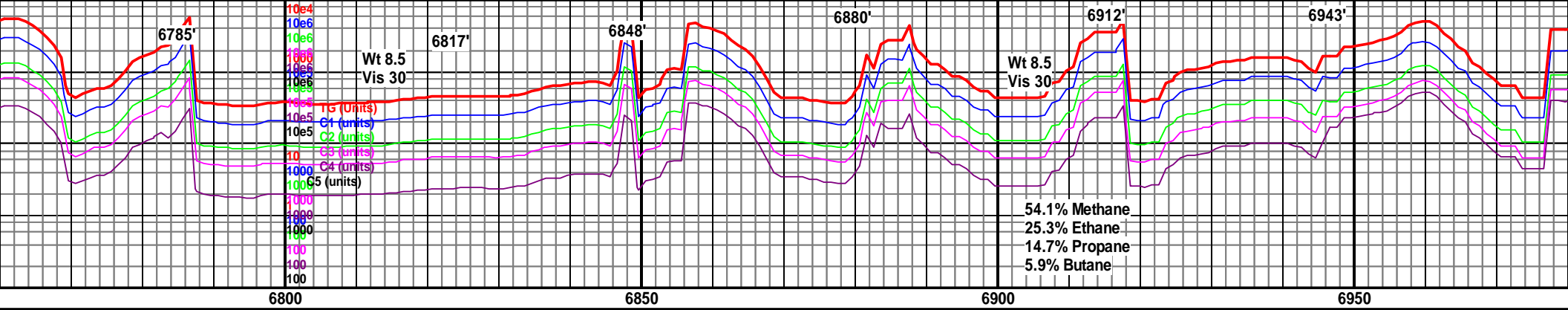


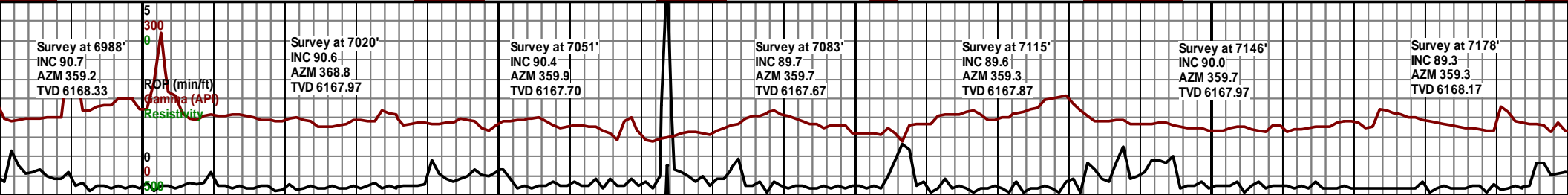
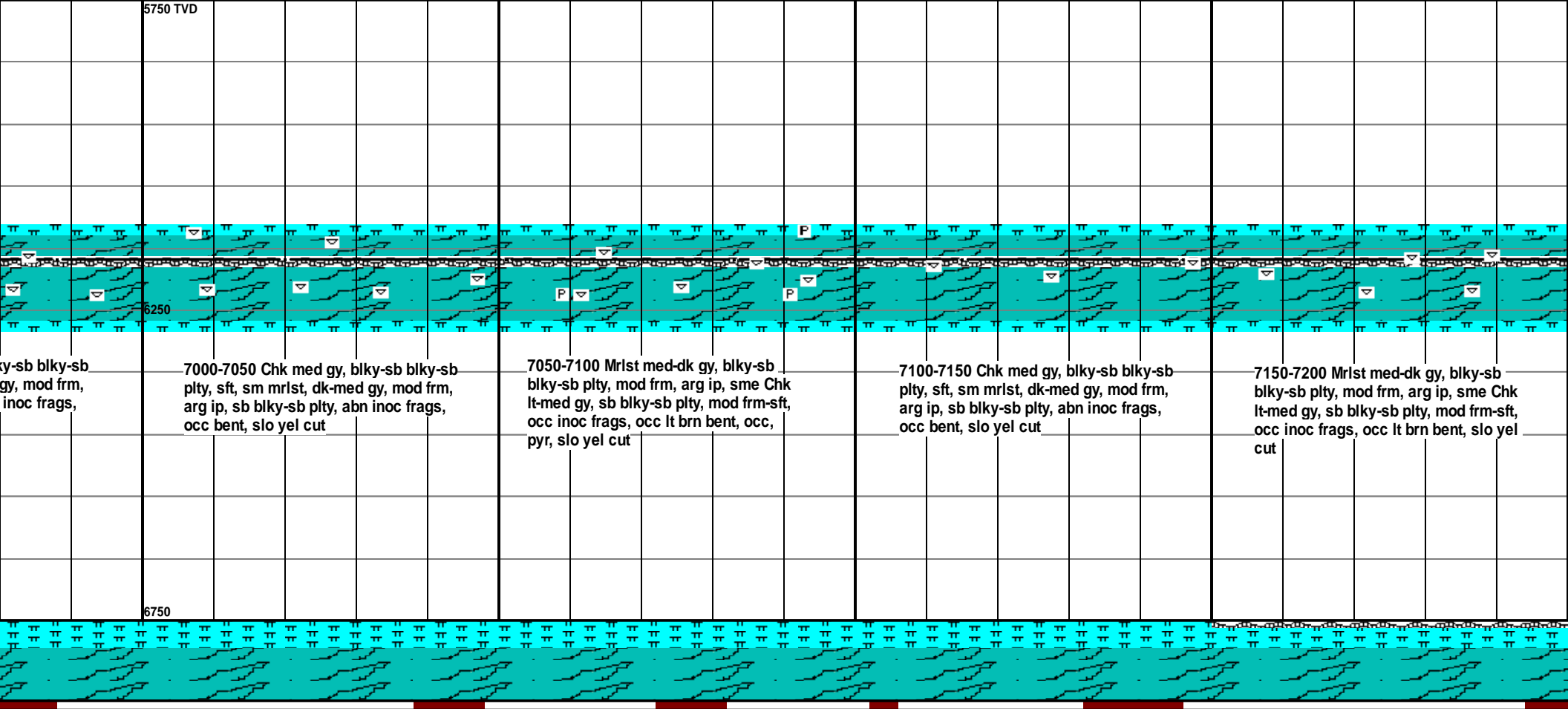
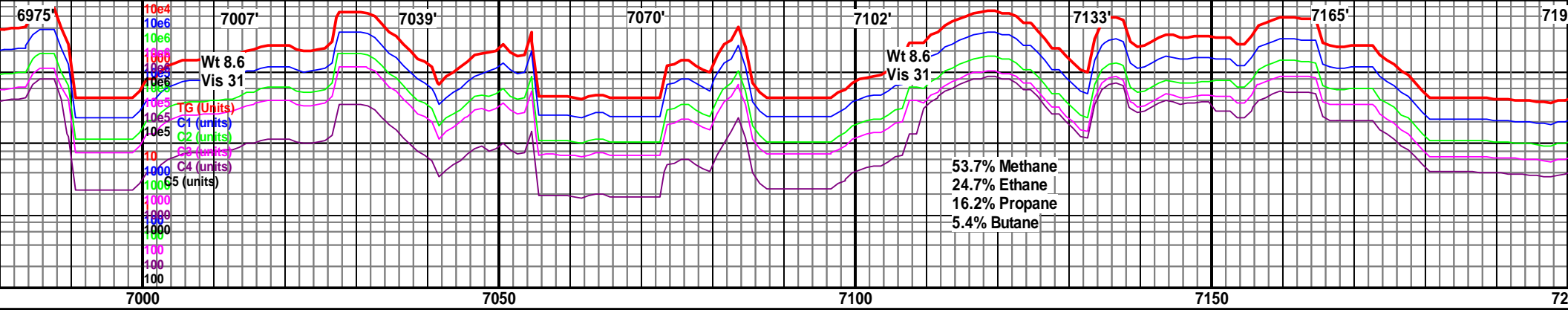


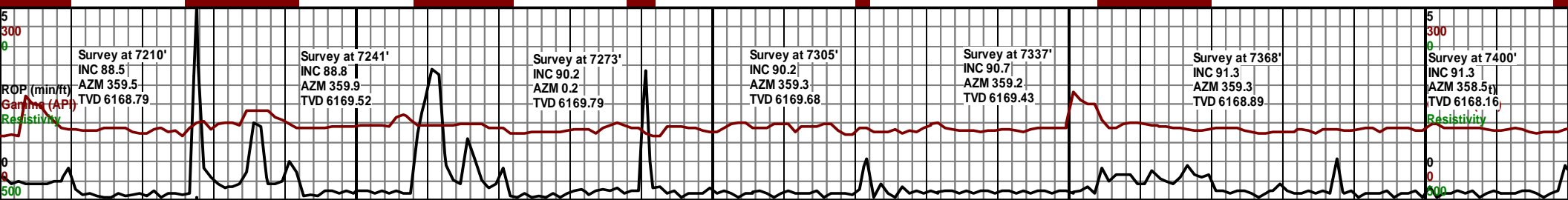
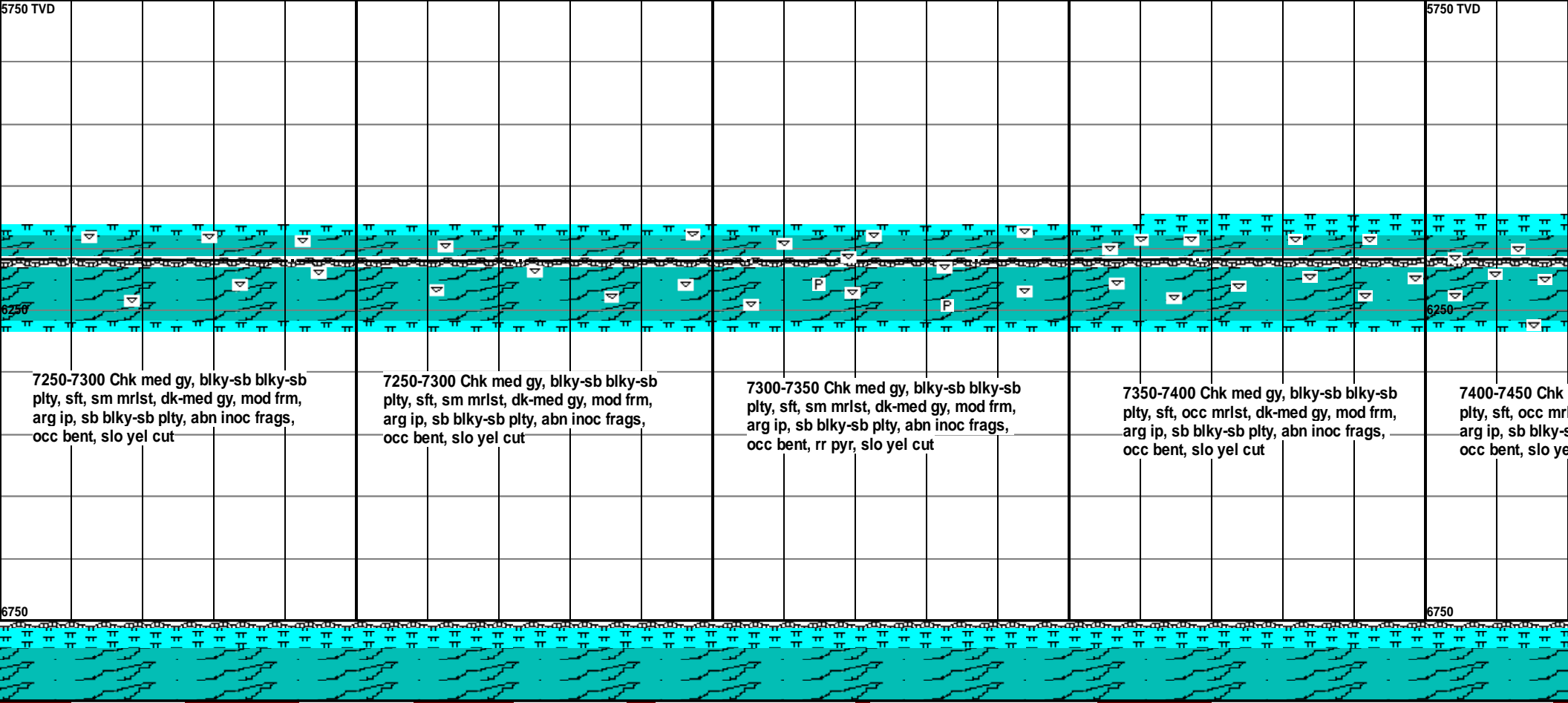
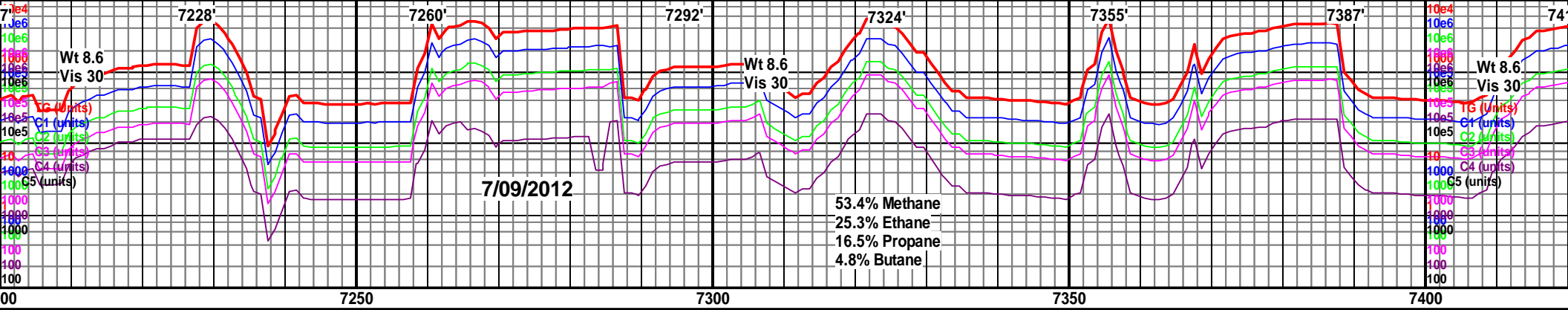


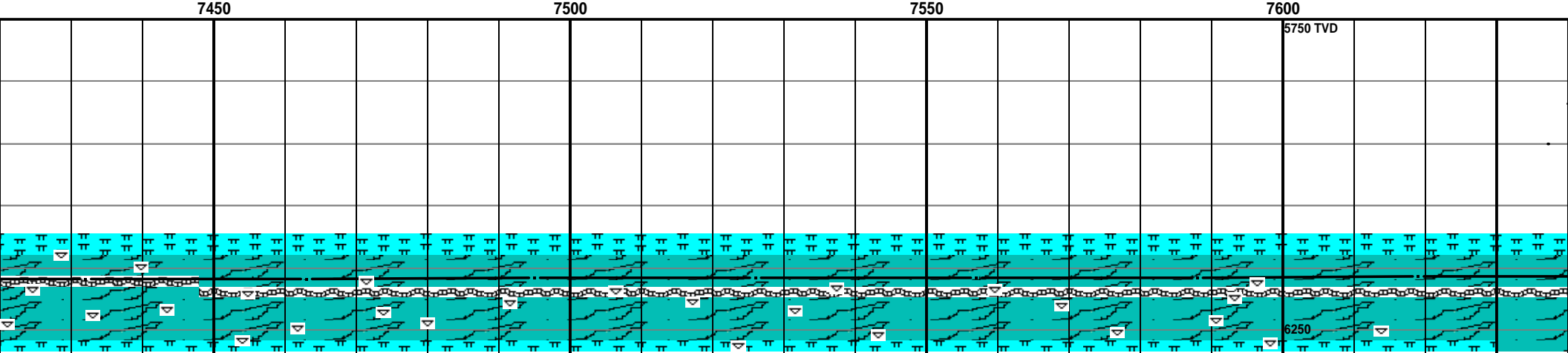
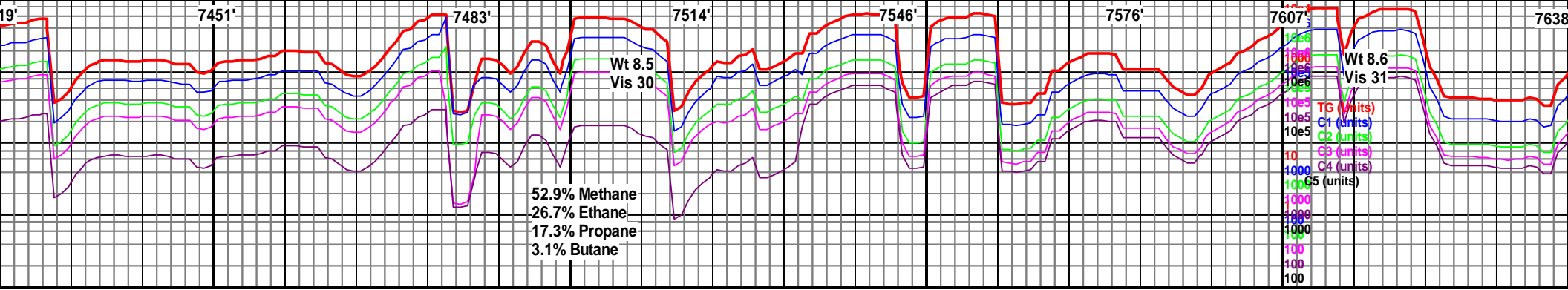












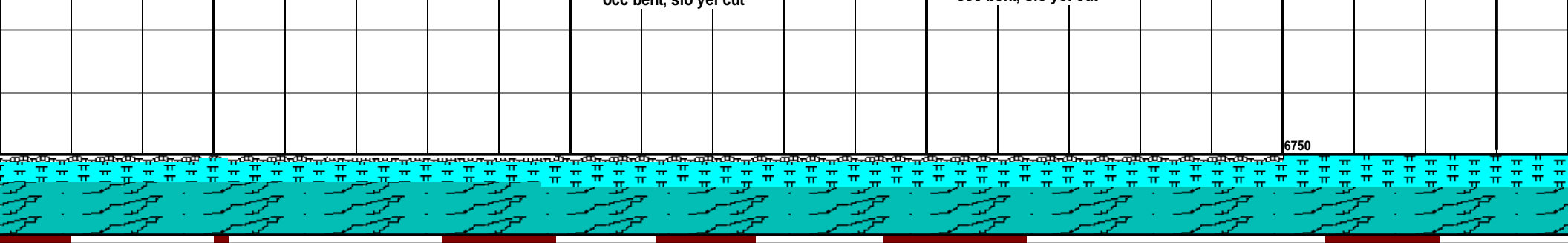
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 l cut

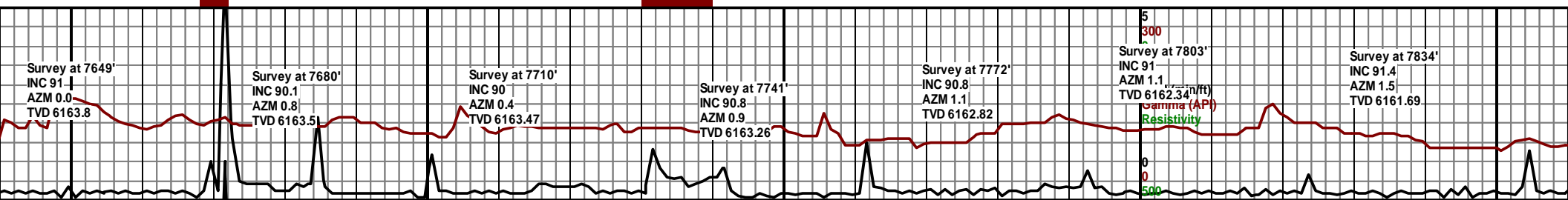
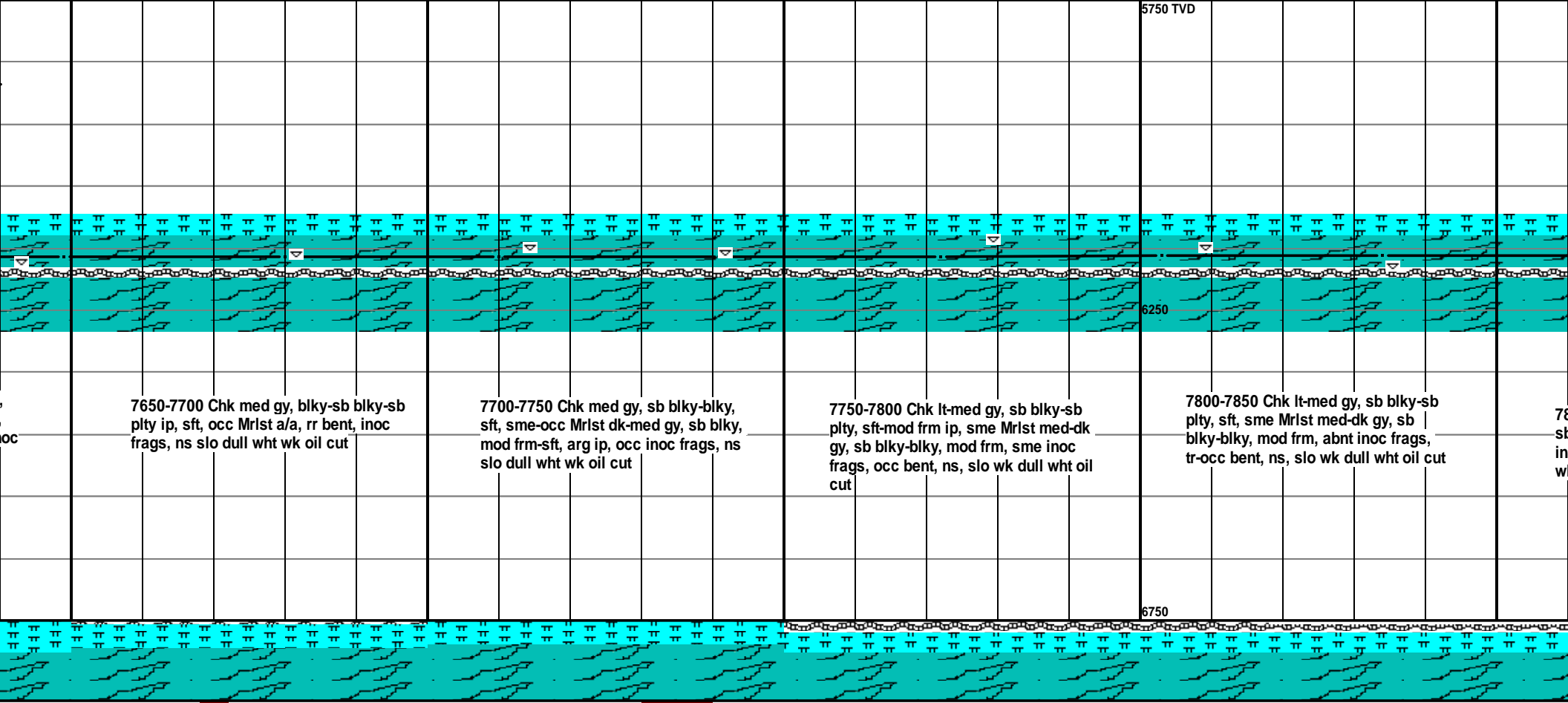
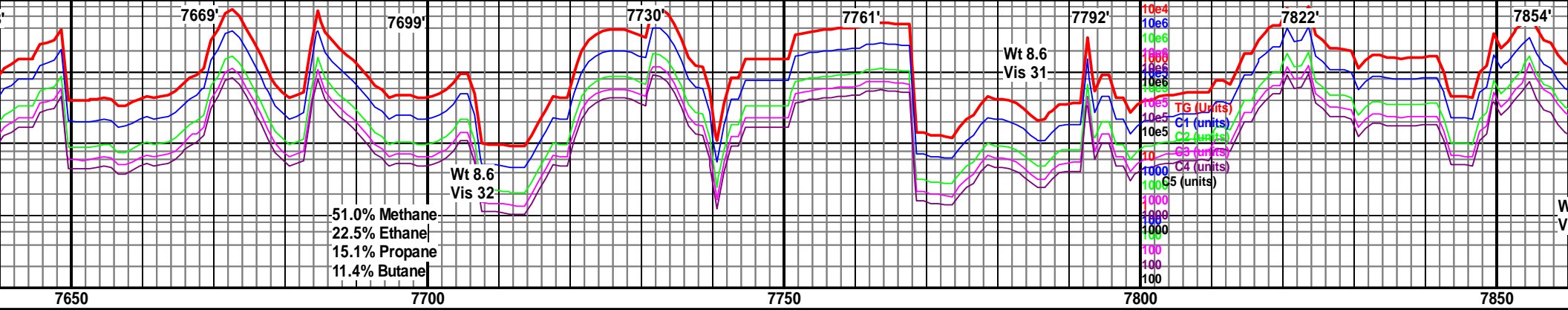
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 occ bent, slo yel cut

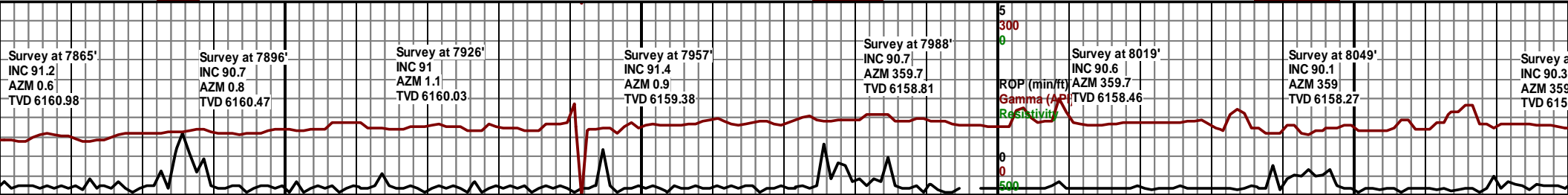
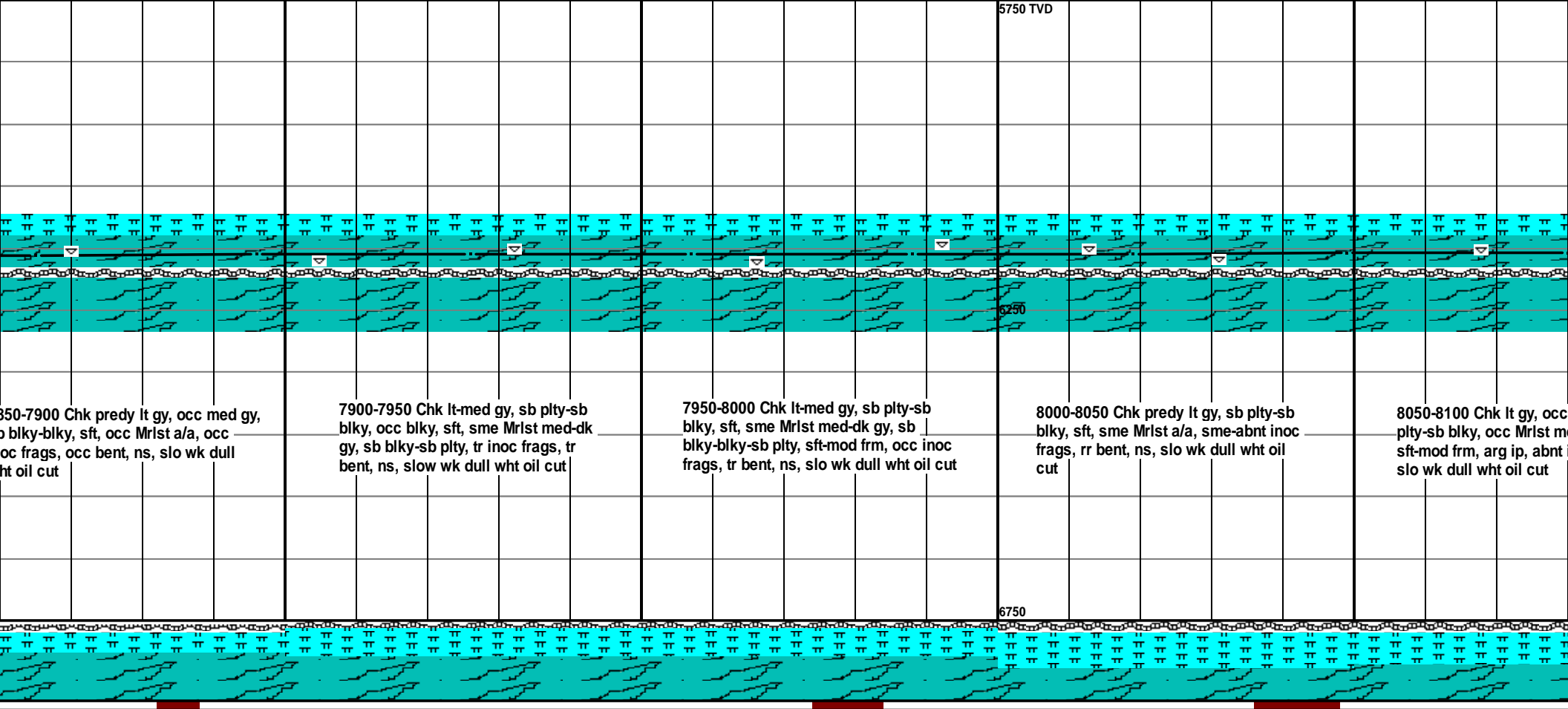
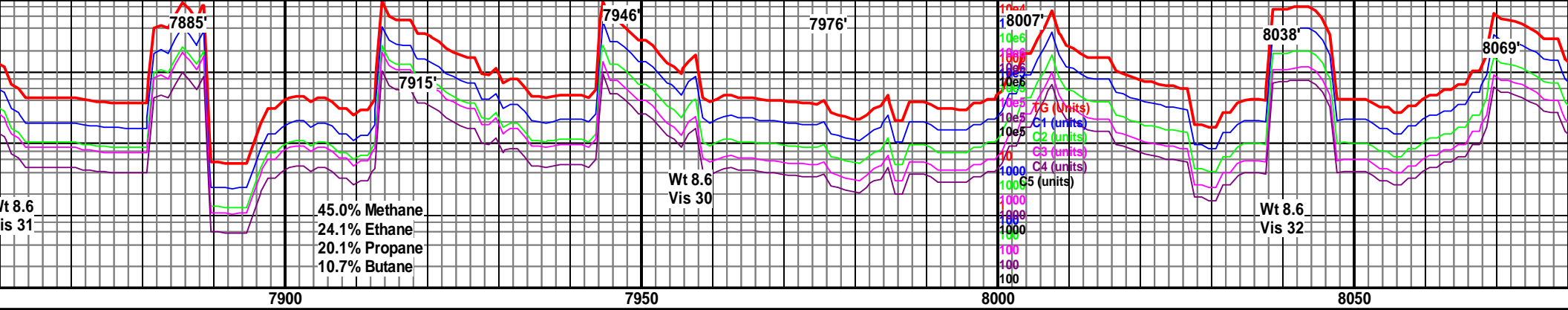
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 arg ip, sb blk-y-sb plty, abn inoc frags,  
 occ bent, slo yel cut

7600-7650 Chk med gy, blk-y-sb blk-y-sb  
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 frags, ns, slo dull wht wk oil cut



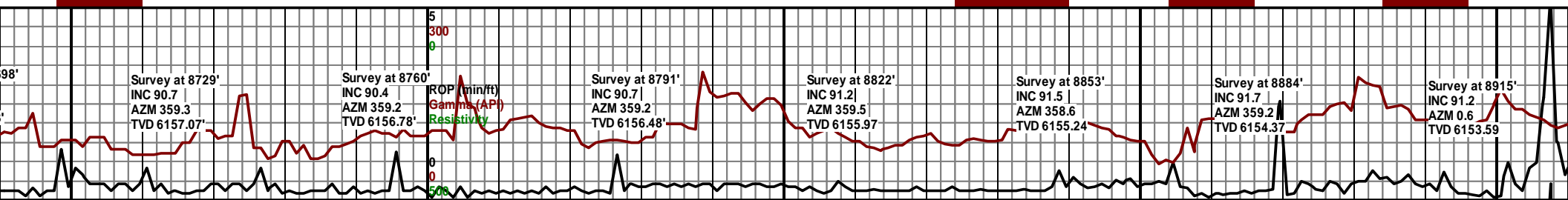
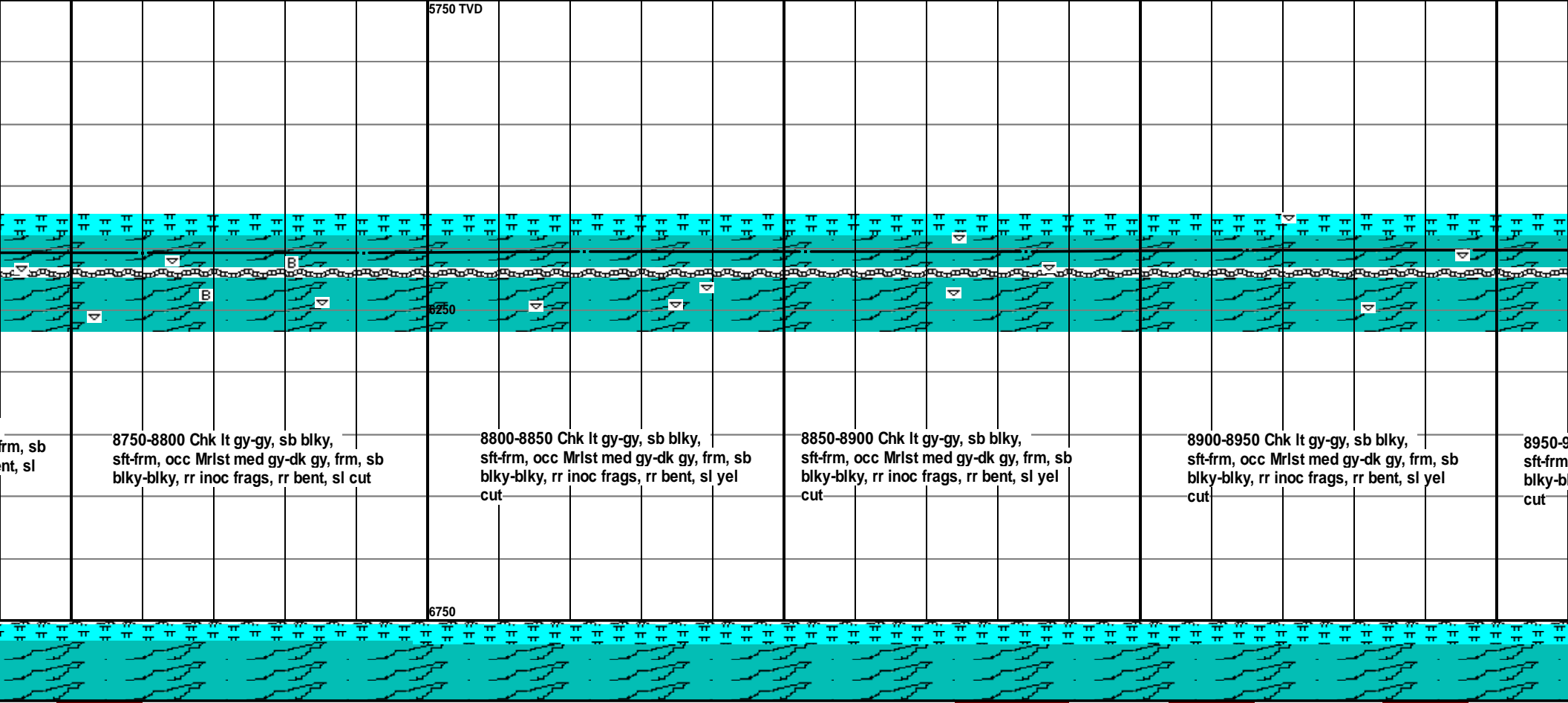
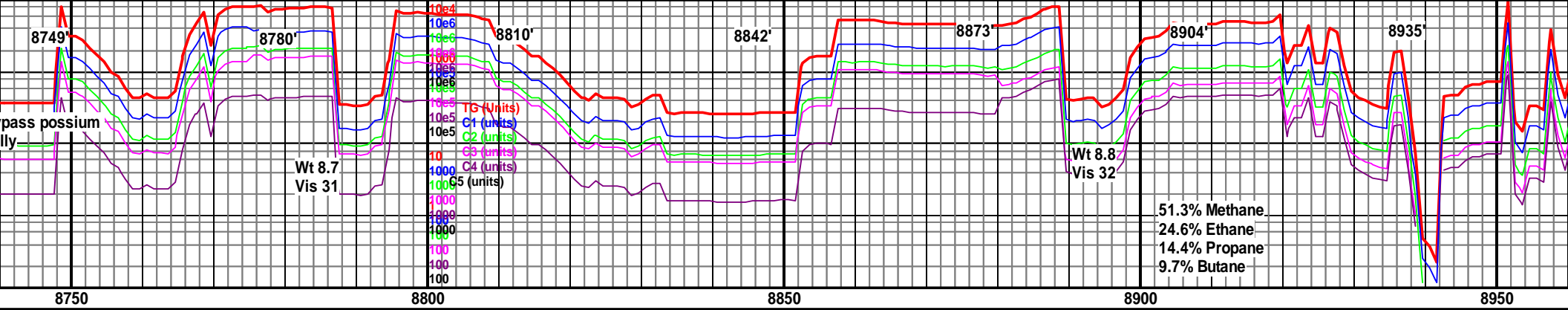


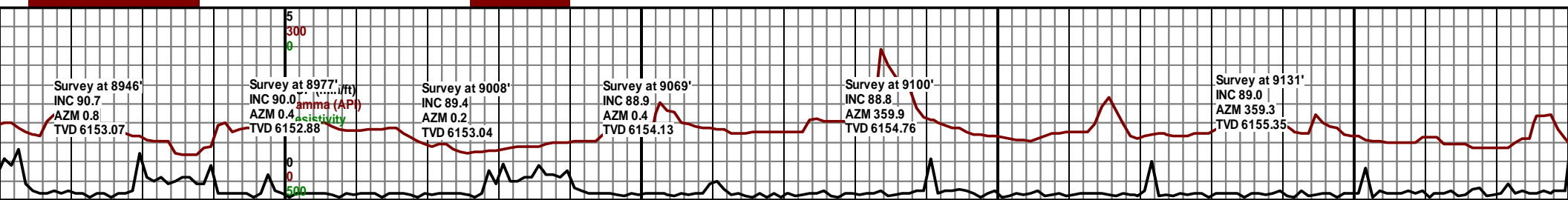
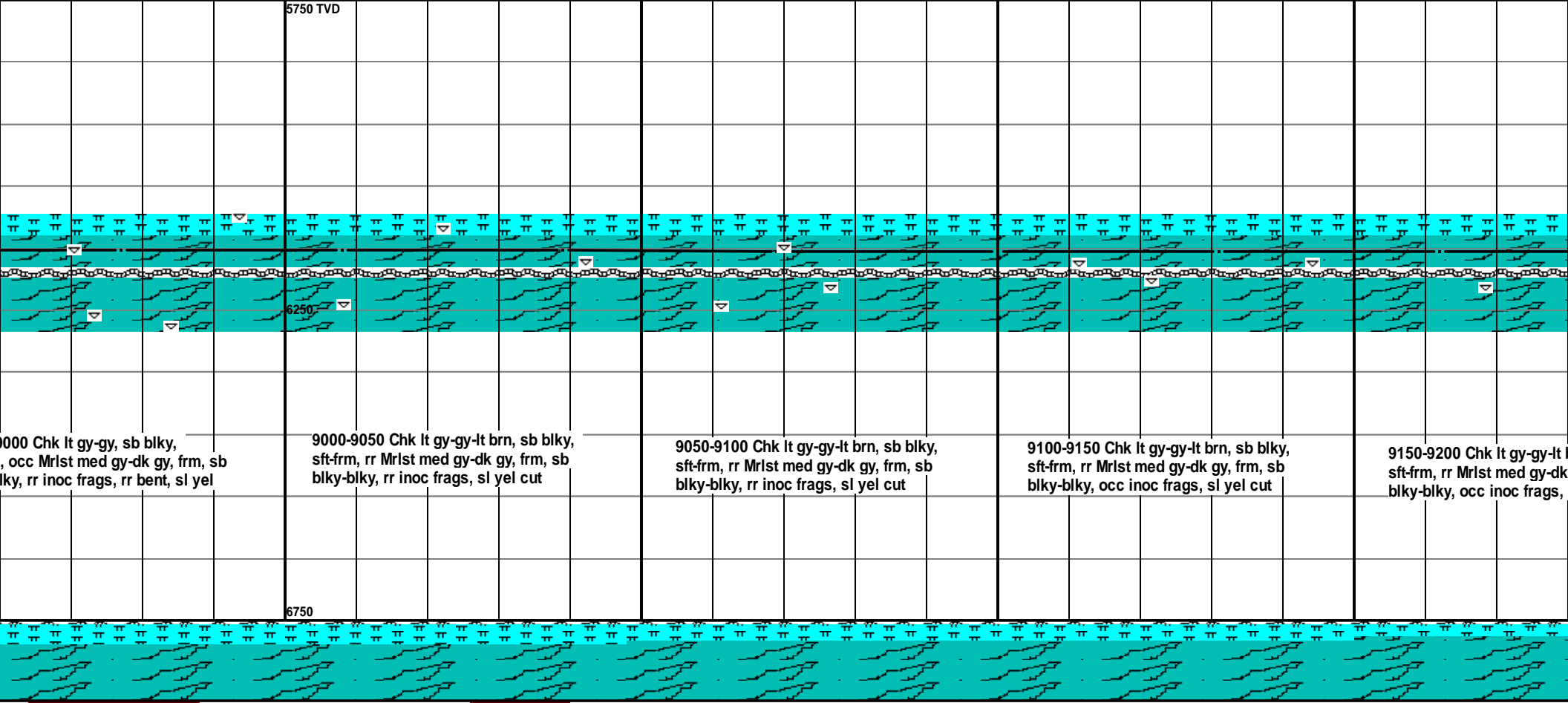
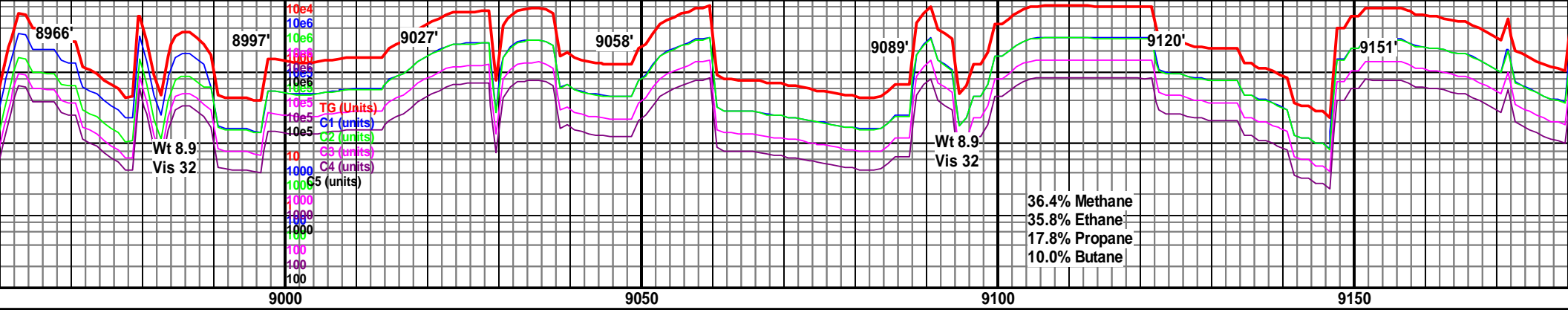


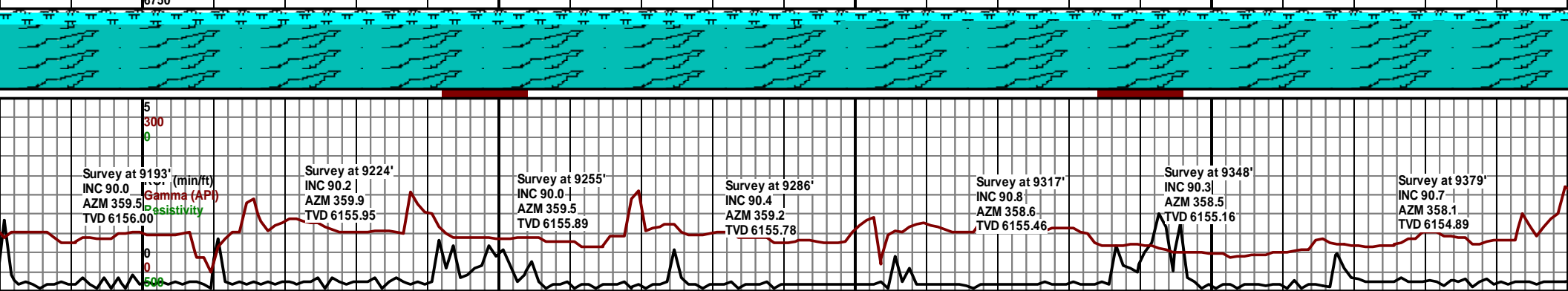
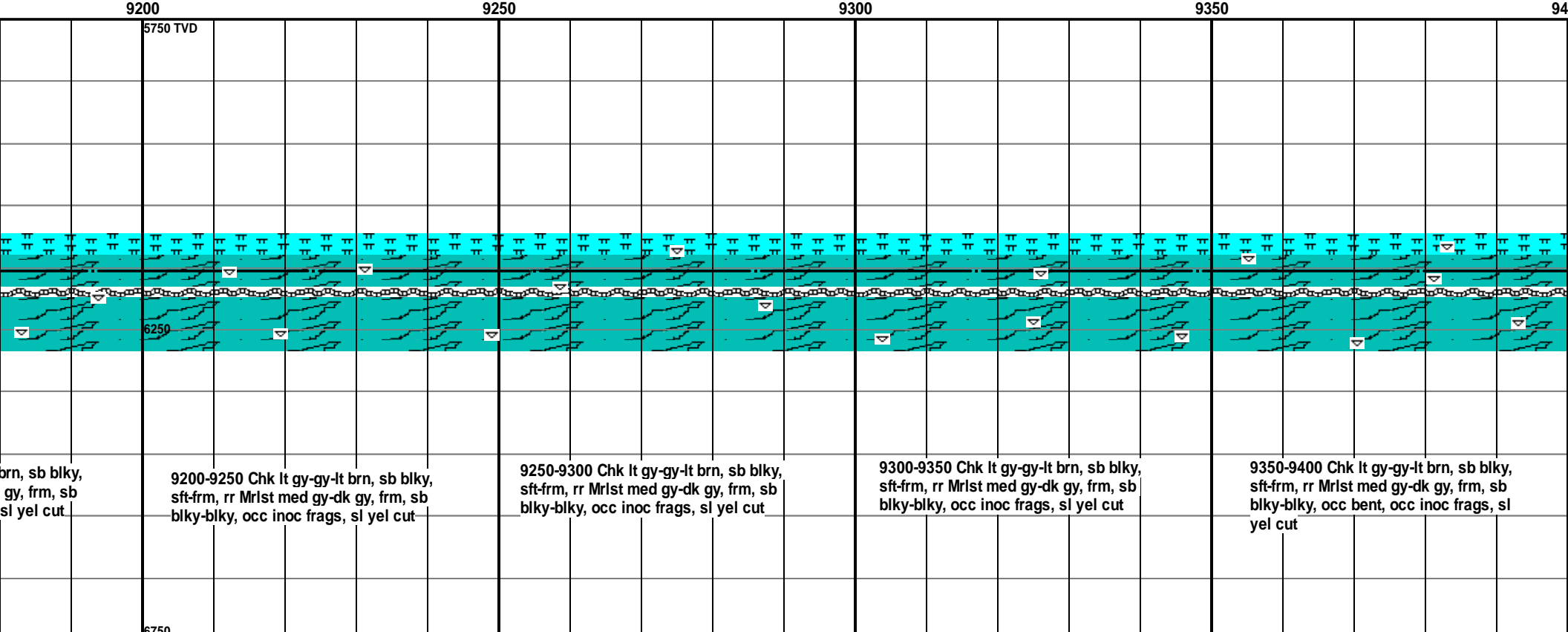
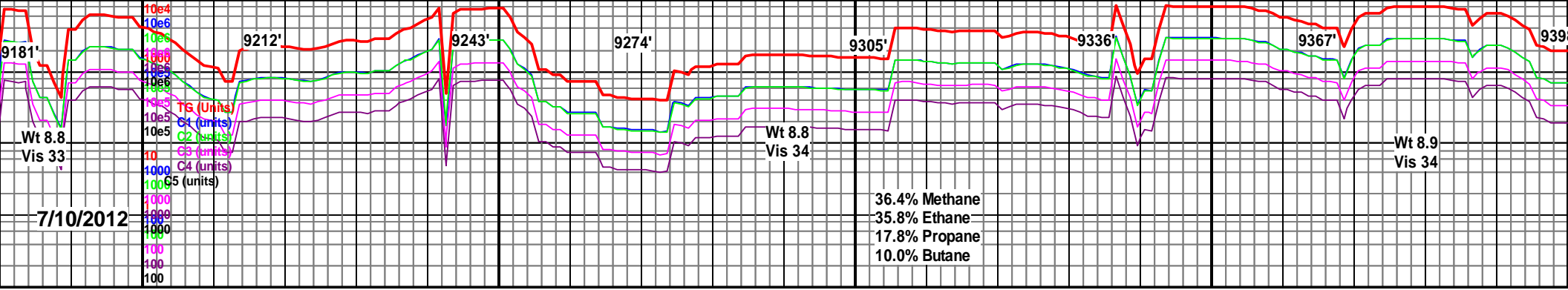


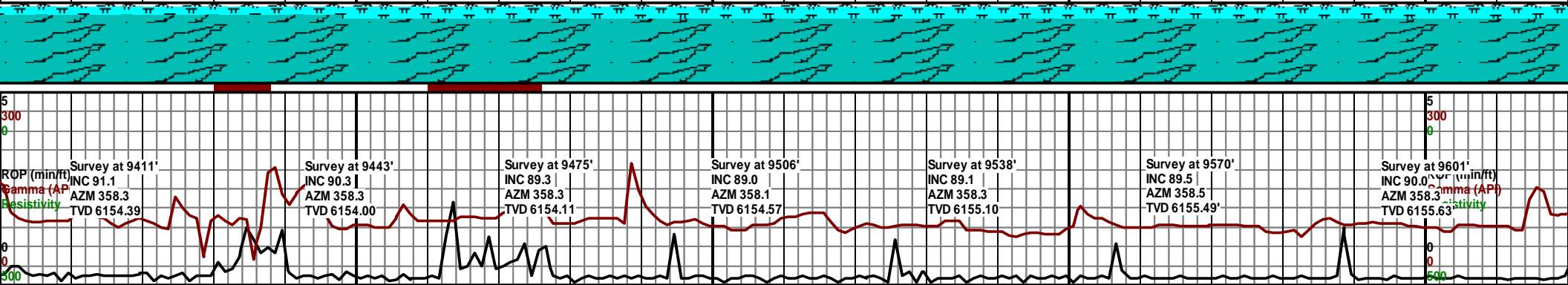
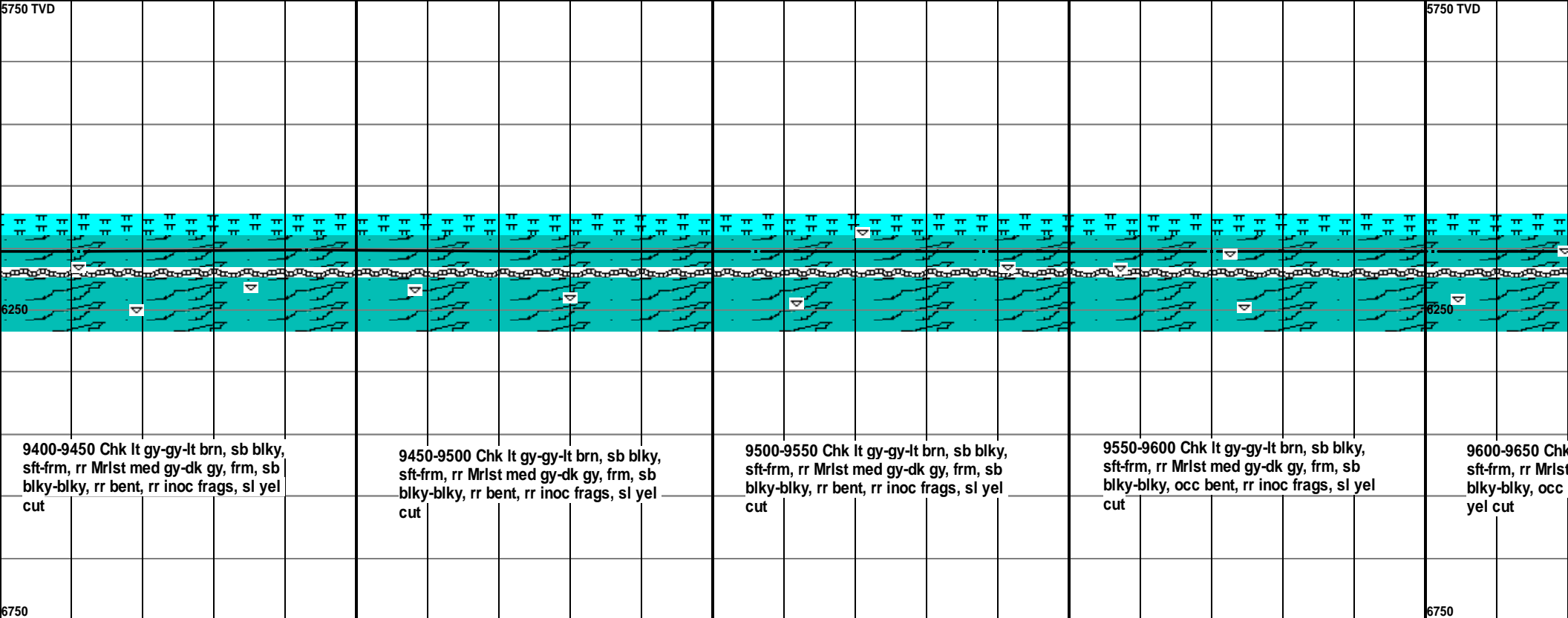
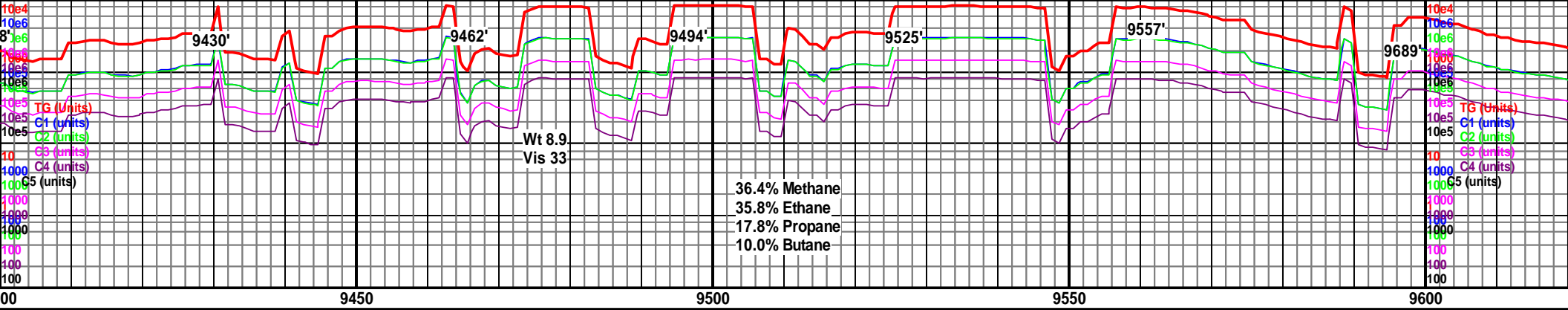


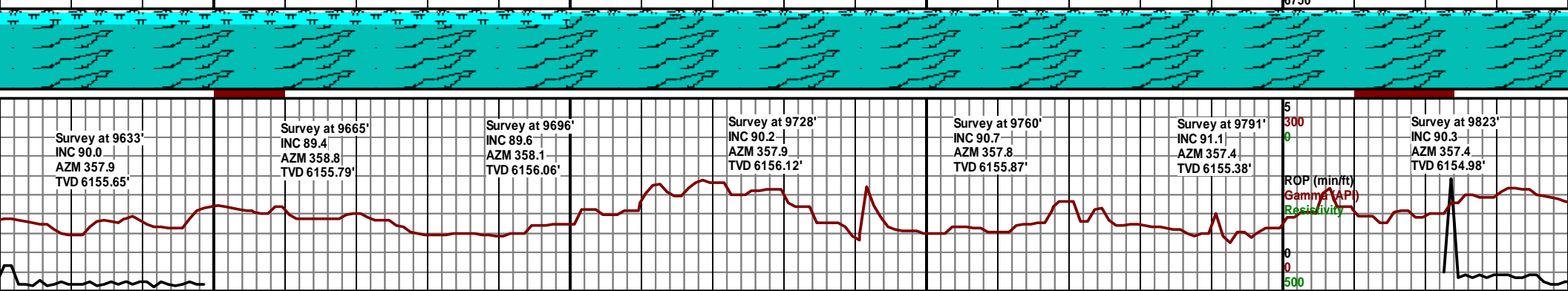
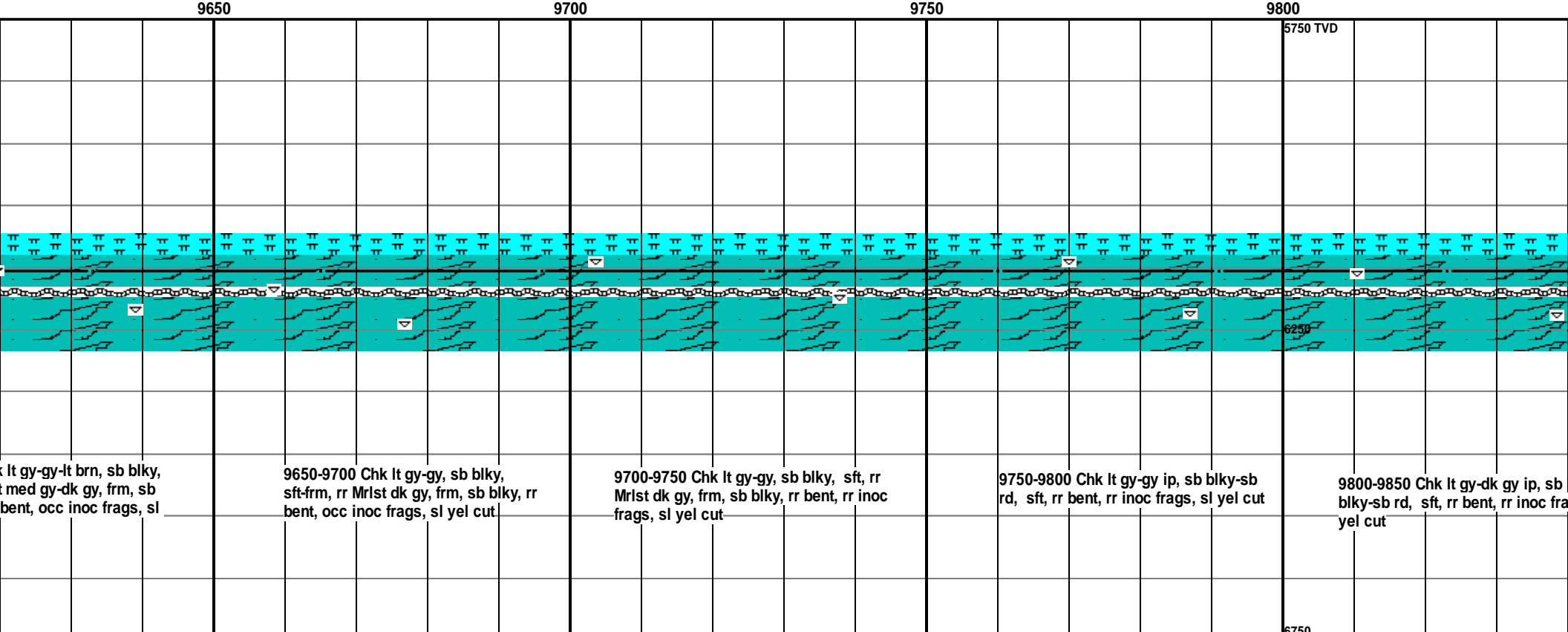
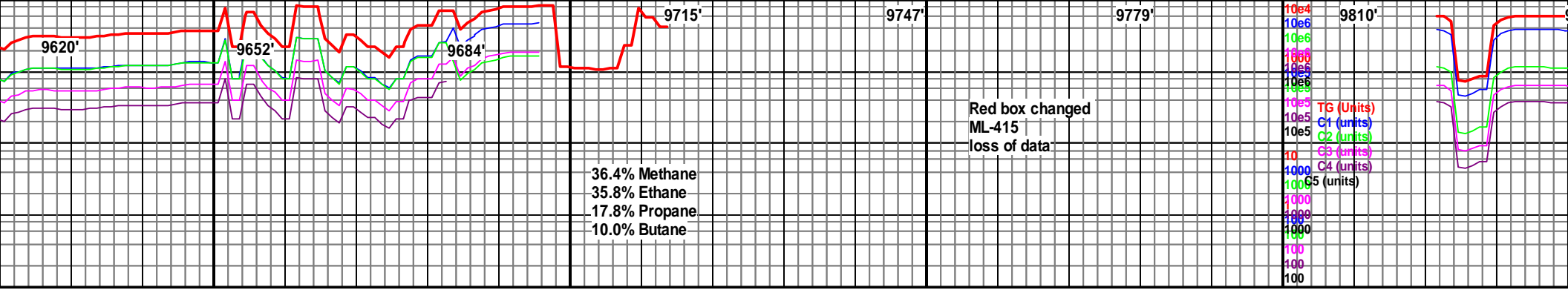


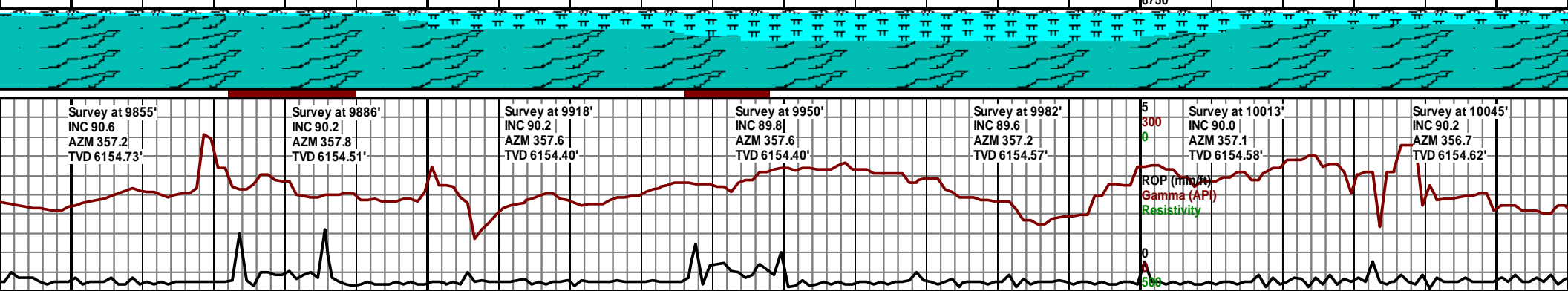
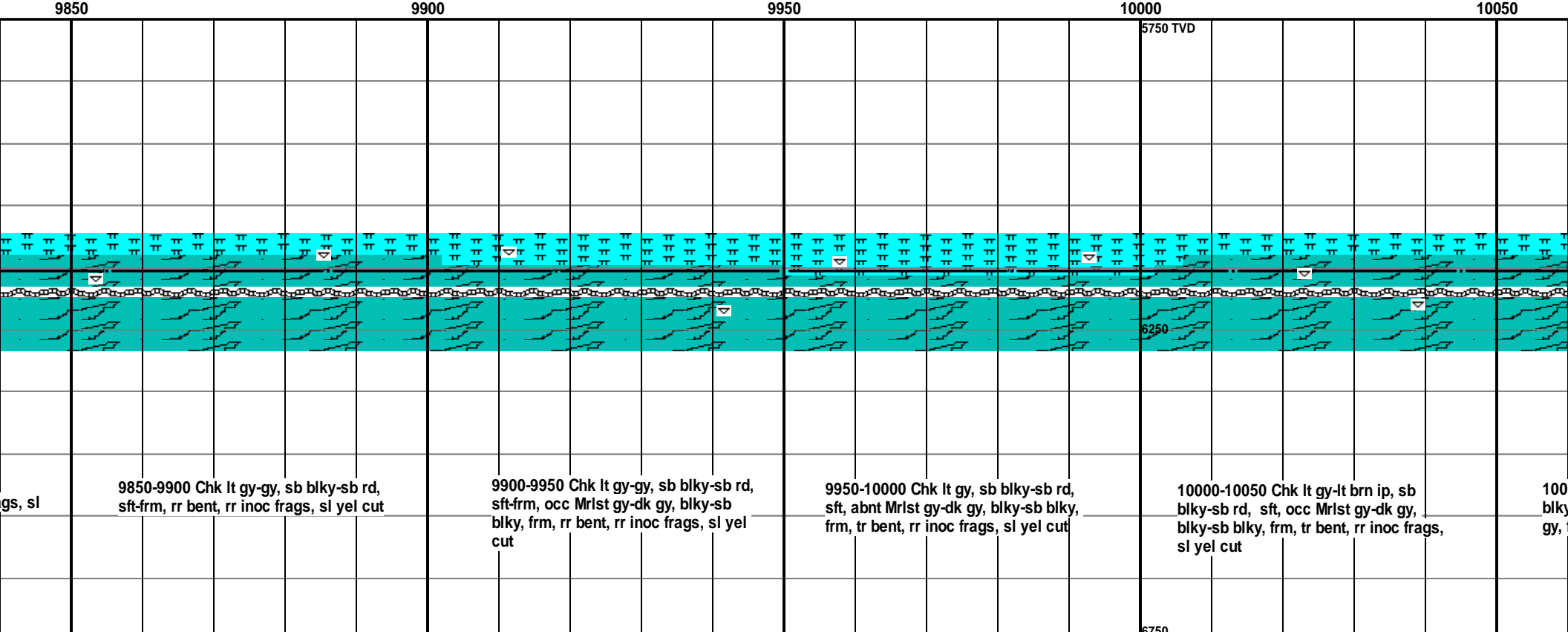
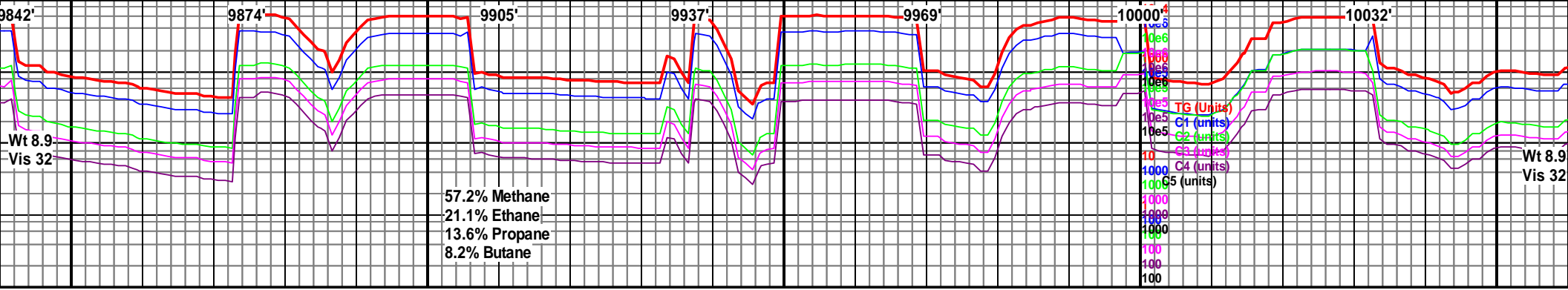


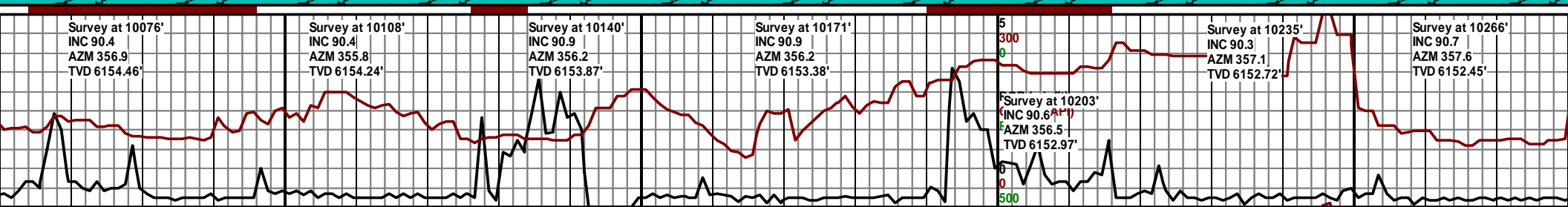
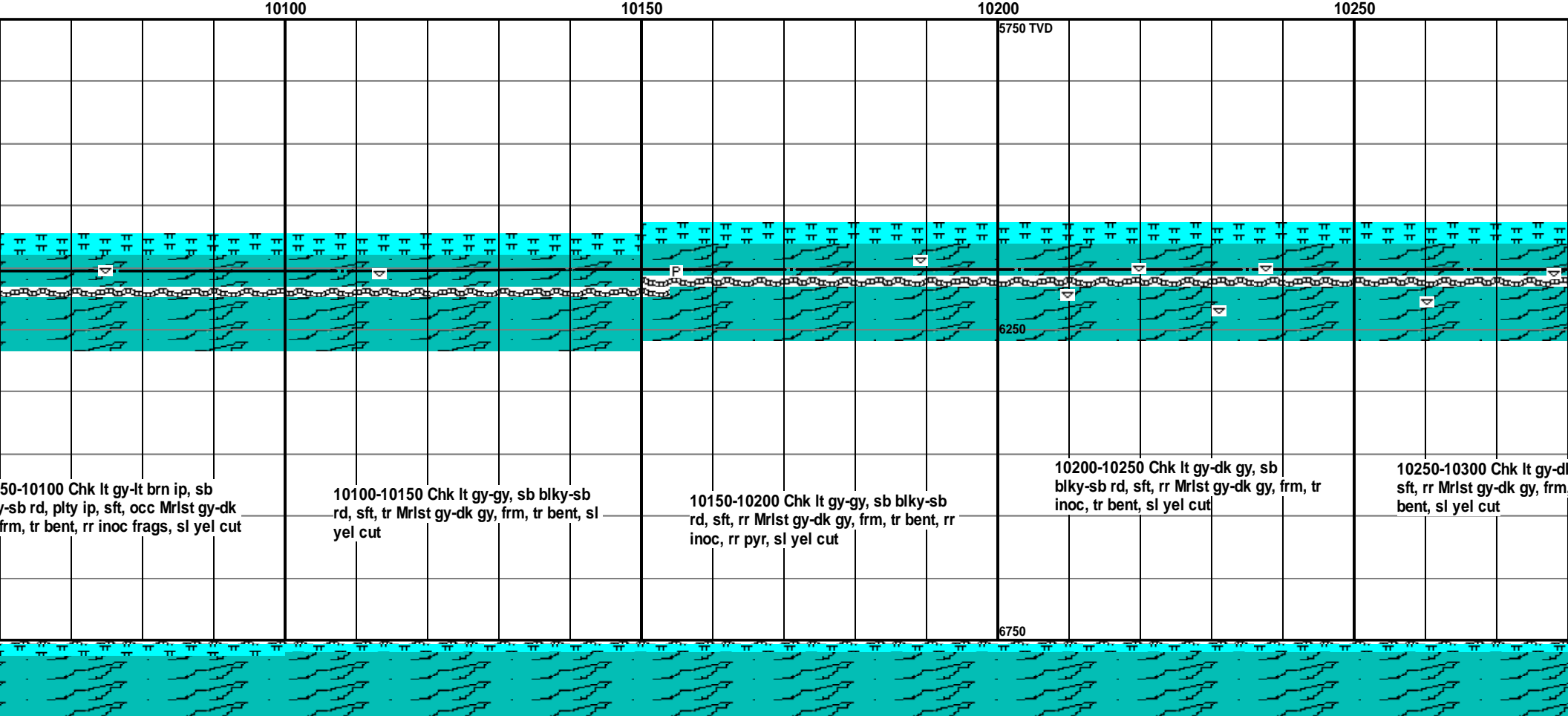
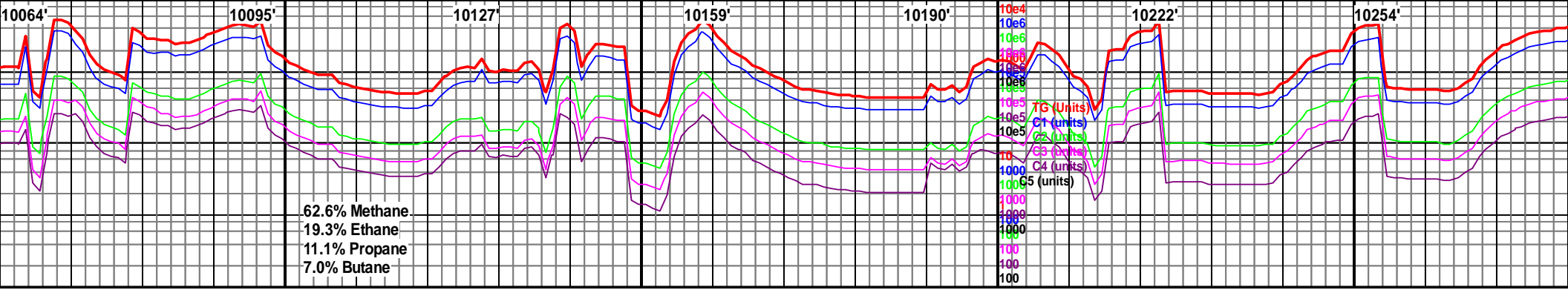


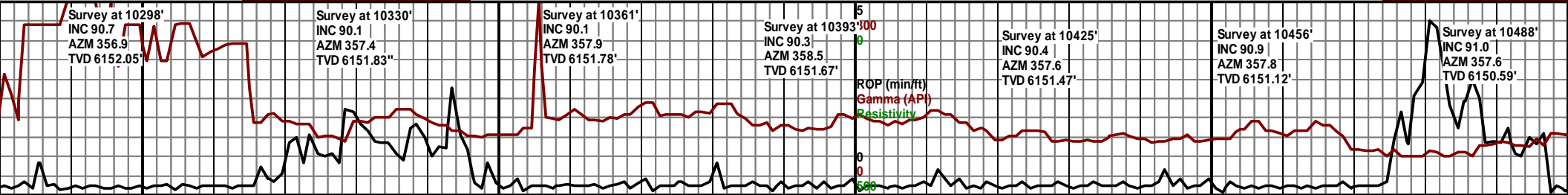
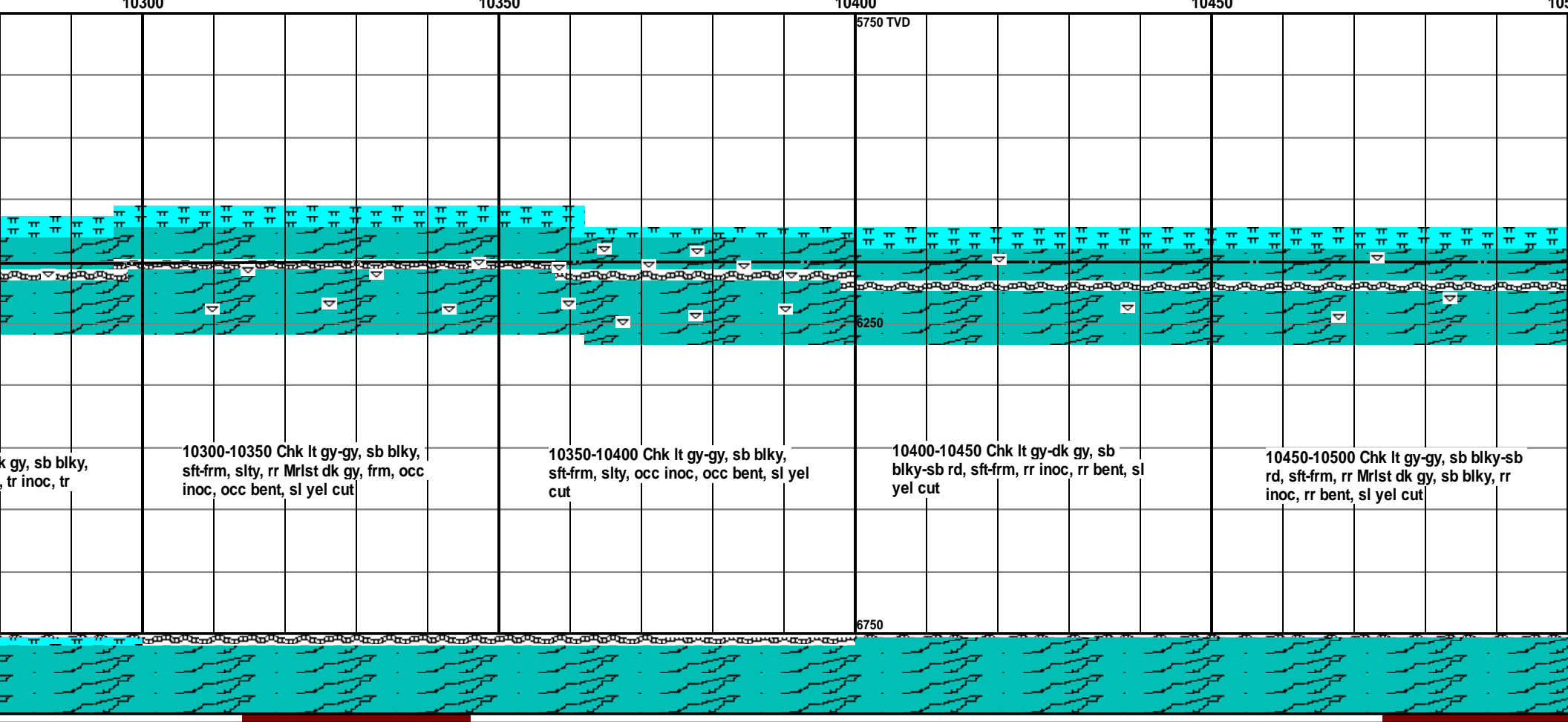
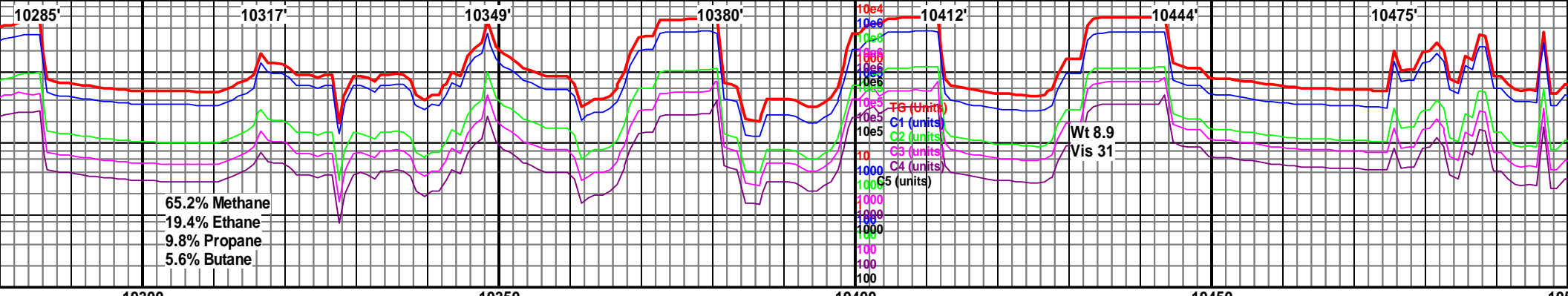


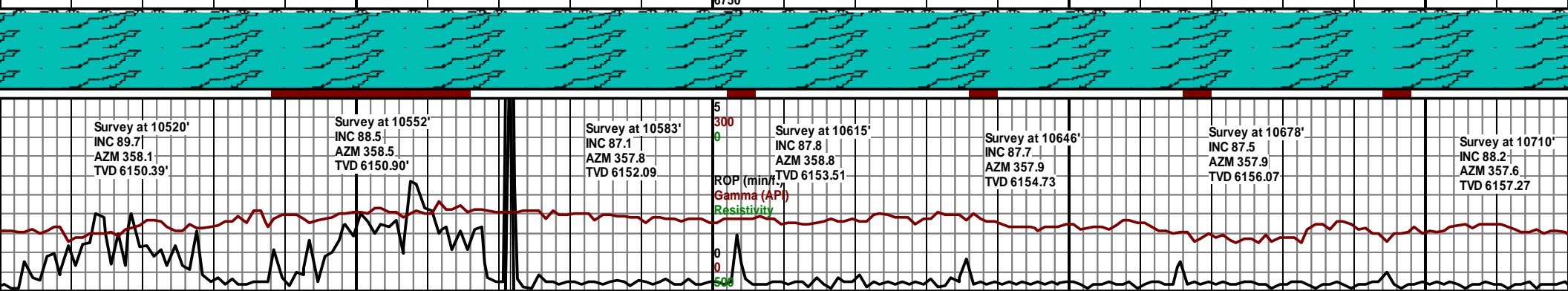
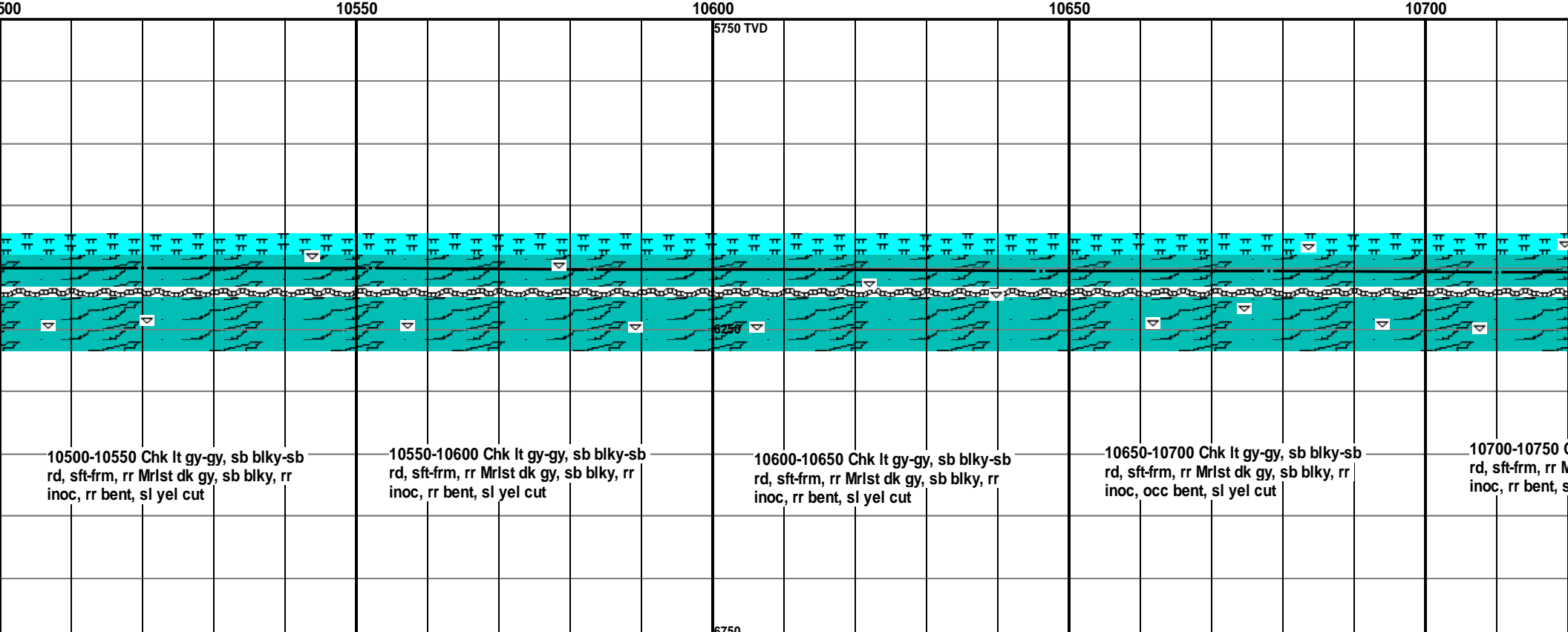
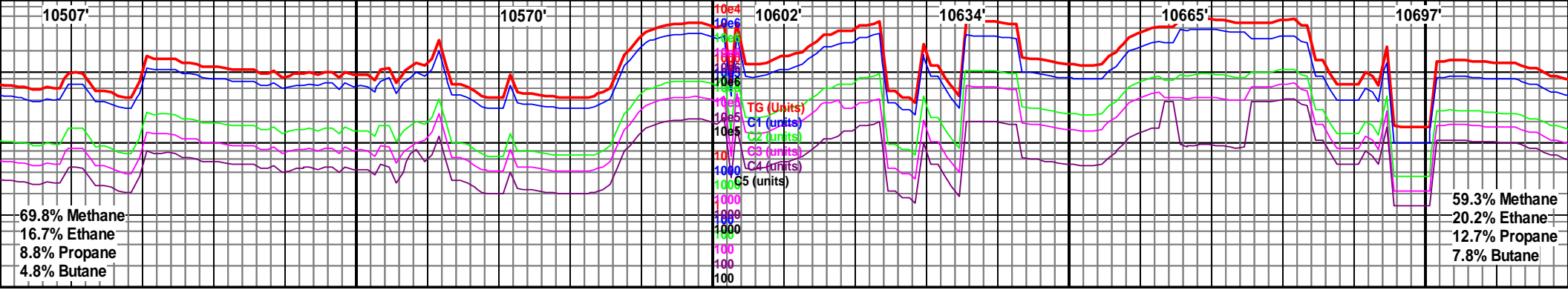


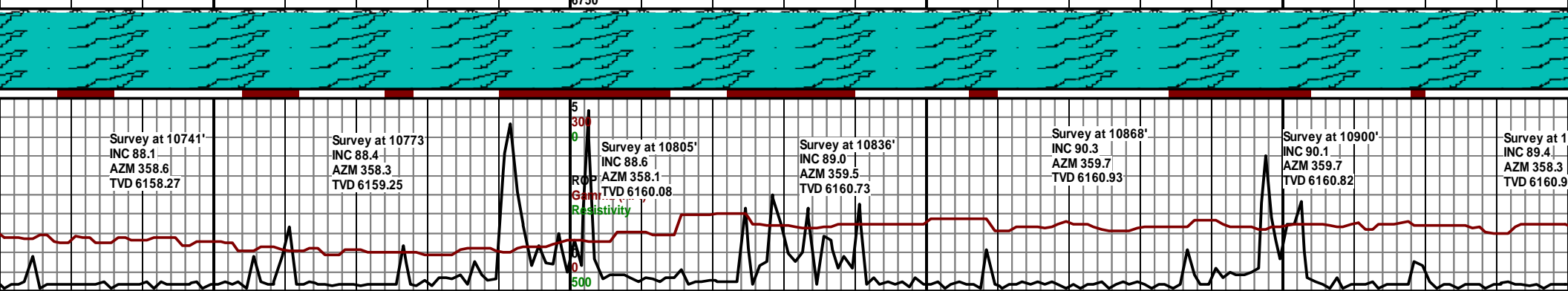
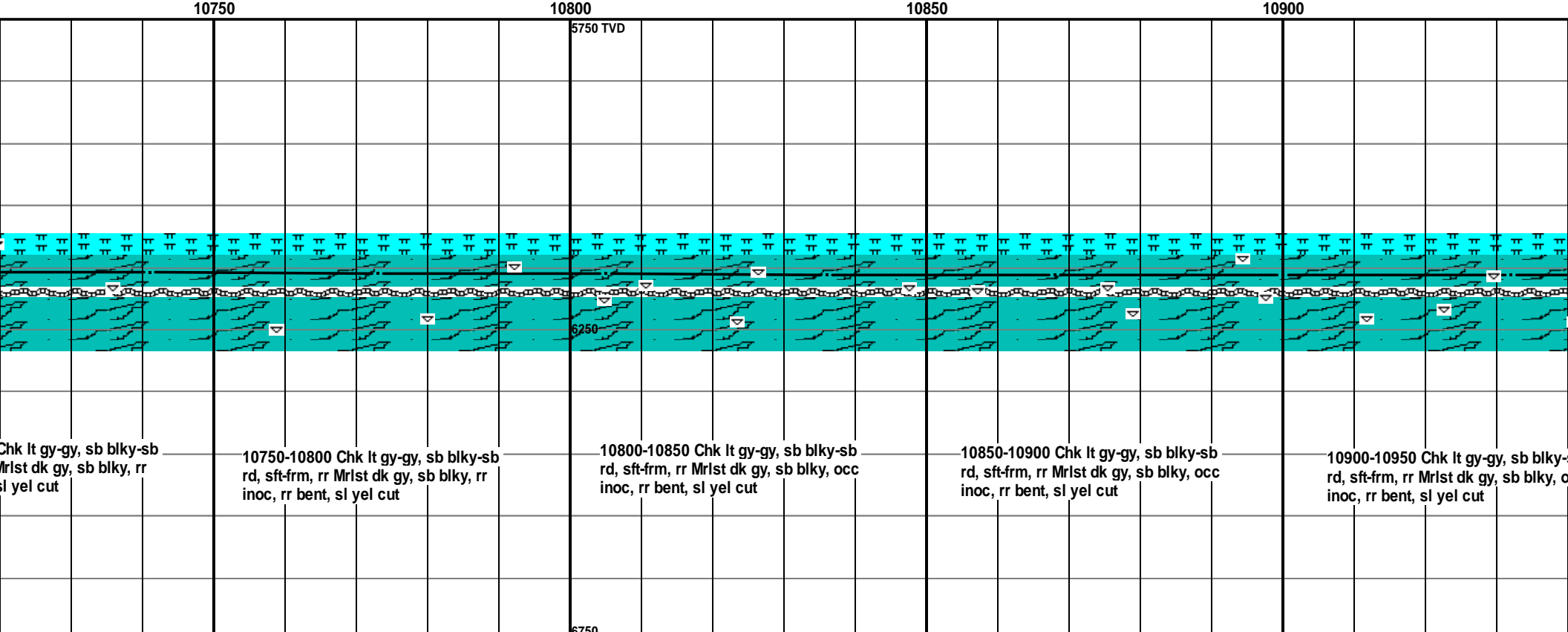
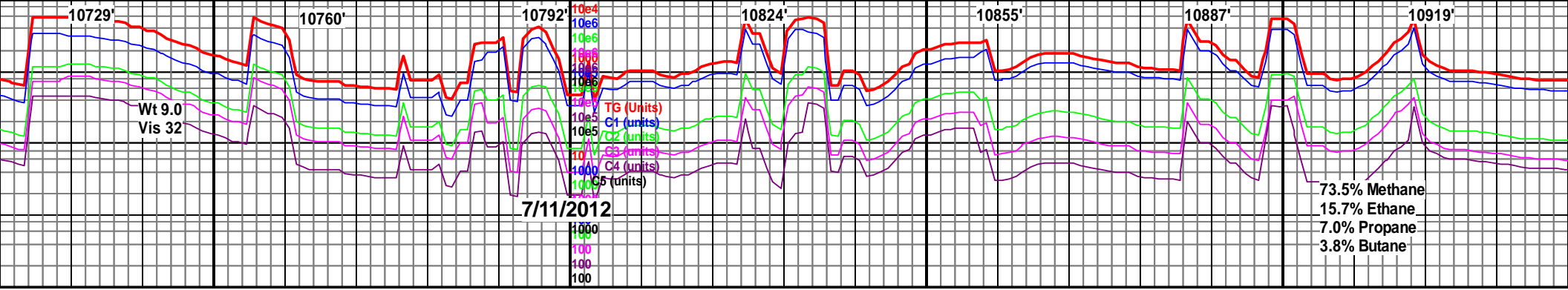


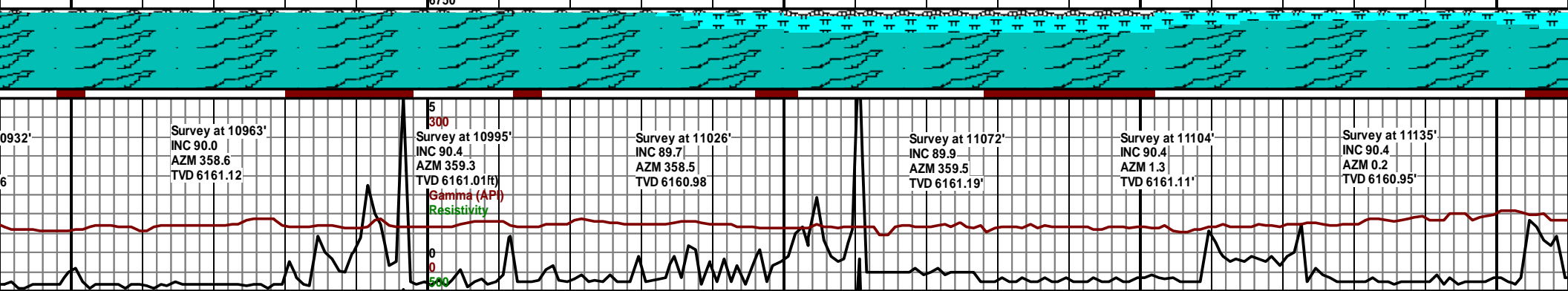
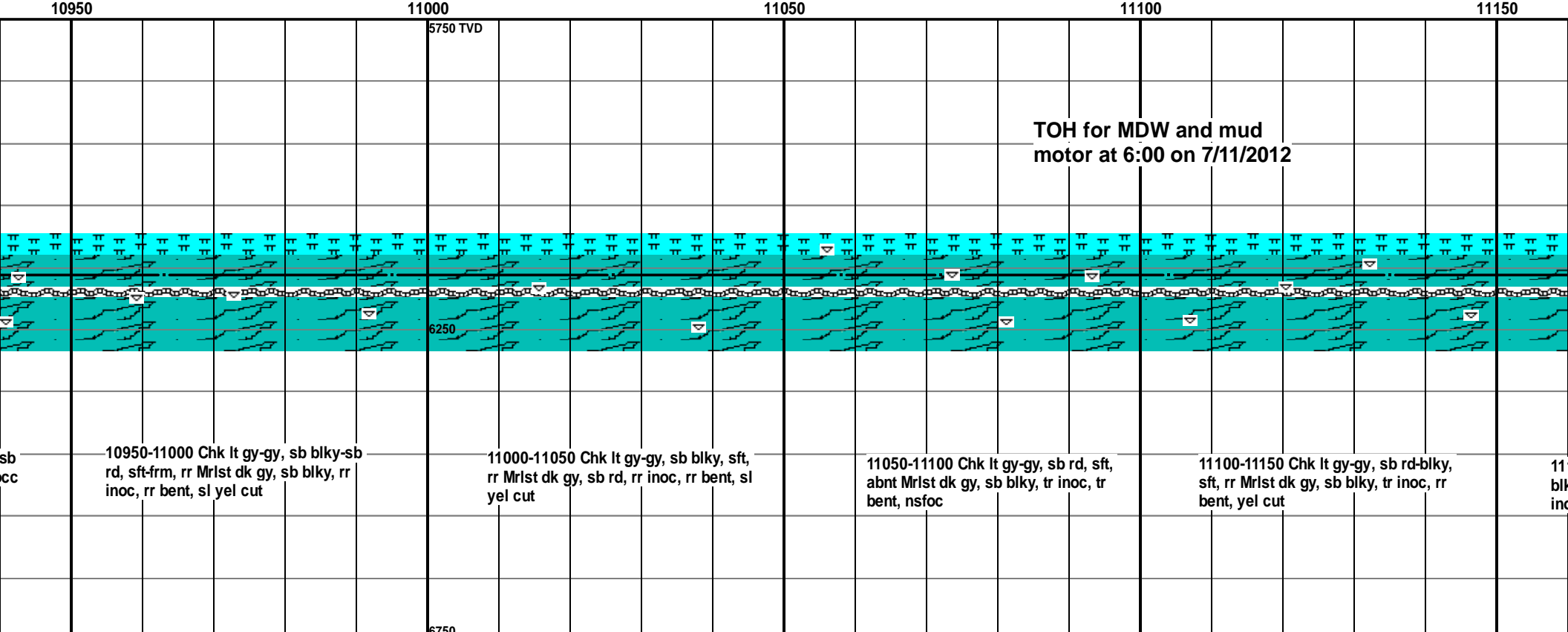
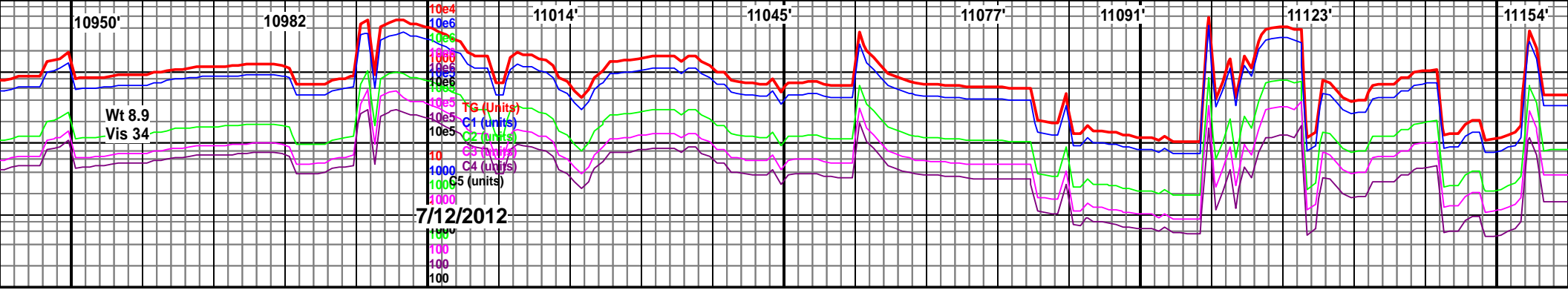


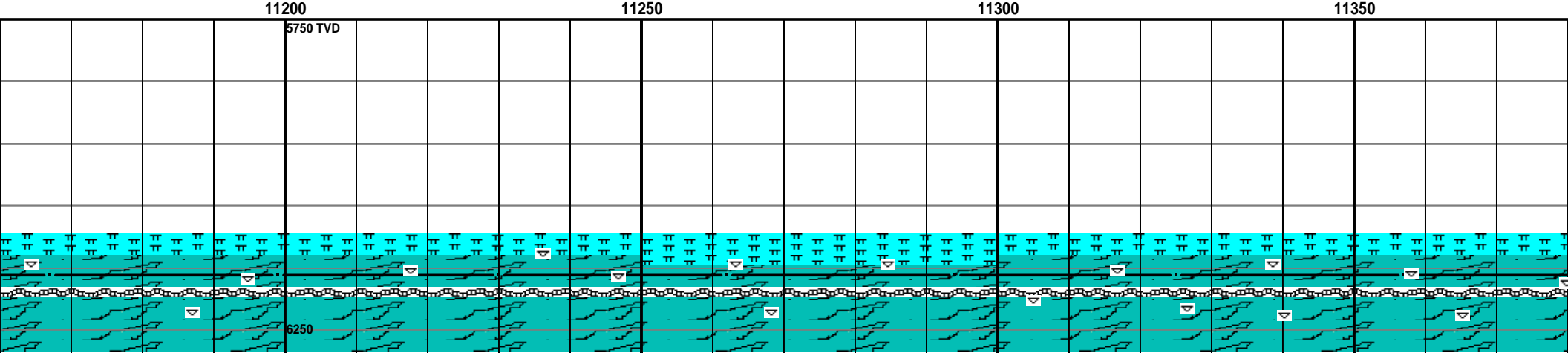
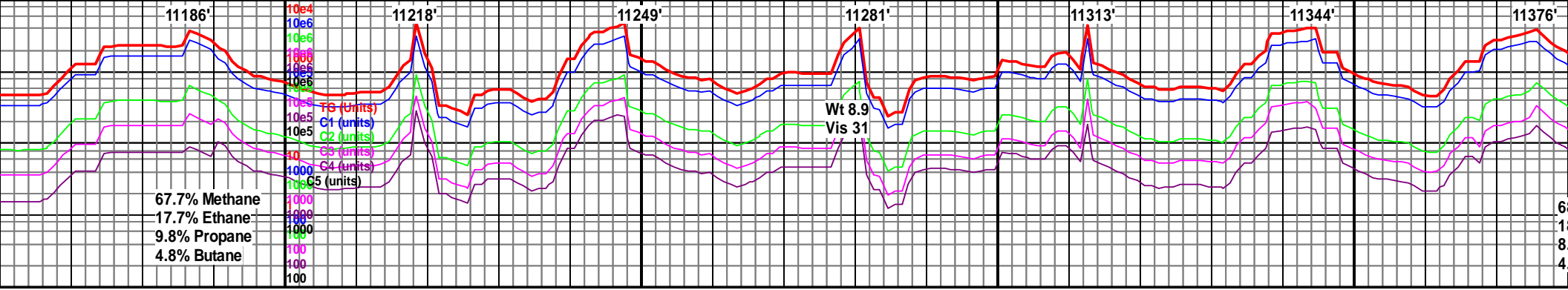












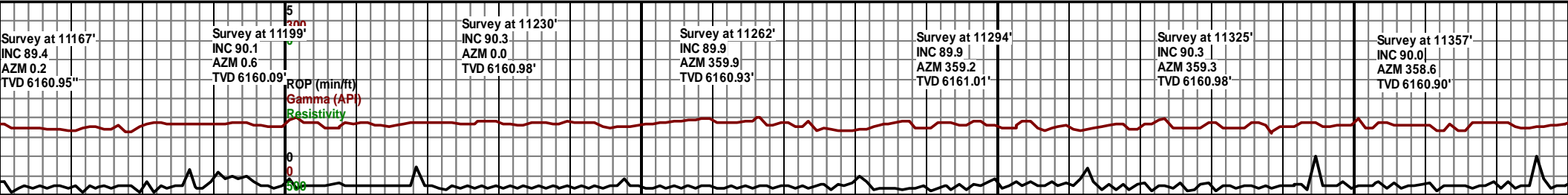
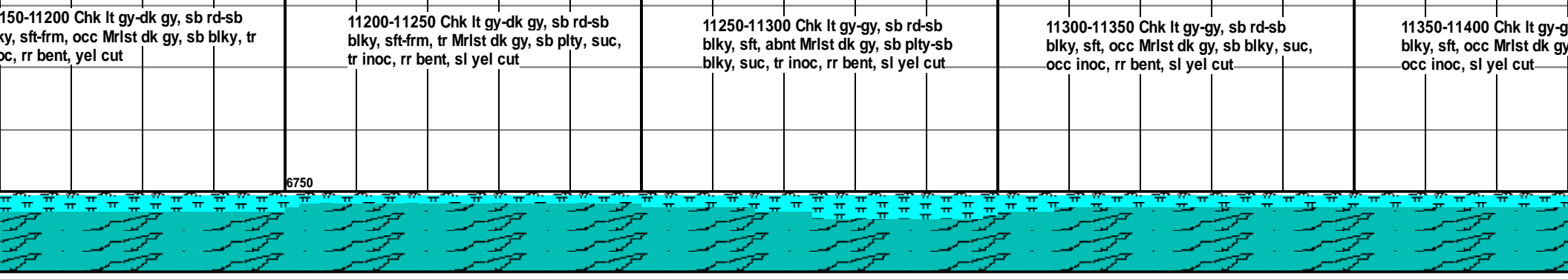
1150-11200 Chk lt gy-dk gy, sb rd-sb  
 gy, sft frm, occ Mrlst dk gy, sb blk, tr  
 oc, rr bent, yel cut

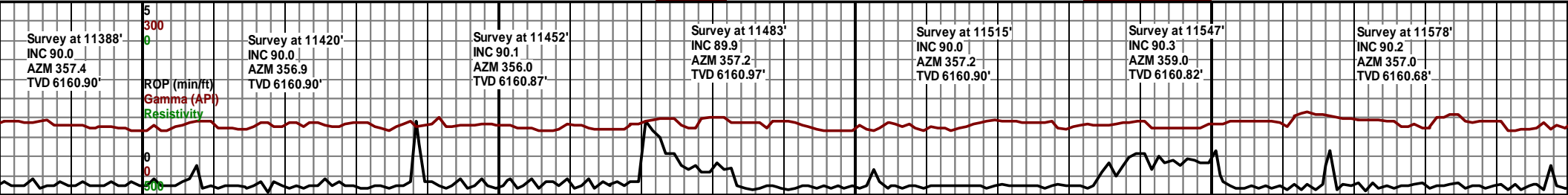
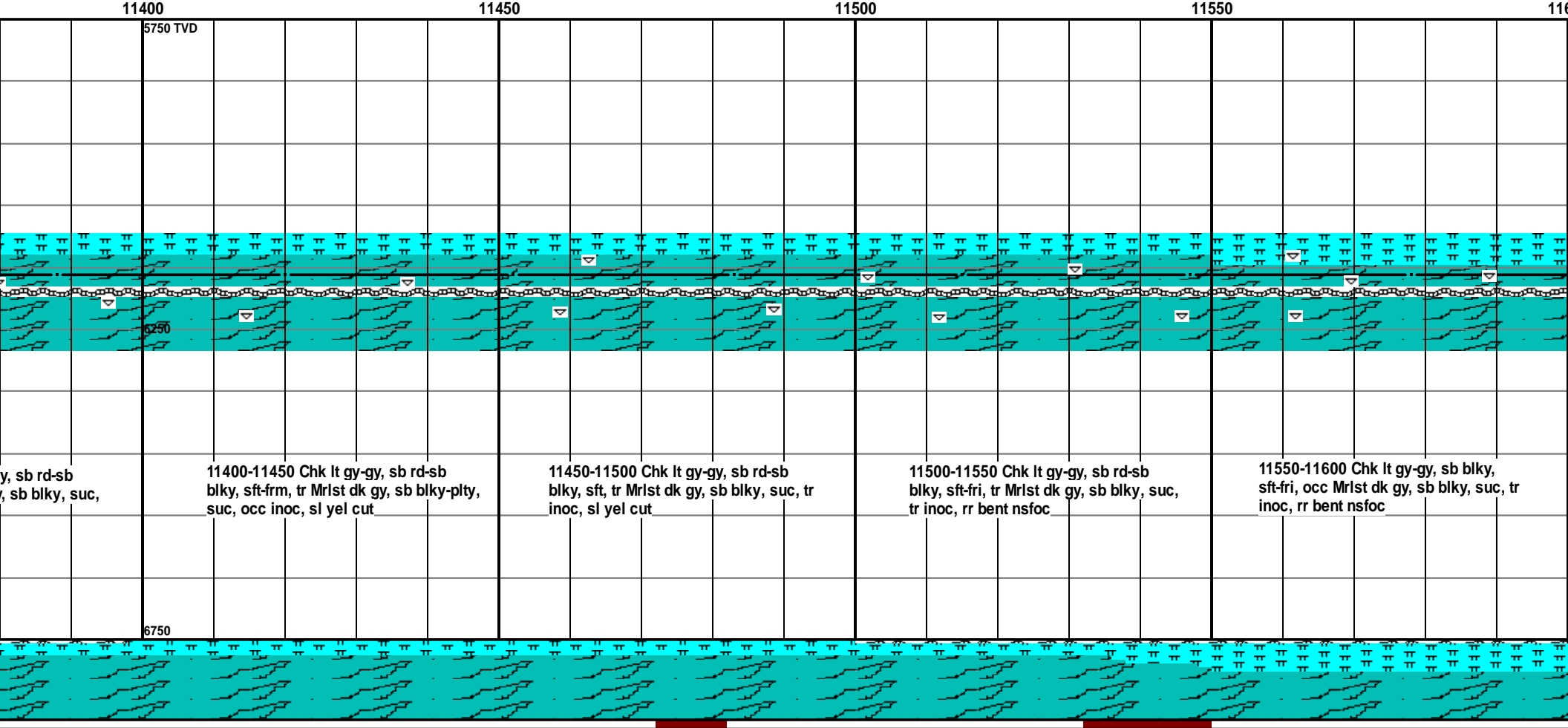
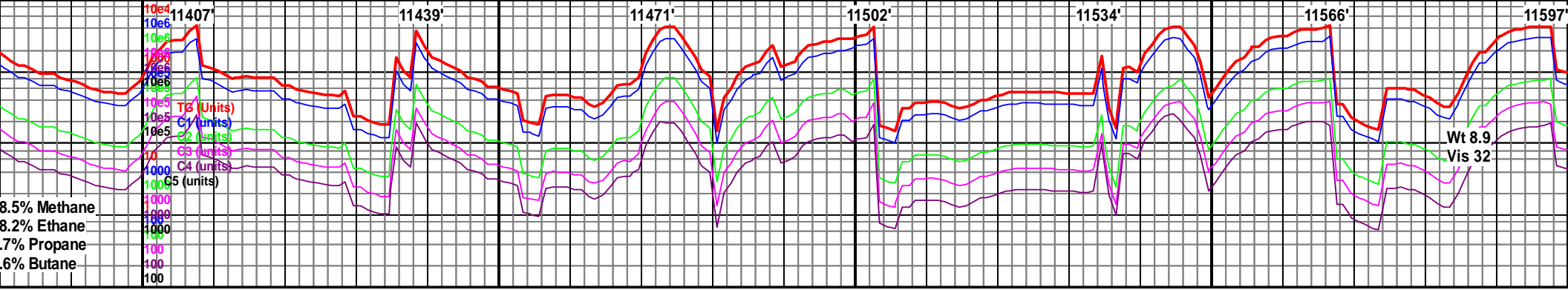
11200-11250 Chk lt gy-dk gy, sb rd-sb  
 blk, sft frm, tr Mrlst dk gy, sb plty, suc,  
 tr inoc, rr bent, sl yel cut

11250-11300 Chk lt gy-gy, sb rd-sb  
 blk, sft, abnt Mrlst dk gy, sb plty-sb  
 blk, suc, tr inoc, rr bent, sl yel cut

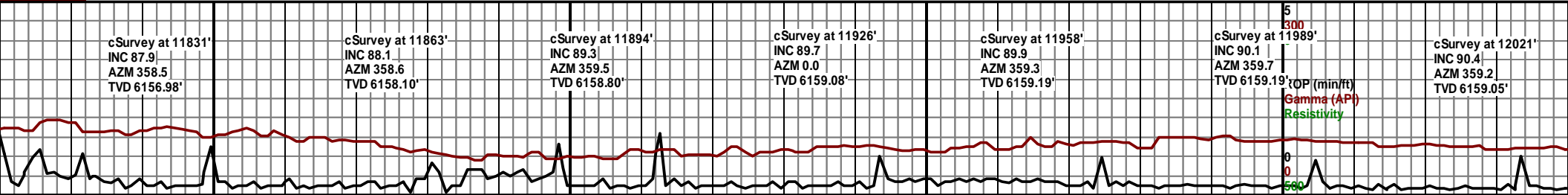
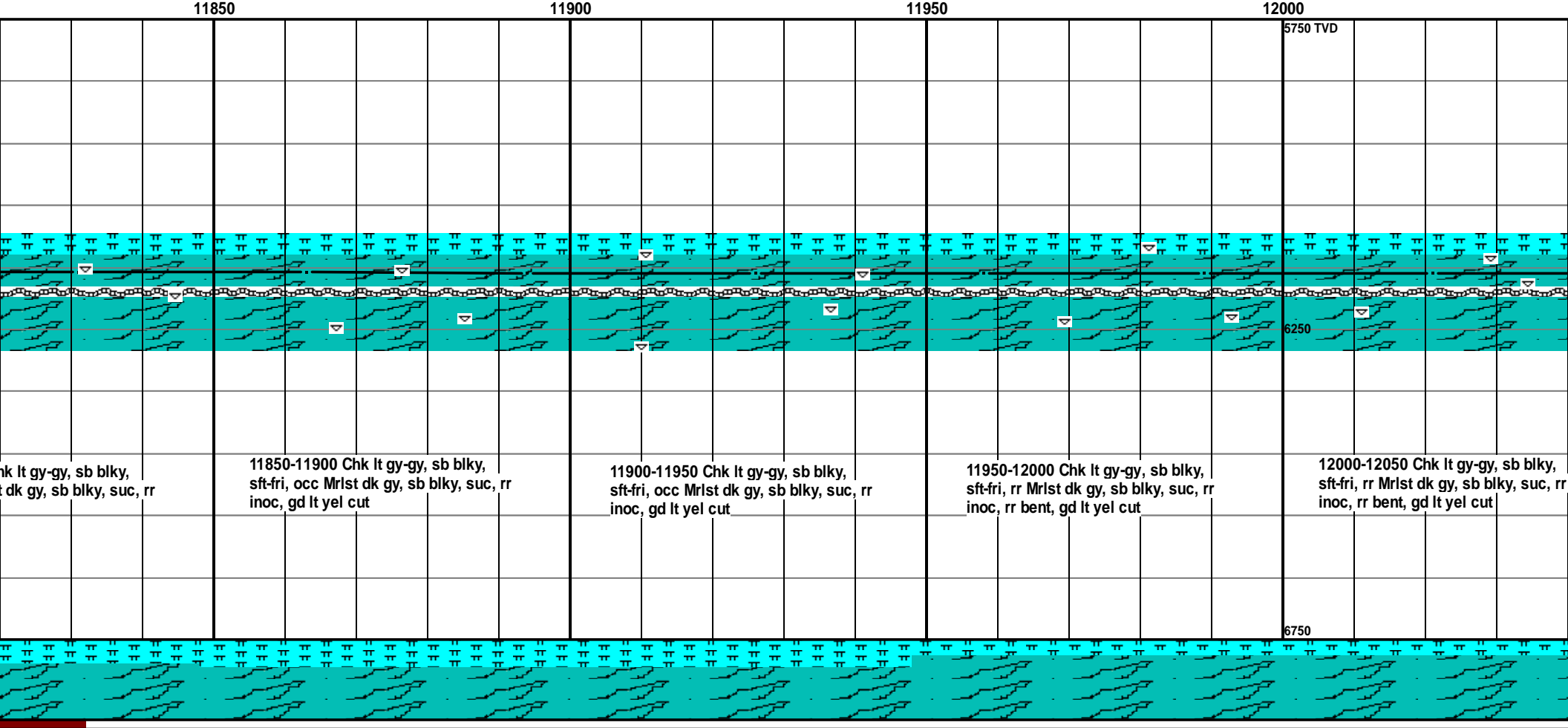
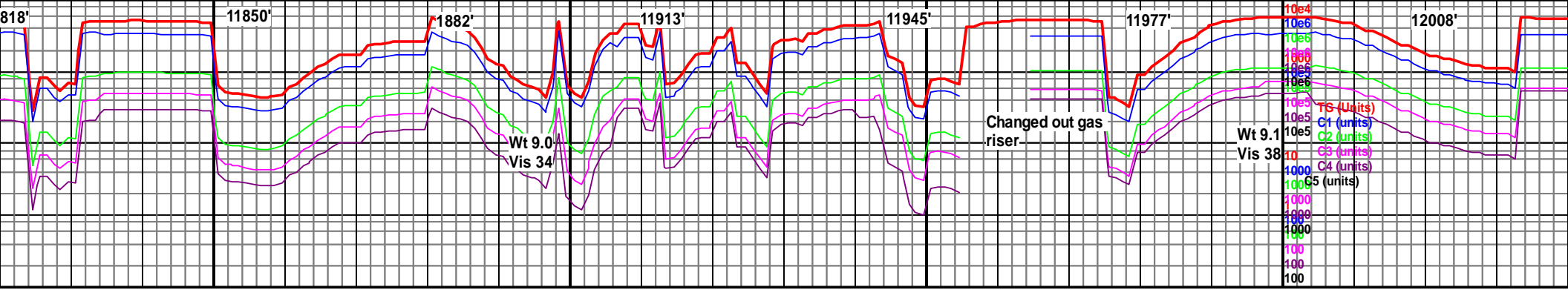
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 occ inoc, rr bent, sl yel cut

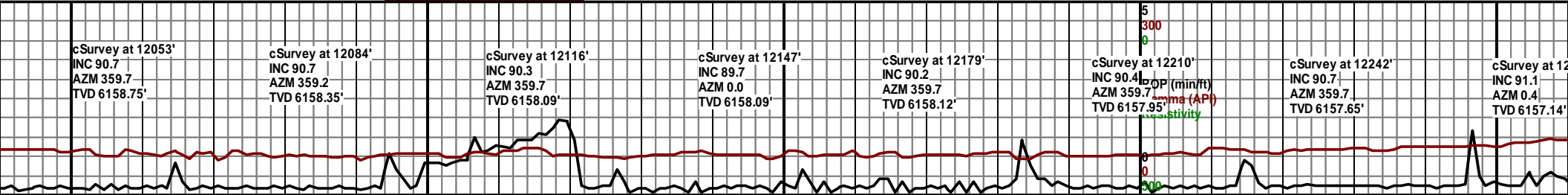
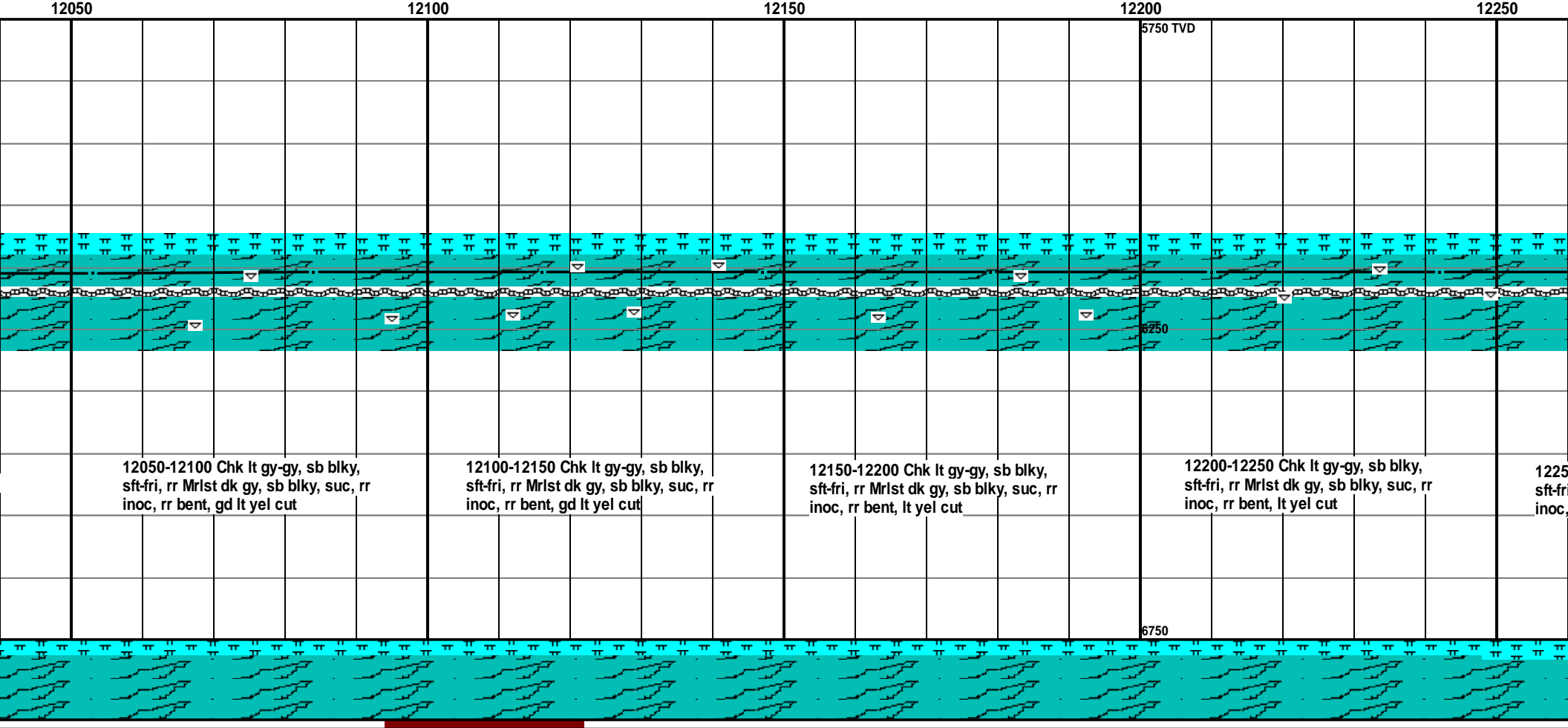
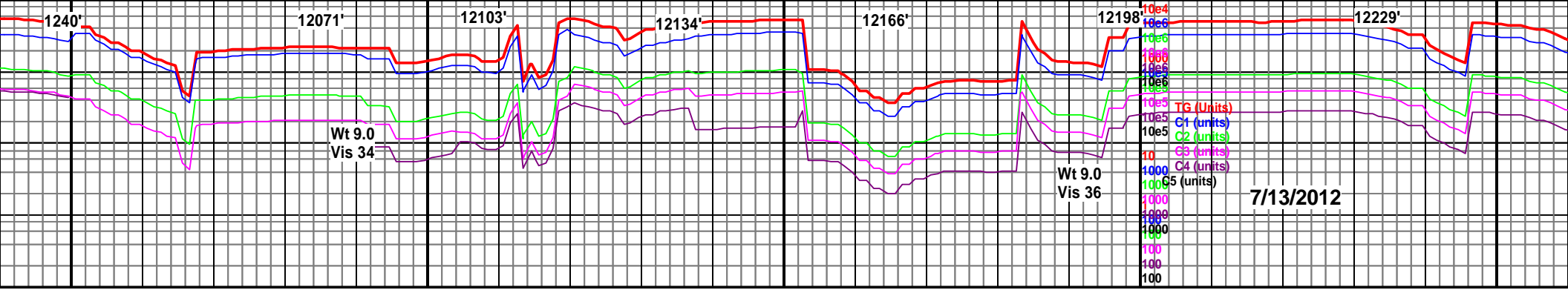
11350-11400 Chk lt gy-gy,  
 blk, sft, occ Mrlst dk gy,  
 occ inoc, sl yel cut

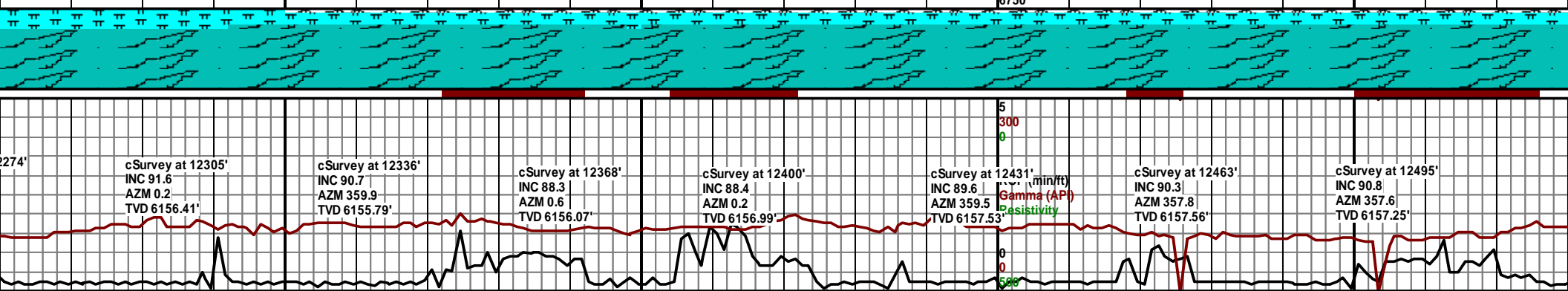
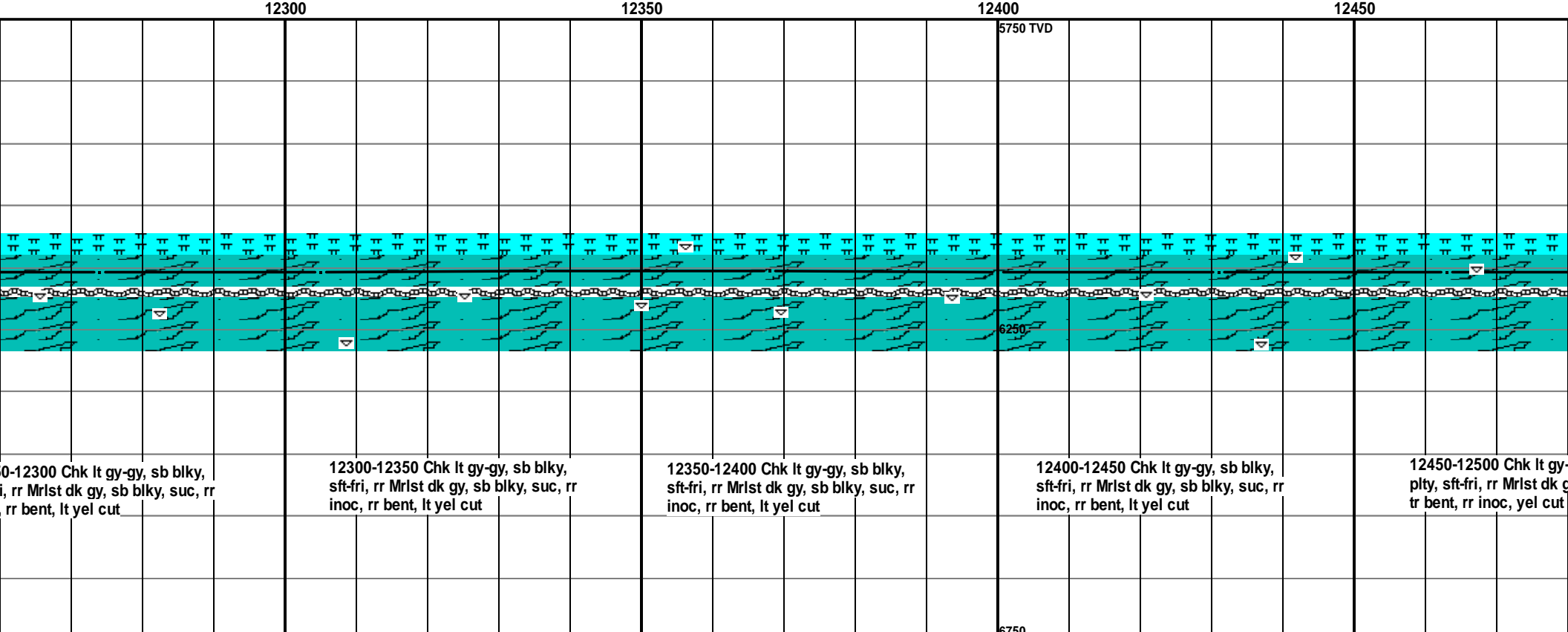
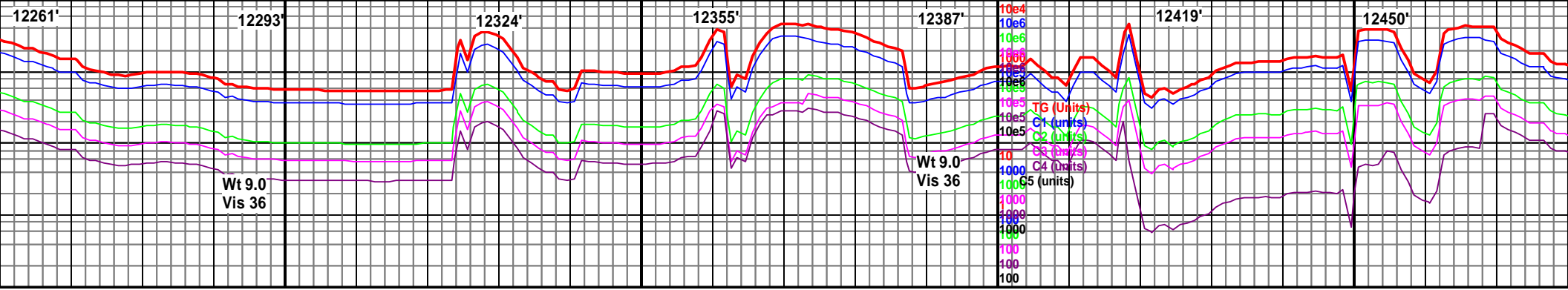




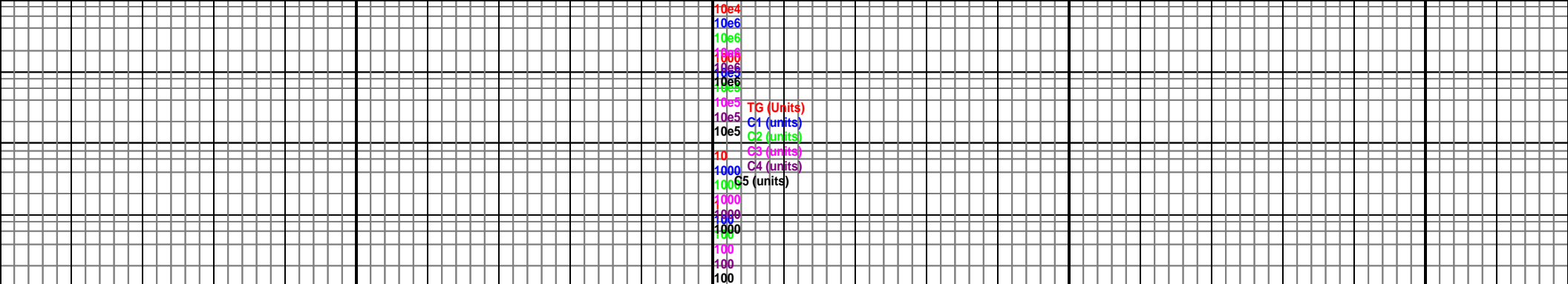




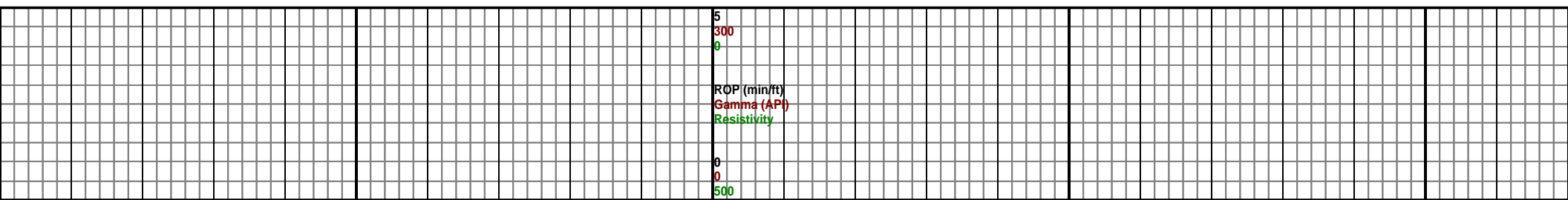
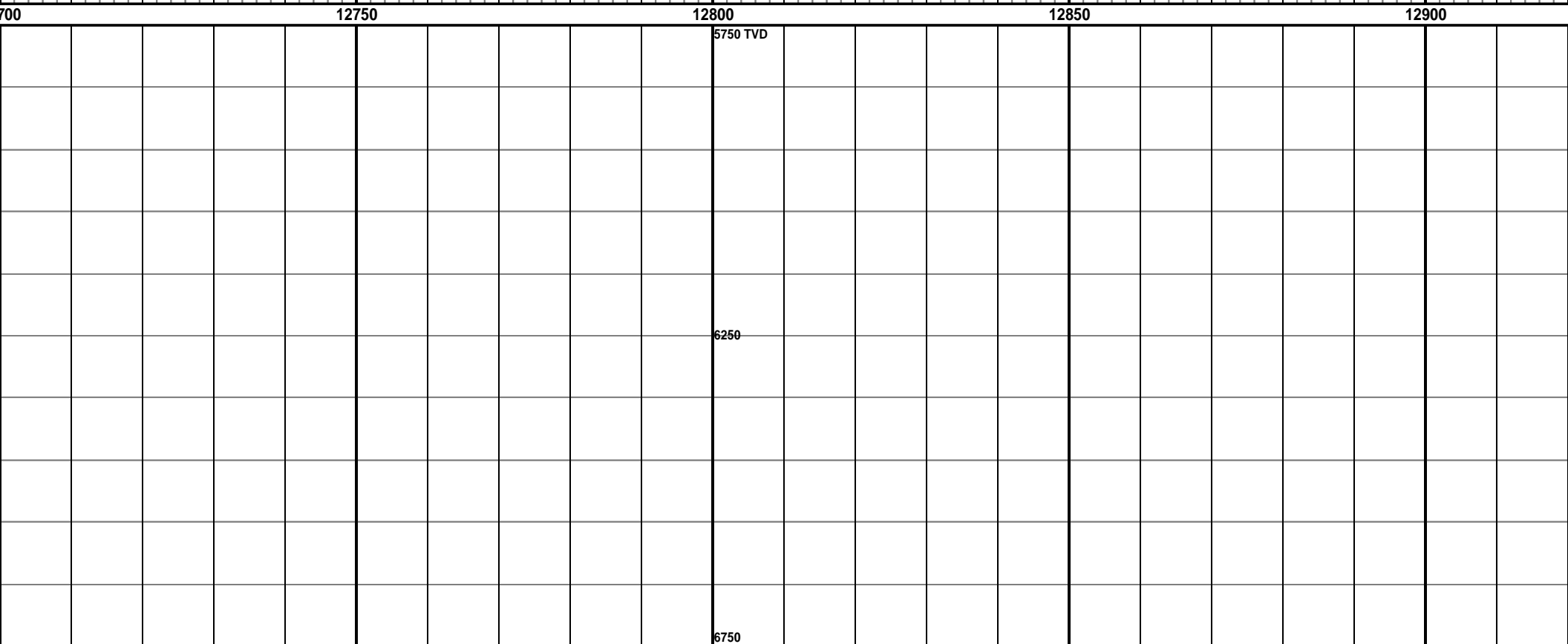




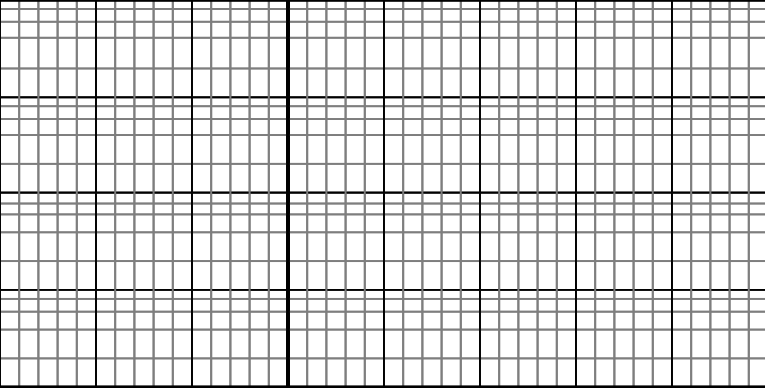




TG (Units)  
 C1 (units)  
 C2 (units)  
 C3 (units)  
 C4 (units)  
 C5 (units)



ROP (min/ft)  
 Gamma (API)  
 Resistivity



12950

13