



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

Well Name: Horsetail 30F-3106  
Well Id:  
Location: SENW 30-T10N-R57W, Weld County, Colorado  
License Number: 05-123-3920000  
Spud Date: 6/16/2014  
Surface Coordinates: Lat.: 40.810544, Long.: -103.796139

Region: Redtail Field  
Drilling Completed: 6/25/2014

Bottom Hole Lat.: 40.789492, Long.: -103.796339  
Coordinates:  
Ground Elevation (ft): 4780  
Logged Interval (ft): 5050 To: 13210  
Formation: Pierre, Sharon Springs, Niobrara  
Type of Drilling Fluid: Water Based Mud

K.B. Elevation (ft): 4797  
Total Depth (ft): 13210

Printed by WellSight Log Manager from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

#### OPERATOR

Company: Whiting Oil & Gas Corp.  
Address: 1700 Broadway Suite 2300  
Denver, CO 80290

#### GEOLOGIST

Name: Kyle Newman, Brian Reddick, Jim Wenger  
Company: Acme Geologic Consulting  
Address: 108 Berry Street  
Little Rock, AR 72205

## Drilling Company

Xtreme 18


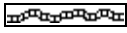
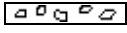
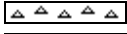

## Gas Detection






Mudlogging Systems, Inc., M Logger, Model TGC, Total Gas and Chromatograph, #328



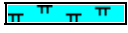
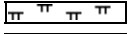

## Comments


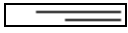
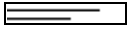
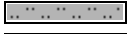

Lithologies and tops at drilled depths, not corrected to elogs. Where the well bore gas is 100% methane, the C1 line is moved to 85% for graphical purposes only.




## ROCK TYPES

 Anhy  
 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
-  Subrond
-  Subang
-  Angular

**OIL SHOW**

-  Even



**Spotted**



**Ques**



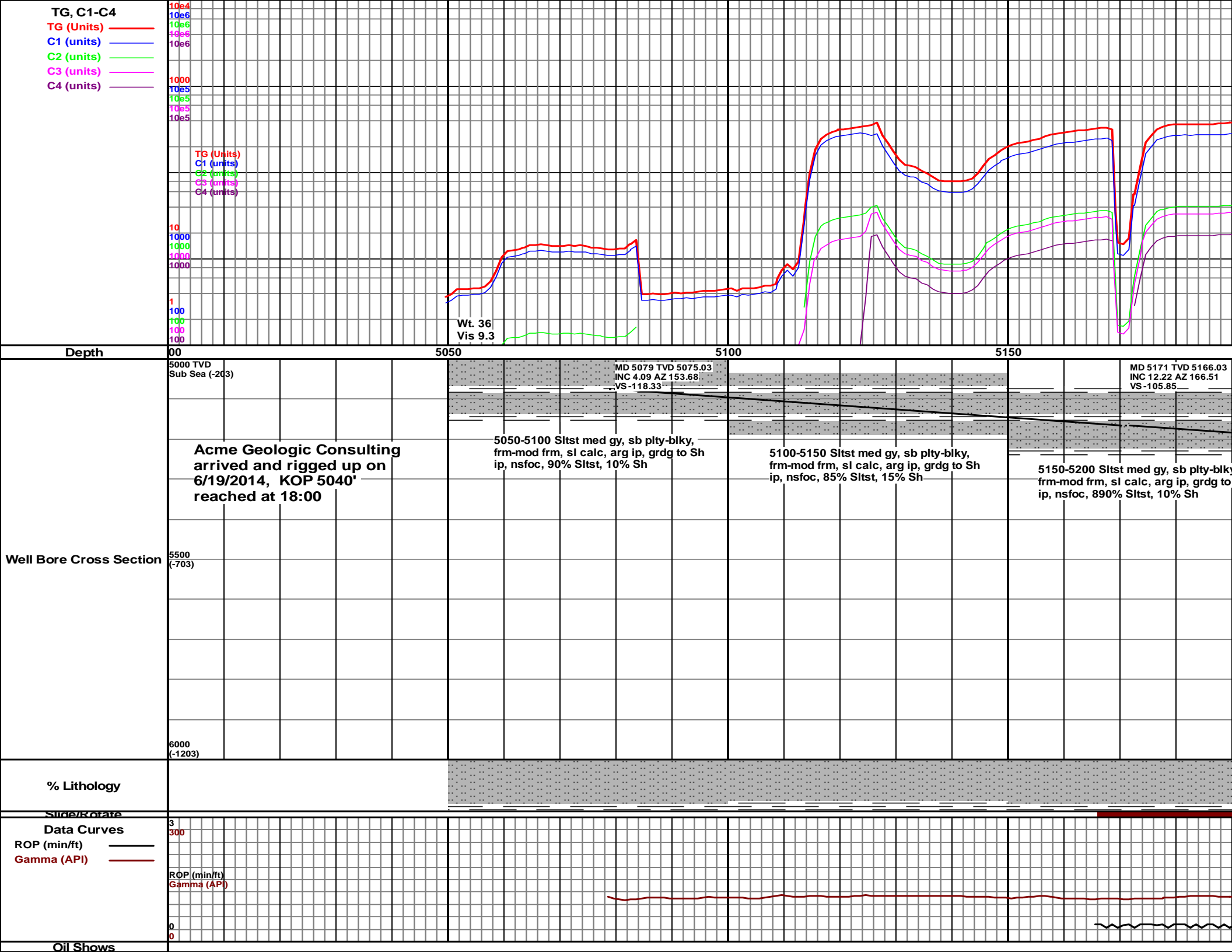
**Dead**

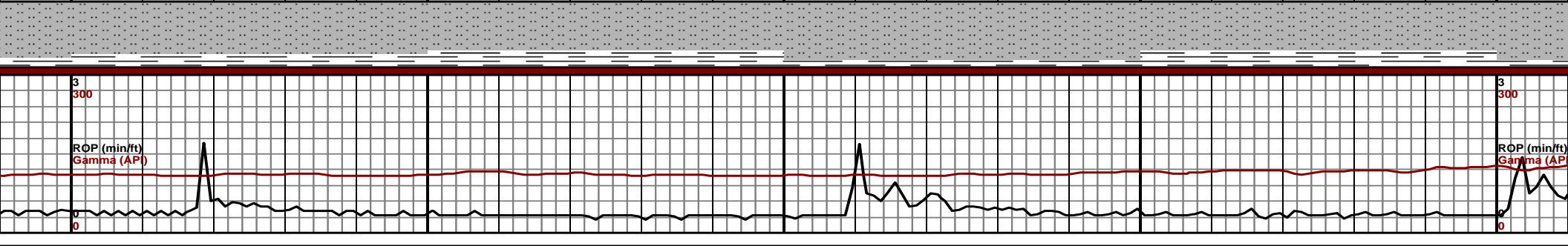
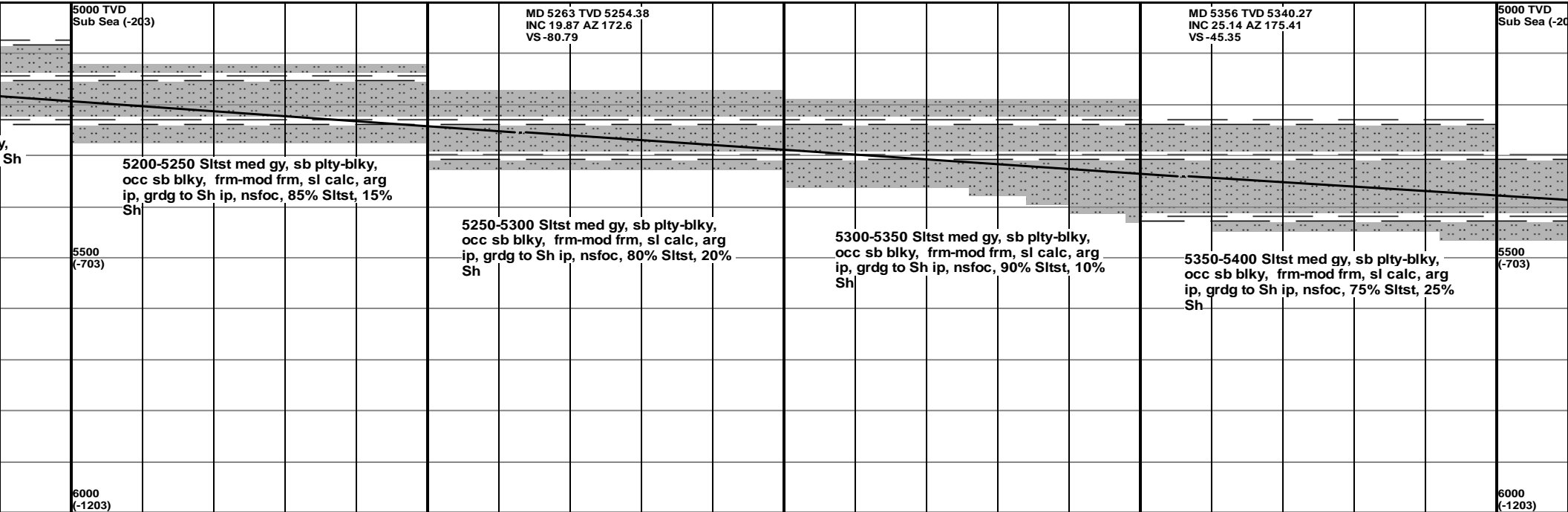
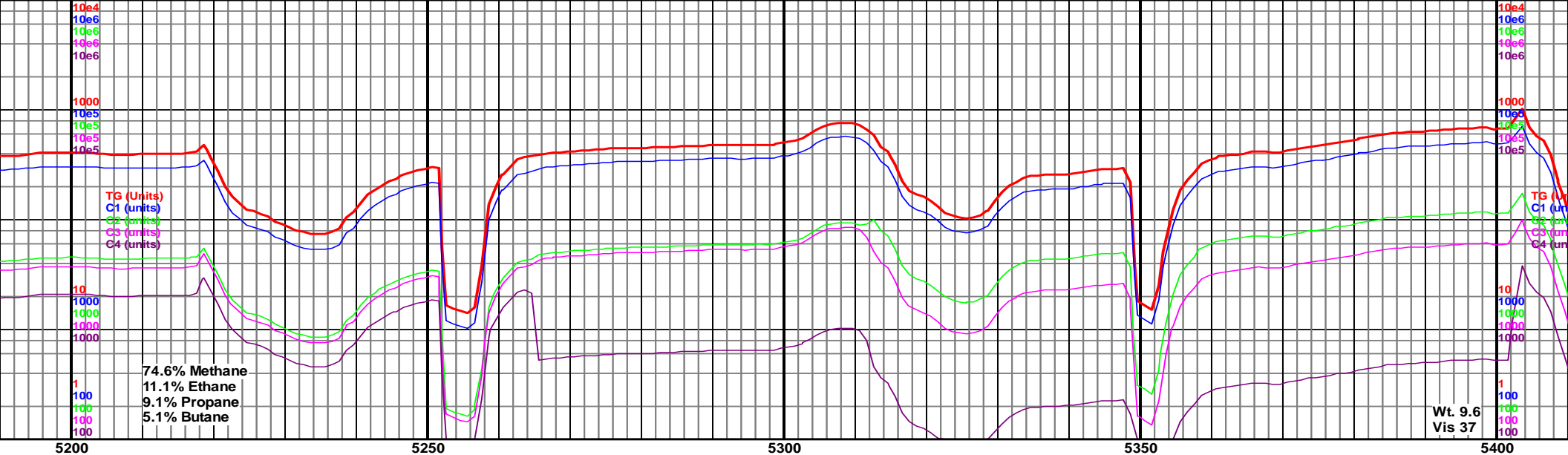
**INTERVAL**

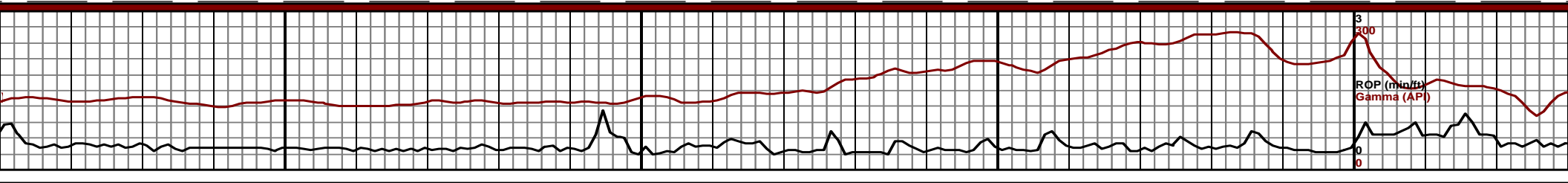
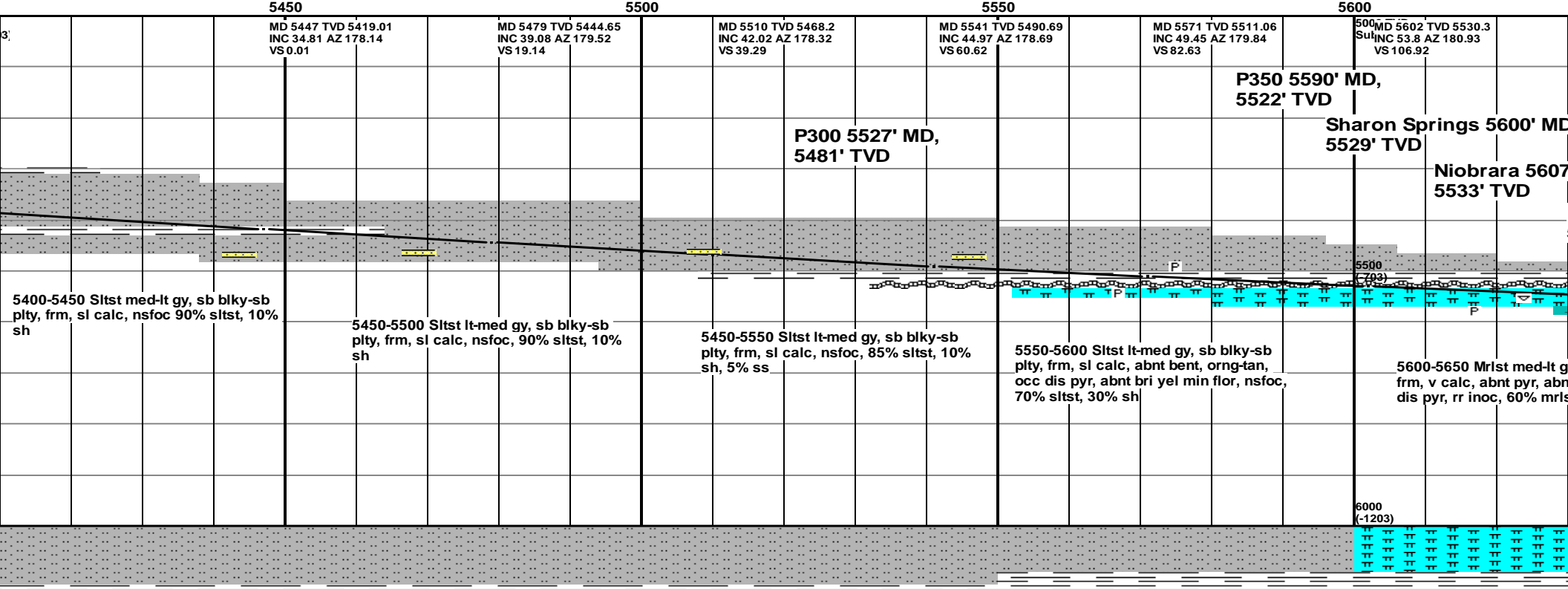
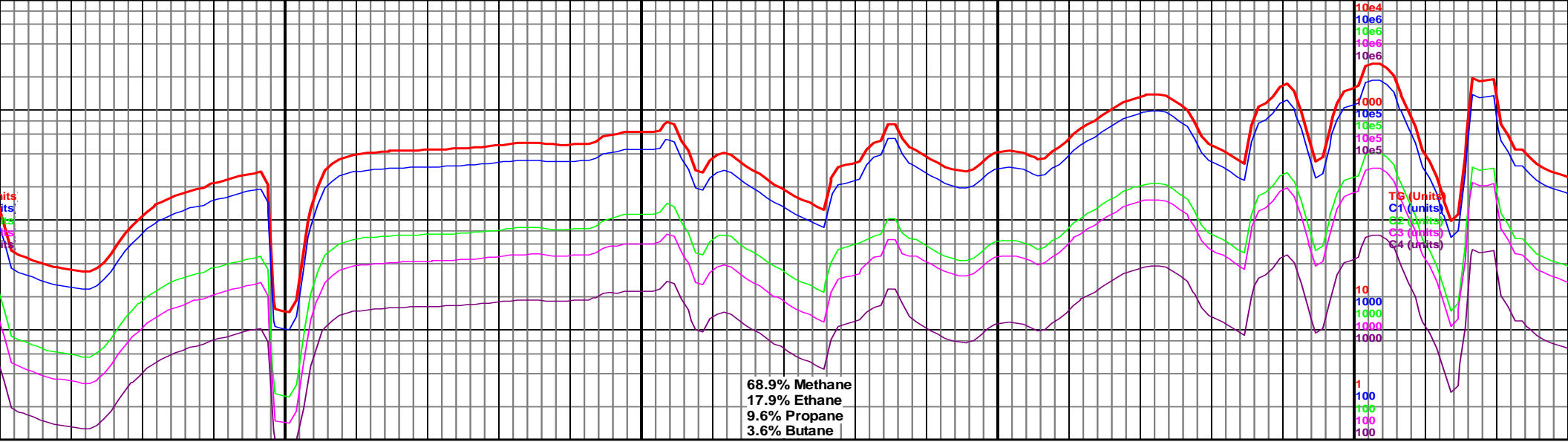
-  Core
-  Dst

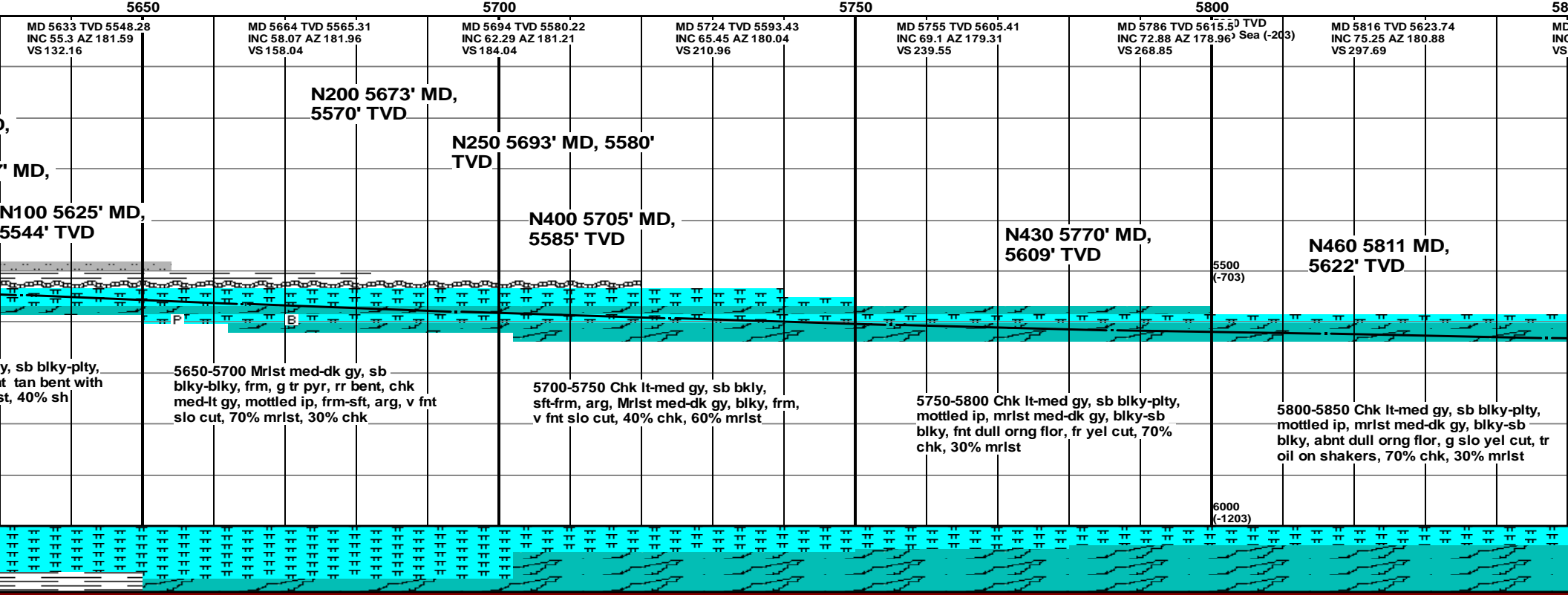
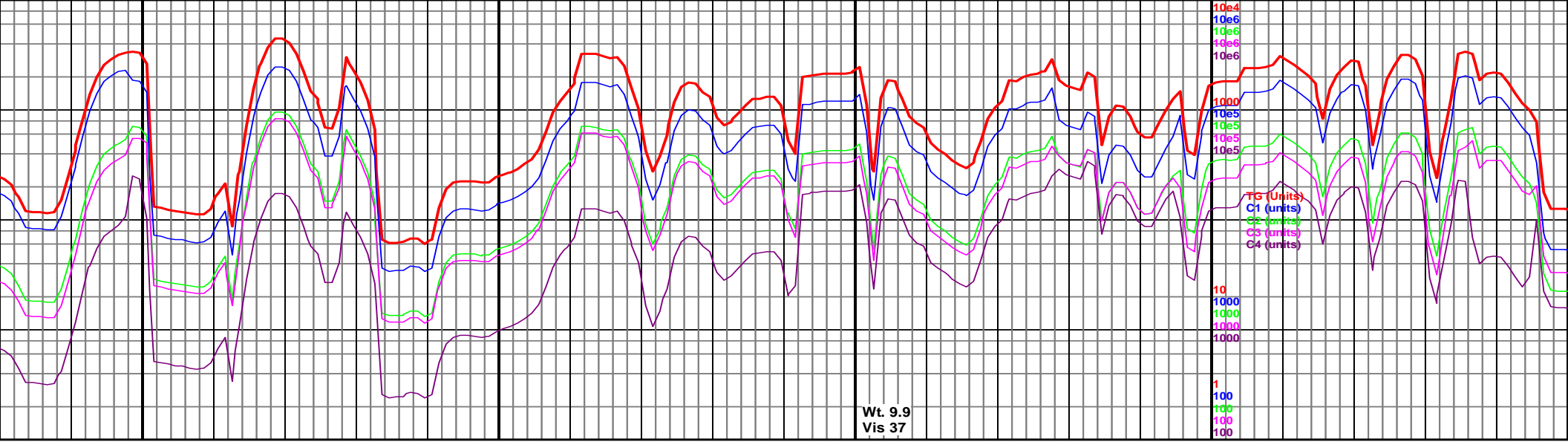
**EVENT**

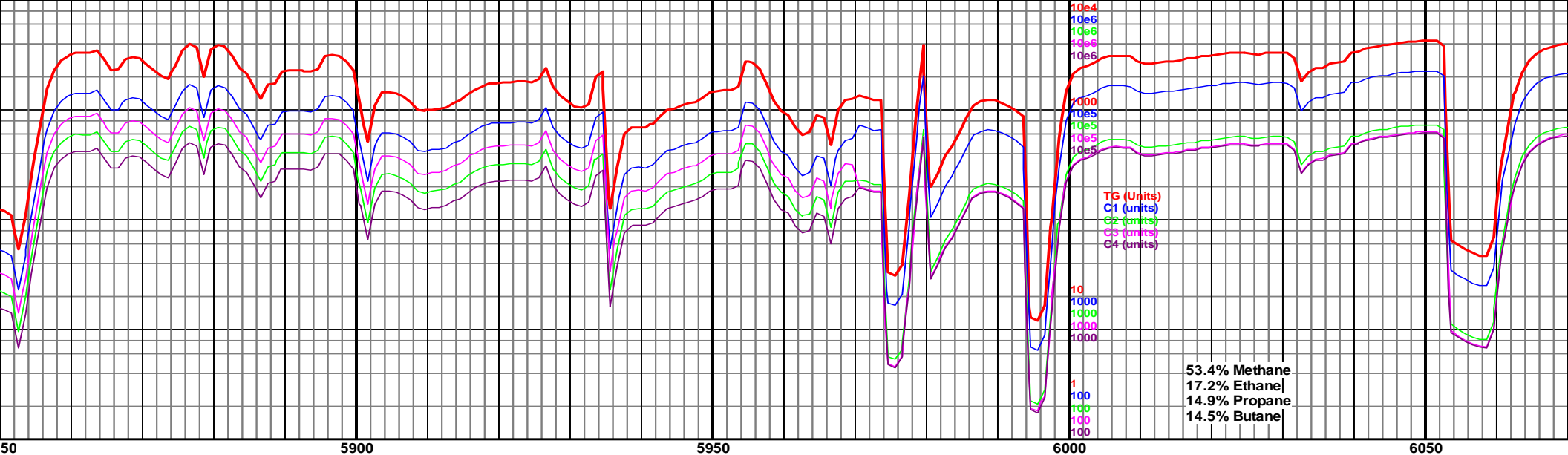
-  Rft
-  Sidewall



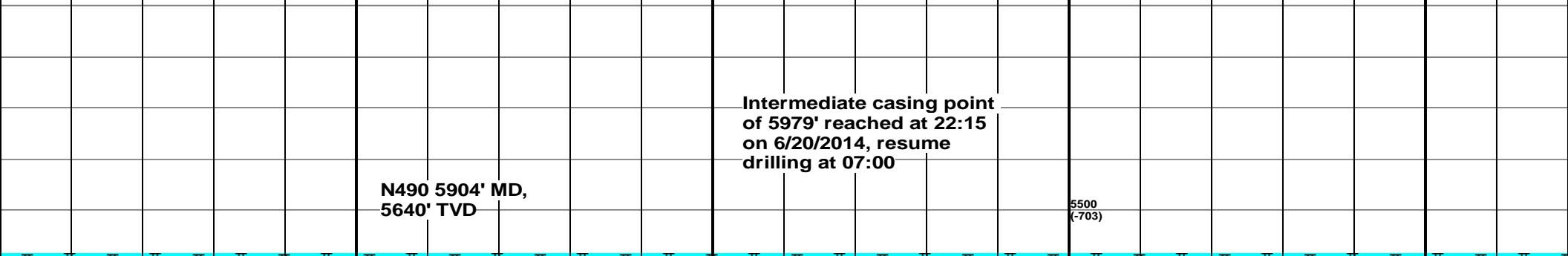




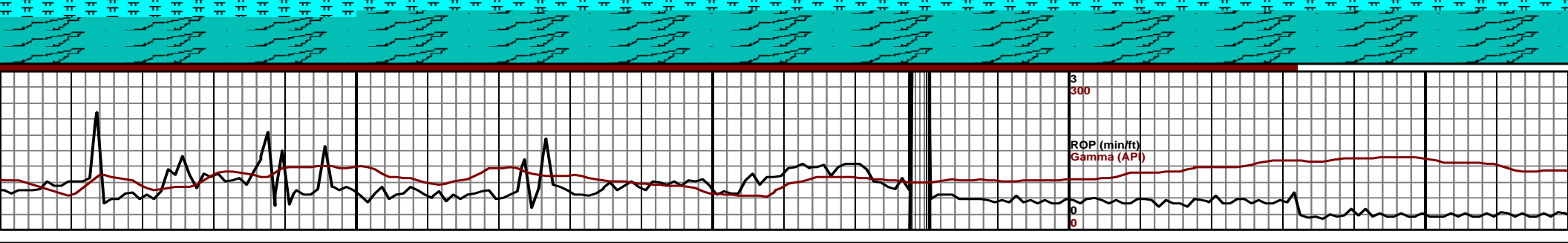




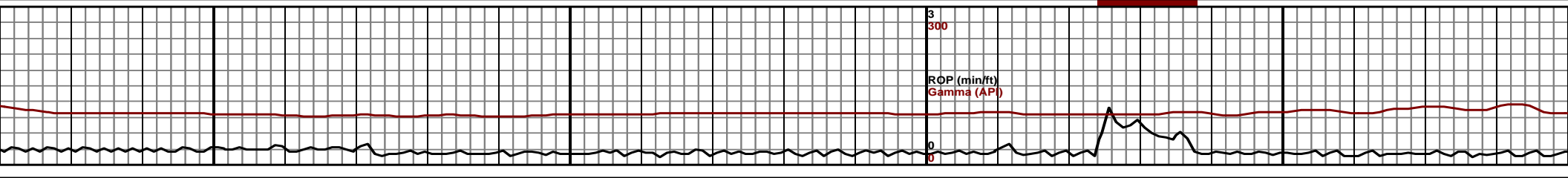
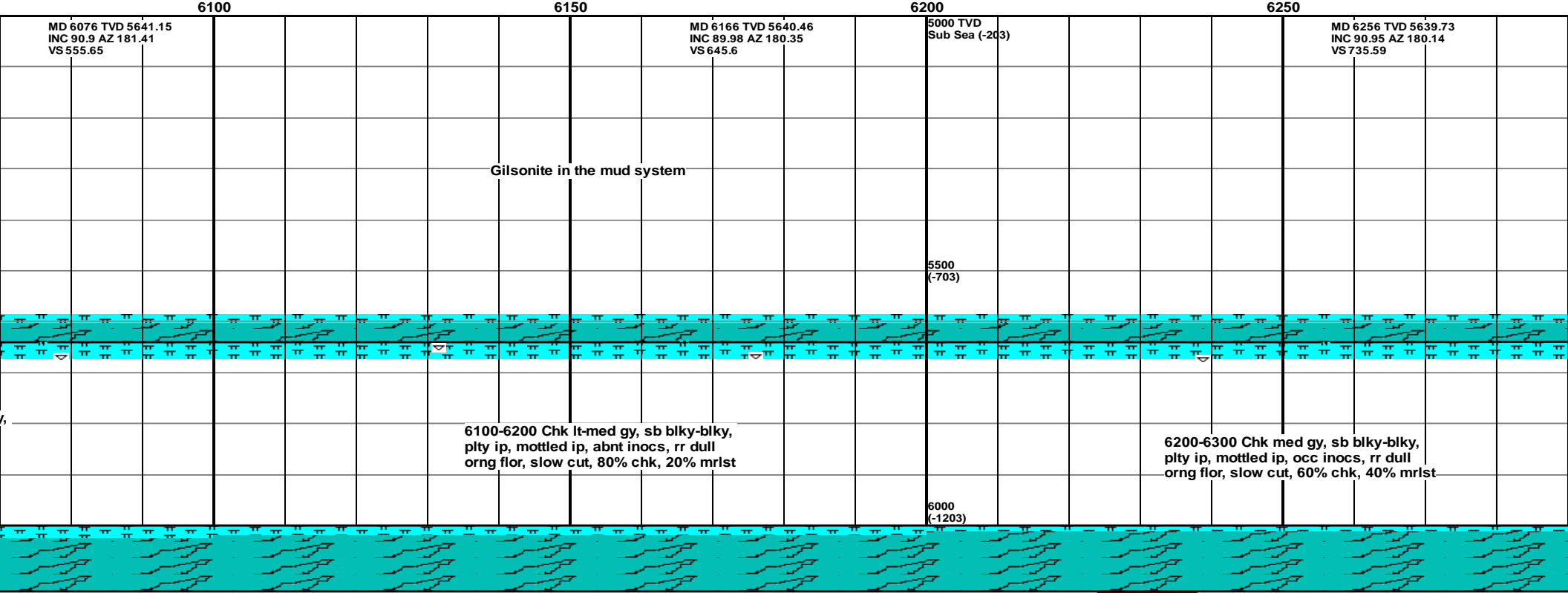
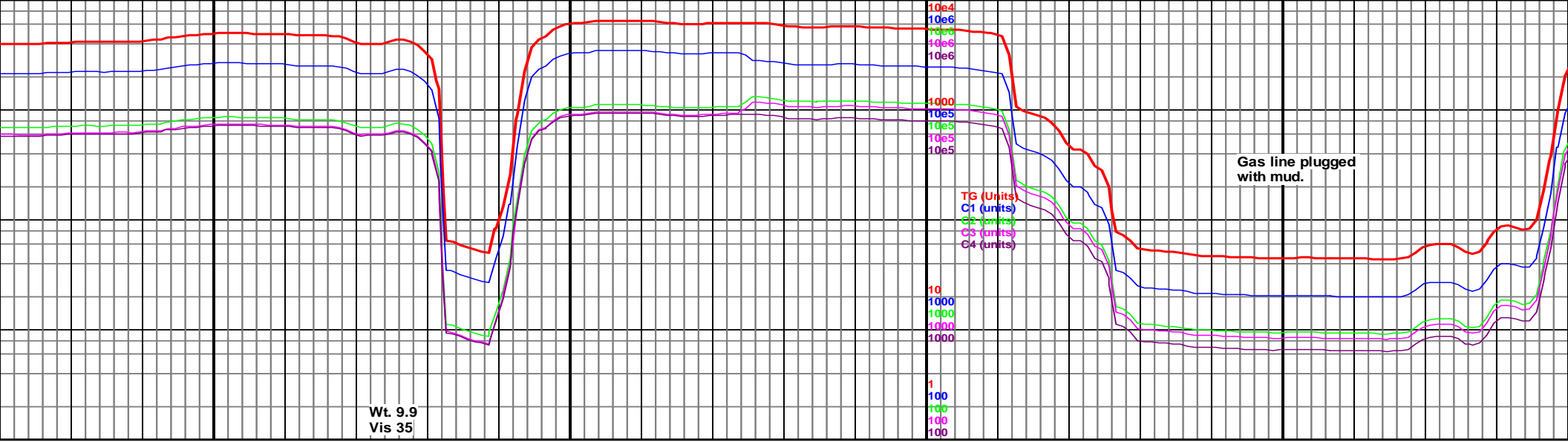
MD 5847 TVD 5631 INC 77.67 AZ 182.24 VS 327.8	MD 5877 TVD 5636.66 INC 80.57 AZ 182.26 VS 357.22	MD 5908 TVD 5640.68 INC 84.53 AZ 181.04 VS 387.93	MD 5933 TVD 5642.3 INC 88 AZ 182.26 VS 412.85	MD 5987 TVD 5642.72 VD INC 91.12 AZ 182.53 Sea (-203) VS 466.76
---	---	---	---	---

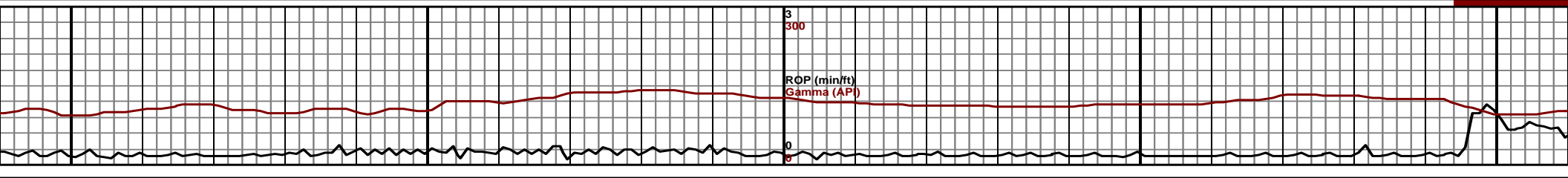
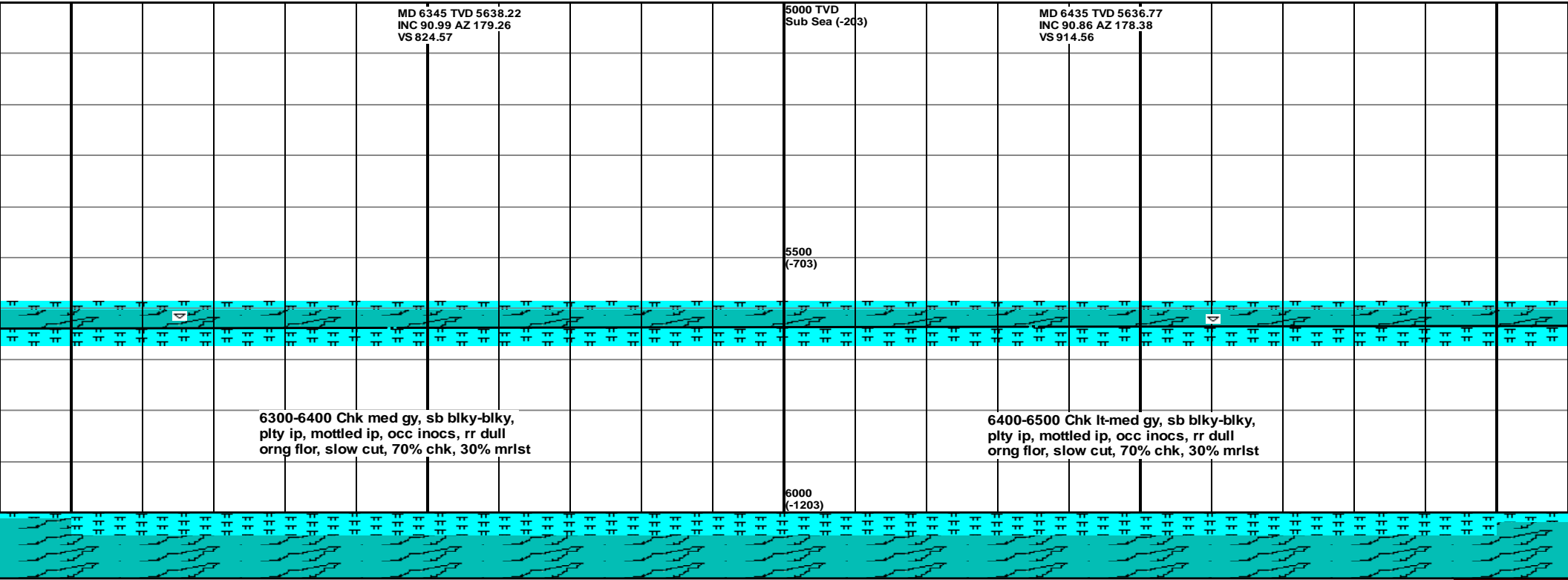
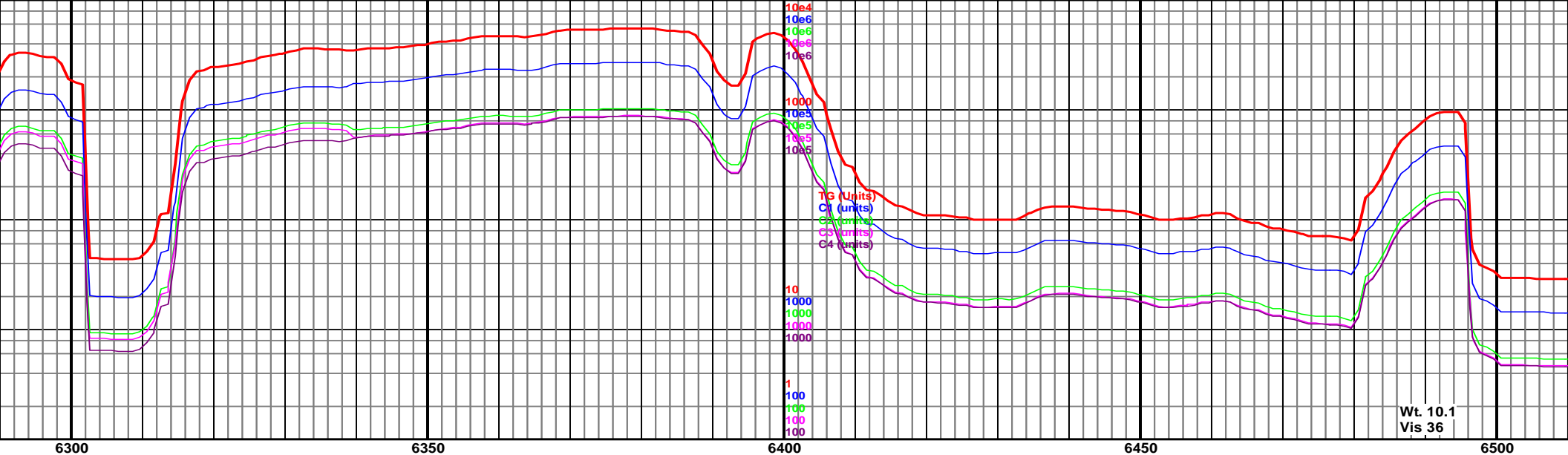


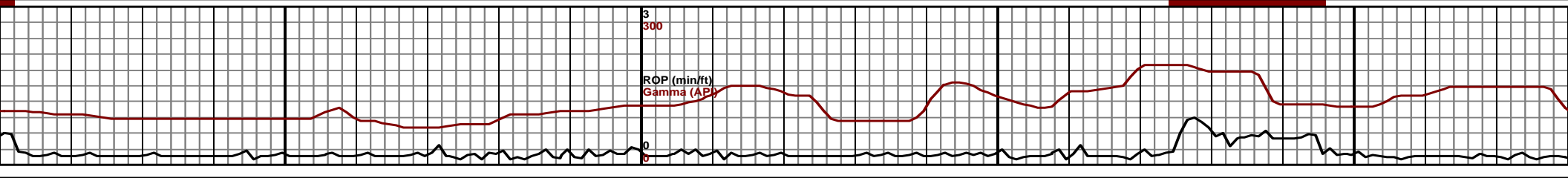
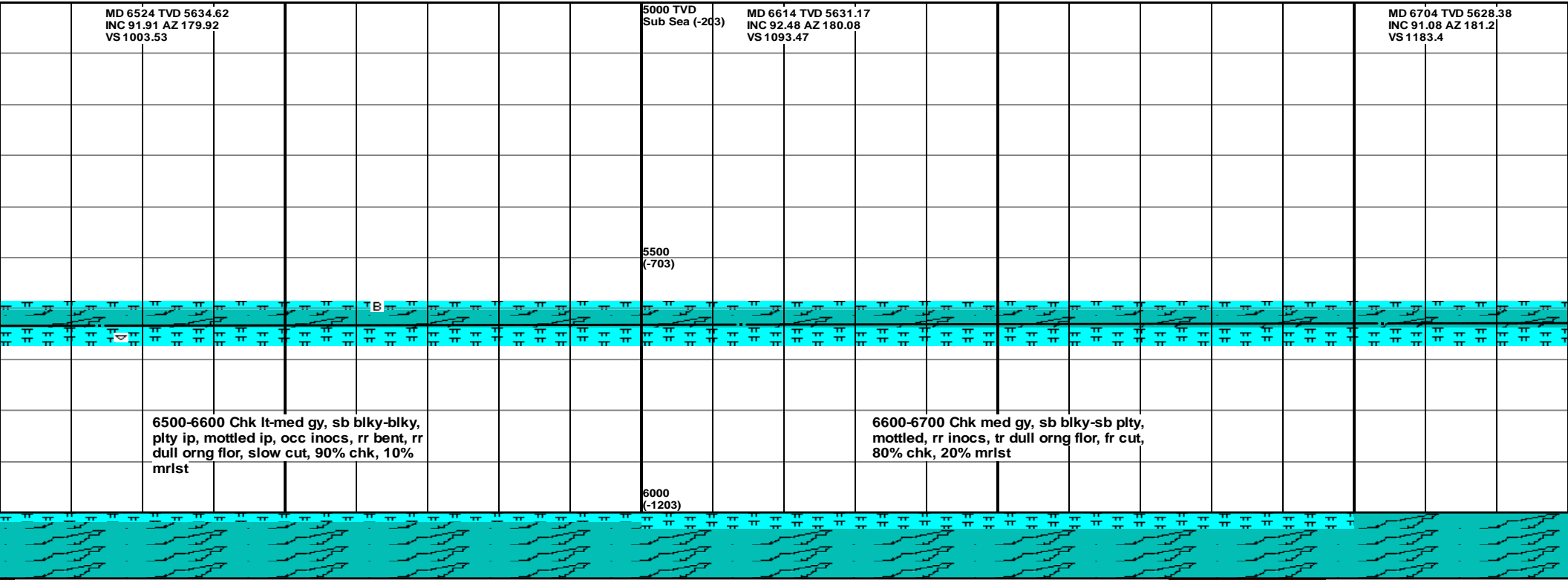
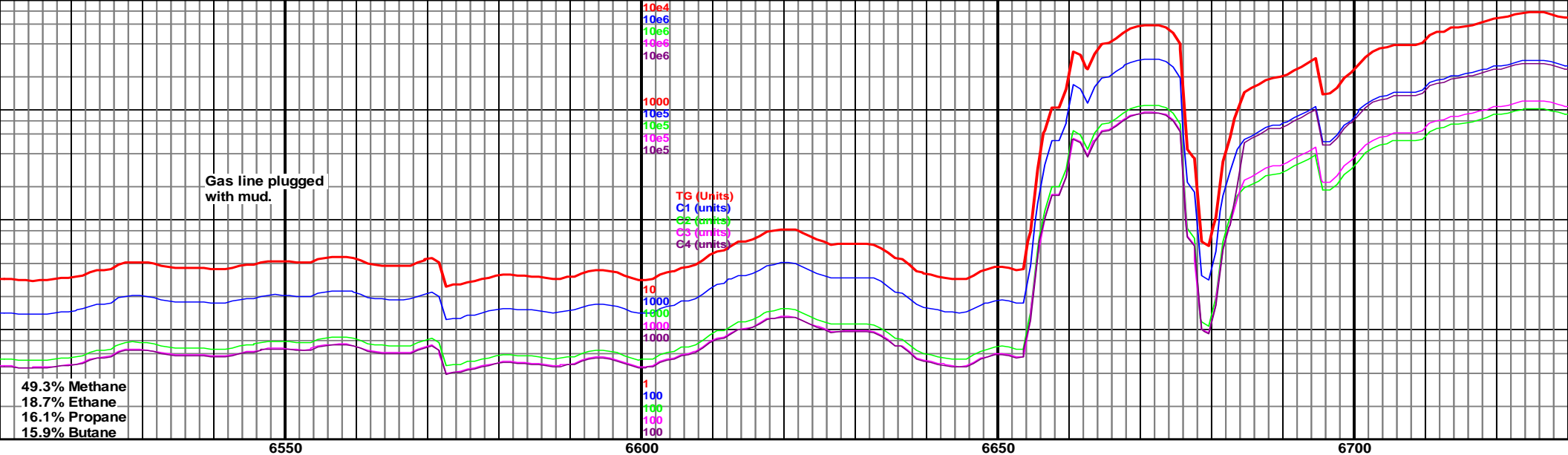
5850-5900 Chk lt-med gy, sb blkly-plty, mottled ip, mrlst med-dk gy, blkly-sb blkly, rr inoc frags, abnt dull orng flor, g slo yel cut, 70% chk, 30% mrlst	5900-5950 Chk lt-med gy, sb blkly-plty, mottled ip, abnt inoc, rr bent, rr euhedral pyr, mrlst a/a, abnt dull orng flor, 80% chk, 20% mrlst	5950-6000 Chk lt-med gy, blkly-sb plty, mottled ip, abnt inoc, rr bent, rr xln cal, rr dull orng flor, 80% chk, 20% mrlst	6000-6100 Chk lt-med gy, blkly-sb plty, mottled ip, abnt inoc, rr bent, rr xln cal, rr dull orng flor, 80% chk, 20% mrlst
--	---	---	---





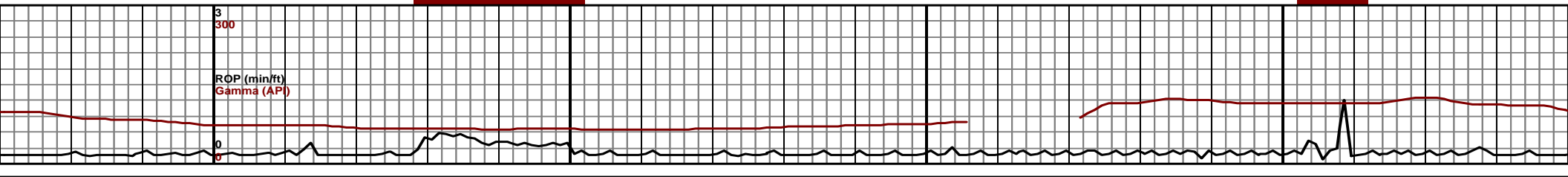
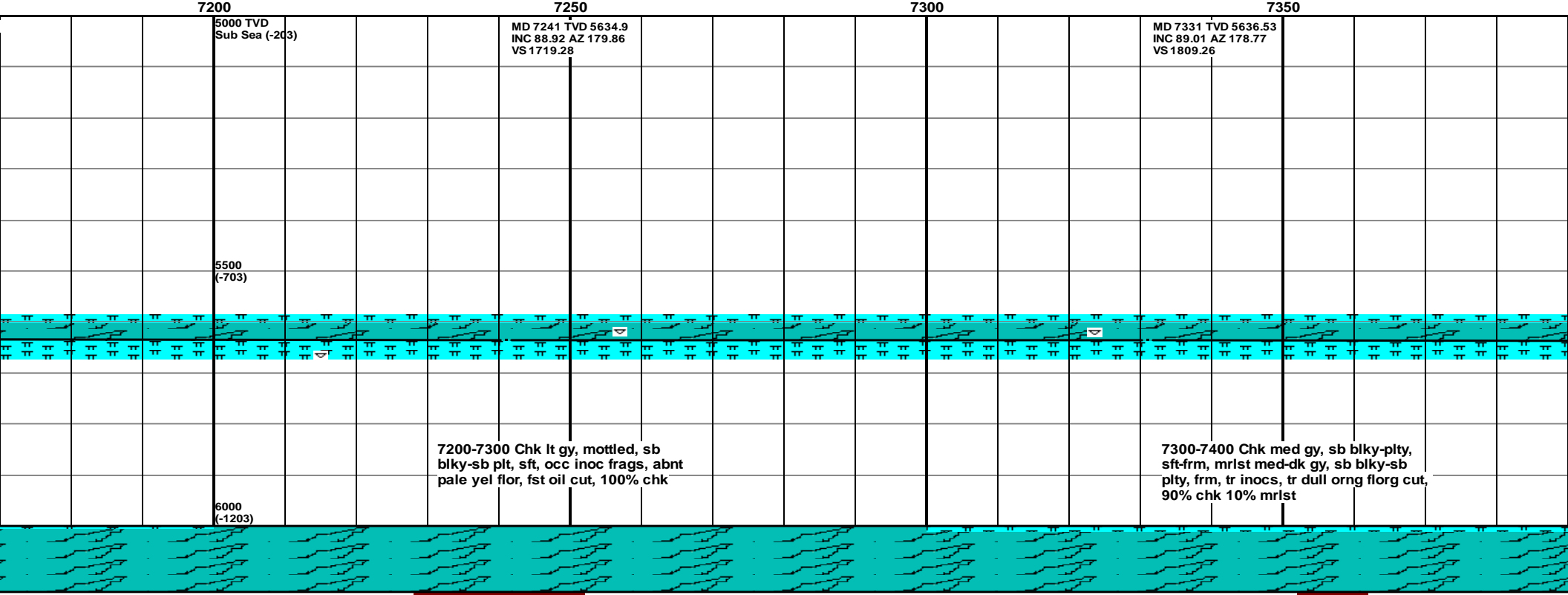
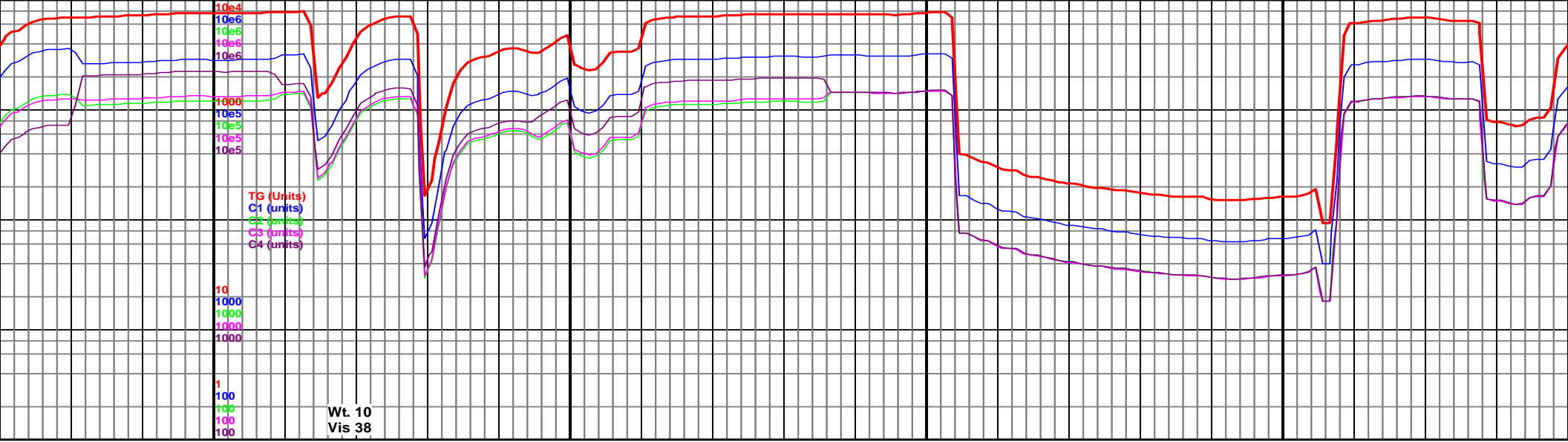


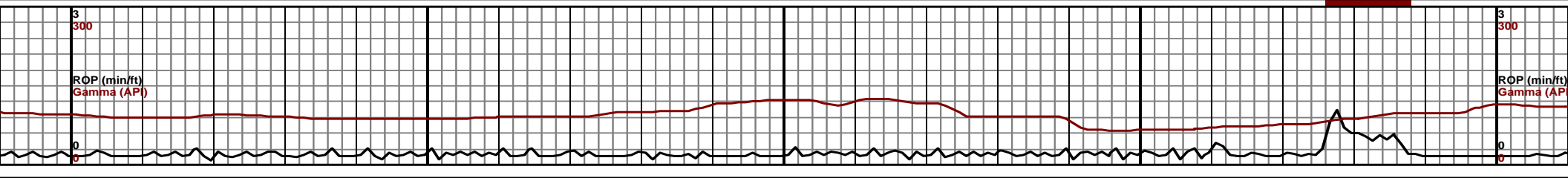
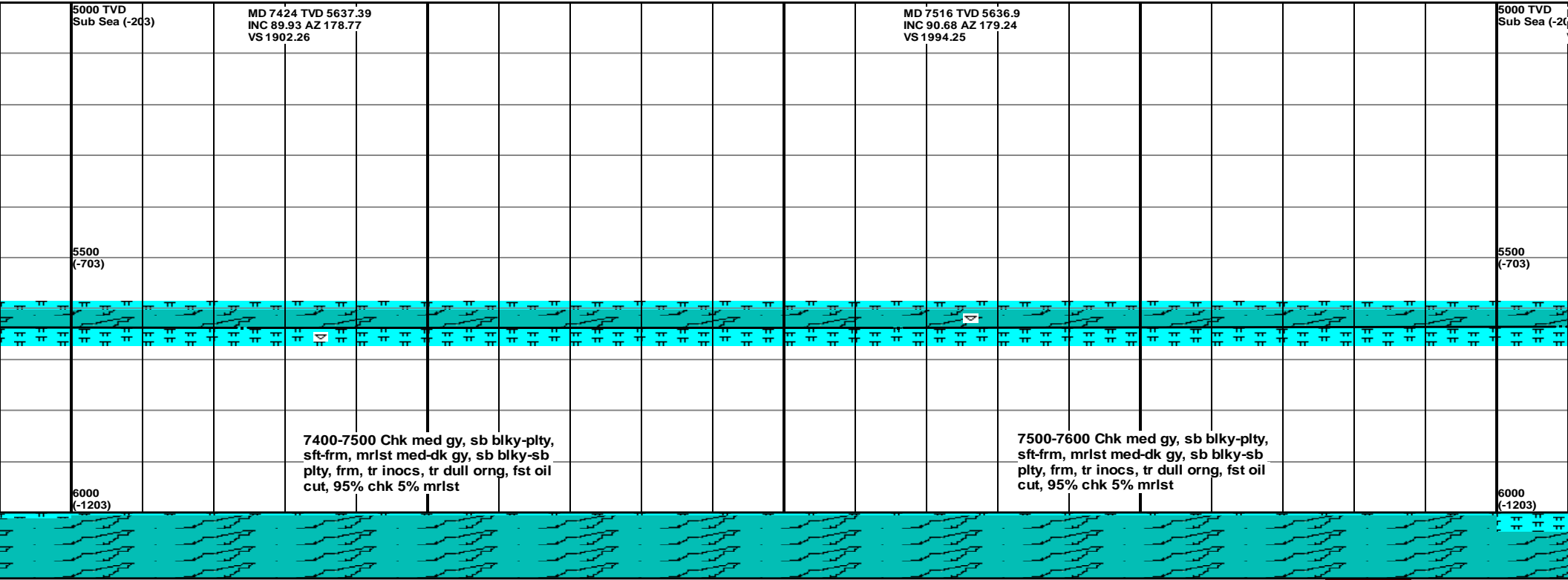
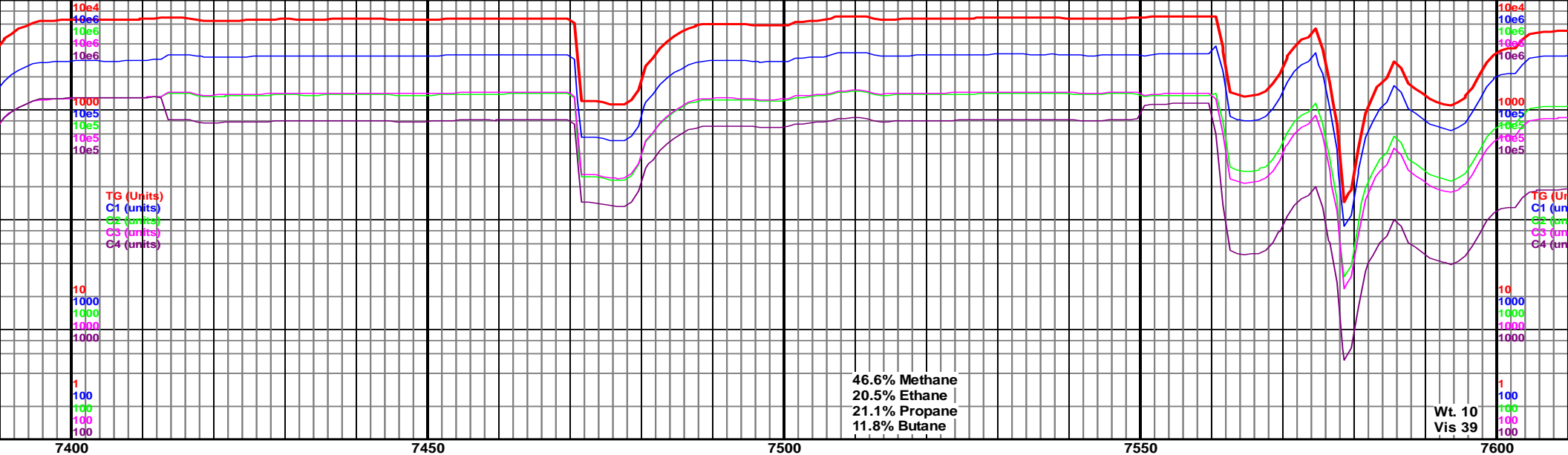


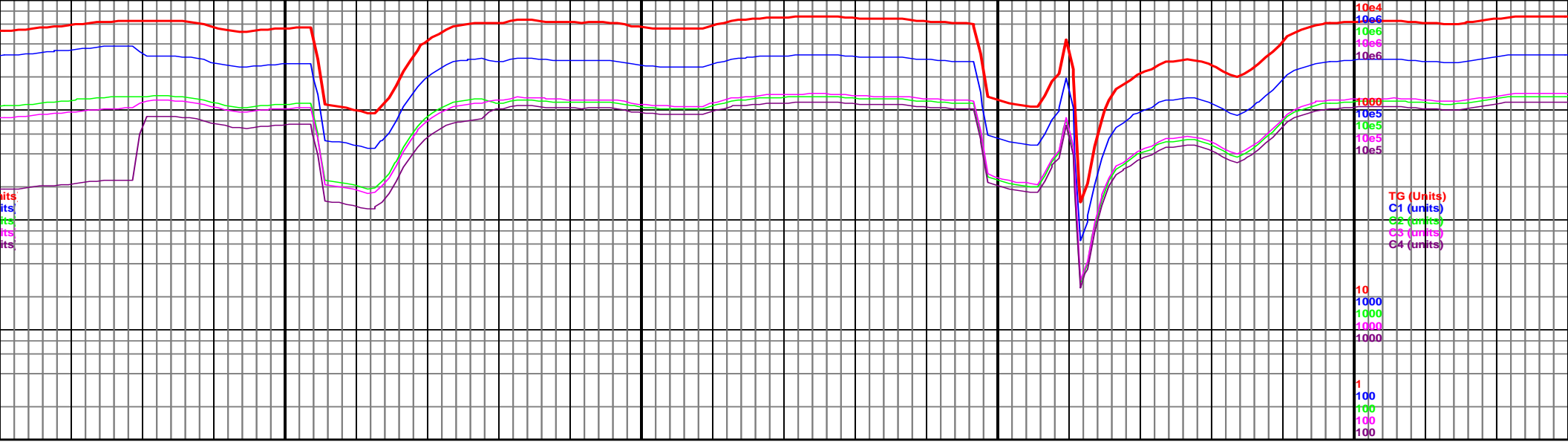




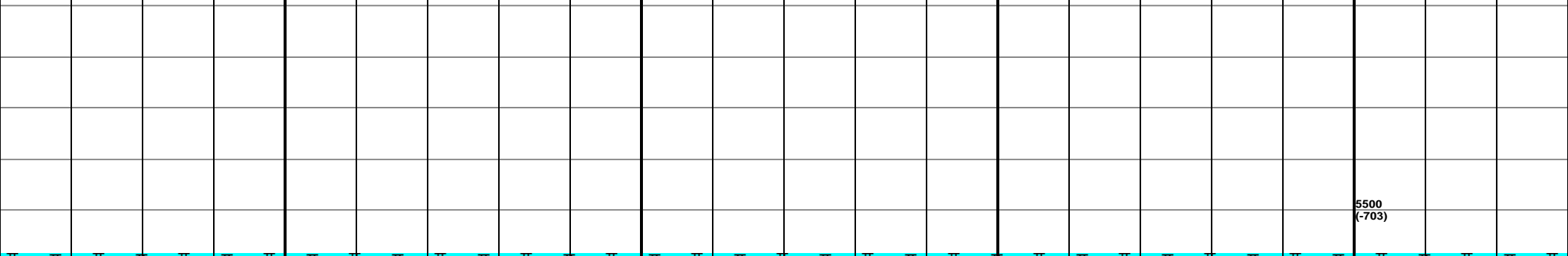








MD 7609 TVD 5636.64 INC 89.63 AZ 177.87 VS 2087.24	MD 7701 TVD 5636.71 INC 90.29 AZ 177.21 VS 2179.2	MD 7792 TVD 5637.12 INC 89.19 AZ 177.32 <sup>(43)</sup> VS 2270.14
--	---	--



7600-7700 Chk med gy, sb blkly-plty,  
sft frm, occ mrlst med-dk gy, sb  
blkly-sb plty, frm, tr inocs, rr bent, tr  
dull orng, fst oil cut, 65% chk 35%  
mrlst

7700-7800 Chk med gy, sb blkly-plty,  
sft frm, occ mrlst med-dk gy, sb  
blkly-sb plty, frm, rr inocs, rr bent, tr  
dull orng, fst oil cut, 50% chk 50%  
mrlst

