



E-logs

MWD Gamma 6850' - 16,715'  
MWD Resistivity (no resistivity)

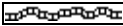

Casing

9 5/8" Surface Casing set @ 994'  
7" Casing Set @ 7938'  
4.5" Liner Set to 16672'


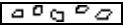
Comments

1) Drilling Contractor: Xtreme Drilling, Rig # 22  
Rig Manager: Victor Davis / Tyler Humphrey  
2) Company Man: Scott Hancock / Butch Beddingfield  
Jack Sanders / Cody Sanders  
3) Well Site Geologists: Goolsby Brothers & Assoc. :  
Robert Nordek / Jack Rogers / Phillip Willcox  
4) Mud Company : AES Drilling Fluids,  
Mud Engineer: Sam Evans / Michael Cook  
5) Directional Drilling: Sperry / Halliburton  
Drillers: Randy Bernatow,  
MWD: Clay Wass / Caleb Jones  
6) Gas Equipment: Mudlogging Systems Inc.  
by Terra Services  
Redbox # ML-058 w/ Ratcliff Agitator



ROCK TYPES





Anhy  
Bent





Brec  
Cht



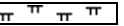

Clyst  
Coal





Oil sat.  
Congl




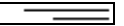
Dol  
Gyp





Lmst  
Mrlst





Salt  
Shale



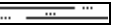

Shcol  
Shgy



Ss  
Sltst



Ss  
Chalk




Carb sh  
Sltly sh

ACCESSORIES



MINERAL  
Anhy  
Arggrrn  
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  
Chlkstg  
Anhy  
Arg  
Bent  
Coal  
Dol  
Gyp



Ls  
Mrst  
Sltstrg  
Ssstrg



TEXTURE  
Boundst  
Chalky



Cryxln  
Earthy  
Finexln  
Grainst  
Lithogr  
Microxln  
Mudst  
Packst



Wackest

OIL SHOWS

- Even
- Spotted



Ques



Dead



Vspotty



near even

POROSITY TYPE

- Earthy
- Fenest



Fracture



Inter



Moldic

OTHER SYMBOLS



Organic



Pinpoint



Vuggy

ROUNDING

- Rounded
- Subrnd



Subang



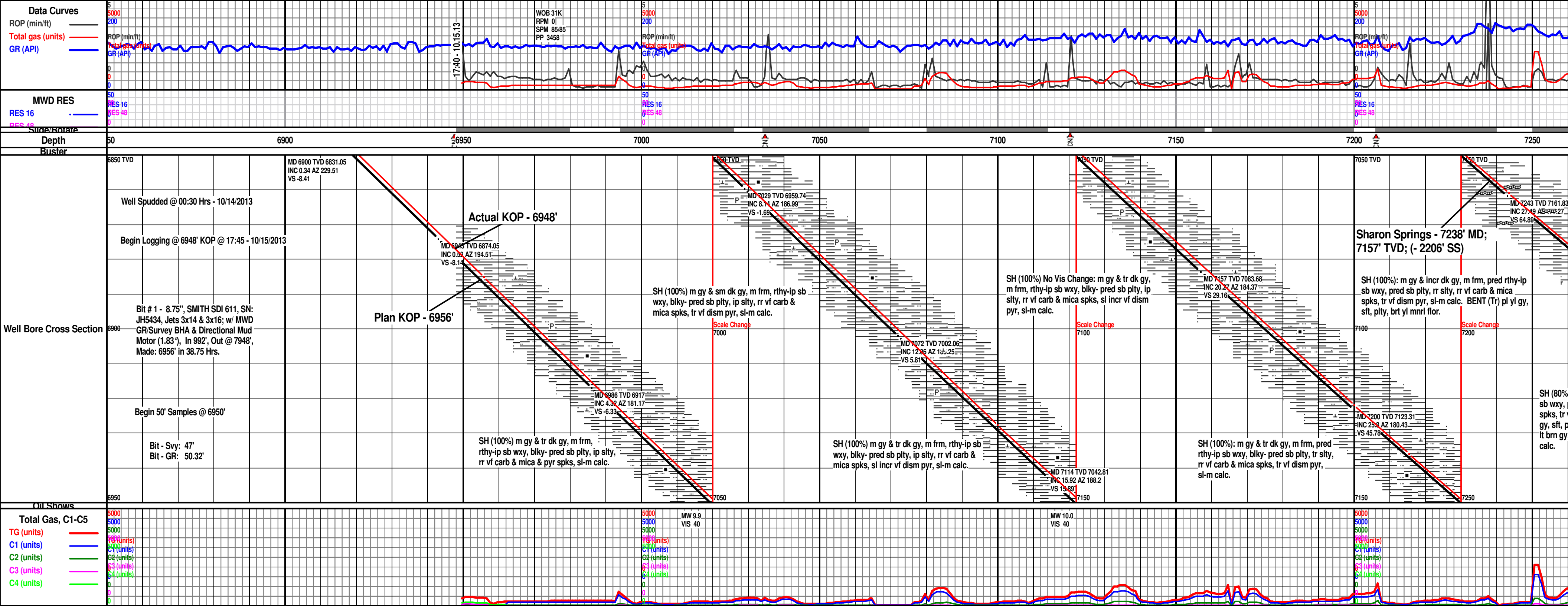
Angular

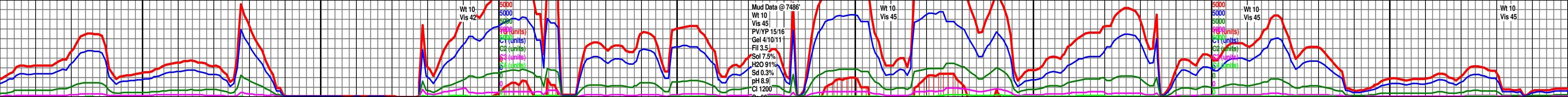
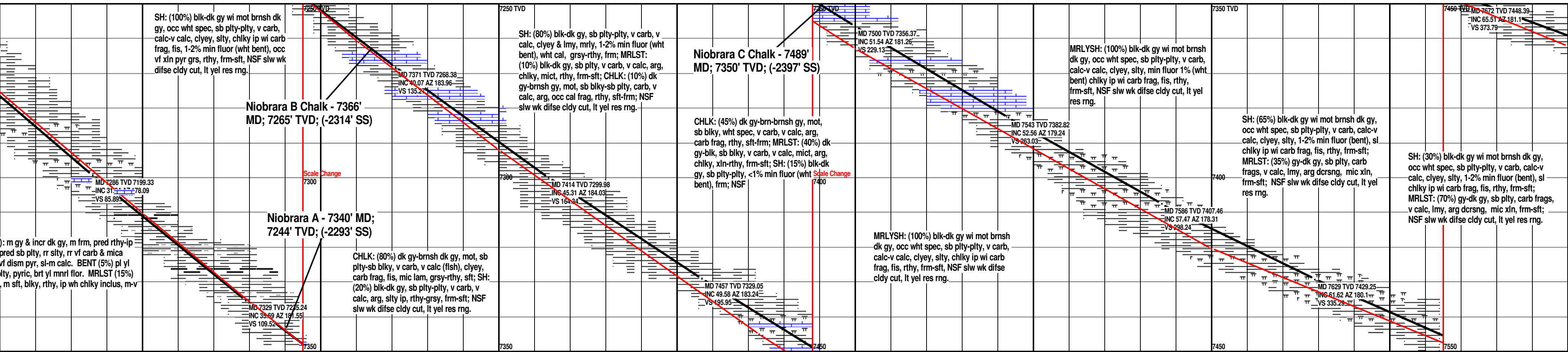
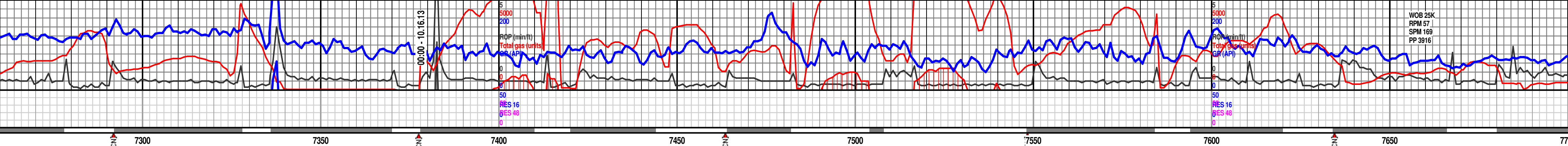
SORTING

- Well
- Moderate



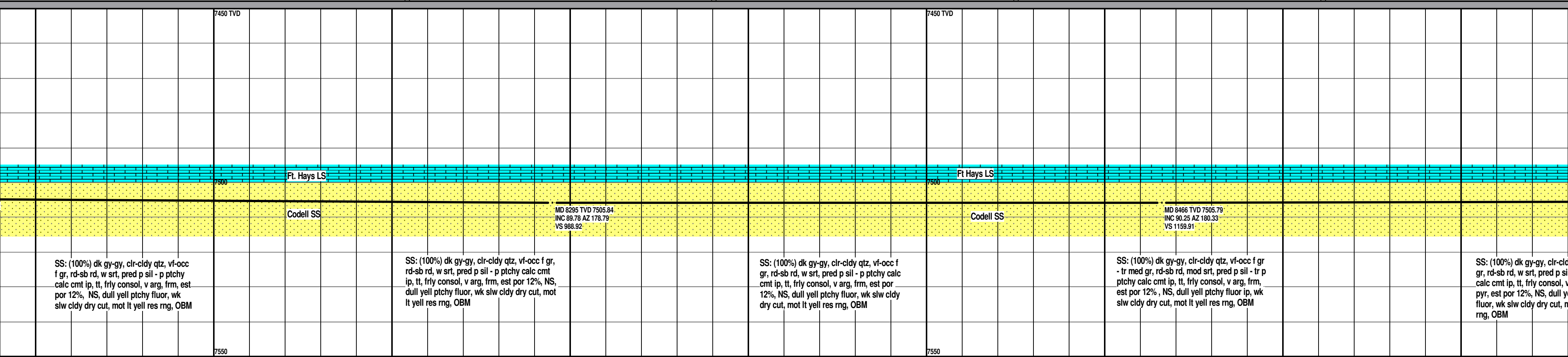
Poor

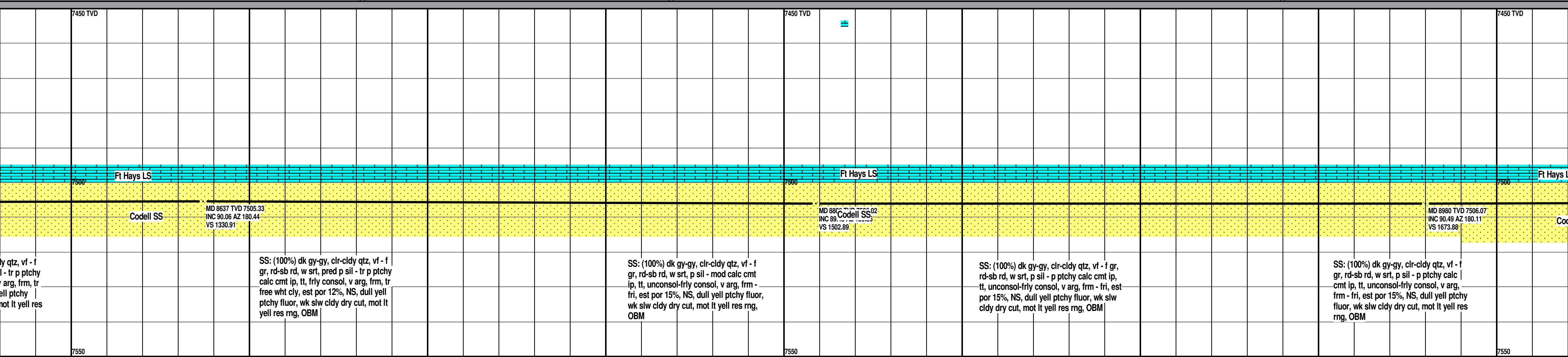




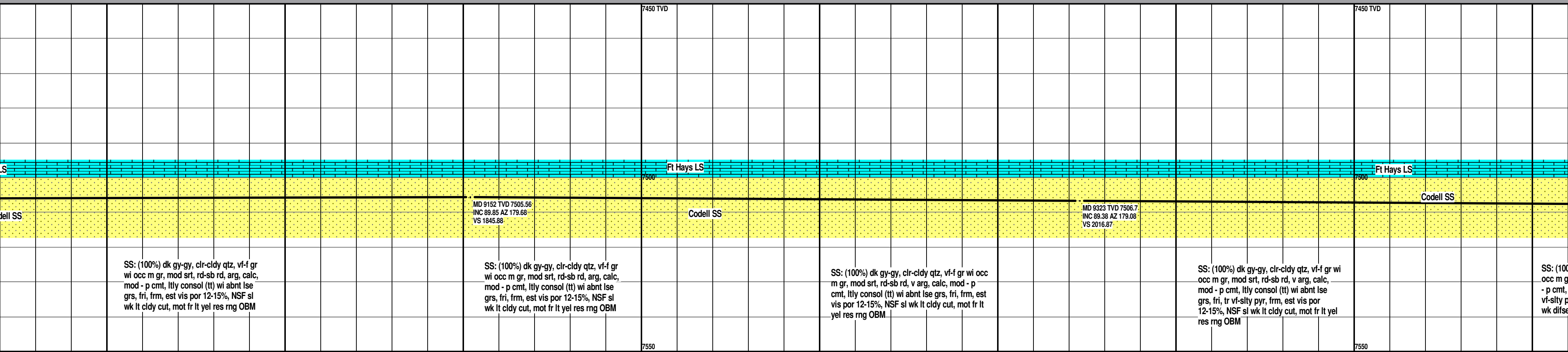


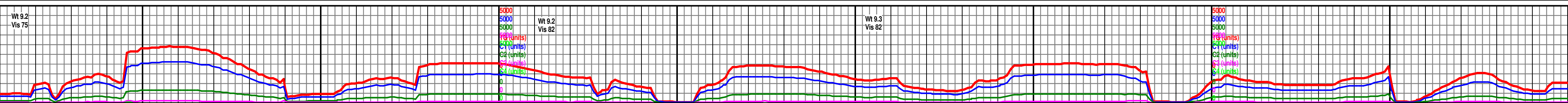
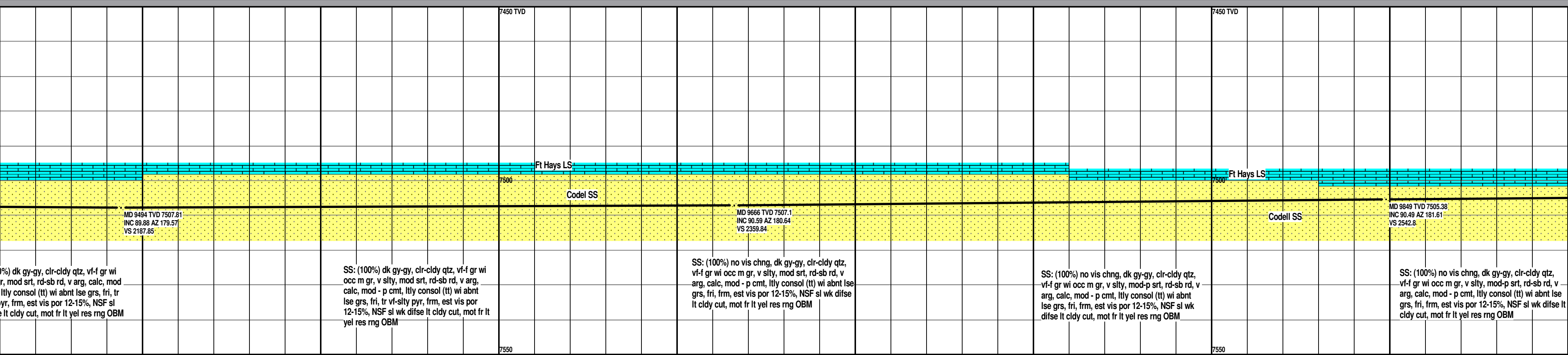
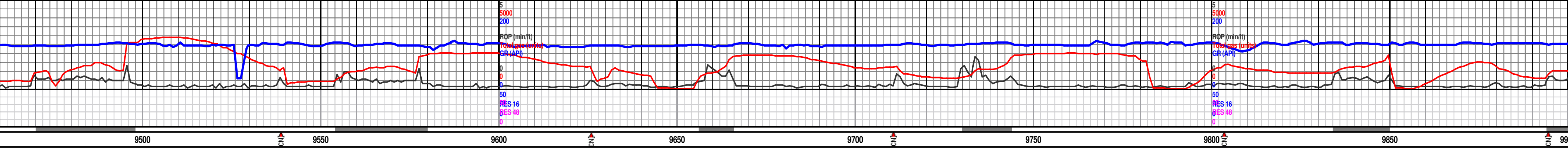


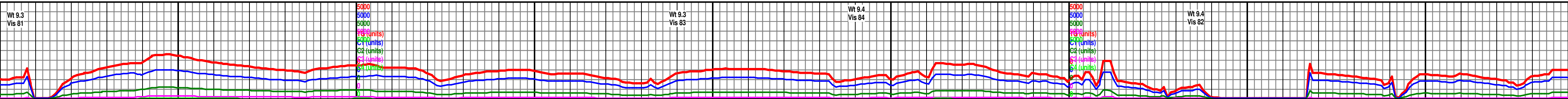
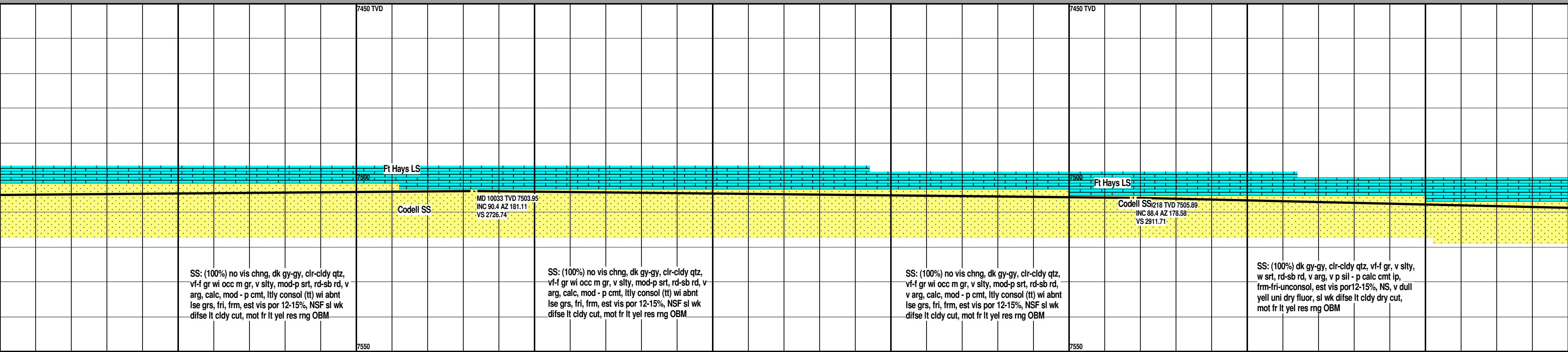
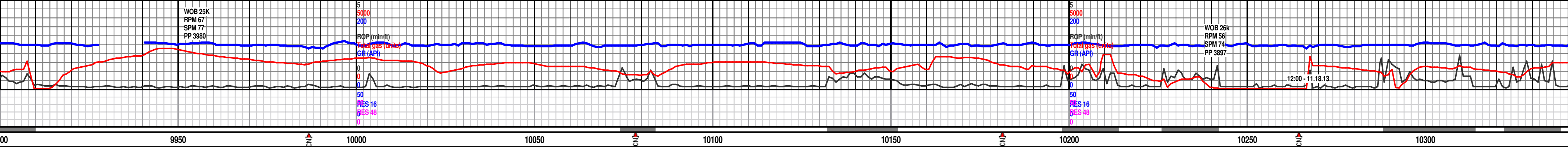


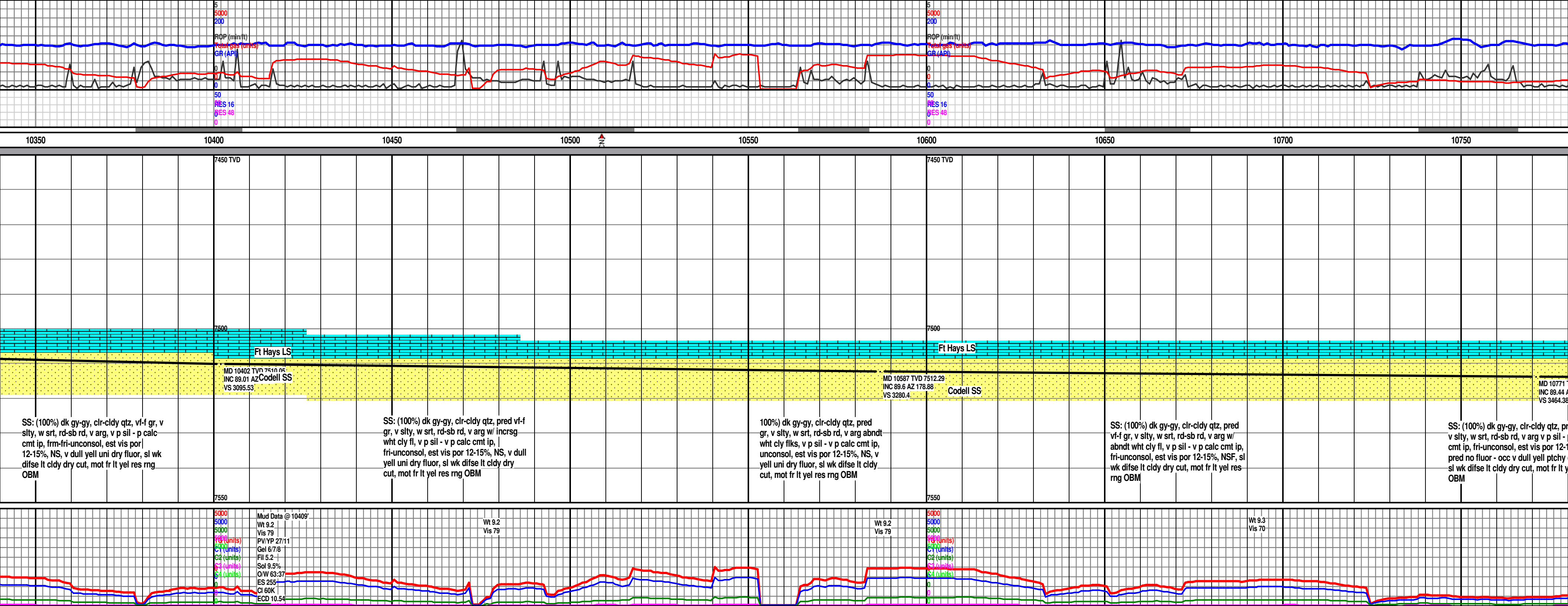


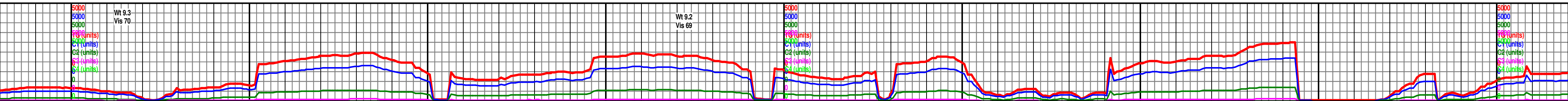
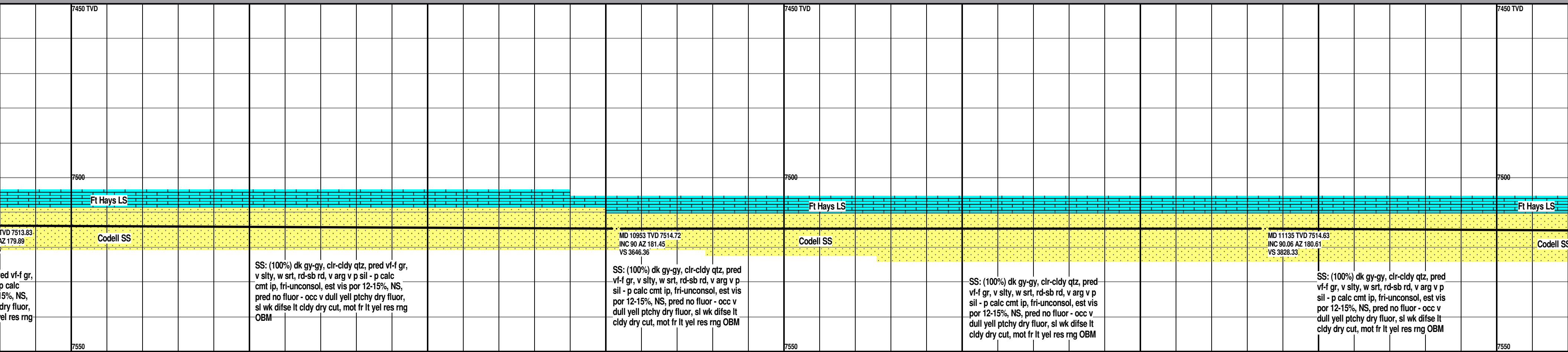
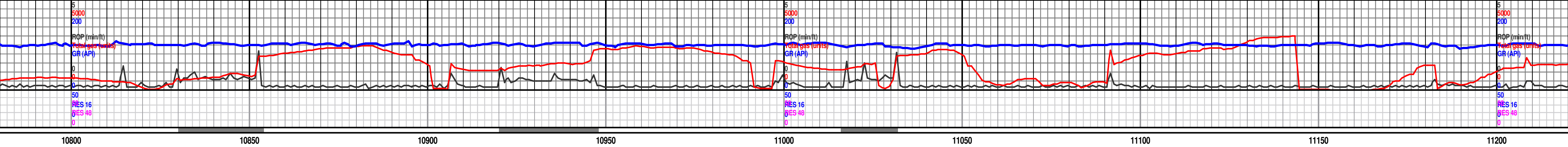




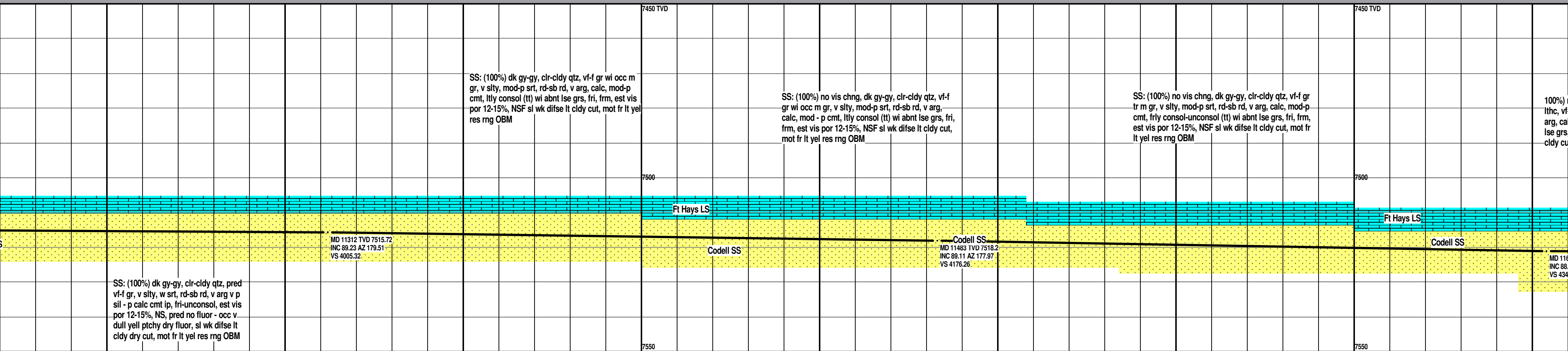


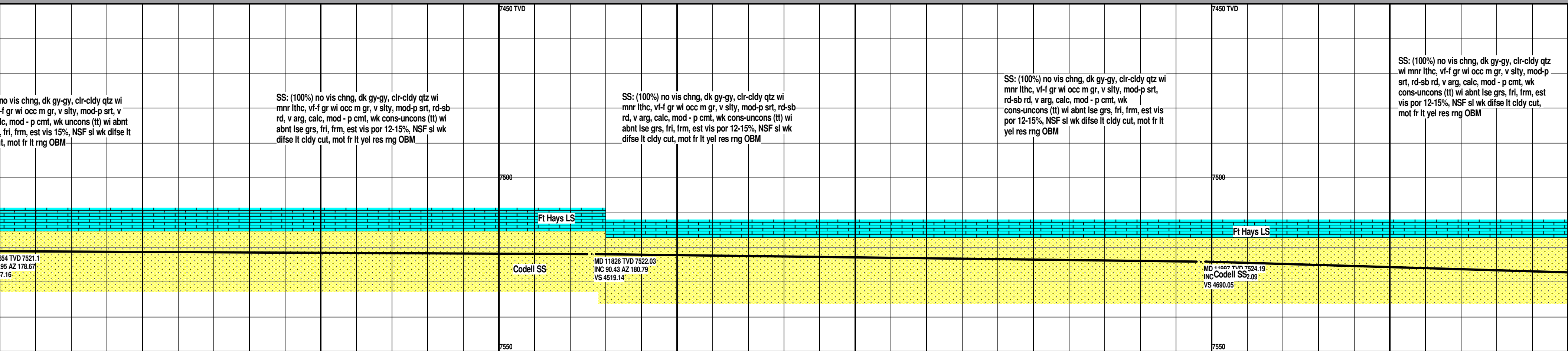


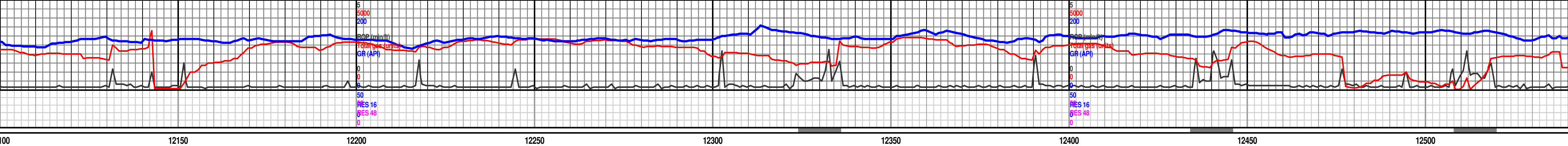












SS: (100%) no vis chng, dk gy-gy, clr-cldy qtz wi mn lthc, vf-f gr wi occ m gr, v slty, mod-p srt, rd-sb rd, v arg, calc, mod - p cmt, wk cons-uncons (tt) wi abnt lse grs, fri, frm, est vis por 12-15%, NSF sl wk difse lt cldy cut, mot fr lt yel res rng OBM

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Ft Hays LS

Codell SS

MD 12169 TVD 7529.37  
INC 88.43 AZ 181.45  
VS 4861.89

MD 12341 TVD 7531.45  
INC 90.18 AZ 183.11  
VS 5033.73

Ft Hays LS

Codell SS

MD 12512 TVD 7532.62  
INC 89.04 AZ 183.06  
VS 5204.48

