

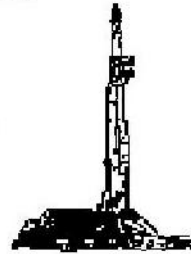
**GOOLSBY BROTHERS**  
and associates, inc.

575 Union Blvd, Suite 208  
Lakewood, CO 80228  
303-945-2860 Office



Geological Wellsite  
Supervision

[www.goolsbybrothers.com](http://www.goolsbybrothers.com)



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

Well Name: Douthit 16C-27HC

API: 05-123-39584

Location: Section 26, T3N, R68W

License Number:

Spud Date: 10/1/2014

Region: Wattenberg, DJ Basin

Drilling Completed:xx

Surface Coordinates: NESE Sec 26 T3N R68W; 1628' FSL & 416' FEL

Lat N 40.194254 Long W -104.96212

Bottom Hole Proposed: Sec 27 T3N 68W; 815' FSL 300' FEL

Coordinates:

Ground Elevation (ft):4925'

K.B. Elevation (ft): 4941'

Logged Interval (ft):6800'

To: 12949'

Total Depth (ft):12949

Formation: Pierre Shales/Sands, Niobrara, Codell Target

Type of Drilling Fluid:Water & Poly, LSND

Printed by HORIZONTAL.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.co](http://www.WellSight.co)

**OPERATOR**

Company: Kerr-McGee Oil & Gas Onshore LP

Address: Granite Tower - 1099 18th St, Ste 1800

Denver, CO 80202

CO Geologist, Ian Harris

**GEOLOGIST**

Name: Brian Spitzmiller, Jack R. Rogers

Company: Goolsby Brothers & Assoc. (GBA), Inc. ([www.goolsbybrothers.com](http://www.goolsbybrothers.com))

Address: 575 Union Blvd.

Suite 208,

Lakewood CO. 80228

## E-logs

MWD GR 6400-12884'


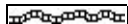
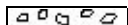

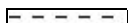

## Casing





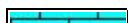
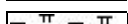
9 5/8" Surface Casing set @ 1244' MD  
7" Intermediate Casing set @ 7743' MD  
4 1/2" Production Liner hung 10/xx/2014, landed @ xx'


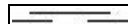
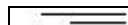


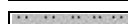
## Comments





- 1) Drilling Contractor: Xtreme Drilling, Rig #20  
Toolpusher: Joseph Contreras & Jared Glass
- 2) Company Man: Charlie Daigle & Wade Mulligan
- 3) Mud Company : AES  
Engineer: Gober Howell
- 4) Directional Drilling: Baker Hughes  
Pulse Tool  
Drillers: Kenny King & Josh Backus  
MWD: Barry Combs & Travis Wilcox
- 5) Gas Equipment: Pason Systems
- 6) Wellsite Geology: Goolsby Brothers & Associates  
Geologists: Brian Spitzmiller, Jack R. Rogers

## 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
	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

	Chlkgstg
	Anhy
	Arg
	Bent
	Coal

	Dol
	Gyp
	Ls
	Mrst
	Sltstrg
	Ssstrg

### TEXTURE

	Boundst
	Chalky
	Cryxln
	Earthy
	Finexln
	Grainst
	Lithogr
	Microxln
	Mudst
	Packst
	Wackest

## OTHER SYMBOLS

### OIL SHOWS

	Even
	Spotted
	Ques
	Dead
	Vspotty
	near even

### POROSITY TYPE

	Earthy
	Fenest
	Fracture
	Inter
	Moldic
	Organic

	Pinpoint
	Vuggy

### ROUNDING

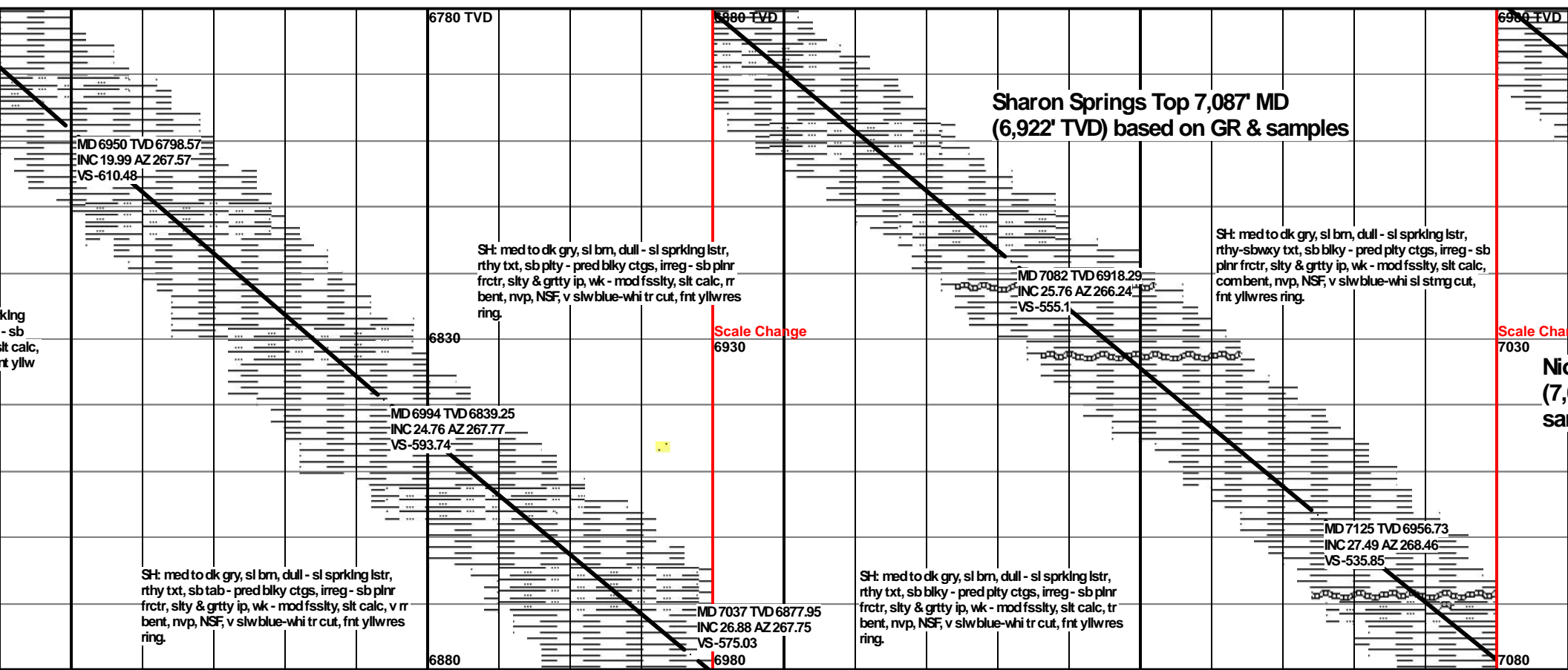
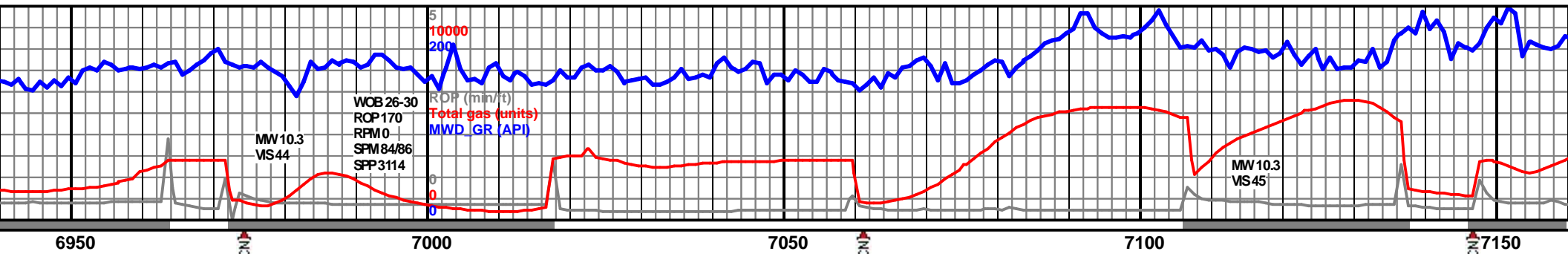
	Rounded
	Subrnd
	Subang

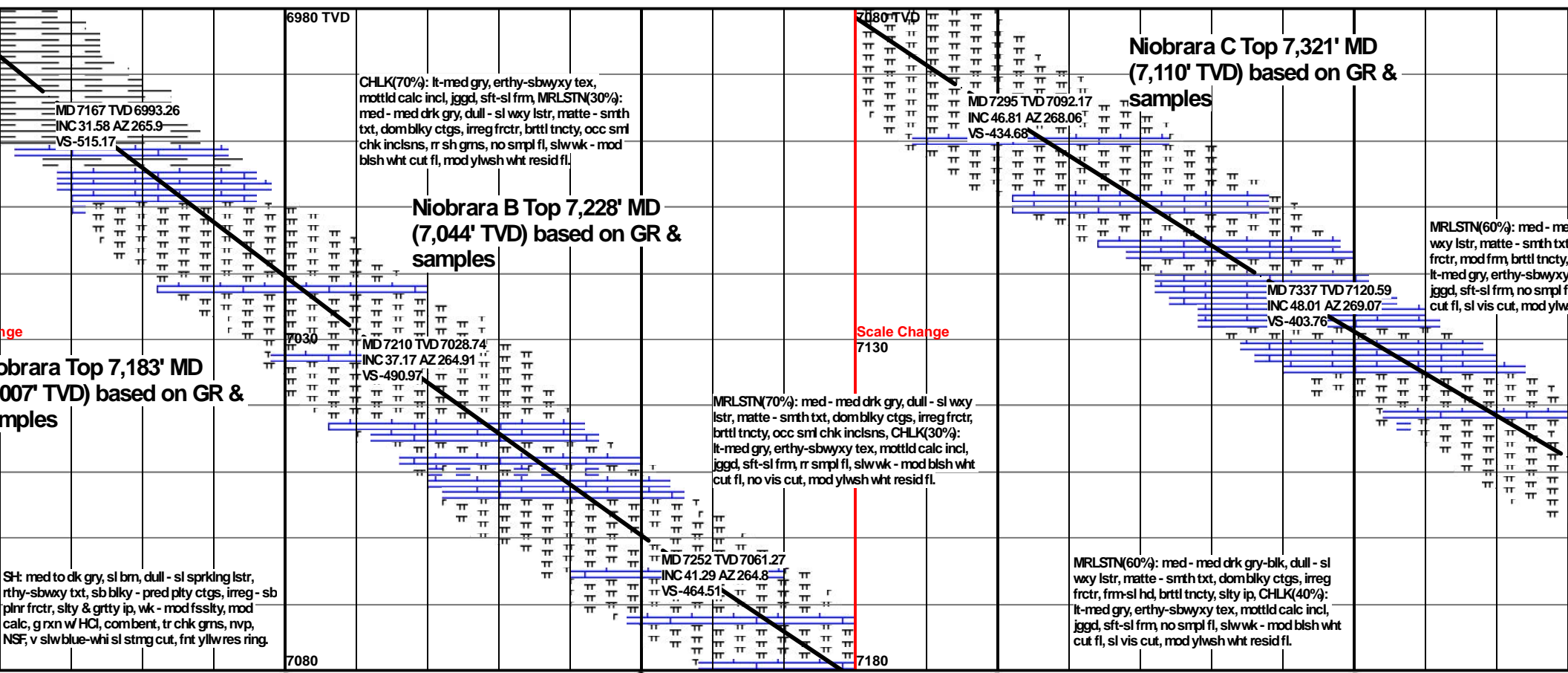
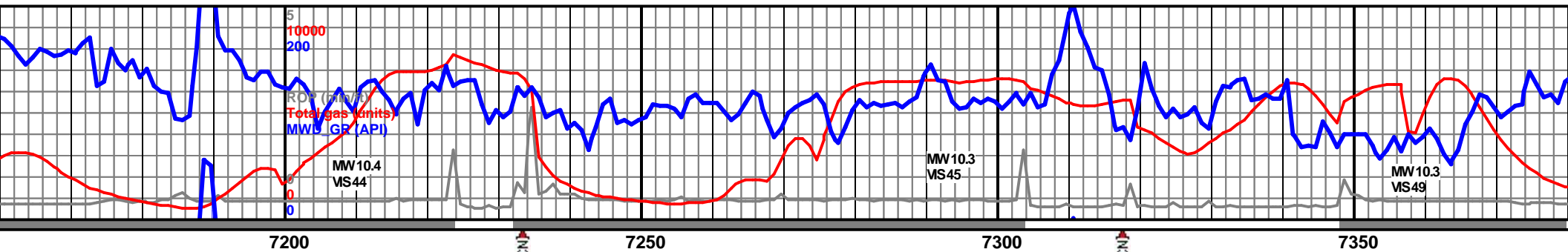
	Angular
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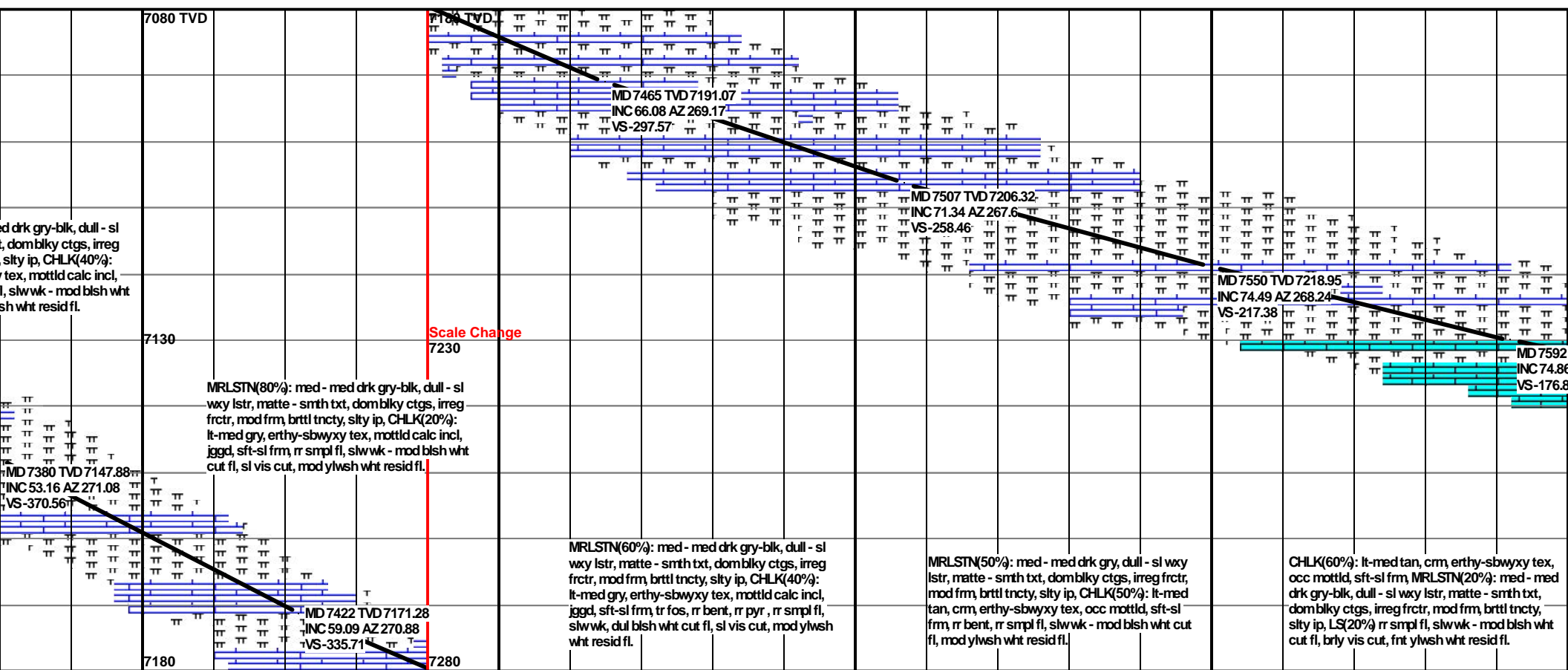
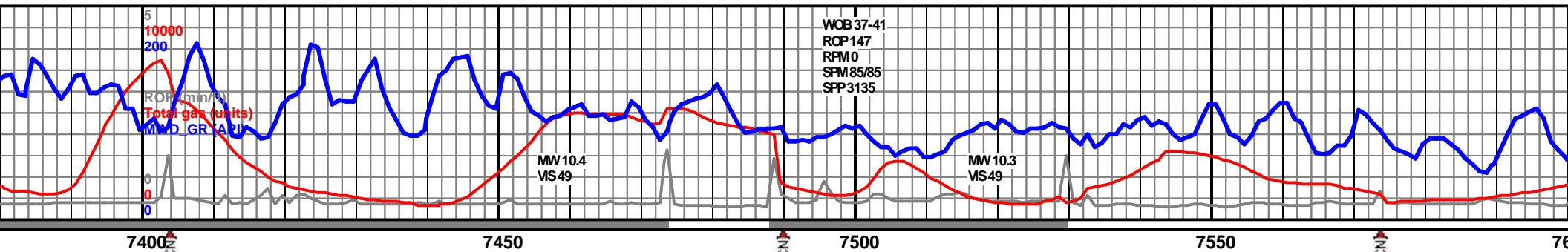
### SORTING

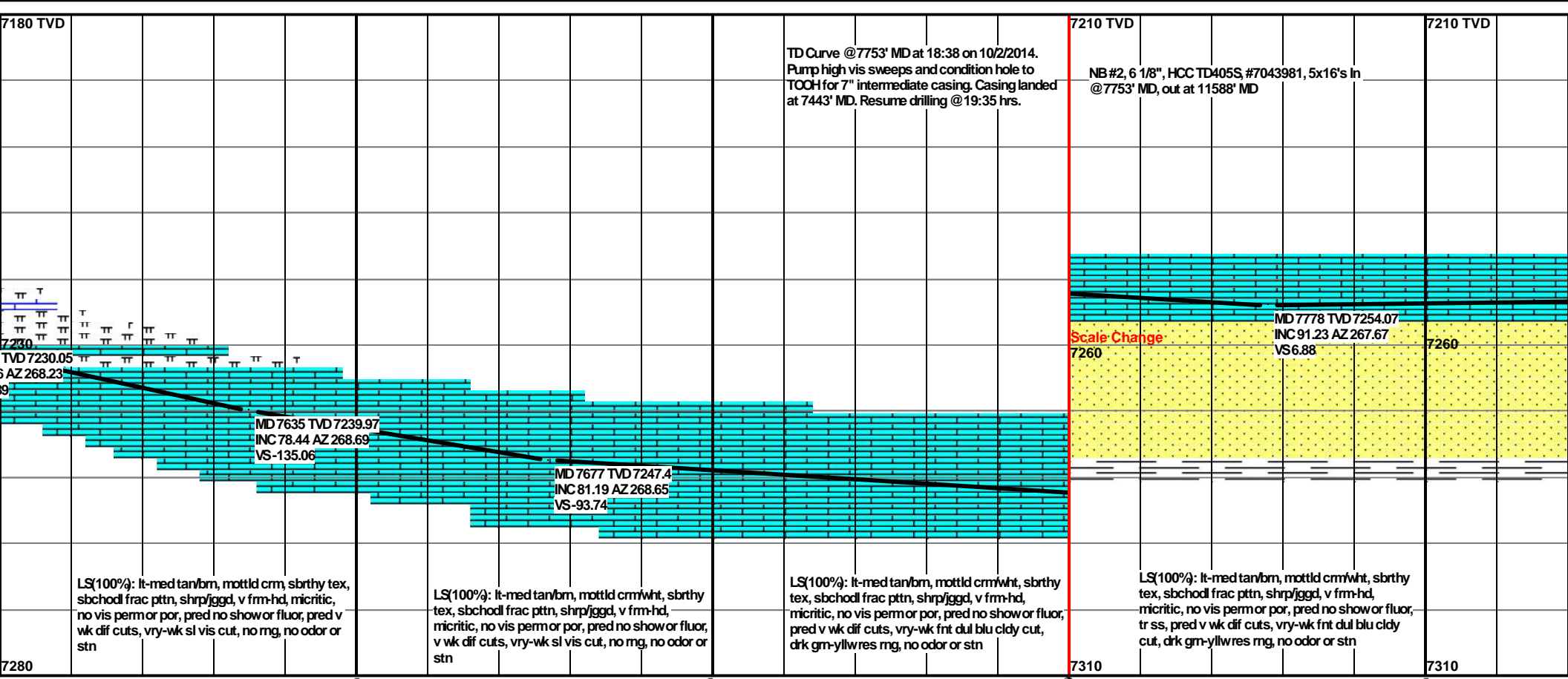
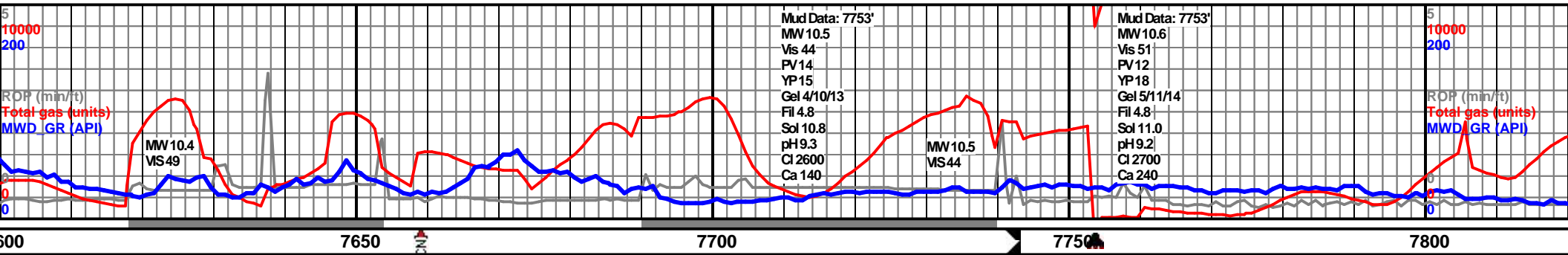
	Well
	Moderate
	Poor



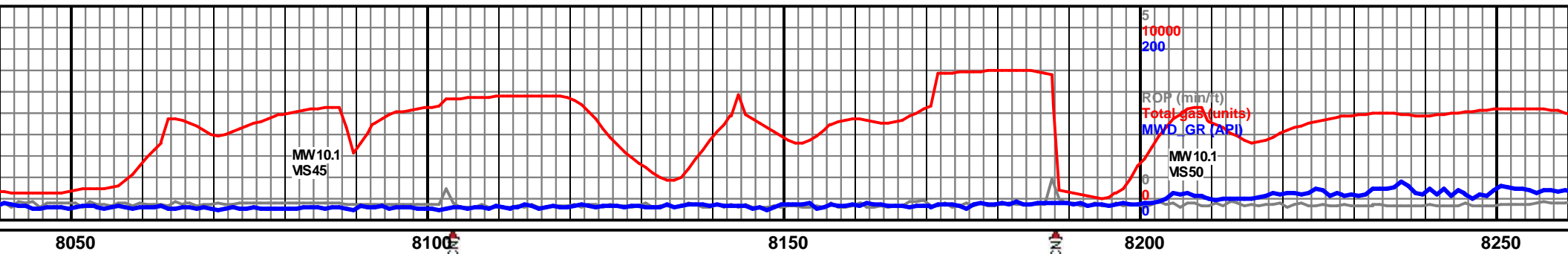




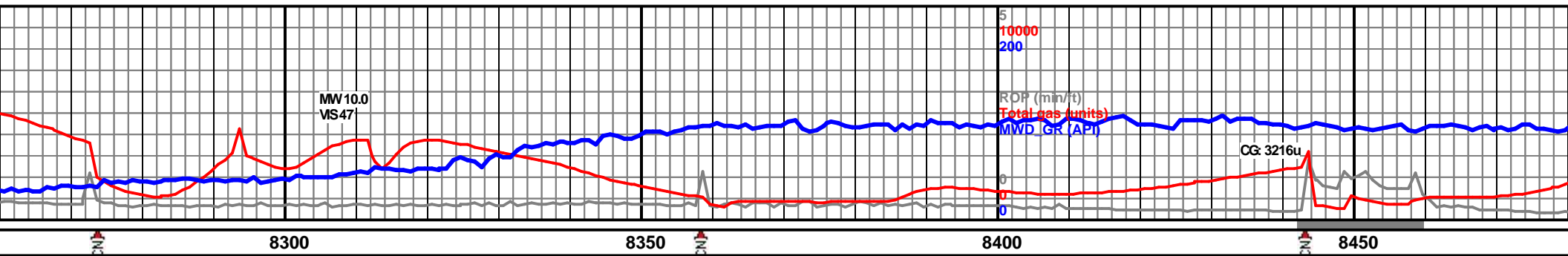








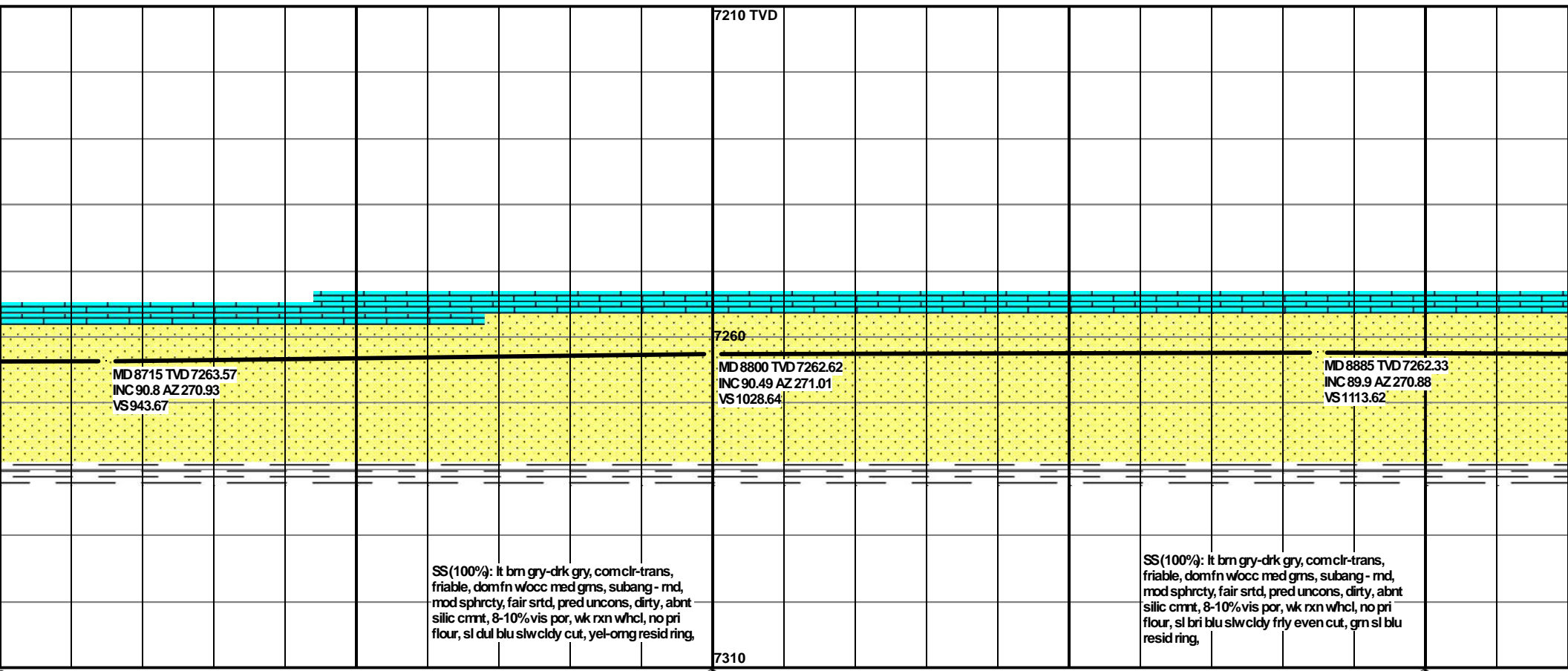
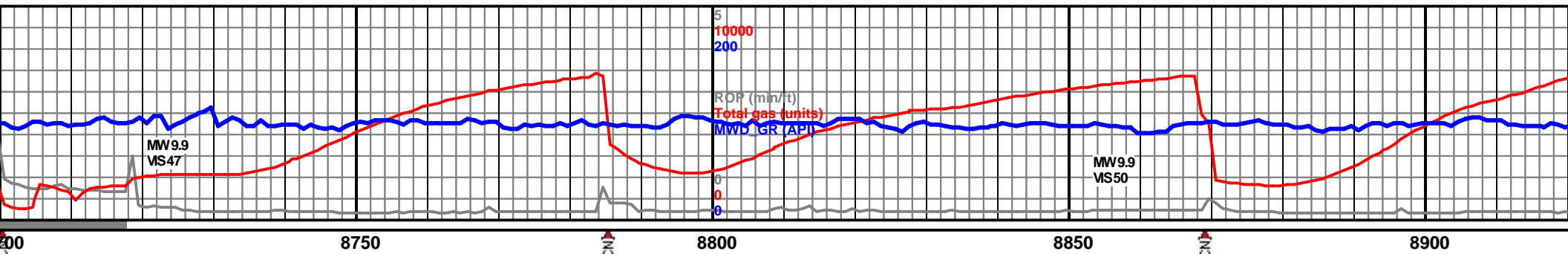
										7210 TVD																			



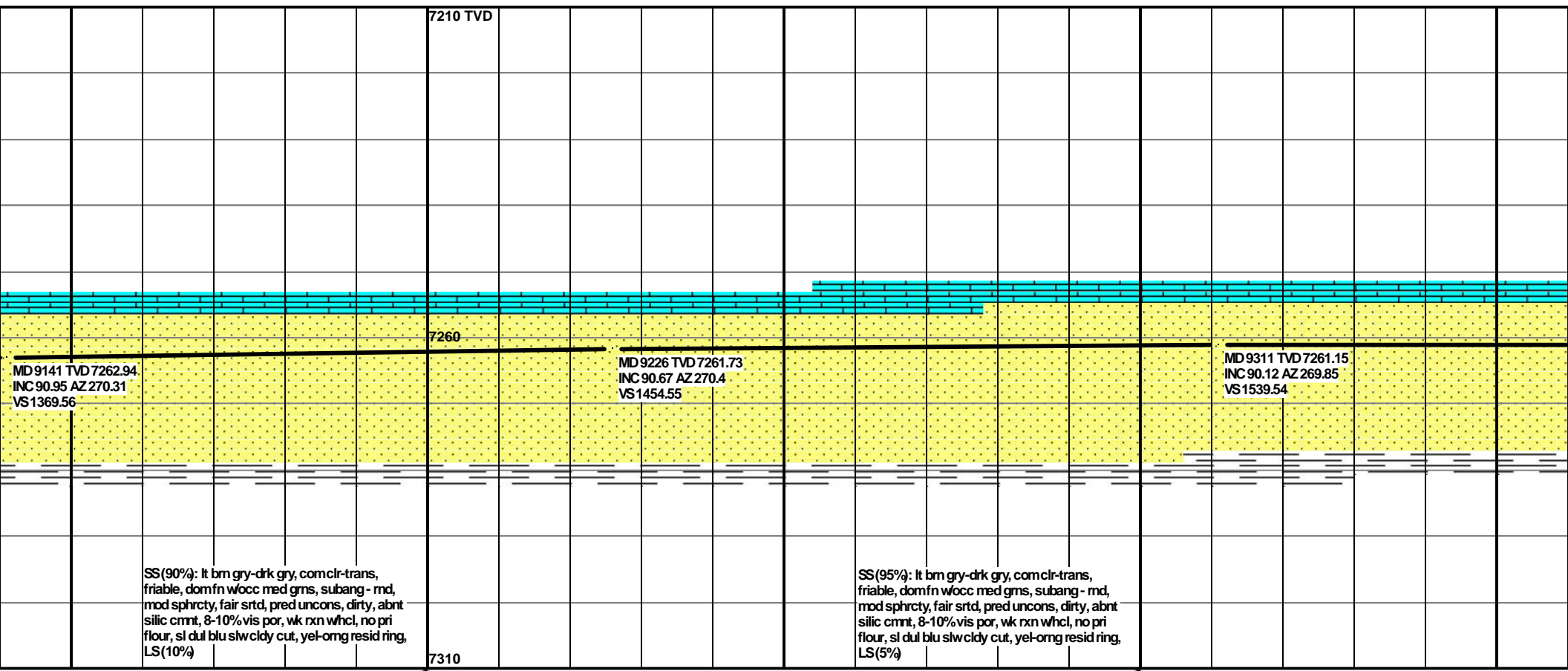
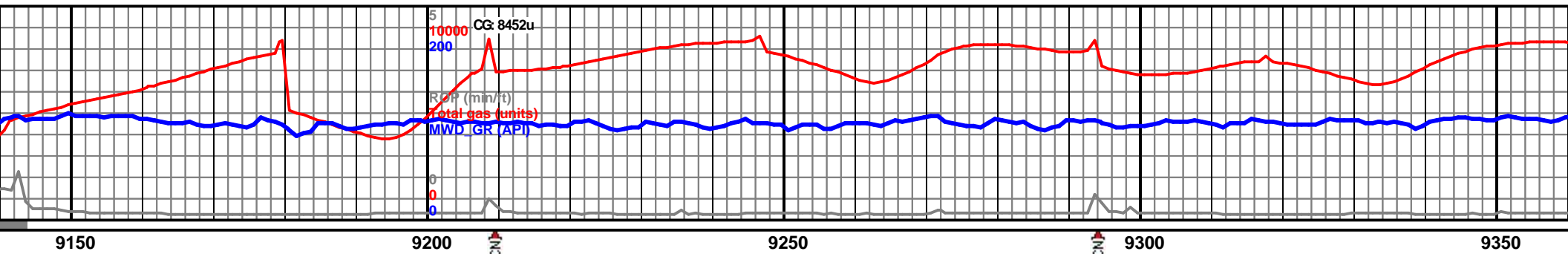
<p>MD 8290 TVD 7256.53 INC 89.29 AZ 270.55 VS 518.79</p>		<p>MD 8375 TVD 7258.3 INC 88.33 AZ 270.6 VS 603.76</p>		<p>MD 8460 TVD 7260.82 INC 88.27 AZ 269.86 VS 688.72</p>
<p>LS(100%): lt-med tan/bn, mottld crm/wht, sbtrthy tex, sbchodl frac ptnn, shrp/jggd, v frm-hd, micritic, no vis perm or por, pred no show or fluor, tr ss, pred v wk dif cuts, vry-wk frt dul blu cldy cut, drk gm-ylw res mg, no odor or stn</p>		<p>SS(75%): lt bn gry-drk gry, com clr-trans, friable, dom frn wocc med grms, subang - md, mod sphrcty, fair srtld, dirty, abnt silic cmnt, 8-10% vis por, pnt-ling cntct, wk rxn whcl, no pri flour, sl dul blu slw stmg cut, lt yel resid ring, LS (25%)</p>		<p>SS(90%): lt bn gry-drk g friable, dom frn wocc me mod sphrcty, fair srtld, ur cmnt, 8-10% vis por, pnt no pri flour, sl dul blu slw resid ring, LS(10%)</p>

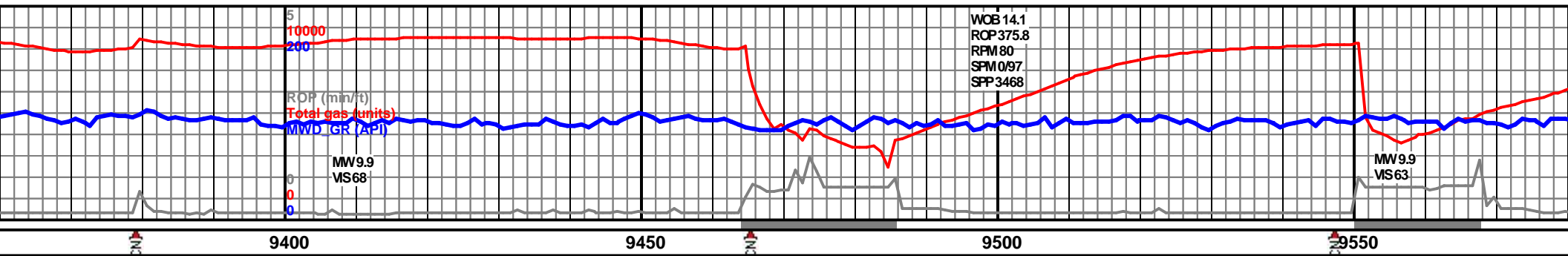






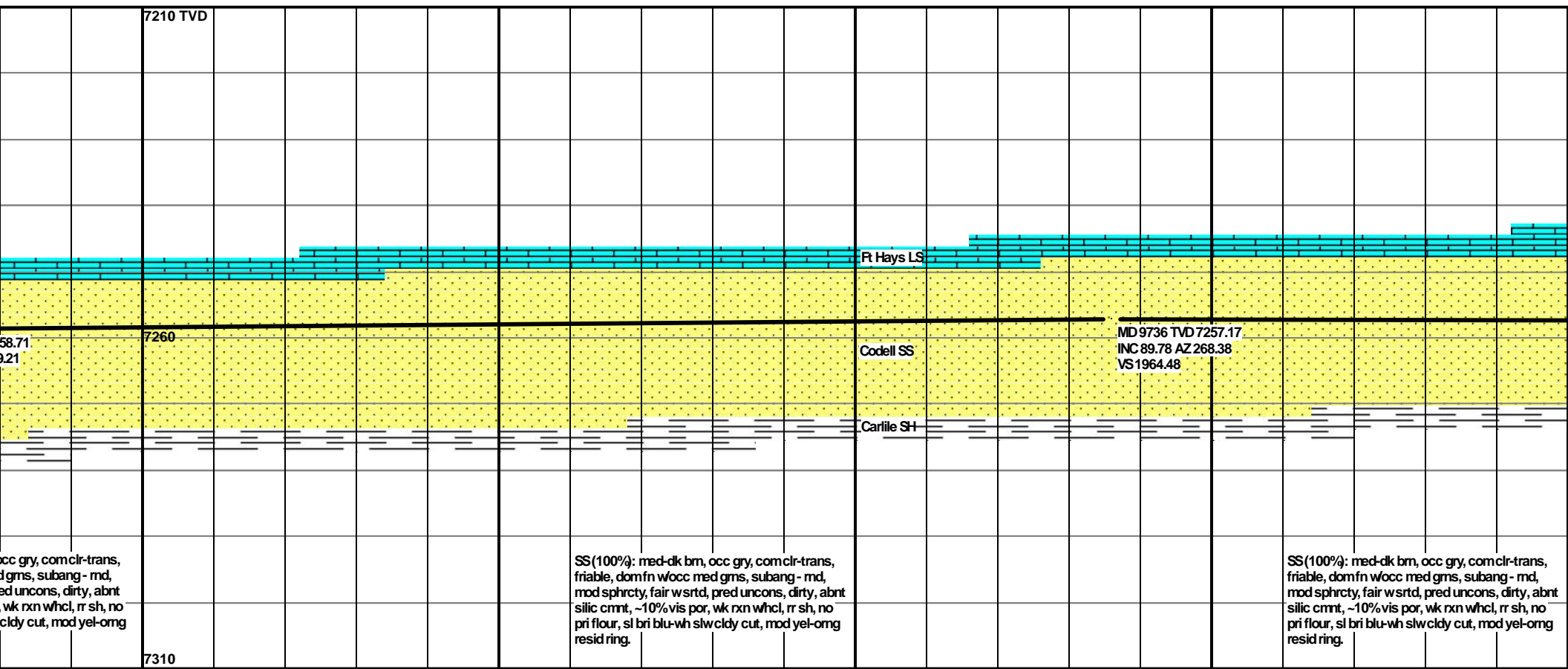
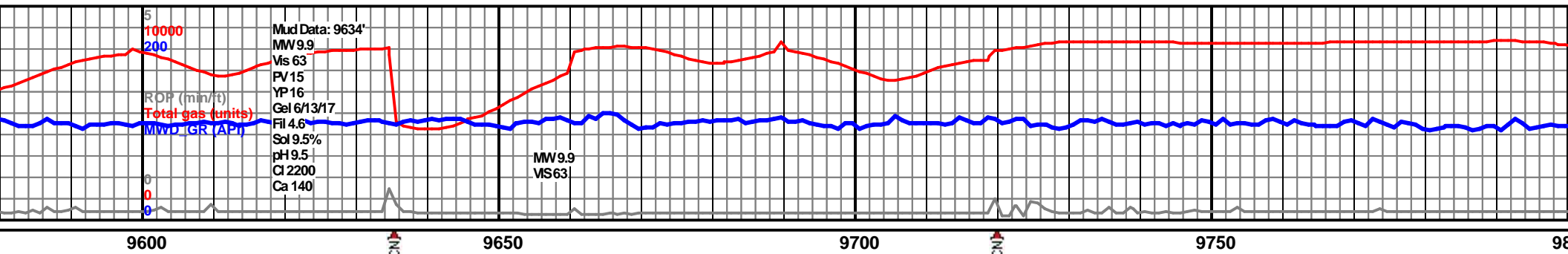




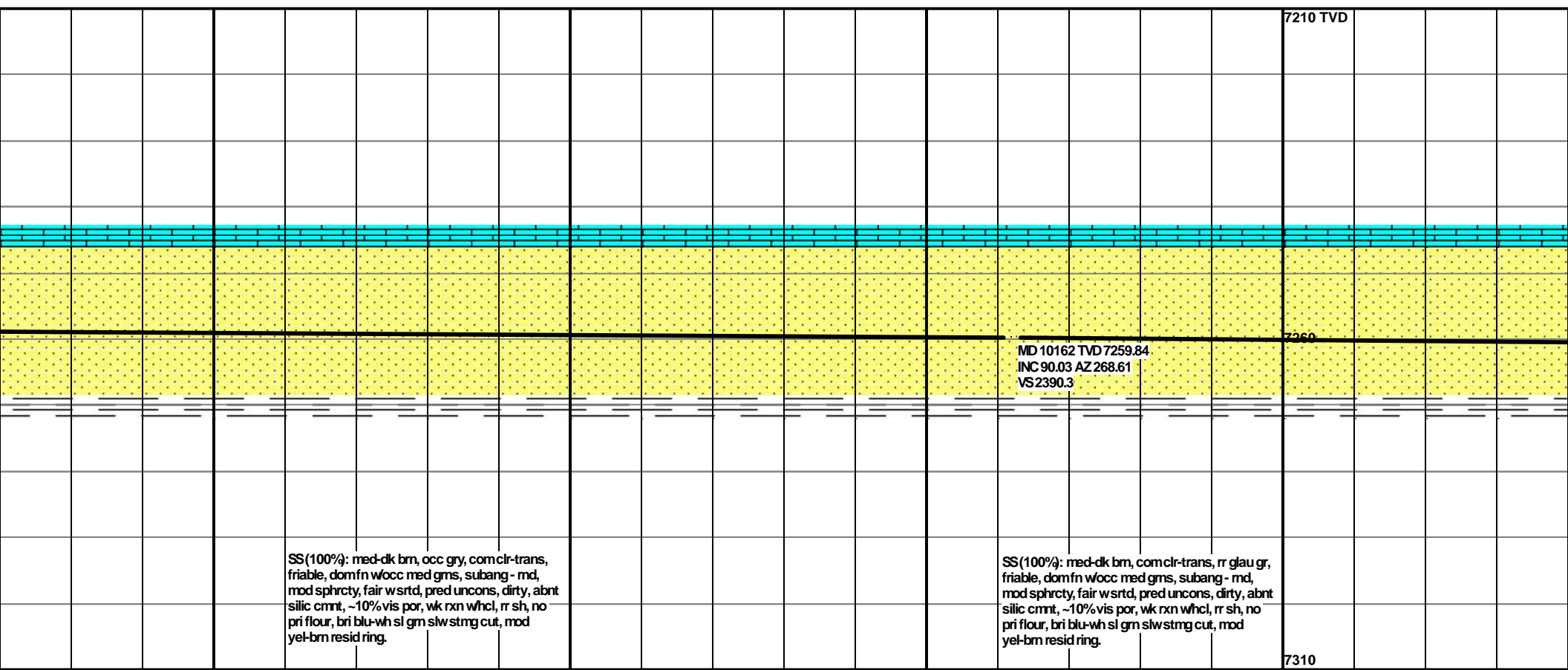
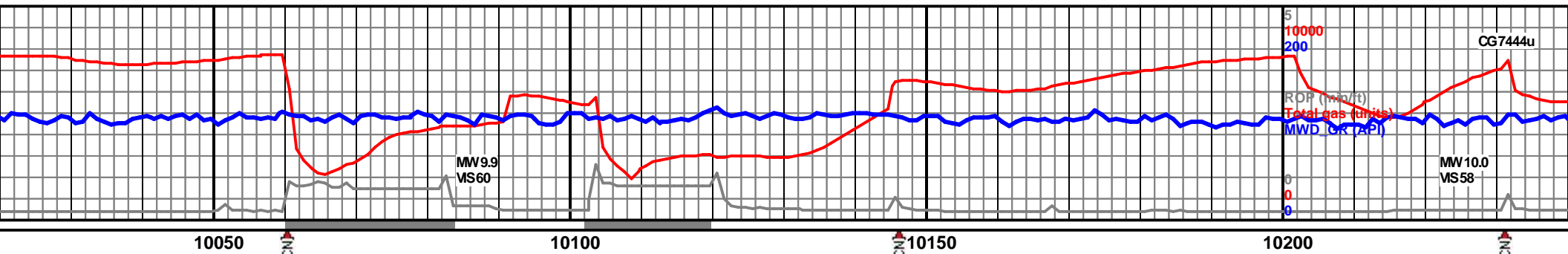


	7210 TVD					
					Ft. Hays LS	
	7260	MD 9396 TVD 7261.04 INC 90.03 AZ 270.39 VS 1624.54		MD 9481 TVD 7260.33 INC 90.92 AZ 270.13 VS 1709.53	Codell SS	MD 9566 TVD 7260.33 INC 91.26 AZ 270.13 VS 1794.51
					Carlile SH	
SS(95%): med-dk bm, sl gry, com clr-trans, friable, dom fn wocc med gms, subang - md, mod sphrcty, fair srted, pred uncons, dirty, abnt silic cmnt, 8-10% vis por, wk rxn whcl, no pri flour, sl dul blu slwcldy cut, yel-omg resid ring, LS(5%)	7310		SS(95%): med-dk bm, sl gry, com clr-trans, friable, dom fn wocc med gms, subang - md, mod sphrcty, fair srted, pred uncons, dirty, abnt silic cmnt, 8-10% vis por, wk rxn whcl, r sh, no pri flour, sl bri blu-wh slwcldy cut, mod yel-omg resid ring, LS(5%)			SS(100%): med-dk bm, c friable, dom fn wocc med mod sphrcty, fair srted, pred silic cmnt, 8-10% vis por, pri flour, sl bri blu-wh slwcldy cut, mod yel-omg resid ring, LS(5%)





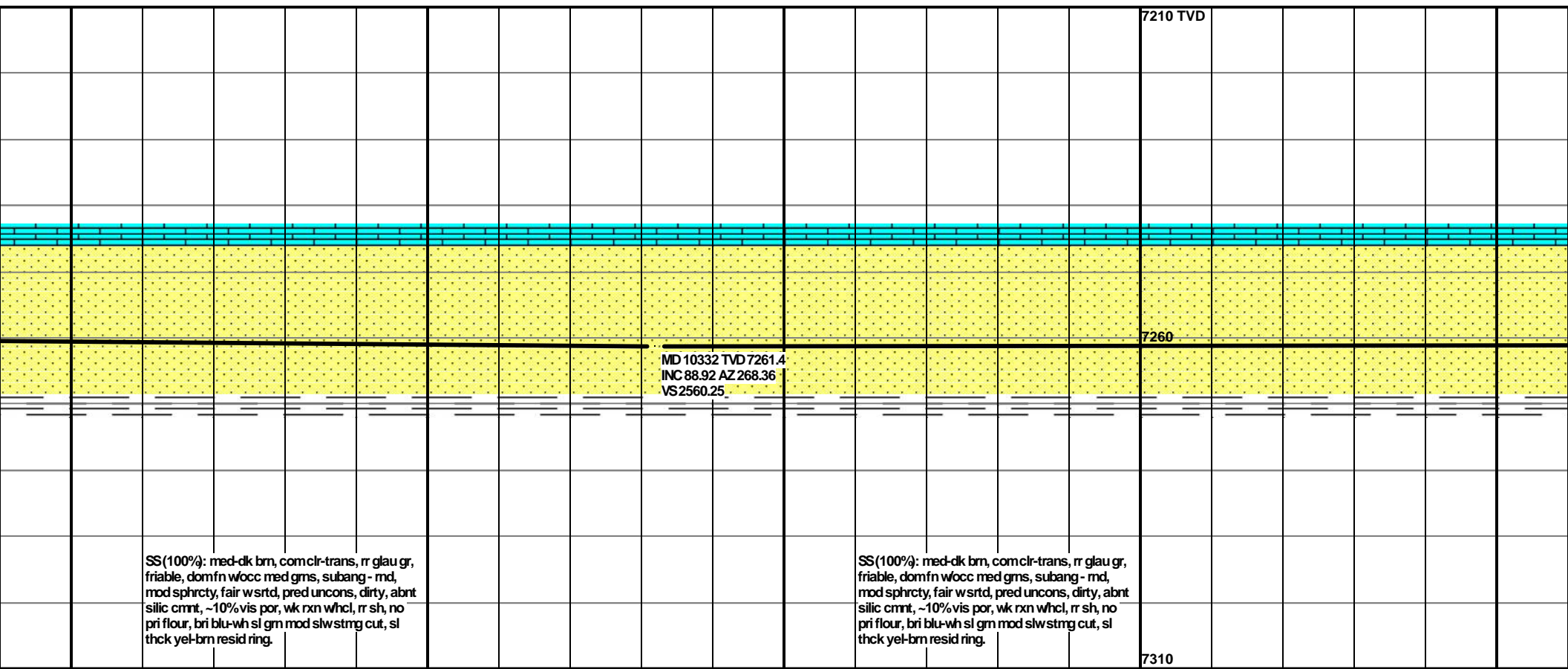
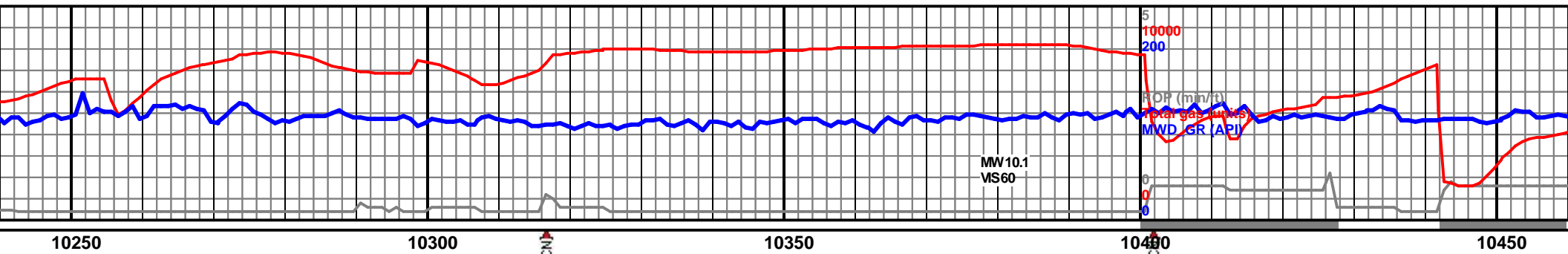




SS(100%): med-dk brn, occ gry, com clr-trans, friable, domfn wocc med gms, subang - md, mod sphrcty, fair wsrted, pred unconcs, dirty, abnt silic cmnt, ~10% vis por, wk rxn whcl, rr sh, no pri flour, bri blu-wh sl gm slwstmg cut, mod yel-brn resid ring.

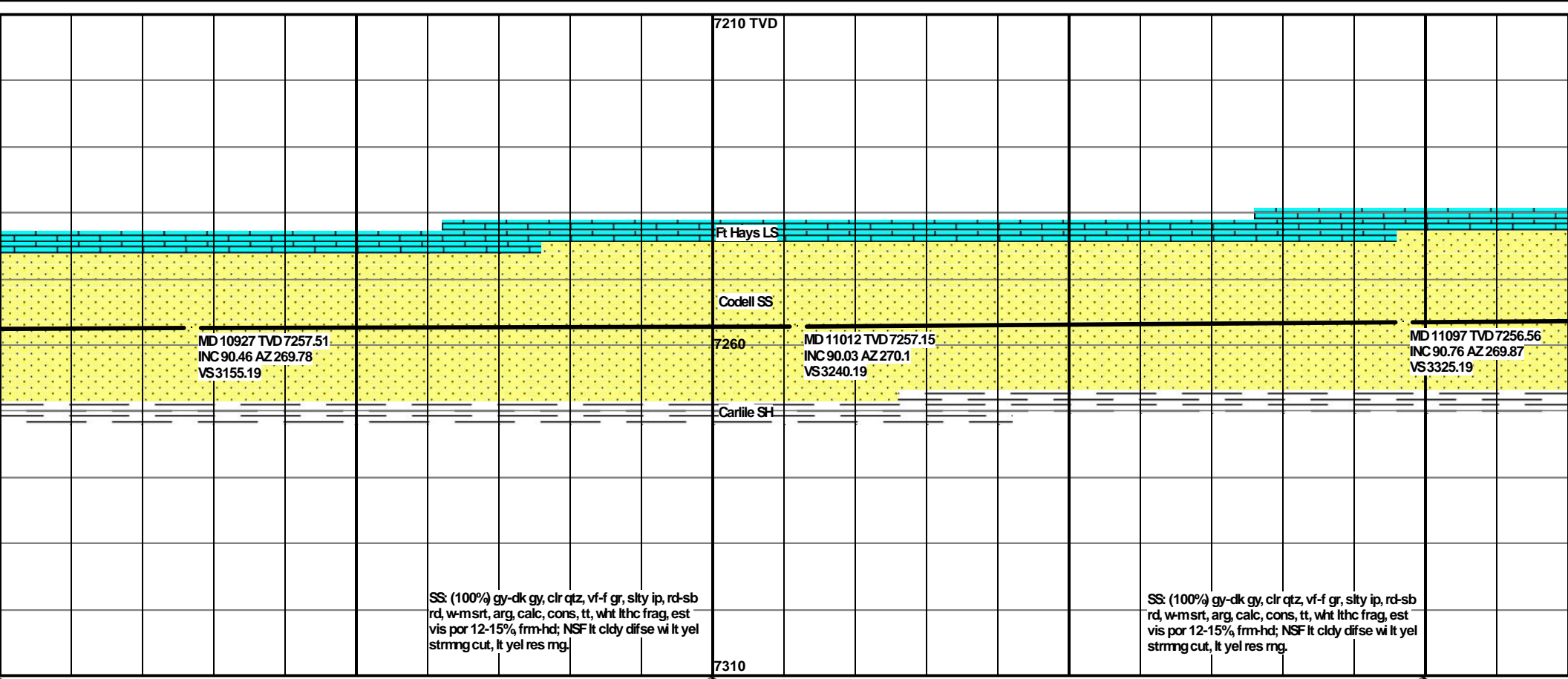
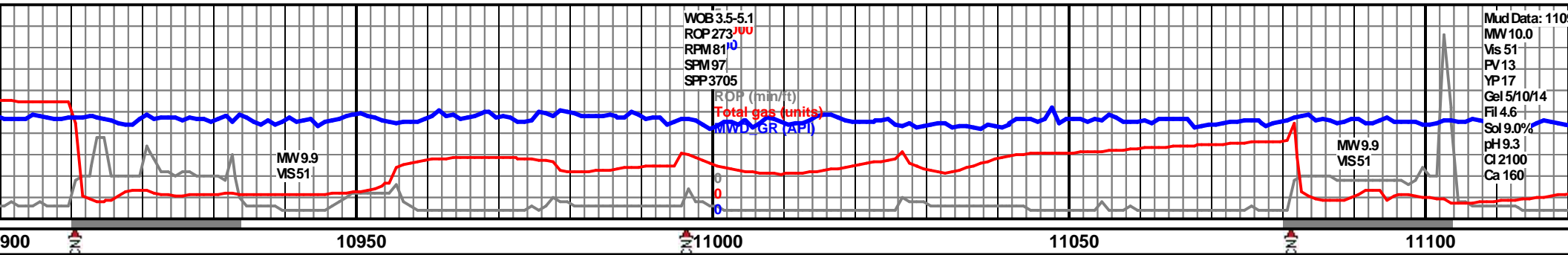
SS(100%): med-dk brn, com clr-trans, rr glau gr, friable, domfn wocc med gms, subang - md, mod sphrcty, fair wsrted, pred unconcs, dirty, abnt silic cmnt, ~10% vis por, wk rxn whcl, rr sh, no pri flour, bri blu-wh sl gm slwstmg cut, mod yel-brn resid ring.

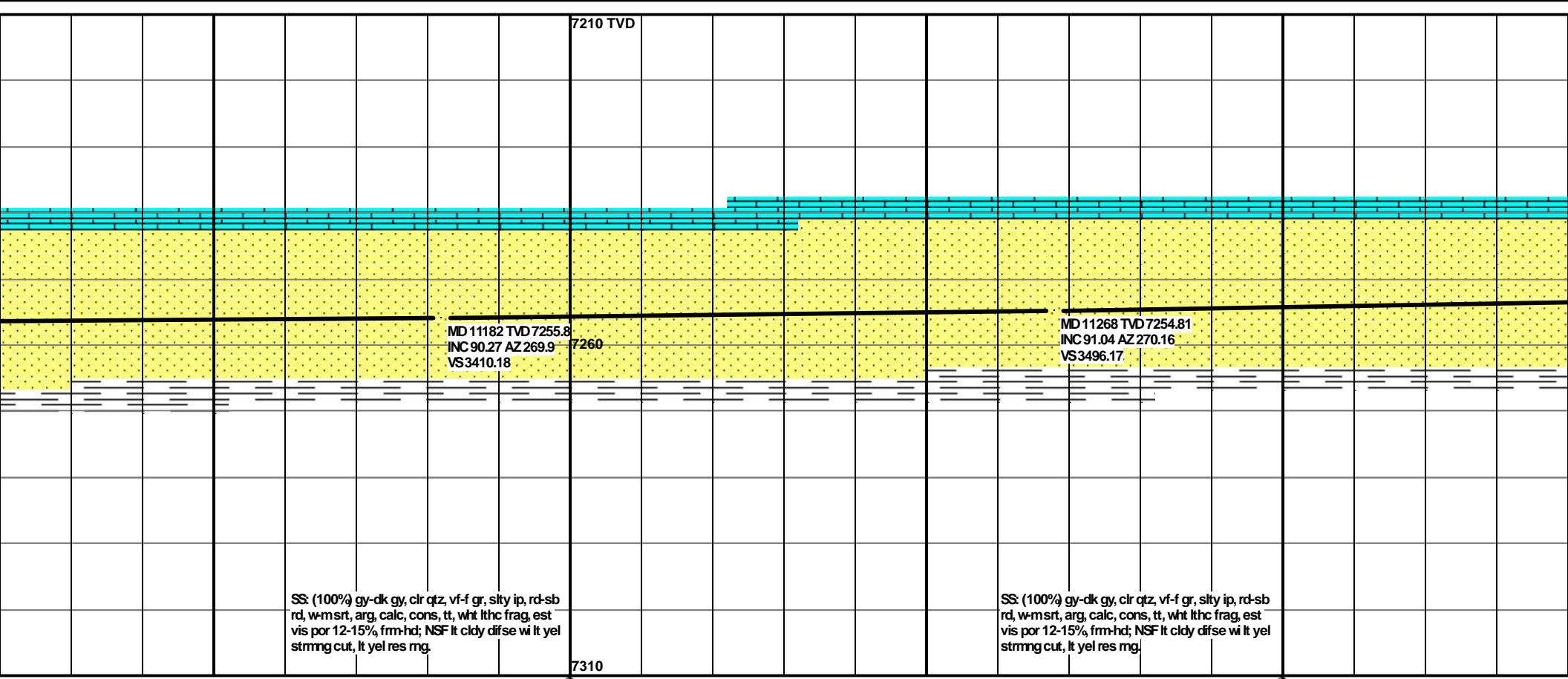
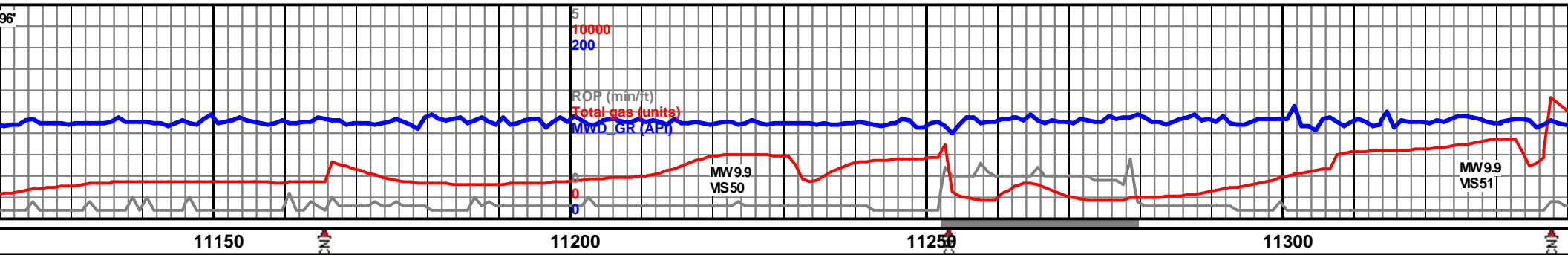








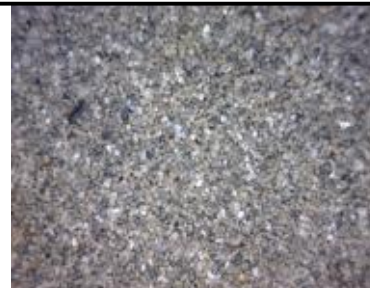
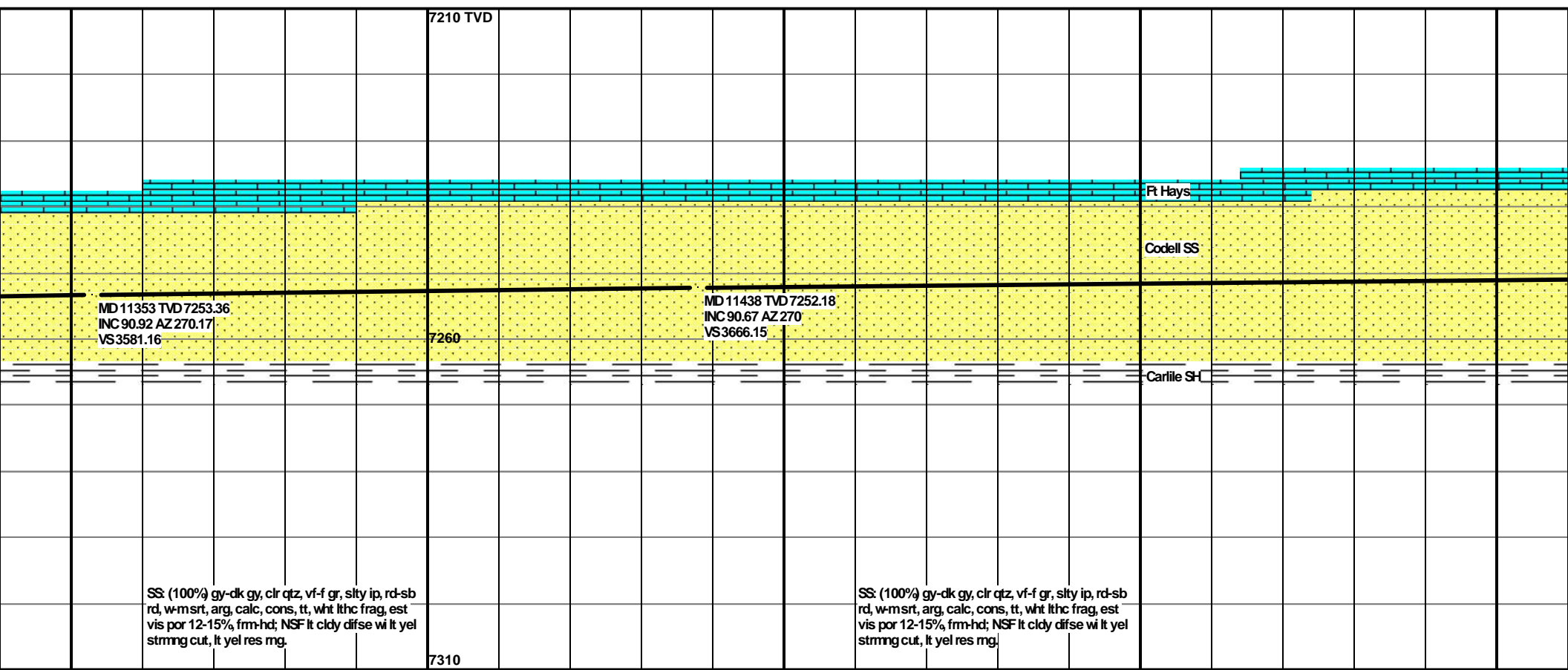
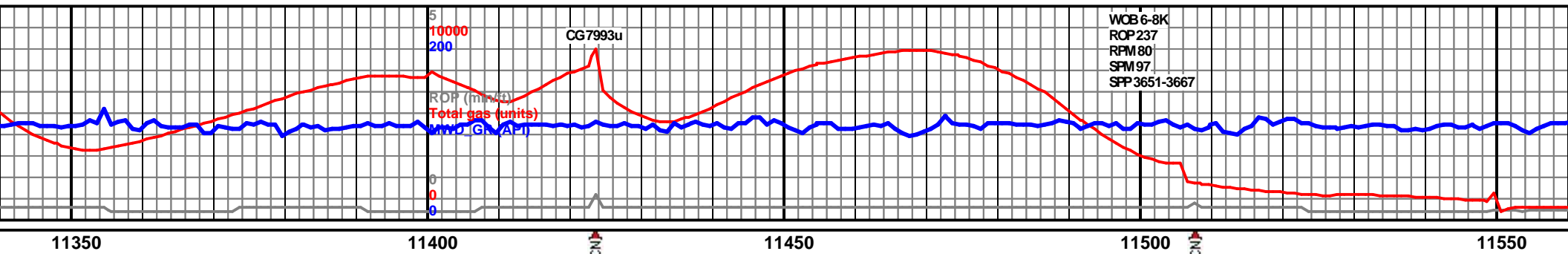


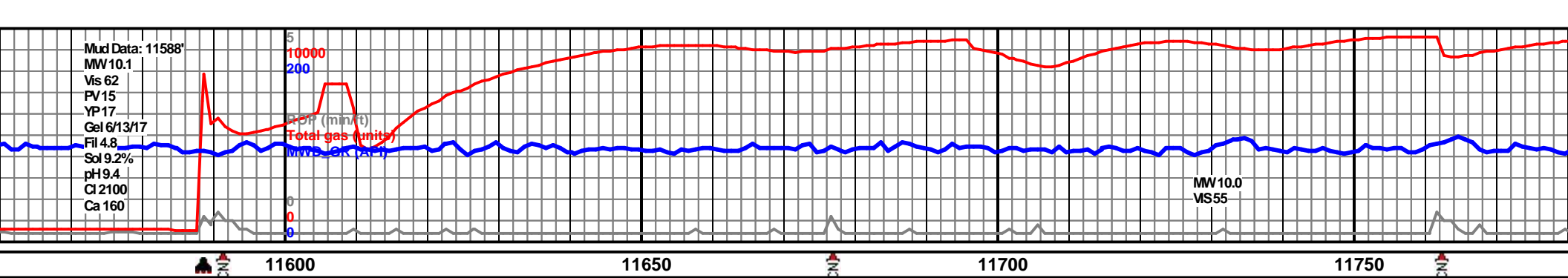


SS: (100%) gy-dk gy, clr qtz, vf-f gr, slty ip, rd-sb  
rd, w-msrt, arg, calc, cons, tt, wht lith frag, est  
vis por 12-15% frm-hd; NSF lt cldy difse wi lt yel  
strmg cut, lt yel res mg.

SS: (100%) gy-dk gy, clr qtz, vf-f gr, slty ip, rd-sb  
rd, w-msrt, arg, calc, cons, tt, wht lith frag, est  
vis por 12-15% frm-hd; NSF lt cldy difse wi lt yel  
strmg cut, lt yel res mg.





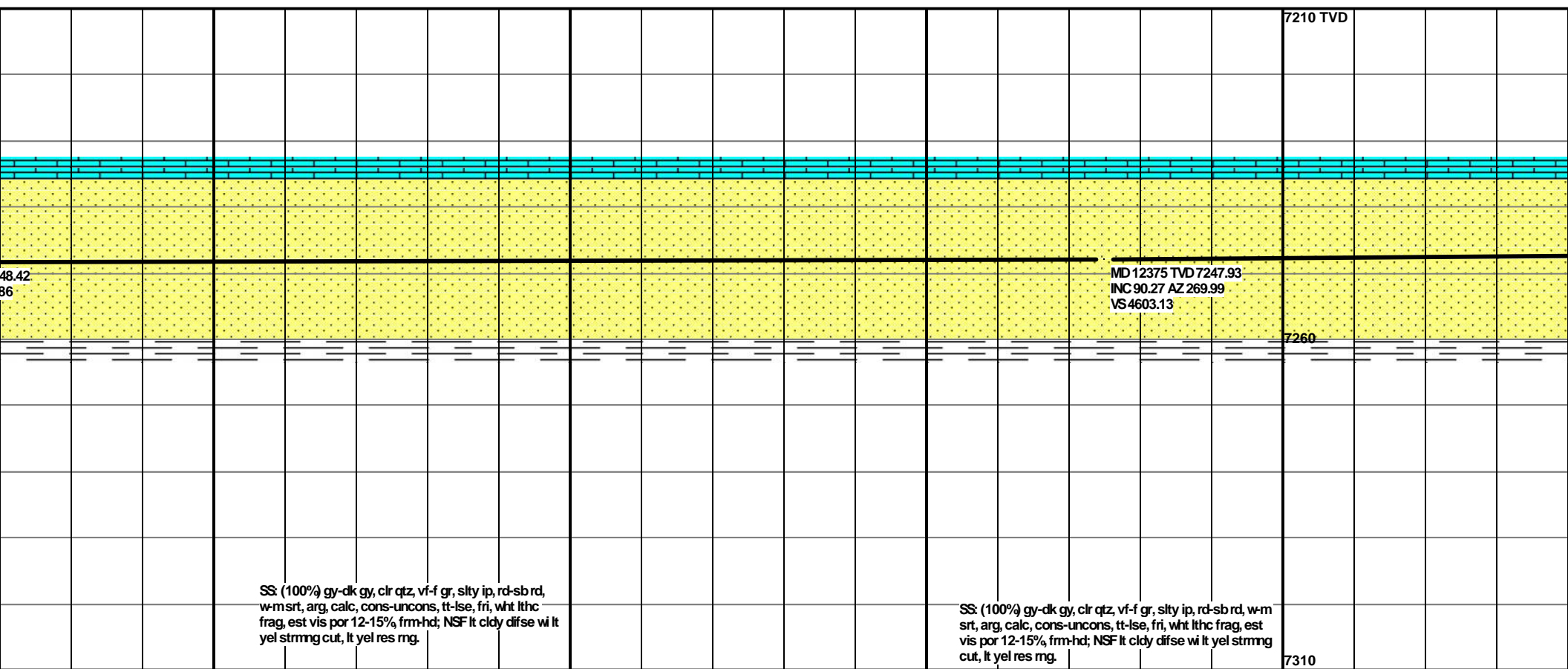
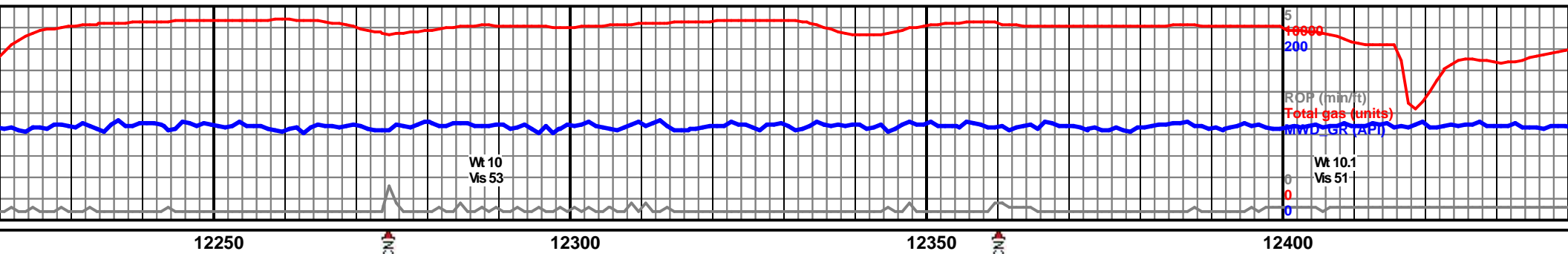


TOOH for new mud motor at 11588' MD on 10/6/14 @01:23 hrs. Resume drilling on 10/6/14 @20:39 hrs											
NB #2, 6 1/8", SEC MMD54, #12267010, 5x16's in @11588' MD, out at 12949' MD											
7210 TVD											
MD 11608 TVD 7250.59 INC 90.4 AZ 269.67 VS 3836.14											
7260											
MD 11693 TVD 7250.03 INC 90.36 AZ 269.57 VS 3921.14											
SS: (100%) gy-dk gy, brn, clr qtz, vf-f gr, slty ip, rd-sb rd, w-msrt, arg, calc, uncon, tt, wht lithc frag, est vis por 12-15% frm-hd; NSF lt cldy difse wi sl bri yel sl gm strmg cut, lt yel res mg.											
7310											
SS: (100%) gy-dk gy, brn, clr qtz, vf-f gr, slty ip, rd-sb rd, w-msrt, arg, calc, uncon, tt, wht lithc frag, est vis por 12-15% frm-hd; NSF lt cldy difse wi sl bri yel sl gm strmg cut, lt yel res mg.											
SS: (100%) gy-dk gy, brn, clr qtz, vf-f gr, slty ip, rd-sb rd, w-msrt, arg, calc, uncon, tt, wht lithc frag, est vis por 12-15% frm-hd; NSF lt cldy difse wi sl bri yel sl gm strmg cut, lt yel res mg.											

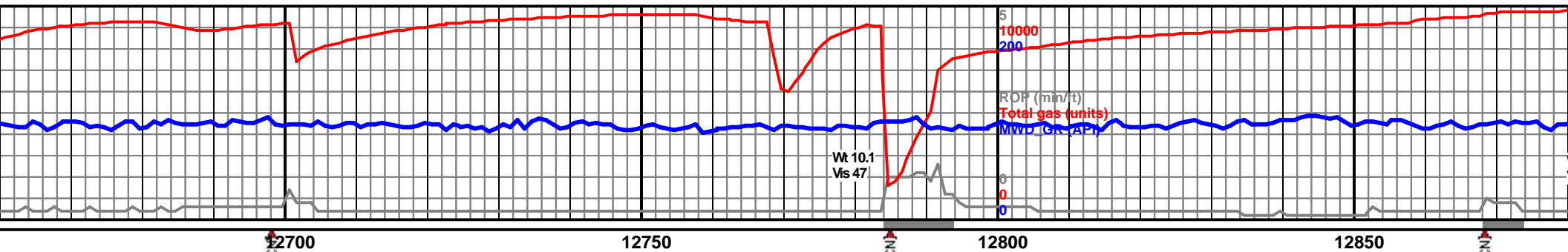












										7210 TVD																			

Wt 10.1  
Vis 48

TD 12949'

12900

12950

13

MD 12881 TVD 7243.97  
INC 89.62 AZ 270.6  
VS 5109.05

-Bit Projection  
MD 12949 TVD 7244.43  
INC 89.62 AZ 270.6  
VS 5177.05

TD reached on Tuesday, October 7,  
2014, 04:00 hrs. 9 stand wiper trip,  
pump weighted sweeps, condition hole  
to TOOH for 4.5" production liner. Liner  
set at 12,934' MD on Wednesday,  
October 8th 2014.

Thank you for using Goolsby  
Brothers and Associates

Brian Spitzmiller  
Jack R. Rogers

gy-dk gy, clt qtz, vf-f gr,  
w-m srt, arg, calc,  
wht lthc frag, est vis por  
dy difse w/ lt yel strmg

SS: no vis chng (100%) gy-dk gy, clt qtz, vf-f gr,  
occ mgr, slty ip, rd-sb rd, w-m srt, arg, calc,  
cons-uncons, tt-lse, fri, wht lthc frag, est vis por  
12-15% frm-hd; NSF lt cldy difse w/ lt yel strmg  
cut, lt yel res mg

