

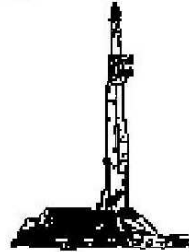
GOOLSBY BROTHERS
and associates, inc.

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



Geological Wellsite
Supervision

www.goolsbybrothers.com



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

Well Name: Wishbone 29N-E24HZ
Location: Section 24, T2N, R66W, Weld County, CO.
License Number: API# 05-123-37149
Spud Date: 1 June 2013
Surface Coordinates: 320' FSL & 1940' FWL SE SW Sec 24 T2N, R66W
Lat: 40° 07' 02.68" Long: -104° 43' 40.93"
Bottom Hole Coordinates: 487 FNL & 1858' FWL NE NW Sec 24, T2N, R66W
Ground Elevation (ft): 5084' K.B. Elevation (ft): 5100'
Logged Interval (ft): 6900' To: 11910' Total Depth (ft): 11910'
Formation: Sharon Springs, Niobrara chalks,
Type of Drilling Fluid: Polymer-Water
Region: Wattenberg
Drilling Completed: 29 June 2013
Printed by HORIZONTAL.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Anadarko/Kerr-McGee Oil & Gas Onshore LP
Address: Granite Tower - 1099 18th St, Ste 1800
Denver, CO 80202
CO Geologist, Tom Birmingham

GEOLOGIST

Name: Jack R. Rogers, Alan Seeling, Robert Nordeck, W. H. McCroskey III
Company: Goolsby Brothers & Assoc. (GBA), Inc. (www.goolsbybrothers.com)
Address: 575 Union Blvd.
Suite 208,
Lakewood CO. 80228

E-logs

MWD GR: 6850'-11843'
MWD Resistivity: 7800'-11850'


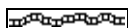
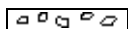
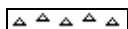
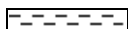

Casing






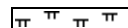
9 5/8" Surface Casing set @ 1042'
7" Intermediate Casing set @ 7755'
4 1/2" Production Liner to be set to 119xx' TD

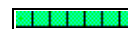





Comments



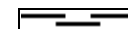
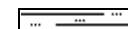
- 1) Drilling Contractor: Xtreme Drilling, Rig # 22
Rig Manager: Mike Headley / Tyler Humphrey
- 2) Company Man: Dave Cornett / Nol Jones/
Will Pettijohn / Peter Perry /
- 3) Well Site Geologists: Goolsby Brothers & Assoc. :
Jack Rogers / Alan Seeling - Curve
Hank McCroskey / Robert Nordeck - Lateral
- 4) Mud Company : Newpark Drilling Fluids,
Mud Engineer: Michael Cook/Jody Graham
- 5) Directional Drilling: Sperry / Halliburton
Drillers: Randy Bernatow,
MWD: Matthew Busche, Caleb Jones, Clay Wass, Drew Perry
- 6) Gas Equipment: Mudlogging Systems Inc.
by Terra Services
Redbox # ML-173 & # 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
 Sltty sh

ACCESSORIES

MINERAL

	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtl
	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

OTHER SYMBOLS

OIL SHOWS

	Even
	Spotted
	Ques
	Dead
	Vspotty
	near even

POROSITY TYPE

	Earthy
	Fenest
	Fracture
	Inter
	Moldic
	Organic

	Pinpoint
	Vuggy

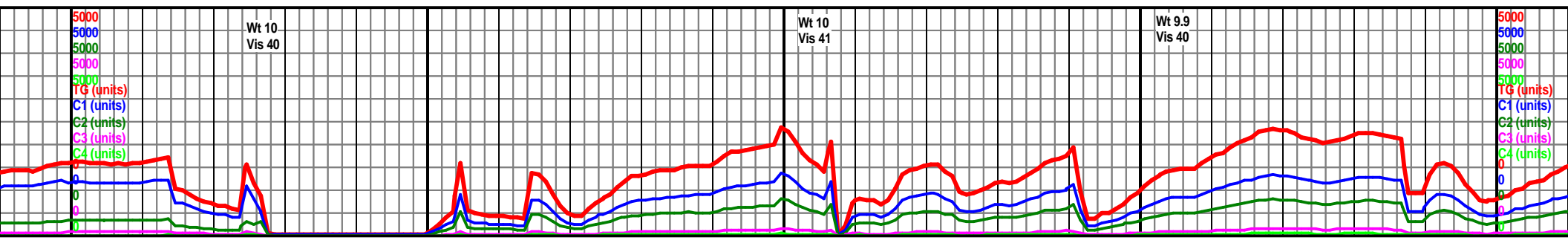
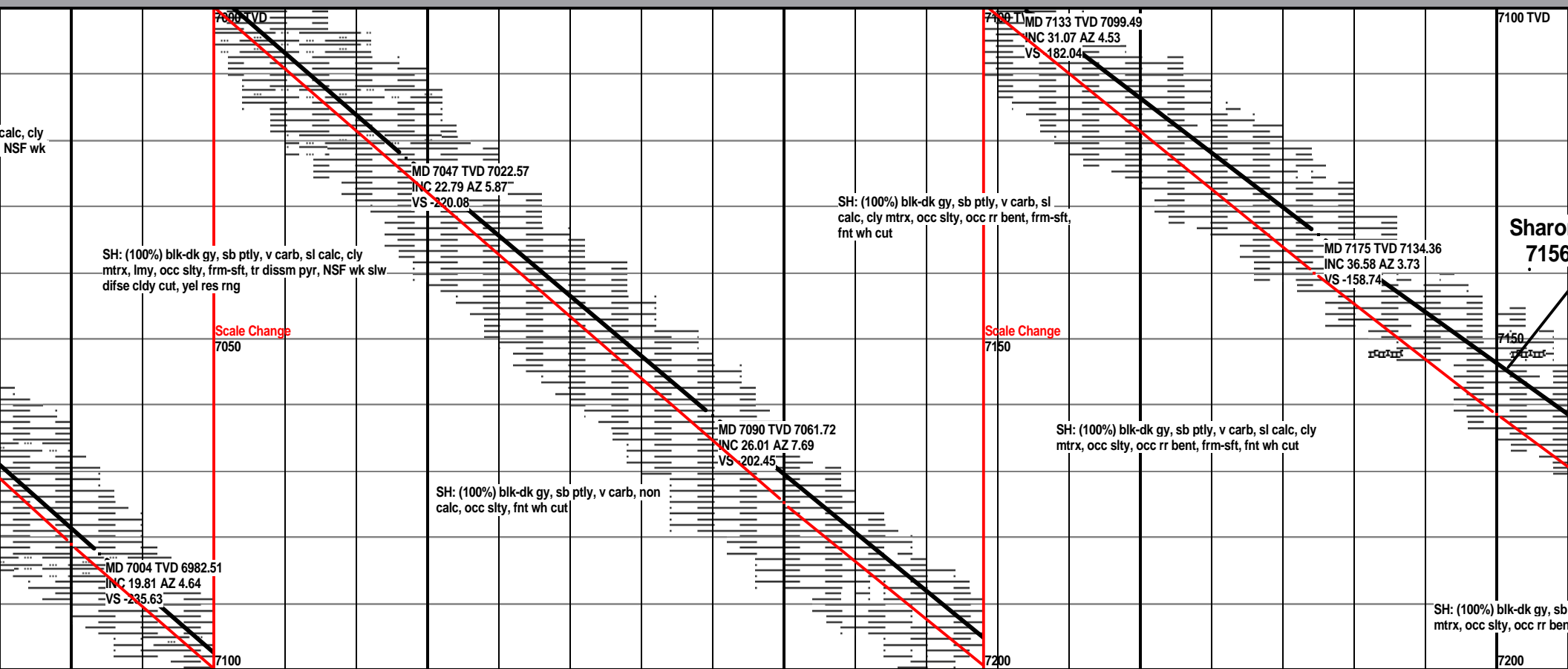
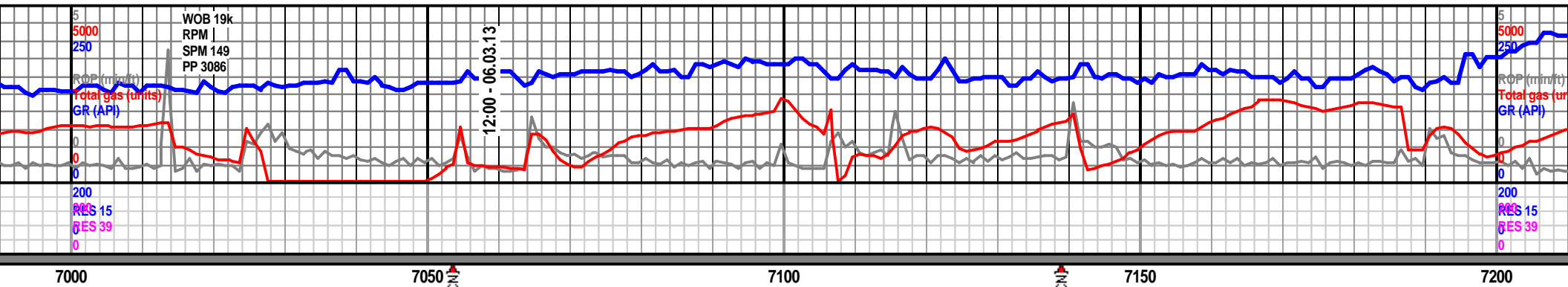
ROUNDING

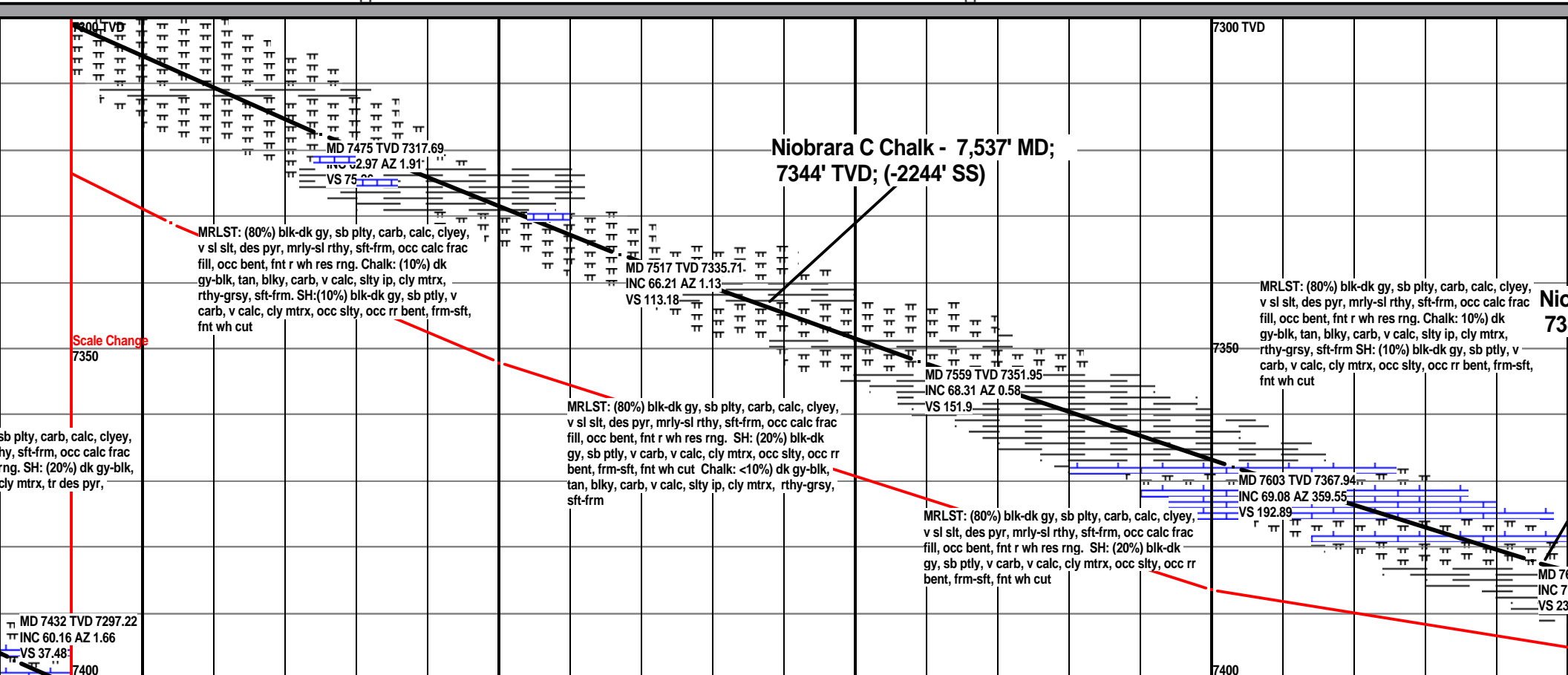
	Rounded
	Subrnd
	Subang

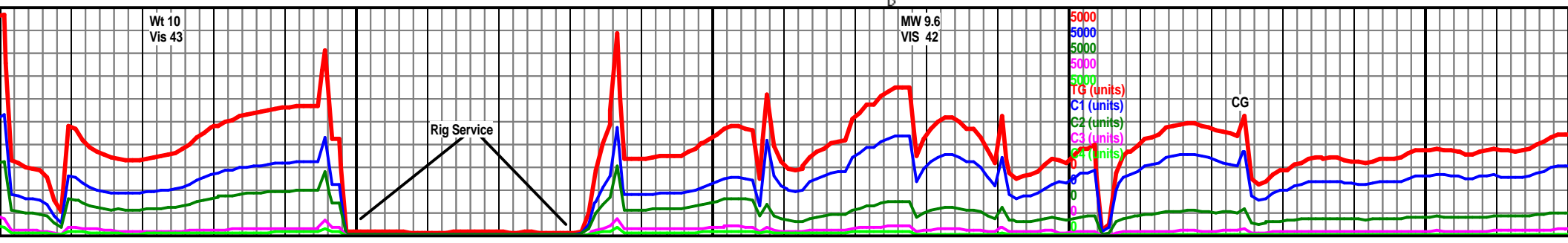
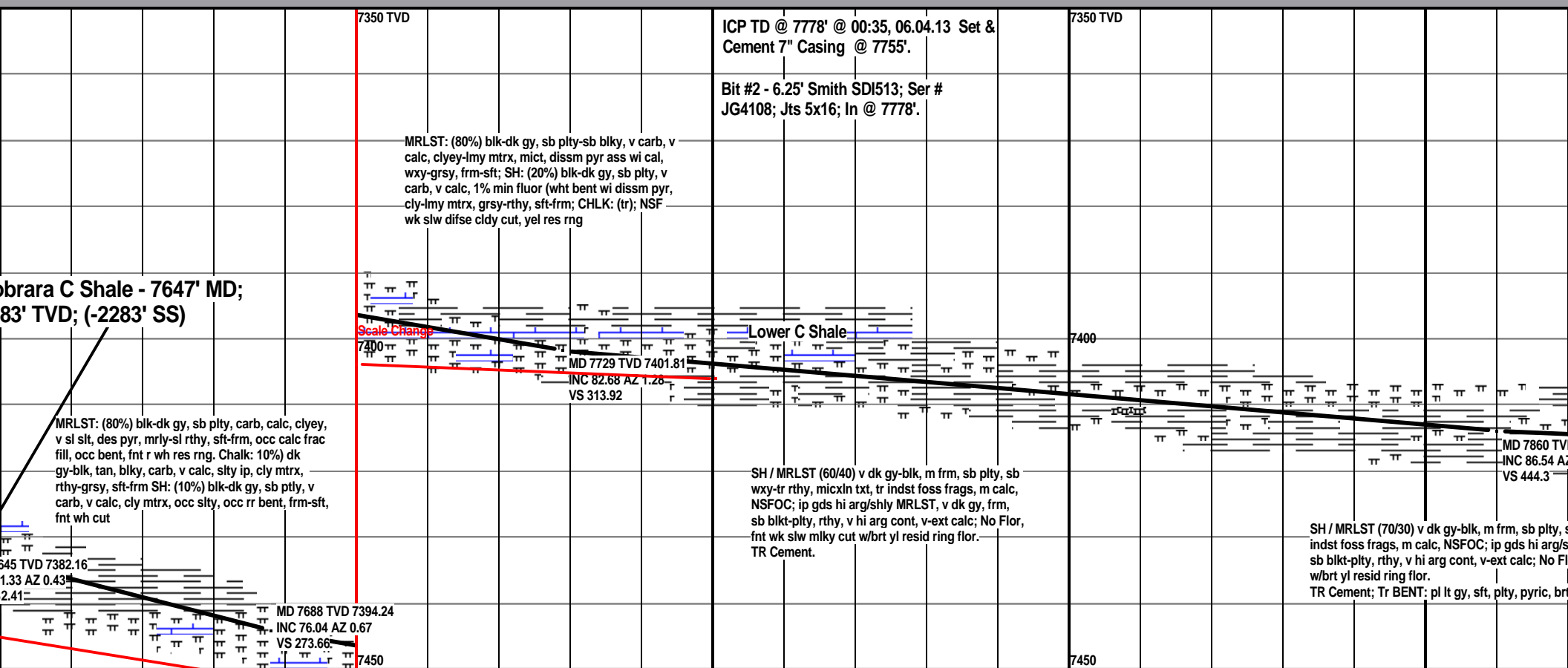
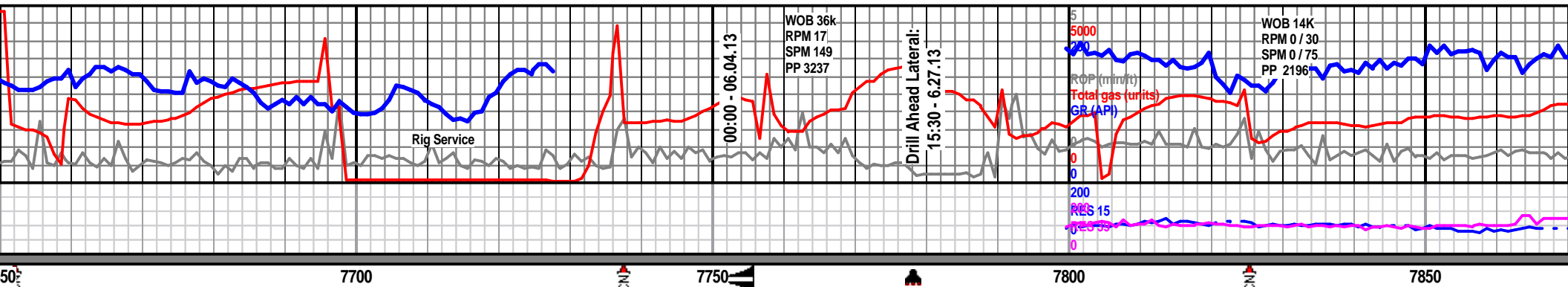
	Angular
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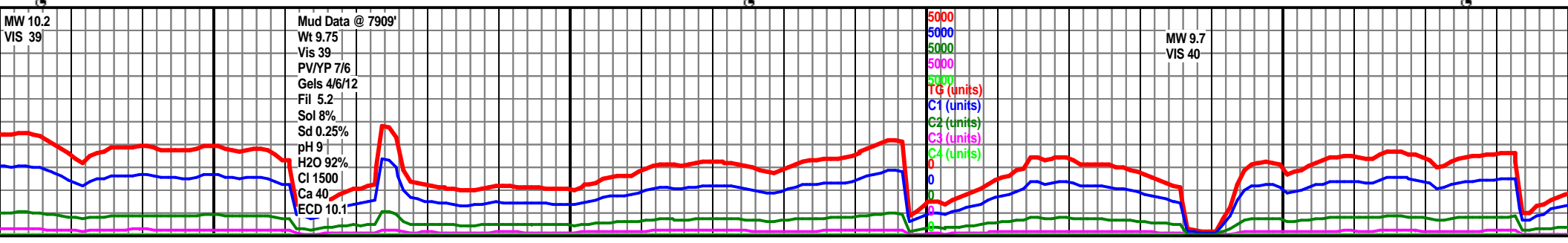
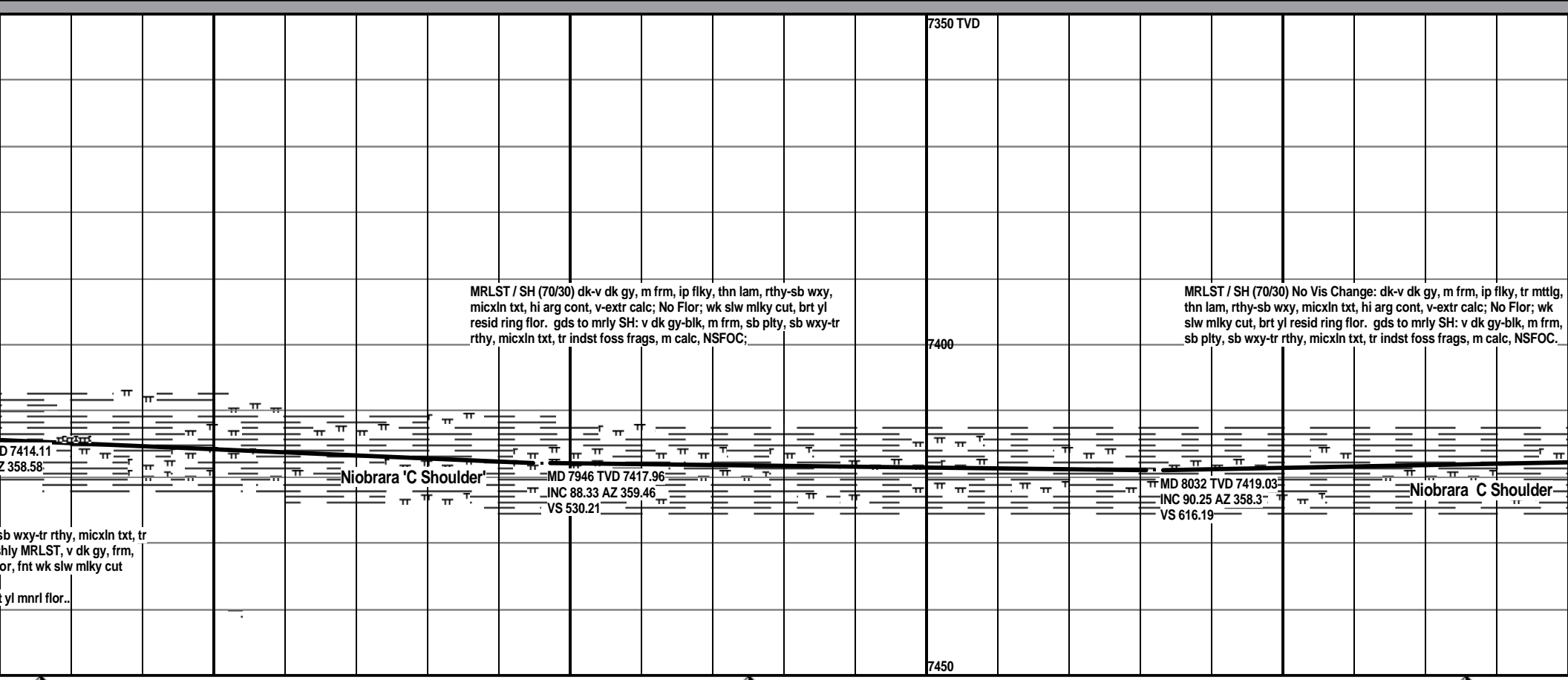
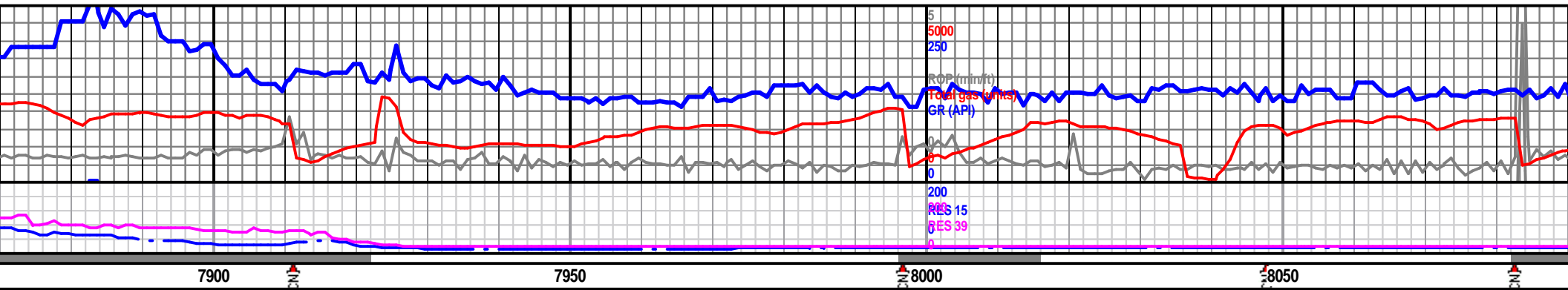
SORTING

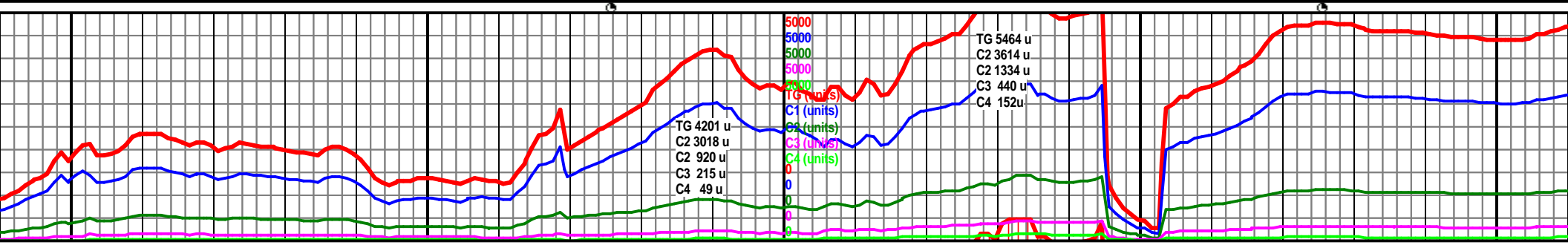
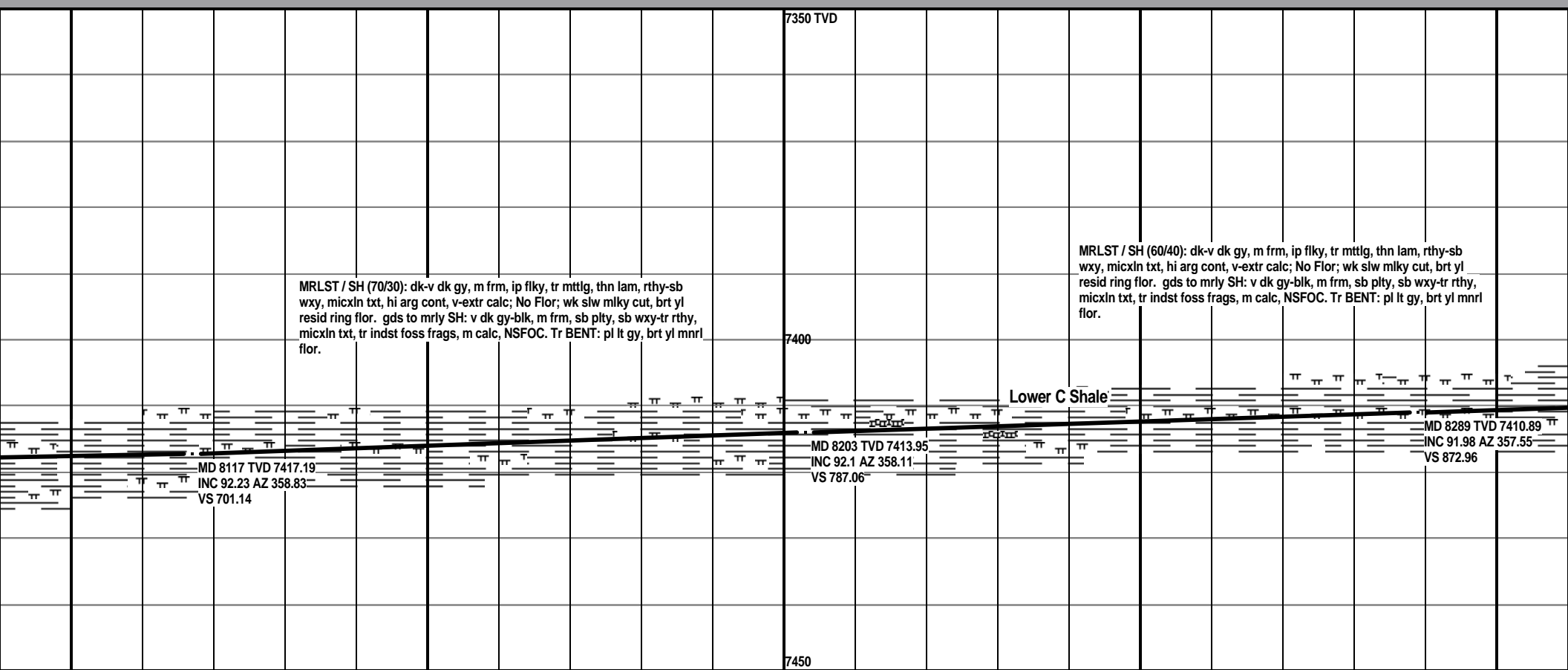
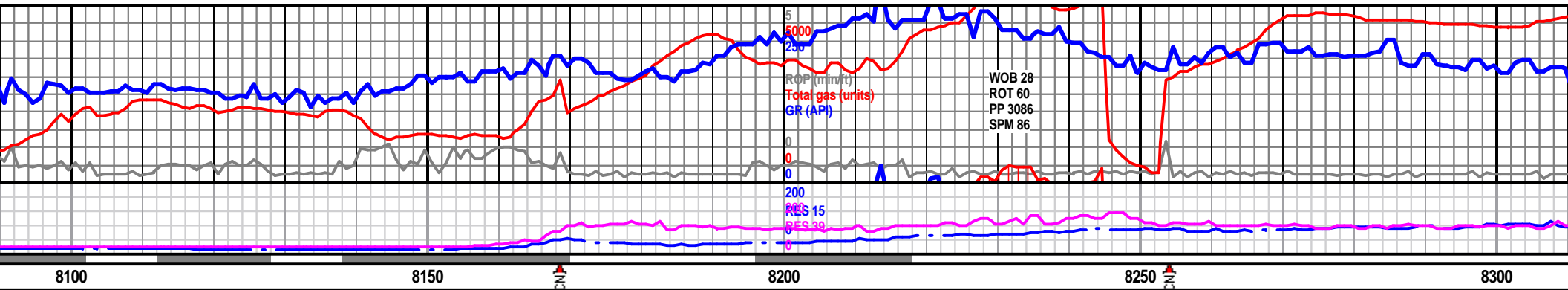
	Well
	Moderate
	Poor

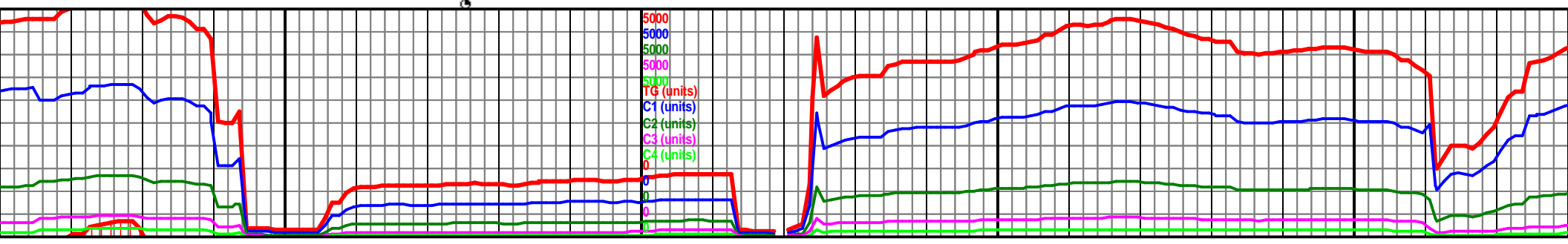
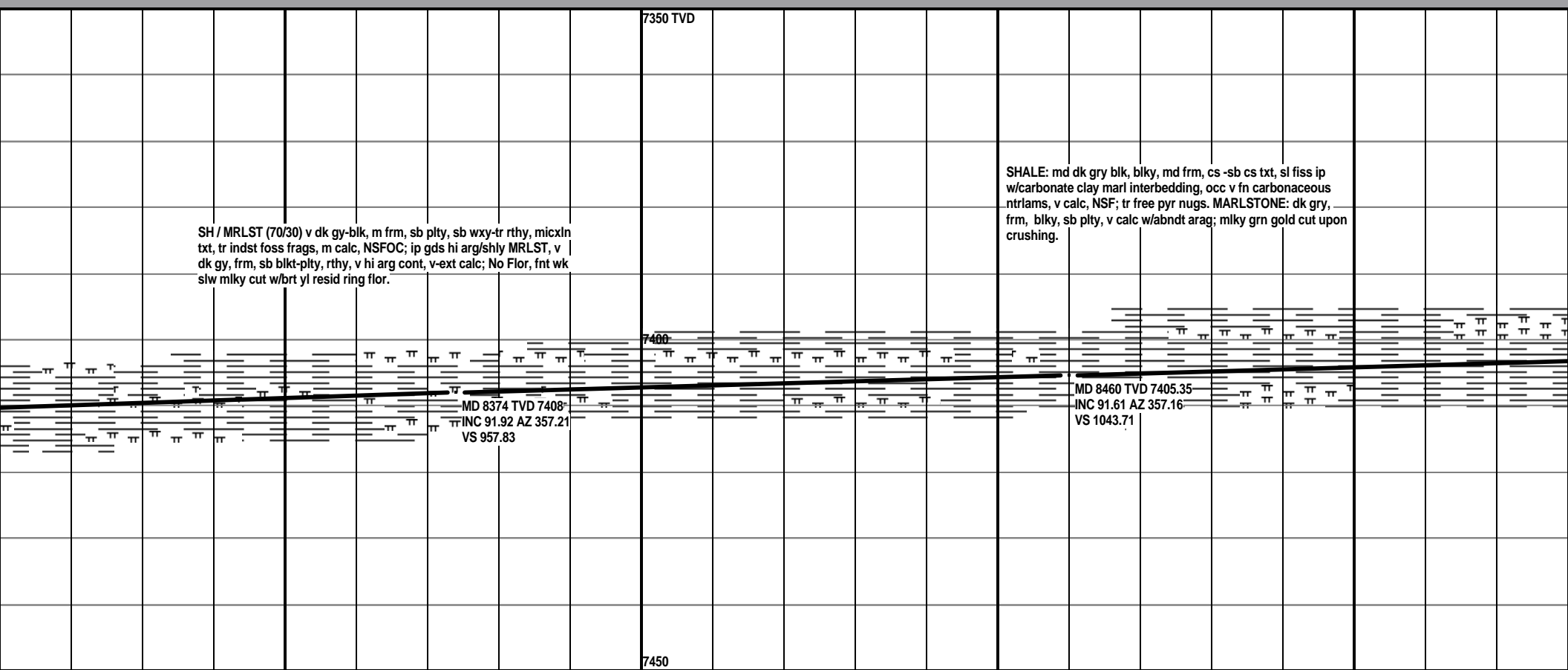
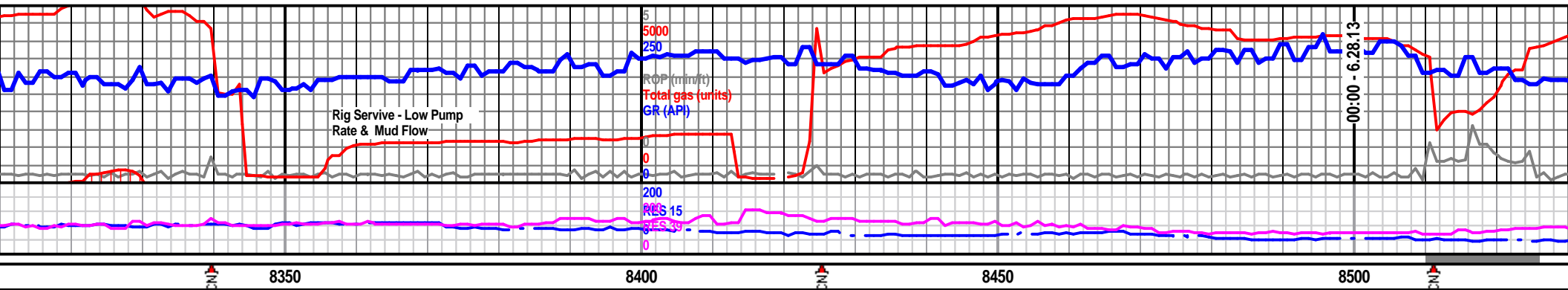




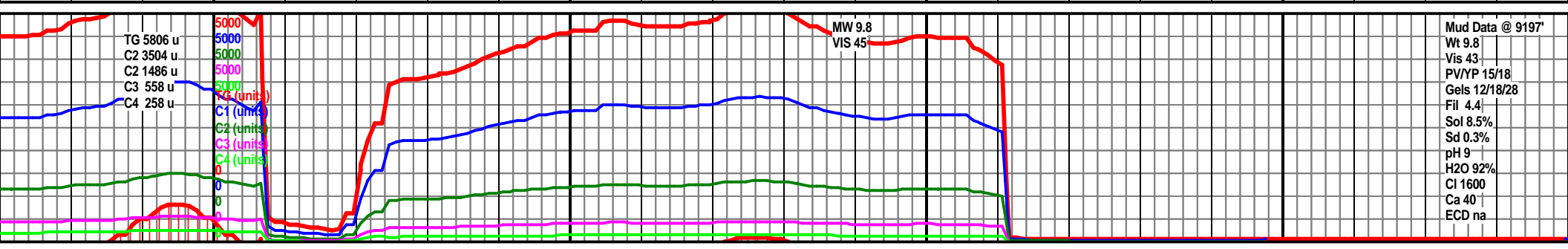
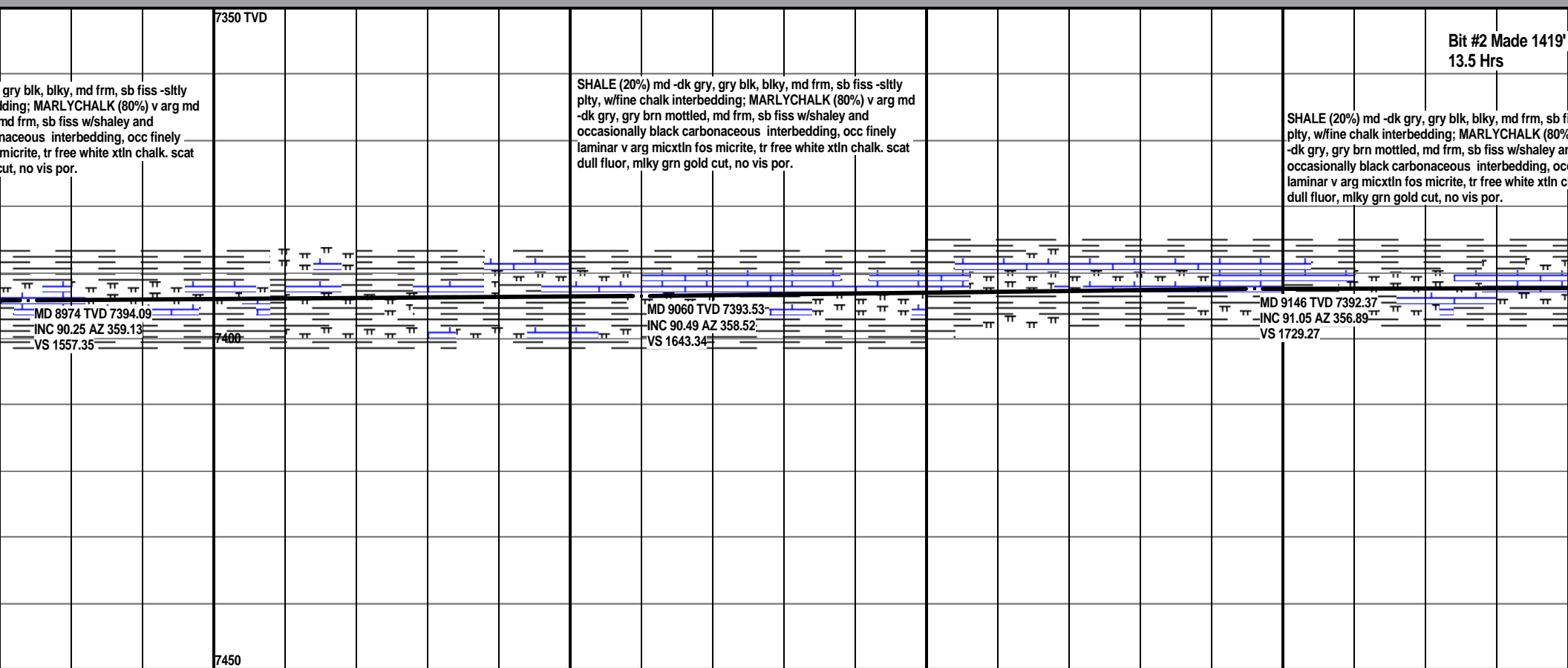
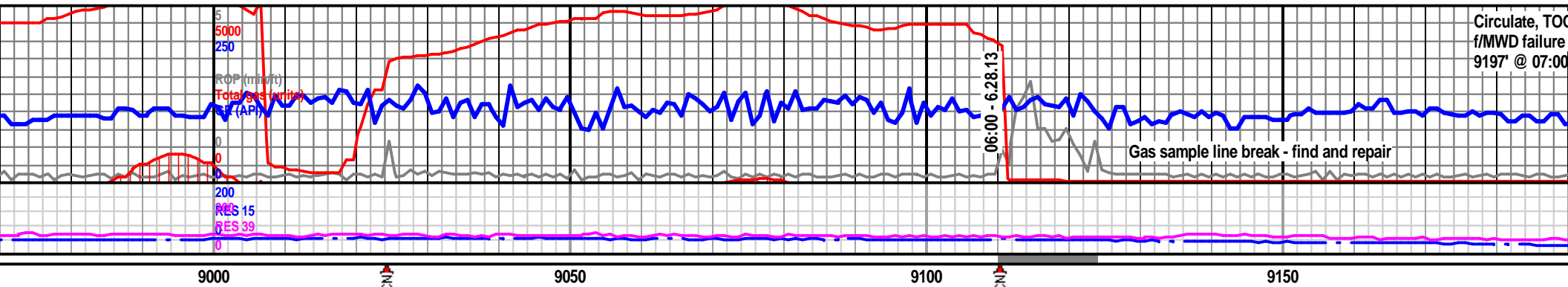


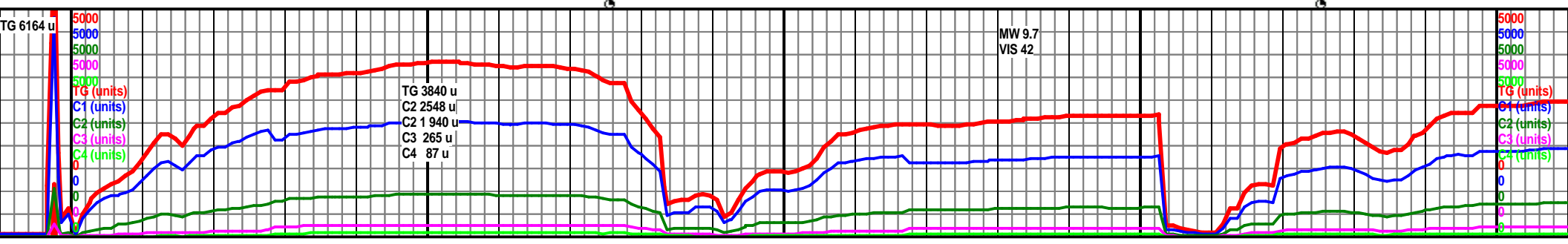
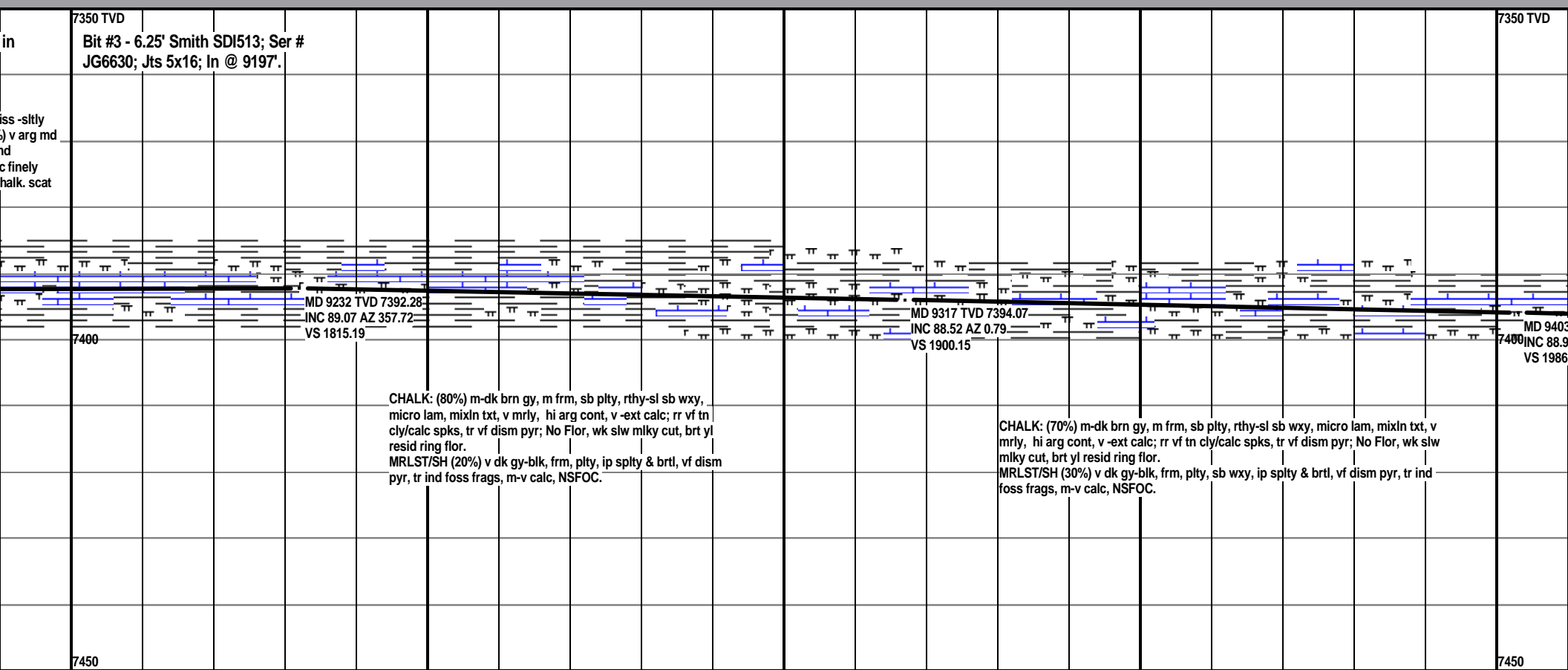
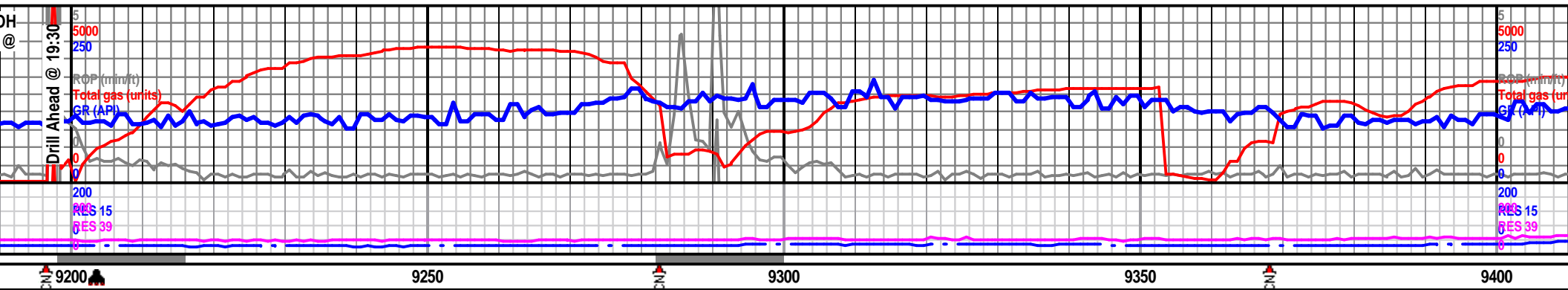


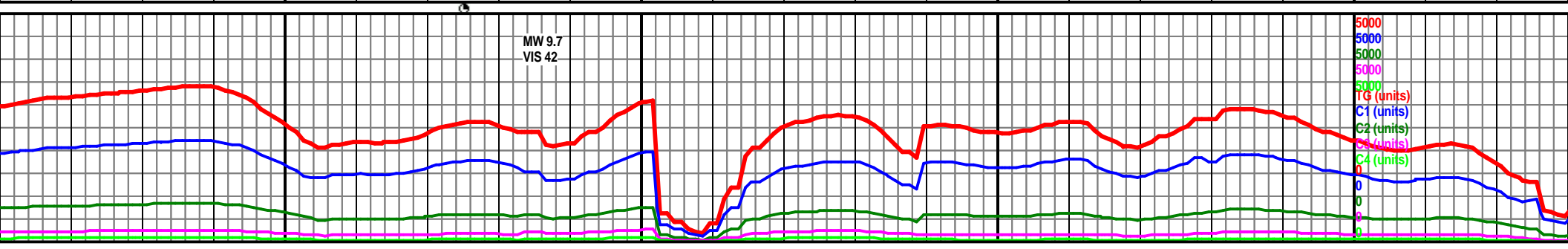
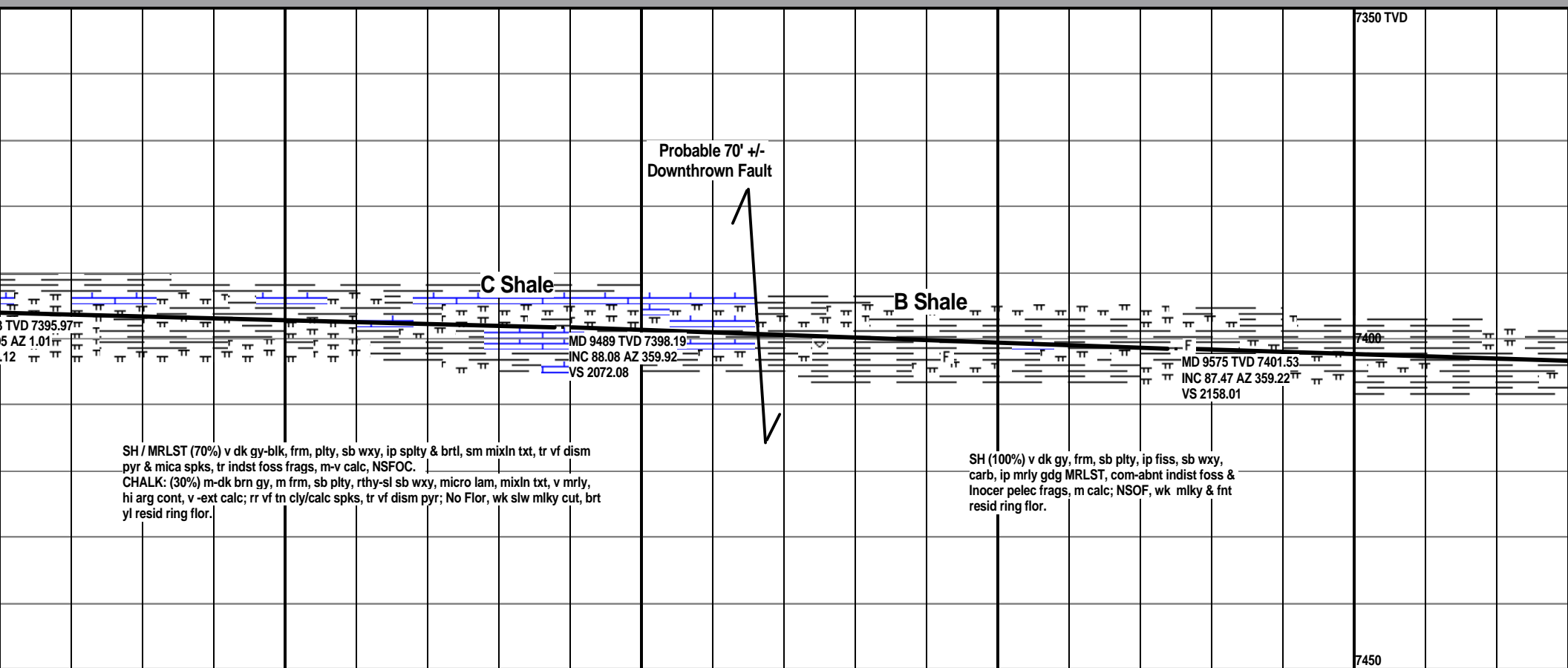


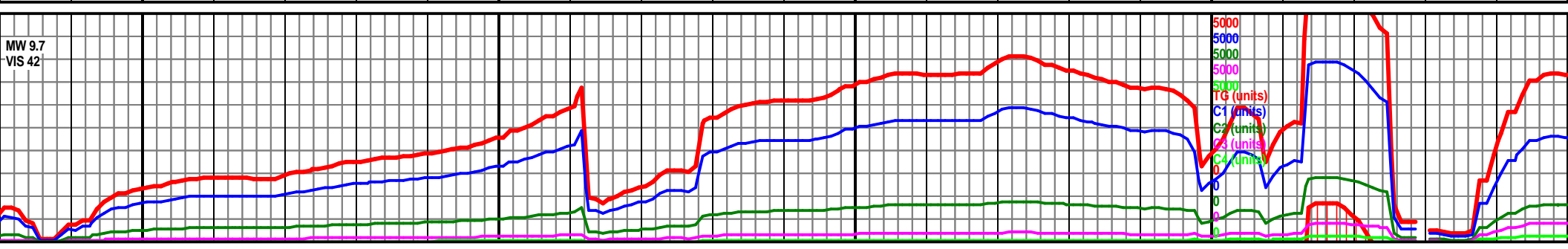
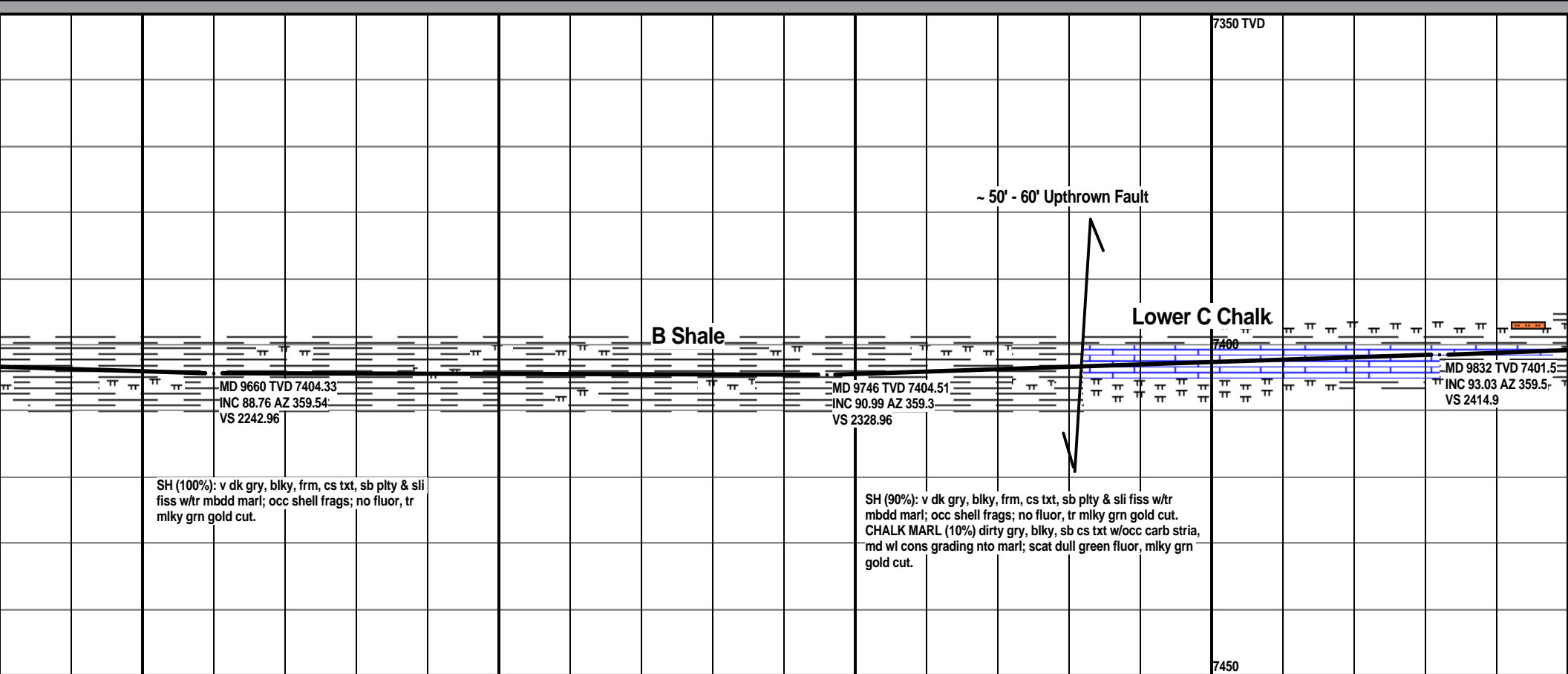
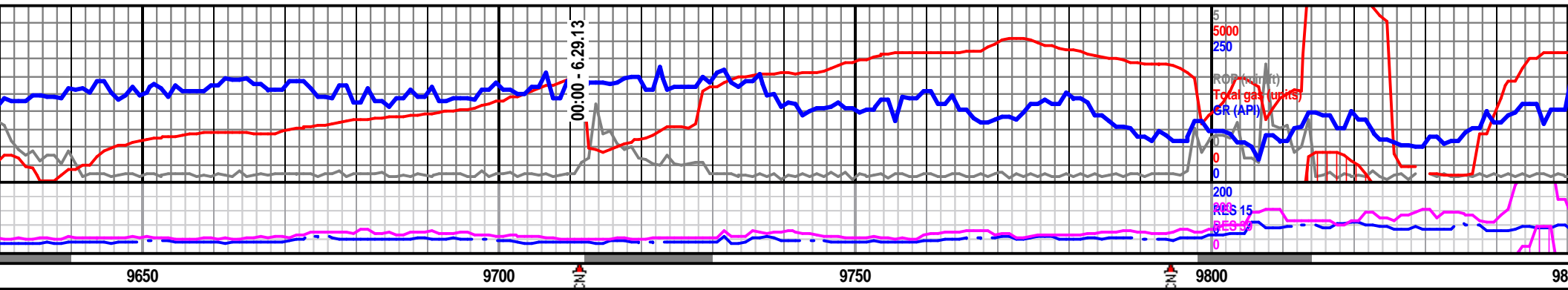


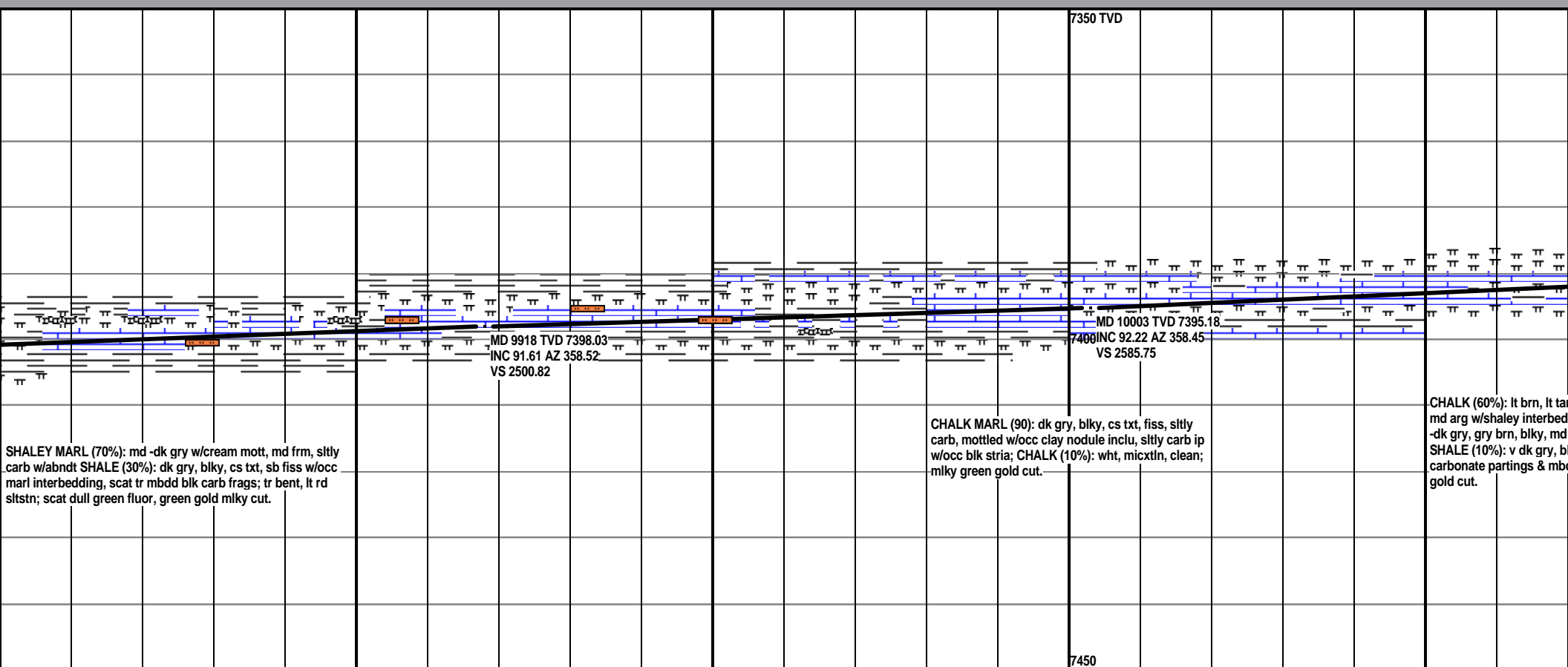
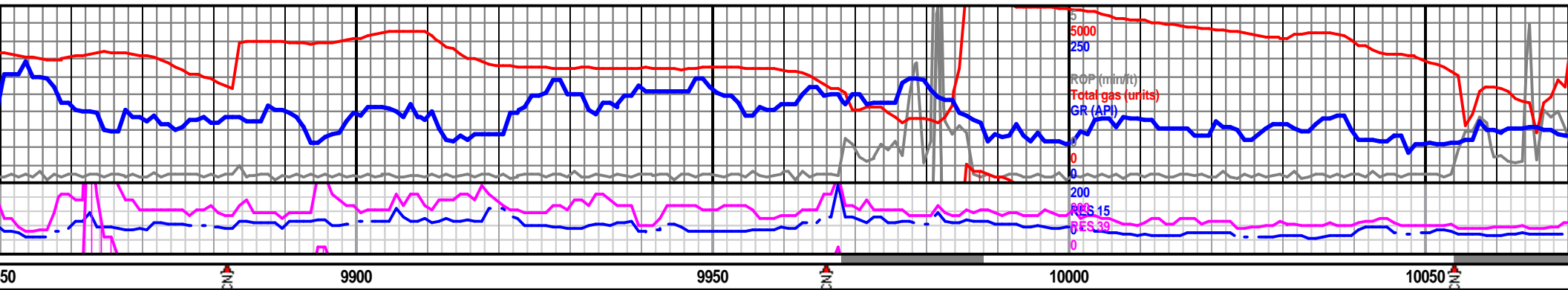
Circulate, TOC
f/MWD failure
9197' @ 07:00







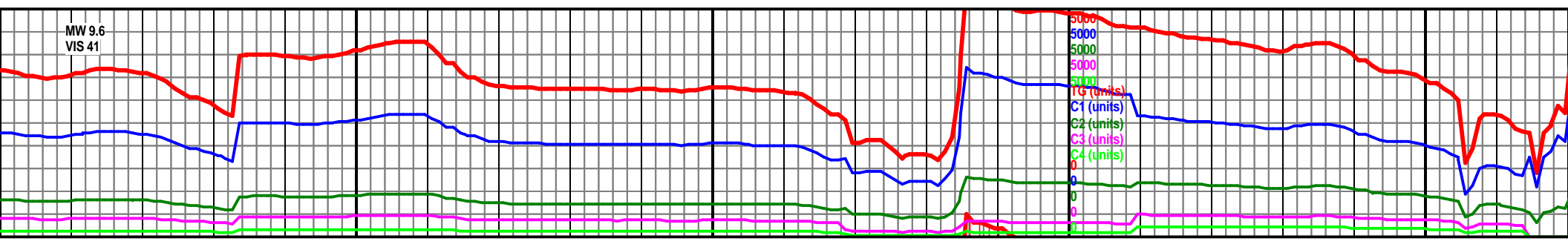




SHALEY MARL (70%): md -dk gry w/cream mott, md frm, sltly carb w/abndt SHALE (30%): dk gry, blk, cs txt, sb fiss w/occ marl interbedding, scat tr mbdd blk carb frags; tr bent, lt rd sltstn; scat dull green fluor, green gold mlky cut.

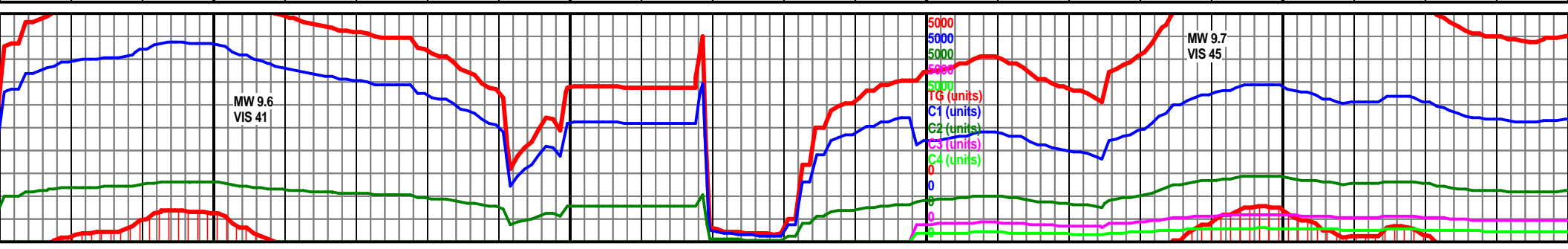
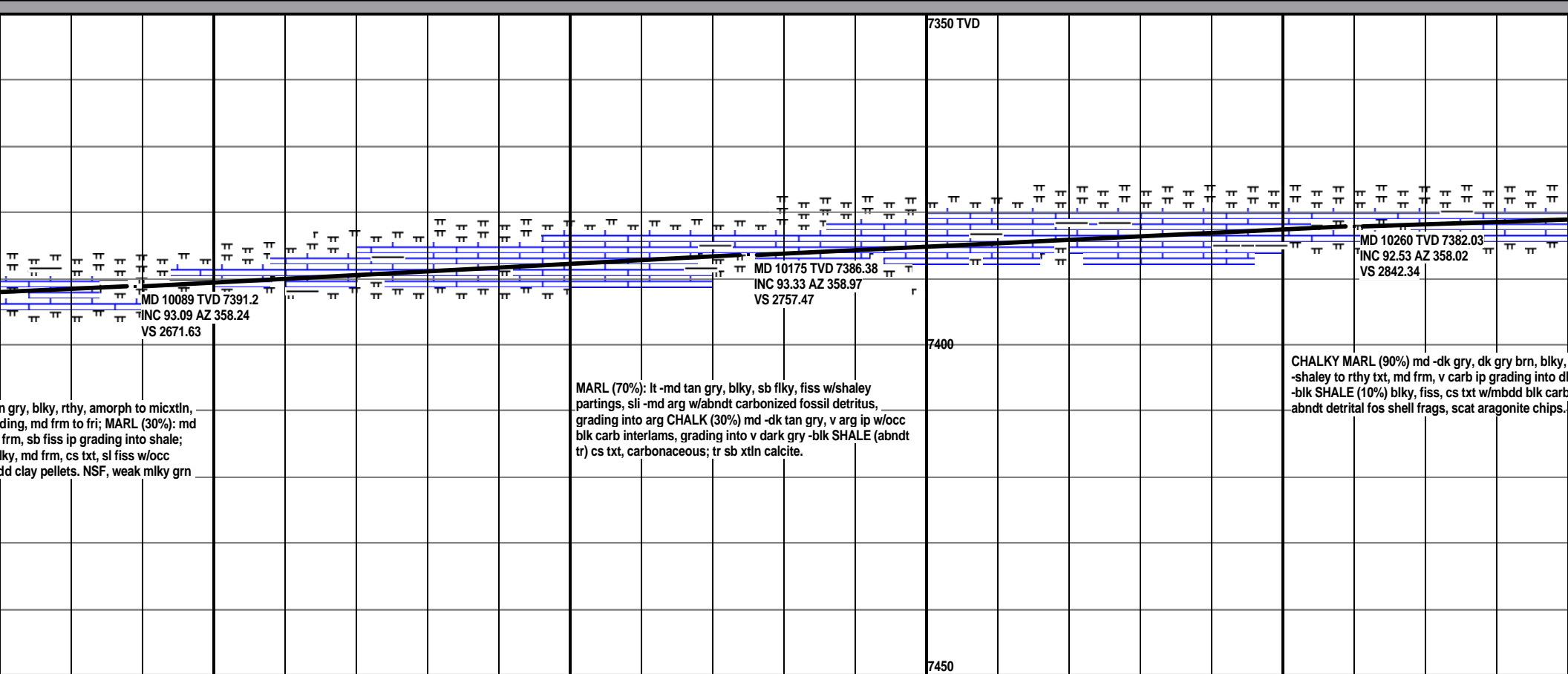
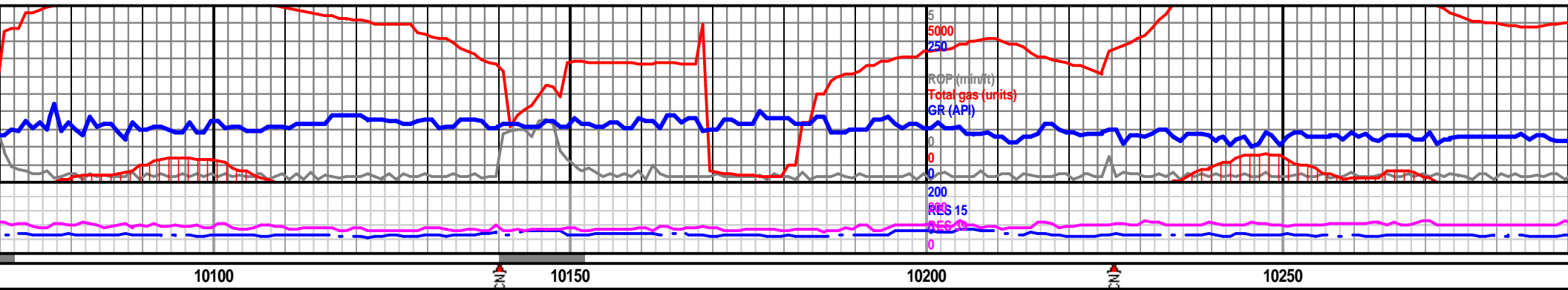
CHALK MARL (90): dk gry, blk, cs txt, fiss, sltly carb, mottled w/occ clay nodule inclu, sltly carb ip w/occ blk stria; CHALK (10%): wht, micxtln, clean; mlky green gold cut.

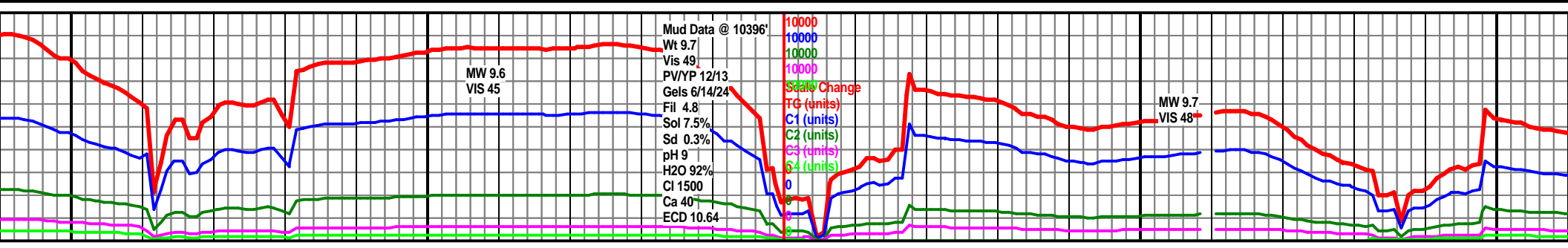
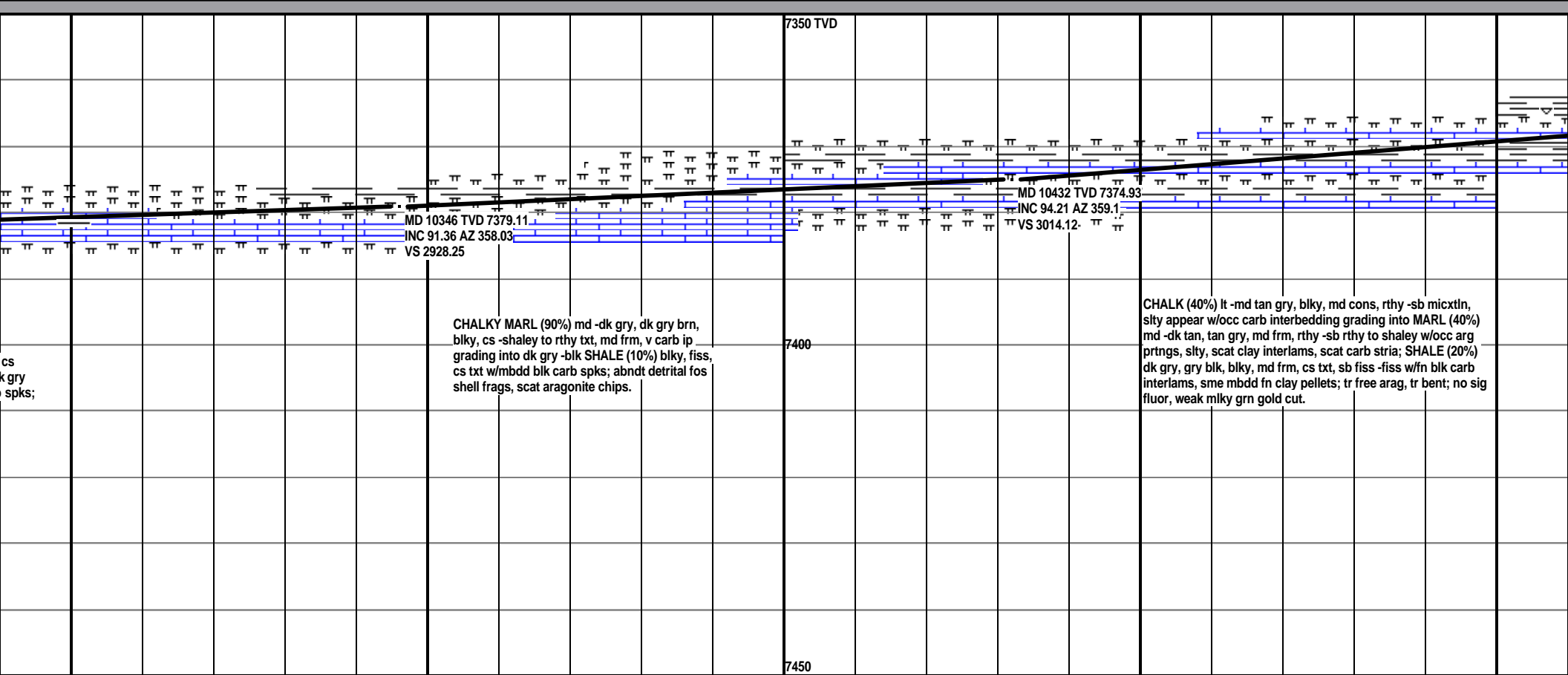
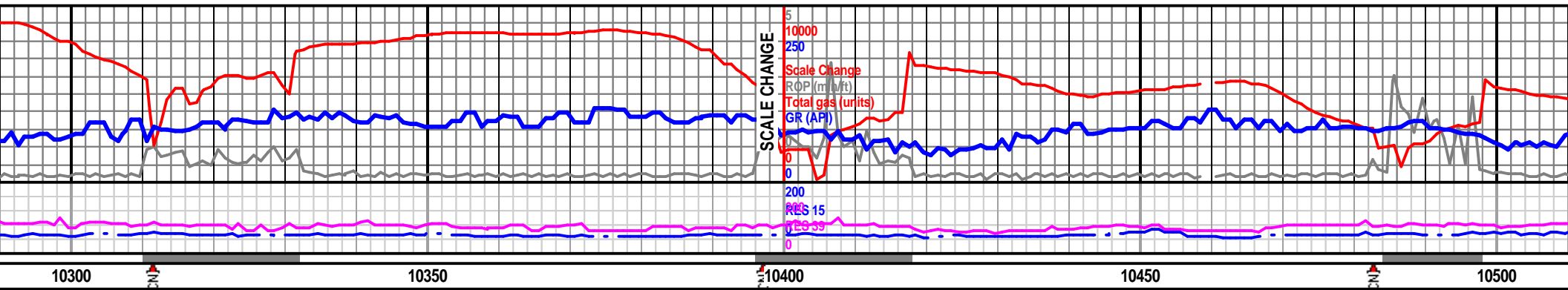
CHALK (60%): lt brn, lt tan md arg w/shaley interbed -dk gry, gry brn, blk, md SHALE (10%): v dk gry, blk carbonate partings & mbdd gold cut.

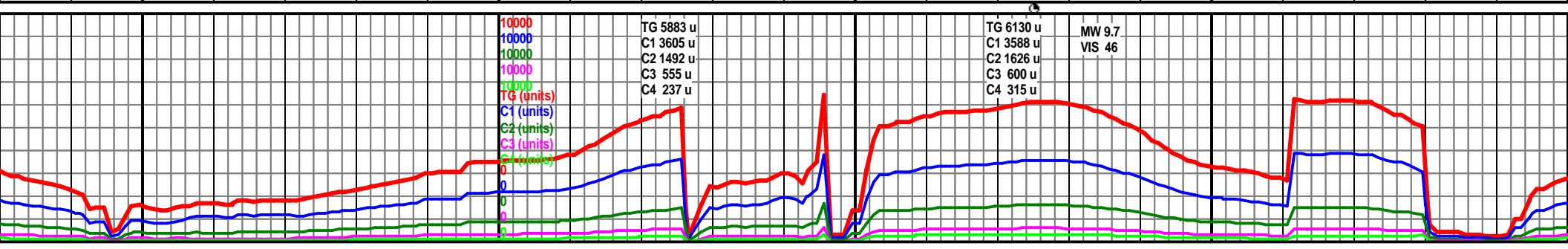
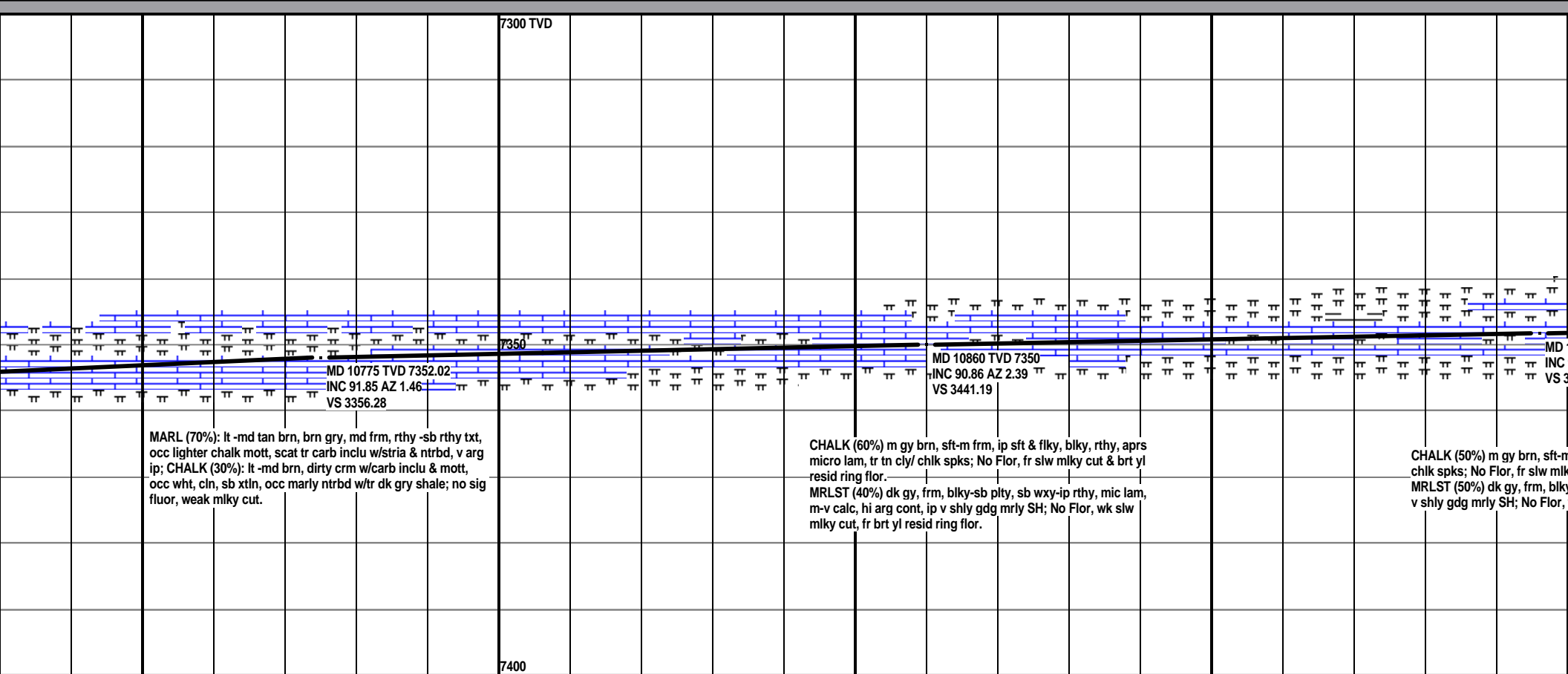
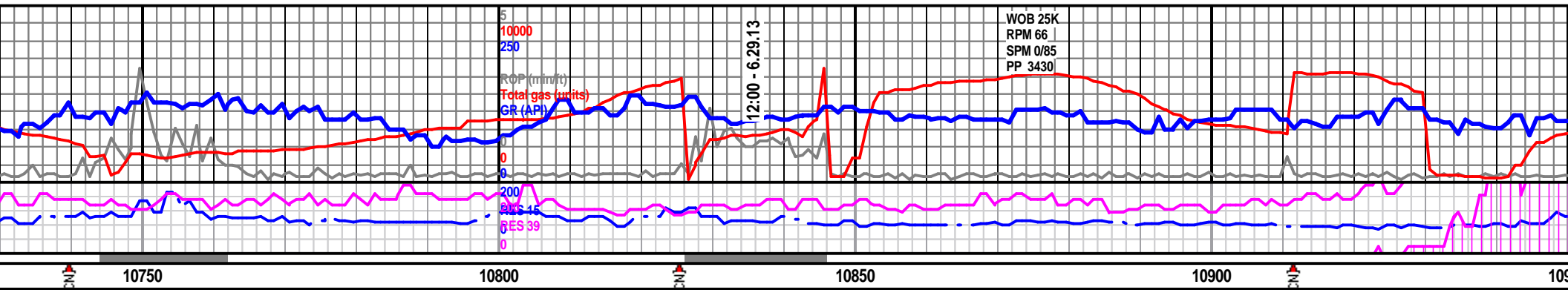


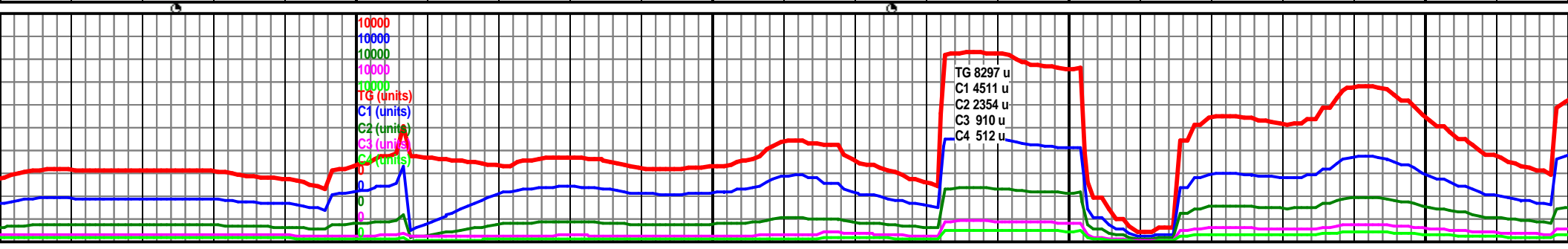
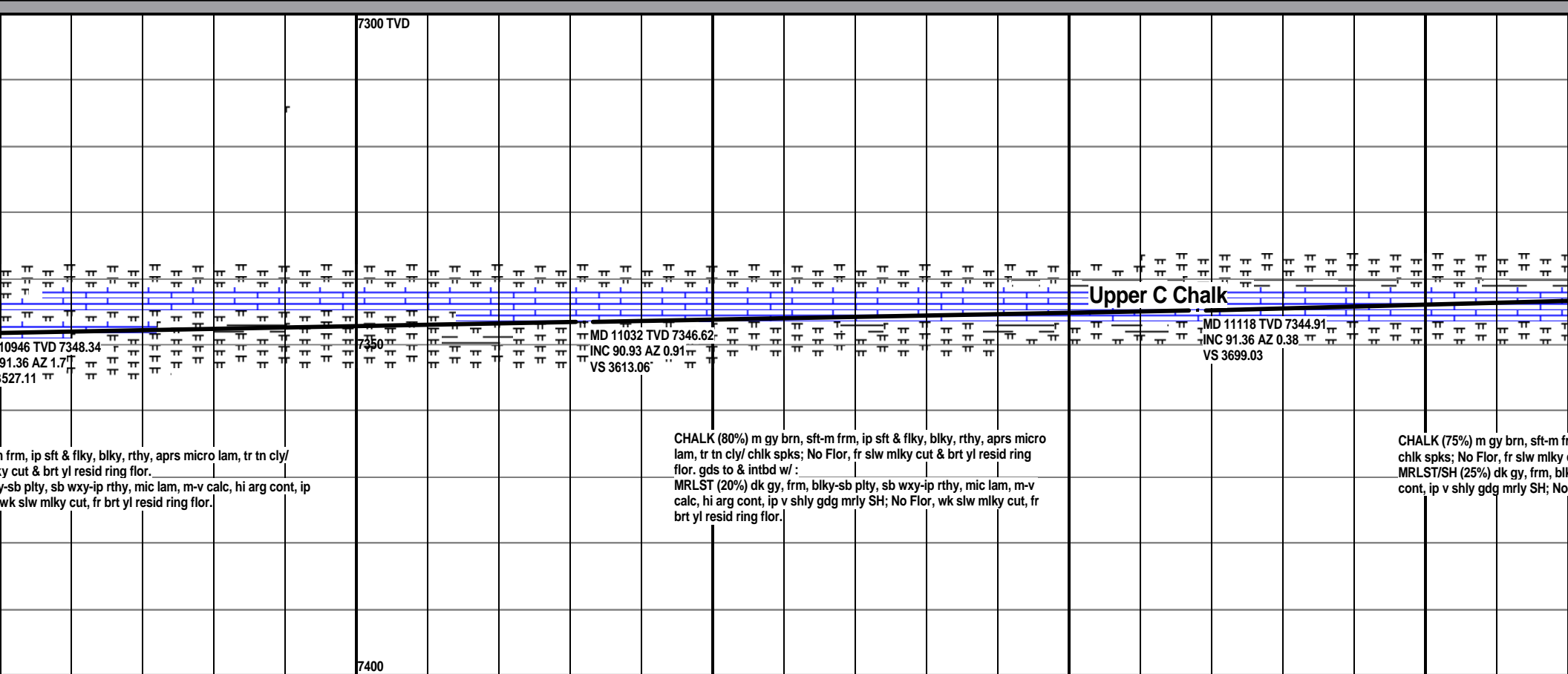
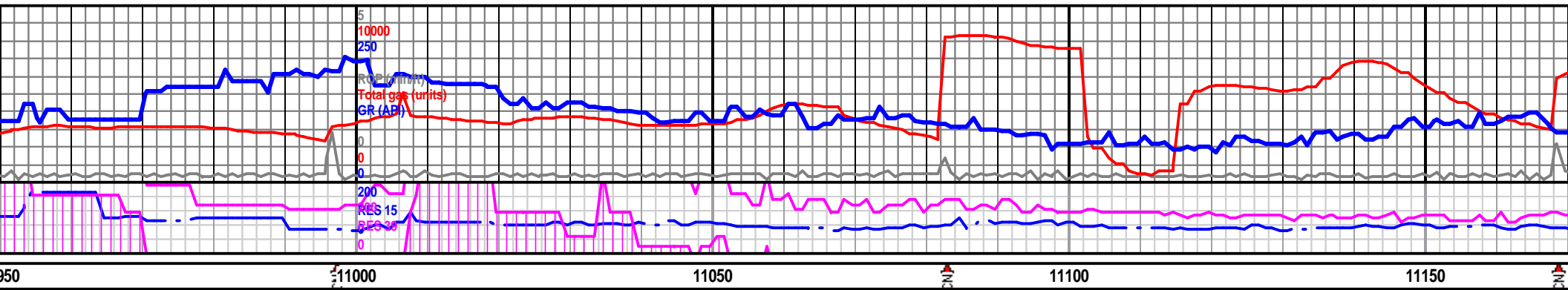
MW 9.6
VIS 41

7400 7450





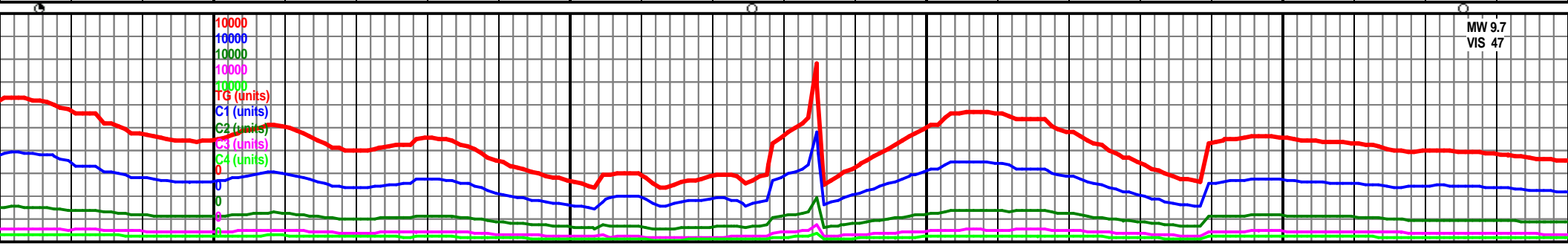
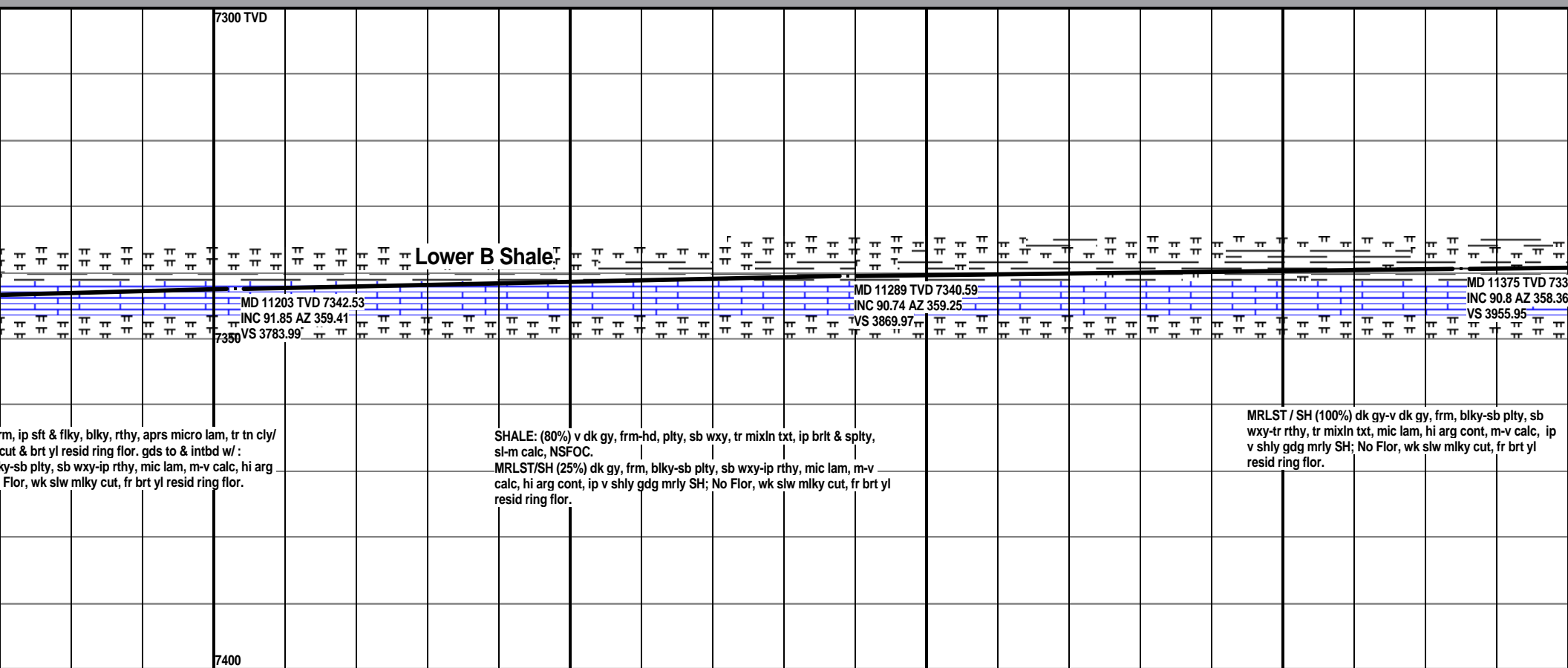


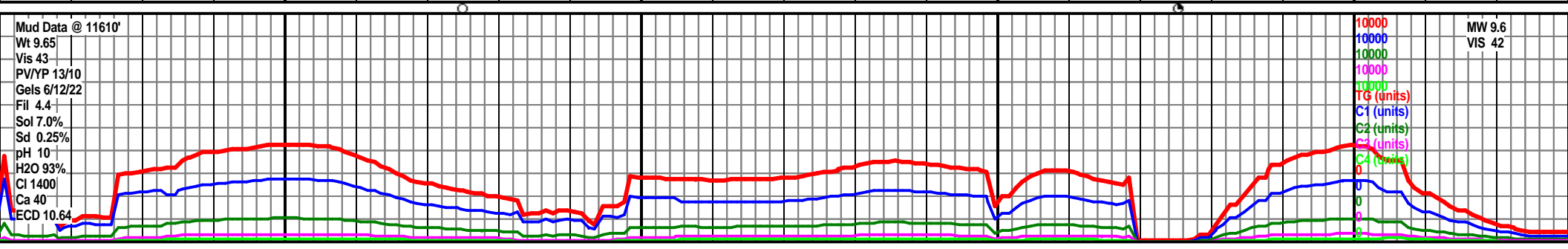
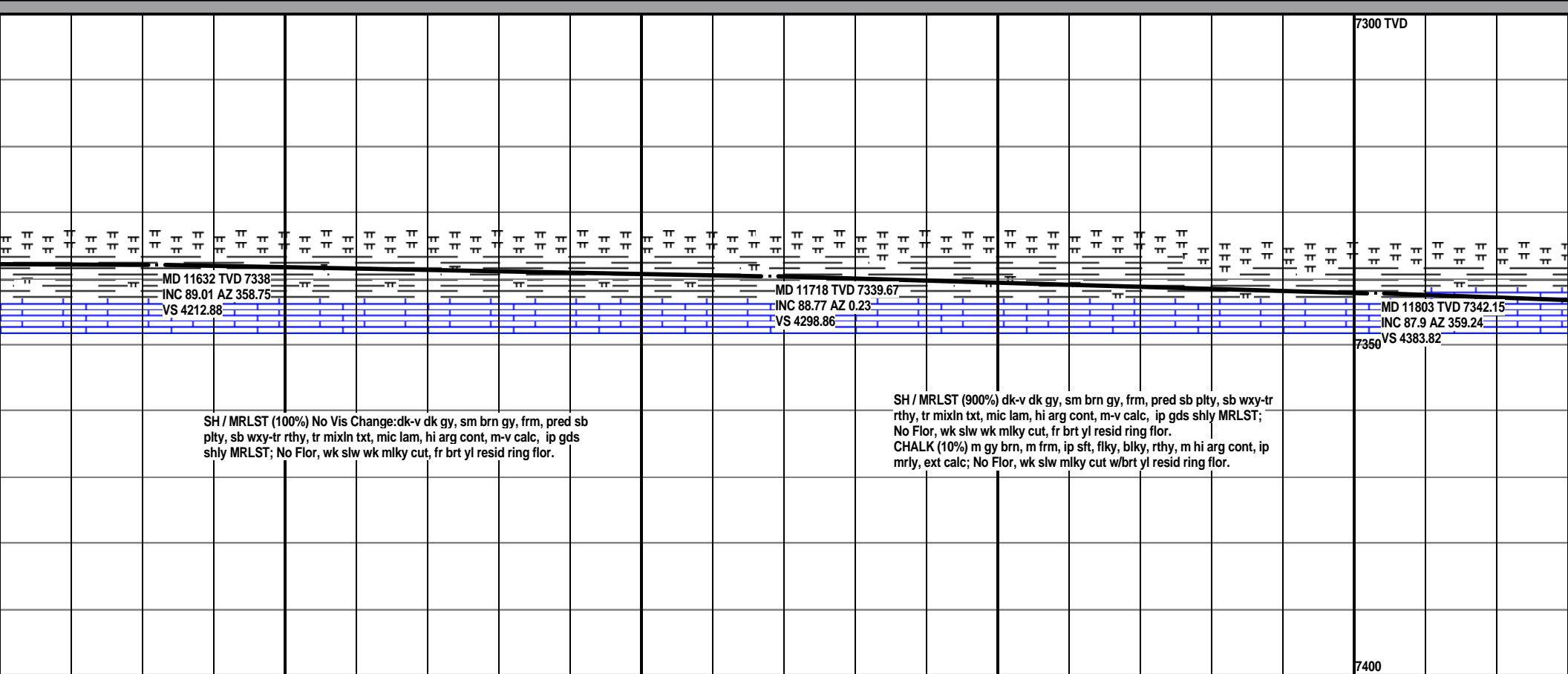
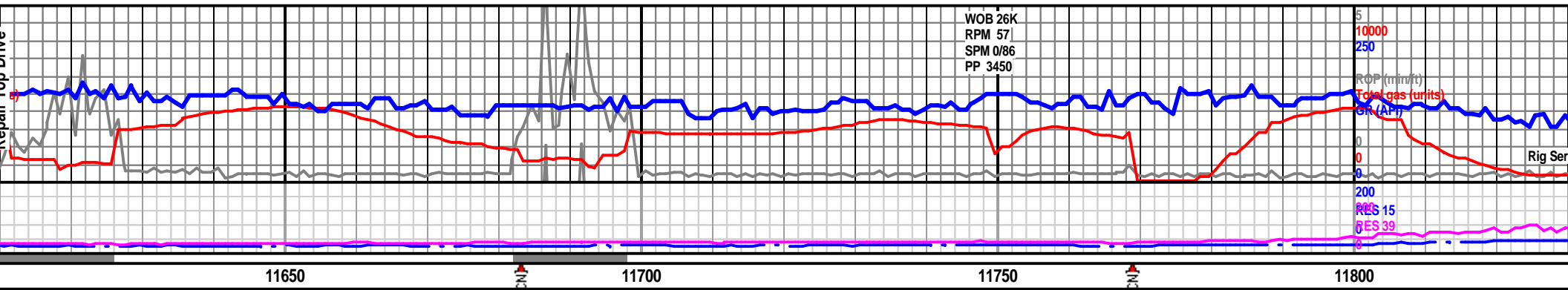


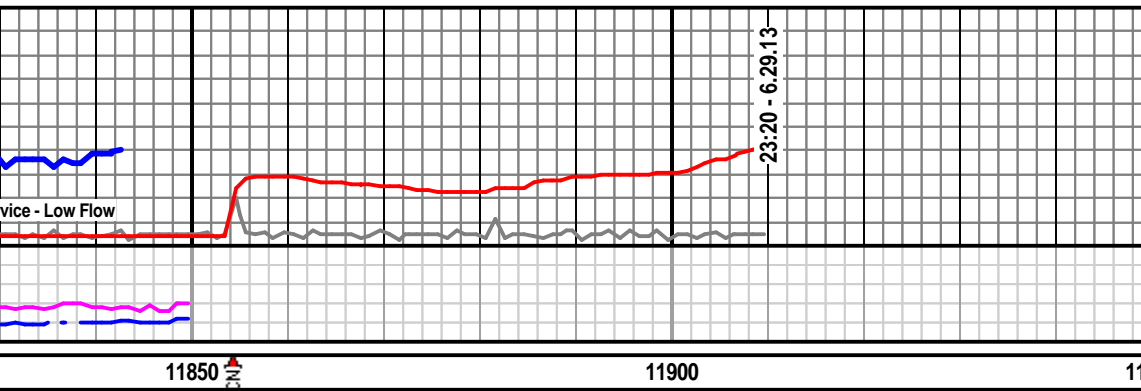
fr, ip sft & flky, blk, rthy, aprs micro lam, tr tn cly/
y cut & brt yl resid ring flr.
y-sb plty, sb wxy-ip rthy, mic lam, m-v calc, hi arg cont, ip
wk slw mlky cut, fr brt yl resid ring flr.

CHALK (80%) m gy brn, sft-m frm, ip sft & flky, blk, rthy, aprs micro
lam, tr tn cly/ chlk spks; No Flor, fr slw mlky cut & brt yl resid ring
flr. gds to & intbd w/ :
MRLST (20%) dk gy, frm, blk-sb plty, sb wxy-ip rthy, mic lam, m-v
calc, hi arg cont, ip v shly gdg mrlly SH; No Flor, wk slw mlky cut, fr
brt yl resid ring flr.

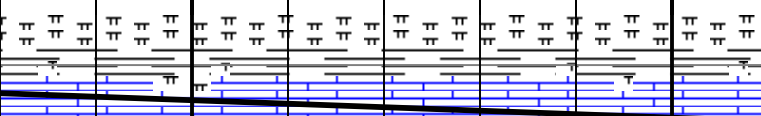
CHALK (75%) m gy brn, sft-m frm, ip sft & flky, blk, rthy, aprs micro
lam, tr tn cly/ chlk spks; No Flor, fr slw mlky cut & brt yl resid ring
flr. gds to & intbd w/ :
MRLST/SH (25%) dk gy, frm, blk-sb plty, sb wxy-ip rthy, mic lam, m-v
calc, hi arg cont, ip v shly gdg mrlly SH; No Flor, wk slw mlky cut, fr
brt yl resid ring flr.







Bit # 3 Made 713' in TD @ 11,910' MD @ 23:20 hours,
24.25 Hrs. 06.29.2013; Circ & Cond; Pump Mud
Sweeps;



Projection to Bit:
MD 11910 TVD 7346.41
INC 87.65 AZ 359.09
VS 4490.73

CHALK (70%) m gy brn, m frm, ip sft, flky, blk, rthy, m hi arg cont, ip mrl, ext
calc; No Flor, wk slw mlky cut w/bt yl resid ring flor.
SH / MRLST (30%) dk-v dk gy, sm brn gy, frm, pred sb plty, sb wxy-tr rthy, tr
mixln txt, mic lam, hi arg cont, m-v calc, ip gds shly MRLST; No Flor, wk slw wk
mlky cut, fr brt yl resid ring flor.

**THANK YOU FOR CHOOSING
GOOLSBY BROTHERS &
ASSOCIATES**

**JACK ROGERS
ROBERT NORDECK
W. H. McCROSKEY III**

