

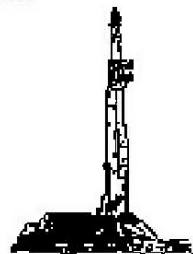
GOOLSBY BROTHERS
and associates, inc.

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: Benson Farms 14N-19HZ

API: 05123393390000

Location: Section 23, T3N, R68W

License Number:

Spud Date: July 18, 2014

Surface Coordinates: SESE Sec 23 T3N R68W; 617' FSL, 72' FEL

LAT: 40° 20'60.56 N; LONG: 104° 96'08.98 W

Bottom Hole Coordinates: SESW Sec 19 T3N R67W; 302' FSL; 2061' FWL

Ground Elevation (ft): 4960'

Logged Interval (ft): 6800'

To: 14424'

Formation: Pierre Shales/Sands, Sharon Springs, Niobrara, Niobrara C Chalk (Target)

Type of Drilling Fluid: Water & Poly to 5000', LSND 5000'-14424'

K.B. Elevation (ft): 4976'

Total Depth (ft): 14424' DMTD

Region: Wattenberg, DJ Basin

Drilling Completed: July 27, 2014

Printed by HORIZONTAL.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Kerr-McGee Oil & Gas Onshore LP

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

Denver, CO 80202

CO Geologist, Tom Birmingham

GEOLOGIST

Name: Blake Stacey and Shelton Davis

Company: Goolsby Brothers & Assoc. (GBA), Inc. (www.goolsbybrothers.com)

Address: 575 Union Blvd.

Suite 208,

Lakewood CO. 80228

E-logs

MWD GR 6000' - 14424'

Casing

9 5/8" Surface Casing set @ 1195' MD


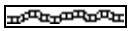
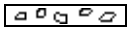

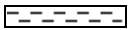
7" Intermediate Casing set @ 7501' MD






4 1/2" Production Liner hung 7/28/2014, landed @ 14,414' MD


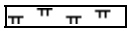
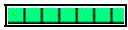
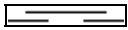
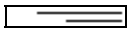
Comments

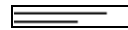

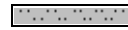


- 1) Drilling Contractor: Xtreme Drilling, Rig # 23
- 2) Directional Drilling: Baker Hughes
MWD GR: Baker Hughes
- 3) Gas Equipment: Pason Gas Analyzer and Agitator

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
 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
 Chlkstg
 Anhy
 Arg
 Bent
 Coal
 Dol
 Gyp
 Ls

 Mrst
 Sltstgr
 Ssstgr

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

OTHER SYMBOLS

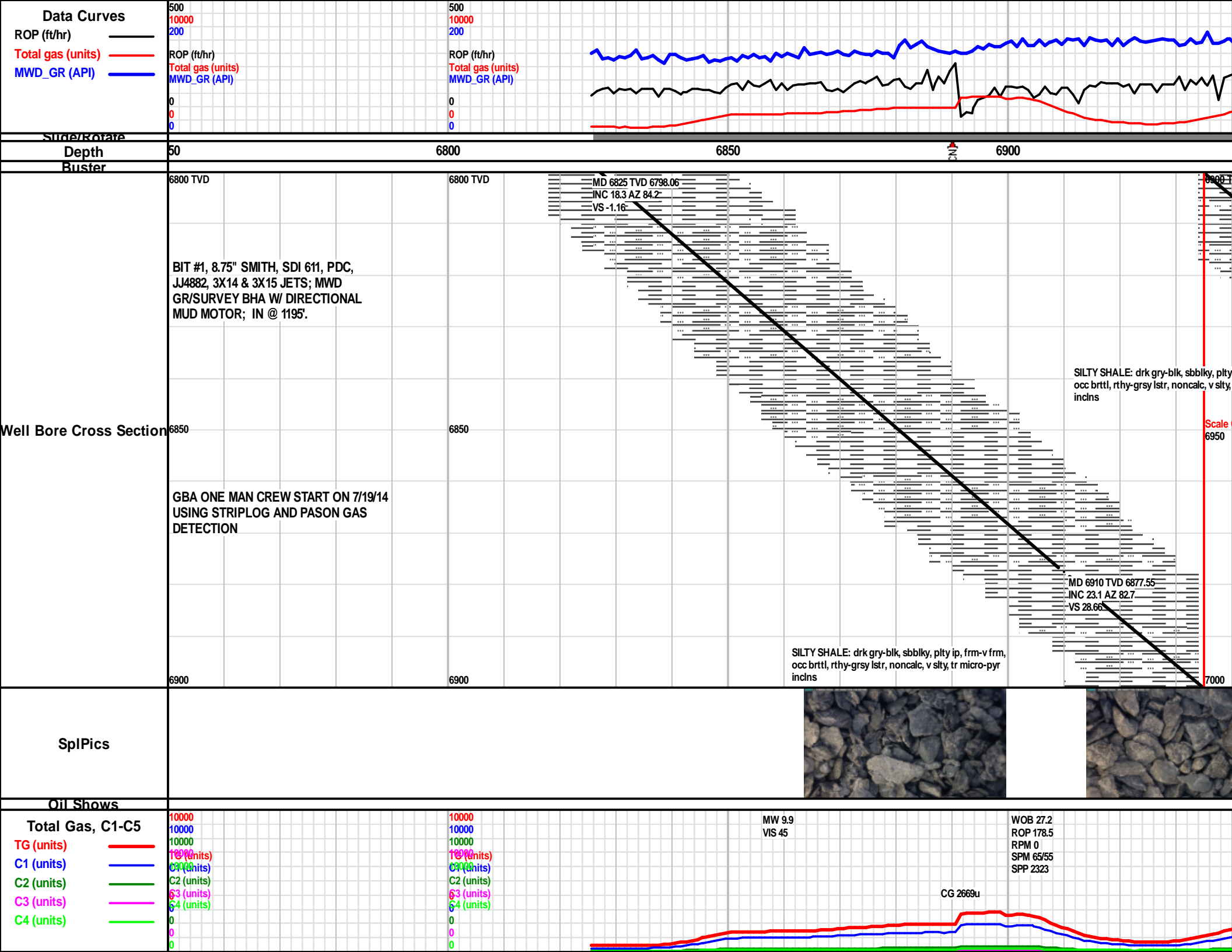
- ⊗ Inter
- ⊗ Moldic
- ⊗ Organic
- ⊗ Pinpoint
- ⊗ Vuggy

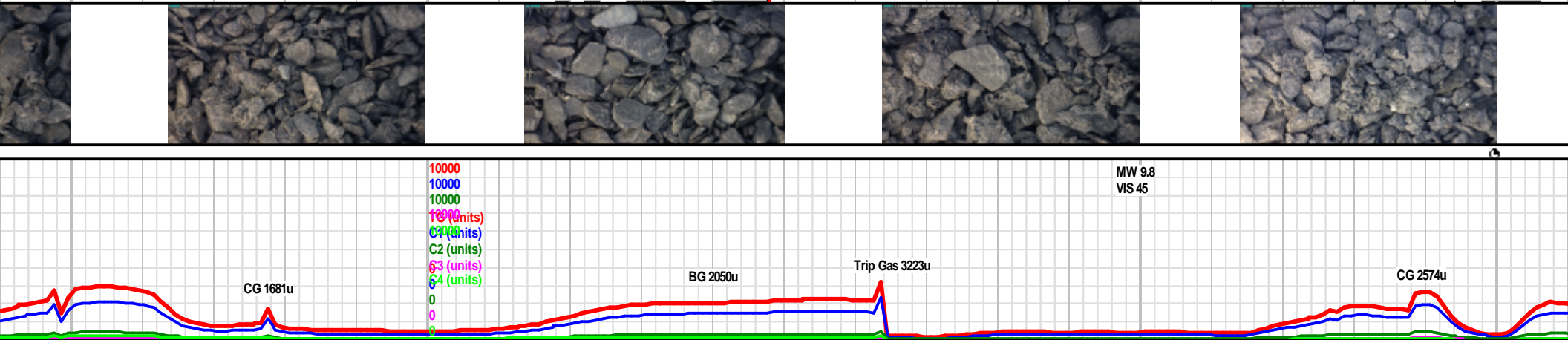
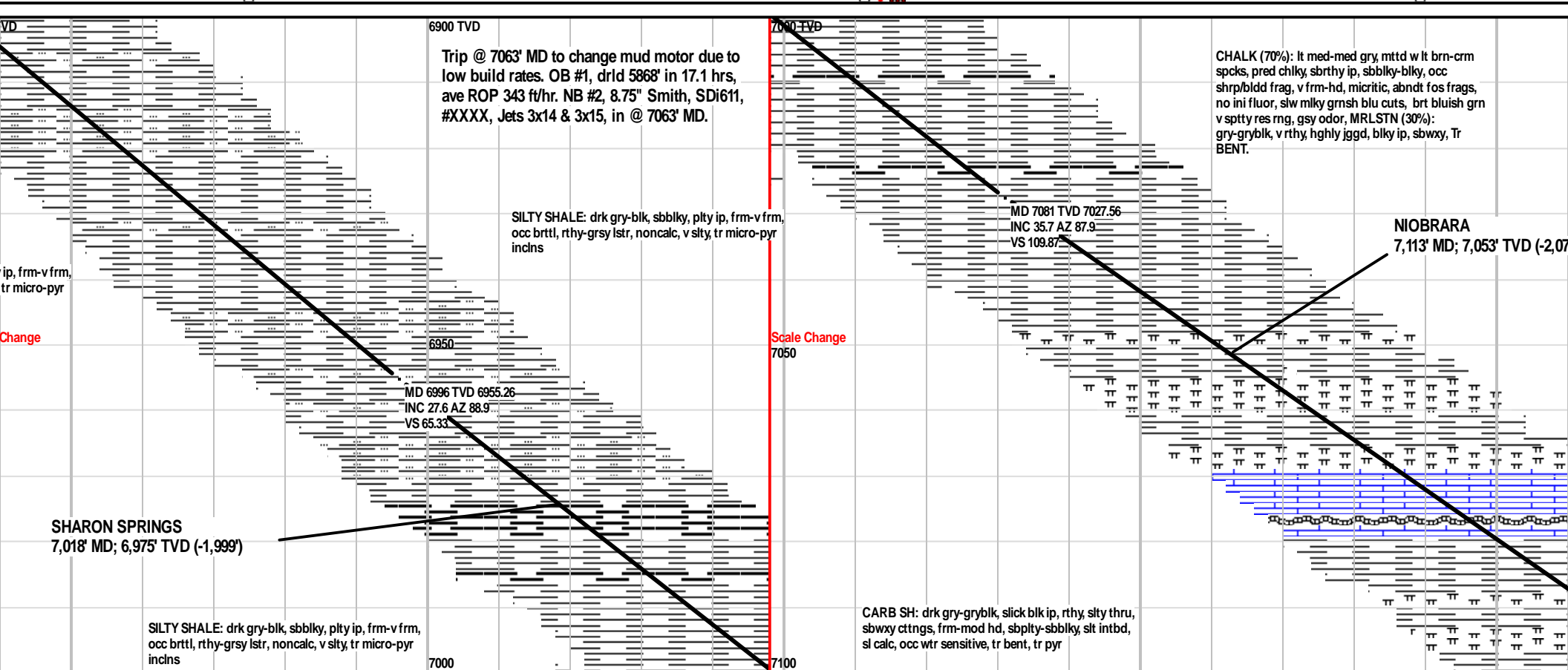
ROUNDING

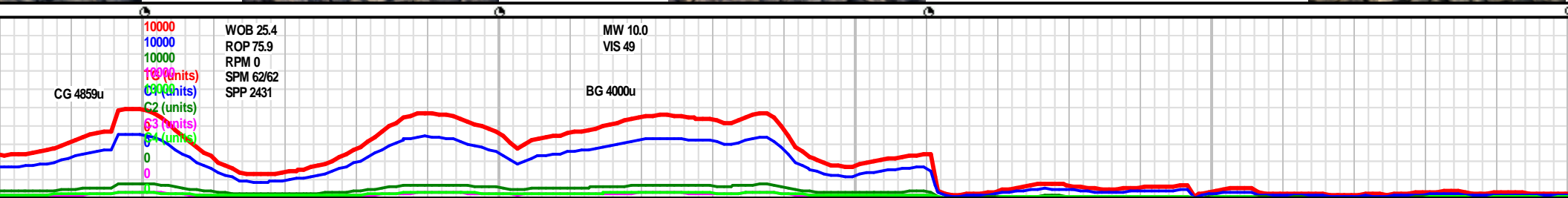
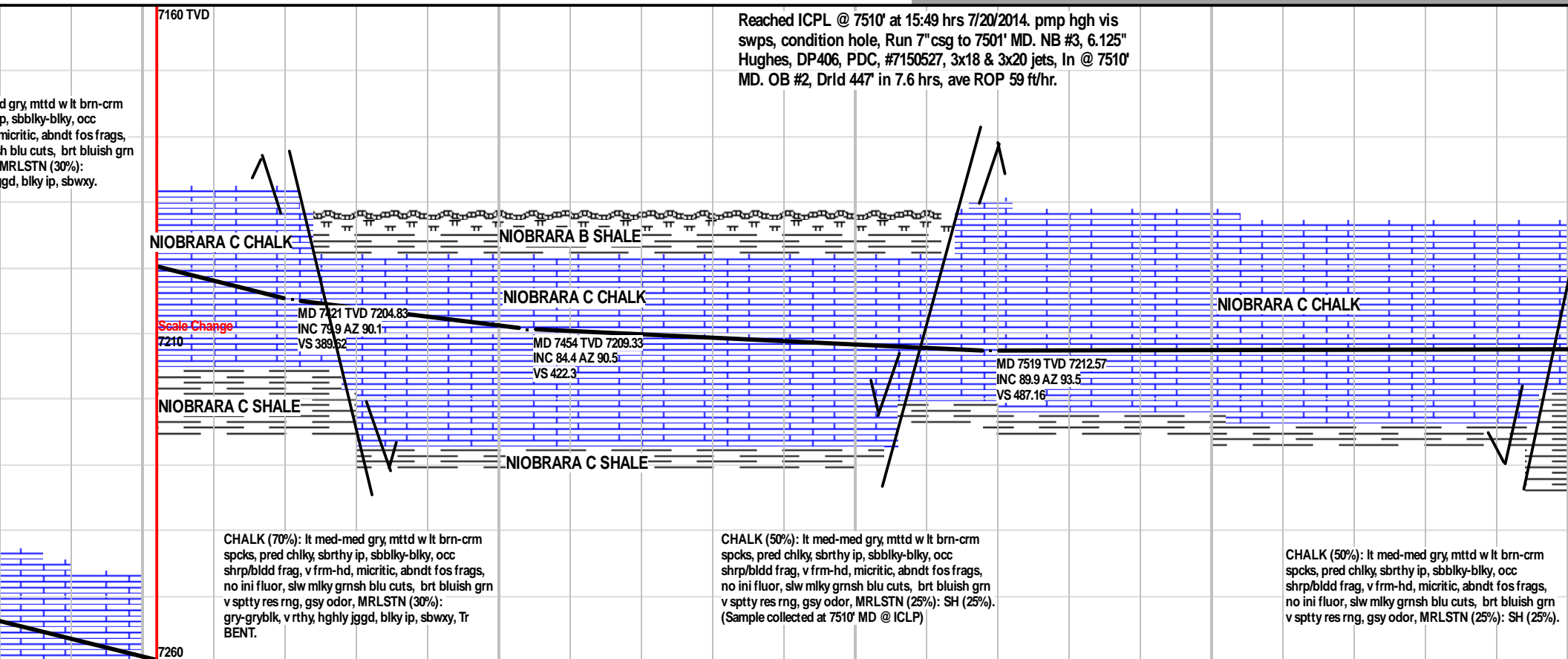
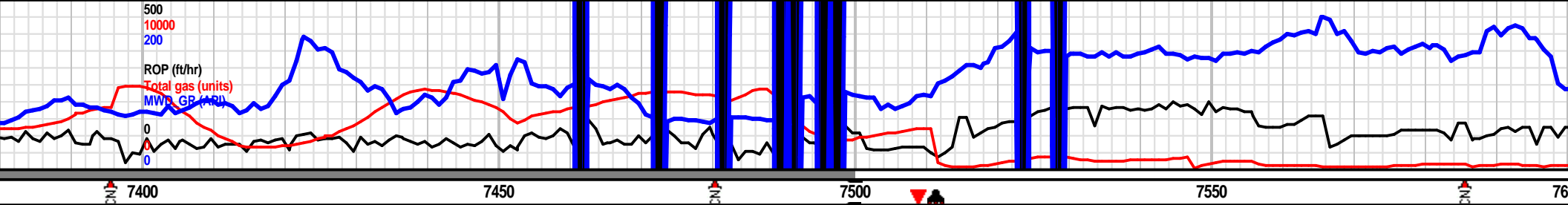
- ◑ Rounded
- ◑ Subrnd
- ◑ Subang
- ◑ Angular

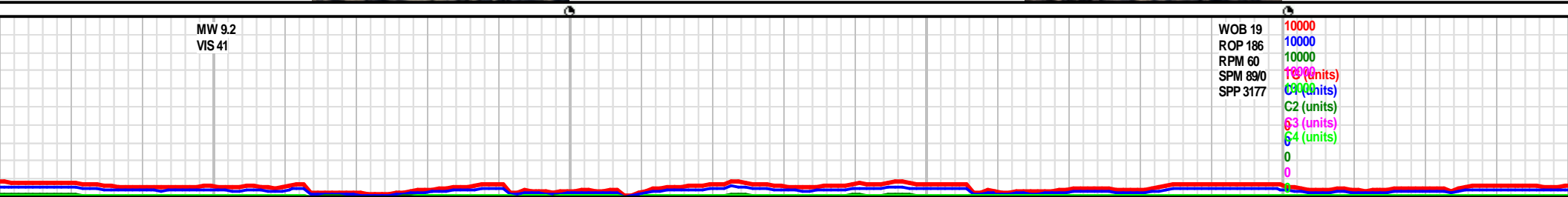
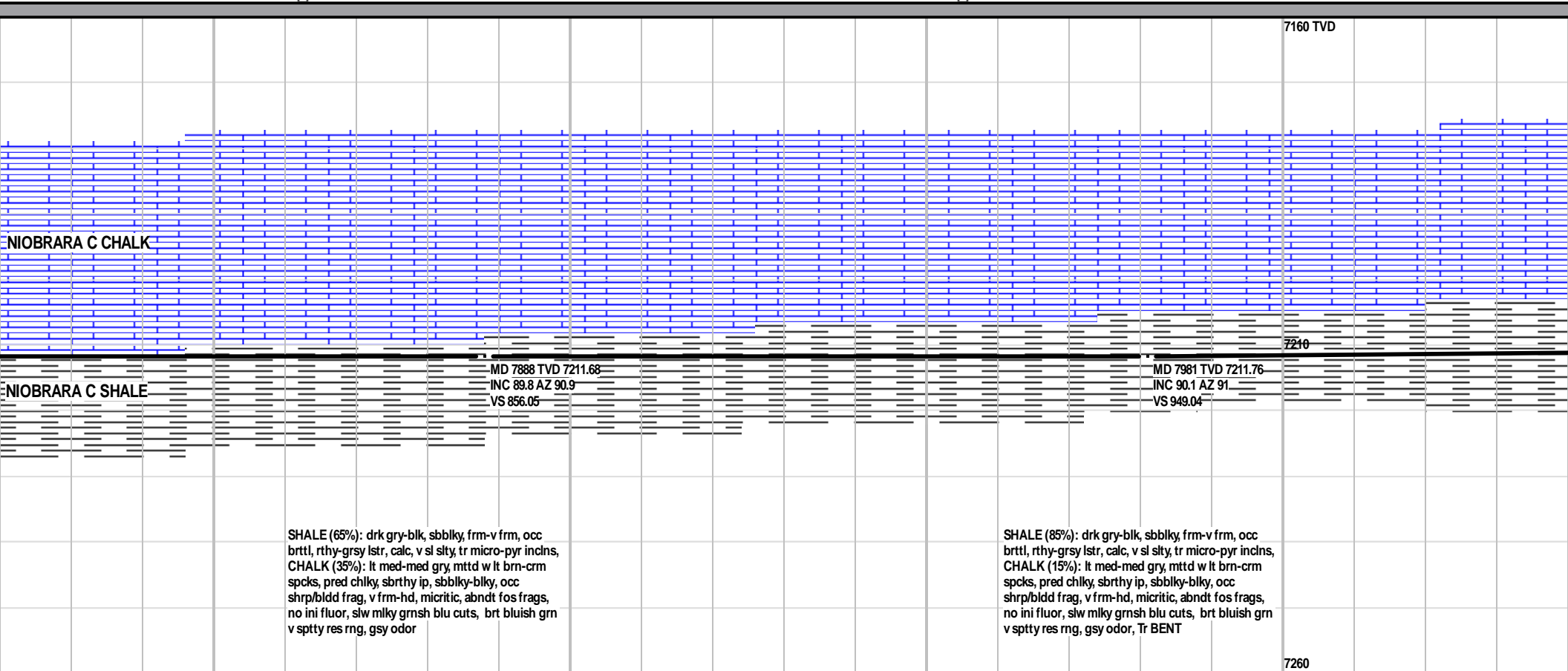
SORTING

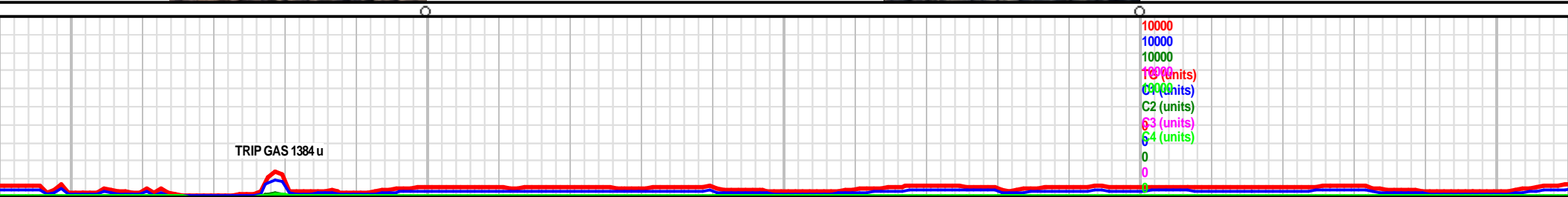
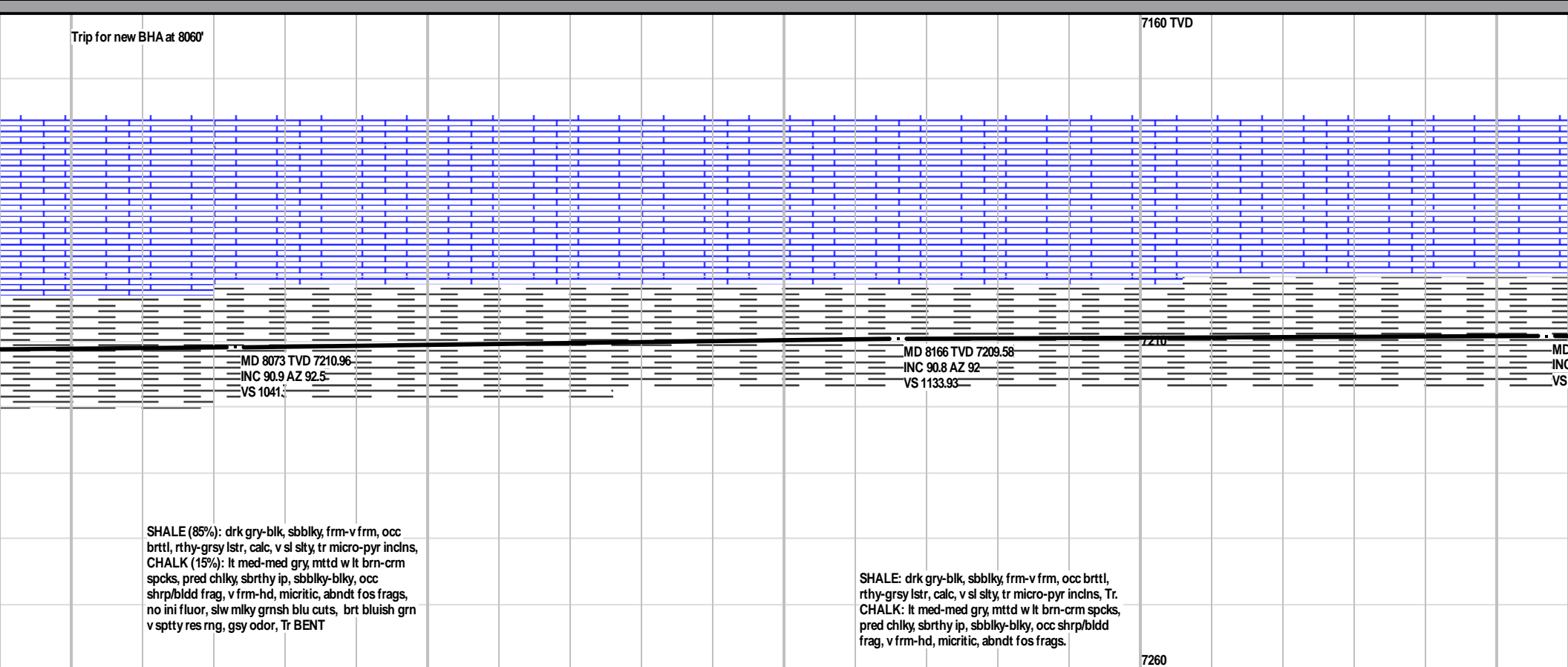
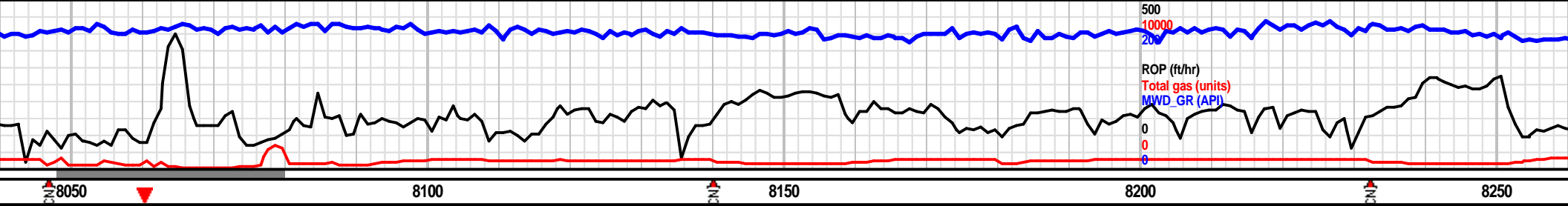
- ◑ Well
- ◑ Moderate
- ◑ Poor

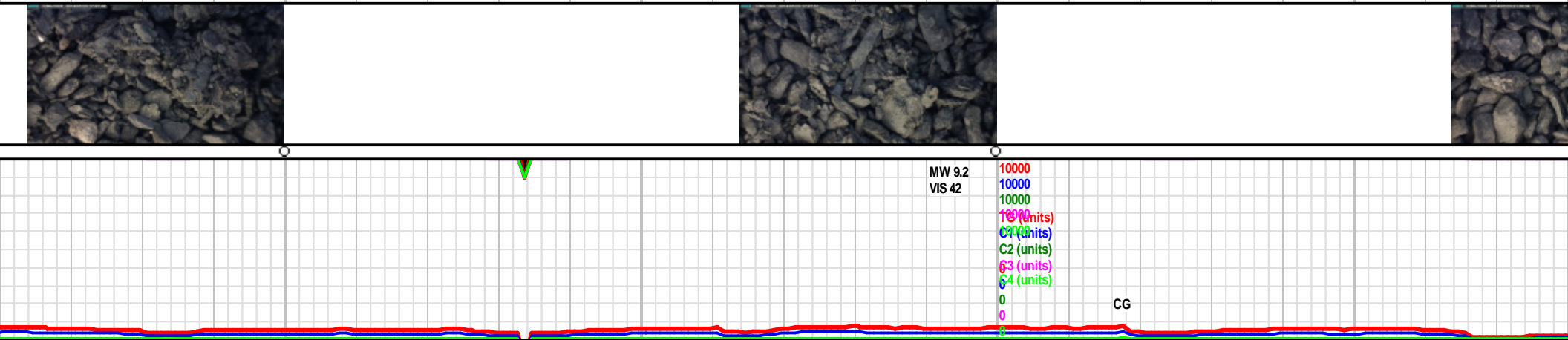


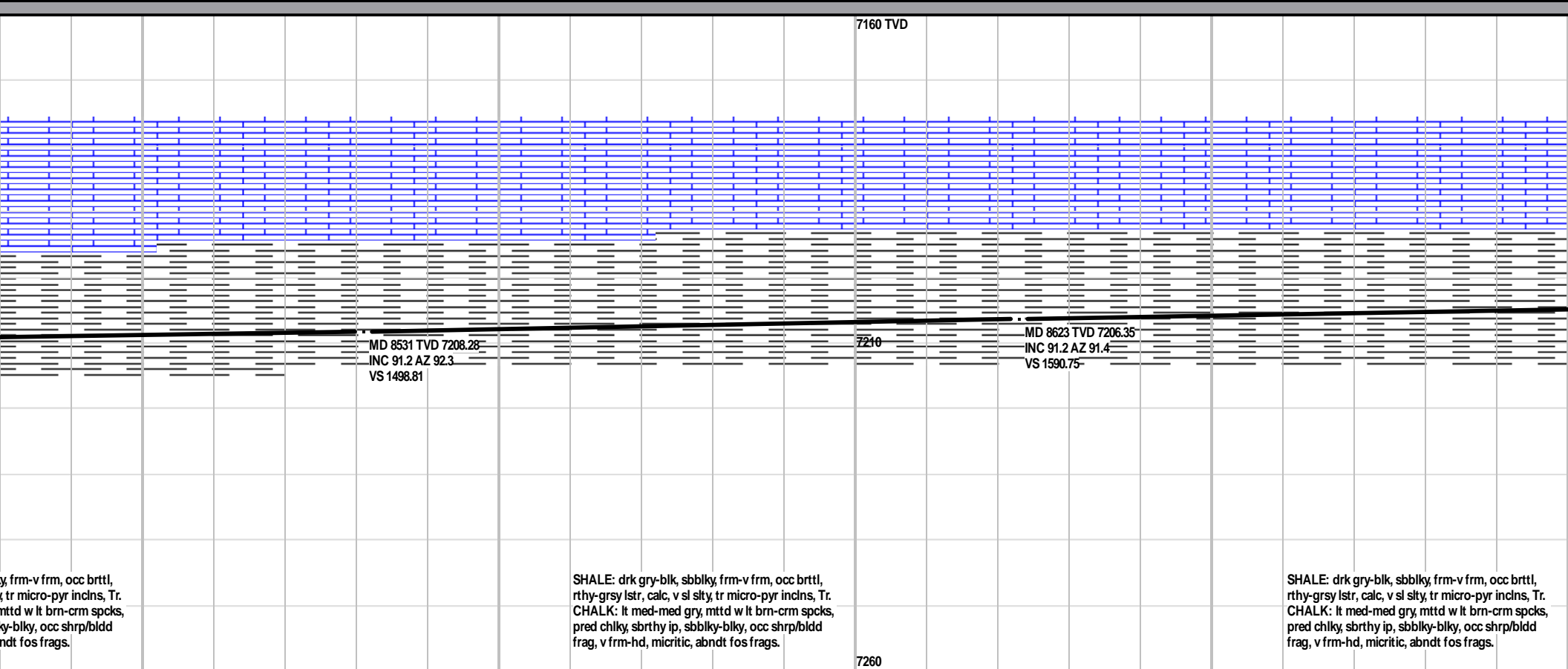


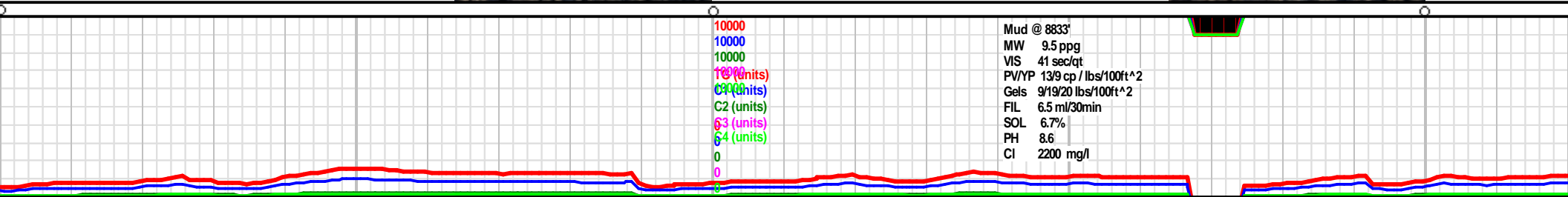
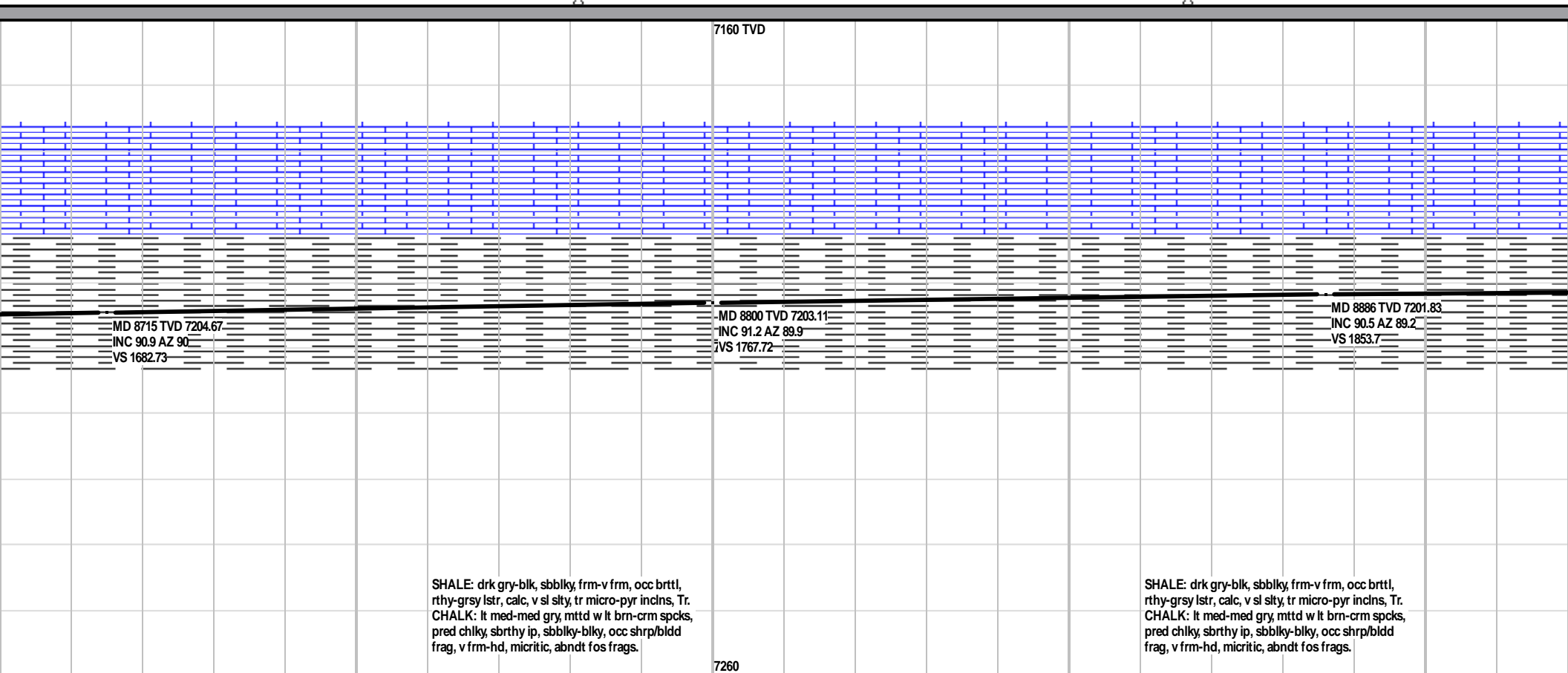
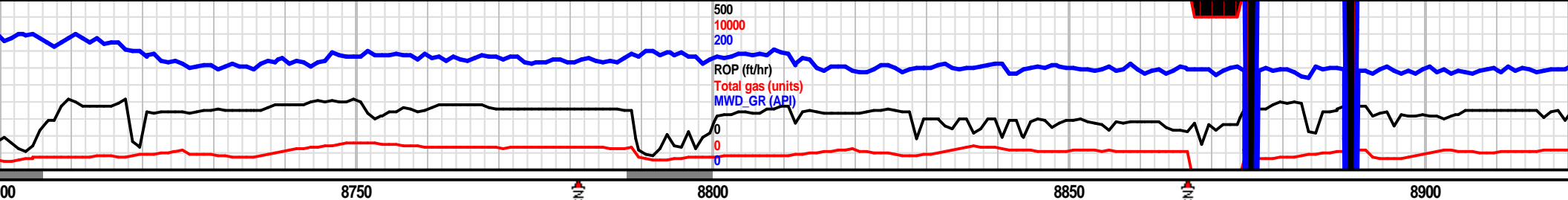


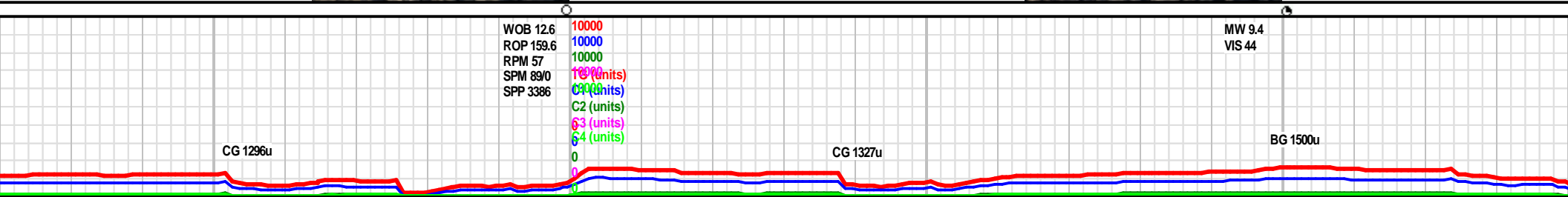
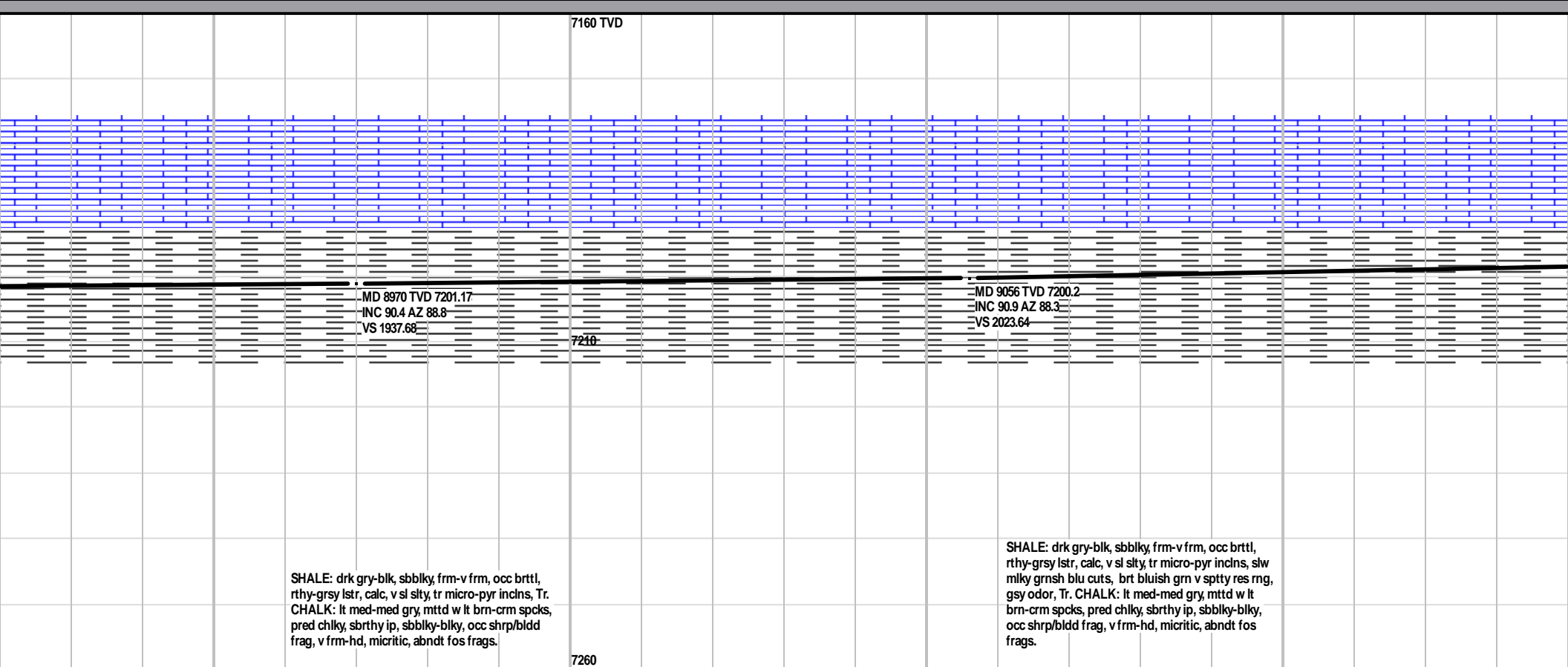
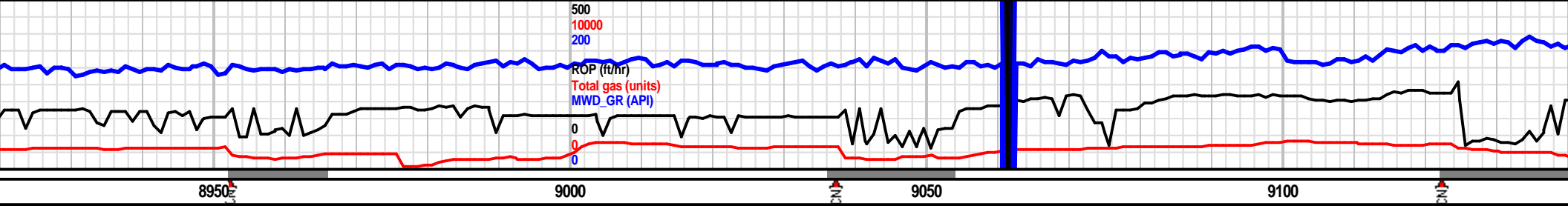


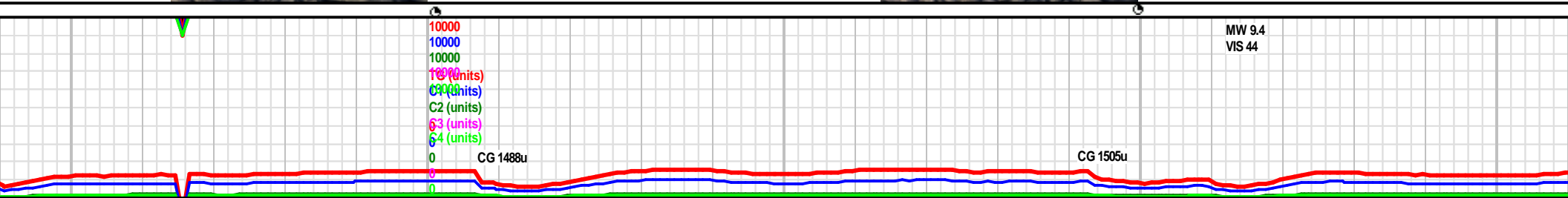
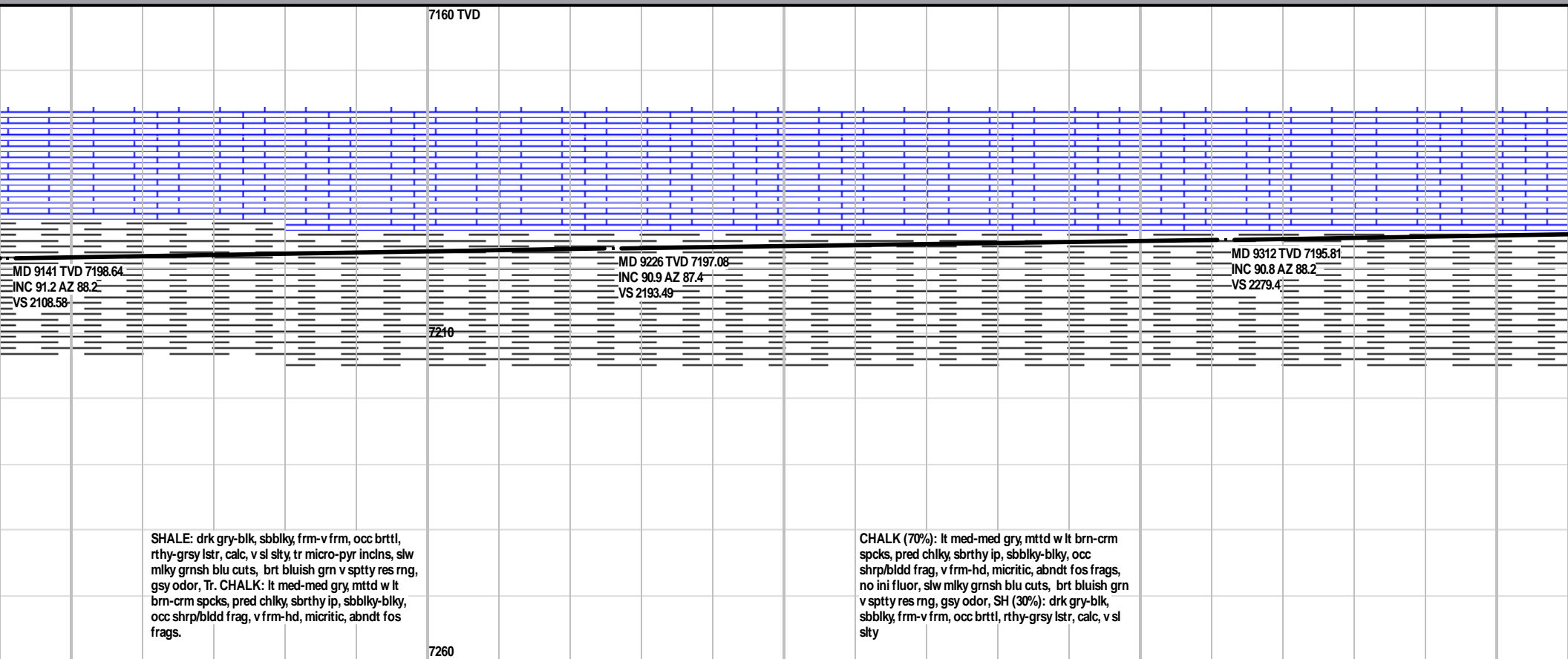
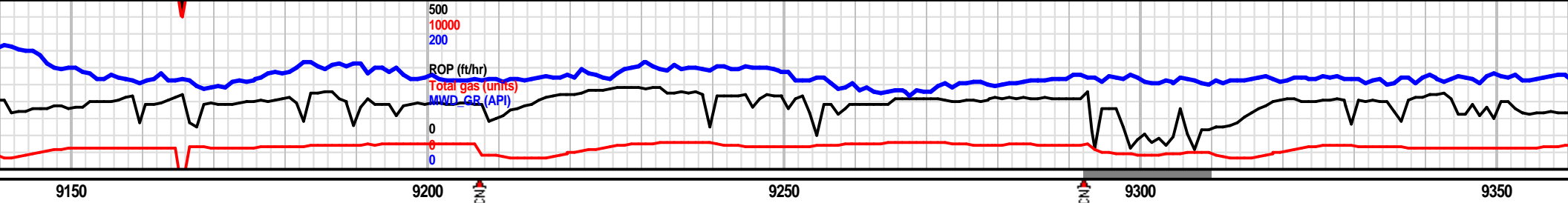


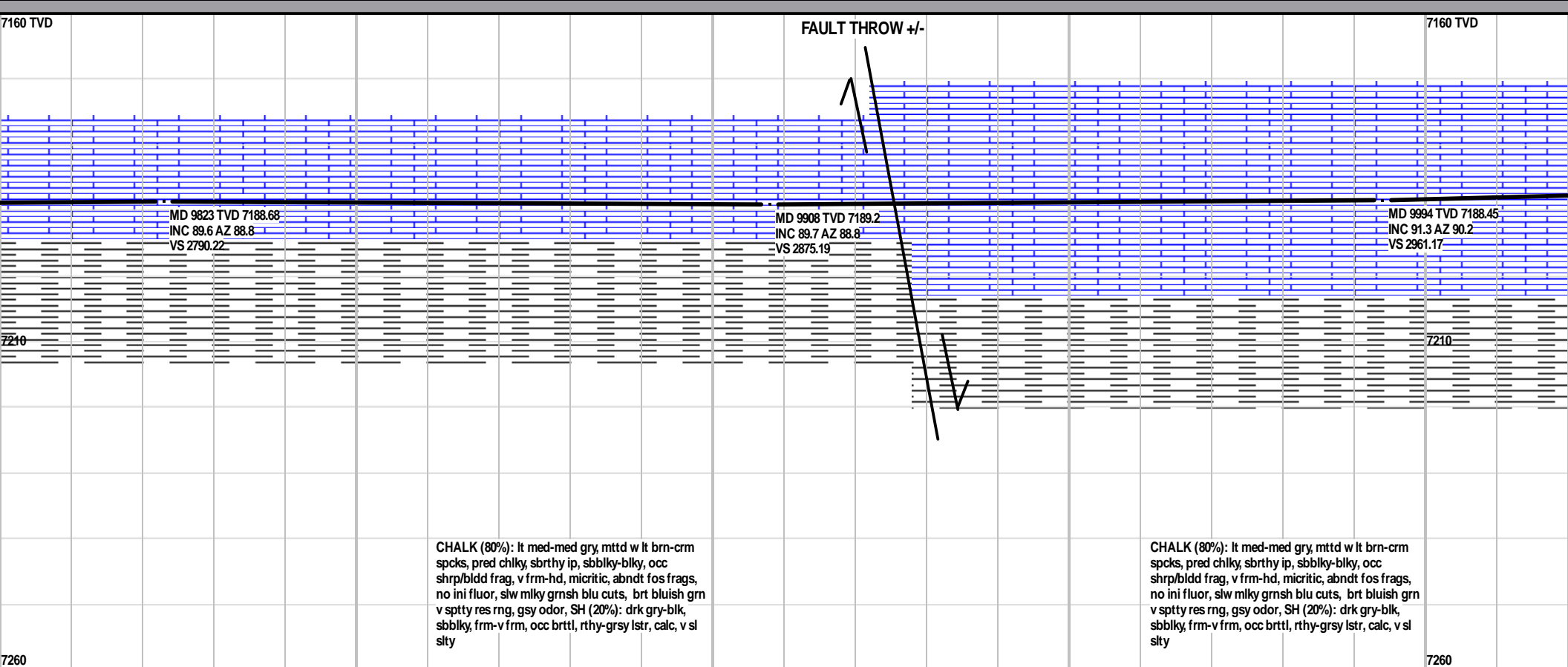
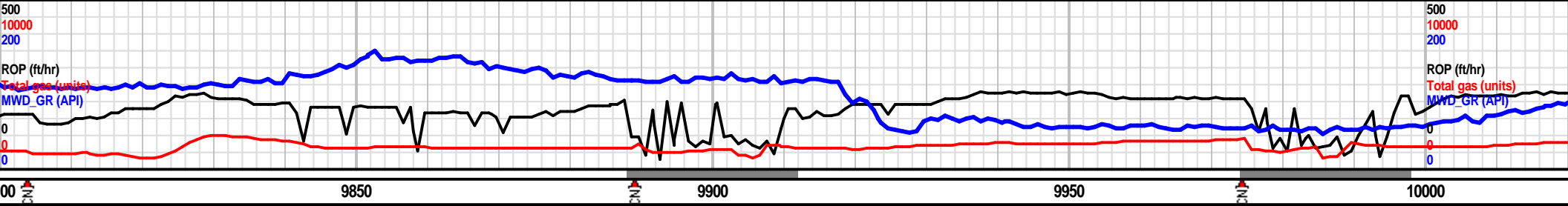






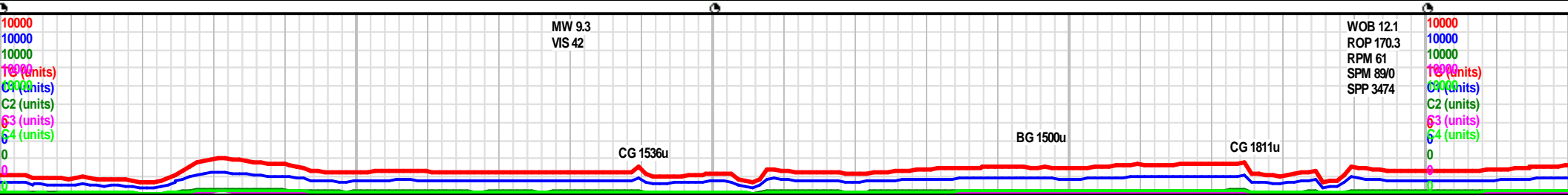


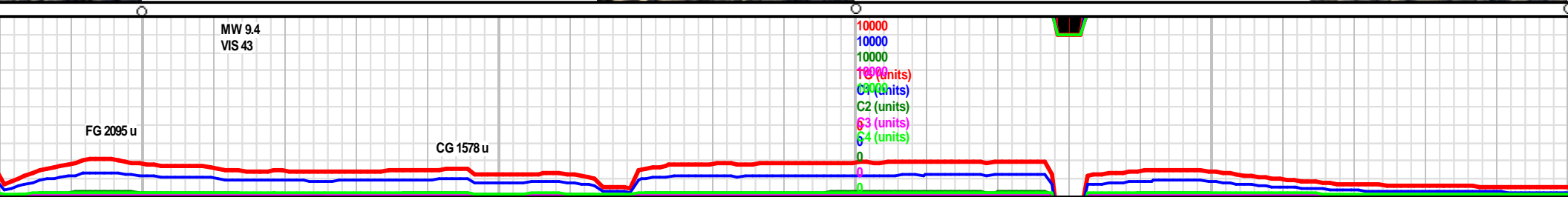
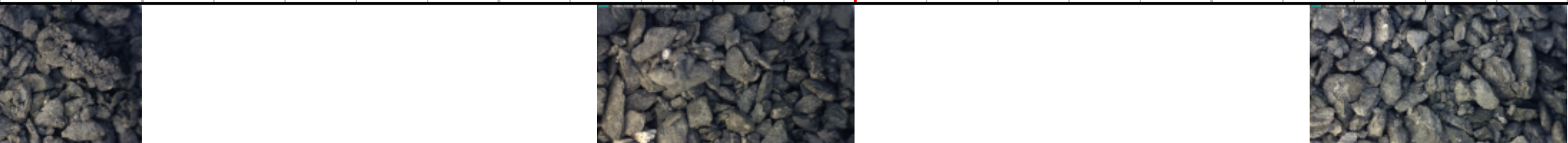
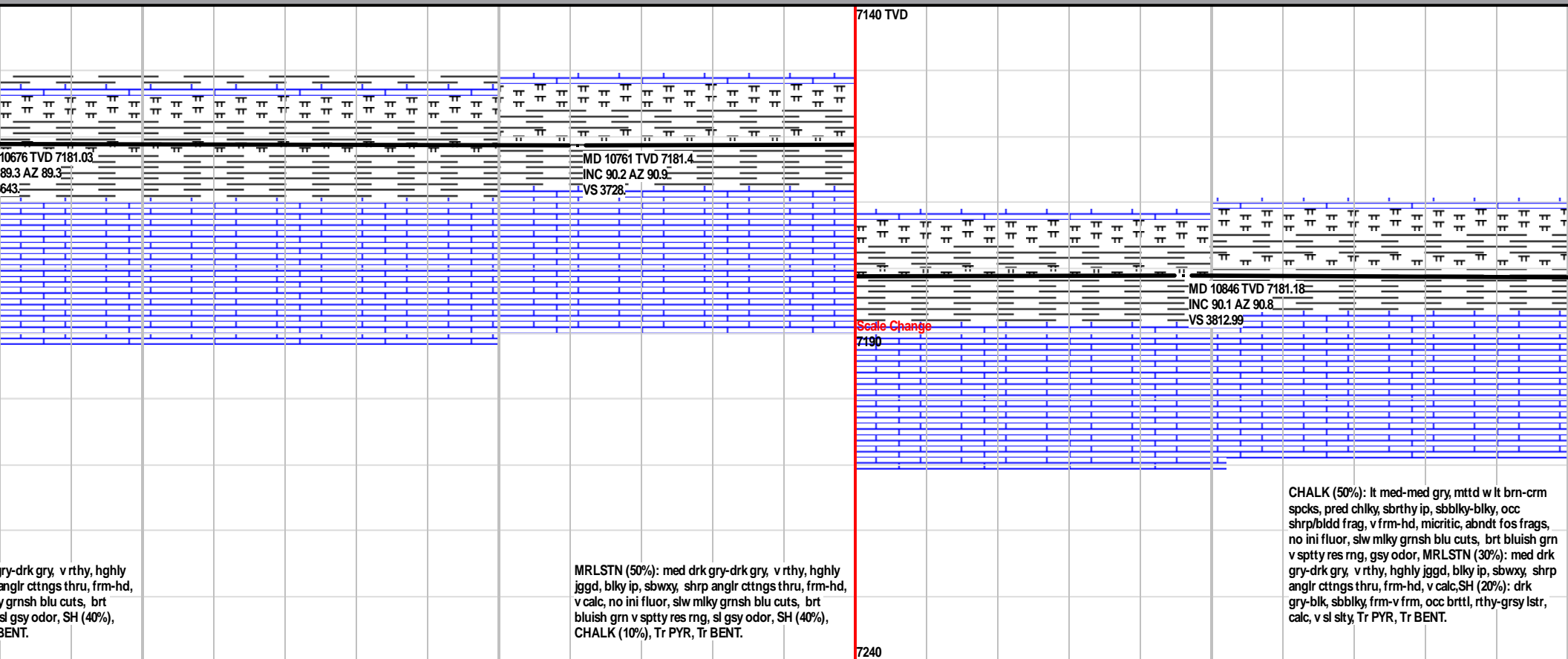
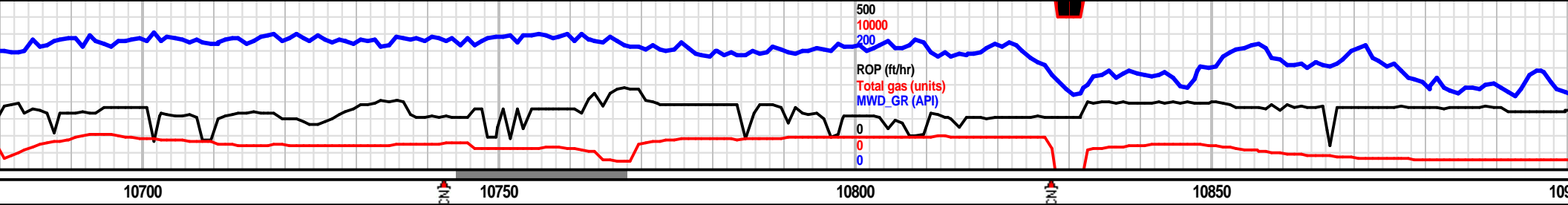


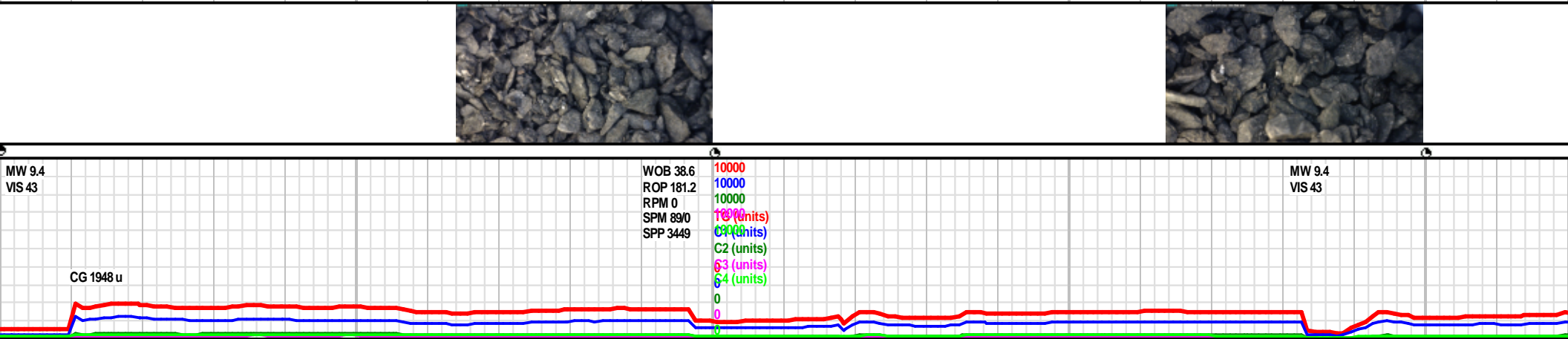
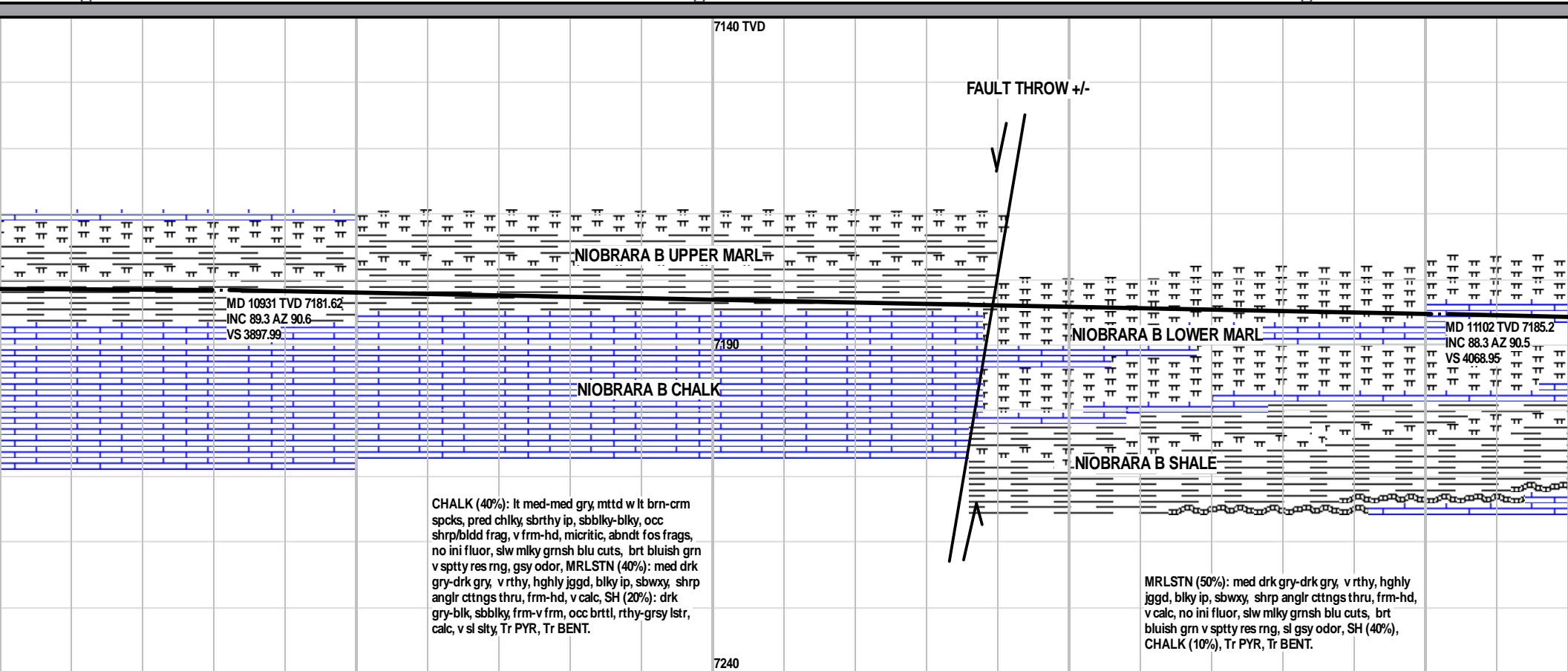


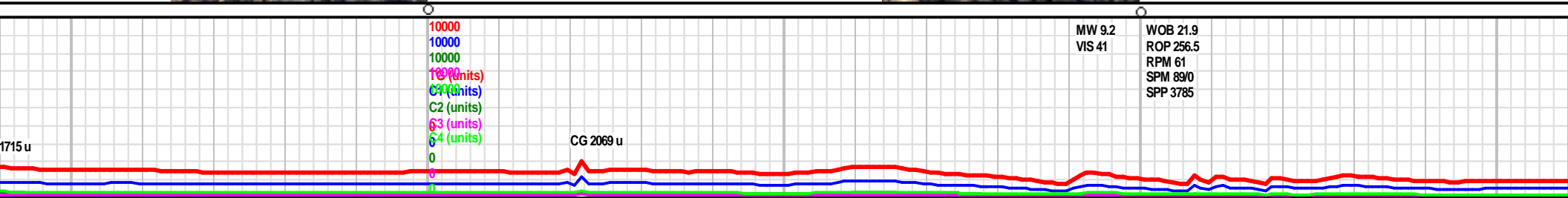
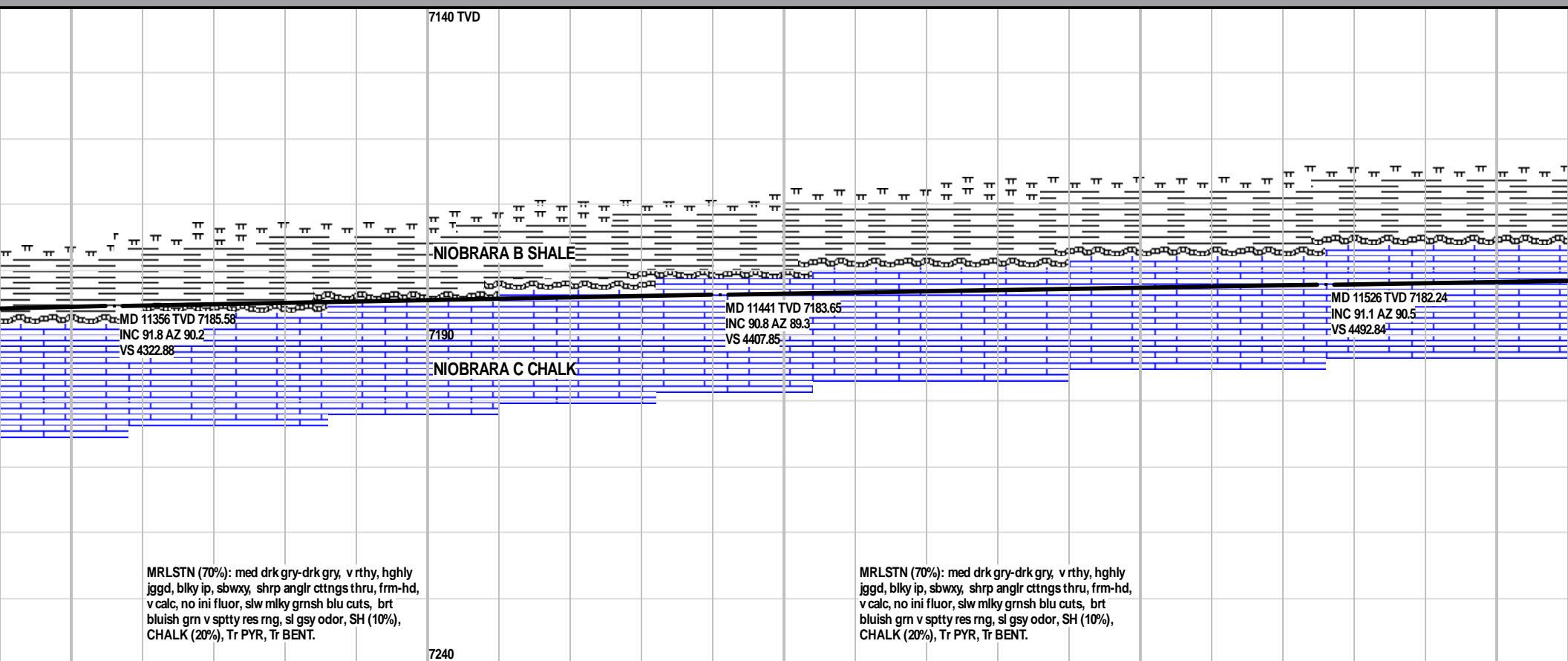
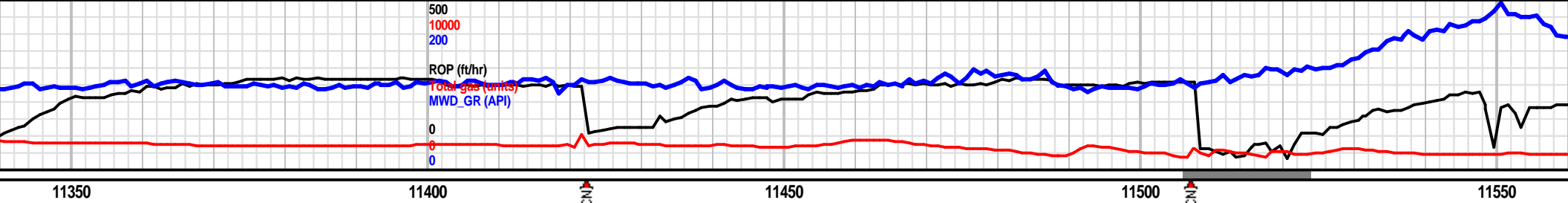
CHALK (80%): lt med-med gry, mttdd w lt brn-crm spcks, pred chiky, sbrthy ip, sbbiky-blky, occ shrp/bldd frag, v frm-hd, micritic, abndt fos frags, no ini fluor, slw mlky grnsh blu cuts, brt bluish grn v sptty res rng, gsy odor, SH (20%): drk gry-blk, sbbiky, frm-v frm, occ brttl, rthy-grsy lstr, calc, v sl slty

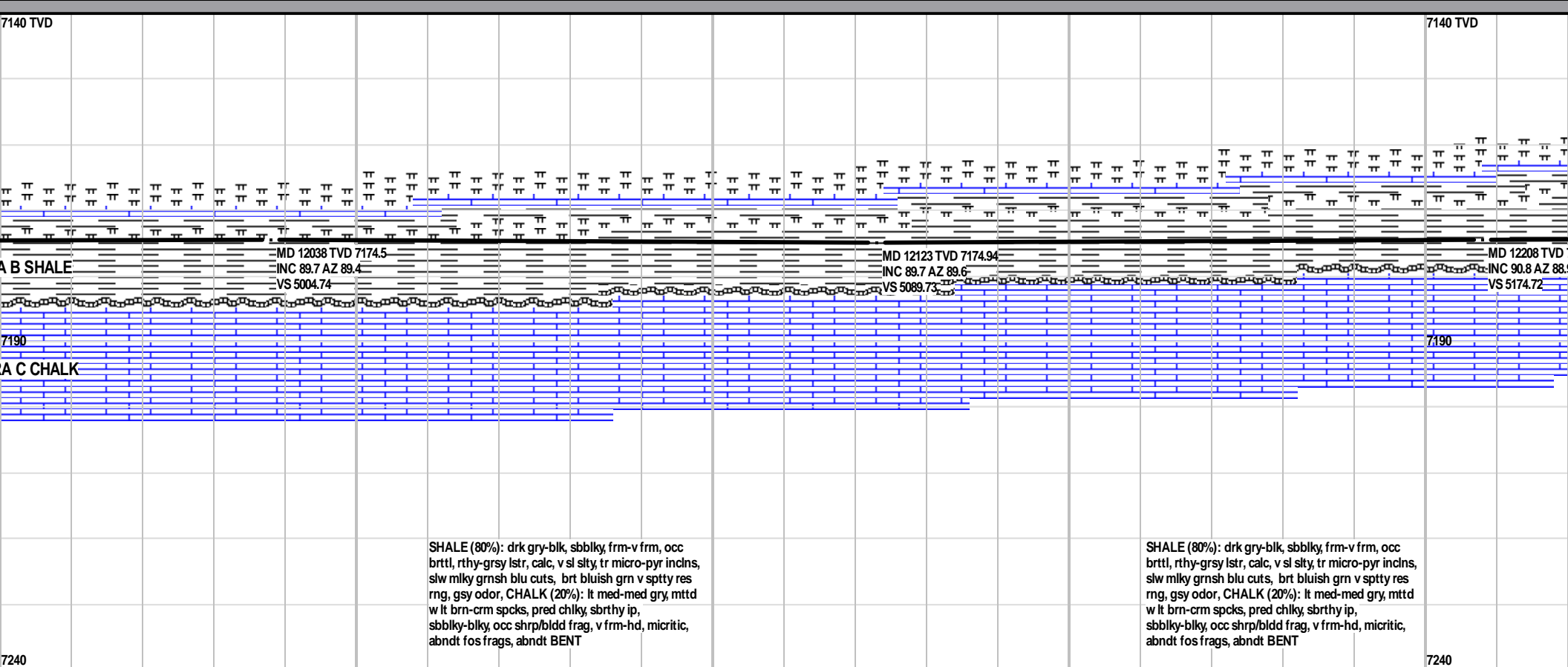
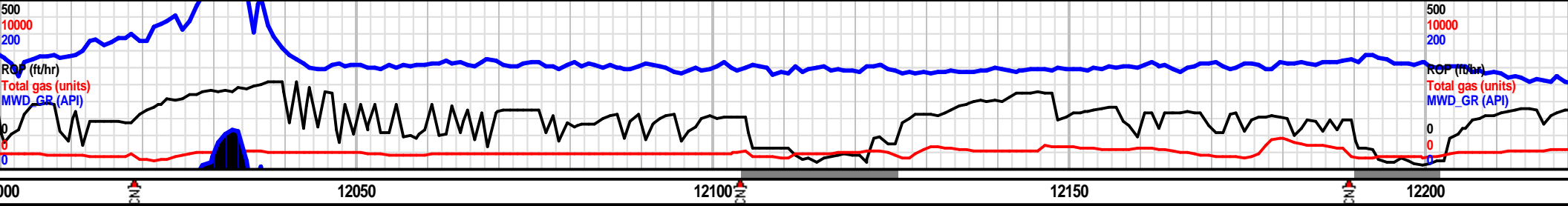
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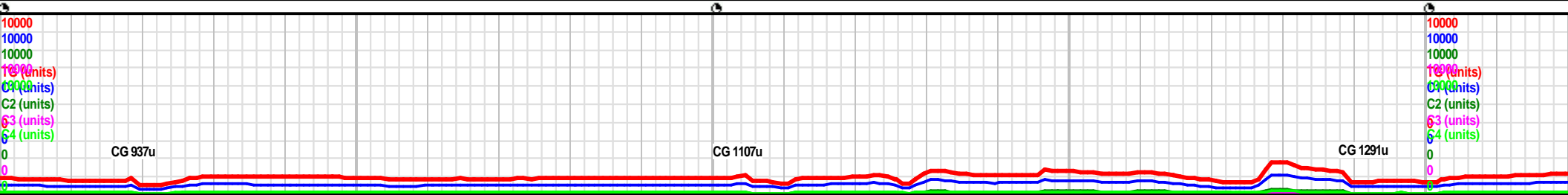


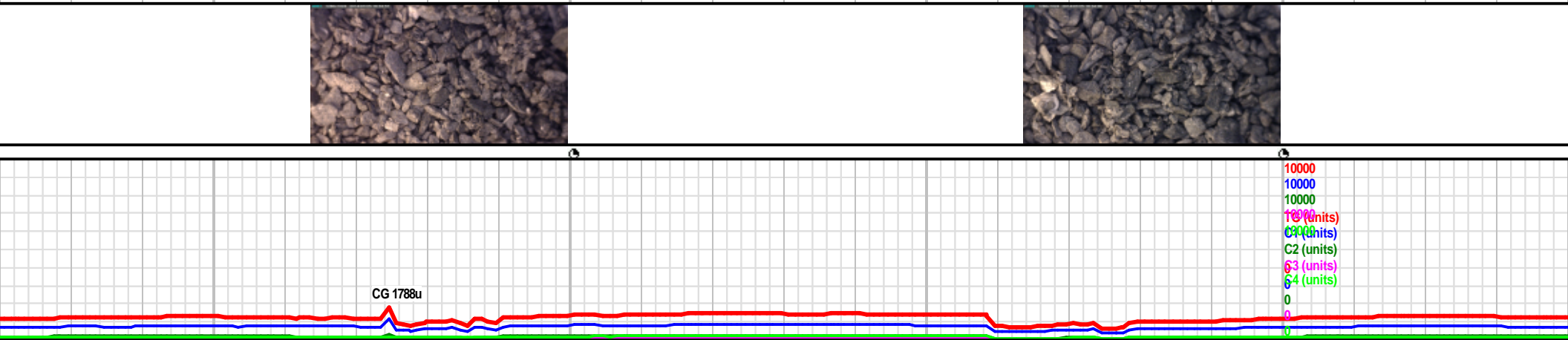
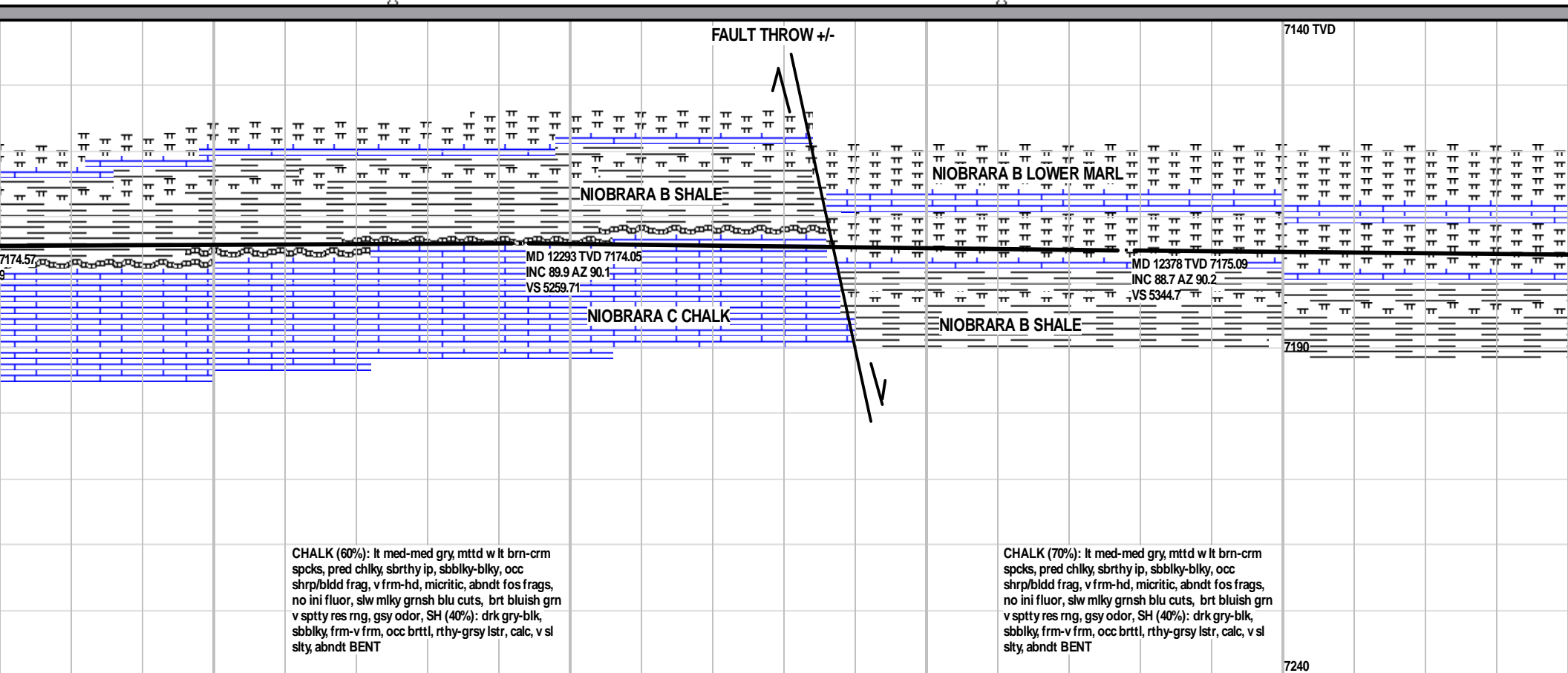
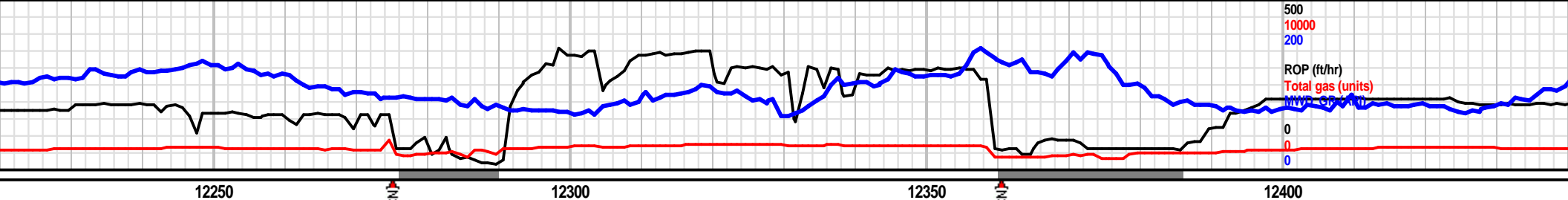


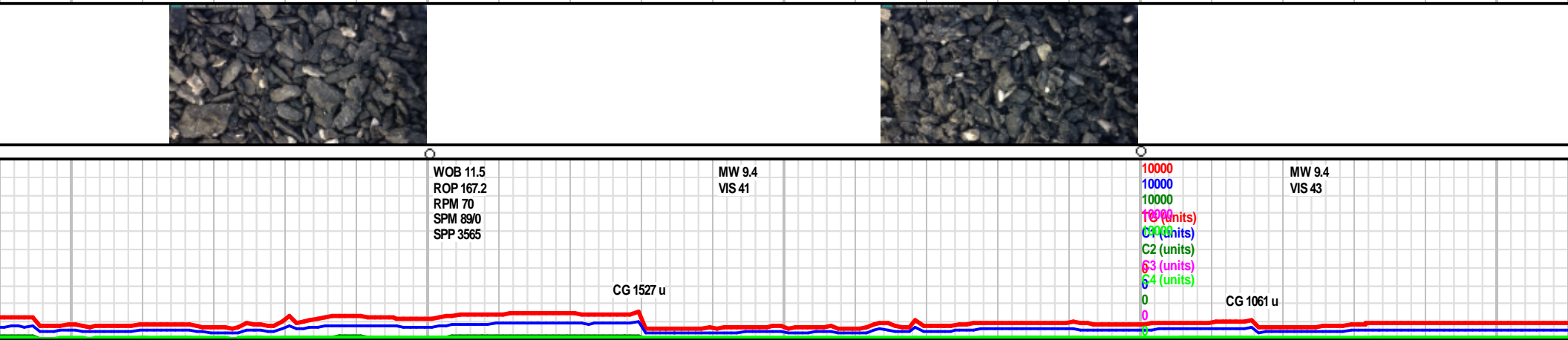
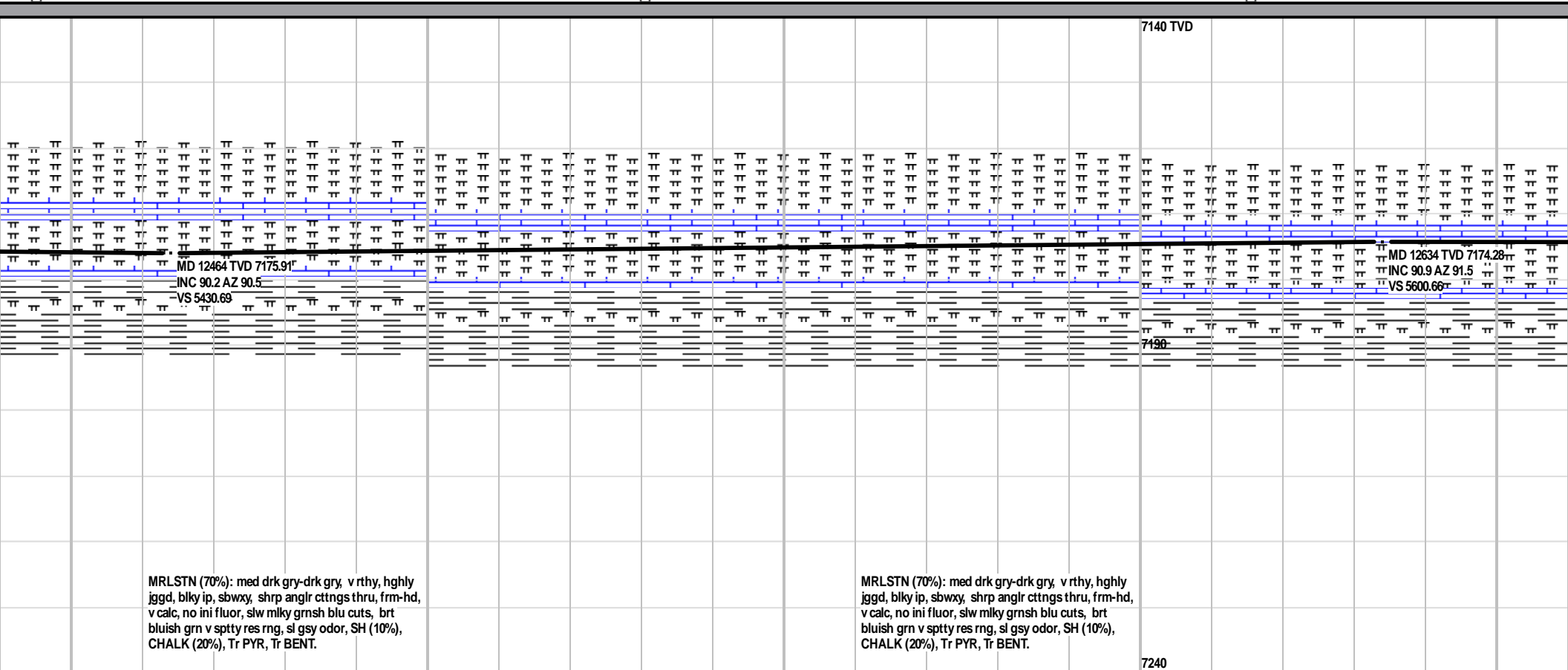


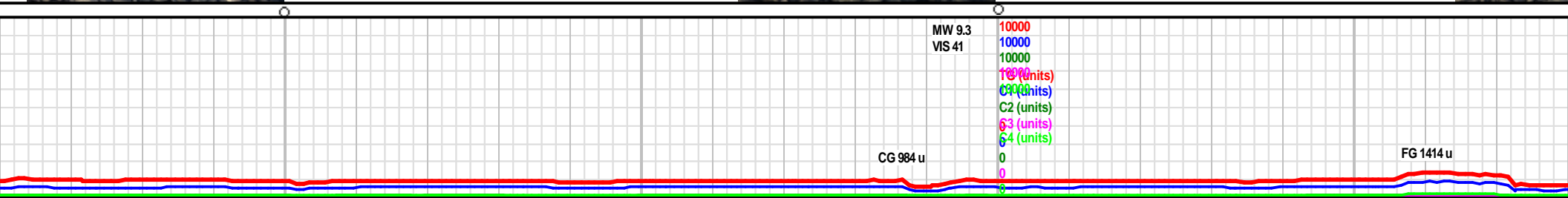
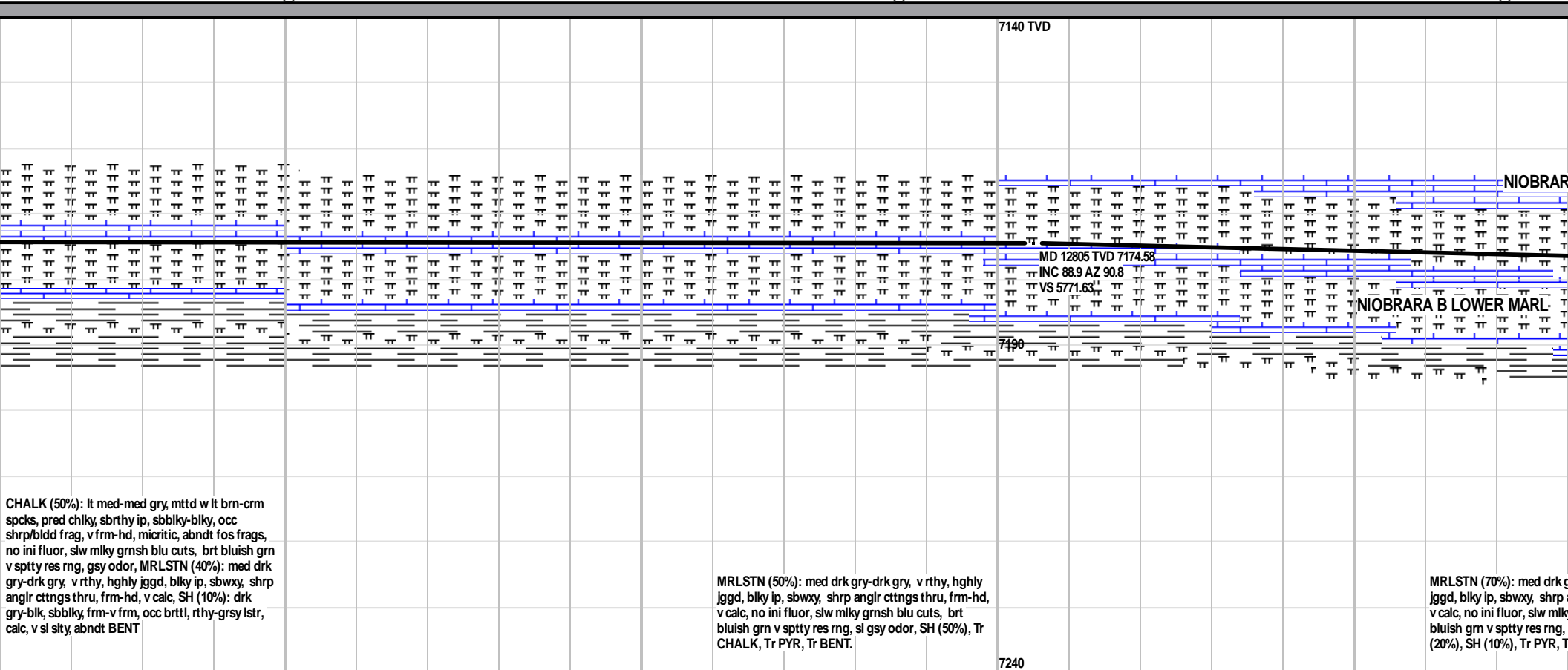
SHALE (80%): drk gry-blk, sbbiky, frm-v frm, occ brttl, rthy-grsy lstr, calc, v sl silty, tr micro-pyr inclns, slw mlky grnsh blu cuts, brt bluish grn v sptty res rng, gsy odor, CHALK (20%): lt med-med gry, mtttd w lt brn-crm spcks, pred chilky, sbrthy ip, sbbiky-blky, occ shrp/bldd frag, v frm-hd, micritic, abndt fos frags, abndt BENT

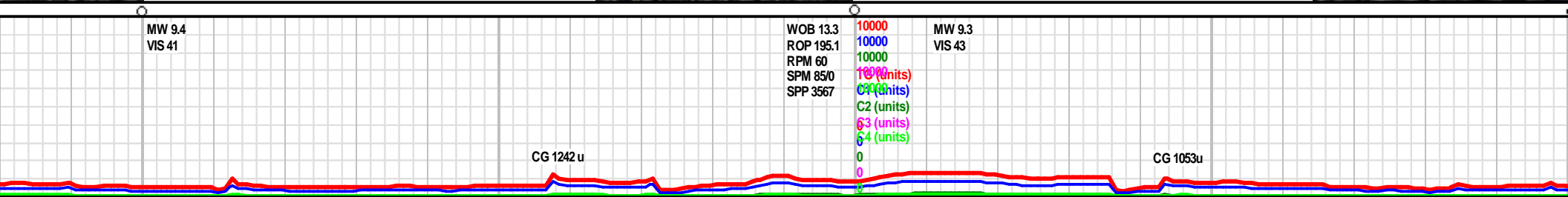
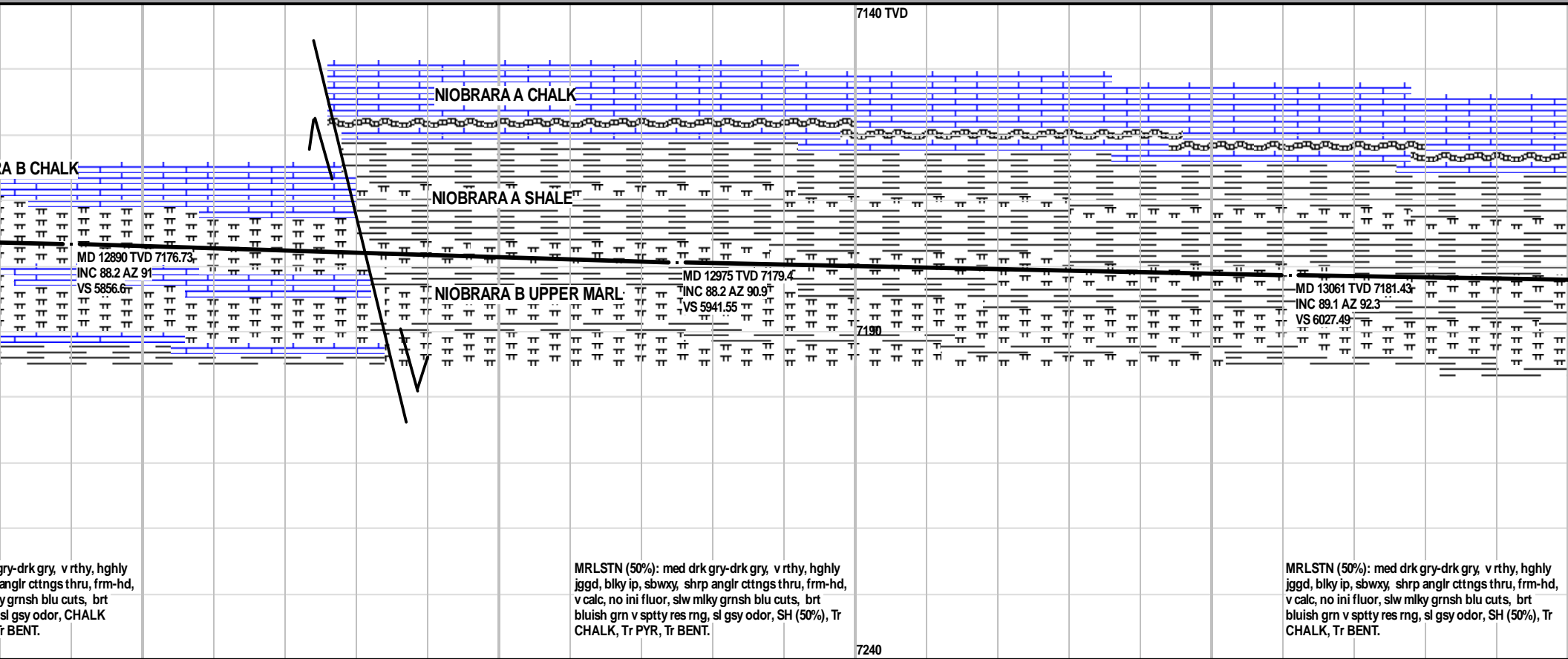
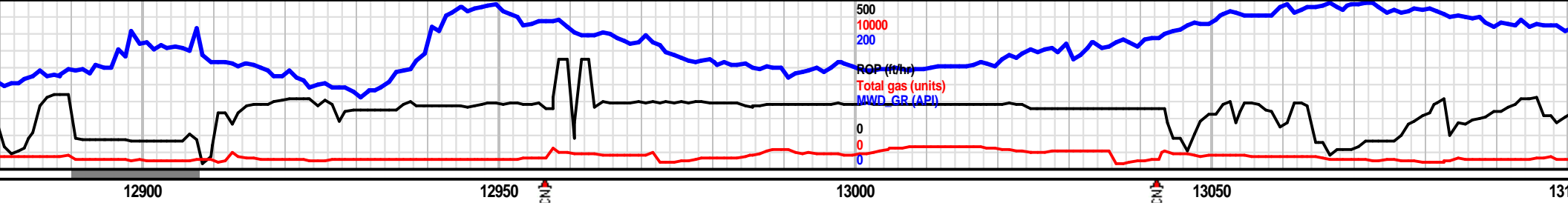
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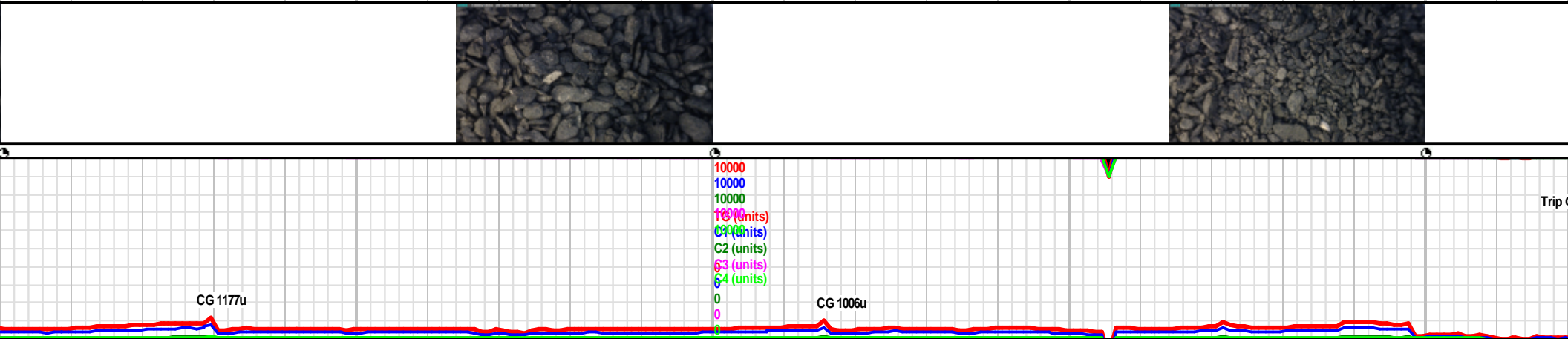
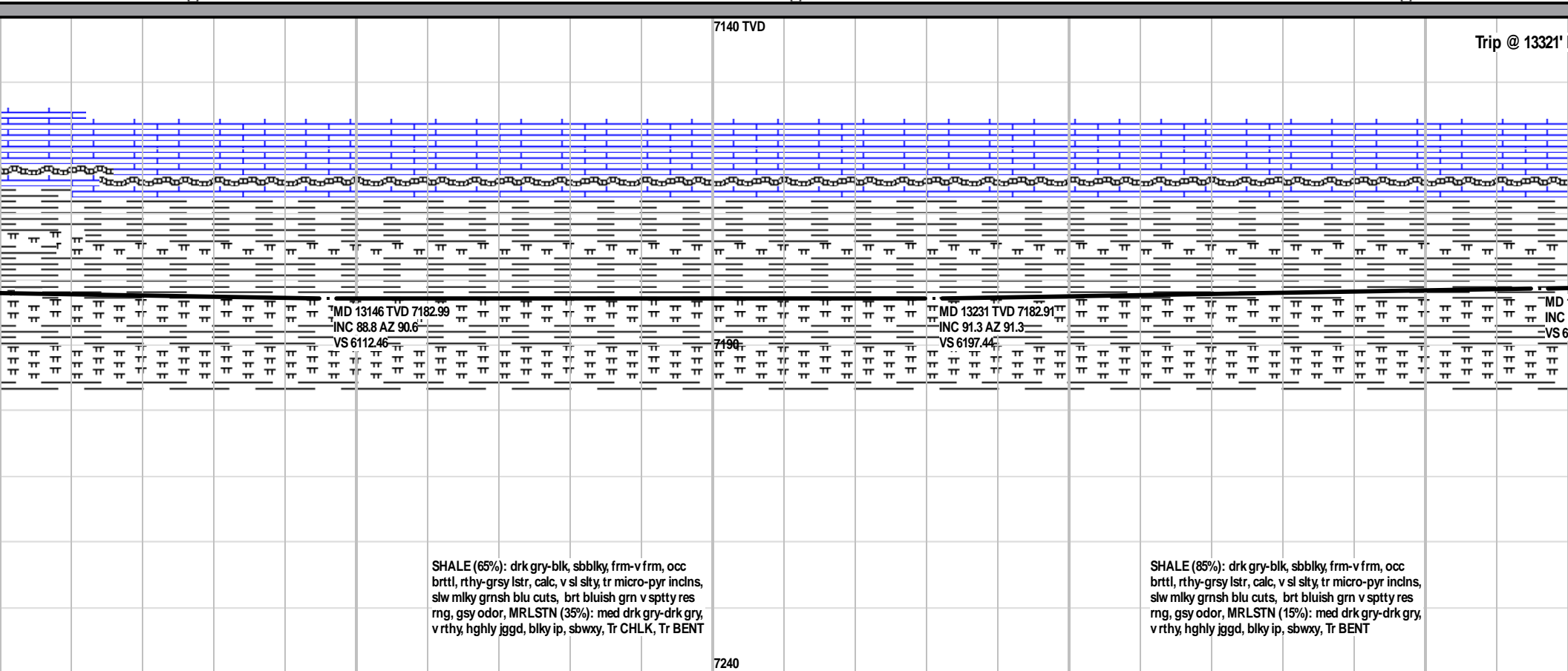


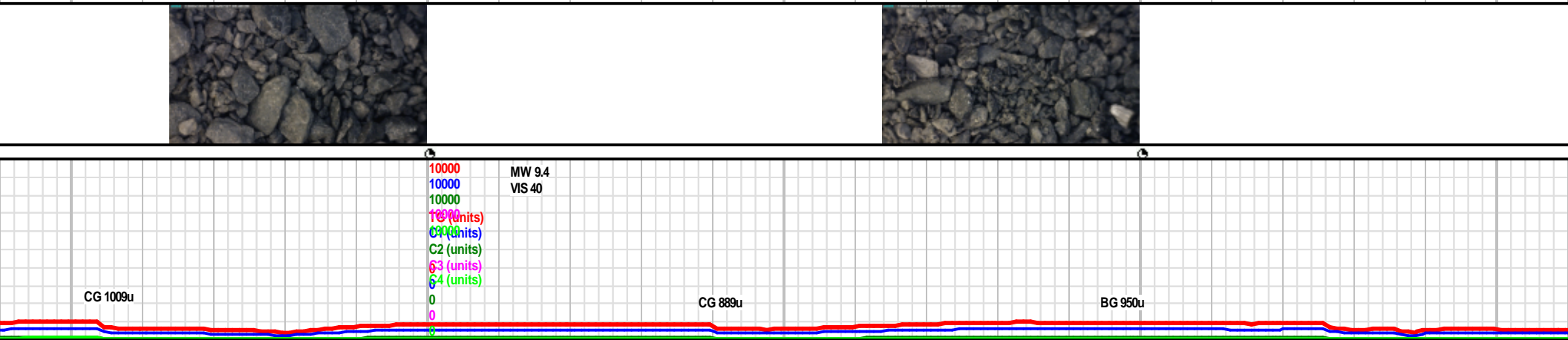


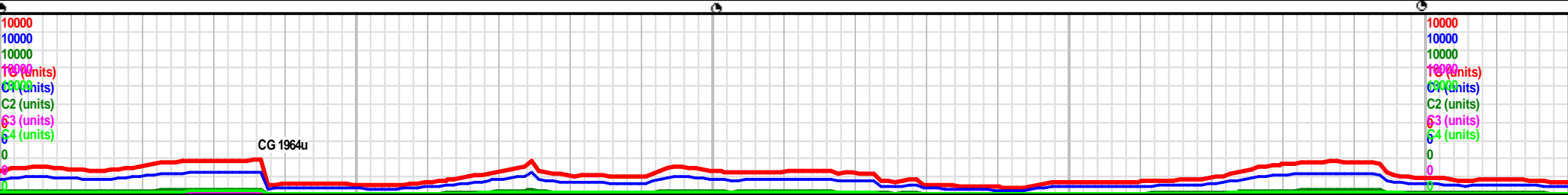
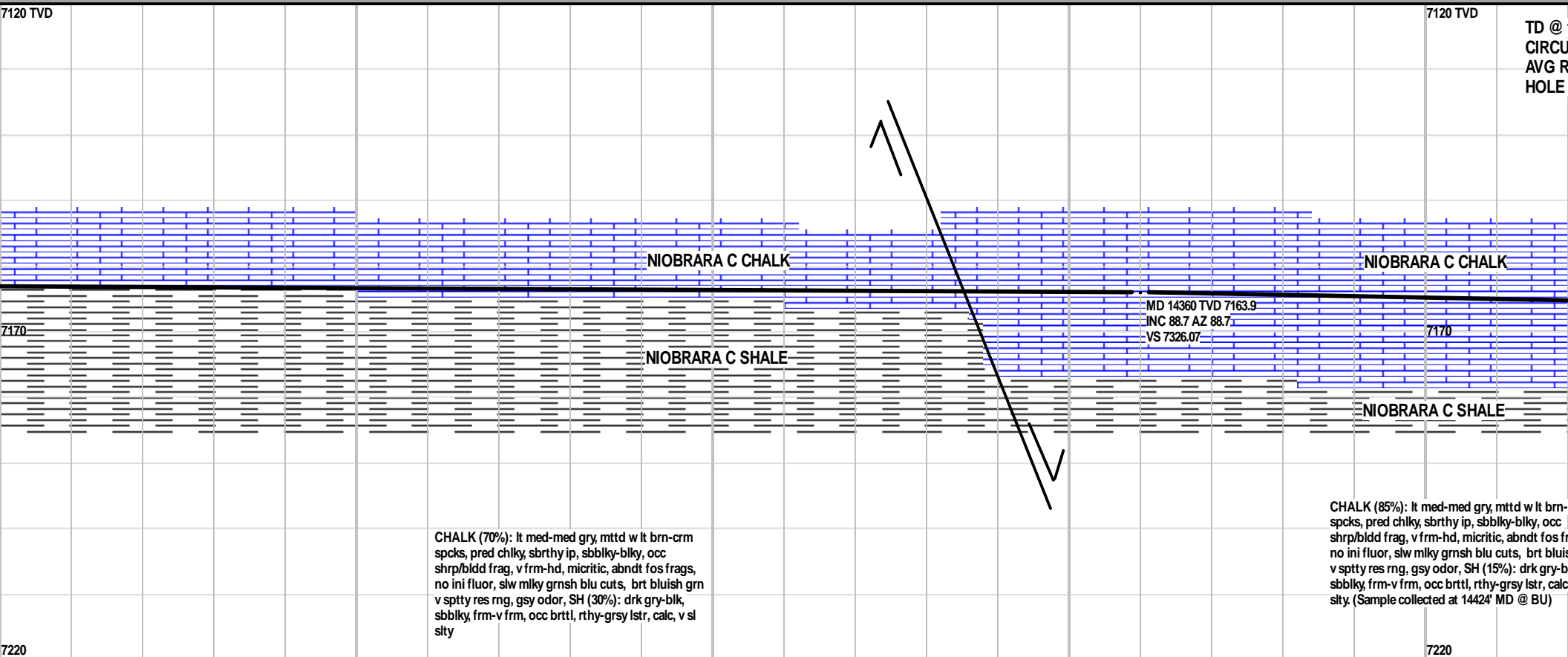












14450

14500

14,424' MD, REACHED ON JULY 27, 2014 @ 06:00 HRS,
LATE BOTTOMS UP, BIT #5 DRILLED 1,103' IN 6.5 HRS,
ROP 169.7 ft/hr. WIPER TRIP TO SHOE, TRIP OUT OF
FOR 4 1/2" LINER, SET @ 14,414' MD ON JULY 26, 2014.

Projected to Bit

MD 14424 TVD 7165.35
INC 88.7 AZ 88.7
VS 7390.03

FORMATION TOPS

Sharon Springs	7,018' MD (6,975' TVD)	
Niobrara A	7,113' MD (7,053' TVD)	Niobrara
B Chalk	7,187' MD (7,106' TVD)	
Niobrara C Chalk	7,319' MD (7,176' TVD)	
DMTD	14,424' MD	
Production Liner	14,414' MD	

Thank You
Goolsby Bros. & Assoc.
Blake Stacey & Shelton Davis