

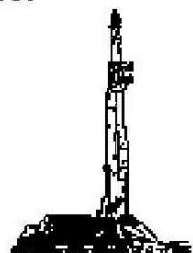
GOOLSBY BROTHERS
and associates, inc.

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: Reynolds Cattle 30N-23HZ

API: 05-123-39135-0000

Location: Section 23, T3N, R68W

License Number:

Spud Date: July 4, 2014

Surface Coordinates: NENE Sec 23 T3N R68W; 560' FNL & 155' FEL

Lat N 40.217381 Long W -104.961385

Bottom Hole Coordinates: NENW Sec 23 T3N R68W; 233' FNL; 111' FWL

Ground Elevation (ft): 4,933'

Logged Interval (ft): 6,950'

To: 12,439'

Formation: Pierre Shales/Sands, Niobrara B Target

Type of Drilling Fluid: Water & Poly to 6572', LSND 6572'-12,439'

K.B. Elevation (ft): 4,949'

Total Depth (ft): 12,439' DMTD

Region: Wattenberg, DJ Basin

Drilling Completed: July 10, 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, John Morgan & Ian Harris

GEOLOGIST

Name: Andrew Krueger & Daniel Kabala

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

Address: 575 Union Blvd.

Suite 208,

Lakewood CO. 80228

E-logs

MWD GR 6572' - 12372'

Casing

9 5/8" Surface Casing set @ 1351' MD





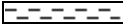
7" Intermediate Casing set @ 7506' MD

4 1/2" Production Liner hung 07/xx/2014, landed @ xxxxx'






Comments






- 1) Drilling Contractor: Xtreme Drilling, Rig #20
Toolpusher: Joseph Contreras
- 2) Company Man: Charlie Daigle & Wade Mullican
- 3) Mud Company : AES
Engineer: Shannon Davis
- 4) Directional Drilling: Baker Hughes
Pulse Tool
Drillers: Travis Wilcox & Barry Combs
MWD: Adam Schlenz & Greg Dore
- 5) Gas Equipment: Pason Systems
- 6) Wellsite Geology: Goolsby Brothers & Associates
Geologists: Dan Kabala & Andrew Krueger

ROCK TYPES

 Anhy
 Bent
 Brec
 Cht
 Clyst

 Coal
 Oil sat.
 Congl
 Dol
 Gyp

 Lmst
 Mrlst
 Salt
 Shale
 Shcol

 Shgy
 Ss
 Slstst
 Ss
 Chalk

 Carb sh
 Slty 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

OTHER SYMBOLS

OIL SHOWS

Even
 Spotted
 Ques
 Dead
 Vspotty

near even

POROSITY TYPE

Earthy
 Fenest
 Fracture

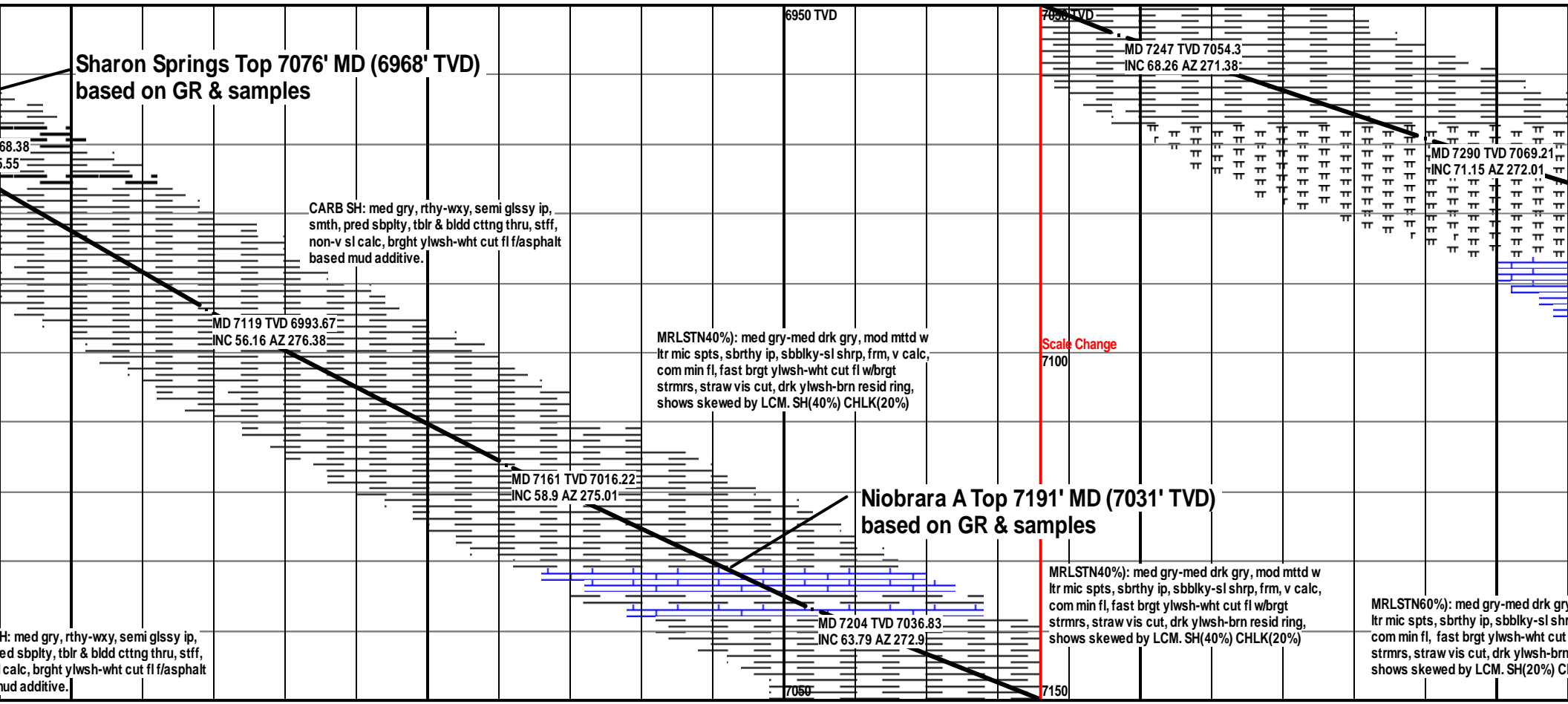
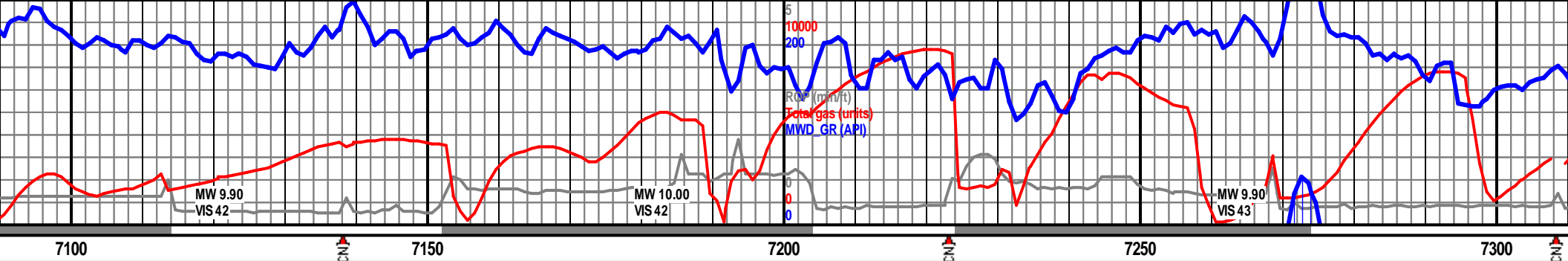
Inter
 Moldic
 Organic
 Pinpoint
 Vuggy

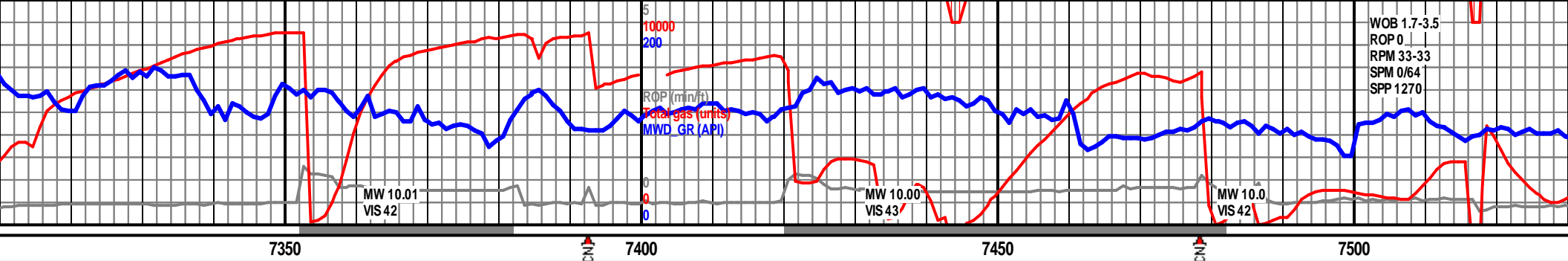
ROUNDING

Rounded
 Subrnd
 Subang
 Angular

SORTING

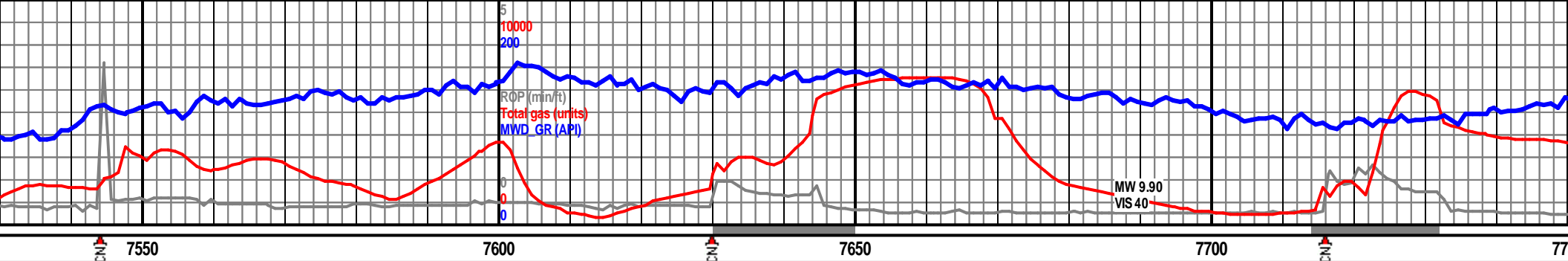
Well
 Moderate
 Poor





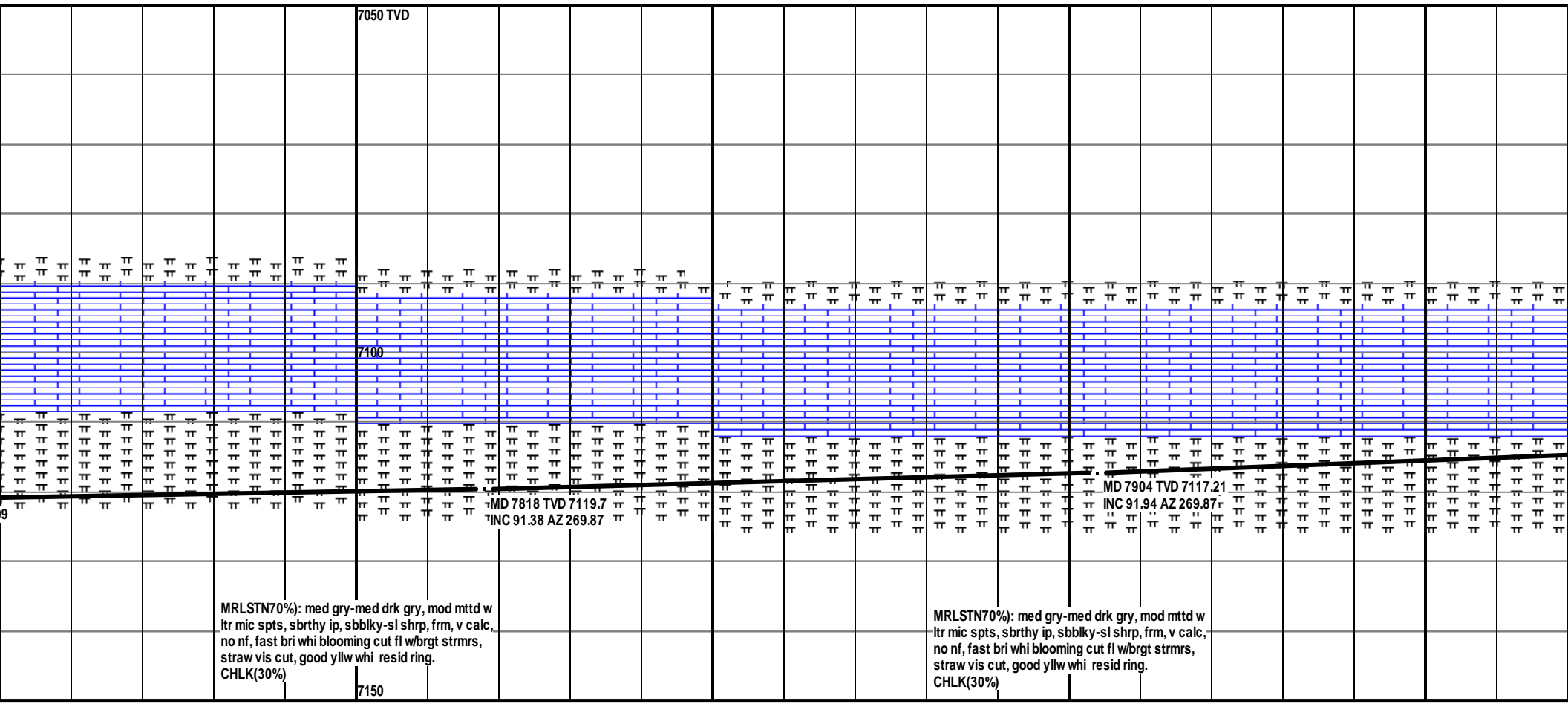
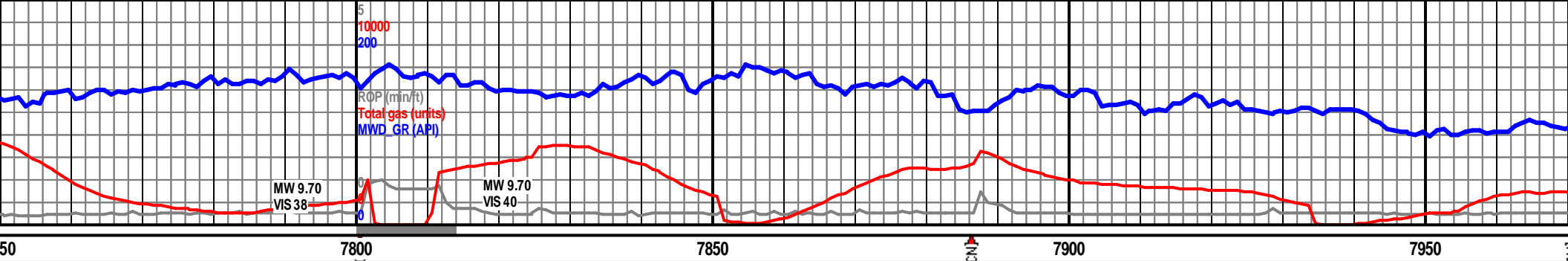
<p>7/7/2014</p>	<p>MD 7332 TVD 7082.63 INC 71.6 AZ 271.73</p>	<p>Niobrara B Chalk Top 7389' MD (7085' TVD) based on GR & samples</p>	<p>MD 7380 TVD 7096.04 INC 75.94 AZ 269.78</p>	<p>MD 7417 TVD 7104.41 INC 77.93 AZ 269.47</p>	<p>MD 7456 TVD 7110.67 INC 83.58 AZ 269.17</p>	<p>MD 7517 TVD 7117.00 INC 89.00 AZ 269.50</p>	<p>7/8-9/2014 Reached ICPL @ 7517' 03' pmp high vis swps, condition DP, PU & run 7" csg to 7500' new Bit, NB #3, 6 1/8", VAP #4006846, 5X18, In @ 7517' Drld 628' in 7.0 hrs. Two man wellsite geology 7/8/2014, begin 100' sample</p>
<p>y, mod mttd w p, frm, v calc, fl w/brgt resid ring, HCLK(20%)</p>	<p>MRLSTN60%): med gry-med drk gry, mod mttd w ltr mic spts, sbrthy ip, sbbly-sl shrp, frm, v calc, com min fl, fast brgt ylwsh-wht cut fl w/brgt strms, straw vis cut, drk ylwsh-brn resid ring, shows skewed by LCM. SH(10%) CHLK(30%)</p>	<p>CARB CHLK(70%): lt med-med drk gry, highly mttd w ltr crm mcro spcks, chiky-v rthy txt, sbbly occ sbfiss ip, mstly frm, sl crmbly, no pri flur, fast brgt ylwsh-wht cut fl w/brgt strms, straw vis cut, drk ylwsh-brn resid ring, shows skewed by LCM.MRLSTN (30%)</p>	<p>CARB CHLK(80%): lt med-med drk gry, highly mttd w ltr crm mcro spcks, chiky-v rthy txt, sbbly occ sbfiss ip, mstly frm, sl crmbly, no pri flur, fast brgt ylwsh-wht cut fl w/brgt strms, straw vis cut, drk ylwsh-brn resid ring, shows skewed by LCM.MRLSTN (20%)</p>	<p>MRLSTN70%): med gry-med drk gry, mod mttd w ltr mic spts, sbrthy ip, sbbly-sl shrp, frm, v calc, fast brgt ylwsh-wht cut fl w/brgt strms, straw vis cut, drk ylwsh-brn resid ring, shows skewed by LCM. CHLK(30%)</p>			





<p>12 7/7/2014. on hole, TO 6' MD, PU REL VS513D, 7'. OB #2,</p> <p>team on site</p> <p>les</p> <p>114.61'</p>	<p>Nio B Chalk</p> <p>Nio B Lower Marl</p> <p>MD 7563 TVD 7118.56 INC 87.96 AZ 268.5</p> <p>MRLSTN (70%): med gry-med drk gry, mod mtttd w ltr mic spts, sbrthy ip, sbbly-si shrp, frm, v calc, no NF, mod-fst brt whi cldy cut, good yel res rng CARB SH (30%) tr CHLK</p>	<p>7050 TVD</p> <p>7100</p> <p>MD 7648 TVD 7120.76 INC 89.07 AZ 268.82</p>	<p>MRLSTN (80%): med gry-med drk gry, mod mtttd w ltr mic spts, sbrthy ip, sbbly-si shrp, frm, v calc, no NF, mod-fst brt whi cldy cut, good yel res rng CARB SH (20%) tr CHLK</p>	<p>MD 7733 TVD 7121.0 INC 90.49 AZ 269.11</p>
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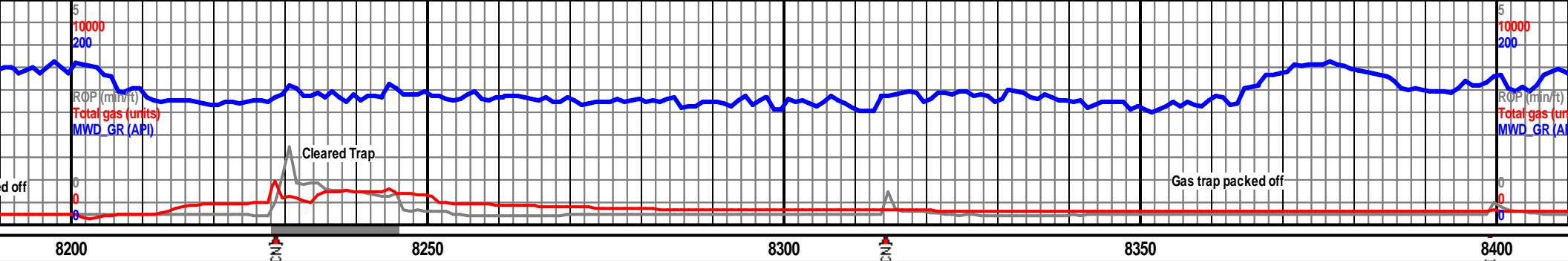




MRLSTN70%): med gry-med drk gry, mod mttd w
ltr mic spts, sbrthy ip, sbbly-sl shrp, frm, v calc,
no nf, fast bri whi blooming cut fl wbrgt strms,
straw vis cut, good yllw whi resid ring.
CHLK(30%)

MRLSTN70%): med gry-med drk gry, mod mttd w
ltr mic spts, sbrthy ip, sbbly-sl shrp, frm, v calc,
no nf, fast bri whi blooming cut fl wbrgt strms,
straw vis cut, good yllw whi resid ring.
CHLK(30%)





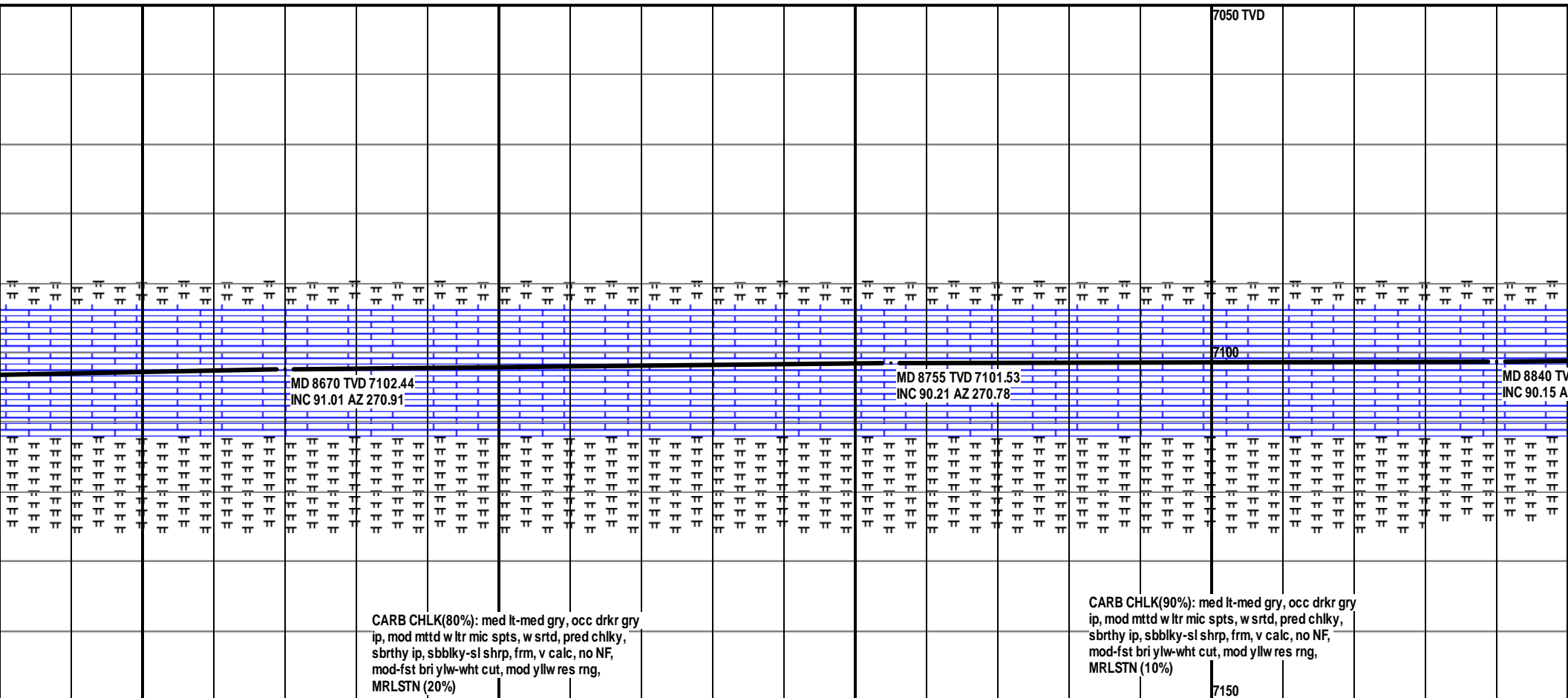
7050 TVD	7/9/2014																7050 TVD																	
<div>7100</div>																		7100																
																		MD 8244 TVD 7106.88 INC 90.55 AZ 270.69																
																		MD 8329 TVD 7106.36 INC 90.15 AZ 270.64																
LK(70%): med lt-med gry, occ drkr gry mtd w ltr mic spts, w srted, pred chlky, sbbiky-sl shrp, frm, v calc, no NF, bri ylw-wht cut, mod yllw res rng, 30%)																		7150																
CARB CHLK(90%): med lt-med gry, occ drkr gry ip, mod mtd w ltr mic spts, w srted, pred chlky, sbrthy ip, sbbiky-sl shrp, frm, v calc, no NF, mod-fst bri ylw-wht cut, mod yllw res rng, MRLSTN (10%)																		7150																
CARB CHLK(90%): med lt-med gry, ip, mod mtd w ltr mic spts, w srted, p sbrthy ip, sbbiky-sl shrp, frm, v calc mod-fst bri ylw-wht cut, mod yllw re MRLSTN (10%)																		7150																

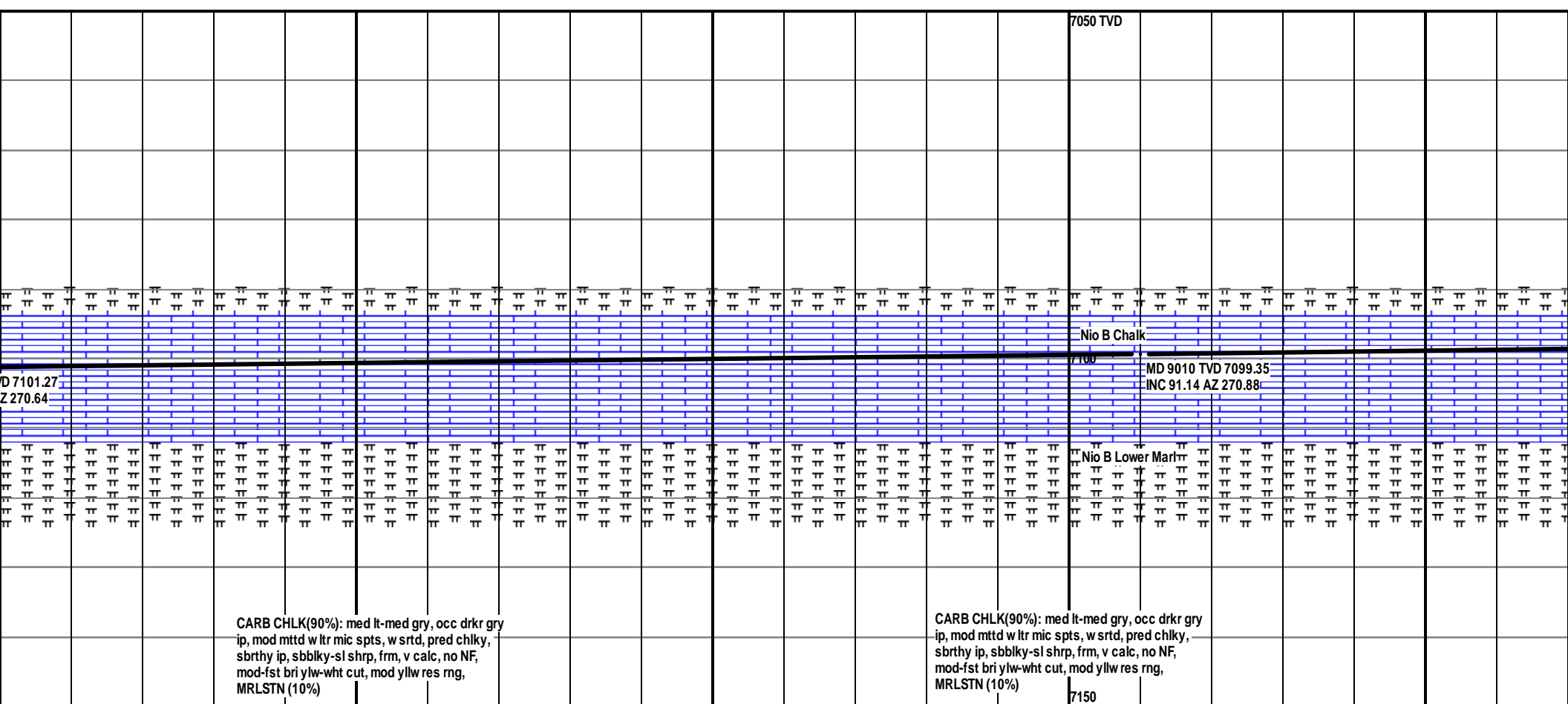
CHLK(70%): med lt-med gry, occ drkr gry
ip, mod mtd w ltr mic spts, w srted, pred chlky,
sbrthy ip, sbbkly-sl shrp, frm, v calc, no NF,
mod-fst bri ylw-wht cut, mod yllw res rng,
MRLSTN (10%)

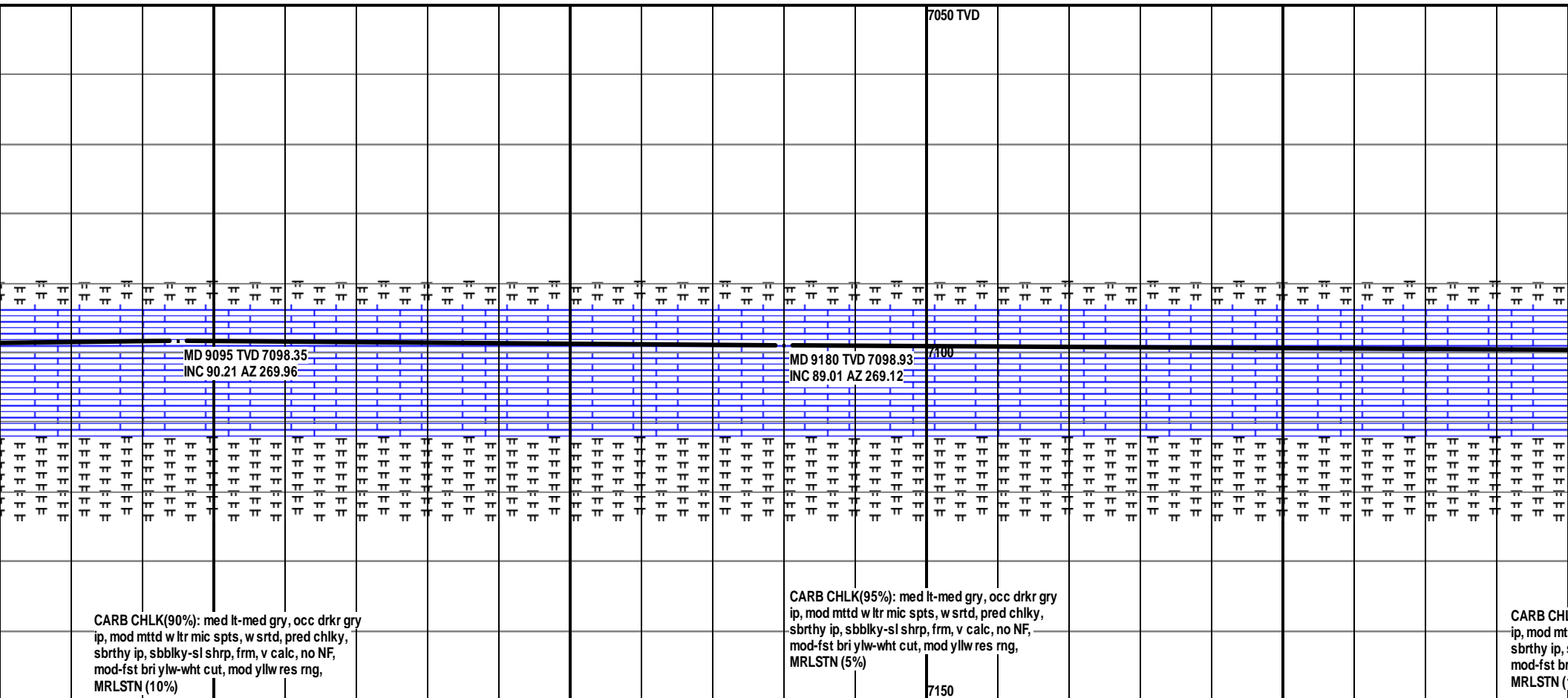
CARB CHLK(90%): med lt-med gry, occ drkr gry
ip, mod mtd w ltr mic spts, w srted, pred chlky,
sbrthy ip, sbbkly-sl shrp, frm, v calc, no NF,
mod-fst bri ylw-wht cut, mod yllw res rng,
MRLSTN (10%)

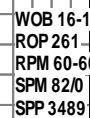
CARB CHLK(90%): med lt-med gry,
ip, mod mtd w ltr mic spts, w srted, p
sbrthy ip, sbbkly-sl shrp, frm, v calc
mod-fst bri ylw-wht cut, mod yllw re
MRLSTN (10%)

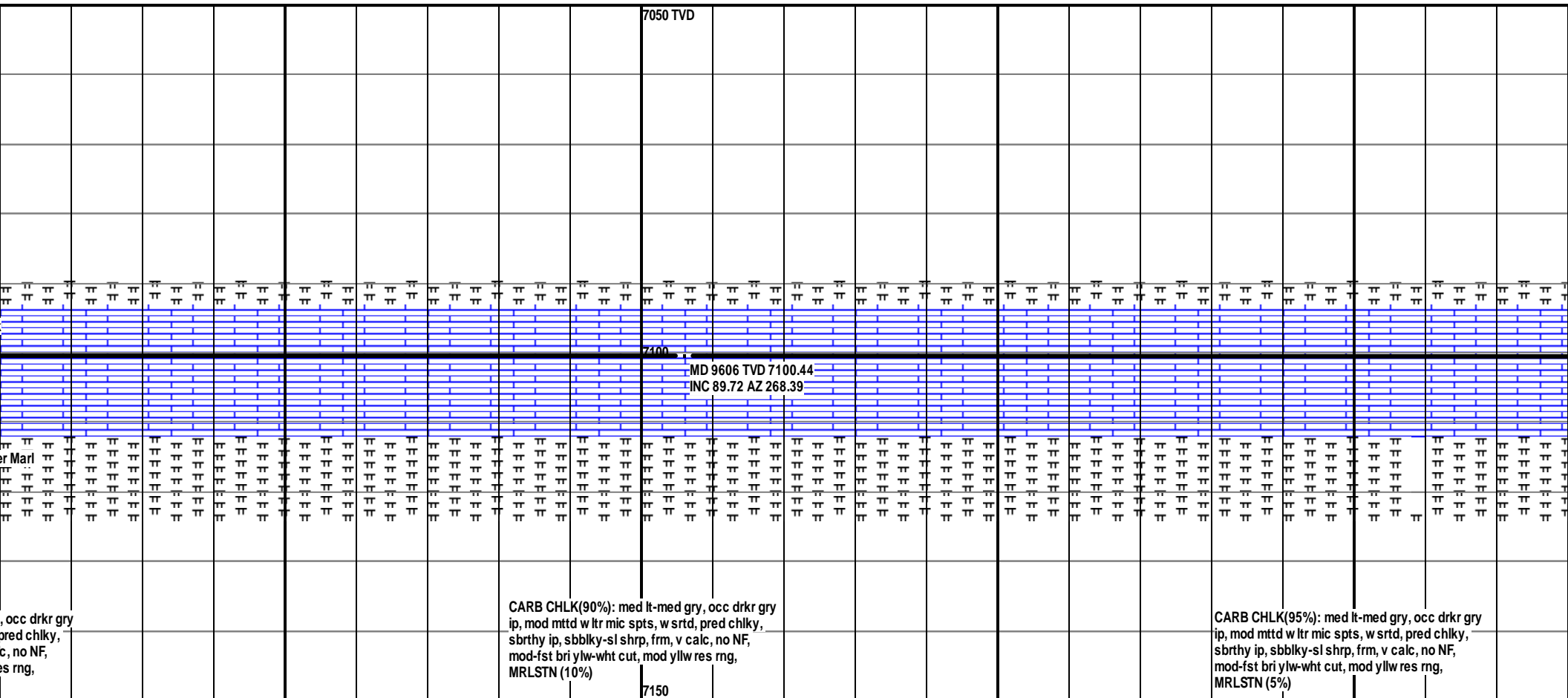


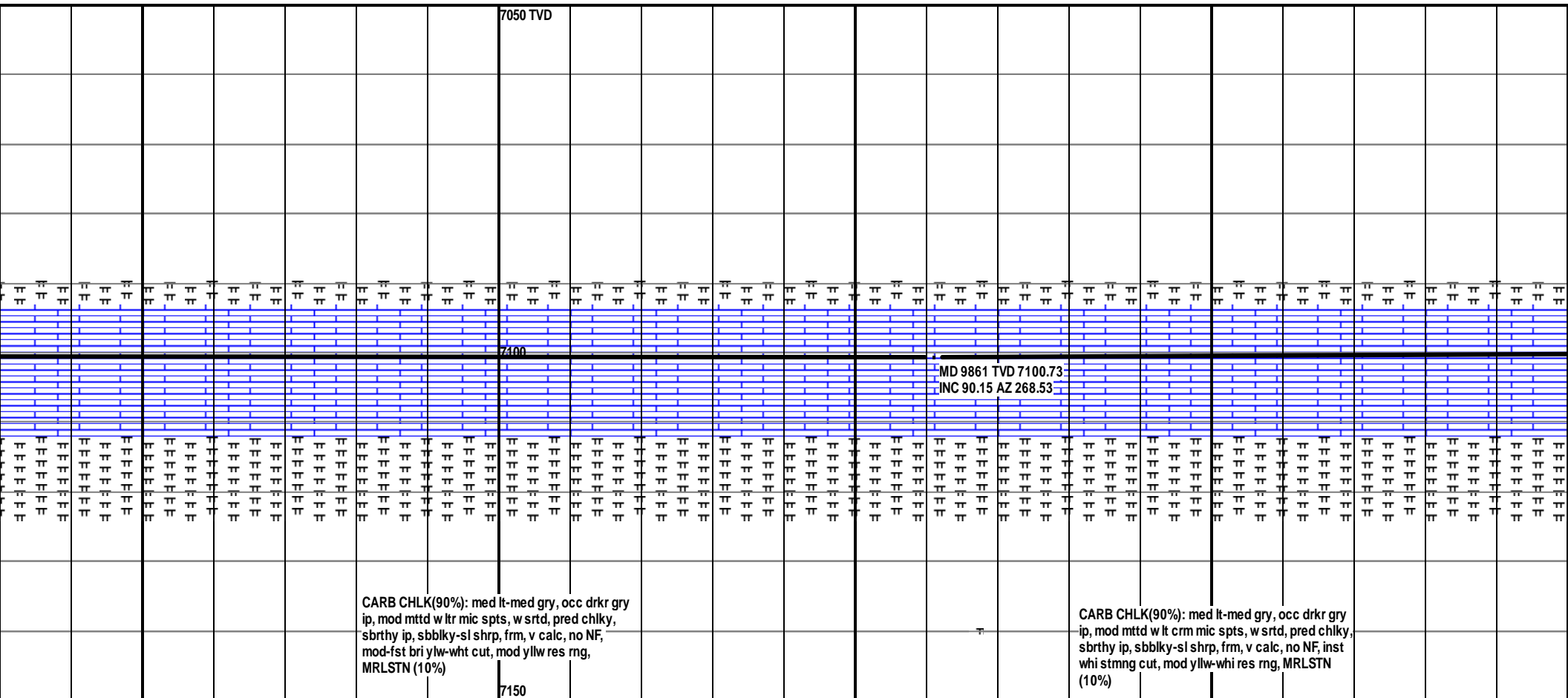


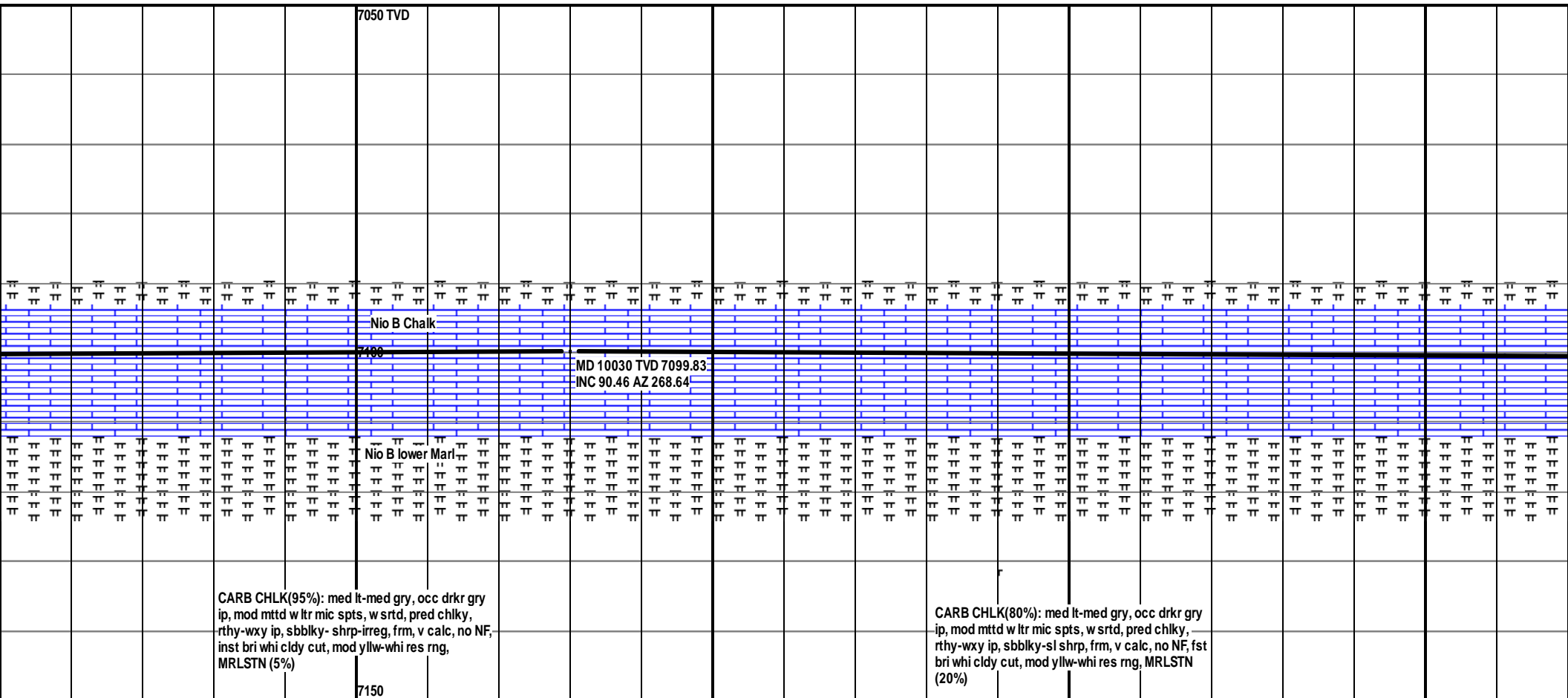


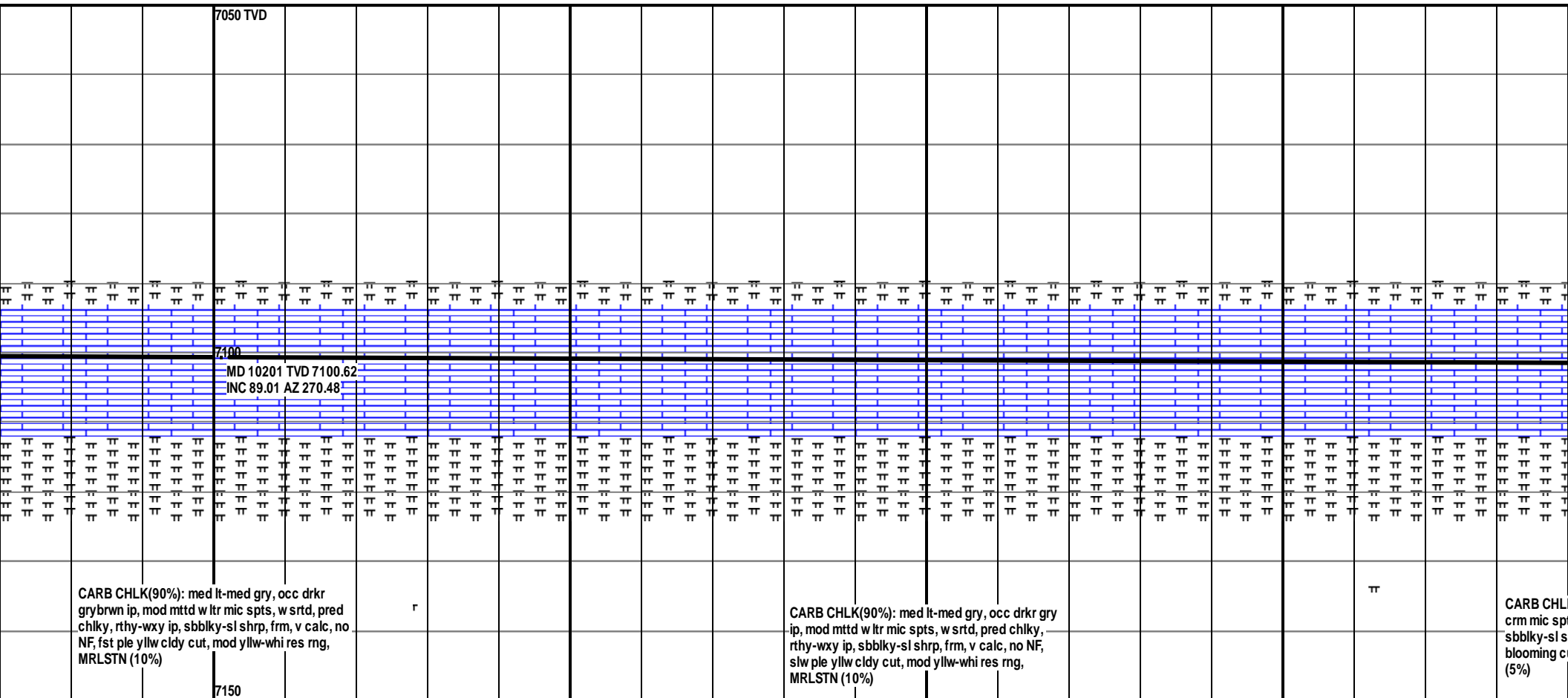


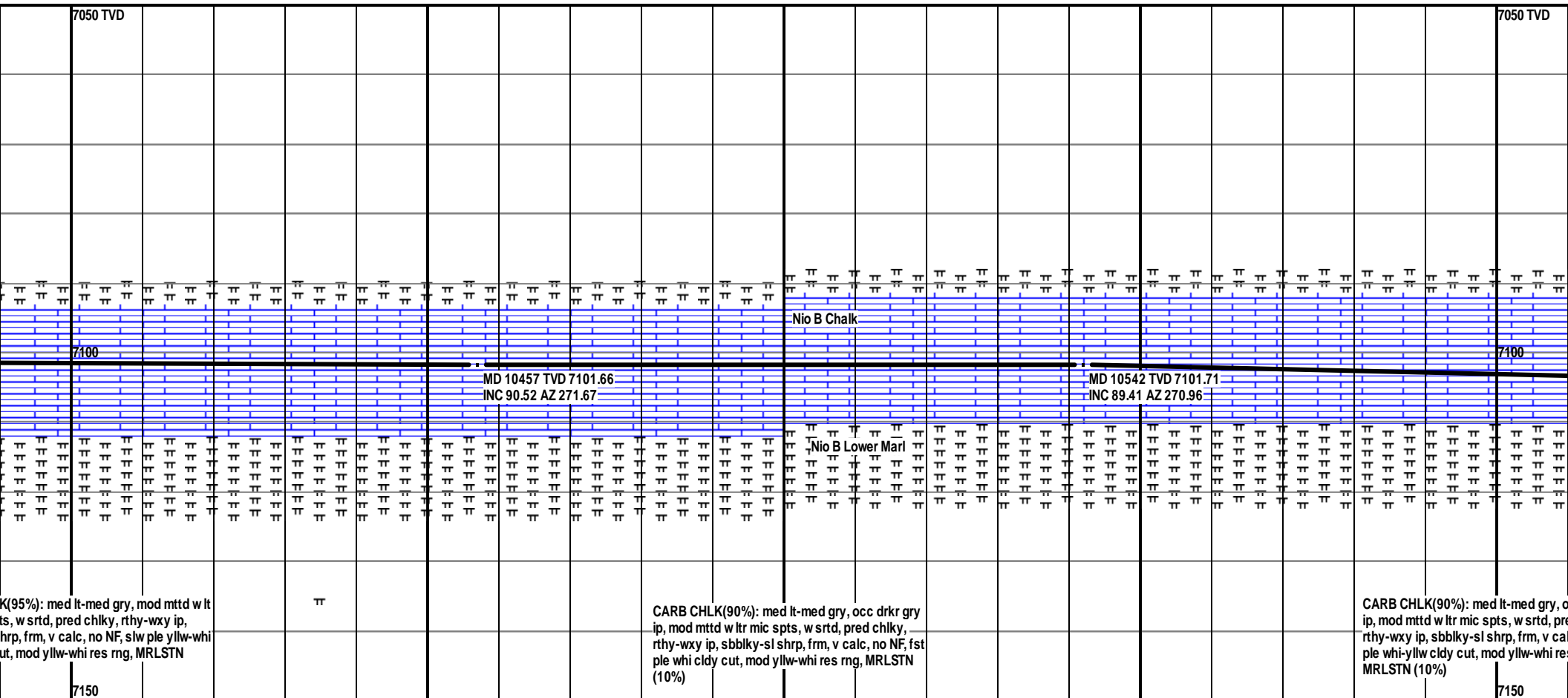


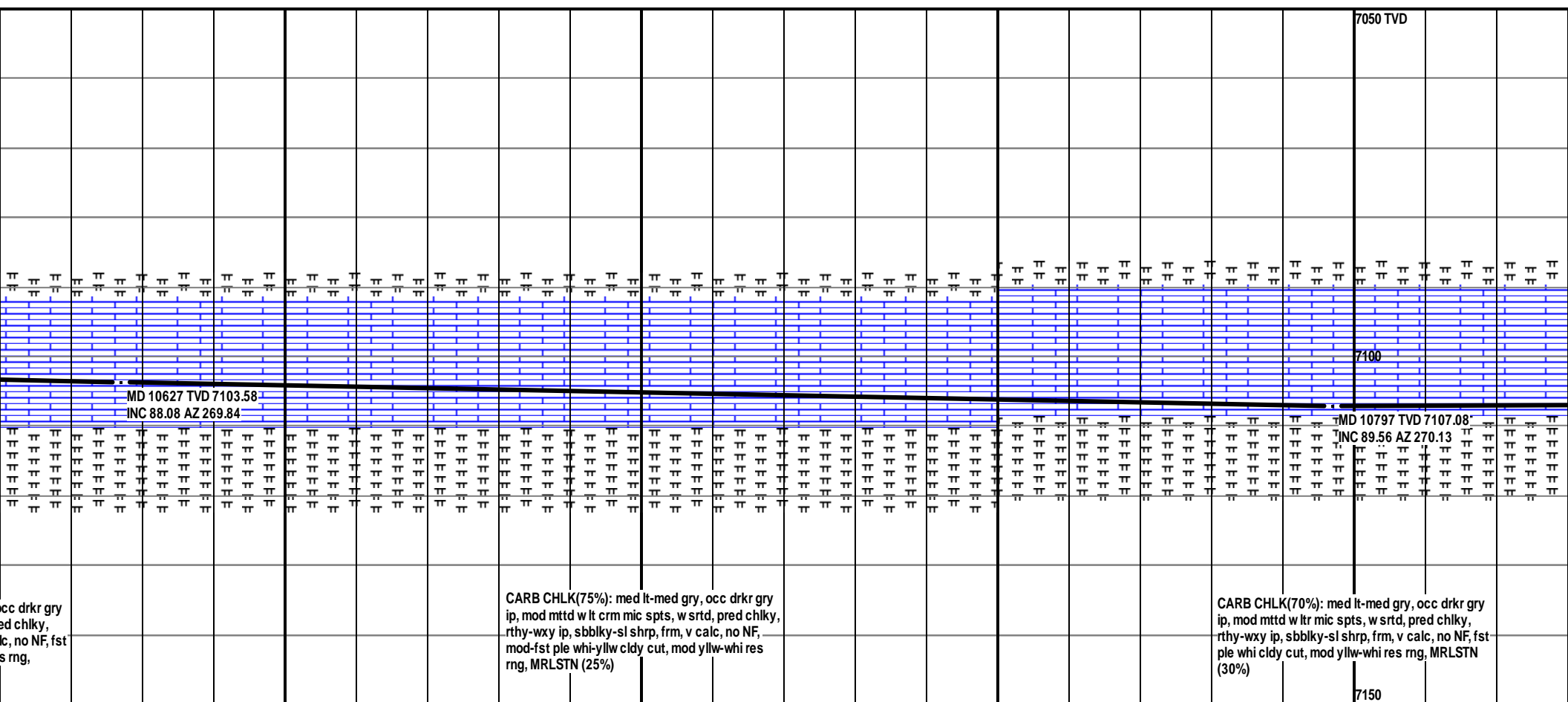
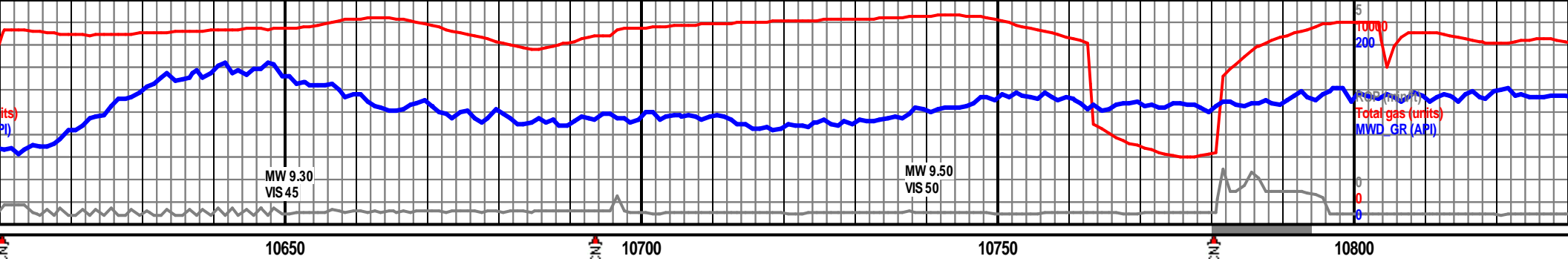


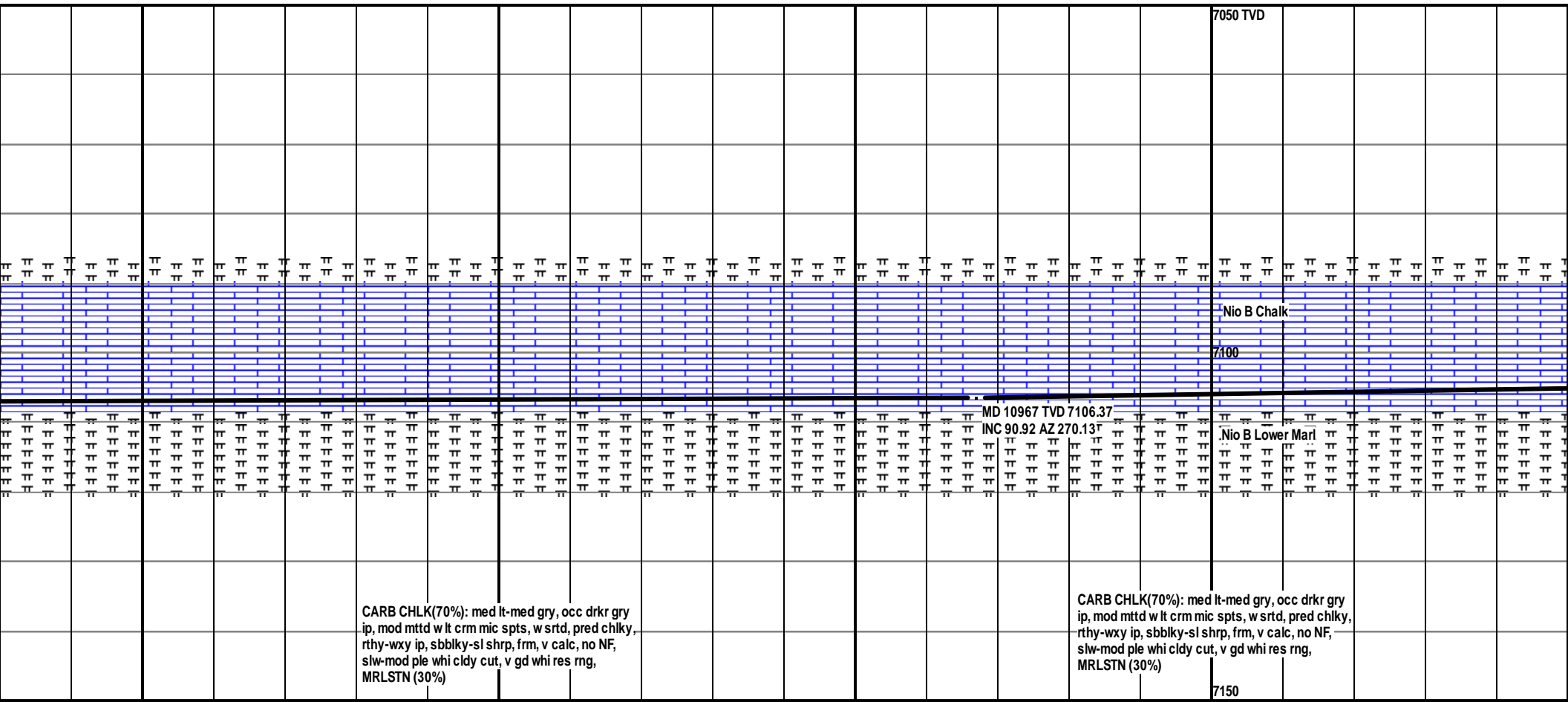












9.40
48

