

GREAT DIVIDE CONSULTING



THE EXPERIENCED WELLSITE GEOLOGISTS

Scale 1:200 Imperial
Measured Depth Log

Well Name: D&C Farms 35C-33HZ

Location: Weld County, CO.

License Number: 05123378920000

Region: Weld County

Spud Date: 10/08/13

Drilling Completed: 10/13/13

Surface Coordinates: 736' FSL & 2135' FWL, SEC. 28, T1N-R67W

Bottom Hole Coordinates: 460' FSL & 1530' FWL, SEC. 33, T1N-R67W

Ground Elevation (ft): 5011' K.B. Elevation (ft): 5027'
Logged Interval (ft): 7900' To: 12889' Total Depth (ft): 12889'

Formation: Codell

Type of Drilling Fluid: Water Based

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

OPERATOR

Company: Anadarko Petroleum Corporation

Address: Granite Tower

1099 18th St., Suite 1800

Denver, CO 80202

GEOLOGIST

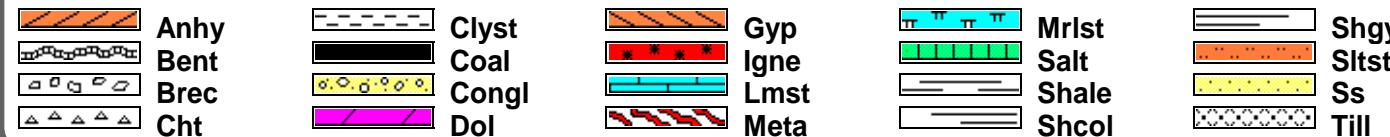
Name: Scott Crozier / Ben Thompson
Company: Great Divide Consulting, Inc.
Address: P.O. Box 630263
Highlands Ranch, CO 80163

Cores

DSTs

Comments

ROCK TYPES



ACCESSORIES

MINERAL	FOSSIL	TEXTURE	
	Gyp		Sltstrg
	Hvymin		Ssstrg
	Kaol		Boundst
	Marl		Chalky
	Minxl		Cryxl
	Nodule		Earthy
	Phos		Finexln
	Pyr		Grainst
	Salt		Lithogr
	Sandy		Microxln
	Silt		Mudst
	Sil		Packst
	Sulphur		Wackest
	Tuff		
	Ostra		
	Algae		
	Amph		
	Belm		
	Bioclst		
	Brach		
	Bryozoa		
	Cephal		
	Coral		
	Crin		
	Echin		
	Fish		
	Foram		
	Fossil		
	Gastro		
	Oolite		
	STRINGER		
	Anhy		
	Arg		
	Bent		
	Coal		
	Dol		
	Gyp		
	Ls		
	Mrst		

OTHER SYMBOLS

POROSITY
E Earthy
F Fenest
Fr Fracture
X Inter
M Moldic
O Organic
P Pinpoint

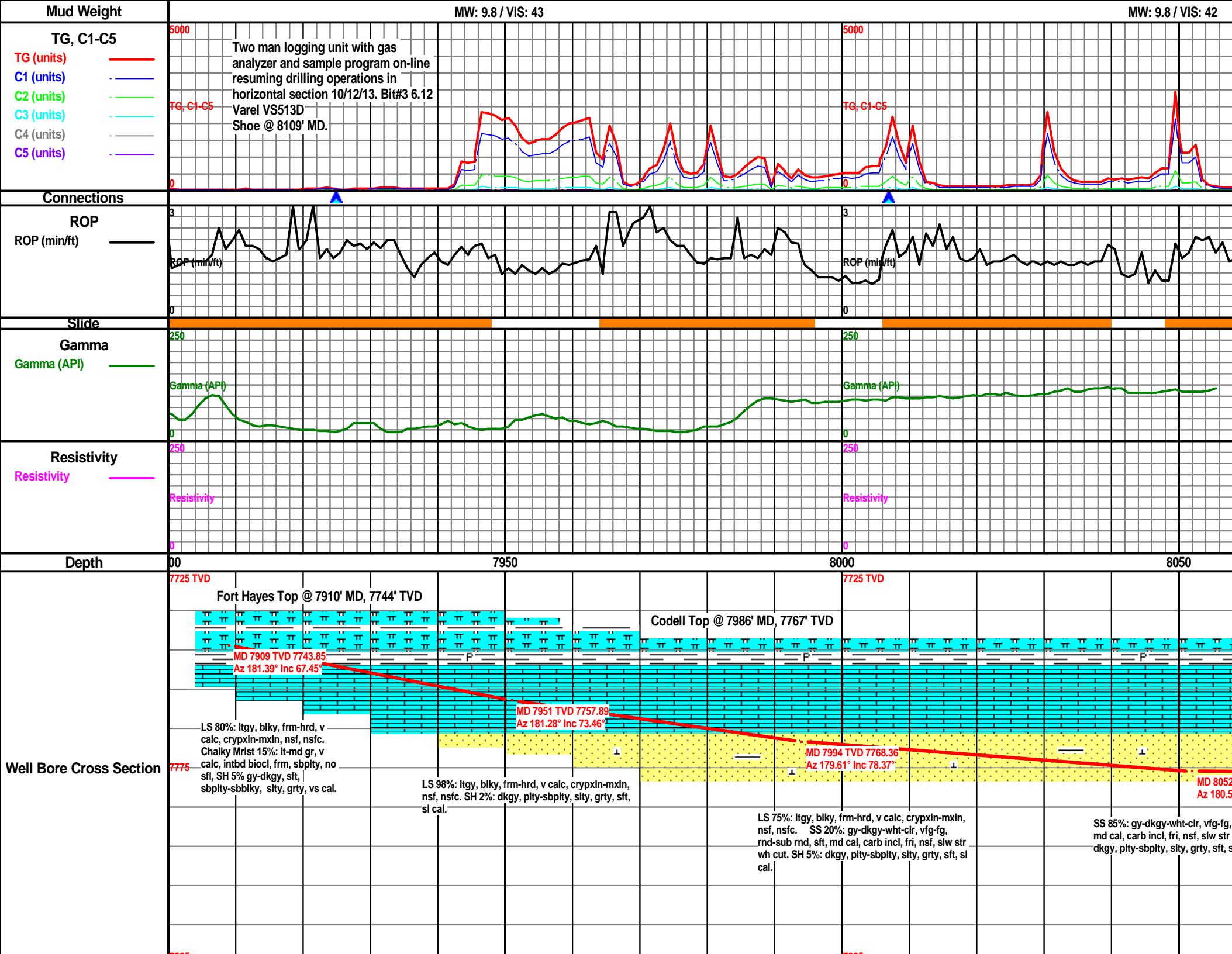
V Vuggy
SORTING
W Well
M Moderate
P Poor

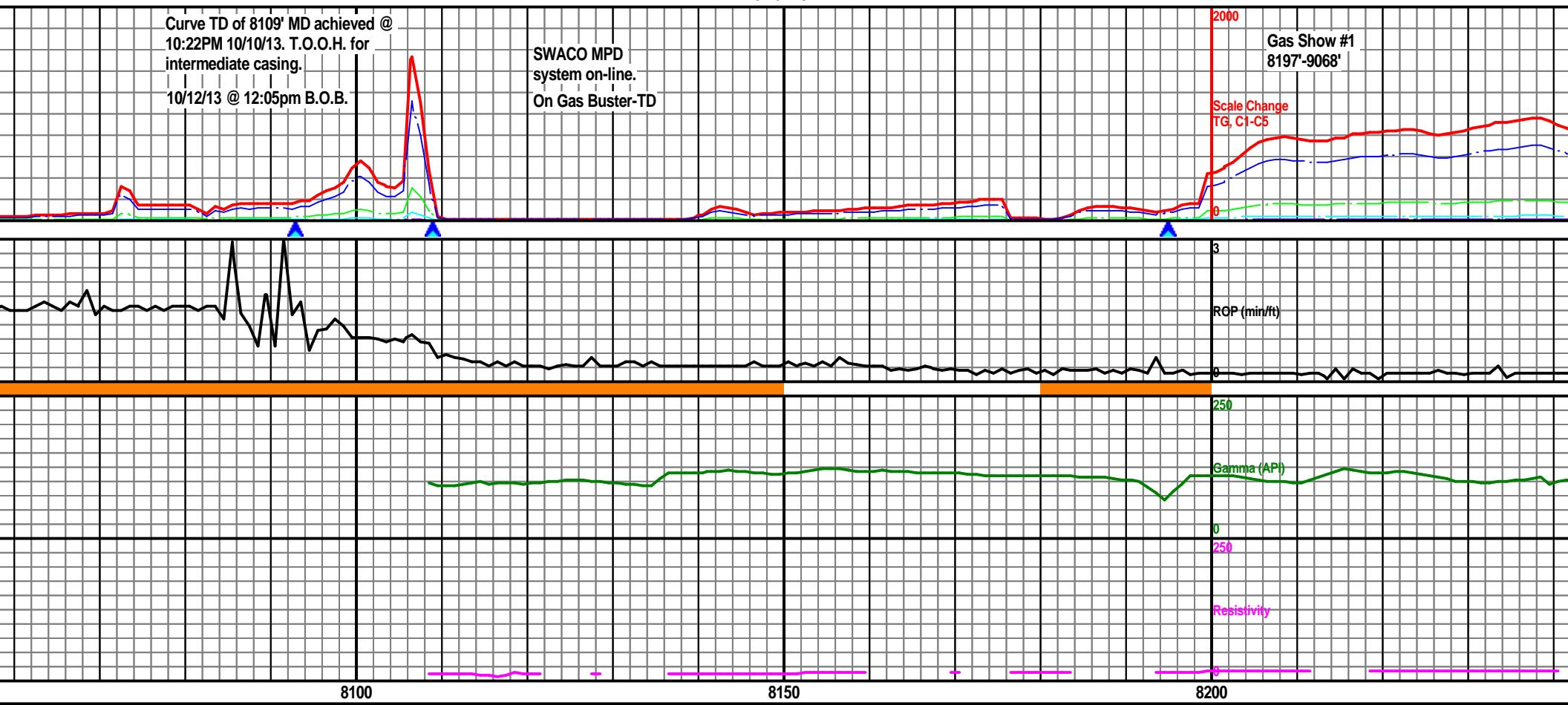
ROUNDING
R Rounded
F Subrnd
S Subang
A Angular

OIL SHOW
E Even

Spotted
Ques
Dead
INTERVAL
Core
Dst

EVENT
Rft
Connection





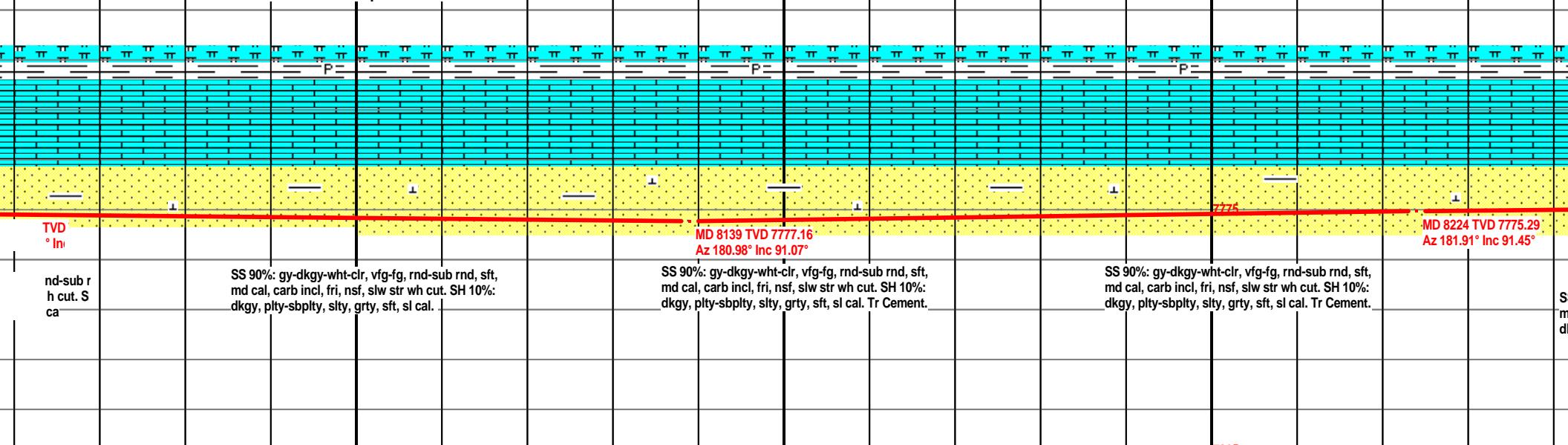
8100

8150

8200

7725 TVD

10/12/13 4:30am Depth @ 8109' MD

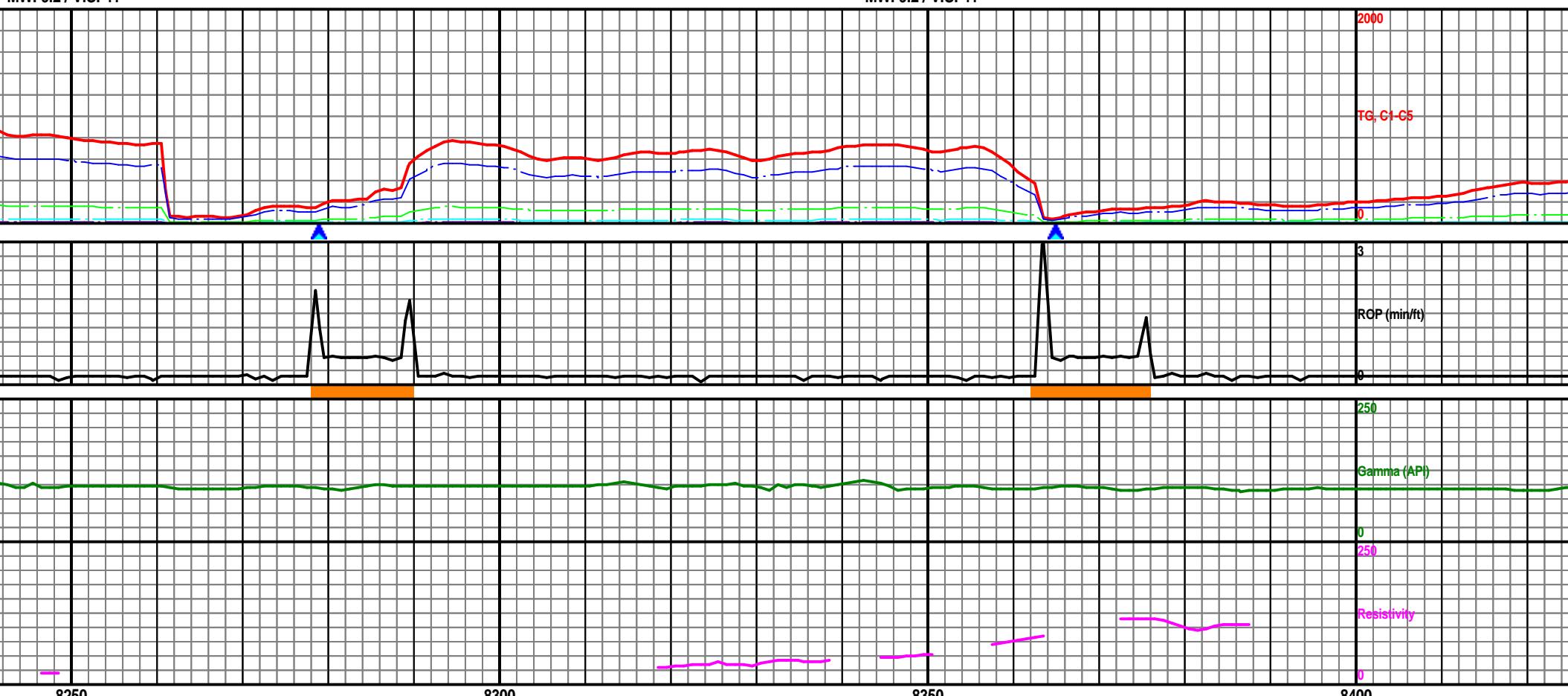


MW: 9.2 / VIS: 41

MW: 9.2 / VIS: 41

2000

TG, G1-C5



90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub r
d cal, carb incl, fri, nsf, slw str wh cut. S
gy, pty-sbpsty, sly, grty, sft, sl cal. Tr C

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgy, pty-sbpsty, sly, grty, sft, sl cal.

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgy, pty-sbpsty, sly, grty, sft, sl cal.

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgy, pty-sbpsty, sly, grty, sft, sl cal.

MD 8309 TVD 7773.83
Az 181.52° Inc 90.52°

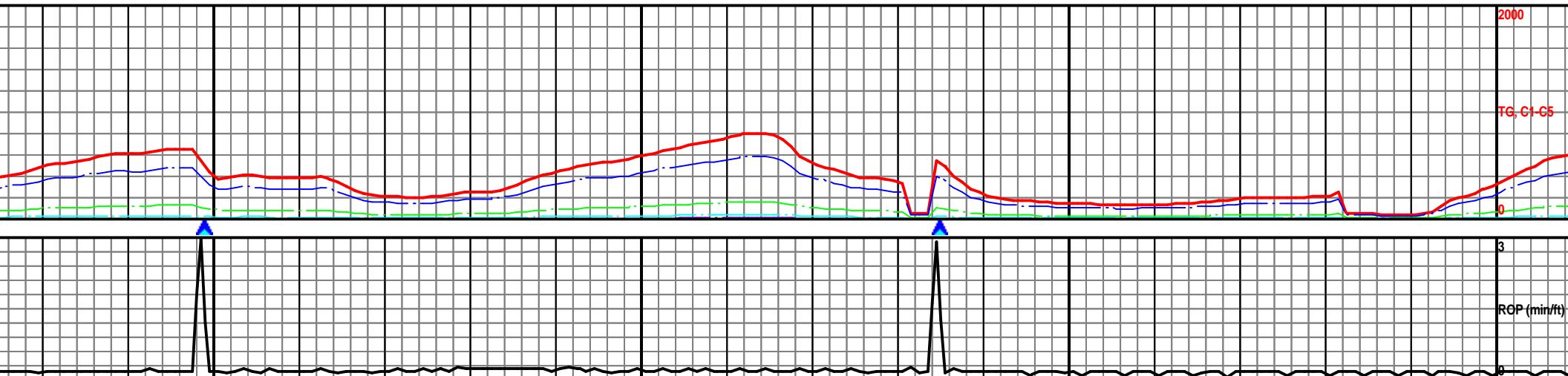
MD 8395 TVD 7773.51
Az 182.04° Inc 89.9°

MW: 9.2 / VIS: 41

MW: 9.2 / VIS: 42

2000

TG, C1-C5



3

ROP (min/ft)

0

250

Gamma (API)

0

250

Resistivity

0

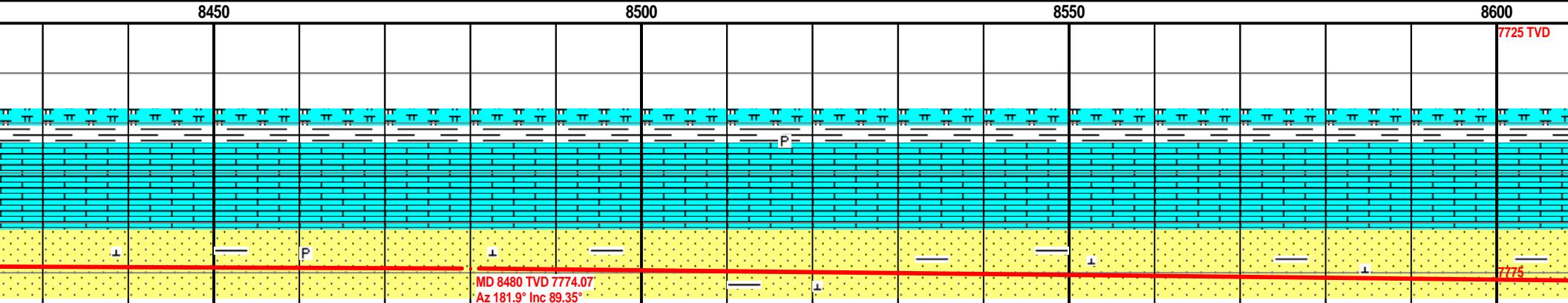
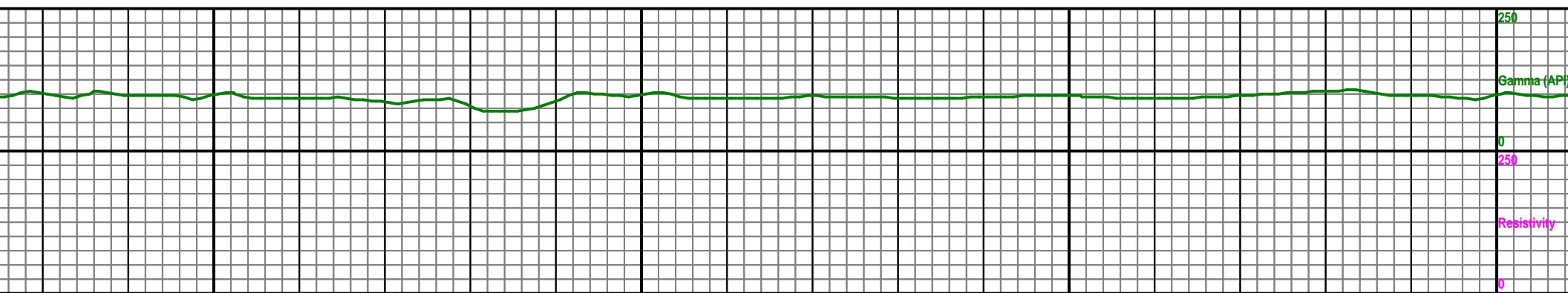
8450

8500

8550

8600

7725 TVD



775

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgry, pty-sbplty, sly, grty, sft, sl cal.

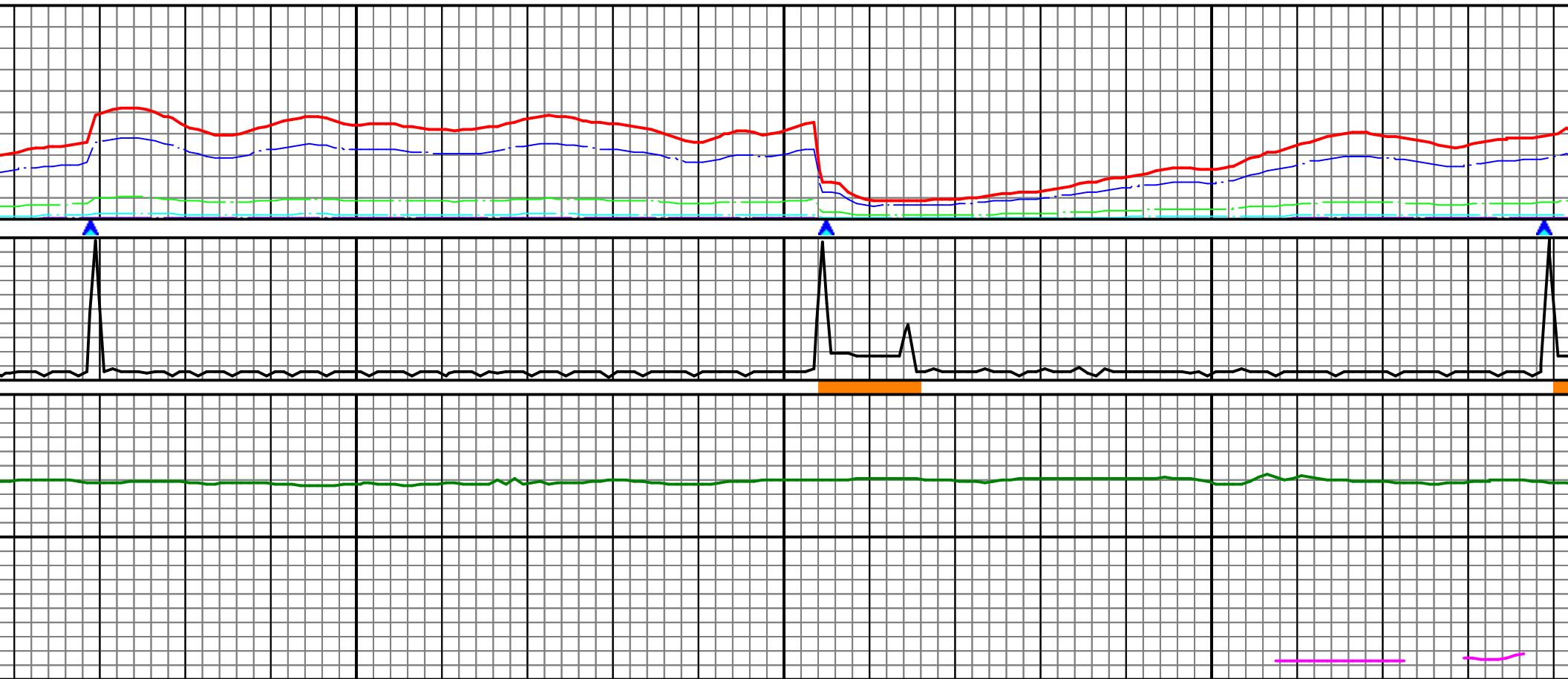
SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgry, pty-sbplty, sly, grty, sft, sl cal.

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgry, pty-sbplty, sly, grty, sft, sl cal.

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, slw str wh cut. SH 10%:
dkgry, pty-sbplty, sly, grty, sft, sl cal.

MW: 9.2 / VIS: 42

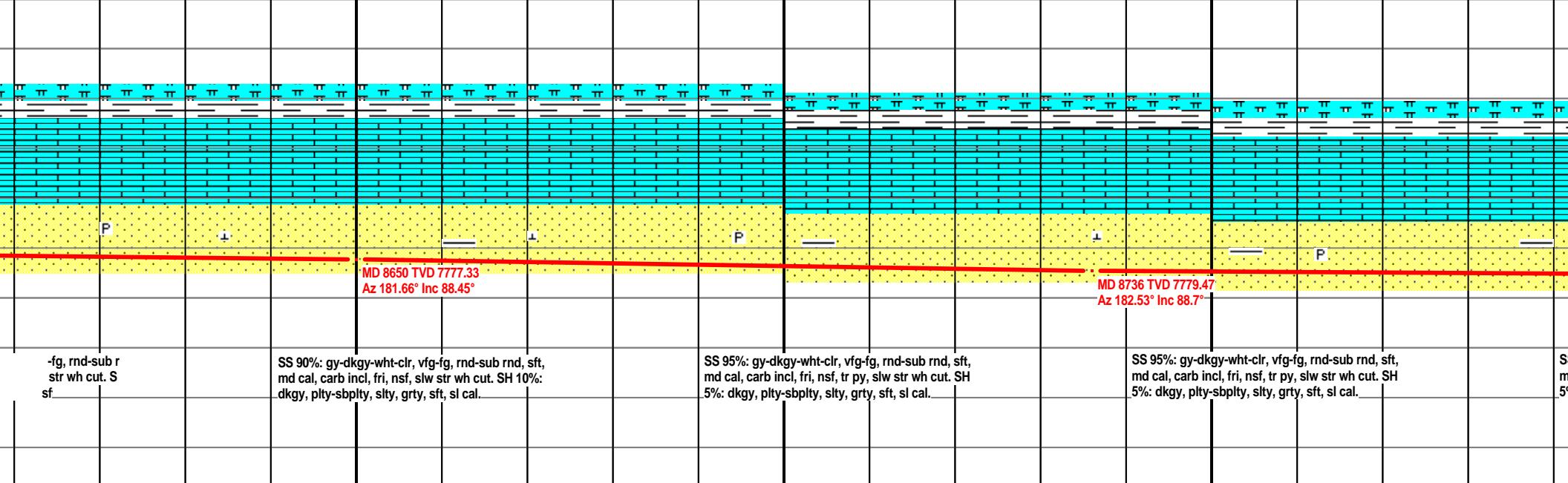
MW: 9.0 / VIS: 44



8650

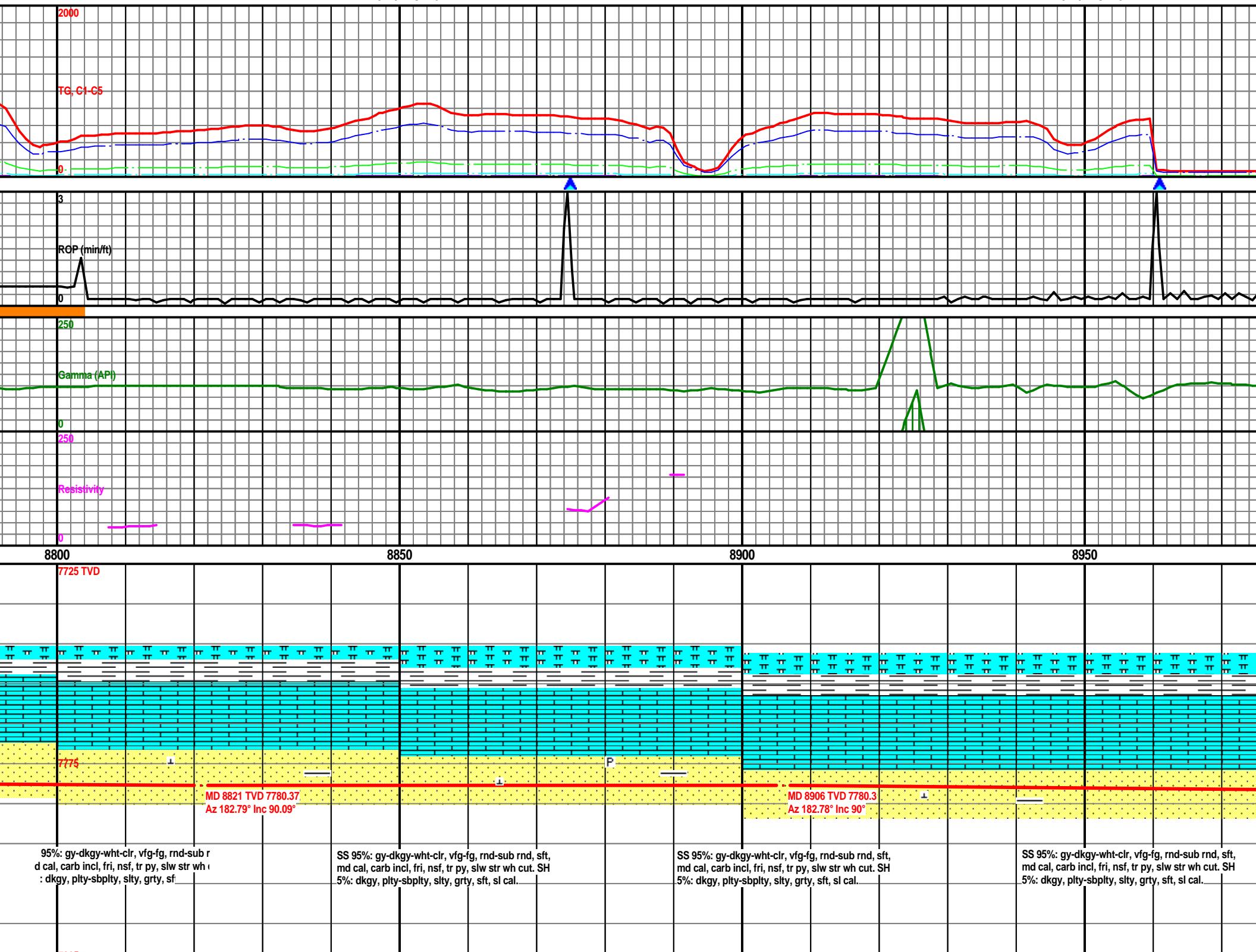
8700

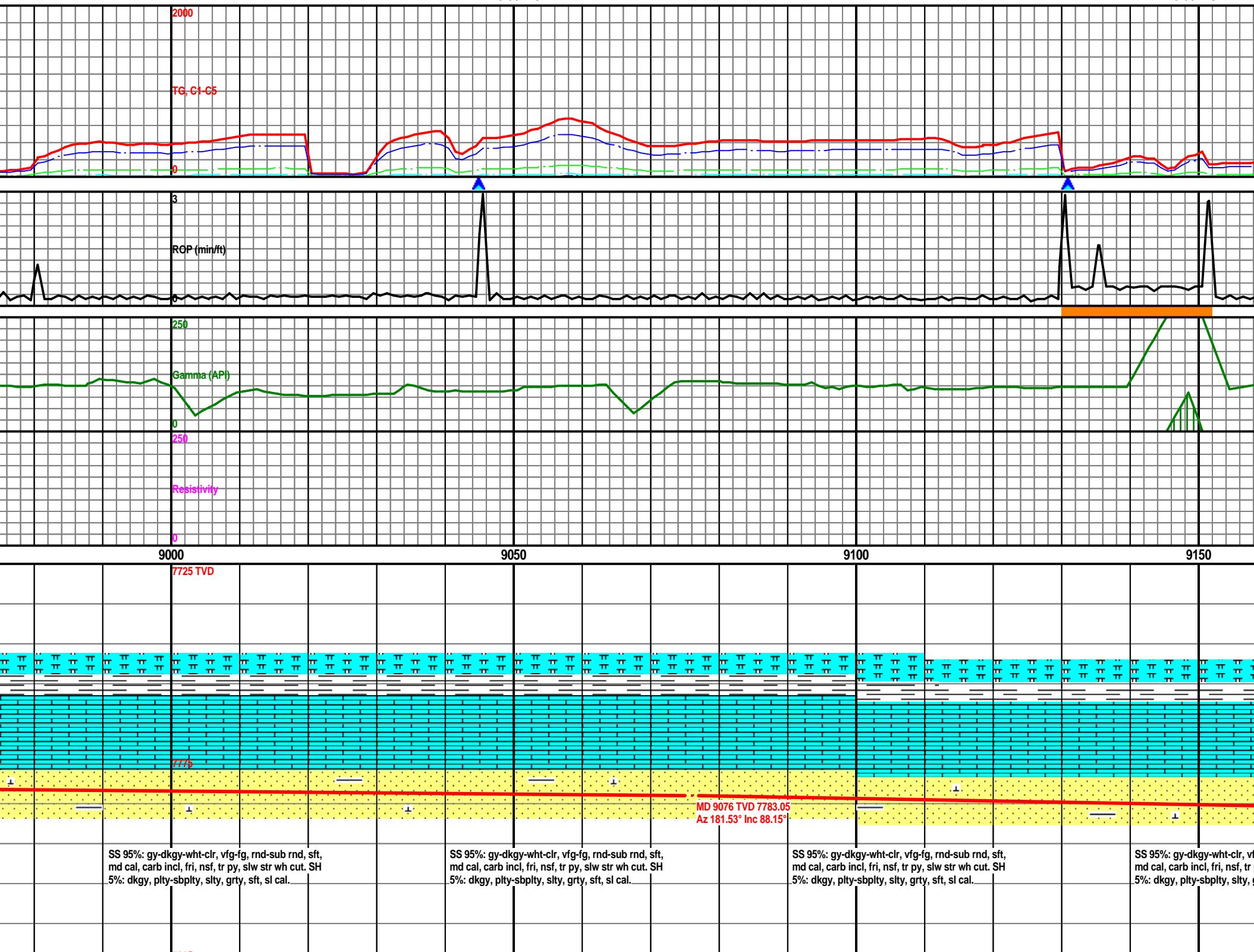
8750

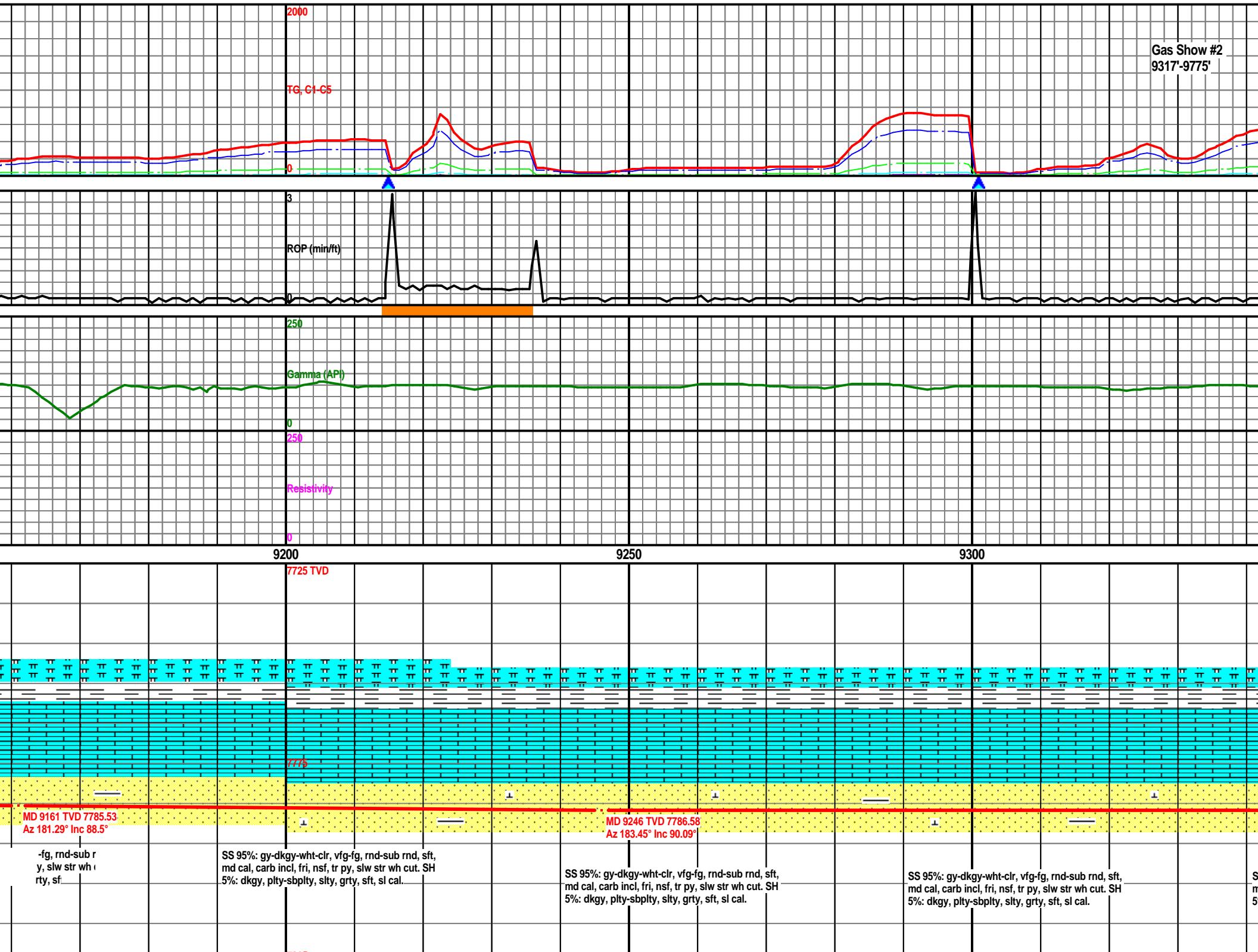


MW: 9.1 / VIS: 45

MW: 9.1 / VIS: 45

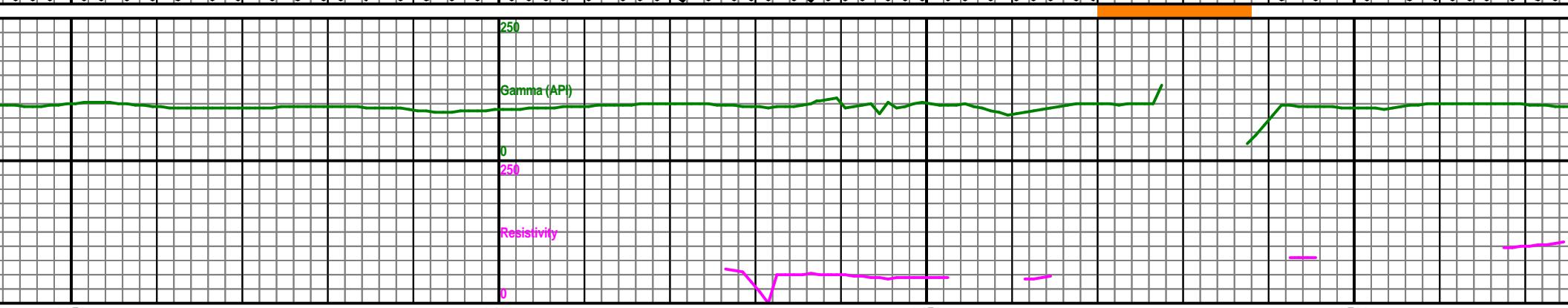
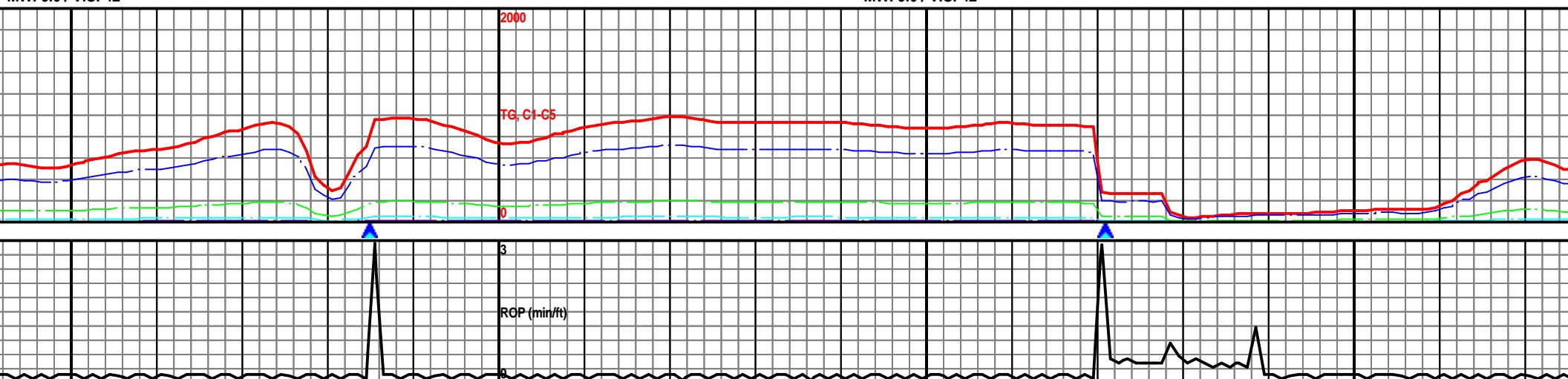






MW: 9.0 / VIS: 42

MW: 9.0 / VIS: 42



9350

9400

9450

9500

7725 TVD

776

MD 9417 TVD 7786.77
Az 181.59° Inc 89.78°

S 95%: gy-dkgry-wht-clr, vfg-fg, rnd-sub r
d cal, carb incl, fri, nsf, tr py, slw str wh i
: dkgry, pfty-sbptly, slyt, grty, sf

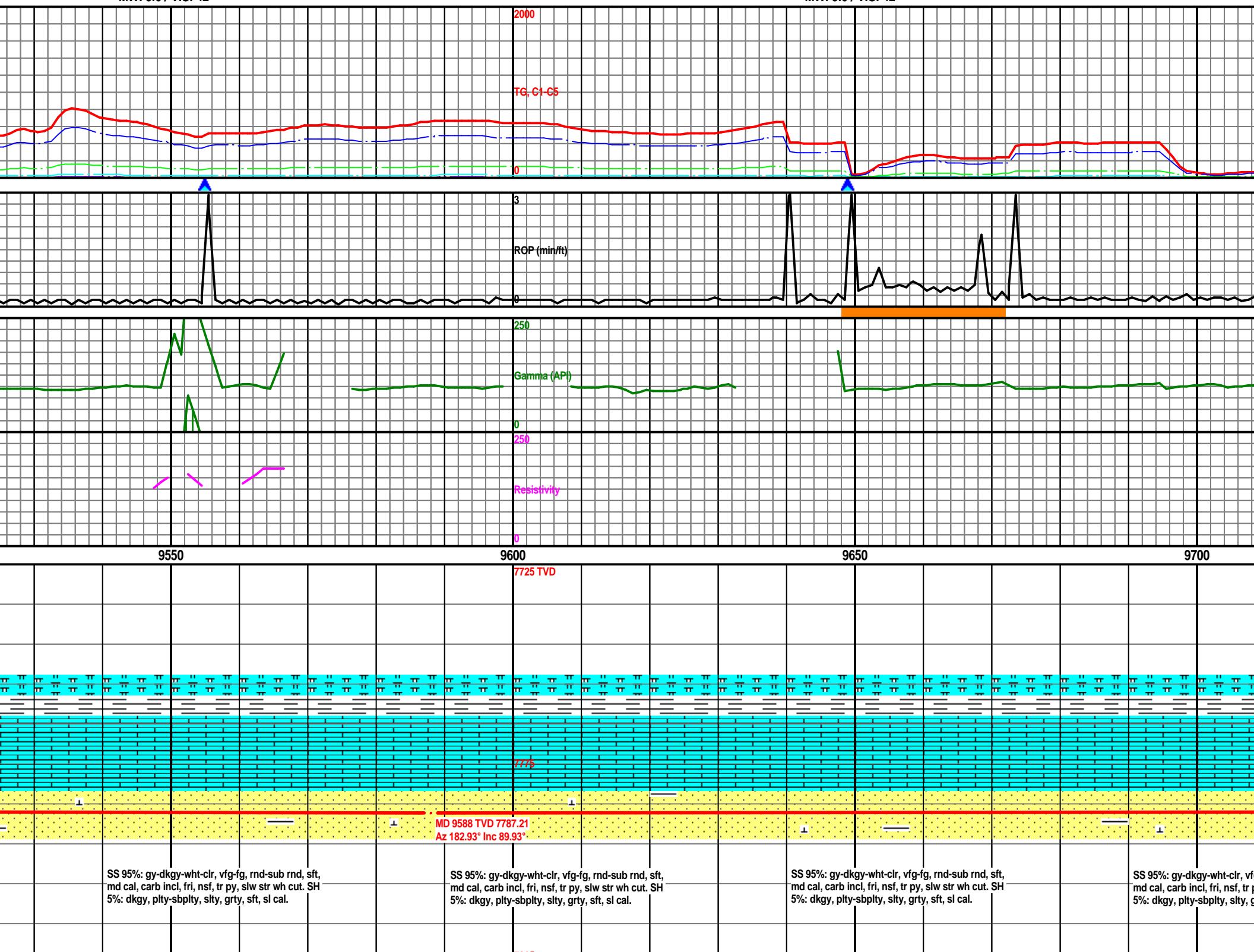
SS 95%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH
5%: dkgry, pfty-sbptly, slyt, grty, sft, sl cal.

SS 95%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH
5%: dkgry, pfty-sbptly, slyt, grty, sft, sl cal.

SS 95%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH
5%: dkgry, pfty-sbptly, slyt, grty, sft, sl cal.

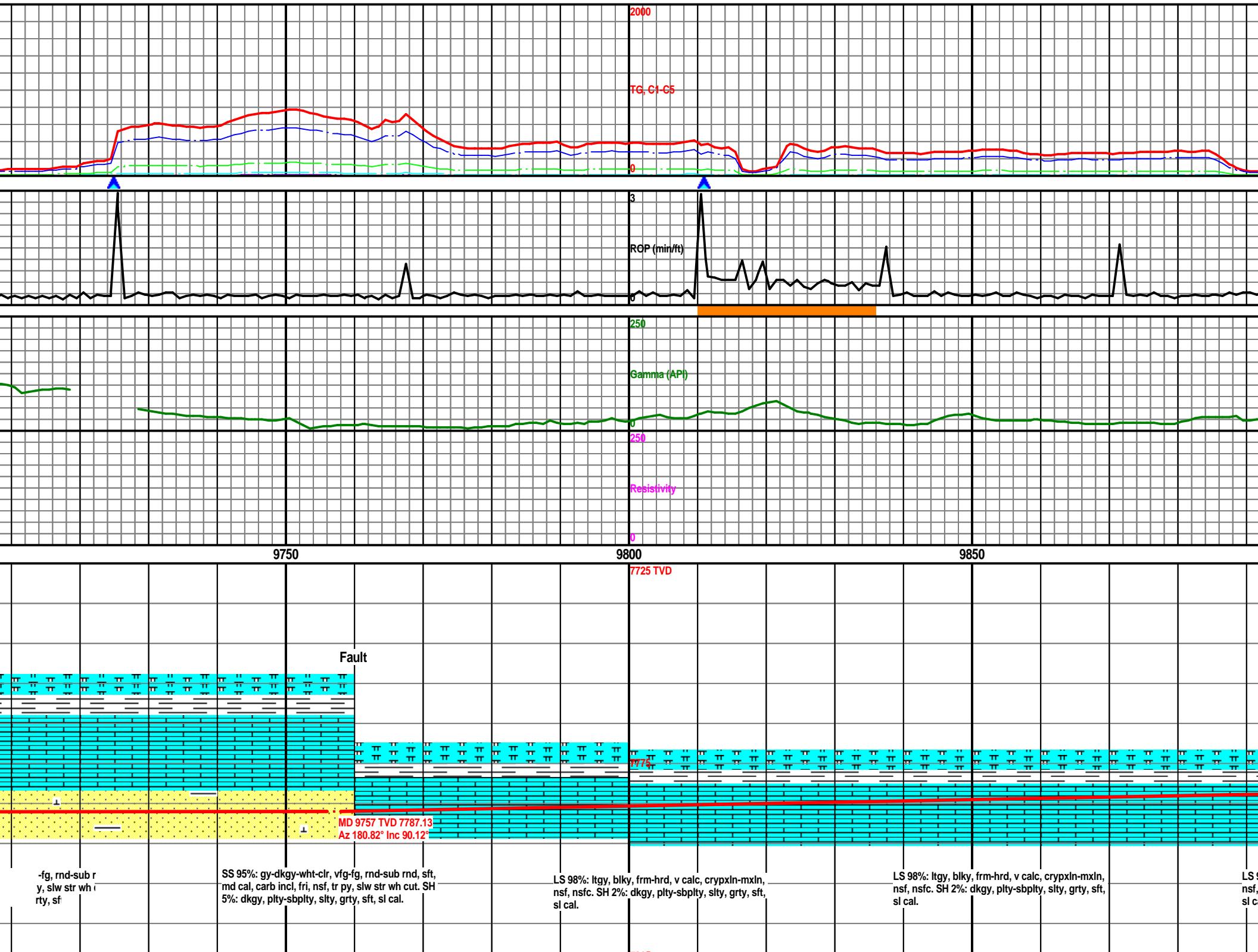
MW: 9.0 / VIS: 42

MW: 9.0 / VIS: 42



MW: 9.1 / VIS: 42

MW: 9.1 / VIS: 42



MW: 9.1 / VIS: 41

MW: 9.1 / VIS: 41

2000

TG, C1-C5

0

3

ROP (min/ft)

250

Gamma (API)

0

250

Resistivity

9900

9950

10000

10050

7725 TVD

8%: ltgy, blky, frm-hrd, v calc, crypxl
nsfc. SH 2%: dkgy, pty-sbplty, sly, g

Chalky Mrlst 85%: lt-md gr, v calc, intbd biocl, frm,
sbplty, no sfl, slw str wh-ylw cut. SH 15%:
gy-dkgy, sft, sbplty-sbblky, sly, grty, vs cal. Tr
Pty.

Chalky Mrlst 85%: lt-md gr, v calc, intbd biocl, frm,
sbplty, no sfl, slw str wh-ylw cut. SH 15%:
gy-dkgy, sft, sbplty-sbblky, sly, grty, vs cal. Tr
Pty.

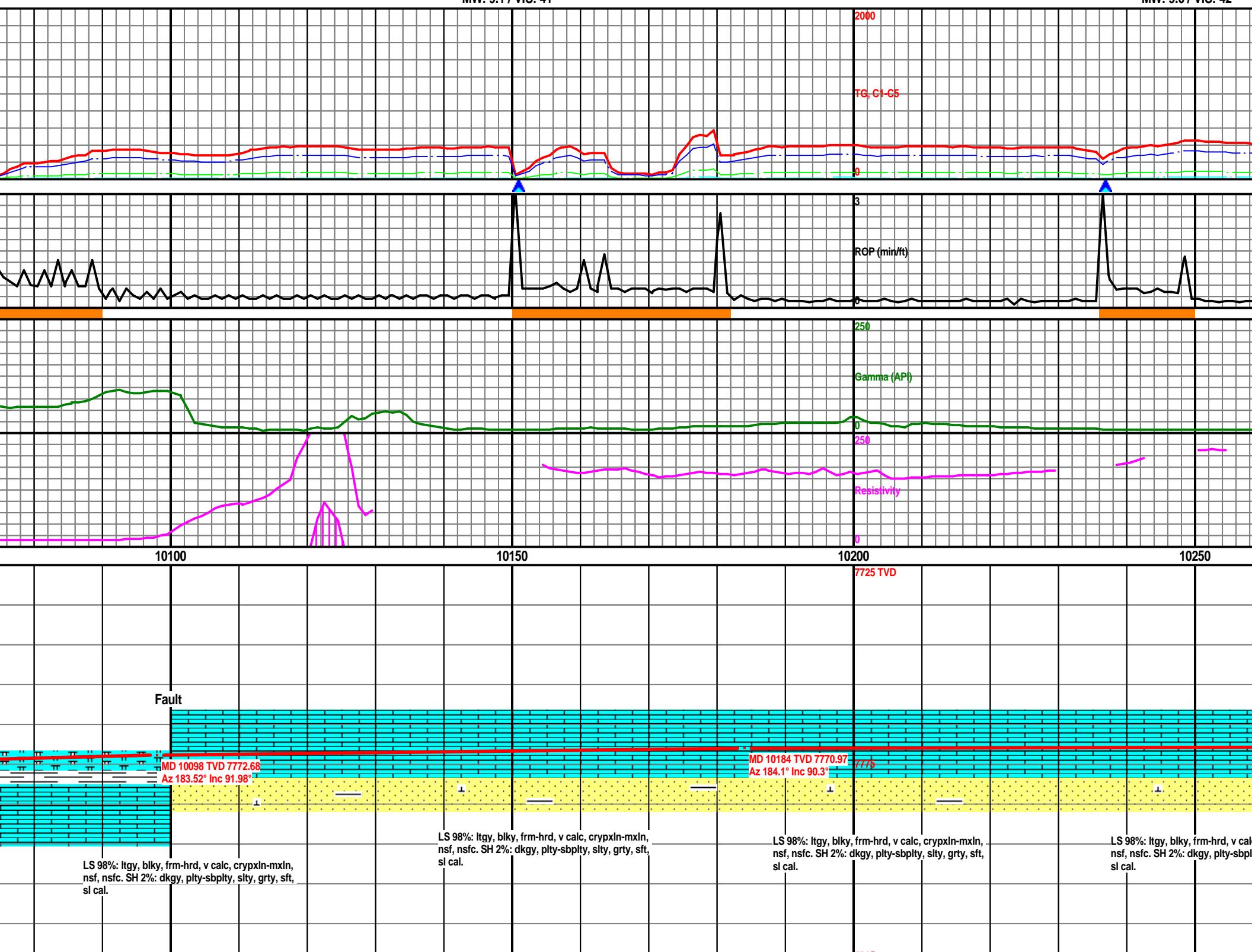
Chalky Mrlst 85%: lt-md gr, v calc, intbd biocl, frm,
sbplty, no sfl, slw str wh-ylw cut. SH 15%:
gy-dkgy, sft, sbplty-sbblky, sly, grty, vs cal. Tr
Pty.

MD 9928 TVD 7781.57
Az 181.61° Inc 93.61°

MD 10013 TVD 7776.52
Az 182.54° Inc 93.2°

MW: 9.1 / VIS: 41

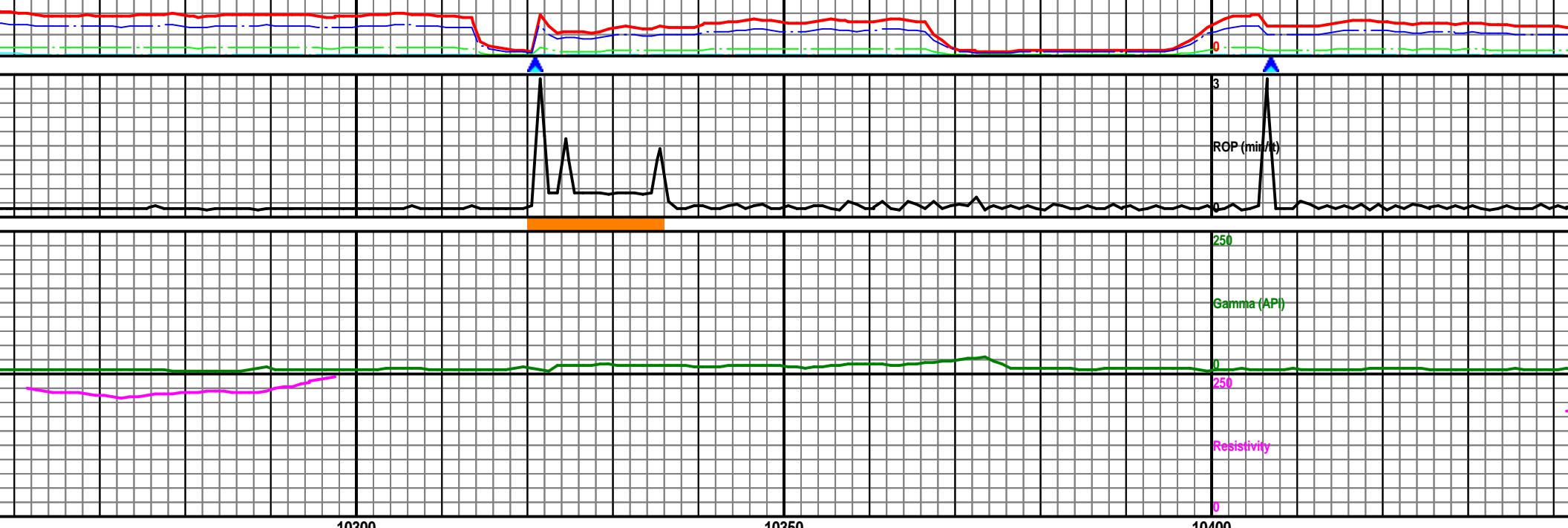
MW: 9.0 / VIS: 42



MW: 9.0 / VIS: 41

2000

TG, C1-C5

MD 10269 TVD 7770.68
Az 184.77° Inc 90.09°MD 10354 TVD 7771.18
Az 184.85° Inc 89.23°

775

MD
Az, crypxln,
ty, slyt, gLS 98%: ltgy, blky, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, paly-sbplt, slyt, grty, sft,
sl cal.LS 98%: ltgy, blky, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, paly-sbplt, slyt, grty, sft,
sl cal.LS 98%: ltgy, blky, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, paly-sbplt, slyt, grty, sft,
sl cal.LS 98%
nsf, nsfc.
sl cal.

MW: 9.0 / VIS: 41

MW: 9.0 / VIS: 41

2000

TG, G1-C5

3

ROP (min/ft)

250

Gamma (API)

0

250

0

10450

10500

10550

10600

7725 TVD

10439 TVD
184.77° InMD 10610 TVD 7774.8
Az 185.31° Inc 88.66°: ltgy, blkly, frm-hrd, v calc, crypxlr
c. SH 2%: dkgy, pty-sbptly, sly, gLS 98%: ltgy, blkly, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, pty-sbptly, sly, grty, sft,
sl cal.LS 98%: ltgy, blkly, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, pty-sbptly, sly, grty, sft,
sl cal.LS 98%: ltgy, blkly, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, pty-sbptly, sly, grty, sft,
sl cal.

MW: 9.0 / VIS: 41

MW: 8.9 / VIS: 43

2000

TG, C1-C5

0

ROP (min/ft)

3

250

Gamma (API)

0

250

Resistivity

0

10650

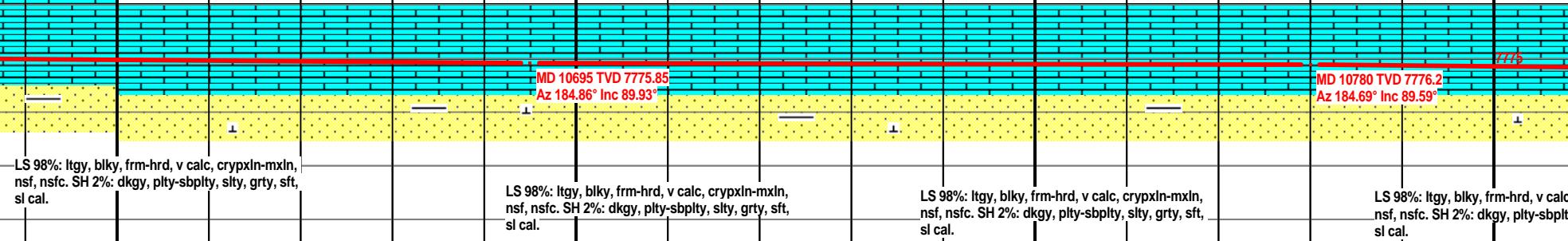
10700

10750

10800

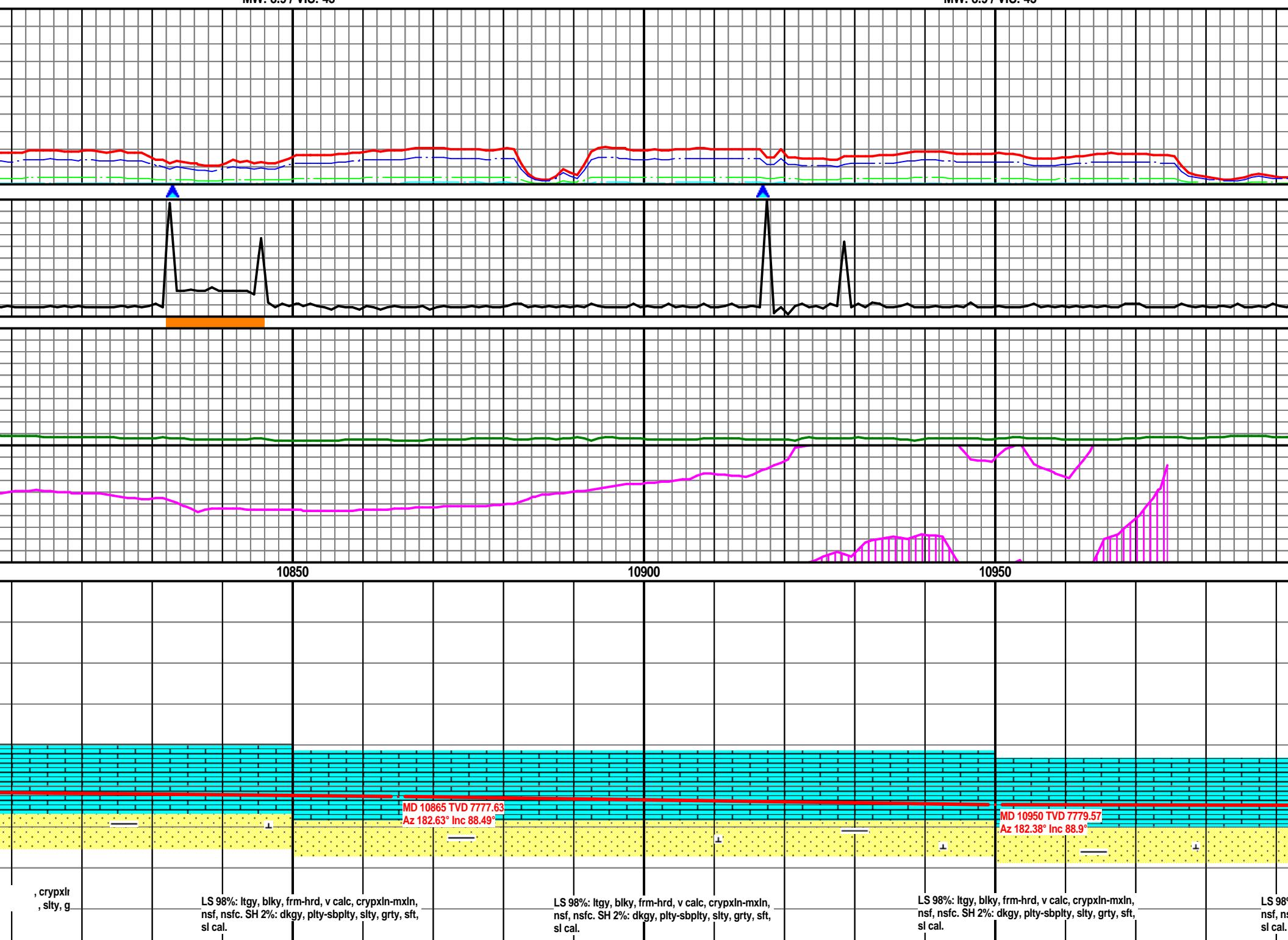
7725 TVD

10/13/13 4:30am Depth @ 10705' MD



MW: 8.9 / VIS: 43

MW: 8.9 / VIS: 43



MW: 8.9 / VIS: 43

MW: 8.9 / VIS: 41

2000

TG, C1-C5

3

ROP (min/ft)

250

Gamma (API)

250

Resistivity

0

11000

11050

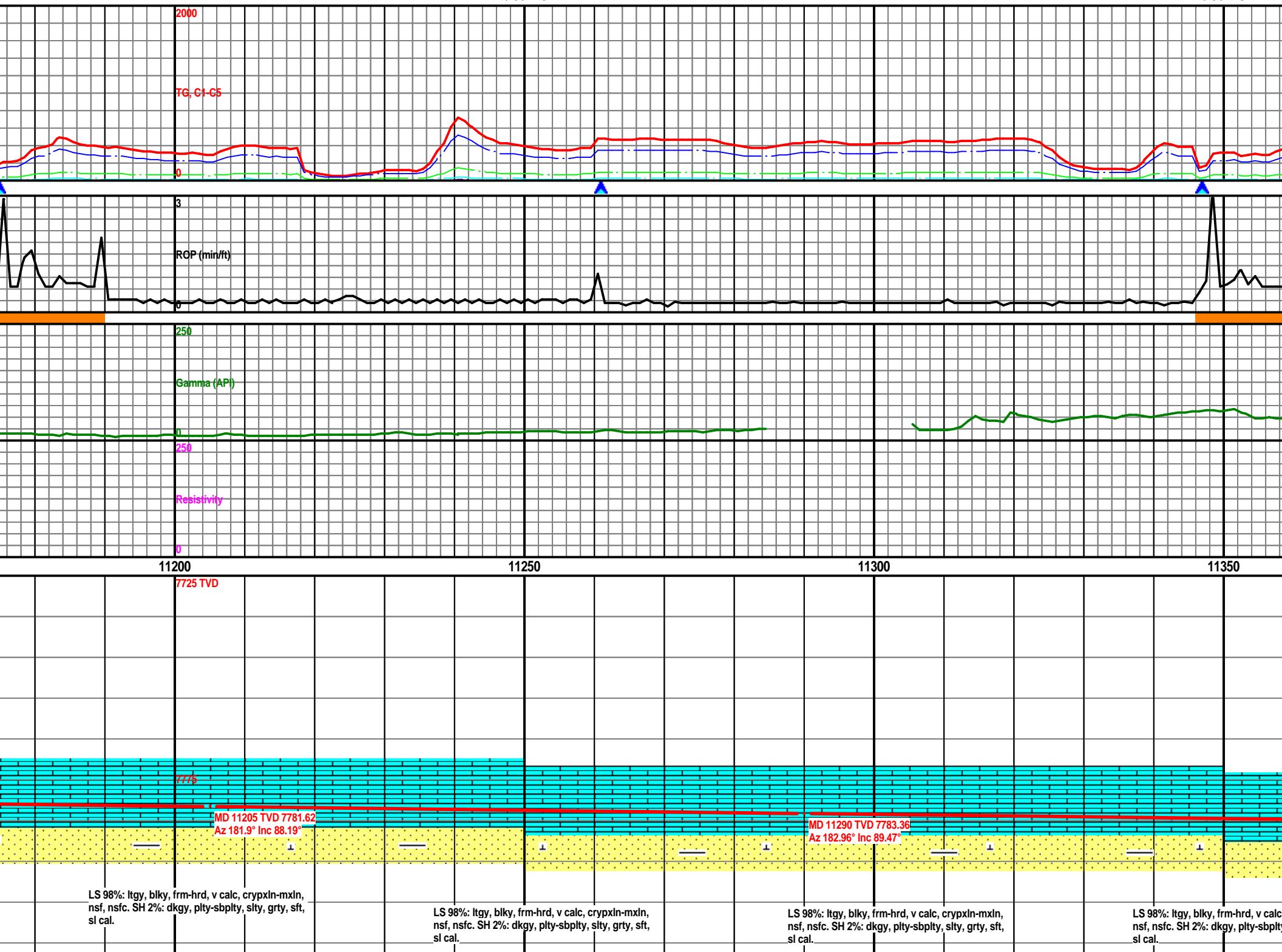
11100

11150

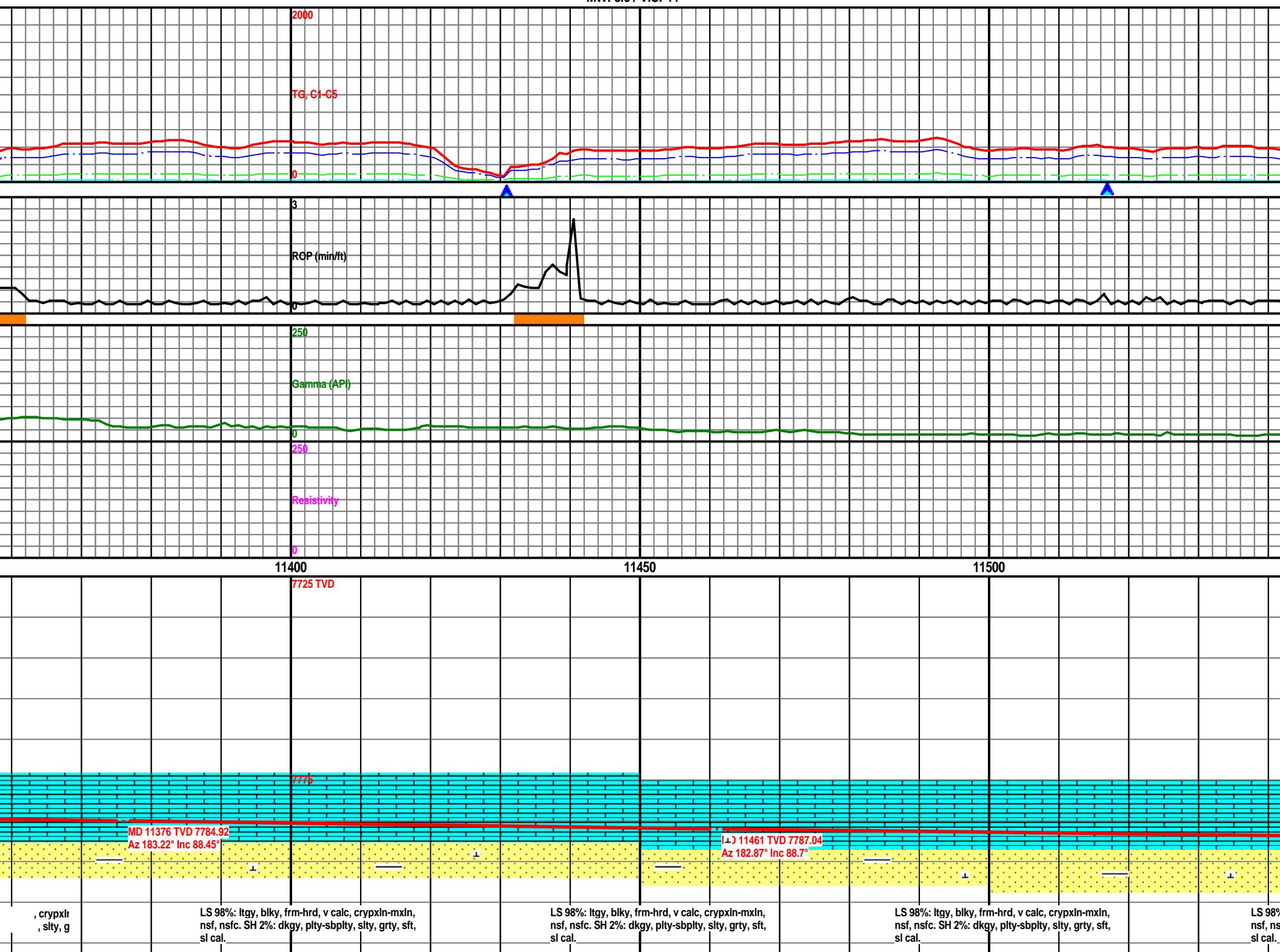
7725 TVD

776

MD 11036 TVD 7779.96
Az 181.71° Inc 90.57°MD 11120 TVD 7779.91
Az 180.94° Inc 89.5°: ltgy, blky, frm-hrd, v calc, crypxlr
fc. SH 2%: dkgy, pty-sbpsty, sity, gLS 98%: ltgy, blky, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, pty-sbpsty, sity, grty, sft,
sl cal.LS 98%: ltgy, blky, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, pty-sbpsty, sity, grty, sft,
sl cal.LS 98%: ltgy, blky, frm-hrd, v calc, crypxln-mxln,
nsf, nsfc. SH 2%: dkgy, pty-sbpsty, sity, grty, sft,
sl cal.

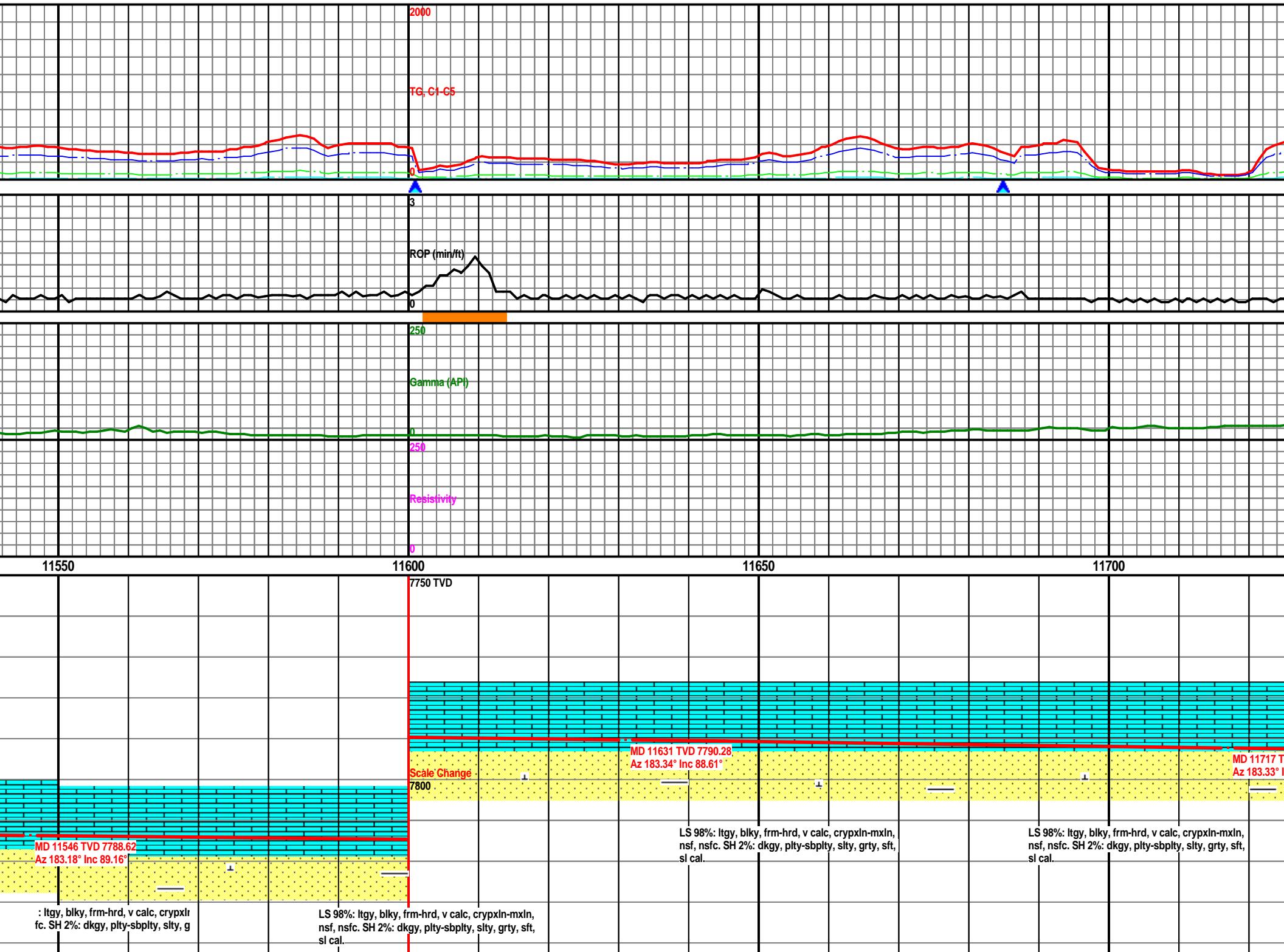


MW: 8.9 / VIS: 44



MW: 8.9 / VIS: 42

MW: 8.9 / VIS: 42

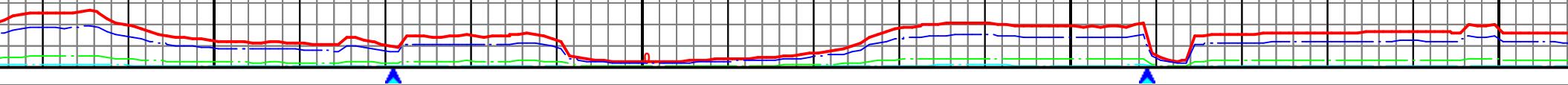


MW: 9.0 / VIS: 43

MW: 9.0 / VIS: 43

2000

TG, C1-C5



3

ROP (min/ft)

250

Gamma (API)

0

250

Resistivity

0

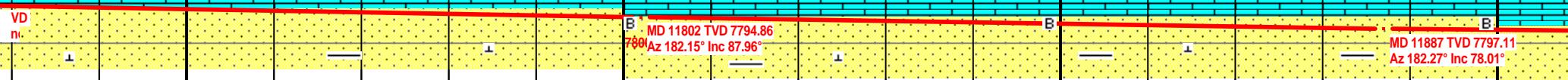
11750

11800

11850

11900

7750 TVD



LS 98%: Itgy, blky, frm-hrd, v calc, crypxln-mxln, nsf, nsfc. SH 2%: dkgy, pty-sbplt, sly, grty, sft, sl cal.

LS 60%: Itgy, blky, frm-hrd, v calc, crypxln-mxln, nsf, nsfc. SS 35%: gy-dkgy-wht-clr, fg-mg, rnd-sub rnd, sft, md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH 5%: dkgy, pty-sbplt, sly, grty, sft, sl cal. Tr Bent, num ls qrt.

SS 80%: gy-dkgy-wht-clr, fg-mg, rnd-sub rnd, sft, md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS 15%: Itgy, blky, frm-hrd, v calc, crypxln-mxln, nsf, nsfc. SH 5%: dkgy, pty-sbplt, sly, grty, sft, sl cal. Tr Bent, num ls qrt.

SS 80%: gy-dkgy-wht-clr, vfg-fg, rnd-s, md cal, carb incl, fri, nsf, tr py, slw str 15%: Itgy, blky, frm-hrd, v calc, crypxln-mxln, nsf, SH 5%: dkgy, pty-sbplt, sly, grty, sft, sl cal. Tr Bent, num ls qrt.

7750

MW: 9.0 / VIS: 42

MW: 9.0 / VIS: 42

2000

TG, C1-C5

0

3

ROP (min/ft)

250

Gamma (API)

0

250

Resistivity

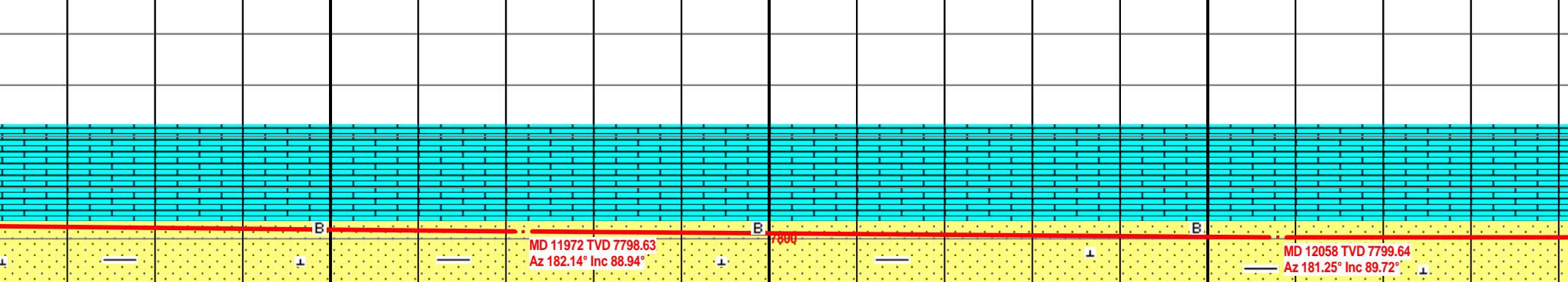
0

11950

12000

12050

7750 TVD

ub r
wh
-mx
ty

SS 80%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft, md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS 15%. Itgy, blky, frm-hrd, v calc, crypxln-mxln, nsf, nsfc. SH 5%: dkgry, pty-sbpsty, sly, grty, sft, sl cal. Tr Bent, oc ls qrt.

SS 95%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft, md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH 5%: dkgry, pty-sbpsty, sly, grty, sft, sl cal. Tr LS, Tr Bent, oc ls qrt.

SS 95%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft, md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH 5%: dkgry, pty-sbpsty, sly, grty, sft, sl cal. Tr LS, Tr Bent, oc ls qrt.

SS 95%: cal, carb incl, fri, nsf, tr py, slw str wh cut. SH 5%: dkgry, pty-sbpsty, sly, grty, sft, sl cal. Tr LS, Tr Bent, oc ls qrt.

MW: 9.0 / VIS: 42

MW: 9.0 / VIS: 42

2000

TG, C1-C5

0

3

ROP (min/ft)

250

Gamma (API)

0

250

Resistivity

0

12100

12150

12200

12250

7750 TVD

B

: gy-dkg-y-wht-clr, vfg-fg, rnd-sub rnd,
incl, fri, nsf, tr py, slw str wh cut.
Itly-sbpsty, slyt, grty, sft, sl cal. Tr LS, T

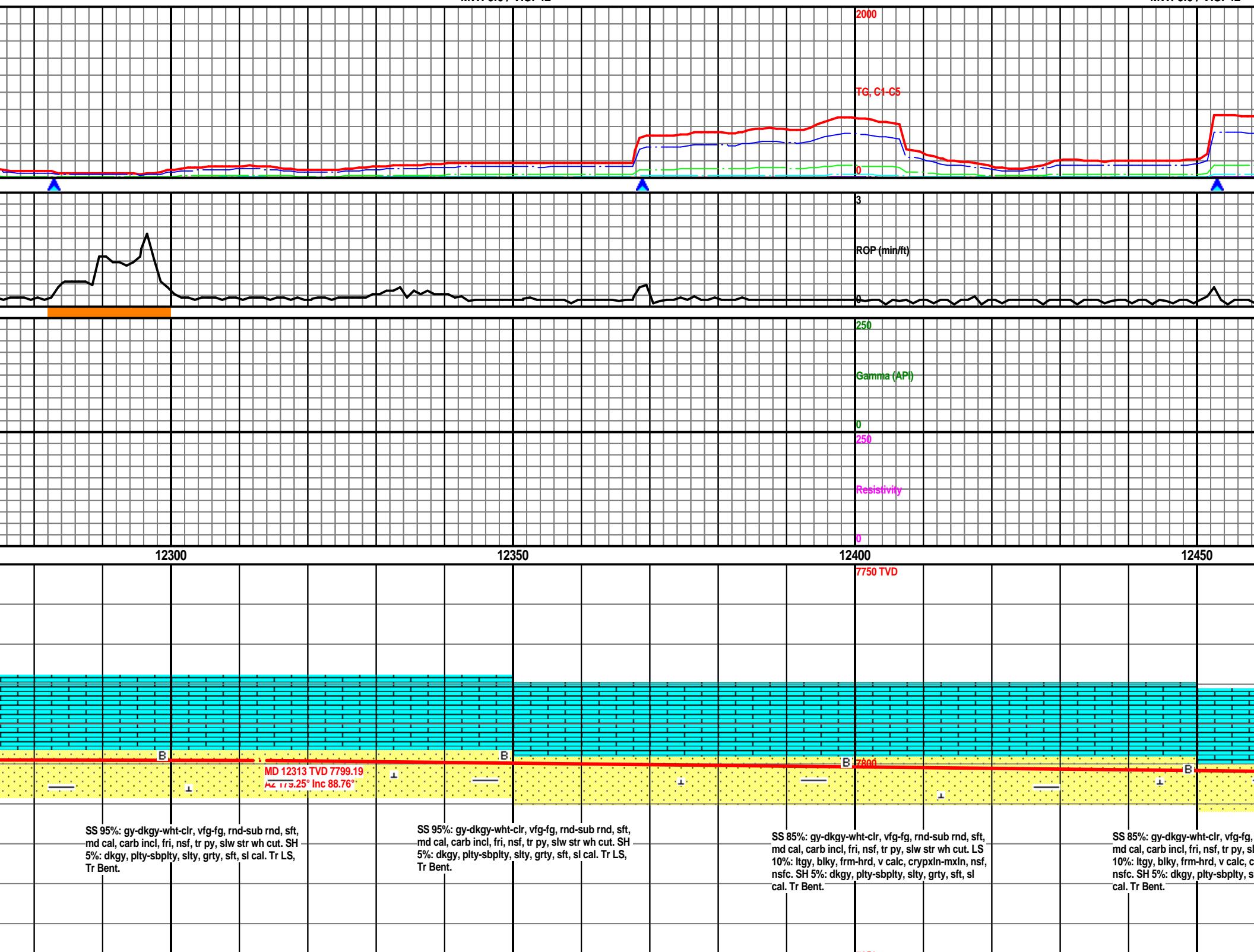
B

MD 12143 TVD 7799.64
Az 180.73° Inc 90.27°
SS 95%: gy-dkg-y-wht-clr, vfg-fg, rnd-sub rnd, sft, md
cal, carb incl, fri, nsf, tr py, slw str wh cut. SH 5%:
dkgy, plty-sbpsty, slyt, grty, sft, sl cal. Tr LS, Tr Bent,
oc ls qrt.

B

1600
MD 12228 TVD 7798.86
Az 181.18° Inc 90.79°
SS 95%: gy-dkg-y-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH
5%: dkgy, plty-sbpsty, slyt, grty, sft, sl cal. Tr LS,
Tr Bent.

SS 95%: gy-dkg-y-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. SH
5%: dkgy, plty-sbpsty, slyt, grty, sft, sl cal. Tr LS,
Tr Bent.



MW: 9.0+ / VIS: 42

2000

TG, C1-C5

3

ROP (min/ft)

250

Gamma (API)

0

250

Resistivity

0

12500

12550

12600

7750 TVD

MD 12484 TVD 7802.2
Az 178.58° Inc 89.22°rnd-sub r
w str wh
rypxln-mx
ty, grtySS 90%: gy-dkgy-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS
5%: ltgy, blky, frm-hrd, v calc, crypxln-mxln, nsf,
nsfc. SH 5%: dkgy, plty-sbplt, slyt, grty, sft, sl
cal. Tr Bent.SS 90%: gy-dkgy-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS
5%: ltgy, blky, frm-hrd, v calc, crypxln-mxln, nsf,
nsfc. SH 5%: dkgy, plty-sbplt, slyt, grty, sft, sl
cal. Tr Bent.SS 90%: gy-dkgy-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS
5%: ltgy, blky, frm-hrd, v calc, crypxln-mxln, nsf,
nsfc. SH 5%: dkgy, plty-sbplt, slyt, grty, sft, sl
cal. Tr Bent.SS 90%
md cal
5%: ltgy
nsfc. Sh
cal. Tr

MW: 9.0+ / VIS: 42

MW: 9.0+ / VIS: 42

2000

TG, G1-C5

3

ROP (min/ft)

250

Gamma (API)

0

250

Resistivity

0

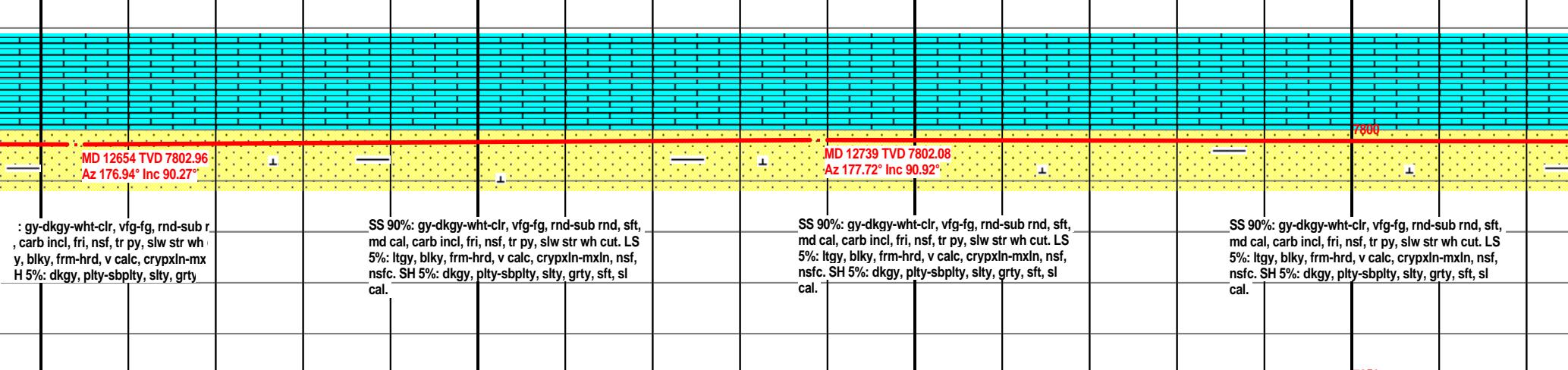
12650

12700

12750

12800

7750 TVD



MW: 9.0+ / VIS: 42

TD of 12889' MD
Achieved 11:10pm
10/13/13. T.O.O.H. to
run liner.
Reamer Trip Gas = 6142 U
Casing Trip Gas =



Two man logging unit
with sample program
and gas analyzer
released 10/15/13.

12850

12900

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS
5%: ltgy, blkly, frm-hrd, v calc, crypxln-mxln, nsf,
nsfc. SH 5%: dkgy, pty-sbpsty, slyt, grty, sft, sl
cal.

SS 90%: gy-dkgry-wht-clr, vfg-fg, rnd-sub rnd, sft,
md cal, carb incl, fri, nsf, tr py, slw str wh cut. LS
5%: ltgy, blkly, frm-hrd, v calc, crypxln-mxln, nsf,
nsfc. SH 5%: dkgy, pty-sbpsty, slyt, grty, sft, sl
cal.

MD 12834 TVD 4302.27
Az 177.26° Inc 88.85°

MD 12889 TVD 7803.37
Az 177.26° Inc 88.85°