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 (318)-590-9755
 FAX (318)590-9754

COMPANY: Sandridge EXPLORATION & PRODUCTION

WELL: Pintail SWD 0780 2-16D

FIELD: Wildcat COUNTY: Jackson STATE: Colorado

LOCATION: _____

Interval Logged: 2318 To: _____ G.L.: _____ K.B: _____

Date Logged: _____ To: _____ Spud Date: _____

Rig: _____ Unit No.: _____

Loggers: _____

Api No.: 05-057-6566

Filename: pintail_sw_d_2-16d.mlw

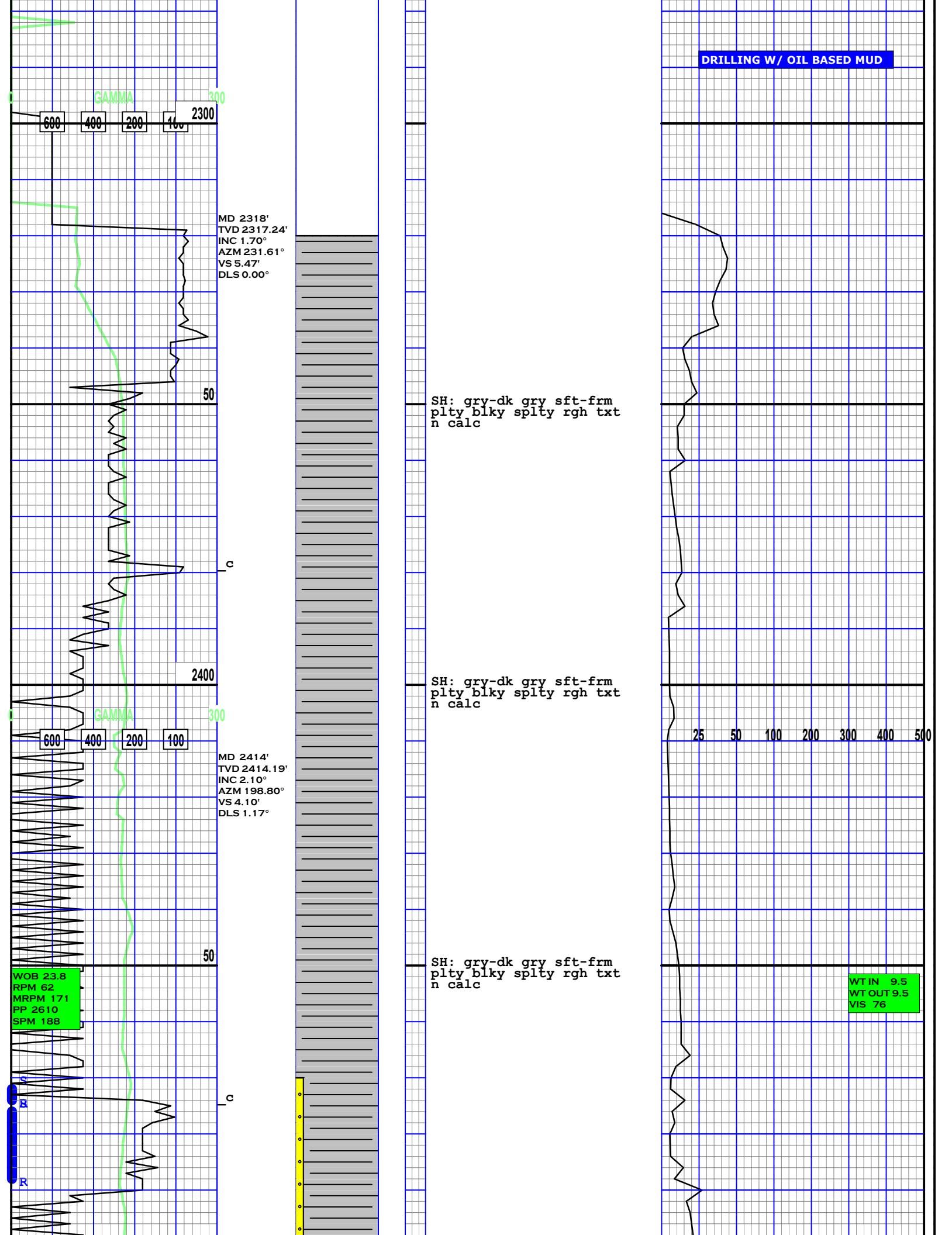
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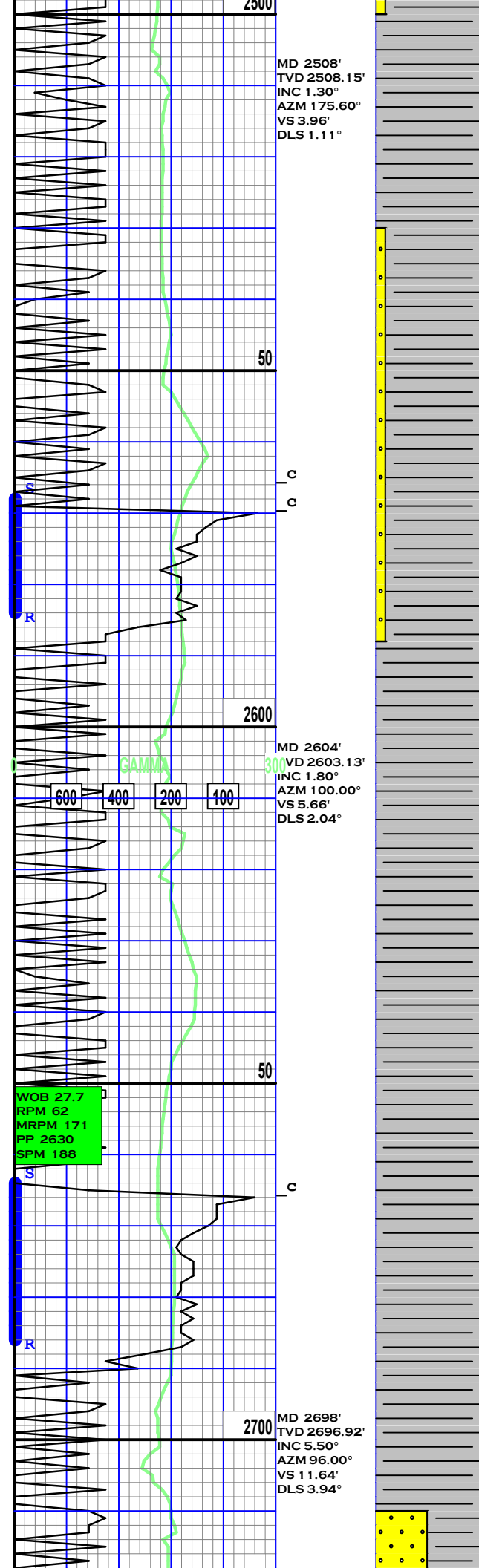
Created By MainLog

Abbreviations:		Lithology Symbols:			Gas Chromatograph Analysis:	
NB...New Bit	DST...Drill Stem Test	Anhydrite	Salt	Granite	TG	_____
CO...Circ Out	DS...Directional Survey	Siltstone	Chert	Sandstone	C1	_____
NR...No Returns	CG...Connection gas	Dolomite	Conglomerate	Limestone	C2	_____
TG...Trip Gas	LAT...Logged After Trip	Coal	Shale	Bentonite	C3	_____
WOB...Wt on Bit	PP...Pump Pressure	Carb Shale	Granite Wash	Quartz Wash	IC4	_____
RPM...Rev/Min	SPM...Strokes/Min	Red Sh	Org Sh	Green Sh	NC4	_____
SG...Survey Gas	DTG...Down Time Gas	Cust Sh1	Cust Sh2	Cust Sh3	IC5	_____
		Cust Sh4	Cust Sh5	Cust Sh6	NC5	_____
Mud Data		Accessories				
WT...Weight	V...Viscosity	Glauconite	Pyrite	Fossils		
PH...Acidity	F...Filtrate	Fractures	Cement	Oolites		
CHL...Chlorides	SC...Solids Content					

Drilling Rate FT/HR	Vis Por	Lithology	% Oil Flu	Cut Tr / p f g	Descriptions/Remarks	Total Gas/Chromatograph
	Tr / p f g					

RIG UP 2 MAN UNIT ON 12/19/17 SET 9 5/8" CSG. @ 2318' DRILLING 8 3/4" O.H. W/5" D.P. PUMPS 5.5"x11"		2 ALL DEPTHS FROM RIG TALLY 0 500				
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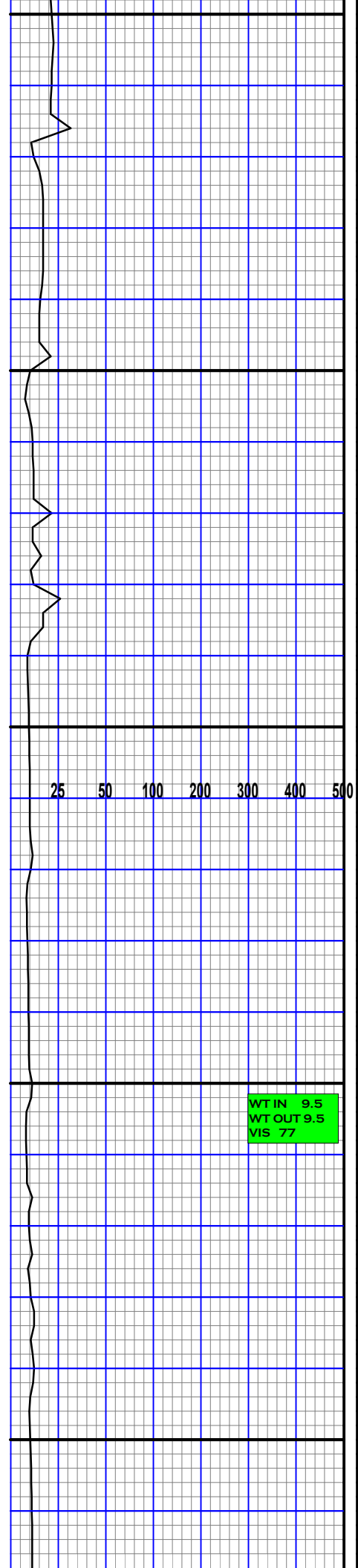
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consol ip calc

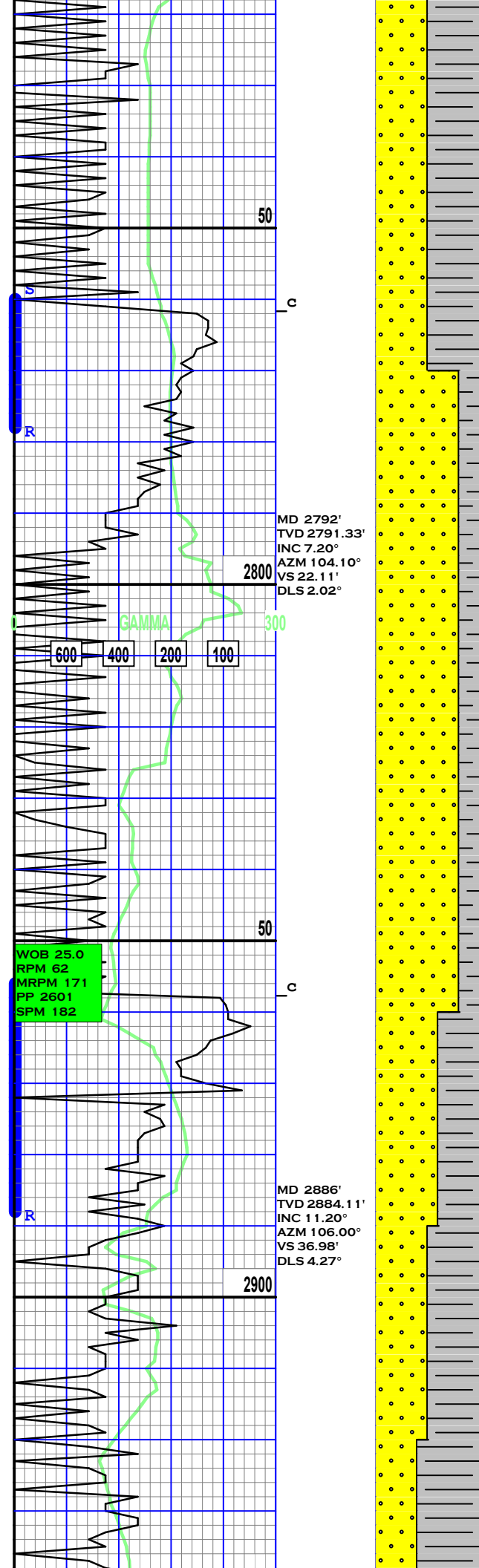
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n calc

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sbrnd sbang wlsrtd wl
consol ip calc

SH: gry-dk gry sft-firm
plty blkly splty rgh txt
n calc

SH: gry-dk gry sft-firm
plty blkly splty rgh txt
n calc





SD: lt gry trans off
wht-wht xf-vfg sbrnd
sbang wlsrtd wl consol
ip calc

SH: gry-dk gry sft-fm
plty blkly splty rgh txt
n calc

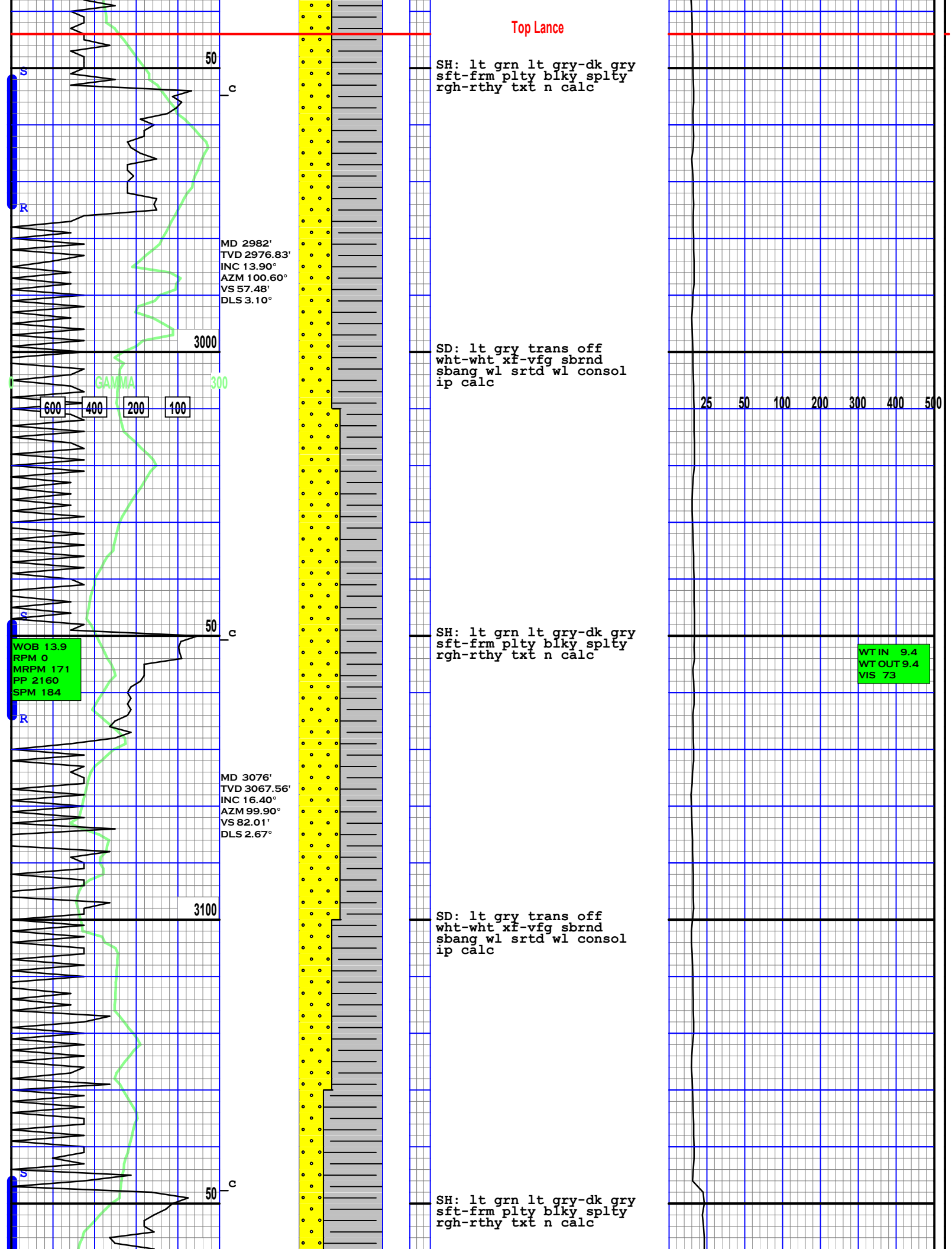
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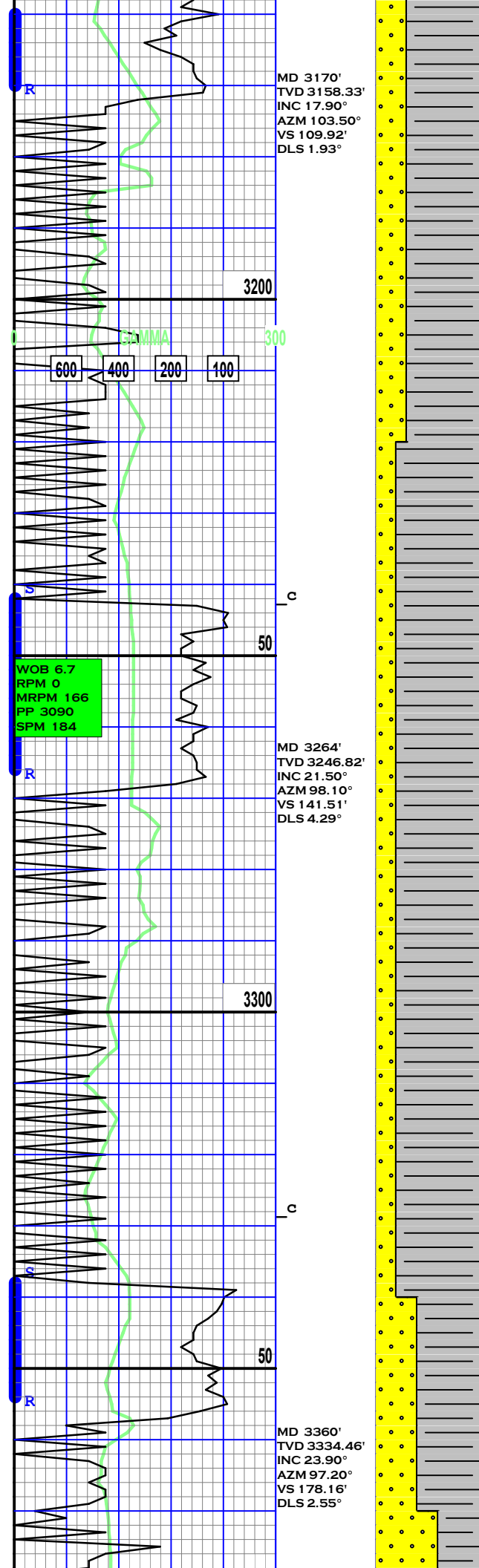
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ip calc

25 50 100 200 300 400 500

WTIN 9.4
WT OUT 9.4
VIS 73

Top Lance





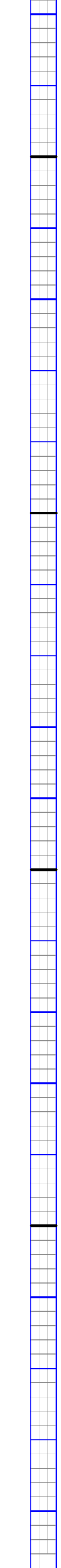
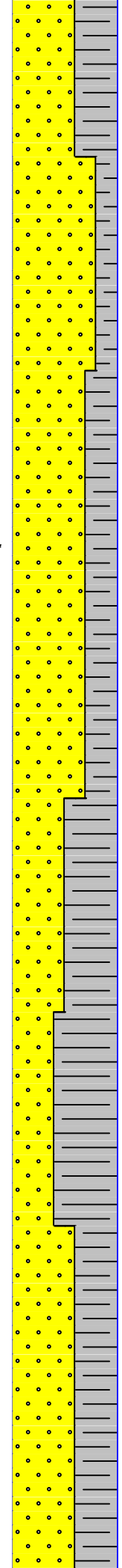
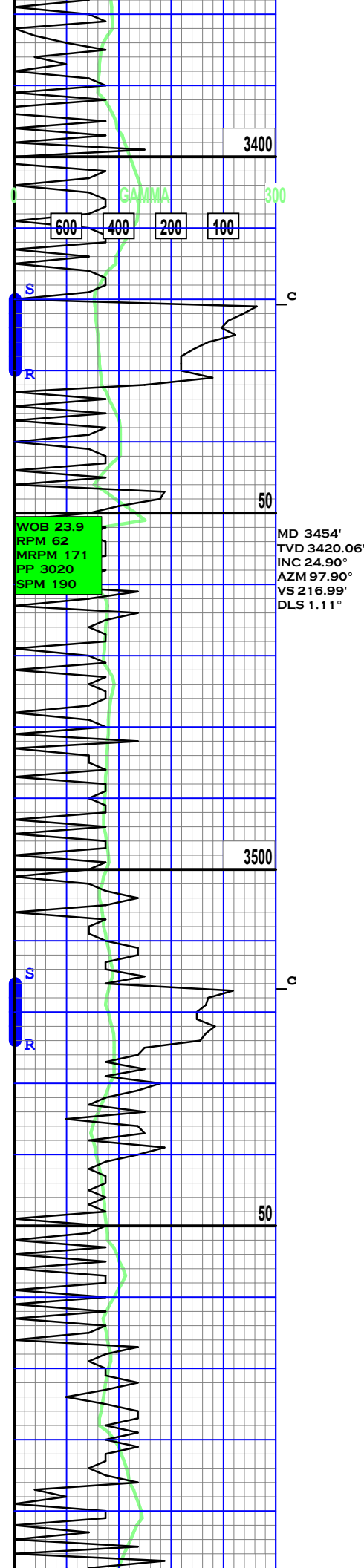
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calc

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wht-wht xf-vfg sbrnd
sbang wl srted wl consol
ip calc

SH: 1t grn 1t gry-dk
gry sft-frm plty blk
splty rgh-rthy txt n
calc

SH: 1t grn 1t gry-dk
gry sft-frm plty blk
splty rgh-rthy txt n
calc

WTIN 9.3
WTOUT 9.3
VIS 61

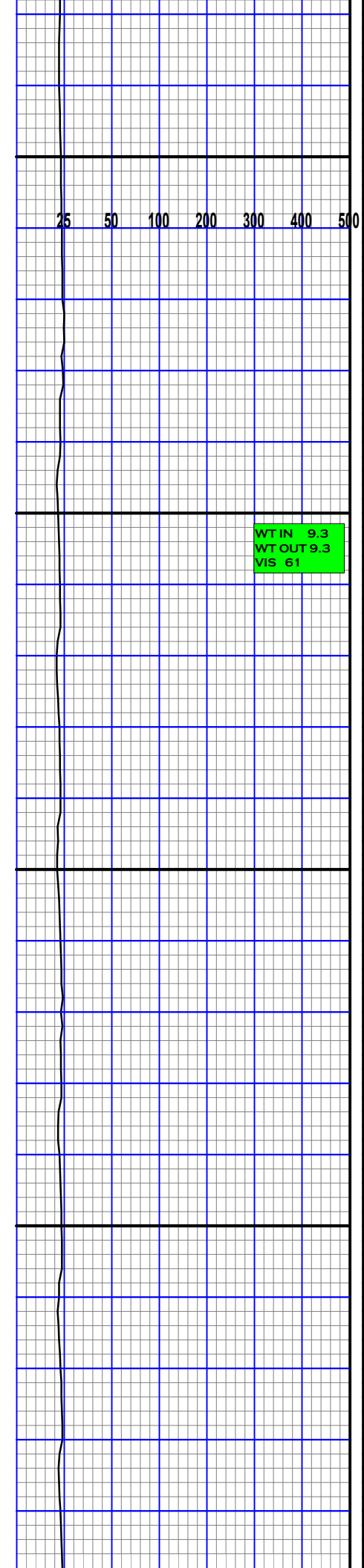


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ip calc

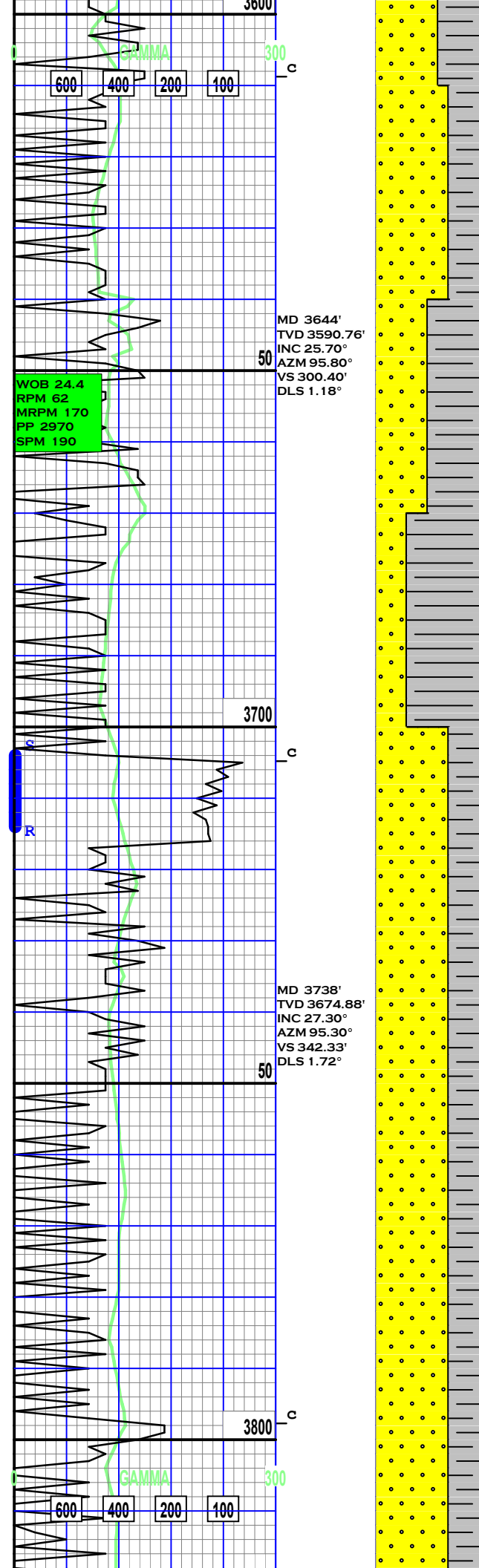
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splty rgh-rthy txt n
calc

SH: lt grn lt gry-dk
gry sft-frm plty blk
splty rgh-rthy txt n
calc

SD: lt gry trans off
wht-wht xf-vfg sbrnd
sbang wl srted wl consol
ip calc



WTIN 9.3
WTOUT 9.3
VIS 61



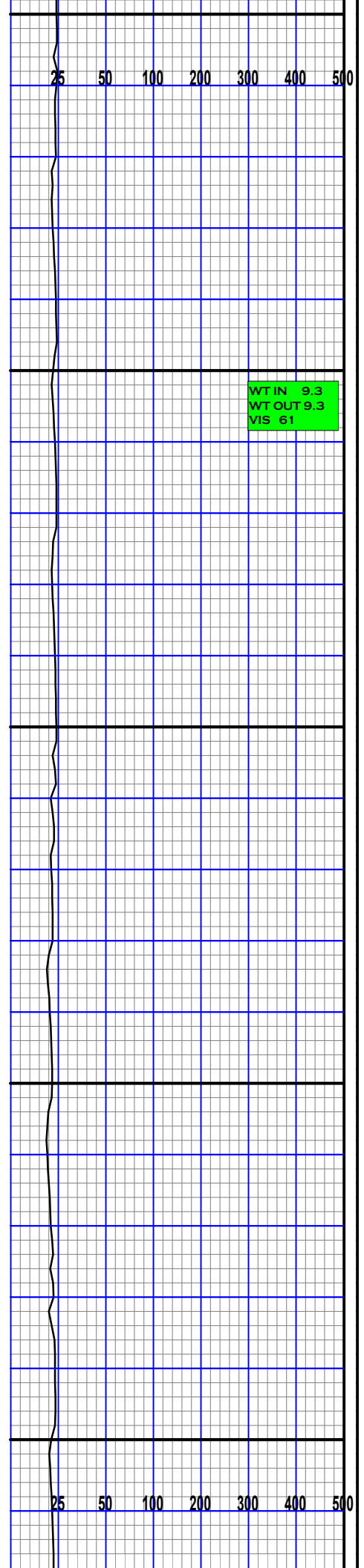
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calc

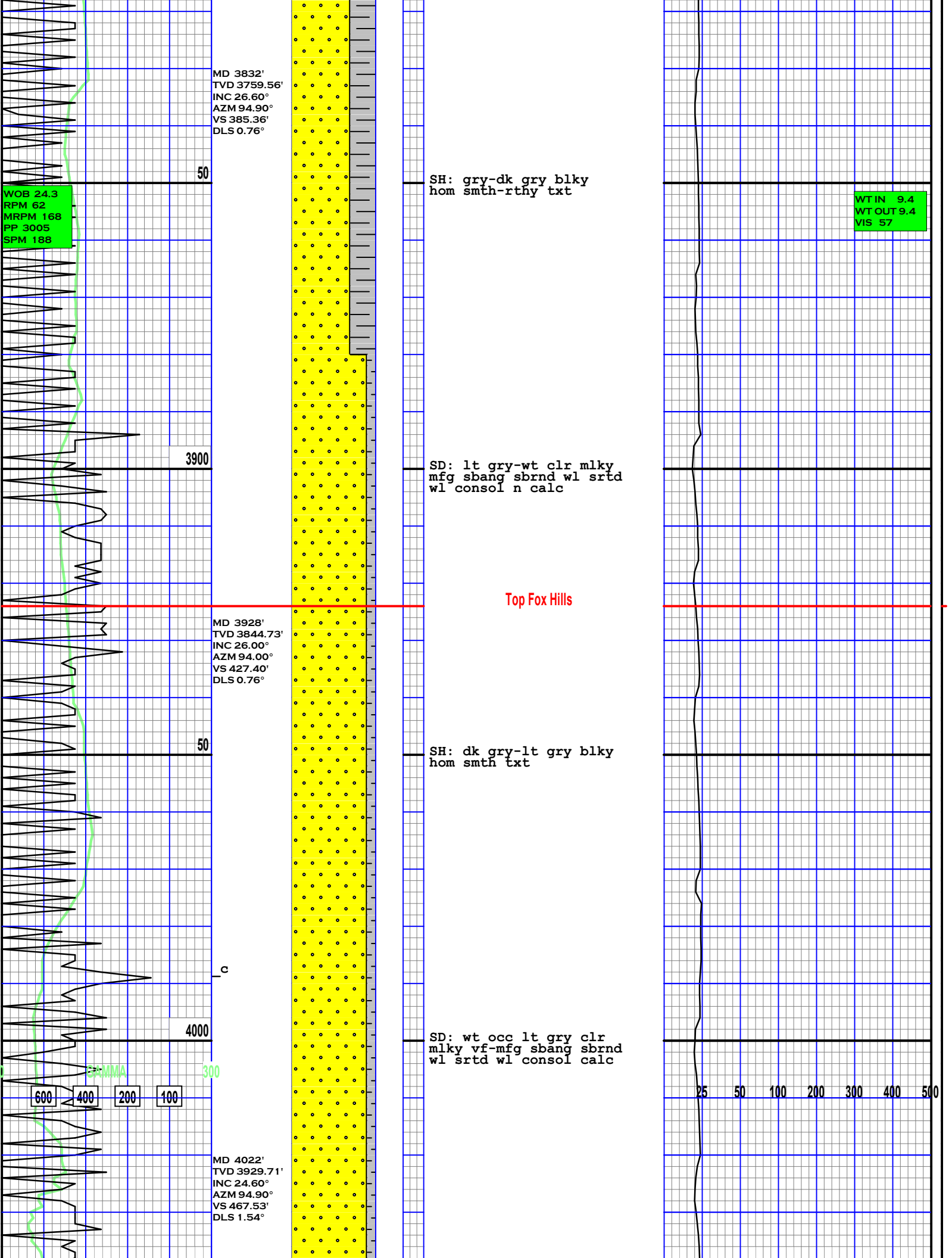
SD: lt gry trans off
wht-wht xf-vfg sbrnd
sbang wl srted wl consol
ip calc

SH: lt grn lt gry-dk
gry sft-firm plty blk
splty rgh-rthy txt n
calc

SD: wt lt gry clr mlky
sbang sbrnd mf-cg wl
srted wl consol

SD: lt gry wht clr mlky
mfg sbang sbrnd wl
srted wl consol





WOB 24.3
RPM 62
MRPM 172
PP 3233
SPM 192

WTIN 9.4
WT OUT 9.4
VIS 57

SH: gry-dk gry blk
hom rthy txt

SD wt-off wt occ lt gry
clr mlky vf-mfg sbang
sbrnd wl strd wl consol
calc

SD: wt off wt lt gry
clr mlky mf-cg sbang
sbrnd wl srtd wl consol

SD: wt off wt lt gry
clr mlky mfg sbang
sbrnd wl srtd wl consol
v sli calc

SH: dk gry chky hom rgh
rthy txt

WTIN 9.4
WT OUT 9.4
VIS 64

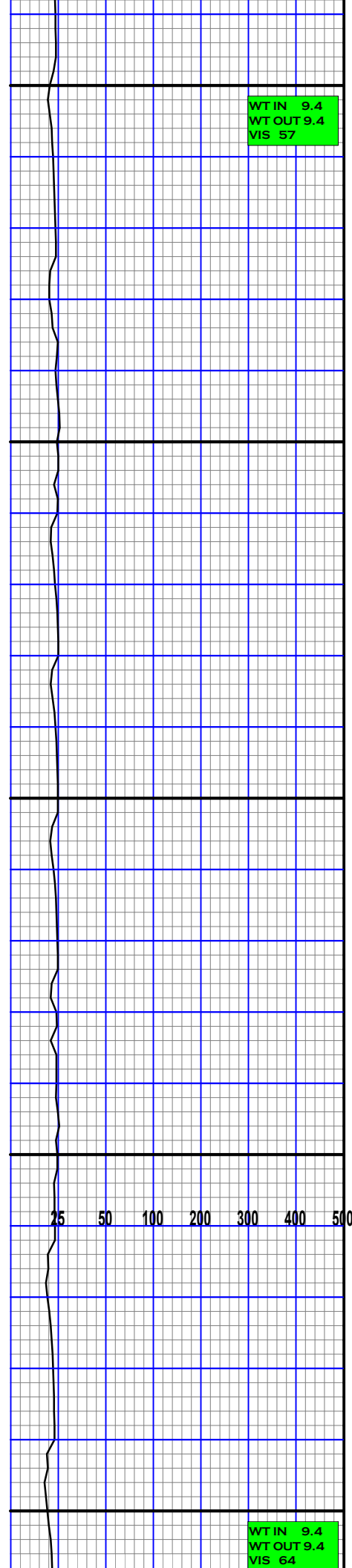
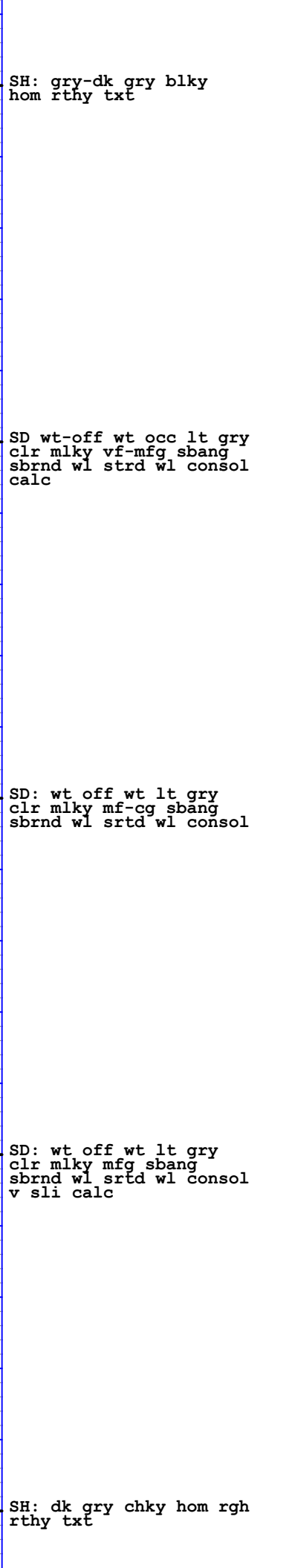
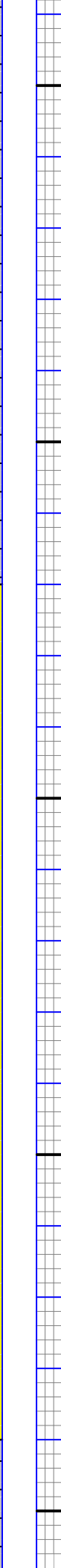
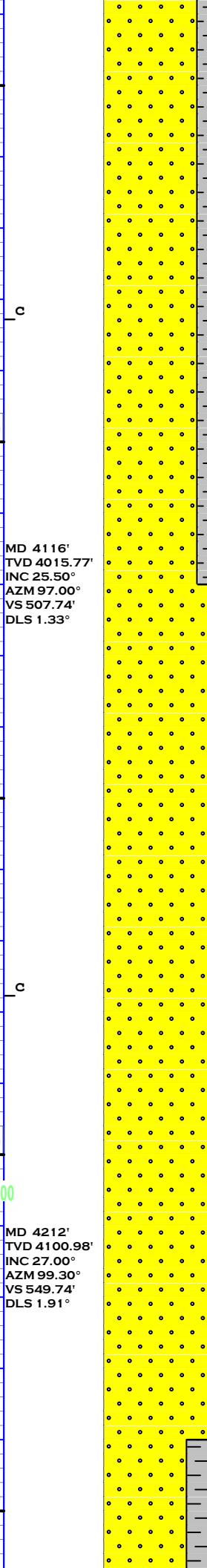
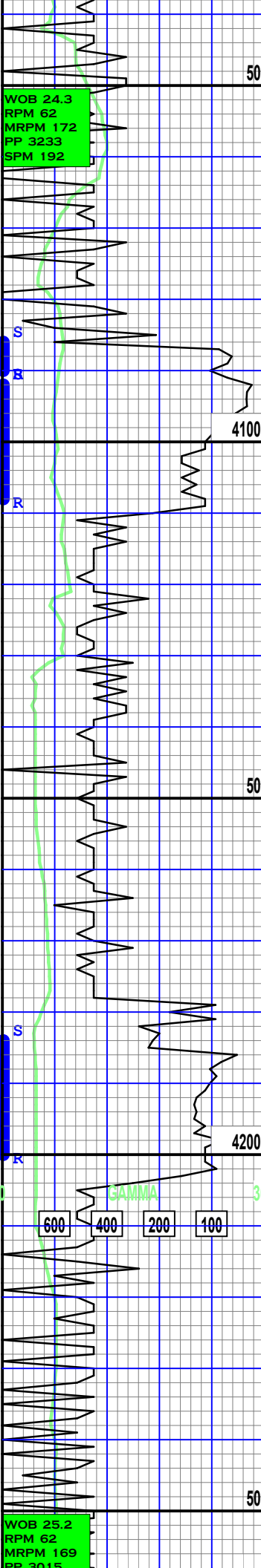
S
R
R

MD 4116'
TVD 4015.77'
INC 25.50°
AZM 97.00°
VS 507.74'
DLS 1.33°

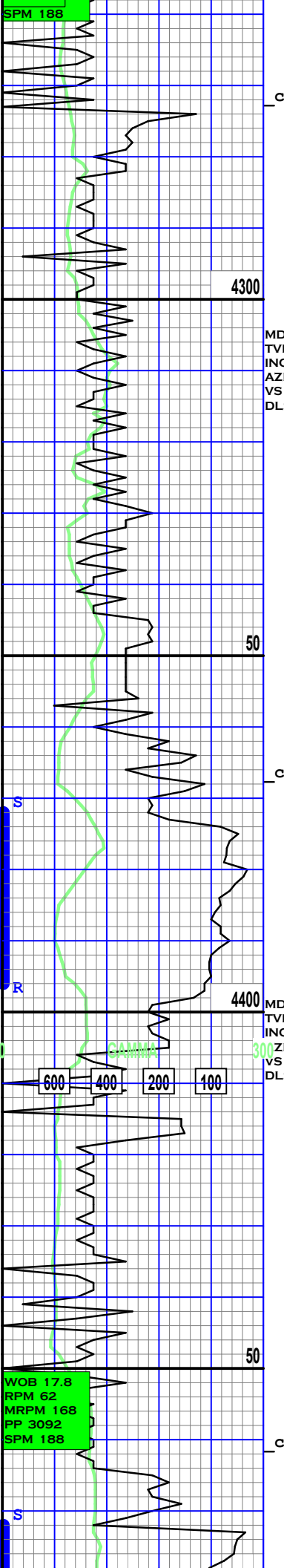
S
R

MD 4212'
TVD 4100.98'
INC 27.00°
AZM 99.30°
VS 549.74'
DLS 1.91°

WOB 25.2
RPM 62
MRPM 169
PP 3015



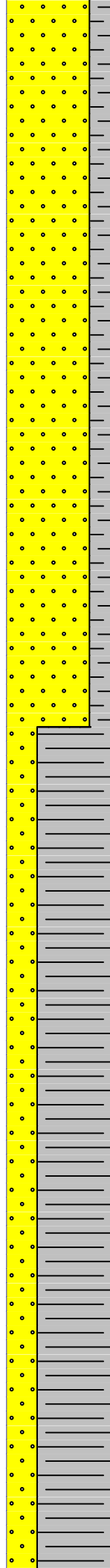
SPM 188



MD 4306'
TVD 4185.99'
INC 26.00°
AZM 99.30°
VS 592.10'
DLS 1.05°

MD 4400'
TVD 4269.93'
INC 27.50°
AZM 100.90°
VS 634.34'
DLS 1.77°

WOB 17.8
RPM 62
MRPM 168
PP 3092
SPM 188

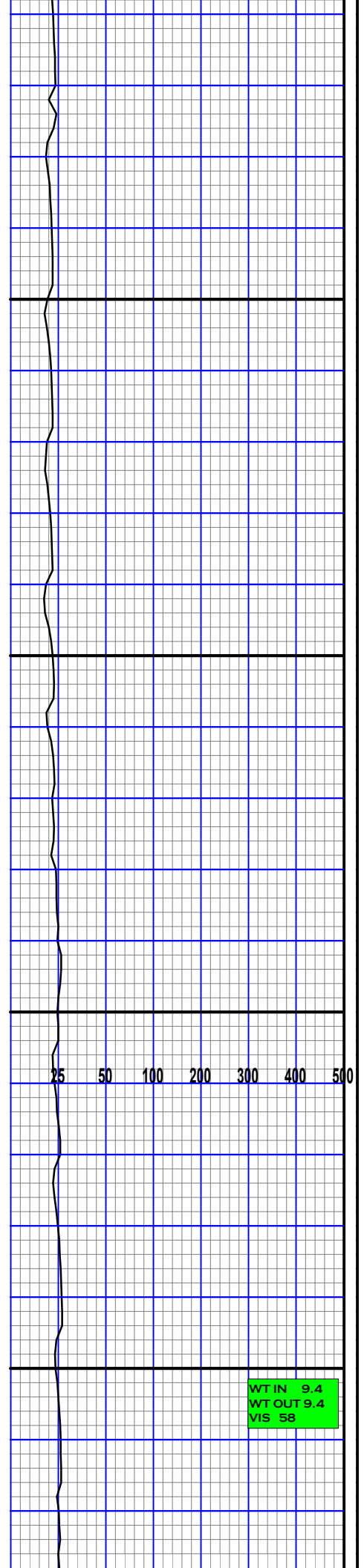


SD: off wt lt gry occ
wt clr mlky mfg wl srted
wl consol

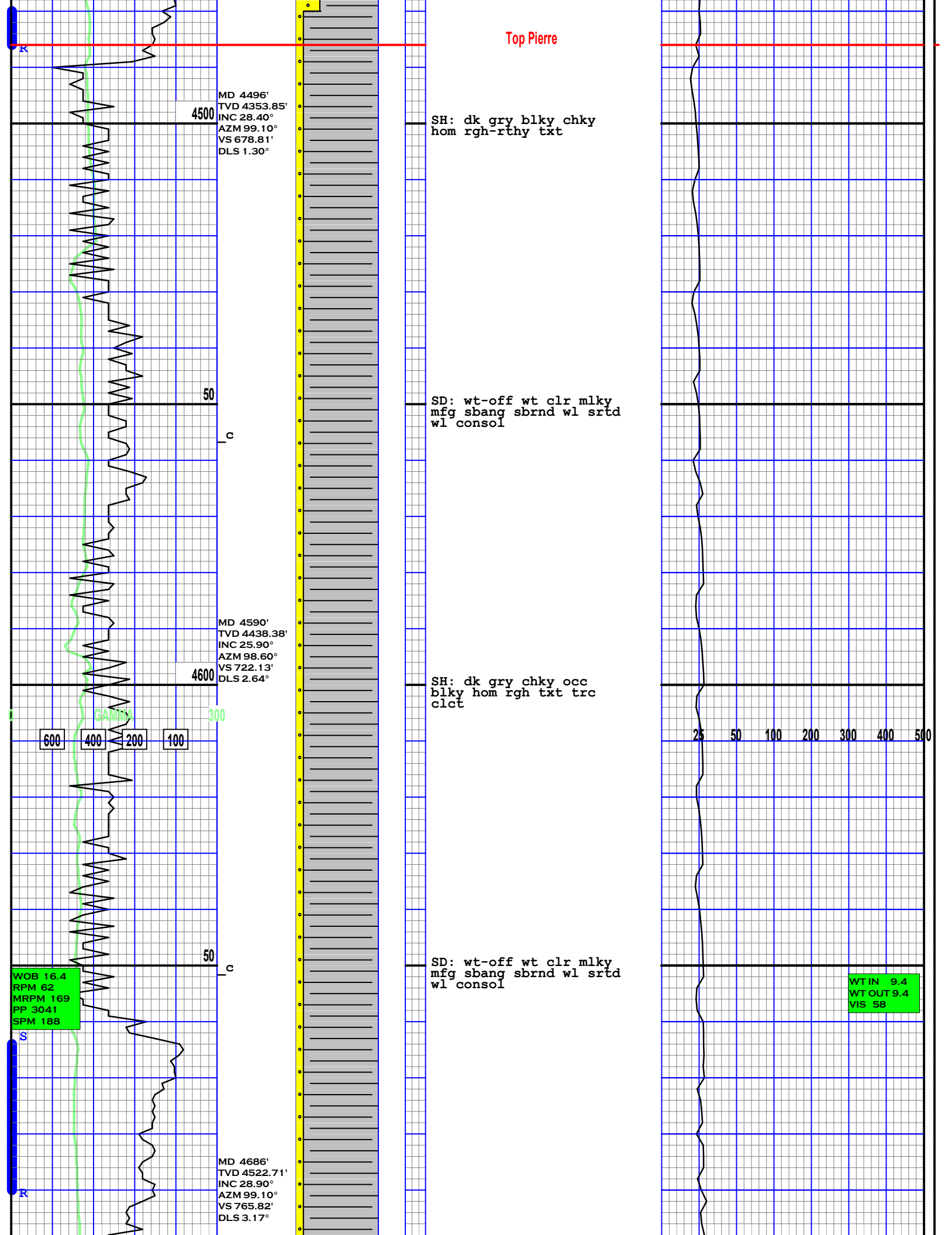
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rthy txt

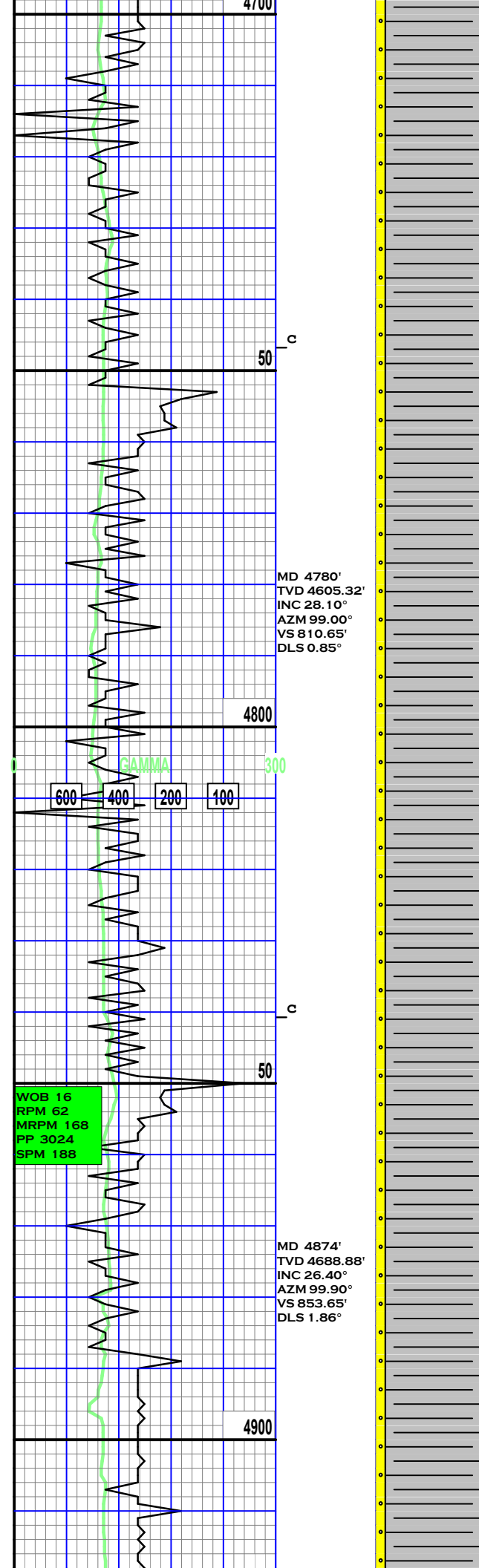
SH: dk gry blkky chky
hom rgh-rthy txt

SD: wt-off wt clr mlky
mfg sbang sbrnd wl srted
wl consol sli clac



WTIN 9.4
WT OUT 9.4
VIS 58





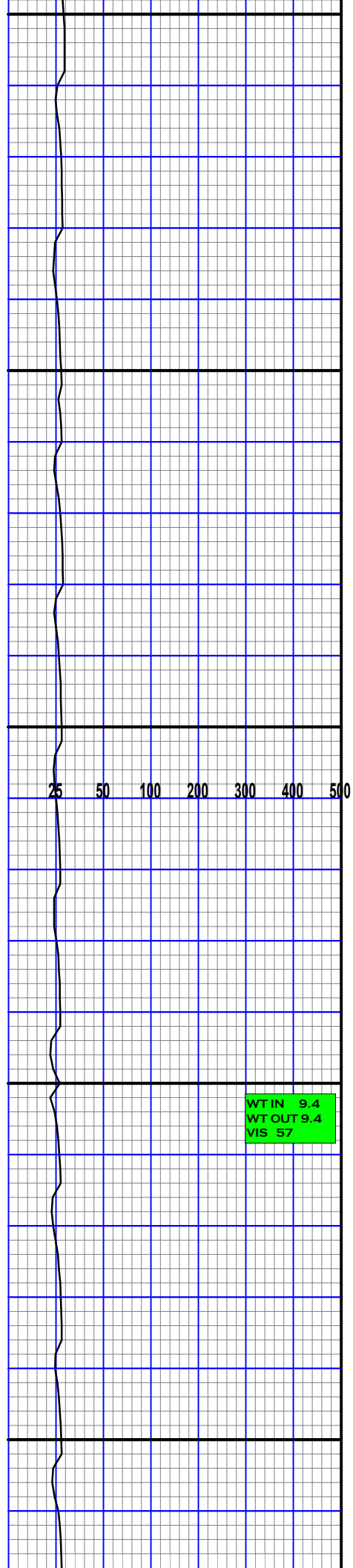
SH: dk gry chky blk
occ plty hom rgh txt

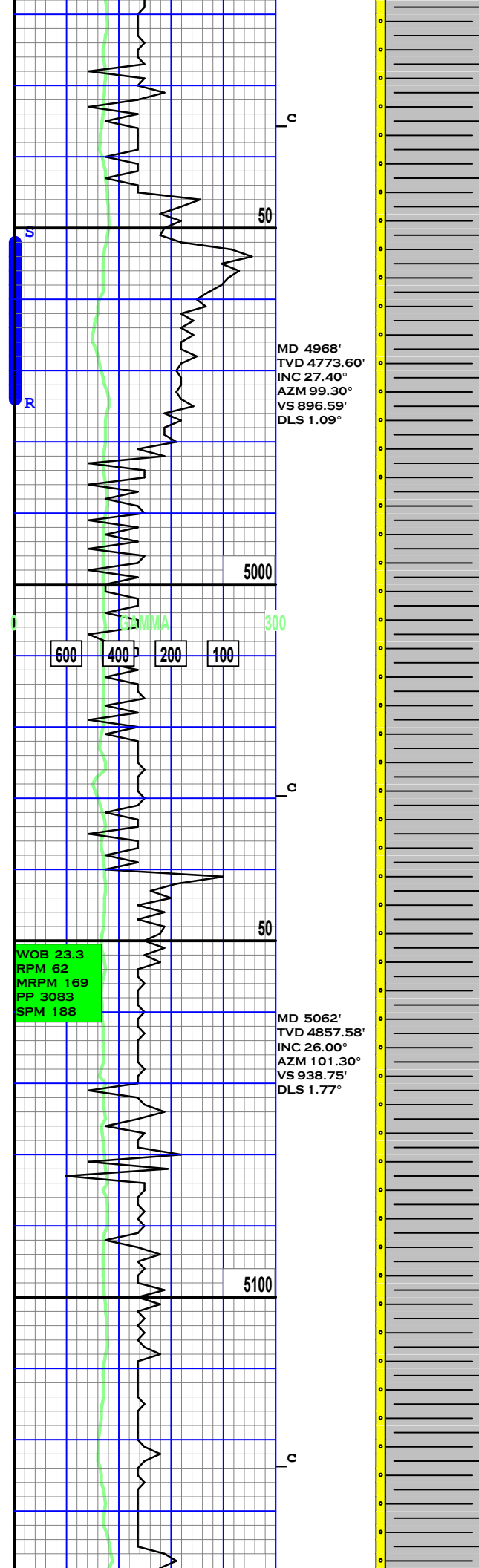
SD: lt gry-off wt clr
mlky vfg sbang wl srtd
wl consol sli calc

SH: dk gry chky occ
plty hom rgh-rthy txt
sly

SD: lt gry- off wt mlky
vf-mfg sbang sbrnd wl
srtd wl consol calc

SH: dk gry chky occ
plty hom rgh txt v
sly trc clct



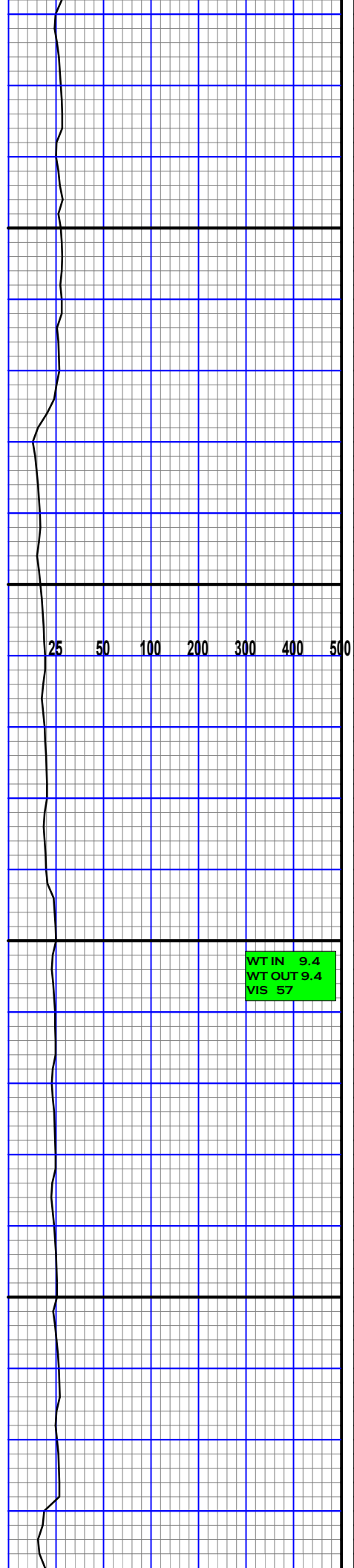


SD: lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc

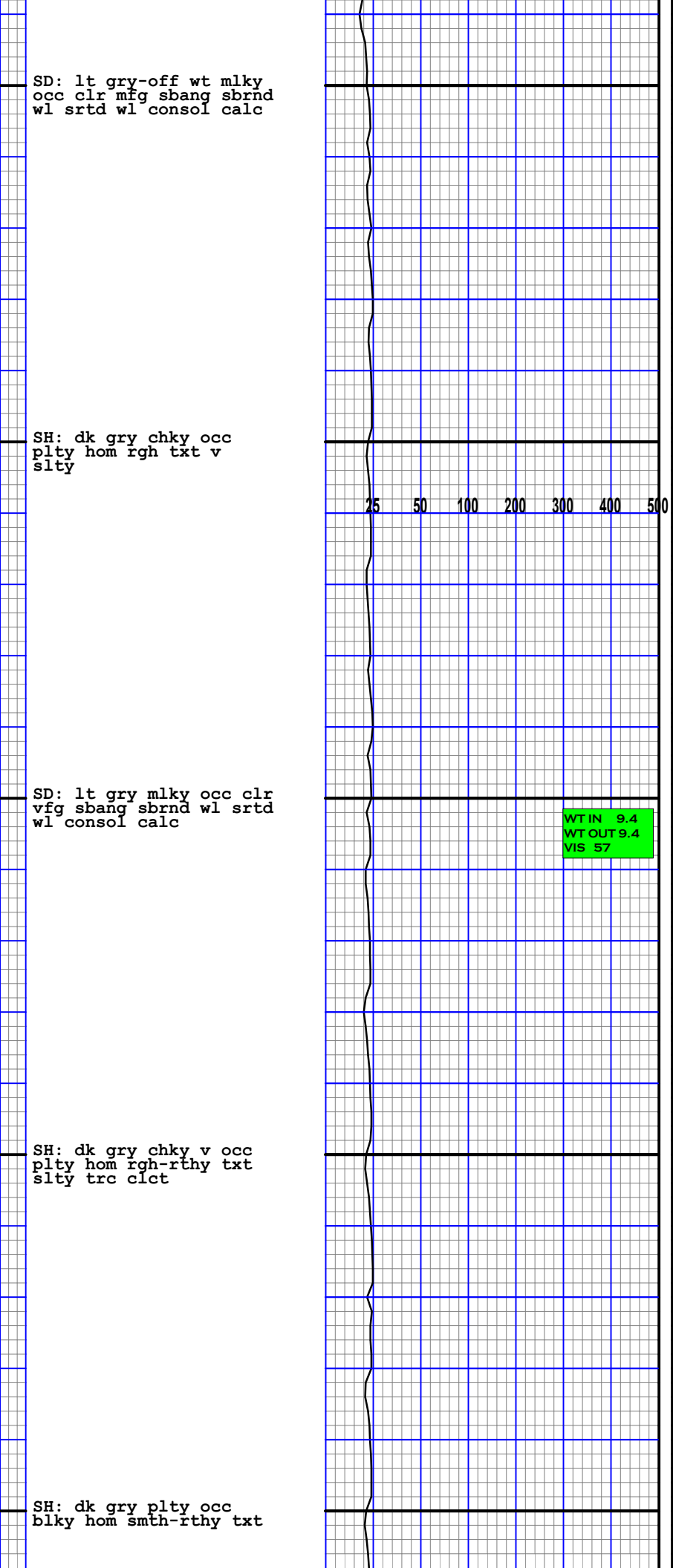
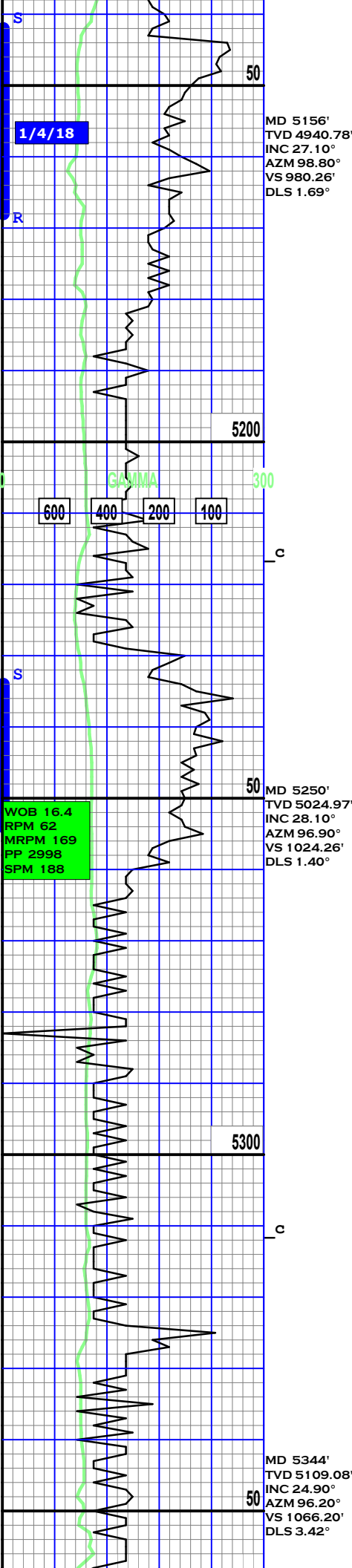
SH: dk gry chky occ
plty hom rgh txt v
silty calc

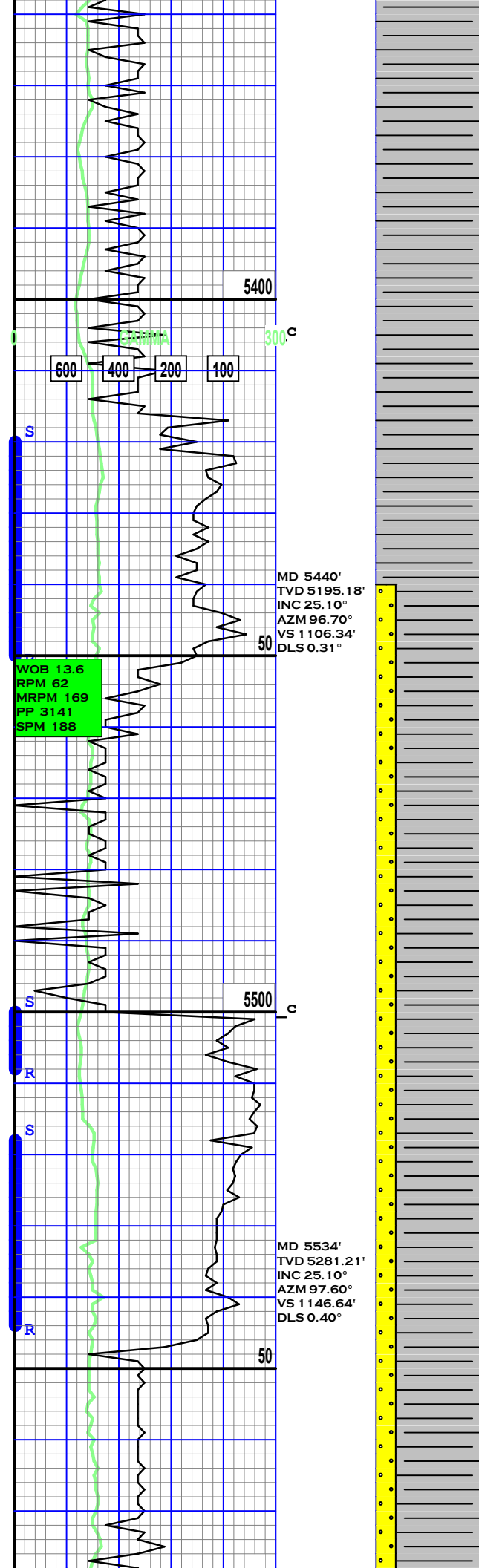
SD: lt gry occ off wt
mlkt occ clr vf-mfg
sbang sbrnd wl srted wl
consol

SH: dk gry chky occ
plty hom rgh-rthy txt
silty



WTIN 9.4
WT OUT 9.4
VIS 57



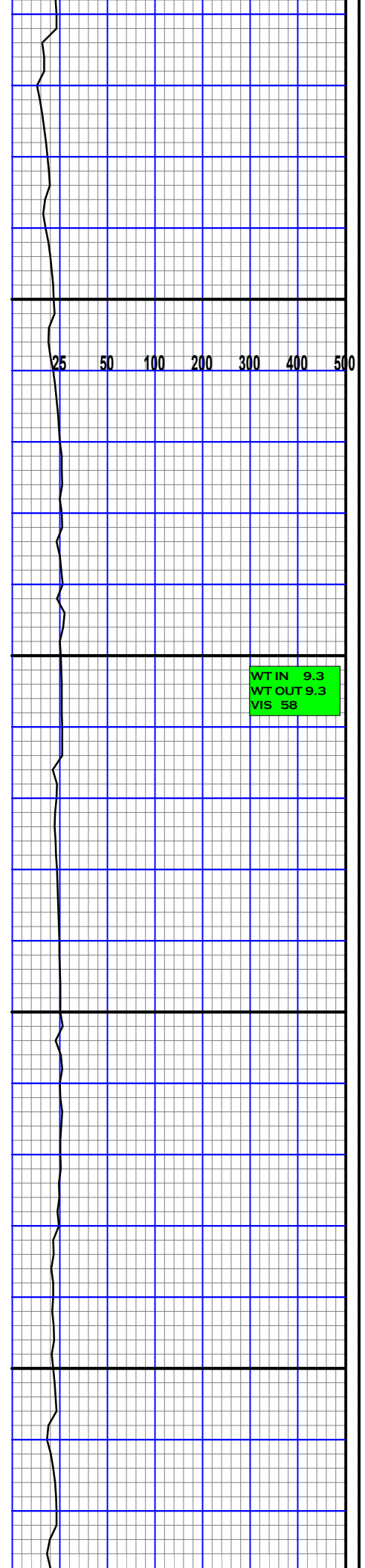


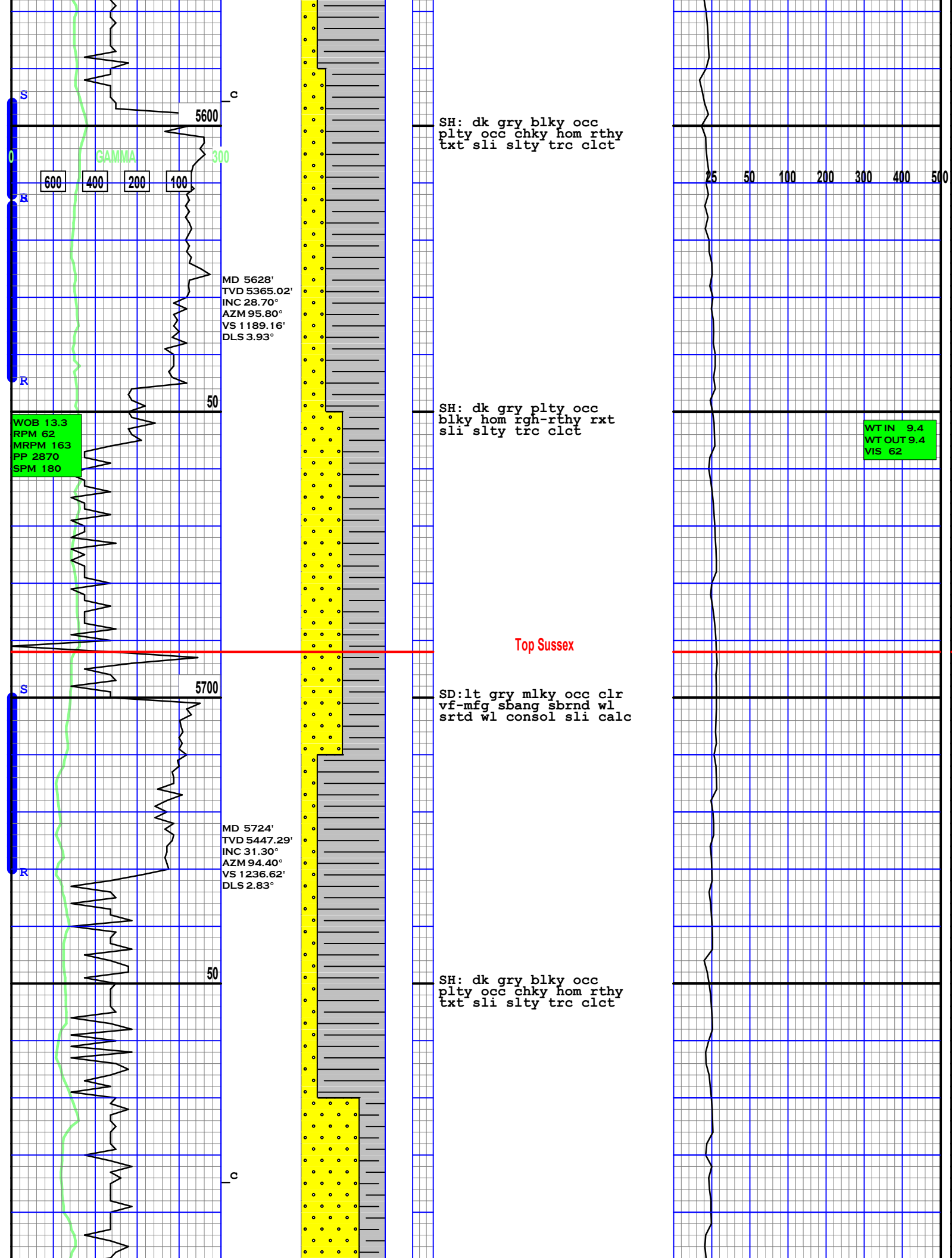
SH: dk gry plty occ
blky occ chky hom smth
txt

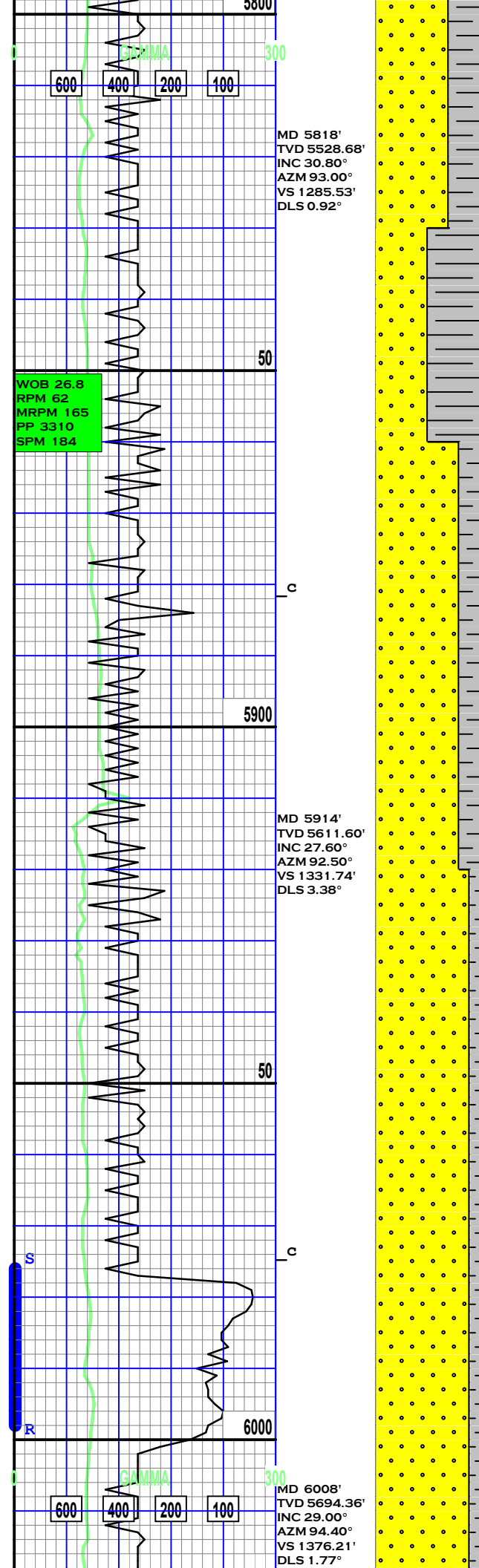
SD: lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol v sli
calc

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SD: lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc







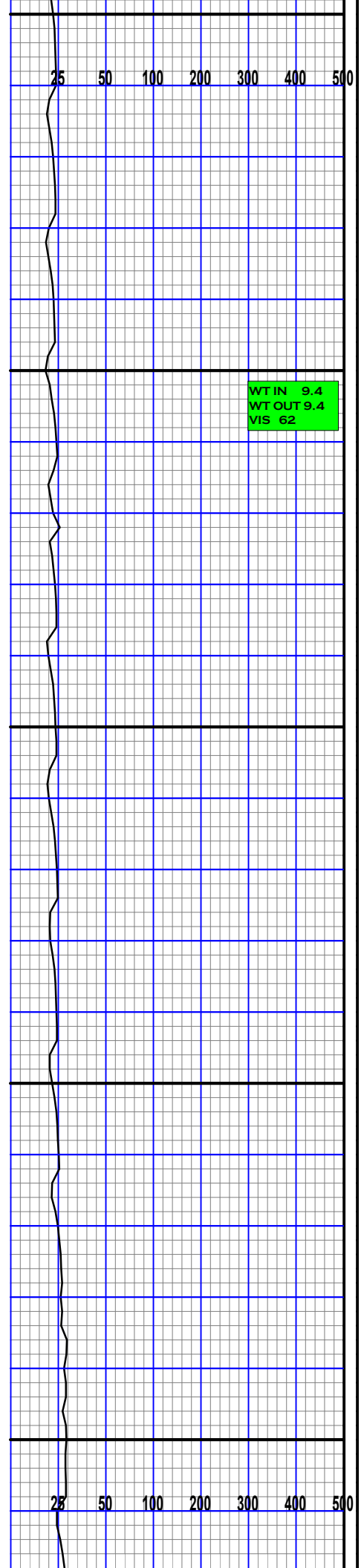
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blky hom rgh-rthy rxt
sli slty trc clct

SD: lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc

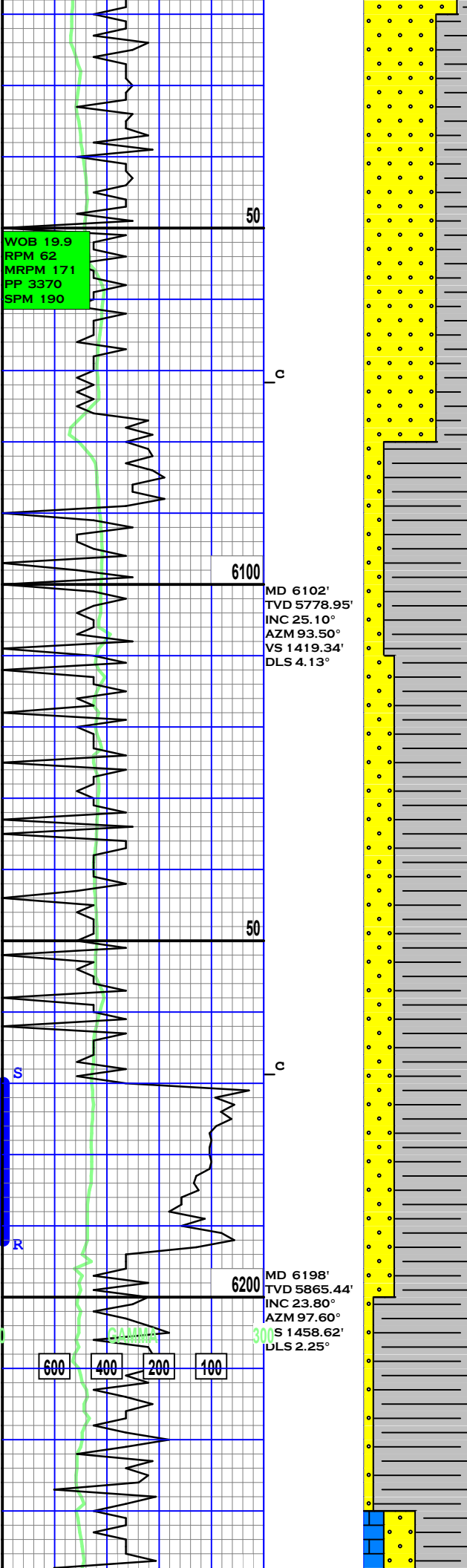
SD: lt gry mlky vf-mfg
sbang sbrnd wl srted wl
consol hvy carb lams sli
calc

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SD:lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc



WOB 19.9
RPM 62
MRPM 171
PP 3370
SPM 190



50

c

6100

MD 6102'
TVD 5778.95'
INC 25.10°
AZM 93.50°
VS 1419.34'
DLS 4.13°

50

c

6200

MD 6198'
TVD 5865.44'
INC 23.80°
AZM 97.60°
VS 1458.62'
DLS 2.25°

600 400 200 100

SD: lt gry mlky vf-mfg
sbang sbrnd wl srted wl
consol hvy carb lams sli
calc

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SD:lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc

WTIN 9.5
WT OUT 9.5
VIS 56

TRAP TEST

25 50 100 200 300 400 500

WOB 21.1
RPM 62
MRPM 168
PP 3470
SPM 188

R

S

R

S

WOB 16.6
RPM 0
MRPM 168
PP 2750

50

c

6300

MD 6292'
TVD 5951.39'
INC 26.60°
AZM 99.10°
VS 1499.06'
DLS 3.02°

50

c

6400

MD 6386'
TVD 6035.15'
INC 24.90°
AZM 99.50°
VS 1539.43'
DLS 1.84°

50

c

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SD: lt gry clay occ clr
vf-mfg sbang sbnd w/
srtd w/ consol sli calc

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

WTIN 9.5
WT OUT 9.5
VIS 54

WTIN 9.5
WT OUT 9.5
VIS 54

25 50 100 200 300 400 500

SPM 188

R

S

R

S

WOB 11.9
RPM 0
MRPM 168
PP 2970
SPM 188

MD 6482'
TVD 6122.55'
INC 24.00°
AZM 103.90°
VS 1579.01'
DLS 2.12°

6500

MD 6576'
TVD 6209.21'
INC 24.40°
AZM 98.80°
VS 1617.81'
DLS 2.24°

6600

600 400 200 100

300

MD 6670'
TVD 6293.97'
INC 26.80°
AZM 99.70°
VS 1658.39°

50

SD:lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc

Top Lower Pierre

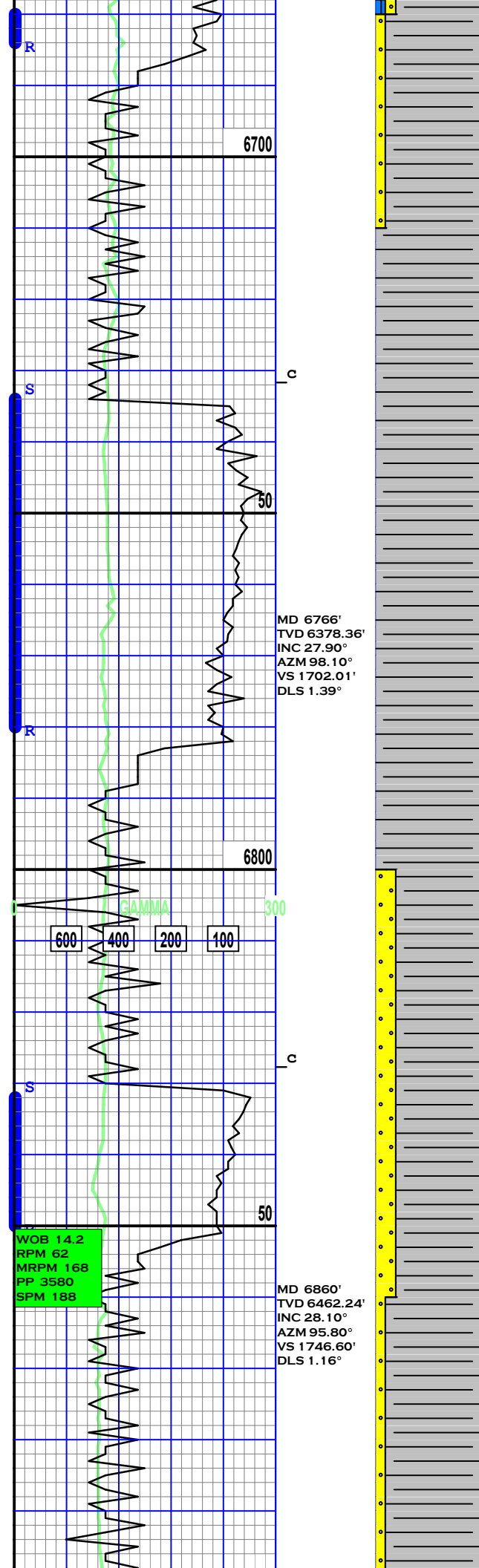
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sli slty trc clct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

WT IN 9.3+
WT OUT 9.3+
VIS 52

25 50 100 200 300 400 500

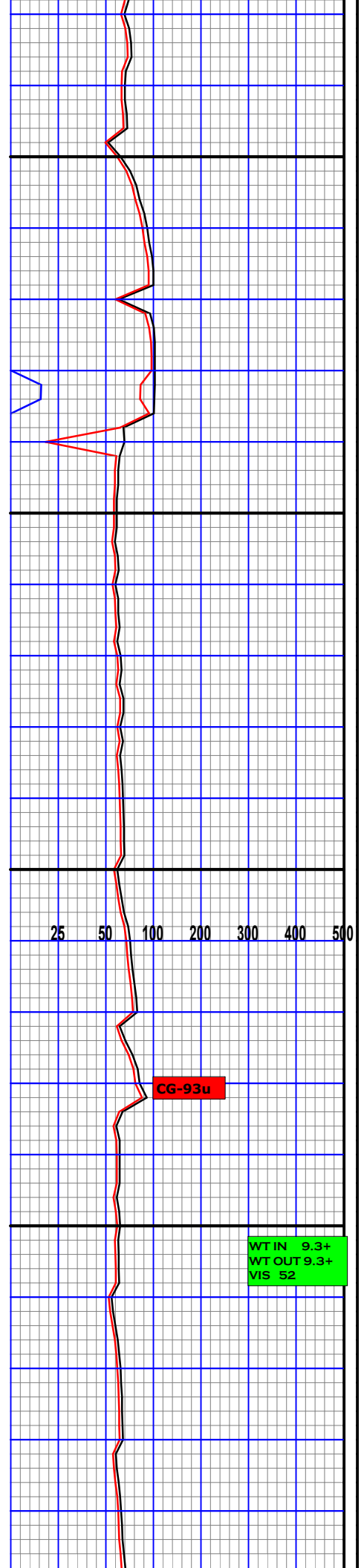


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vf-mfg sbang sbrnd wl
srted wl consol sli calc

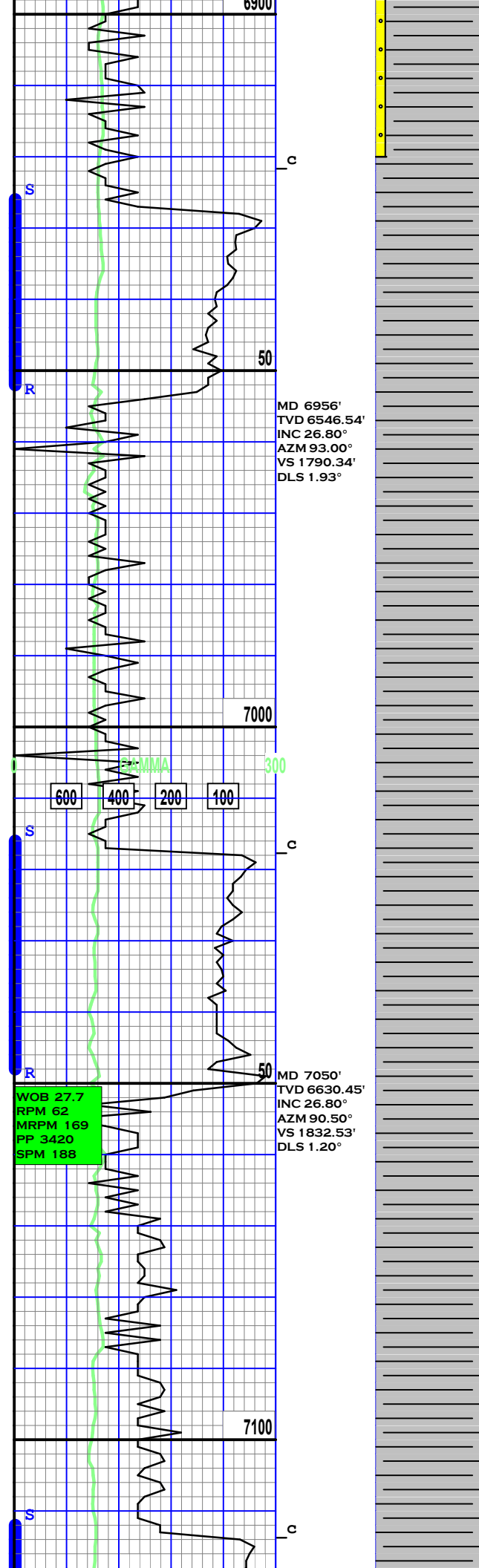
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blky hom rgh-rthy rxt
sli slty trc clct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc clct

SD: lt gry mlky occ clr
vf-mfg sbang sbrnd wl
srted wl consol sli calc



CG-93u



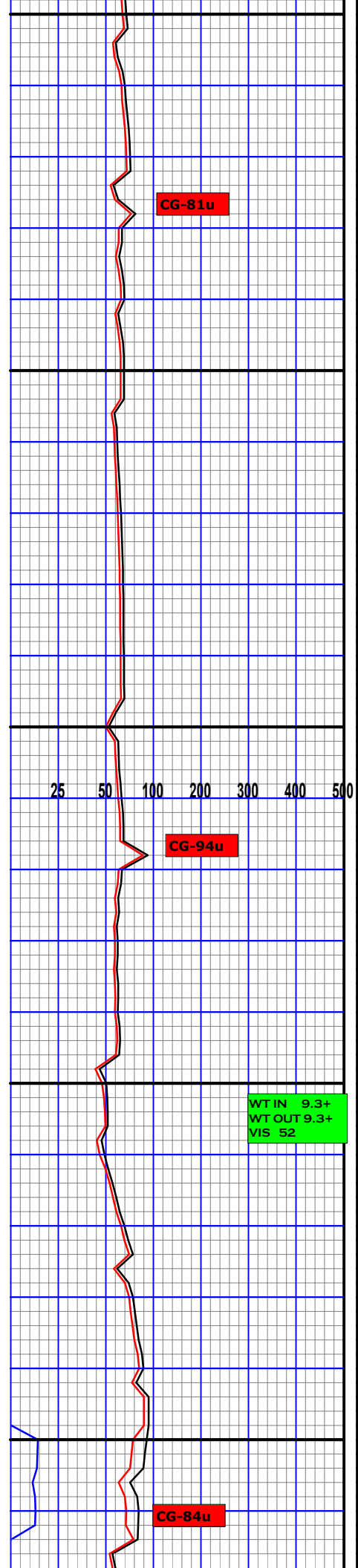
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blky hom rgh-rthy rxt
sli slty n calc

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty n calc

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty trc calct

SH: dk gry plty occ
blky hom rgh-rthy rxt
sli slty n calc

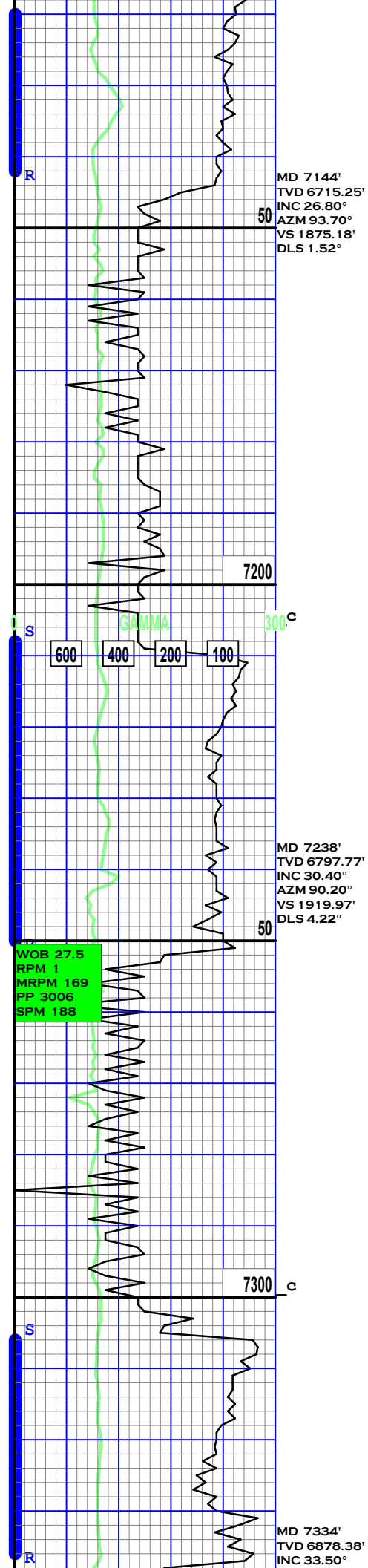
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blky hom rgh-rthy rxt
sli slty trc calct



CG-81u

CG-94u

CG-84u

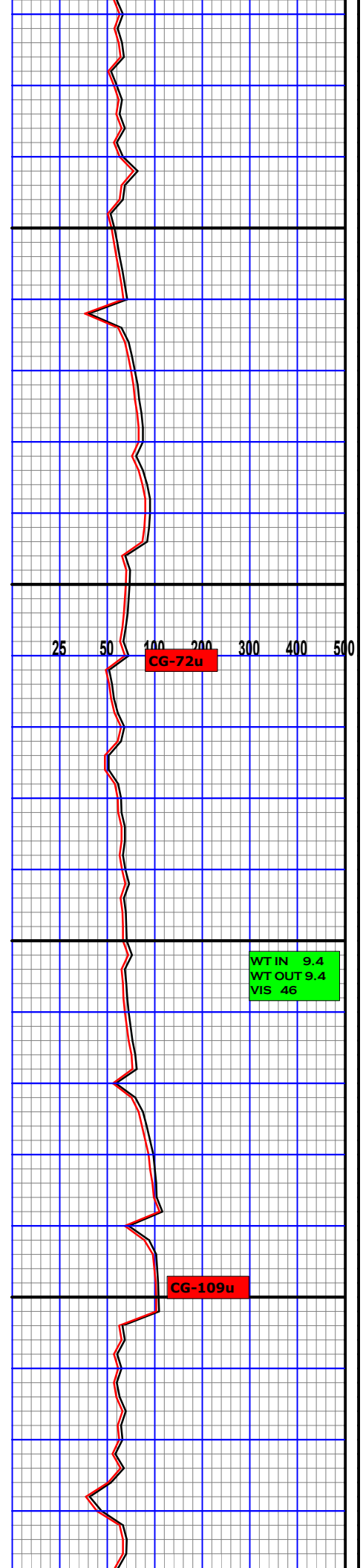


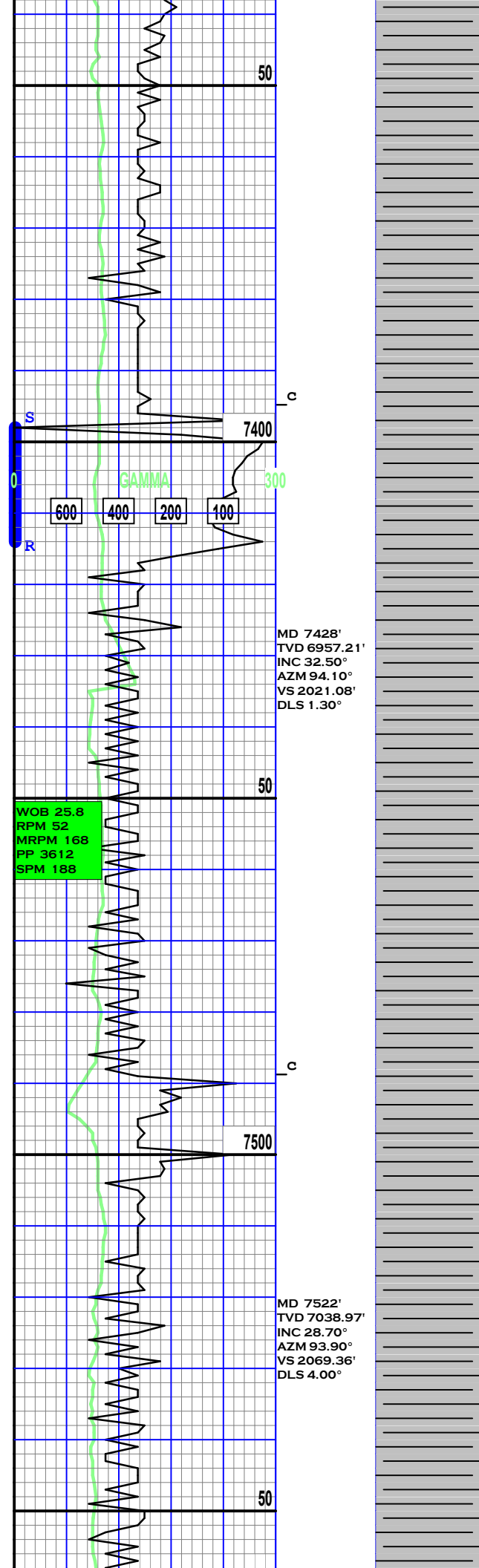
```
SH: dk gry chky plty
occ blký hom smth-rgh
txt v sli calc
```

```
SH: dk gry plty blk  
occ fiss hom smth-rgh  
txt occ slty trc clct
```

```
SH: dk gry plty blk  
occ chky hom smth-rgh  
txt sli slty trc clct
```

SH: dk gry plty blk
hom smth occ rgh txt
trc clct





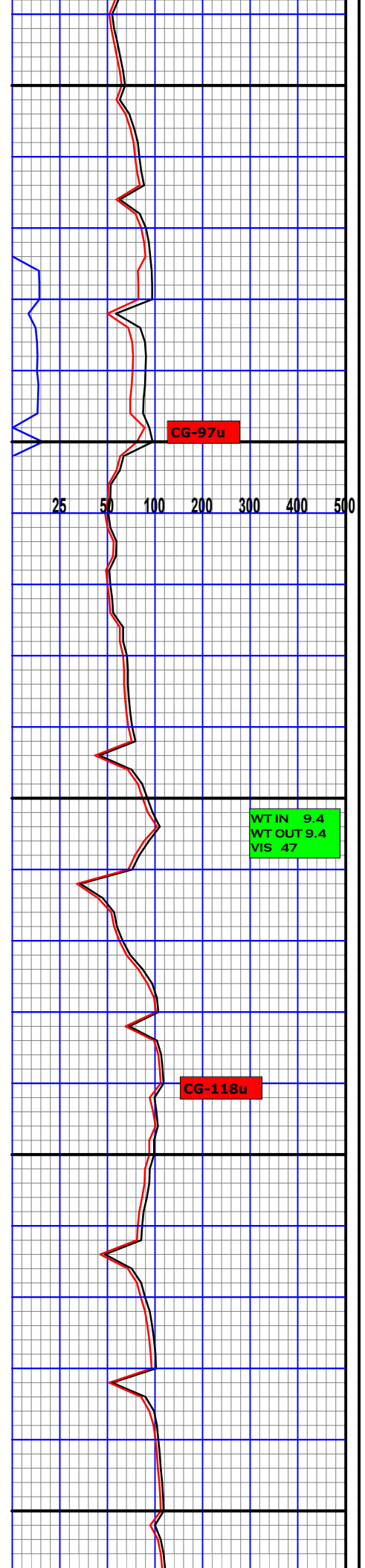
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hom smth-rgh txt

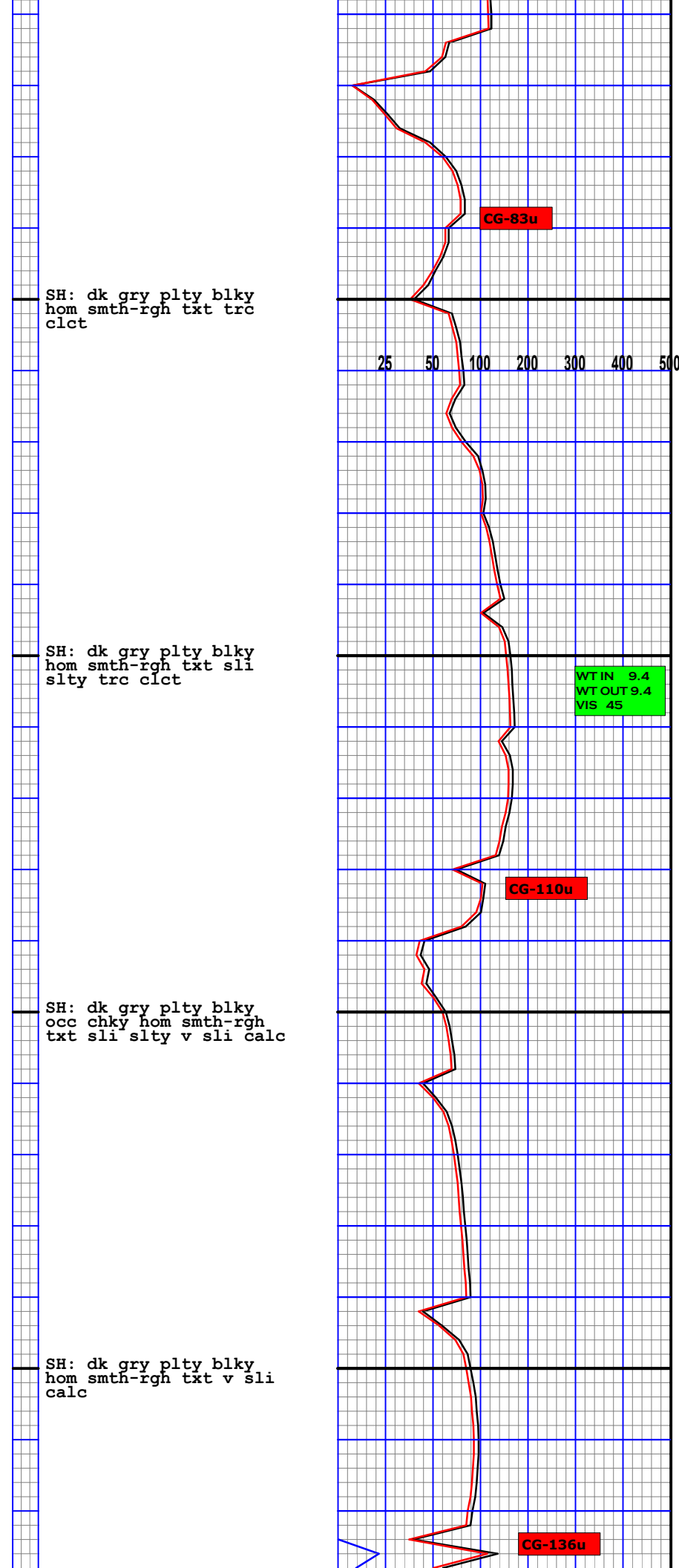
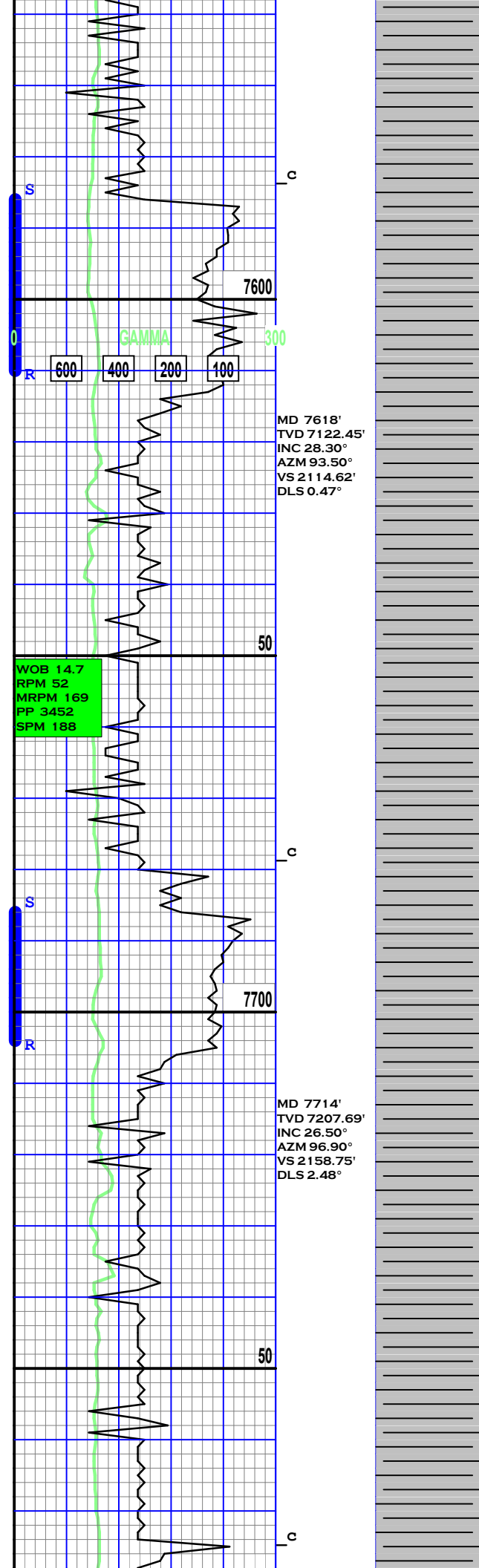
SH: dk gry plty blk
hom smth-rgh txt trc
clct

SH: dk gry plty blk
occ chky hom smth-rgh
txt trc clct

SH: dk gry plty blk
hom smth-rgh txt trc
clct

SH: dk gry plty blk
occ chky hom smth-rgh
txt trc clct





SH: dk gry plty blk
hom smth-rgh txt trc
clct

SH: dk gry plty blk
hom smth-rgh txt sli
sli trc clct

SH: dk gry plty blk
occ chky hom smth-rgh
txt sli sli v sli calc

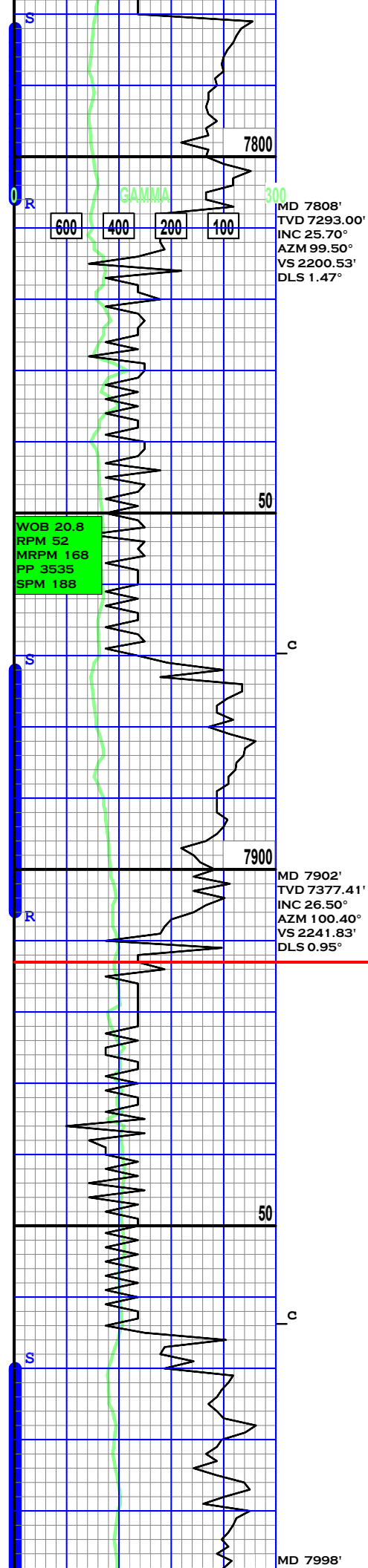
SH: dk gry plty blk
hom smth-rgh txt v sli
calc

CG-83u

WTIN 9.4
WT OUT 9.4
VIS 45

CG-110u

CG-136u



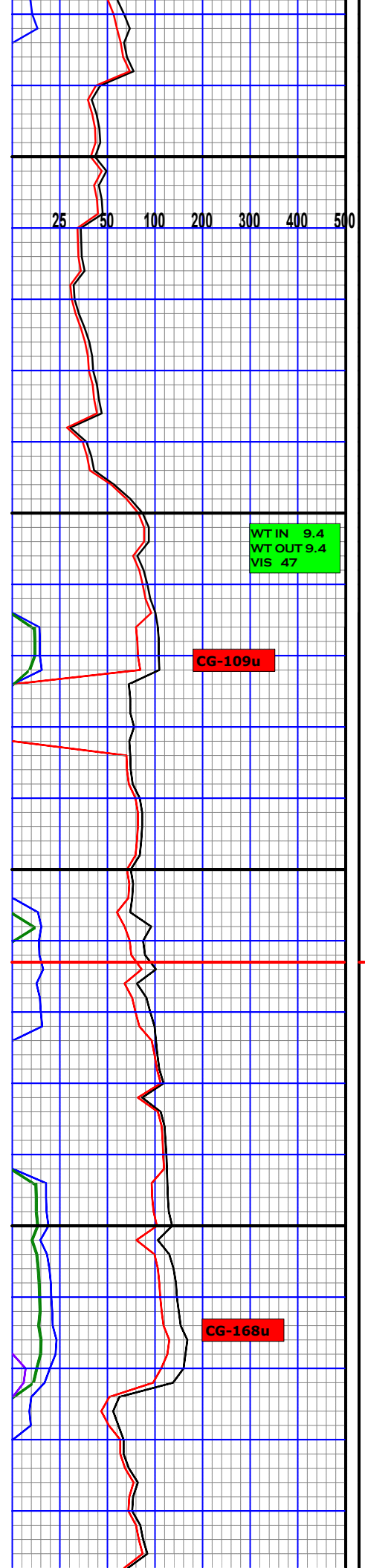
SH: dk gry plty blk
hom smth txt trc clct

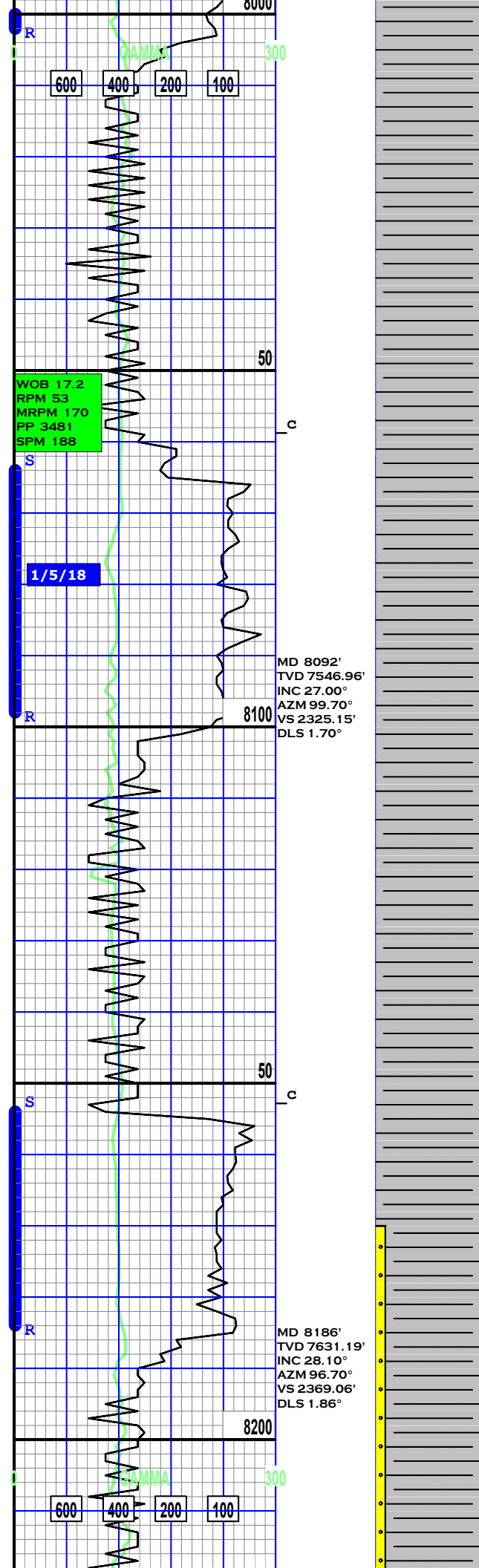
SH: dk gry plty blk
occ chky hom smth-rgh
txt

SH: dk gry occ lt gry
occ wt plty blk hom
smth-rgh txt trc clct

Top Mancos

SH: dk gry plty blk
hom smth-rgh txt trc
clct





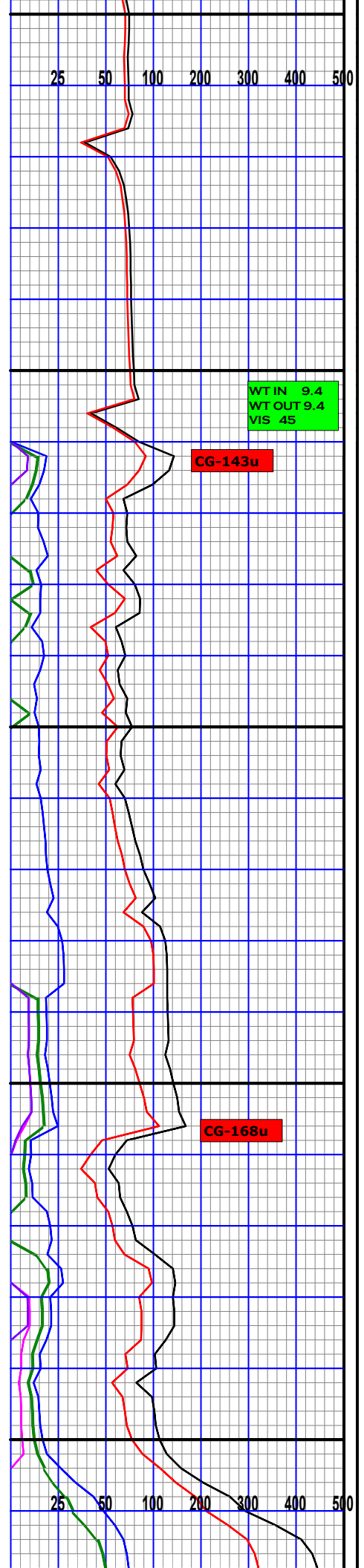
SH: dk gry plty blk
hom smth txt trc clct

SH: dk gry plty blk
occ chky hom smth txt
trc clct

SH: dk gry plty blk
hom smth txt trc clct

SH: dk gry plty blk
hom smth-rgn txt trc
clct

SH: dk gry plty blk
occ fiss hom smth txt
trc clct



WOB 11.9
RPM 52
MRPM 171
PP 3172
SPM 190

S

R

S

R

50

MD 8280'
TVD 7713.88'
INC 28.70°
AZM 93.90°
VS 2413.74'
DLS 1.55°

8300

50

MD 8376'
TVD 7797.68'
INC 27.50°
AZM 95.50°
VS 2458.44'
DLS 1.49°

8400

600 400 200 100

50

SH: dk gry plty occ
blky hom smth-rgh txt
trc clct

Top Niobrara

SH: dk gry plty blky
hom smth-rgh txt trc
clct

SH: dk gry plty blky
hom smth-rgh txt trc
clct trc pyr

SH: dk gry plty blky
hom smth-rgh txt trc
pyr calc

CG-488u

WTIN 9.4
WT OUT 9.4
VIS 45

CG-272u

CG-226u

25 50 100 200 300 400 500

WOB 6.6
RPM 52
MRPM 168
PP 2923
SPM 190

R

MD 8470'
TVD 7882.97'
INC 24.80°
AZM 89.30°
VS 2500.12'
DLS 4.04°

8500

S

c

50

R

MD 8564'
TVD 7968.40'
INC 24.50°
AZM 88.40°
VS 2538.93'
DLS 0.51°

8600

S

c

WOB 21.6
RPM 1
MRPM 167
PP 2969

SH: dk gry plty blk
hom smth-rgh txt calc
trc clct

SH: dk gry plty blk
hom smth-rgh txt trc
clct

SH: dk gry plty blk
hom smth-rgh txt abndt
lse calct

LS: wt-off wt crm
micxln-xln sft frm mass
mic sucx abndt lse calct

SH: dk gry plty blk
occ chky hom smth txt

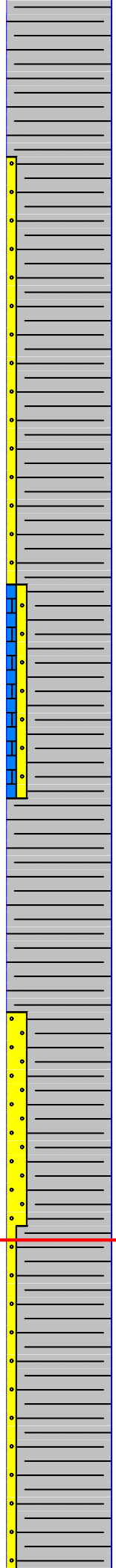
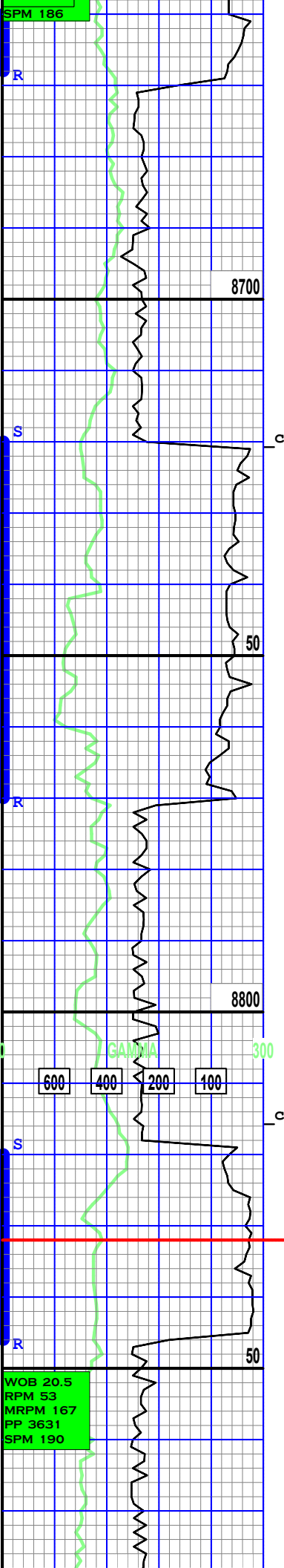
WTIN 9.4
WT OUT 9.4
VIS 45

CG-77u

WTIN 9.3
WT OUT 9.3+
VIS 46

600 400 200 100

25 50 100 200 300 400 500



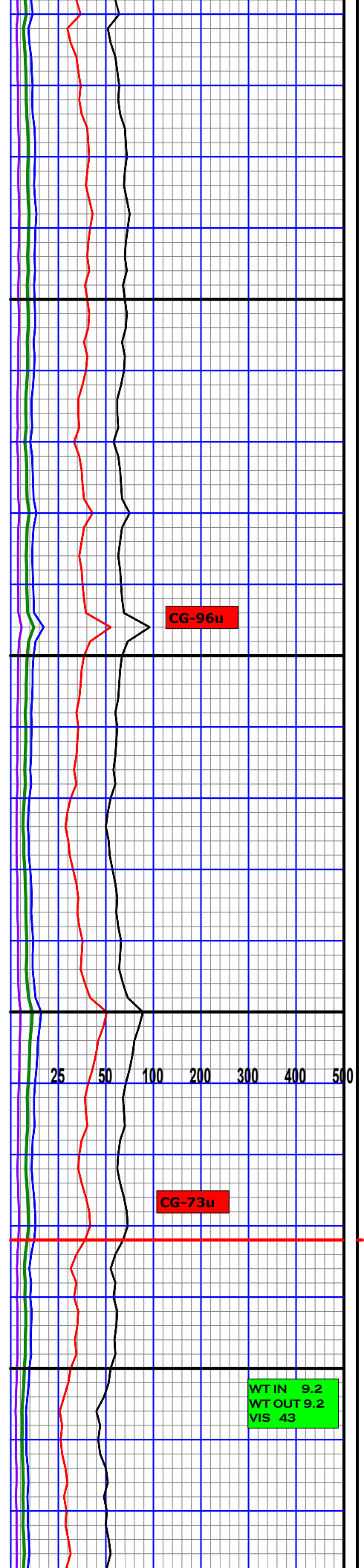
SH: dk gry plty chky
hom smth-rgh txt

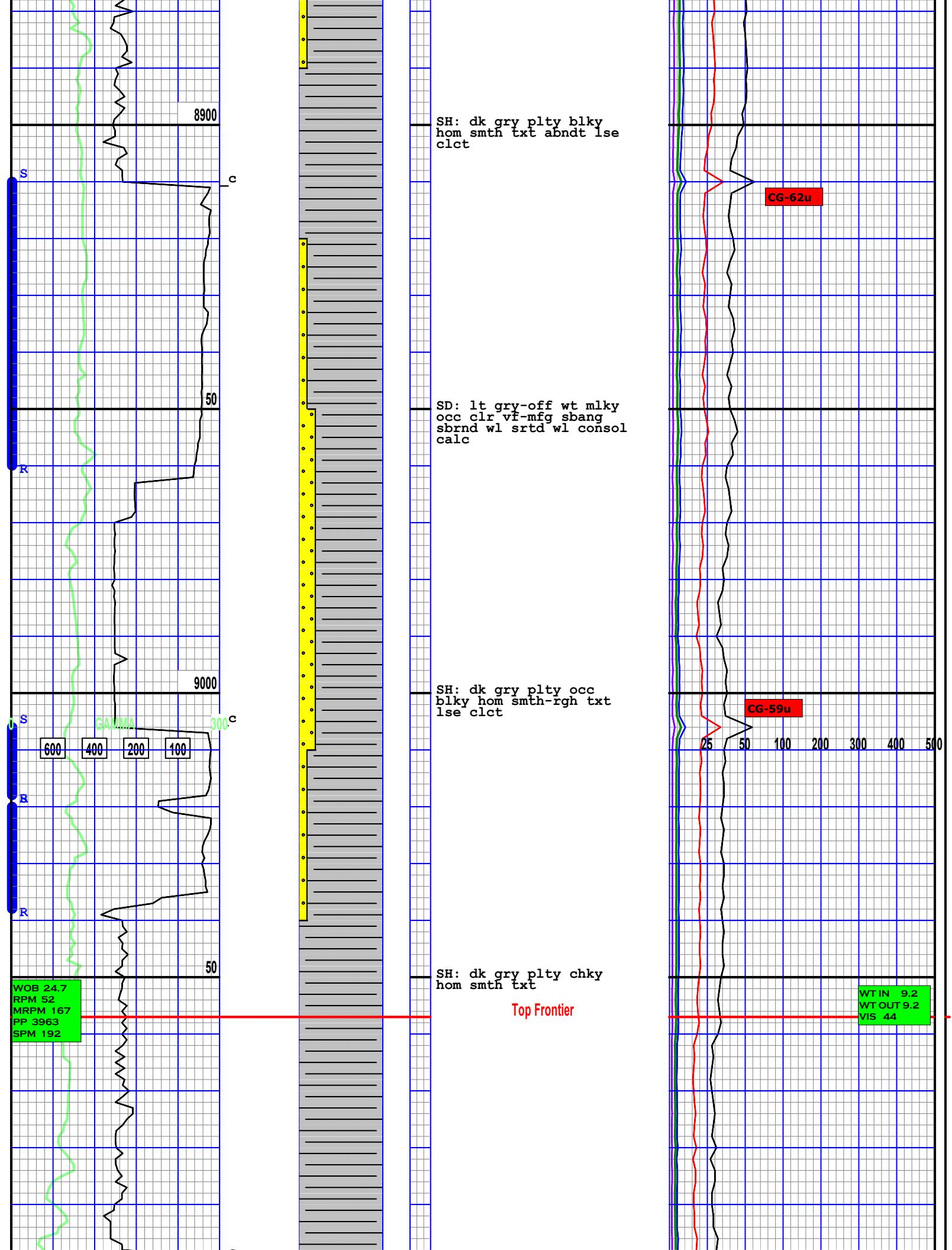
SD: lt gry-off wt mlky
occ clr vf-mfg sbang
sbrnd wl srted wl consol
calc

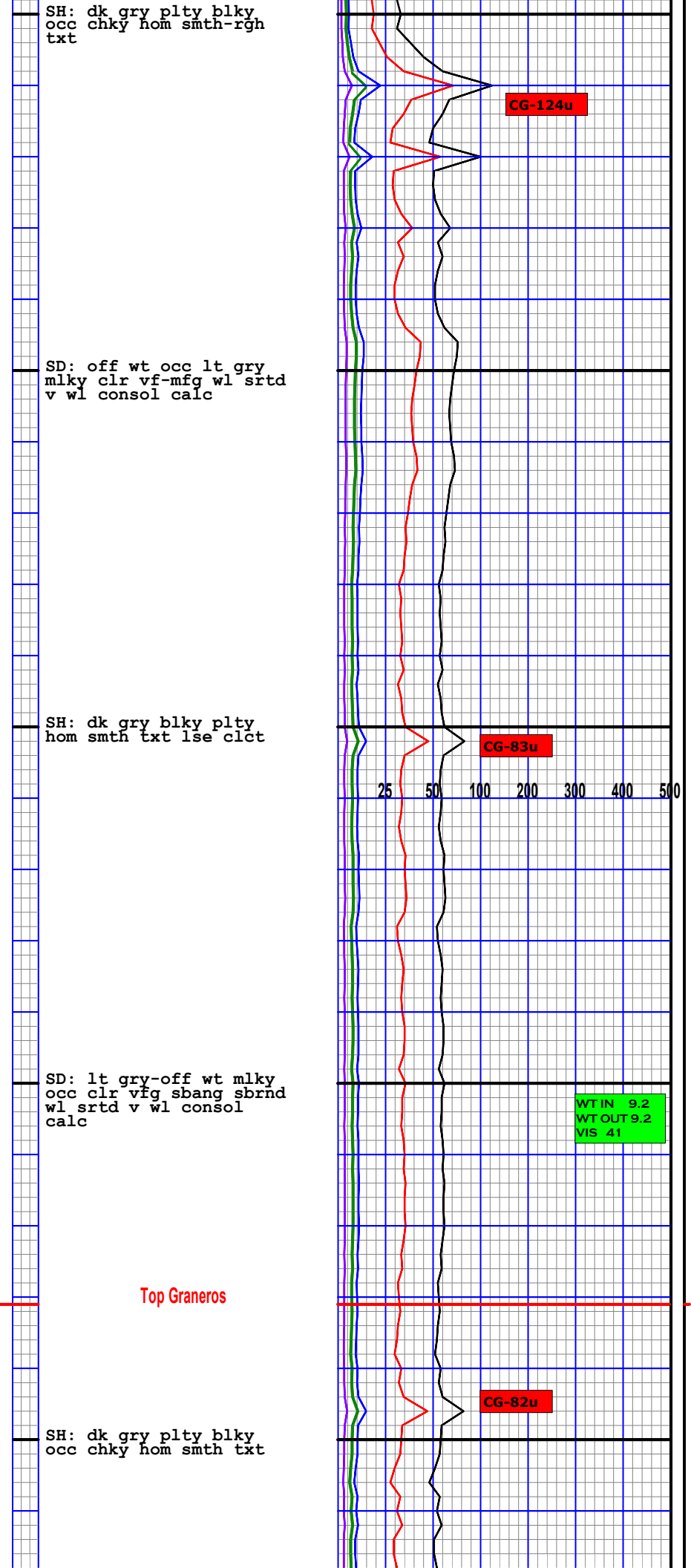
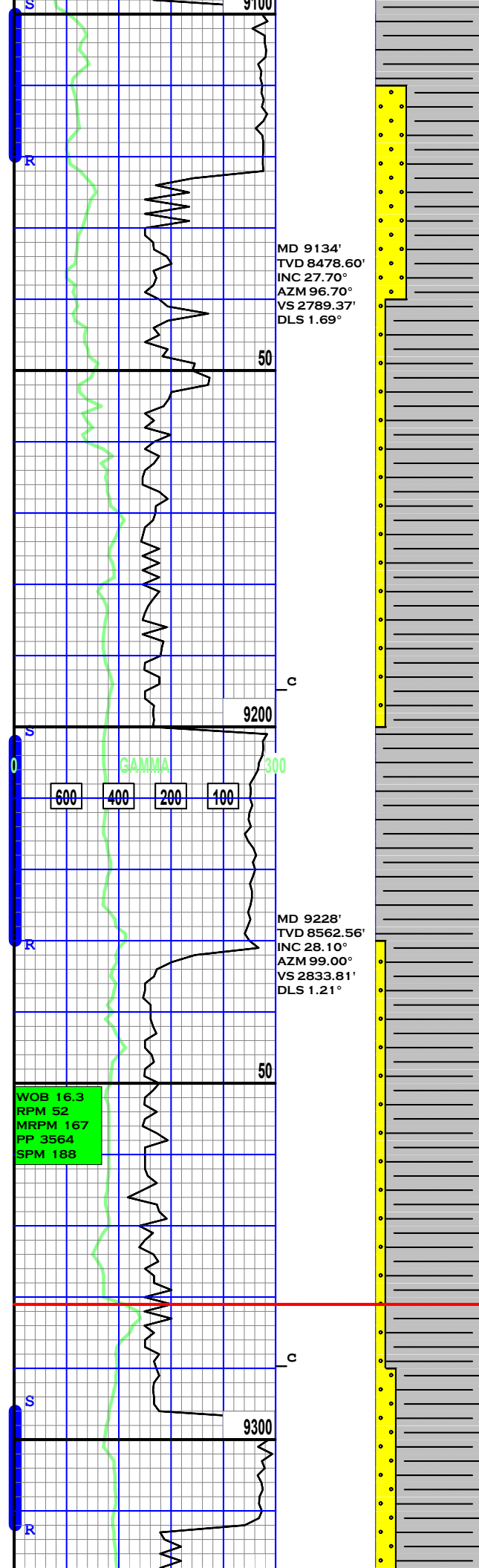
SH: dk gry plty blk
hom smth-rgh txt lse
clct

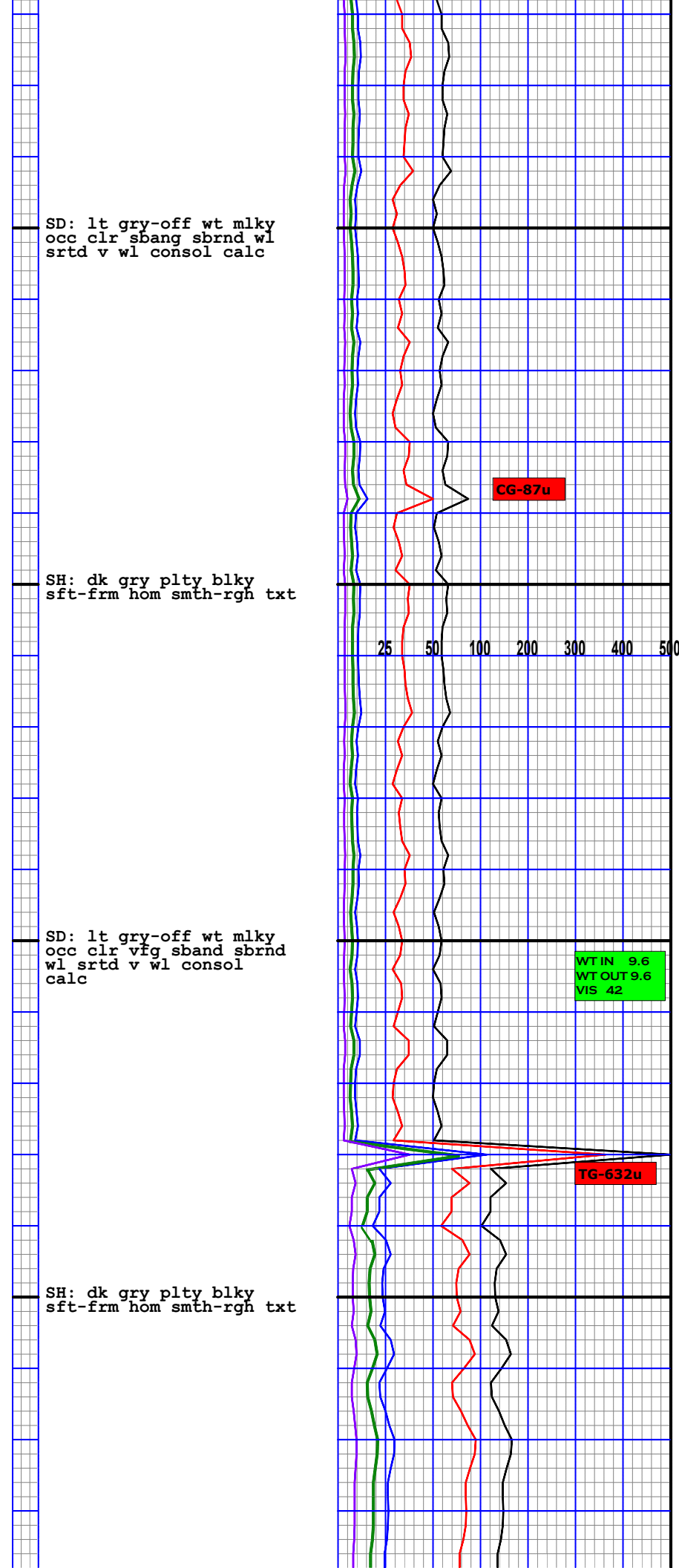
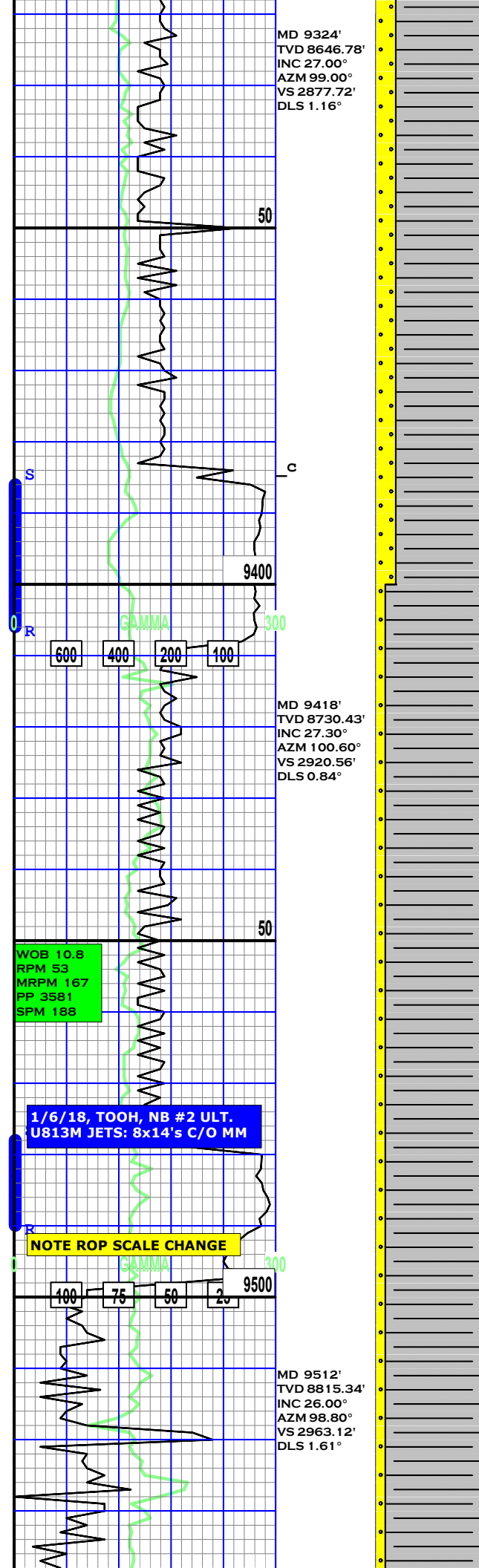
Top Carlie

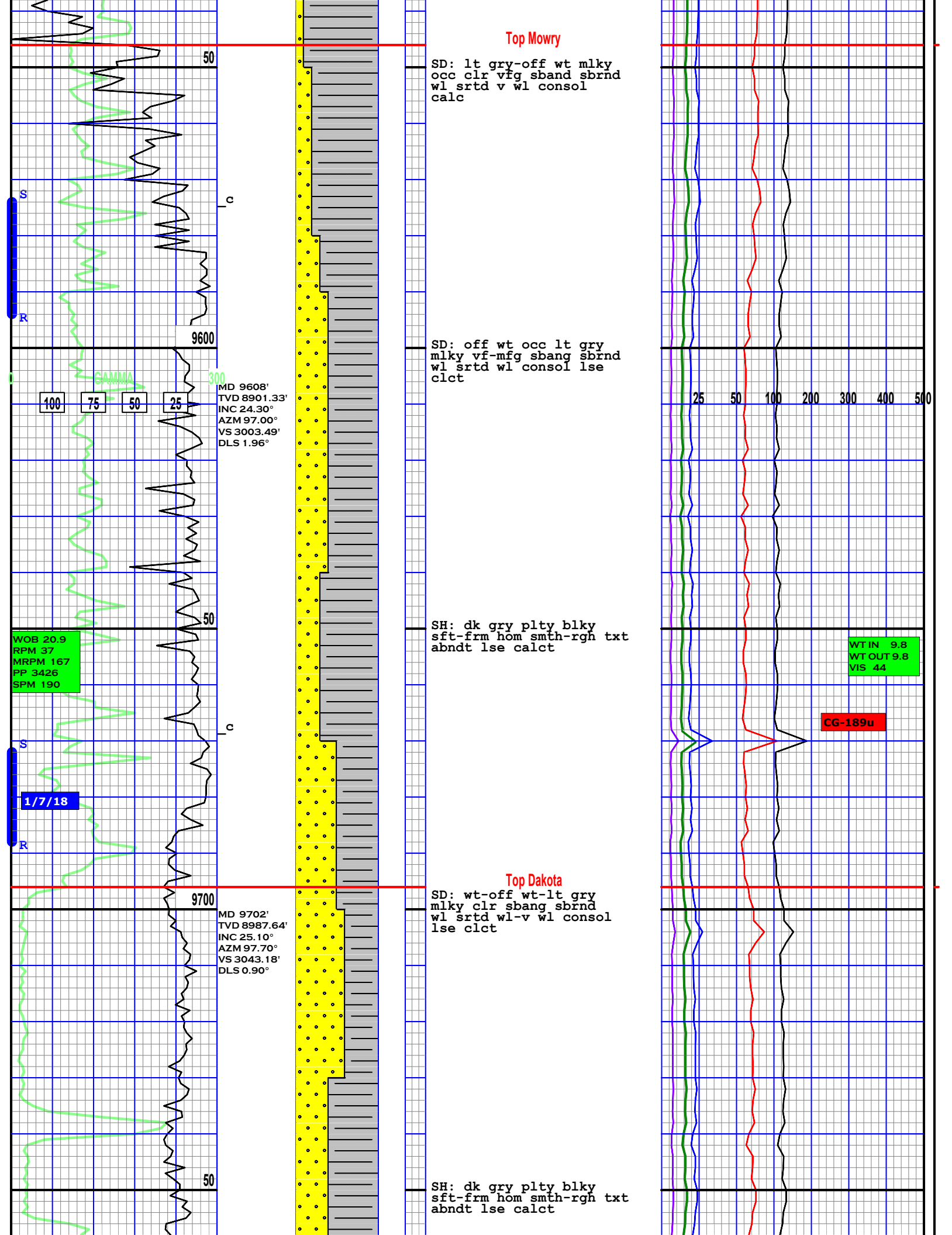
SD: lt gry occ off wt
mlky occ clr mfg sbang
sbrnd wl srted wl consol
calc

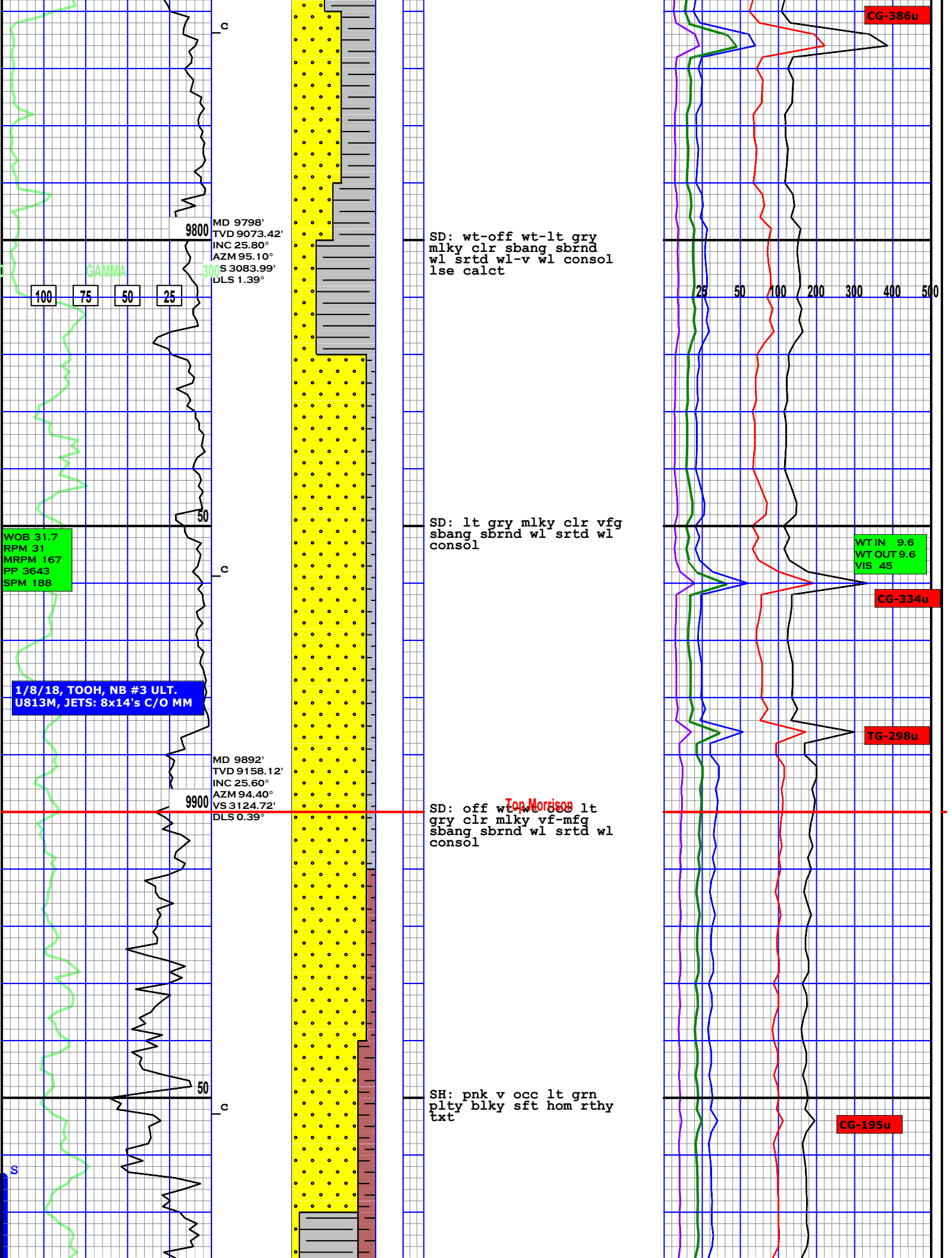












MD 9798'
TVD 9073.42'
INC 25.80°
AZM 95.10°
S 3083.99'
DLS 1.39°

WOB 31.7
RPM 31
MRPM 167
PP 3643
SPM 188

1/8/18, TOOH, NB #3 ULT.
U813M, JETS: 8x14's C/O MM

MD 9892'
TVD 9158.12'
INC 25.60°
AZM 94.40°
VS 3124.72'
DLS 0.39°

SD: wt-off wt-lt gry
mlky clr sbang sbrnd
wl srted wl-v wl consol
lse calct

SD: lt gry mlky clr vfg
sbang sbrnd wl srted wl
consol

SD: off w ~~Top Morris~~ lt
gry clr mlky vf-mfg
sbang sbrnd wl srted wl
consol

SH: pnk v occ lt grn
plty blkly sft hom rthy
txt

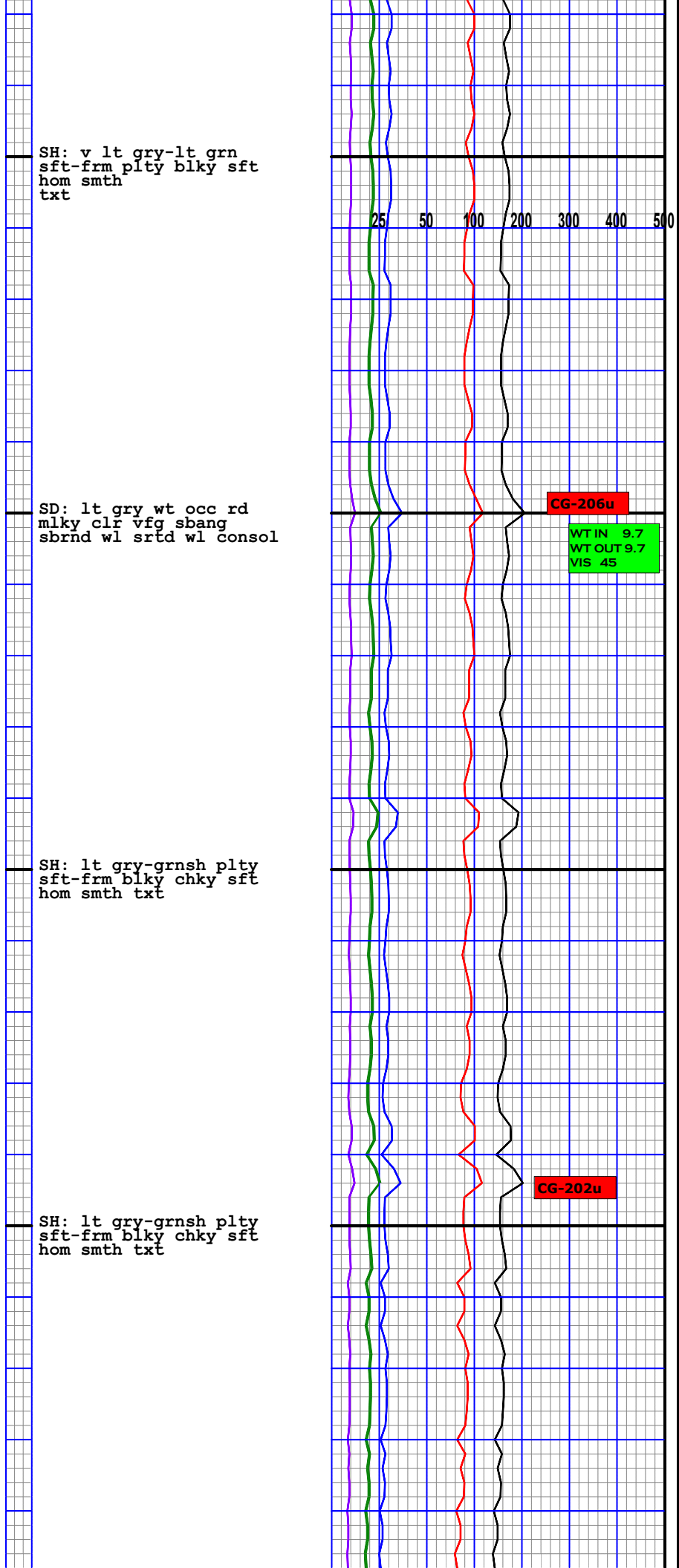
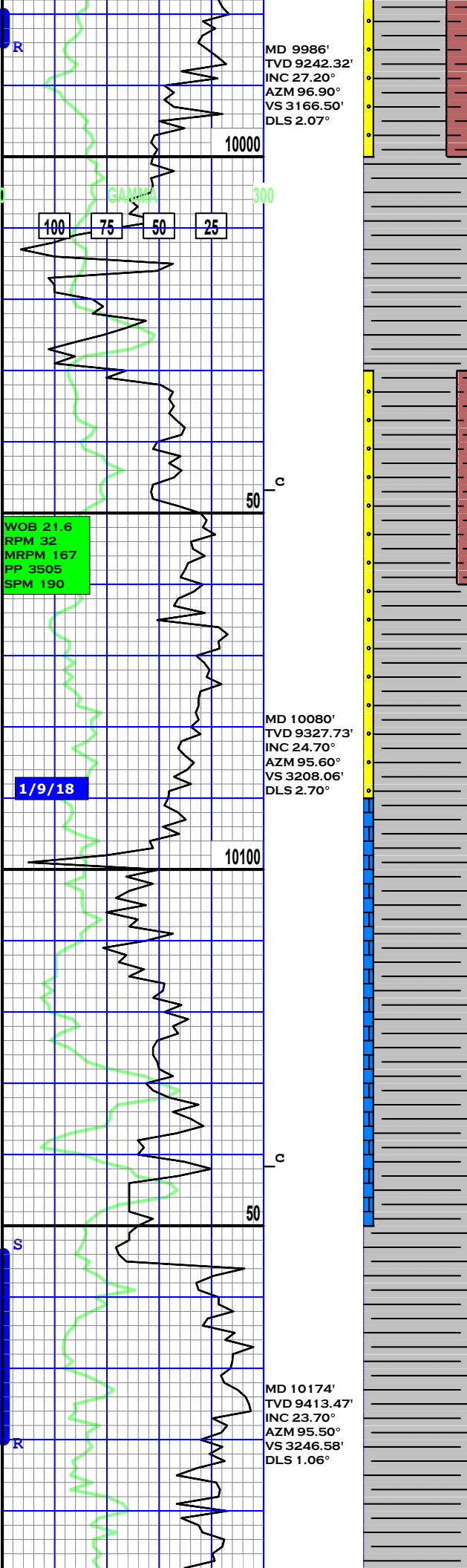
CG-386u

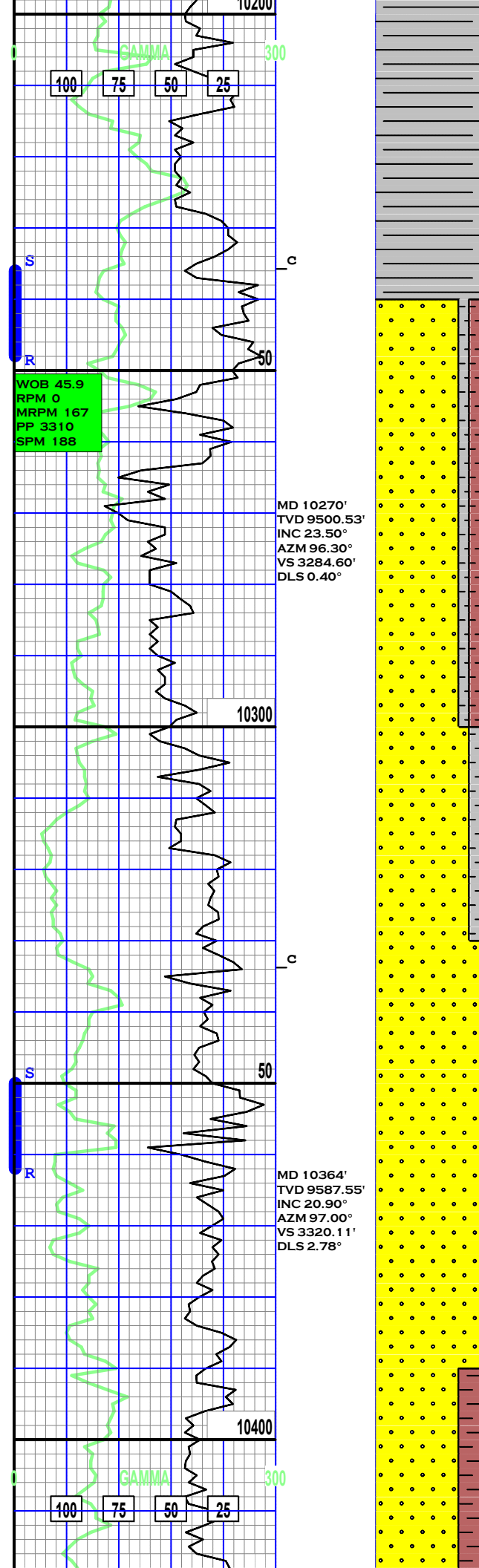
WTIN 9.6
WT OUT 9.6
VIS 45

CG-334u

TG-298u

CG-195u





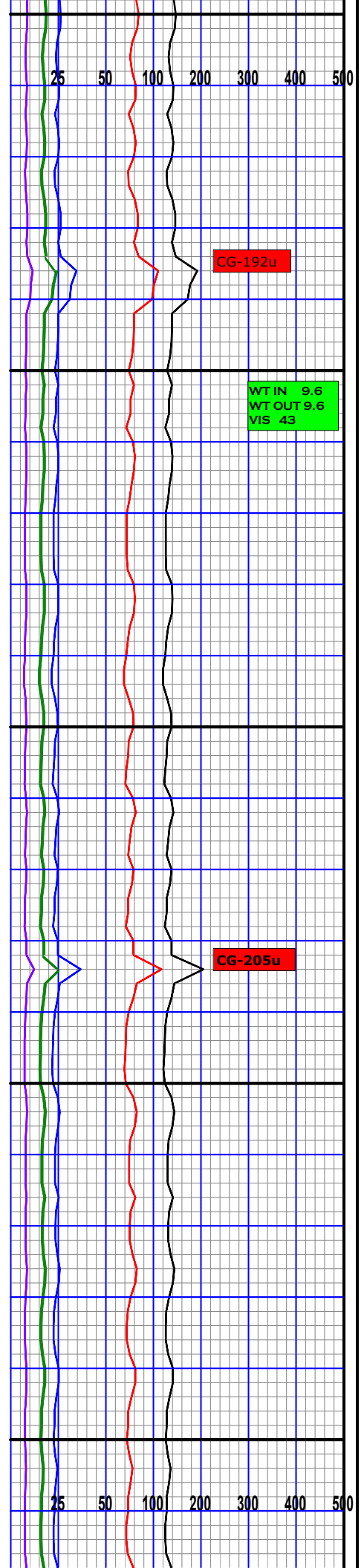
SH: lt gry-grnsh plty
sft frm blk'y chky sft
hom smth txt trc ls

SD: off wht lt gry-gry
vf-mfg sbrnd sbang wl
consol wl srtd n calc
trc ls

SH: lt gry-grnsh plty
sft frm blk'y chky sft
hom smth txt trc ls

SD: off wht lt gry-gry
vf-mfg sbrnd sbang wl
consol wl srtd n calc
trc ls

SD: off wht lt gry-gry
vf-mfg sbrnd sbang wl
consol wl srtd n calc
trc ls trc gry sh



WOB 24.0
RPM 31
MRPM 167
PP 3420
SPM 188

1/10/18

GAMMA 300
100 75 50 25

MD 10458'
TVD 9676.99'
INC 18.50°
AZM 94.10°
VS 3352.12'
DLS 2.73°

MD 10490'
TVD 9707.38'
INC 18.00°
AZM 93.20°
VS 3362.12'
DLS 1.79°

MD 10522'
TVD 9737.89'
INC 17.00°
AZM 93.70°
VS 3371.72'
DLS 3.16°

MD 10554'
TVD 9767.71'
INC 14.80°
AZM 91.60°
VS 3380.19'
DLS 7.33°

MD 10586'
TVD 9798.81'
INC 12.40°
AZM 93.90°
VS 3387.69'
DLS 7.69°

MD 10616'
TVD 9829.12'
INC 11.70°
AZM 95.80°
VS 3394.15'
DLS 2.60°

RSH: brnsh red dk red
frm plty blkly tab smth-
rgh txt n calc trc ls

SD: wt-off wt occ lt
gry mlky clr vf-mfg
sbang sbrnd wl srted wl
consol calc lse clct

SH: lt gry-gry occ grn
plty sft hom smth txt
calc lse clct

Top Entrada

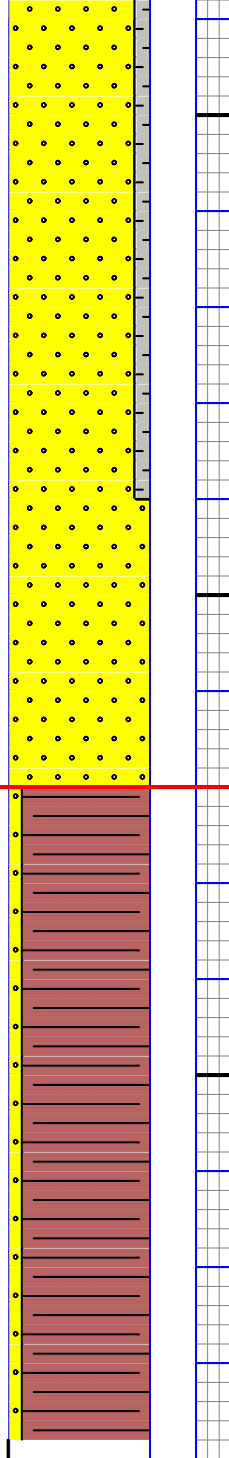
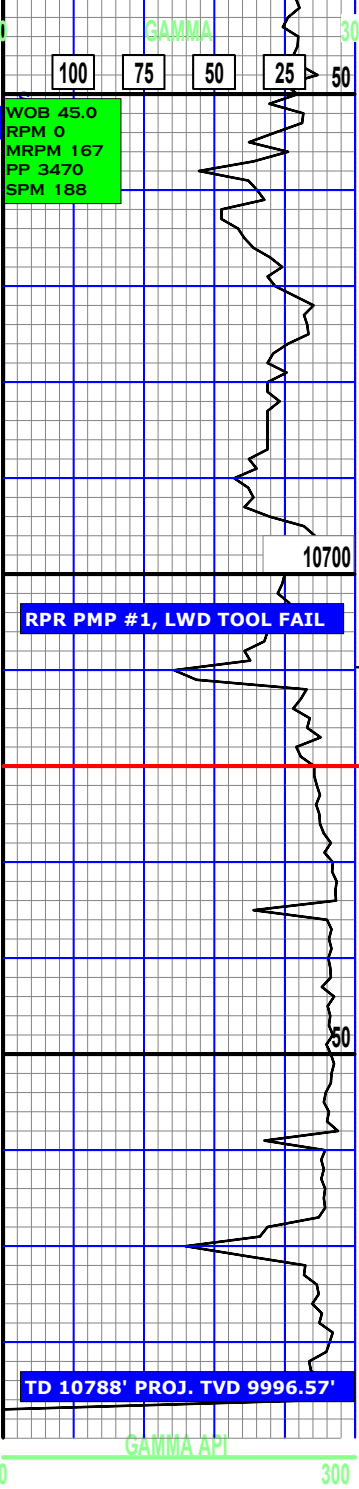
SD: wt-off wt mlky clr
vf-mfg sbang sbrnd wl
srted wl consol calc

CG-181u

WTIN 9.5
WT OUT 9.5
VIS 43

CG-266u

CG-297u



SD: wt-off wt mlky clr
vf-mfg sbang sbrnd wl
srted wl consol calc

SD: wt-off wt mlky clr
vf-mfg sbang sbrnd wl
srted wl consol calc

Top Chugwater

RSH: rd-brn plty blk
v sft hom rthy txt n
calc

