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711 W TENTH ST  
RESERVE, LA 70084  
800-280-2096

COMPANY: Bayswater  
WELL: GD Hanks S-27-28-HN  
FIELD: Watenberg COUNTY: Weld STATE: Colorado  
LOCATION: Section. 27-N7-R66W  
Interval Logged: 3650 To: 4335 G.L.: 4874 K.B: 4899.00  
Date Logged: 3/31/18 To: 4-6-18 Spud Date: 3/29/18  
Rig: True 38 Unit No.: DLT-003  
Loggers: Russell Frommer Steven Harbison  
Api No.: 05-123-46036-0000  
Filename: gd\_hanks\_s-27-28-hn.mlw  
Geologist: Kevin Smith

Created By MainLog

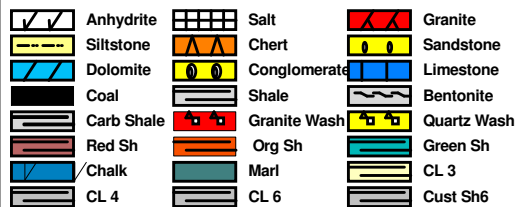
### Abbreviations:

NB...New Bit  
CO...Circ Out  
NR...No Returns  
TG...Trip Gas  
WOB...Wt on Bit  
RPM...Rev/Min  
SG...Survey Gas  
DST...Drill Stem Test  
DS...Directional Survey  
CG...Connection gas  
LAT...Logged After Trip  
PP...Pump Pressure  
SPM...Strokes/Min  
DTG...Down Time Gas

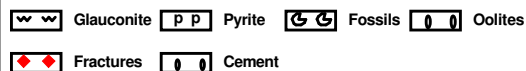
### Mud Data

WT...Weight  
PH...Acidity  
CHL...Chlorides  
V...Viscosity  
F...Filtrate  
SC...Solids Content

### Lithology Symbols:



### Accessories

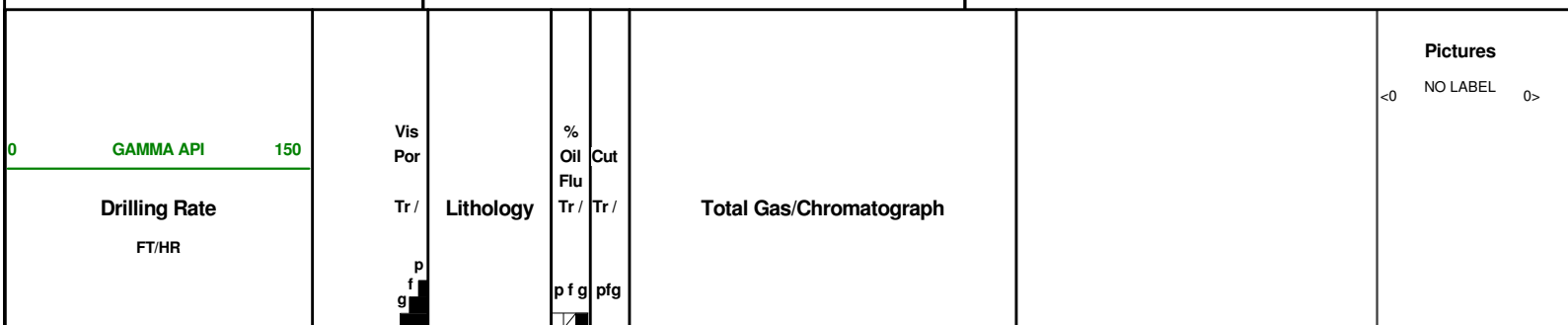


### Gas Chromatograph Analysis:

TG  
C1  
C2  
C3  
IC4  
NC4  
IC5  
NC5

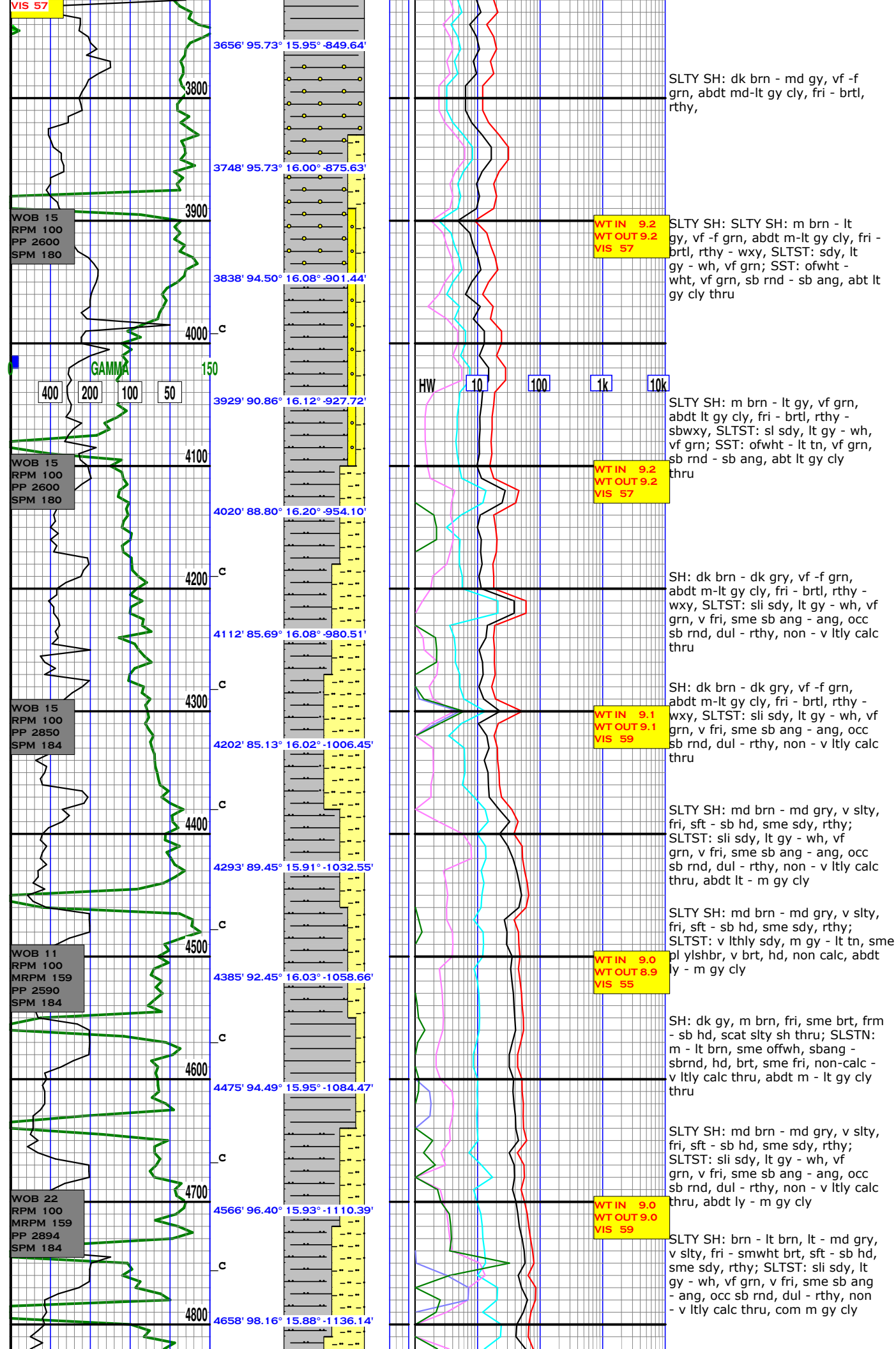
### Pictures

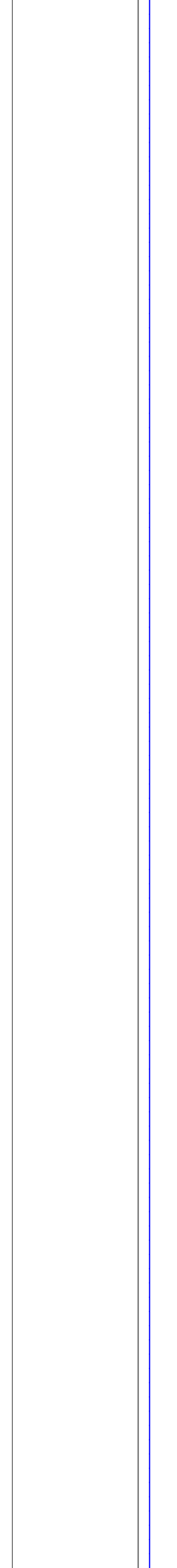
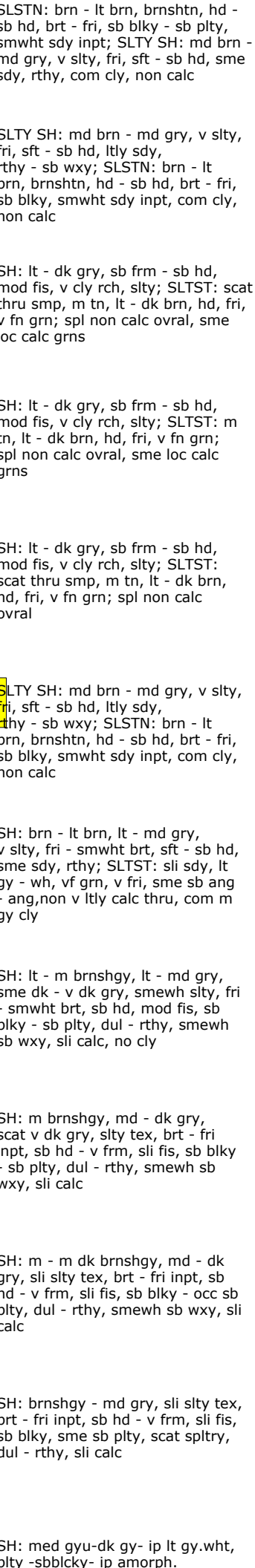
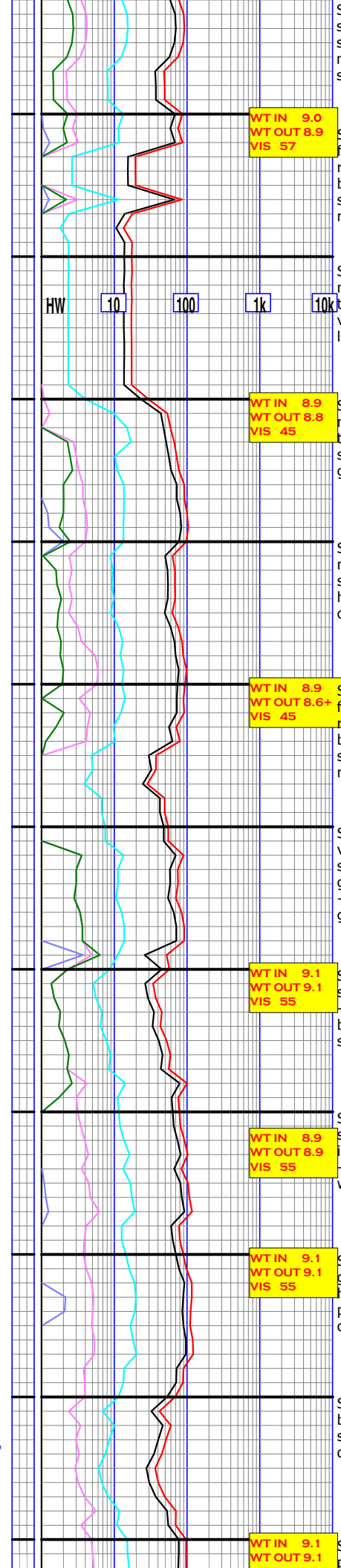
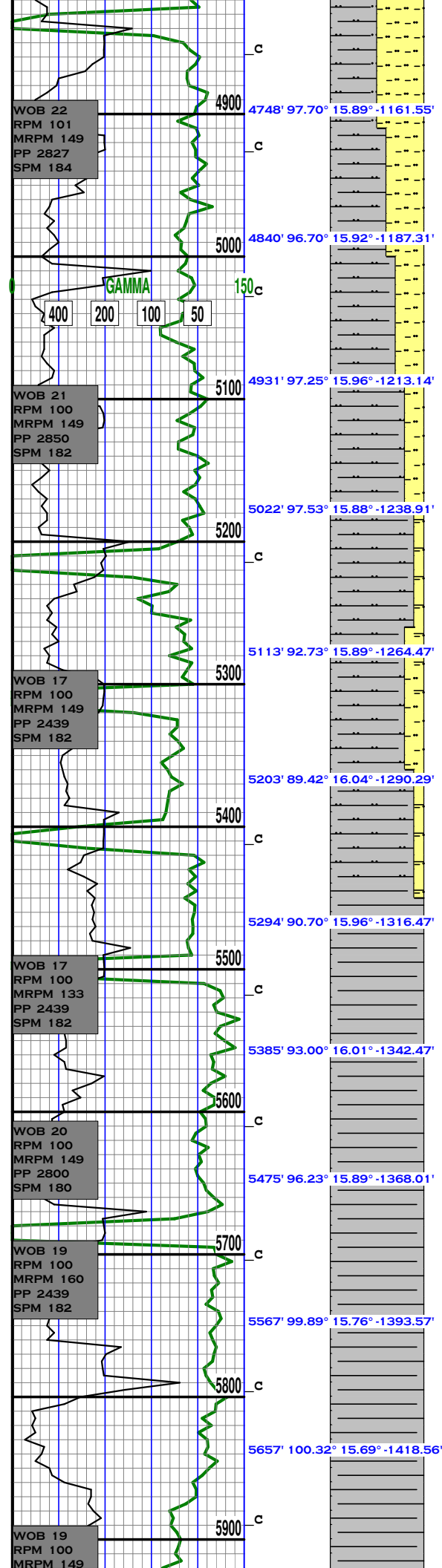
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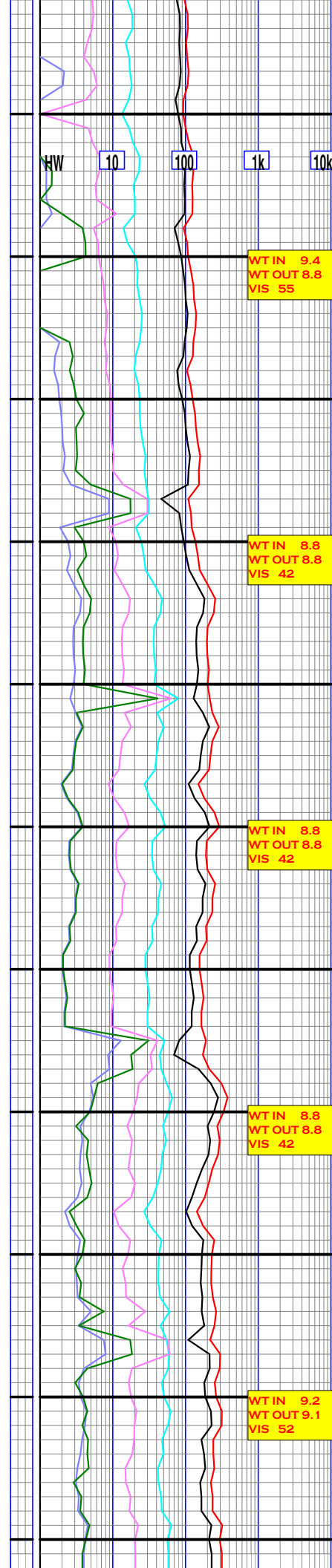
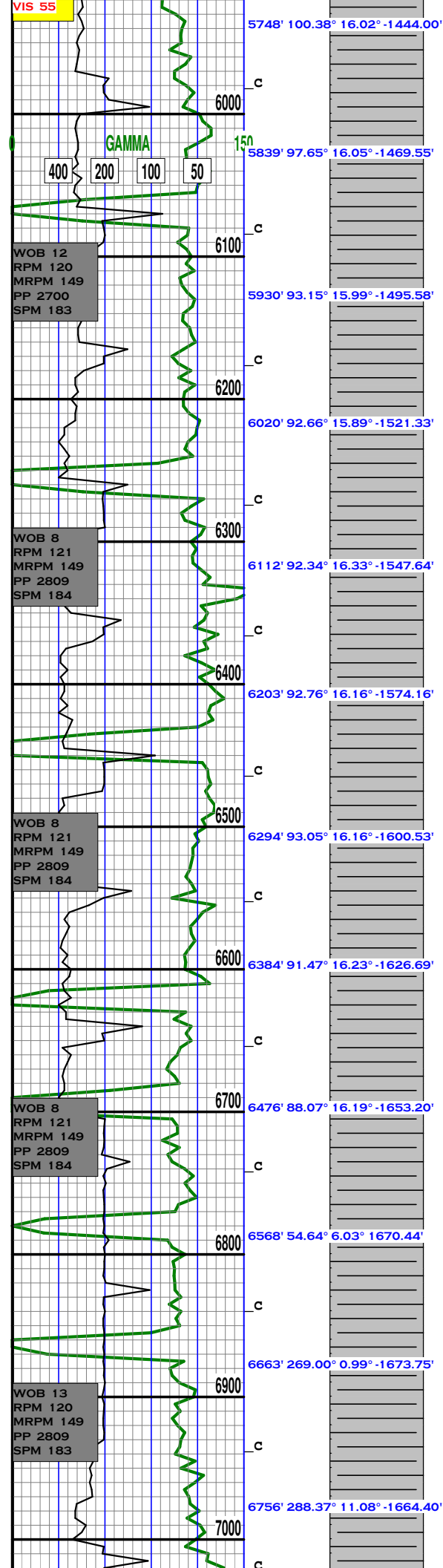


Loggers onsite: 03/30/2018  
Begin logging at 3,700' MD  
Unit: DLT-003  
Gas Unit: CHR027

WT IN 9.2  
WT OUT 9.2







brtle,scat sft- ip wxy txt- dul-rthy  
no cut no min fluor

SH: med gyu-dk gy- ip lt gy.wht,  
plty -sbbkly- ip amorph.  
brtle,scat sft- ip wxy txt- dul-rthy  
no cut no min fluor

WT IN 9.4  
WT OUT 8.8  
VIS 55

SH: lt gry-gry, med gry - dk gry  
ip, ip mott, sli frm-frm,  
sbbklybkly, v aren, v calc, smth-  
sli grtty txt, imbd wi abndt calc  
incl, no cut

SH:lt gry,med gry,mod frm-  
frm,smooth txt,calc ,scctd v fnly  
dissem pyr,sme flky txt,sub  
bkly-bkly

WT IN 8.8  
WT OUT 8.8  
VIS 42

SH:gy/brn,v sft/fri amorph ip, tr  
sub bkly ip, calc ip, slty/sdy ip,fer  
ip, no lam,sbhed calct,tab pyr ip

SH:drk gy/blk,mod frm/  
frm,amorph ip,sbbkly/ bkly,occ  
calc ip,carb cmnt, slty text

WT IN 8.8  
WT OUT 8.8  
VIS 42

SH:Ip blk dkgy,mtx sup,sft ,slty -  
sltstn txt,tr carb ip lam,slty grs,  
tt por, no flu no cut no stn

SH:dk gry,v dk gry,mod hd,occ  
frm,calc i/p, carb,trc foss,sli trcs v  
fnly dissem pyr,sub bkly

WT IN 8.8  
WT OUT 8.8  
VIS 42

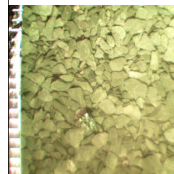
SH:dk gry,dk brn,v dk  
gry,smooth-v fnly grttyR  
txt,frm-mod hd,carb, calc i/p,sub  
bkly-blk

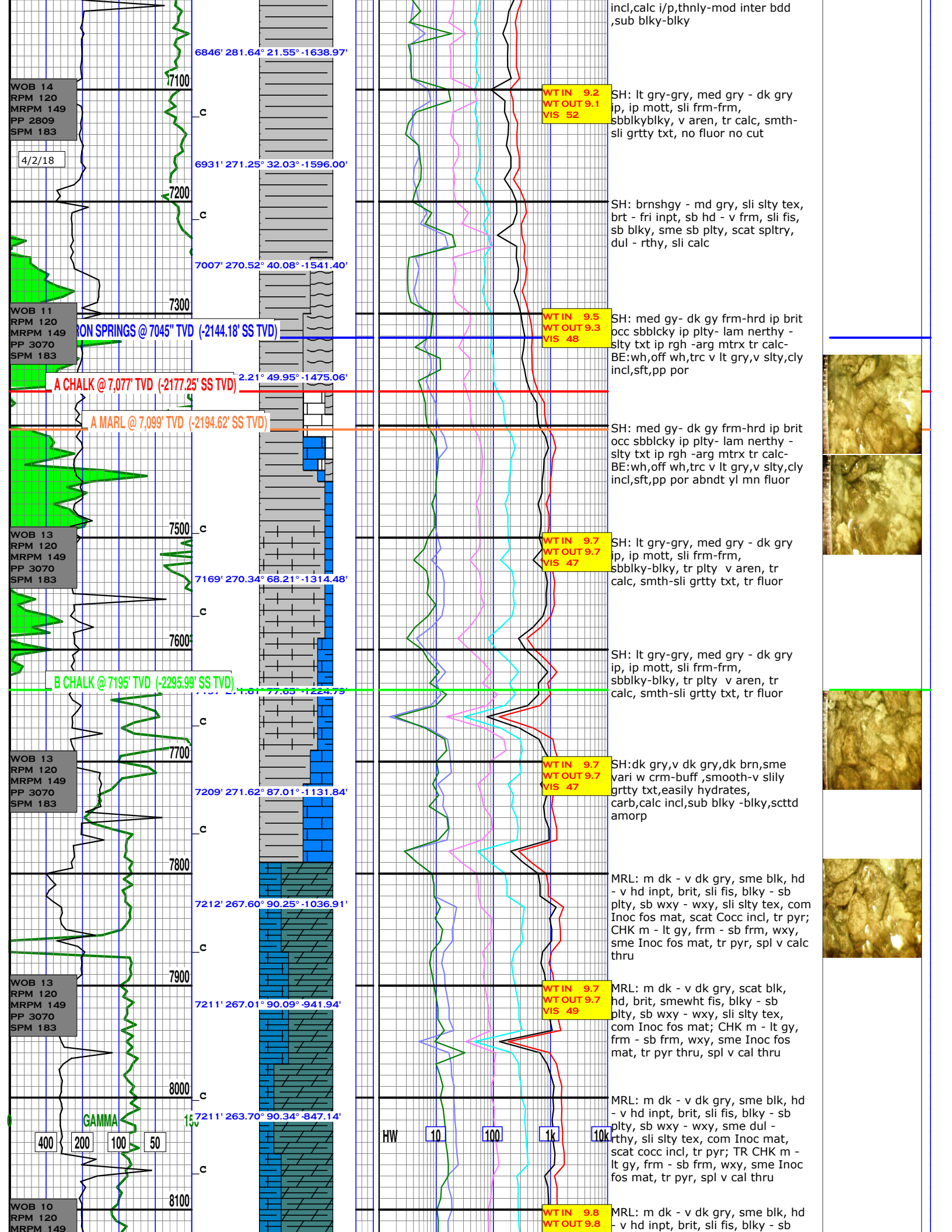
SH:dk gry,v dk gry,occ vari w lt  
crm,frm,slty i/p,smooth-sliy grtty  
txt,carb,calc i/p,sub bkly-bkly

WT IN 9.2  
WT OUT 9.1  
VIS 52

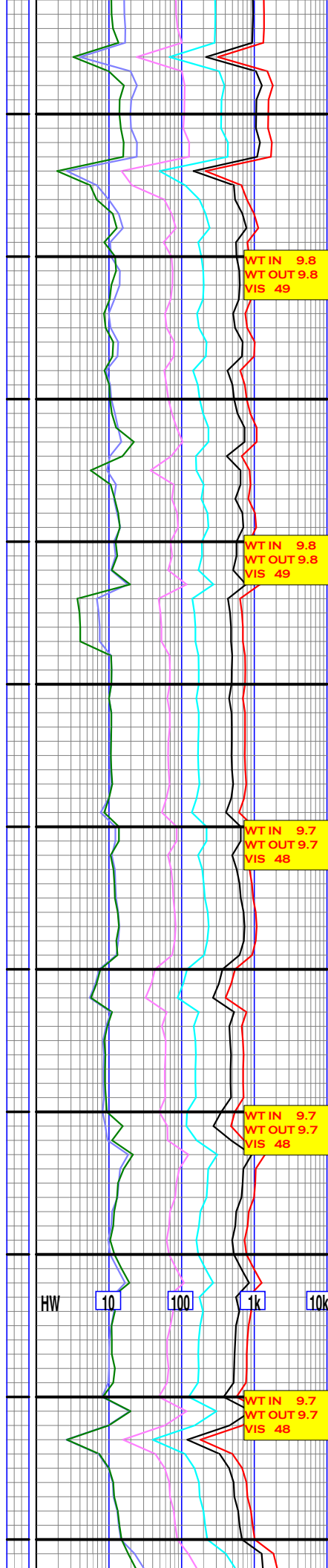
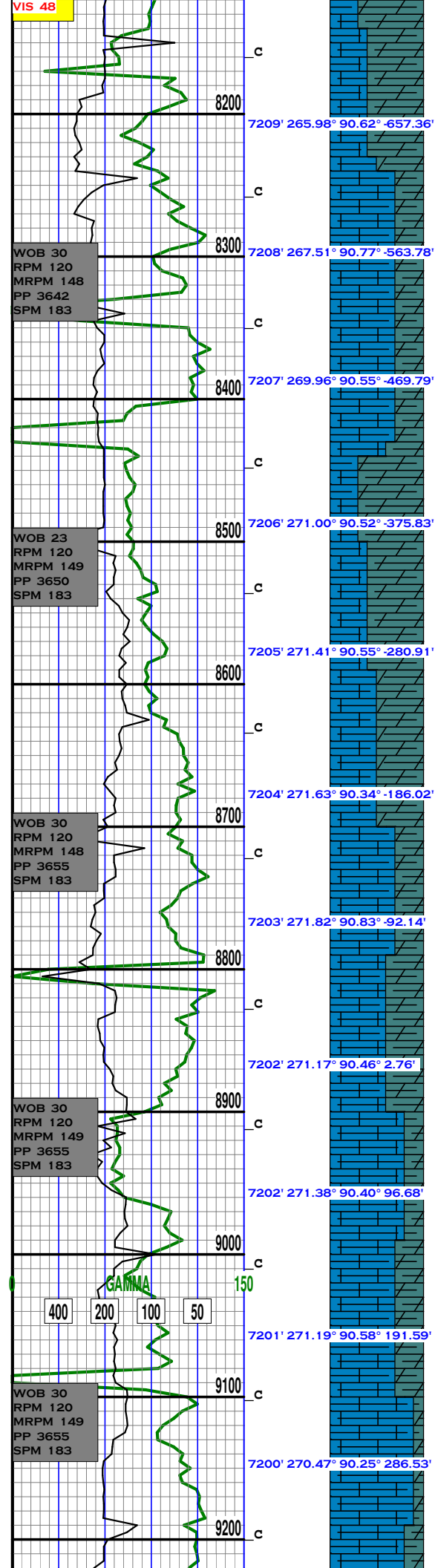
SH:med gry,trc rd,frm, slily wxy  
txt,calc i/p, occ free calcitic incl,  
sub bkly-sub plty

SH:med gy-dk gy- ip blk, v slily  
grtty txt,frm, occ-abndt snd









plty, sb wxy - wxy, sme dul -  
rthy, sli slty tex, com Inoc mat,  
scat cocc incl, tr pyr; TR CHK m -  
lt gy, frm - sb frm, wxy, sme Inoc  
fos mat, tr pyr, spl v calc

MRL: m dk - v dk gry, scat blk - blkshgy, hd - v hd, brit, mod fis, blk, rly sb plty, sb wxy - wxy, sme dul - rthy, com slty tex, com Inoc mat, scat cocc incl, tr pyr; TR CHK m - lt gy, frm - sb frm, wxy, sme Inoc fos mat, tr pyr, spl v calc

CHK: pred m gy, scat lt & m dk gy,  
frm - sft, fri, abdt cocc incl, few Inoc  
fos frags, sme pyr rplcmt, v calc;  
MRL: m - v dk gy, pred hd, sme frm  
sb hd, mod fis, pred blyk, scat plty -  
sb spltry, tr Inoc frags, mod calc

CHK: pred m gy, scat lt & m dk gy, frm - sft, fri, com cocc incl, sme fos frags, sme pyr, v calc; MRL: m - v dk gy, pred hd, sme frm - sb hd, mod fis, pred blk, scat plty - sb spltry, tr Inoc frags, mod calc

MRL: m - v dk gy, pred hd, sme frm -  
sb hd, mod fis, pred blk, scat plty -  
sb spltry, scat Inoc micfrags, mod -  
lthtly calc; CHK: pred m - dk gy, sme  
dk brnshgy, frm, fri, sme cocc incl, tr  
fos frags, sme pyr, v calc

CHK: m-dk gryshbrn, m-dk gy, sb  
frm-sft, fri, blk-y-sb blk-y, com cocc  
incl, scat fos micfrags, rr pyr, v calc;  
MRL: dk - v dk gryshblk, sme blk, v  
frm - v hd, brit, mod fis, sb blk-y -  
blk-y, sme sb plty, scat - tr inoc fos  
micfrags, tr lgr fos frags, rr pyr

CHK: m gryshbrn, m-dk gy, frm-smewht sft, fri, sb blk, com cocc incl, scat fos micfrags, rr pyr, v calc;  
MRL: dk-v dk gryshblk, sme blk, v frm-v hd, brit, mod fis, blk, sme sb pty, scat-tr inoc fos micfrags, tr lgr fos frags, rr pyr

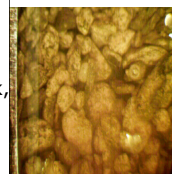
CHK: m - dk gryshbrn, m-dk gy, sb  
frm - sft, sme frm, fri, blk-y-sb blk-y,  
com cocc incl, scat fos micfrags, tr-  
rr pyr, v cal; MRL: dk-v dk gryshblk,  
v frm - v hd, brit, mod fis, sb blk-y -  
blk-y, sme sb pty, scat-tr inoc fos  
micfrags, tr lqr fos frags, rr pyr

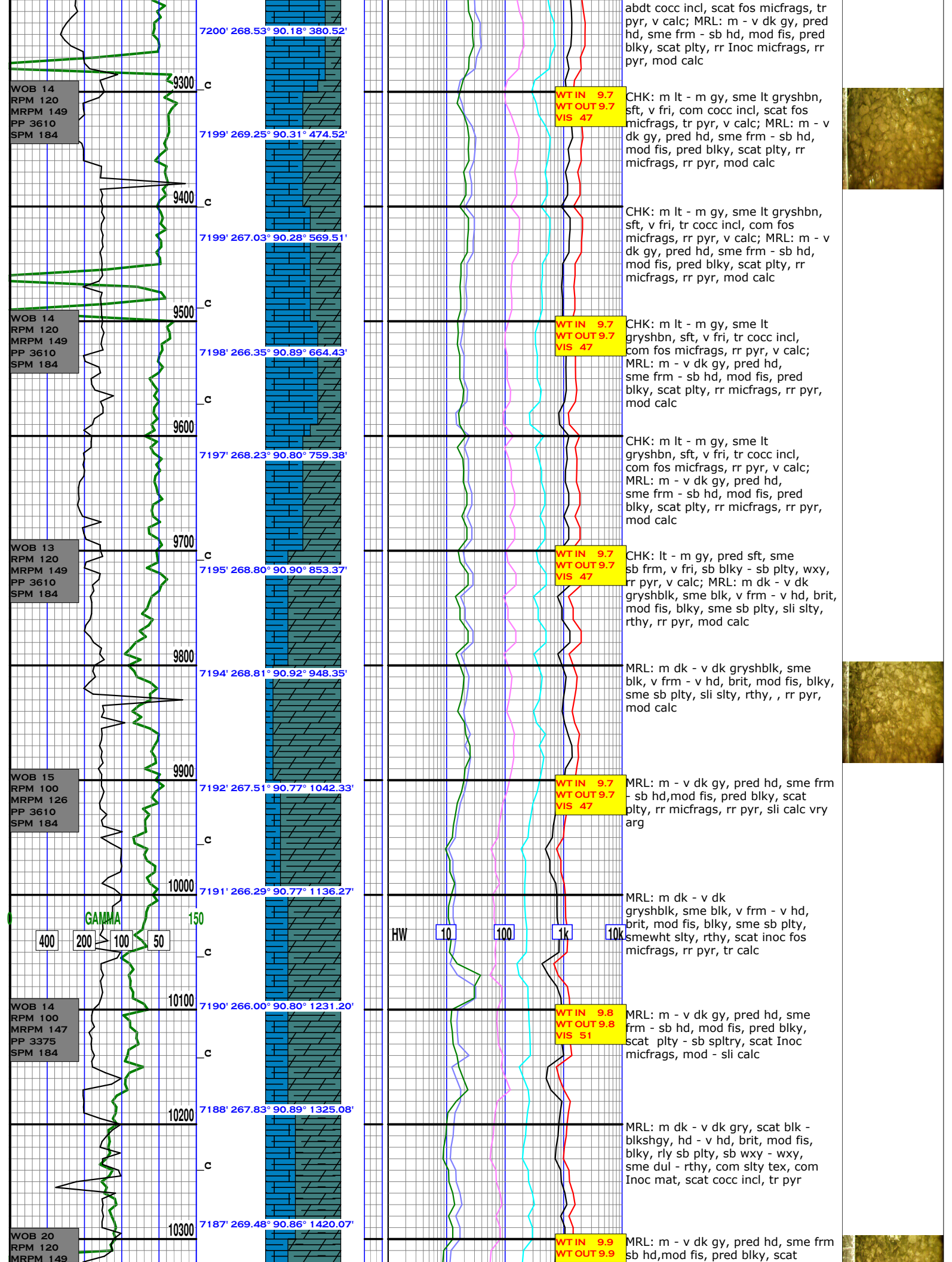
CHK: pred lt - m lt gy, sme v lt  
gryshbn, sft - sme sb frm, v fri, abdt  
cocc incl, scat fos micfrags, tr pyr, v  
calc; MRL: m - v dk gy, pred hd, sme  
frm - sb hd, mod fis, pred blk, scat  
plty, rr Inoc micfrags, rr pyr, mod  
calc

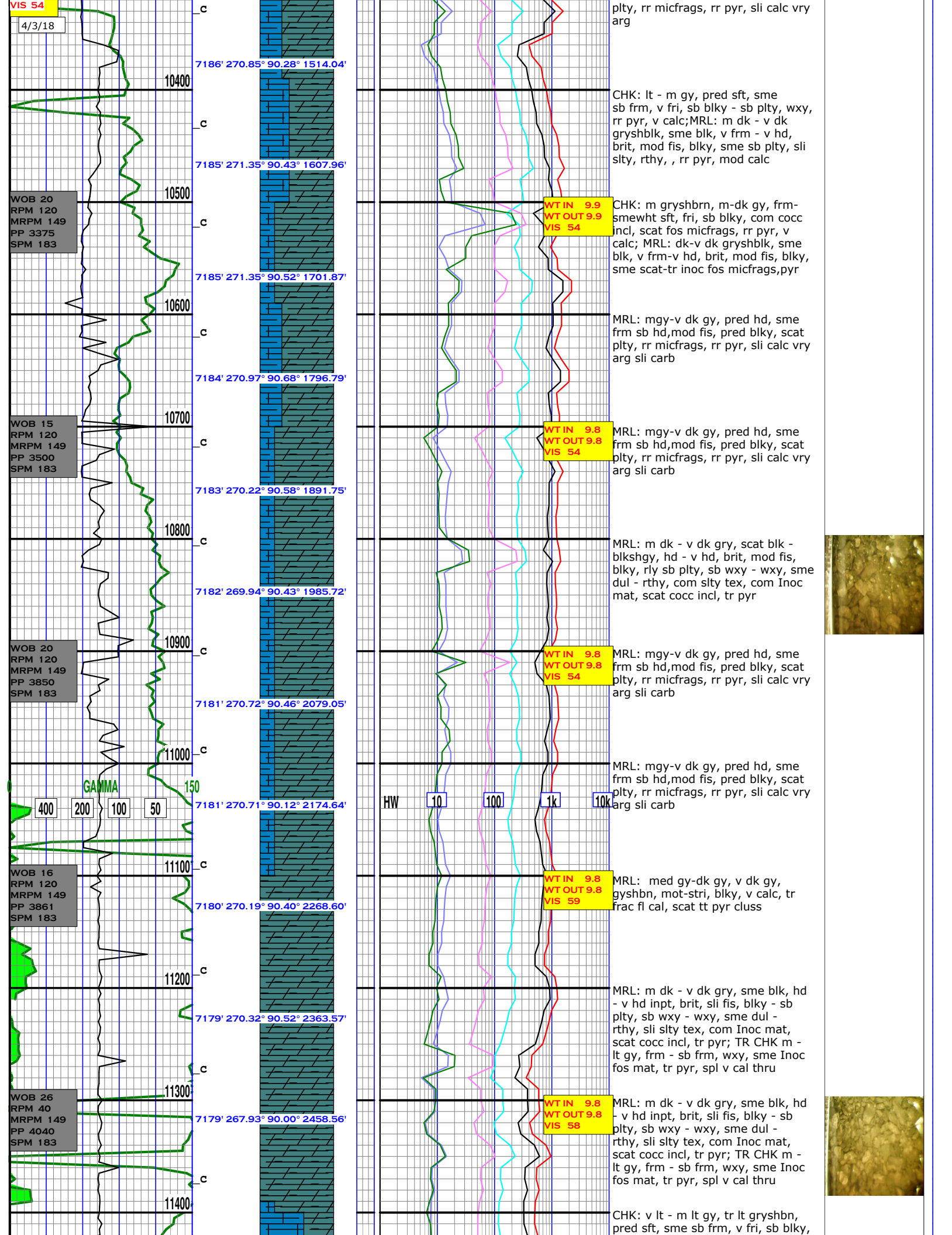
CHK: v lt - m lt gy, tr lt gryshbn,  
pred sft, sme sb frm, v fri, sb blk,  
com cocc incl, scat fos micfrags, rr  
pyr, v calc; MRL: dk - v dk gryshblk,  
sme blk, v frm - v hd, brit, mod fis,  
blk, sme sb plty, scat - tr inoc fos  
micfrags, tr lgr fos frags, rr pyr

CHK: lt - m gy, pred sft, sme sb  
frm, v fri, sb blkly - sb plty, wxy,  
scat fos micfrags, tr cocc incl, rr  
pyr, v calc; MRL: m dk - v dk  
grshbblk, sme blk, v frm - v hd,  
brit, mod fty, blkly, sme sb plty,  
smewht slty, rthy, scat inoc fos  
micfrags, rr pyr, mod calc

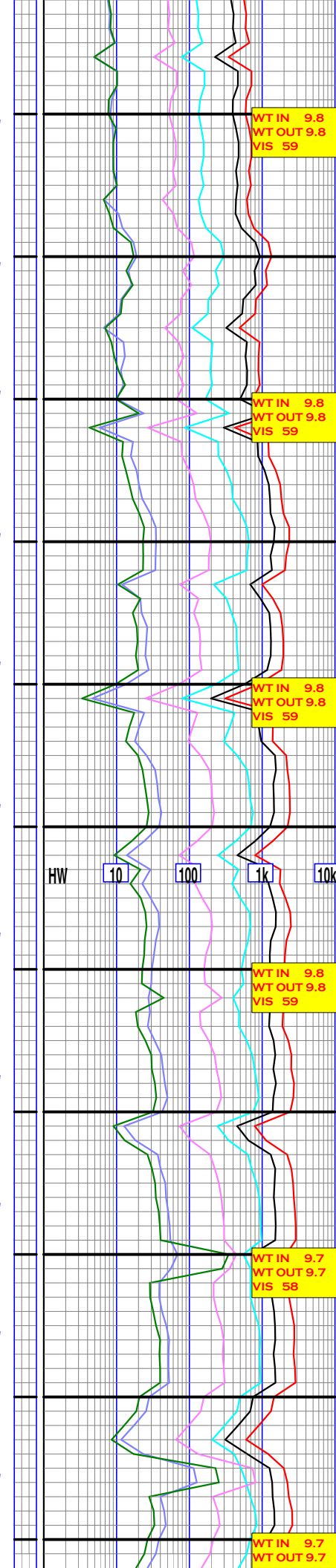
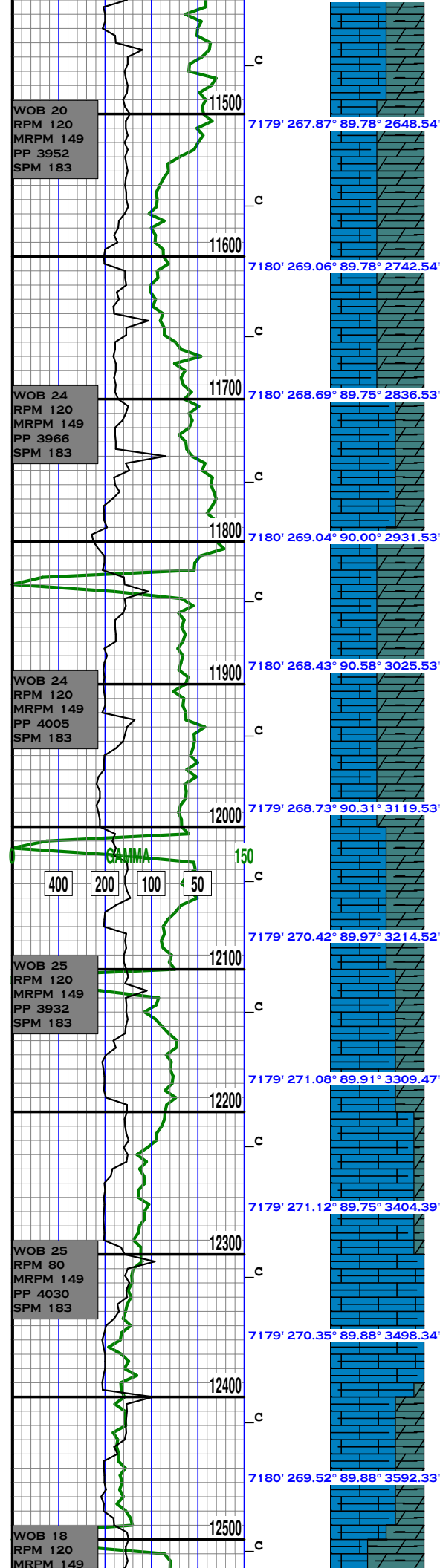
CHK: pred m lt gy, sme v lt  
gryshbn, sft - sme sb frm, v fri,











com cocc incl, scat fos micfrags, rr pyr, v calc; MRL: dk - v dk gryshblk, sme blk, v frm - v hd, brit, mod fis, blk, sme sb plty, scat - tr inoc fos micfrags, tr lgr fos frags, rr pyr

CHK: m lt - m gryshbn, sft - frm, fri, com cocc, scat fos frags, scat lse pyr grns, hily calc; MRL: m-v dk gy, hd, sme v frm, mod fis, pred blk, scat sb blk, tr micfrags, mod calc

CHK: pred m - m dk gy, com gryshbn, sft - sb frm, v fri, wxy, sb blk, com cocc, abdt fos frags, scat lse pyr grns, hily calc; MRL: m - v dk gy, pred hd, sme v frm, mod fis, sb wxy - dul, pred blk, sme sb plty, com fos micfrags, mod calc

CHK: pred m - m dk gy, com gryshbn, sft - sb frm, v fri, wxy, sb blk, com cocc incl, abdt fos frags, scat lse pyr grns, hily calc; MRL: m - v dk gy, pred hd, sme v frm, mod fis, sb wxy - dul, pred blk, sme sb plty, com fos micfrags, mod calc

CHK: m lt - m gy, sme lt gryshbn, sft, v fri, com cocc incl, scat fos micfrags, tr pyr, v calc; MRL: m - v dk gy, pred hd, sme frm - sb hd, mod fis, pred blk, scat plty, rr micfrags, rr pyr, mod calc

CHK: m - m dk gy, com gryshbn, sft - sb frm, v fri, wxy, sb blk, com cocc incl, abdt fos frags, scat lse pyr grns; MRL: m - v dk gy, pred hd, sme v frm, mod fis, sb wxy - dul, blk, sme sb plty, com fos micfrags, rr blk org intbdd org mat, mod calc

CHK: v lt - m lt gy, scat gryshbn, sft - sb frm, v fri, sb blk, wxy, com cocc incl, scat fos micfrags, rr pyr, v calc; MRL: dk - v dk gryshblk, sme blk, v frm - v hd, brit, mod fis, blk, sme sb plty, scat - tr inoc fos micfrags, rr pyr, rr blk org mat

CHK: pred m - m dk gy, com gryshbn, sft - sb frm, v fri, wxy, sb blk, com cocc incl, abdt fos frags, scat lse pyr grns, hily calc; MRL: m - v dk gy, pred hd, sme v frm, mod fis, sb wxy - dul, pred blk, sme sb plty, com fos micfrags, mod calc

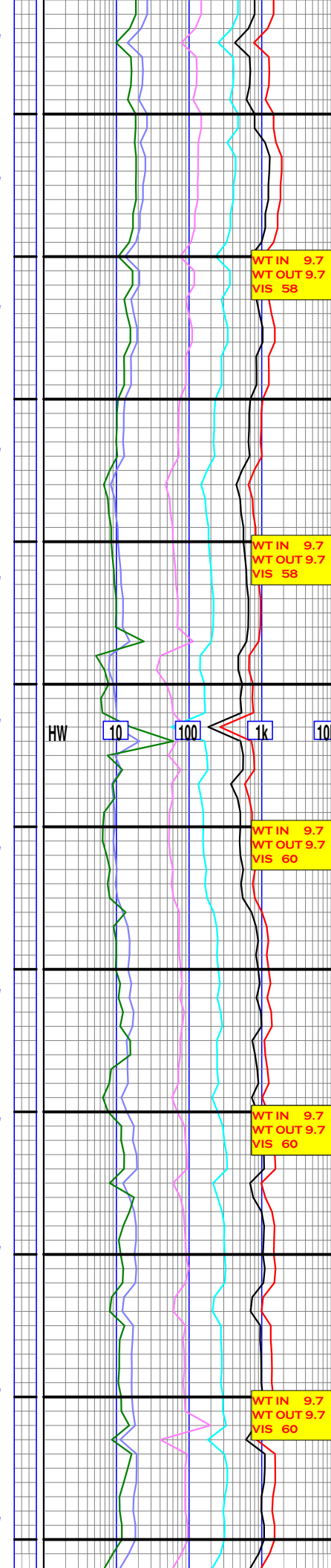
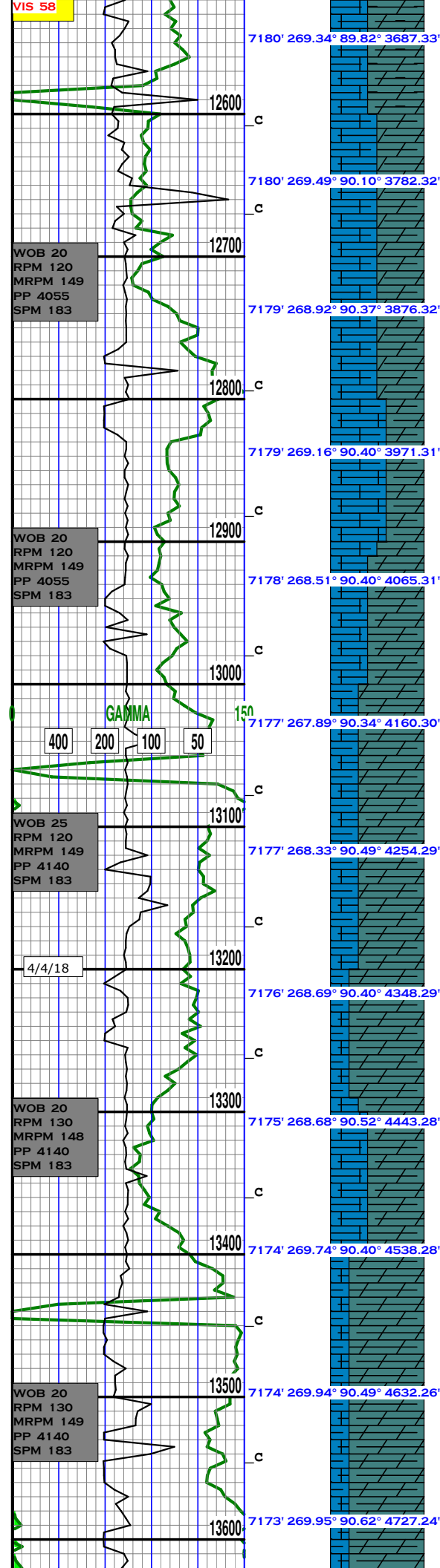
CHK: lt - m gy, pred sft, sme sb frm, v fri, sb blk - sb plty, wxy, scat fos micfrags, tr cocc incl, rr pyr; MRL: m dk - v dk gryshblk, sme blk, v frm - v hd, brit, mod fis, blk, sme sb plty, smewht slty, rthy, scat inoc fos micfrags, rr pyr

CHK: lt - m gy, scat gryshbn, sft - sb frm, v fri, wxy, mot thru, sb blk, com cocc incl, abdt fos frags, rr pyr grns, hily calc; TR MRL: m - v dk gy, hd - v frm, mod fis, sb wxy - dul, blk - sb plty inpt, com fos micfrags, mod calc

CHK: m - m dk gy, com gryshbn, sft - sb frm, v fri, wxy, sb blk, com cocc incl, abdt fos frags, scat lse pyr grns, hily calc; MRL: m - v dk gy, pred hd, sme v frm, mod fis, sb wxy - dul, pred blk, sme sb plty, com fos micfrags, mod calc

CHK: m - m dk gy, com gryshbn, sft - sb frm, v fri, wxy, sb blk, com cocc incl, abdt fos frags, scat lse pyr grns, hily calc; MRL: m - v dk gy, pred hd, sme v frm, mod fis, sb wxy - dul, pred blk, sme sb plty, com fos micfrags, mod calc





blky, com cocc incl, abdt fos frags,  
scat lse pyr grns, hily calc;MRL: m -  
v dk gy, pred hd, sme v frm, mod  
fis, sb wxy - dul, blky, sme sb plty,  
com fos micfrags mod calc

CHK: m lt - m gy, sme lt gryshbn,  
sft, v fri, com cocc incl, scat fos  
micfrags, tr pyr, v calc; MRL: m - v  
dk gy, pred hd, sme frm - sb hd,  
mod fis, pred blky, scat plty, rr  
micfrags, rr pyr, mod calc

CHK: m lt - m gy, sme lt gryshbn,  
sft, v fri, com cocc incl, scat fos  
micfrags, tr pyr, v calc MRL: m - v  
dk gy, pred hd, sme frm - sb hd,  
mod fis, pred blky, scat plty, rr  
micfrags, rr pyr, mod calc

CHK: m lt - m gy, sme lt gryshbn,  
sft, v fri, com cocc incl, scat fos  
micfrags, tr pyr, v calc; MRL: m - v  
dk gy, pred hd, sme frm - sb hd,  
mod fis, pred blky, scat plty, rr  
micfrags, rr pyr, mod calc

CHK: lt - m gy, pred sft, sme  
sb frm, v fri, sb blky - sb plty, wxy,  
scat fos micfrags, l, r v calc  
MRL: m dk - v dk gryshblk, sme  
blk, v frm - v hd, brit, mod fis,  
smewht slty, rthy, rr pyr, mod calc

CHK: lt - m gy, pred sft, sme  
sb frm, v fri, sb blky - sb plty, wxy,  
scat fos micfrags, l, r v calc  
MRL: m dk - v dk gryshblk, sme  
blk, v frm - v hd, brit, mod fis,  
smewht slty, rthy, rr pyr, mod calc

CHK: m lt - m gy, sme lt  
gryshbn, sft, v fri, com cocc incl,  
scat fos micfrags, tr pyr  
MRL: m - v dk gy, pred hd,  
sme frm - sb hd, mod fis, pred  
blky, scat plty, rr pyr, mod calc

CHK sb frm, v fri, sb blky - sb  
plty, wxy, scat fos micfrags, tr cocc  
incl, rr pyr MRL: m dk -v dk  
gryshblk, sme blk, v frm - vhd,  
brit, mod fis, blky, sli slty tex, rthy,  
scat fos micfrags, rr pyr

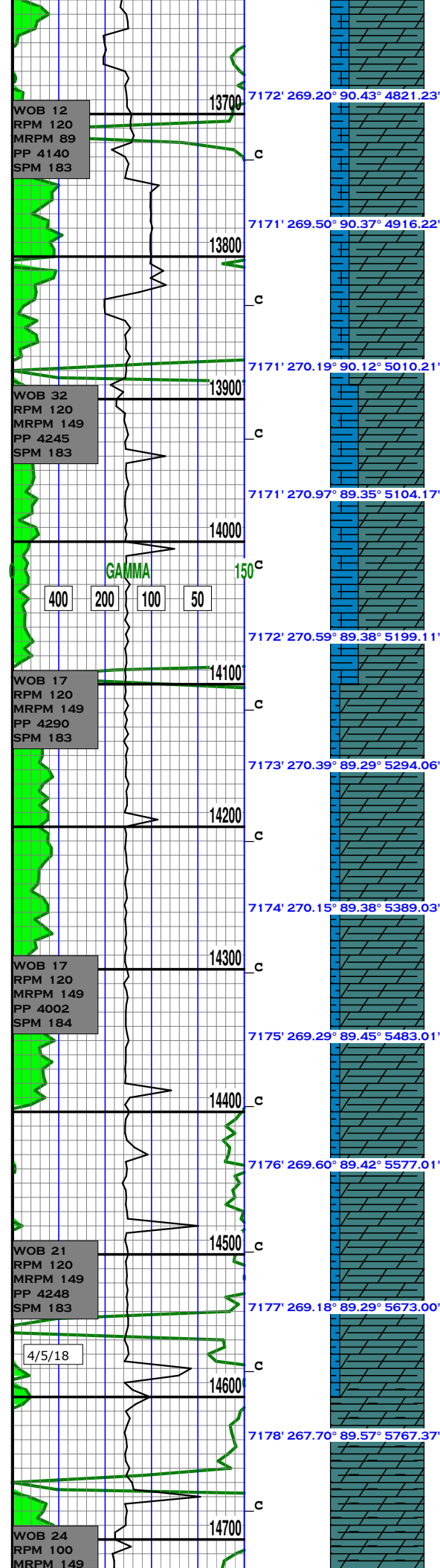
MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blky sb plty,  
sb wxy - wxy, sme dul - rthy, sli  
slty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blky sb plty,  
sb wxy - wxy, sme dul - rthy, sli  
slty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blky sb plty,  
sb wxy - wxy, sme dul - rthy, sli  
slty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blky sb plty,





sb wxy - wxy, sme dul - rthy, sli  
silty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blkly sb plty,  
sb wxy - wxy, sme dul - rthy, sli  
silty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blkly sb plty,  
sb wxy - wxy, sme dul - rthy, sli  
silty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

CHK: lt - m gyshbrn, pred sft, sme  
sb frm, v fri, sb blkly - sb plty, wxy,  
scat fos micfrags, l, r v calc  
MRL: m dk - v dk gryshblk, sme  
blk, v frm - v hd, brit, mod fis,  
smewht slty, rthy, rr pyr, mod calc

MRL: m dk - v dk gryshblk, sme blk,  
v frm - v hd, brit, mod fis, smewht  
slty, rthy, rr pyr, mod calc; CHK: lt -  
m gyshbrn, pred sft, sme sb frm, v  
fri, sb blkly - sb plty, wxy, scat fos  
micfrags, v calc

MRL: m dk - v dk gry, sme blk, hd  
- v hd inpt, brit, sli fis, blkly - sb  
plty, sb wxy - wxy, sme dul -  
rthy, sli silty tex, com Inoc mat,  
scat cocc incl, tr pyr; TR CHK: m -  
lt gy, frm - sb frm, wxy, sme Inoc  
fos mat, tr pyr, spl v cal thru

MRL: m dk - v dk gry, sme blk, hd  
- v hd inpt, brit, sli fis, blkly - sb plty,  
dul - rthy, occ slty tex, com Inoc  
mat, scat cocc incl, tr pyr; TR CHK:  
m - lt gy, frm - sb frm, wxy, tr fos  
mat

MRL: m dk - v dk gry, hd - frm, brit,  
sli fis, blkly - sb blkly, sb wxy - wxy,  
sme dul - rthy, com fos mat, scat  
cocc incl, tr pyr; TR CHK: m - lt  
brnshgy, sme mot, sb frm, v fri, wxy  
- sb wxy, scat Inoc fos mat, rr pyr

MRL: m dk - v dk gryshblk, sme  
blk, v frm - v hd, brit, mod fi, mod  
calc; CHK: lt - m gyshbrn, pred sft,  
sme sb frm, v fri, sb blkly - sb plty,  
wxy, scat fos micfrags

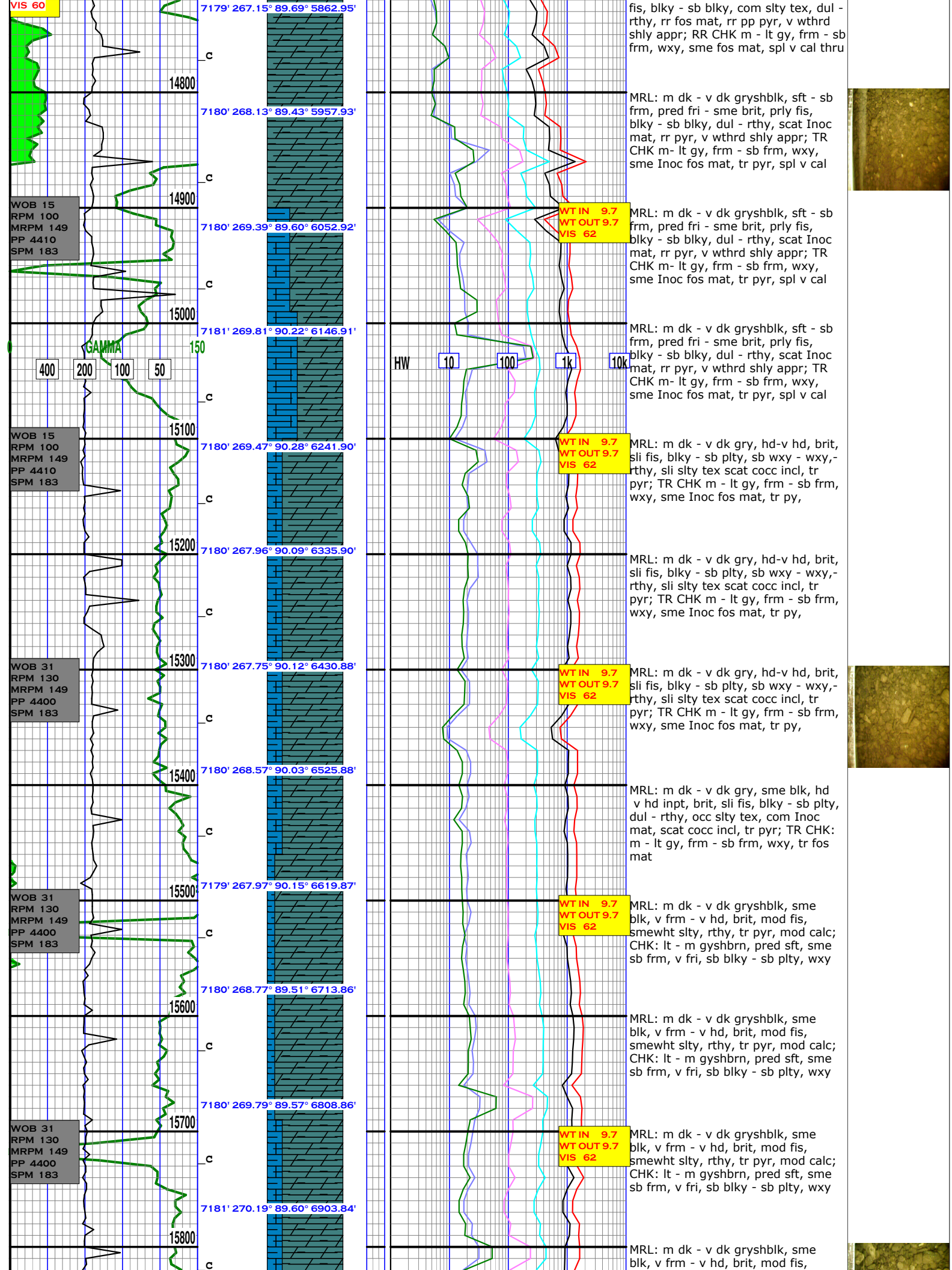
MRL: m dk - v dk gryshblk, sme  
blk, v frm - v hd, brit, mod fi, mod  
calc; CHK: lt - m gyshbrn, pred sft,  
sme sb frm, v fri, sb blkly - sb plty,  
wxy, scat fos micfrags

MRL: m dk - v dk gryshblk, sft - sb  
frm, pred fri - sme brit, prly fis, blkly  
- sb blkly, dul - rthy, scat Inoc mat,  
rr pyr, v wthrd shly appr; TR CHK m  
- lt gy, frm - sb frm, wxy, sme Inoc  
fos mat, tr pyr, spl v cal thru

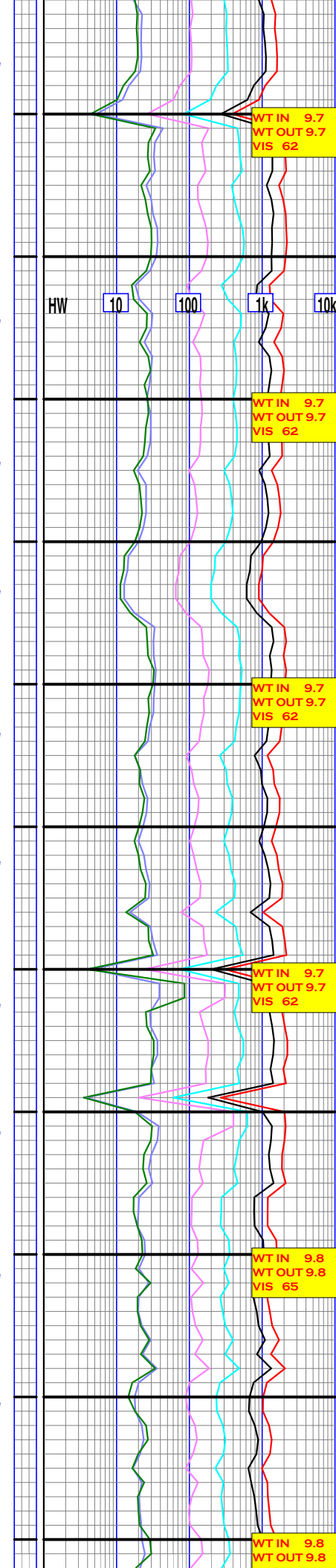
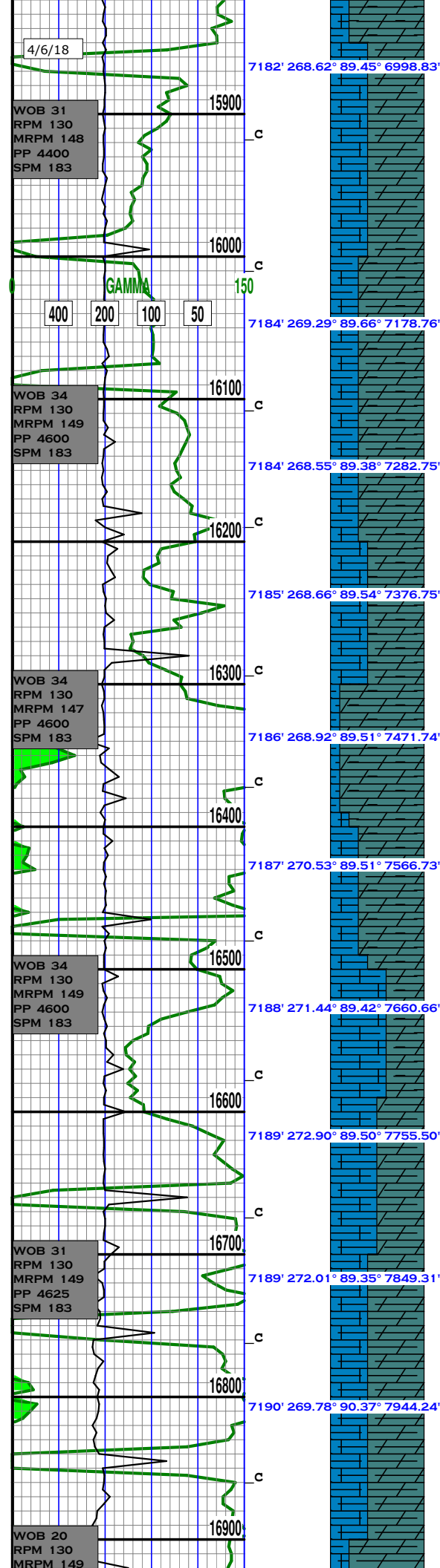
MRL: m - v dk gryshblk, sft - sb  
frm, sme hd, pred fri - sme brit, prly











smewht slty, rthy, tr pyr, mod calc;  
CHK: lt - m gyshbrn, pred sft, sme  
sb frm, v fri, sb blk - sb plty, wxy

CHK: m lt - m gy, sme lt gryshbn,  
sft, v fri, com cocc incl, scat fos  
micfrags, tr pyr, v calc MRL: m - v  
dk gy, pred hd, sme frm - sb hd,  
mod fis, pred blk, scat plty, rr  
micfrags, rr pyr, mod calc

CHK: m lt - m gy, sme lt gryshbn,  
sft, v fri, com cocc incl, scat fos  
micfrags, tr pyr, v calc MRL: m - v  
dk gy, pred hd, sme frm - sb hd,  
mod fis, pred blk, scat plty, rr  
micfrags, rr pyr, mod calc

MRL: m dk - v dk gryshblk, sme  
blk, v frm - v hd, brit, mod fis,  
smewht slty, rthy, tr pyr, mod calc;  
CHK: lt - m gyshbrn, pred sft, sme  
sb frm, v fri, sb blk - sb plty, wxy

CHK: v lt - m lt gy, scat  
gryshbn, sft - sb frm, v fri, sb blk,  
wxy, com cocc incl, scat fos frags,  
rr pyr; MRL: dk - vdkgrysh  
blk, sme blk, v frm - v hd, brit, mod  
fis, blk, sme sb plty, scat pyr

MRL: m dk - v dk gry, sme blk, hd  
- v hd inpt, brit, sli fis, blk - sb  
plty, sb wxy - wxy, sme dul -  
rthy, sli slty tex, com Inoc mat,  
scat cocc incl, tr pyr

MRL: dk - vdkgrysh blk, sme blk, v  
frm - v hd, brit, mod fis, blk, sme  
sb plty, scat pyr; CHK: v lt - m lt gy,  
scat gryshbn, sft - sb frm, v fri, sb  
blk, wxy, tr fos frags, rr pyr

CHK: lt - m brnshgy, lt - m gy, v sft  
- sft, v fri, mot thru, sb blk - sb  
plty, wxy, scat cocc incl, rr Inoc mat,  
rr frac fil calct; MRL: m - dk blkshgy,  
v frm - hd, brit, rthy, slty, rr pp pyr,  
sme fos mat, spl v calc thru

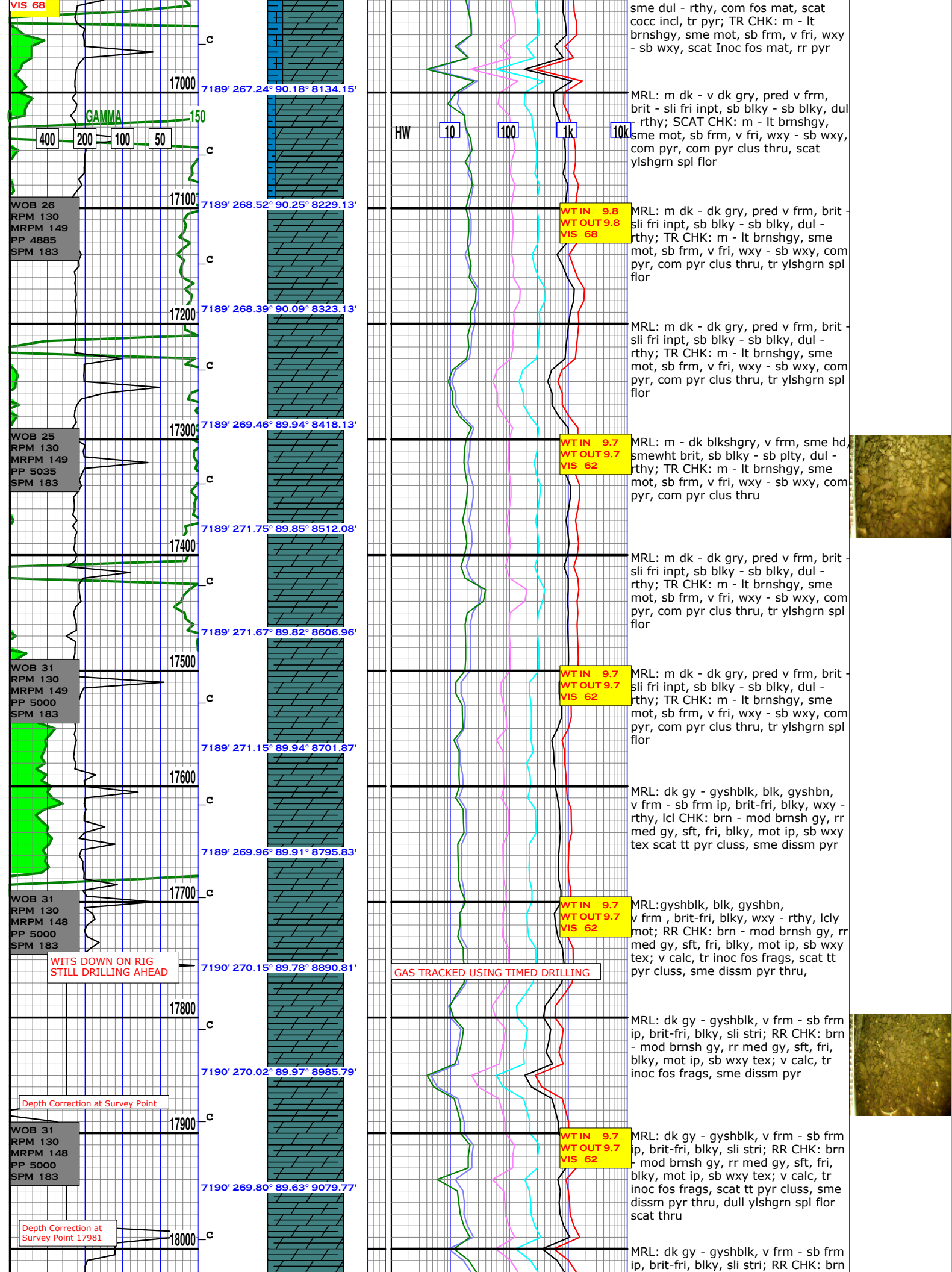
CHK: lt - m brnshgy, lt - m gy, v sft  
- sft, v fri, mot thru, sb blk - sb  
plty, wxy, com cocc incl, tr Inoc mat,  
rr frac fil calct; MRL: m - dk blkshgy,  
v frm - hd, brit, rthy, slty, spl  
v calc thru

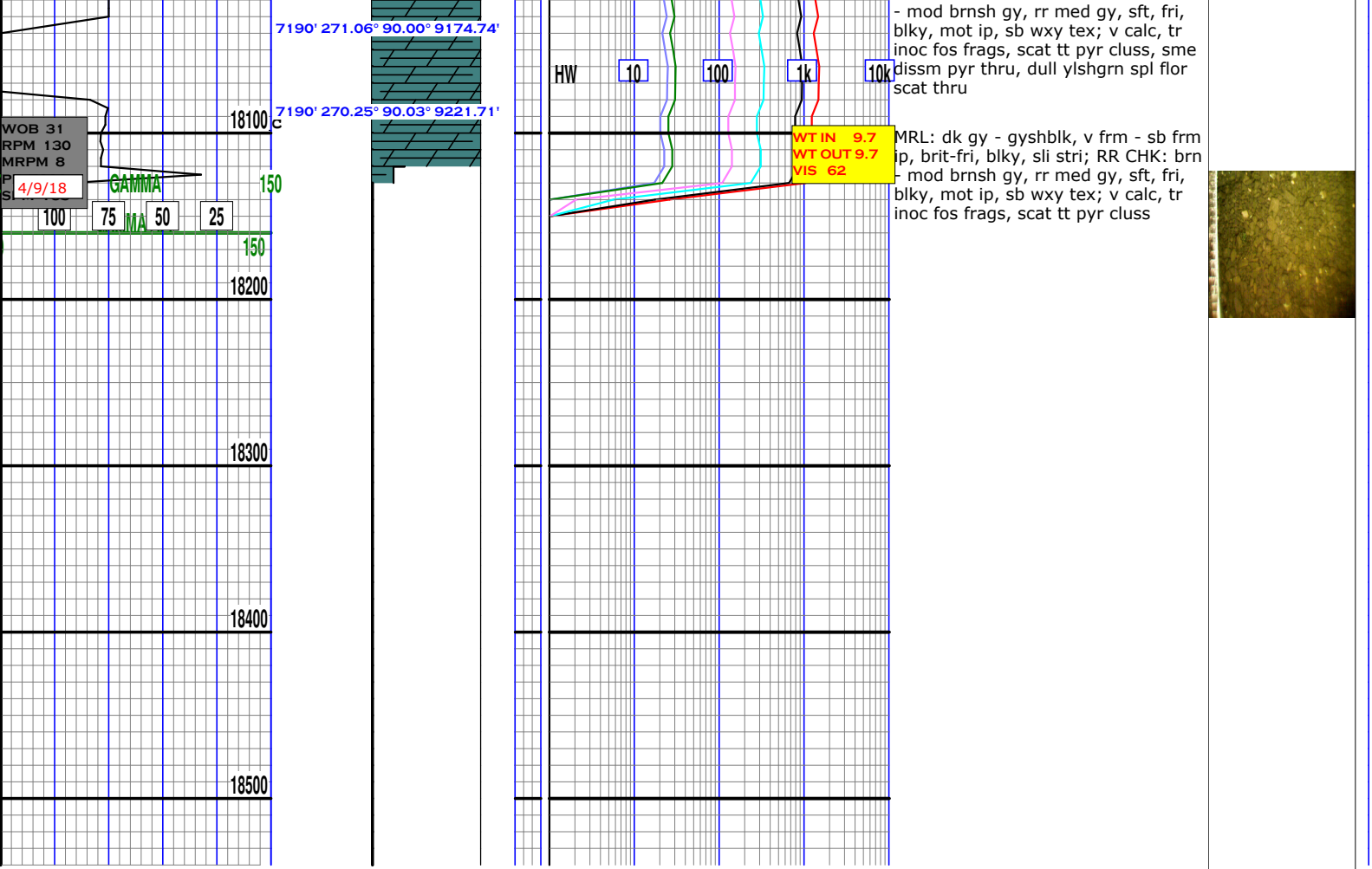
CHK: lt - m brnshgy, lt - m gy, v sft  
- sft, v fri, mot thru, sb blk - sb  
plty, wxy, tr Inoc mat, MRL: m - dk  
blkshgy, v frm - hd, brit, rthy, slty, tr  
pyr, sme fos mat, spl v calc thru

MRL: m dk - v dk gry, sme blk, hd -  
v hd inpt, brit, sli fis, blk - sb plty,  
sb wxy - wxy, sme dul - rthy, sli  
slty tex, com Inoc mat, scat cocc  
incl, tr pyr CHK m - lt gy, frm - sb  
frm, wxy, tr pyr

MRL: m dk - v dk gry, hd - frm, brit,  
sli fis, blk - sb blk, sb wxy - wxy,







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