



Company : Overseas Energy Holdings Ltd

Well : Westwood 1

Interval : -7.00 - 1686.98 meters

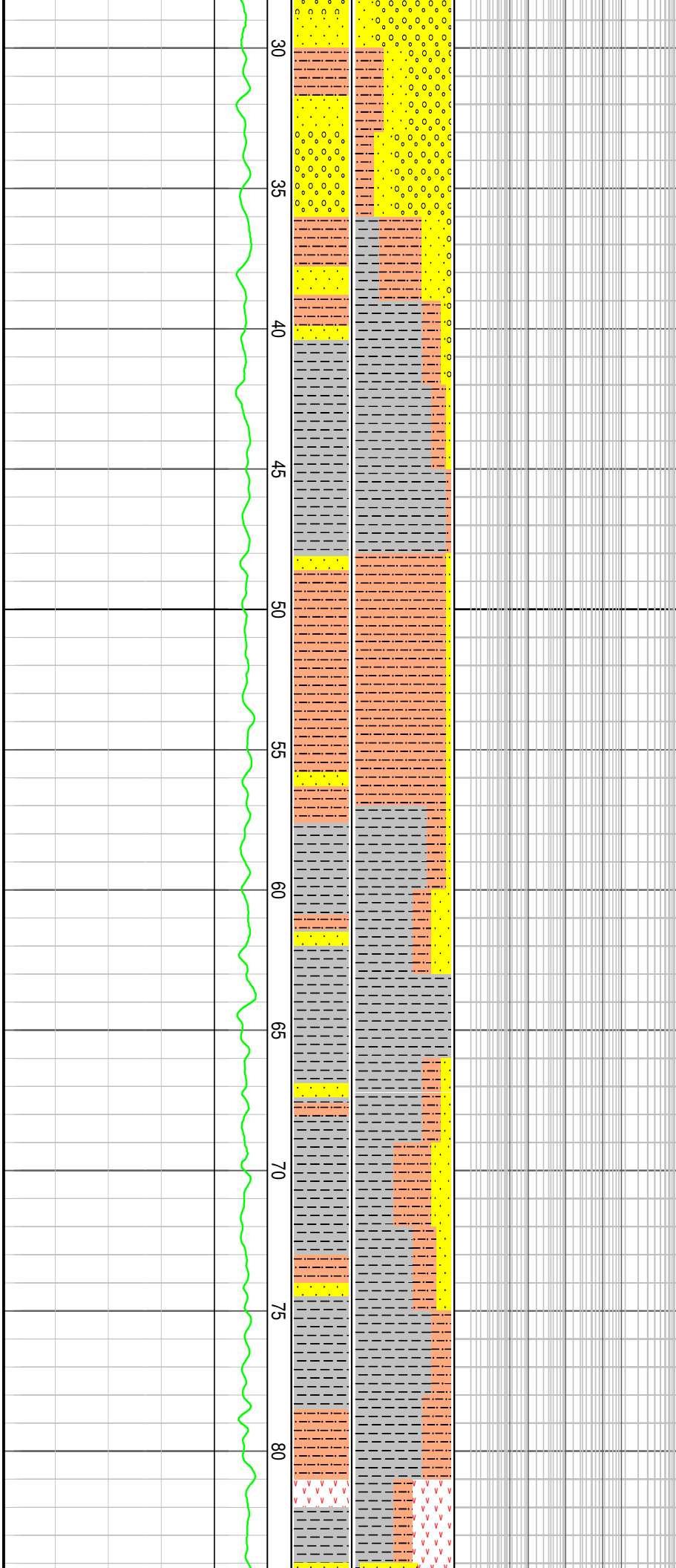
Created : 02/Jan/2010 3:54:40 PM



INTEQ

FORMATION EVALUATION LOG

ROP m/hr Gamma Ray API WOB klbf Surf RPM RPM	CORE MD meters	INTERPRETED LITHOLOGY	LITHOLOGY %	TOTAL GAS & RESISTIVITY Total Gas 0.1 1 10 100 %	OIL FLUORESCENCE P F G	CHROMATOGRAPH	REMARKS
						Methane ppm Ethane Propane iso-Butane n-Butane iso-Pentane n-Pentane ppm	
	1200						
	-5						
	0						
Spaulding Rig drilled 203mm(8") pilot hole to 112m with Air							
	5						
	10						
	15						
	20						
	25						

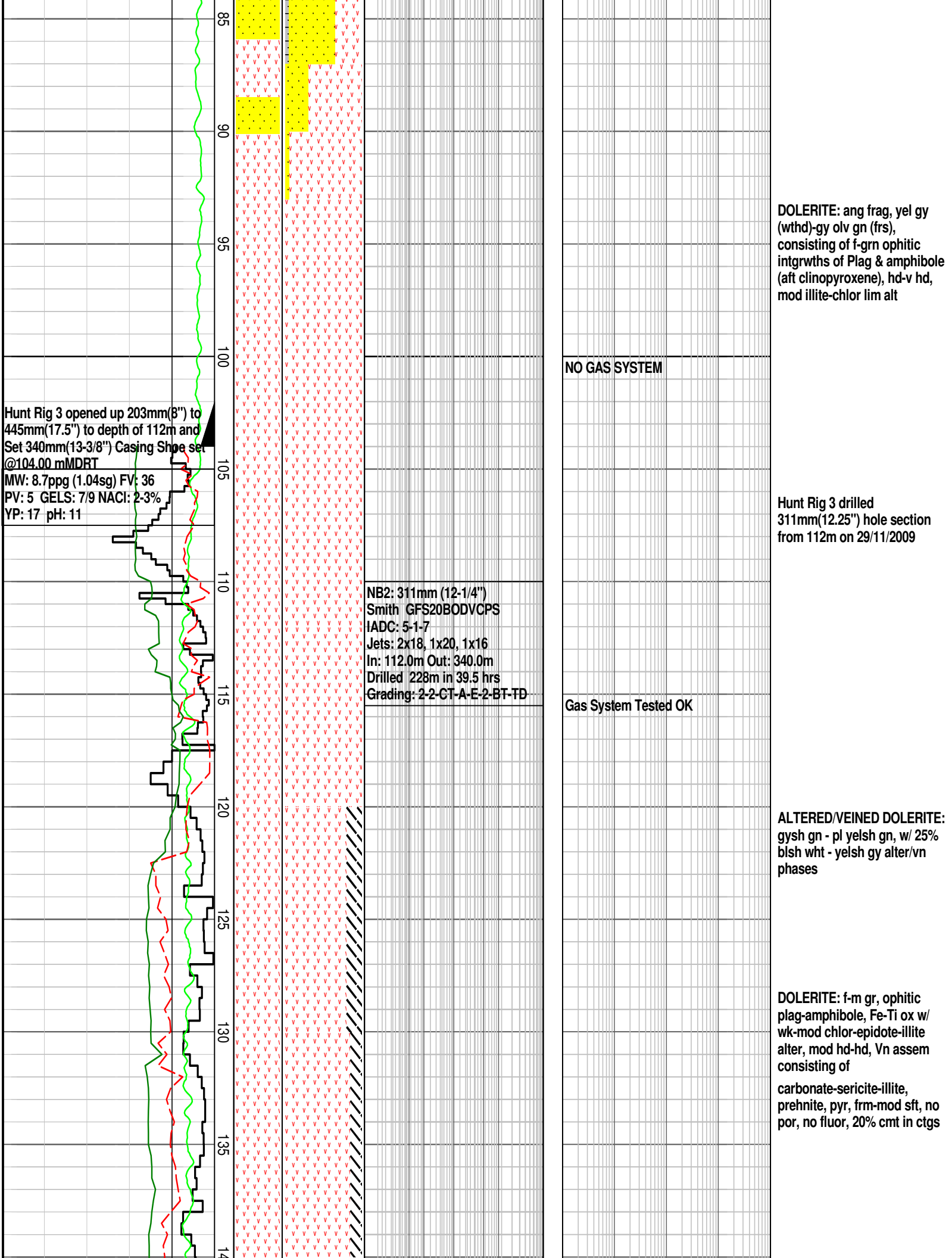


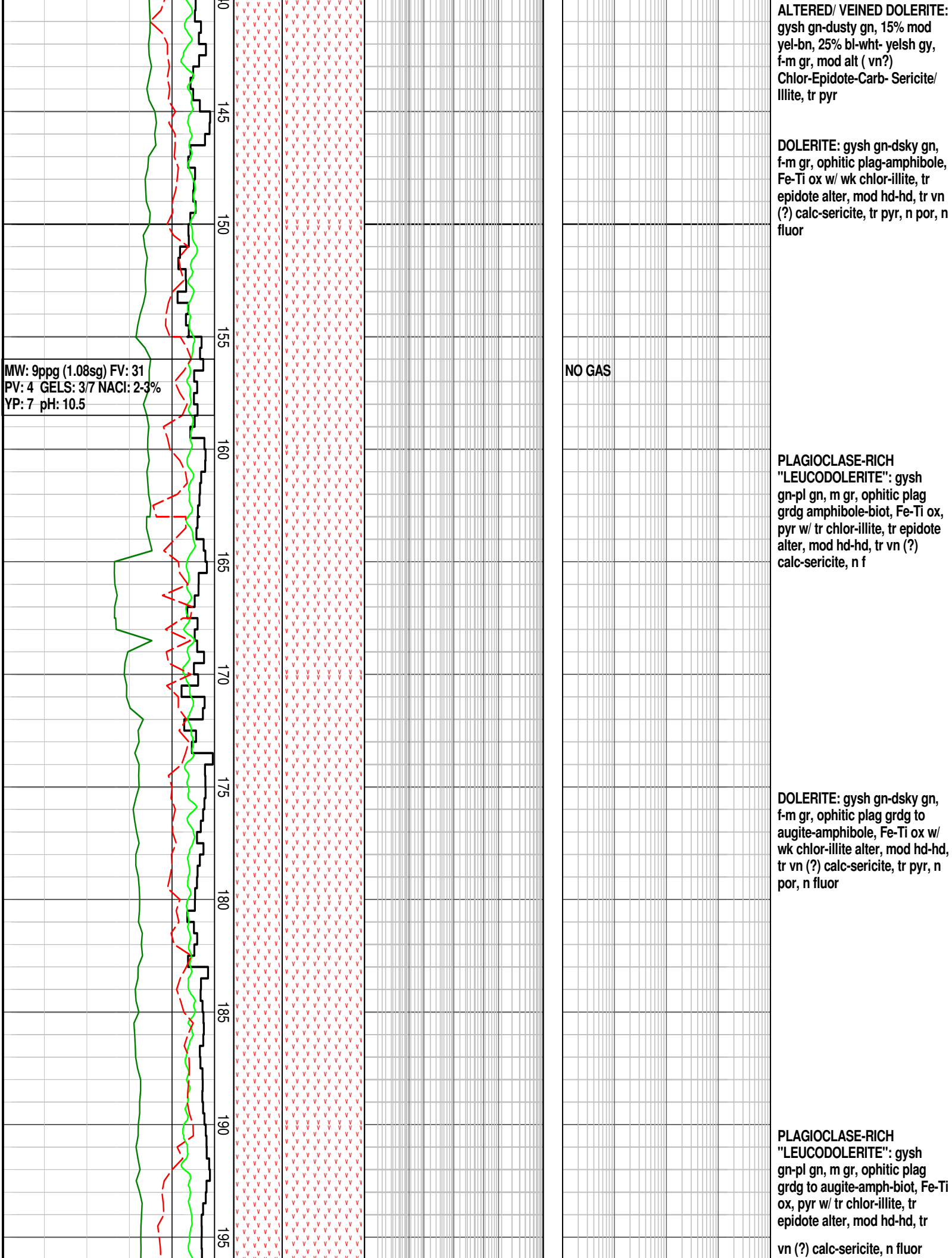
NO GAS SYSTEM

CLAYSTONE: mod rd brn, sft, sbblky

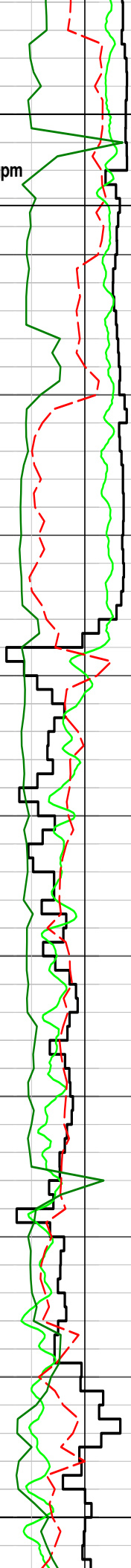
FELDSPATHIC SANDSTONE: off wht pl gy Plag fspr, m-v crs, sbang-sbrndd, pr srted, uncon, tr ang dolerite frag (Cvg?)

SILTSTONE: mod rd brn-gn gy, frm, sbblky-sbfis, loc aren

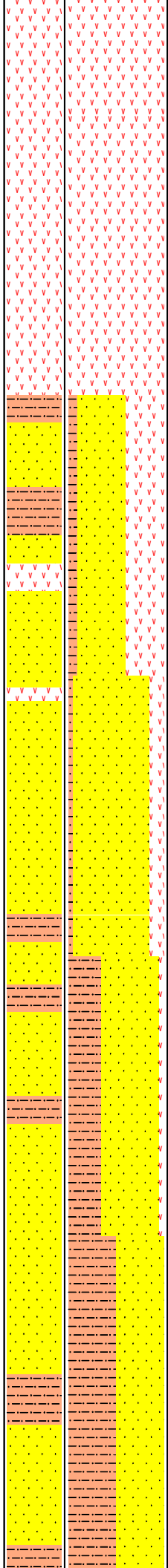




WOB: 2 - 34 klbf
RPM: 29 - 94
FLOW: 278 - 597 gpm
SPP: 256 - 563 psi



200
205
210
215
220
225
230
235
240
245
250



NO GAS

FG

SILTSTONE: mod yel,
blky-sbfis, frm-mod hd

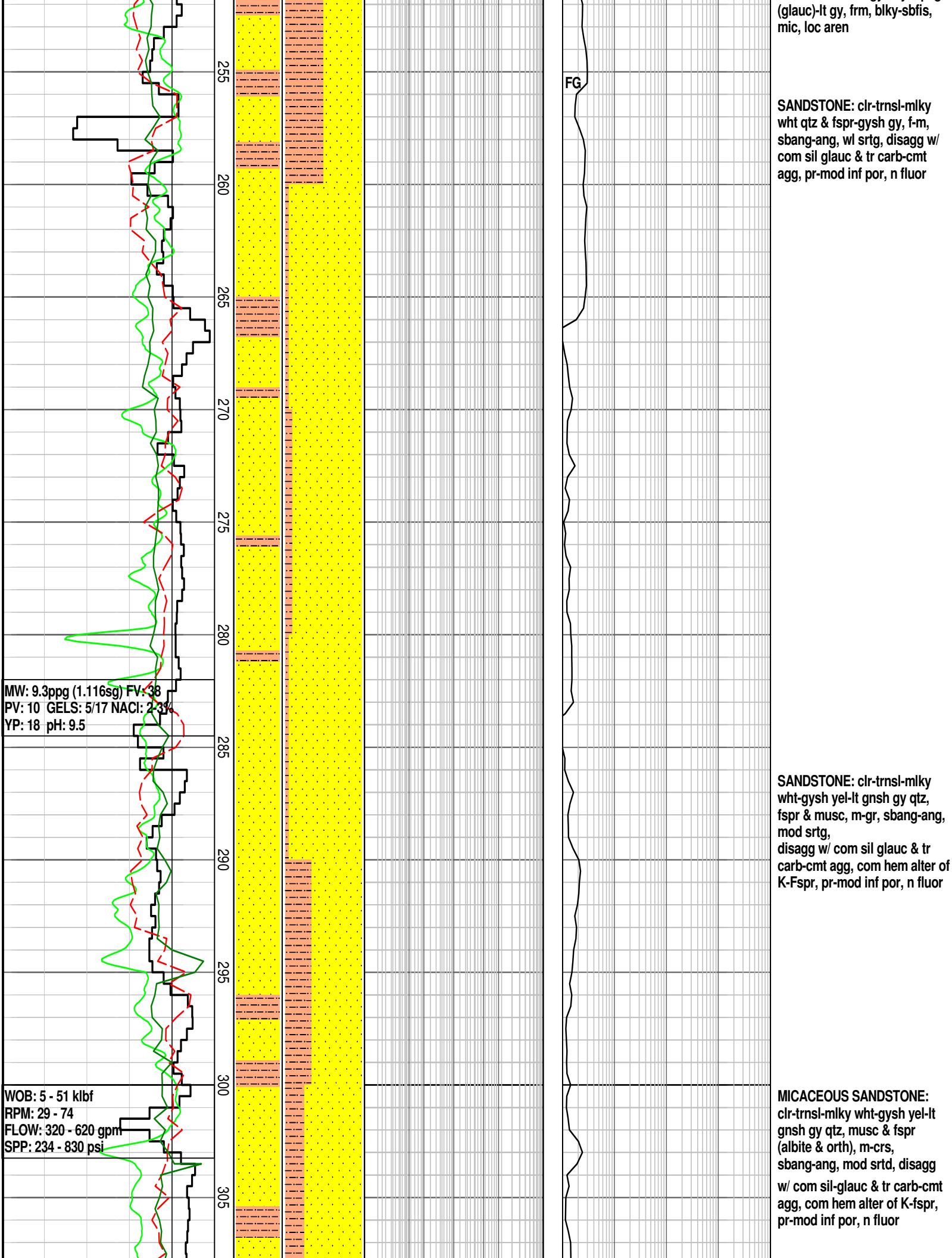
HORNFELS: yelsh gn-pl gn, vf,
epidote-chlor alter sltst chilled
dolerite

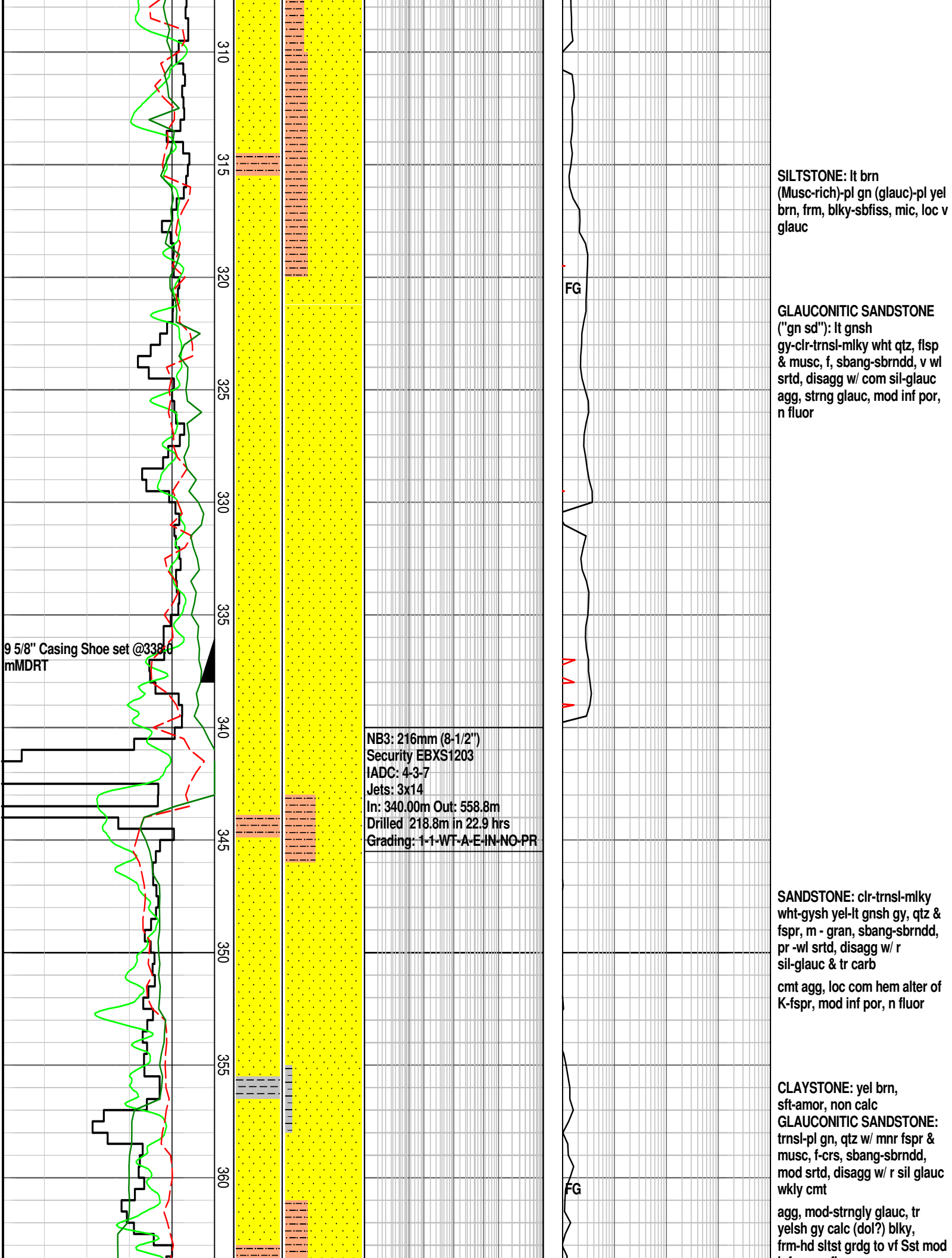
SANDSTONE: clr-trnsl-mlky
wht qtz fspr, m-crs,
sbang-sbrnodd, mod-pr srtg,
disagg w/ occ sil & carb-cmt
agg, tr glauc, pr-mod inf por, n
fluor

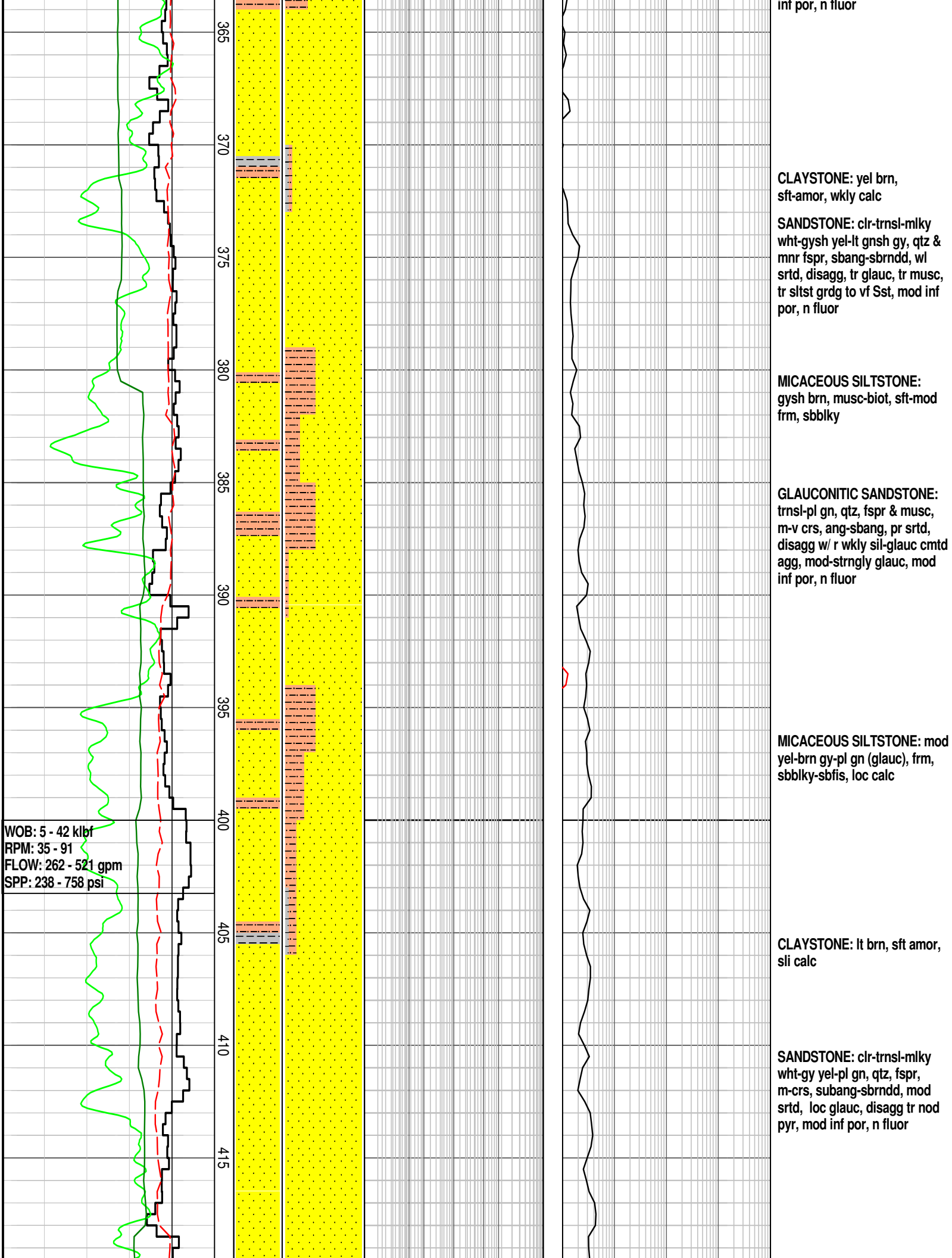
DOLERITE: gysh gn-dsky gn,
f-m gr, ophitic plag-amphibole,
Fe-Ti ox w/ wk chlor-illite alter,
mod hd-hd, tr vn (?)
calc-sericite, tr pyr, n por, n
fluor

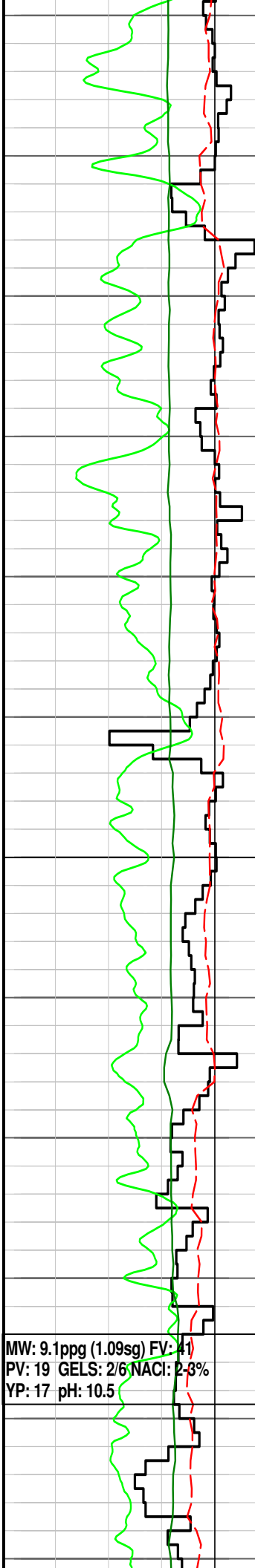
SILTSTONE: mod yel-pl yelsh
brn-pl gn (glauc)- lt gy,
blky-sbfiss, loc aren, carb frag,
sft-frm

SILTSTONE: olv gy-m yel-pl gn

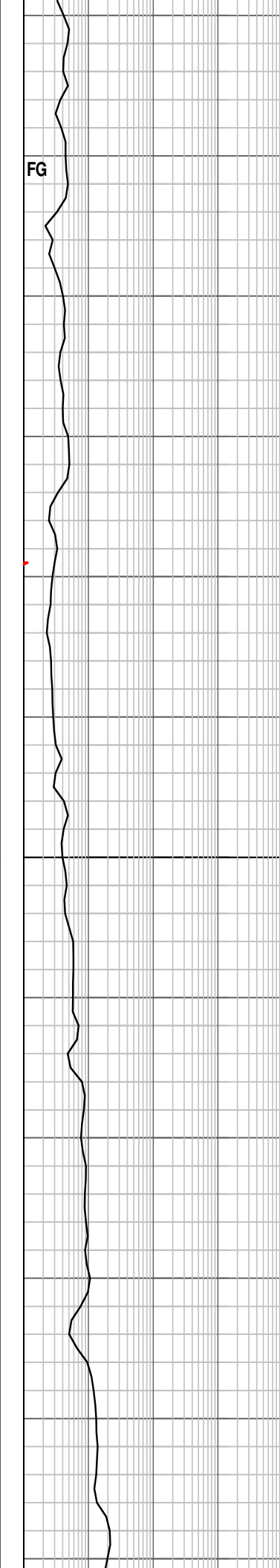
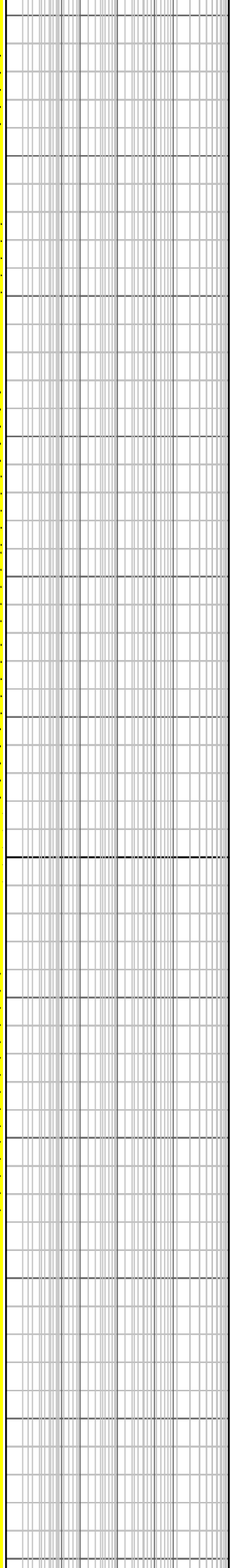
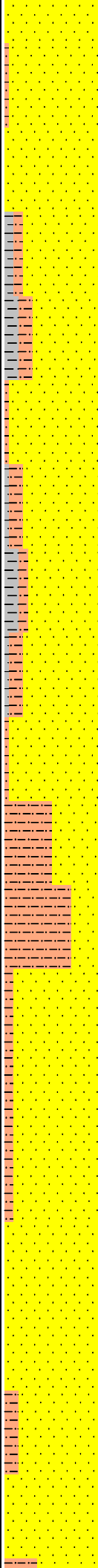
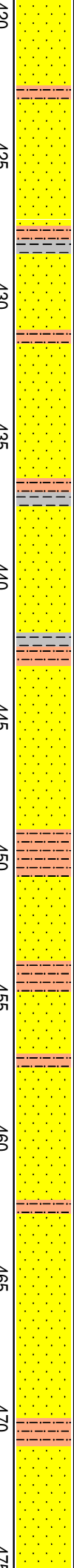








420
425
430
435
440
445
450
455
460
465
470
475



SILTSTONE: pl olv-lt brn, frm, blk, loc aren, v f biot/carb flks(?)

GLAUCONITIC SANDSTONE: trns-l pl gn, qtz, fspr & musc, m, sbang, wl srt, disagg w/ r wkly cmt, mod-strngly glauc, mod inf por, n fluor

CLAYSTONE: lt brn, sft amor, sli calc

SILTSTONE: pl olv-lt brn, frm, blk, loc aren, v f biot & musc

SANDSTONE: clr-trns-l mlky wht-gysh yel-pl gn, qtz, fspr, m, ang-subang, wl srt, loc mod glauc, disagg, tr nod pyr, mod inf por, n fluor

SILTSTONE: pl olv-lt brn, frm, blk, loc aren, v f biot & musc

SANDSTONE: clr-trns-l mlky wht-gysh yel-pl gn, qtz, fspr, f-v crs, ang-subang, pr srt, loc mod glauc, disagg, mod inf por, n fluor

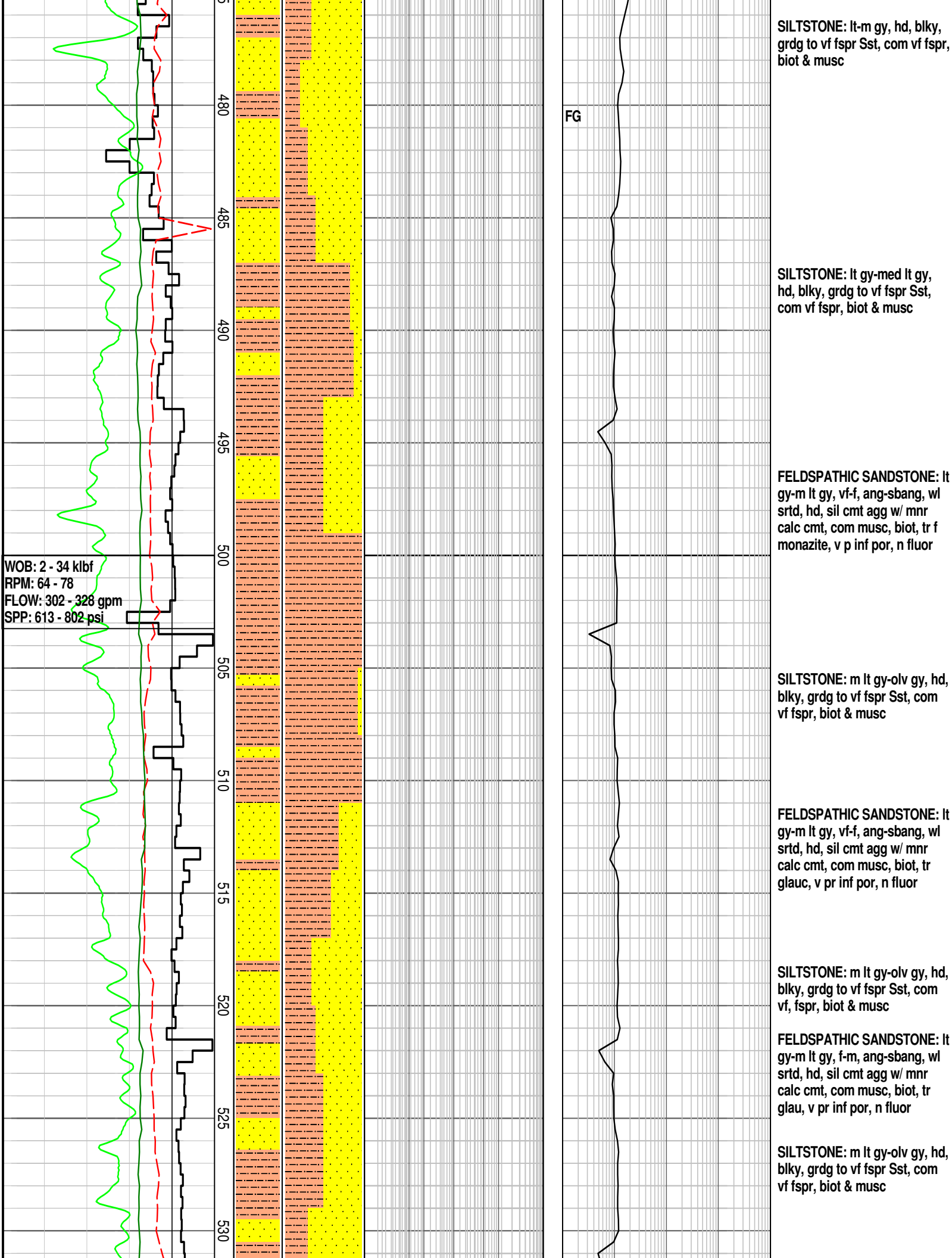
SILTSTONE: lt gy, frm, blk, grdg to vf Sst, com vf, fspr, biot & musc

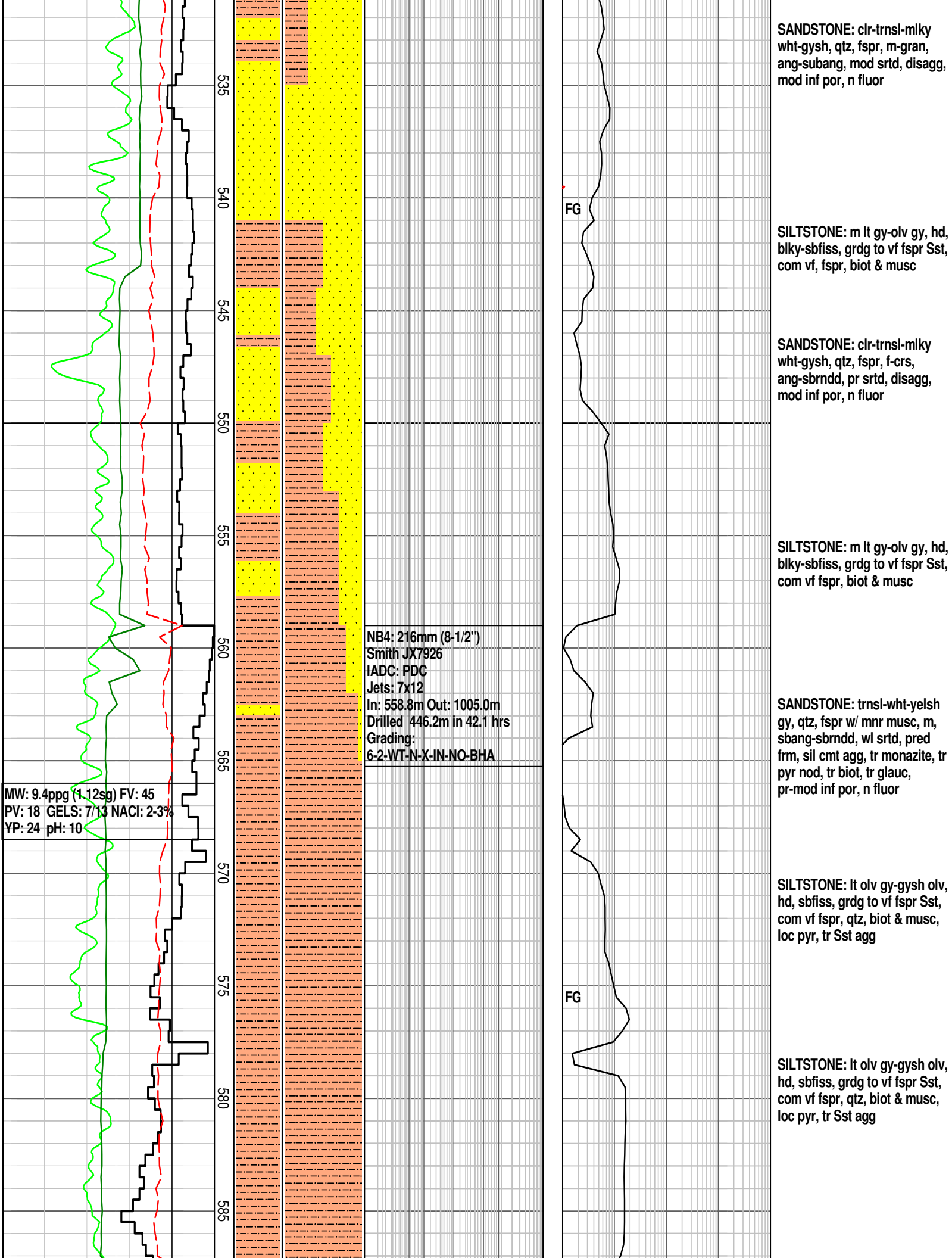
MICACEOUS SANDSTONE: clr-trns-l mlky wht-gysh yel-lt gy qtz, fspr, f-v crs, ang-sbang, wl srt, sil cmt, p inf por, n fluor

SANDSTONE: clr-trns-l mlky wht-gysh yel-pl gn, qtz, fspr, f-v crs, ang-subang, pr srt, loc mod glauc, com calc cmt, f sd agg, mod inf por, n fluor

MICACEOUS SANDSTONE: clr-trns-l mlky wht-gysh yel-lt gy qtz, fspr, musc & biot, vf-f, sbang-ang, wl srt, sil cmt agg, pr inf por, n fluor

MW: 9.1ppg (1.09sg) FV: 41
PV: 19 GELS: 2/6 NACI: 2-3%
YP: 17 pH: 10.5





WOB: 8 - 39 klbf
RPM: 65 - 107
FLOW: 272 - 456 gpm
SPP: 407 - 1250 psi

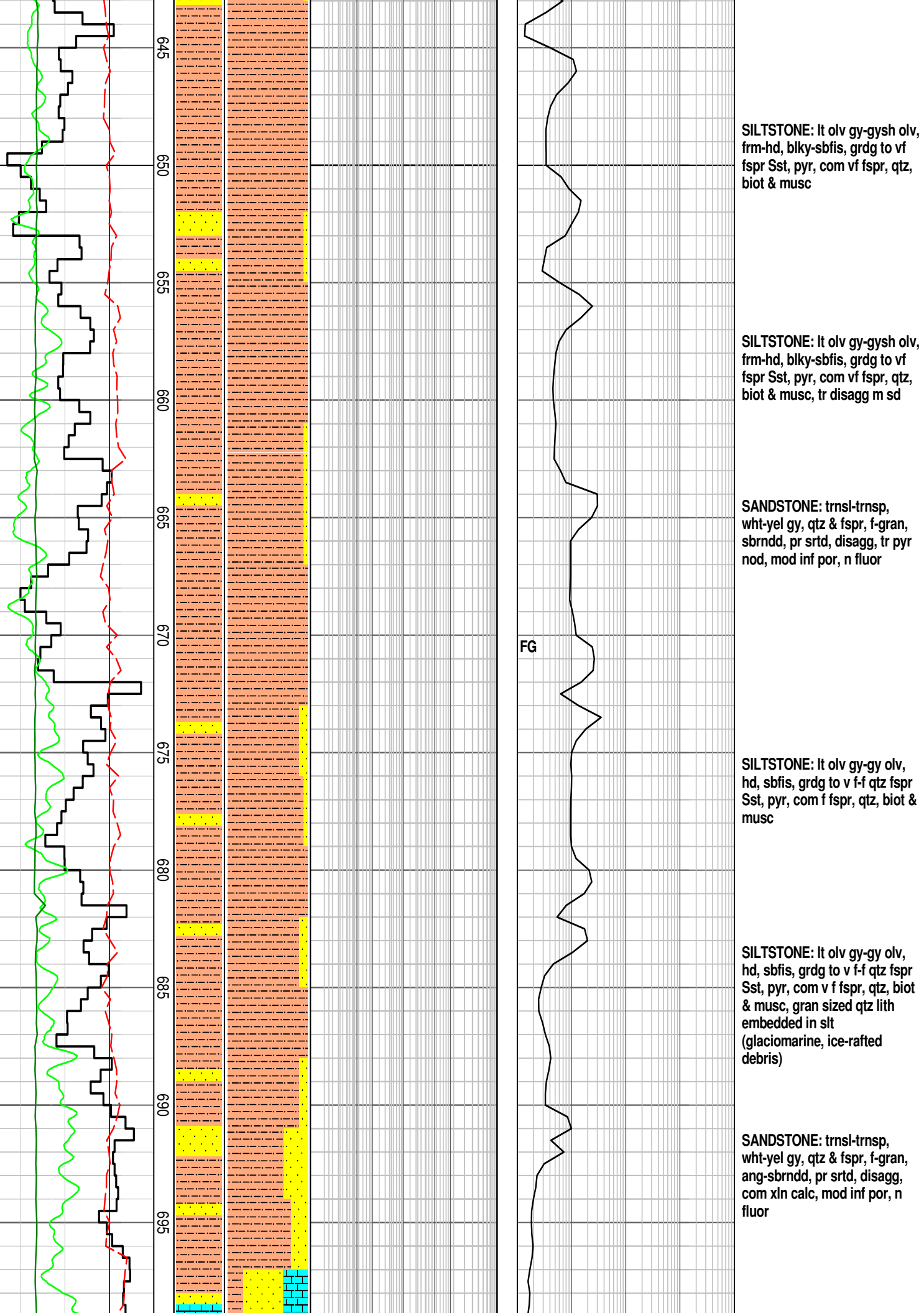
590
595
600
605
610
615
620
625
630
635
640

SANDSTONE: trnsl-wht-yelsh
gy, qtz, fspr w/ mnr musc, f-m,
sbang-sbrnodd, wl srtd, pred
frm, sil cmt agg, tr monazite, tr
pyr nod, tr biot, tr glauc,
pr-mod inf por, n fluor

FG

SANDSTONE: trnsl-wht-yelsh
gy, qtz, mnr fspr , f-crs,
sbrnodd, pr srtd, disagg, tr pyr
nod, pr-mod inf por, n fluor

SILTSTONE: lt olv gy-gysh olv,
frm-hd, blk-y-sbfis, grdg to vf
fspr Sst, pyr, com vf fspr, qtz,
biot & musc



SILTSTONE: lt olv gy-gysh olv, frm-hd, blk-y-sbfis, grdg to vf fspr Sst, pyr, com vf fspr, qtz, biot & musc

SILTSTONE: lt olv gy-gysh olv, frm-hd, blk-y-sbfis, grdg to vf fspr Sst, pyr, com vf fspr, qtz, biot & musc, tr disagg m sd

SANDSTONE: trns-l-trnsp, wht-yel gy, qtz & fspr, f-gran, sbrndd, pr srted, disagg, tr pyr nod, mod inf por, n fluor

FG

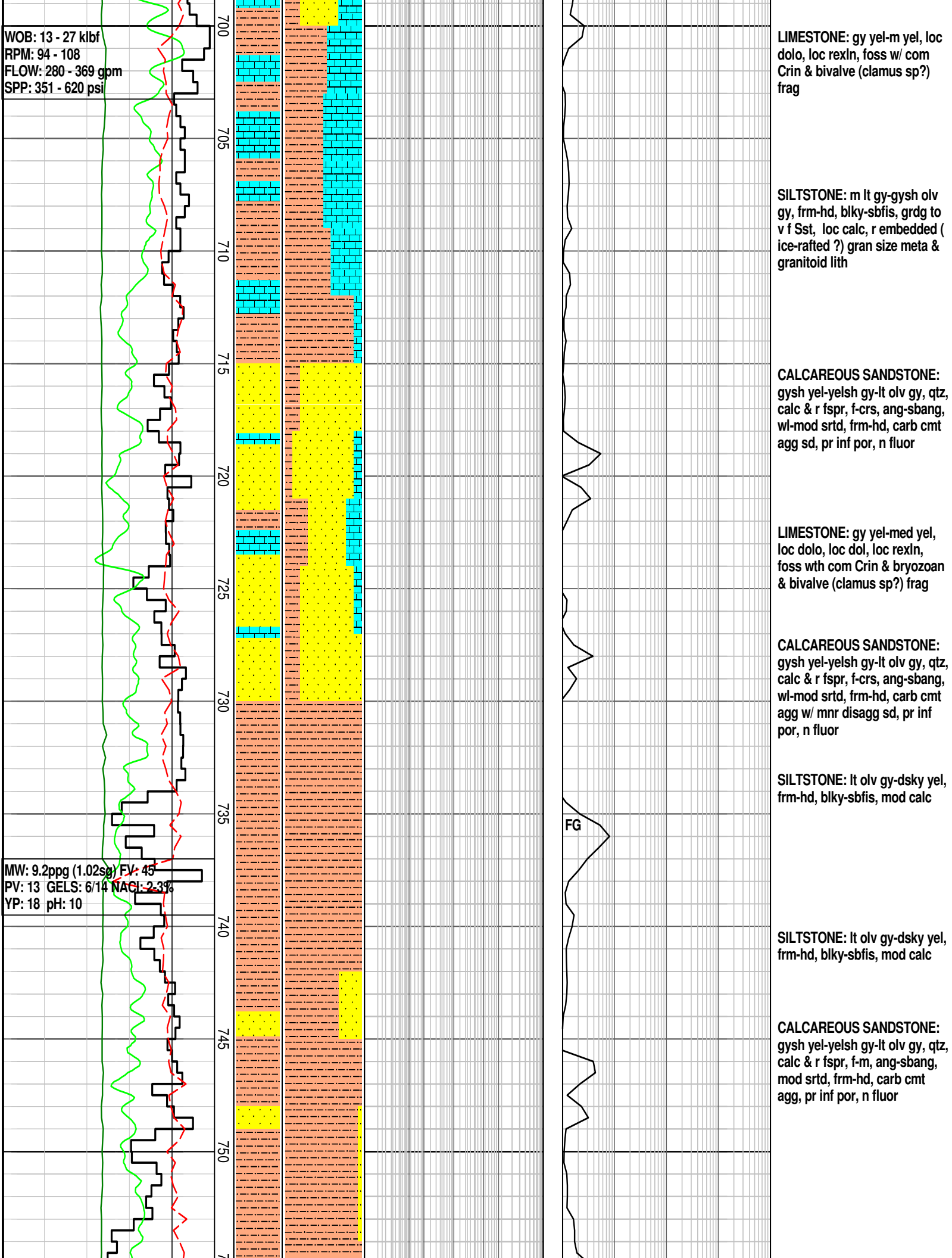
SILTSTONE: lt olv gy-gy olv, hd, sbfis, grdg to v f-f qtz fspr Sst, pyr, com f fspr, qtz, biot & musc

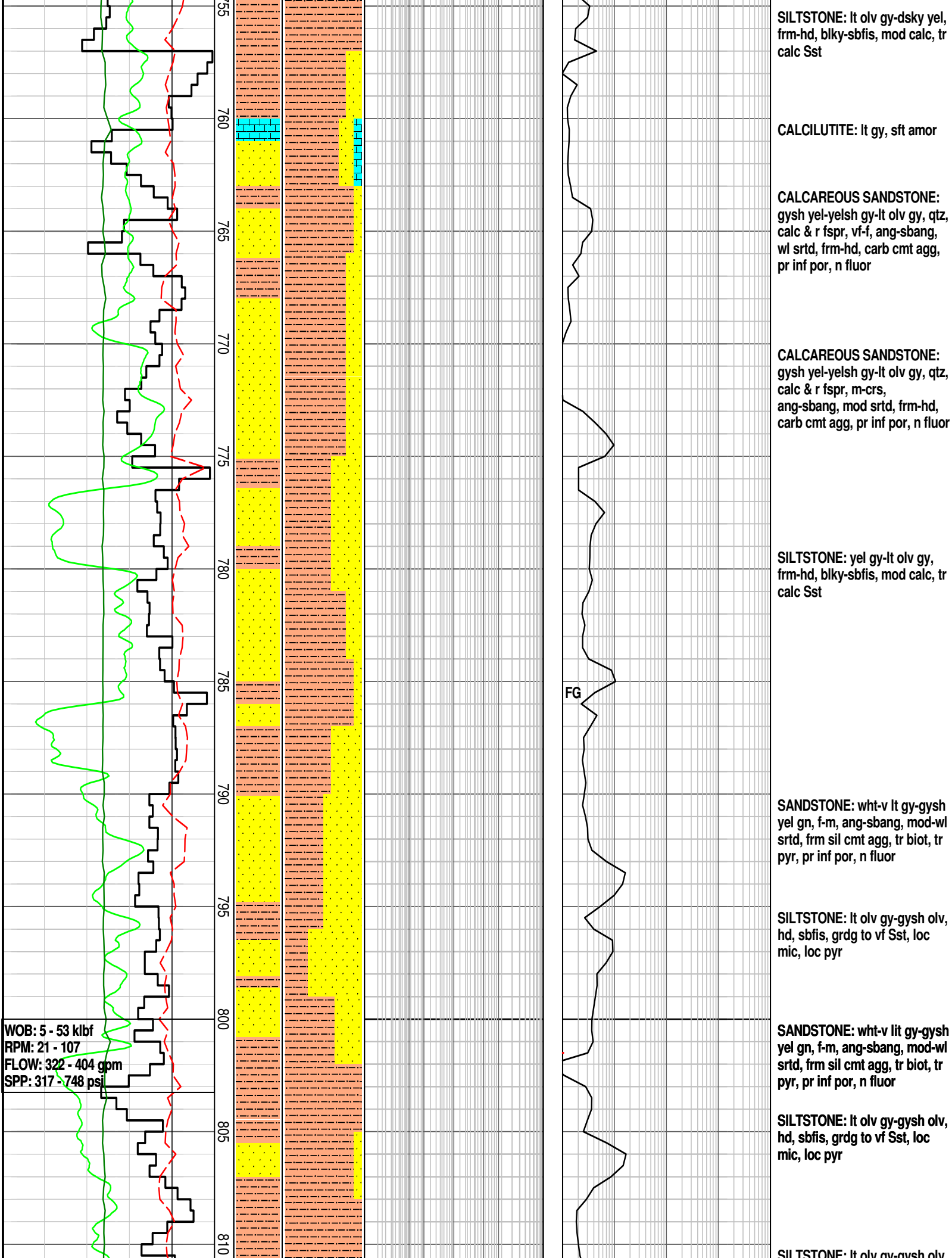
SILTSTONE: lt olv gy-gy olv, hd, sbfis, grdg to v f-f qtz fspr Sst, pyr, com v f fspr, qtz, biot & musc, gran sized qtz lith embedded in slt (glaciomarine, ice-rafted debris)

SANDSTONE: trns-l-trnsp, wht-yel gy, qtz & fspr, f-gran, ang-sbrndd, pr srted, disagg, com xln calc, mod inf por, n fluor

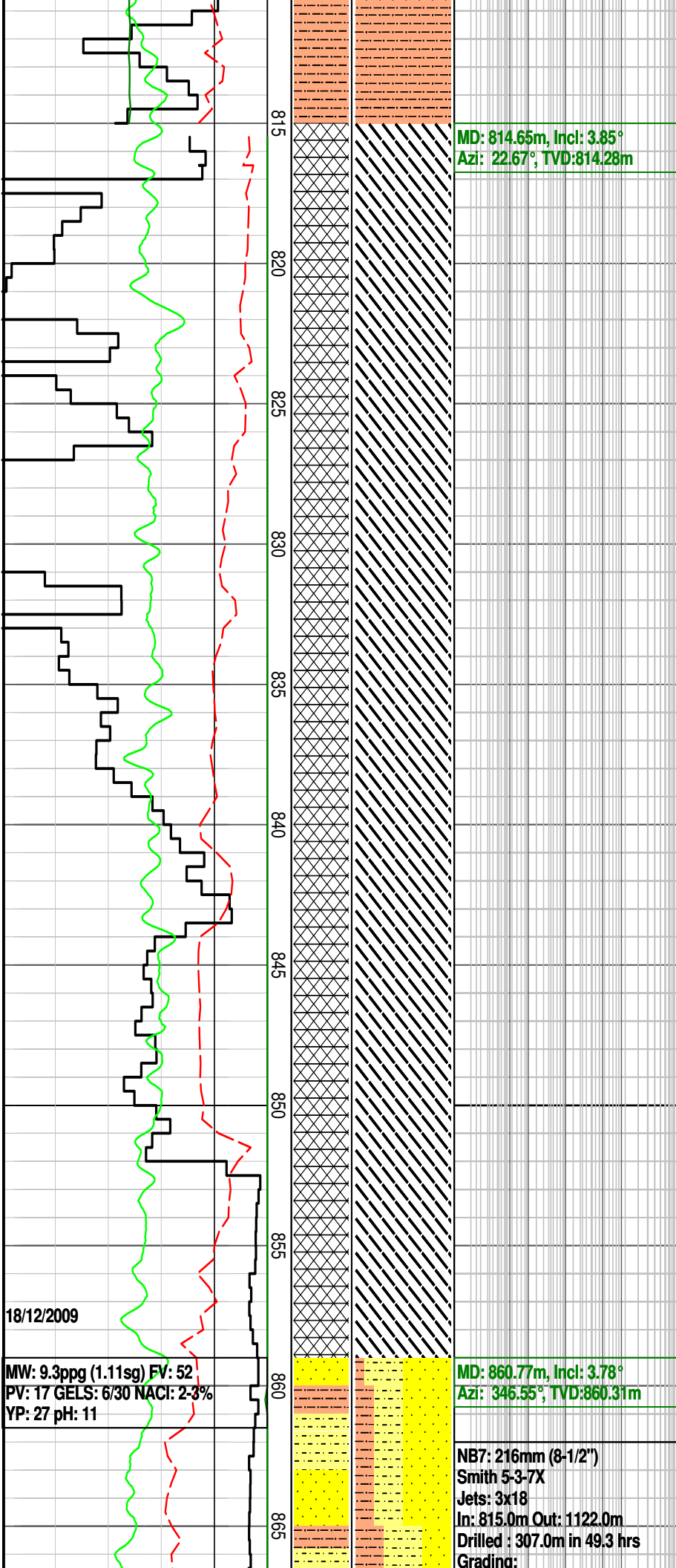
WOB: 13 - 27 klbf
RPM: 94 - 108
FLOW: 280 - 369 gpm
SPP: 351 - 620 psi

MW: 9.2ppg (1.02sg) FV: 45
PV: 13 GELS: 6/14 NACL: 2.3%
YP: 18 pH: 10



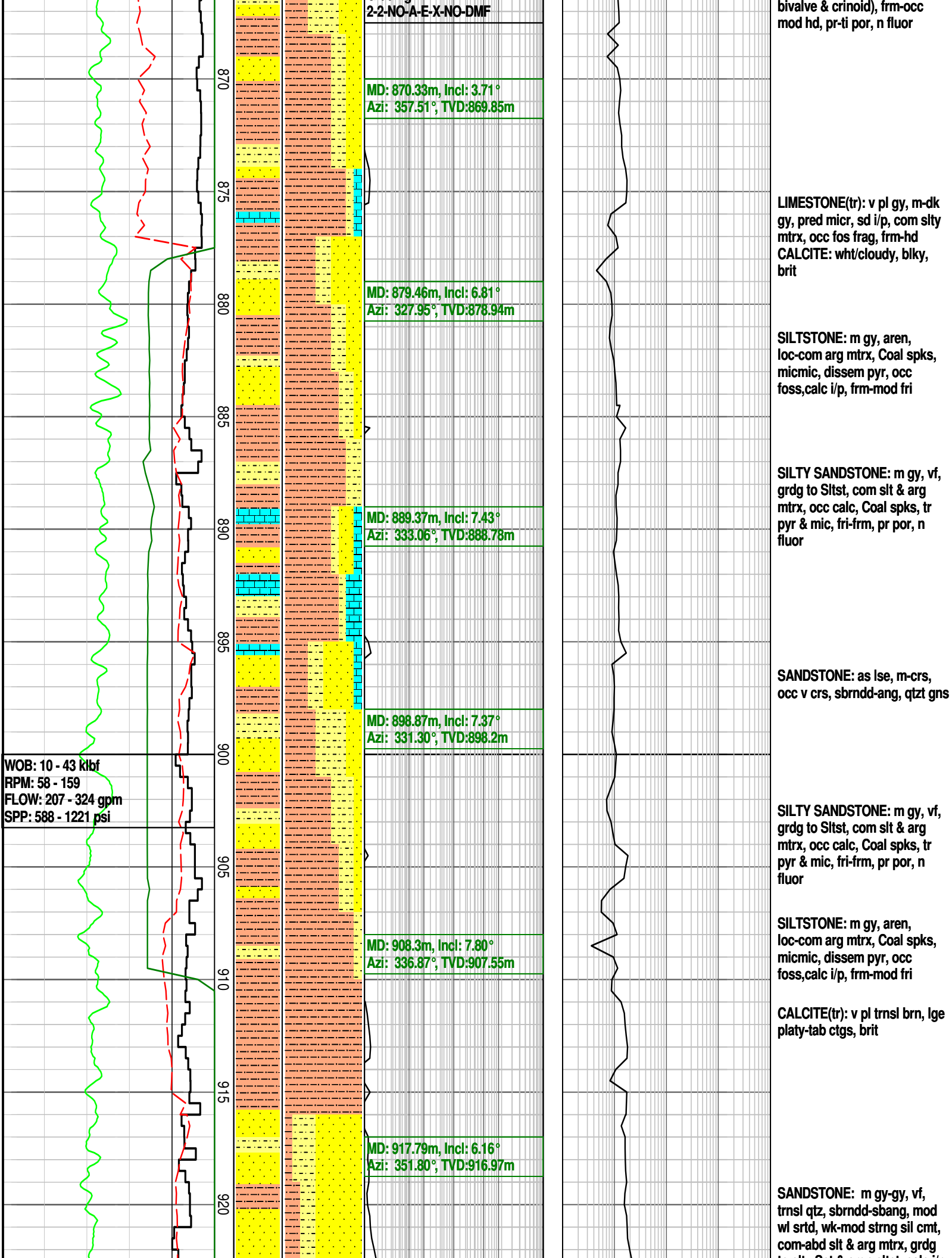


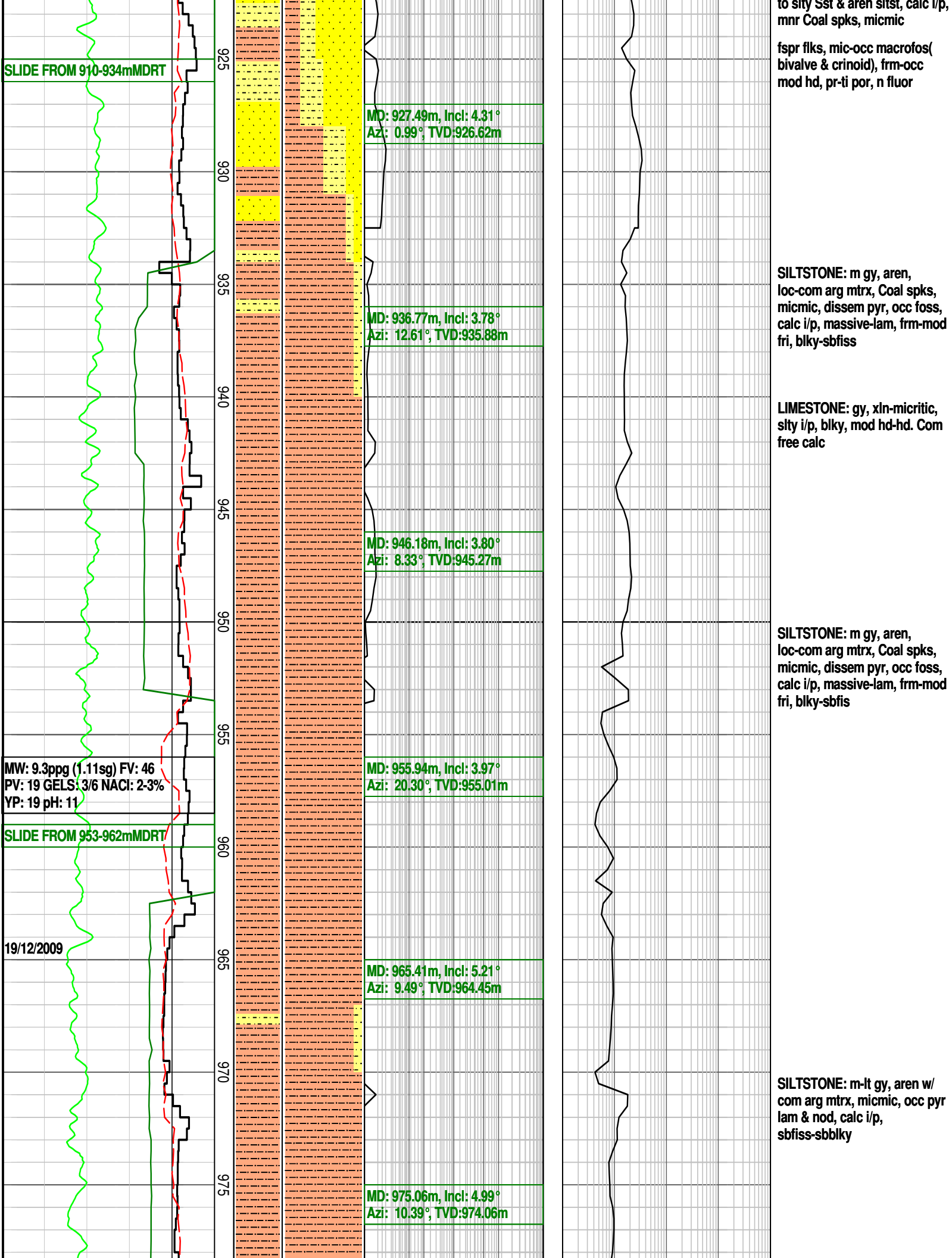
SLT: 10-15% m gy, gy, m, w,
hd, sbfis, grdg to vf Sst, loc
mic, loc pyr, tr qtz gran, tr Sst

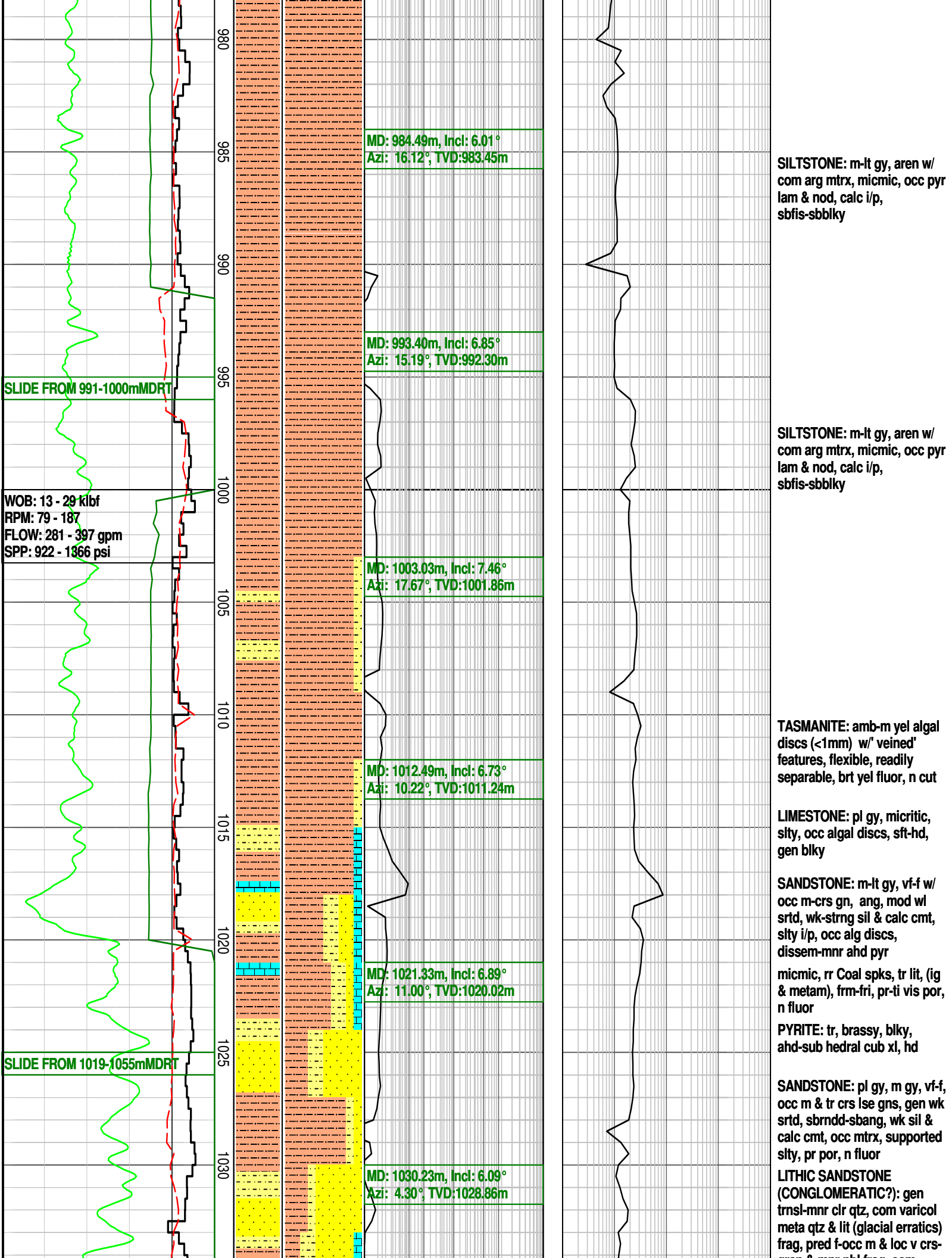


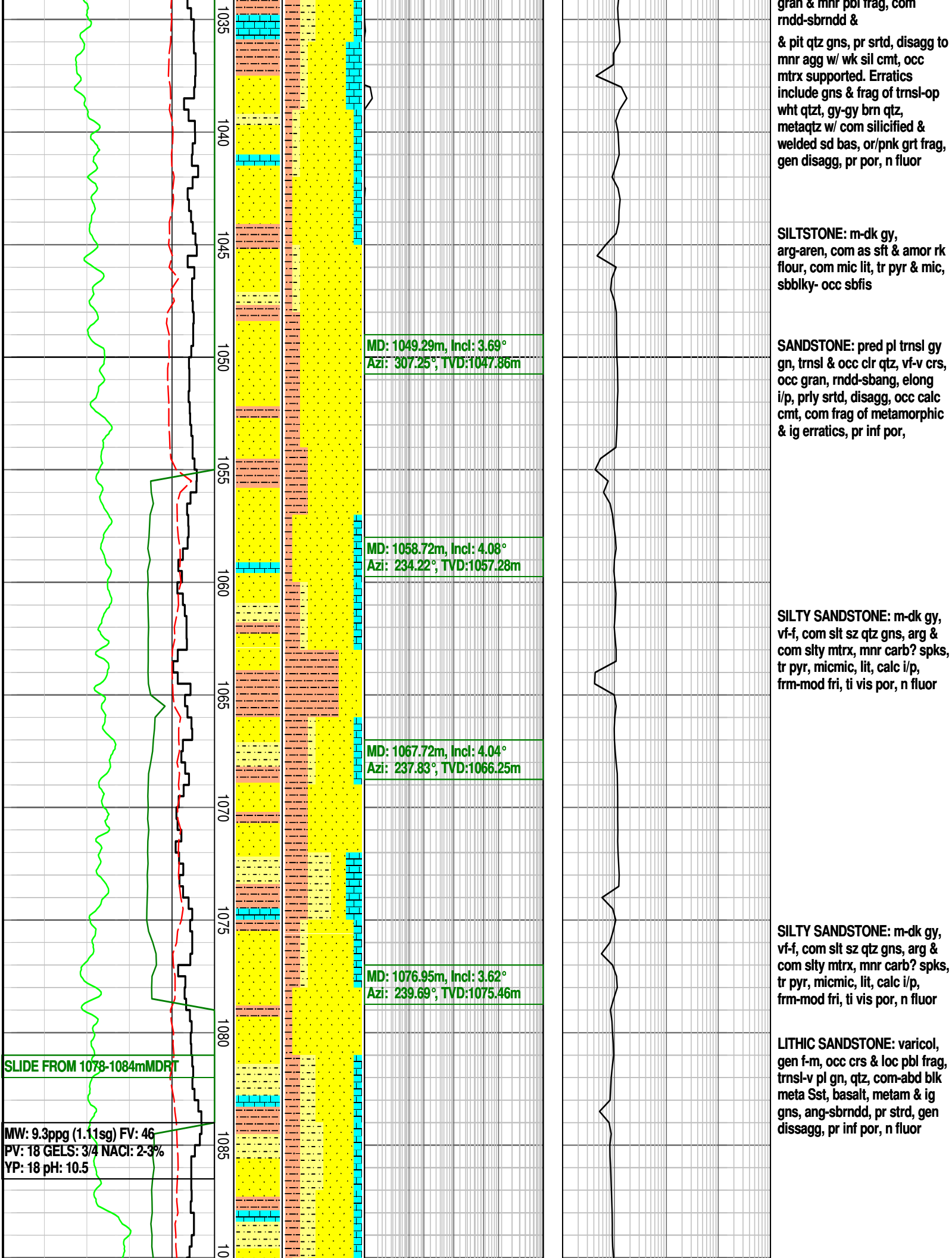
Sidetrack WESTWOOD1 ST1
@860.0m MDRT on 19 DEC
2009 at 00:30 Hrs

SANDSTONE: m gy-gy, vf-f,
occ m, trnsi qtz, sbrndd-sbang,
mod wl srtd, wk-mod strng sil
cmt, com-abd slit & arg mtrx,
grdg to slty Sst & aren sltst,
calc i/p, mnr Coal spks,
micmic
fspr flks, mic-occ macrofos(









20/12/2009

SLIDE FROM 1093-1102mMDRT

WOB: 11 - 25 kbf
RPM: 80 - 173
FLOW: 248 - 395 gpm
SPP: 1024 - 1364 psi

SLIDE FROM 1112-1121mMDRT

MW: 9.3ppg (1.11sg) FV: 44
PV: 19 GELS: 3/4 NACI: 2-3%
YP: 16 pH: 10.5

10m DEPTH CORRECTED AFTER
BIT TRIP

SAMPLES FROM 1123.0mMDRT ARE
10.0m DEPTH CORRECTED
START RECORDING DATA F/1117m

SLIDE FROM 1127-1155mMDRT

90
1095
1100
1105
1110
1115
1120
1125
1130
1135
1140
1145

MD: 1107.58m, Incl: 7.35°
Azi: 314.52°, TVD:1106.00m

carbide check at possum belly

MD: 1117.22m, Incl: 9.10°
Azi: 319.84°, TVD:1115.54m

NB8: 216mm (8-1/2")
Smith PJ4480
Jets: 3x18
In: 1112.0m Out: 1389.0m
Drilled : 277.0m in 60.9 hrs
Grading:
3-2-NO-A-E-X-NO-DMF

MD: 1126.42m, Incl: 8.71°
Azi: 317.80°, TVD:1124.63m

MD: 1135.59m, Incl: 6.39°
Azi: 314.77°, TVD:1133.72m

MD: 1144.80m, Incl: 3.29°
Azi: 320.98°, TVD:1142.99m

SILTSTONE: m-dk gy,
arg-aren, com as sft & amor rk
flour, com mic lit, tr pyr & mic,
sbbiky- occ sbfis

META SILTSTONE: dk gy,
aren, gen silicif, com mic on
clvg surf, shaly, fis-sbfis,
splnty i/p

META SILTY SANDSTONE:
blk-v dk gy, vf, sbrn-dd-sbang,
wl srtd, silicif agg, slty lam i/p,
com calc cmt, blk-occ sb fis,
n por, n fluor

LITHIC SANDSTONE: varicol,
gen f-m, occ crs & loc pbl frag,
trns-l-v pl gn, qtz, com-abd blk
meta Sst, basalt, metam & ig
gns, ang-sbrn-dd, pr strd, gen
dissagg, pr inf por, n fluor

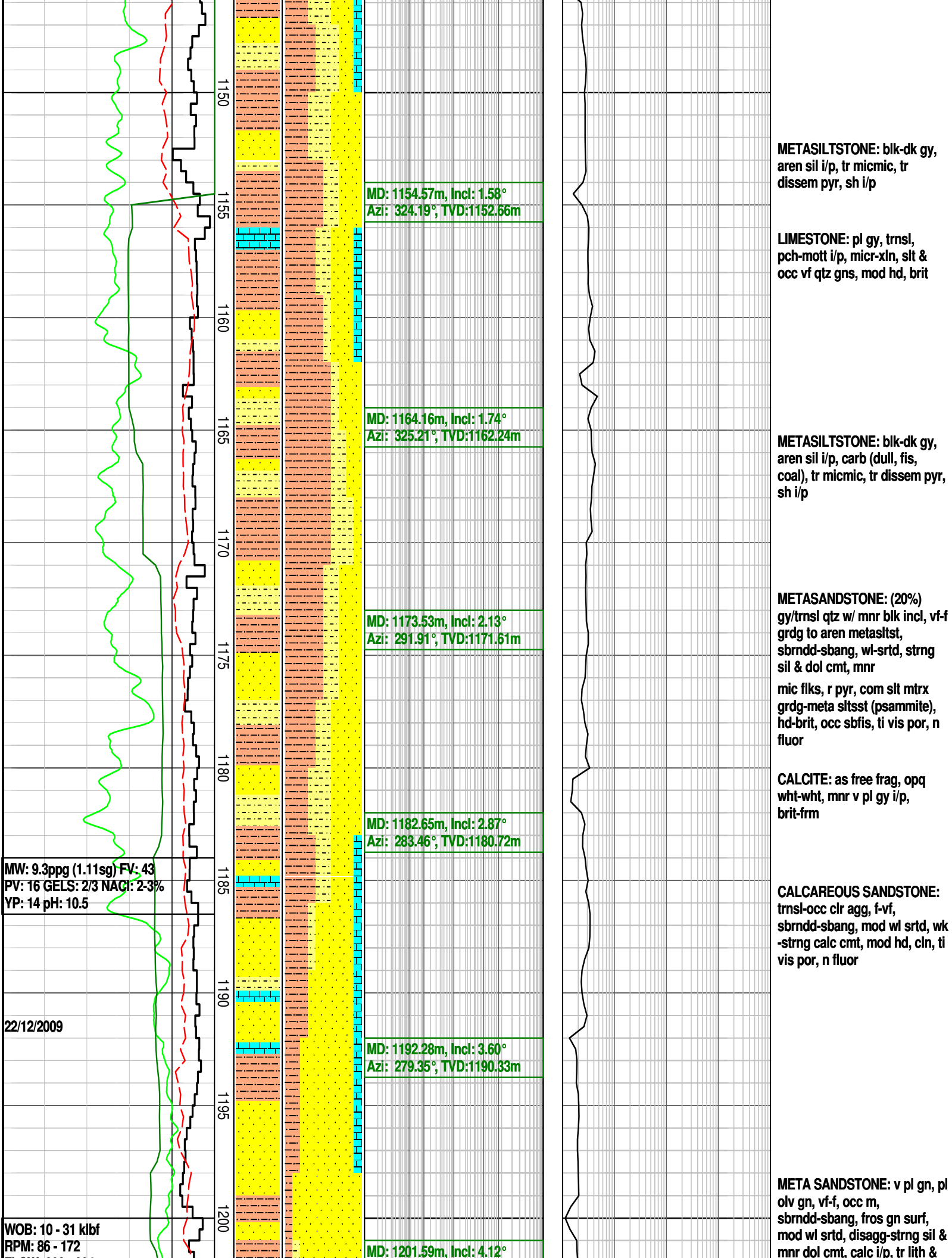
LIMESTONE: mott, m-lt gy, occ
off wht, pred xln, slty i/p, mod
hd-hd, blk-y

SANDSTONE: f-m, mod wl
srtd, sbrn-dd-sbang,
disagg-occ strng sil cmt, calc
i/p, occ slt mtrx, pr inf por, no
fluor

SILTY SANDSTONE: m-dk gy,
f-vf grdg to aren Sltst, occ m,
sbrn-dd-sbang, mod wl srtd,
wk-mod strng calc cmt, com
slty mtrx, tr micmic, mod fri, pr
vis por, n fluor

META SILTSTONE: dk gy,
aren, gen silicif, com mic on
clvg surf, shaly, fis-sbfis,
splnty i/p

META SANDSTONE: as above
w/ 10% pbl frag, trns-l-wht qtz,
n fluor



FLOW: 292 - 394 gpm
SPP: 1138 - 1394 psi

Azi: 273.45°, TVD:1199.62m

pyr, mod hd, ti inf por, n fluor

SLIDE FROM 1207-1228mMDRT

META SILTY SANDSTONE: m
brn-brnsh blk, vf grdg to sltst,
silicif, micmic, calc i/p, brit-frn

MW: 9.3ppg (1.11sg) FV: 40
PV: 17 GELS: 3/4 NACI: 2-3%
YP: 16 pH: 10.5

MD: 1229.54m, Incl: 3.47°
Azi: 189.10°, TVD:1227.57m

META SANDSTONE: pl gy gn,
pl gn-trnsl wht qtz, vf-m, occ
crs, tr gran & pbl frag, pr srted ,
sbrn-dd-sbang, occ wl rnd,
elong i/p, occ frosted gn surf,
silicif agg w/ com ocld mtrx &
mtrx & metallic sheen, occ blk
liths, phyl slty lam i/p, gran-xln
tex, hd-v hd, ti por, n fluor

MD: 1239.14m, Incl: 4.06°
Azi: 188.67°, TVD:1237.09m

metallic sheen, occ blk liths,
phyl slty lam i/p, gran-xln tex,
hd-v hd, ti por, n fluor

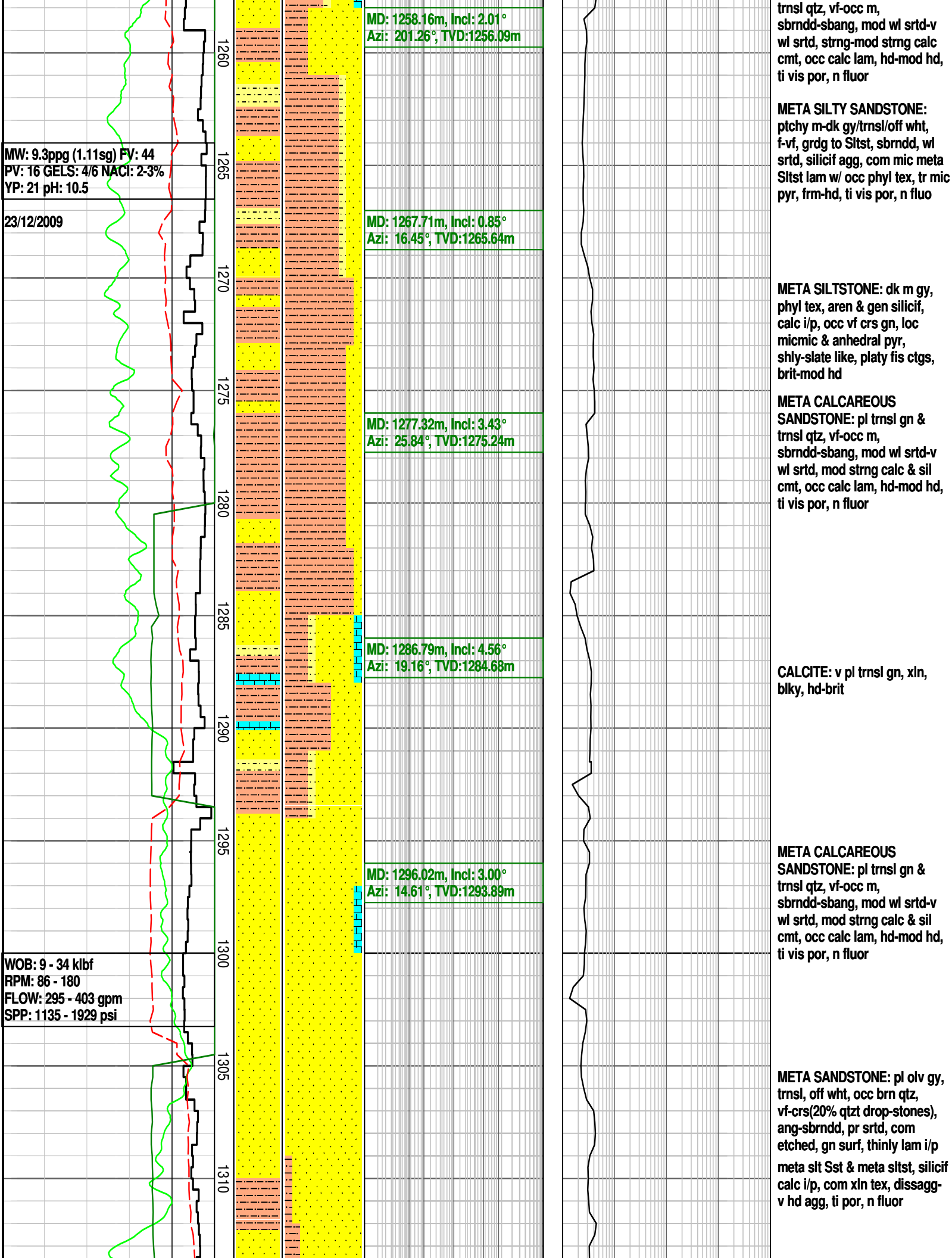
MD: 1248.68m, Incl: 3.92°
Azi: 192.53°, TVD:1246.62m

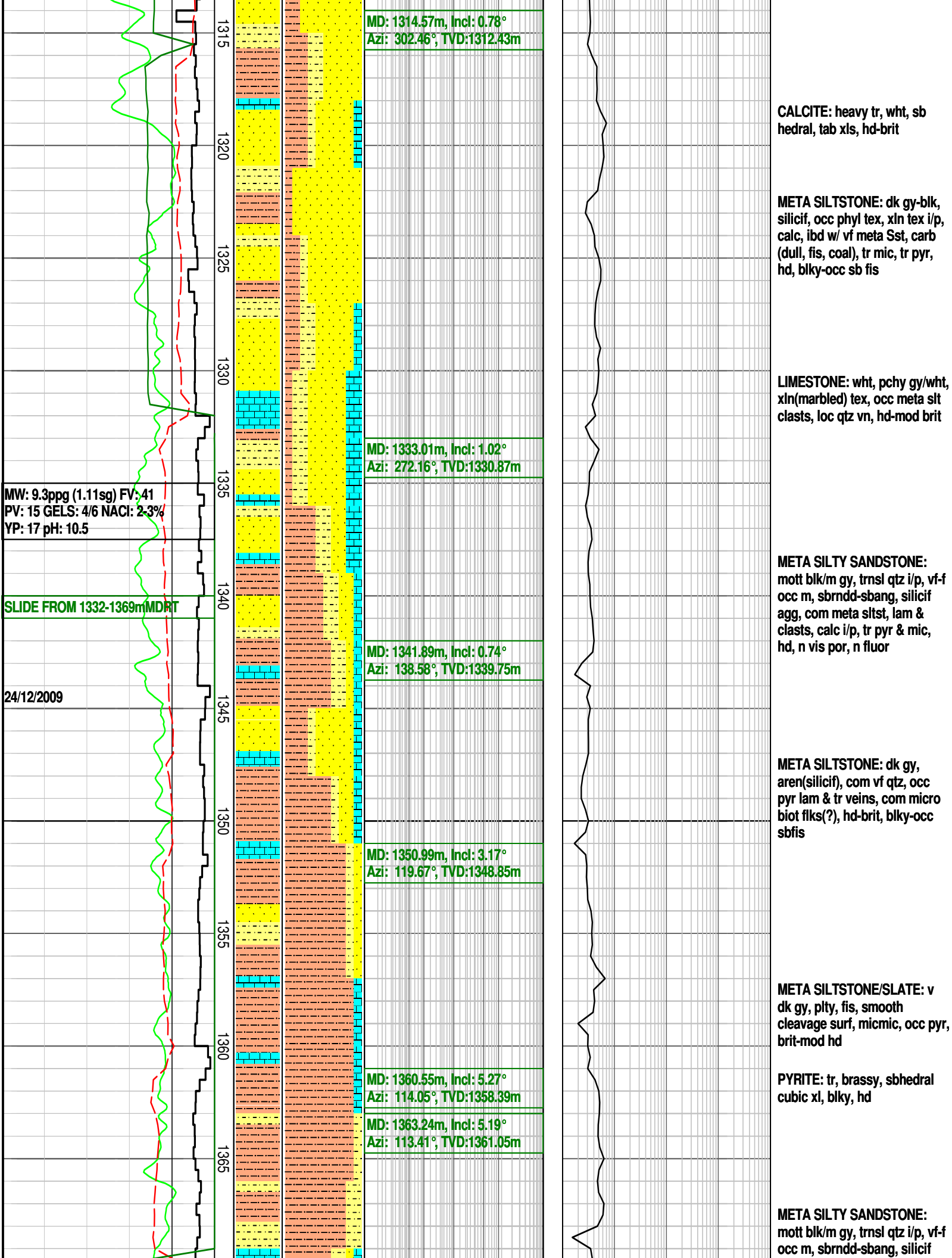
META SILTSTONE: dk m gy,
phyl i/p, com mic lam, gen
silicif, micmic, occ pyr, brit,
hd, sbfis

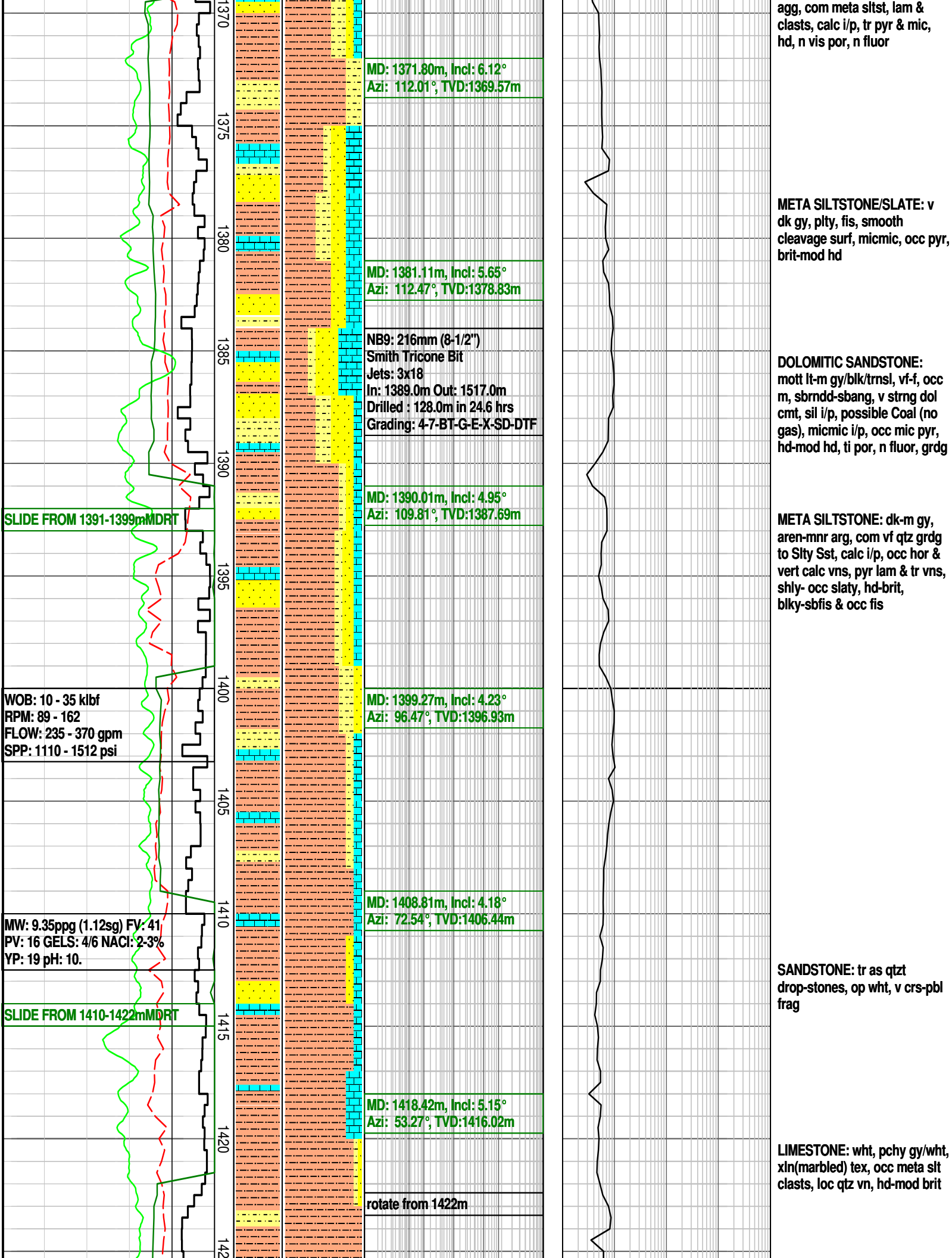
SLIDE FROM 1253-1280mMDRT

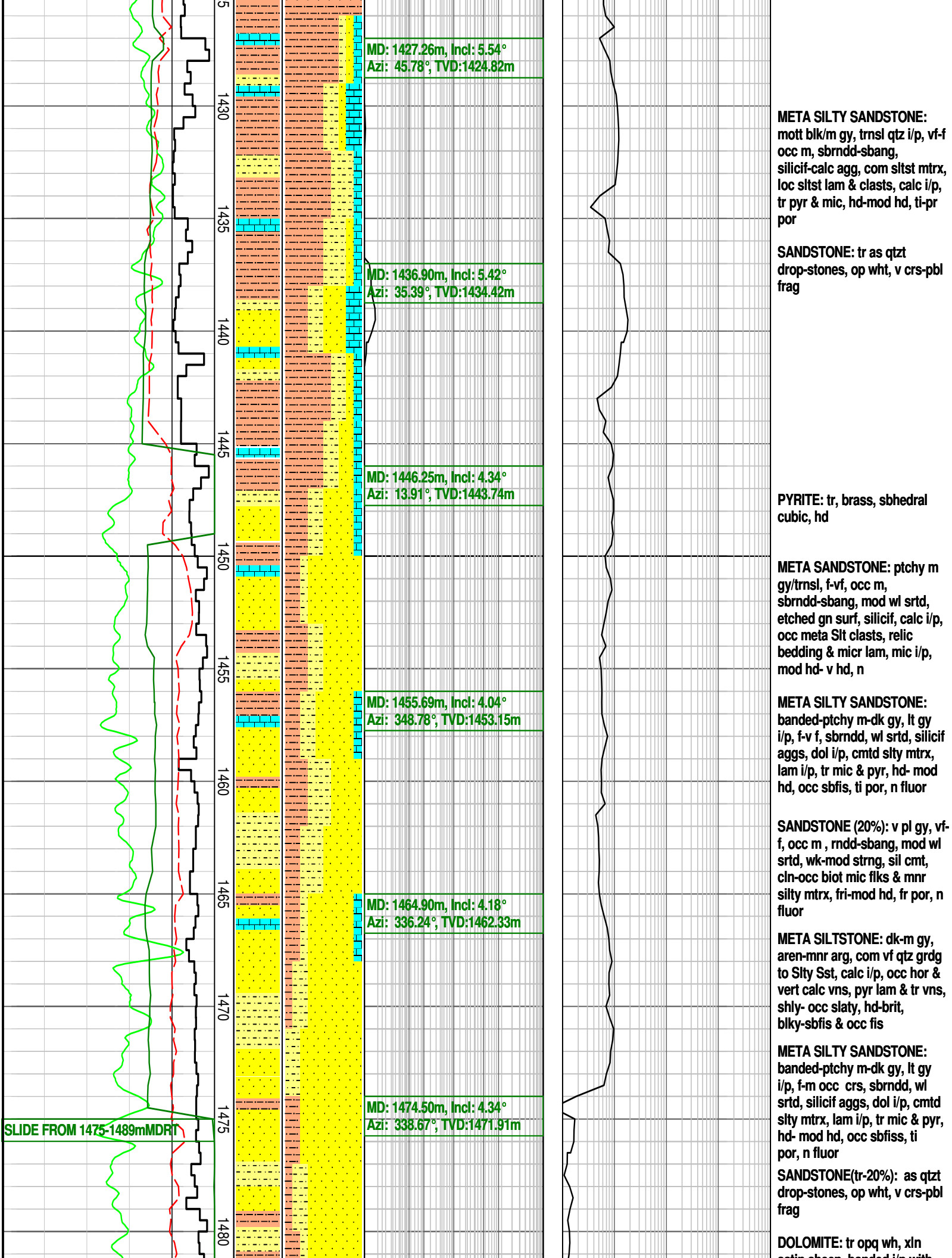
META SILTSTONE: dk m gy,
phyl tex, aren & gen silicif,
calc i/p, occ vf crs gn, loc
micmic & anhedral pyr,
shly-slate like, platy fis ctgs,
brit-mod hd

META CALCAREOUS
SANDSTONE: pl trnsl gn &









META SILTY SANDSTONE:
mott blk/m gy, trnsi qtz i/p, vf-f
occ m, sbrndd-sbang,
silicif-calc agg, com sltst mtrx,
loc sltst lam & clasts, calc i/p,
tr pyr & mic, hd-mod hd, ti-pr
por

SANDSTONE: tr as qtz
drop-stones, op wht, v crs-pbl
frag

PYRITE: tr, brass, sbhedral
cubic, hd

META SANDSTONE: ptchy m
gy/trnsi, f-vf, occ m,
sbrndd-sbang, mod wl srted,
etched gn surf, silicif, calc i/p,
occ meta slt clasts, relic
bedding & micr lam, mic i/p,
mod hd- v hd, n

META SILTY SANDSTONE:
banded-ptchy m-dk gy, lt gy
i/p, f-v f, sbrndd, wl srted, silicif
aggs, dol i/p, cmted slty mtrx,
lam i/p, tr mic & pyr, hd- mod
hd, occ sbfis, ti por, n fluor

SANDSTONE (20%): v pl gy, vf-
f, occ m, rndd-sbang, mod wl
srted, wk-mod strng, sil cmt,
cln-occ biot mic flks & mnr
silty mtrx, fri-mod hd, fr por, n
fluor

META SILTSTONE: dk-m gy,
aren-mnr arg, com vf qtz grdg
to slty sst, calc i/p, occ hor &
vert calc vns, pyr lam & tr vns,
shly- occ slaty, hd-brit,
blky-sbfis & occ fis

META SILTY SANDSTONE:
banded-ptchy m-dk gy, lt gy
i/p, f-m occ crs, sbrndd, wl
srted, silicif aggs, dol i/p, cmted
slty mtrx, lam i/p, tr mic & pyr,
hd- mod hd, occ sbfiss, ti
por, n fluor

SANDSTONE(tr-20%): as qtz
drop-stones, op wht, v crs-pbl
frag

DOLOMITE: tr opq wh, xln
actin obscp, banded i/p, with

satin sheen, banded i/p with
Slt & v f Sst, blkly, v hd

META SILTSTONE: silver gy,
metallic lustre, phyl, abd
micmic on crenulated clvg
surfs, occ vf Sltly Sst lam, plty,
frm-brit, sb fis

META SANDSTONE: mott, lt
gy/blk/trnsl, vf-m, gen f (occ
crs qtz frags)-drop stones, pr
srted, sbrndd-ang(bit
fractured), etched gn surfs,
silicif agg w/ xln & sucrosic

tex, loc relic slty mtrx grdg to
Meta Sltly Sst, dl blk Coal flks(
no gas), micmic i/p, hd, ti-n vis
por, n fluor

META SILTSTONE: dk-m gy,
aren-mnr arg, com vf qtz grdg
to Sltly Sst, calc i/p, occ hor &
vert calc vns, pyr lam & tr vns,
shly- occ slaty, hd-brit,
blkly-sbfis & occ fis

CALCITE(tr): wht, amor, hd-brit

META SILTY SANDSTONE:
bndd-ptchly m-dk gy, lt gy i/p,
f-m occ crs, sbrndd, wl srted,
silicif aggs, dol i/p, cmted slty
mtrx, lam i/p, tr mic & pyr, hd-
mod hd, occ sbfiss, ti
por, n fluor

META SILTSTONE: v dk gy,
shly, smooth flat surf, phyl i/p
w/ abd micmic, plty, splin,
sbfis-fis

META SANDSTONE: lt-m gy &
trnsl qtz, vf-f, occ m & loc crs-v
crs qtz gn, sbrndd-sbang,
mod wl srted, strng-wk sil cmt,
occ silicif agg, fri-hd, fr-ti por,
n fluor

MICACEOUS SANDSTONE(Tr):
pl gy qtz, f-vf, rndd-sbang, wl
srted, wk- no cmt, abd lge
silvery brn biot flks, fri, gd inf

MD: 1483.85m, Incl: 4.80°
Azi: 337.44°, TVD:1481.23m

MD: 1493.44m, Incl: 5.48°
Azi: 326.78°, TVD:1490.78m

MD: 1500.78m, Incl: 5.36°
Azi: 315.25°, TVD:1498.10m

MD: 1510.34m, Incl: 6.56°
Azi: 295.48°, TVD:1507.61m

NB10: 216mm (8-1/2")
Reed Insert R30APDH
Jets: 3x18
In: 1517.0m Out: 1604.0m
Drilled : 87.0m in 18.4 hrs
Grading:6-4-BT-G-E-X-SD-BHA

MD: 1519.95m, Incl: 8.6°
Azi: 278.70°, TVD:1517.12m

MD: 1529.57m, Incl: 10.26°
Azi: 268.54°, TVD:1526.62m

MW: 9.3ppg (1.11sg) FV: 40
PV: 16 GELS: 4/6 NACI: 2-3%
YP: 20 pH: 10.5

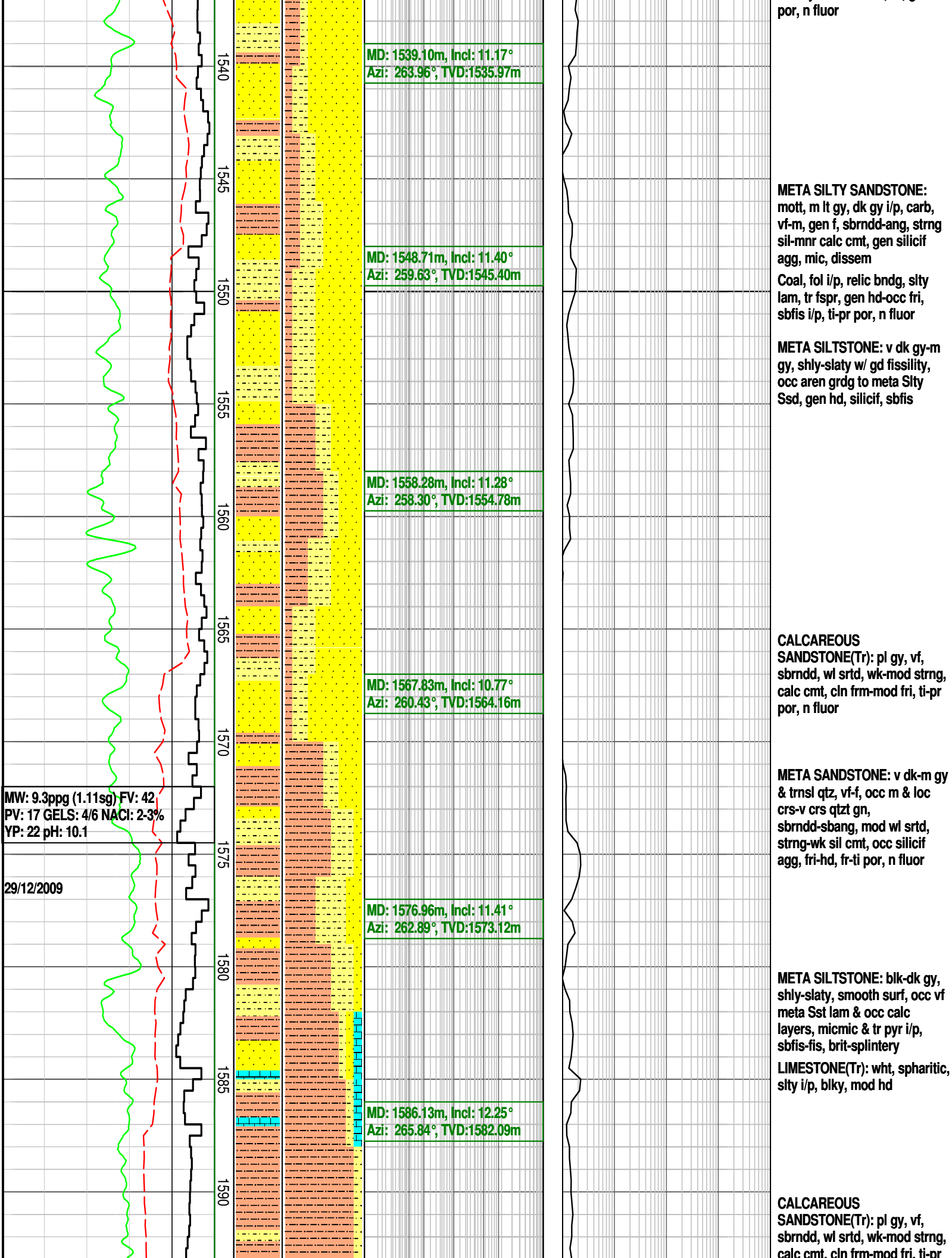
SLIDE FROM 1493-1504mMDRT

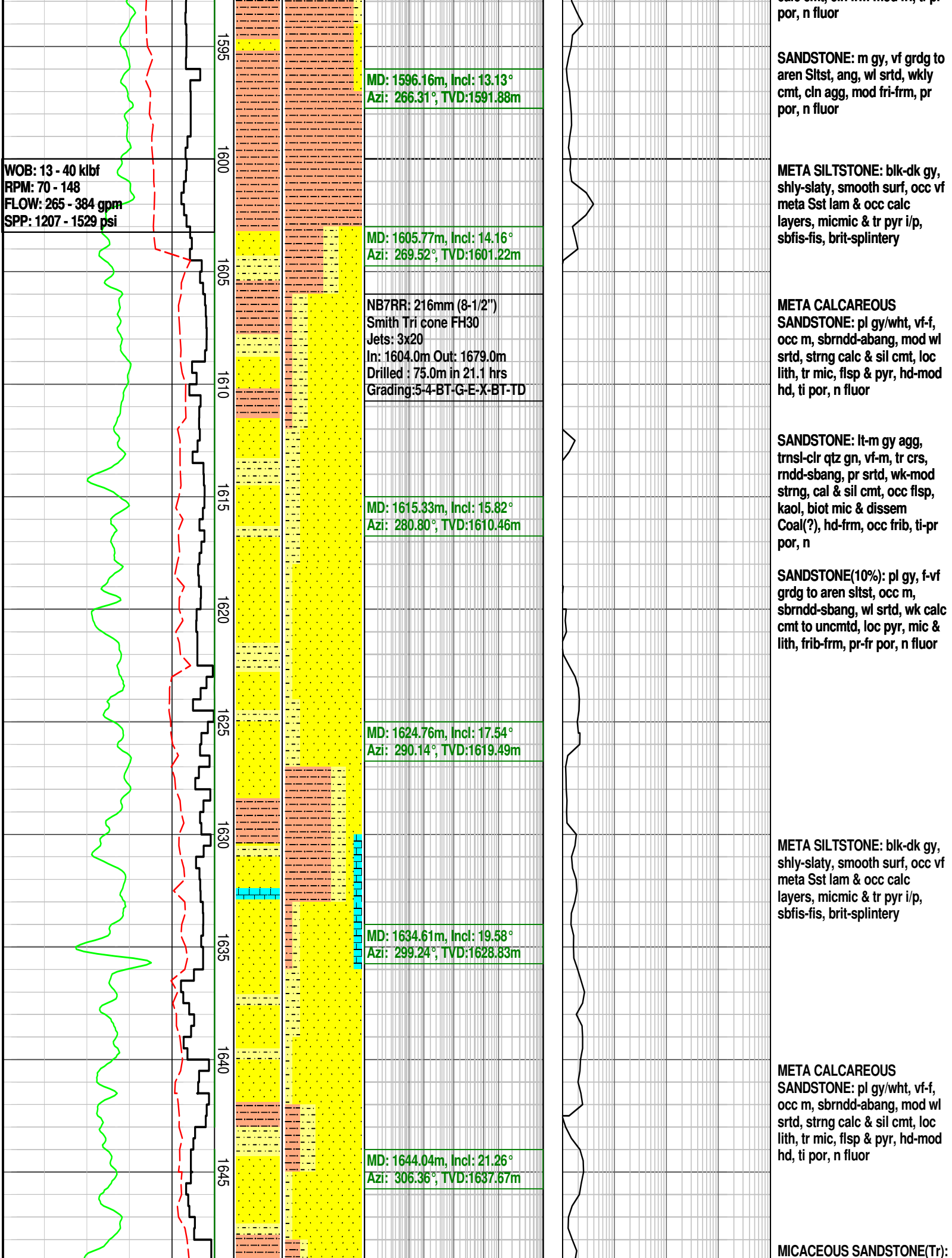
27/12/2009

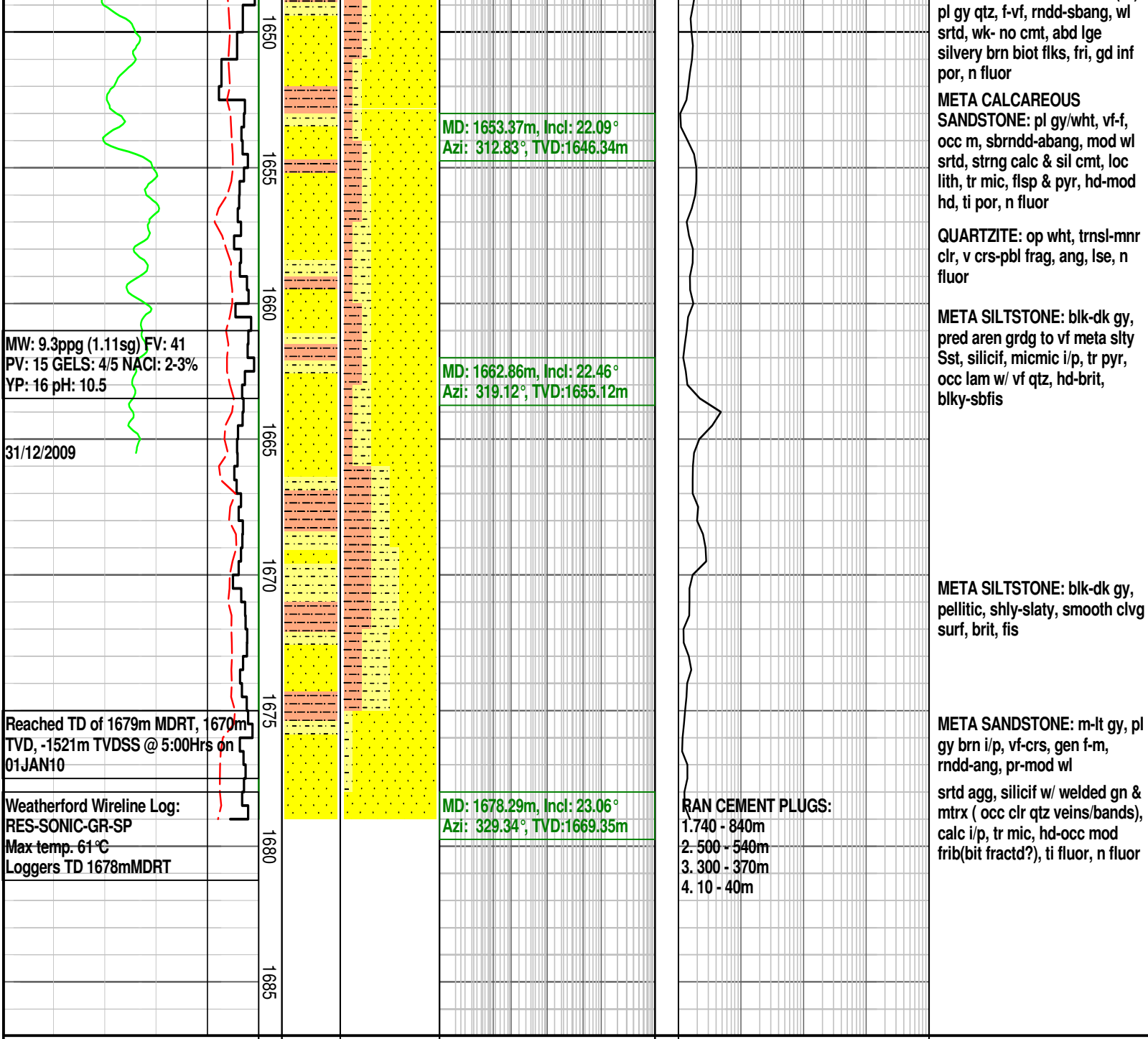
WOB: 12 - 35 klbf
RPM: 81 - 169
FLOW: 277 - 368 gpm
SPP: 1006 - 1468 psi

MW: 9.3ppg (1.11sg) FV: 41
PV: 15 GELS: 4/6 NACI: 2-3%
YP: 21 pH: 10.2

SLIDE FROM 1512-1625mMDRT







FORMATION EVALUATION LOG

