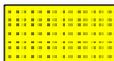


LOG created using LPLOT VH Version 3.0, March 07, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

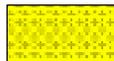
OPERATOR: NOBLE ENERGY INC
WELL: THISTLE DOWN STATE PC F36-69HN
LOCATION: SEC25 T5N R65W
COUNTY: WELD
STATE: COLORADO
SPOT: 1136' FSL, 860' FEL
ELEVATION: 4723 ' GL, 4739' KB
FIELD: WATTENBERG
SPUD DATE: 2/26/13
TD DATE: 3/7/13
DATES LOGGED: 2/28/13 - 3/7/13
DEPTHS LOGGED: 684' - 11126'
GEOLOGISTS: GARY MYERS, TED STOCKWELL
DRILLING FLUID: LSND
DRILLING RIG: PRECISION 828
API: 05-123-36391
LOG TYPE: VERTICAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING INC.

LOG CONTINUES ON FILE: Thistle Down State PC F36-69HN Horiz.lplot

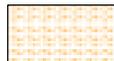
LITHOLOGIES



Sandstone



Shaly Sandstone



Shaly Siltstone



Silty Shale

ENGINEERING SYMBOLS



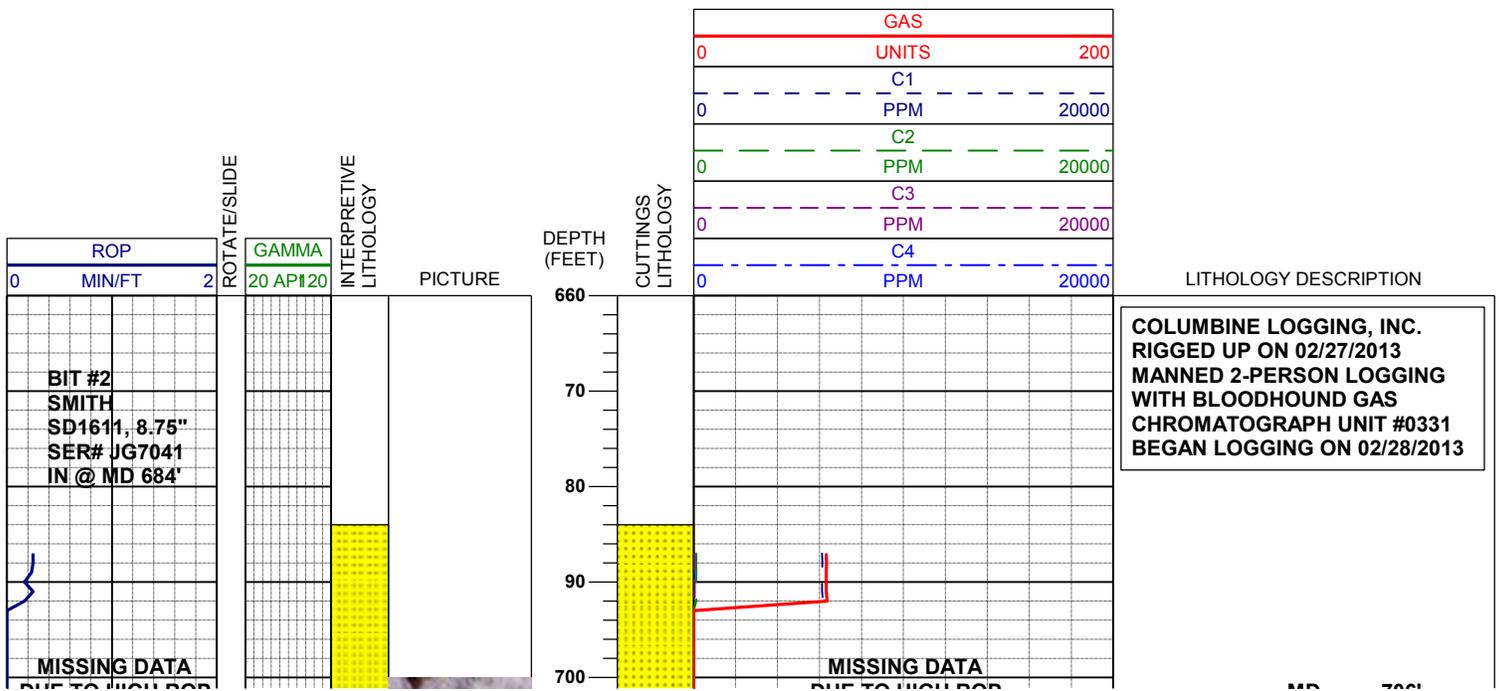
Connection

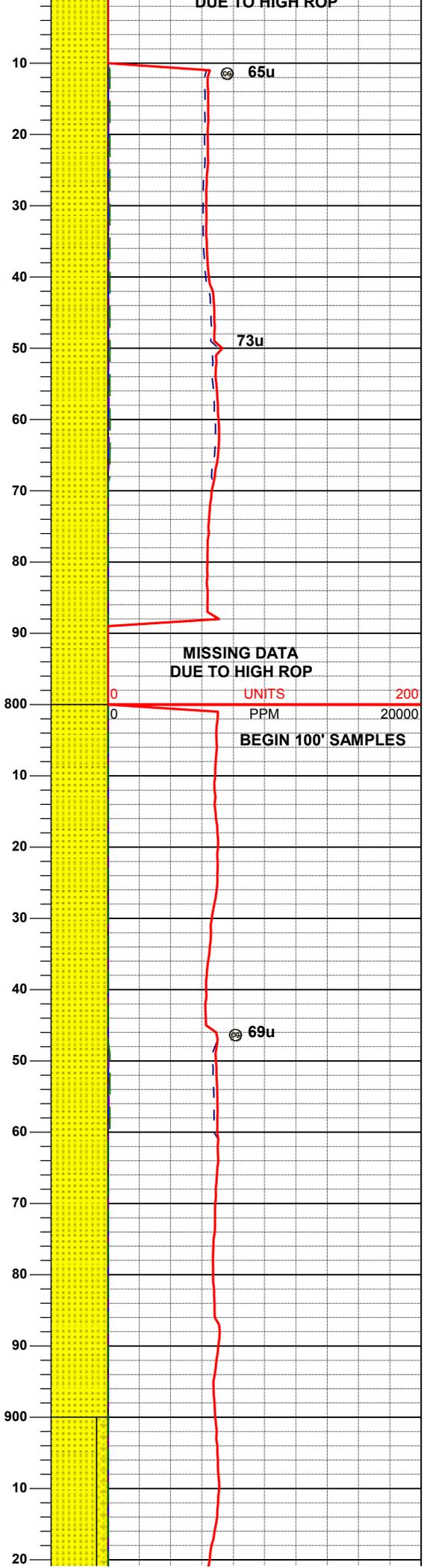
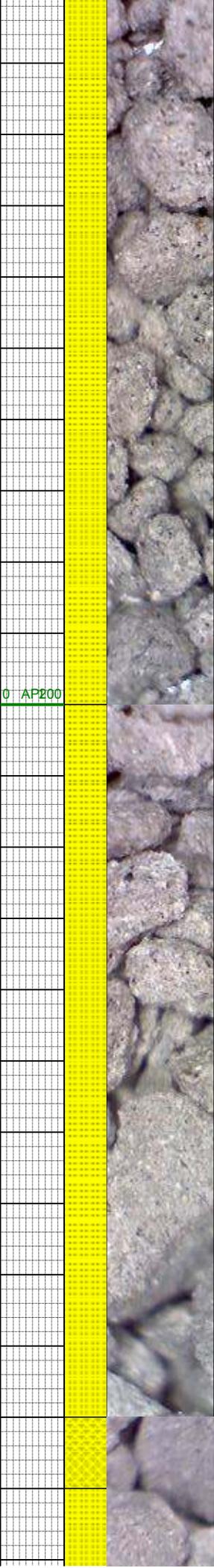
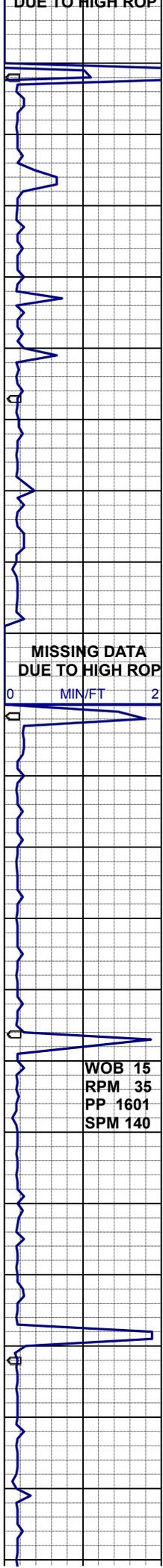


Connection Gas



Midnight Depth





MD 706'
INC 0.4°
AZI 16.6°
TVD 706.0'

SS: clr-wh-gy-lt tan, m-fgr, blk-
sbbkly, sbang-sbrnodd, mod srt, sft,
arg-sil mtx, noncalc

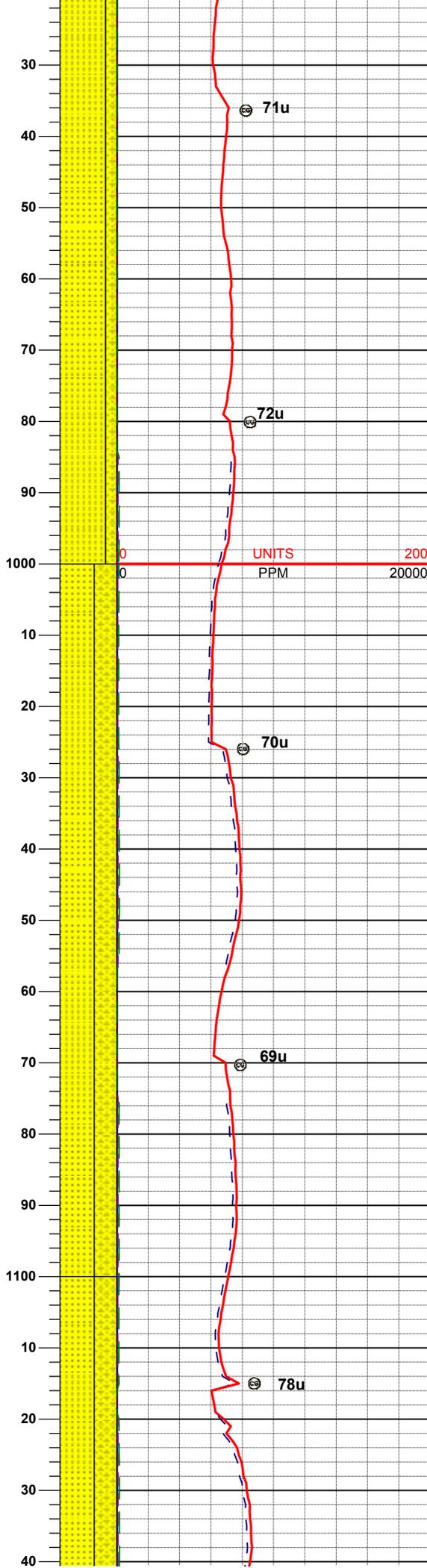
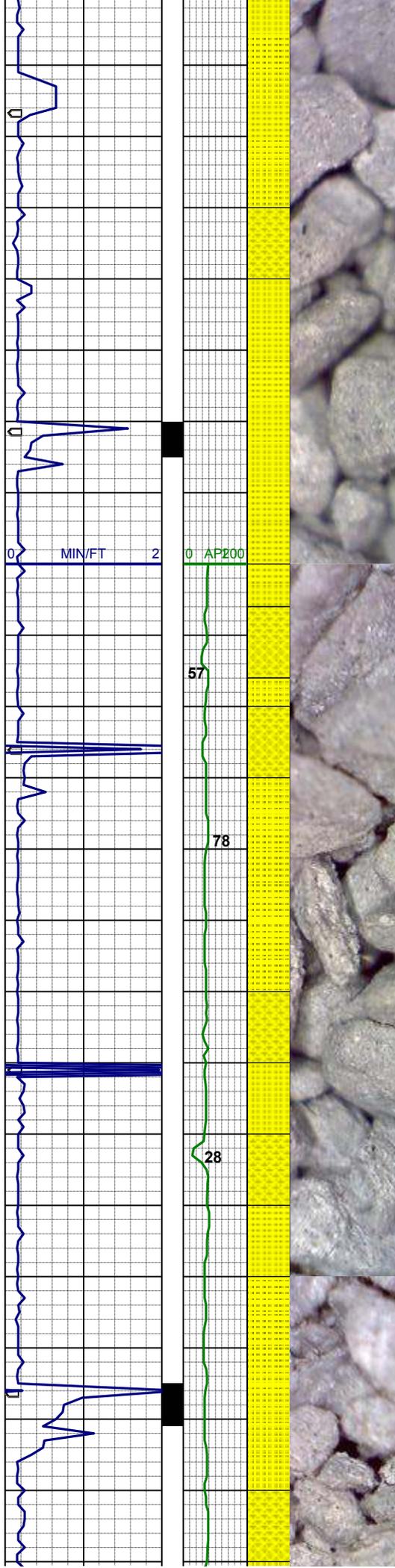
WT 8.50

MD 796'
INC 0.2°
AZI 45.1°
TVD 796.0'

SS: clr-wh-gy-lt tan, m-fgr, blk-
sbbkly, sbang-sbrnodd, mod srt, sft,
arg-sil mtx, noncalc

MD 886'
INC 0.3°
AZI 309.6°
TVD 886.0'

WT 8.55



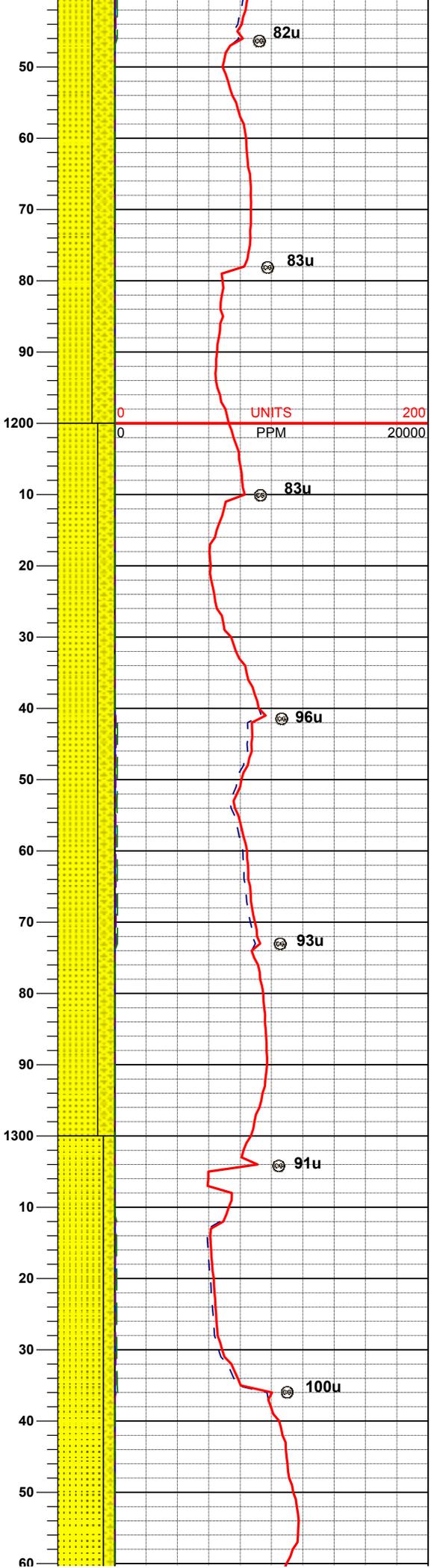
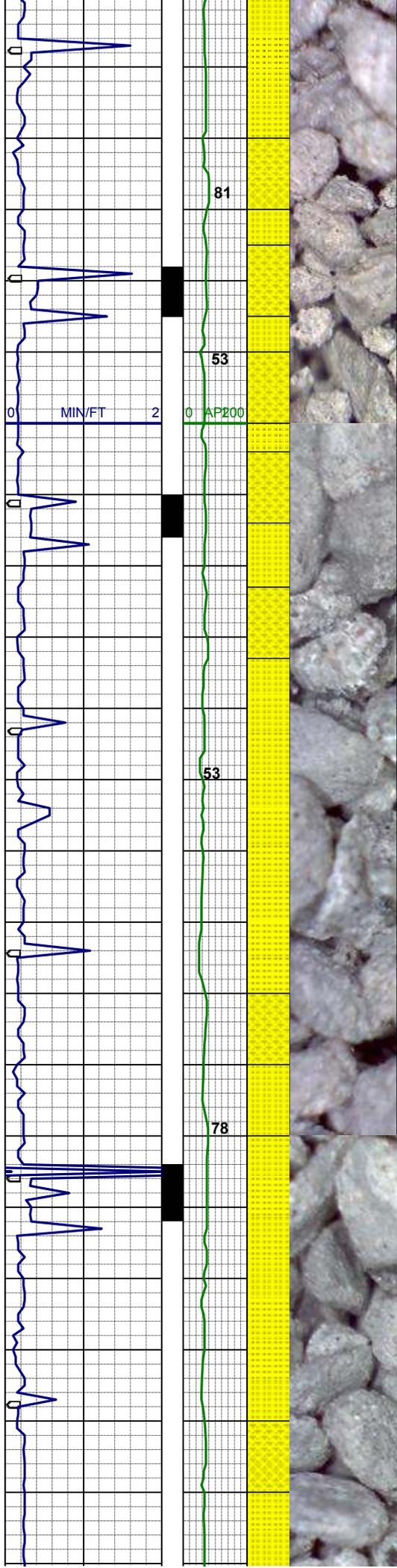
SS: clr-wh-gy-lt tan, m-fgr, blk-
 sbbkly, sbang-sbrnodd, mod srt, sft,
 arg-sil mtx, noncalc
 SHYSS: clr-gy-modgy, f-vfgr, sbbkly-
 sbply, sbang-sbrnodd, mod srt, sft-
 firm, arg-sil mtx, noncalc

MD 976'
 INC 0.4°
 AZI 209.8°
 TVD 976.0'

SS: clr-wh-gy-lt tan, m-fgr, blk-
 sbbkly, sbang-sbrnodd, mod srt, sft,
 arg-sil mtx, noncalc
 SHYSS: clr-gy-modgy, f-vfgr, sbbkly-
 sbply, sbang-sbrnodd, mod srt, sft-
 firm, arg-sil mtx, noncalc

MD 1066'
 INC 3.4°
 AZI 161.3°
 TVD 1065.9'

WT 8.7 / VIS 28



SS: clr-wh-gy-lt tan, m-fgr, blk-
sbbkly, sbang-sbrnodd, mod srt, sft,
arg-sil mtx, noncalc
SHYSS: clr-gy-modgy, f-vfgr, sbbkly-
sbply, sbang-sbrnodd, mod srt, sft-
firm, arg-sil mtx, noncalc

MD 1161'
INC 3.7°
AZI 131.6°
TVD 1160.8'

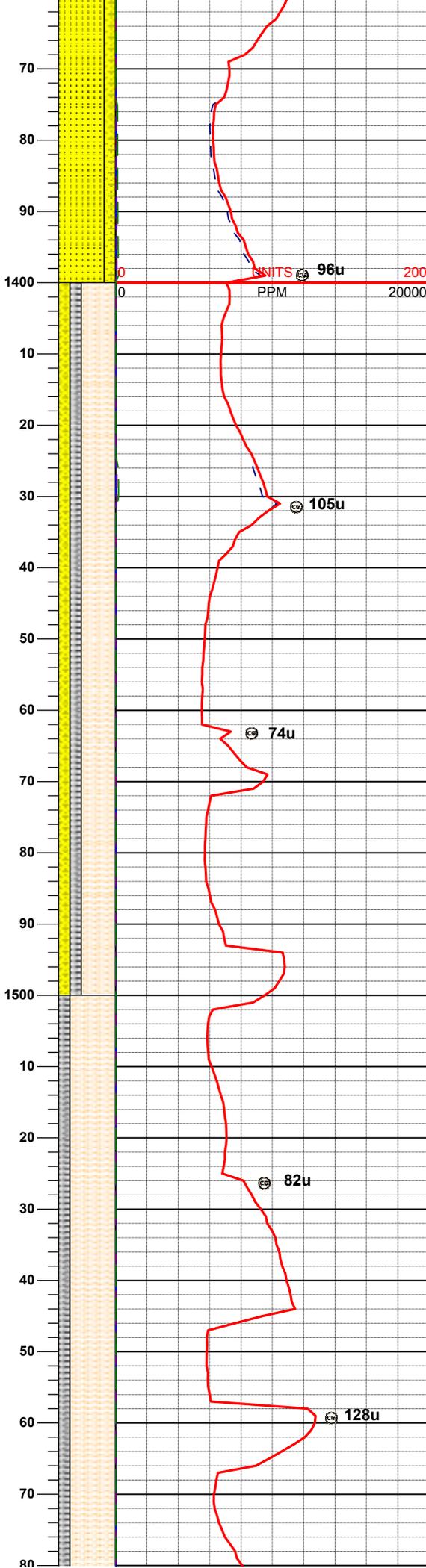
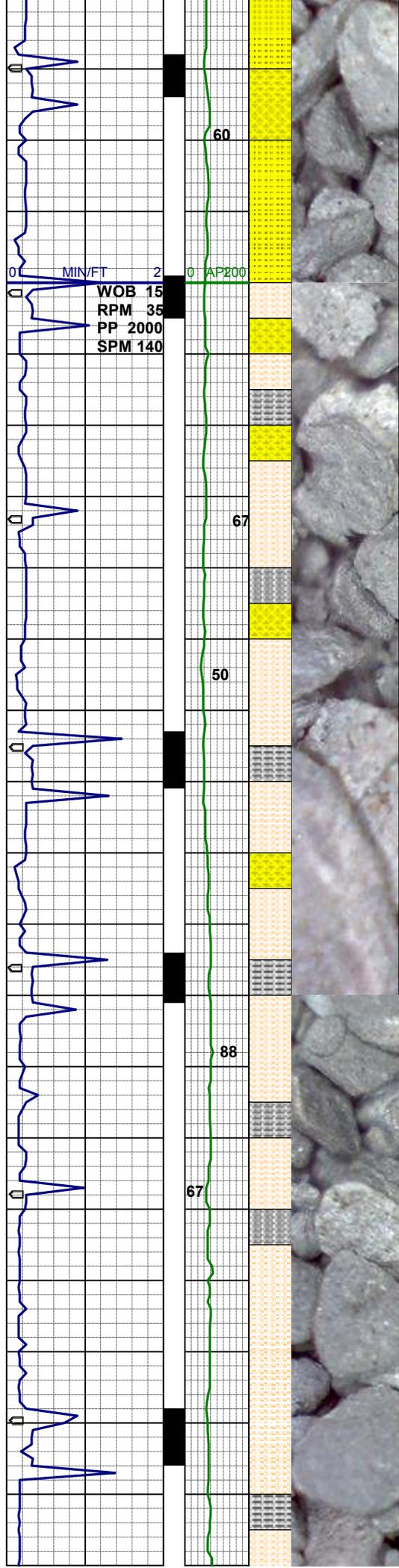
SS: clr-wh-gy-lt tan, m-fgr, blk-
sbbkly, sbang-sbrnodd, mod srt, sft-
firm- occ hd,, arg-sil mtx, slcalc, tr
glau
SHYSS: clr-gy-modgy, f-vfgr, sbbkly-
sbply, sbang-sbrnodd, mod srt, sft-
firm, arg-sil mtx, slcalc

MD 1256'
INC 5.6°
AZI 138.8°
TVD 1255.5'

WT 8.7 / VIS 30

MD 1351'
INC 5.6°
AZI 128.6°
TVD 1350.0'

SS: clr-wh-gy-lt tan, m-fgr, blk-
sbbkly, sbang-sbrnodd, mod srt, sft-
firm- occ hd,, arg-sil mtx, slcalc, tr
glau
SHYSS: clr-gy-modgy, f-vfgr, sbbkly-



SNITS 96u
PPM 20000

105u

74u

82u

128u

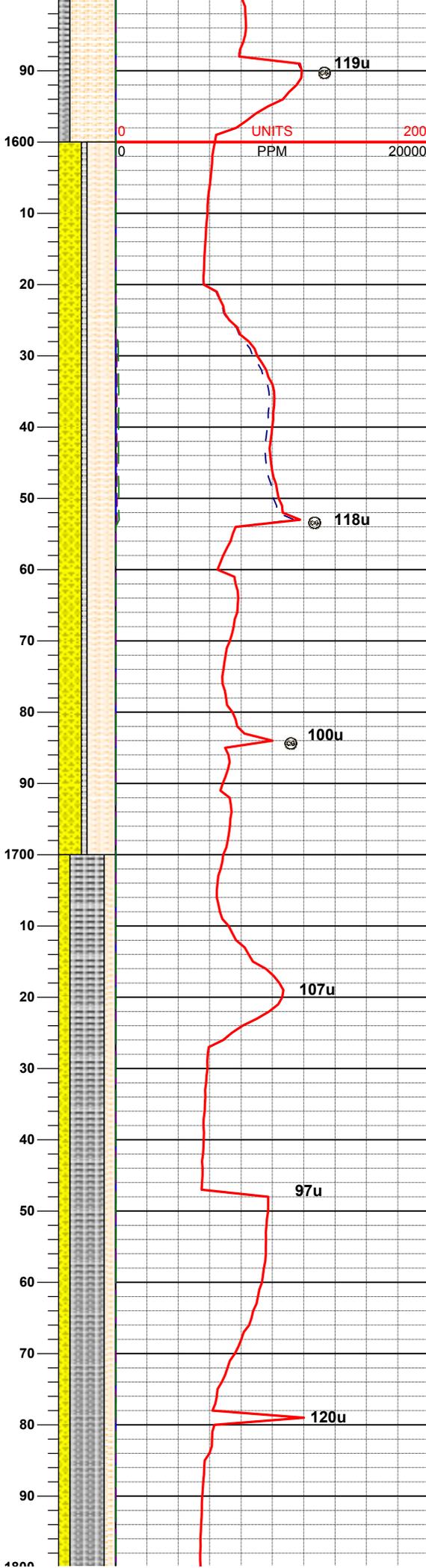
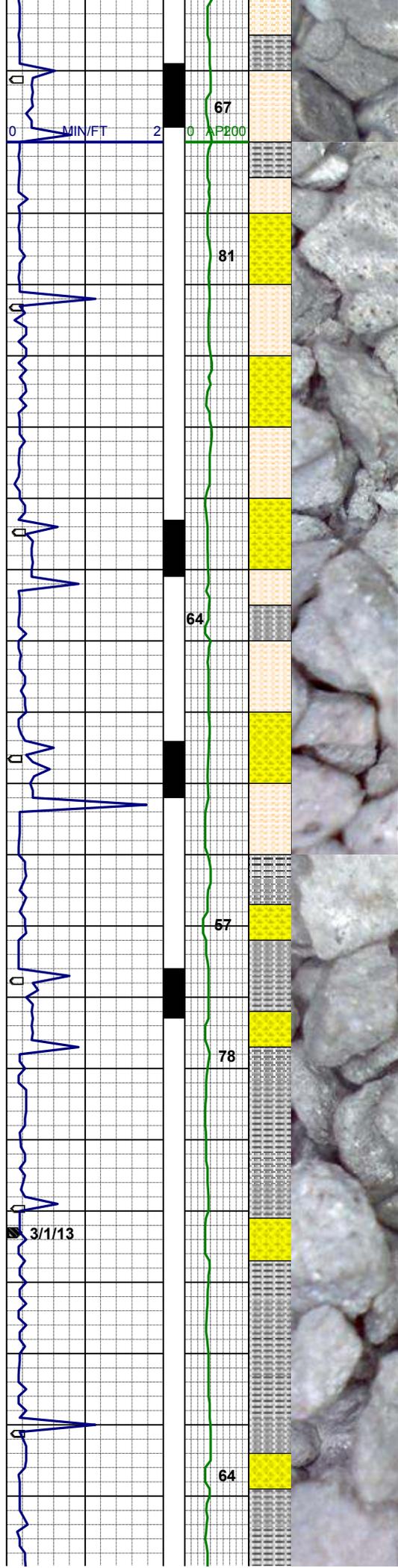
sbplty, sbang-sbrndd, mod srt, sft-firm, arg-sil mtx, slcalc

MD 1446'
INC 7.9°
AZI 130.2°
TVD 1444.3'

SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-sbplty, sdy ip, sil-arg mtx, sl calc
SHYSS: clr-gy-modgy, f-vfgr, sbblky-sbplty, sbang-sbrndd, mod srt, sft-firm, arg-sil mtx, slcalc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbplty, sdy ip, arg-sil mtx, slcalc

MD 1541'
INC 9.8°
AZI 137.0°
TVD 1538.2'

SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-sbplty, sdy ip, sil-arg mtx, sl calc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbplty, occ sl sdy ip, arg mtx, slcalc



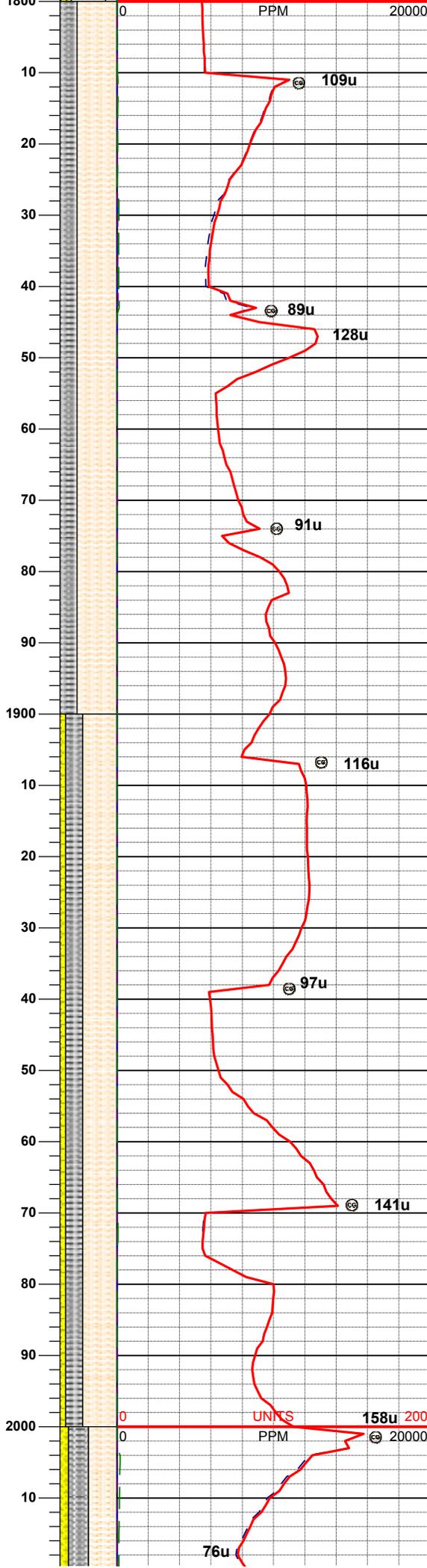
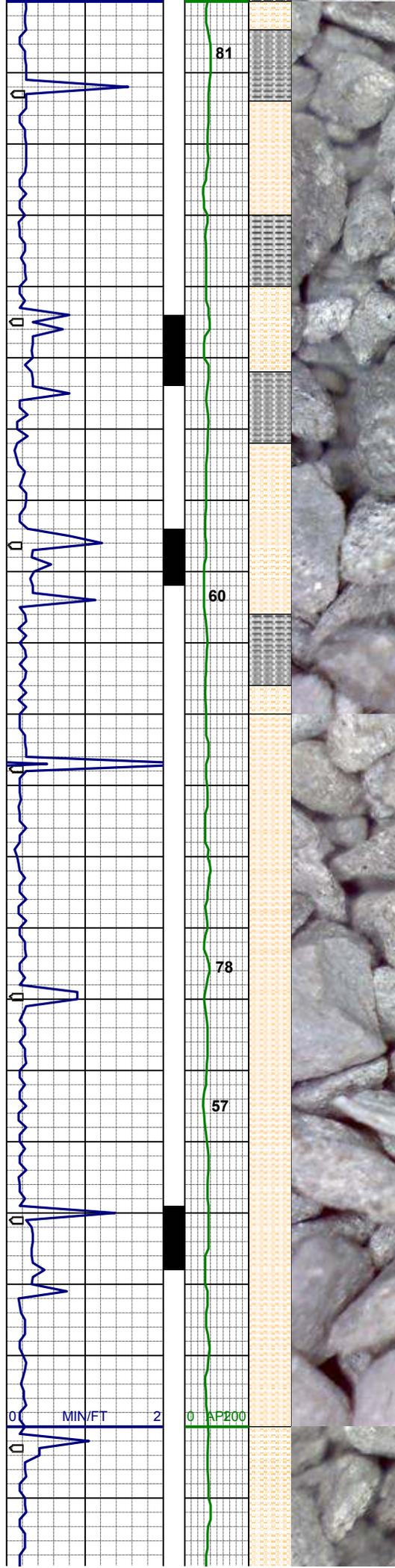
MD 1636'
 INC 11.6°
 AZI 135.4°
 TVD 1631.6'

SHYSLTST: lt tan- lt gy, f-vfgr, sbbkly-sbply, sdy ip, sil-arg mtx, sl calc
 SHYSS: clr-gy-modgy, f-vfgr, sbbkly-sbply, sbang-sbrmdd, mod srt, sft-firm, arg-sil mtx, slcalc
 SLTYSH: lt-mgy, f-vfgr, sbbkly-sbply, sdy ip, arg-sil mtx, slcalc

MD 1731'
 INC 14.3°
 AZI 136.0°
 TVD 1724.1'

SHYSLTST: lt tan- lt gy, f-vfgr, sbbkly-sbply, sdy ip, sil-arg mtx, sl calc
 SHYSS: clr-gy-modgy, f-vfgr, sbbkly-sbply, sbang-sbrmdd, mod srt, sft-firm, arg-sil mtx, slcalc
 SLTYSH: lt-mgy, f-vfgr, sbbkly-sbply, sdy ip, arg-sil mtx, slcalc

WT 8.75 / VIS 29



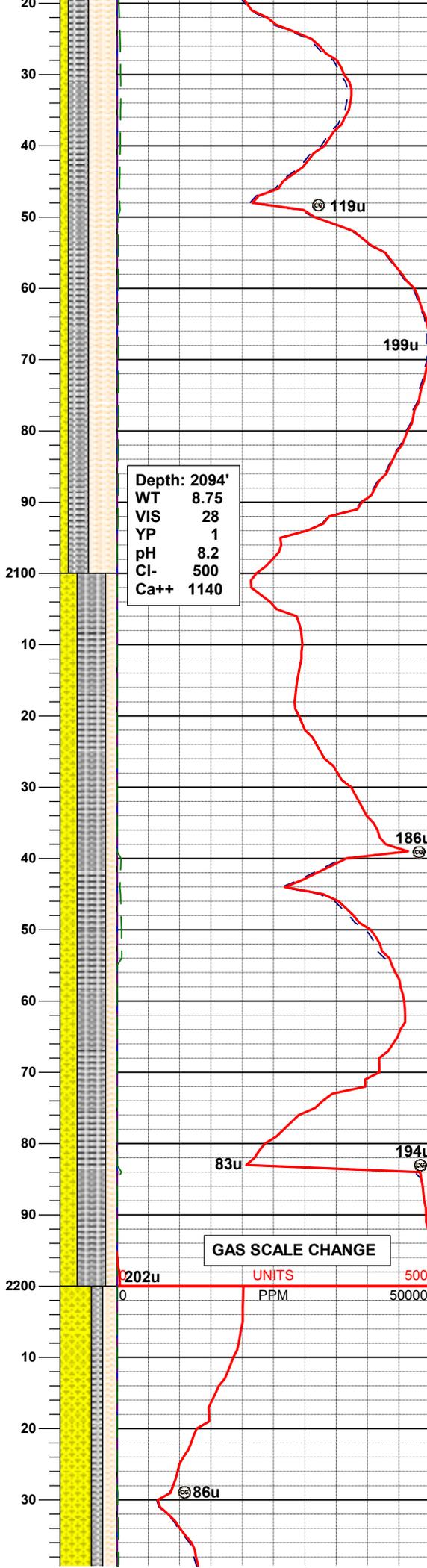
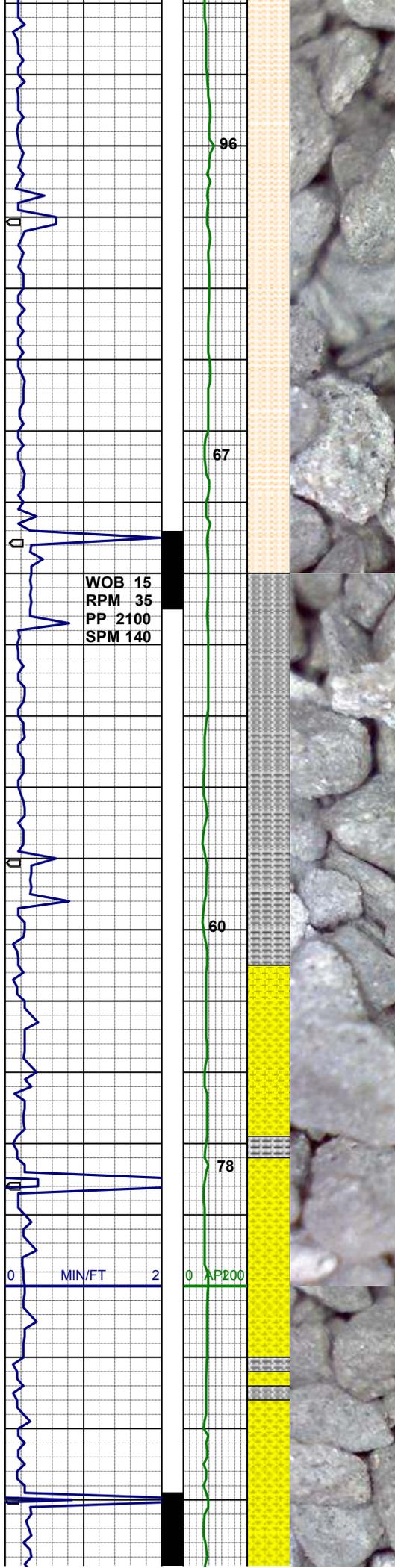
MD 1826'
INC 13.5°
AZI 133.8°
TVD 1816.3'

SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-sbply, sdy ip, sil-arg mtx, sl calc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbply, arg-sil mtx, slcalc

MD 1921'
INC 14.9°
AZI 134.9°
TVD 1908.4'

SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-sbply, sdy ip, sil-arg mtx, sl calc
SHYSS: clr-gy-modgy, f-vfgr, sbblky-sbply, sbang-sbrnidd, mod srt, sft-firm, arg-sil mtx, tr ss, slcalc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbply, sdy ip, arg-sil mtx, slcalc

WT 8.75 / VIS 31



MD 2045'
INC 14.3°
AZI 133.0°
TVD 2028.4'

SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-sbply, sdy ip, sil-arg mtx, sl calc
SHYSS: clr-gy-modgy, f-vfgr, sbblky-sbply, sbang-sbrnodd, mod srt, sft-firm, arg-sil mtx, tr ss, slcalc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbply, sdy ip, arg-sil mtx, slcalc

WT 8.75 / VIS 31

MD 2135'
INC 14.2°
AZI 138.1°
TVD 2115.7'

SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-sbply, sdy ip, sil-arg mtx, sl calc
SHYSS: clr-gy-modgy, f-vfgr, sbblky-sbply, sbang-sbrnodd, mod srt, sft-firm, arg-sil mtx, tr ss, slcalc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbply, sdy ip, arg-sil mtx, slcalc

MD 2225'
INC 14.1°
AZI 139.8°
TVD 2202.9'

WT 8.75 / VIS 30

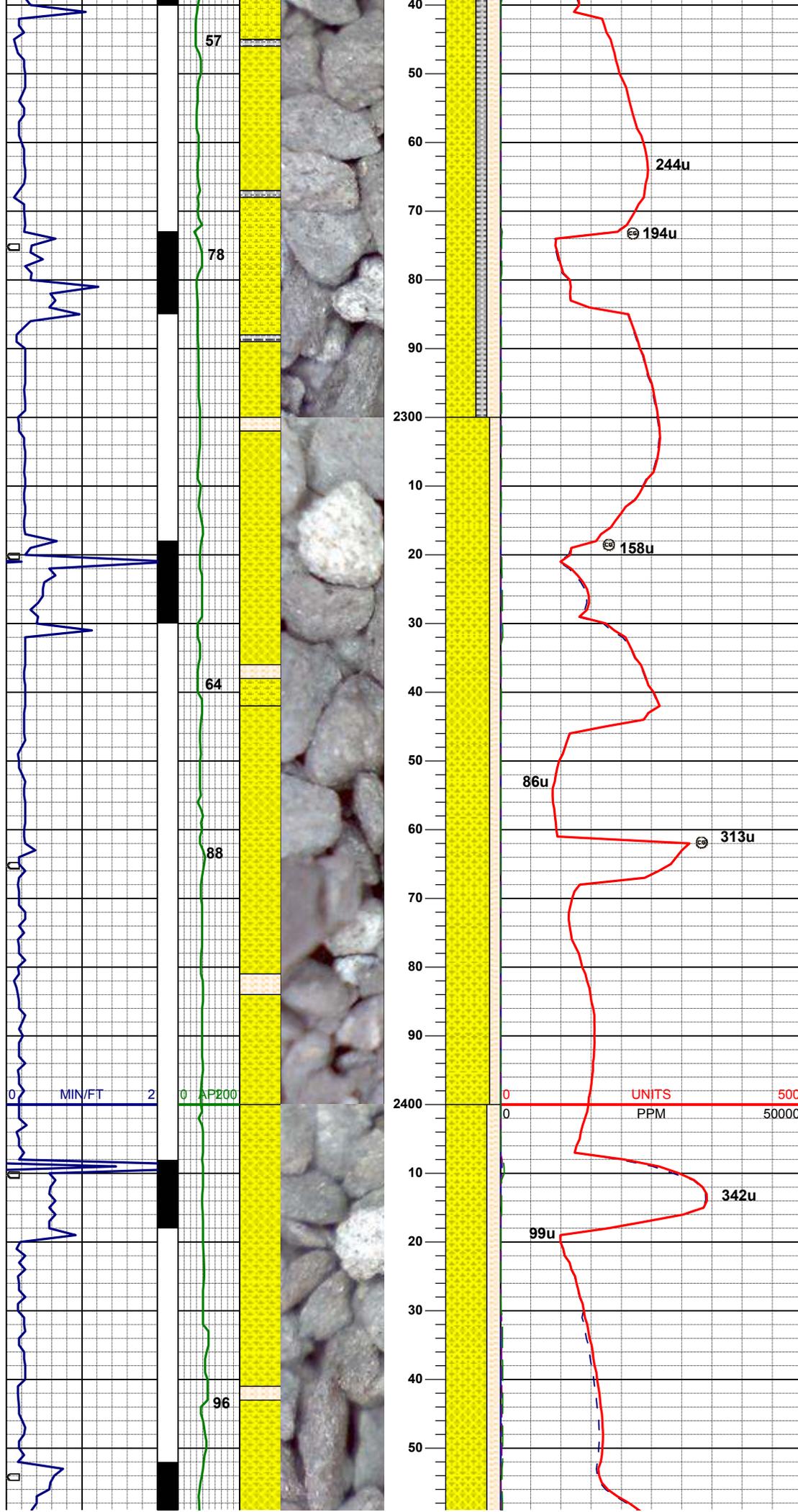
SHYSS: gy- mgy, clr- trnsl, sme op, f-
vfgr, sbblky-sbply, mod srt, sft-sl
firm, arg-sil mtx, slcalc
SHYSLTST: lt tan- lt gy, f-vfgr, sbblky-
sbply, sdy ip, sil-arg mtx, sl calc
SLTYSH: lt-mgy, f-vfgr, sbblky-sbply,
sdy ip, arg-sil mtx, slcalc

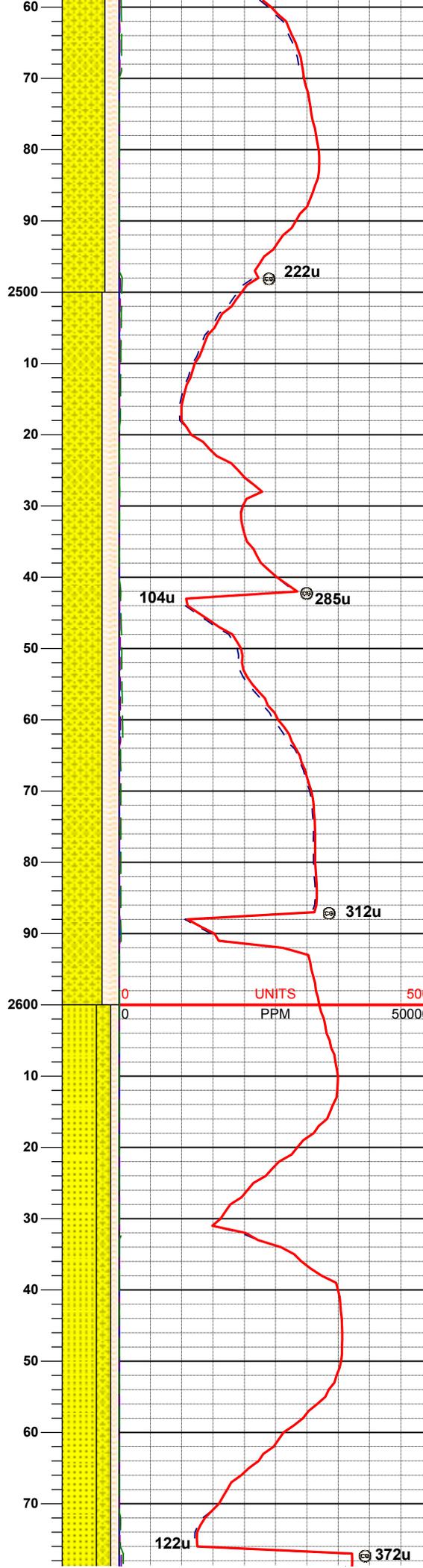
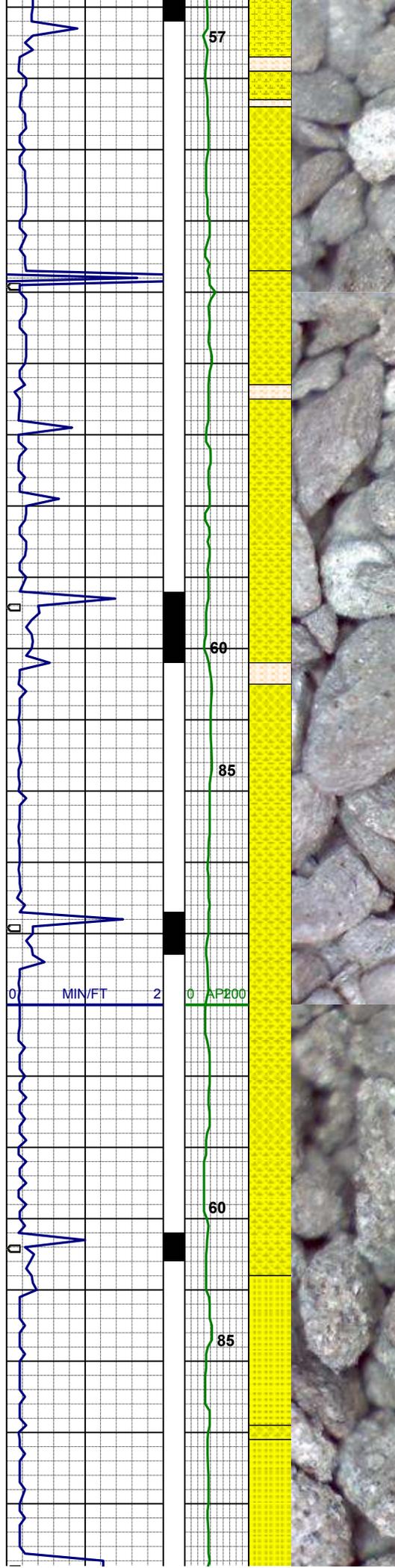
MD 2315'
INC 14.4°
AZI 150.0°
TVD 2290.2'

SHYSS: gy- mgy- tan, clr- trnsl, sme
op, f-vfgr, sbblky-sbply, mod srt, sft-
sl firm, arg-sil mtx, slcalc, grdg-
shysltst

MD 2404'
INC 13.8°
AZI 152.8°
TVD 2376.5'

SHYSS: gy- mgy- tan, clr- trnsl, sme
op, f-vfgr, sbblky-sbply, mod srt, sft-
sl firm, arg-sil mtx, slcalc, grdg-
shysltst





MD 2494'
 INC 14.1°
 AZI 160.6°
 TVD 2463.9'

SHYSS: gy- mgy- tan, clr- trnsl, sme op, f-vfgr, sbblky-sbplty, mod srt, sft-sl firm, arg-sil mtx, slcalc, grdg-shysltst

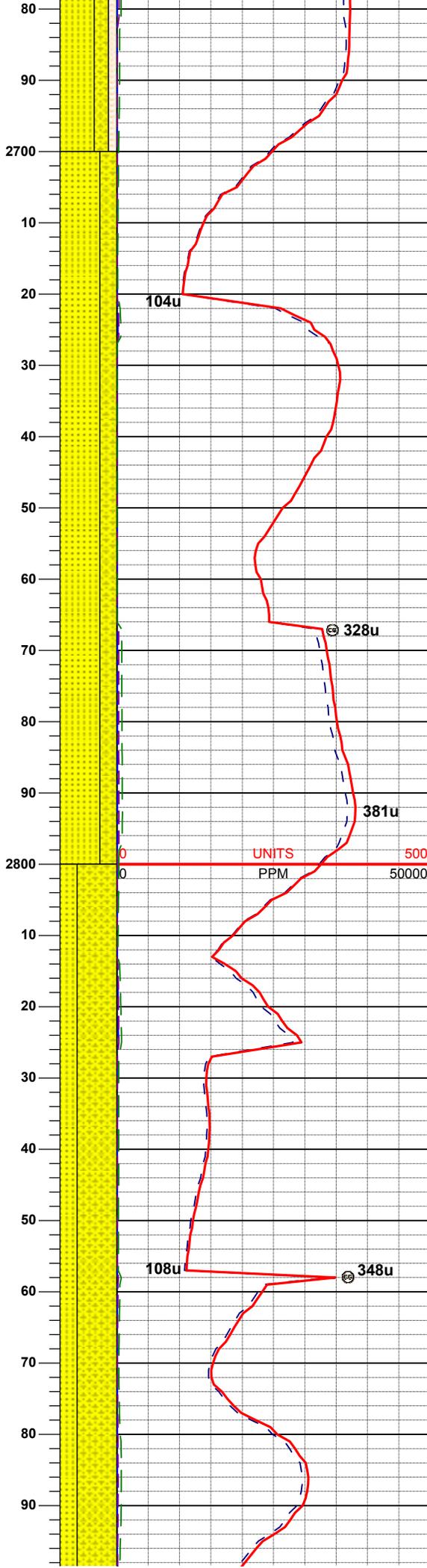
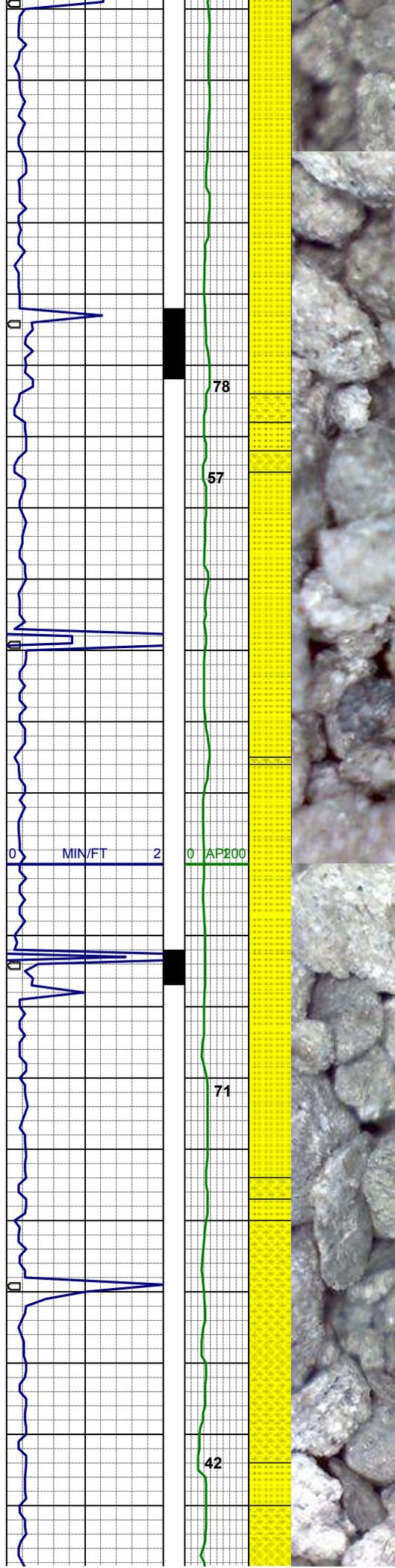
MD 2584'
 INC 14.2°
 AZI 162.2°
 TVD 2551.1'

UNITS 500
 PPM 50000

SS: wh- ltgy, clr-trnsl, f- mgr, sbblky, mod srt, fri, p cmt, sil mtx, occ, glau, slcalc
 SHYSS: gy- mgy, trnsl- op, f-vfgr, sbblky-sbplty, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- shysltst

WT 8.65

MD 2674'
 INC 15.4°
 AZI 161.8°
 TVD 2638.1'

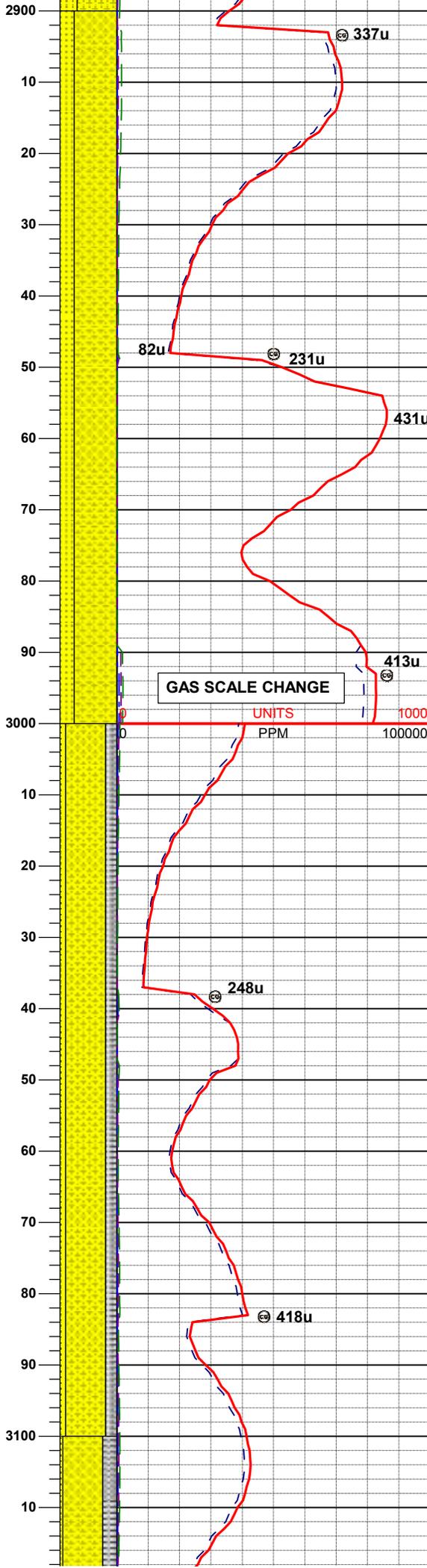
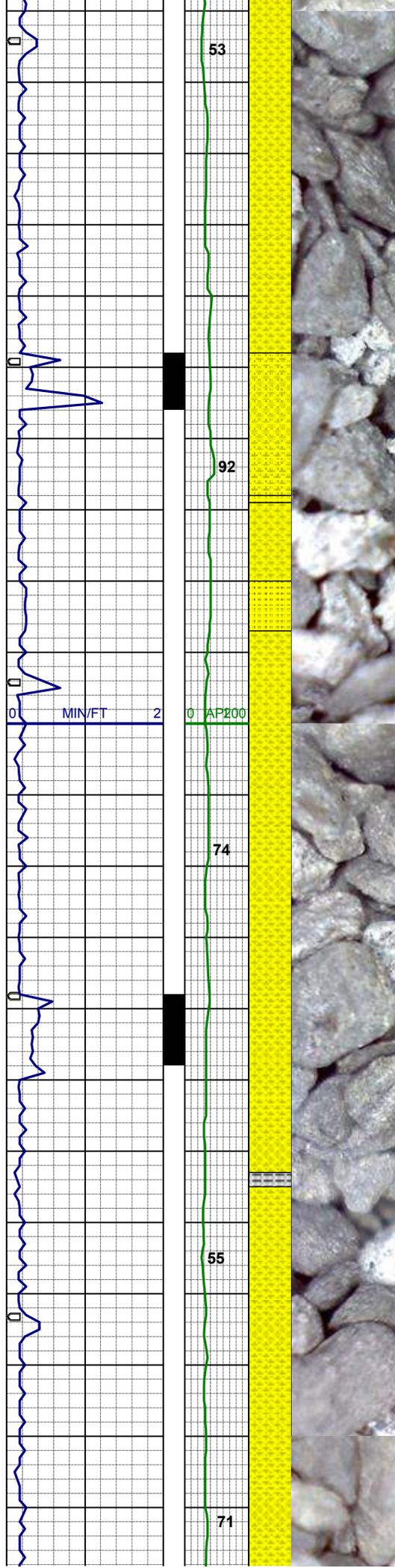


SS: wh- ltgy, clr-trnsl, f- mgr, sbbkly, mod srt, fri, p cmt, sil mtx, occ, glau, slcalc
 SHYSS: gy- mgy, trnsl- op, f-vfgr, sbbkly-sbplty, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- shysltst

MD 2764'
INC 16.1°
AZI 154.1°
TVD 2724.8'

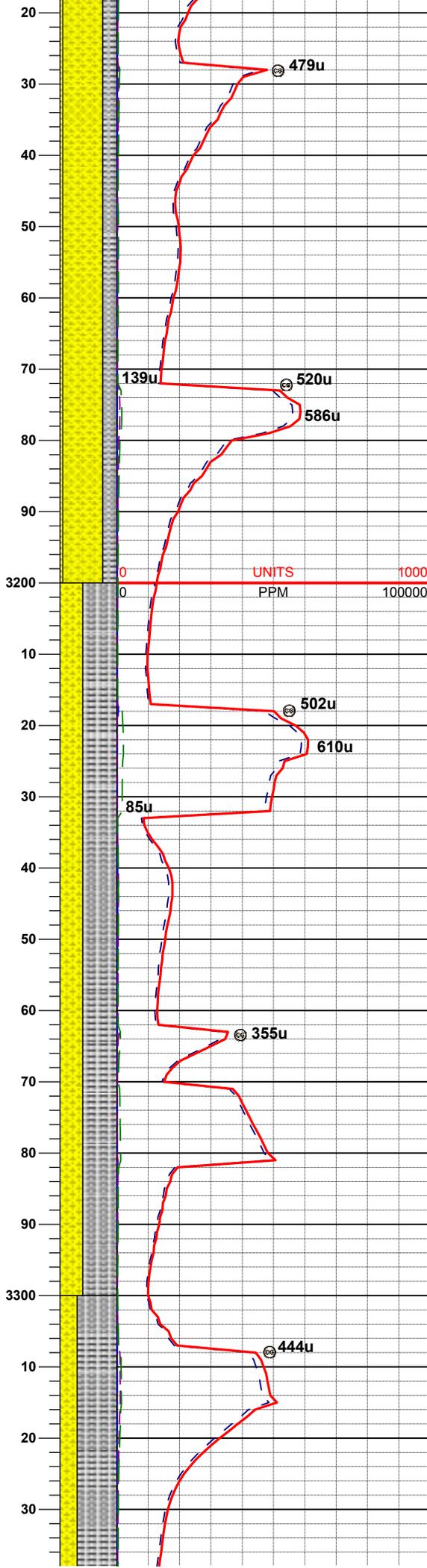
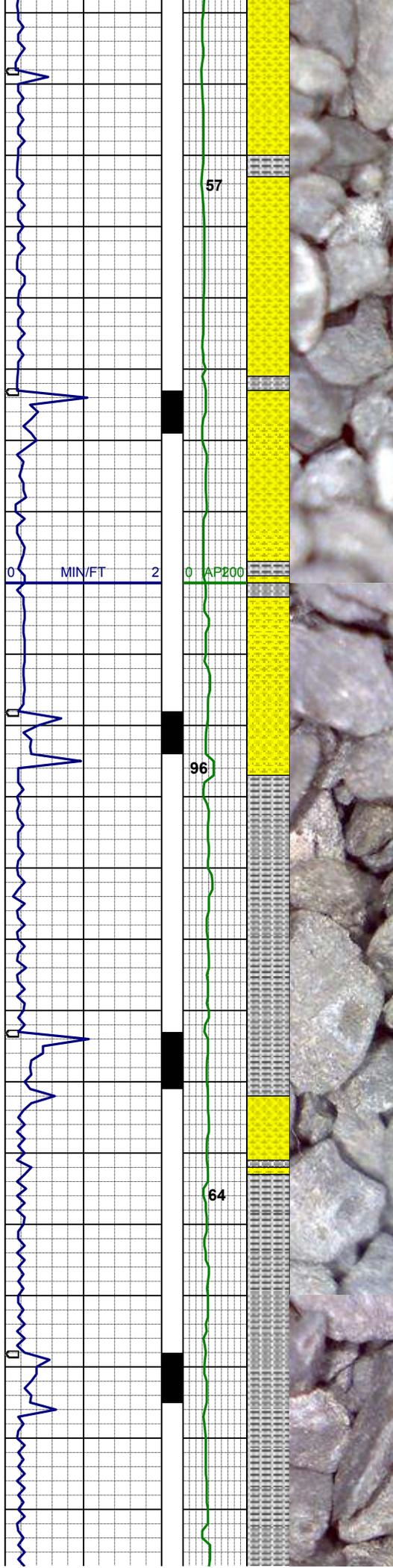
SHYSS: gy- mgy, trnsl- op, f-vfgr, sbbkly-sbplty, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- shysltst
 SS: wh- ltgy, clr-trnsl, f- mgr, sbbkly, mod srt, fri, p cmt, sil mtx, occ, glau, slcalc

MD 2854'
INC 14.9°
AZI 151.8°
TVD 2811.5'



MD 2944'
INC 14.9°
AZI 149.3°
TVD 2898.5'
 SHYSS: gy- mgy, trnsl- op, f-vfgr,
 sbbiky-sbply, mod srt, sft-sl firm, arg-
 sil mtx, tr pyr, slcalc, grdg- shysltst
 SS: wh- ltgy, clr-trnsl, f- mgr, sbbiky,
 mod srt, fri, p cmt, sil mtx, occ, glau,
 slcalc
WT 8.75

MD 3033'
INC 14.1°
AZI 150.2°
TVD 2984.6'
 SHYSS: gy- mgy, trnsl- op, f-vfgr,
 sbbiky-sbply, mod srt, sft-sl firm, arg-
 sil mtx, tr pyr, slcalc, grdg- slysh
 SS: wh- ltgy, clr-trnsl, f- mgr, sbbiky,
 mod srt, fri, p cmt, sil mtx, occ, glau,
 slcalc



MD 3123'
 INC 13.2°
 AZI 154.2°
 TVD 3072.1'

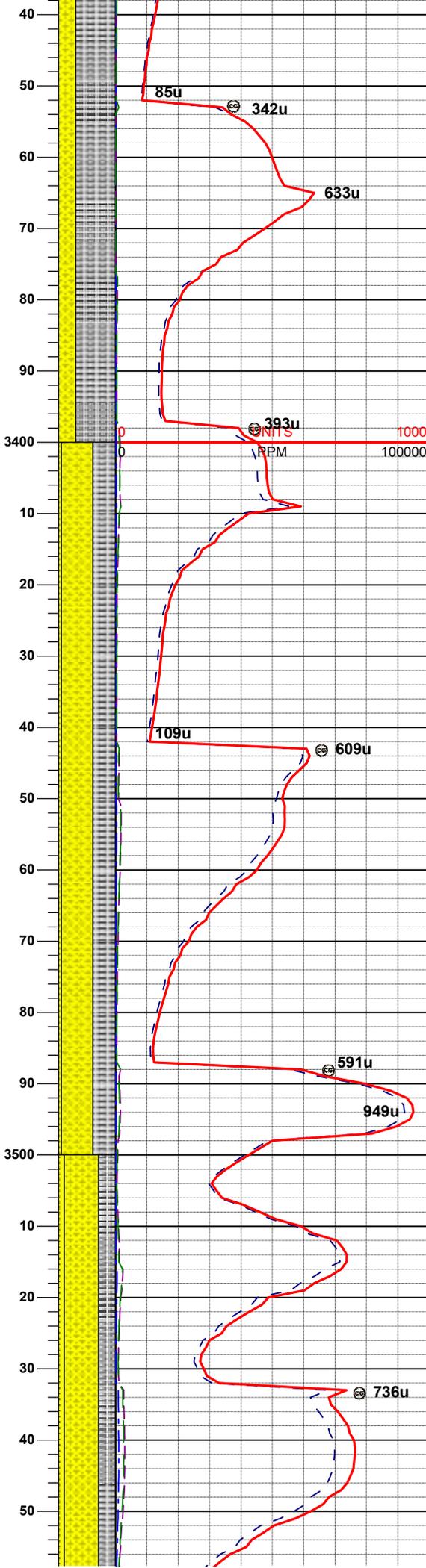
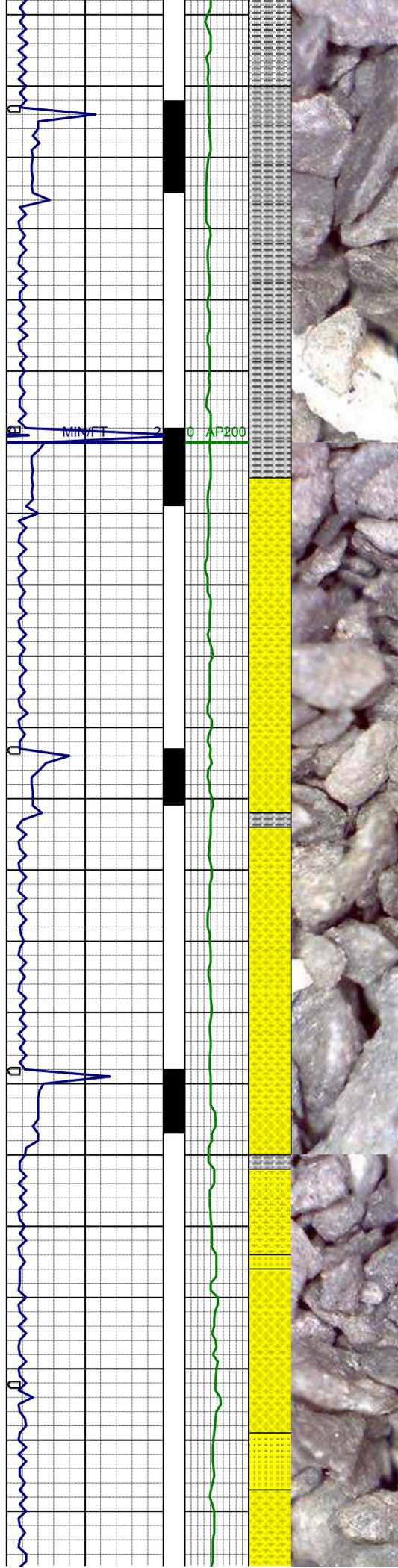
SHYSS: gy- mgy, trnsl- op, f-vfgr, sbbkly-sbplty, mod srt, sft-sl firm, arg-sil mtz, tr pyr, slcalc, grdg- sltysh
 SS: wh- ltgy, clr-trnsl, f- mgr, sbbkly, mod srt, fri, p cmt, sil mtz, occ, glau, slcalc

WT 8.75

MD 3213'
 INC 12.6°
 AZI 154.8°
 TVD 3159.8'

SLTYSH: lt-mgy, sbbkly-sbplty, sft- m firm, rthy- gt tex, sdy ip, slcalc, grdg-shyss

MD 3303'
 INC 12.5°
 AZI 156.5°
 TVD 3247.7'



SLTYSH: lt-mgy, sbblky-sbply, sft- m
firm, rthy- gt tex, sdy ip, slcalc, grdg-
shyss

MD 3393'
INC 14.2°
AZI 157.2°
TVD 3335.2'

WT 8.85

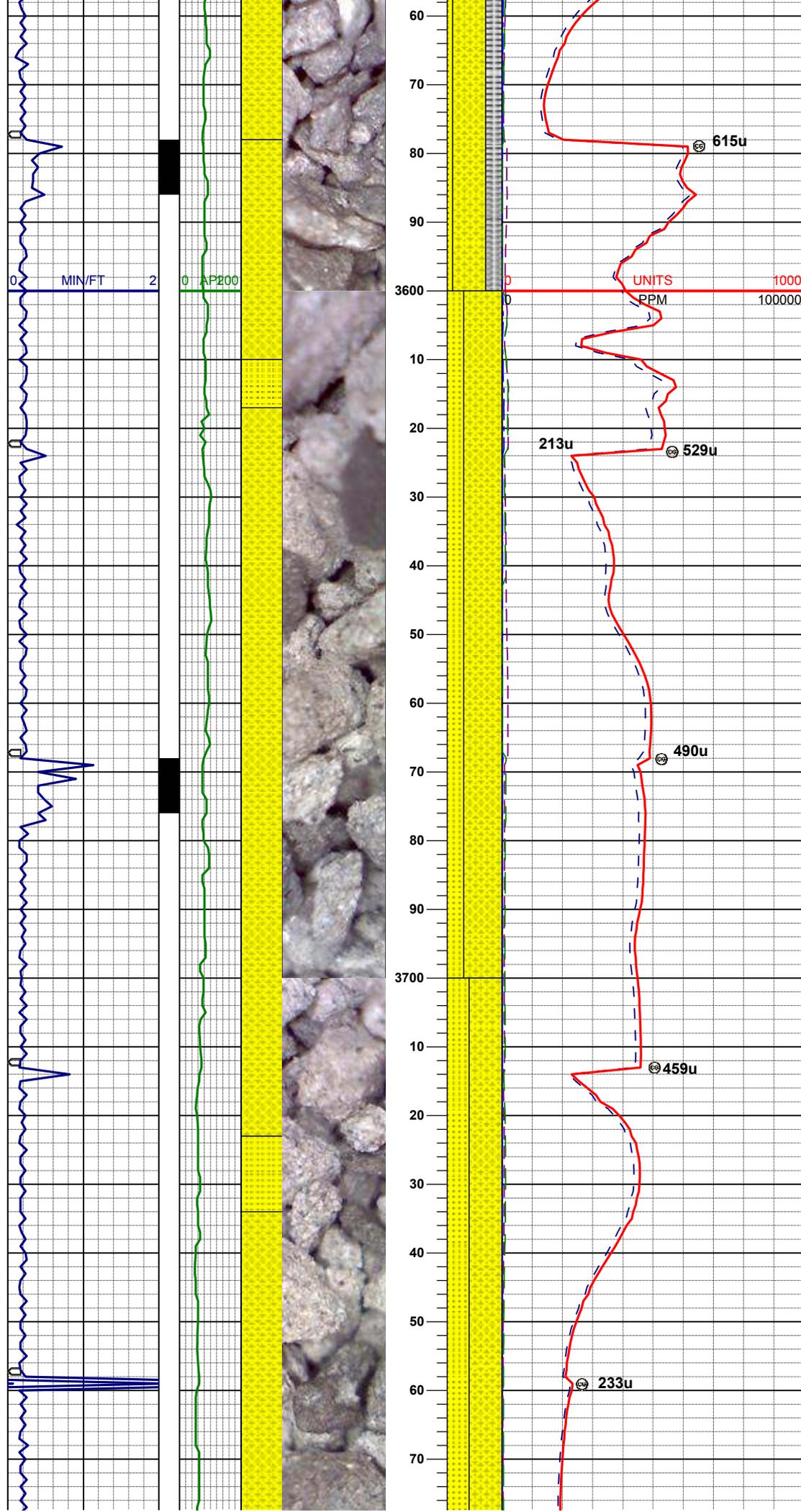
SHYSS: gy- mgy, trnsl- op, vf-f gr,
sbbly-sbply, mod srt, sft-sl firm, arg-
sil mtx, tr pyr, slcalc, grdg- sltysh
SS: tan- ltgybrn, clr- trnsl, f- mgr,
sbbly, p cmt, sil mtx

MD 3482'
INC 14.9°
AZI 162.9°
TVD 3421.4'

SHYSS: gy- mgy, trnsl- op, vf-f gr,
sbbly-sbply, mod srt, sft-sl firm, arg-
sil mtx, tr pyr, slcalc, grdg- sltysh
SS: tan- ltgybrn, clr- trnsl, f- mgr,
sbbly, p cmt, sil mtx

sbbiky, p cmt, sil mtx

MD 3572'
INC 14.3°
AZI 156.9°
TVD 3508.5'



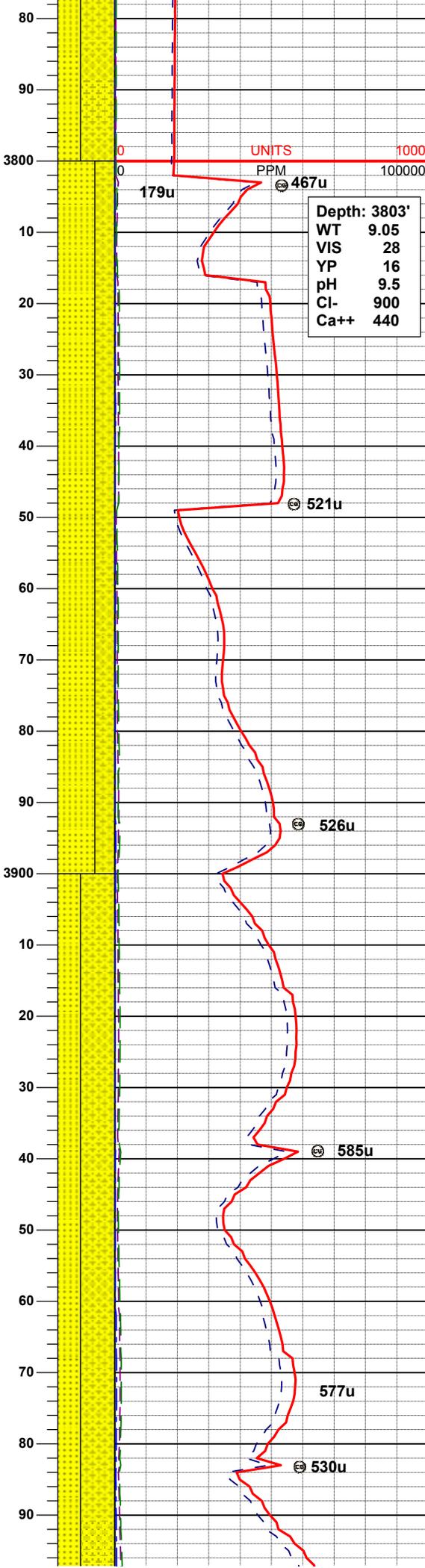
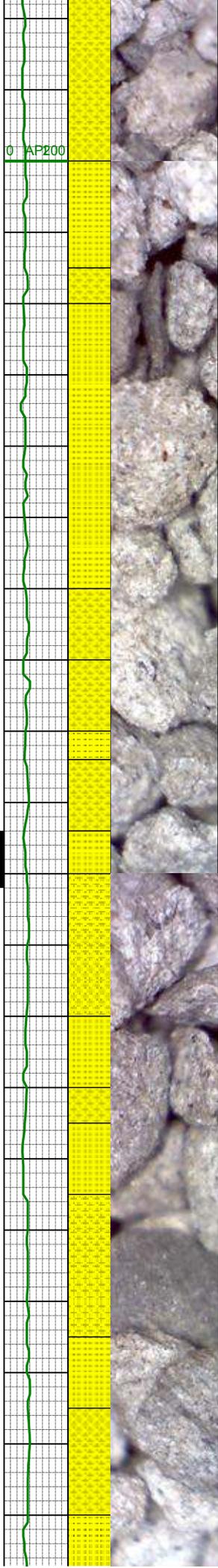
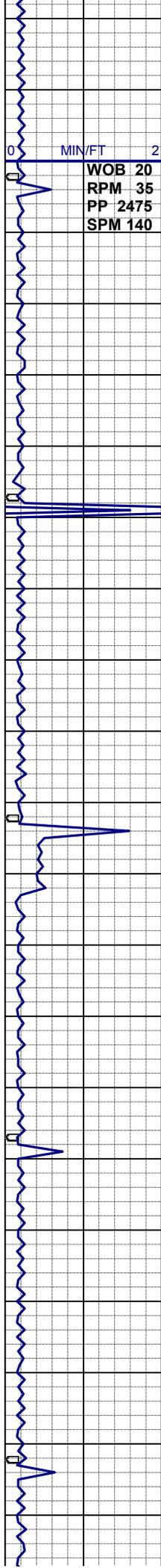
WT 8.95

SHYSS: gy- mgy, trnsl- op, vf-f gr,
sbbiky-sbply, mod srt, sft-sl firm, arg-
sil mtx, tr pyr, slcalc, grdg- sltysh
SS: tan- ltgybrn, s&p ip clr- trnsl, f gr,
sbbiky, p cmt, sil mtx

MD 3662'
INC 14.0°
AZI 157.2°
TVD 3595.8'

SHYSS: gy- mgy, trnsl- op, vf-f gr,
sbbiky-sbply, mod srt, sft-sl firm, arg-
sil mtx, tr pyr, slcalc, grdg- sltysh
SS: tan- ltgybrn, s&p ip clr- trnsl, f gr,
sbbiky, p cmt, sil mtx

MD 3752'
INC 14.6°
AZI 153.9°
TVD 3683.0'



Depth:	3803'
WT	9.05
VIS	28
YP	16
pH	9.5
Cl-	900
Ca++	440

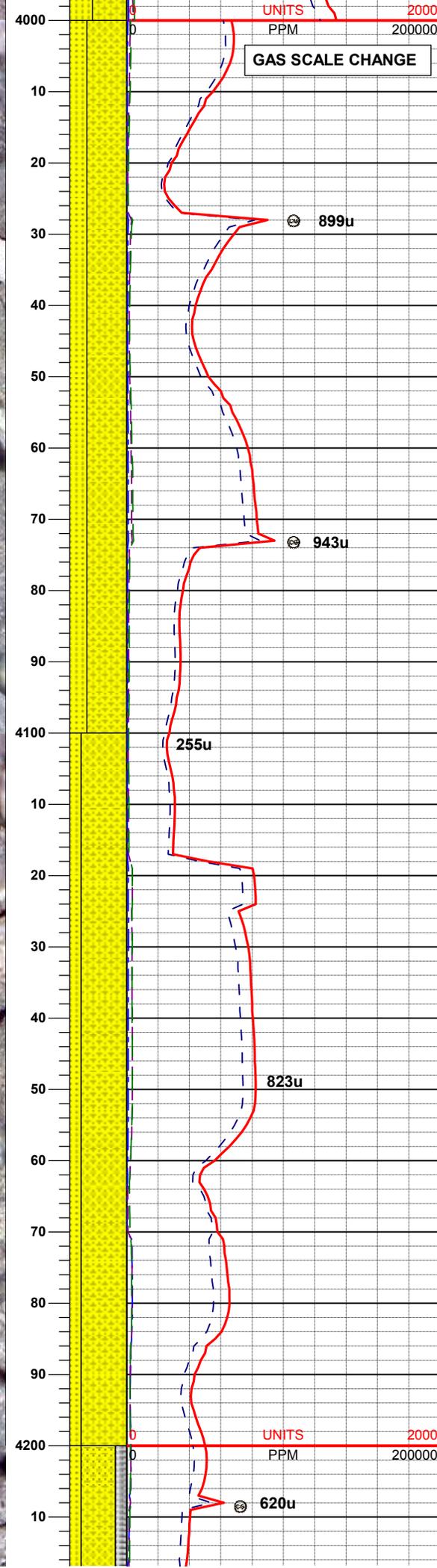
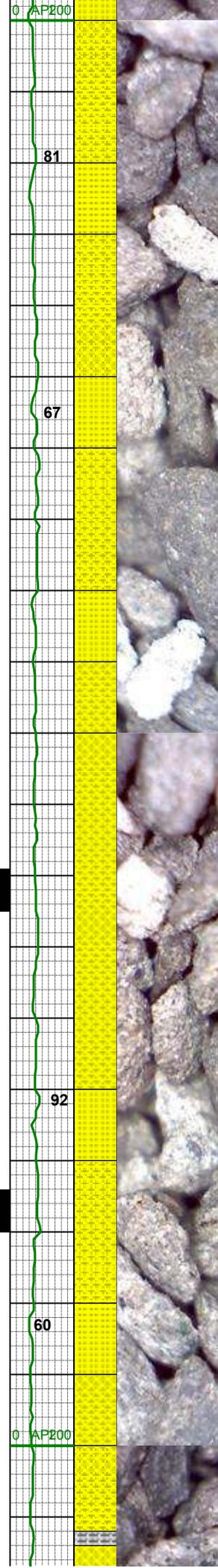
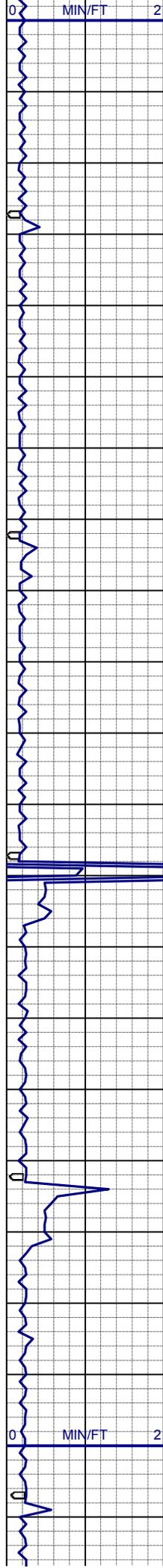
WT 9.1

MD 3842'
 INC 14.9°
 AZI 152.1°
 TVD 3770.0'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbblyk-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: tan- ltgybrn, s&p ip clr- trnsl, f gr, sbblyk, p cmt, sil mtx

MD 3932'
 INC 14.4°
 AZI 156.7°
 TVD 3857.1'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbblyk-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: tan- ltgybrn, s&p ip clr- trnsl, f gr, sbblyk, p cmt, sil mtx



WT 9.2 / VIS 38

MD 4022'
 INC 14.2°
 AZI 156.0°
 TVD 3944.3'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: tan- ltgybrn, s&p ip clr- trnsl, f gr, sbbly, p cmt, sil mtx

MD 4111'
 INC 13.6°
 AZI 154.8°
 TVD 4030.7'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: tan- ltgybrn, s&p ip clr- trnsl, f gr, sbbly, p cmt, sil mtx

MD 4201'
 INC 14.9°
 AZI 158.3°
 TVD 4117.9'

UNITS 2000
 PPM 200000
GAS SCALE CHANGE

899u

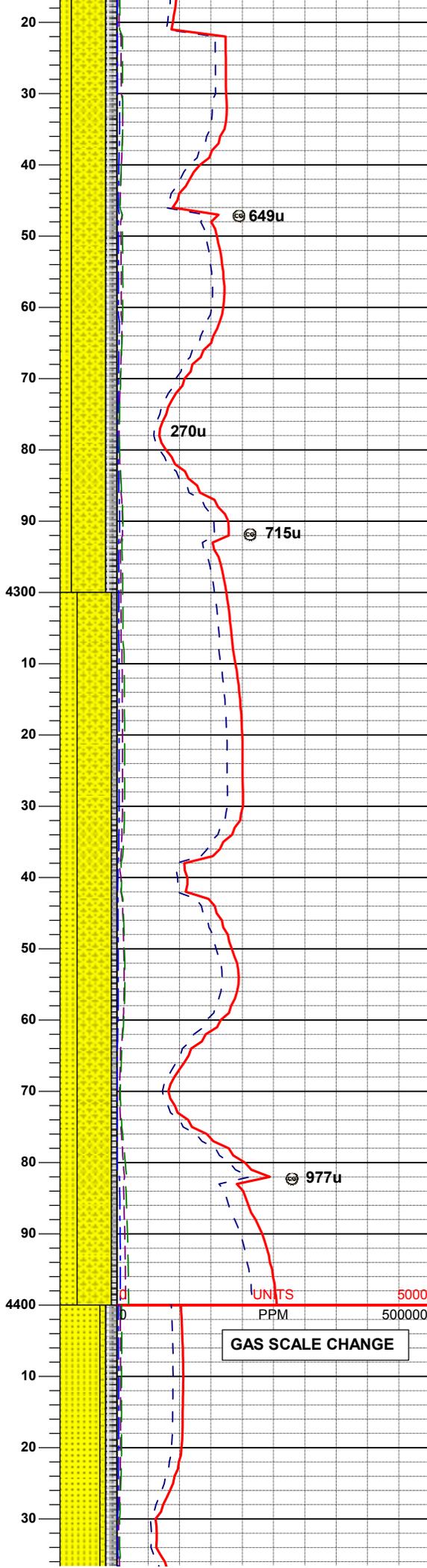
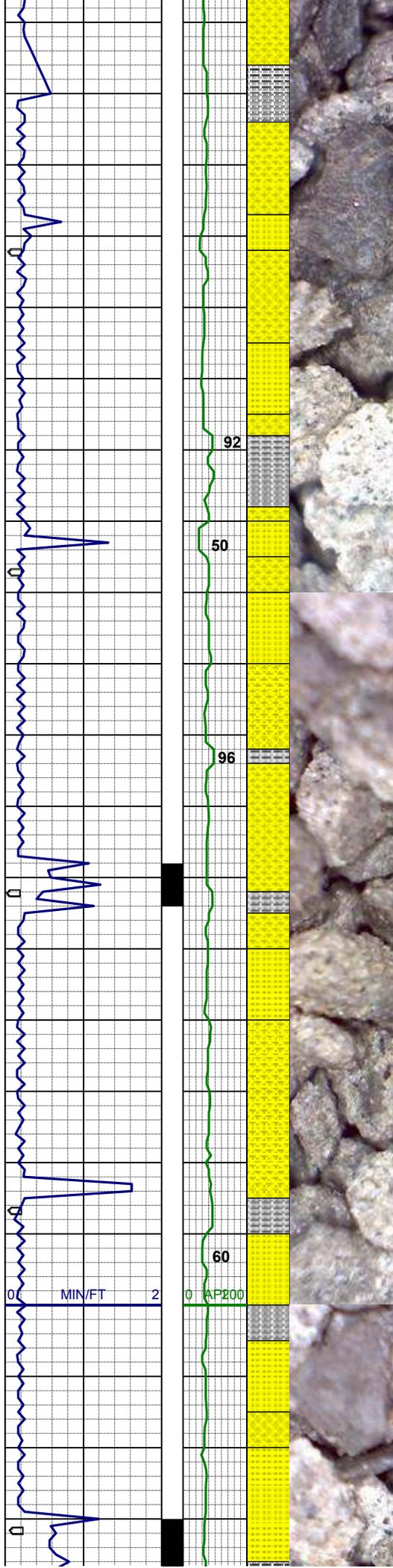
943u

255u

823u

620u

UNITS 2000
 PPM 200000



SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbiky-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: tan- ltgybrn, s&p ip clr- trnsl, f gr, sbbiky, p cmt, sil mtx
 SLTYSH: lt-dkgy, sbply-pty, vfgr-fgr, sft-firm, arg cmt, occ sdy ip

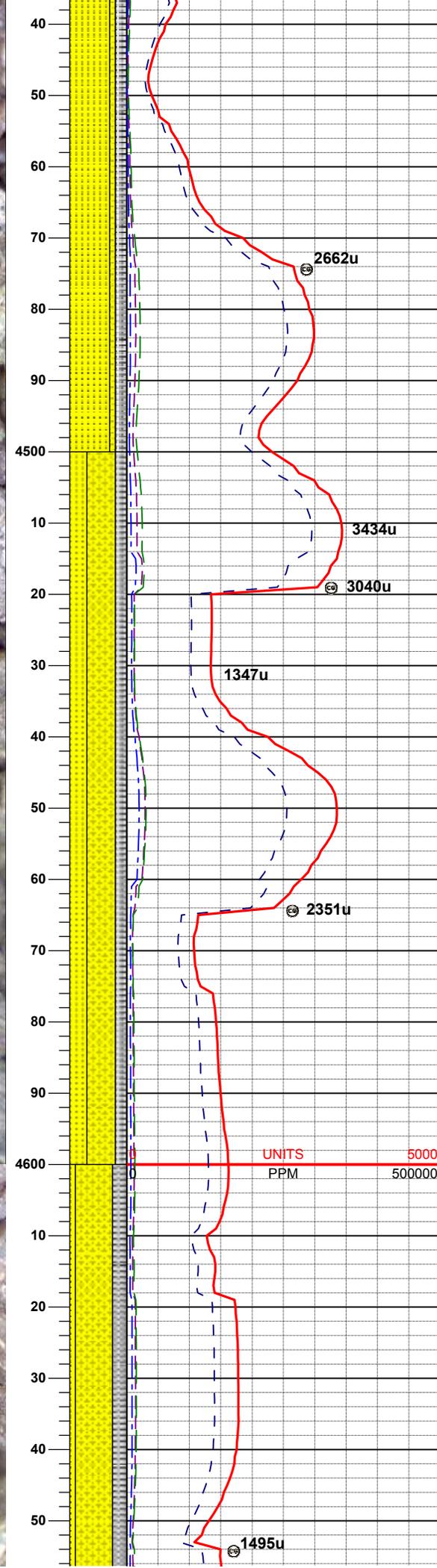
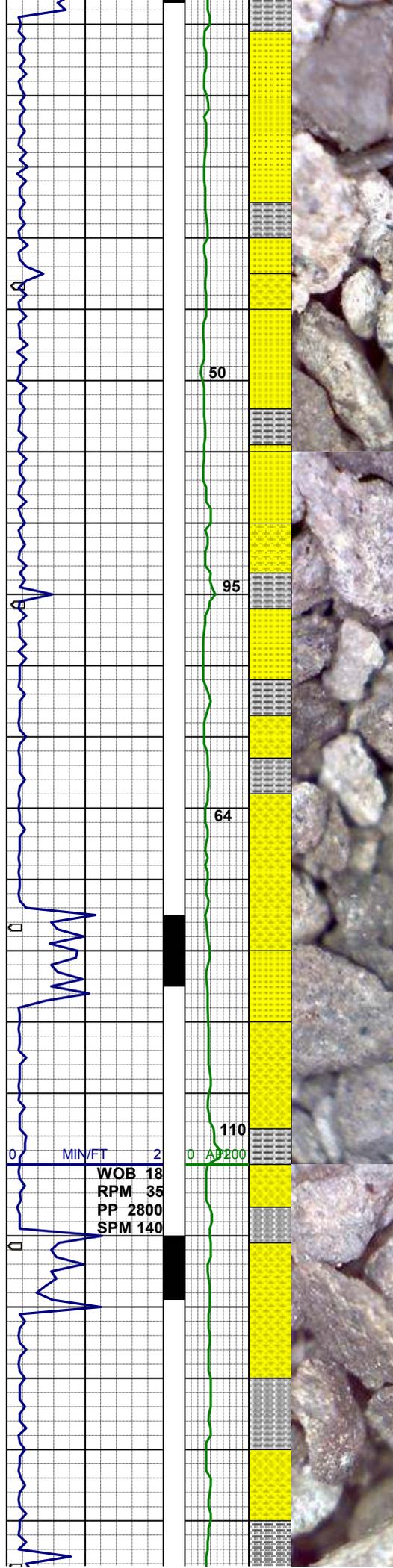
MD 4291'
 INC 14.0°
 AZI 158.1°
 TVD 4205.1'

WT 9.25 / VIS 32

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbiky-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: tan- ltgybrn, s&p ip clr- trnsl, f gr, sbbiky, p cmt, sil mtx
 SLTYSH: lt-dkgy, sbply-pty, vfgr-fgr, sft-firm, arg cmt, occ sdy ip

MD 4381'
 INC 13.5°
 AZI 159.3°
 TVD 4292.5'

UNITS 5000
 PPM 500000
 GAS SCALE CHANGE



SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbkly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbkly, p cmt, sil mtx
 SLTYSH: lt-dkgy, sbply-pty, vfgr-fgr, sft-firm, arg cmt, occ sdy ip

MD 4471'
INC 14.2°
AZI 156.7°
TVD 4379.9'

WT 9.2 / VIS 30

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbkly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbkly, p cmt, sil mtx
 SLTYSH: lt-dkgy, sbply-pty, vfgr-fgr, sft-firm, arg cmt, occ sdy ip

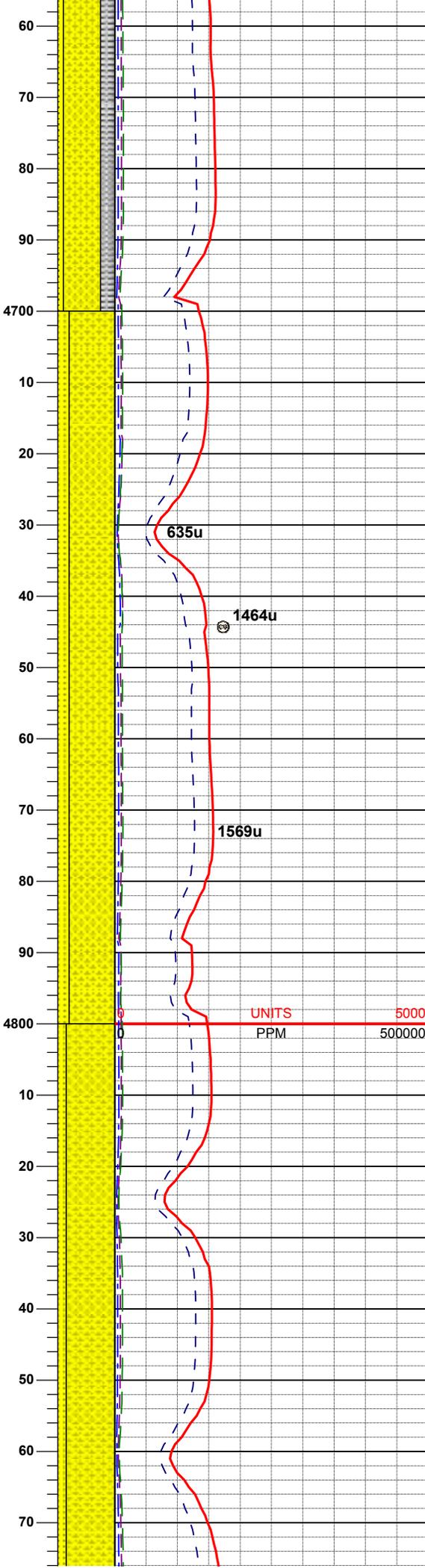
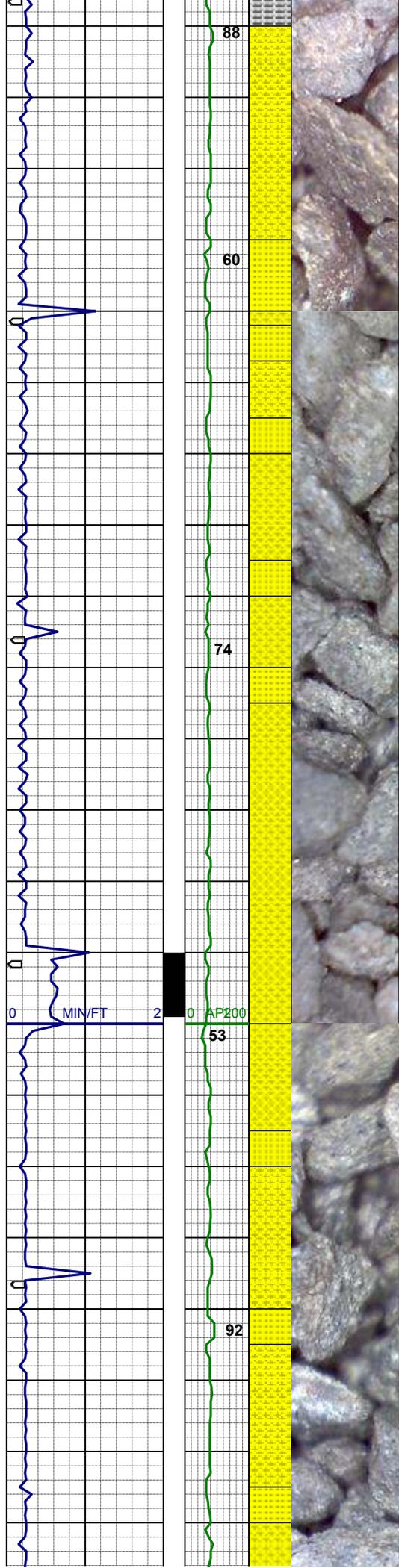
MD 4561'
INC 13.8°
AZI 156.5°
TVD 4467.2'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbkly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbkly, p cmt, sil mtx
 SLTYSH: lt-dkgy, sbply-pty, vfgr-fgr, sft-firm, arg cmt, occ sdy ip

MD 4651'
INC 15.6°
AZI 159.5°
TVD 4554.2'

MIN/FT 2
 WOB 18
 RPM 35
 PP 2800
 SPM 140

UNITS 5000
 PPM 500000



WT 9.25 / VIS 35

MD 4741'
 INC 13.8°
 AZI 158.6°
 TVD 4641.3'

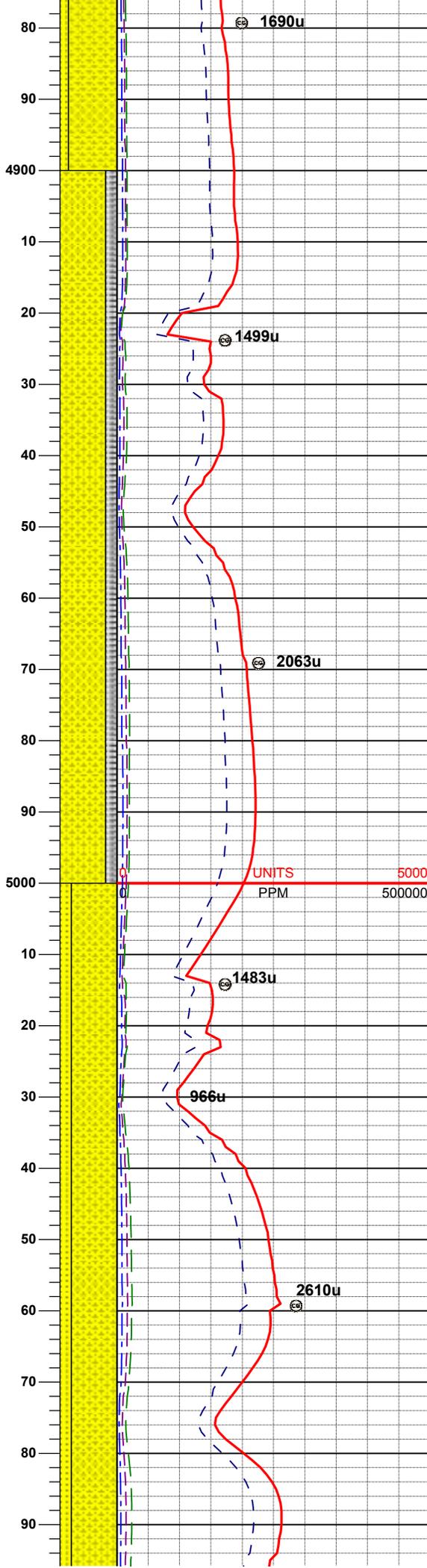
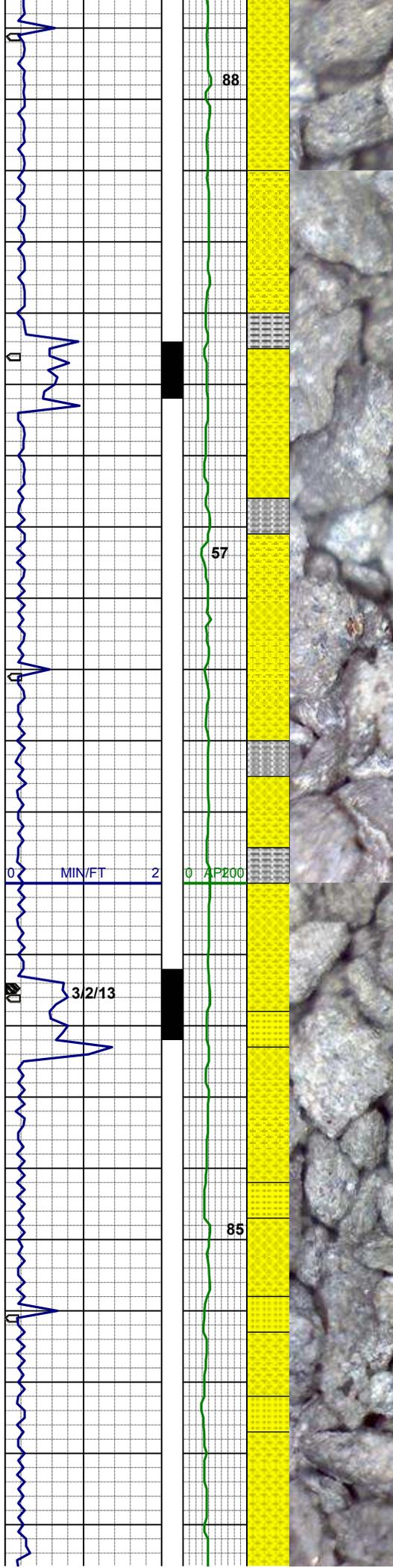
SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbiky-sbpity, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh

SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbiky, p cmt, sil mtx

MD 4830'
 INC 14.4°
 AZI 157.1°
 TVD 4727.6'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbiky-sbpity, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh

SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbiky, p cmt, sil mtx



MD 4920'
 INC 13.5°
 AZI 156.7°
 TVD 4815.0'

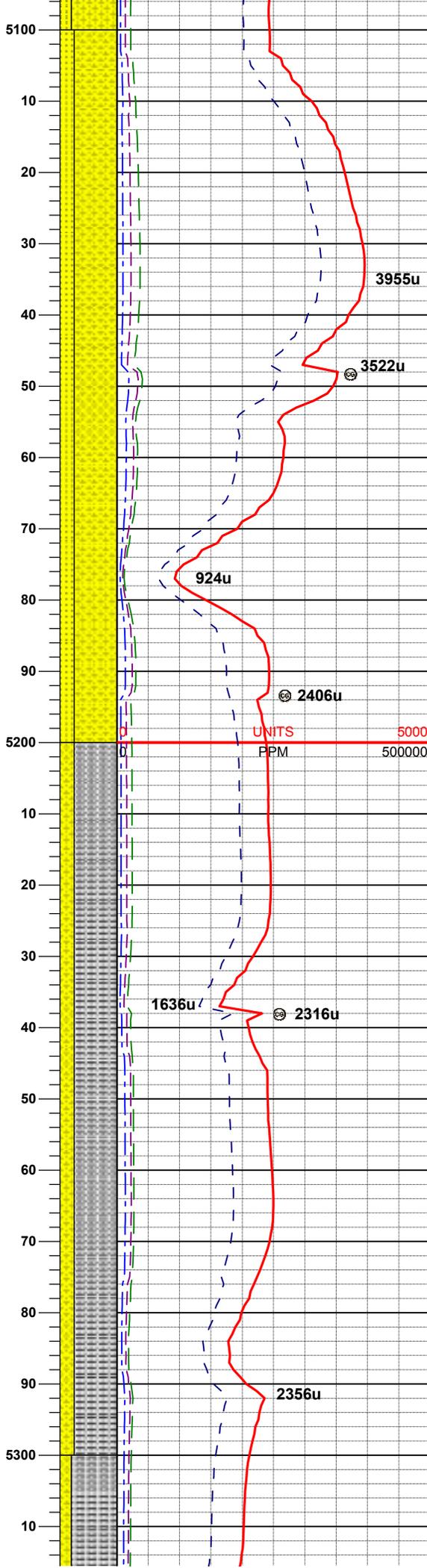
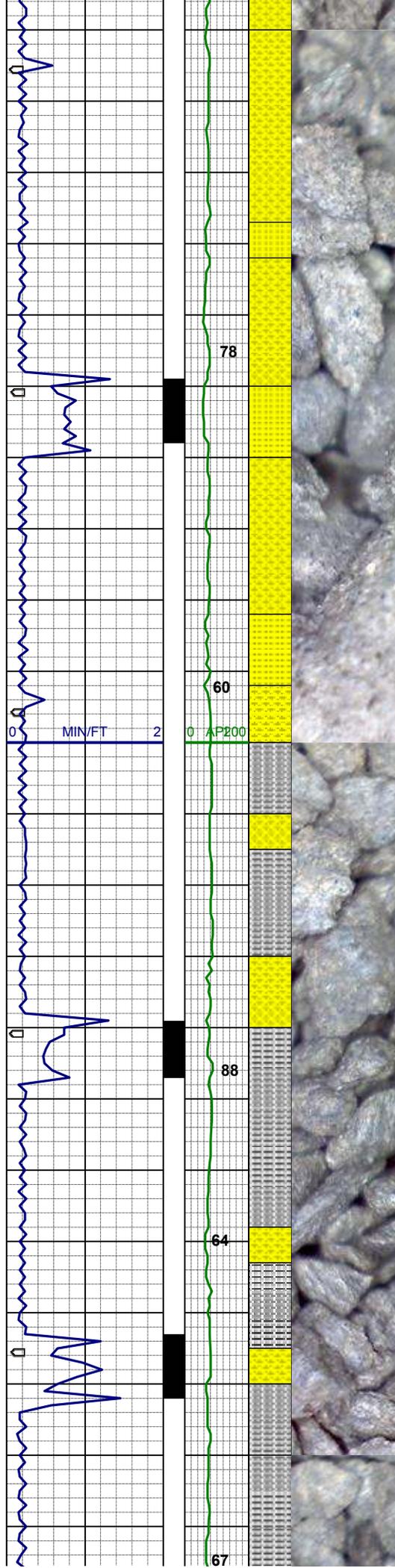
SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, occ sltysh
 SLTYSH: lt-dkgy, sbply-ply, vfgr-fgr, sft-firm, arg cmt, occ sdy ip

WT 9.3 / VIS 33

MD 5010'
 INC 13.7°
 AZI 156.2°
 TVD 4902.4'

SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, tr sltysh
 SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbly, p cmt, sil mtx

MD 5100'



INC 14.2°
 AZI 155.5°
 TVD 4989.8'

WT 9.3 / VIS 37

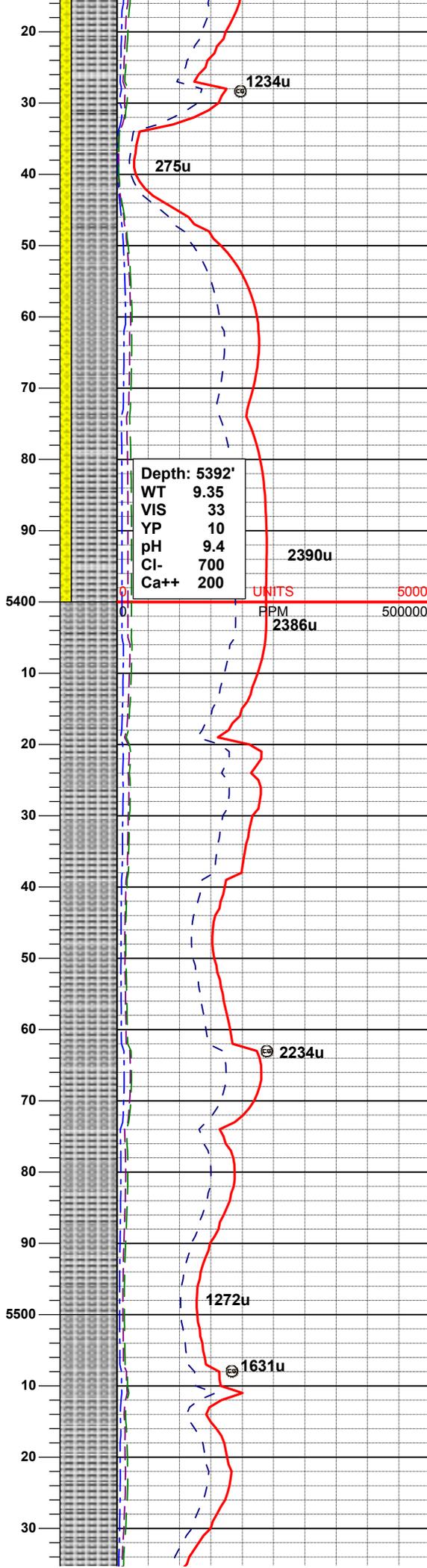
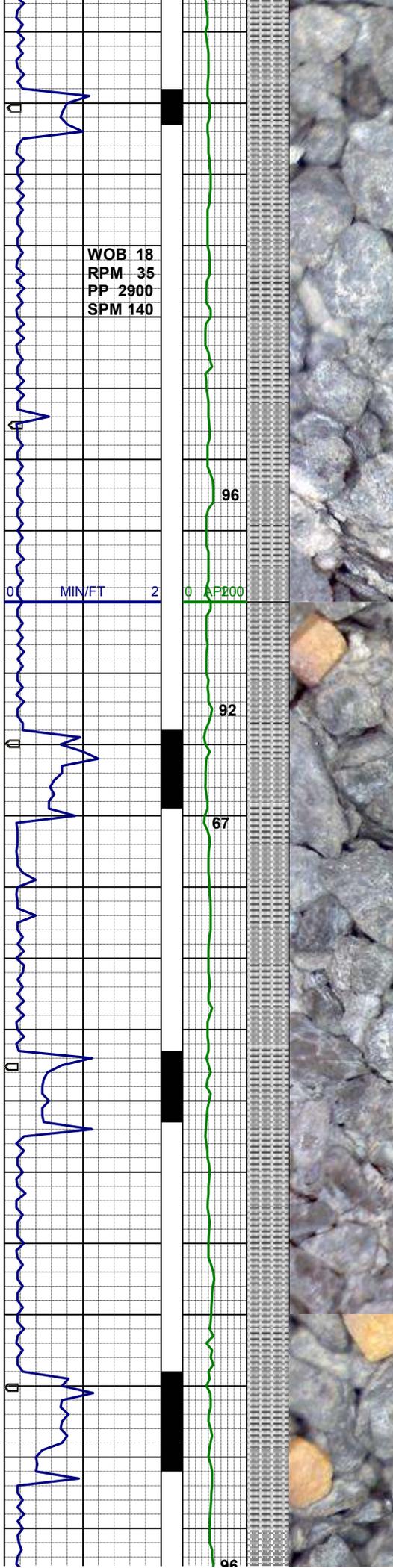
SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh, tr sltysh
 SS: wh- ltgybrn, s&p ip clr- trnsl, f gr, sbbly, p cmt, sil mtx

MD 5190'
 INC 15.1°
 AZI 157.2°
 TVD 5076.9'

SLTYSH: lt-dkgy, sbbly-sbply, vfgr-fgr, firm- mod hd, slty txt, arg cmt, occ sdy ip, tr pyr
 SHYSS: gy- mgy, trnsl- op, vf-f gr, sbbly-sbply, mod srt, sft-sl firm, arg-sil mtx, tr pyr, slcalc, grdg- sltysh

MD 5280'
 INC 13.5°
 AZI 151.3°
 TVD 5164.1'

WT 9.35 / VIS 33



SLTYSH: lt-dkgy, sbblky-sbplty, vfgr-
fgr, firm- mod hd, slty txt, arg cmt, occ
sdy ip, tr pyr
SHYSS: gy- mgy, trnsl- op, vf-f gr,
sbbly-sbplty, mod srt, sft-sl firm, arg-
sil mtx, tr pyr, slcalc, grdg- sltysh

MD 5370'
INC 13.2°
AZI 154.2°
TVD 5251.6'

WT 9.25 / VIS 33

SLTYSH: lt-dkgy, sbblky-sbplty, firm,
gt tex, occ sdy ip, sl calc, grdg- shyss

MD 5460'
INC 13.1°
AZI 156.5°
TVD 5339.3'

1234u

275u

2390u

2386u

5400

10

20

30

40

50

60

70

80

90

5500

10

20

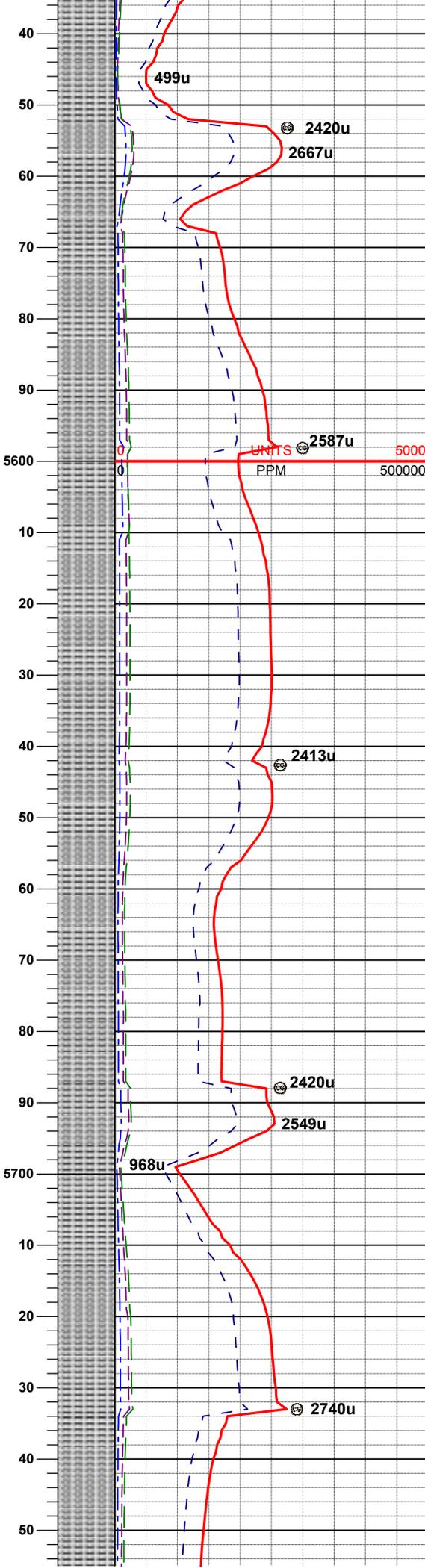
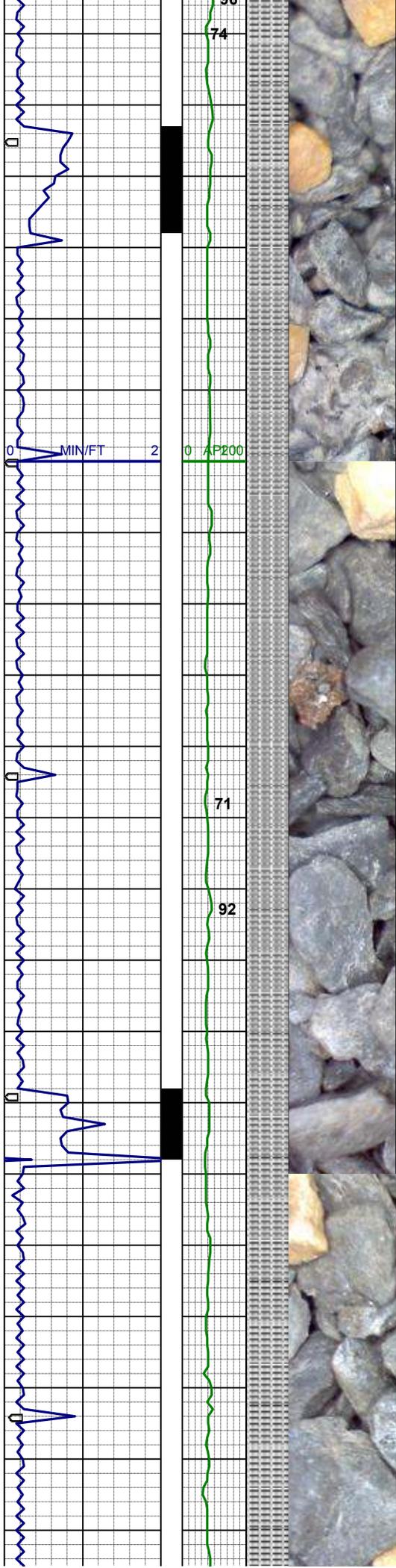
30

96

92

67

96



SLTYSH: lt-dkgy, sbblky-sbplty, firm, gt tex, occ sdy ip, sl calc, grdg- shyss

MD 5550'
 INC 14.6°
 AZI 159.2°
 TVD 5426.7'

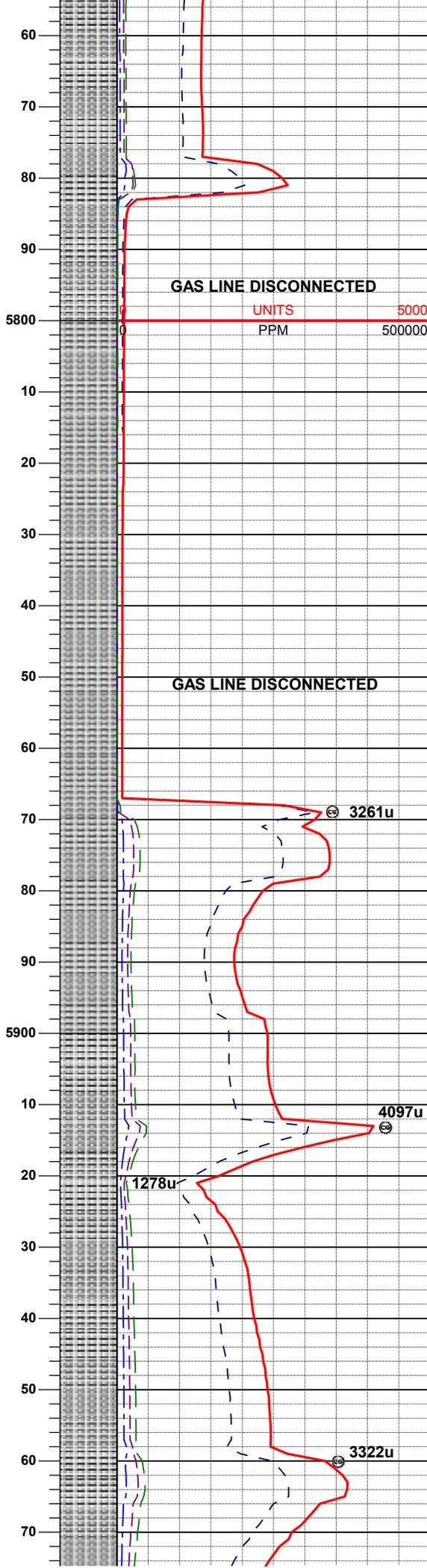
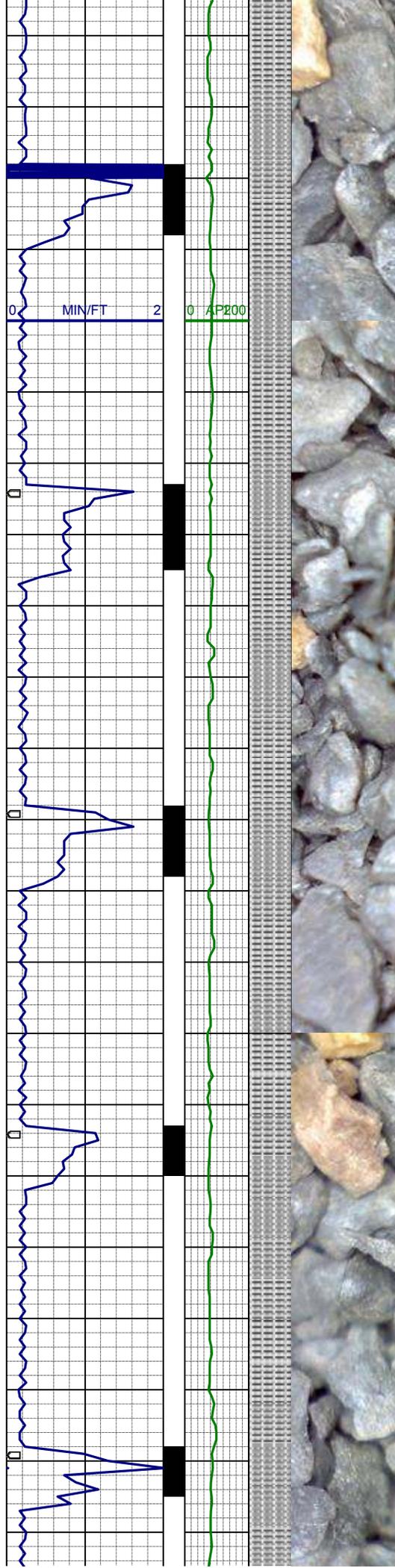
WT 9.5 / VIS 40

MD 5639'
 INC 14.0°
 AZI 157.9°
 TVD 5512.9'

SLTYSH: m- dkgy, occ lt gy, sbblky-sbplty, firm, gt tex, occ sdy ip, sl calc, grdg- shyss

MD 5729'
 INC 13.5°
 AZI 155.1°
 TVD 5600.3'

SLTYSH: m- dkgy, occ lt gy, sbblky-sbplty, firm, gt tex, occ sdy ip, sl calc, grdg- shyss



MD 5819'
 INC 13.0°
 AZI 156.7°
 TVD 5687.9'

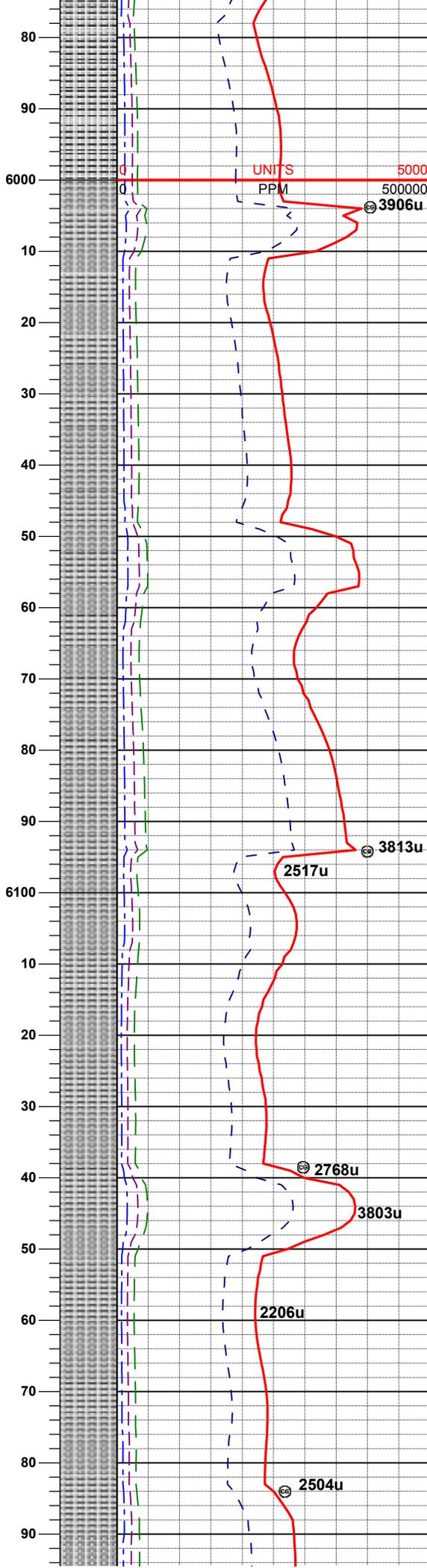
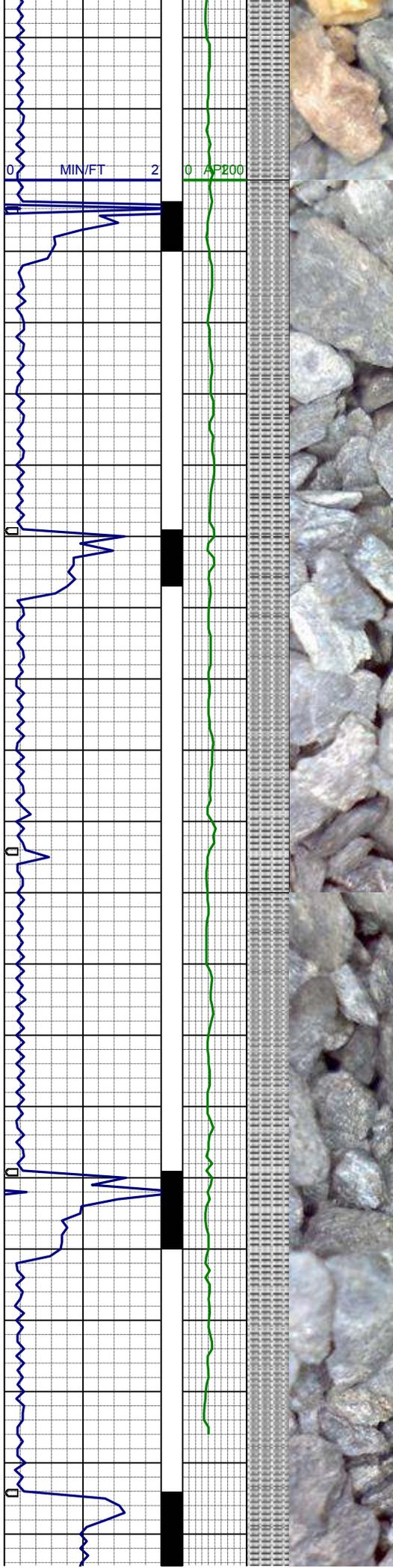
WT 9.6

SLTYSH: m- dkgy, occ lt gy, sbbly-
 sbply, firm, gt tex, occ sdy ip, sl calc,
 grd- shyss

MD 5909'
 INC 14.7°
 AZI 158.5°
 TVD 5775.3'

SLTYSH: m- dkgy, occ lt gy, sbbly-
 sbply, firm, gt tex, occ sdy ip, sl calc,
 grd- shyss

WT 9.7 / VIS 39



MD 5999'
 INC 14.9°
 AZI 158.5°
 TVD 5862.3'

WT 10.0 / VIS 40

SLTYSH: m- dkgy, occ lt gy, sbbly-
 sbply, firm, gt tex, occ sdy ip, sl calc,
 grd- shyss

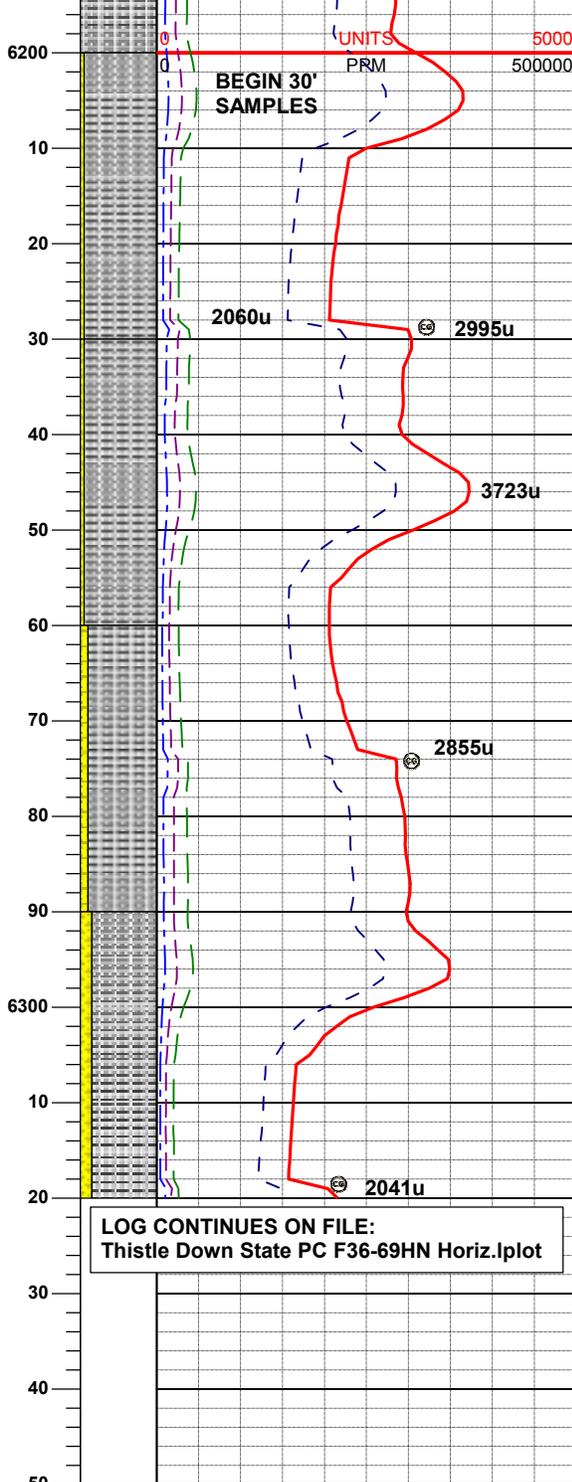
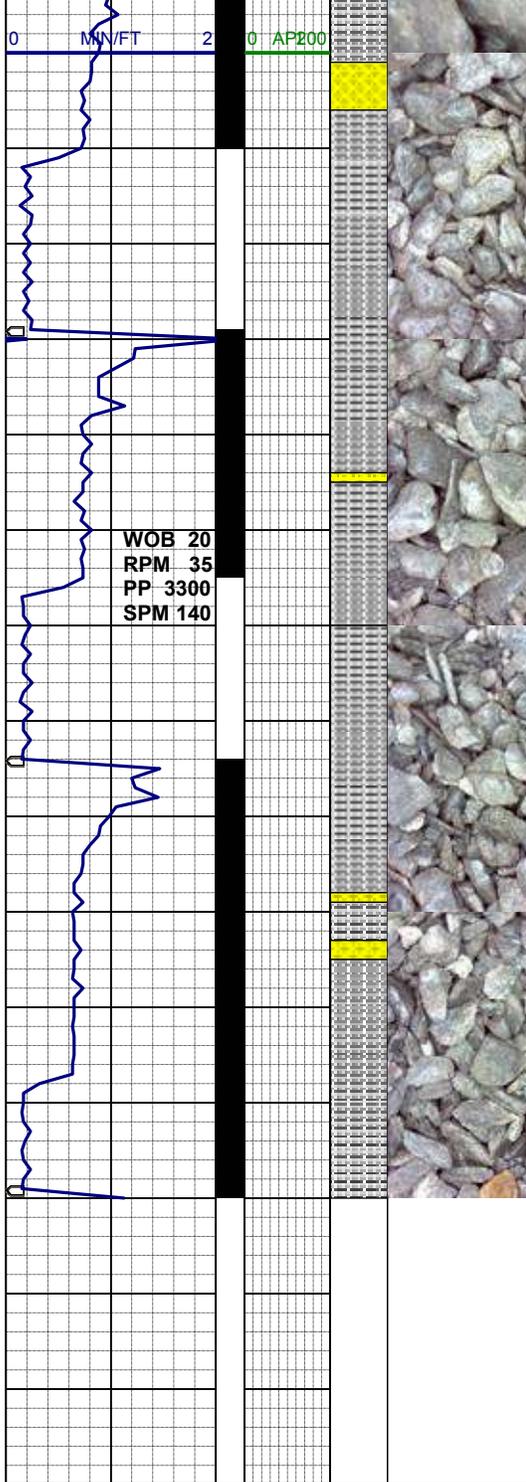
MD 6089'
 INC 15.2°
 AZI 159.7°
 TVD 5949.2'

WT 10.1 / VIS 39

SLTYSH: m- dkgy, occ lt gy, sbbly-
 sbply, firm, gt tex, sdy ip, sl calc, grd-
 - shyss

MD 6179'
 INC 15.2°
 AZI 163.9°
 TVD 6036.1'

UNITS 5000
 PPM 500000
 3906u
 2517u
 3813u
 2768u
 3803u
 2206u
 2504u



SLTYSH: m- dkgy, occ lt gy, sbbky-sbplty, firm, gt tex, sdy ip, sl calc, grdg - shyss

MD 6224'
INC 15.1°
AZI 176.2°
TVD 6079.5'

SLTYSH: m- dkgy, occ lt gy, sbbky-sbplty, firm, gt tex, sdy ip, sl calc, grdg - shyss

WT 10.2 / VIS 40

MD 6269'
INC 15.6°
AZI 188.7°
TVD 6122.9'

SLTYSH: m- dkgy, occ lt gy, sbbky-sbplty, firm, gt tex, sdy ip, sl calc, grdg - shyss

SLTYSH: m- dkgy, occ lt gy, sbbky-sbplty, firm, gt tex, sdy ip, sl calc, grdg - shyss

MD 6314'
INC 15.9°
AZI 203.8°
TVD 6166.3'

THANK YOU FOR CHOOSING
COLUMBINE LOGGING, INC.