

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name Reliance E23-65-1HC Vert

Location NESE 23 6N 65W 6 PM

State COLORADO

County WELD

Country UNITED STATES

Rig Number H&P 326

API Number 05-123-37603

Field WATTENBERG

Region DJ BASIN

Drilling Completed 3/9/2015

Spud Date 3/4/2015

Surface Coordinates NESE 23 6N 65W 6 PM
2103 FSL 280 FEL
Lat/Long: 40.46998/-104.62185

Bottom Hole Coordinates PROJECTED
NESE 23 6N 65W
2310 FSL 535 FFWLL

Ground Elevation 4695'

K.B. Elevation 4725'

Logged Interval 1000' **To** 11352'

Total Depth 11352'

Formation Codell

Type of Drilling Fluid LSND, WATER BASED MUD

Other Symbols

Oil Show

- DEAD
- EVEN
- QUESTIONABLE
- SPOTTED STAINING

Porosity

- E EARTHY
- F FENESTRAL
- F FRACTURE
- INTERCRYSTALLINE
- INTEROOLITIC
- MOLDIC

ORGANIC

P PINPOINT

V VUGGY

Engineering

- BIT CHANGE
- CONNECTION (LEFT)
- CONNECTION (RIGHT)
- CONNECTION GAS
- TRIP GAS
- DOWN TIME GAS
- CORE - LOST
- CORE - RECOVERED
- DST INTERVAL

FAULT

FORMATION TOP

GAS SHOW

OIL SHOW

MN DEPTH MN DEPTH

MN DEPTH MN DEPTH (RIGHT)

NORMAL FAULT

OVERTURNED STRATA

REVERSE FAULT

CASING

SIDEWALL CORE (LEFT)

SIDEWALL CORE (RIGHT)

SLIDE

SURVEY

DST DRILL STEM TEST

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

Rounding

- ANGULAR
- ROUNDED
- SUBANG
- SUBRND

Textures

- BOUNDSTONE
- CHALKY
- CRYPTOXLN

E EARTHY

FINELYXLN

GRAINSTONE

L LITHOGRAPHIC

MX MICROXLN

MS MUDSTONE

PS PACKSTONE

WS WACKESTONE

Sorting

- M MODERATE
- P POOR
- W WELL

Accessories

Fossils

GASTROPOD

ARGILLITE GRAIN

HEAVY MINERAL

Stringer

Fossils

ALGAE
AMPHIPORA
BELEMNITE
BIOCLASTIC
BRACHIOPOD
BRYOZOA
CEPHALOPOD
CORAL
CRINOID
ECHINOID
FISH
FORAMINIFERA
FOSSIL

Inoceramus

OOLITE
OSTRACOD
PELECYPOD
PELLET
PISOLITE
PLANT REMAINS
PLANT SPORES
SCAPHOPOD
STROMATOPOROID

Minerals

ANHYDRITIC
ARGILLACEOUS

Bentonite

BITUMENOUS SUBSTANCE
BRECCIA FRAGMENTS
CALCAREOUS
CARBONACEOUS FLAKES
CHTDK
CHTLT
COAL - THIN BEDS
DOLOMITIC
FELDSPAR
FERRUGINOUS PELLET
FERRUGINOUS
GLAUCONITE
GYPSIFEROUS

Kaolin

MARCASITE
MARLSTONE
MICACEOUS
MINERAL CRYSTALS
NODULES
PHOSPHATE PELLETS
PYRITE
SALT CAST
SANDY
SIDERITE
SILICEOUS
SILTY
TUFFACEOUS

Stringer

ANHYDRITE STRINGER
BENTONITE STRINGER
COAL STRINGER
DOLOMITE STRINGER
GYPSUM STRINGER
LIMESTONE STRINGER
MARLSTONE (CALC) STRG
MARLSTONE (DOL) STRG
SANDSTONE STRINGER
SHALE STRINGER
SILTSTONE STRINGER

Rock Types

UNKNOWN
ANHYDRITE
BENTONITE
BRECCIA
CEMENT
CHALK
CHERT
CLAY CHOKE SAND
CLAYSTONE

COAL
CONGLOMERATE
DOLOMITE
DOLOMITIC LIMESTONE
GRANITE
GYPSUM
IGNEOUS
LIMESTONE
SIDERITE or LIMONITE

MARLSTONE
METAMORPHIC
NO SAMPLE
SALT
SALT- PEPPER SAND
SANDSTONE
SHALE
SHALE COLORED
SHALE GRAY

SHALY SANDSTONE
SHALY SILTSTONE
SILTSTONE
SILTY SHALE
TILL
TUFF
WELDED TUFF

Operator

Company NOBLE ENERGY INC.

Address 1625 Broadway Suite 2200
Denver, CO 80202

Geologist

Name HOLLY DUNCAN

Company NOBLE ENERGY INC.

Address 1625 Broadway Suite 2200
Denver, CO 80202

Other

Well Site Geologist (Days) Brad Wilson

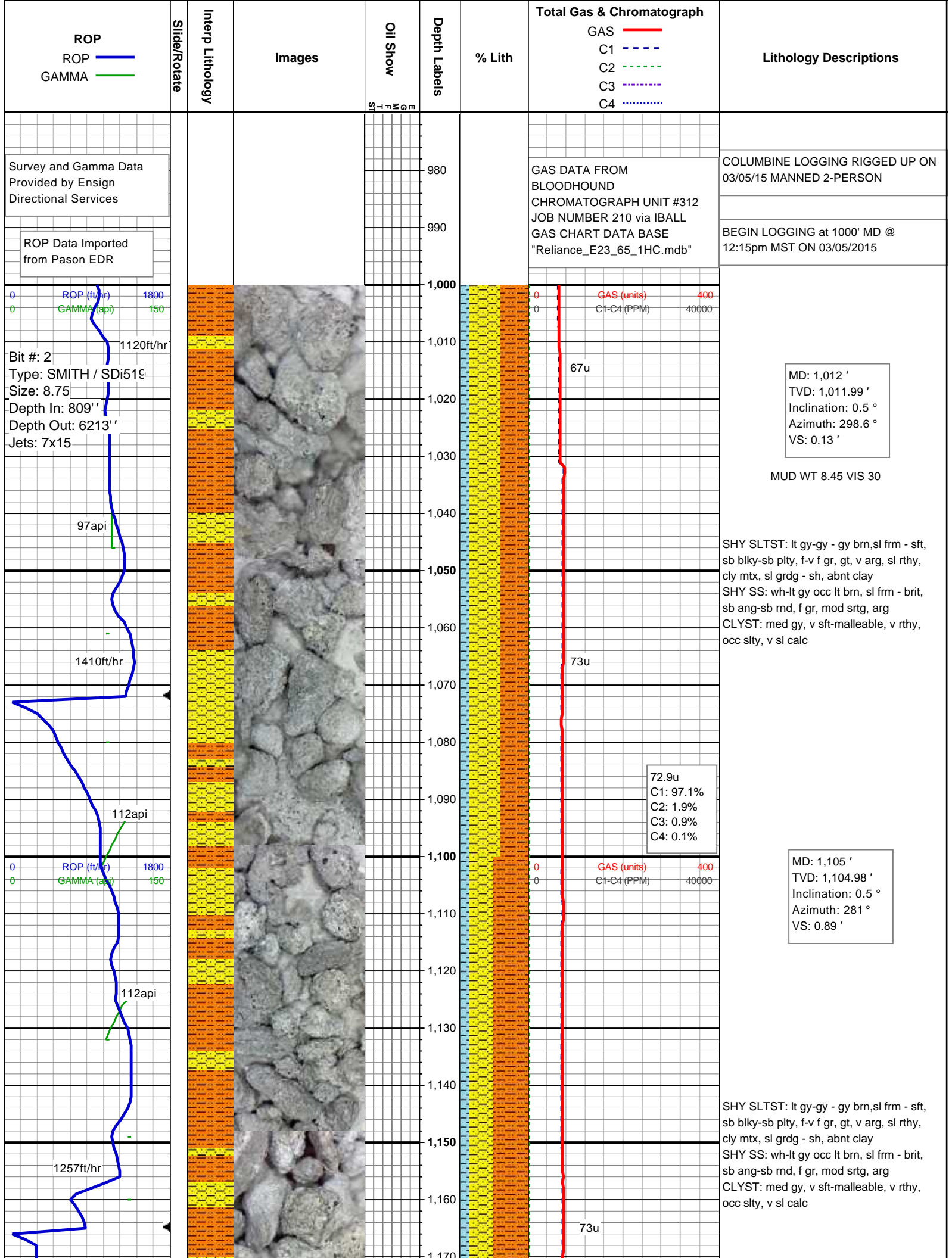
Well Site Geologist (Nights) Irene Kadel-Harder

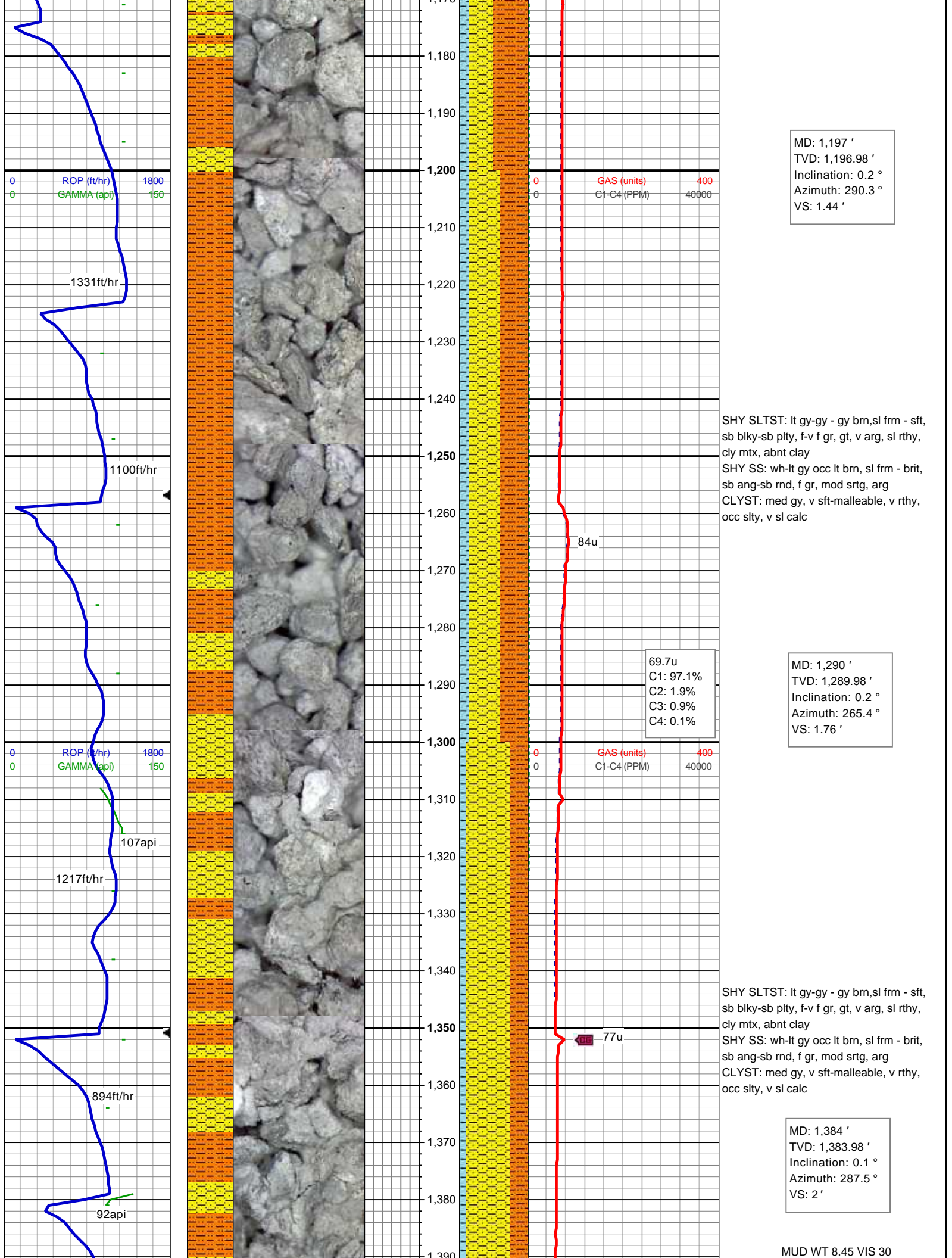
Zone Color Coding

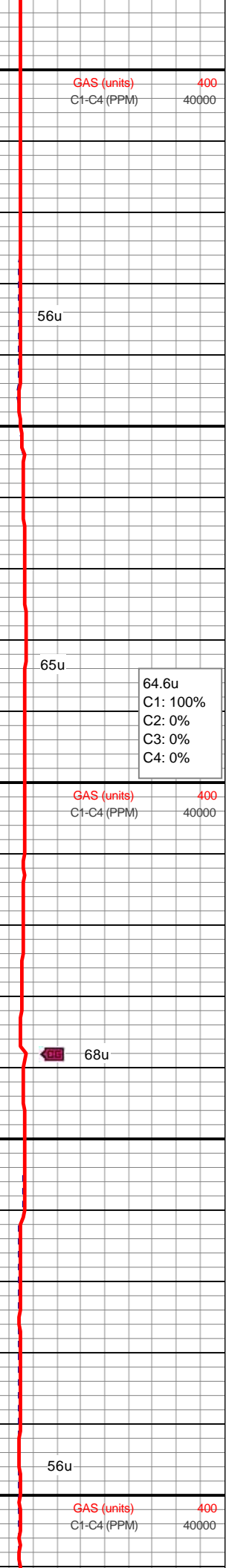
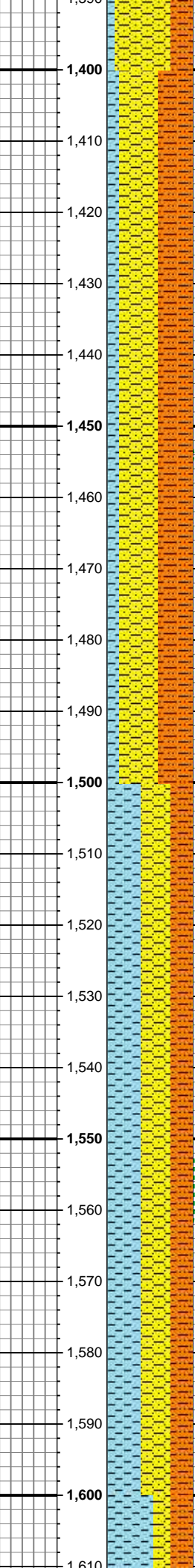
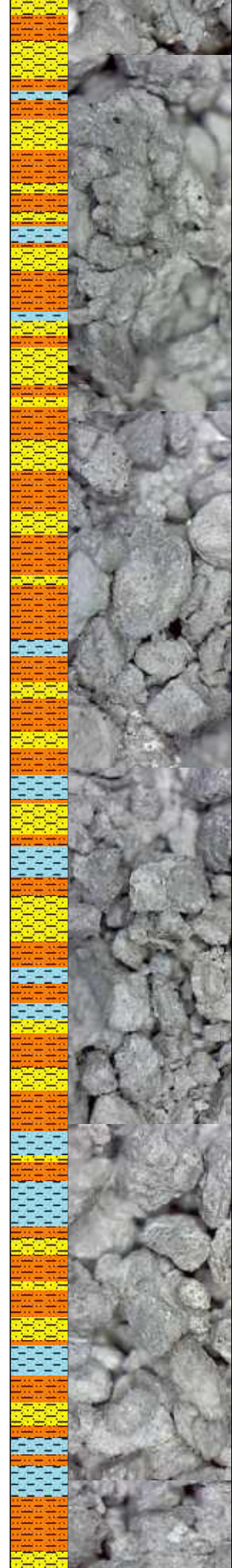
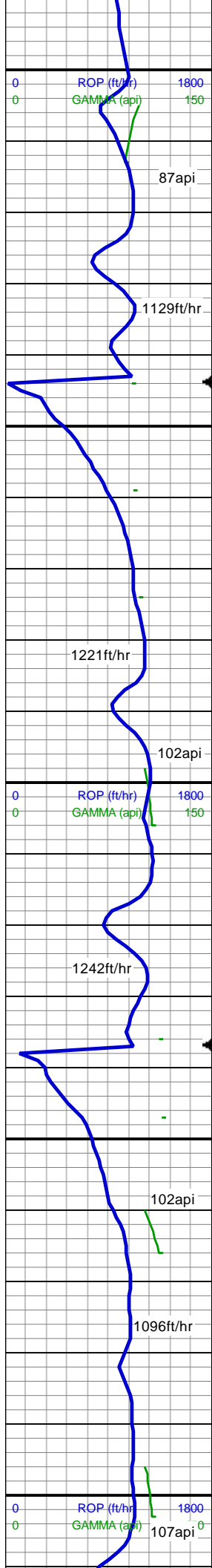
Oil
Note
Error

Condensate
Core
Water

Gas
Pressure
Seal







Mud Report @ 1452'MD
Wt 8.5 Gel 1/2/4
Vis 29 API 1/0
YP 2 Sand 0.4%
pH 11.6 Hard 80

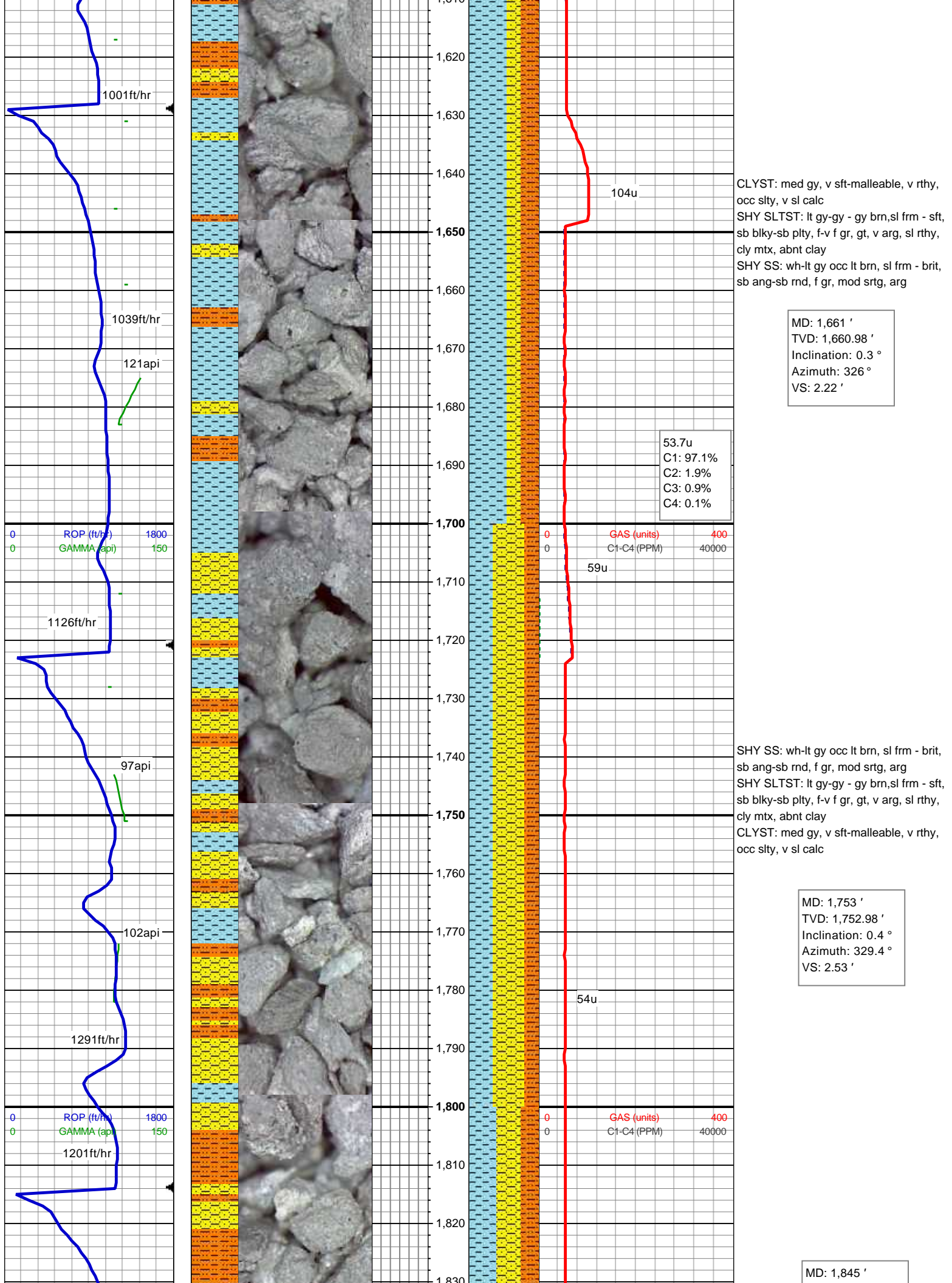
SHY SLTST: lt gy-gy - gy brn,sl frm - sft,
sb blkly-sb plty, f-v f gr, gt, v arg, sl rthy,
cly mtx, abnt clay
SHY SS: wh-lt gy occ lt brn, sl frm - brit,
sb ang-sb rnd, f gr, mod srtg, arg
CLYST: med gy, v sft-malleable, v rthy,
occ slty, v sl calc

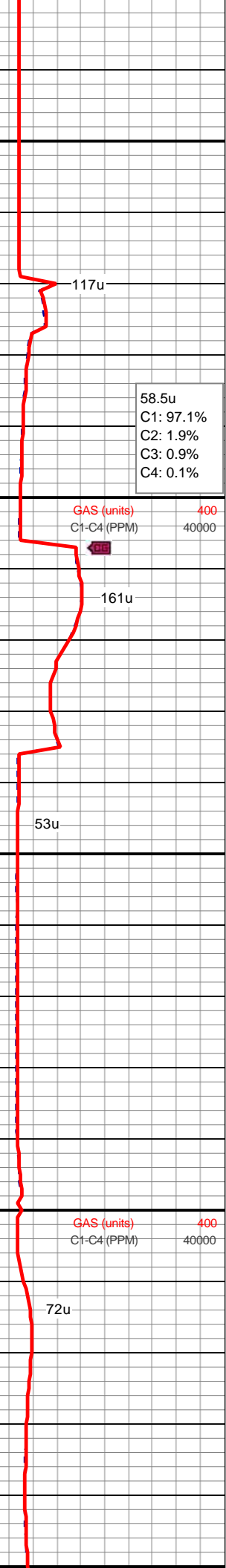
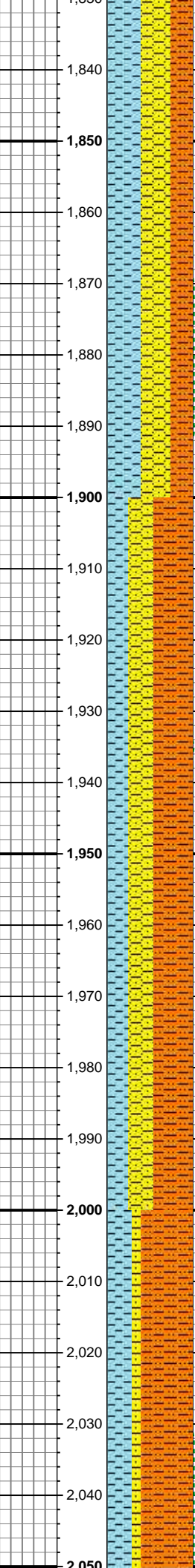
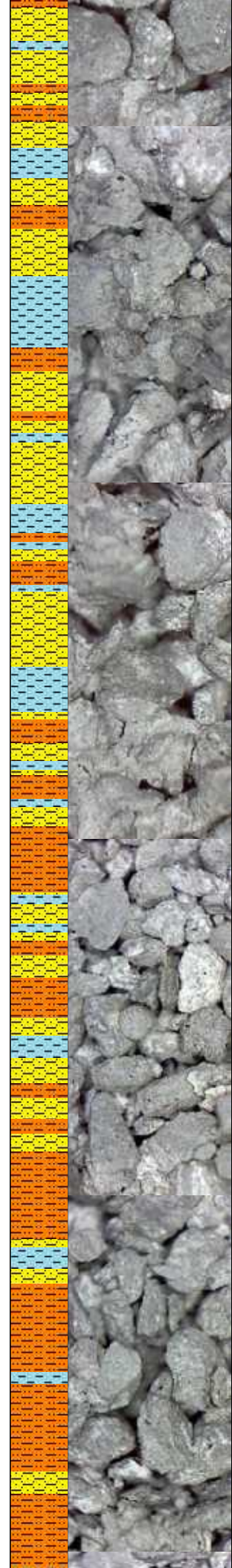
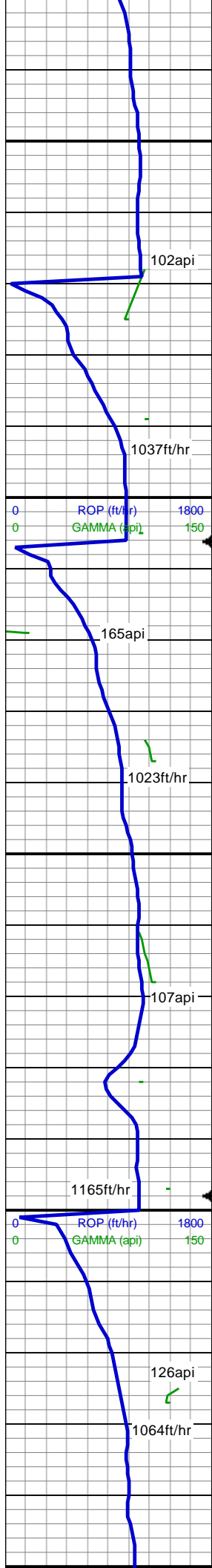
MD: 1,477 '
TVD: 1,476.98 '
Inclination: 0 °
Azimuth: 219.2 °
VS: 2.08 '

64.6u
C1: 100%
C2: 0%
C3: 0%
C4: 0%

SHY SLTST: lt gy-gy - gy brn,sl frm - sft,
sb blkly-sb plty, f-v f gr, gt, v arg, sl rthy,
cly mtx, abnt clay
SHY SS: wh-lt gy occ lt brn, sl frm - brit,
sb ang-sb rnd, f gr, mod srtg, arg
CLYST: med gy, v sft-malleable, v rthy,
occ slty, v sl calc

MD: 1,569 '
TVD: 1,568.98 '
Inclination: 0 °
Azimuth: 272.6 °
VS: 2.08 '





TVD: 1,844.97 '
Inclination: 0.7 °
Azimuth: 344.9 °
VS: 2.87 '

CLYST: med gy, v sft-malleable, v rthy, occ slty, v sl calc
SHY SLTST: lt gy-gy - gy brn,sl frm - sft, sb blkgy-sb plty, f-v f gr, gt, v arg, sl rthy, cly mtx, abnt clay
SHY SS: wh-lt gy occ lt brn, sl frm - brit, sb ang-sb rnd, f gr, mod srtg, arg

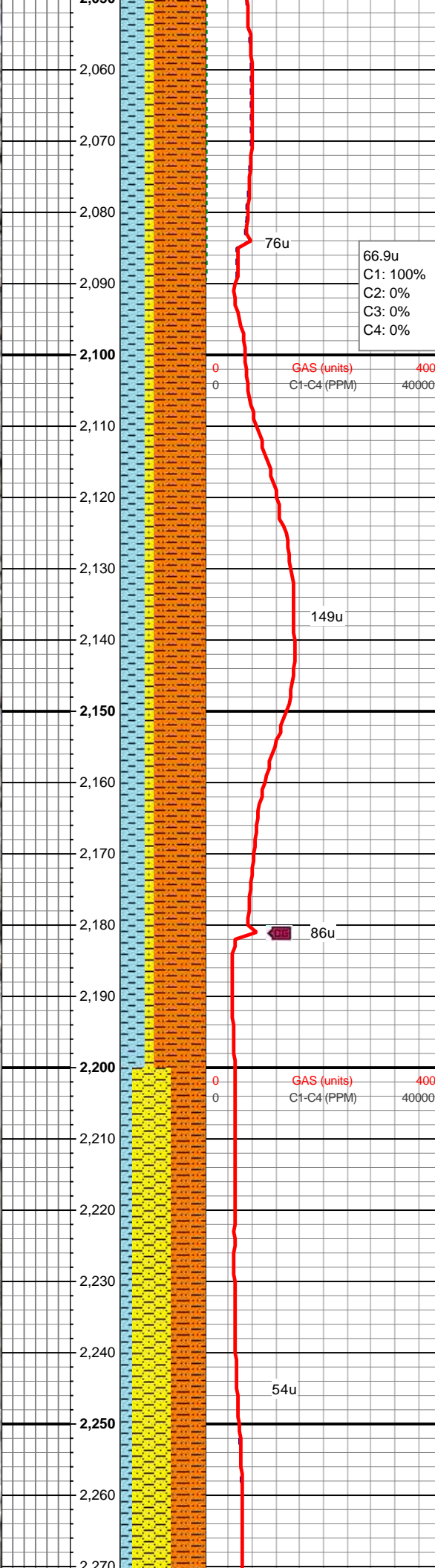
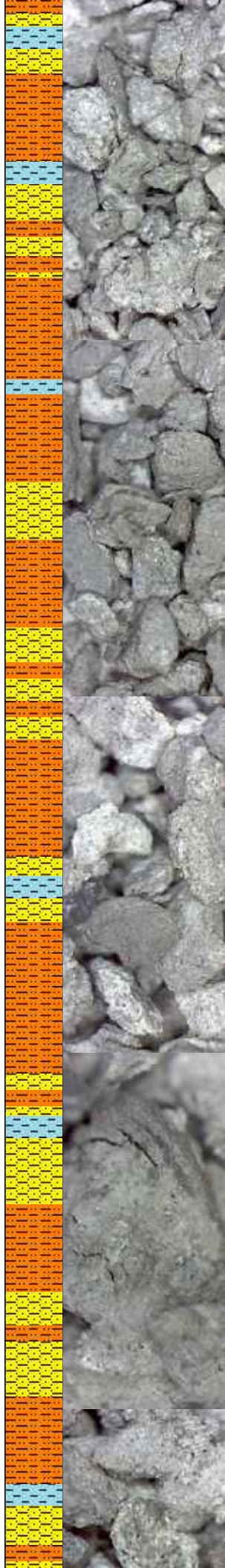
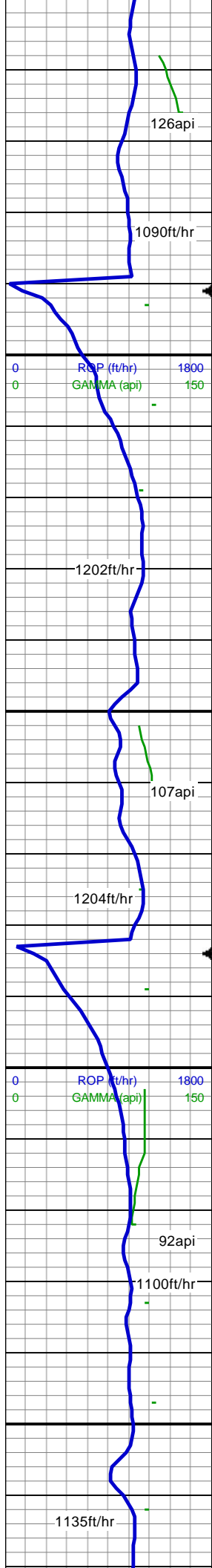
MUD WT 8.5 VIS 30

MD: 1,938 '
TVD: 1,937.97 '
Inclination: 0.8 °
Azimuth: 357.2 °
VS: 3.06 '

SHY SLTST: lt gy-gy - gy brn,sl frm - sft, sb blkgy-sb plty, f-v f gr, gt, v arg, sl rthy, cly mtx, abnt clay
CLYST: med gy, v sft-malleable, v rthy, occ slty, v sl calc
SHY SS: wh-lt gy occ lt brn, sl frm - brit, sb ang-sb rnd, f gr, mod srtg, arg

MD: 2,031 '
TVD: 2,030.96 '
Inclination: 0.8 °
Azimuth: 350.9 °
VS: 3.24 '

SHY SLTST: lt gy-gy - gy brn,sl frm - sft, sb blkgy-sb plty, f-v f gr, gt, v arg, sl rthy, cly mtx, abnt clay

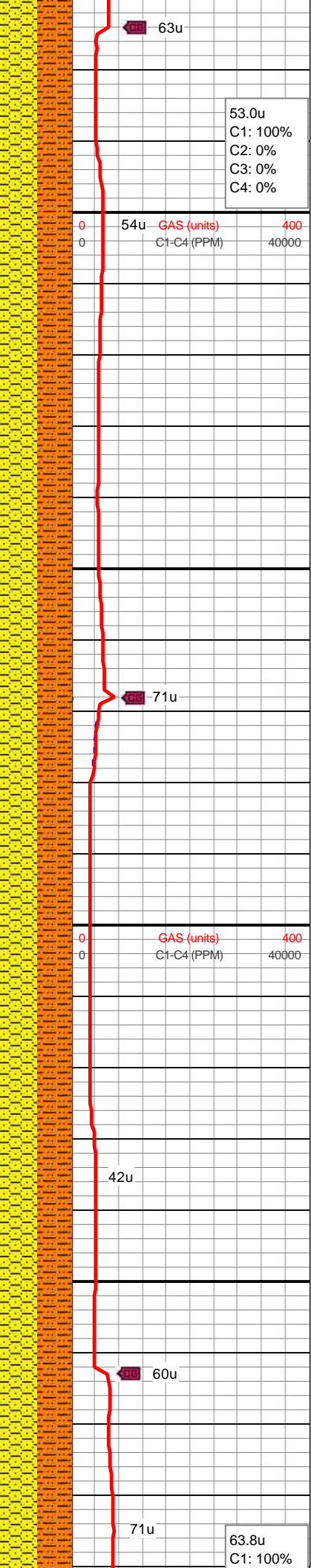
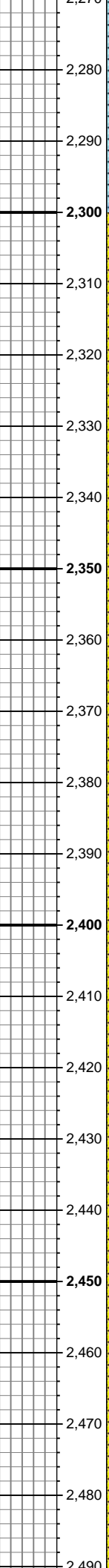
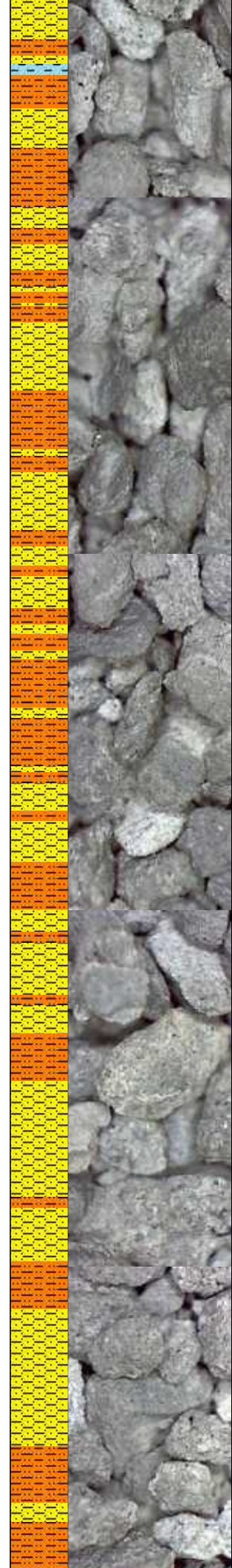
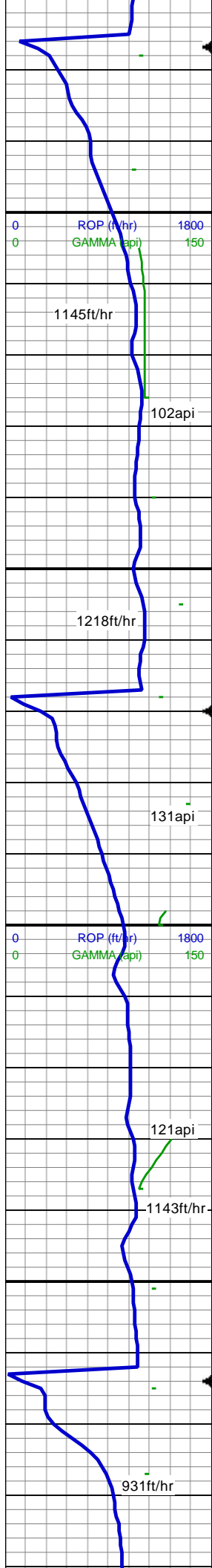


CLYST: med gy, v sft-malleable, v rthy, v slty, v sl calc, grdg - shy sltst
SHY SS: wh-lt gy occ lt brn, sl frm - brit, sb ang-sb rnd, f gr, mod srtg, arg

MD: 2,124 '
TVD: 2,123.95 '
Inclination: 0.7 °
Azimuth: 345.1 °
VS: 3.53 '

SHY SLTST: lt gy-gy - gy brn,sl frm - sft, sb blk-y-sb plty, f-v f gr, gt, v arg, sl rthy, cly mtx, abnt clay
CLYST: med gy, v sft-malleable, v rthy, v slty, v sl calc, grdg - shy sltst
SHY SS: wh-lt gy occ lt brn, sl frm - brit, sb ang-sb rnd, f gr, mod srtg, arg

SHY SLTST: lt gy-gy - gy brn,sl frm - sft, sb blk-y-sb plty, f-v f gr, gt, v arg, sl rthy, cly mtx, abnt clay
CLYST: med gy, v sft-malleable, v rthy, v slty, v sl calc, grdg - shy sltst
SHY SS: wh-lt gy occ lt brn, sl frm - brit, sb ang-sb rnd, f gr, mod srtg, arg

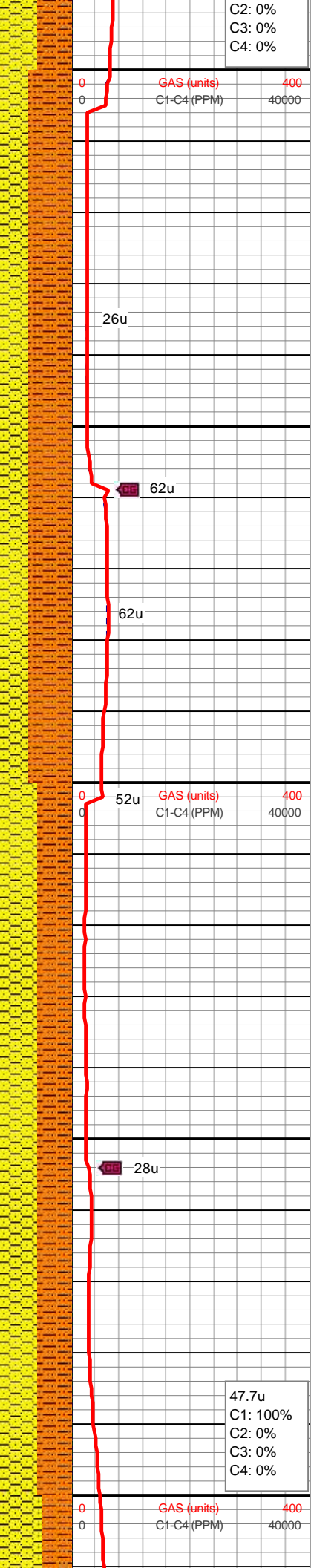
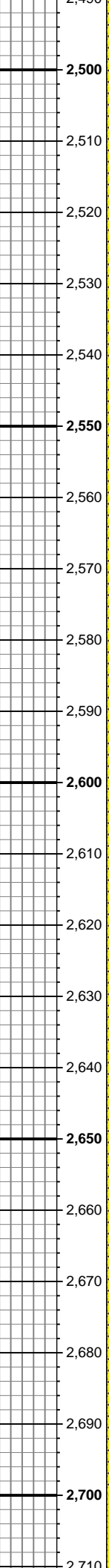
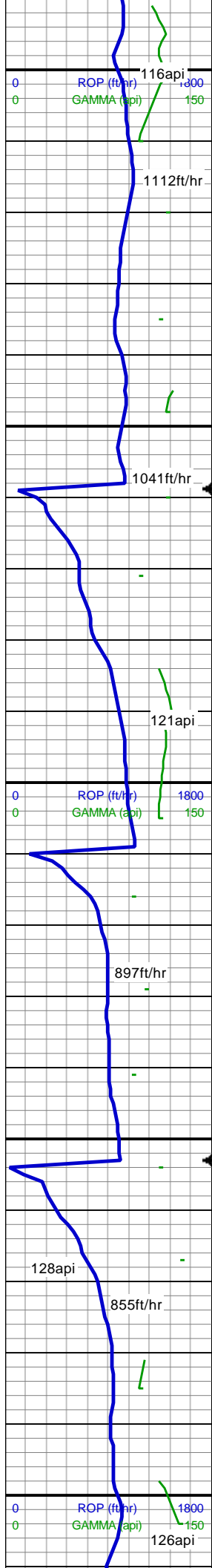


MD: 2,310 '
TVD: 2,309.94 '
Inclination: 0.5 °
Azimuth: 339.3 °
VS: 4.17 '

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt,
decr cly
SHY SS: wh-lt gy occ lt brn, sl frm - v sft,
sb ang-sb rnd, f -v f gr, ply srtg, arg, incr
shy ss

MD: 2,404 '
TVD: 2,403.94 '
Inclination: 0.4 °
Azimuth: 327 °
VS: 4.51 '

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt,
decr cly
SHY SS: wh-lt gy occ lt brn, sl frm - v sft,
sb ang-sb rnd, f -v f gr, ply srtg, arg, incr
shy ss



C2: 0%
C3: 0%
C4: 0%

GAS (units)
C1-C4 (PPM)

GAS (units)
C1-C4 (PPM)

47.7u
C1: 100%
C2: 0%
C3: 0%
C4: 0%

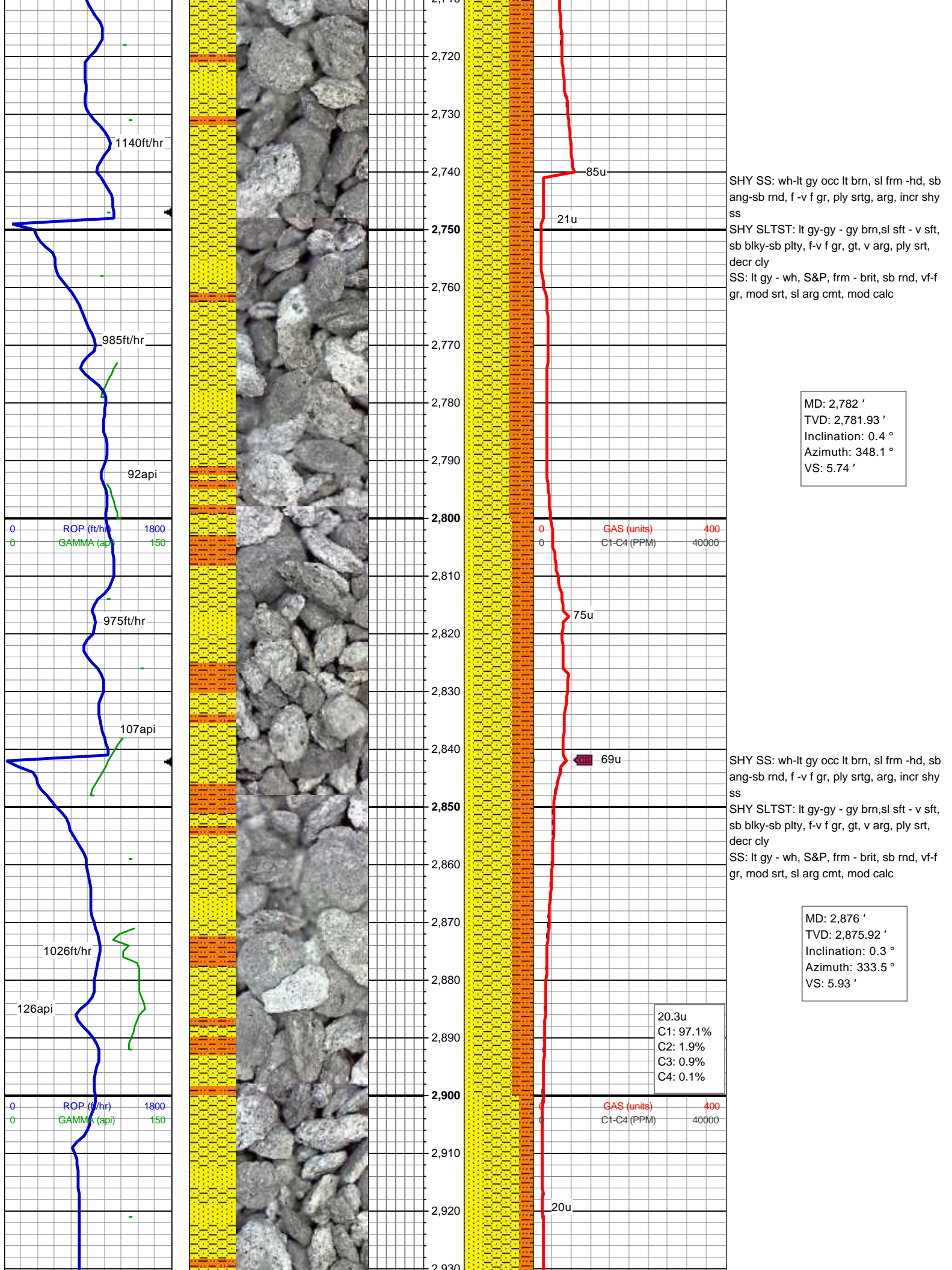
GAS (units)
C1-C4 (PPM)

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blkly-sb plty, f-v f gr, gt, v arg, ply srt,
decr cly
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, incr shy
ss

MD: 2,593 '
TVD: 2,592.93 '
Inclination: 0.4 °
Azimuth: 341.2 °
VS: 5.12 '

SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, incr shy
ss
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blkly-sb plty, f-v f gr, gt, v arg, ply srt,
decr cly

MD: 2,687 '
TVD: 2,686.93 '
Inclination: 0.4 °
Azimuth: 322.6 °
VS: 5.45 '



MD: 2,782 '
TVD: 2,781.93 '
Inclination: 0.4 °
Azimuth: 348.1 °
VS: 5.74 '

SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb ang-sb rnd, f -v f gr, ply srtg, arg, incr shy ss
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft, sb blkgy-sb plty, f-v f gr, gt, v arg, ply srt, decr cly
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f gr, mod srt, sl arg cmt, mod calc

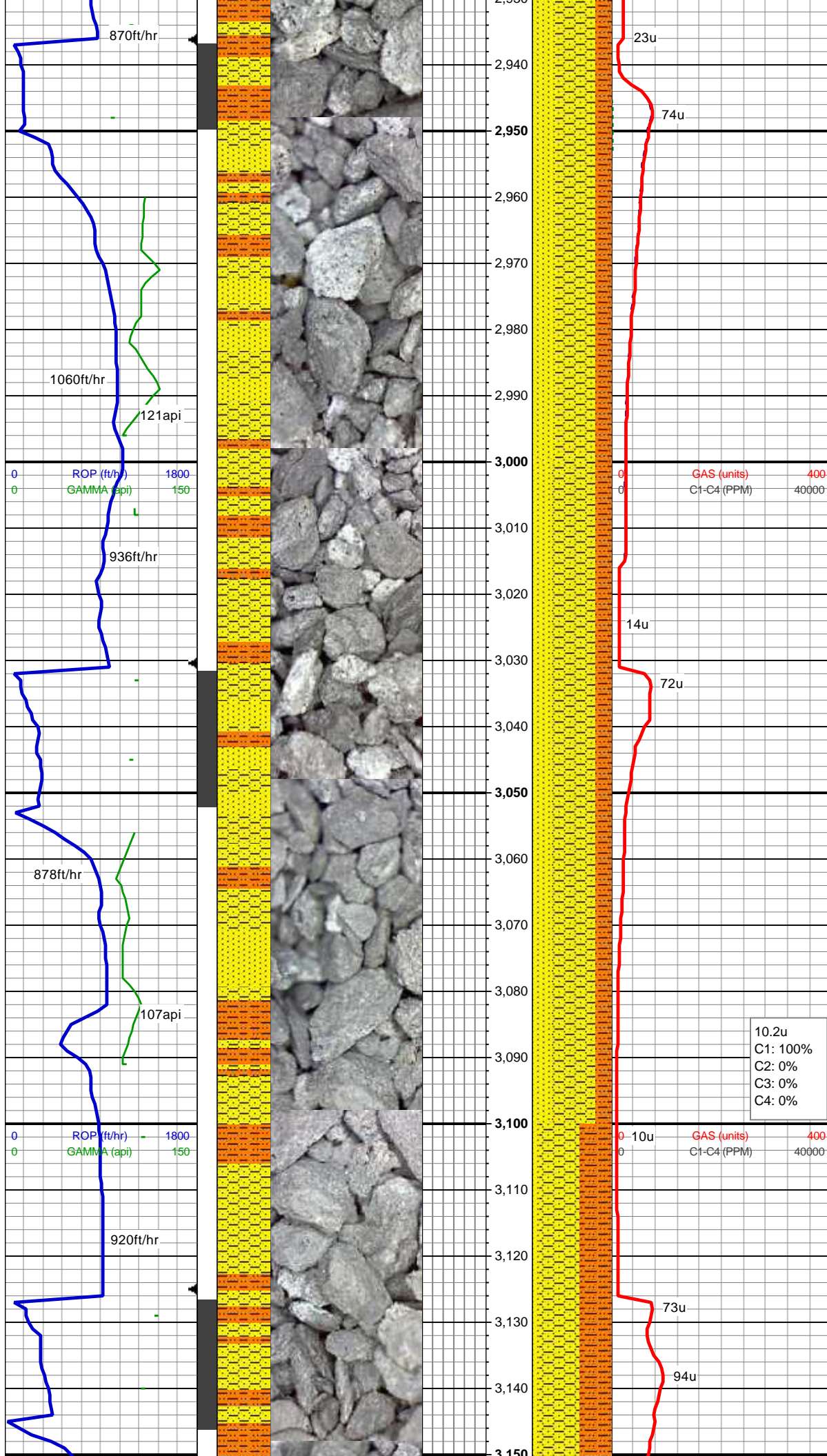
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb ang-sb rnd, f -v f gr, ply srtg, arg, incr shy ss
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft, sb blkgy-sb plty, f-v f gr, gt, v arg, ply srt, decr cly
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f gr, mod srt, sl arg cmt, mod calc

MD: 2,876 '
TVD: 2,875.92 '
Inclination: 0.3 °
Azimuth: 333.5 °
VS: 5.93 '

20.3u
C1: 97.1%
C2: 1.9%
C3: 0.9%
C4: 0.1%

GAS (units) 400
C1-C4 (PPM) 40000

20u



MUD WT 8.55 VIS 30
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb ang-sb rnd, f -v f gr, ply srtg, arg
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f gr, mod srt, sl arg cmt, mod calc, rr lt brn-yel stn
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft, sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt

MD: 2,970 '
TVD: 2,969.92 '
Inclination: 1.2 °
Azimuth: 49 °
VS: 5.33 '

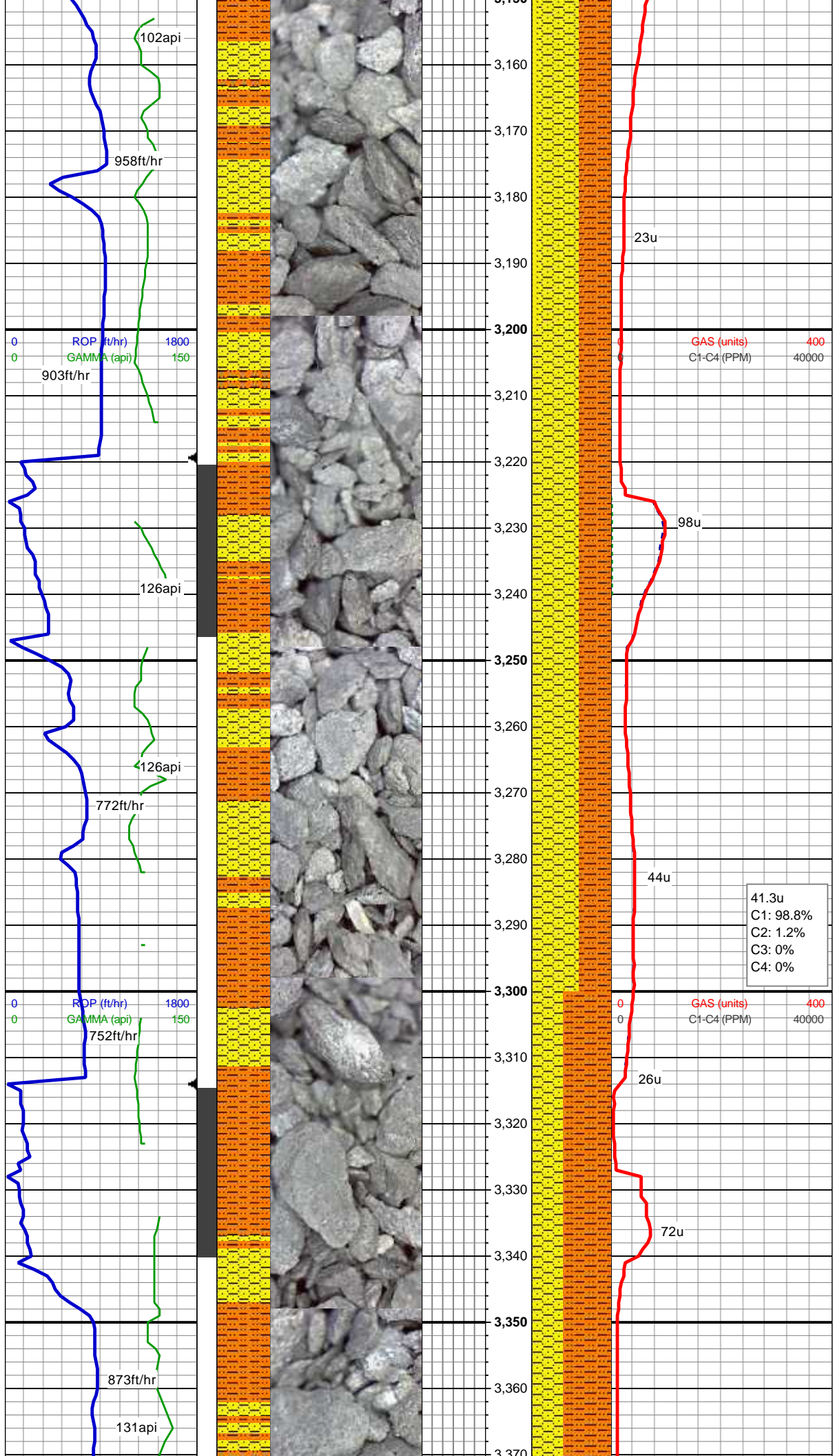
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb ang-sb rnd, f -v f gr, ply srtg, arg
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f gr, mod srt, sl arg cmt, mod calc, rr lt brn-yel stn
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft, sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt

MD: 3,065 '
TVD: 3,064.83 '
Inclination: 3.4 °
Azimuth: 51.2 °
VS: 2.46 '

10.2u
C1: 100%
C2: 0%
C3: 0%
C4: 0%

MUD WT 8.6 VIS 30

SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb ang-sb rnd, f -v f gr, ply srtg, arg
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,



sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f
gr, mod srt, sl arg cmt, mod calc, rr lt
brn-yel stn

MD: 3,159 '
TVD: 3,158.6 '
Inclination: 4.6 °
Azimuth: 47.4 °
VS: -2.34 '

23u

GAS (units) 400
C1-C4 (PPM) 40000

98u

SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt; rr
bent

MD: 3,254 '
TVD: 3,253.22 '
Inclination: 5.7 °
Azimuth: 42.4 °
VS: -8.12 '

44u

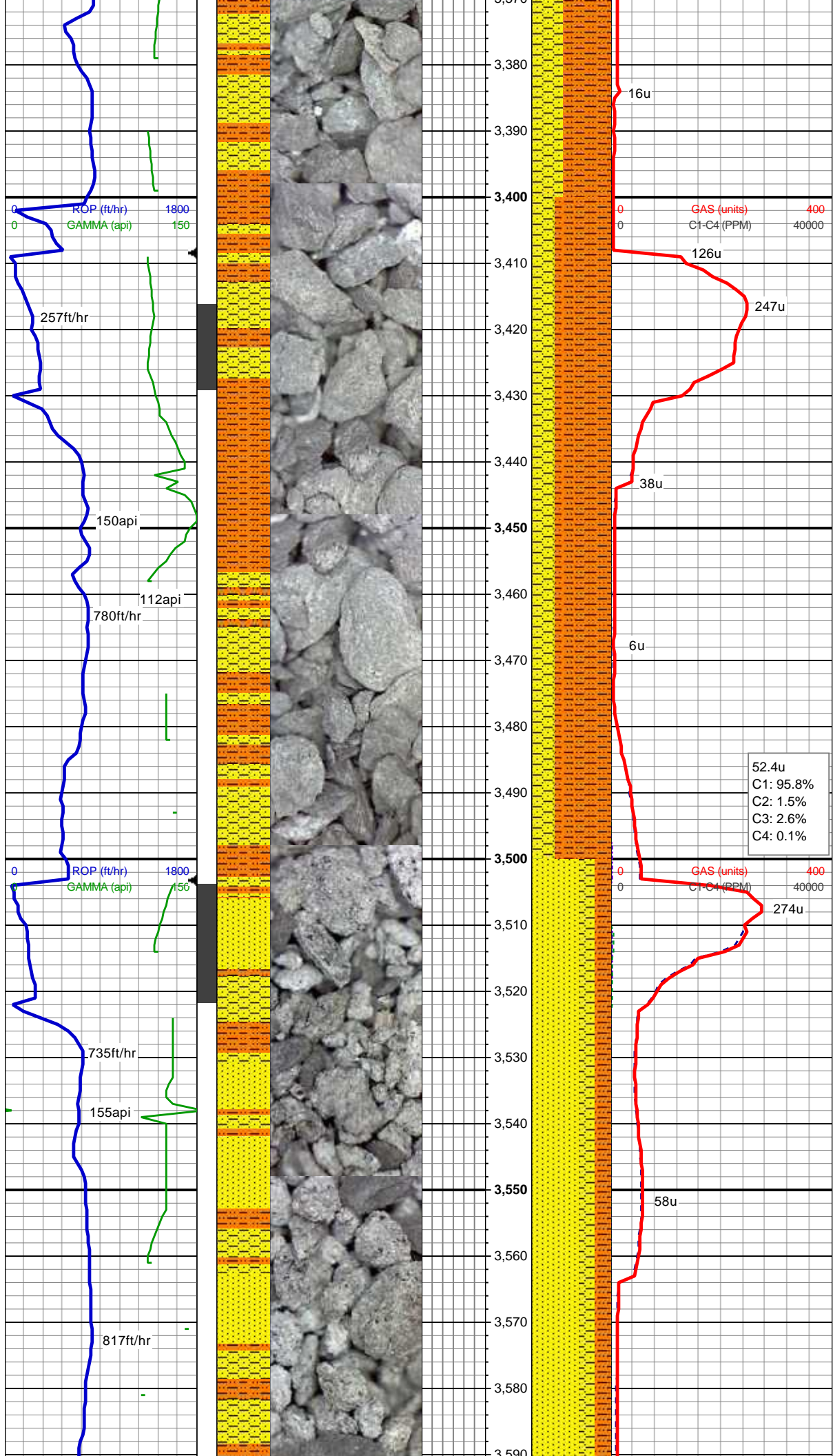
41.3u
C1: 98.8%
C2: 1.2%
C3: 0%
C4: 0%

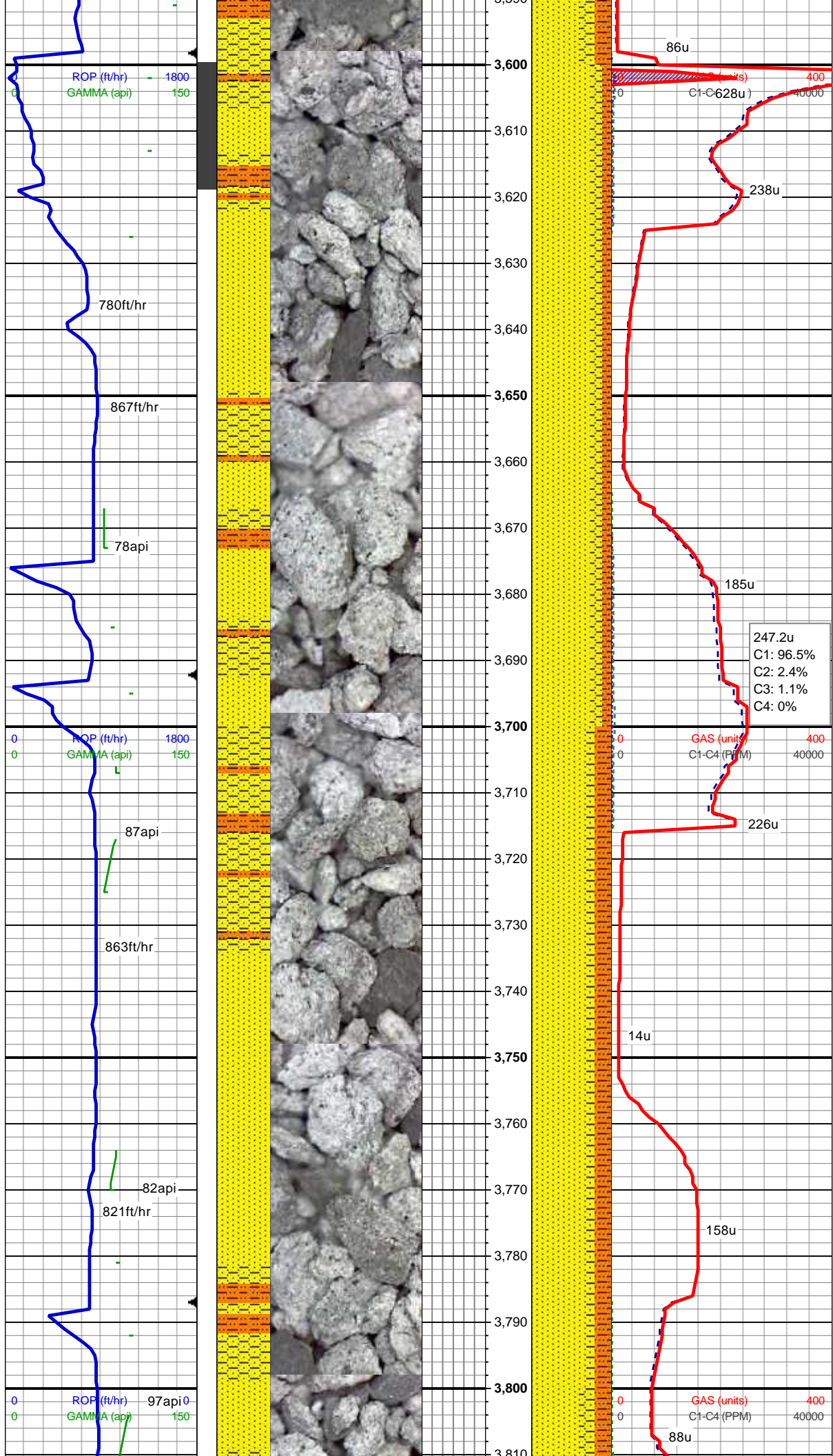
GAS (units) 400
C1-C4 (PPM) 40000

26u

72u

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg; tr bent





MD: 3,632 '
TVD: 3,628.69 '
Inclination: 7.5 °
Azimuth: 48 °
VS: -38.1 '

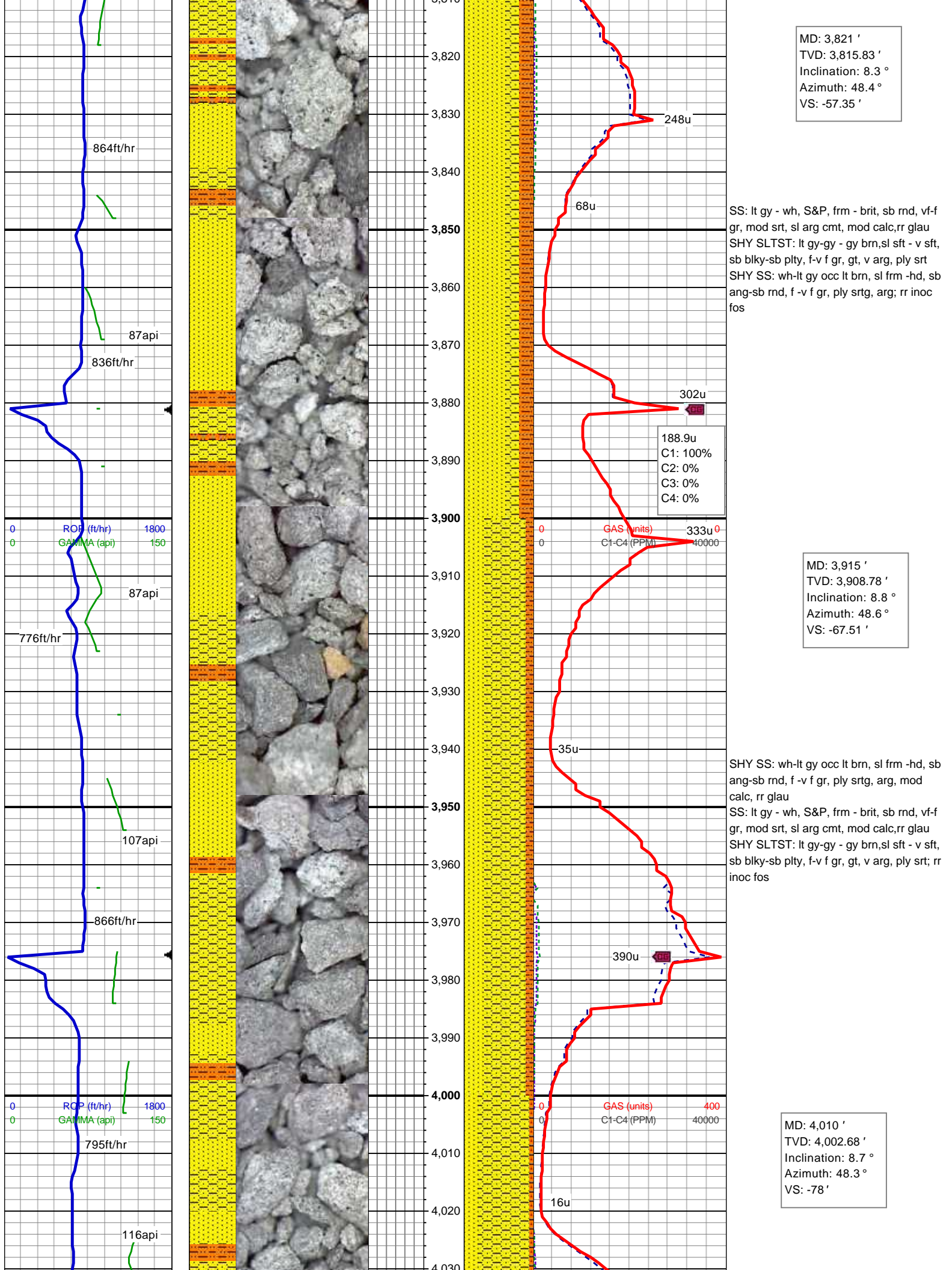
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f
gr, mod srt, sl arg cmt, mod calc,rr glau
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt

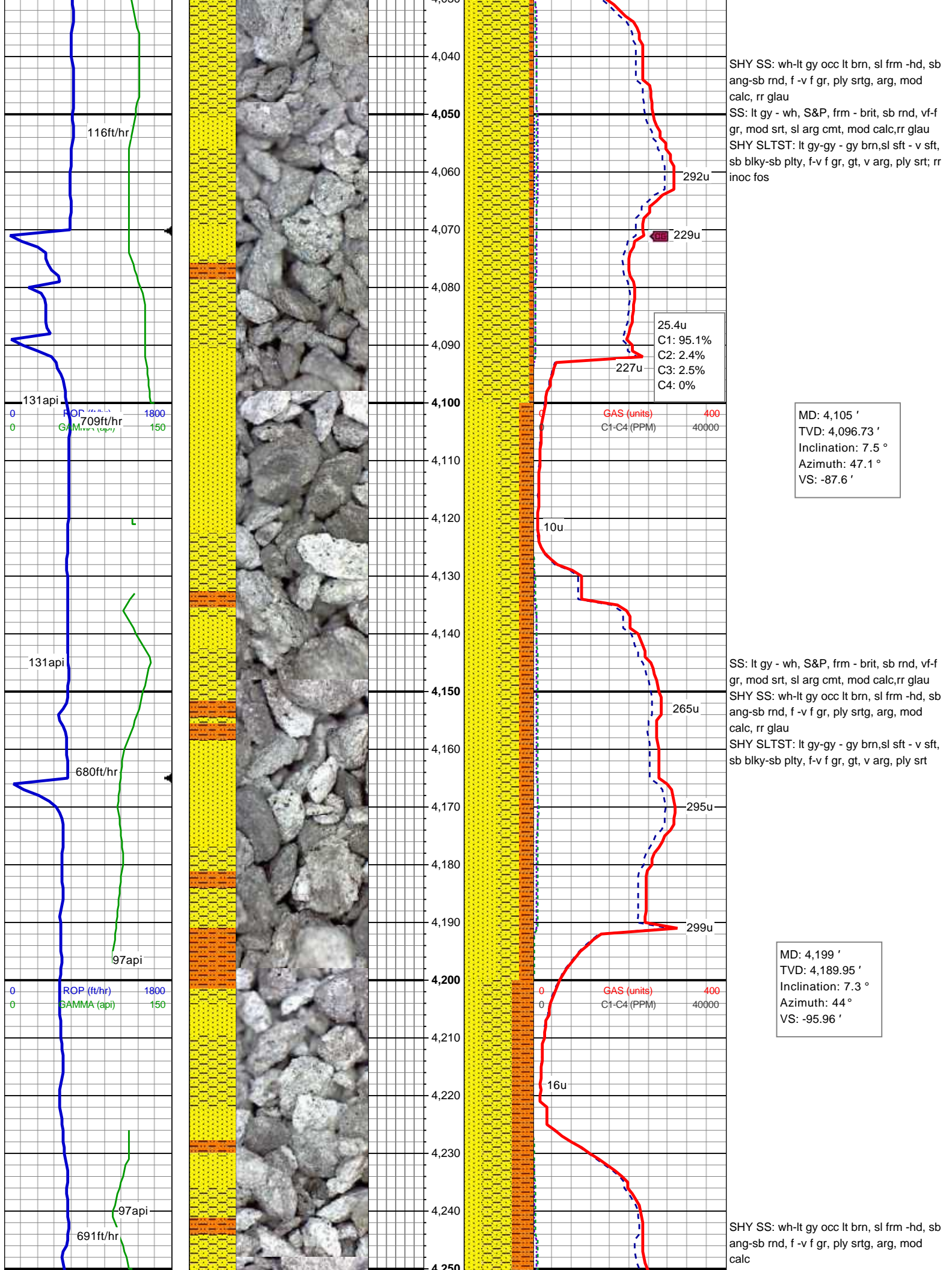
247.2u
C1: 96.5%
C2: 2.4%
C3: 1.1%
C4: 0%

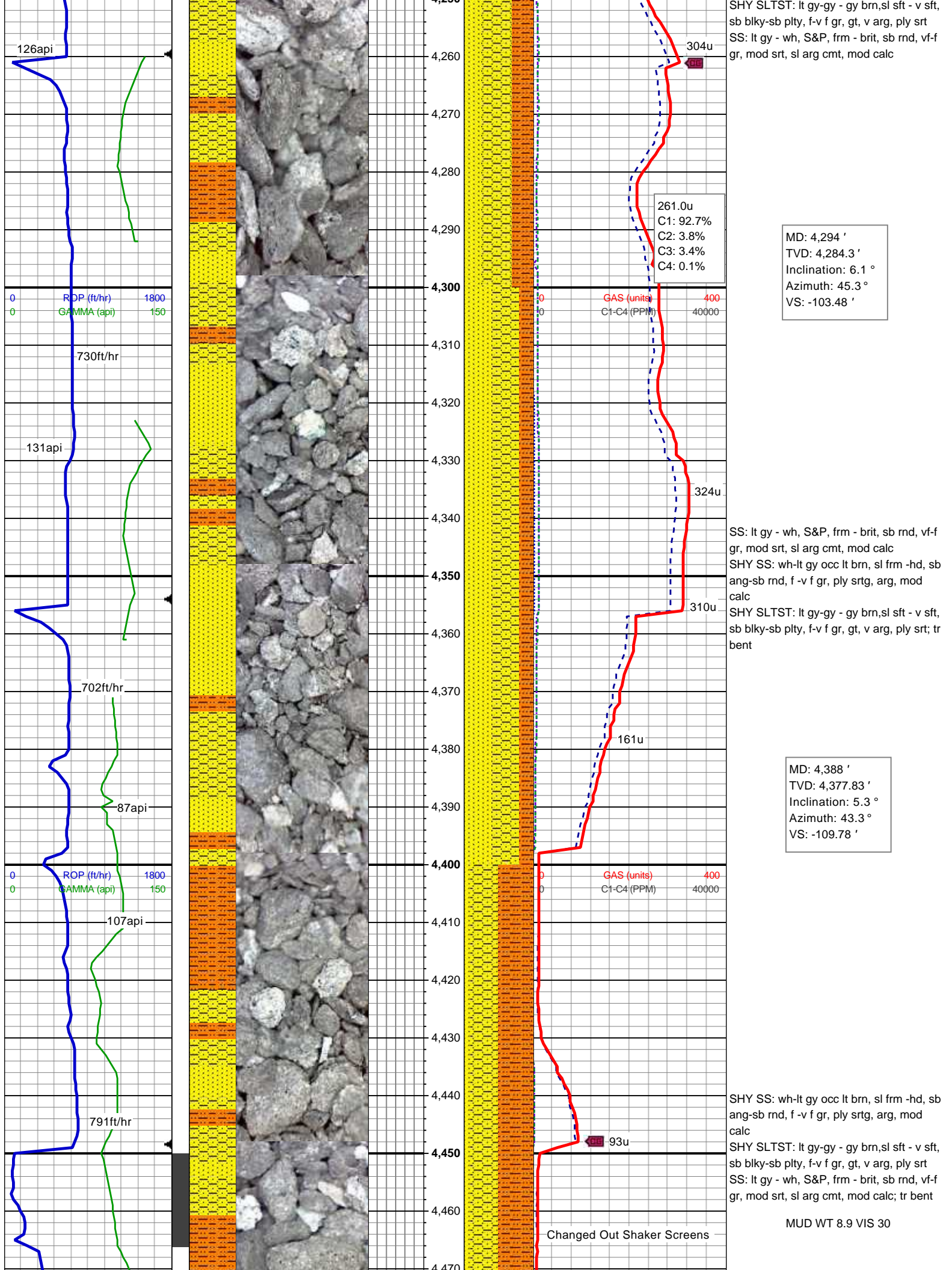
MD: 3,726 '
TVD: 3,721.81 '
Inclination: 8.2 °
Azimuth: 48.9 °
VS: -47.43 '

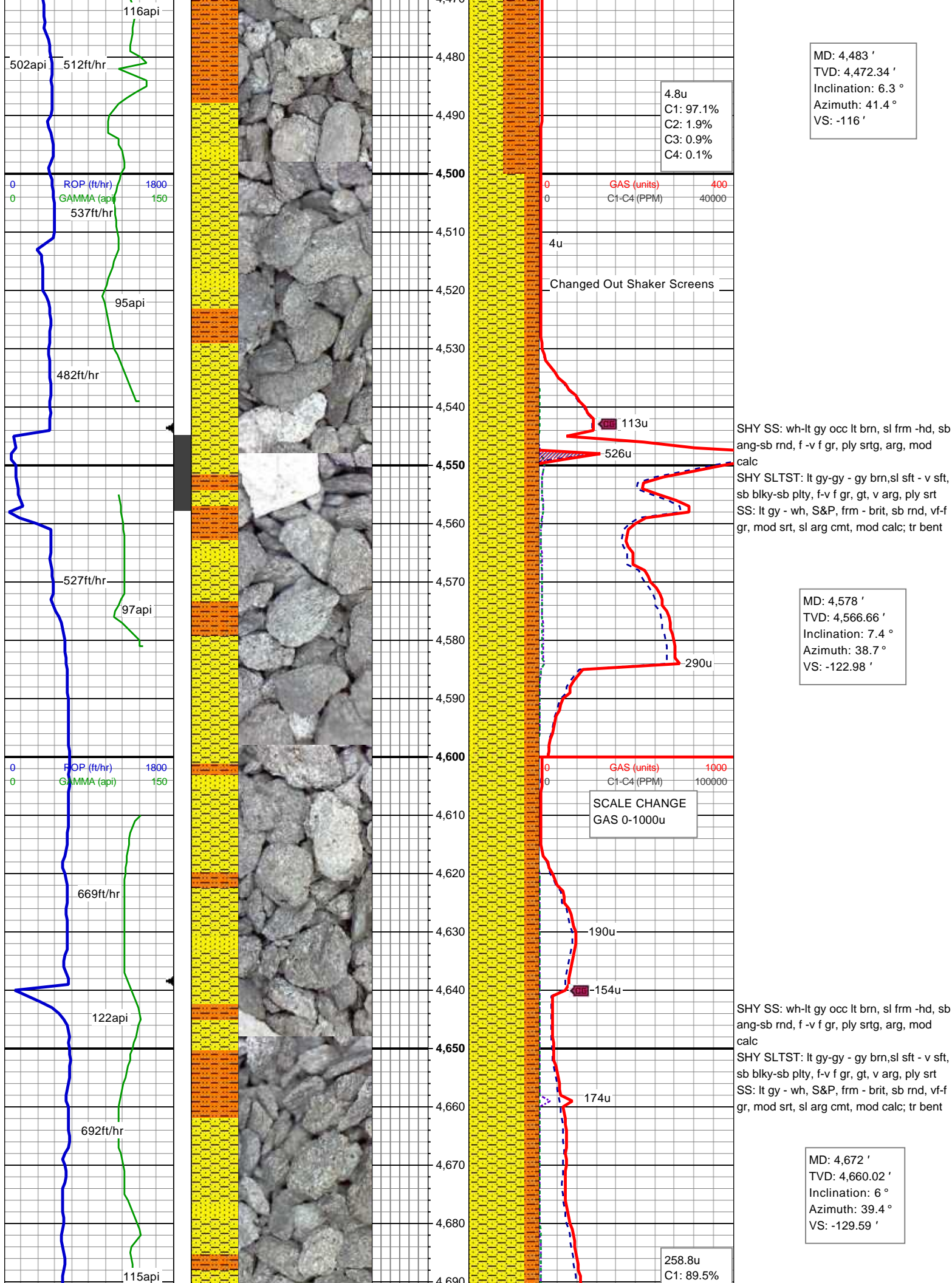
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f
gr, mod srt, sl arg cmt, mod calc,rr glau
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg

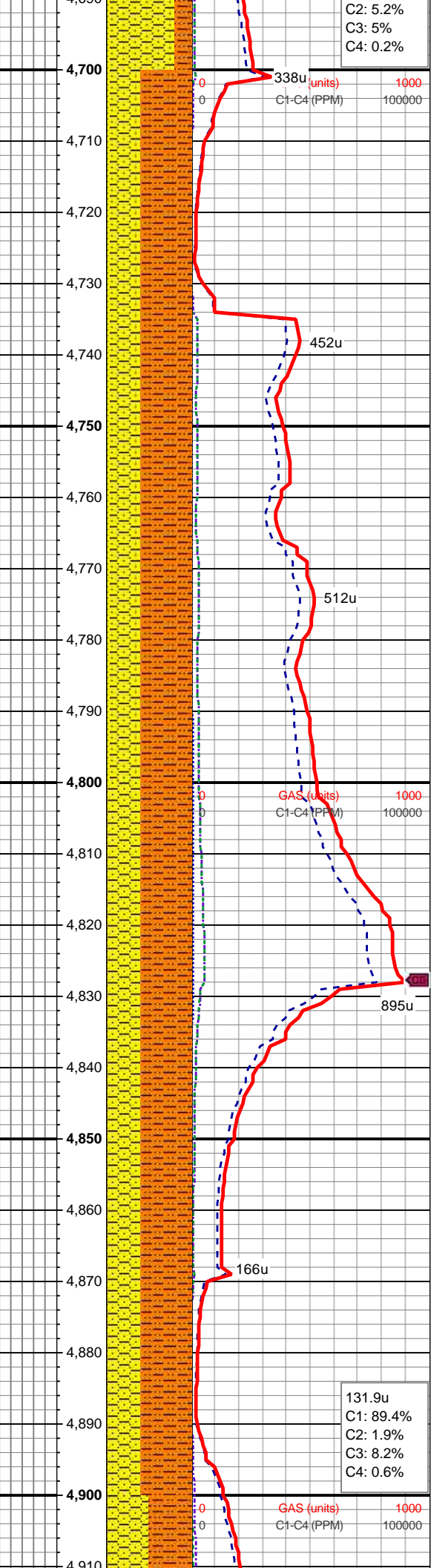
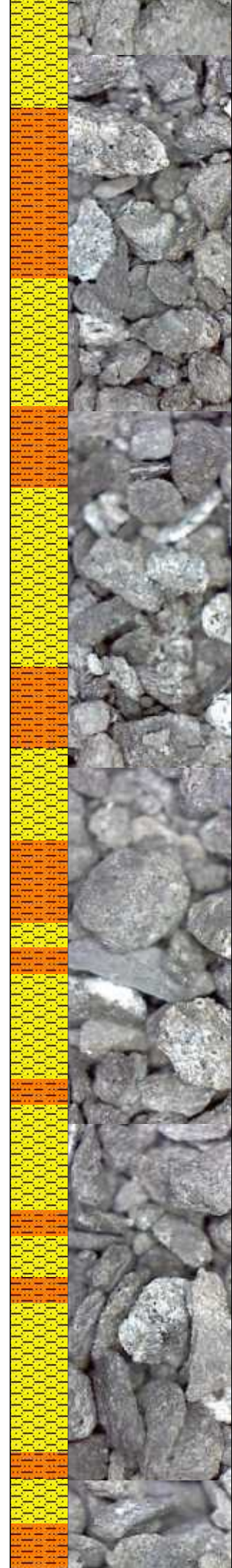
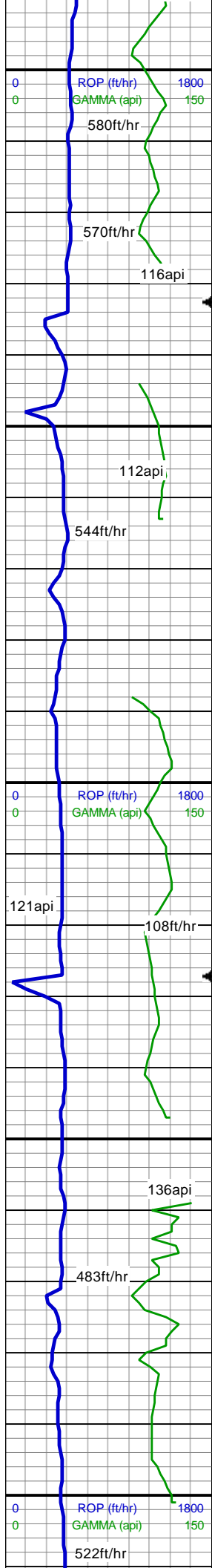
MUD WT 8.7+ VIS 31











C2: 5.2%
C3: 5%
C4: 0.2%

338u (units)
C1-C4 (PPM)

1000
100000

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, mod
calc
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f
gr, mod srt, sl arg cmt, mod calc; scat
bent

MD: 4,767 '
TVD: 4,754.53 '
Inclination: 5.7 °
Azimuth: 36.6 °
VS: -135.3 '

GAS (units)
C1-C4 (PPM)

1000
100000

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blk-y-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, mod
calc;tr bent

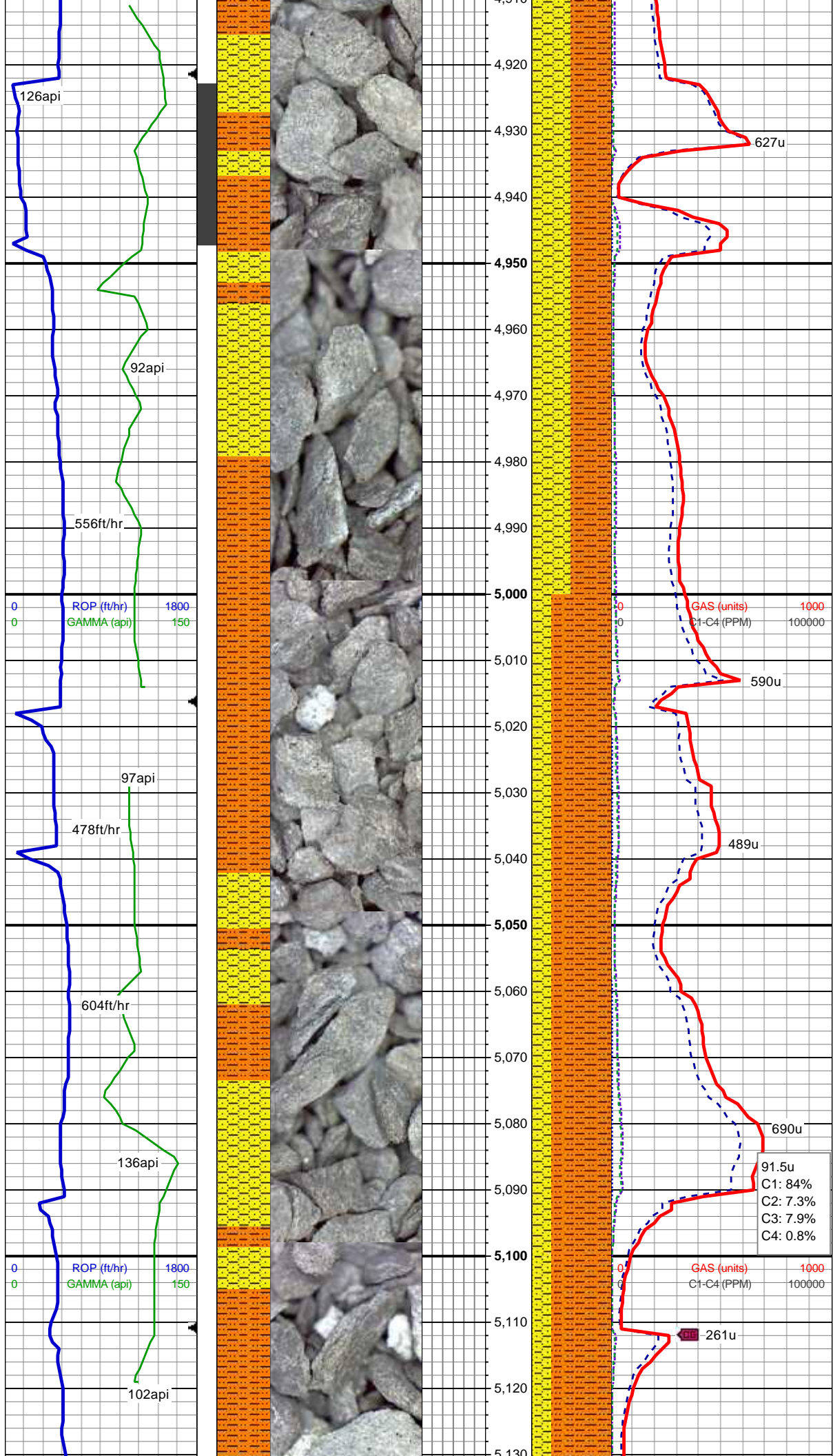
MD: 4,861 '
TVD: 4,848.11 '
Inclination: 5.1 °
Azimuth: 29.8 °
VS: -139.91 '

131.9u
C1: 89.4%
C2: 1.9%
C3: 8.2%
C4: 0.6%

GAS (units)
C1-C4 (PPM)

1000
100000

MUD WT 9.0 VIS 30



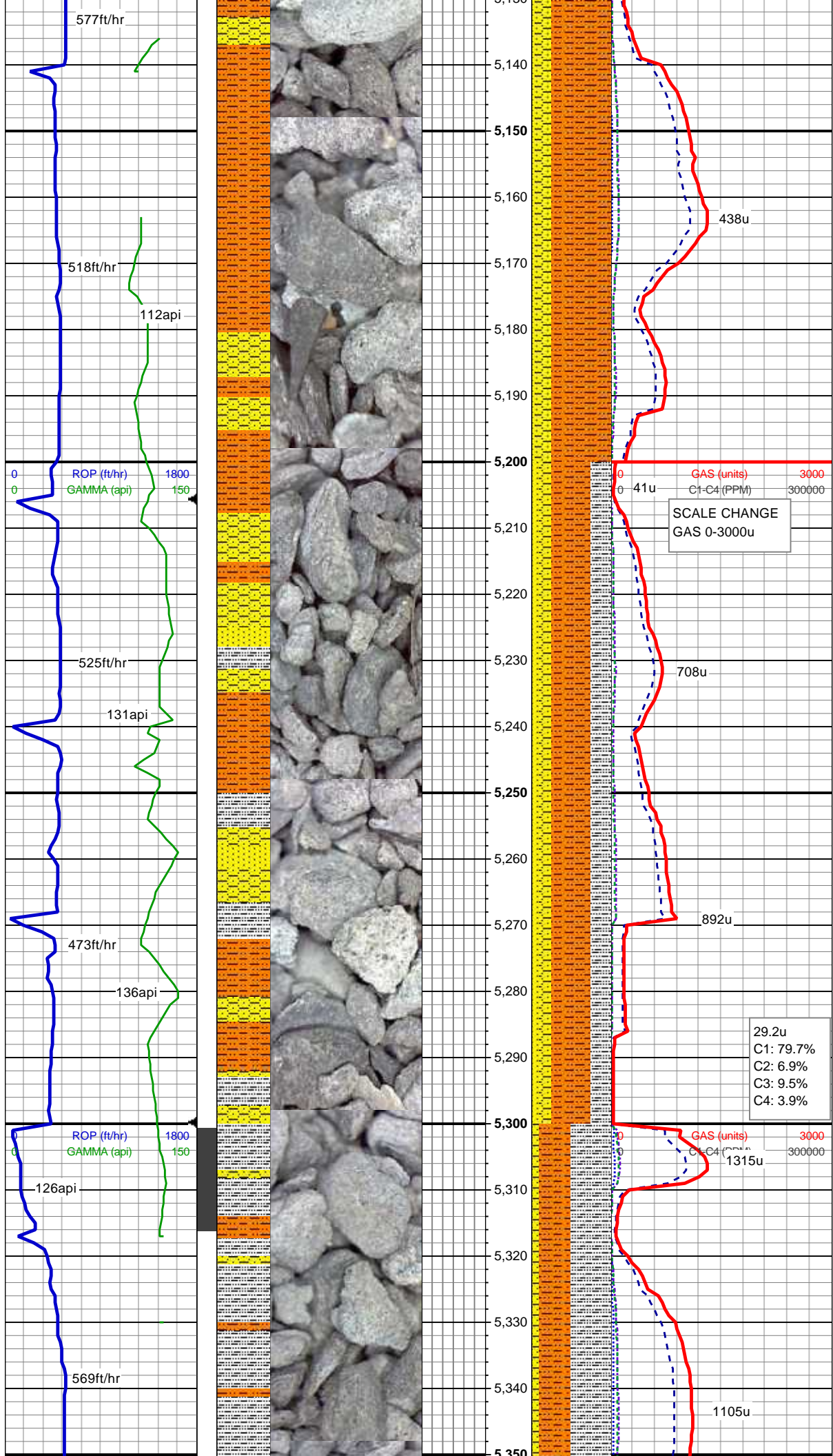
SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blkgy-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, mod
calc; tr bent

MD: 4,956 '
TVD: 4,942.7 '
Inclination: 5.6 °
Azimuth: 43.1 °
VS: -144.94 '

MD: 5,050 '
TVD: 5,036.26 '
Inclination: 5.5 °
Azimuth: 42.3 °
VS: -150.88 '

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blkgy-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, mod
calc; tr bent

MUD WT 9.0+ VIS 30



MD: 5,145 '
TVD: 5,130.9 '
Inclination: 4.5 °
Azimuth: 46.5 °
VS: -156.45 '

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blkly-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, mod
calc
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f
gr, mod srt, sl arg cmt, mod calc; tr bent

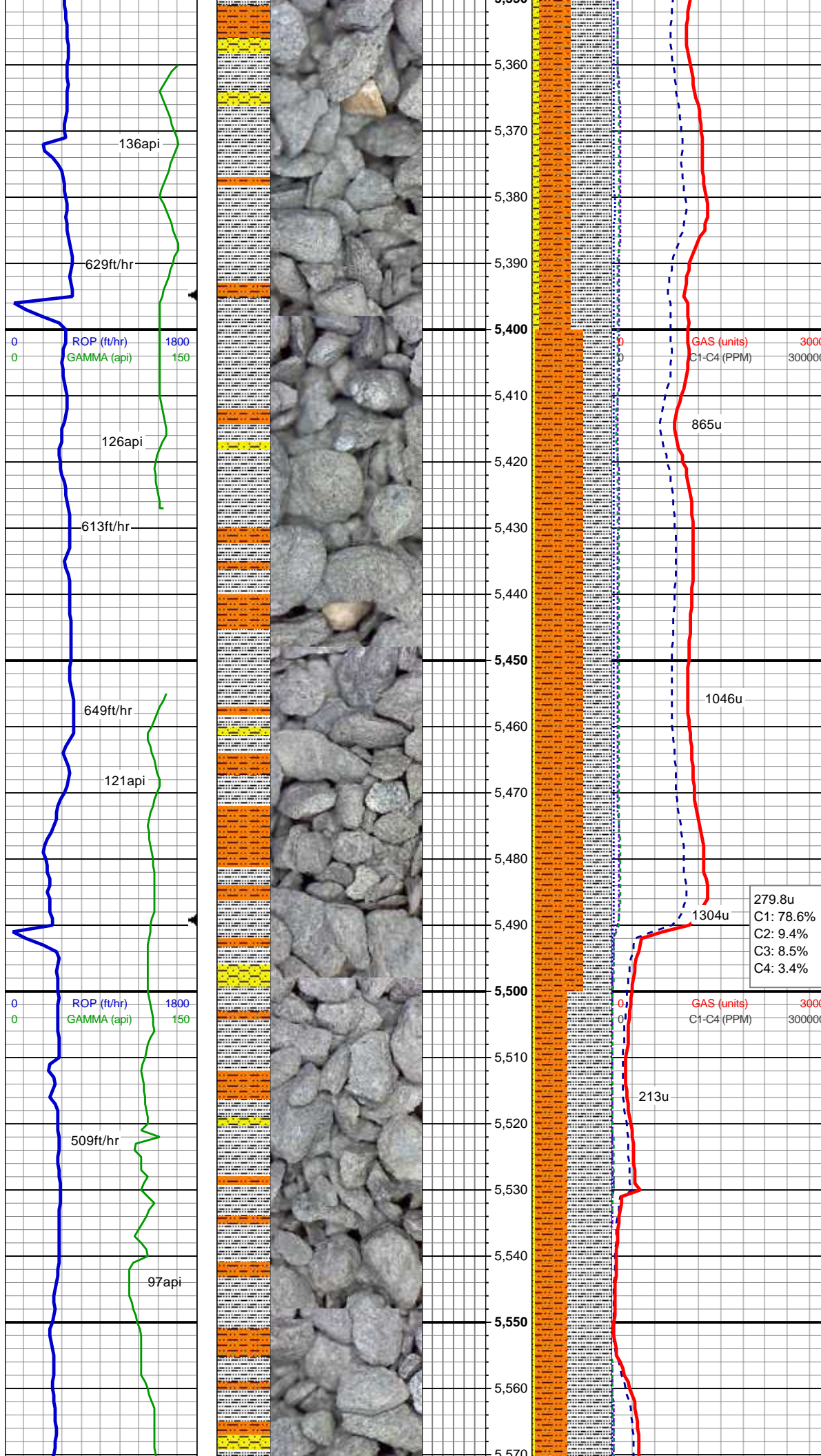
MD: 5,240 '
TVD: 5,225.67 '
Inclination: 3.4 °
Azimuth: 51.1 °
VS: -161.2 '

SHY SLTST: lt gy-gy - gy brn,sl sft - v sft,
sb blkly-sb plty, f-v f gr, gt, v arg, ply srt
SHY SS: wh-lt gy occ lt brn, sl frm -hd, sb
ang-sb rnd, f -v f gr, ply srtg, arg, mod
calc
SS: lt gy - wh, S&P, frm - brit, sb rnd, vf-f
gr, mod srt, sl arg cmt, mod calc
SLTY SH: med - dk gy, sb blkly -sb plty, sl
sft- frm, slt tex, sl rthy lstr, pred aren, non
calc, occ imbd pyr

29.2u
C1: 79.7%
C2: 6.9%
C3: 9.5%
C4: 3.9%

MUD WT 9.0+ VIS 30

MD: 5,334 '
TVD: 5,319.46 '
Inclination: 4.3 °
Azimuth: 56.8 °
VS: -166.19 '



SLTY SH: med gy, sb plty-plty, sft- sl frm,
slt tex, sl rthy lstr, sl sdy ip, non calc
SHY SLTST: gy - gy brn, sl sft - v sft, sb
blky-sb plty, f-v f gr, sl gt - sl rthy tex, aren
SHY SS: ltgy - occ off wh, sft - brit occ
frm, sb rnd, f-v f gr, mod srt, arg cmt

Mud Report @ 5401'MD
Wt 9.05 Gel 1/8/16
Vis 31 API 1/0
YP 3 Sand 0.4%
pH 8.4 Hard 50

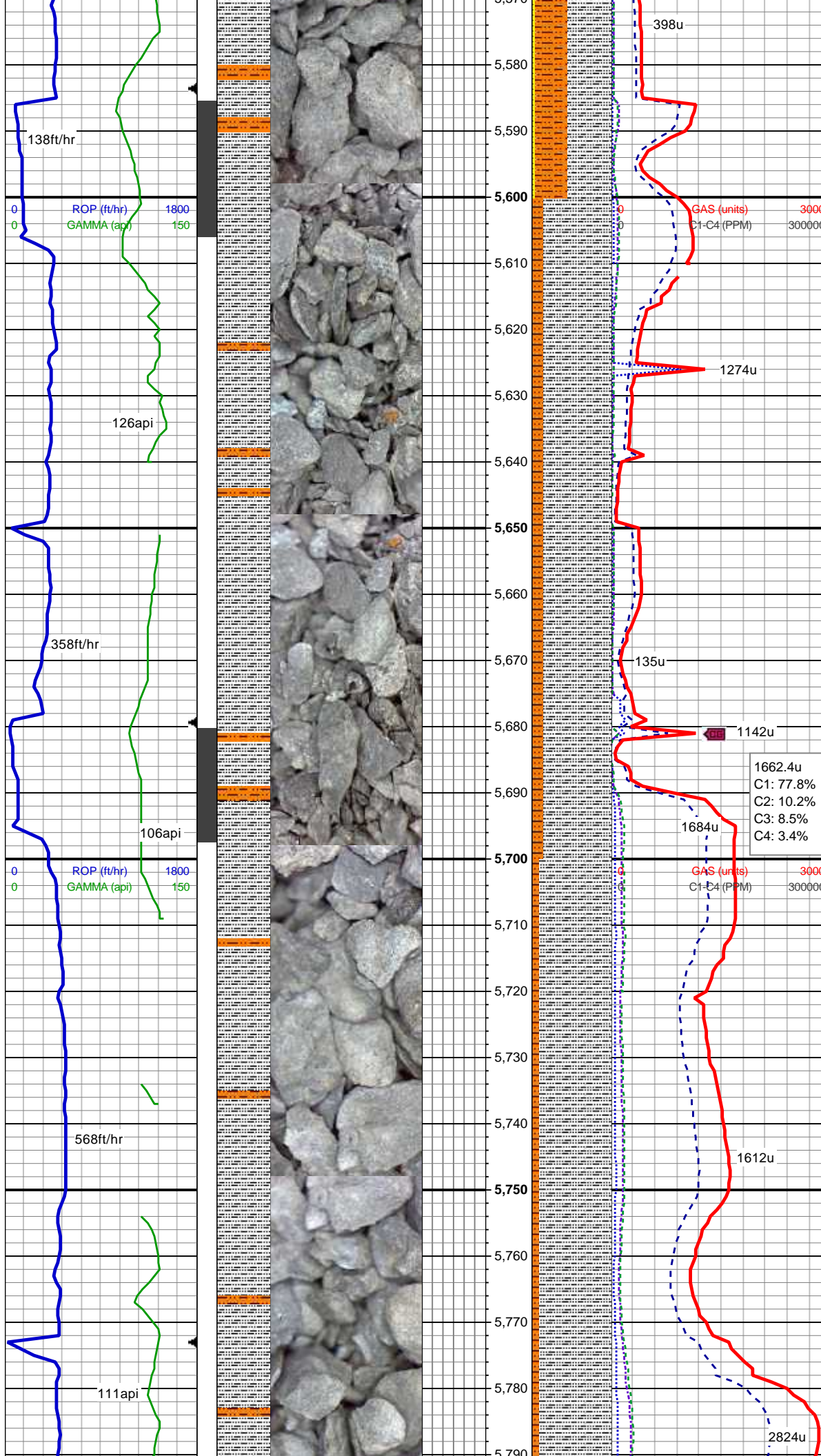
MD: 5,429 '
TVD: 5,414.27 '
Inclination: 2.9 °
Azimuth: 54.1 °
VS: -171.01 '

SLTY SH: med gy, sb plty-plty, sft- sl frm,
slt tex, sl rthy lstr, sl sdy ip, non calc
SHY SLTST: gy - gy brn, sl sft - v sft, sb
blky-sb plty, f-v f gr, sl gt - sl rthy tex, aren,
rr pyr
SS: ltgy - occ off wh, sft - brit occ frm, sb
rnd, f-v f gr, mod srt, arg cmt

279.8u
C1: 78.6%
C2: 9.4%
C3: 8.5%
C4: 3.4%

MD: 5,523 '
TVD: 5,508.17 '
Inclination: 2.2 °
Azimuth: 59 °
VS: -174.4 '

SLTY SH: med gy, sb plty-plty, sft- sl frm,
slt tex, sl rthy lstr, sl sdy ip, non calc
SHY SLTST: gy - gy brn, sl sft - v sft, sb
blky-sb plty, f-v f gr, sl gt - sl rthy tex, aren,
rr pyr
SS: ltgy - occ off wh, sft - brit occ frm, sb
rnd, f-v f gr, mod srt, arg cmt



MUD WT 9.05 VIS 30

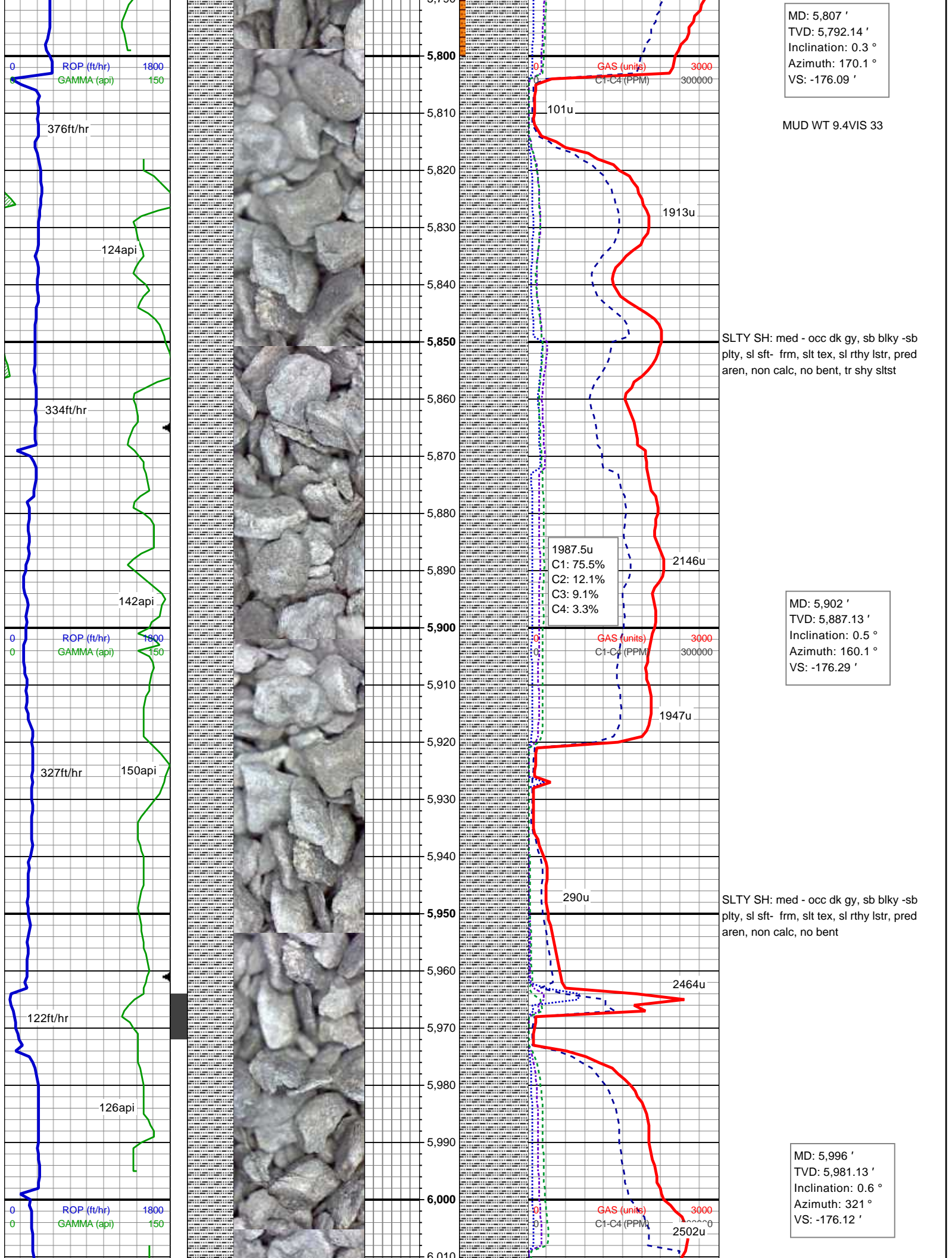
MD: 5,618 '
TVD: 5,603.14 '
Inclination: 0.6 °
Azimuth: 28.4 °
VS: -176.15 '

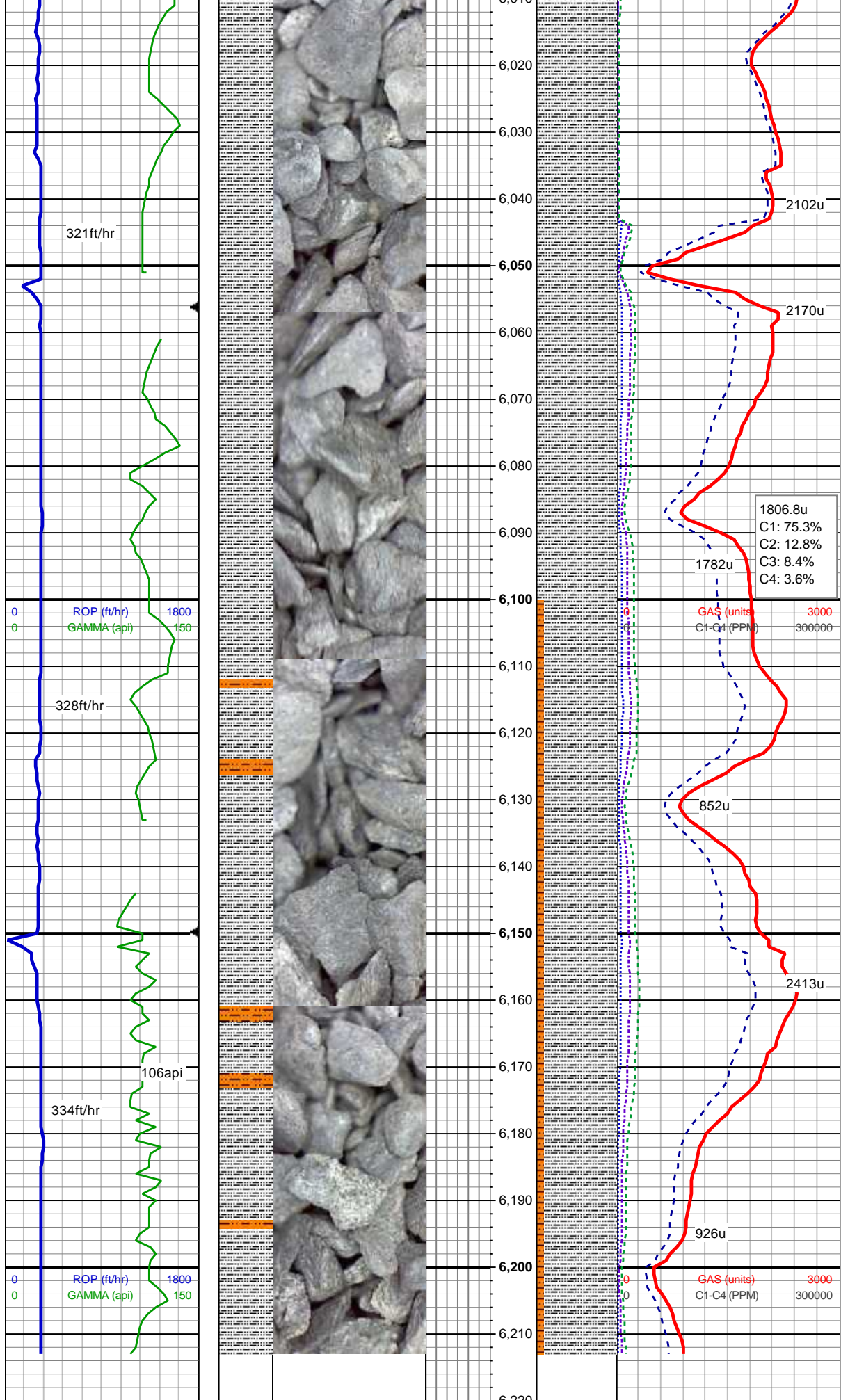
SLTY SH: med gy, sb plty-plty, sft- sl frm,
slt tex, sl rthy lstr, sl sdy ip, non calc
SHY SLTST: gy - gy brn, sl sft - v sft, sb
blky-sb plty, f-v f gr, sl gt - sl rthy tex, aren

1662.4u
C1: 77.8%
C2: 10.2%
C3: 8.5%
C4: 3.4%

MD: 5,713 '
TVD: 5,698.14 '
Inclination: 0.6 °
Azimuth: 201.8 °
VS: -176.21 '

SLTY SH: med gy, sb plty-plty, sft- sl frm,
slt tex, sl rthy lstr, sl sdy ip, non calc
SHY SLTST: gy - gy brn, sl sft - v sft, sb
blky-sb plty, f-v f gr, sl gt - sl rthy tex, aren





SLTY SH: med - dk gy, sb blkly -sb plty, sl sft- frm, slt tex, sl rthy lstr, pred aren, non calc, no bent, occ bnndd org mat

SLTY SH: med - dk gy, sb blkly -sb plty, sl sft- frm, slt tex, sl rthy lstr, pred aren, non calc, no bent, occ bnndd org mat
SHY
SLTST: gy - gy brn, sl sft - v sft, sb blkly-sb plty, f-v f gr, sl gt - sl rthy tex, aren

Mud Report @ 6213'MD
Wt 9.9 Gel 1/30/52
Vis 30 API 1/0
YP 6 Sand 0.2%
pH 8.4 Hard 60

MUD WT 10.0 Vis 32

TD Vertical Section @ 6213'MD
6:45AM MST 3/6/2015
TOOH for Tools

Mudlog Continues on "Reliance E23-65-1HC HORZ.mplot" for the Curve and Lateral Sections of this Well.