

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name Merritt 6-66-9-0560BH

Location NWNE SEC 9, T6N, 66W

State COLORADO

County WELD

Country USA

Rig Number NABORS M22

API Number 5-123-37722

AFE # 18460D

Region DJ BASIN

Field WATTENBERG

Spud Date 8/20/2013

Drilling Completed 8/30/2013

Surface Coordinates 260' FNL x 2155' FEL

Bottom Hole Coordinates 500' FSL x 2510' FEL

Ground Elevation 4822'

K.B. Elevation 4844'

Logged Interval 4000' To 11604'

Total Depth 11604'

Formation SUSSEX - SHANNON

Type of Drilling Fluid LSND - WATER POLY MUD

Operator

Company Bill Barrett Corp.

Address 1099 18TH STREET, SUITE 2300
DENVER, CO. 80202

Geologist

Name JOHN ROESINK

Company BILL BARRETT CORPORATION

Address 1099 18TH STREET, SUITE 2300
DENVER, CO. 80202

Rock Types

UNKNOWN
ANHYDRITE
BENTONITE
BRECCIA
CEMENT
CHALK
CHERT
CLAY CHOKE SAND
CLAYSTONE

COAL
CONGLOMERATE
DOLOMITE
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

Accessories

Fossils

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

Fossil

GASTROPOD
INOCERAMUS
OOLITE
OSTRACOD
PELECYPOD
PELLET
PISOLITE
PLANT REMAINS
PLANT SPORES
SCAPHOPOD
STROMATOPOROID

Minerals

ANHYDRITIC

ARGILLACEOUS
ARGILLITE GRAIN
BENTONITE
BITUMENOUS SUBSTANCE
BRECCIA FRAGMENTS
CALCAREOUS
CARBONACEOUS FLAKES
CHTDK
CHTLT
COAL - THIN BEDS
DOLOMITIC
FELDSPAR
FERRUGINOUS PELLET

FERRUGINOUS

GLAUCONITE
GYPSIFEROUS
HEAVY MINERAL
KAOLIN
MARLSTONE
MINERAL CRYSTALS
NODES
PHOSPHATE PELLETS
PYRITE
SALT CAST
SANDY
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

Other Symbols

Oil Show

DEAD
EVEN
QUESTIONABLE
SPOTTED STAINING

Porosity

EARTHY
FENESTRAL
FRACTURE
INTERCRYSTALLINE
INTEROOLITIC

MOLDIC

ORGANIC
PINPOINT
VUGGY

Engineering

BIT
CONNECTION (LEFT)
CONNECTION (RIGHT)
CONNECTION GAS
CORE - LOST
CORE - RECOVERED
DST INTERVAL

FAULT

FORMATION TOP
GAS SHOW
MN DEPTH
NORMAL FAULT
OIL SHOW
OVERTURNED STRATA
REVERSE FAULT
SIDEWALL CORE (LEFT)
SIDEWALL CORE (RIGHT)
SLIDE
SURVEY
TRIP GAS

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

Rounding

ANGULAR
ROUNDED
SUBANG
SUBRND

Textures

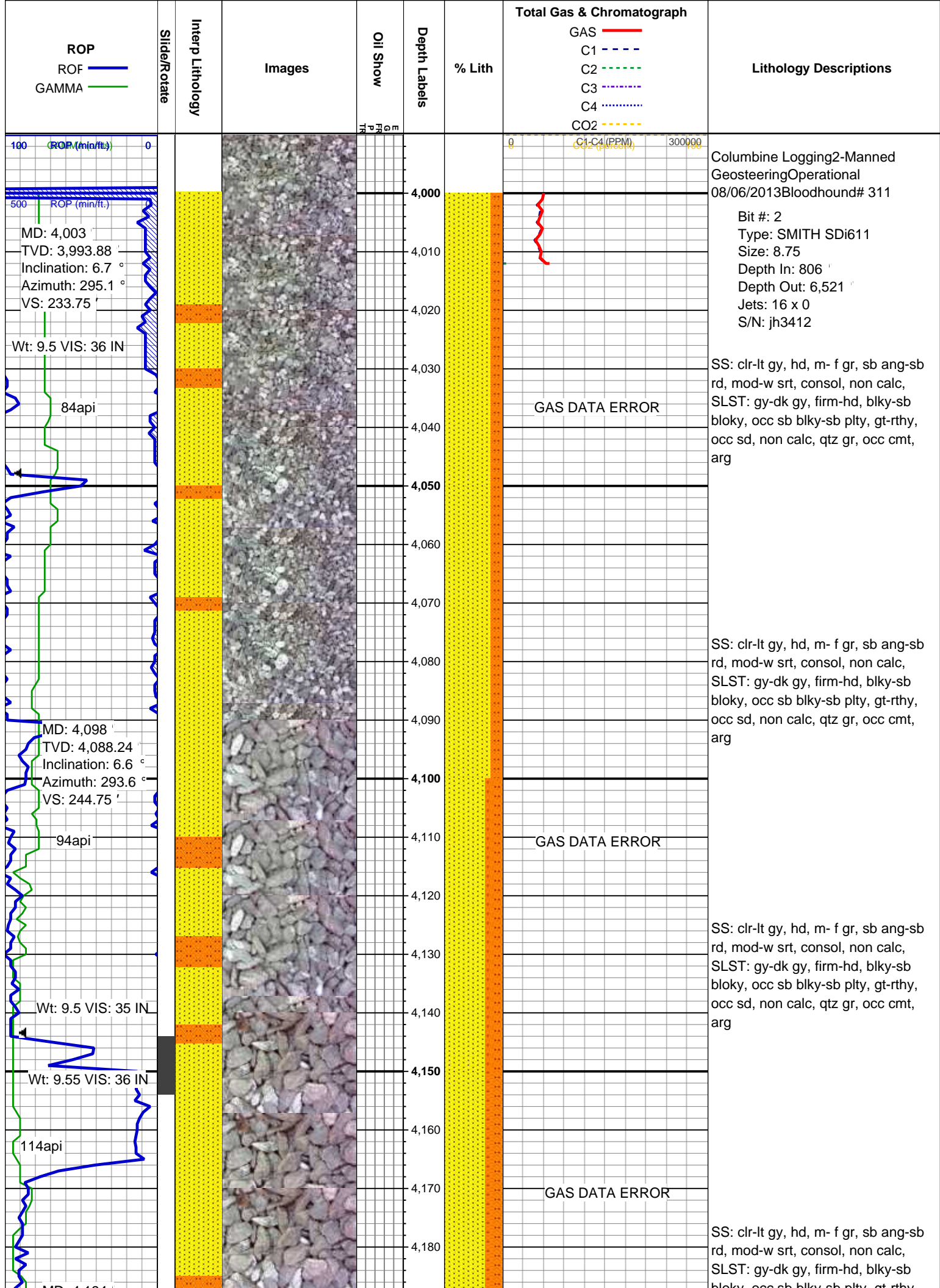
BOUNDSTONE
CHALKY
CRYPTOXLN

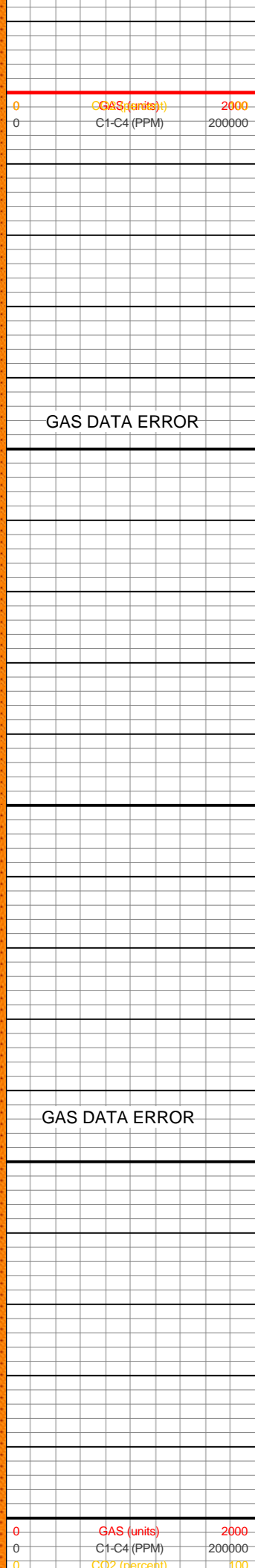
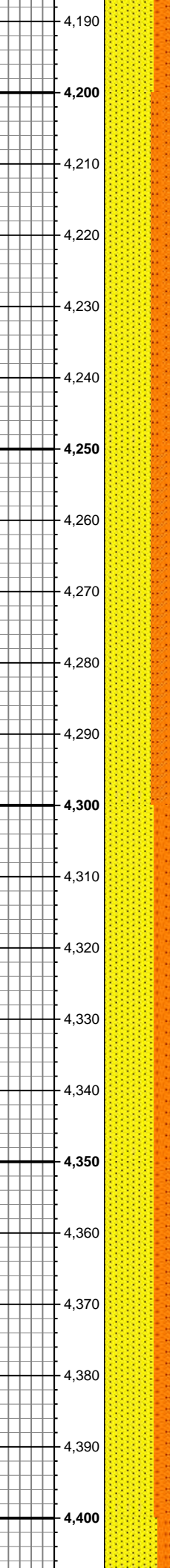
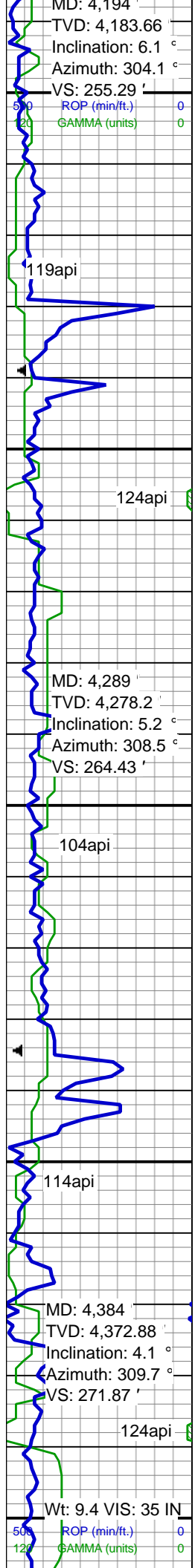
EARTHY

FINELYXLN
GRAINSTONE
LITHOGRAPHIC
MICROXLN
MUDSTONE
PACKSTONE
WACKESTONE

Sorting

MODERATE
POOR
WELL





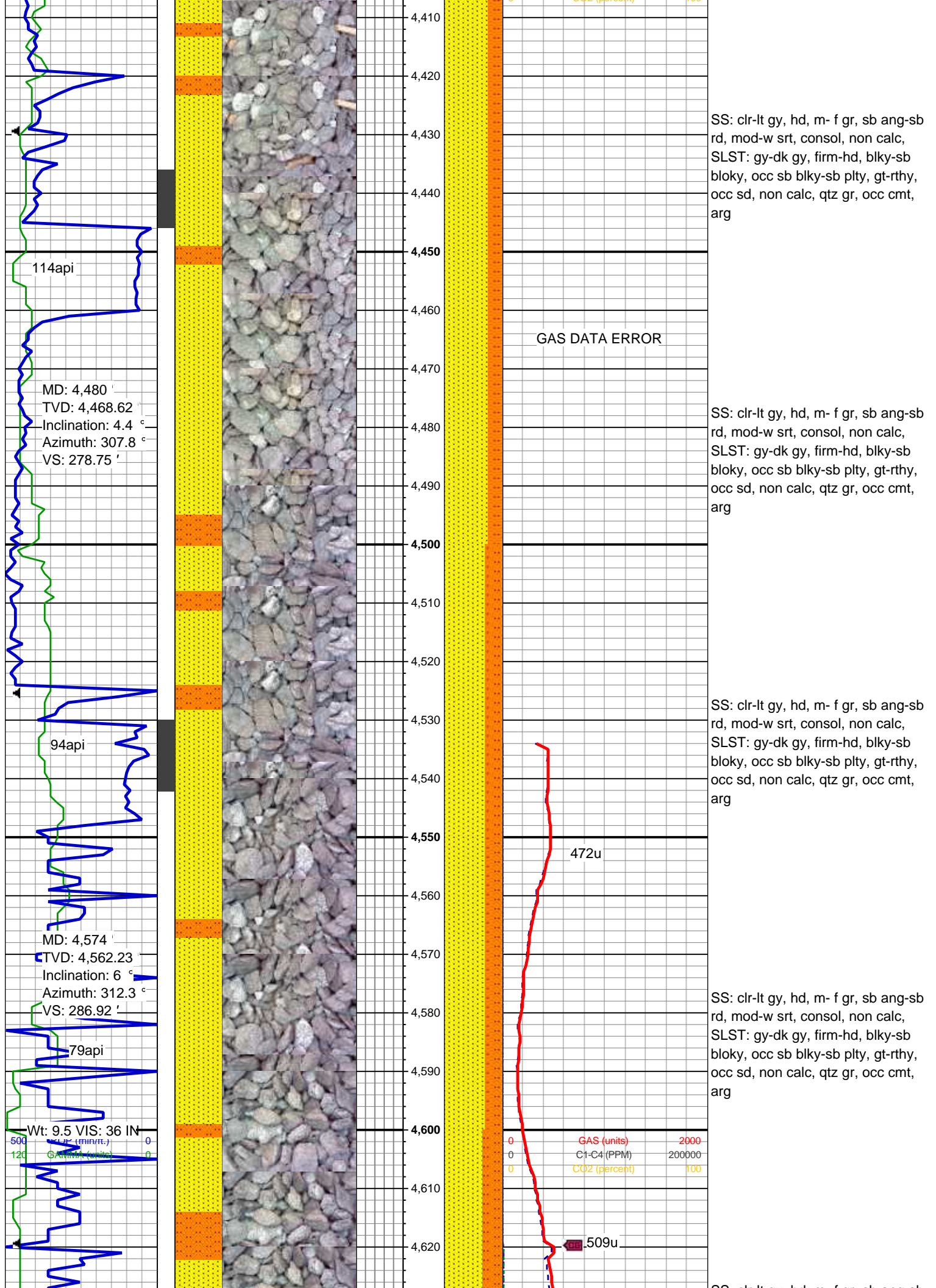
bloky, occ sd, blk-ly-sb plty, gt-rthy, occ sd, non calc, qtz gr, occ cmt, arg

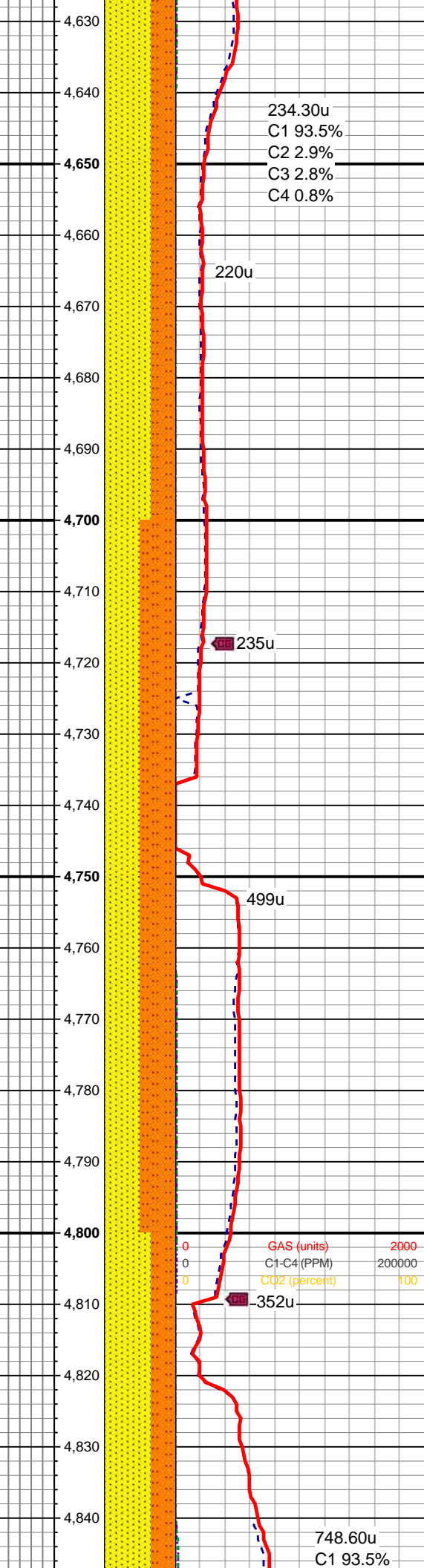
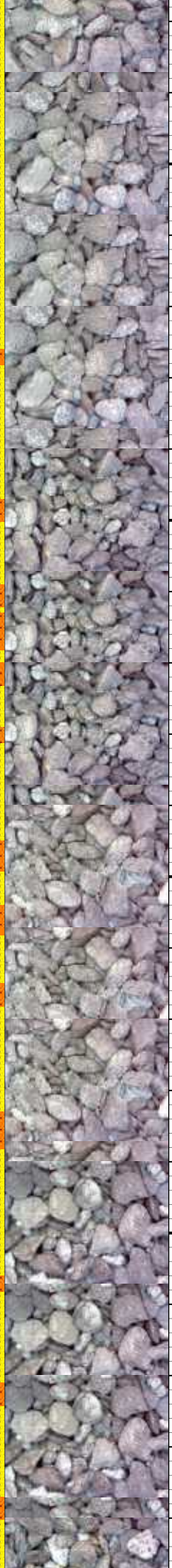
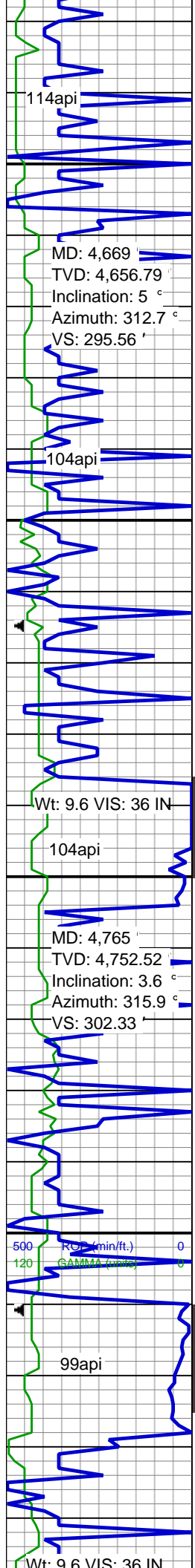
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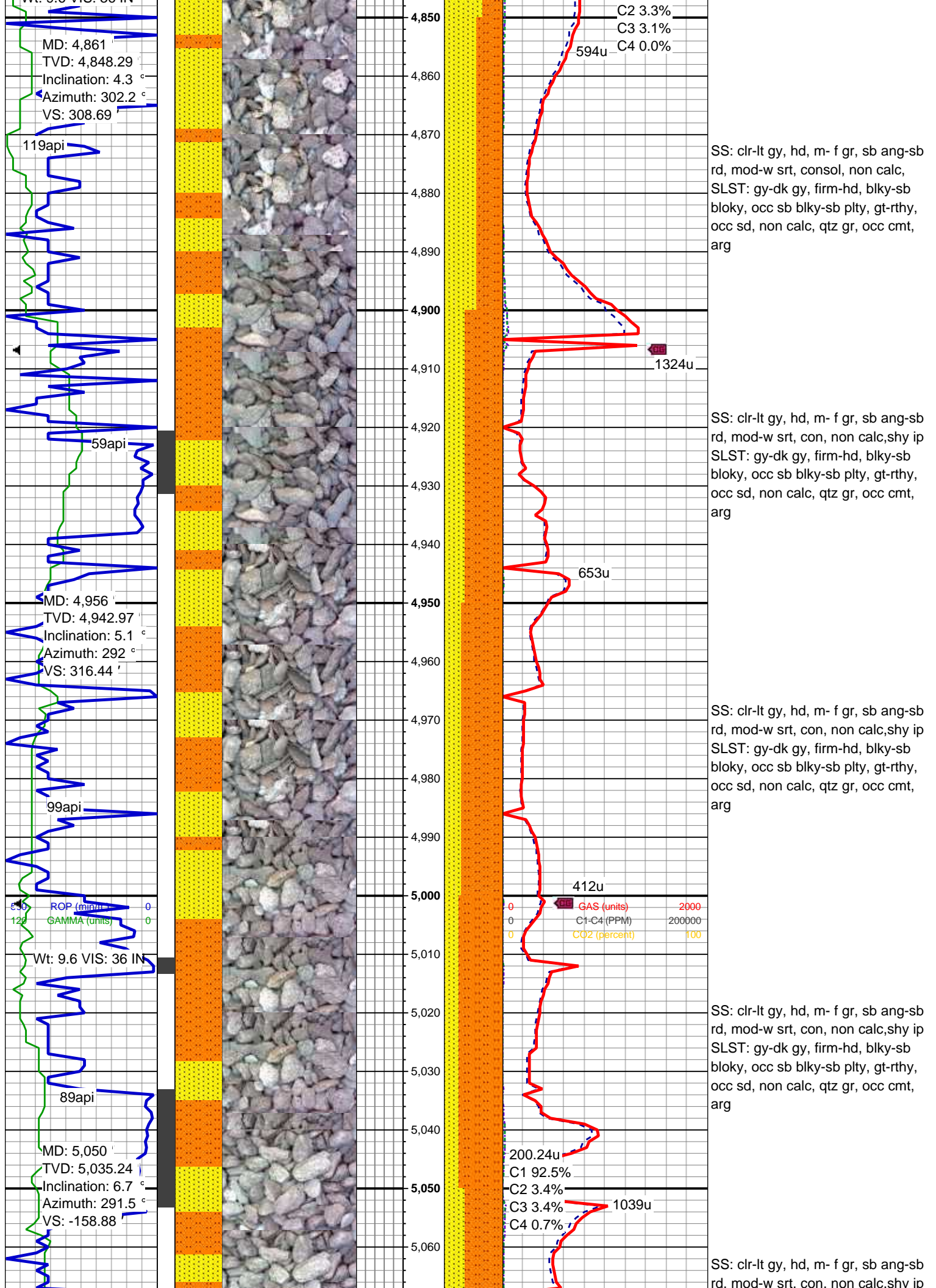
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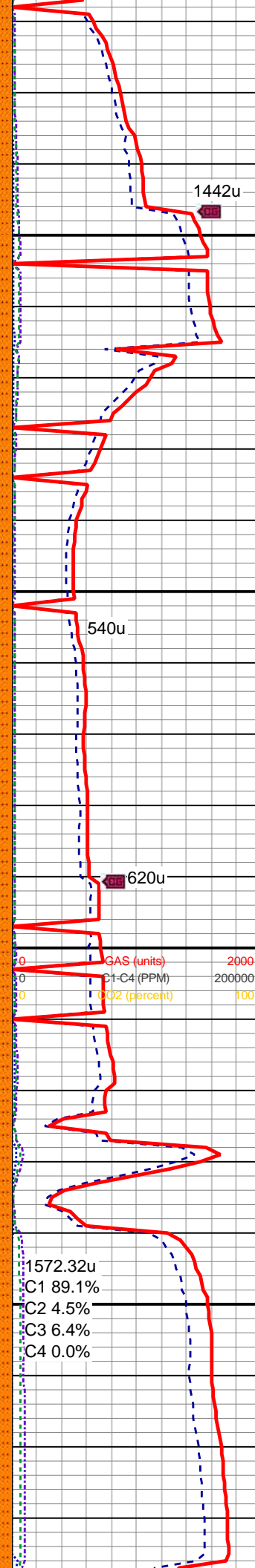
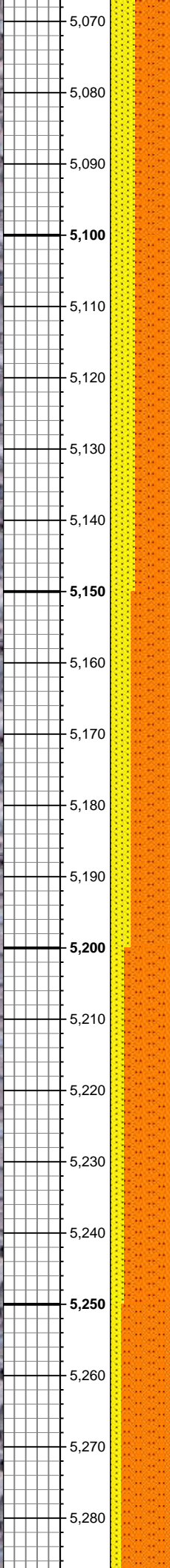
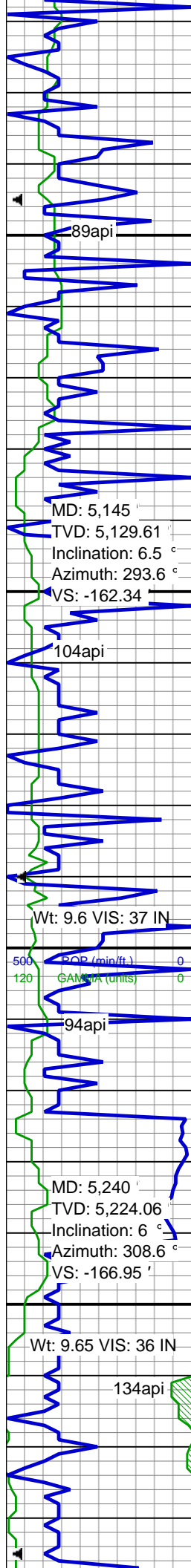
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1442u

SS: clr-lt gy, hd, m- f gr, sb ang-sb rd, mod-w srt, con, non calc, shy ip
SLST: lt gy-dk gy, firm-hd, blk-y-sb bloky, occ sb blk-y-sb plty, gt-rthy, occ sd, non calc, qtz gr, occ cmt, arg

540u

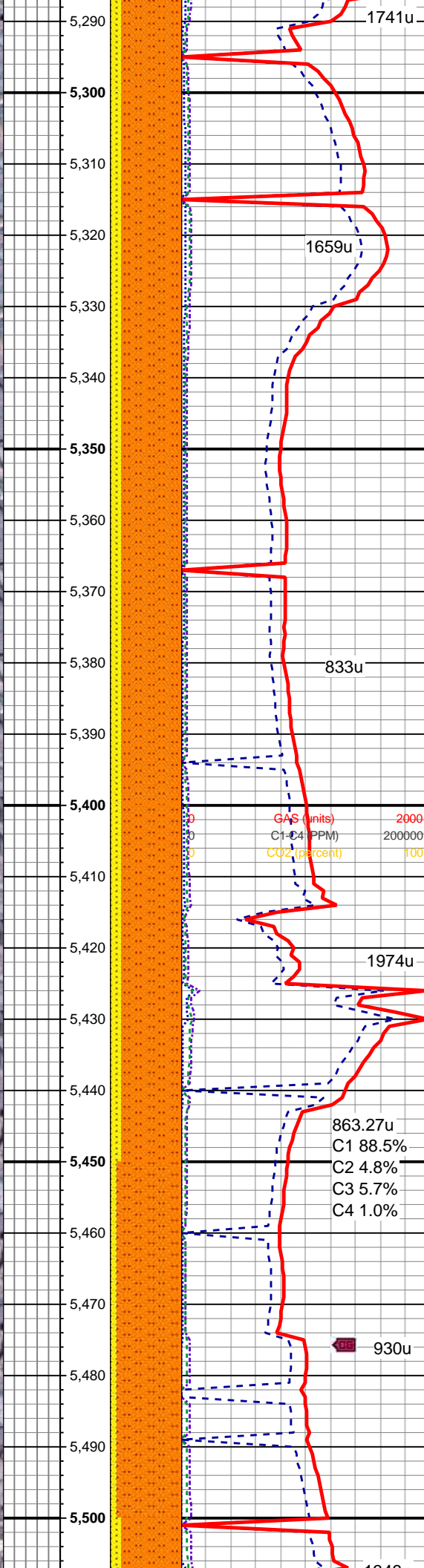
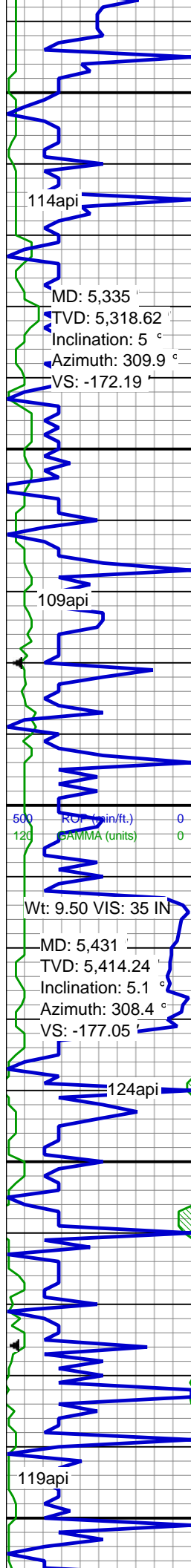
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SLST: lt gy-dk gy, firm-hd, sb blk-y-sb plty, occ sb blk-y-sb plty, gt-rthy, occ sd, non calc, qtz gr, occ cmt, arg

620u

SS: clr-lt gy, hd, m- f gr, sb ang-sb rd, mod-w srt, con, non calc, shy ip
SLST: lt gy-dk gy, firm-hd, sb blk-y-sb plty, occ sb blk-y-sb plty, gt-rthy, occ sd, non calc, qtz gr, occ cmt, arg

1572.32u
C1 89.1%
C2 4.5%
C3 6.4%
C4 0.0%

SS: clr-lt gy, hd, m- f gr, sb ang-sb rd, mod-w srt, con, non calc, shy ip
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GAS (units) 2000
C1-C4 (PPM) 200000
CO2 (percent) 100

1741u

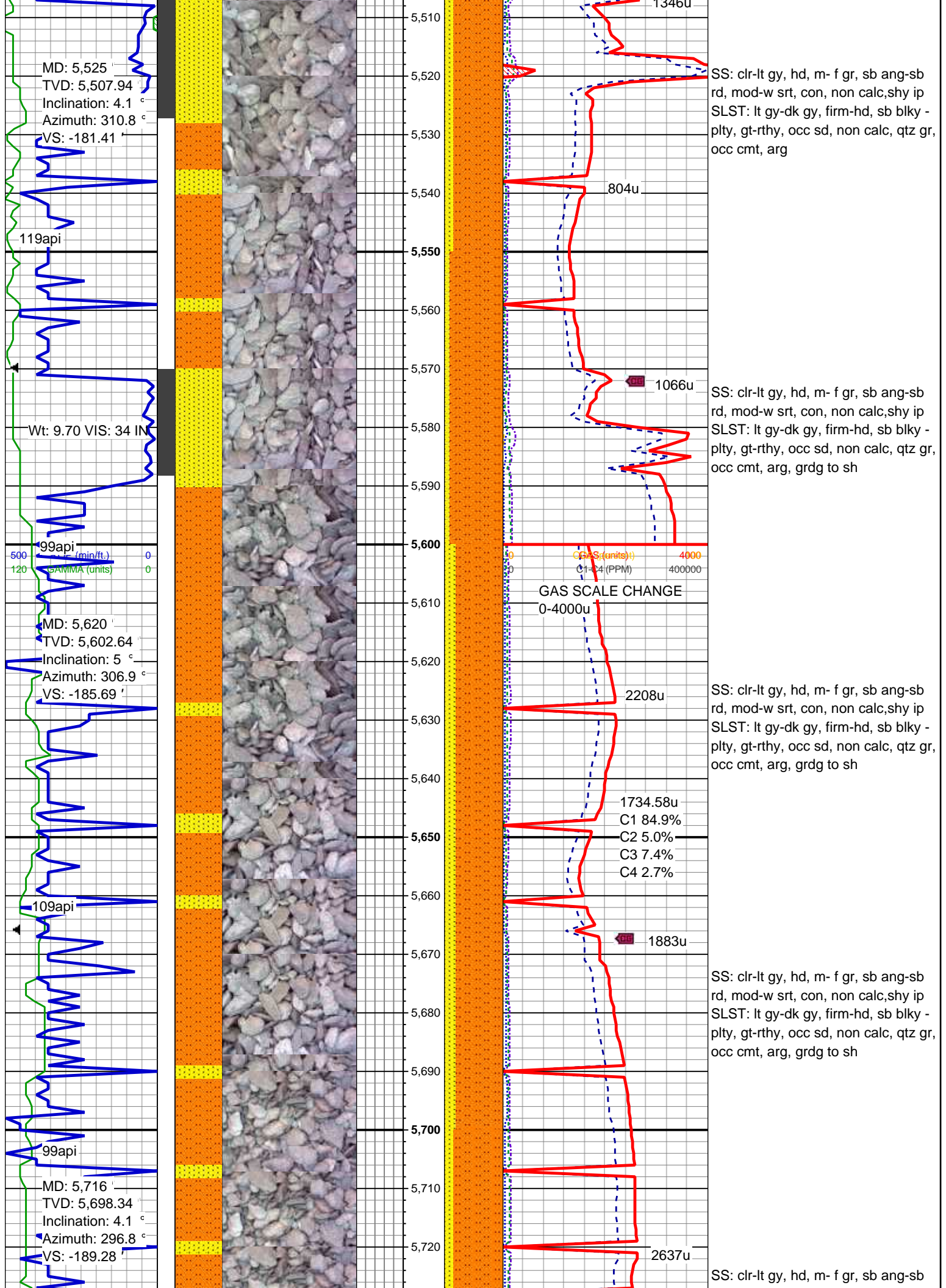
1659u

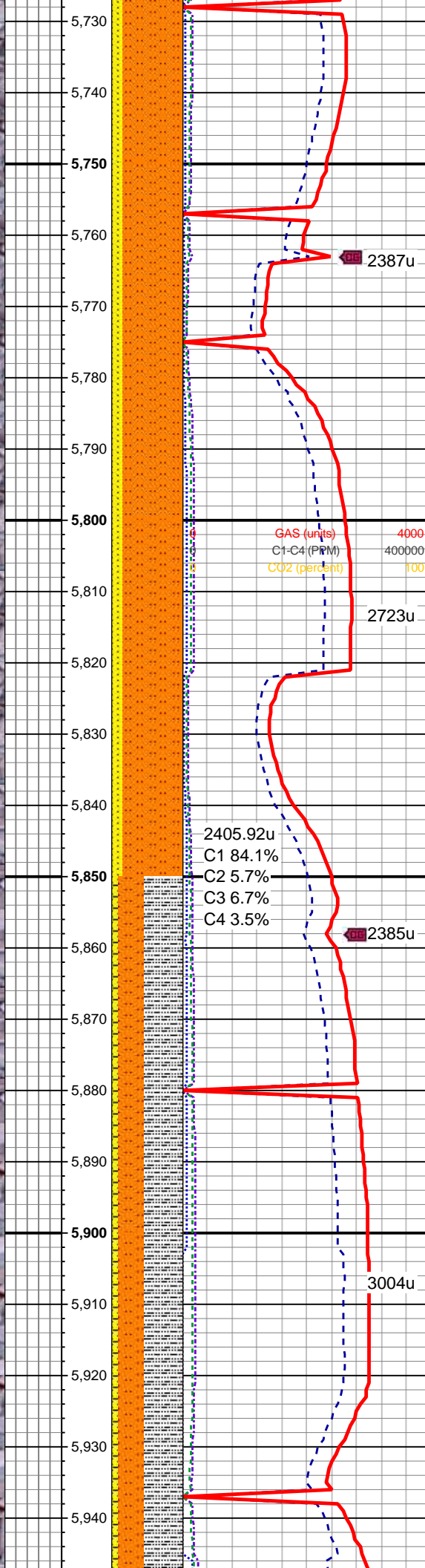
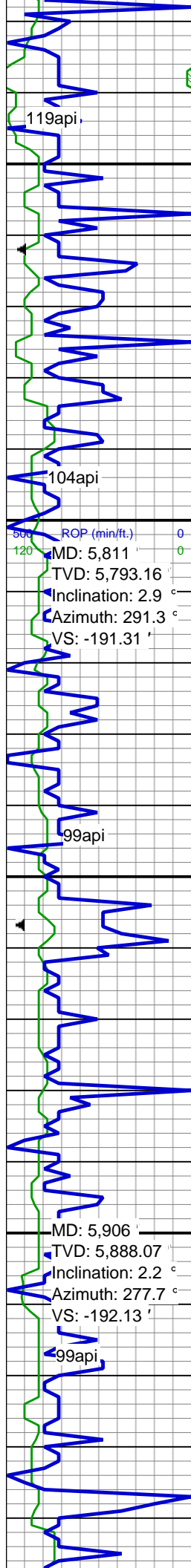
833u

1974u

863.27u
C1 88.5%
C2 4.8%
C3 5.7%
C4 1.0%

930u





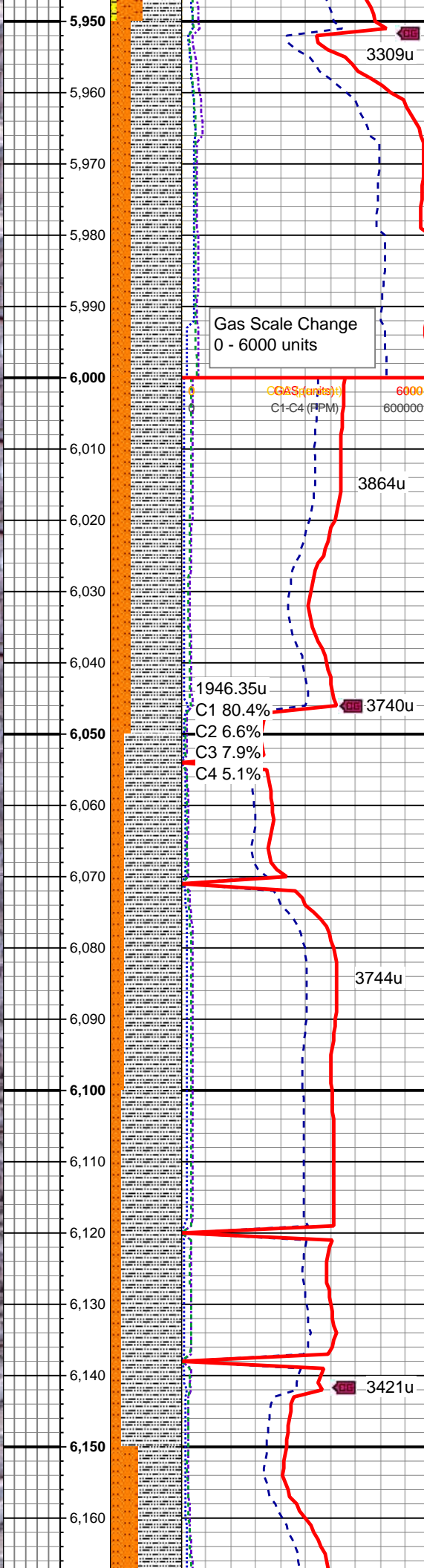
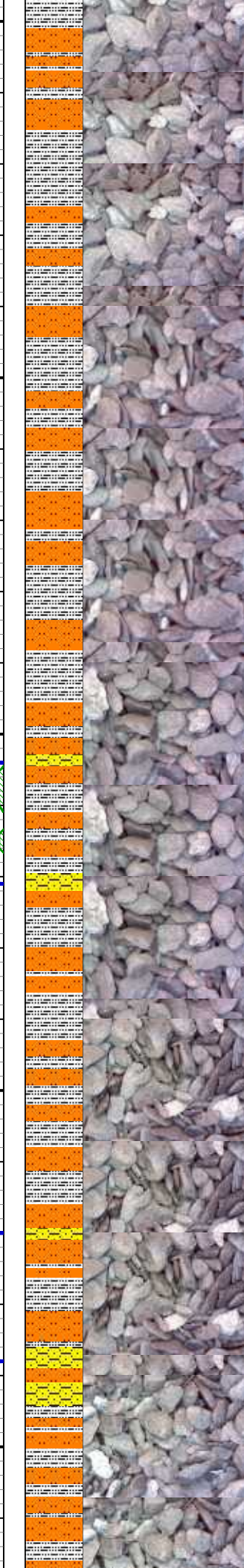
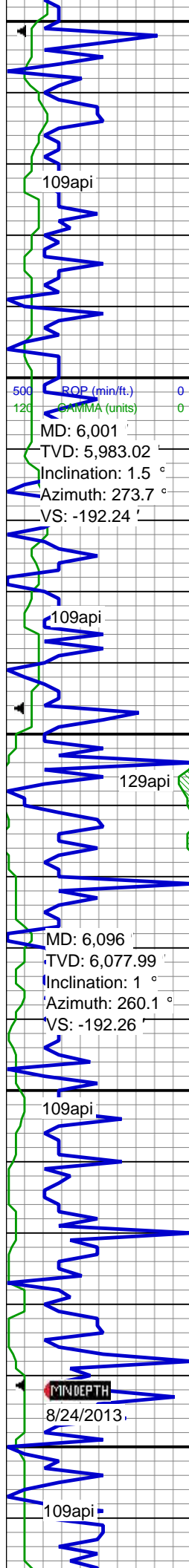
rd, mod-w srt, con, non calc,shy ip
SLST: lt gy-dk gy, firm-hd, sb blkly -
plty, gt-rthy, occ sd, non calc, qtz gr,
occ cmt, arg, grdg to sh

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plty, gt-rthy, occ sd, non calc, qtz gr,
occ cmt, arg, grdg to sh

SLTYSH: m gy-m gy brn, mod fri-sl
britt, sb blkly-sb plty, gt-rthy, silty,
grdg - SH, SLST: lt gy-dk gy,
firm-hd, sb blkly - plty, gt-rthy, occ
sd, non calc, qtz gr, occ cmt, arg,
grdg to sh, SHYSS: lt gy- m gy, fri, f
gr, sb rd- rd, mod - w srt, arg, str ss

SLTYSH: m gy-m gy brn, mod fri-sl
britt, sb blkly-sb plty, gt-rthy, silty,
grdg - SH, SLST: lt gy-dk gy,
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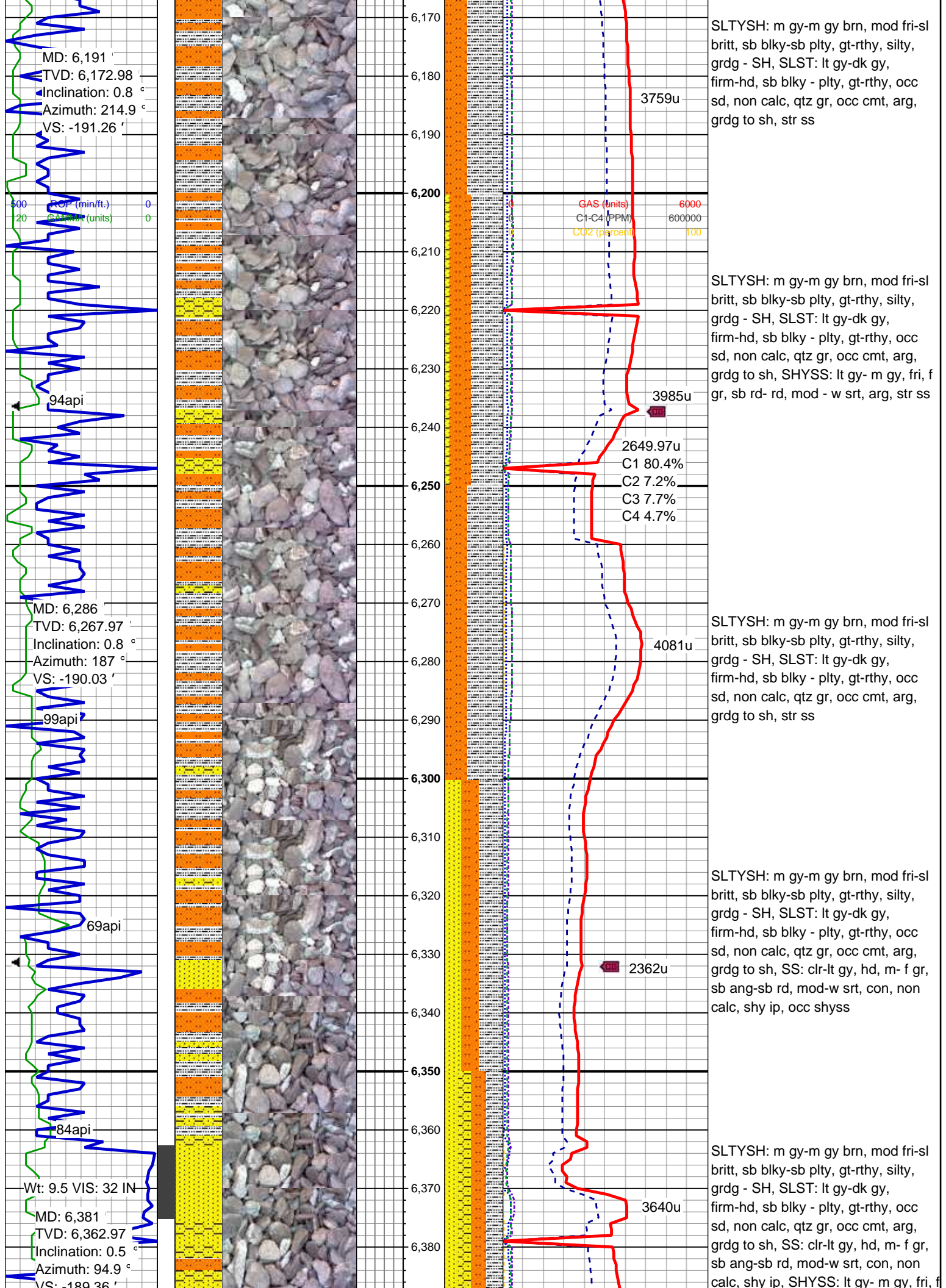


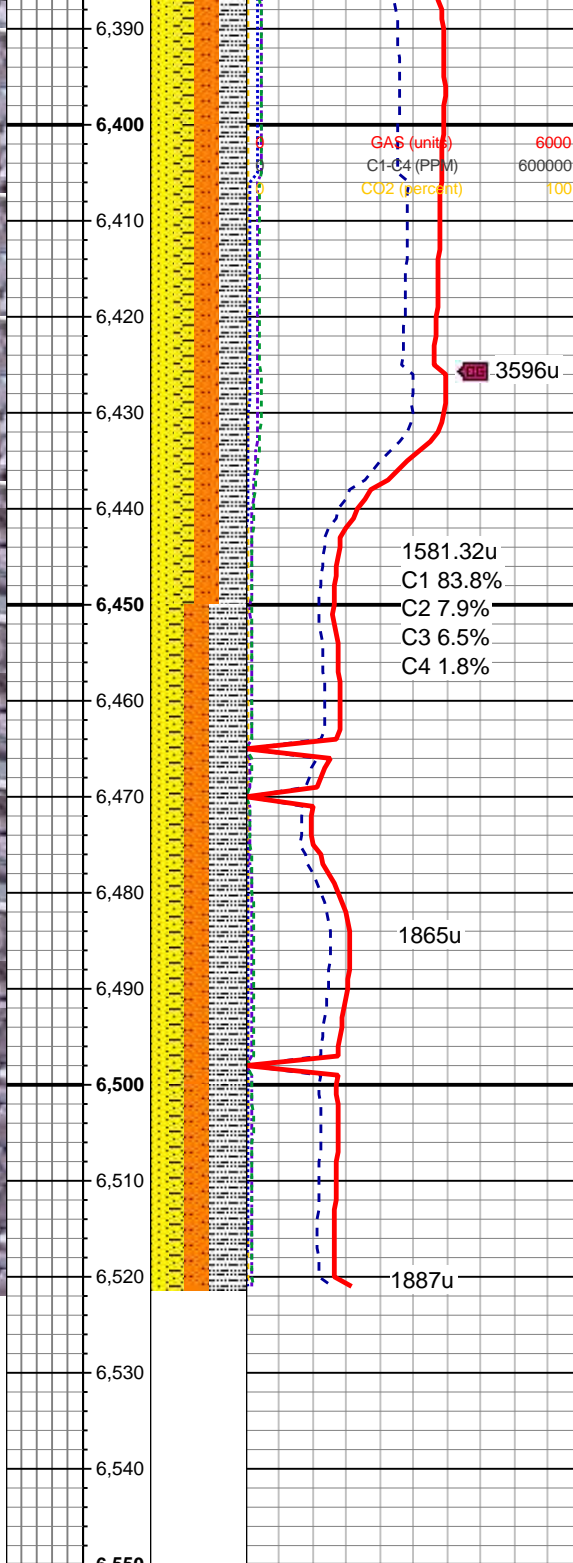
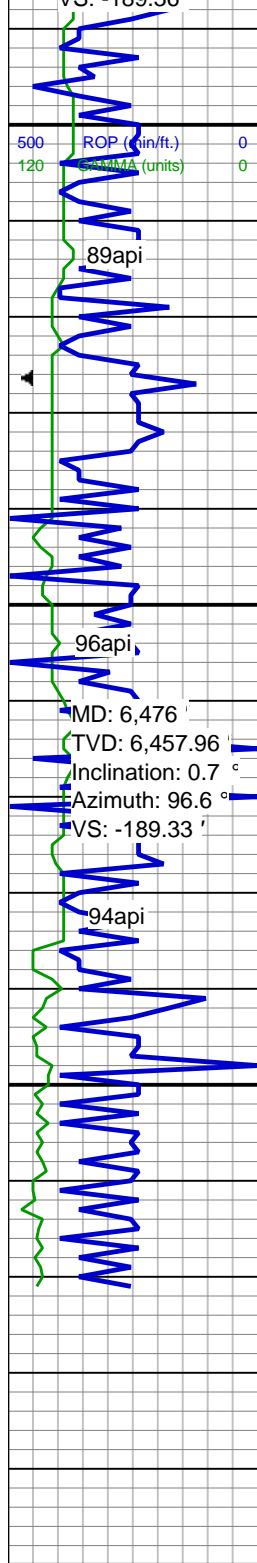
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sd, non calc, qtz gr, occ cmt, arg,
grdg to sh, str ss





gr, sb rd- rd, mod - w srt, arg

SLTYSH: m gy-m gy brn, mod fri-sl
britt, sb blk-y-sb plty, gt-rthy, silty,
grdg - SH, SLST: lt gy-dk gy,
firm-hd, sb blk-y - plty, gt-rthy, occ
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gr, sb rd- rd, mod - w srt, arg

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Log continues on
Merritt 6-66-9-0560BH HZ