



Scale: 5" / 100'
Measured Depth Log

Well Name SHOOK 3-10-4CDH_VERT_CURVE

Location SECTION 3 T1S R67W

State COLORADO

County ADAMS

Country USA

Rig Number ENSIGN 145

API Number 05-001-09974

AFE # 1700010

Geographic Region DJ BASIN

Field WATTENBERG

Spud Date 4/14/2017

Drilling Completed 8/15/2017

Surface Coordinates Section 3, 2058' FSL x 2184' FEL
39.992220, -104.873330

Bottom Hole Coordinates Section 3, 854' FSL x 2174' FEL
39.988901, -104.873313

Ground Elevation 5098'

K.B. Elevation 5111'

Logged Interval 1815' **To** 8230'

Total Depth 6415'

Formation SURFACE - CODELL SS

Type of Drilling Fluid OBM - OIL BASED MUD

Operator

Company Petro Share

Address 9635 Maroon Circle, Suite 400
Englewood, CO 80112



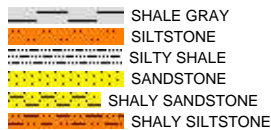
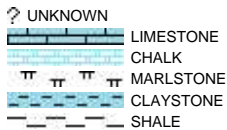
Geologist

Name JOEY LUCE, SAGE BETTS

Company TERRA GUIDANCE

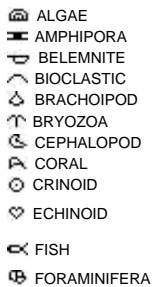
Address 1298 O Road
Loma CO 81524
(970) 260-5408

Rock Types



Accessories

Fossils



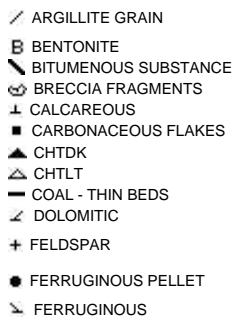
Fossil



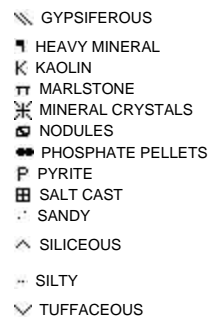
Minerals



Argillaceous



Glauconite

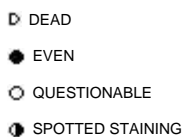


Stringer



Other Symbols

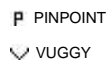
Oil Show



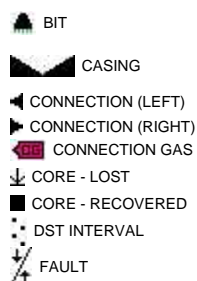
Porosity



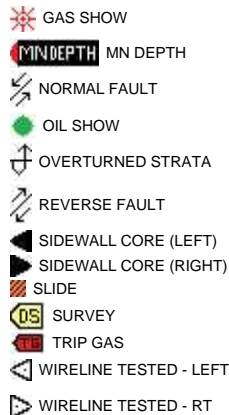
Organic



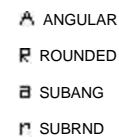
Engineering



Formation Top



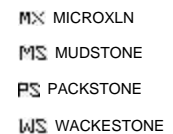
Rounding



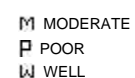
Textures

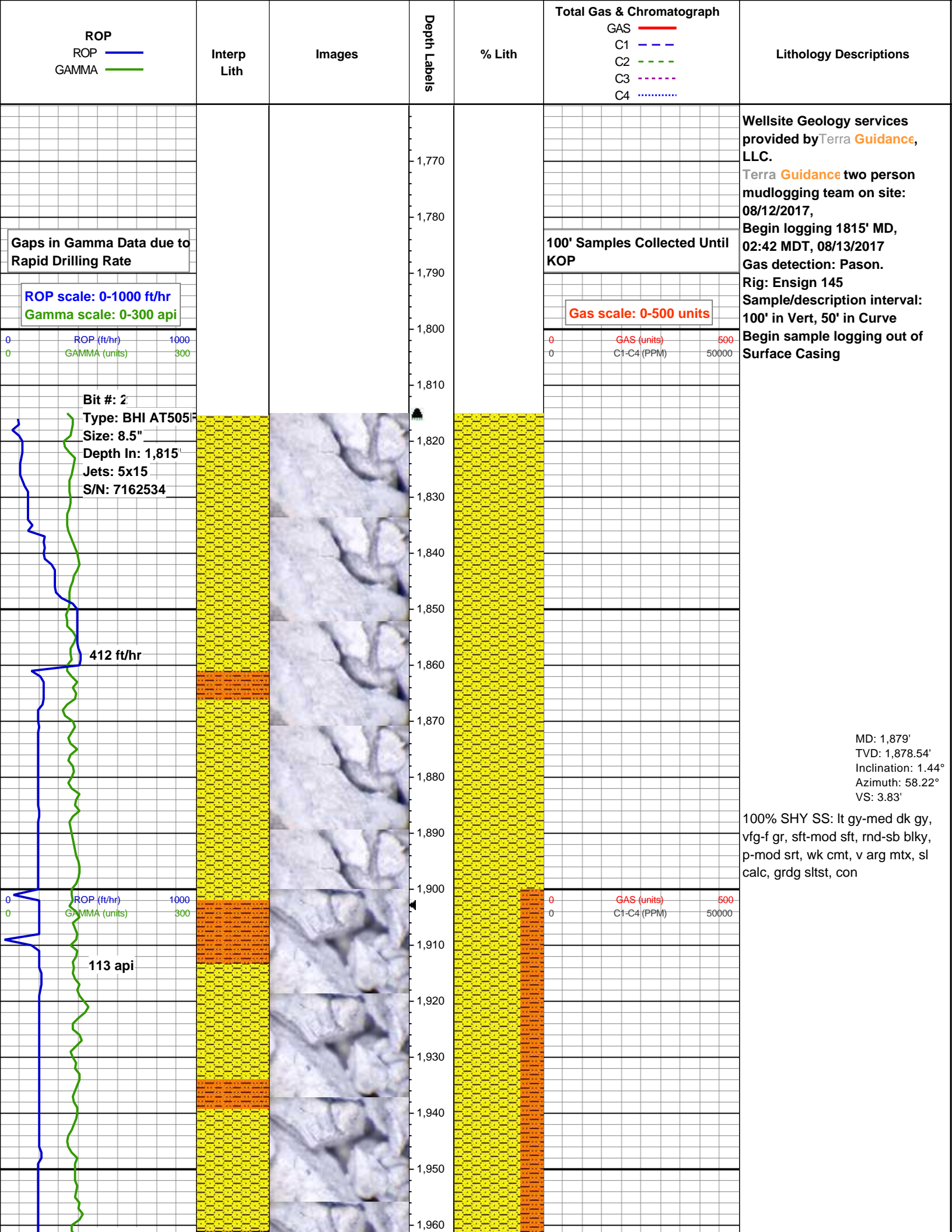


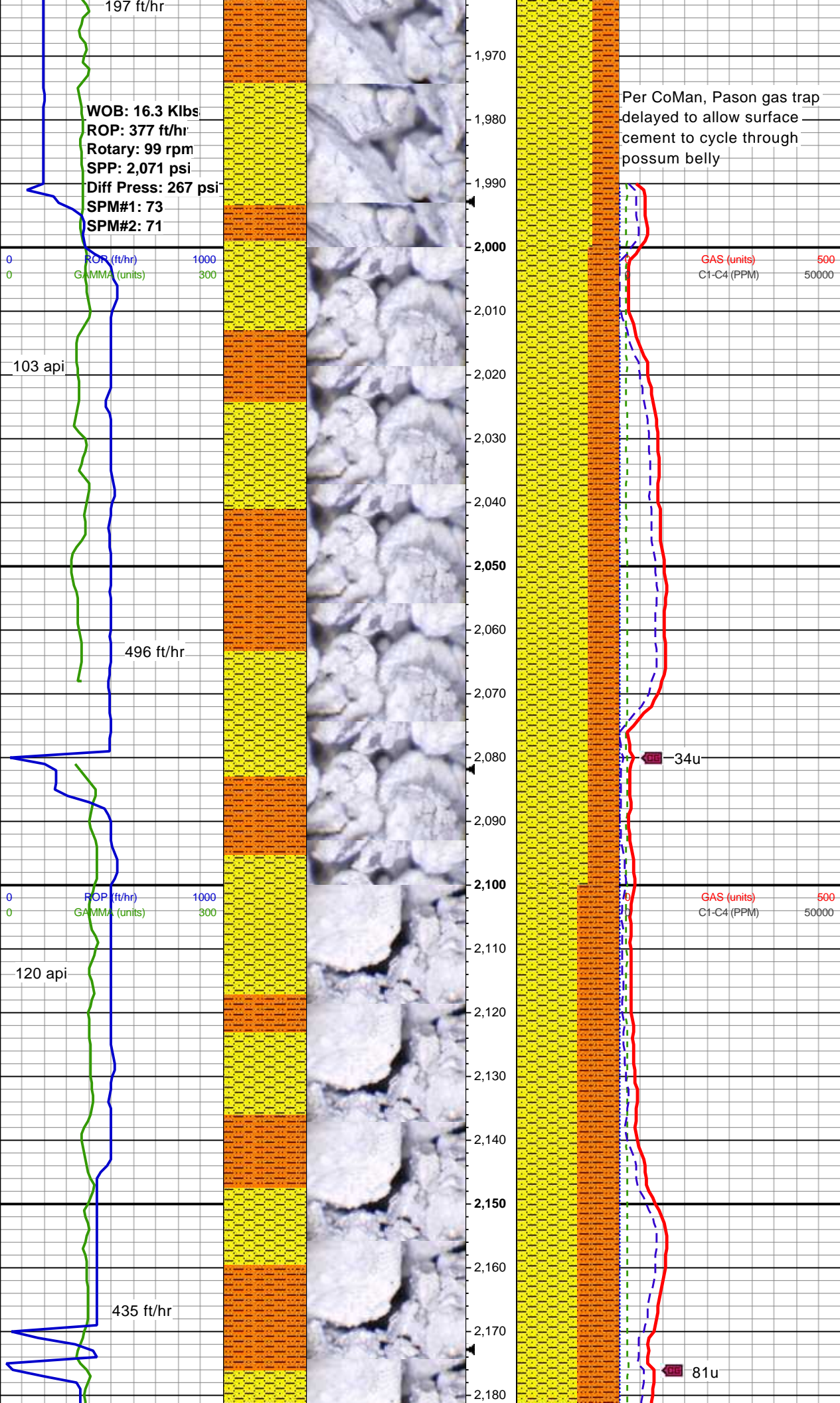
Lithographic



Sorting



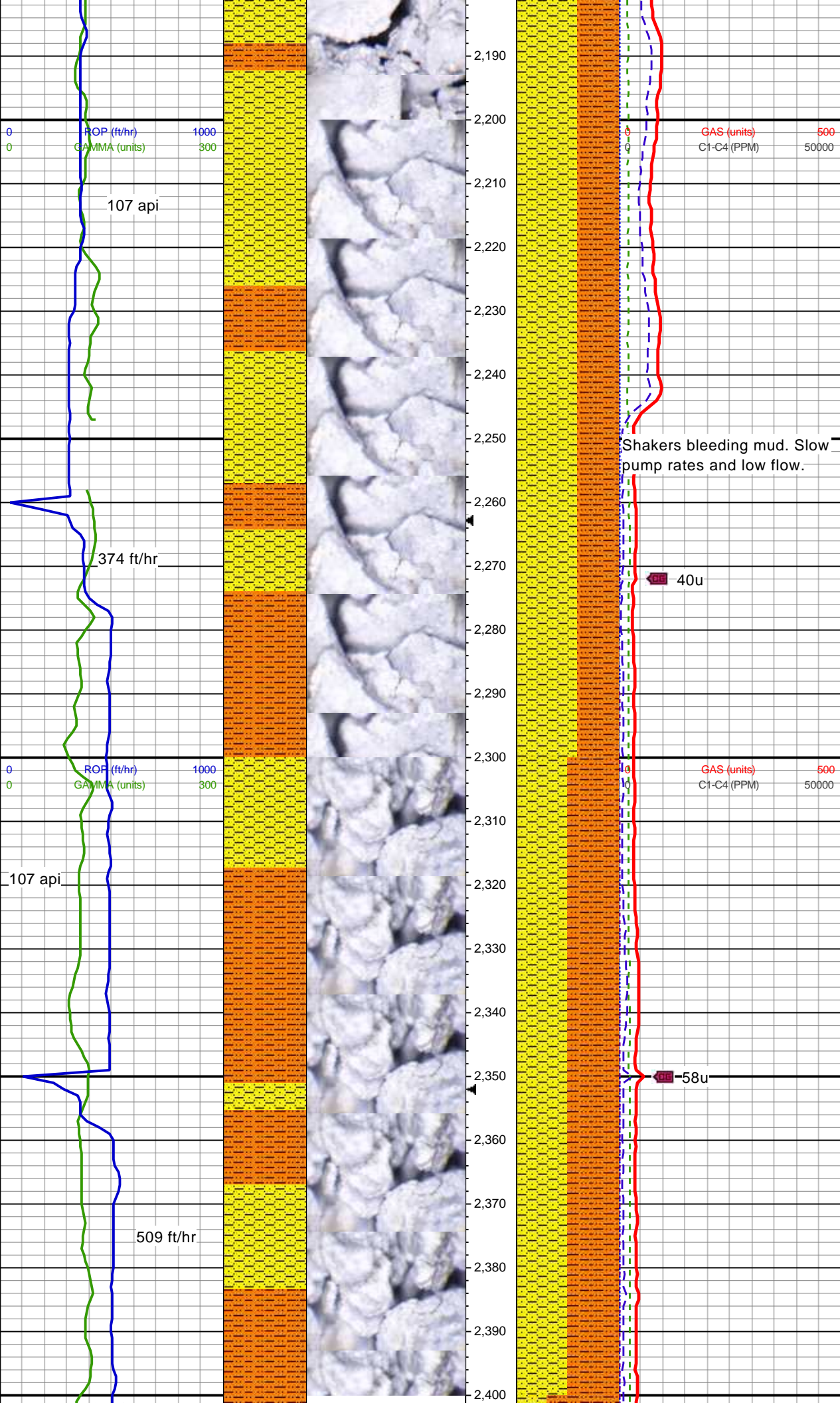




75% SHY SS: lt-medgy, sme dkr, sft-fri, blk-y-sr clus, ply srt, lmy/cly wk cmt, arg mtx, calc, grdg sltst; 25% SHY SLTST: medgy-gy/brn, sft-sl frm, sb fis-sb ang, arg-aren mtx, sl calc, ip clyst

70% SHY SS: lt-medgy, sme dkr, sft-fri-ip spg, blk-y-sr clus, ply srt, lmy/cly wk cmt, arg mtx, calc, grdg sltst; 30% SHY SLTST: medgy-gy/brn, sft-sl frm, sb fis-sb ang, arg-aren mtx, sl calc, ip clyst

20% SHY SS: lt-medgy, sme dkr, sft-fri-ip spg, blk-y-sr clus, ply srt, lmy/cly wk cmt, arg mtx, calc, grdg sltst; 30% SHY SLTST: medgy-gy/brn, sft-sl frm, sb fis-sb ang, arg-aren mtx, sl calc, ip clyst

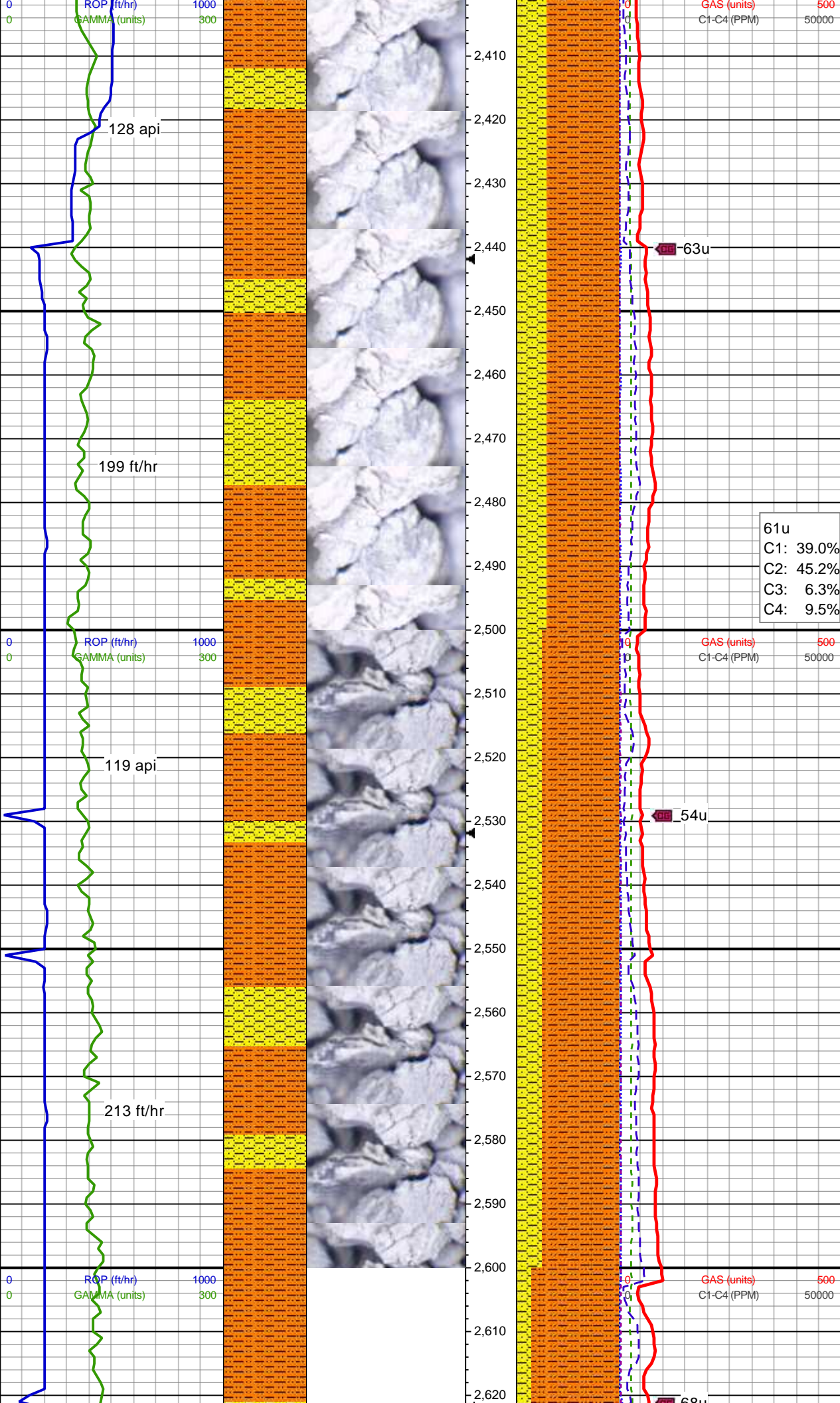


60% SHY SS: lt-medgy, sme dkr, sft-fri, blk-sr clus, ply srt, lmy/cly wk cmt, arg mtx, calc, grdg sltst; 40% SHY SLTST: medgy-gy/brn, sft-sl frm, sb fis-sb ang, arg-aren mtx, sl calc, ip clyst

60% SHY SS: lt-medgy, sme dkr, sft-fri-ip spg, blk-sr clus, ply srt, lmy/cly wk cmt, arg mtx, calc, grdg sltst; 40% SHY SLTST: medgy-gy/brn, sft-sl frm, sb fis-sb ang, arg-aren mtx, sl calc, ip clyst

50% SHY SLTST: lt-medgy, gy/brn, ip drkgy, mod sft-frm, ip spg, sb blk-sb fis, vfg, p-mod srt, arg mtx, sl calc, ip clyst; 50% SHY SS: ltgy, sft-fri, blk-sb ang clus, vfg, mod-w srt, lmy/cly cmt, arg mtx, sl calc

MD: 2,329'
TVD: 2,328.48'
Inclination: 0.34°
Azimuth: 26.96°
VS: -0.32'



MD: 2,419'
TVD: 2,418.48'
Inclination: 0.54°
Azimuth: 51.02°
VS: -0.83'

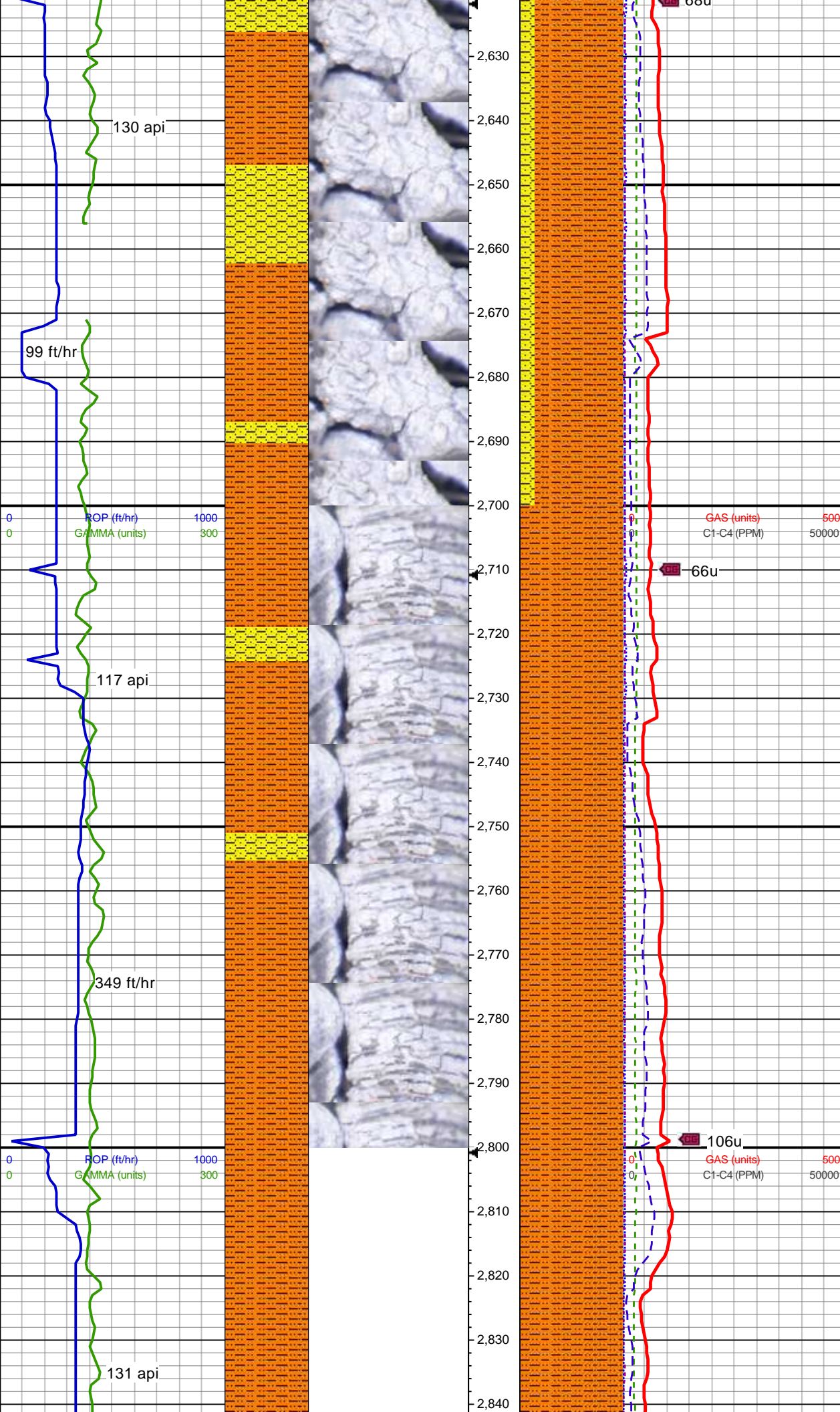
70% SHY SLTST: lt-medgy,
gy/brn, mod sft-fri-spg, sb blk-
fy-sb fis, vfg, p-mod srt, arg mt-
x, sl calc, grdg clyst; 30% SHY
SS: ltgy, sft-fri, blk-
fy-sb ang clus, vfg, mod-w srt,
lmy/cly cmt, arg mt-
x, sl calc

61u
C1: 39.0%
C2: 45.2%
C3: 6.3%
C4: 9.5%

MD: 2,509'
TVD: 2,508.45'
Inclination: 2.5°
Azimuth: 197.22°
VS: 0.78'

75% SHY SLTST: lt-medgy, mod
sft-fri-spg, sb blk-
fy-sb fis-ip ang, vfg, p-mod srt,
arg mt-
x, mod calc, grdg clyst; 25% SHY
SS: ltgy, sft-fri, blk-
fy-sb ang clus, vfg, mod srt,
lmy/cly cmt, arg mt-
x, mod calc

MD: 2,598'
TVD: 2,597.23'
Inclination: 5.4°
Azimuth: 198.52°
VS: 6.6'

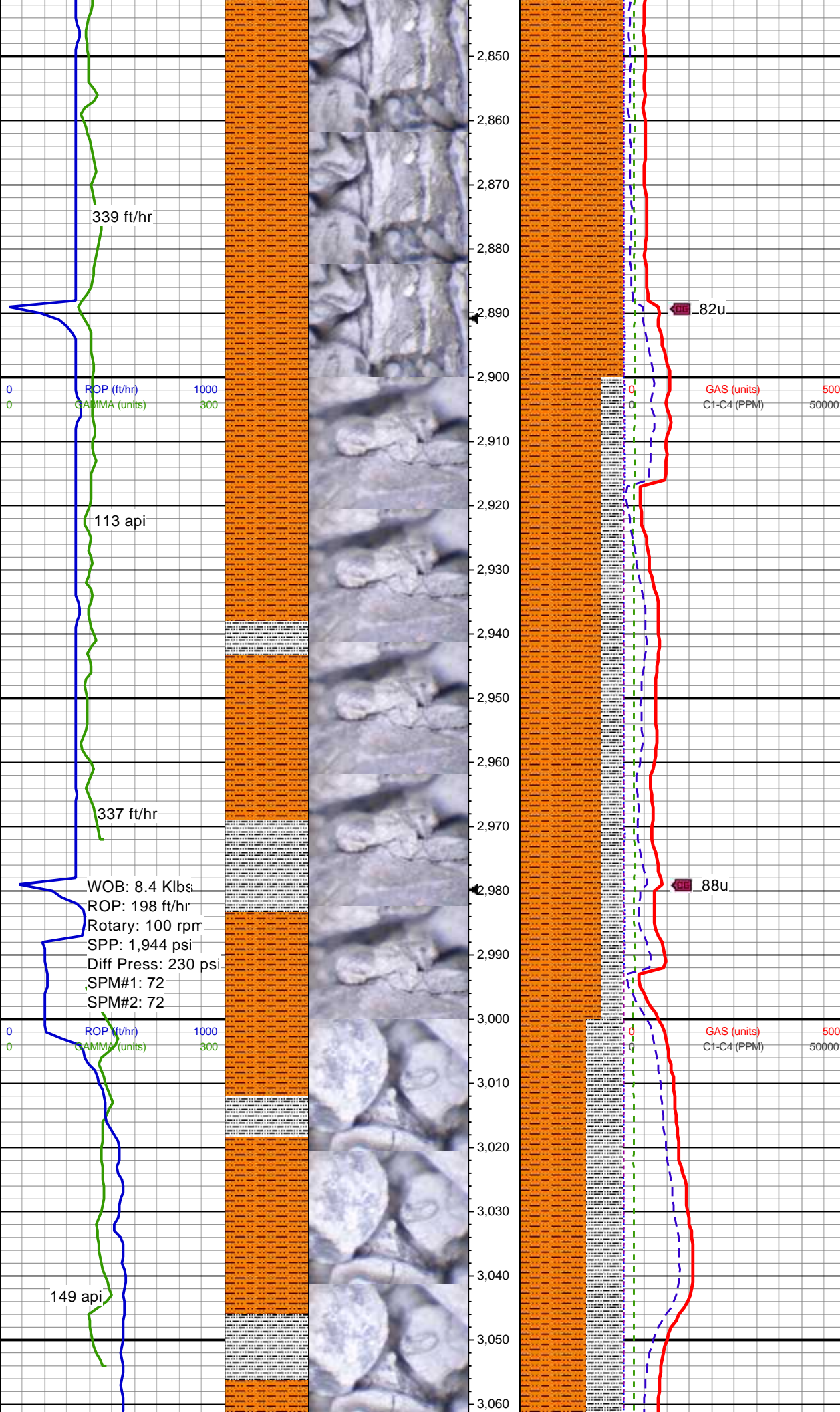


85% SHY SLTST: medgy-occ ltr, gy/brn, rr drkgy, v-mod sft, fri-spg, sb blkgy-sb fis, vfg, p-mod srt, v arg mtz, mod calc, abnt cly; 15% SHY SS: ltgy, sft-fri, blkgy-sb ang clus, vfg, mod-w srt, lmy/cly cmt, arg mtz, sl-mod calc

MD: 2,688'
TVD: 2,686.53'
Inclination: 8.76°
Azimuth: 196.85°
VS: 17.17'

100% SHY SLTST: medgy-ip drkgy, gy/brn, mod sft-frn, brit-ip fis, sb blkgy-sb plty-ip ang, vfg, mod-w srt, arg mtz, sl-mod calc, grdg sh

MD: 2,777'
TVD: 2,774.67'
Inclination: 7.19°
Azimuth: 188.87°
VS: 29.15'



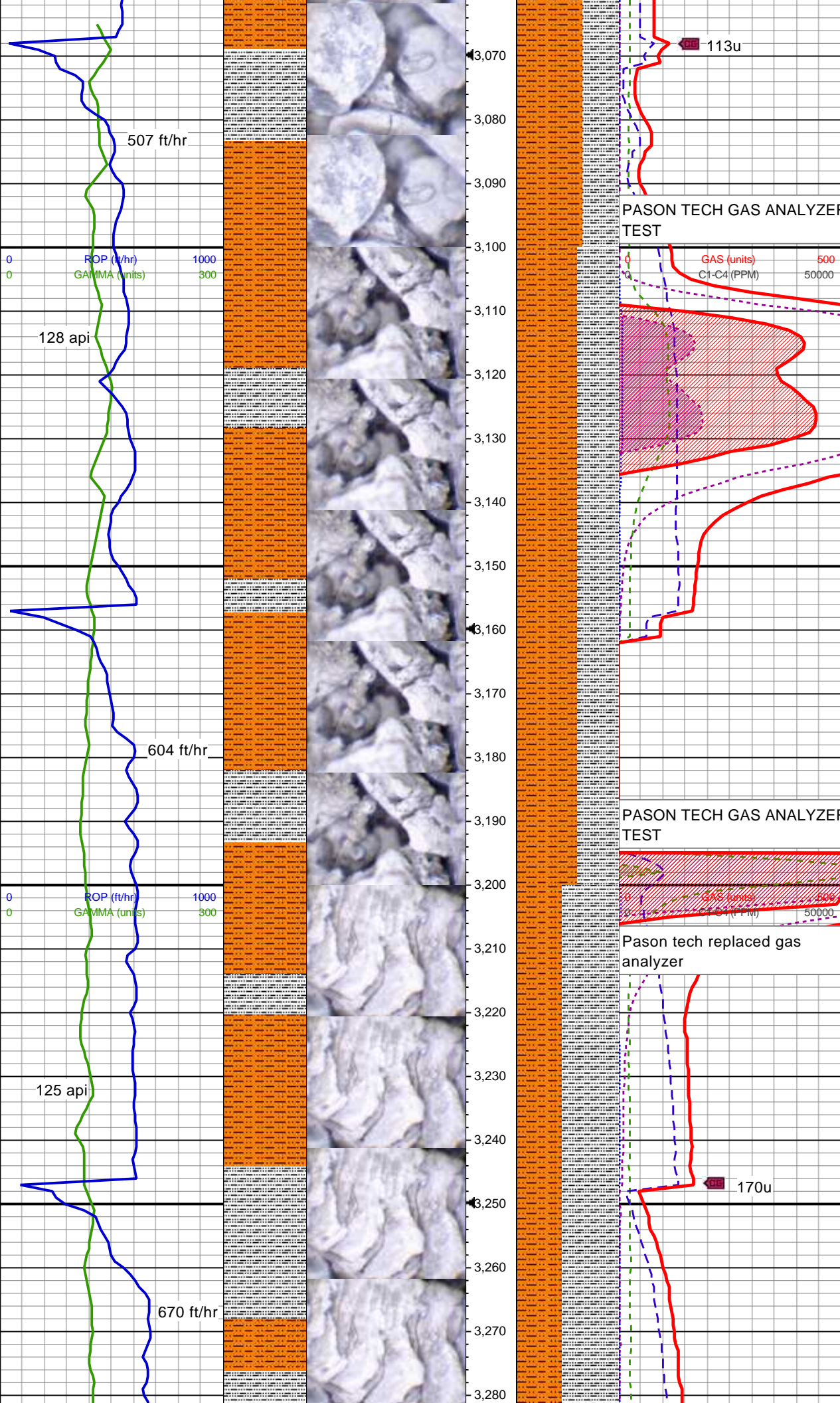
MD: 2,868'
TVD: 2,864.96'
Inclination: 7.13°
Azimuth: 186.3°
VS: 40.38'

100% SHY SLTST: medgy-ip
drkgy, gy/brn, mod sft-frm, brit-ip
fis, sb blkgy-sb plty-ip ang, vfg,
mod-w srt, arg mtz, sl-mod calc,
grdg sh

MD: 2,957'
TVD: 2,953.26'
Inclination: 7.27°
Azimuth: 179.76°
VS: 51.5'

80% SHY SLTST: med-drkgy,
gy/brn, sl sft-mod frm, sb blkgy-sb
ang, ip fis, vfg, p-mod srt, arg mtz,
calc; 20% SLTY SH: med-drkgy,
mod hd, fis ip, sb blkgy-ang, rthy, v
arg mtz, sl calc

MD: 3,047'
TVD: 3,042.56'
Inclination: 7.06°
Azimuth: 175.82°
VS: 62.72'

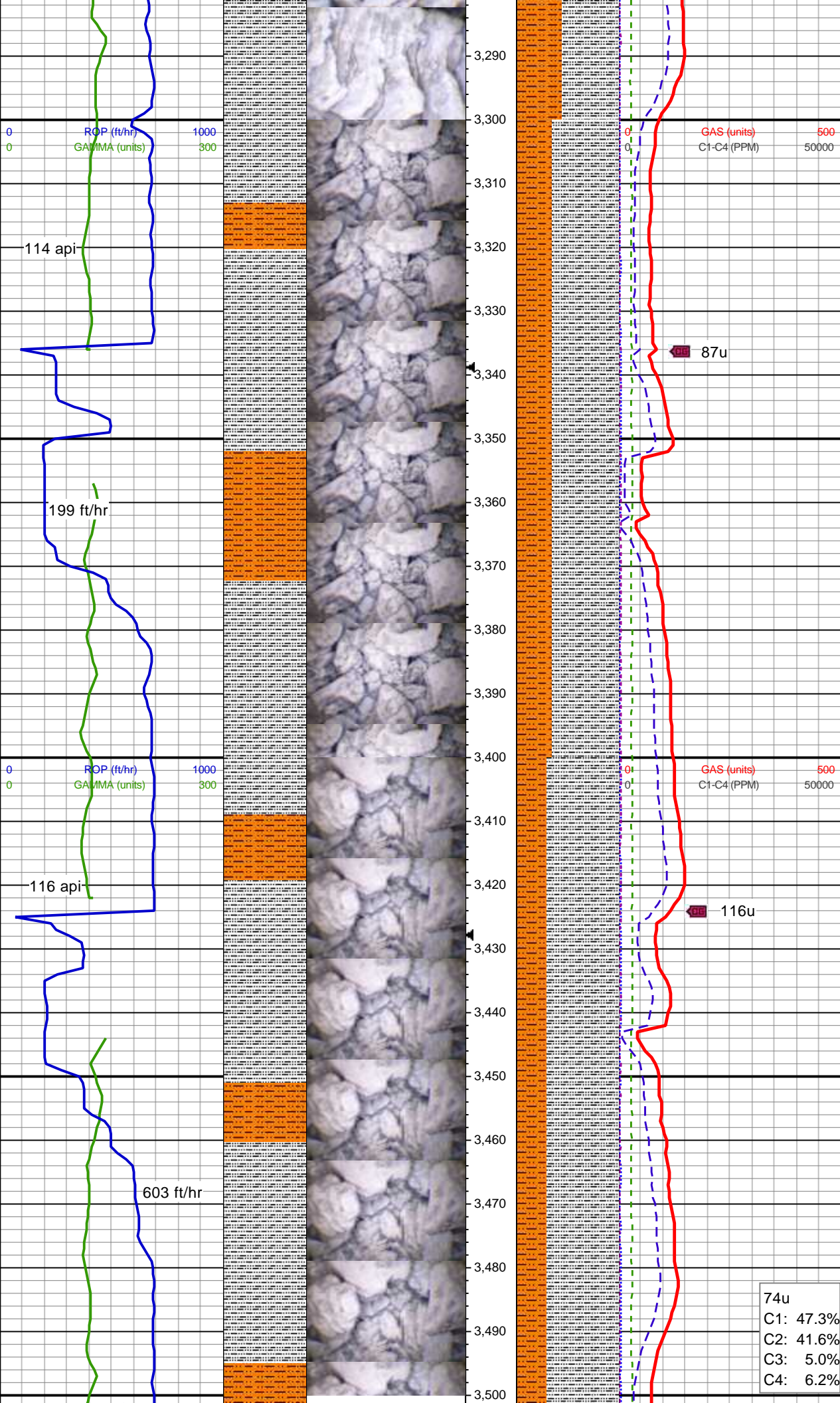


65% SHY SLTST: med-drkgy, gy/brn, sl sft-mod frm, sb blkgy-sb ang, ip fis, vfg, p-mod srt, arg mtx, calc; 35% SLTY SH: med-drkgy, mod hd, fis ip, sb blkgy-ang, rthy, v arg mtx, sl calc

MD: 3,136'
TVD: 3,130.87'
Inclination: 7.23°
Azimuth: 178.15°
VS: 73.77'

60% SHY SLTST: med-drkgy, gy/brn, sl sft-mod frm, sb blkgy-sb ang, ip fis, vfg, p-mod srt, arg mtx, calc; 40% SLTY SH: med-drkgy, mod hd, fis ip, sb blkgy-ang, rthy, v arg mtx, sl calc

MD: 3,226'
TVD: 3,220.17'
Inclination: 7.1°
Azimuth: 178.04°
VS: 84.99'



55% SLTY SH: med-drkgy, mod
hd, occ fri, sb fis, sb blkgy-ang,
rthy, v arg mtx, sl calc; 45% SHY
SLTST: gy-drkgy, gy/brn, frm-ip
brit, sb blkgy-sb ang, vfg, p-mod
srt, arg mtx, sl calc

MW 9.3 / VIS 46 IN
MW 9.3 / VIS 47 OUT

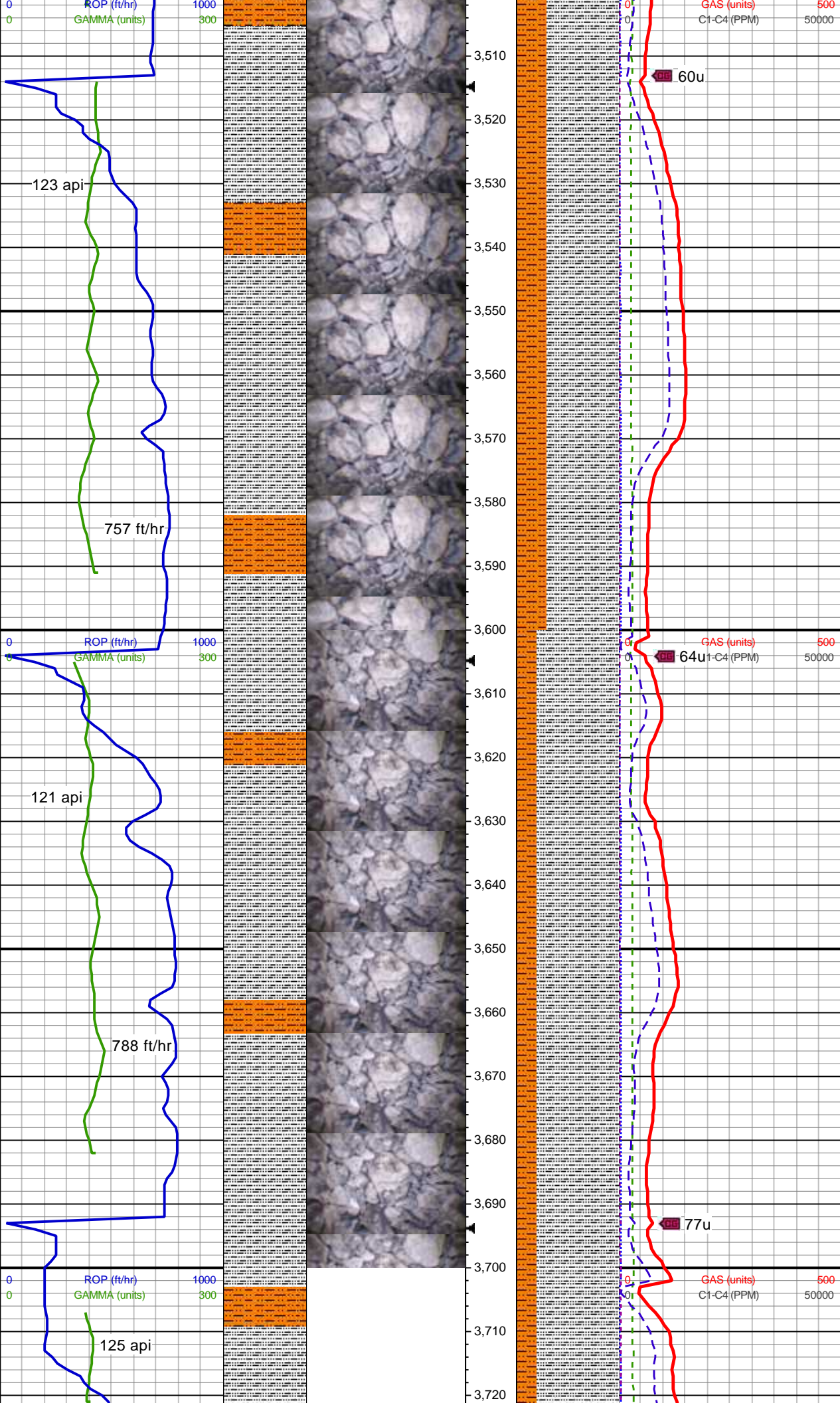
MD: 3,315'
TVD: 3,308.47'
Inclination: 7.24°
Azimuth: 181.25°
VS: 96.09'

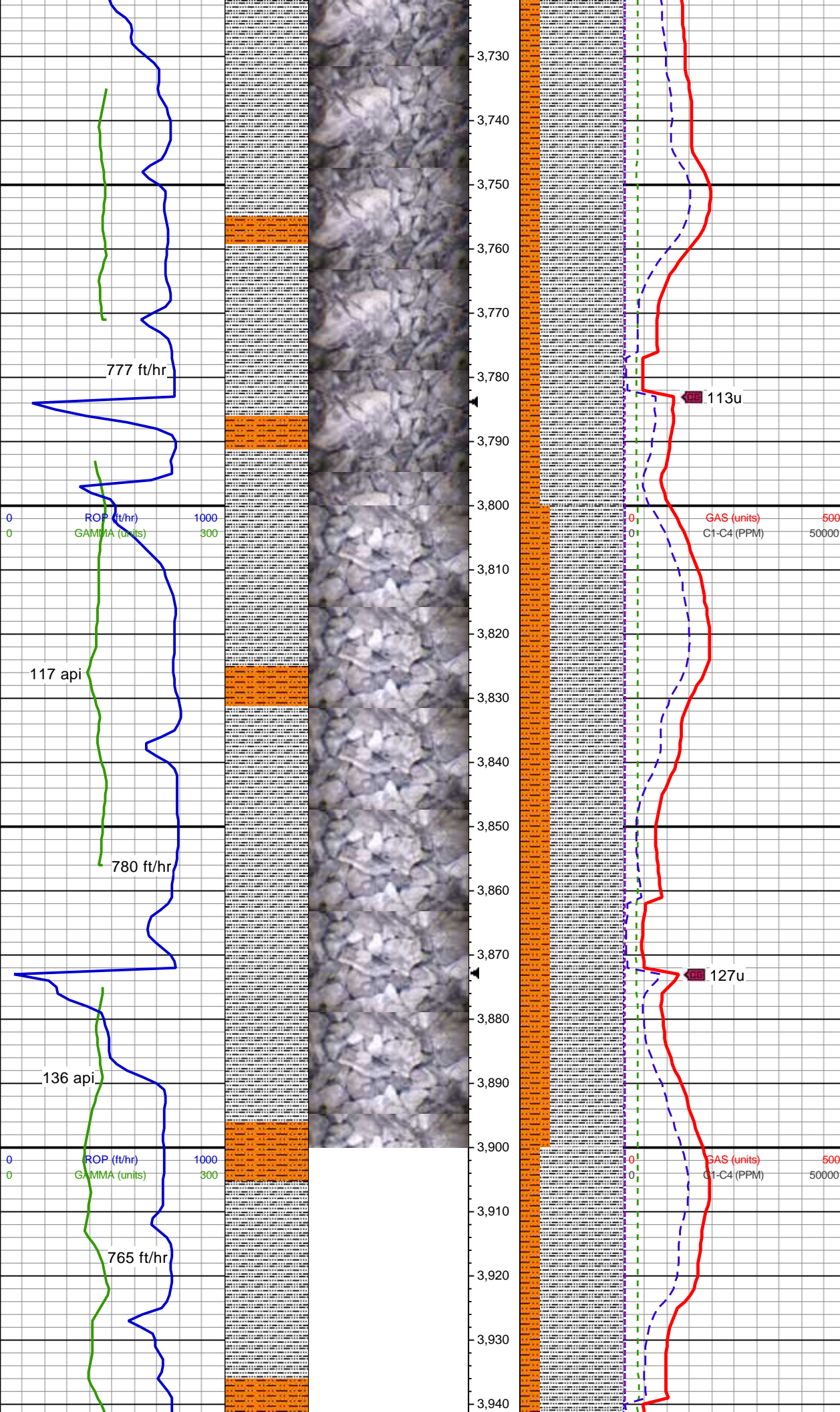
65% SLTY SH: med-drkgy, mod
hd, occ fri, sb fis, sb blkgy-ang,
rthy, v arg mtx, sl calc; 35% SHY
SLTST: gy-drkgy, gy/brn, frm-ip
brit, sb blkgy-sb ang, vfg, p-mod
srt, arg mtx, sl calc

MD: 3,405'
TVD: 3,397.75'
Inclination: 7.27°
Azimuth: 183.9°
VS: 107.44'

70% SLTY SH: med-dk gy, mod
frm-hd, sb fis, sb blkgy-ang, rthy, v
arg mtx, sl calc; 30% SHY SLTST:
med dk gy-v dk gy, frm-hd, sb
blkgy-sb ang, vfg, p-mod srt, arg
mtx, v sl calc

74u
C1: 47.3%
C2: 41.6%
C3: 5.0%
C4: 6.2%





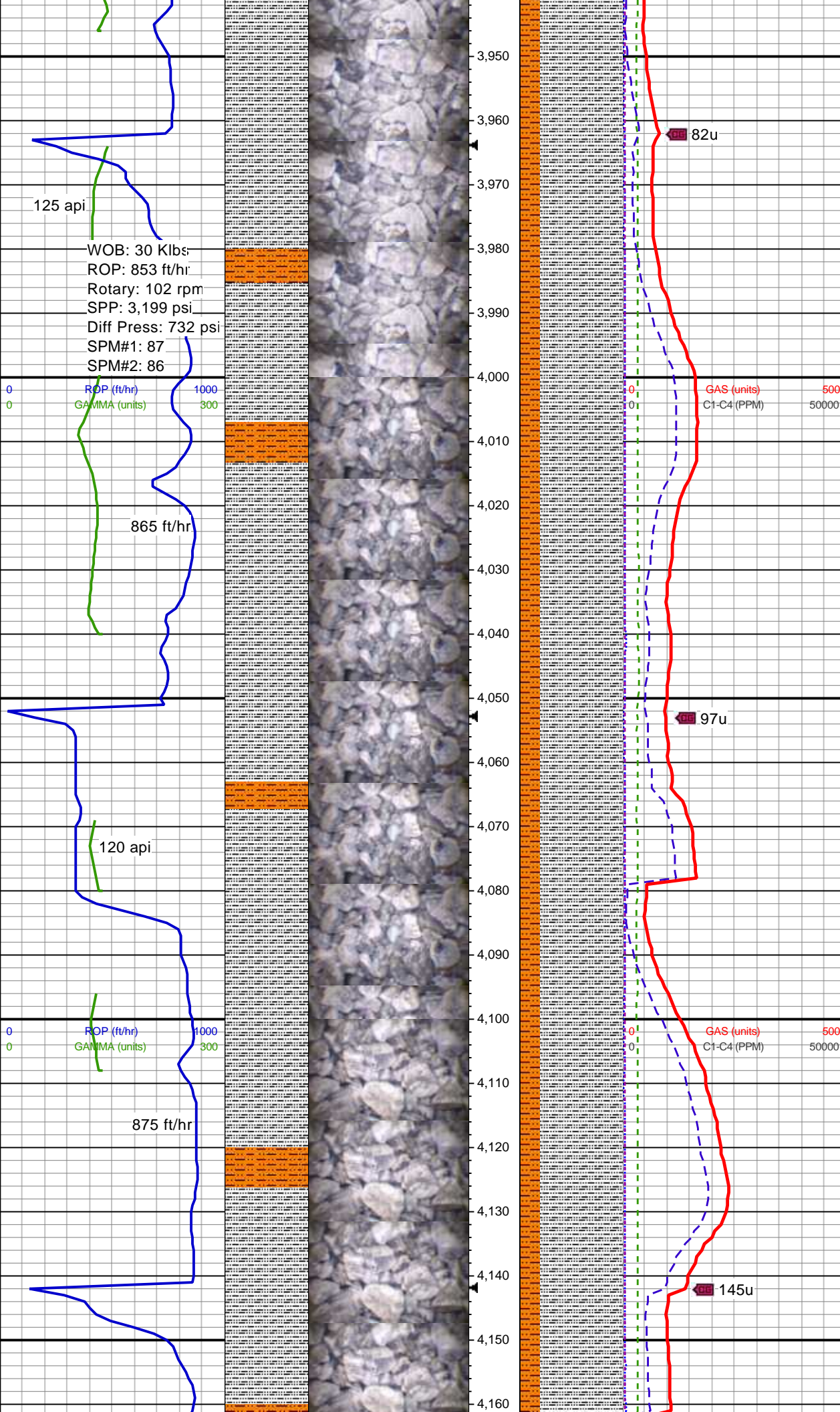
MD: 3,763'
TVD: 3,752.87'
Inclination: 7.19°
Azimuth: 160.51°
VS: 151.82'

80% SLTY SH: med-dk gy,
frm-hd, sb fis, sb blk-ang, rthy, v
arg mtx, sl calc; 20% SHY SLTST:
med dk gy-v dk gy, hd, blk-sb
ang, vfg-slty, p-mod srt, arg mtx, v
sl calc

MD: 3,852'
TVD: 3,841.16'
Inclination: 7.36°
Azimuth: 167.22°
VS: 162.64'

70% SLTY SH: med-dk gy,
frm-hd, sb blk-ang, rthy, v arg
mtx, sl calc; 30% SHY SLTST:
med dk gy-v dk gy, hd, blk-sb
ang, vfg, p-mod srt, arg mtx, v sl
calc

MD: 3,942'
TVD: 3,930.43'



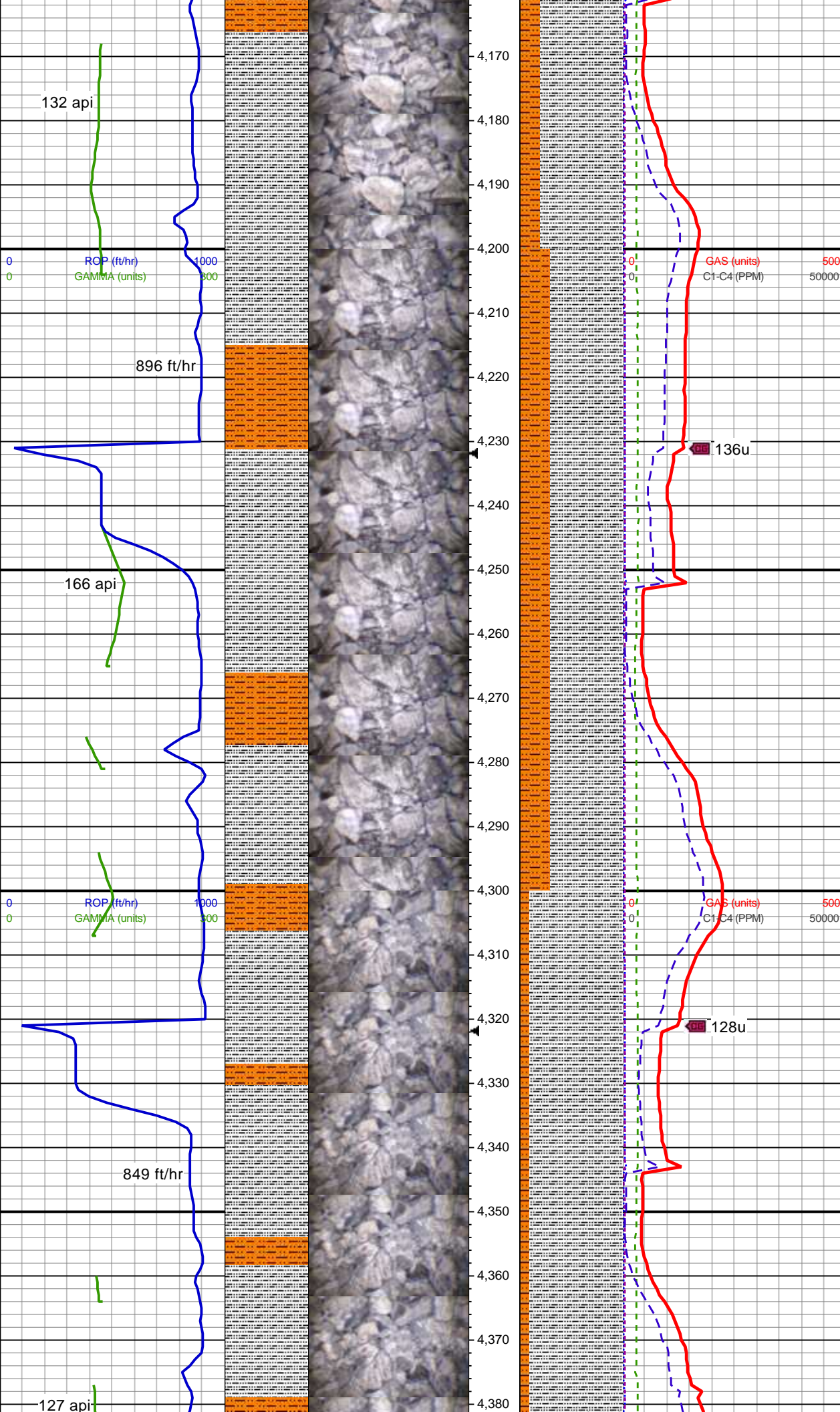
Inclination: 7.25°
Azimuth: 168.89°
VS: 173.84'

80% SLTY SH: med-dk gy,
frm-hd, sb blk-ang, rthy, v arg
mtx, sl calc; 20% SHY SLTST:
med dk gy-v dk gy, hd, blk-sb
ang, vfg, p-mod srt, arg mtx, v sl
calc

MD: 4,031'
TVD: 4,018.71'
Inclination: 7.34°
Azimuth: 177.51°
VS: 185.04'

80% SLTY SH: med-dk gy, hd, sb
blk-ang, rthy, v arg mtx, sl calc;
20% SHY SLTST: med dk gy-v dk
gy, hd, blk-sb ang, vfg, p-mod srt,
arg mtx, v sl calc

MD: 4,121'
TVD: 4,107.93'
Inclination: 7.75°
Azimuth: 183.04°
VS: 196.84'



80% SLTY SH: med-dk gy, hd, blky-sb ang, rthy, v arg mtx, sl calc; 20% SHY SLTST: med dk gy-v dk gy, hd, blky-sb ang, vfg, p-mod srt, arg mtx, v sl calc

MD: 4,211'
TVD: 4,197.13'
Inclination: 7.51°
Azimuth: 188.96°
VS: 208.71'

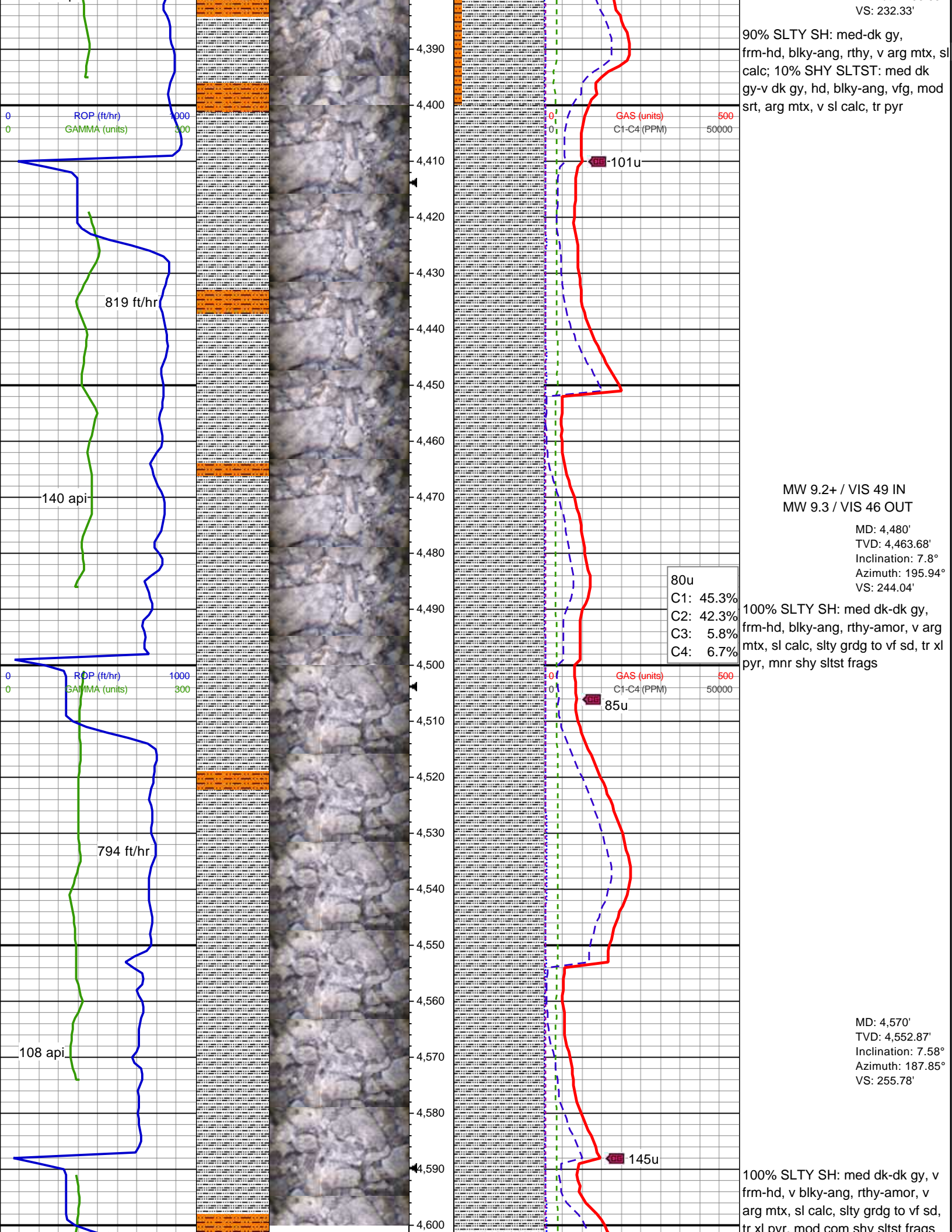
136u

70% SLTY SH: med-dk gy, hd, blky-sb ang, rthy, v arg mtx, sl calc; 30% SHY SLTST: med dk gy-v dk gy, hd, blky-sb ang, vfg, p-mod srt, arg mtx, v sl calc

MD: 4,301'
TVD: 4,286.34'
Inclination: 7.73°
Azimuth: 191.66°
VS: 220.44'

128u

MD: 4,391'
TVD: 4,375.51'
Inclination: 7.85°
Azimuth: 193.55°



VS: 232.33'

90% SLTY SH: med-dk gy,
frm-hd, blk-ang, rthy, v arg mtx, sl
calc; 10% SHY SLTST: med dk
gy-v dk gy, hd, blk-ang, vfg, mod
srt, arg mtx, v sl calc, tr pyr

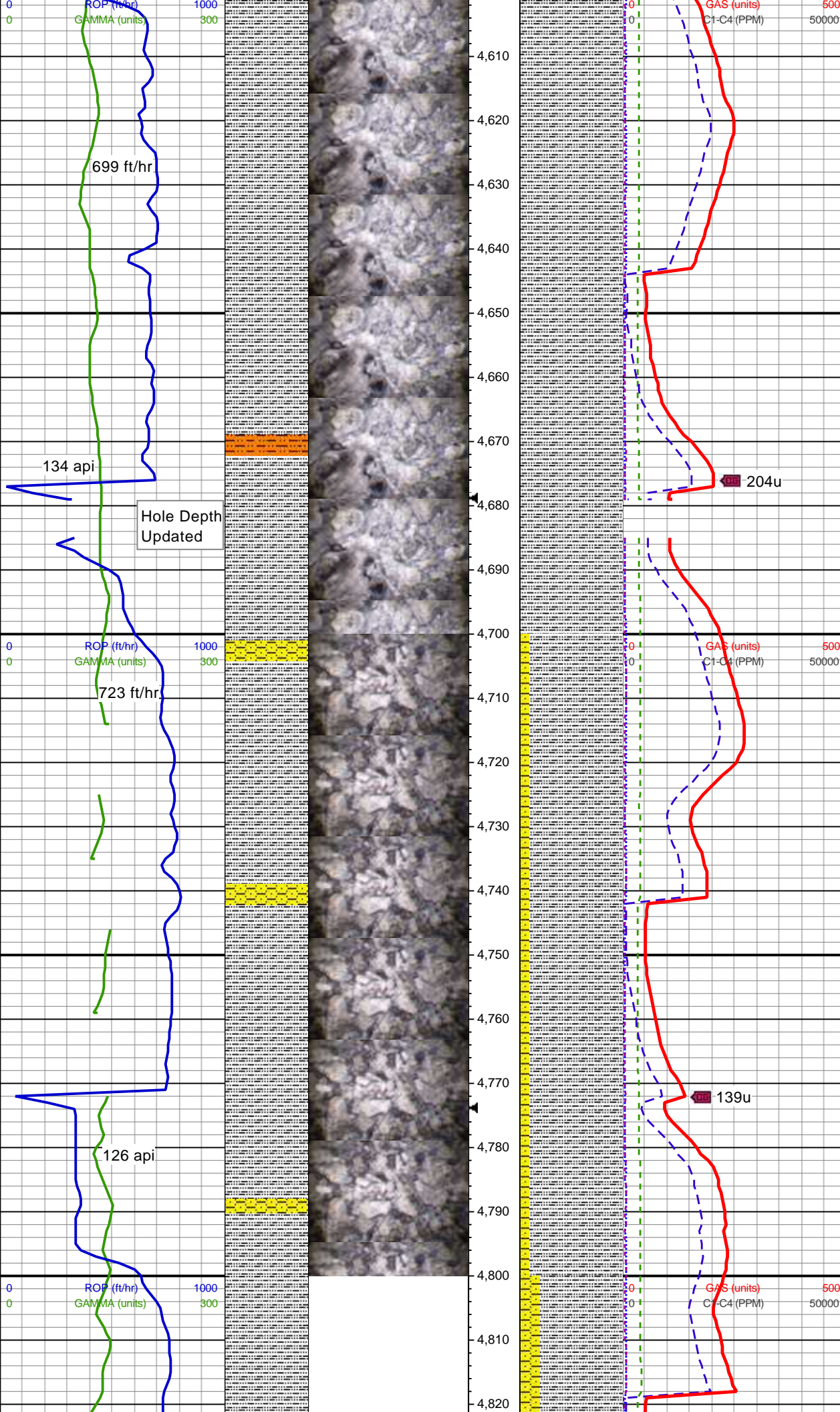
MW 9.2+ / VIS 49 IN
MW 9.3 / VIS 46 OUT

MD: 4,480'
TVD: 4,463.68'
Inclination: 7.8°
Azimuth: 195.94°
VS: 244.04'

100% SLTY SH: med dk-dk gy,
frm-hd, blk-ang, rthy-amor, v arg
mtx, sl calc, slty grdg to vf sd, tr xl
pyr, mntr shy sltst frags

MD: 4,570'
TVD: 4,552.87'
Inclination: 7.58°
Azimuth: 187.85°
VS: 255.78'

100% SLTY SH: med dk-dk gy, v
frm-hd, v blk-ang, rthy-amor, v
arg mtx, sl calc, slty grdg to vf sd,
tr xl pvr, mod com shv sltst frags

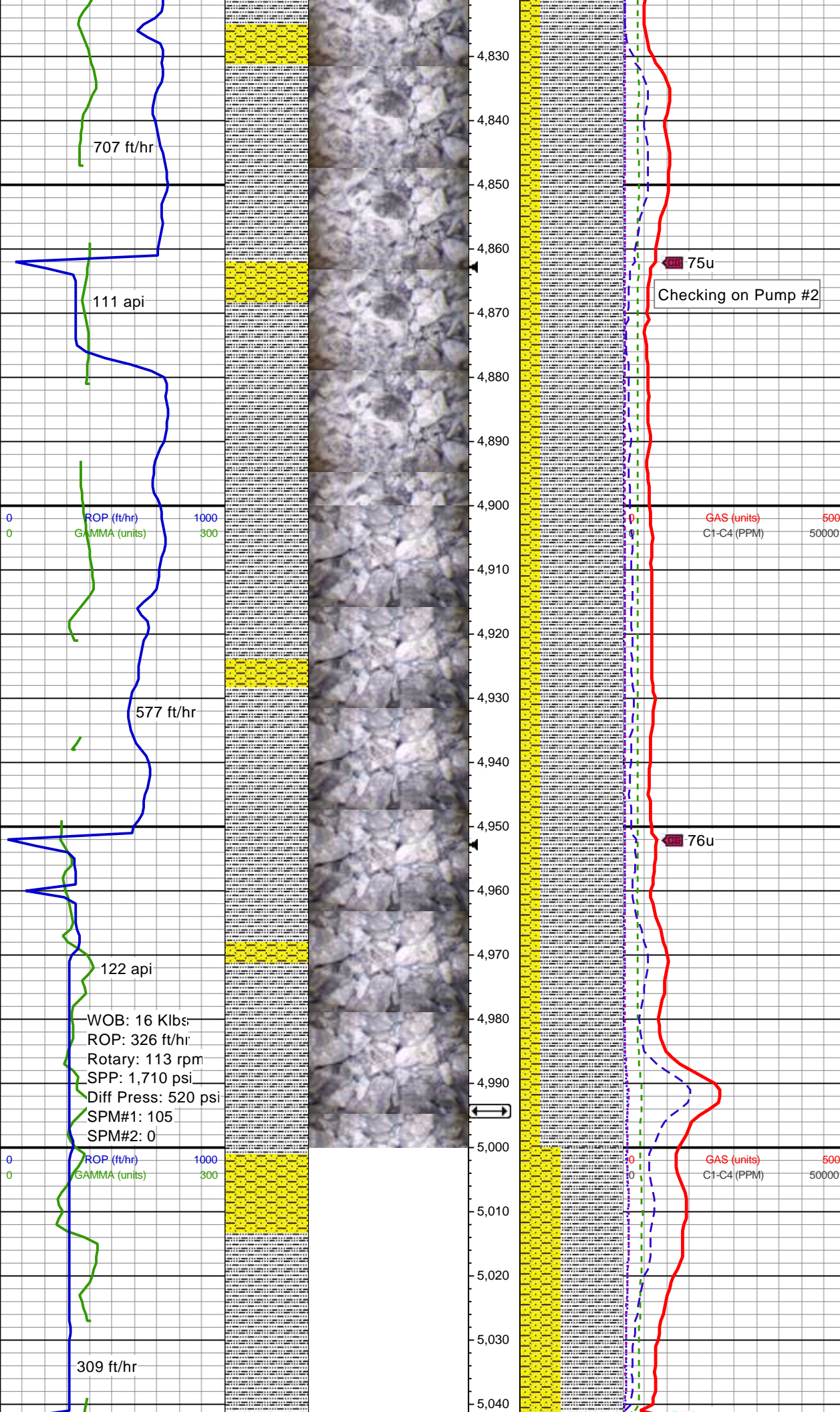


MD: 4,660'
TVD: 4,642.07'
Inclination: 7.74°
Azimuth: 192.14°
VS: 267.58'

100% SLTY SH: med dk-dk gy
grd blk, v frm-hd, blk-ang,
rhy-amor, v arg mtx, sl calc, slty
grd to vf sd, tr xl pyr, tr lse cal
grns, mod com shy slst frags

MD: 4,750'
TVD: 4,731.24'
Inclination: 7.89°
Azimuth: 200.61°
VS: 279.28'

90% SLTY SH: med dk-dk gy grd
blk, v frm-hd, blk-ang, rhy-amor,
v arg mtx, sl calc, slty grd to vf
sd; 10% SHY SS: med lt gy-med
gy, sft-frm, fri, sb blk-rnd, rthy, sl
lam, pos carb mat, f gr, mod srt,
sl-mod calc



MD: 4,841'
TVD: 4,821.39'
Inclination: 7.79°
Azimuth: 200.08°
VS: 290.9'

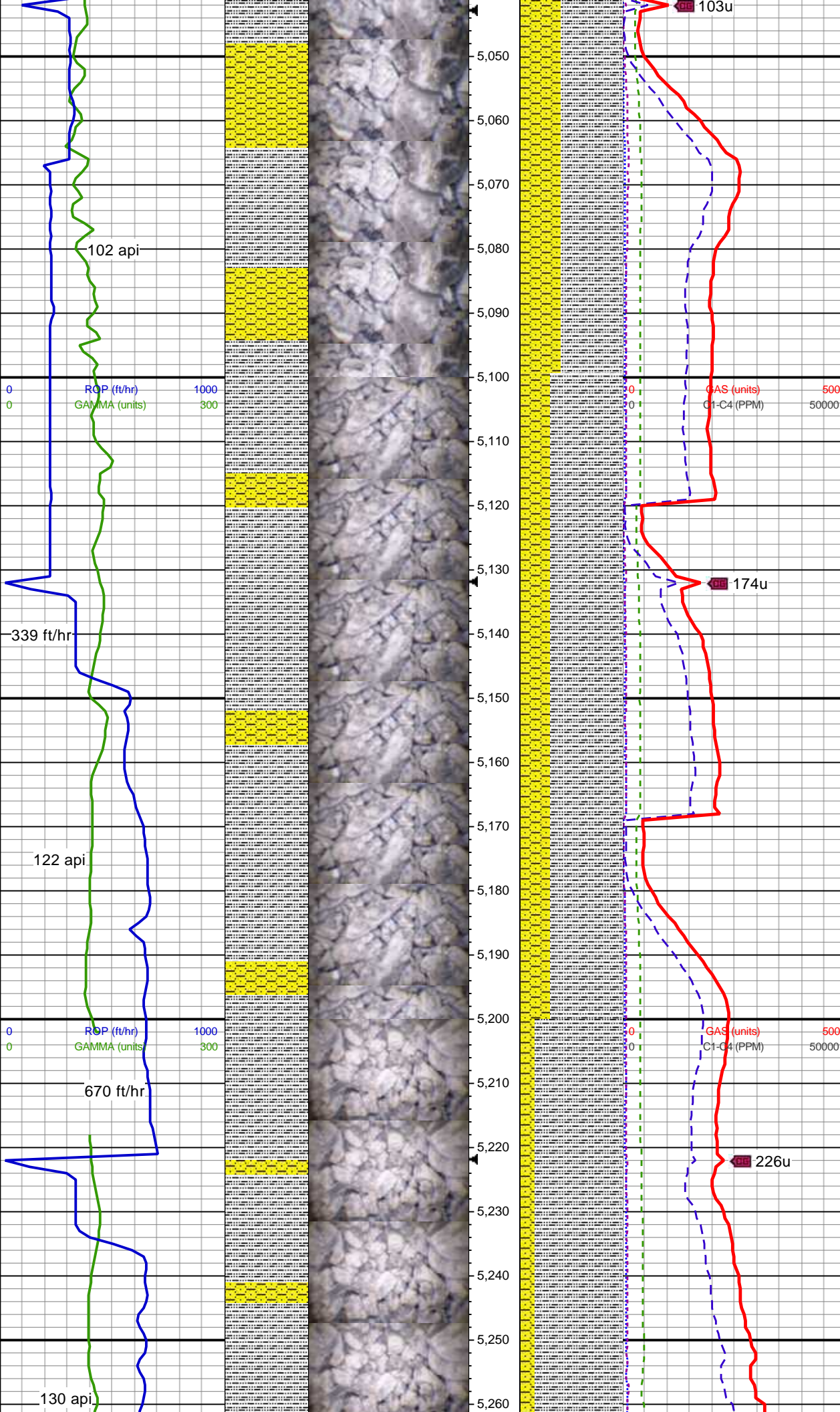
80% SLTY SH: med dk-dk gy, frm-hd, blk-ang, rthy-amor, v arg mtx, sl calc, slty grd to vf sd; 20% SHY SS: med lt gy-med gy, sft-frm, fri, sb blk-rnd, rthy, sl lam, pos carb mat, f gr, mod srt, sl-mod calc

MD: 4,930'
TVD: 4,909.57'
Inclination: 7.8°
Azimuth: 196.98°
VS: 302.33'

80% SLTY SH: med dk-dk gy, hd, blk-ang, rthy-amor, v arg mtx, sl calc, slty; 20% SHY SS: med lt gy-med gy, mod sft-frm, fri, sb blk-rnd, rthy, sl lam, pos carb mat, f gr, mod srt, mod calc

Sussex/Shannon Top
4995' MD / 4974' TVD

MD: 5,019'
TVD: 4,997.76'
Inclination: 7.63°
Azimuth: 189.48°
VS: 313.92'

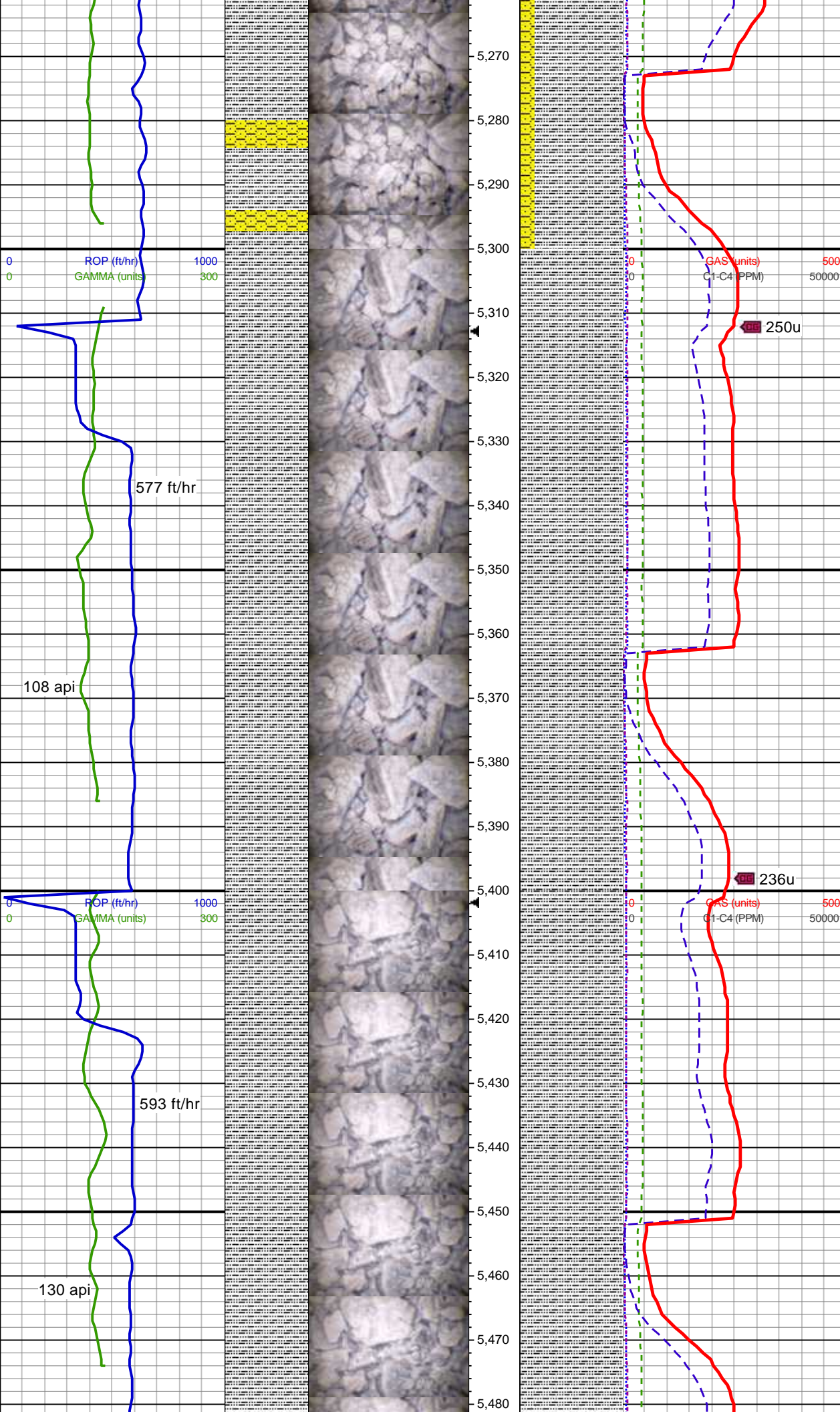


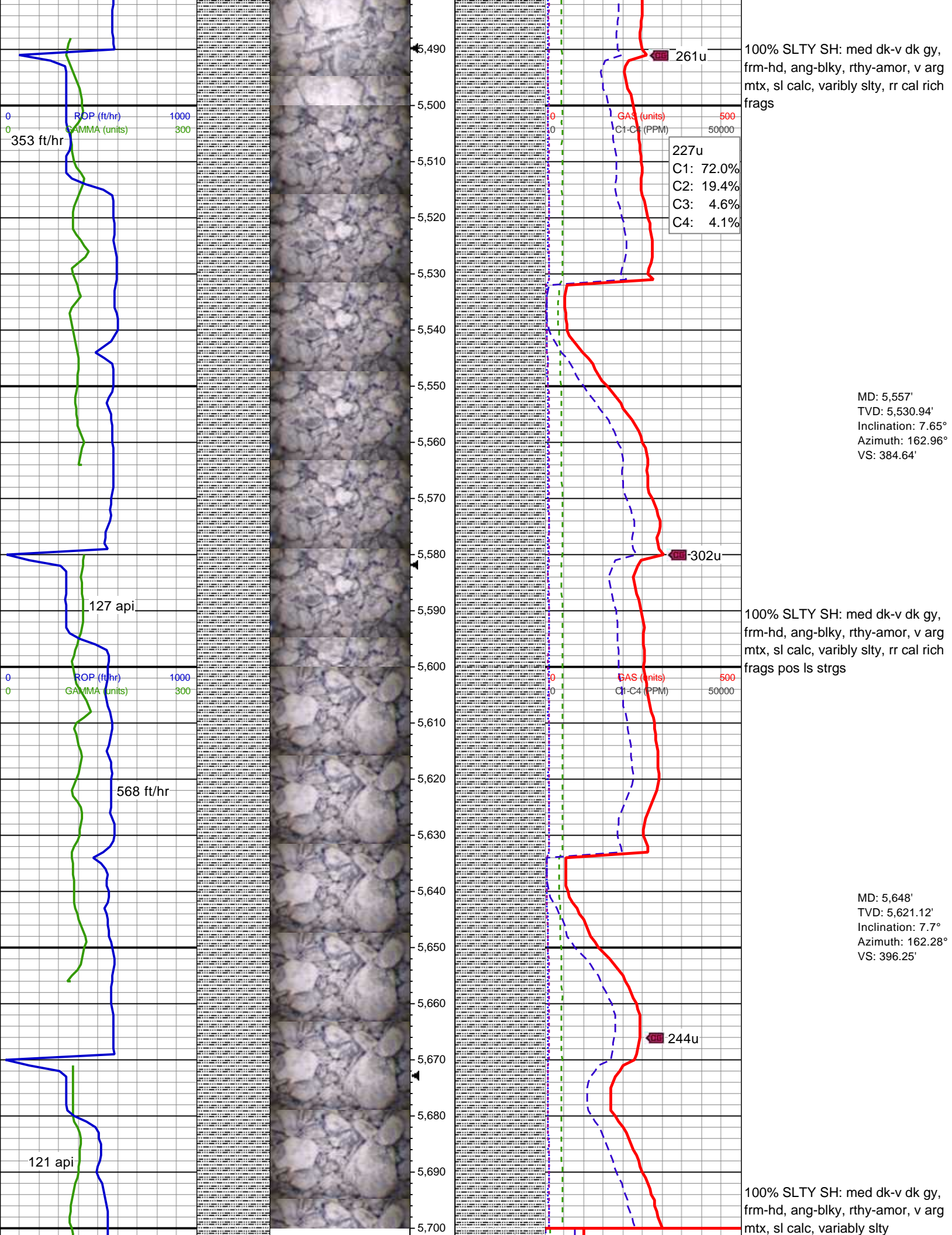
60% SLTY SH: med dk-dk gy, v
frm-hd, ang-blky, rthy-amor, v arg
mtx, sl calc, mod slty; 40% SHY
SS: med lt gy-med gy, sl sft-frm,
fri, sb blky-rnd, rthy, sl lam, pos
mnr carb mat, f gr, mod srt, mod
calc

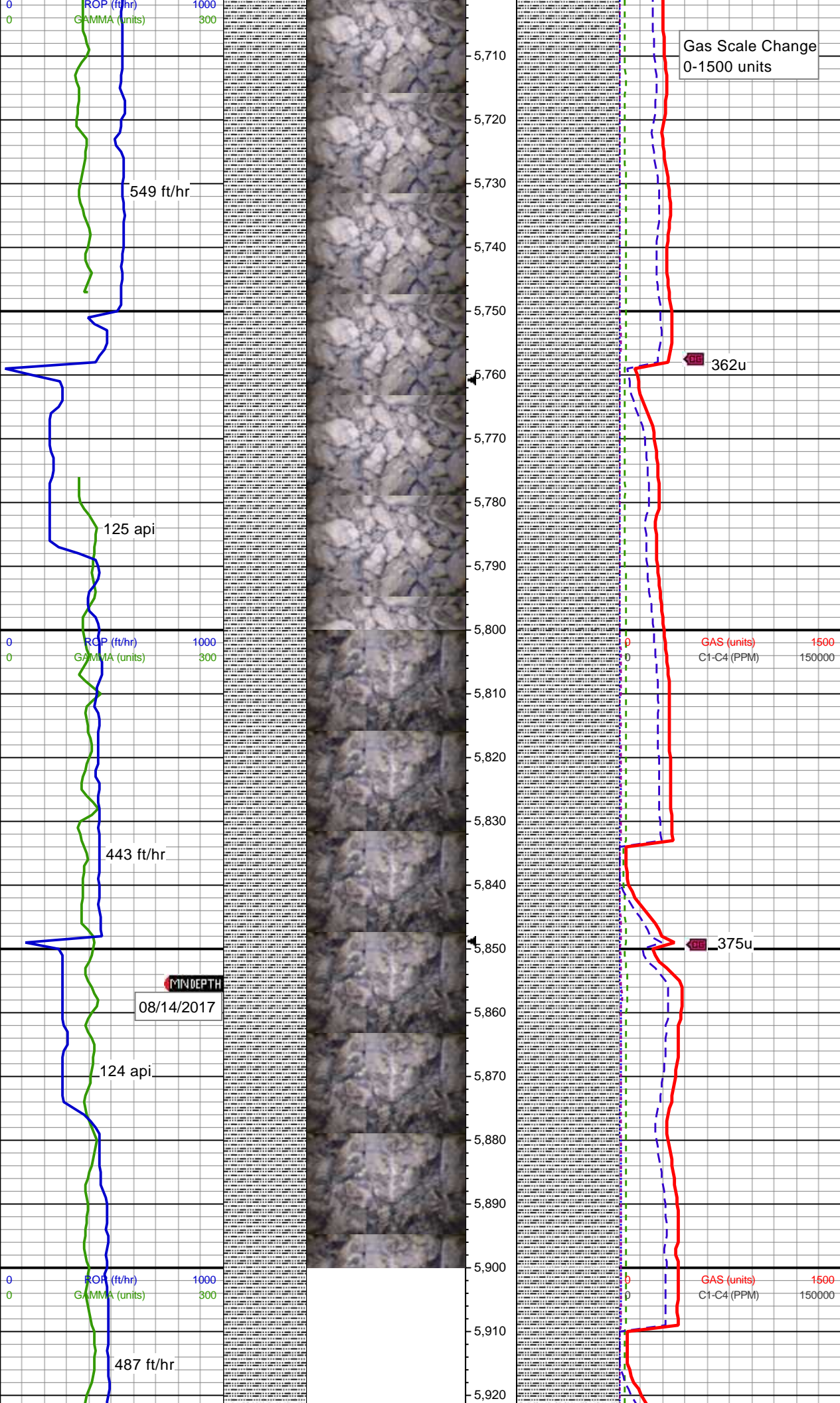
MD: 5,108'
TVD: 5,085.97'
Inclination: 7.7°
Azimuth: 183.07°
VS: 325.7'

70% SLTY SH: med dk-dk gy, v
frm-hd, ang-blky, rthy-amor, v arg
mtx, sl calc, mod slty; 30% SHY
SS: med lt gy-med gy, frm, fri, sb
blky-rnd, rthy, pos mnr-tr carb
mat, f gr, mod srt, mod calc

MD: 5,197'
TVD: 5,174.17'
Inclination: 7.66°
Azimuth: 177.58°
VS: 337.58'







MW 9.4 / VIS 48 IN
MW 9.4 / VIS 48 OUT

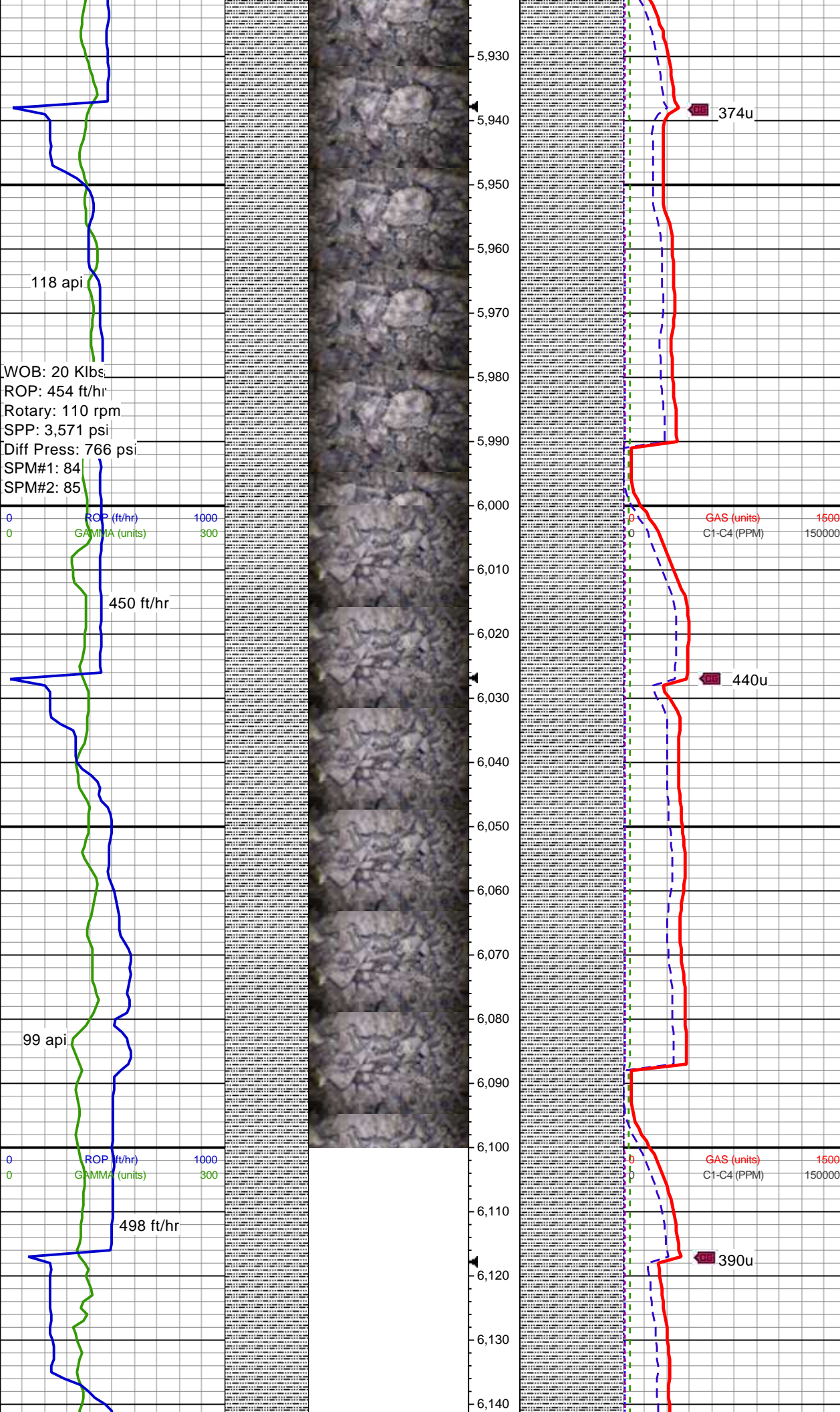
MD: 5,737'
TVD: 5,709.32'
Inclination: 7.7°
Azimuth: 159.66°
VS: 407.53'

100% SLTY SH: med dk-v dk gy,
frm-hd, ang-blky, rthy-amor, v arg
mtx, sl calc, variably slty

MD: 5,827'
TVD: 5,798.58'
Inclination: 7°
Azimuth: 156.9°
VS: 418.25'

100% SLTY SH: med dk-v dk gy,
frm-hd, ang-blky, rthy-amor, v arg
mtx, variably calc, variably slty

MD: 5,917'
TVD: 5,887.91'
Inclination: 6.98°
Azimuth: 153.99°
VS: 428.22'



WOB: 20 Klbs
ROP: 454 ft/hr
Rotary: 110 rpm
SPP: 3,571 psi
Diff Press: 766 psi
SPM#1: 84
SPM#2: 85

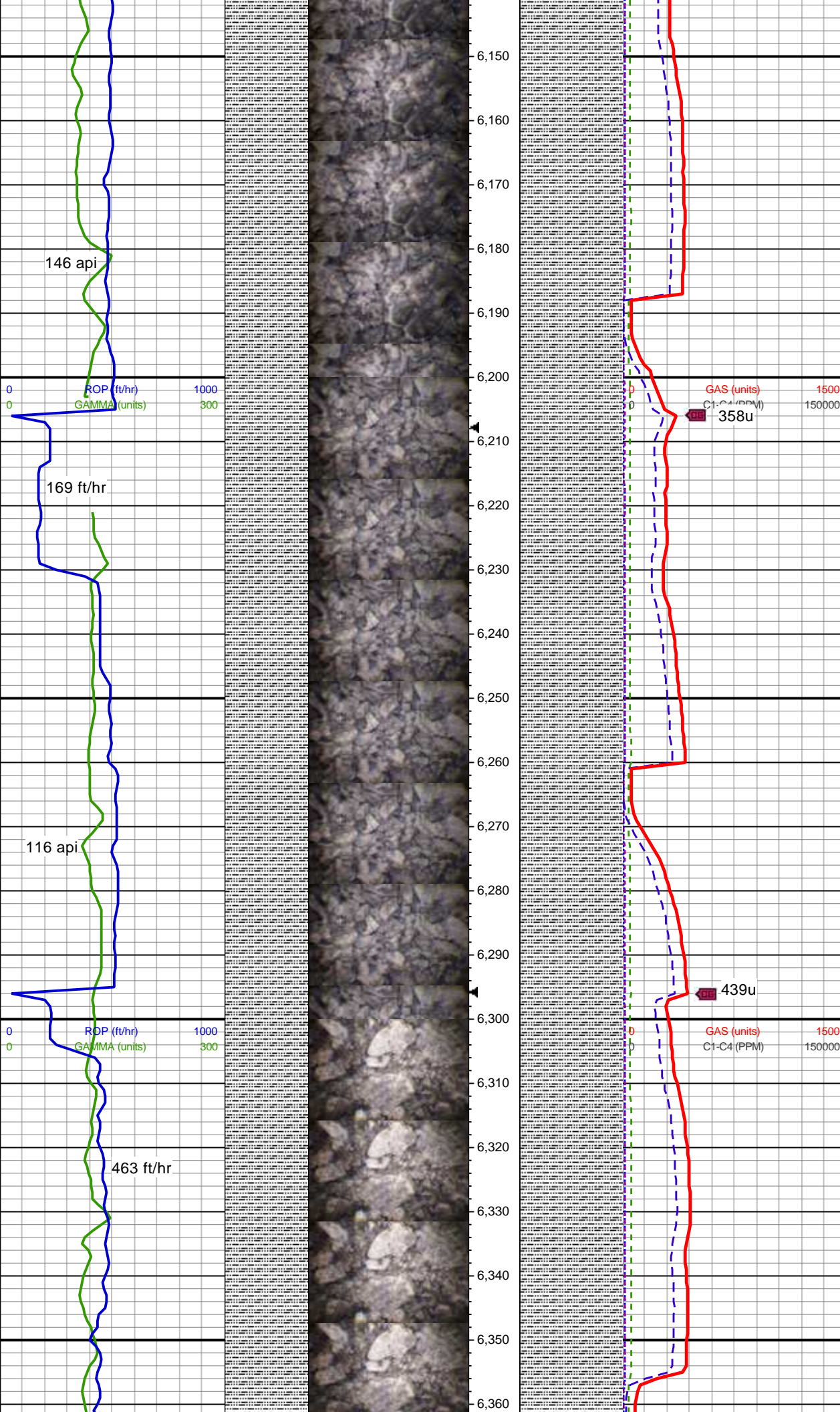
100% SLTY SH: med dk-v dk gy
brn, v frm-hd, ang-blky, rthy-amor,
v arg mtx, incr calc, variably slty

MD: 6,007'
TVD: 5,977.24'
Inclination: 7.06°
Azimuth: 154.29°
VS: 438.13'

100% SLTY SH: med dk-v dk gy
brn, frm-hd, ang-blky, rthy-amor, v
arg mtx, variably calc, variably slty

MD: 6,098'
TVD: 6,067.53'
Inclination: 7.22°
Azimuth: 153.33°
VS: 448.3'

MW 9.5 / VIS 47 IN
MW 9.5 / VIS 47 OUT



MD: 6,187'
TVD: 6,155.83'
Inclination: 7.19°
Azimuth: 150.06°
VS: 458.14'

100% SLTY SH: med dk-v dk gy
brn, frm-hd, v ang-blky, rthy-amor,
v arg mtx, incr calc, variably slty

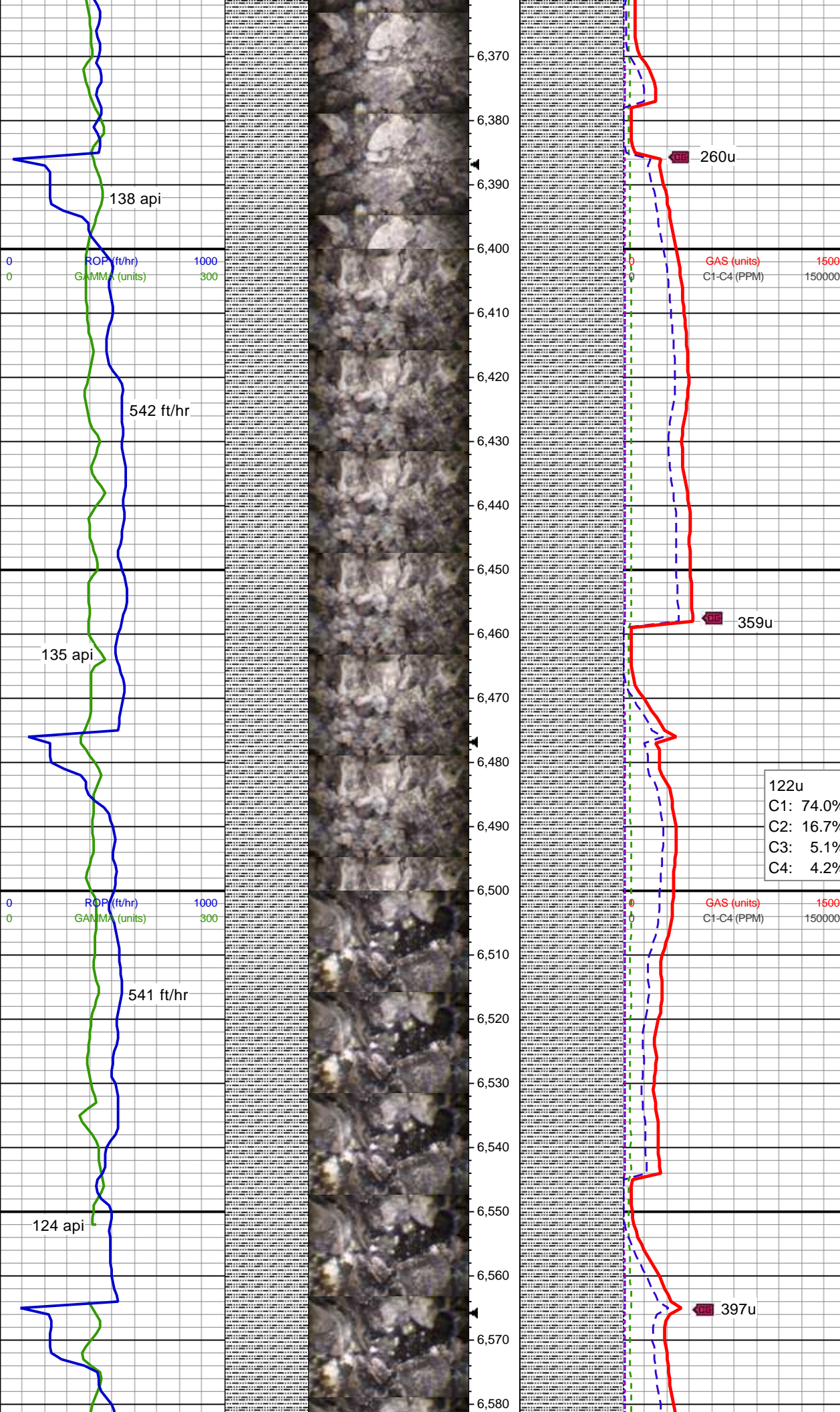
GAS (units)
C1-C4 (PPM)
358u

MD: 6,277'
TVD: 6,245.14'
Inclination: 6.99°
Azimuth: 151.2°
VS: 467.84'

100% SLTY SH: med dk-v dk gy
brn, frm-hd, v ang-blky, rthy-amor,
v arg mtx, incr calc, variably slty

GAS (units)
C1-C4 (PPM)
439u

MD: 6,366'



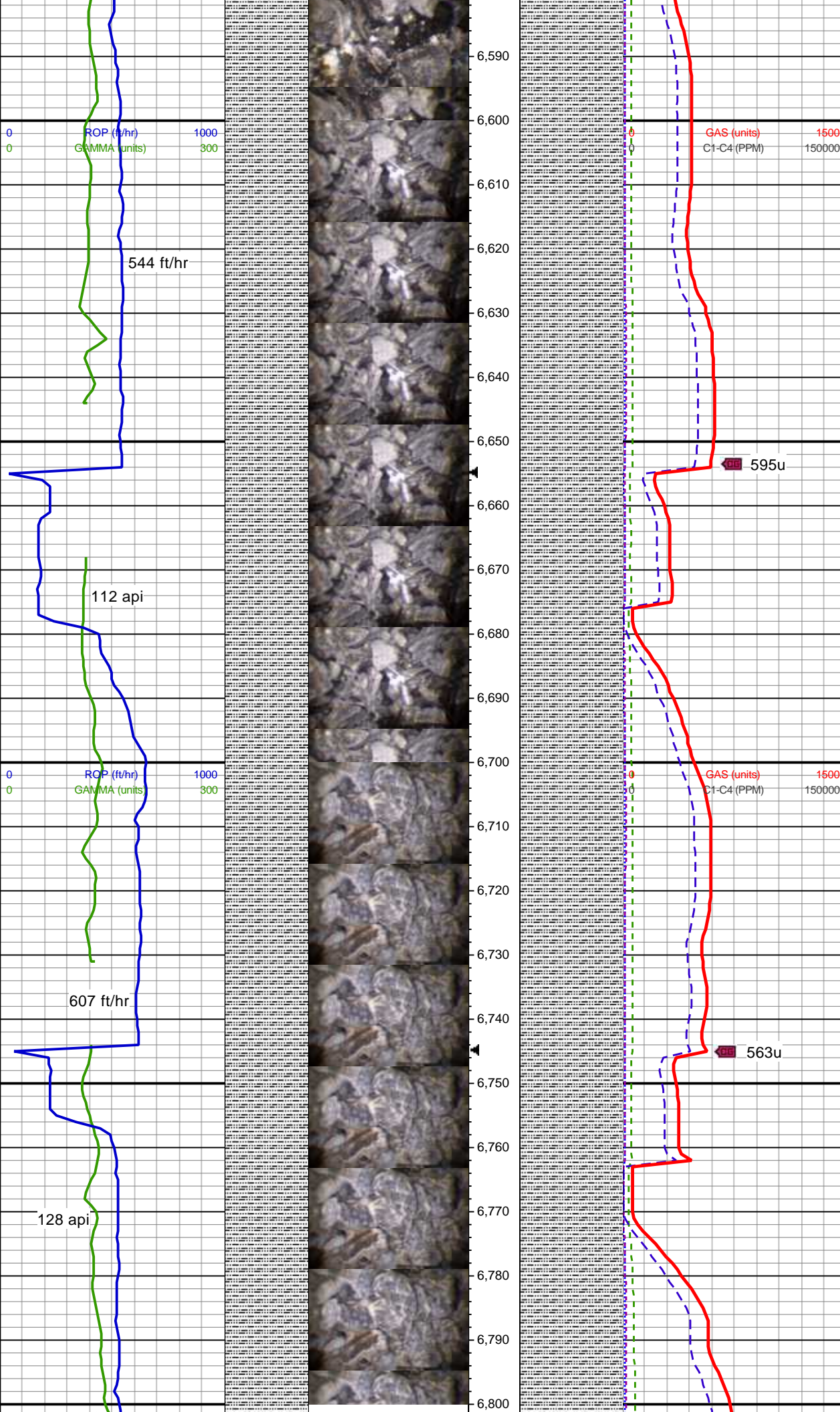
TVD: 6,333.47'
Inclination: 7.13°
Azimuth: 157.26°
VS: 477.69'

100% SLTY SH: med dk-v dk gy
brn, frm-hd, v ang- mntr blkly,
rthy-amor, v arg mtx, incr calc,
variably slty

MD: 6,456'
TVD: 6,422.77'
Inclination: 7.14°
Azimuth: 158.43°
VS: 488.06'

100% SLTY SH: med dk-v dk gy
brn, frm-v hd, v ang-blky,
rthy-amor, v arg mtx, incr calc,
variably slty

MD: 6,545'
TVD: 6,511.08'
Inclination: 7.13°
Azimuth: 161.57°
VS: 498.46'



100% SLTY SH: med dk-v dk gy
brn, frm-v hd, v ang-blky,
rthy-amor, v arg mtx, incr calc,
variably slty

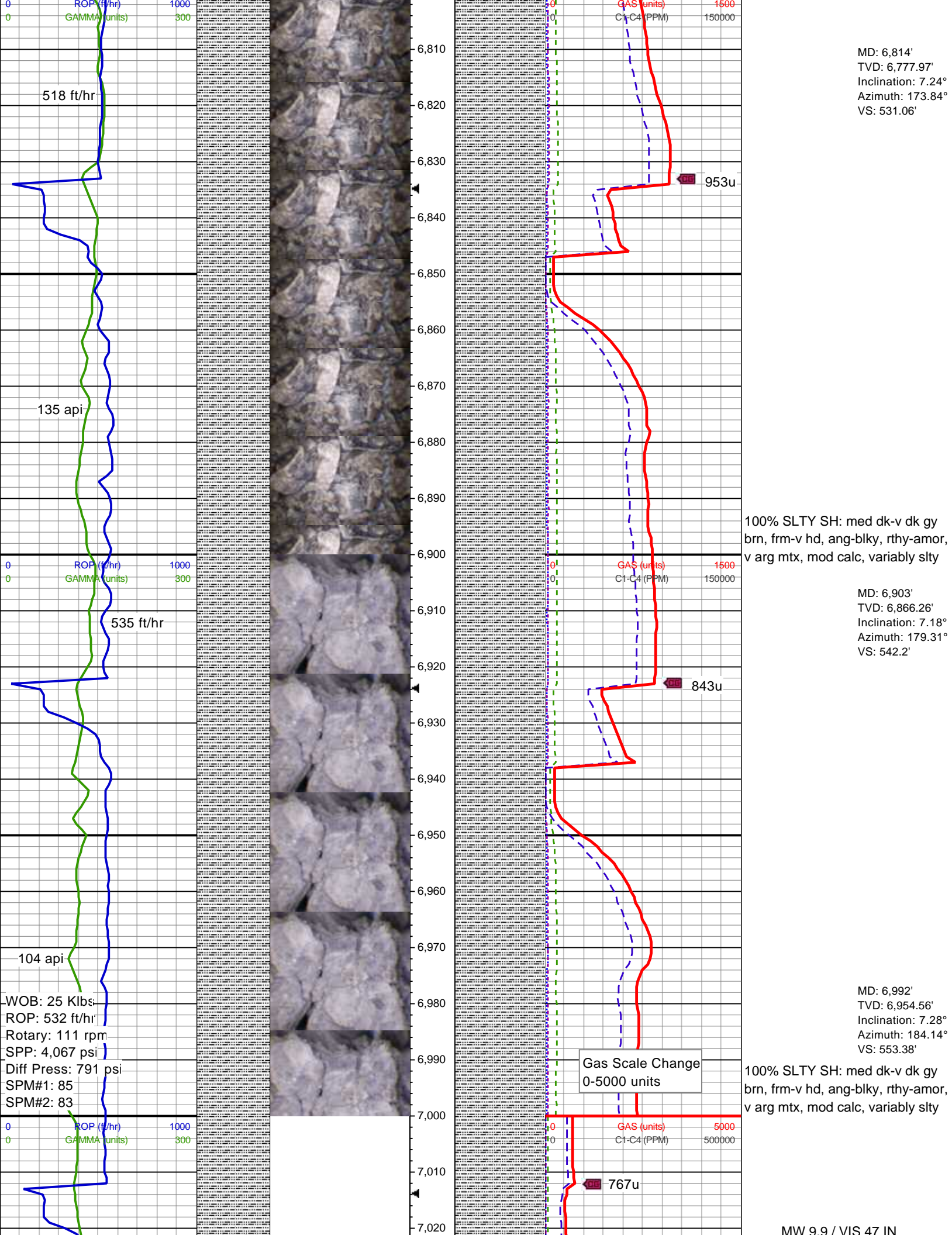
MW 9.6 / VIS 45 IN
MW 9.5+ / VIS 47 OUT

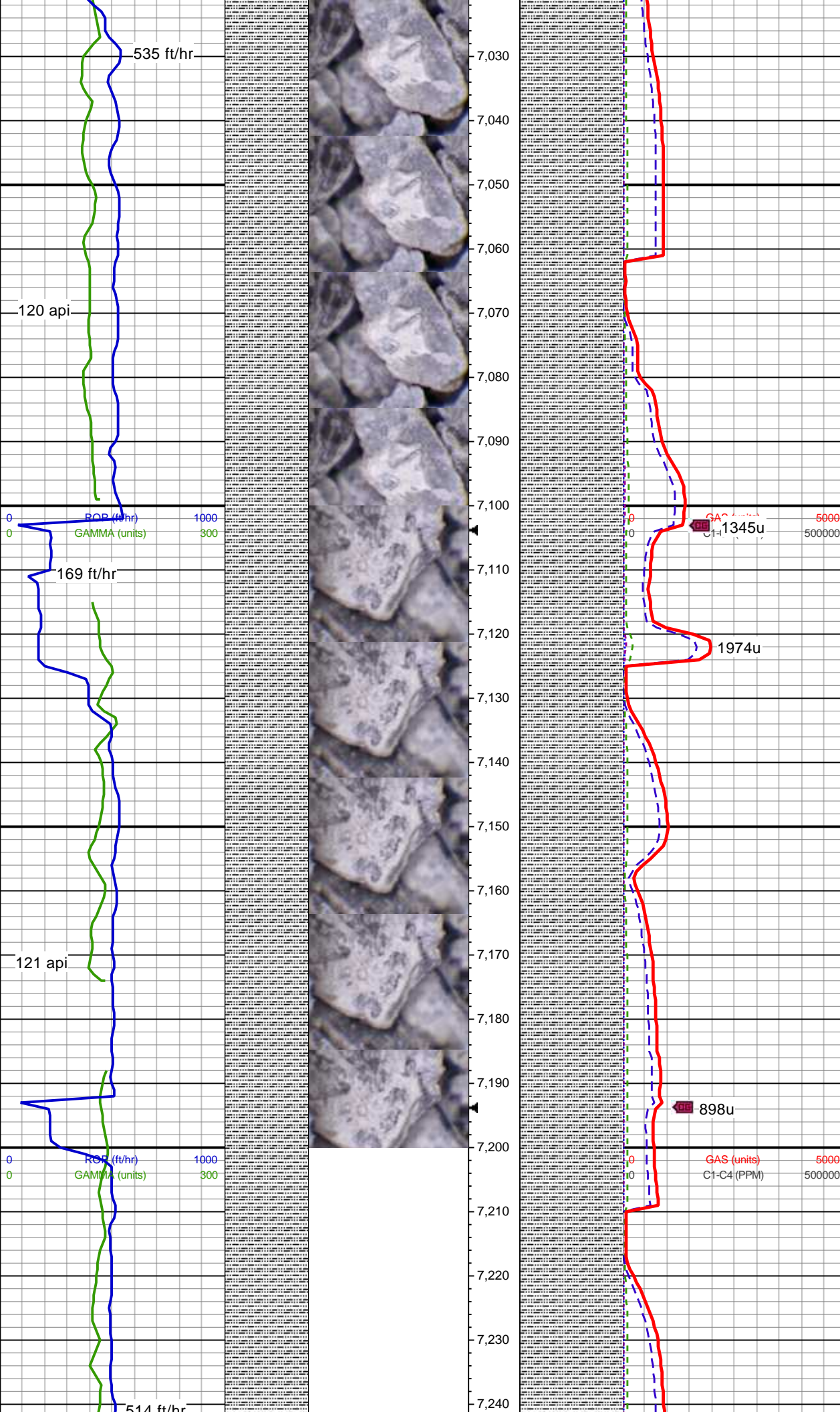
MD: 6,635'
TVD: 6,600.38'
Inclination: 7.15°
Azimuth: 163.27°
VS: 509.13'

100% SLTY SH: med dk-v dk gy
brn, frm-v hd, v ang-mnr rnd,
rthy-amor, v arg mtx, incr calc,
variably slty

MD: 6,725'
TVD: 6,689.68'
Inclination: 7.25°
Azimuth: 166.3°
VS: 520.02'

100% SLTY SH: med dk-v dk gy
brn, frm-v hd, v ang-mnr rnd,
rthy-amor, v arg mtx, incr calc,
variably slty



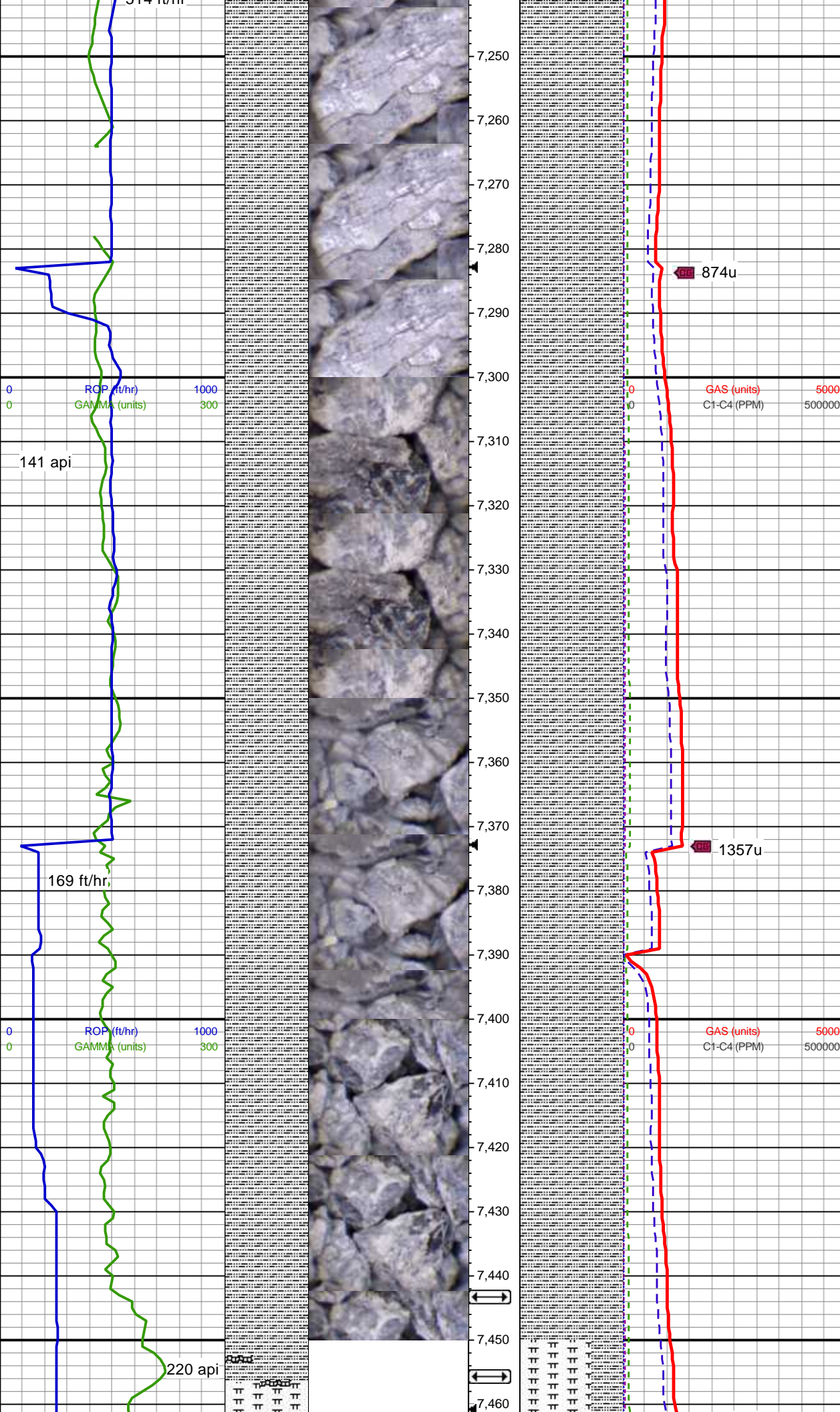


MD: 7,082'
TVD: 7,043.83'
Inclination: 7.28°
Azimuth: 191.65°
VS: 564.65'

100% SLTY SH: med dk-v dk gy
brn, frm-v hd, ang-blky, rthy-amor,
v arg mtx, mod calc, variably slty

MD: 7,171'
TVD: 7,132.12'
Inclination: 7.28°
Azimuth: 193.81°
VS: 575.64'

100% SLTY SH: med dk gy-dk gy,
frm-hrd, blky-ang, rthy-amor, v sl
slty, v arg mtx, sl calc cmt



MD: 7,260'
TVD: 7,220.41'
Inclination: 7.17°
Azimuth: 193.34°
VS: 586.51'

On Gas Buster

100% SLTY SH: med dk gy-dk gy,
frm-hrd, blk-ang, rthy-amor, v sl
slty, v arg mtx, sl calc cmt

MD: 7,349'
TVD: 7,308.71'
Inclination: 7.2°
Azimuth: 194.28°
VS: 597.31'

MW 10 / VIS 44 IN
MW 10 / VIS 46 OUT

KOP @ 7372' MD, 05:10 MDT,
08/14/2017
Begin 50' Sample Collection

100% SLTY SH: drkgy-ip blk,
frm-v hd, blk-ang, com fis,
rthy-amor, slty, v arg mtx, non calc

MD: 7,438'
TVD: 7,396.11'
Inclination: 14.23°
Azimuth: 187.4°
VS: 613.58'

100% SLTY SH: drkgy-ip blk,
frm-hd, blk-ang, rthy, amor, arg
mtx, sl-non calc, mnr bent, scat
nodr pyr

Sharon Springs Top
7443' MD / 7401' TVD

Niobrara Top

