



Scale: 9.60" / 100'
Measured Depth Log

Well Name Doe Canyon#15(Lateral)(M-13)

Location 1069 FSL & 1610 FWL Sec 11 T40N R18W

State CO

County Dolores

Country US

Rig Number M-13

API Number 05-033-06176-01

Field Doe Canyon

Spud Date July 23, 2013. Lateral Spud is 8/29/2013

Surface Coordinates 1069 FSL & 1610 FWL
Sec 11 T40N R18W

Ground Elevation 7227'

K.B. Elevation 7249'

Formation Leadville

Type of Drilling Fluid Fresh water

Operator

Company KINDER MORGAN

Geologist

Company Above Enterprise

Rock Types

? UNKNOWN

ANHYDRITE

GYPSUM

SALT

SIDERITE or LIMONITE

LIMESTONE

DOLOMITE

CHERT

COAL

MARLSTONE

CLAYSTONE

SHALE

SHALE GRAY

SHALE COLORED

SILTSTONE

SANDSTONE

CONGLOMERATE

BRECCIA

TILL

BENTONITE

TUFF

IGNEOUS

METAMORPHIC

Accessories

Fossils

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

F FOSSIL

- GASTROPOD
- 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
- NODULES
- 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

- E 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

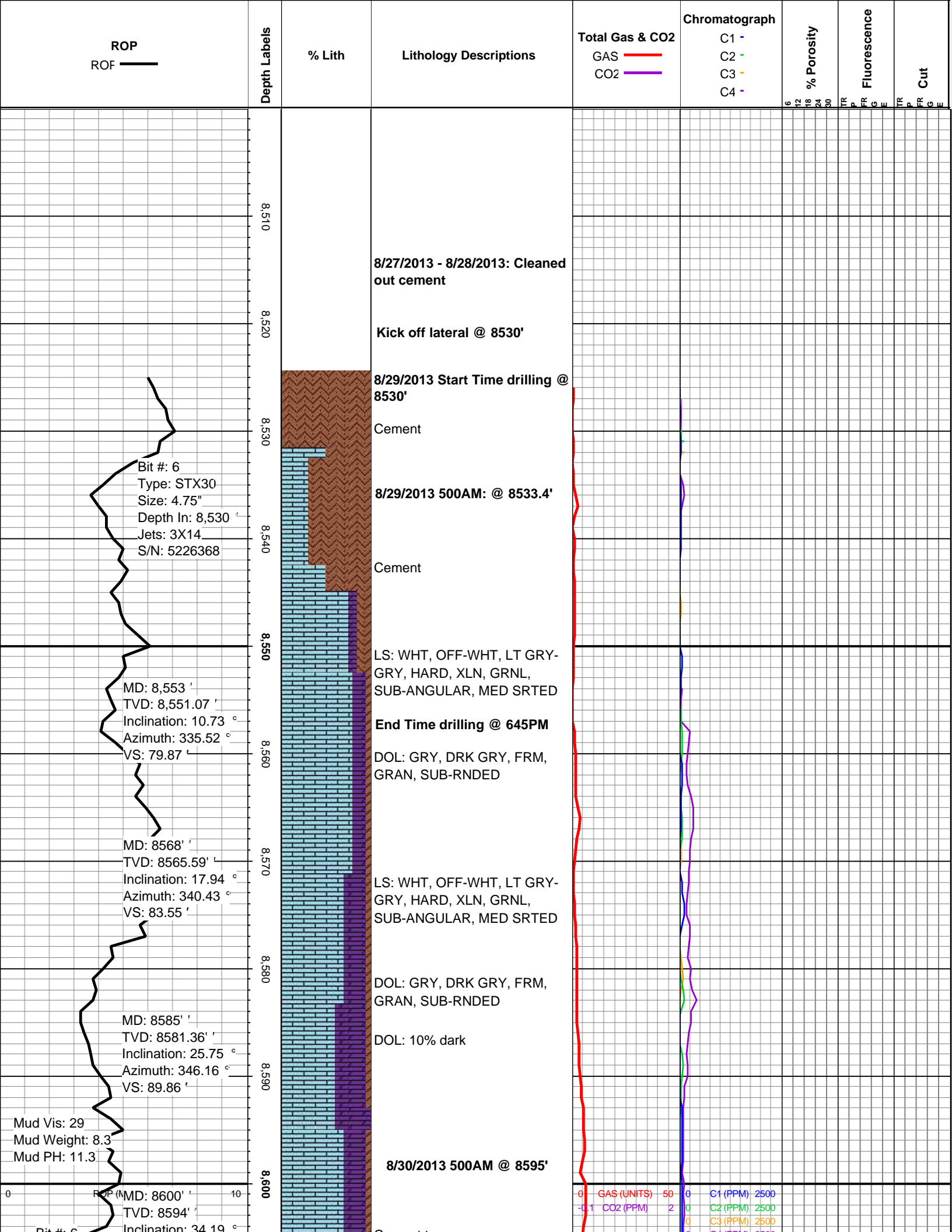
- BOUNDSTONE
- CHALKY
- CRYPTOXLN

E EARTHY

- FINELYXLN
- GRAINSTONE
- L LITHOGRAPHIC
- MIX MICROXLN
- MUDSTONE
- PACKSTONE
- WACKESTONE

Sorting

- MODERATE
- POOR
- WELL



Bit #: 6
Type: STX30
Size: 4.75"
Depth In: 8530' '
Hours: 19 hrs
Jets: 3X14
S/N: 5226368

MD: 8617' '
TVD: 8607.66' '
Inclination: 42.56 °
Azimuth: 348.63 °
VS: 107.86' '

MD: 8632' '
TVD: 8618.31' '
Inclination: 47.06 °
Azimuth: 339.7 °
VS: 118.41' '

Mud Vis: 29
Mud Weight: 8.3
Mud PH: 11.2

MD: 8648' '
TVD: 8628.62' '
Inclination: 52.69 °
Azimuth: 336 °
VS: 130.53' '

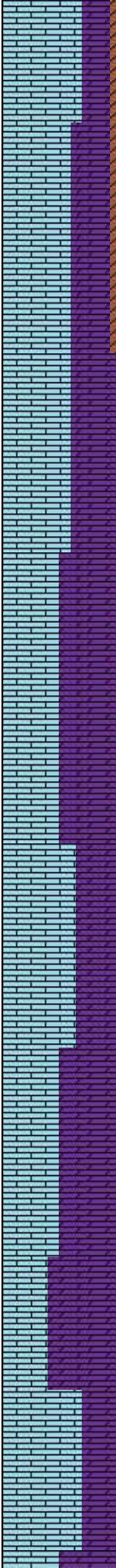
MD: 8663' '
TVD: 8637.33' '
Inclination: 56.35 °
Azimuth: 328.89 °
VS: 142.44' '

MD: 8680' '
TVD: 8646.04' '
Inclination: 61.98 °
Azimuth: 329.35 °
VS: 156.47' '

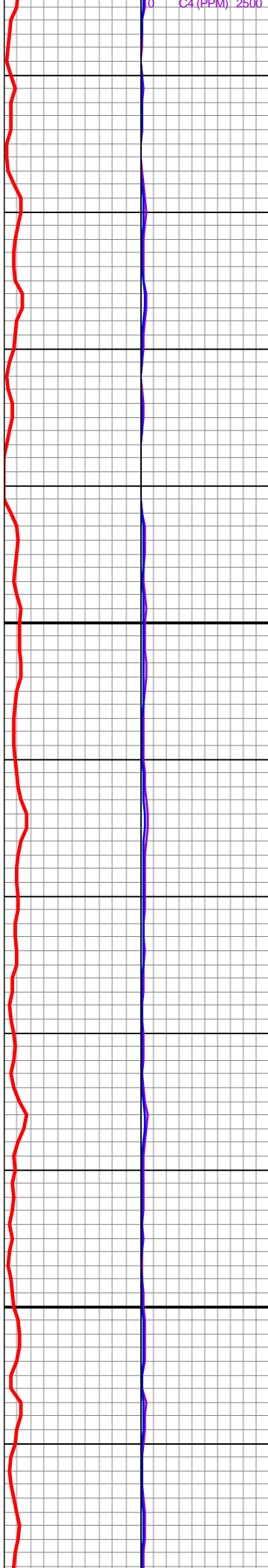
MD: 8695' '
TVD: 8652.23' '
Inclination: 69.31 °
Azimuth: 335.5 °
VS: 169.8' '

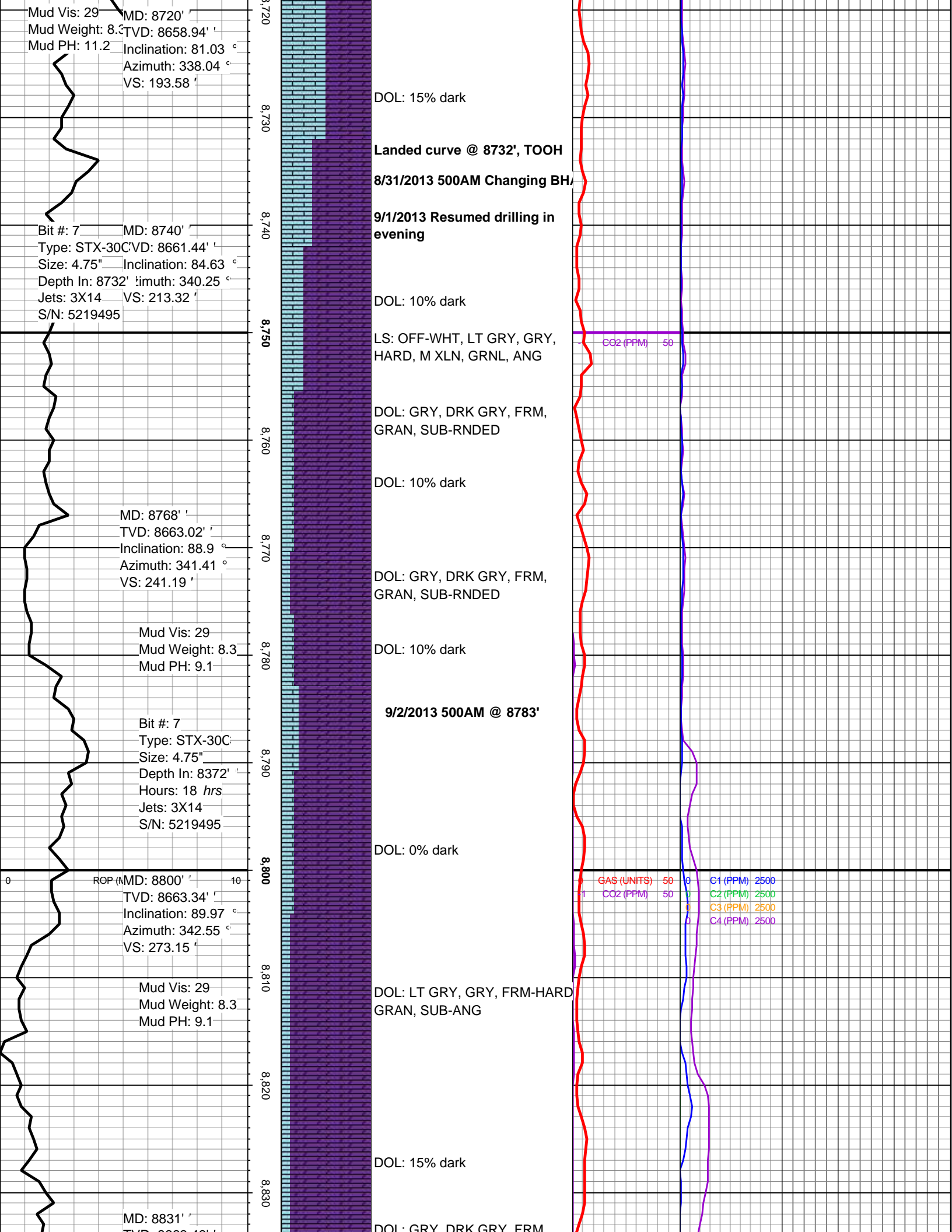
MD: 8705' '
TVD: 8655.51' '
Inclination: 72.44 °
Azimuth: 336.5 °
VS: 179.13' '

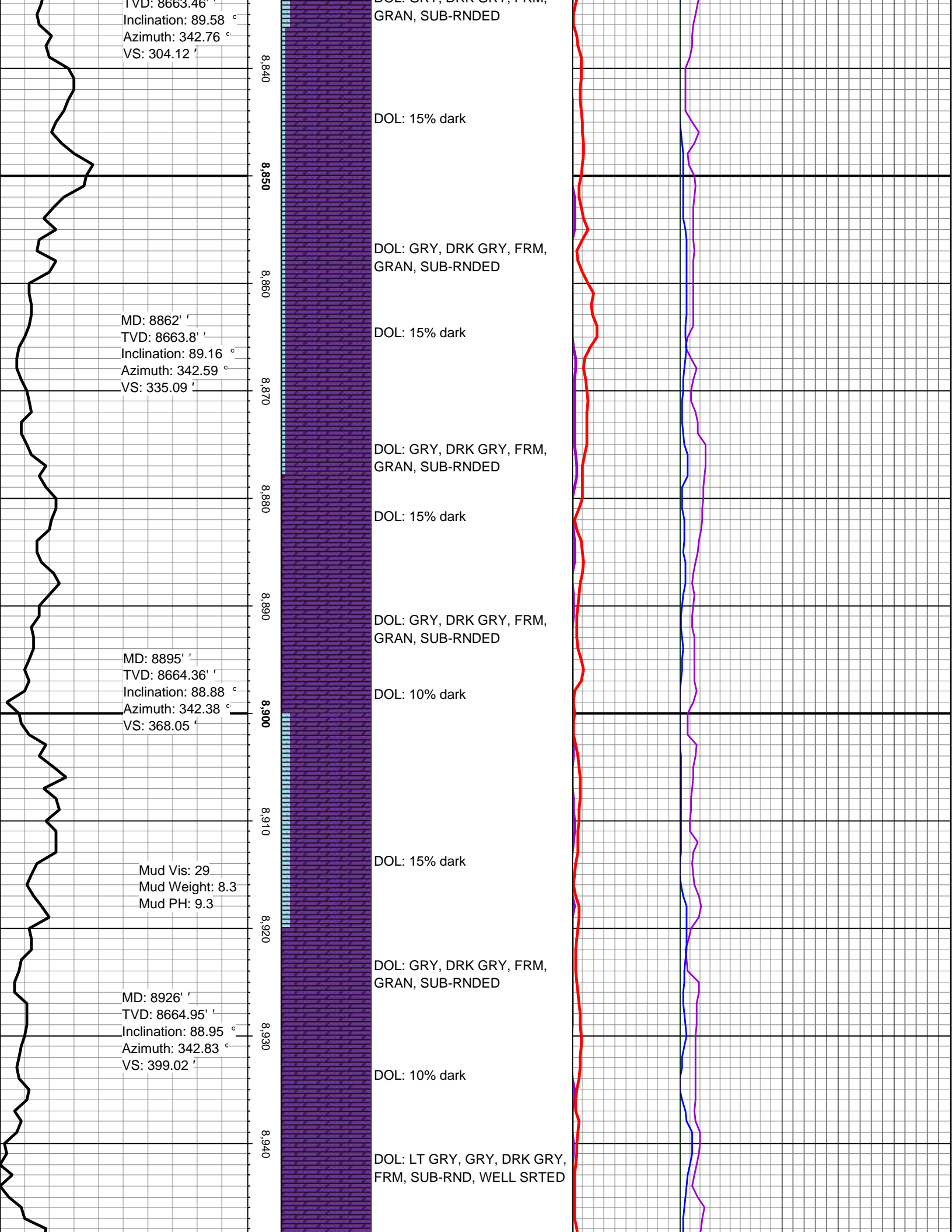
8,610
8,620
8,630
8,640
8,650
8,660
8,670
8,680
8,690
8,700
8,710

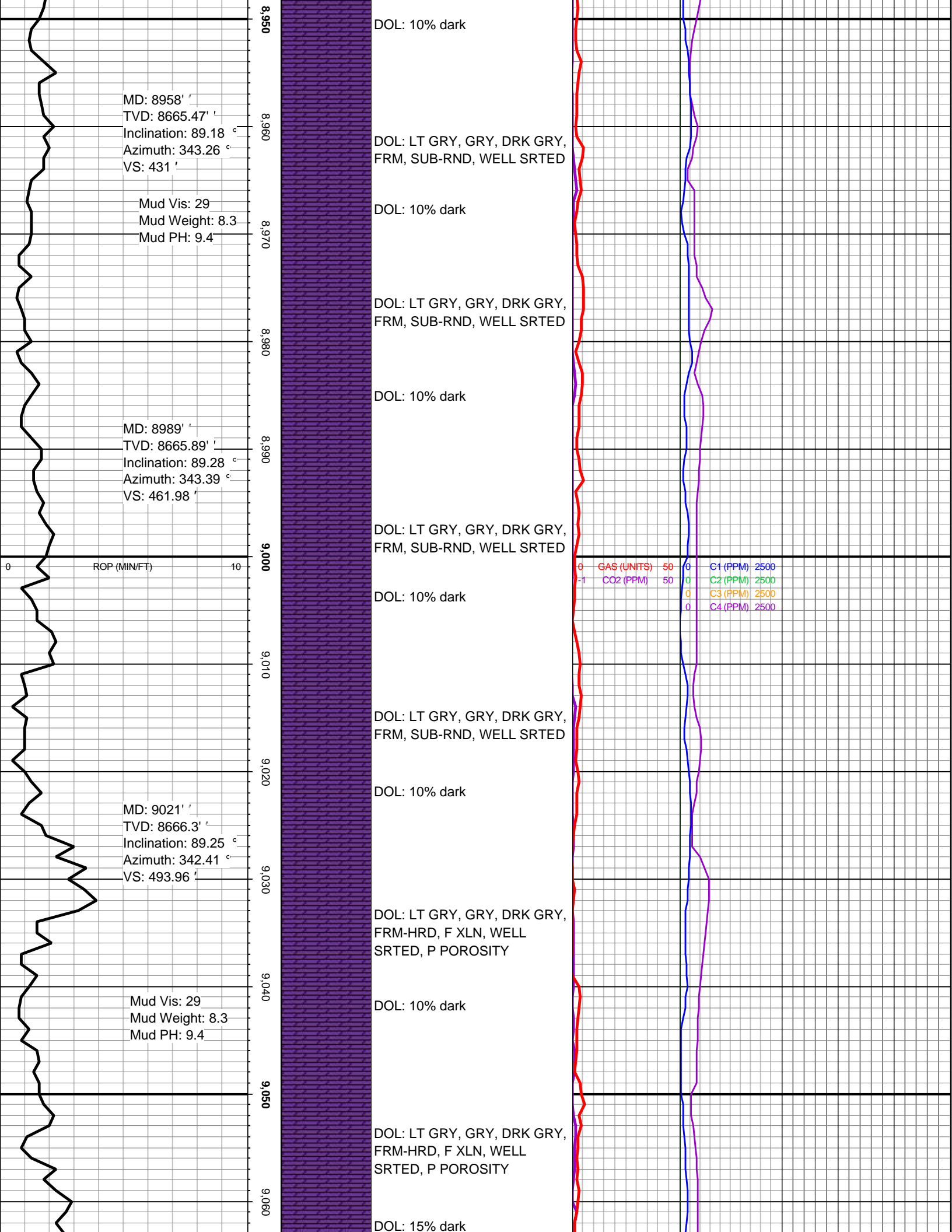


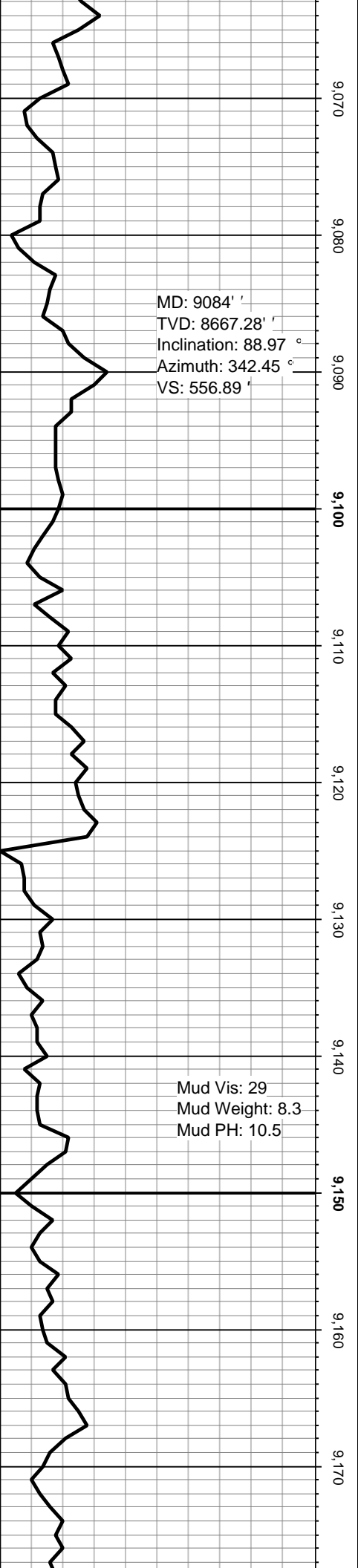
Cement traces
DOL: 0% dark
LS: WHT, OFF-WHT, LT GRY-GRY, HARD, XLN, GRNL, SUB-ANGULAR, MED SRTED
DOL: GRY, DRK GRY, FRM, GRAN, SUB-RNDED
DOL: 0% dark
Cement traces
DOL: GRY, DRK GRY, FRM, GRAN, SUB-RNDED
LS: WHT, OFF-WHT, LT GRY-GRY, HARD, XLN, GRNL, SUB-ANGULAR, MED SRTED
DOL: 0% dark
Cement traces
DOL: 10% dark
DOL: GRY, DRK GRY, FRM, GRAN, SUB-RNDED
DOL: 10% dark
LS: WHT, OFF-WHT, LT GRY-GRY, HARD, XLN, GRNL, SUB-ANGULAR, MED SRTED











DOL: LT GRY, GRY, DRK GRY,
FRM-HRD, F XLN, WELL
SRTED, P POROSITY

DOL: 15% dark

DOL: LT GRY, GRY, DRK GRY,
FRM-HRD, F XLN, WELL
SRTED, P POROSITY

DOL: 15% dark

DOL: LT GRY, GRY, DRK GRY,
FRM-HRD, F XLN, WELL
SRTED, P POROSITY

DOL: 15% dark

DOL: LT GRY, GRY, DRK GRY,
FRM-HRD, F XLN, WELL
SRTED, P POROSITY

DOL: 15% dark

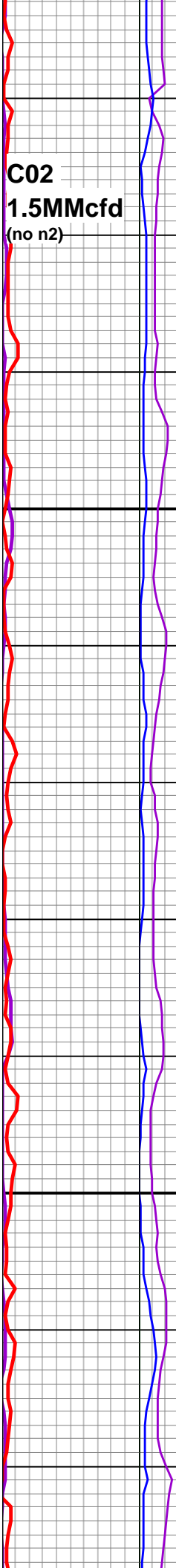
DOL: LT GRY, GRY, DRK GRY,
FRM-HRD, F XLN, WELL
SRTED, P POROSITY

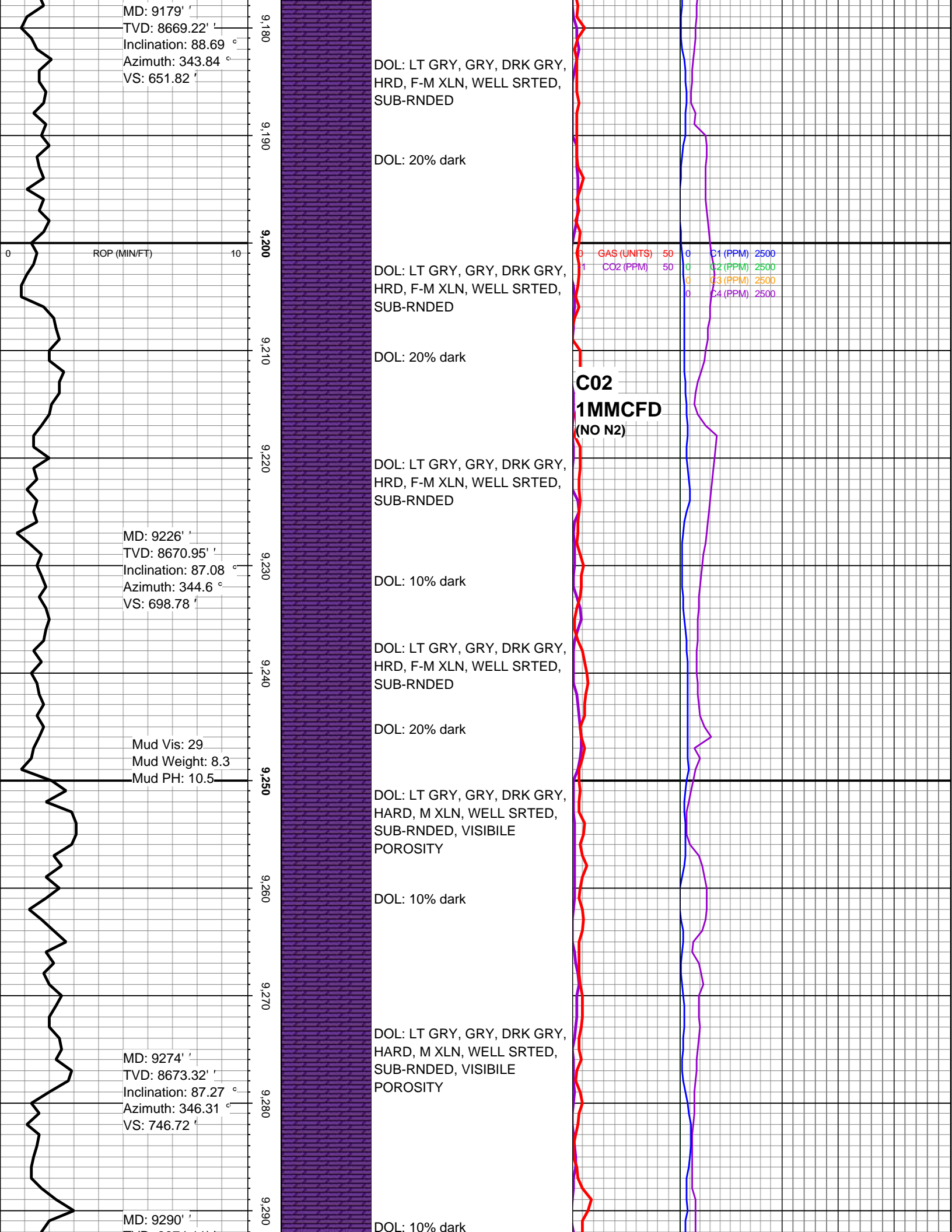
DOL: 15% dark

DOL: LT GRY, GRY, DRK GRY,
HRD, F-M XLN, WELL SRTED,
SUB-RNDED

DOL: 15% dark

C02
1.5MMcfd
(no n2)





TVD: 8674.11' °
Inclination: 87.06 °
Azimuth: 346.38 °
VS: 762.69'

Mud Vis: 29
Mud Weight: 8.3
Mud PH: 10.1

MD: 9369' °
TVD: 8677.41' °
Inclination: 88.15 °
Azimuth: 347.18 °

VS not emailed from WF yet

Mud Vis: 29
Mud Weight: 8.3
Mud PH: 10.1

0 ROP (MIN/FT) 10

9,300
9,310
9,320
9,330
9,340
9,350
9,360
9,370
9,380
9,390
9,400

DOL: LT GRY, GRY, DRK GRY,
HARD, M XLN, WELL SRTE
D, SUB-RNDED, VISIBL
POROSITY

DOL: 10% dark

DOL: LT GRY, GRY, DRK GRY,
HARD, M XLN, WELL SRTE
D, SUB-RNDED, VISIBL
POROSITY

DOL: 15% dark

DOL: LT GRY, GRY, DRK GRY,
HARD, M XLN, WELL SRTE
D, SUB-RNDED, VISIBL
POROSITY

DOL: 15% dark

DOL: LT GRY, GRY, DRK GRY,
HARD, M XLN, WELL SRTE
D, SUB-RNDED, VISIBL
POROSITY

DOL: 20% dark

DOL: LT GRY, GRY, DRK GRY,
HARD, M XLN, WELL SRTE
D, SUB-RNDED, VISIBL
POROSITY

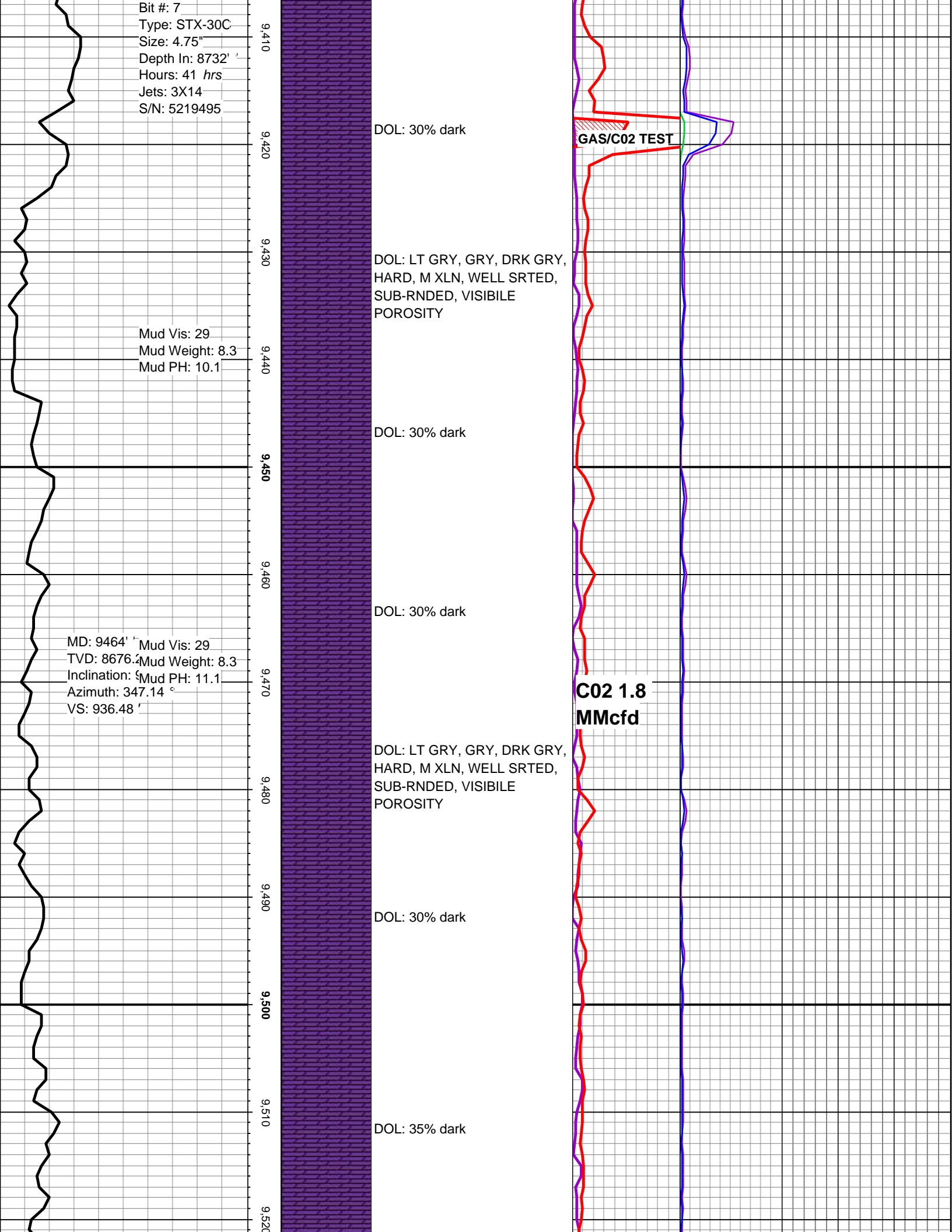
DOL: 20% dark

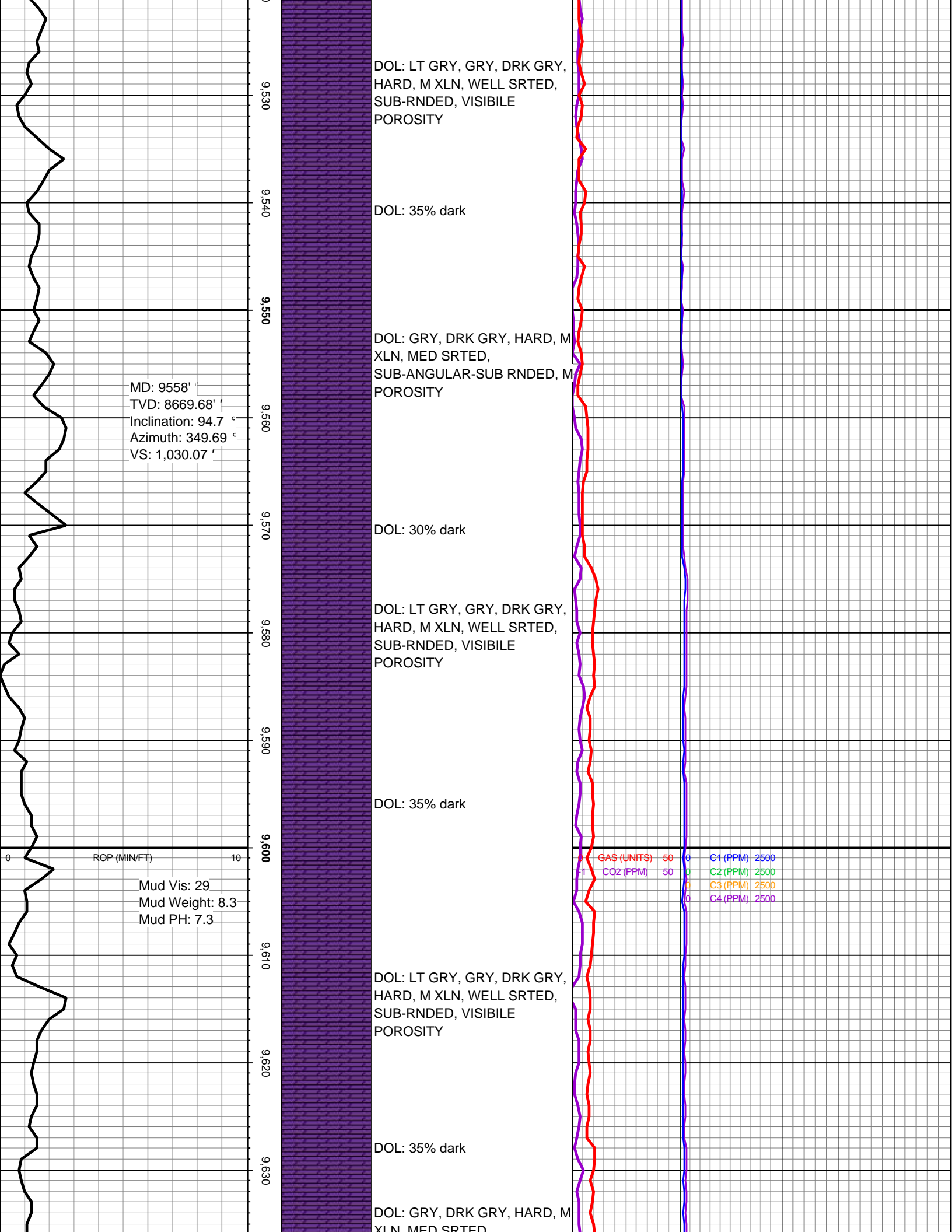
DOL: LT GRY, GRY, DRK GRY,
HARD, M XLN, WELL SRTE
D, SUB-RNDED, VISIBL
POROSITY

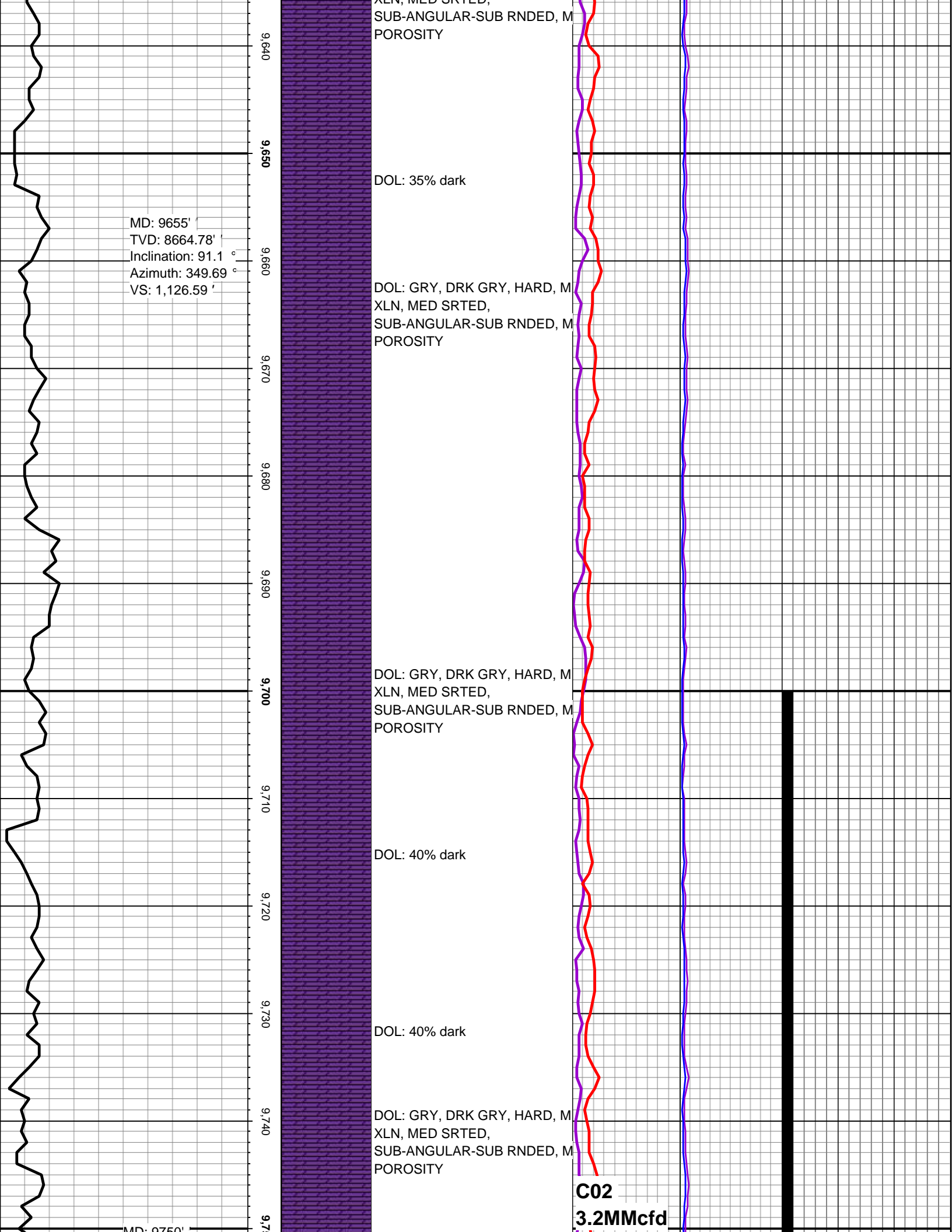
DOL: 20% dark

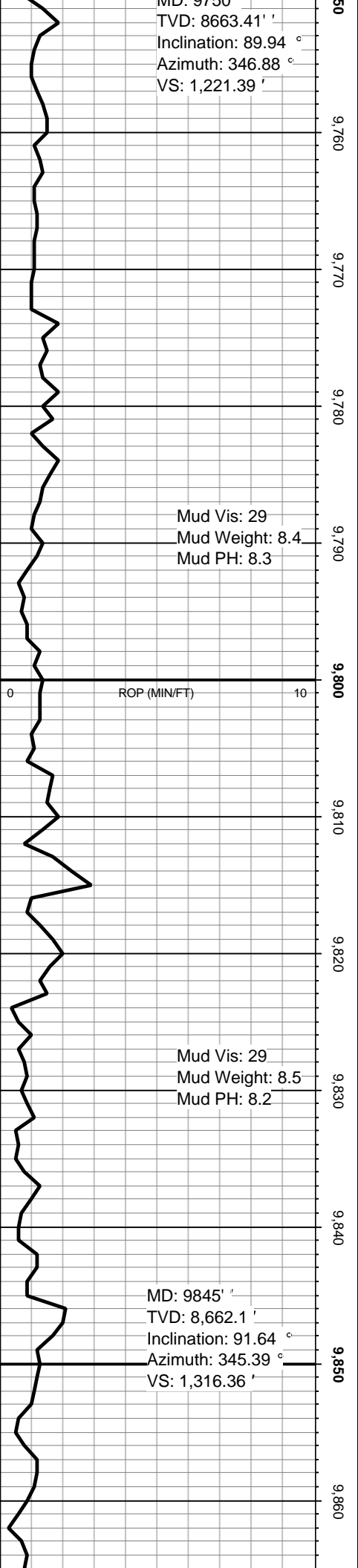
C02
3MMCFD
(NO N2)

0	GAS (UNITS)	50	0	C1 (PPM)	2500
1	CO2 (PPM)	50	0	C2 (PPM)	2500
			0	C3 (PPM)	2500
			0	C4 (PPM)	2500









DOL: 50% dark

DOL: GRY, DRK GRY, HARD, M
XLN, MED SRTED,
SUB-ANGULAR-SUB RNDED, M
POROSITY

DOL: 50% dark

DOL: GRY, DRK GRY, HARD, M
XLN, MED SRTED,
SUB-ANGULAR-SUB RNDED, M
POROSITY

DOL: 50% dark

DOL: GRY, DRK GRY, HARD, M
XLN, MED SRTED,
SUB-ANGULAR-SUB RNDED, M
POROSITY

DOL: 50% dark

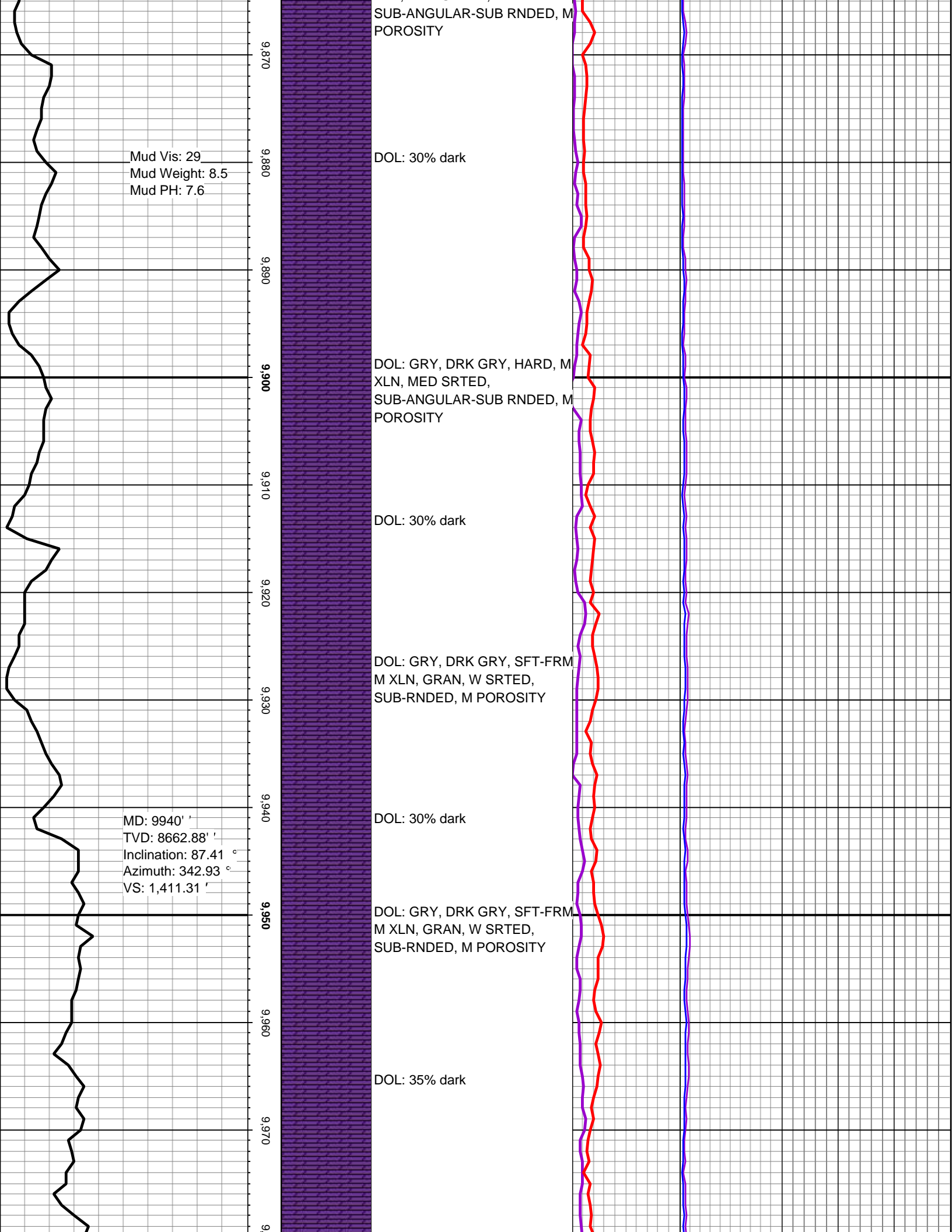
9/4/2013 500AM @ 9843'

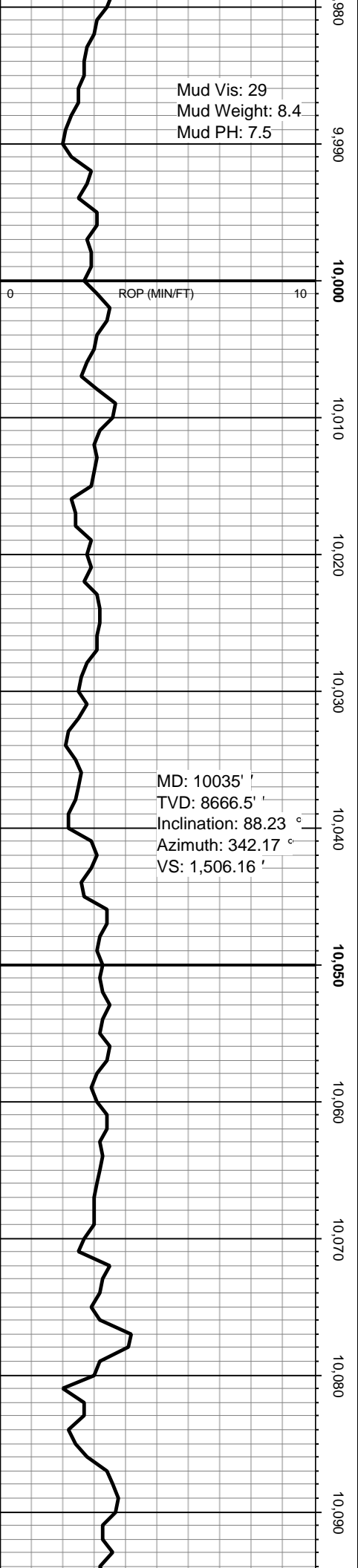
DOL: GRY, DRK GRY, HARD, M
XLN, MED SRTED.

GAS (UNITS)	50	0	C1 (PPM)	2500
CO2 (PPM)	50	0	C2 (PPM)	2500
		0	C3 (PPM)	2500
		0	C4 (PPM)	2500

C02
2.7MMcfd

GAS/CO2 TEST





DOL: 25% dark

DOL: GRY, DRK GRY, SFT-FRM
M XLN, GRAN, W SRTED,
SUB-RNDED, M POROSITY

DOL: 35% dark

DOL: GRY, DRK GRY, SFT-FRM
M XLN, GRAN, W SRTED,
SUB-RNDED, M POROSITY

DOL: 40% dark

DOL: GRY, DRK GRY, SFT-FRM
M XLN, GRAN, W SRTED,
SUB-RNDED, M POROSITY

DOL: 40% dark

