

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name Steadfast E27-62-1HN

Location SESE SEC26 T6N R65W

State COLORADO

County WELD

Country USA

Rig Number PRECISION 828

API Number 05-123-38156

AFE # 139767

Region DENVER-JULESBURG BASIN

Field WATTENBERG

Spud Date 6/17/2014

Drilling Completed 6/25/2014

Surface Coordinates 305' FSL, 280' FEL

Lat/Long: 40.45052/-104.62175

Ground Elevation 4676'

K.B. Elevation 4692'

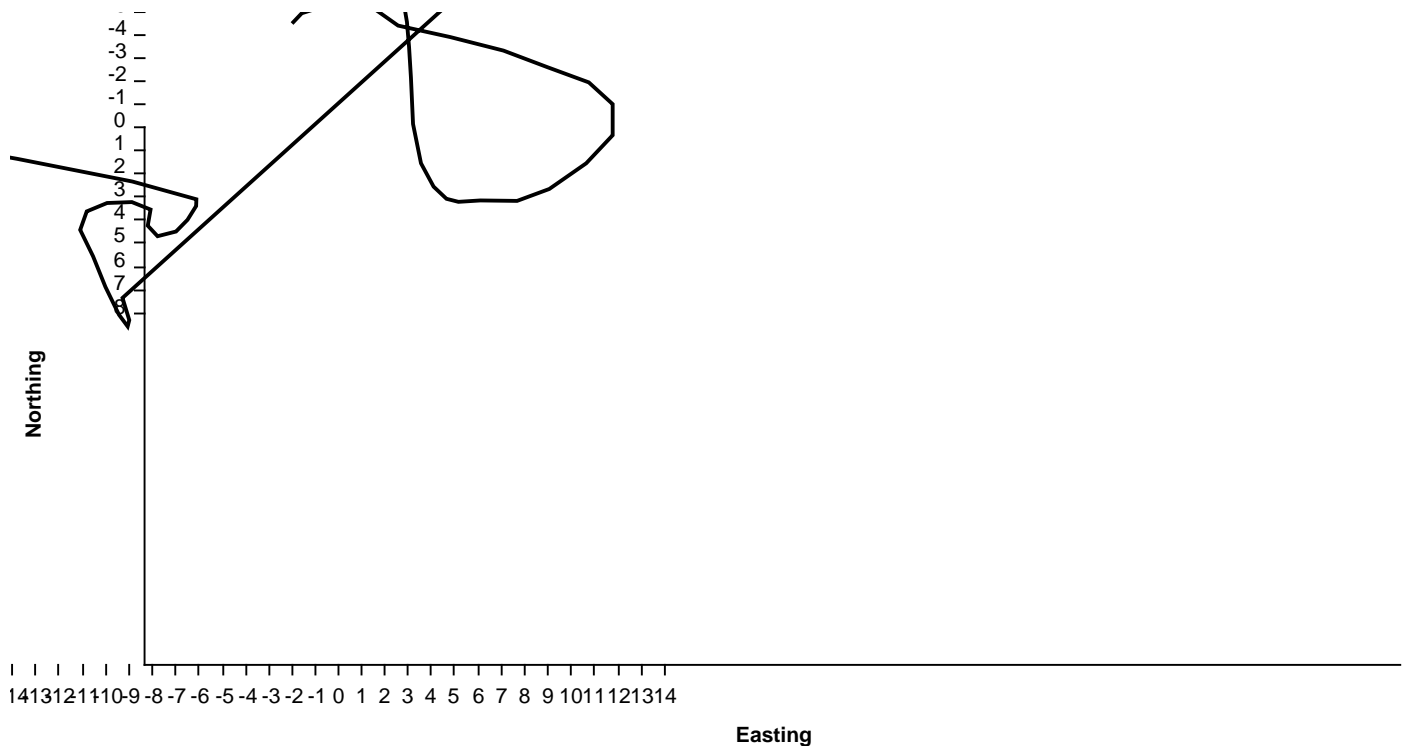
Logged Interval 597' **To** 6220'

Total Depth 13603'

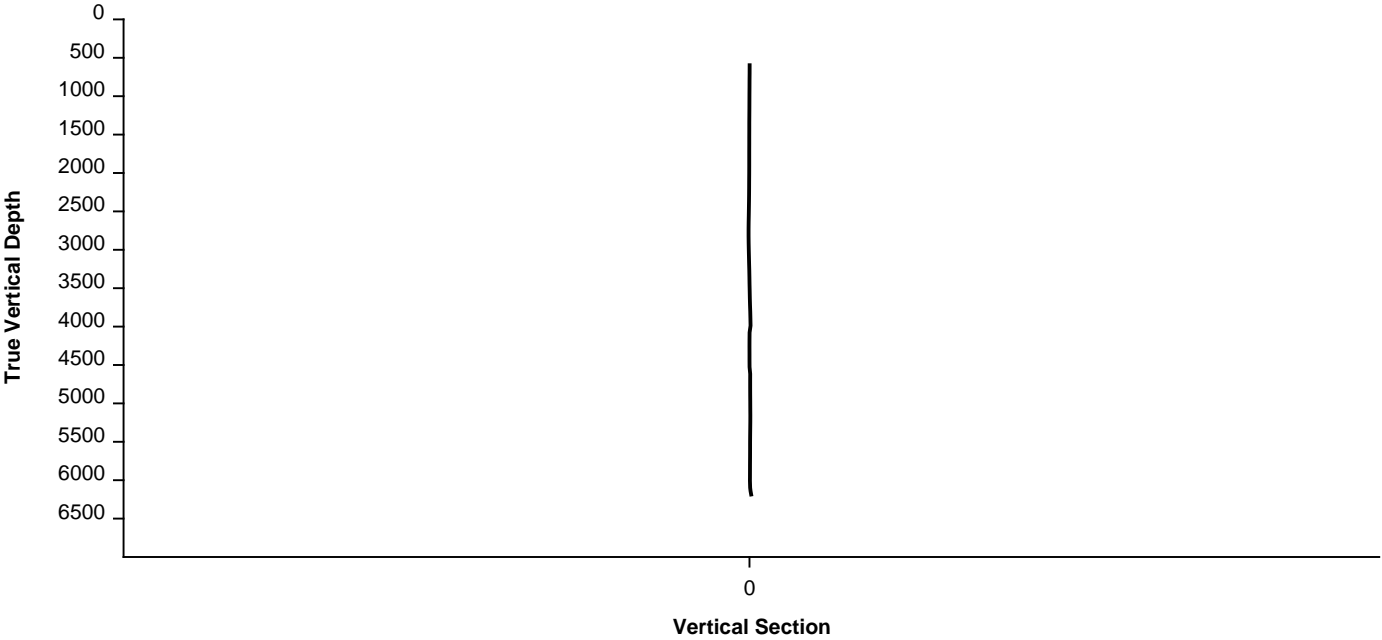
Formation FOX HILLS, PIERRE, PARKMAN, SUSSEX, SHANNON, TEEPEE BUTTES

Type of Drilling Fluid FRESH WATER, LSND

Survey Plan



Survey Elevation



Other

WELLSITE GEOLOGISTS: GARY MYERS, GABRIEL RUBIO

GEOLOGIC SERVICES PROVIDED BY COLUMBINE LOGGING, INC.

LOG CONTINUES ON FILE: Steadfast E27-62-1HN Horiz.mplot


Operator

Company NOBLE ENERGY INC.

Address 1625 Broadway
Denver, CO 80202


Accessories

Stringer

 SANDSTONE STRINGER

Rock Types

 SANDSTONE

 SHALY SANDSTONE

 SHALY SILTSTONE

 SILTY SHALE


Geologist


Name MELANIE PETERSON

Company NOBLE ENERGY, INC.



Other Symbols

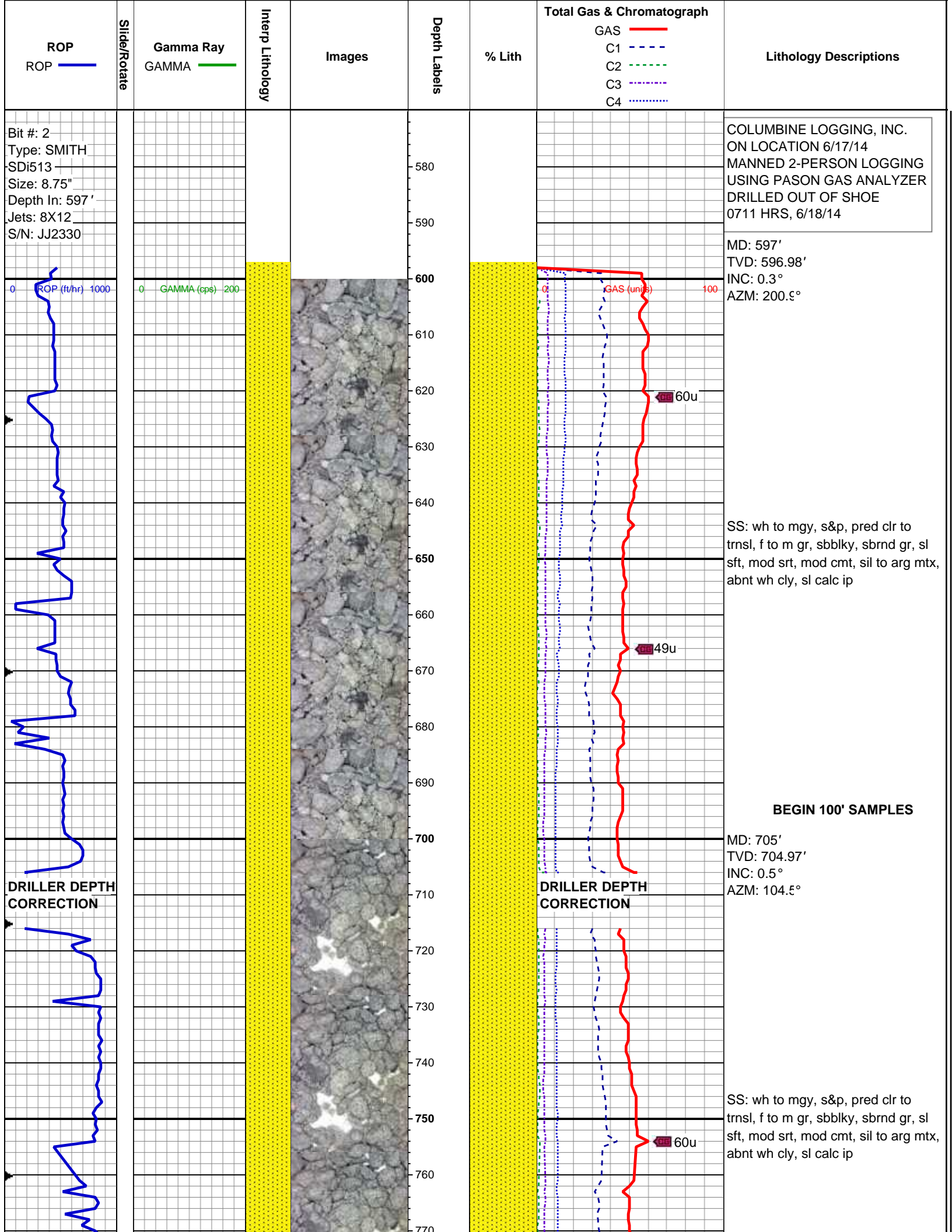
Engineering

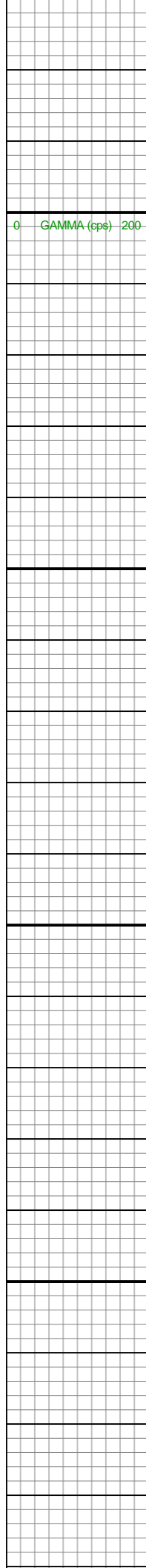
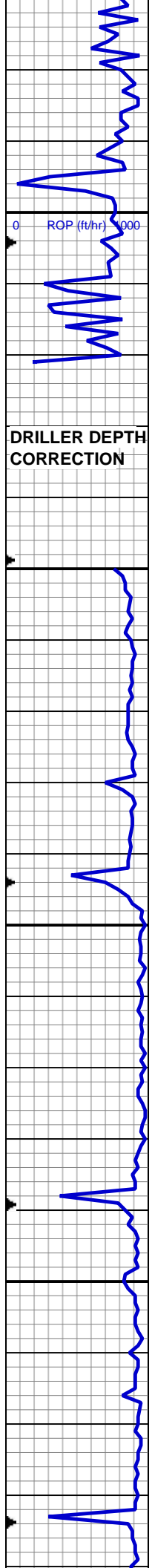
 CONNECTION (RIGHT)

 CONNECTION (LEFT)

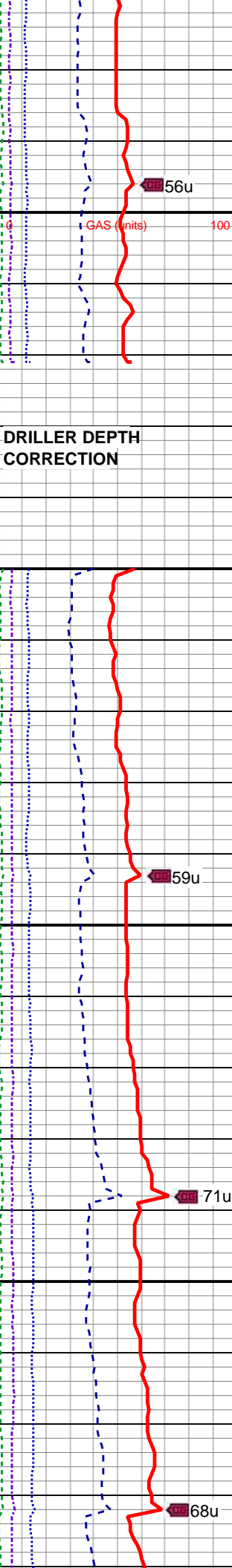
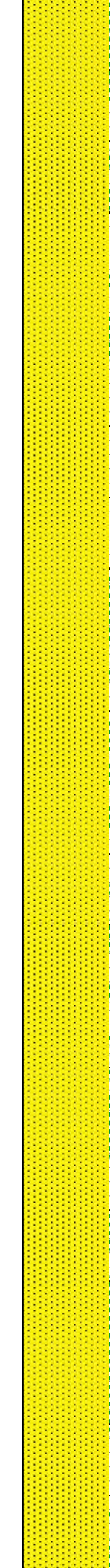
Address 1625 Broadway
Denver, CO 80202

 CONNECTION GAS
 MN DEPTH (RIGHT)





770
780
790
800
810
820
830
840
850
860
870
880
890
900
910
920
930
940
950
960
970
980
990



MD: 794'
TVD: 793.97'
INC: 0.5°
AZM: 110.3°

SS: wh to mgy, s&p, pred clr to trnsl, f to mgr, sbblky, sbrnd gr, sl sft, mod srt, mod cmt, sil to arg mtx, abnt wh cly, sl calc ip, tr dk gy sh

MD: 884'
TVD: 883.97'
INC: 0.4°
AZM: 130.3°

SS: wh to mgy, s&p, pred clr to trnsl, f to mgr, sbblky, sbrnd gr, sl sft, mod srt, mod cmt, sil to arg mtx, abnt wh cly, sl calc ip, tr dk gy sh

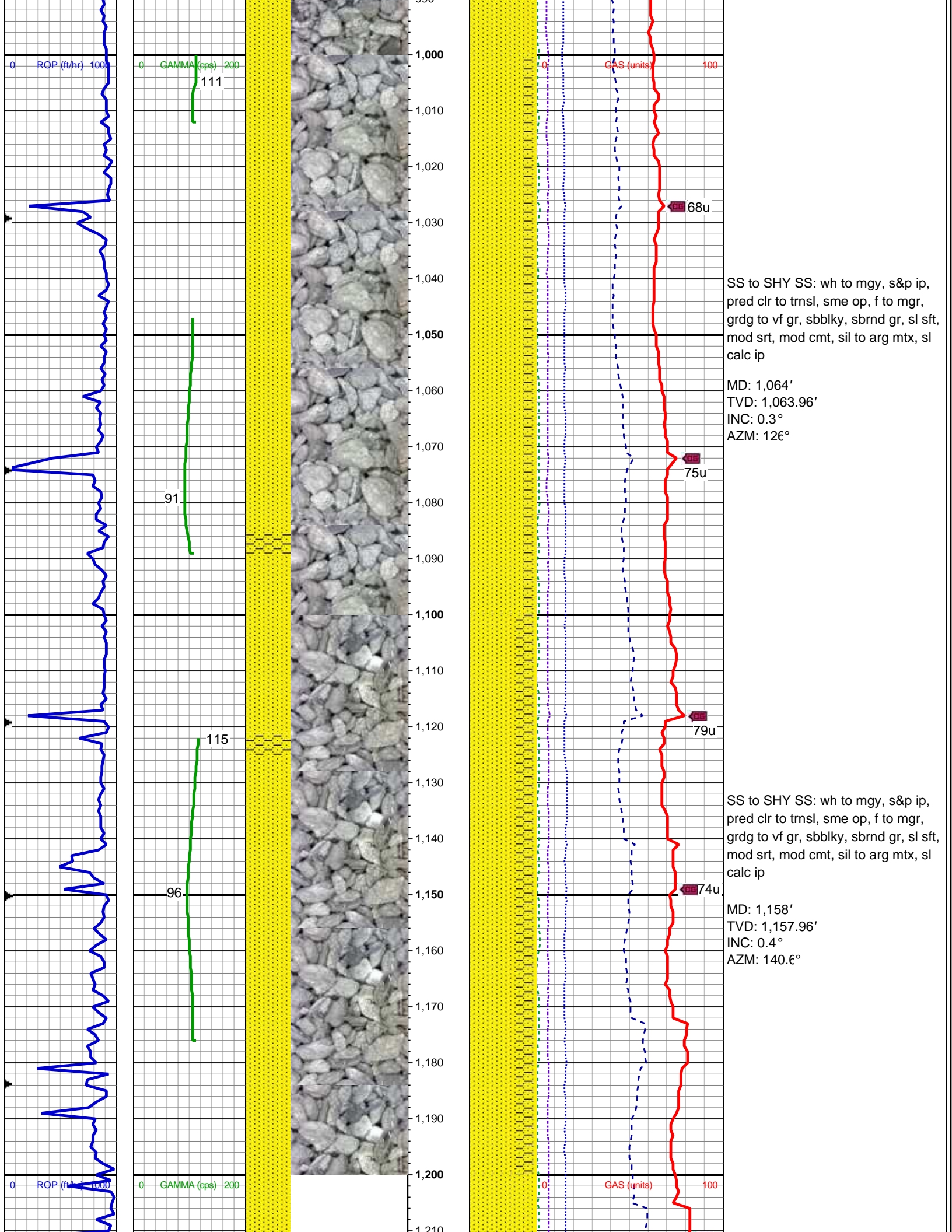
MD: 974'
TVD: 973.97'
INC: 0.4°
AZM: 124.5°

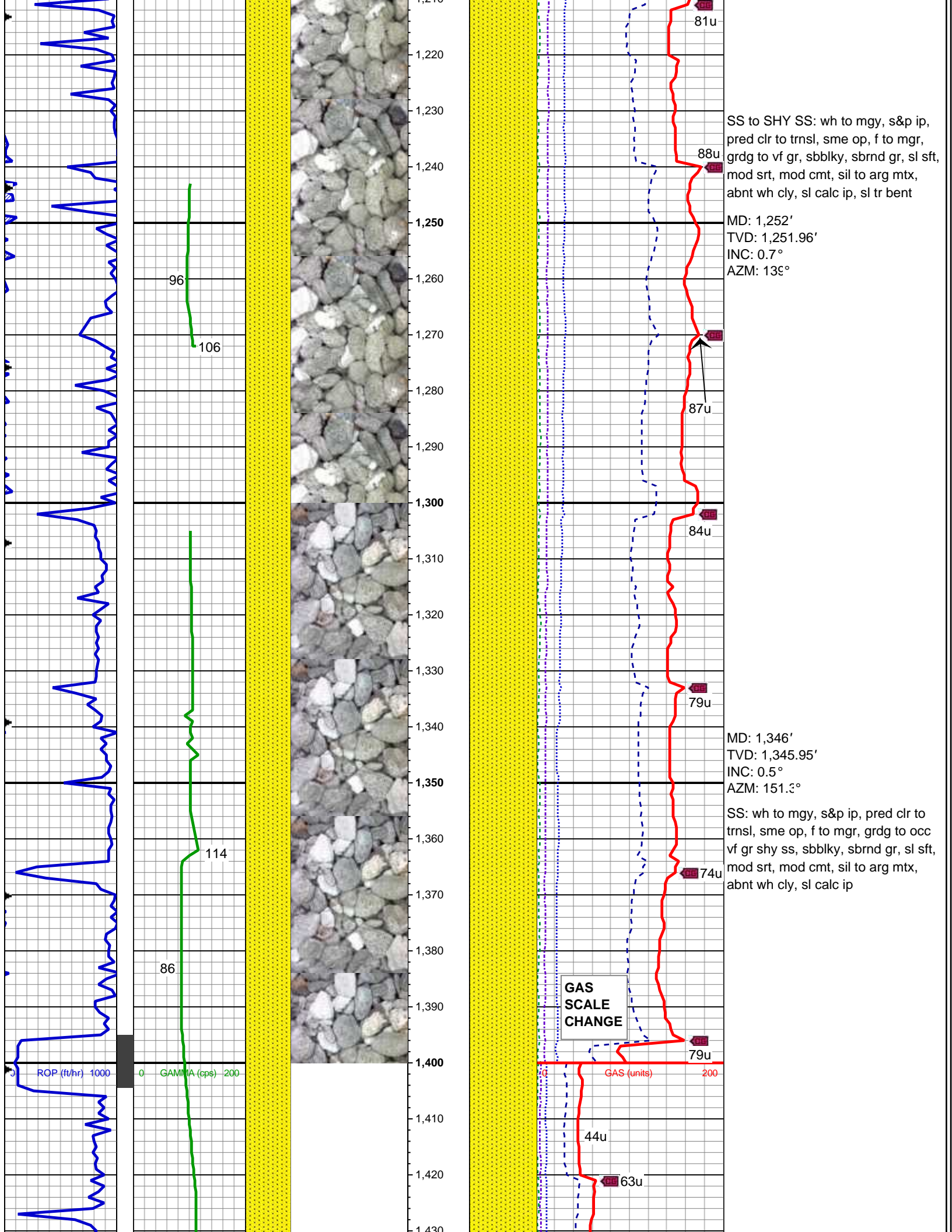
56u

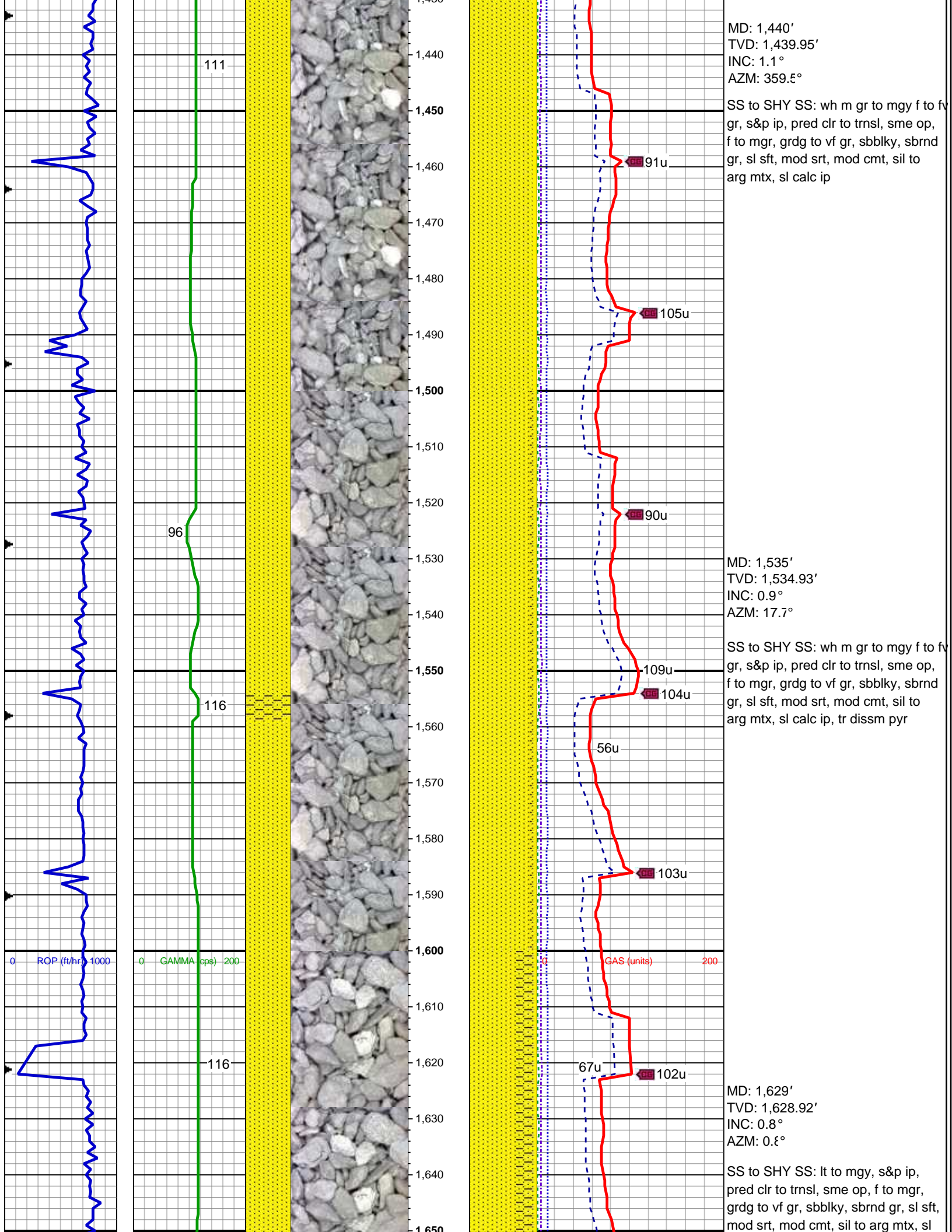
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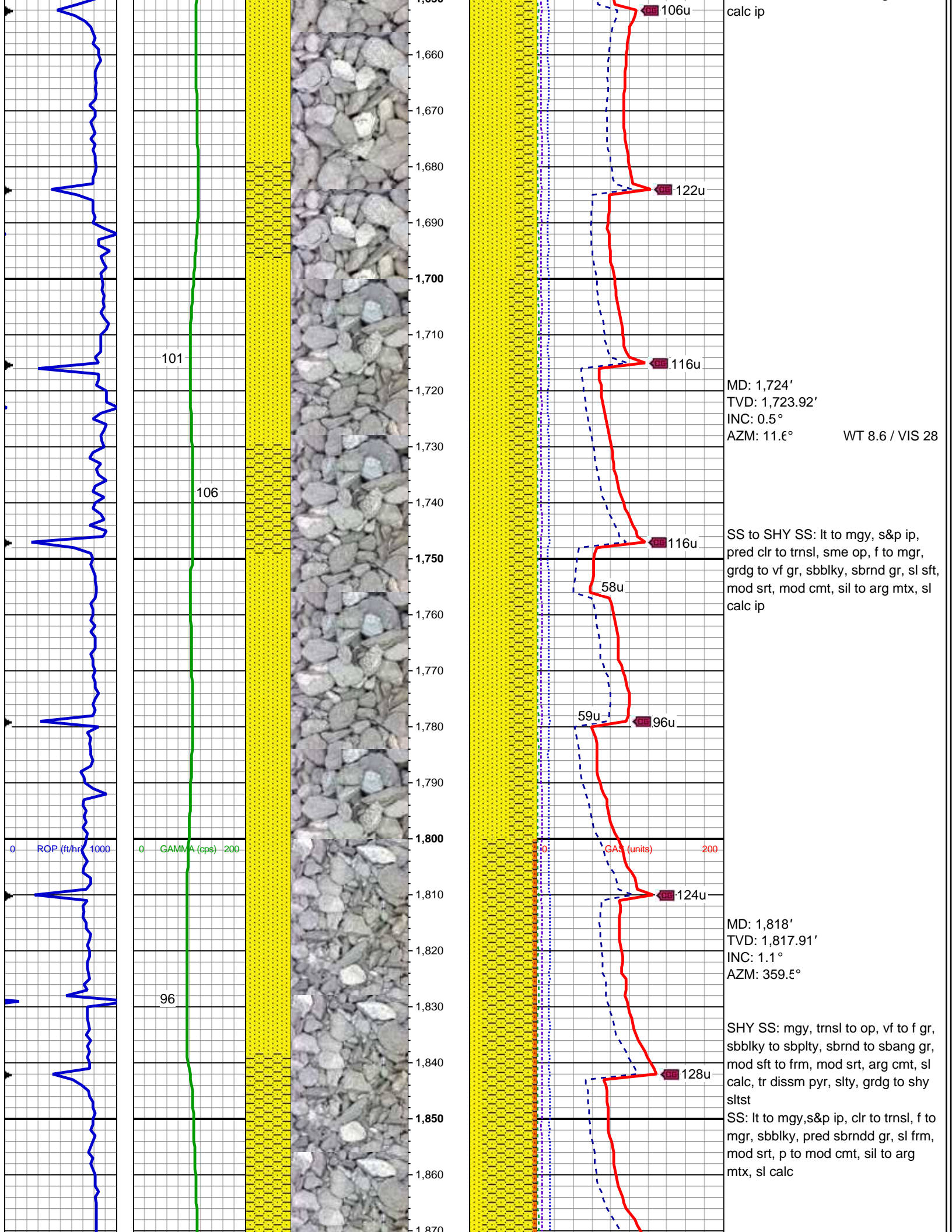
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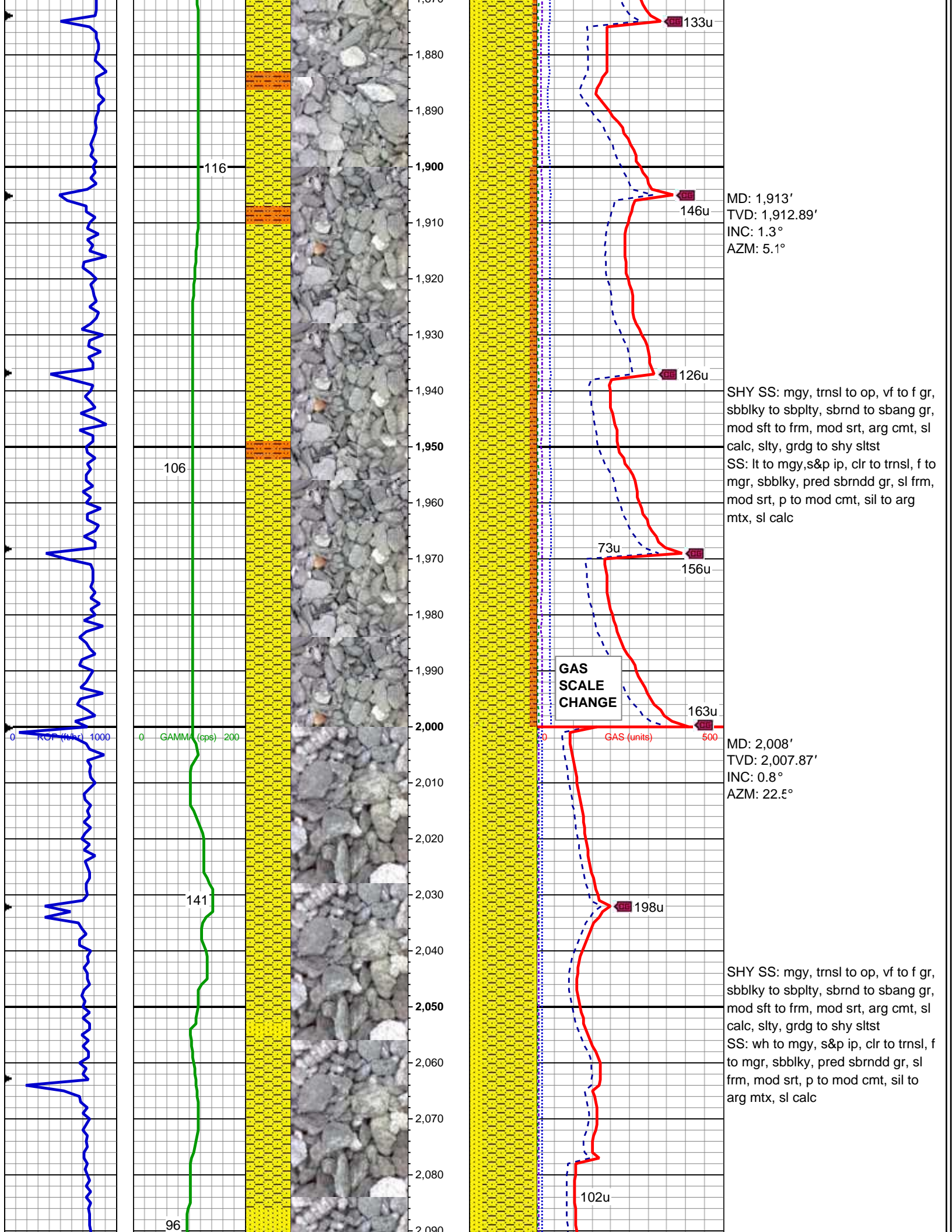
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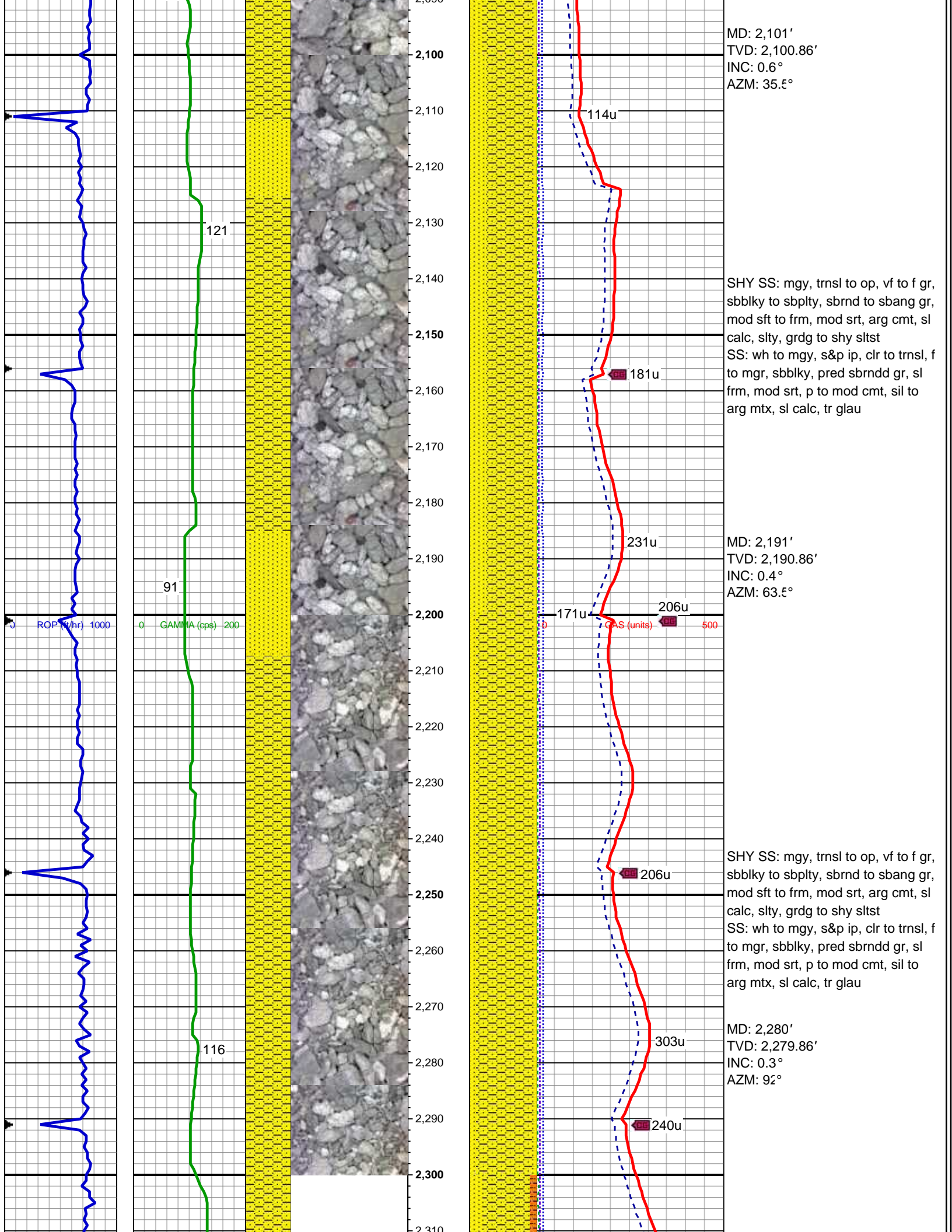


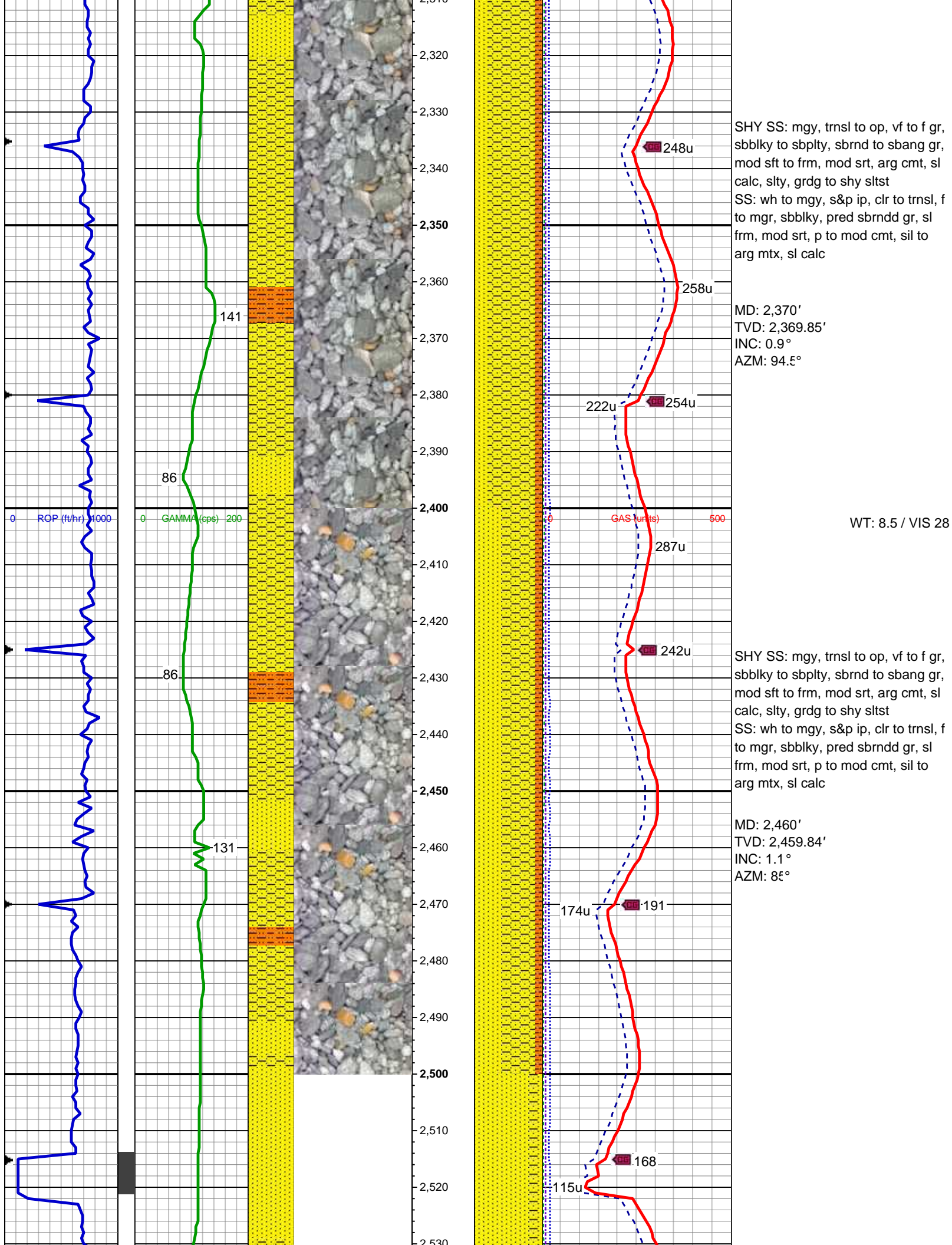


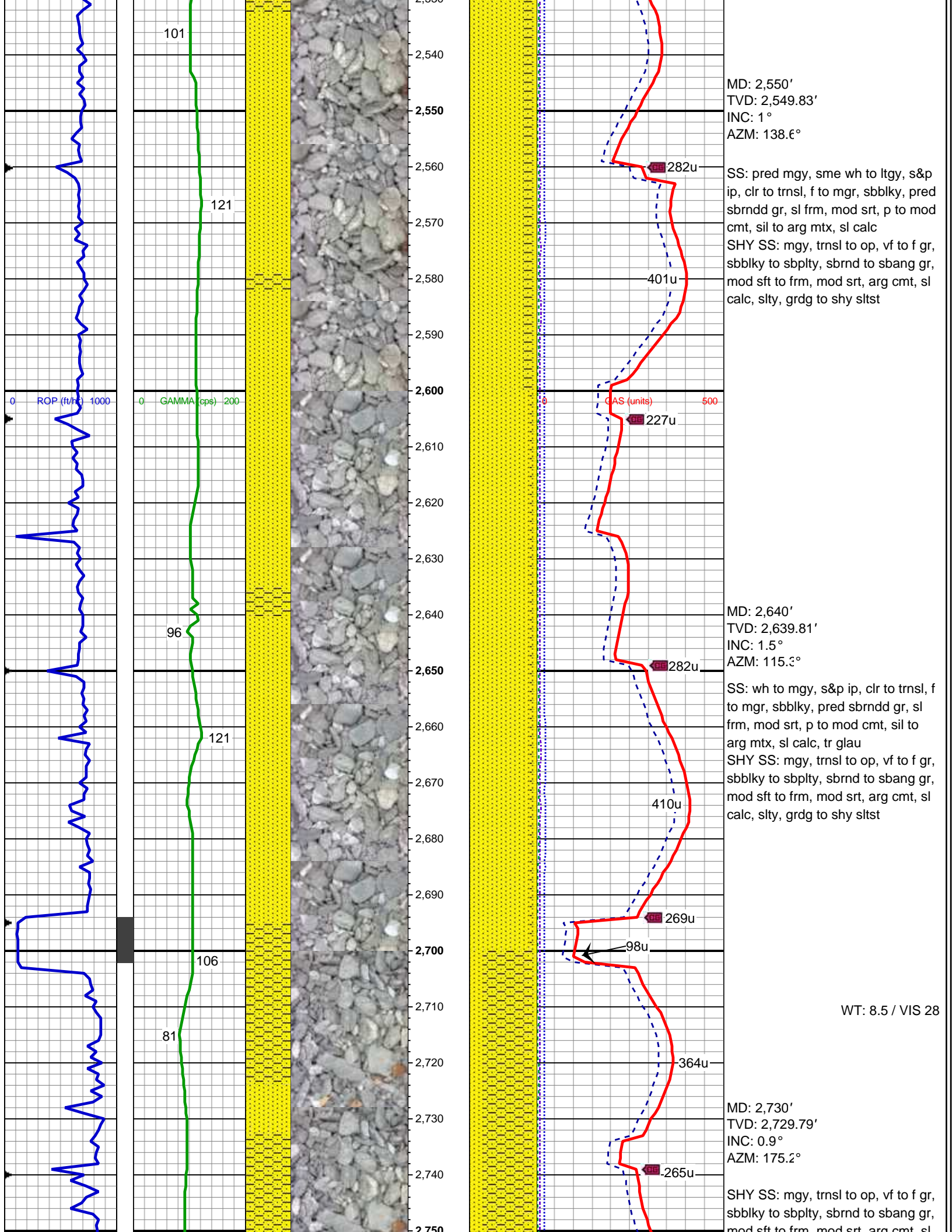


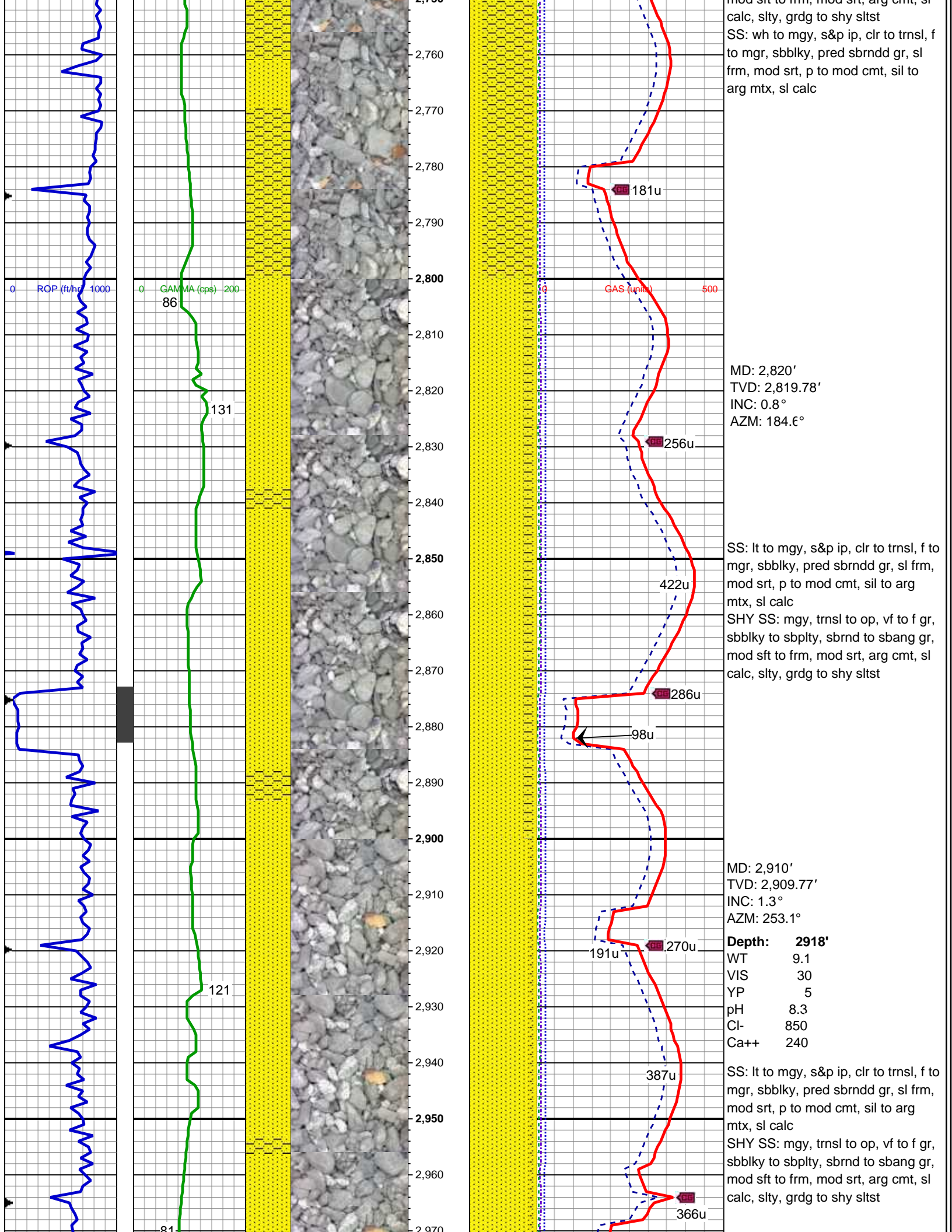


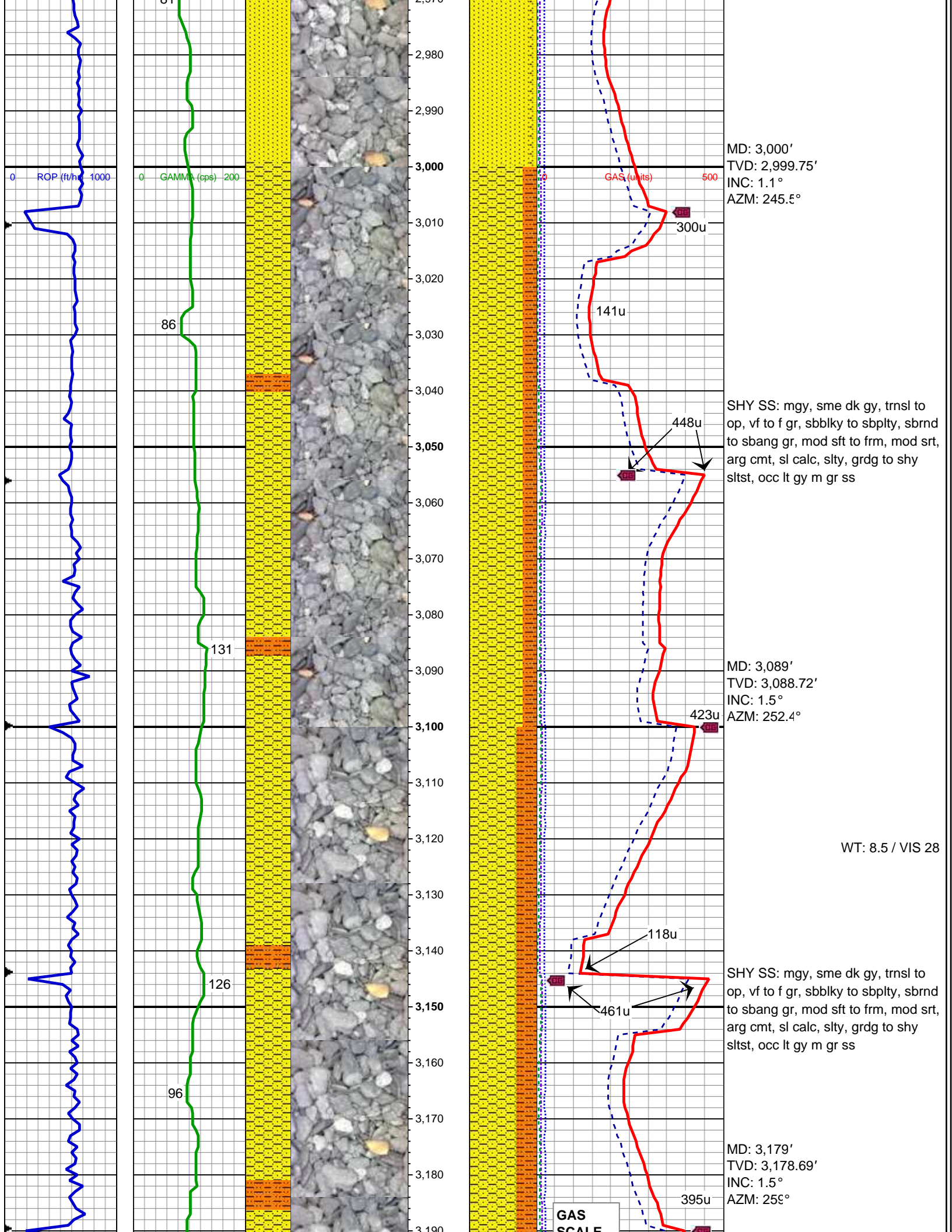


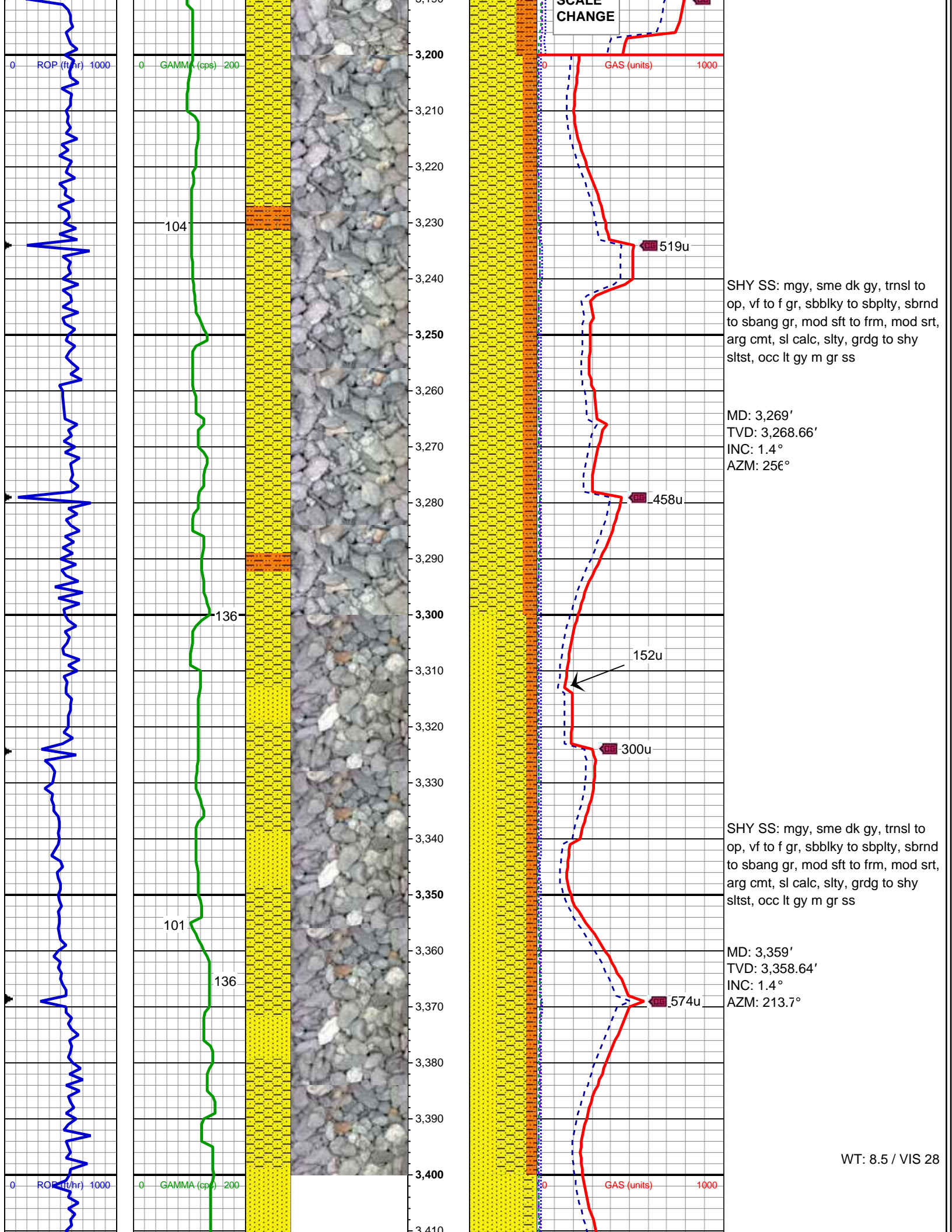


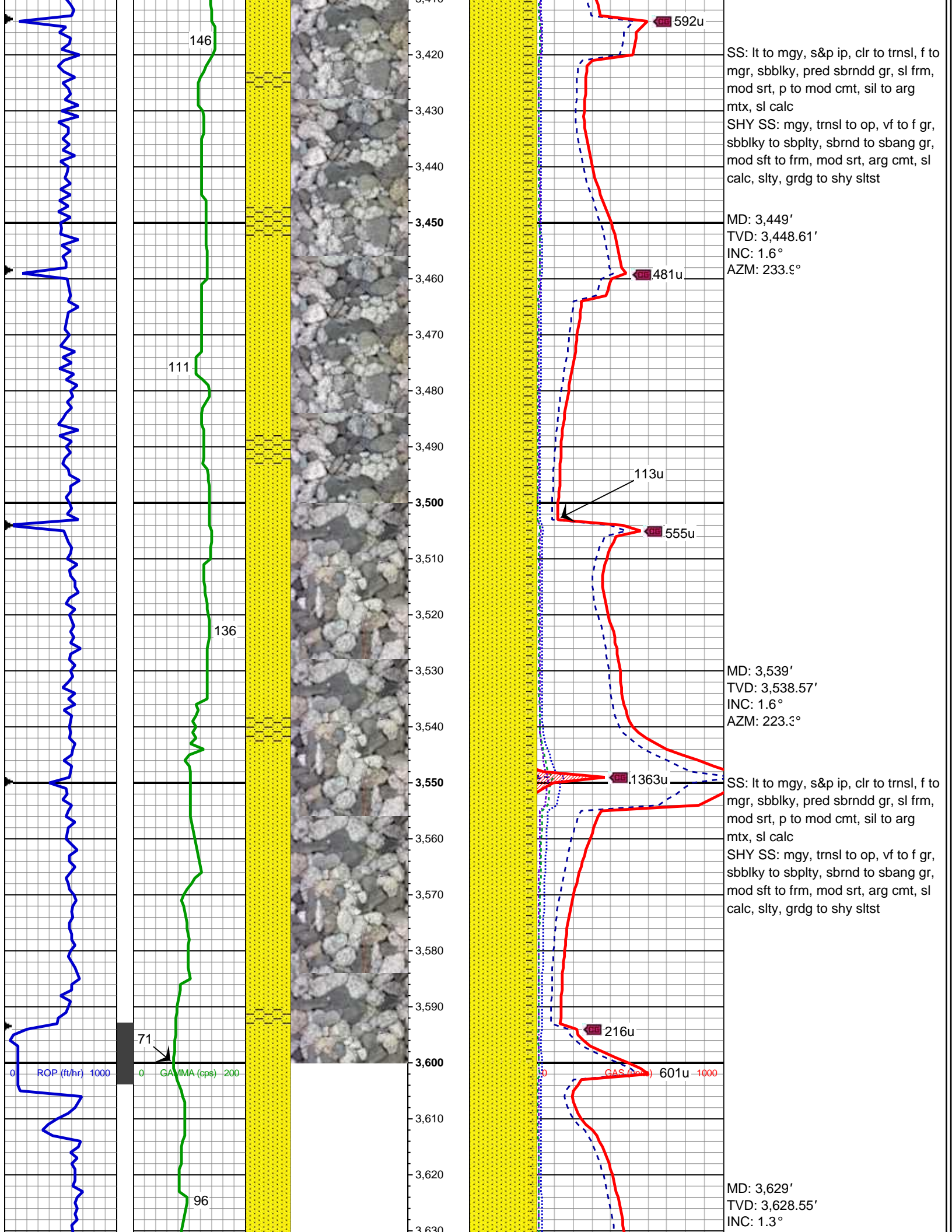


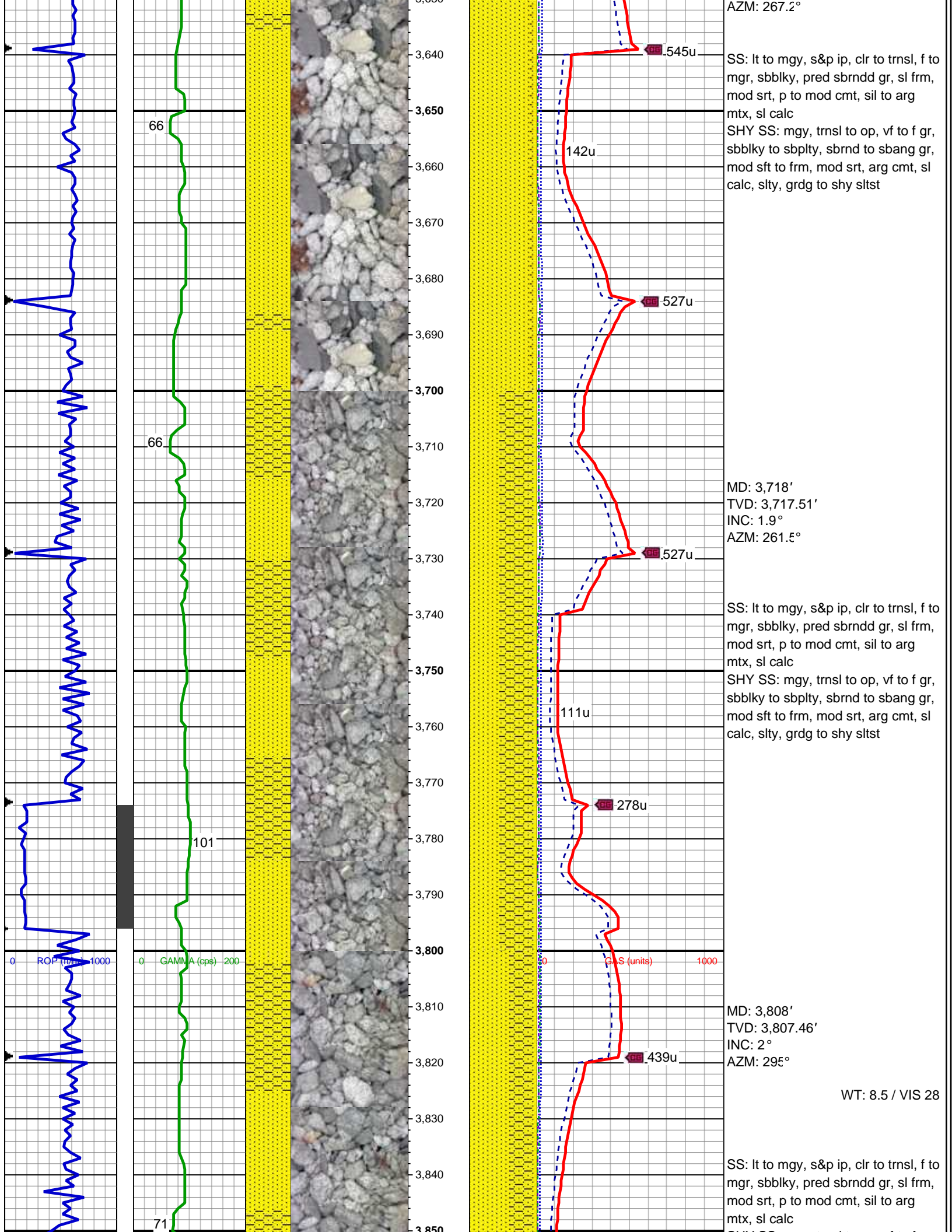


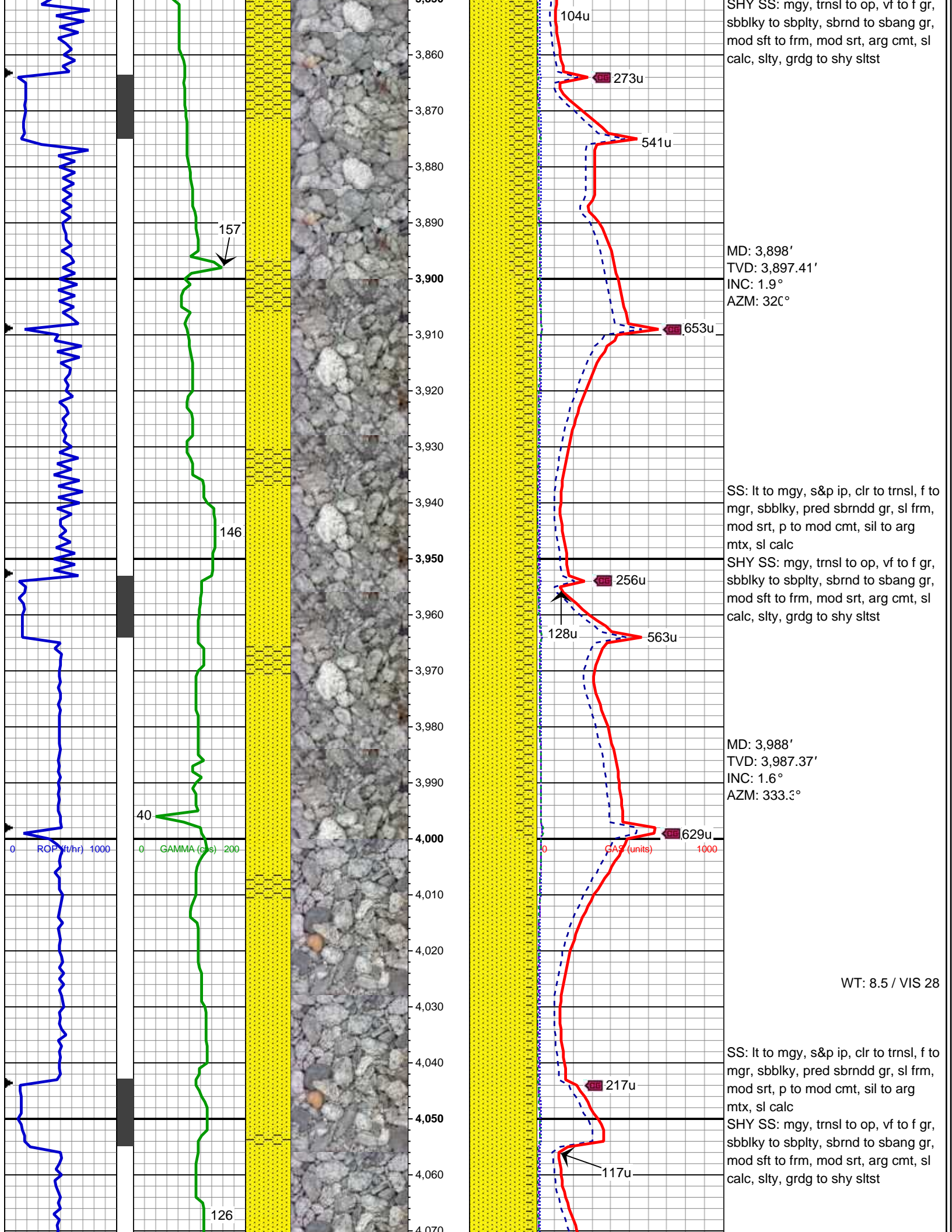


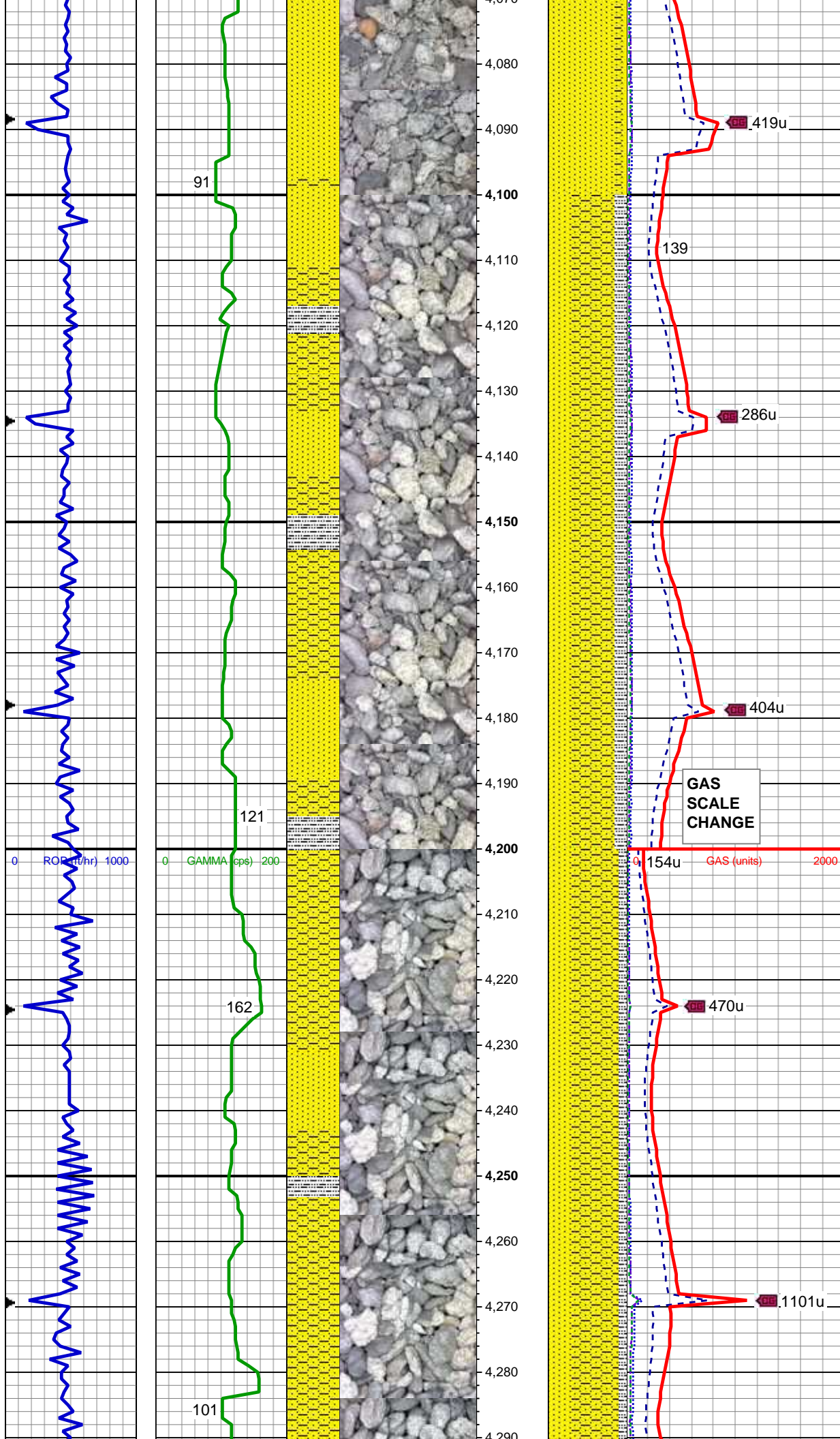












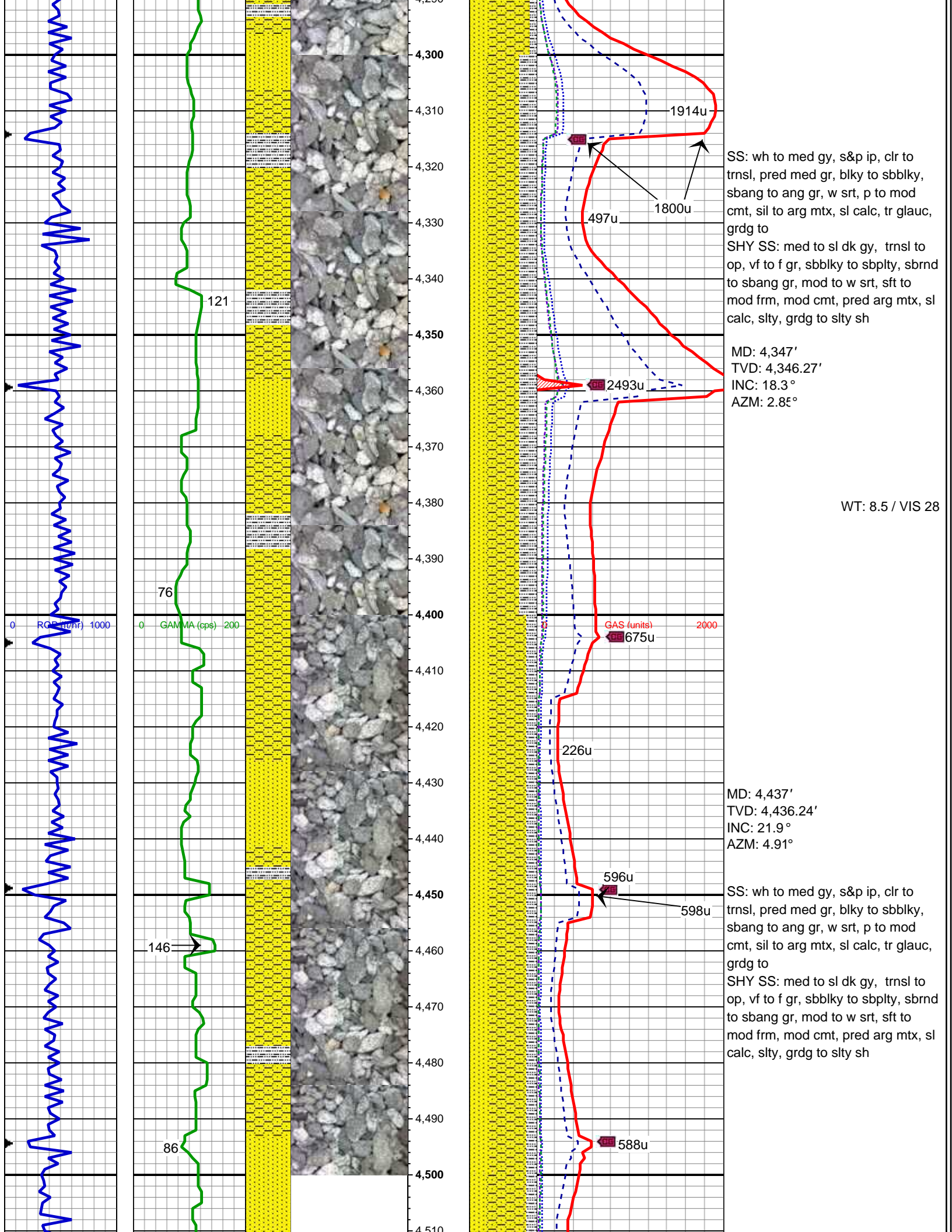
MD: 4,078'
TVD: 4,077.34'
INC: 18.1°
AZM: -3.32°

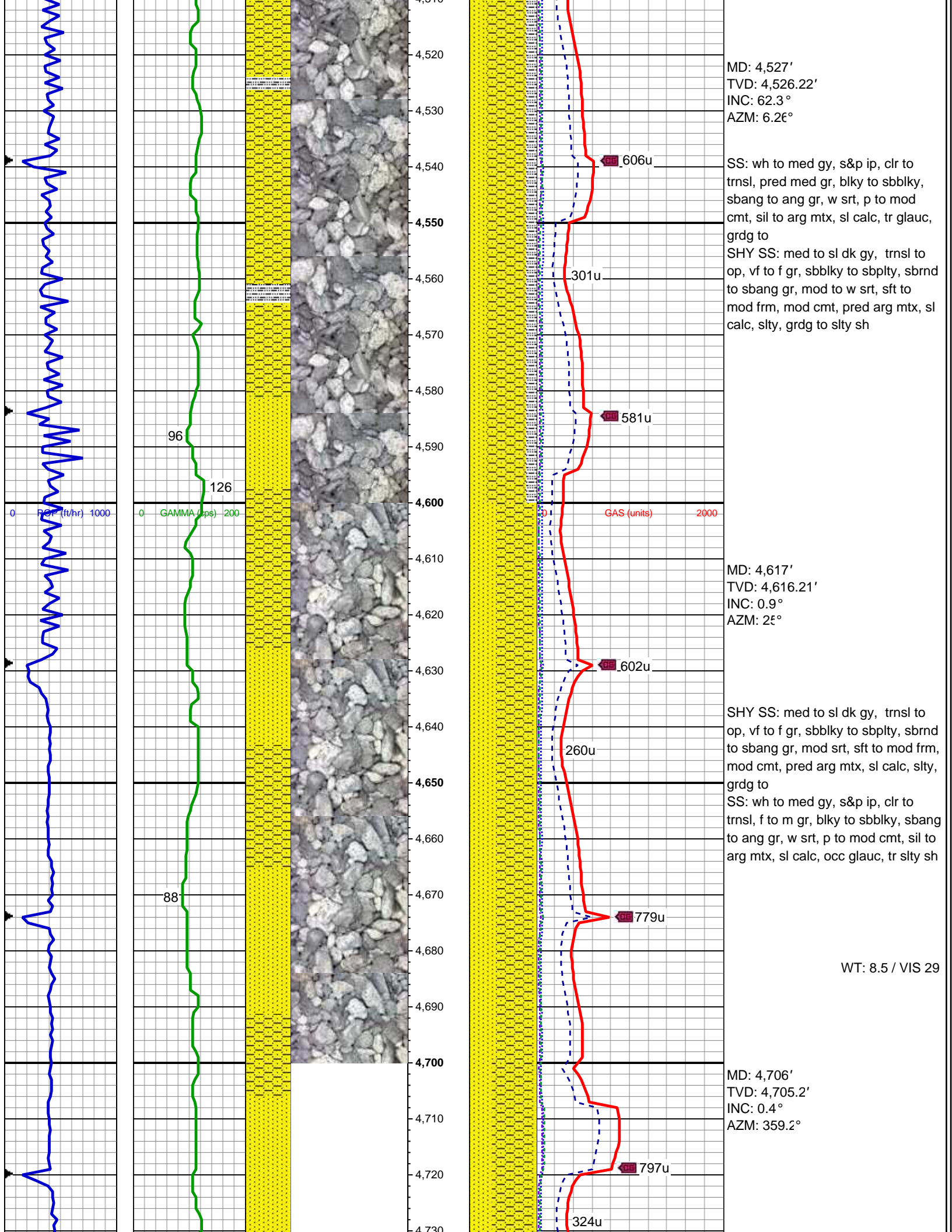
SS: wh to med gy, s&p ip, clr to trnsl, pred med gr, blkly to sbbly, sbang to ang gr, w srt, p to mod cmt, sil to arg mtx, sl calc, tr glauc, grdg to
SHY SS: med to sl dk gy, trnsl to op, vf to f gr, sbbly to sbply, sbrnd to sbang gr, mod to w srt, sft to mod frm, mod cmt, pred arg mtx, sl calc, slty, grdg to slty sh

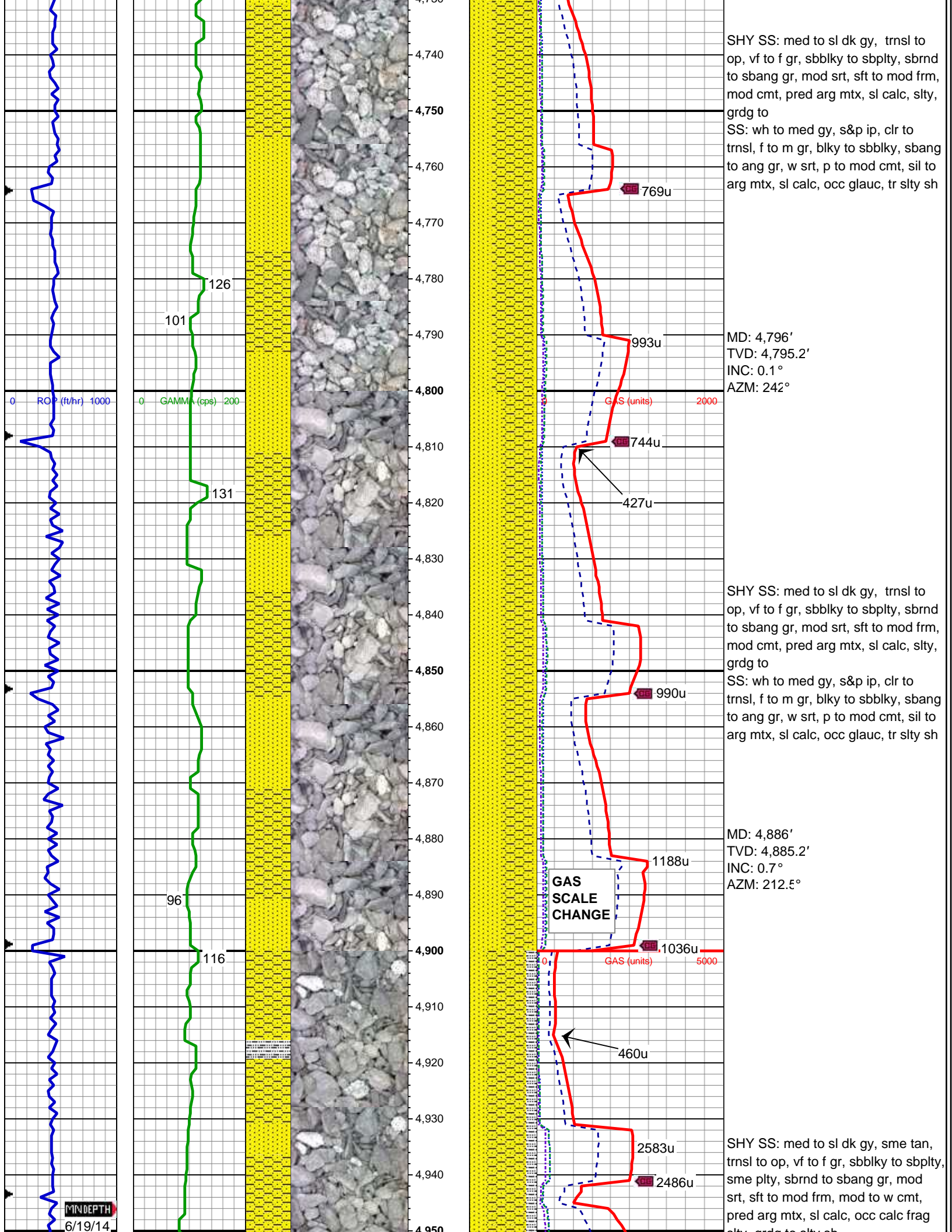
MD: 4,168'
TVD: 4,167.32'
INC: 15.6°
AZM: -1.21°

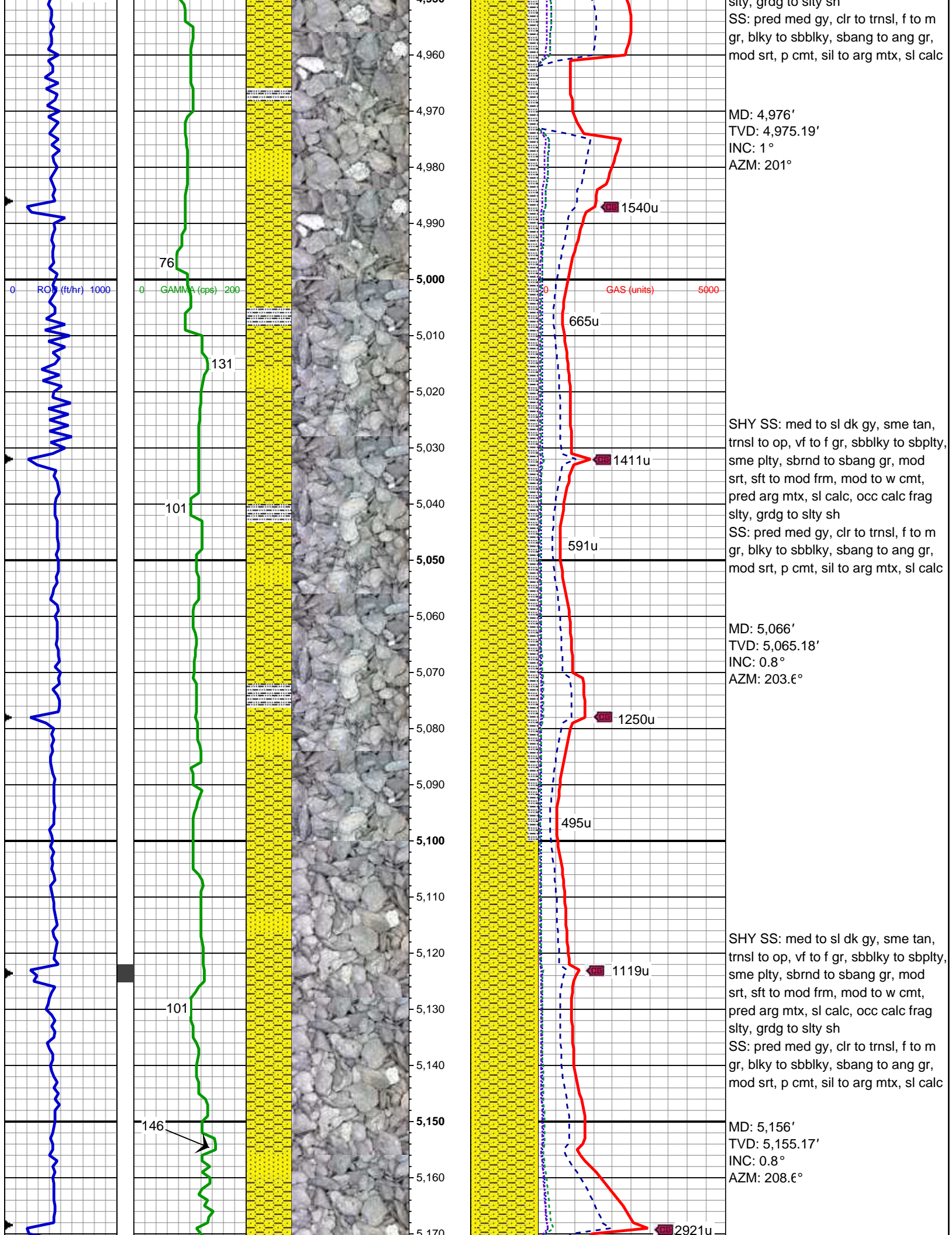
SS: wh to med gy, s&p ip, clr to trnsl, pred med gr, blkly to sbbly, sbang to ang gr, w srt, p to mod cmt, sil to arg mtx, sl calc, tr glauc, grdg to
SHY SS: med to sl dk gy, trnsl to op, vf to f gr, sbbly to sbply, sbrnd to sbang gr, mod to w srt, sft to mod frm, mod cmt, pred arg mtx, sl calc, slty, grdg to slty sh

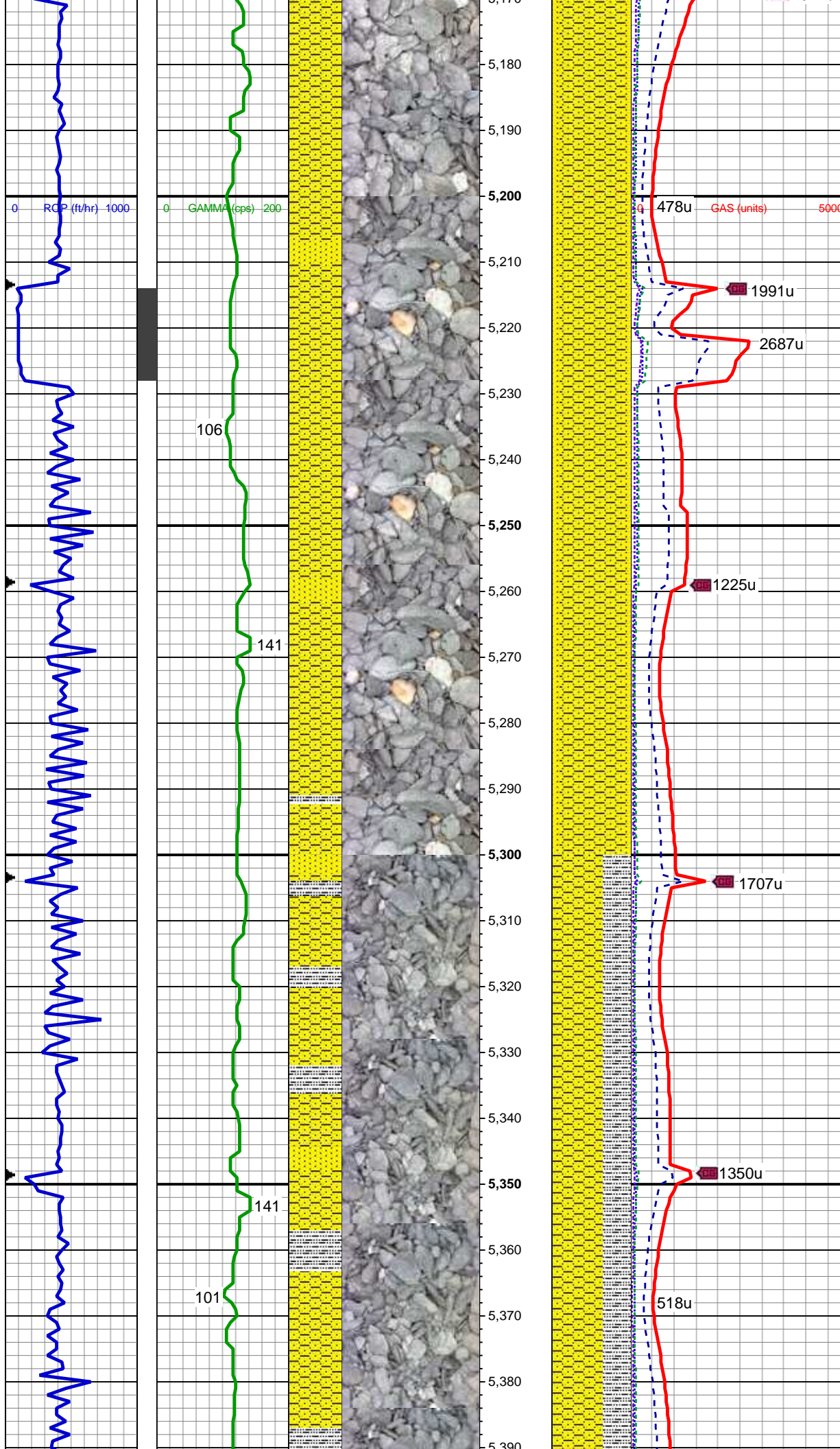
MD: 4,258'
TVD: 4,257.29'
INC: 14.1°
AZM: 0.76°











MD: 5,246'
TVD: 5,245.16'
INC: 0.8°
AZM: 112.6°

SHY SS: med to sl dk gy, sme tan, trnsl to op, vf to f gr, sbblky to sbplty, sme plty, sbrnd to sbang gr, mod srt, sft to mod frm, mod to w cmt, pred arg mtx, sl calc, occ calc frag slty, grdg to slty sh
SS: pred med gy, clr to trnsl, f to m gr, blkly to sbblky, sbang to ang gr, mod srt, p cmt, sil to arg mtx, sl calc

MD: 5,336'
TVD: 5,335.16'
INC: 0.4°
AZM: 112°

SHY SS: med to sl dk gy, sme tan, trnsl to op, vf to f gr, sbblky to sbplty, sme plty, sbrnd to sbang gr, mod srt, sft to mod frm, mod to w cmt, pred arg mtx, sl calc, occ calc frag slty, grdg to slty sh
SS: pred med gy, clr to trnsl, f to m gr, blkly to sbblky, sbang to ang gr, mod srt, p cmt, sil to arg mtx, sl calc

