

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name HIGHWAY 160 16C-2HZ

Location NW/NE SEC. 2, T1N, R66W

State COLORADO

Country USA

API Number 0512338029

Region DJ BASIN

Spud Date 11/23/2013

Surface Coordinates 636' FNL & 1532' FEL

40.085614 -104.740313

Bottom Hole Coordinates 1' FSL & 720' FEL

40.073155 -104.737425

Ground Elevation 5102'

K.B. Elevation 5119'

Logged Interval 6900' To 12663'

Total Depth 5763'

Formation CODELL

Type of Drilling Fluid FSNL

County WELD

Rig Number ENSIGN 132

AFE # 2085776

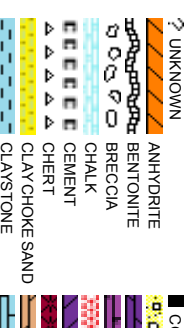
Field WATTENBERG

Drilling Completed 11/28/2013

Company ANADARKO PE
Address 1099 18th St, S
Denver, CO 80202

Name JAKE STUART
Company ANADARKO PE
Address 1099 18th St, S
Denver, CO 80202

SHANA



Operator

ETROLEUM INC.

uite 1800
202

Geologist

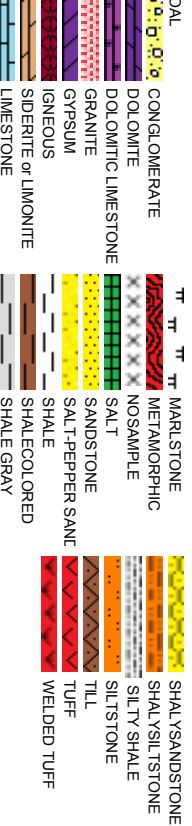
ETROLEUM INC.

uite 1800
202

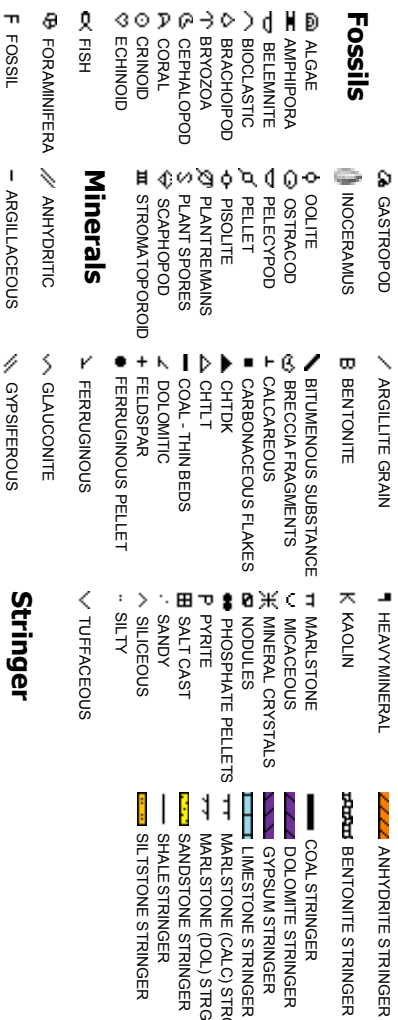
Other

SWIRIN, TOM WRIGHT

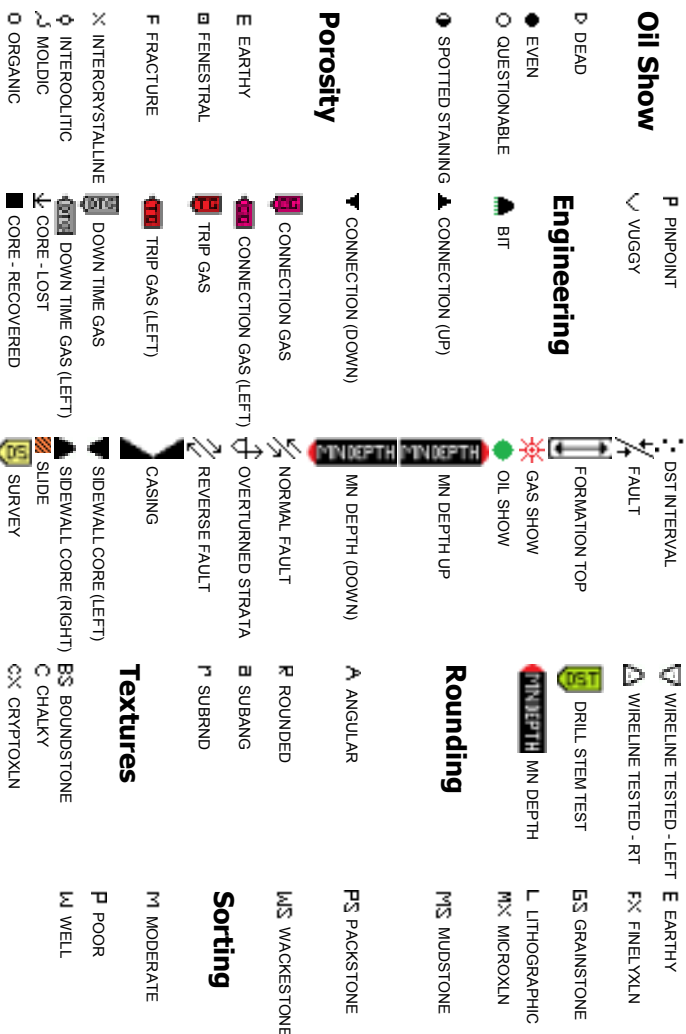
Rock Types



Accessories



Other Symbols



Slide/Rotate

Columbine Logging Two Person
Rigged Up 0700hrs 11/23/2013
With Bloodhound Unit # 0313

2757u
C1: 69.5%
C2: 18.9%
C3: 11.6%
C4: 0.0%

Problems with Gamma

ROP
ROF
GAMMA

Logging Started @
0255hrs 11/24/2013
at 6900' MD

Total Gas & Chromatograph

GAS
C1
C2
C3
C4

Bit Data
Bit #: 02
Type: SMITH SDI611MPX
Size: 8.75
Depth In: 1,240'
Depth Out: 8,048'
Jets: 3x14 3x15
S/N: JH6568

Depth Labels

6,850

6,900

6,950

% Lith

Begin in Sussex Formation

Well Bore
TVD

Acetone was used as the cutting agent with the dimple filled to the rim
The ratings are based on 7 descriptors:
None, Slight trace, Trace,Fair, Moderate, Good, and Excellent.The descriptor used is based on the loggers observations and best judgement of brilliance, color and longevity of the cut.

MD:6,923'
TVD:6,802.2'
Inclination: 0.33°
Azimuth: 30.32°
VS:-721.53'

SLTY SH: lt-med gy,sb
ply-sb blkly, mod sft-frm, w
srt, sb rnd-sb ang, mod fri,
tr shy ss, sting bl cut, dull
yel ring

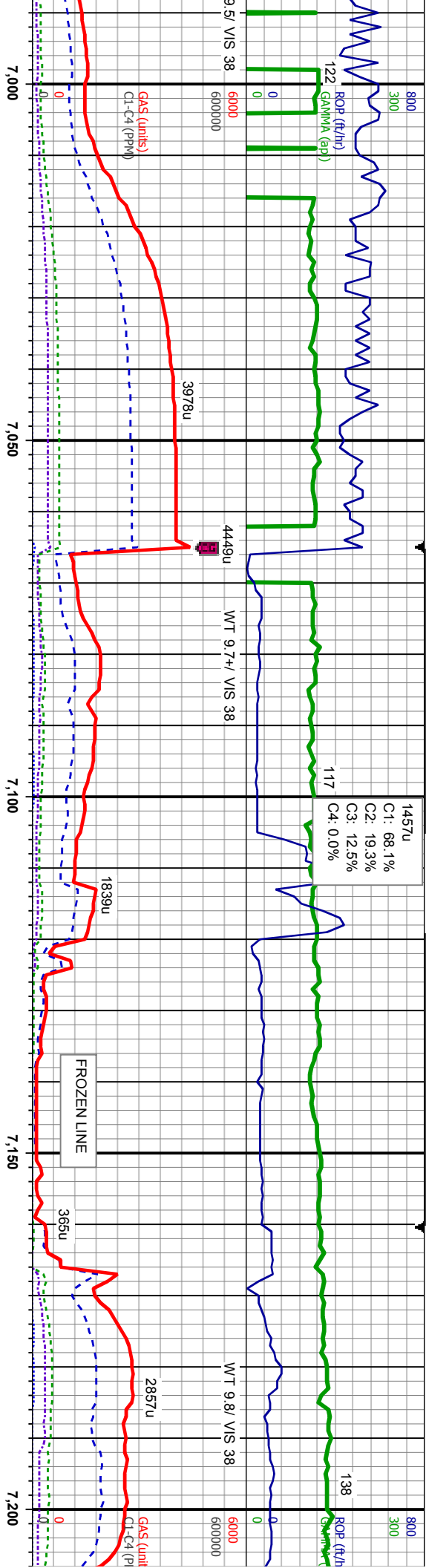
SLTY SH: lt-med gy,sb
ply-sb blkly, mod sft-frm,
srt, sb rnd-sb ang, mod f
tr shy ss, sting bl cut, du
yel ring

Oil Show

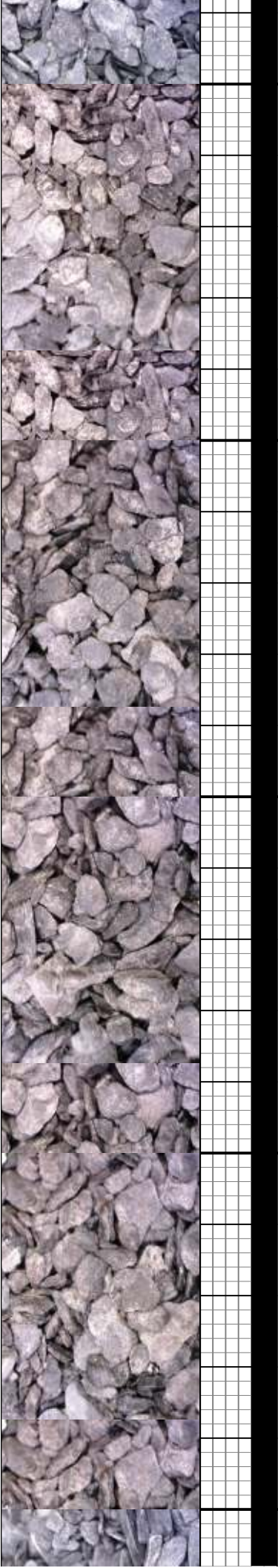
ST
FM
CE

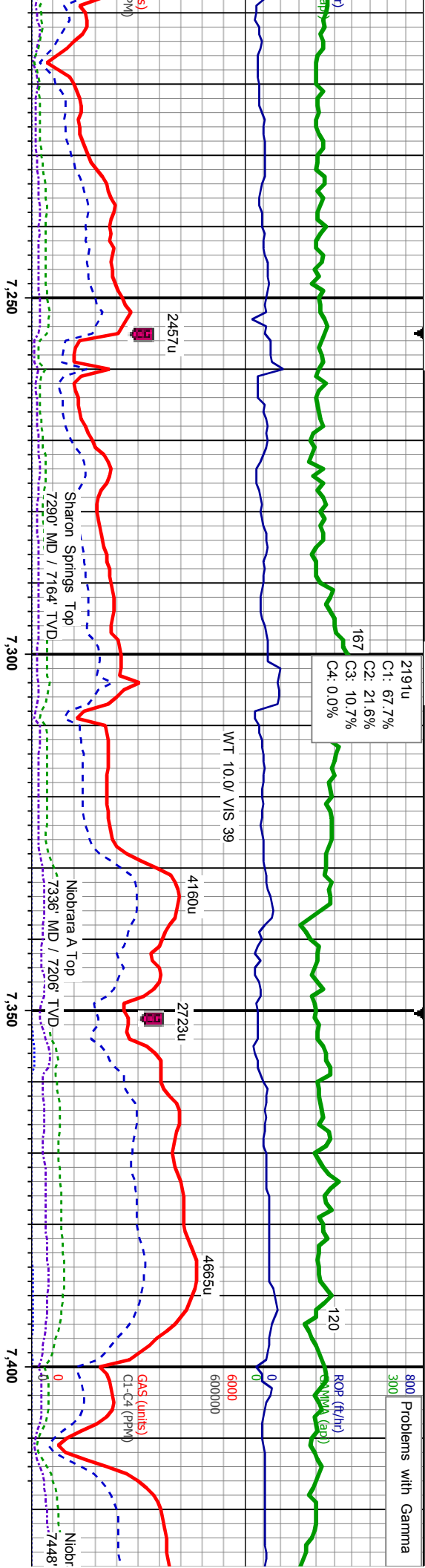
Images



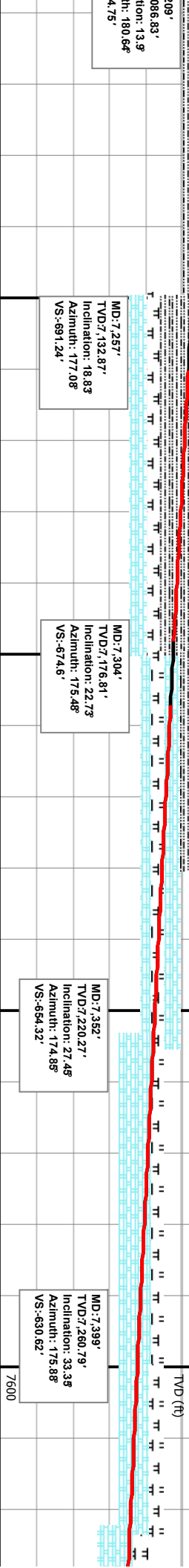


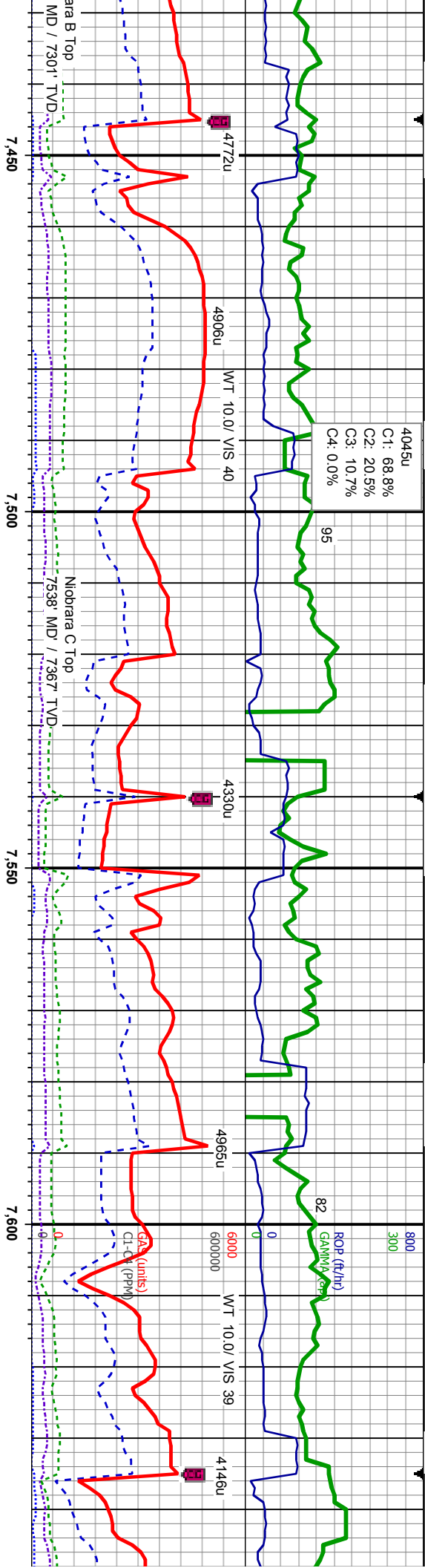
6700	MD:7.018' TVD:6,897.2' Inclination: 0.4° Azimuth: 8.48° VS:-722.09°	SLTY SH: lt-med gy, sb ply-sb blkly, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, sting bl cut, dull yel ring
6700	MD:7.066' TVD:6,945.2' Inclination: 0.57° Azimuth: 174.79° VS:-722.02°	SLTY SH: lt-med gy, sb ply-sb blkly, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, sting bl cut, dull yel ring
6700	MD:7.113' TVD:6,992.14' Inclination: 4.6° Azimuth: 182.3° VS:-719.9°	SLTY SH: lt-med gy, sb ply-sb blkly, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, sting bl cut, dull yel ring
6700	MD:7.161' TVD:7,039.8' Inclination: 8.94° Azimuth: 181° VS:-714.25°	SLTY SH: lt-med gy, sb ply-sb blkly, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, sting bl cut, dull yel ring
7600	MD:7.161' TVD:7,039.8' Inclination: 8.94° Azimuth: 181° VS:-714.25°	SLTY SH: lt-med gy, sb ply-sb blkly, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, sting bl cut, dull yel ring





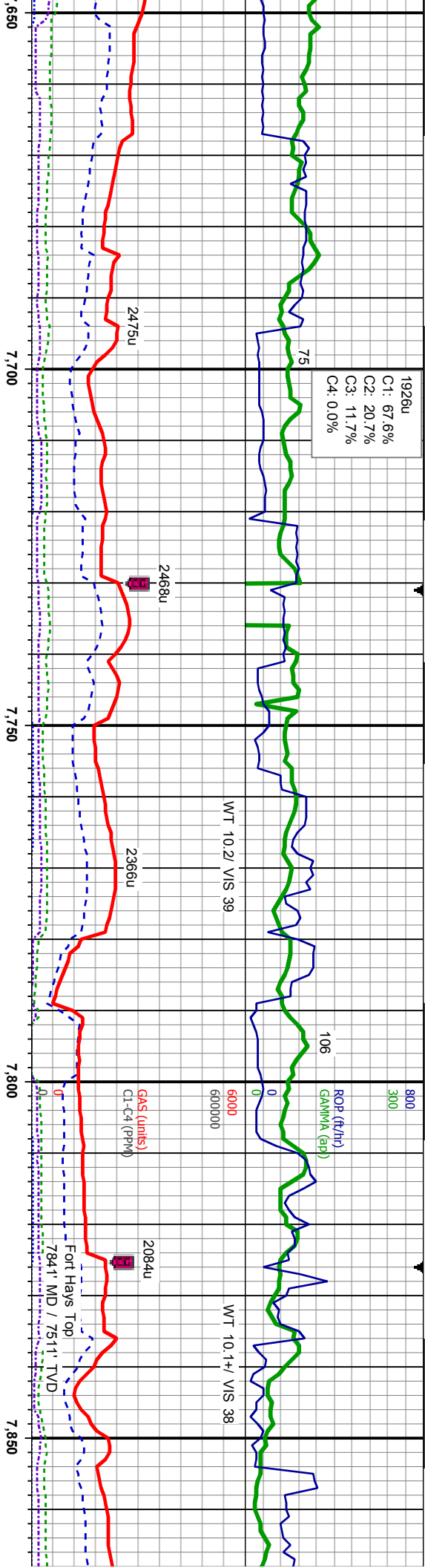
SLTY SH: lt-med gy, sb ply-sb blk, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, sting bl cut, dull yel ring	SLTY SH: lt-med gy, sb ply-sb blk, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, occ bent, sting bl cut, dull yel ring	CHK: lt gy-brn, blk-sb ply, sft-fm, sr-sb ang, mod fri, SLTY SH: lt-med gy, sb ply-sb blk, mod sft-fm, w srt, sb md-sb ang, mod fri, tr shy ss, r bent, sting bl cut, bl ring	CHK: lt gy-brn, blk-sb ply, sft-fm, sb rd-sb ang, mod fri, MRLST: med gy-brn, blk-sb ply, sft-fm, sb rd-sb ang, mod fri, sting bl cut, bl ring	CHK: lt gy-brn, t sft-fm, sb rd-sb fri, MRLST: mec blk-sb ply, sft- rd-sb ang, mod cut, bl ring
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ang, mod gy-brn, frm, sb fri, sting bl	CHK: lt gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, MRLST: med-dk gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, sting bl cut, bl ring	CHK: lt gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, MRLST: med-dk gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, sting bl cut, bri bl ring	CHK: lt gy-brn, occ cm, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, MRLST: med-dk gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, sting bl cut, bri bl ring	6700	CHK: lt-med gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, MRLST: med-dk gy-brn, blk-ysb pty, sft-frm, sb rd-sb ang, mod fri, sting bl cut, bri bl ring
MD: 7.447' TVD: 299.83' Inclination: 37.77° Azimuth: 176.9° VS: 602.77'	MD: 7.494' TVD: 335.61' Inclination: 43.01° Azimuth: 176.02° VS: 572.38'	MD: 7.542' TVD: 369.48' Inclination: 47.21° Azimuth: 176.1° VS: 538.45'	MD: 7.589' TVD: 400.14' Inclination: 51.35° Azimuth: 177.62° VS: 502.89'	TVD (ft)	MD: 7.637' TVD: 427.96' Inclination: 57.78° Azimuth: 178.5° VS: 463.82'





CHK: lt gy-brn, occ crm,
blky-sb pty, sft-fm, sb
rd-sb ang, mod fri, MRLST:
med-dk gy-brn, blky-sb pty,
sft-fm, sb rd-sb ang, mod
fri, sting bl cut, dull yel ring

MD: 7,684'
TVD: 7,451.59'
Inclination: 61.86°
Azimuth: 180.16°
VS: 423.21'

CHK: lt gy-brn, occ crm,
blky-sb pty, sft-fm, sb
rd-sb ang, mod fri, MRLST:
med-dk gy-brn, blky-sb pty,
sft-fm, sb rd-sb ang, mod
fri, sting bl cut, dull yel ring

MD: 7,732'
TVD: 7,472.69'
Inclination: 65.98°
Azimuth: 180.99°
VS: 380.11'

CHK: lt gy-brn, occ crm,
blky-sb pty, sft-fm, sb
rd-sb ang, mod fri, MRLST:
med-dk gy-brn, blky-sb pty,
sft-fm, sb rd-sb ang, mod
fri, sting bl cut, dull yel ring

MD: 7,779'
TVD: 7,490.84'
Inclination: 68.58°
Azimuth: 180.75°
VS: 336.77'

6700

LMST: lt gy-brn, offwht-crm,
mod sft-mod hd, sb blky-sb
pty, SH: blk-dk gy, sb
pty-pty, mod sft-fm, CHK:
lt gy-brn, occ crm, blky-sb
pty, sft-fm, sb rd-sb ang,
mod fri, sting bl cut, dull yel
ring

TVD (ft)

MD: 7,827'
TVD: 7,507.01'
Inclination: 72.04°
Azimuth: 181.47°
VS: 291.59'

LMST:
mod sft
pty, SH:
pty-pty
bl cut,

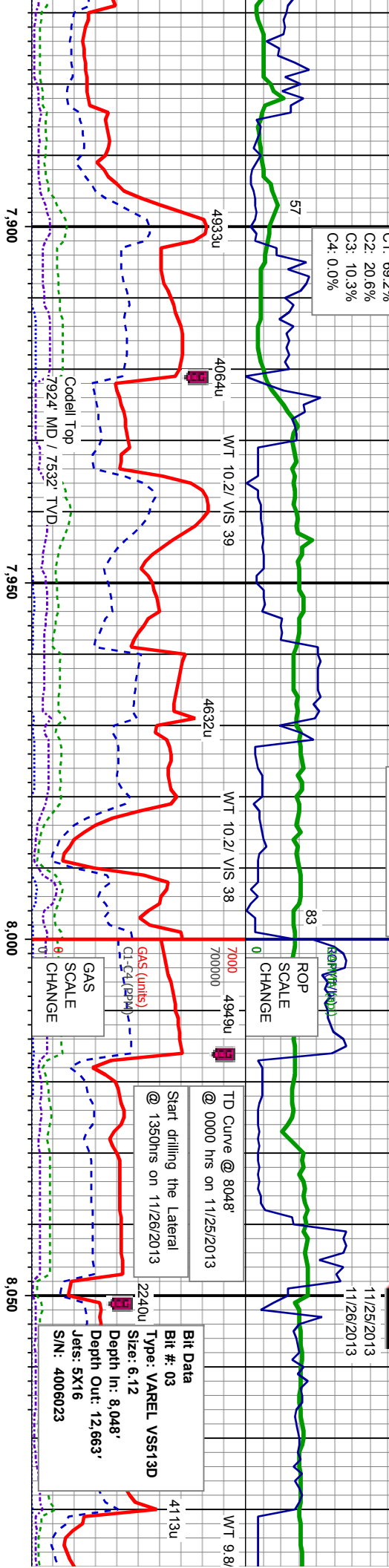


2599u

C1: 69.2%
C2: 20.6%
C3: 10.3%
C4: 0.0%

Problems with Gamma

11/25/2013
11/26/2013



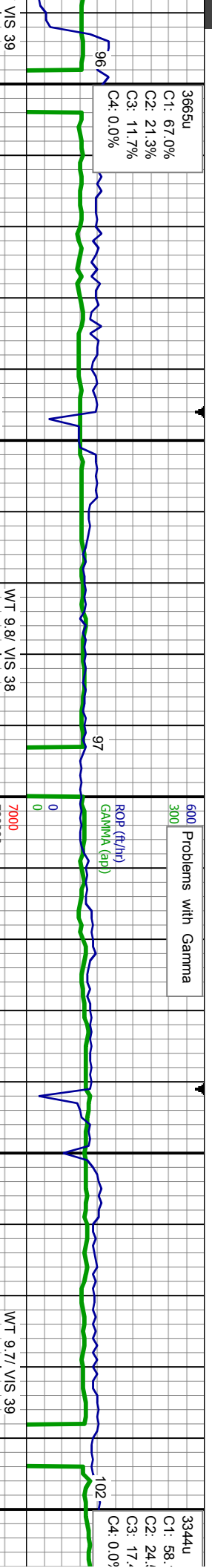
it gy-brn, offwht-crm, t-mod hd, sb blk-ysb	LMST: it gy-brn, offwht-crm, mod sft-mod hd, sb blk-ysb	SS: lt-med gy-brn, clus, w srt, mod sft-hd, w rd, med gr, non-sl calc, SH: blk-dk gy, sb ply-ply, mod sft-frm, tr LMST: it gy-brn, offwht-crm, mod sft-mod hd, sb blk-ysb ply, stmg bl cut, bl ring	SS: lt-med gy-brn, lse lith, occ clus, w srt, mod sft-hd, w rd, med gr, non-sl calc, SH: blk-dk gy, sb ply-ply, mod sft-frm, stmg bl cut, bl ring	SS: lt-med gy-brn, lse lith w srt, mod sft-hd, w rd, med gr, non-sl calc, SH: blk-dk gy, sb ply-ply, mod sft-frm, abnt bit, stmg bl cut, bl ring
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MD: 7.874' TVD: 7,520.19' Inclination: 75.39° Azimuth: 180.88° VS: -246.5'	MD: 7.922' TVD: 7,531.11' Inclination: 78.3° Azimuth: 180.79° VS: -199.77'	MD: 7.969' TVD: 7,539.19' Inclination: 81.9° Azimuth: 180.77° VS: -153.48'	MD: 8.001' TVD: 7,542.95' Inclination: 84.6° Azimuth: 180.6° VS: -121.71'
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3665u

C1: 67.0%
C2: 21.3%
C3: 11.7%
C4: 0.0%



V/S 39

4567u

WT 9.8/ V/S 38

97

ROP (ft/hr)
GAMMA (cp)

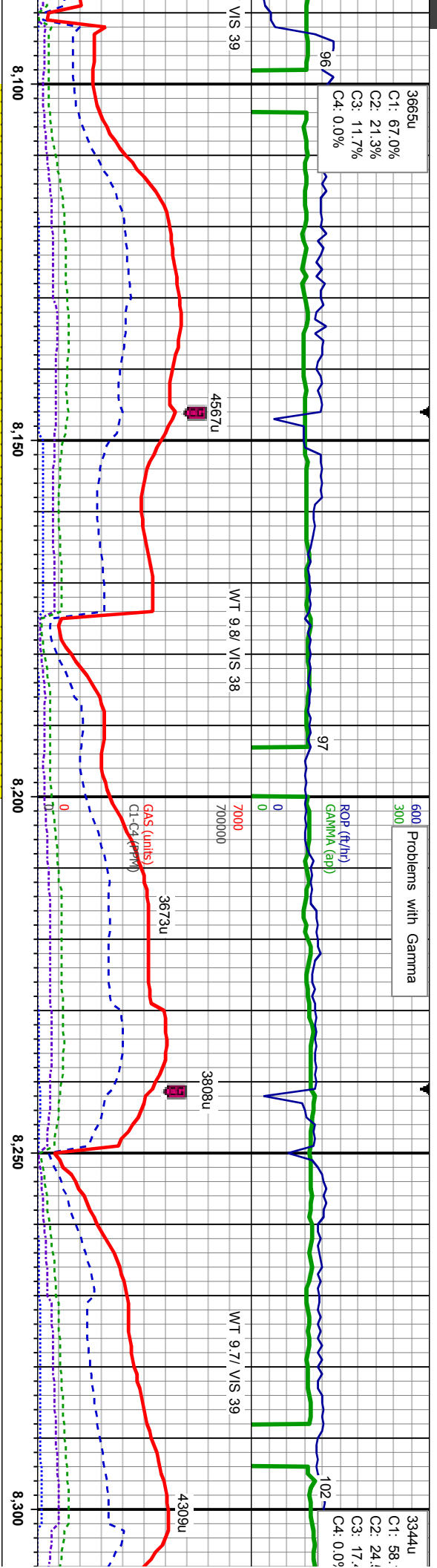
3808u

WT 9.7/ V/S 39

102

3344u

C1: 58.
C2: 24.
C3: 17.
C4: 0.0%



8,100

8,150

8,200

8,250

8,300

GAS (units)
CL (CL-PPM)

3673u

3808u

4309u

SS: lt-med gy-brn, lse lith,
w srt, mod sft-hd, w rd,
med gr, non-sl calc, tr SH:
blk-dk gy, sb pily-pily, mod
sft-frm, rr bit, sting bl cut,
dull bl ring

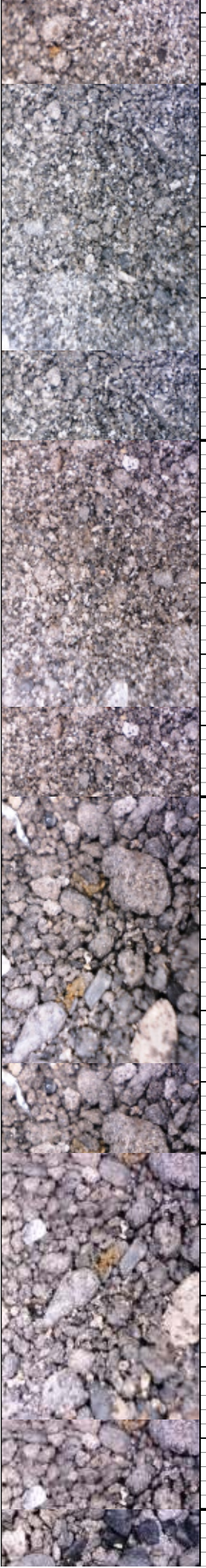
SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pily,
mod sft-frm, sting bl cut,
dull bl ring

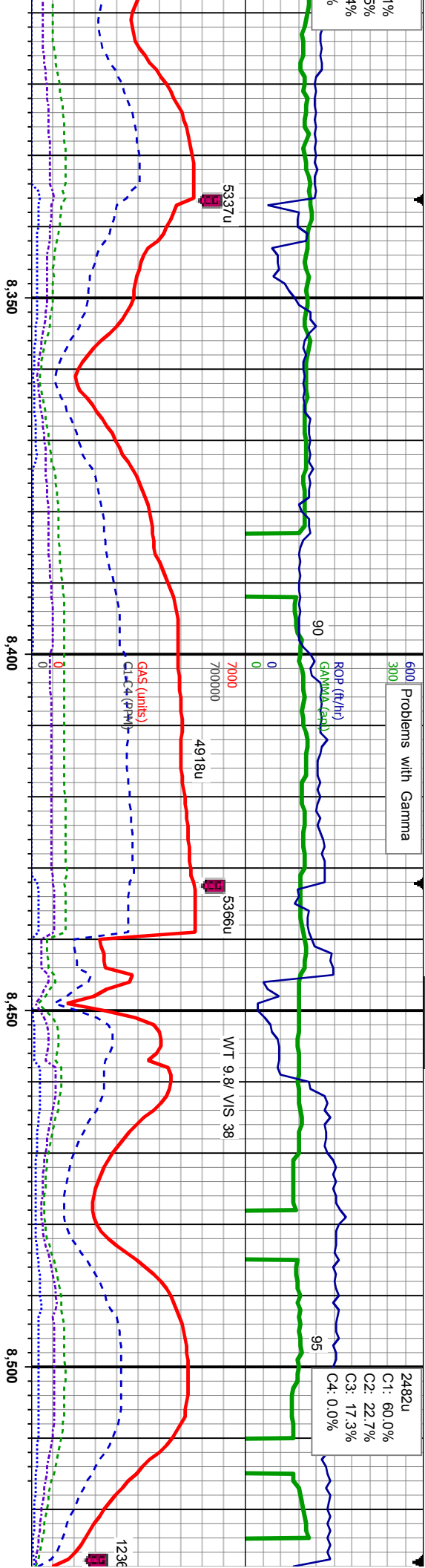
MD: 8,129'
TVD: 7,547.39'
Inclination: 91.42
Azimuth: 180.18
VS: 6.13

MD: 8,200'
TVD: 7,544.01'
Inclination: 91.29
Azimuth: 179.58
VS: 7.16

MD: 8,295'
TVD: 7,542.09'
Inclination: 91.02
Azimuth: 178.82
VS: 17.13

7600



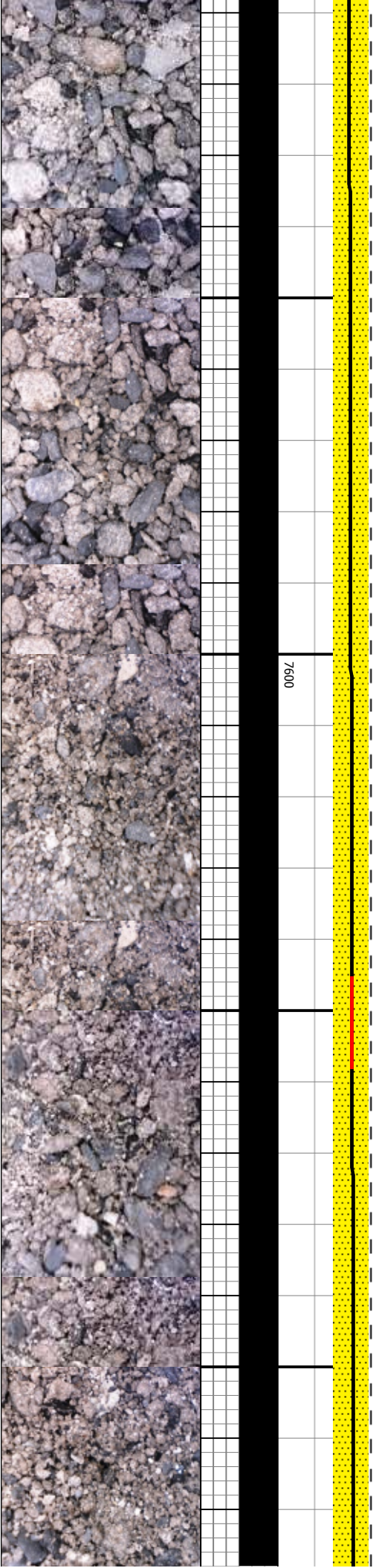


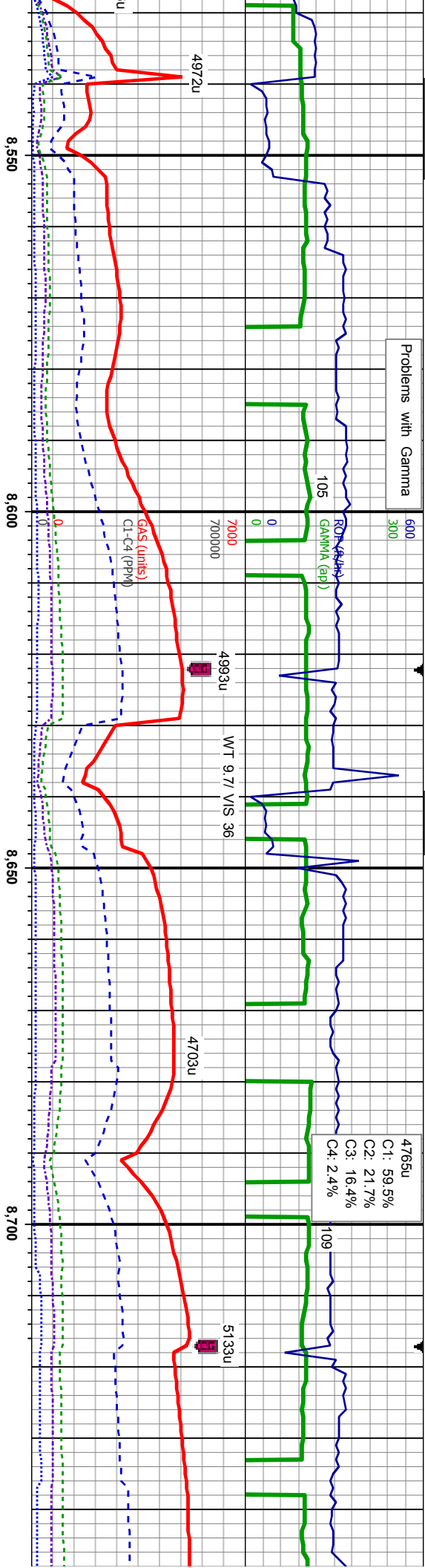
SS: lt-med gy-bm, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pty-pty,
mod sft-frn, sting bl cut,
dull bl ring

MD: 8,390'
TVD: 540.45'
Inclination: 90.98°
Azimuth: 178.04°
VS: 267.09

SS: lt-med gy-bm, lse lith,
w srt, mod sft-hd, w rd,
med gr, non-sl calc, SH:
blk-dk gy, sb pty-pty, mod
sft-frn, sting bl cut, dull bl
ring

MD: 8,484'
TVD: 538.87'
Inclination: 90.98°
Azimuth: 180.02°
VS: 361.06





SS: lt-med gy-bm, lse lith,
w srt, mod sft-hd, w rd,
med gr, non-sl calc, SH:
blk-dk gy, sb pty-pty, mod
sft-frn, rr bit, sting bl cut,
dull bl ring

MD: 8,579'
TVD: 7,537.28'
Inclination: 88.6°
Azimuth: 179.69°
VS: 456.02'

TVD (ft)

7300

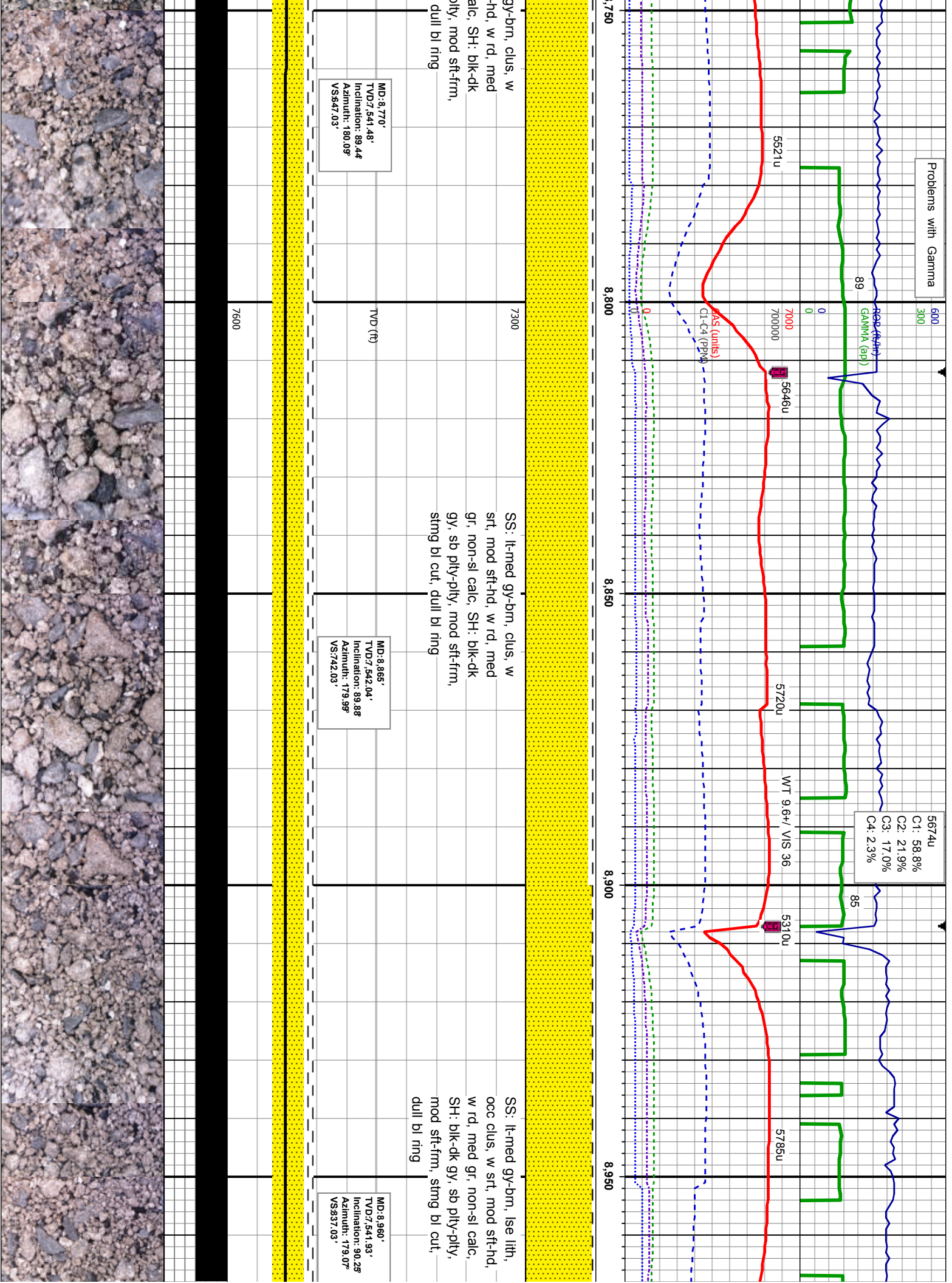
SS: lt-med gy-bm, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pty-pty,
mod sft-frn, sting bl cut,
dull bl ring

MD: 8,675'
TVD: 7,540.7'
Inclination: 89.5°
Azimuth: 180.5°
VS: 552.04'

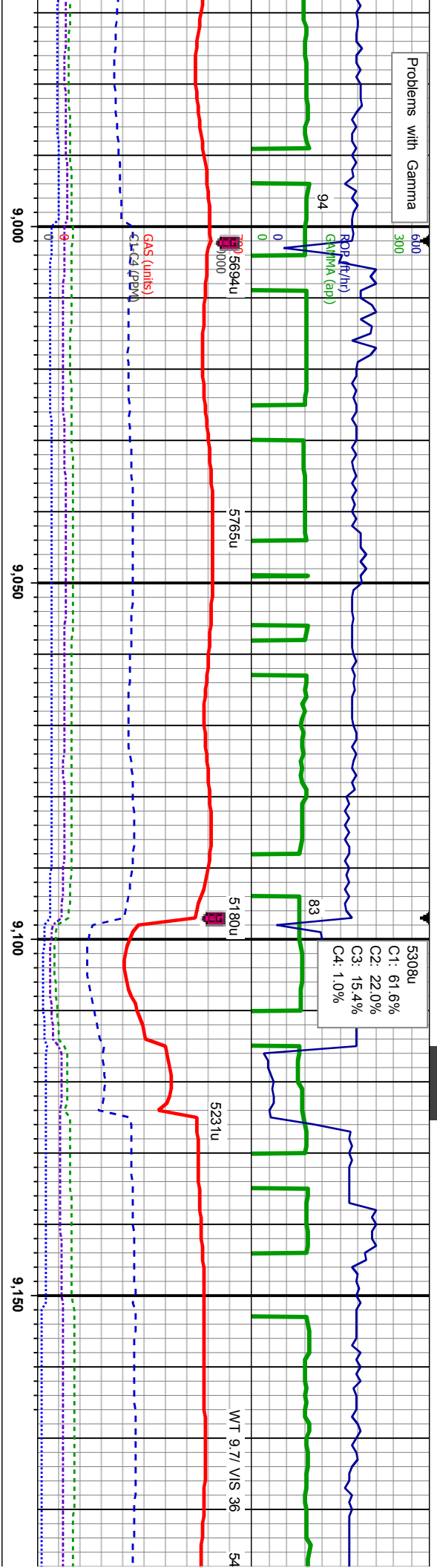
SS: lt-med
srt, mod sft
gr, non-sl c
gy, sb pty-t
sting bl cut,

7600





Problems with Gamma



C1: 61.6%
C2: 22.0%
C3: 15.4%
C4: 1.0%

SS: lt-med gy-bm, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pty,
mod sft-fm, sting bl cut,
dull bl ring

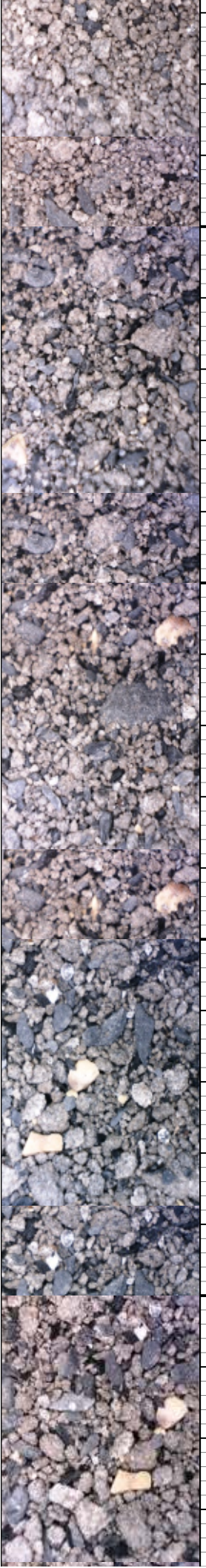
SS: lt-med gy-bm, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pty,
mod sft-fm, sting bl cut,
dull bl ring

MD: 9.055'
TVD: 7,541.42'
Inclination: 90.37°
Azimuth: 177.3°
VS: 931.98'

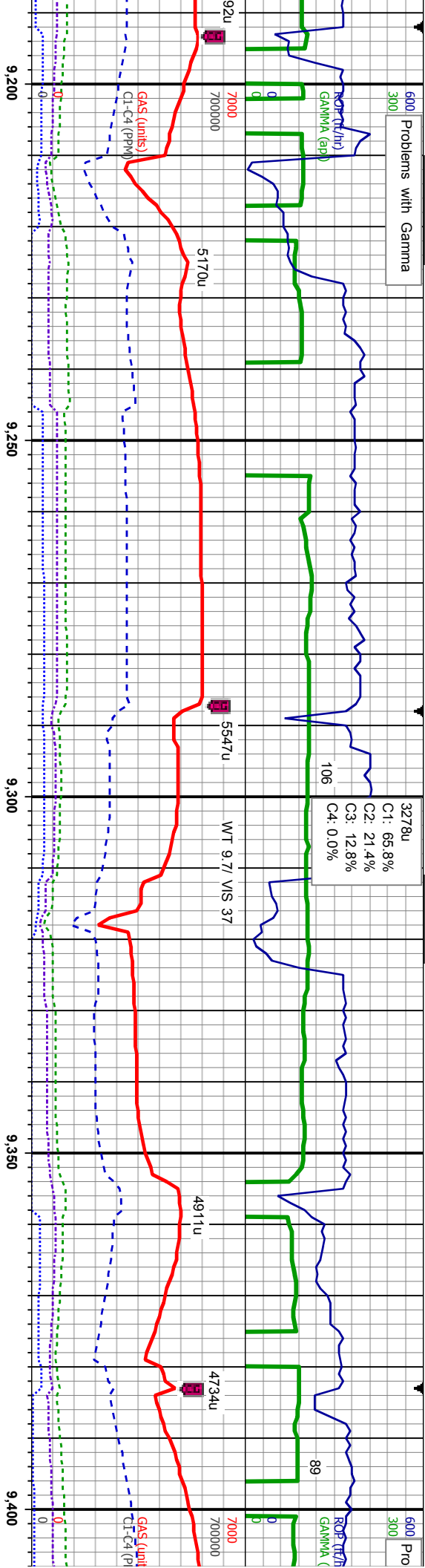
MD: 9.150'
TVD: 7,541.27'
Inclination: 89.8°
Azimuth: 178.02°
VS: 1,026.91'

TVD (ft)

7600



Problems with Gamma

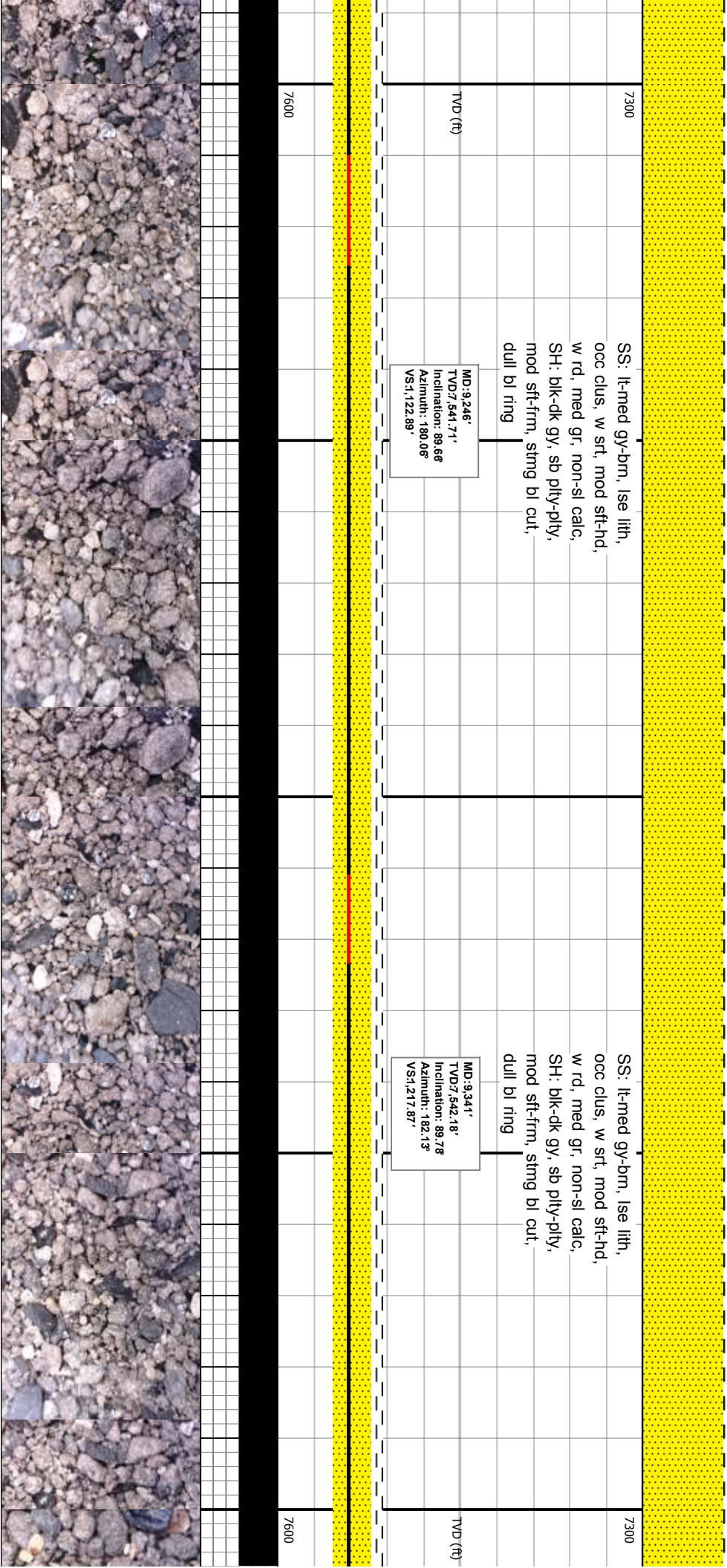


SS: lt-med gy-bm, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pty,
mod sft-fm, sting bl cut,
dull bl ring

MD: 9,246'
TVD: 7,541.71'
Inclination: 89.66
Azimuth: 180.06°
VS: 1,122.89'

SS: lt-med gy-bm, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pty,
mod sft-fm, sting bl cut,
dull bl ring

MD: 9,341'
TVD: 7,542.18'
Inclination: 89.78
Azimuth: 182.13°
VS: 1,217.87'



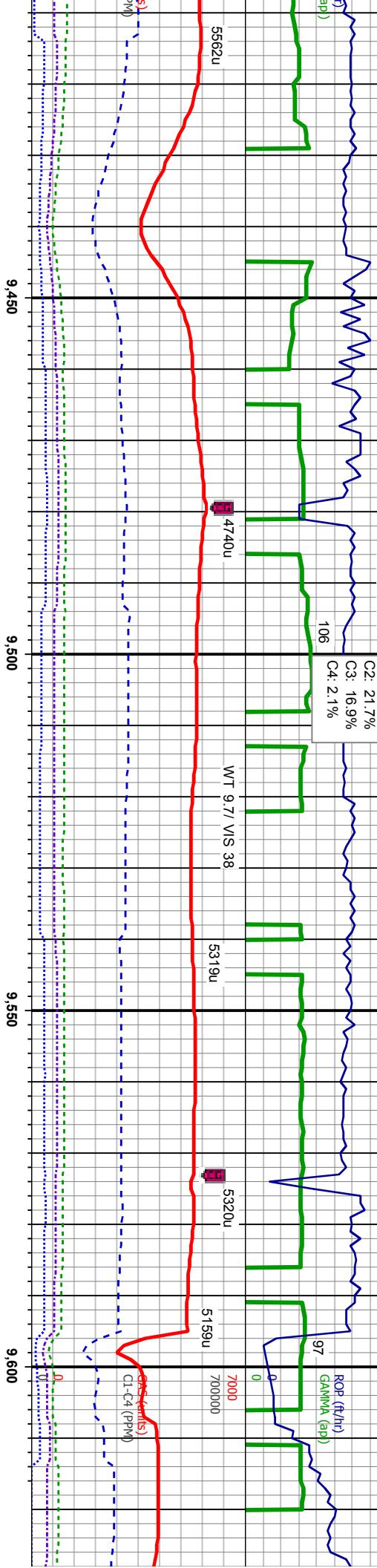
Problems with Gamma

Problems with Gamma

11/27/2013

5349u
C1: 59.2%
C2: 21.7%
C3: 16.9%
C4: 2.1%

600 Problems with Gamma
300
ROF (ft/hr)
GAMMA (cp)
7000
700000



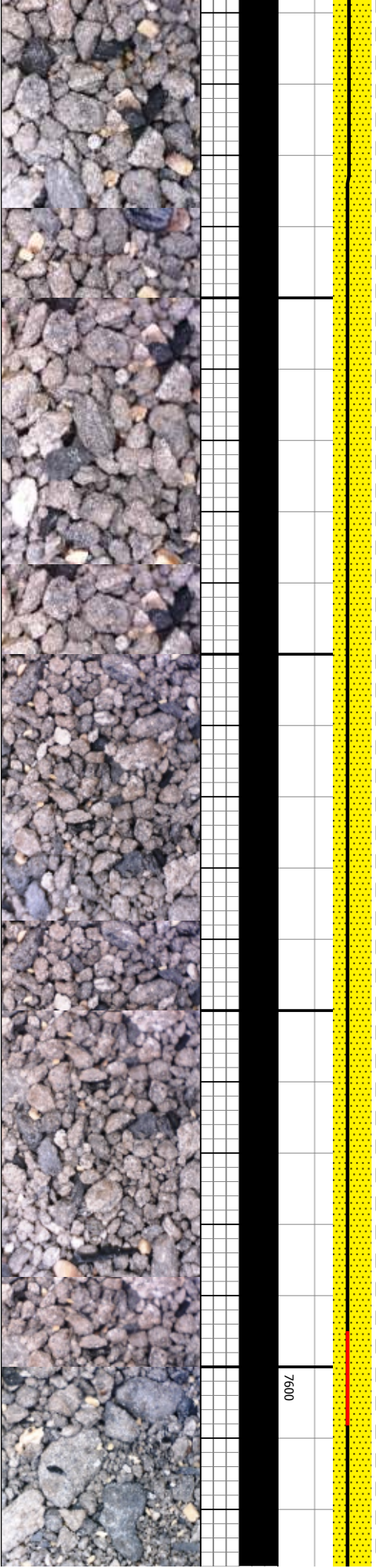
SS: lt-med gy-bm, clus, w
sft, mod sft-hd, w rd, med
gr, non-sl calc, SH: blk-dk
gy, sb ply-ply, mod sft-fm,
stmg bl cut, dull bl ring

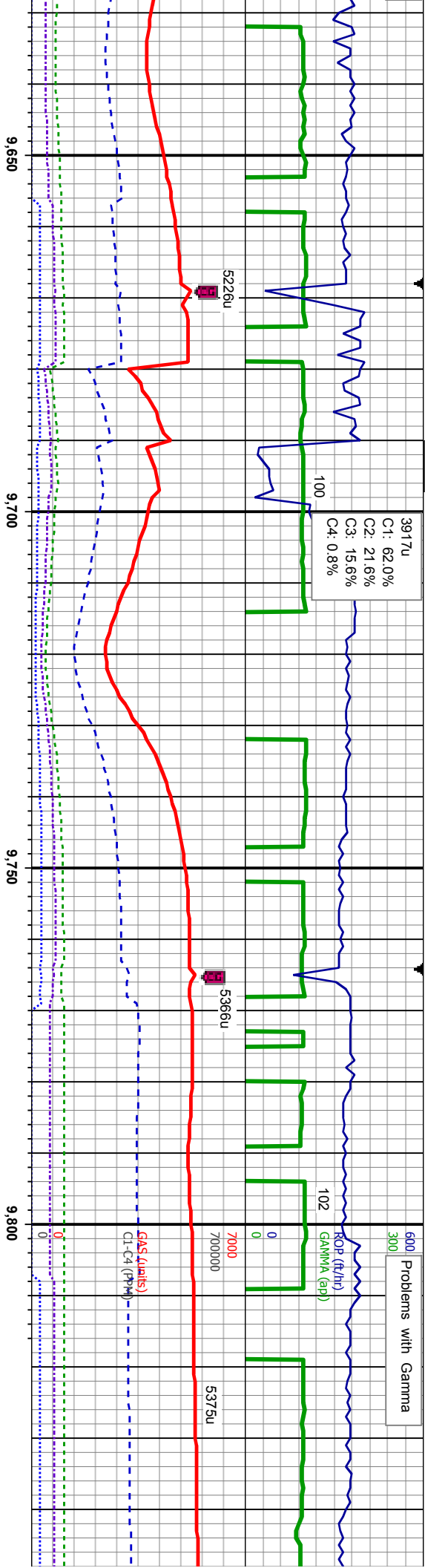
SS: lt-med gy-bm, clus, w
sft, mod sft-hd, w rd, med
gr, non-sl calc, SH: blk-dk
gy, sb ply-ply, mod sft-fm,
stmg bl cut, dull bl ring

MD: 9.436'
TVD: 7,542.59'
Inclination: 89.72°
Azimuth: 181.08°
VS: 1,312.82'

MD: 9.531'
TVD: 7,543.13'
Inclination: 89.63°
Azimuth: 179.58°
VS: 1,407.81'

MD: 9.627'
TVD: 7,544'
Inclination: 89.63°
Azimuth: 179.58°
VS: 1,503'





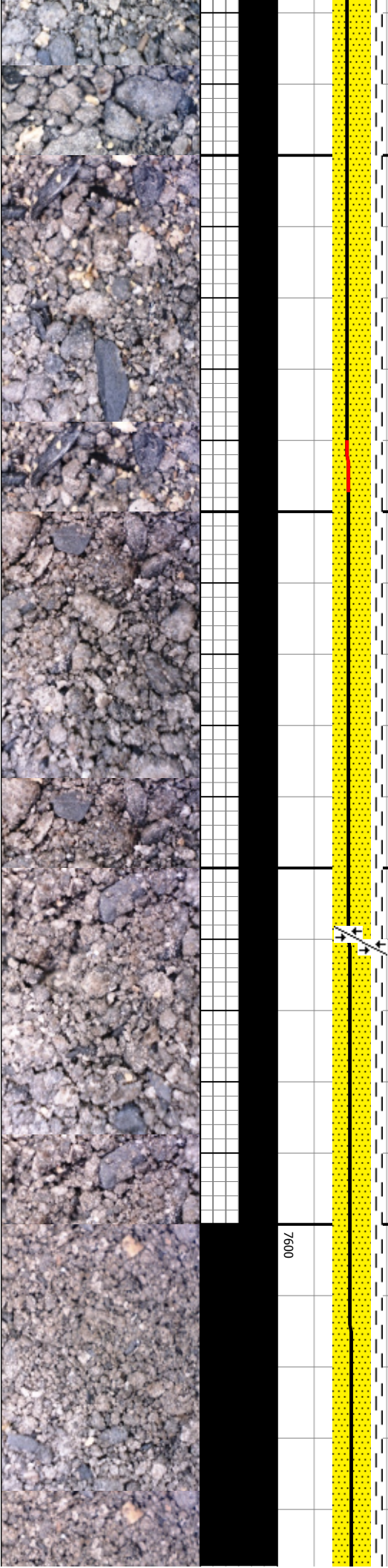
SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb plty-plty,
mod sft-frn, string bl cut,
dull bl ring

MD: 9.722'
TVD: 542.25'
Inclination: 91.14°
Azimuth: 181.32°
VS1: 598.79'

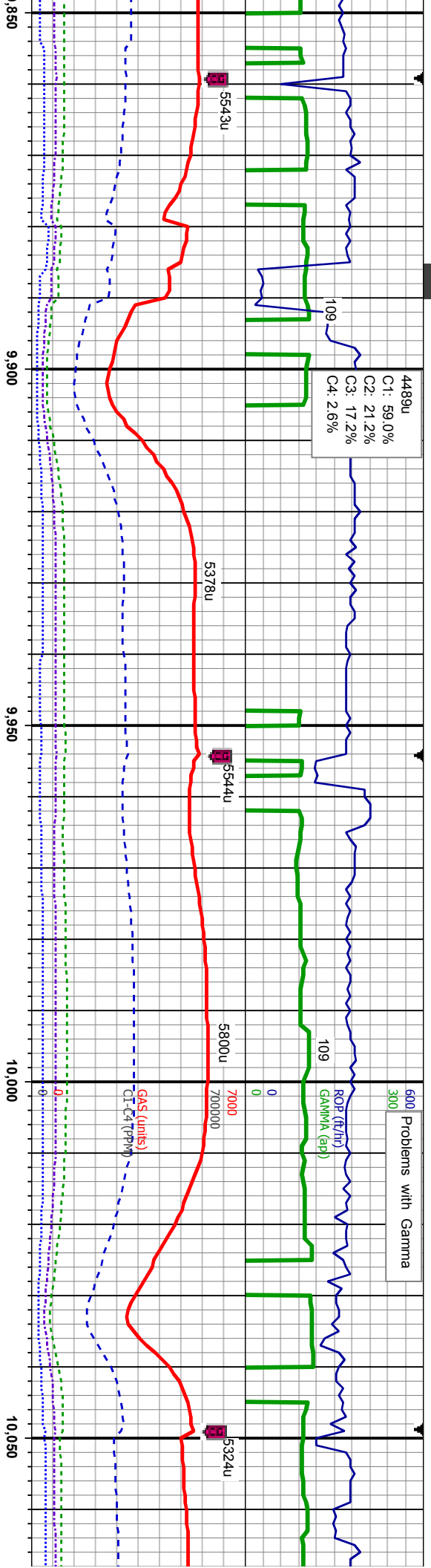
SS: lt-med gy-brn, lse lith,
abnt clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc, tr
SH: blk-dk gy, sb plty-plty,
mod sft-frn, string bl cut,
dull bl ring

MD: 9.817'
TVD: 560.17'
Inclination: 91.38°
Azimuth: 180.5°
VS1: 693.75'

SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb plty-plty,
mod sft-frn, string bl cut,
dull bl ring



Problems with Gamma



gy-brn, lse lith,
srt, mod sft-hd,
r, non-sl calc, tr
y, sb pily-pily,
sting bl cut, bri

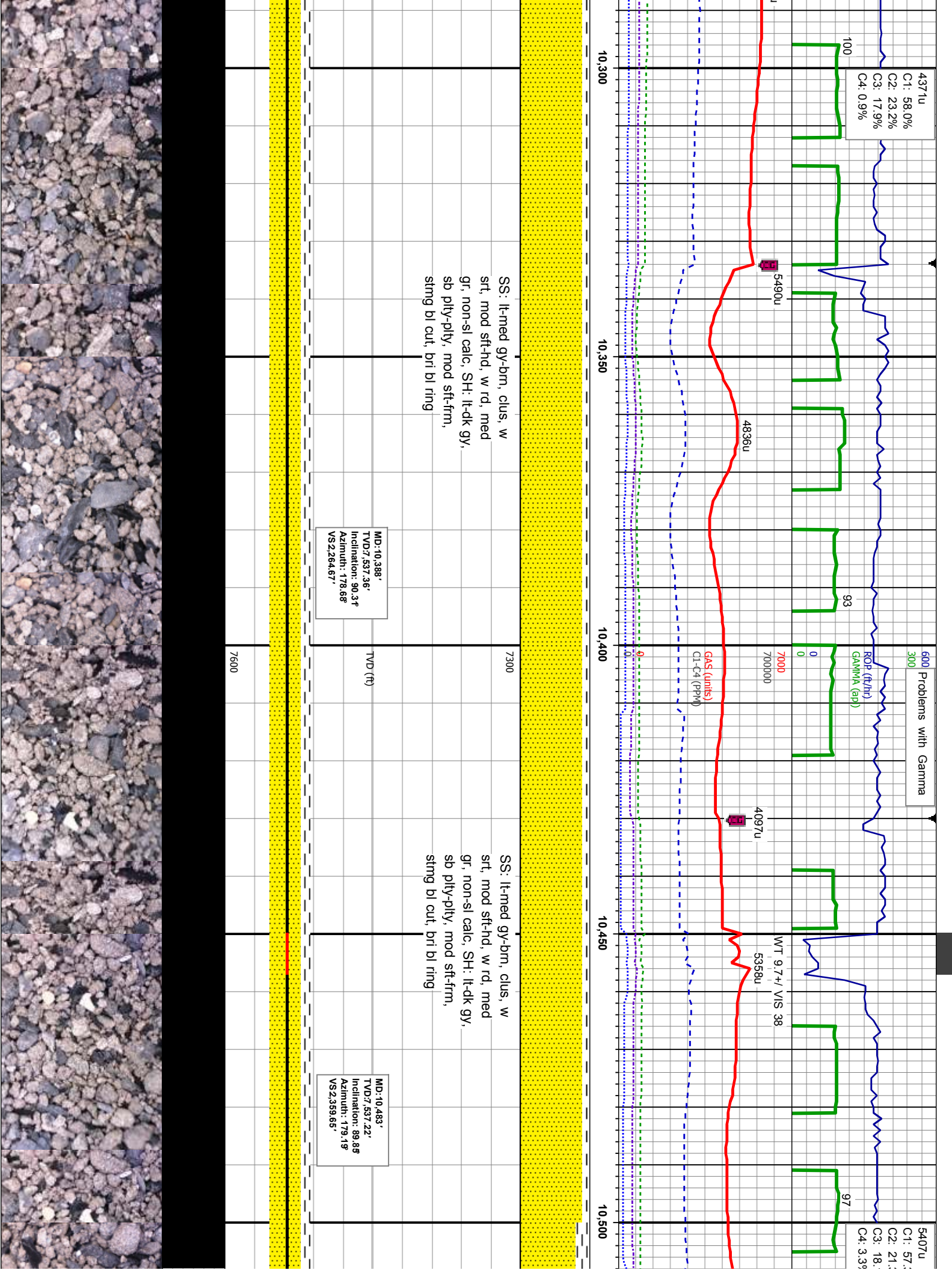
MD:9,912'
TVD:7,538.61'
Inclination: 90.52
Azimuth: 181.28
VS:1,788.72'

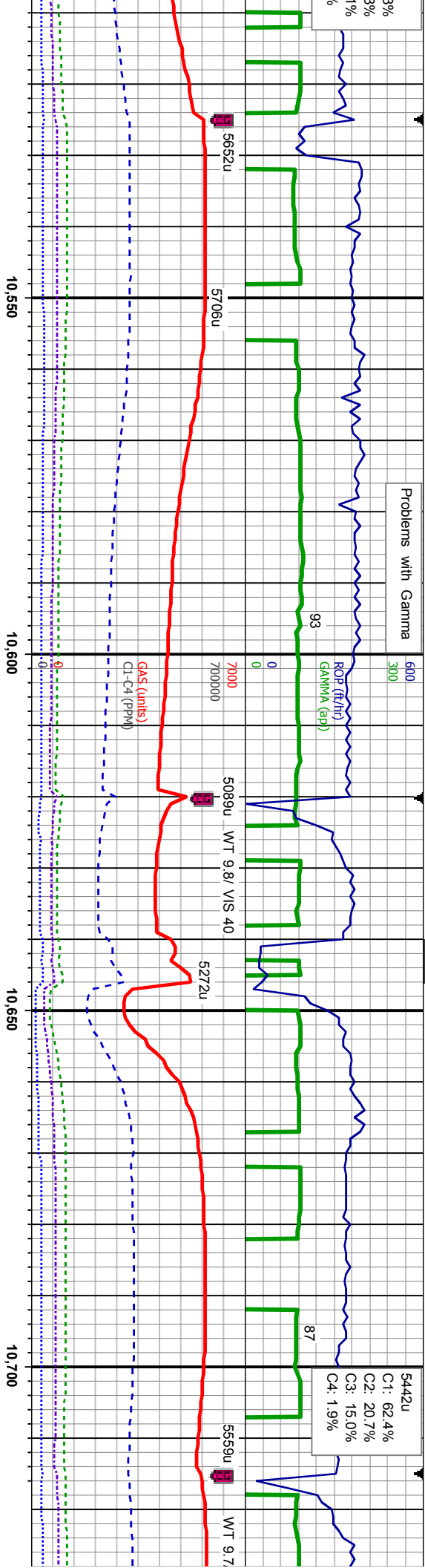
SS: lt-med gy-bm, occ lse
lith, clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pily,
mod sft-frn, sting bl cut, bri
bl ring

MD:10,007'
TVD:7,537.85'
Inclination: 90.48
Azimuth: 180.98
VS:1,883.69'

SS: lt-med gy-bm, occ lse
lith, clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: blk-dk gy, sb pily-pily,
mod sft-frn, sting bl cut, bri
bl ring







SS: lt-med gy-bm, clus, w
sft, mod sft-hd, w rd, med
gr, non-sl calc, SH: lt-dk gy,
sb pily-pily, mod sft-fm,
sting bl cut, bri bl ring

MD:10,578'
TVD:7,537.37'
Inclination: 89.97°
Azimuth: 178.37°
VS2:454.63'

TVD (ft)

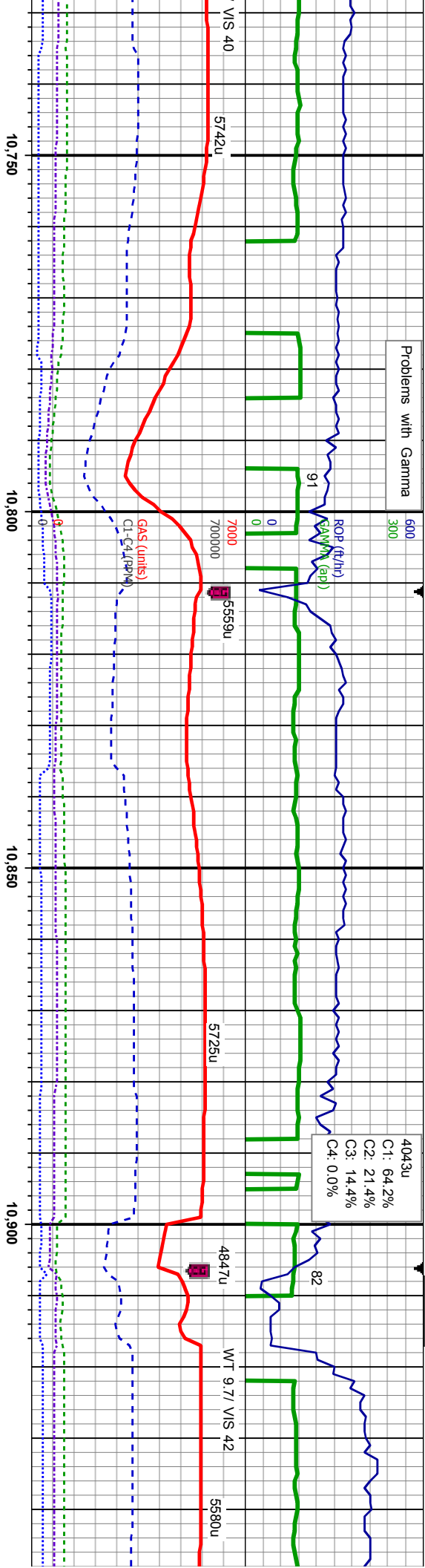
7300

SS: lt-med gy-bm, clus, w
sft, mod sft-hd, w rd, med
gr, non-sl calc, SH: lt-dk gy,
sb pily-pily, mod sft-fm,
sting bl cut, bri bl ring

MD:10,673'
TVD:7,537.63'
Inclination: 89.72°
Azimuth: 179.13°
VS2:549.62'

7600





SS: lt-med gy-bm, clus, w
srt, mod sft-hd, w rd, med
gr, non-sl calc, SH: lt-dk gy,
sb ply-ply, mod sft-fm,
stimg bl cut, bri bl ring

MD:10,768'
TVD:537.76'
Inclination: 90.12°
Azimuth: 179.06°
VS2:644.61'

TVD (ft)

SS: lt-med gy-bm, clus, w
srt, mod sft-hd, w rd, med
gr, non-sl calc, SH: lt-dk gy,
sb ply-ply, mod sft-fm,
stimg bl cut, bri bl ring

MD:10,863'
TVD:537.51'
Inclination: 90.18°
Azimuth: 178.18°
VS2:739.58'

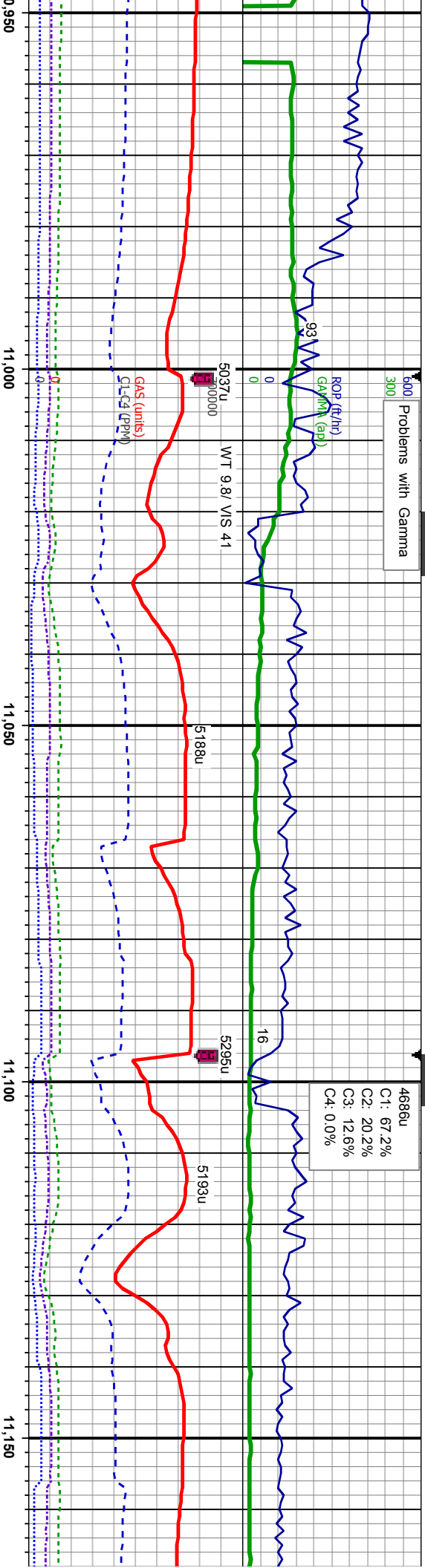
SS: lt-med
srt, mod sft
gr, non-sl c
sb ply-ply,
stimg bl cut



Problems with Gamma

4686u

C1: 67.2%
C2: 20.2%
C3: 12.6%
C4: 0.0%



5037u
WT 9.8/ V/S 41

5188u

5295u

5193u

gy-bm, clus, w

7300

LMST: lt gy-bm, ofwht-crm,

LMST: lt gy-bm, ofwht-crm,

-hd, w rd, med
alc, SH: lt-dk gy,
mod sft-fm,
bri bl ring

mod sft-mod hd, sb blk-y-sb
ply, SS: lt-med gy-bm, clus,
w srt, mod sft-hd, w rd,
med gr, non-sl calc, SH:
lt-dk gy, sb ply-ply, mod
sft-fm, sting bl cut, bri bl
ring

mod sft-mod hd, sb blk-y-sb
ply, SS: lt-med gy-bm, clus,
w srt, mod sft-hd, w rd,
med gr, non-sl calc, SH:
lt-dk gy, sb ply-ply, mod
sft-fm, sting bl cut, bri bl
ring

MD:10.959'
TVD:7.536.64'
Inclination: 90.86°
Azimuth: 178.98°
VS2.835.55'

TVD (ft)

ring

MD:11.054'
TVD: 7.536
Inclination: 89.9°
Azimuth: 178.86°
VS2.930.54'

ring

MD:11.149'
TVD:7.537.05'
Inclination: 88.83°
Azimuth: 179.2°
VS3.025.52'

7600



Problems with Gamma

500
300

ROP (ft/hr)
GAMMA (cp)

14

5011u

7000
700000

5022u

WT 9.7 / VIS 40

4847u

17

2851u
C1: 66.1%
C2: 20.7%
C3: 12.6%
C4: 0.5%

4723u

WT 9.7 / VIS 40

4068u

11,200

11,250

11,300

11,350

GAS (cc/stk)
CL-C4 (PPM)

LMST: lt gy-brn, offwht-crm,
mod sft-mod hd, sb blk-ly-sb
ply, SH: blk, lt-dk gy, sb
ply-ply, mod sft-frm, string
bl cut, bri bl ring

LMST: lt gy-brn, offwht-crm,
mod sft-mod hd, sb blk-ly-sb
ply, SH: blk, lt-dk gy, sb
ply-ply, mod sft-frm, string
bl cut, bri bl ring

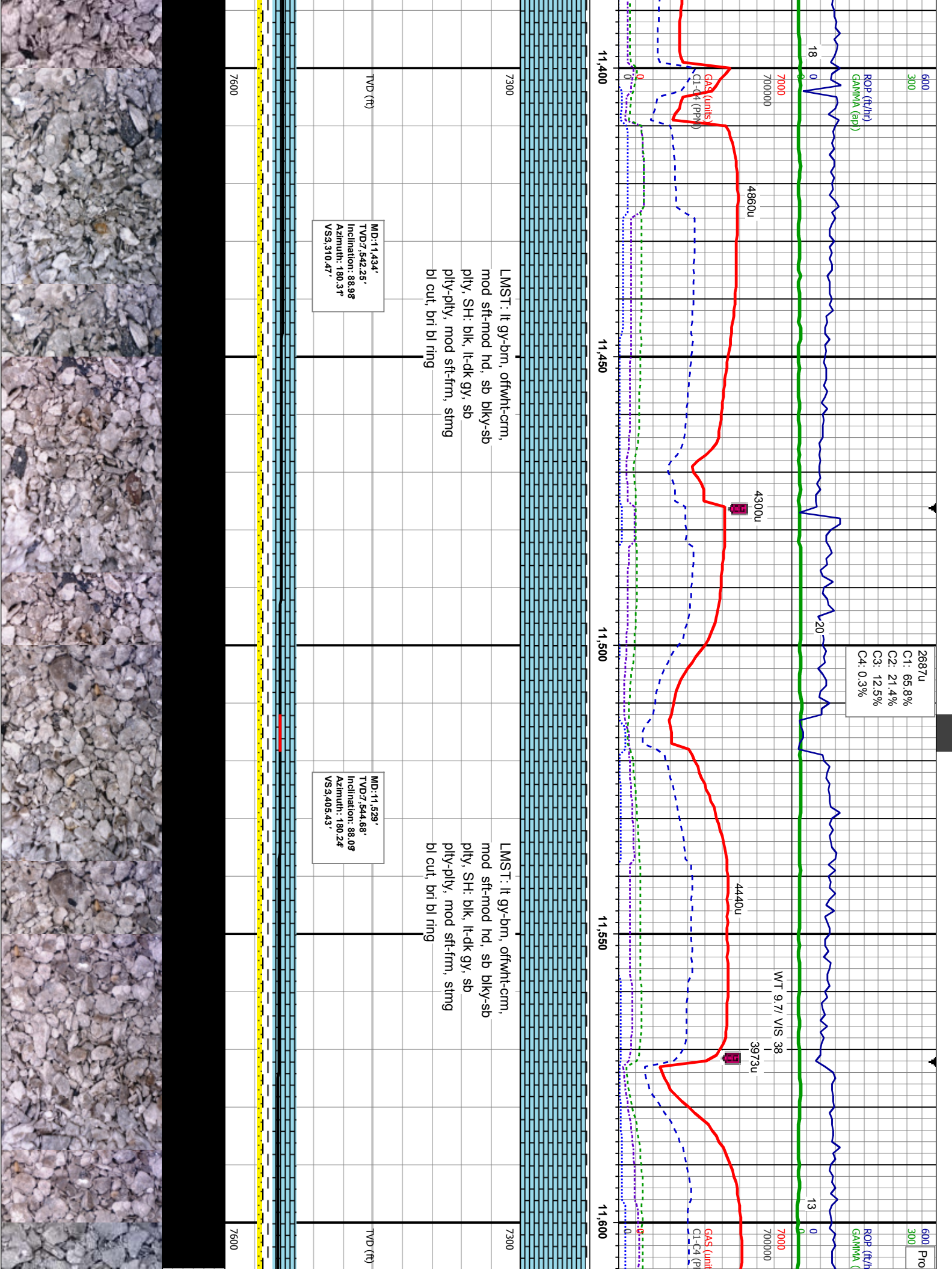
TVD (ft)

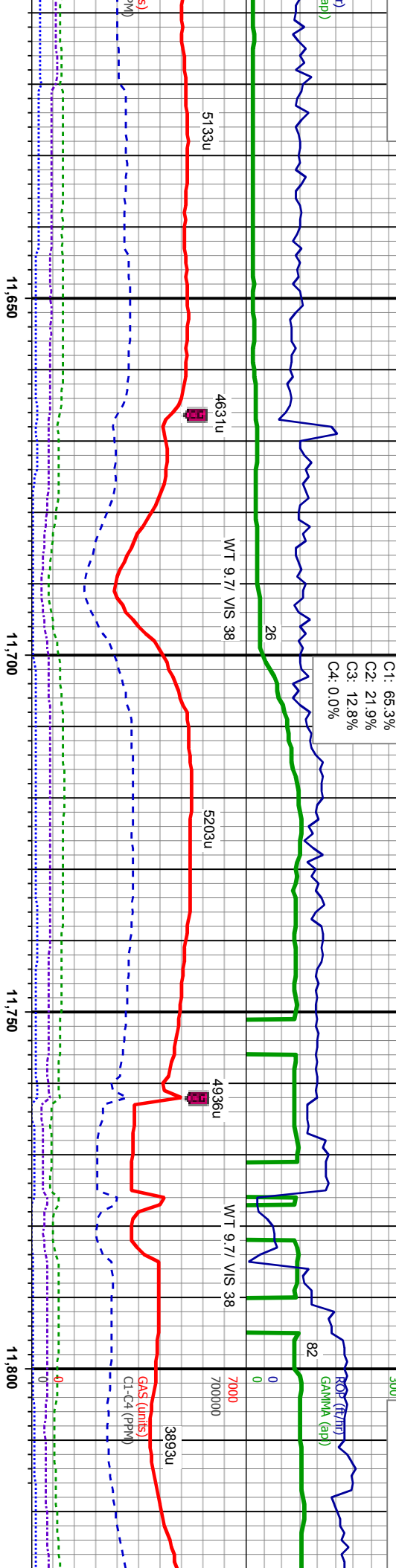
MD: 11,244'
TVD: 538.86'
Inclination: 88.98°
Azimuth: 180.29°
VS: 3,120.5'

7300

7600







3307u
C1: 65.3%
C2: 21.9%
C3: 12.8%
C4: 0.0%

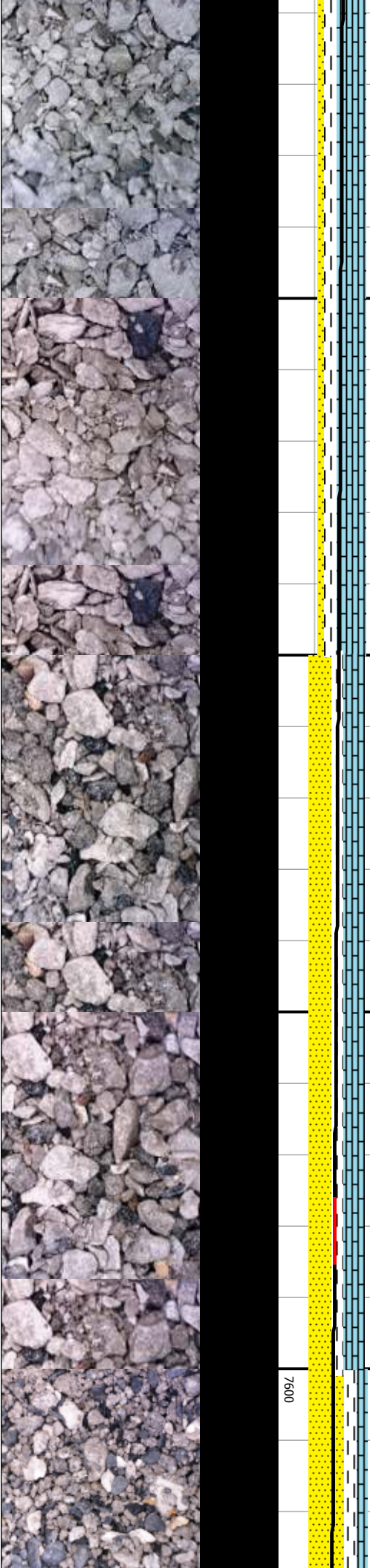
LMST: lt gy-brn, ofwht-crm,
mod sft-mod hd, sb blk-ly-sb
ply, SH: blk, lt-dk gy, sb
ply-ply, mod sft-fm, sting
bl cut, bri bl ring

MD:11,624'
TVD7,547.64'
Inclination: 88.33
Azimuth: 179.96
VS3,500.38'

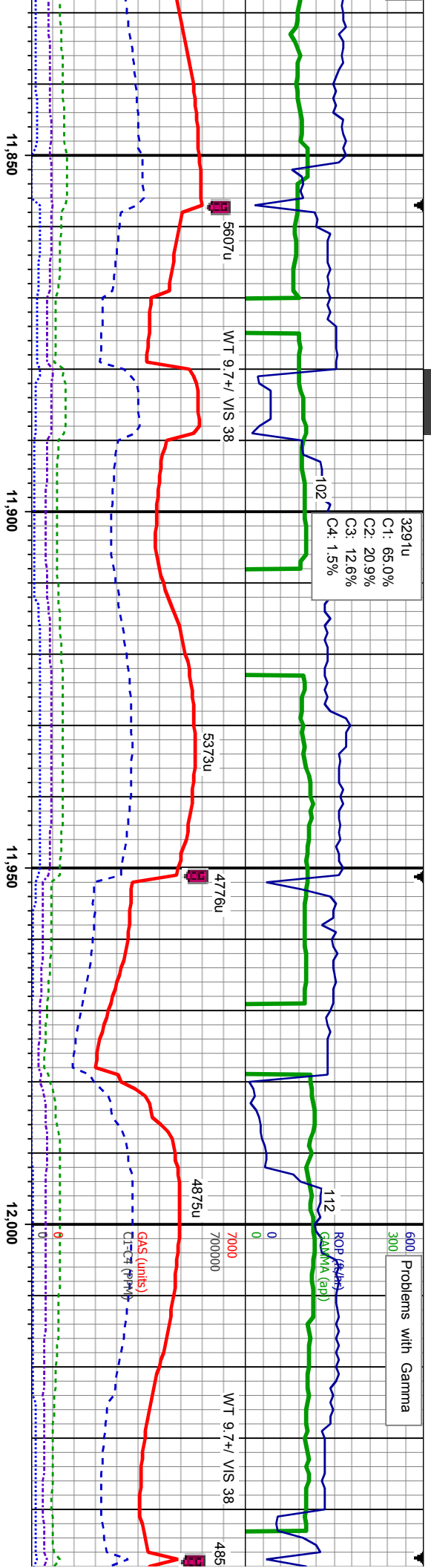
MD:11,720'
TVD7,561.16'
Inclination: 87.47
Azimuth: 179.29
VS3,596.32'

LMST: lt gy-brn, ofwht-crm,
mod sft-mod hd, sb blk-ly-sb
ply, SS: lt-med gy-brn, clus,
w srt, mod sft-hd, w rd,
med gr, non-sl calc, lt SH:
blk, lt-dk gy, sb ply-ply,
mod sft-fm, sting bl cut, bri
bl ring

MD:11,815'
TVD7,555.15'
Inclination: 87.72
Azimuth: 179.29
VS3,691.23'



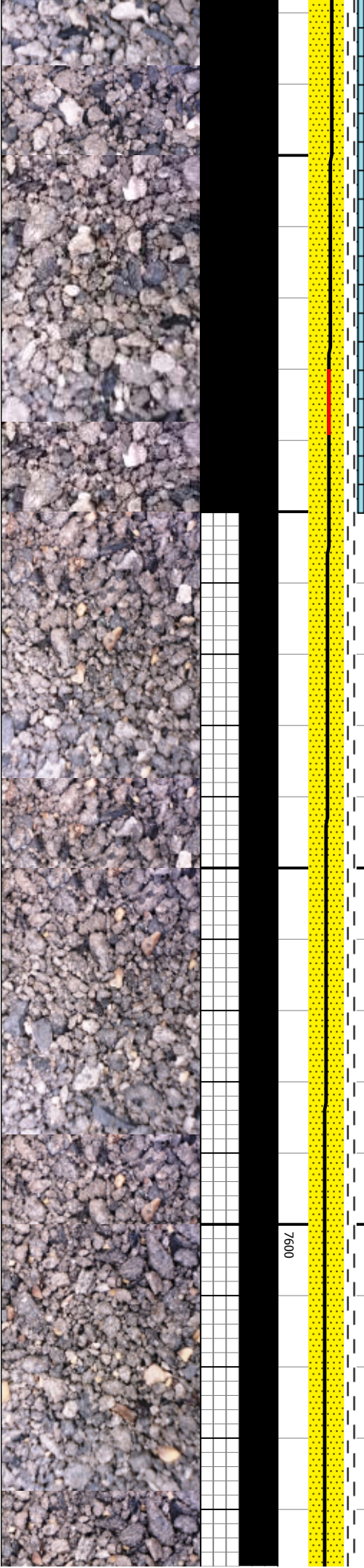
Problems with Gamma



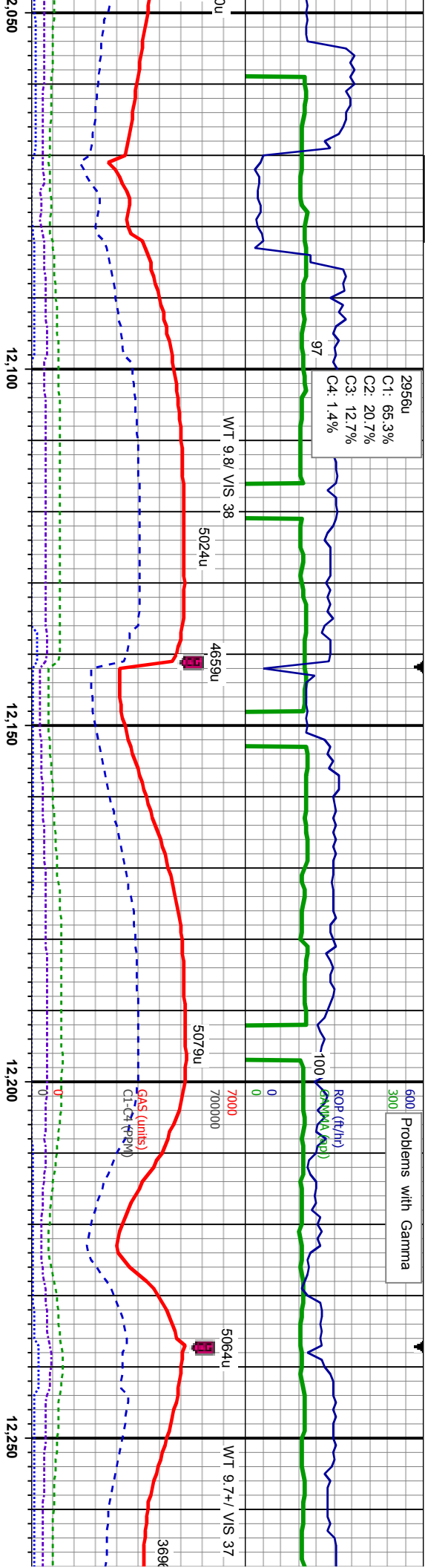
SS: lt-med gy-brn, lse lith, w srt, mod sft-hd, w rd, med gr, non-sl calc, LMST: lt gy-brn, offwht-crm, mod sft-mod hd, sb blk-y-sb pily, SH: lt-dk gy, sb pily-pily, mod sft-frm, sting bl cut, bri bl ring

SS: lt-med gy-brn, lse lith, occ clus, w srt, mod sft-hd, w rd, med gr, non-sl calc, SH: lt-dk gy, sb pily-pily, mod sft-frm, sting bl cut, dull bl ring

SS: lt-med (occ clus, w w rd, med g SH: lt-dk gy, mod sft-frm, dull bl ring



Problems with Gamma



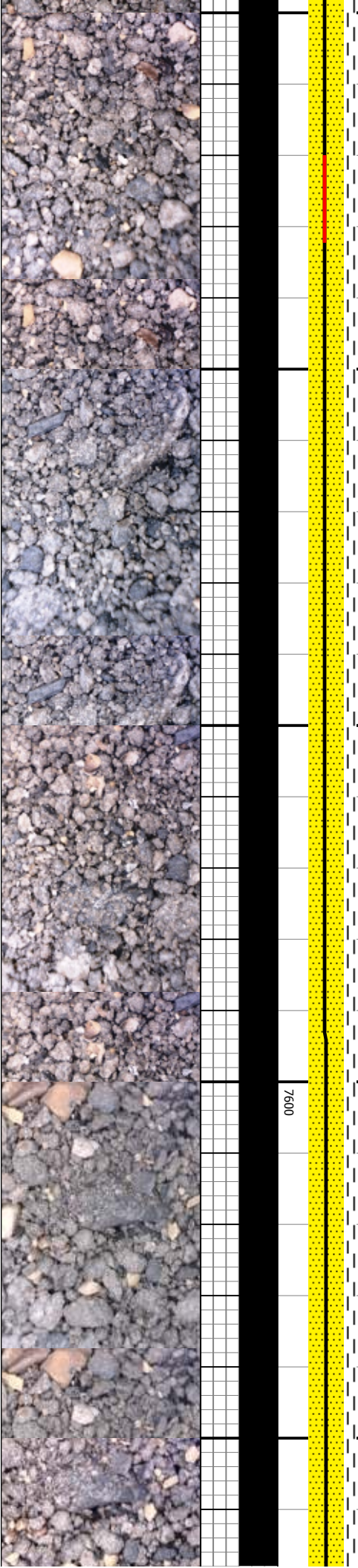
MD:12,100'
TVD:7,562.18'
Inclination: 90.52°
Azimuth: 180.48°
VSA:976.09°

MD:12,195'
TVD:7,561.31'
Inclination: 90.52°
Azimuth: 179.61°
VSA:071.09°

gy-brn, lse lith,
srt, mod sft-hd,
r, non-sl calc,
sb ply-pty,
stmg bl cut,

SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: lt-dk gy, sb ply-pty,
mod sft-frm, stmg bl cut,
dull bl ring

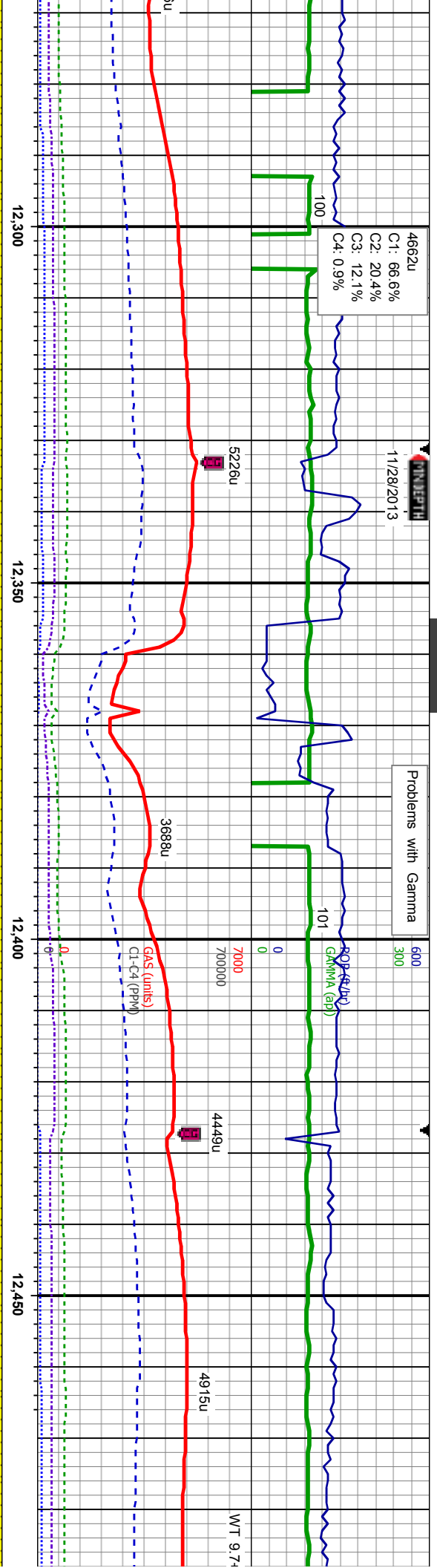
SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc, tr
SH: lt-dk gy, sb ply-pty,
mod sft-frm, stmg bl cut,
dull bl ring



4662u
C1: 66.6%
C2: 20.4%
C3: 12.1%
C4: 0.9%

11/28/2013

Problems with Gamma



SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc,
SH: lt-dk gy, sb ply-pty,
mod sft-fm, sting bl cut,
dull bl ring

SS: lt-med gy-brn, lse lith,
occ clus, w srt, mod sft-hd,
w rd, med gr, non-sl calc, tr
SH: lt-dk gy, sb ply-pty,
mod sft-fm, sting bl cut,
dull bl ring

MD:12,290'
TVD:7,560.34'
Inclination: 90.65°
Azimuth: 178.94°
VSA:166.08°

MD:12,385'
TVD:7,559.22'
Inclination: 90.77°
Azimuth: 179.88°
VSA:261.07°

MD:12,480'
TVD:7,557.89'
Inclination: 90.89°
Azimuth: 179.16°
VSA:356.05°

