



Scale: 5" / 100'  
Measured Depth Log

Well Name Mahalo State AA09\_74\_1AHNC

Location Sec. 4 T6N R63W

State Colorado

Country United States

API Number 05-123-39015

Region DJ Basin

Spud Date 1/12/2015

Surface Coordinates 325FSL & 2340FEL, Sec.4

Bottom Hole Coordinates 30°FNL & 1860FEL, Sec.16

County Weld

Rig Number Precision 829

AFE # 200334

Field Wattenberg

Drilling Completed 1/21/2015

Ground Elevation 4694'

K.B. Elevation 4694'

Logged Interval 5980' To 11481'

Total Depth 11481'

Formation Niobrara C chalk

Type of Drilling Fluid FW LSND

Company Noble Energy Inc  
Address 1625 BROADWAY  
DENVER, CO 80202

Name Holly Duncan  
Company Noble Energy, Inc  
Address 1625 BROADWAY  
DENVER, CO 80202

Columbine Logging, Inc.  
Wellsite Geologist

# Operator

0202

# Geologist

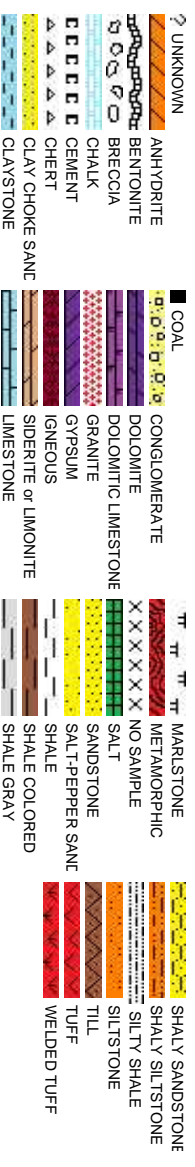
nc.  
AY  
0202

## Other

602 S. Lipan St.  
Denver CO, 80223

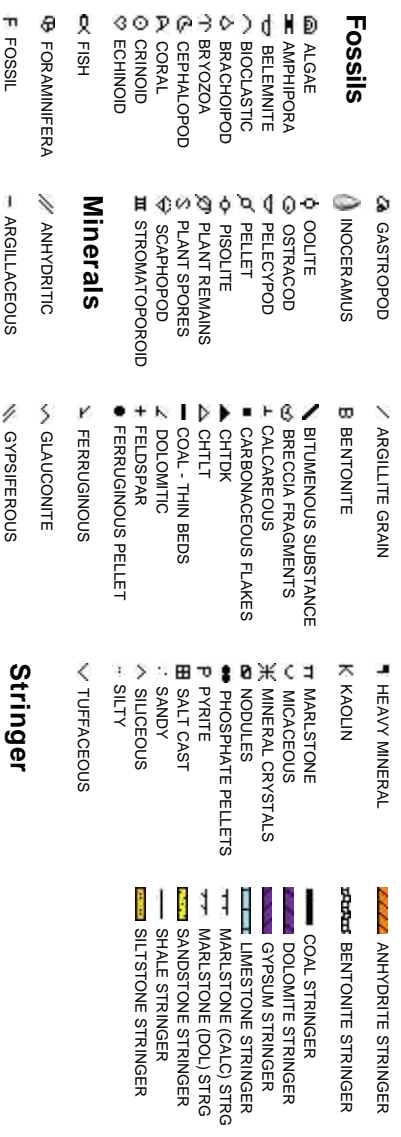
Nick Barber  
Ted Stockwell

## Rock Types



## Accessories

## Fossils



**Springer**

# Other Symbols

**Oil Show**      P PINPOINT      ∴ DST INTERVAL      ▽ WIRELINE TESTED - LEFT      E EARTHY  
V VUGGY      / FAULT      ▽ WIRELINE TESTED - RT      FX FINELYXLN

**Engineering**      D DEAD      [ ] FORMATION TOP      [DST] DRILL STEM TEST      ES GRAINSTONE  
● EVEN      ✖ GAS SHOW      [MINDEPTH] MN DEPTH      L LITHOGRAPHIC  
○ QUESTIONABLE      BIT      ● OIL SHOW      [MINDEPTH] MN DEPTH      MX MICROXLN  
● SPOTTED STAINING      ▲ CONNECTION (UP)      MN DEPTH UP      [MINDEPTH] MN DEPTH      MS MUDSTONE

**Porosity**      ▼ CONNECTION (DOWN)      MN DEPTH (DOWN)      ▲ ANGULAR      PS PACKSTONE  
[ ] CONNECTION GAS      [ ] MN DEPTH      [ ] NORMAL FAULT      R ROUNDED      WS WACKSTONE  
[ ] CONNECTION GAS (LEFT)      [ ] MN DEPTH      [ ] OVERTURNED STRATA      B SUBANG      [ ] SUBBRND

E EARTHY      [ ] CONNECTION GAS (LEFT)      [ ] MN DEPTH      [ ] NORMAL FAULT      R ROUNDED      WS WACKSTONE  
[ ] FENESTRAL      [ ] TRIP GAS      [ ] MN DEPTH      [ ] OVERTURNED STRATA      B SUBANG      [ ] SUBBRND  
F FRACTURE      [ ] TRIP GAS (LEFT)      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND

CASING      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND  
[ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND

**Textures**      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND  
[ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND

INTERCRYSTALLINE      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND  
INTERPOOLITIC      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND  
MOLDIC      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND  
ORGANIC      [ ] MN DEPTH      [ ] REVERSE FAULT      M SUBRND

Slide/Rotate

ROP

ROP  
ROF  
GAMMA

ROP Scale  
0 - 800 units

ROF Scale  
0 - 800 units

Gamma Scale  
0 - 300 units

Gas Scale  
0 - 6000 units

Total Gas & Chromatograph

GAS  
C1  
C2  
C3  
C4

COLUMBINE LOGGING, INC. RIGGED UP ON  
1/14/2014 MANNED 2-PERSON LOGGING WITH  
BLOODHOUND GAS CHROMATOGRAPH UNIT #  
0312

Depth Labels

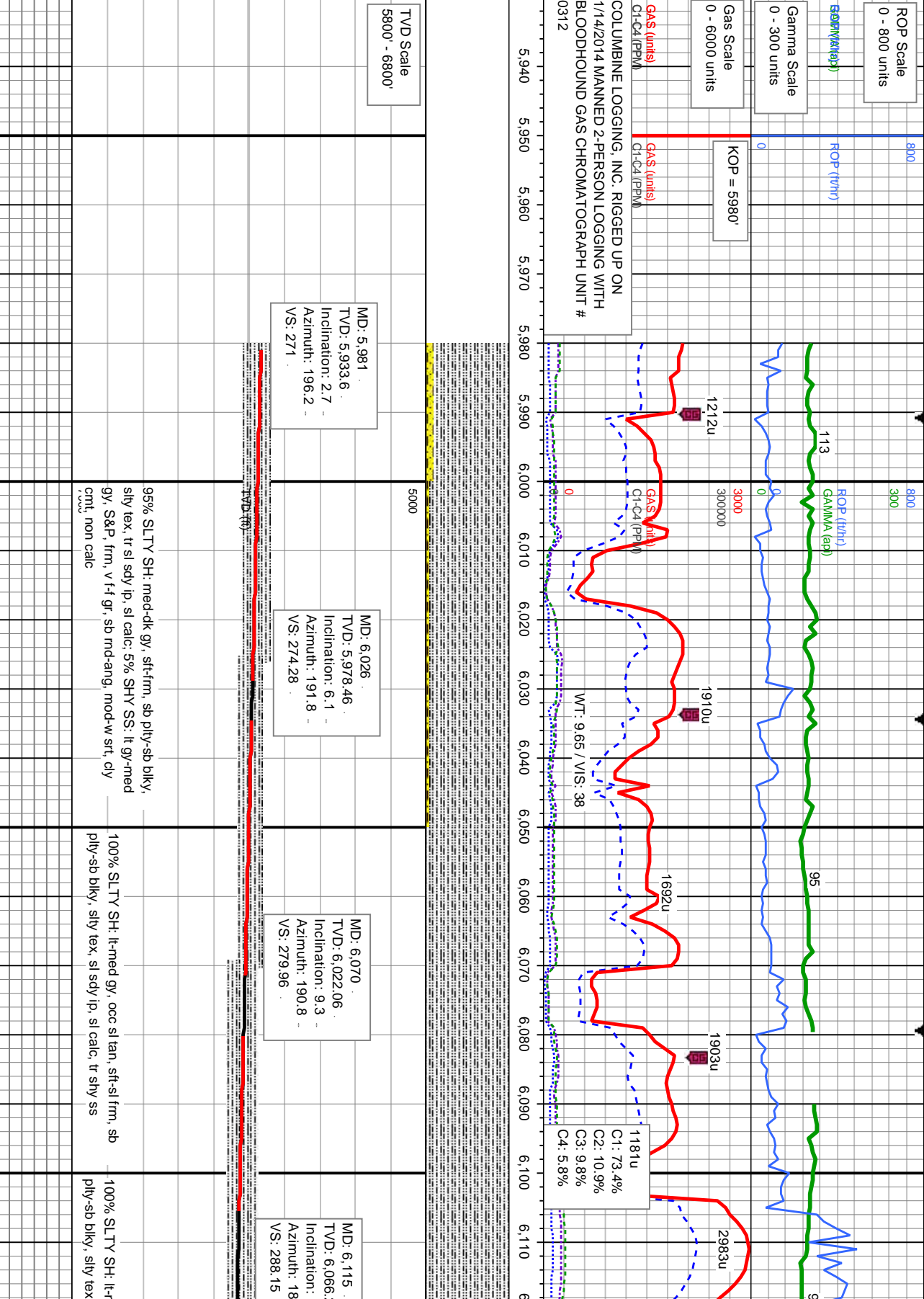
% Lith

Well Bore  
TVD

Oil Show

Images

exc  
gd  
mod  
tr  
st



TVD Scale  
5800' - 6800'

MD: 5.981  
TVD: 5.933.6  
Inclination: 2.7  
Azimuth: 196.2  
VS: 271

MD: 6.026  
TVD: 5.978.46  
Inclination: 6.1  
Azimuth: 191.8  
VS: 274.28

MD: 6.070  
TVD: 6.022.06  
Inclination: 9.3  
Azimuth: 190.8  
VS: 279.96

MD: 6.115  
TVD: 6.066  
Inclination:  
Azimuth: 18  
VS: 288.15

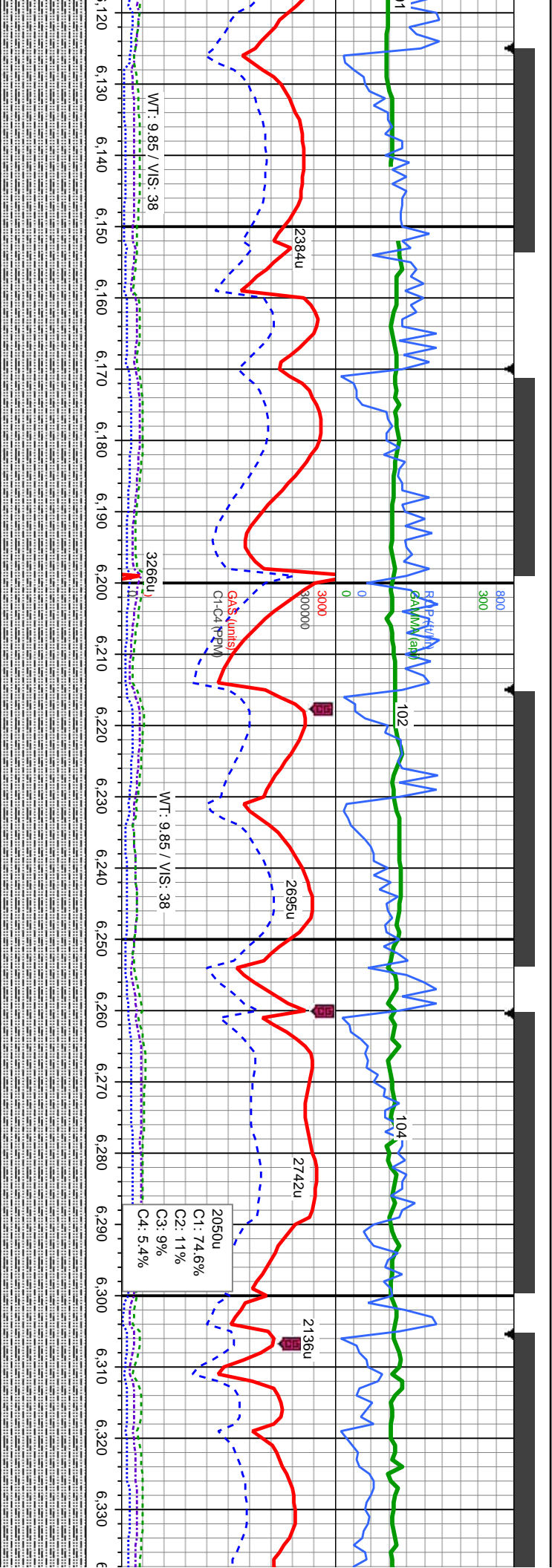
95% SLTY SH: med-dk gy, sft-firm, sb pty-sb blkly, silty tex, tr sl sdy ip, sl calc: 5% SHY SS; lt gy-med gy, S&P, firm, v ft gr, sb md-ang, mod-w srl, cly cmf, non calc

100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, sb pty-sb blkly, silty tex, sl sdy ip, sl calc, tr shy ss

100% SLTY SH: lt-r







MD: 6.120  
TVD: 6,120.03  
Inclination: 12.1  
Azimuth: 2.5

MD: 6.160  
TVD: 6,110.03  
Inclination: 14.8  
Azimuth: 181  
VS: 298.55

MD: 6.205  
TVD: 6,153.28  
Inclination: 17.3  
Azimuth: 180.3  
VS: 310.94

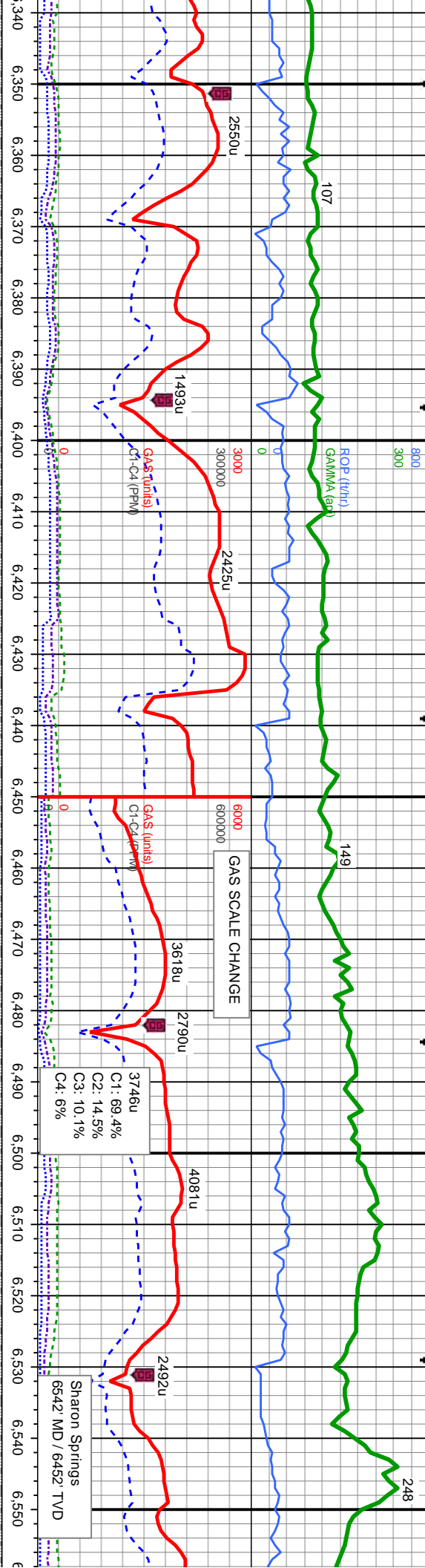
MD: 6.250  
TVD: 6,196  
Inclination: 19.3  
Azimuth: 181  
VS: 325.01

MD: 6.295  
TVD: 6,238.15  
Inclination: 21.7  
Azimuth: 179.2  
VS: 340.72

MD: 6.3  
TVD: 6,  
Inclination:  
Azimuth:  
VS: 358

med gy, occ sl tan, sft, sb sl sdy ip, sl calc, tr shy ss	100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, sb ply-sb blk, silty tex, sl sdy ip, sl calc, tr shy ss	100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, sb ply-sb blk, silty tex, sl sdy ip, sl calc, tr shy ss	100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, ply-sb blk, silty tex, sl sdy ip, sl calc, tr shy ss	100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, ply-sb blk, silty tex, sl sdy ip, sl calc
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MD: 6,384 TVD: 6,319.44 Inclination: 26.1 Azimuth: 184.3 VS: 376.7	MD: 6,429 TVD: 6,359.39 Inclination: 28.7 Azimuth: 188.4 VS: 397.02	MD: 6,474 TVD: 6,398.02 Inclination: 33 Azimuth: 188 VS: 419.52	MD: 6,519 TVD: 6,434.71 Inclination: 37.7 Azimuth: 184.6 VS: 445.09
40	5000		
MD: 6,279.6 TVD: 6,214.1 Inclination: 179.9 Azimuth: 18			

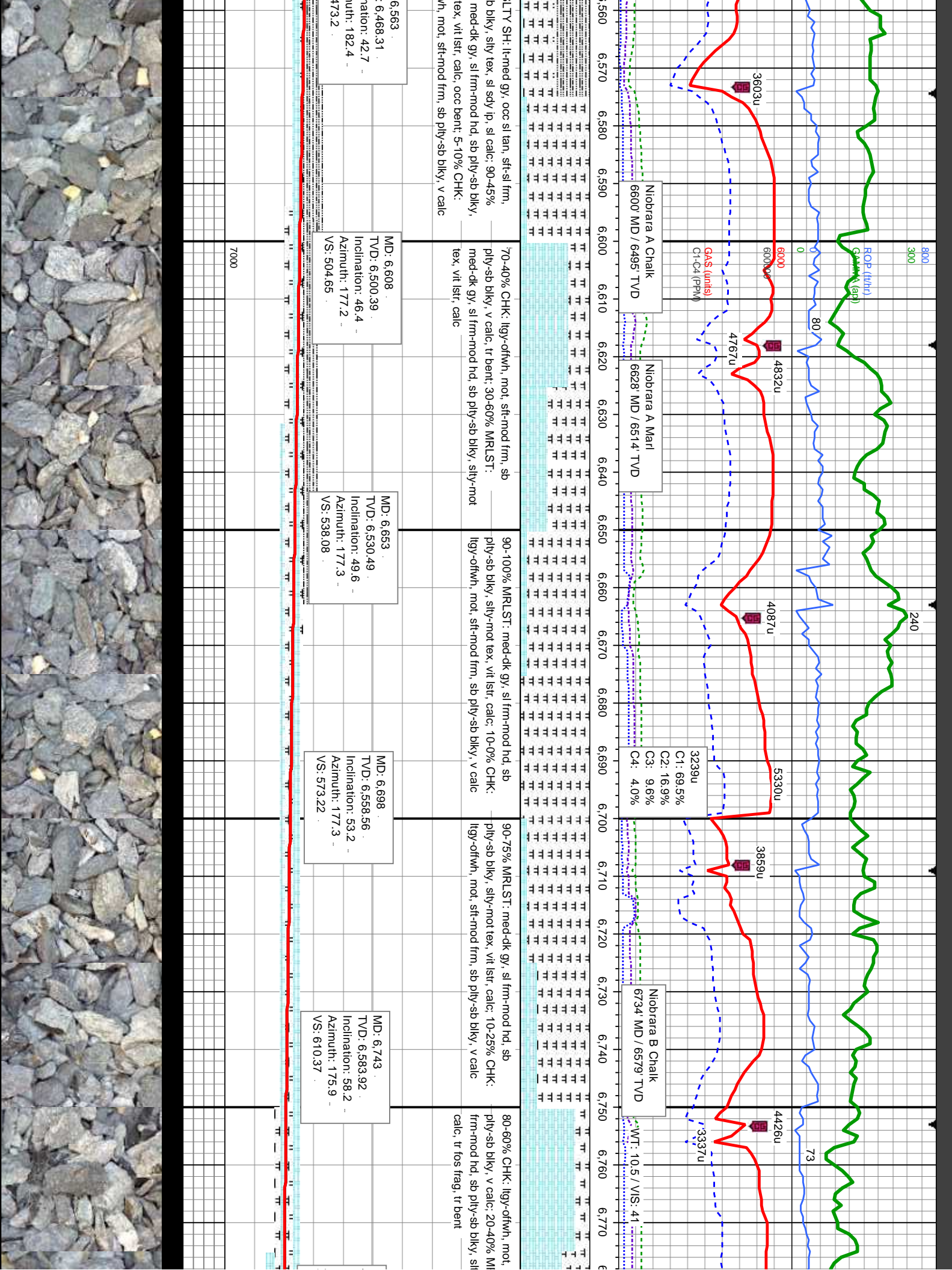
sb sl frm, sb	100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, sb pty-sb blk, silty tex, sl sdy ip, sl calc	100% SLTY SH: lt-med gy, occ sl tan, sft-sl frm, sb pty-sb blk, silty tex, sl sdy ip, sl calc, v tr shy ss	100% SLTY SH: med gy-dk gy, occ sl tan, sft-sl frm, sb pty-sb blk, silty tex, sl sdy ip, sl calc	100% SLTY SH: med gy-dk gy, occ sl tan, sft-sl frm, sb pty-sb blk, silty tex, sl sdy ip, sl calc
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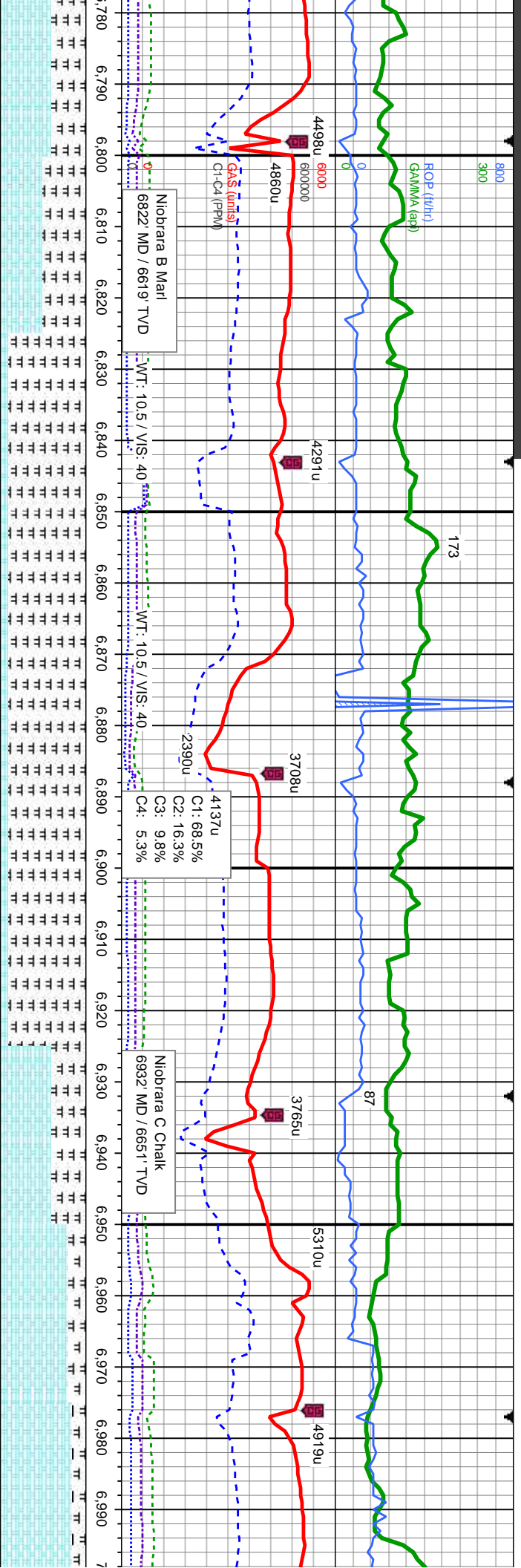


0-50% S  
sb pty-s  
MRLST:  
sily-mot  
llyg-off v

MD:  
TVD  
Incli  
Azim  
VS:

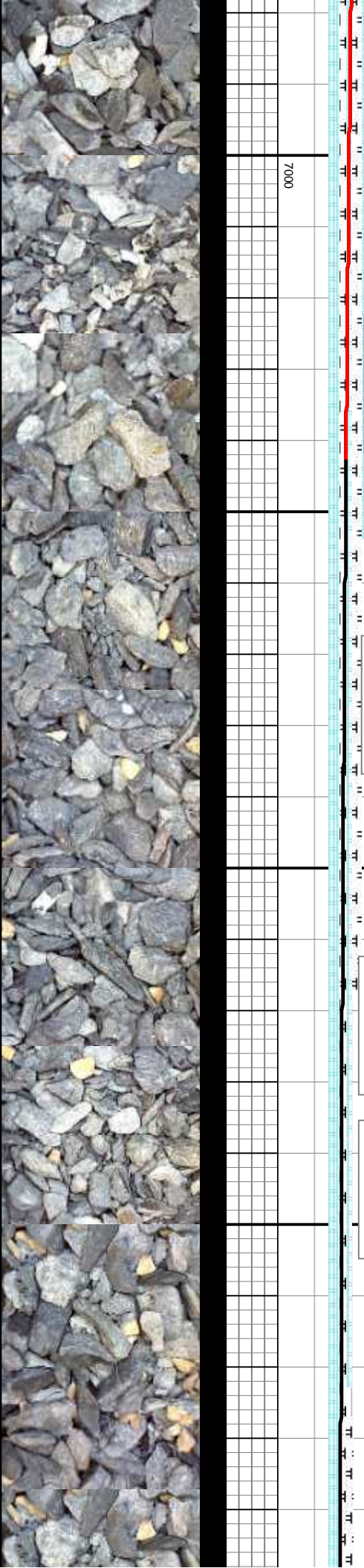






MD: 6.787 TVD: 6.605.41 Inclination: 63.3 Azimuth: 177.2 VS: 648.74	MD: 6.832 TVD: 6.623.89 Inclination: 68.2 Azimuth: 178.6 VS: 689.72	MD: 6.877 TVD: 6.638.57 Inclination: 73.7 Azimuth: 180.7 VS: 732.12	MD: 6.922 TVD: 6.649.07 Inclination: 79.3 Azimuth: 181.7 VS: 775.64	MD: 6.945 TVD: 6.652.67 Inclination: 82.7 Azimuth: 181.7 VS: 798.22
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Bit Data  
Bit #: 3  
Type: MM54  
Size: 6.12  
Depth In: 7,000 '  
Jets: 5X16  
S/N: 12589854



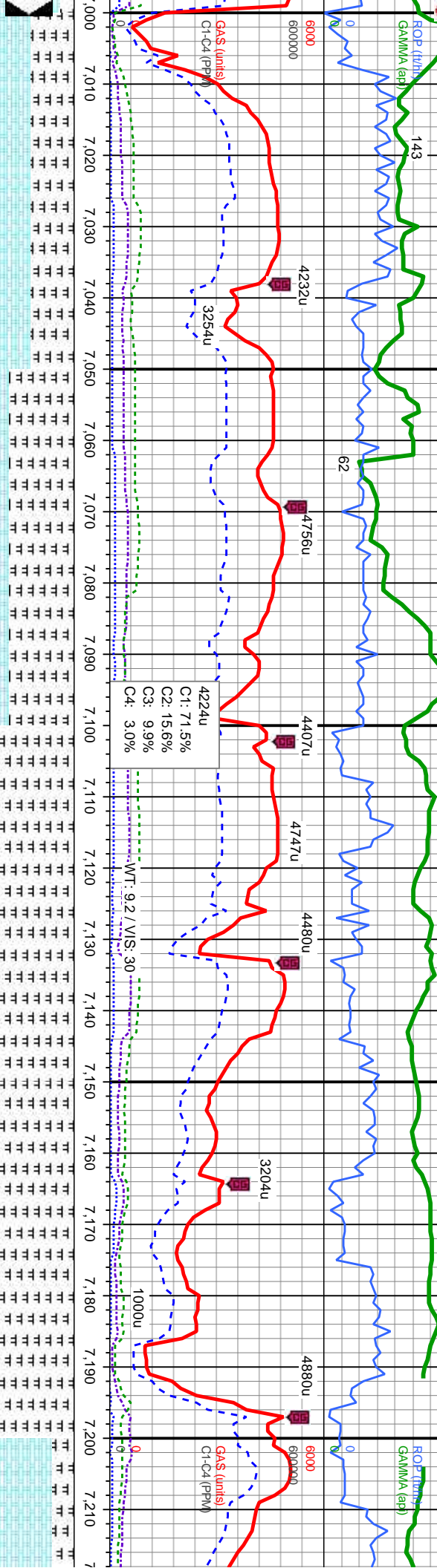


300 1/16/15-1/18/15

MINDEPTH

800  
300

ROP (ft/hr)  
GAMMA (api)



50% CHK: lgy-offwh, mot, sft-mod frm, sb ply-sb bly, v calc; 50% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb bly, sily-mot tex, vit lstr, calc; tr bent

75% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb bly, sily-mot tex, vit lstr, calc; 25% CHK: lgy-offwh, mot, sft-mod frm, sb ply-sb bly, v calc; tr bent

90% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb bly, sily-mot tex, vit lstr, calc; 10% CHK: lgy-offwh, mot, sft-mod frm, sb ply-sb bly, v calc; tr bent

90% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb bly, sily-mot tex, vit lstr, calc; 10% CHK: lgy-offwh, mot, sft-mod frm, sb ply-sb bly, v calc; tr bent

75% CHK: lgy-offwh ply-sb bly, v calc, frm-mod hd, sb ply-sb bly, v calc; tr bent

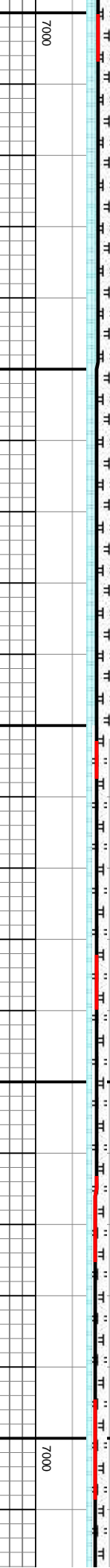
TVD (ft)  
MD: 7.039  
TVD: 6,663.06  
Inclination: 84.6  
Azimuth: 181.4  
VS: 891.11

TVD (ft)  
MD: 7.070  
TVD: 6,665.9  
Inclination: 84.9  
Azimuth: 181.6  
VS: 921.81

TVD (ft)  
MD: 7.101  
TVD: 6,668.49  
Inclination: 85.5  
Azimuth: 181.1  
VS: 952.54

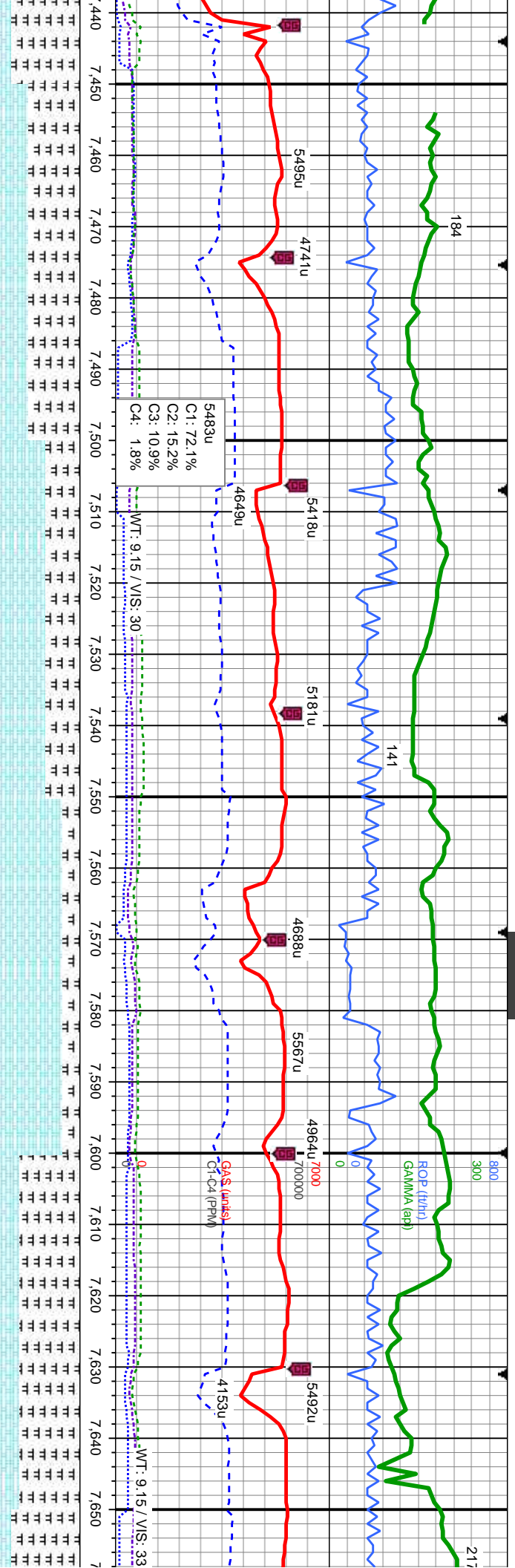
TVD (ft)  
MD: 7.133  
TVD: 6,670.62  
Inclination: 86.9  
Azimuth: 181.2  
VS: 984.31

TVD (ft)  
MD: 7.164  
TVD: 6,671.86  
Inclination: 88.5  
Azimuth: 181.1  
VS: 1,015.13

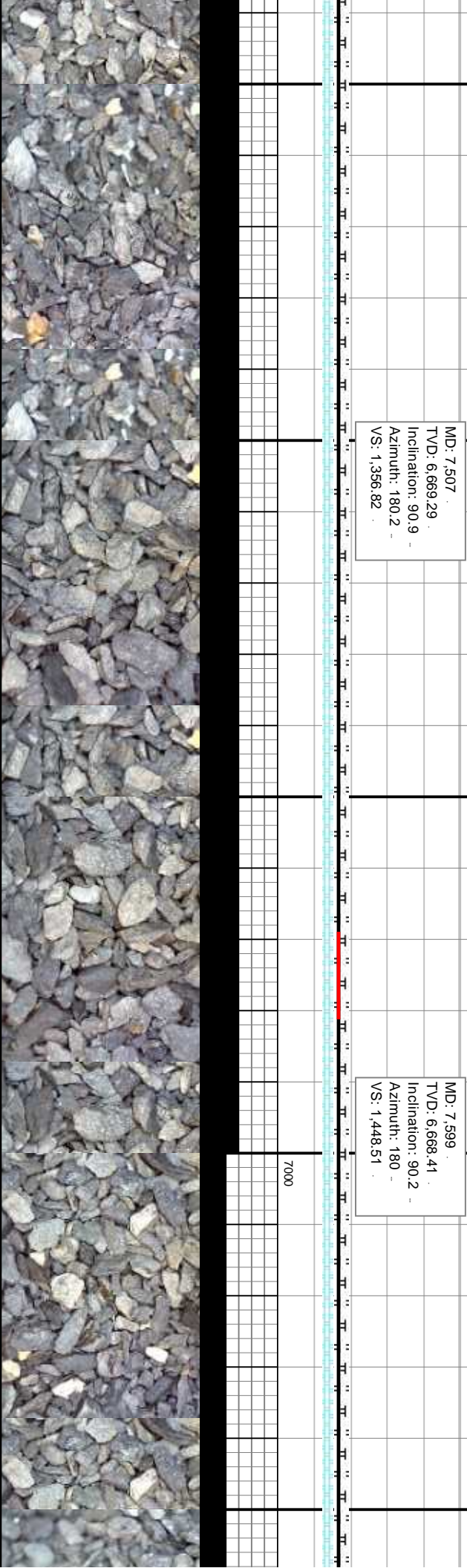






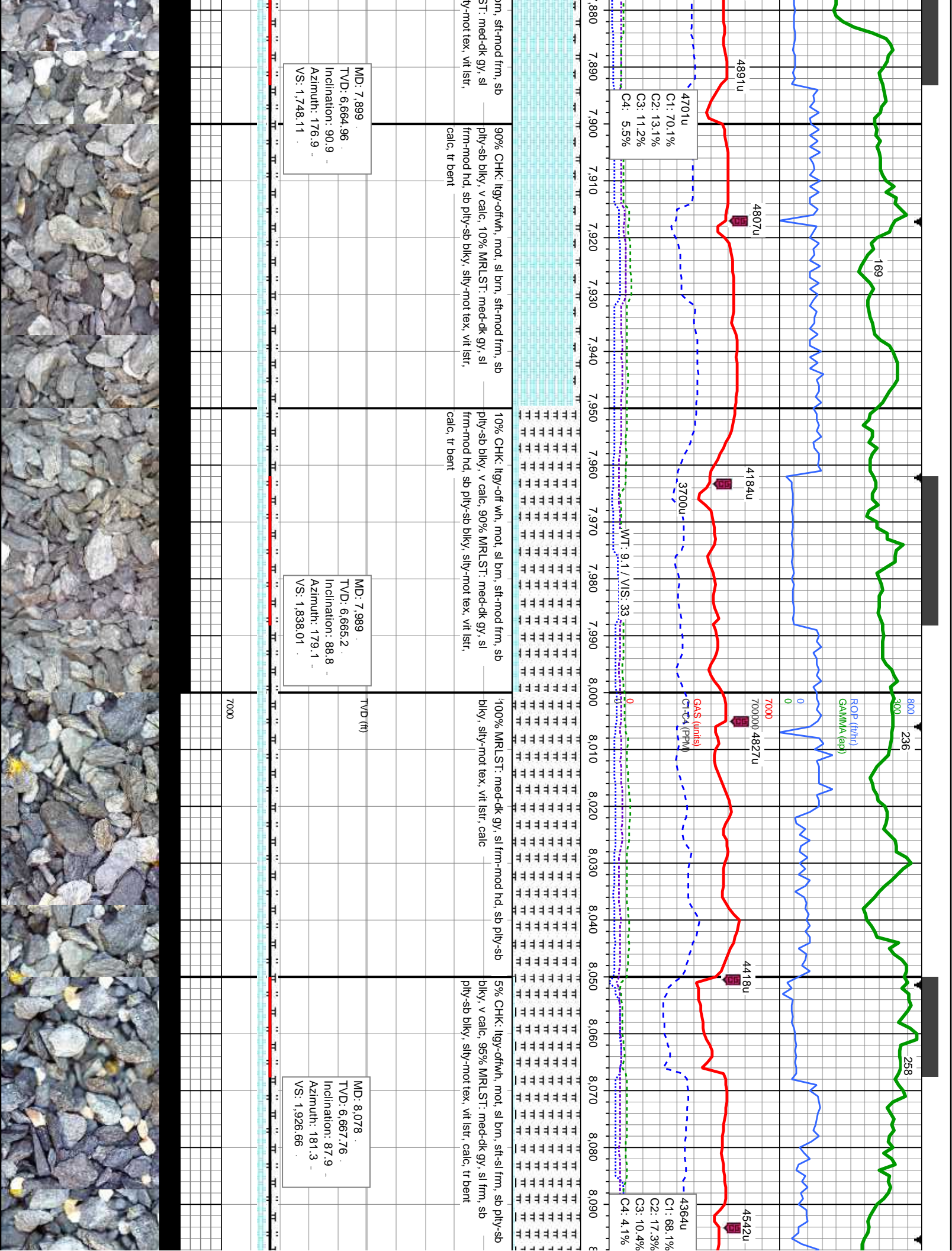


sb ply-sb	60% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb	60% CHK: lgy-offwh, mot, sl brn, sft-mod frm, sb	80% CHK: lgy-offwh, mot, sl brn, sft-mod frm, sb	70% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb	80% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb
ply-sb	bily, sily-mot tex, vit istr, calc: 40% CHK:	ply-sb blk, v calc, 40% MRLST: med-dk gy, sl	ply-sb blk, v calc, 20% MRLST: med-dk gy, sl	bily, sily-mot tex, vit istr, calc: 30% CHK:	bily, sily-mot tex, vit istr, calc: 30% CHK:
sy, v calc	lgy-offwh, mot, sl brn, sft-mod frm, sb ply-sb blk, v	frm-mod hd, sb ply-sb blk, sily-mot tex, vit istr,	frm-mod hd, sb ply-sb blk, sily-mot tex, vit istr,	lgy-offwh, mot, sft-mod frm, sb ply-sb blk, v calc	lgy-offwh, mot, sft-mod frm, sb ply-sb blk, v calc
	calc	calc, tr bent	calc, tr bent		tr fos fr

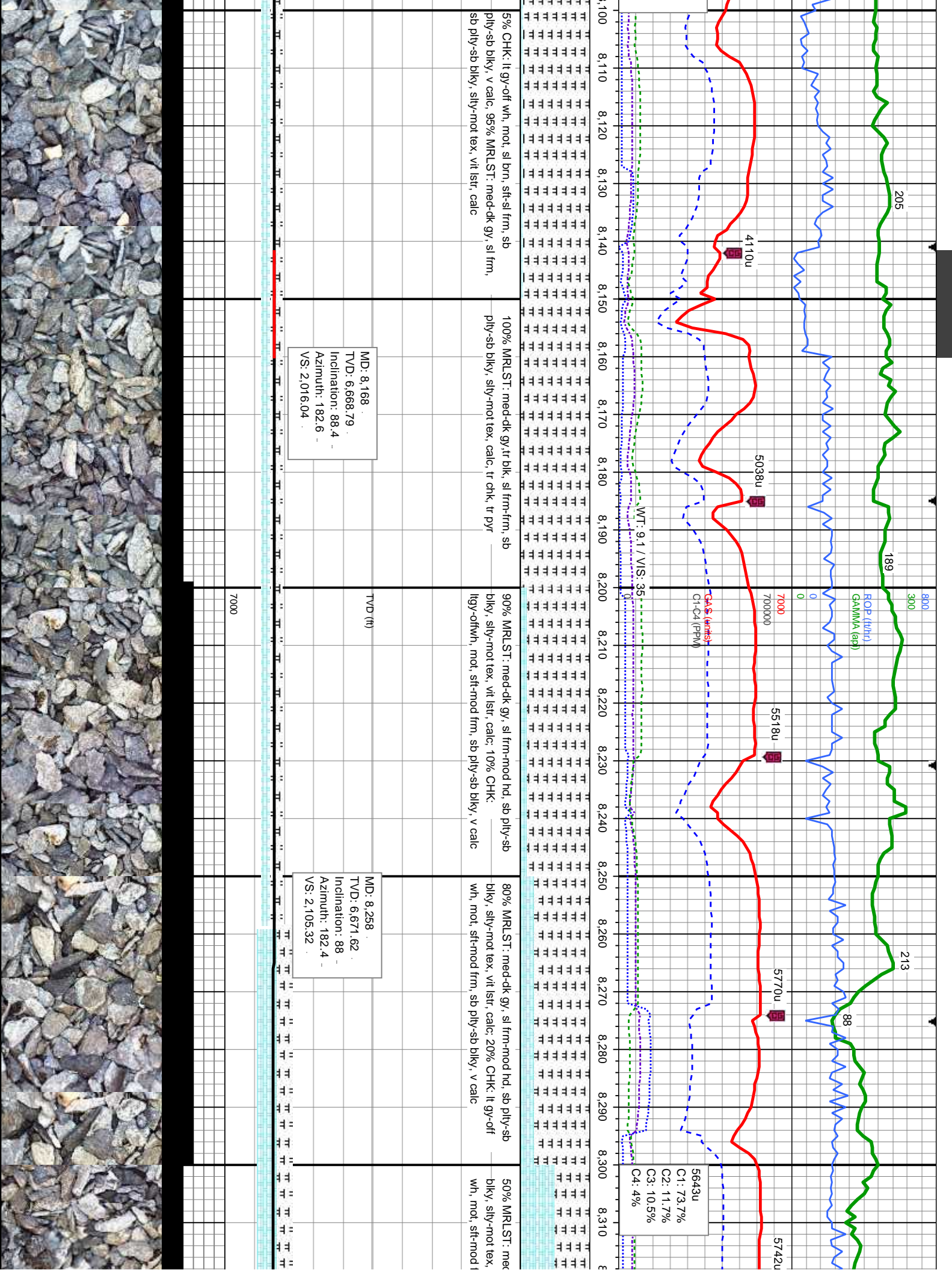




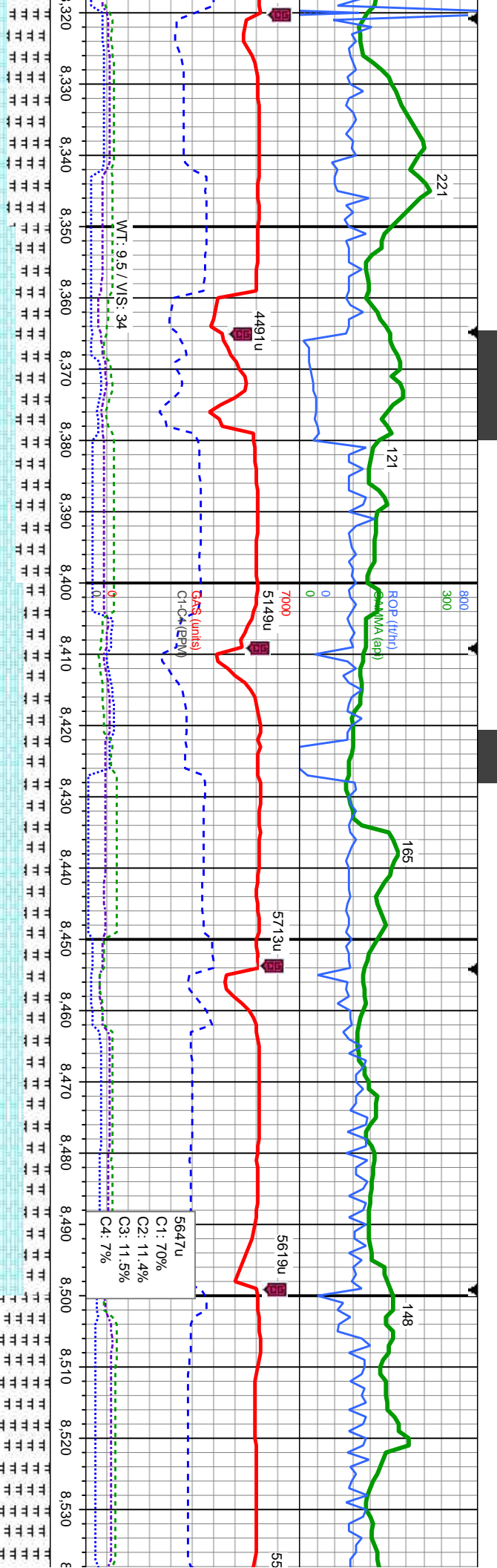












60% CHK: lt gy-off wh, mot, sft-mod frm, sb ply-sb blkly, v calc 40% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb blkly, silty-mot tex, calc, tr foss

70% CHK: lt gy-off wh, mot, sft-mod frm, sb ply-sb blkly, v calc 30% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb blkly, silty-mot tex, calc, tr foss

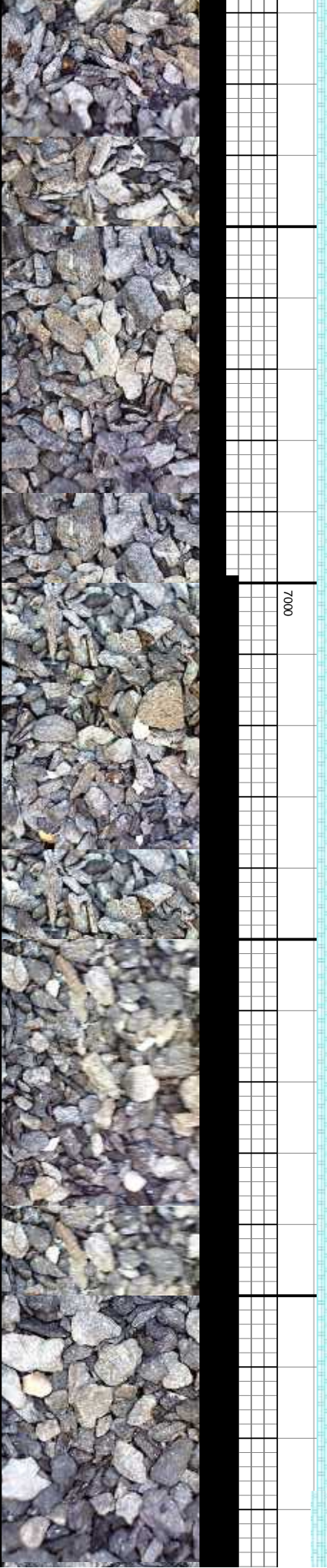
70% CHK: lt gy-off wh, mot, sft-mod frm, sb ply-sb blkly, v calc 30% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb blkly, silty-mot tex, calc, tr foss

40% CHK: lt gy-off wh, mot, sft-mod frm, sb ply-sb blkly, v calc 60% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb blkly, silty-mot tex, calc, tr foss

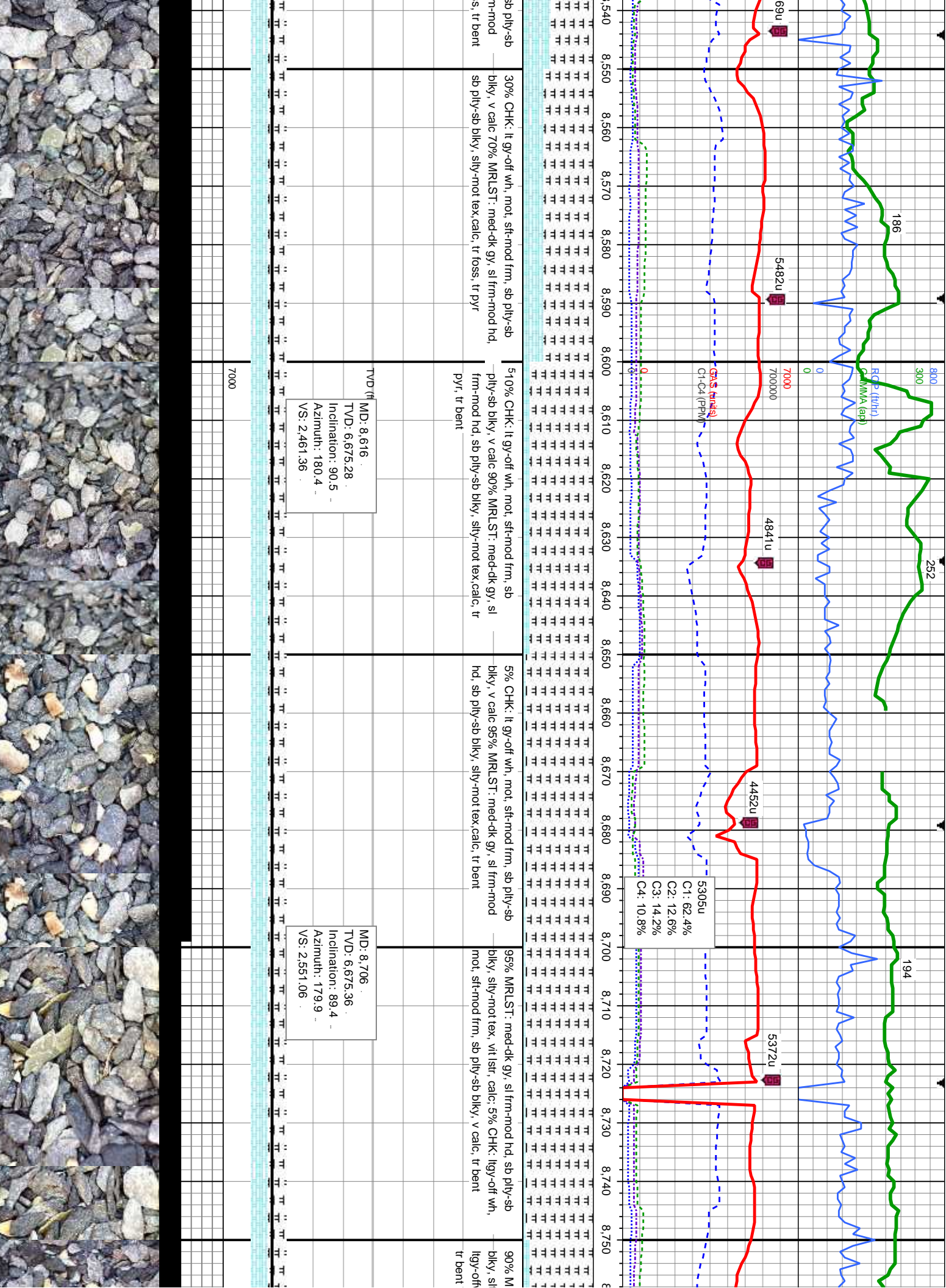
MD: 8,347  
TVD: 6,674.8  
Inclination: 87.9  
Azimuth: 182.1  
VS: 2,193.64

MD: 8,437  
TVD: 6,676.29  
Inclination: 90.2  
Azimuth: 180.8  
VS: 2,283.13

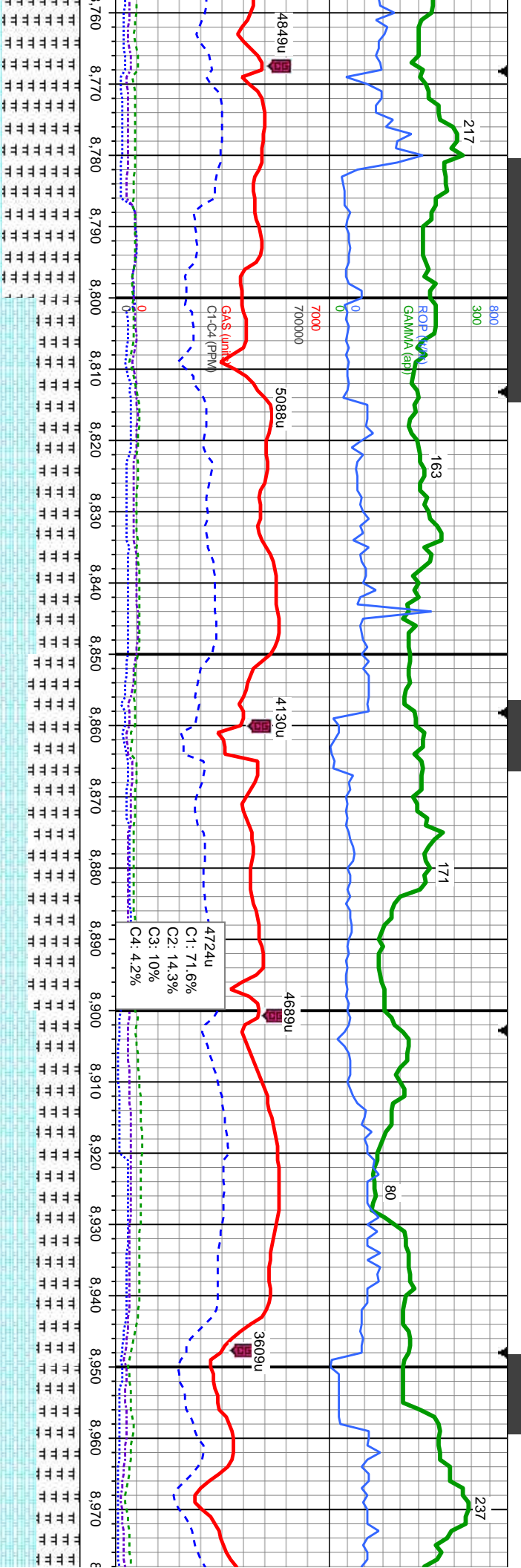
MD: 8,527  
TVD: 6,675.9  
Inclination: 90.3  
Azimuth: 180.9  
VS: 2,372.73











50% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
ply-sb blkly, silty-mot tex, vit lstr, calc: 50%  
CHK: lgy-off wh, mot, sft-mod frm, sb ply-sb  
blkly, v calc, tr bent

50% MRLST: med-dk gy, sl frm-mod hd, sb  
ply-sb blkly, silty-mot tex, vit lstr, calc: 50%  
CHK: lgy-off wh, mot, sft-mod frm, sb ply-sb  
blkly, v calc, tr bent

60% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit lstr, calc: 40% CHK: lgy-off  
wh, mot, sft-mod frm, sb ply-sb blkly, v calc, tr bent

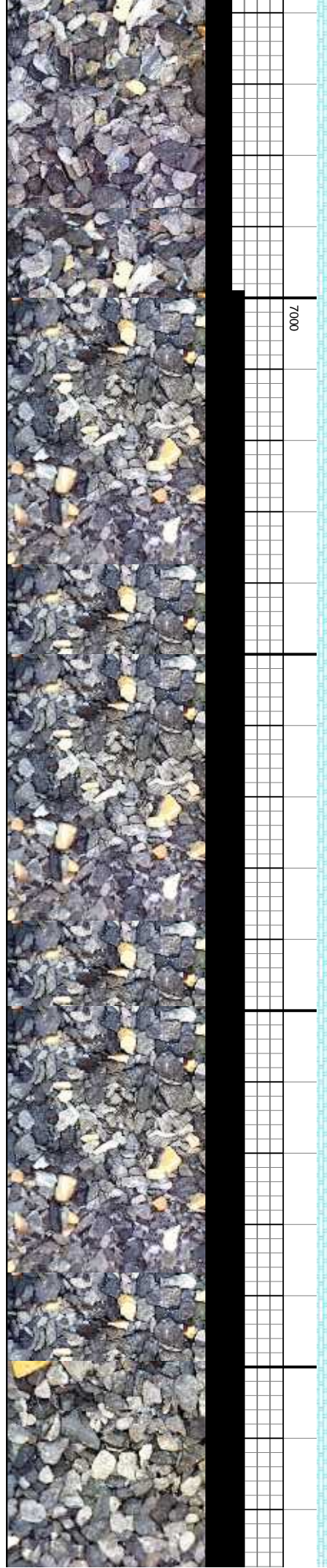
50% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit lstr, calc: 50% CHK: lgy-off  
wh, mot, sft-mod frm, sb ply-sb blkly, v calc, tr bent

50% MRLST: med-dk gy, sl frm  
blkly, silty-mot tex, vit lstr, calc: 5  
wh, mot, sft-mod frm, sb ply-sb

MD: 8,796  
TVD: 6,676.62  
Inclination: 89  
Azimuth: 179.5  
VS: 2,640.8

MD: 8,886  
TVD: 6,678.11  
Inclination: 89.1  
Azimuth: 179.5  
VS: 2,730.56

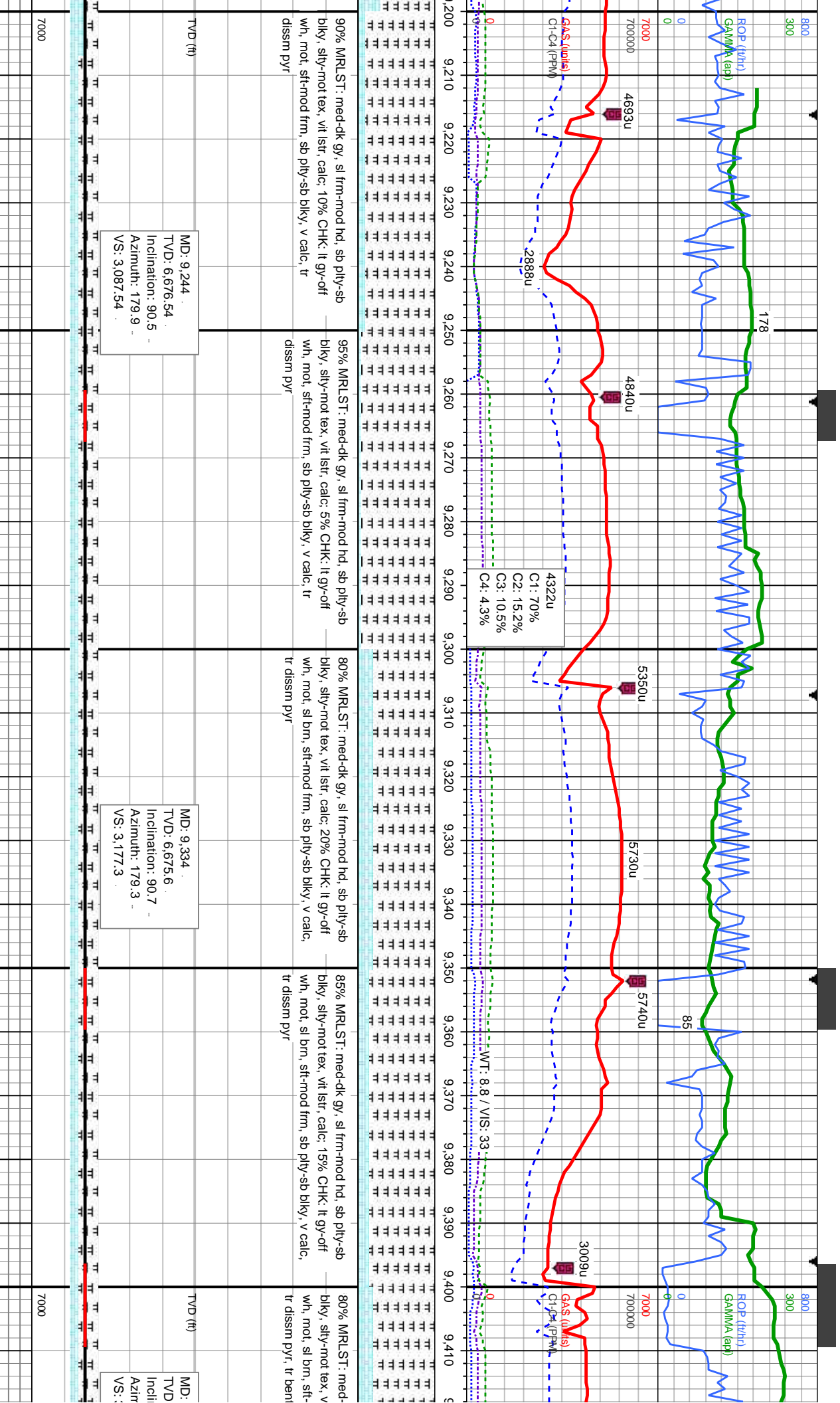
MD: 8,975  
TVD: 6,678.5  
Inclination: 9  
Azimuth: 178  
VS: 2,819.38



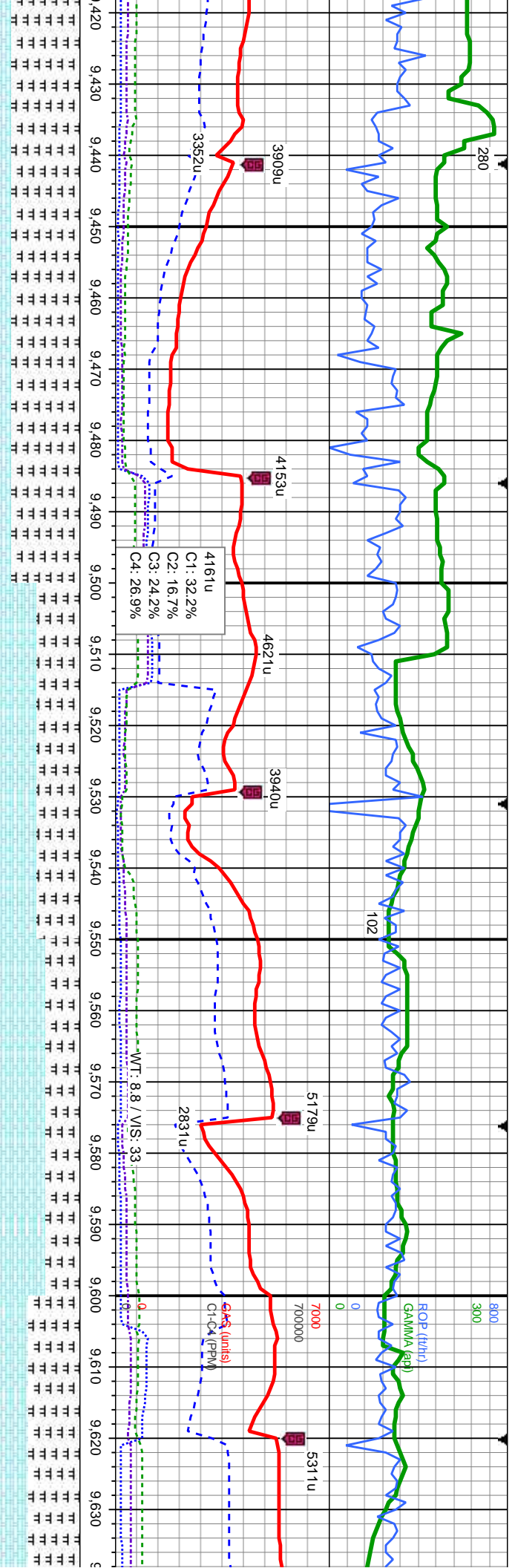












dk gy, sl frm-mod hd, sb ply-sb  
it istr, calc: 20% CHK: it gy-off  
frm-mod frm, sb ply-sb blkly, v calc.

80% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit istr, calc: 20% CHK: it gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc.  
tr dissn pyr, tr bent

50% CHK: it gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blkly, v calc: 50% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blkly, silty-mot tex, vit istr,  
calc

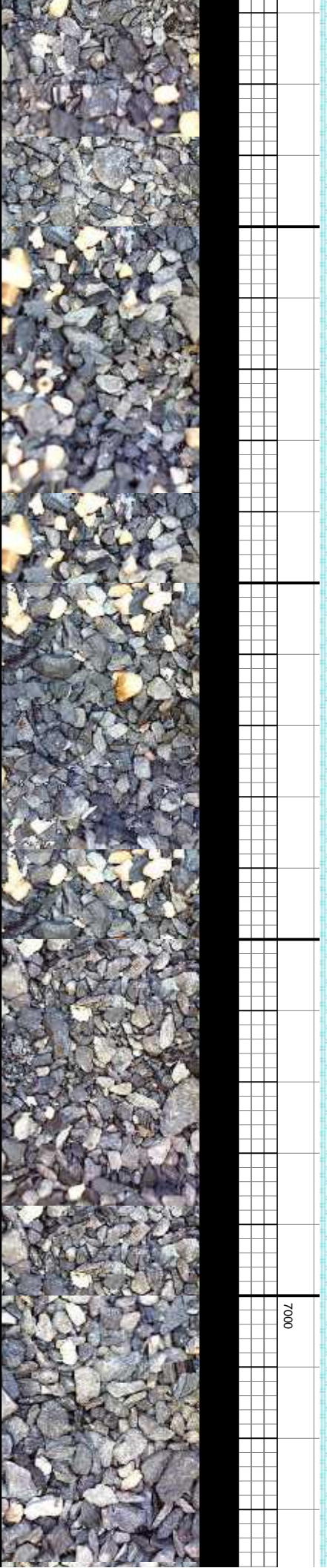
60% CHK: it gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blkly, v calc: 40% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blkly, silty-mot tex, vit istr,  
calc, tr bent

50% MRLST: med-dk gy, sl frm-mod hd, sb  
blkly, silty-mot tex, vit istr, calc: 40% CHK:  
wh, mot, sl brn, sft-mod frm, sb ply-sb blk

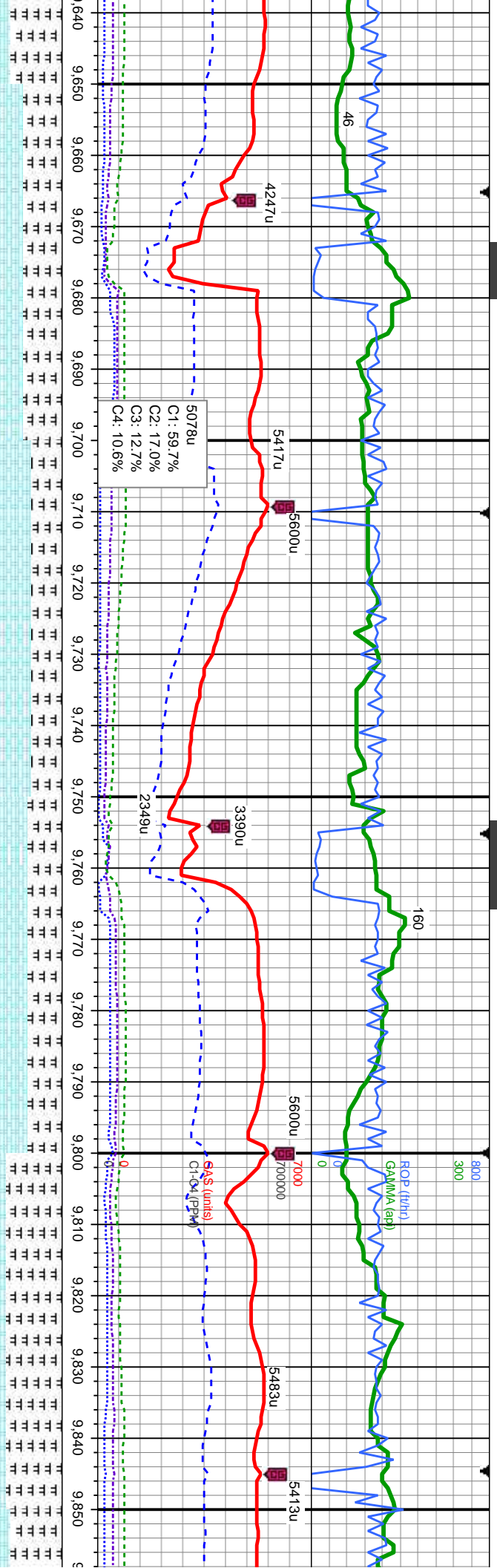
9.423  
6.674.59  
ation: 90.6  
uth: 180.9  
3.266

MD: 9.513  
TVD: 6.674.27  
Inclination: 89.8  
Azimuth: 180.9  
VS: 3.365.59

MD: 9.603  
TVD: 6.675.06  
Inclination: 89.2  
Azimuth: 180.5  
VS: 3.445.21







ply-sb  
it gy-off  
y, v calc.

55% CHK: it gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blk, v calc: 45% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blk, silty-mot tex, vit istr,  
calc, tr bent

65% CHK: it gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blk, v calc: 35% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blk, silty-mot tex, vit istr,  
calc

60% CHK: it gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blk, v calc: 40% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blk, silty-mot tex, vit istr,  
calc, tr bent

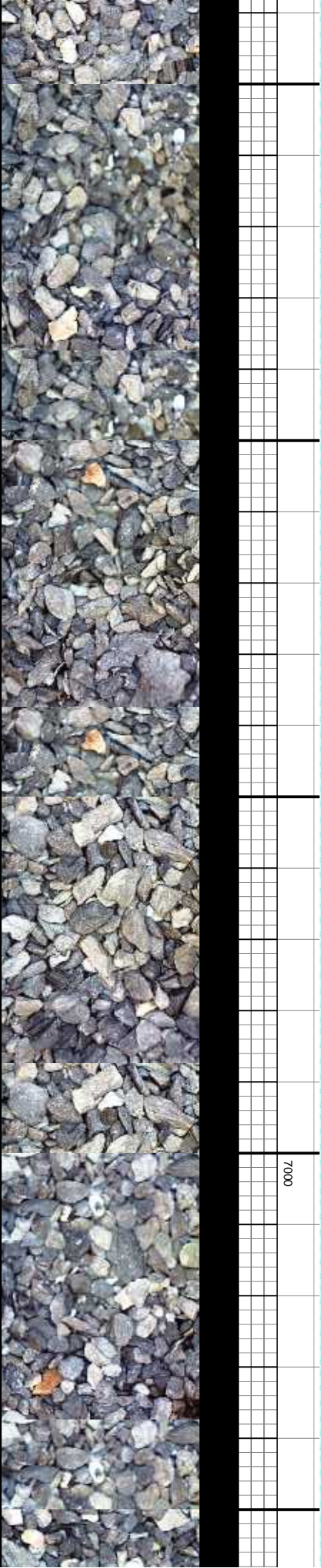
65% CHK: it gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blk, v calc: 35% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blk, silty-mot tex, vit istr,  
calc

60% MF  
bly, sft  
wh, mot

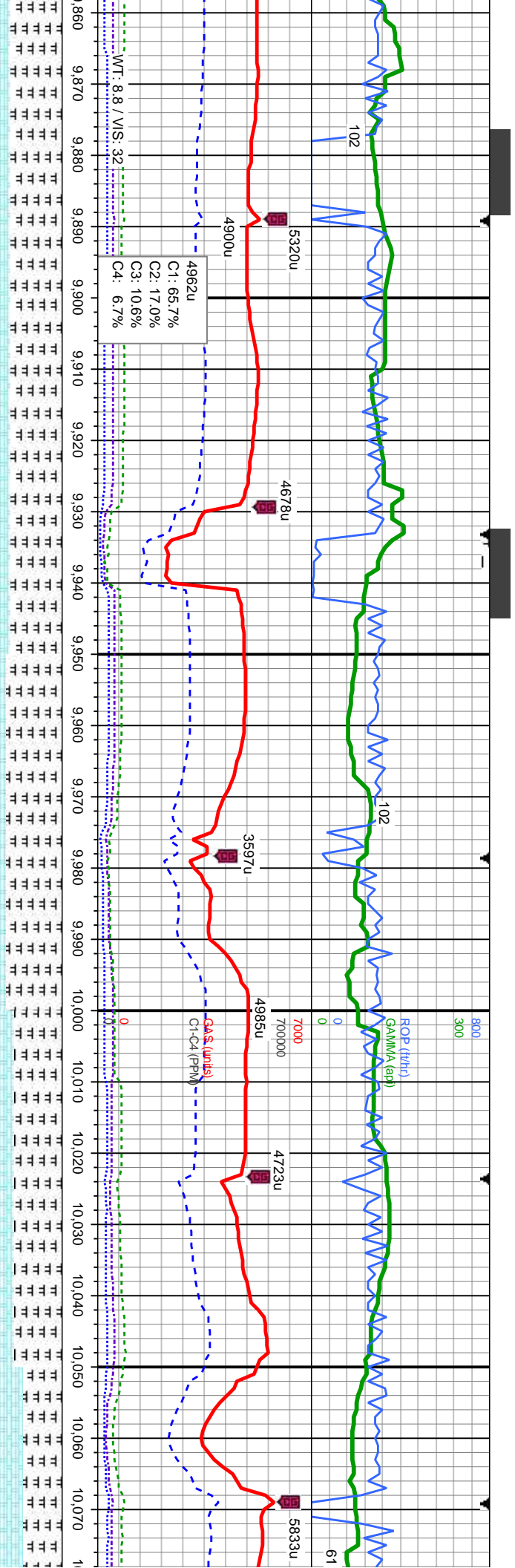
MD: 9,692  
TVD: 9,676.53  
Inclination: 88.9  
Azimuth: 181.4  
VS: 3,533.79

MD: 9,782  
TVD: 9,677.48  
Inclination: 89.9  
Azimuth: 182.4  
VS: 3,623.21

TVD (ft)







ST: med-dk gy, sl frm-mod hd, sb ply-sb  
mot tex, vit lstr, calc: 40% CHK: lt gy-off  
sl brn, sft-mod frm, sb ply-sb blkly, v calc

60% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit lstr, calc: 40% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc,  
tr bent

65% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit lstr, calc: 35% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc,  
tr bent

55% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit lstr, calc: 45% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc

55% CHK: lt gy-off wh, mot, sl  
frm-mod hd, sb ply-sb blkly, silty  
calc, tr bent

MD: 9.871  
TVD: 6,677.48  
Inclination: 90.1  
Azimuth: 182.4  
VS: 3,711.56

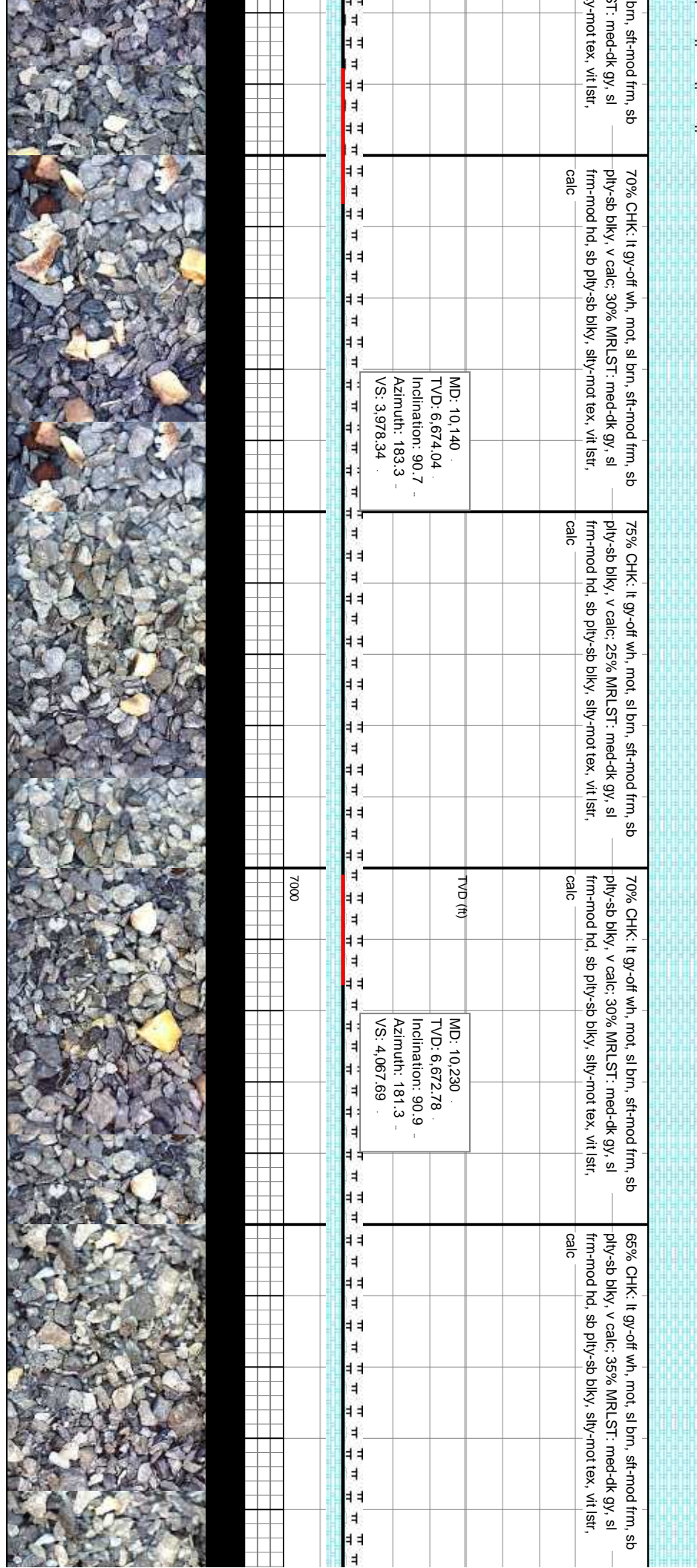
MD: 9.961  
TVD: 6,676.69  
Inclination: 90.9  
Azimuth: 183  
VS: 3,800.84

MD: 10.051  
TVD: 6,675.28  
Inclination: 90.9  
Azimuth: 182.5  
VS: 3,890.1

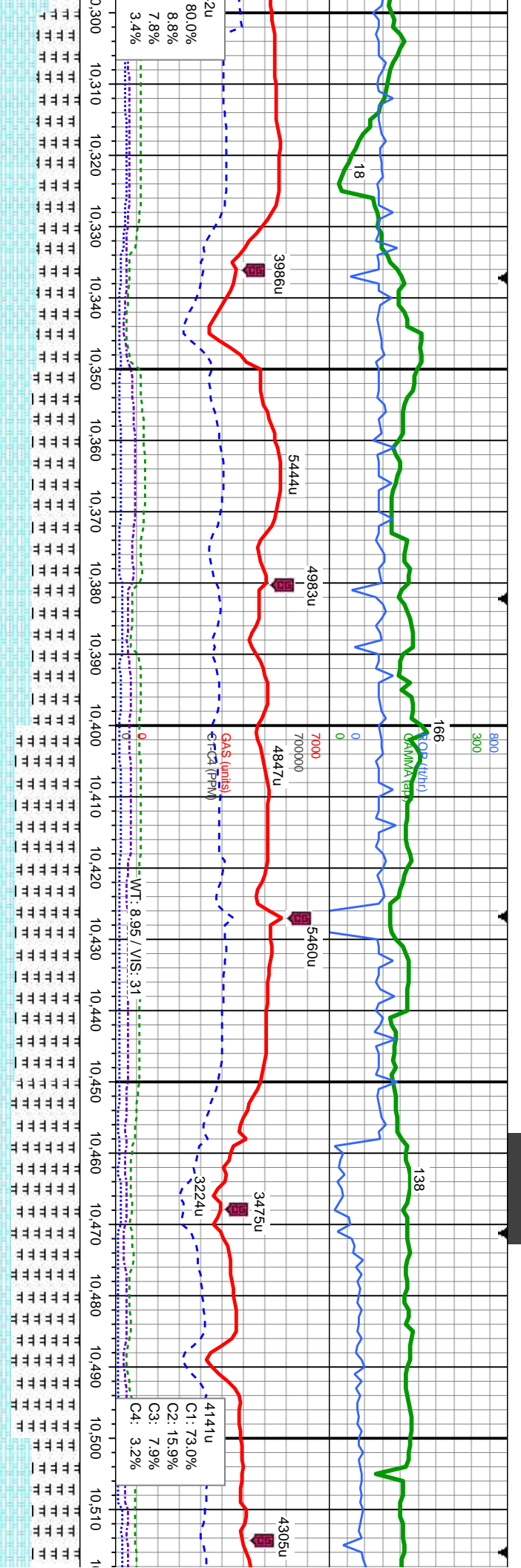
TVD (ft)











50% CHK: lt gy-off wh, mot, sl brn, sft-mod frm, sb  
ply-sb blkly, v calc: 50% MRLST: med-dk gy, sl  
frm-mod hd, sb ply-sb blkly, silty-mot tex, vit istr,  
calc

55% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit istr, calc: 45% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc,  
tr bent

75% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit istr, calc: 25% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc,  
tr bent

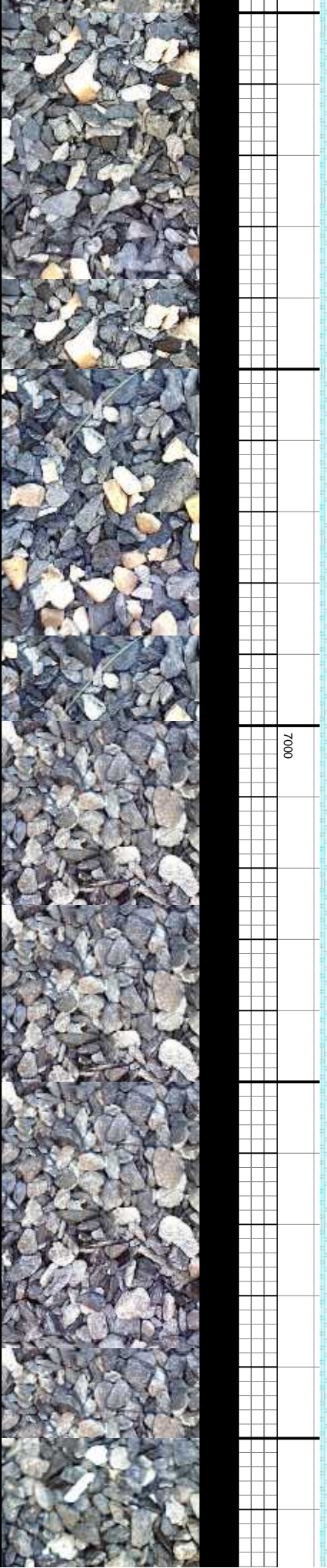
80% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blkly, silty-mot tex, vit istr, calc: 20% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blkly, v calc,  
tr bent

55% MRLST: med  
blkly, silty-mot tex, v  
wh, mot, sl brn, sft-  
tr bent, tr fos frag

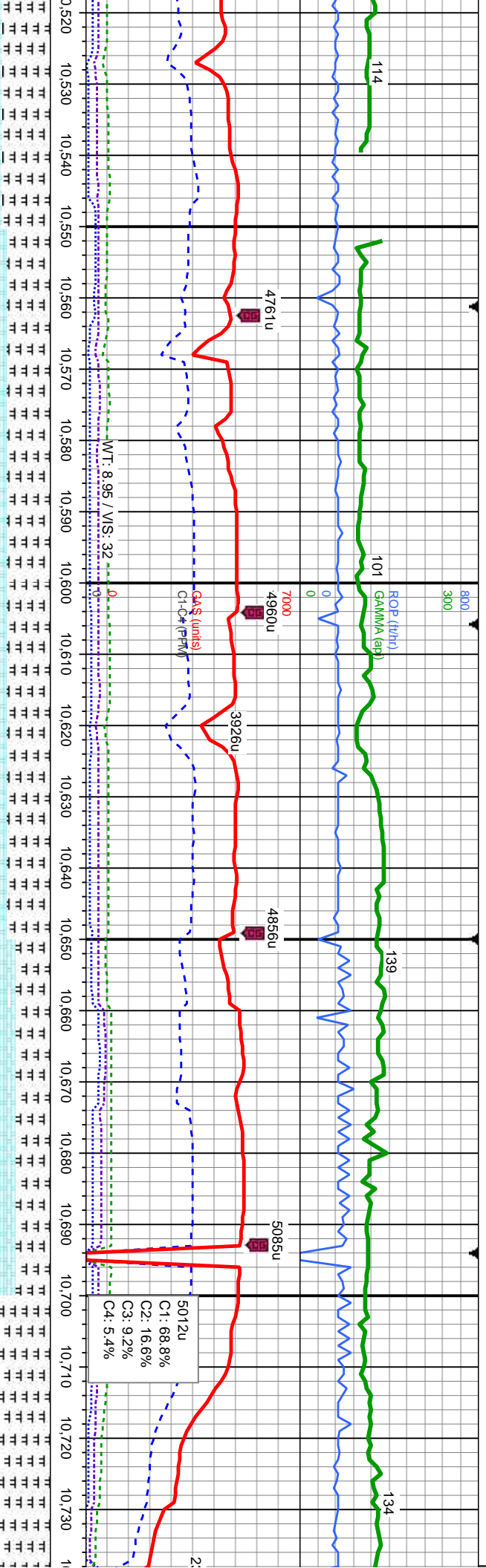
MD: 10,319  
TVD: 6,671.61  
Inclination: 90.6  
Azimuth: 180.7  
VS: 4,156.26

MD: 10,409  
TVD: 6,670.91  
Inclination: 90.3  
Azimuth: 180.4  
VS: 4,245.91

MD: 10,498  
TVD: 6,670.52  
Inclination: 90.2  
Azimuth: 180.2  
VS: 4,334.59







dk gy, sl frm-mod hd, sb ply-sb  
it istr, calc: 45% CHK: lt gy-off  
mod frm, sb ply-sb blk, v calc.

50% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blk, silty-mot tex, vit istr, calc: 50% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blk, v calc.  
tr bent, tr fos frag

50% MRLST: med-dk gy, sl frm-mod hd, sb ply-sb  
blk, silty-mot tex, vit istr, calc: 50% CHK: lt gy-off  
wh, mot, sl brn, sft-mod frm, sb ply-sb blk, v calc

40% MRLST: med-dk gy, sl frm-frn, sb ply-sb  
blk, silty-mot tex, vit istr, calc: 60% CHK: lt gy-off  
wh, mot, sl brn, sft-sl frm, sb ply-sb blk, v calc

60% MRLST: med-dk gy, sl frm-frn, sb ply-sb  
blk, silty-mot tex, vit istr, calc: 40% CHK: lt gy-off  
wh, mot, sl brn, sft-sl frm, sb ply-sb blk, v calc

MD: 10.588  
TVD: 6.669.58  
Inclination: 91  
Azimuth: 180.9  
VS: 4.424.23

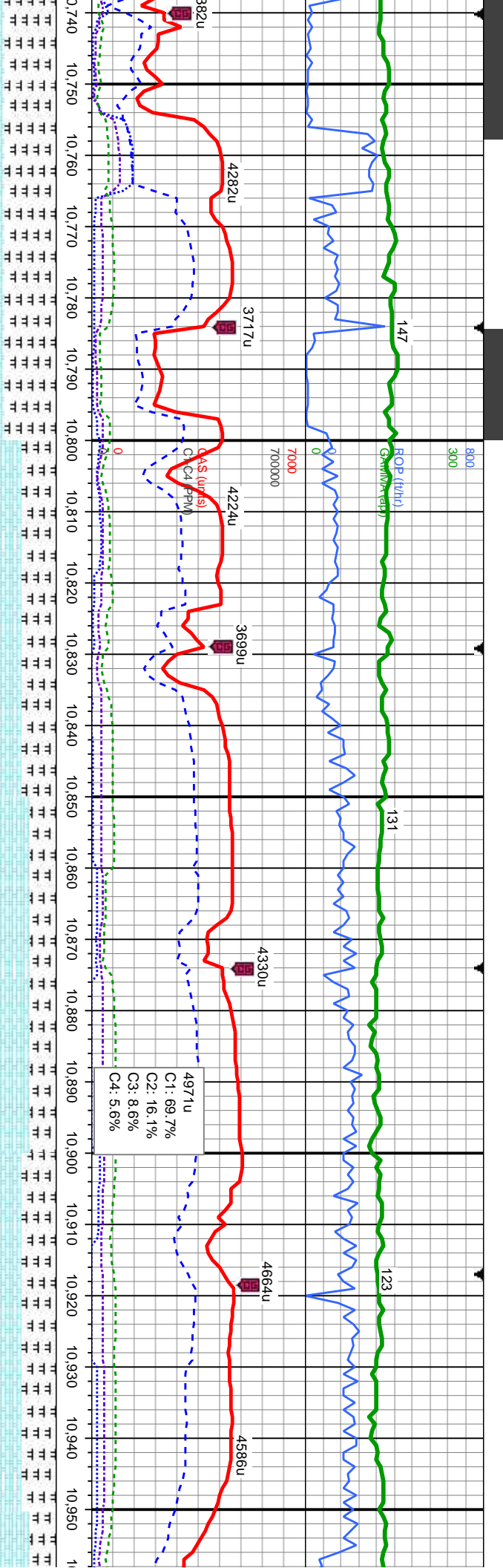
MD: 10.677  
TVD: 6.667.56  
Inclination: 91.6  
Azimuth: 182.3  
VS: 4.512.66

5012u  
C1: 68.8%  
C2: 16.6%  
C3: 9.2%  
C4: 5.4%

7000







60% MRLST: med-dk gy, sl frm-frn, sb ply-sb blkly, t gy-off wh, calc  
60% MRLST: med-dk gy, sl frm-frn, sb ply-sb blkly, mot, sl brn, sft-sl frm, sb ply-sb blkly, v calc  
50% MRLST: med-dk gy, sl frm-frn, sb ply-sb blkly, wh, mot, sl brn, sft-sl frm, sb ply-sb blkly, v calc  
30% MRLST: med-dk gy, sl frm-frn, sb ply-sb blkly, sily-mot tex, vit lsfr, calc: 70% CHK: lt gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blkly, v calc  
40% MRLST: med-dk gy, sl frm-frn, sb ply-sb blkly, blkly, sily-mot tex, vit lsfr, calc: 60% CHK: lt gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blkly, v calc, tr foss, tr pyr  
30% MRLST: med-dk gy, sl frm-frn, sb ply-sb blkly, blkly, sily-mot tex, vit lsfr, calc: 40% CHK: lt gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blkly, v calc

MD: 10.767  
TVD: 6.665.2  
Inclination: 91.4  
Azimuth: 180.9  
VS: 4.602.11

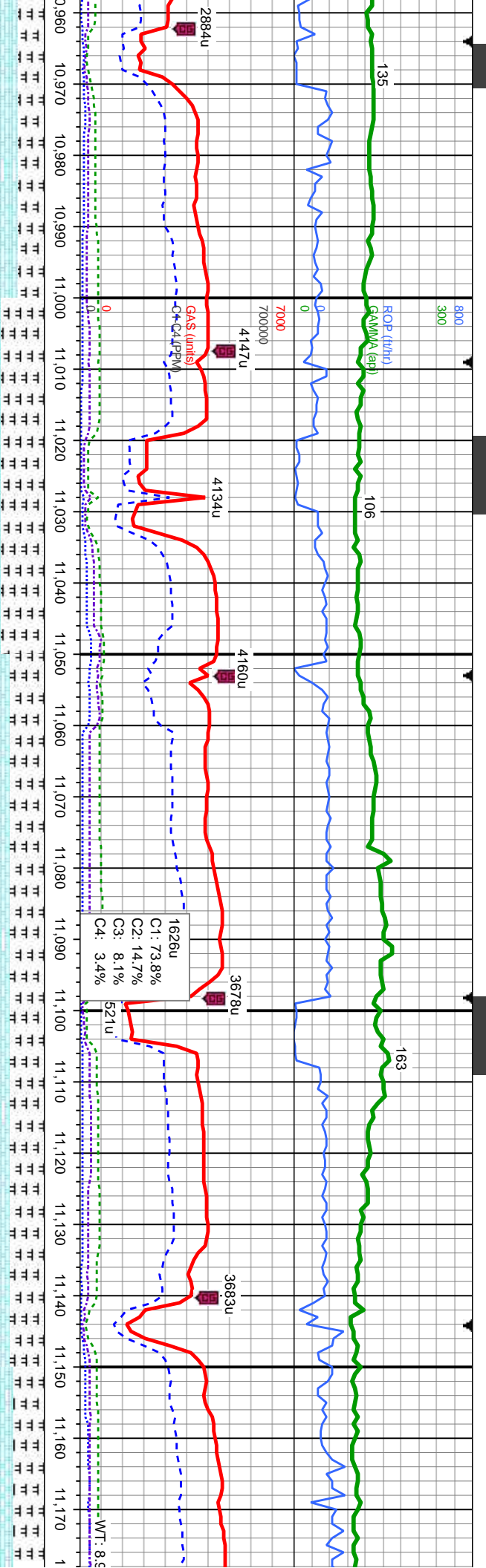
MD: 10.857  
TVD: 6.664.02  
Inclination: 90.1  
Azimuth: 178.5  
VS: 4.691.85

MD: 10.946  
TVD: 6.663.32  
Inclination: 90.8  
Azimuth: 175.1  
VS: 4.780.81

7000







50% MRLST: med-dk gy, sl frm-frn, sb ply-sb blyk, silty-mot tex, vit istr, calc: 50% CHK: it gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blyk, v calc, tr foss

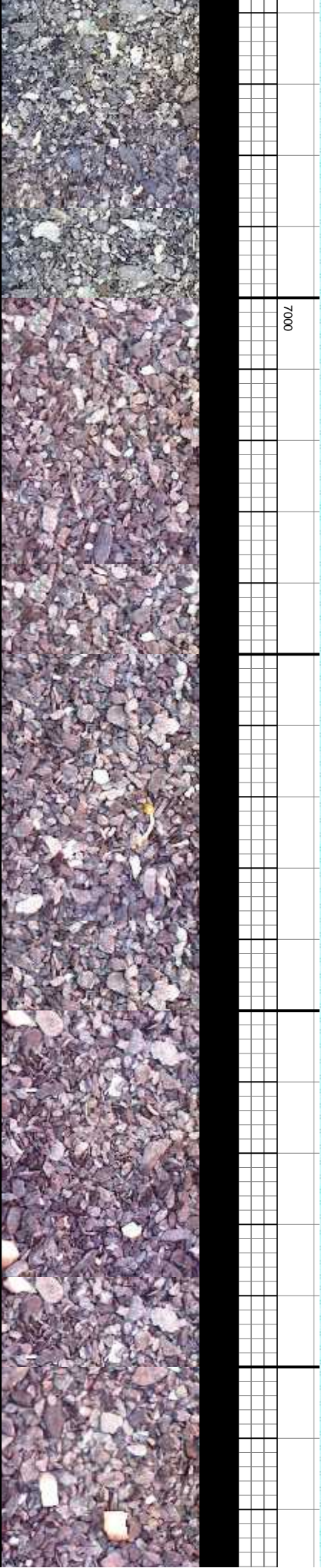
MD: 11.036  
TVD: 6,662.46  
Inclination: 90.3  
Azimuth: 176.6  
VS: 4,870.8

40% MRLST: med-dk gy, sl frm-frn, sb ply-sb blyk, silty-mot tex, vit istr, calc: 60% CHK: it gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blyk, v calc, tr foss

MD: 11.126  
TVD: 6,661.83  
Inclination: 90.5  
Azimuth: 178  
VS: 4,960.75

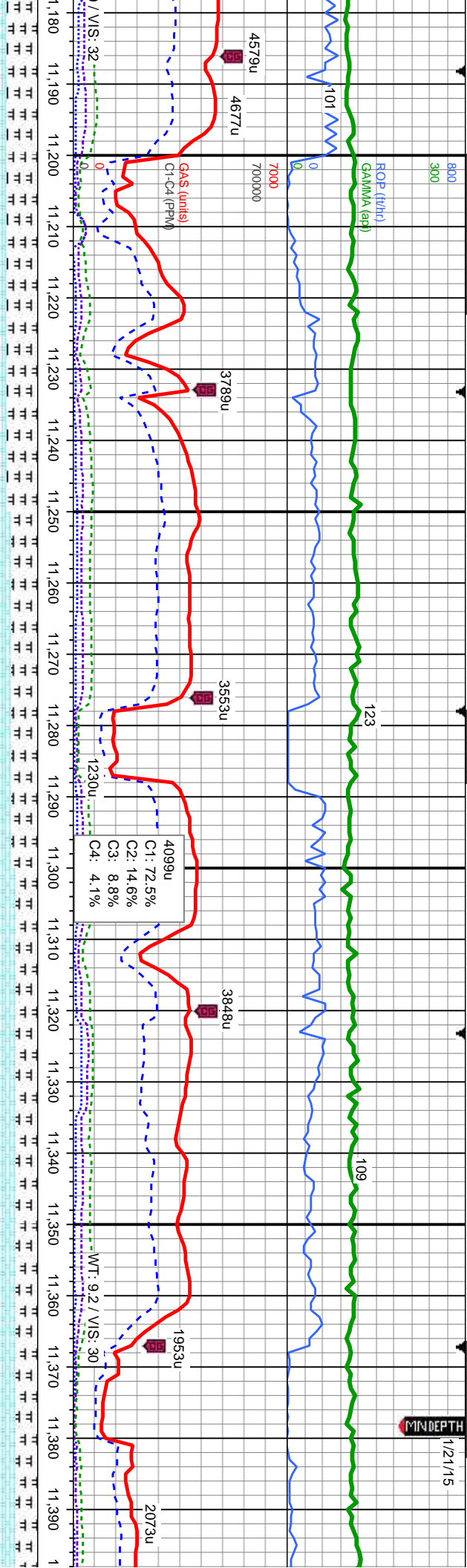
60% CHK: it gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blyk, v calc: 40% MRLST: med-dk gy, sl frm-frn, sb ply-sb blyk, silty-mot tex, vit istr, calc, tr foss

65% CHK: it gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blyk, v calc: 35% MRLST: med-dk gy, sl frm-frn, sb ply-sb blyk, silty-mot tex, vit istr, calc: 65% CHK: it gy-off wh, mot, sl brn, sft-sl frm, sb ply-sb blyk, v calc, tr foss





MINDEPTH



brn, sft-sl frm, sb	65% CHK: It gy-off wh, mot, sl brn, sft-sl frm, sb	70% CHK: It gy-off wh, mot, sl brn, sft-sl frm, sb	75% CHK: It gy-off wh, mot, sl brn, sft-sl frm, sb	75% CHK: It gy-off wh, mot, sl brn, sft-sl frm, sb
ST: med-dk gy, sl	ply-sb blk, v calc: 35% MRLST: med-dk gy, sl	ply-sb blk, v calc: 30% MRLST: med-dk gy, sl	ply-sb blk, v calc: 25% MRLST: med-dk gy, sl	ply-sb blk, v calc: 25% MRLST: med-dk gy, sl
not tex, vit lstr, calc, tr	frm-frm, sb ply-sb blk, silty-mot tex, vit lstr, calc, tr	frm-frm, sb ply-sb blk, silty-mot tex, vit lstr, calc, tr	frm-frm, sb ply-sb blk, silty-mot tex, vit lstr, calc, tr	frm-frm, sb ply-sb blk, silty-mot tex, vit lstr, calc, tr
	foss	foss	foss, tr bent	foss, tr bent

TVD: 11,215  
MD: 6,661.44  
Inclination: 90  
Azimuth: 178.3  
VS: 5,049.65

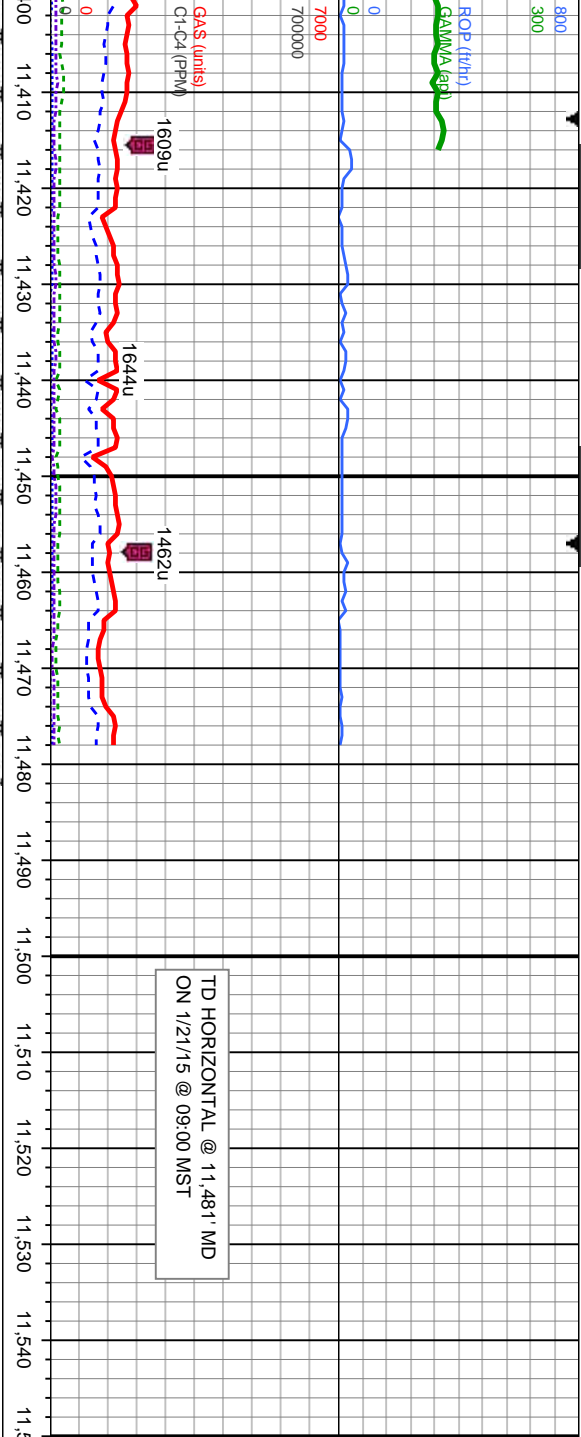
TVD: 11,305  
MD: 6,661.29  
Inclination: 90.2  
Azimuth: 178.7  
VS: 5,139.52

TVD: 11,394  
MD: 6,660.74  
Inclination: 90  
Azimuth: 178  
VS: 5,228.39

7000







70% CHK: lt gy-off wh, mot, sl brn, sft-sl frm, sb  
ply-sb blk, v calc: 30% MRLST: med-dk gy, sl  
frm-frm, sb ply-sb blk, stly-mot tex, vit lstr, calc, tr  
foss, tr bent

80% CHK: lt gy-med gy, mot, sl brn, sft-sl frm, sb  
ply-sb blk, v calc: 20% MRLST: dk gy-blk, sl  
frm-frm, sb ply-sb blk, stly-mot tex, vit lstr, calc,  
tr foss, tr bent, tr pyr

MD: 11,481  
TVD: 6,660.08  
Inclination: 90.5  
Azimuth: 178.4  
VS: 5,315.25

PROJECTION TO BIT

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