



Scale: 5" / 100'  
Measured Depth Log

Well Name North Platte E-A 24HNA

Location SESW SECTION 24, T5N, R63W

State COLORADO

County WELD

Country USA

Rig Number CADE 25

API Number 05-123-39520

Region DJ BASIN

Field WATTENBERG

Spud Date 8/5/2014

Drilling Completed 8/13/2014

Surface Coordinates 461' FSL x 1339' FWL

Bottom Hole Coordinates 230' FNL x 85' FWL

Ground Elevation 4568'

K.B. Elevation 4585'

Logged Interval 5930' To 11081'

Total Depth 11081'

Formation NIOBRARA A CHALK

Type of Drilling Fluid FW LSND

Company Bonanza Creek  
Address 410 17th STRE  
DENVER, CO 8

Name BRANT LOGAN  
Company BONANZA CRE  
Address 410 17th STRE  
DENVER, CO 8

COLUMBINE LOGGING, INC  
WELL SITE GEOLOGISTS

Operator

Energy Inc.

ET, SUITE 1500  
0202

Geologist

EEK ENERGY INC.

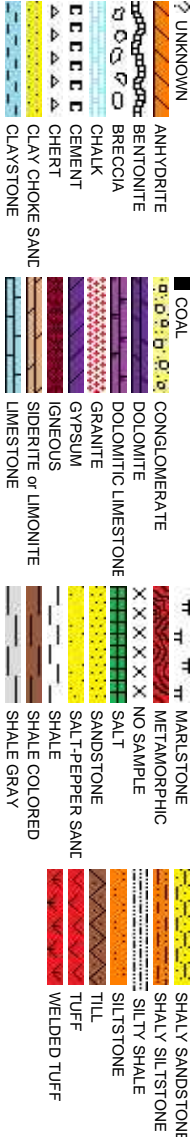
ET, SUITE 1500  
0202

Other

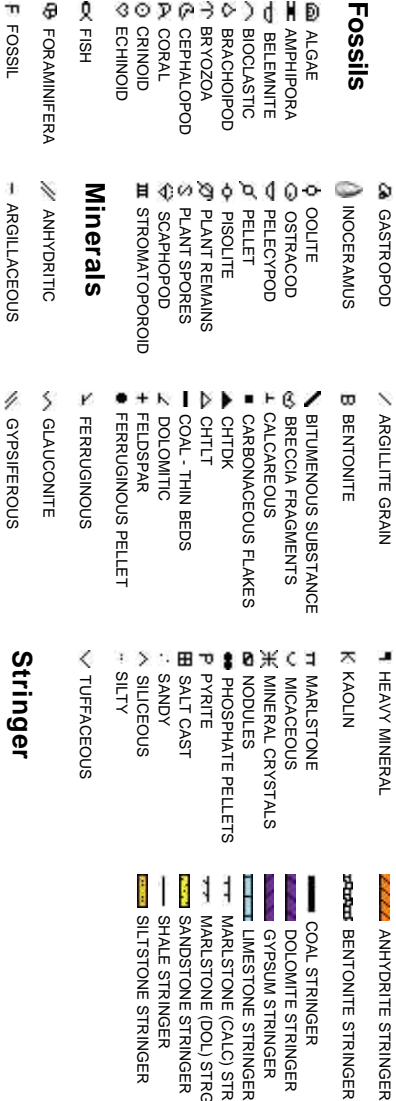
2385 S. LIPAN ST.  
DENVER, CO 80223

JOEY LUCE  
JEFF LACY

Rock Types

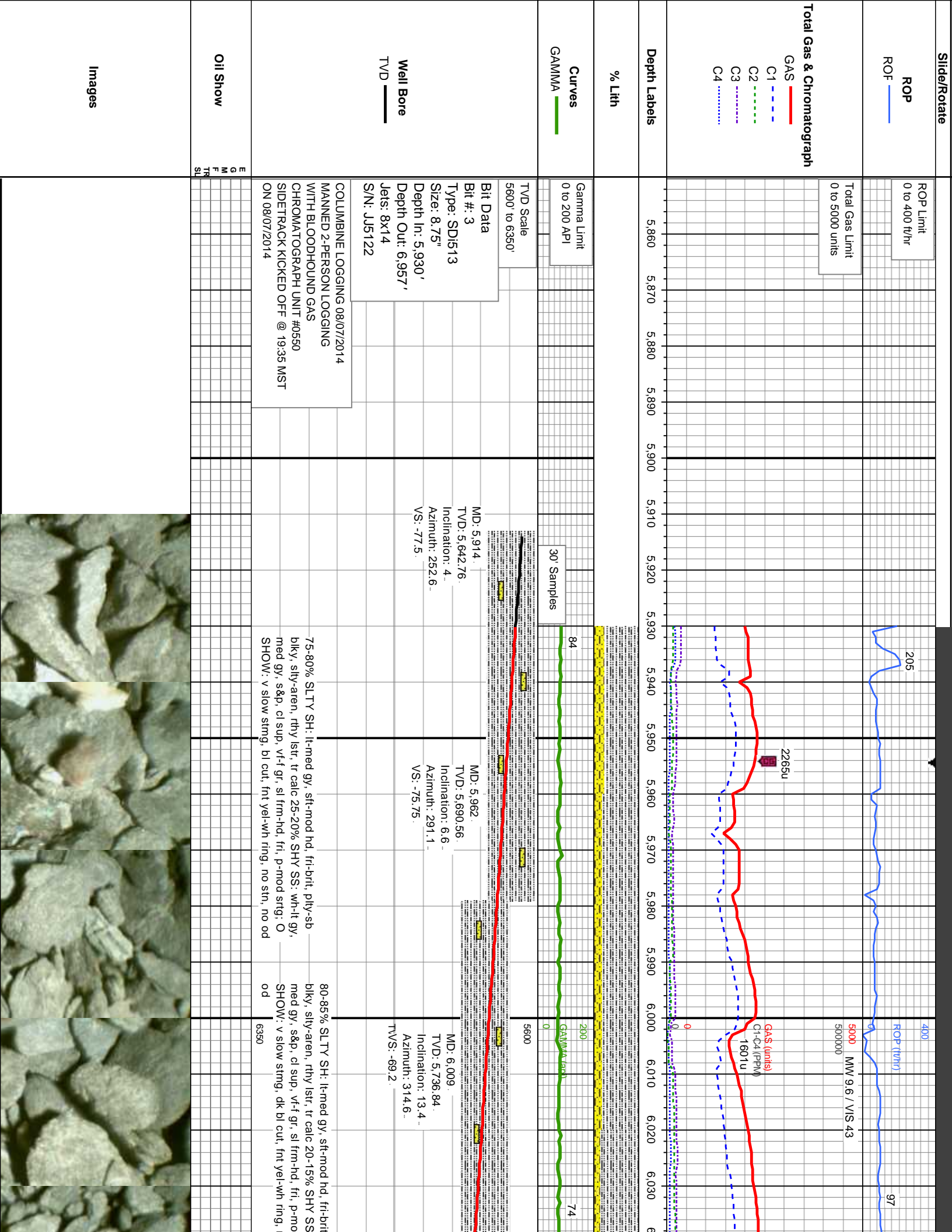


Accessories

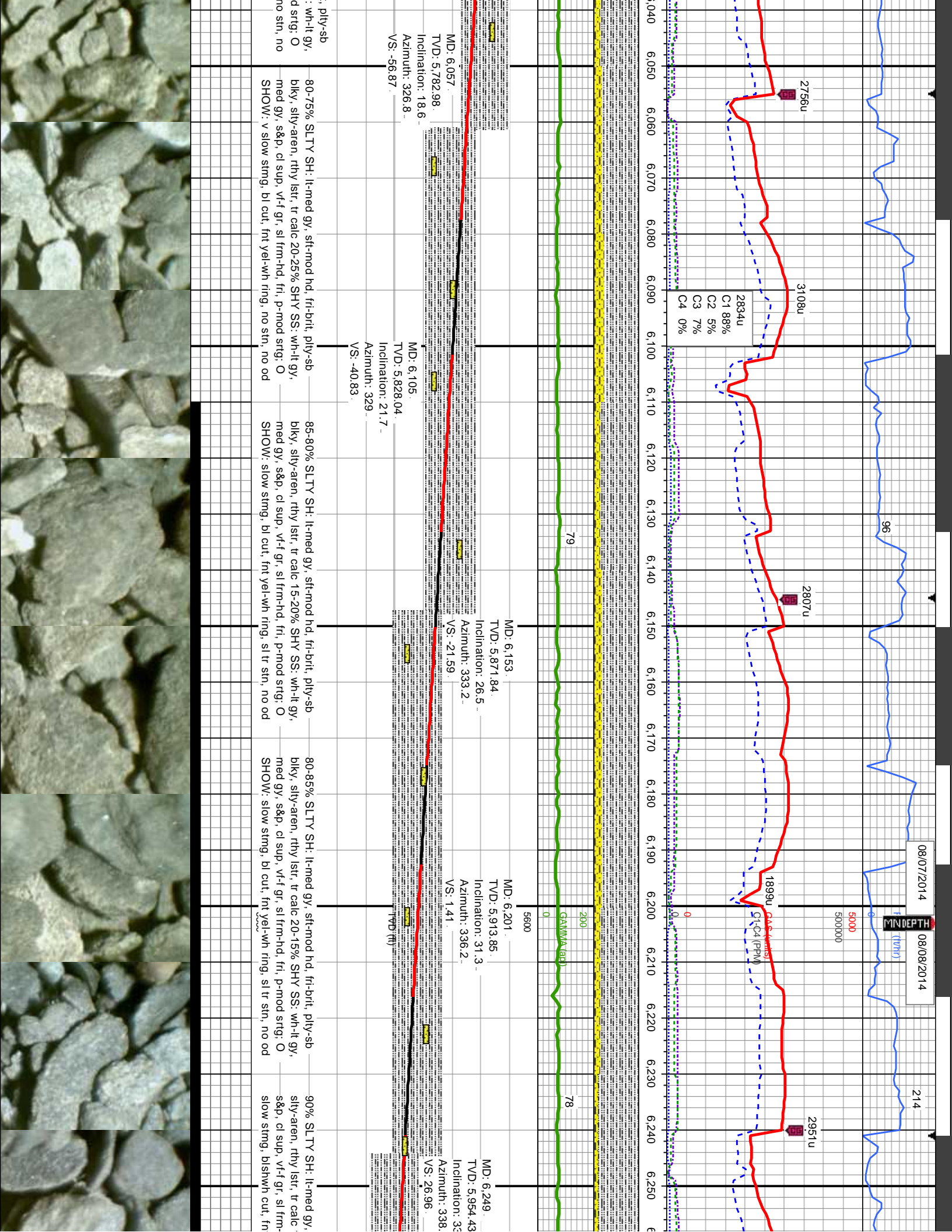


Stringer

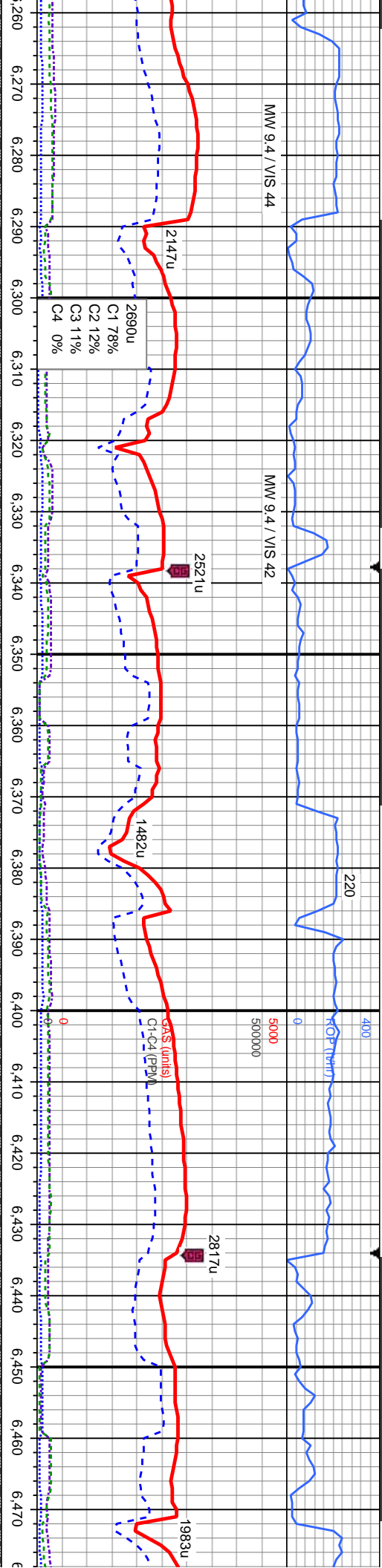












MD: 6.298  
TVD: 5.994.98  
Inclination: 35  
Azimuth: 341.5  
VS: 54.44

MD: 6.346  
TVD: 6.032.71  
Inclination: 41.3  
Azimuth: 346.2  
VS: 84.04

MD: 6.394  
TVD: 6.067.87  
Inclination: 44.5  
Azimuth: 347  
VS: 116.61

MD: 6.442  
TVD: 6.101.9  
Inclination: 45.2  
Azimuth: 348  
VS: 150.31

sft-mod hd, fri-brit, pily-sb blkly,  
10% SHY SS: wh-lt gy, med gy,  
hd, fri, p-mod strg; O SHOW:  
gn-yl ring, sl tr stn, no od

85% SLTY SH: lt-med gy, sft-mod hd, fri-brit, pily-sb blkly,  
sily-aren, rthy lsfr, tr calc 15% SHY SS: wh-lt gy, med gy,  
s&p, cl sup, vf-f gr, sl frm-hd, fri, p-mod strg; O SHOW:  
slow stmg, blshwh cut, fnt gn-yl ring, sl tr stn, no od

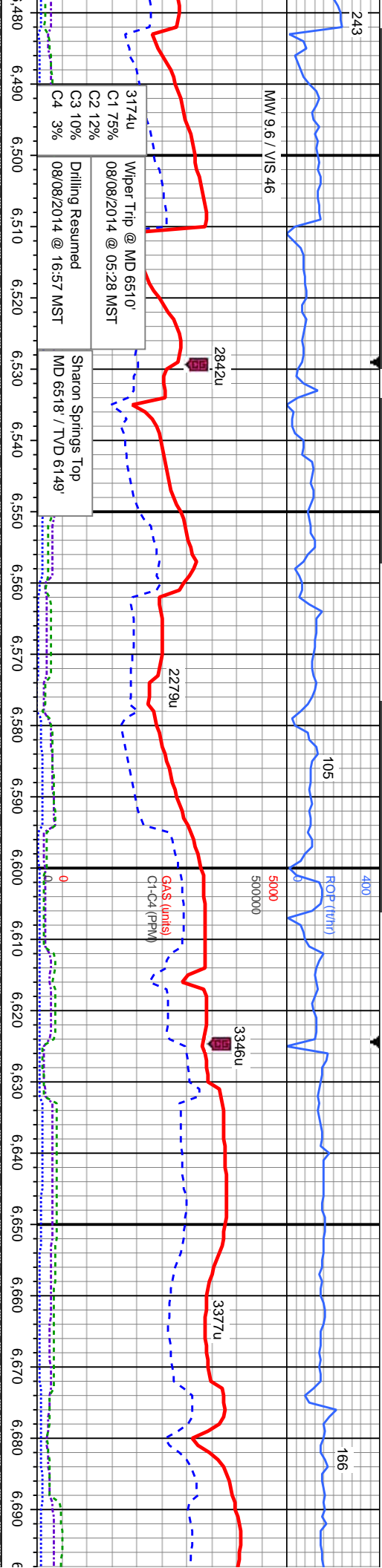
90-85% SLTY SH: lt-med gy, sft-mod hd, fri-brit, pily-sb  
blkly, sily-aren, rthy lsfr, tr calc 10-15% SHY SS: wh-lt  
gy, med gy, s&p, cl sup, vf-f gr, sl frm-hd, fri, p-mod  
strg; O SHOW: slow stmg, blshwh cut, fnt yel-gn ring,  
sl tr stn, no od

90% SLTY SH: lt-med gy, sft-mod hd, fri-brit, pily-sb  
blkly, sily-aren, rthy lsfr, tr calc 10% SHY SS: wh-lt gy,  
med gy, s&p, cl sup, vf-f gr, sl frm-hd, fri, p-mod strg; O  
SHOW: slow stmg, blshwh cut, fnt yel-gn ring, sl tr stn,  
no od

95-1  
blkly,  
med  
SHO  
no o







100% SLTY SH: lt-med gy, sft-mod hd, fri-brit, pty-sb  
sily-aren, rthy lstf, tr calc 5-0% SHY SS: wh-lt gy,  
gy, s&g, cl sup, v-f gr, sl frm-hd, fri, p-mod stryg; O  
W: slow stimg, blshwh cut, fnt yel-gn ring, sl tr stn,  
d

100% SLTY SH: lt-med gy, sft-mod hd, fri-brit, pty-sb  
blky, sily-aren, rthy lstf, tr calc tr shy ss; O SHOW:  
slow stimg, blshwh cut, fnt yel-gn ring, tr stn, no od

100% SLTY SH: lt-med gy, sft-mod hd, fri-brit, pty-sb  
blky, sily-aren, rthy lstf, tr calc tr shy ss, tr scat bent; O  
SHOW: mod-slow stimg, blshwh cut, yel-gn ring, tr stn,  
no od

100% SLTY SH: lt-med gy, sft-mod hd, fri-brit, p  
blky, sily-aren, rthy lstf, tr calc, tr shy ss, occ s  
bent; O SHOW: mod-slow stimg, bl cut, yel-gn r  
stn, no od

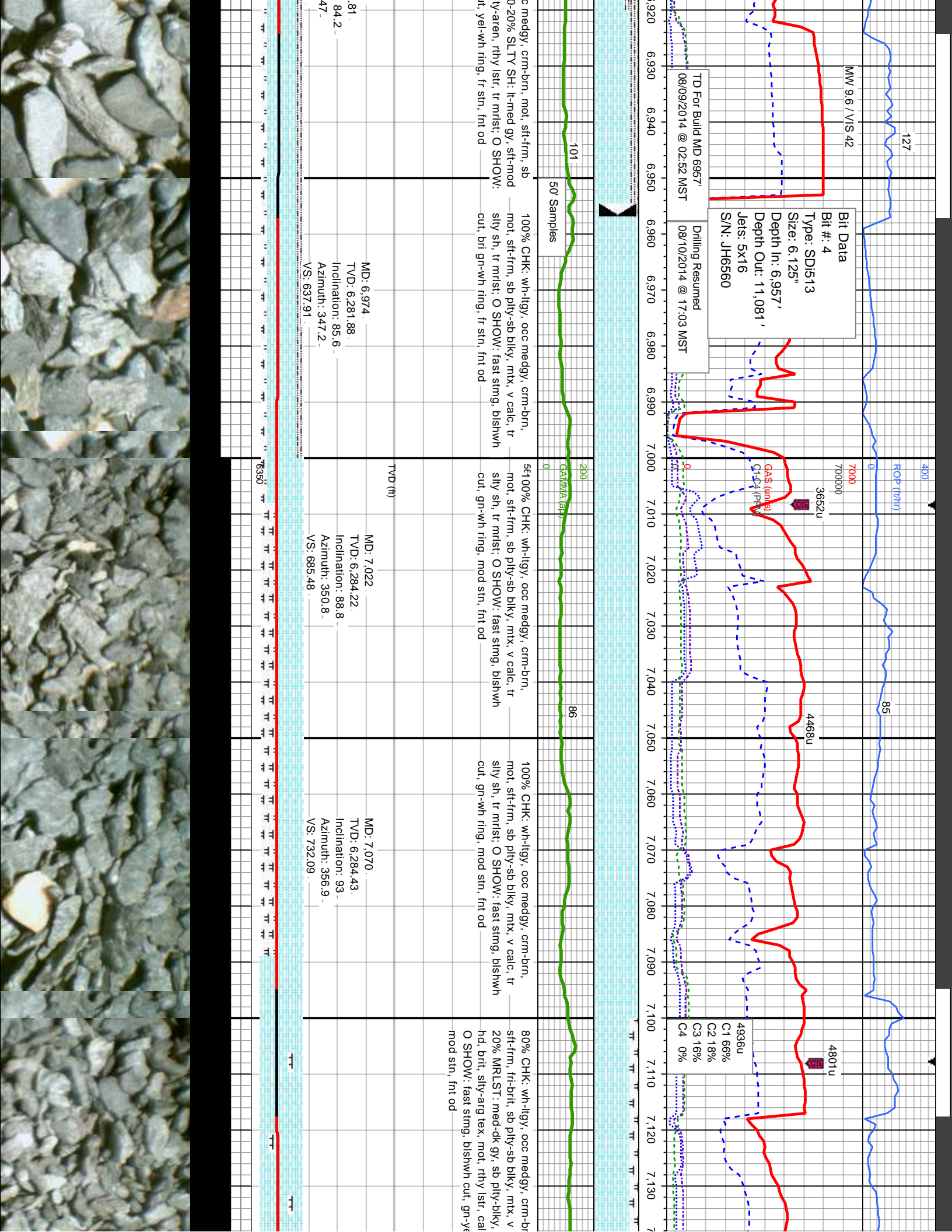
MD: 6,489 TVD: 6,133.25 Inclination: 51.1 Azimuth: 346 VS: 185.17	MD: 6,537 TVD: 6,160.76 Inclination: 58.9 Azimuth: 347.2 VS: 224.33	MD: 6,585 TVD: 6,183.4 Inclination: 64.8 Azimuth: 348.5 VS: 266.41	MD: 6,633 TVD: 6,202.57 Inclination: 68.1 Azimuth: 349.7 VS: 310.07	MD: 6,682 TVD: 6,220.73 Inclination: 68.4 Azimuth: 349 VS: 355.22
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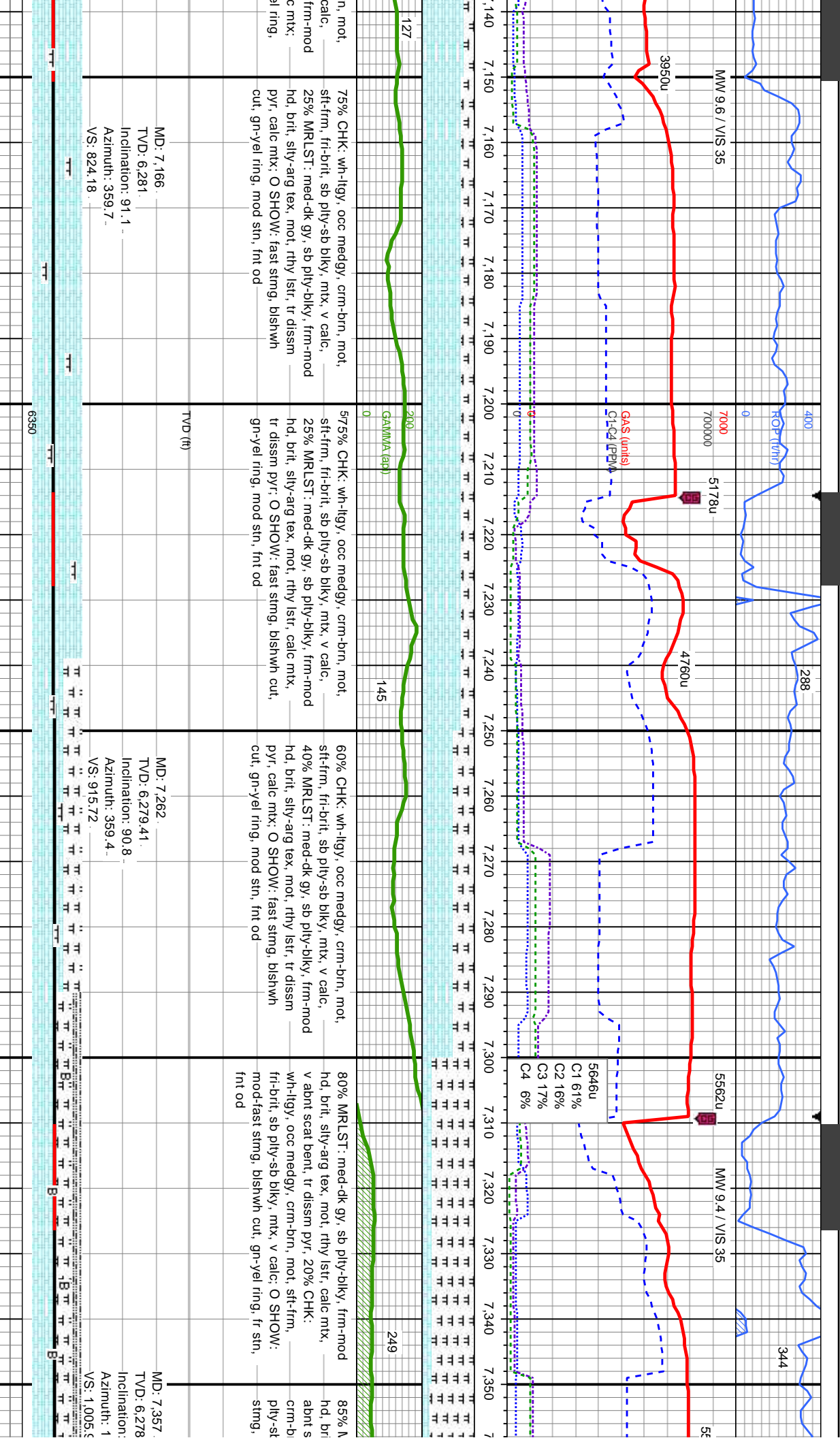




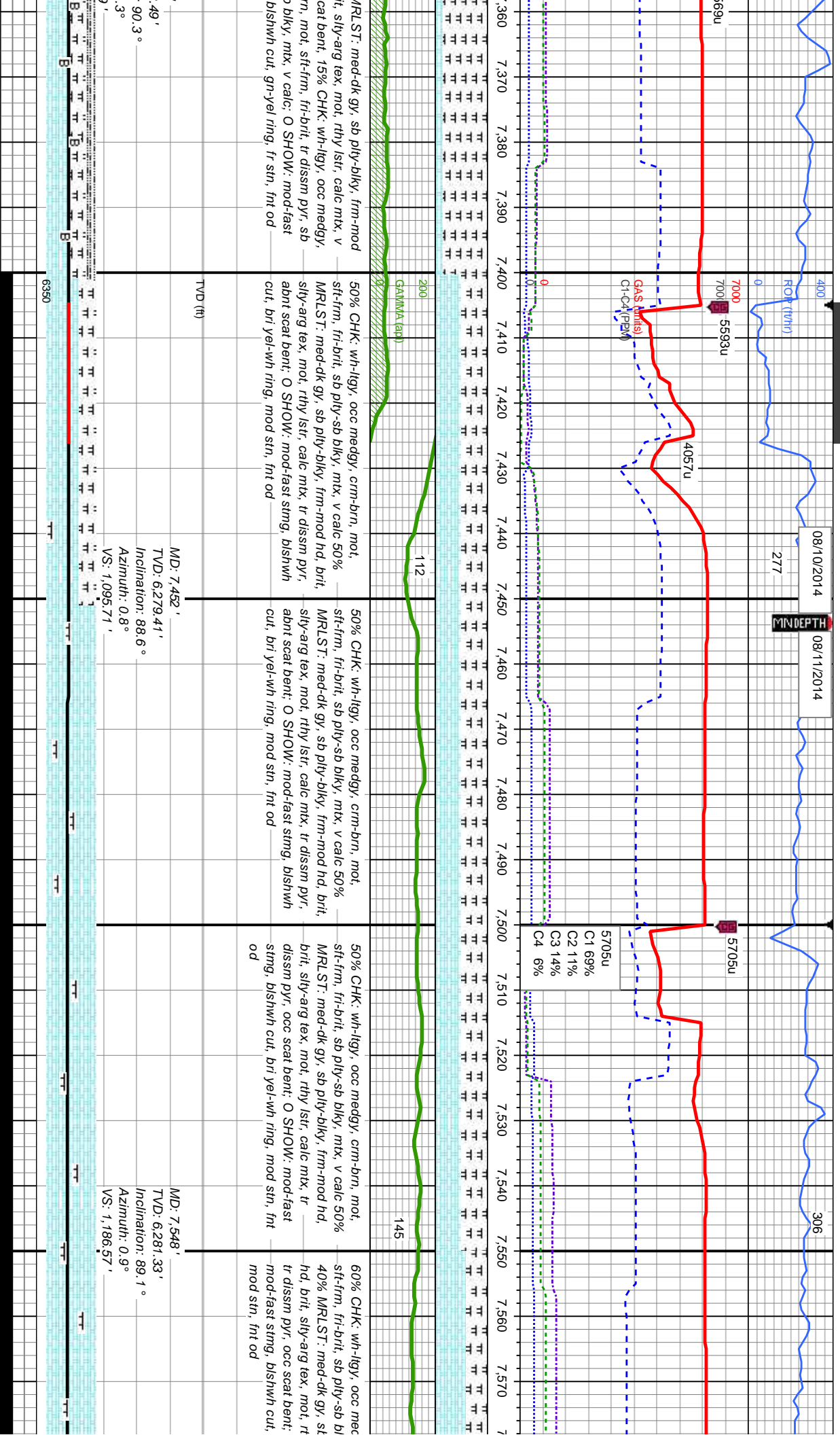








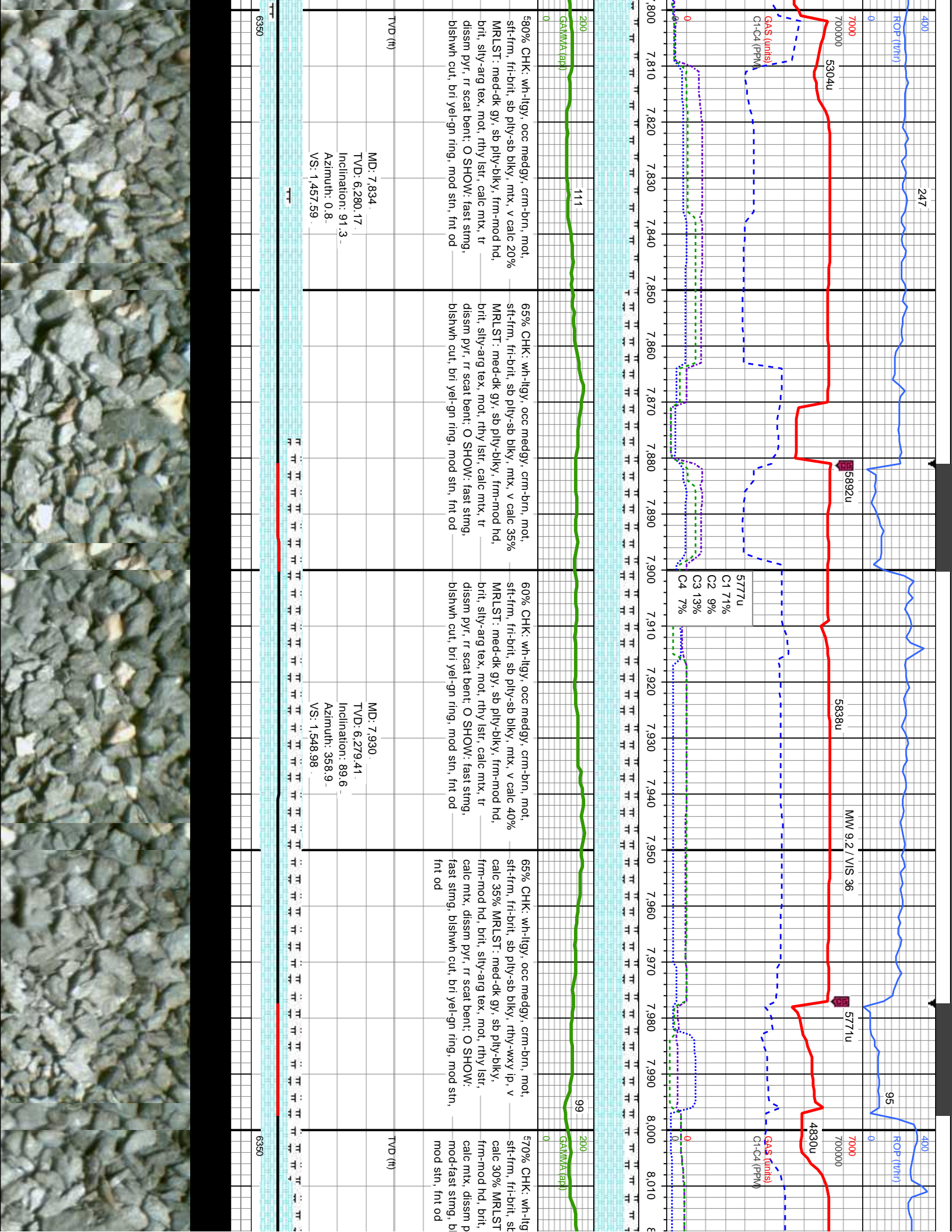


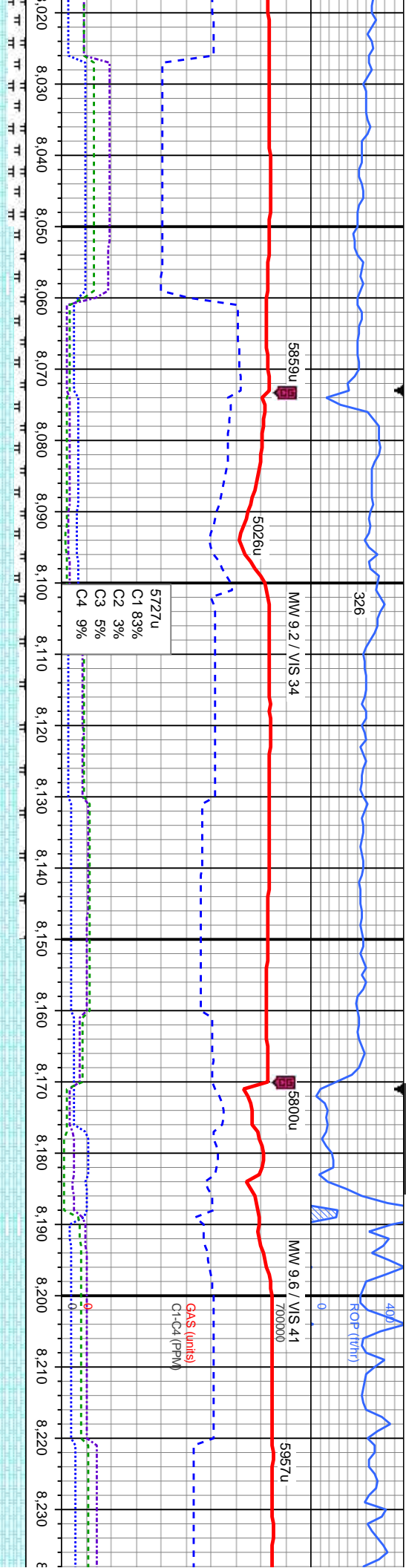










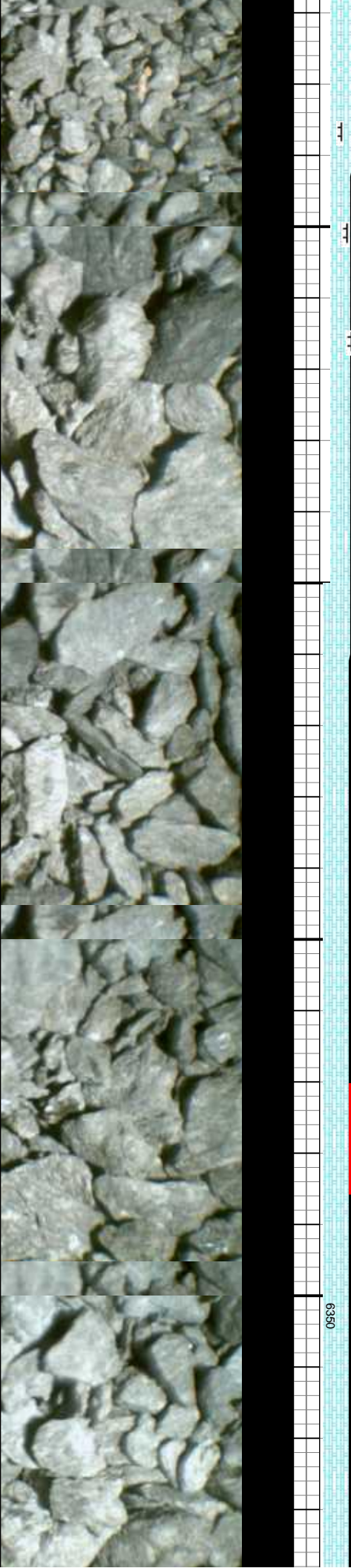


80% CHK: wh-llgy, ooc medgy, crm-brn, mot, sft-frn, fri-brlt, sb ply-sb blkly, rthy-wxy lp, v calc 20% MRLST: med-dk gy, sb ply-blkly, frm-mod hd, brlt, sily-arg tex, mot, rthy lstr, calc mtx, dissim pyr; O SHOW: mod-fast stmg, bishwh cut, bri yel-gn ring, mod stn, fnt od

MD: 8,026  
TVD: 6,281.93  
Inclination: 87.4  
Azimuth: 358.5  
VS: 1,640.91

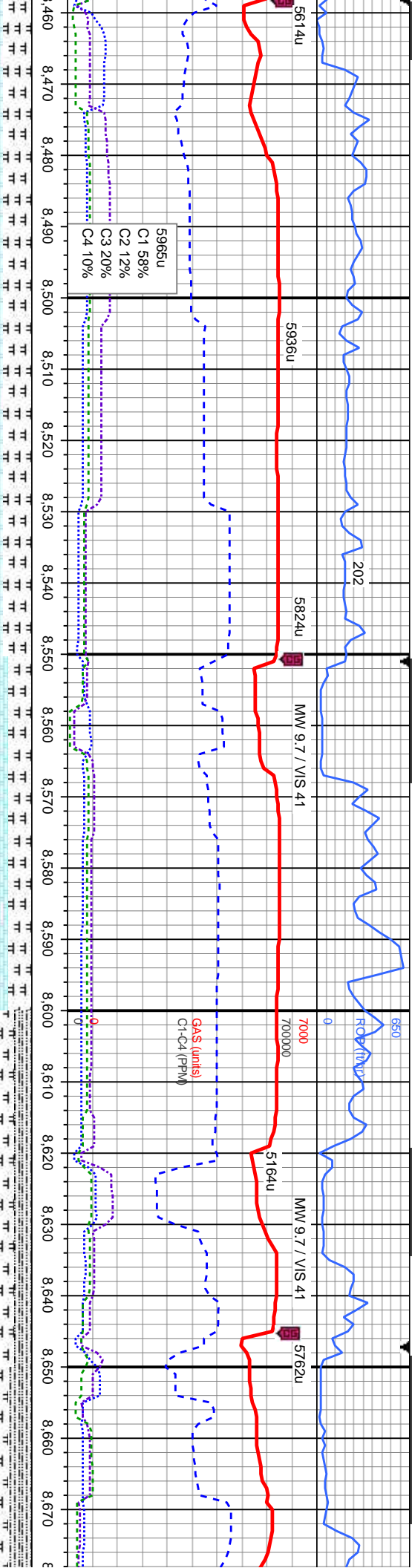
MD: 8,122  
TVD: 6,286.03  
Inclination: 87.7  
Azimuth: 357.1  
VS: 1,733.22

MD: 8,219  
TVD: 6,287.98  
Inclination: 90  
Azimuth: 357.6  
VS: 1,826.75









HK: wh-llgy, crm-brn, mot, sft-frm, sb ply-sb blkly, rthy-wxy, v calc 50%  
fr-brit, sb ply-sb blkly, rthy-wxy, v calc 50%  
MRST: med-dk gy, sb ply-blky, frm-mod hd, brlt, silty-arg tex, mot, rthy lstr, calc mix; O SHOW: mod stmg, blshwh wh cut, bri gn-wh stn, frt od

50% CHK: wh-llgy, crm-brn, mot, sft-frm, fr-brit, sb ply-sb blkly, rthy-wxy, v calc 50%  
MRST: med-dk gy, sb ply-blky, frm-mod hd, brlt, silty-arg tex, mot, rthy lstr, calc mix; O SHOW: mod stmg, blshwh wh cut, bri gn-wh ring, fr stn, frt od

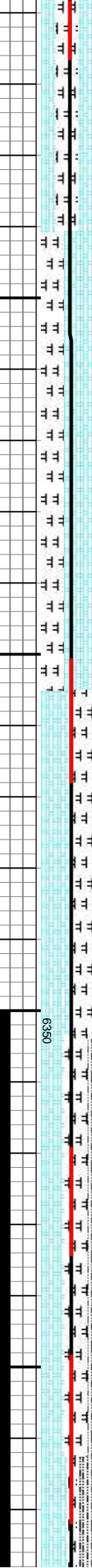
60% CHK: wh-llgy, crm-brn, mot, sft-frm, fr-brit, sb ply-sb blkly, rthy-wxy, v calc 40%  
MRST: med-dk gy, sb ply-blky, frm-mod hd, brlt, silty-arg tex, mot, rthy lstr, calc mix; O SHOW: mod stmg, blshwh wh cut, bri gn-wh ring, fr stn, frt od

540% CHK: wh-llgy, crm-brn, mot, sft-frm, fr-brit, sb ply-sb blkly, rthy-wxy ip, v calc 30% MRST: med-dk gy, sb ply-blky, frm-mod hd, brlt, silty-arg tex, mot, rthy lstr, calc mix 30% SLTY SH: lt-medgy, occ dk gy, sft-mod hd, fr-brit, ply-sb blkly, silty-arg, rthy lstr, non calc, v rr scat bent; O SHOW: mod stmg, blshwh wh cut, bri gn-wh ring, mod stn, frt od

40% SLTY SH: lt-medgy, occ fr-brit, ply-sb blkly, silty-arg, v rr scat bent 35% CHK: wh-sft-frm, fr-brit, sb ply-sb blkly, frm-mod hd, brlt, silty-arg tex, mot, rthy lstr, calc mix; O SHOW: mod stmg, blshwh wh ring, mod stn, frt od

MD: 8,505  
TVD: 6,279.7  
Inclination: 92  
Azimuth: 356.7  
VS: 2,102.31

MD: 8,600  
TVD: 6,276.88  
Inclination: 91.4  
Azimuth: 357.7  
VS: 2,193.97

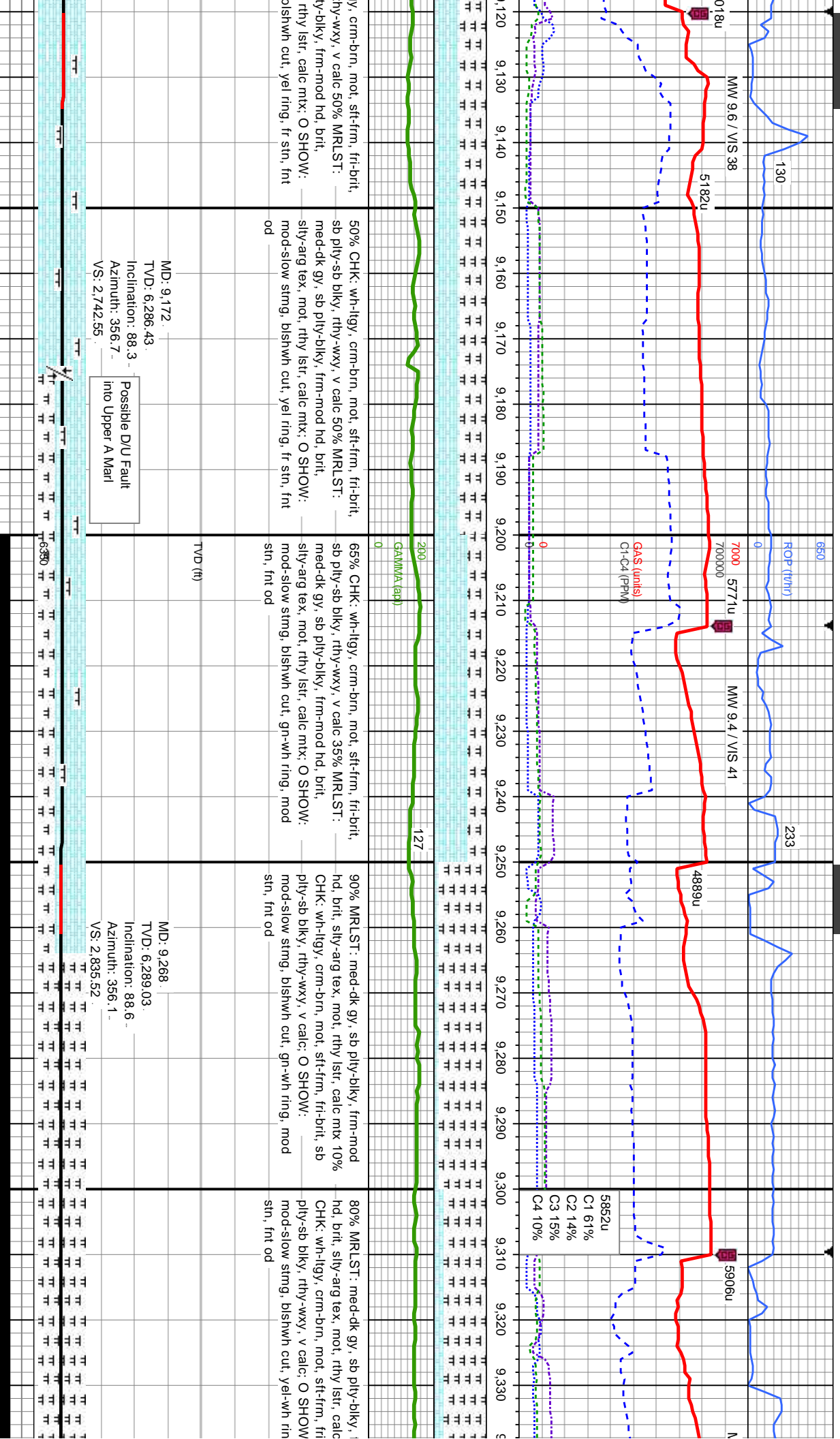




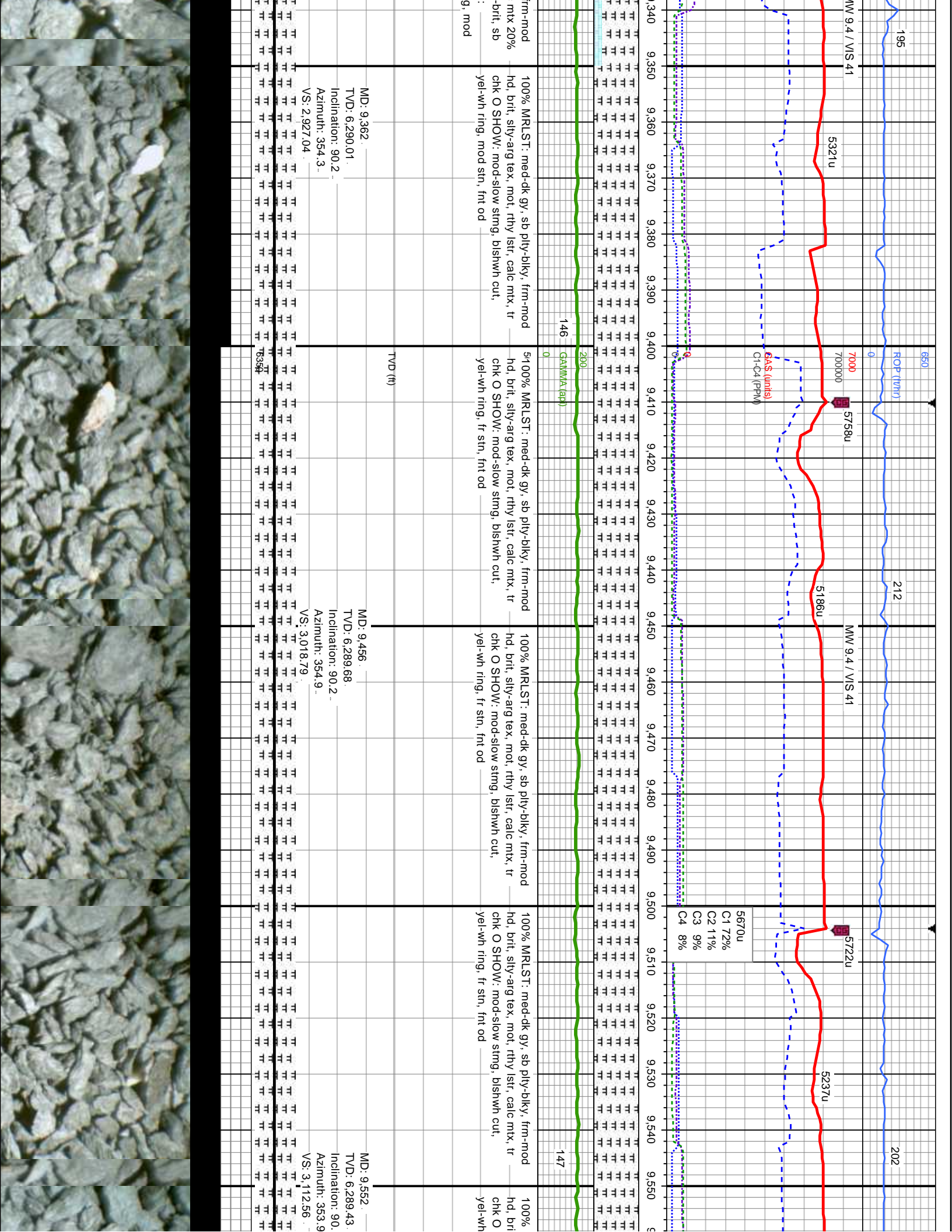


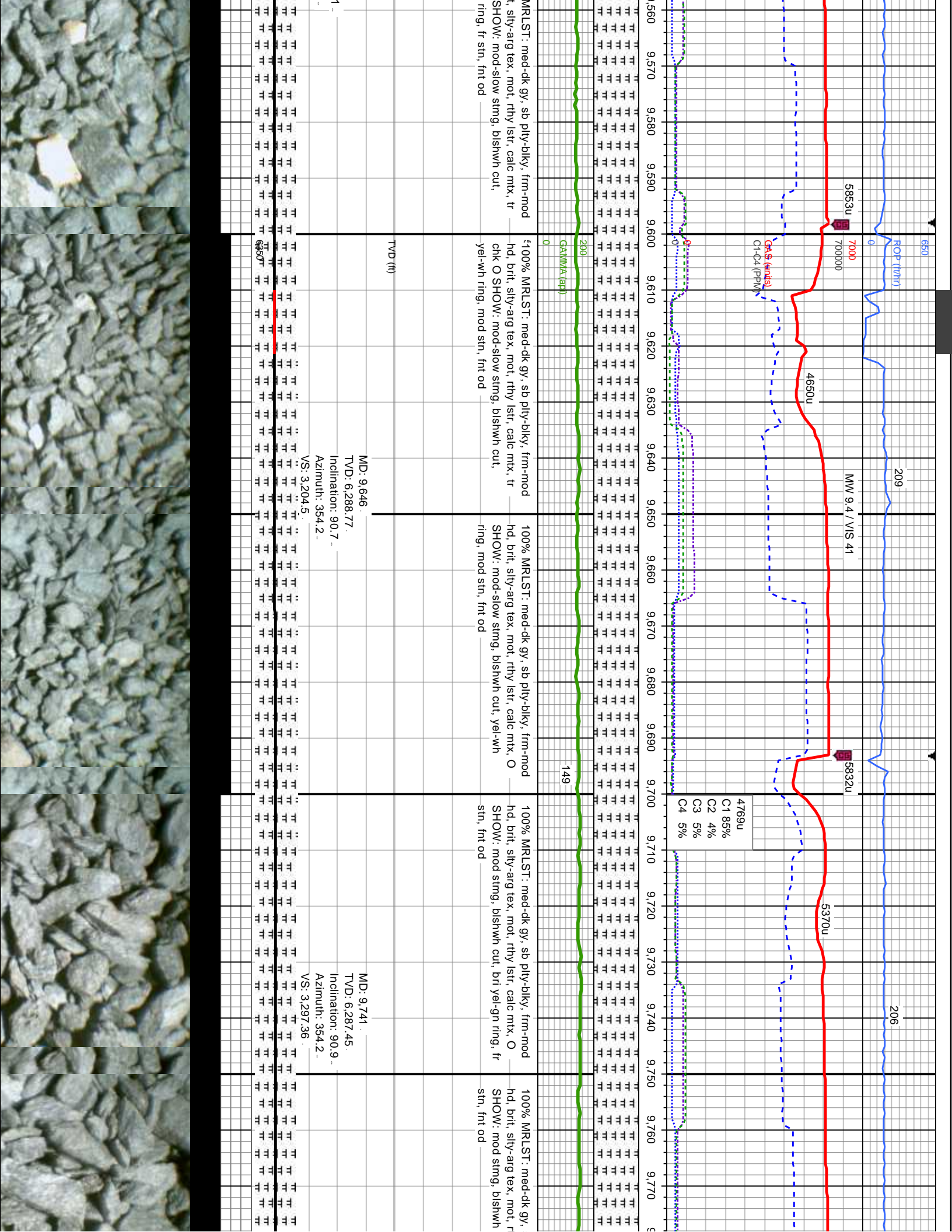












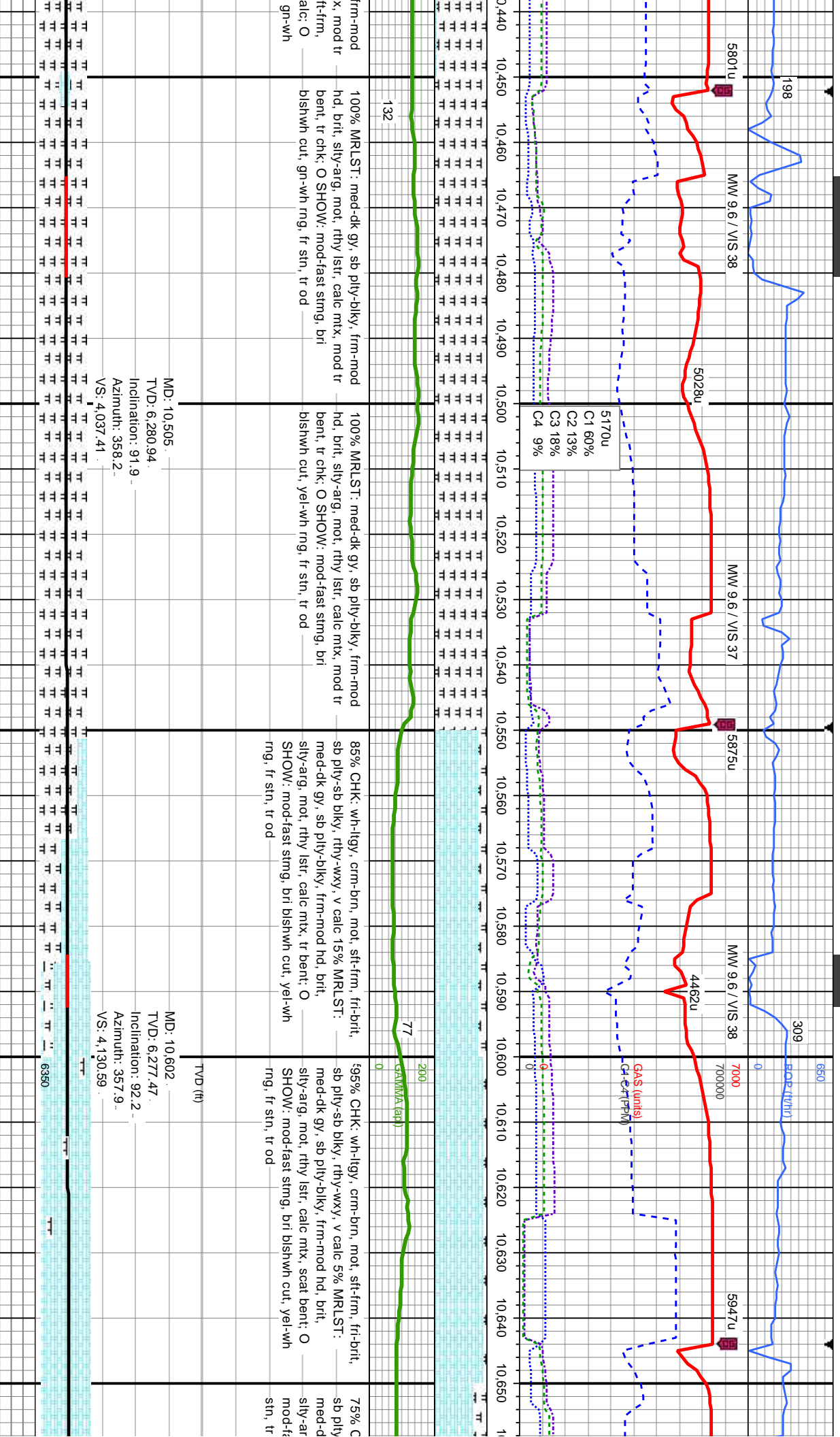




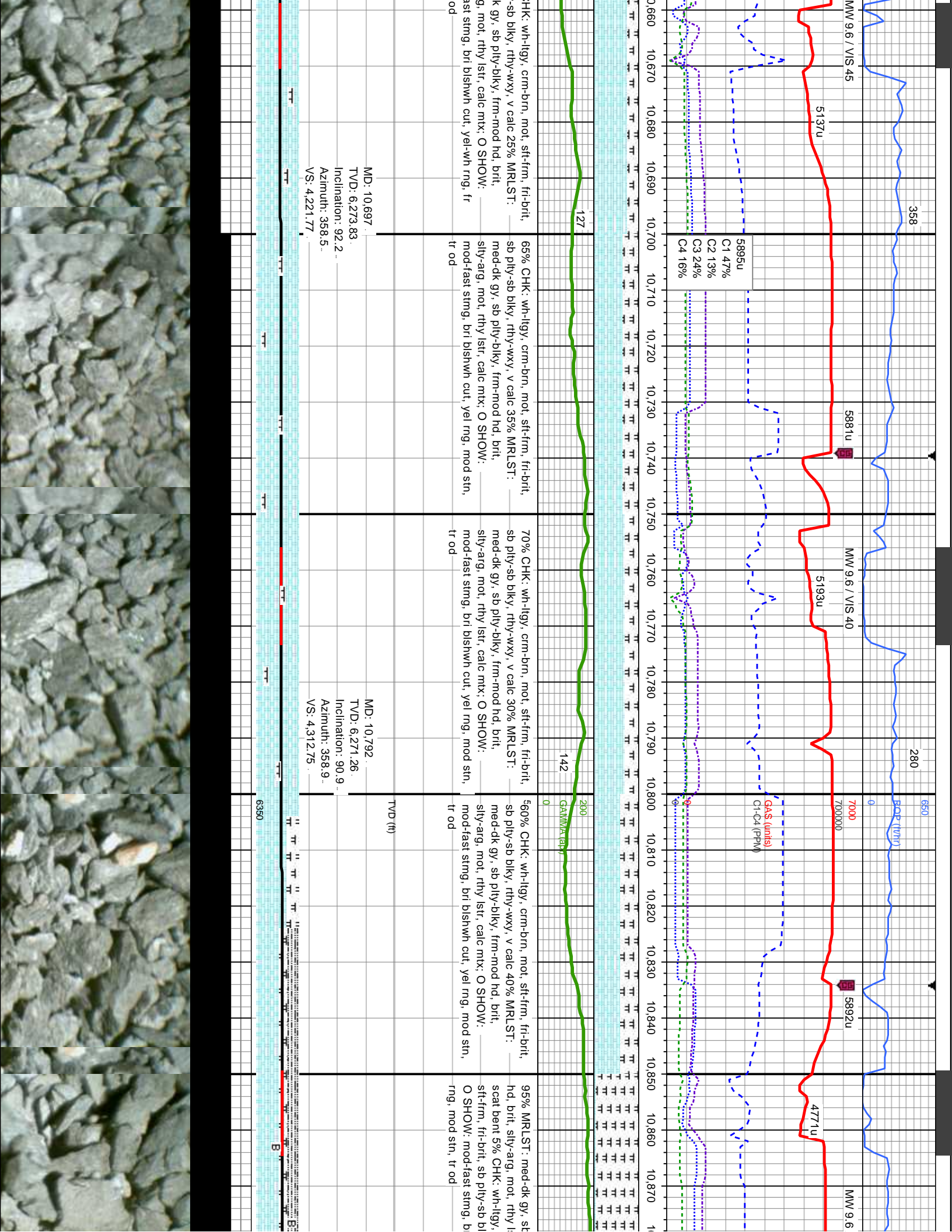












08/12/2014 08/13/2014

203

VIS 38

5453u

MMW 9.5 / VIS 36

5647u

5280u

80

MINDEPTH  
210  
ROP (ft/h)  
0  
7000  
700000

Hole Depth  
Recalibrated

Gas (units)  
C1 69%  
C2 13%  
C3 13%  
C4 5%

0.880 10.890 10.900 10.910 10.920 10.930 10.940 10.950 10.960 10.970 10.980 10.990 11.000 11.010 11.020 11.030 11.040 11.050 11.060 11.070 11.080 11.090 1

185

200  
GAMMA (pp)

120

ply-biky, frm-mod  
stfr, calc mtx, occ  
cm-brn, mot,  
ky, rthy-wxy, v calc;  
i bishwh cut, yel

90% MRLST: med-dk gy, sb ply-biky, frm-mod  
hd, brlt, silty-arg, mot, rthy lstr, calc mtx, occ  
scat bent 10% CHK: wh-llgy, cm-brn, mot,  
sft-frm, fri-brlt, sb ply-sb biky, rthy-wxy, v calc;  
O SHOW: mod-fast stng, bri bishwh cut, yel  
rng, mod stn, tr od

85% MRLST: med-dk gy, sb ply-biky, frm-mod  
hd, brlt, silty-arg, mot, rthy lstr, calc mtx, occ  
scat bent 15% CHK: wh-llgy, cm-brn, mot,  
sft-frm, fri-brlt, sb ply-sb biky, rthy-wxy, v calc;  
O SHOW: mod-fast stng, bri bishwh cut, yel  
rng, mod stn, tr od

575% MRLST: med-dk gy, sb ply-biky, frm-mod  
hd, brlt, silty-arg, mot, rthy lstr, calc mtx, occ  
scat bent 25% CHK: wh-llgy, cm-brn, mot,  
sft-frm, fri-brlt, sb ply-sb biky, rthy-wxy, v calc;  
O SHOW: mod-fast stng, bri bishwh cut, yel  
rng, mod stn, tr od

65% MRLST: med-dk gy, sb  
ply-biky, frm-mod hd, brlt, silty-arg,  
mot, rthy lstr, calc mtx, occ scat  
bent 35% CHK: wh-llgy, cm-brn,  
mot, sft-frm, fri-brlt, sb ply-sb  
biky, rthy-wxy, v calc; O SHOW:  
mod-fast stng, bri bishwh cut, yel  
rng, mod stn, tr od

MD: 10.887  
TVD: 6.269.68  
Inclination: 91  
Azimuth: 359.4  
VS: 4.403.53

MD: 10.983  
TVD: 6.269.09  
Inclination: 89.7  
Azimuth: 358.9  
VS: 4.495.28

MD: 11.033  
TVD: 6.269.66  
Inclination: 89  
Azimuth: 357.7  
VS: 4.543.27

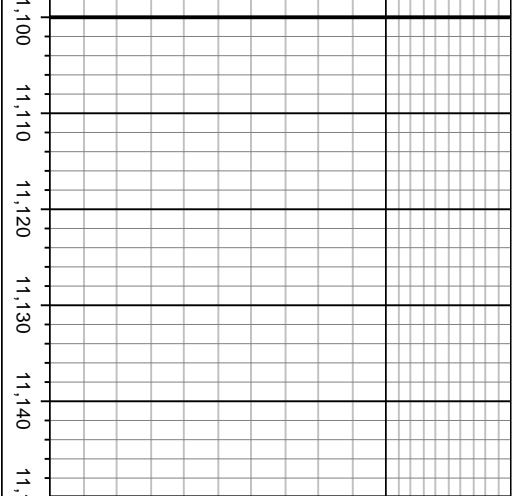
MD: 11.081  
TVD: 6.270.5  
Inclination: 89  
Azimuth: 357.7  
VS: 4.589.48

PROJ. to Bit

6360







TD Reached MD 11081'  
08/13/2014 @ 01:29 MST

Thank you for using  
Columbine Logging, Inc.