



Scale: 5" / 100'  
Measured Depth Log

Well Name No Worries PC G14-63-1HN

Location SWSW SEC 14 T4N R65W

State COLORADO

Country UNITED STATES

API Number 05-123-36328

Region DJ BASIN

Spud Date 1/13/2014

Surface Coordinates 1247' FSL; 276' FWL

Bottom Hole Coordinates 1000' FSL; 535' FEL

County WELD

Rig Number H&P 273

Field WATTENBERG

Drilling Completed 1/19/2014

Ground Elevation 4695'

K.B. Elevation 4844'

Logged Interval 6200' To 11310'

Total Depth 11310'

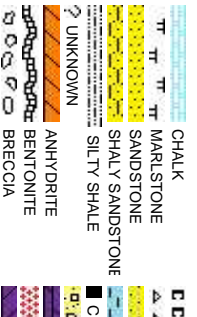
Formation NIOBRARA

Type of Drilling Fluid LSND

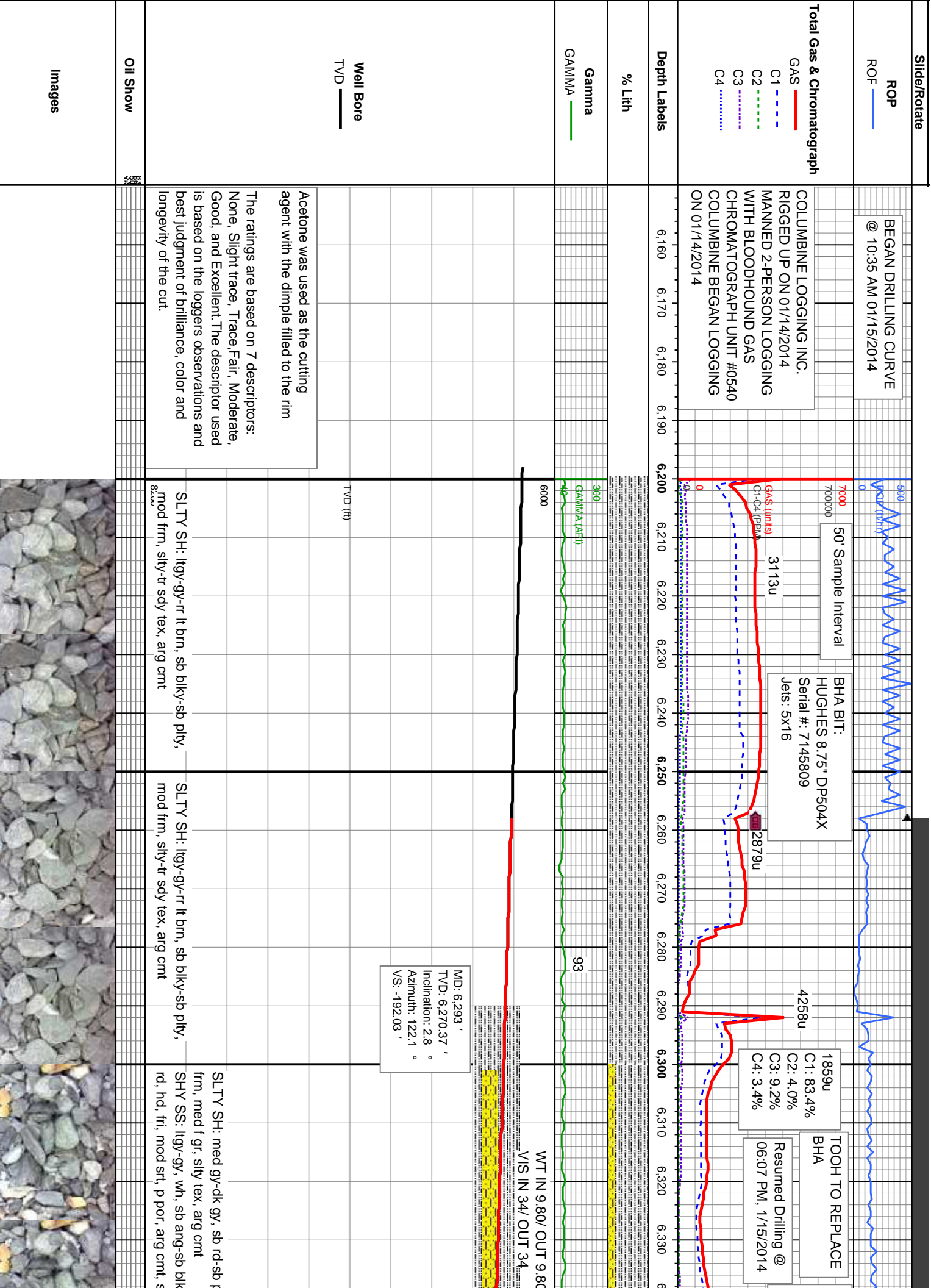
Company NOBLE ENERGY  
Address 1625 Broadway  
Denver, CO 80202

Name SARAH COMP  
Company NOBLE ENERGY  
Address 1625 Broadway  
Denver, CO 80202

Wellsite Geologist #1: LA  
Wellsite Geologist #2: JA  
Wellsite Geological Service







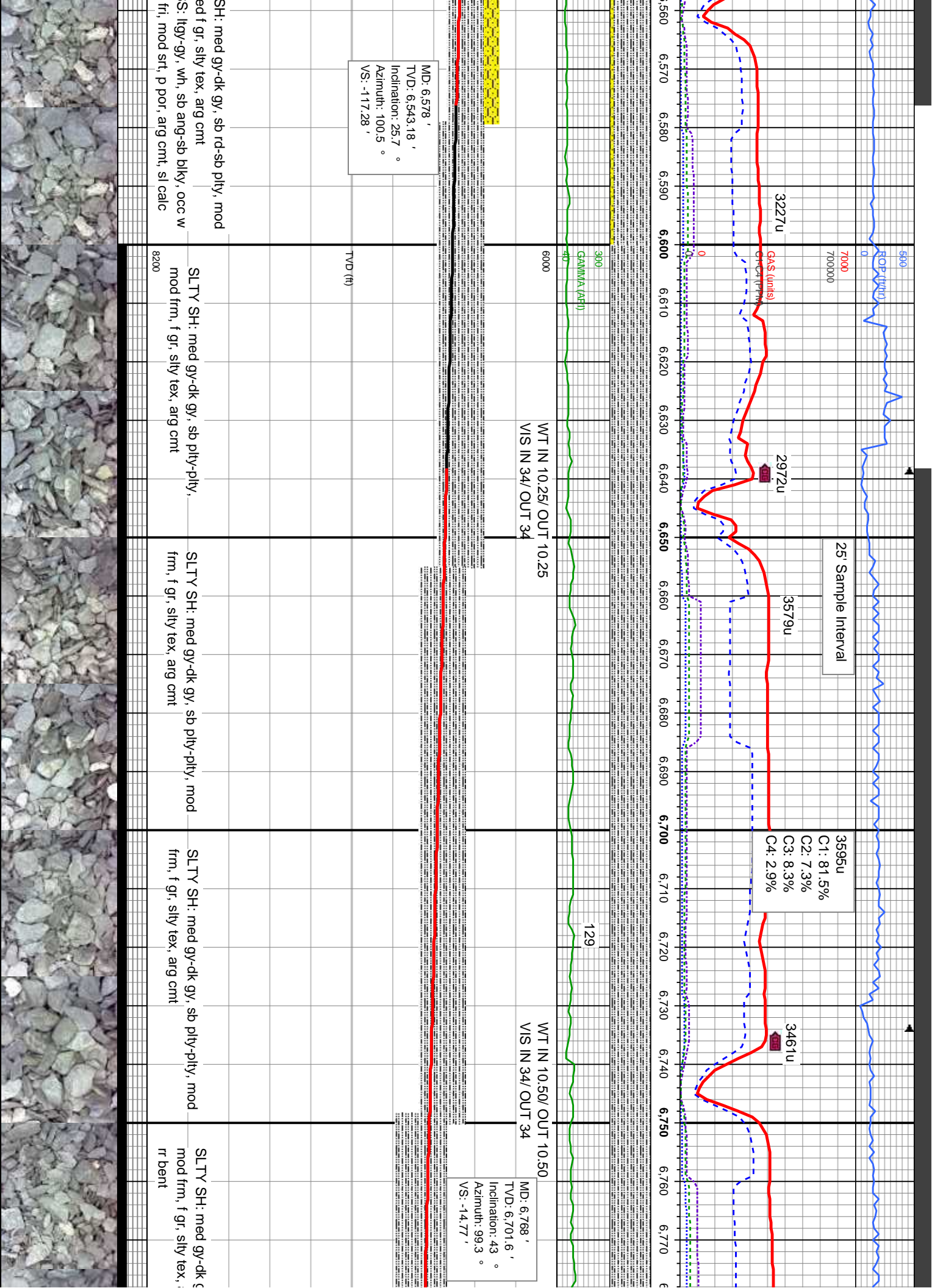


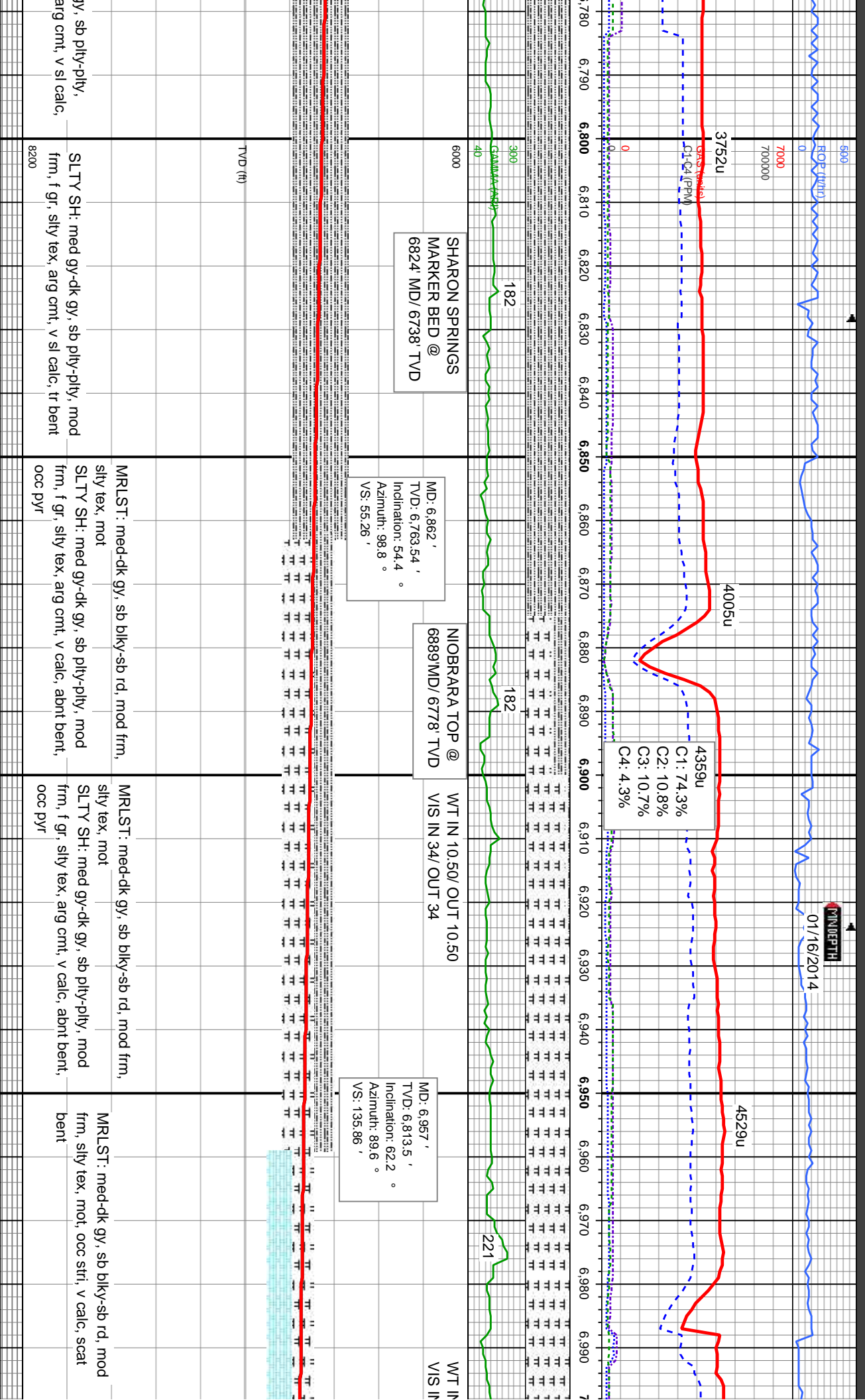
IVD: 6.364.45  
 Inclination: 12.3 °  
 Azimuth: 105.1 °  
 VS: -180.12 '

WT IN 10.10/ OUT 10.10	
VIS IN 33/ OUT 33	

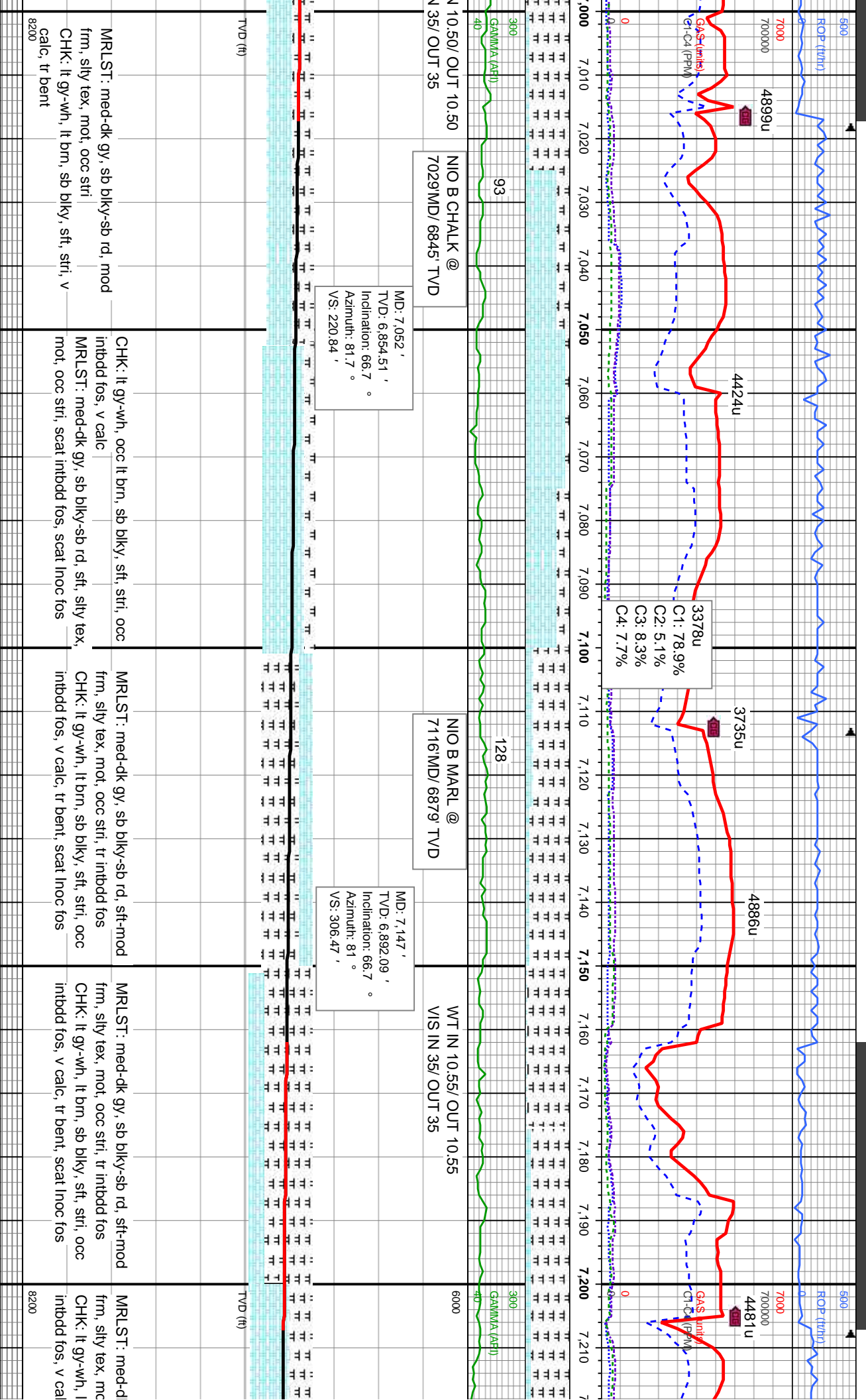
[illegible]











MINIDPT4

01/17/2014

50' Sample Interval

4610u

4673u

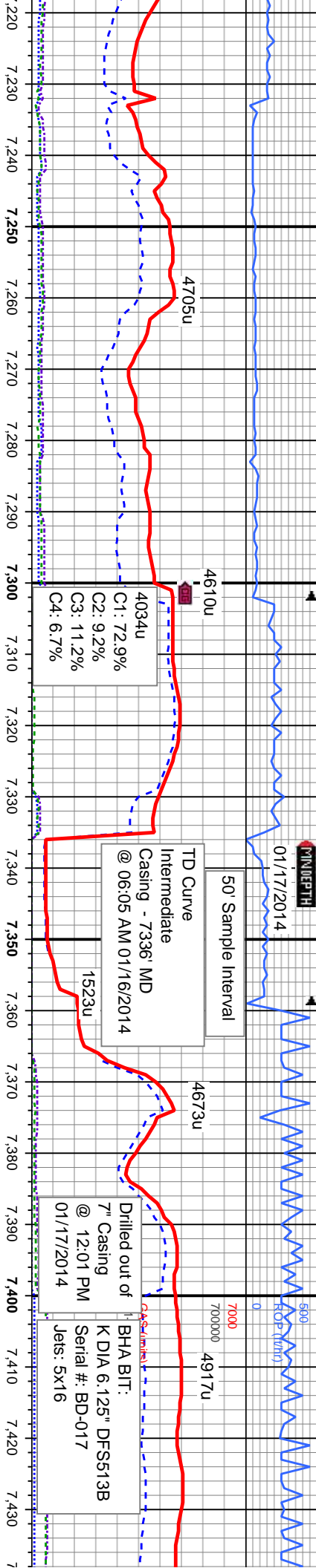
4917u

TD Curve  
Intermediate  
Casing - 7336' MD  
@ 06:05 AM 01/16/2014

Drilled out of  
7" Casing  
@ 12:01 PM  
01/17/2014  
BHA BIT:  
K DIA 6.125" DFSS13B  
Serial #: BD-017  
Jets: 5x16

4034u  
C1: 72.9%  
C2: 9.2%  
C3: 11.2%  
C4: 6.7%

1523u



NIO C CHALK @  
7244' MD/ 6924' TVD

WT IN 10.55/ OUT 10.55  
VIS IN 35/ OUT 35

MD: 7.242' TVD: 6.923.55' Inclination: 74.6° Azimuth: 84.7° VS: 394.77'

MD: 7.275' TVD: 6.931.09' Inclination: 79° Azimuth: 87.9° VS: 426.71'

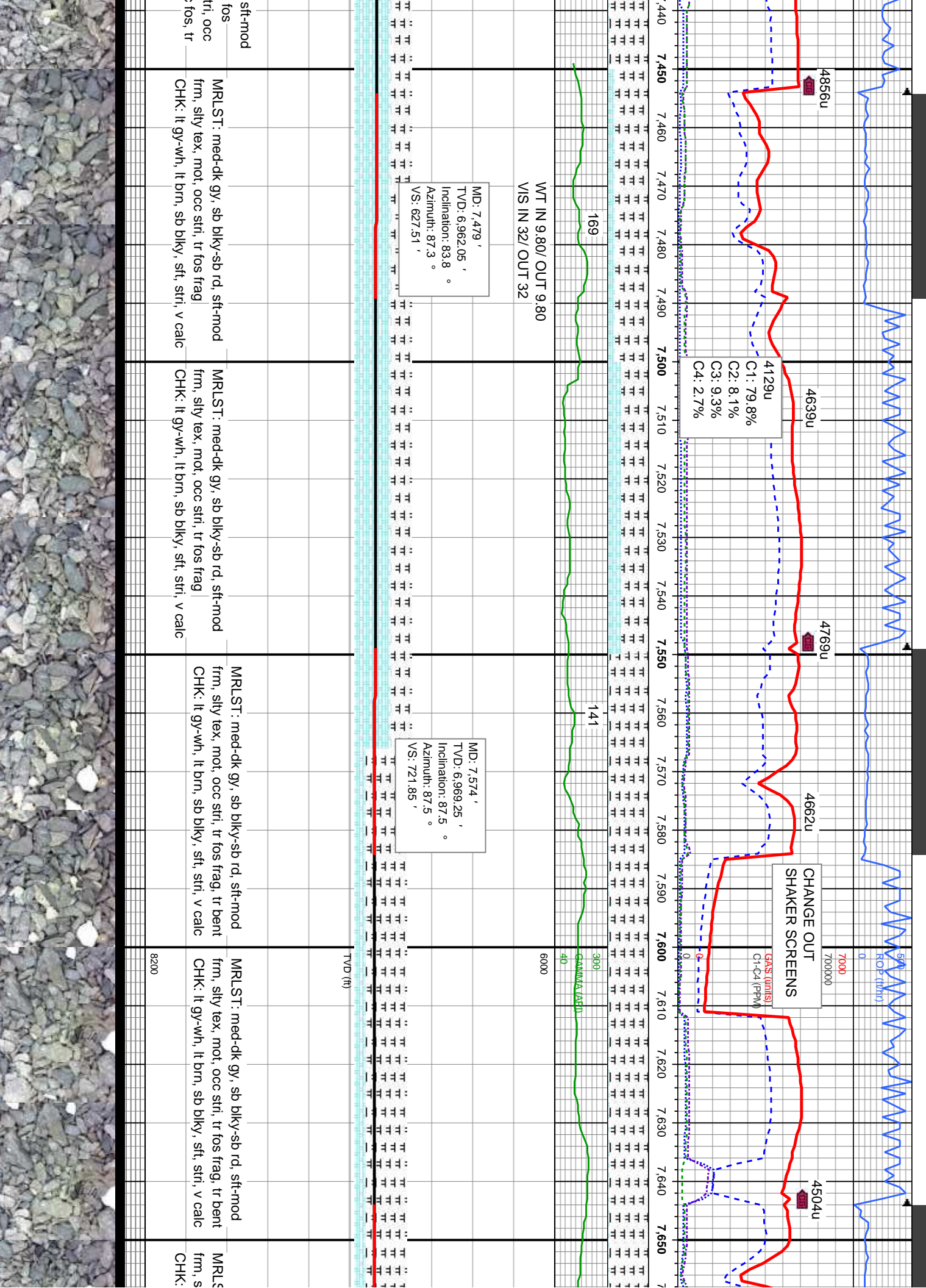
MD: 7.384' TVD: 6.949.73' Inclination: 81.3° Azimuth: 87.2° VS: 533.7'

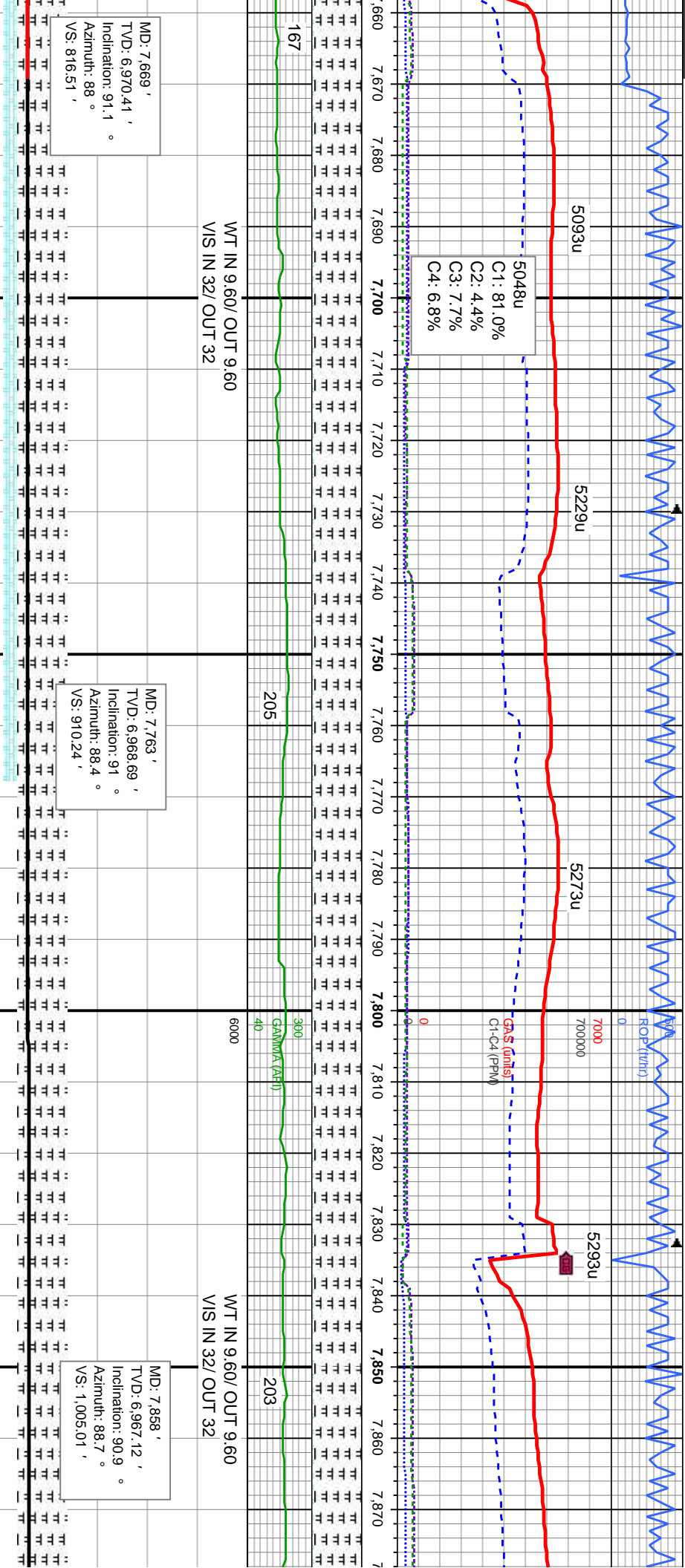
gy, sb blk-y-sb rd, sft-mod	MRLST: med-dk gy, sb blk-y-sb rd, sft-mod	CHK: lt gy-wh, lt brn, sb blk-y, sft, stri, occ	MRLST: med-dk gy, sb blk-y-sb rd, sft-mod
tr, occ stri, tr intbdd fos	frm, silty tex, mot, occ stri, tr intbdd fos	intbdd fos, v calc, tr bent, scat inoc fos, tr pyr	frm, silty tex, mot, occ stri, tr intbdd fos
lt brn, sb blk-y, sft, stri, occ	CHK: lt gy-wh, lt brn, sb blk-y, sft, stri, occ	CHK: lt gy-wh, lt brn, sb blk-y, sft, stri, occ	CHK: lt gy-wh, lt brn, sb blk-y, sft, stri, occ
c, tr bent, scat inoc fos	intbdd fos, v calc, tr bent, scat inoc fos, tr pyr	MRLST: med-dk gy, sb blk-y-sb rd, sft-mod	intbdd fos, v calc, tr bent, scat inoc fos, tr pyr

TVD (ft)









MD: 7.669 '  
TVD: 6,970.41 '  
Inclination: 91.1 °  
Azimuth: 88 °  
VS: 816.51 '

MD: 7.763 '  
TVD: 6,968.69 '  
Inclination: 91 °  
Azimuth: 88.4 °  
VS: 910.24 '

MD: 7.858 '  
TVD: 6,967.12 '  
Inclination: 90.9 °  
Azimuth: 88.7 °  
VS: 1,005.01 '

WT IN 9.60/ OUT 9.60  
VIS IN 32/ OUT 32

WT IN 9.60/ OUT 9.60  
VIS IN 32/ OUT 32

TVD (ft)

ST: med-dk gy, sb blk-y-sb rd, sft-mod  
lly tex, mot  
lt gy-wh, lt brn, sb blk-y, sft, stri, v calc

MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot  
CHK: lt gy-wh, lt brn, sb blk-y, sft, stri, v calc,  
tr bent

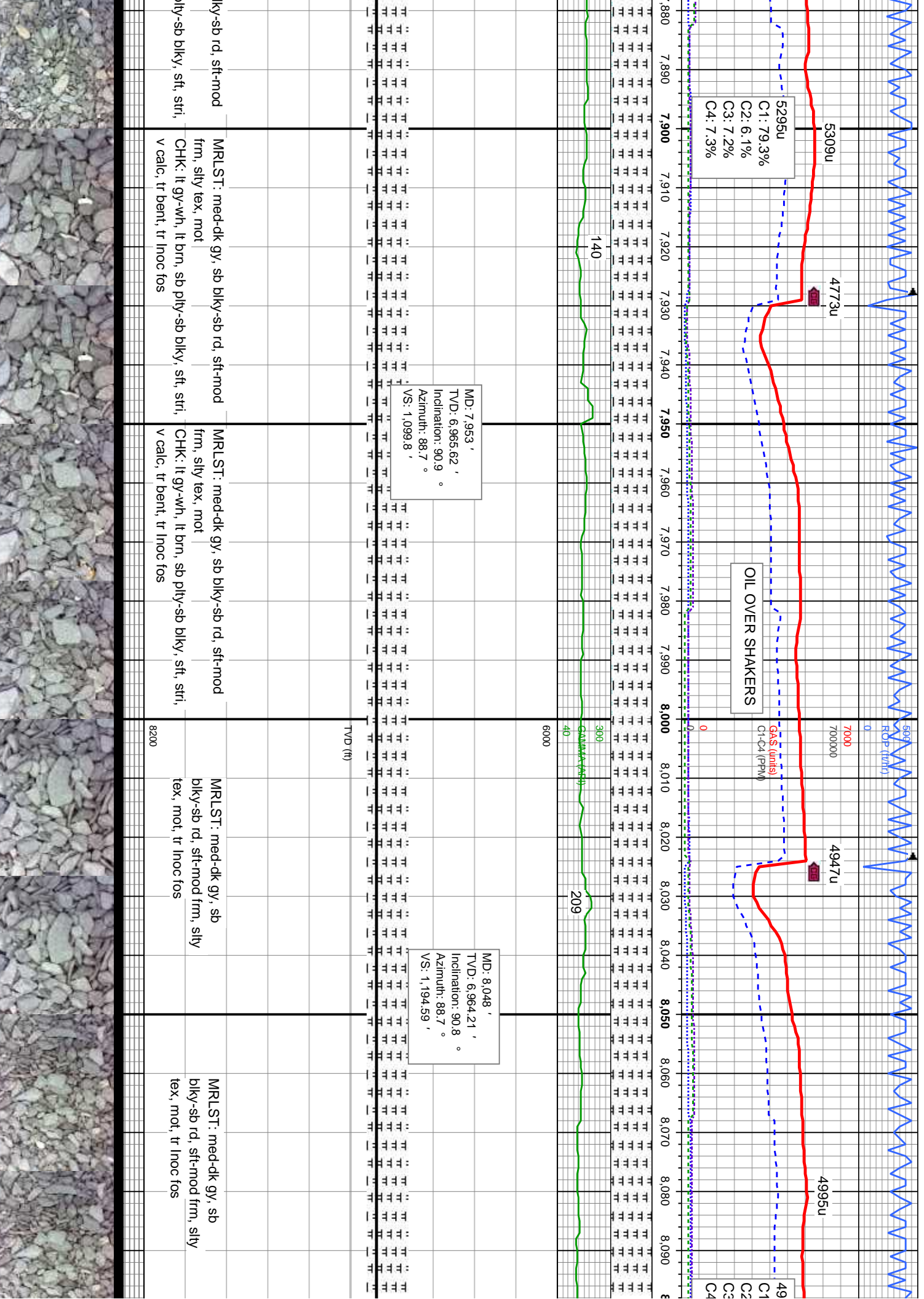
MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot  
CHK: lt gy-wh, lt brn, sb blk-y, sft, stri, v calc,  
tr bent

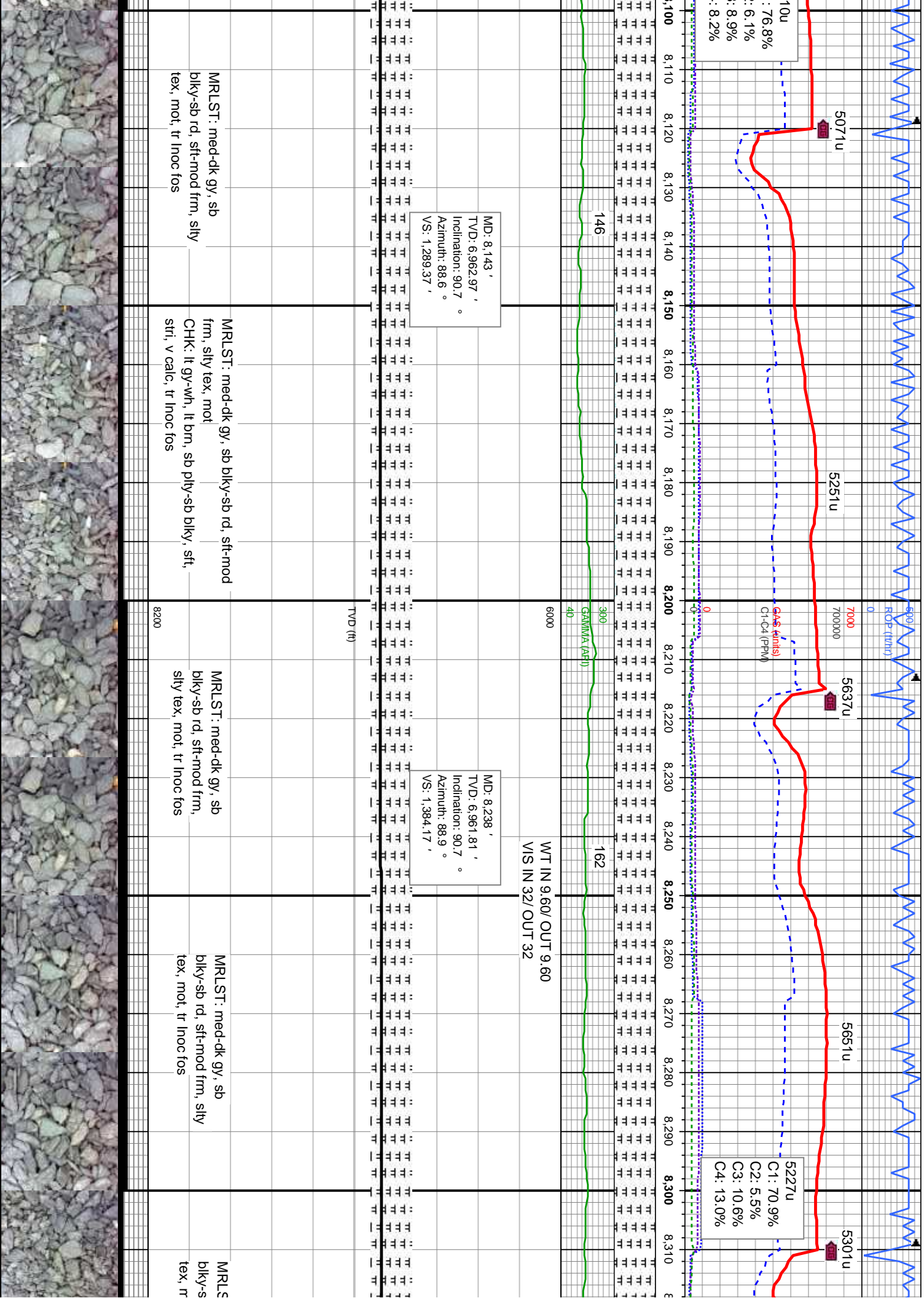
MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot  
CHK: lt gy-wh, lt brn, sb pily-sb blk-y, sft,  
stri, v calc, tr bent

MRLST: med-dk gy, sb b  
frm, silty tex, mot  
CHK: lt gy-wh, lt brn, sb p  
v calc, tr bent

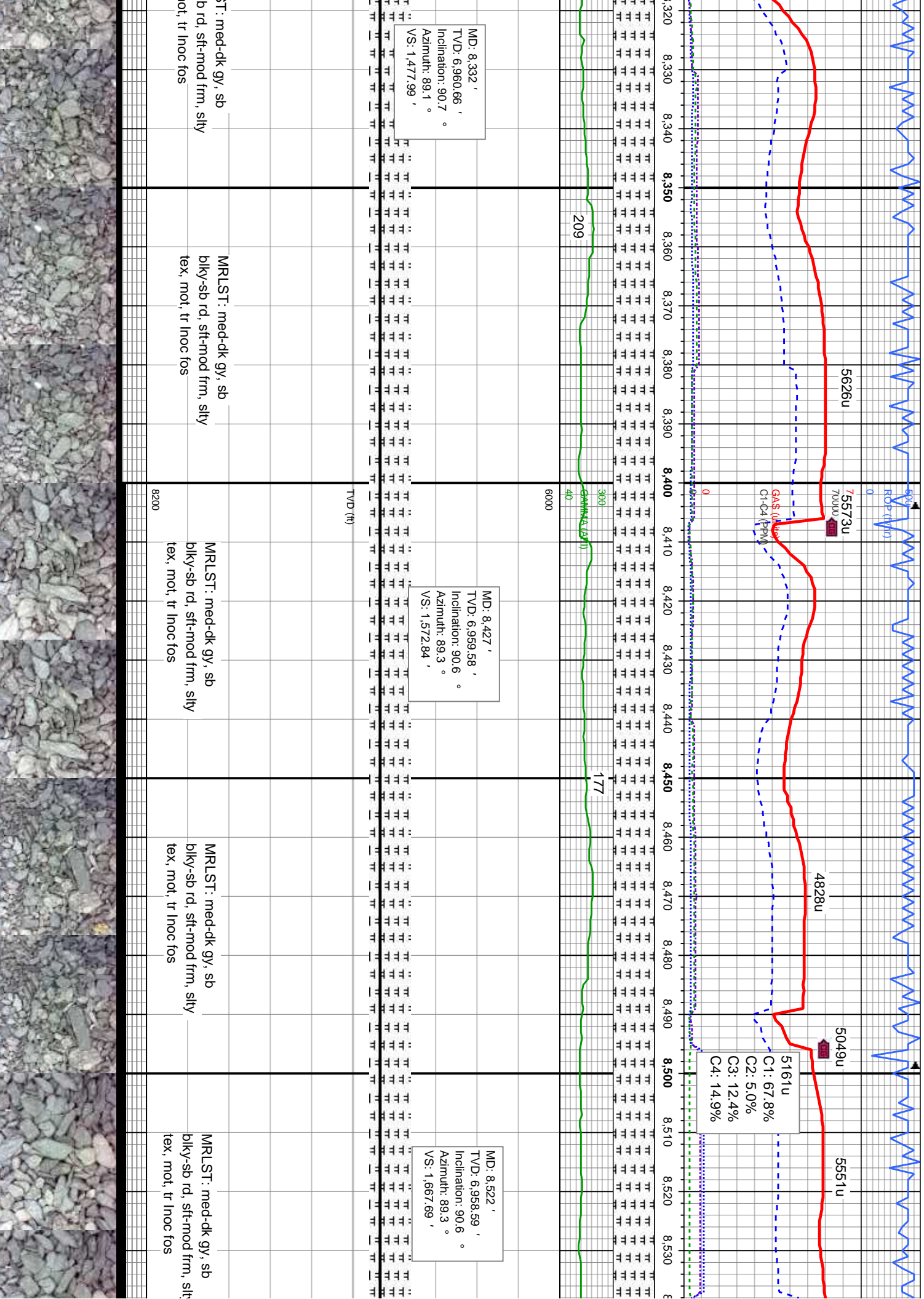


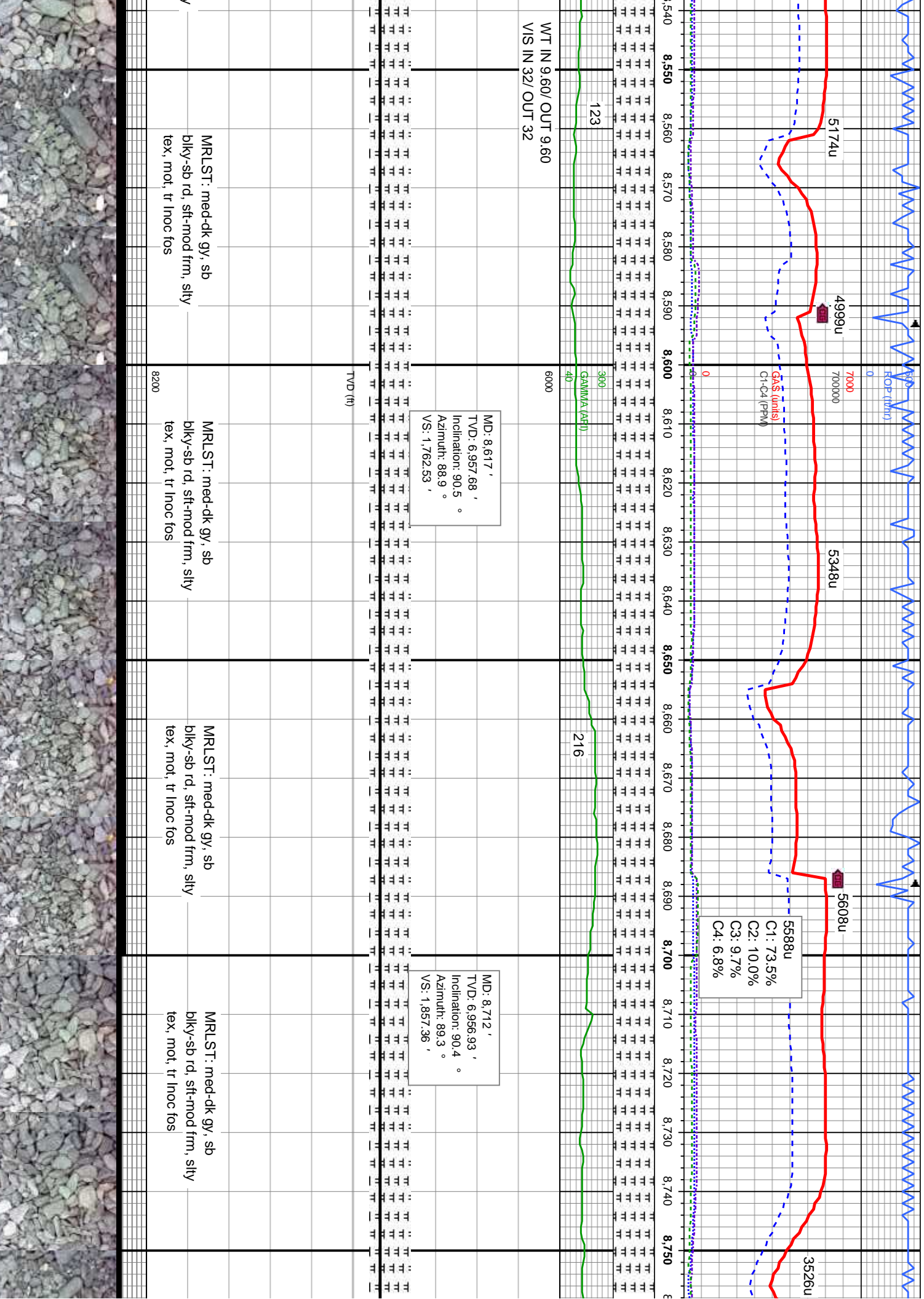




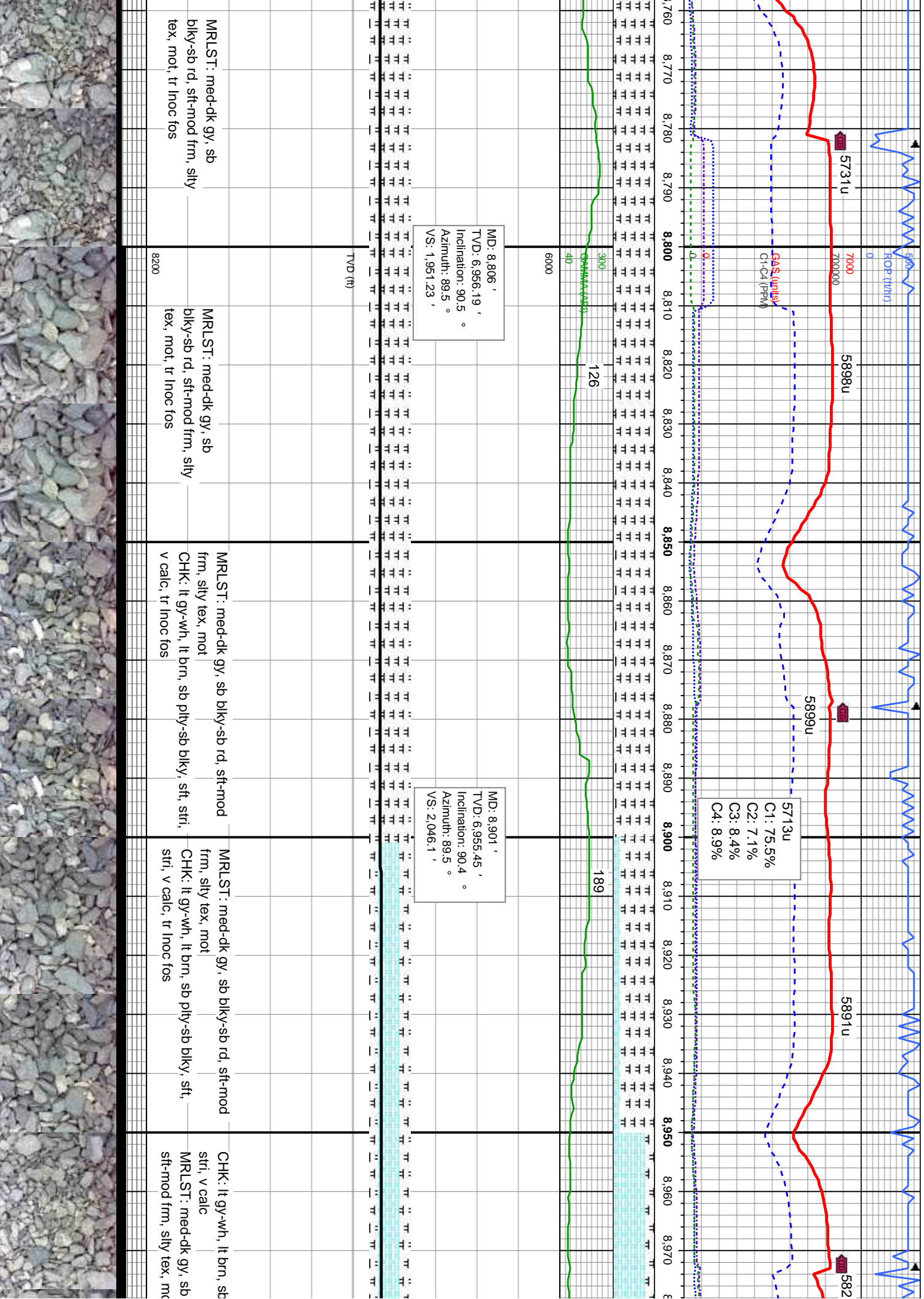


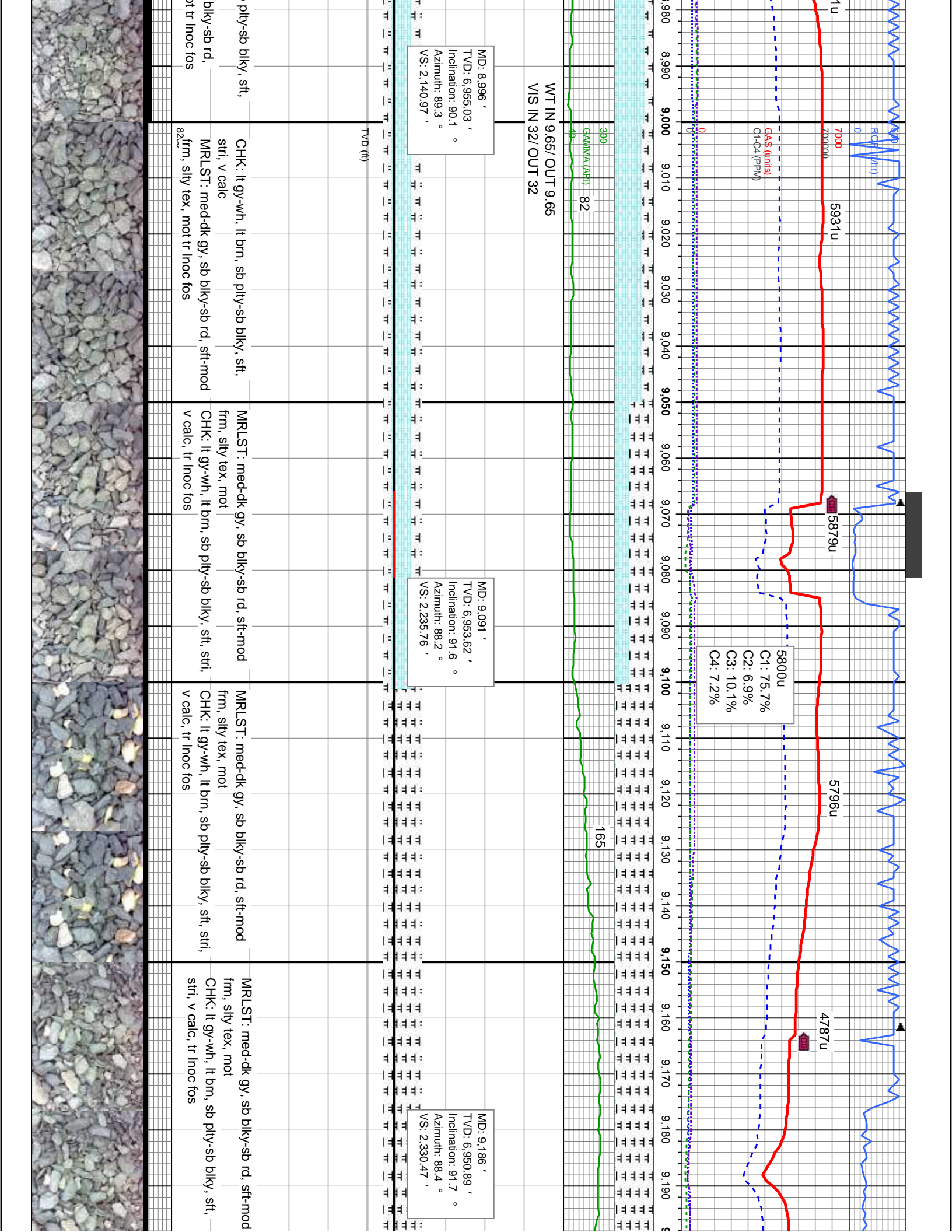




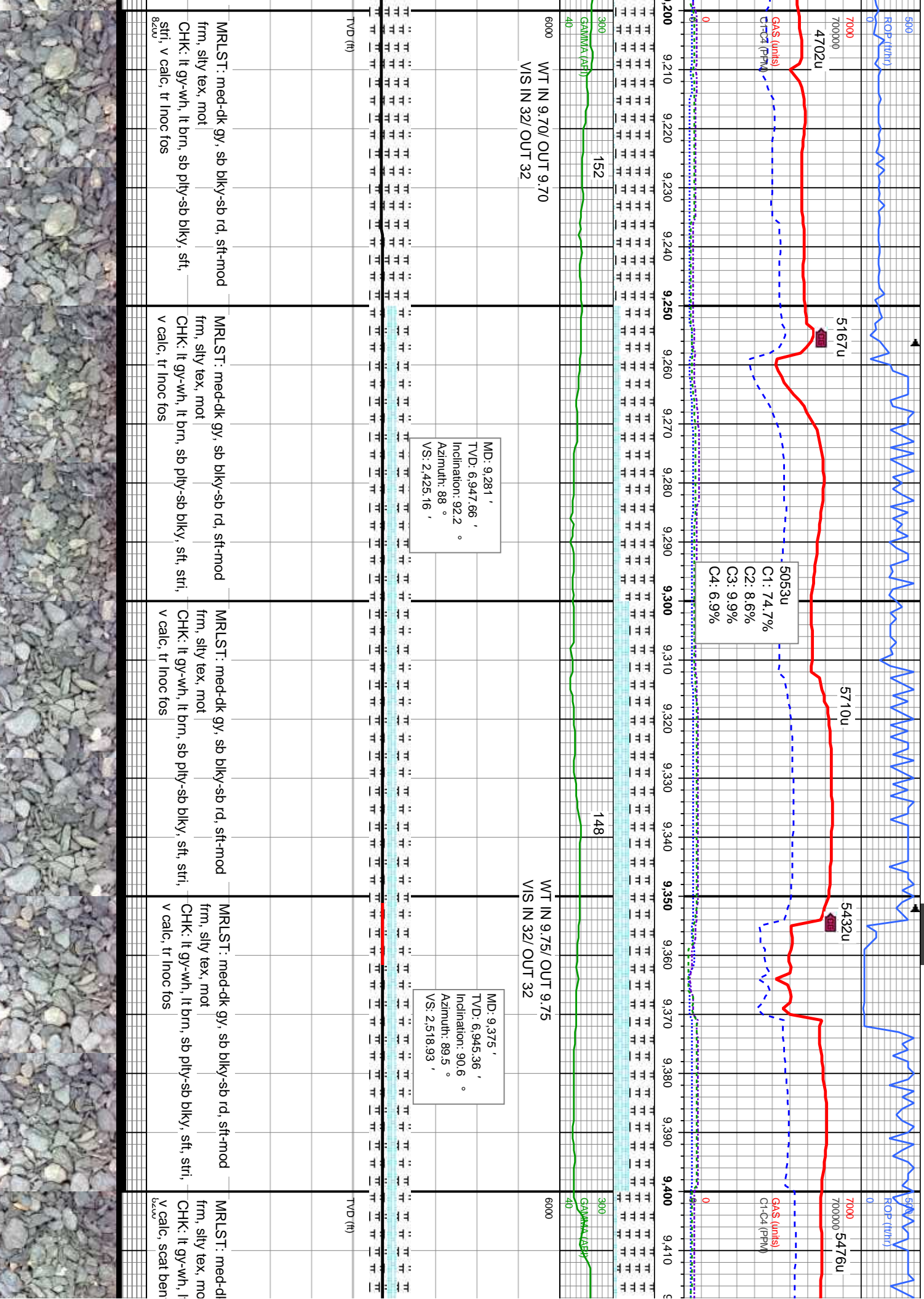


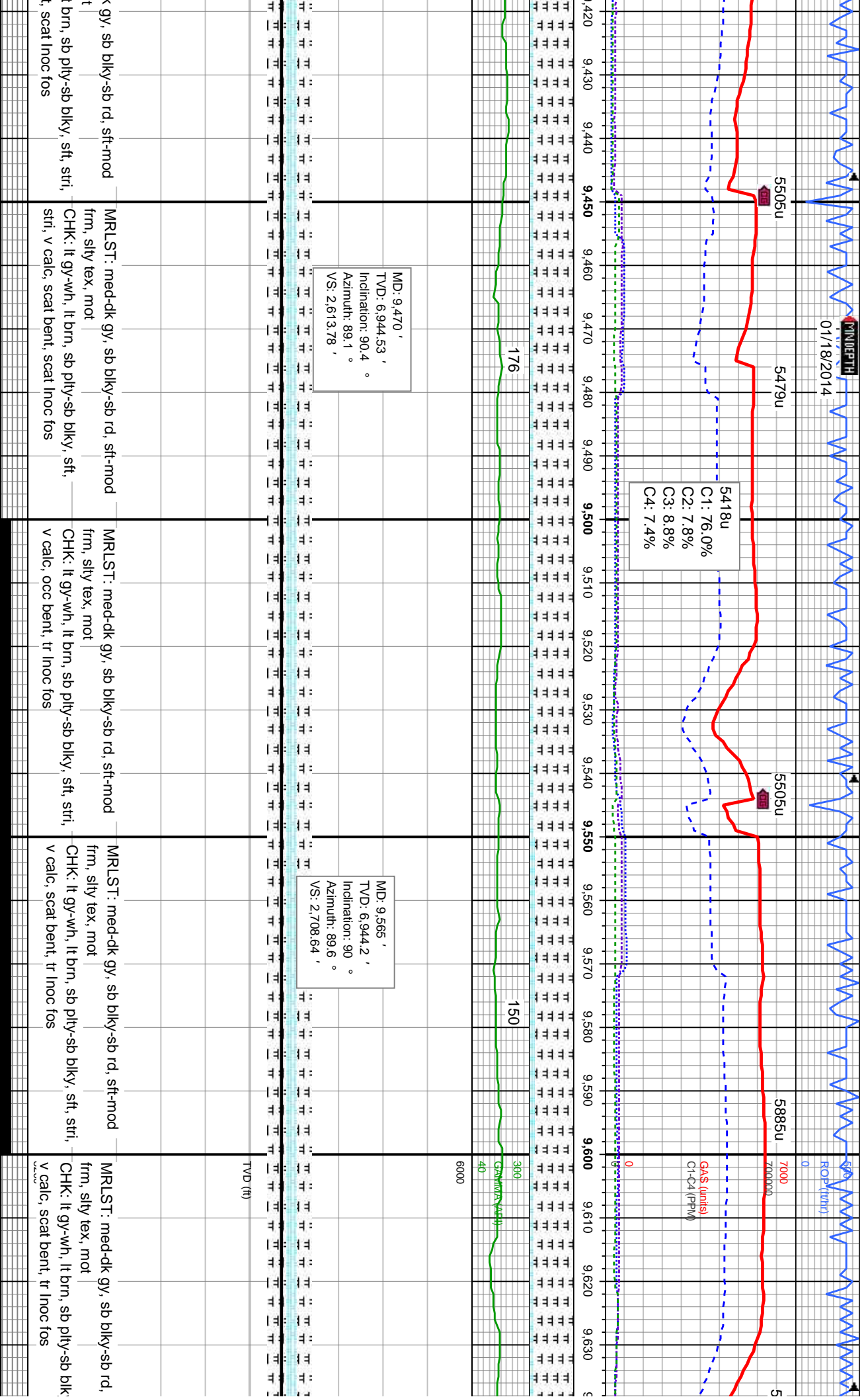




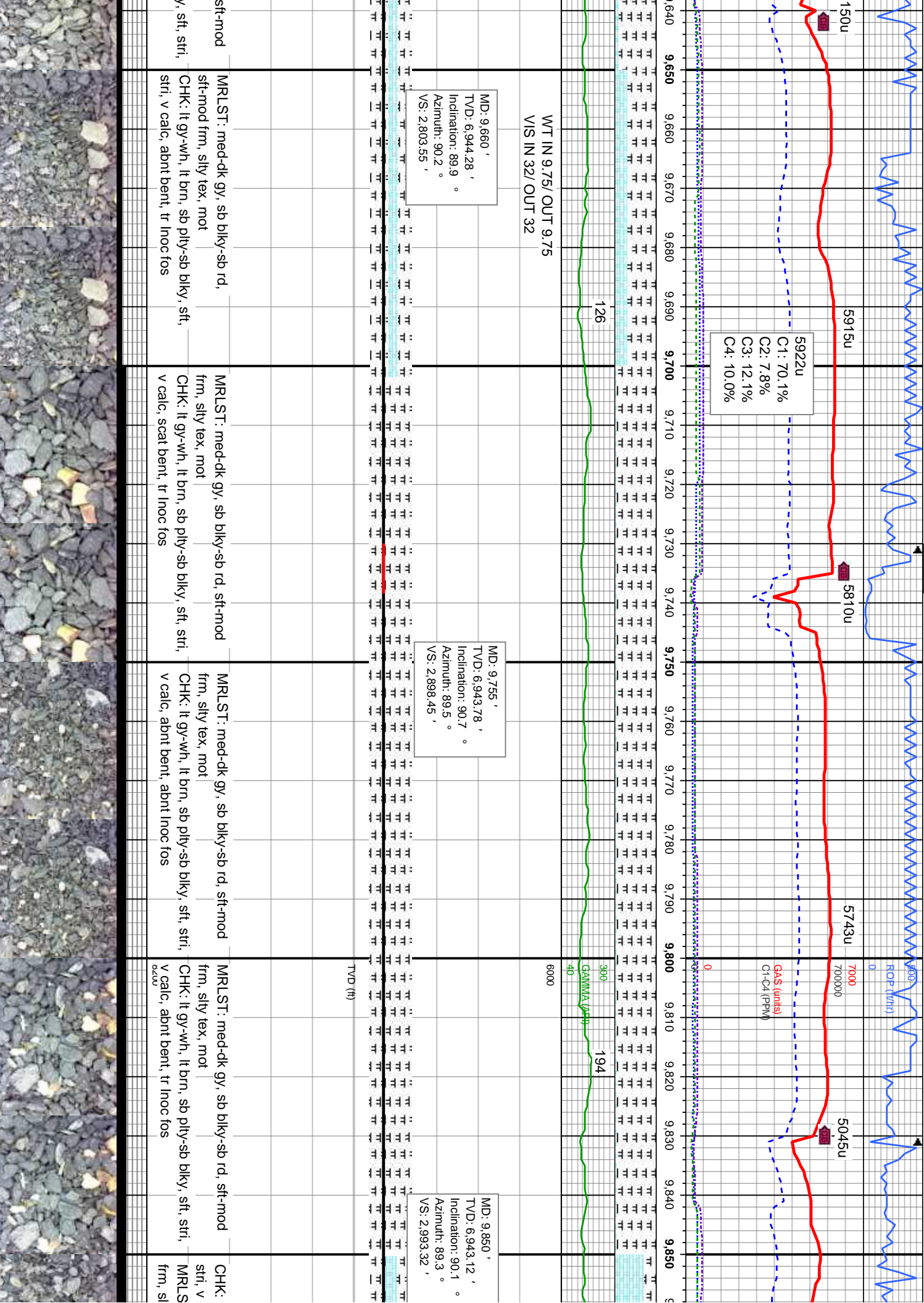


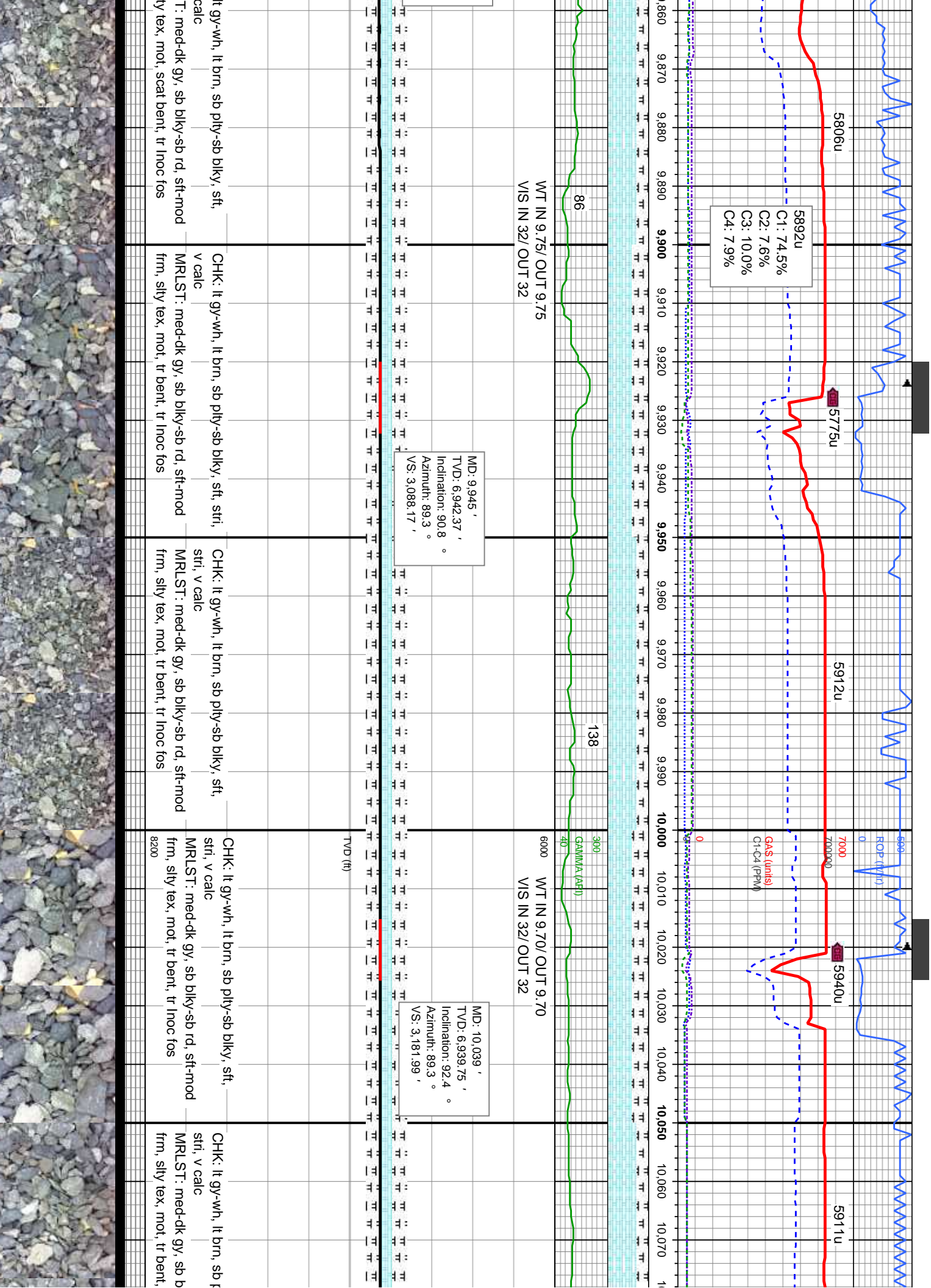




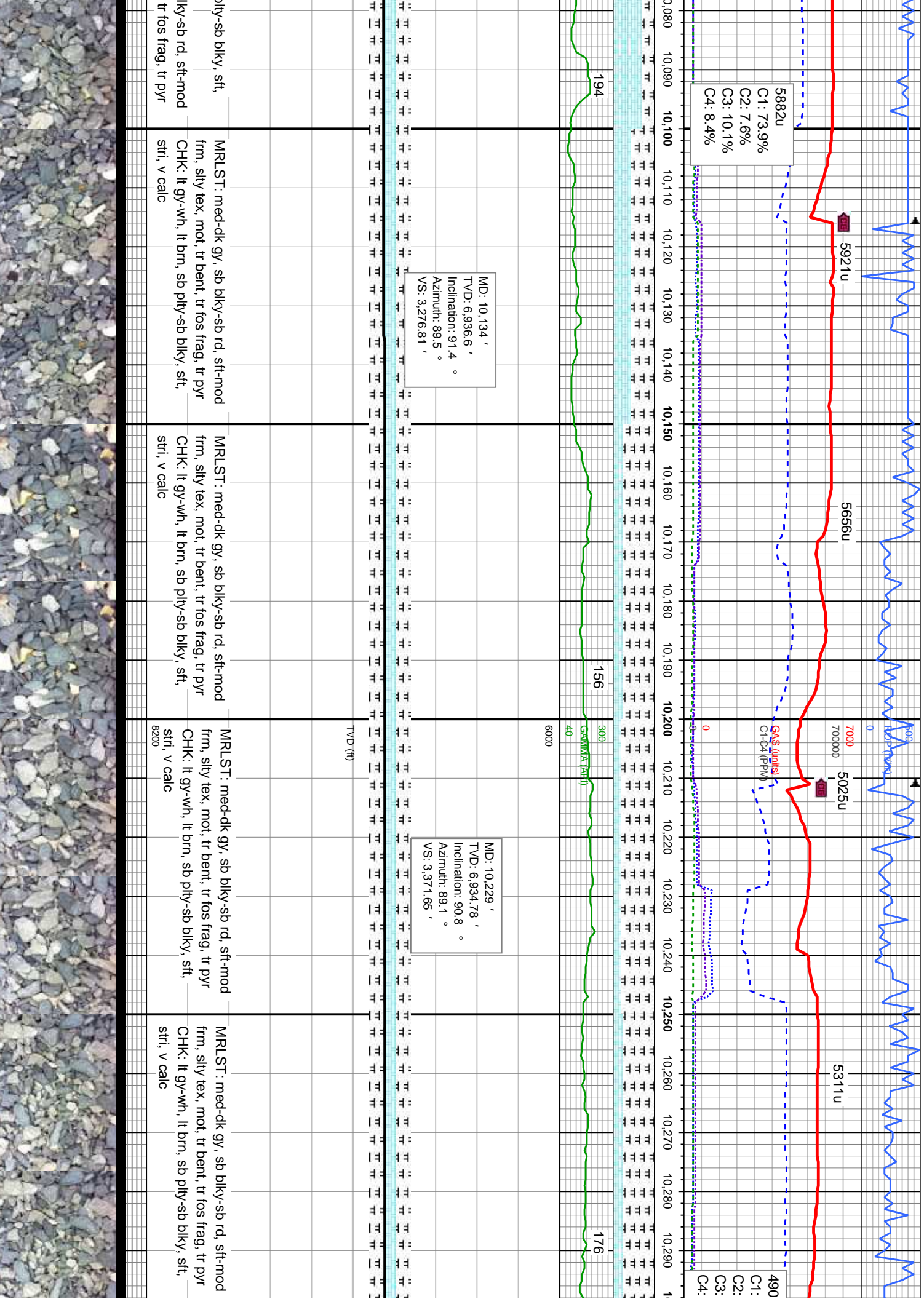


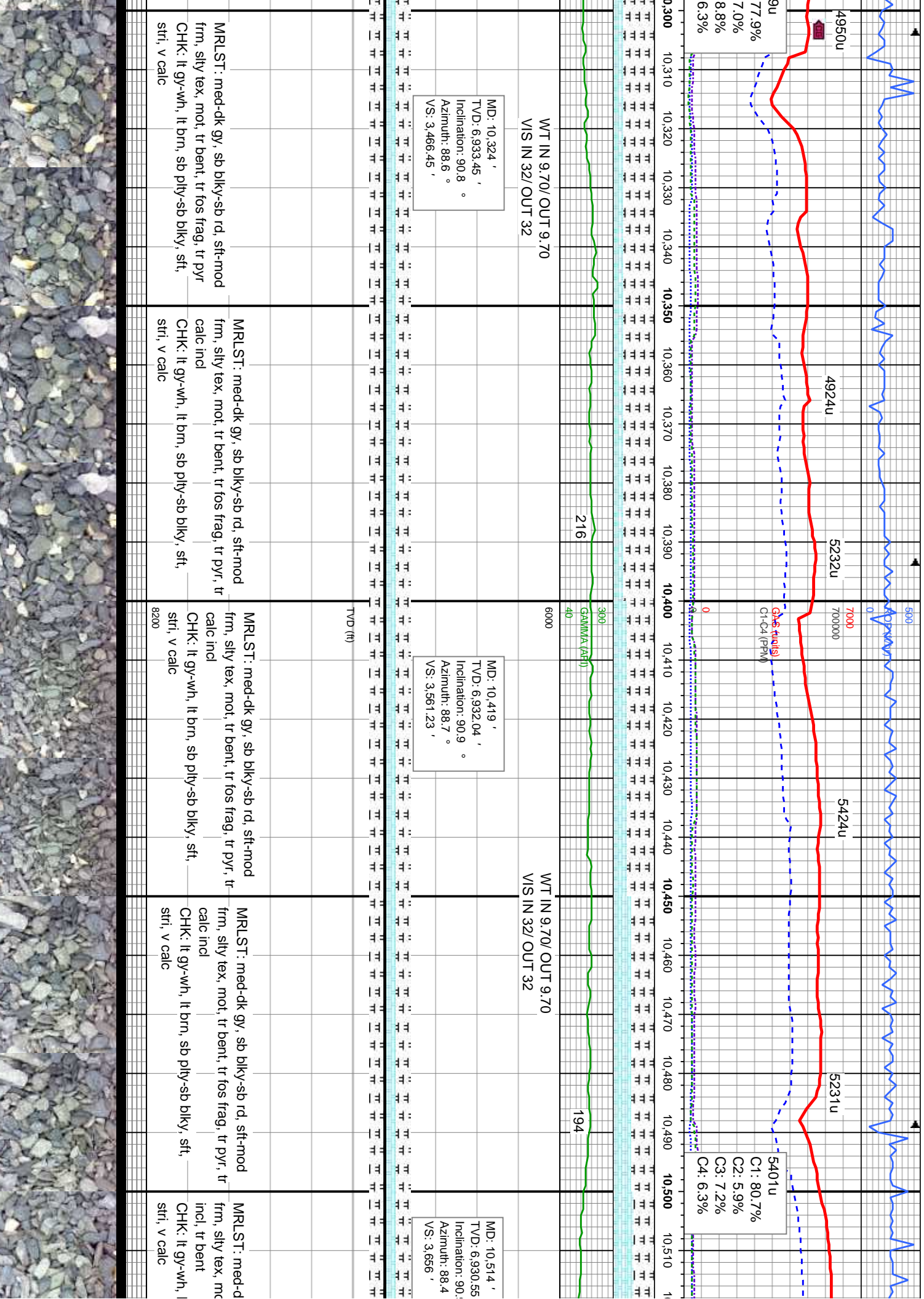




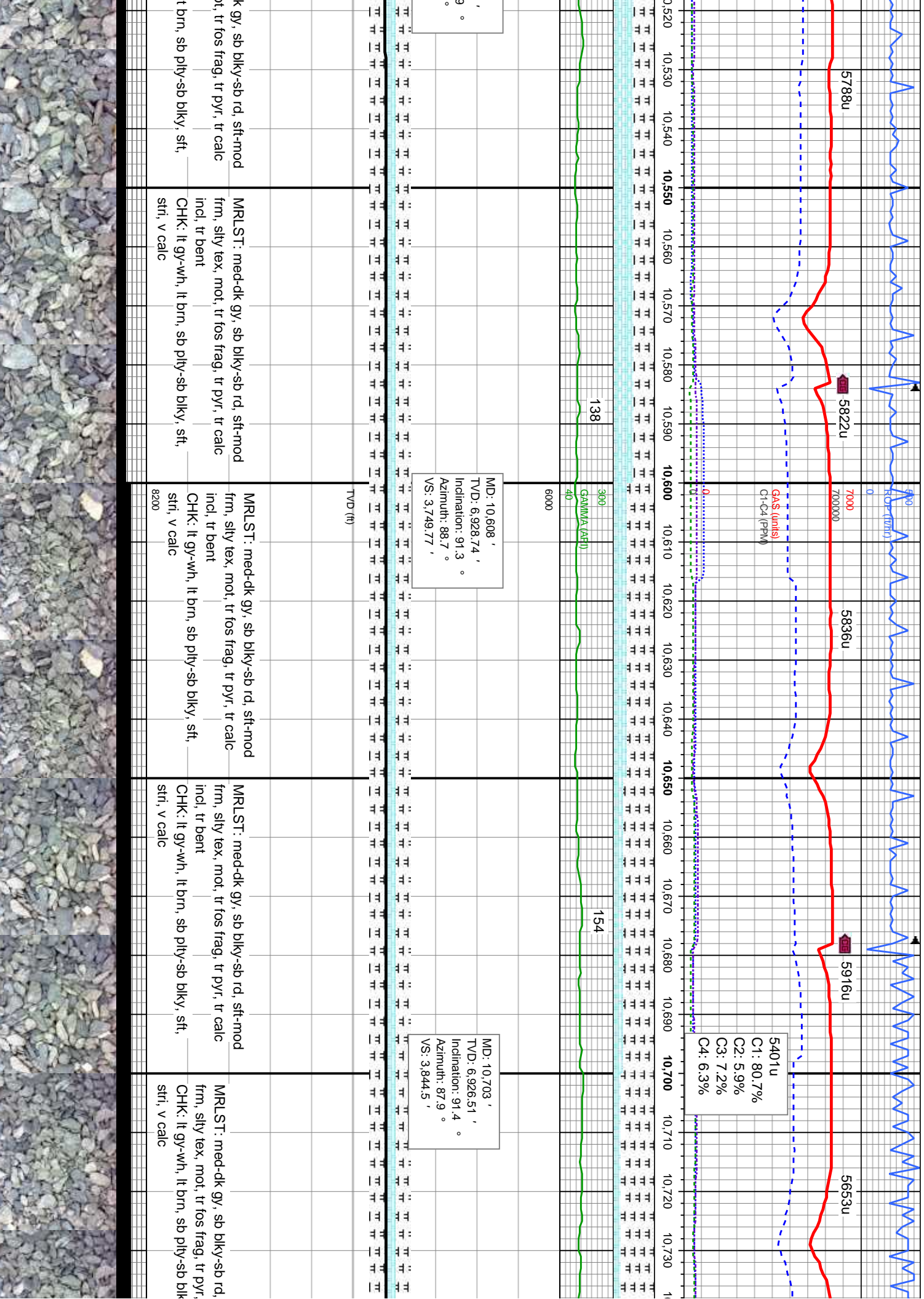


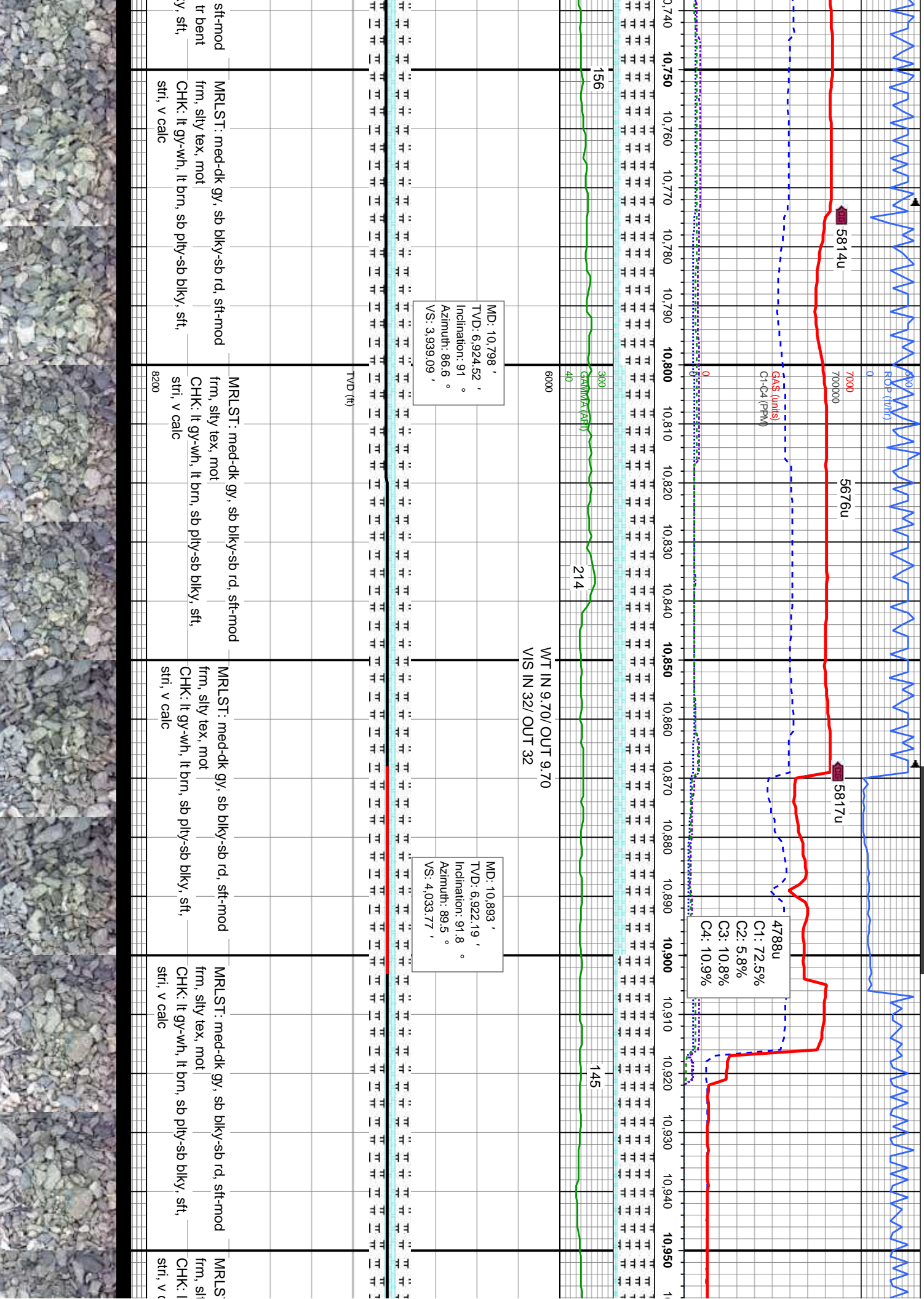




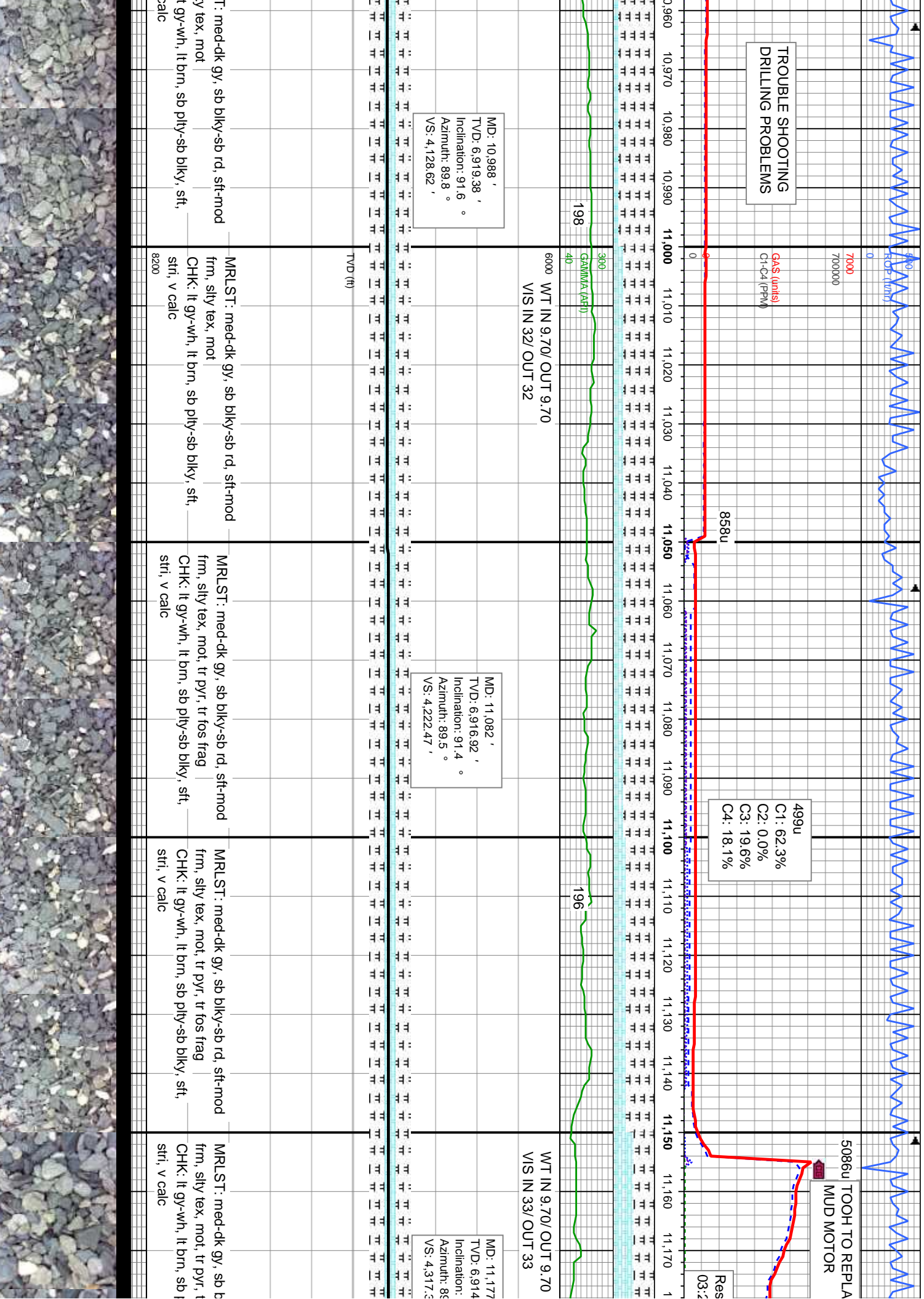












TROUBLE SHOOTING  
DRILLING PROBLEMS

GAS (units)  
C1-C4 (PPM)

858u

499u  
C1: 62.3%  
C2: 0.0%  
C3: 19.6%  
C4: 18.1%

5086u TOOTH TO REPLA  
MUD MOTOR

Res  
03.2

MD: 10.988 '  
TVD: 6,919.38 '  
Incination: 91.6 °  
Azimuth: 89.8 °  
VS: 4,128.62 '

MD: 11.082 '  
TVD: 6,916.92 '  
Incination: 91.4 °  
Azimuth: 89.5 °  
VS: 4,222.47 '

MD: 11.177 '  
TVD: 6,914 '  
Incination: 88 °  
Azimuth: 88 °  
VS: 4,317.3 '

6000 WT IN 9.70/ OUT 9.70  
VIS IN 32/ OUT 32

WT IN 9.70/ OUT 9.70  
VIS IN 33/ OUT 33

T: med-dk gy, sb blk-y-sb rd, sft-mod  
y tex, mot  
t gy-wh, lt brn, sb ply-sb blk-y, sft,  
calc

MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot  
CHK: lt gy-wh, lt brn, sb ply-sb blk-y, sft,  
stri, v calc  
8200

MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot, tr pyr, tr fos frag  
CHK: lt gy-wh, lt brn, sb ply-sb blk-y, sft,  
stri, v calc

MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot, tr pyr, tr fos frag  
CHK: lt gy-wh, lt brn, sb ply-sb blk-y, sft,  
stri, v calc

MRLST: med-dk gy, sb blk-y-sb rd, sft-mod  
frm, silty tex, mot, tr pyr, tr fos frag  
CHK: lt gy-wh, lt brn, sb ply-sb blk-y, sft,  
stri, v calc

01/19/2014

RCP (ft)

CE

7000

4928u

5261u

5478u

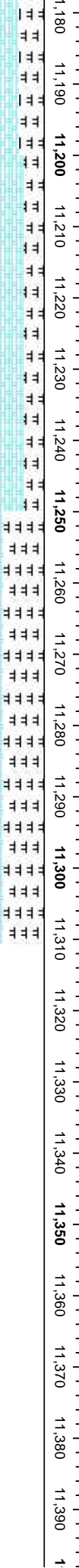
umed Drilling @

Jets: 5x16

BHA BIT:  
K DIA 6.125" DFSS13B  
Serial #: BC-017

4917u  
C1: 80.2%  
C2: 6.4%  
C3: 7.4%  
C4: 5.9%

NOBLE ENERGY INC.  
NO WORRIES PC G14-63-1HN  
TD @ 11310' MD  
01/19/2014 @ 04:05 AM  
THANK YOU  
COLUMBINE LOGGING



300

202

6000

WT IN 9.70/OUT 9.70  
VIS IN 33/OUT 33

PROJECTED

MD: 11,240 '  
TVD: 6,912.34 '  
Inclination: 92.2 °  
Azimuth: 89.3 °  
VS: 4,380.19 '

MD: 11,310 '  
TVD: 6,909.65 '  
Inclination: 92.2 °  
Azimuth: 89.3 °  
VS: 4,450.04 '

TVD (ft)

blky-sb rd, sft-mod  
r fos frag, tr bent  
blky-sb blky, sft,  
MRLST: med-dk gy, sb blky-sb rd, sft-mod  
frm, silty tex, mot, tr pyr, tr fos frag, tr bent  
CHK: lt gy-wh, lt brn, sb pily-sb blky, sft,  
stri, v calc

MRLST: med-dk gy, sb blky-sb rd, sft-mod frm,  
silty tex, mot, tr pyr, tr fos frag, tr bent  
CHK: lt gy-wh, lt brn, sb pily-sb blky, sft, stri, v  
calc





