

**Scale: 5" / 100'**  
**Measured Depth Log**

**Total Depth 17341'**

	UNKNOWN		CO
	ANHYDRITE		CL
	BENTONITE		CH
	BRECCIA		CR
	CHALK		CU
	CEMENT		DI
	CHERT		DR
	CLAY CHOKESAND		LS
	CLAYSTONE		TR

# Operator

202

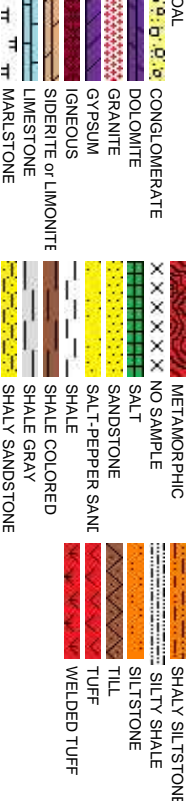
# Geologist

c Smith, Tim Bright

giving, Inc.

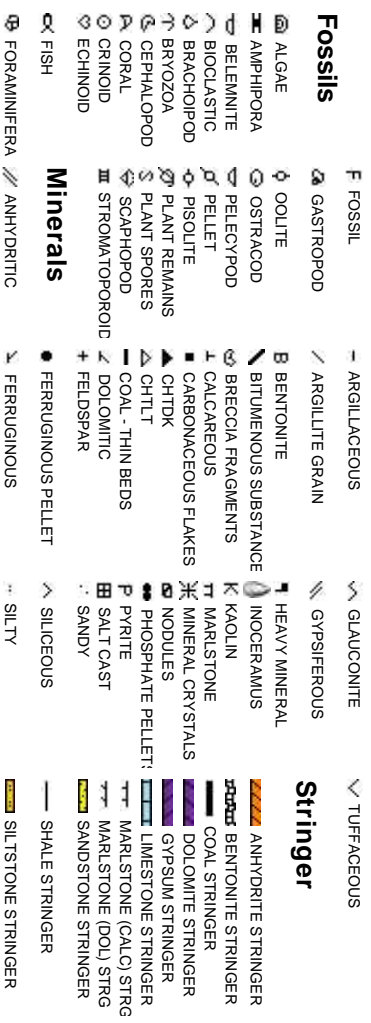
st.

## Rock Types



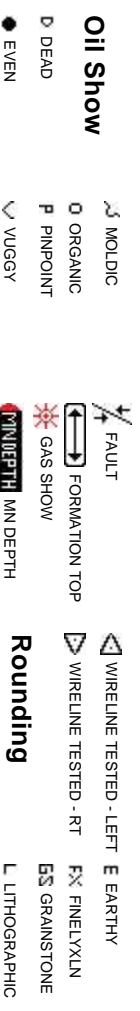
## Accessories

## Fossils

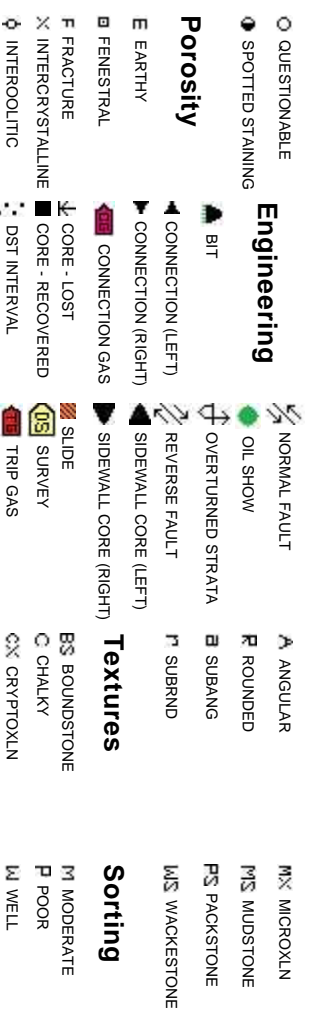


## Other Symbols

# Oil Show



## Porosity



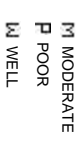
## Stringer



## Minerals



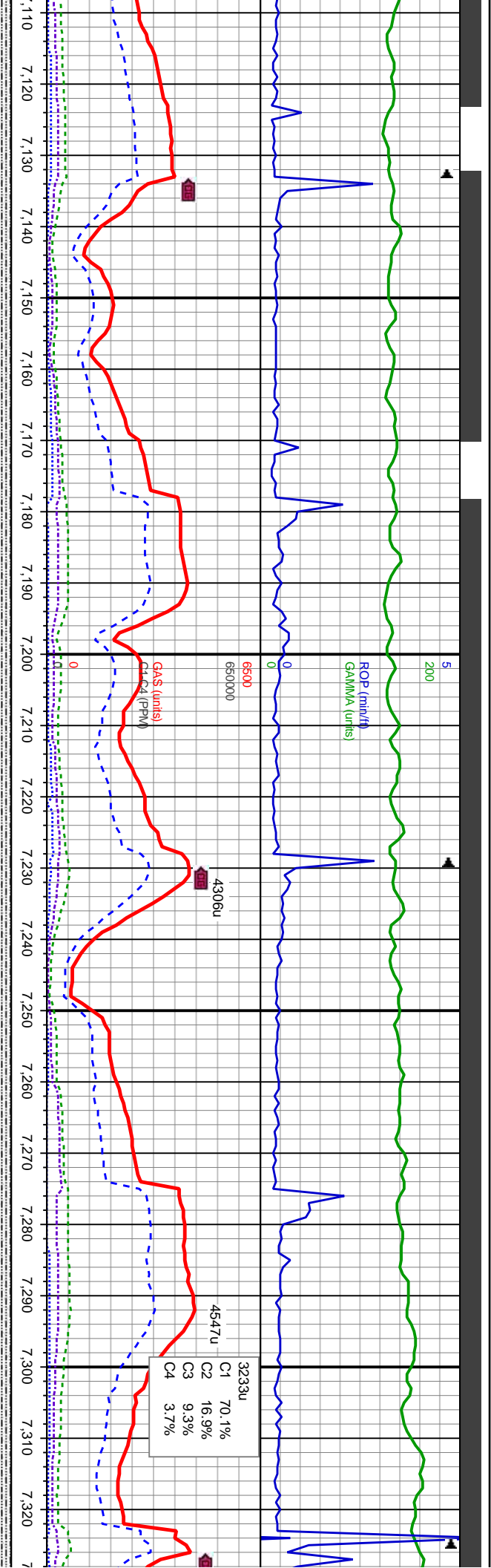
## Sorting











WT IN 10.4 OUT 10.3  
VIS IN 47 OUT 46

MD: 7,118 '  
TVD: 7,070.27 '  
Inclination: 15.87 °  
Azimuth: 168.49 °  
VS: -390.31 '

MD: 7,167 '  
TVD: 7,116.87 '  
Inclination: 20.06 °  
Azimuth: 172.73 °  
VS: -375.4 '

MD: 7,214 '  
TVD: 7,160.41 '  
Inclination: 24.18 °  
Azimuth: 175.12 °  
VS: -357.8 '

MD: 7,261 '  
TVD: 7,202.43 '  
Inclination: 28.95 °  
Azimuth: 175.72 °  
VS: -336.84 '

MD: 7,308 '  
TVD: 7,242.48 '  
Inclination: 34.13 °  
Azimuth: 178.33 °  
VS: -312.3 '

WT IN 10  
VIS IN 4

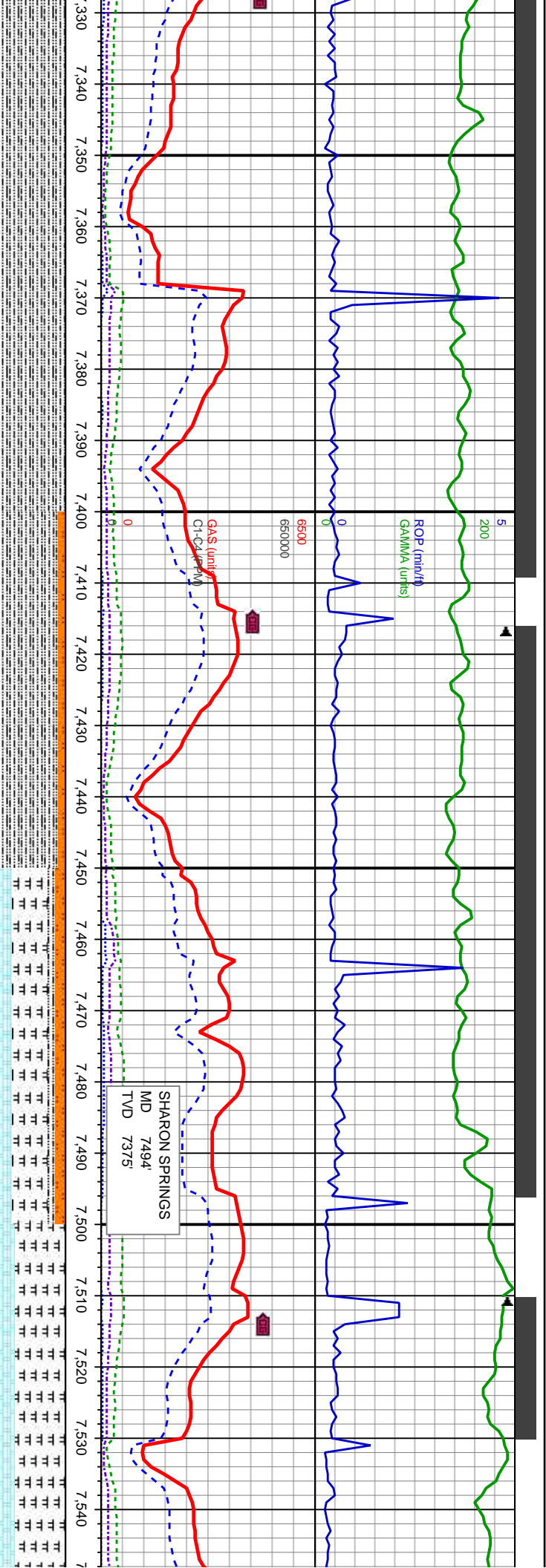
7100'-7200' MD: SLTY SH: med gy-dk gy, sb pily-sb biky, firm to med sft, sb rnd-sb ang, mod frt, sl calc, tr bent, no o

7200'-7300' MD: SLTY SH: med gy-dk gy, sb pily-sb biky, firm to med sft, sb rnd-sb ang, mod frt, sl calc, tr bent, no o

7300'-7400' MD: SLTY SH: med gy-dk gy, sb pily-sb biky, firm to med sft, sb rnd-sb ang, mod frt, sl calc, tr bent, no o







2 OUT 10.0  
8 OUT 46

MD: 7,356 '  
TVD: 7,281.12 '  
Inclination: 38.63 °  
Azimuth: 180.9 °  
VS: -283.84 '

SCALE  
CHANGE

MD: 7,403 '  
TVD: 7,316.34 '  
Inclination: 44.24 °  
Azimuth: 181.34 °  
VS: -252.76 '

MD: 7,450 '  
TVD: 7,348.17 '  
Inclination: 50.43 °  
Azimuth: 181.31 °  
VS: -218.23 '

SHARON SPRINGS  
MD 7494'  
TVD 7375'

MD: 7,497 '  
TVD: 7,376.19 '  
Inclination: 56.36 °  
Azimuth: 180.51 °  
VS: -180.52 '

MD: 7,544 '  
TVD: 7,401.06 '  
Inclination: 59. °  
Azimuth: 179. °  
VS: -140.65 '

SLTY SH: med gy-dk gy, sb pily-sb blk, firm  
-sb ang, mod fri, sl calc, tr bent, no o

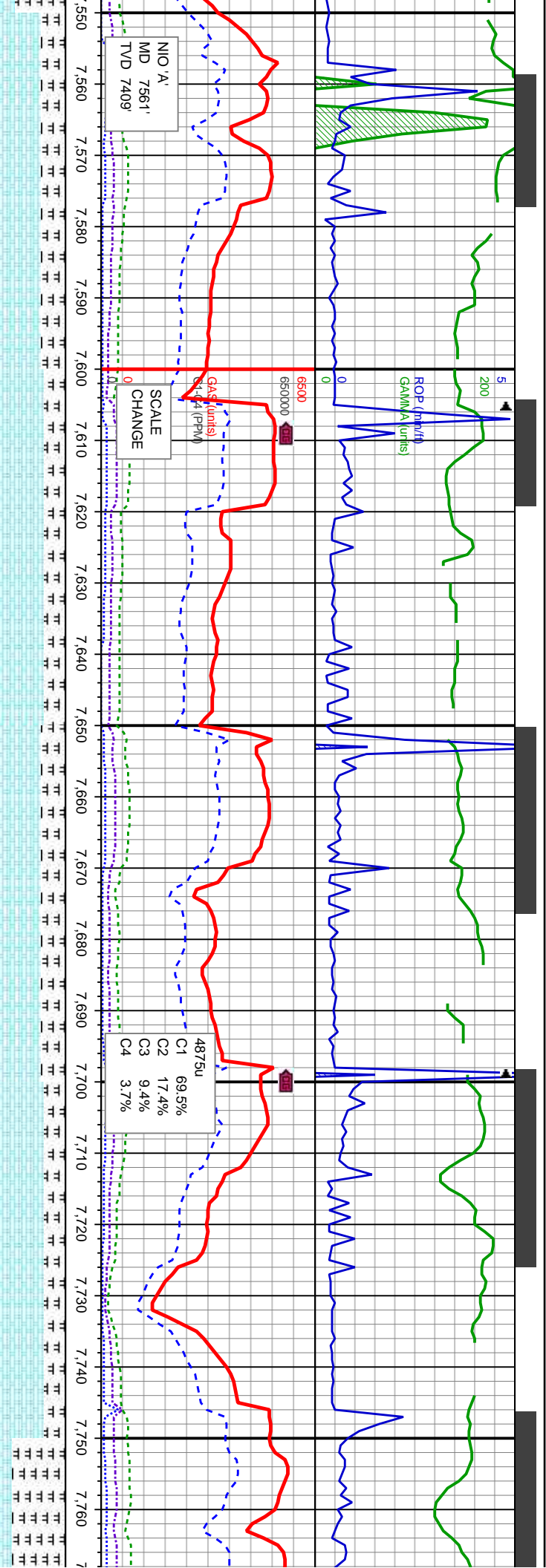
7400'-7450' MD: SLTY SH: med gy-dk gy,  
sb pily-sb blk, firm to med sft, sb  
md-sb ang, mod fri, sl calc, tr bent,  
SLTST: lt gy-lt gy brn, sb pily-blky,  
med-v frm, sl arg, sl-med calc, no o

7500'-7550' MD: CHK- lt-med gy, lt-med gy  
brn, mot, stri, sb blk-y-sb pily, sft - sl frm,  
fri, chky-sb wxy, v calc, MRLST- med-dk  
gy-gy brn, sb pily-blky, sft-frm, mod  
arg-sily, sl calc, tr lt bl flr w/ v sl halo cut

7450'-7500' MD: CHK- lt-med gy, lt-med gy brn,  
mot, stri, sb blk-y-sb pily, sft - sl frm, fri,  
chky-sb wxy, v calc, MRLST- med-dk gy-gy brn,  
sb pily-blky, sft-frm, mod arg-sily, sl calc,  
SLTST: lt gy-lt gy brn, sb pily-blky, med-v frm, sl  
arg, sl-med calc, tr lt bl flr w/ v sl halo cut







NIO A'  
MD 7561'  
TVD 7409'

SCALE  
CHANGE

4875u  
C1 69.5%  
C2 17.4%  
C3 9.4%  
C4 3.7%

MD: 7,591 '  
TVD: 7,423.46 '  
Inclination: 63.31 °  
Azimuth: 176.58 °  
VS: -99.37 '

MD: 7,639 '  
TVD: 7,444.04 '  
Inclination: 65.93 °  
Azimuth: 175.81 °  
VS: -56.09 '

MD: 7,686 '  
TVD: 7,462.51 '  
Inclination: 67.77 °  
Azimuth: 176.85 °  
VS: -12.96 '

MD: 7,733 '  
TVD: 7,479.23 '  
Inclination: 70.55 °  
Azimuth: 177.49 °  
VS: 30.92 '

7550'-7600 MD: CHK-It-med gy, It-med gy brn, mot, stri, sb blk-y-sb ply, sft-sl frm, fri, chky-sb wxy, v calc, MRLST- med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, sl calc, tr It bl flr w/ v sl halo cut

7600'-7650 MD: CHK-It-med gy, It-med gy brn, mot, stri, sb blk-y-sb ply, sft-sl frm, fri, chky-sb wxy, v calc, MRLST- med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, sl calc, tr It bl flr w/ v sl halo cut

7650'-7700 MD: CHK-It-med gy, It-med gy brn, mot, stri, sb blk-y-sb ply, sft-sl frm, fri, chky-sb wxy, v calc, MRLST- med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, sl calc, tr bent, tr It bl flr w/ v sl halo cut

7700'-7750 MD: CHK-It-med gy, It-med gy brn, mot, stri, sb blk-y-sb ply, sft-sl frm, fri, chky-sb wxy, v calc, MRLST- med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, sl calc, tr bent, tr It bl flr w/ v sl halo cut

7750'-7800 MD: N ply-blky, sft-frm, bent, CHK-It-med sb blk-y-sb ply, sft calc, tr It bl flr w/



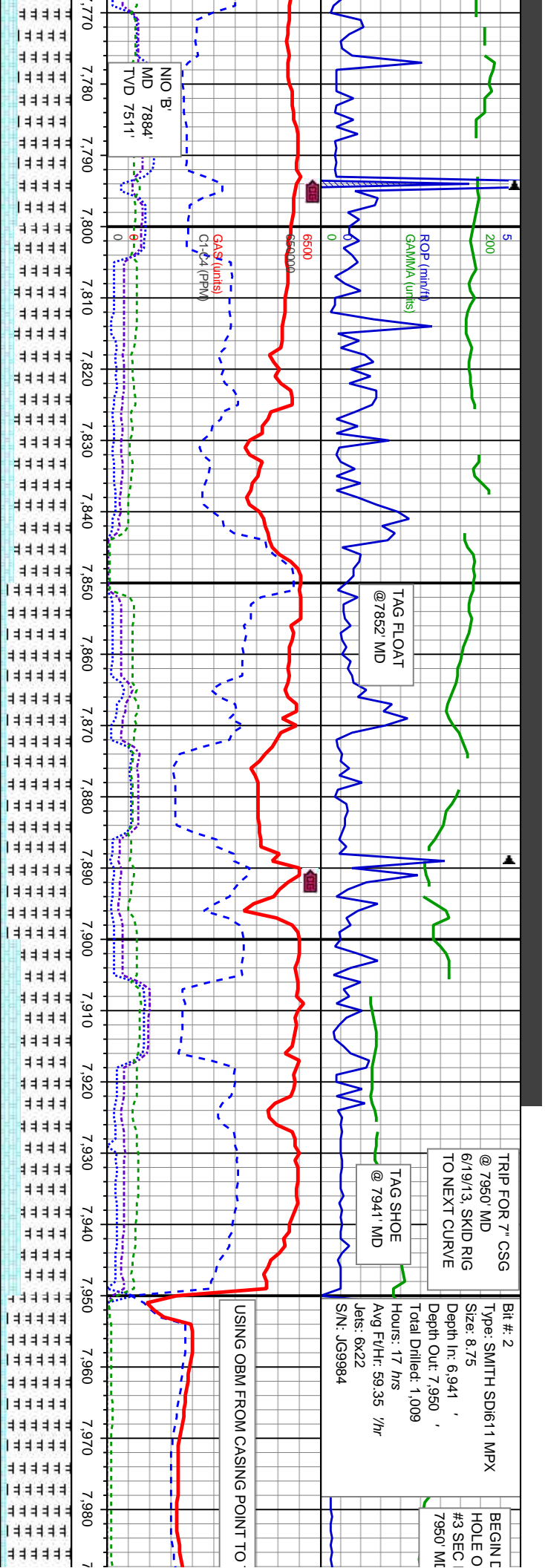
Micrograph 1

Micrograph 2

Micrograph 3

Micrograph 4





MD: 7,780 '  
TVD: 7,492.89 '  
Inclination: 75.66 °  
Azimuth: 178.54 °  
VS: 75.85 '

MD: 7,827 '  
TVD: 7,503.04 '  
Inclination: 79.38 °  
Azimuth: 178.93 °  
VS: 121.73 '

MD: 7,859 '  
TVD: 7,508.2 '  
Inclination: 82.07 °  
Azimuth: 179.58 °  
VS: 153.31 '

MD: 7,890 '  
TVD: 7,511.61 '  
Inclination: 85.31 °  
Azimuth: 179.95 °  
VS: 184.11 '

WT IN 10.1 OUT 10  
VIS IN 45 OUT 43

7780'-7800' MD: MRLST-med-dk gy-gy brn, sb  
ply-biky, sft-frn, mod arg-sily, sl calc, tr  
bent,CHK-It-med gy, It-med gy brn, mot, stri,  
sb biky-sb pily, sft-sl frn, fri, chky-sb wxy, v  
calc, tr It bl flwr w/ v sl halo cut

7800'-7850 MD: MRLST-med-dk gy-gy brn, sb  
ply-biky, sft-frn, mod arg-sily, sl calc, tr  
bent,CHK-It-med gy, It-med gy brn, mot, stri,  
sb biky-sb pily, sft-sl frn, fri, chky-sb wxy, v  
calc, tr It bl flwr w/ v sl halo cut

7850'-7900 MD: MRLST-med-dk gy-gy brn, sb  
ply-biky, sft-frn, mod arg-sily, sl calc, tr  
bent,CHK-It-med gy, It-med gy brn, mot, stri,  
sb biky-sb pily, sft-sl frn, fri, chky-sb wxy, v  
calc, tr It bl flwr w/ v sl halo cut

7900'-7950 MD: MRLST-med-dk gy-gy brn, sb  
ply-biky, sft-frn, mod arg-sily, sl calc, tr  
bent,CHK-It-med gy, It-med gy brn, mot, stri, sb  
biky-sb pily, sft-sl frn, fri, chky-sb wxy, v calc, tr  
It bl flwr w/ v sl halo cut

7950'-8000 MD: MRLST-med-dk gy-gy  
ply-biky, sft-frn, mod arg-sily, sl calc, tr  
bent,CHK-It-med gy, It-med gy brn, mot, stri,  
sb biky-sb pily, sft-sl frn, fri, chky-sb wxy, v  
calc, tr It bl flwr w/ v sl halo cut

PICTURE QUALITY DIMINISHED FROM OIL BAS





89


Gamma ( )

89

Gamma ( )

650000	650000
--------	--------

CVS (right)

~~C1-C4 (P)~~

2860u

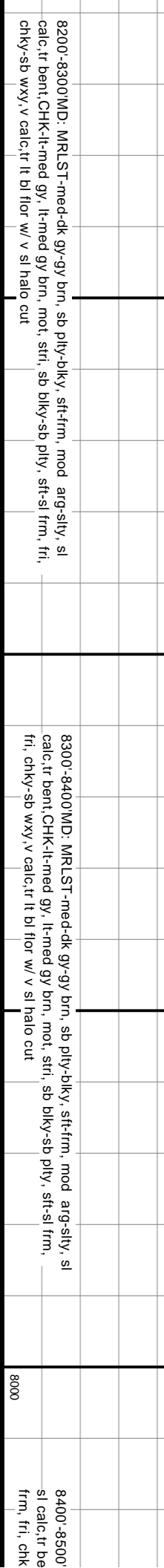
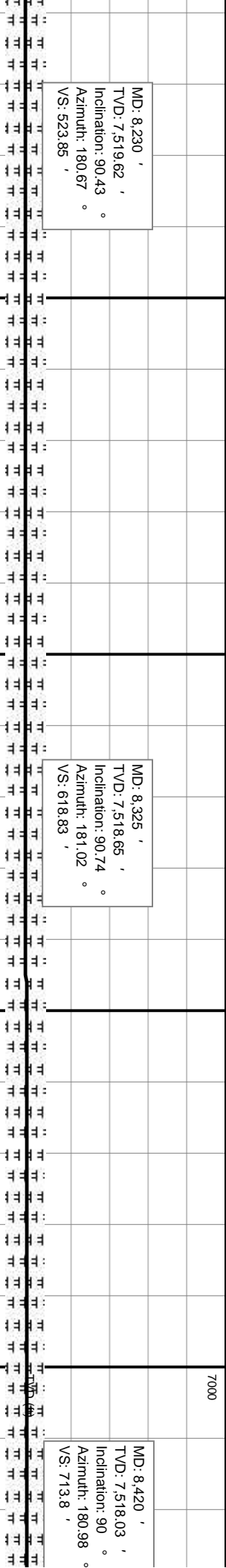
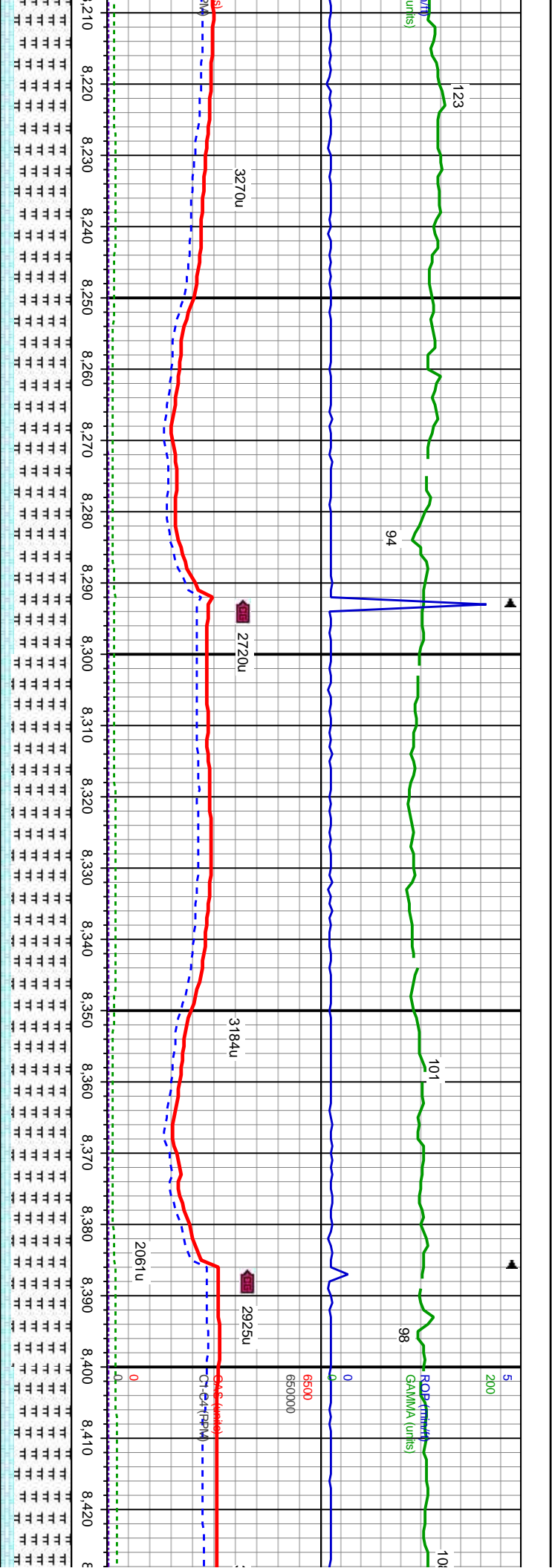
MD: 8,136 ' °  
TVD: 7,520.42 ' °  
Inclination: 90.55 °  
Azimuth: 180.39 °  
VS: 429.86 ' °

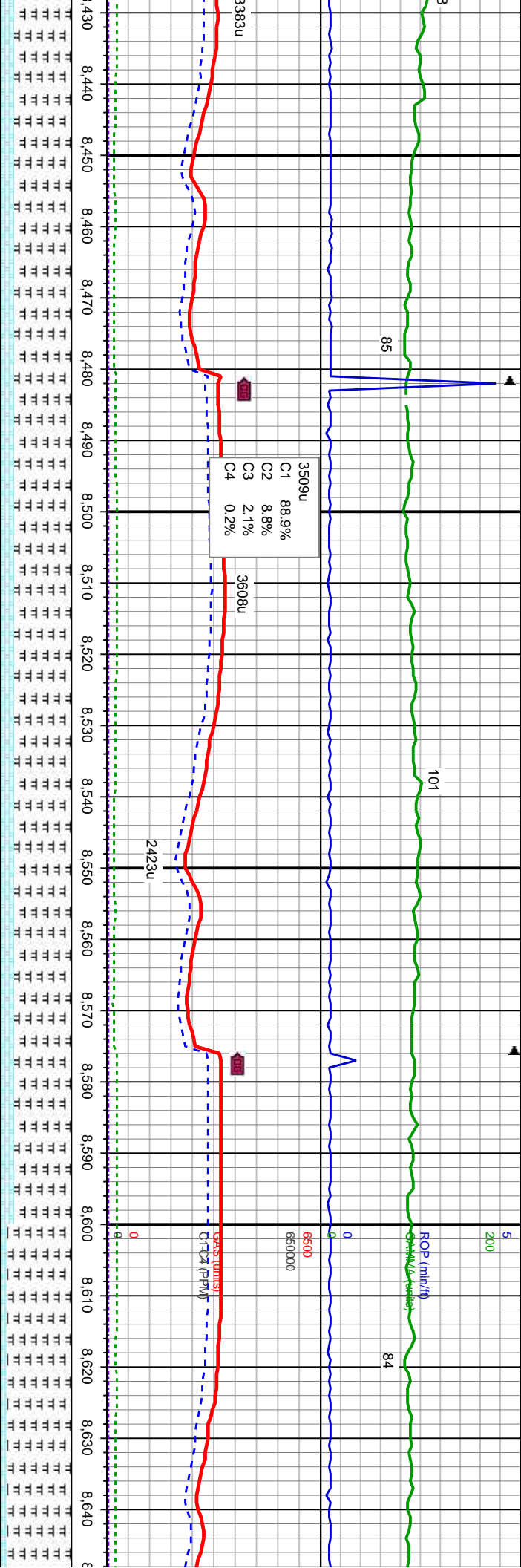
WT IN 10.2+ OUT 10.2+  
VIS IN 89 OUT 86

81000-82000MD: MRKST-med-dk gy-gy brn, sb ply-b/ply, stf-frn, mod alg-slt, sl  
calc, tr bent, CHK-It-med gy, It-med gy brn, mot, stri, sb bky-sb ply, stf-sl frn, fri,  
chky-sb wxy v calc, tr lt bl flwr w/ v sl halo cut

8000







WT IN 10.1+ OUT 10.1+  
VIS IN 75 OUT 73

MD: 8,514 '  
TVD: 7,518.69 '  
Inclination: 89.2 °  
Azimuth: 180.56 °  
VS: 807.79 '

MD: 8,609 '  
TVD: 7,519.71 '  
Inclination: 89.57 °  
Azimuth: 180.48 °  
VS: 902.77 '

WT IN 10.1+ OUT 10.1+  
VIS IN 75 OUT 73

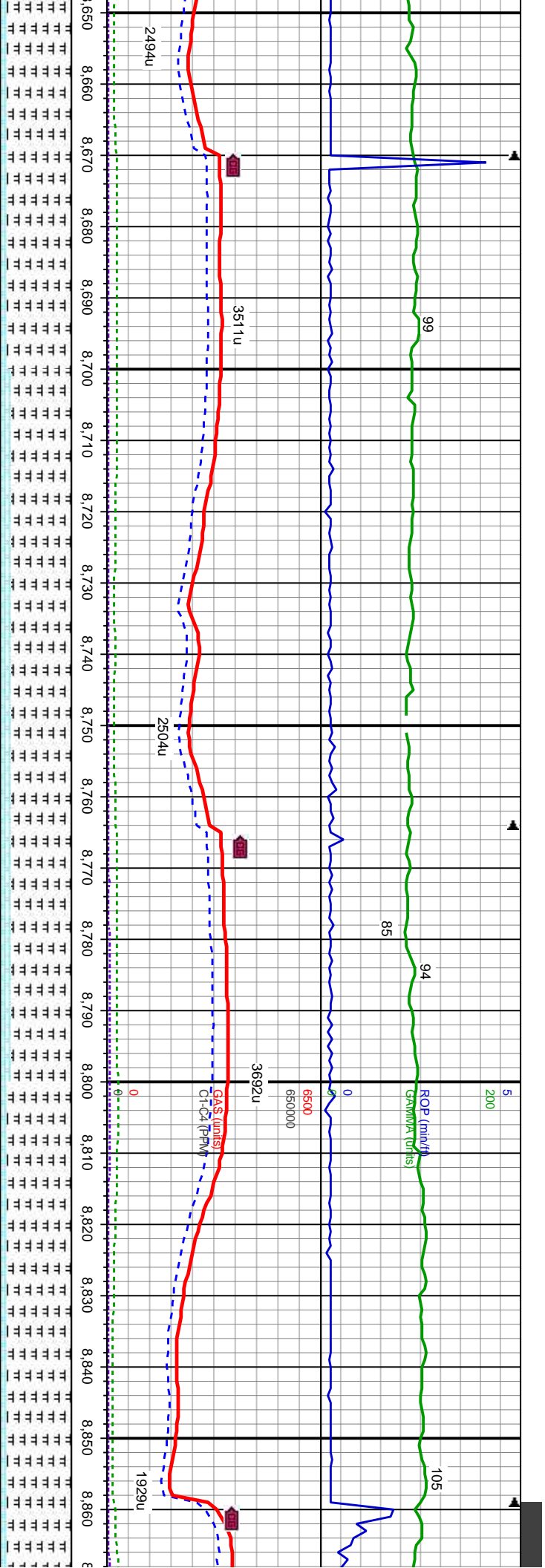
MD: MRLST-med-dk gy-gy brn, sb pily-bkly, sft-frn, mod arg-sily, bent,CHK-lt-med gy, lt-med gy brn, mot, strf, sb bkly-sb pily, sft-sl  
y-sb wxy,v calc,lr lt bl flr w/ v sl halo cut

8500'-8600'MD: MRLST-med-dk gy-gy brn, sb pily-bkly, sft-frn, mod arg-sily, sl calc,lr bent,CHK-lt-med gy, lt-med gy brn, mot, strf, sb bkly-sb pily, sft-sl frn, fri, chky-sb wxy,v calc,lr lt bl flr w/ v sl halo cut

8600'-8700'MD: MRLST-med-dk gy-gy brn, bent,CHK-lt-med gy, lt-med gy brn, mot, str wxy,v calc,lr lt bl flr w/ v sl halo cut







MD: 8,703 '   
 TVD: 7,520.35 '   
 Inclination: 89.65 °   
 Azimuth: 180.22 °   
 VS: 996.76 '

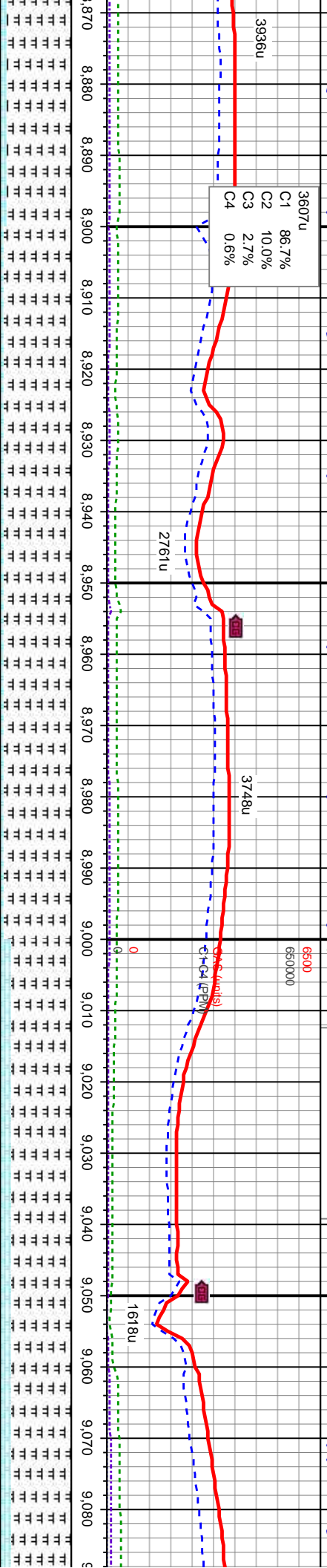
MD: 8,798 '   
 TVD: 7,521.46 '   
 Inclination: 89.01 °   
 Azimuth: 179.15 °   
 VS: 1,091.76 '

sb pily-blky, sft-frm, mod arg-sily, sl calc, tr  
i, sb blk-y-sb pily, sft-sl frm, fri, chky-sb  
8700'-8800MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily, sl  
calc, tr bent, CHK-it-med gy, lt-med gy brn, mot, stri, sb blk-y-sb pily, sft-sl frm,  
fri, chky-sb wxy, v calc, tr lt bl flwr w/ v sl halo cut

8800'-8900MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-f  
calc, tr bent, CHK-it-med gy, lt-med gy brn, mot, stri, sb blk-y-  
chky-sb wxy, v calc, tr lt bl flwr w/ v sl halo cut



Bit #: 3  
Type: SECURITY MMD54  
Size: 6.12  
Depth In: 7.950 '  
Depth Out: 9.048 '  
Total Drilled: 1.098  
Hours: 20 hrs  
Avg Ft/Hr: 54.9 '/hr  
Jets: 5X20  
S/N: 12232846



WT IN 10.1 OUT 10.1+  
VIS IN 73 OUT 72

MD: 8.893 '  
TVD: 7.521.92 '  
Inclination: 90.43 °  
Azimuth: 180.69 °  
VS: 1.186.75 '

MD: 8.987 '  
TVD: 7.522.33 '  
Inclination: 89.08 °  
Azimuth: 179.56 °  
VS: 1.280.74 '

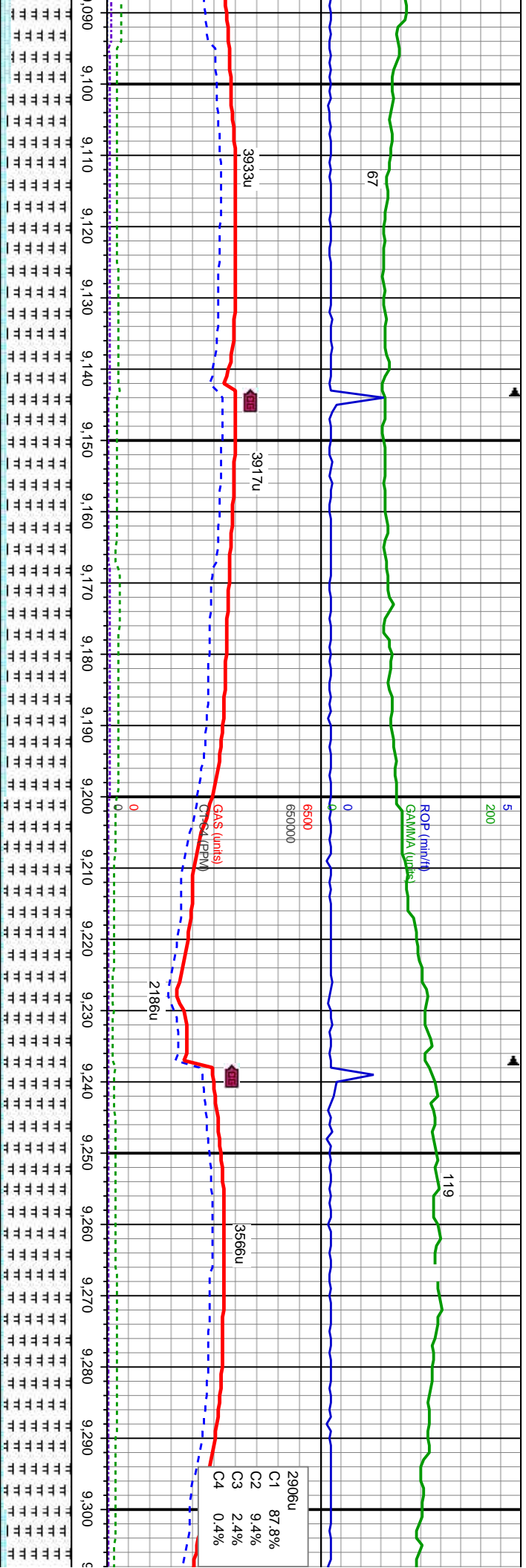
MD: 9.082 '  
TVD: 7.522.38 '  
Inclination: 90.86 °  
Azimuth: 179.43 °  
VS: 1.375.74 '

8900'-9000' MD: MRLST-med-dk gy-gy brn, sb pily-biky, sft-frm, mod arg-sily, sl calc, tr bent, CHK-II-med gy, II-med gy brn, mot, stri, sb biky-sb pily, sft-sl frm, fri, chky-sb wxy, v calc, tr II bl flr w/ v sl halo cut

9000'-9100' MD: MRLST-med-dk gy-gy brn, sb pily-biky, sft-frm, mod arg-sily, sl calc, tr bent, CHK-II-med gy, II-med gy brn, mot, stri, sb biky-sb pily, sft-sl frm, fri, chky-sb wxy, v calc, tr II bl flr w/ v sl halo cut







10.1 OUT 10.1  
75 OUT 78

MD: 9,176 '  
TVD: 7,521.62 '  
Inclination: 90.06 °  
Azimuth: 178.29 °  
VS: 1,469.72 '

7000  
WT IN 10.1 OUT 10.1  
VIS IN 75 OUT 77

MD: 9,271 '  
TVD: 7,521.26 '  
Inclination: 90.37 °  
Azimuth: 178.09 °  
VS: 1,564.68 '

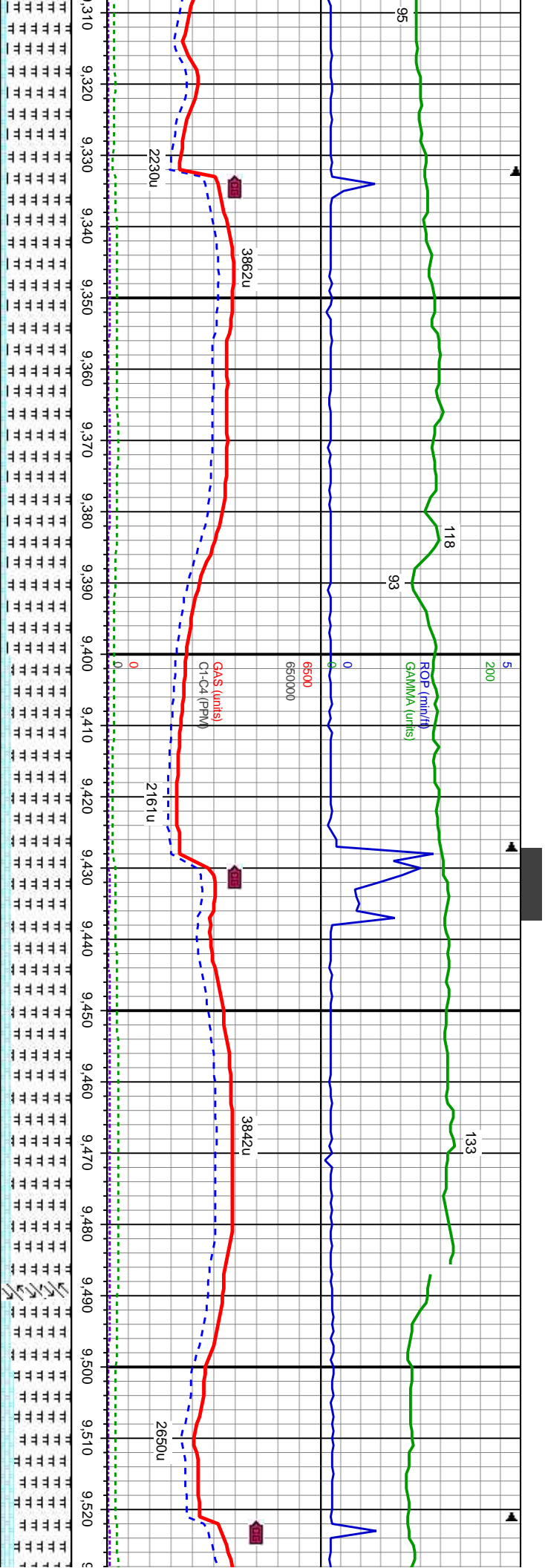
2906u  
C1 87.8%  
C2 9.4%  
C3 2.4%  
C4 0.4%

9100'-9200 MD: MRLST -med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl calc, tr bent, CHK-lt-med gy, lt-med gy brn, mot, stri, sb blkgy-sb ply, sft-sl frn, fri, chky-sb wxy, v calc, tr lt bl flwr w/ v sl halo cut

9200'-9300 MD: MRLST -med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl calc, tr bent, CHK-lt-med gy, lt-med gy brn, mot, stri, sb blkgy-sb ply, sft-sl frn, fri, chky-sb wxy, v calc, tr lt bl flwr w/ v sl halo cut







MD: 9,366 '   
 TVD: 7,521.16 '   
 Inclination: 89.75 °   
 Azimuth: 177.41 °   
 VS: 1,659.62 '

WT IN 10.1 OUT 10.1   
 VIS IN 75 OUT 79

MD: 9,460 '   
 TVD: 7,521.98 '   
 Inclination: 89.26 °   
 Azimuth: 178.01 °   
 VS: 1,753.56 '

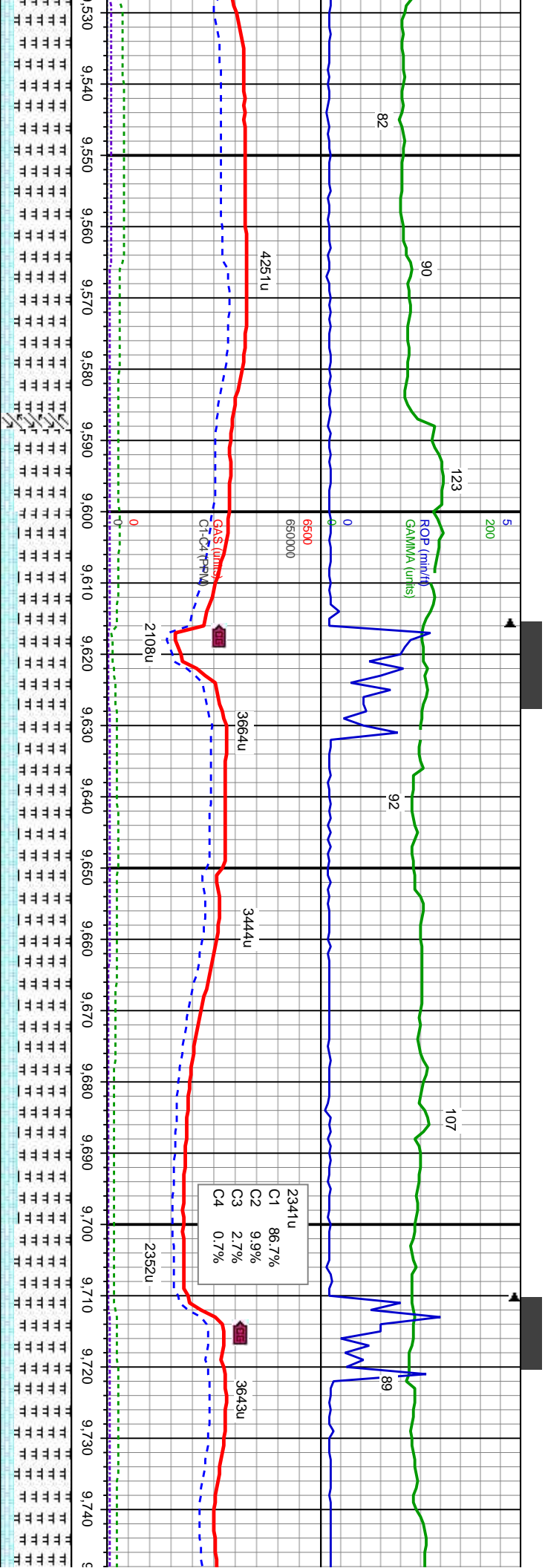
300'-9400 MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl calc, tr bent, CHK-It-med gy, It-med gy brn, mot, stri, sb blkys-sb ply, sft-sl frn, fri, chky-sb wxy, v calc, tr It bl flr w/ v sl halo cut

9400'-9500 MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl calc, tr bent, CHK-It-med gy, It-med gy brn, mot, stri, sb blkys-sb ply, sft-sl frn, fri, chky-sb wxy, v calc, tr It bl flr w/ v sl halo cut

9500'-9600 MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl calc, tr bent, CHK-It-med gy, It-med gy brn, mot, stri, sb blkys-sb ply, sft-sl frn, fri, chky-sb wxy, v calc, tr It bl flr w/ v sl halo cut







MD: 9,554 '  
TVD: 7,523.59 '  
Inclination: 88.77 °  
Azimuth: 177.45 °  
VS: 1,847.48 '

MD: 9,649 '  
TVD: 7,525.02 '  
Inclination: 89.51 °  
Azimuth: 178.85 °  
VS: 1,942.43 '

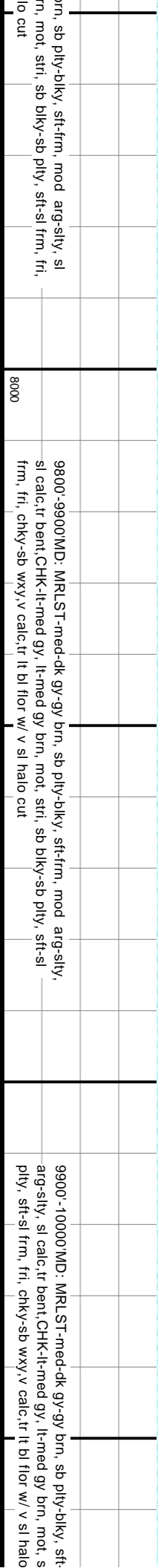
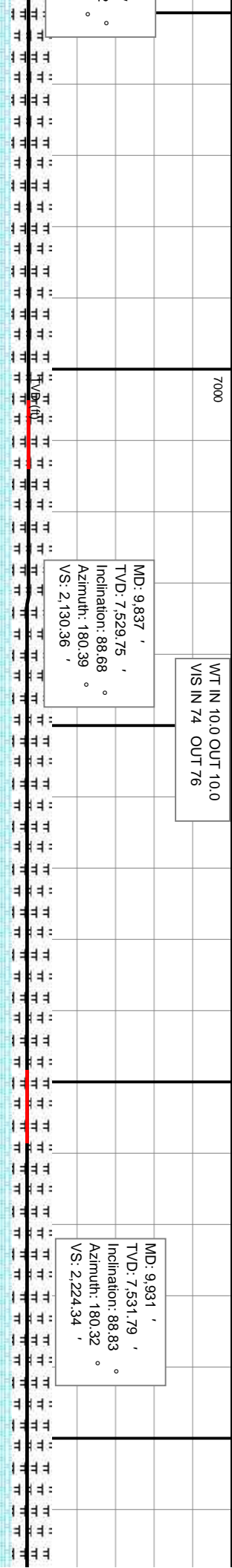
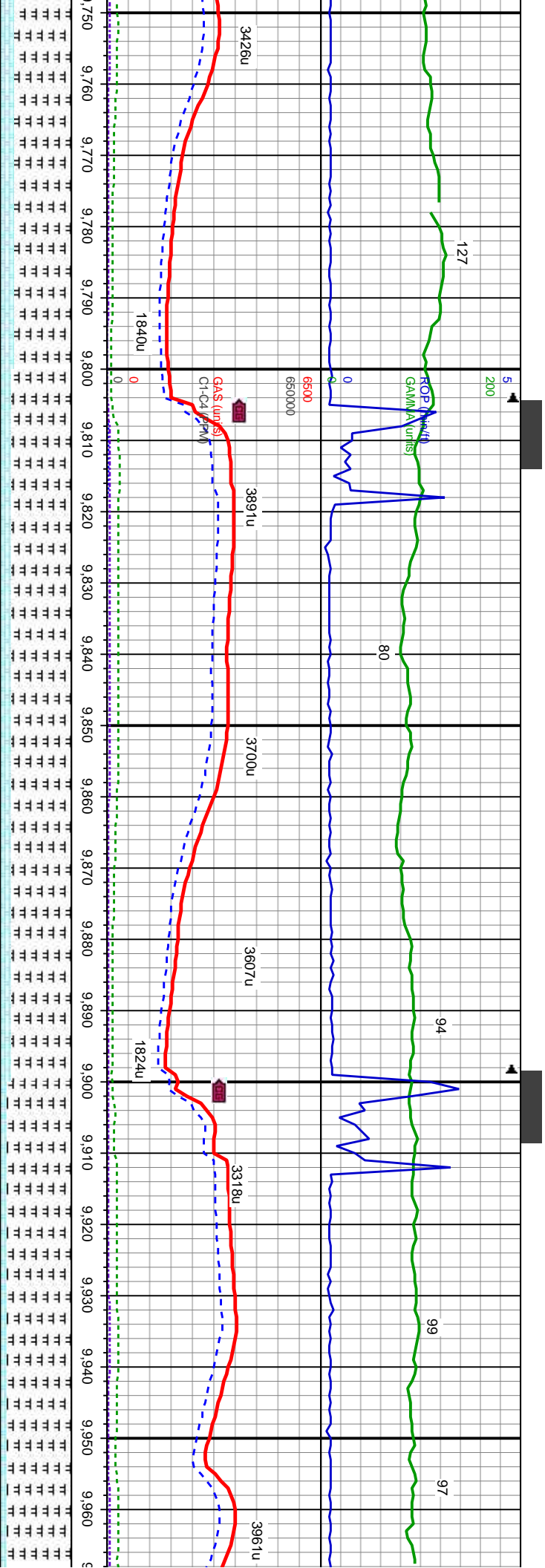
MD: 9,743 '  
TVD: 7,527.04 '  
Inclination: 88.02 °  
Azimuth: 179.95 °  
VS: 2,036.41 '

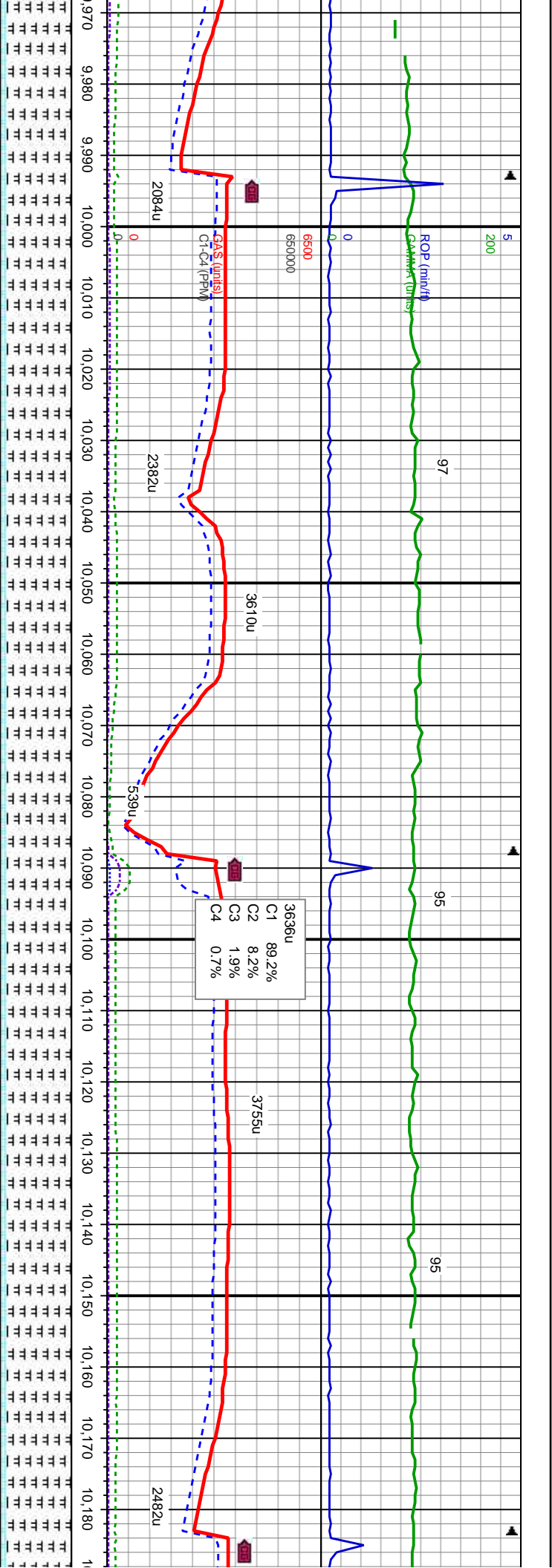
WT IN 10.0 OUT 10.0+  
VIS IN 77 OUT 79

9530-9540 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9540-9550 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9550-9560 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9560-9570 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9570-9580 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9580-9590 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9590-9600 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9600-9610 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9610-9620 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9620-9630 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9630-9640 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9640-9650 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9650-9660 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9660-9670 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9670-9680 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9680-9690 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9690-9700 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9700-9710 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9710-9720 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9720-9730 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9730-9740 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9740-9750 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9750-9760 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9760-9770 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9770-9780 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9780-9790 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9790-9800 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9800-9810 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9810-9820 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9820-9830 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9830-9840 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9840-9850 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9850-9860 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9860-9870 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9870-9880 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9880-9890 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9890-9900 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9900-9910 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9910-9920 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9920-9930 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9930-9940 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9940-9950 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9950-9960 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9960-9970 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9970-9980 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9980-9990 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
9990-10000 MD: MR LST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl









MD: 10,026 '  
TVD: 7,532.66 '  
Inclination: 90.12 °  
Azimuth: 179.99 °  
VS: 2,319.33 '

MD: 10,120 '  
TVD: 7,532.77 '  
Inclination: 89.75 °  
Azimuth: 179.8 °  
VS: 2,413.33 '

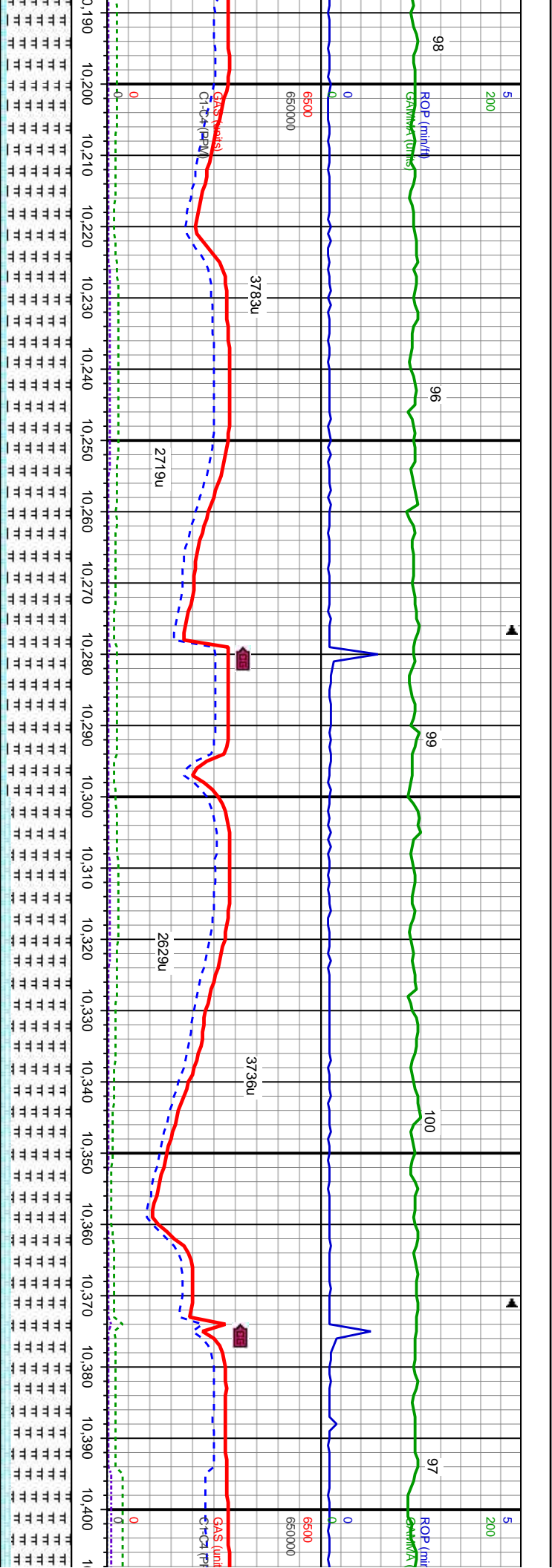
frm, mod  
fri, sb blk-y-sb  
cut  
8000

10000'-10100'MD: MRLST-med-dk gy-gy brn, sb pty-blky, sft-frm, mod  
arg-sily, sl calc, tr bent, CHK-lt-med gy, lt-med gy brn, mot, stri, sb blk-y-sb  
pty, sft-sl frm, fri, chky-sb wxy, v calc, tr lt bl flr w/ v sl halo cut

10100'-10200'MD: MRLST-med-dk gy-gy brn, sb pty-blky, sft-frm, mod  
arg-sily, sl calc, tr bent, CHK-lt-med gy, lt-med gy brn, mot, stri, sb blk-y-sb  
pty, sft-sl frm, fri, chky-sb wxy, v calc, tr lt bl flr w/ v sl halo cut







WT IN 10.0 OUT 10.0  
VIS IN 73 OUT 75

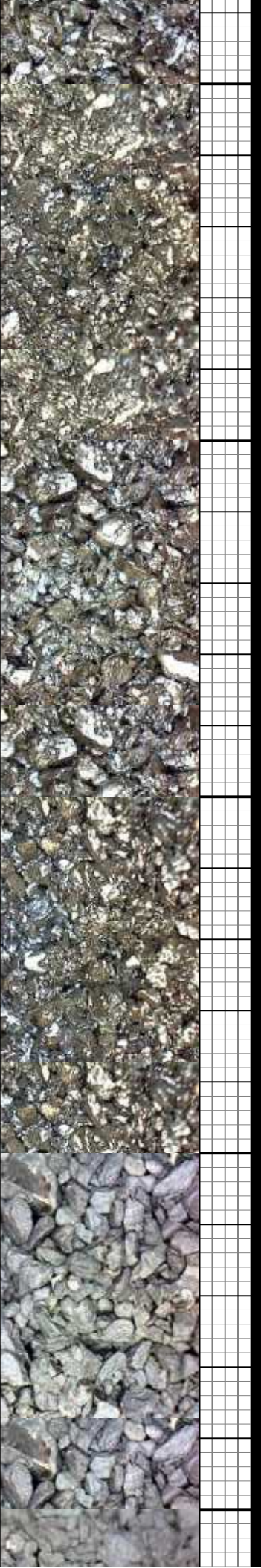
MD: 10,214 '   
TVD: 7,533.18 '   
Inclination: 89.75 °   
Azimuth: 179.47 °   
VS: 2,507.33 '

MD: 10,308 '   
TVD: 7,533.44 '   
Inclination: 89.94 °   
Azimuth: 179.41 °   
VS: 2,601.32 '

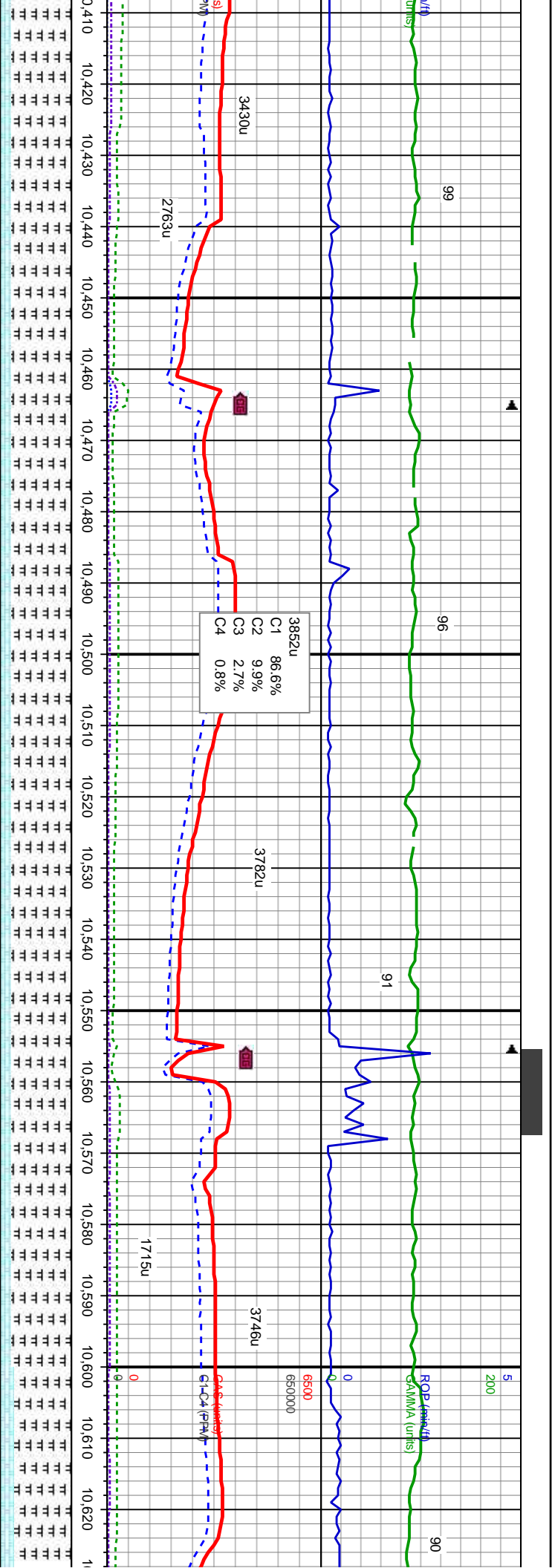
MD: 10,402 '   
TVD: 7,533.69 '   
Inclination: 89.75 °   
Azimuth: 179.12 °   
VS: 2,695.32 '

10200-10300MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-firm, mod arg-sily, sl calc,lr bent,CHK-It-med gy, It-med gy brn, mot, strf, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy,v calc,lr It bl flr w/ v sl halo cut

10300-10400MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-firm, mod arg-sily, sl calc,lr bent,CHK-It-med gy, It-med gy brn, mot, strf, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy,v calc,lr It bl flr w/ v sl halo cut



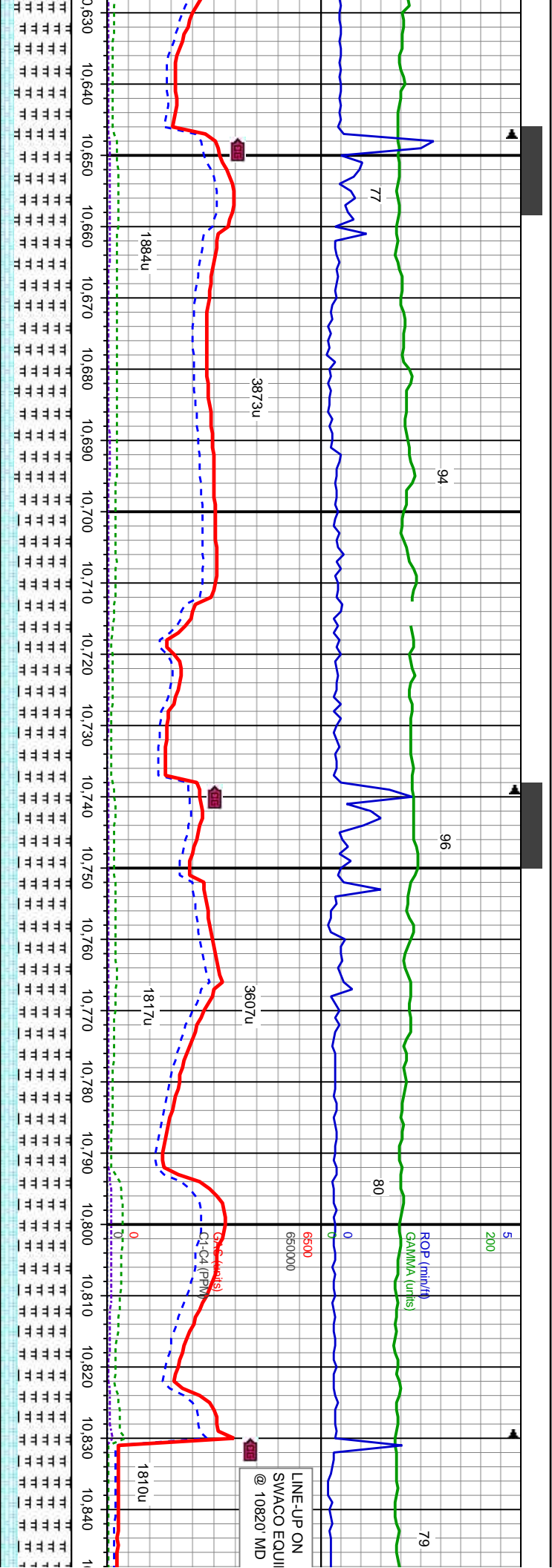




10400-10500MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-firm, mod arg-sily, sl calc, tr bent, CHK-ilt-med gy, lt-med gy brn, mot, sft, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy, v calc, tr lt bl flr w/ v sl halo cut	10500-10600MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-firm, mod arg-sily, sl calc, tr bent, CHK-ilt-med gy, lt-med gy brn, mot, sft, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy, v calc, tr cal frags, tr lt bl flr w/ v sl tr halo cut	10600-10700MD: sl calc, tr bent, CHK-ilt-med gy, lt-med gy brn, mot, sft, sb blky-sb pily, sft-sl frm, fri, chky-sb w
--	---	---







MD: 10,677 '  
TVD: 7,534.92 '  
Inclination: 90.8 °  
Azimuth: 179.74 °  
VS: 2,970.29 '

WT IN 10.0 OUT 10.0  
VIS IN 69 OUT 46

MD: 10,768 '  
TVD: 7,534.78 '  
Inclination: 89.38 °  
Azimuth: 181.48 °  
VS: 3,061.27 '

MR LST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily,  
K-lt-med gy, lt-med gy brn, mot, strl, sb blky-sb pily, sft-sl  
Xy,v calc, tr cal frags, tr lt bl flr w/ v sl tr halo cut

10700'-10800'MD: MR LST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily,  
sl calc, tr bent,CHK-lt-med gy, lt-med gy brn, mot, strl, sb blky-sb pily, sft-sl frm,  
fri, chky-sb wxy,v calc, tr cal frags, tr lt bl flr w/ v sl tr halo cut

8000

10800'-10900'MD: MR LST-med-dk gy-g  
arg-sily, sl calc, tr bent,CHK-lt-med gy,  
pily, sft-sl frm, fri, chky-sb wxy,v calc, t



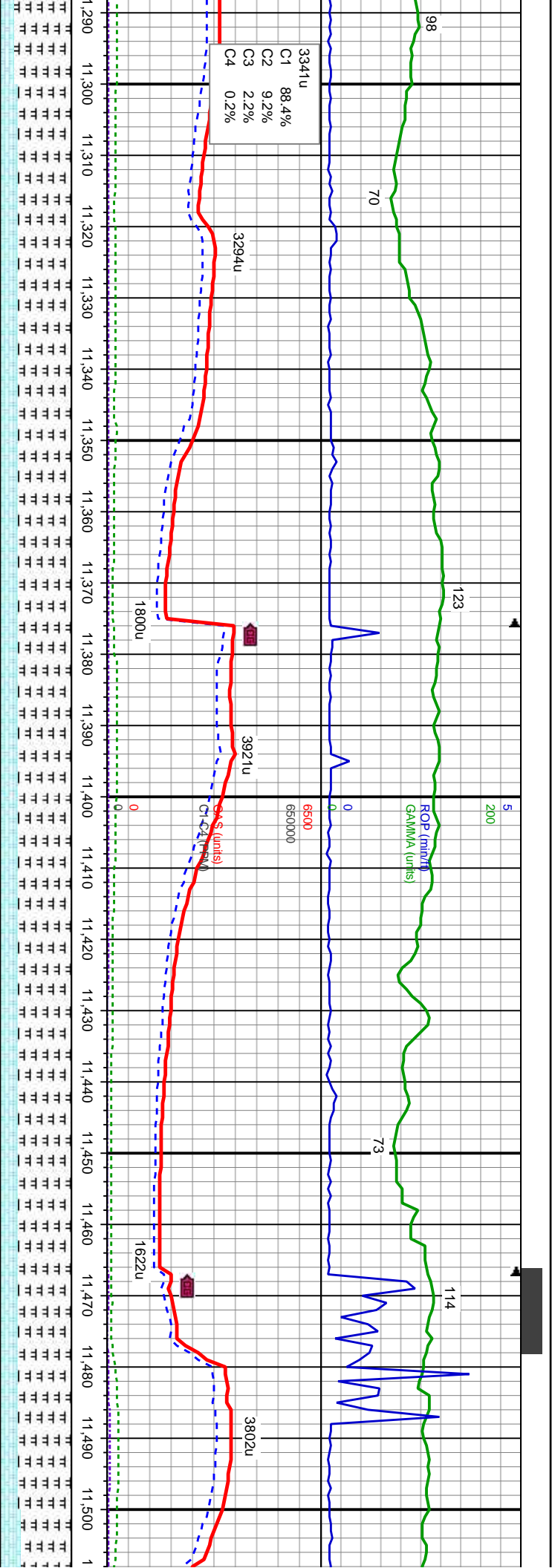












MD: 11,318 '   
TVD: 7,536.2 '   
Inclination: 88.28 °   
Azimuth: 179.18 °   
VS: 3,611.14 '

MD: 11,409 '   
TVD: 7,538.87 '   
Inclination: 87.1 °   
Azimuth: 178.18 °   
VS: 3,702.04 '

MD: 11,500 '   
TVD: 7,542.1 '   
Inclination: 88.83 °   
Azimuth: 179.34 °   
VS: 3,792.97 '

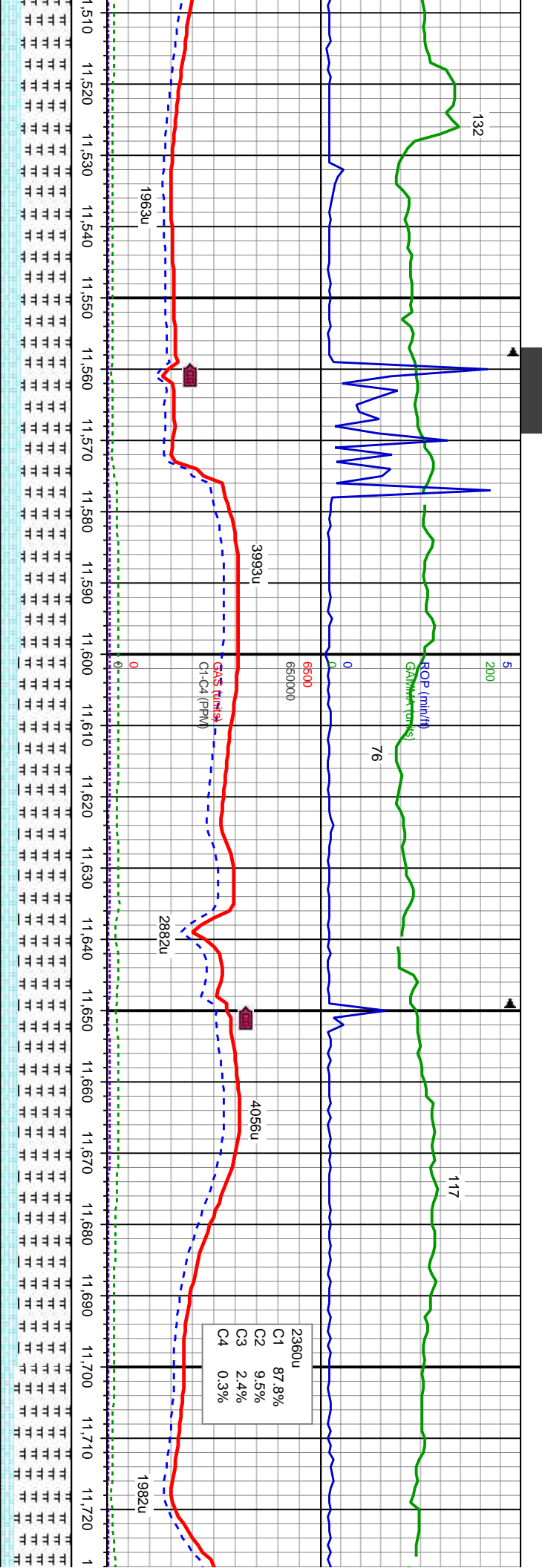
7000 WT IN 10.0 OUT 10.0  
VIS IN 80 OUT 79

11300-11400MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, sl calc, tr bent,CHK-lt-med gy, lt-med gy brn, mot, strf, sb blky-sb ply, sft-sl frm, fri, chky-sb wxy.v arg.v calc, tr lt bl flor w/ v sl tr halo cut

11400-11500MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, sl calc, tr bent,CHK-lt-med gy, lt-med gy brn, mot, strf, sb blky-sb ply, sft-sl frm, fri, chky-sb wxy.v arg.v calc, tr lt bl flor w/ v sl tr halo cut





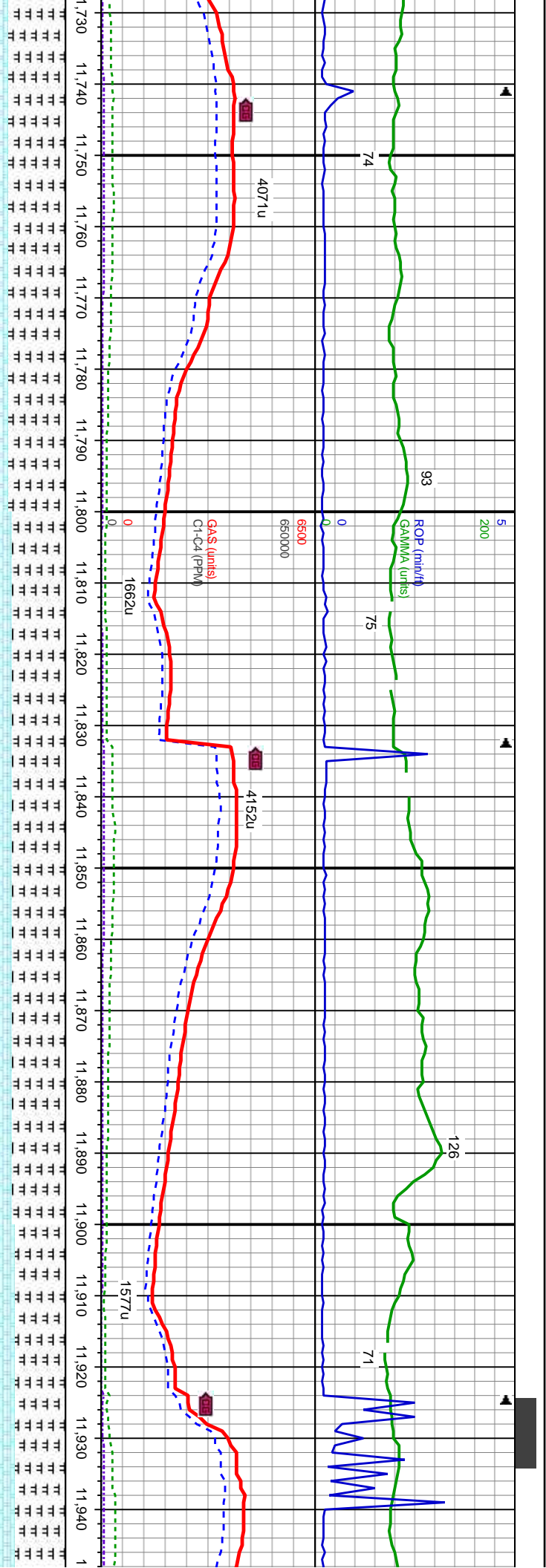


11500'-11600' MD: MRLST-med-dk gy-gy brn, sb ply-biky, stf-frn, mod arg-sily, sl calc tr bent, CHK-it-med gy, lt-med gy brn, moi, strf, sb biky-sb ply, stf-sl frn, frn, chky-sb wxy v arg v calc, tr lt bl flr w/ v sl tr halo cut

11600'-11700' MD: MRLST-med-dk gy-gy brn, sb ply-biky, stf-frn, mod arg-sily, sl calc tr bent, CHK-it-med gy, lt-med gy brn, moi, strf, sb biky-sb ply, stf-sl frn, frn, chky-sb wxy v arg v calc, tr lt bl flr w/ v sl tr halo cut

11700'-11800' MD: calc, tr bent, CHK-chky-sb wxy v arg





OUT 10.0  
OUT 76  
7000  
WT IN 9.9  
VIS IN 67  
OUT 9.9  
OUT 70

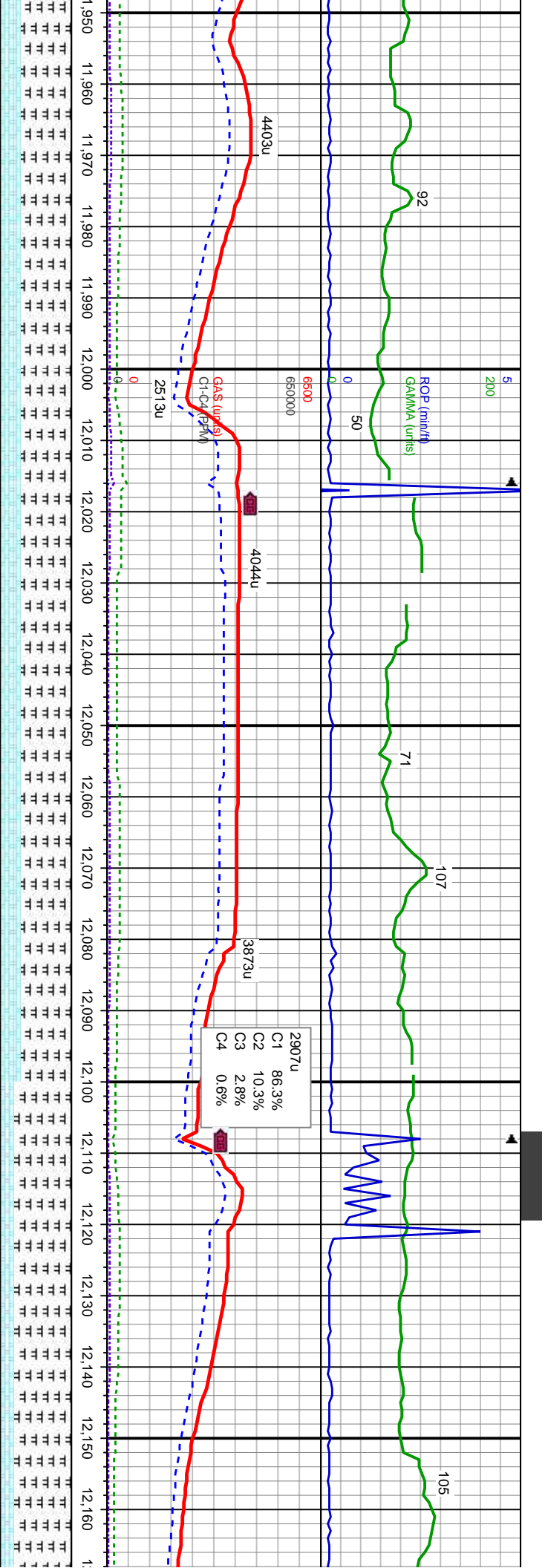
MD: 11,775 '  
TVD: 7,541.12 '  
Inclination: 89.81 °  
Azimuth: 179.62 °  
VS: 4,067.94 '

MD: 11,867 '  
TVD: 7,542.21 '  
Inclination: 88.83 °  
Azimuth: 179.03 °  
VS: 4,159.93 '

MRLST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod arg-sily, sl  
lt-med gy, lt-med gy brn, mot, stri, sb blky-sb ply, sft-sl frn, fri,  
v calc, tr lt bl flr w/ v sl tr halo cut  
11800'-11900' MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frn, mod  
arg-sily, sl calc, tr bent, CHK-lt-med gy, lt-med gy brn, mot, stri, sb  
blky-sb ply, sft-sl frn, fri, chky-sb wxy, v arg, v calc, tr lt bl flr w/ v sl  
tr halo cut  
11900'-12000' MD: MRLST-med-dk gy-g  
calc, tr bent, CHK-lt-med gy, lt-med gy br  
chky-sb wxy, v arg, v calc, tr lt bl flr w/ v







MD: 11,958 '   
 TVD: 7,544.57 '   
 Inclination: 88.21 °   
 Azimuth: 180.79 °   
 VS: 4,250.9 '

MD: 12,050 '   
 TVD: 7,548.23 '   
 Inclination: 87.22 °   
 Azimuth: 180.37 °   
 VS: 4,342.81 '

MD: 12,142 '   
 TVD: 7,551.95 '   
 Inclination: 88.15 °   
 Azimuth: 180.37 °   
 VS: 4,434.73 '

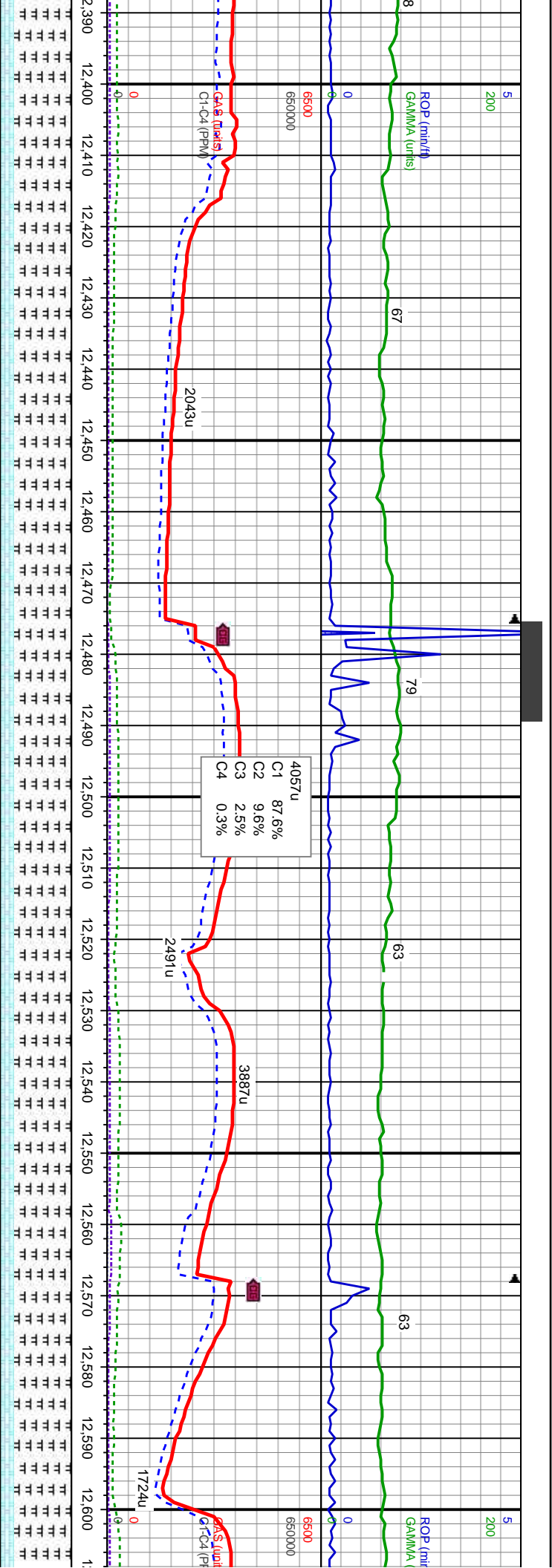
12000'-12100' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-frm, mod arg-sily, sl  
calc, tr bent, CHK-ilt-med gy, lt-med gy brn, mot, stri, sb biky-sb pily, stf-sl frm, fri,  
wxy v arg v calc, tr lt bl flor w/ v sl tr halo cut

12100'-12200' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-f  
sl calc, tr bent, CHK-ilt-med gy, lt-med gy brn, mot, stri, sb biky-s  
fri, chky-sb wxy v arg v calc, tr lt bl flor w/ v sl tr halo cut



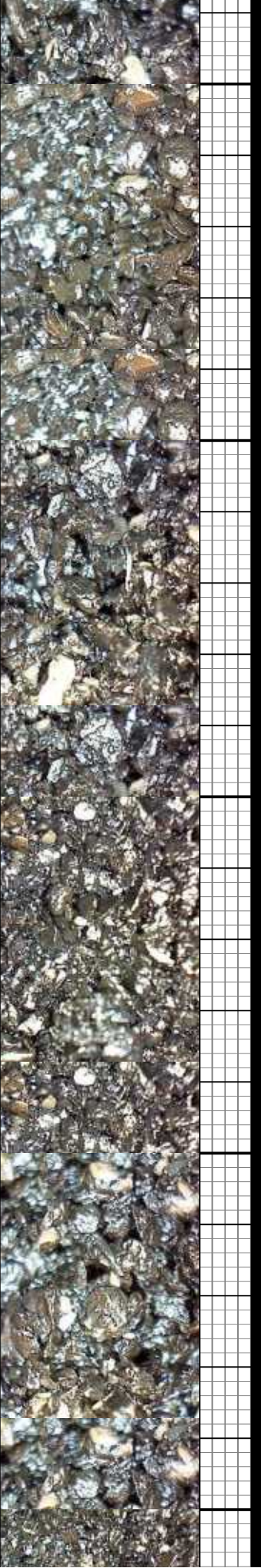


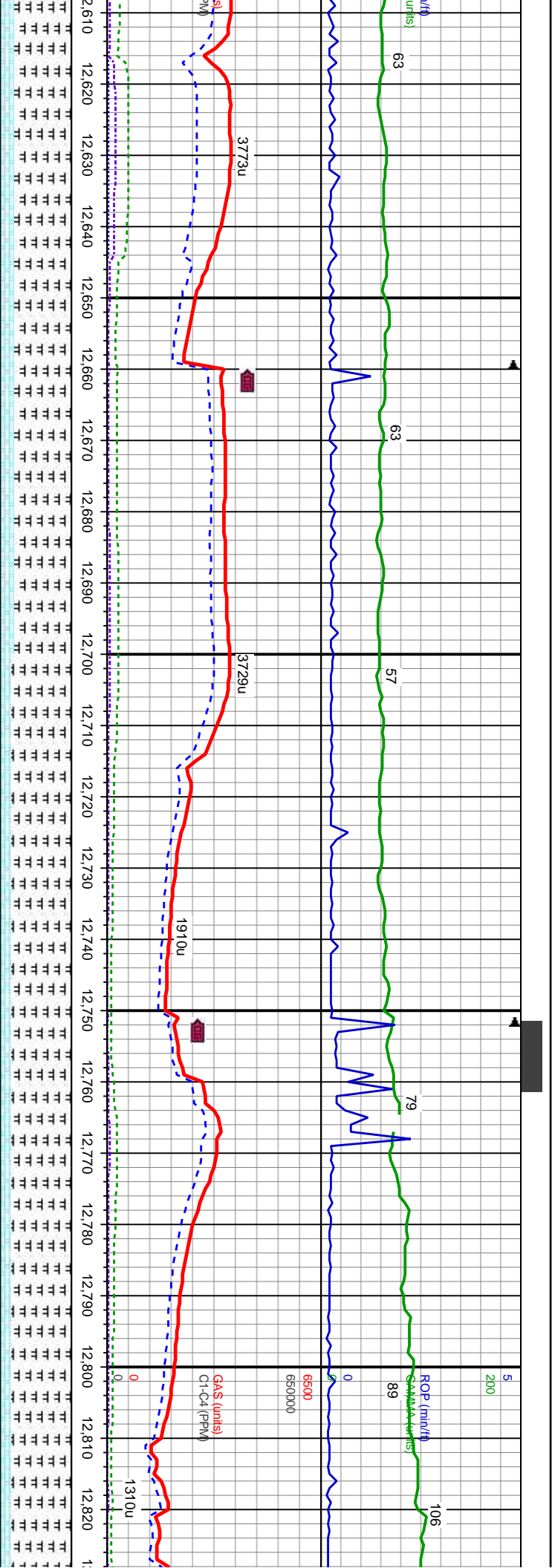




7000	MD: 12,418 ' TVD: 7,558.08 ' Inclination: 88.89 ° Azimuth: 180.94 ' VS: 4,710.59 ' TWD (ft)	12,390 12,400 12,410 12,420 12,430 12,440 12,450 12,460 12,470 12,480 12,490 12,500 12,510 12,520 12,530 12,540 12,550 12,560 12,570 12,580 12,590 12,600
7000	WT IN 9.9+ OUT 9.9+ VIS IN 61 OUT 60	12,390 12,400 12,410 12,420 12,430 12,440 12,450 12,460 12,470 12,480 12,490 12,500 12,510 12,520 12,530 12,540 12,550 12,560 12,570 12,580 12,590 12,600
7000	MD: 12,510 ' TVD: 7,558.62 ' Inclination: 90.44 ° Azimuth: 180.39 ' VS: 4,802.58 ' TWD (ft)	12,390 12,400 12,410 12,420 12,430 12,440 12,450 12,460 12,470 12,480 12,490 12,500 12,510 12,520 12,530 12,540 12,550 12,560 12,570 12,580 12,590 12,600
7000	MD: 12,602 ' TVD: 7,558.27 ' Inclination: 90 ° Azimuth: 179.65 ' VS: 4,894.57 ' TWD (ft)	12,390 12,400 12,410 12,420 12,430 12,440 12,450 12,460 12,470 12,480 12,490 12,500 12,510 12,520 12,530 12,540 12,550 12,560 12,570 12,580 12,590 12,600

8000	12400'-12500' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily, mod calc,CHK-ilt-med gy, lt-med gy brn, mot, stri, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy,v arg,v calc, tr lt bl flor w/ v sl tr halo cut	12500'-12600' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily, mod calc,CHK-ilt-med gy, lt-med gy brn, mot, stri, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy,v arg,v calc, tr lt bl flor w/ v sl tr halo cut
8000		





WT IN 9.9+ OUT 9.9+  
VIS IN 64 OUT 64

MD: 12,694 '  
TVD: 7,568.02 '  
Inclination: 90.31 °  
Azimuth: 178.63 °  
VS: 4,986.57 '

WT IN 9.9+ OUT 9.9+  
VIS IN 66 OUT 63

MD: 12,785 '  
TVD: 7,558.56 '  
Inclination: 89.01 °  
Azimuth: 177.23 °  
VS: 5,077.51 '

12600'-12700' MD: MRLST -med-dk gy-gy brn, sb pily-blky, sft-frn, mod arg-sily, mod calc CHK-lt-med gy, lt-med gy brn, mot, strf, sb blky-sb pily, sft-sl frn, fri, chky-sb wxy, v arg, v calc, tr lt bl floor w/ v sl tr halo cut

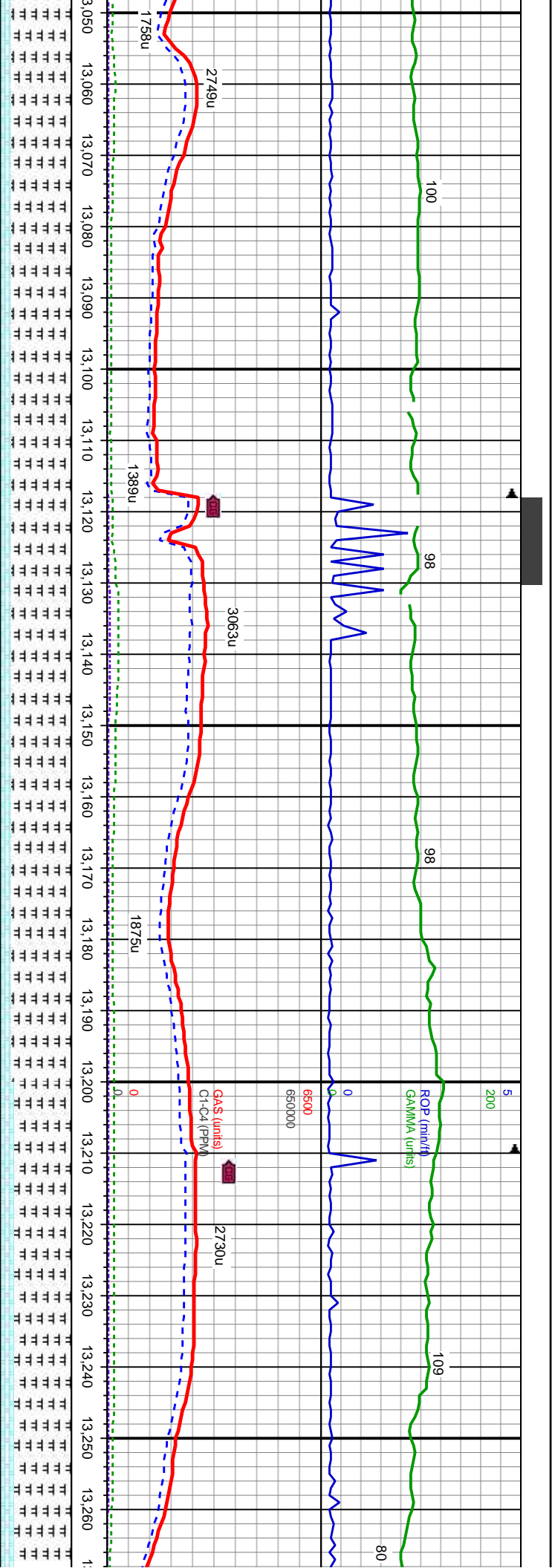
12700'-12800' MD: MRLST -med-dk gy-gy brn, sb pily-blky, sft-frn, mod arg-sily, mod calc CHK-lt-med gy, lt-med gy brn, mot, strf, sb blky-sb pily, sft-sl frn, fri, chky-sb wxy, v arg, v calc, tr lt bl floor w/ v sl tr halo cut

12800'-12900' mod calc, CHK-chky-sb wxy, v









MD: 13.061 '   
 TVD: 7.562.96 '   
 Inclination: 89.57 °   
 Azimuth: 179.32 °   
 VS: 5.363.4 '

MD: 13.153 '   
 TVD: 7.563.9 '   
 Inclination: 89.26 °   
 Azimuth: 180.92 °   
 VS: 5.445.39 '

MD: 13.244 '   
 TVD: 7.565.95 '   
 Inclination: 88.15 °   
 Azimuth: 180.06 °   
 VS: 5.536.35 '

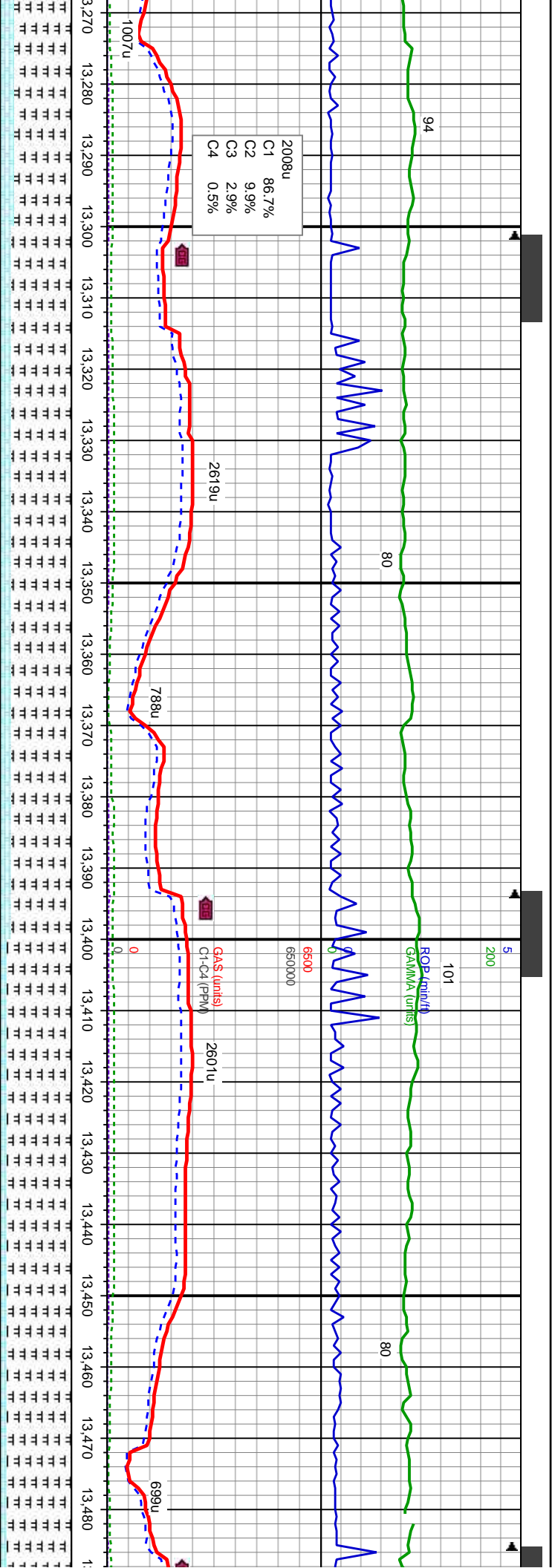
gy-gy brn, sb pily-blky, sft frm, mod  
lt-med gy brn, mot, stri, sb blky-sb pily, sft-si  
lt bl flr w/ v sl tr, tr bent halo cut

13100'-13200' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft frm, mod arg-sily,  
mod calc,CHK-lt-med gy, lt-med gy brn, mot, stri, sb blky-sb pily, sft-si frm, fri,  
chky-sb wxy v arg v calc, tr-mod bent, tr lt bl flr w/ v slw halo cut

13200'-13300' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft  
calc,CHK-lt-med gy, lt-med gy brn, mot, stri, sb blky-sb pily,  
wxy v arg v calc, tr-mod bent, tr lt bl flr w/ v slw halo cut







2008u  
C1 86.7%  
C2 9.9%  
C3 2.9%  
C4 0.5%

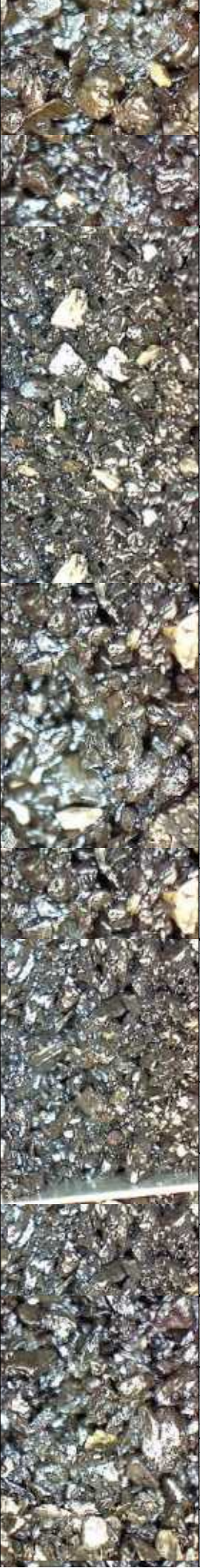
WT IN 10 OUT 9.9+  
VIS IN 68 OUT 62

MD: 13,336 '  
TVD: 7,568.72 '  
Inclination: 88.4 °  
Azimuth: 180.08 °  
VS: 5,628.31 '

MD: 13,428 '  
TVD: 7,570.71 '  
Inclination: 89.12 °  
Azimuth: 180.75 °  
VS: 5,720.28 '

13300'-13400' MD: MRLST-med-dk gy-gy brn, sb pily-biky, sft-firm, mod arg-sily, mod calc,CHK-It-med gy, It-med gy brn, mot, stri, sb biky-sb pily, sft-sl frm, fri, chky-sb wxy v arg v calc, tr-mod bent, tr lt bl flr w v slw halo cut

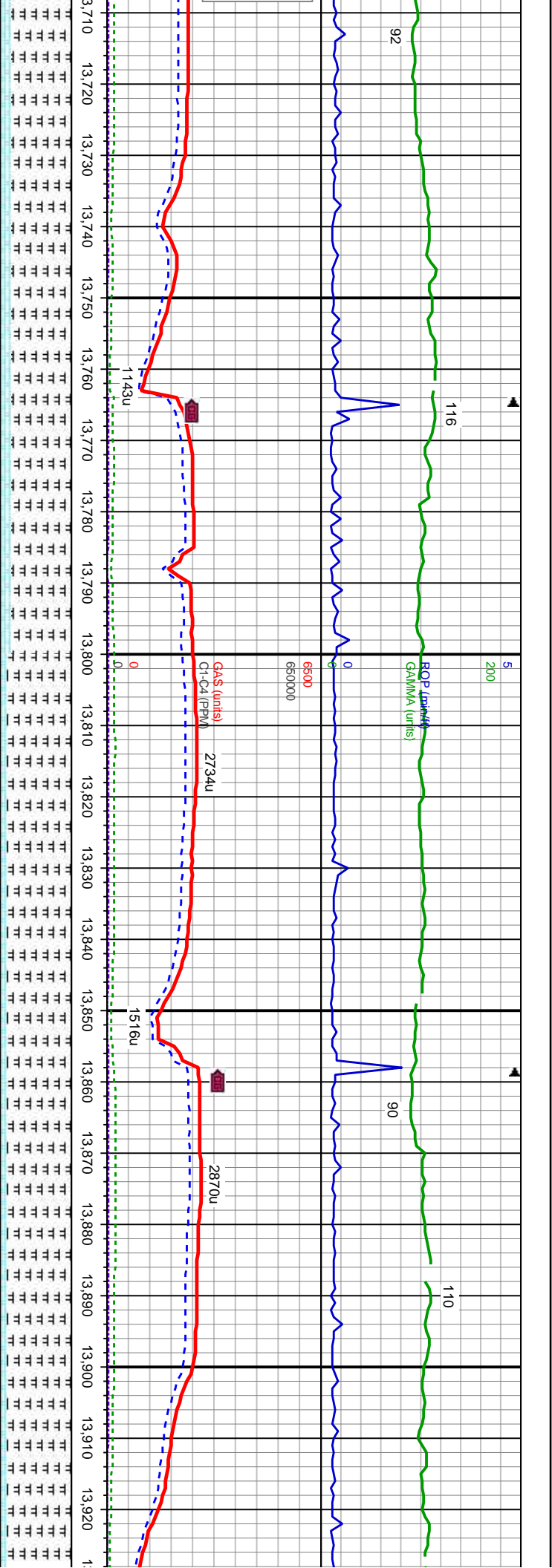
13400'-13500' MD: MRLST-med-dk gy-gy brn, sb pily-biky, sft-firm, mod arg-sily, mod calc,CHK-It-med gy, It-med gy brn, mot, stri, sb biky-sb pily, sft-sl frm, fri, chky-sb wxy v arg v calc, tr bent, tr lt bl flr w v slw halo cut











3 ' 11.11 ° 2.66 °

MD: 13,801 ' TVD: 7,573.13 ' Inclination: 90.31 ° Azimuth: 182.39 ° VS: 6,093.03 '

MD: 13,896 ' TVD: 7,573.09 ' Inclination: 89.75 ° Azimuth: 182.13 ° VS: 6,187.94 '

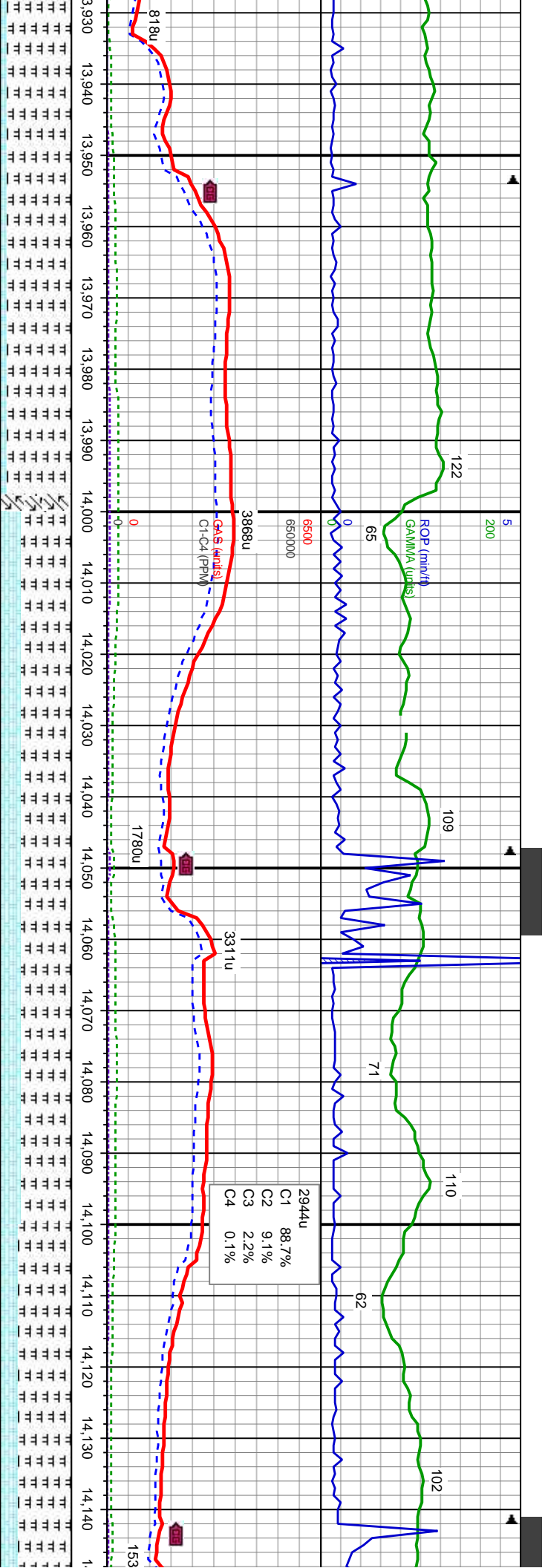
13700'-13800' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frn, mod arg-sily, mod calc,CHK-it-med gy, lt-med gy brn, mot, stri, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flwr w/ v slw halo cut

13800'-13900' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frn, mod arg-sily, mod calc,CHK-it-med gy, lt-med gy brn, mot, stri, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flwr w/ v slw halo cut

13900'-14000' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frn, mod arg-sily, mod calc,CHK-it-med gy, lt-med gy brn, mot, stri, sb blky-sb pily, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flwr w/ v slw halo cut







MD: 13,990 '  
TVD: 7,574.36 '  
Inclination: 88.7 °  
Azimuth: 181.93 °  
VS: 6,281.86 '

MD: 14,084 '  
TVD: 7,576.48 '  
Inclination: 88.71 °  
Azimuth: 181.8 °  
VS: 6,375.77 '

2944u  
C1 88.7%  
C2 9.1%  
C3 2.2%  
C4 0.1%

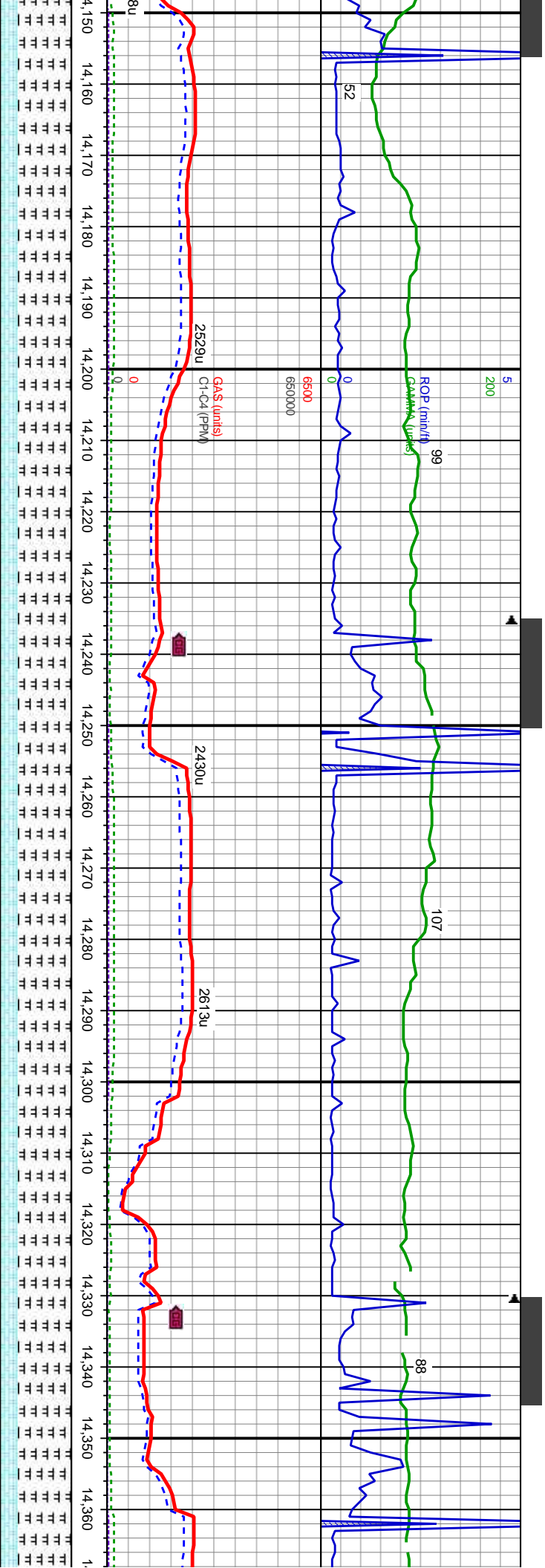
2: MRLST-med-dk gy-gy brn, sb pily-bily, sft-frm, mod  
c,CHK-It-med gy, It-med gy brn, mot, stri, sb bily-sb pily, sft-sl  
wxy, v arg, v calc, tr bent, tr It bl flor w/ v slw halo cut

14000'-14100' MD: MRLST-med-dk gy-gy brn, sb pily-bily, sft-frm, mod arg-sily,  
mod calc,CHK-It-med gy, It-med gy brn, mot, stri, bily-sb pily, sft-sl frm, fri,  
chly-sb wxy, v arg, v calc, v sl aren ip, tr bent, tr It bl flor w/ v slw halo cut

14100'-14200' MD: MRLST-med-dk gy-g  
mod-v calc,CHK-It-med gy, It-med gy br  
chly-sb wxy, v arg, v calc, v sl aren ip, tr







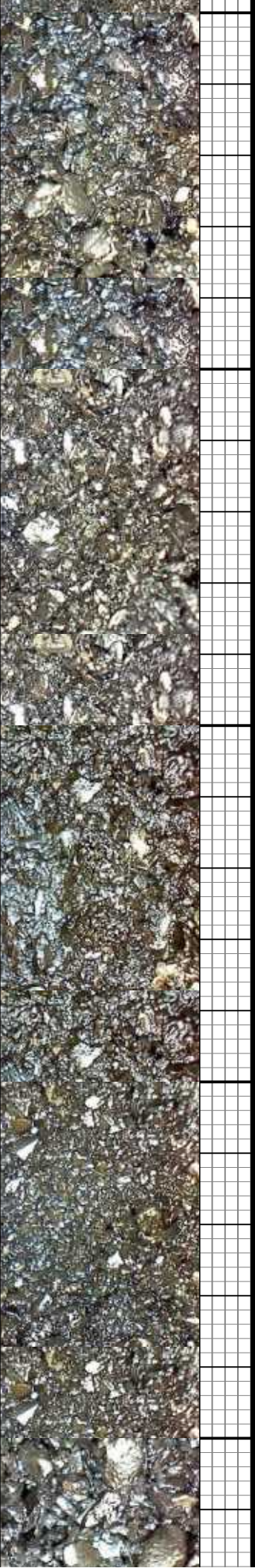
MD: 14,178 '   
 TVD: 7,578.2 '   
 Inclination: 89.2 °   
 Azimuth: 181.51 °   
 VS: 6,469.71 '

MD: 14,273 '   
 TVD: 7,579.57 '   
 Inclination: 89.14 °   
 Azimuth: 180.19 °   
 VS: 6,564.68 '

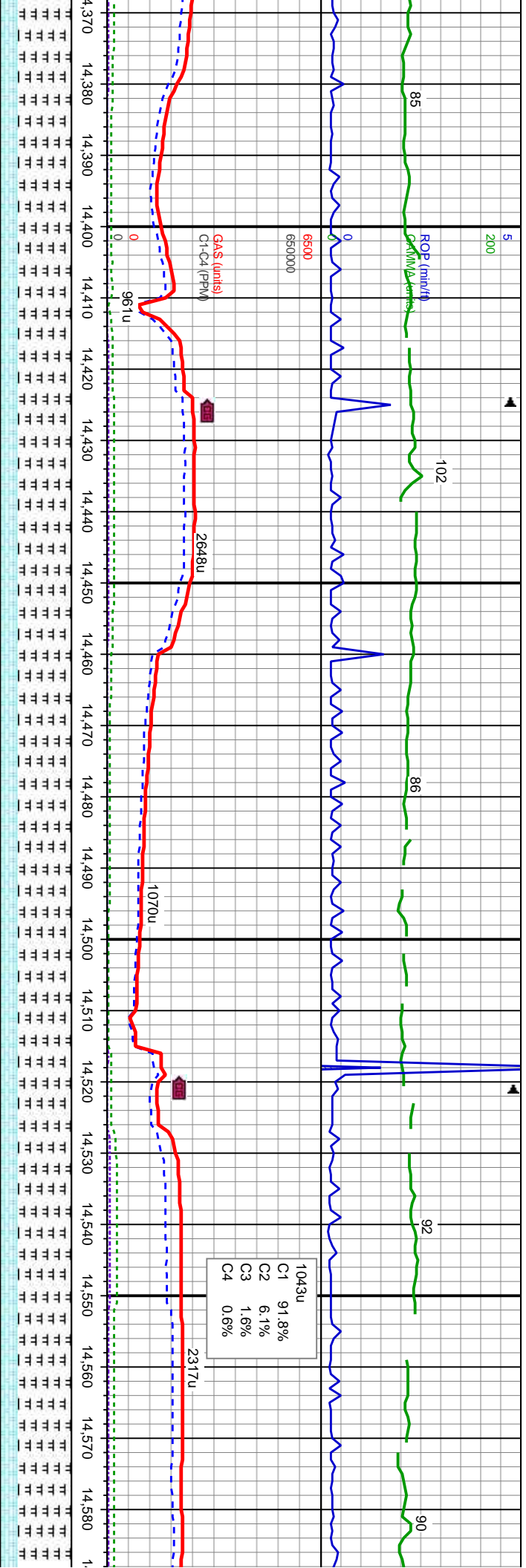
MD: 14,367   
 TVD: 7,578.   
 Inclination: 89.14 °   
 Azimuth: 17   
 VS: 6,658.6

14200'-14300' MD: MRLST-med-dk gy-gy brn, sb pily-blky, stf-frm, mod arg-sily, mod-v calc,CHK-lt-med gy, lt-med gy brn, moi, stri, blky-sb pily, stf-si frm, fri, chky-sb wxy,v arg,v calc, v sl aren ip, tr bent, tr lt bl flr w/ v slw halo cut

14300'-14400' MD: MRLST-med-dk gy-gy brn, sb pily-blky, stf-frm, mod arg-sily, mod-v calc,CHK-lt-med gy, lt-med gy brn, moi, stri, blky-sb pily, stf-si frm, fri, chky-sb wxy,v arg,v calc, v sl aren ip, tr bent, tr lt bl flr w/ v







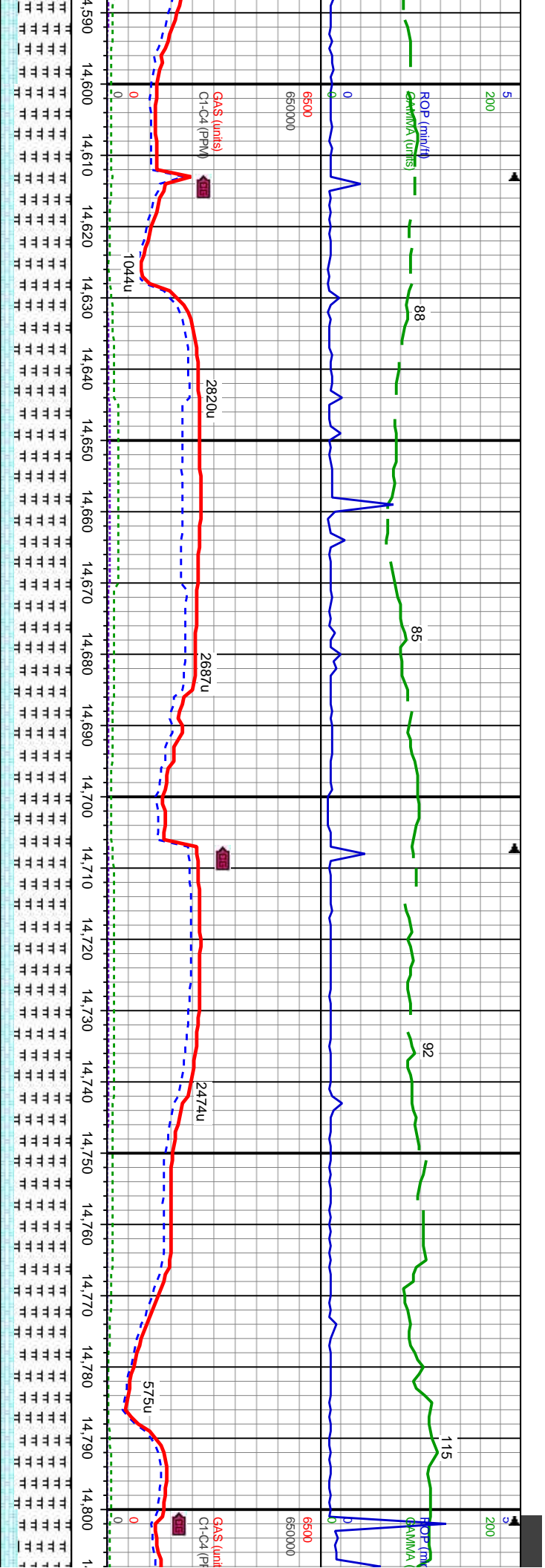
tr pyr slw halo cut

14400-14500 MD: MRLST-med-ck gy-gy brn, sb ply-bky, stf-firm, mod arg-sly, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, bky-sb ply, stf-sl frm, fri, chys-sb wxy, v arg, v calc, v sl aren ip, tr bent, tr lt bl flor w/ v, tr pyr slw halo cut

14500-14600 MD: MRST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod agsily, monocalc, CHK-it-med gy, it-med gy brn, moi, stri, biky-sb ply, sft-sf frm, fri, chky-sb wxy, ang, v calc, v sl aren ip, tr bent, tr it bl flwr w/v, tr pyr slw halo cut





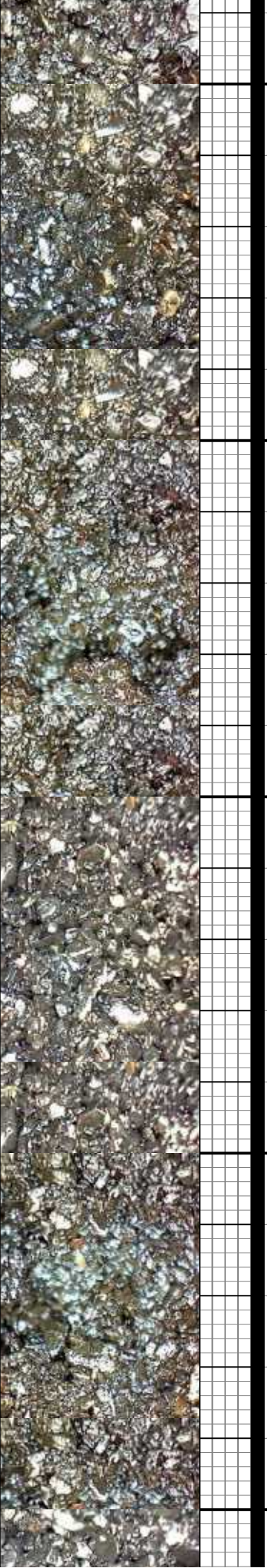


MD: 14,650 '  
TVD: 7,576.09 '  
Inclination: 89.81 °  
Azimuth: 179.59  
VS: 6,941.64 '

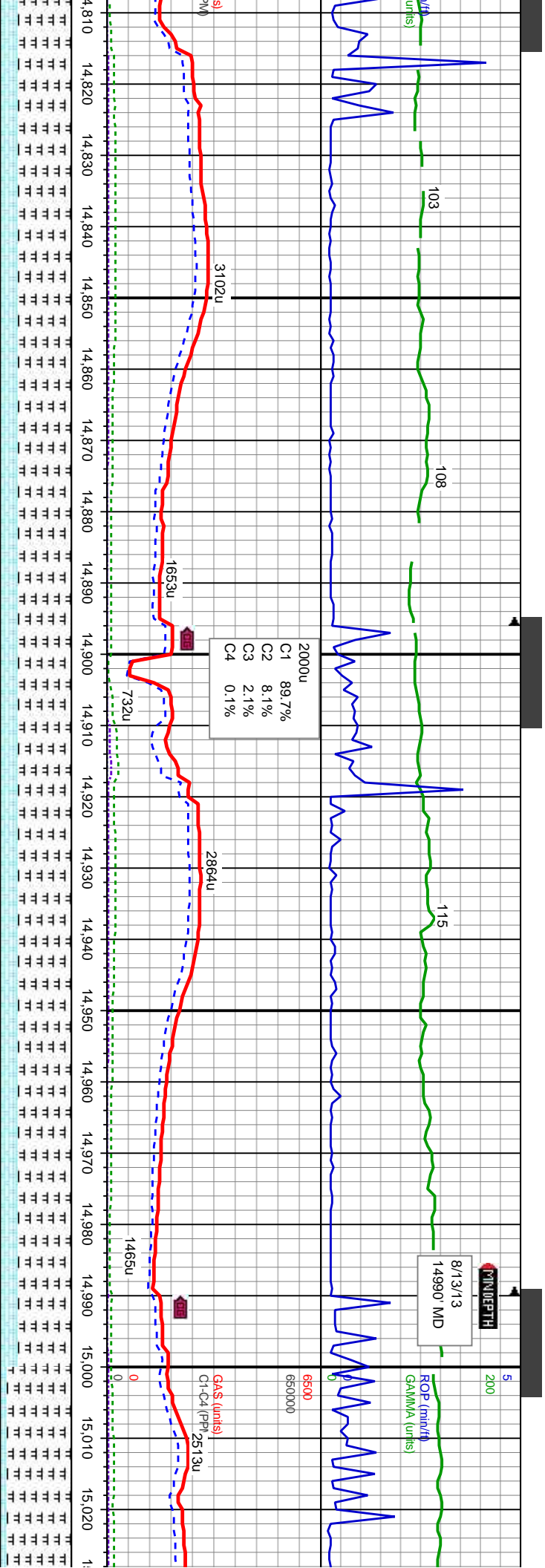
MD: 14,744 '  
TVD: 7,577.25 '  
Inclination: 88.77 °  
Azimuth: 178.51  
VS: 7,035.62 '

WT IN 9.8+ OUT 9.9  
VIS IN 62 OUT 64

14500'-14600' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc,CHK-It-med gy, It-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy,v arg,v calc, v sl aren lp, tr bent, tr lt bl flr w/ v, slw halo cut	8000
14700'-14800' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc,CHK-It-med gy, It-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy,v arg,v calc, v sl aren lp, tr bent, tr lt bl flr w/ v, tr pyr slw halo cut	8000







TIN 9.7 OUT 9.8  
S IN 64 OUT 62

WT IN 9.7 OUT 9.7+  
VIS IN 64 OUT 62

WT IN 9.7 OUT 9.7  
VIS IN 60 OUT 60

MD: 14,838 '  
TVD: 7,578.97 '  
Inclination: 89.14 °  
Azimuth: 177.54 °  
VS: 7,129.56 '

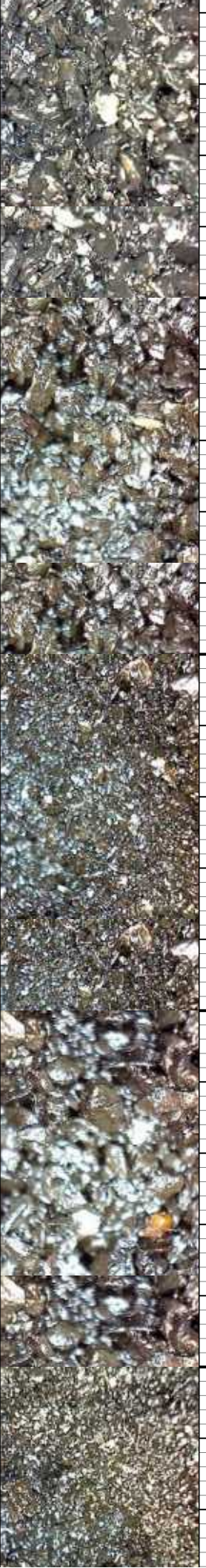
MD: 14,932 '  
TVD: 7,580.88 '  
Inclination: 88.52 °  
Azimuth: 178.68 °  
VS: 7,223.5 '

MD: 15,026  
TVD: 7,582.  
Inclination: 9  
Azimuth: 178  
VS: 7,317.47

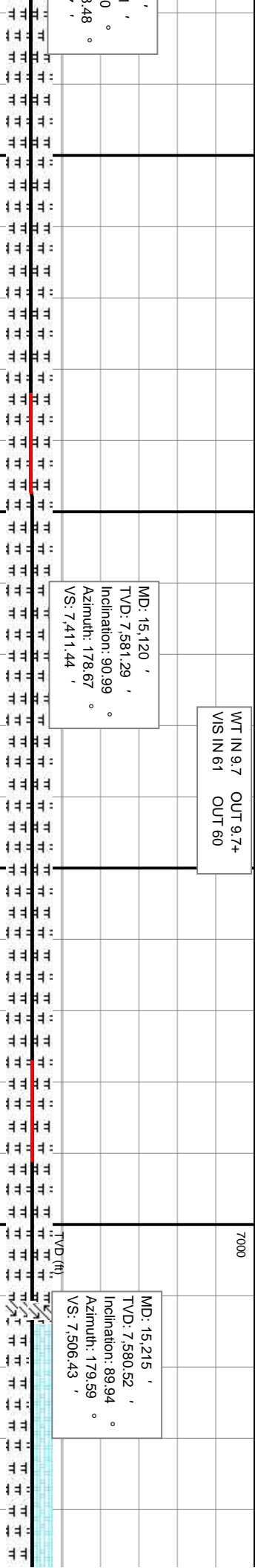
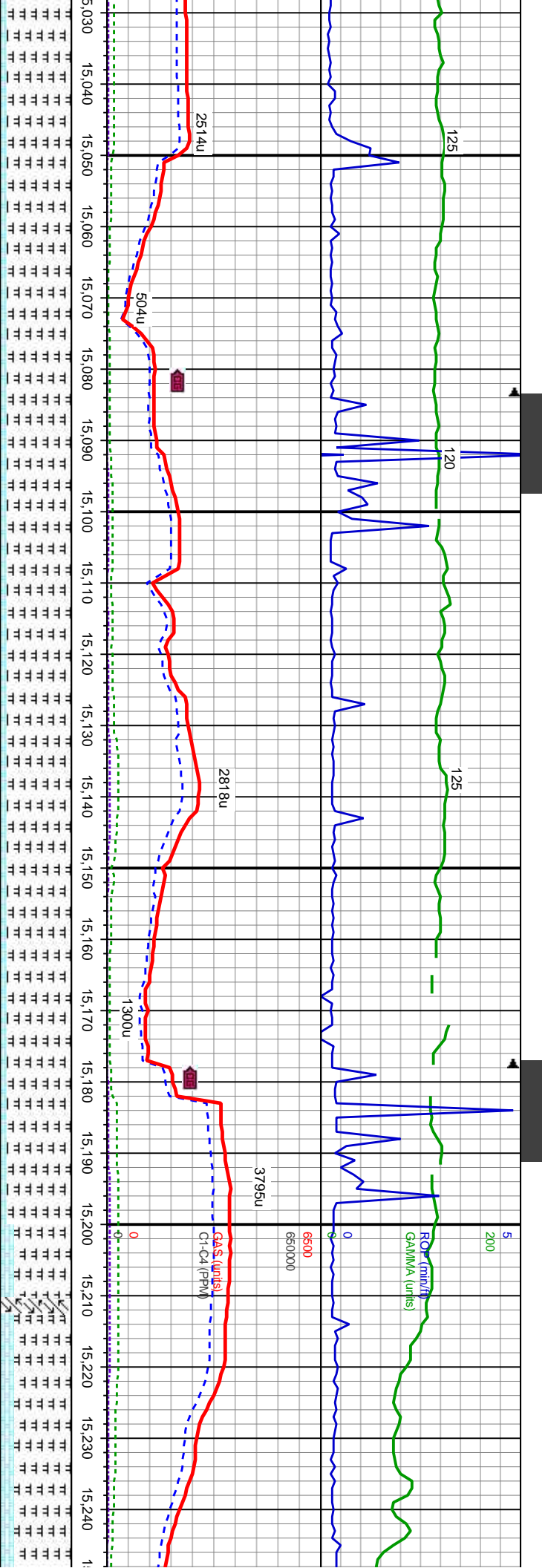
14800'-14900' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily,  
mod-v calc,CHK-lt-med gy, lt-med gy brn, mot, stri, blky-sb pily, sft-sl frm, fri,  
chky-sb wxy,v arg,v calc, v sl aren ip, tr bent, tr lt bl flwr w/ v, slw halo cut

14900'-15000' MD: MRLST-med-dk gy-gy brn, sb pily-blky, sft-frm, mod arg-sily,  
mod-v calc,CHK-lt-med gy, lt-med gy brn, mot, stri, blky-sb pily, sft-sl frm, fri,  
chky-sb wxy,v arg,v calc, v sl aren ip, tr bent, tr lt bl flwr w/ v, slw halo cut

15000'-15100' MD:  
calc,CHK-lt-med g  
arg,v calc, tr bent,







15,030' - 15,040' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,040' - 15,050' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,050' - 15,060' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,060' - 15,070' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,070' - 15,080' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,080' - 15,090' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,090' - 15,100' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,100' - 15,110' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,110' - 15,120' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,120' - 15,130' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,130' - 15,140' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,140' - 15,150' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,150' - 15,160' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,160' - 15,170' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,170' - 15,180' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,180' - 15,190' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

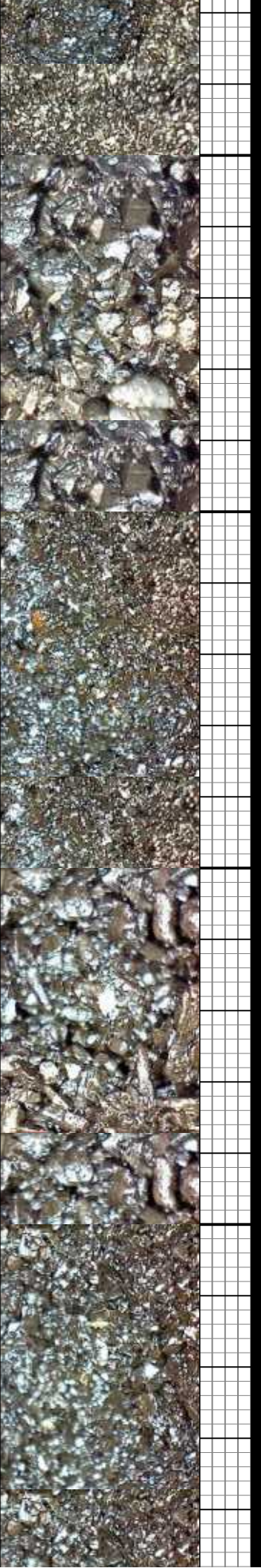
15,190' - 15,200' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,200' - 15,210' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

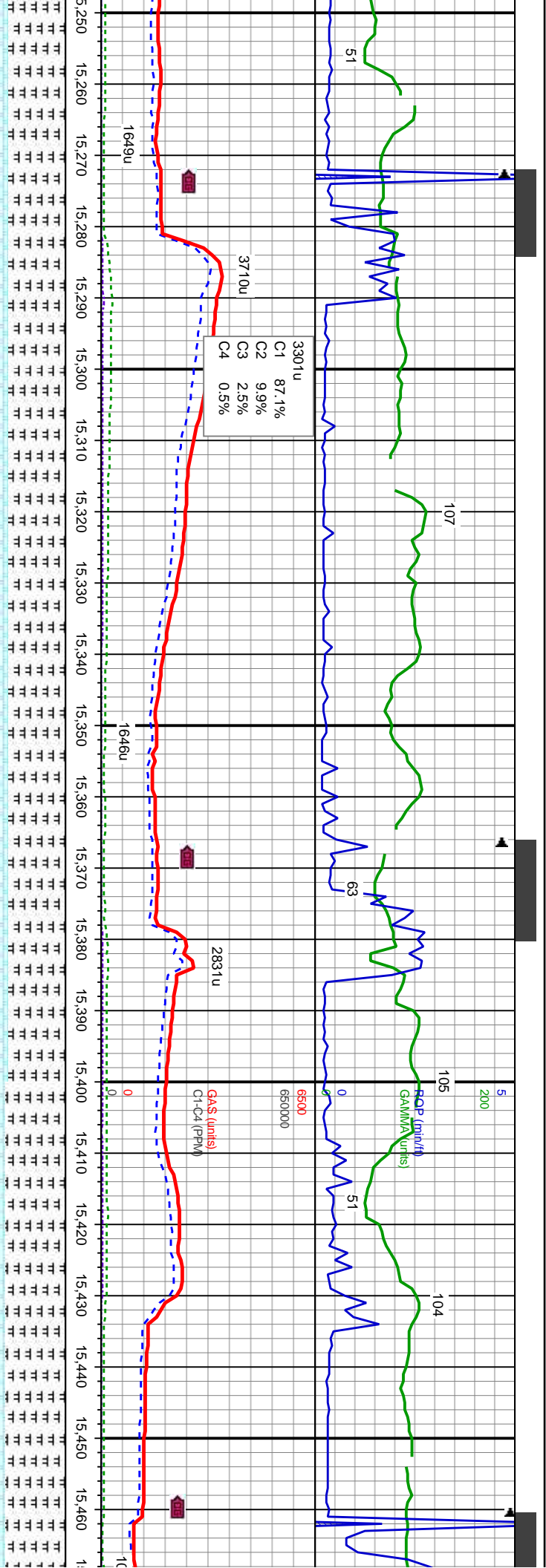
15,210' - 15,220' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,220' - 15,230' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut

15,230' - 15,240' MD: MRLST-med-dk gy-gy brn, sb pily-biky, stf-firm, mod arg-sily, mod-v arg-sily, mod-v calc, CHK-it-med gy, lt-med gy brn, mot, stri, biky-sb pily, stf-si frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl fior w/ v, slw halo cut







WT IN 9.7 OUT 9.8  
VIS IN 60 OUT 64

MD: 15,309 '  
TVD: 7,581.36 '  
Inclination: 89.03 °  
Azimuth: 180.57 °  
VS: 7,600.43 '

WT IN 9.7 OUT 9.7+  
VIS IN 62 OUT 59

MD: 15,403 '  
TVD: 7,583.12 '  
Inclination: 88.83 °  
Azimuth: 179.85 °  
VS: 7,694.41 '

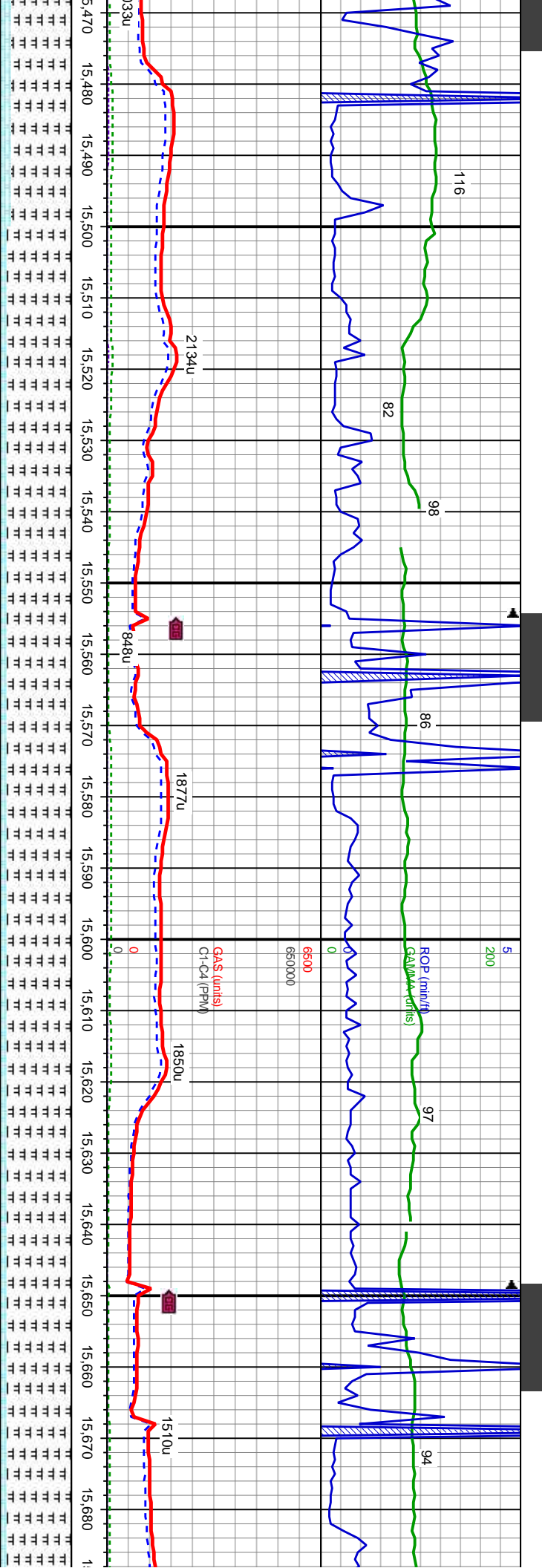
-gy brn, sb ply-blky, sft-frm, mod arg-sily,  
brn, moi, strf, blk-sb ply, sft-sl frm, fri,  
bl flr w/ v, slw halo cut

15300'-15400' MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily,  
mod-v calc, CHK-lt-med gy, lt-med gy brn, moi, strf, blk-sb ply, sft-sl frm, fri,  
chky-sb wxy v arg v calc, tr bent, tr lt bl flr w/ v, slw halo cut

15400'-15500' MD: MRLST-med-dk gy-gy brn, sb ply-blky, ;  
arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, moi, strf,  
frm, fri, chky-sb wxy v arg v calc, tr bent, tr lt bl flr w/ v, sl







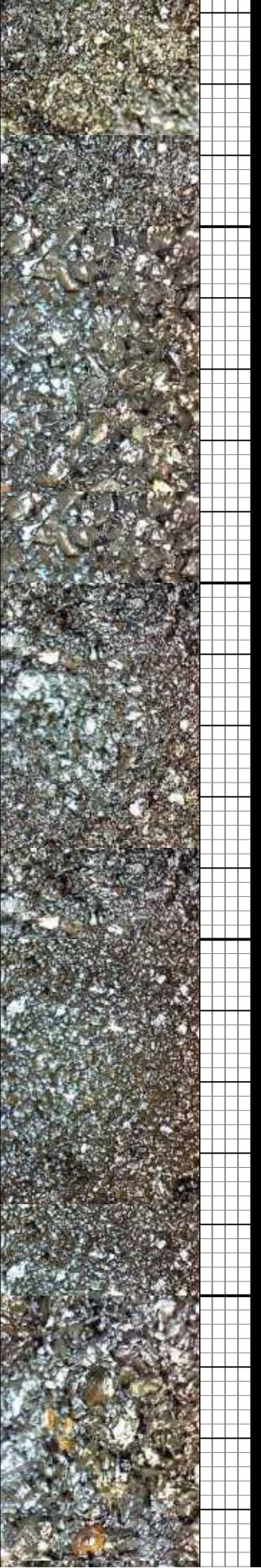
MD: 15.497 '   
 TVD: 7.584.66 '   
 Inclination: 89.29 °   
 Azimuth: 178.1 °   
 VS: 7.788.38 '

MD: 15.591 '   
 TVD: 7.584.84 '   
 Inclination: 90.49 °   
 Azimuth: 176.62 °   
 VS: 7.882.29 '

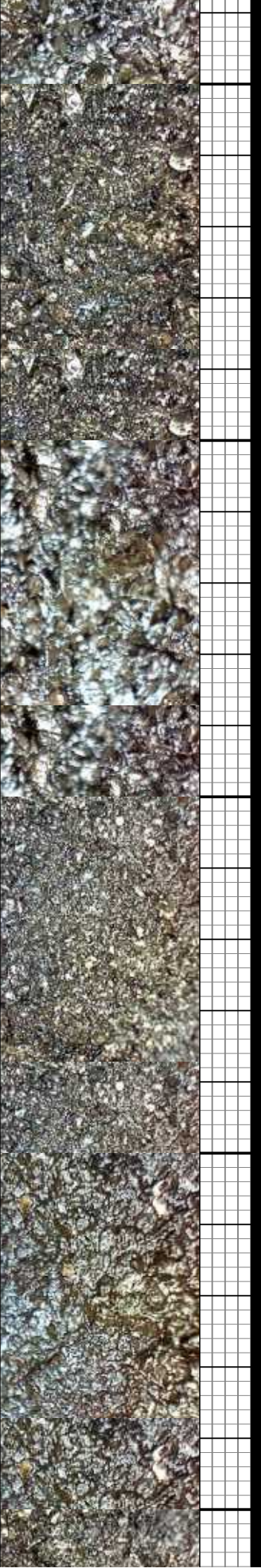
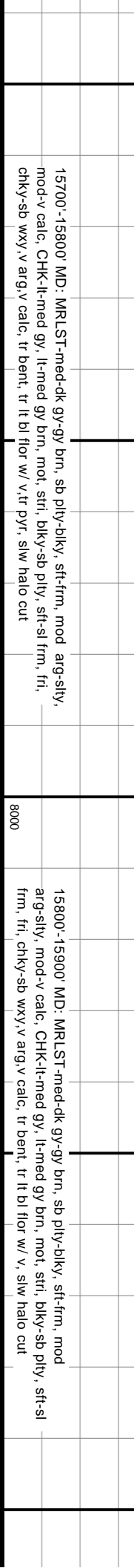
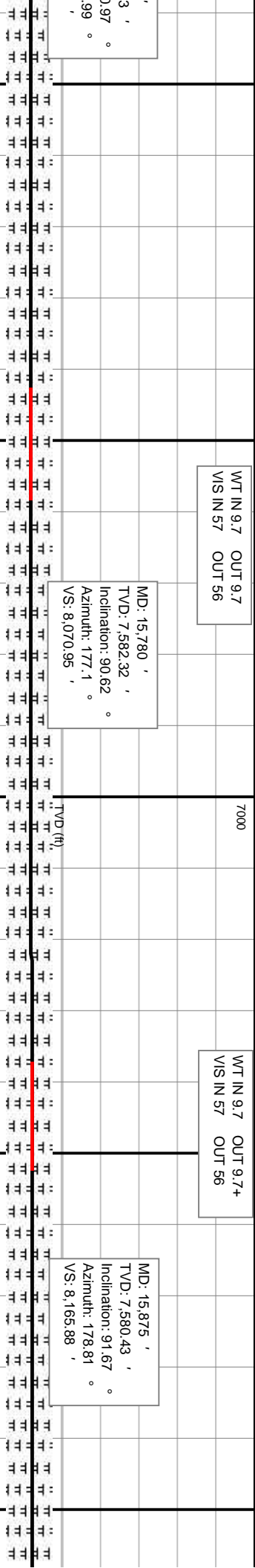
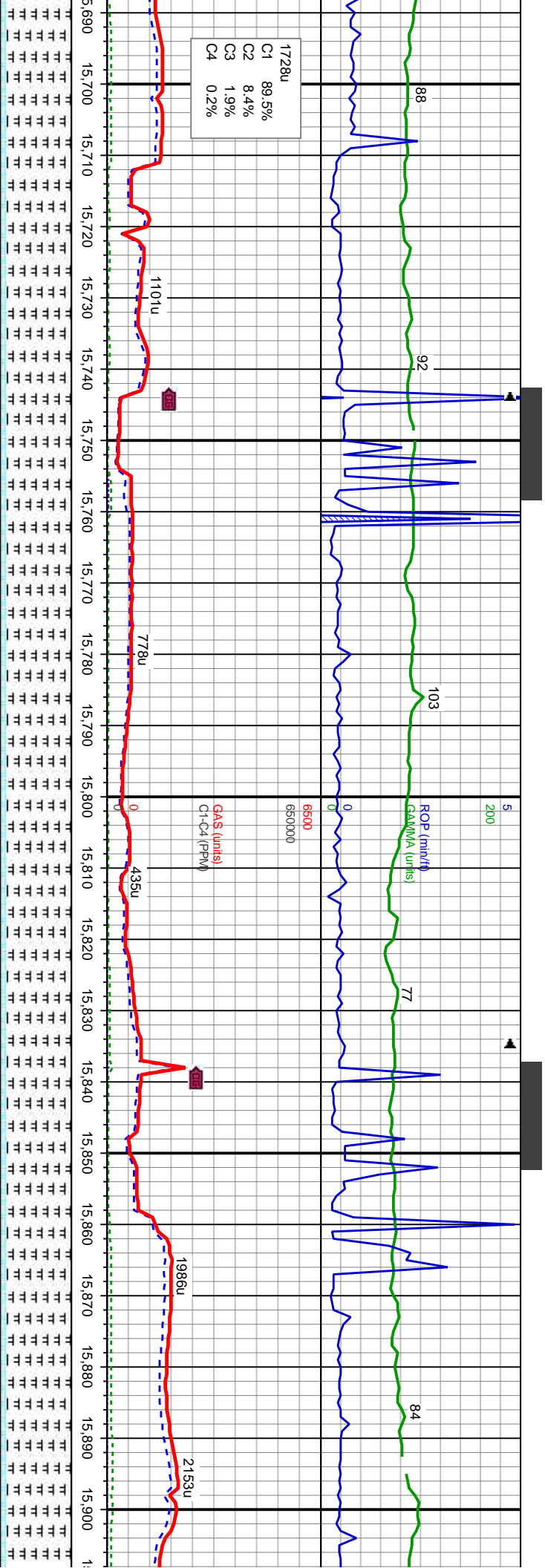
MD: 15.686   
 TVD: 7.583.6   
 Inclination: 91   
 Azimuth: 175   
 VS: 7.977.11

15500'-15600' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-It-med gy, It-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr It bl flr w/ v, slw halo cut

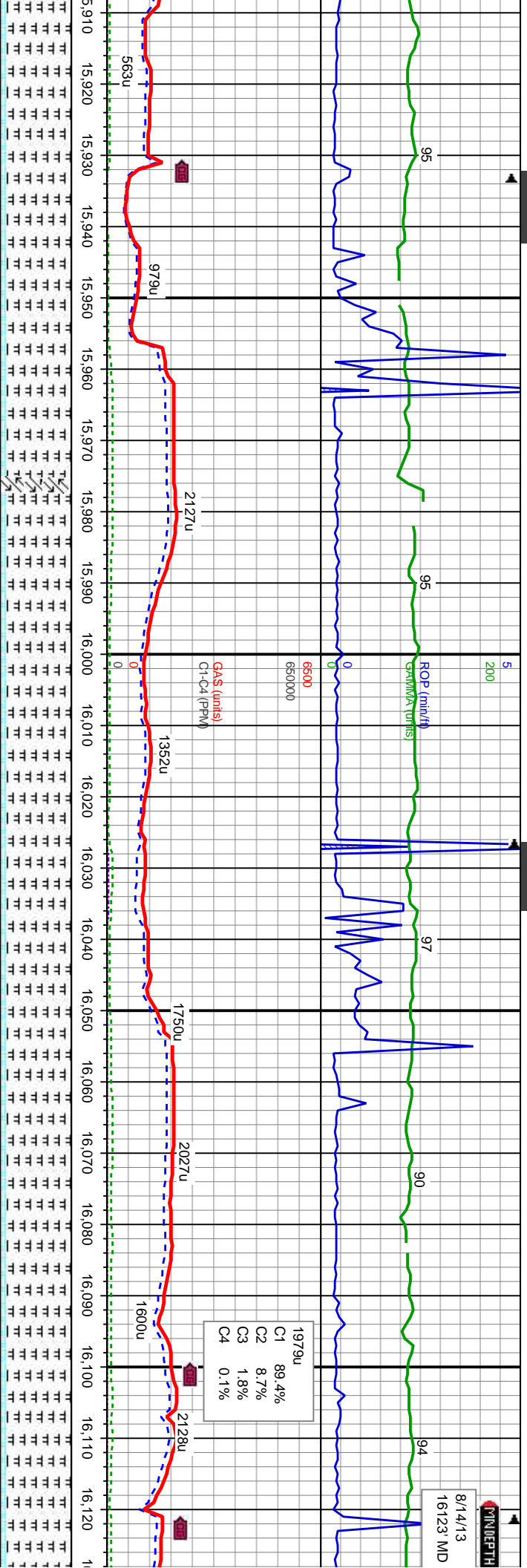
15600'-15700' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-It-med gy, It-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr It bl flr w/ v, tr pyr, slw halo cut











MD: 15,969 '  
TVD: 7,578.41 '  
Inclination: 90.79 °  
Azimuth: 179.34 °  
VS: 8,259.85 '

MD: 16,064 '  
TVD: 7,577.29 '  
Inclination: 90.56 °  
Azimuth: 181.93 °  
VS: 8,354.82 '

WT IN 9.7 OUT 9.7  
VIS IN 56 OUT 56

7000 WT IN 9.7 OUT 9.7  
VIS IN 57 OUT 58

WT IN 9.7 OUT 9.7  
VIS IN 57 OUT 58

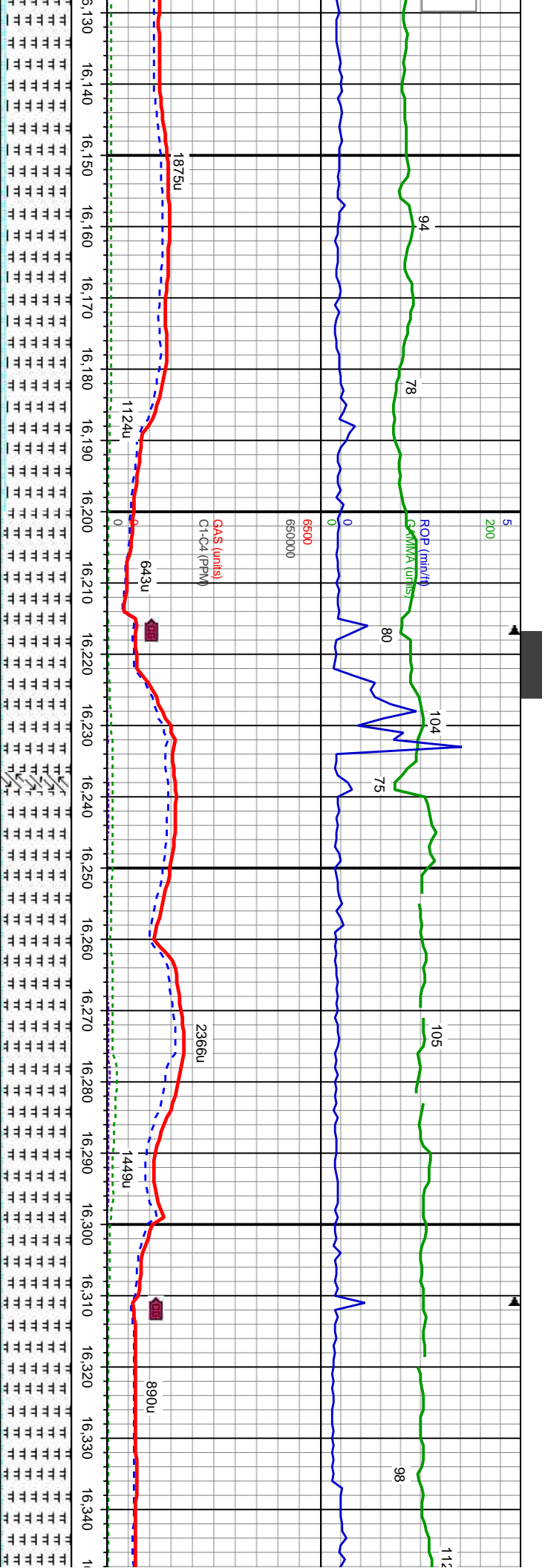
15900'-16000' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, fr ants bent, tr lt bl flr w/ v, slw halo cut

16000'-16100' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flr w/ v, slw halo cut

16100'-16200' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flr w/ v, slw halo cut





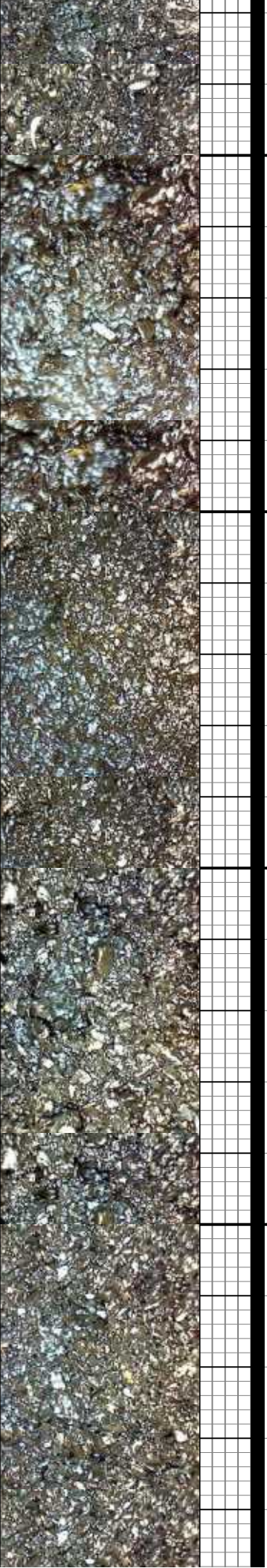


MD: 16,159 '  
TVD: 7,577.41 '  
Inclination: 89.29 °  
Azimuth: 181.63 °  
VS: 8,449.76 '

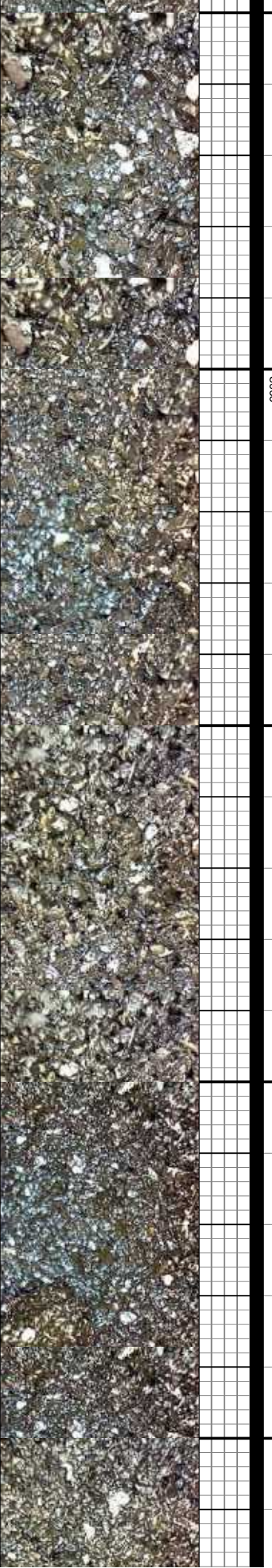
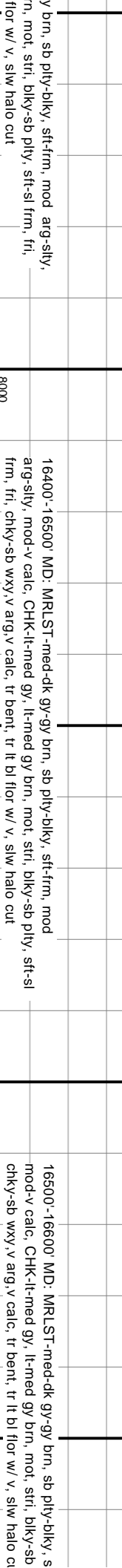
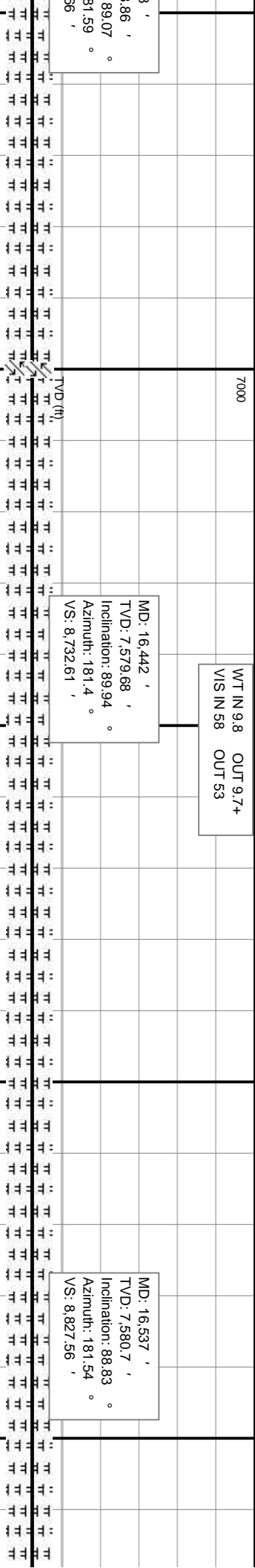
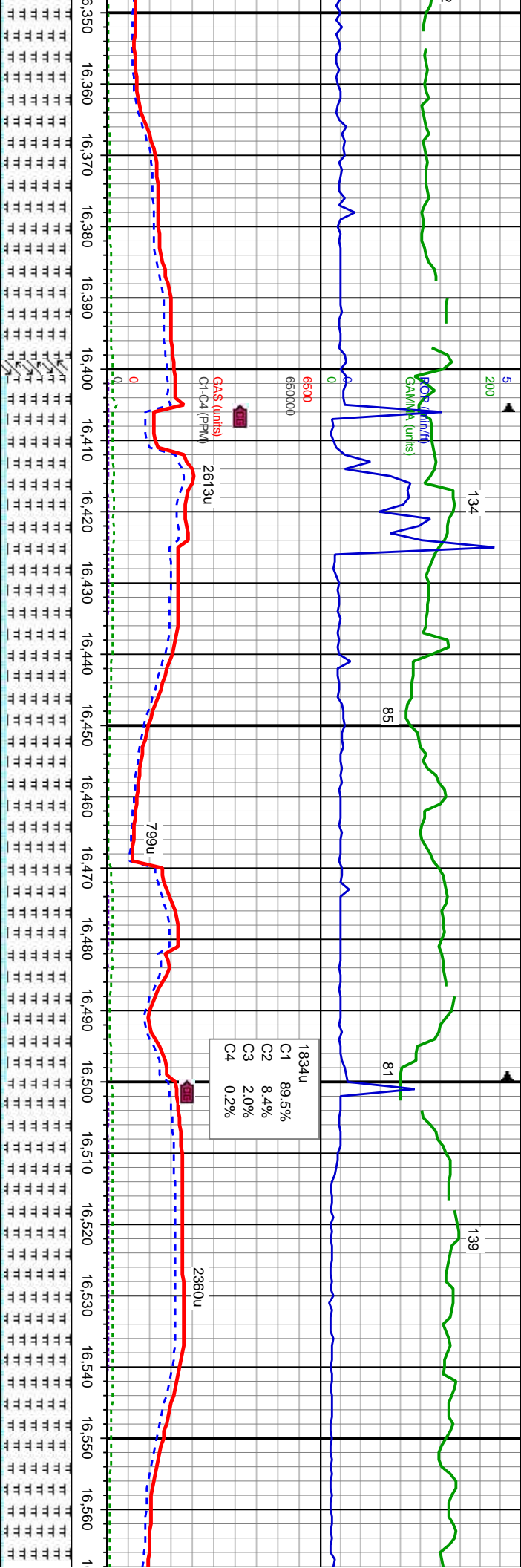
MD: 16,253 '  
TVD: 7,578.04 '  
Inclination: 89.94 °  
Azimuth: 181.6 °  
VS: 8,543.71 '

MD: 16,348 '  
TVD: 7,578 '  
Inclination: 181.6 °  
Azimuth: 181.6 °  
VS: 8,638.1 '

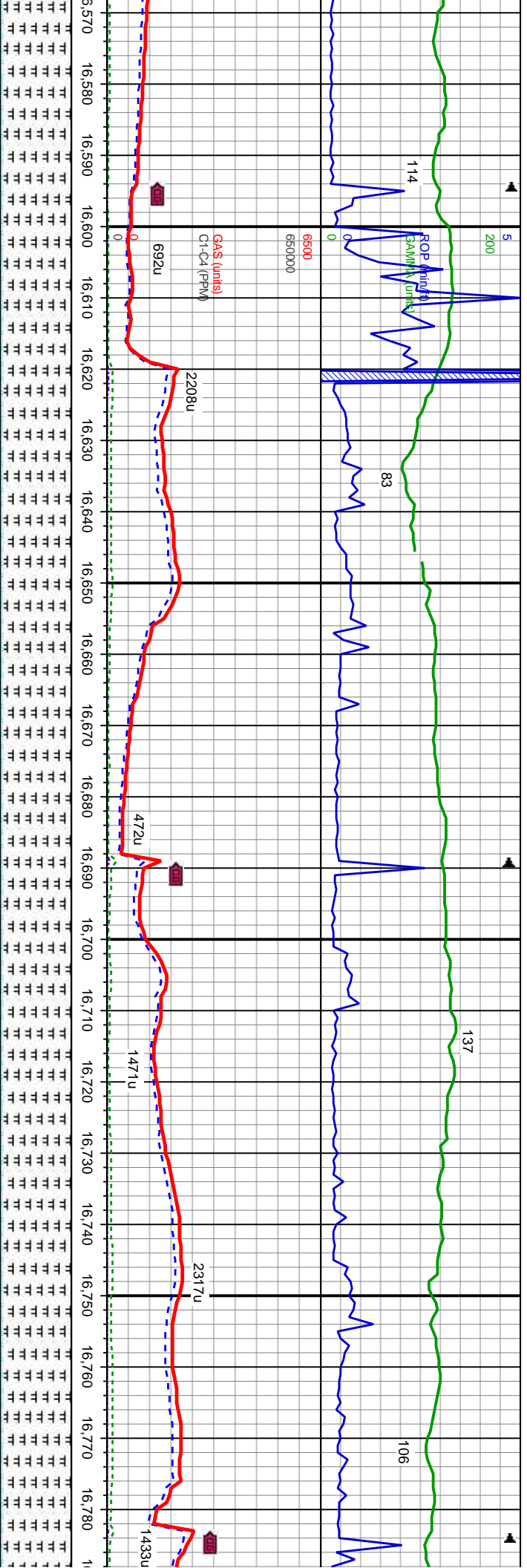
16,130-16,150' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, arg-v calc, tr bent, tr lt bl flr w/ v, slw halo cut	16,200'-16,300' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flr w/ v, slw halo cut	16,300'-16,400' MD: MRLST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flr w/ v, slw halo cut
--	---	---









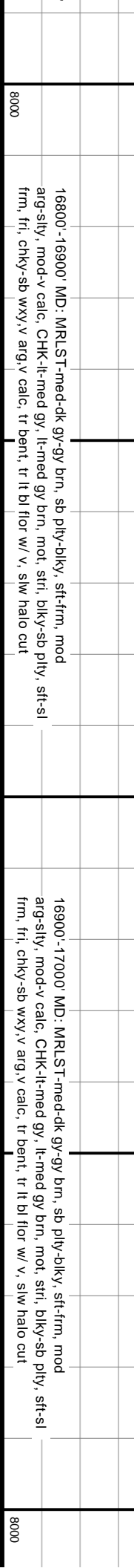
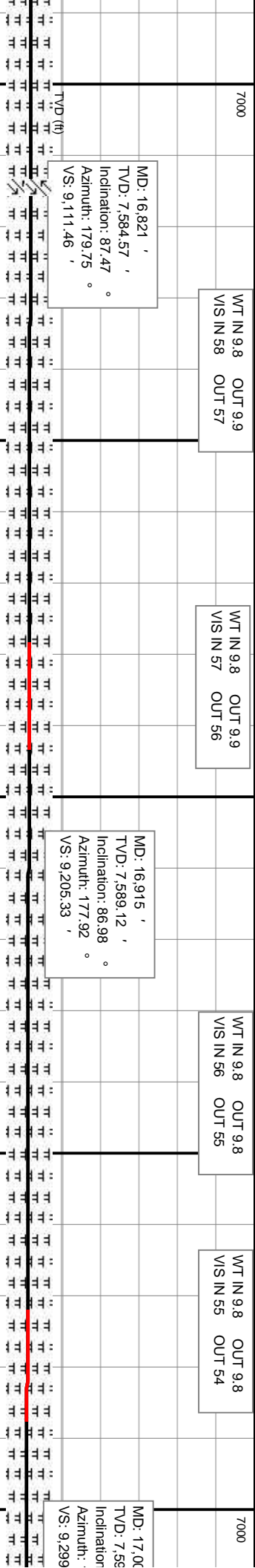
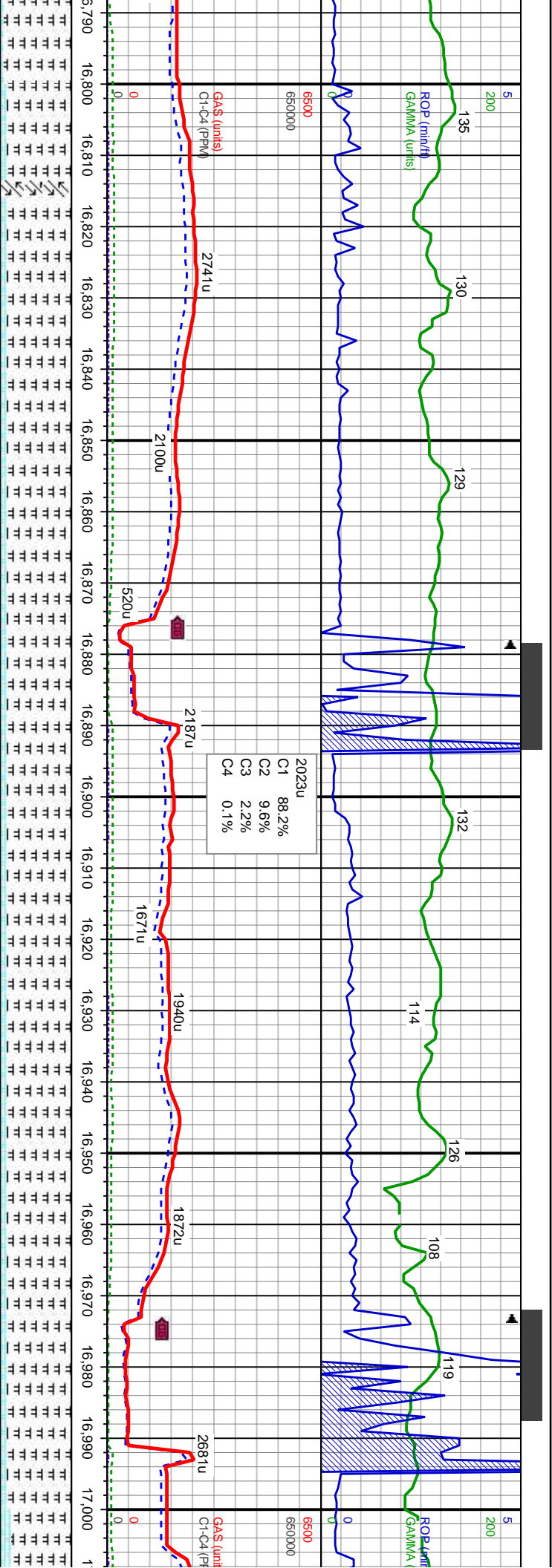


MD: 16.632 ' °  
TVD: 7,581.36 ' °  
Inclination: 90.37 °  
Azimuth: 181.21 °  
VS: 8,922.52 ' °

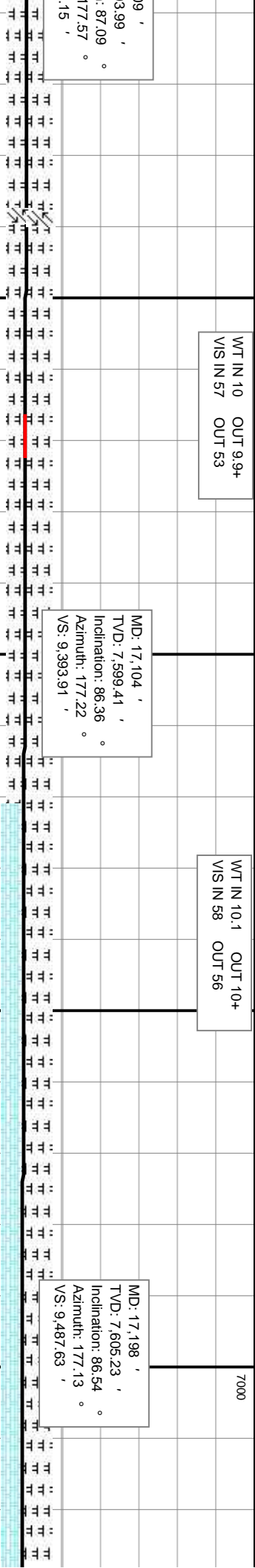
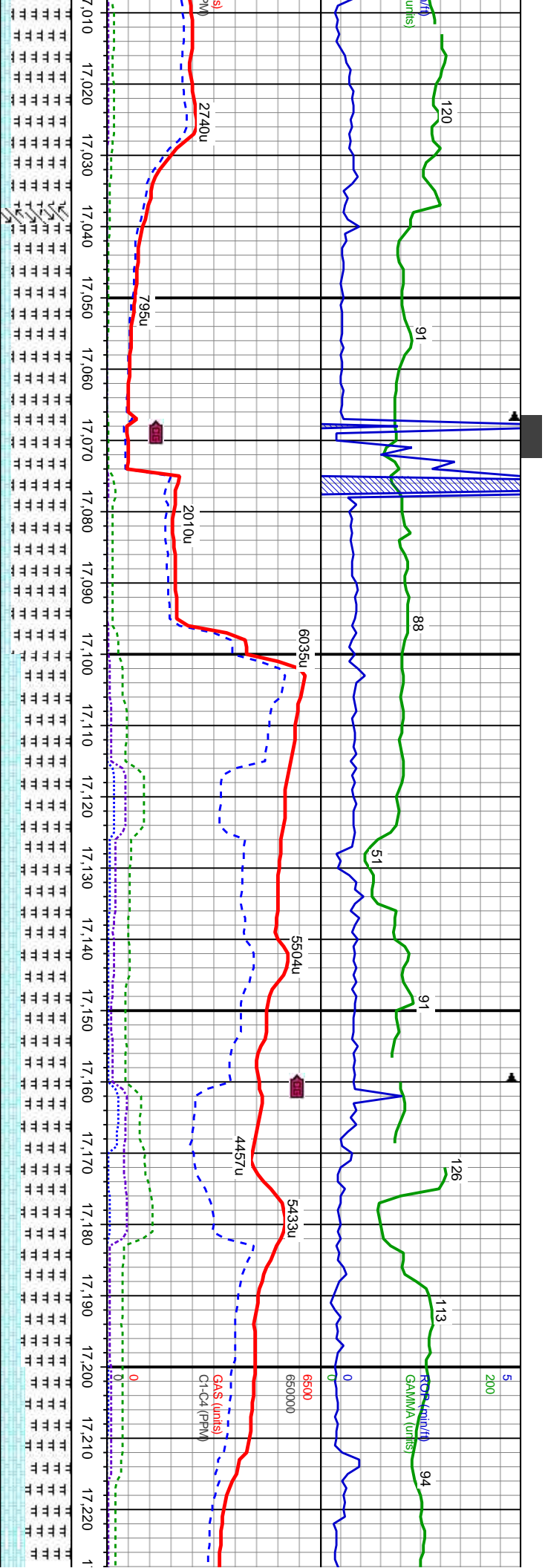
MD: 16,726 ' °  
TVD: 7,581.76 '  
Inclination: 89.14 °  
Azimuth: 180.3 °  
VS: 9,016.5 '

8000	<p>16600'-16700' MD: MR.LST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flwr w/ v, slw halo cut</p> <p>16700'-16800' MD: MR.LST-med-dk gy-gy brn, sb ply-biky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, mot, stri, biky-sb ply, sft-sl frm, fri, chky-sb wxy, v arg, v calc, tr bent, tr lt bl flwr w/ v, slw halo cut</p>
------	---









17000-17100' MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, moi, stri, blk-y-sb ply, sft-sl frm, fri, chky-sb wxy,v arg,v calc, tr bent, tr lt bl flwr w/ v, slw halo cut

17100-17200' MD: MRLST-med-dk gy-gy brn, sb ply-blky, sft-frm, mod arg-sily, mod-v calc, CHK-lt-med gy, lt-med gy brn, moi, stri, blk-y-sb ply, sft-sl frm, fri, chky-sb wxy,v arg,v calc, tr bent, tr lt bl flwr w/ v, slw halo cut







