



Scale: 5" / 100'  
Measured Depth Log

Well Name    Storis E24-79HN

Location    SWSW SEC 24, T6N, R65W

State    COLORADO

Country    USA

API Number    05-123-38157

Region    DJ BASIN

Spud Date    4/17/2014

Surface Coordinates    350' FNL, 882' FEL

Bottom Hole Coordinates    4568' FNL, 889' FWL

Ground Elevation    4692'

Logged Interval    6224'    To    11523'

Formation    NIOBRARA C CHALK

Type of Drilling Fluid    LSND

County    WELD

Rig Number    H&P 330

Field    WATTENBERG

Drilling Completed    4/25/2014

K.B. Elevation    4722'

Total Depth    11523'

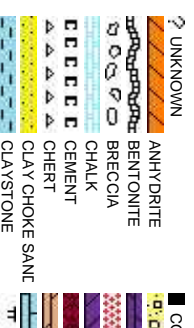
Company    NOBLE ENERGY

Name    RENEE CLACK

Company    NOBLE ENERGY

Address    1625 Broadway  
Denver, CO 80202

ANDREA ZUIDEMA  
JESSICA SIEBERG





Operator

SY INC.

Geologist

LER

SY INC.

Suite 2200  
202

Accessories

<b>Fossils</b>	F FOSSIL	ARGILLACEOUS	GLAUCONITE	TUFFACEOUS
GASTROPOD	ARGILLITE GRAIN	GYPSIFEROUS		
ALGAE	OOLITE	B BENTONITE	HEAVY MINERAL	
AMPHIPORA	OSTRACOD	BITUMENOUS SUBSTANCE	INOCERAMUS	ANHYDRITE STRINGER
BELEMITE	PELECYPOD	BRECCIA FRAGMENTS	KAOLIN	BENTONITE STRINGER
BIOCLASTIC	PELLET	CALCAREOUS	MARLSTONE	COAL STRINGER
BRACHIOPOD	PISOLITE	CARBONACEOUS FLAKES	MINERAL CRYSTALS	DOLOMITE STRINGER
BRYOZOA	PLANT REMAINS	CHTDK	NODULES	GYPSUM STRINGER
CEPHALOPOD	PLANT SPORES	CHTLT	PHOSPHATE PELLET:	LIMESTONE STRINGER
CORAL	SCAPHOPOD	COAL - THIN BEDS	PYRITE	MARLSTONE (CALC) STRG
CRINOID	STROMATOPOROID	DOLOMITIC	SALT CAST	MARLSTONE (DOL) STRG
ECHINOID		FELDSPAR	SANDY	SANDSTONE STRINGER
FISH	<b>Minerals</b>	FERRUGINOUS PELLET	SILICEOUS	SHALE STRINGER
FORAMINIFERA	ANHYDRITIC	FERRUGINOUS	SILTY	SILTSTONE STRINGER

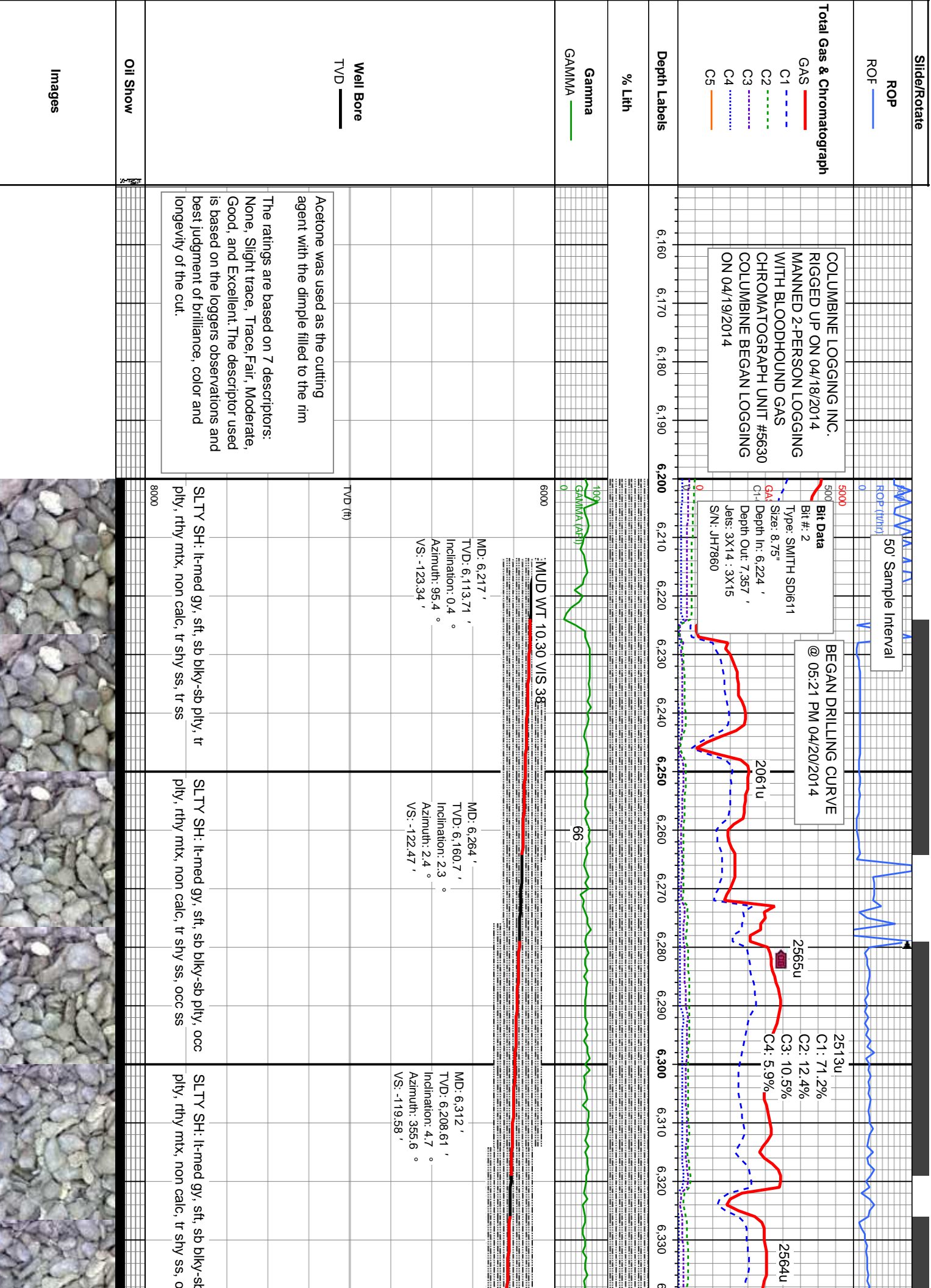
Other

Other Symbols

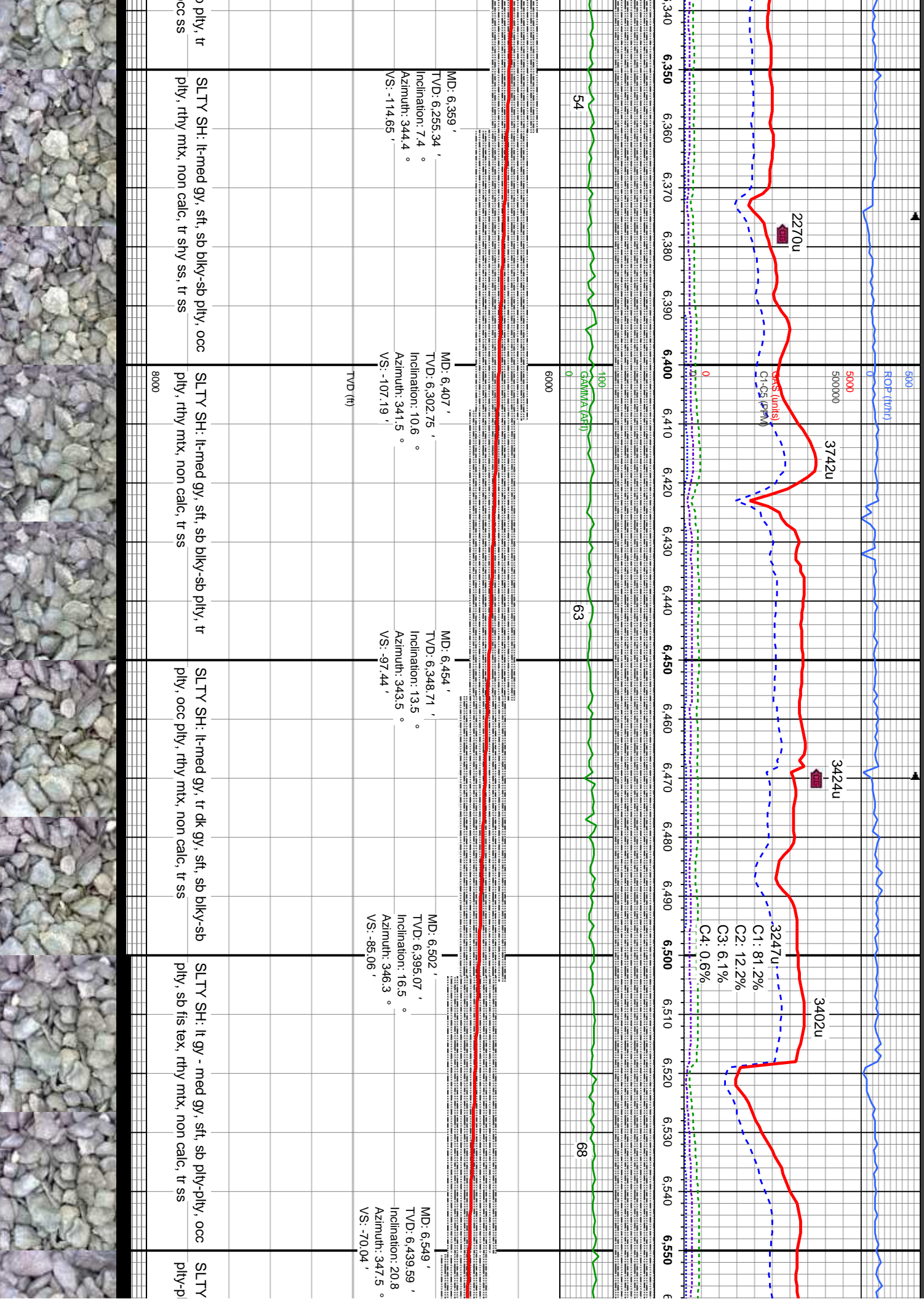
Rock Types

CONGLOMERATE	METAMORPHIC	SHALY SILTSTONE
DOLOMITE	NO SAMPLE	SILTY SHALE
GRANITE	SALT	SILTSTONE
GYPSUM	SANDSTONE	TILL
IGNEOUS	SALT-PEPPER SANT	TUFF
SIDERITE or LIMONITE	SHALE	WELDED TUFF
LIMESTONE	SHALE COLORED	
MARLSTONE	SHALE GRAY	
	SHALY SANDSTONE	

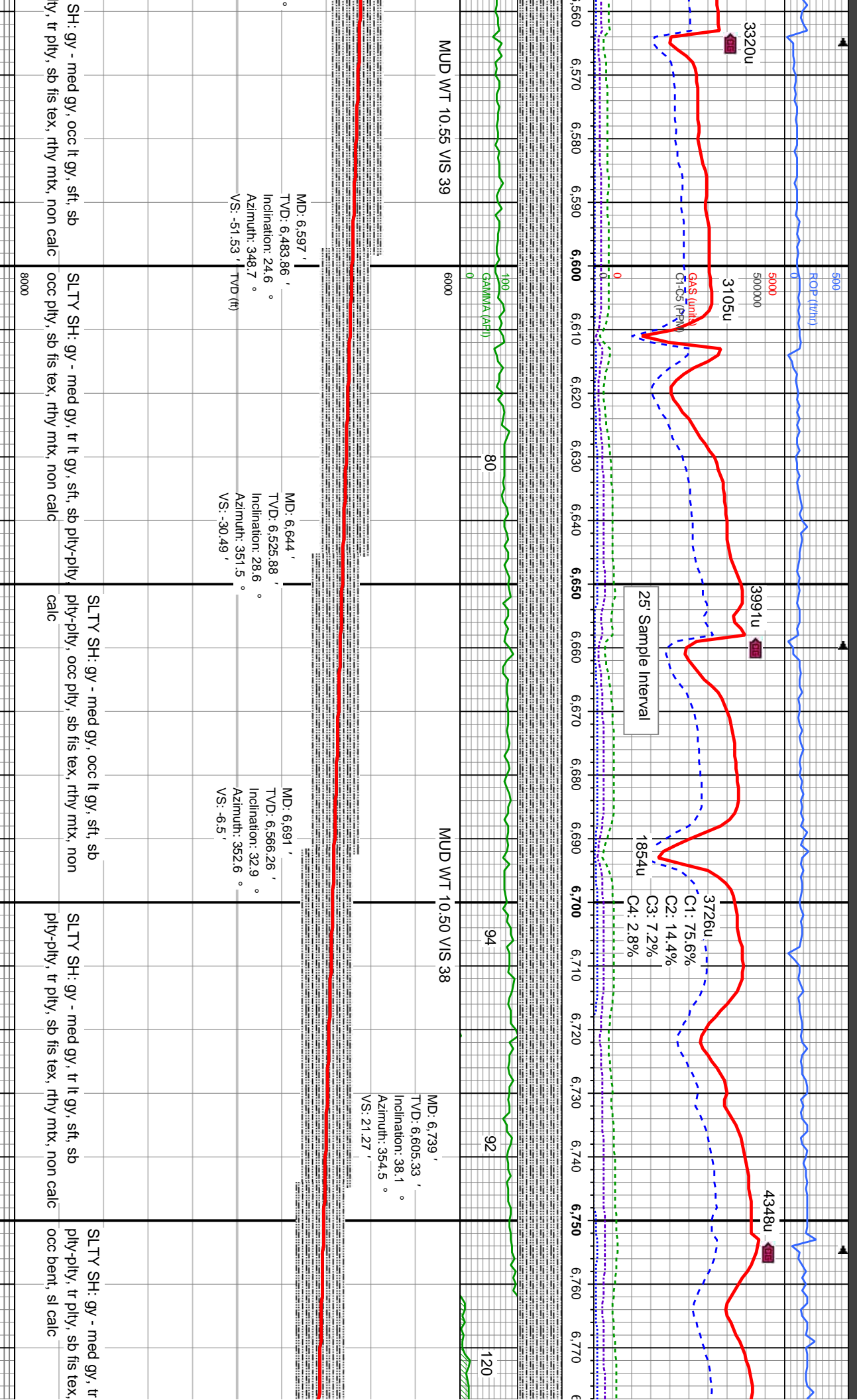














DEPTH

04/21/2014

6000

4452u

GAS SCALE CHANGE

SHARON SPRINGS  
MARKER BED @  
6807' MD/ 6655' TVD

4590u

SHAKER  
BYPASSED

NIOBRARA TOP @  
6632' MD/ 6673' TVD

NIOBRARA A CHALK @  
6853' MD/ 6687' TVD

NIOBRARA A MARL @  
6884' MD/ 6707' TVD

5042u

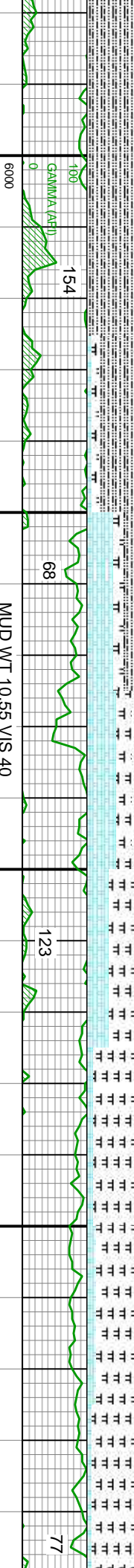
C1: 60.3%  
C2: 21.0%  
C3: 14.1%  
C4: 4.6%

4928u

4783u

4724u

6,780 6,790 6,800 6,810 6,820 6,830 6,840 6,850 6,860 6,870 6,880 6,890 6,900 6,910 6,920 6,930 6,940 6,950 6,960 6,970 6,980 6,990 7



MD: 6,787' TVD: 6,641.76' Inclination: 43.1° Azimuth: 356.3° VS: 52.31'

MD: 6,834' TVD: 6,674.99' Inclination: 46.9° Azimuth: 355° VS: 85.32'

MD: 6,882' TVD: 6,705.99' Inclination: 52.6° Azimuth: 356.1° VS: 121.71'

MD: 6,929' TVD: 6,732.74' Inclination: 58° Azimuth: 358.6° VS: 159.93'

MD: 6,977' TVD: 6,756.38' Inclination: 63° Azimuth: 2.9° VS: 200.82'

MUD WT 10.55 VIS 40

TVD (ft)

SLTY SH: gy-med gy, occ lt gy, sft, sb  
ply-pty, occ ply, sb fis tex, rthy mtx, tr bent,  
non calc

MRLST: gy blk, blk-sb ply, sme fis, mod  
frm, rthy tex, v calc  
CHK: lt gy, mod sft - mod frm, sb ply-sb  
blk, rthy tex - mot, v calc

CHK: lt gy-gy, mod sft - mod frm, sb ply-sb  
blk, rthy tex - mot, v calc

MRLST: gy blk-bn blk, blk-sb ply, sme fis,  
mod frm, rthy tex, v calc  
SLTY SH: gy-med gy, sft, sb ply-pty, tr ply,  
sb fis tex, rthy mtx, non calc

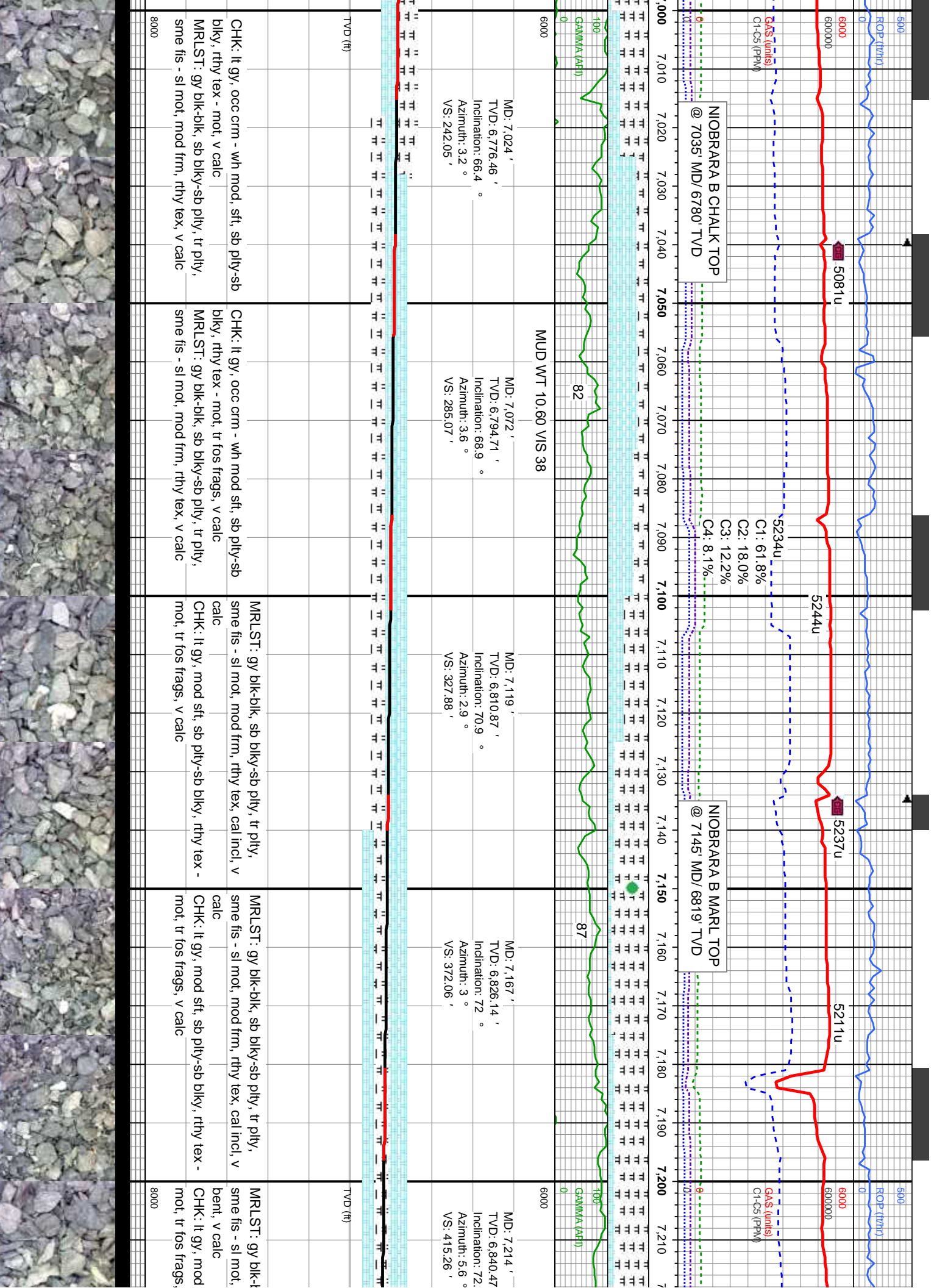
MRLST: gy blk-bk, sb blk-sb ply, tr ply,  
sme fis, mod frm, rthy tex, v calc, tr pyr  
CHK: lt gy, mod sft - mod frm, sb ply-sb  
blk, rthy tex - mot, v calc

MRLST: gy blk-bk, sb blk-sb ply, tr ply,  
sme fis - sl mot, mod frm, rthy tex, v calc, tr  
pyr  
CHK: lt gy, mod sft - mod frm, sb ply-sb  
blk, rthy tex - mot, v calc

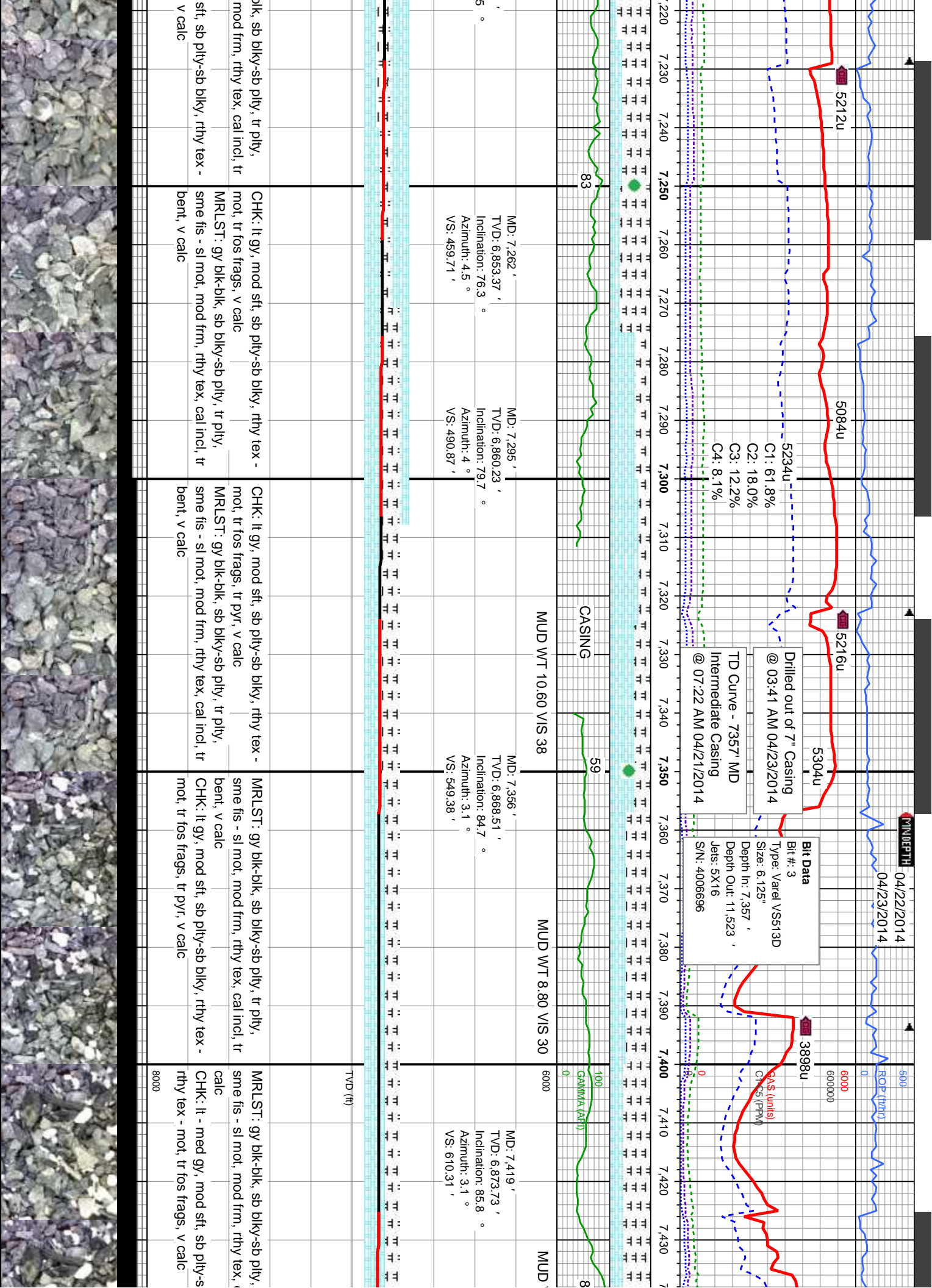
8000



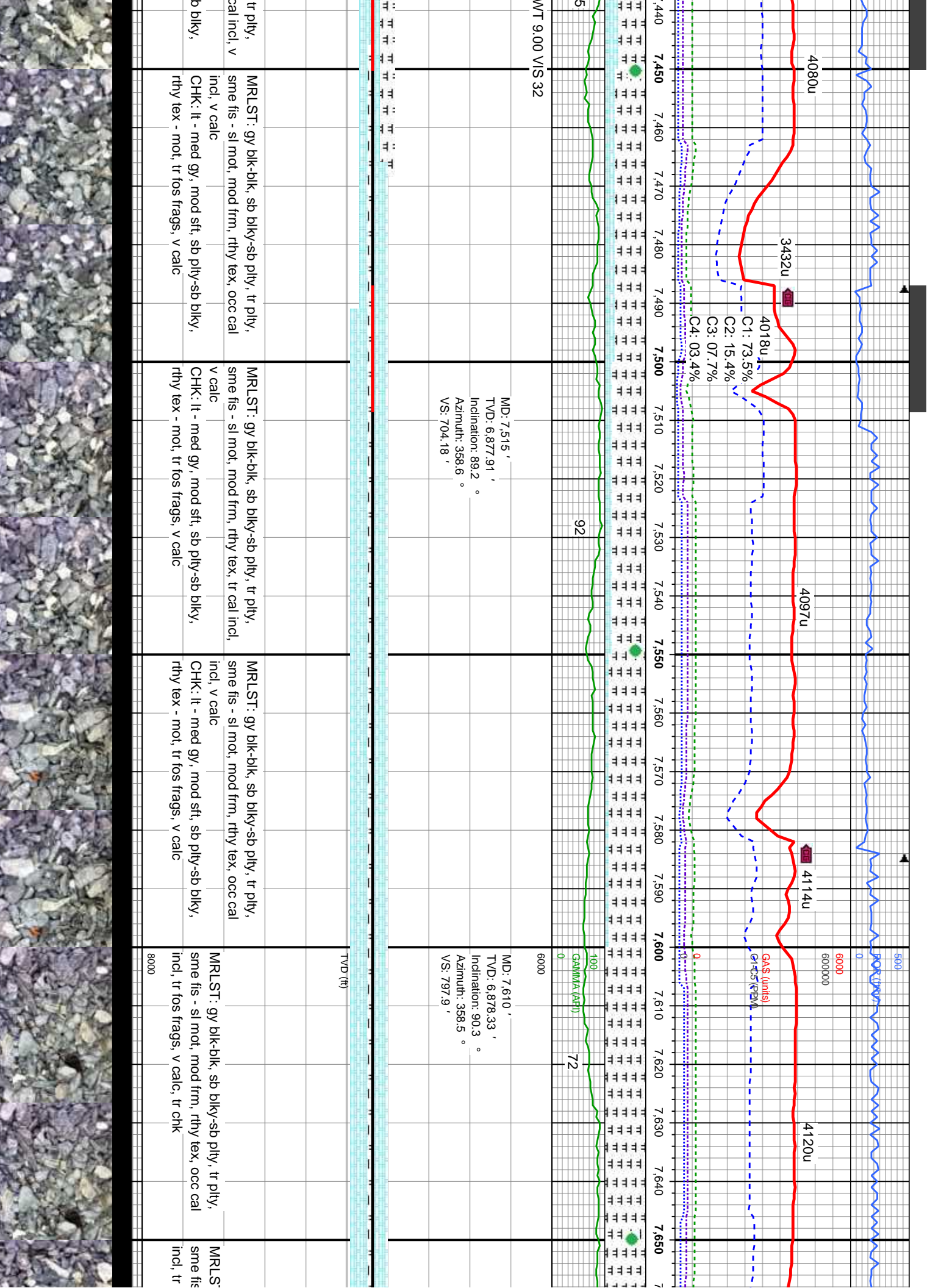




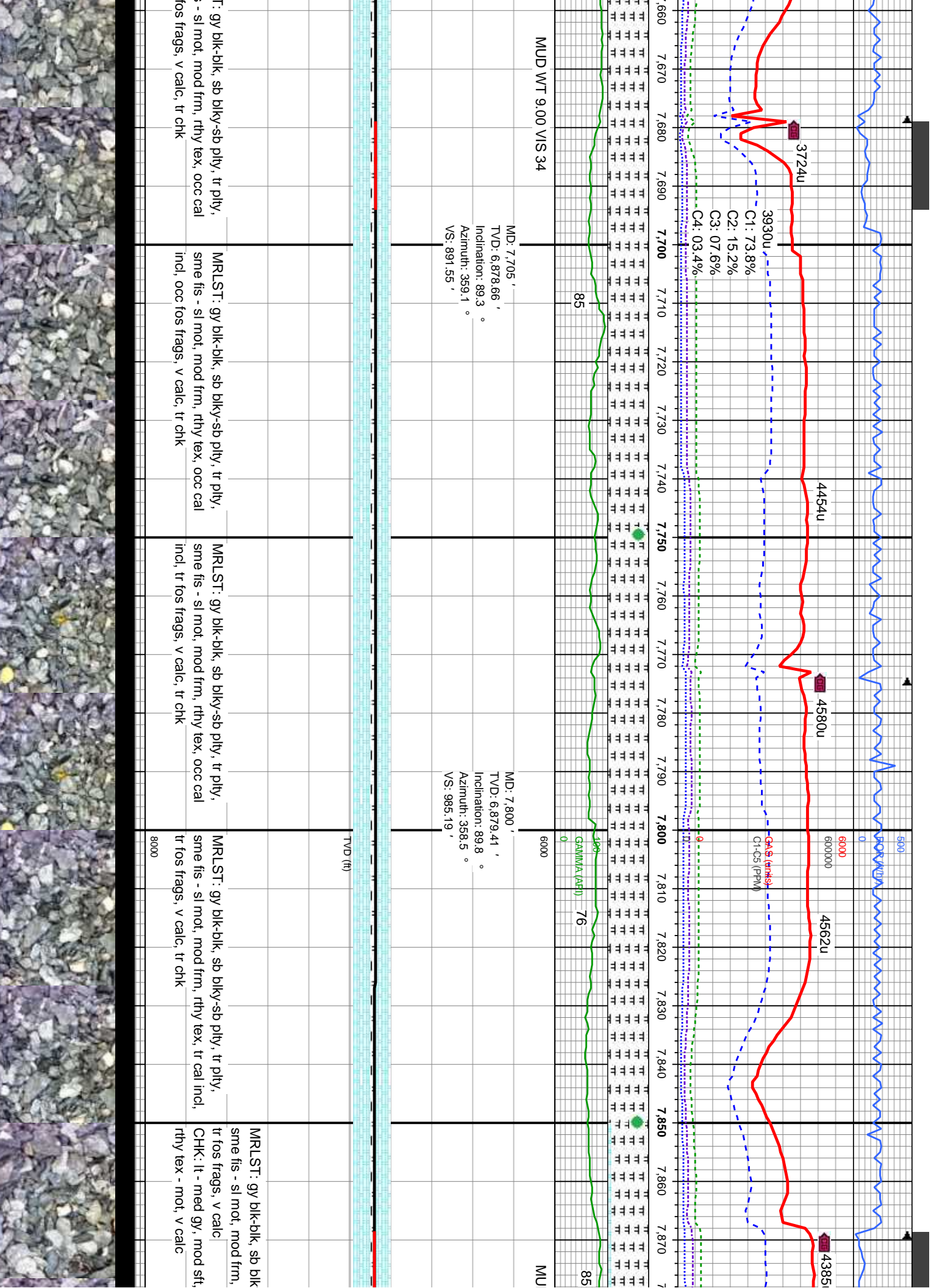




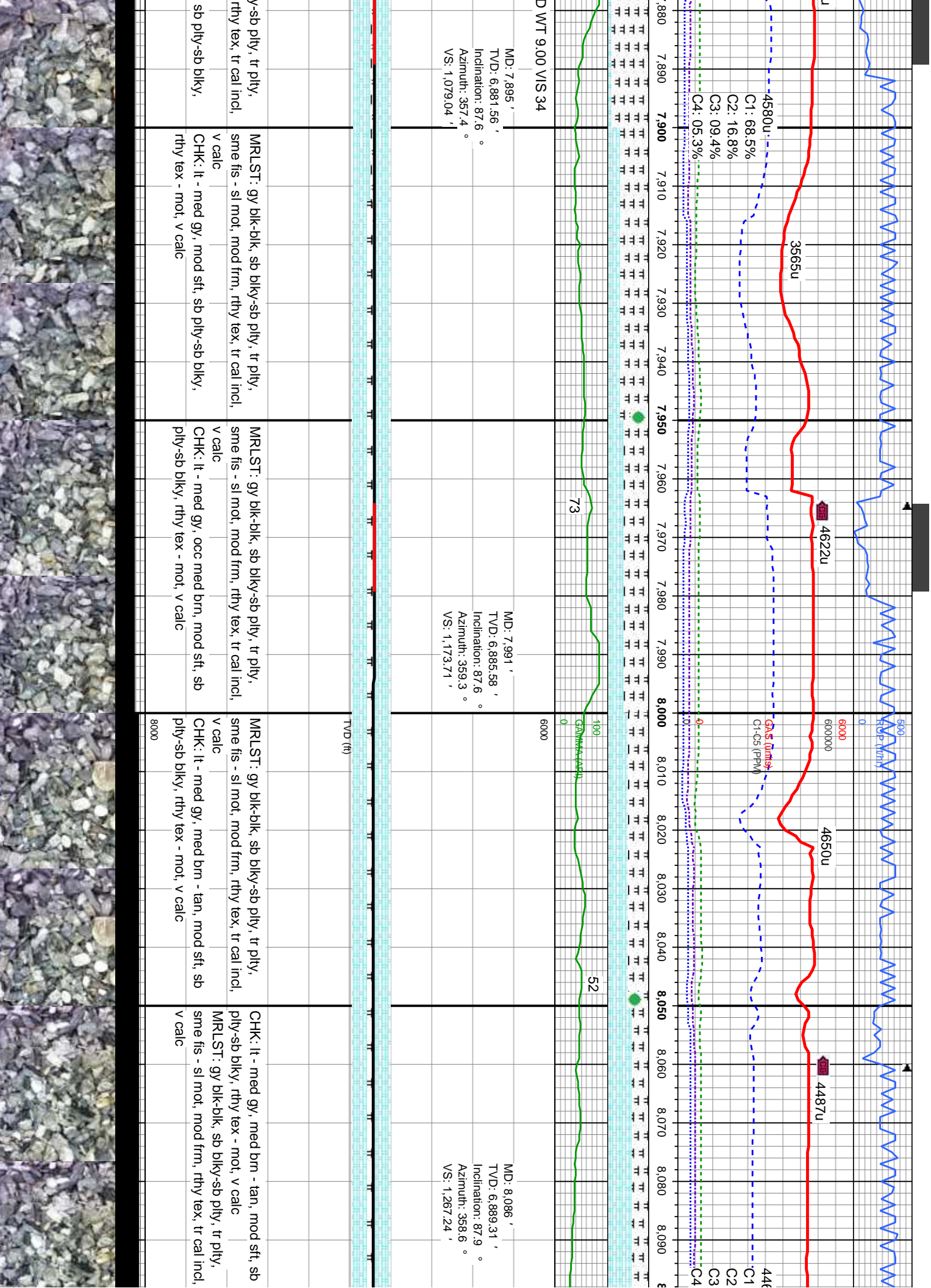




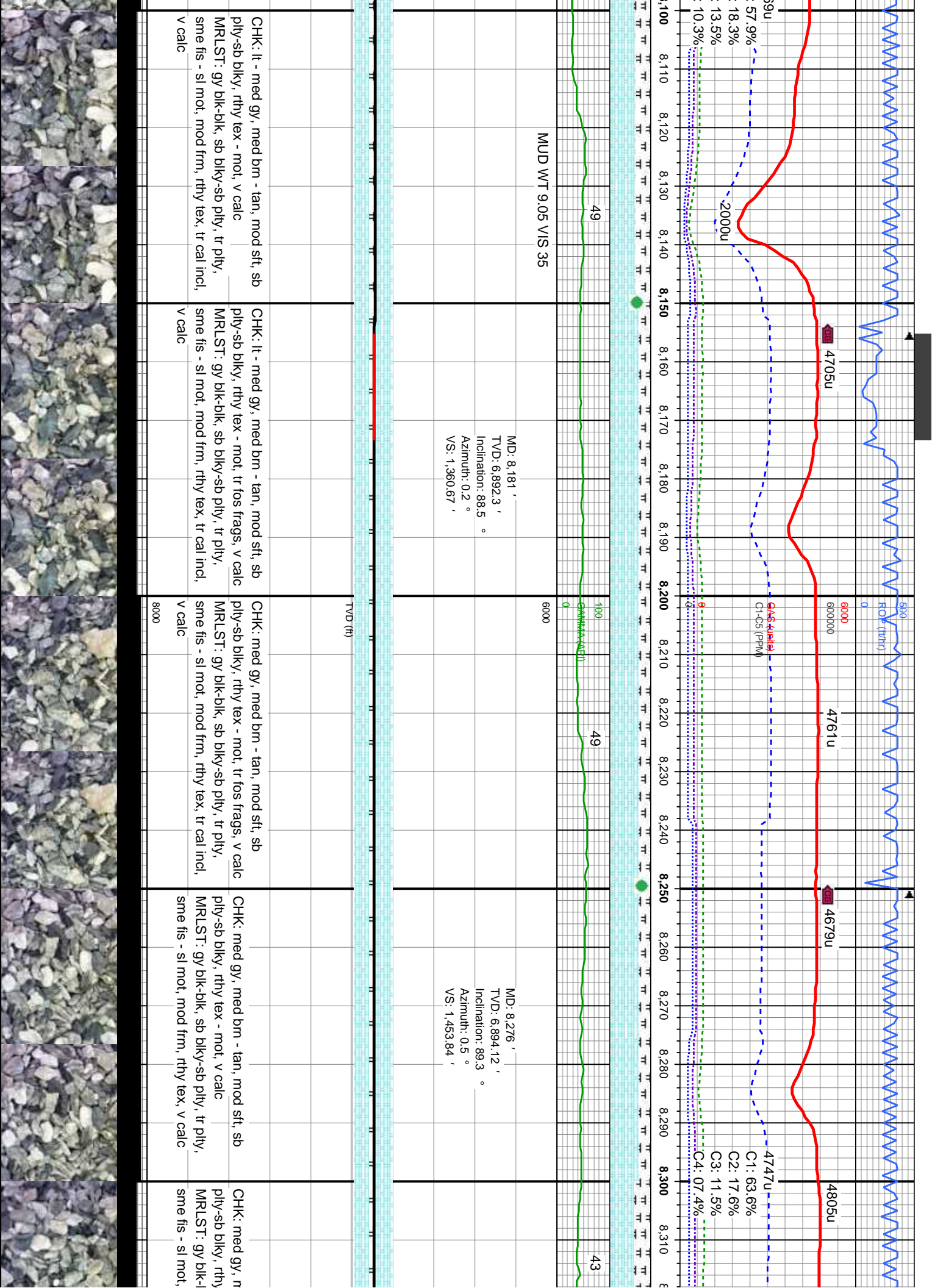




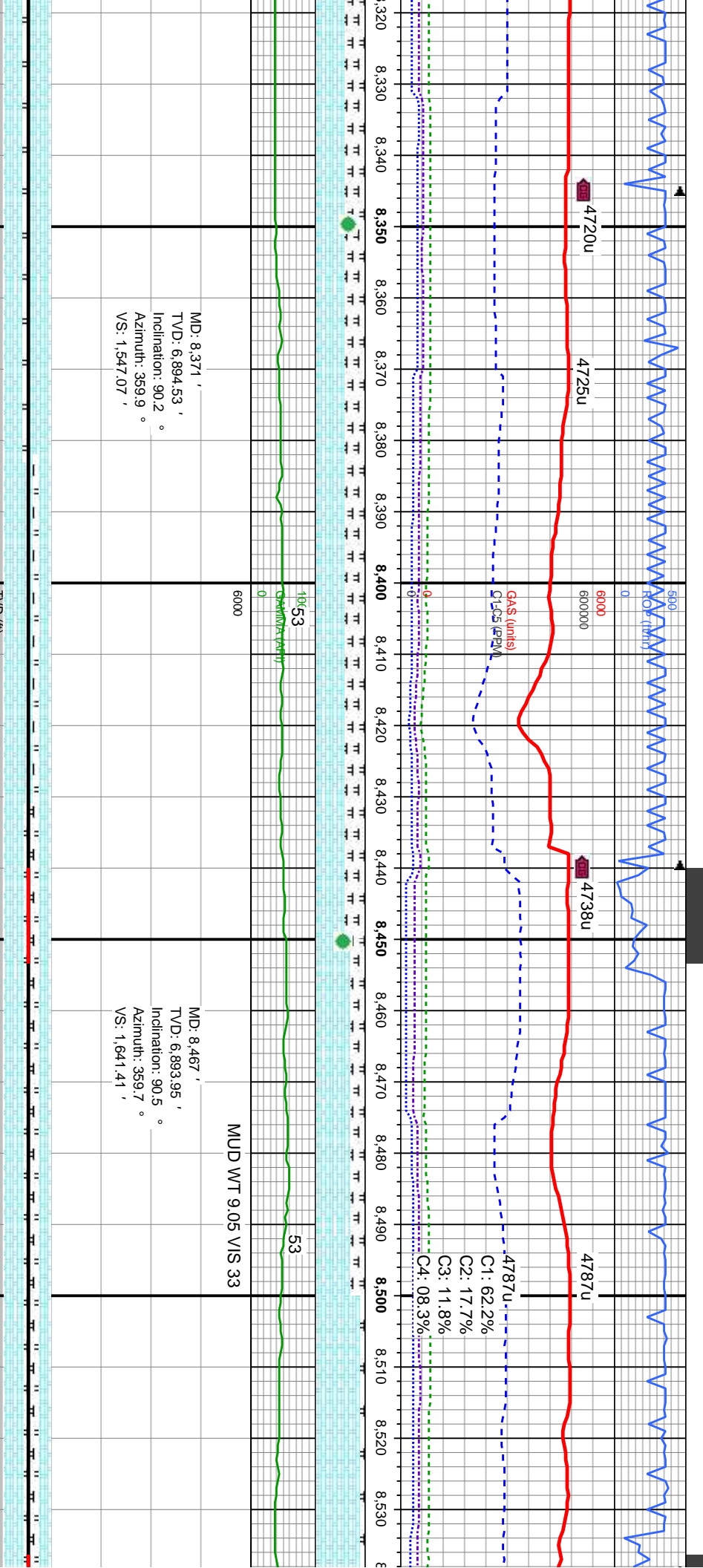




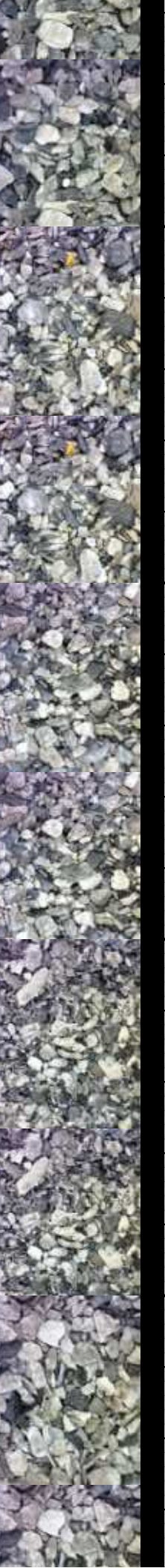




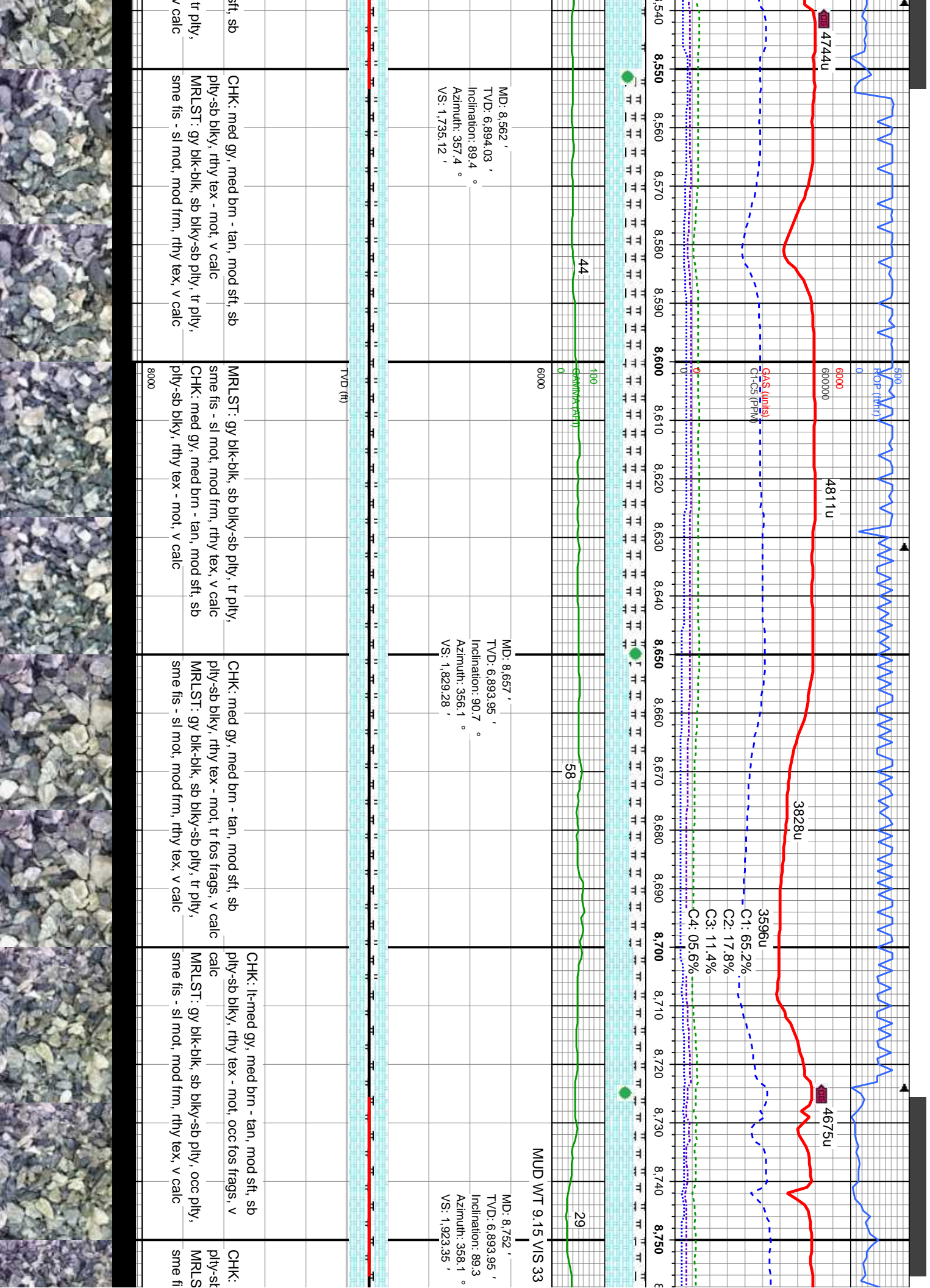




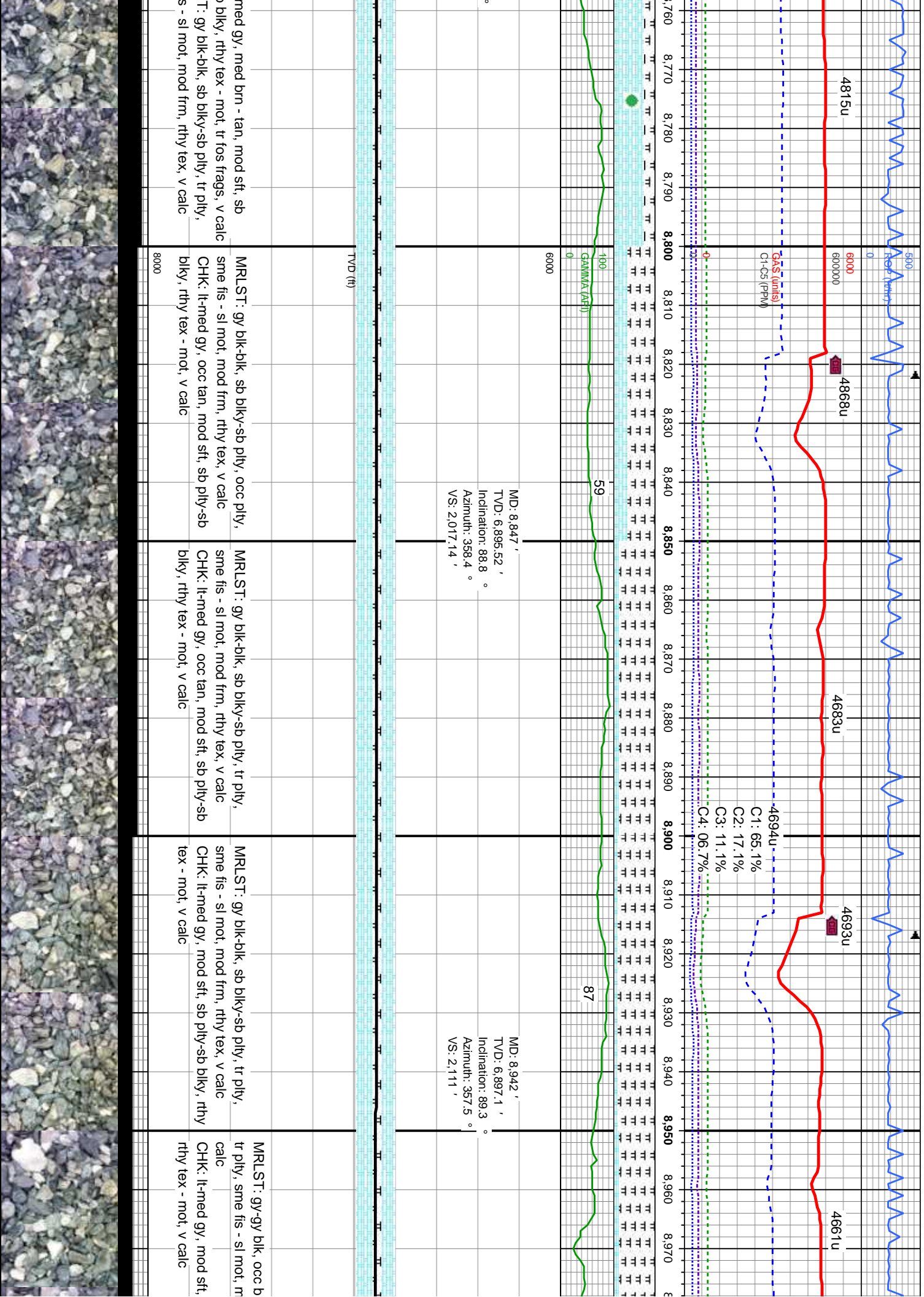
med brn - tan, mod sft, sb	CHK: med gy, med brn - tan, mod sft, sb	CHK: med gy, med brn - tan, mod sft, sb	CHK: med gy, med brn - tan, mod sft, sb
ply-sb blk, rthy tex - mot, v calc	ply-sb blk, rthy tex - mot, v calc	ply-sb blk, rthy tex - mot, v calc	ply-sb blk, rthy tex - mot, v calc
MLST: gy blk-blk, sb blk-sb ply, tr ply, sme fls - sl mot, mod frm, rthy tex, v calc	MLST: gy blk-blk, sb blk-sb ply, tr ply, sme fls - sl mot, mod frm, rthy tex, v calc	MLST: gy blk-blk, sb blk-sb ply, tr ply, sme fls - sl mot, mod frm, rthy tex, v calc	MLST: gy blk-blk, sb blk-sb ply, tr ply, sme fls - sl mot, mod frm, rthy tex, v calc
mod frm, rthy tex, v calc	8000		



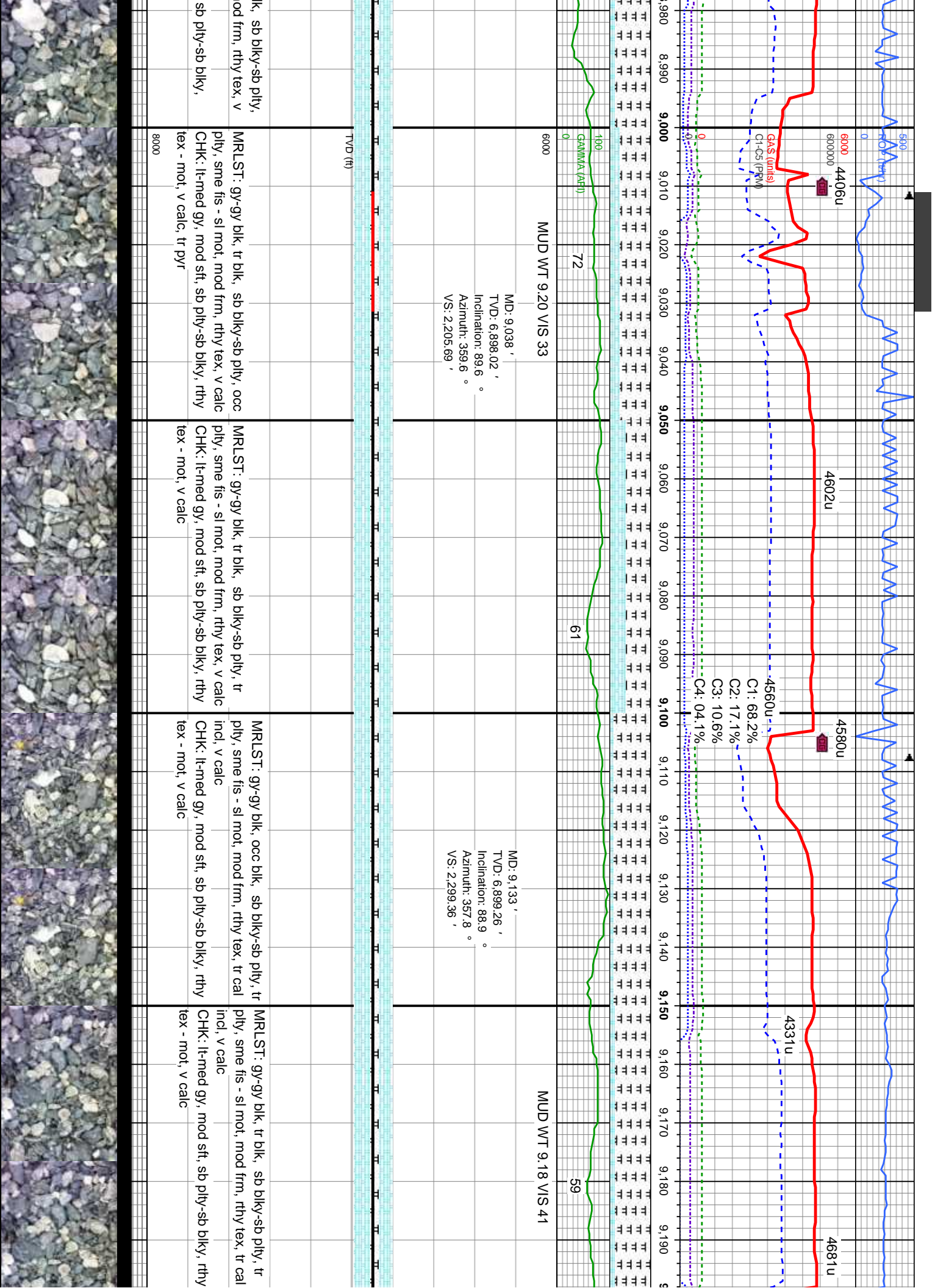




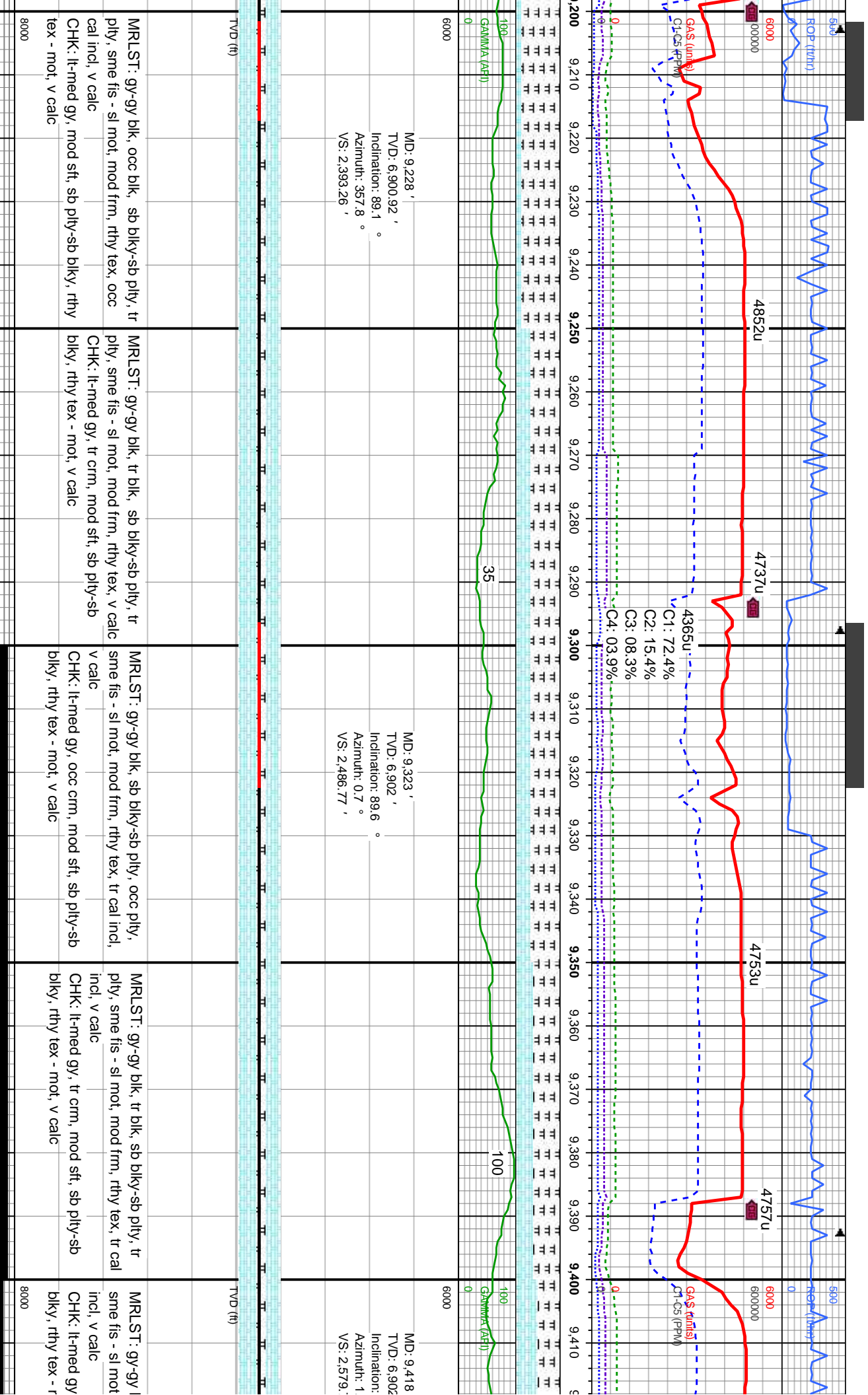




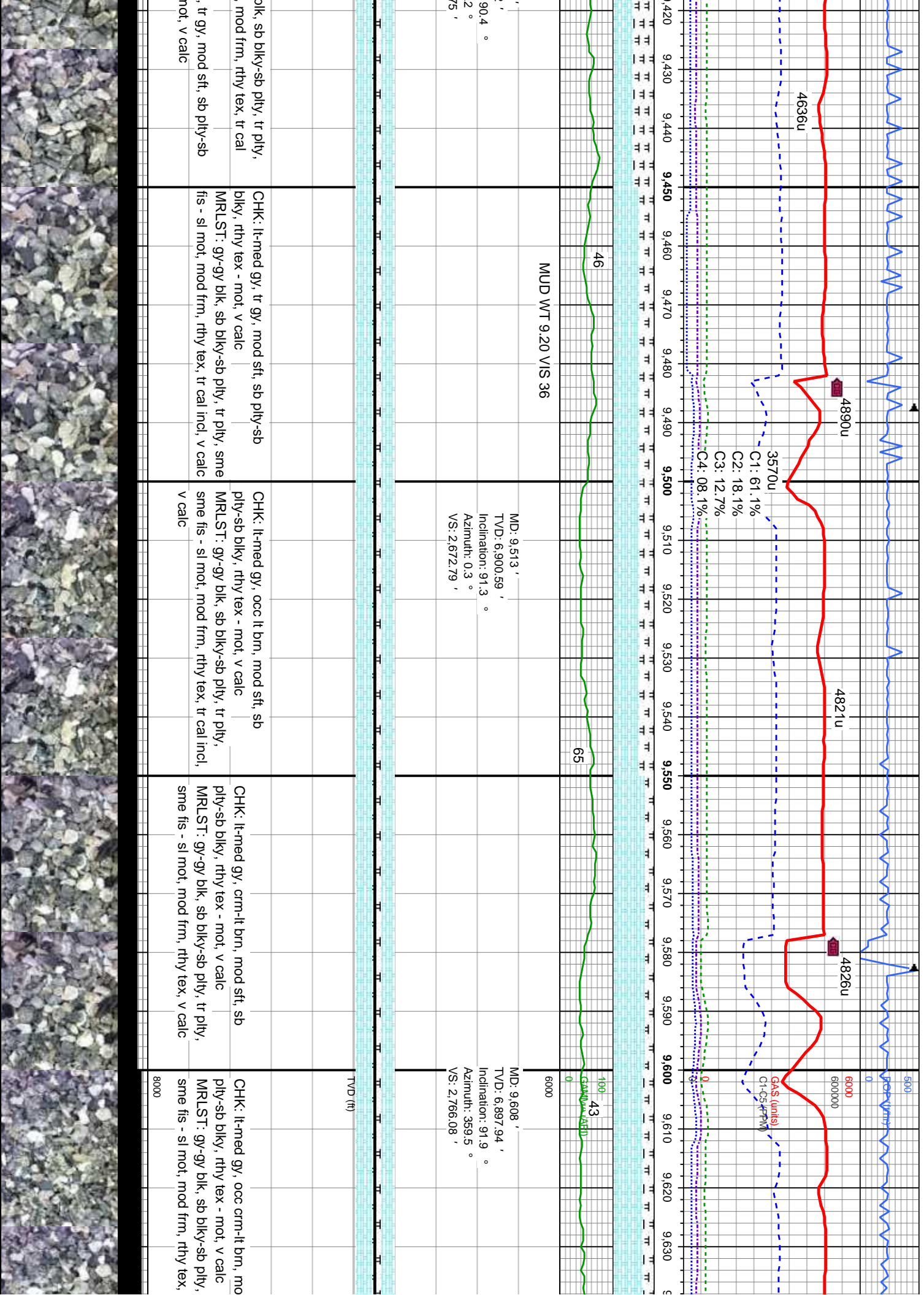




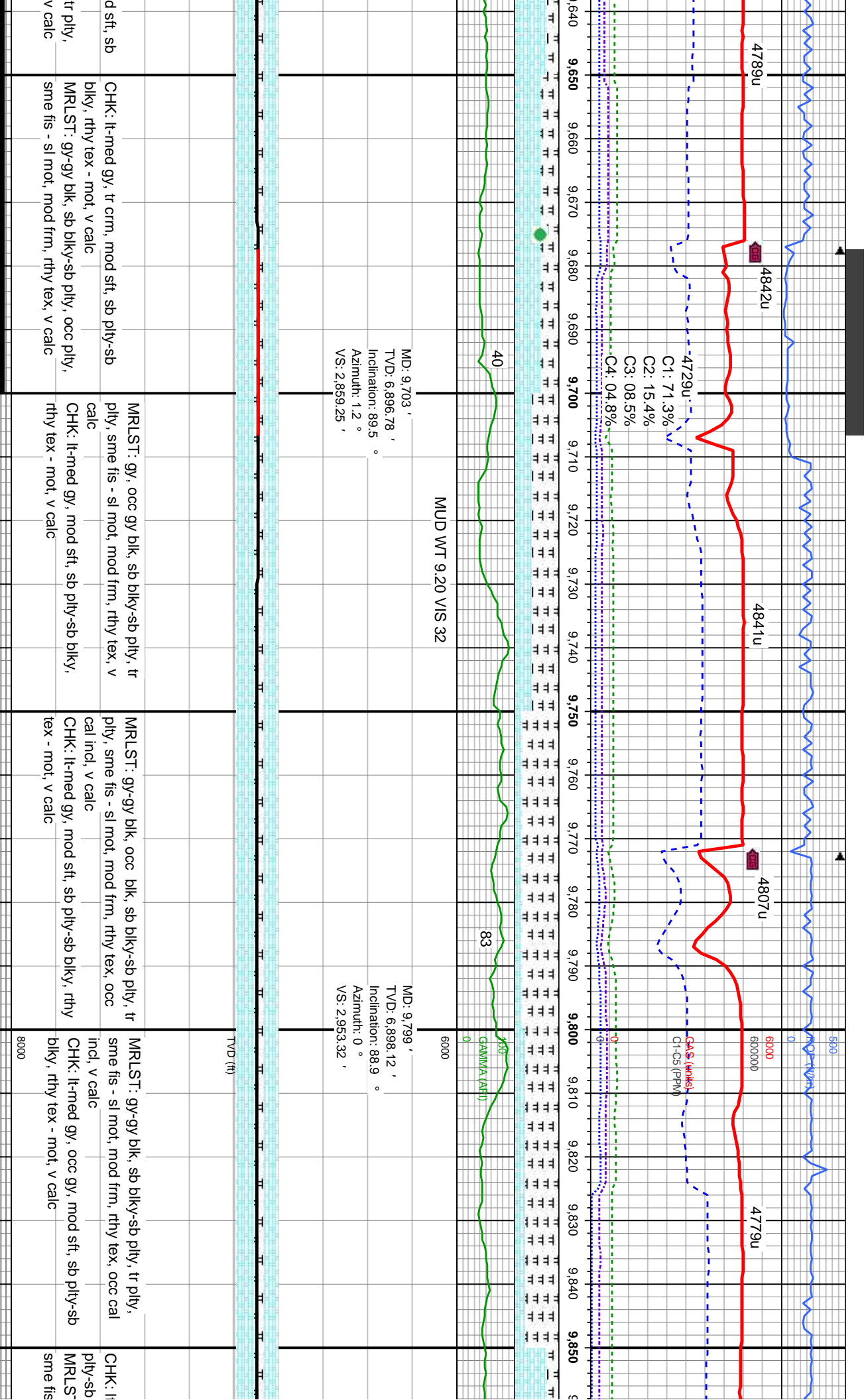








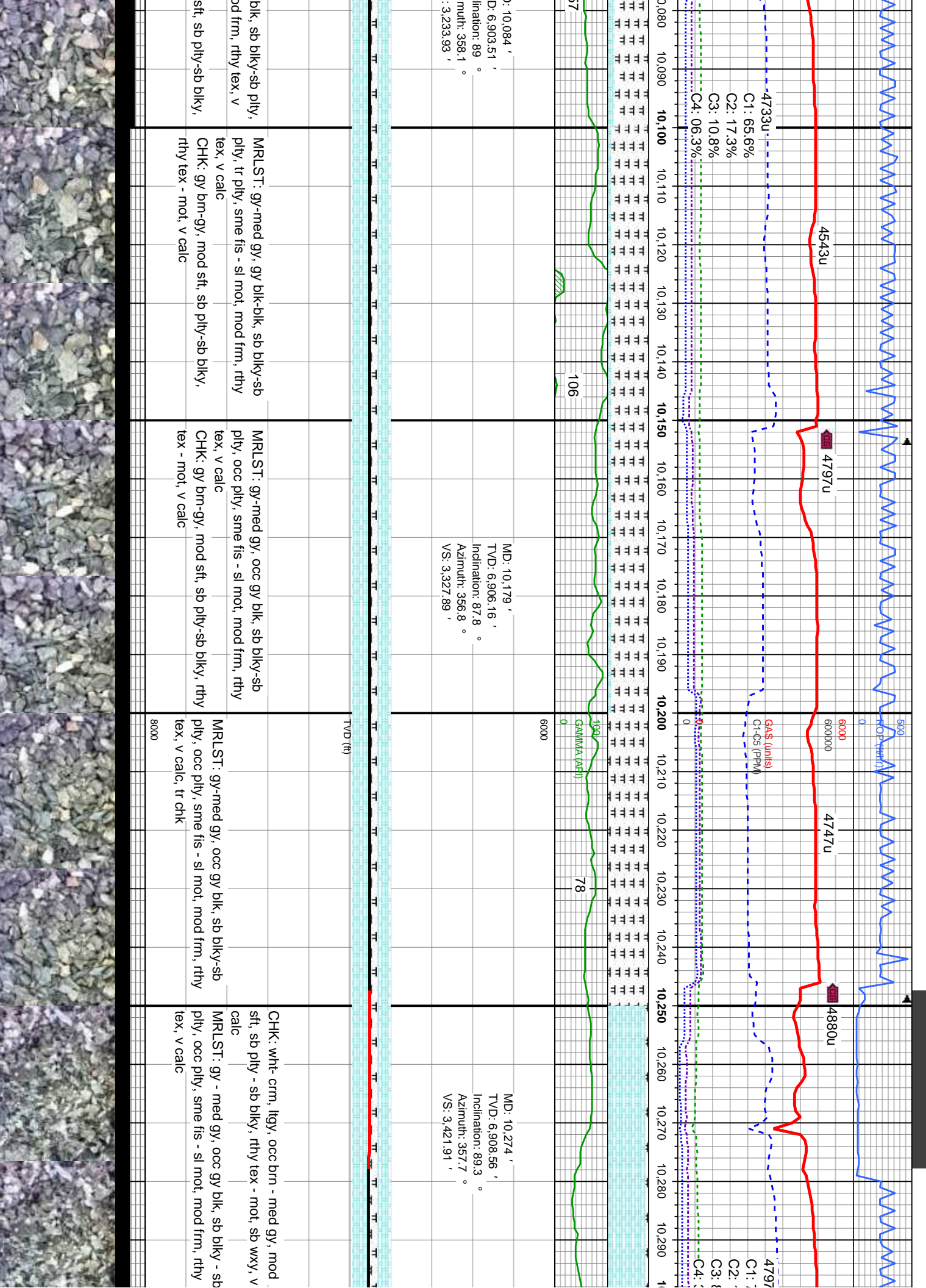




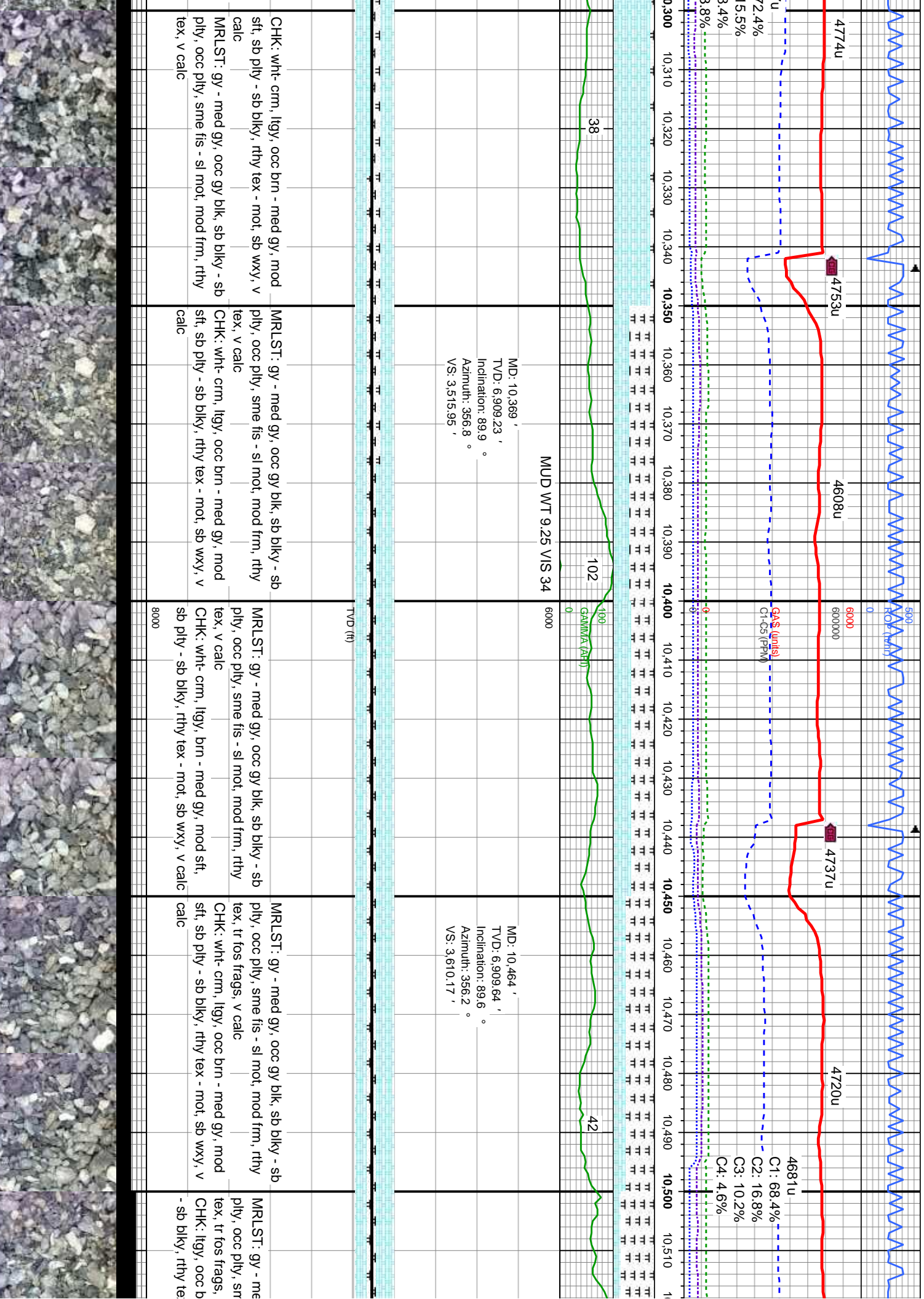




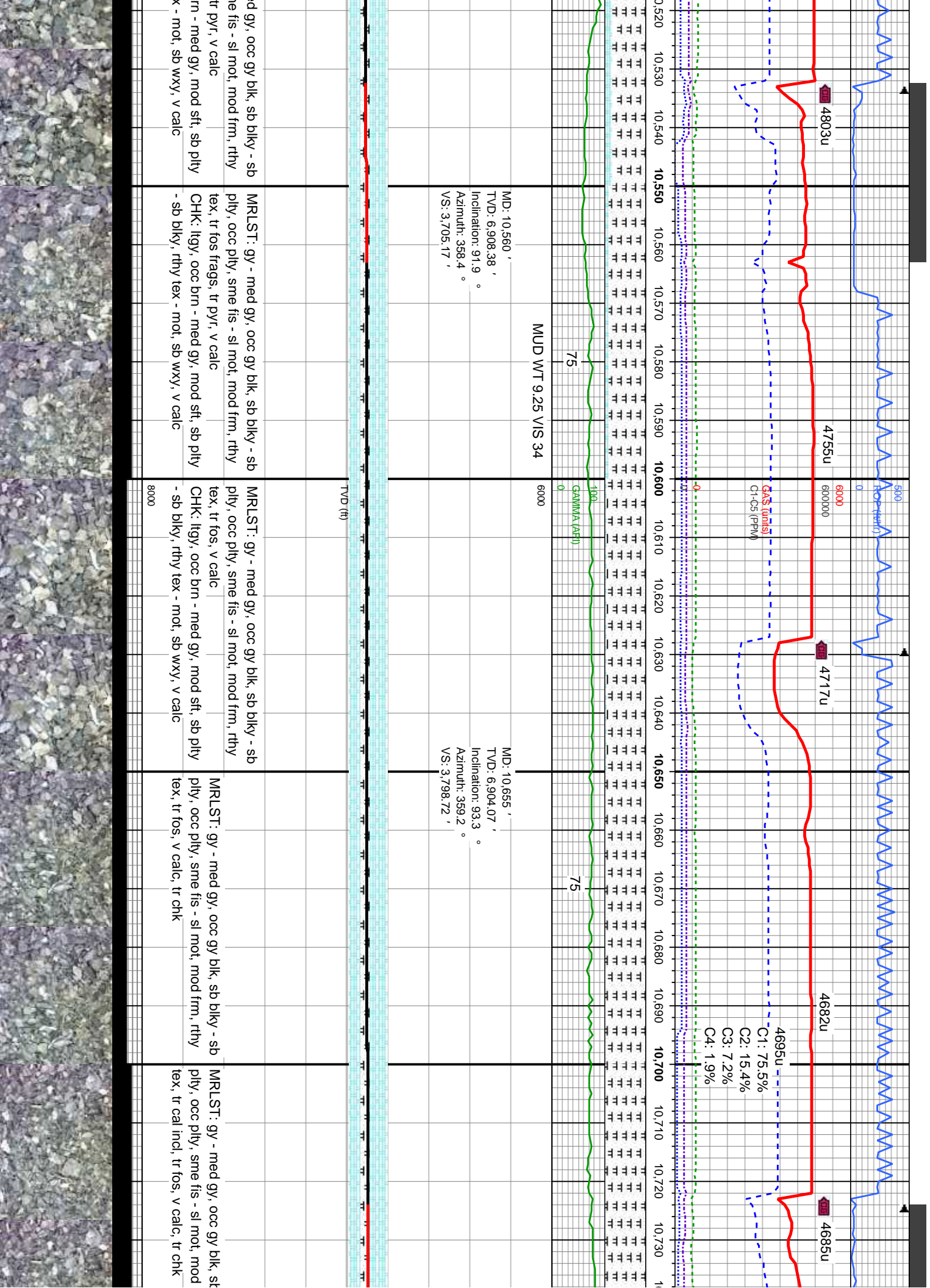




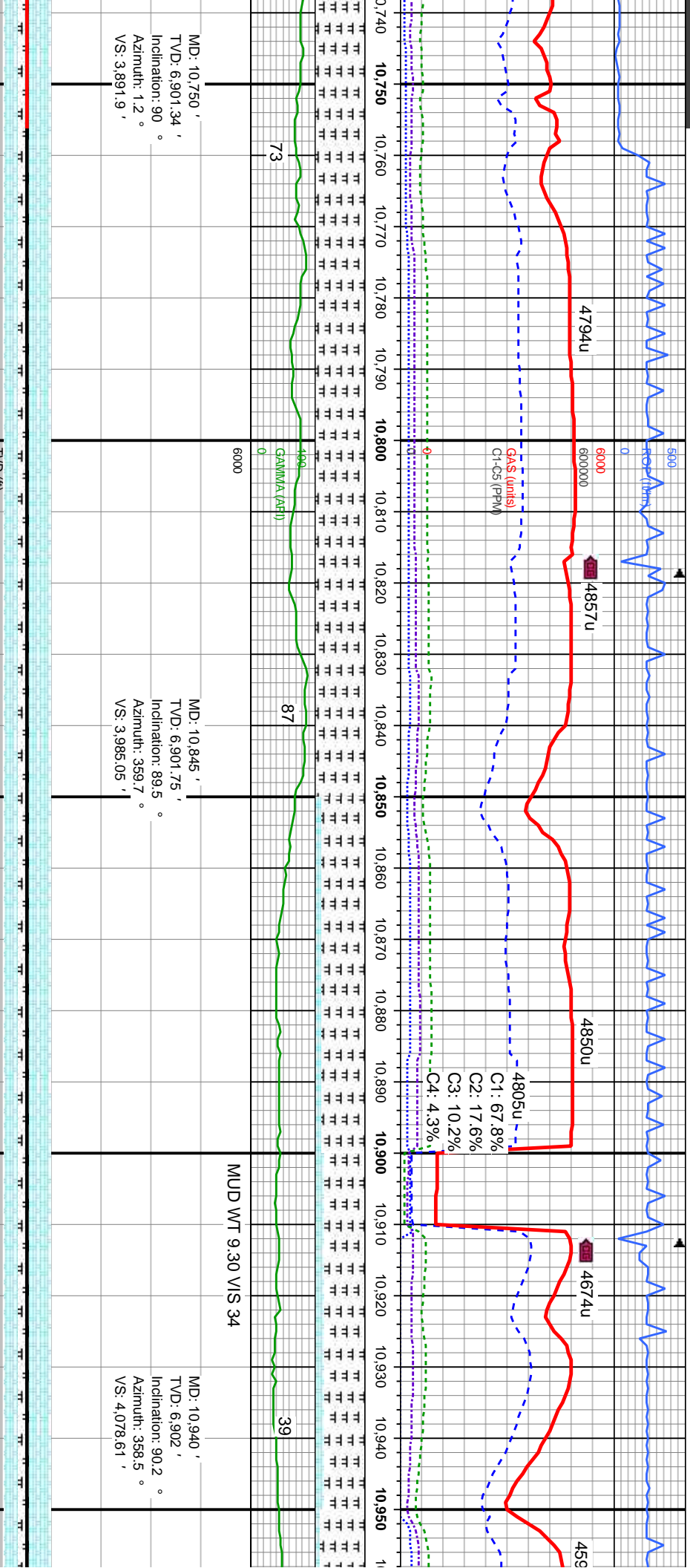












MD: 10,750 '  
TVD: 6,901.34 '  
Inclination: 90 °  
Azimuth: 1.2 °  
VS: 3,891.9 '

MD: 10,845 '  
TVD: 6,901.75 '  
Inclination: 89.5 °  
Azimuth: 359.7 °  
VS: 3,985.05 '

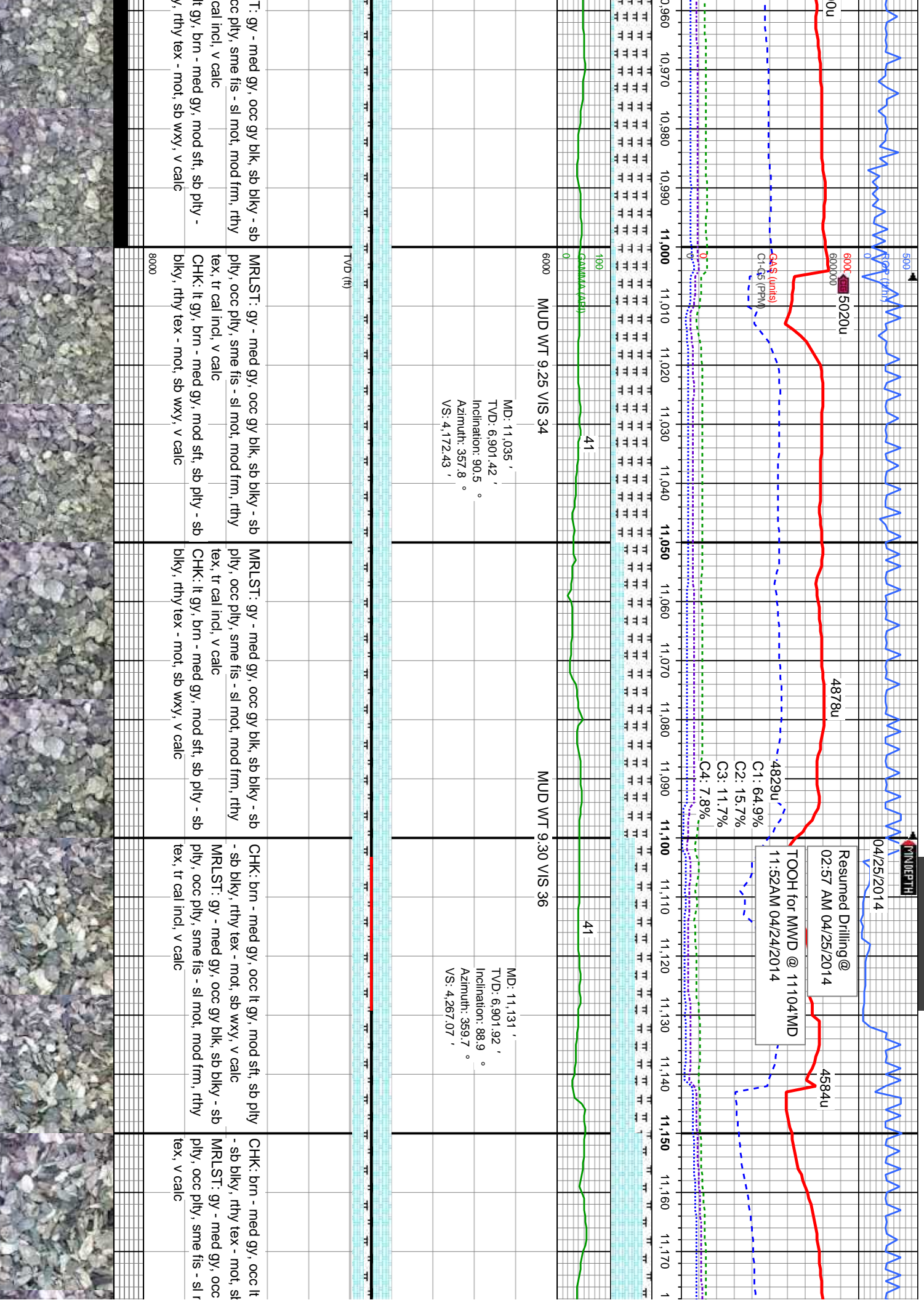
MD: 10,940 '  
TVD: 6,902 '  
Inclination: 90.2 °  
Azimuth: 358.5 °  
VS: 4,078.61 '

MUD WT 9.30 VIS 34

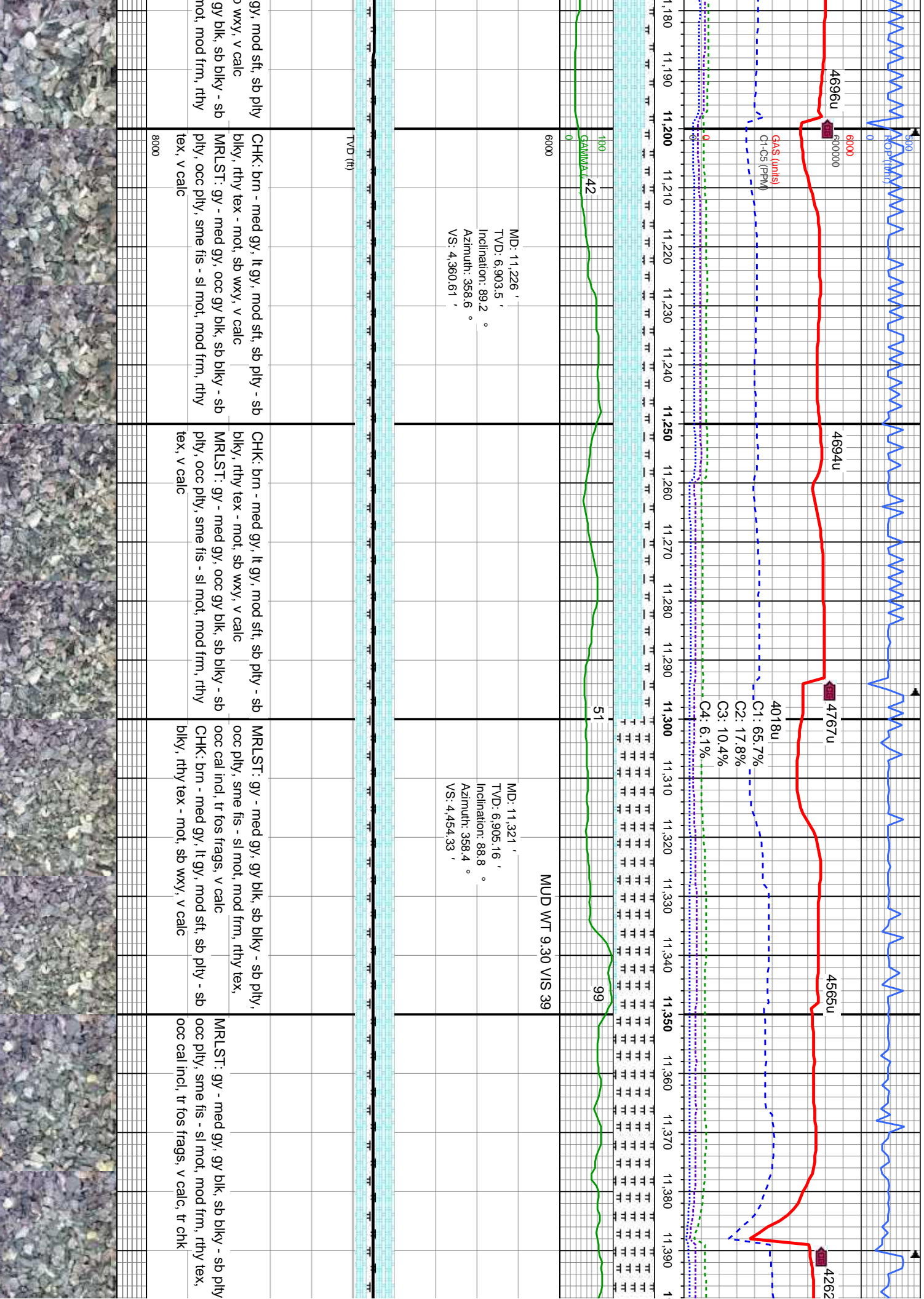
b blkly - sb frm, rthy	MRLST: gy - med gy, occ gy blk, sb blkly - sb ply, occ ply, sme fis - sl mot, mod frm, rthy tex, tr cal incl, tr fos, v calc, tr chk	TVD (ft)	8000	MRLST: gy - med gy, occ gy blk, sb blkly - sb ply, occ ply, sme fis - sl mot, mod frm, rthy tex, v calc CHK: lt gy, brn - med gy, mod sft, sb ply - sb blkly, rthy tex - mot, sb wxy, v calc	MRLST: gy - med gy, occ gy blk, sb blkly - sb ply, occ ply, sme fis - sl mot, mod frm, rthy tex, tr cal incl, v calc CHK: lt gy, brn - med gy, mod sft, sb ply - sb blkly, rthy tex - mot, sb wxy, v calc	MRLS ply, o tex, tr CHK: sb blkly











4696u

4694u

4767u

4565u

4262

GAS (units)  
C1-C5 (PPM)

4018u

C1: 65.7%  
C2: 17.8%  
C3: 10.4%  
C4: 6.1%

6000

MUD WT 9.30 VIS 39

MD: 11,226 '  
TVD: 6,903.5 '  
Inclination: 89.2 °  
Azimuth: 358.6 °  
VS: 4,360.61 '

MD: 11,321 '  
TVD: 6,905.16 '  
Inclination: 88.8 °  
Azimuth: 358.4 °  
VS: 4,454.33 '

TVD (ft)

CHK: brn - med gy, lt gy, mod sft, sb pty - sb blk, rthy tex - mot, sb wxy, v calc  
MRLST: gy - med gy, occ gy blk, sb blk - sb pty, occ pty, sme fis - sl mot, mod frm, rthy tex, v calc

CHK: brn - med gy, lt gy, mod sft, sb pty - sb blk, rthy tex - mot, sb wxy, v calc  
MRLST: gy - med gy, occ gy blk, sb blk - sb pty, occ pty, sme fis - sl mot, mod frm, rthy tex, v calc

MRLST: gy - med gy, gy blk, sb blk - sb pty, occ pty, sme fis - sl mot, mod frm, rthy tex, occ cal incl, tr fos frags, v calc  
CHK: brn - med gy, lt gy, mod sft, sb pty - sb blk, rthy tex - mot, sb wxy, v calc

MRLST: gy - med gy, gy blk, sb blk - sb pty, occ pty, sme fis - sl mot, mod frm, rthy tex, occ cal incl, tr fos frags, v calc, tr chk



