



Scale: 5" / 100'  
Measured Depth Log

Well Name Schneider HD 11-392HN

Location SMSW S19-T4N-R67W

State COLORADO

County WELD

Country USA

Rig Number XTREME 17

API Number 05-123-41747

Field WATTENBERG

Region DJ BASIN

Drilling Completed 10/24/2015

Spud Date 10/21/2015

Surface Coordinates 1120' FSL, 280' FWL

Bottom Hole Coordinates PROJECTED:  
1' FSL, 2170' FEL

Ground Elevation 4735'

K.B. Elevation 4751'

Logged Interval 6000' To 14707'

Total Depth 14707'

Formation NIO C CHALK

Type of Drilling Fluid OBM

## Operator

Company Great Western Oil and Gas

Address 1801 Broadway, Ste 500  
Denver, CO 80202

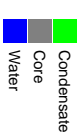
## Geologist

Name Shane DePinto and Beth Storey

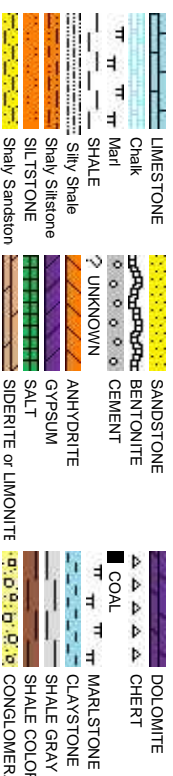
Company Terra Guidance

Address 1298 O Road  
Loma CO 81524  
(970) 260-5408

## Zone Color Coding



## Rock Types





## Accessories

### Fossils

F FOSSIL	- ARGILLACEOUS	GLAUCONITE	
GASTROPOD	/ ARGILLITE GRAIN	GYPSIFEROUS	
ALGAE	Ø OOOLITE	B BENTONITE	HEAVY MINERAL
AMPHIPODA	O OSTRACOD	BITUMENOUS SUBSTANCE	K KAOLIN
BELEMNITE	PELECYPOD	BRECCIA FRAGMENTS	MARLSTONE
BIOCLASTIC	PELLET	CALCAREOUS	MINERAL CRYSTALS
BRACHIOPOD	PISOLITE	CARBONACEOUS FLAKES	NODULES
BRYOZOA	PLANT REMAINS	CHTDK	PHOSPHATE PELLET:
CEPHALOPOD	PLANT SPORES	CHTLT	P PYRITE
CORAL	SCAPHOPOD	COAL - THIN BEDS	SALT CAST
CRINOID	STROMATOPOROID	DOLOMITIC	SANDY
ECHINOID		FELDSPAR	SILICEOUS
FISH		FERRUGINOUS PELLET	SILTY
FORAMINIFERA	ANHYDRITIC	FERRUGINOUS	TUFFACEOUS
			SILTSTONE STRINGER

### Stringer

ANHYDRITE STRINGER
BENTONITE STRINGER
COAL STRINGER
DOLOMITE STRINGER
GYPSUM STRINGER
LIMESTONE STRINGER
MARLSTONE (CALC) STRG
MARLSTONE (DOL) STRG
SANDSTONE STRINGER
SHALE STRINGER
SILTSTONE STRINGER

## Other Symbols

### Oil Show

ORGANIC
P PINPOINT
V VUGGY

### Engineering

DEAD
EVEN
QUESTIONABLE
SPOTTED STAINING
BIT
CASING
CONNECTION (LEFT)
CONNECTION (RIGHT)
CONNECTION GAS
CORE - LOST
CORE - RECOVERED
DST INTERVAL
FAULT

### Porosity

E EARTHLY
F FENESTRAL
F FRACTURE
INTERCRYSTALLINE
INTEROOLITIC
MOLDIC

### Rounding

L LITHOGRAPHIC
MX MICROXLN
MS MUDSTONE
PS PACKSTONE
WSS WACKESTONE

### Sorting

M MODERATE
P POOR
W WELL

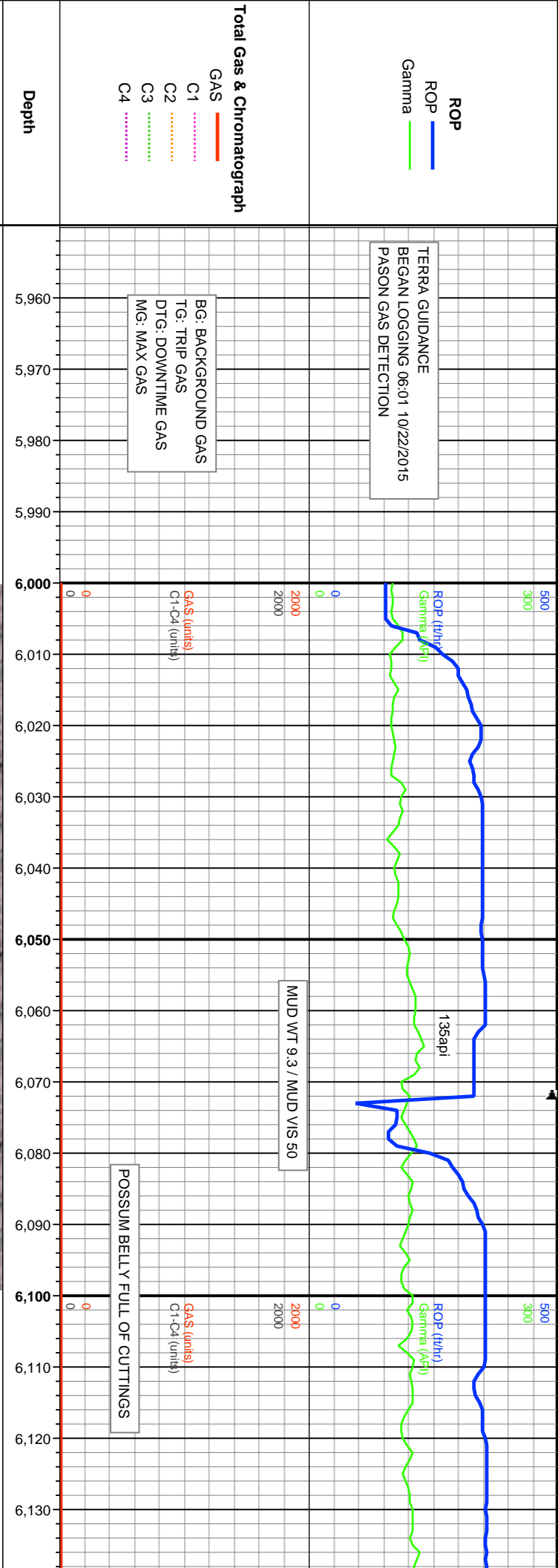
### Textures

B3 BOUNDSTONE
C CHALKY
CX CRYPTOXLN
E EARTHLY
FX FINELYXLN
GS GRANSTONE



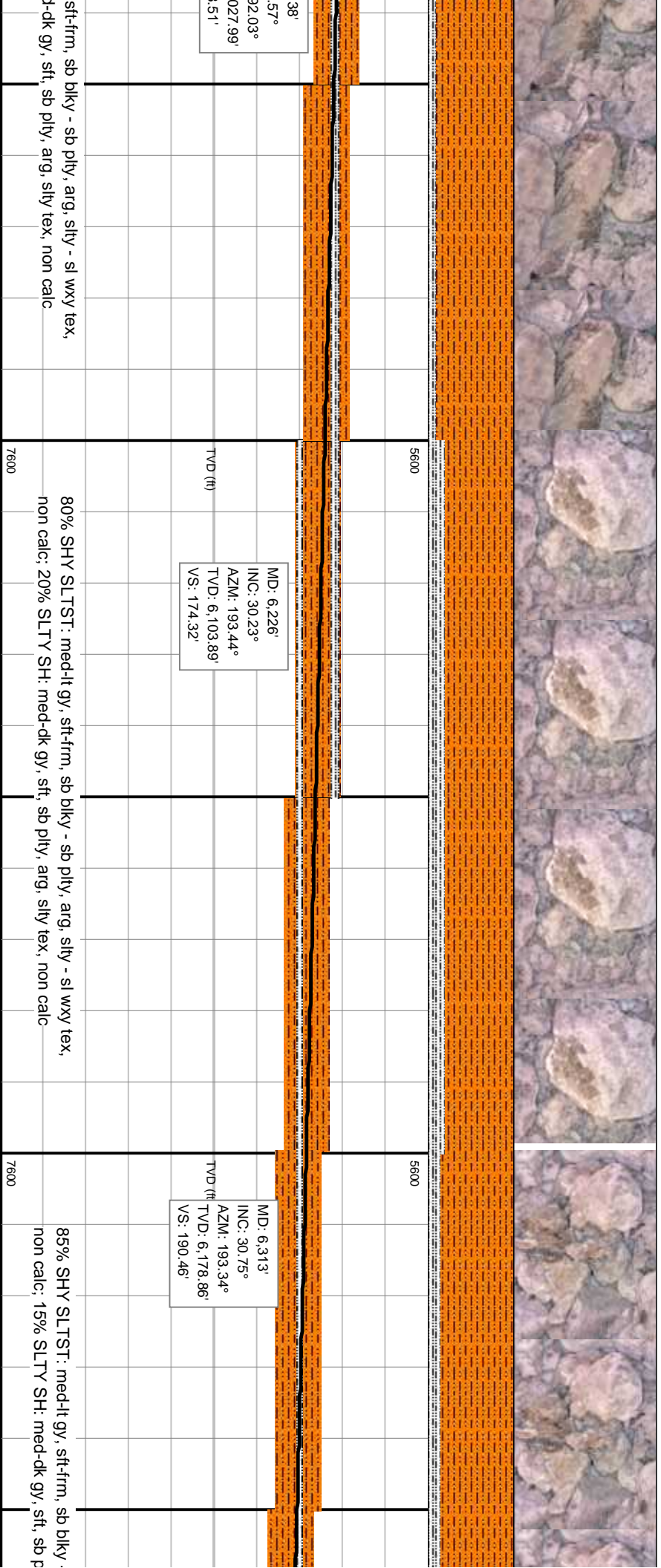
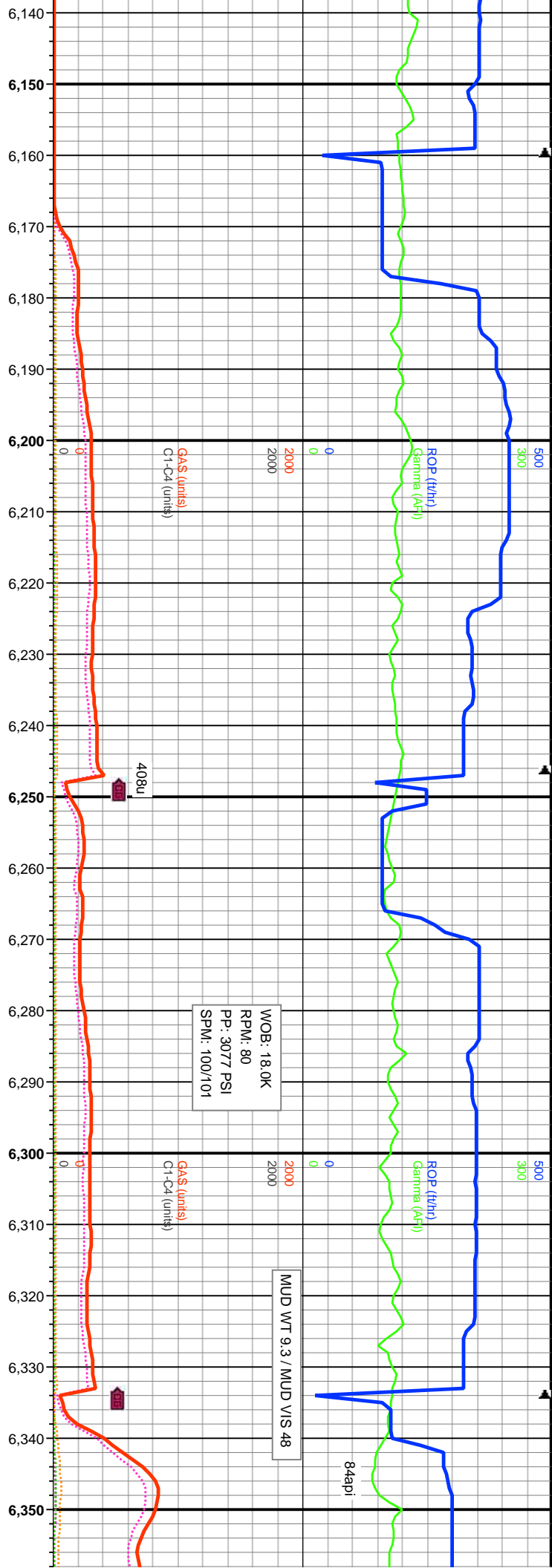
BRECCIA  
TILL  
TUFF  
IGNEOUS  
METAMORPHIC



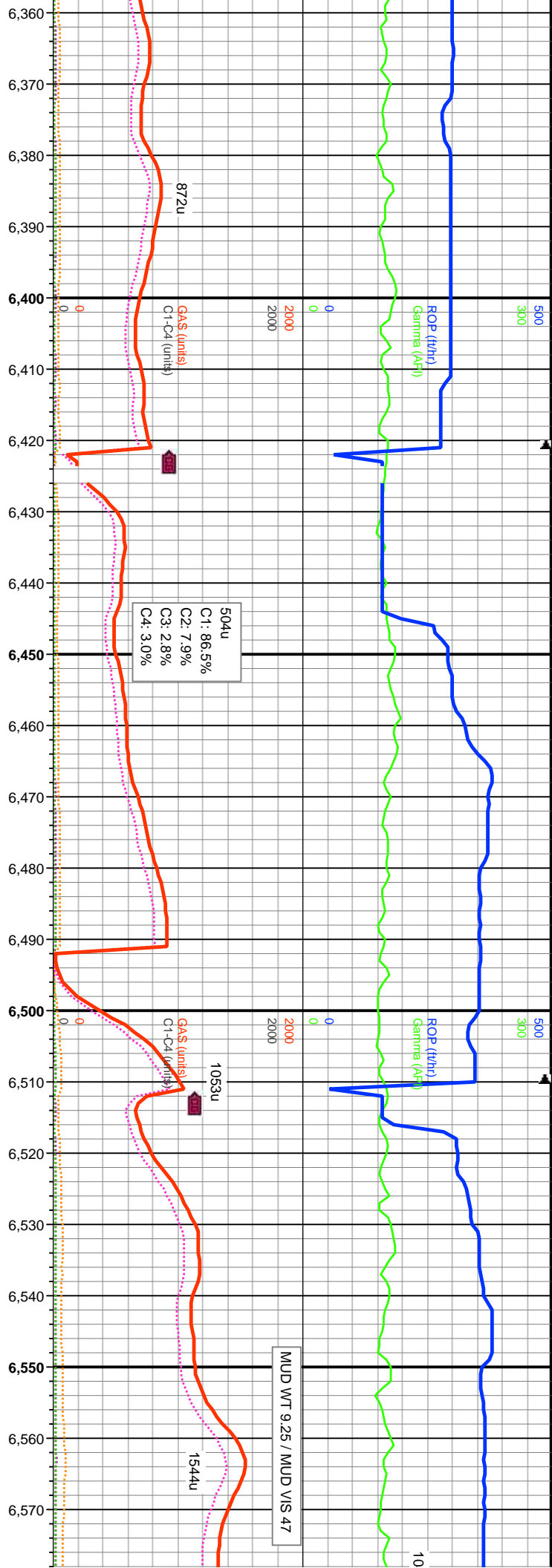


Images				
% Lithology				
Well Bore TVD				
	Bit #: 1 Type: HCC AT506S Size: 8.5 Depth In: 1,444' Jets: 6x18 S/N: 7045950		MD: 6.051' INC: 30.42° AZM: 190.69° TVD: 5,953.02' VS: 143.83'	
	90% SHY SLTST: med-lt gy, sft-frm, sb blkly - sb plty, arg, silty - sl wxy tex, non calc; 10% SLTY SH: med-dk gy, sft, sb plty, arg, silty tex, non calc		90% SHY SLTST: med-lt gy, non calc; 10% SLTY SH: med	









MD: 6,401'  
INC: 30.54°  
AZM: 190.42°  
TVD: 6,254.57'  
VS: 205.76'

MD (ft)

MD: 6,488'  
INC: 30.52°  
AZM: 189.44°  
TVD: 6,329.51'  
VS: 219.4'

TVD (ft)

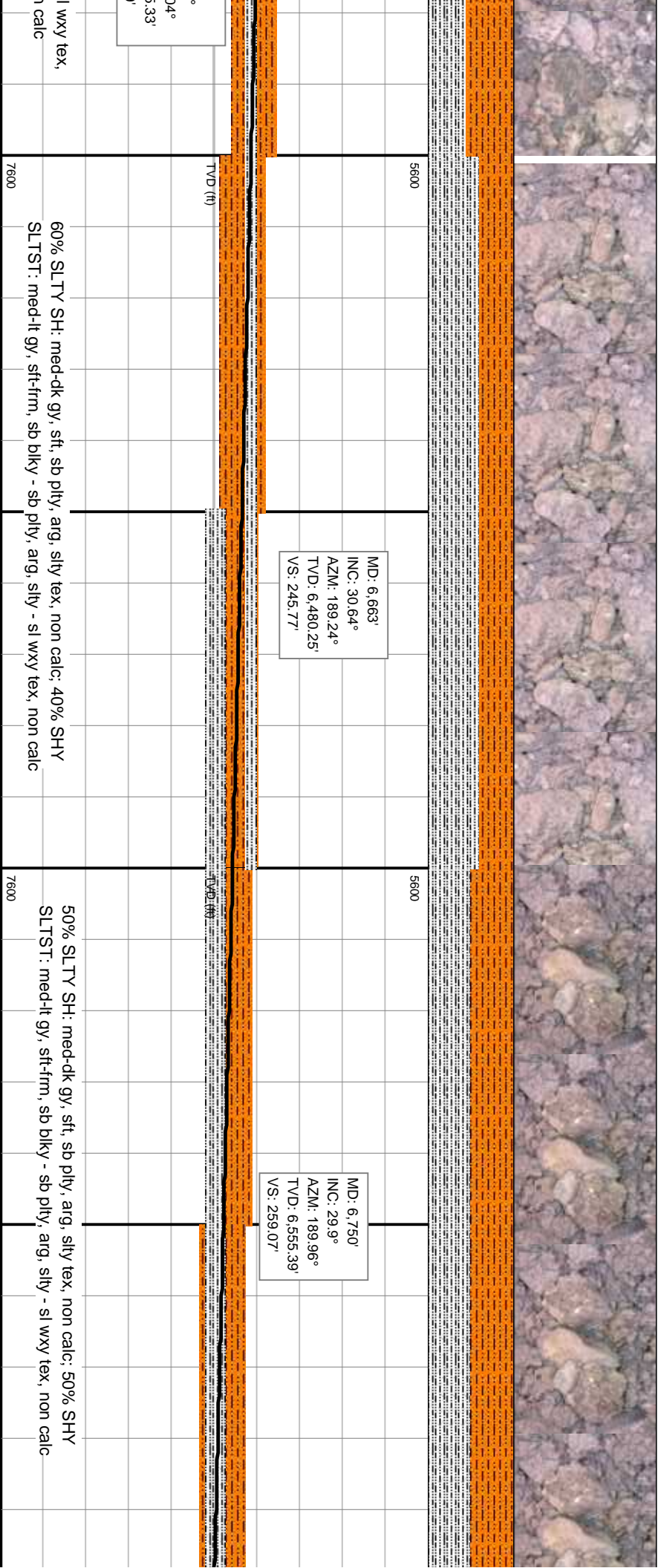
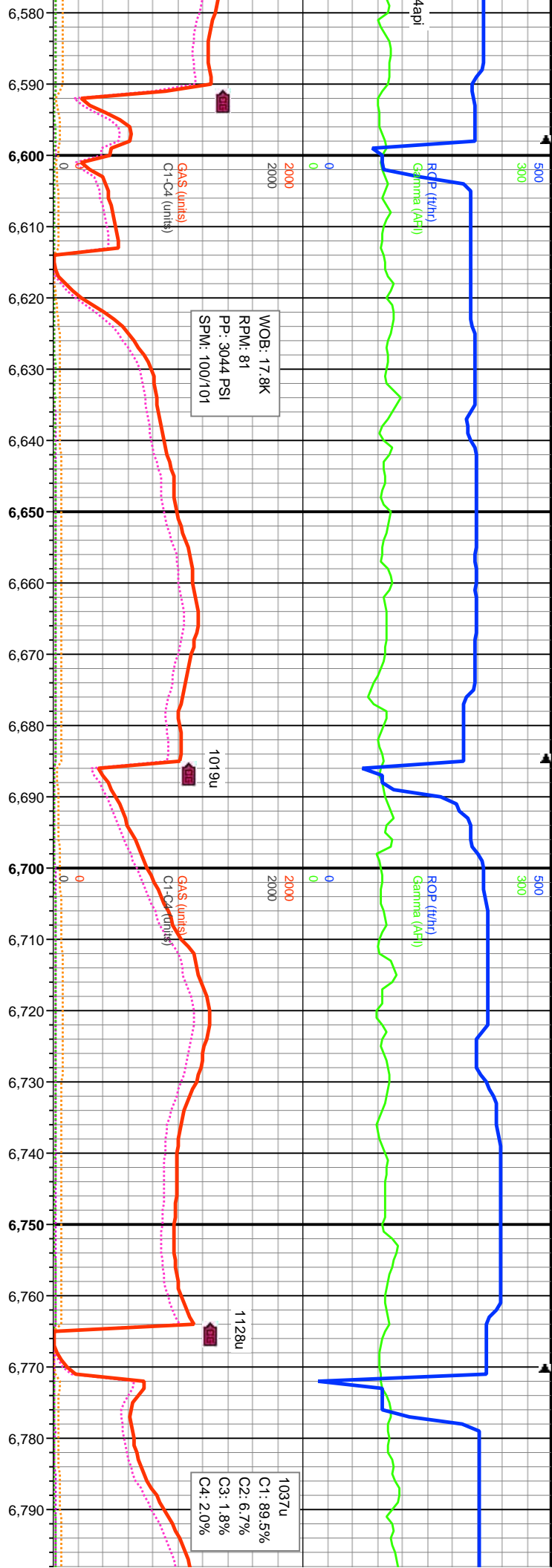
MD: 6,576'  
INC: 30.48°  
AZM: 189.1°  
TVD: 6,400'  
VS: 232.66'

sb pily, arg, silty - sl wxy tex,  
ily, arg, silty tex, non calc

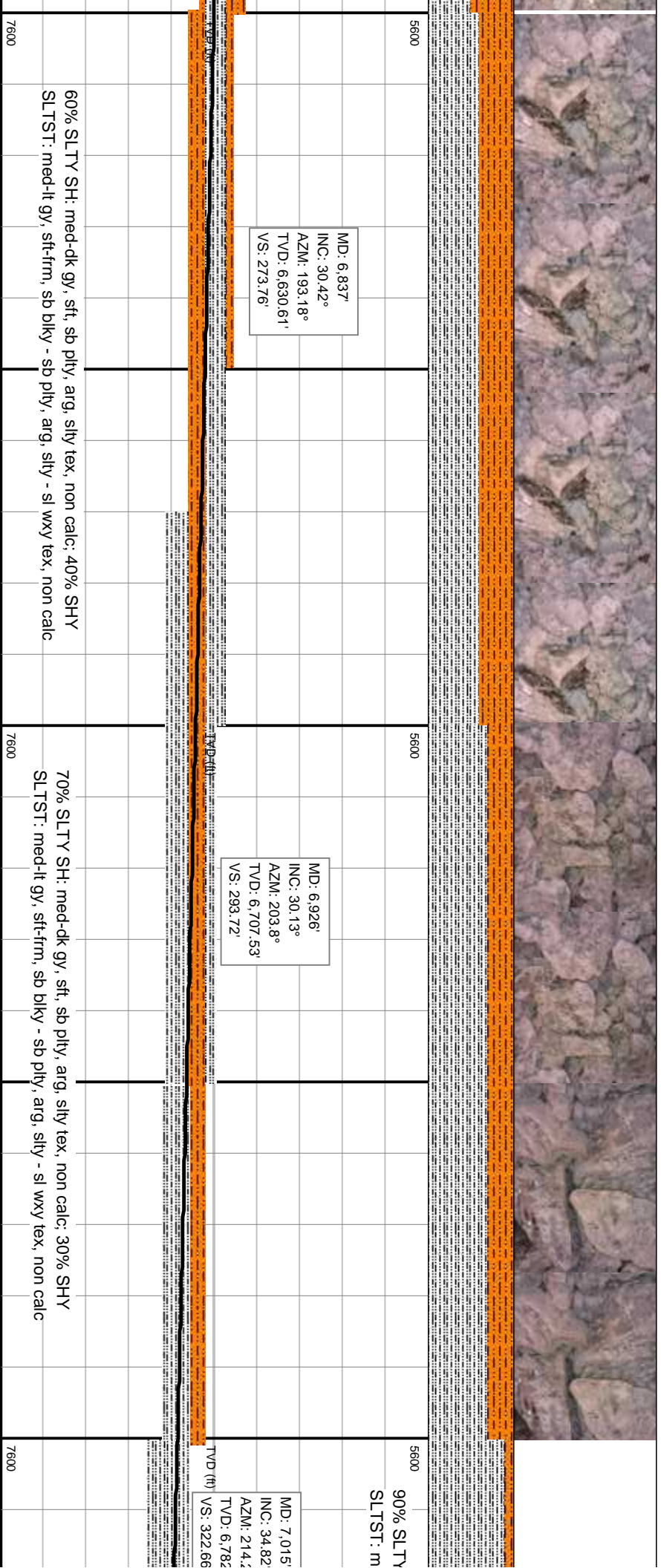
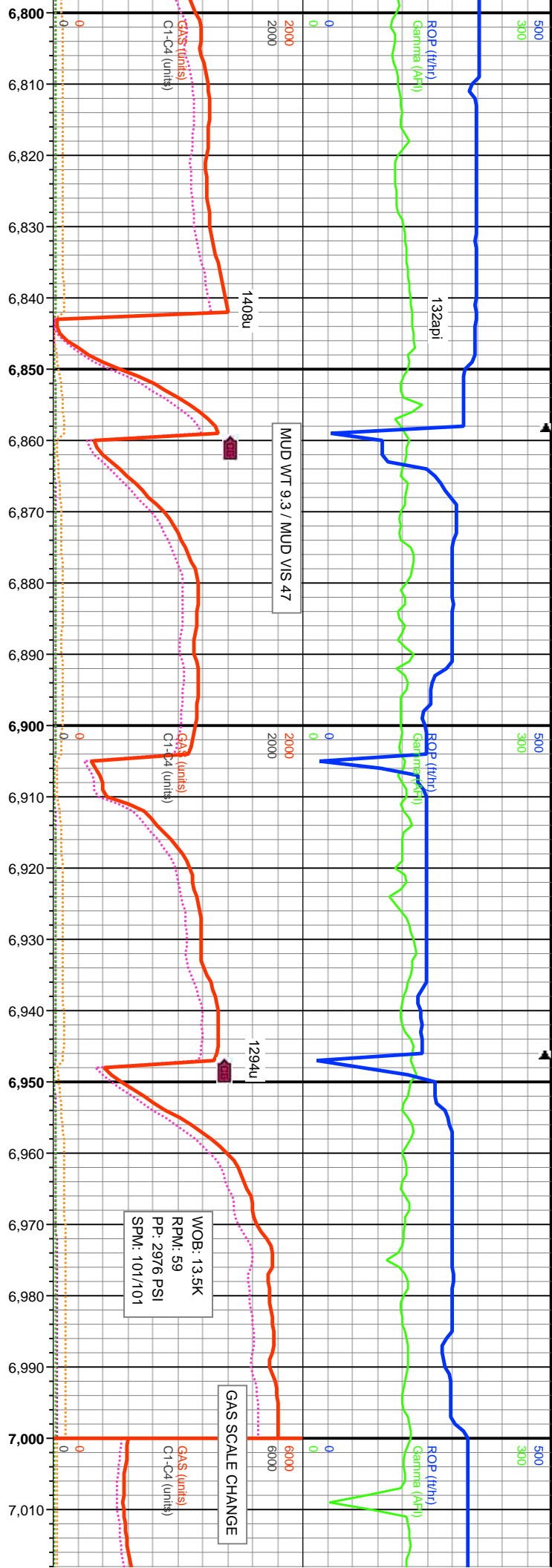
80% SHY SLTST: med-lt gy, sft-firm, sb blkly - sb pily, arg, silty - sl wxy tex,  
non calc; 20% SLTY SH: med-dk gy, sft, sb pily, arg, silty tex, non calc

55% SHY SLTST: med-lt gy, sft-firm, sb blkly - sb pily, arg, silty - s  
non calc; 45% SLTY SH: med-dk gy, sft, sb pily, arg, silty tex, non

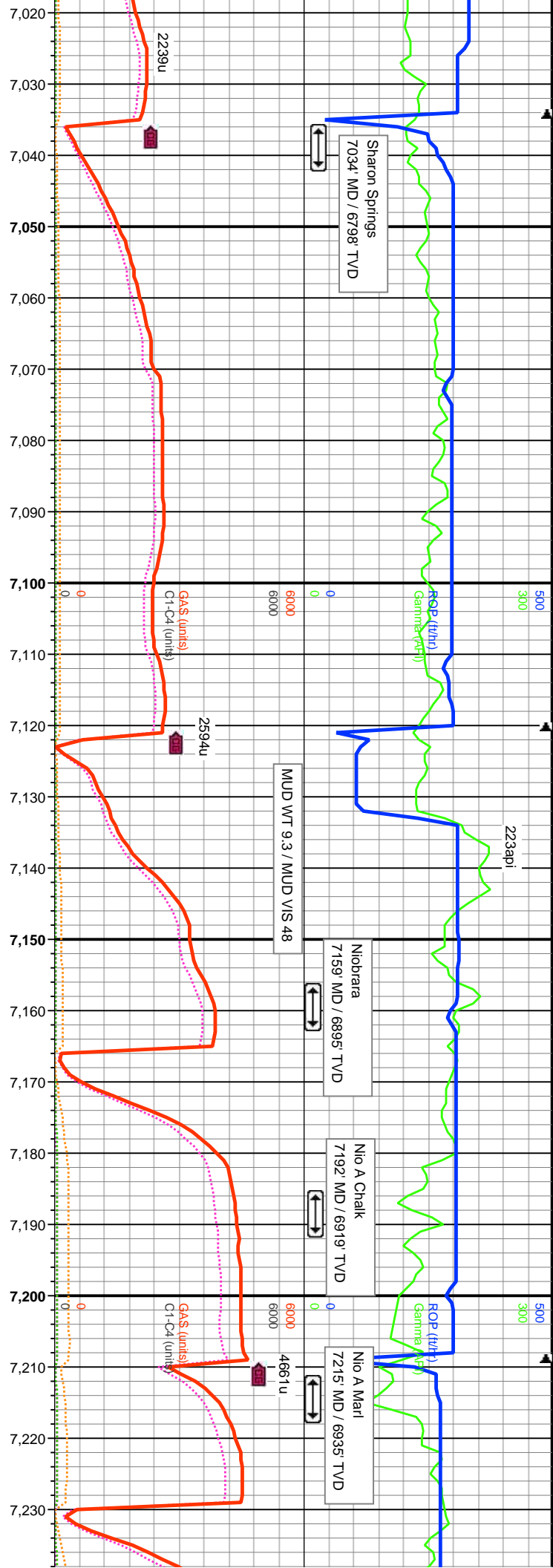










SH: med-dk gy, sft, sb pily, arg, slty tex, non calc; 10% SHY  
ed-it gy, sft-frn, sb blkly - sb pily, arg, slty - sl wxy tex, non calc

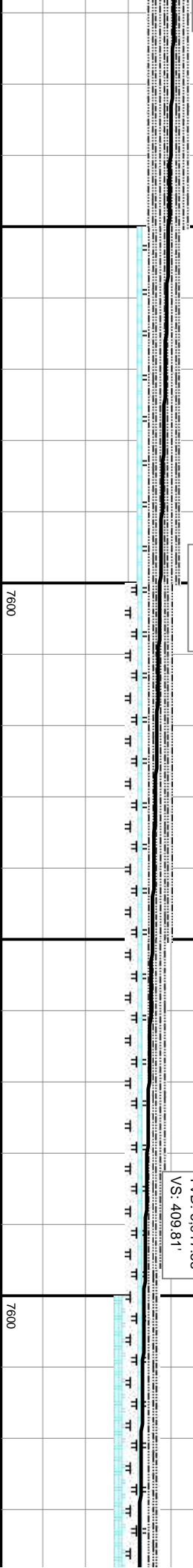
56100% SLTY SH: med-dk gy, sft, sb plty,  
arg, silty tex, non calc, tr bent

85% MARL: dk-med gy, dk gy brn, frm-hd, sb blkly-sb plty, slty mot tex, v calc; 15% CHK: dk brn, mod sft, lam, sb plty-sb blkly, wxy-rtly tex, v calc, slty tex

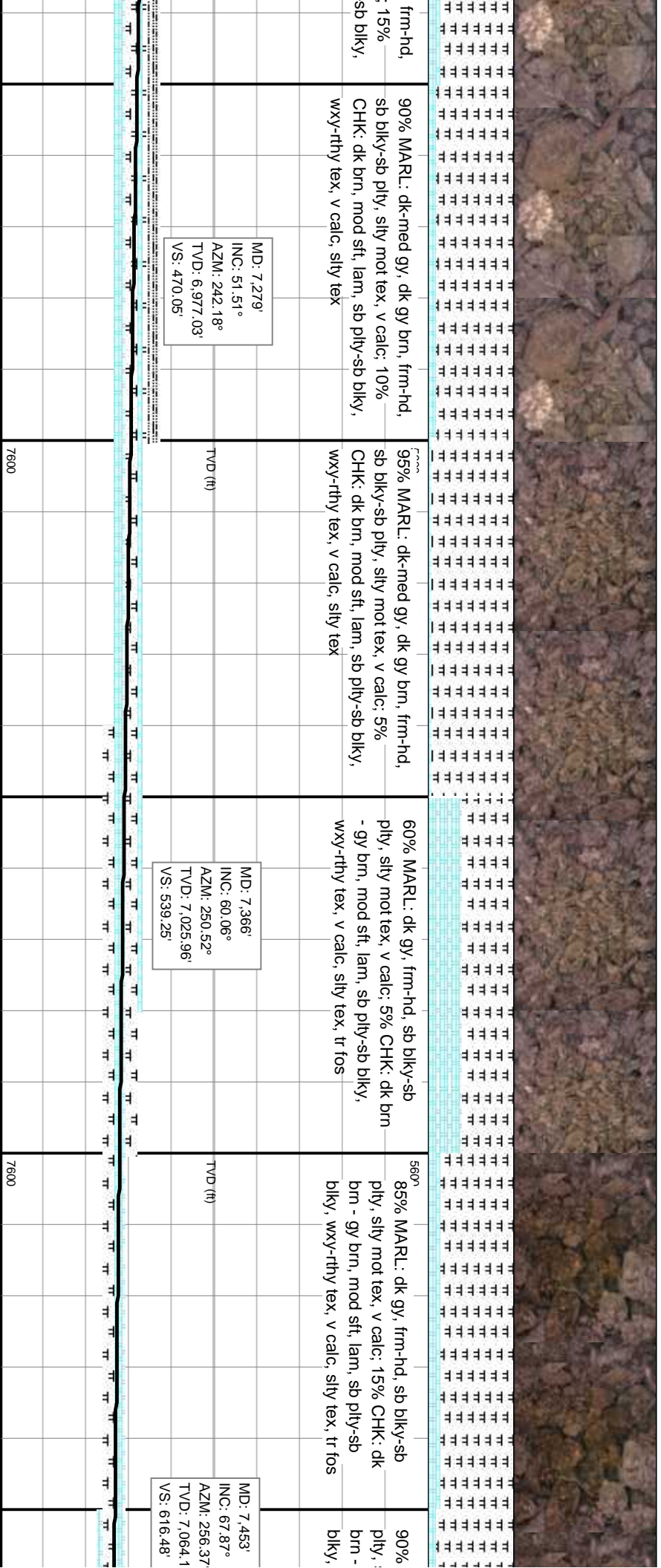
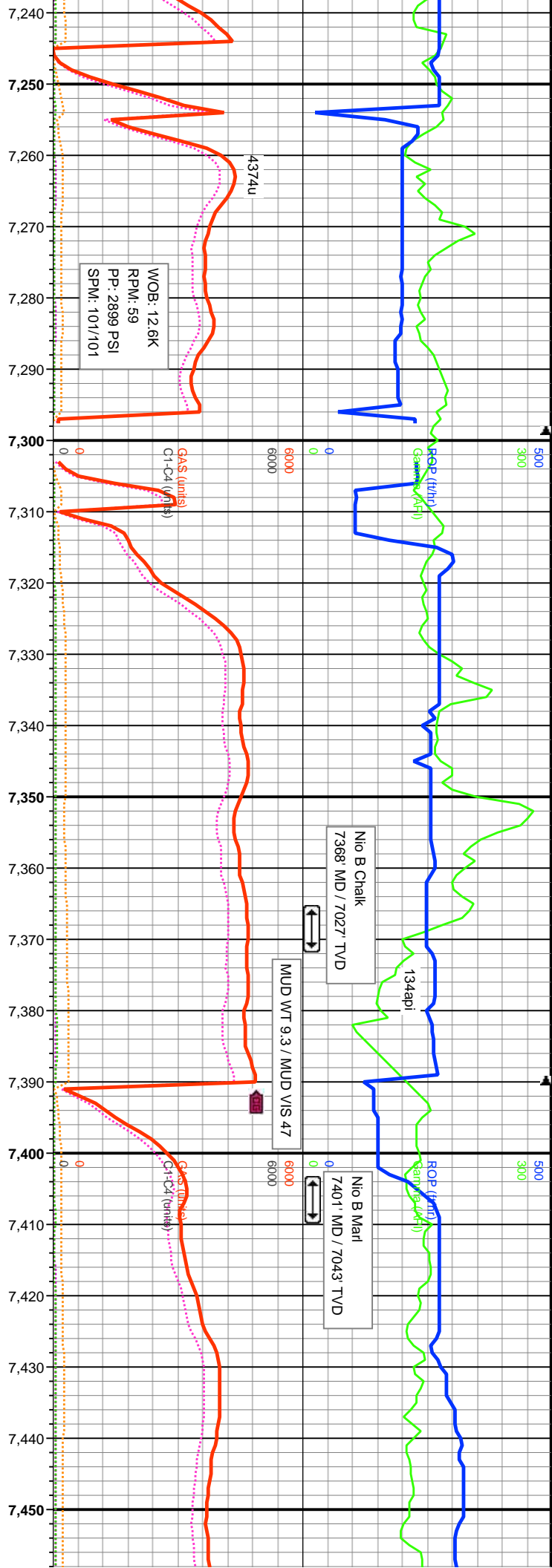
<sup>5</sup>.85% MARL: dk-med gy, dk gy brn, sb blk-y-sb ply, sily mot tex, v calc CHK: dk brn, mod sft, lam, sb ply-wxy-rthy tex, v calc, sily tex

25°  
2.65'

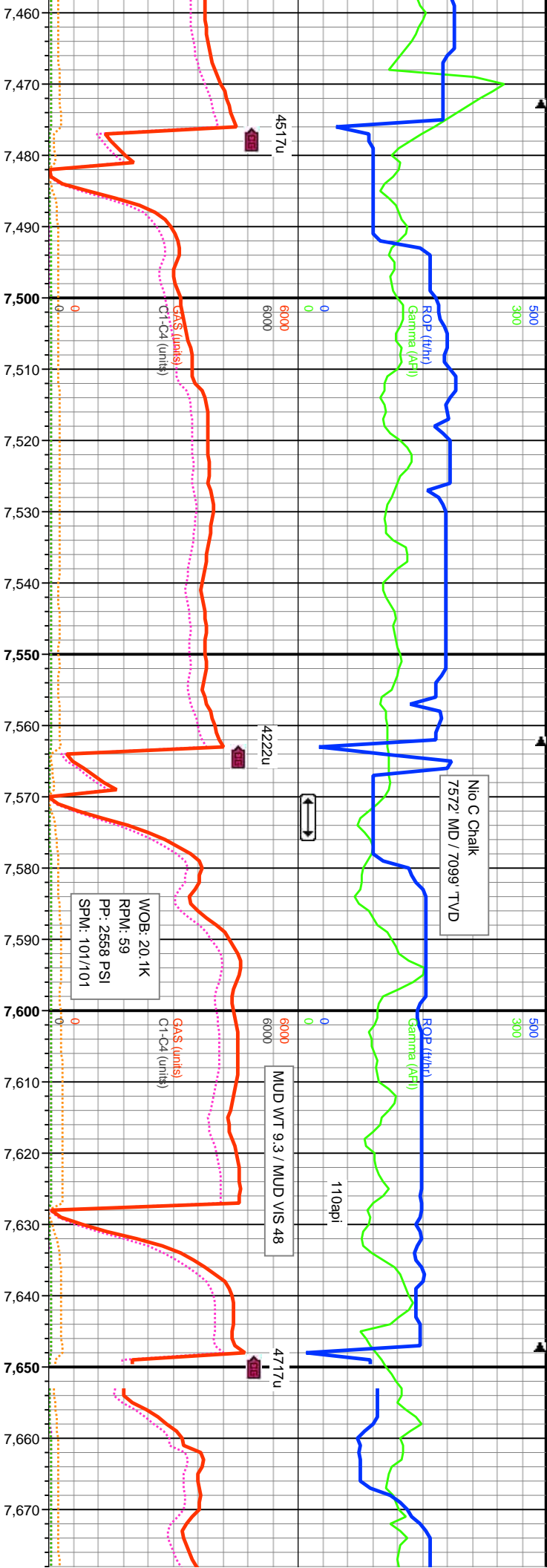
MD: 7,102'  
INC: 39.24°  
AZM: 223.4°  
TVD: 6,852.14'  
VS: 360.95'

TV<sub>D</sub> (ft)

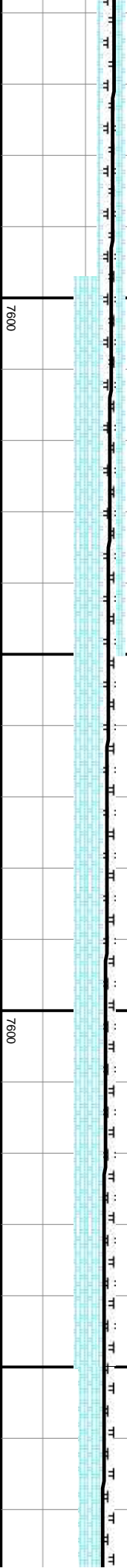




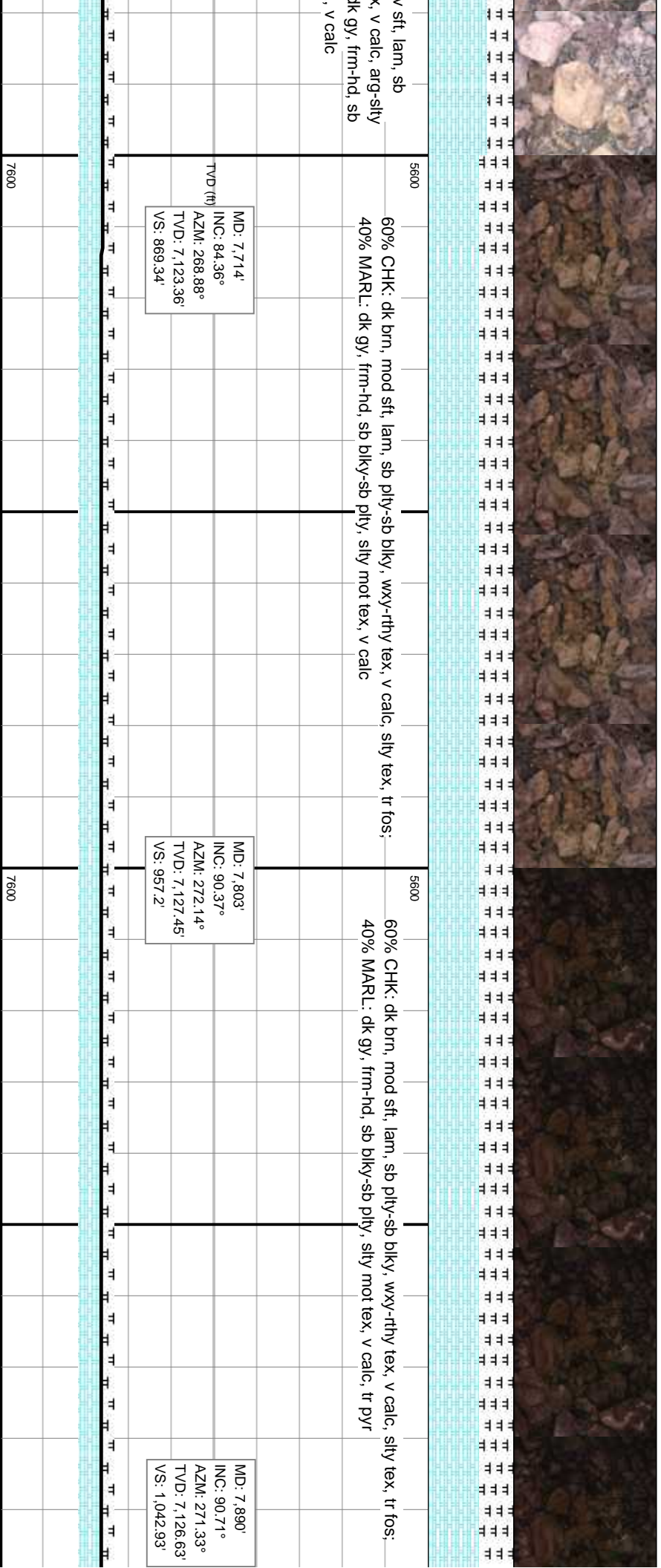
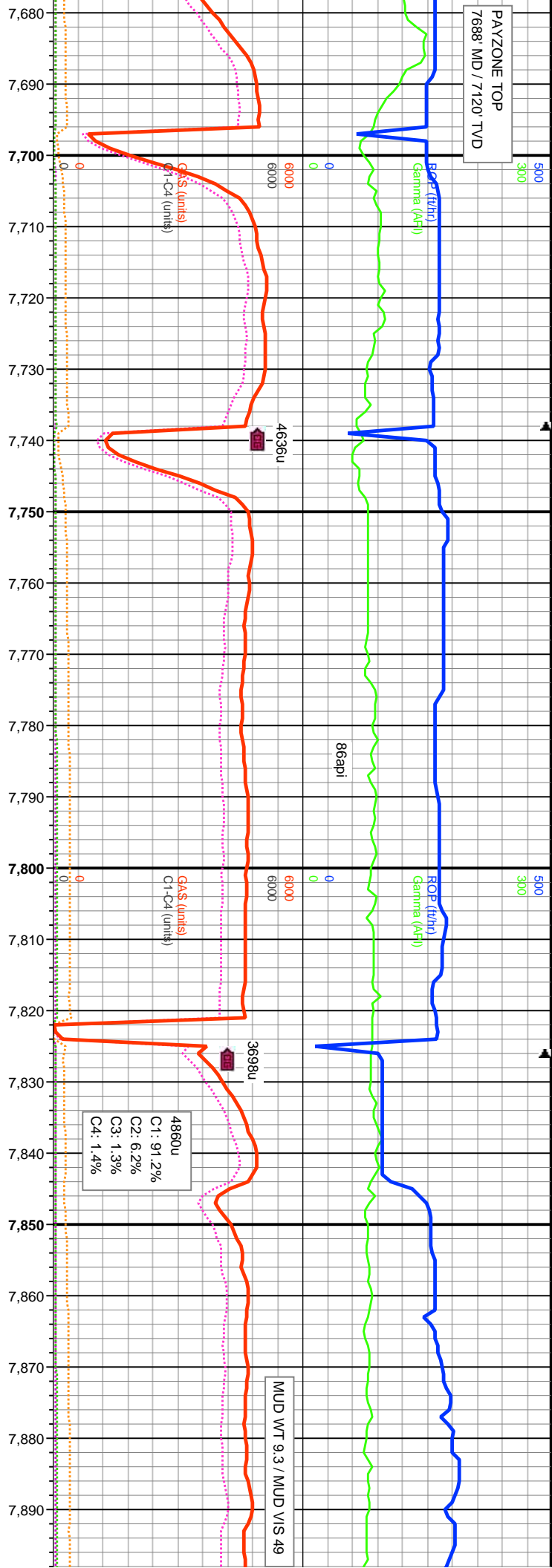




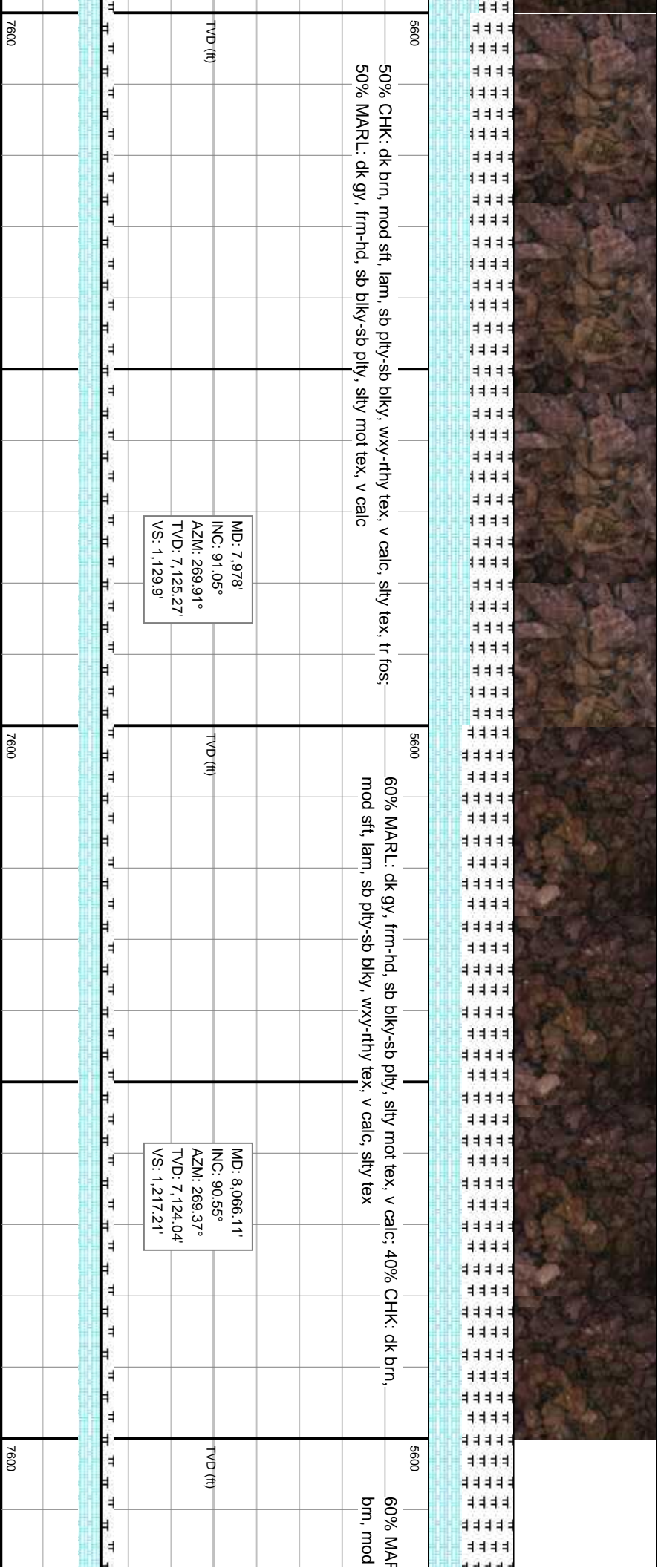
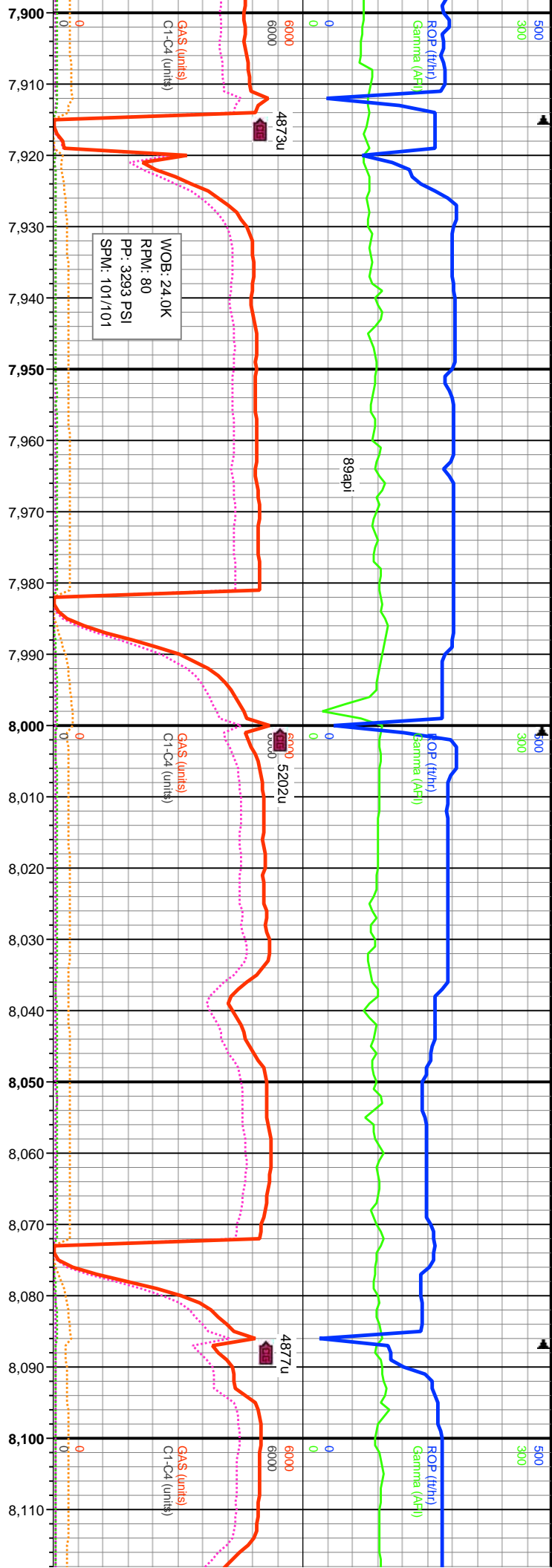
5600	MARL: dk gy, frm-hd, sb blk-y-sb 95% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 5% CHK: dk brn - gy brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr fos	75% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 25% CHK: dk brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr fos	5600	70% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 30% CHK: dk brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr fos	70% CHK: dk brn-lt gy, r ply-sb blk-y, wxy-rthy tex, tex, tr fos; 30% MARL: c blk-y-sb ply, silty mot tex
4					



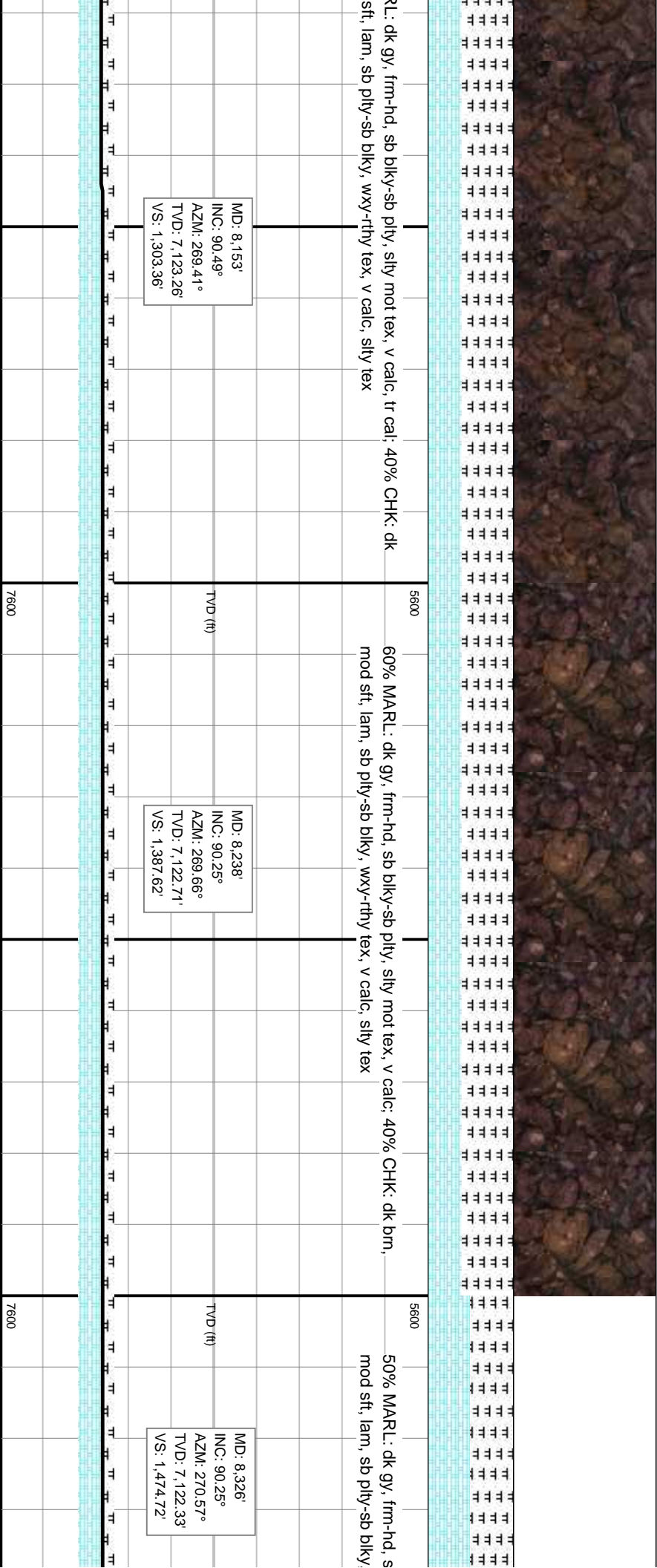
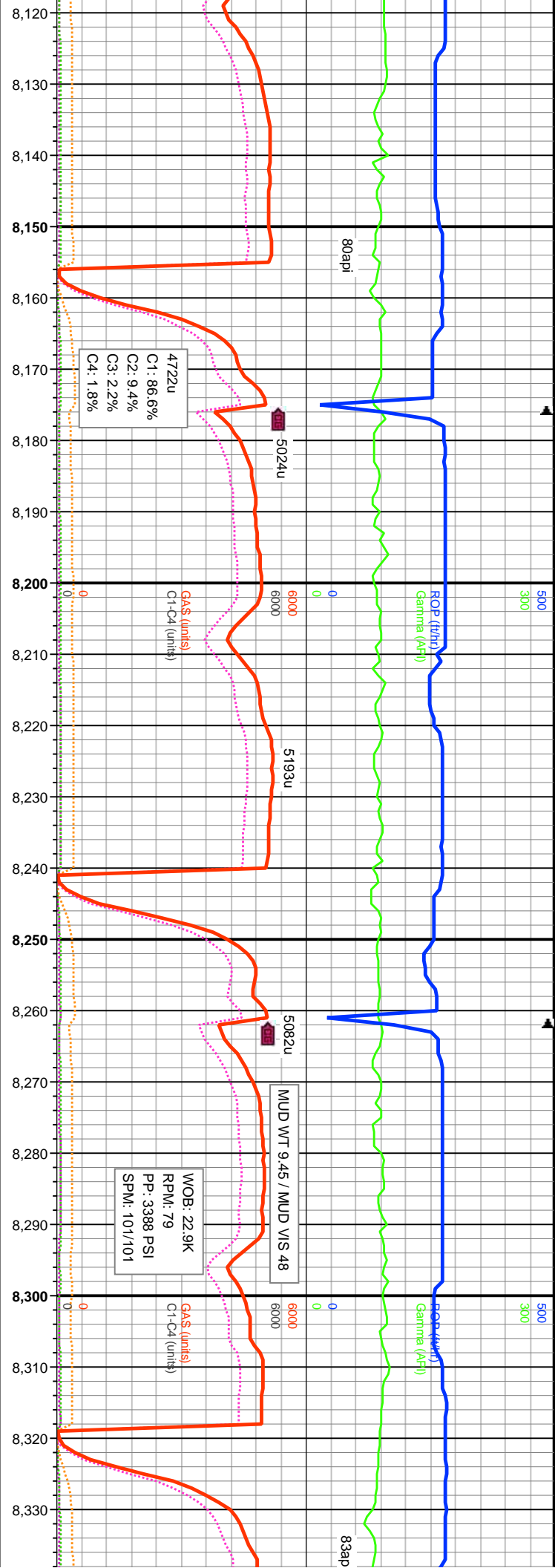




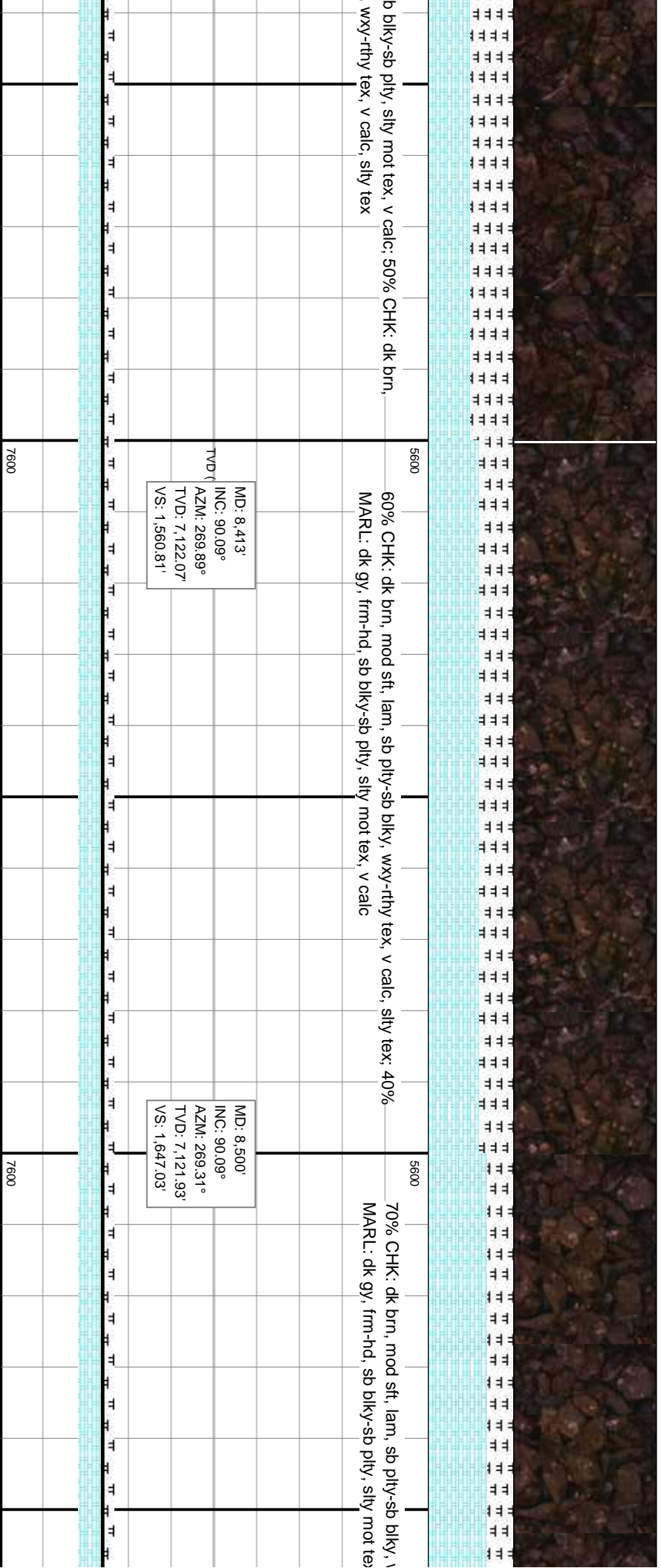
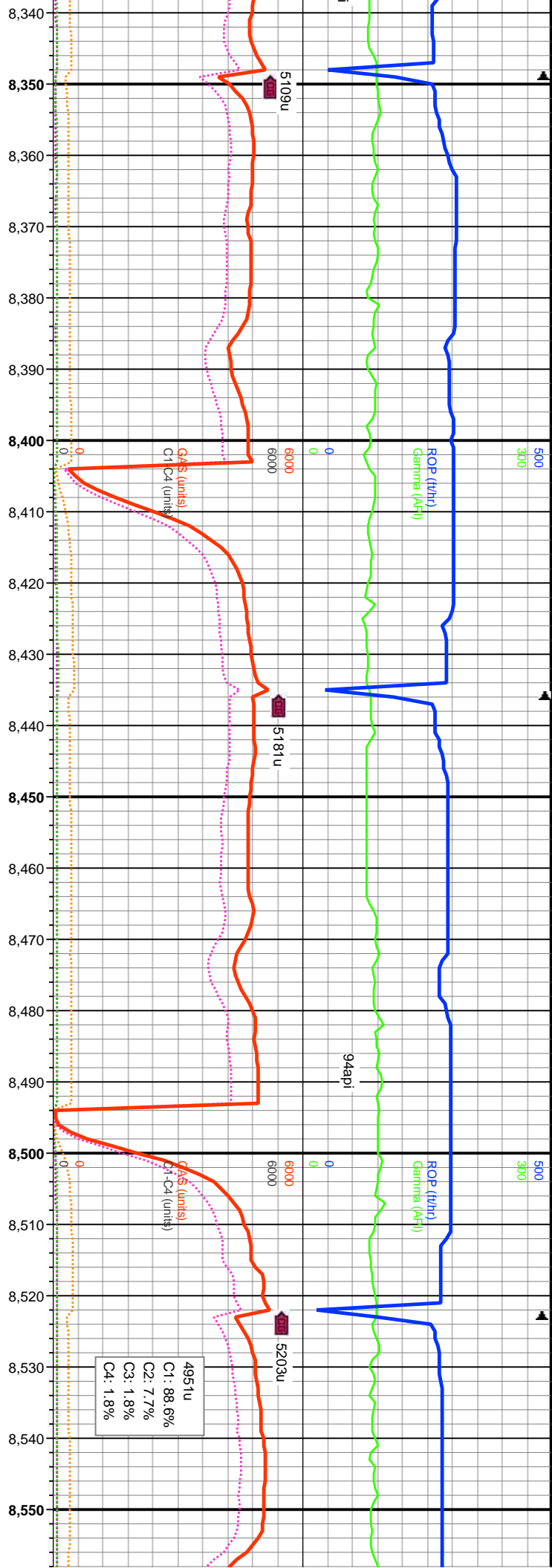




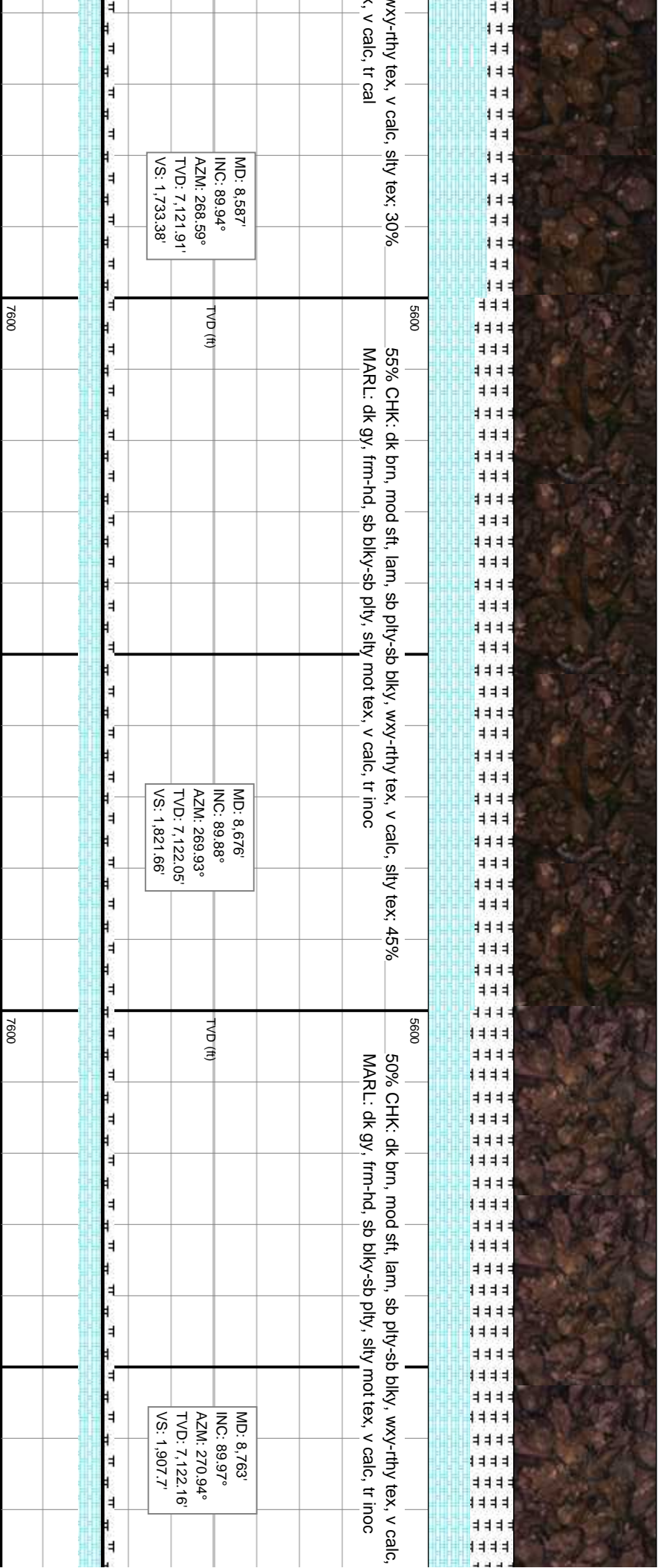
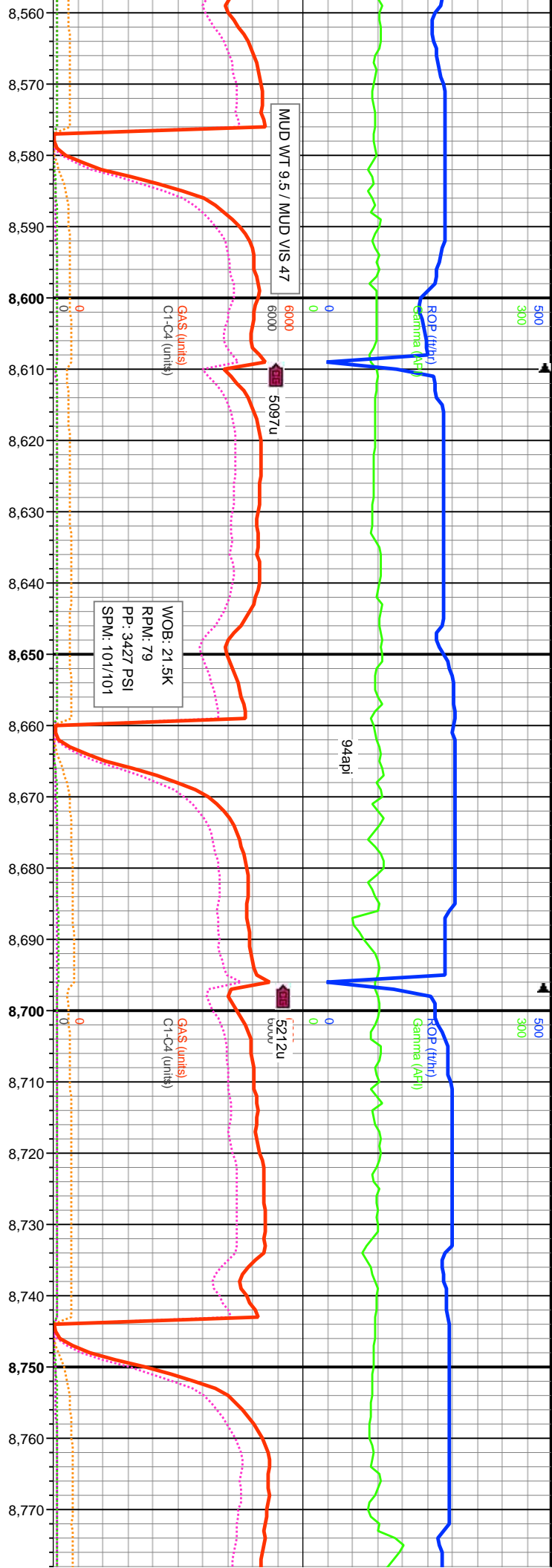




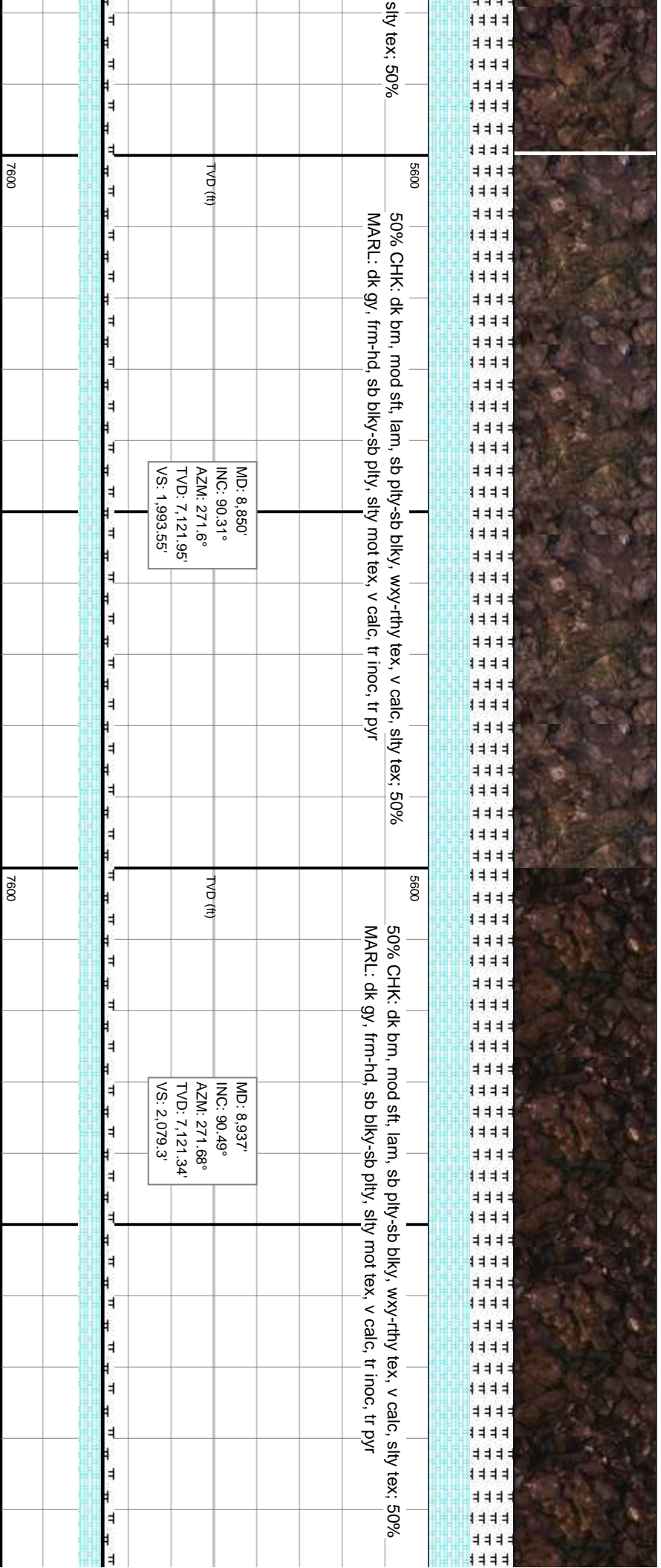
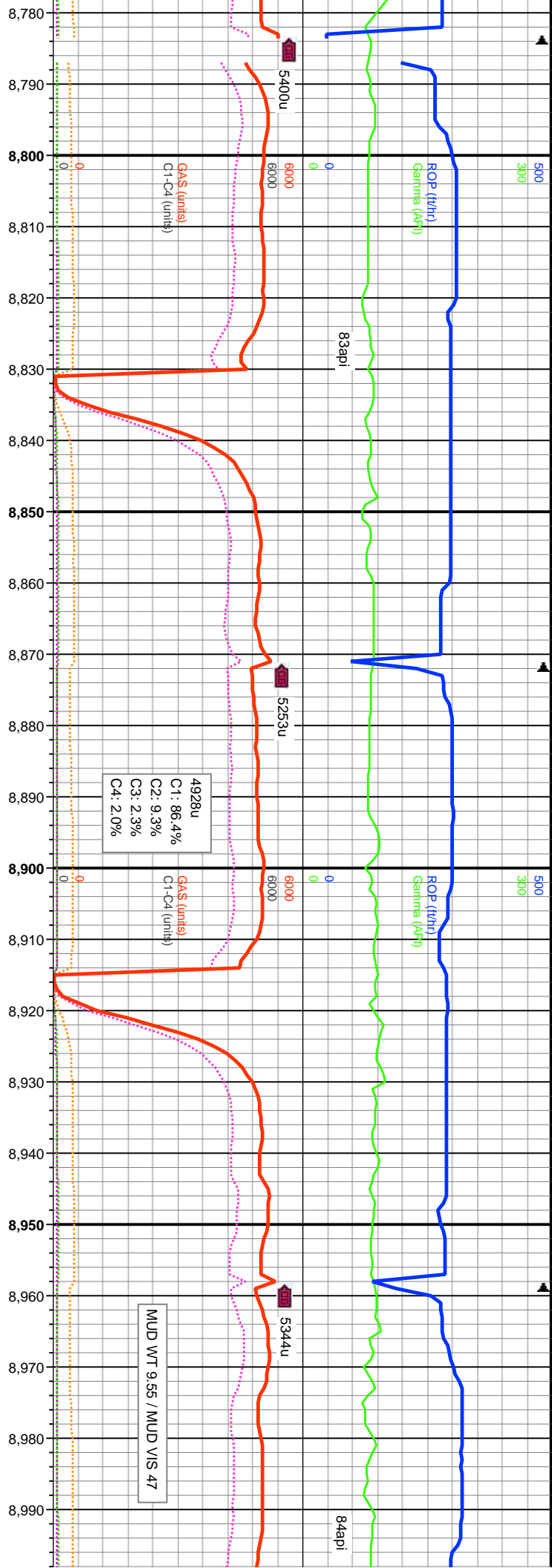




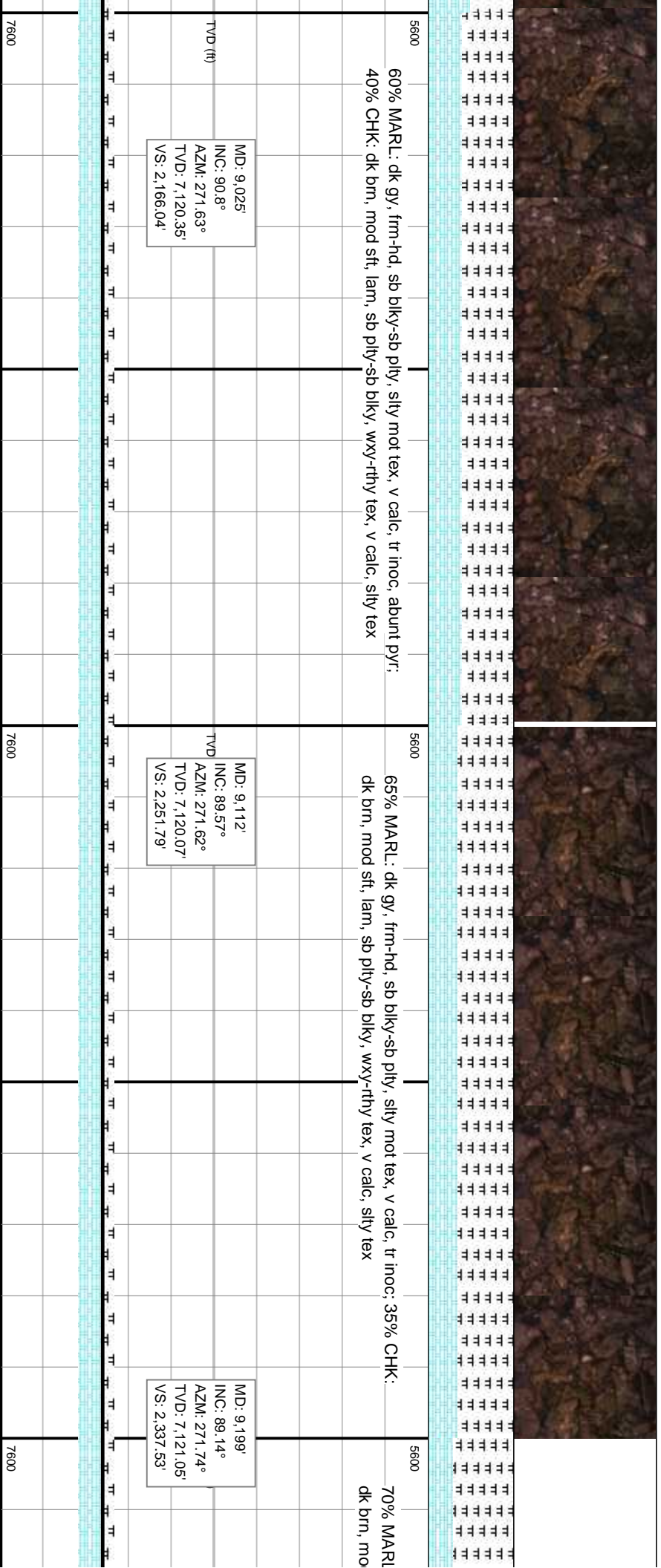
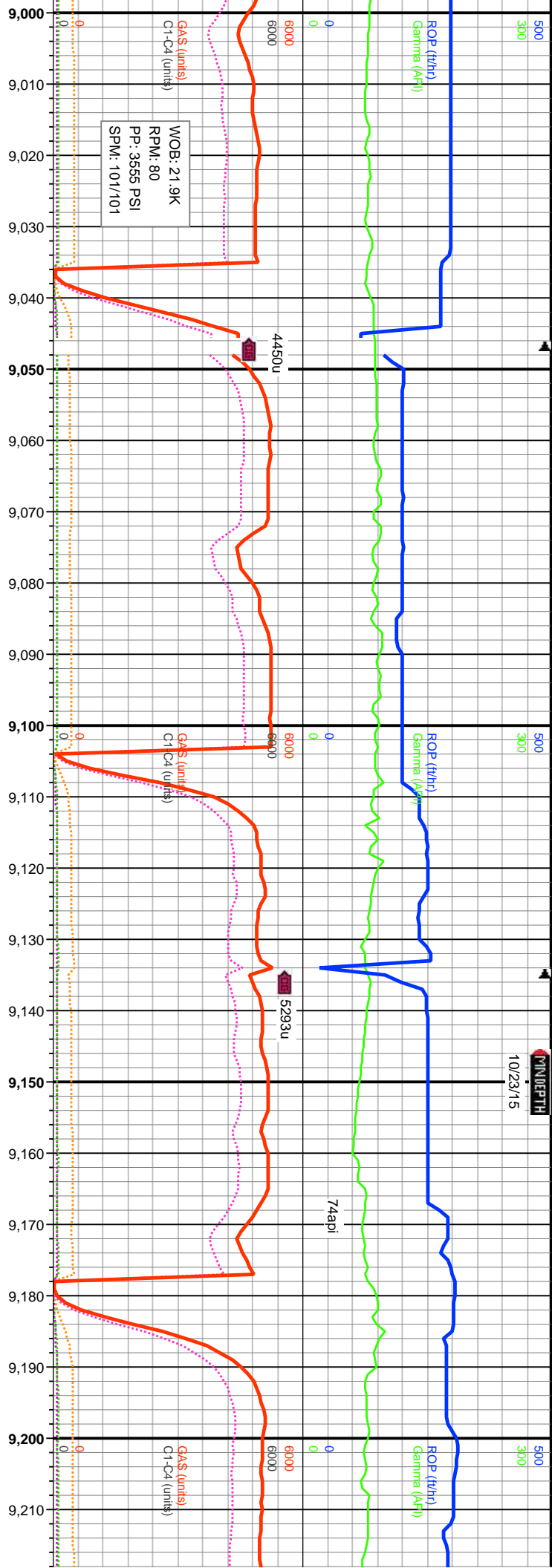




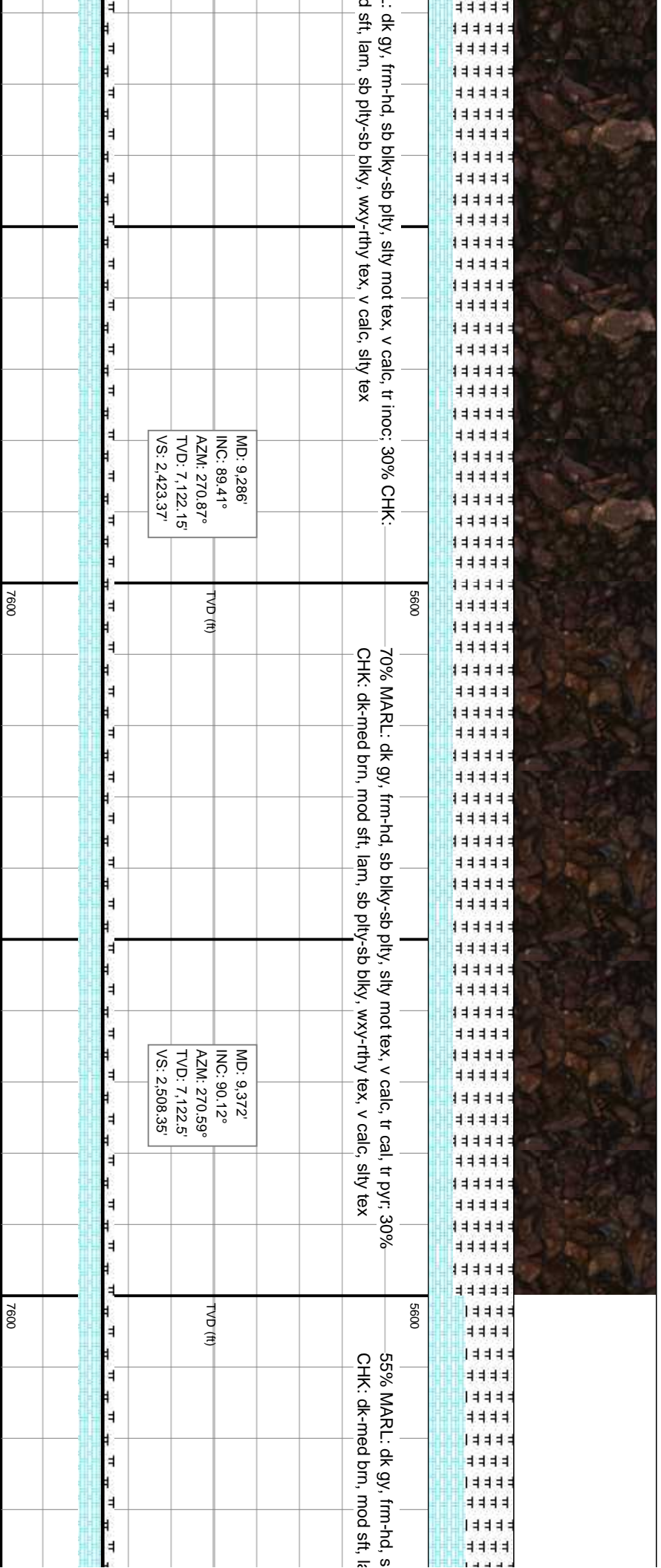
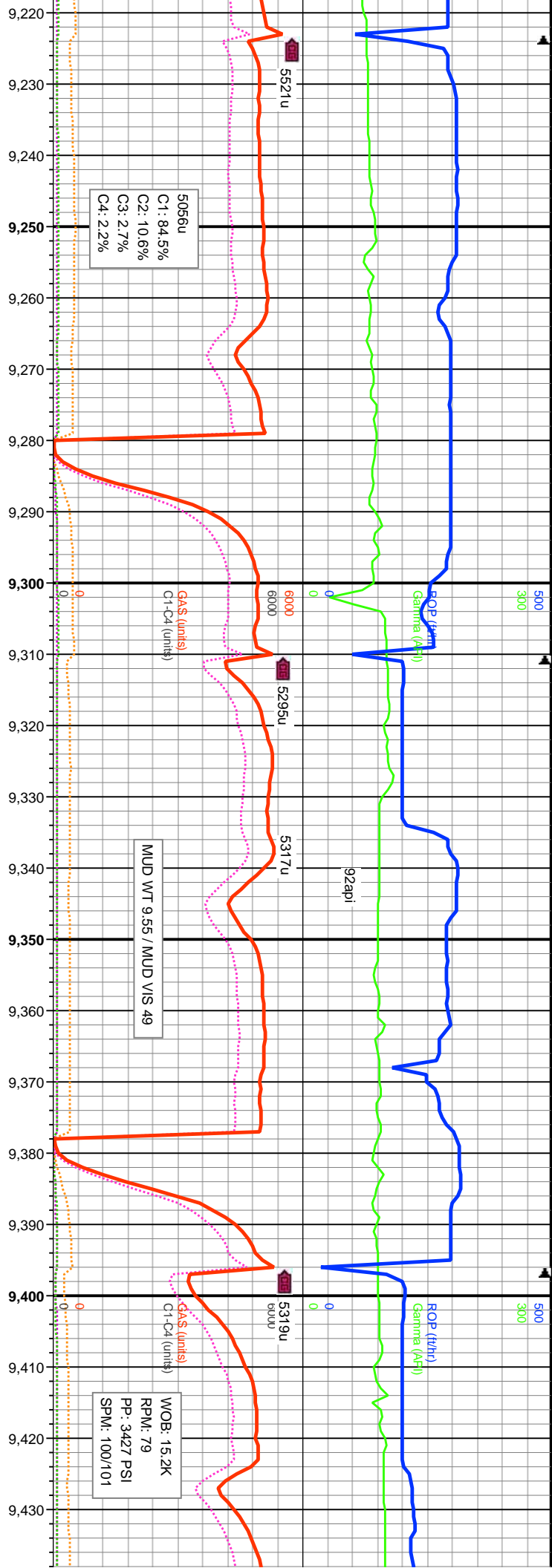




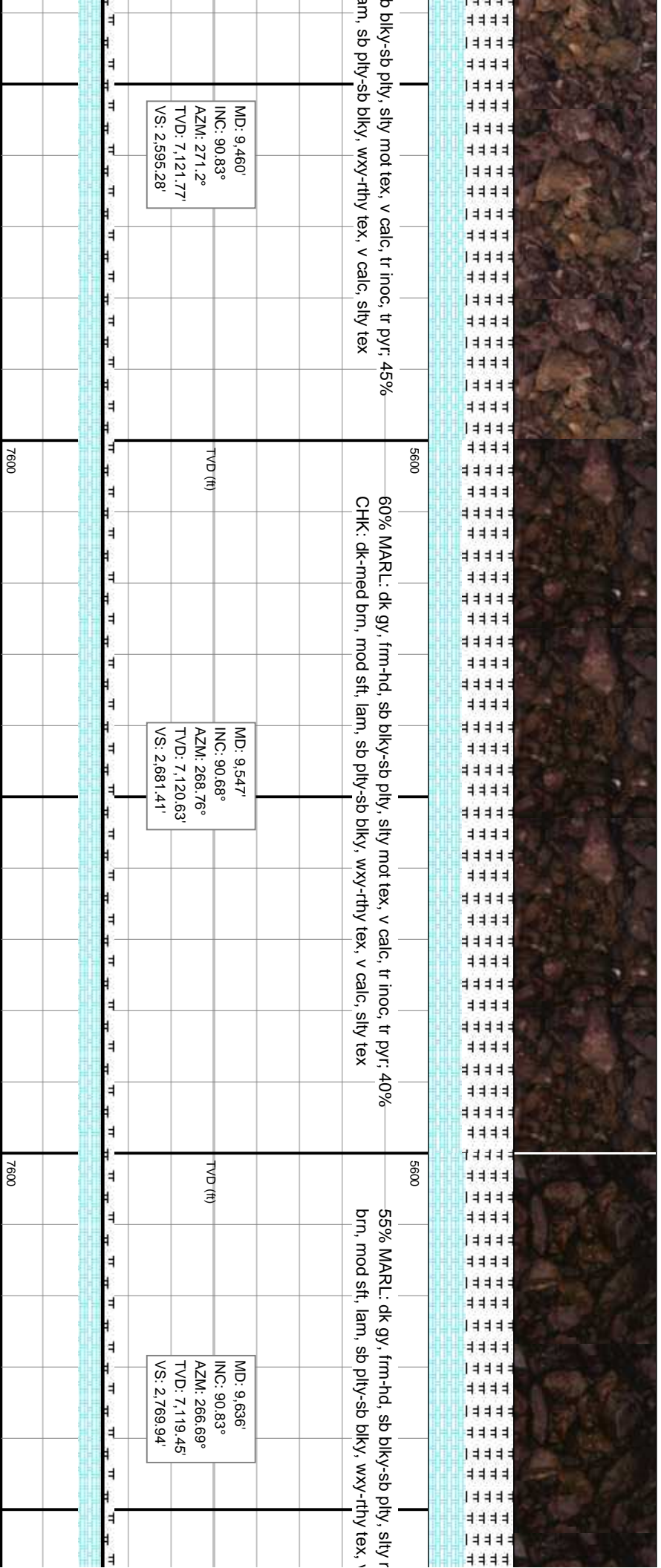
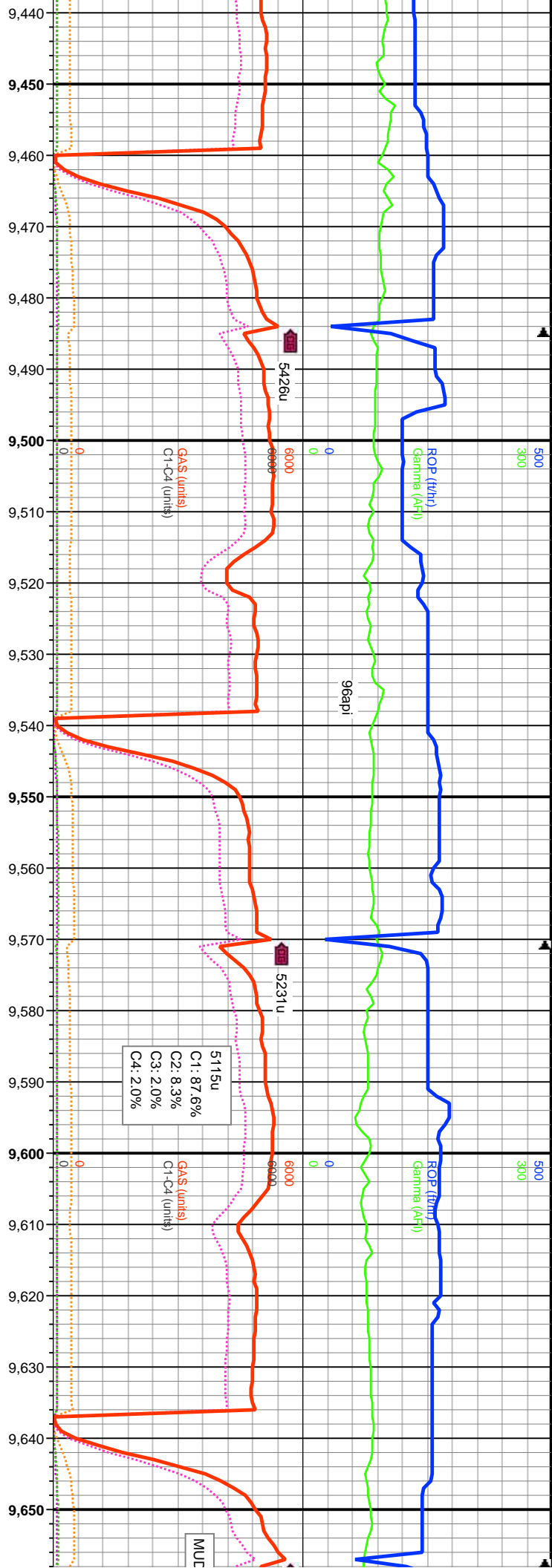




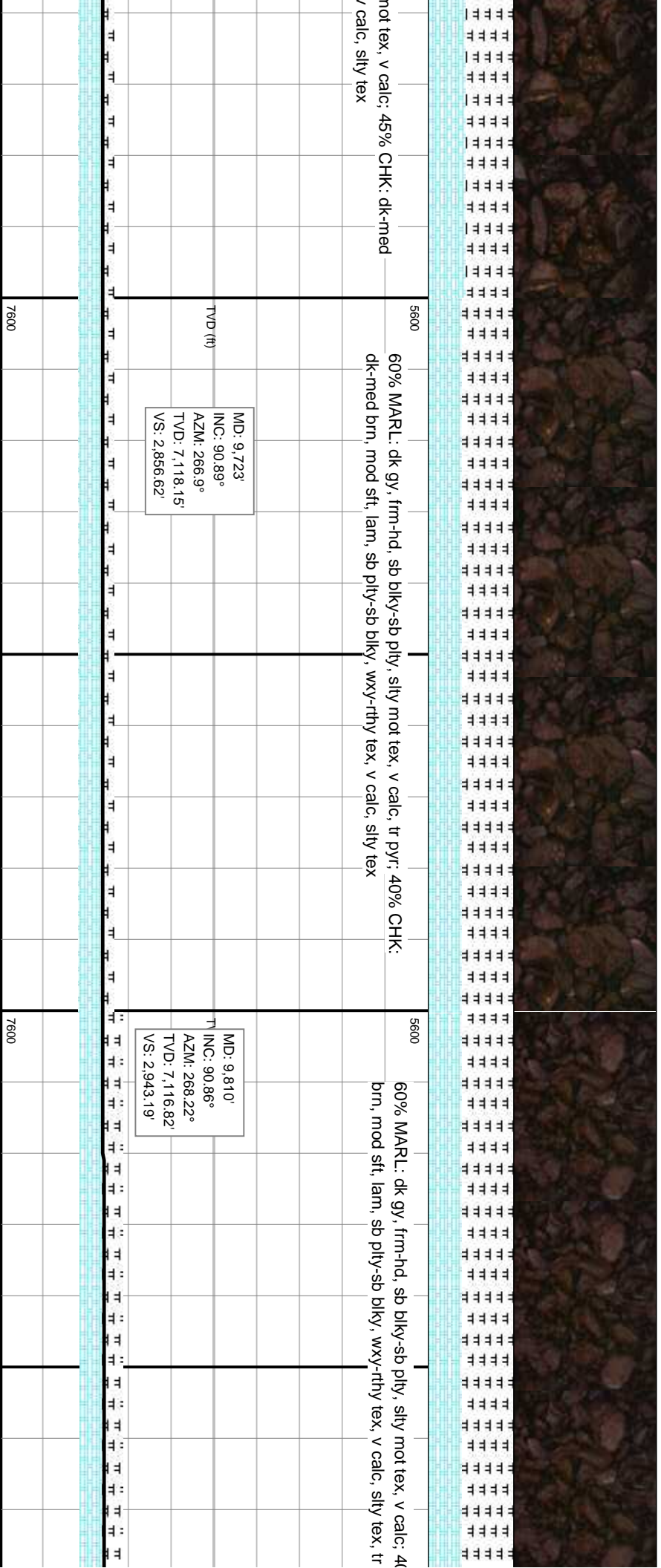
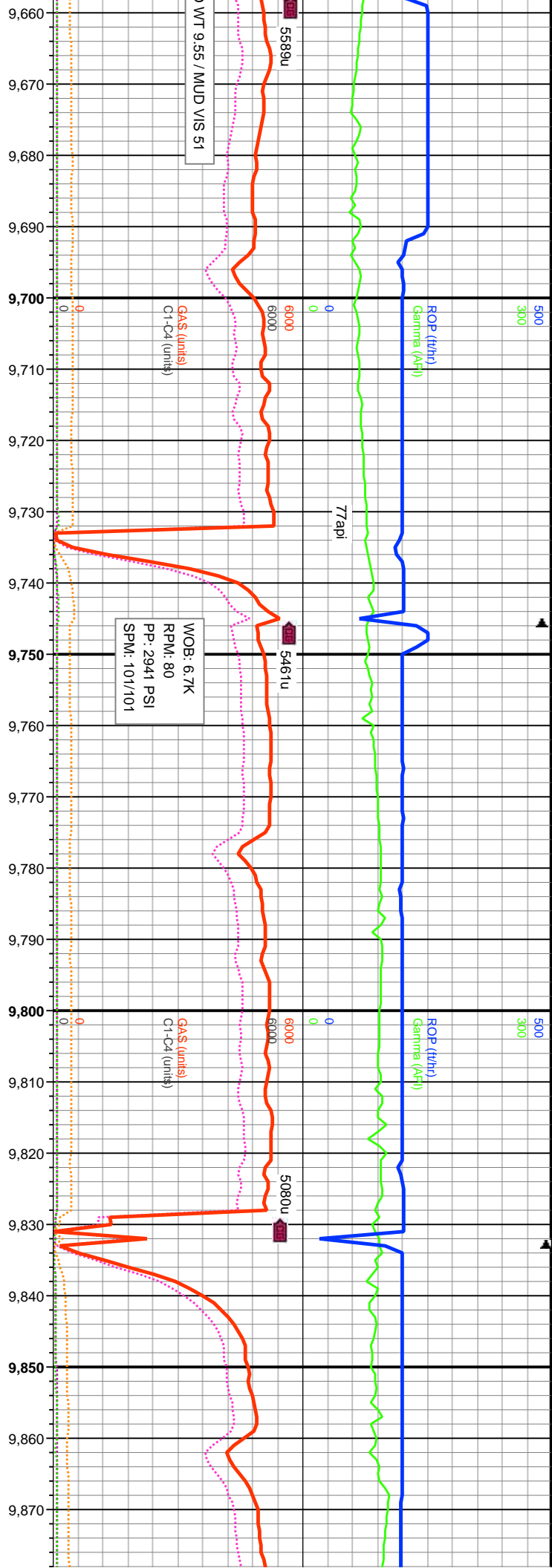




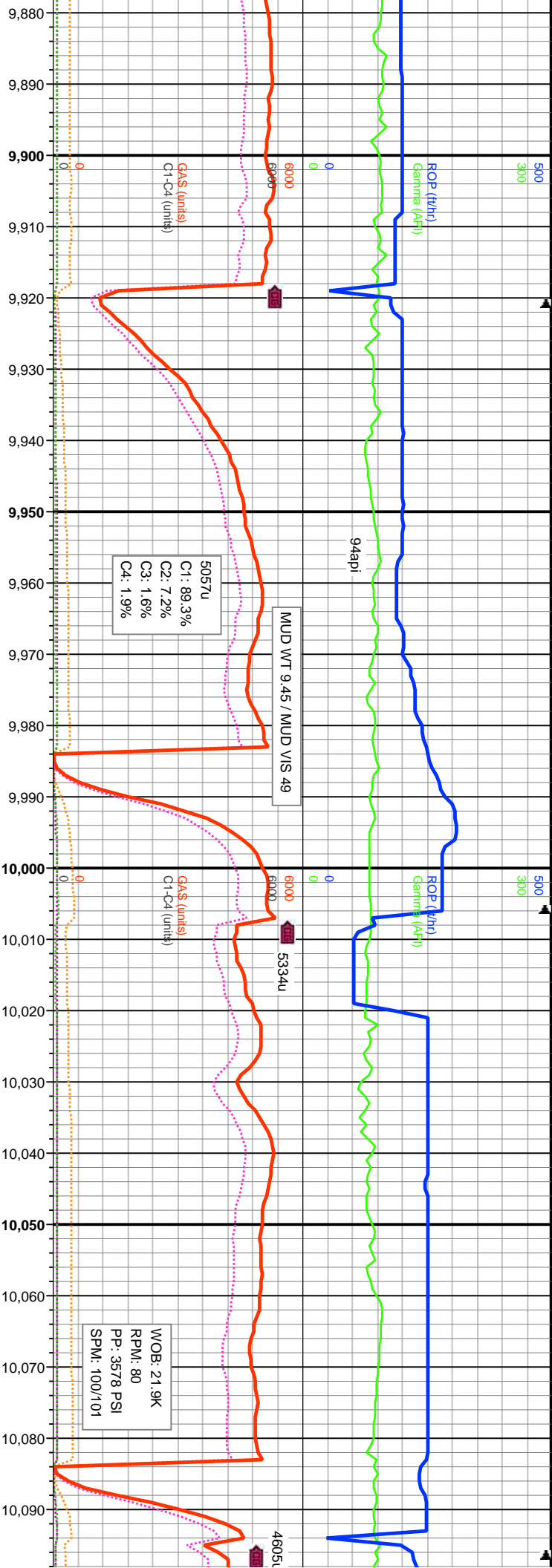






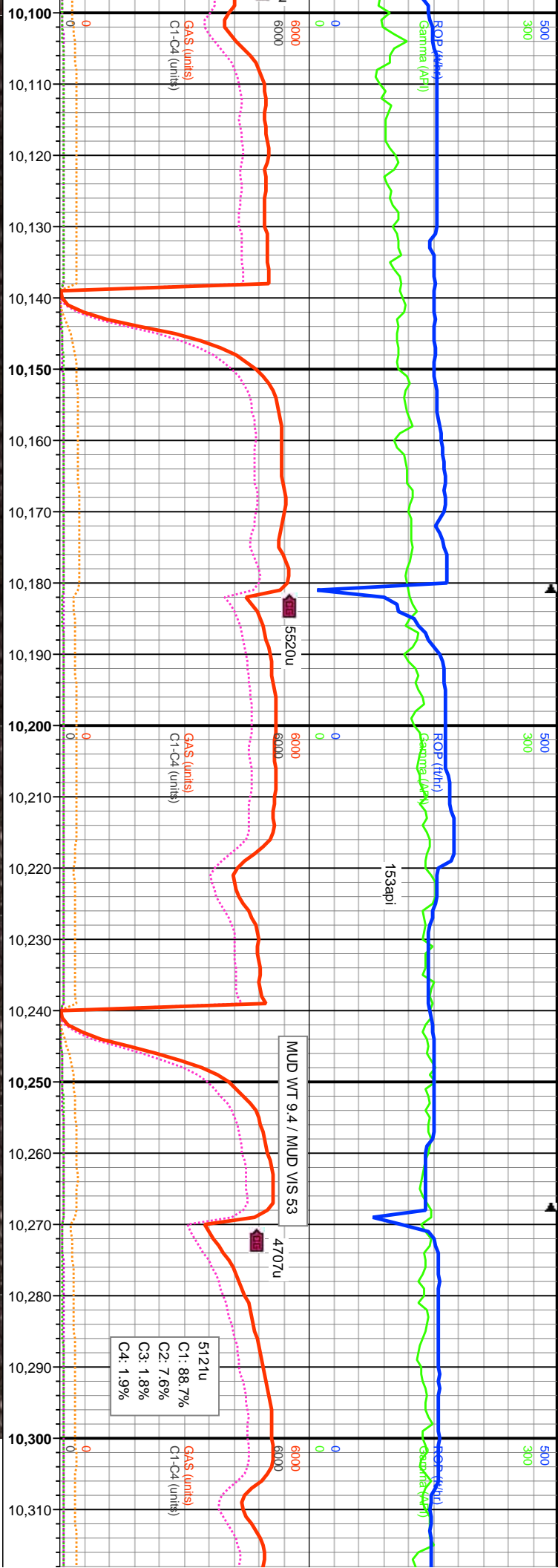






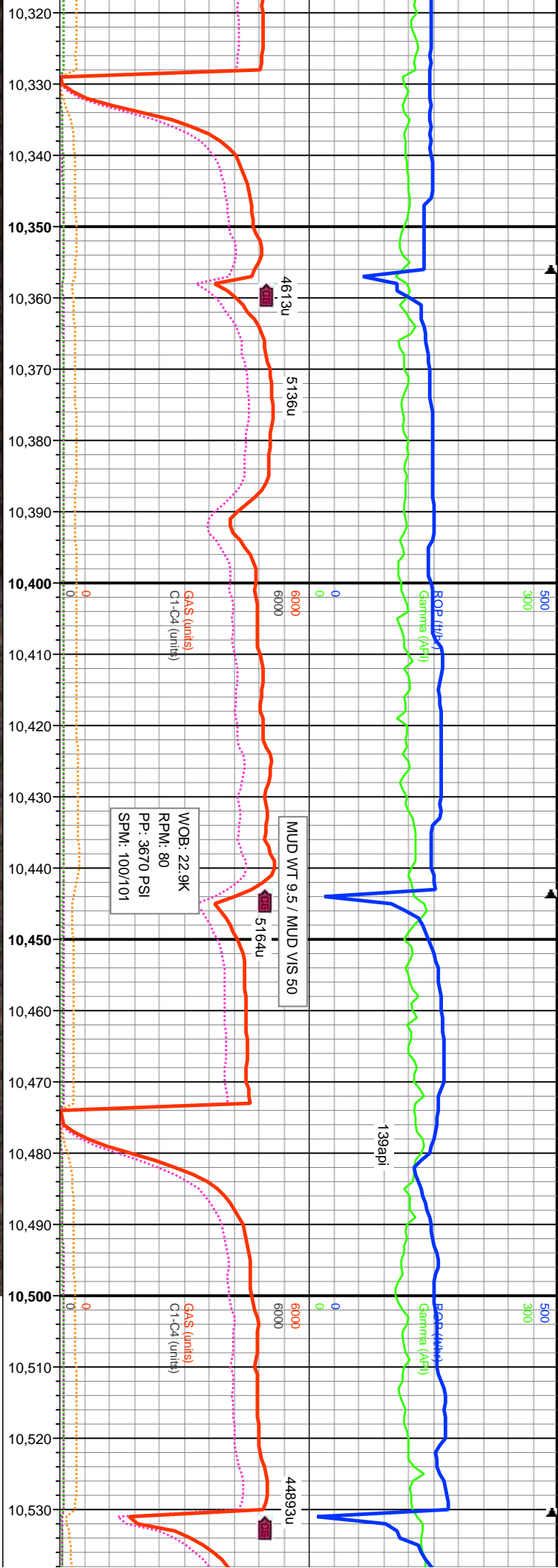
		5600		5600	
		70% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 30% CHK: dk-med		80% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 20% CHK: dk-med	
		brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr, rr fos		brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr, rr fos	
		pyr, rr calcite			
		MD: 9,898' INC: 90.86° AZM: 269.04° TVD: 7,115.5' VS: 3,030.58'		MD: 9,984' INC: 90.71° AZM: 272.91° TVD: 7,114.32' VS: 3,115.49'	
		TVD (ft)		TVD (ft)	
		7600		7600	





5600		80% MARL: dk gy, frm-hd, sb blk-y-sb pily, silty mot tex, v calc; 20% CHK: dk-med brn, mod sft, lam, sb pily-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr, tr fos	5600	85% MARL: dk gy, frm-hd, sb blk-y-sb pily, silty mot tex, v calc; 15% CHK: dk-med brn, mod sft, lam, sb pily-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr, tr fos	5600	85% MARL: dk gy, frm-hd, sb blk-y-sb pily, silty mot tex, v calc; 15% CHK: dk-med brn, mod sft, lam, sb pily-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr, tr fos
TVD (ft)		MD: 10,159' INC: 90.65° AZM: 271.36° TVD: 7,112.2' VS: 3,287.69'	TVD (ft)		MD: 10,247' INC: 90.77° AZM: 271.26° TVD: 7,111.11' VS: 3,374.51'	TVD (ft)
7600			7600			7600





RL: dk gy, frm-hd, sb blkys-sb pily, silty mot tex, v calc, 15% CHK: dk-med  
sft, lam, sb pily-sb blkly, wxy-rthy tex, v calc, silty tex, rr pyr, rr fos

5600 885% MARL: dk gy, frm-hd, sb blkys-sb pily, silty mot tex, v calc, 15% CHK: dk-med  
bbrn, mod sft, lam, sb pily-sb blkly, wxy-rthy tex, v calc, silty tex, rr pyr, rr fos

5600 80% MARL: dk gy, frm-hd, sb  
brn, mod sft, lam, sb pily-sb

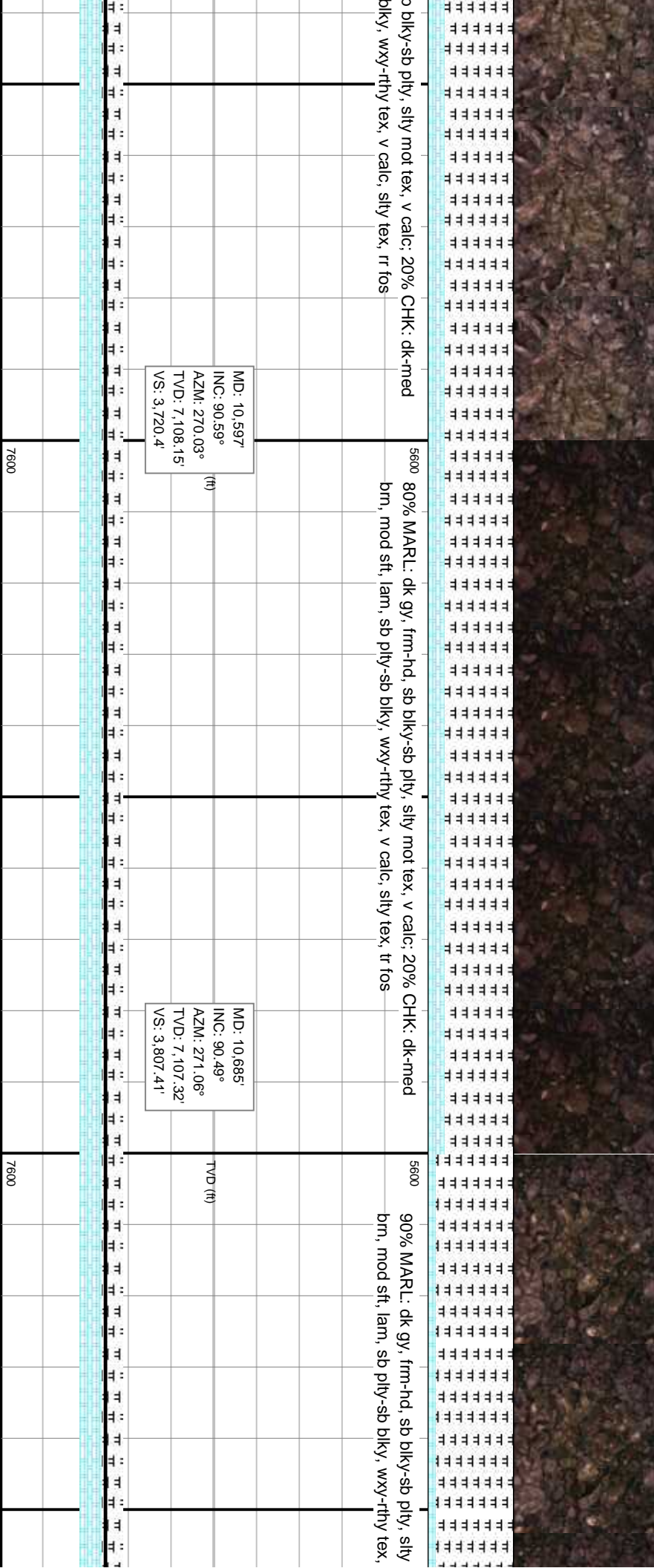
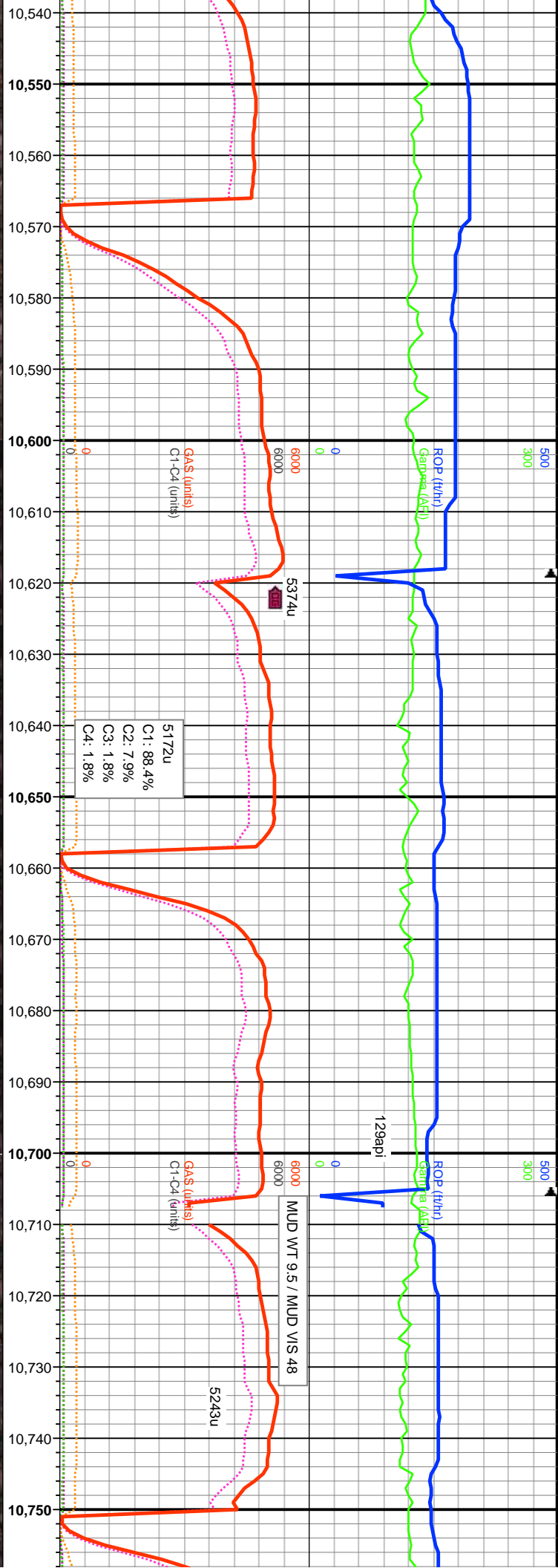
MD: 10,334'  
INC: 90.71°  
AZM: 271.03°  
TVD: 7,109.98'  
VS: 3,460.38'

TVD (ft)

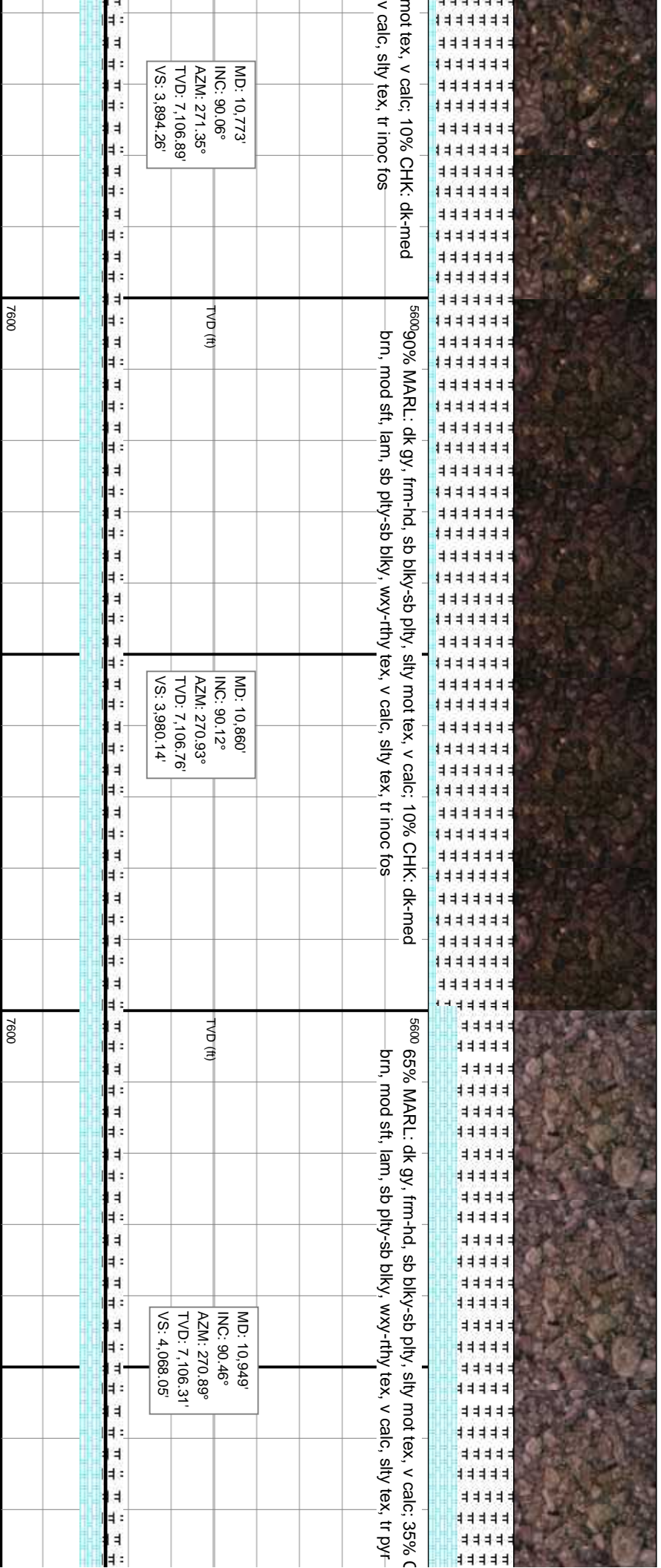
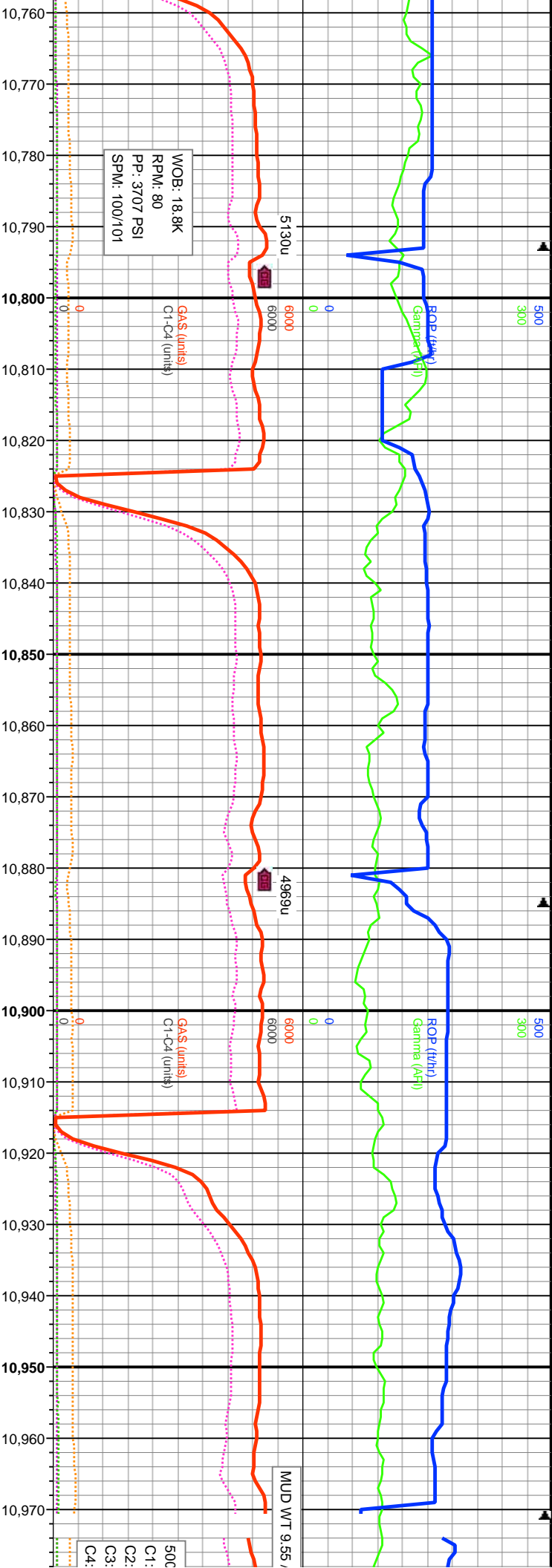
MD: 10,421'  
INC: 90.12°  
AZM: 270.83°  
TVD: 7,109.35'  
VS: 3,546.31'

MD: 10,509'  
INC: 90.43°  
AZM: 270.3°  
TVD: 7,108.93'  
VS: 3,633.31'

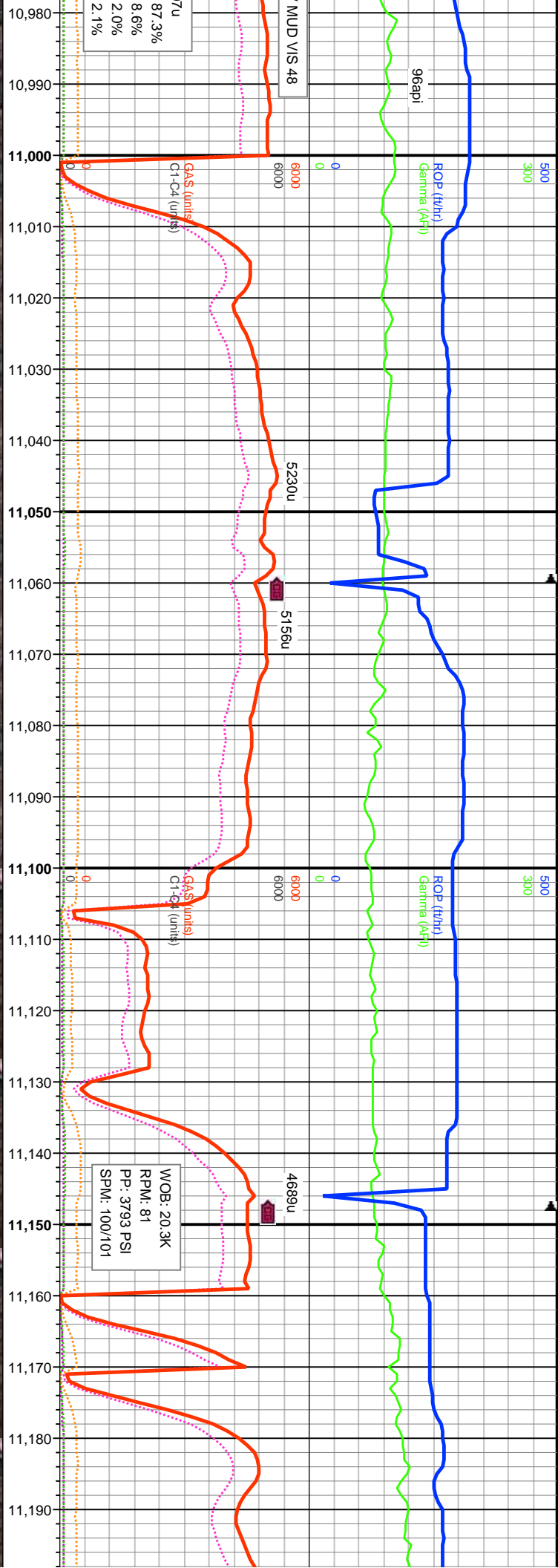










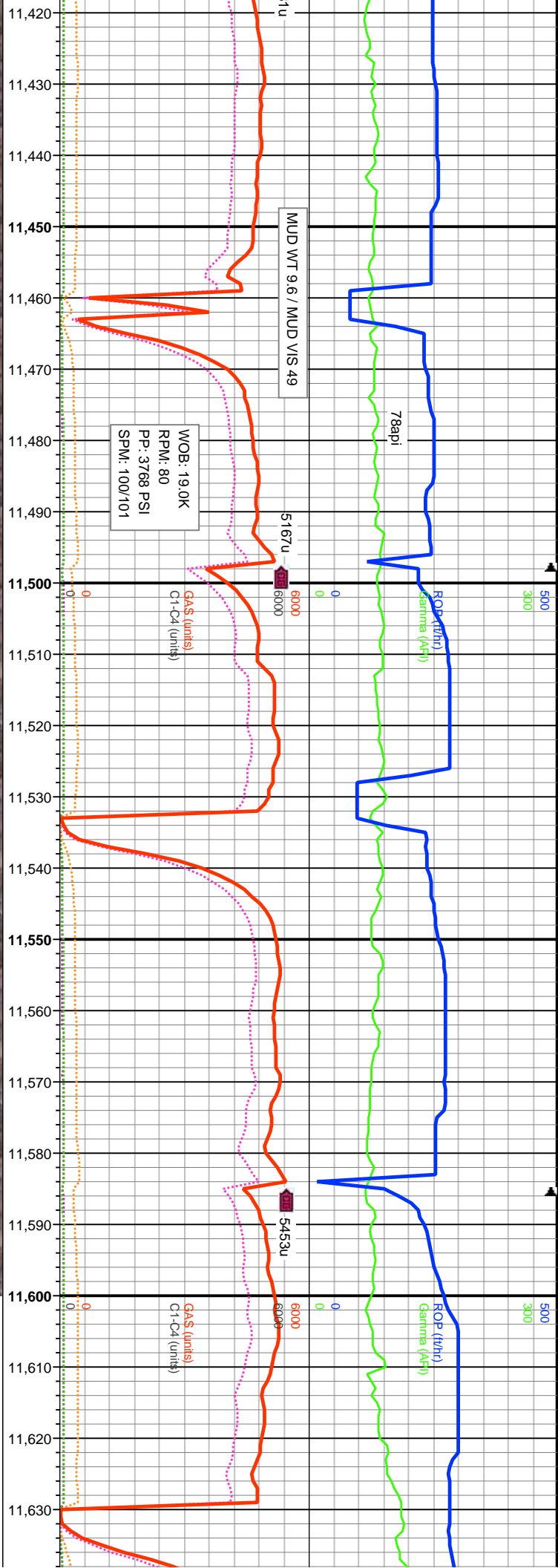


CHK: dk-med		5600		65% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 35% CHK: dk-med brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr		5600		80% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 20% CHK: dk-med brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr	
TVD (ft)		MD: 11,037' INC: 90.18° AZM: 271.16° TVD: 7,105.82' VS: 4,154.94'		TVD (ft)		MD: 11,123' INC: 90.37° AZM: 270.3° TVD: 7,105.4' VS: 4,239.93'		TVD (ft)	
7600				7600				7600	



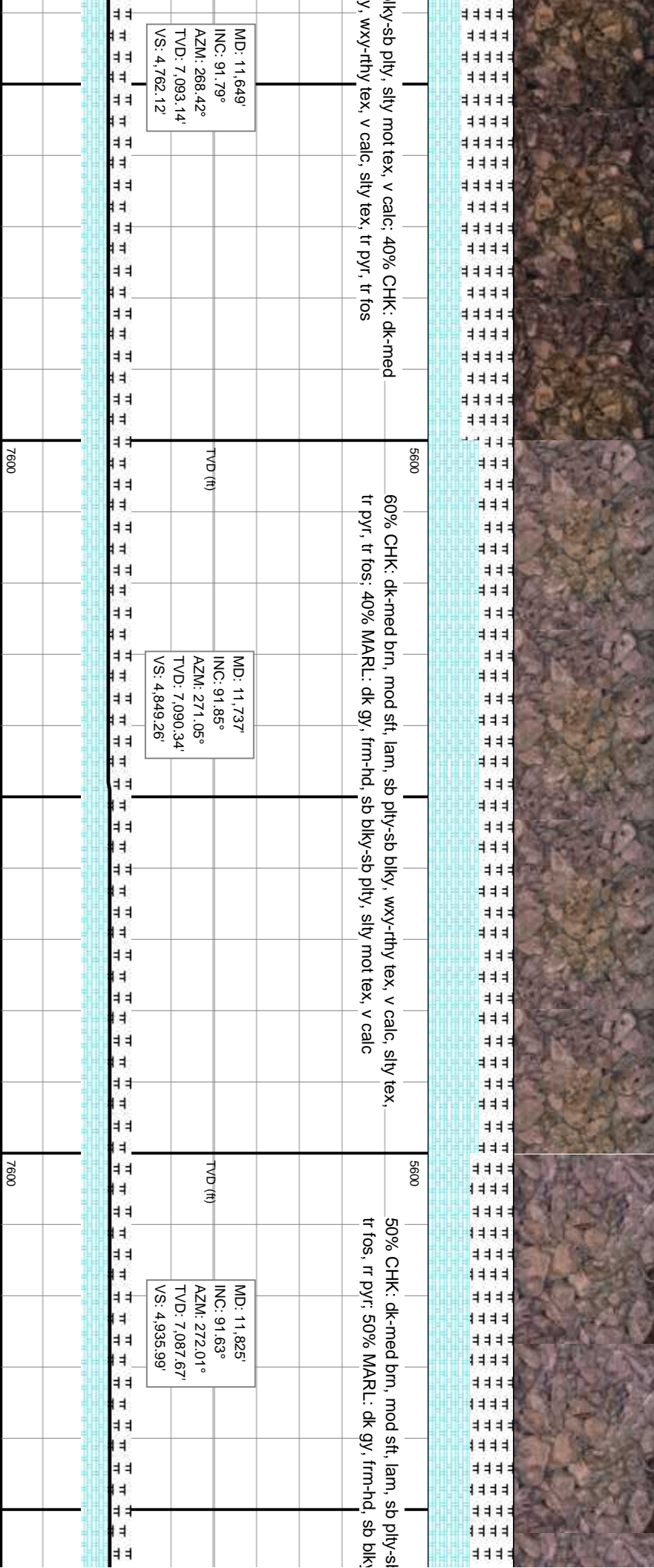
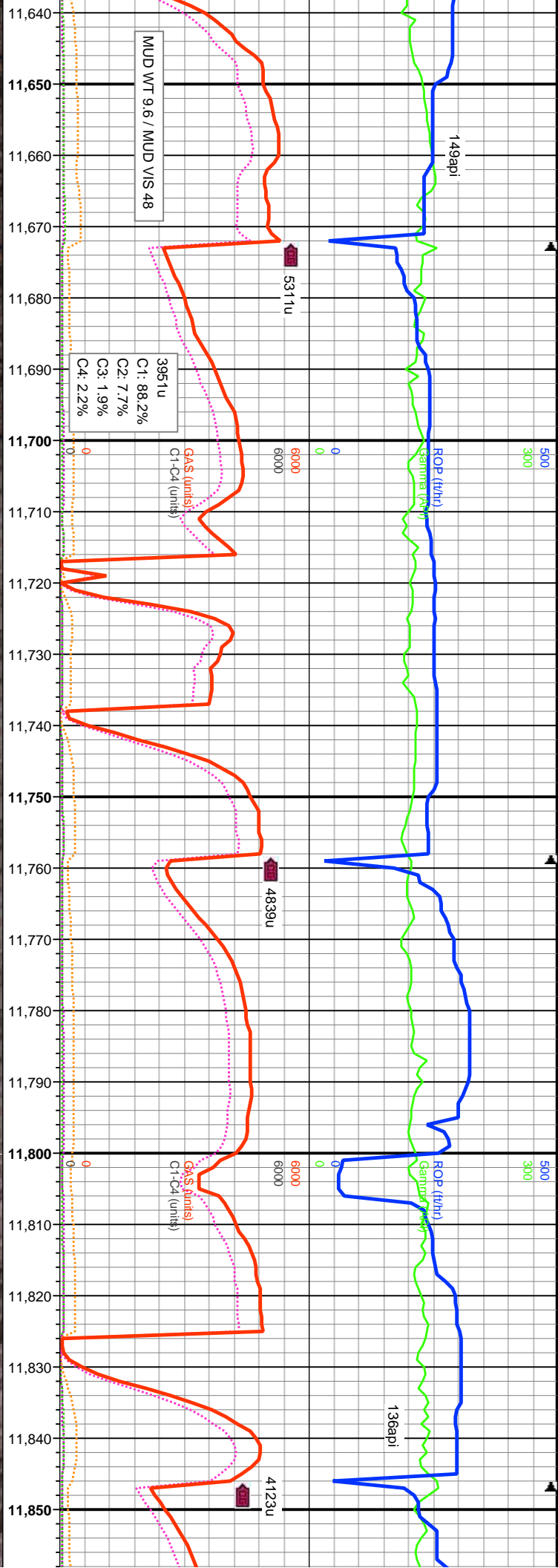






L: dk gy, frm-hd, sb biky-sb pty, silty mot tex, v calc; 20% CHK: dk-med sft, lam, sb pty-sb biky, wxy-rthy tex, v calc, silty tex, rr pyr, rr fos		5600	85% MARL: dk gy, frm-hd, sb biky-sb pty, silty mot tex, v calc; 15% CHK: dk-med brn, mod sft, lam, sb pty-sb biky, wxy-rthy tex, v calc, silty tex, rr pyr, rr fos	5600	60% MARL: dk gy, frm-hd, sb biky-sb pty, silty mot tex, v calc; 15% CHK: dk-med brn, mod sft, lam, sb pty-sb biky, wxy-rthy tex, v calc, silty tex, rr pyr, rr fos
MD: 11,473' INC: 91.69° AZM: 268.92° TVD: 7,098.47' VS: 4.587.32'			MD: 11,561' INC: 91.73° AZM: 268.12° TVD: 7,095.84' VS: 4.674.7'		
TVD (ft)			TVD (ft)		
7600			7600		





MD: 11,649'  
INC: 91.79°  
AZM: 268.42°  
TVD: 7,093.14'  
VS: 4,762.12'

MD: 11,737'  
INC: 91.85°  
AZM: 271.05°  
TVD: 7,090.34'  
VS: 4,849.26'

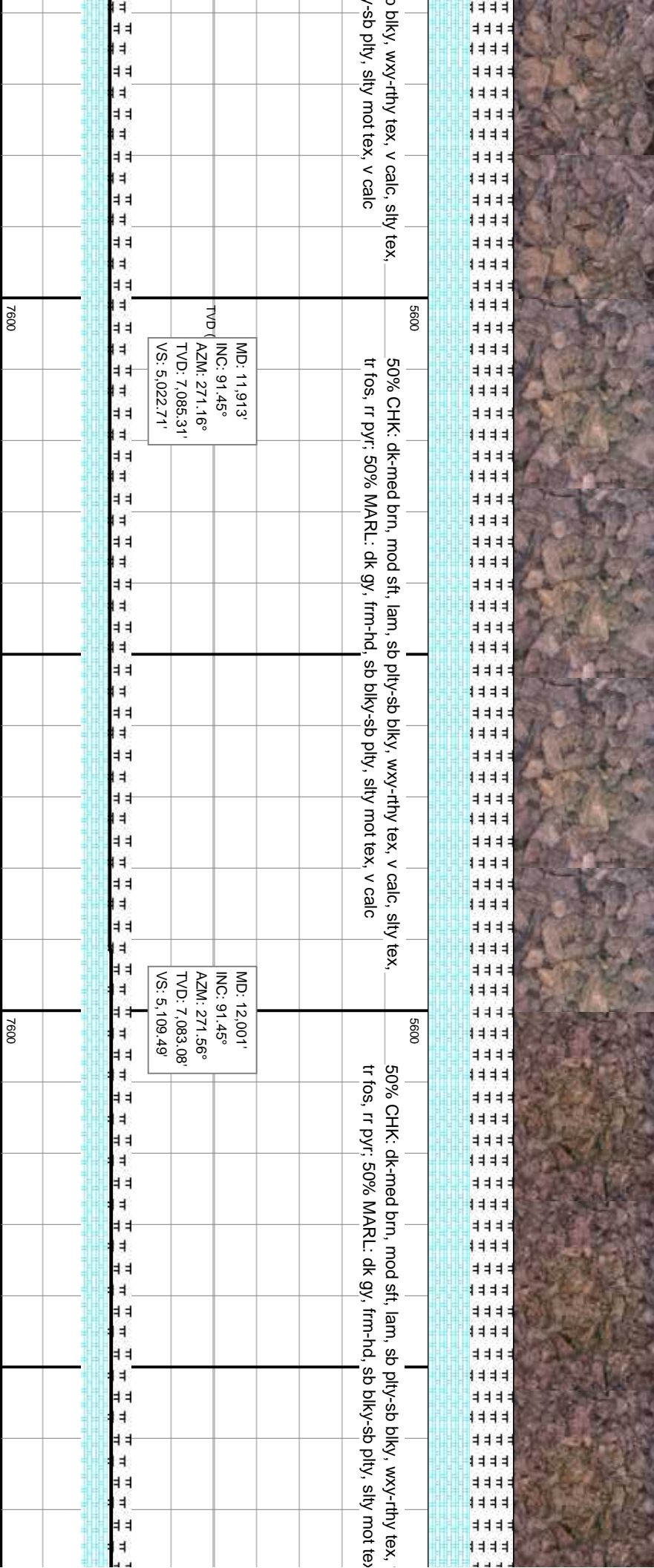
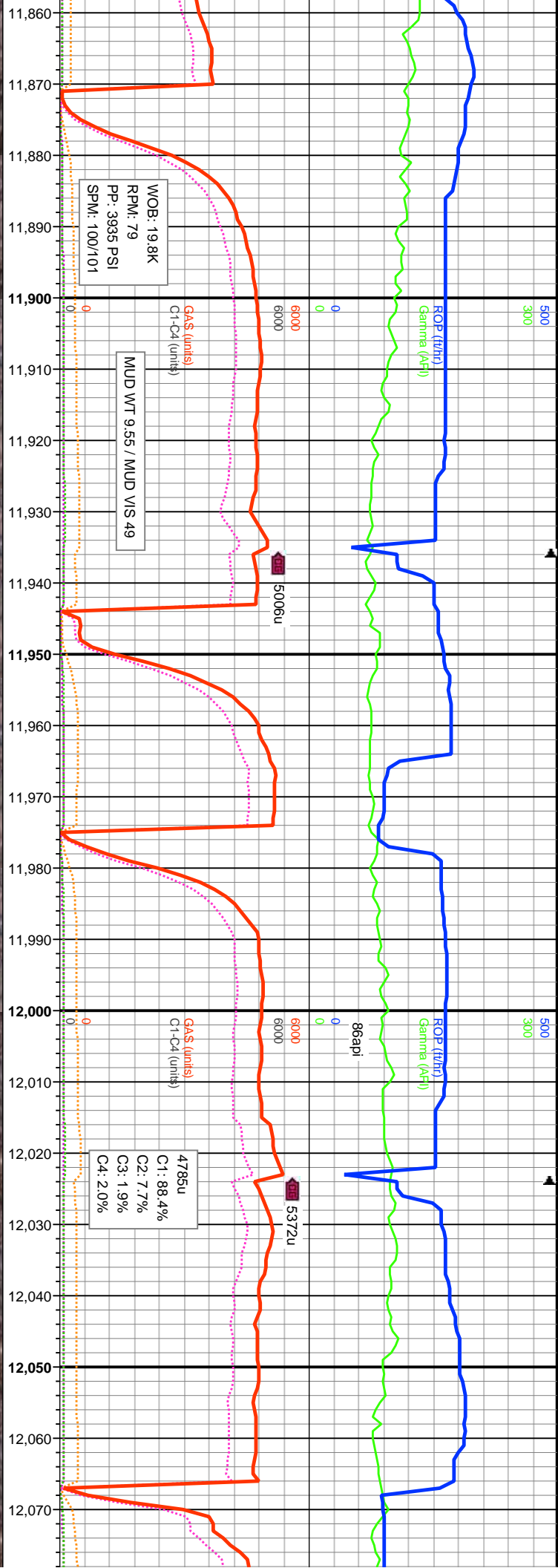
MD: 11,825'  
INC: 91.63°  
AZM: 272.01°  
TVD: 7,087.67'  
VS: 4,935.99'

dky-sb pty, slty mot tex, v calc; 40% CHK: dk-med  
y, wxy-rthy tex, v calc; slty tex, tr pyr, tr fos

60% CHK: dk-med brn, mod sft, lam, sb pty-sb blk, wxy-rthy tex, v calc; slty tex,  
tr pyr, tr fos; 40% MARL: dk gy, frm-hd, sb blk-y-sb pty, slty mot tex, v calc

50% CHK: dk-med brn, mod sft, lam, sb pty-sl  
tr fos, tr pyr; 50% MARL: dk gy, frm-hd, sb blk

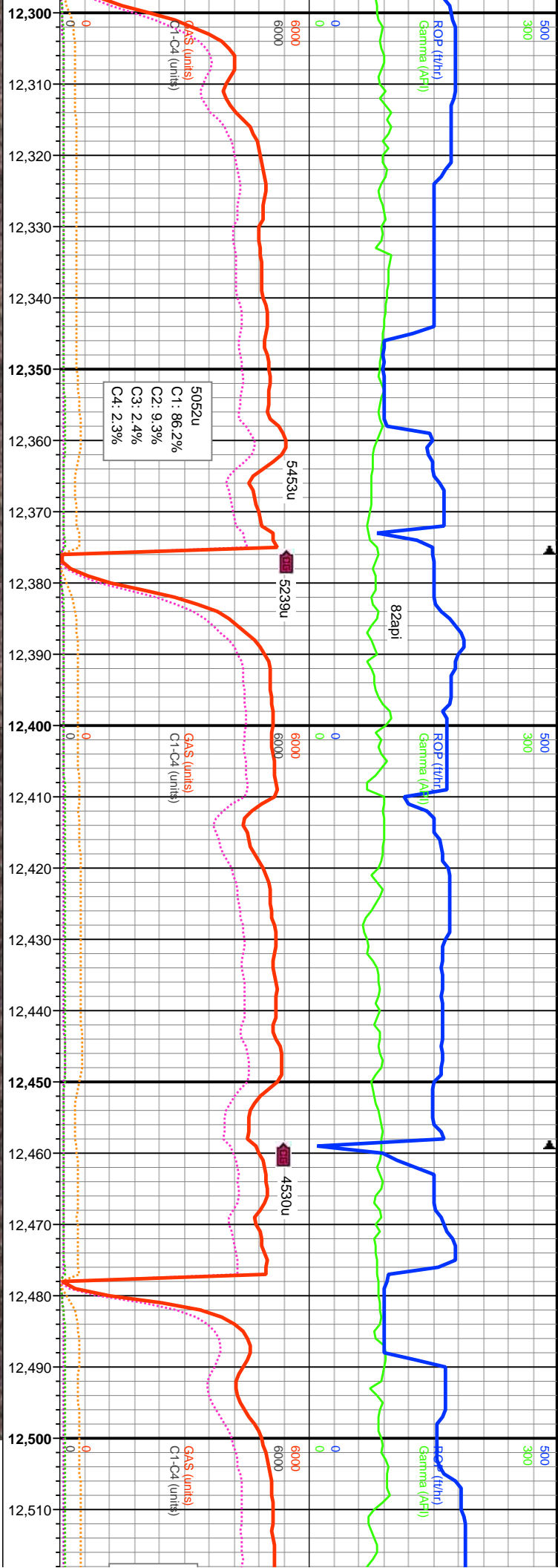






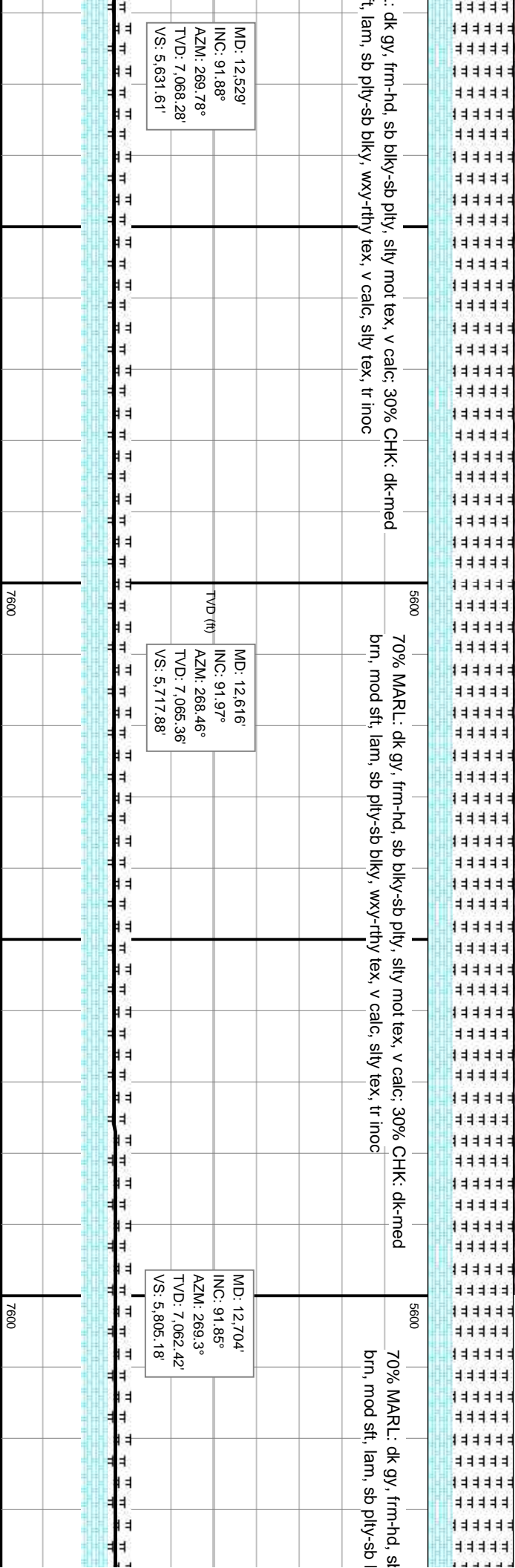
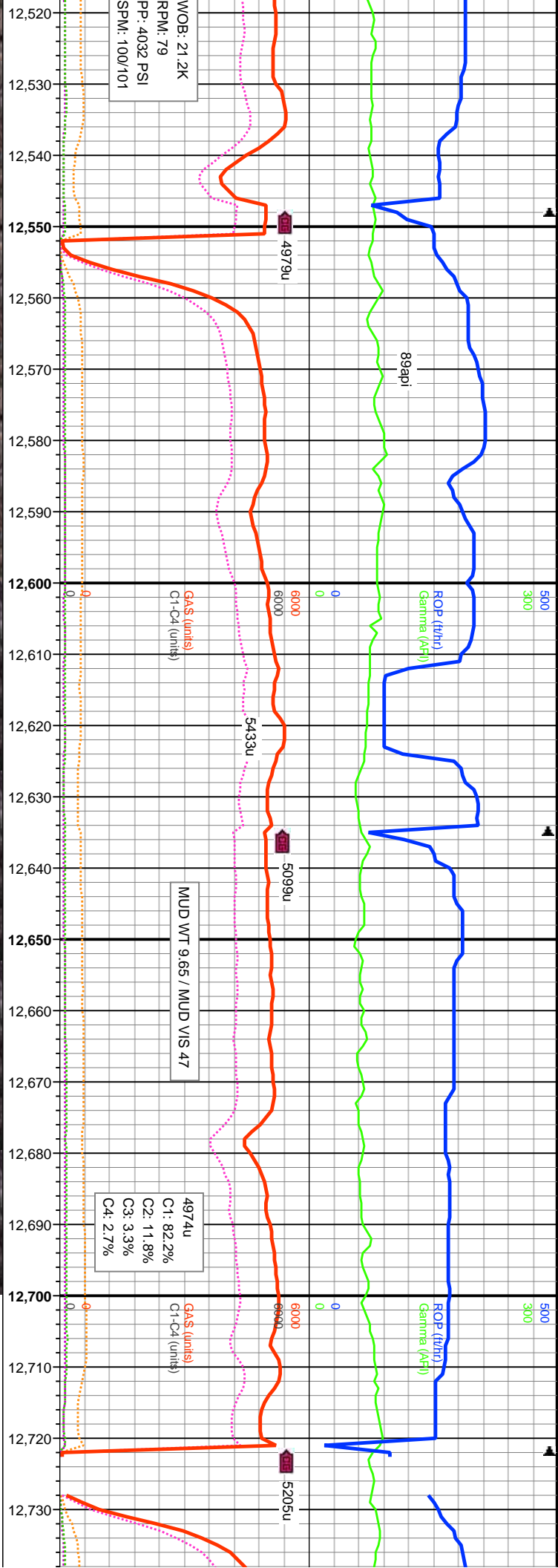




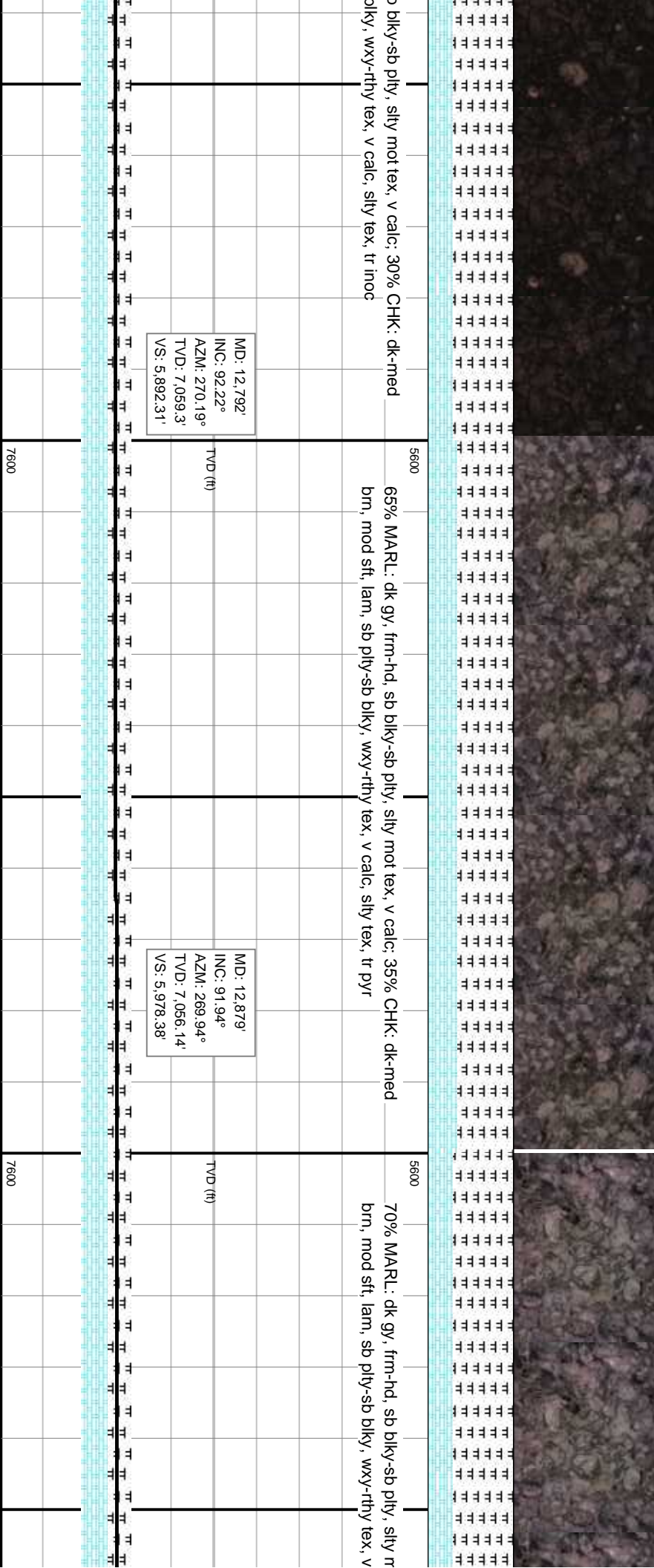
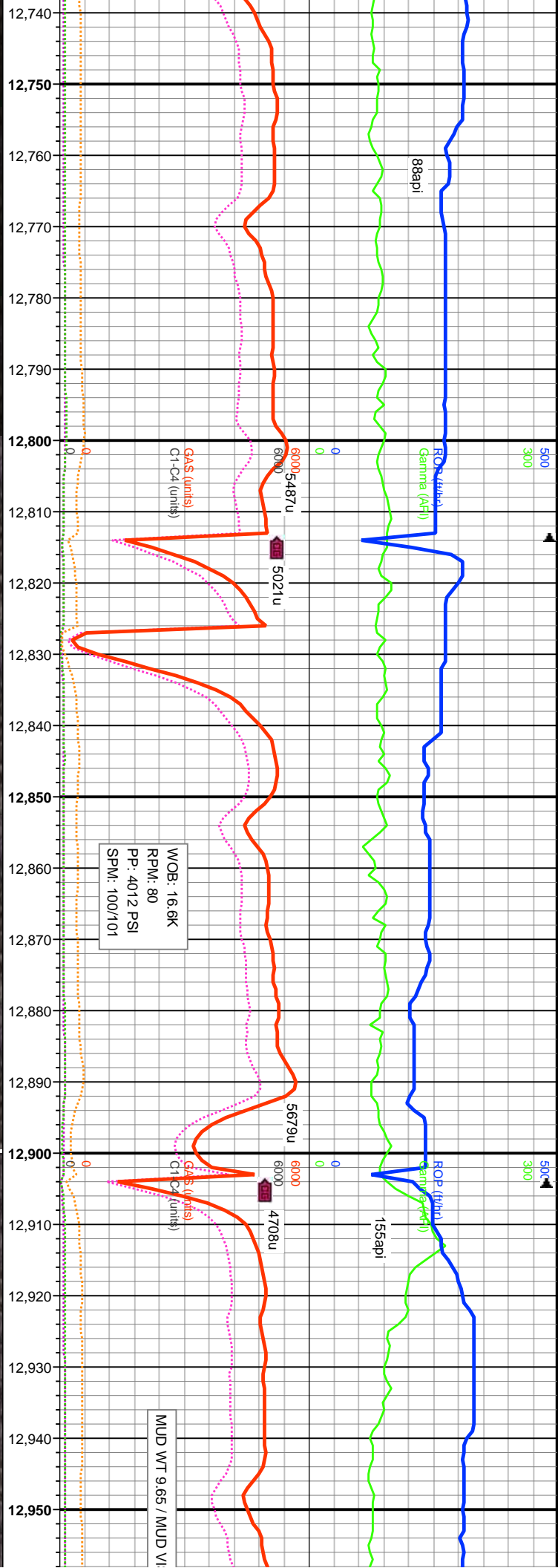


5600		50% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 50% CHK: dk-med brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr fos, tr pyr	5600	60% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc; 40% CHK: dk-med brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr fos, tr pyr	5600	70% MARL: brn, mod sft
TVD (ft)		MD: 12,354' INC: 91.63° AZM: 268.45° TVD: 7,073.59' VS: 5,458.11'	TVD (ft)		TVD (ft)	
7600			7600		7600	

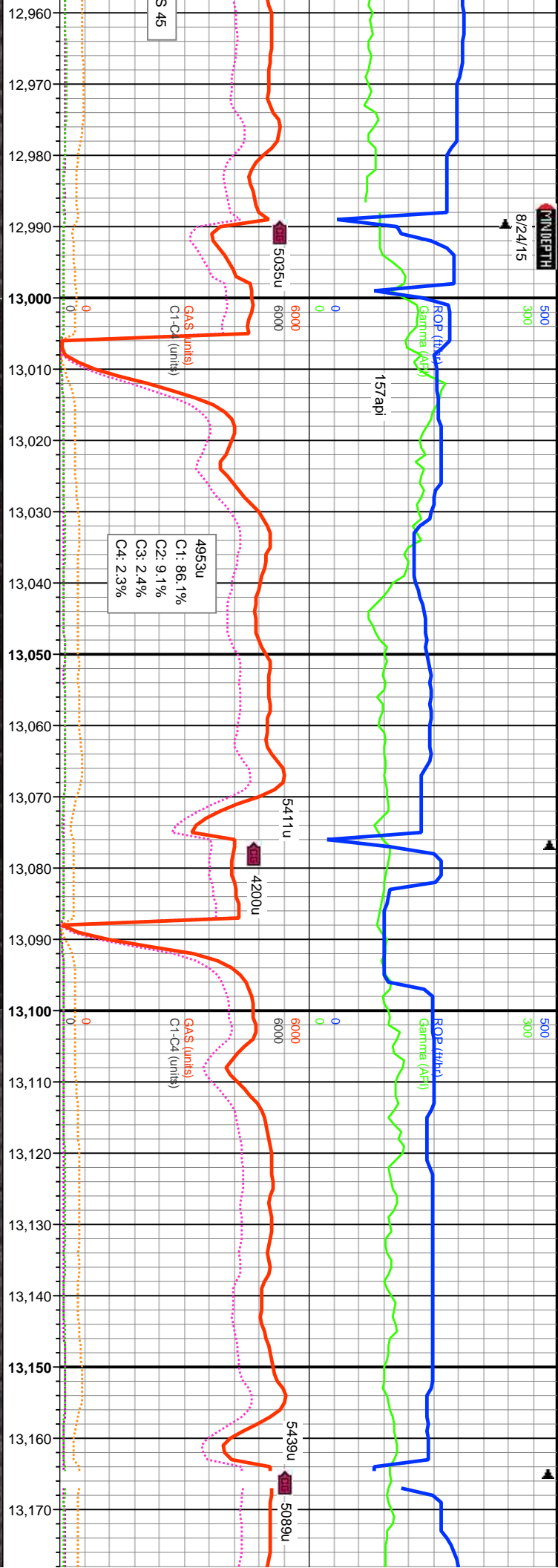












lot tex, v calc: 30% CHK: dk-med  
calc, silty tex, tr pyr, tr cal

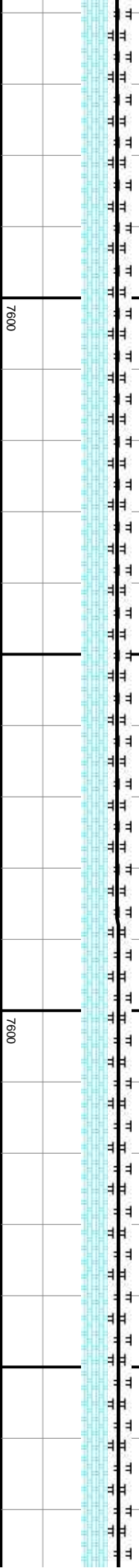
70% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc: 30% CHK: dk-med  
brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex, tr pyr, tr cal, tr inoc

60% MARL: dk gy, frm-hd, sb blk-y-sb ply, silty mot tex, v calc: 40%  
brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex

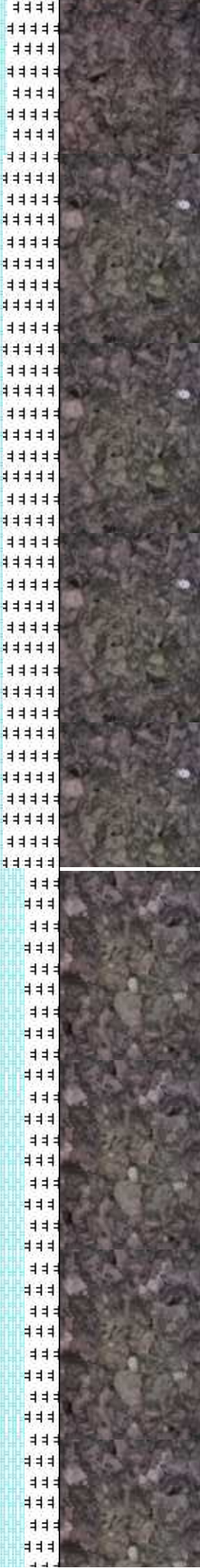
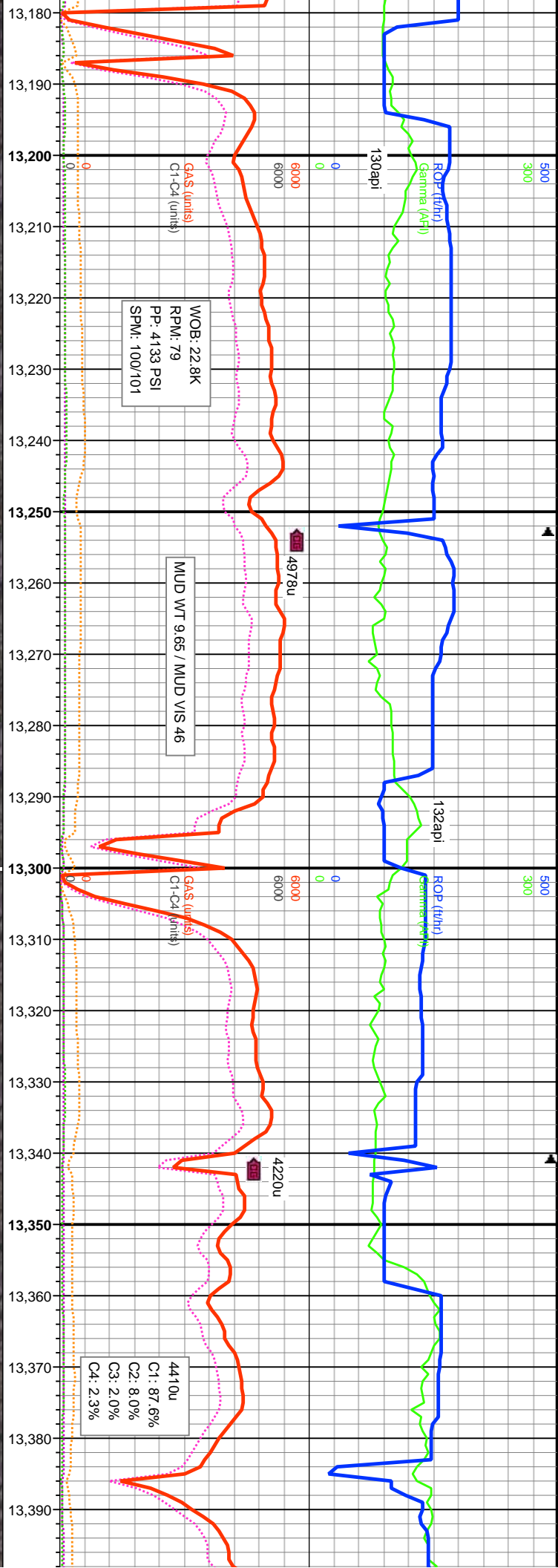
MD: 12,967'  
INC: 91.6°  
AZM: 270.49°  
TVD: 7,053.42'  
VS: 6,065.42'

MD: 13,056'  
INC: 91.6°  
AZM: 271.46°  
TVD: 7,050.94'  
VS: 6,153.29'

MD: 13,143'  
INC: 91.79°  
AZM: 272.43°  
TVD: 7,048.37'  
VS: 6,238.92'

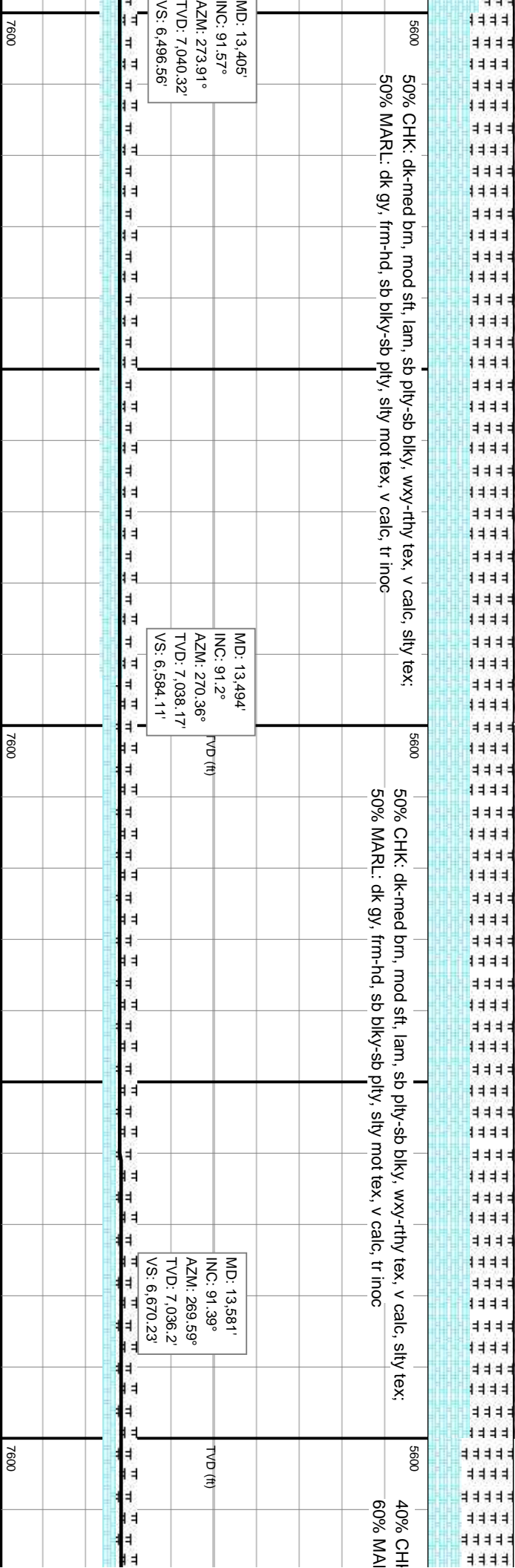
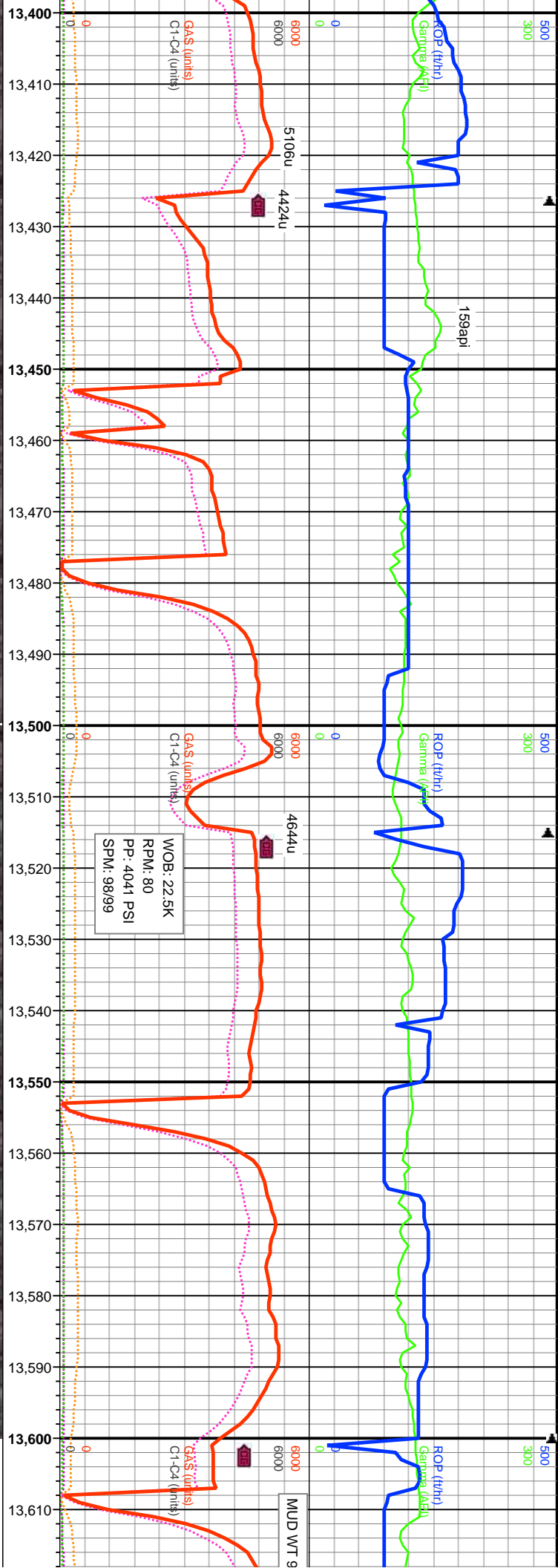




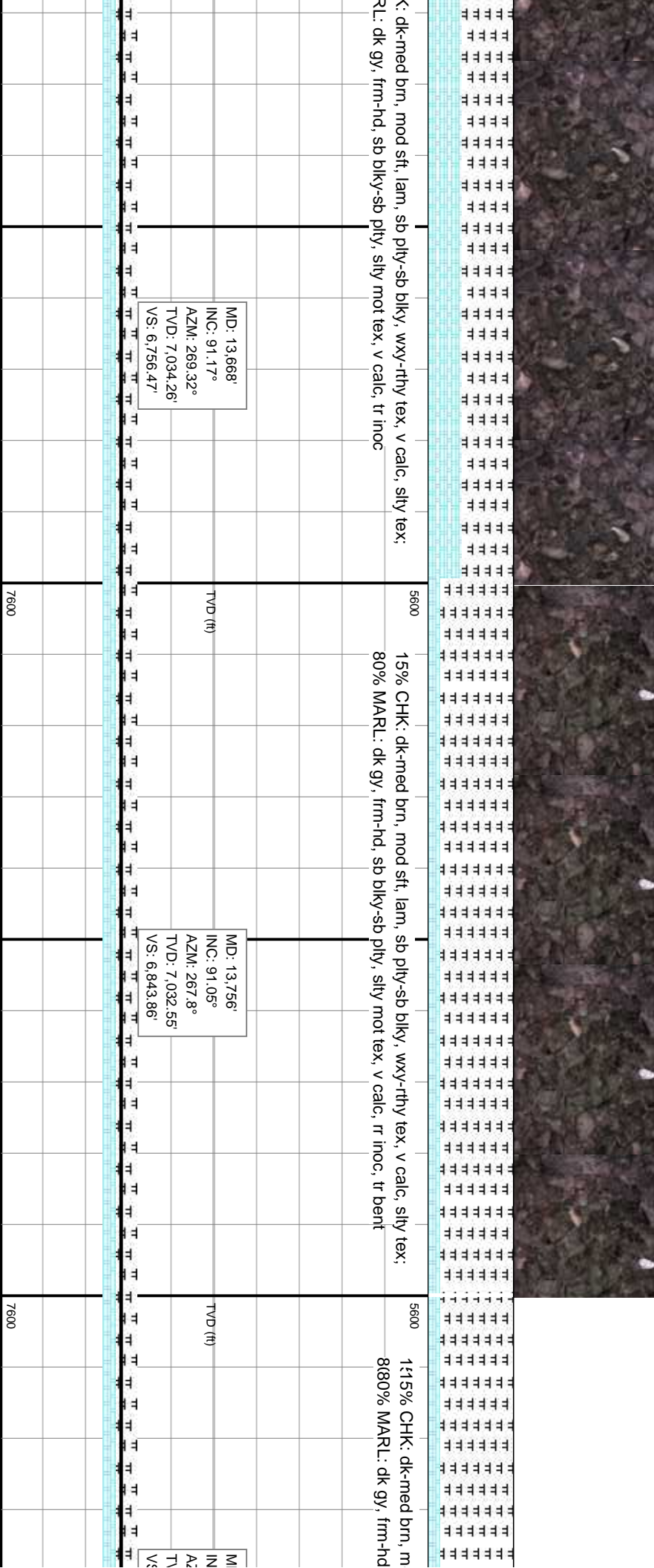
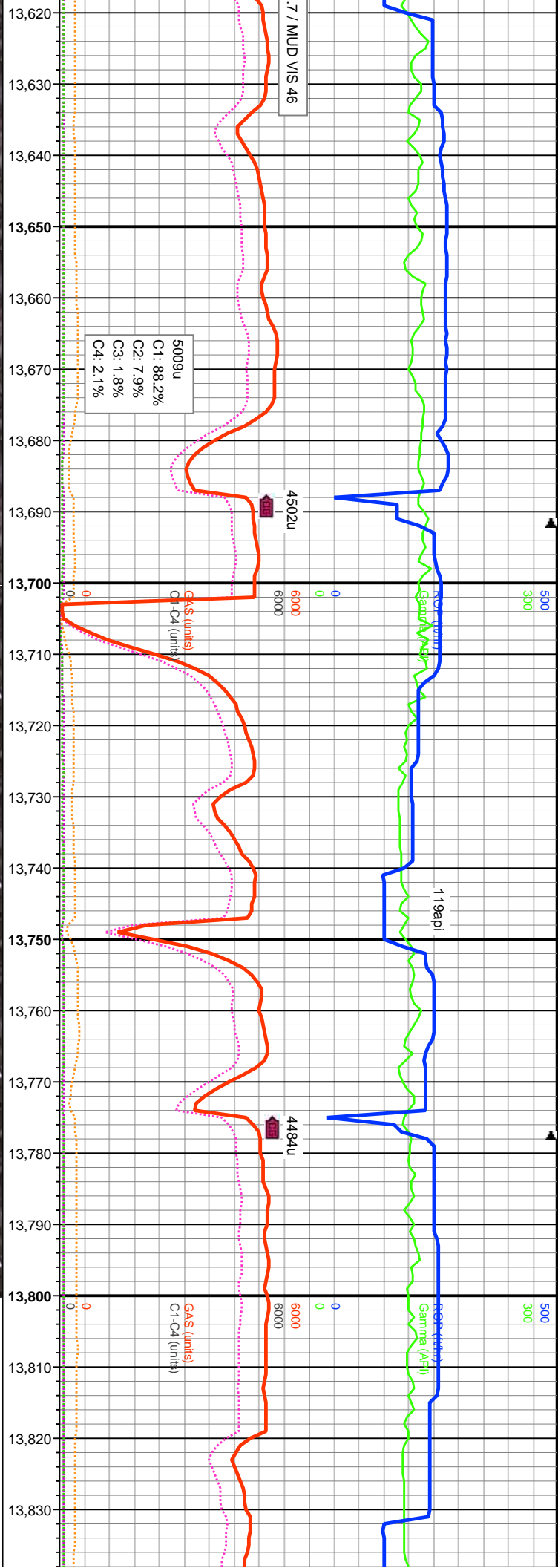


CHK: dk-med	5600	65% MARL: dk gy, frm-hd, sb blk-y-sb plty, silty mot tex, v calc, 35% CHK: dk-med brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, silty tex	5600	60% CHK: dk-med brn, mod sft, lam, sb ply-sb blk-y, wxy-rthy tex, v calc, tr inoc 40% MARL: dk gy, frm-hd, sb blk-y-sb plty, silty mot tex, v calc, tr inoc
		MD: 13,230' INC: 92.09° AZM: 271.79° TVD: 7,045.42' VS: 6.324.51'		MD: 13,318' INC: 91.51° AZM: 271.8° TVD: 7,042.66' VS: 6.411.17'
		TVD (ft)		TVD (ft)
		7600		7600

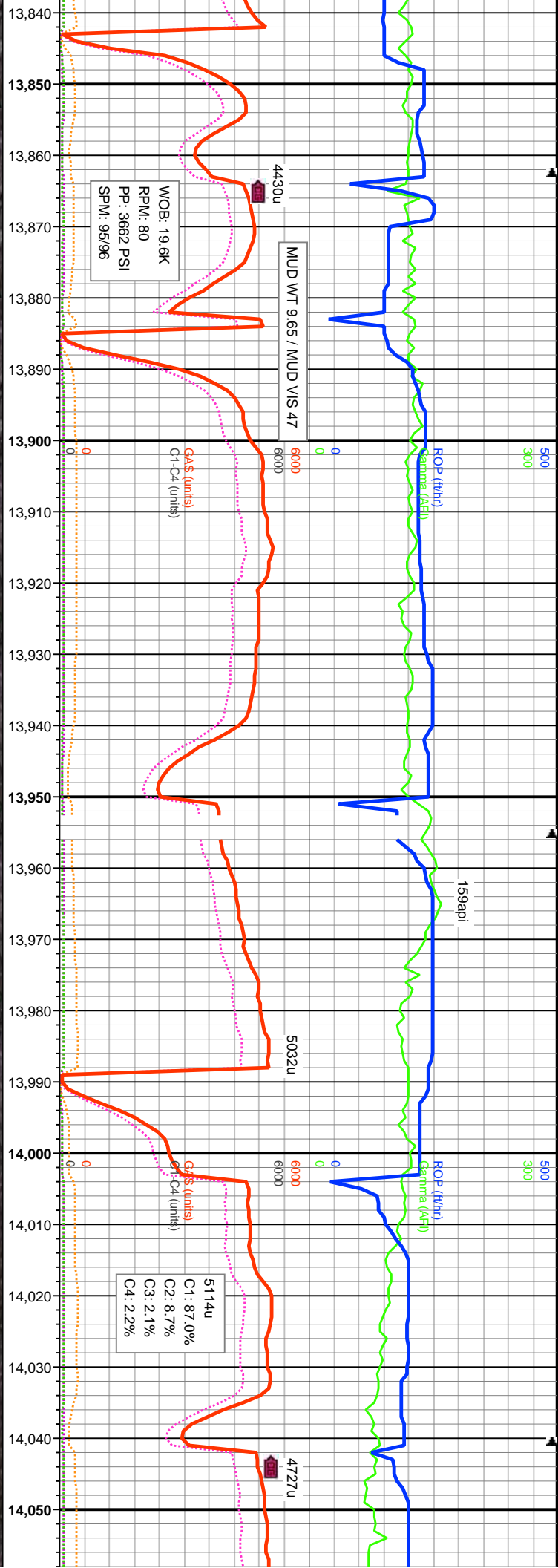






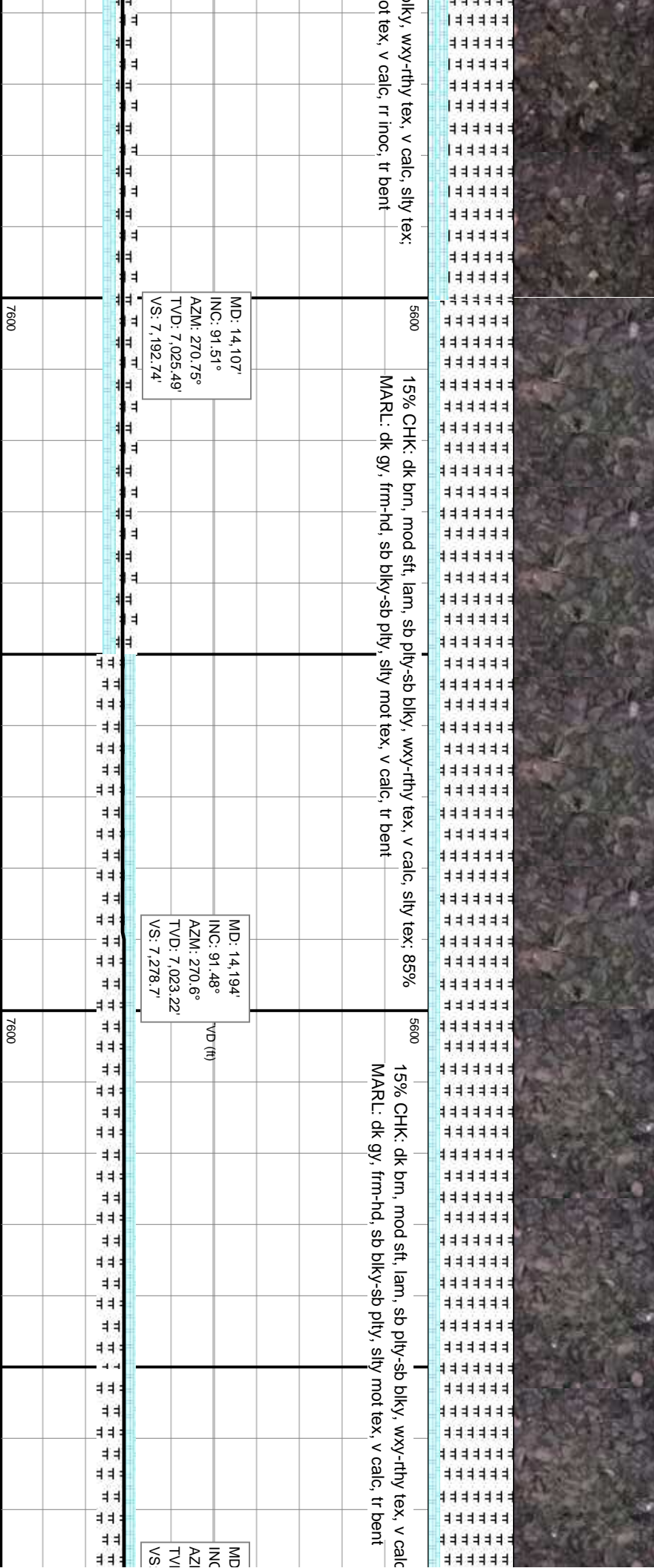
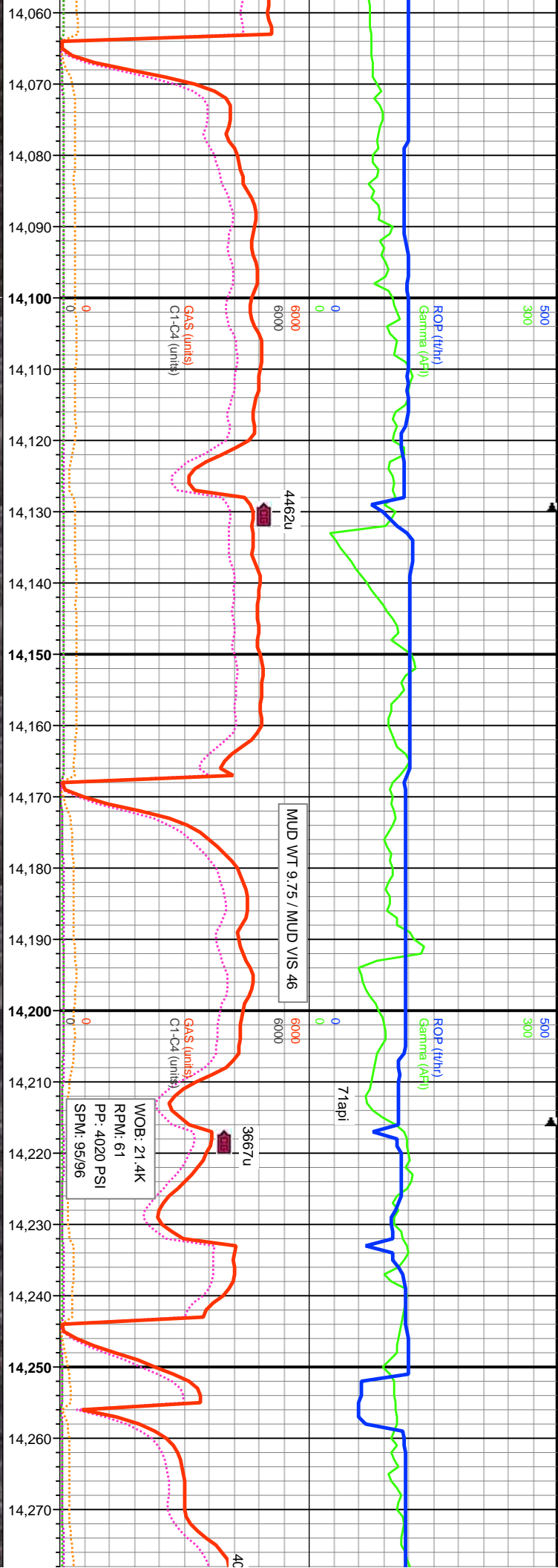




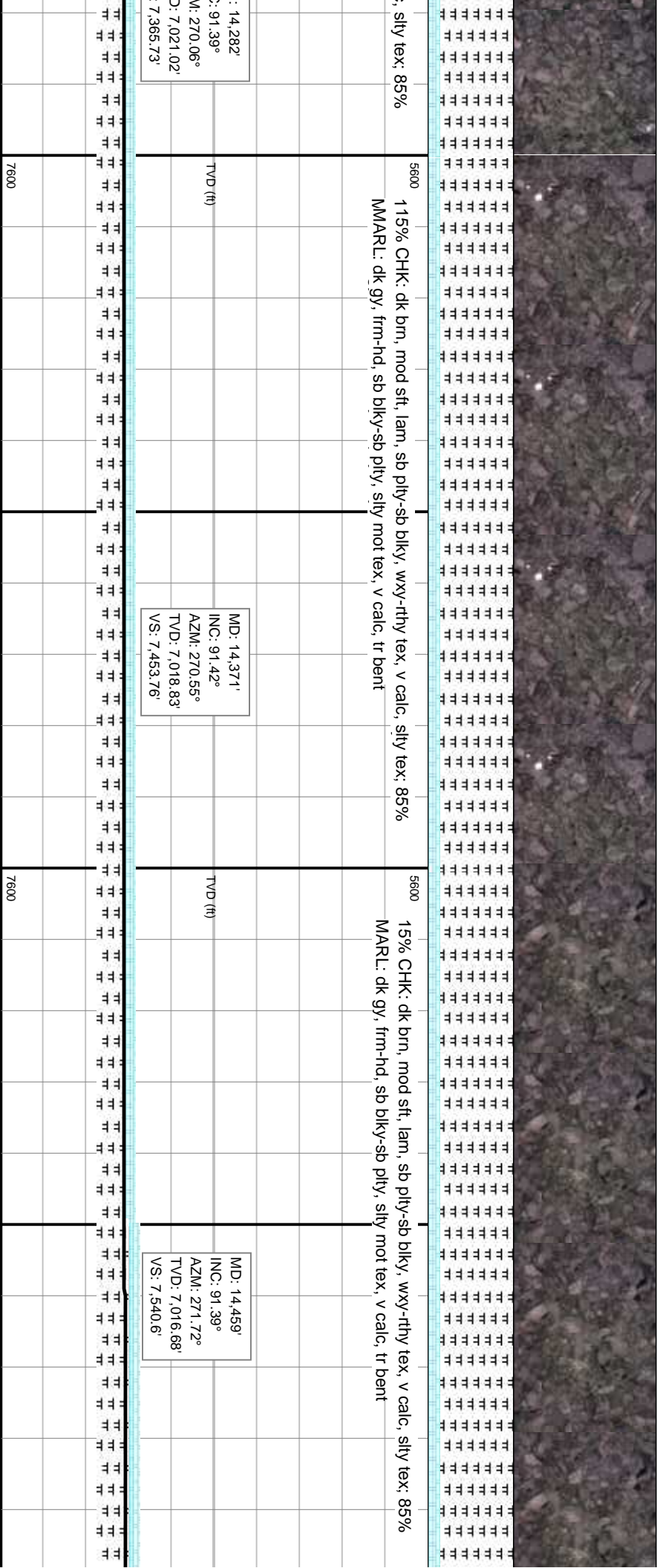
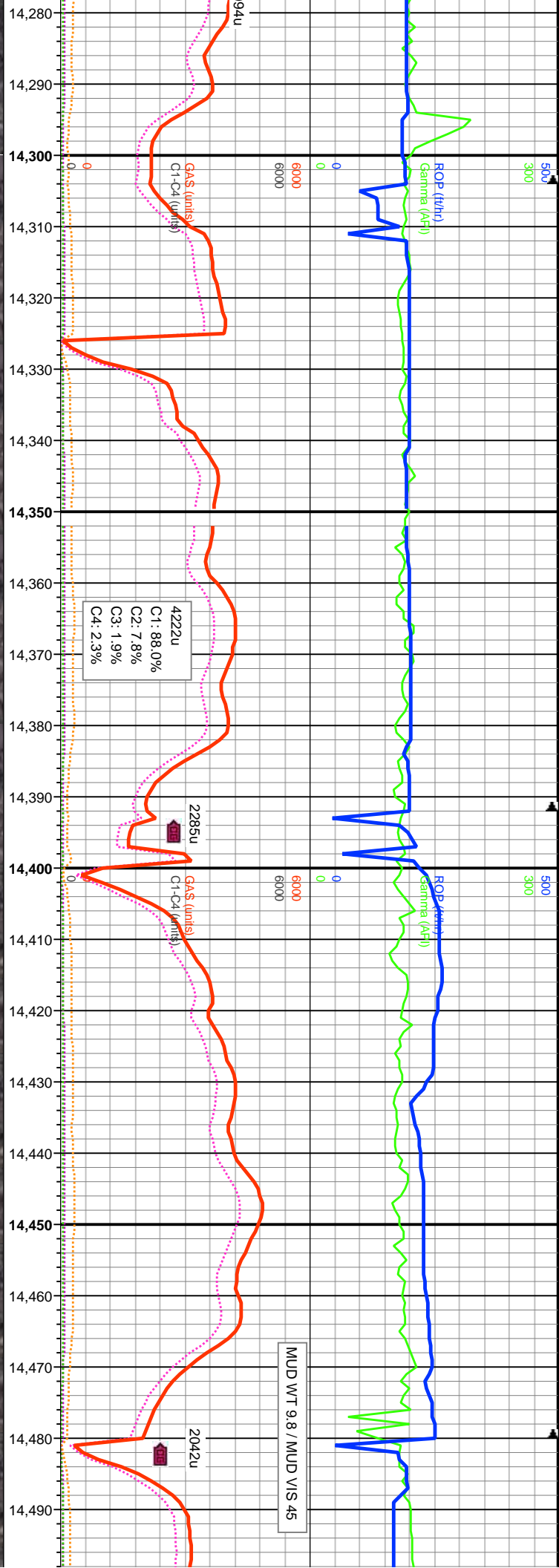


D: 13.843' C: 91.2° LM: 266.36° D: 7.030.84' S: 6.930.49'		TVD (ft)		MD: 13.932' INC: 91.11° AZM: 267.12° TVD: 7.029.05' VS: 7.019.16'		TVD (ft)		MD: 14.019' INC: 91.02° AZM: 269.21° TVD: 7.027.43' VS: 7.105.63'	
sb blkly-sb ply, silty mot tex, v calc, rr inoc, tr bent		5600		225% CHK: dk-med brn, mod sft, lam, sb ply-sb blkly, wxy-rthy tex, v calc, silty tex;		5600		25% CHK: dk-med brn, mod sft, lam, sb ply-sb blkly, wxy-rthy tex, v calc, silty tex;	
sb blkly-sb ply, silty mot tex, v calc, rr inoc, tr bent		7600		775% MARL: dk gy, frm-hd, sb blkly-sb ply, silty mot tex, v calc, rr inoc, tr bent		7600		75% MARL: dk gy, frm-hd, sb blkly-sb ply, silty mot tex, v calc, rr inoc, tr bent	

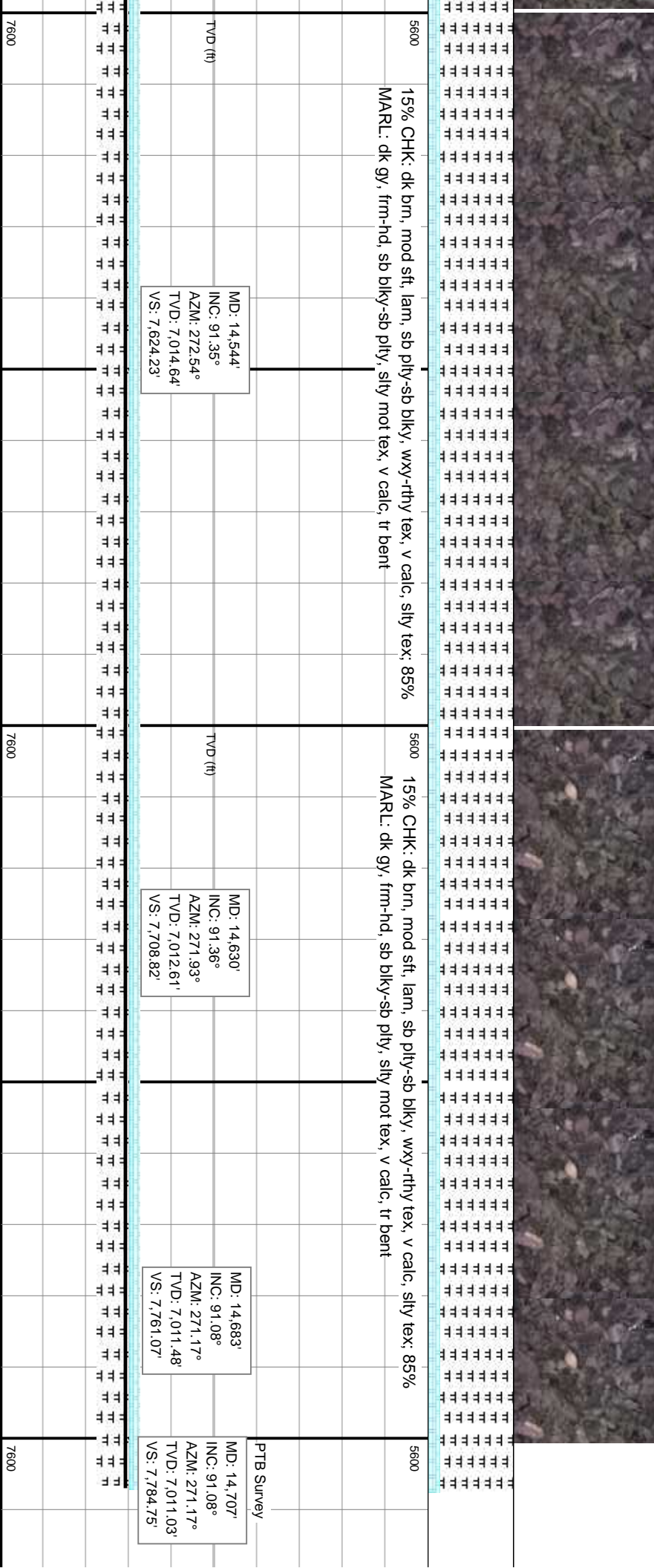
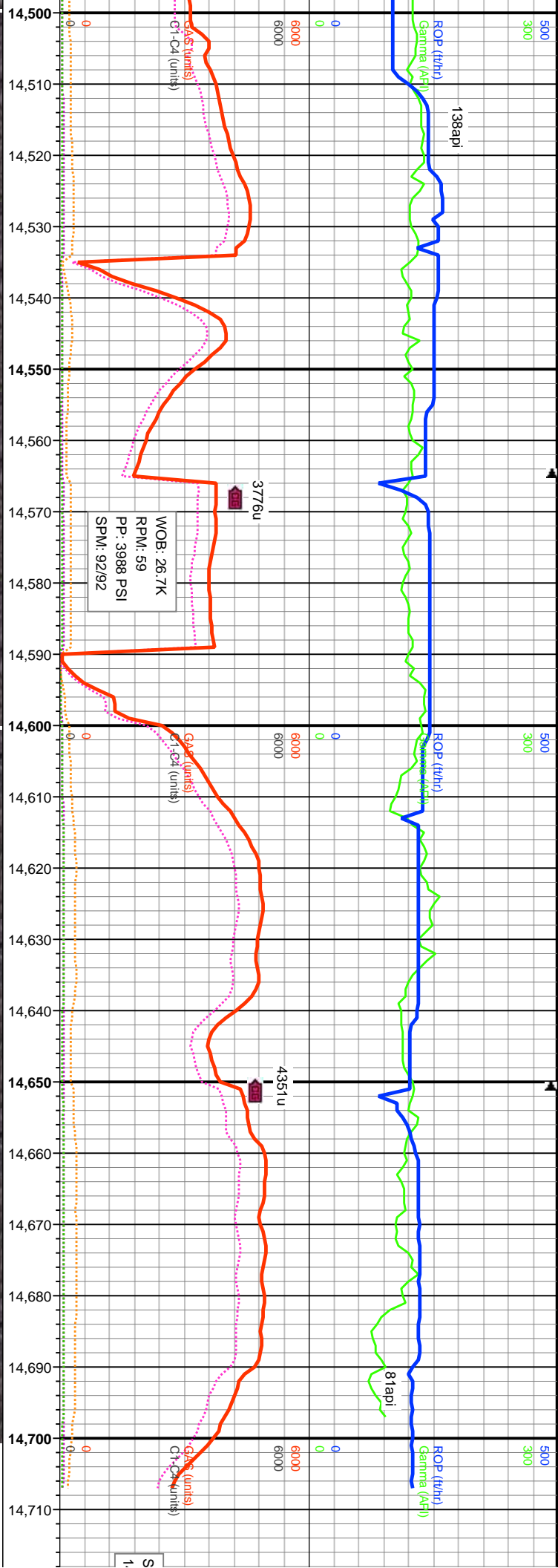














CHNEIDER HD 11-392HN WELLBORE TD AT  
4707' MD AT 11:54 ON 10/24/2015

14,720  
14,730  
14,740  
**14,750**  
14,760  
14,770

THANK YOU FOR USING TERRAGUIDANCE