



Scale: 5" / 100'
Measured Depth Log

Well Name Schneider HD 11-019HNX

Location SECTION 7, T4N, R66W

State COLORADO

Country UNITED STATES

API Number 051234641300

Geographic Region DJ BASIN

County WELD

Rig Number PRECISION 460

AFF # 19DC0216

Field WATTENBERG

Ground Elevation 4735.0'

K.B. Elevation 4755.0'

Logged Interval 6000' MD To 18136' MD

Total Depth 18136' MD

Formation NIOBRARA A CHALK

Type of Drilling Fluid OIL BASED MUD

Operator

Company Great Western Operating Company, LLC

Address 1001 17th Street, Suite 2000
Denver, CO 80202



Geologist

Name Joey Luce, Zac Olds, Hunter Newman

Company Terra Guidance

Address 67 W. Floyd Ave. Ste 105
Englewood, CO 80110
(970) 260-5408

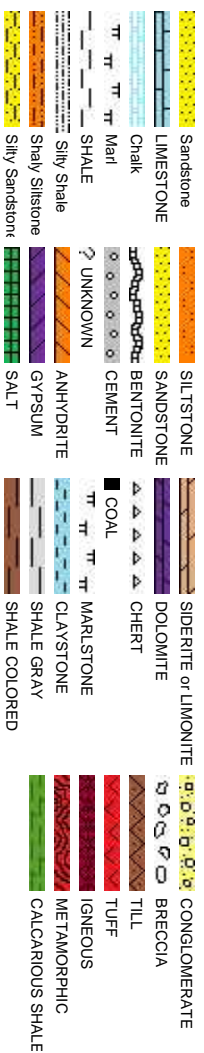


Other

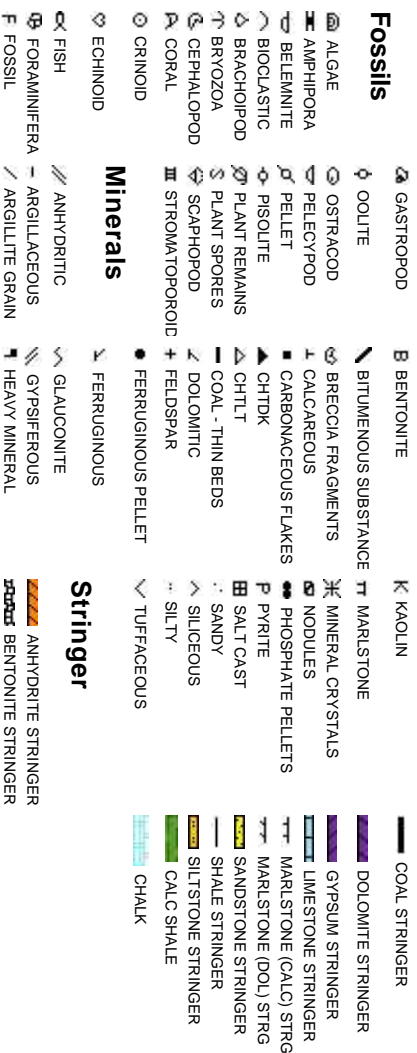
MUDLOG START DATE 09/15/2019

MUDLOG END DATE 09/18/2019

Rock Types



Accessories



Fossils

Minerals

Stringer

Porosity

Engineering

Oil Show

DEAD

EVEN

QUESTIONABLE

SPOTTED STAINING

BIT

CASING

CONNECTION (LEFT)

E EARTHY

CONNECTION (RIGHT)

FENESTRAL

CONNECTION GAS

F FRACTURE

CORE - LOST

INTERCRYSTALLINE

CORE - RECOVERED

INTEROOLITIC

DST INTERVAL

MOLDIC

FAULT

ORGANIC

PINPOINT

VUGGY

DEAD

EVEN

QUESTIONABLE

SPOTTED STAINING

BIT

CASING

CONNECTION (LEFT)

CONNECTION (RIGHT)

CONNECTION GAS

CORE - LOST

CORE - RECOVERED

DST INTERVAL

FAULT

ORGANIC

PINPOINT




VUGGY

Other Symbols

 FORMATION TOP L LITHOGRAPHIC


Rounding

GAS SHOW  MICROXLN

 MIN DEPTH  ANGULAR  MUDSTONE

NORMAL FAULT  ROUNDED  PACKSTONE

OIL SHOW  SUBANG  WACKESTONE

OVERTURNED STRATA  SUBRND

Sorting


REVERSE FAULT

Textures

SIDEWALL CORE (LEFT)  MODERATE


SIDEWALL CORE (RIGHT)  BOUNDSTONE  POOR

SLIDE  CHALKY  WELL


 SURVEY  CRYPTOXLN

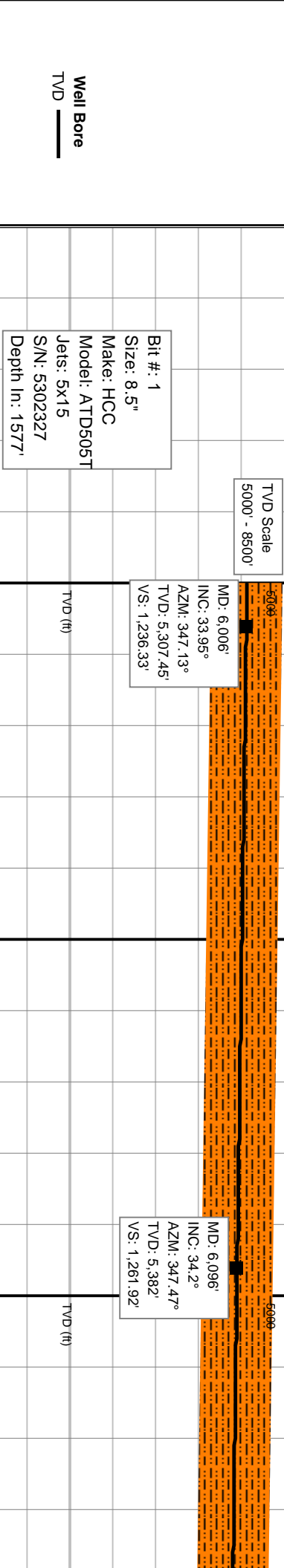
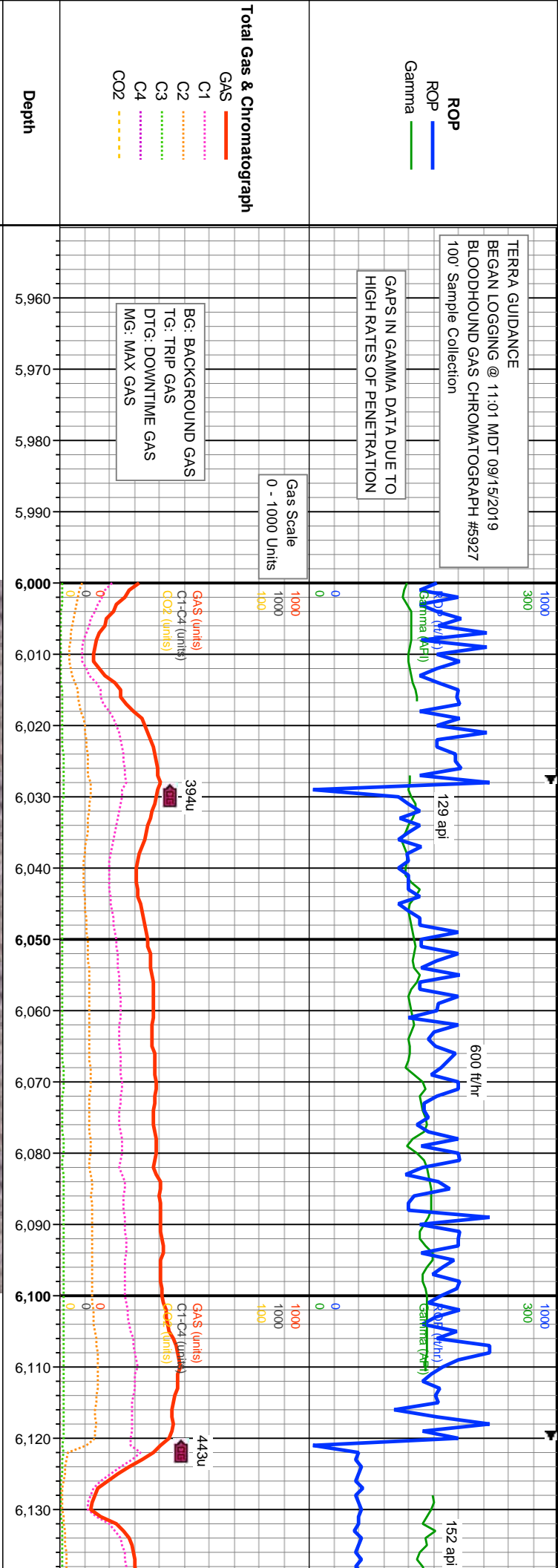
CALCARIUOS SHALE

 TRIP GAS  EARTHY

WIRELINE TESTED - LEFT  FINELYXLN

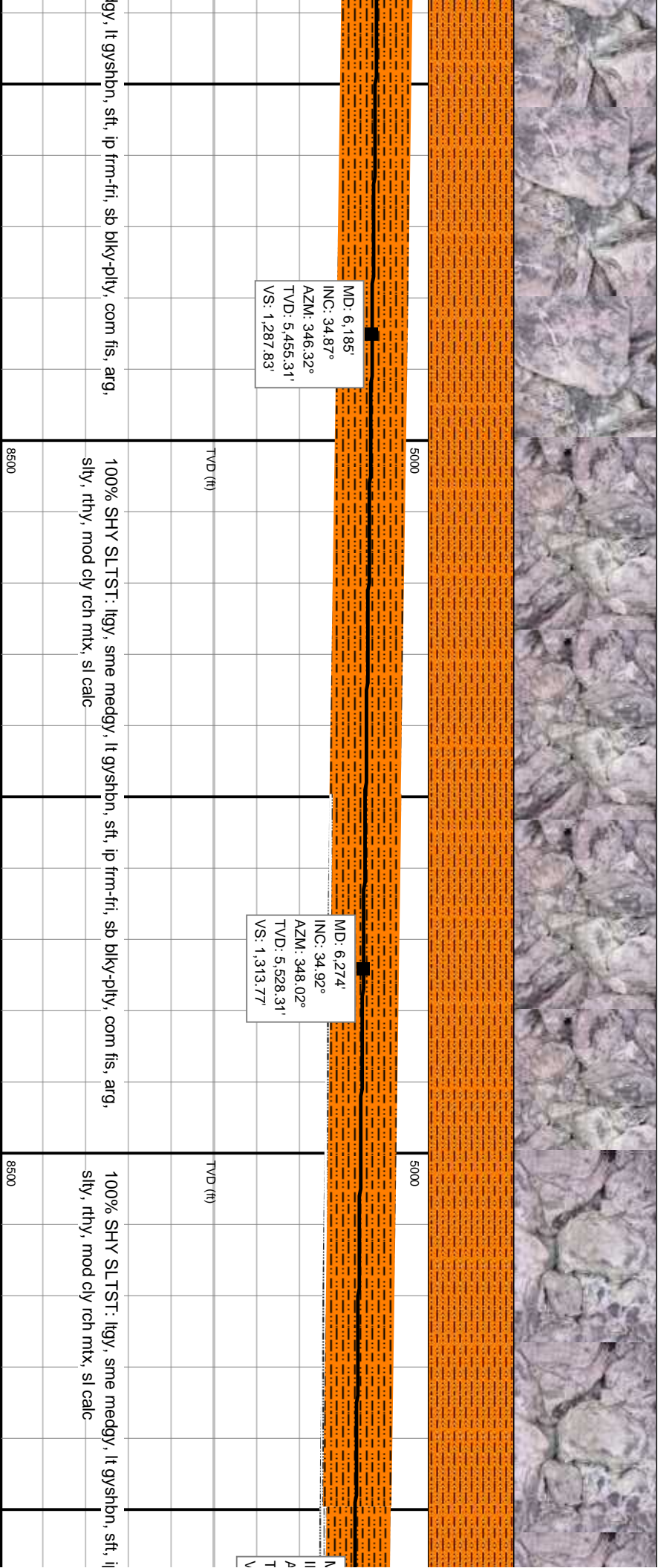
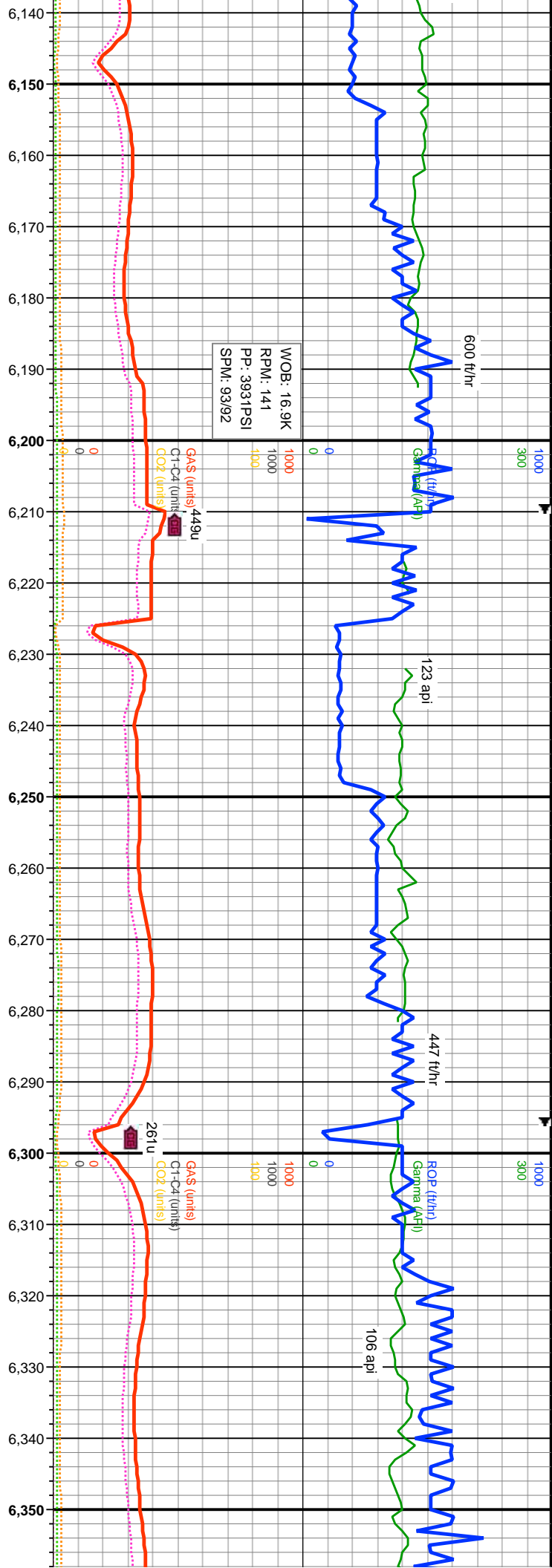
CALCARIOUS SHALE

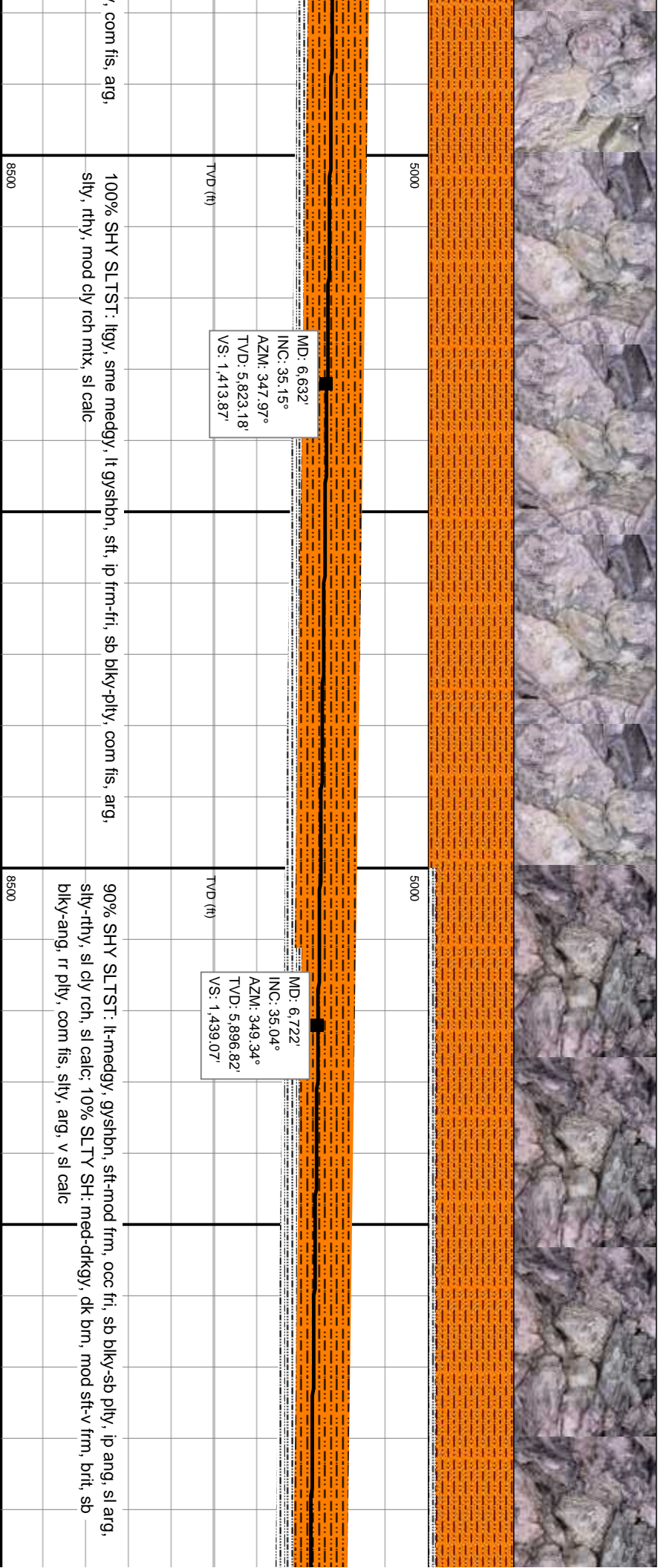
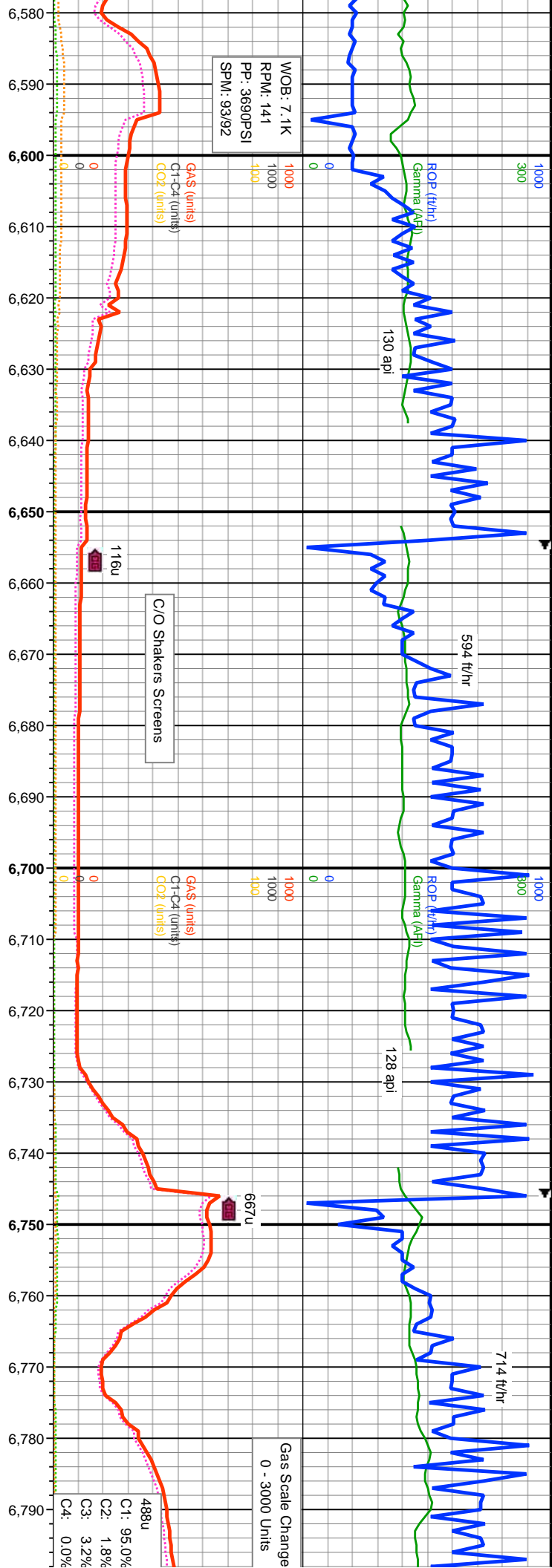
WIRELINE TESTED - RT  GRAINSTONE

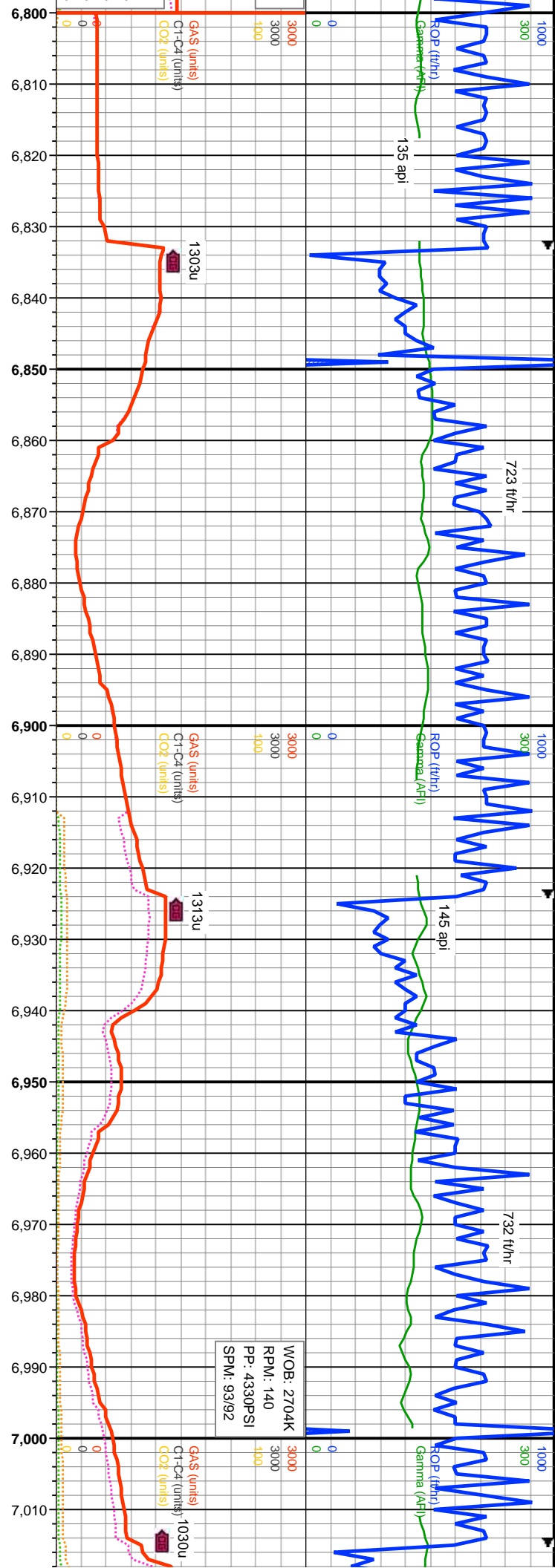


100% SHY SLTST: ltgy, sme medgy, lt gysbhn, sft, ip frm-fri, sb blkv-plty, com fis, arg, sfty, rthy, mod cly rch mtx, sl calc

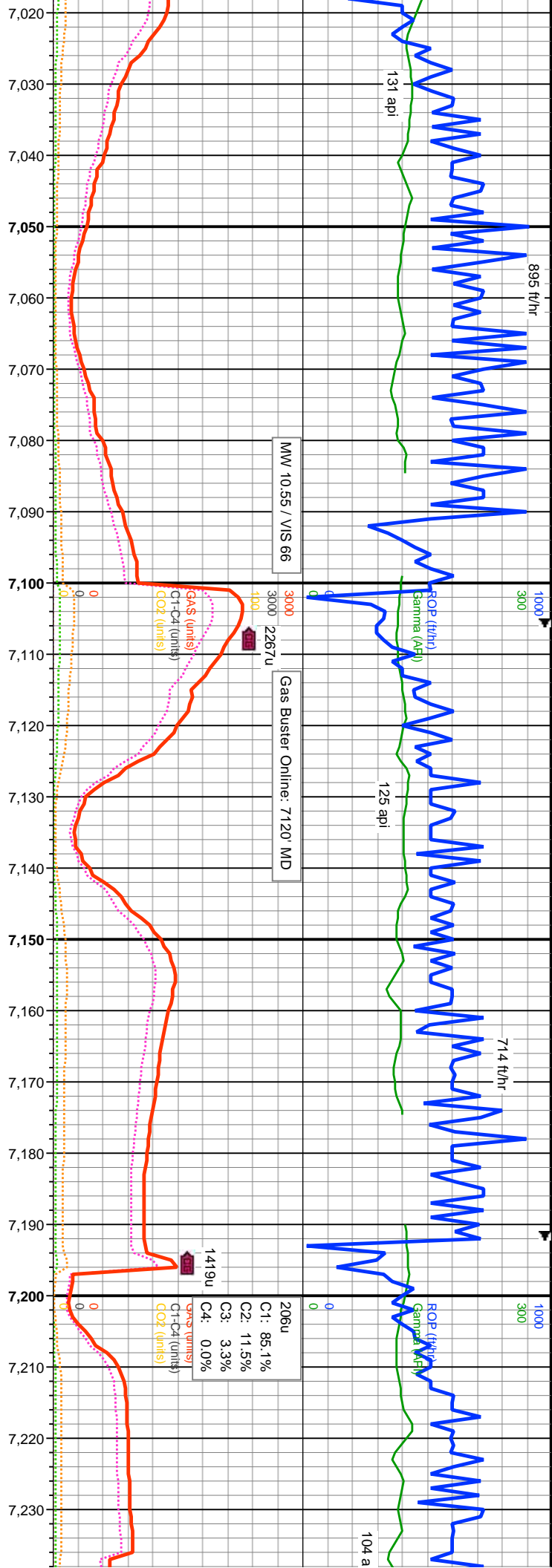
100% SHY SLTST: ltgy, sme meoc sfty, rthy, mod cly rch mtx, sl calc





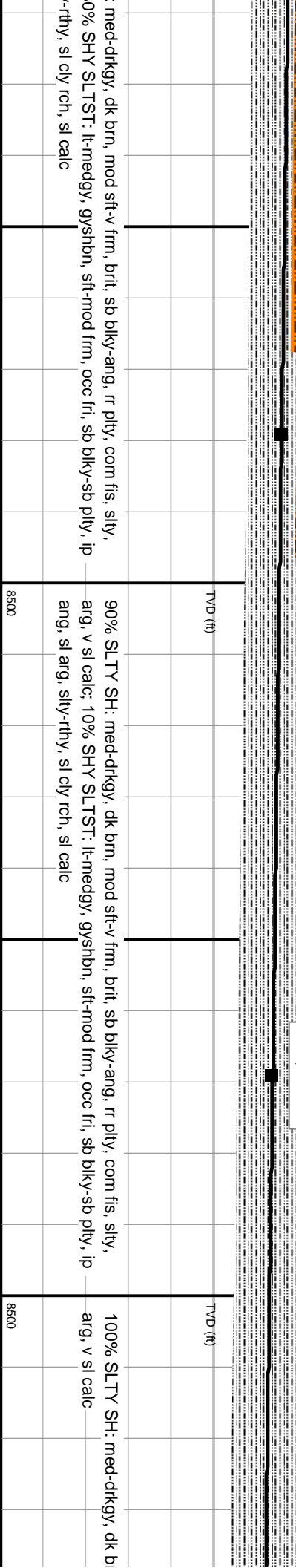


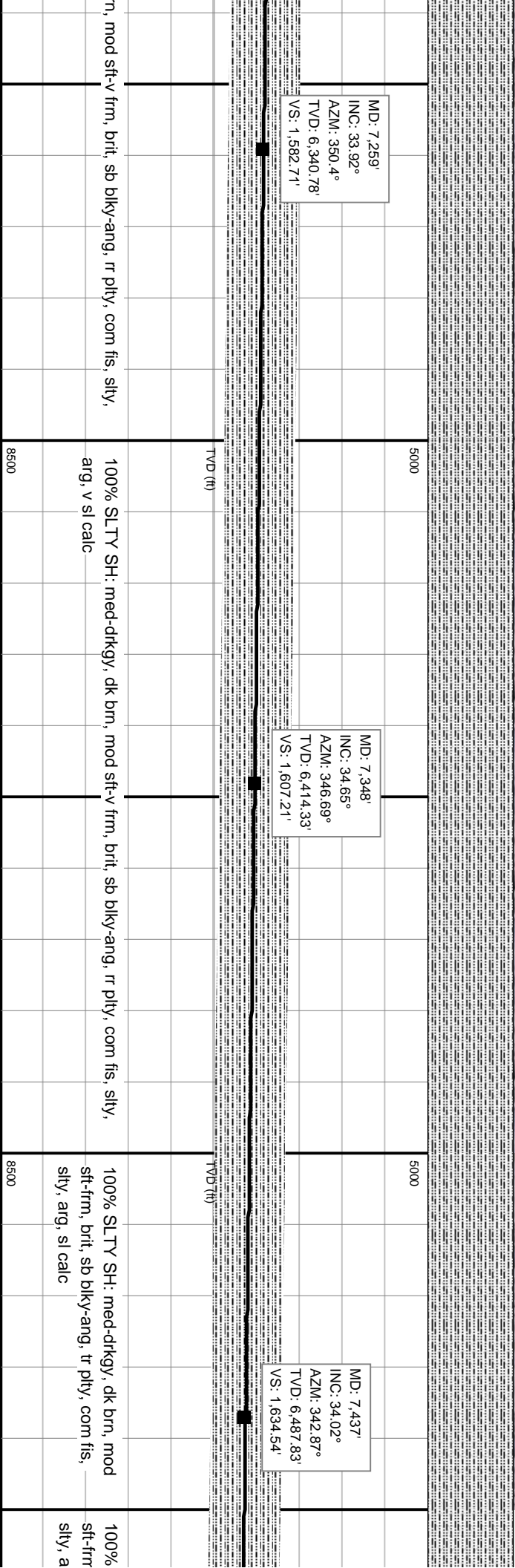
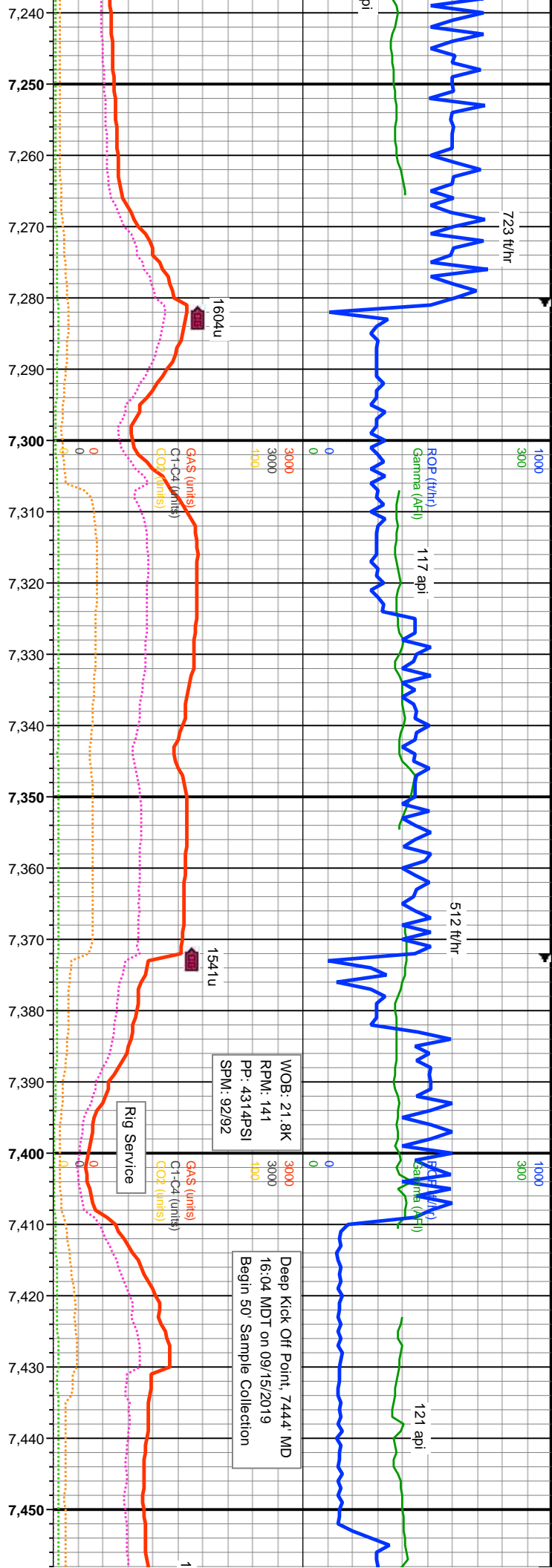
504 MD: 6,811' INC: 34.46° AZM: 348.84° TVD: 5,969.94' VS: 1,463.44'		MD: 6,901' INC: 34.05° AZM: 349.37° TVD: 6,044.33' VS: 1,487.77'		MD: 6,990' INC: 34.27° AZM: 348.56° TVD: 6,117.98' VS: 1,511.87'	
75% SHY SLTST: lt-medgy, gyshbn, sft-mod frm, occ fri, sb blk-y-sb pily, ip ang, sl arg, slty-rthy, sl cly rch, sl calc, 25% SLTY SH: med-dtkgy, dk brn, mod sft-v frm, brit, sb blk-y-ang, rr pily, com fis, slty, arg, v sl calc		50% SHY SLTST: lt-medgy, gyshbn, sft-mod frm, occ fri, sb blk-y-sb pily, ip ang, sl arg, slty-rthy, sl cly rch, sl calc, 50% SLTY SH: med-dtkgy, dk brn, mod sft-v frm, brit, sb blk-y-ang, rr pily, com fis, slty, arg, v sl calc		70% SLTY SH arg, v sl calc, 3 ang, sl arg, slty	
TVD (ft)		TVD (ft)		TVD (ft)	
8500		8500		8500	

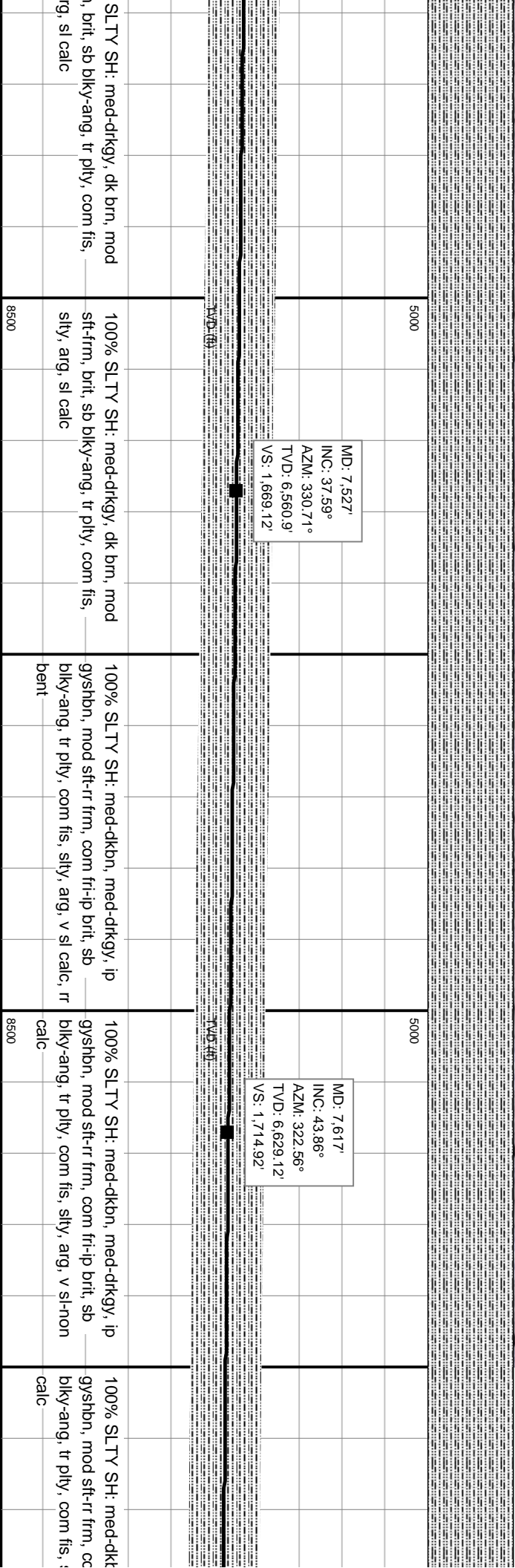
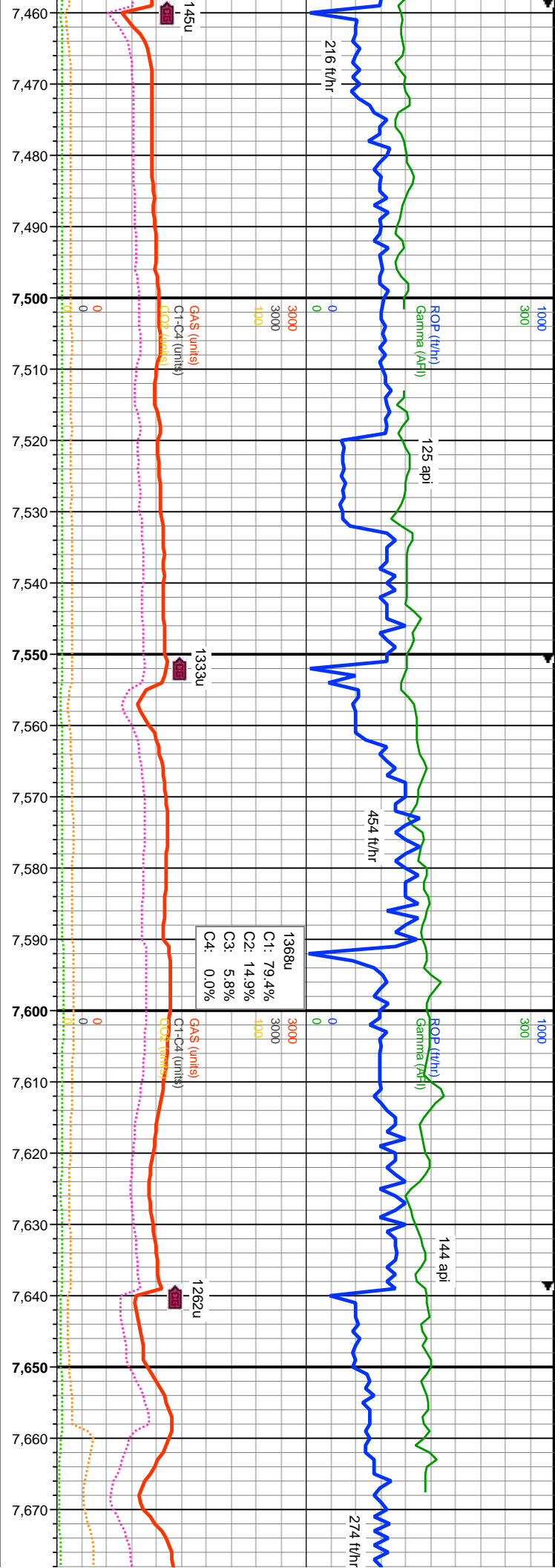


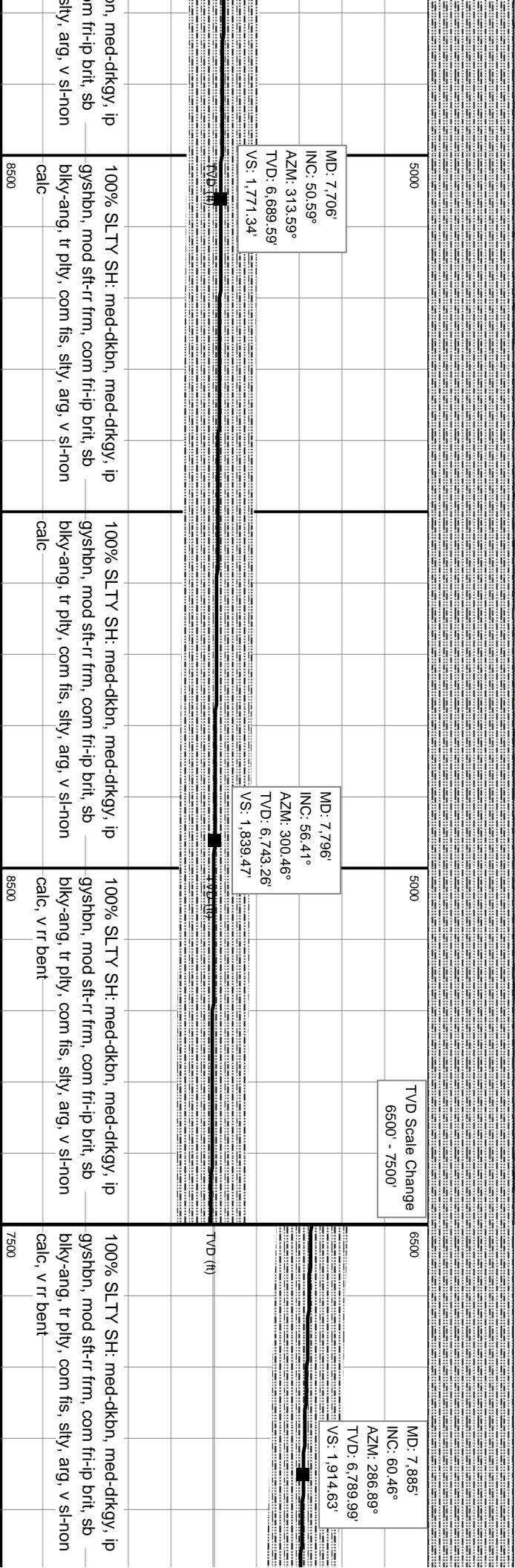
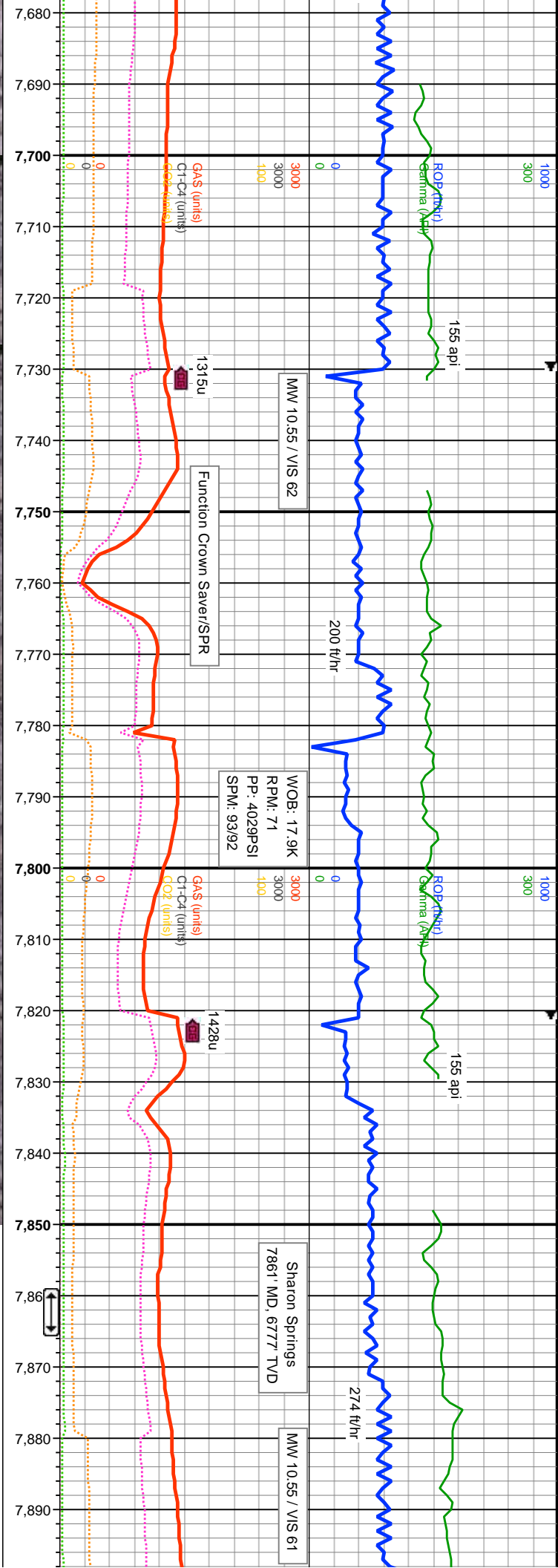
MD: 7,079'
INC: 33.62°
AZM: 349.46°
TVD: 6,191.81'
VS: 1,535.81'

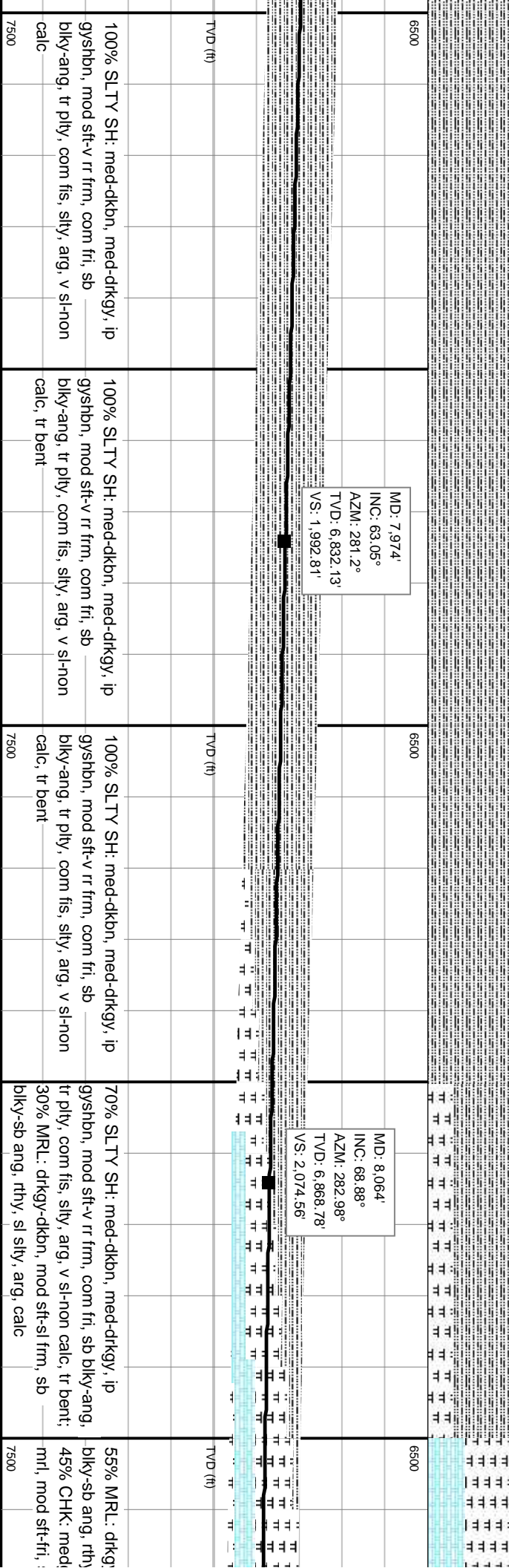
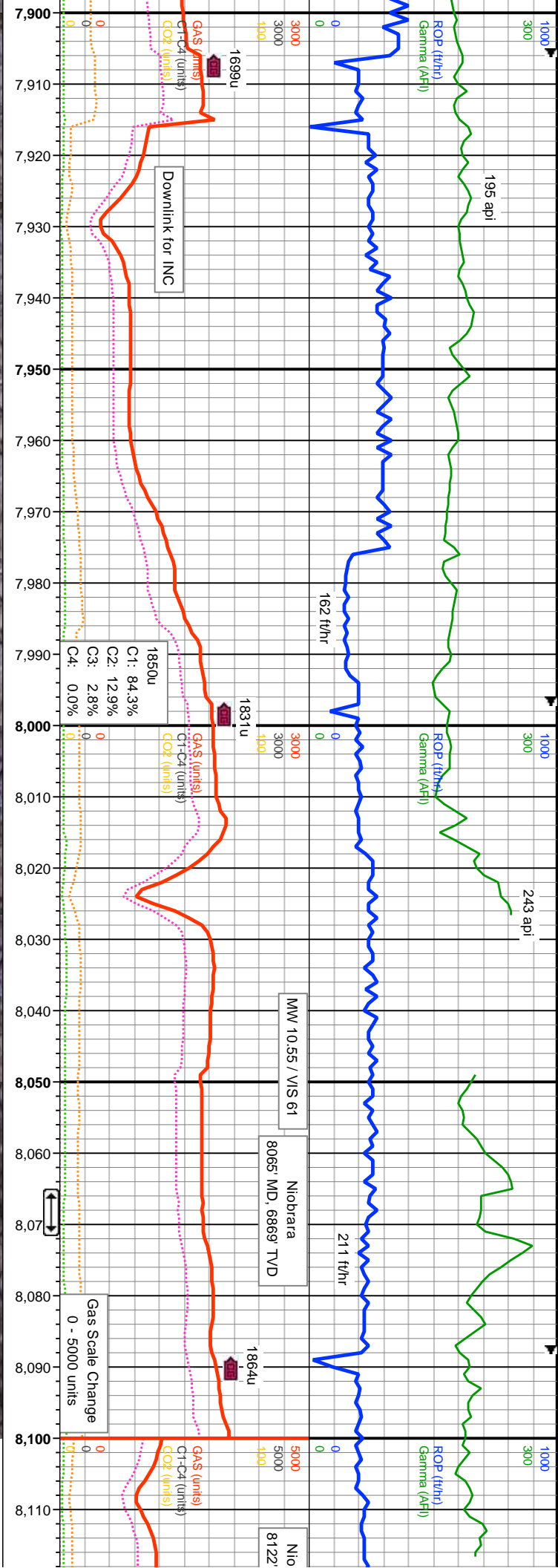
MD: 7,169'
INC: 34.52°
AZM: 350.34°
TVD: 6,266.36'
VS: 1,569.39'

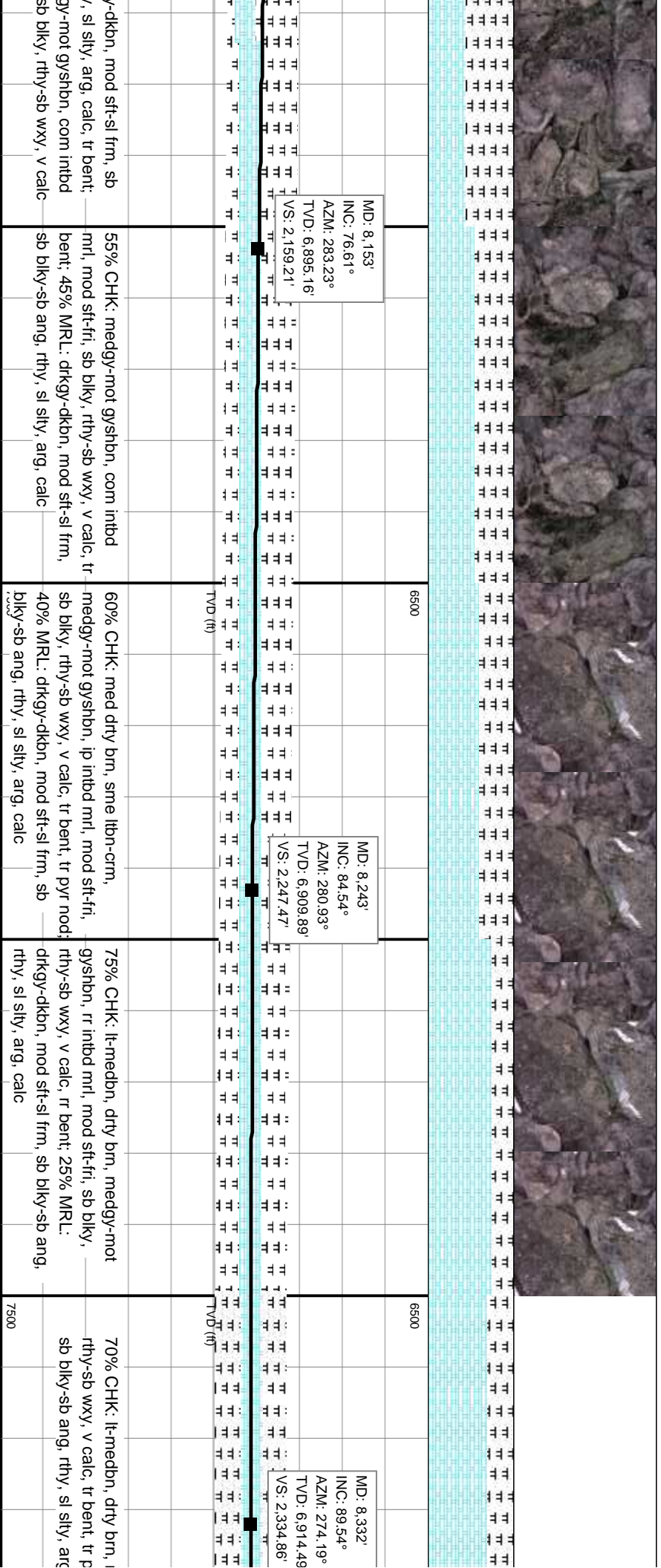
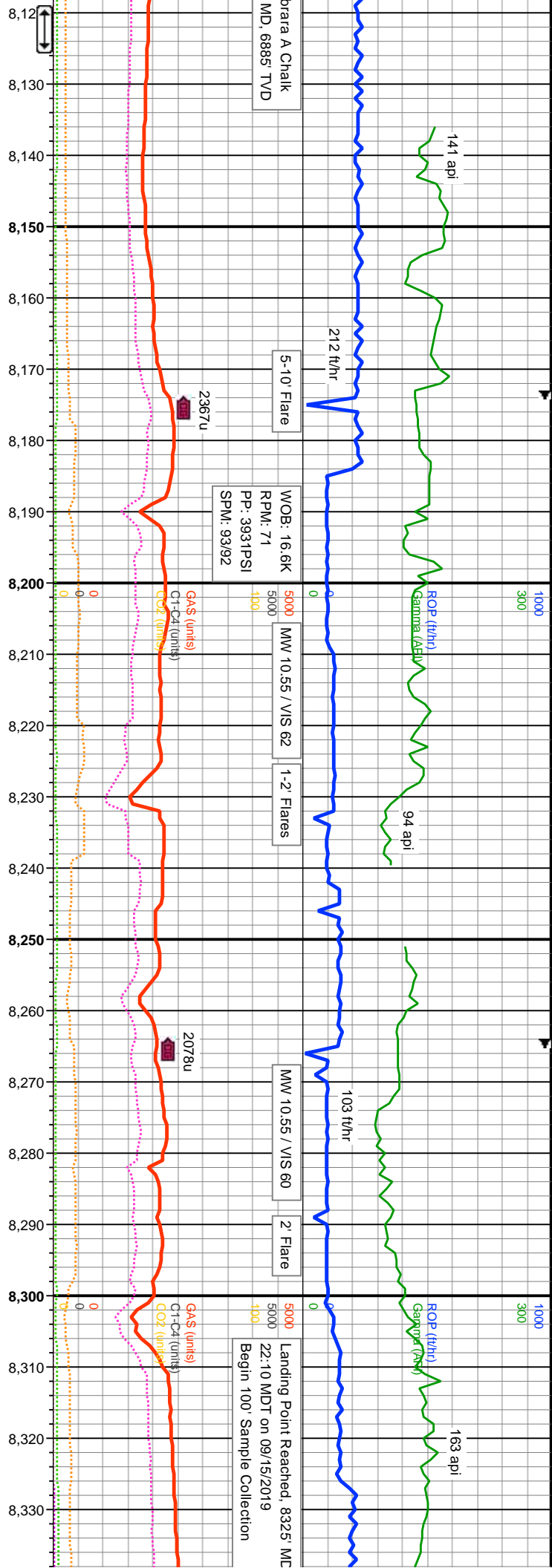


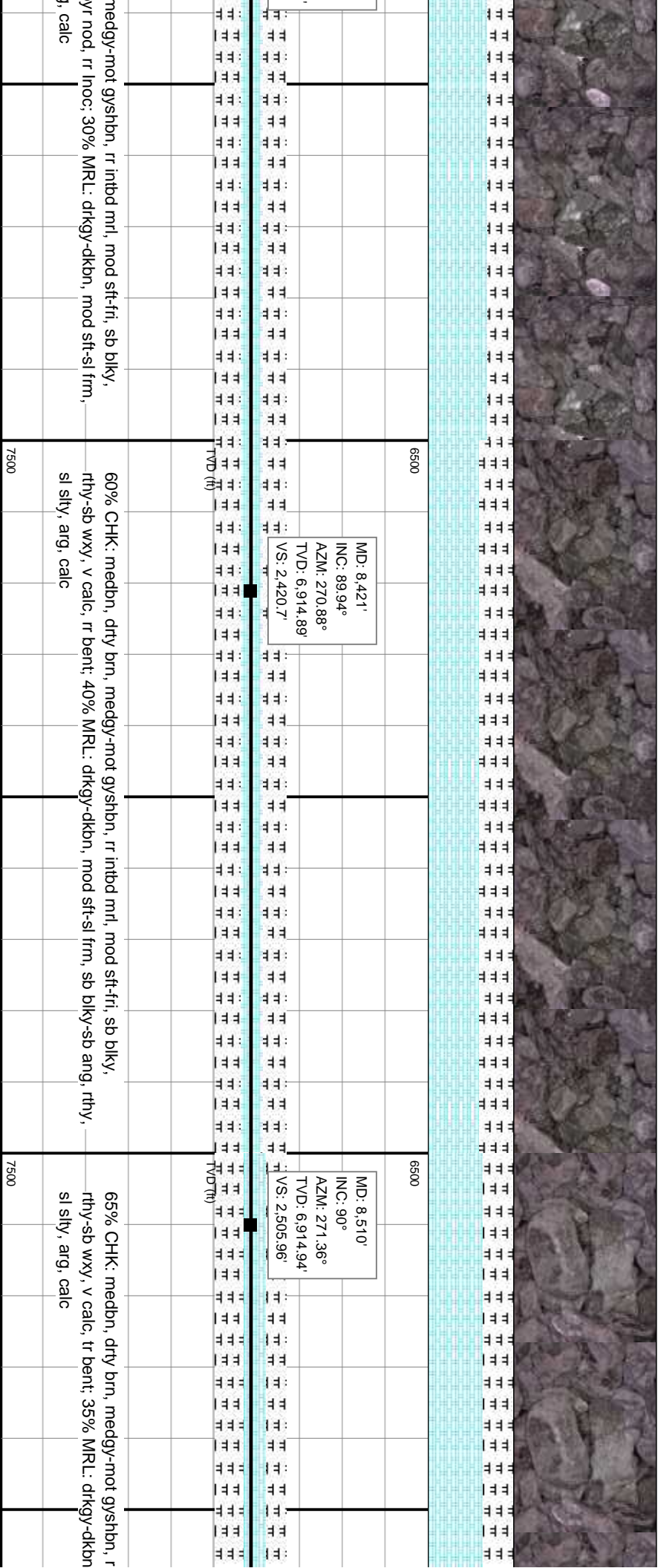
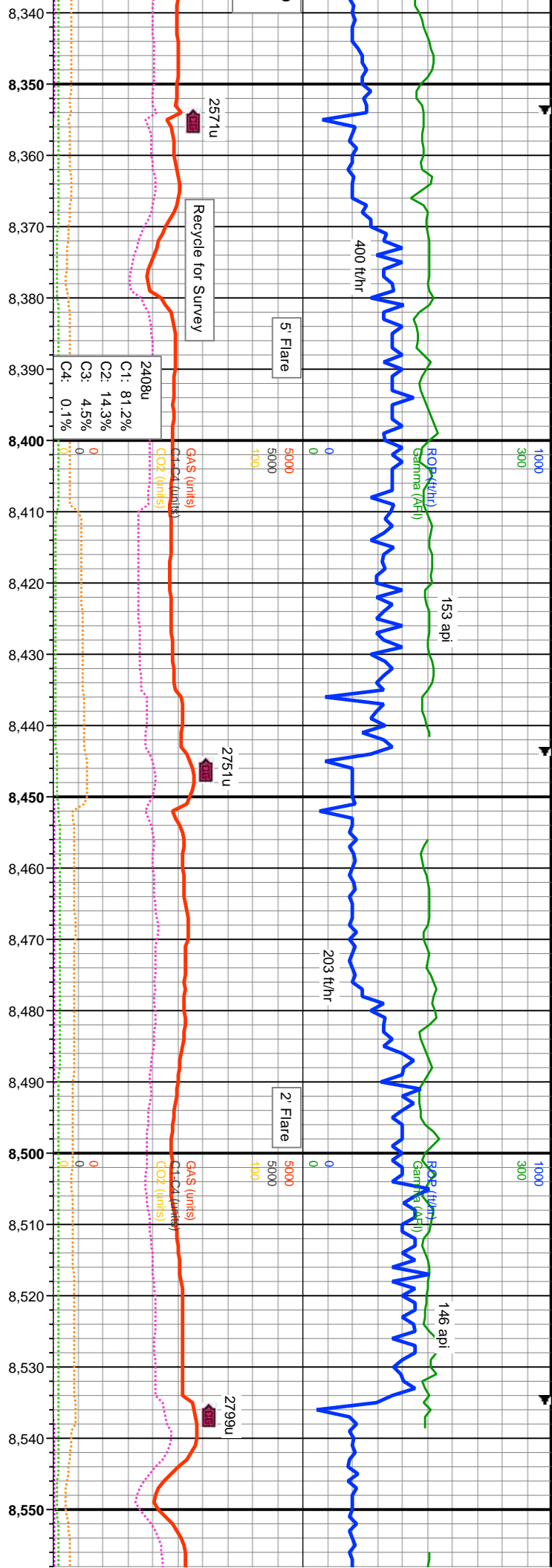


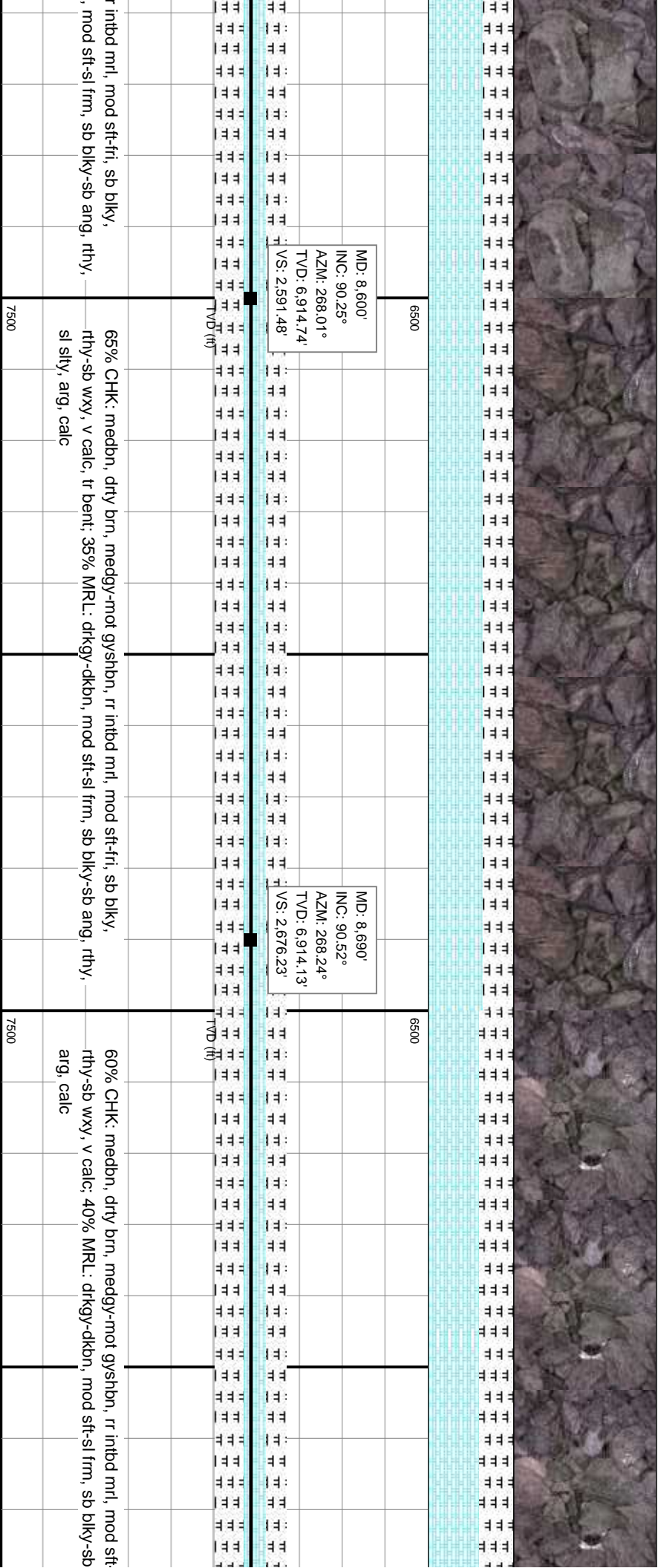
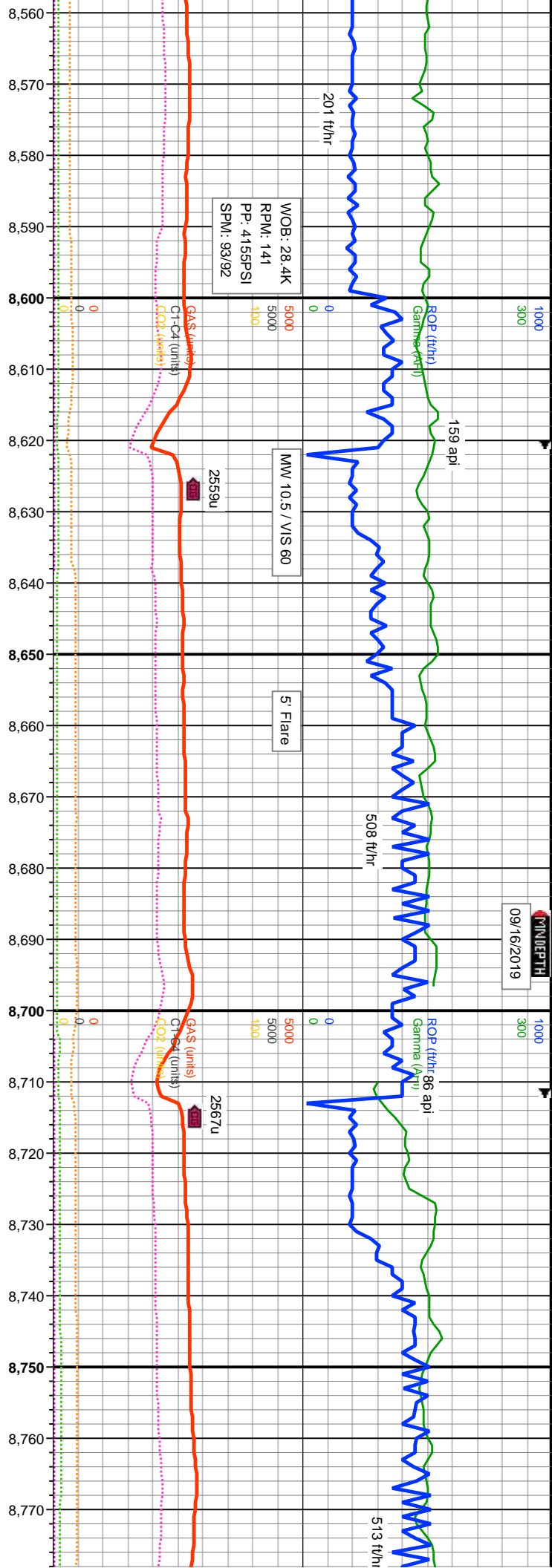


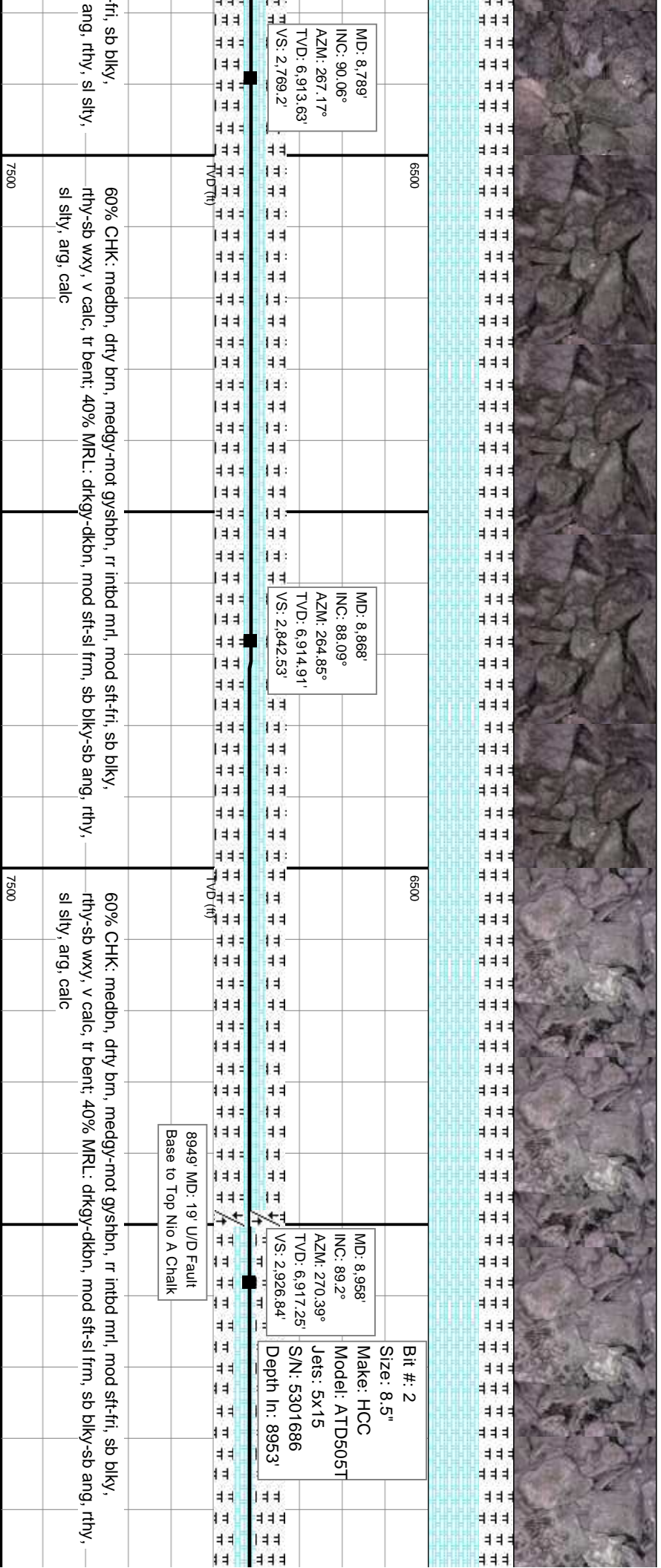
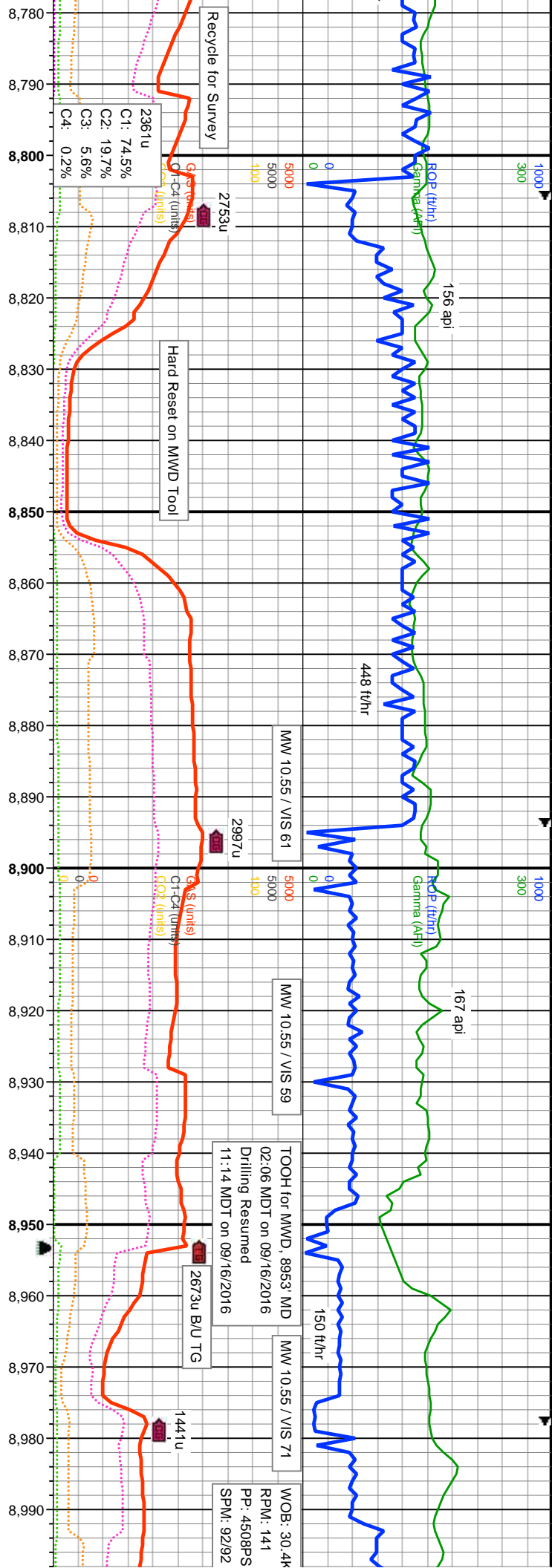


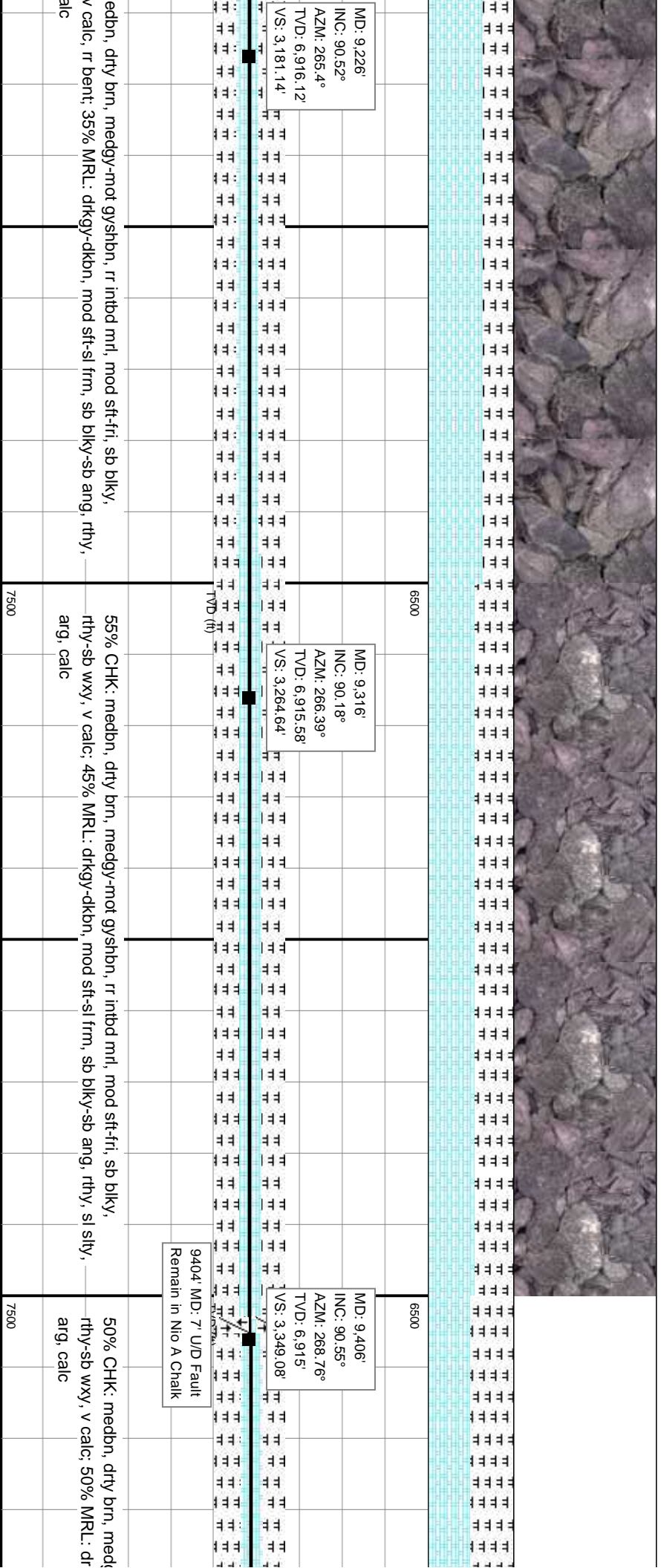
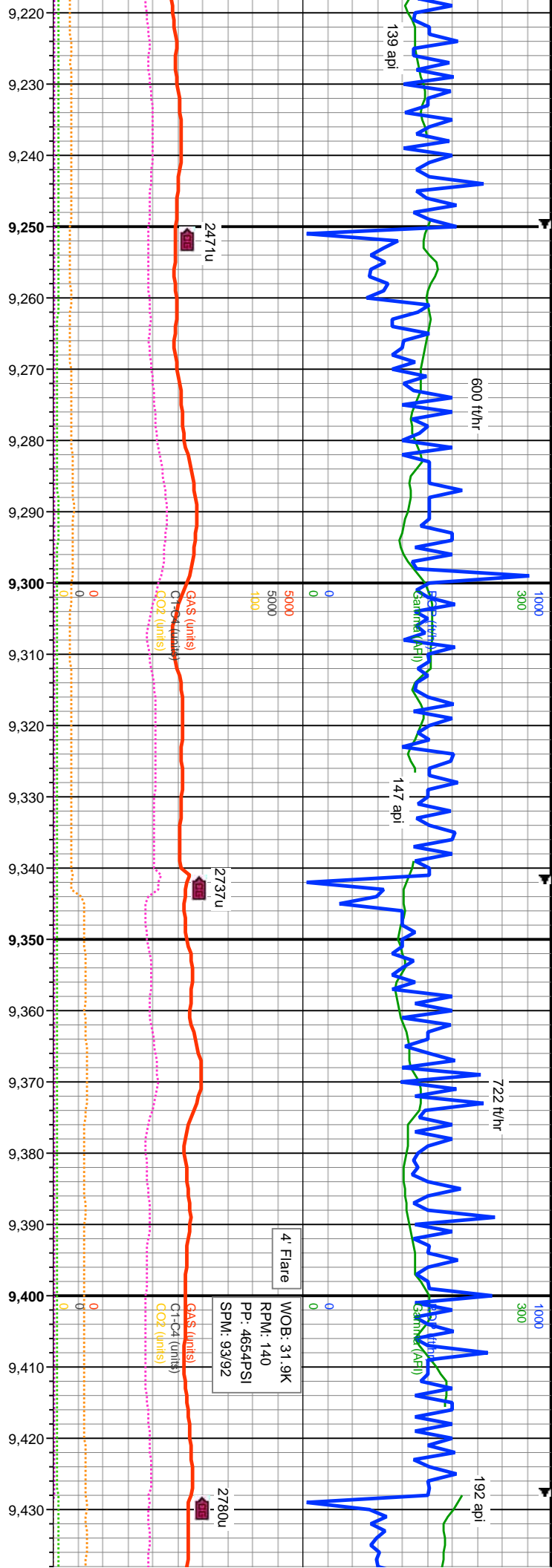


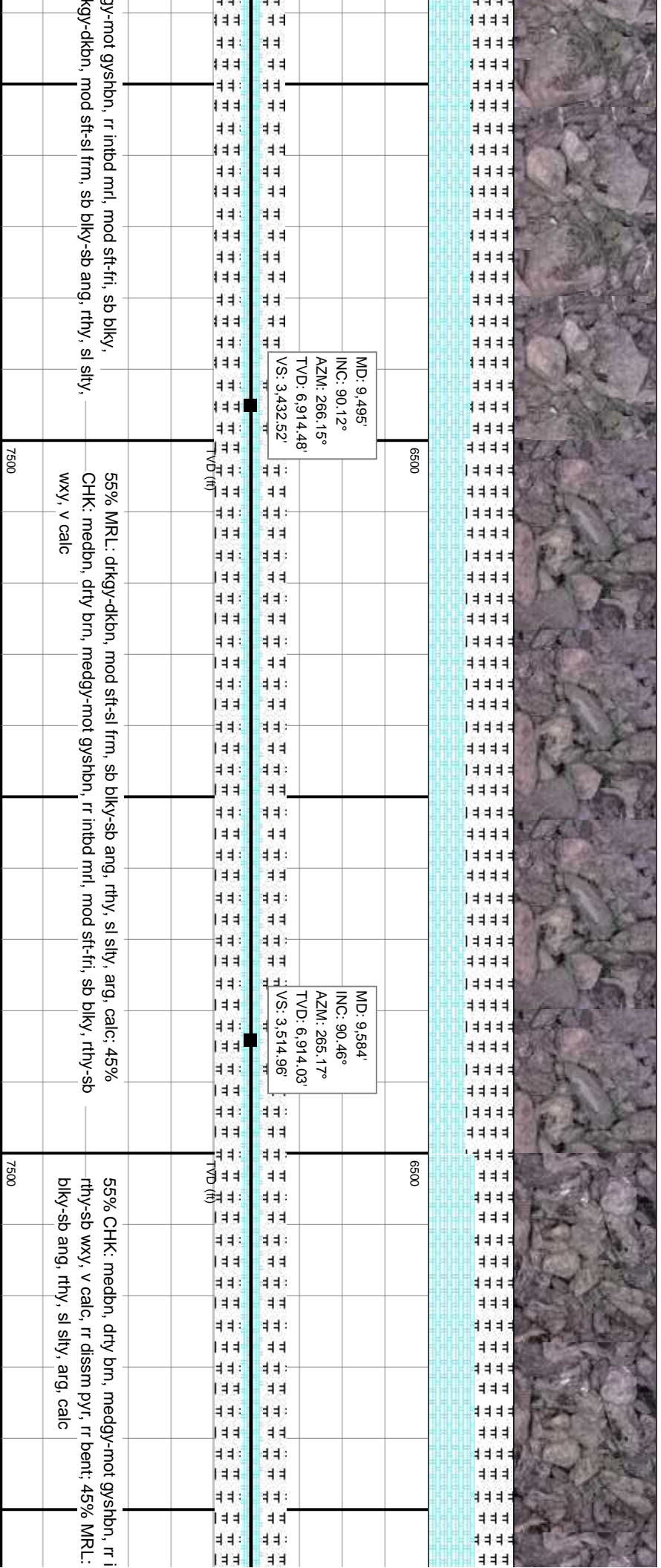
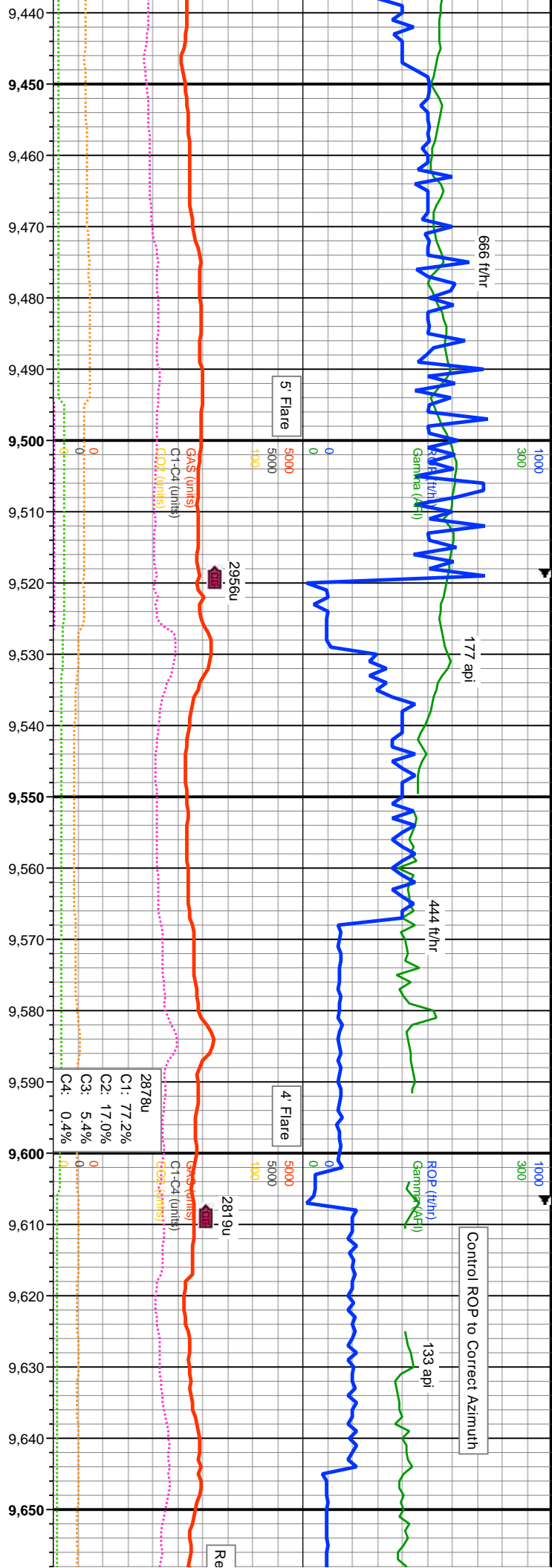


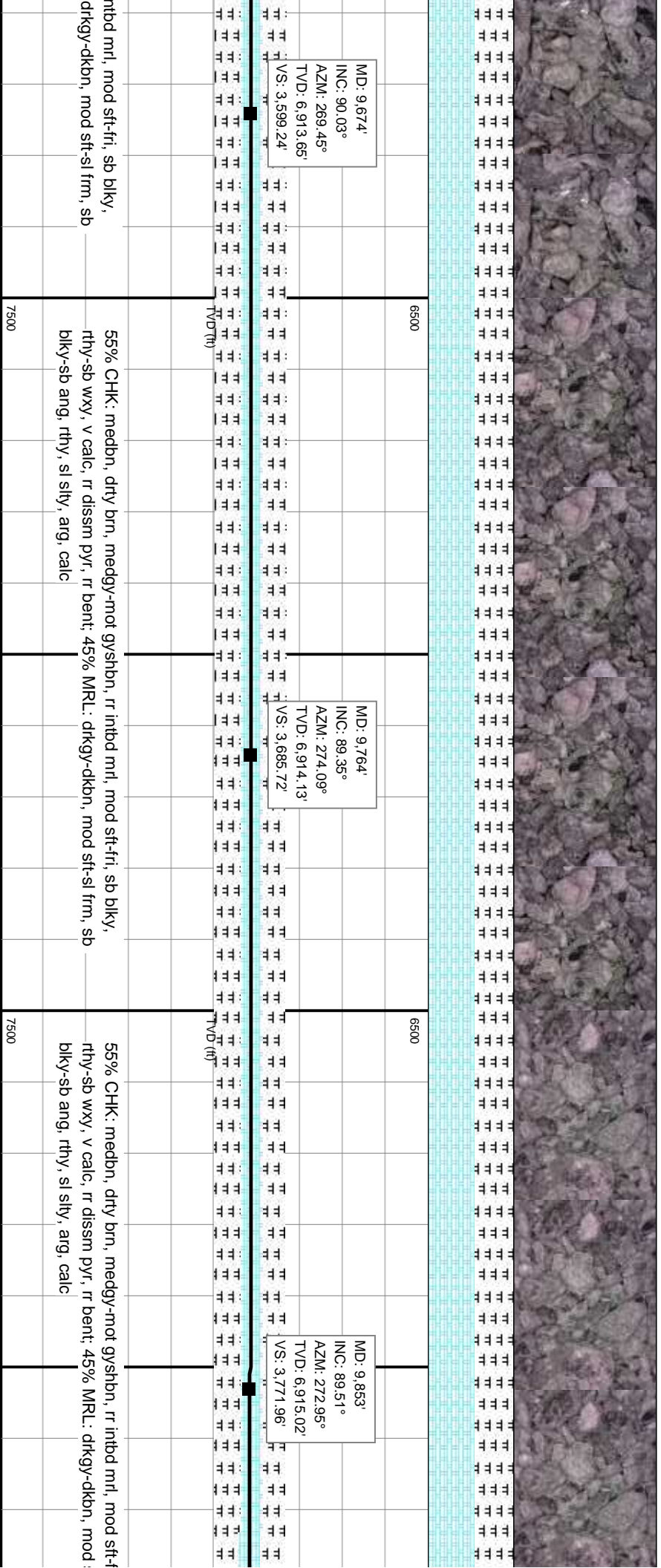
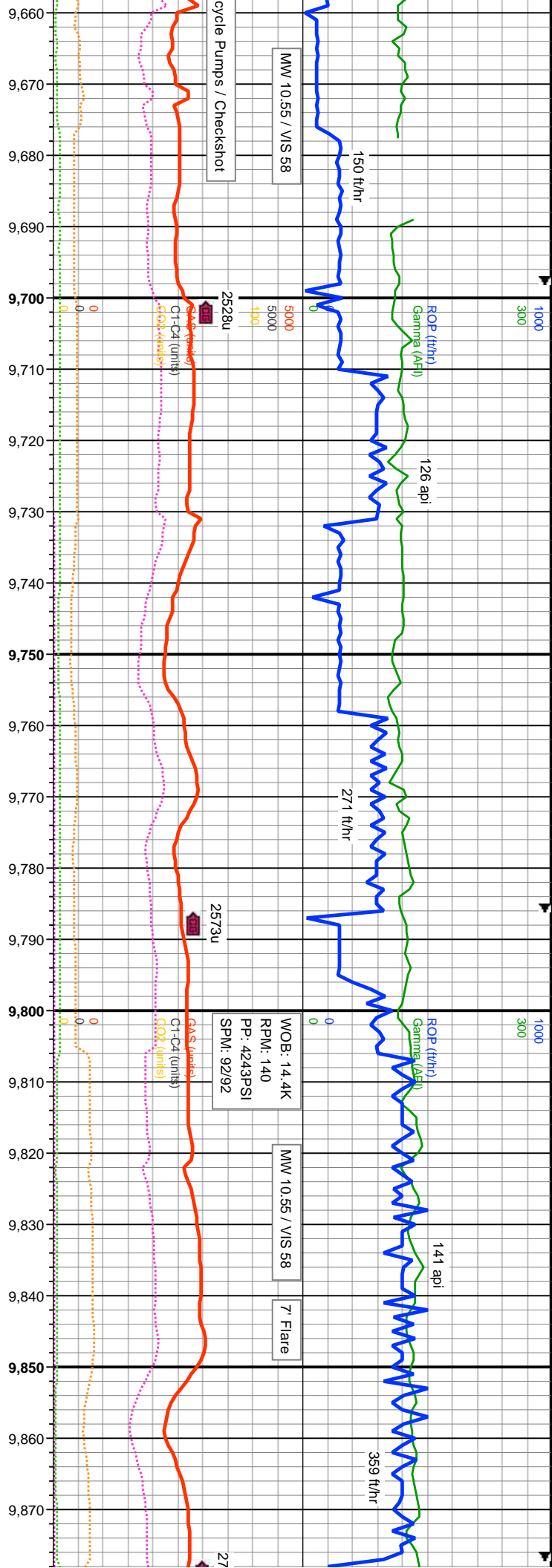


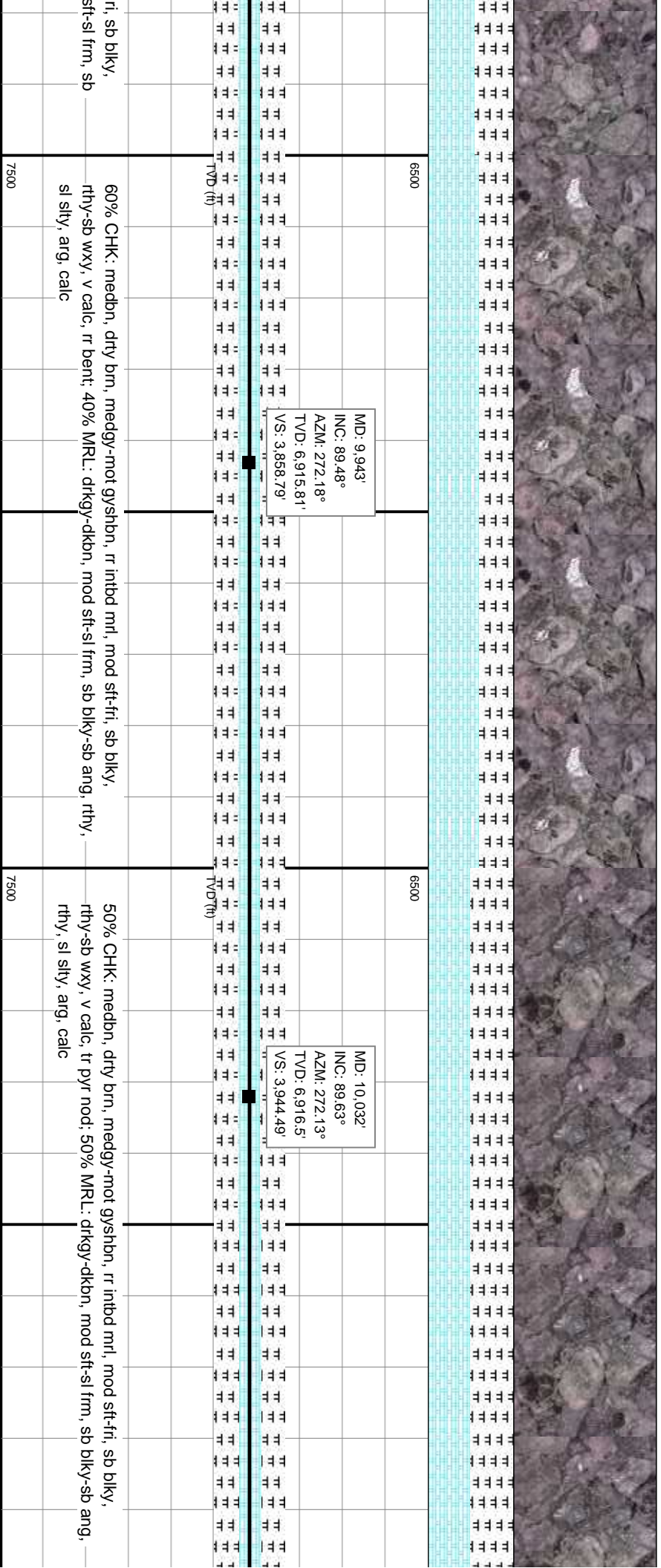
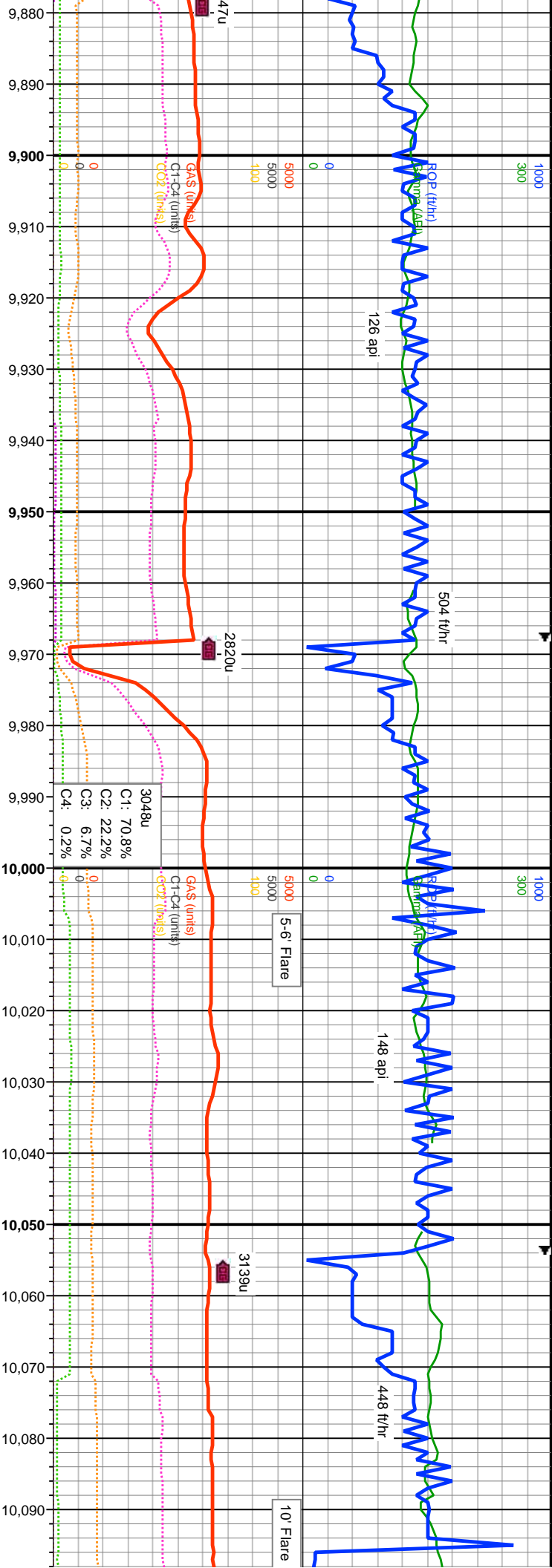


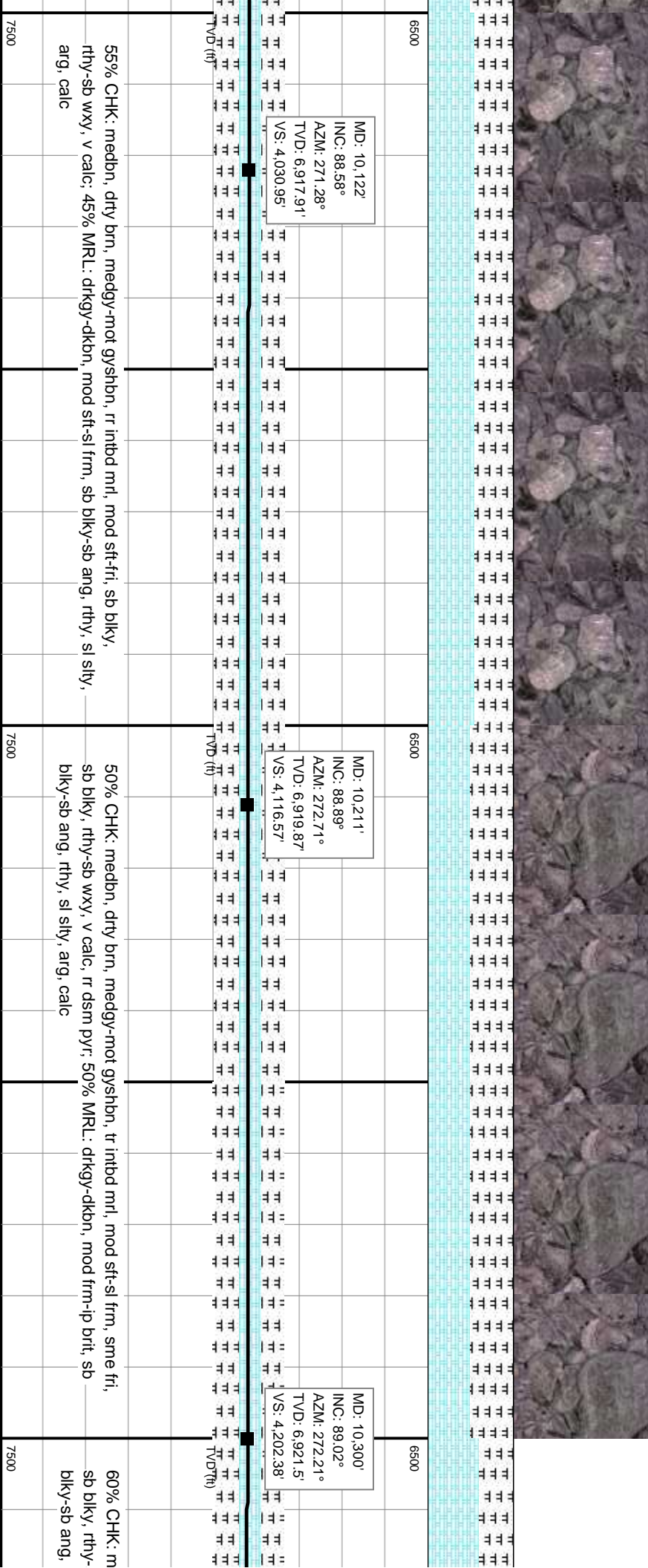
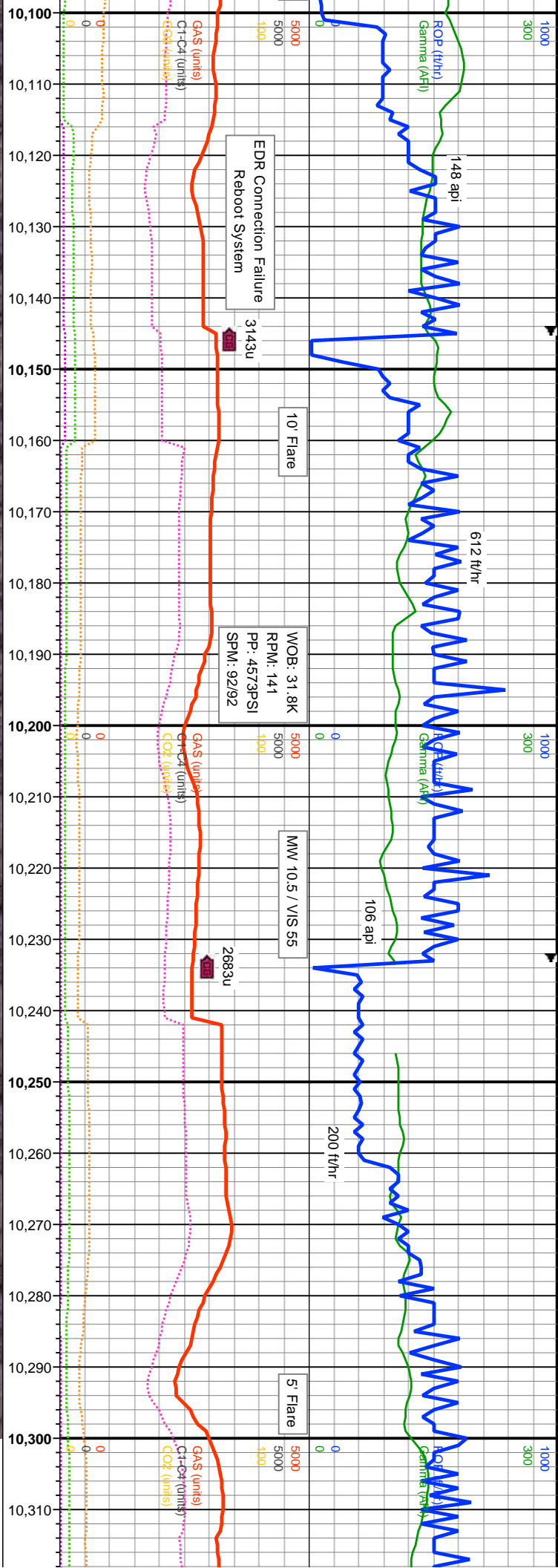


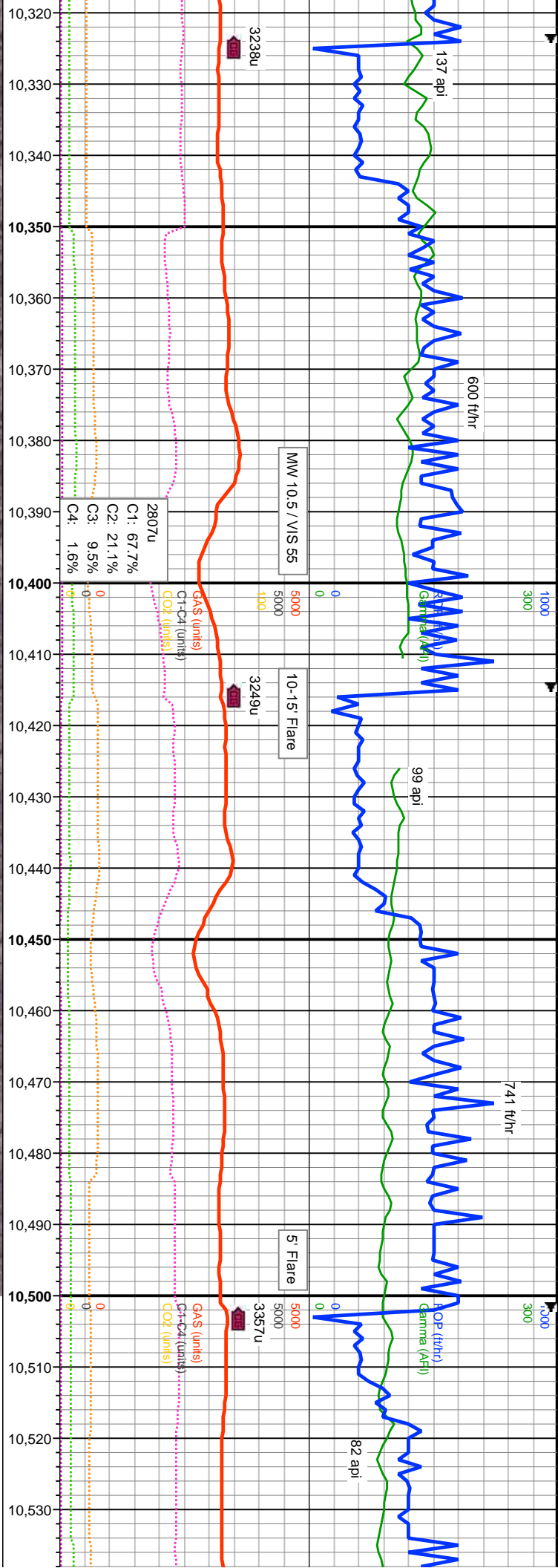




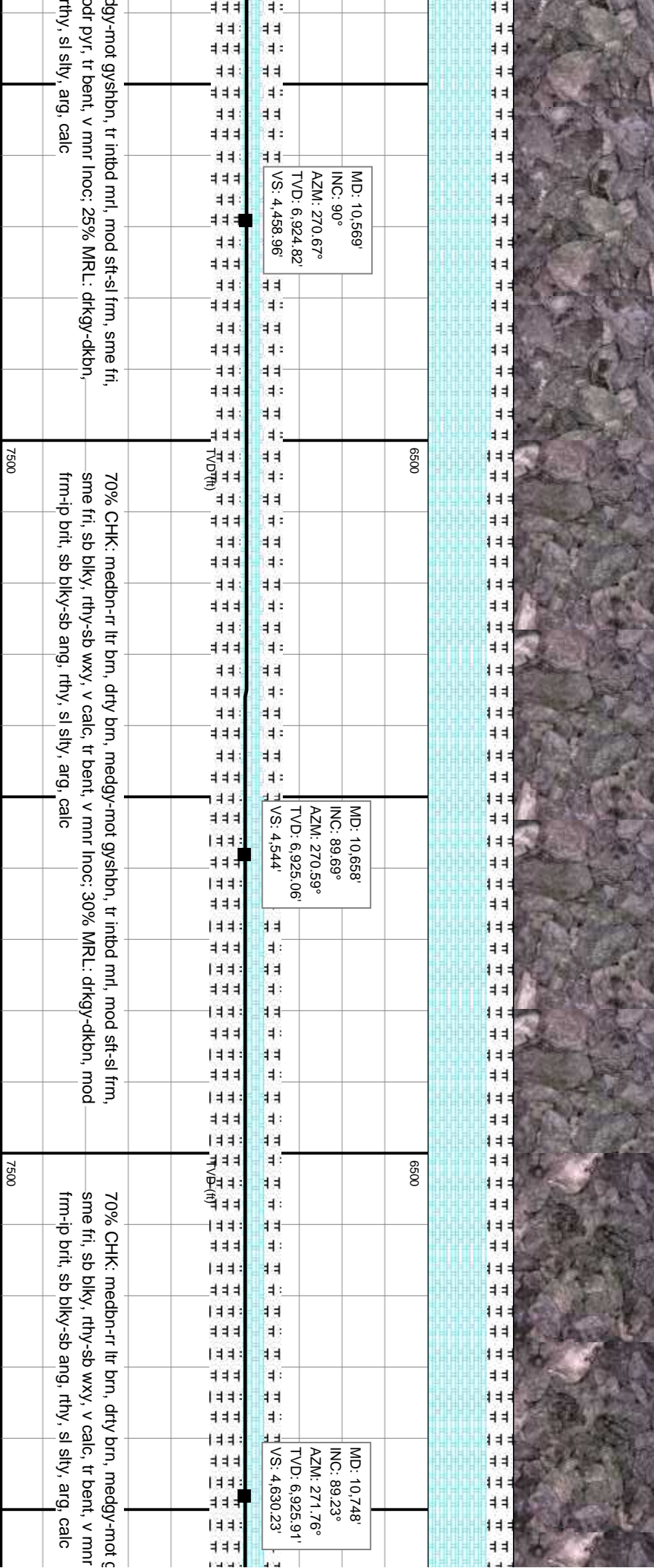
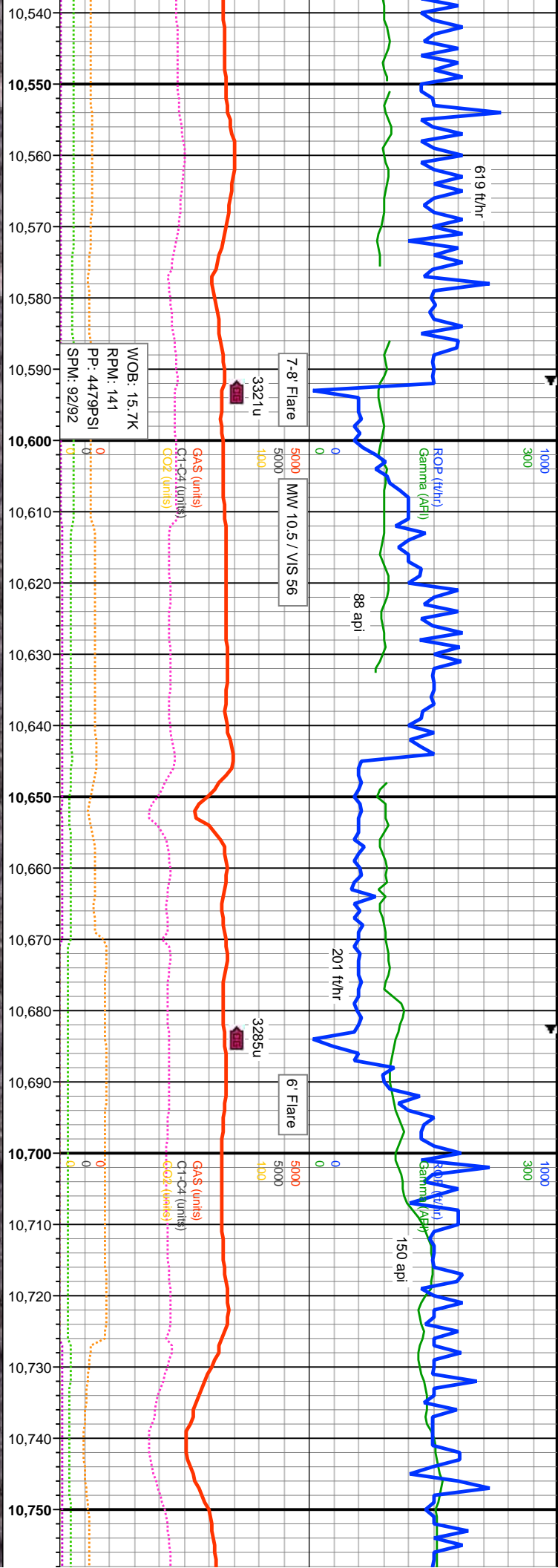


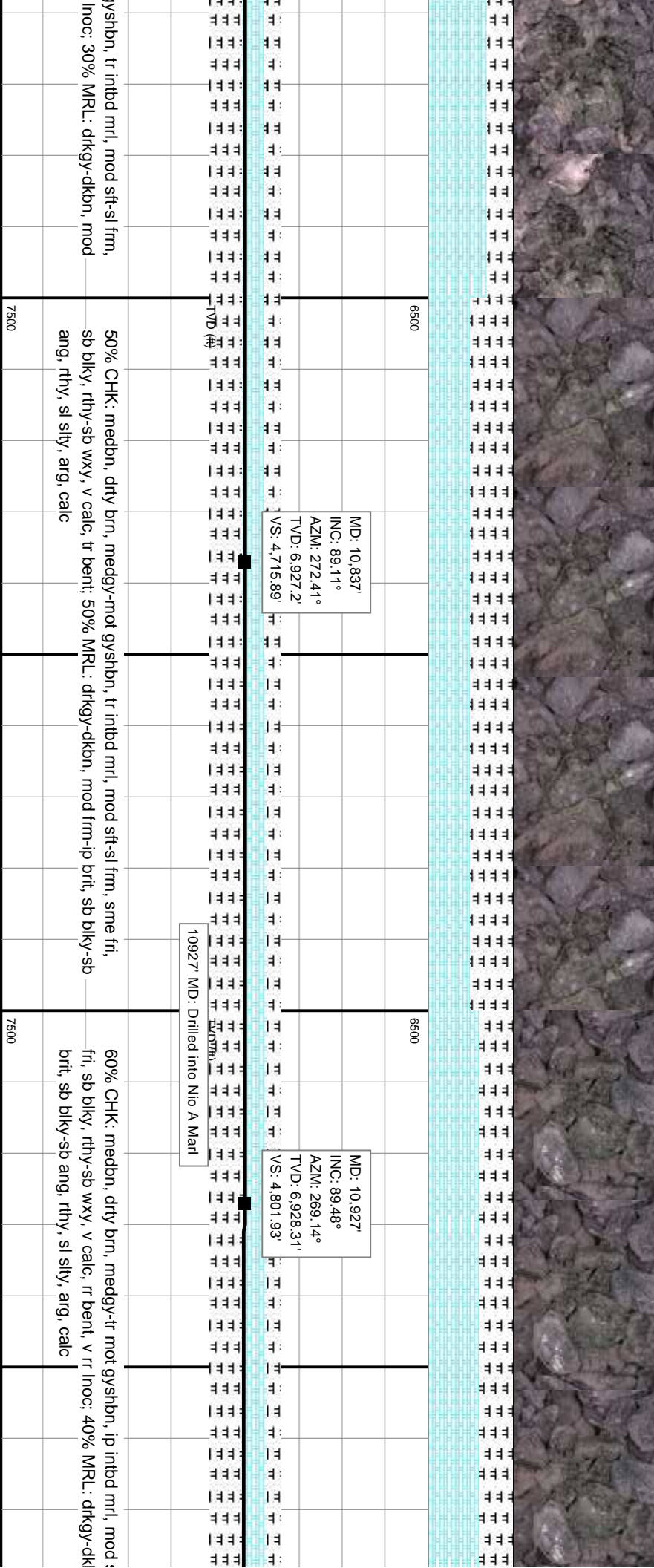
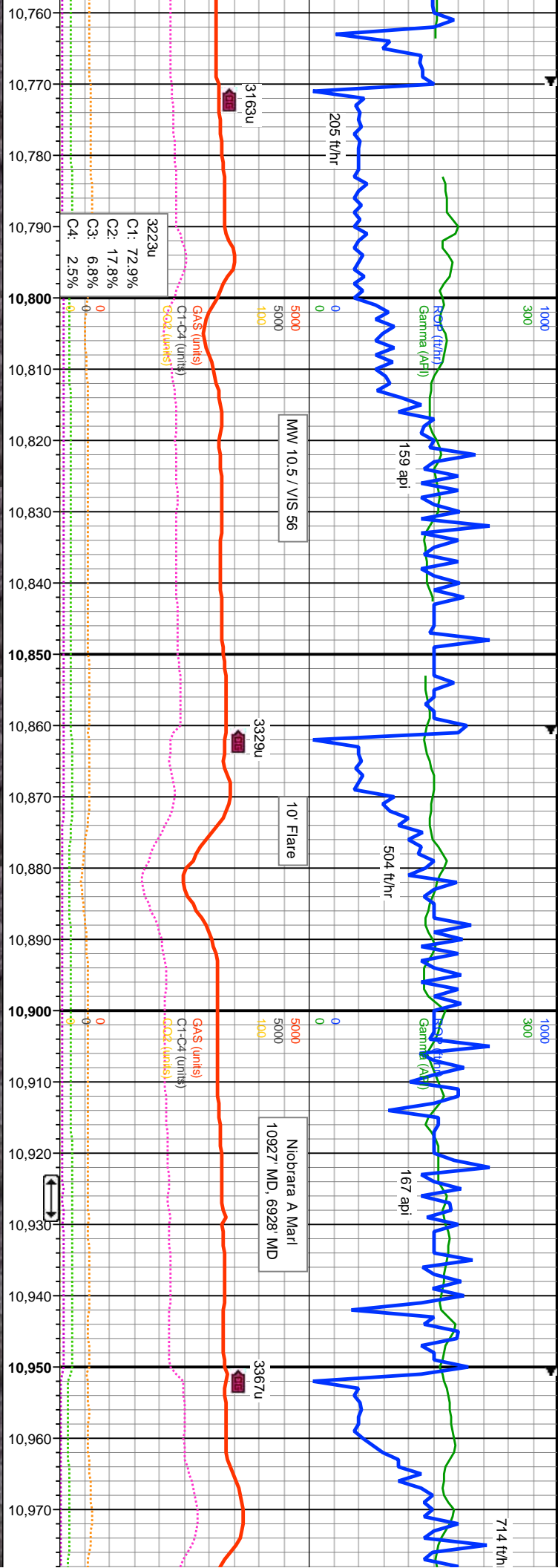


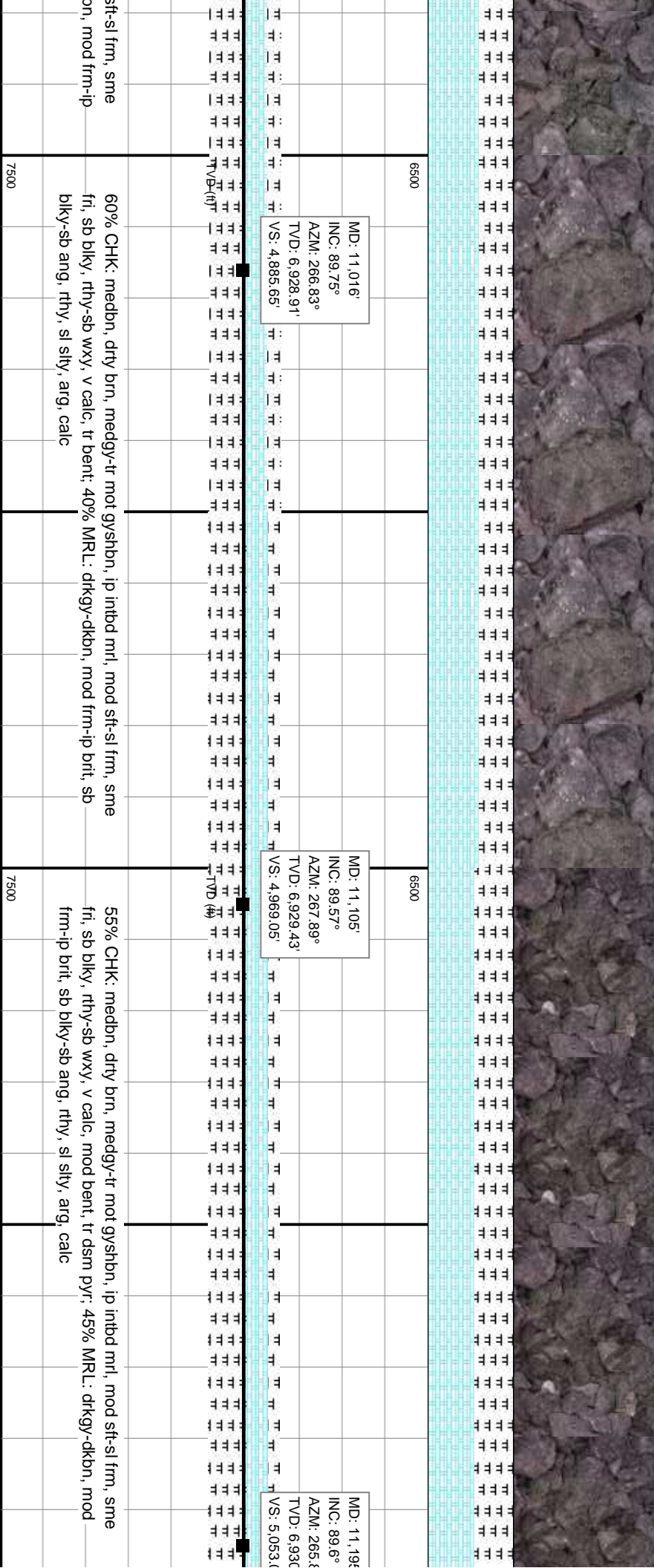
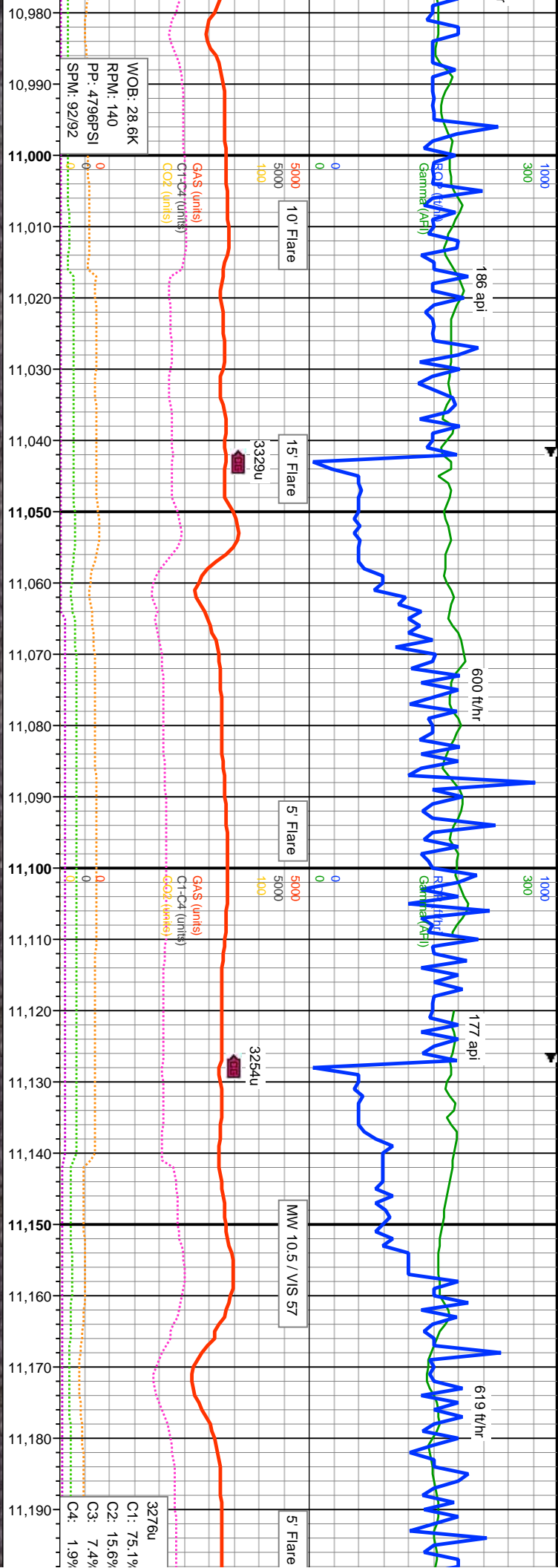


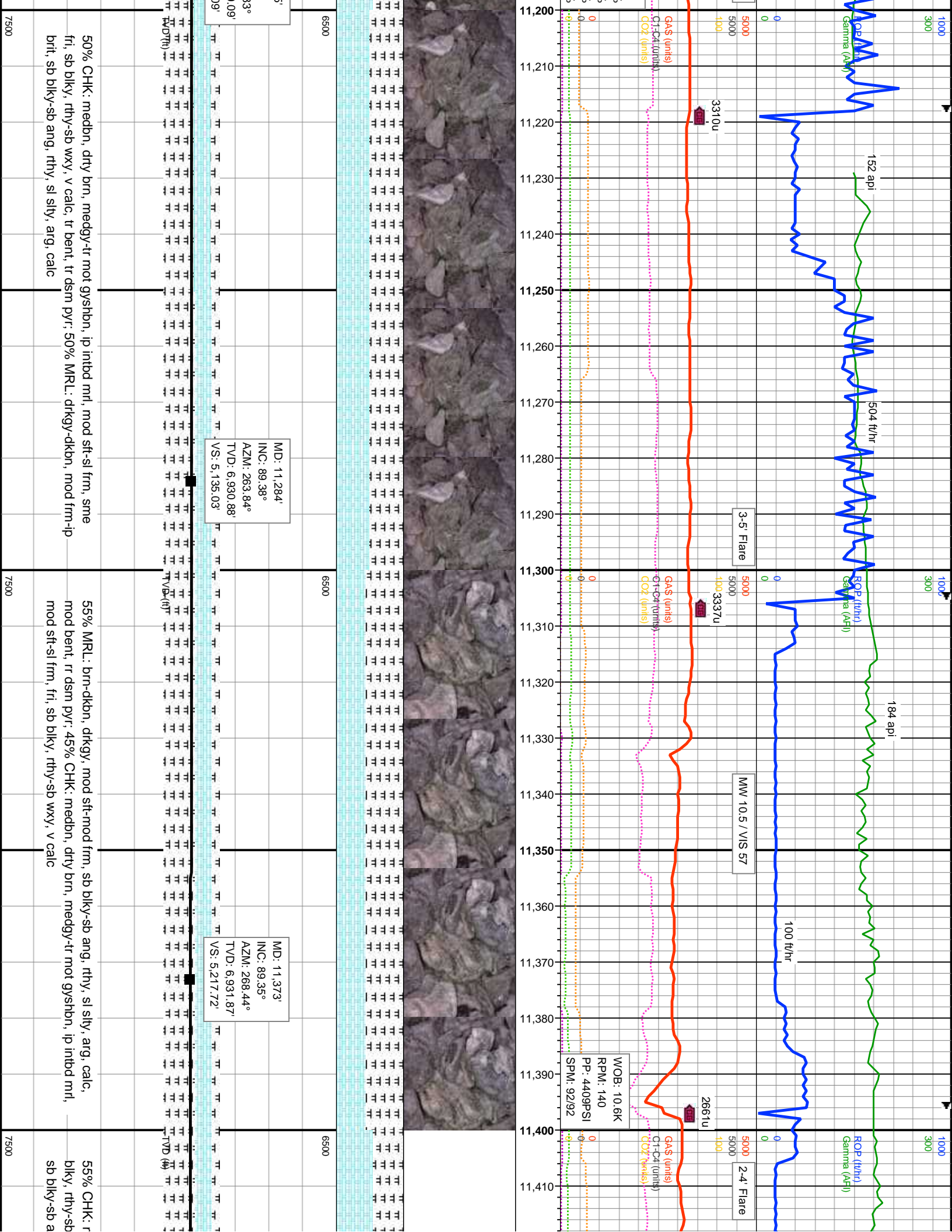


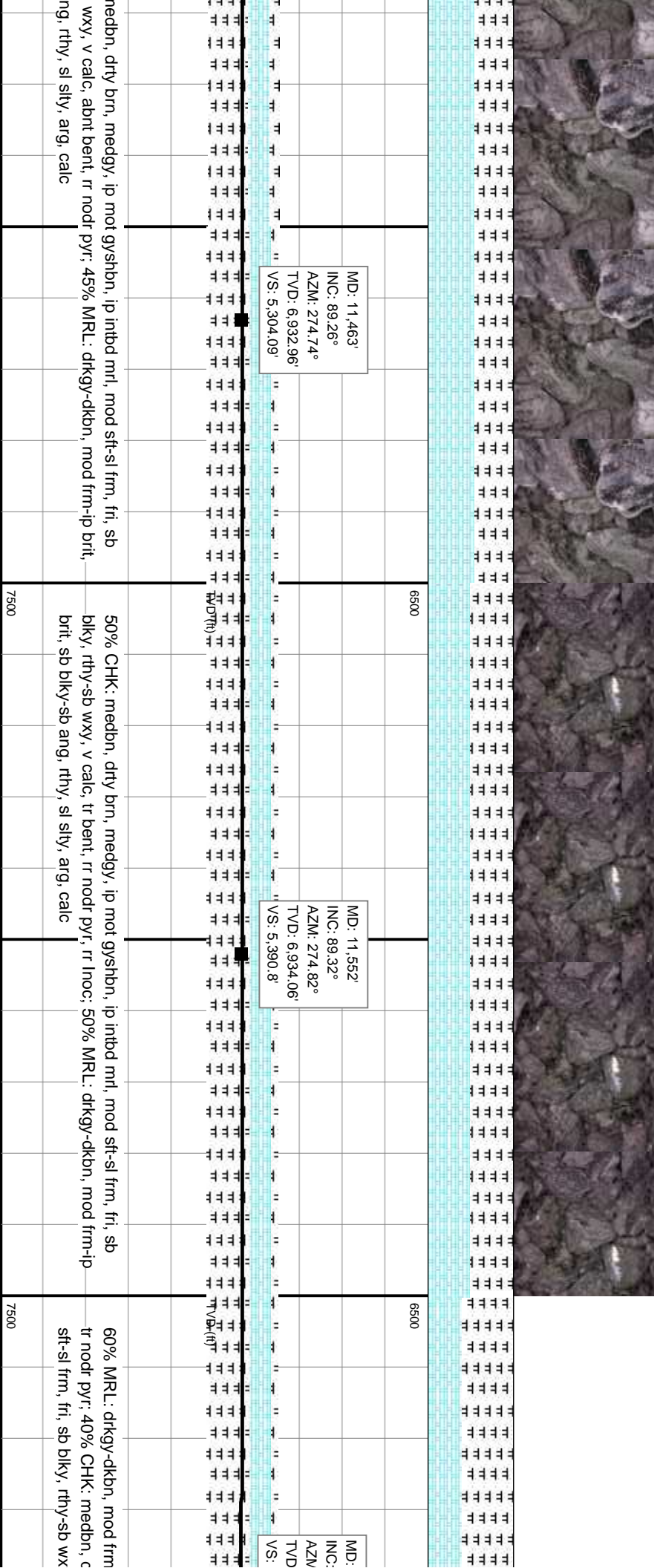
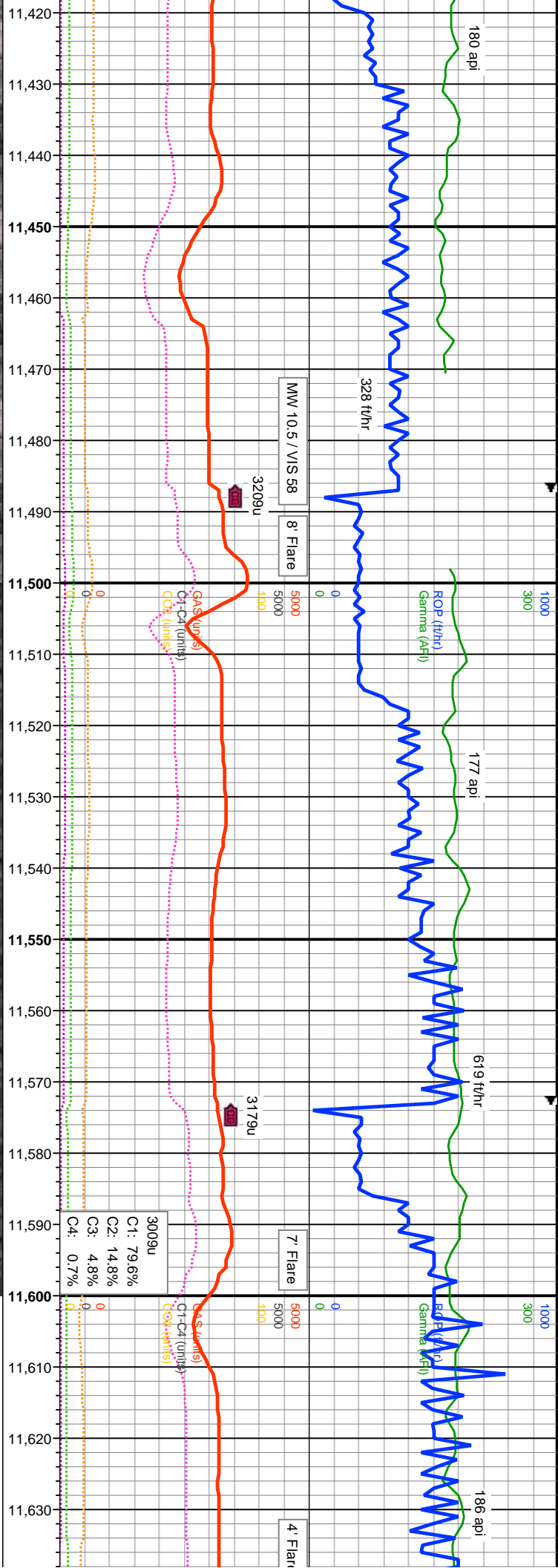
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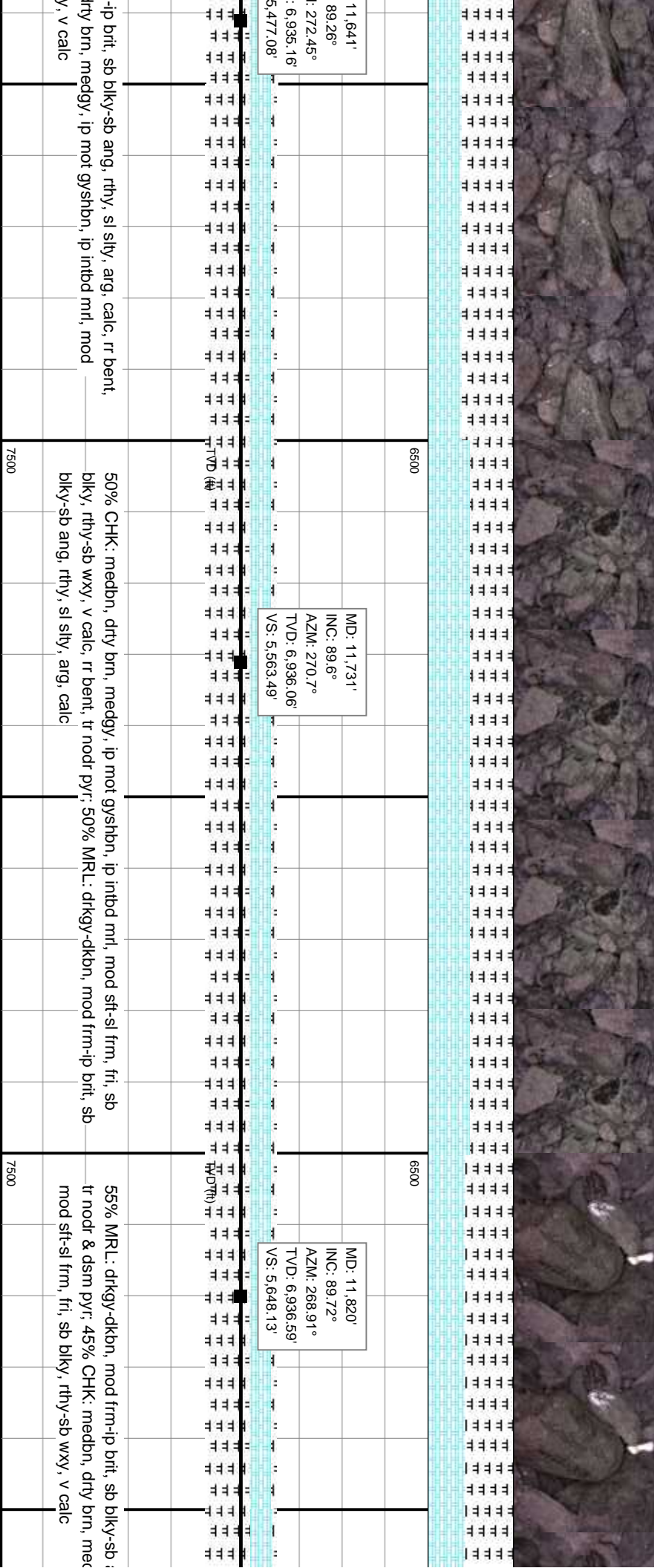
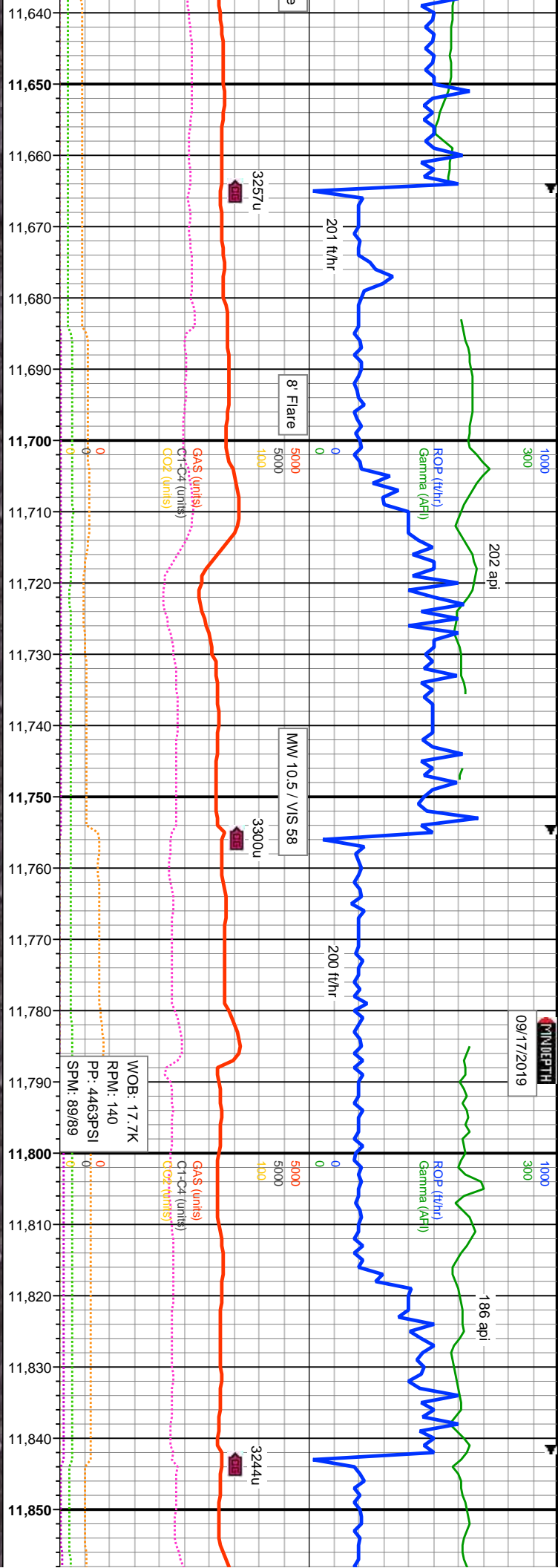


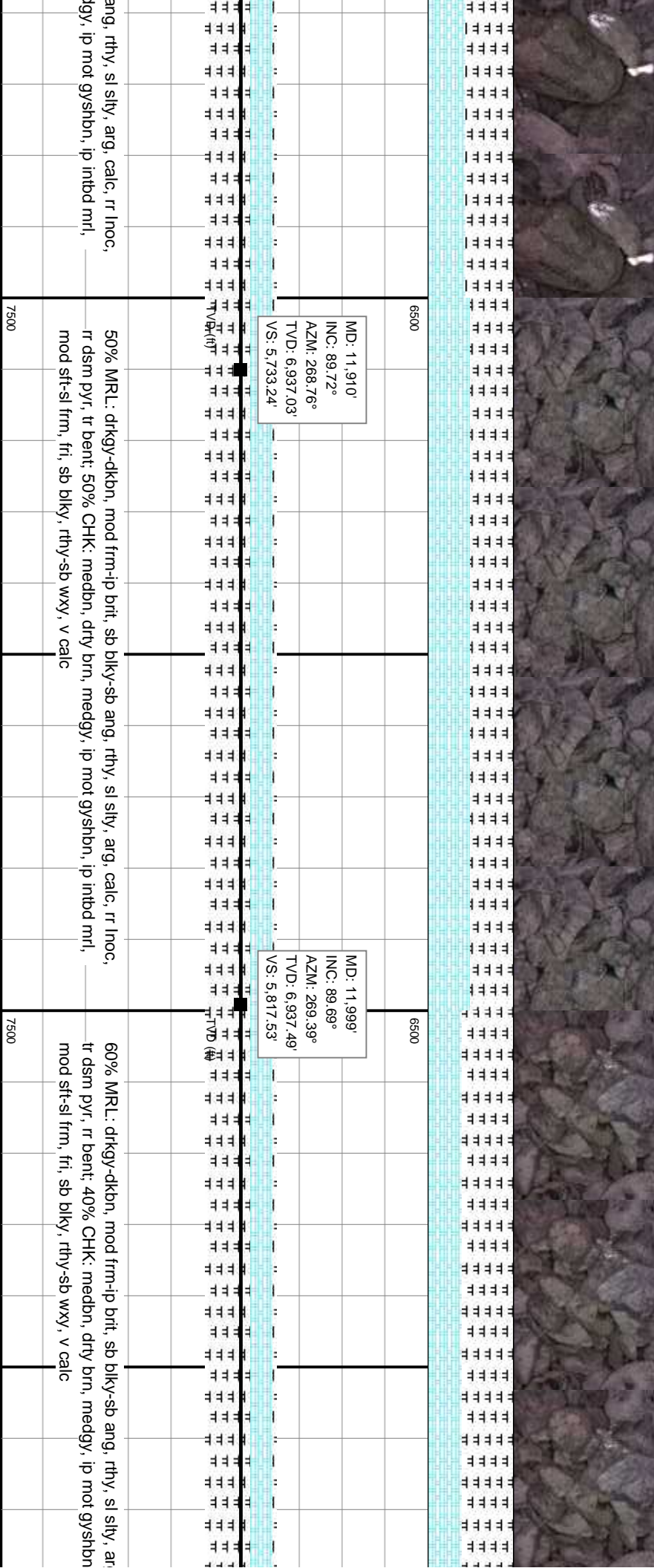
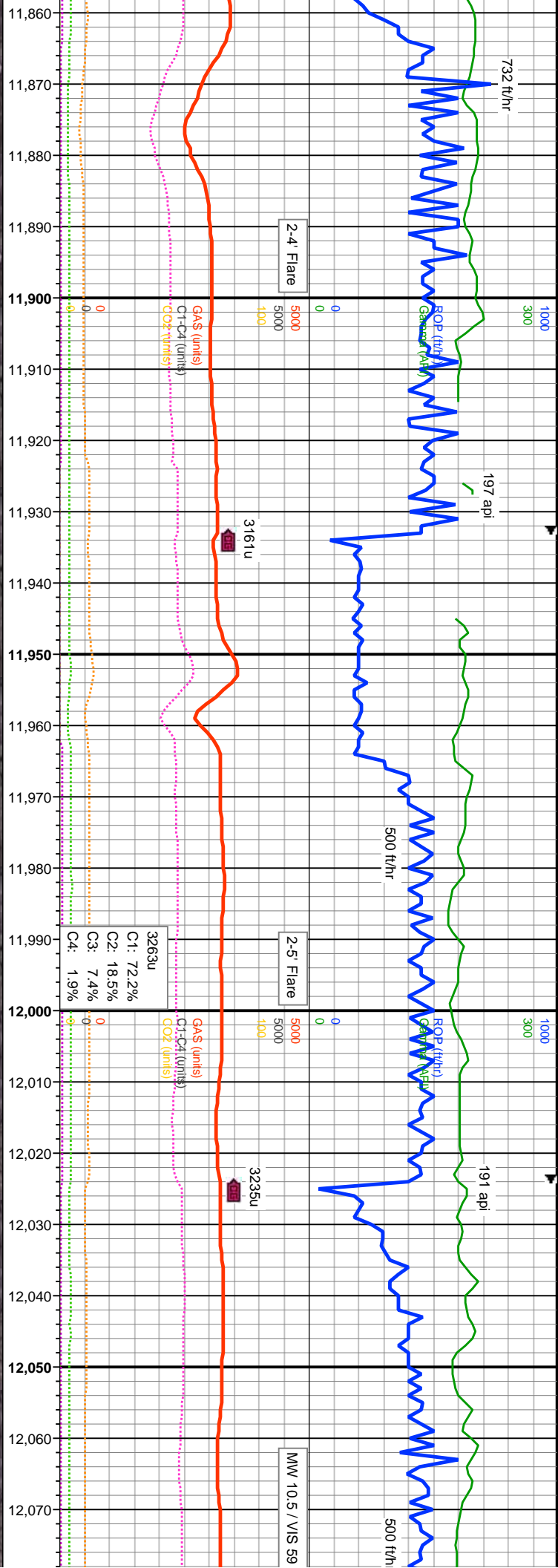


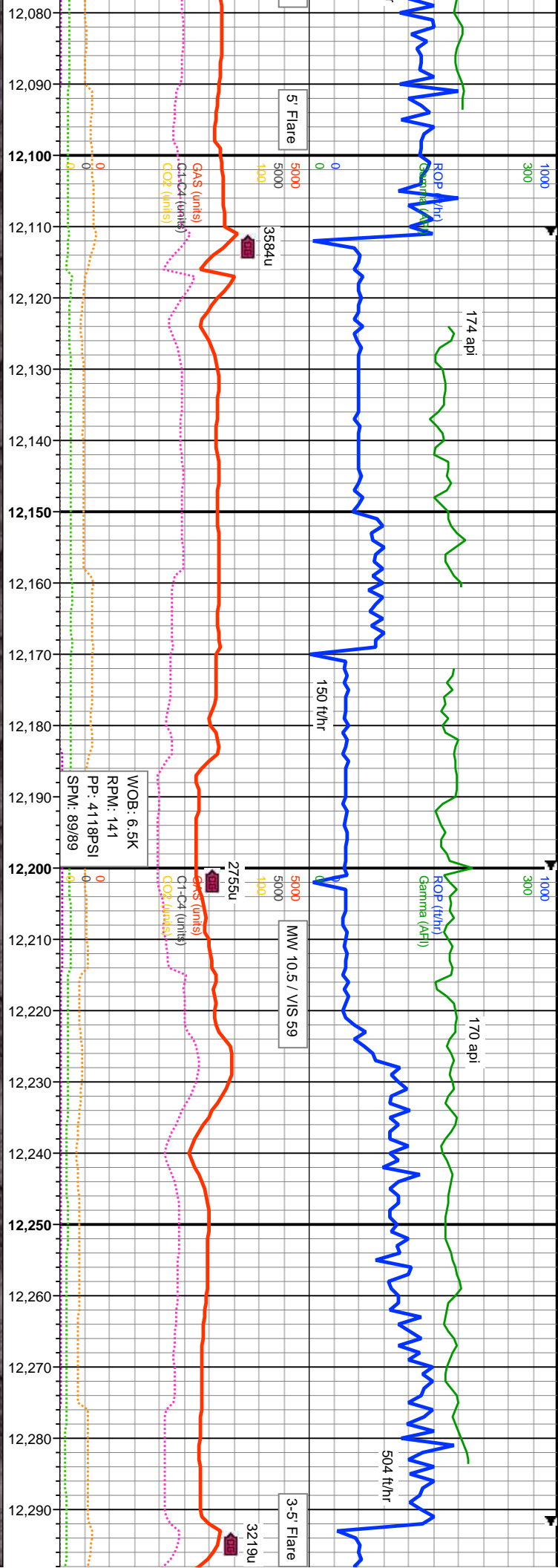




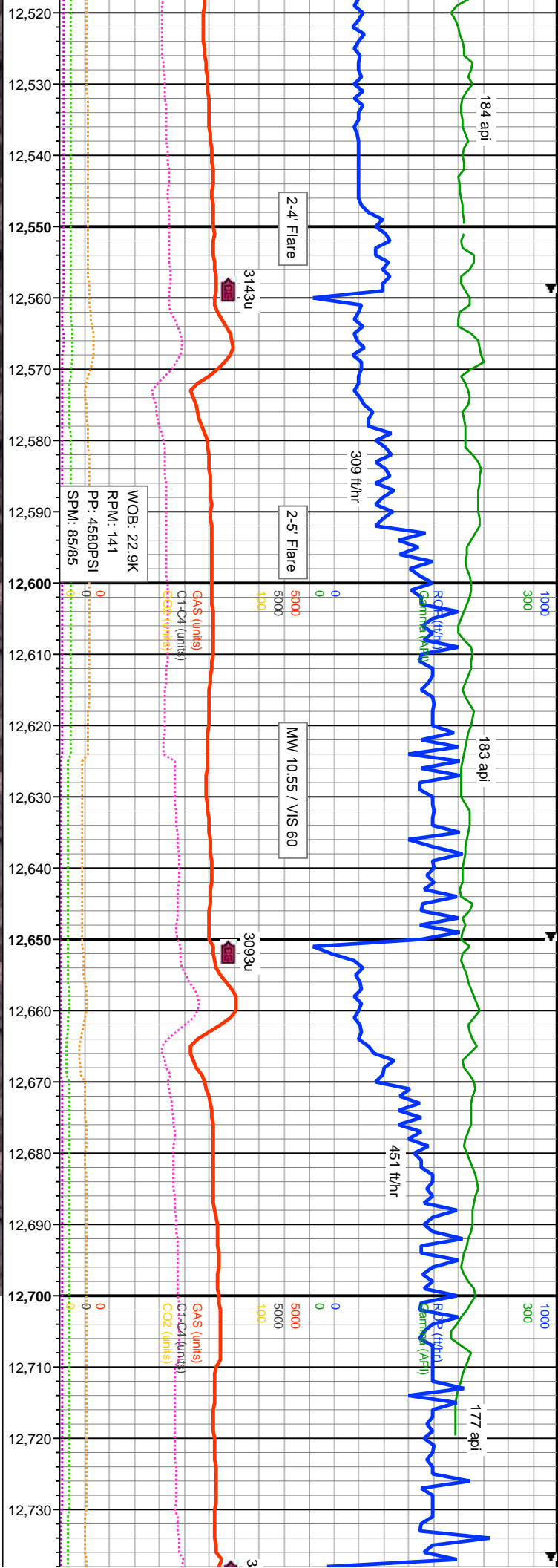




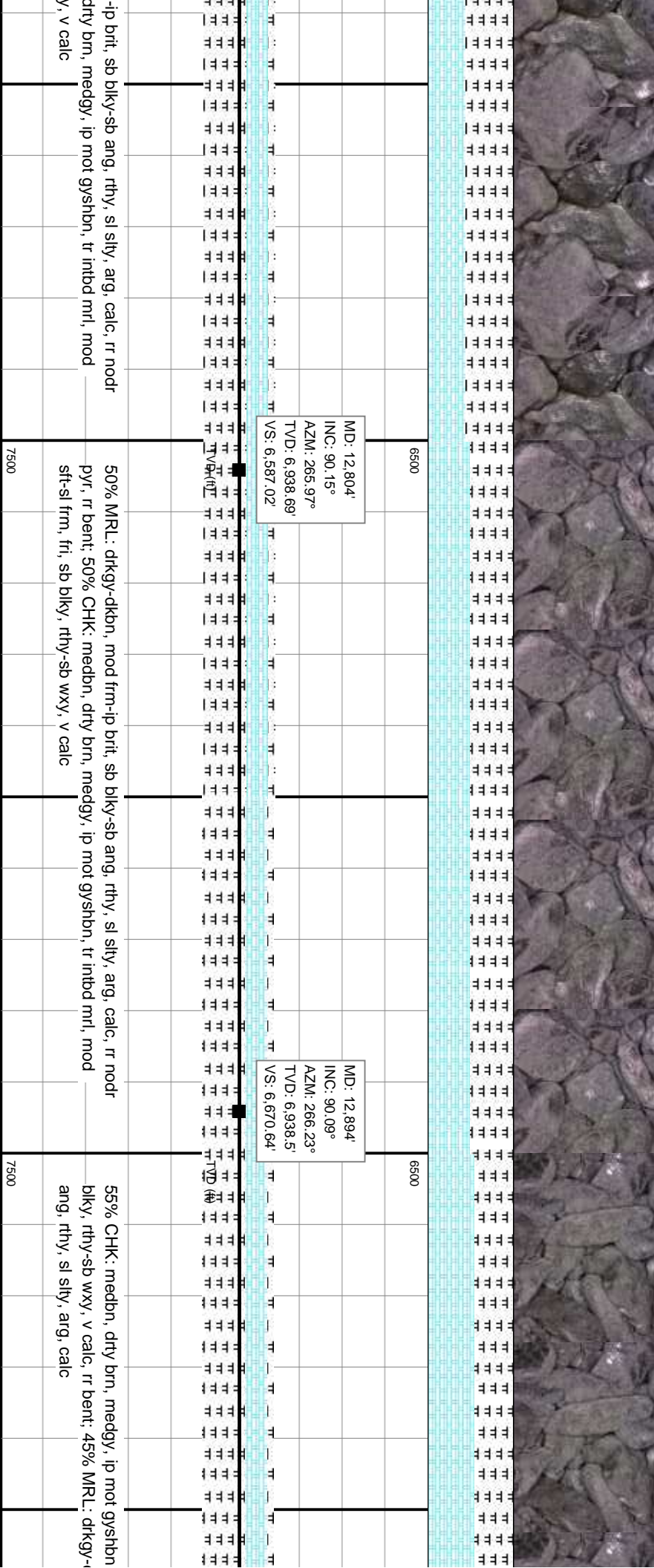
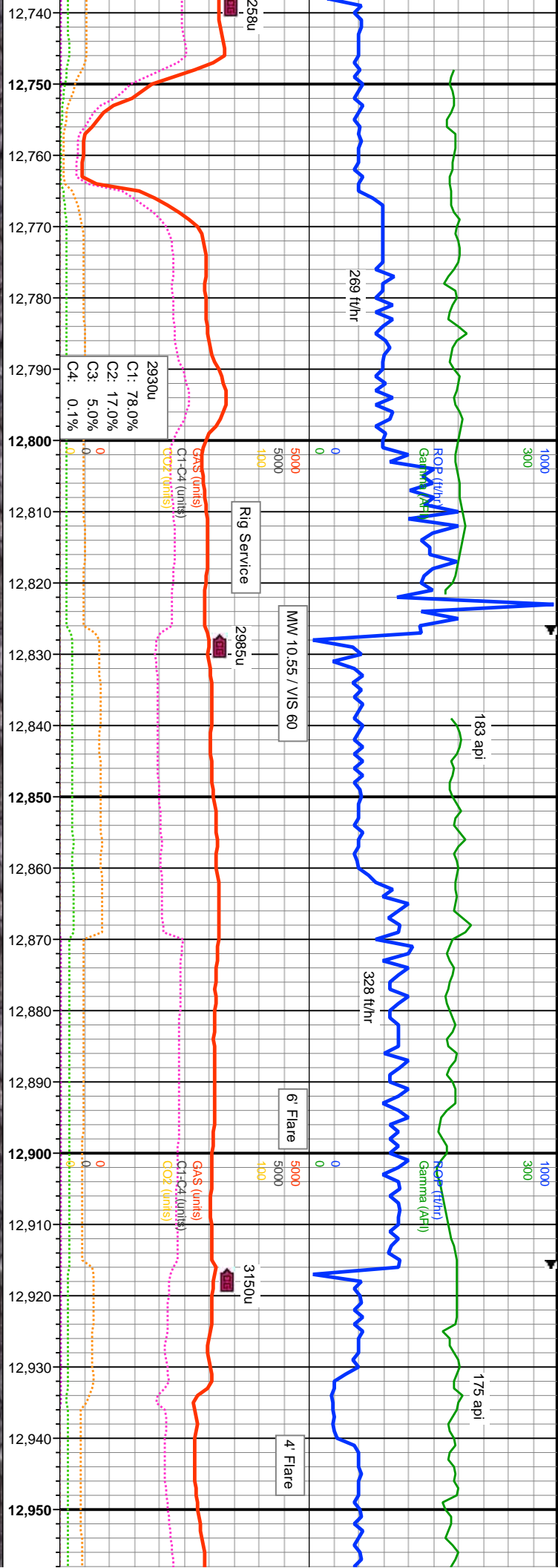


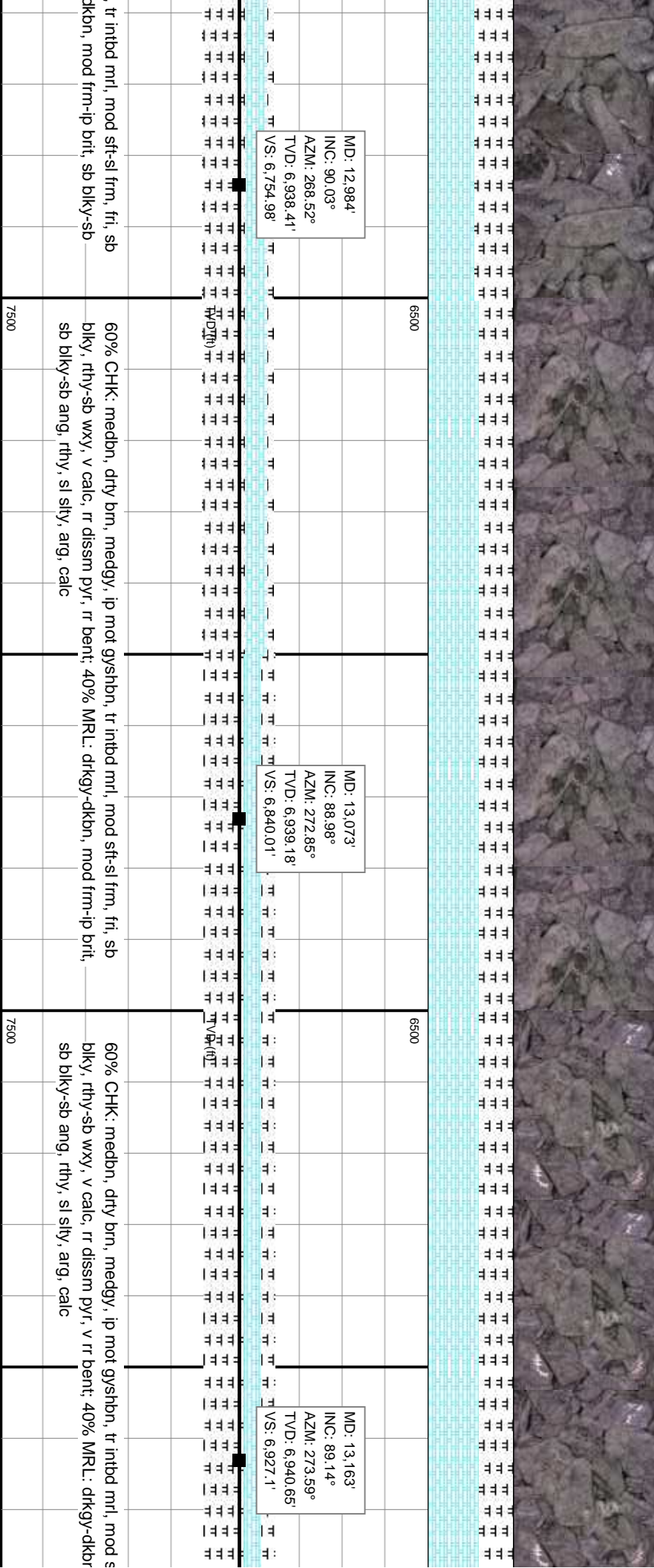
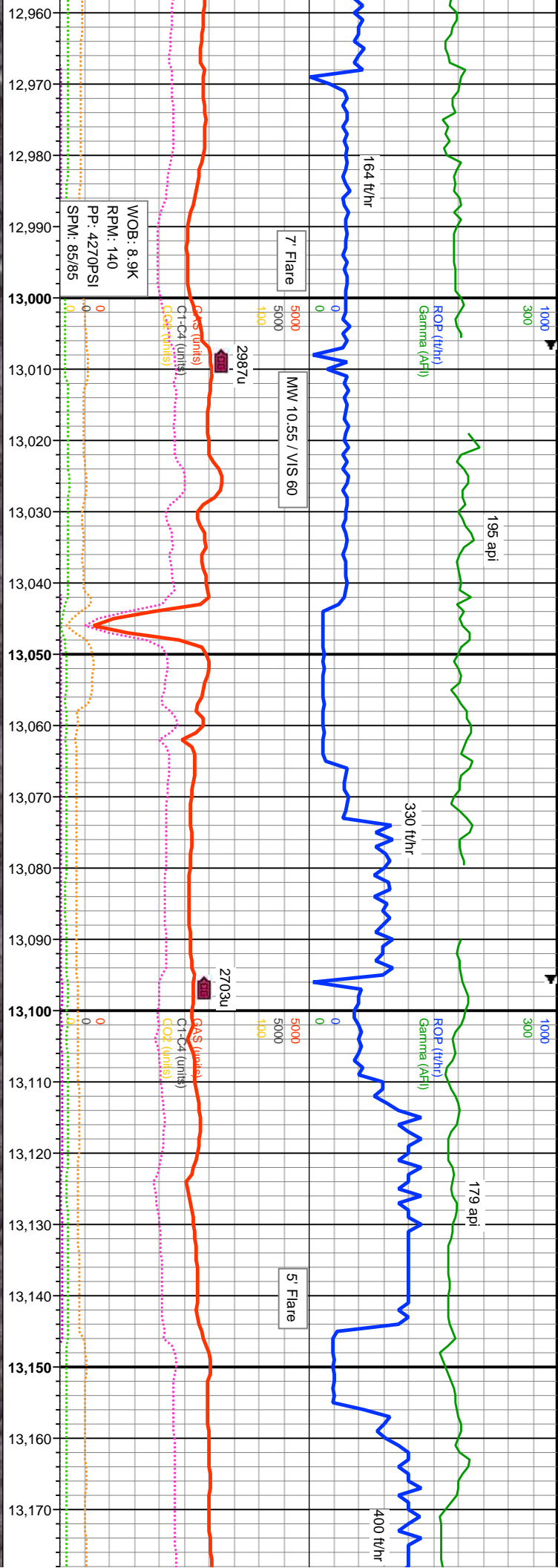


6500		6500		6500	
MD: 12.089' INC: 89.63° AZM: 267.51° TVD: 6.938.02' VS: 5.902.44'		MD: 12.178' INC: 90.28° AZM: 268.61° TVD: 6.938.09' VS: 5.986.21'		MD: 12.268' INC: 89.6° AZM: 271.33° TVD: 6.938.18' VS: 6.071.88'	
g, calc, rr Inoc, tr intbd mrl, 60% MRL: dkgy-dkbn, mod frm-ip brit, sb blkyy-sb ang, rthy, sl slty, arg, calc; 40% CHK: medbn, dry brn, medgy, ip mot gysbhn, com intbd mrl, mod sft-sl frm, fri, sb blkyy, rthy-sb wxy, v calc		55% CHK: medbn, dry brn, medgy, ip mot gysbhn, tr intbd mrl, mod sft-sl frm, fri, sb blkyy, rthy-sb wxy, v calc, rr Inoc, rr bent, tr dsm pyr; 45% MRL: dkgy-dkbn, mod frm-ip brit, sb blkyy-sb ang, rthy, sl slty, arg, calc			
7500		7500		7500	



drkgy-dkbn, mod frm-ip brit, sb blkly-sb ang, rthy, sl stly, arg, calc, tr nodr	6500	MD: 12.536' INC: 90.09° AZM: 274.13° TVD: 6.939.44' VS: 6.332.48'
45% CHK: medbn, drty brn, medgy, ip mot gysbhn, tr intbd mrl, mod	6500	MD: 12.626' INC: 90.18° AZM: 271.11° TVD: 6.939.23' VS: 6.419.33'
sb blkly, rthy-sb wxy, v calc	7500	
50% MRL: drkgy-dkbn, mod frm-ip brit, sb blkly-sb ang, rthy, sl stly, arg, calc, tr nodr & dsm pyr, rr bent; 50% CHK: medbn, drty brn, medgy, ip mot gysbhn, tr intbd mrl, mod	6500	MD: 12.715' INC: 90.18° AZM: 267.99° TVD: 6.938.95' VS: 6.503.84'
sft-sl frm, fri, sb blkly, rthy-sb wxy, v calc	7500	





MD: 12.984'
INC: 90.03°
AZM: 268.52°
TVD: 6.938.41'
VS: 6.754.98'

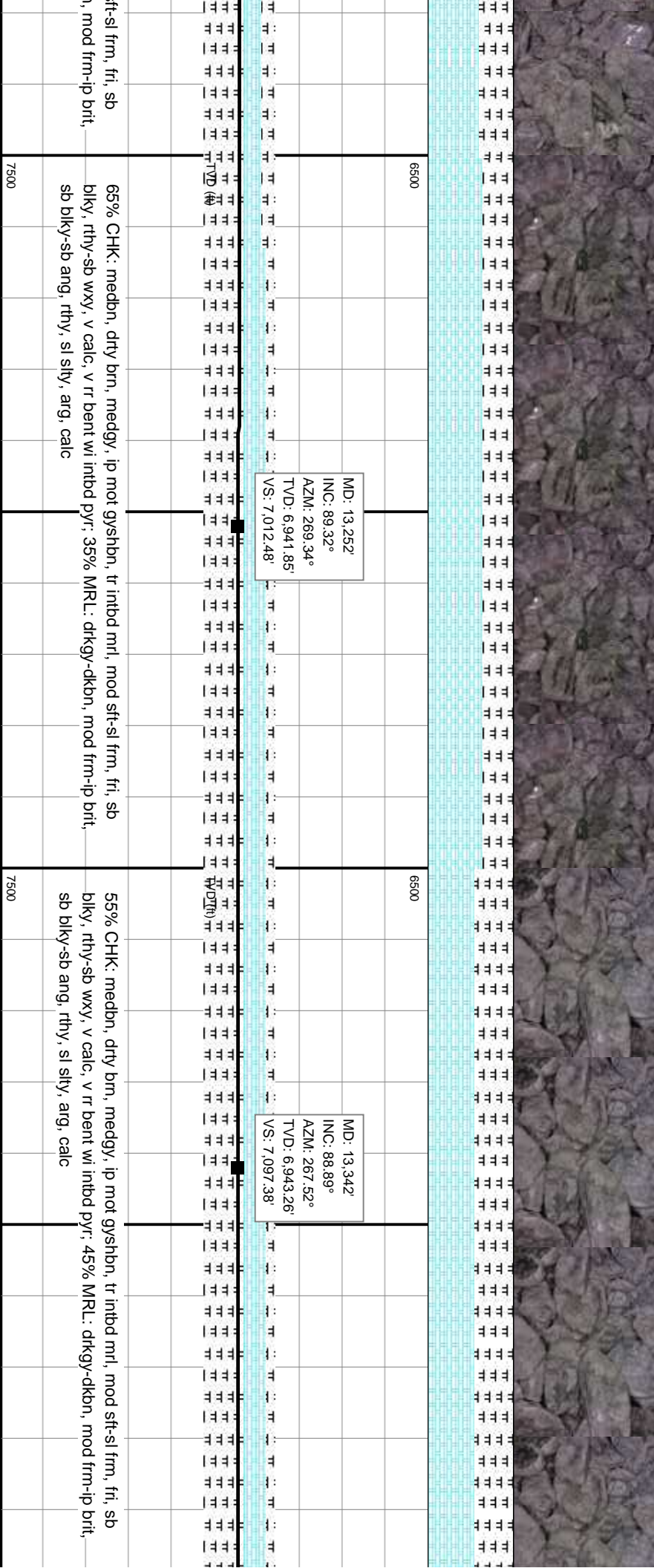
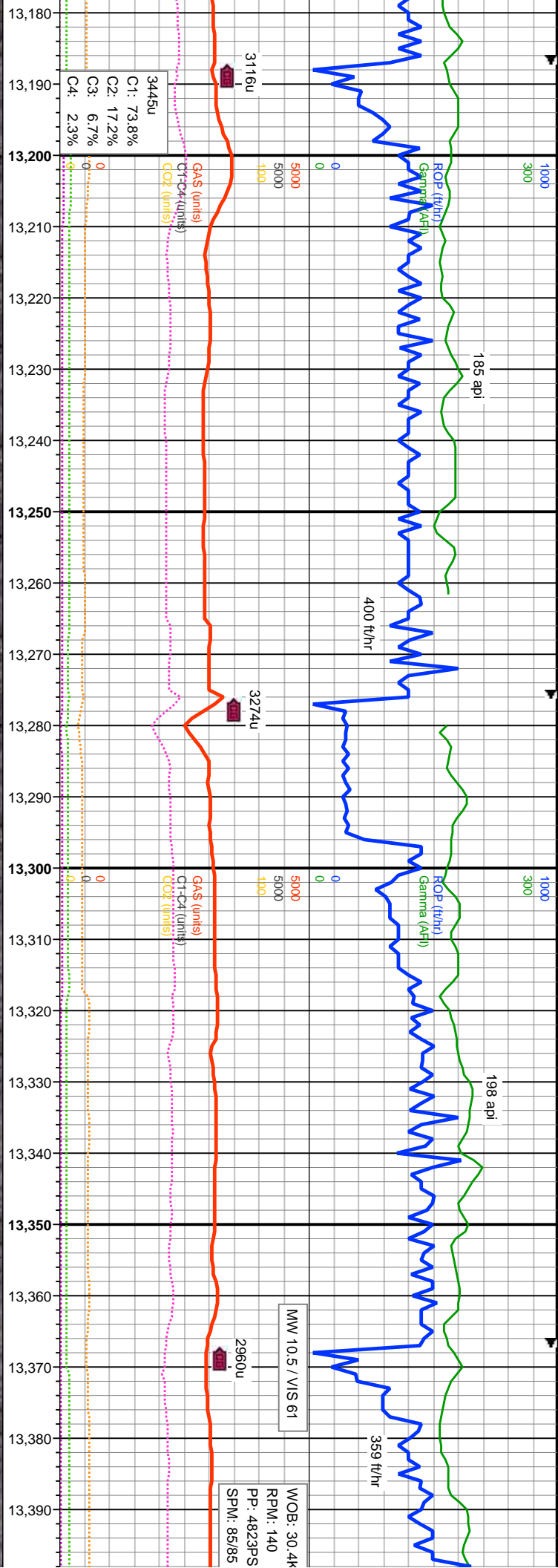
MD: 13.073'
INC: 88.98°
AZM: 272.85°
TVD: 6.939.18'
VS: 6.840.01'

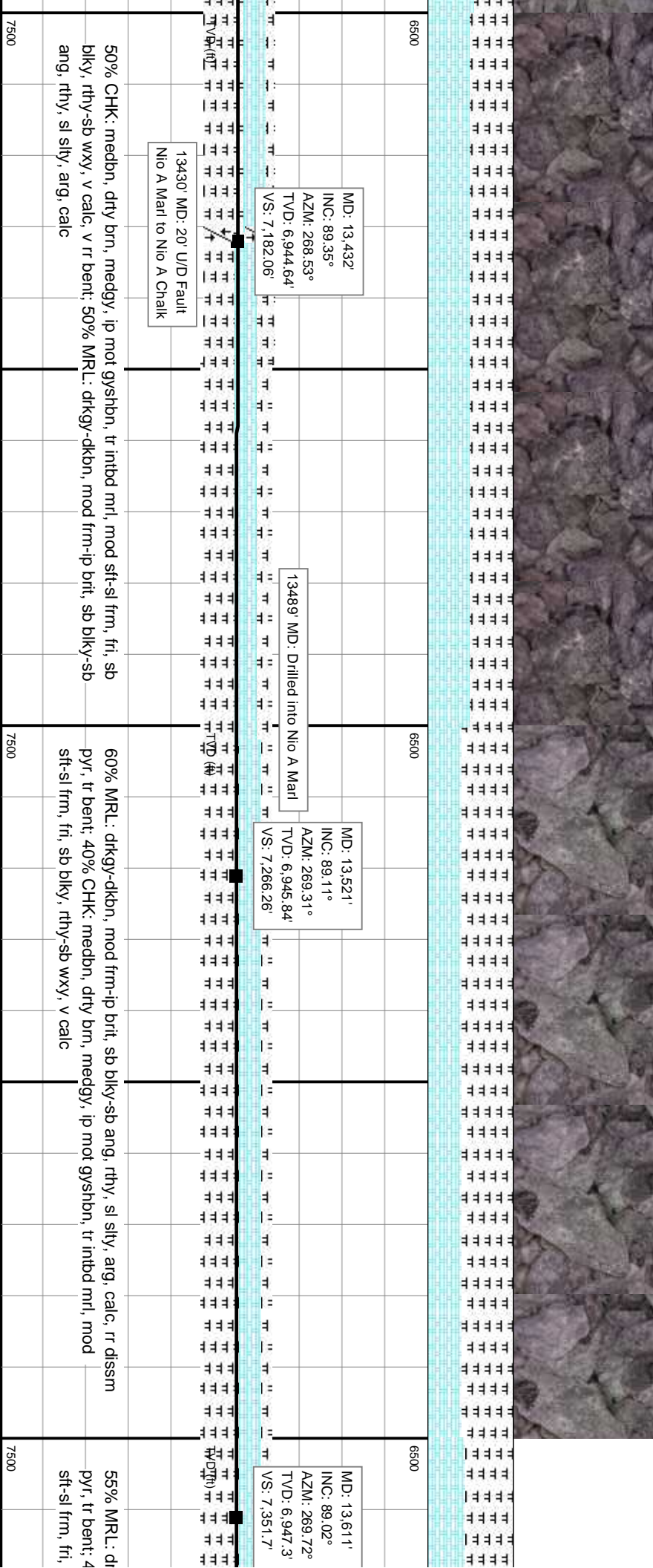
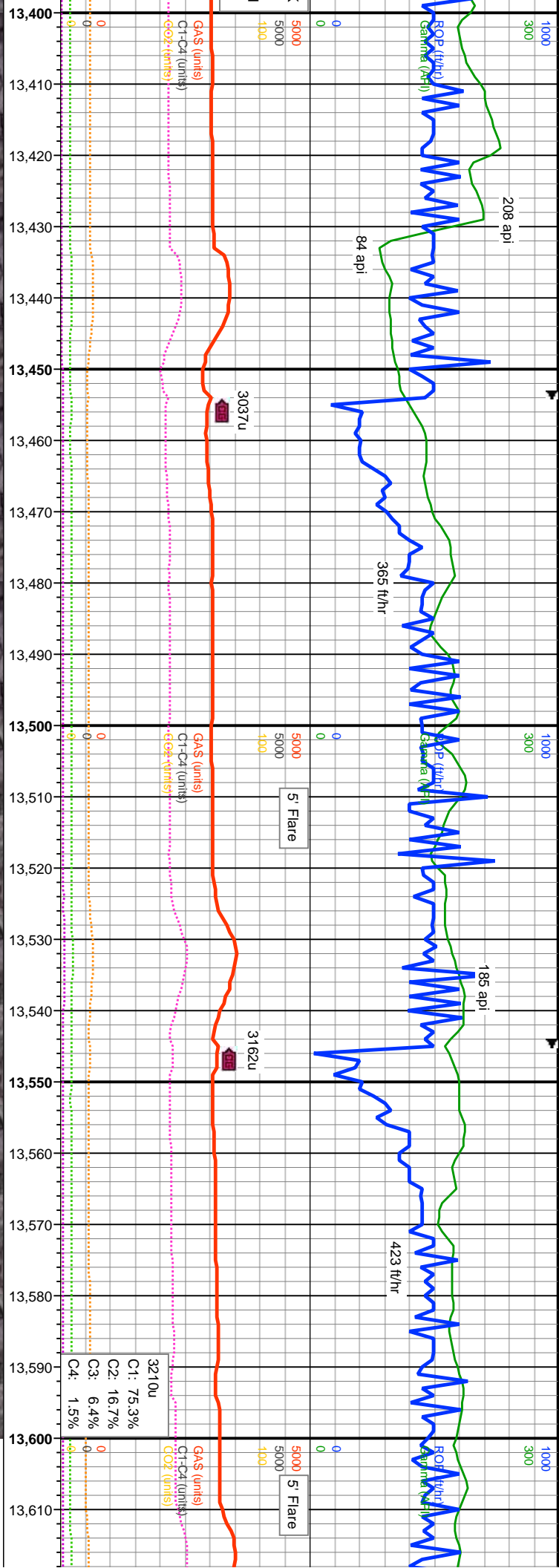
MD: 13.163'
INC: 89.14°
AZM: 273.59°
TVD: 6.940.65'
VS: 6.927.1'

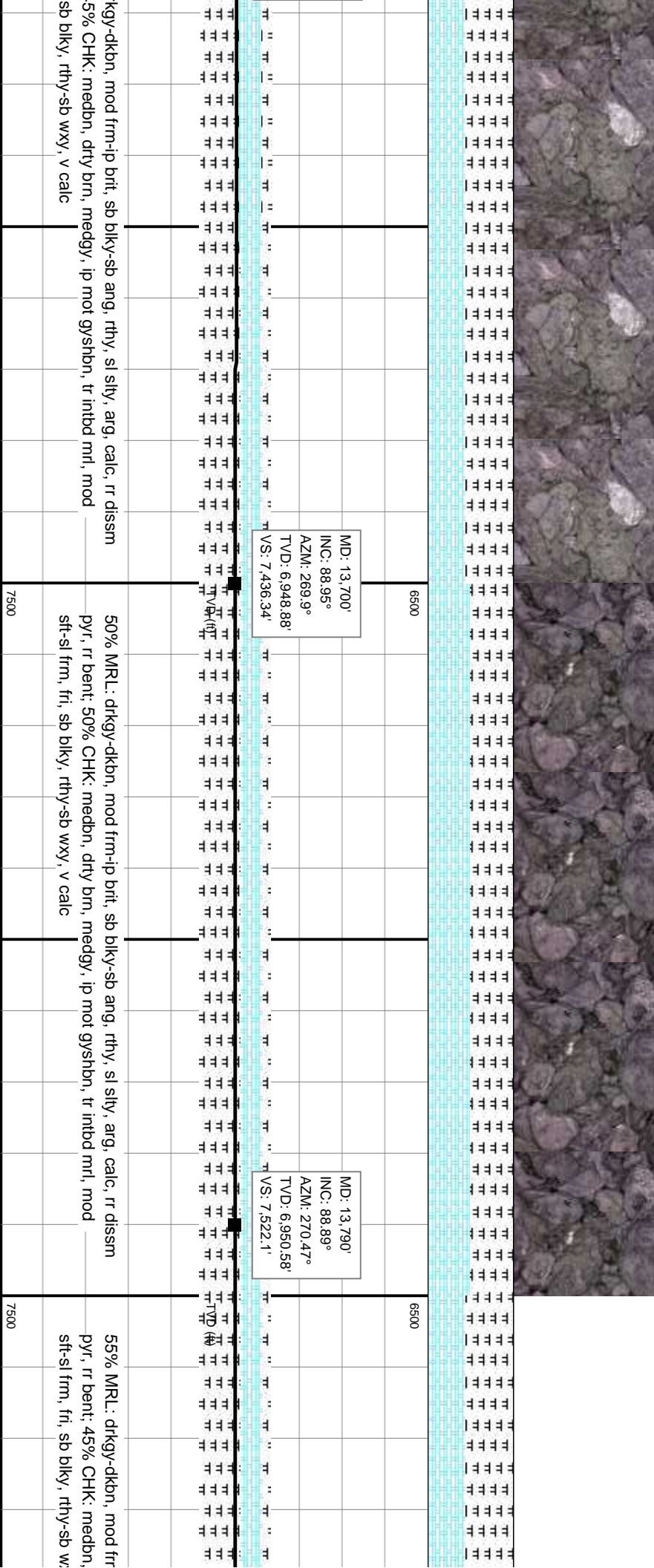
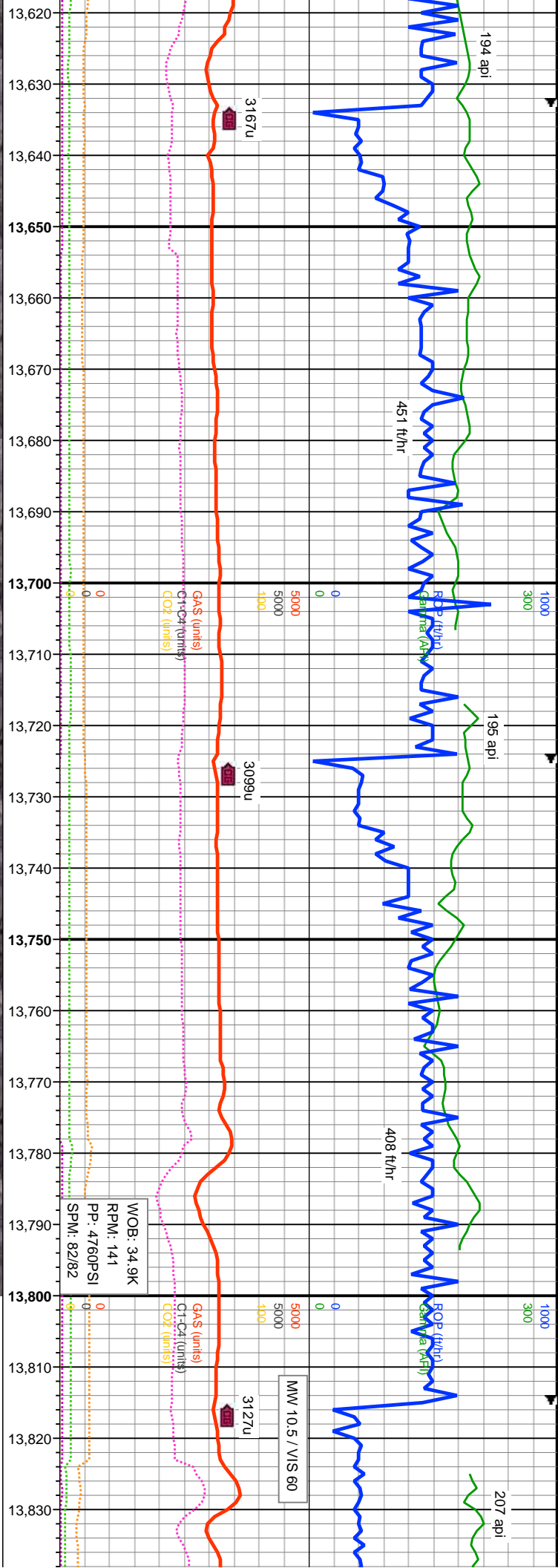
tr intbd mrl, mod sft-sl frm, fri, sb
dkbn, mod frm-ip brt, sb blk-y-sb

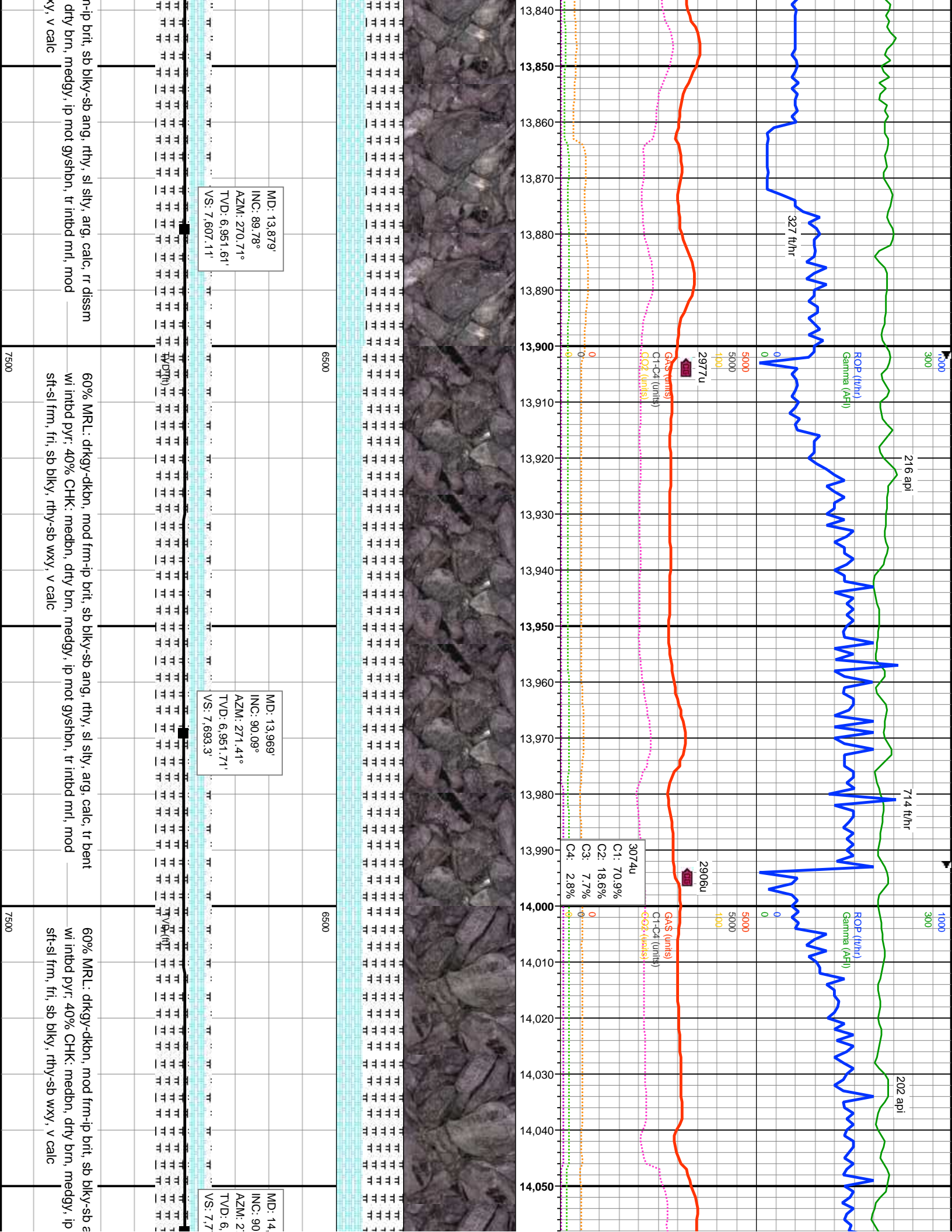
60% CHK: medbn, drty brn, medgy, ip mot gysbhn, tr intbd mrl, mod sft-sl frm, fri, sb
blk-y, rthy-sb wxy, v calc, rr dissim pyr, rr bent; 40% MRL: drkyg-dkbn, mod frm-ip brt,
sb blk-y-sb ang, rthy, sl silty, arg, calc

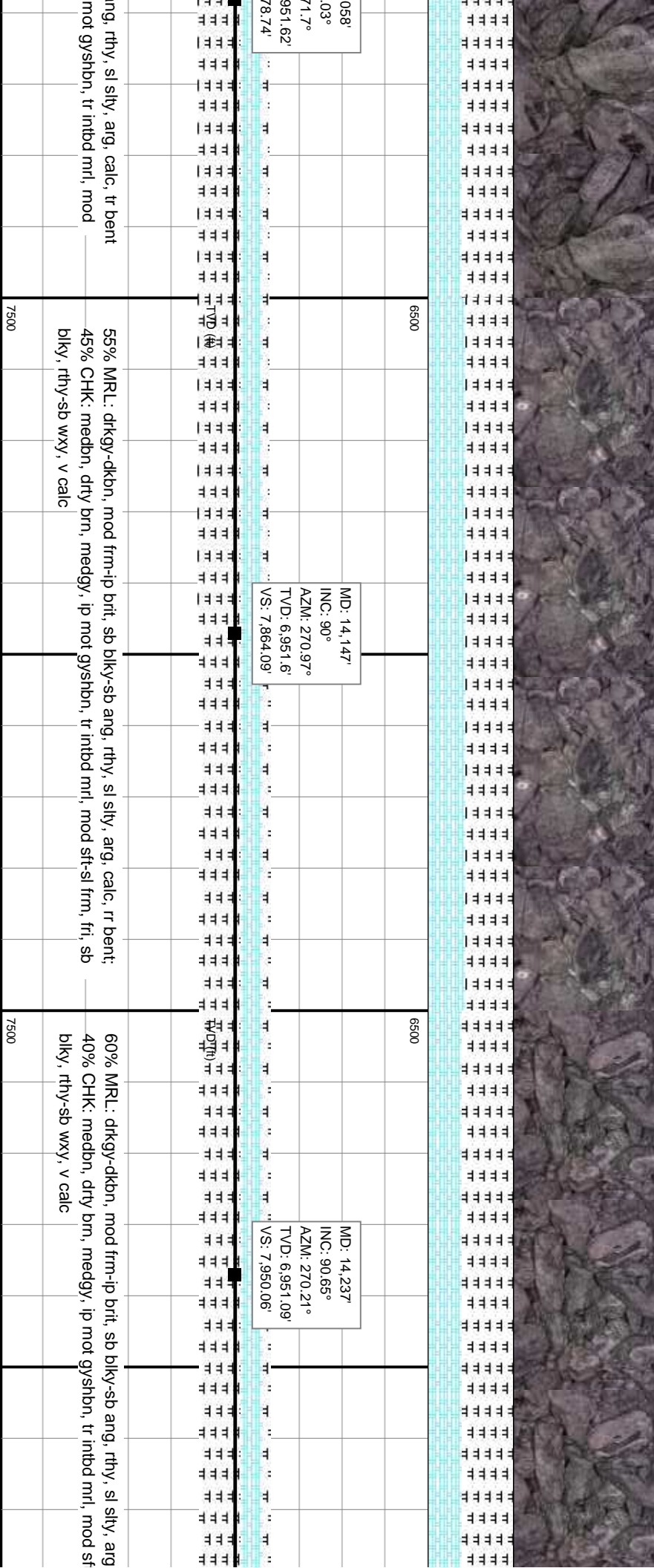
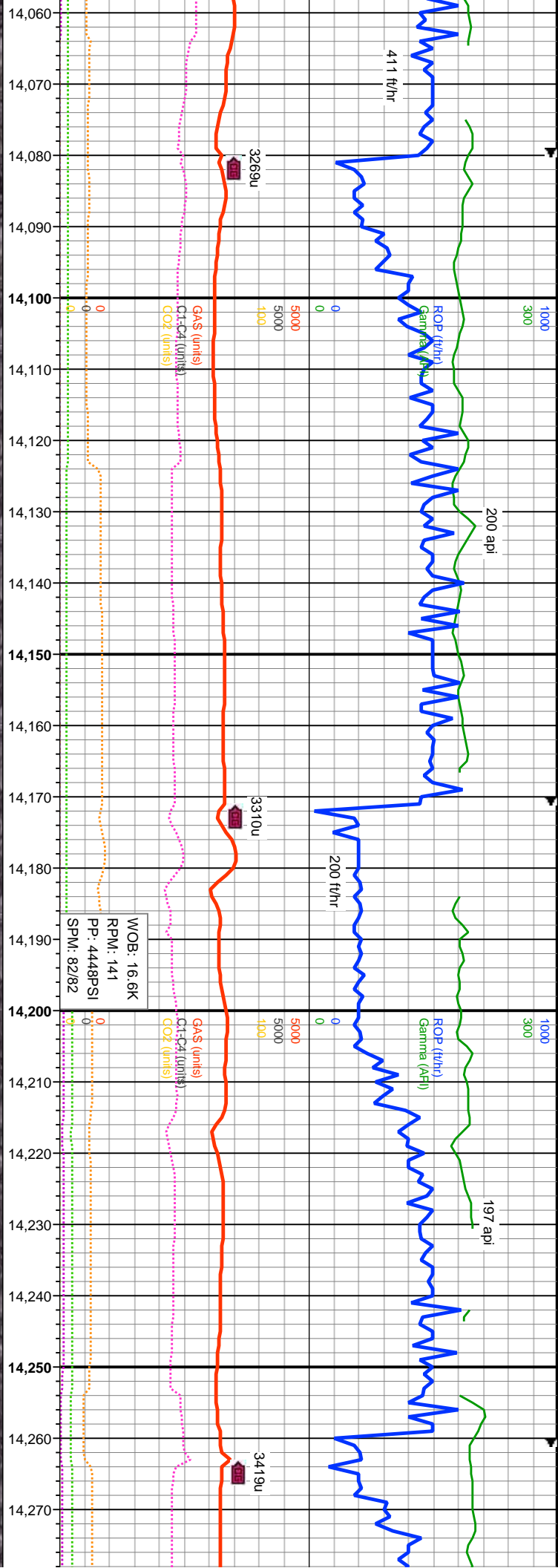
60% CHK: medbn, drty brn, medgy, ip mot gysbhn, tr intbd mrl, mod s
blk-y, rthy-sb wxy, v calc, rr dissim pyr, v rr bent; 40% MRL: drkyg--dkbr
sb blk-y-sb ang, rthy, sl silty, arg, calc

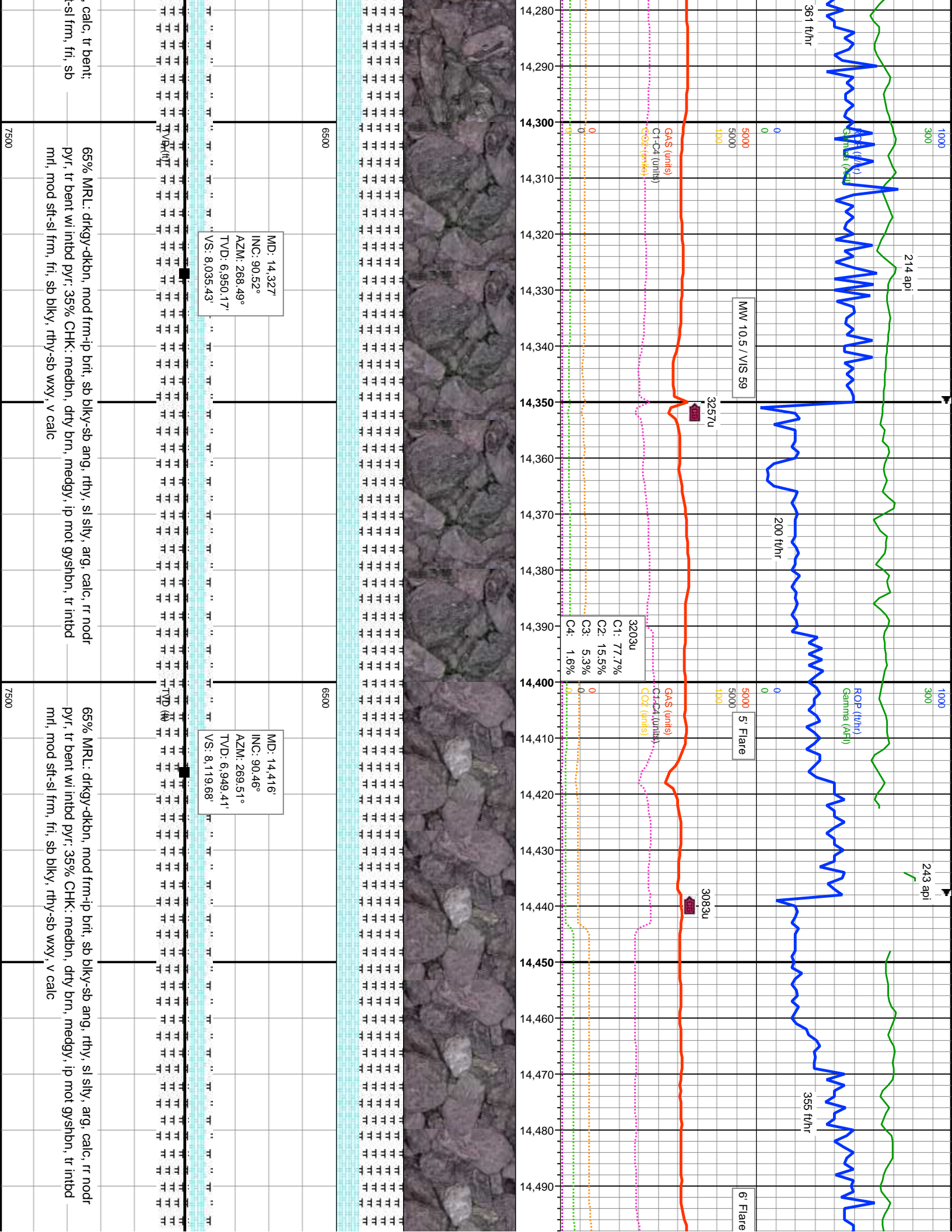


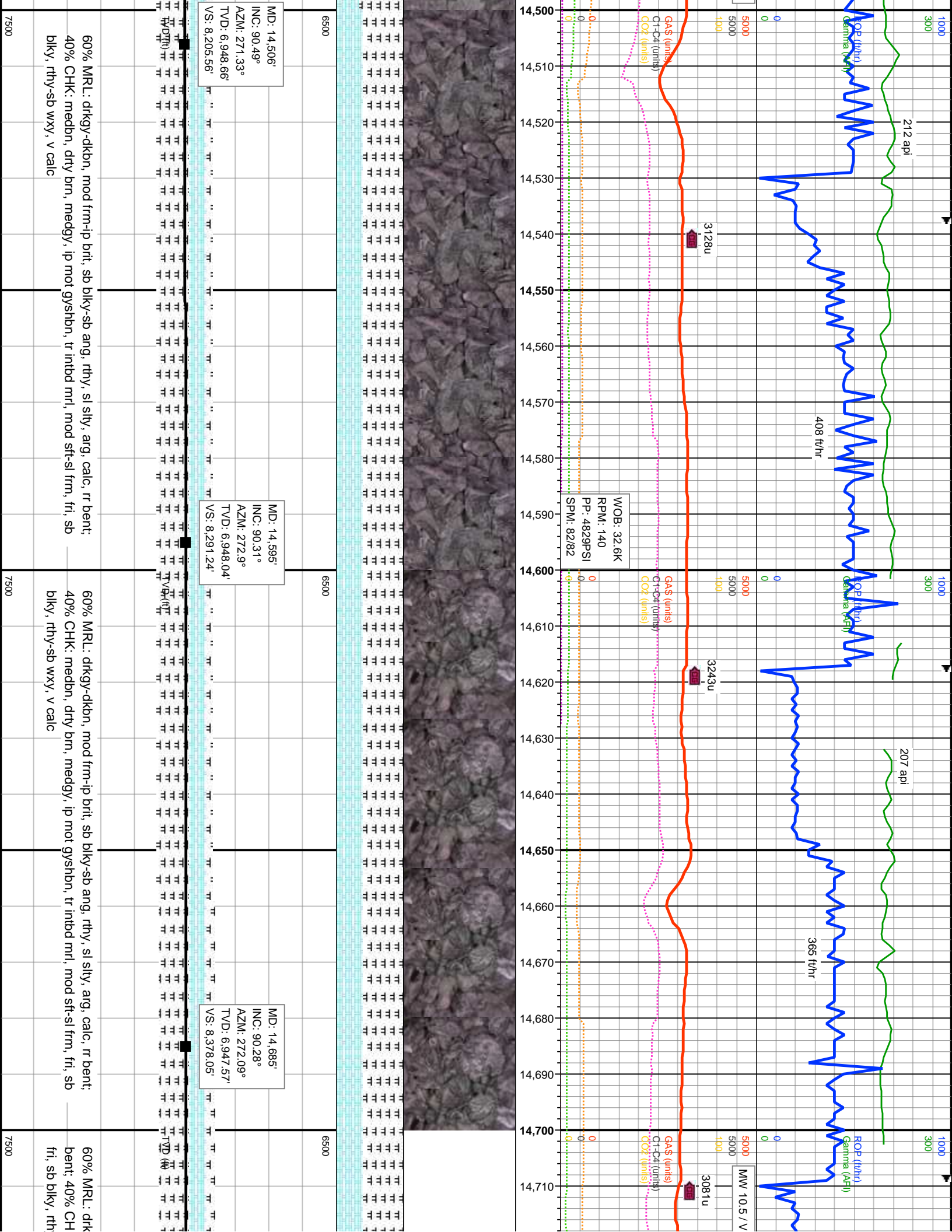


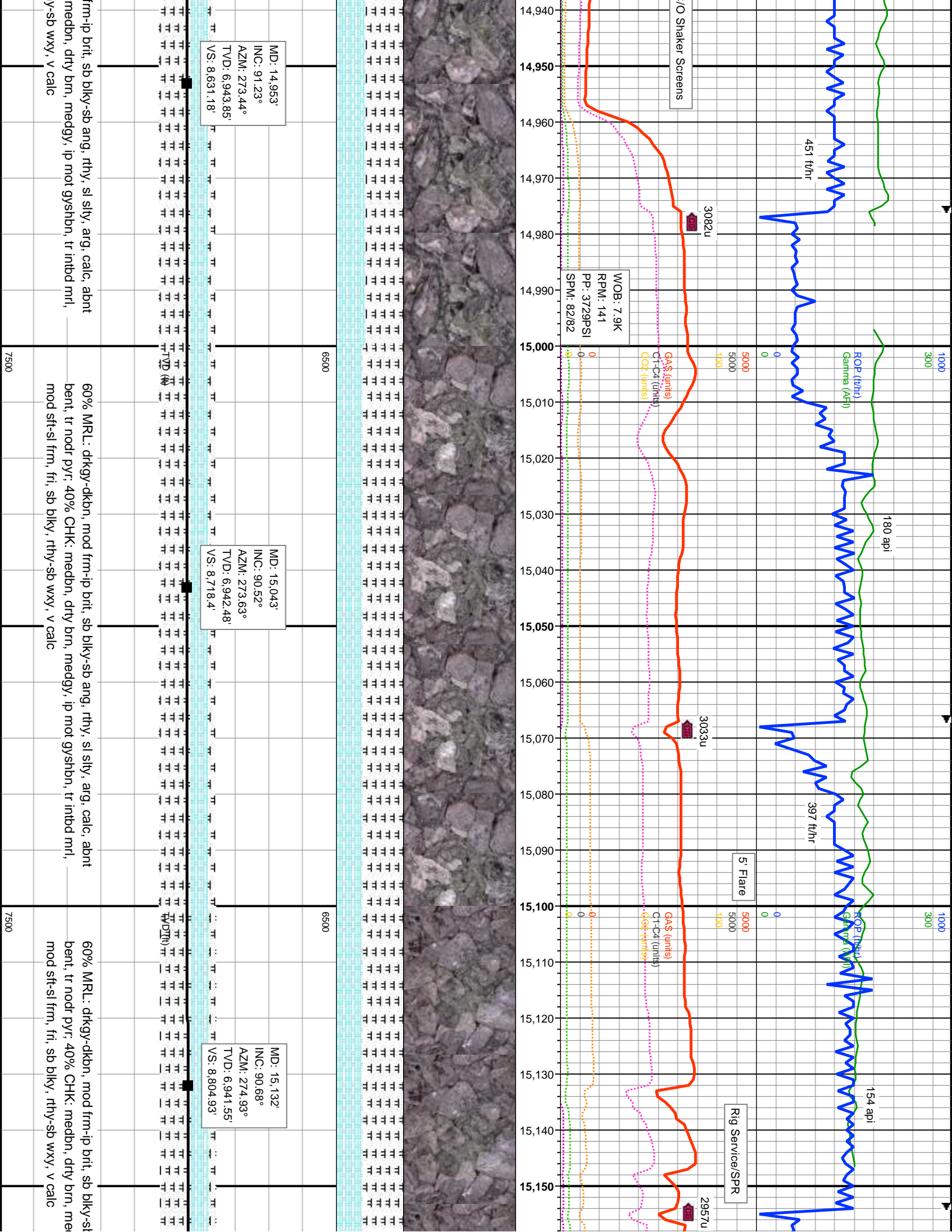


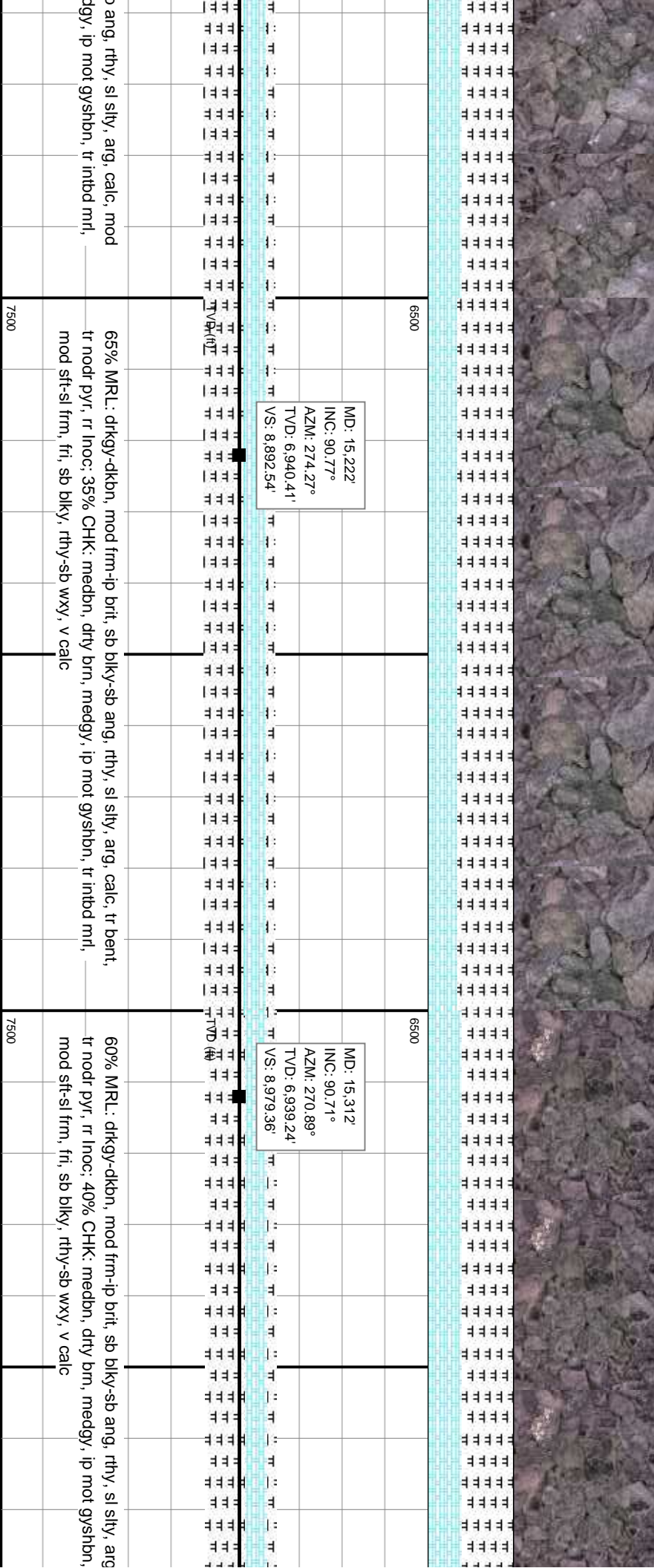
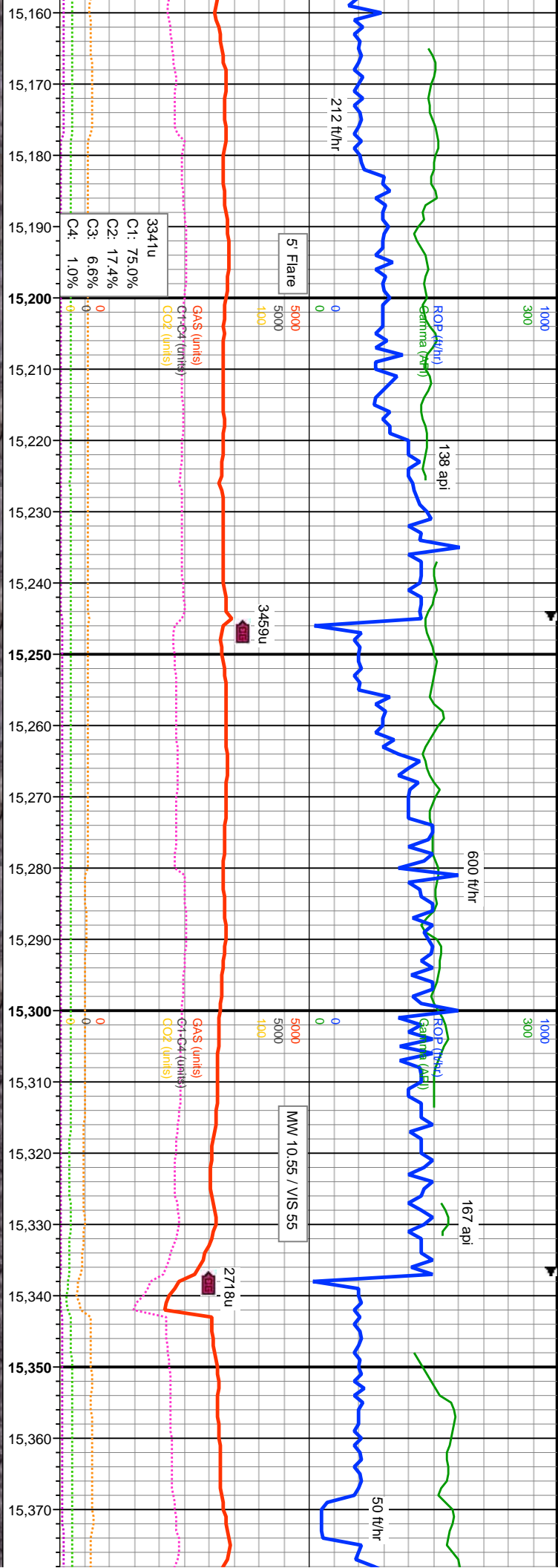


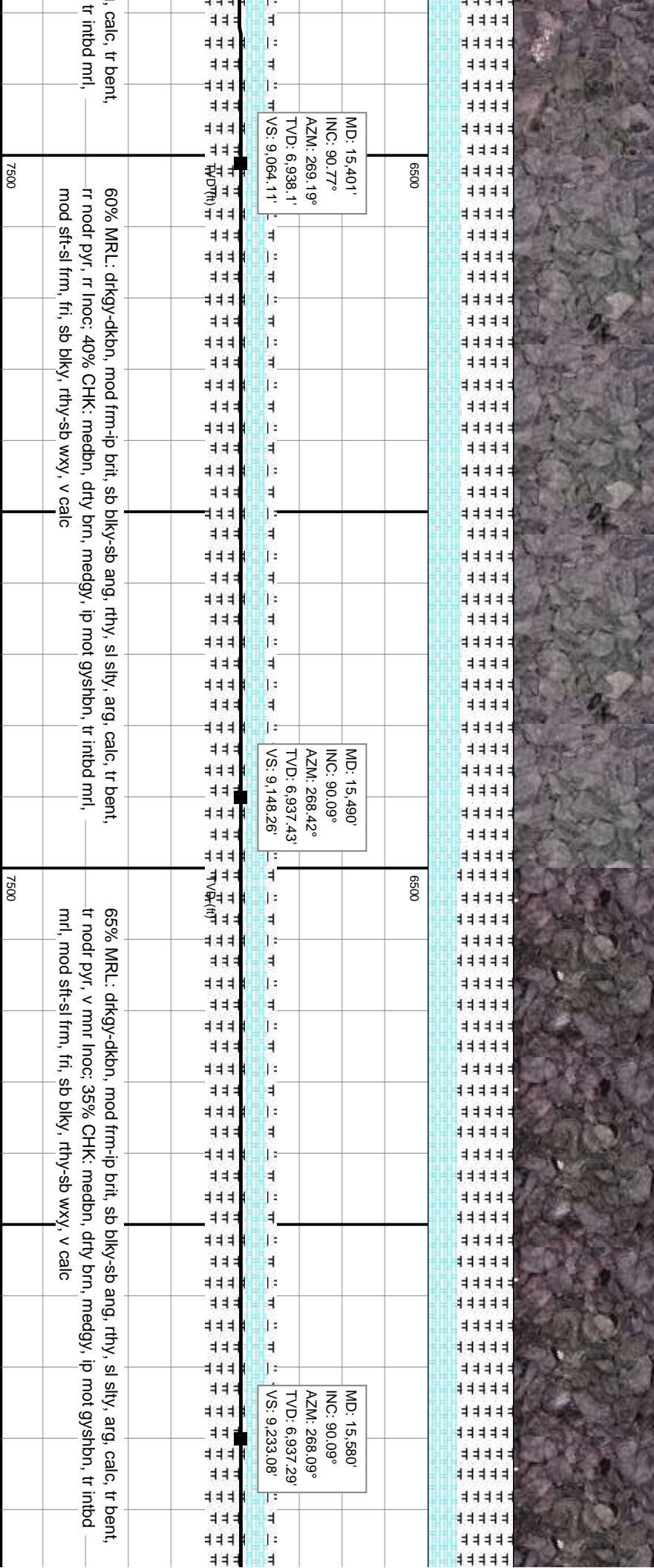
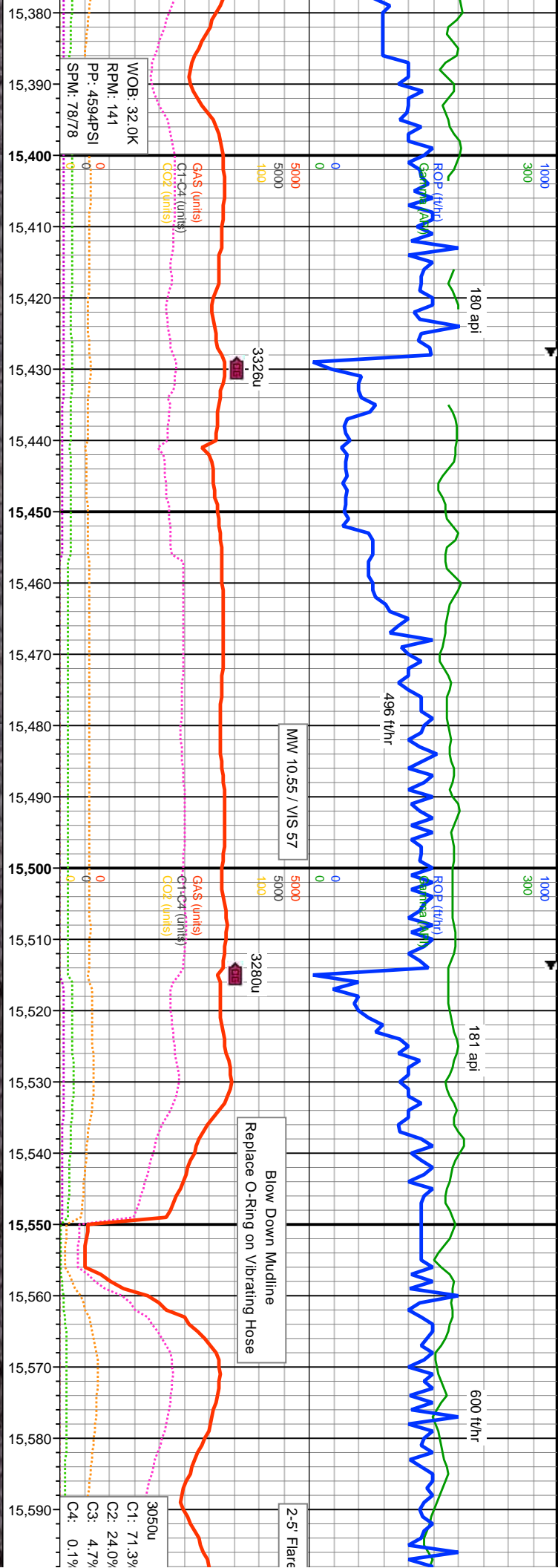


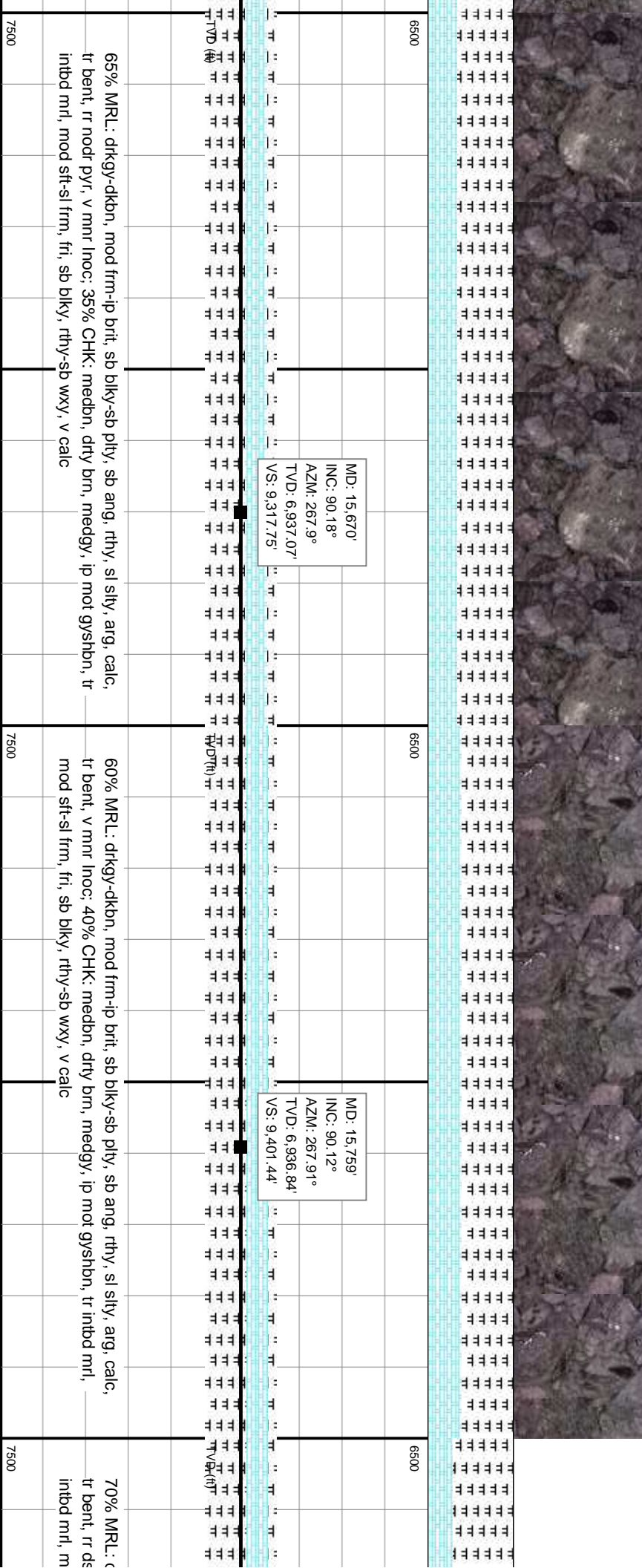
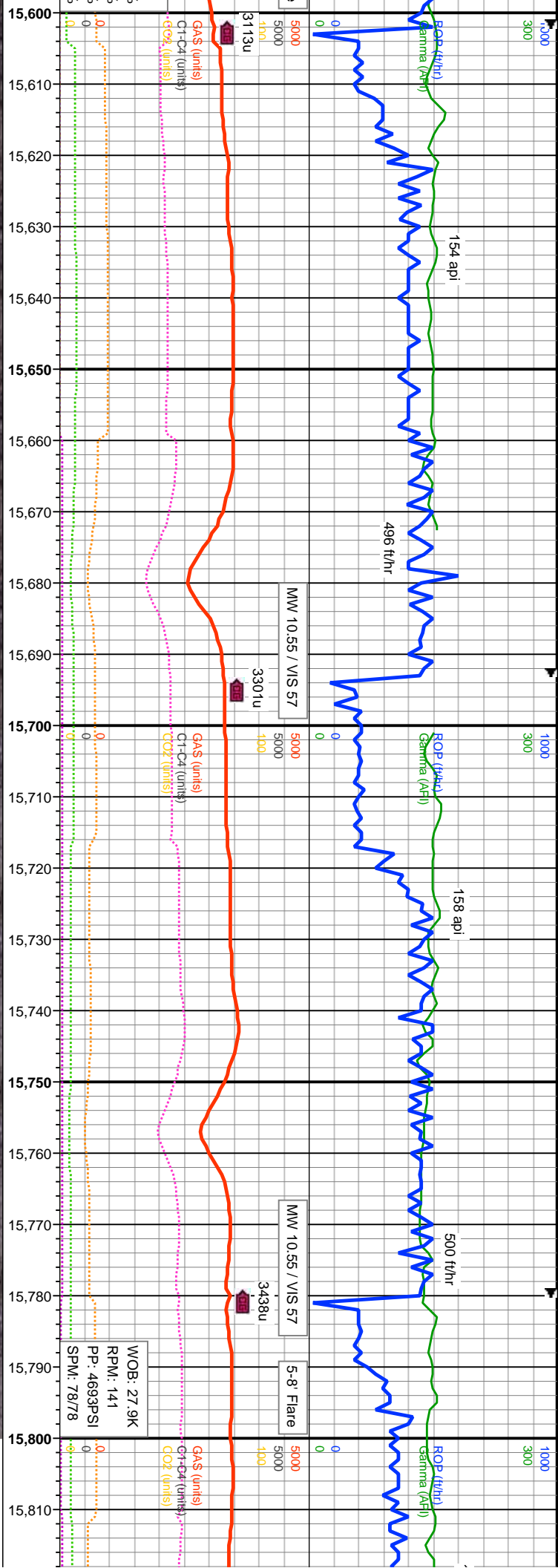


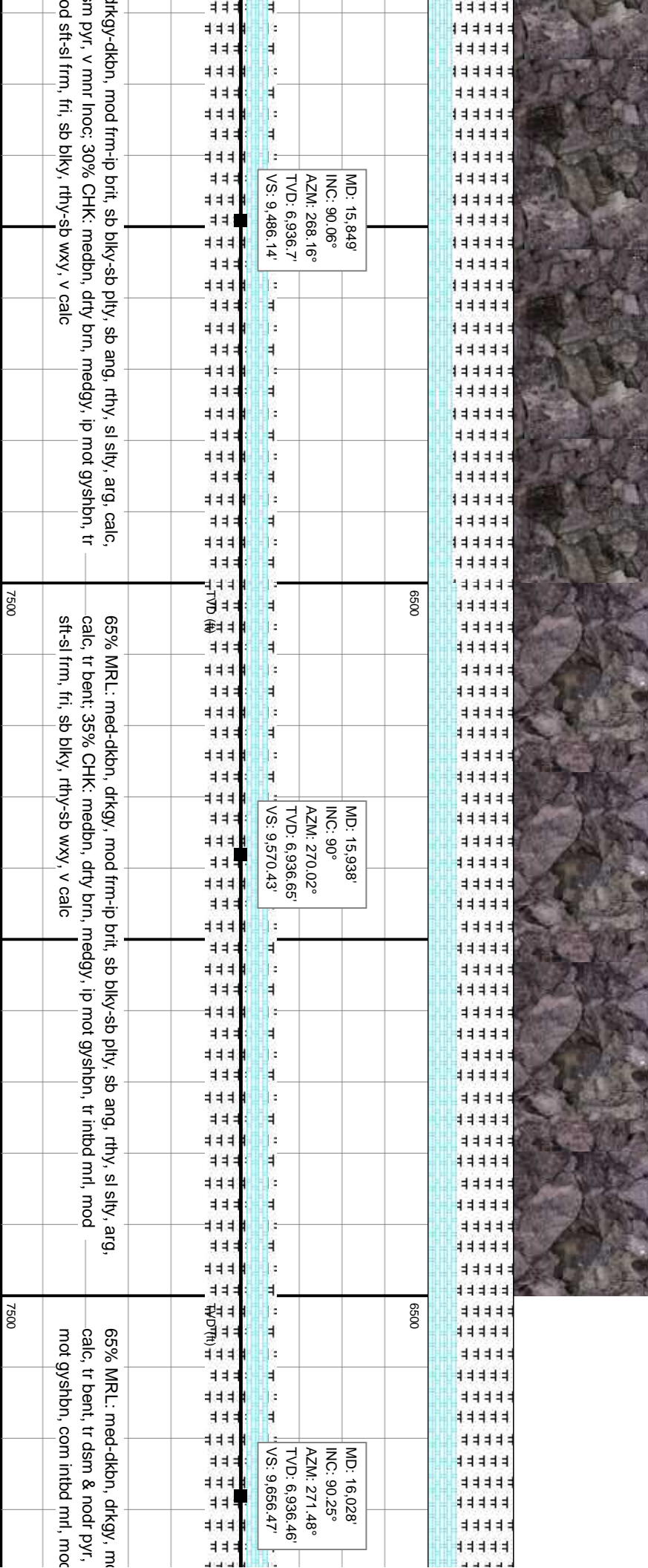
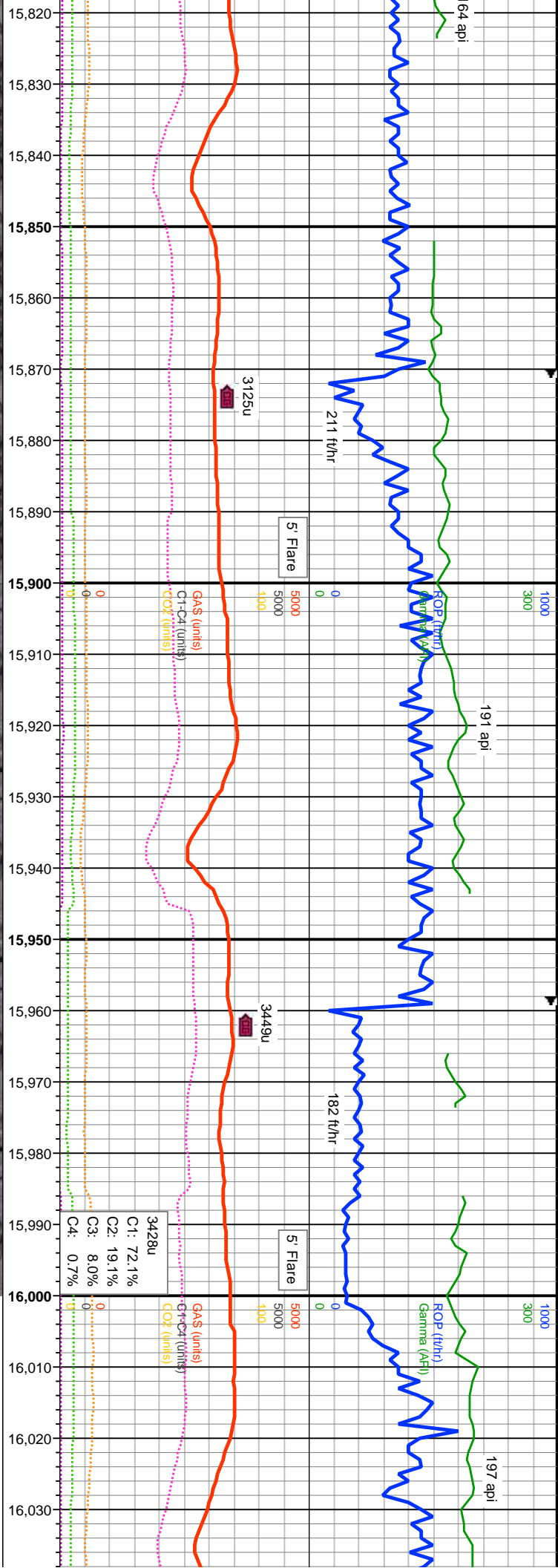


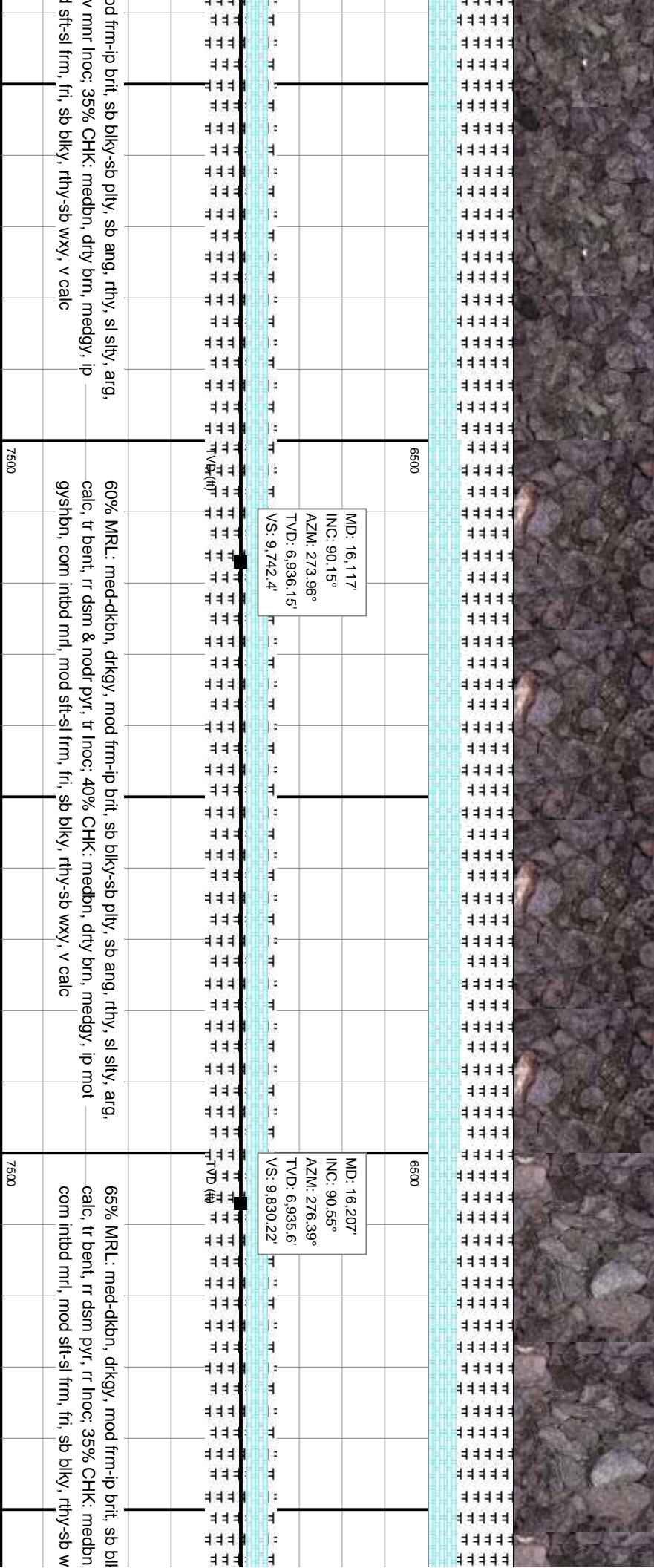
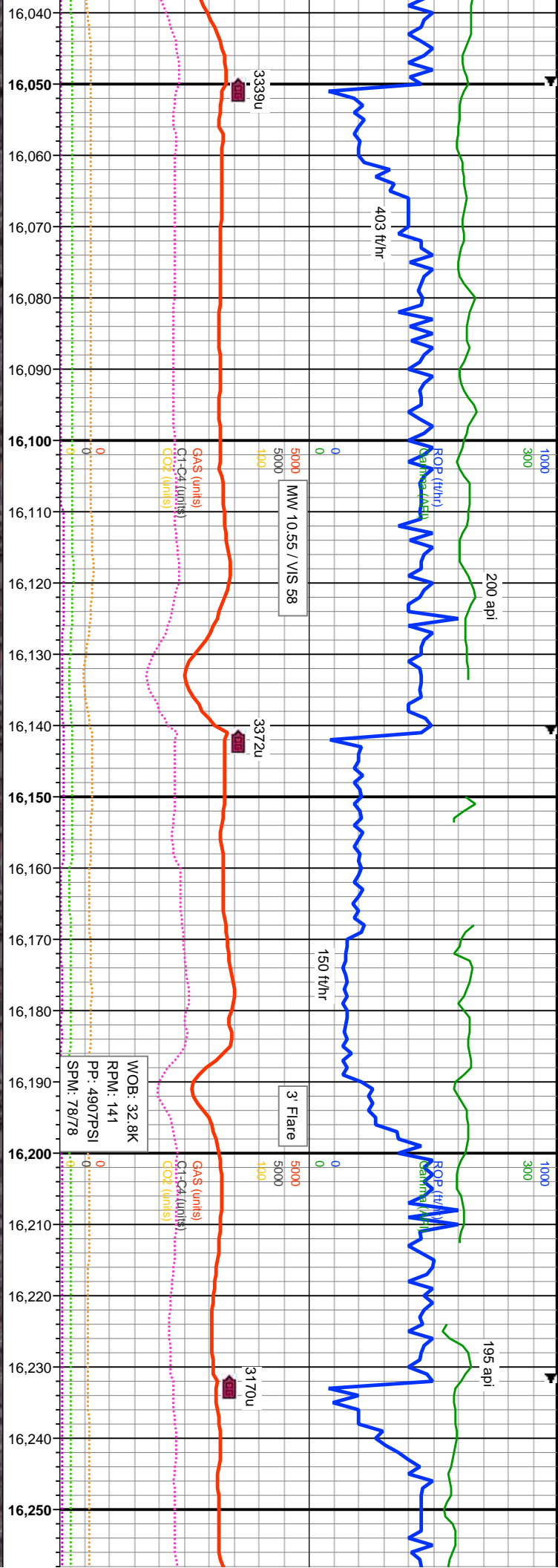


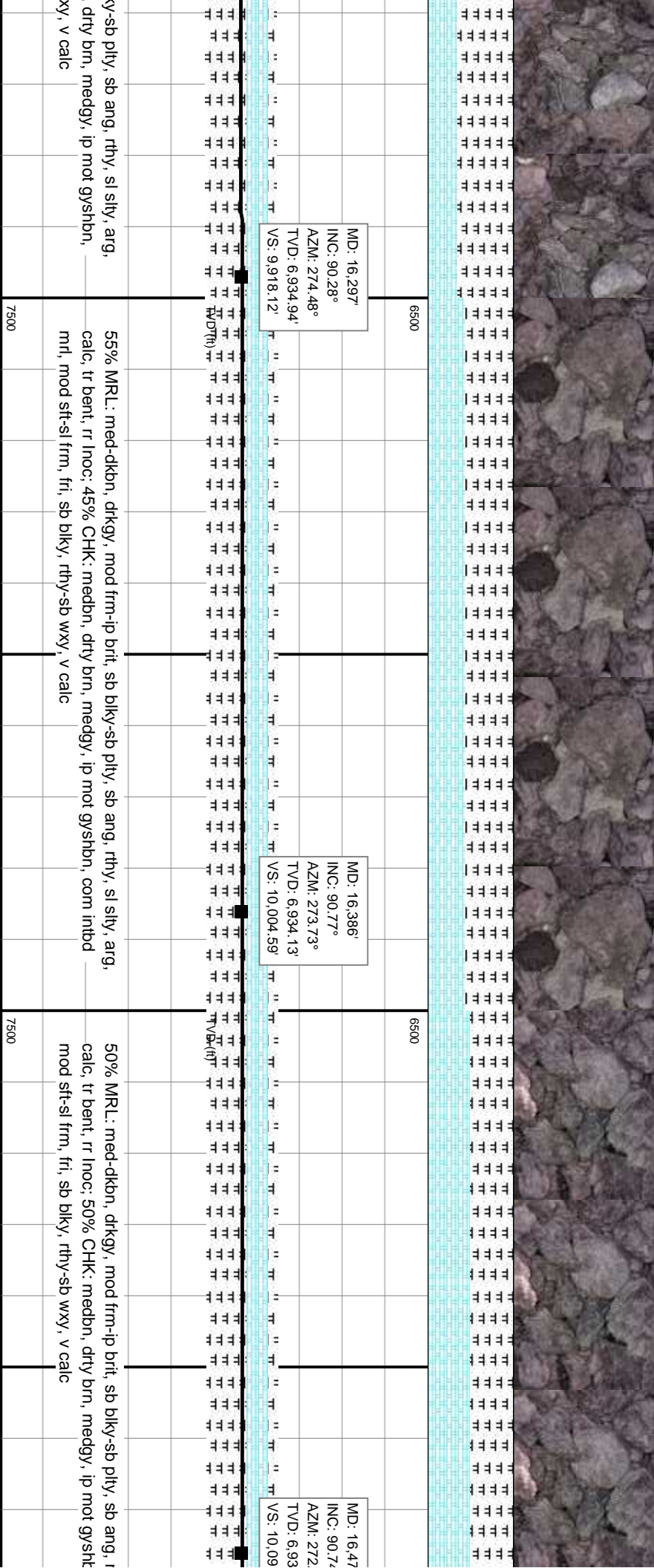
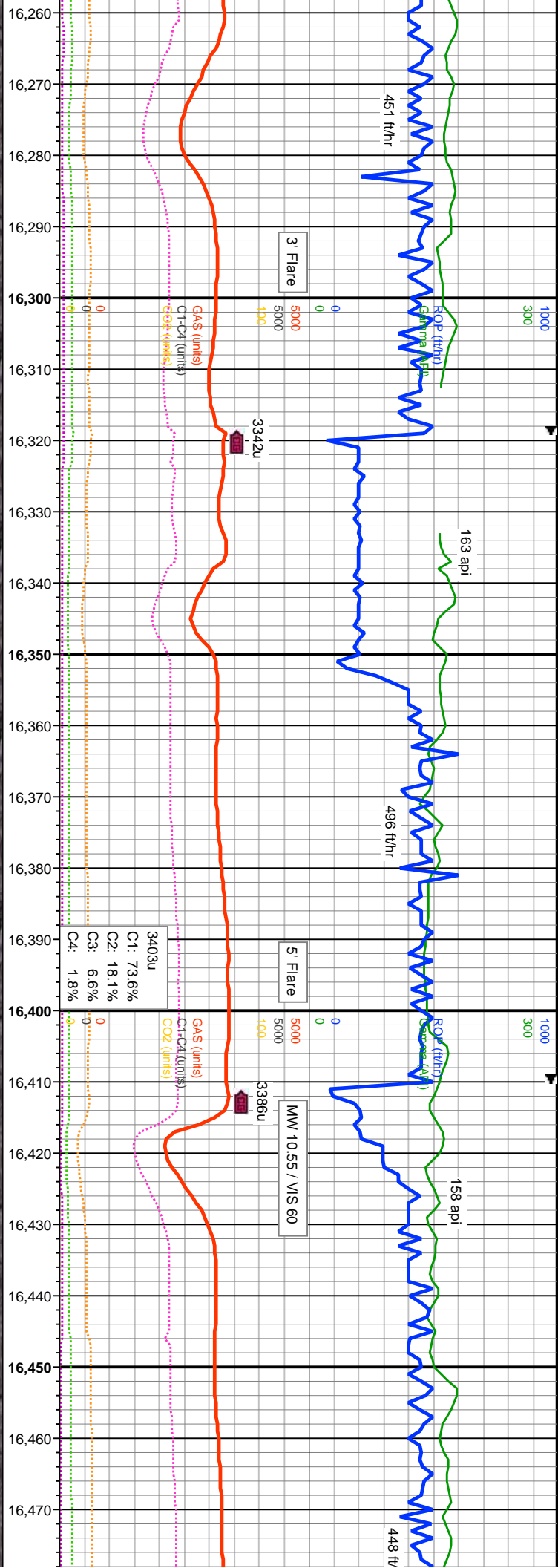


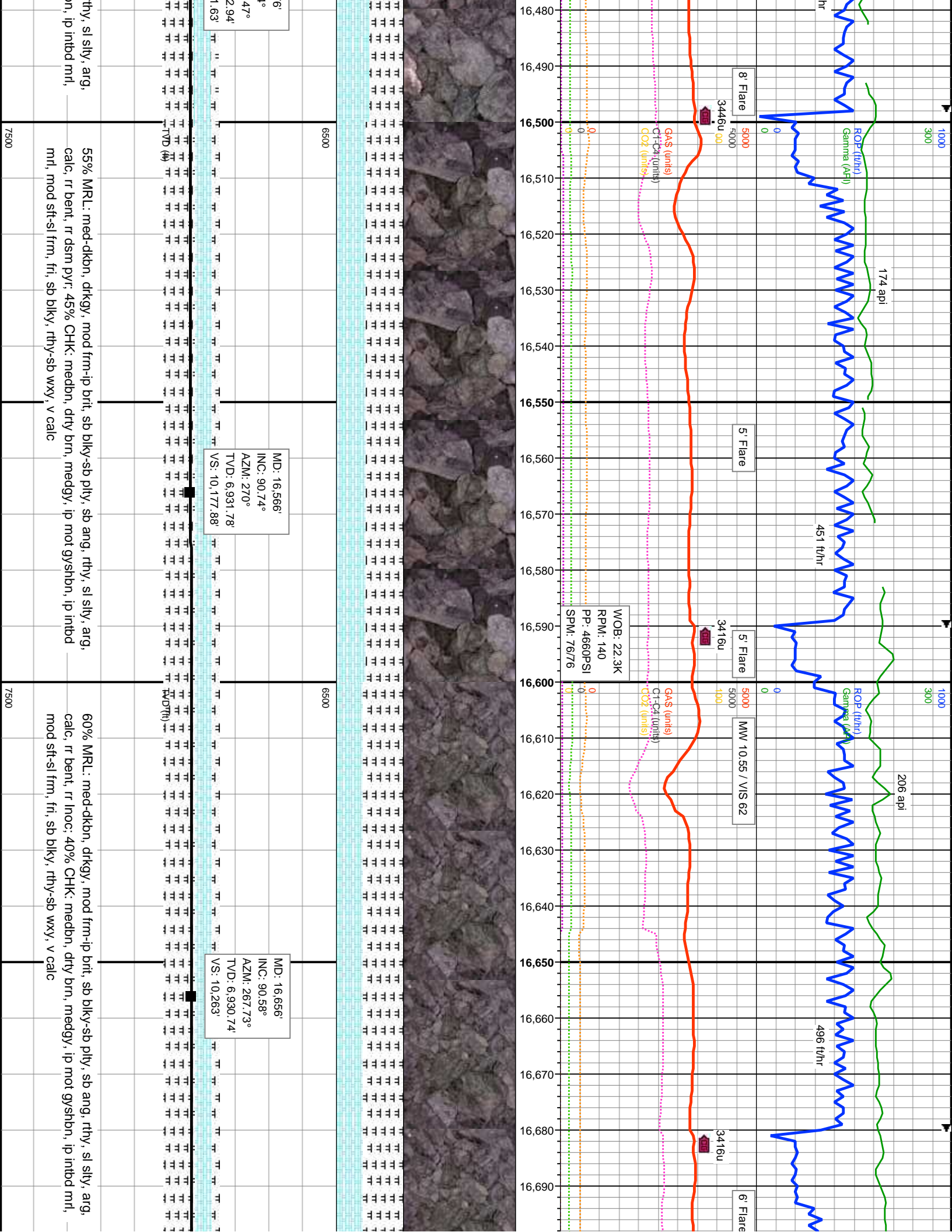


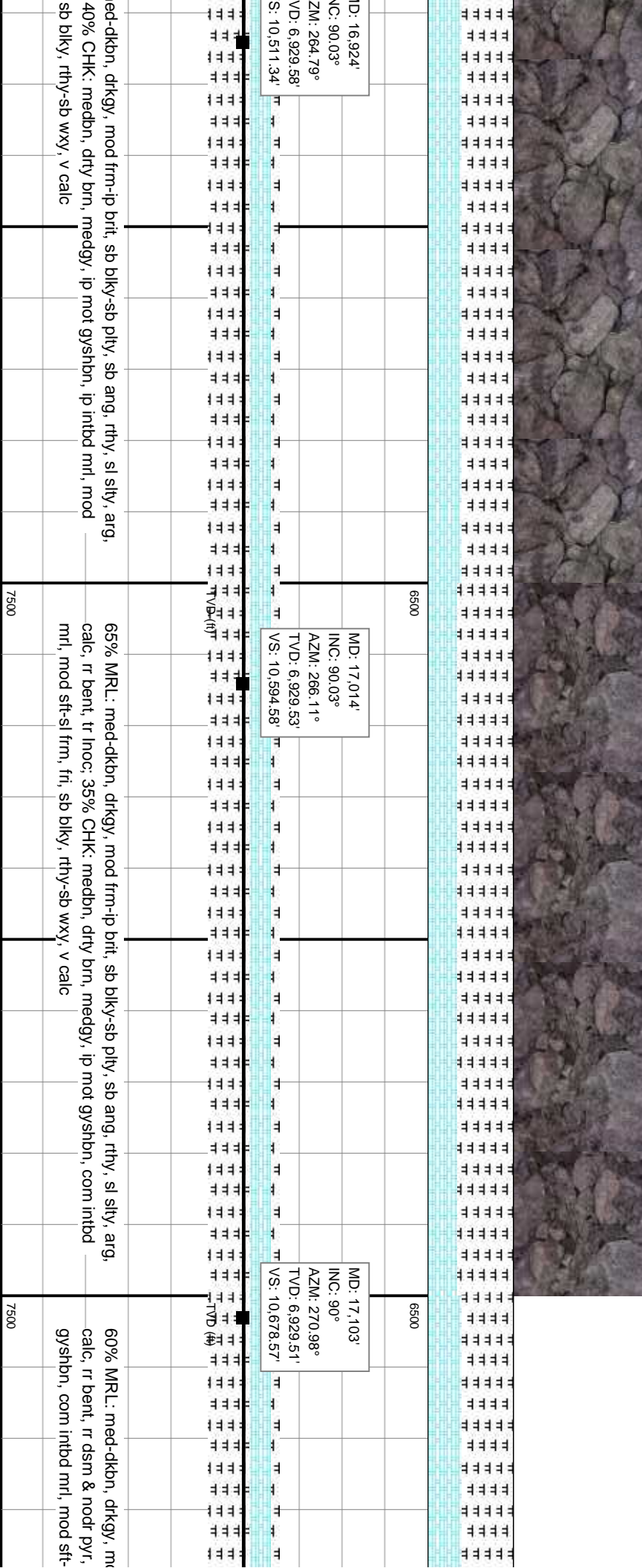
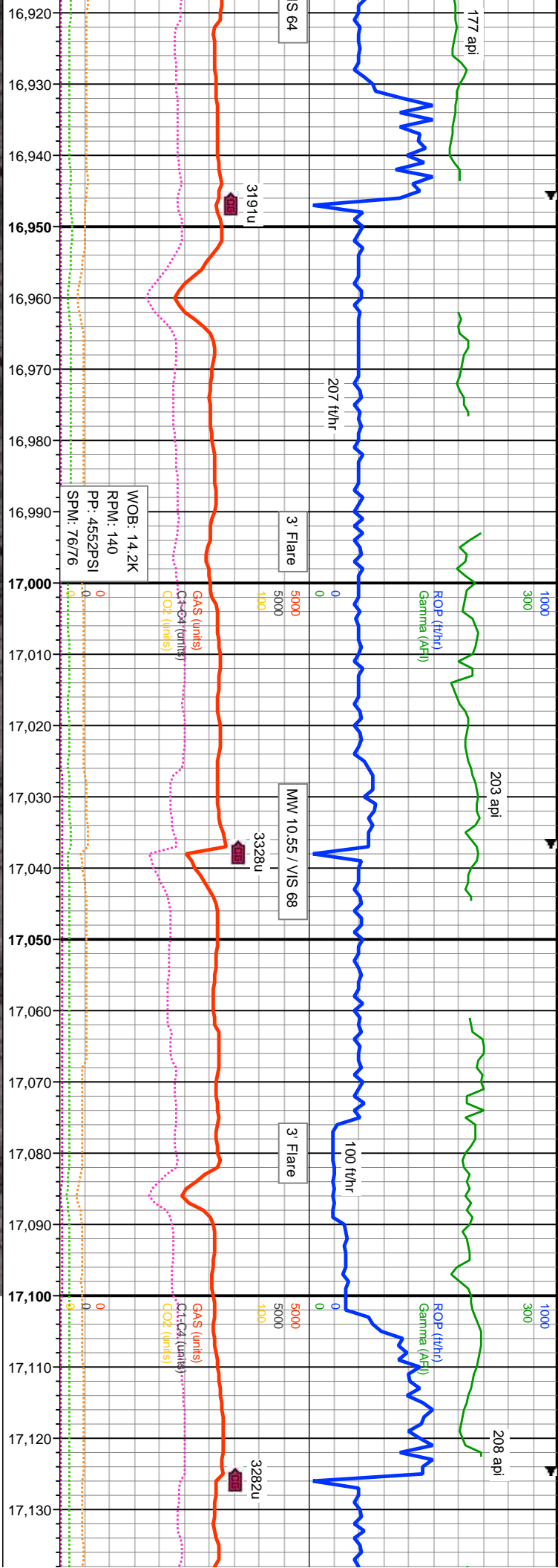


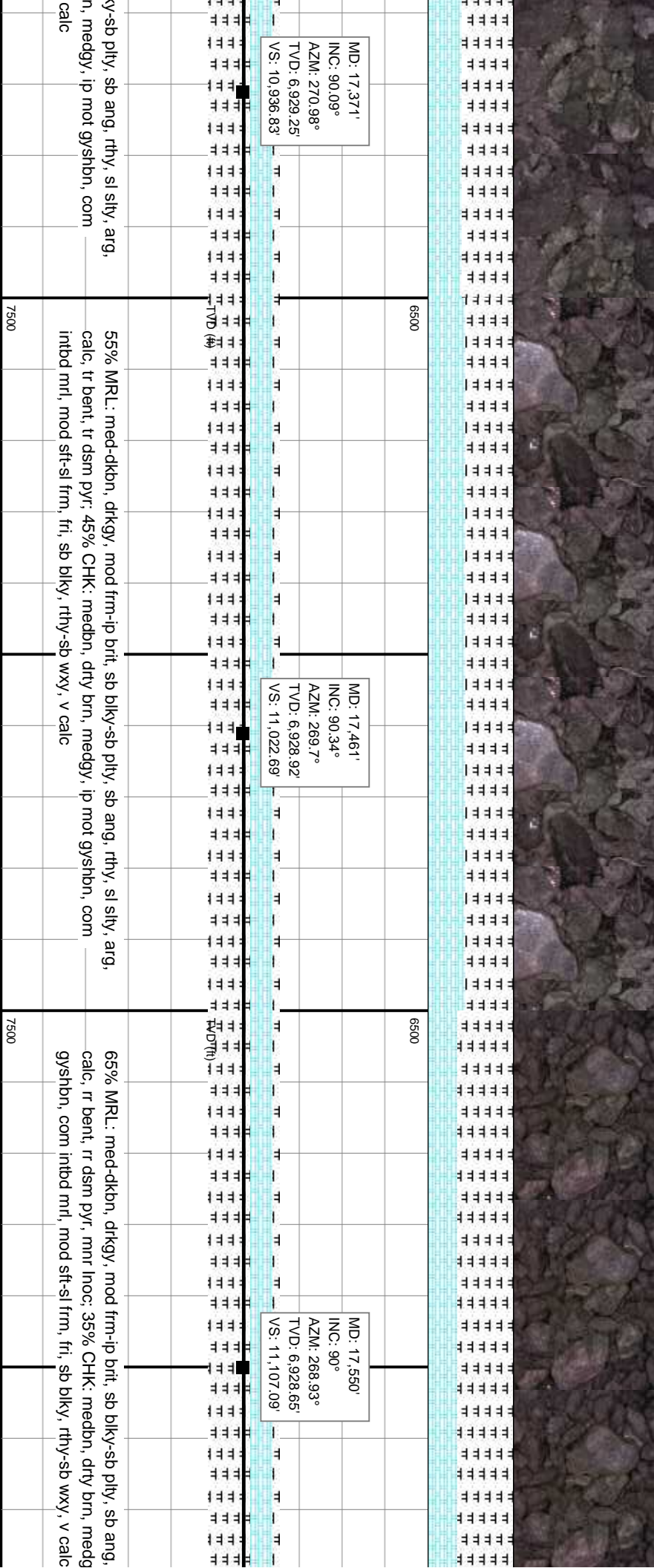
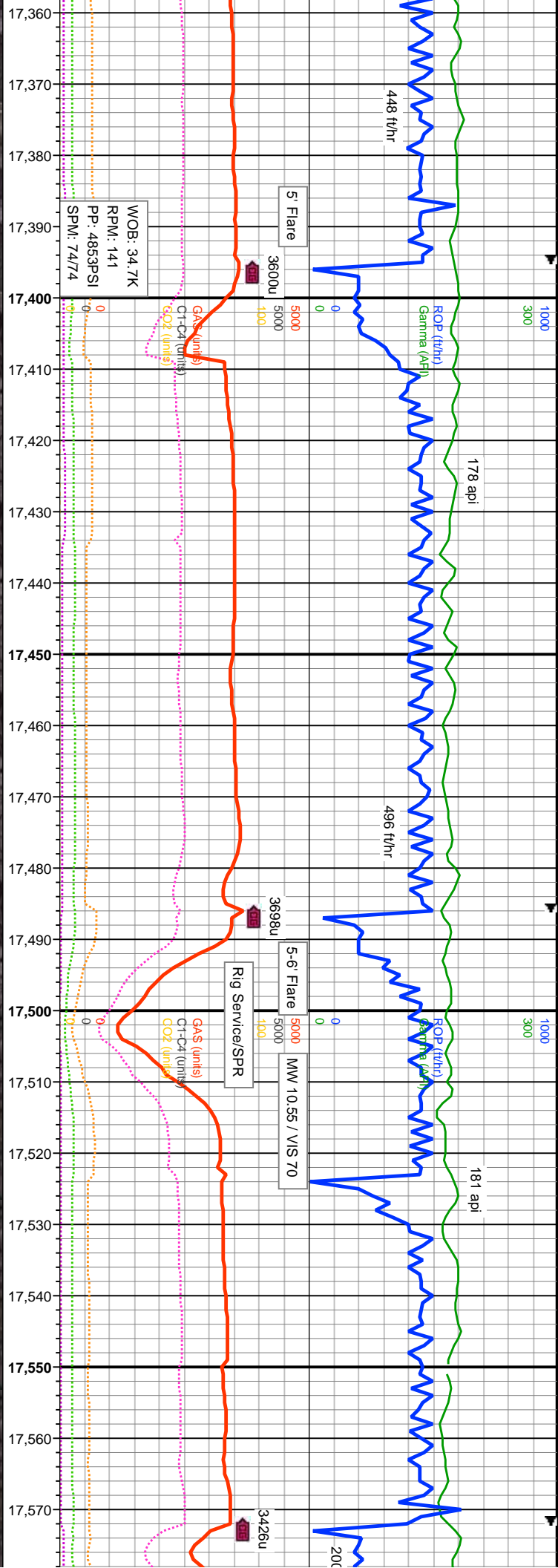


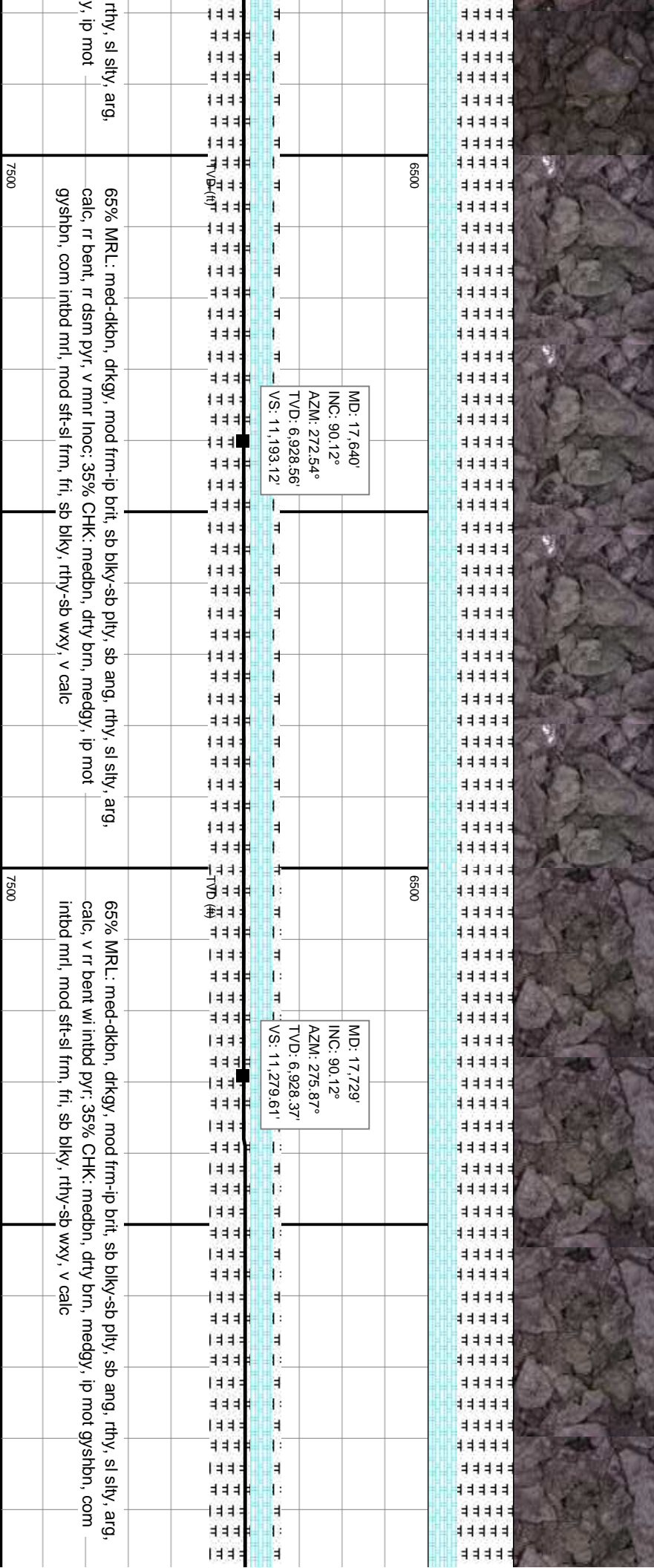
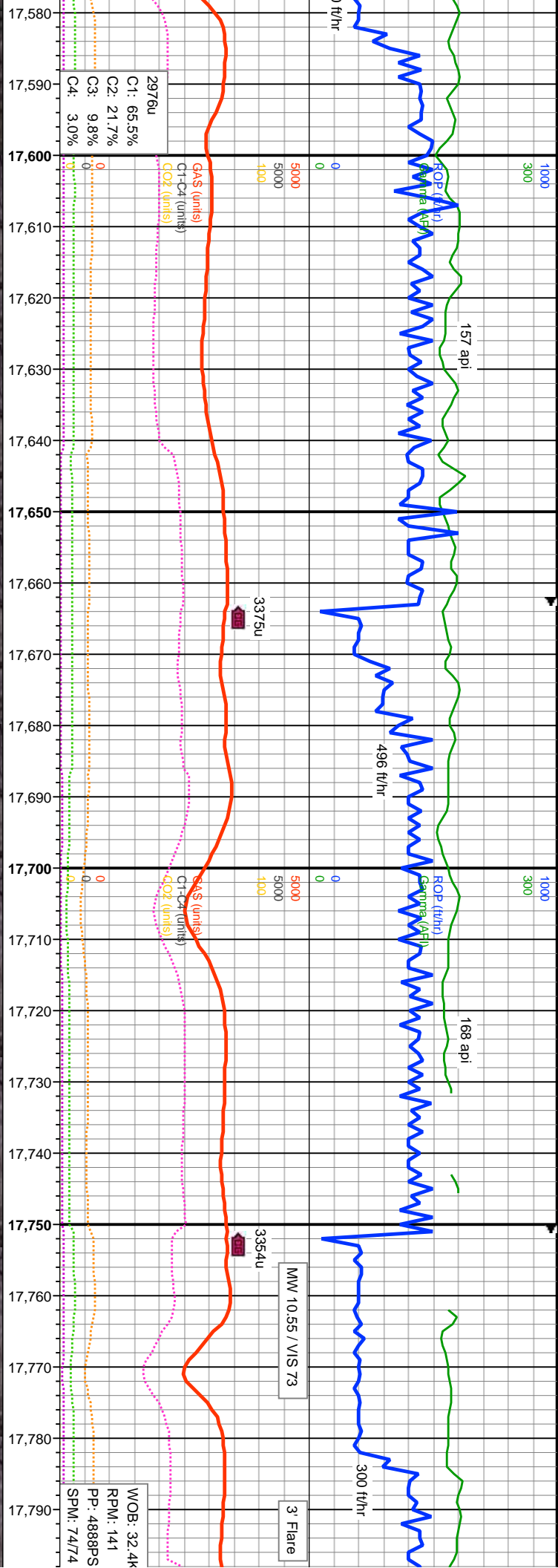


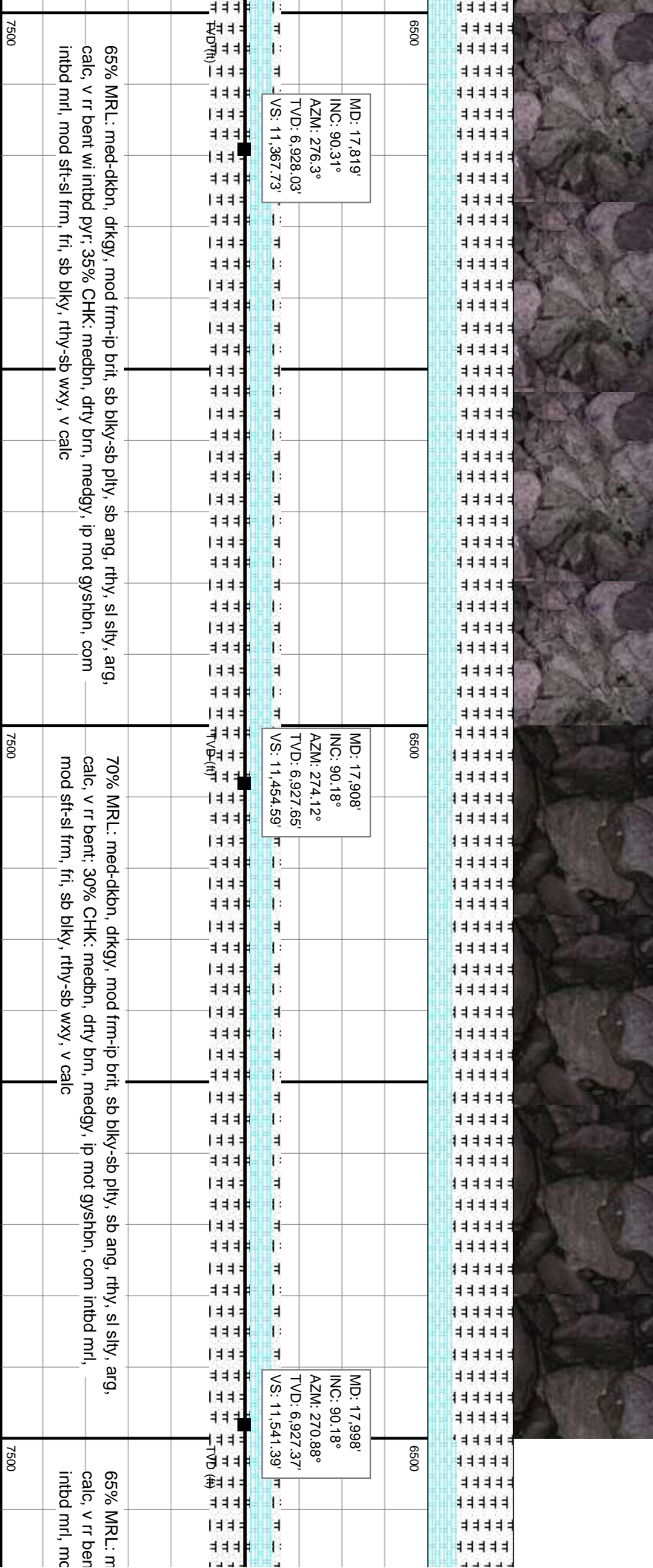
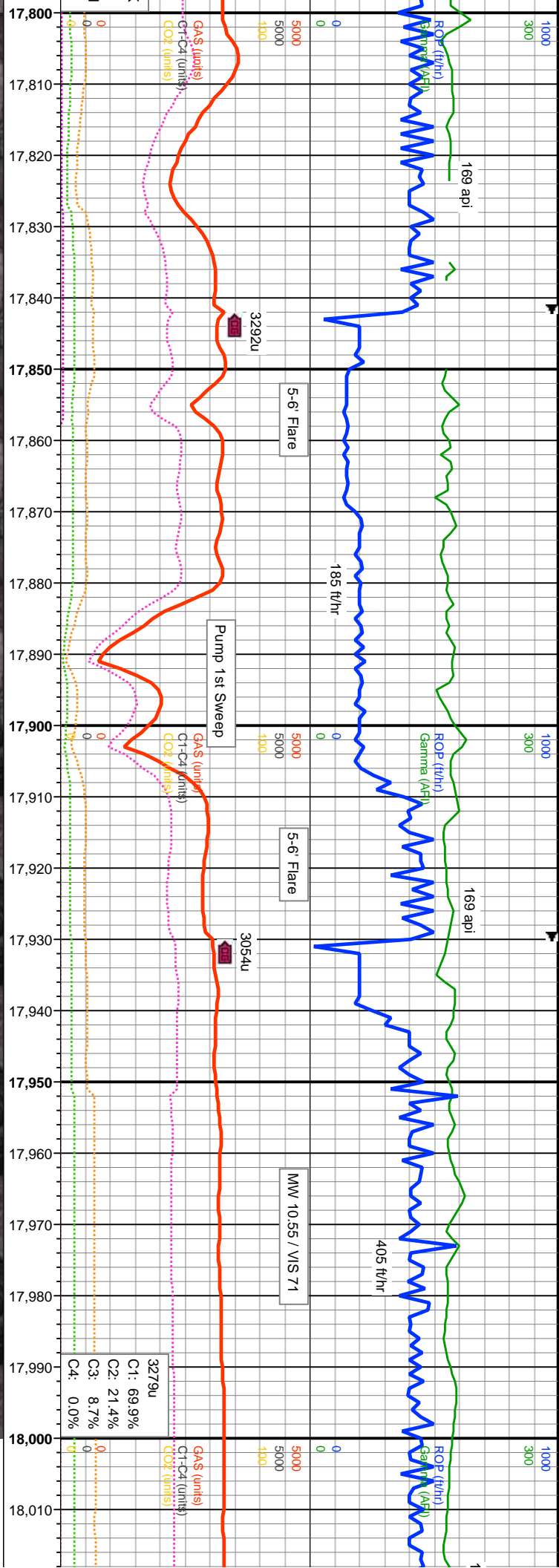


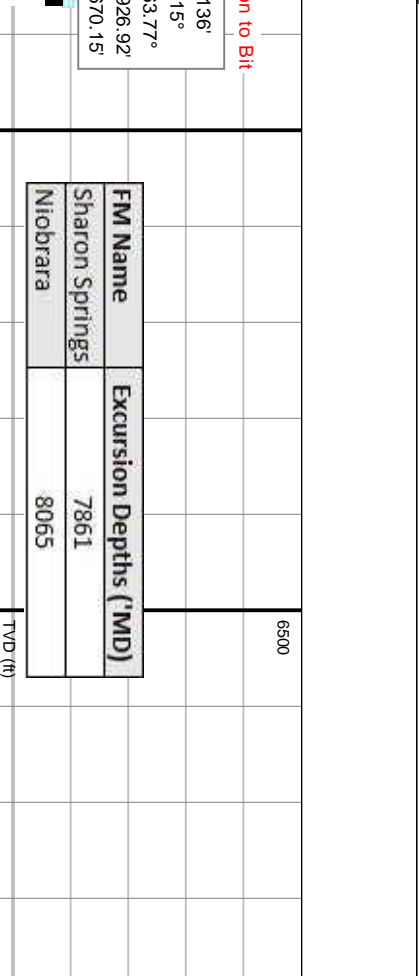
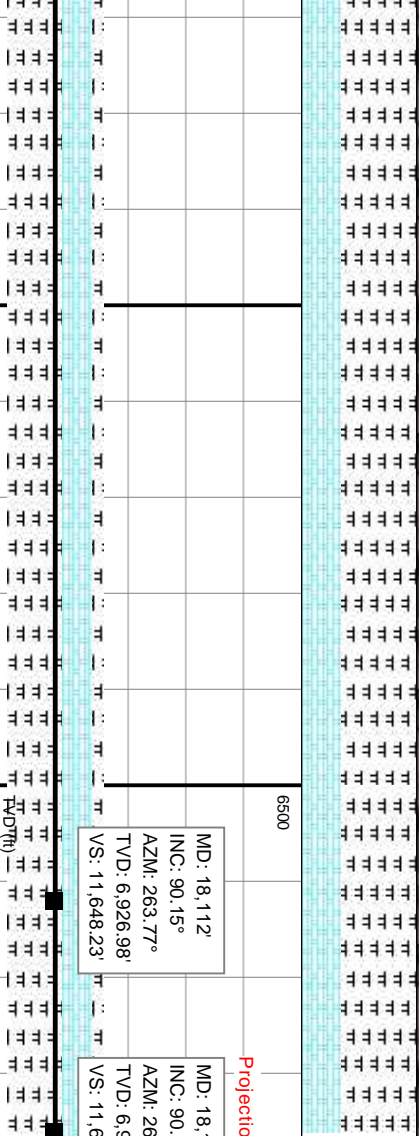
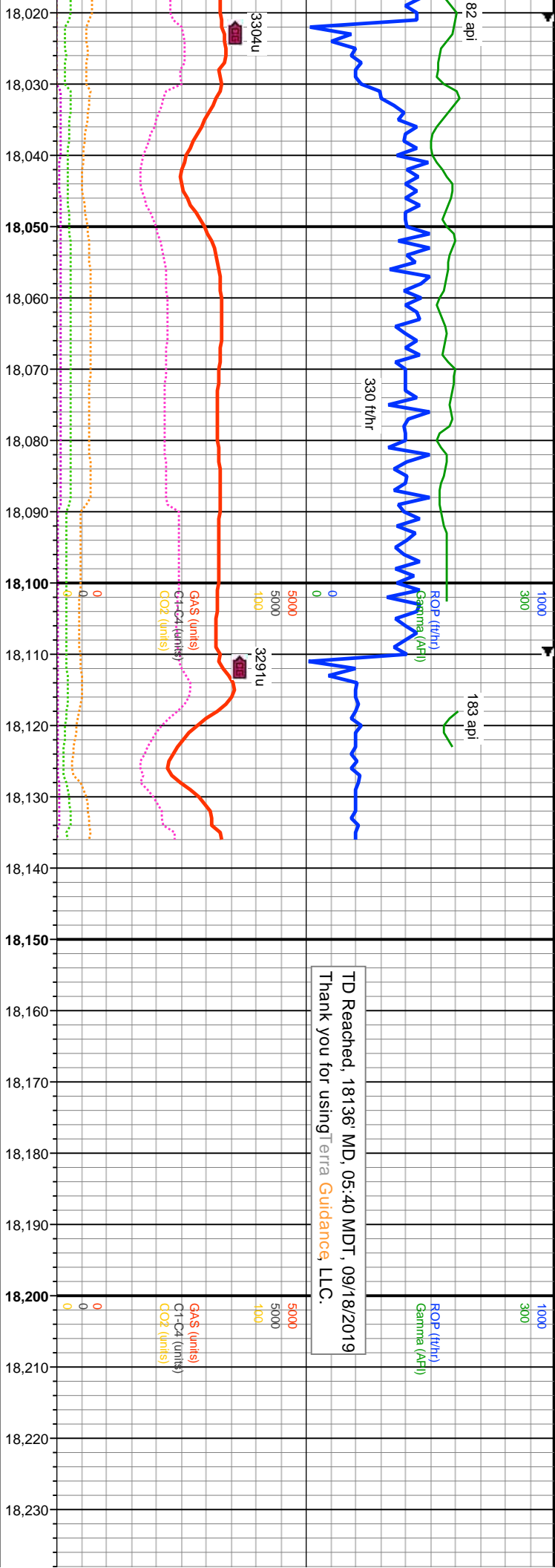












ed-dkbn, dkggy, mod frm-ip brit, sb blkgy-sb pty, sb ang, rthy, sl stly, arg, t wi intbd pyr, 35% CHK: medbn, drty brn, medgy, ip mot gysbhn, com d sft-sl frm, fri, sb blkgy, rthy-sb wxy, v calc	6500	7500
65% MRL: med-dkbn, dkggy, mod frm-ip brit, sb blkgy-sb pty, sb ang, rthy, sl stly, arg, calc, v rr bent wi intbd pyr, 35% CHK: medbn, drty brn, medgy, ip mot gysbhn, com intbd mrl, mod sft-sl frm, fri, sb blkgy, rthy-sb wxy, v calc	6500	7500

