



Scale: 5" / 100'  
Measured Depth Log

Well Name    Arellano O-10-9HN

Location    Sec 10 T5N R65W

State    Colorado

County    Weld

Country    United States

Rig Number    Frontier (Utah) 8

API Number    05-123-41110

AFE #    41110

Region    DJ Basin

Field    Wattenberg

Spud Date    3/31/2015

Drilling Completed    5/23/2015

Surface Coordinates    1565' FSL x 309' FEL, Sec 10

Bottom Hole Coordinates    1687' FSL x 2151' FEL, Sec 9

Ground Elevation    4616'

K.B. Elevation    4640'

Logged Interval    6000' To    13948'

Total Depth    13948'

Formation    Niobrara C Chalk

Type of Drilling Fluid    FWLSND

## Operator

Company    Bayswater Exploration & Production, LLC.

Address    730 17th St.  
Denver, CO 80202

## Geologist

Name    Mark E. Brown

Company    Bayswater Exploration & Production, LLC.

Address    730 17th St.  
Denver, CO 80202

## Other

Robert Davis    Wellsite Geologist

Columbine Logging Computer    148

Bloodhound Unit    298

Shanna Gilbert    Wellsite Geologist

Joey Luce    Wellsite Geologist

Andrew Martens    Wellsite Geologist

Zone Color Coding

Oil

Note

Error

Condensate

Core

Water

Gas

Pressure

Seal

Rock Types

UNKNOWN

ANHYDRITE

BENTONITE

BRECCIA

CHALK

CEMENT

CHERT

CLAY CHOKE SANC

CLAYSTONE

COAL

CONGLOMERATE

DOLOMITE

DOLOMITIC LIMESTONE

GRANITE

GYPSUM

IGNEOUS

SIDERITE or LIMONITE

LIMESTONE

MARLSTONE

METAMORPHIC

NO SAMPLE

SALT

SANDSTONE

SALT-PEPPER SANC

SHALE

SHALE COLORED

SHALE GRAY

SHALY SANDSTONE

SHALY SILTSTONE

SILTY SHALE

SILTSTONE

TILL

TUFF

WELDED TUFF

Accessories

GASTROPOD

INOCERAMUS

OOLITE

OSTRACOD

PELECYPOD

PELLET

PISOLUTE

PLANT REMAINS

PLANT SPORES

SCAPHOPOD

STROMATOPOROID

ECHINOID

FISH

FORAMINIFERA

FOSSIL

ARGILLITE GRAIN

B BENTONITE

BITUMENOUS SUBSTANCE

BRECCIA FRAGMENTS

CALCAREOUS

CARBONACEOUS FLAKES

CHTDK

CHTLT

COAL - THIN BEDS

DOLOMITIC

FELDSPAR

FERRUGINOUS PELLET

FERRUGINOUS

GLAUCONITE

GYPSIFEROUS

HEAVY MINERAL

K KAOLIN

MARCASITE

TT MARLSTONE

MICACEOUS

MINERAL CRYSTALS

NODULES

PHOSPHATE PELLETS

P PYRITE

SALT CAST

SANDY

S SIDERITE

SILICEOUS

SILTY

TUFFACEOUS

ANHYDRITE STRINGER

BENTONITE STRINGER

COAL STRINGER

DOLOMITE STRINGER

GYPSUM STRINGER

LIMESTONE STRINGER

MARLSTONE (CALC) STRG

MARLSTONE (DOL) STRG

SANDSTONE STRINGER

SHALE STRINGER

SILTSTONE STRINGER

Oil Show

PINPOINT

VUGGY

Engineering

DEAD

EVEN

QUESTIONABLE

BIT

SPOTTED STAINING

CONNECTION (UP)

Porosity

CONNECTION (DOW)

CONNECTION GAS

TRIPP GAS

FRACTURE

TRIPP GAS (LEFT)

INTERCRYSTALLINE

DOWN TIME GAS

INTEROOLITIC

DOWN TIME GAS






































MOLDIC

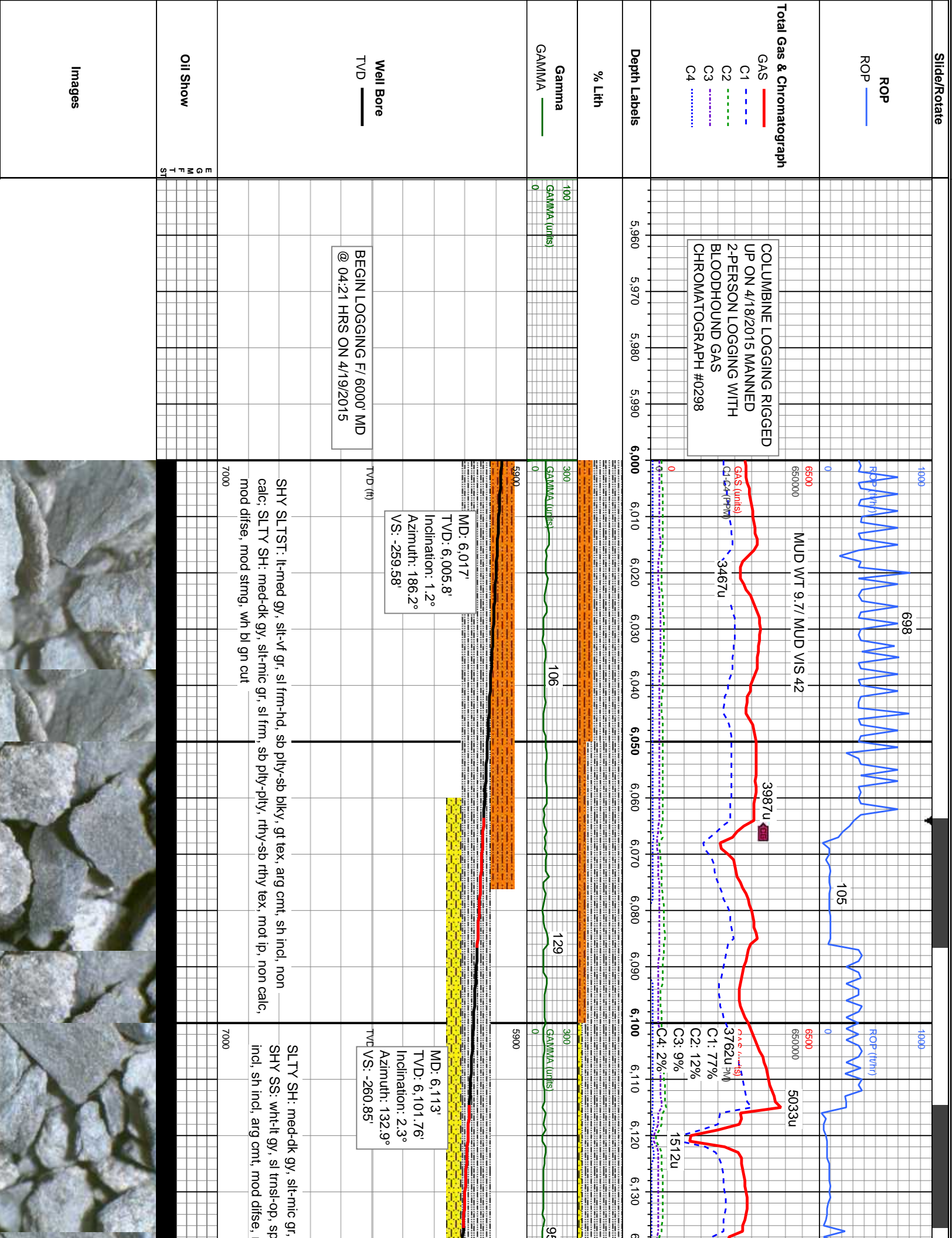
CORE - LOST

ORGANIC

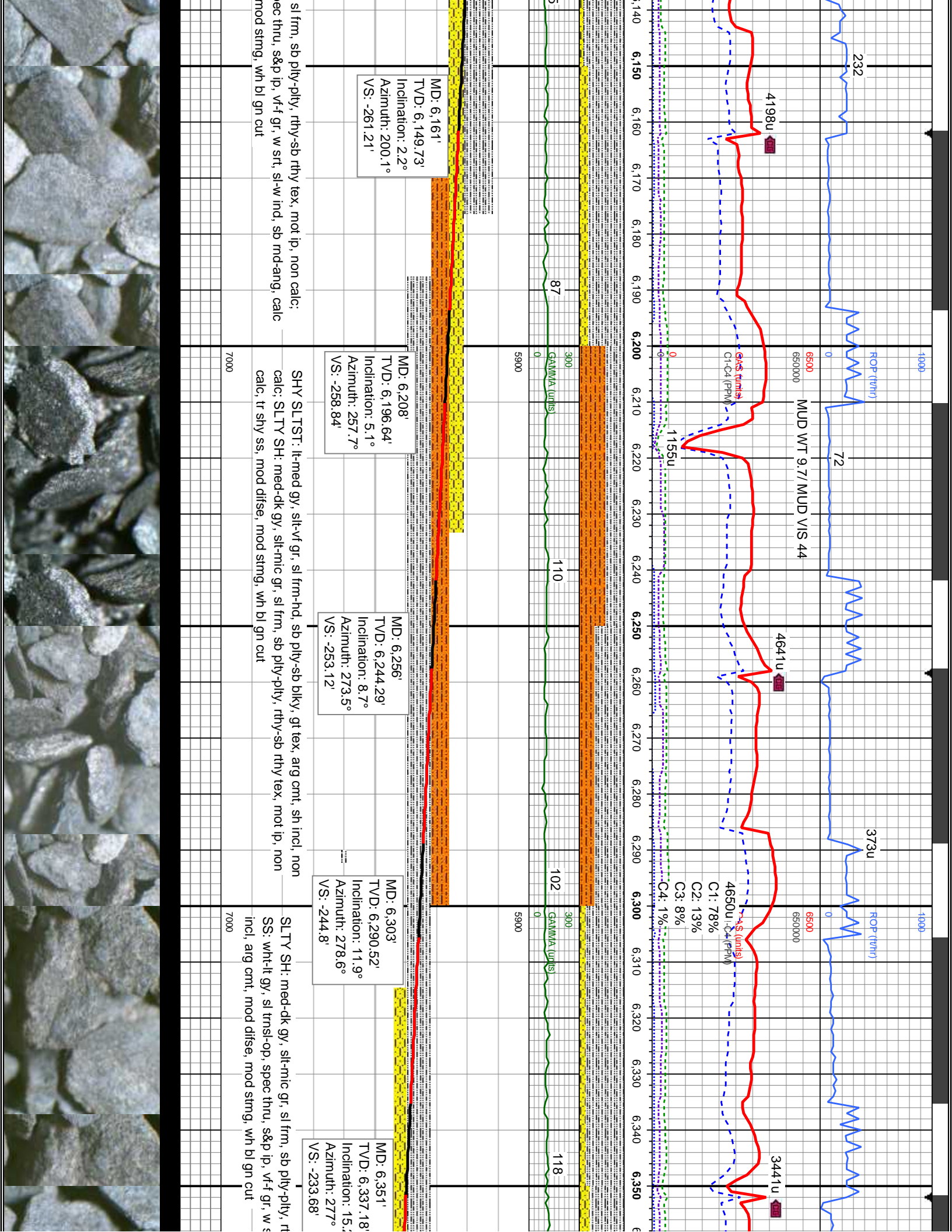
CORE - RECOVERED

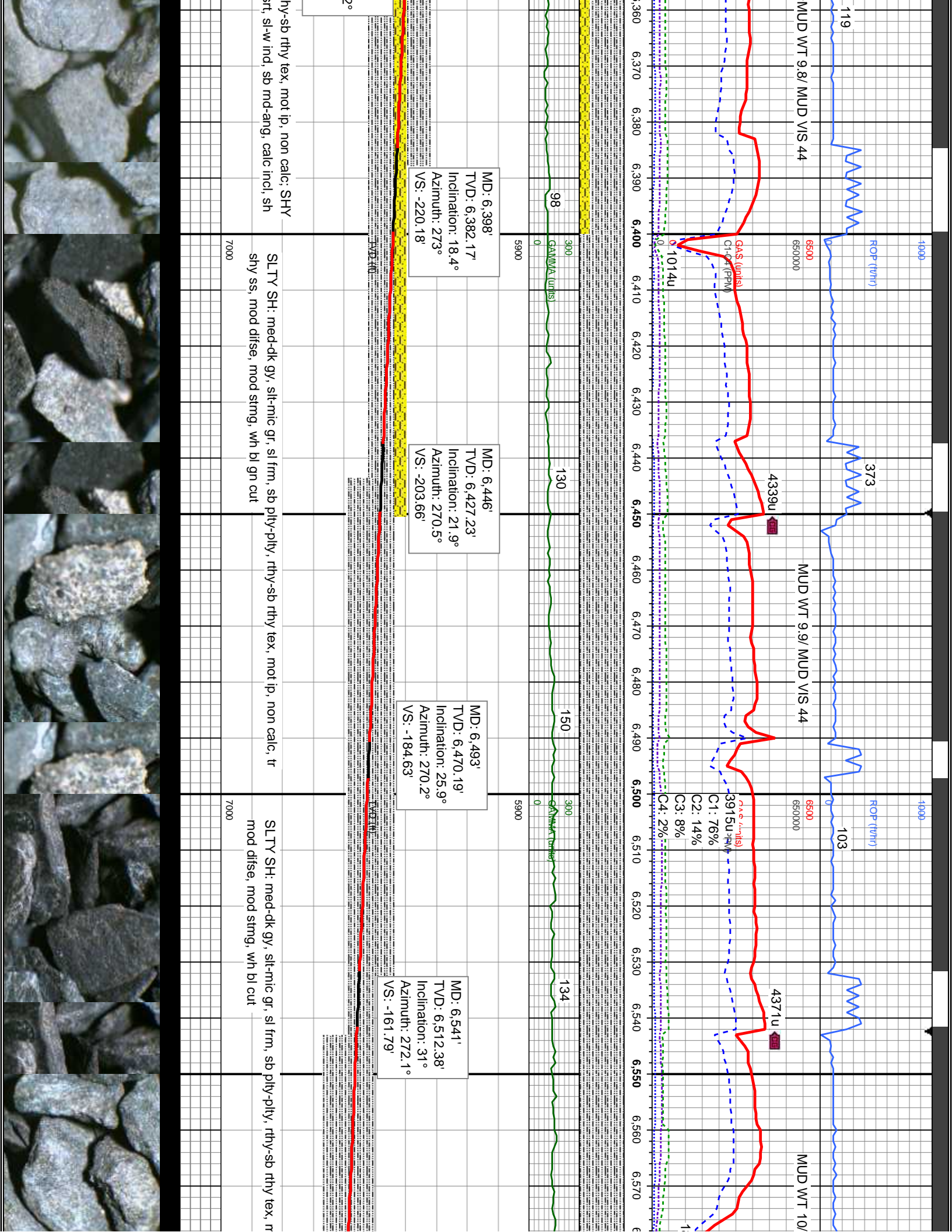
Other Symbols

	DST INTERVAL		WIRELINE TESTED - LEFT		E EARTHY
	FAULT		WIRELINE TESTED - RT		FX FINELYXLN
	FORMATION TOP		DRILL STEM TEST		BS GRAINSTONE
	GAS SHOW		MN DEPTH		L LITHOGRAPHIC
	OIL SHOW				MX MICROXLN
	MN DEPTH UP	<b>Rounding</b>			
					MX MUDSTONE
	MN DEPTH (DOWN)		A ANGULAR		PS PACKSTONE
	NORMAL FAULT		R ROUNDED		WS WACKESTONE
	OVERTURNED STRATA		B SUBANG		
	REVERSE FAULT		P SUBRND	<b>Sorting</b>	
	CASING				M MODERATE
<b>Textures</b>					
	SIDEWALL CORE (LEFT)				P POOR
	SIDEWALL CORE (RIGHT)		BS BOUNDSTONE		W WELL
	SLIDE		C CHALKY		
	SURVEY		CX CRYPTOXLN		

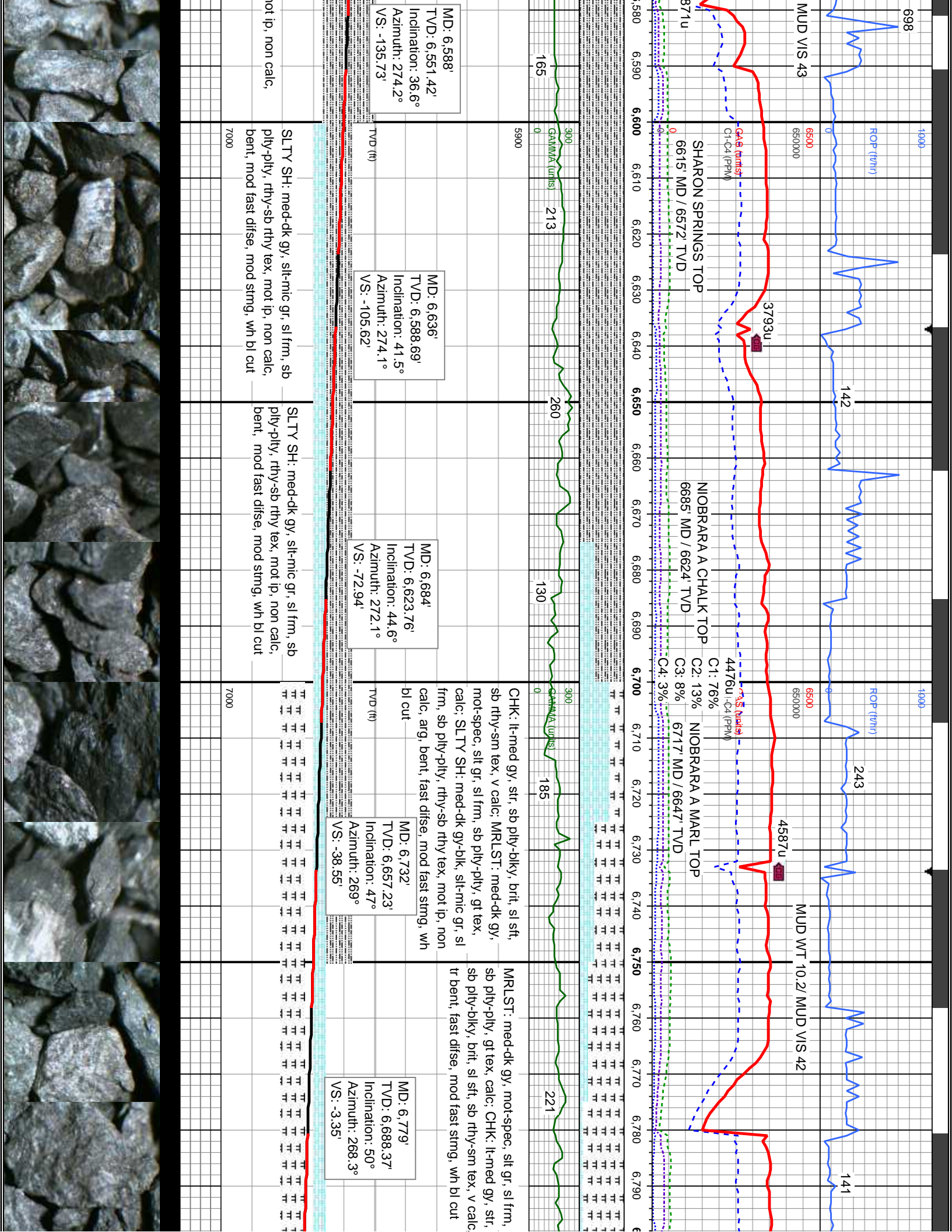


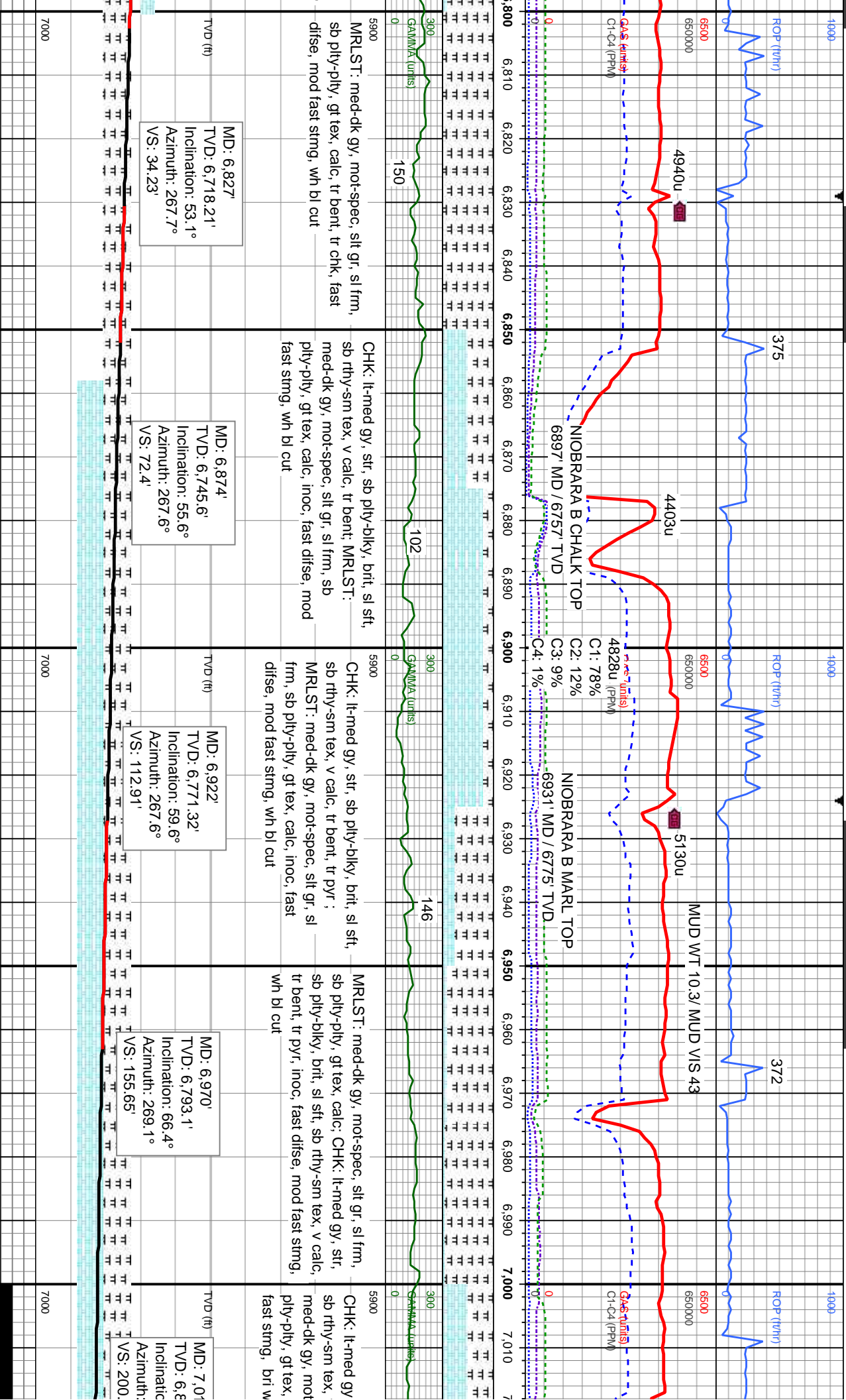




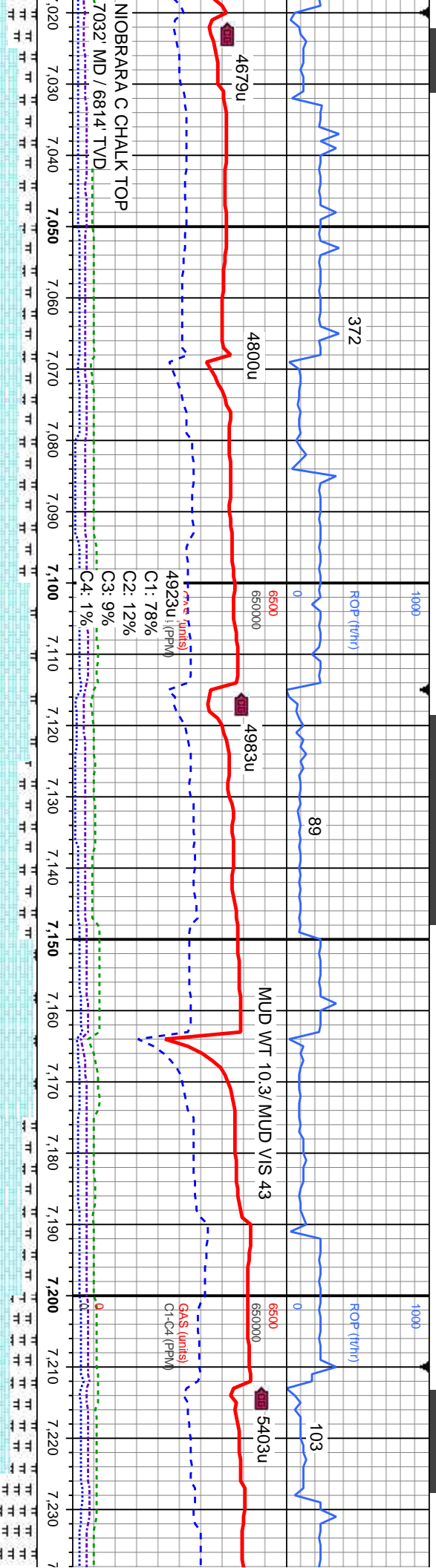












150 83 5900 300 122 5900 300 148 5900

str, sb pily-blky, brit, sl sft, v calc, tr bent; MRLST: med-dk gy, mot-spec, slt gr, sl frm, sb pily-pty, gt tex, calc, inoc, fast difse, mod h bl cut

CHK: lt-med gy, str, sb pily-blky, brit, sl sft, sb rthy-sm tex, v calc, tr bent; MRLST: med-dk gy, mot-spec, slt gr, sl frm, sb pily-pty, gt tex, calc, inoc, fast difse, mod fast string, bri wh bl cut

CHK: lt-med gy, str, sb pily-blky, brit, sl sft, sb rthy-sm tex, v calc, tr bent; MRLST: med-dk gy, mot-spec, slt gr, sl frm, sb pily-pty, gt tex, calc, inoc, fast difse, fast string, bri wh bl cut

CHK: lt-med gy, str, sb pily-blky, brit, sl sft, sb rthy-sm tex, v calc, tr bent; MRLST: med-dk gy, mot-spec, slt gr, sl frm, sb pily-pty, gt tex, calc, inoc, fast difse, fast string, bri wh bl cut

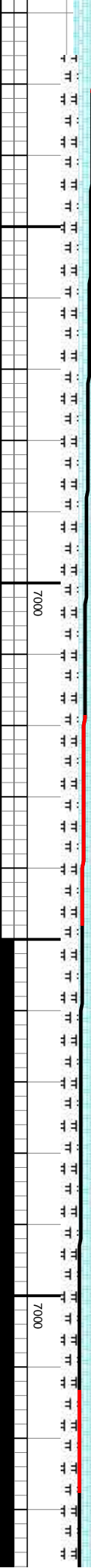
MRLST: med-dk gy, mot-spec, slt gr, sb pily-pty, gt tex, calc, CHK: lt-med sb pily-blky, brit, sl sft, sb rthy-sm tr bent, tr pyr, inoc, fast difse, fast s wh bl cut

MD: 7.065' TVD: 6.824.23' Inclination: 73.5° Azimuth: 271.1° VS: 245.3'

MD: 7.113' TVD: 6.836.81' Inclination: 76.1° Azimuth: 270.9° VS: 291.59'

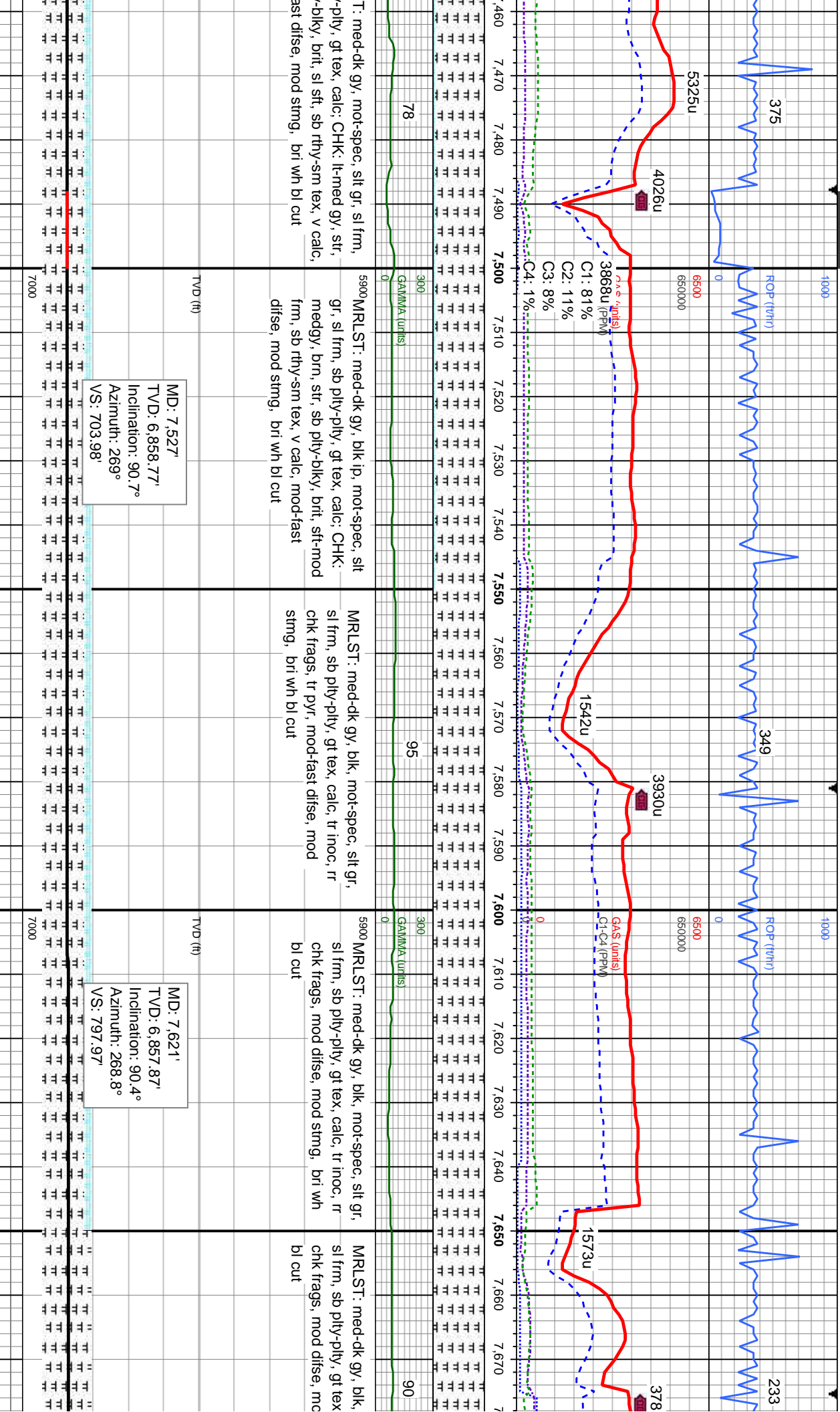
MD: 7.160' TVD: 6.846.1' Inclination: 81.1° Azimuth: 270.4° VS: 337.63

MD: 7.208' TVD: 6.851.87' Inclination: 85.1° Azimuth: 270° VS: 385.27'

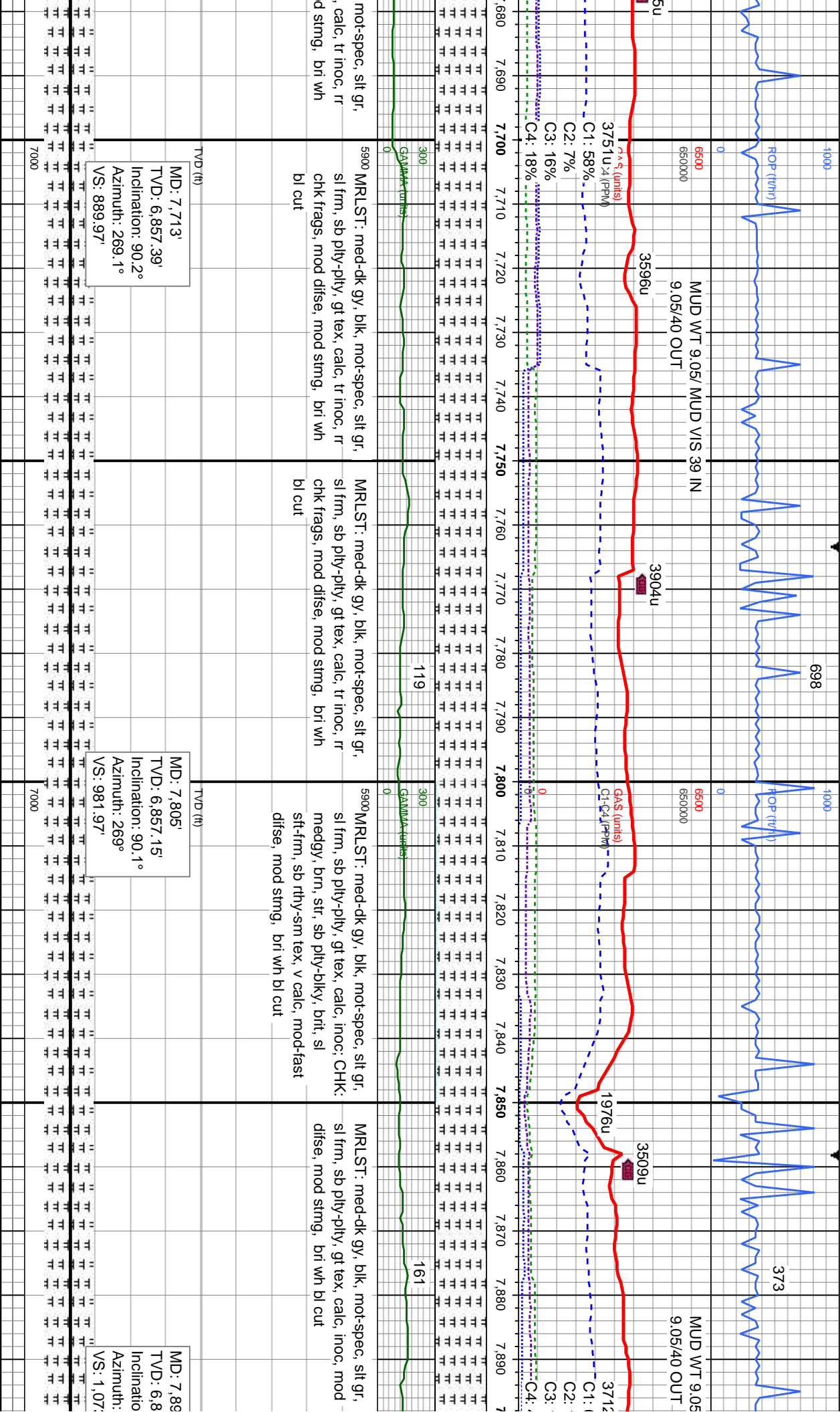


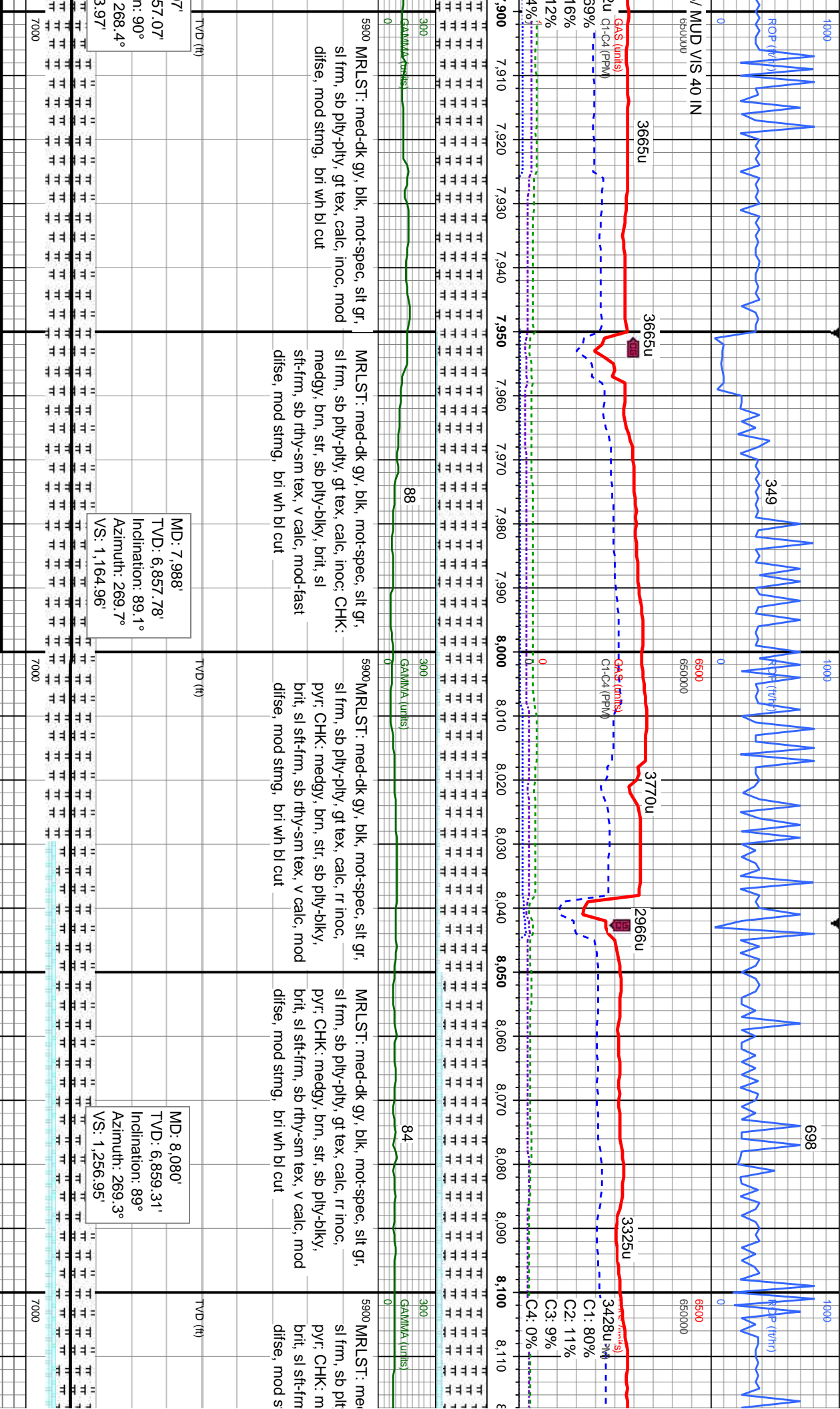














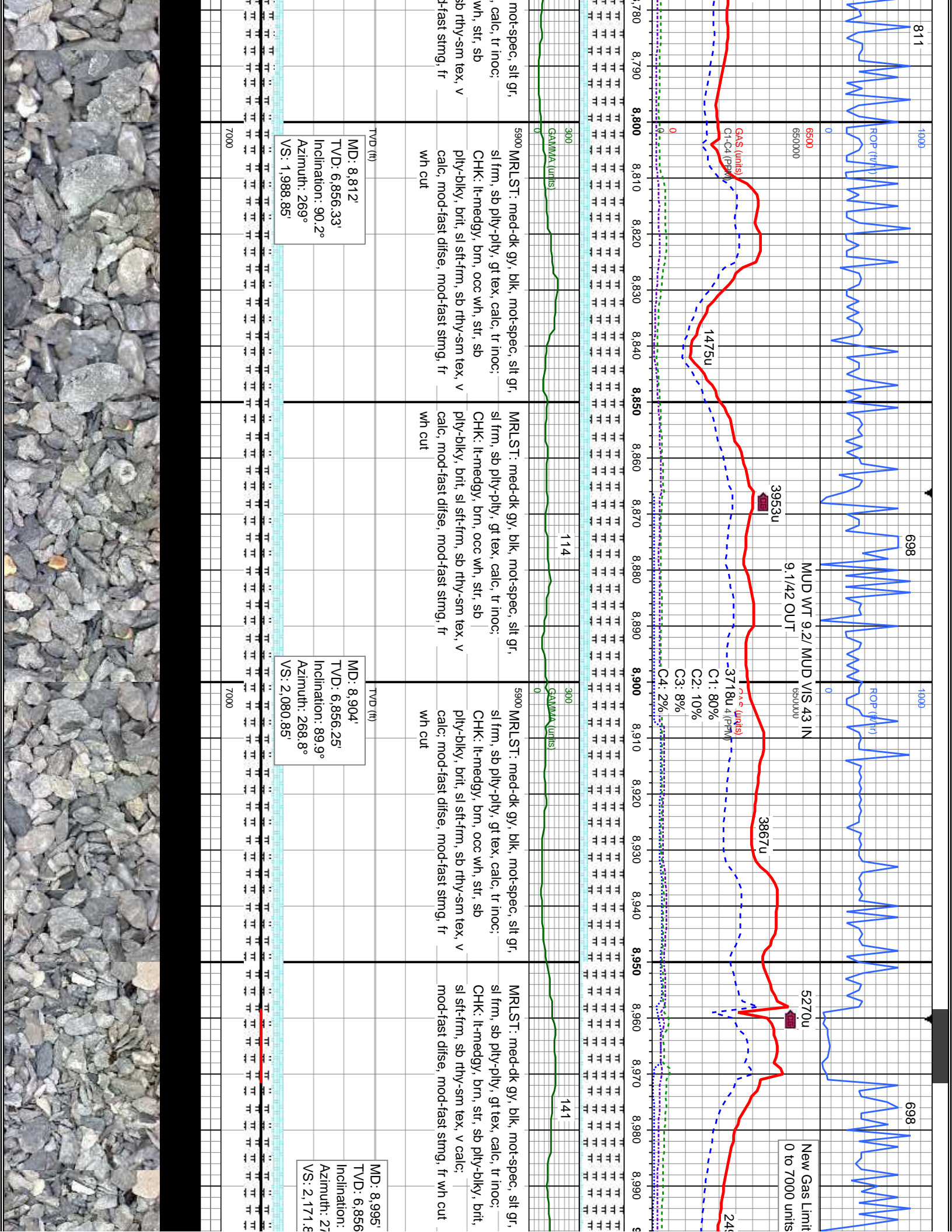




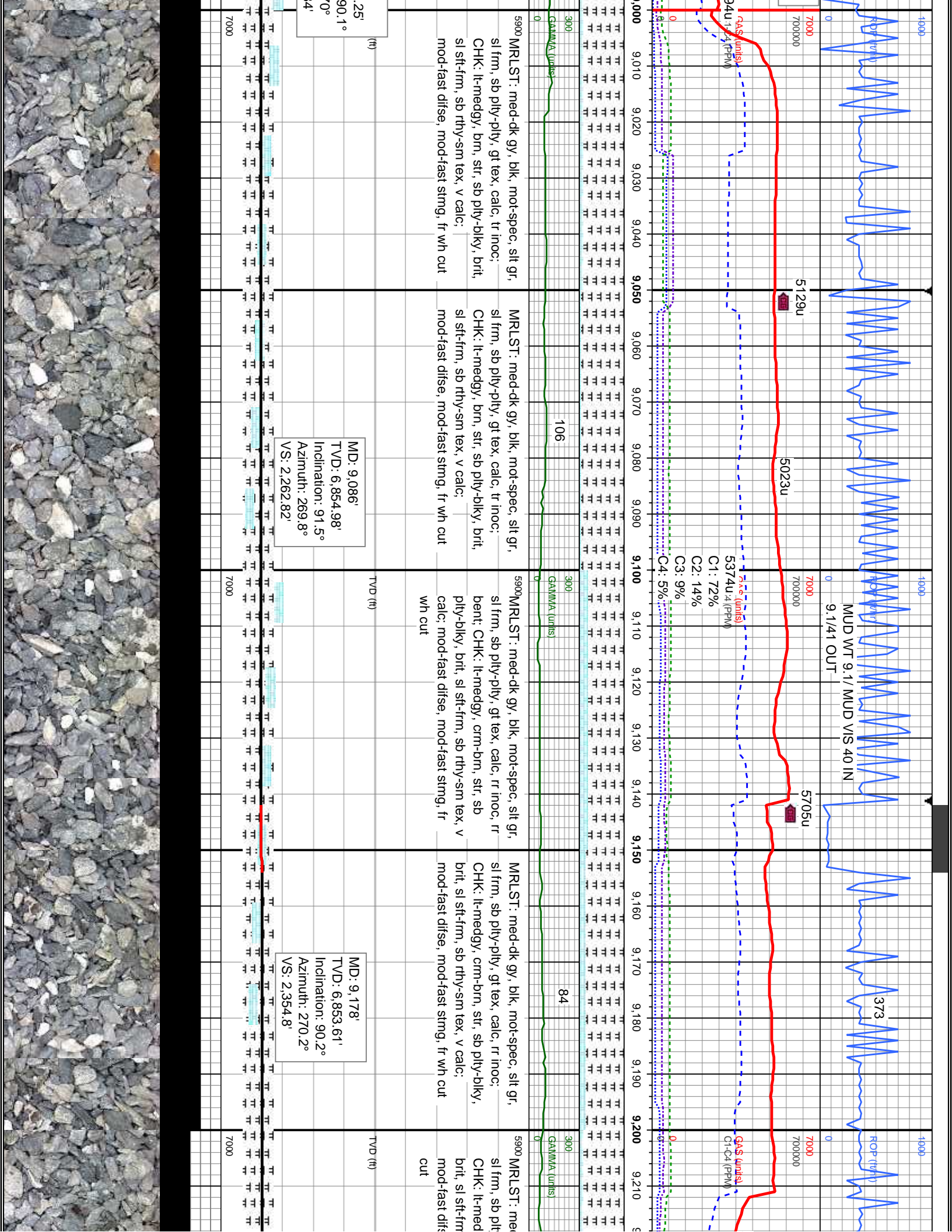






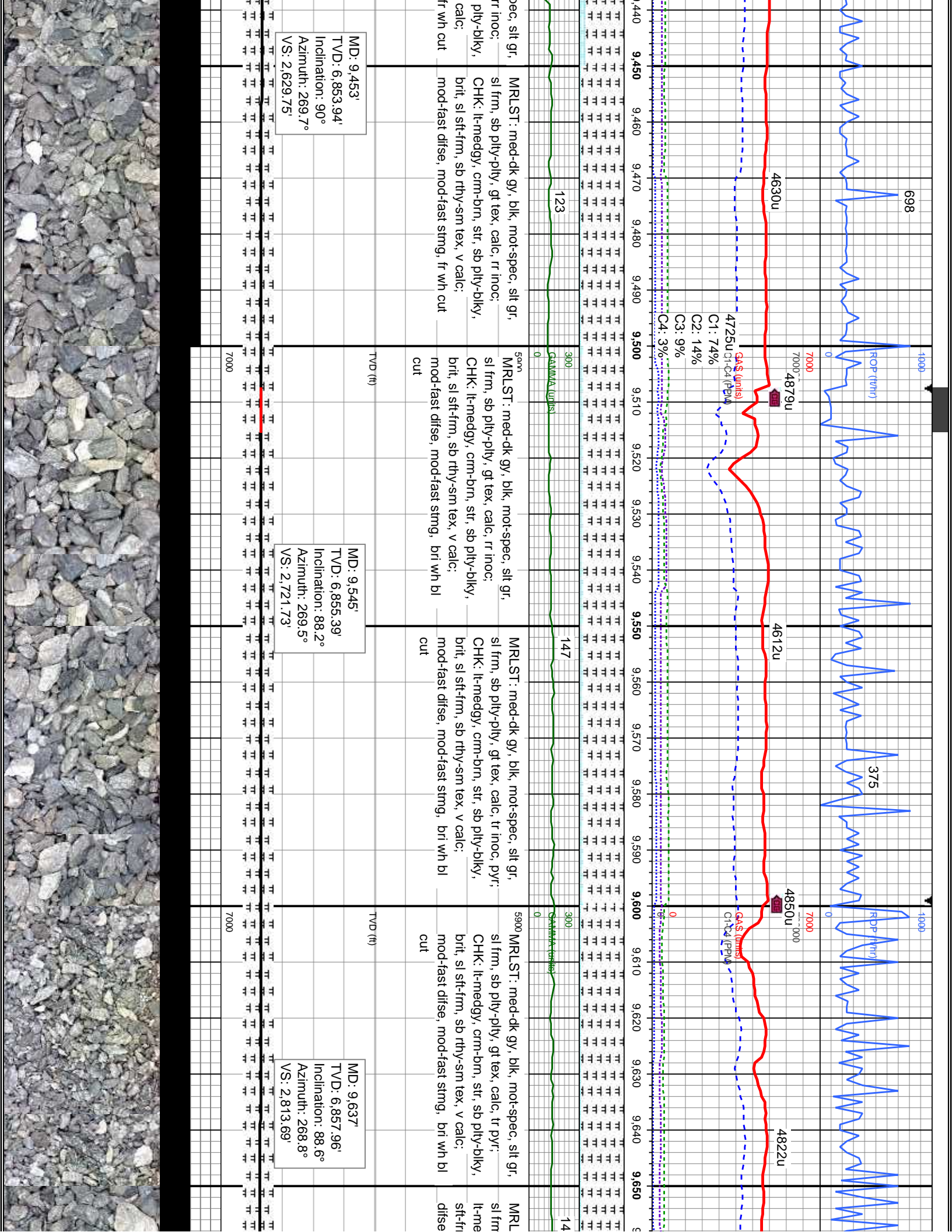


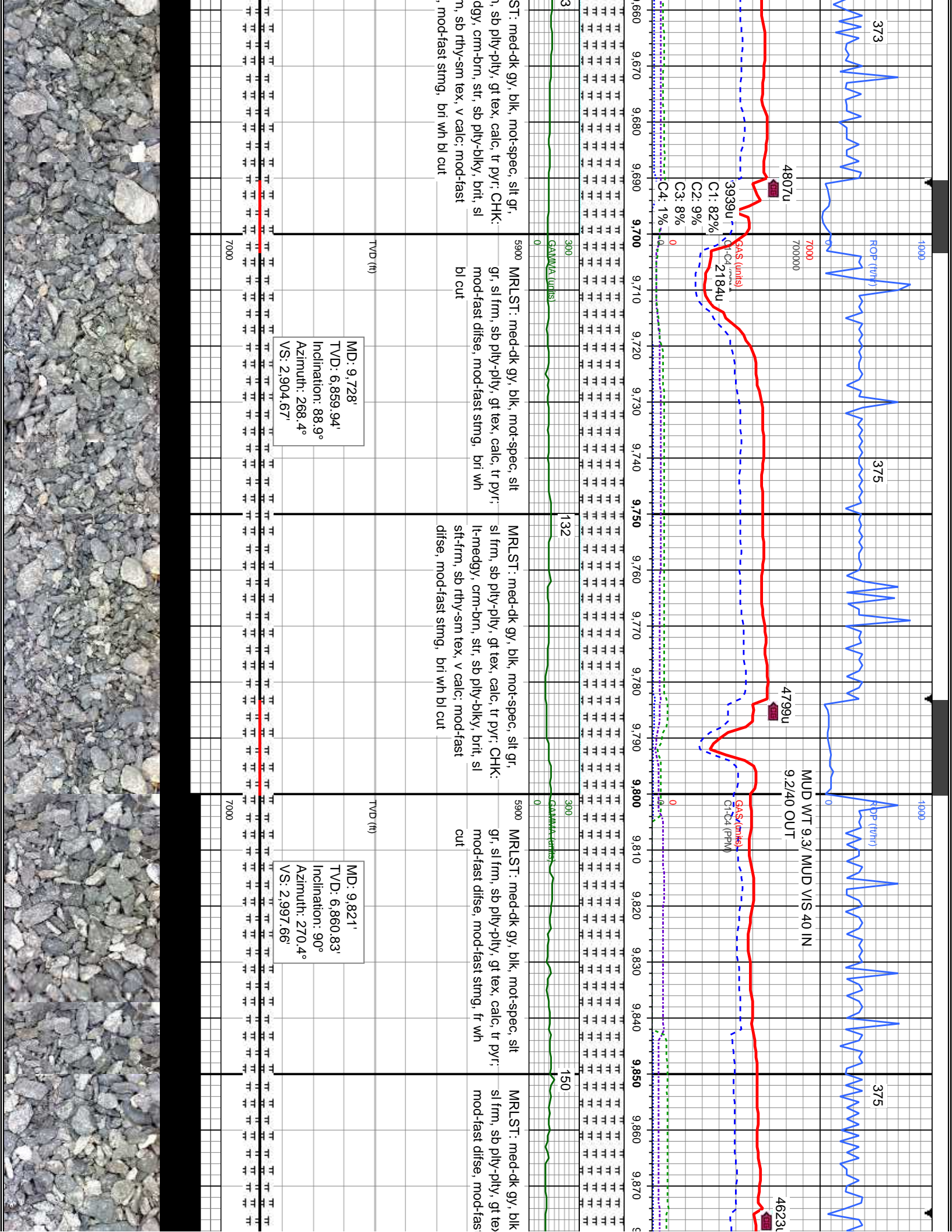






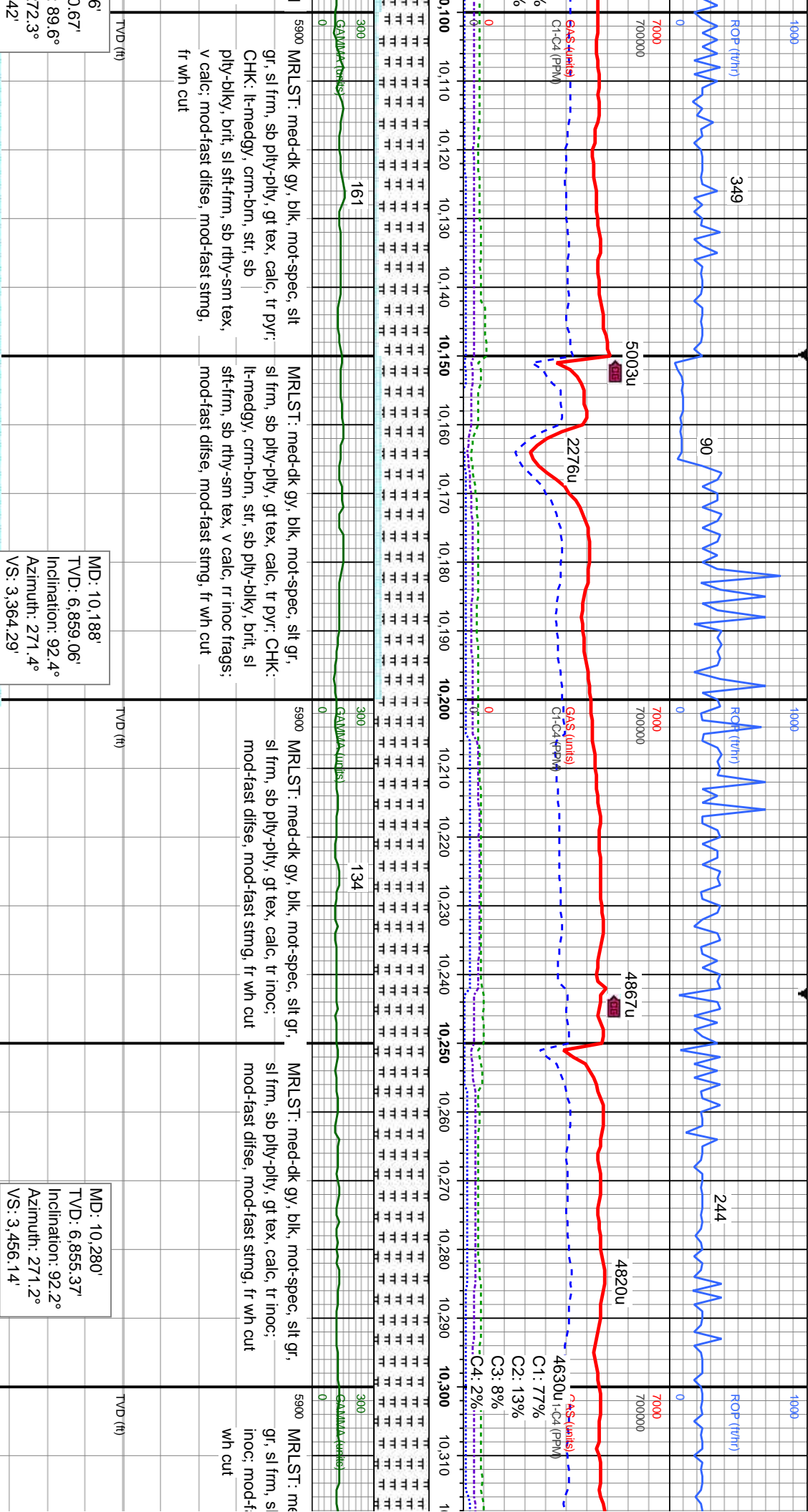










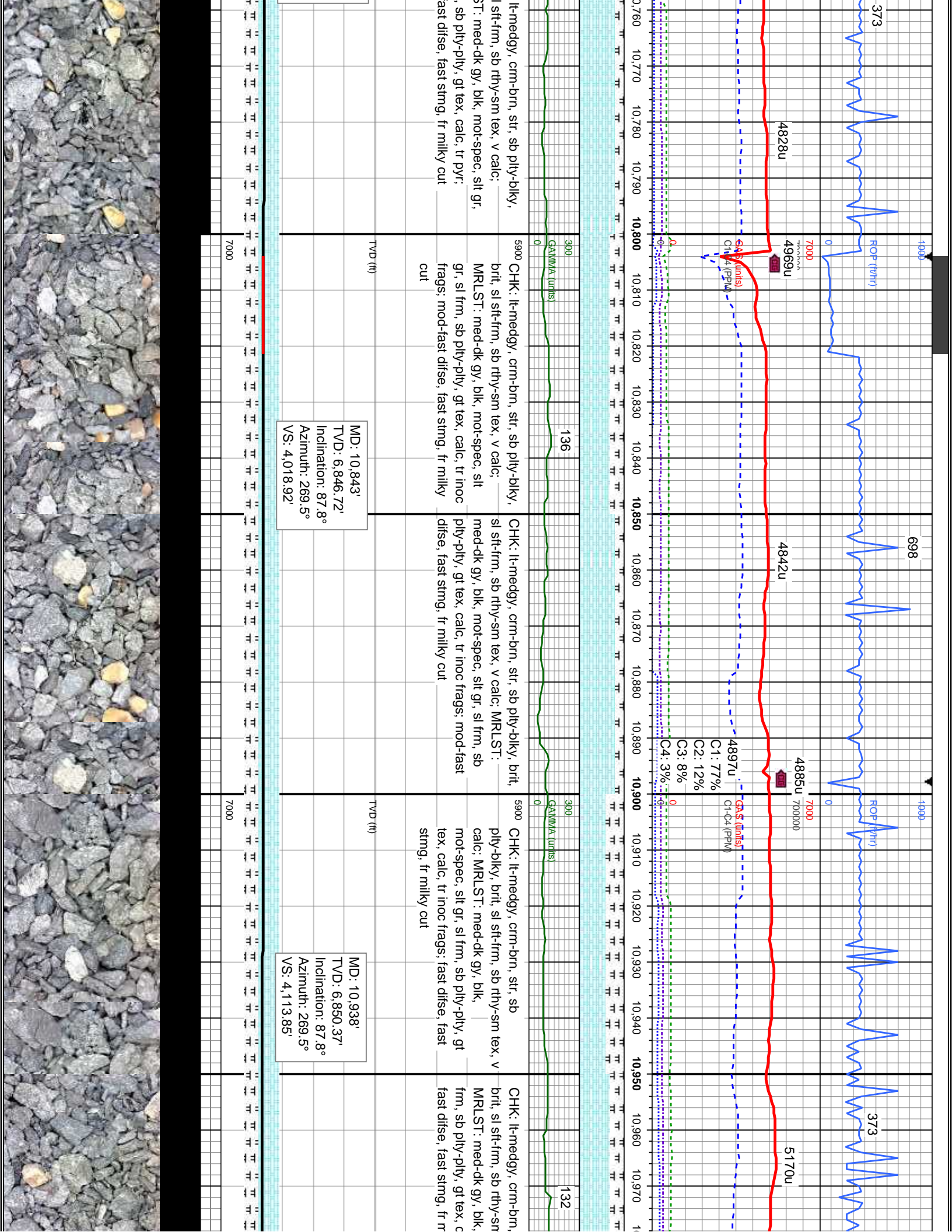






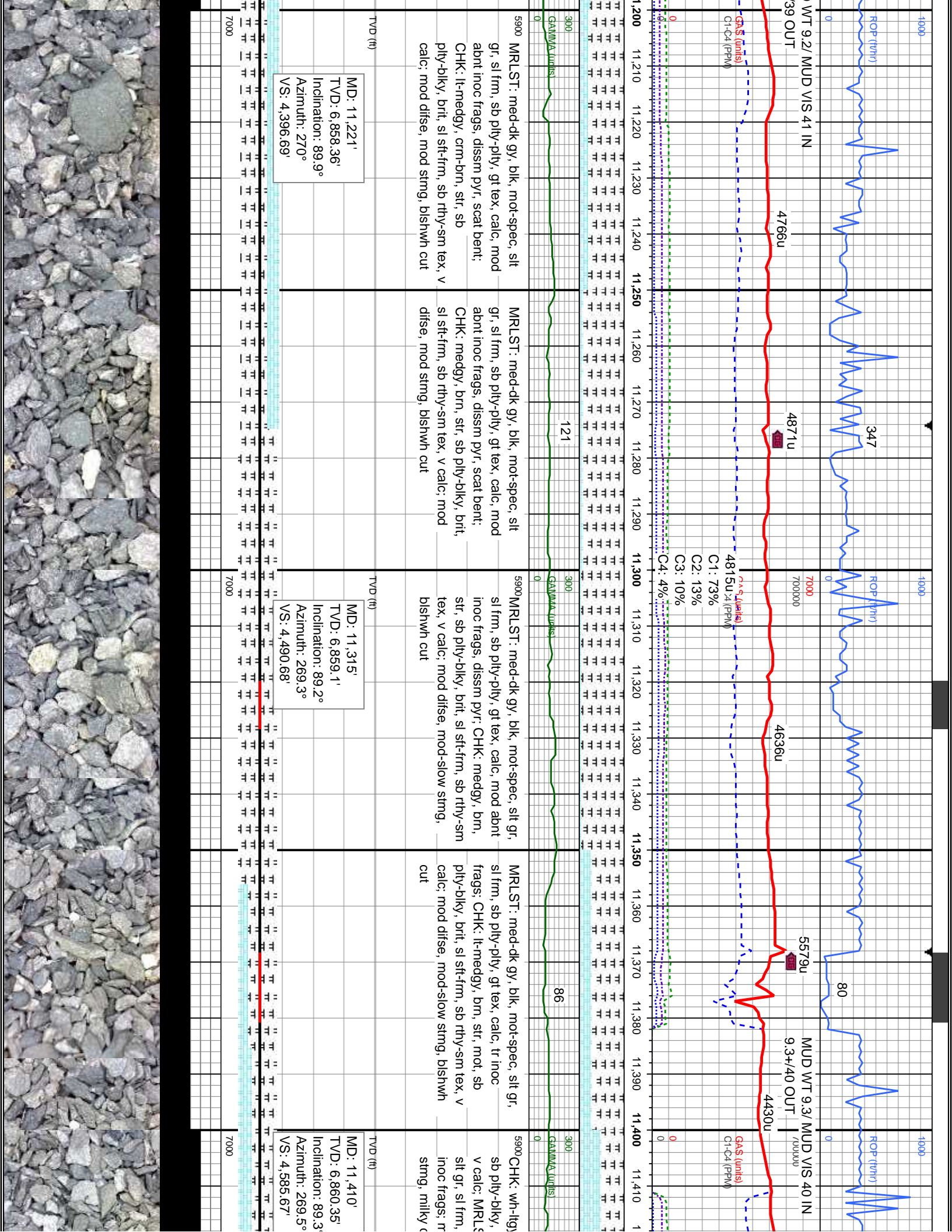


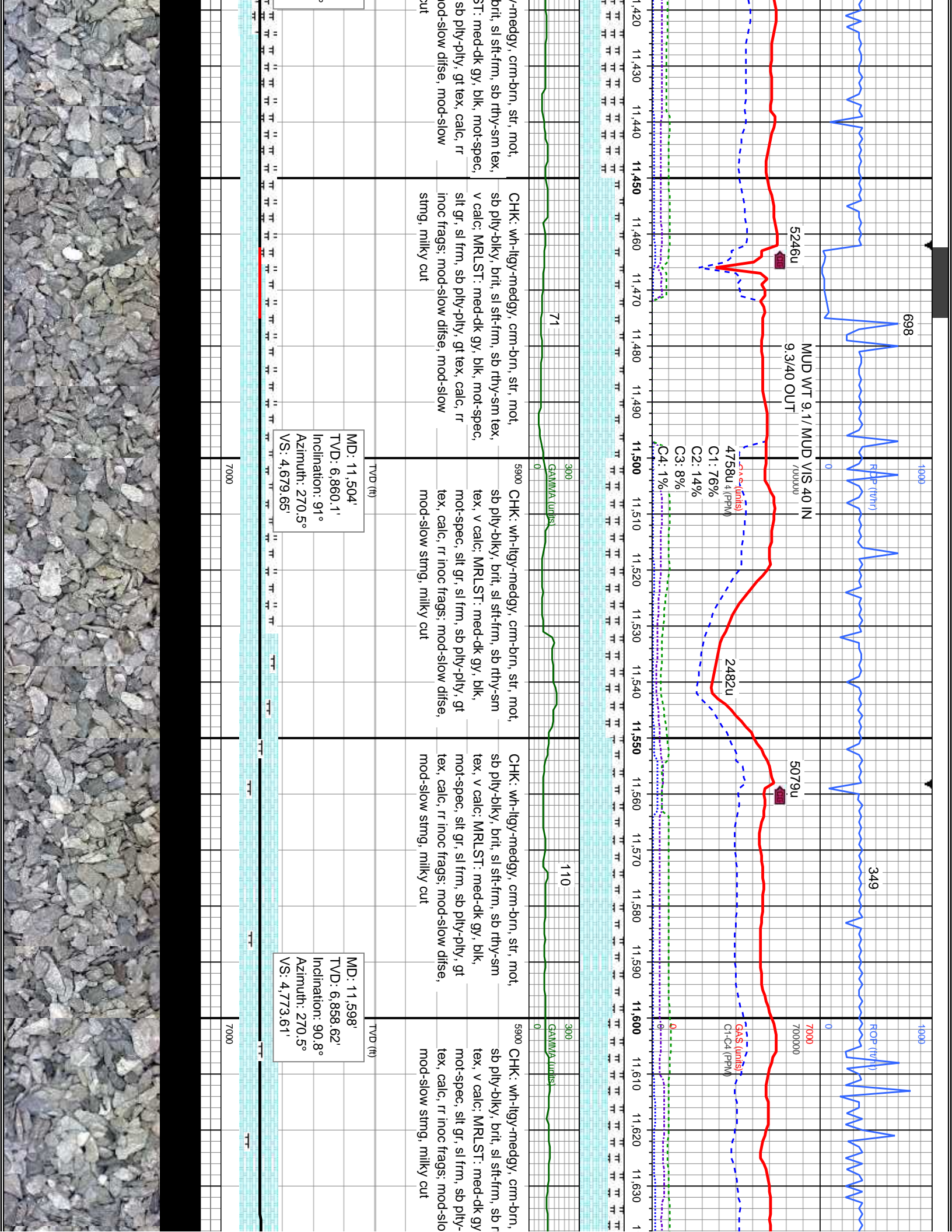




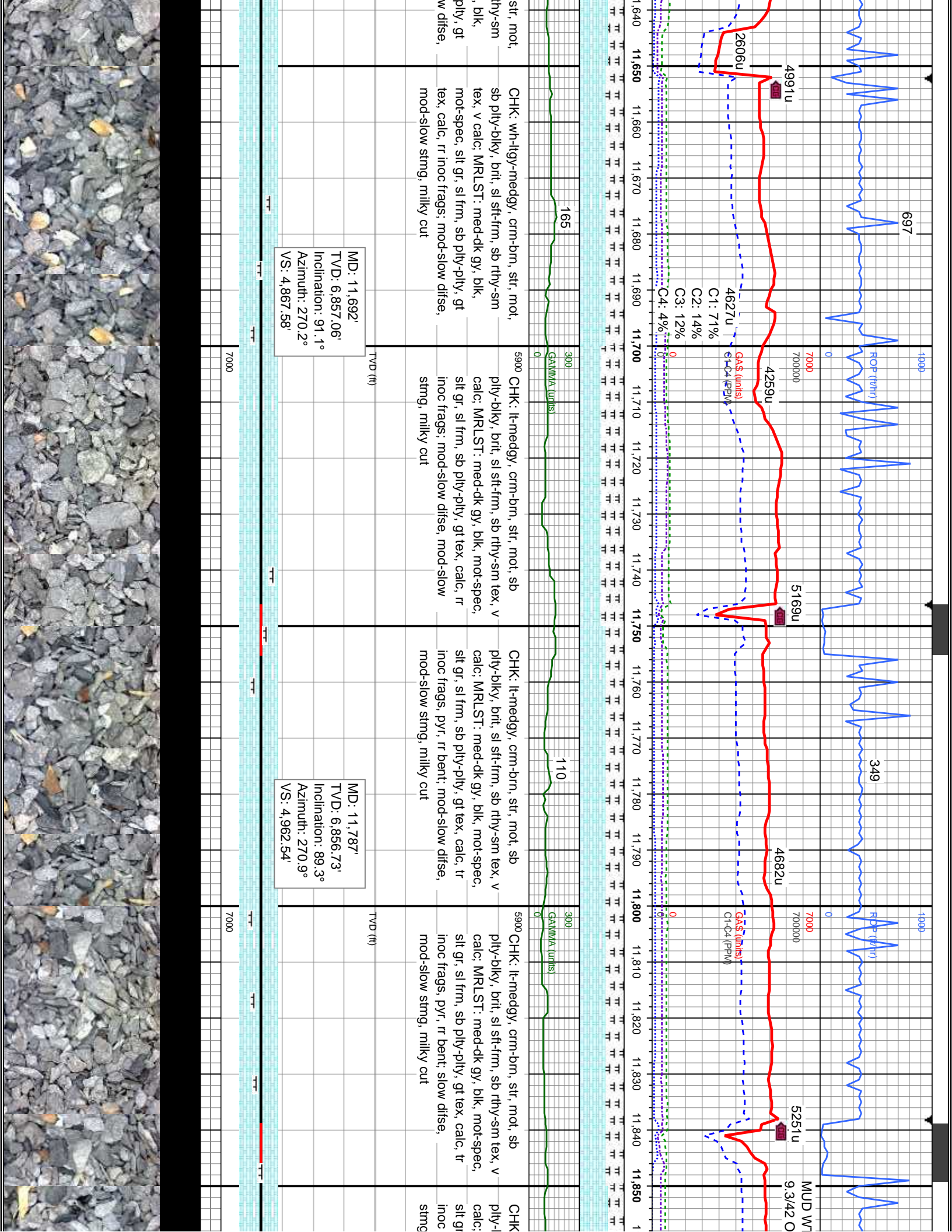




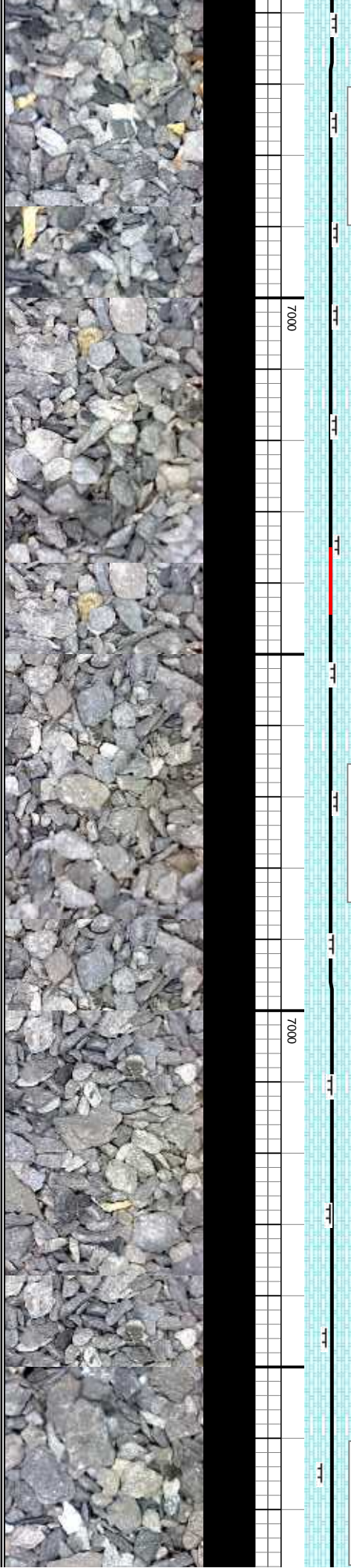
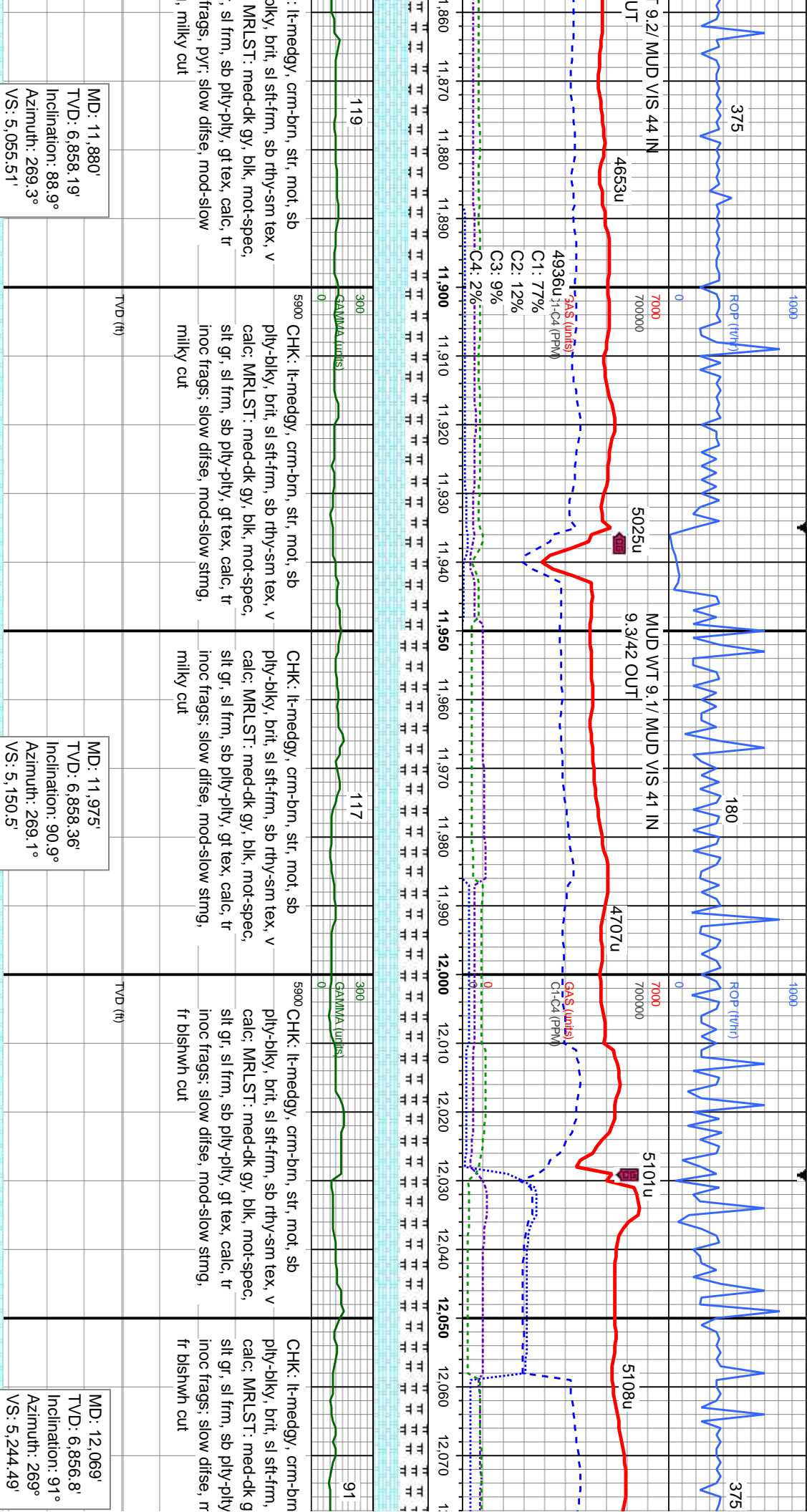






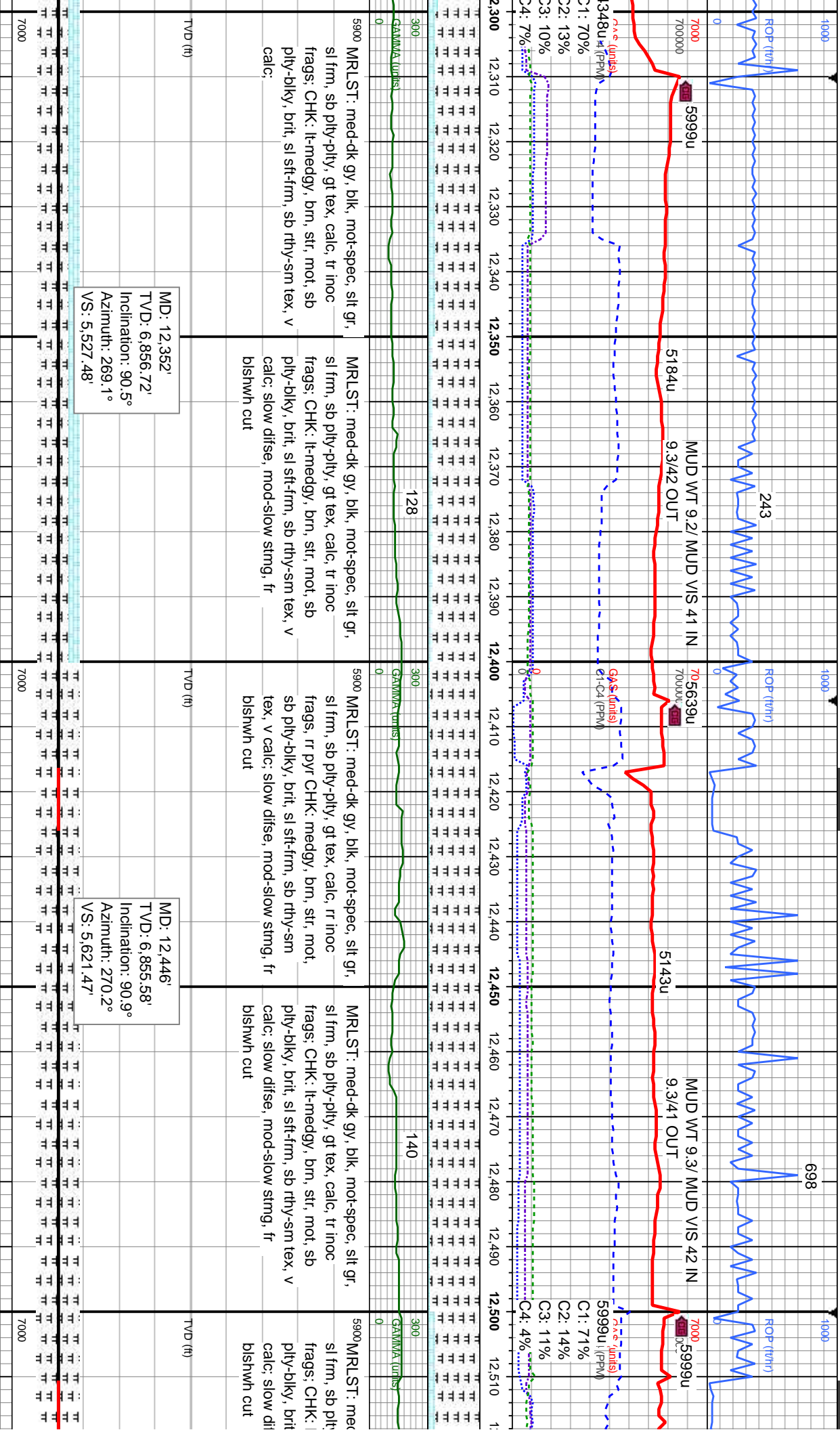




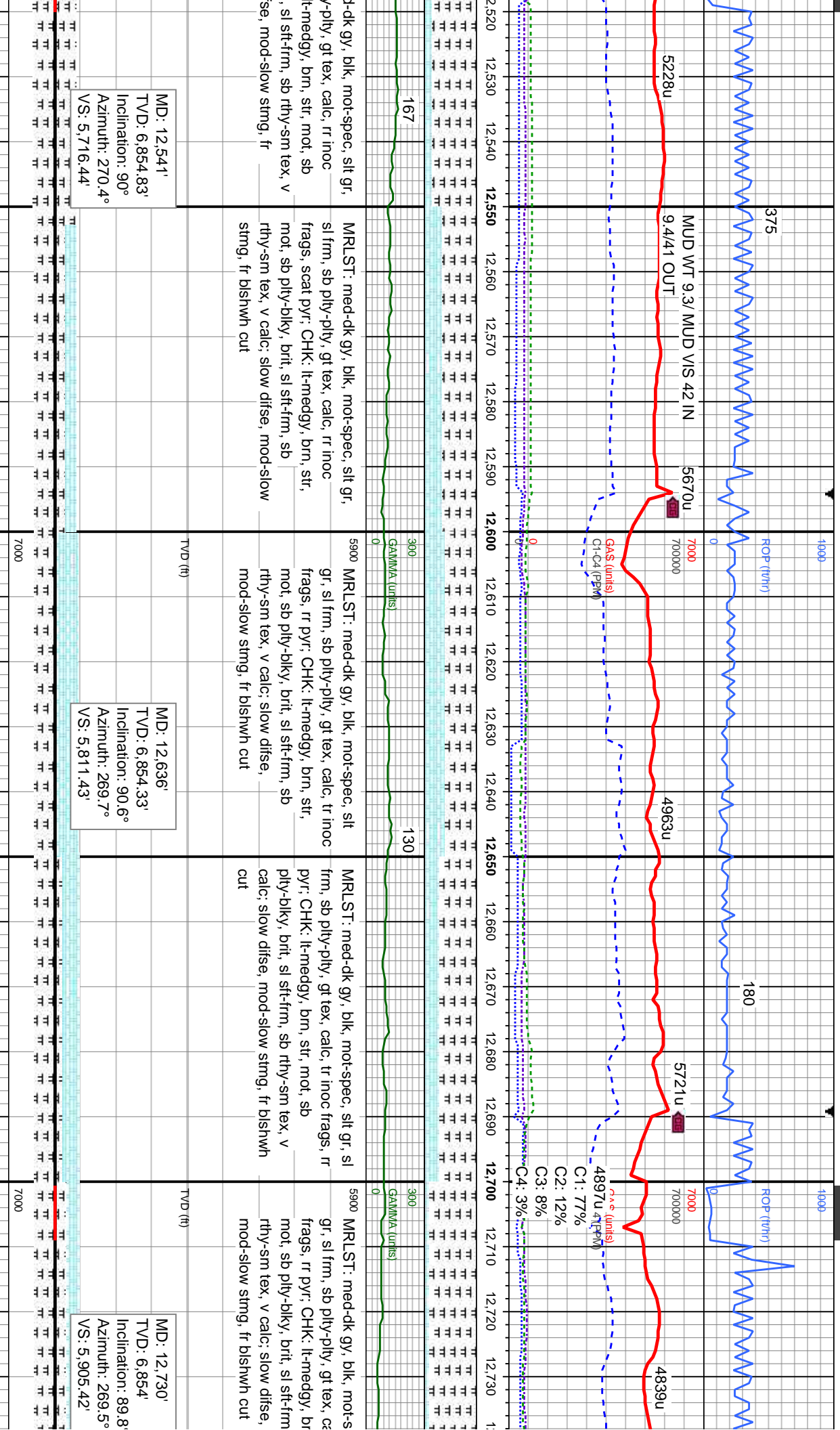


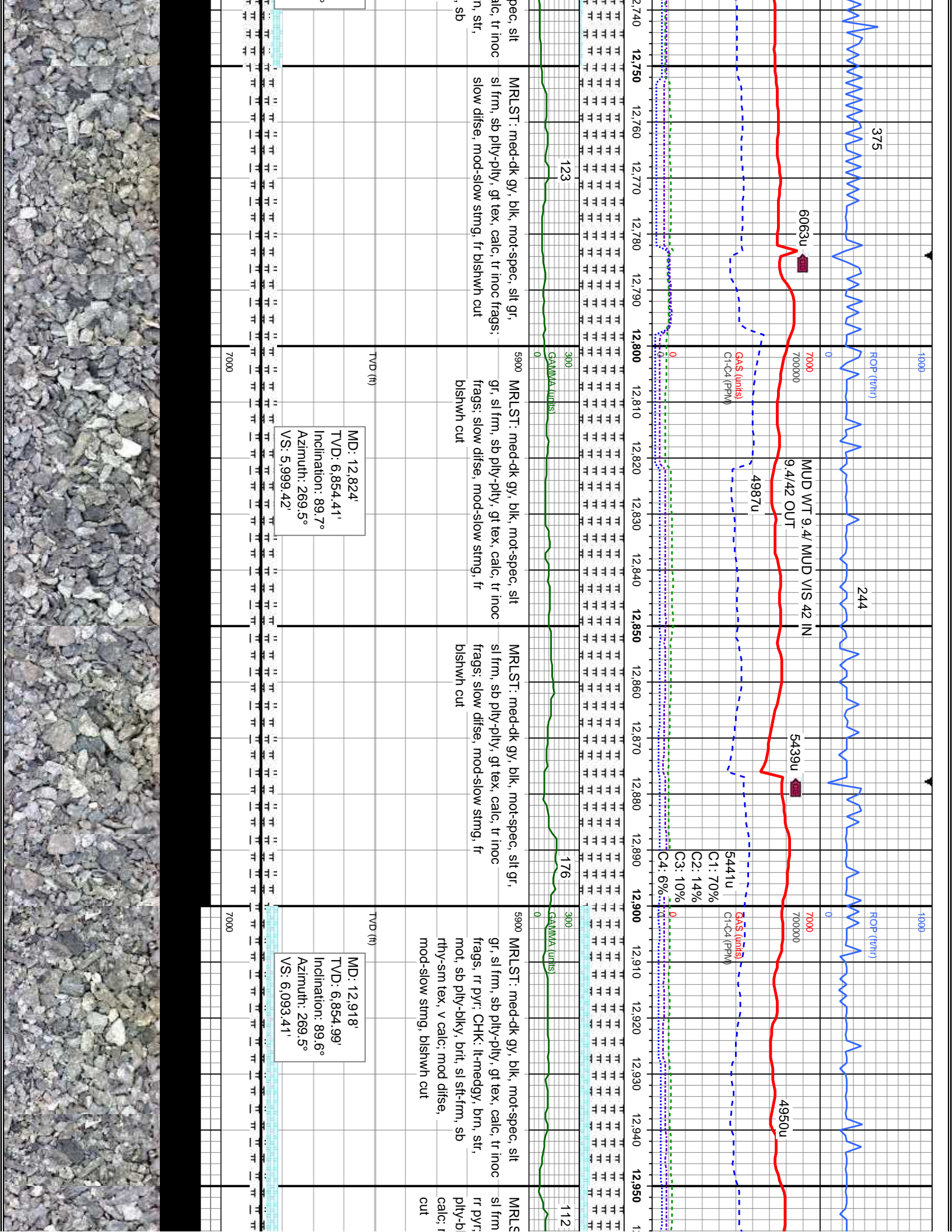




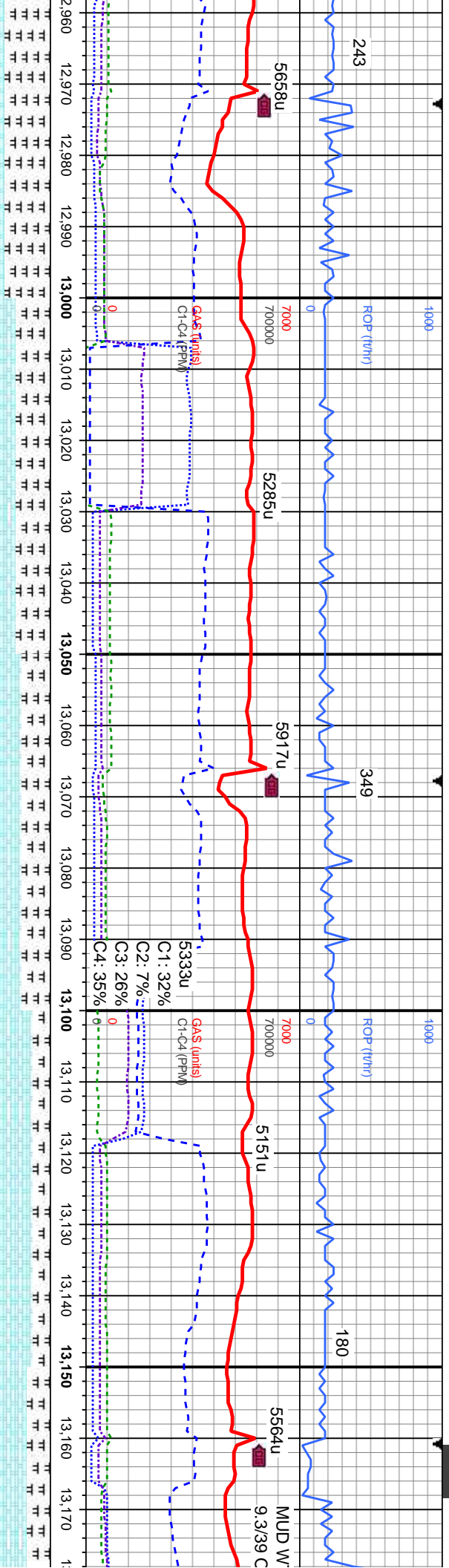












5900  
T: med-dk gy, blk, mot-spec, silt gr, sb pily-pily, gt tex, calc, tr inoc frags, CHK: lt-medgy, brn, str, mot, sb vky, brit, sl sft-firm, sb rthy-sm tex, v mod difse, mod-slow string, bishwh

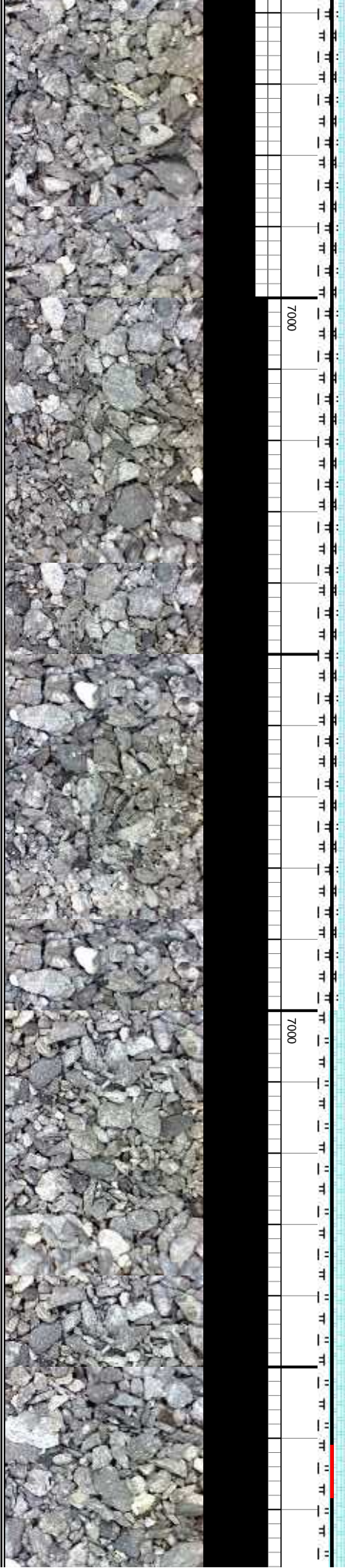
5900  
MRLST: med-dk gy, blk, mot-spec, silt gr, sl frm, sb pily-pily, gt tex, calc, tr inoc frags, rr pyr; CHK: lt-medgy, brn, str, mot, sb pily-blky, brit, sl sft-firm, sb rthy-sm tex, v calc; mod difse, mod-slow string, bishwh cut

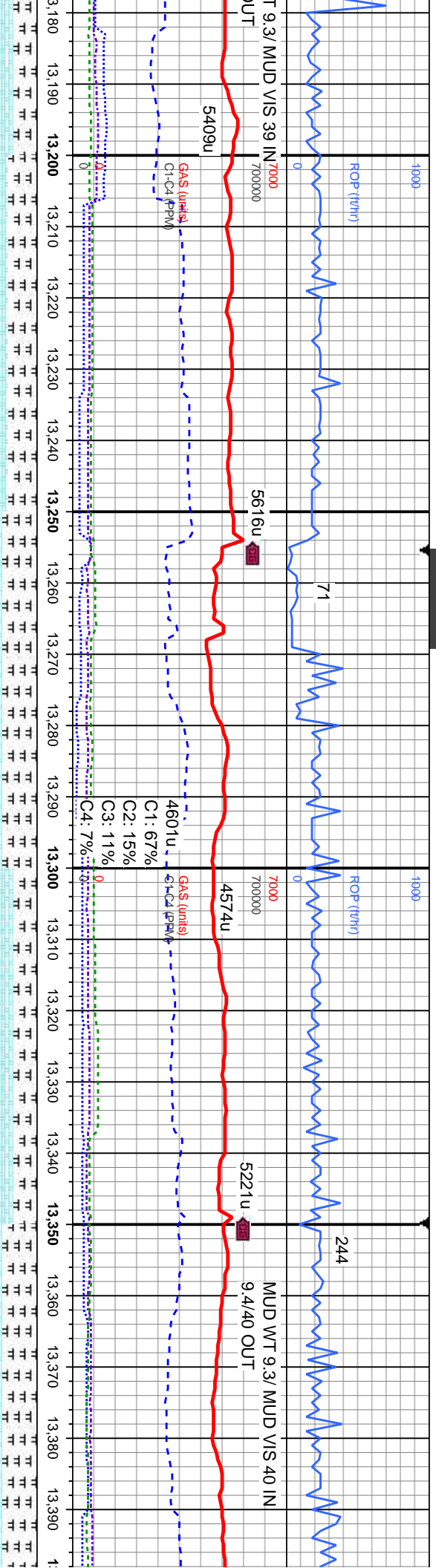
5900  
CHK: lt-medgy, brn, str, mot, sb pily-blky, brit, sl sft-firm, sb rthy-sm tex, v calc; MRLST: med-dk gy, blk, mot-spec, silt gr, sl frm, sb pily-pily, gt tex, calc, tr inoc frags; mod difse, mod-slow string, bishwh cut

5900  
CHK: lt-medgy, brn, str, mot, sb pily-blky, brit, sl sft-firm, sb rthy-sm tex, v calc; MRLST: med-dk gy, blk, mot-spec, silt gr, sl frm, sb pily-pily, gt tex, calc, tr inoc frags; mod difse, mod-slow string, bishwh cut

MD: 13,013'  
TVD: 6,855.32'  
Inclination: 90°  
Azimuth: 269.1°  
VS: 6,188.41'

MD: 13,107'  
TVD: 6,854.91'  
Inclination: 90.5°  
Azimuth: 269.5°  
VS: 6,282.41'





MD: 13,202'  
TVD: 6,854.08'  
Inclination: 90.5°  
Azimuth: 269.1°  
VS: 6,377.4'

MD: 13,297'  
TVD: 6,854'  
Inclination: 89.6°  
Azimuth: 269.8°  
VS: 6,472.4'

MD: 13,391'  
TVD: 6,854.33'  
Inclination: 90°  
Azimuth: 269.6°  
VS: 6,566.39'

5900	MR LST: med-dk gy, blk, mot-spec, slt gr, si fr, sb pty-pty, gt tex, calc, tr inoc frags, rr pyr; CHK: lt-medgy, brn, str, mot, sb pty-blky, brit, sl sft-frm, sb rthy-sm tex, v calc;; mod difse, mod-slow stmg, bishwh cut	5900	CHK: lt-medgy, brn, str, mot, sb pty-blky, brit, sl sft-frm, sb rthy-sm tex, v calc;; MR LST: med-dk gy, blk, mot-spec, slt gr, si fr, sb pty-pty, gt tex, calc, tr inoc frags, rr pyr; CHK: lt-medgy, brn, str, mot, sb pty-blky, brit, sl sft-frm, sb rthy-sm tex, v calc;; mod difse, mod-slow stmg, bishwh cut	5900	MR LST: med-dk gy, blk, mot-spec, slt gr, si fr, sb pty-pty, gt tex, calc, tr inoc frags, rr pyr; CHK: lt-medgy, brn, str, mot, sb pty-blky, brit, sl sft-frm, sb rthy-sm tex, v calc;; mod difse, mod-slow stmg, bishwh cut
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