



Scale: 5" / 100'
Measured Depth Log

Well Name RAINBOW LC28-79-1HNA HORZ

Location SWSW SEC 28, T9N, R59W

State COLORADO

Country USA

API Number 05-123-38853

Region DJ BASIN

Spud Date 8/2/2014

Surface Coordinates 340' FSL, 1318' FWL
SWSW SEC 28, T9N, R59W
40.71499 -103.98764

Ground Elevation 4854'

Logged Interval 6100' To 10108'

Formation NIOBRARA-A MAR

Type of Drilling Fluid LSND

County WELD

Rig Number H&P 326

Field WILDCAT

Drilling Completed 8/3/2014

K.B. Elevation 4892'

Total Depth 10108'

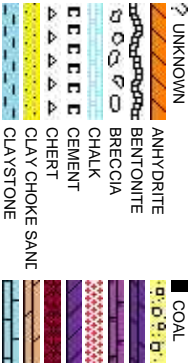
Company Noble Energy Inc

Address 1625 Broadway Suite
Denver, CO 80202

Name EVAN HOWELL

Company NOBLE ENERGY INC
Address 1625 Broadway Suite
Denver, CO 80202

JMBINE LOGGING INC. KEVIN D
MIKE K
BEN KA
COLLIN



Operator

e 2200

Geologist

IC.

e 2200

Other

DONAHUE
ERSCHEN
TKA
METZ

Rock Types

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

Accessories

	GASTROPOD		ARGILLITE GRAIN		HEAVY MINERAL		ANHYDRITE STRINGER
	INOCERAMUS		B BENTONITE		K KAOLIN		BENTONITE STRINGER
	ALGAE		O OOLITE		M MARLSTONE		COAL STRINGER
	AMPHIPORA		O OSTRACOD		M MICACEOUS		DOLOMITE STRINGER
	BELEMNITE		P PELECYPOD		MINERAL CRYSTALS		GYPSUM STRINGER
	BIOCLASTIC		P PELLET		C CARBONACEOUS FLAKES		LIMESTONE STRINGER
	BRACHIOPOD		P PISOLITE		C CHERT		PHOSPHATE PELLETS
	BRYOZOA		PLANT REMAINS		C CHERT		P PYRITE
	CEPHALOPOD		PLANT SPORES		COAL - THIN BEDS		SALT CAST
	CORAL		SCAPHOPOD		D DOLOMITIC		SANDY
	CRINOID		STROMATOPOROID		F FELDSPAR		SILICEOUS
	ECHINOID		FERRUGINOUS PELLETT		F FERRUGINOUS		SILTY
	FISH		Minerals		T TUFFACEOUS		
	FORAMINIFERA		ANHYDRITIC				
	F FOSSIL		ARGILLACEOUS		G GYPSIFEROUS		Stringer

Other Symbols

	P PINPOINT		DST INTERVAL		E EARTHY
	V VUGGY		FAULT		FX FINELYXLN
	D DEAD		FORMATION TOP		DS GRAINSTONE
	E EVEN		GAS SHOW		MN DEPTH
	Q QUESTIONABLE		OIL SHOW		L LITHOGRAPHIC
	SPOTTED STAINING		CONNECTION (UP)		MX MICROXLN
	CONNECTION (DOWN)		Rounding		MS MUDSTONE
	Porosity		A ANGULAR		PS PACKSTONE
	E EARTHY		NORMAL FAULT		WS WACKESTONE
	F FENESTRAL		OVERTURNED STRATA		
	F FRACTURE		REVERSE FAULT		S SUBRND
	INTERCRYSTALLINE		CASING		Textures
	INTERCRYSTALLINE		DOWN TIME GAS		P POOR
	MOLDIC		DOWN TIME GAS (LEFT)		BS BOUNDSTONE
	ORGANIC		CORE - LOST		C CHALKY
			CORE - RECOVERED		CX CRYPTOXLN
			SIDEWALL CORE (LEFT)		
			SIDEWALL CORE (RIGHT)		M MODERATE
			SLIDE		
			Sorting		

Slide/Rotate

ROP

ROF

Total Gas & Chromatograph

GAS
C1
C2
C3
C4

COLUMBINE LOGGING INC.
RIGGED UP ON 07/30/2014
MANNED 2-PERSON LOGGING
WITH BLOODHOUND GAS
CHROMATOGRAPH UNIT #0570

Depth Labels

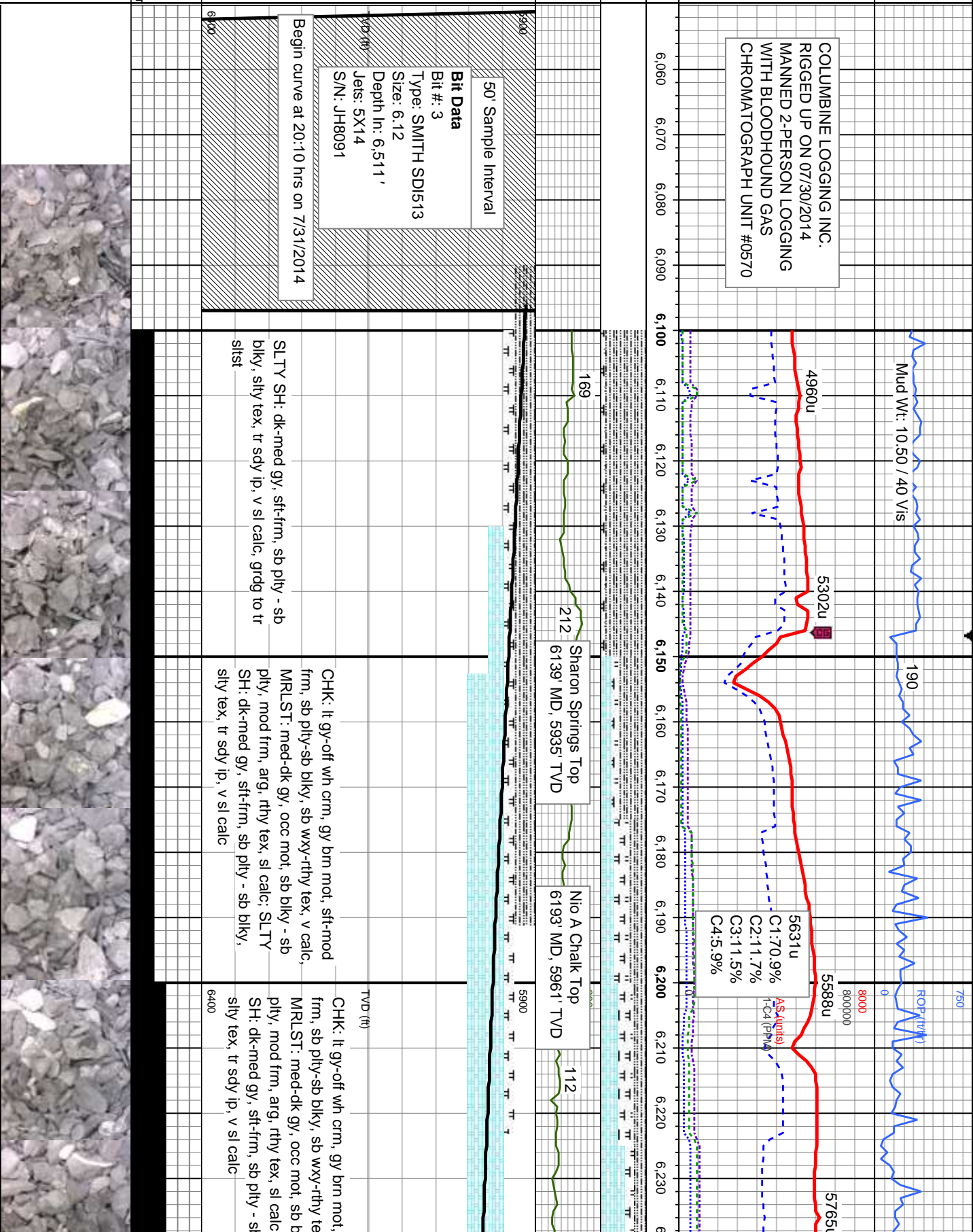
% Lith

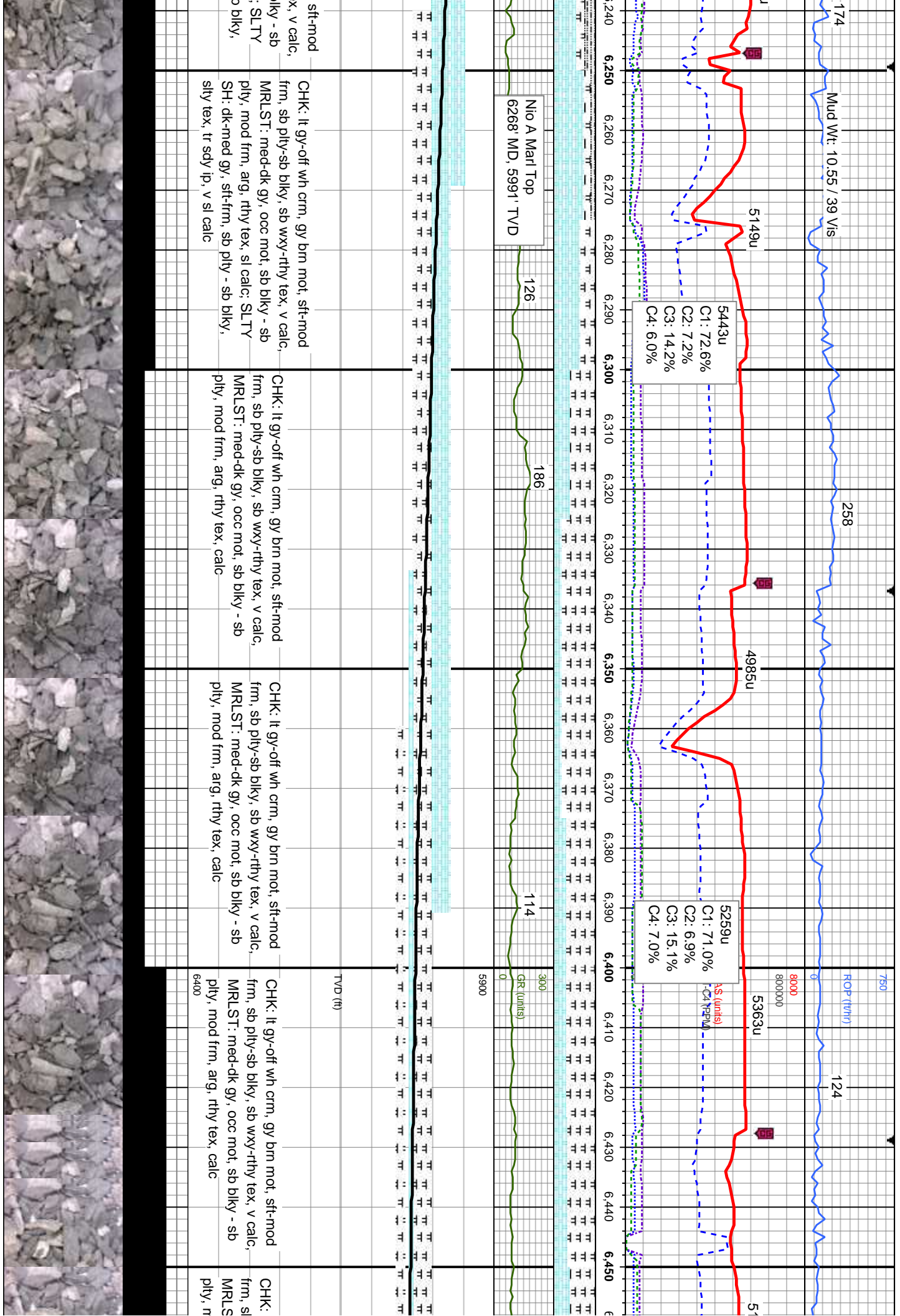
GAMMA
GR

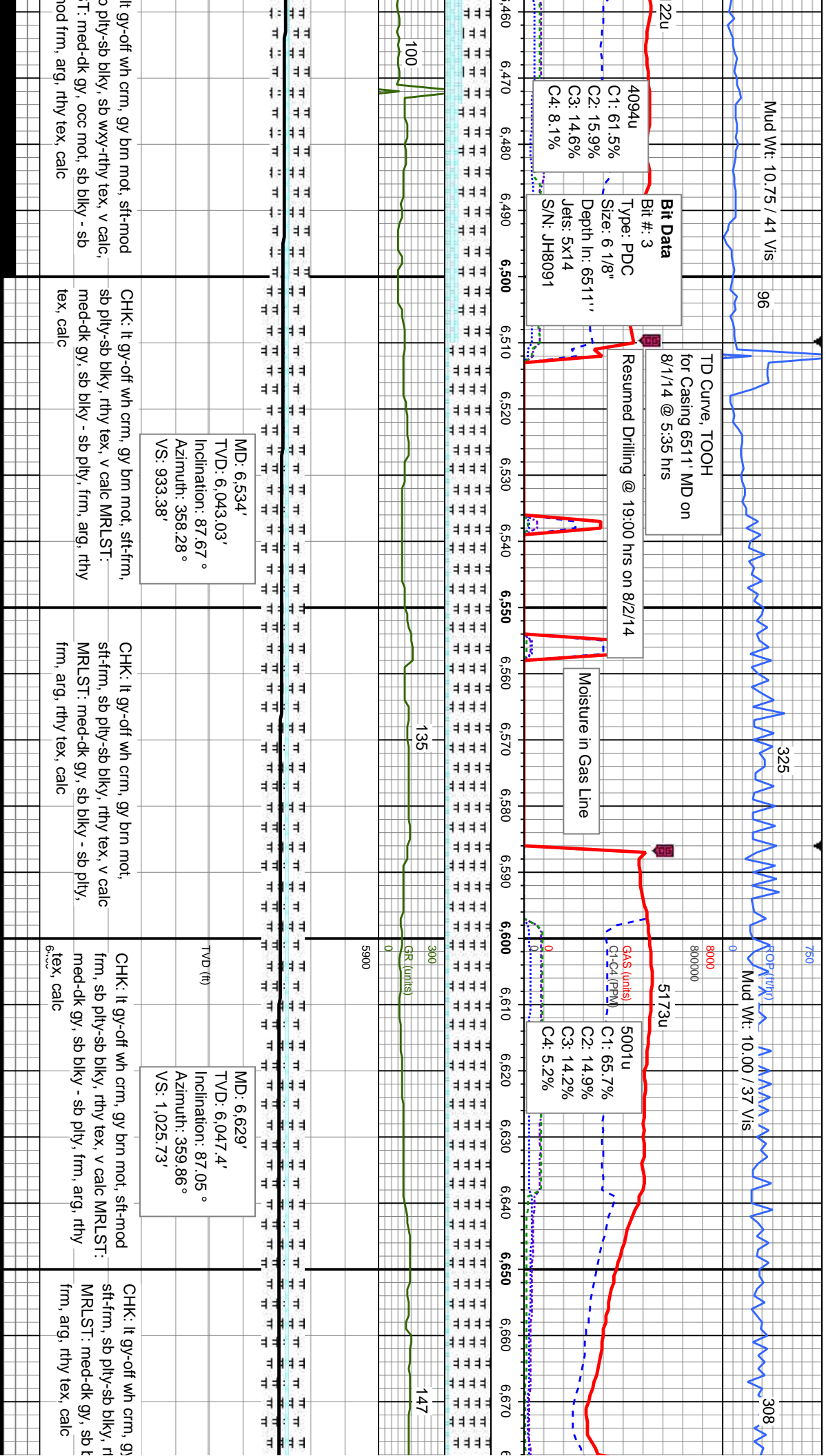
Well Bore
TVD

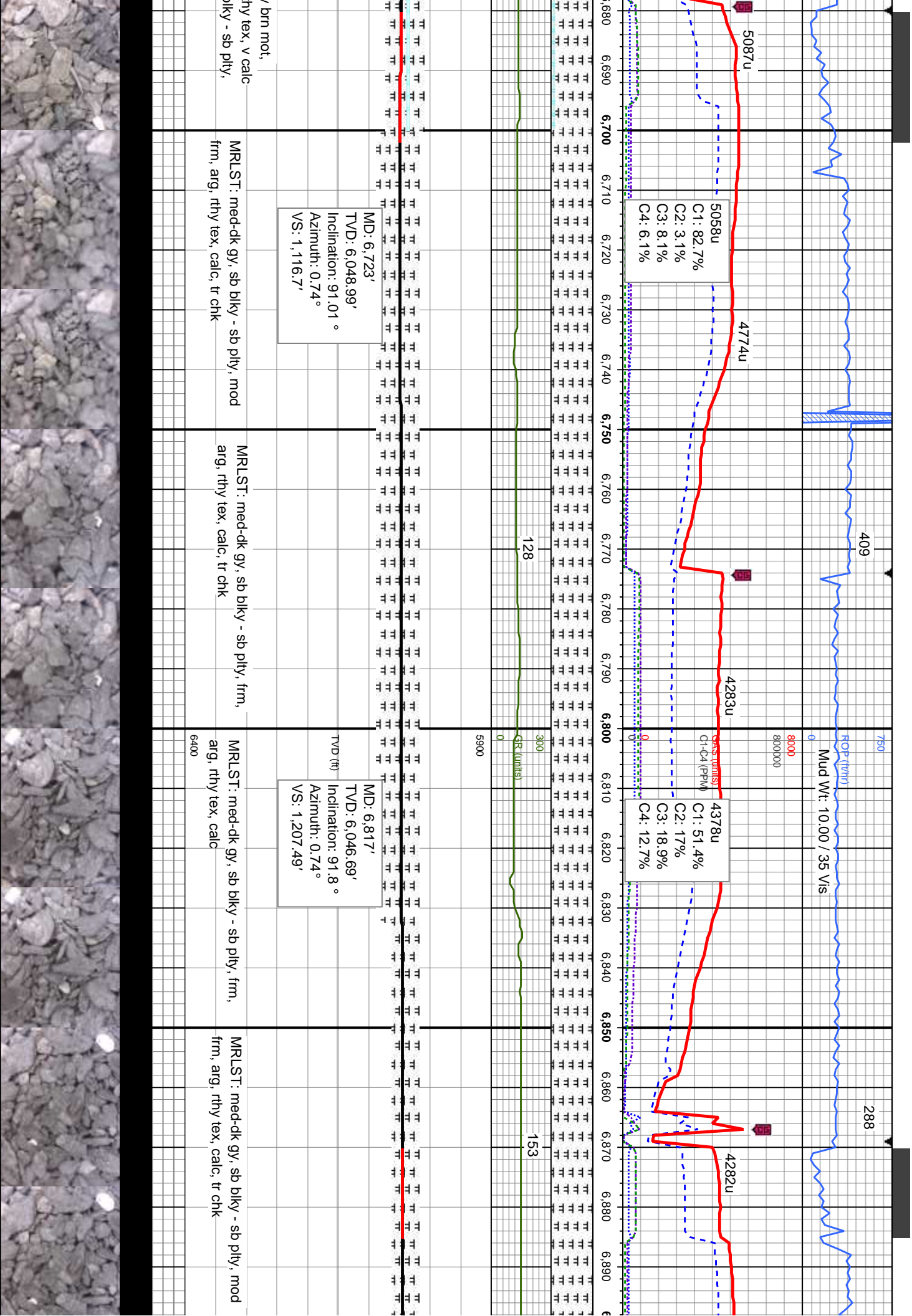
Oil Show

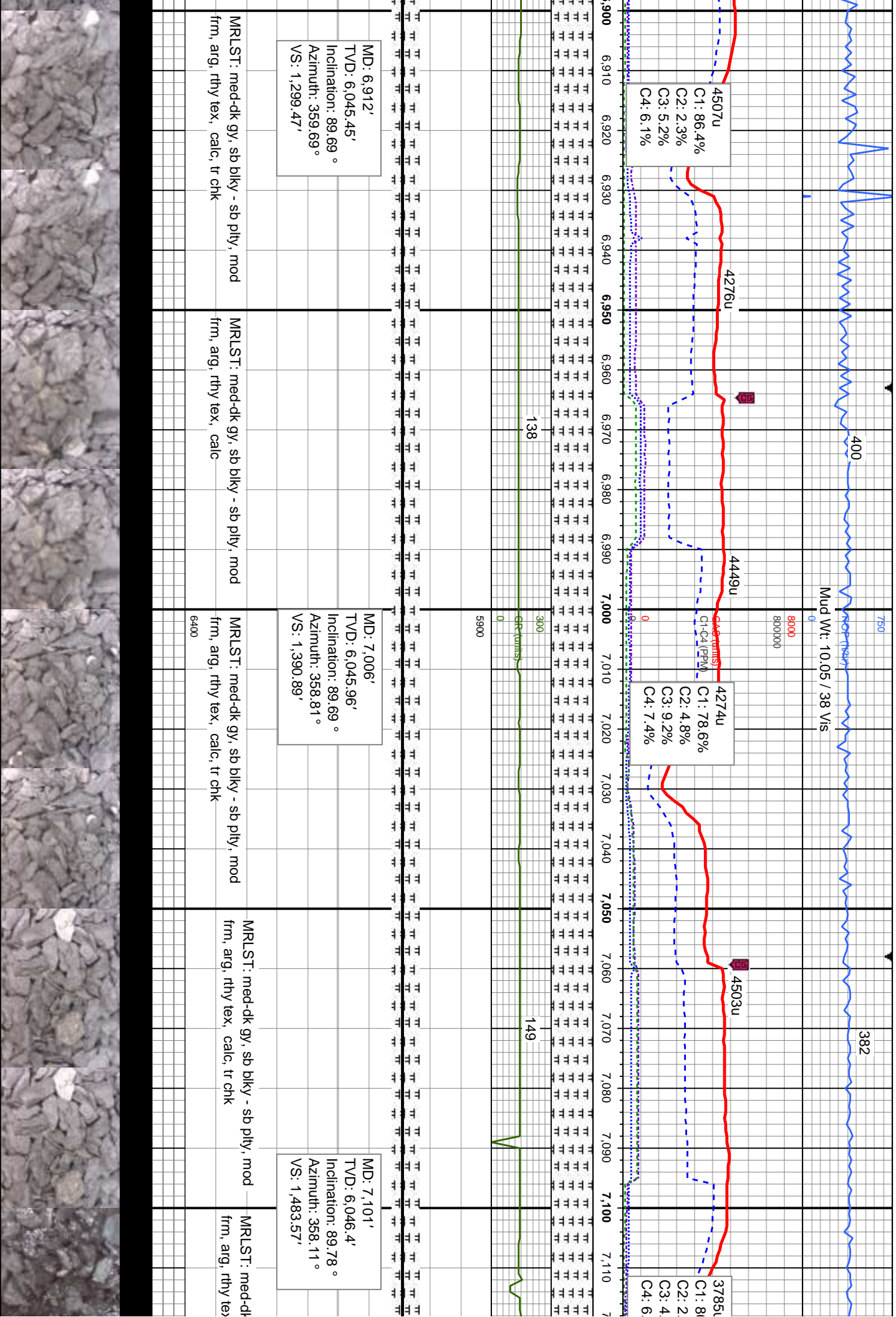
Images

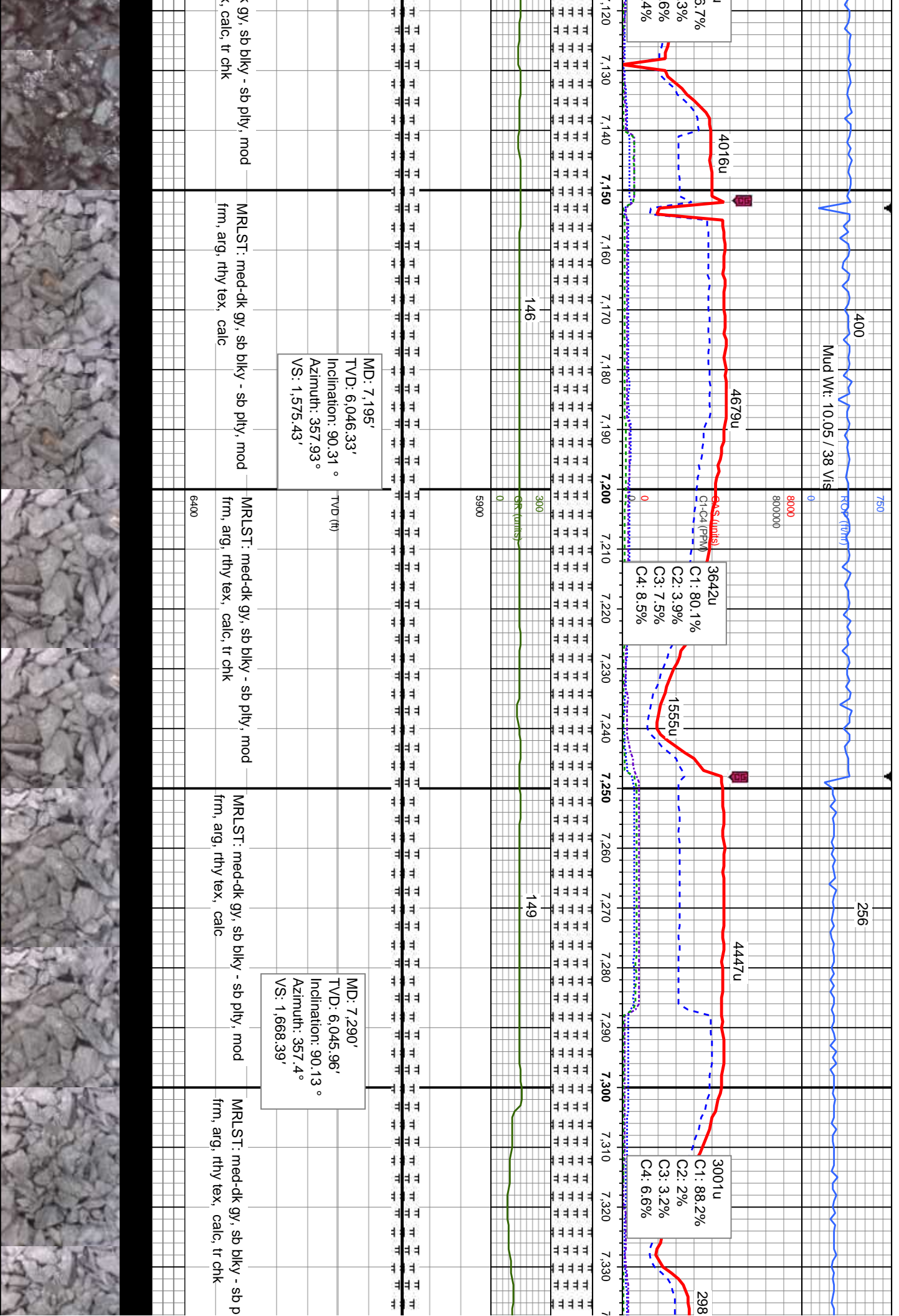


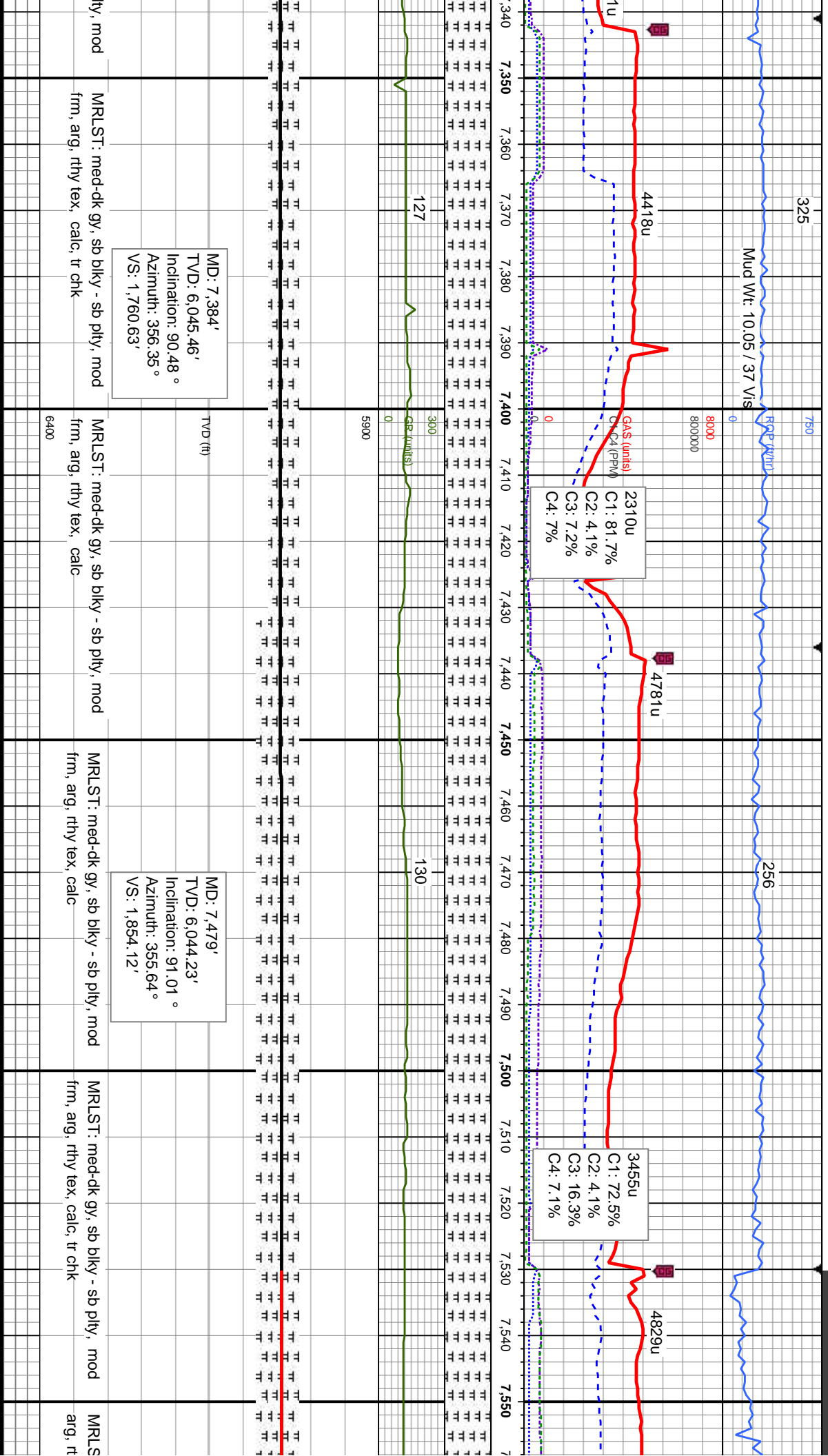


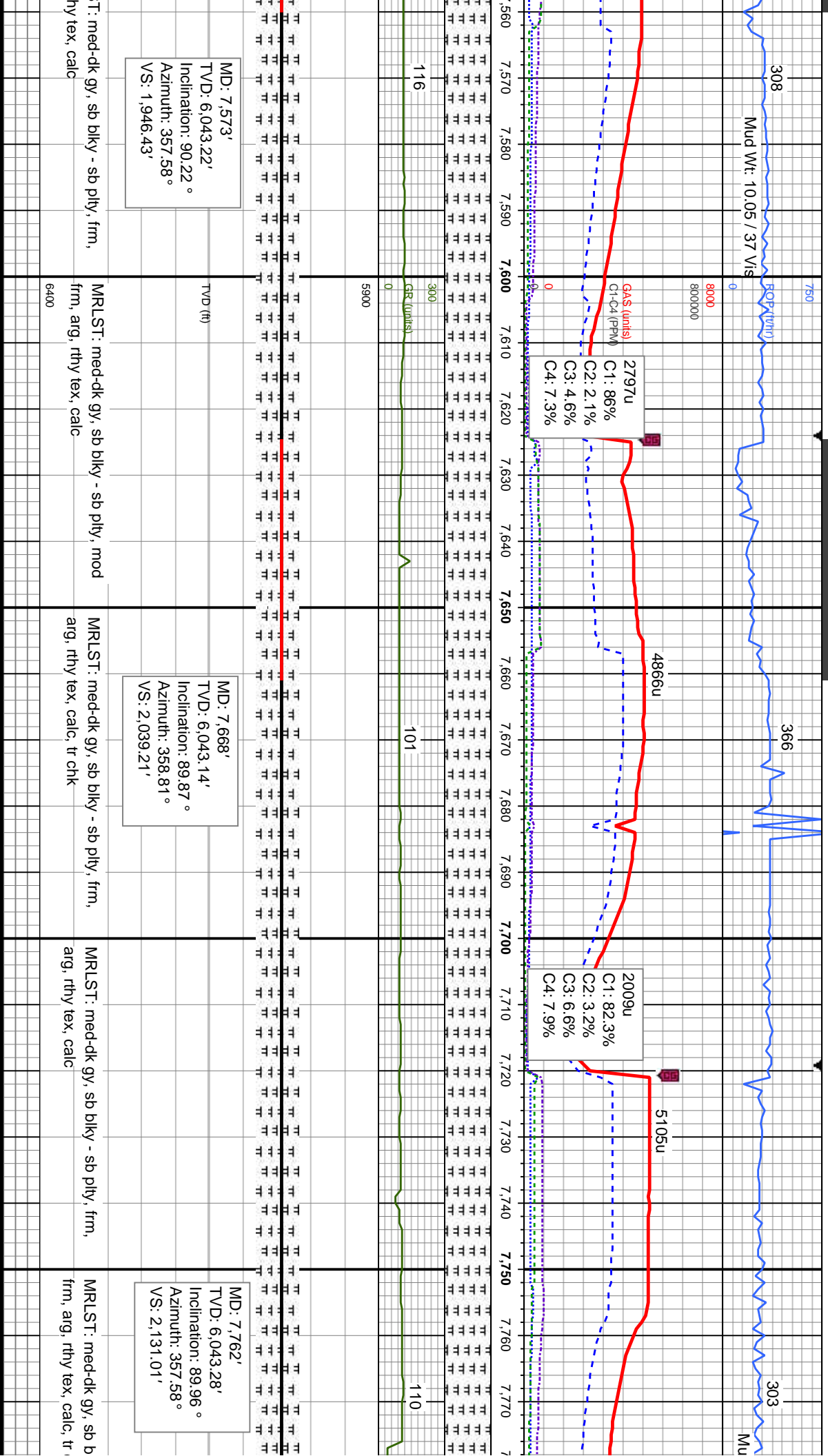


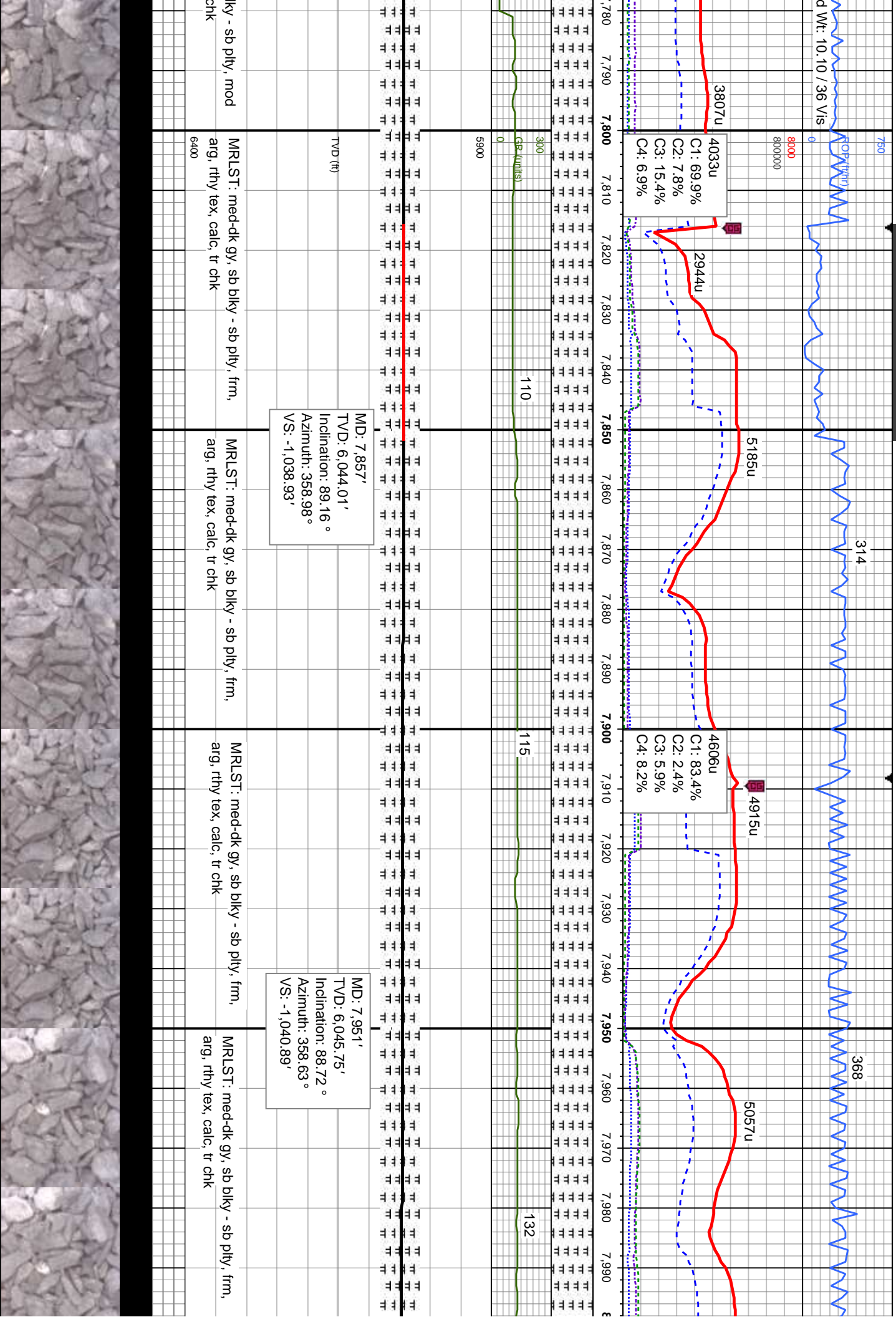


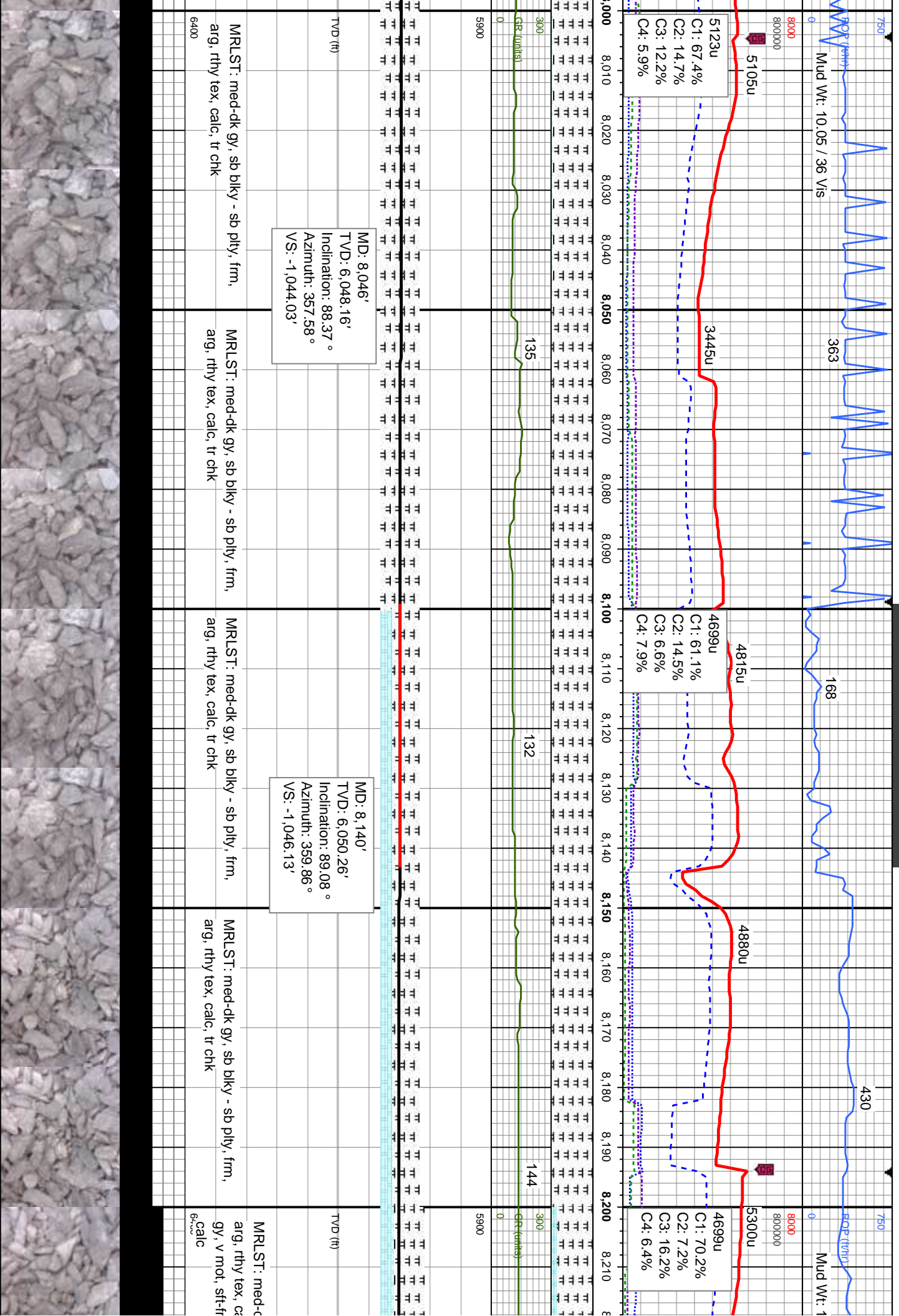


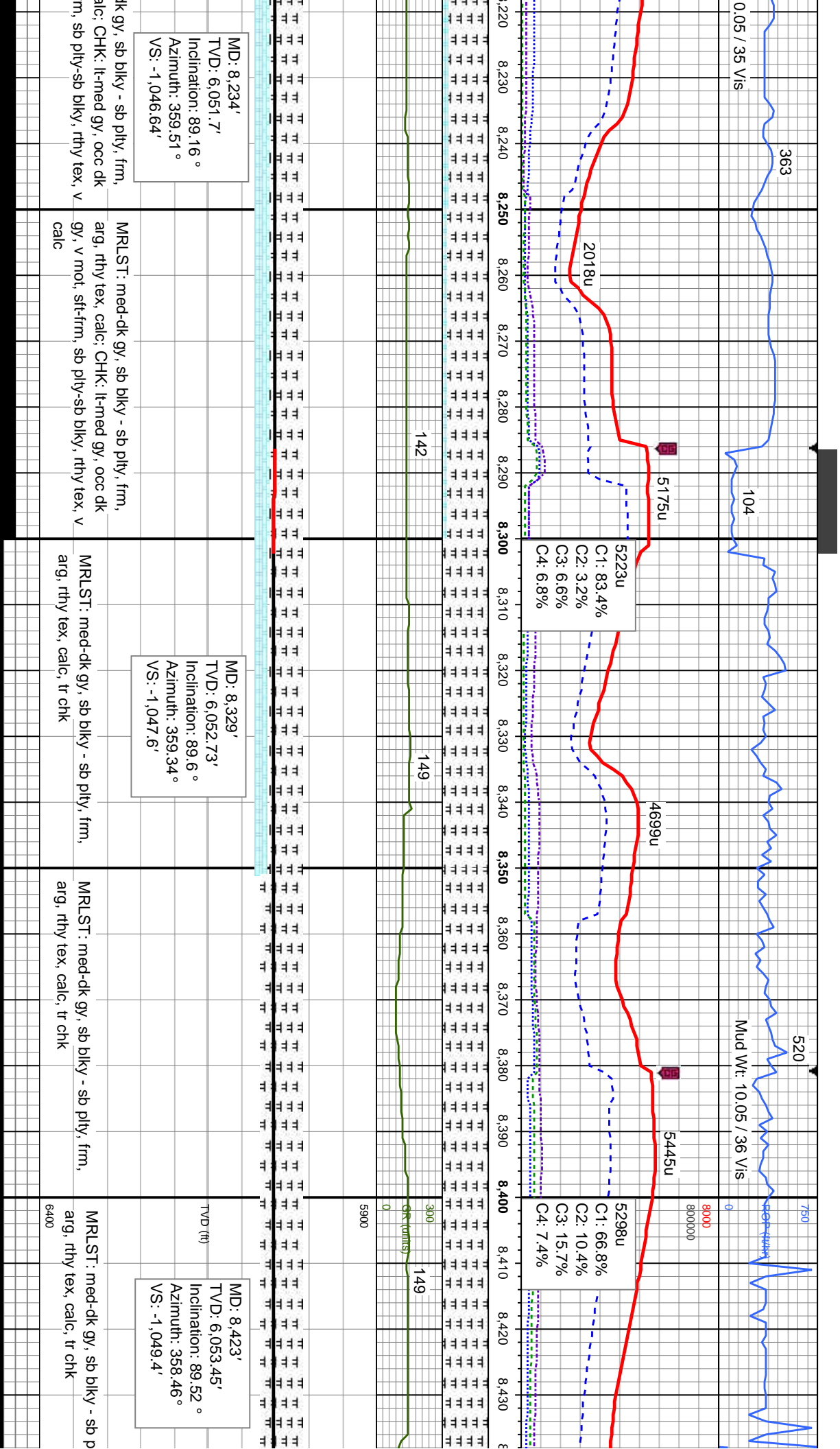


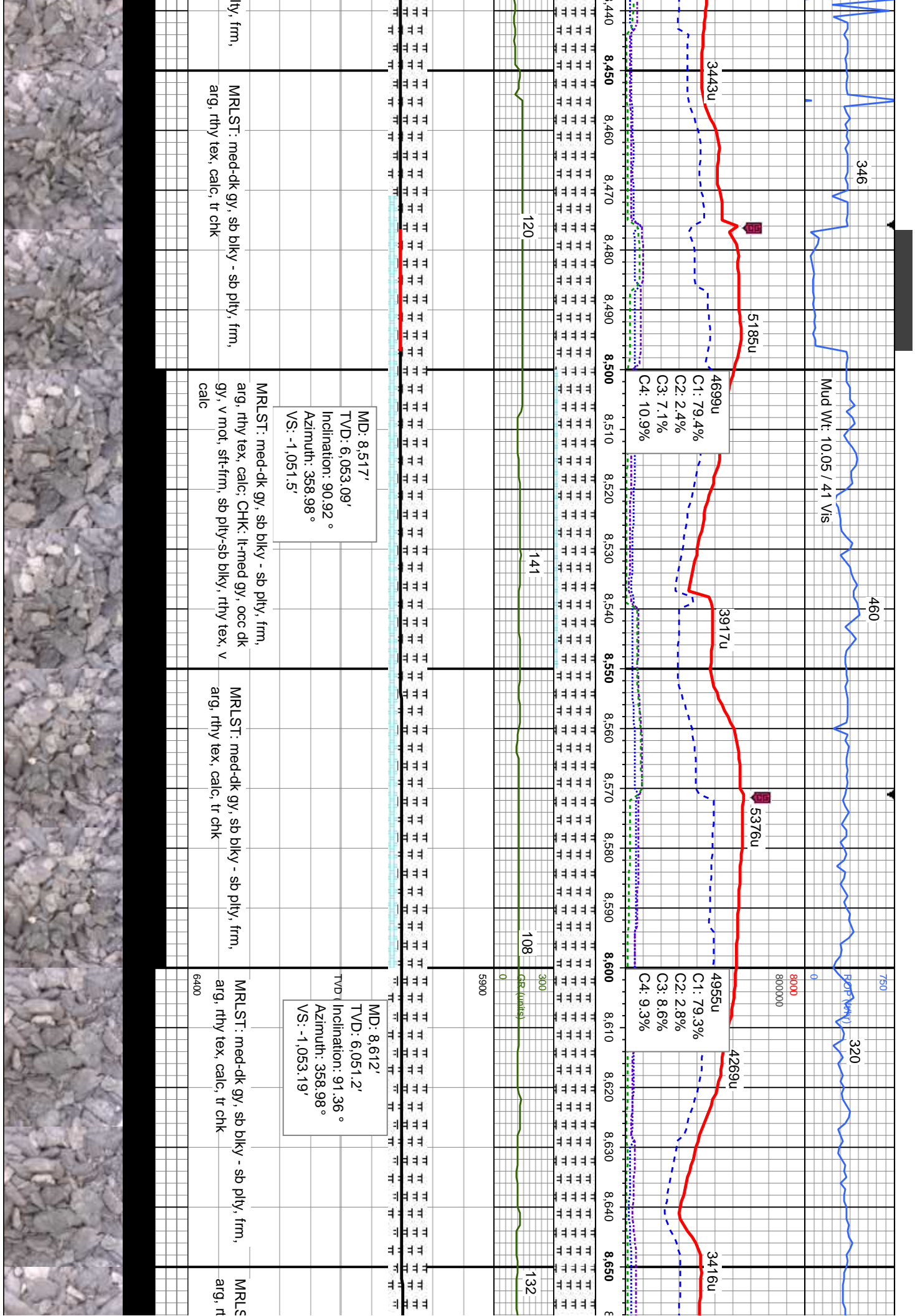


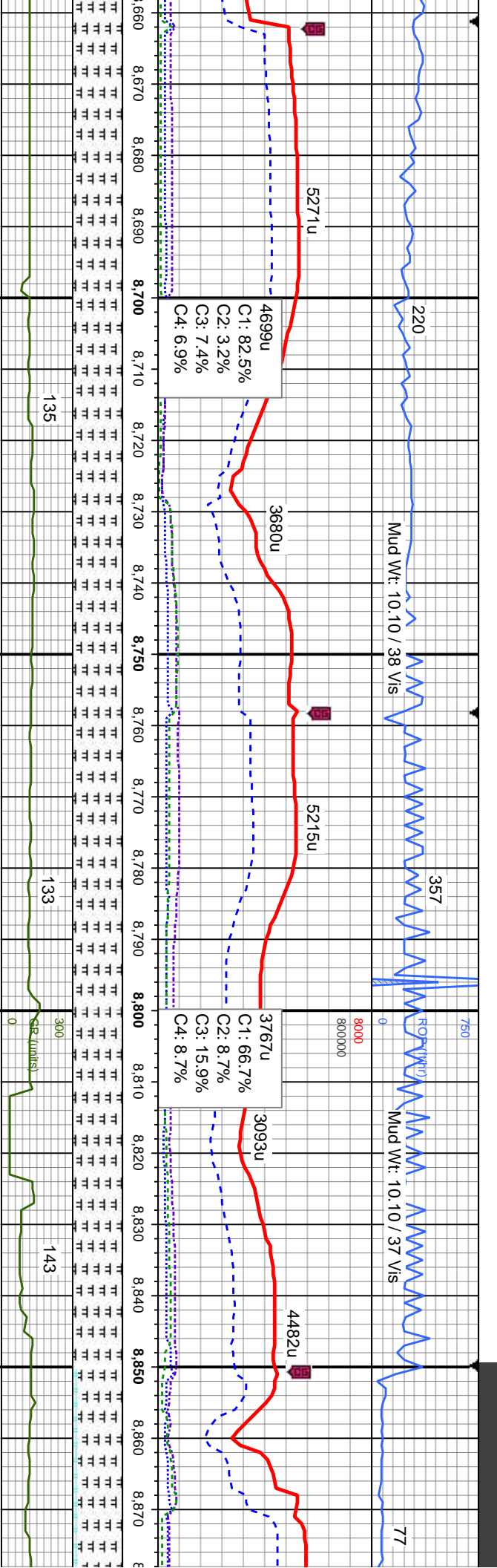












MD: 8,706'
TVD: 6,049.33'
Inclination: 90.92 °
Azimuth: 358.28 °
VS: -1,055.44'

MD: 8,801'
TVD: 6,048.02'
Inclination: 90.66 °
Azimuth: 357.4 °
VS: -1,059.02'

hy tex, calc, tr chk	MRLST: med-dk gy, sb blkly - sb plty, frm, arg, rthy tex, calc, tr chk	MRLST: med-dk gy, sb blkly - sb plty, frm, arg, rthy tex, calc, tr chk	MRLST: med-dk gy, sb blkly - sb plty, frm, arg, rthy tex, calc, tr chk	MRLST: med-dk gy, sb blkly - sb plty, frm, arg, rthy tex, calc, tr chk
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