



Scale: 5" / 100'
Measured Depth Log

Well Name

Cuthroat LC28-73HNB

Location

SEC 20, T9N, R59W

State

Colorado

County

Weld

Country

USA

Rig Number

H&P 326

Region

DJ BASIN

Field

WILDCAT

Operator

Company Noble Energy Inc

Geologist

Name

EVAN HOWELL

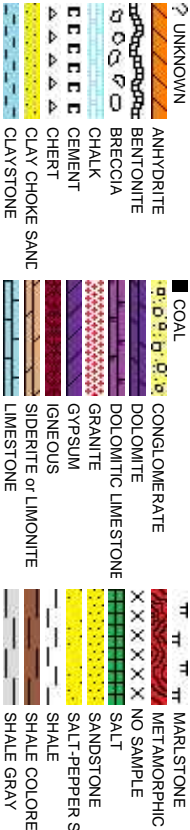
Company

NOBLE ENERGY INC.

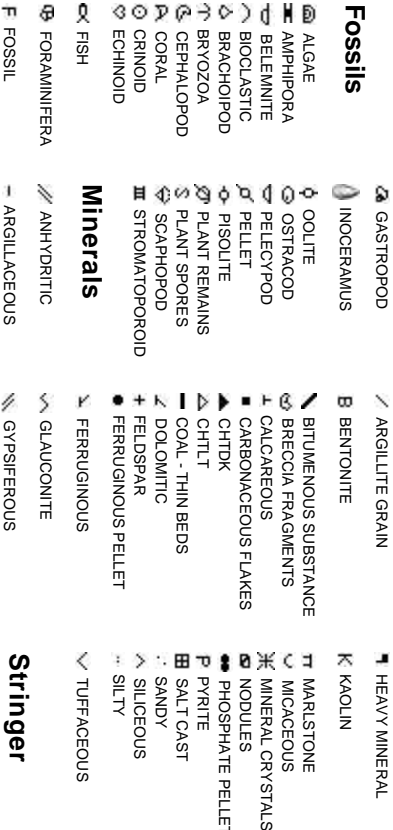
Address

1625 Broadway Suite 2200
Denver, CO 80202

Rock Types



Accessories



Stringer

Other Symbols

- SHAL Y SANDSTONE
- SHAL Y SILTSTONE
- SILTY SHALE
- SILTSTONE
- TILL
- TUFF
- WELDED TUFF

- 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

- P PINPOINT
- V VUGGY

Engineering

- D DEAD
- EVEN
- QUESTIONABLE
- BIT
- SPOTTED STAINING
- CONNECTION (UP)

Porosity

- CONNECTION (DOWN)
- CONNECTION GAS
- CONNECTION GAS (LEFT)
- TRIP GAS
- TRIP GAS (LEFT)
- INTERCRYSTALLINE
- DOWN TIME GAS
- INTERCOOLITIC
- DOWN TIME GAS (LEFT)
- MOLDIC
- CORE - LOST
- ORGANIC
- CORE - RECOVERED

- DST INTERVAL
- FAULT

- FORMATION TOP
- GAS SHOW
- OIL SHOW

- MINDEPTH
- MINDEPTH
- MINDEPTH (DOWN)

Rounding

- WIRELINE TESTED - LEFT
- WIRELINE TESTED - RT
- FINELYXLN
- DRILL STEM TEST
- MINDEPTH
- MINDEPTH
- L LITHOGRAPHIC
- MX MICROXLN
- MS MUDSTONE

- ANGULAR

- PS PACKSTONE

- ROUNDED

- WS WACKSTONE

- SUBANG
- SUBRND

Sorting

- M MODERATE

Textures

- SIDEWALL CORE (LEFT)
- SIDEWALL CORE (RIGHT)
- BOUNDSTONE
- CHALKY
- SLIDE
- SURVEY
- CRYPTOXLN

- P POOR

- W WELL

Slide/Rotate

ROP

ROF

Total Gas & Chromatograph

GAS

C1

C2

C3

C4

Depth Labels

% Lith

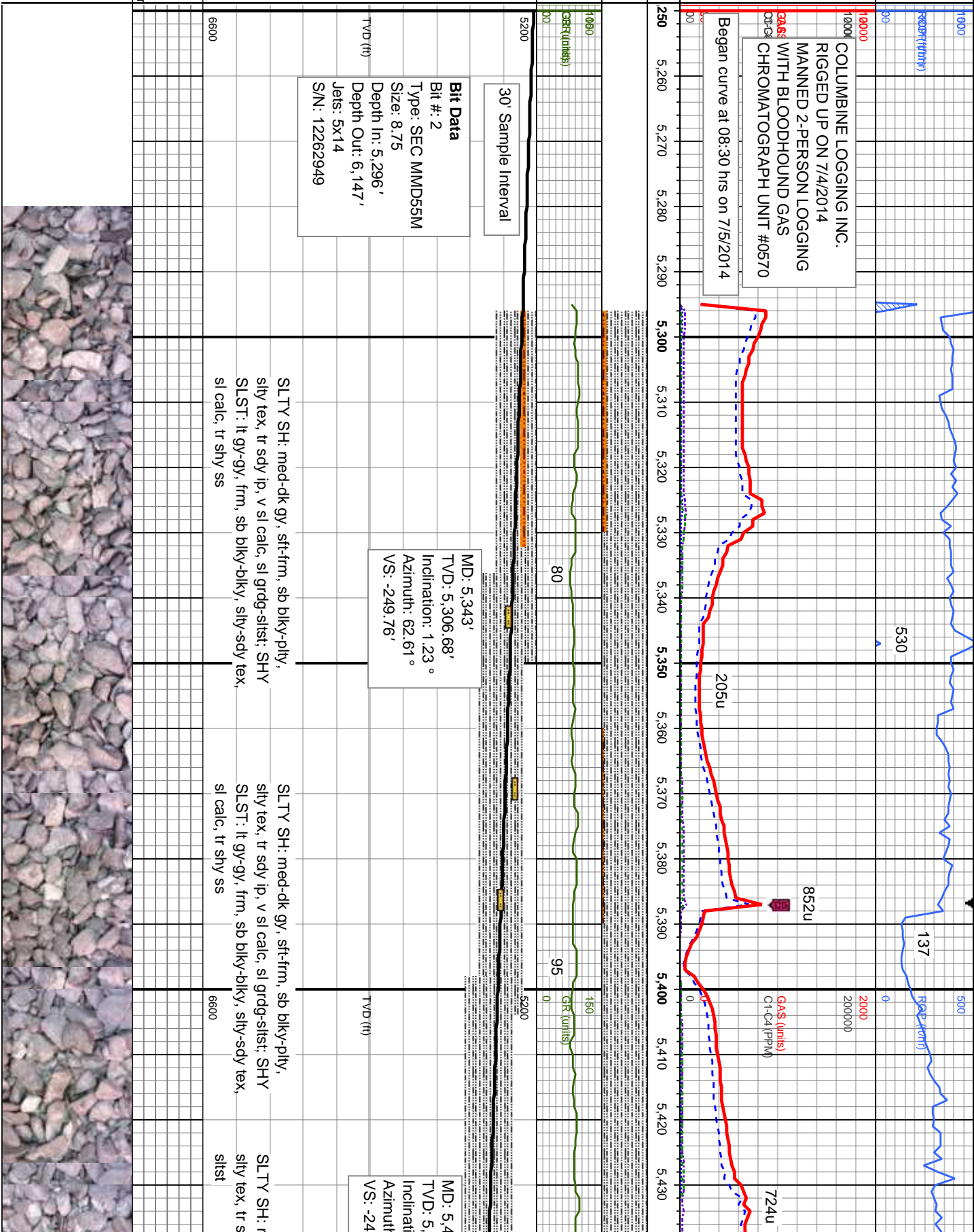
GAMMA

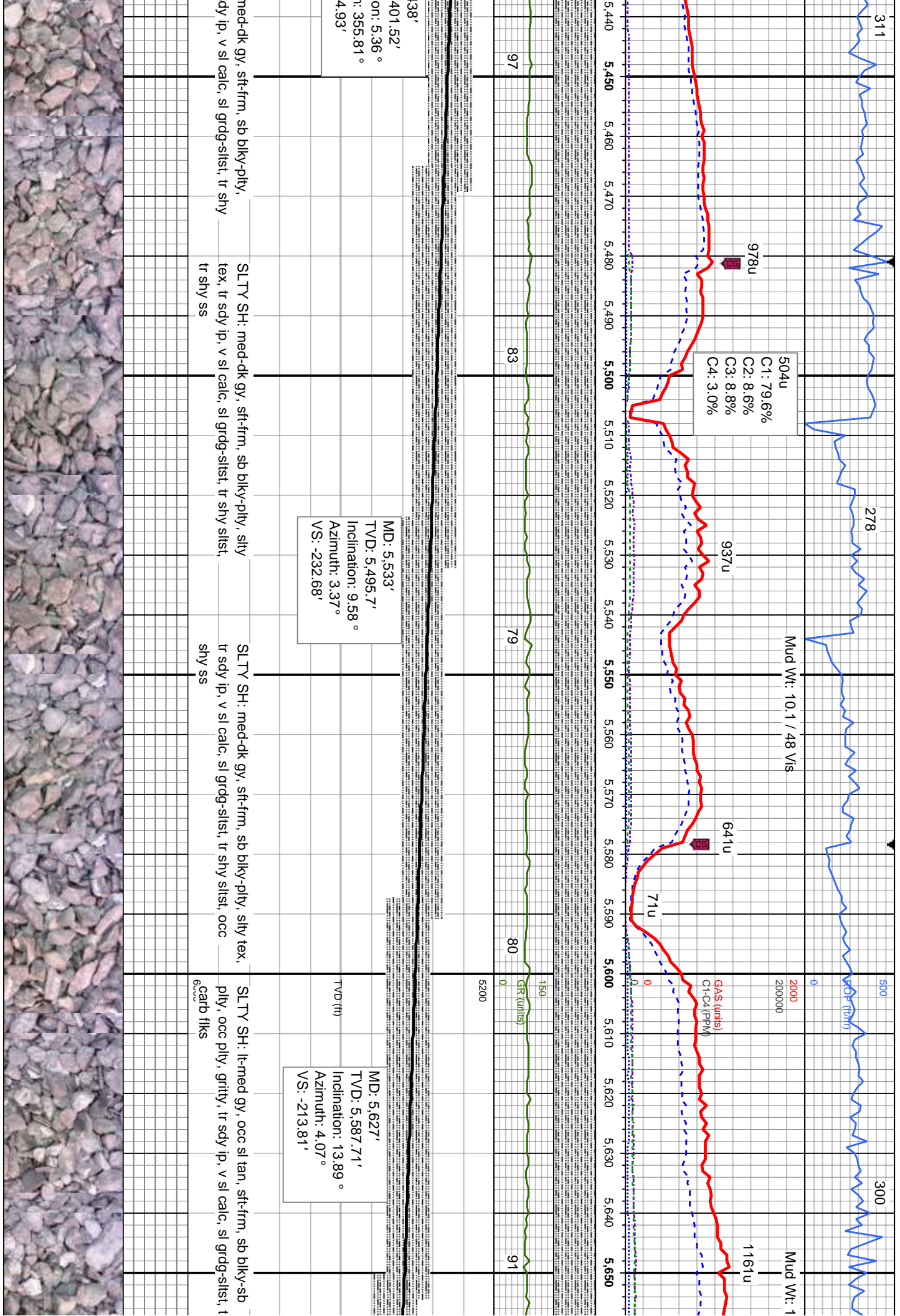
GR

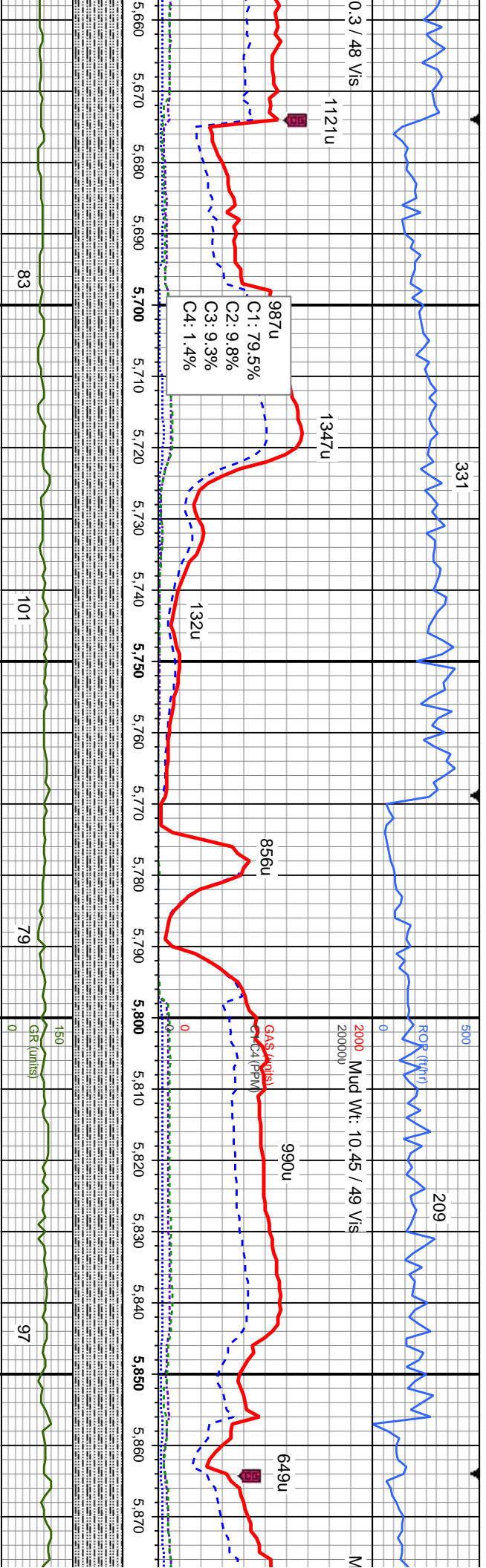
Well Bore
TVD

Oil Show

Images







SLTY SH: lt-med gy, occ sl tan, sft-frm, sb blk-y-sb
pity, occ pity, gritty, tr sdy ip, v sl calc, sl grdg-slst, tr
carb flks, tr shly ss

SLTY SH: lt-med gy, occ sl tan, sft-frm, sb blk-y-sb
pity, occ pity, gritty, tr sdy ip, v sl calc, sl grdg-slst,
tr carb flks

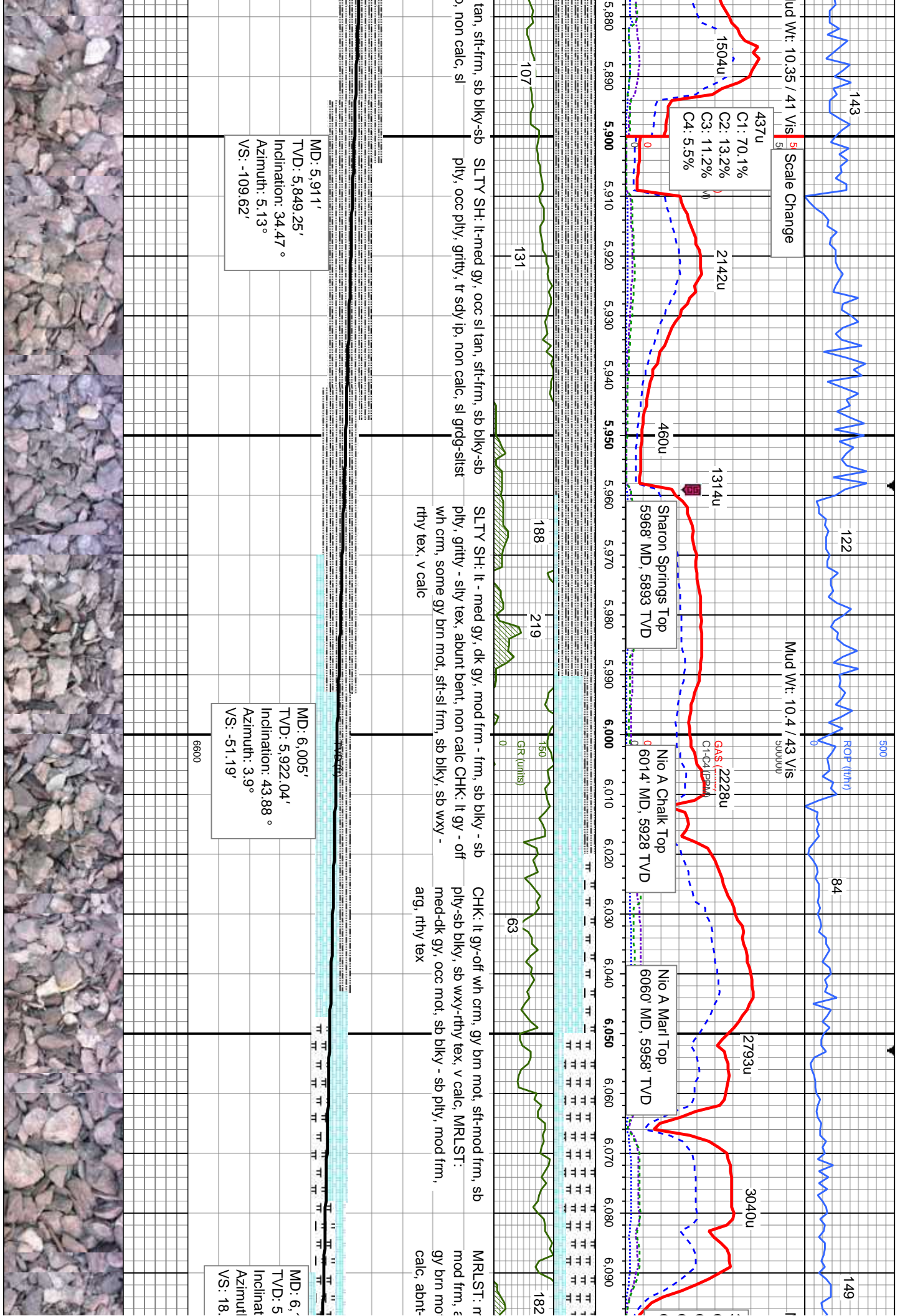
SLTY SH: lt-med gy, occ sl tan, sft-frm, sb
blk-y-sb pity, occ pity, gritty, tr sdy ip, non calc, sl
grdg-slst, tr carb flks

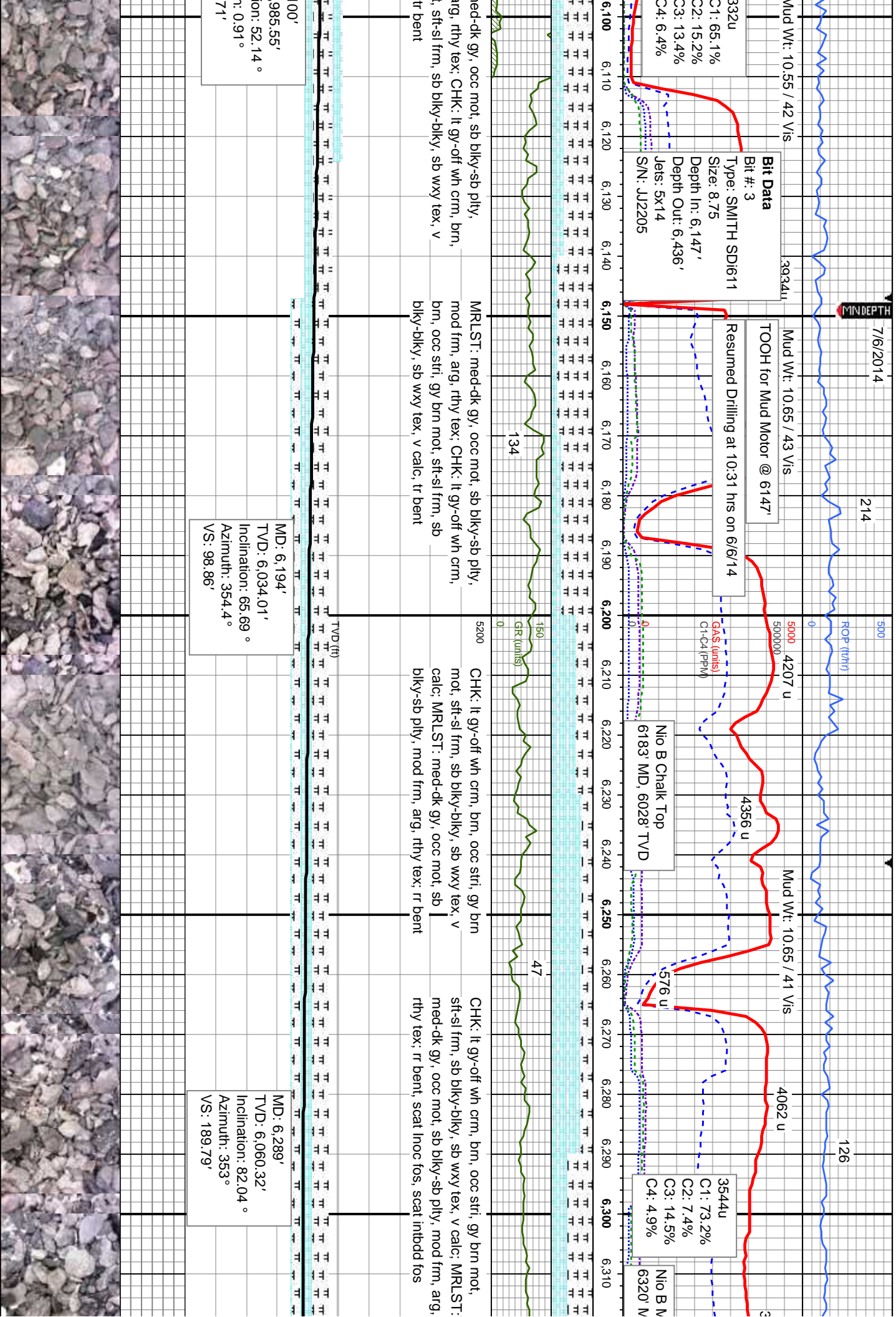
SLTY SH: lt-med gy, occ sl
pity, occ pity, gritty, tr sdy ip
grdg-slst, tr carb flks

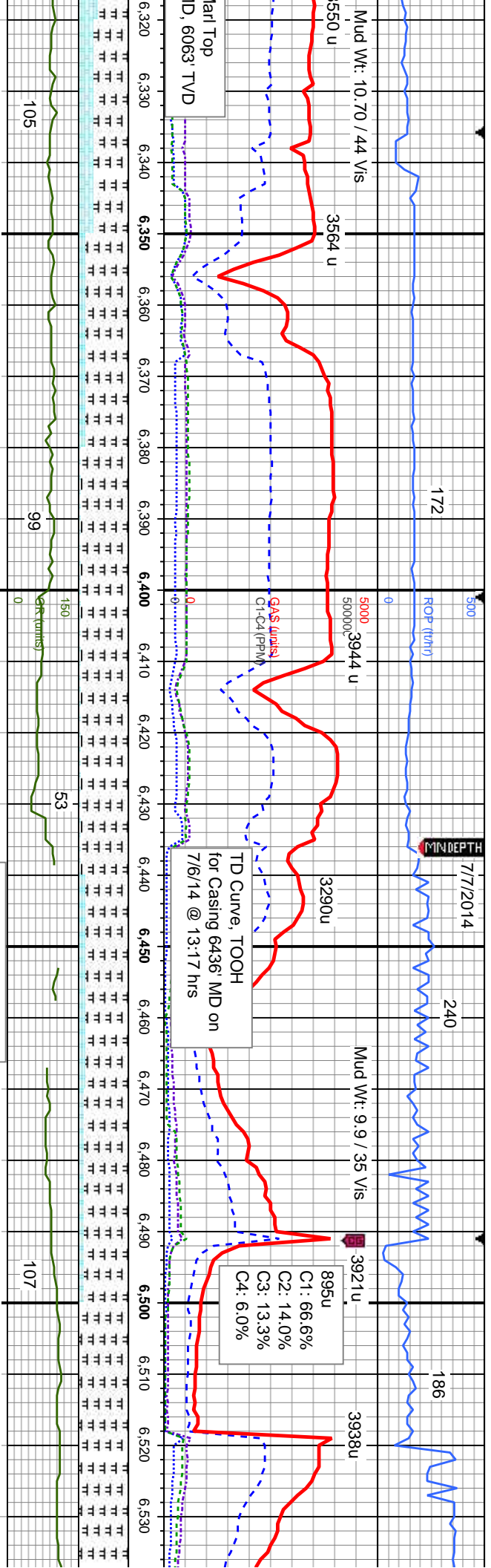
MD: 5,722'
TVD: 5,679.3'
Inclination: 16.88 °
Azimuth: 3.9°
VS: -188.95'

MD: 5,816'
TVD: 5,766.94'
Inclination: 25.24 °
Azimuth: 7.59°
VS: -155.89'









MRLST: med-dk gy, occ mot, sb blkly-sb ply, mod frm, arg, rthy tex; CHK: lt gy-off wh crm, brn, occ stri, gy brn mot, sft-sl frm, sb blkly-bkly, sb wxy tex, v calc, rr bent, scat intbdd fos

MRLST: med-dk gy, occ mot, sb blkly-sb ply, mod frm, arg, rthy tex; CHK: lt gy-off wh crm, brn, occ stri, gy brn mot, sft-sl frm, sb blkly-bkly, sb wxy tex, v calc, rr bent, abnt inoc fos, scat intbdd fos

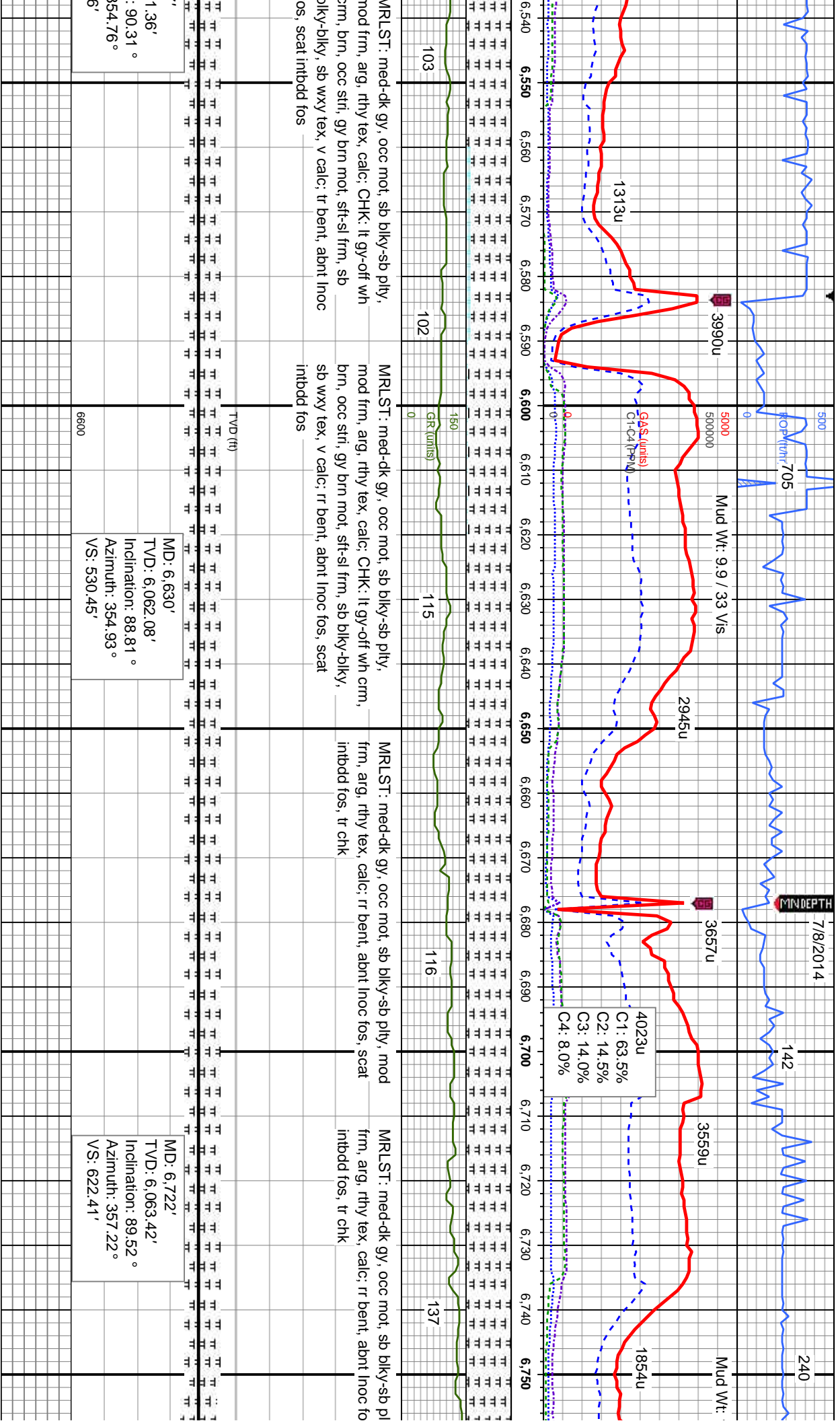
Bit Data
Bit #: 4
Type: PDCL/PLD513S5
Size: 6.12
Depth In: 6.436'
Jets: 5x15
S/N: S08861

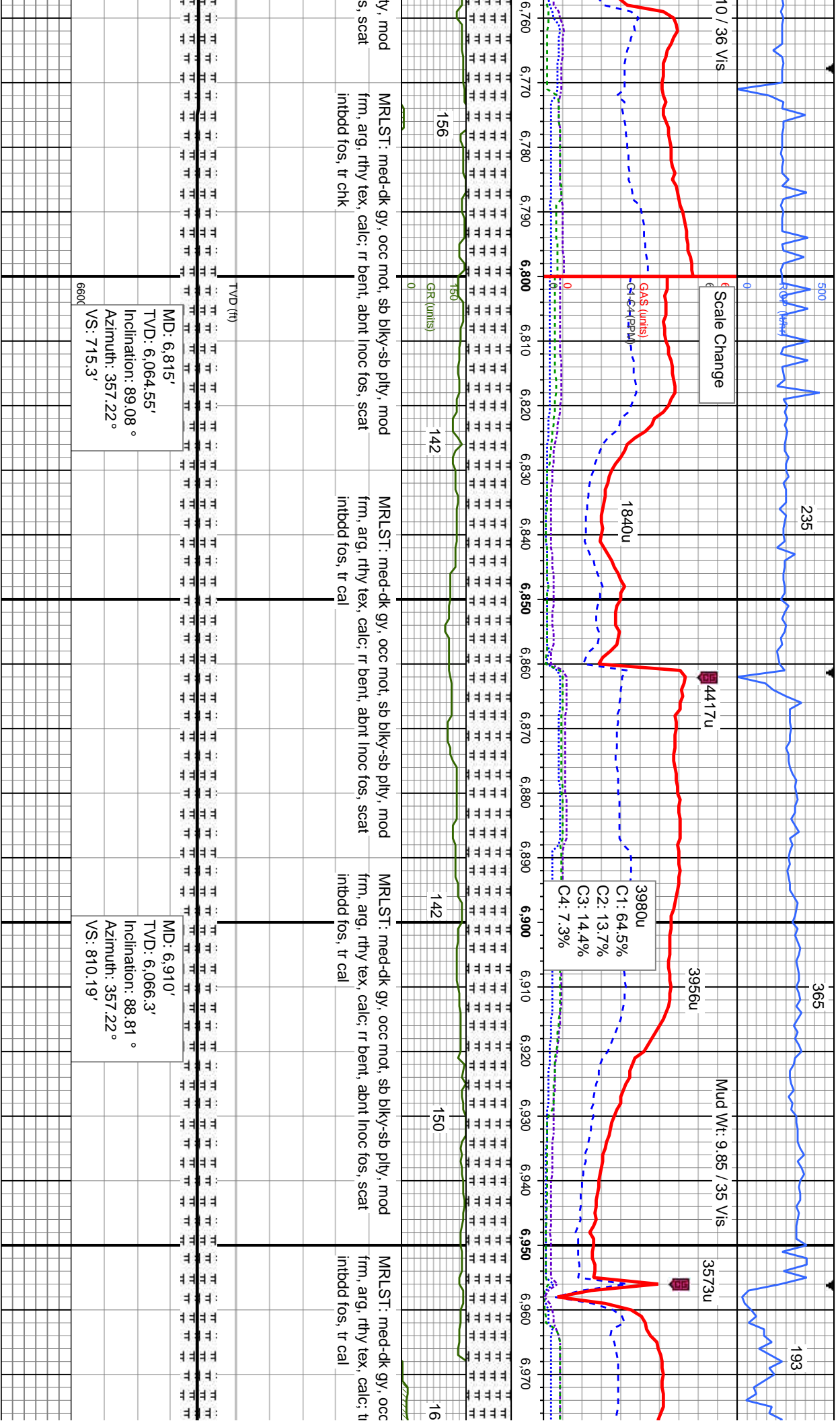
MRLST: med-dk gy, occ mot, sb blkly-sb ply, mod frm, arg, rthy tex, calc; CHK: lt gy-off wh crm, brn, occ stri, gy brn mot, sft-sl frm, sb blkly-bkly, sb wxy tex, v calc, tr bent, abnt inoc fos, scat intbdd fos

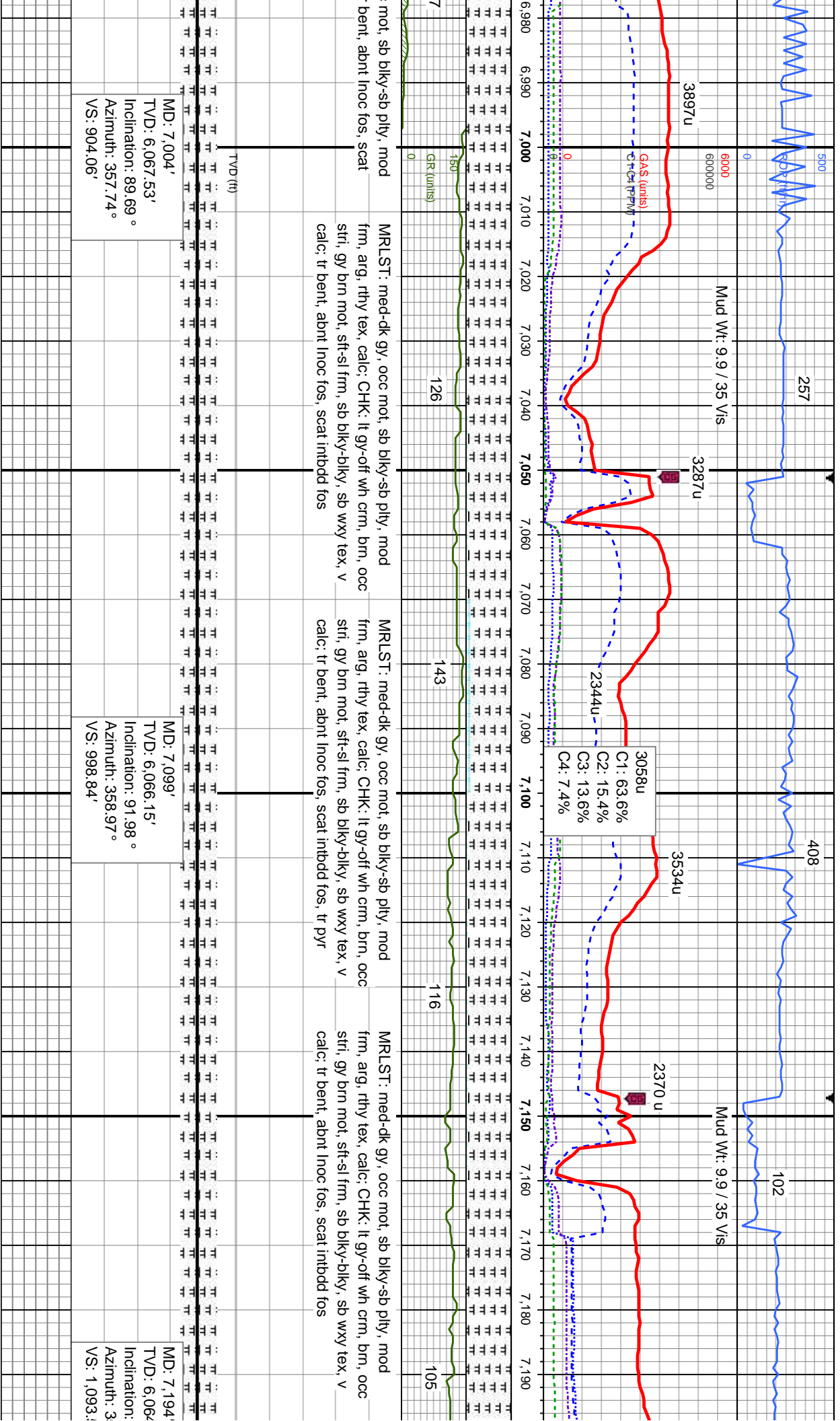
MD: 6.445'
TVD: 6.063.48'
Inclination: 92.33 °
Azimuth: 355.11 °
VS: 345.49'

MD: 6.537
TVD: 6.06
Inclination
Azimuth: 3
VS: 437.4





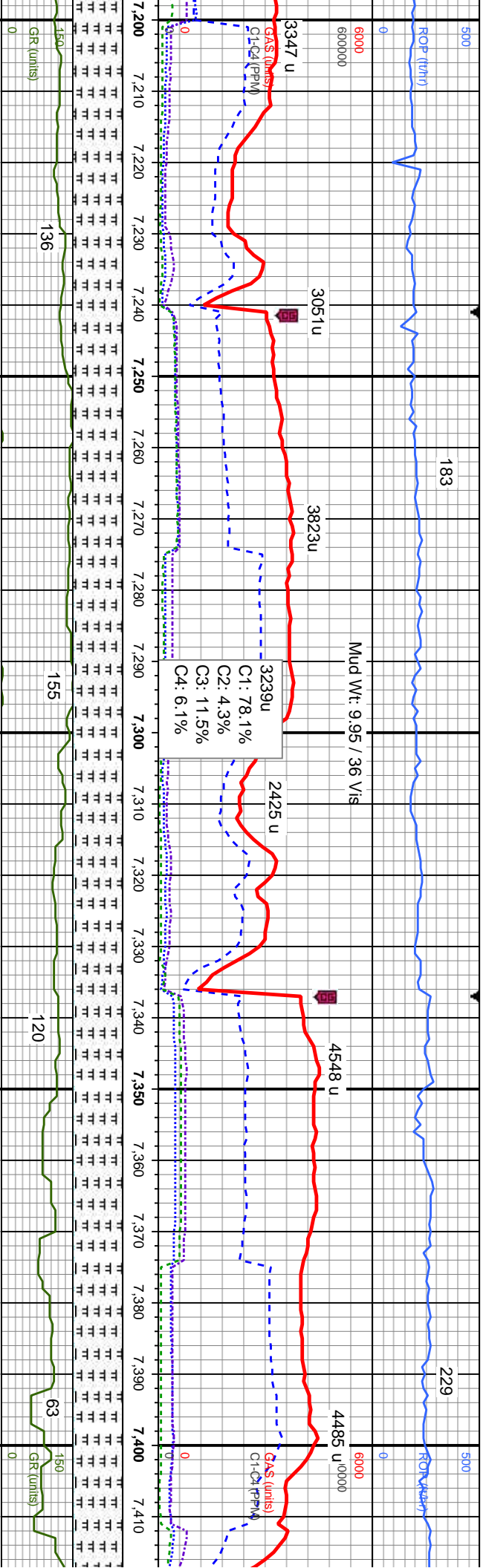




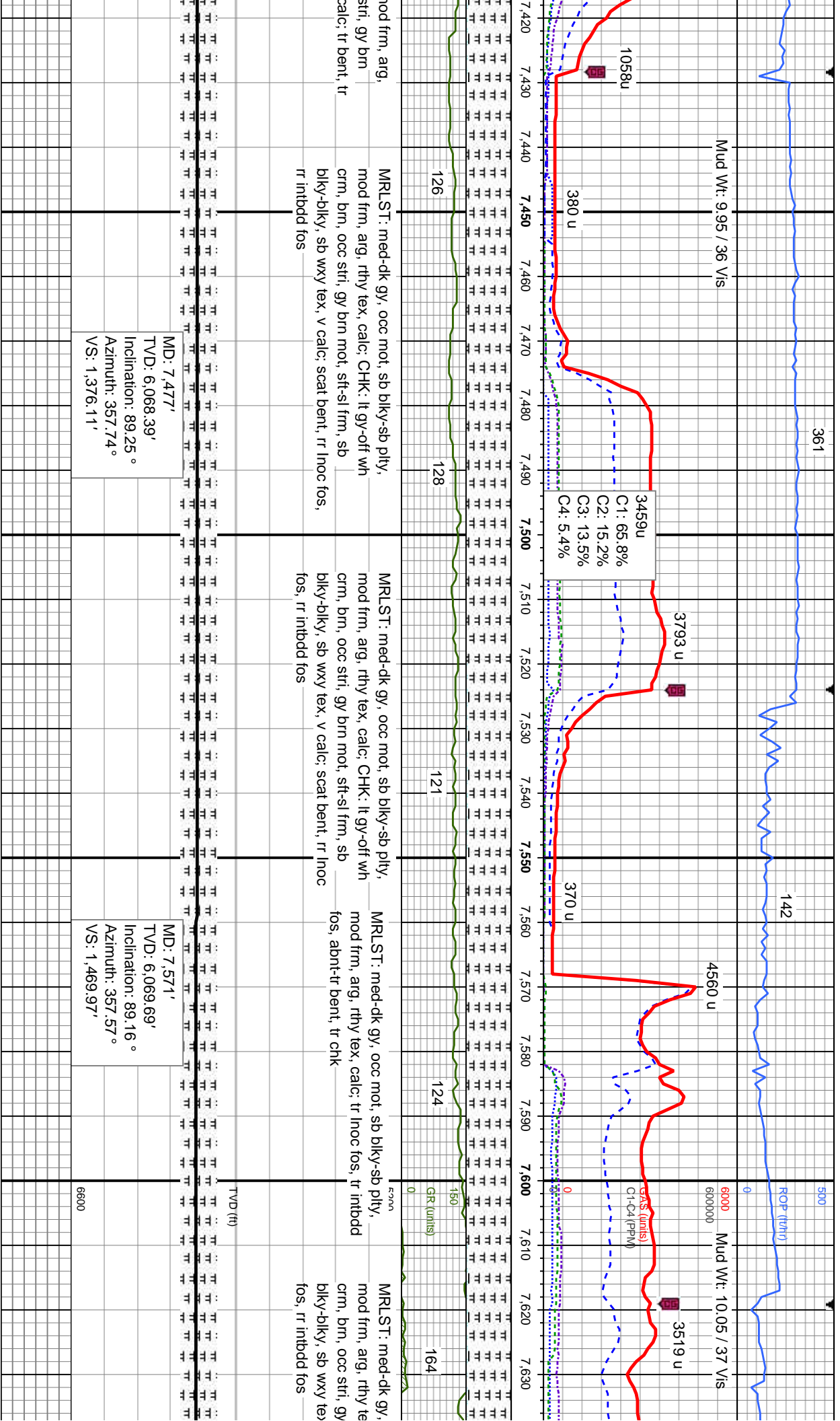
MD: 7,004'
TVD: 6,067.53'
Inclination: 89.69°
Azimuth: 357.74°
VS: 904.06'

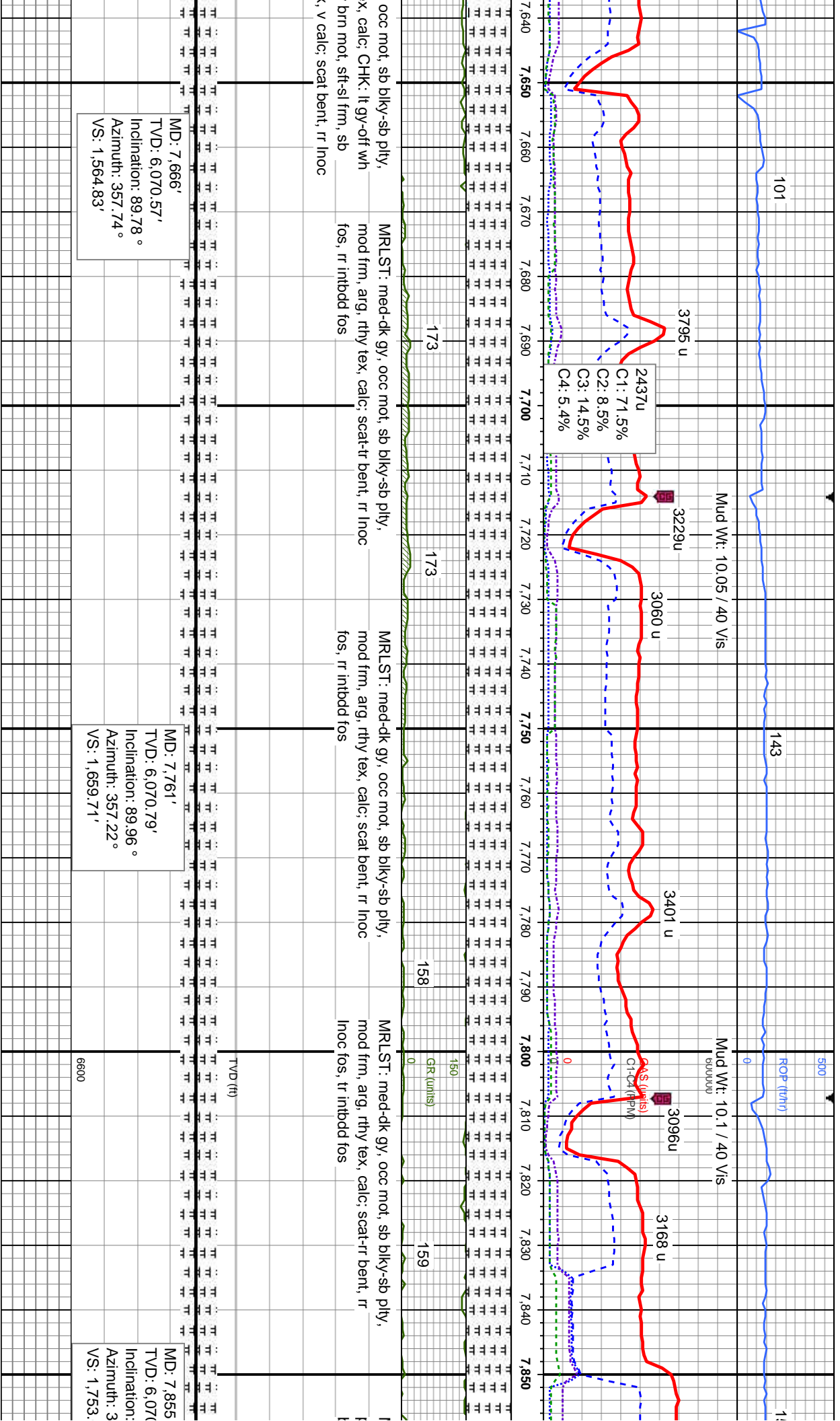
MD: 7,099'
TVD: 6,066.15'
Inclination: 91.98°
Azimuth: 358.97°
VS: 998.84'

MD: 7,194'
TVD: 6,066.15'
Inclination: 91.98°
Azimuth: 358.97°
VS: 998.84'



52.7'	MRLST: med-dk gy, occ mot, sb blkly-sb ply, mod frm, arg, rthy tex, calc	MRLST: med-dk gy, occ mot, sb blkly-sb ply, mod frm, arg, rthy tex, calc; CHK: lt gy-off wh crm, brn, occ stri, gy brn mot, sft-sl frm, sb blkly-blky, sb wxy tex, v calc; tr bent, scat inoc fos, scat intbdd fos, abnt cal	MRLST: med-dk gy, occ mot, sb blkly-sb ply, mod frm, arg, rthy tex, calc; CHK: lt gy-off wh crm, brn, occ stri, gy brn mot, sft-sl frm, sb blkly-blky, sb wxy tex, v calc; tr bent, scat inoc fos, scat intbdd fos, abnt cal	MRLST: med-dk gy, occ mot, sb blkly-blky, rthy tex, calc; CHK: lt gy-crm, brn, occ mot, sft-sl frm, blkly-blky, sb wxy tex, v scat intbdd fos, abnt cal
TVD (ft)				TVD (ft)
1.62'				MD: 7,382'
89.87°				TVD: 6,067.07'
58.1°				Inclination: 89.16°
59'				Azinuth: 357.74°
				VS: 1,281.26'
				6600

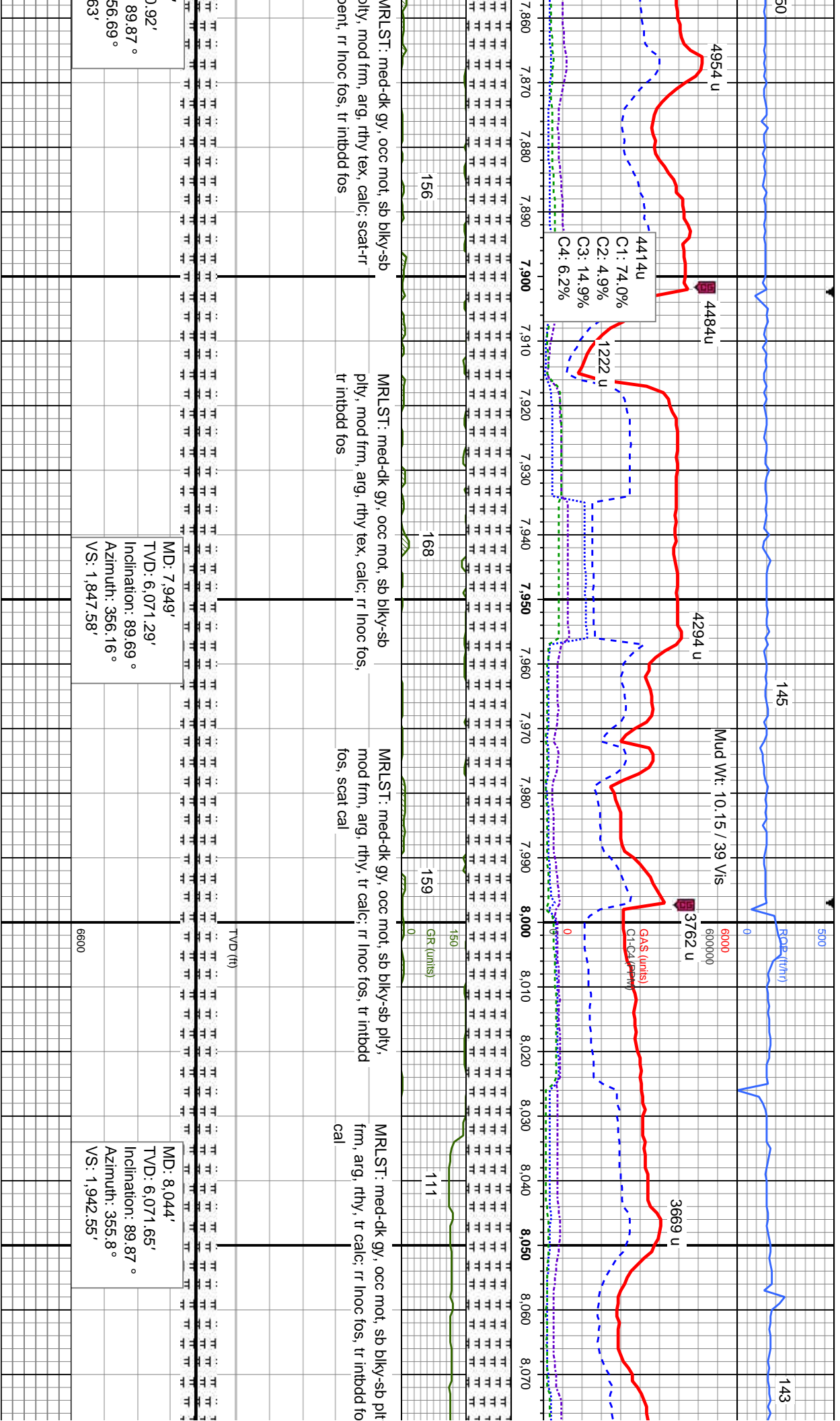




MD: 7.666'
TVD: 6,070.57'
Inclination: 89.78 °
Azimuth: 357.74 °
VS: 1,564.83'

MD: 7.761'
TVD: 6,070.79'
Inclination: 89.96 °
Azimuth: 357.22 °
VS: 1,659.71'

MD: 7.855
TVD: 6,070.79'
Inclination: 89.96 °
Azimuth: 357.22 °
VS: 1,753.



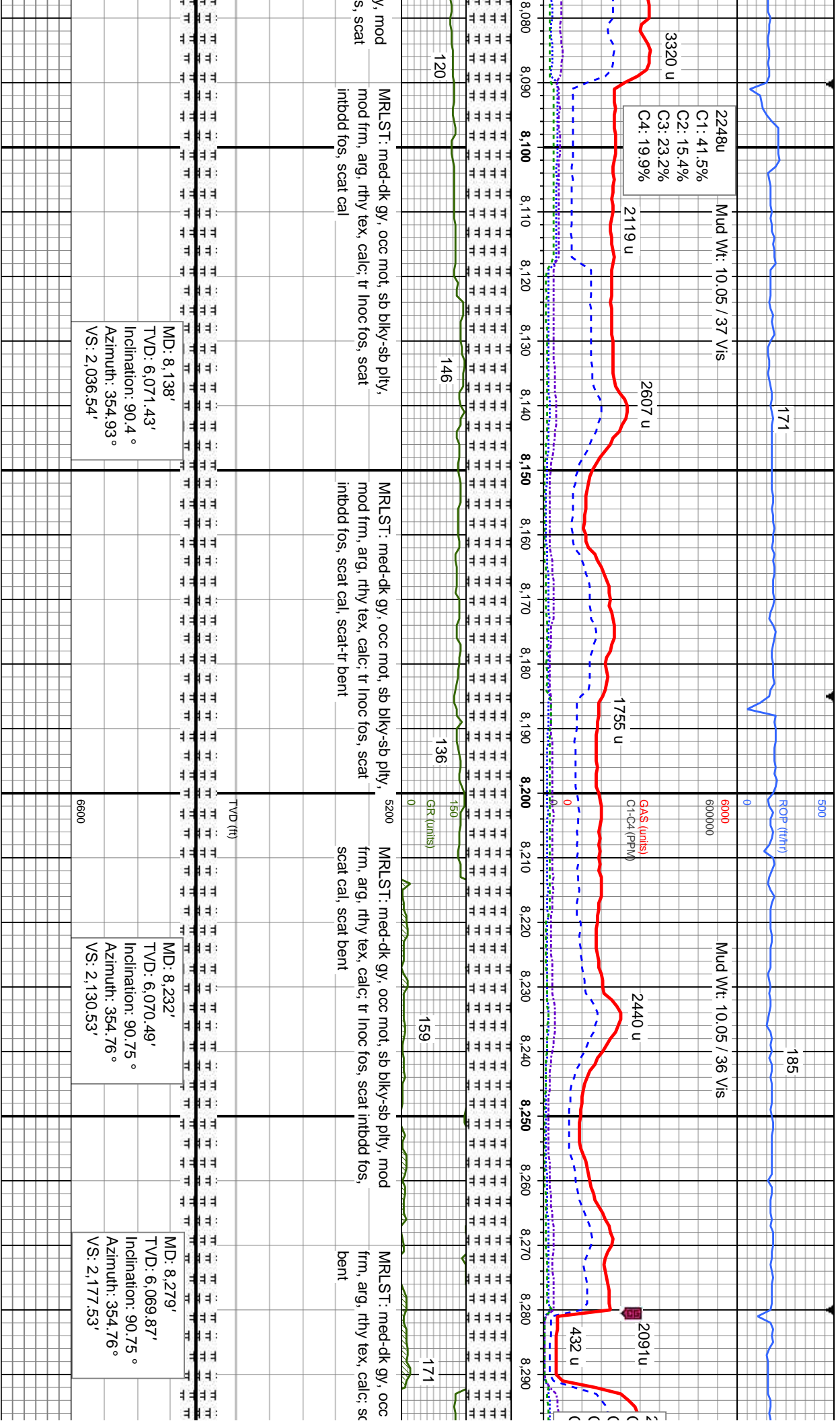
4414u
C1: 74.0%
C2: 4.9%
C3: 14.9%
C4: 6.2%

MRLST: med-dk gy, occ mot, sb blk-y-sb
ply, mod frm, arg, rthy tex, calc; scat-tr
ent, tr inoc fos, tr inbdd fos

MRLST: med-dk gy, occ mot, sb blk-y-sb
ply, mod frm, arg, rthy tex, calc; rr inoc fos,
tr inbdd fos

MRLST: med-dk gy, occ mot, sb blk-y-sb ply,
mod frm, arg, rthy, tr calc; rr inoc fos, tr inbdd
fos, scat cal

MRLST: med-dk gy, occ mot, sb blk-y-sb ply
frm, arg, rthy, tr calc; rr inoc fos, tr inbdd fo
cal



2248u
C1: 41.5%
C2: 15.4%
C3: 23.2%
C4: 19.9%

Mud Wt: 10.05 / 37 Vis

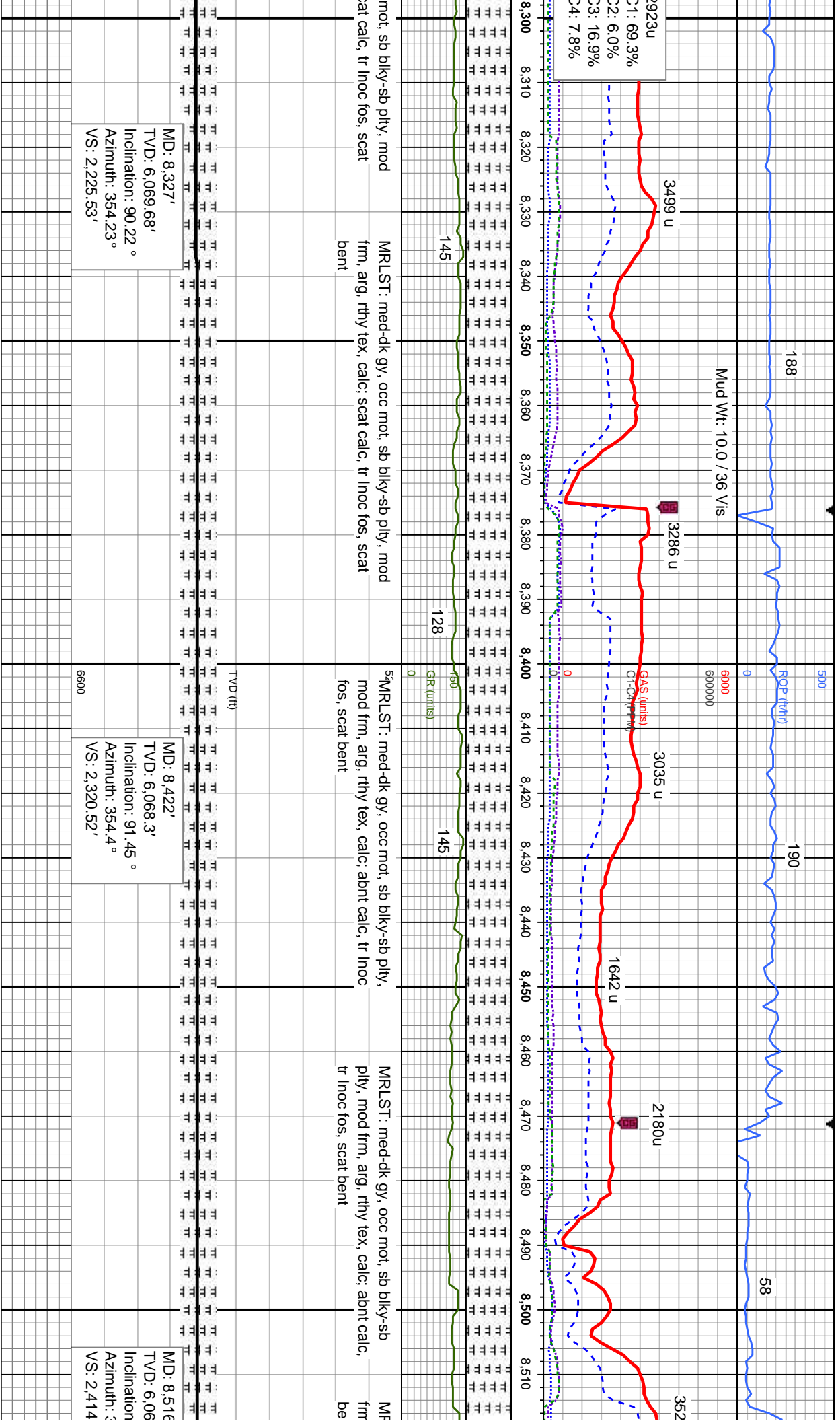
GA\$ (units)
C1-C4 (ppm)

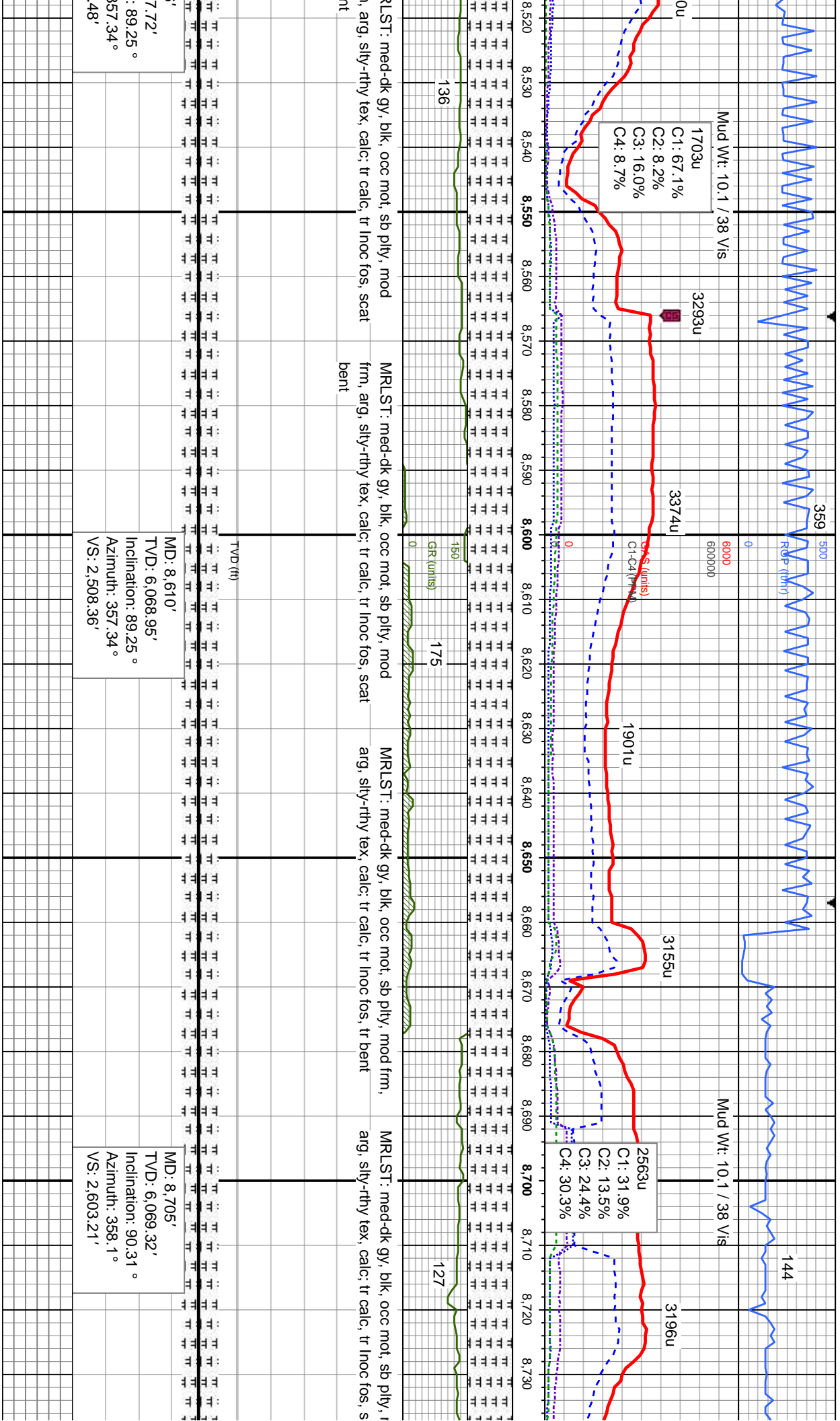
Mud Wt: 10.05 / 36 Vis

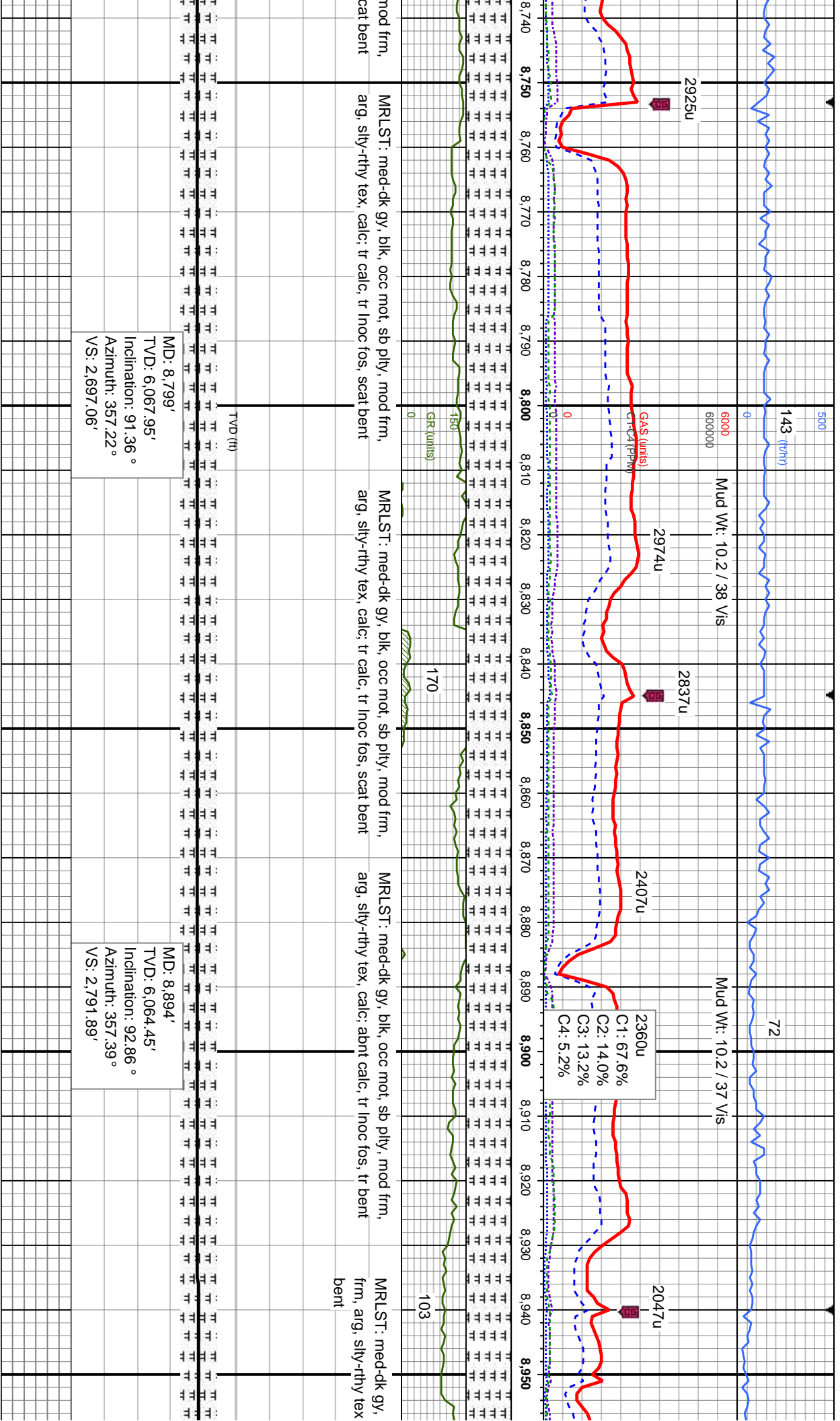
5200
GR (units)

MRLST: med-dk gy, occ mot, sb blk-y-sb pily, mod frm, arg, rthy tex, calc; tr inoc fos, scat
scat cal, scat bent

MRLST: med-dk gy, occ frm, arg, rthy tex, calc; bent





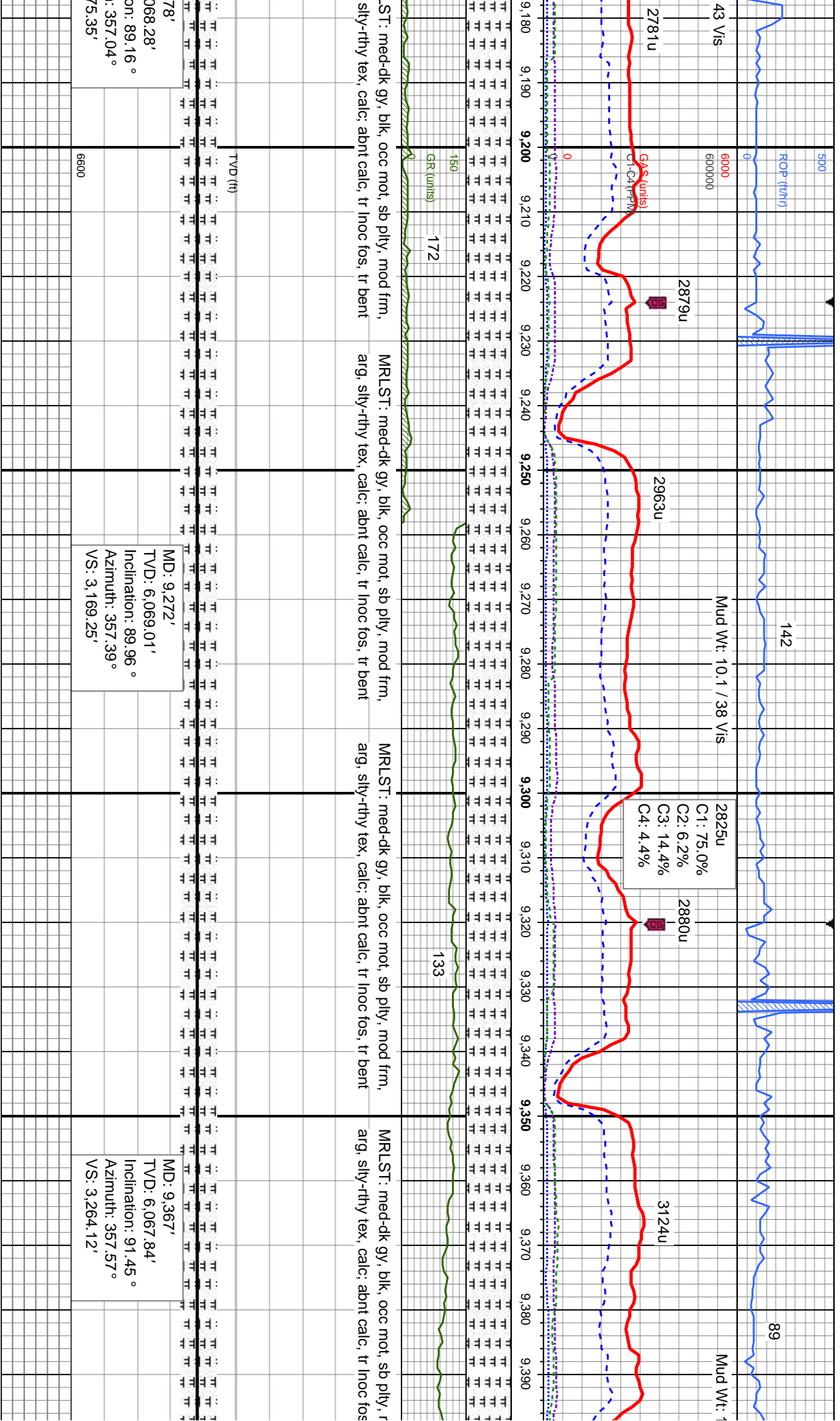


TVD (ft)

MD: 8,799'
TVD: 6,067.95'
Inclination: 91.36°
Azimuth: 357.22°
VS: 2,697.06'

MD: 8,894'
TVD: 6,064.45'
Inclination: 92.86°
Azimuth: 357.39°
VS: 2,791.89'

C1: 67.6%
C2: 14.0%
C3: 13.2%
C4: 5.2%



ST: med-dk gy, blk, occ mot, sb pily, mod frm, arg, silty-rthy tex, calc; abnt calc, tr inoc fos, tr bent	MRLST: med-dk gy, blk, occ mot, sb pily, mod frm, arg, silty-rthy tex, calc; abnt calc, tr inoc fos, tr bent	MRLST: med-dk gy, blk, occ mot, sb pily, mod frm, arg, silty-rthy tex, calc; abnt calc, tr inoc fos, tr bent	MRLST: med-dk gy, blk, occ mot, sb pily, mod frm, arg, silty-rthy tex, calc; abnt calc, tr inoc fos, tr bent
068.28'	MD: 9.272'	MD: 9.367'	
Inclination: 89.16°	TVD: 6.069.01'	TVD: 6.067.84'	
Azimuth: 357.04°	Inclination: 89.96°	Inclination: 91.45°	
VS: 3.169.25'	Azimuth: 357.39°	Azimuth: 357.57°	
VS: 3.169.25'	VS: 3.169.25'	VS: 3.264.12'	

