

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name Big Sandy 3-65 36-31 2BH

Location SEC 35 T3S-R65W

State COLORADO

County ADAMS

Country USA

Rig Number Nabors B16

API Number 05-001-10100

AFE # WAY.CDR.7016

Geographic Region DJ BASIN

Field WILDCAT

Spud Date 2/27/2018

Drilling Completed 3/28/2018

Surface Coordinates 2505' FSL & 465' FEL SEC 35 T3S-R65W

SL Lat:

39° 44' 48.07" N (NAD 83)

SL Long:

104° 37' 24.56" W (NAD 83)

Bottom Hole Coordinates Proposed BHL: 1874' FNL & 325' FEL SEC 31 T3S-R64W

Ground Elevation 5524'

K.B. Elevation 5549'

Logged Interval 6000 To 18220

Total Depth 18220

Formation Niobrara D Chalk

Type of Drilling Fluid OBM

Operator

Company Conoco Phillips

Address 600 N. Dairy Ashford Rd.
Houston, TX 77079-1175



Geologist

Name Dave Aldridge

Company Conoco Phillips Central Rockies Implementa

Address Dave.E.Aldridge@conocophilips.com

Office: (832) 486-3983

600 N Dairy Ashford EC3 14-W134

Houston, TX 77079



Other

Columbine Logging Inc. Mud Logging Company

Geologists/Geosteers on Location: Todd Thiesse, Haynes Burnside

Gas Detection: Bloodhound chromatograph gas unit #311

DD/MWD: Baker Hughes

Columbine Computer 87A

- Fossils**
- ALGAE
 - AMPHIPH
 - BELEMN
 - BIOCCLAS
 - BRACHD
 - BRYOZO
 - CERPHAL
 - CORAL
 - CRINOID
 - ECHINOI
 - FISH
 - FORAMIN
 - F FOSSIL

Color Coding

- Oil
- Condensate
- Gas
- Note
- Core
- Pressure
- Error
- Water
- Seal

Rock Types

- UNKNOWN
- ANHYDRITE
- BENTONITE
- BRECCIA
- CHALK
- CEMENT
- CHERT
- CLAY CHOKE SAND
- CLAYSTONE
- COAL
- CONGLOMERATE
- DOLomite
- DOLOMITIC LIMESTONE
- GRANITE
- GYP SUM
- IGNEOUS
- SIDERITE or LIMONITE
- LIMESTONE
- MARLSTONE
- METAMORPHIC
- NO SAMPLE
- SALT
- SANDSTONE
- SALT-PEPPER SAND
- SHALE
- SHALE COLORED
- SHALE GRAY
- SHALY SANDSTONE
- SHALY SILTSTONE
- SILTSTONE
- TILL
- TUFF
- WELDED TUFF

Porosi

- E EARTH
- FENESTR
- F FRACTUR
- INTERRO
- INTERRO
- MOLDIC
- ORGANIC















































Oil Sho

- DEAD
- EVEN
- QUESTIO
- SPOTTE

Accessories

	Stringer
GASTROPOD	HEAVY MINERAL
INOCERAMUS	KAOLIN
OOLITE	MARCASITE
OSTRACOD	MARLSTONE
PELECYPOD	MICAEOUS
PELIC	MINERAL CRYSTALS
PISOLITE	ODULES
PLANT REMAINS	PHOSPHATE PELLETS
PLANT SPORES	PYRITE
SCAPHOPOD	SALT CAST
STROMATOPOROID	SANDY
	SIDERITE
	SILICEOUS
	SILTY
	TUFFACEOUS
	ANHYDRITE STRINGER
	BENTONITE STRINGER
	COAL STRINGER
	DOLOMITE STRINGER
	GYPSUM STRINGER
	LIMESTONE STRINGER
	MARLSTONE (CALC) STRINGER
	MARLSTONE (DOL) STRINGER
	SANDSTONE STRINGER
	SHALE STRINGER
	SILTSTONE STRINGER

Other Symbols

	P PINPOINT		WIRELINE TESTED - LEFT		E EARTH
	V VUGGY		WIRELINE TESTED - RT		FX FINELYXLN
Engineering					
	D DISABLE		FORMATION TOP		ST DRILL STEM TEST
	BIT		GAS SHOW		MIN DEPTH
	OIL SHOW		MN DEPTH UP		MN DEPTH
	C CONNECTION (UP)		MN DEPTH (DOWN)		A ANGULAR
	C CONNECTION (DOWN)		NORMAL FAULT		R ROUNDED
	C CONNECTION GAS		OVERTURNED STRATA		S SUBANG
	C CONNECTION GAS (LEFT)		REVERSE FAULT		S SUBRND
	T TRIP GAS		CASING	Textures	
	T TRIP GAS (LEFT)		SIDEWALL CORE (LEFT)		B BOUNDSTONE
	D DOWN TIME GAS		SIDEWALL CORE (RIGHT)		C CHALKY
	D DOWN TIME GAS (LEFT)		SURVEY		CX CRYPTOXLN
	C CORE - LOST	Rounding			
	C CORE - RECOVERED		MS PACKSTONE		MS MUDSTONE
Sorting					
	W WACKESTONE		P POOR		W WELL
	M MODERATE				

COLUMBINE LOGGING

ROP (ft/hr)
GAMMA (units)
Columbine Logging Inc. Rigged Up 2 man
logging 3/23/2018 Chromatograph Gas Unit
#0311, began logging from 6000' MD at 7:20
AM, MDT on 3/25/18.

Gamma Data and Survey Data Provided by
Baker Hughes

Total Gas & Chromatograph

- GAS —
C1 - - -
C2 - - -
C3 - - -
C4 - - -

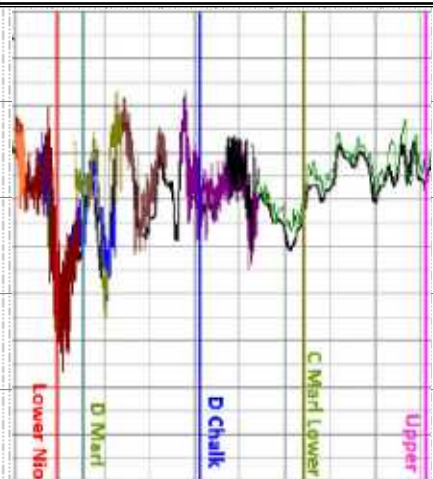
Gas Data From Bloodhound Unit #0311,
data imported via Rig Watch and Gaschart

Depth Labels

% Lith

Well Bore
TVD —

Target Formation/Member:
Niobrara D Chalk



Bit Data
Bit #: 2
Type: HCC AT505F
Size: 8.5
Depth In: 2108'
Depth Out: 18'
Jets: 5x14s
S/N: 118

MUD WT IN: 9.35 V/S: 52
MUD WT OUT: 9.35 V/S:

ROP: 316 ft/hr
RPM: 100
SPM: 3102
STRK 1: 103 SPM
STRK 2: 103 SPM
WOB: 18 klbs

GAS (units)
C1-C4 (units)

252u
268u

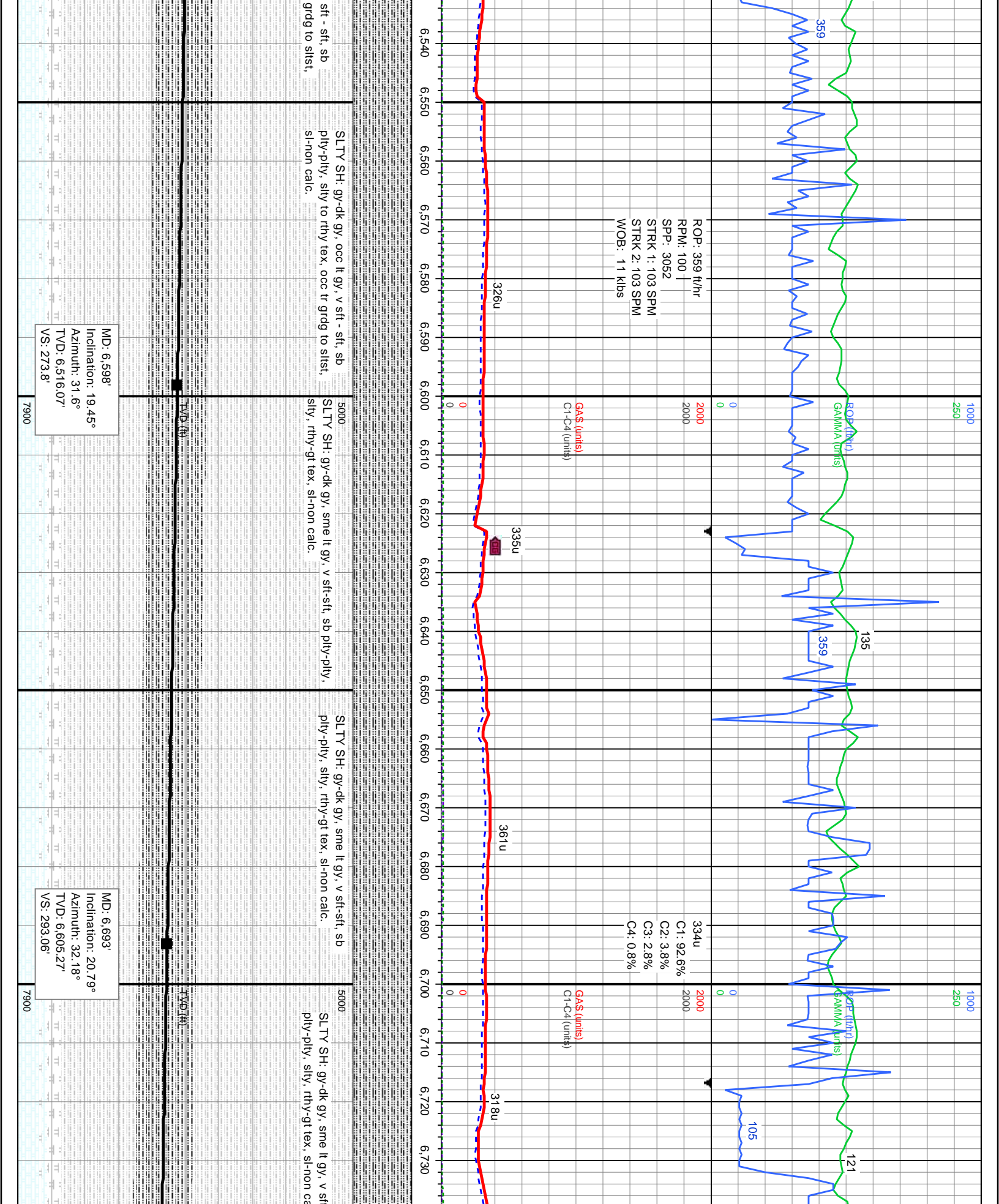
5SLTY SH: gy-dk gy, occ lt gy, v sft - sft, sb
ply-pty, silty to rthy tex, tr grgd to slst in pt, sl
calc with some tr SLTST: med gy- gy, sl frm, sb
biky- occ sb ply, rthy-silty tex, sl calc.

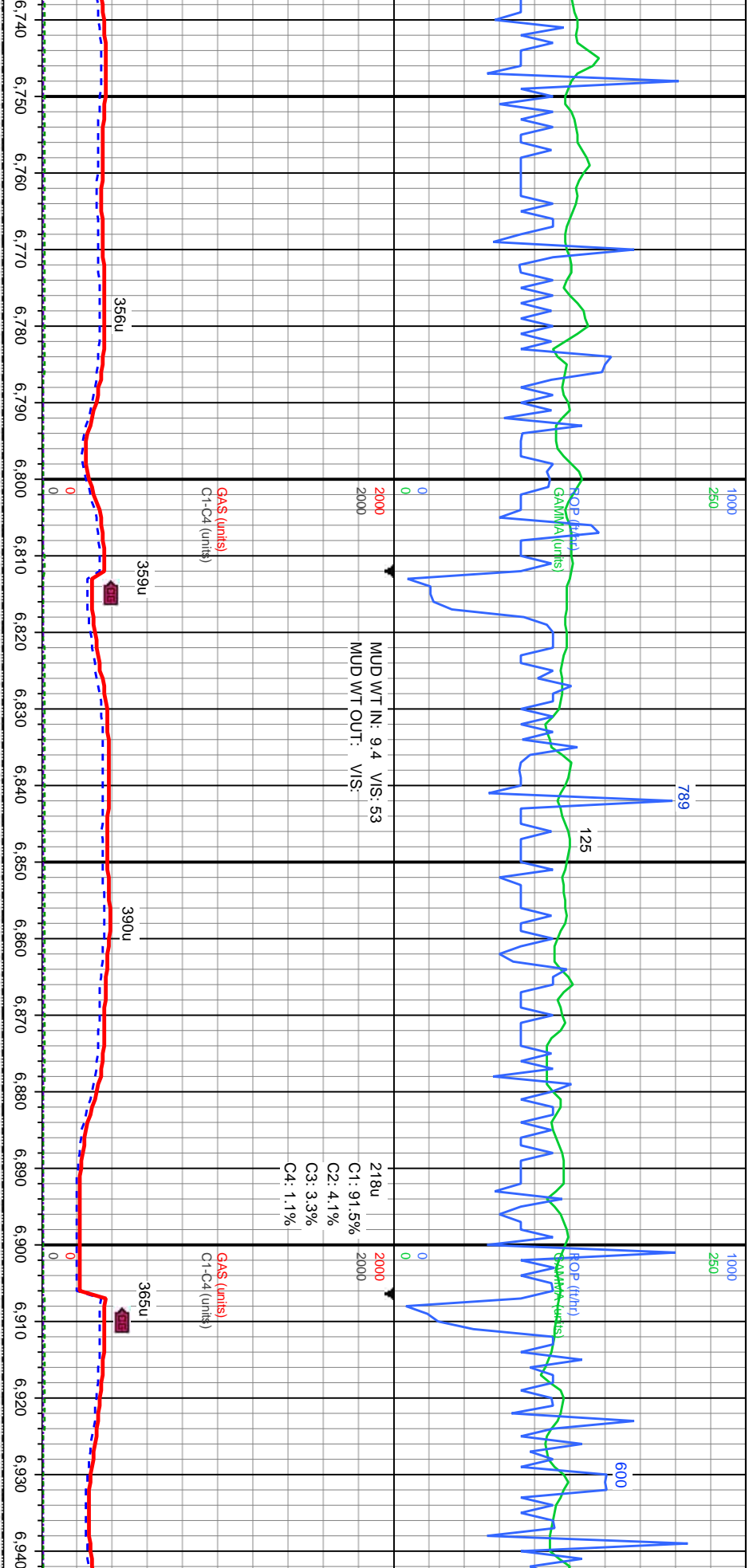
SLTY SH: gy-dk gy, occ lt gy, v sft - sft, sb
ply-pty, silty to rthy tex, tr grgd to slst in pt,
sl calc w/ tr SLTST: med gy- gy, sl frm, sb
biky- occ sb ply, rthy-silty tex, sl calc.

SLTY SH: gy-dk gy, o
ply-pty, silty to rthy t
sl-non calc.

MD: 6.032'
Inclination: 20.9°
Azimuth: 28.42°
TVD: 5.983.76'
VS: 167.12'

MD: 6
Inclina
Azimu
TVD: t
VS: 16





MUD WT IN: 9.4 VIS: 53
MUD WT OUT: VIS:

218u
C1: 91.5%
C2: 4.1%
C3: 3.3%
C4: 1.1%

SLTY SH: gy-dk gy, sme lt gy, v sft-sft, sb
ply-pty, silty, rthy-gt tex, sl-non calc.

SLTY SH: gy-dk gy, sme lt gy, v sft-sft, sb
ply-pty, silty, rthy-gt tex, sl-non calc.

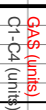
SLTY SH: gy-dk gy, sme lt gy, v sft-sft, sb
ply-pty, silty, rthy-gt tex, sl-non calc.

MD: 6,787'
Inclination: 20.75°
Azimuth: 30.08°
TVD: 6,693.16'
VS: 312.34'

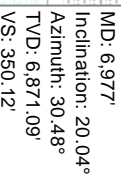
MD: 6,882'
Inclination: 20.67°
Azimuth: 30.39°
TVD: 6,782.03'
VS: 331.34'



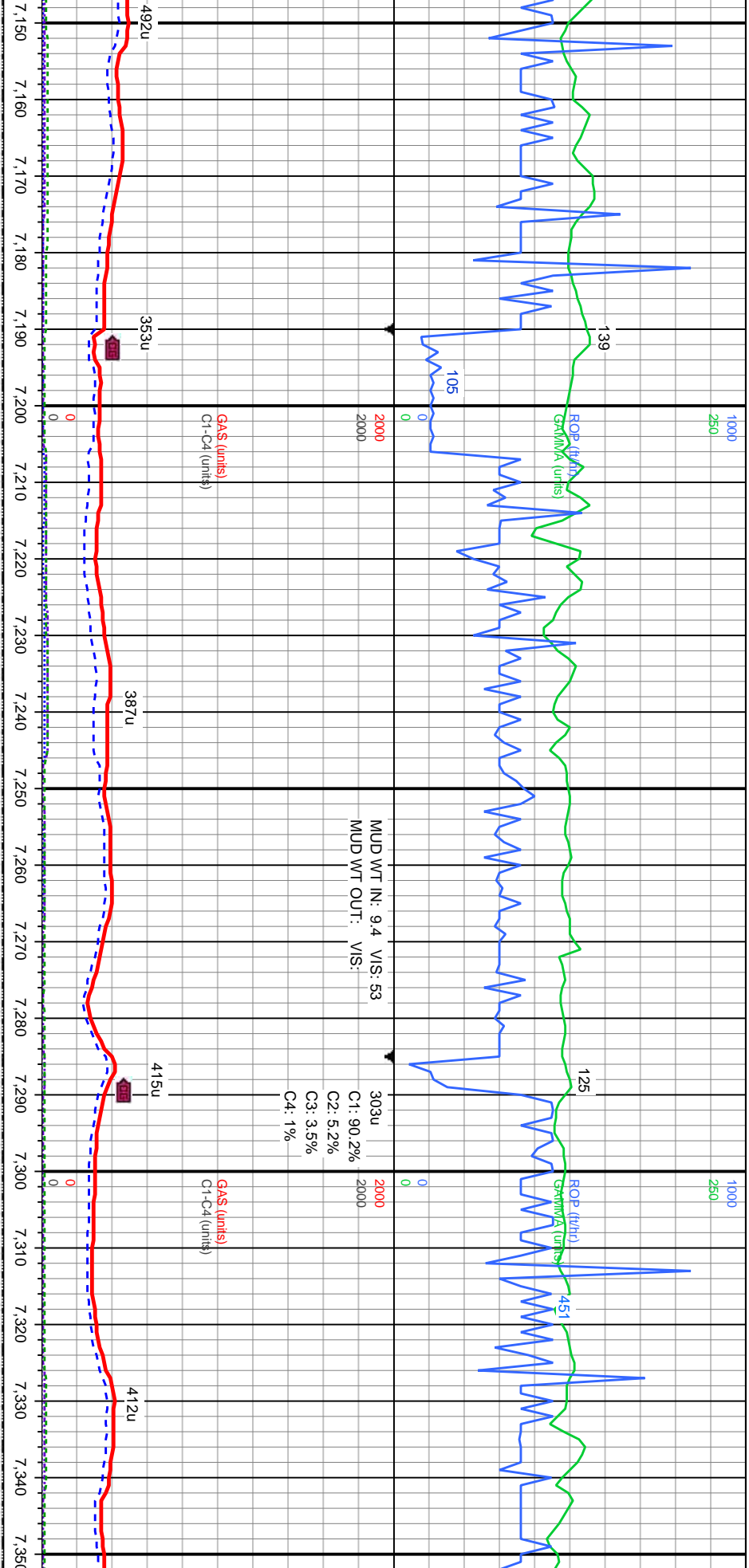
443u	
C1: 89.3%	
C2: 5.7%	
C3: 3.6%	
C4: 1.4%	



SLTY SH: gy-dk gy, sme lk gy, v sft-sft, sb
ply-pty, sfty, rthy-gt tex, sl-non calc. wi tr
Bent.

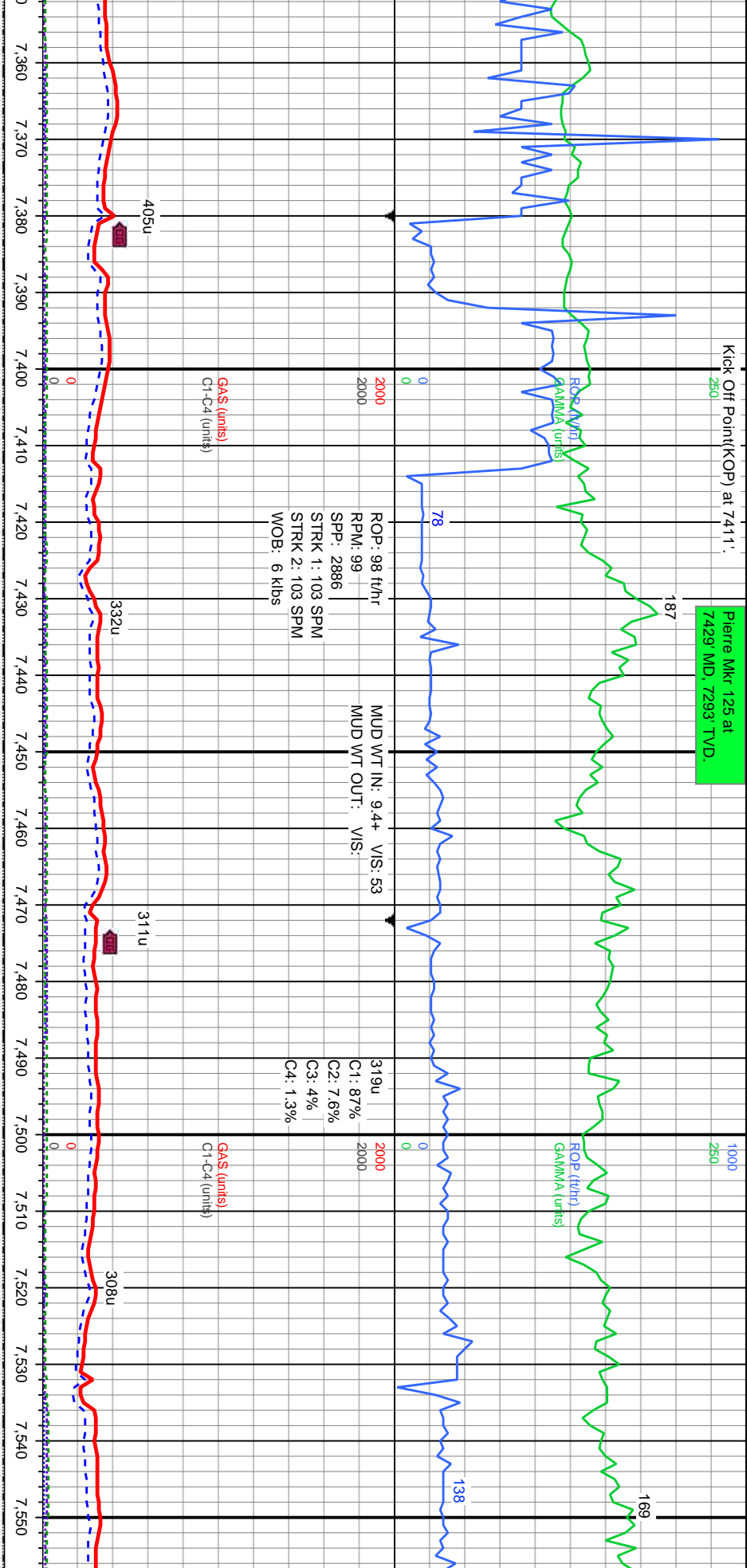


MD: 7,072'
Inclination: 20.08°
Azimuth: 32.17°
TVD: 6,960.33'
VS: 369.06'



SLTY SH: gy-dk gy, sme lt gy, v sft-sft, sb pily-pily, silty, rthy-gf tex, sl-non calc. wi tr Bent.		5000	SLTY SH: lt-med gy, occ dk gy, sb pily-pily, v sft-sft, occ silty in pt, rthy tex, occ wxy lstr, sl-non calc		5000
MD: 7,166' Inclination: 19.84° Azimuth: 32.87° TVD: 7,048.68' VS: 388.25'		TVD (ft)	MD: 7,261' Inclination: 22.15° Azimuth: 29.35° TVD: 7,137.38' VS: 407.87'		TVD (ft)
VS: 388.25'		7900	VS: 420.87'		7900

Kick Off Point(KOP) at 7411'.
250
Pierre Mkr 125 at
7429' MD, 7293' TVD.



ROP: 98 ft/hr
RPM: 99
SPP: 2886
STRK 1: 103 SPM
STRK 2: 103 SPM
WOB: 6 klbs

MUD WT IN: 9.4+ V/S: 53
MUD WT OUT: V/S:

319u
C1: 87%
C2: 7.6%
C3: 4%
C4: 1.3%

GAS (units)
C1-C4 (units)

GAS (units)
C1-C4 (units)

SLTY SH: lt-med gy, occ dk gy, sb pily-pily, v
sft-sft, occ silty in pt, rthy tex, occ wxy lstr,
si-non calc

SLTY SH: gy-dk gy, sme lt gy, v sft-sft, sb
pily-pily, silty, rthy-gt tex, si-non calc.

SLTY SH: gy-dk gy, sme lt gy, v sft-sft, sb
pily-pily, silty, rthy-gt tex, si-non calc.

SLTY SH: med gy-dk gy, occ lt gy, v sft-sft, sb
pily- pily, silty, rthy-gt tex, si-non calc.

SLTY SH: med gy-dk gy, occ lt gy, v sft-sft, sb
pily- pily, silty, rthy-gt tex, si-non calc.

MD: 7.450'
Inclination: 23.35°
Azimuth: 38.85°
TVD: 7.312.38'
V/S: 448.84'

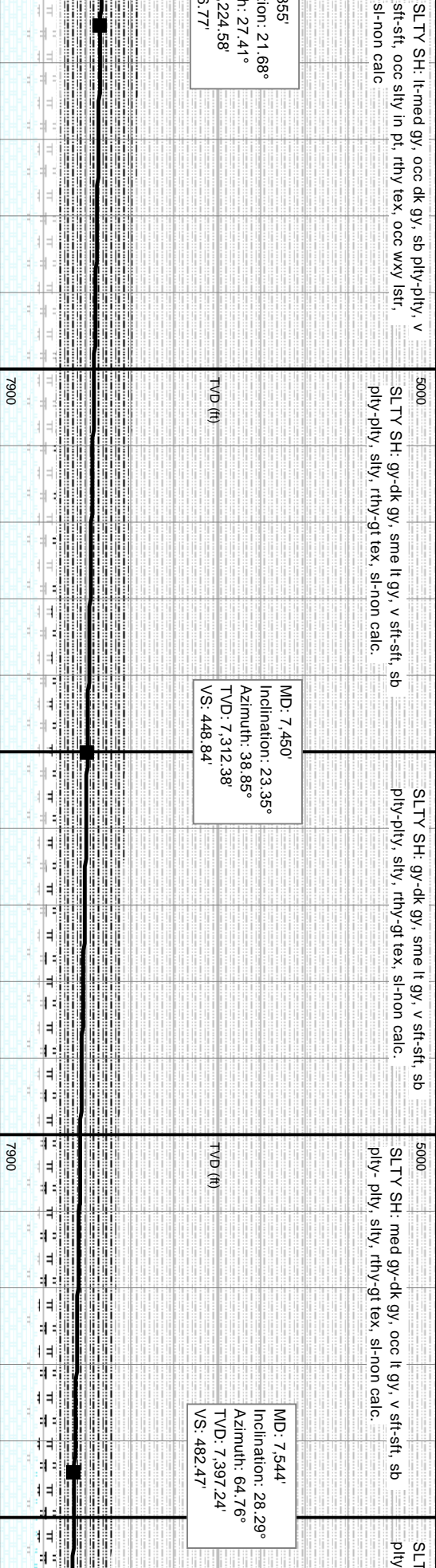
TVD (ft)

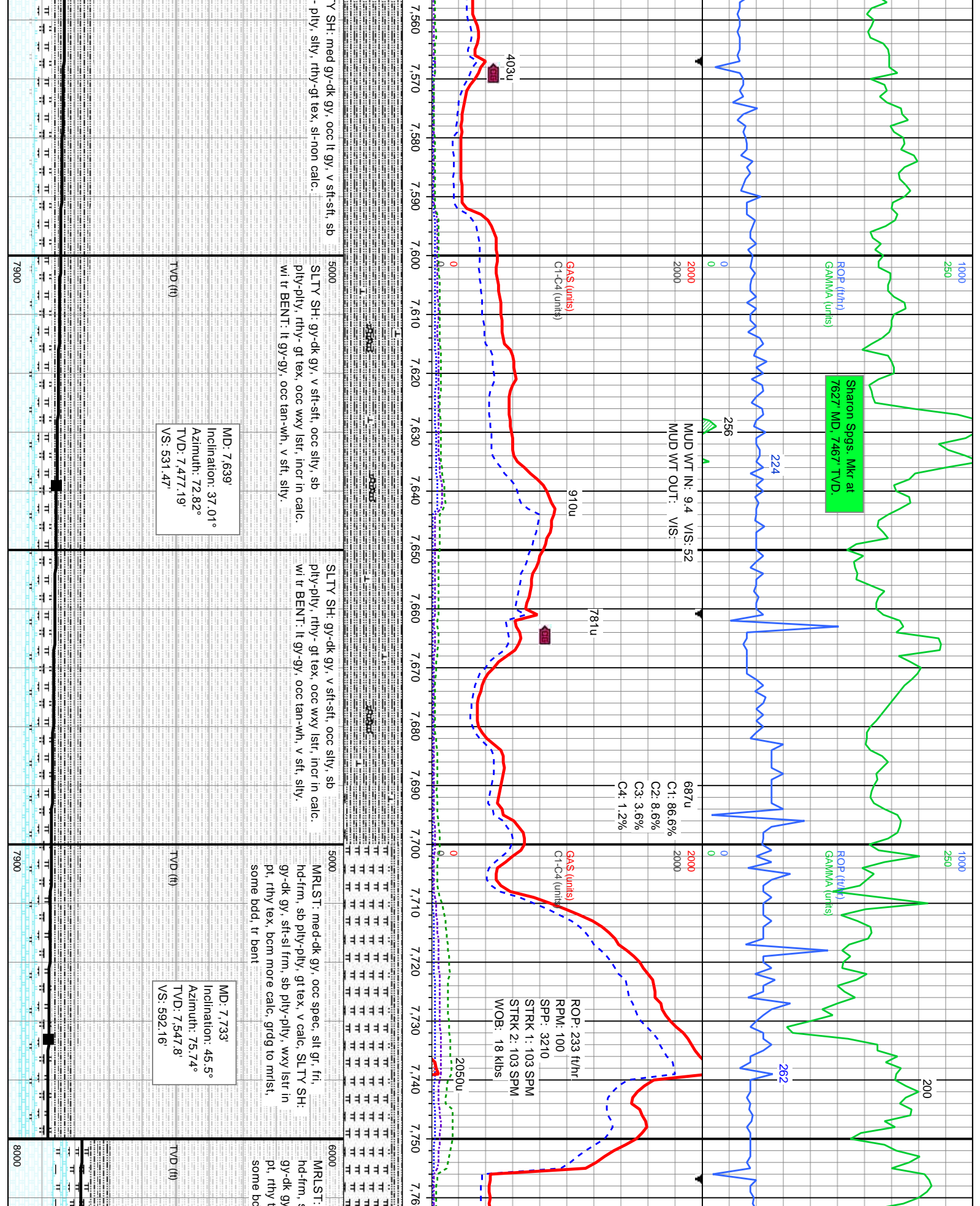
MD: 7.450'
Inclination: 23.35°
Azimuth: 38.85°
TVD: 7.312.38'
V/S: 448.84'

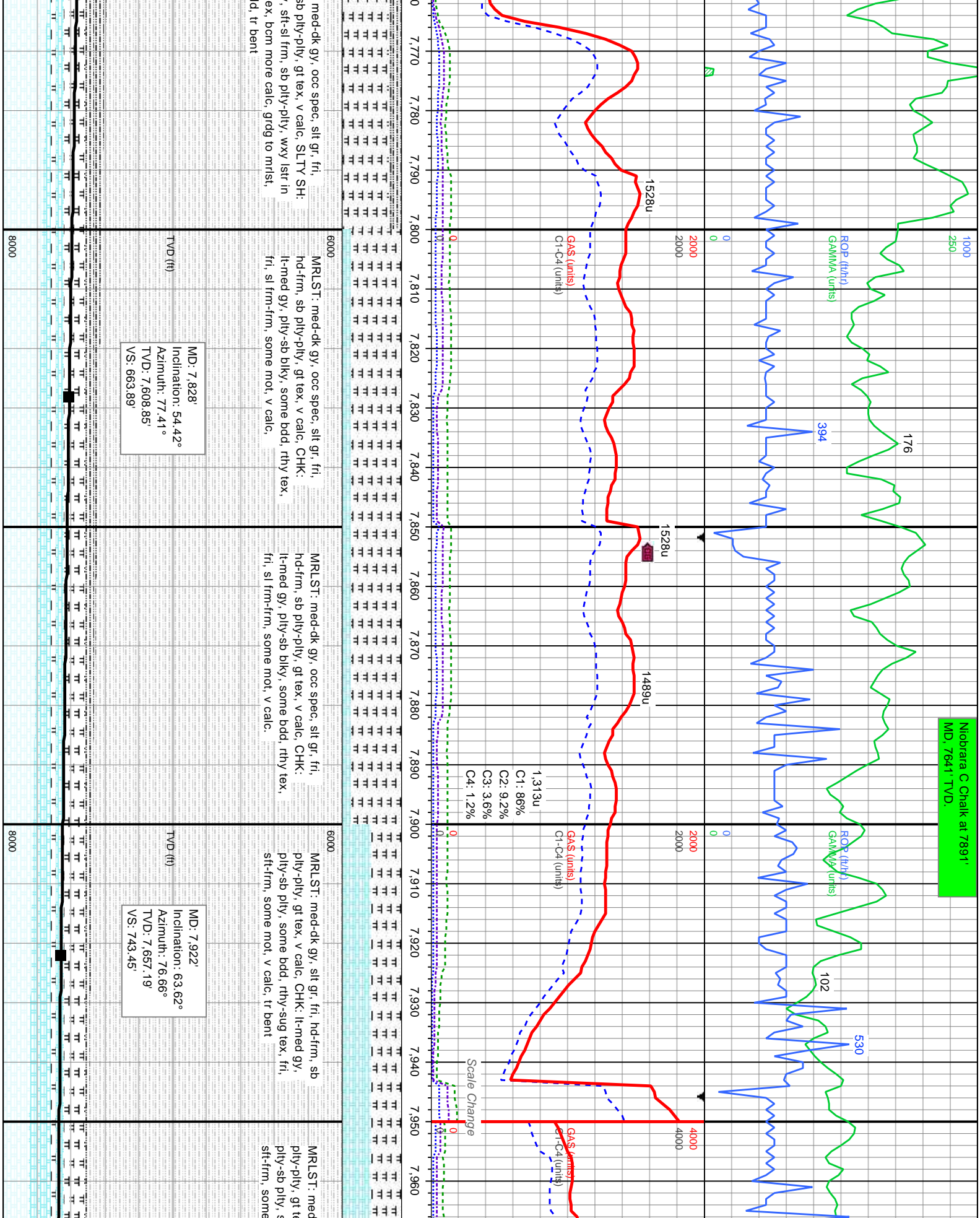
TVD (ft)

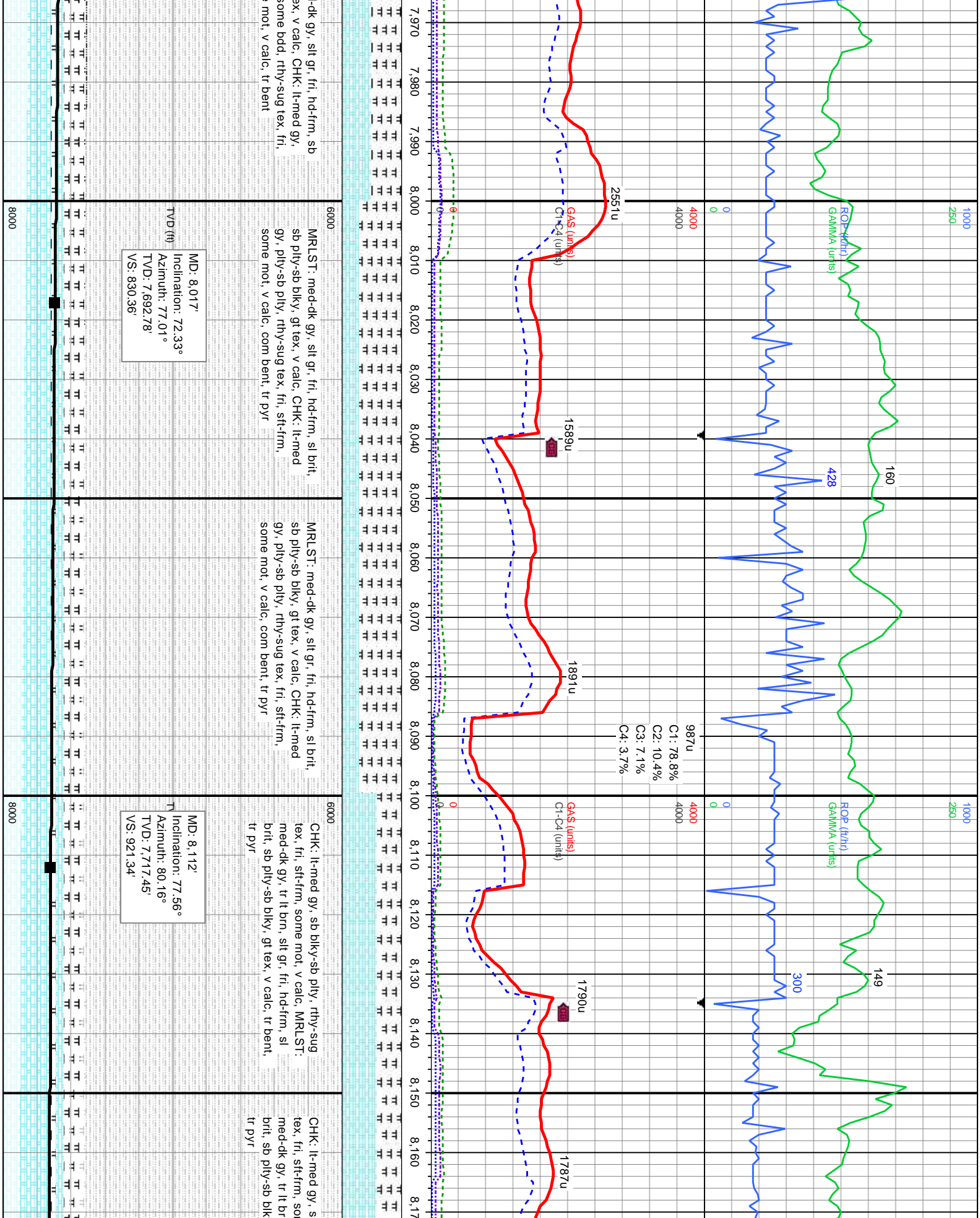
MD: 7.544'
Inclination: 28.29°
Azimuth: 64.76°
TVD: 7.397.24'
V/S: 482.47'

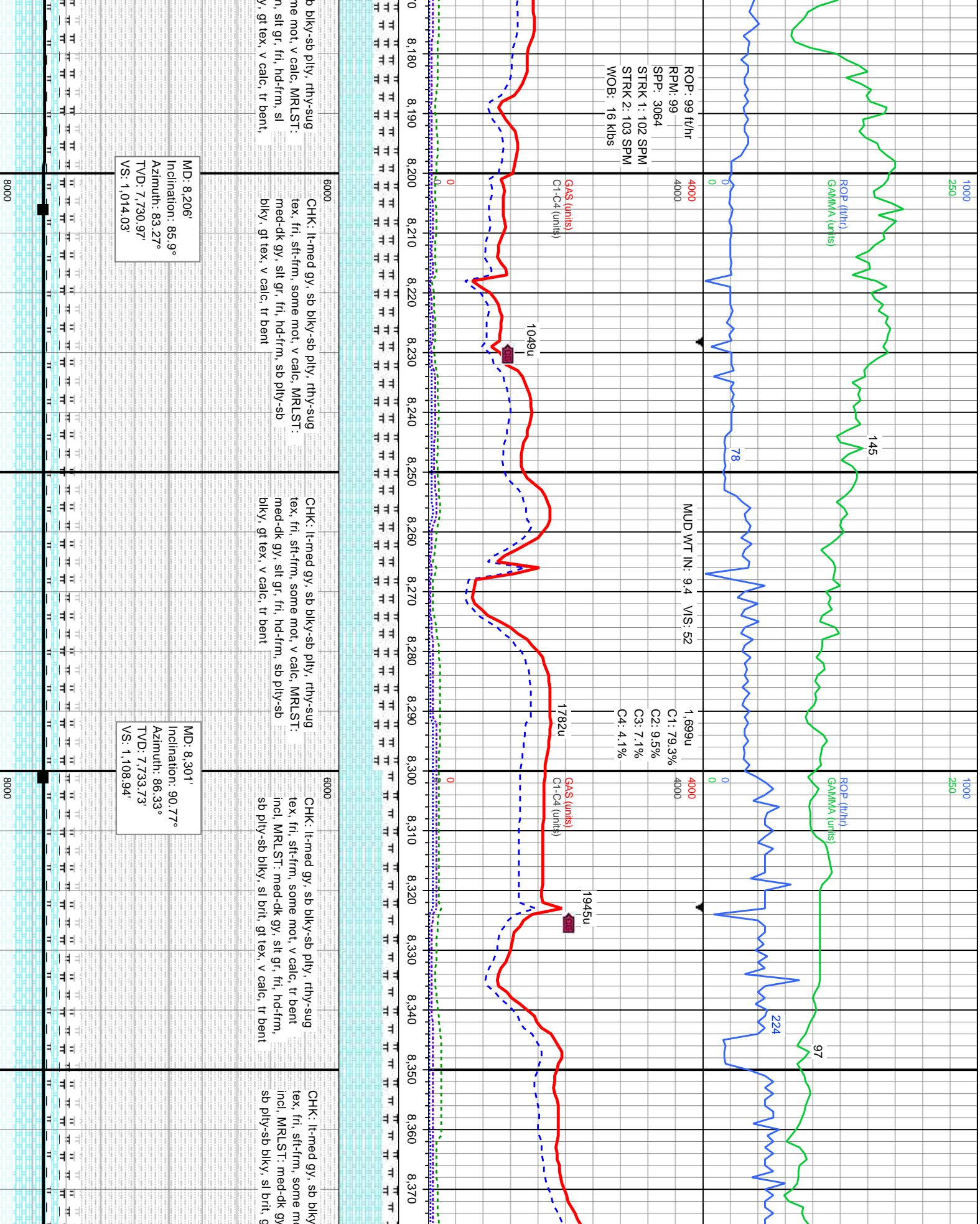
TVD (ft)

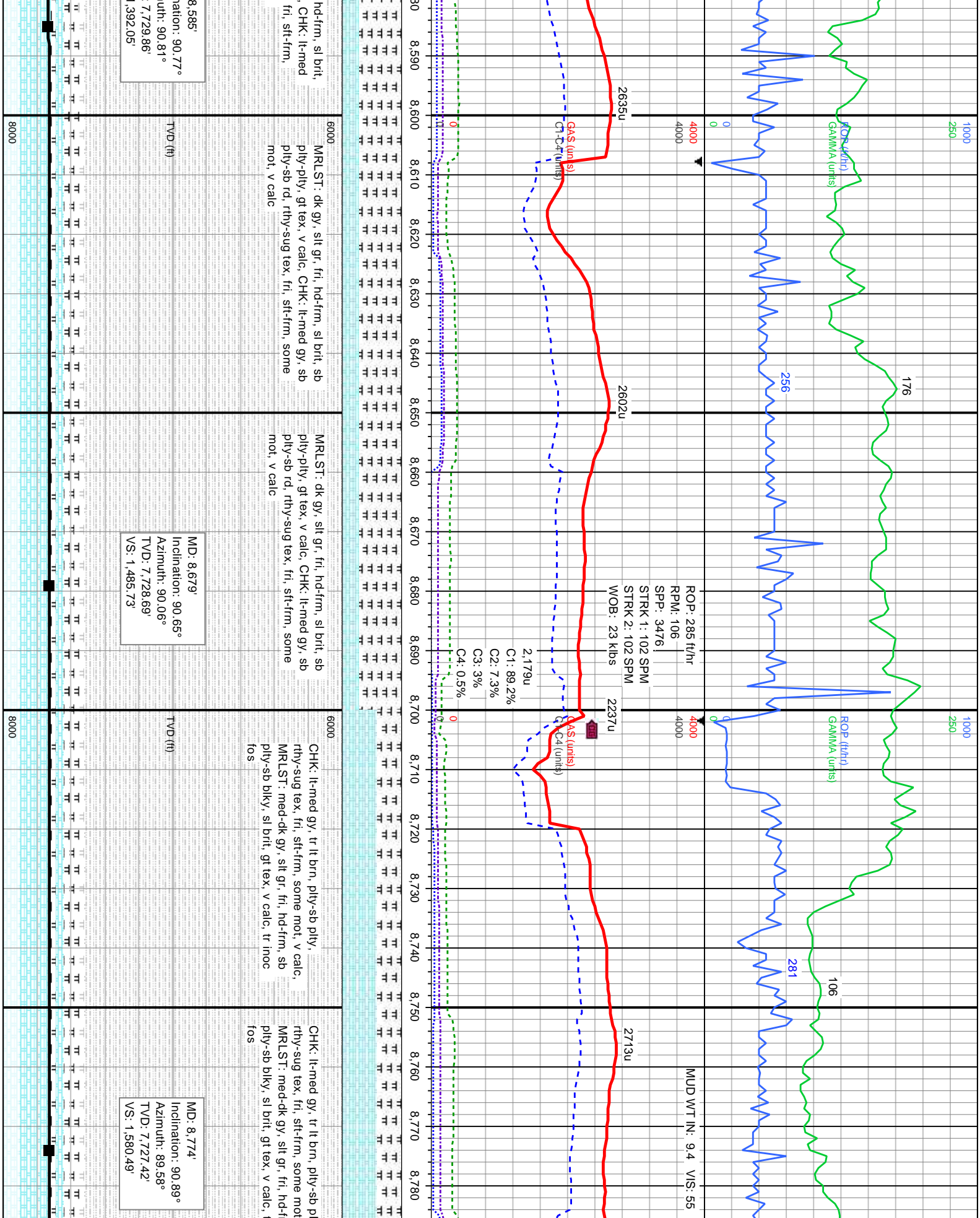


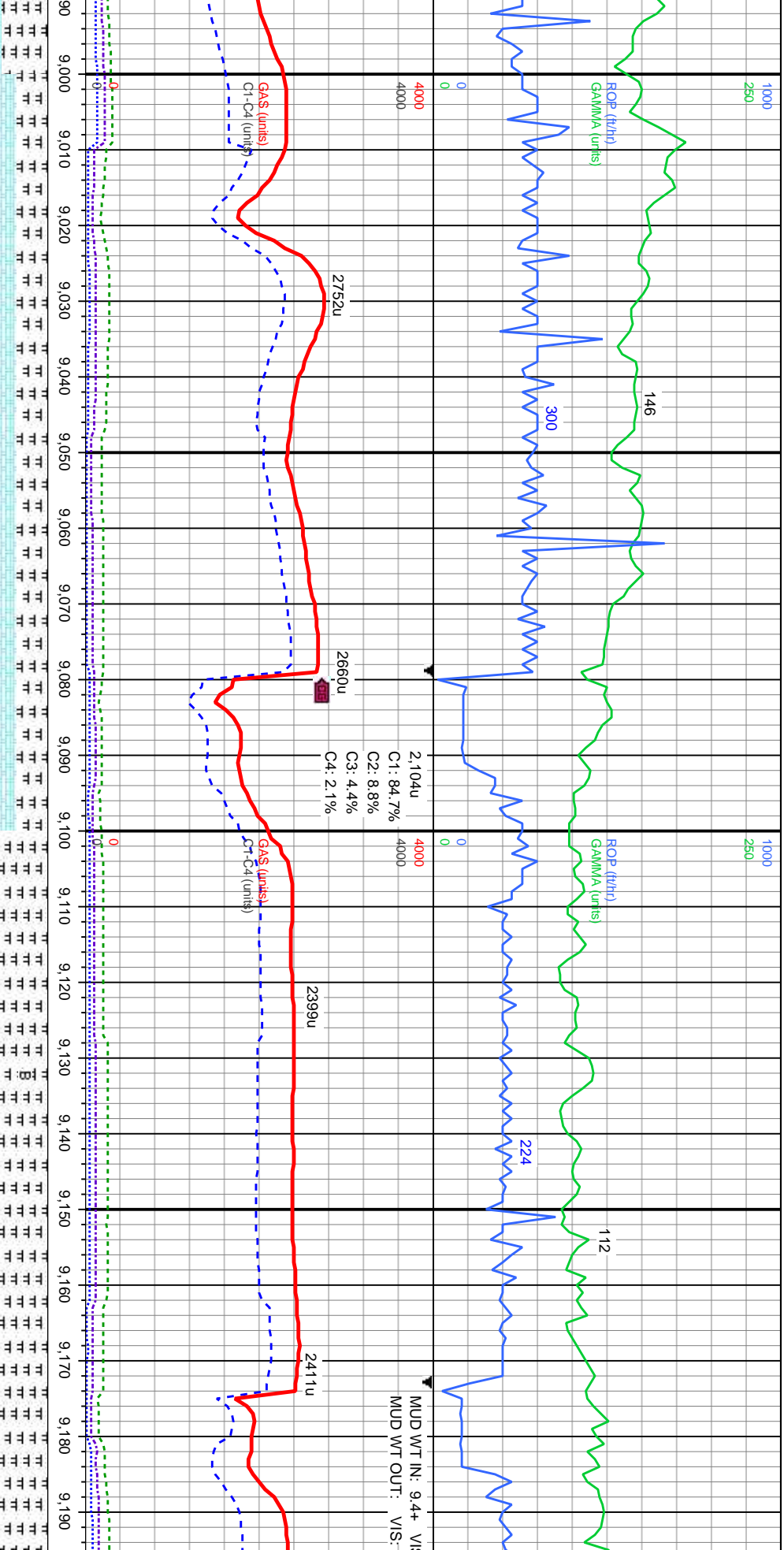












t, sb
t, sb
e mot,

CHK: lt-med gy, lt brn, pily-sb pily, rthy-sug
tex, fri, frm, some mot, v calc, MRLST:
med-dk gy, slt gr, fri, hd-frm, sb pily, sl brit,
gt tex, v calc, tr inoc fos

CHK: lt-med gy, lt brn, pily-sb pily, rthy-sug
tex, fri, frm, some mot, v calc, MRLST:
med-dk gy, slt gr, fri, hd-frm, sb pily, sl brit,
gt tex, v calc, tr inoc fos

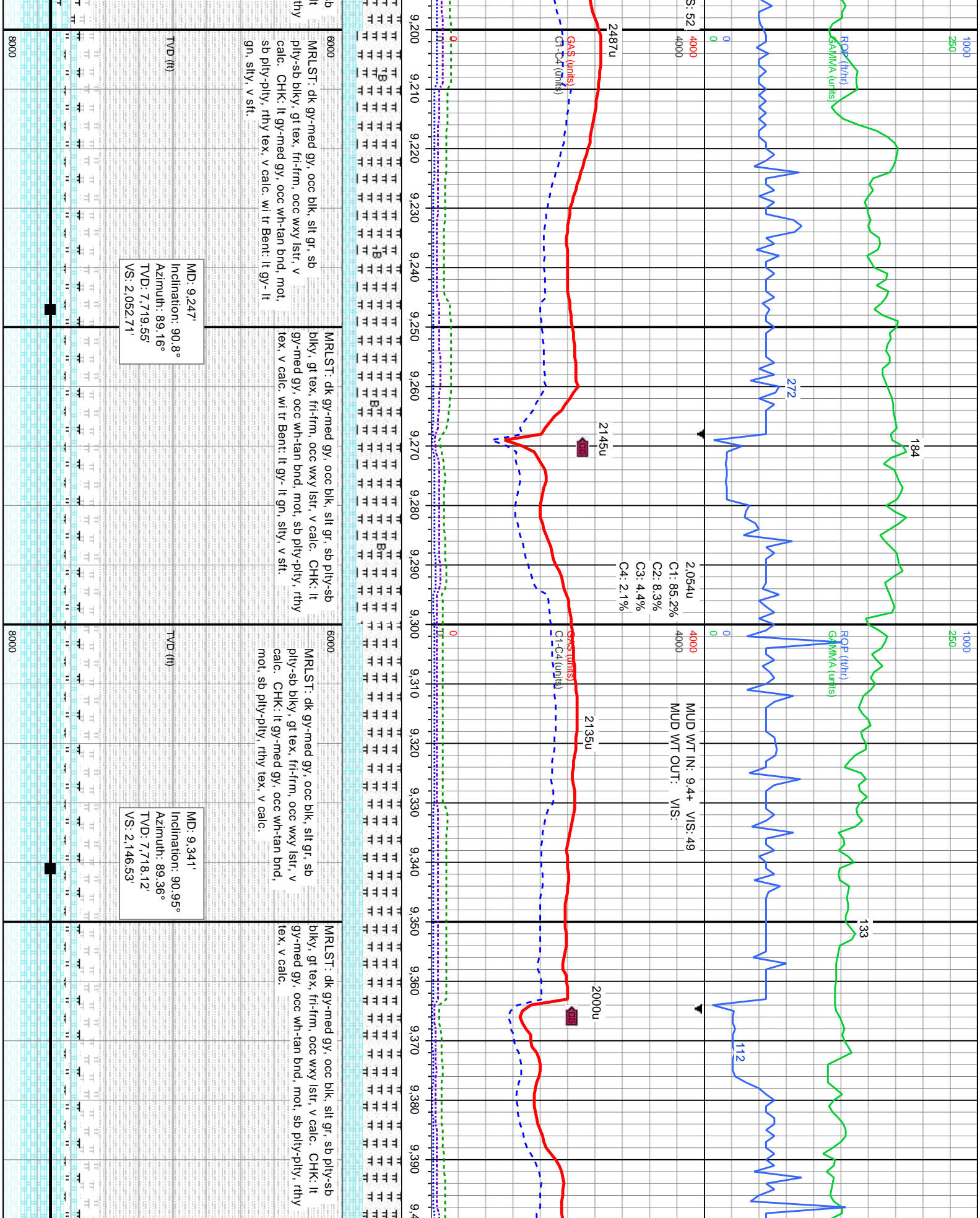
MRLST: dk gy-med gy, occ blk, slt gr, sb pily-sb
blk, gt tex, fri-frm, occ wxy lstr, v calc, CHK: lt
gy-med gy, occ wh-tan bnd, mot, sb pily-pily, rthy
tex, v calc, wi tr Bent: lt gy- lt gn, slty, v sft.

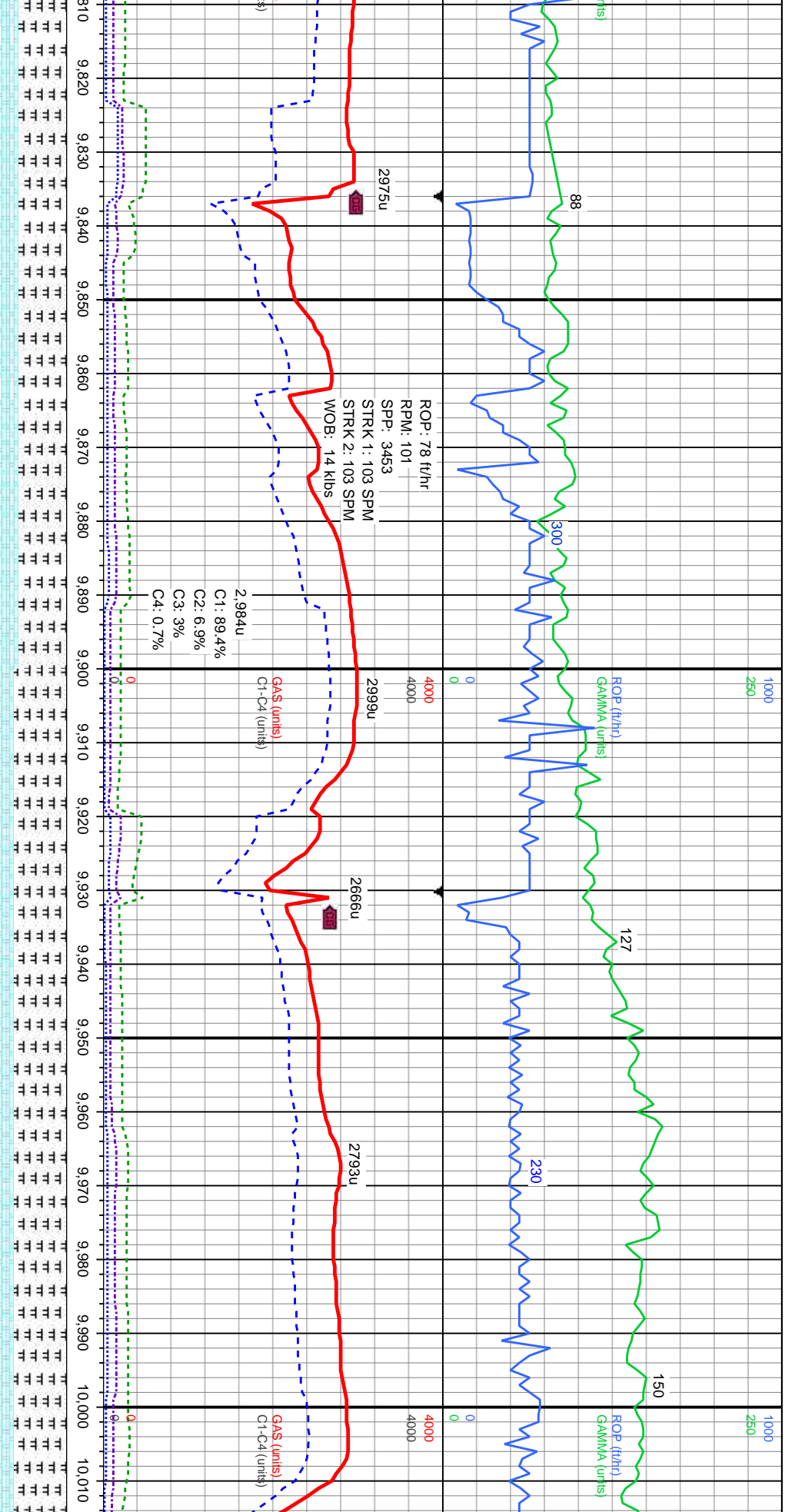
MRLST: dk gy-med gy, occ blk, slt gr, sb pily-s
blk, gt tex, fri-frm, occ wxy lstr, v calc, CHK: lt
gy-med gy, occ wh-tan bnd, mot, sb pily-pily, r
tex, v calc, wi tr Bent: lt gy- lt gn, slty, v sft.

MD: 9,058'
Inclination: 90.74°
Azimuth: 88.4°
TVD: 7,722.65'
VS: 1,863.94'

MD: 9,153'
Inclination: 91.11°
Azimuth: 88.11°
TVD: 7,721.12'
VS: 1,958.84'

MUD WT IN: 9.4+ V/
MUD WT OUT: VS:





dk gy-med gy, silt gr, rthy-gt tex, sb
fri-frim, occ hd, occ wxy lst, v calc.
med gy-lt gy, occ wh-tan bnd, sb ply-sb
fri-frim, rthy tex, v calc.

MRLST: dk gy-med gy, silt gr, rthy-gt tex, sb
ply-pty, fri-frim, occ hd, occ wxy lst, v calc.
CHK: med gy-lt gy, occ wh-tan bnd, sb ply-sb
biky, fri-frim, rthy tex, v calc.

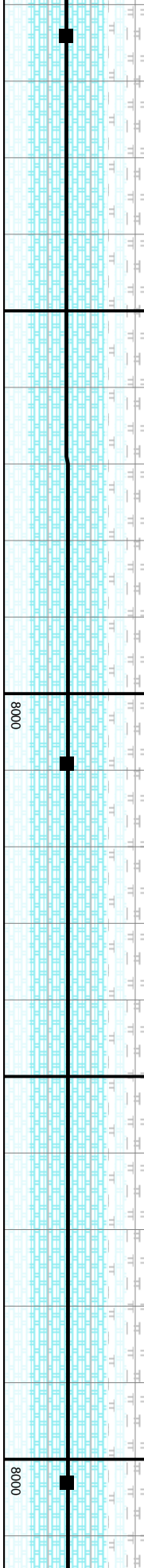
MRLST: dk gy-med gy, silt gr, rthy-gt tex, sb
ply-pty, fri-frim, occ hd, occ wxy lst, v calc.
CHK: med gy-lt gy, occ wh-tan bnd, sb ply-sb
biky, fri-frim, rthy tex, v calc.

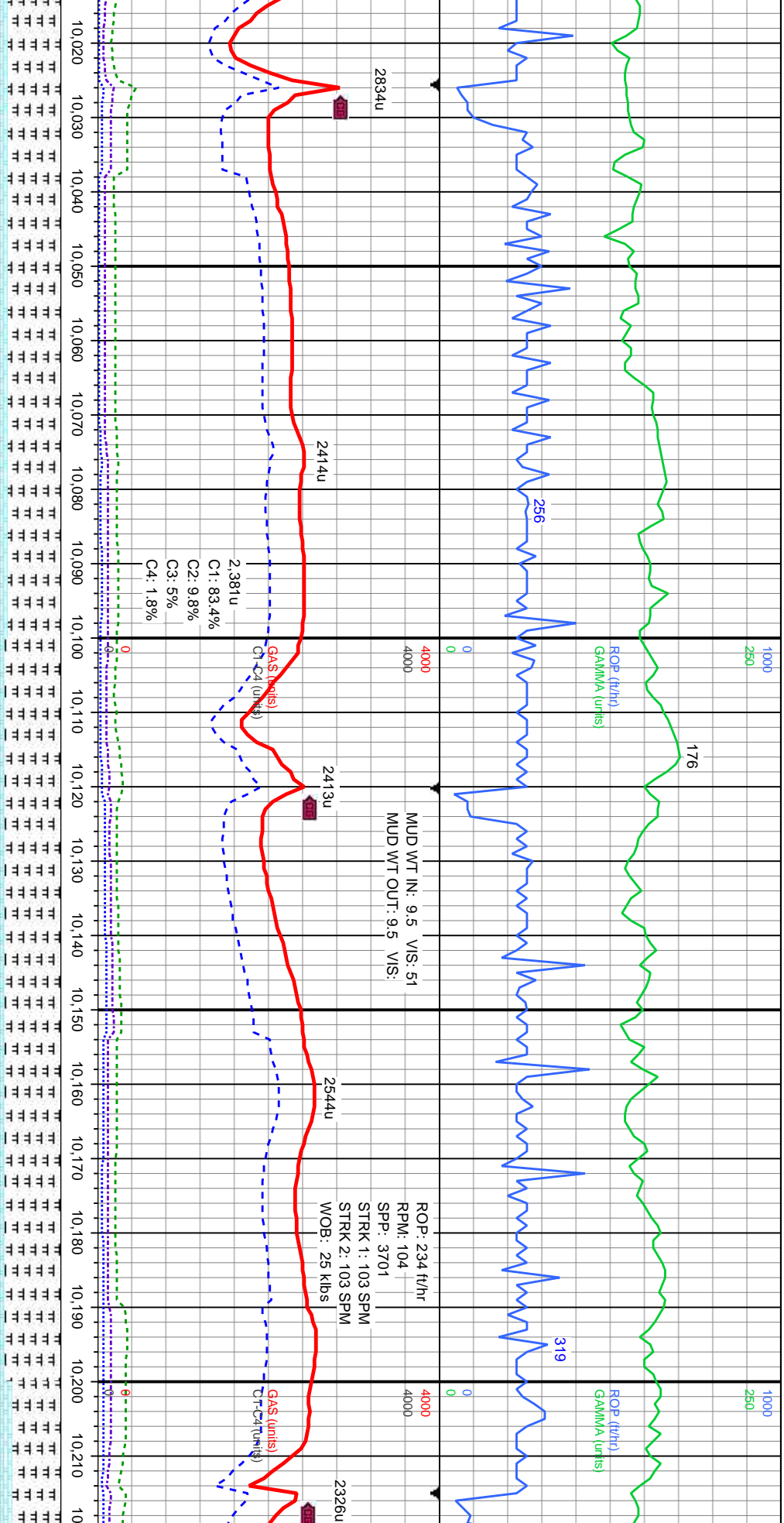
MRLST: dk gy-med gy, silt gr, rthy-gt tex, sb
ply-pty, fri-frim, occ hd, occ wxy lst, v calc.
CHK: med gy-lt gy, occ wh-tan bnd, sb ply-sb
biky, fri-frim, rthy tex, v calc.

9,814'
Inclination: 90.98°
Azimuth: 94.91°
TVD: 7,709.8'
VS: 2,615.21'

MD: 9,909'
Inclination: 91.14°
Azimuth: 93.61°
TVD: 7,708.05'
VS: 2,709.16'

MD: 10,003'
Inclination: 90.92°
Azimuth: 92.77°
TVD: 7,706.36'
VS: 2,802.36'





med gy, slt gr, rthy-gt tex, sb
m, occ hd, occ wxy lstr, v calc.
lt-gy, occ wh-tan bnd, sb ply-sb
rthy tex, v calc.

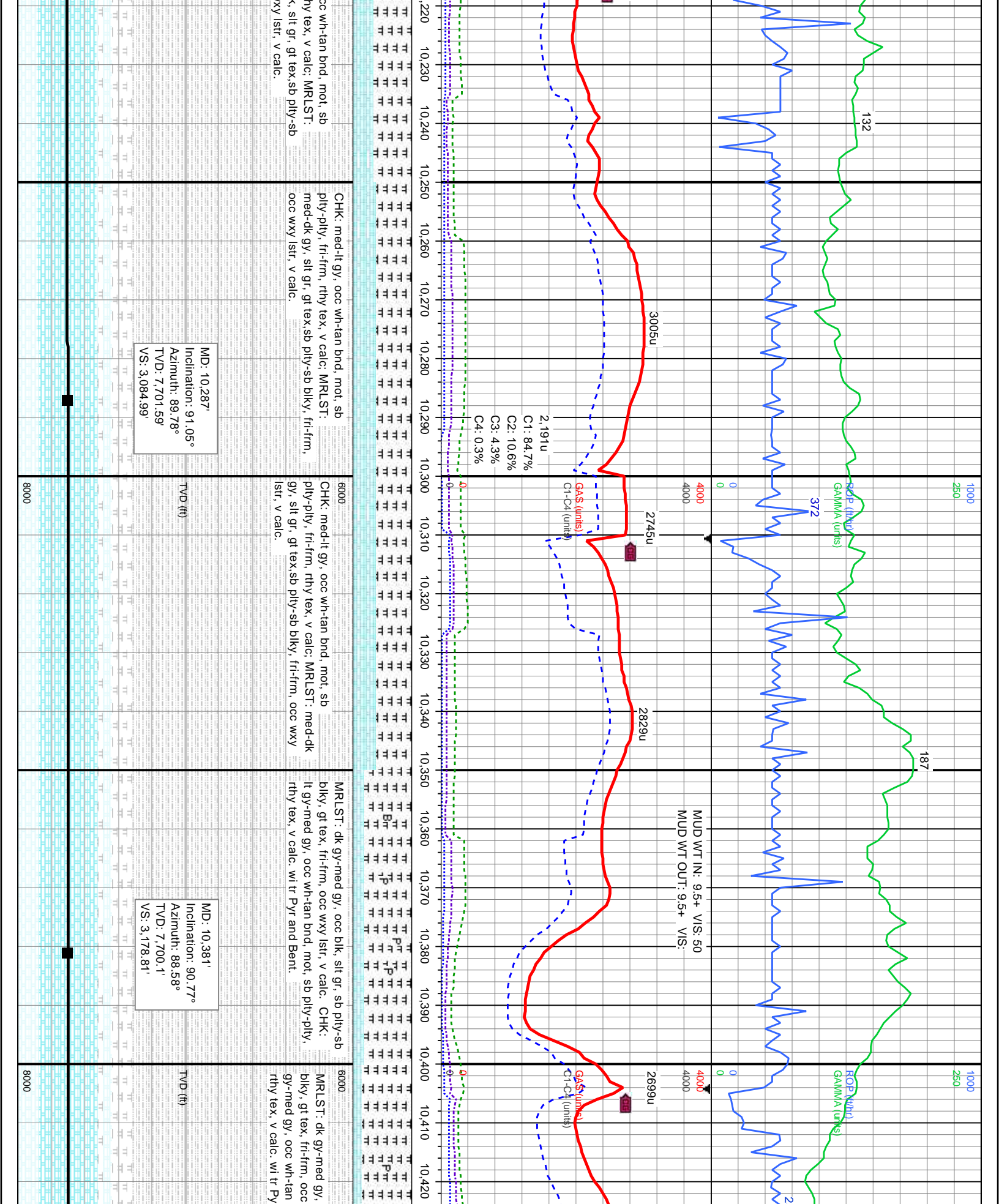
MRLST: dk gy-med gy, slt gr, rthy-gt tex, sb
ply-ply, fri-frm, occ hd, occ wxy lstr, v calc.
CHK: med gy-lt gy, occ wh-tan bnd, sb ply-sb
biky, fri-frm, rthy tex, v calc.

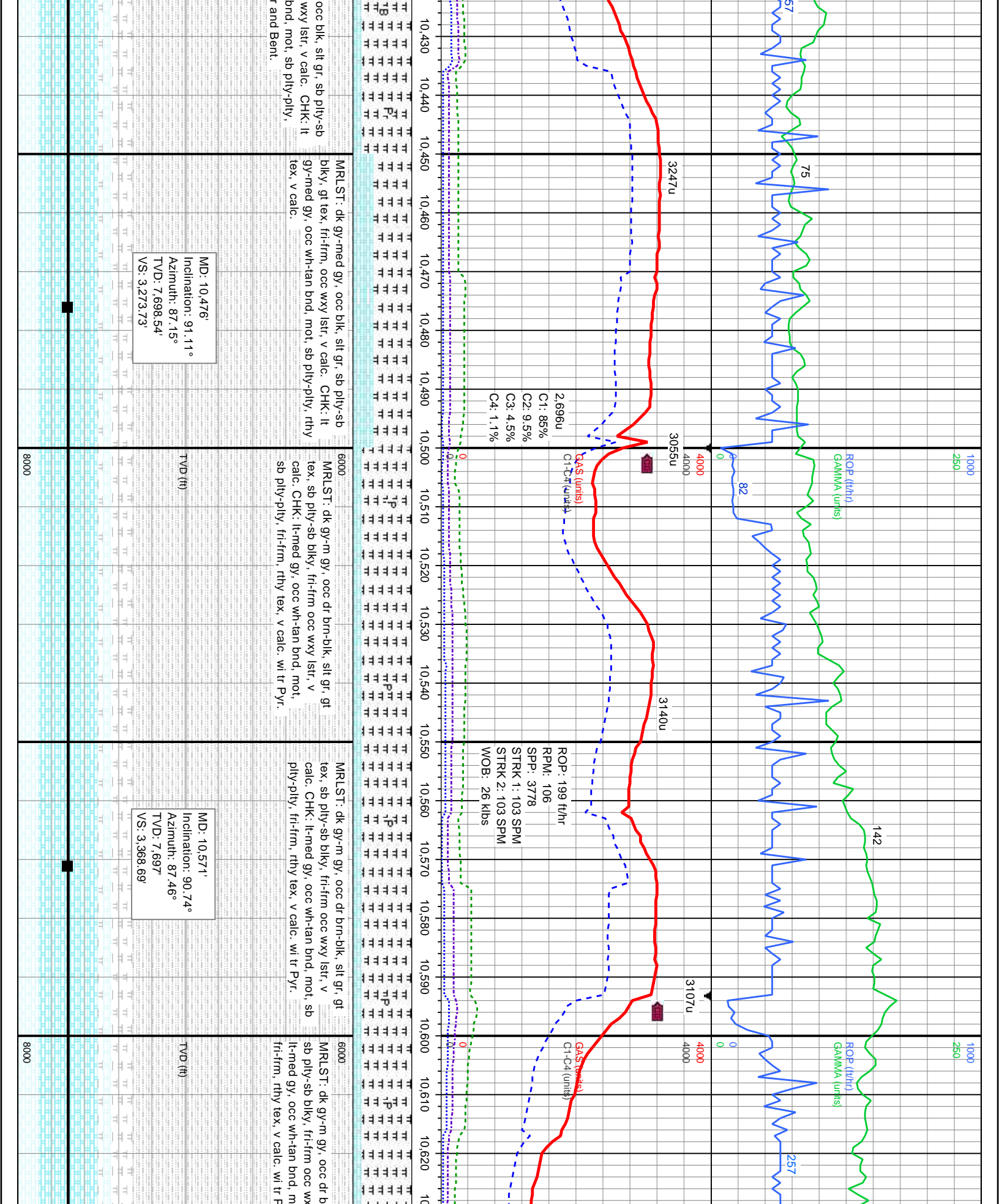
6000 MRLST: dk gy-m gy, occ dr brn-blk, slt gr, gt
tex, sb ply-sb biky, fri-frm occ wxy lstr, v
calc. CHK: lt-med gy, occ wh-tan bnd, mot, sb
ply-ply, fri-frm, rthy tex, v calc. wi tr Pyr.

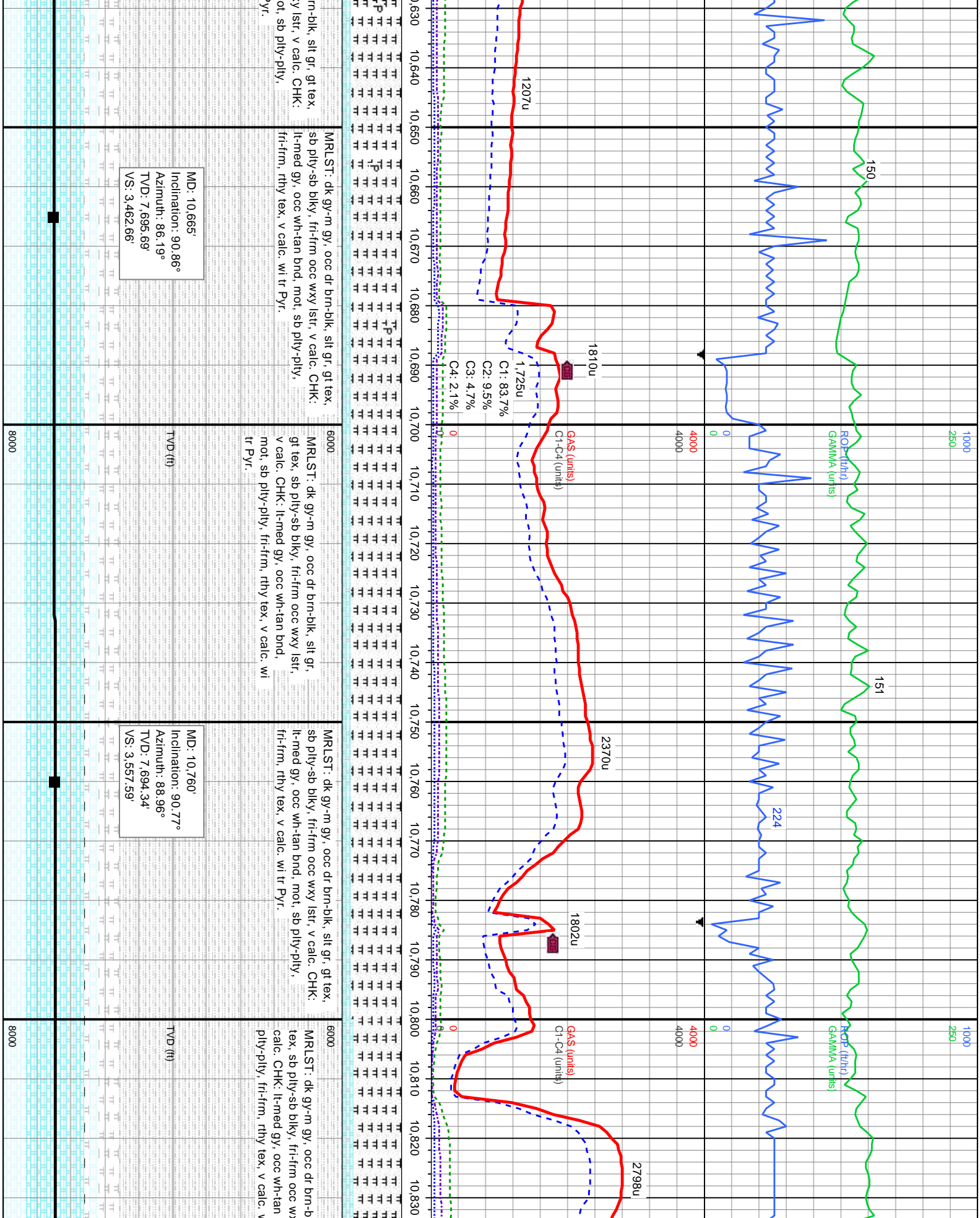
6000 MRLST: dk gy-m gy, occ dr brn-blk, slt gr, gt
tex, sb ply-sb biky, fri-frm occ wxy lstr, v
calc. CHK: lt-med gy, occ wh-tan bnd, mot, sb
ply-ply, fri-frm, rthy tex, v calc. wi tr Pyr.

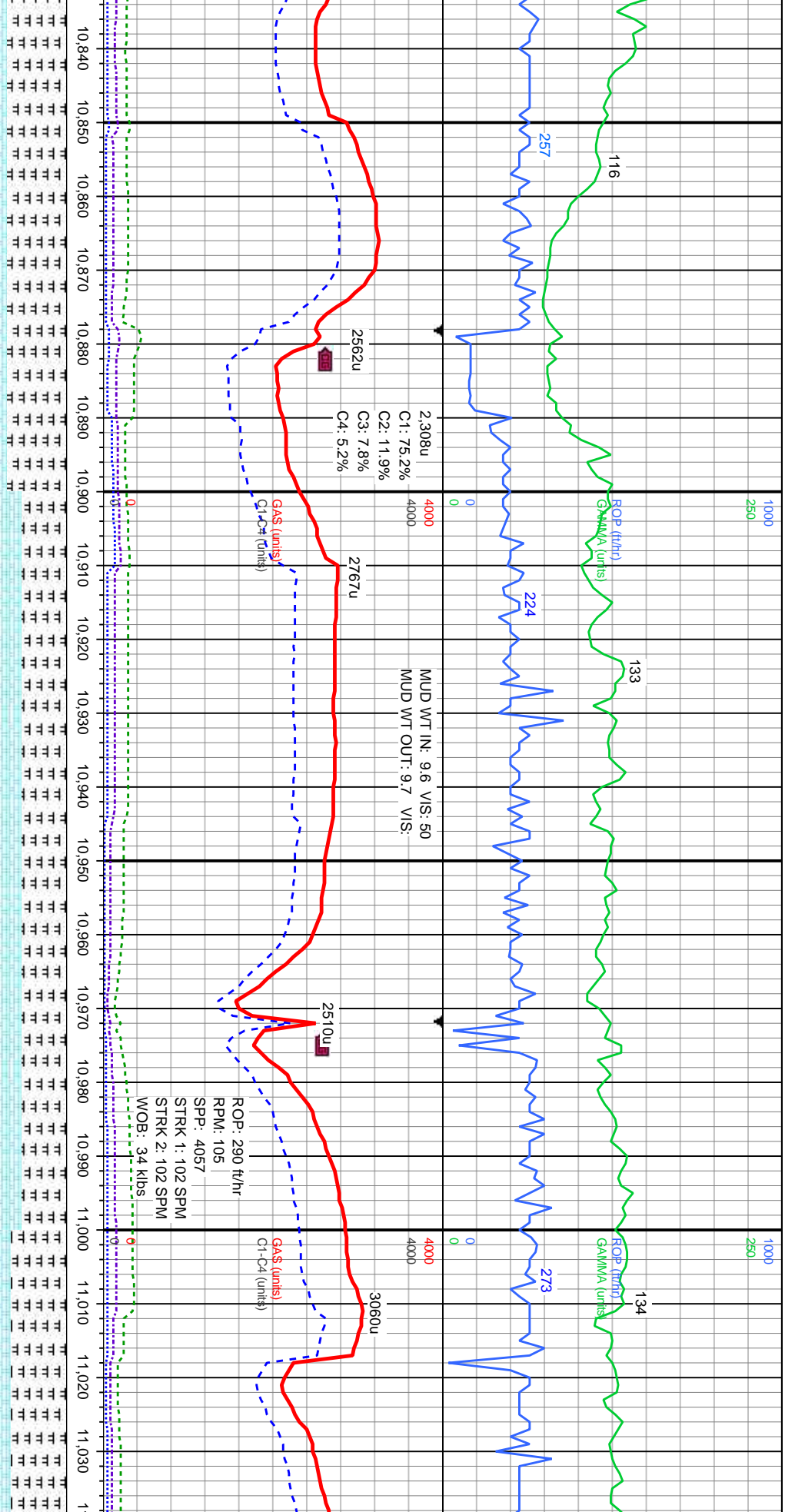
MD: 10,098'
Inclination: 90.92°
Azimuth: 91.97°
TVD: 7,704.83'
VS: 2,896.72'

MD: 10,192'
Inclination: 90.98°
Azimuth: 90.55°
TVD: 7,703.27'
VS: 2,990.28'







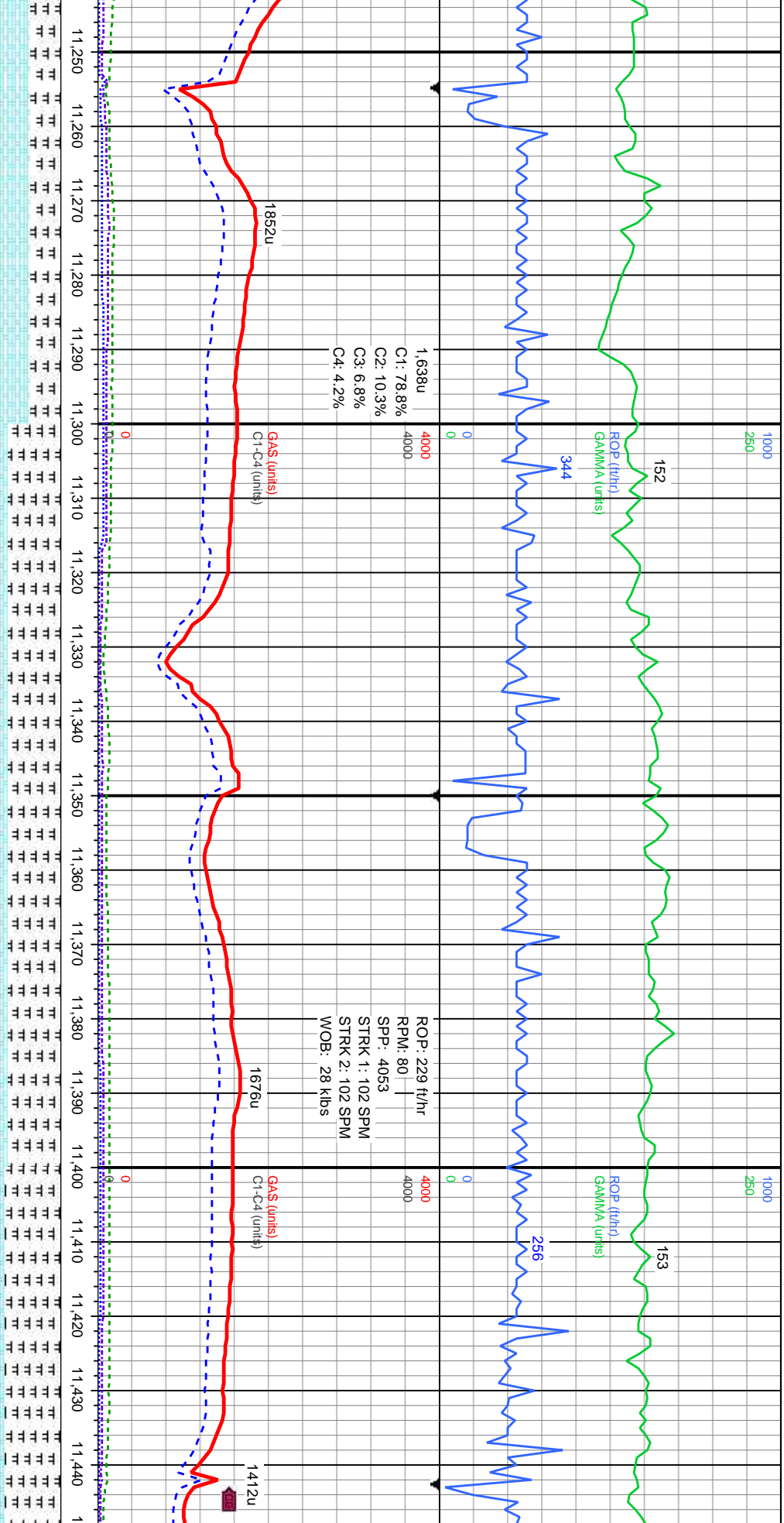


MR.LST: dk gy-m gy, occ dr brn-blk, sit gr, gt tex, sb ply-sb blk, fri-frm occ wxy lst, v calc. CHK: lt-med gy, occ wh-tan bnd, mot, sb ply-ply, fri-frm, rthy tex, v calc. wl tr Pyr.	MR.LST: med-dk gy, occ blk, sit gr, gt tex, sb ply-ply, fri, hd-frm, v calc. CHK: lt-med gy, mot, sb ply-sb blk, fri, sft-frm, rthy tex, v calc, tr bent.	MR.LST: med-dk gy, occ blk, sit gr, gt tex, sb ply-ply, fri, hd-frm, v calc. CHK: lt-med gy, mot, sb ply-sb blk, fri, sft-frm, rthy tex, v calc, tr bent.
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MD: 10.854'
Inclination: 90.68°
Azimuth: 90.87°
TVD: 7.693.15'
VS: 3.651.34'

MD: 10.949'
Inclination: 90.86°
Azimuth: 91.4°
TVD: 7.691.87'
VS: 3.745.92'

MD
Inc
Azi
TVD
VS



CHK: med-ly, occ wh-tan bnd, mot, sb
ply-sb blk, fri, sft-fm, rthy-sug tex, v calc;
MRLST: med-dk gy, sft gr, gt tex, sb ply, fri,
hd-fm, occ wxy lsir, v calc, tr bent

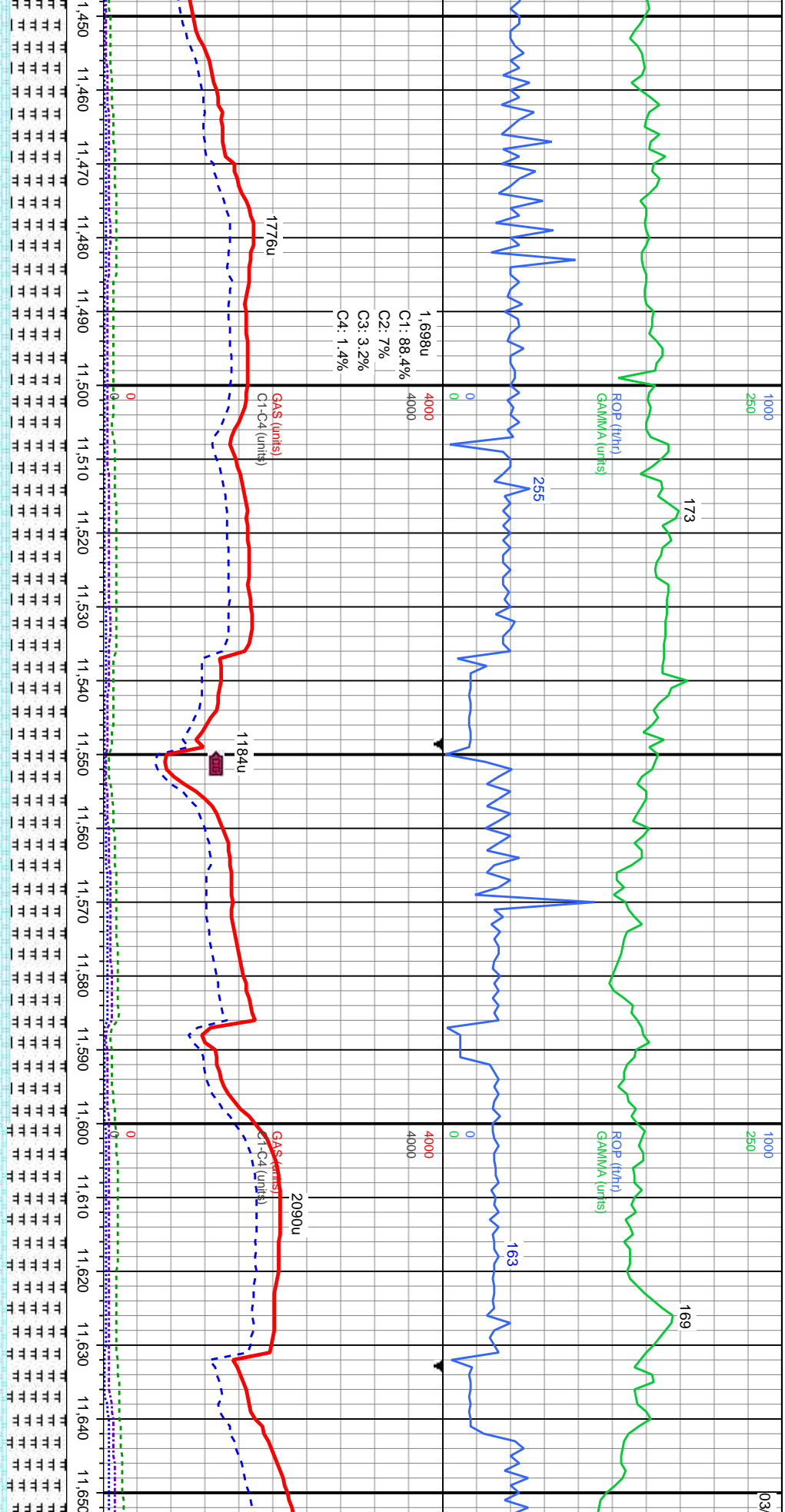
MRLST: med-dk gy, occ blk, sft gr, gt tex, sb
ply-ply, fri, hd-fm, brit, v calc. CHK: lt-med
gy, mot, sb ply-sb blk, fri, sft-fm, rthy-sug
tex, v calc, tr bent.

MRLST: med-dk gy, occ blk, sft gr, gt tex, sb
ply-ply, fri, hd-fm, brit, v calc. CHK: lt-med
gy, mot, sb ply-sb blk, fri, sft-fm, rthy-sug
tex, v calc, tr bent.

MRLST: med-dk gy, occ wxy lsir, sft gr, gt
tex, sb ply-ply, fri, hd-fm, brit, v calc. CHK:
lt-med gy, mot, sb ply-ply, fri, sft-fm,
rthy-sug tex, v calc, tr bent.

MD: 11,327'
Inclination: 90.65°
Azimuth: 90.77°
TVD: 7,686.84'
VS: 4,122.32'

MD: 11,421'
Inclination: 90.86°
Azimuth: 91.22°
TVD: 7,685.6'
VS: 4,215.92'



1,688u
C1: 88.4%
C2: 7%
C3: 3.2%
C4: 1.4%

MD: 11,515'
Inclination: 90.98°
Azimuth: 95.38°
TVD: 7,684.09'
VS: 4,309.08'

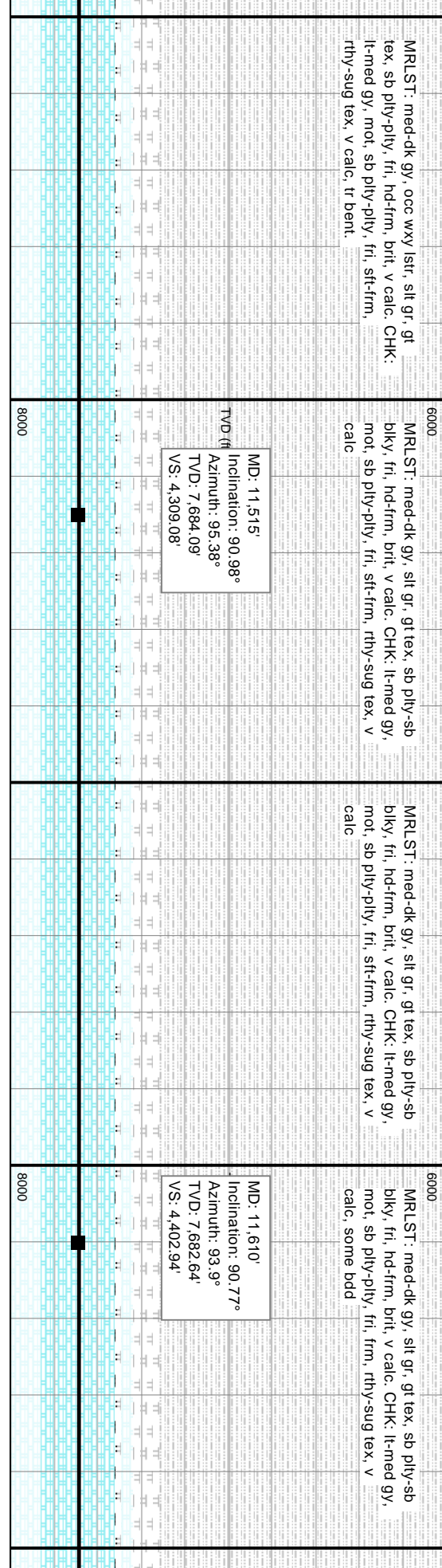
MD: 11,610'
Inclination: 90.77°
Azimuth: 93.9°
TVD: 7,682.64'
VS: 4,402.94'

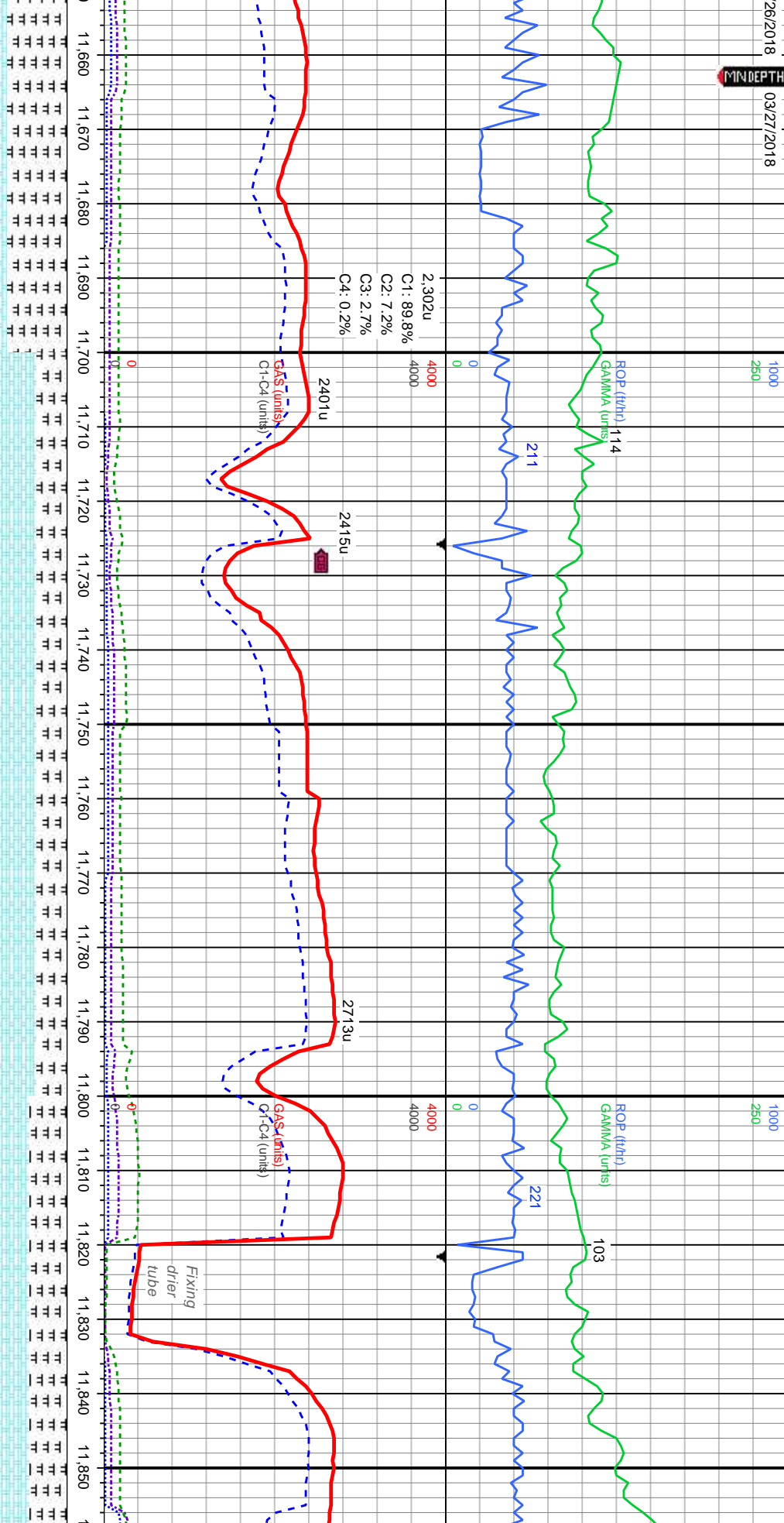
MRLST: med-dk gy, ooc wxy lsir, slt gr, gt
tex, sb pily-pily, fri, hd-frn, brit, v calc, CHK:
lt-med gy, mot, sb pily-pily, fri, slt-frn,
rthy-sug tex, v calc, tr bent.

MRLST: med-dk gy, slt gr, gt tex, sb pily-sb
biky, fri, hd-frn, brit, v calc, CHK: lt-med gy,
mot, sb pily-pily, fri, slt-frn, rthy-sug tex, v
calc

MRLST: med-dk gy, slt gr, gt tex, sb pily-sb
biky, fri, hd-frn, brit, v calc, CHK: lt-med gy,
mot, sb pily-pily, fri, slt-frn, rthy-sug tex, v
calc

MRLST: med-dk gy, slt gr, gt tex, sb pily-sb
biky, fri, hd-frn, brit, v calc, CHK: lt-med gy,
mot, sb pily-pily, fri, frn, rthy-sug tex, v
calc, some bdd





MRSLST: med-dk gy, silt gr, gt tex, sb pily-sb bily, fri, hd-firm, brit, v calc. CHK: lt-med gy, mot, sb pily-pily, fri, frm, rthy-sug tex, v calc, some bdd

CHK: med-lt gy, mot, sb pily-pily, fri, frm, rthy-sug tex, v calc. MRSLST: med-dk gy, silt gr, gt tex, sb pily, fri, hd-firm, occ wxy lstr, v calc, tr inoc fos

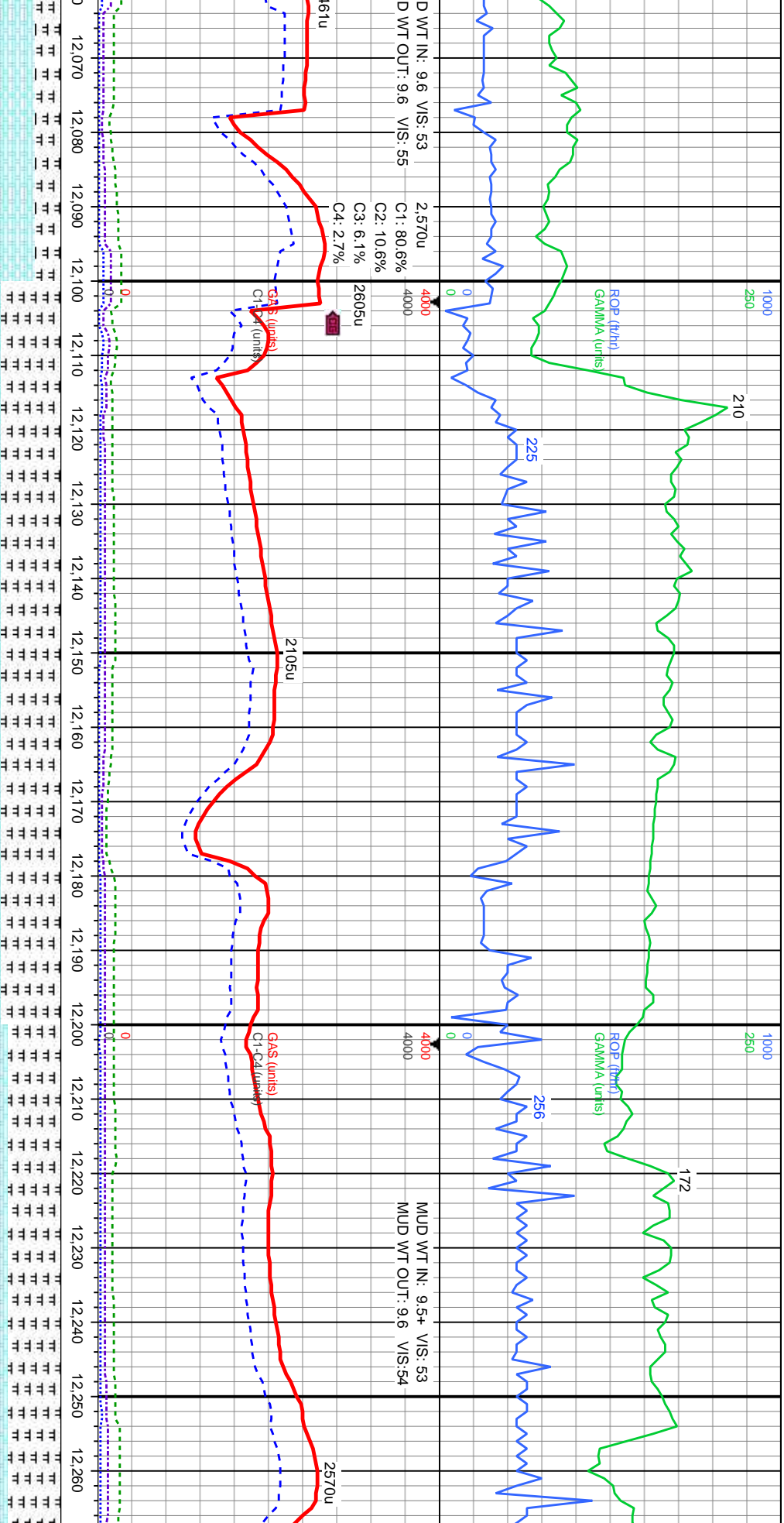
CHK: med-lt gy, mot, sb pily-pily, fri, frm, rthy-sug tex, v calc. MRSLST: med-dk gy, silt gr, gt tex, sb pily, fri, hd-firm, occ wxy lstr, v calc, tr inoc fos

MRSLST: med-dk gy, silt gr, gt tex, sb pily-sb bily, fri, hd-firm, brit, v calc. CHK: lt-med gy, mot, sb pily-pily, fri, frm, rthy-sug tex, v calc, some bdd, tr inoc fos

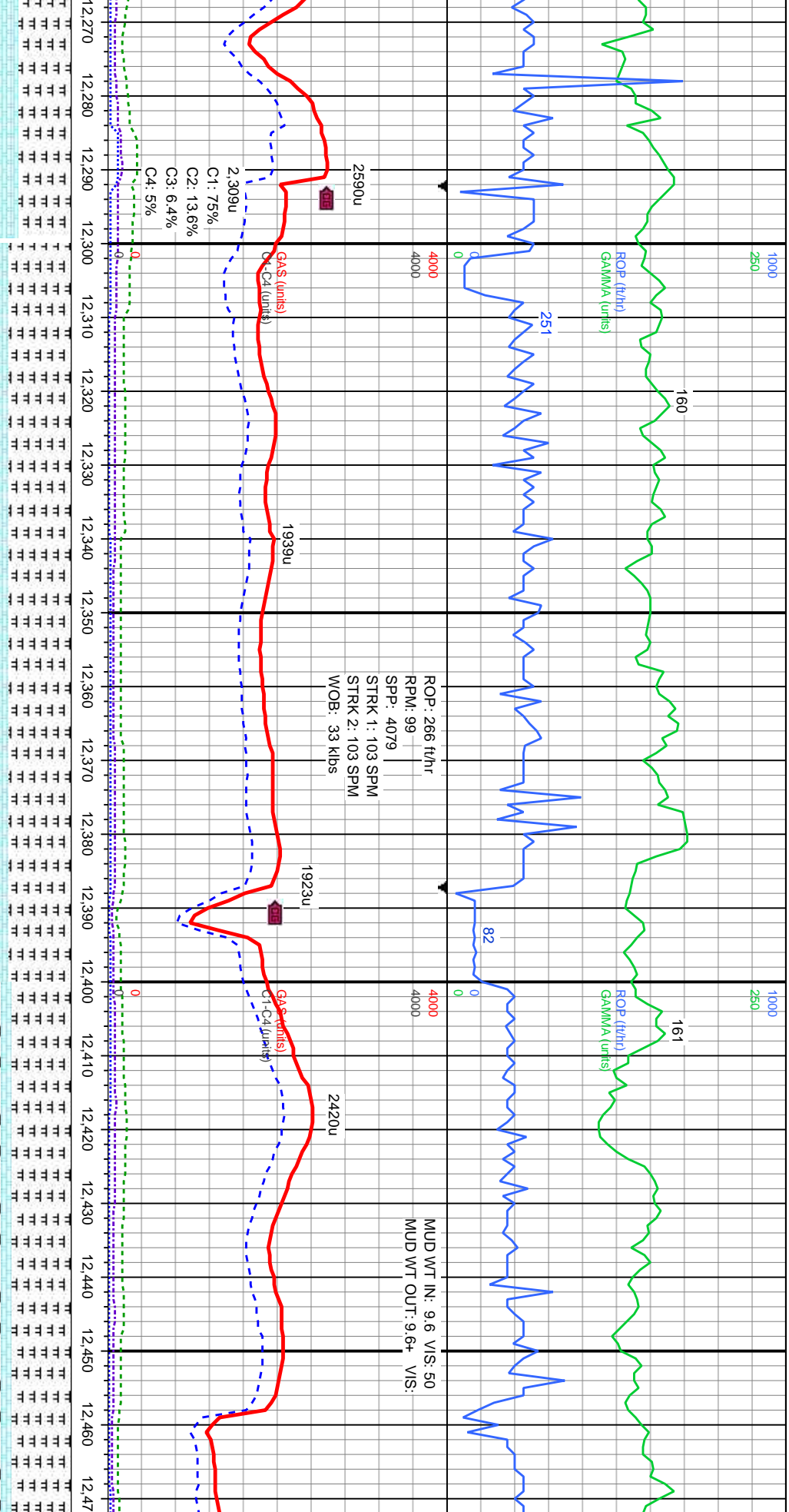
MRSLST: med-dk gy, silt gr, gt tex, sb pily-sb bily, fri, hd-firm, brit, v calc. CHK: lt-med gy, mot, sb pily-pily, fri, frm, rthy-sug tex, v calc, some bdd

MD: 11,704'
Inclination: 90.8°
Azimuth: 92.72°
TVD: 7,681.35'
VS: 4,496.12'

MD: 11,799'
Inclination: 90.8°
Azimuth: 90.04°
TVD: 7,680.02'
VS: 4,590.65'



MD: 12.083° Inclination: 90.92° Azimuth: 93.63° TVD: 7.674.49' VS: 4.873.07'		MD: 12.178° Inclination: 90.68° Azimuth: 90.31° TVD: 7.673.16' VS: 4.967.5'		MD: 12.178° Inclination: 90.68° Azimuth: 90.31° TVD: 7.673.16' VS: 4.967.5'	
lt gy, mot, sb ply-sb rd, fri, sft frm, x, v calc: MRLST: med-dk gy, occ gt tex, sb ply-ply, fri, hd frm, brit, fri, v calc, tr bent		MRLST: med-dk gy, occ blk, sit gr, gt tex, sb ply-ply, fri, hd frm, brit, v calc. CHK: med-dk gy, mot, occ wh-tan thn bnd, sb ply-sb blk, fri, sft frm, rthy-sug tex, v calc, tr inoc fos		MRLST: med-dk gy, occ blk, sit gr, gt tex, sb ply-ply, fri, hd frm, brit, v calc. CHK: med-dk gy, mot, occ wh-tan thn bnd, sb ply-sb blk, fri, sft frm, rthy-sug tex, v calc, tr inoc fos	
TVD (ft)		TVD (ft)		TVD (ft)	
8000		8000		8000	



dy-sb blky, fri, sft-firm, rthy-sug

MRLST: med-dk gy, ooc blk, sit gr, gt tex, sb
ply-pty, fri, hd-firm, brit v calc. CHK: med gy,
mot, sb ply-sb blk, fri, stf-firm, rthy-sug tex,
v calc

MRLST: med-dk gy, occ blk, slt gr, gt tex, sb ply-ply, fri, hd-frm, brit, v calc. CHK: med gy, mot, sb ply-sb blk, fri, stf-frm, rhy-sug tex, v calc

MR LST: dk gy-med gy, occ blk, silt gr, sb
ply-sb blkly, gt tex, fir-fm, occ wxy str, v calc.
CHK: lt gy-med gy, occ wh-tan bnd, mot, sb
ply-pty, rthy tex, v calc. wi BENT: lt gy-lt gn,
sily, gt tex, v sft.

MRST: dk gy-med g
biky, gt tex, fri-fm, oo
gy-med gy, occ wh-ta
tex, v calc. wi BENT:

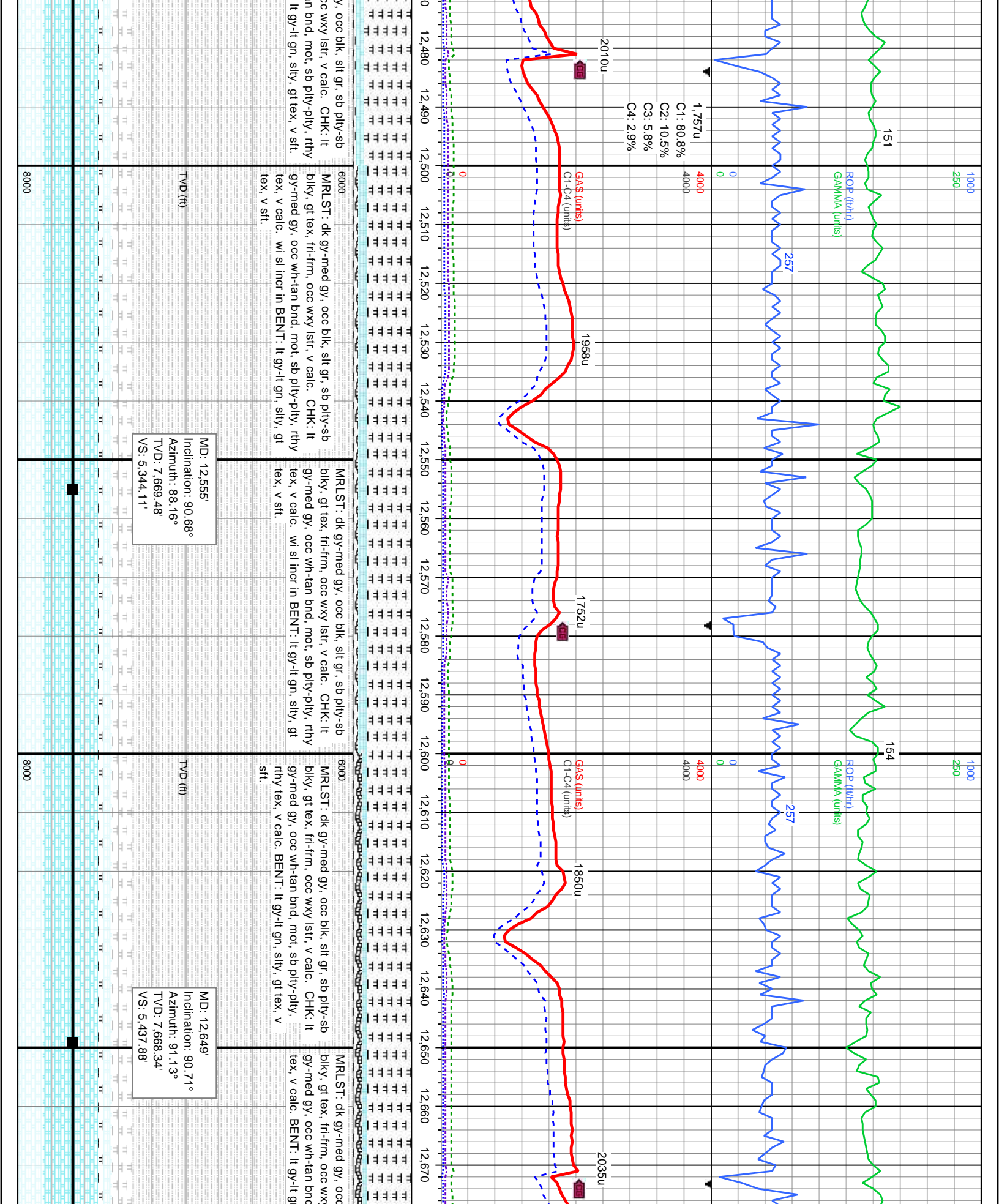
12,272'
 nation: 90.58°
 month: 88.38°
 : 7,672.13'
 5,061.31'

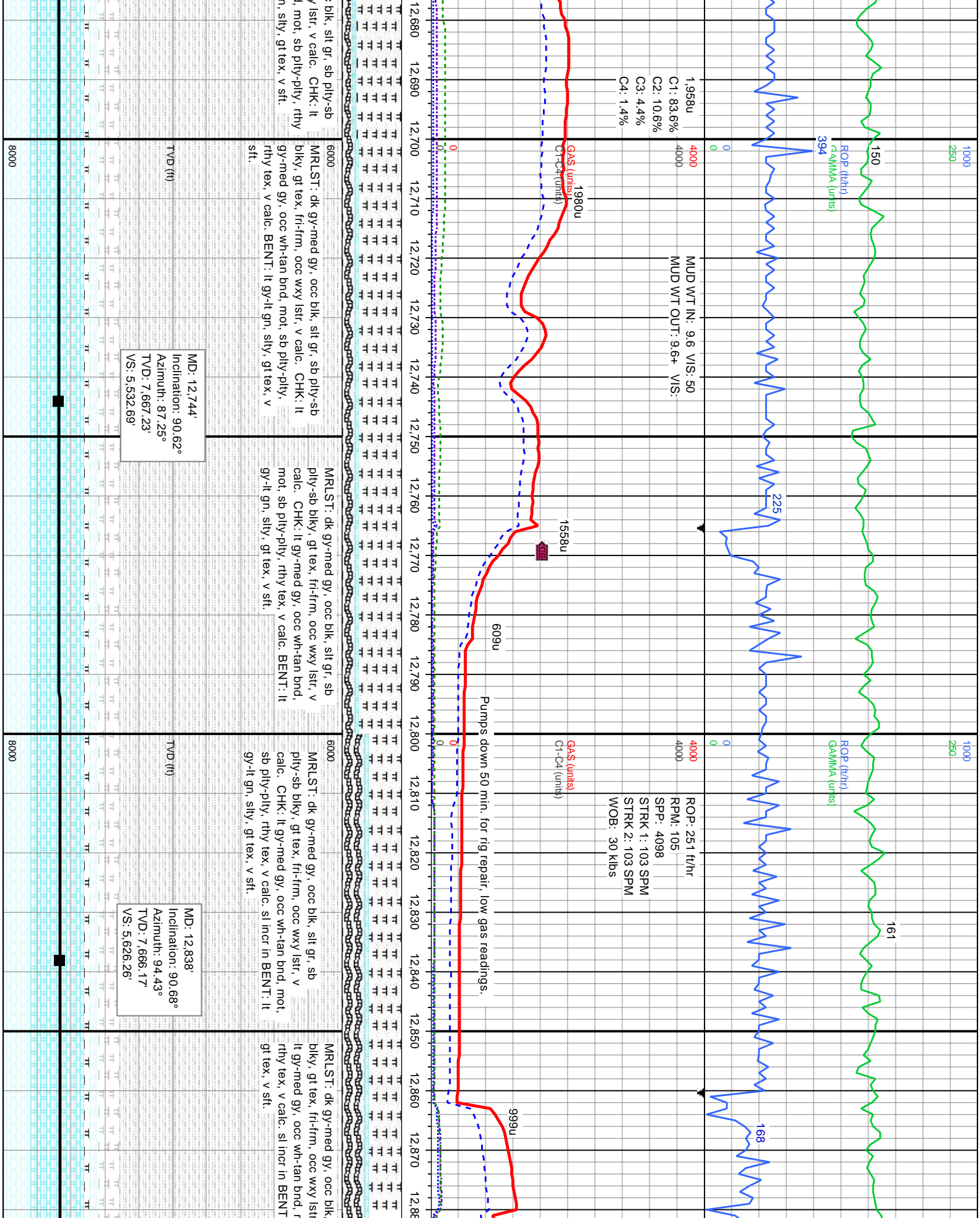
TVD (ft)

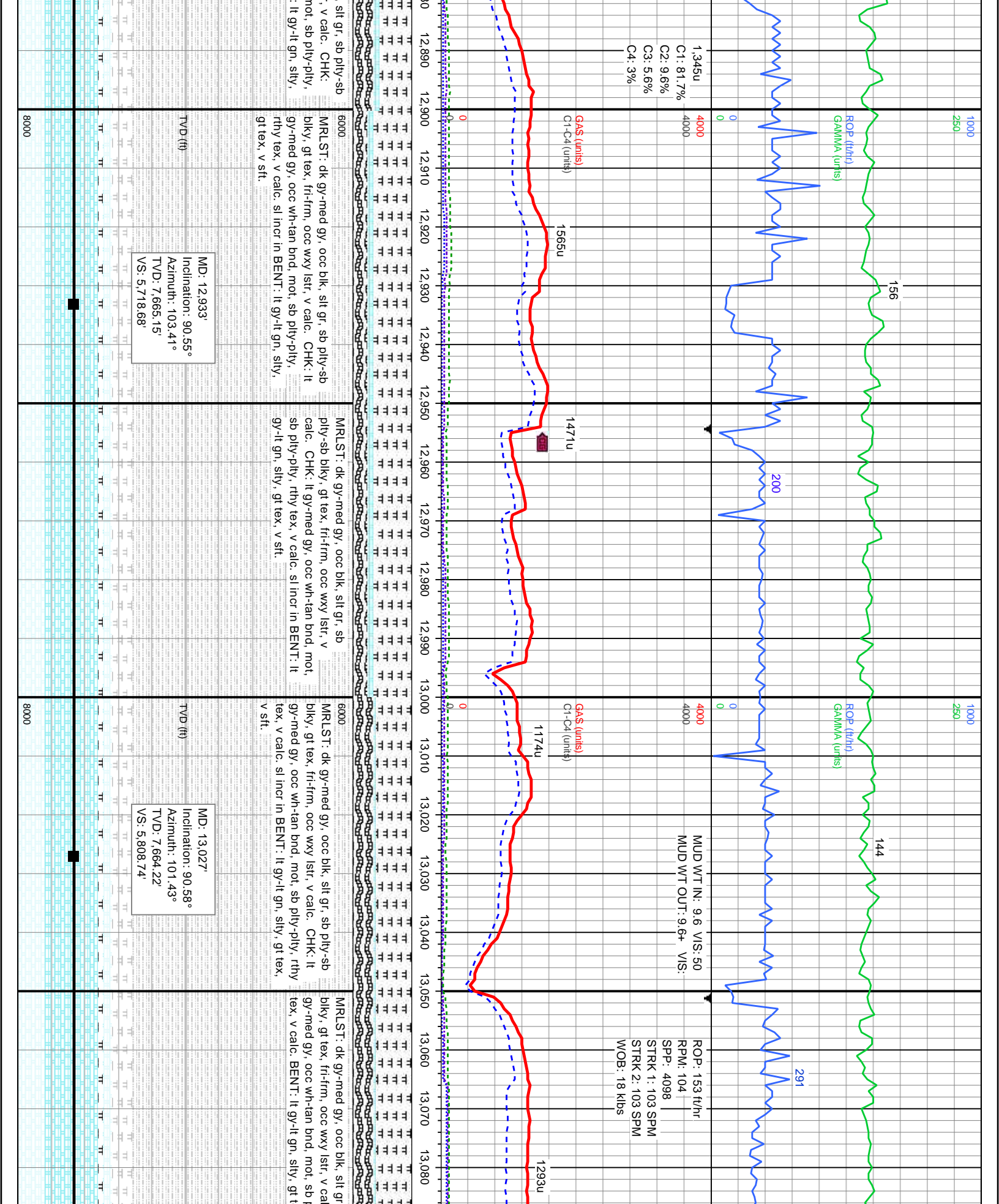
MD: 12,366'
Inclination: 90.46°
Azimuth: 87.62°
TVD: 7,671.28'
VS: 5,155.23'

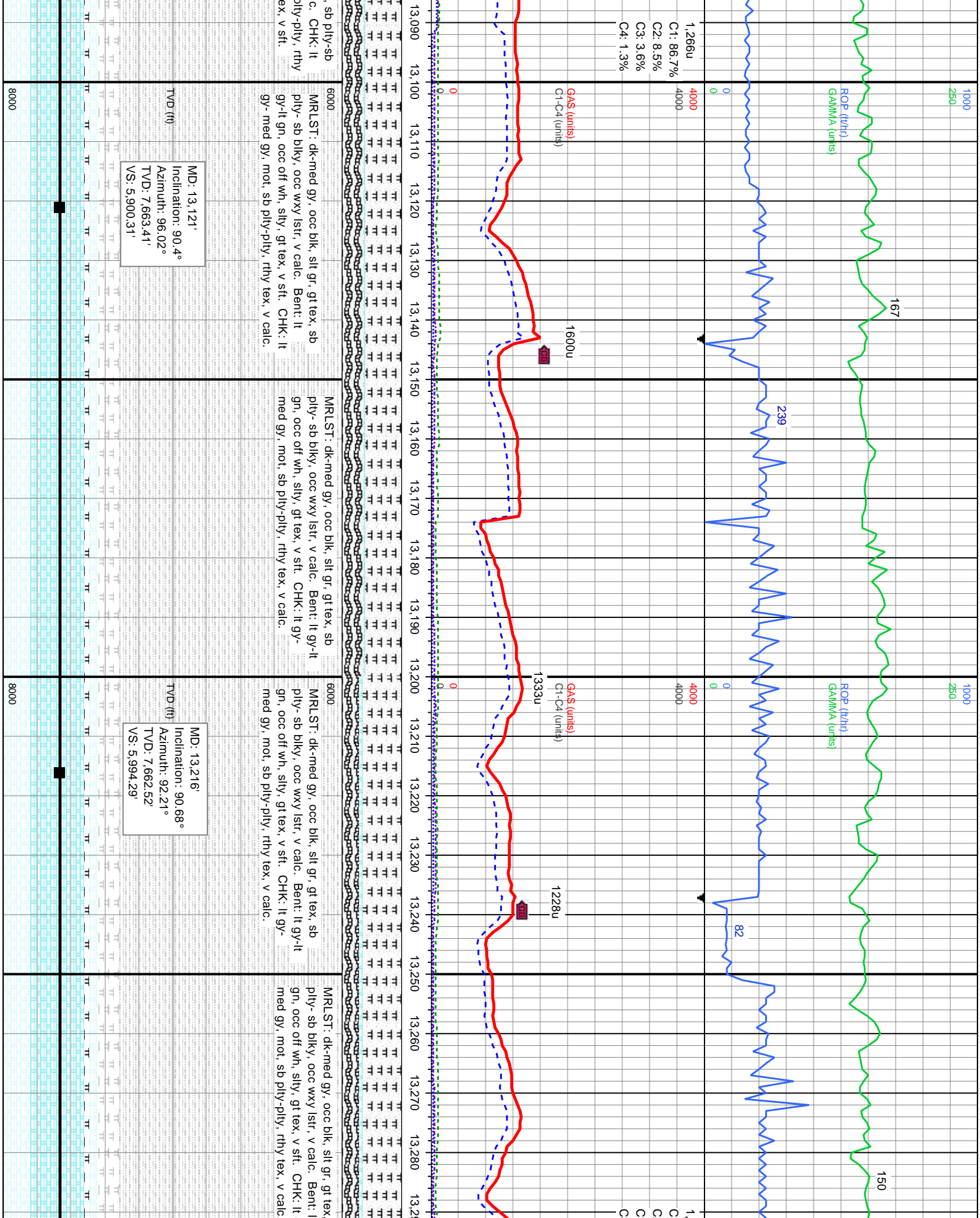
TVD (ft)

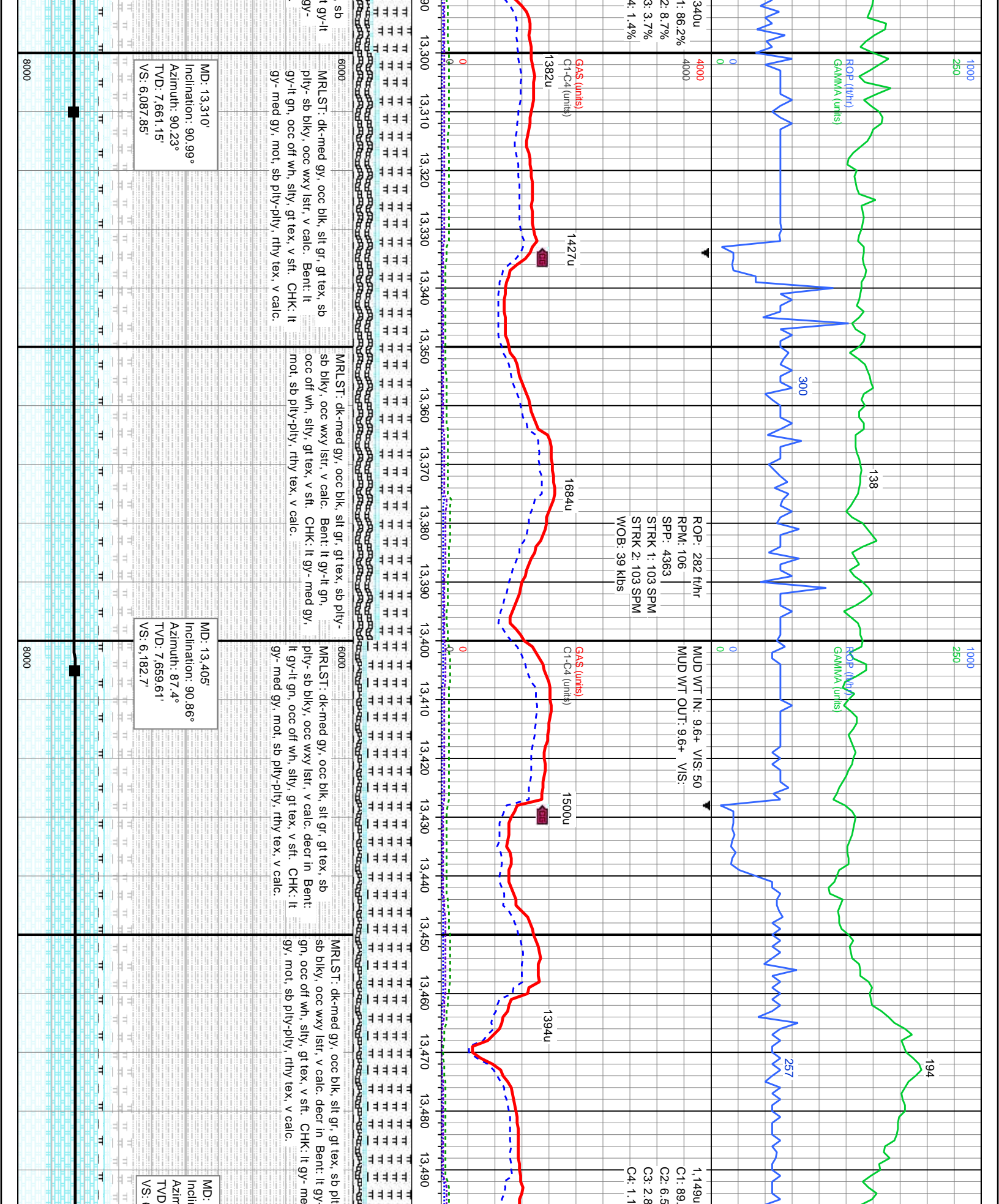
MD: 12.461'
Inclination: 90.52°
Azimuth: 87.56°
TVD: 7,670.46'
VS: 5,250.18'

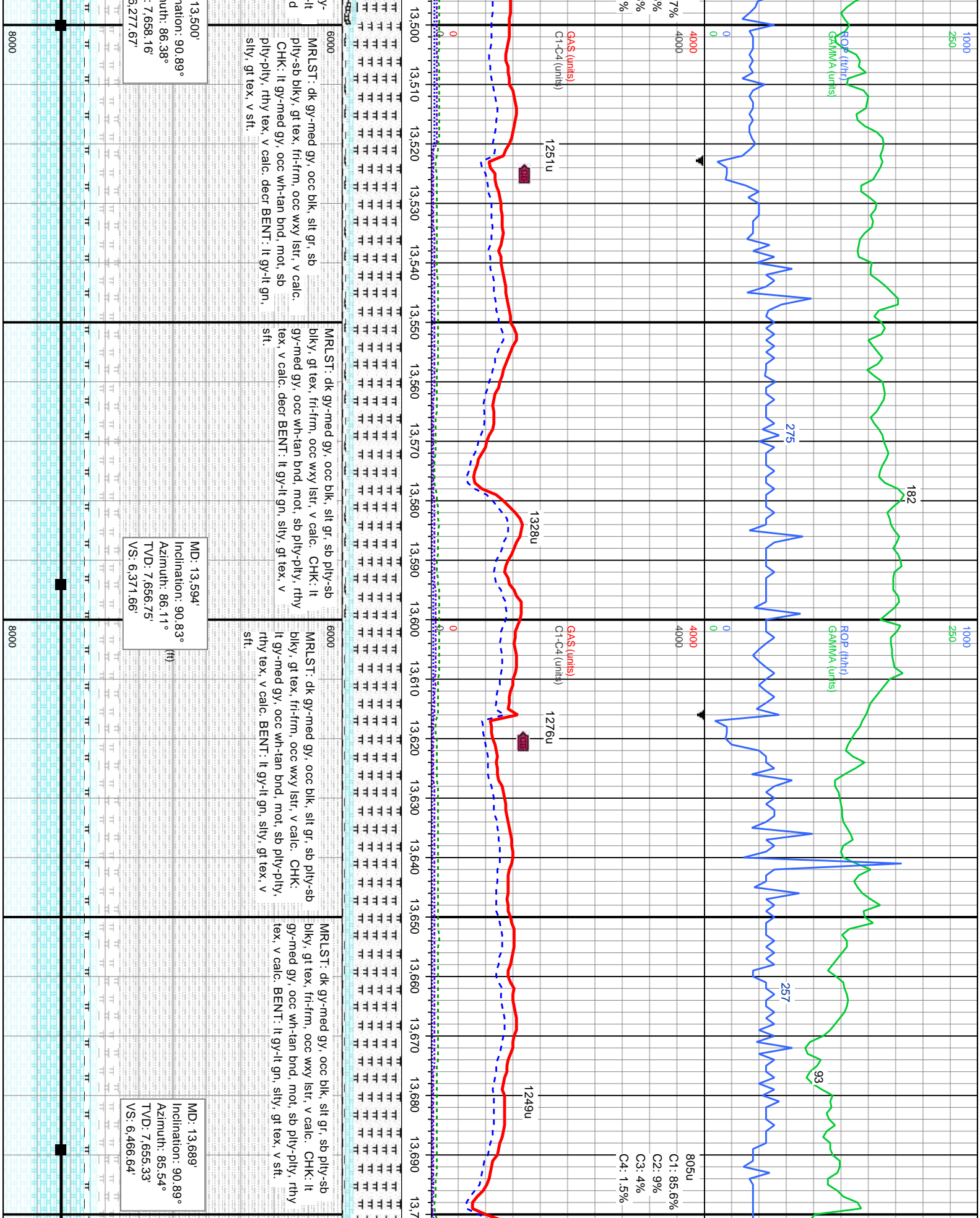


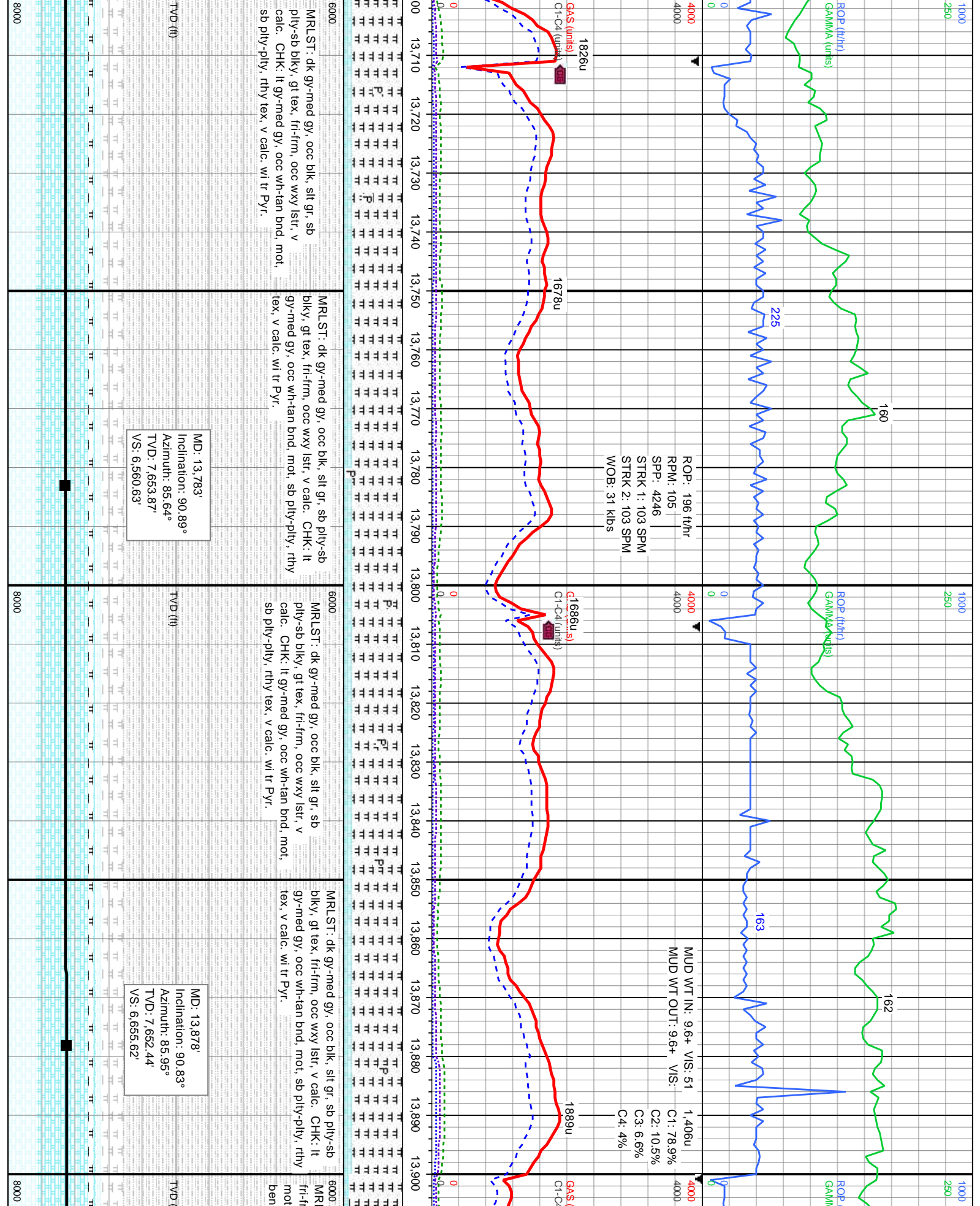


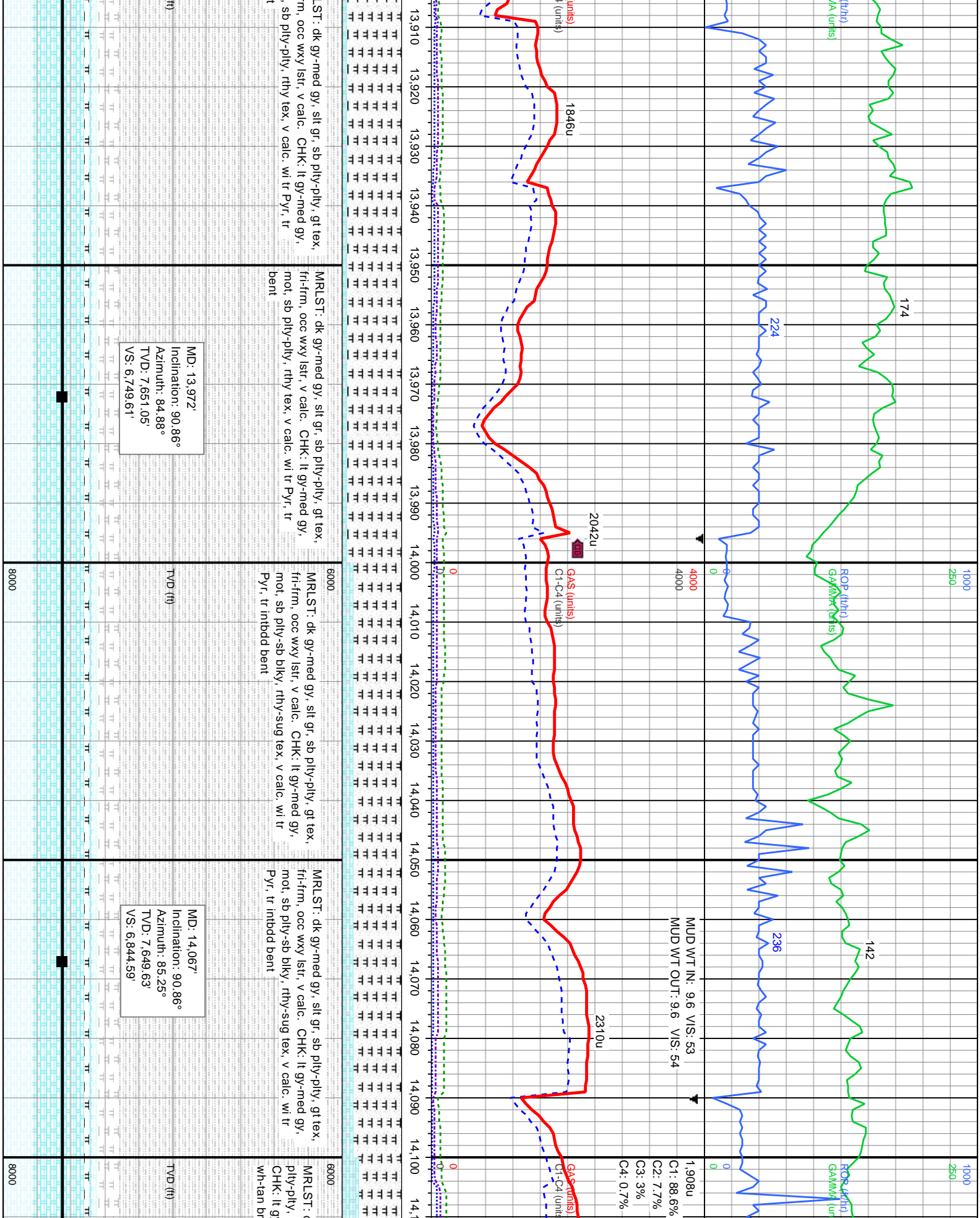


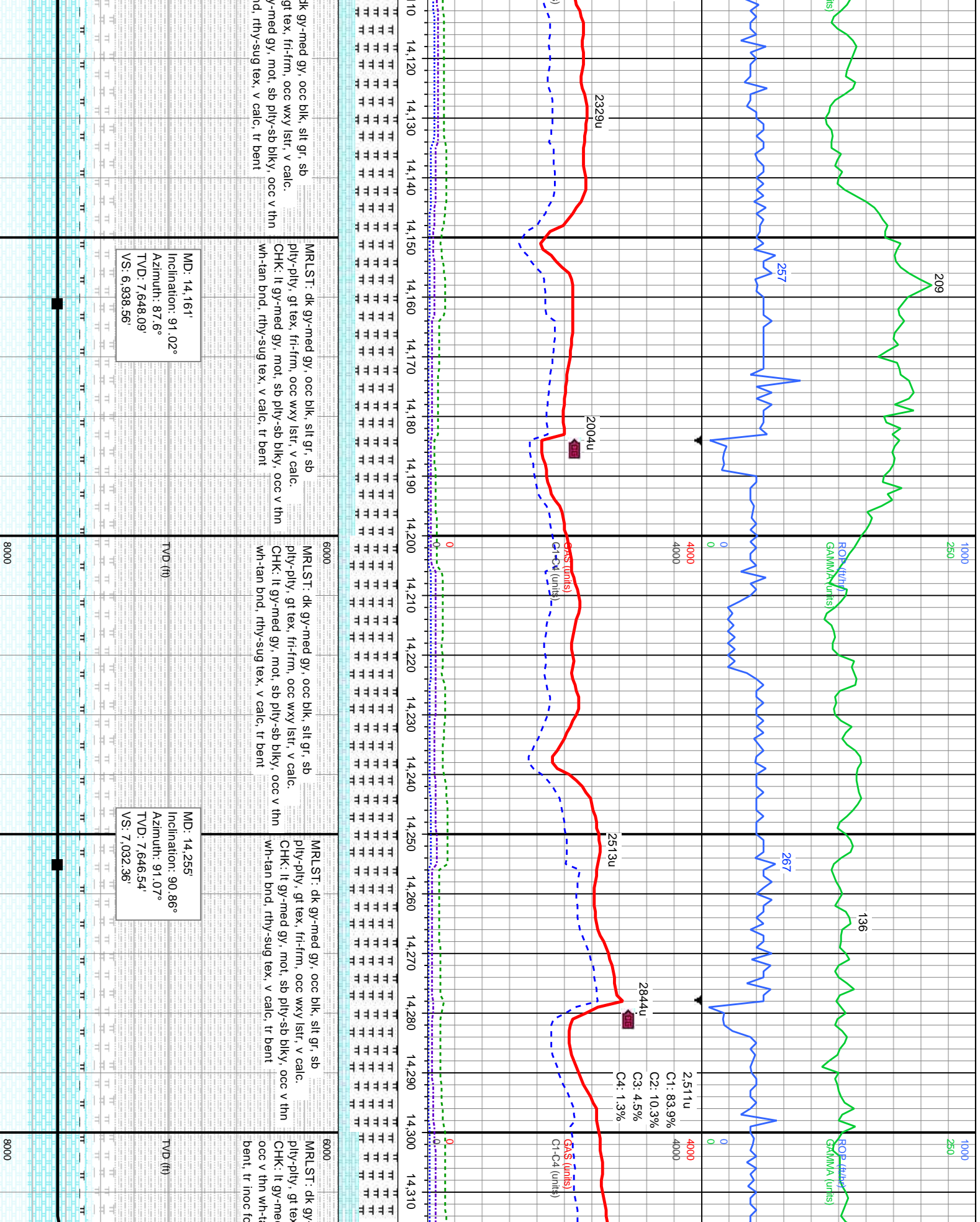


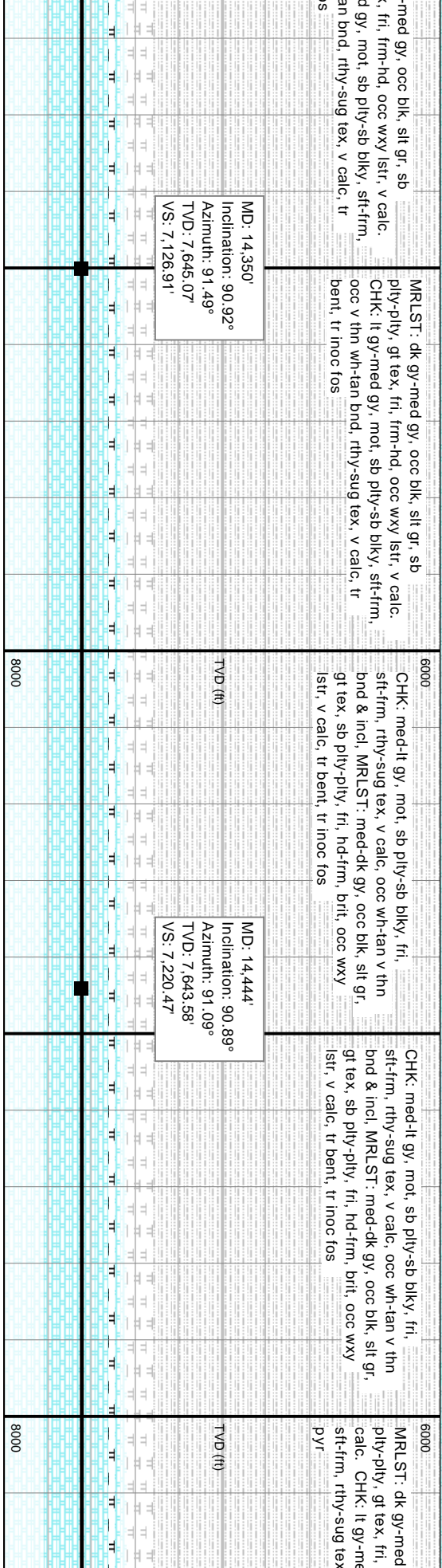
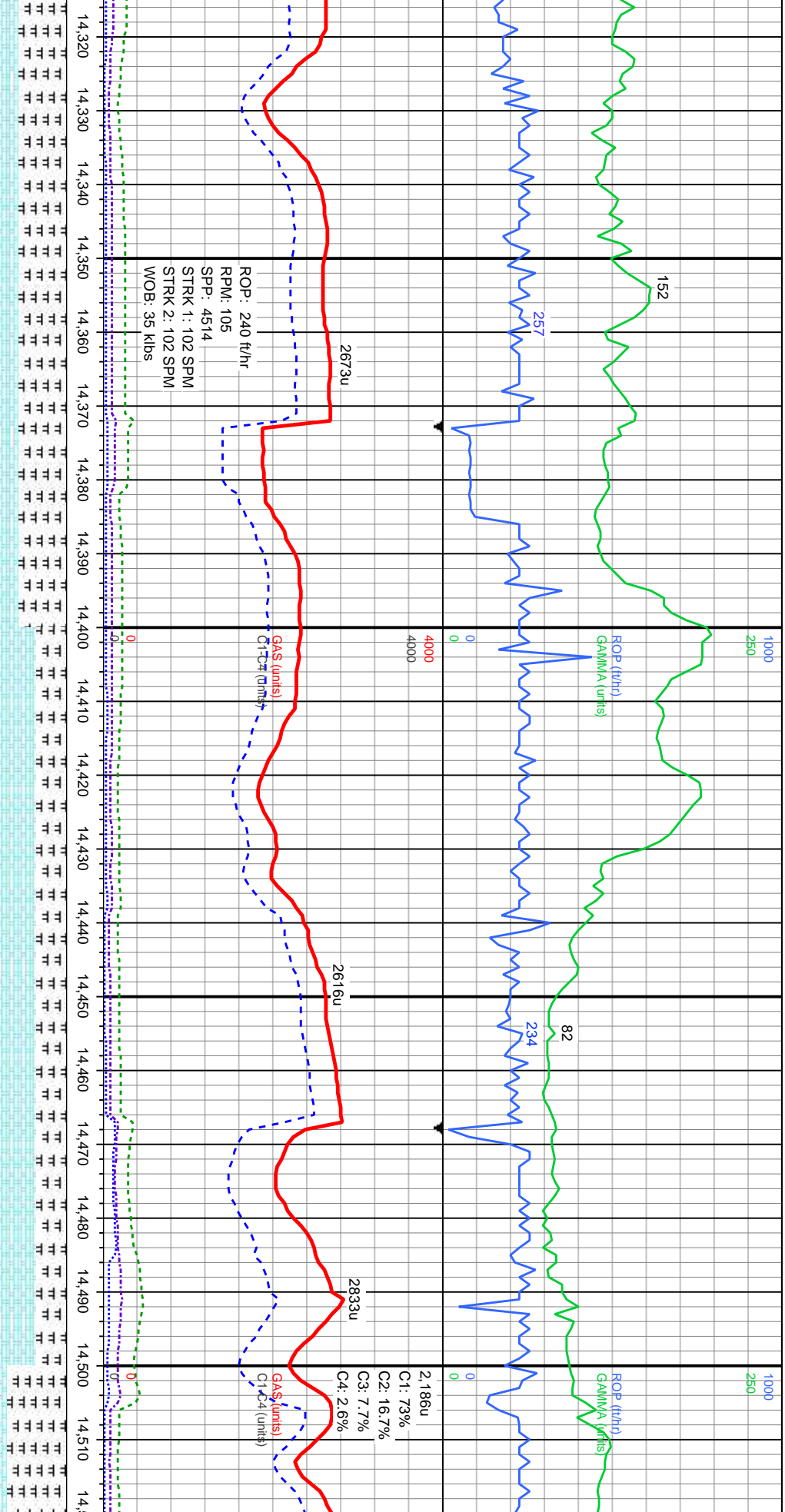


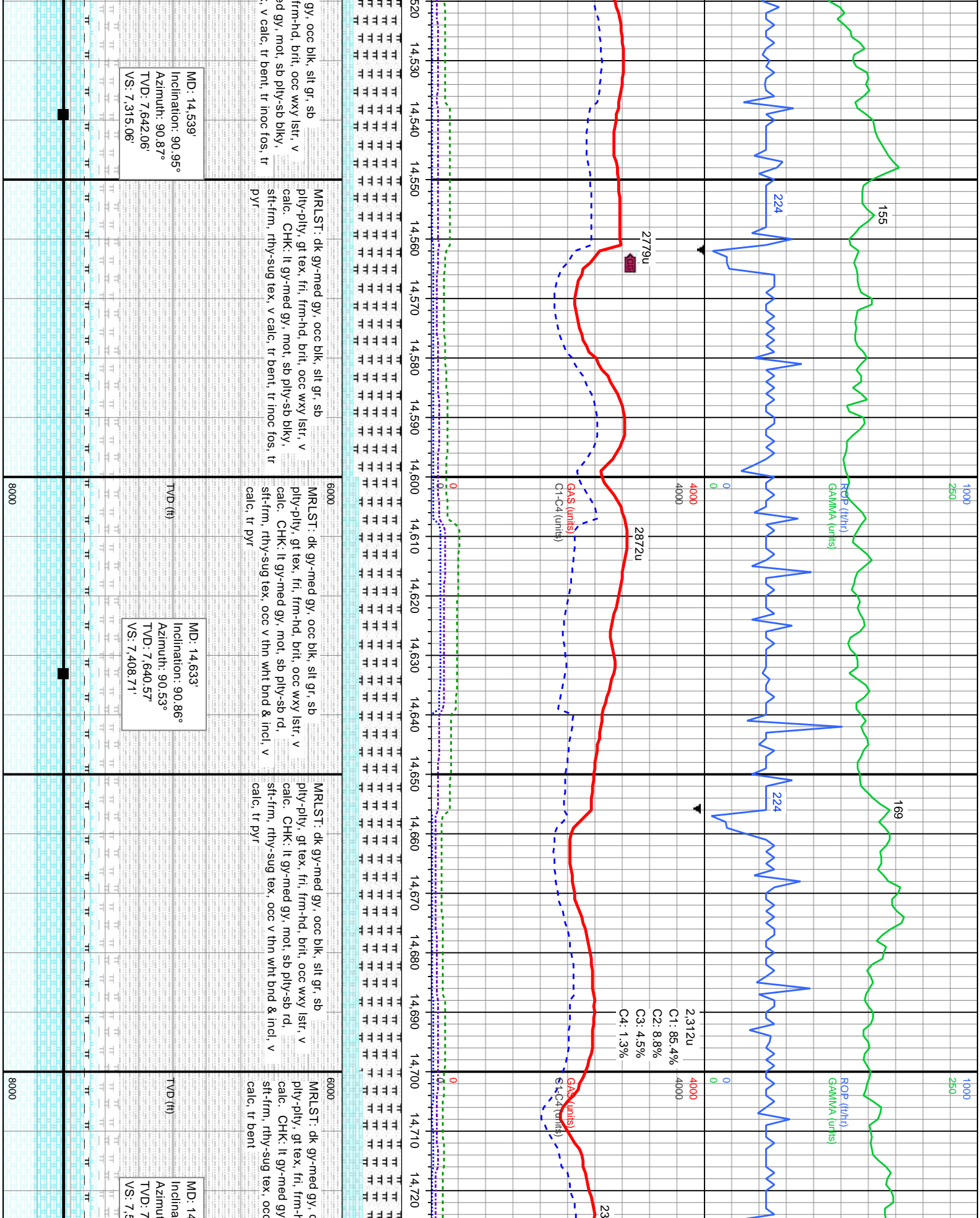






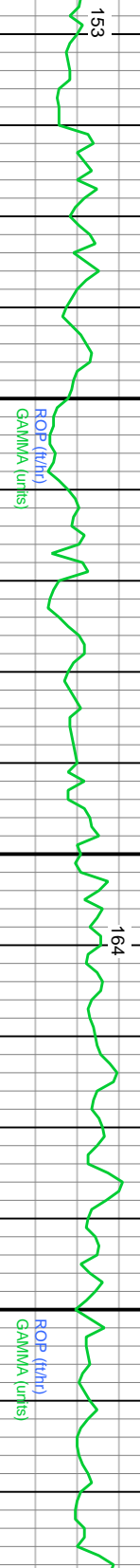






MINDEPTH

250

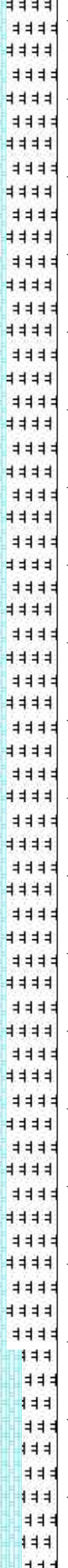


ROP: 83 ft/hr
RPM: 103
SPR: 4308
STRK 1: 102 SPM
STRK 2: 102 SPM
WOB: 23 kbs

2.355u
C1: 89.8%
C2: 6.8%
C3: 2.8%
C4: 0.7%

2486u
GAS (units)
C1-C4 (units)

2418u
GAS (units)
C1-C4 (units)



MR.LST: dk gy-med gy, occ blk, slt gr, sb
ply-ply, gt tex, fr, frm-hd, brit, occ wxy lstr, v
calc. CHK: lt gy-med gy, mot, sb ply-sb rd,
slt-frm, rthy-sug tex, occ v thin wht bnd & incl, v
calc, tr bent

6000
MR.LST: dk-med gy, occ blk, slt gr, gt tex, sb
ply-ply, occ wxy lstr, v calc. Bent: lt gy-lt
gn, occ off wh, slty, gt tex, v sft. CHK: lt gy-
med gy, mot, sb ply-ply, rthy tex, v calc, tr
pyr

MR.LST: dk-med gy, occ blk, slt gr, gt tex, sb
ply-ply, occ wxy lstr, v calc. Bent: lt gy-lt
gn, occ off wh, slty, gt tex, v sft. CHK: lt gy-
med gy, mot, sb ply-ply, rthy tex, v calc, tr
pyr

6000
MR.LST: dk-med gy, occ blk
ply, occ wxy lstr, v calc. B
occ off wh, slty, gt tex, v sft
gy, mot, sb ply-sb blk, occ
incl, rthy-sug tex, v calc

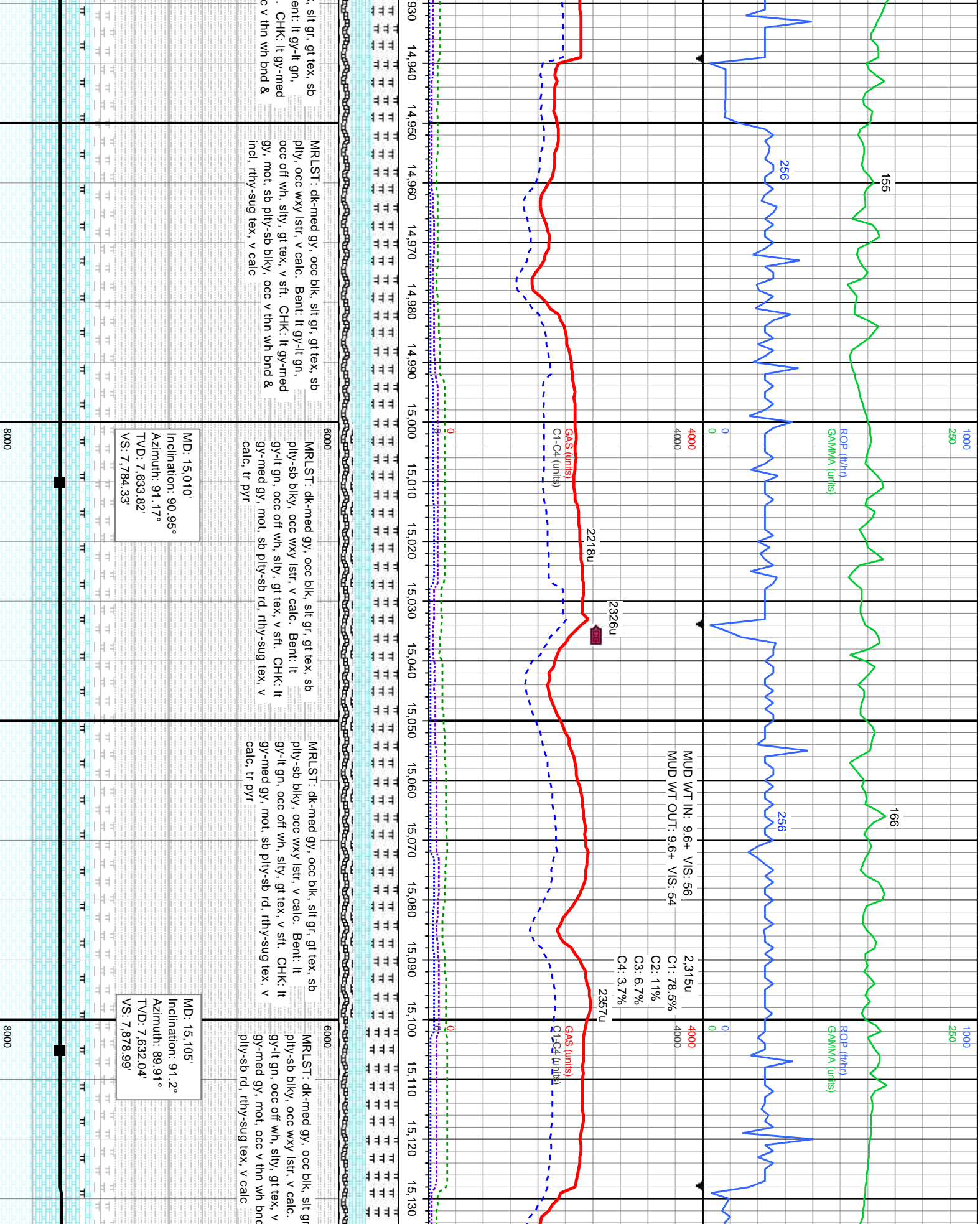
7.227
ation: 90.95°
h: 89.5°
639.09'
02.44'

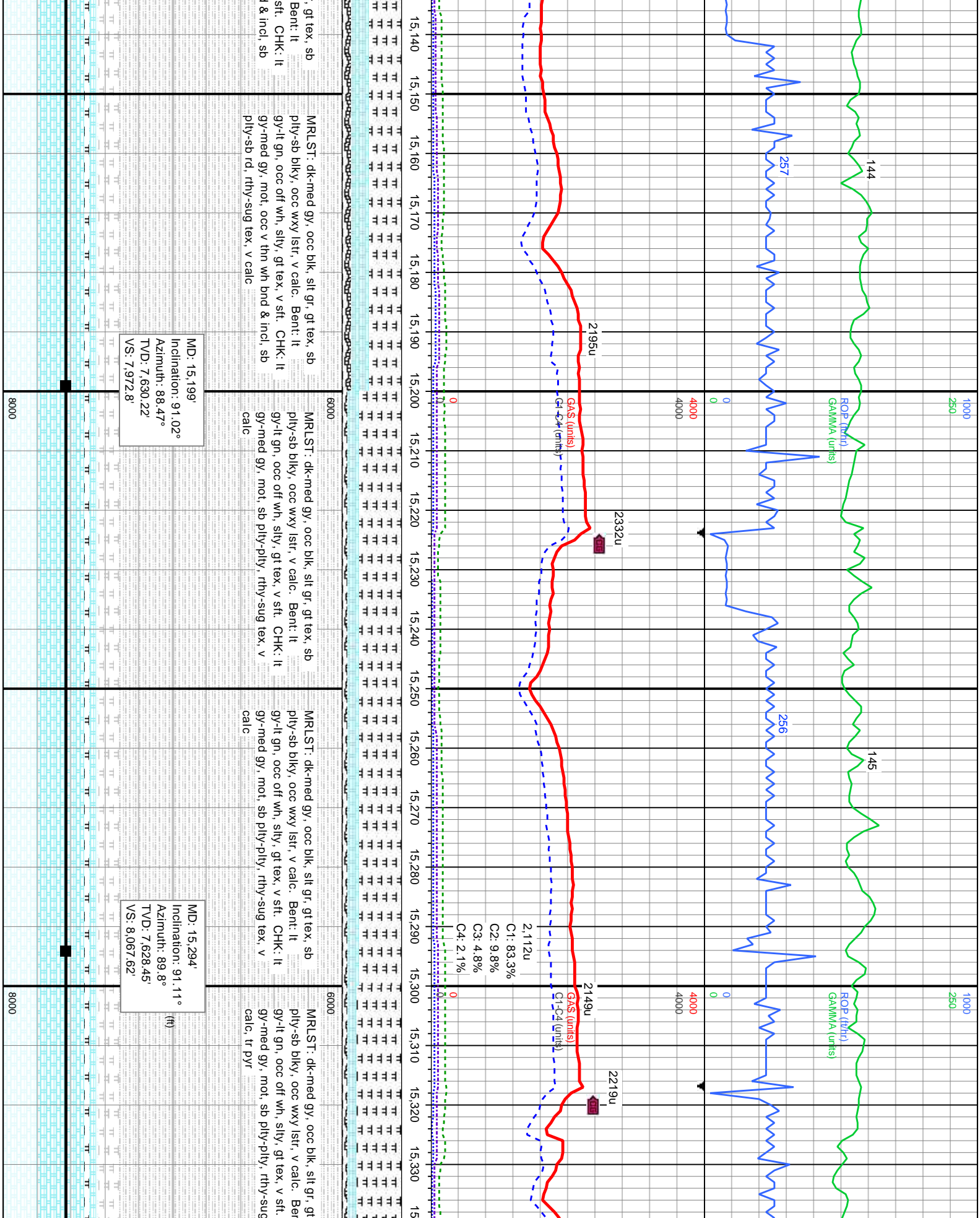
TVD (ft)

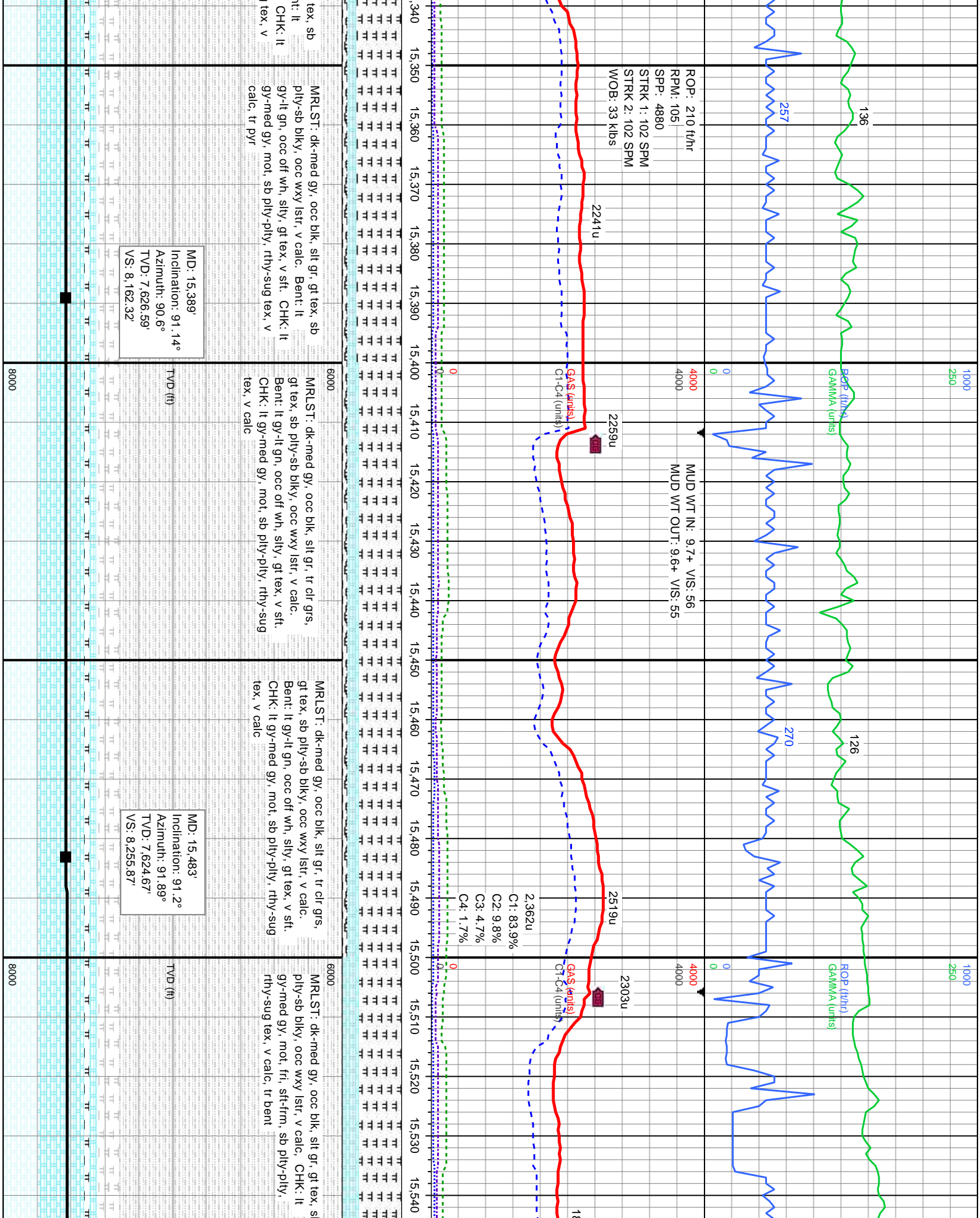
MD: 14.822
Inclination: 91.14°
Azimuth: 90.12°
TVD: 7.637.36'
VS: 7.597.19'

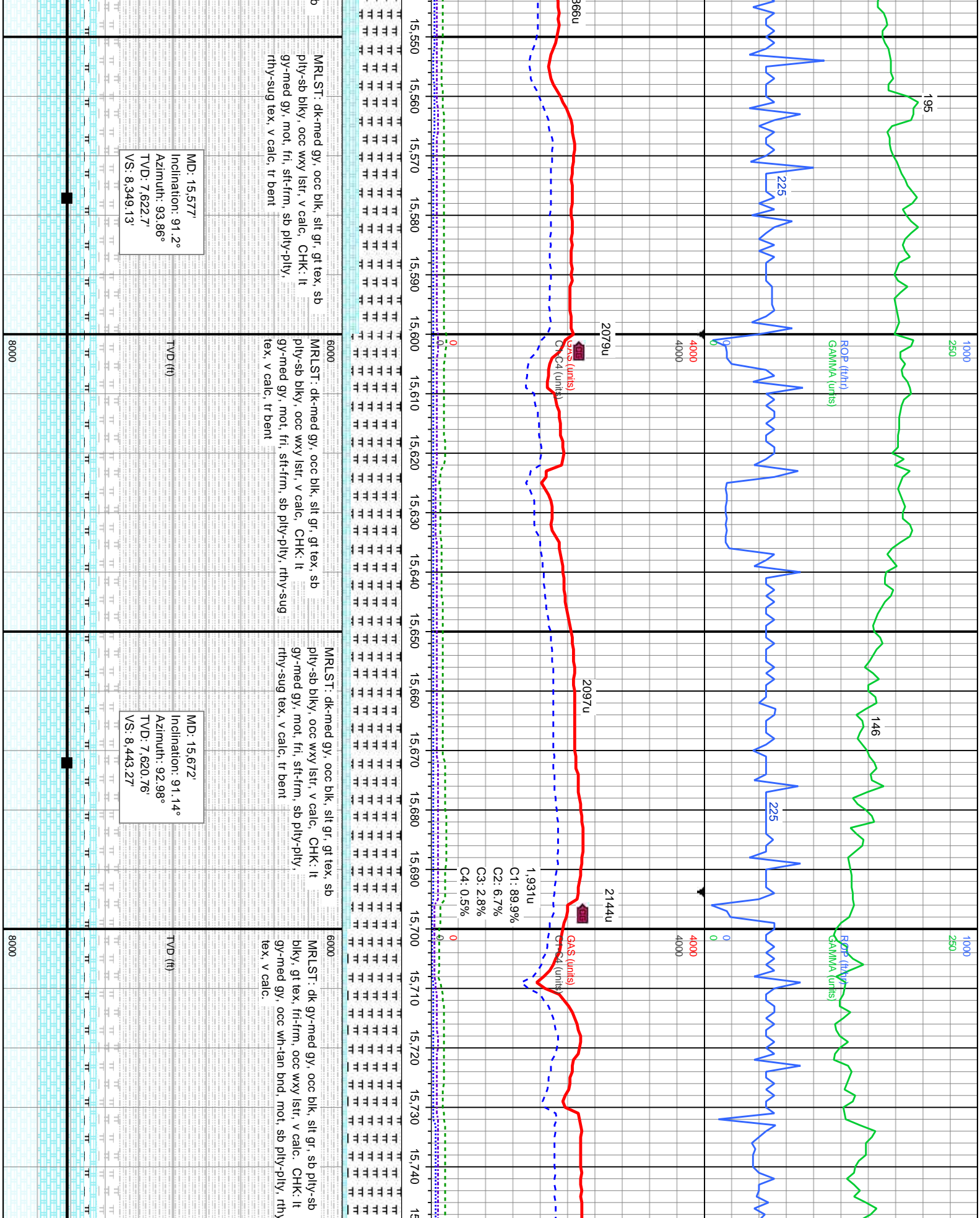
TVD (ft)

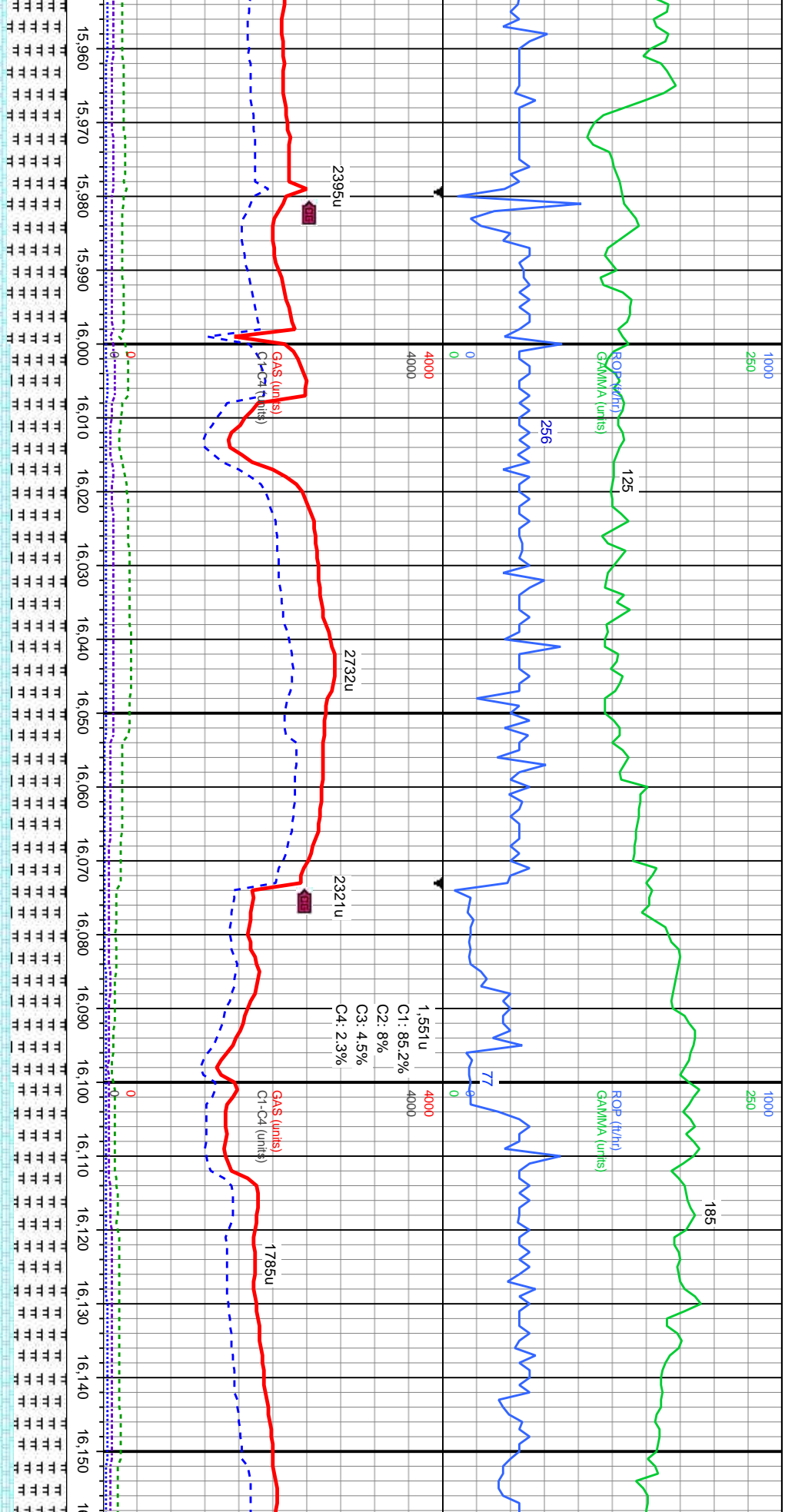
MD: 14.916'
Inclination: 91.11°
Azimuth: 91.63°
TVD: 7.635.51'
VS: 7.690.8'











RST: dk gy-med gy, occ blk, silt gr, sb pty-sb
ky, gt tex, fri-frn, occ wxy lst, v calc, sl incr
CHK: lt gy-med gy, occ wh-tan bnd, mot, sb
pty-pty, rthy tex, v calc.

MRLST: dk gy-med gy, occ blk, silt gr, sb pty-sb
blk, gt tex, fri-frn, occ wxy lst, v calc, sl incr
in CHK: lt gy-med gy, occ wh-tan bnd, mot, sb
pty-pty, rthy tex, v calc.

MRLST: dk gy-med gy, occ blk, silt gr, sb pty-sb
blk, gt tex, fri-frn, occ wxy lst, v calc, sl incr
in CHK: lt gy-med gy, occ wh-tan bnd, mot, sb
pty-pty, rthy tex, v calc.

MRLST: gy-dk gy, occ dk brn, sme spec, silty
gr ip, fri-frn, sb pty-pty, v calc. CHK: dk
gy-gy, occ off wh-crm, mot, sb pty-blky,
fri-occ frm, rthy tex, v calc.

MRLST
ip, fri-frn
occ off
rthy tex

MD: 91.08'
Inclination: 90.98°
Azimuth: 15.18°
VS: 4.62'

TVD (ft)

MD: 16,049'
Inclination: 91.17°
Azimuth: 89.5°
TVD: 7,613.33'
VS: 8,818.31'

TVD (ft)

MD: 16,144'
Inclination: 91.08°
Azimuth: 88.89°
TVD: 7,611.47'
VS: 8,913.13'

