

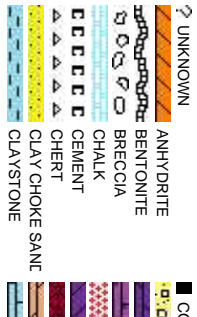


Scale: 5" / 100'
Measured Depth Log

Well Name	FERGE 28N-14HZ		
Location	SEC 14, T3N, R66W		
State	COLORADO	County	WELD
Country	USA	Rig Number	ENSIGN 132
API Number	05123363410000	AFE #	2073366
Region	DJ BASIN	Field	WATTENBERG
Spud Date	4/29/2014	Drilling Completed	5/5/2014
Surface Coordinates	281' FSL & 1148' FWL 40.21859 -104.76969		
Bottom Hole Coordinates	1' FNL 2480' FWL 40.23225 -104.7450		
Ground Elevation	4913'	K.B. Elevation	4926'
Logged Interval	6765'	To	12518'
Total Depth	12518'		
Formation	NIOBRARA		
Type of Drilling Fluid	FSNL		

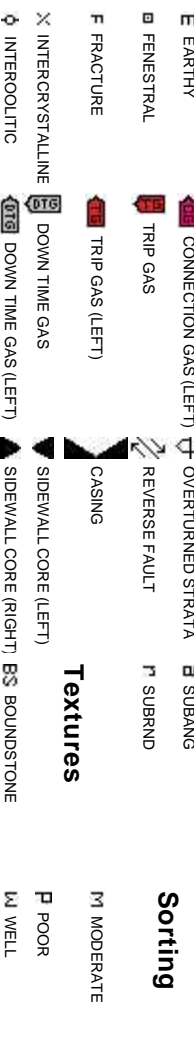
Company ANADARKO PE
Address 1099 18th St, S
Denver , CO 80

Name SHANA SWIRIN
Company COLUMBINE L

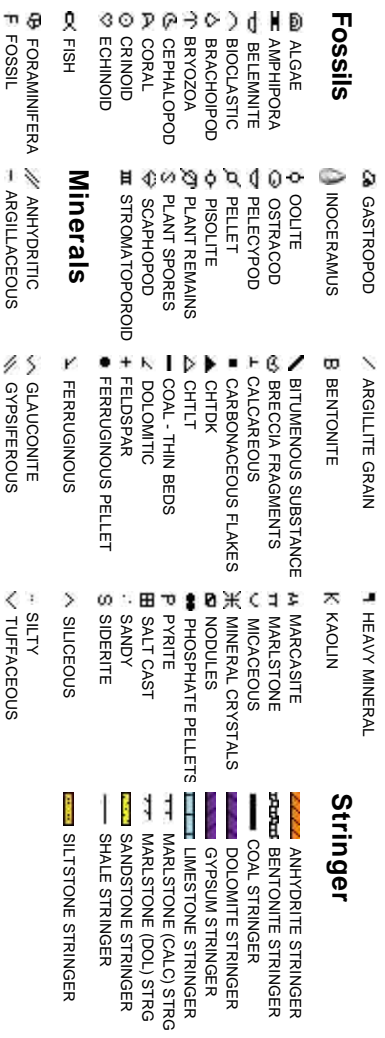


Accessories

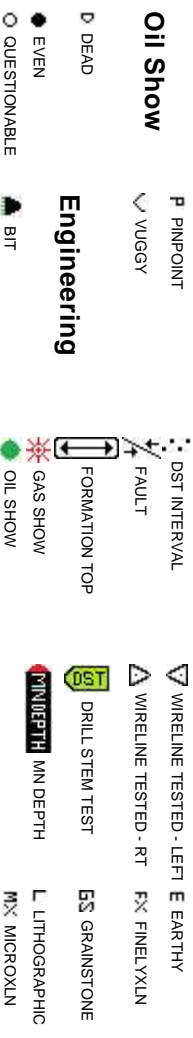
MIN DEPTH (DOWN)



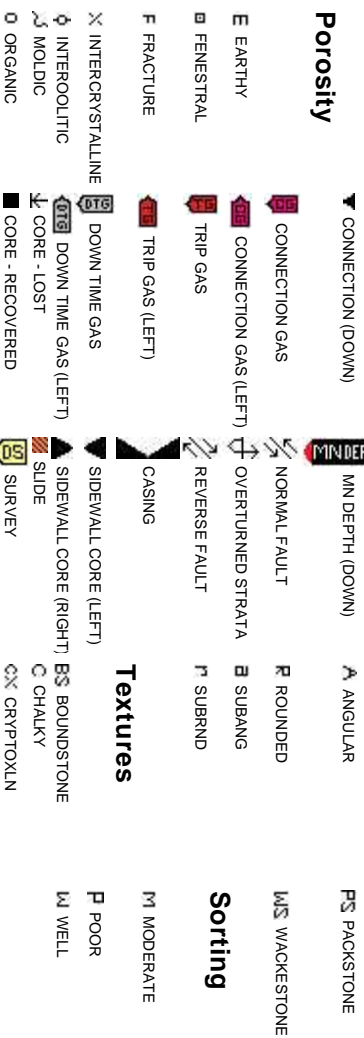
ITONITE KK



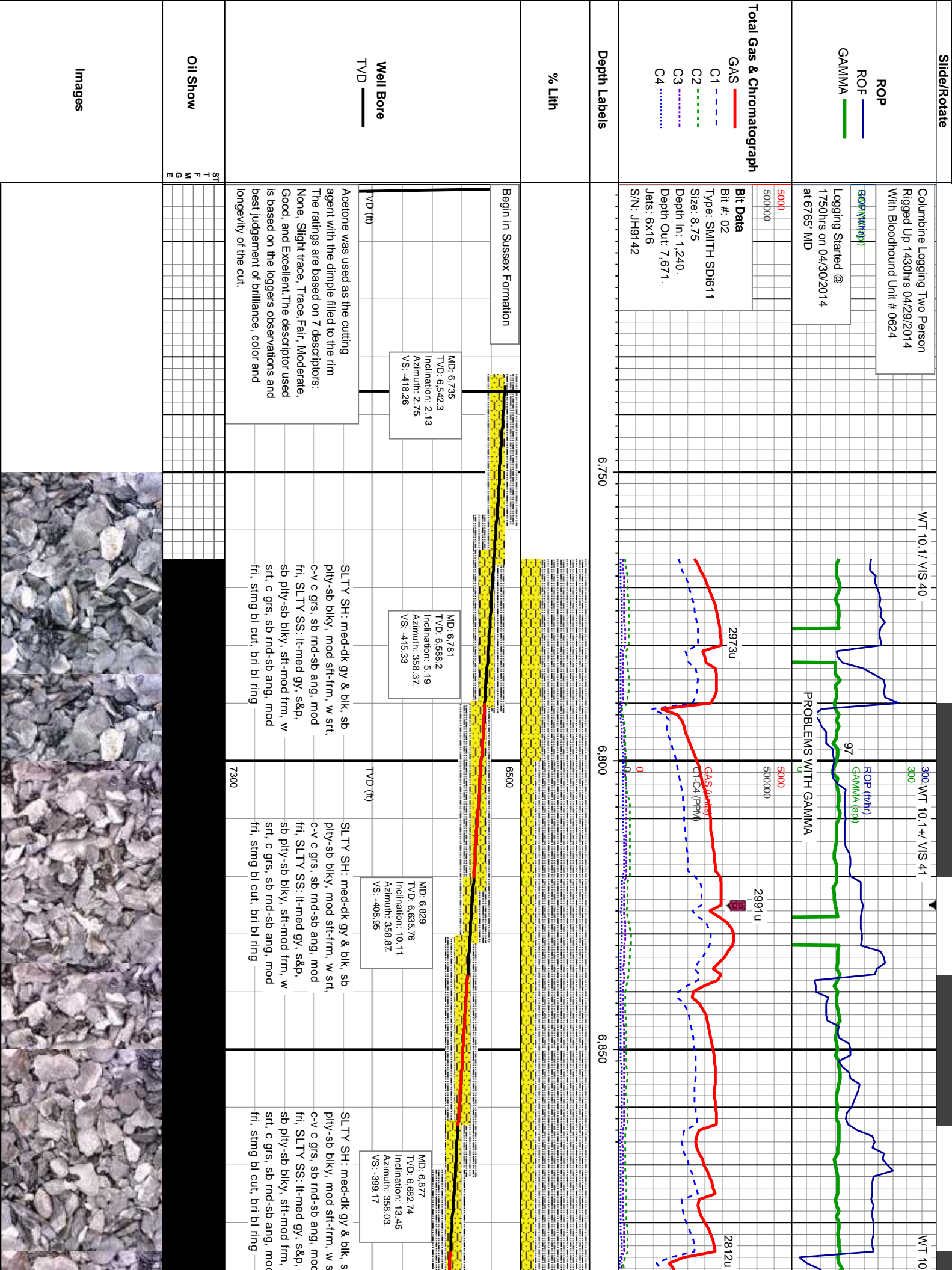
DO NOT REMOVE
←
EMIT

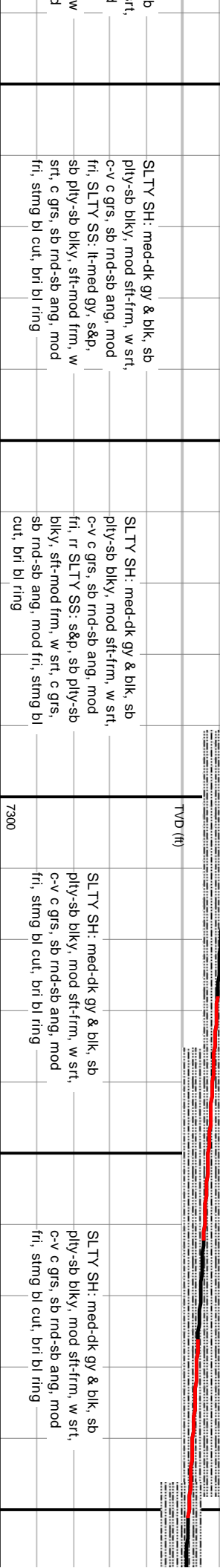
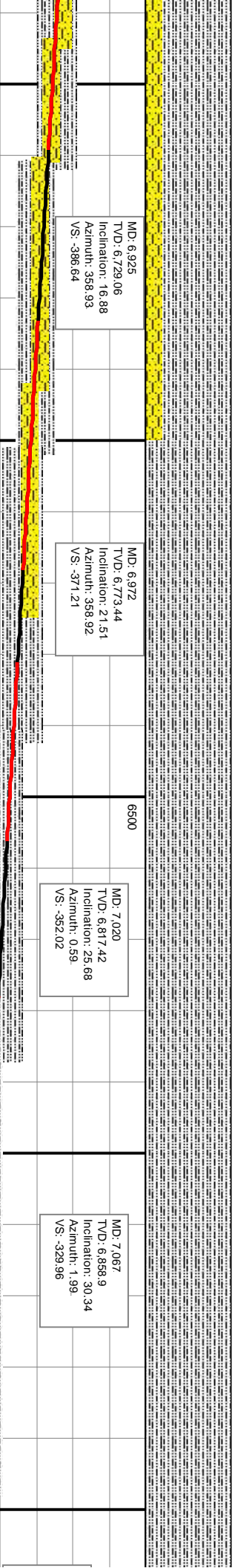
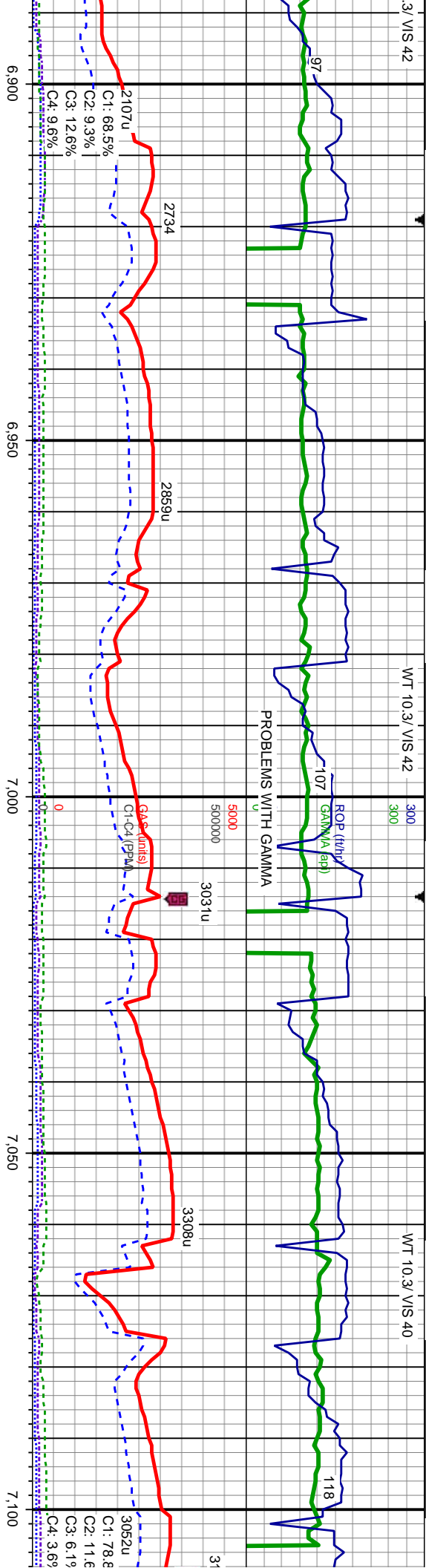


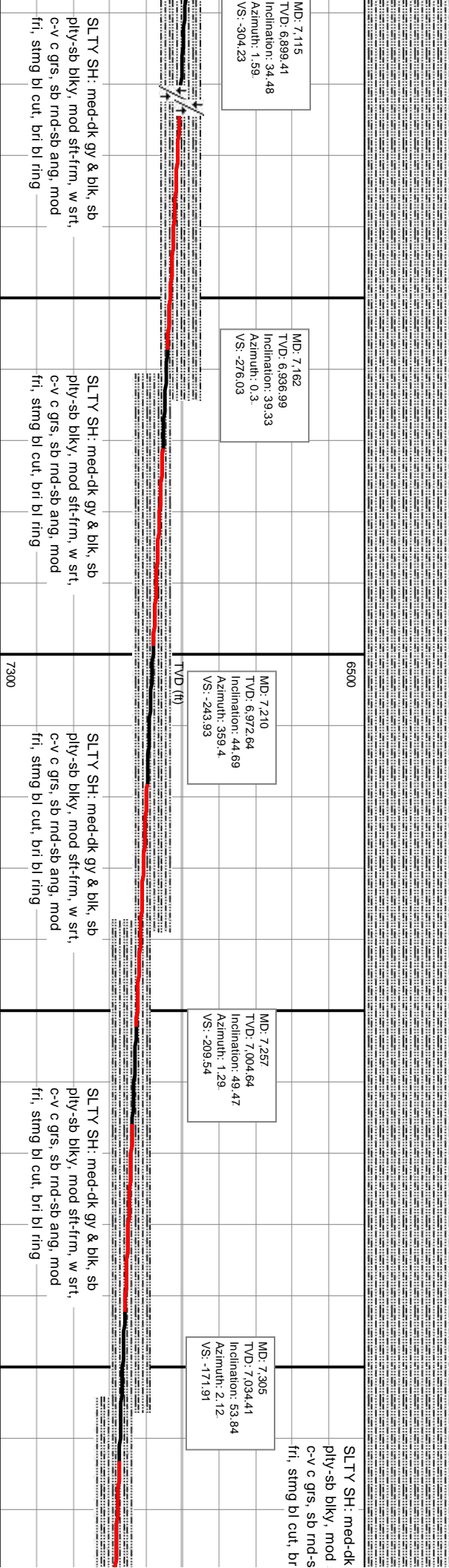
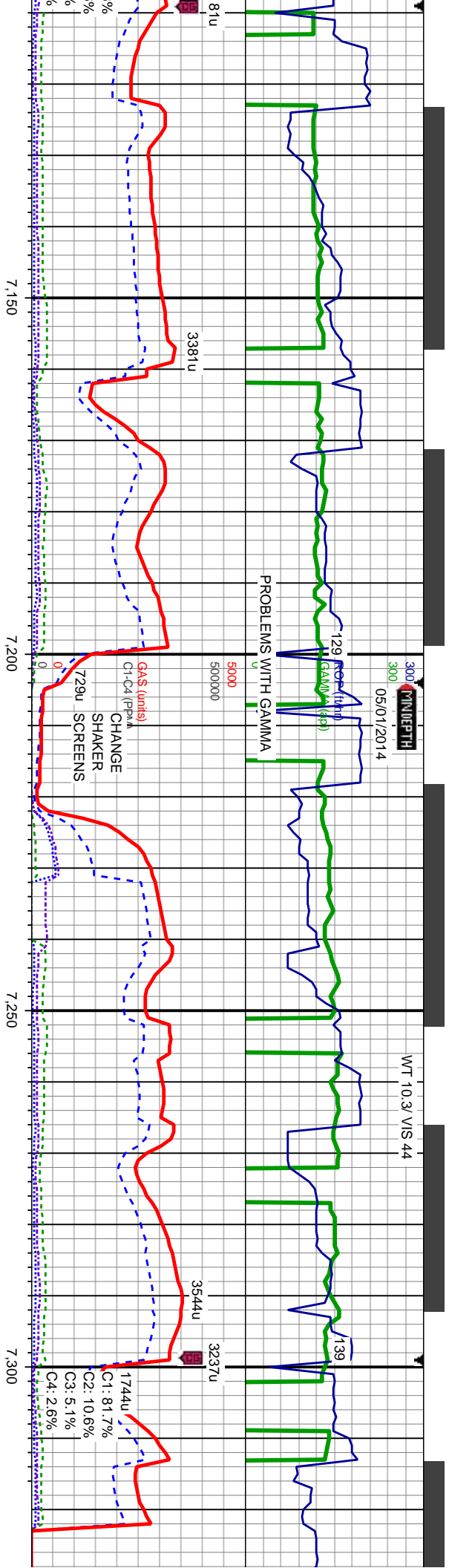
MIN

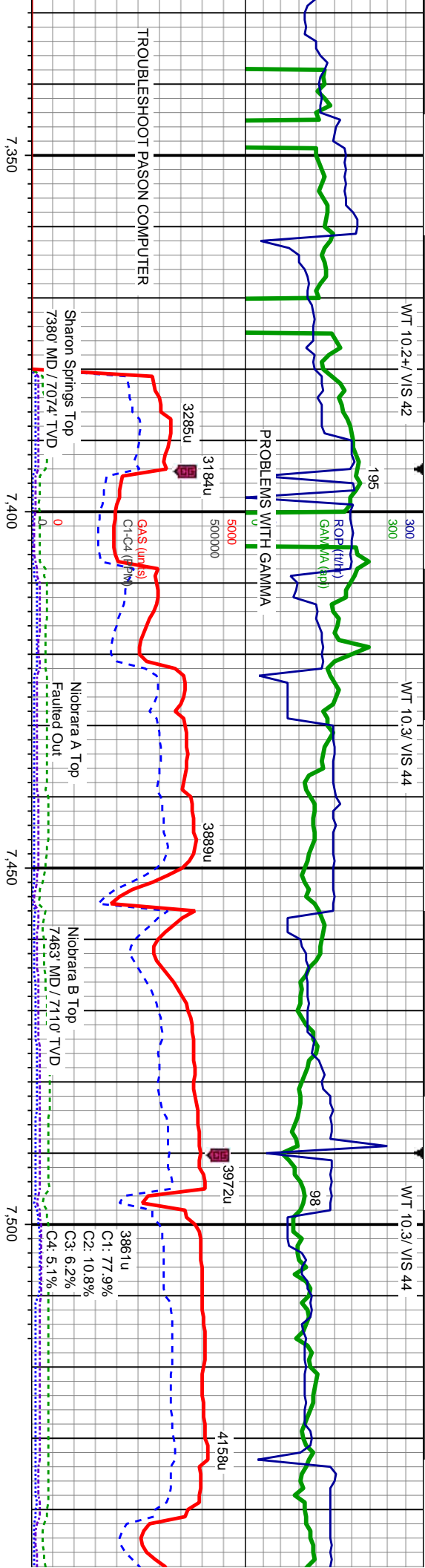


Other Symbols









TROUBLESHOOT PASON COMPUTER

gy & blk, sb
sft-frn, w srl,
b ang, mod
bl ring

SLTY SH: med-dk gy & blk, sb
ply-sb blk, mod sft-frn, w srl,
c-v c grs, sb md-sb ang, mod
fri, occ bent, sting bl cut, bri bl
ring

MD: 7.352
TVD: 7.060.36
Inclination: 59.1
Azimuth: 1.45
VS: -132.74

6500

CHK: lt-med gy-brn, mot,
blk-sb ply, sft-frn, mod srt,
c grs, sb rd-sb ang, mod fri,
MRLST: med-dk gy & blk,
blk-sb ply, sft-frn, mod srt,
c grs, sb rd-sb ang, mod fri,
SLTY SH: med-dk gy & blk, sb
ply-sb blk, mod sft-frn, w srl,
c-v c grs, sb md-sb ang, mod
fri, rr bent, sting bl cut, bri bl
ring

MD: 7.447
TVD: 7.103.49
Inclination: 66.18
Azimuth: 0.55
VS: -48.17

CHK: lt-med gy-brn, mot,
blk-sb ply, sft-frn, mod srt,
c grs, sb rd-sb ang, mod fri,
MRLST: med-dk gy & blk,
blk-sb ply, sft-frn, mod srt,
c grs, sb rd-sb ang, mod fri,
sting bl cut, bri bl ring

MD: 7.495
TVD: 7.120.79
Inclination: 71.54
Azimuth: 0.59
VS: -3.43

CHK: lt-med gy-brn, mot,
blk-sb ply, sft-frn, mod srt,
c grs, sb rd-sb ang, mod fri,
MRLST: med-dk gy & blk,
blk-sb ply, sft-frn, mod srt,
c grs, sb rd-sb ang, mod fri,
abt cal, sting bl cut, bri bl
ring

MD: 7.542
TVD: 7.133.53
Inclination: 77.01
Azimuth: 0.93
VS: 41.78

7300



WT 10.3/ VIS 43

WT 10.2/ VIS 43

WT 9.6/ VIS 41

ROP
SCALE
CHANGE

PROBLEMS WITH GAMMA

TD Curve @ 7671'
@ 07:40hrs on 05/01/2014

Start drilling the Lateral
@ 01:30hrs on 05/03/2014

Bit Data
Bit #: 03
Type: VAREL VS513D
Size: 6.12
Depth In: 7,671'
Depth Out: 12,518'
Jets: 5x18
S/N: 4006847

3233u
C1: 84.5%
C2: 8.7%
C3: 5.4%
C4: 1.4%

7,550 7,600 7,650 7,700 7,750

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-fm, mod strd, c grs,
sb rd-sb ang, mod fri, MRLST:
med-dk gy & blk, blk-y-sb ply,
sft-fm, mod strd, c grs, sb
rd-sb ang, mod fri, abnt cal,
stng bl cut, bri bl ring

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-fm, mod strd, c grs,
sb rd-sb ang, mod fri, MRLST:
med-dk gy & blk, blk-y-sb ply,
sft-fm, mod strd, c grs, sb
rd-sb ang, mod fri, occ cal,
stng bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
blk-y-sb ply, sft-fm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, MRLST: dk gy & blk,
blk-y-sb ply, sft-fm, mod strd,
c grs, sb rd-sb ang, mod fri,
occ calc incl, r r fos frags,
stng bl cut, bri bl ring

MD: 7.590
TVD: 7,142.97
Inclination: 80.3°
Azimuth: 1.51°
VS: 88.84

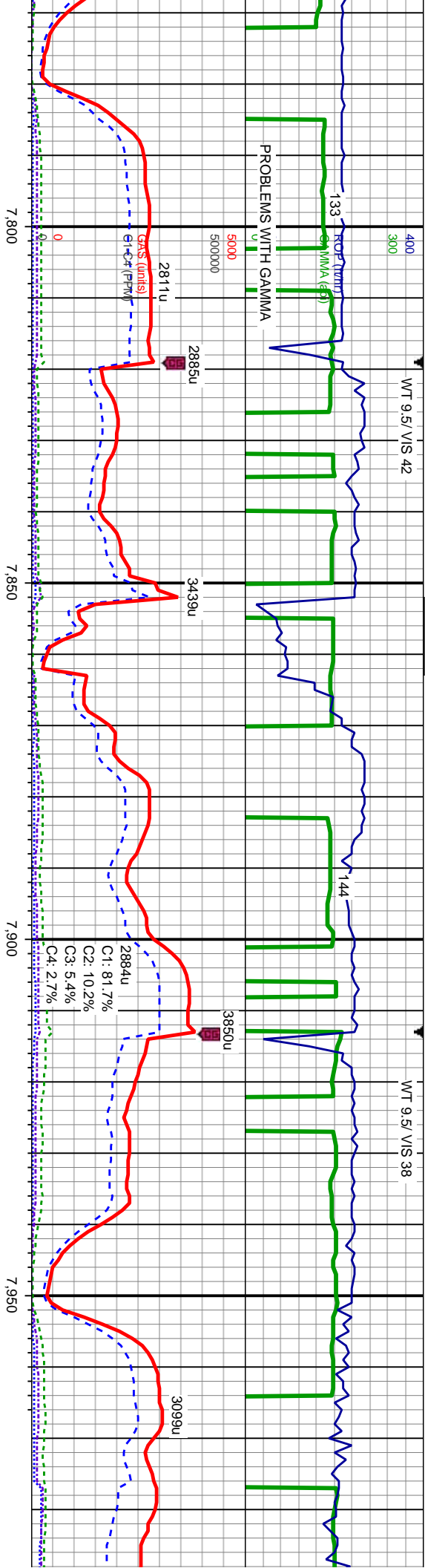
MD: 7.625
TVD: 7,147.62
Inclination: 84.44°
Azimuth: 1.49°
VS: 123.52

MD: 7.682
TVD: 7,151.3
Inclination: 88.15°
Azimuth: 1.68°
VS: 180.39

TVD
SCALE
CHANGE

7,400





CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-frm, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, blk-y-sb
ply, sft-frm, mod strd, c grs,
sb rd-sb ang, mod fri, occ cal,
abnt calc incl, sting bl cut, bri
bl ring

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-frm, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, blk-y-sb
ply, sft-frm, mod strd, med-c
grs, sb rd-sb ang, mod fri, tr
cal, abnt calc incl, sting bl cut,
bri bl ring

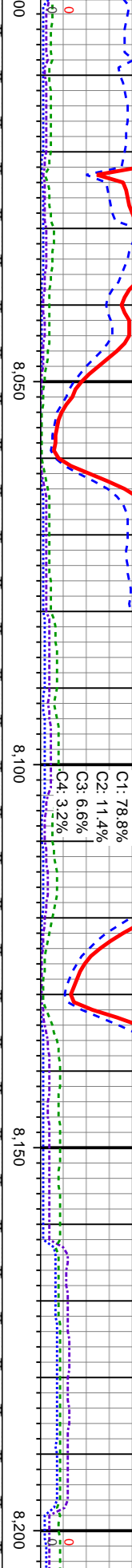
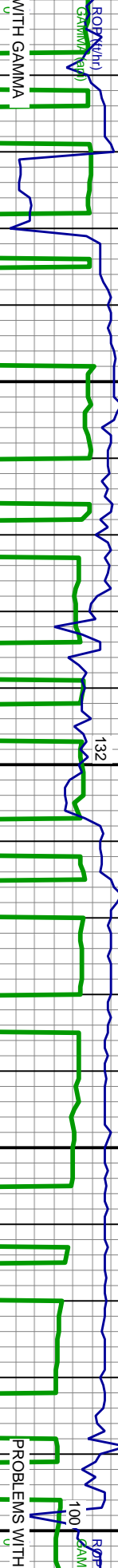
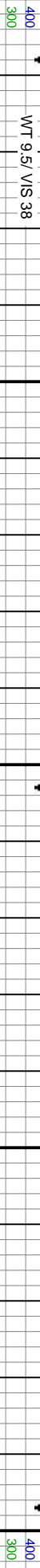
MD: 7.777
TVD: 7.153.29
Inclination: 89.45
Azimuth: 0.75
VS: 275.36

MD: 7.872
TVD: 7.153.28
Inclination: 90.56
Azimuth: 1.21
VS: 370.34

MD: 7.967
TVD: 7.152.94
Inclination: 89.85
Azimuth: 1.09
VS: 465.33



WT 9.5 / VIS 38

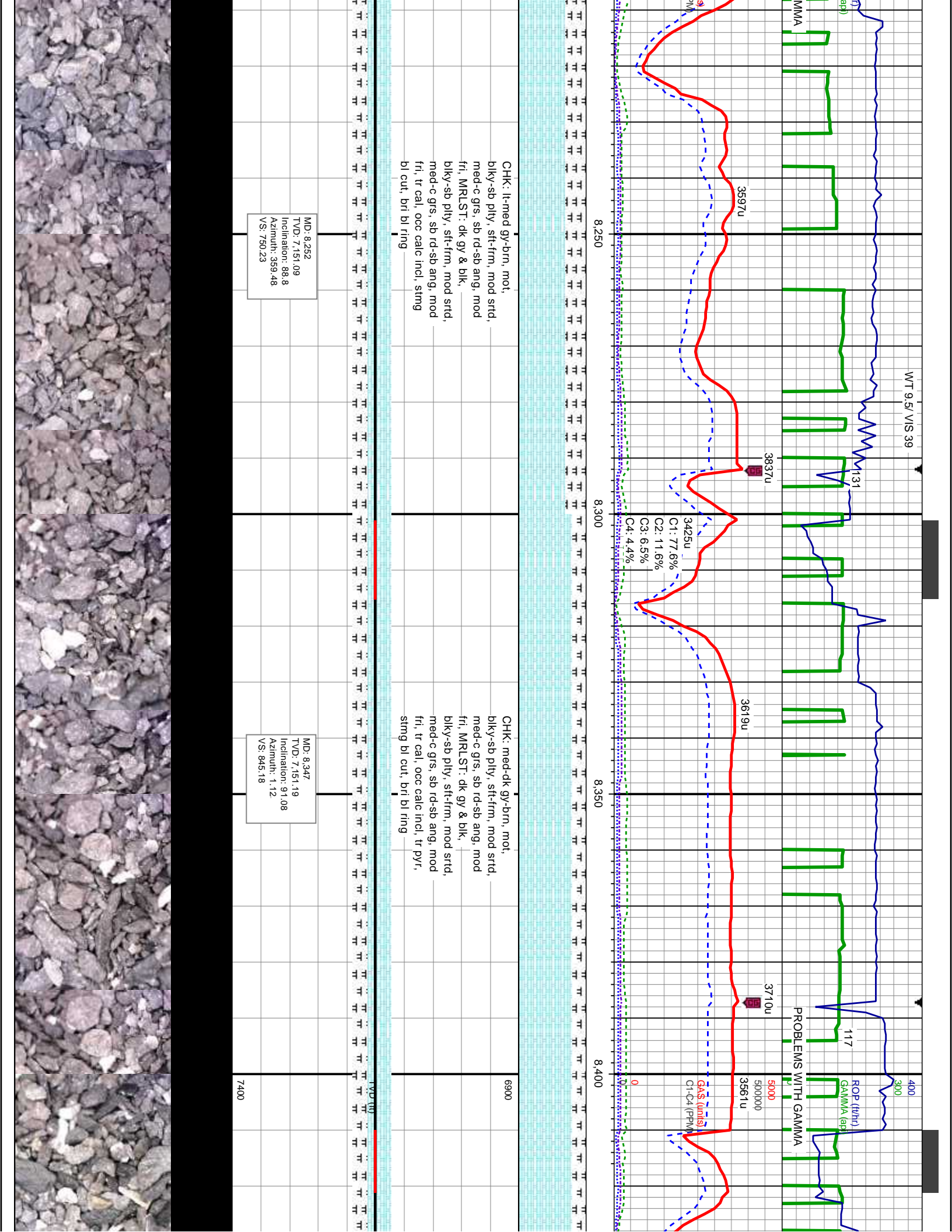


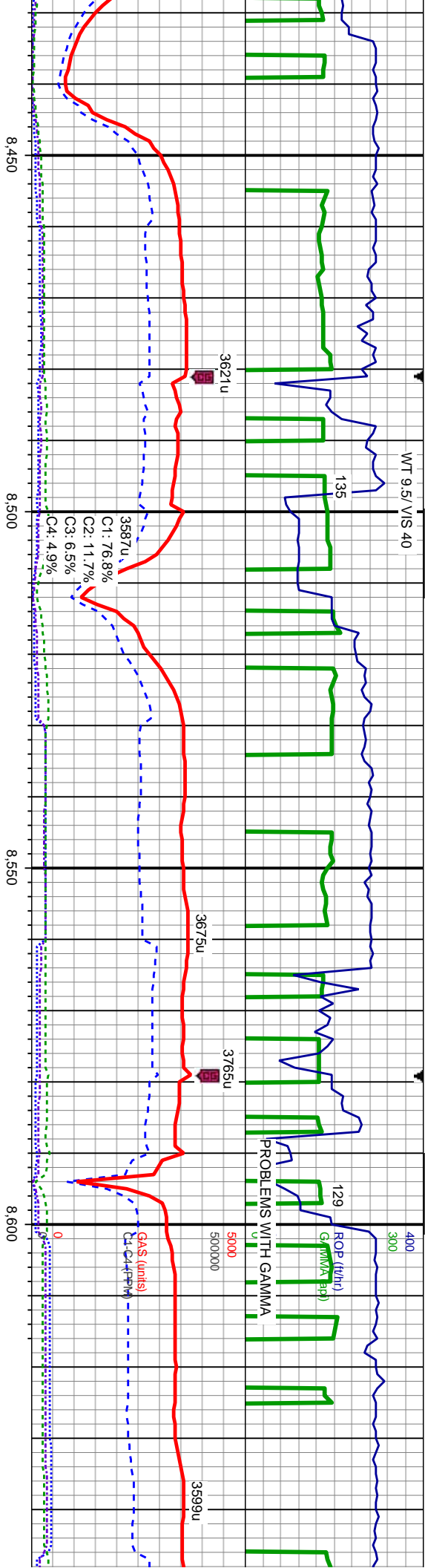
CHK: lt-med gy-brn, mot,
biky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, MRLST: dk gy & blk,
biky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, tr cal, occ calc incl, sting
bl cut, bri bl ring

MD: 8.062
TVD: 7,152.07
Inclination: 91.2
Azimuth: 1.11
VS: 560.32

MD: 8.157
TVD: 7,150.58
Inclination: 90.59
Azimuth: 0.62
VS: 655.29







CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, MRLST: dk gy & blk,
biky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, tr cal, occ calc incl, tr pyr,
stmg bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, MRLST: dk gy & blk,
biky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, tr cal, occ calc incl, occ
pyr, stmg bl cut, bri bl ring

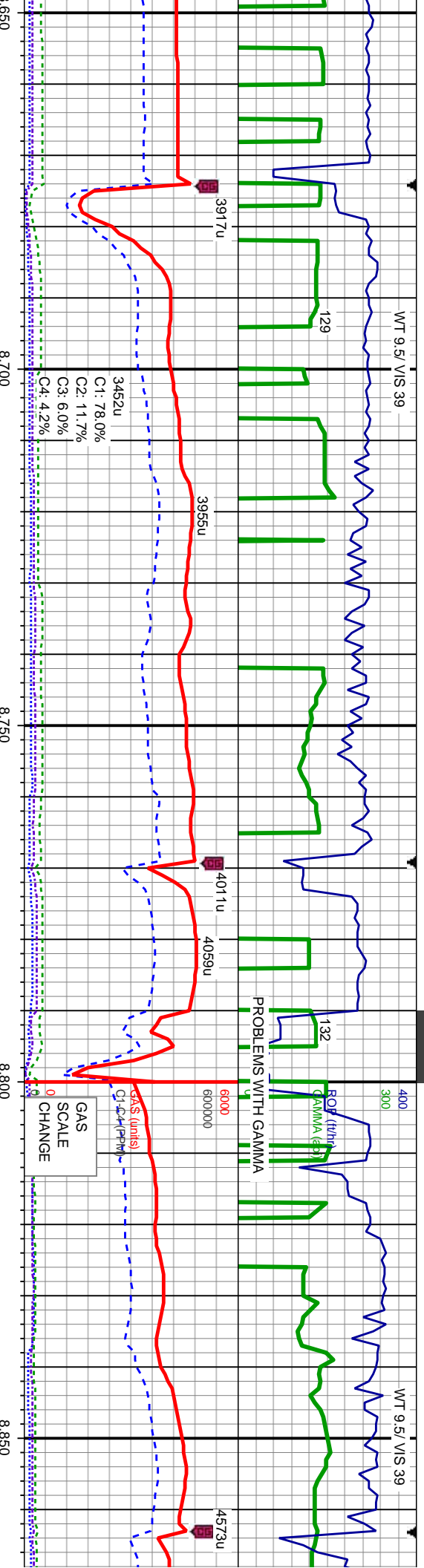
CHK: med-dk
biky-sb pily, s
med-c grs, sb
fri, MRLST: d
biky-sb pily, s
med-c grs, sb
fri, tr cal, occ
pyr, stmg bl c

MD: 8.442
TVD: 7,150.75
Inclination: 89.45
Azimuth: 0.77
VS: 940.17

MD: 8.538
TVD: 7,150.72
Inclination: 90.59
Azimuth: 1.66
VS: 1,036.16

MD: 8.633
TVD: 7,148.46
Inclination: 92.13
Azimuth: 2.12
VS: 1,131.13





gy-brn, mot, —
sft-firm, mod strd, —
rd-sb ang, mod —
k gy & blk, —
sft-firm, mod strd, —
rd-sb ang, mod —
calc incl, occ —
cut, bri bl ring —

CHK: med-dk gy-brn, mot,
biky-sb pty, sft-firm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, MRLST: dk gy & blk, —
biky-sb pty, sft-firm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, abnt cal, occ calc incl,
sting bl cut, bri bl ring —

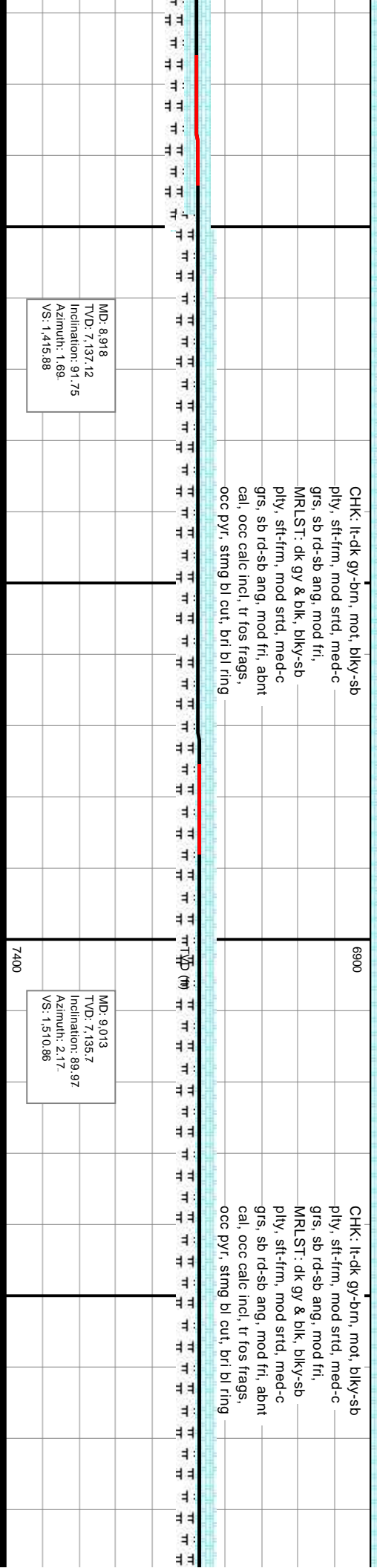
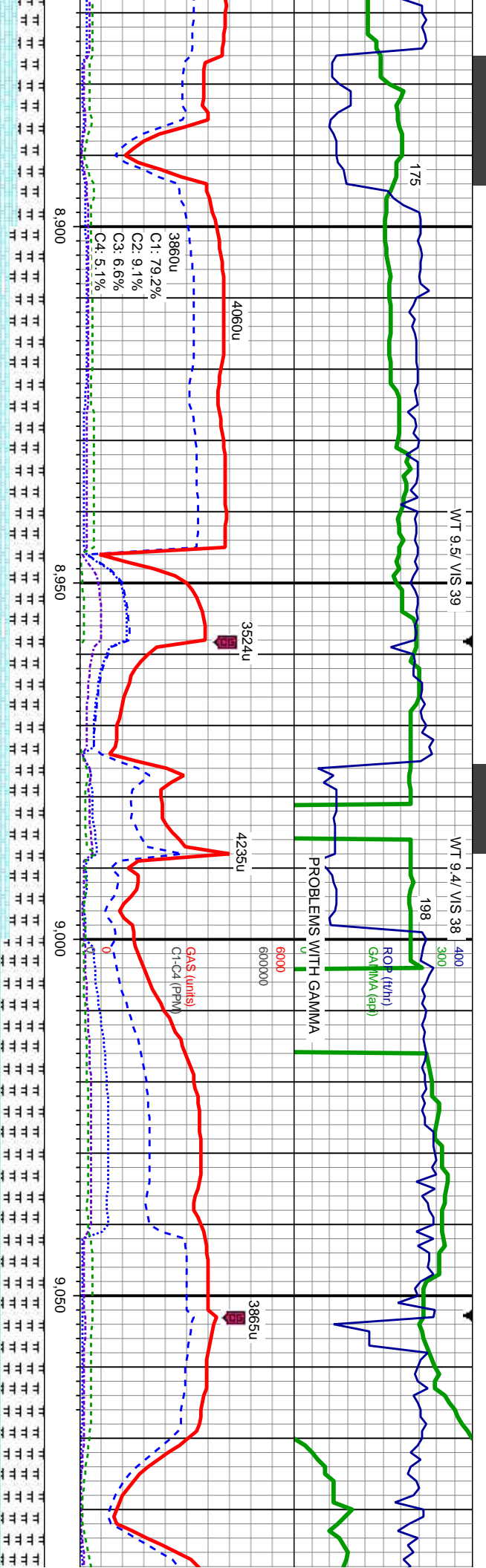
6900

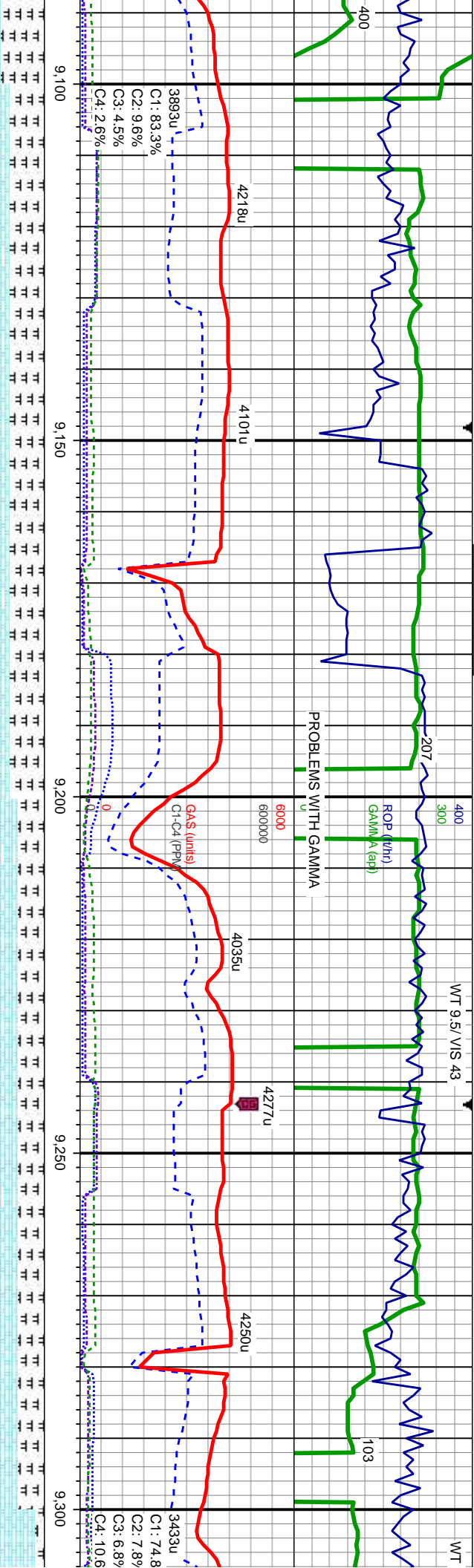
CHK: lt-dk gy-brn, mot, biky-sb
pty, sft-firm, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, biky-sb
pty, sft-firm, mod strd, med-c
grs, sb rd-sb ang, mod fri, abnt
cal, occ calc incl, r fos frags,
tr pyr, sting bl cut, bri bl ring —

MD: 8.728
TVD: 7,144.81
Inclination: 92.28
Azimuth: 0.44
VS: 1.226.05

MD: 8.823
TVD: 7,140.75
Inclination: 92.62
Azimuth: 1.73
VS: 1.320.95







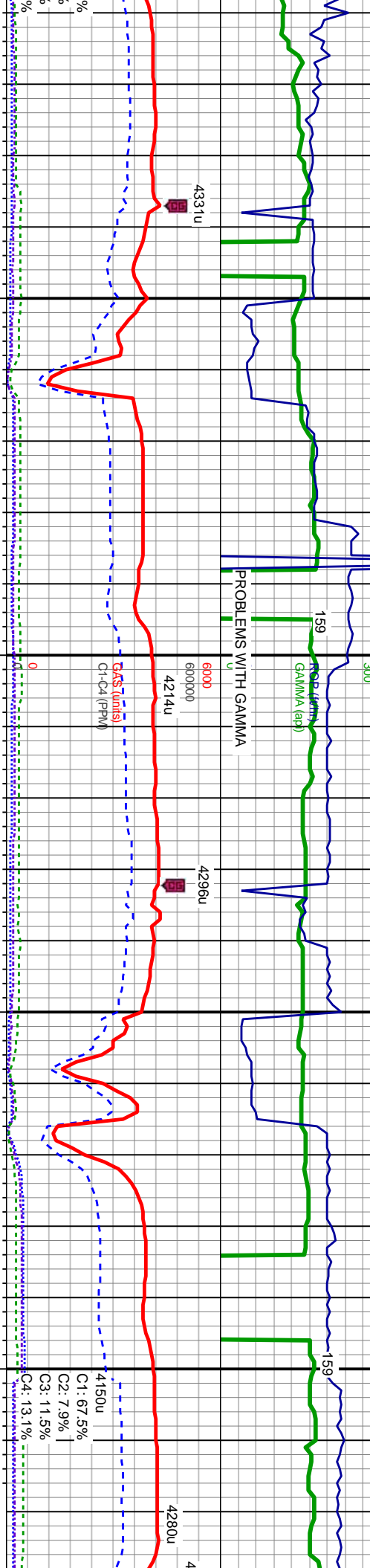
MD: 9.108
TVD: 7,135.47
Inclination: 90.31
Azimuth: 1.21
VS: 1,605.86

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri, abnt
cal, tr calc incl, abnt pyr, tr
bent, sting bl cut, bri bl ring

MD: 9.299
TVD: 7,139.67
Inclination: 88.27
Azimuth: 0.15
VS: 1,796.77

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri, abnt
cal, tr calc incl, tr pyr, rr bent,
sting bl cut, bri bl ring





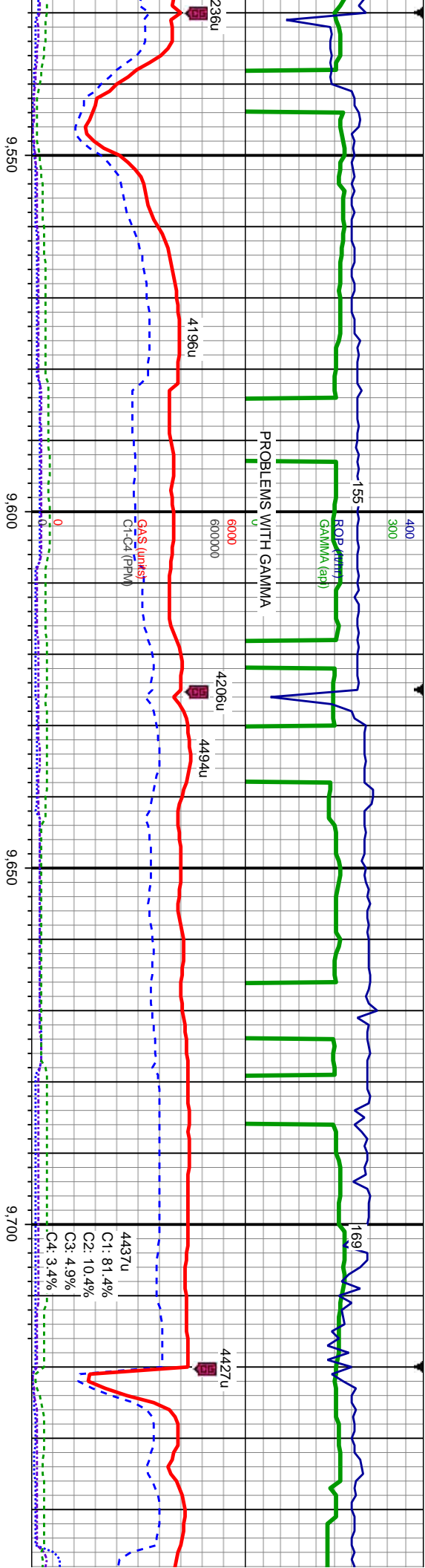
MD: 9.394
TVD: 7,141.44
Inclination: 89.6
Azimuth: 0.54
VS: 1.891.71

MD: 9.489
TVD: 7,141.21
Inclination: 90.68
Azimuth: 3.01
VS: 1.986.7

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri, tr
calc incl, tr pyr, stmg bl cut,
bri bl ring

CHK: lt-dk gy-brn, mot, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri,
MRLST: dk gy & blk, blk-y-sb
ply, sft-frn, mod strd, med-c
grs, sb rd-sb ang, mod fri, tr
calc incl, tr fos frags, rr pyr,
stmg bl cut, bri bl ring





MD: 9.584
TVD: 7,140.03
Inclination: 90.74
Azimuth: 1.87
VS: 2,081.69

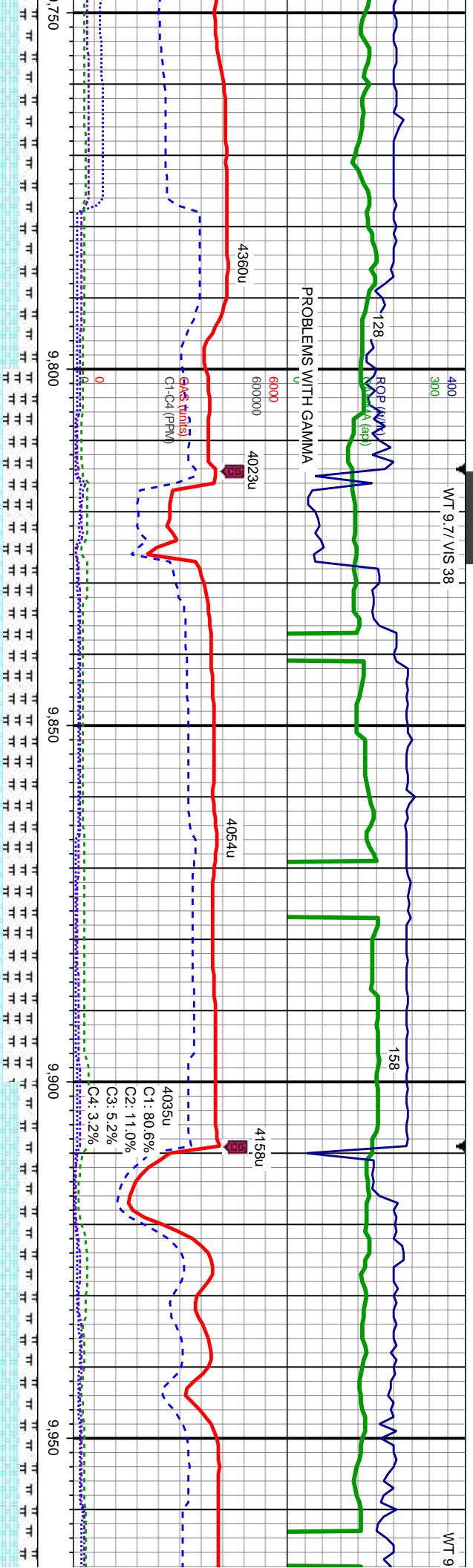
MD: 9.679
TVD: 7,139.96
Inclination: 89.32
Azimuth: 2.36
VS: 2,176.69

CHK: lt-dk gy-brn, mot, blk-y-sb	CHK: lt-dk gy-brn, mot, blk-y-sb	CHK: lt-dk
ply, sft-frm, mod strd, med-c	ply, sft-frm, mod strd, med-c	ply, sft-frm
grs, sb rd-sb ang, mod fri:	grs, sb rd-sb ang, mod fri:	grs, sb rd-s
MRLST: dk gy & blk, blk-y-sb	MRLST: dk gy & blk, blk-y-sb	MRLST: dk
ply, sft-frm, mod strd, med-c	ply, sft-frm, mod strd, med-c	ply, sft-frm
grs, sb rd-sb ang, mod fri, tr	grs, sb rd-sb ang, mod fri, tr	grs, sb rd-s
calc incl, tr fos frags, rr pyr,	calc incl, tr fos frags, rr pyr,	calc, occ cal
stmg bl cut, bri bl ring	rr pyr, stmg bl cut, bri bl ring	stmg bl cut



WT 9.7 / VIS 38

WT 9



MD: 9.774
TVD: 7,141.54
Inclination: 88.8
Azimuth: 1.47
VS: 2.271.67

MD: 9.870
TVD: 7,142.23
Inclination: 90.37
Azimuth: 1.32
VS: 2.367.66

MD: 9.965
TVD: 7,141.00
Inclination: 9
Azimuth: 0.7
VS: 2.462.64

gy-brn, mot, blk-y-sb	gy-brn, mot, blk-y-sb	CHK: lt-dk gy-brn, mot, blk-y-sb	CHK: lt-dk gy-brn, mot, blk-y-sb
mod strd, med-c	mod strd, med-c	ply, sft-frm, mod strd, med-c	ply, sft-frm, mod strd, med-c
b ang, mod fri:	b ang, mod fri:	grs, sb rd-sb ang, mod fri:	grs, sb rd-sb ang, mod fri:
gy & blk, blk-y-sb	gy & blk, blk-y-sb	MRSLT: dk gy & blk, blk-y-sb	MRSLT: dk gy & blk, blk-y-sb
mod strd, med-c	mod strd, med-c	ply, sft-frm, mod strd, med-c	ply, sft-frm, mod strd, med-c
b ang, mod fri, occ	b ang, mod fri, occ	grs, sb rd-sb ang, mod fri, abnt	grs, sb rd-sb ang, mod fri, abnt
c incl, tr fos frags,	c incl, tr fos frags,	cal, occ calc incl, tr fos frags,	cal, occ calc incl, tr fos frags,
bri bl ring	bri bl ring	stmg bl cut, bri bl ring	stmg bl cut, bri bl ring



7/ VIS 37

MINDEPTH
05/04/2014

WT 9.8/ VIS 38

WT 9.8/ VIS 40

400
300

ROP (ft)
130

PROBLEMS WITH GAMMA

6000
4022u

4134u

GAS (units)
C1-C4 (PPM)

10,000

10,050

10,100

10,150

4250u

3920u

3560u

C1: 82.3%
C2: 7.8%
C3: 6.1%
C4: 3.8%

4295u

3
1.08

MD: 10,060
TVD: 7,138.91
Inclination: 91.48
Azimuth: 1.98
VS: 2,557.61

MD: 10,165
TVD: 7,136.93
Inclination: 90.68
Azimuth: 359.59
VS: 2,662.57

CHK: lt-dk gy-brn, mot, blk-y-sb

ply, sft-frm, mod strd, med-c
grs, sb rd-sb ang, mod fri;

MRLST: dk gy & blk, blk-y-sb
ply, sft-frm, mod strd, med-c
grs, sb rd-sb ang, mod fri, abnt
cal, occ calc incl, tr fos frags,
stmg bl cut, bri bl ring

CHK: med-dk gy-brn, mot,

blk-y-sb ply, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,

blk-y-sb ply, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, abnt cal, occ calc incl,
stmg bl cut, bri bl ring

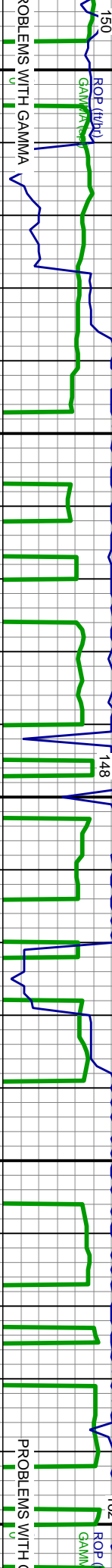
7400

6900

WT 9.7/ VIS 42

WT 9.6/ VIS 43

WT 9.6/ VIS 43



ROP (ft/hr)

ROP (ft/hr)

4230u 60000 60000 4298u 4379u 4350u

PROBLEMS WITH GAMMA

MD: 10,250
TVD: 7,135.03
Inclination: 91.88
Azimuth: 2.46
VS: 2.747/52

MD: 10,345
TVD: 7,132.32
Inclination: 91.39
Azimuth: 3.11
VS: 2.842/47

CHK: med-dk gy-brn, mot, blk-y-sb pily, sft-frm, mod strd, med-c grs, sb rd-sb ang, mod fri; MRLST: dk gy & blk, blk-y-sb pily, sft-frm, mod strd, med-c grs, sb rd-sb ang, mod fri, abnt cal, abnt calc incl, string bl cut, bri bl ring

7400

WT 9.6/ VIS 40

300

ROP (ft/hr)
GAMMA ray

PROBLEMS WITH GAMMA

6000

600000

GAS (units)
C/C4 (PMV)

0

10,600

10,550

10,500

10,450

4479u

4244u

4476u

152

4362u

MD: 10.440
TVD: 7,130.35
Inclination: 90.99
Azimuth: 2.1
VS: 2.937.44

MD: 10.536
TVD: 7,130.14
Inclination: 89.26
Azimuth: 0.69
VS: 3.033.43

MD: TVD
Incl
Azim
VS:

CHK: lt-med gy-brn, mot,
blky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
blky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, occ cal, occ calc incl,
stimg bl cut, bri bl ring

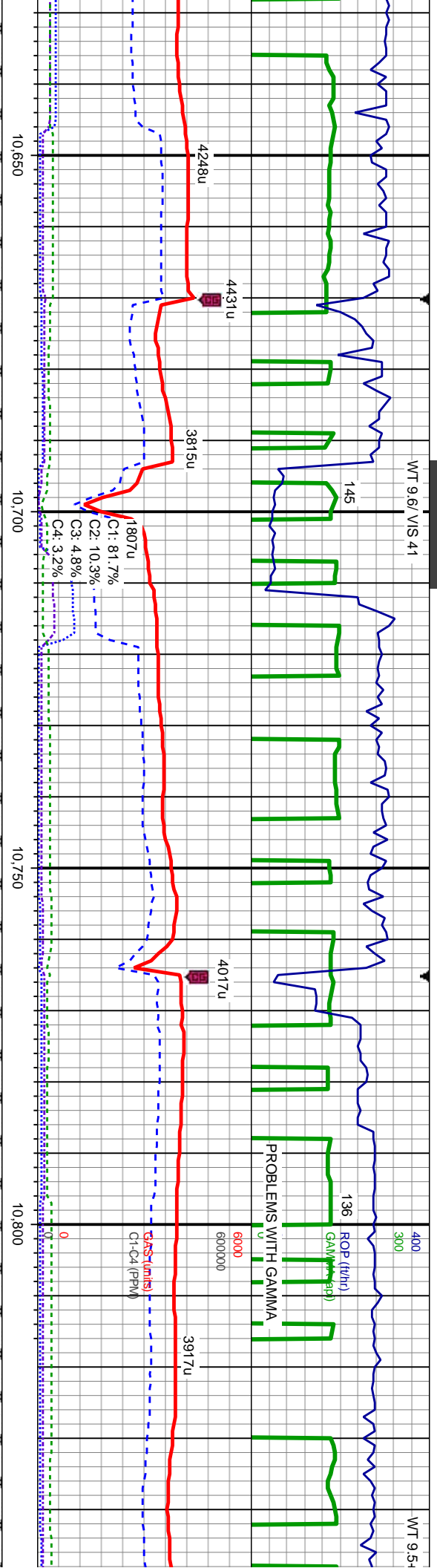
CHK: lt-med gy-brn, mot,
blky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
blky-sb pily, sft-frn, mod strd,
med-c grs, sb rd-sb ang, mod
fri, tr cal, occ calc incl, stimg
bl cut, bri bl ring

7400

6900

WT 9.6/ VIS 41

WT 9.5-



10.631
7.130.78
ation: 89.97
uth: 1.78
3,128.42

MD: 10.726
TVD: 7,130.4
Inclination: 90.49
Azimuth: 4.42
VS: 3.223.39

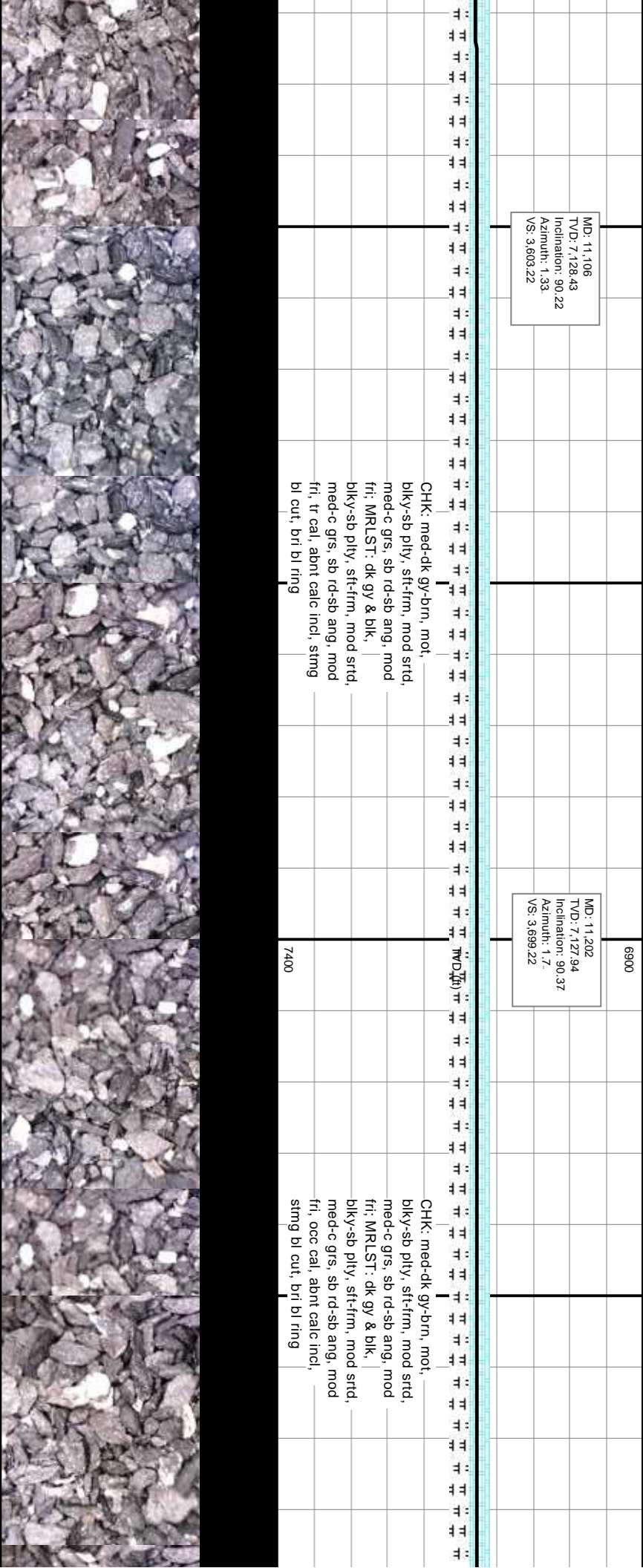
MD: 10.821
TVD: 7,129.61
Inclination: 90.46
Azimuth: 4.67
VS: 3.318.29

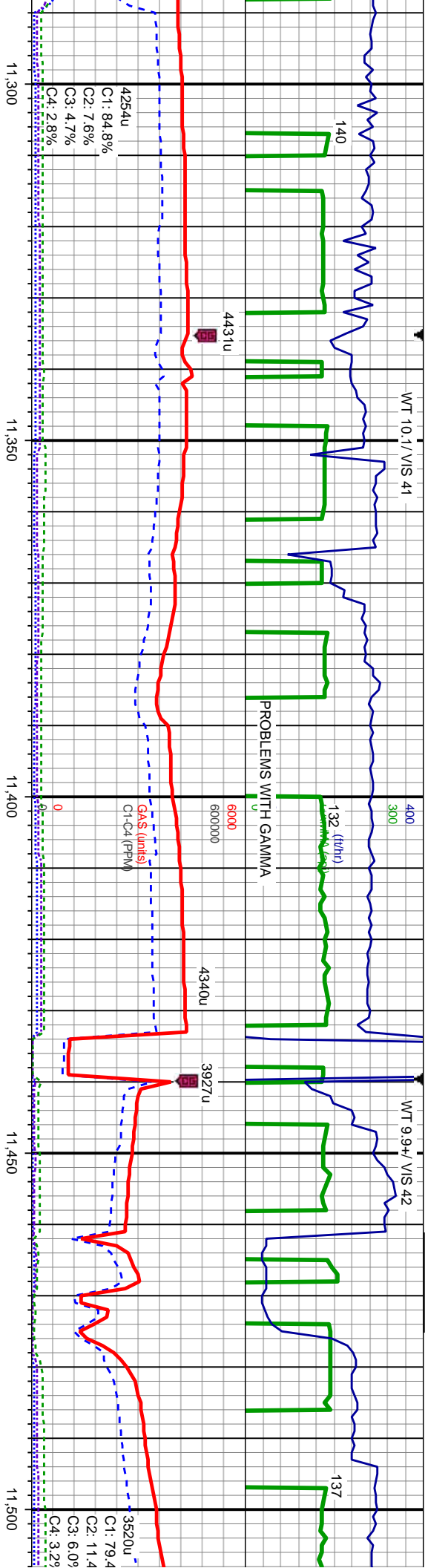
CHK: lt-med gy-brn, mot,
biky-sb ply, sft-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb ply, sft-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stimg bl cut, bri bl ring

CHK: lt-med gy-brn, mot,
biky-sb ply, sft-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb ply, sft-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stimg bl cut, bri bl ring

CHK: med-di
biky-sb ply,
med-c grs, sl
fri; MRLST: c
biky-sb ply,
med-c grs, sl
fri, tr cal, abn
bl cut, bri bl







MD: 11.297
TVD: 7,127.65
Inclination: 89.97
Azimuth: 359.5
VS: 3,794.18

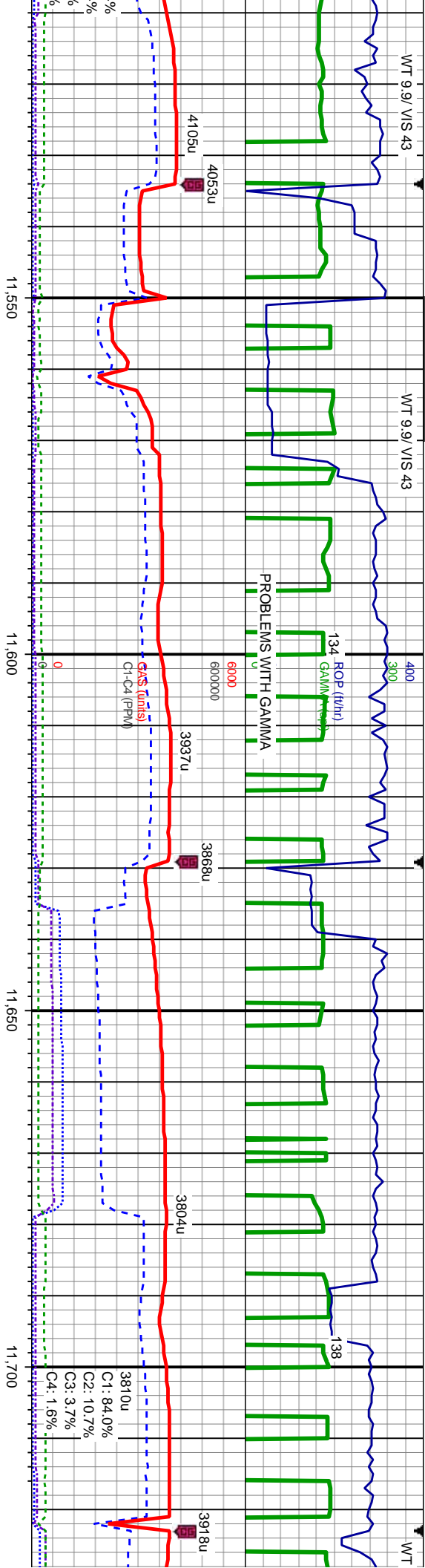
MD: 11.392
TVD: 7,127.45
Inclination: 90.28
Azimuth: 359.8
VS: 3,889.11

MD: 11.487
TVD: 7,127.55
Inclination: 89.6
Azimuth: 359.27
VS: 3,984.03

CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frm, mod srid,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pily, sft-frm, mod srid,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stmg bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frm, mod srid,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pily, sft-frm, mod srid,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stmg bl cut, bri bl ring





MD: 11,582
TVD: 7,127.9
Inclination: 89.97
Azimuth: 3.17
VS: 4.079

6900

MD: 11,677
TVD: 7,127.57
Inclination: 90.43
Azimuth: 3.66
VS: 4.173.97

11,700

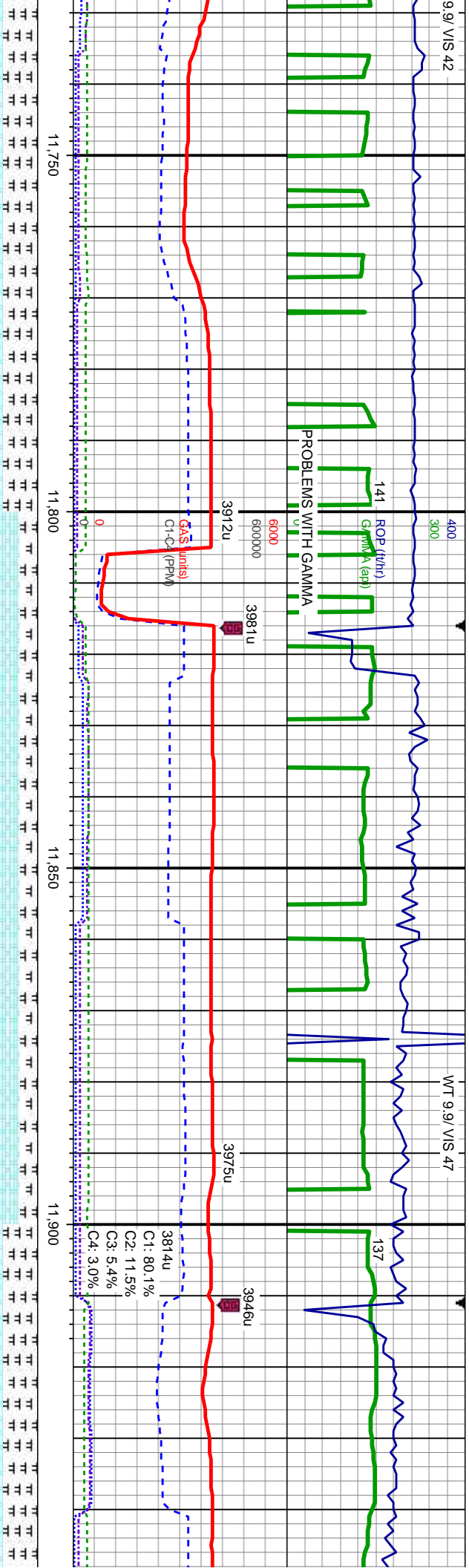
CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pily, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stng bl cut, bri bl ring

7400

CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pily, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stng bl cut, bri bl ring

9.9/ VIS 42

WT 9.9/ VIS 47



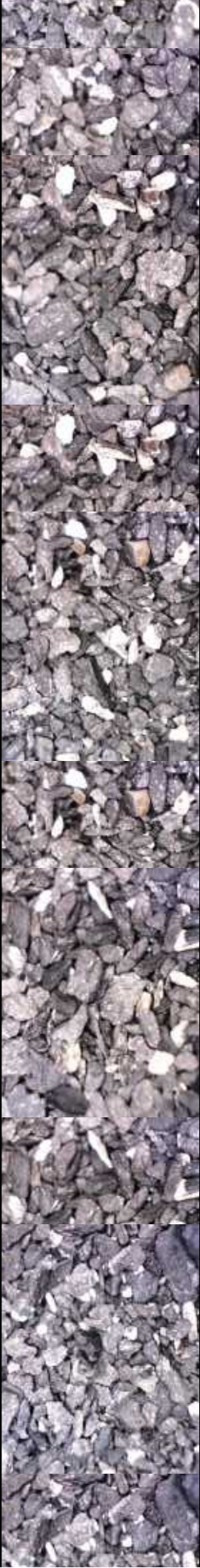
MD: 11,772
TVD: 7,127.06
Inclination: 90.19
Azimuth: 2.31
VS: 4,268.95

MD: 11,867
TVD: 7,126.54
Inclination: 90.43
Azimuth: 2.21
VS: 4,363.94

CHK: med-dk gy-brn, mot,
biky-sb pty, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pty, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stmg bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
biky-sb pty, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pty, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stmg bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
biky-sb pty, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pty, sft-frm, mod strd,
med-c grs, sb rd-sb ang, mod
fri, occ cal, abnt calc incl,
stmg bl cut, bri bl ring



WT 9.8/ V/S 46

400
300

134
138

PROBLEMS WITH GAMMA

6000
4003u

3962u

GAS notes
C1: C (PPM)

12,000

12,050

12,100

12,150

4006u

4016u

4017u
C1: 82.3%
C2: 8.4%
C3: 5.8%
C4: 3.4%

3980u

MD: 11.962
TVD: 7,126.34
Inclination: 89.82
Azimuth: 1.2
VS: 4,458.94

MD: 12.057
TVD: 7,126.69
Inclination: 88.75
Azimuth: 0.95
VS: 4,553.93

MD: 12.152
TVD: 7,126.72
Inclination: 90.22
Azimuth: 0.92
VS: 4,648.92

gy-brn, mot,
stf-firm, mod srt,
rd-sb ang, mod
< gy & blk,
stf-firm, mod srt,
rd-sb ang, mod
c calc incl,
fri bl ring

CHK: med-dk gy-brn, mot,
biky-sb ply, stf-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb ply, stf-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, occ calc incl,
sting bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
biky-sb ply, stf-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb ply, stf-firm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, occ calc incl,
sting bl cut, bri bl ring



WT 10.0/ VIS 45

WT 9.8+/ VIS 45

05/05/2014

PROBLEMS WITH GAMMA

3969u

3962u

436u

WORK ON EQUIPMENT

328u
C1: 36.4%
C2: 1.4%
C3: 17.8%
C4: 45.5%

12.200

12.260

12.300

12.360

MD: 12.247
TVD: 7.126.61
Inclination: 89.91
Azimuth: 359.21
VS: 4.743.86

MD: 12.342
TVD: 7.127.02
Inclination: 89.6
Azimuth: 357.54
VS: 4.838.68

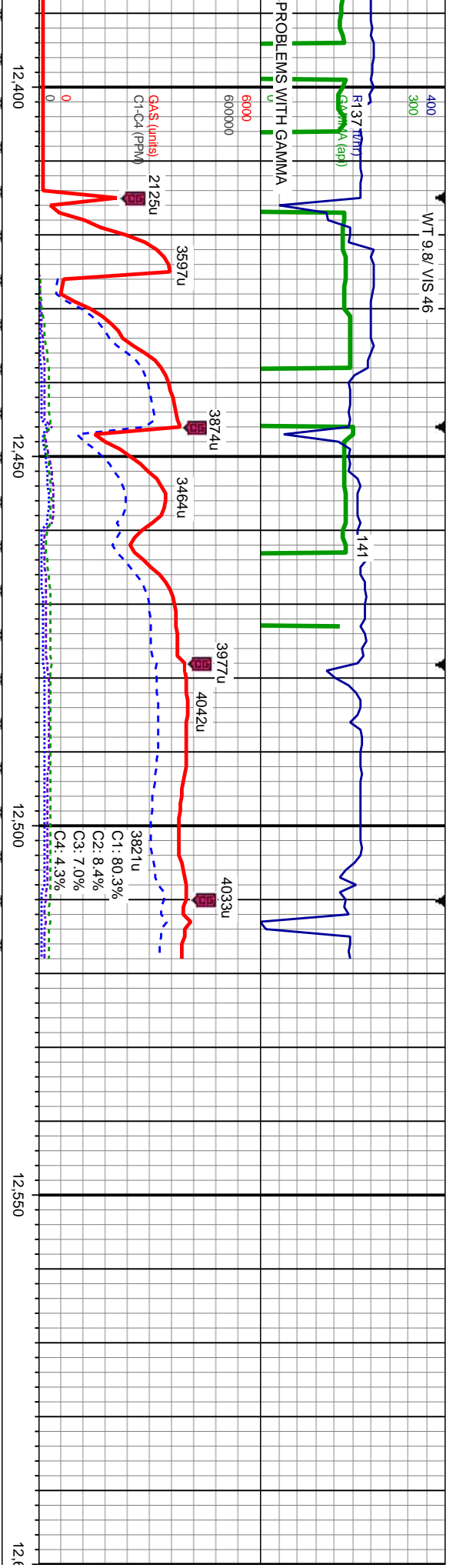
CHK: med-dk gy-brn, mot,
biky-sb ply, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb ply, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, occ calc incl,
sting bl cut, bri bl ring

CHK: med-dk gy-brn, mot,
biky-sb ply, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb ply, sft-frm, mod srt,
med-c grs, sb rd-sb ang, mod
fri, occ cal, occ calc incl, tr
bent, sting bl cut, bri bl ring

7400

6900

WT 9.8 / VIS 46



PROJECTION TO BIT

MD: 12.437
TVD: 7,127.63
Inclination: 89.66
Azimuth: 356.75
VS: 4,933.34

MD: 12.469
TVD: 7,127.86
Inclination: 89.57
Azimuth: 355.48
VS: 4,965.18

MD: 12.518
TVD: 7,128.21
Inclination: 89.57
Azimuth: 355.48
VS: 5,013.87

ANADARKO
FERGE 28N-14HZ
WELL TD @ 12518 MD
ON 05/05/2014 @ 0145HRS

THANK YOU FOR USING
COLUMBINE LOGGING INC.

CHK: med-dk gy-brn, mot,
biky-sb pily, sft-frm, mod srtld,
med-c grs, sb rd-sb ang, mod
fri; MRLST: dk gy & blk,
biky-sb pily, sft-frm, mod srtld,
med-c grs, sb rd-sb ang, mod
fri, occ cal, occ calc incl,
stimg bl cut, bri bl ring

7400

