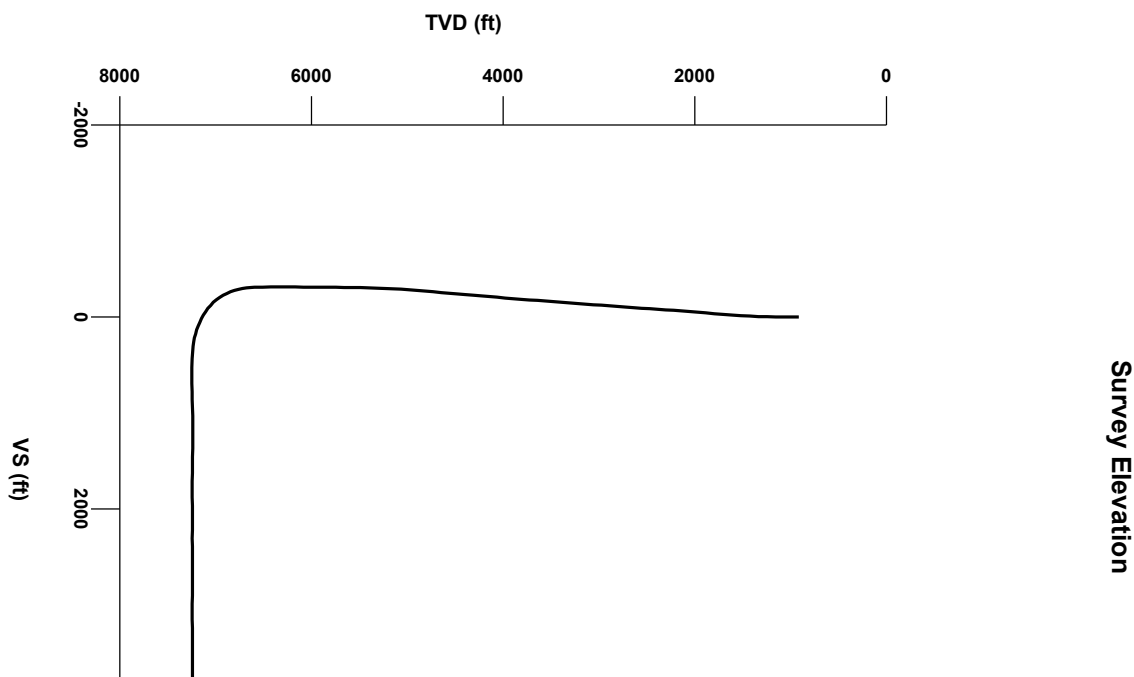
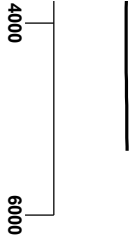
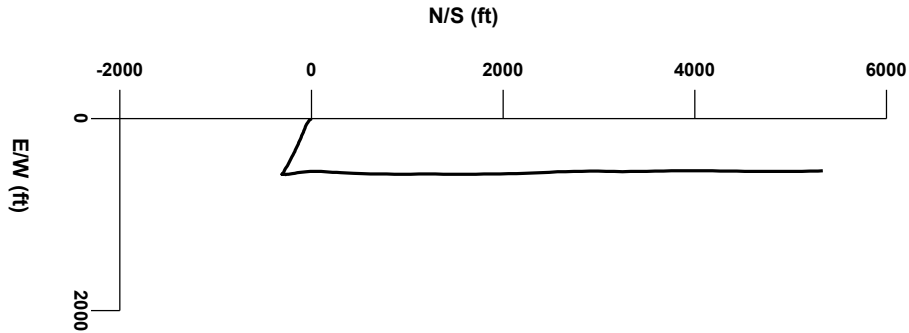


LOG created using LPLLOT VH Version 3.0, April 13, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

OPERATOR: ANADARKO PETROLEUM COMPANY
WELL: RUSSIAN FIDDLER 15N-18HZ
LOCATION: SECTION 19, T2N, R65W
COUNTY: WELD
STATE: COLORADO
SPOT: 365' FSL, 2464' FEL
ELEVATION: 4989' GL, 5006' KB
FIELD: WATTENBERG #90750
SPUD DATE: 04/03/2013
TD DATE: 04/10/2013
DATES LOGGED: 04/05/2013-04/10/2013
DEPTHS LOGGED: 6628' MD - 12714' MD
LOGGERS: MARK WEIDERSPON, MICHAEL ROOKS
DRILLING FLUID: FW LSND
DRILLING RIG: XTREME 6
API: 05-123-36229
LOG TYPE: HORIZONTAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: Wellsite Geological Services Provided By Columbine Logging Inc.



Survey Plan





Chalk

Shaly Sandstone

Marl

Shaly Siltstone

No Sample

Silty Shale

ENGINEERING SYMBOLS

Connection

Connection Gas

SLIDE

DEPTH (FEET)

6600

10

20

30

40

50

60

70

80

90

6700

10

Oil SHOW

TFG

0

10

20

30

40

50

60

70

80

90

6700

10

GAS

0

UNITS

6000

C1

0

PPM

600000

C2

0

PPM

600000

C3

0

PPM

600000

C4

0

PPM

600000

ROP

0

MIN/FT

10

3141u

1515u

CUTTINGS LITHOLOGY

Sample Interval 50
Sample Description Interval 100
All measurements are in feet and degrees

Kick off
0100 hrs 04/05/2013
from 6628 MD
Bit #1
8-3/4
SEC MMD55M
Serial 12142119

91

Survey
MD 6690
INC 5.09
AZM 359.09
TVD 6636.4

SHYSLTST: dkgy, qtz, vifgr, wst, sban
sil, pily, hd, stmg cut, gn ring flr

TVD

ft

6600

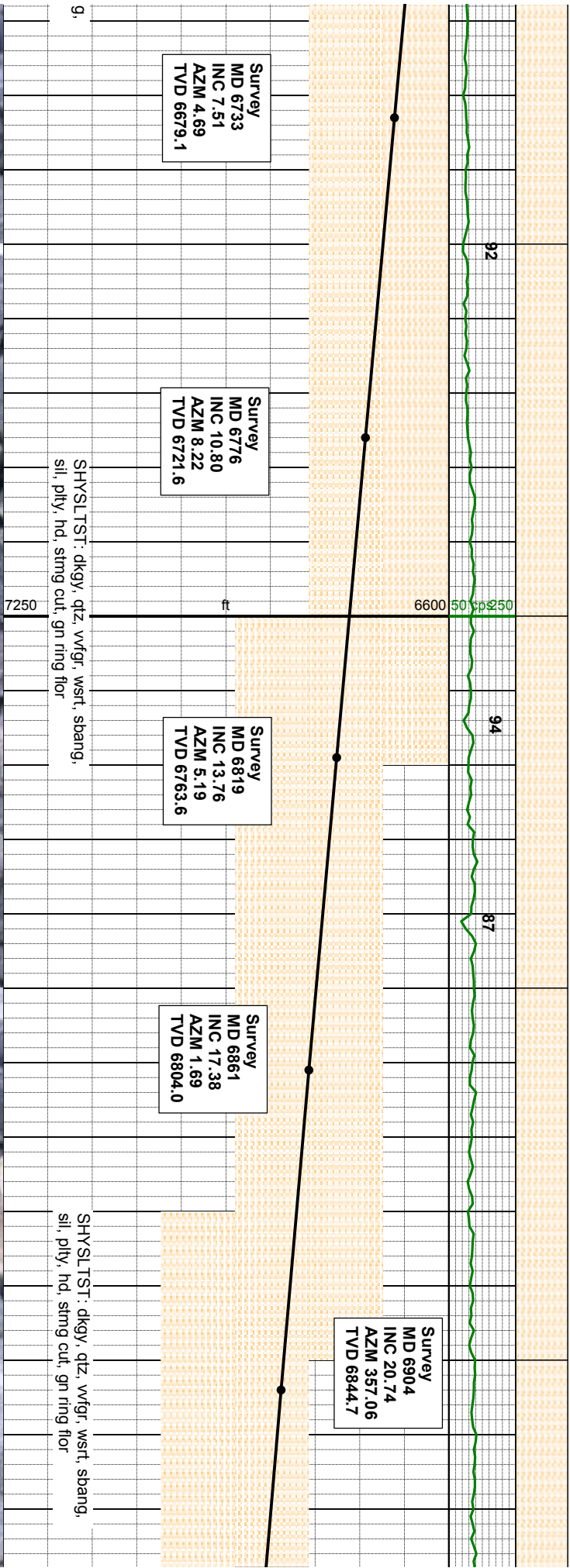
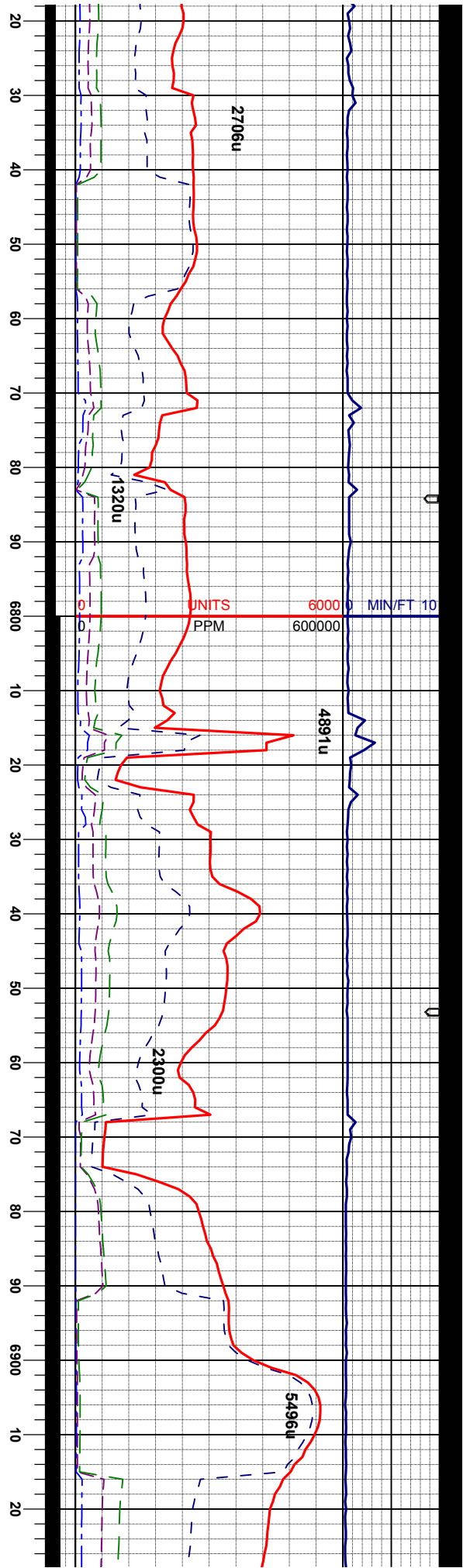
50 cps250

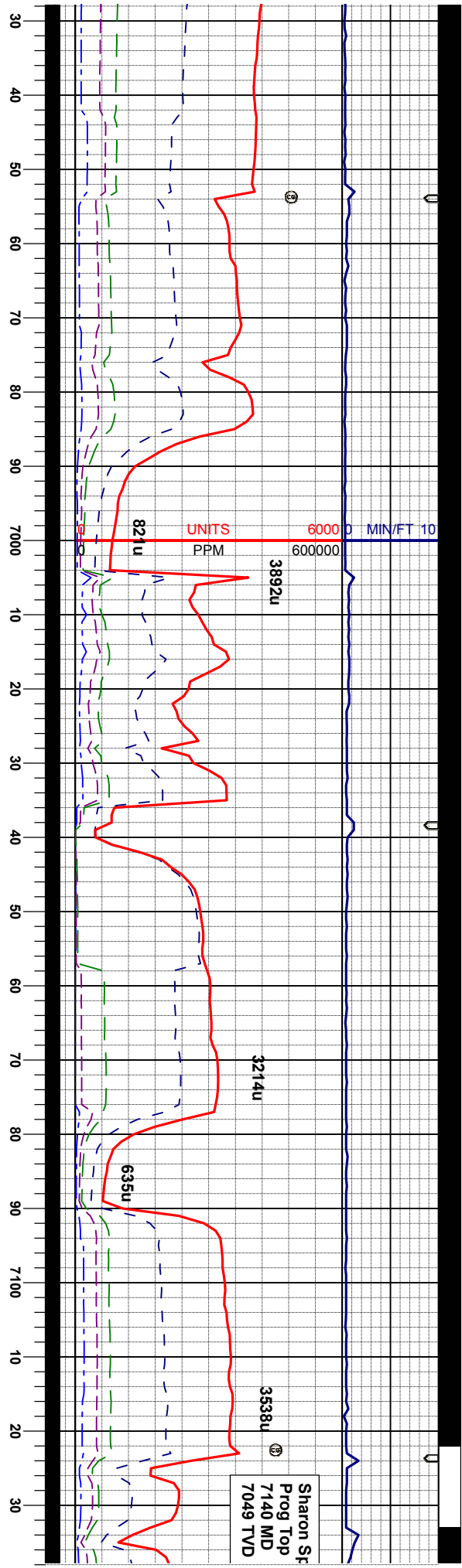
7250

Two man logging unit rigged up
1500 hrs 04/04/2013
Columbine Logging Inc.
Bloodhound Unit #0566

Begin in Sussex Formation

SAMPLE PHOTOS





Survey
MD 6947
INC 25.67
AZM 353.07
TVD 6884.2

Survey
MD 6989
INC 29.00
AZM 349.36
TVD 6921.5

Survey
MD 7032
INC 33.32
AZM 348.75
TVD 6958.3

Survey
MD 7074
INC 38.80
AZM 349.80
TVD 6992.2

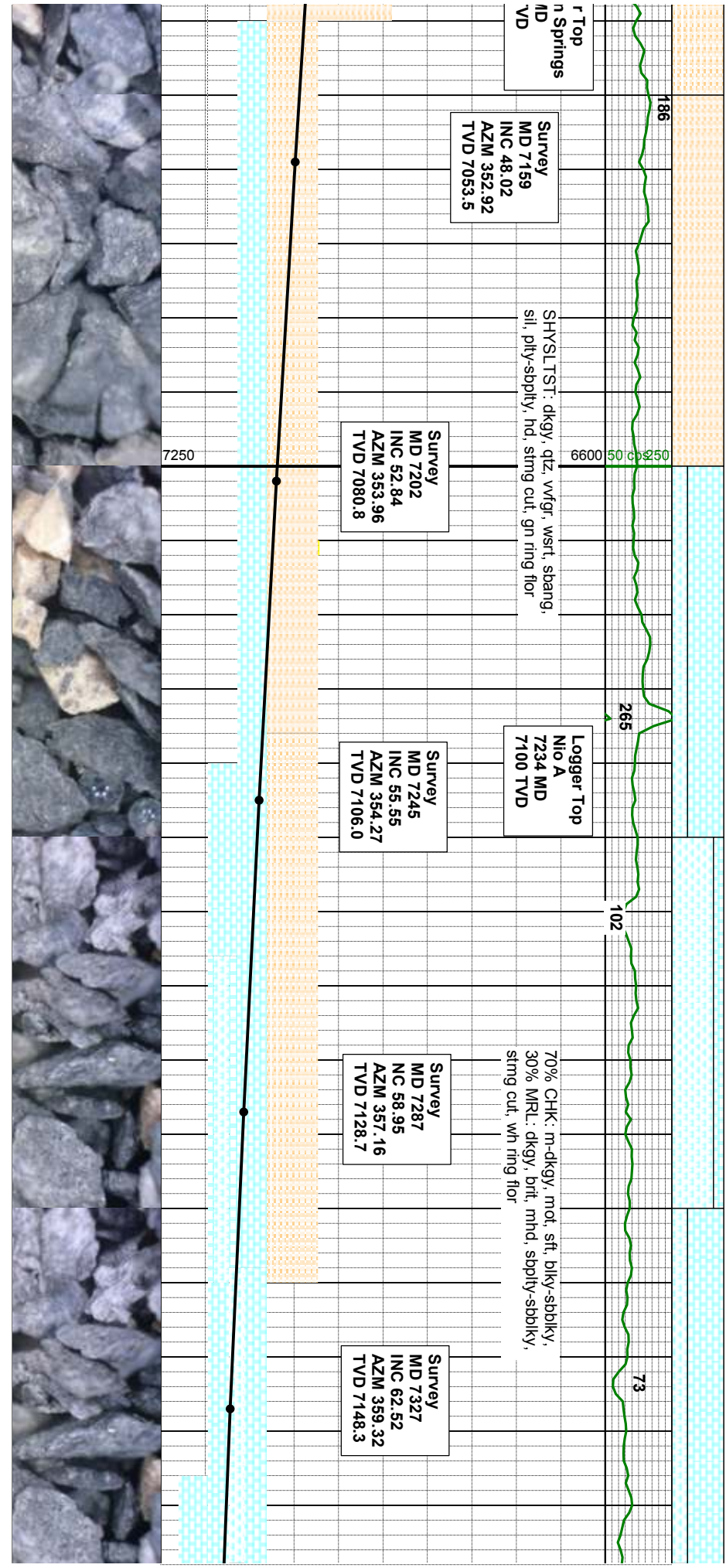
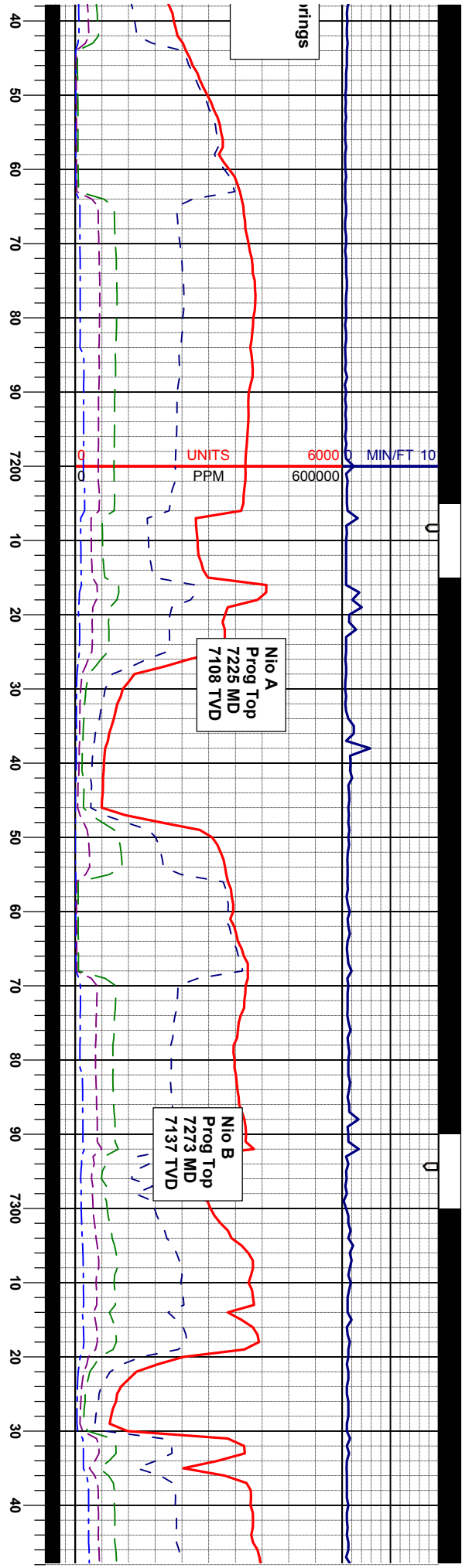
Survey
MD 7116
INC 44.24
AZM 351.43
TVD 7023.7

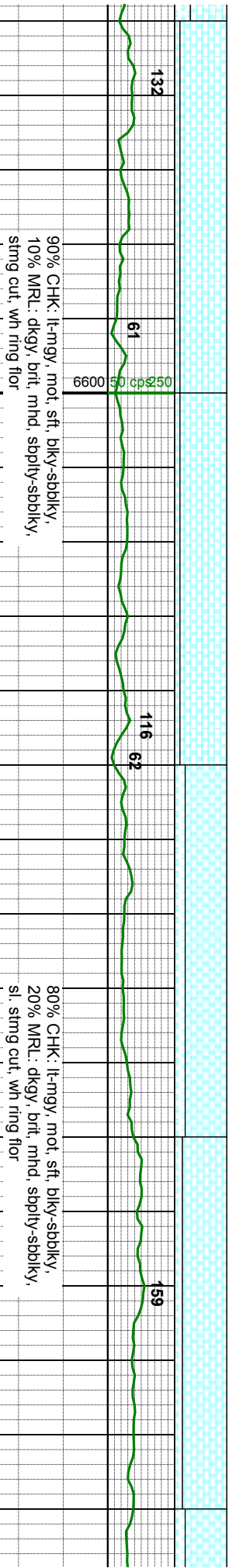
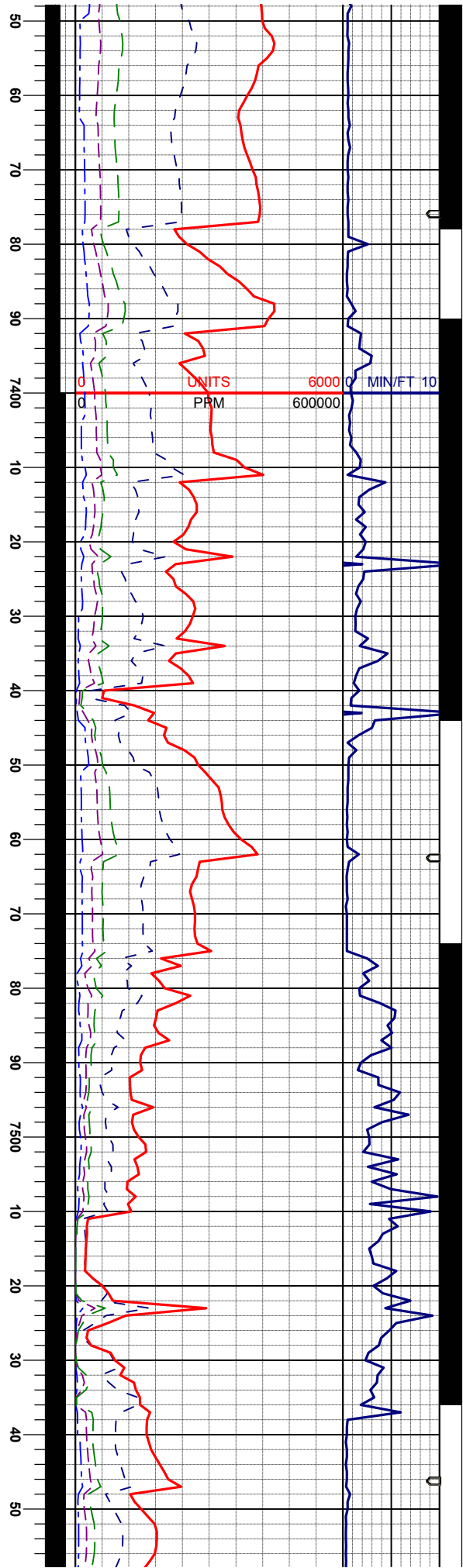
Logge
Sharon
7142 N
7042 T

SHYSLTST: dkgy, qtz, vfg, wst, sbang,
sil, pty, hd, sl, sting cut, gn ring flr

SHYSLTST: dkgy, qtz, vfg, wst, sbang,
sil, pty, hd, tr SS, wh, trnsi, fgr, sil mtx,
clns, sting cut, gn ring flr







Survey
MD 7370
INC 66.36
AZM 2.62
TVD 7166.8

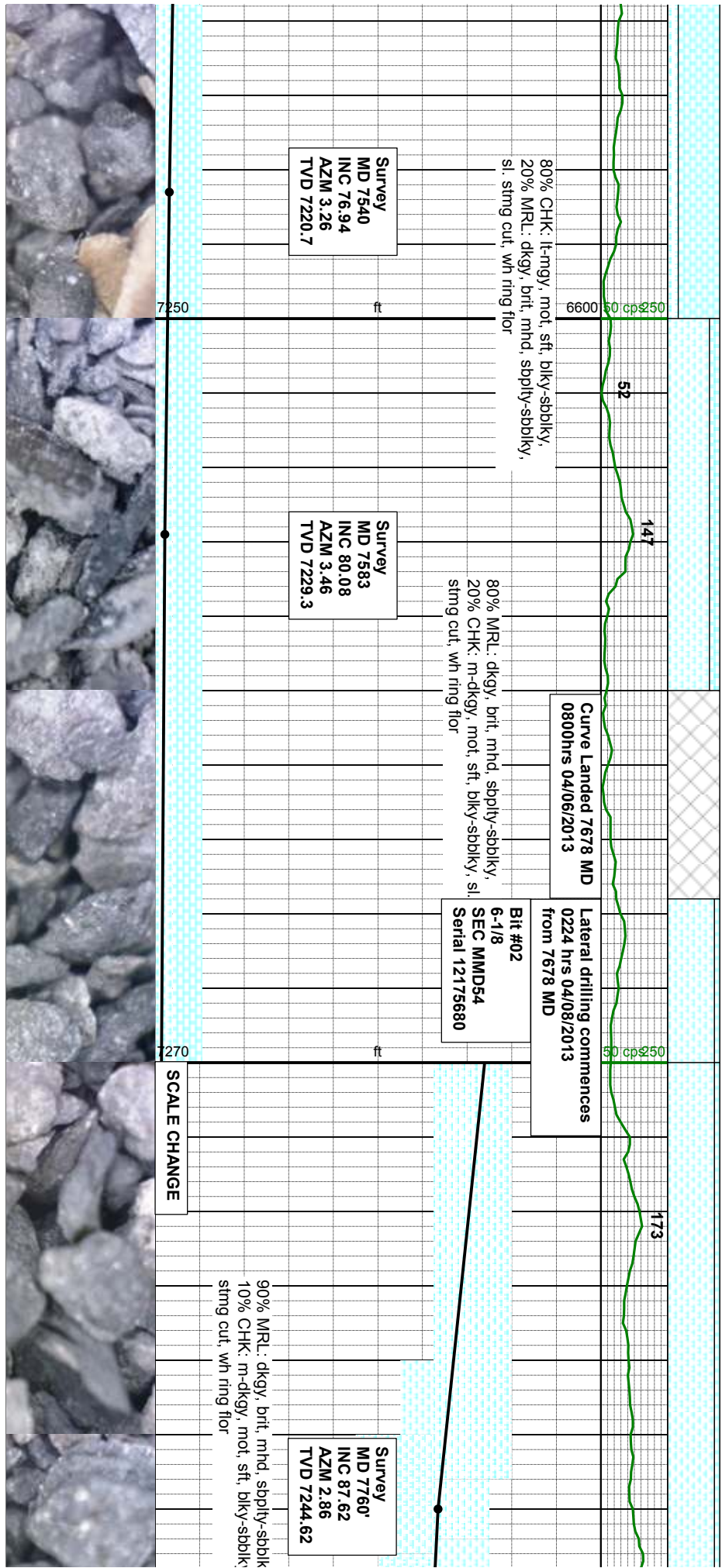
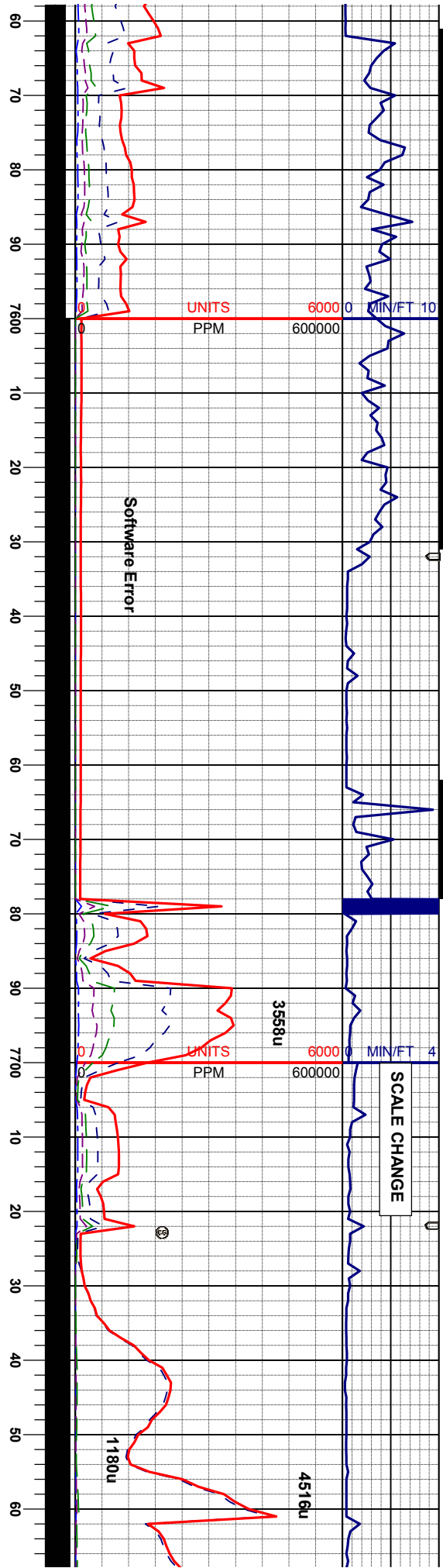
Survey
MD 7413
INC 69.13
AZM 3.18
TVD 7183.1

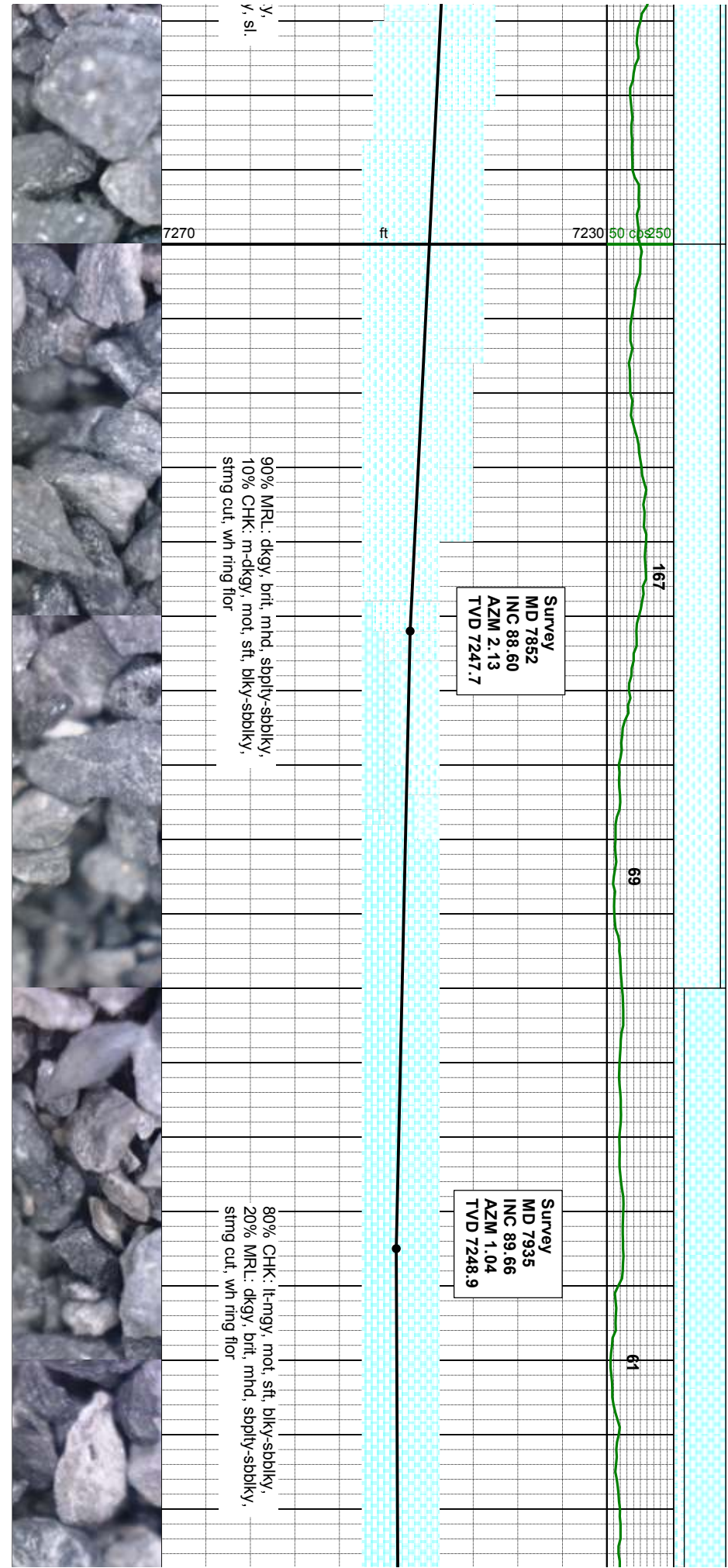
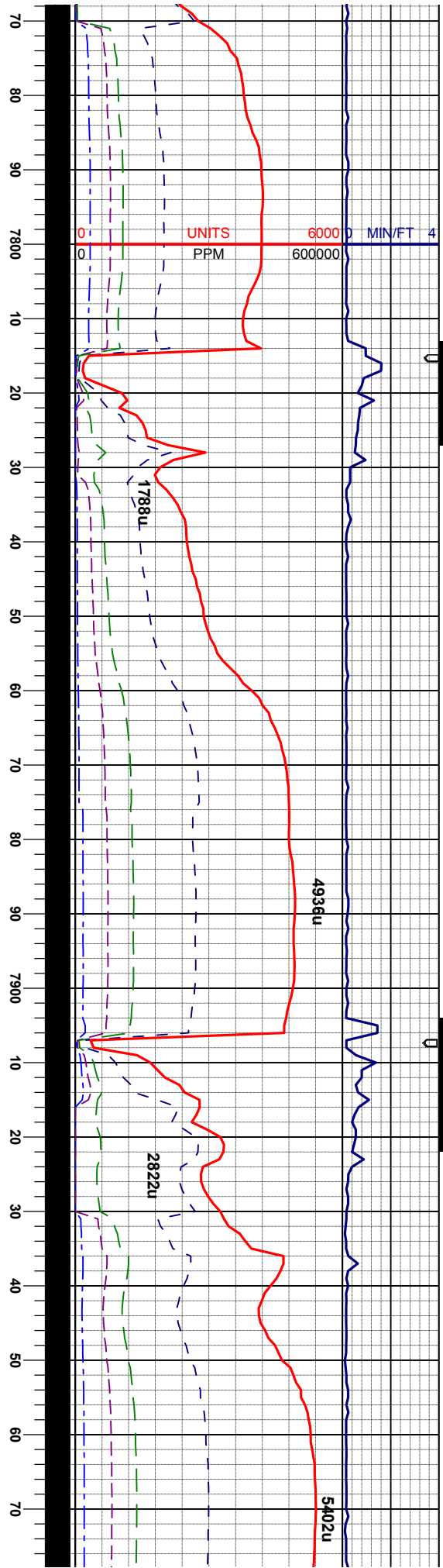
Survey
MD 7455
INC 71.38
AZM 3.71
TVD 7197.3

Survey
MD 7498
INC 73.98
AZM 3.62
TVD 7210.2

Survey
MD 7540
INC 76.94
AZM 3.26
TVD 7220.7





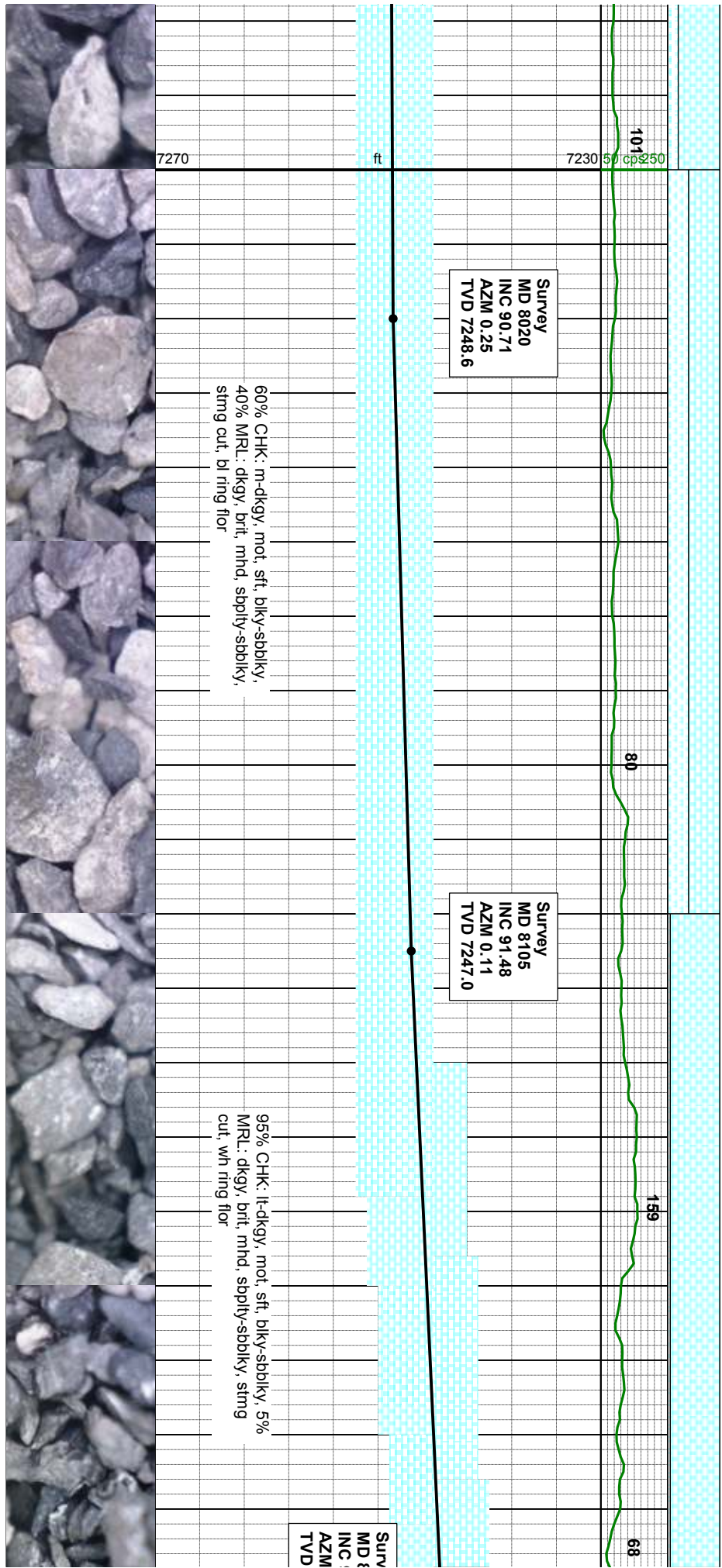
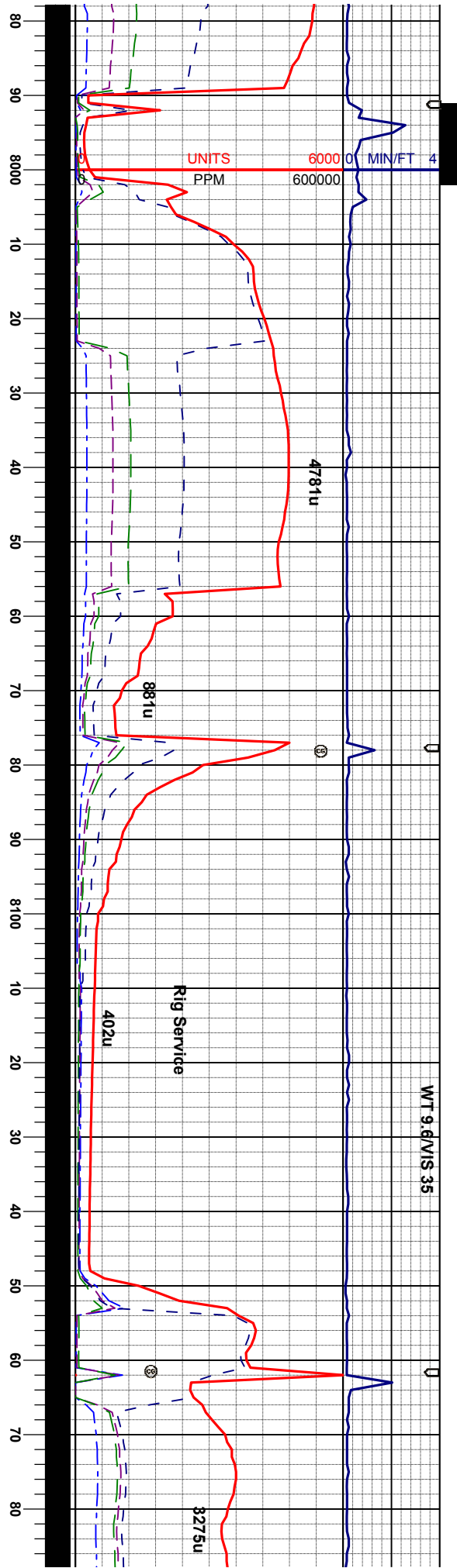


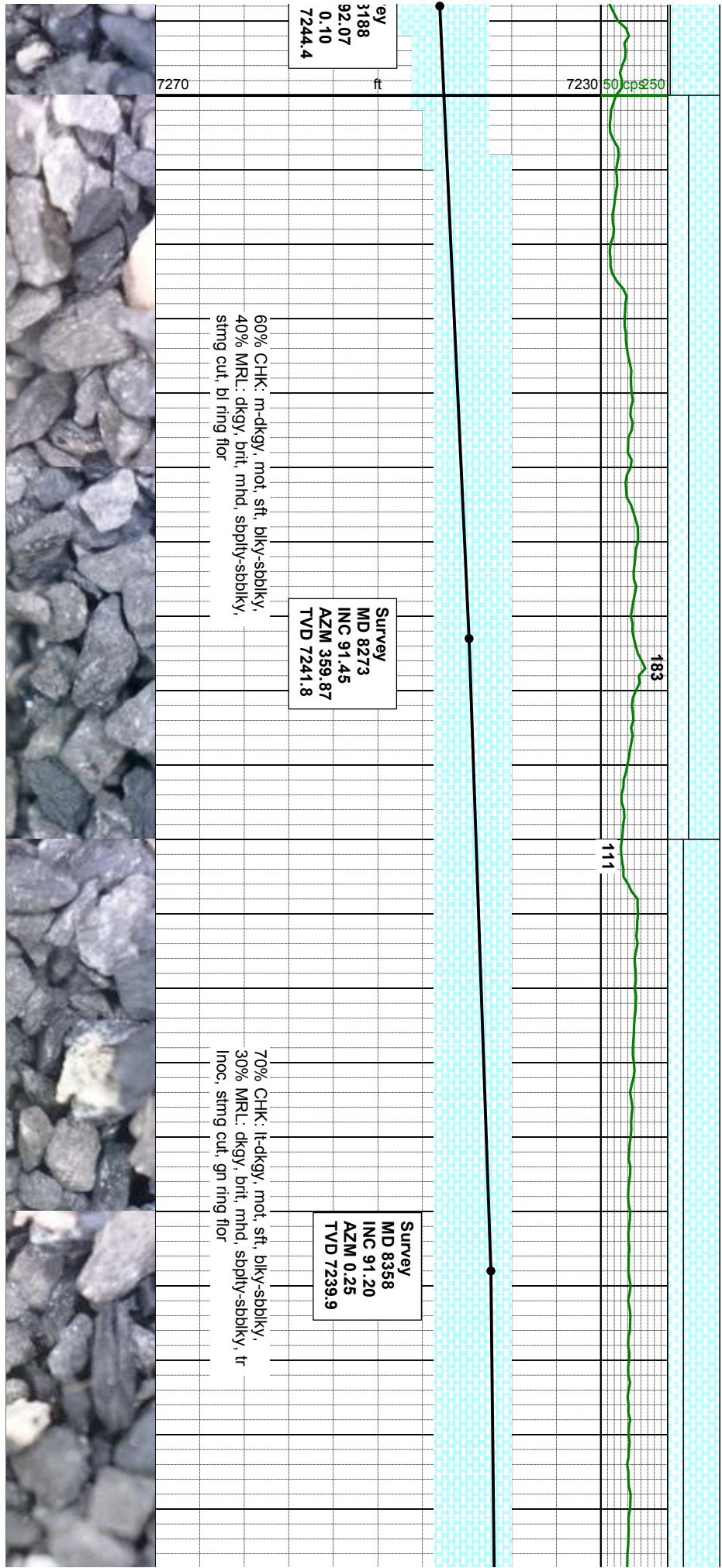
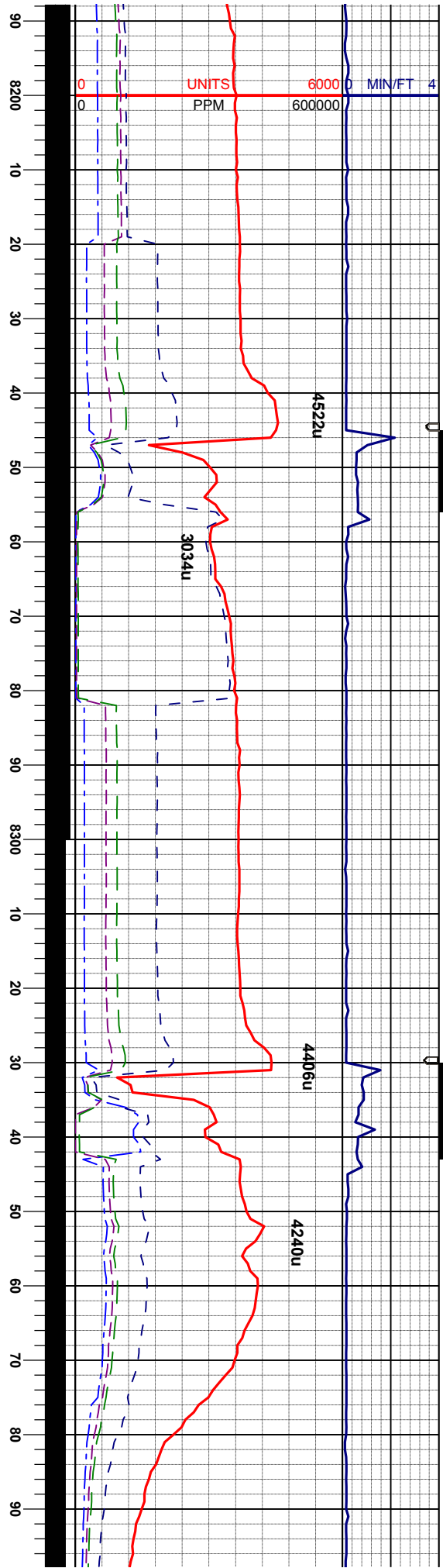
Survey
MD 7852
INC 88.60
AZM 2.13
TVD 7247.7

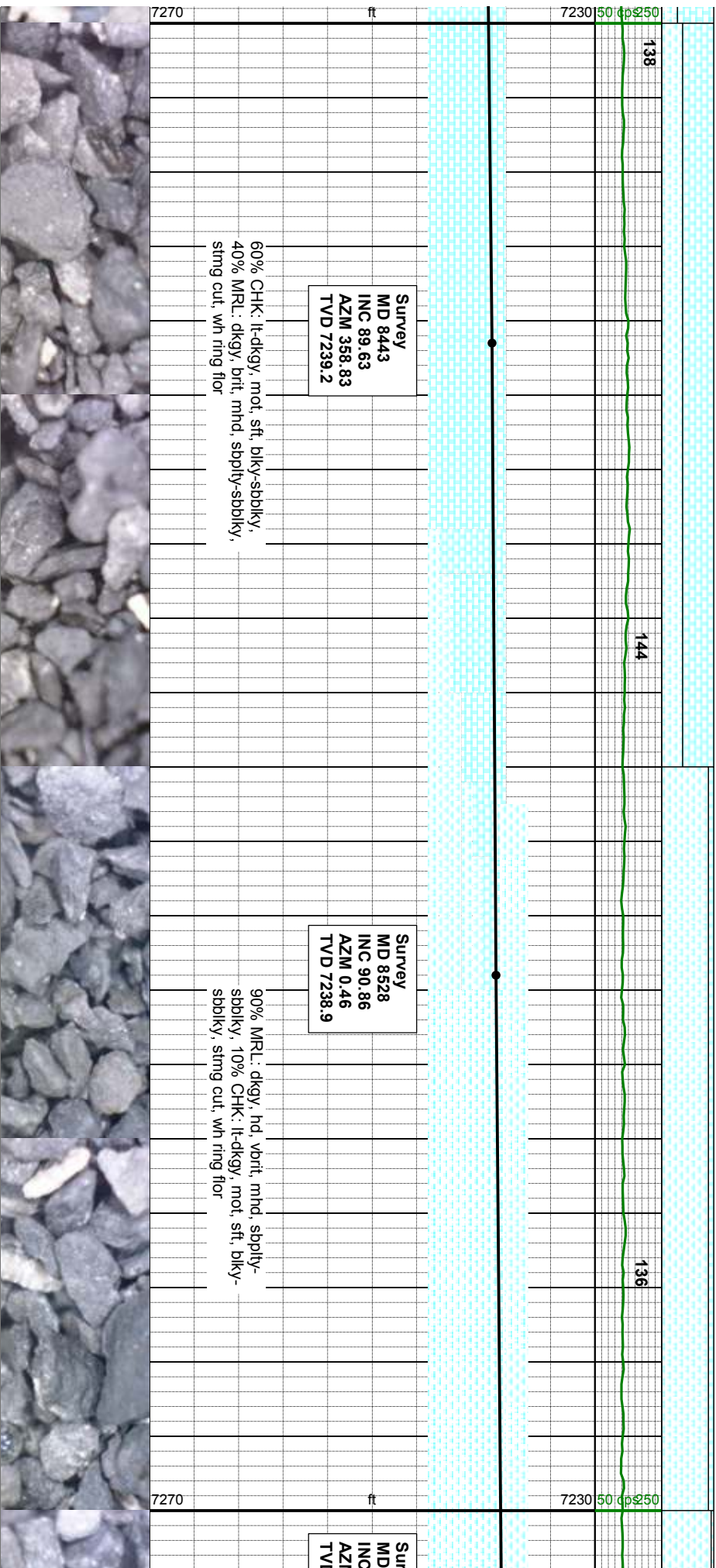
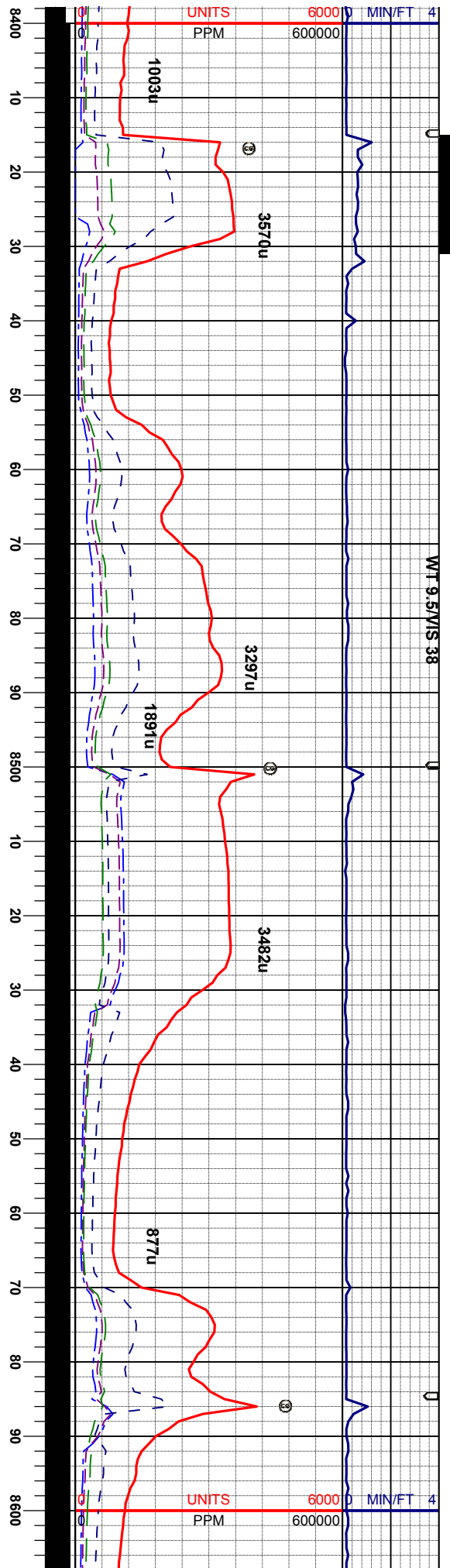
Survey
MD 7935
INC 89.66
AZM 1.04
TVD 7248.9

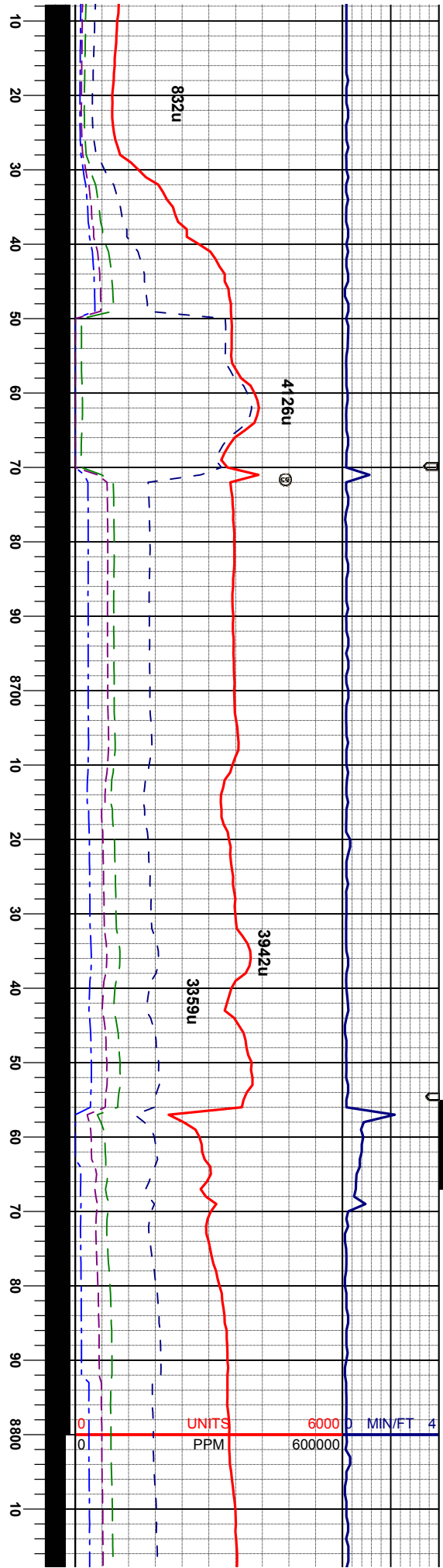
90% MRL: dkgy, brit, mhd, sbply-sbply,
10% CHK: m-dkgy, mot, sft, biky-sbiky,
sting cut, wh ring flr

80% CHK: lt-mgy, mot, sft, biky-sbply,
20% MRL: dkgy, brit, mhd, sbply-sbply,
sting cut, wh ring flr









vey
8613
: 89.81
W 0.64
D 7238.4

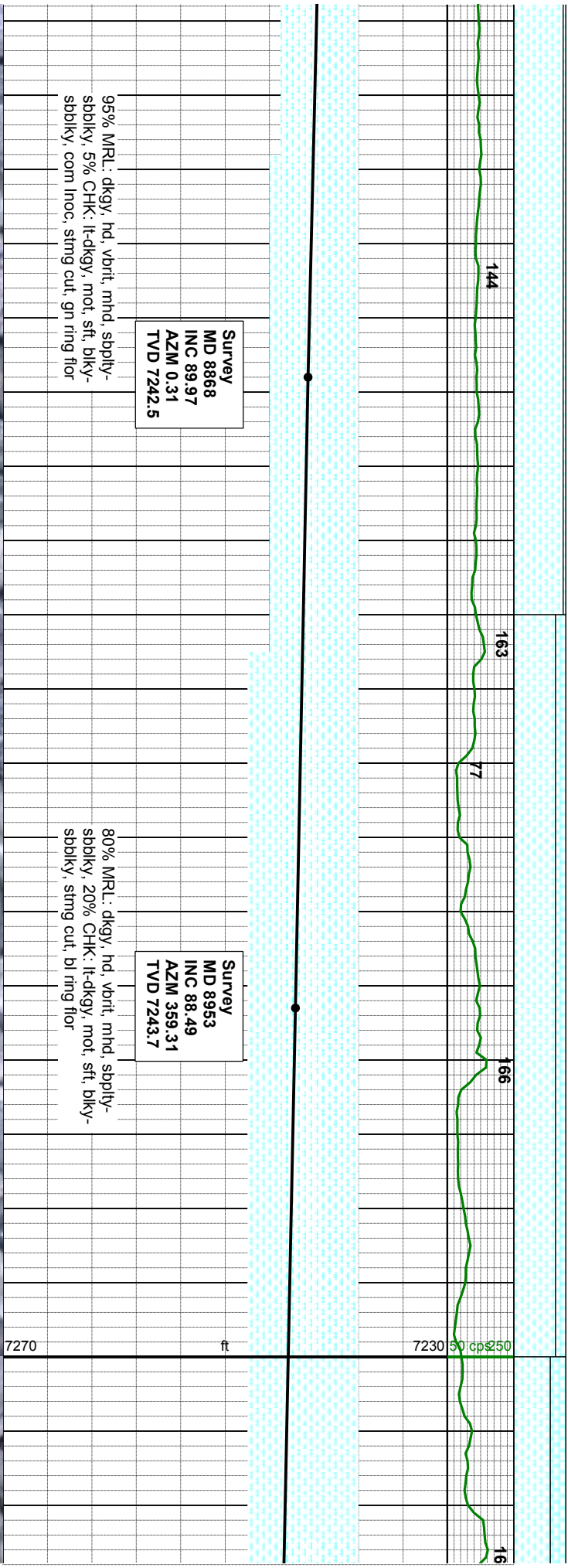
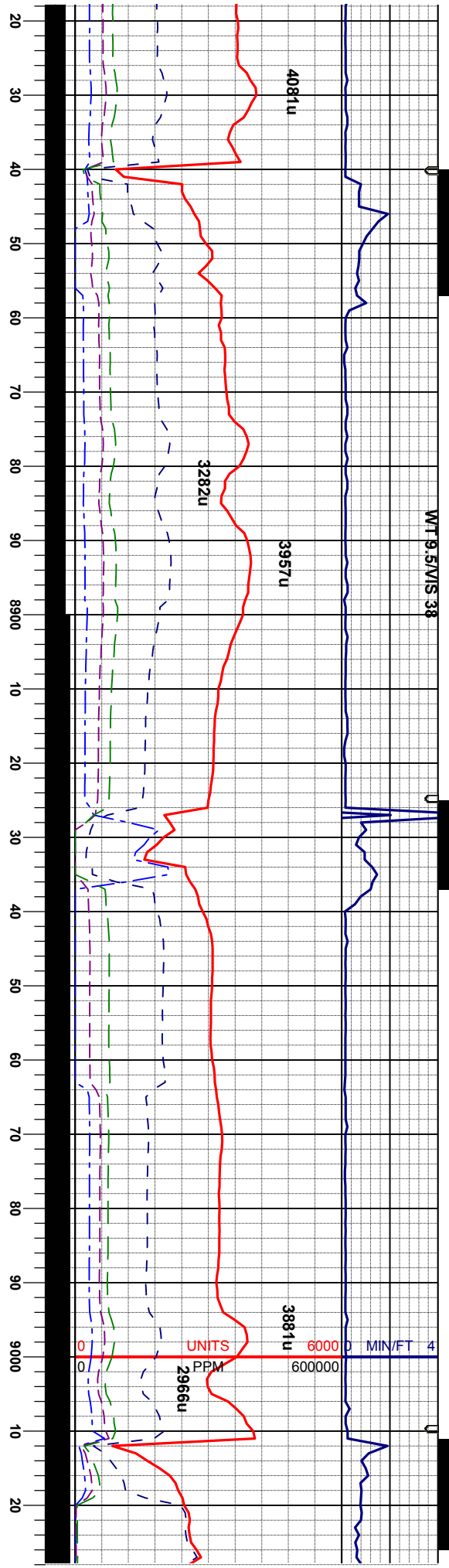
Survey
MD 8698
INC 89.11
AZM 1.49
TVD 7239.2

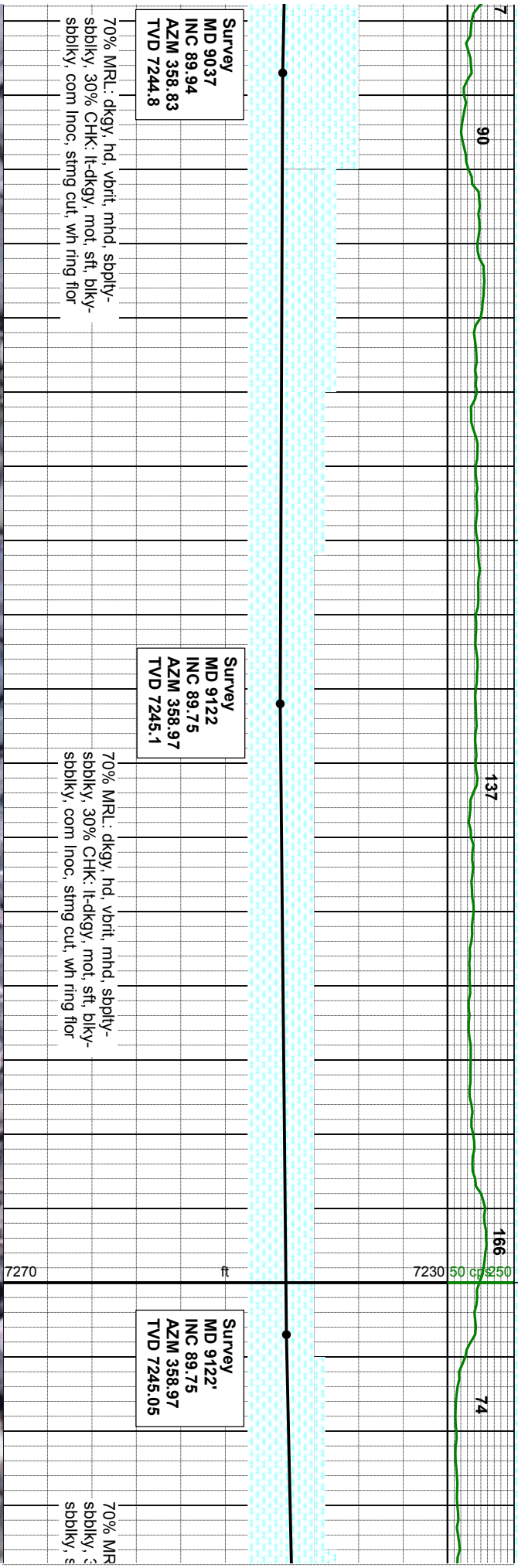
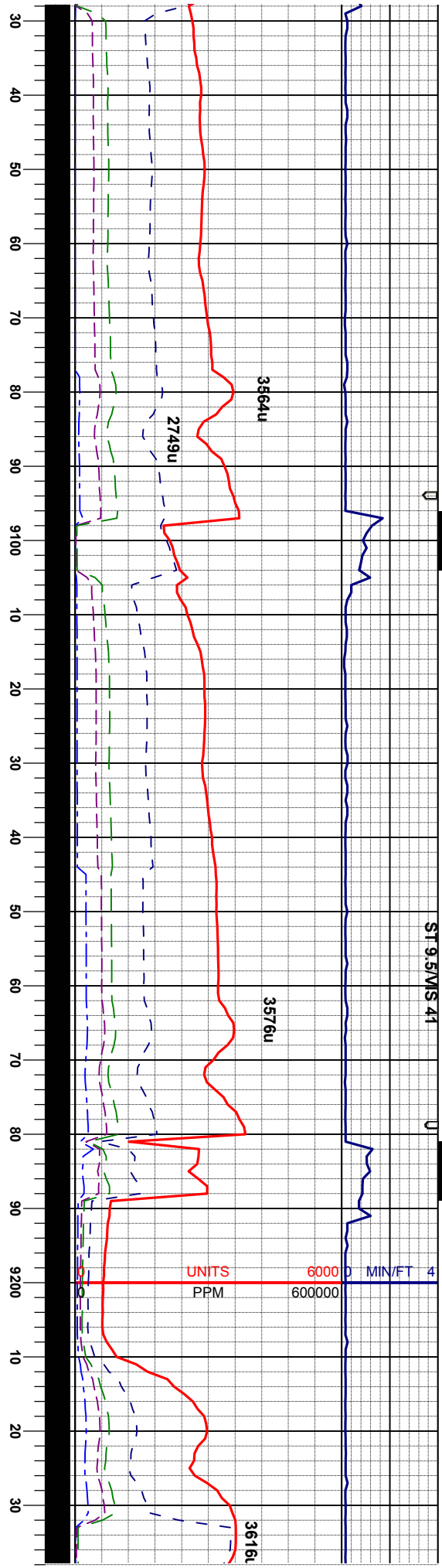
Survey
MD 8783
INC 88.21
AZM 0.22
TVD 7241.2

95% MRL: dkgy, hd, vbrit, mhd, sbply-
sbbky, 5% CHK: lt-dkgy, mot, sft, bky-
sbbky, sting cut, wh ring flr

95% MRL: dkgy, hd, vbrit, mhd, sbply-
sbbky, 5% CHK: lt-dkgy, mot, sft, bky-
sbbky, com lroc, sting cut, wh mg flr







Survey
MD 9037
INC 89.94
AZM 358.83
TVD 7244.8

Survey
MD 9122
INC 89.75
AZM 358.97
TVD 7245.1

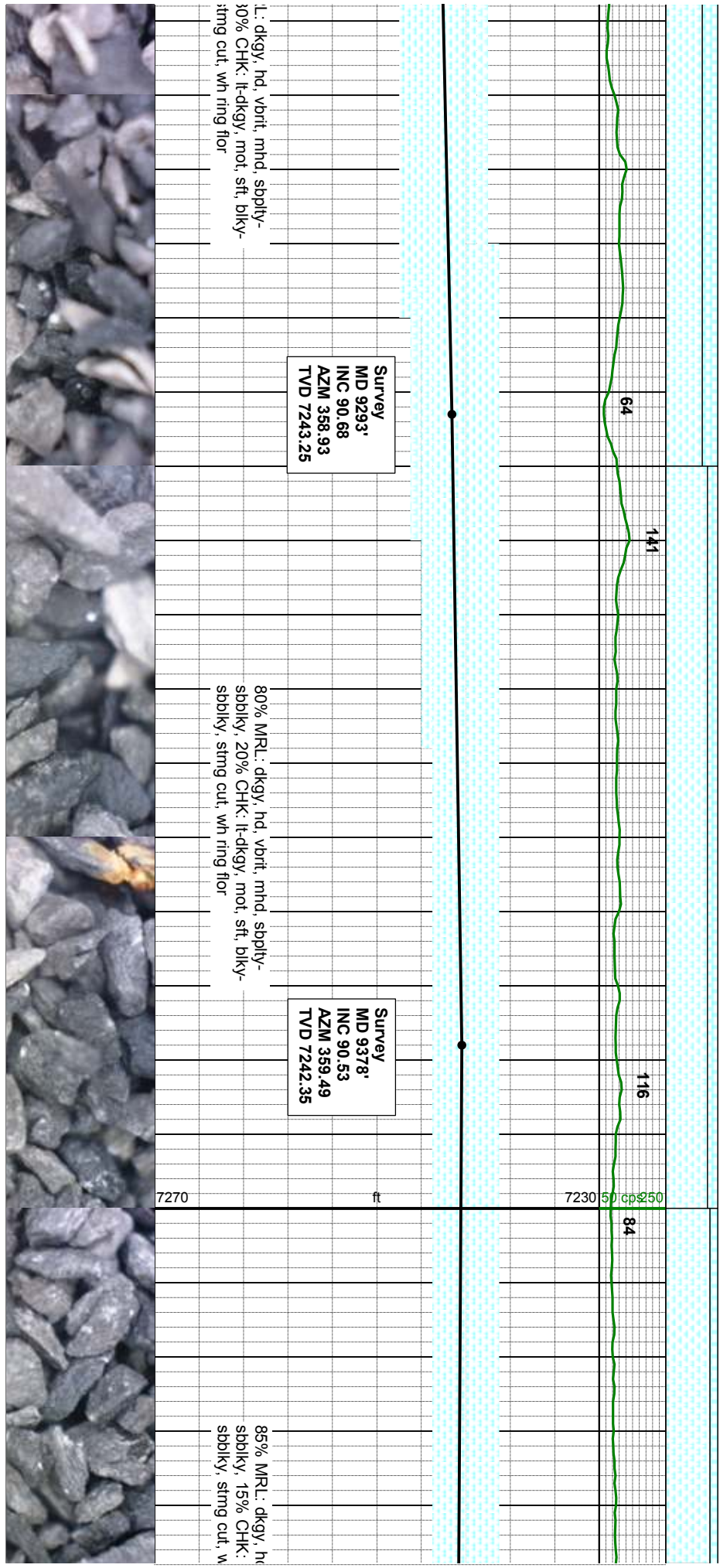
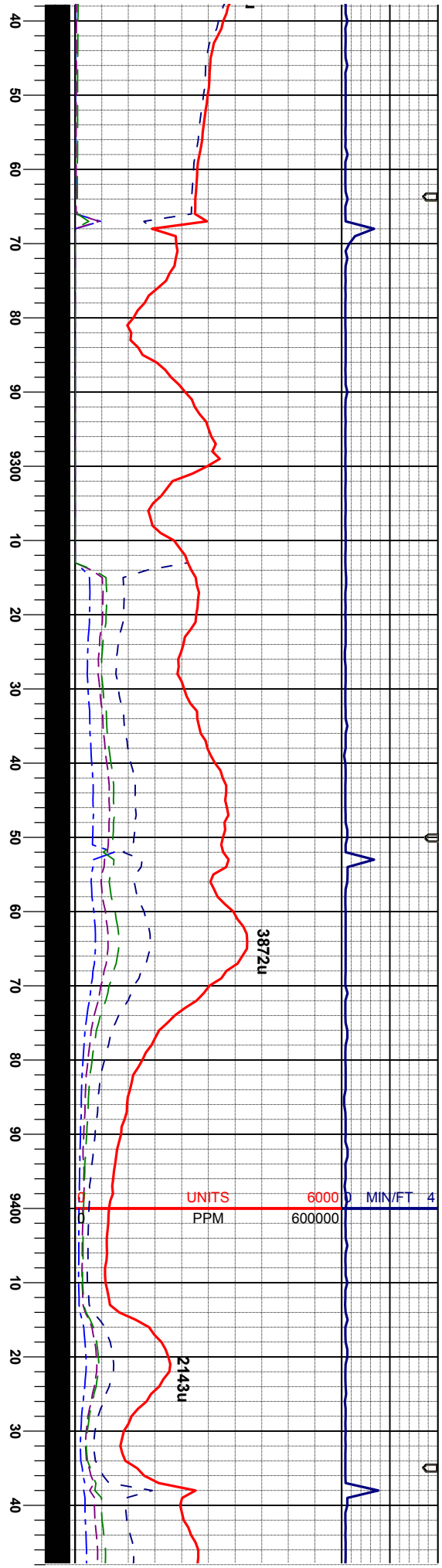
Survey
MD 9122
INC 89.75
AZM 358.97
TVD 7245.05

70% MRL: dkgy, hd, vbrit, mhd, sbply-
sbply, 30% CHK: lt-dkgy, mot, sft, bky-
sbply, com Inoc, sting cut, wh ring flr

70% MRL: dkgy, hd, vbrit, mhd, sbply-
sbply, 30% CHK: lt-dkgy, mot, sft, bky-
sbply, com Inoc, sting cut, wh ring flr

70% MR
sbply, s
sbply, s





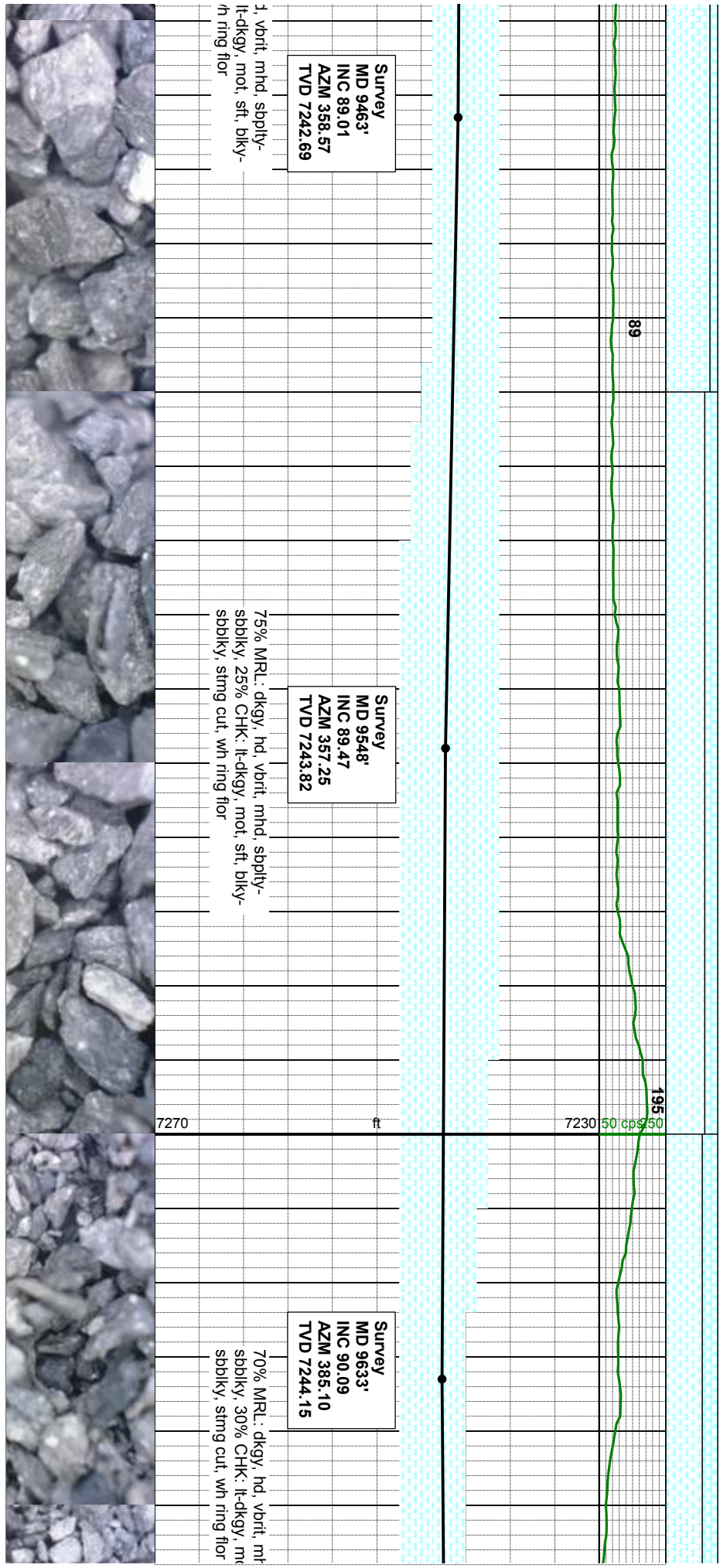
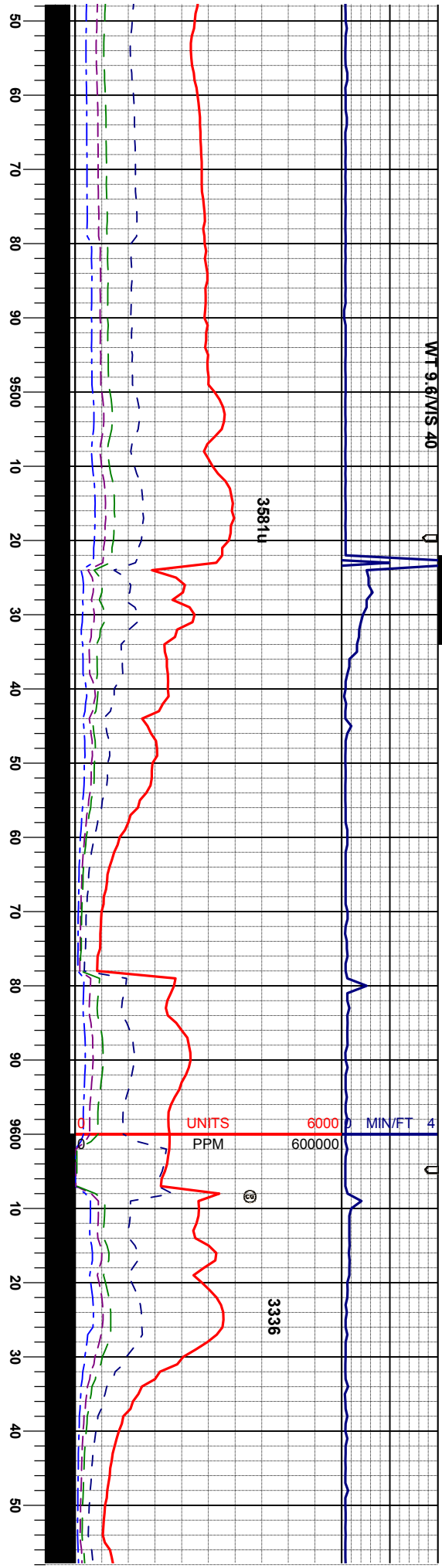
Survey
MD 9293'
INC 90.68
AZIM 358.93
TVD 7243.25

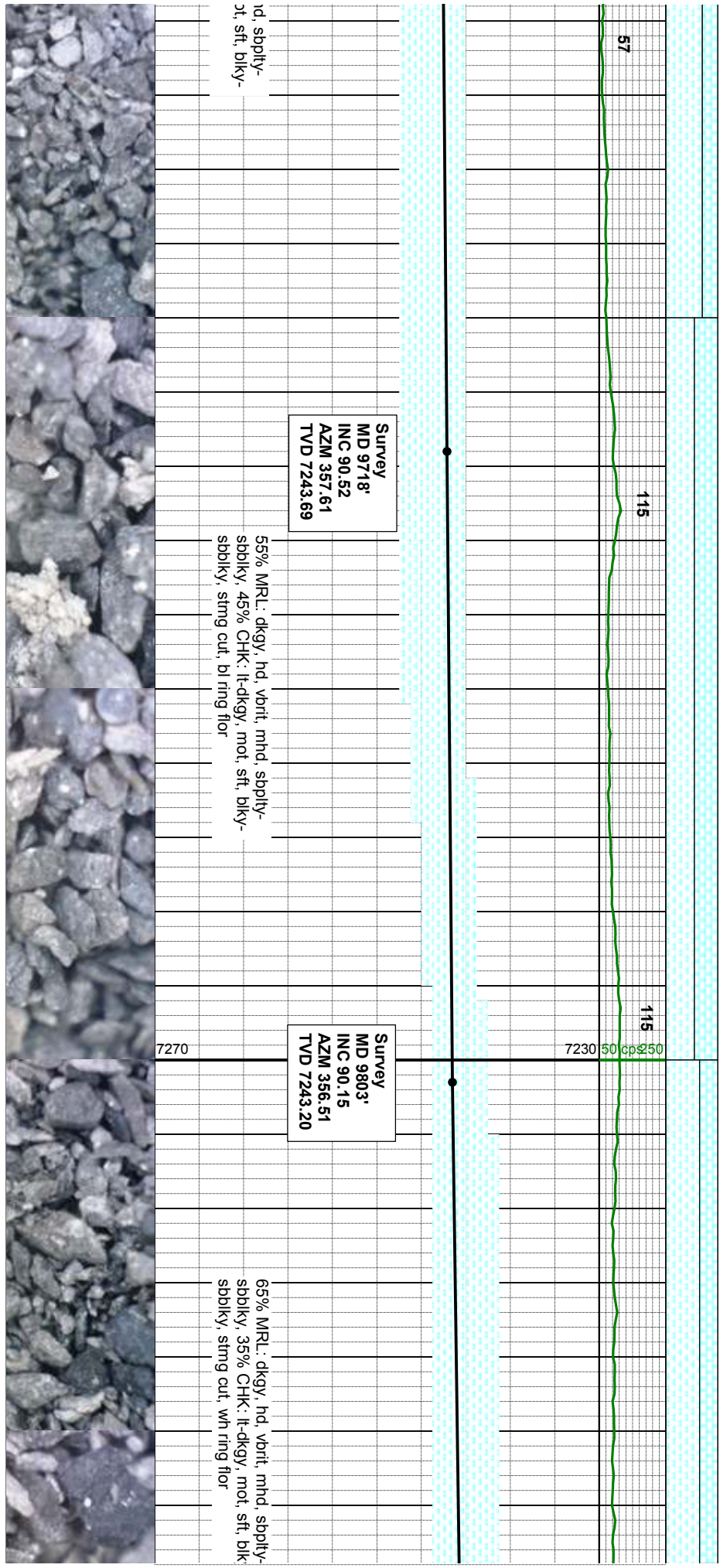
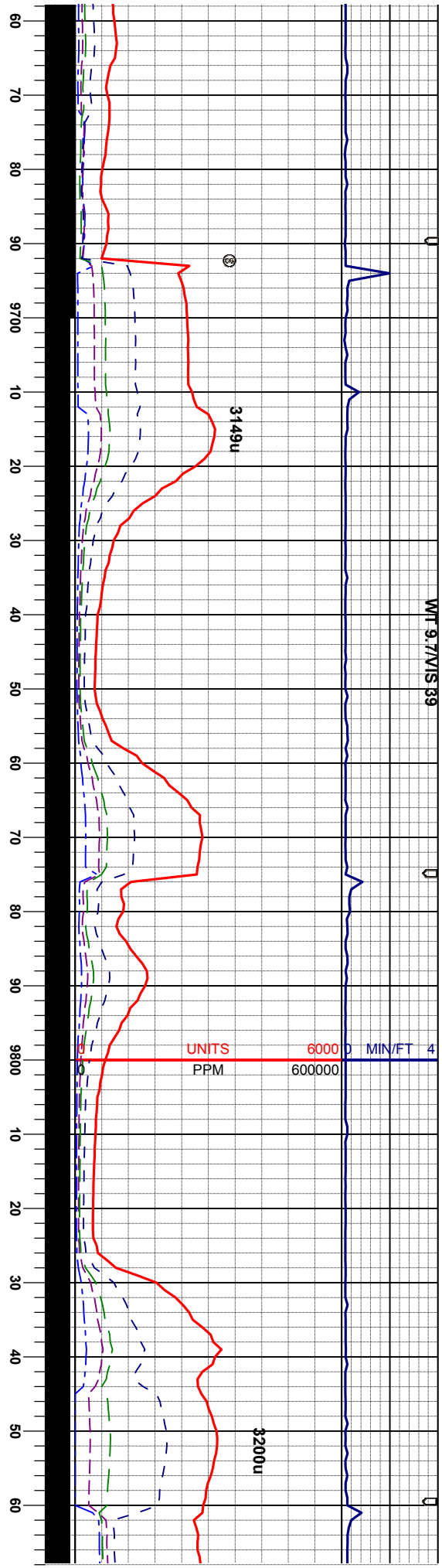
Survey
MD 9378'
INC 90.53
AZIM 359.49
TVD 7242.35

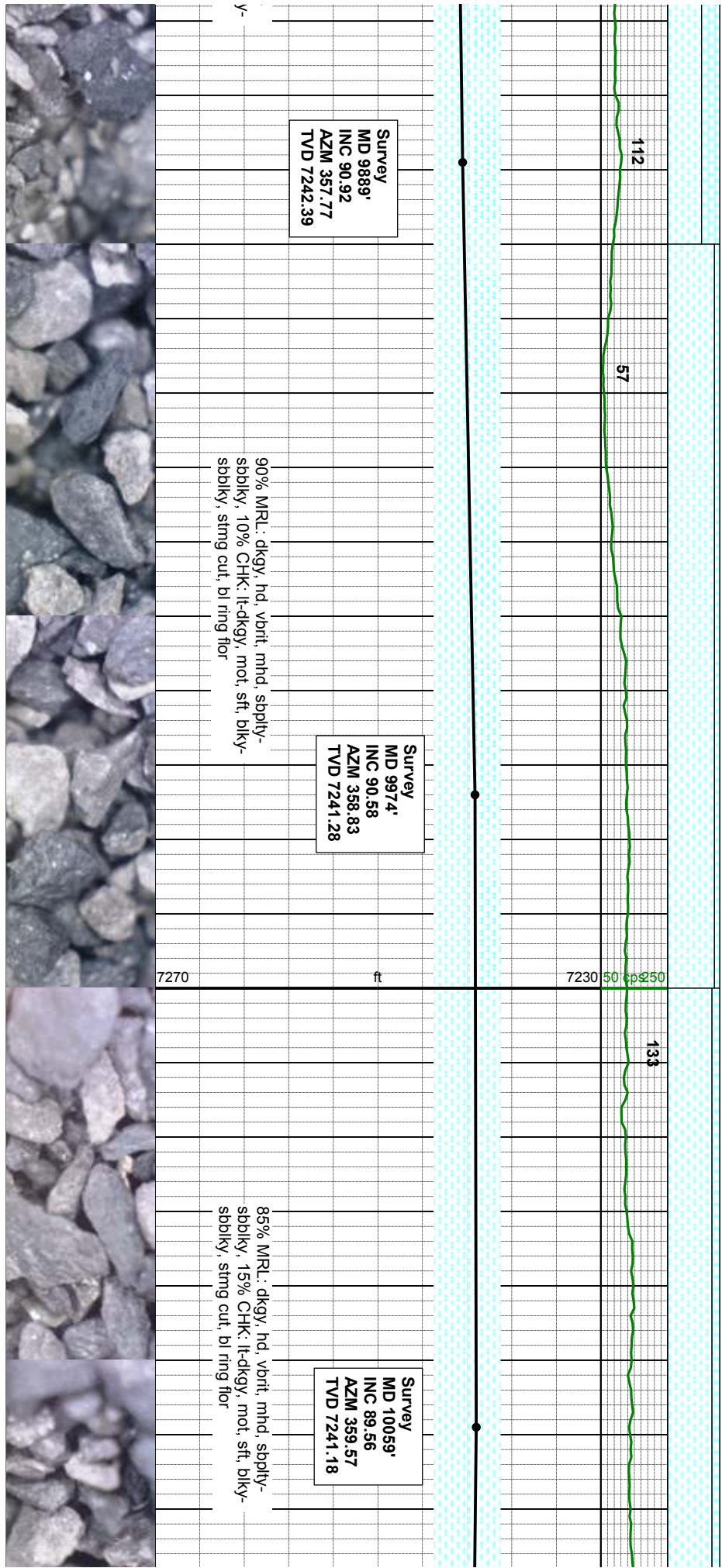
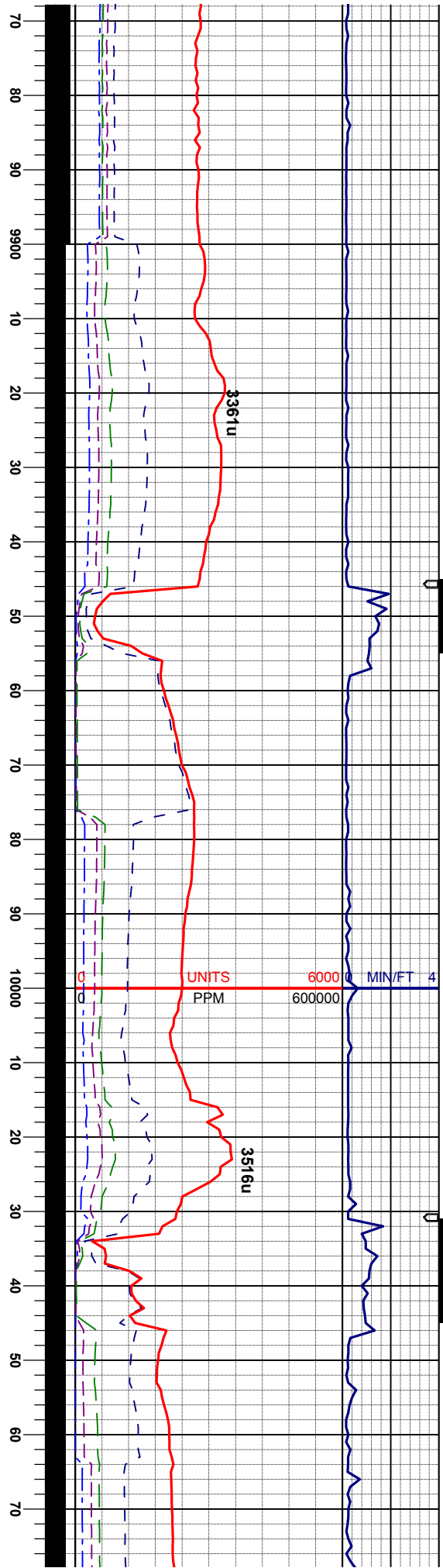
1. dkgy, hd, vbri, mhd, sbply-
80% CHK: lt-dkgy, mot, sft, blk-
stng cut, wh ring flor

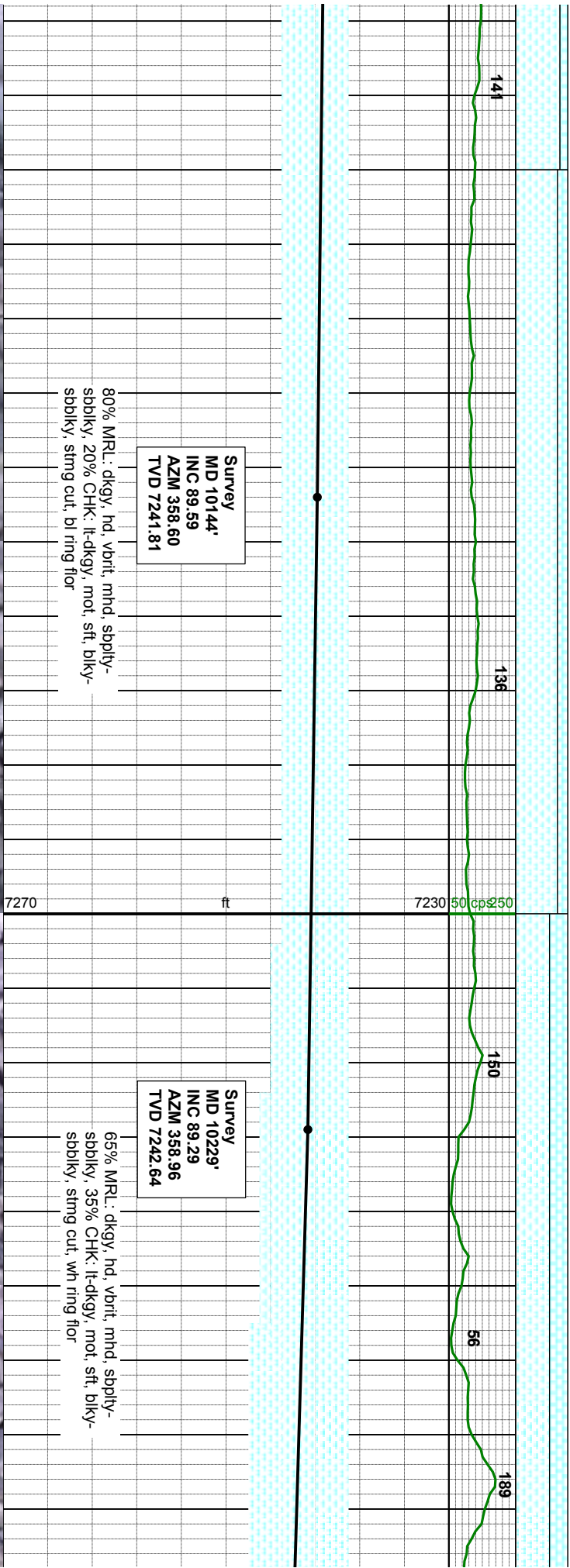
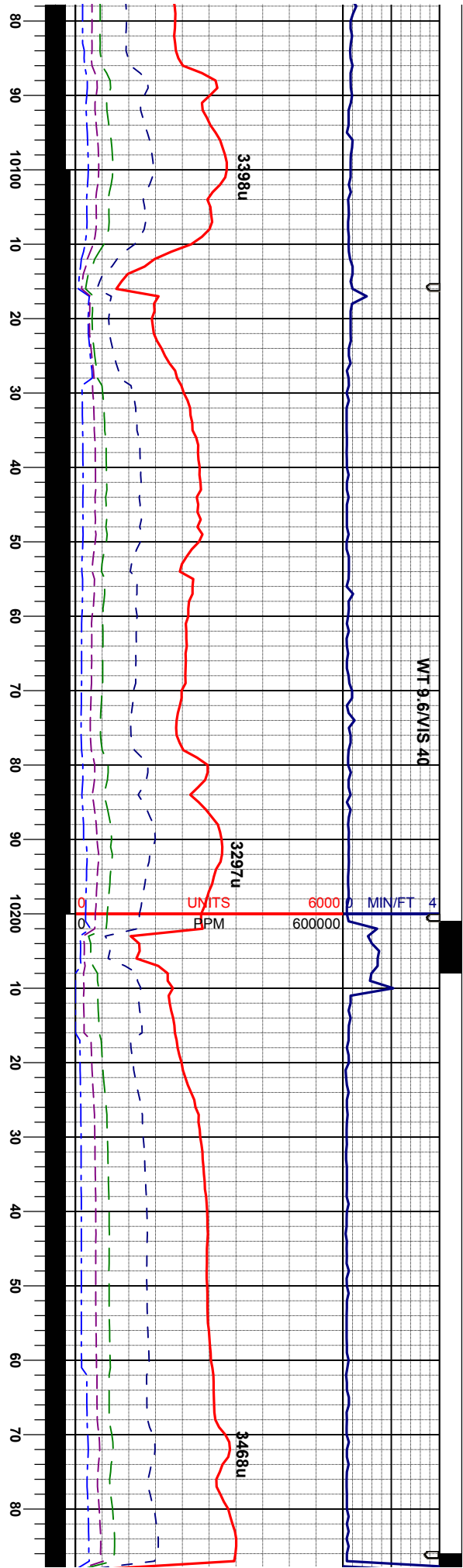
80% MRL: dkgy, hd, vbri, mhd, sbply-
sbply, 20% CHK: lt-dkgy, mot, sft, blk-
sbply, stng cut, wh ring flor

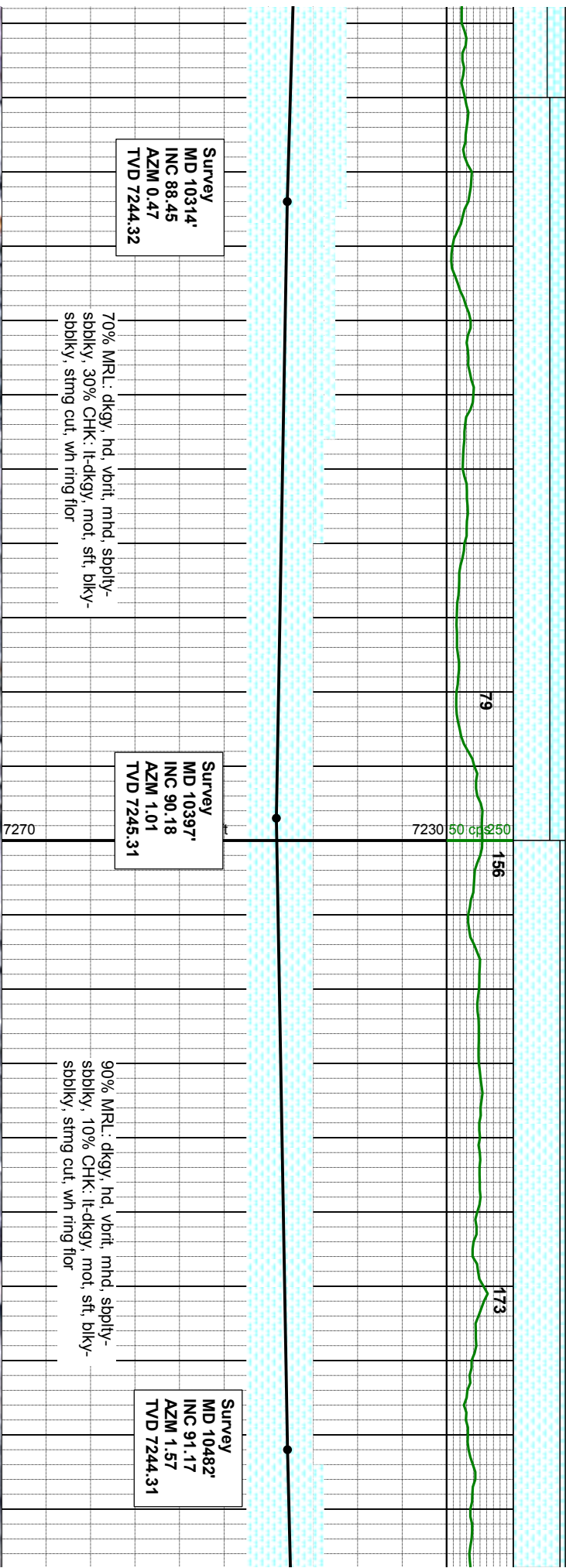
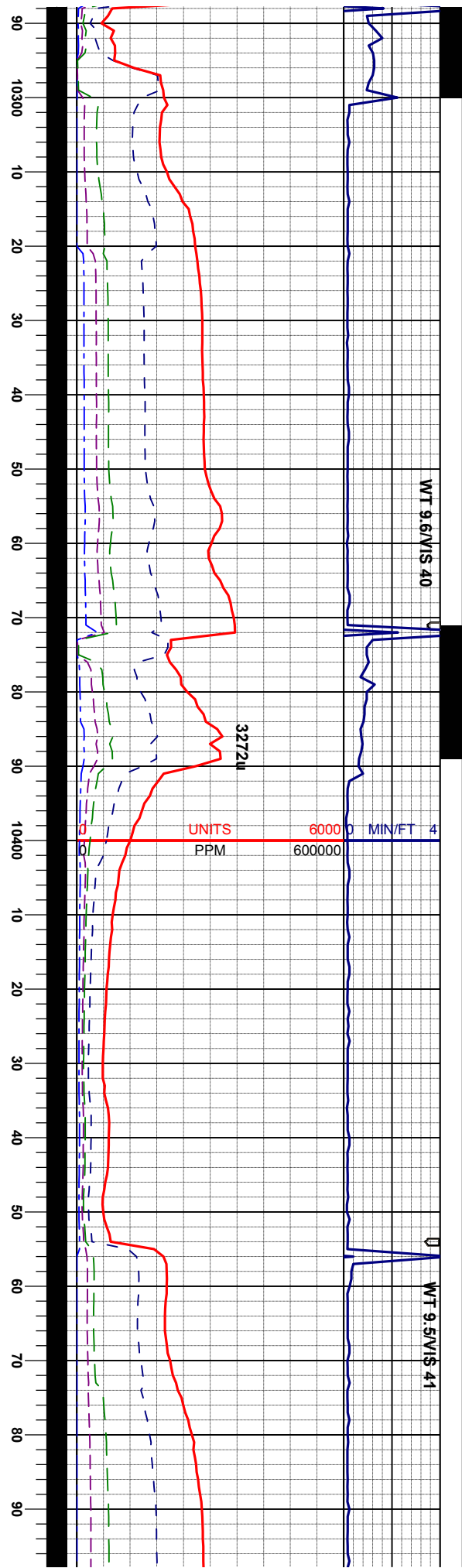
85% MRL: dkgy, hd, vbri, mhd, sbply-
sbply, 15% CHK: lt-dkgy, mot, sft, blk-
sbply, stng cut, wh ring flor

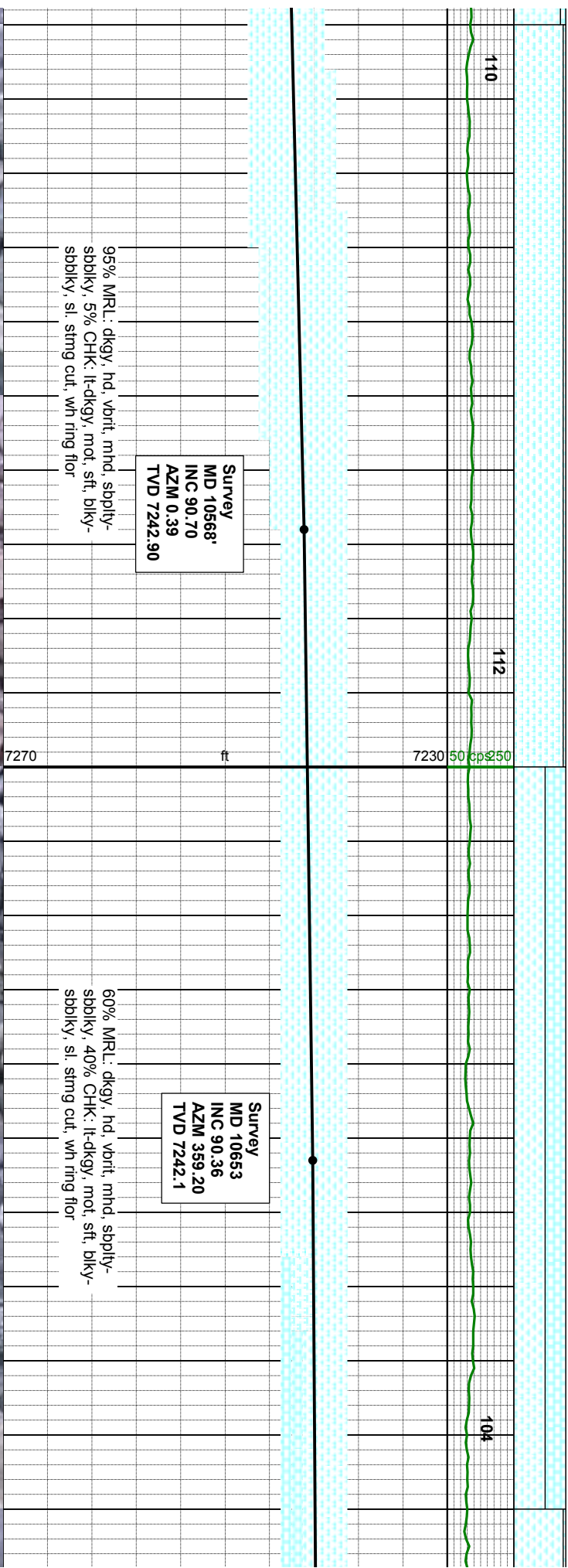
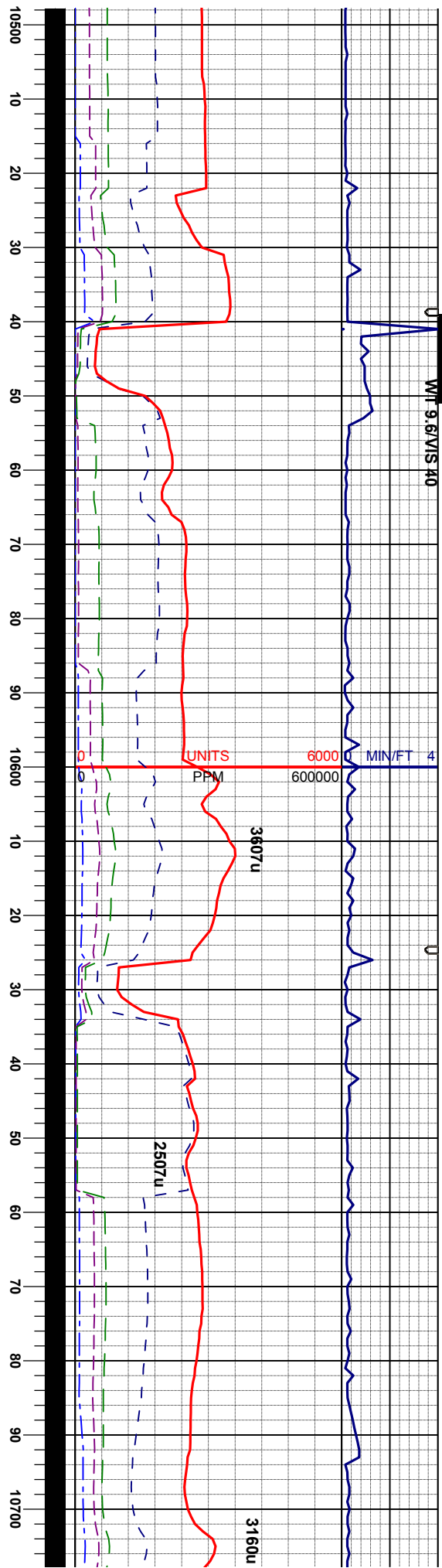


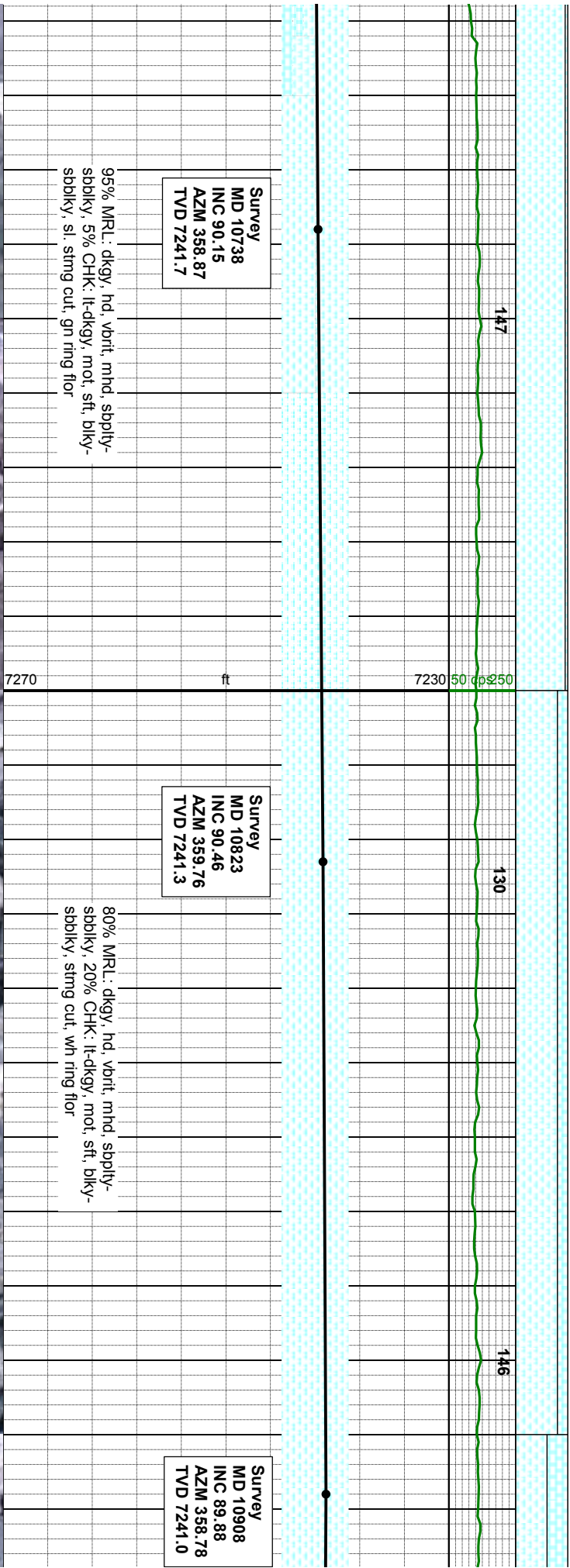
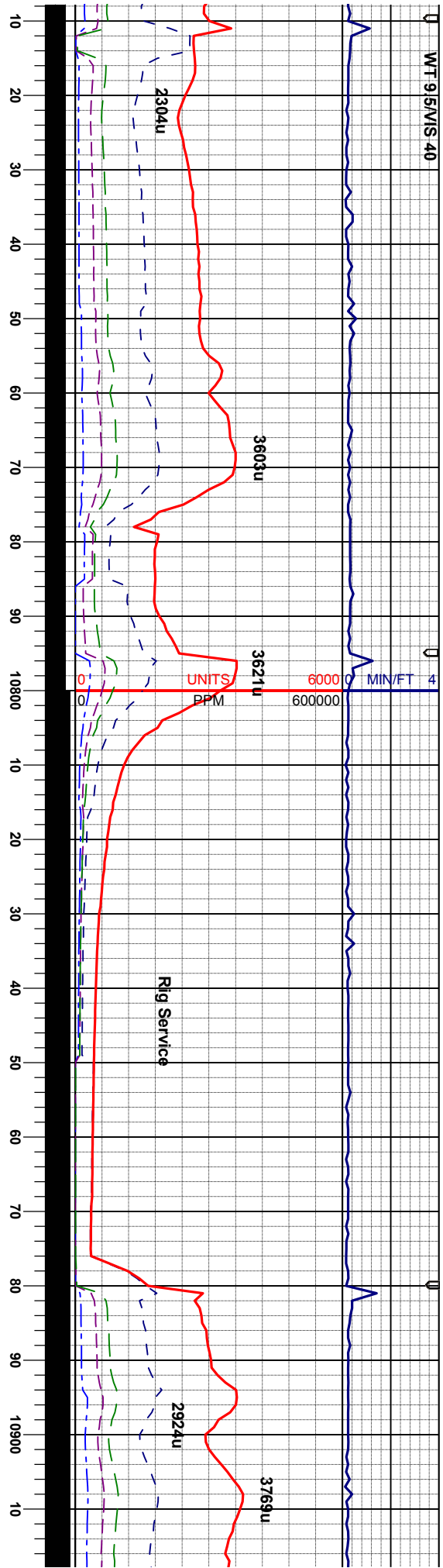


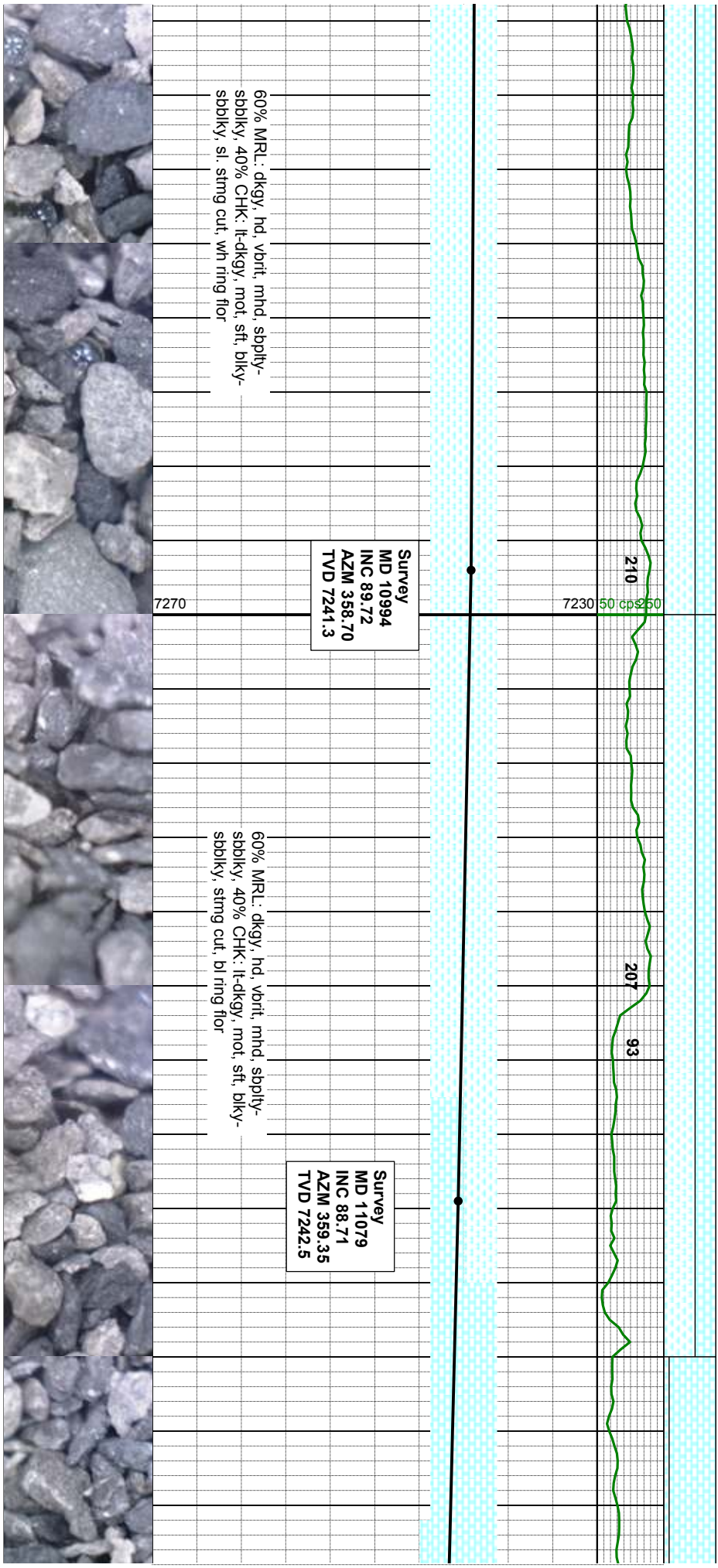
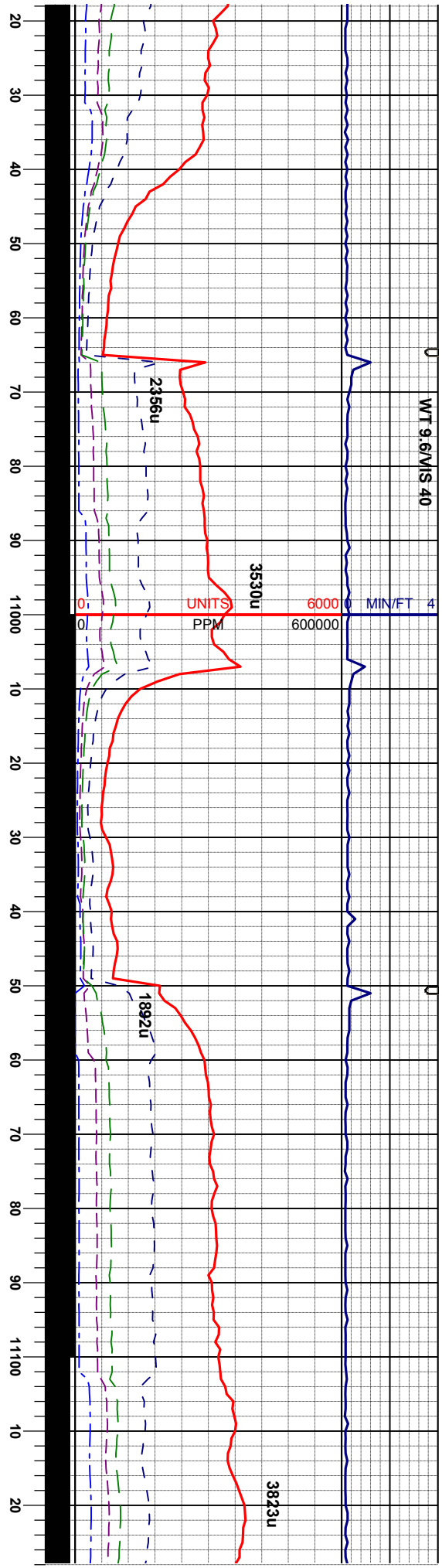


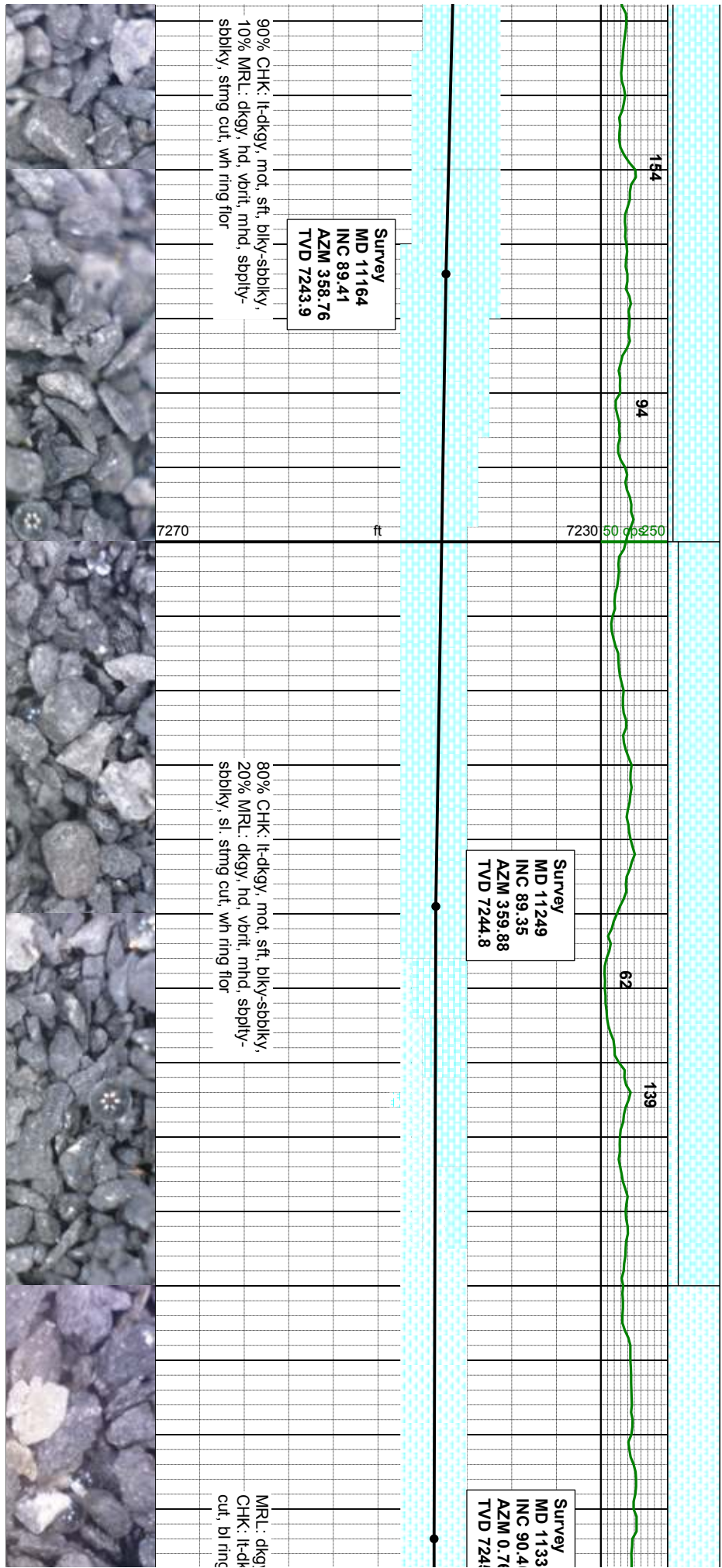
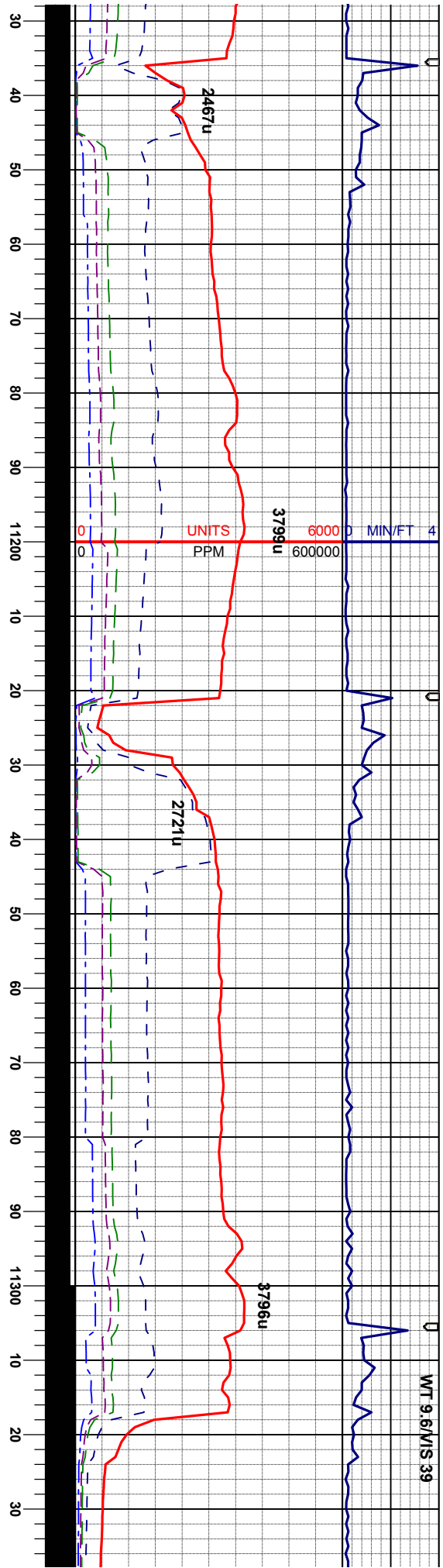


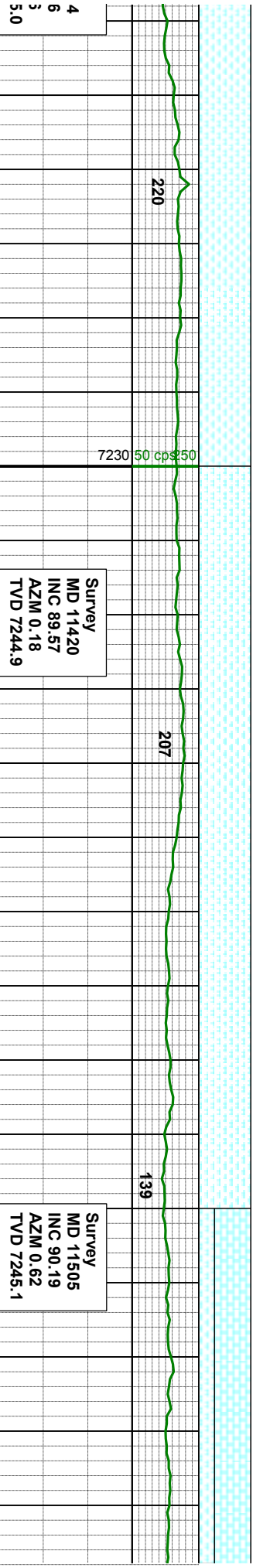
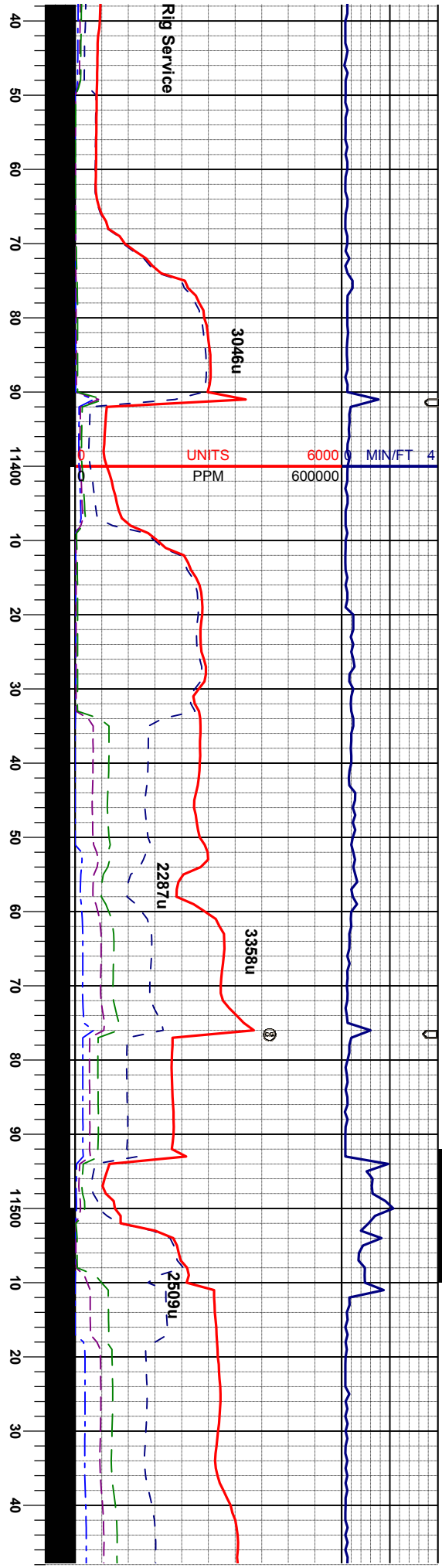












Survey
MD 11420
INC 89.57
AZM 0.18
TVD 7244.9

Survey
MD 11505
INC 90.19
AZM 0.62
TVD 7245.1

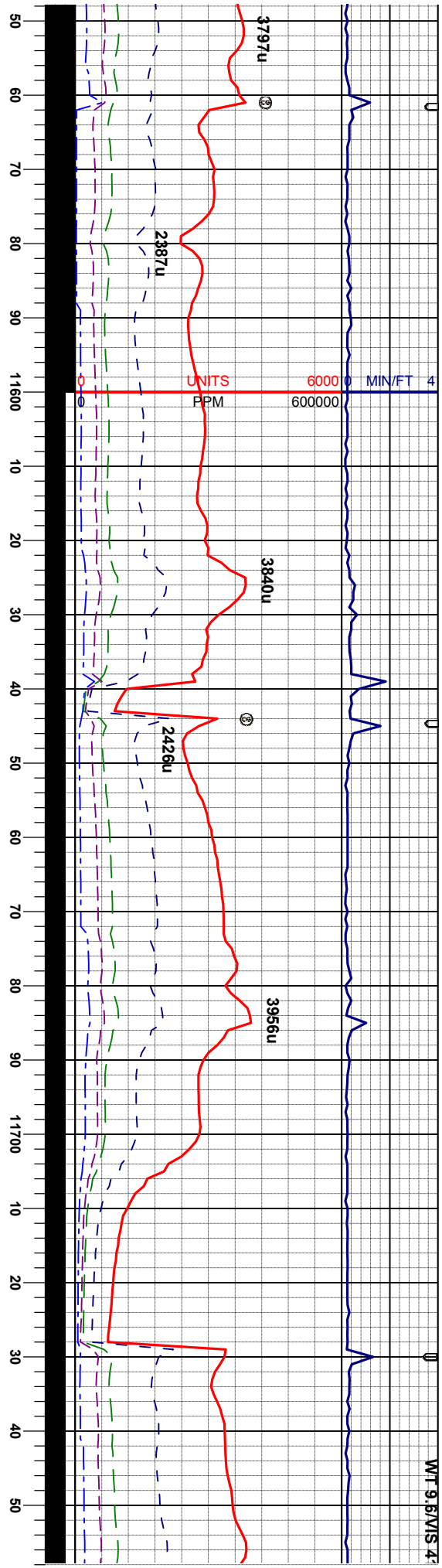
7270 ft

7230 50 cps 50

MR.L: dkgy, hd, vbrit, mhd, soplty-sbblky, tr
CHK: lt-dkgy, mot, sft, blky-sbblky, sl, stmg
cut, bl ring floor

70% CHK: dkgy, hd, vbrit
MR.L: dkgy, hd, vbrit
stmg cut, bl ring floor





Survey
MD 11588
INC 90.25
AZM 1.11
TVD 7244.8

Survey
MD 11673
INC 90.09
AZM 0.31
TVD 7244.5

70% CHK: dkgy, mot, sft, biky-sbiky, 30%
MRL: dkgy, nd, vbit, mhd, sbply-sbiky,
sting cut, wh ring flr

70% CHK: dkgy, mot, sft, biky
MRL: dkgy, nd, vbit, mhd, sbp
sting cut, wh ring flr

