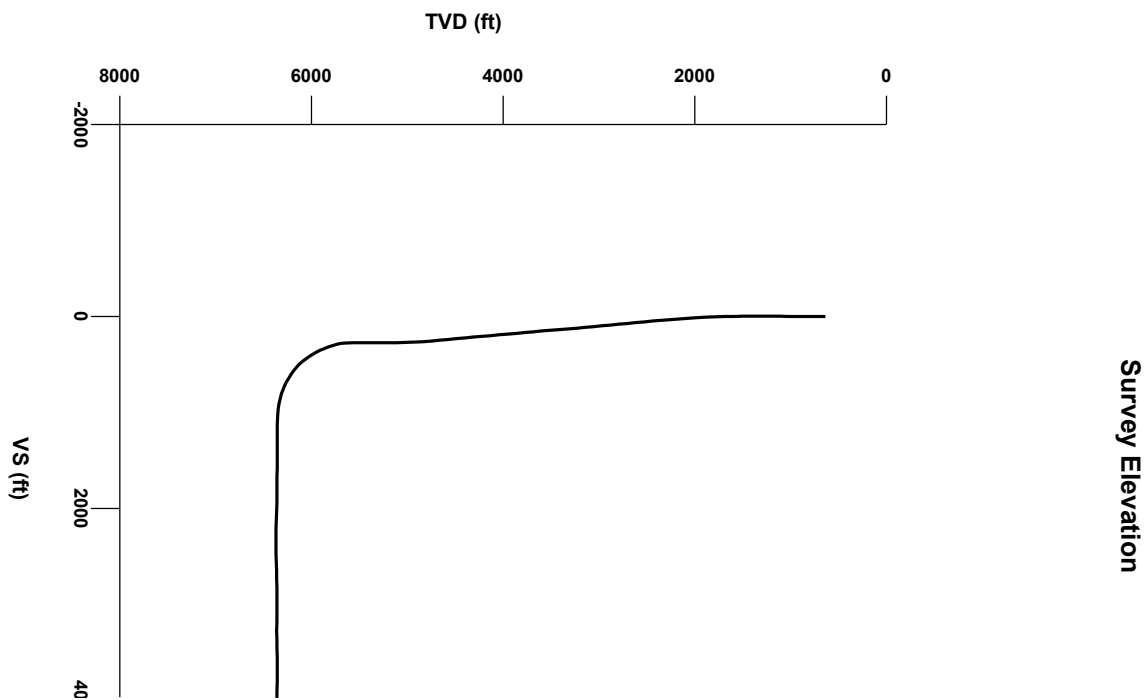


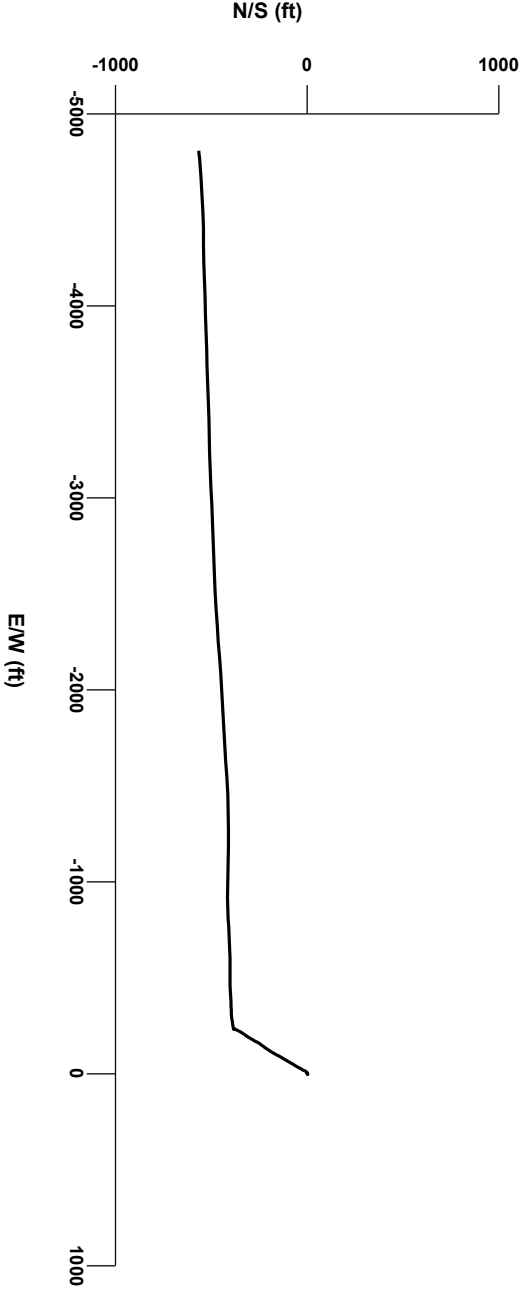
LOG created using LPLLOT VH Version 3.0, April 24, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

OPERATOR: NOBLE ENERGY INC
WELL: SHABLE LB32-68HN
LOCATION: SEC33 T9N R60W
COUNTY: WELD
STATE: COLORADO
SPOT: 288' FNL, 250' FWL
ELEVATION: 4940' GL, 4956' KB
FIELD: WILDCAT
SPUD DATE: 4/15/2013
TD DATE: 4/23/2013
DATES LOGGED: 4/16/2013 - 4/23/2013
DEPTHS LOGGED: 1000' - 10687'
GEOLOGISTS: CHRIS WILLATT, TED STOCKWELL, GARY MYERS
DRILLING FLUID: LSND
DRILLING RIG: PRECISION 828
API: 05-123-36800
LOG TYPE: HORIZONTAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING INC.

LOG CONTINUES FROM FILE: Shable LB32-68HN Vert.lplot



Survey Plan



6000

Chalk

Marl

Shaly Siltstone

Silty Shale

MODIFIERS

B Bentonite

ENGINEERING SYMBOLS

Bit Change

Connection Gas

Arrow

Casing

Arrow

Trip Gas

Casing

Midnight Depth

Connection

Normal Fault

DEPTH (FEET)

5560

70

80

90

5600

10

20

30

40

50

60

70

LOG CONTINUES FROM FILE:
Shale LB32-68HN Ver1.pilot

GAS

0

UNITS

2000

C1

0

PPM

200000

C2

0

PPM

200000

C3

0

PPM

200000

C4

0

PPM

200000

ROP

0

MIN/FT

2

SLIDE/ROTATE

BIT #2

SMITH

SD1611.8.75"

SER# JG5868

IN @ MD 638'

COLUMBINE LOGGING, INC.

ON LOCATION 04/15/2013

MANNED 2-PERSON LOGGING

WITH BLOODHOUND GAS

CHROMATOGRAPH UNIT #0331

UNITS

0

2000

PPM

1486u

MIN/FT

0

2

GAMMA RAY

0

API

200

96

70

MD 5580'

INC 0.5°

AZI 152.4°

TVD 5559.4'

SLTYSH: m-dkgy, sbply-plty, sft-firm, rthy-
gt tex, sl calc, sl mica, grdg-shyslist

TVD

ft

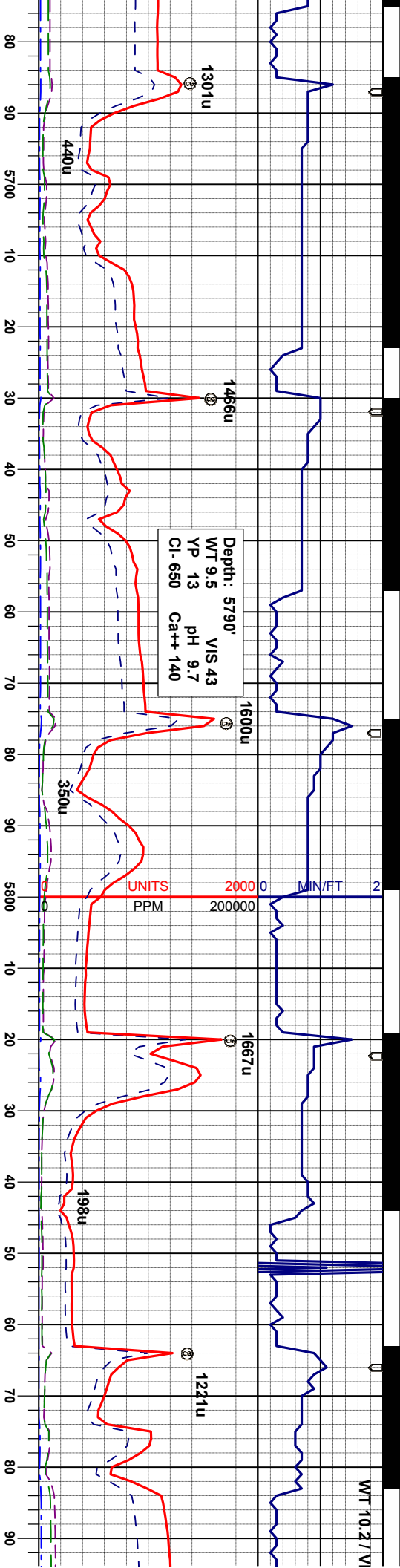
6550

5550

OIL SHOW

T F G

SAMPLE PHOTOS



BEGIN 30' SAMPLES
60' DESCRIPTIONS

| | | | | | | | | | |
|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| MD | 5680' | MD | 5725' | MD | 5769' | MD | 5814' | MD | 5859' |
| INC | 4.6° | INC | 9.8° | INC | 13.8° | INC | 17.1° | INC | 20.4° |
| AZI | 258.4° | AZI | 263.5° | AZI | 260.5° | AZI | 259.5° | AZI | 260.7° |
| TVD | 5649.3' | TVD | 5693.9' | TVD | 5737.0' | TVD | 5780.4' | TVD | 5823.0' |

SLTYSH: m - dkgy, sbply-pty, sft-firm, rthy-
gt tex, mod calc, sl mica, grdg-shysltst
SHYSLTST: lt-modgy, tr dkgy, sbply-
sbply, tr pty, sft -firm, sdy ip, v calc, grdg-
slysh

SHYSLTST: lt-modgy, tr dkgy, sbply-
sbply, tr pty, sft -firm, sdy ip, v calc, grdg-
slysh

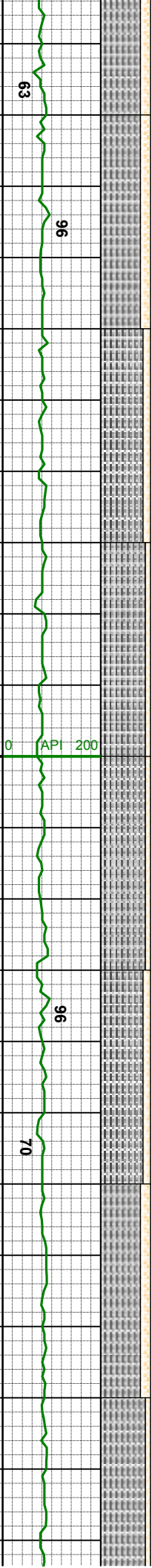
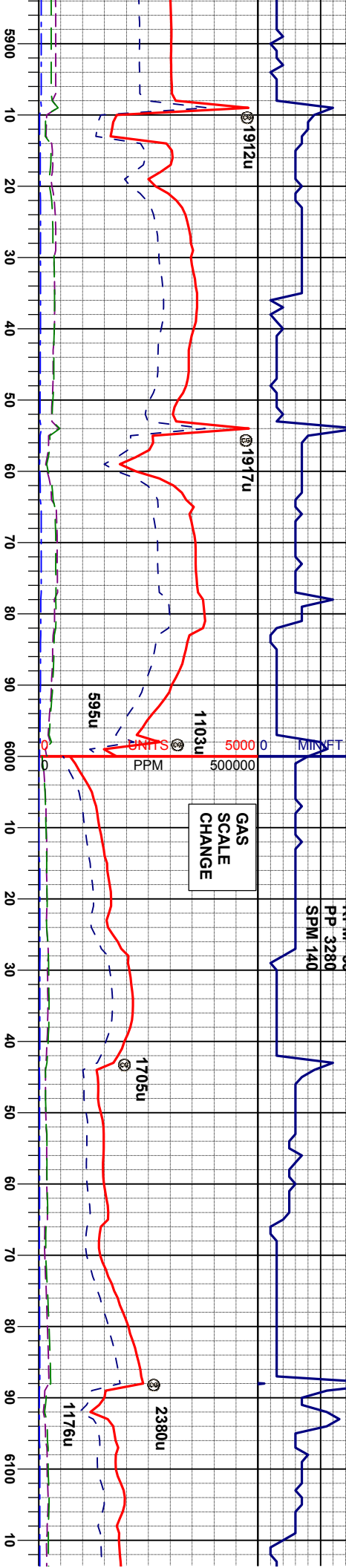
SLTYSH: m - dkgy, tr lgy, sbply-pty, sft
firm, rthy- gt tex, mod calc, sl mica, tr py
occ slyss
SHYSLTST: lt-modgy, sbply-sbply, oc
pty, sft -firm, sdy ip, v calc, grdg-slysh



S 39

WT 10.35 / VIS 42

WOB 24
RPM 35
PP 3280
SPM 140



| | | | | | | | | | |
|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| MD 5904' | INC 22.4° | MD 5949' | INC 24.4° | MD 5994' | INC 28.1° | MD 6039' | INC 31.9° | MD 6084' | INC 33.8° |
| NC 262.1° | | NC 267.6° | | NC 268.3° | | NC 268.1° | | NC 266.7° | |
| AZI 5864.9' | | AZI 5906.2' | | AZI 5946.5' | | AZI 5985.5' | | AZI 6023.3' | |
| TVD | | TVD | | TVD | | TVD | | TVD | |

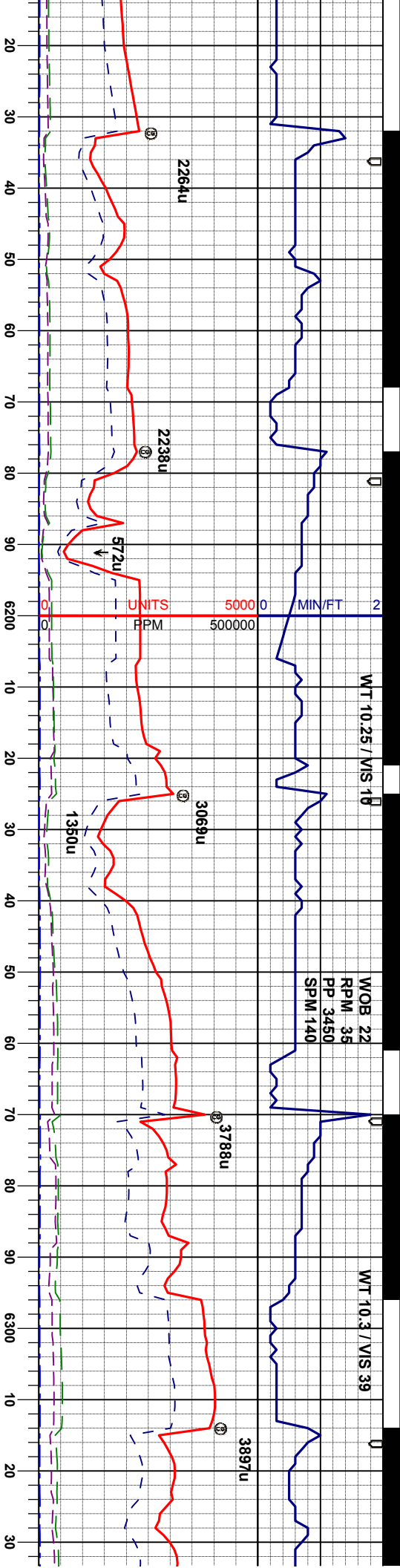
SLTYSH: m- dkgy, tr llyg, sbply-pty, sft-
firm, rthy- gt tex, mod calc, sl mica, tr pyr,
occ shy ss
SHYSLTST: lt-modgy, sbdky-sbply, occ
ply, sft -firm, sdy ip, v calc, grdg-sltvsh

SLTYSH: m- dkgy, tr llyg, sbply-pty, sft-
firm, rthy- gt tex, mod calc, sl mica, tr pyr,
occ shy ss
SHYSLTST: lt-modgy, sbdky-sbply, occ
ply, sft -firm, sdy ip, v calc, grdg-sltvsh

SLTYSH: m- dkgy, tr llyg, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shy ss
SHYSLTST: lt-modgy, sbdky-sbply, occ
ply, sft -firm, sdy ip, sl calc, grdg-sltvsh

SLTYSH: m- dkgy, tr llyg, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shy ss
SHYSLTST: lt-modgy, sbdky-sbply, occ
ply, sft -firm, sdy ip, sl calc, grdg-sltvsh





MD 6129'
INC 35.5°
AZI 266.7°
TVD 6060.3'

MD 6174'
INC 39.2°
AZI 267.6°
TVD 6096.1'

TVD
SCALE
CHANGE

MD 6219'
INC 44.7°
AZI 267.6°
TVD 6129.5'

MD 6264'
INC 49.9°
AZI 268.8°
TVD 6160.0'

SHARON SPRINGS
MARKER
6309' MD, 6188' TVD

SLTYSH: m-dkgy, tr lly, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shly ss

SHYSLST: lt-modgy, sbply-sbply, occ
pty, sft -firm, sdy ip, sl calc, grdg-sltlysh

SLTYSH: m-dkgy, tr lly, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shly ss

SHYSLST: lt-modgy, sbply-sbply, occ
pty, sft -firm, sdy ip, sl calc, grdg-sltlysh

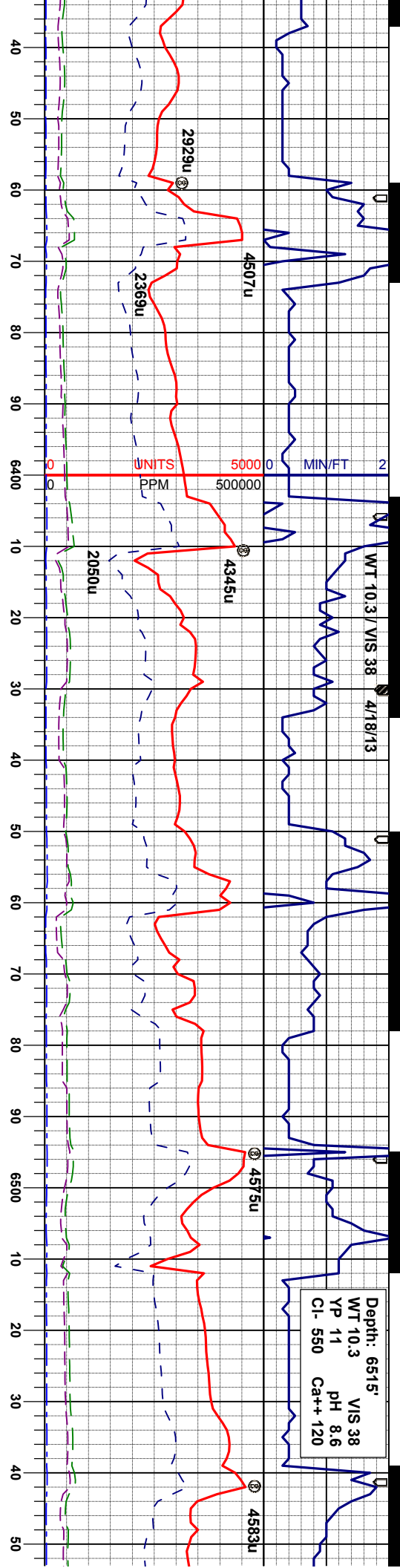
SLTYSH: m-dkgy, tr lly, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shly ss, tr bent

SHYSLST: lt-modgy, sbply-sbply, occ
pty, sft -firm, sdy ip, sl calc, grdg-sltlysh

SLTYSH: m-dkgy, tr lly, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shly ss, scat bent, tr fos

CHK: lt-mgy, mot, sft-mod firm, sbply-
sbply, occ biky, rthy lstr, vcalc, tr fos

Depth: 6515'
WT 10.3 VIS 38
YP 11 pH 8.6
Cl- 550 Ca++ 120



MD 6353'
INC 56.1°
AZI 270.4°
TVD 6213.2'

MD 6398'
INC 57.8°
AZI 268.8°
TVD 6237.7'

NOBRARA A MARL
LOGGER TOP
6416' MD, 6247' TVD

MD 6443'
INC 62.1°
AZI 267.9°
TVD 6260.2'

MD 6488'
INC 66.3°
AZI 267.4°
TVD 6279.8'

MD 6533'
INC 68.6°
AZI 267.0°
TVD 6297.1'

NOBRARA A CHALK
LOGGER TOP
6366' MD, 6220' TVD

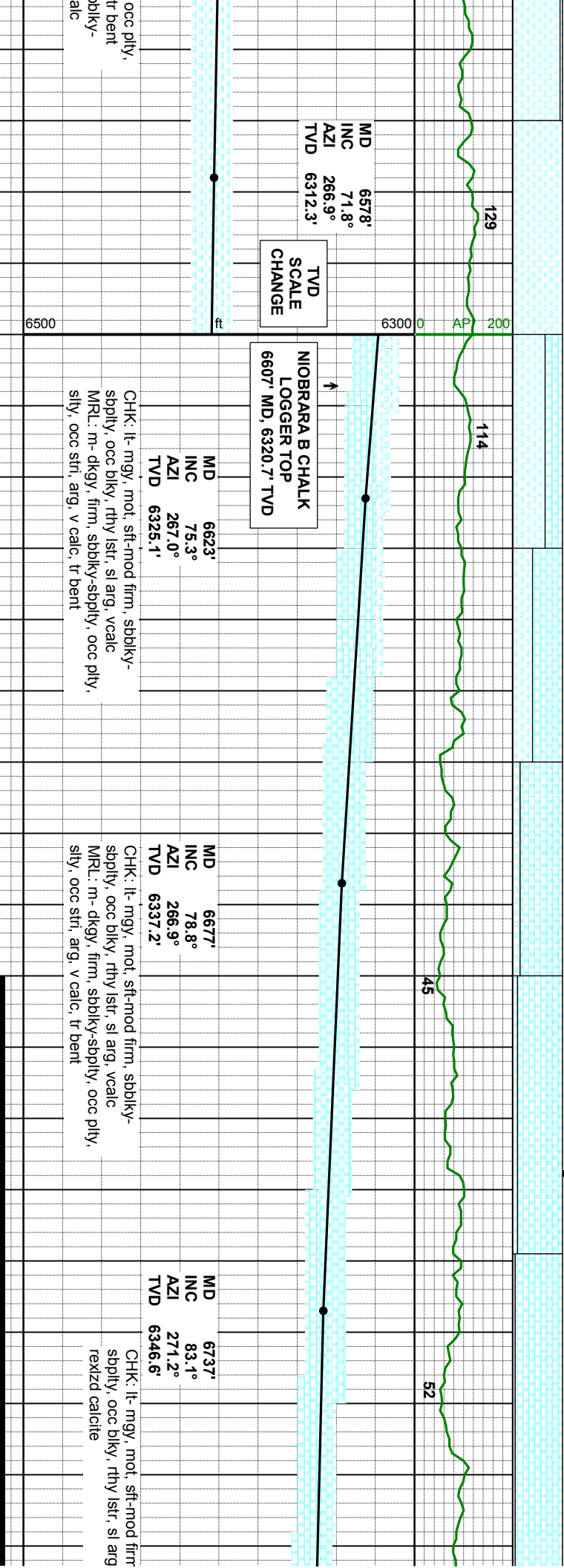
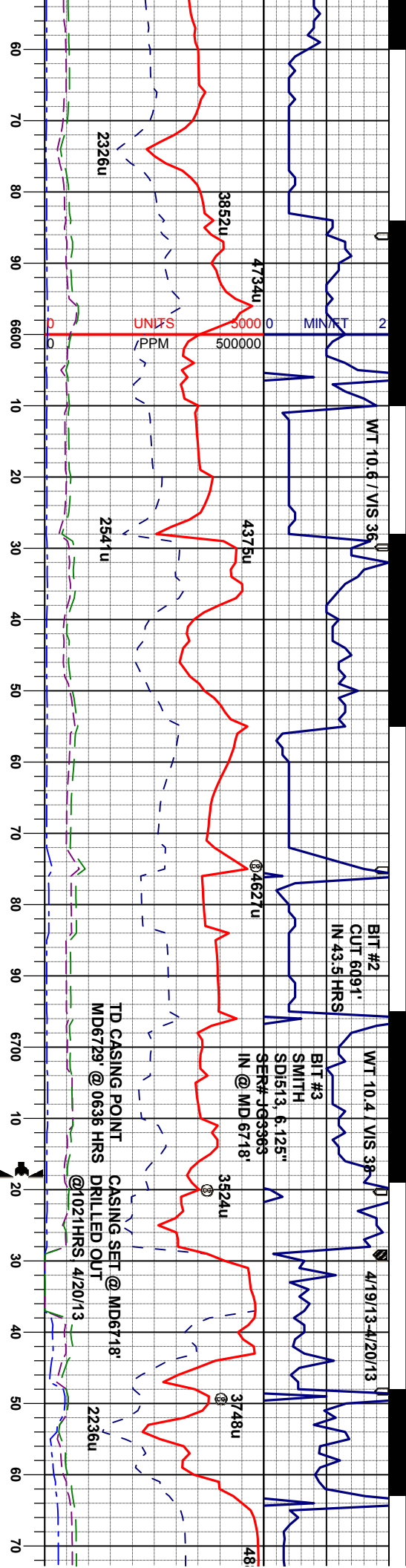
SLTYSH: m- dkgy, tr ilgy, sbply-pty, sft-
firm, rthy- gt tex, non calc, sl mica, tr pyr,
occ shy ss, scat bent, tr fos
CHK: lt- mgy, mot, sft-mod firm, sbblky-
sbply, occ blky, rthy lstr, sl arg, vcalc, tr fos
MRL: m- dkgy, sl firm -firm, sbblky-sbply,
occ pily, silty, tr stri, arg, mod calc

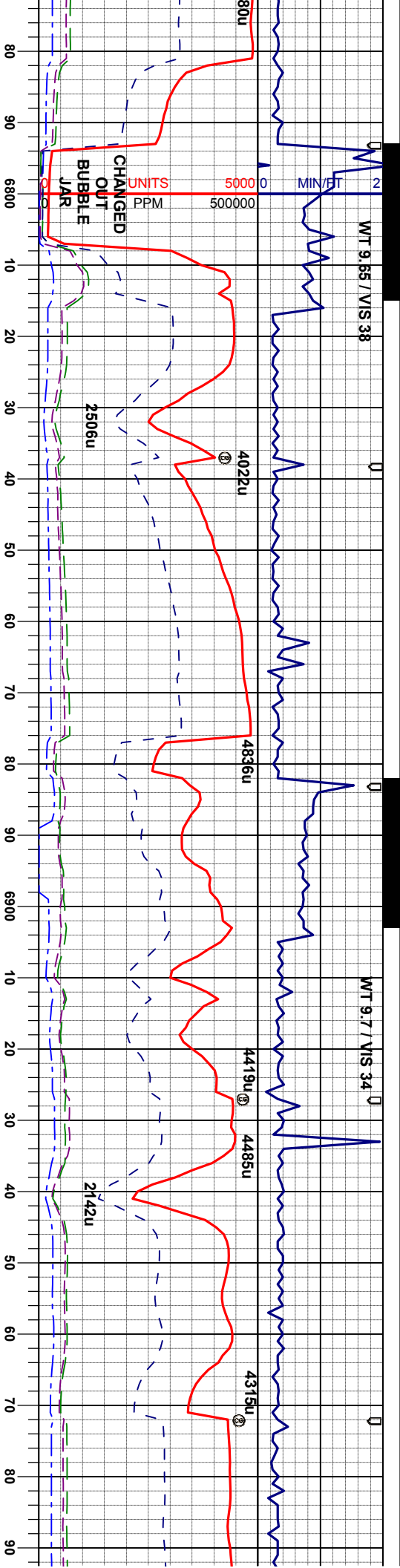
MRL: m- dkgy, sl firm -firm, sbblky-sbply,
occ pily, silty, tr stri, arg, mod calc
CHK: lt- mgy, mot, sft-mod firm, sbblky-
sbply, occ blky, rthy lstr, sl arg, vcalc, tr fos

MRL: m- dkgy, sl firm -firm, sbblky-sbply,
occ pily, silty, tr stri, arg, mod calc, tr fos, tr
bent
CHK: lt- mgy, mot, sft-mod firm, sbblky-
sbply, occ blky, rthy lstr, sl arg, vcalc

MRL: m- dkgy, firm, sbblky-sbply,
silty, occ stri, arg, mod calc, tr fos,
CHK: lt- mgy, mot, sft-mod firm, st
sbply, occ blky, rthy lstr, sl arg, vc







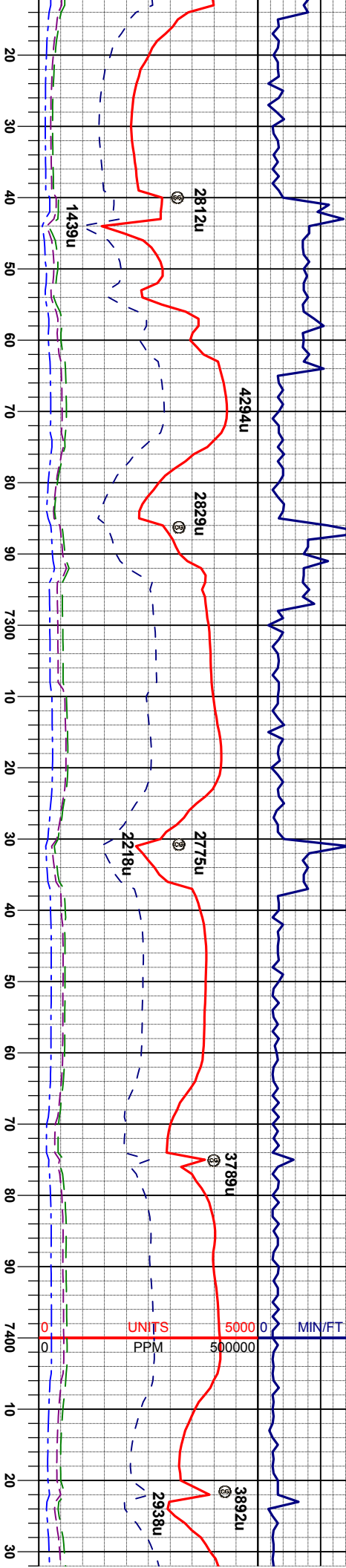
| | | | | |
|---|---|---|---|---|
| 116 | 127 | 89 | 136 | 89 |
| 6300 | 6300 | 6300 | 6300 | 6300 |
| AP | AP | AP | AP | AP |
| 200 | 200 | 200 | 200 | 200 |
| MD 6826' | MD 6916' | MD 6916' | MD 6916' | MD 6916' |
| INC 86.8° | INC 89.4° | INC 89.4° | INC 89.4° | INC 89.4° |
| AZI 271.6° | AZI 270.5° | AZI 270.5° | AZI 270.5° | AZI 270.5° |
| TVD 6354.4' | TVD 6357.4' | TVD 6357.4' | TVD 6357.4' | TVD 6357.4' |
| CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lstr, sl arg, vcalc | CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lstr, sl arg, vcalc | MR: m- dkgy, firm, sbblky-sbply, occ pily, sily, occ stri, arg, v calc, tr bent, abnt fos frag, abnt rexizd calcite | MR: m- dkgy, firm, sbblky-sbply, occ pily, sily, occ stri, arg, v calc, tr bent, abnt fos frag, abnt rexizd calcite | MR: m- dkgy, firm, sbblky-sbply, occ pily, sily, occ stri, arg, v calc, tr bent, abnt fos frag, abnt rexizd calcite |
| MR: m- dkgy, firm, sbblky-sbply, occ pily, sily, occ stri, arg, v calc, tr bent, abnt fos frag, abnt rexizd calcite | MR: m- dkgy, firm, sbblky-sbply, occ pily, sily, occ stri, arg, v calc, tr bent, abnt fos frag, abnt rexizd calcite | CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lstr, sl arg, vcalc | CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lstr, sl arg, vcalc | CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lstr, sl arg, vcalc |
| ft | ft | ft | ft | ft |
| 6500 | 6500 | 6500 | 6500 | 6500 |



T 9.6 / W/S 33

WT 9.5 / V/S 32

WT 9.65 / V/S 33



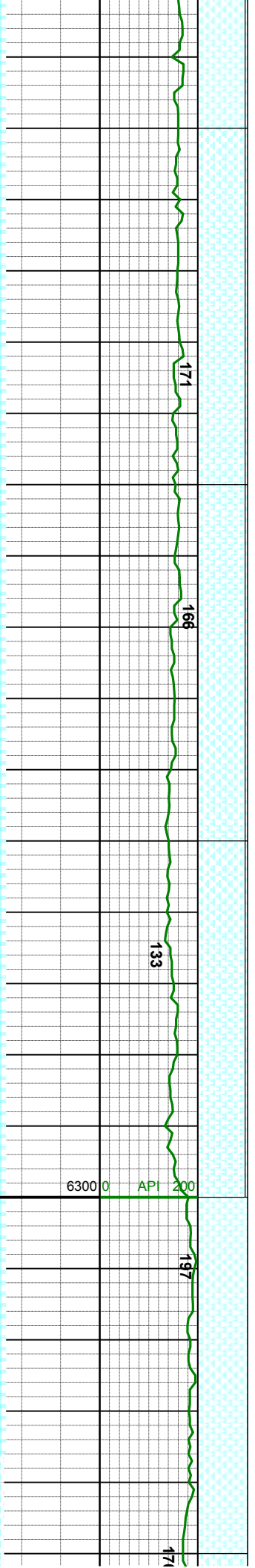
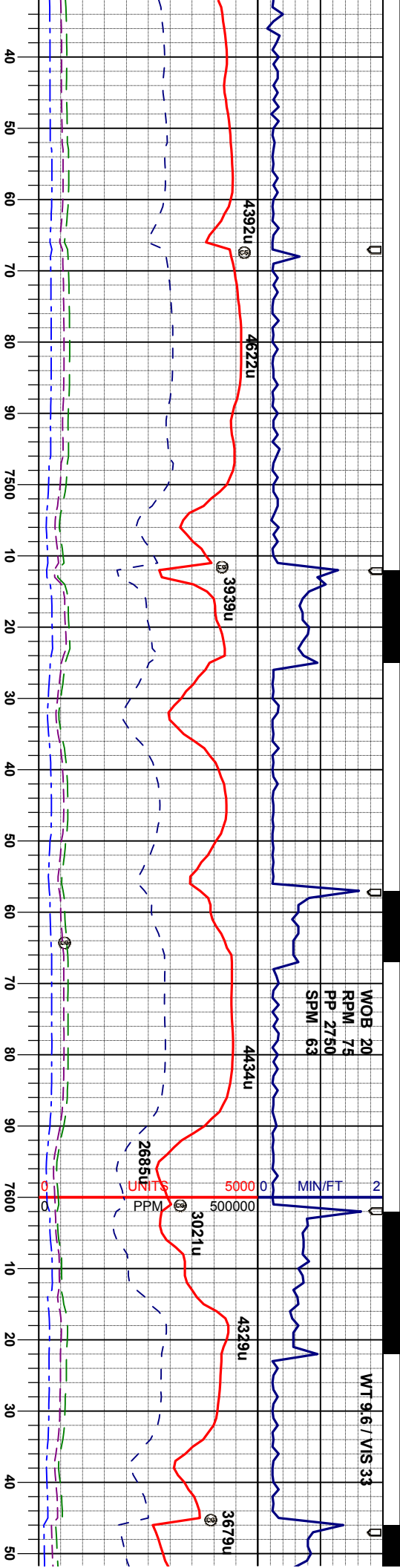
MD 7276'
INC 89.3°
AZI 267.4°
TVD 6355.5'

MD 7366'
INC 88.1°
AZI 266.5°
TVD 6357.8'

MR.L: m- dkgy, firm, sbbiky-sbply, occ pily, silty, occ stri, arg, v calc, tr bent, abnt fos frag, tr pyr
CHK: lt- mgy, mot, sft-mod firm, sbbiky-sbply, occ biky, rthy lstr, sl arg, vcalc

MR.L: m- dkgy, firm, sbbiky-sbply, occ pily, silty, occ stri, arg, v calc, tr bent, abnt fos frag, tr pyr
CHK: lt- mgy, mot, sft-mod firm, sbbiky-sbply, occ biky, rthy lstr, sl arg, vcalc





MD 7456°
INC 89.5°
AZI 266.2°
TVD 6359.7'

MD 7546°
INC 90.6°
AZI 267.0°
TVD 6359.6'

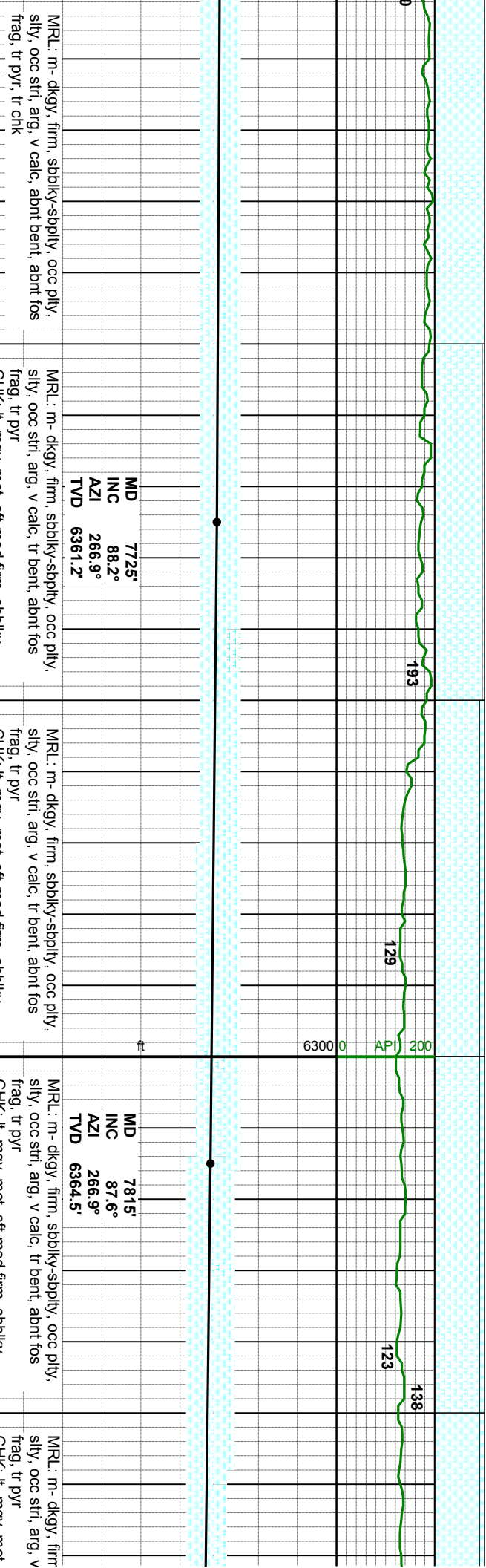
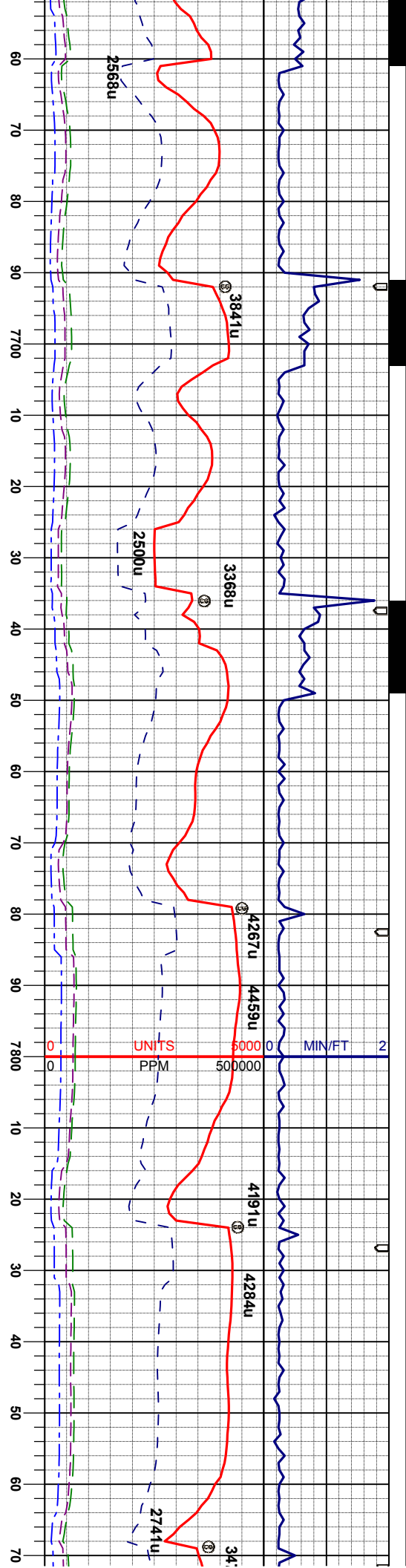
MD 7635°
INC 89.6°
AZI 266.7°
TVD 6359.5'

MRL: m- dkgy, firm, sbblky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, abnt fos frag, tr pyr
CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blk, rthy lstr, sl arg, vcalc

MRL: m- dkgy, firm, sbblky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, abnt fos frag, tr pyr
CHK: lt- mgy, mot, sft-mod firm, sbblky-sbply, occ blk, rthy lstr, sl arg, vcalc

MRL: m- dkgy, firm, sbblky-sbply, occ pily, silty, occ str, arg, v calc, abnt bent, abnt fos frag, tr pyr, tr chk





MRL: m- dkgy, firm, sbdkly-sbply, occ pily, silty, occ stri, arg, v calc, abnt bent, abnt fos frag, tr pyr, tr cnk

MRL: m- dkgy, firm, sbdkly-sbply, occ pily, silty, occ stri, arg, v calc, tr bent, abnt fos frag, tr pyr

MRL: m- dkgy, firm, sbdkly-sbply, occ pily, silty, occ stri, arg, v calc, tr bent, abnt fos frag, tr pyr

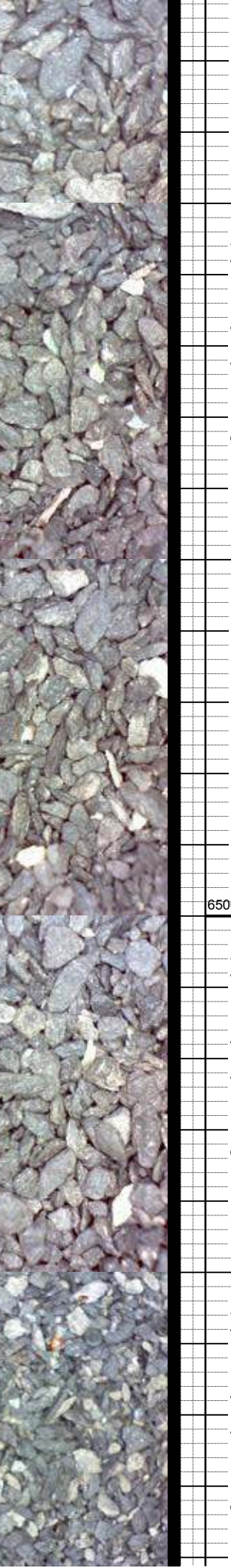
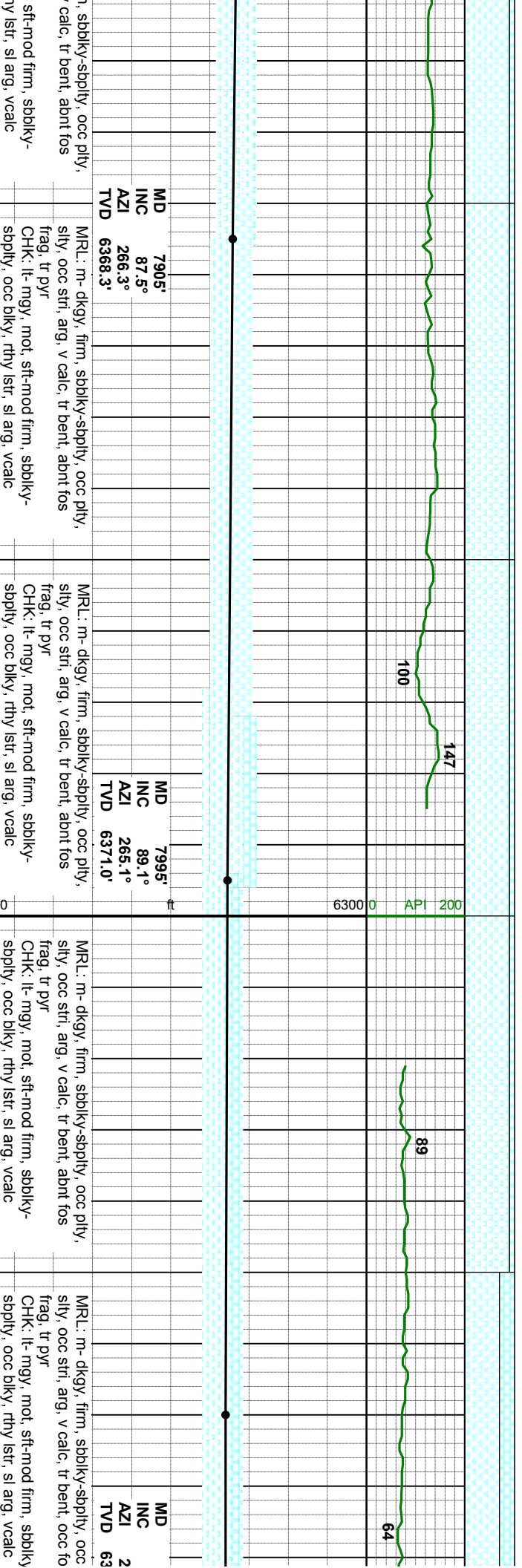
MD 7725'
INC 88.2°
AZI 266.9°
TVD 6361.2'

MD 7815'
INC 87.6°
AZI 266.9°
TVD 6364.5'

6500

6300 0 API 200

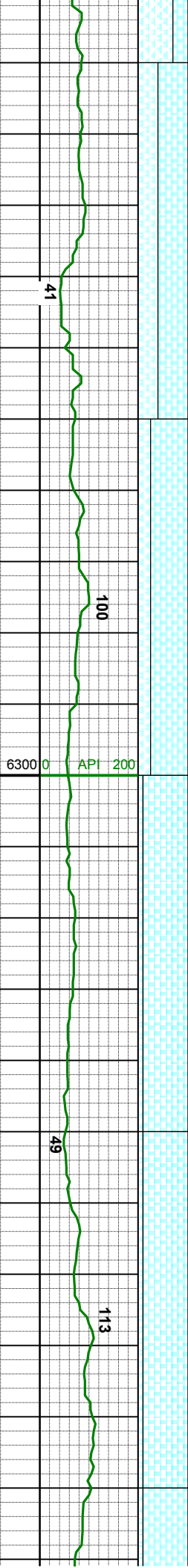
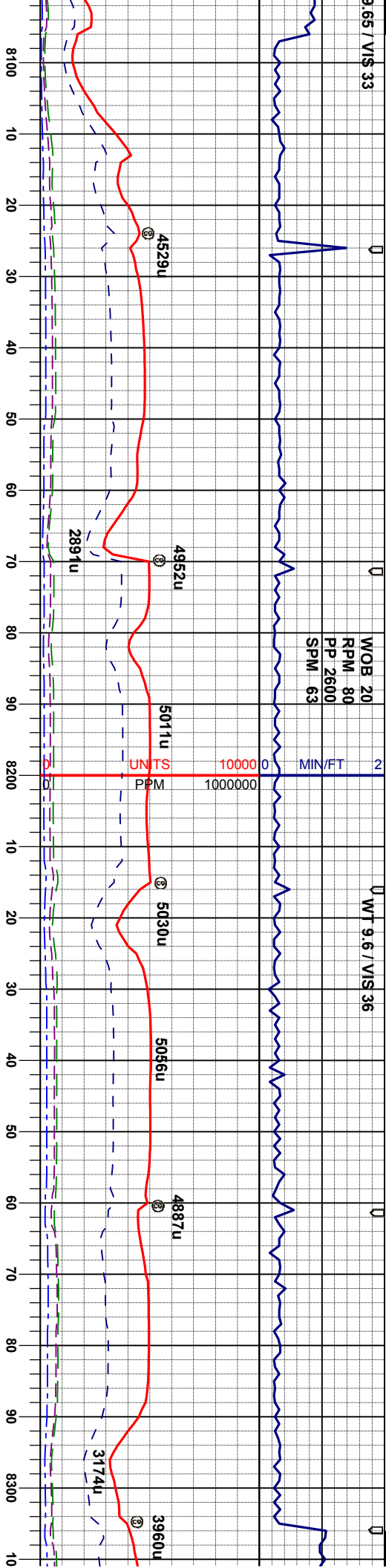




9.65 / VIS 33

WOB 20
RPM 80
PP 2600
SPM 63

WT 9.6 / VIS 36



8070'
INC 89.3°
AZI 65.6°
TVD 772.0'

MD 8160'
INC 90.7°
AZI 266.7°
TVD 6372.0'

MD 8250'
INC 91.7°
AZI 266.0°
TVD 6370.2'

CHK: lt-mgy, mot, sft-mod firm, sbbiky-sbply, occ blk, rthy lstr, sl arg, vcalc MRL: m-dkgy, firm, sbbiky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, occ fos frag

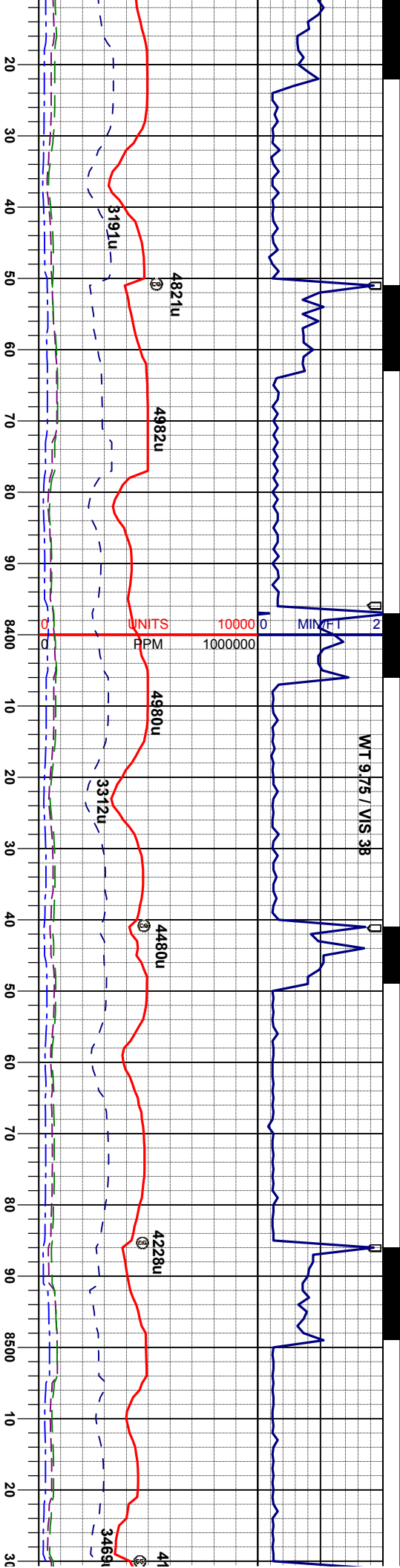
CHK: lt-mgy, mot, sft-mod firm, sbbiky-sbply, occ blk, rthy lstr, sl arg, vcalc MRL: m-dkgy, firm, sbbiky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, occ fos frag

CHK: lt-mgy, mot, sft-mod firm, sbbiky-sbply, occ blk, rthy lstr, sl arg, vcalc MRL: m-dkgy, firm, sbbiky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, occ fos frag

CHK: lt-mgy, mot, sft-mod firm, sbbiky-sbply, occ blk, rthy lstr, sl arg, vcalc MRL: m-dkgy, firm, sbbiky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, occ fos frag

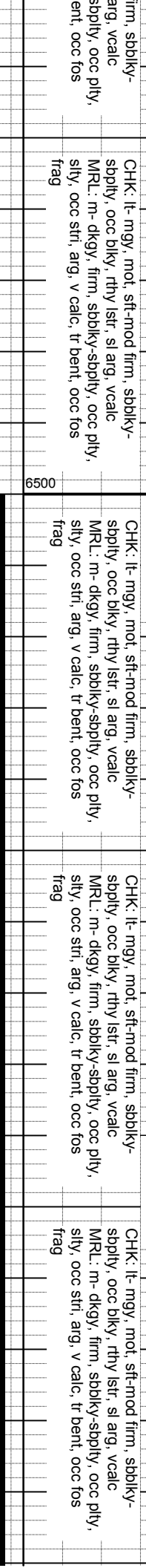
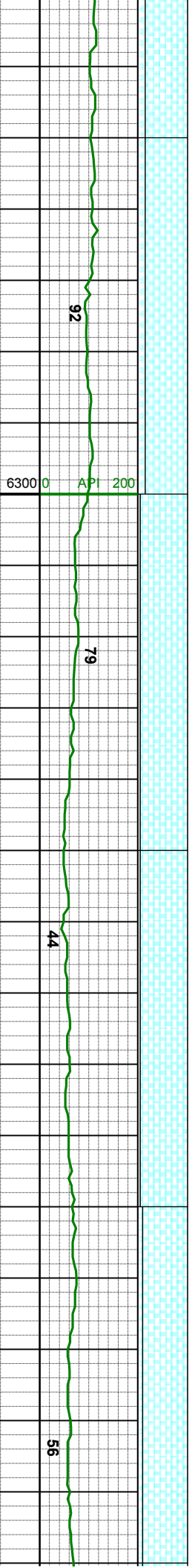
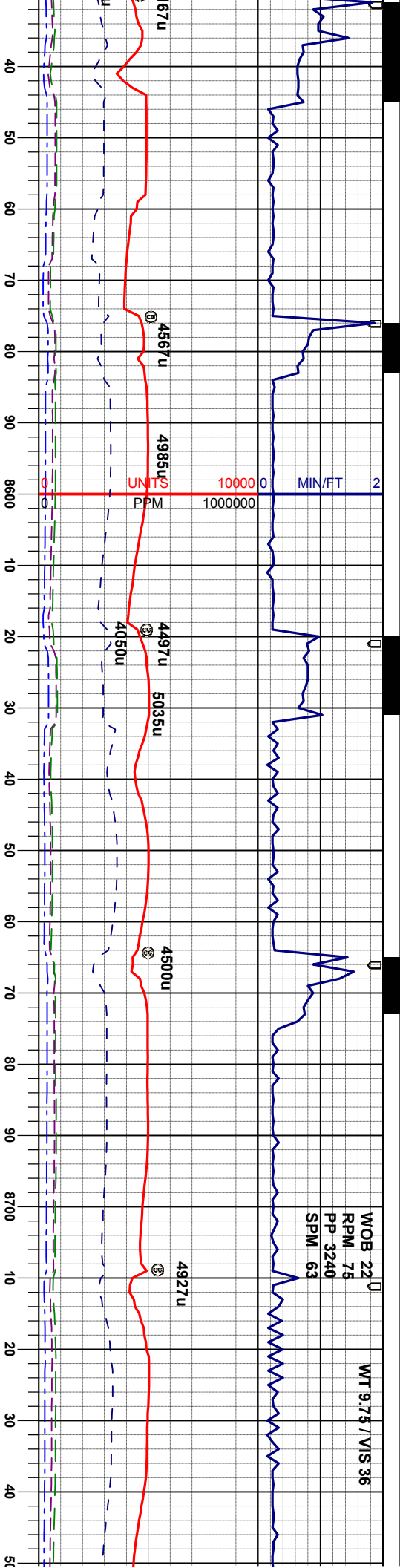
CHK: lt-mgy, mot, sft-mod firm, sbbiky-sbply, occ blk, rthy lstr, sl arg, vcalc MRL: m-dkgy, firm, sbbiky-sbply, occ pily, silty, occ str, arg, v calc, tr bent, occ fos frag



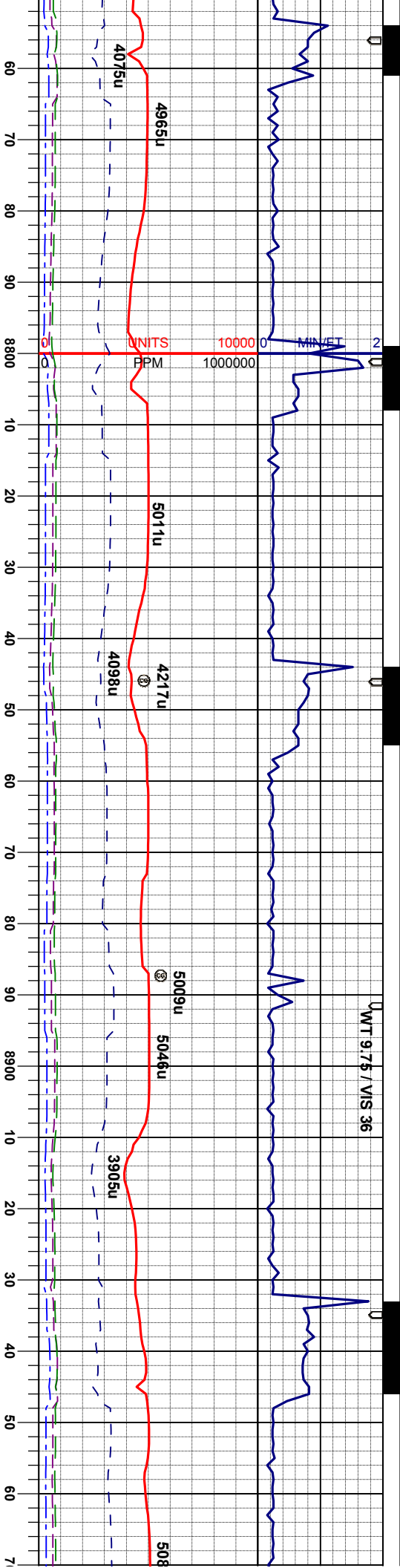


| | | | | | |
|--|--|---|--|---|--|
| MD 8340' | | MD 8430' | | MD 8520' | |
| INC 91.8° | | INC 91.2° | | INC 90.9° | |
| AZI 267.2° | | AZI 267.6° | | AZI 267.7° | |
| TVD 6367.4' | | TVD 6365.1' | | TVD 6363.4' | |
| mgy, mot, sft-mod firm, sbblky- occ blkly, rthy lstr, sl arg, vcalc | | CHK: lt-mgy, mot, sft-mod firm, sbblky- sbply, occ blkly, rthy lstr, sl arg, vcalc | | CHK: lt-mgy, mot, sft-mod firm, sbblky- sbply, occ blkly, rthy lstr, sl arg, vcalc | |
| dkgy, firm, sbblky-sbply, occ pily, | | MRL: m-dkgy, firm, sbblky-sbply, occ pily, | | MRL: m-dkgy, firm, sbblky-sbply, occ pily, | |
| sily, arg, v calc, tr bent, occ fos | | sily, occ stri, arg, v calc, tr bent, occ fos | | sily, occ stri, arg, v calc, tr bent, occ fos | |
| frag | | frag | | frag | |
| ft | | ft | | ft | |
| 6500 | | 6300 | | 6300 | |
| API 200 | | API 200 | | API 200 | |
| 48 | | 54 | | 110 | |
| 62 | | 120 | | | |





WT 9.75 / VIS 36



103u

API 200

90

59

79

38

MD 8789'
INC 90.7°
AZI 267.6°
TVD 6361.7'

CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ stri, arg, v calc, occ fos frag

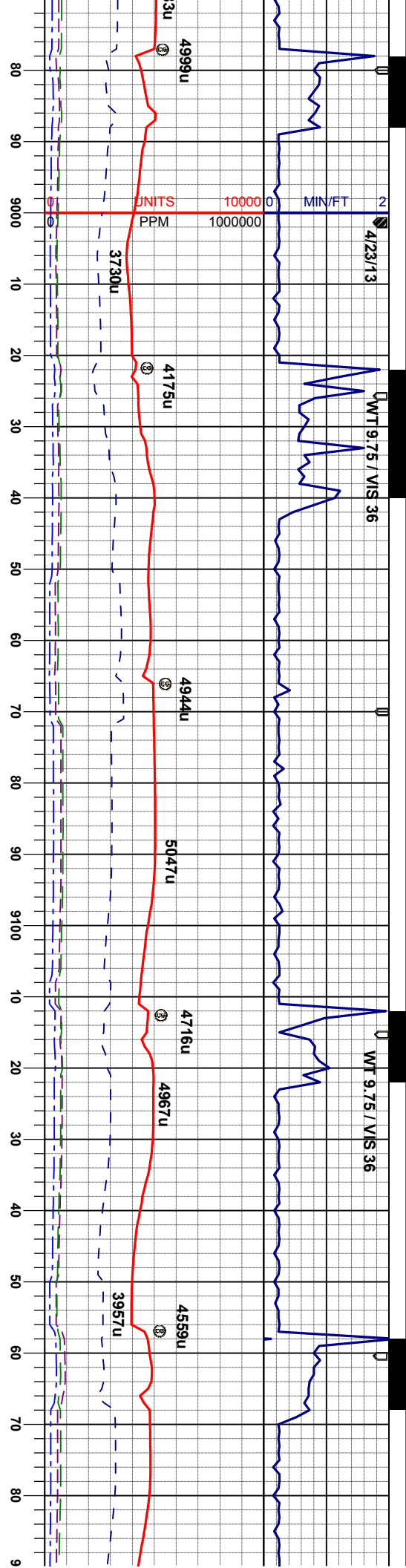
MD 8879'
INC 89.3°
AZI 267.0°
TVD 6361.7'

CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ stri, arg, v calc, occ fos frag

MD
INC
AZI 2
TVD 63

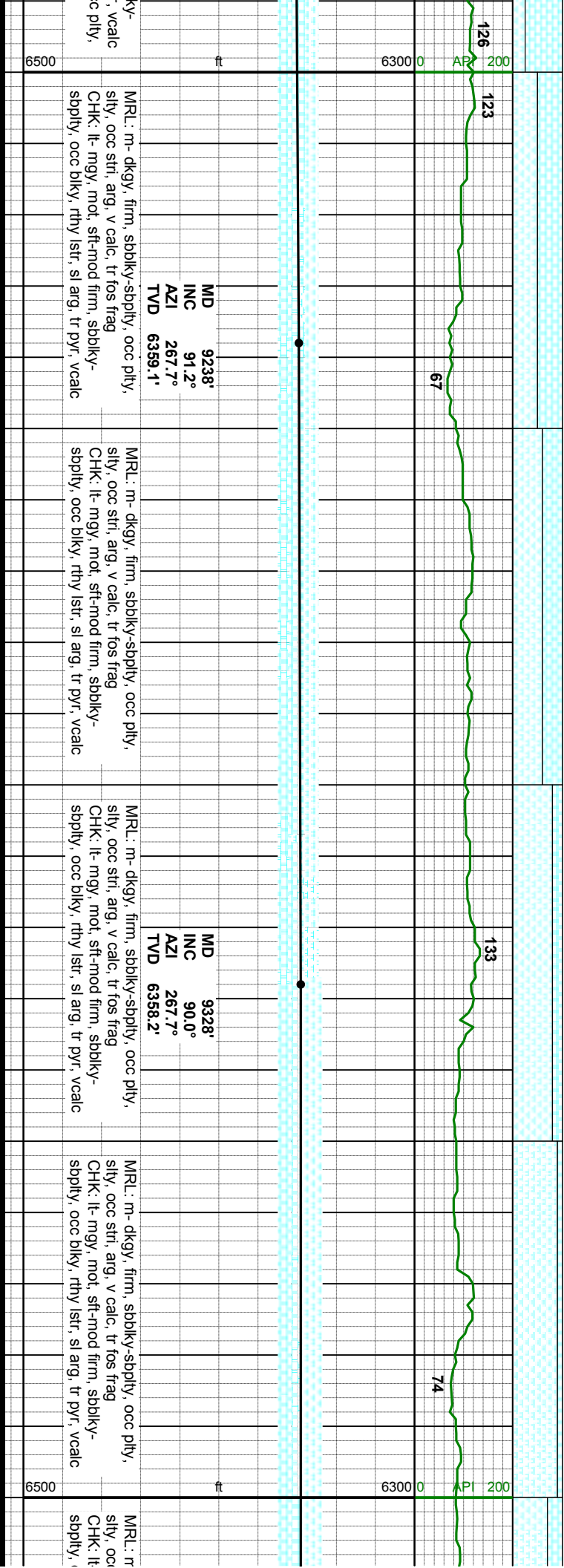
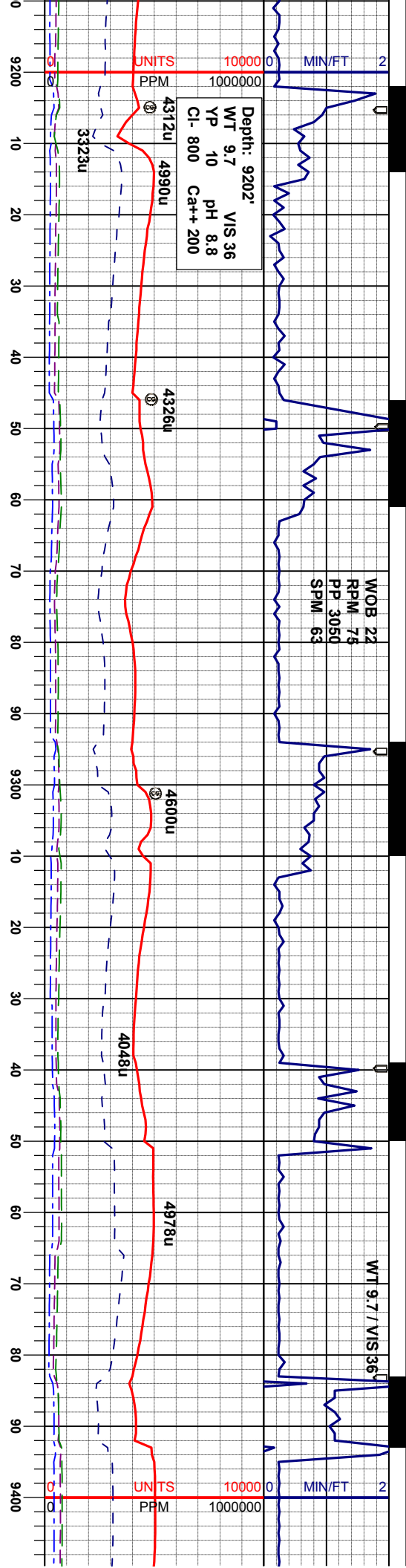
CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ stri, arg, v calc, occ fos frag

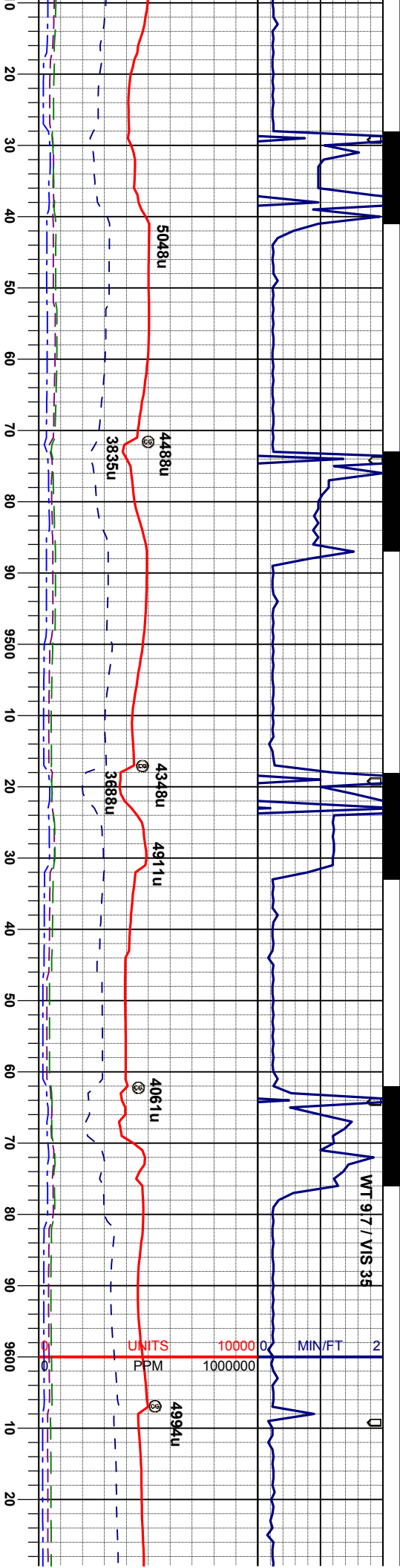




| | | | | |
|----------|-----------|------------|-------------|---|
| 88969' | 89.9° | 67.6° | 62.3° | CHK: lt-mgy, mot, sft-mod firm, sbbkly-sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc MRL: m-dkgy, firm, sbbkly-sbply, occ pily, silty, occ strl, arg, v calc, tr fos frag |
| 6500 | ft | 6300 | 0 | API 200 |
| MD 9059' | INC 90.0° | AZI 268.8° | TVD 6362.4' | CHK: lt-mgy, mot, sft-mod firm, sbbkly-sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc MRL: m-dkgy, firm, sbbkly-sbply, occ pily, silty, occ strl, arg, v calc, tr fos frag |
| MD 9149' | INC 91.5° | AZI 269.5° | TVD 6361.2' | CHK: lt-mgy, mot, sft-mod firm, sbbkly-sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc MRL: m-dkgy, firm, sbbkly-sbply, occ pily, silty, occ strl, arg, v calc, tr fos frag |







MD 9418'
INC 90.0°
AZI 268.1°
TVD 6358.2'

- dkgy, firm, sbdky-sbply, occ pily,
c stri, arg, v calc, tr fos frag, tr bent
- mgy, mot, sft-mod firm, sbdky-
occ blkly, rthy lst, sl arg, tr pyr, vcalc

MRL: m- dkgy, firm, sbdky-sbply, occ pily,
sily, occ stri, arg, v calc, tr fos frag, tr bent
CHK: lt- mgy, mot, sft-mod firm, sbdky-
sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc

MD 9508'
INC 90.0°
AZI 268.4°
TVD 6358.2'

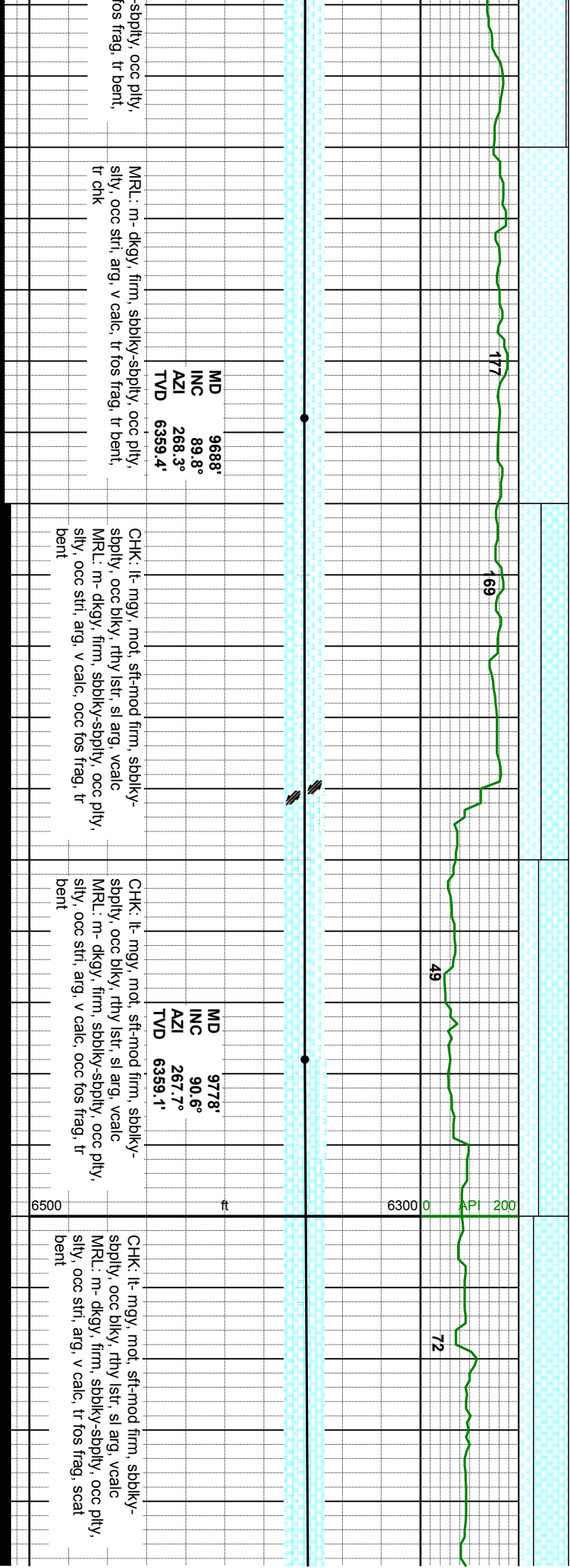
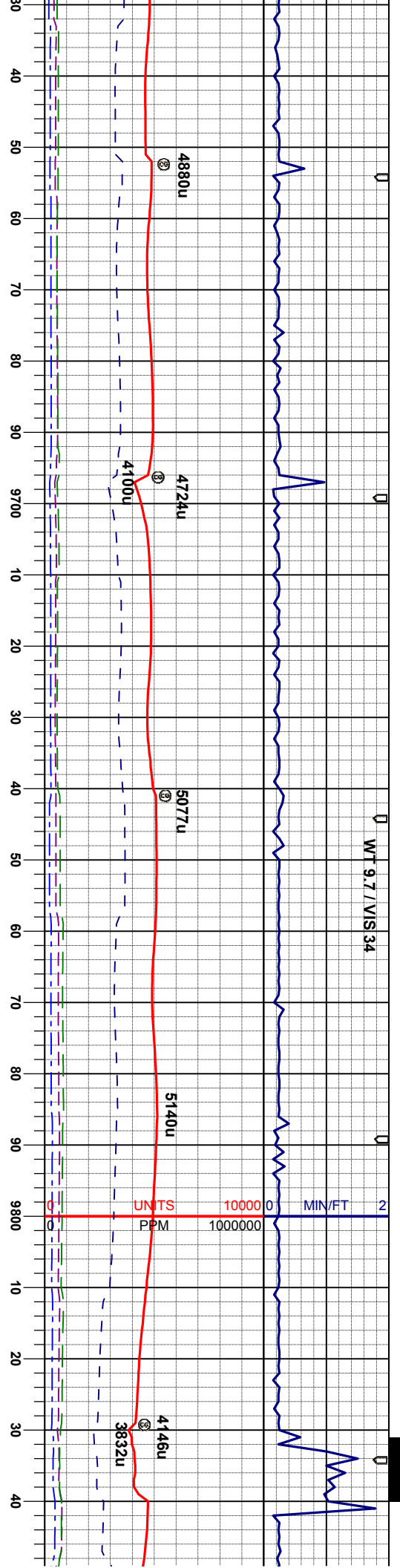
MRL: m- dkgy, firm, sbdky-sbply, occ pily,
sily, occ stri, arg, v calc, tr fos frag, tr bent
CHK: lt- mgy, mot, sft-mod firm, sbdky-
sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc

MD 9598'
INC 89.3°
AZI 268.8°
TVD 6358.7'

MRL: m- dkgy, firm, sbdky-sbply, occ pily,
sily, occ stri, arg, v calc, tr fos frag, tr bent
CHK: lt- mgy, mot, sft-mod firm, sbdky-
sbply, occ blkly, rthy lst, sl arg, tr pyr, vcalc

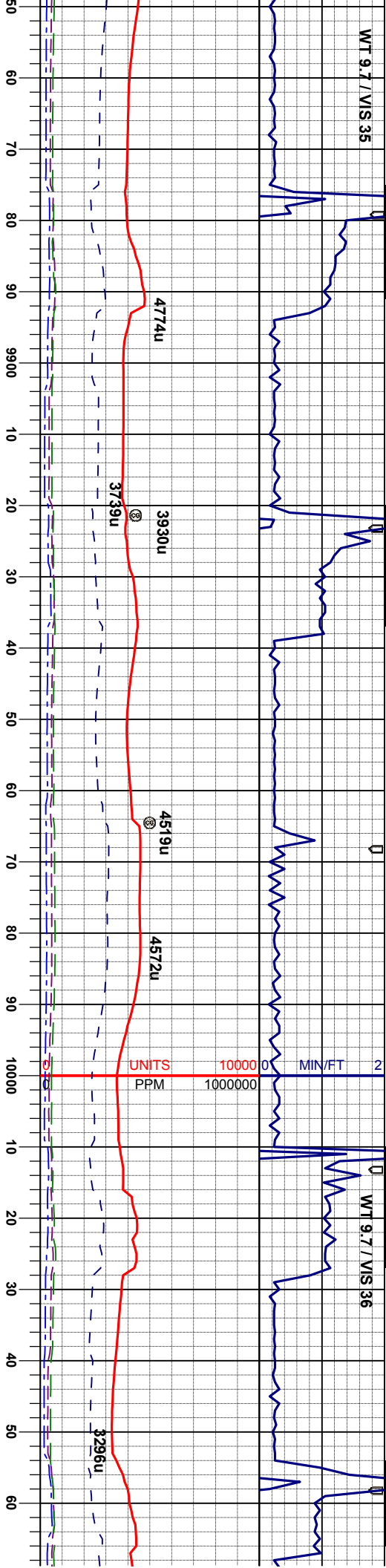
MRL: m- dkgy, firm, sbdky-
sily, occ stri, arg, v calc, tr i
occ chk





WT 9.7 / VIS 35

WT 9.7 / VIS 36



MD 9867'
INC 91.8°
AZI 268.6°
TVD 6357.3'

MRL: m- dkgy, firm, sbblky-sbply, occ ply,
sily, occ stri, arg, v calc, occ fos frag, tr
bent
CHK: lt- mgy, mot, sft-mod firm, sbblky-
sbply, occ biky, rthy lstr, sl arg, v calc

MD 9957'
INC 90.0°
AZI 268.6°
TVD 6355.8'

MRL: m- dkgy, firm, sbblky-sbply, occ ply,
sily, occ stri, arg, v calc, abnt fos frag, tr
bent
CHK: lt- mgy, mot, sft-mod firm, sbblky-
sbply, occ biky, rthy lstr, sl arg, v calc

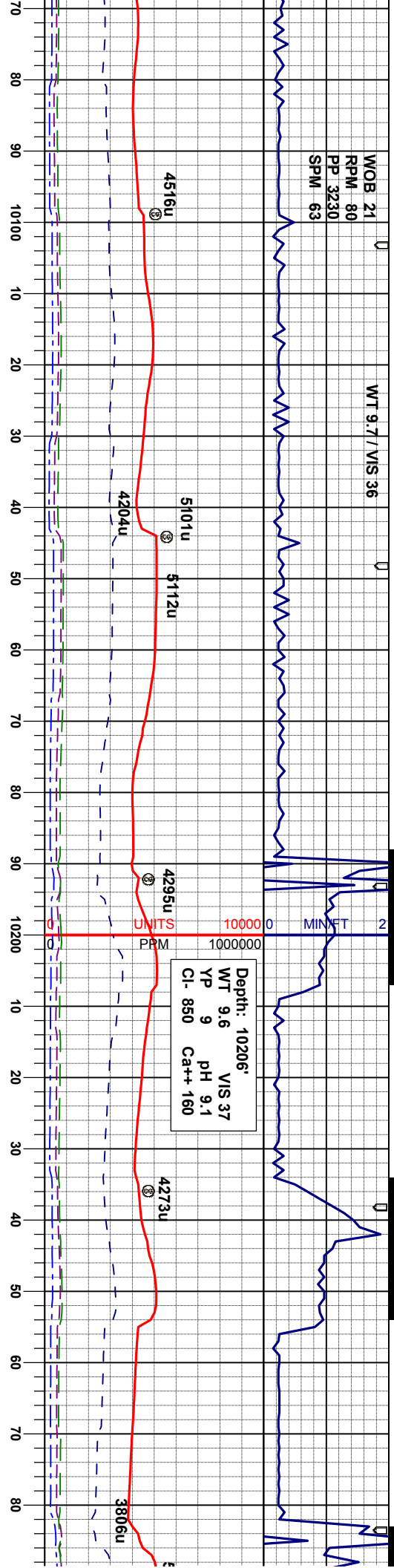
MD 10047'
INC 89.3°
AZI 267.7°
TVD 6356.4'

MRL: m- dkgy, firm, sbblky-sbply, occ ply,
sily, occ stri, arg, v calc, abnt fos frag, scat
bent
MRL: m- dkgy, f
sily, occ stri, arg



WOB 21
RPM 80
PP 3230
SPM 63

WT 9.7 / VIS 36



Depth: 10206'
WT 9.6 VIS 37
YP 9 pH 9.1
Cl- 850 Ca++ 160

85

108

41

75

MD 10137'
INC 90.2°
AZI 269.7°
TVD 6356.8'

MD 10227'
INC 90.0°
AZI 269.5°
TVD 6356.6'

CHK: lt- mgy, mot, sft-mod firm, sbbly-
sbply, occ biky, rthy istr, sl arg, vcalc
MRL: m- dkgy, firm, sbbly-sbply, occ pily,
sily, occ stri, arg, v calc, occ fos frag, scat
bent

CHK: lt- mgy, mot, sft-mod firm, sbbly-
sbply, occ biky, rthy istr, sl arg, vcalc
MRL: m- dkgy, firm, sbbly-sbply, occ pily,
sily, occ stri, arg, v calc, occ fos frag, tr
bent

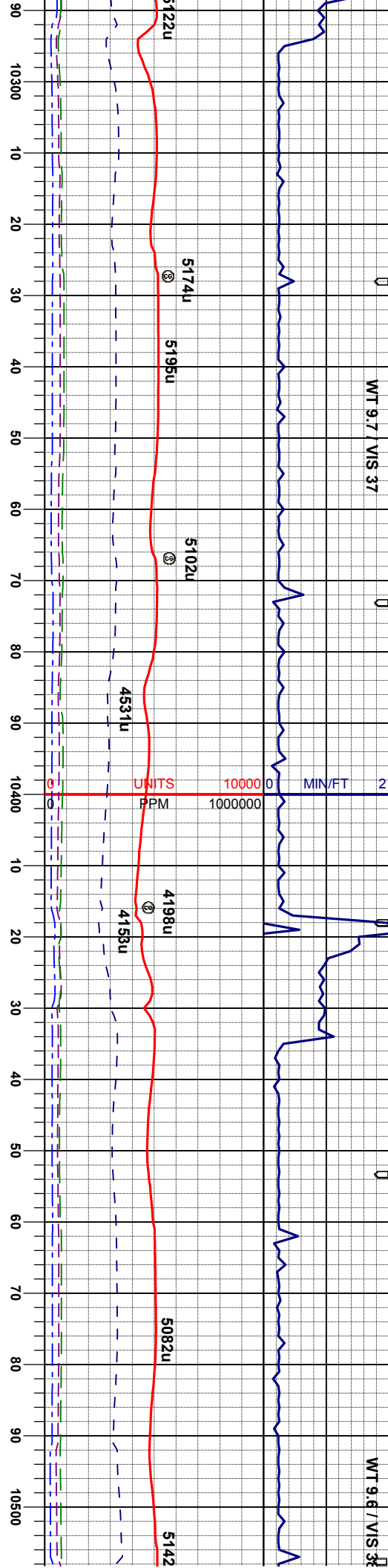
CHK: lt- mgy, mot, sft-mod firm, sbbly-
sbply, occ biky, rthy istr, sl arg, vcalc
MRL: m- dkgy, firm, sbbly-sbply, occ pily,
sily, occ stri, arg, v calc, occ fos frag, tr
bent

CHK: lt- mgy, mot, sft-mod firm, sbbly-
sbply, occ biky, rthy istr, sl arg, vcalc
MRL: m- dkgy, firm, sbbly-sbply, c
sily, occ stri, arg, v calc, occ fos frag,
bent



WT 9.7 / VIS 37

WT 9.6 / VIS 38



MD 10317'
INC 89.2°
AZI 267.2°
TVD 6357.3'

MD 10407'
INC 90.1°
AZI 266.9°
TVD 6357.8'

MD 10497'
INC 90.4°
AZI 266.0°
TVD 6357.4'

CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy istr, sl arg, vcalc, tr marl, tr fos frag

CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy istr, sl arg, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ strl, arg, v calc, occ fos frag

CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy istr, sl arg, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ strl, arg, v calc, occ fos frag

CHK: lt-mgy, mot, sft-mod firm, sbblky-sbply, occ blkly, rthy istr, sl arg, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ strl, arg, v calc, occ fos frag

CHK: sbply, occ blkly, rthy istr, sl arg, vcalc MRL: m-dkgy, firm, sbblky-sbply, occ pily, silty, occ strl, arg, v calc, occ fos frag



