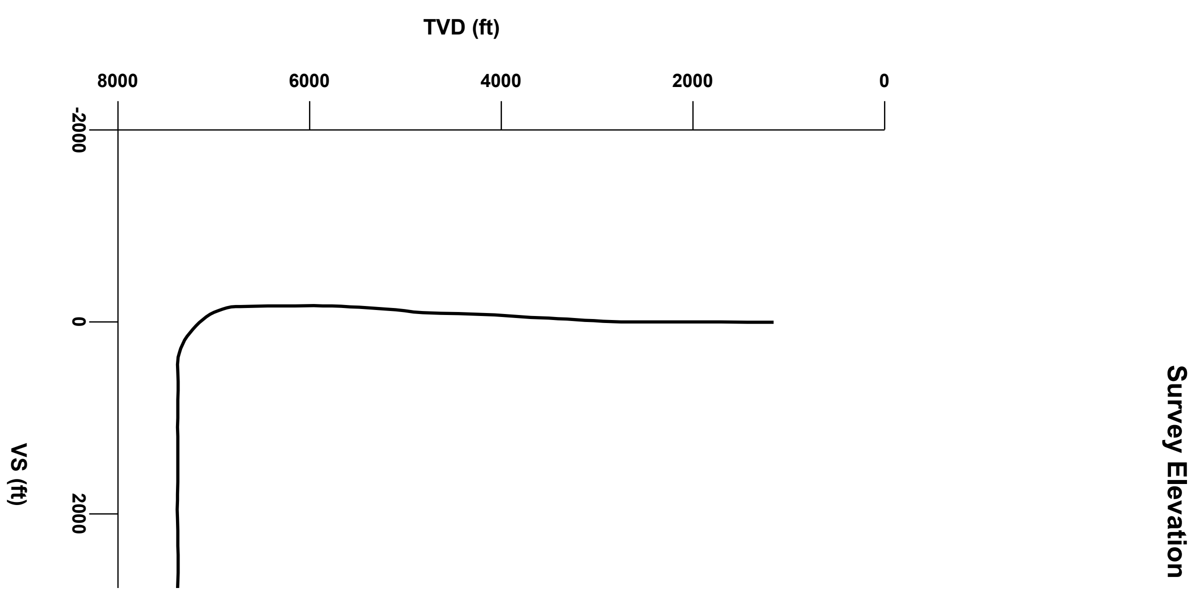
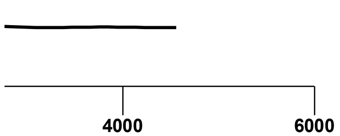
pason

Lplot VH

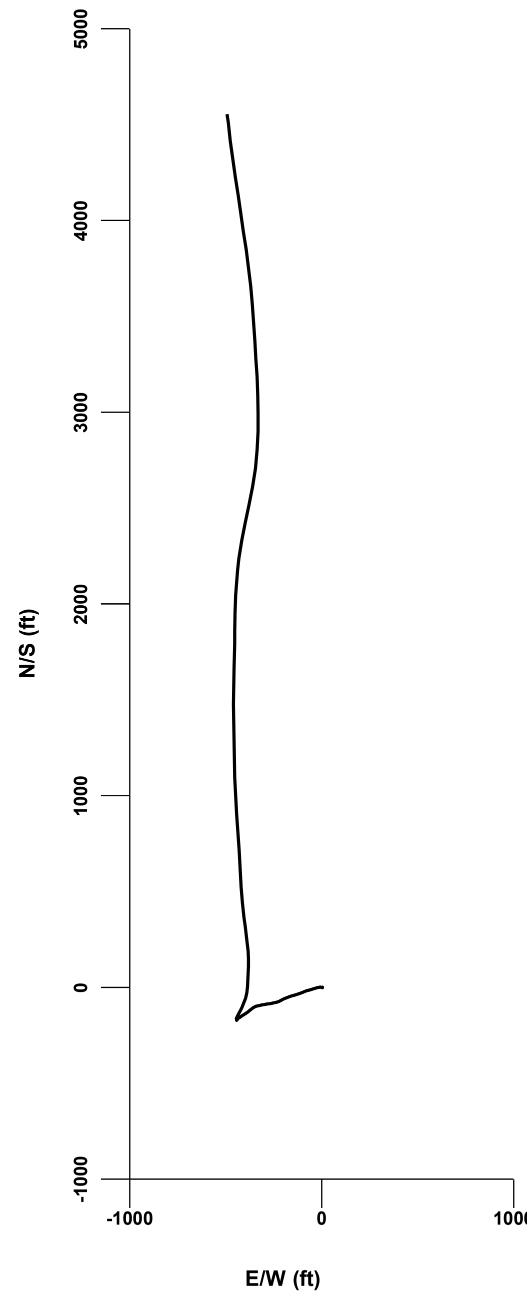
Pason Systems USA Corp.
(720) 880-2000

OPERATOR:	**ANADARKO PETROLEUM CORPORATION**
WELL:	**GOBBLER 28N-23HZ**
LOCATION:	**SWSE 23, T2N, R66W**
COUNTY:	**WELD**
STATE:	**COLORADO**
SPOT:	**240' FSL, 2074' FEL**
ELEVATION:	**GR 5101', KB 5114'**
FIELD:	**WATTENBERG**
SPUD DATE:	**07/02/2013**
TD DATE:	**07/08/2013**
DATES LOGGED:	**07/03/2013 - 07/08/2013**
DEPTHS LOGGED:	**6845' MD - 11881' MD**
LOGGERS:	**SHANA SWIRIN, JOHN VILLENEUVE**
DRILLING FLUID:	**FSLN**
DRILLING RIG:	**ENSIGN 132**
API:	**05-123-35999**
LOG TYPE:	**HORIZONTAL**
SCALE:	**1:240 (5 inches per 100 feet)**
REMARKS:	**WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING INC.**




4000
6000

Survey Plan


5000
4000
3000
2000
1000
0
-1000
N/S (ft)
-1000
0
1000
E/W (ft)

LITHOLOGIES

Chalk

Marl

Silty Shale

ENGINEERING SYMBOLS

Casing

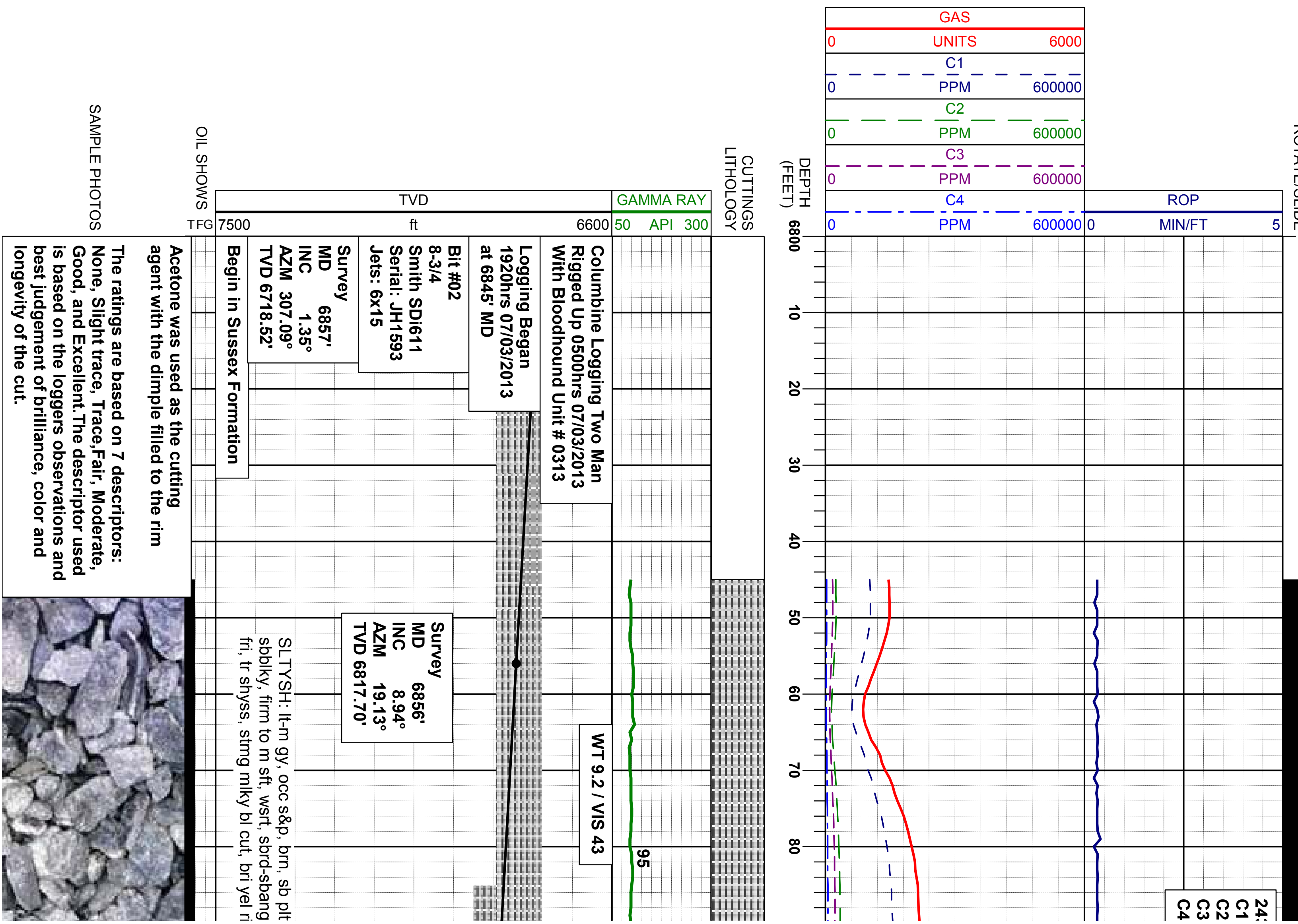
Casing

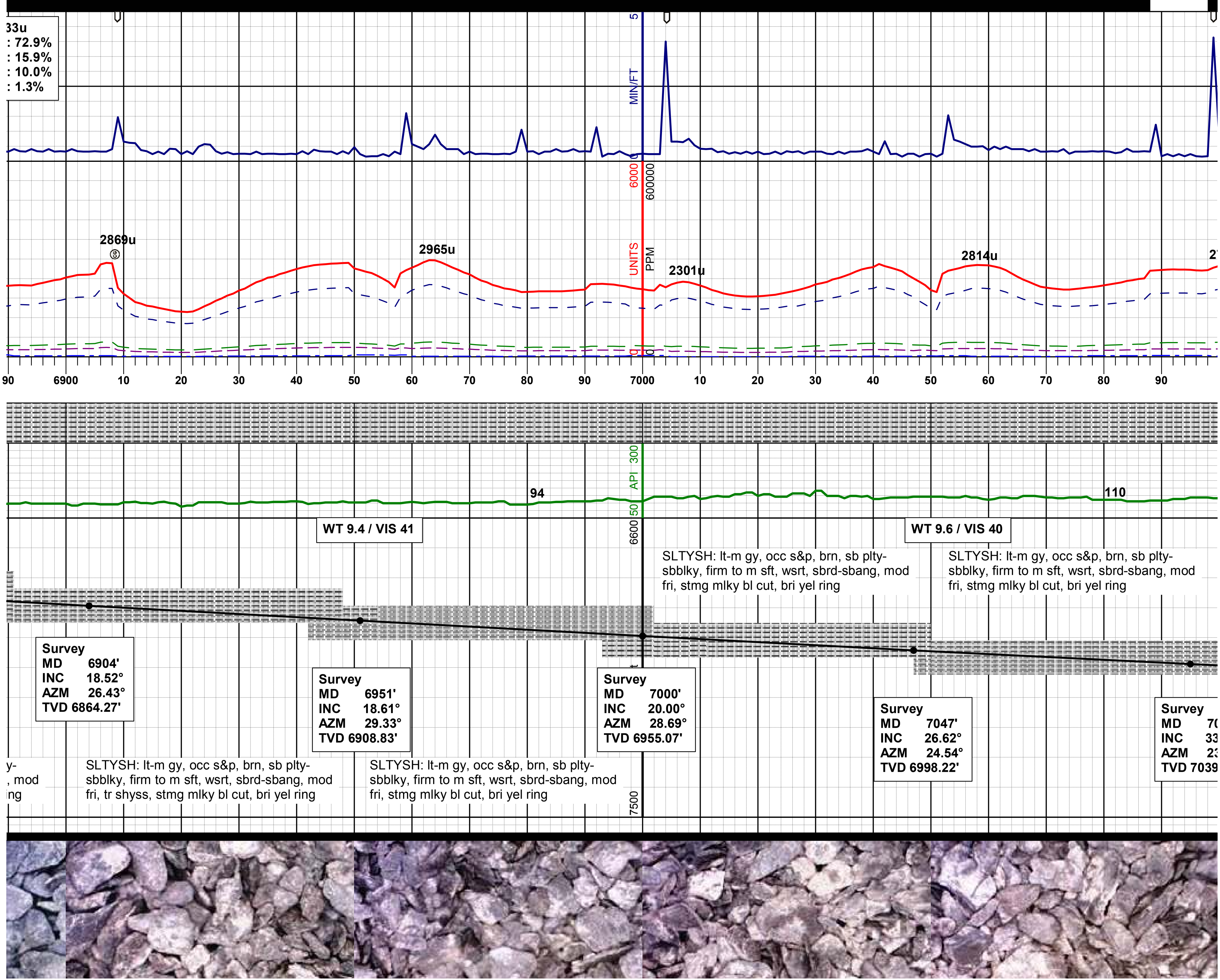
Connection

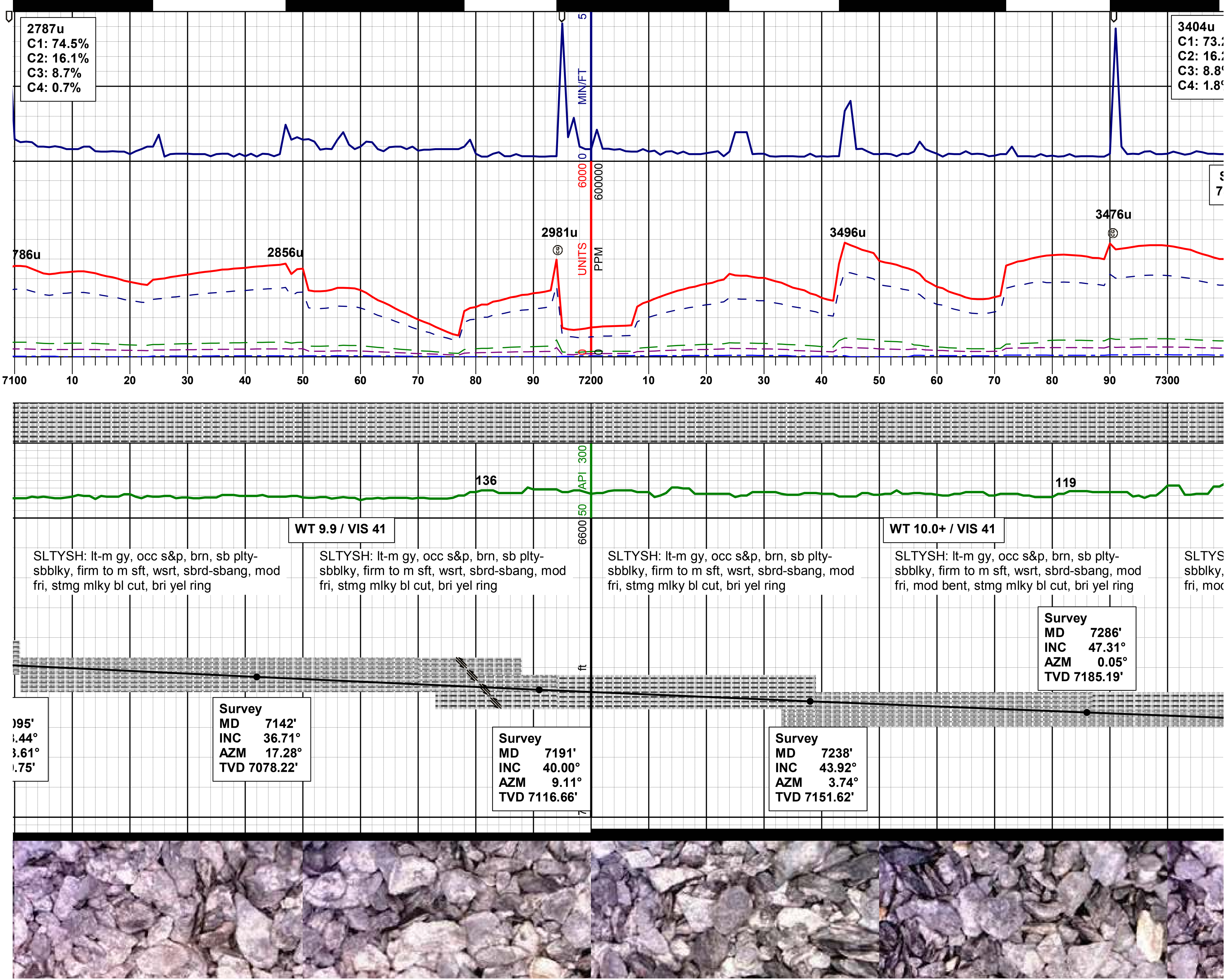
Connection Gas

Midnight Depth

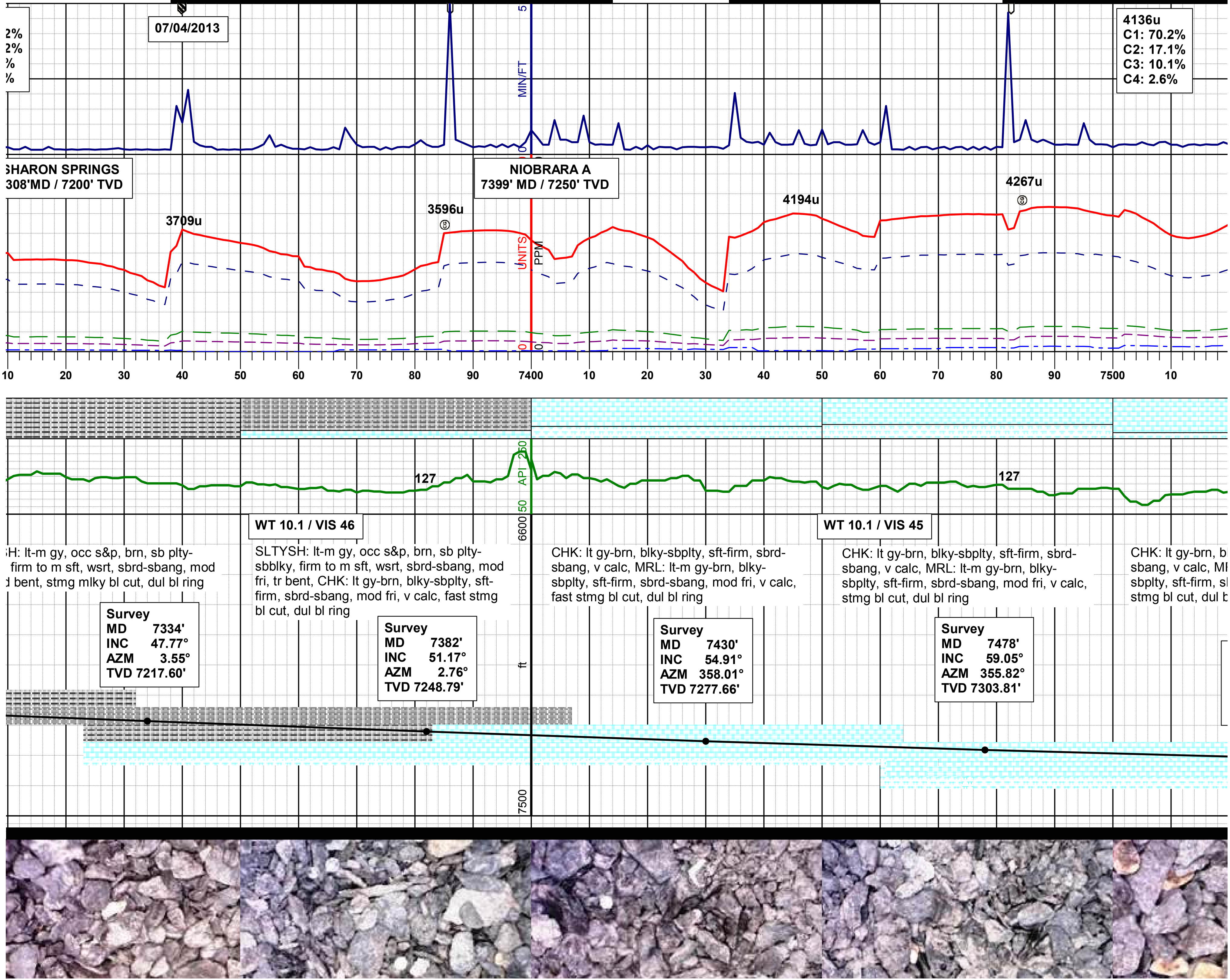
Normal Fault

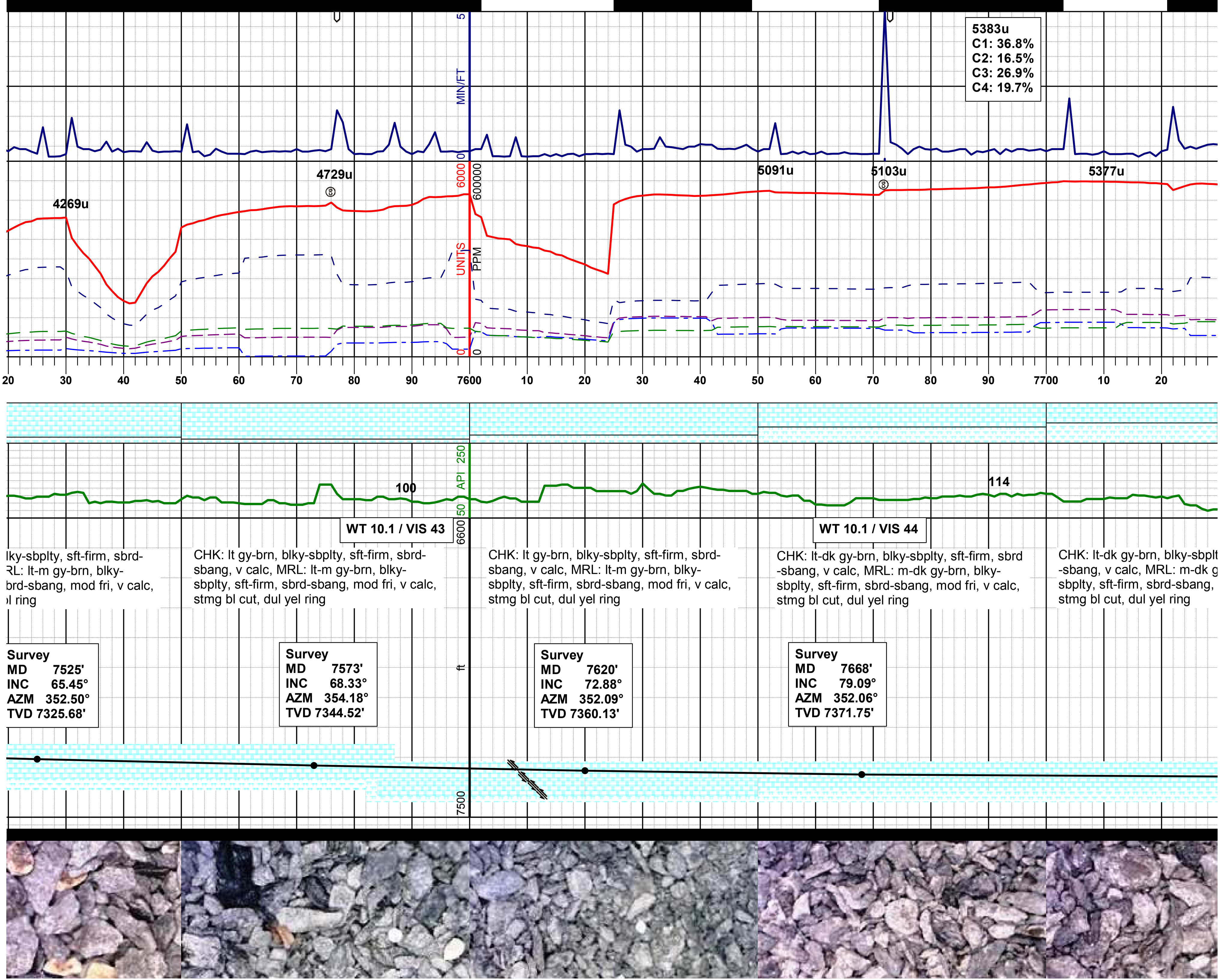


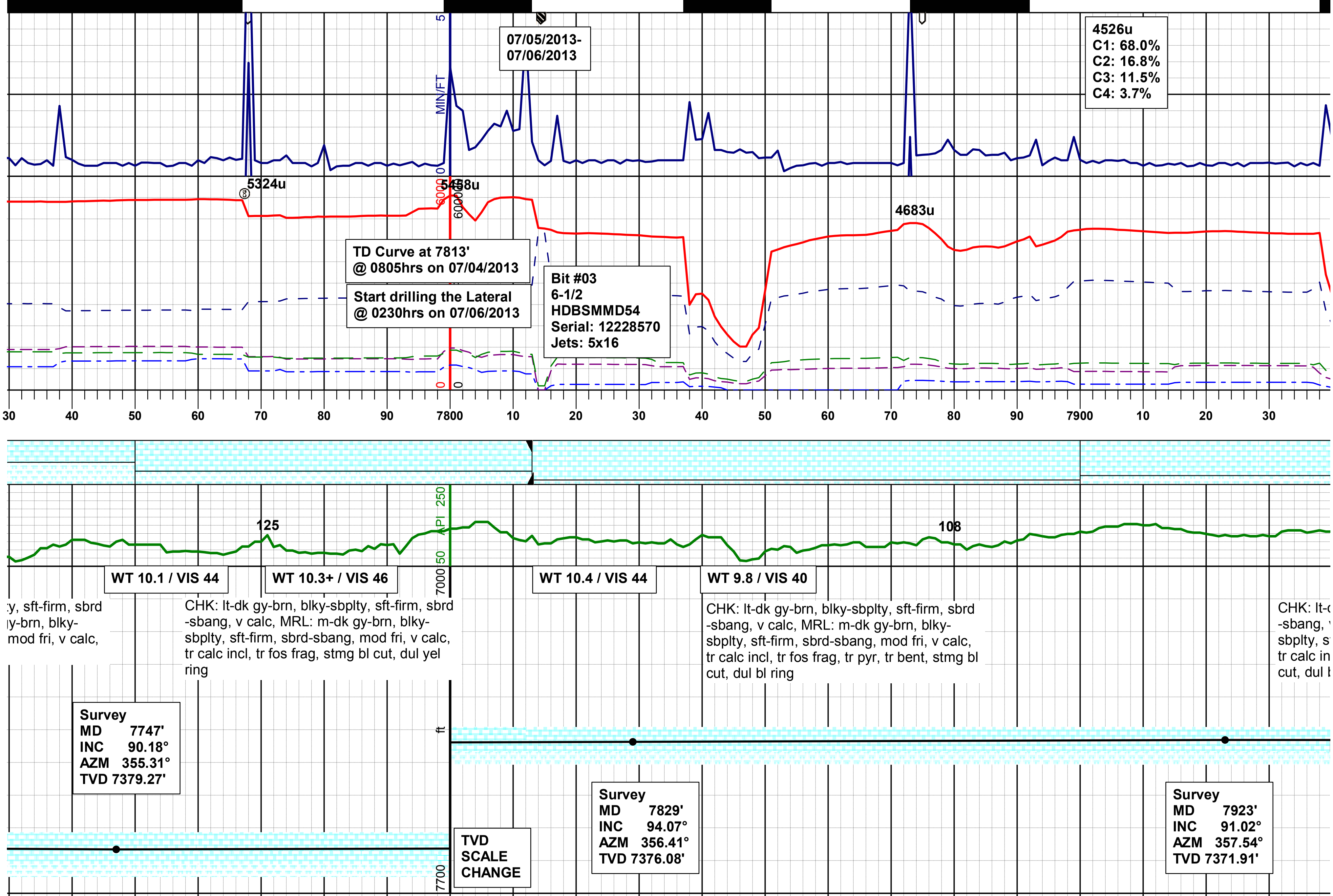

33u
: 72.9%
: 15.9%
: 10.0%
: 1.3%
MIN/FT
5
0
6000
600000
UNITS
PPM
0
2869u
2965u
2301u
2814u
90
6900
10
20
30
40
50
60
70
80
90
7000
10
20
30
40
50
60
70
80
90
300
API
50
6600
94
110
7500
WT 9.4 / VIS 41
WT 9.6 / VIS 40
Survey
MD 6904'
INC 18.52°
AZM 26.43°
TVD 6864.27'
Survey
MD 6951'
INC 18.61°
AZM 29.33°
TVD 6908.83'
Survey
MD 7000'
INC 20.00°
AZM 28.69°
TVD 6955.07'
Survey
MD 7047'
INC 26.62°
AZM 24.54°
TVD 6998.22'
Survey
MD
INC
AZM
TVD 7039
y-
, mod
ing
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, tr shyss, stmg mlky bl cut, bri yel ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, stmg mlky bl cut, bri yel ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, stmg mlky bl cut, bri yel ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, stmg mlky bl cut, bri yel ring



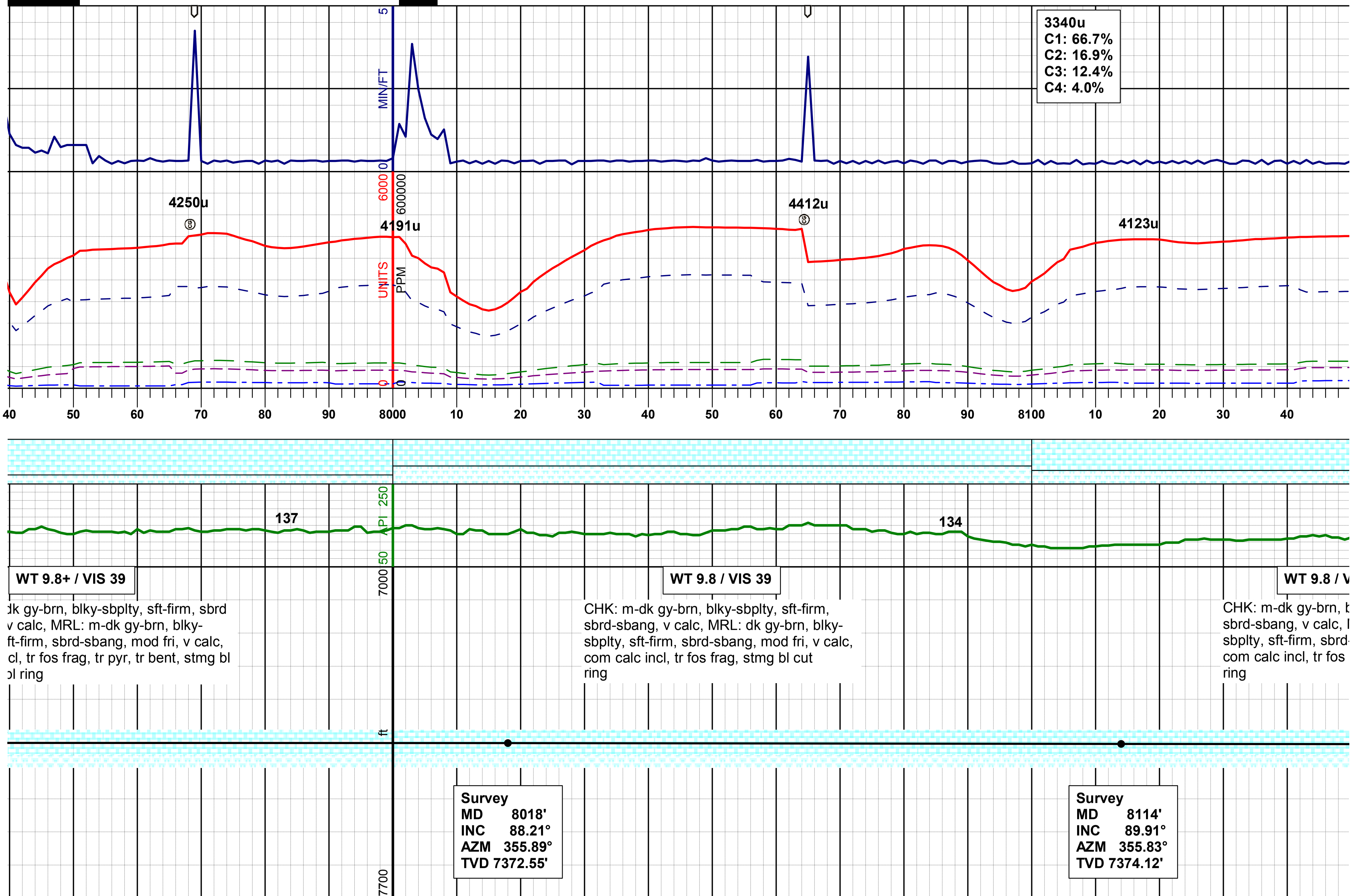
2787u
C1: 74.5%
C2: 16.1%
C3: 8.7%
C4: 0.7%
3404u
C1: 73.
C2: 16.
C3: 8.8
C4: 1.8
MIN/FT
0
5
UNITS
0
6000
PPM
0
600000
786u
2856u
2981u
3496u
3476u
7100
10
20
30
40
50
60
70
80
90
7200
10
20
30
40
50
60
70
80
90
7300
API
50
300
136
119
6600
ft
WT 9.9 / VIS 41
WT 10.0+ / VIS 41
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, stmg mlky bl cut, bri yel ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, stmg mlky bl cut, bri yel ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, stmg mlky bl cut, bri yel ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, mod bent, stmg mlky bl cut, bri yel ring
SLTYS sbblky, fri, moc
095'
.44°
3.61°
.75'
Survey
MD 7142'
INC 36.71°
AZM 17.28°
TVD 7078.22'
Survey
MD 7191'
INC 40.00°
AZM 9.11°
TVD 7116.66'
Survey
MD 7238'
INC 43.92°
AZM 3.74°
TVD 7151.62'
Survey
MD 7286'
INC 47.31°
AZM 0.05°
TVD 7185.19'

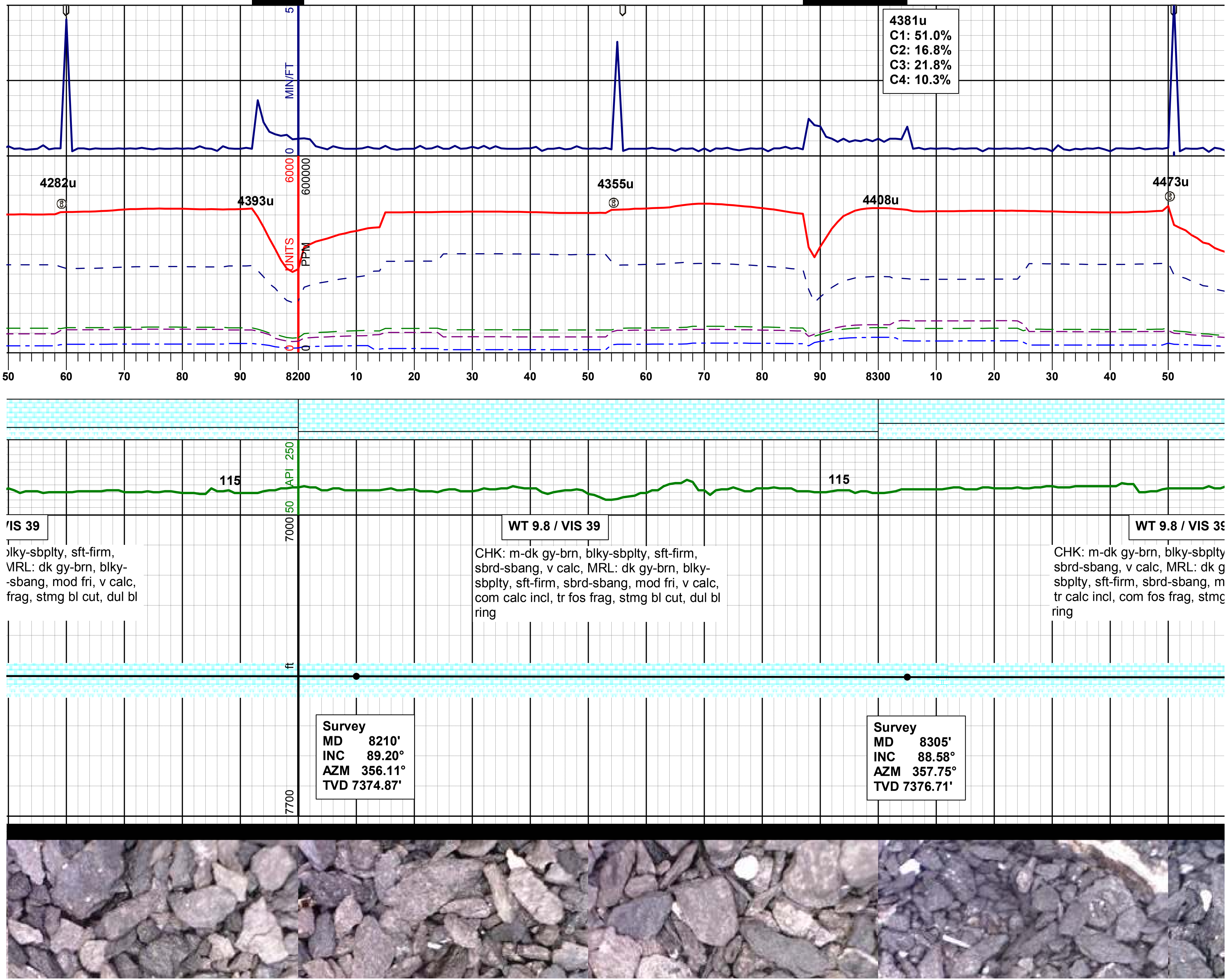

2%
2%
%
%
07/04/2013
4136u
C1: 70.2%
C2: 17.1%
C3: 10.1%
C4: 2.6%
0
MIN/FT
5
SHARON SPRINGS
308'MD / 7200' TVD
NIOBRARA A
7399' MD / 7250' TVD
3709u
3596u
4194u
4267u
0
UNITS
0
PPM
10
20
30
40
50
60
70
80
90
7400
10
20
30
40
50
60
70
80
90
7500
10
50
API
250
127
127
6600
ft
7500
WT 10.1 / VIS 46
WT 10.1 / VIS 45
H: lt-m gy, occ s&p, brn, sb plty-
firm to m sft, wsrt, sbrd-sbang, mod
bent, stmg mlky bl cut, dul bl ring
SLTYSH: lt-m gy, occ s&p, brn, sb plty-sbblky, firm to m sft, wsrt, sbrd-sbang, mod fri, tr bent, CHK: lt gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, fast stmg bl cut, dul bl ring
CHK: lt gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, fast stmg bl cut, dul bl ring
CHK: lt gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, stmg bl cut, dul bl ring
CHK: lt gy-brn, b
sbang, v calc, M
sbplty, sft-firm, s
stmg bl cut, dul b
Survey
MD 7334'
INC 47.77°
AZM 3.55°
TVD 7217.60'
Survey
MD 7382'
INC 51.17°
AZM 2.76°
TVD 7248.79'
Survey
MD 7430'
INC 54.91°
AZM 358.01°
TVD 7277.66'
Survey
MD 7478'
INC 59.05°
AZM 355.82°
TVD 7303.81'

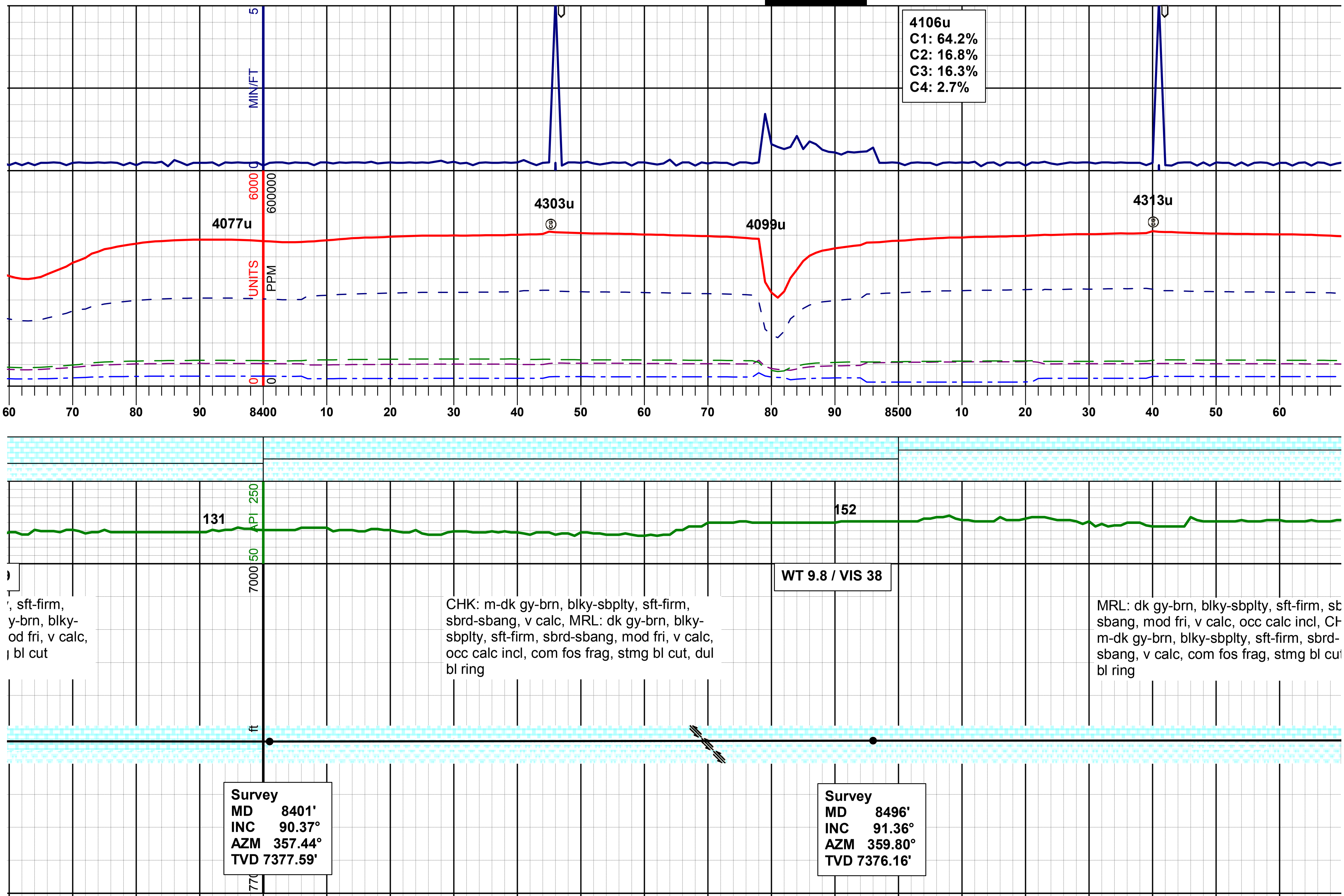

5383u
C1: 36.8%
C2: 16.5%
C3: 26.9%
C4: 19.7%
MIN/FT
0
5
4269u
4729u
5091u
5103u
5377u
UNITS
PPM
0
6000
600000
20
30
40
50
60
70
80
90
7600
10
20
30
40
50
60
70
80
90
7700
10
20
API
50
250
100
114
6600
ft
7500
WT 10.1 / VIS 43
WT 10.1 / VIS 44
lky-sbplty, sft-firm, sbrd-
RL: lt-m gy-brn, blky-
brd-sbang, mod fri, v calc,
l ring
CHK: lt gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, stmg bl cut, dul yel ring
CHK: lt gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, stmg bl cut, dul yel ring
CHK: lt-dk gy-brn, blky-sbplty, sft-firm, sbrd -sbang, v calc, MRL: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, stmg bl cut, dul yel ring
CHK: lt-dk gy-brn, blky-sbplt -sbang, v calc, MRL: m-dk g sbplty, sft-firm, sbrd-sbang, stmg bl cut, dul yel ring
Survey
MD 7525'
INC 65.45°
AZM 352.50°
TVD 7325.68'
Survey
MD 7573'
INC 68.33°
AZM 354.18°
TVD 7344.52'
Survey
MD 7620'
INC 72.88°
AZM 352.09°
TVD 7360.13'
Survey
MD 7668'
INC 79.09°
AZM 352.06°
TVD 7371.75'

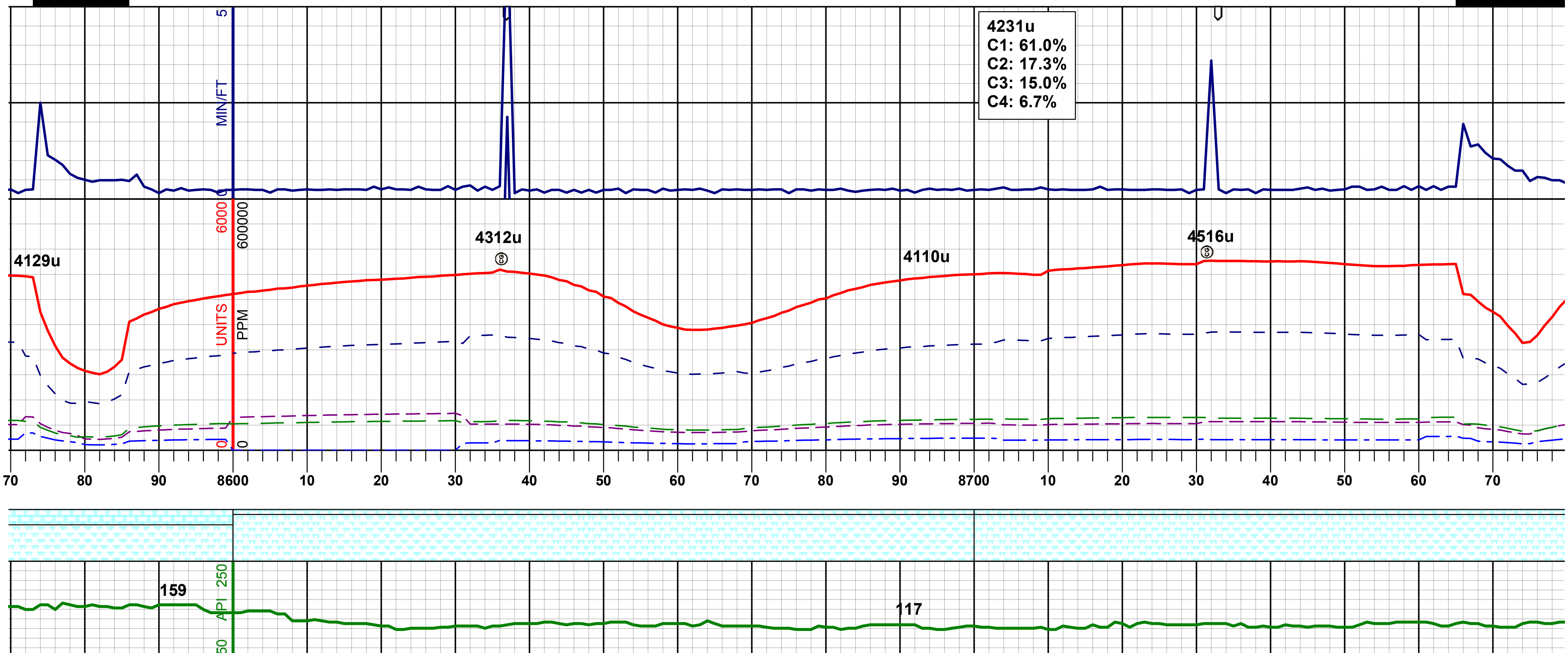


MIN/FT
0
5
07/05/2013-
07/06/2013
4526u
C1: 68.0%
C2: 16.8%
C3: 11.5%
C4: 3.7%
5324u
5458u
4683u
0
6000
TD Curve at 7813'
@ 0805hrs on 07/04/2013
Start drilling the Lateral
@ 0230hrs on 07/06/2013
Bit #03
6-1/2
HDBSMMD54
Serial: 12228570
Jets: 5x16
30
40
50
60
70
80
90
7800
10
20
30
40
50
60
70
80
90
7900
10
20
30
125
108
50
API
250
7000
WT 10.1 / VIS 44
WT 10.3+ / VIS 46
WT 10.4 / VIS 44
WT 9.8 / VIS 40
y, sft-firm, sbrd
y-brn, blky-
mod fri, v calc,
CHK: lt-dk gy-brn, blky-sbplty, sft-firm, sbrd
-sbang, v calc, MRL: m-dk gy-brn, blky-
sbplty, sft-firm, sbrd-sbang, mod fri, v calc,
tr calc incl, tr fos frag, stmg bl cut, dul yel
ring
CHK: lt-dk gy-brn, blky-sbplty, sft-firm, sbrd
-sbang, v calc, MRL: m-dk gy-brn, blky-
sbplty, sft-firm, sbrd-sbang, mod fri, v calc,
tr calc incl, tr fos frag, tr pyr, tr bent, stmg bl
cut, dul bl ring
CHK: lt-
-sbang,
sbplty, s
tr calc in
cut, dul
ft
7700
Survey
MD 7747'
INC 90.18°
AZM 355.31°
TVD 7379.27'
TVD
SCALE
CHANGE
Survey
MD 7829'
INC 94.07°
AZM 356.41°
TVD 7376.08'
Survey
MD 7923'
INC 91.02°
AZM 357.54°
TVD 7371.91'


MIN/FT
0
5
3340u
C1: 66.7%
C2: 16.9%
C3: 12.4%
C4: 4.0%
UNITS
0
6000
PPM
0
600000
4250u
4191u
4412u
4123u
40
50
60
70
80
90
8000
10
20
30
40
50
60
70
80
90
8100
10
20
30
40
API
50
250
137
134
7000
7700
ft
WT 9.8+ / VIS 39
dk gy-brn, blky-sbplty, sft-firm, sbrd
v calc, MRL: m-dk gy-brn, blky-
ft-firm, sbrd-sbang, mod fri, v calc,
cl, tr fos frag, tr pyr, tr bent, stmg bl
ol ring
WT 9.8 / VIS 39
CHK: m-dk gy-brn, blky-sbplty, sft-firm,
sbrd-sbang, v calc, MRL: dk gy-brn, blky-
sbplty, sft-firm, sbrd-sbang, mod fri, v calc,
com calc incl, tr fos frag, stmg bl cut
ring
WT 9.8 / V
CHK: m-dk gy-brn, b
sbrd-sbang, v calc, l
sbplty, sft-firm, sbrd-
com calc incl, tr fos
ring
Survey
MD 8018'
INC 88.21°
AZM 355.89°
TVD 7372.55'
Survey
MD 8114'
INC 89.91°
AZM 355.83°
TVD 7374.12'


4381u
C1: 51.0%
C2: 16.8%
C3: 21.8%
C4: 10.3%
0 MIN/FT 5
0 UNITS 6000
0 PPM 600000
4282u
4393u
4355u
4408u
4473u
50 60 70 80 90 8200 10 20 30 40 50 60 70 80 90 8300 10 20 30 40 50
50 API 250
115
115
7000 ft 7700
WT 9.8 / VIS 39
CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, com calc incl, tr fos frag, stmg bl cut, dul bl ring
Survey
MD 8210'
INC 89.20°
AZM 356.11°
TVD 7374.87'
Survey
MD 8305'
INC 88.58°
AZM 357.75°
TVD 7376.71'


MIN/FT
0
5
4106u
C1: 64.2%
C2: 16.8%
C3: 16.3%
C4: 2.7%
UNITS
0
6000
PPM
0
600000
4077u
4303u
4099u
4313u
60
70
80
90
8400
10
20
30
40
50
60
70
80
90
8500
10
20
30
40
50
60
API
50
250
131
152
7000
WT 9.8 / VIS 38
, sft-firm,
y-brn, blky-
od fri, v calc,
bl cut
CHK: m-dk gy-brn, blky-sbplty, sft-firm,
sbrd-sbang, v calc, MRL: dk gy-brn, blky-
sbplty, sft-firm, sbrd-sbang, mod fri, v calc,
occ calc incl, com fos frag, stmg bl cut, dul
bl ring
MRL: dk gy-brn, blky-sbplty, sft-firm, sb
sbang, mod fri, v calc, occ calc incl, CH
m-dk gy-brn, blky-sbplty, sft-firm, sbrd-
sbang, v calc, com fos frag, stmg bl cut
bl ring
ft
Survey
MD 8401'
INC 90.37°
AZM 357.44°
TVD 7377.59'
Survey
MD 8496'
INC 91.36°
AZM 359.80°
TVD 7376.16'
770

WT 9.9 / VIS 39

rd-
IK:
t, dul

MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, tr fos frag, stmg bl cut, dul bl ring

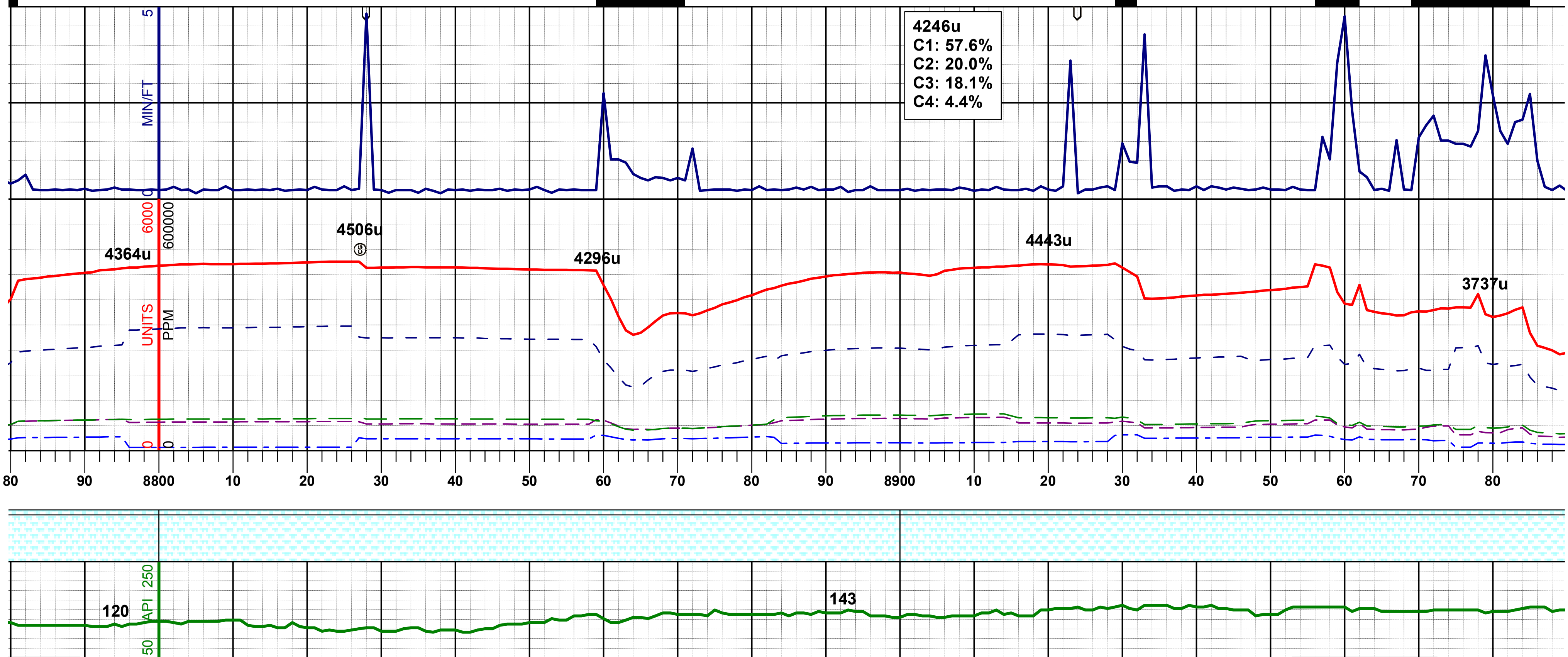
WT 10.0

MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, stmg bl cut dul bl ring

7000 ft 7700

Survey
MD 8687'
INC 89.48°
AZM 358.50°
TVD 7374.77'

S
M
IN
A
T



/ VIS 38

WT 10.0 / VIS 39

7000

MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, stmg bl cut, mod bl ring

MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, tr pyr, stmg bl cut, mod bl ring

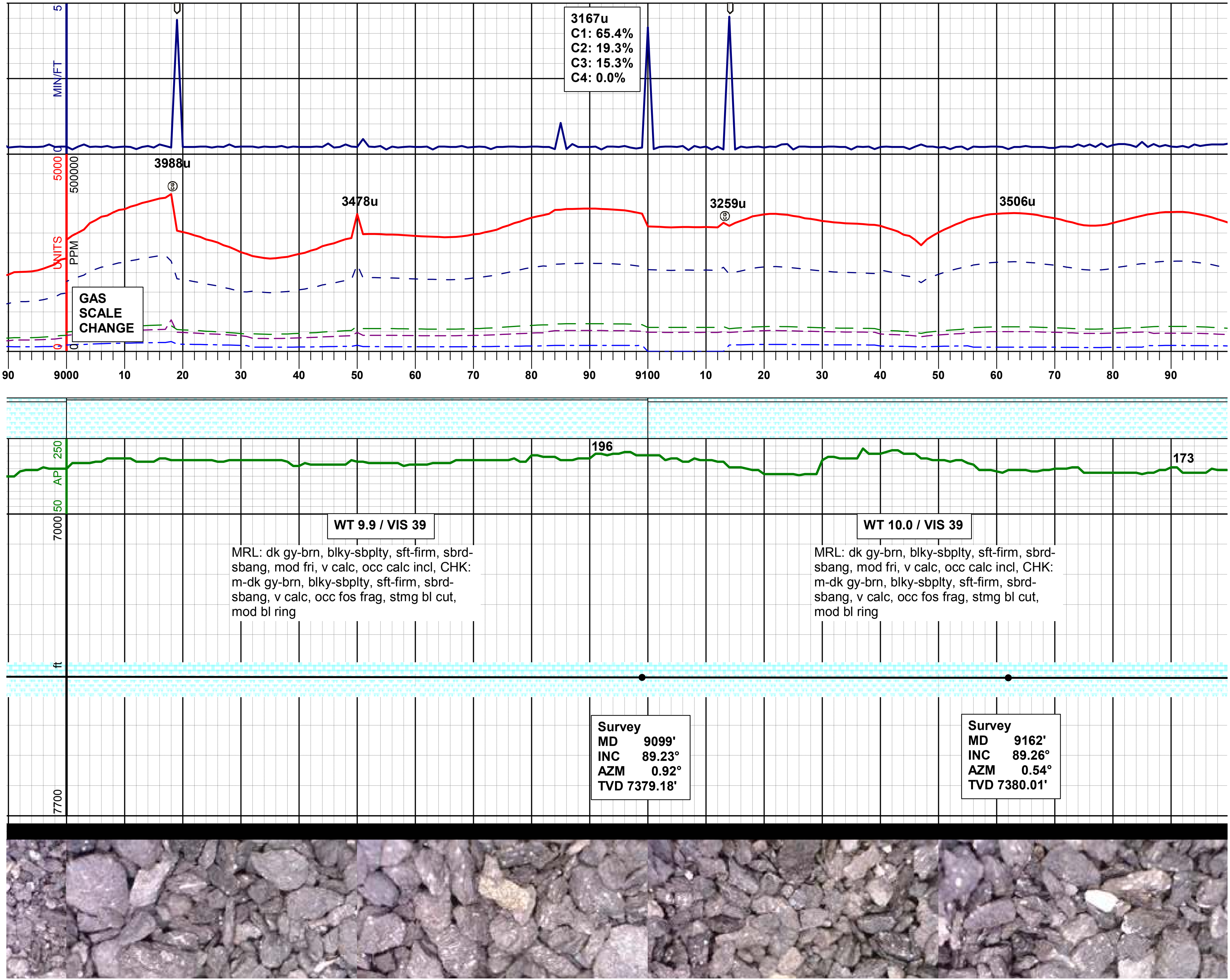
ft

urvey
ID 8782'
NC 89.51°
ZM 0.03°
VD 7375.61'

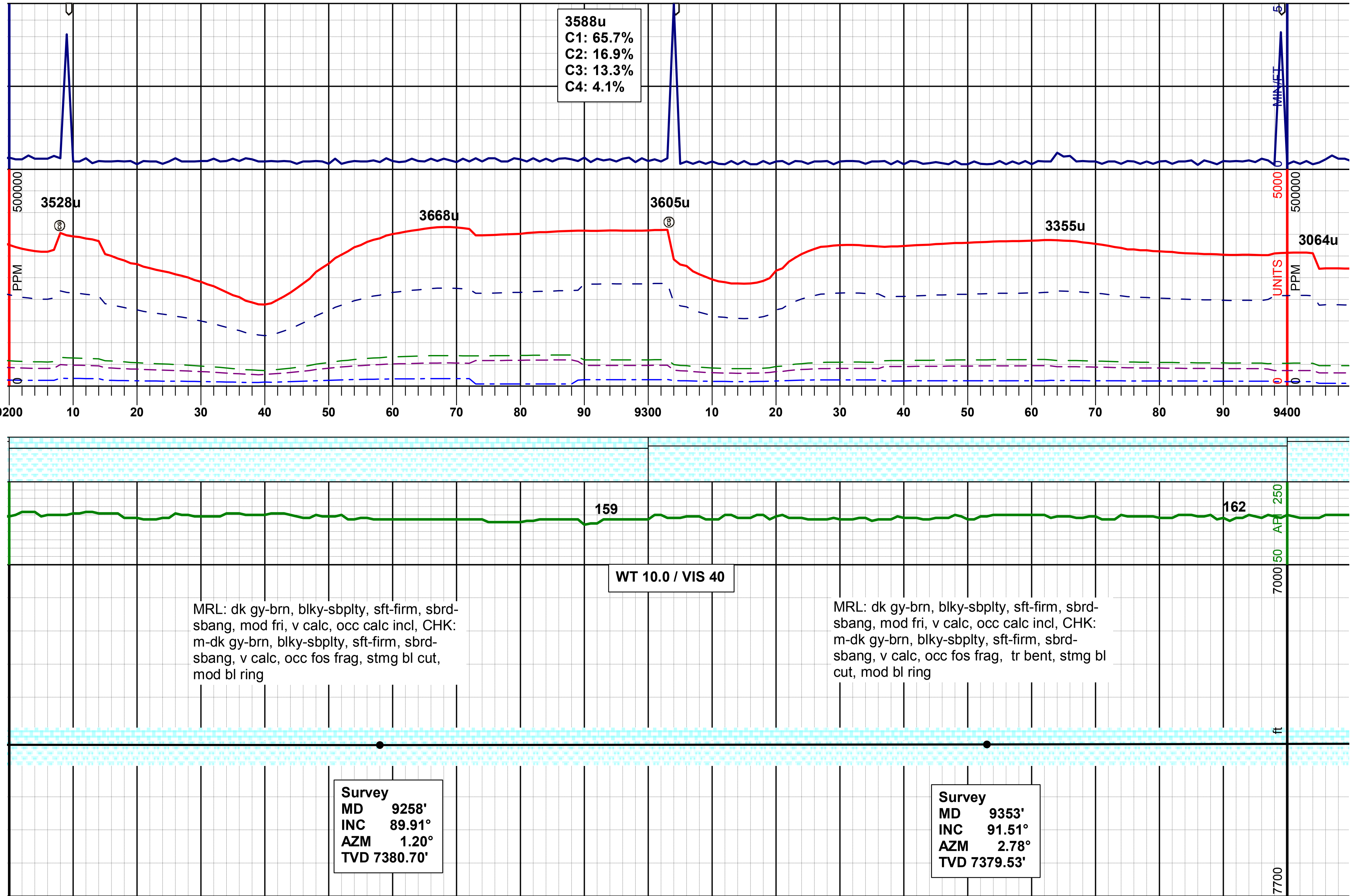
Survey
MD 8878'
INC 89.91°
AZM 1.61°
TVD 7376.10'

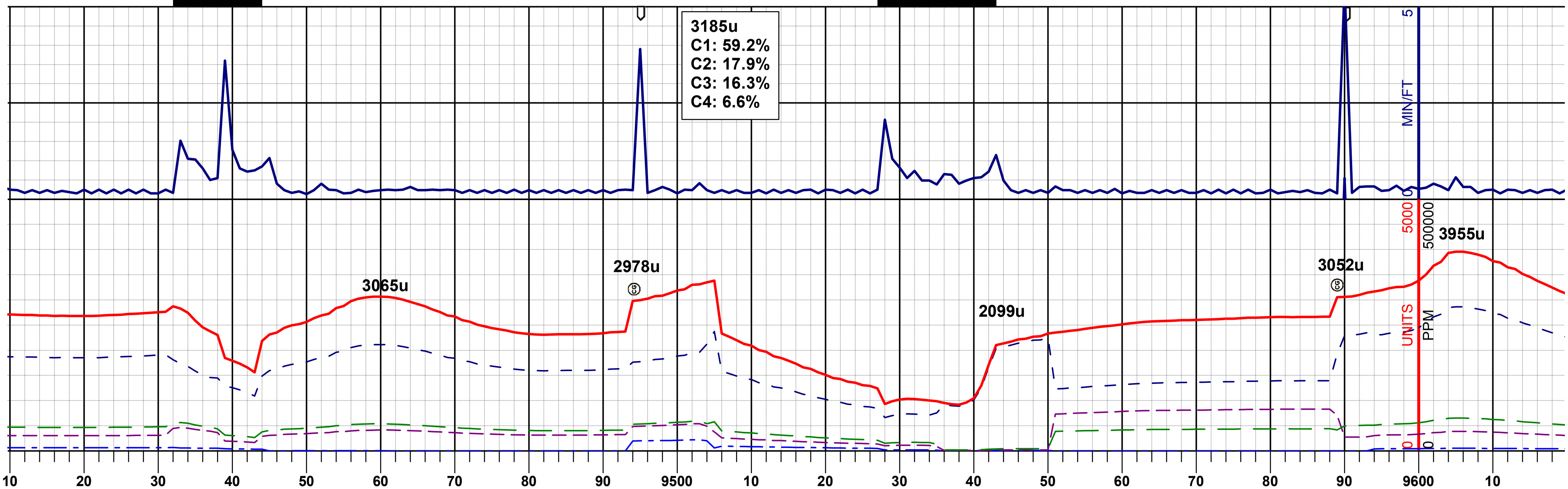
Survey
MD 8972'
INC 88.89°
AZM 0.82°
TVD 7377.09'

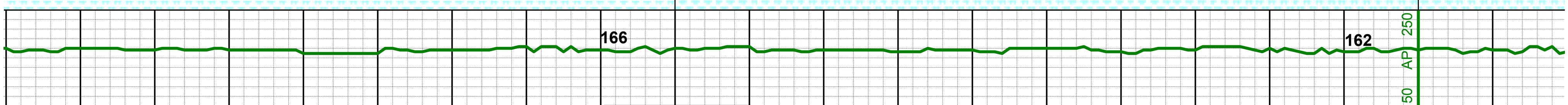
7700



0 MIN/FT 5
0 UNITS 5000
0 PPM 500000
GAS SCALE CHANGE
3988u
3478u
3167u
C1: 65.4%
C2: 19.3%
C3: 15.3%
C4: 0.0%
3259u
3506u
90
9000
10
20
30
40
50
60
70
80
90
9100
10
20
30
40
50
60
70
80
90
50 API 250
196
173
7000 ft 7700
WT 9.9 / VIS 39
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, stmg bl cut, mod bl ring
WT 10.0 / VIS 39
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, stmg bl cut, mod bl ring
Survey
MD 9099'
INC 89.23°
AZM 0.92°
TVD 7379.18'
Survey
MD 9162'
INC 89.26°
AZM 0.54°
TVD 7380.01'


3588u
C1: 65.7%
C2: 16.9%
C3: 13.3%
C4: 4.1%
MIN/FT
0
5
PPM
500000
UNITS
5000
3528u
3668u
3605u
3355u
3064u
9200
10
20
30
40
50
60
70
80
90
9300
10
20
30
40
50
60
70
80
90
9400
50
API
250
159
162
WT 10.0 / VIS 40
7000
ft
7700
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, stmg bl cut, mod bl ring
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, tr bent, stmg bl cut, mod bl ring
Survey
MD 9258'
INC 89.91°
AZM 1.20°
TVD 7380.70'
Survey
MD 9353'
INC 91.51°
AZM 2.78°
TVD 7379.53'





WT 9.9+ / VIS 38

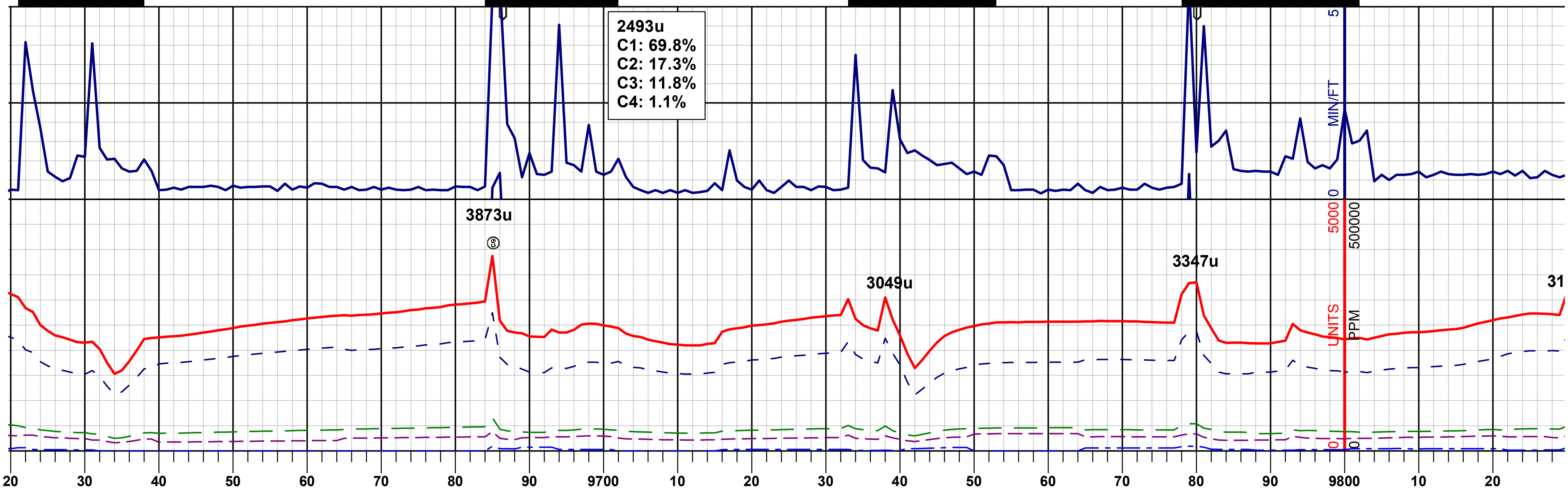
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, tr bent, stmg bl cut, mod bl ring

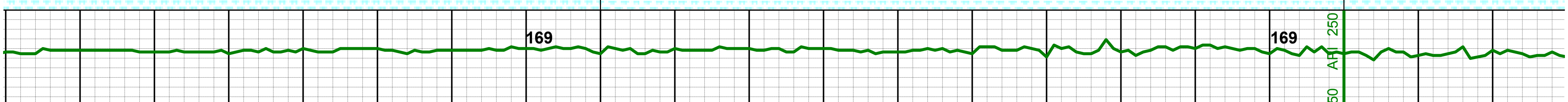
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, tr bent, stmg bl cut, mod bl ring

7000 ft 7700

Survey
MD 9482'
INC 91.14°
AZM 5.89°
TVD 7376.54'

Survey
MD 9544'
INC 90.96°
AZM 7.56°
TVD 7375.41'





WT 9.9 / VIS 38

MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, tr bent, stmg bl cut, mod bl ring

WT 9.9+ / VIS 39

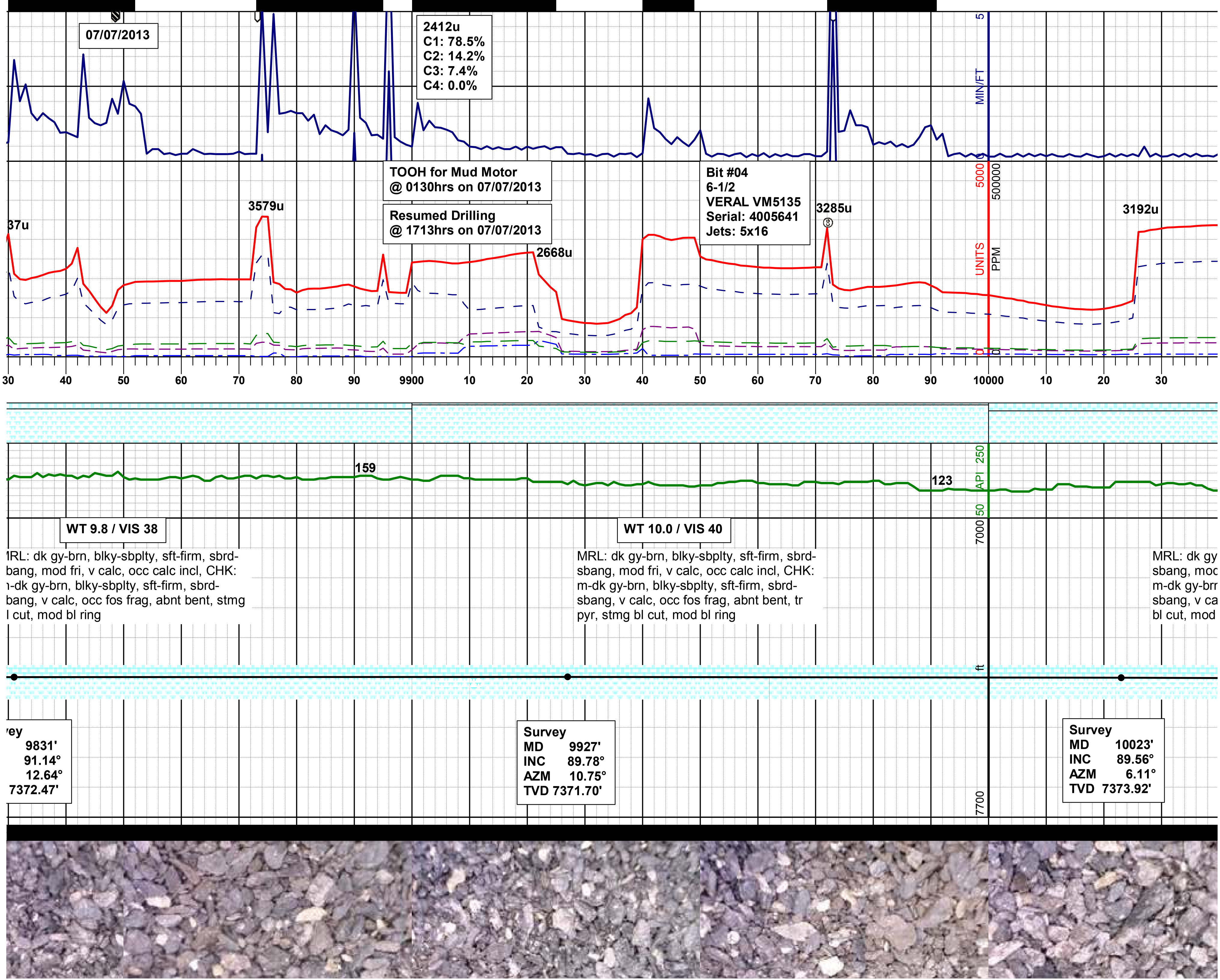
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, tr bent, stmg bl cut, mod bl ring

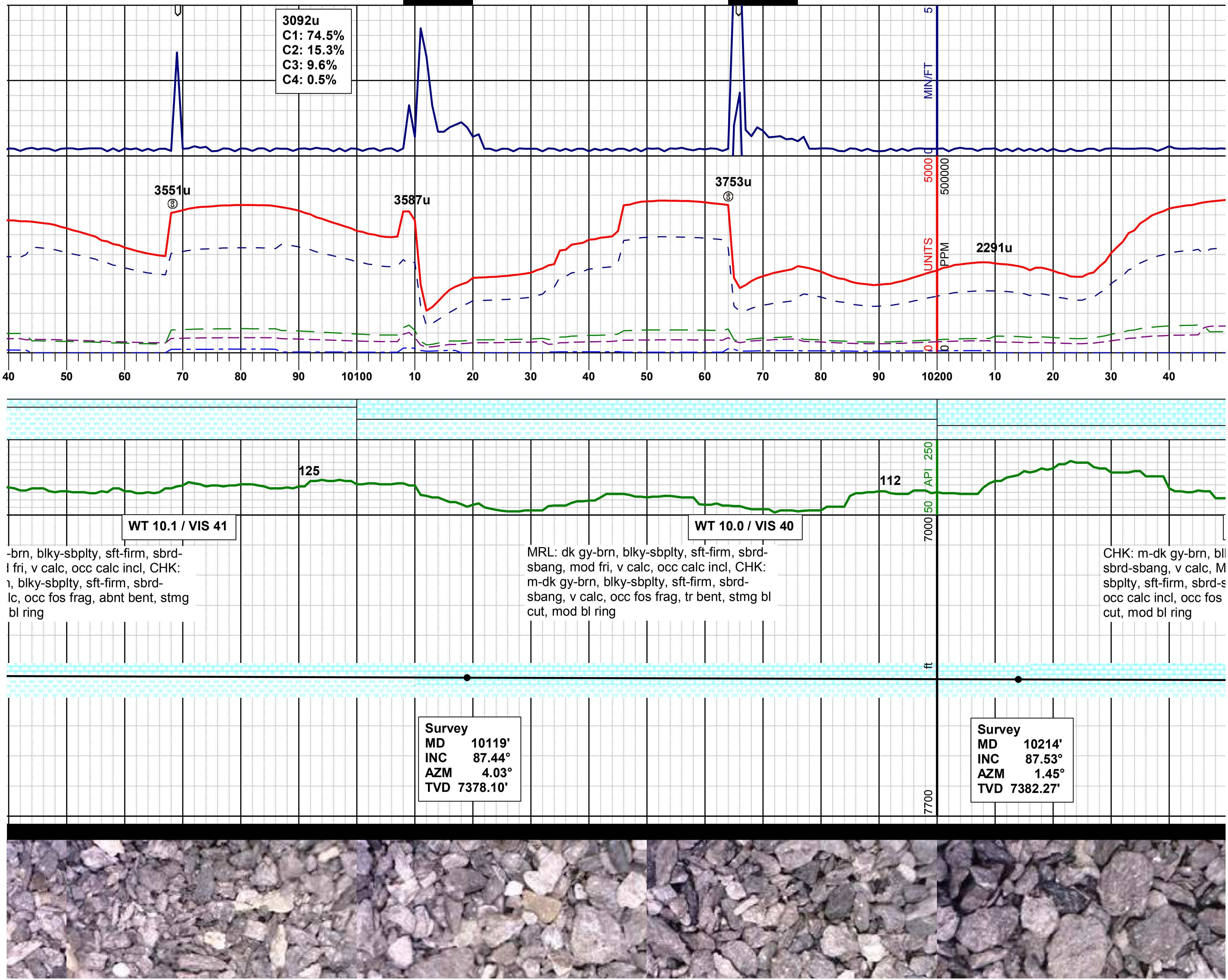
7000 ft 7700

Survey
MD 9640'
INC 90.31°
AZM 10.99°
TVD 7374.35'

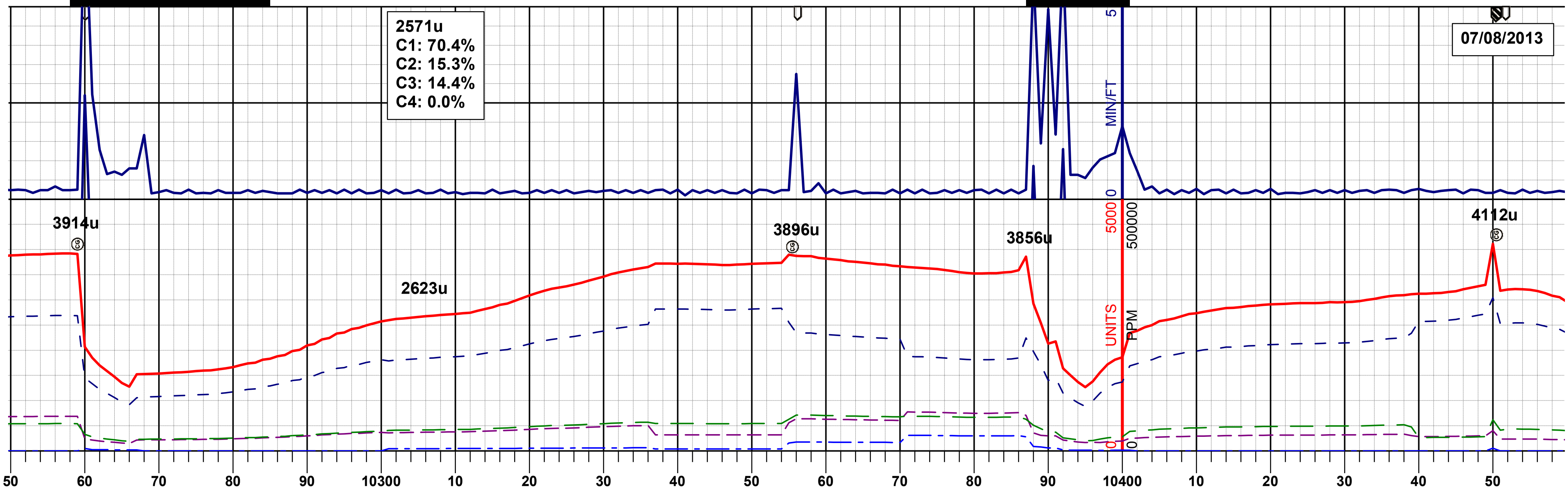
Survey
MD 9735'
INC 90.40°
AZM 10.57°
TVD 7373.76'

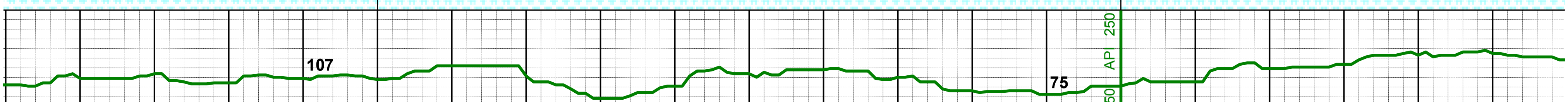
Surv
MD
INC
AZM
TVD


07/07/2013
2412u
C1: 78.5%
C2: 14.2%
C3: 7.4%
C4: 0.0%
MIN/FT
5
TOOH for Mud Motor
@ 0130hrs on 07/07/2013
Resumed Drilling
@ 1713hrs on 07/07/2013
Bit #04
6-1/2
VERAL VM5135
Serial: 4005641
Jets: 5x16
37u
3579u
2668u
3285u
3192u
UNITS
5000
PPM
500000
0
30
40
50
60
70
80
90
9900
10
20
30
40
50
60
70
80
90
10000
10
20
30
159
123
API
50
250
7000
WT 9.8 / VIS 38
WT 10.0 / VIS 40
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, abnt bent, stmg bl cut, mod bl ring
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, occ fos frag, abnt bent, tr pyr, stmg bl cut, mod bl ring
MRL: dk gy sbang, moc m-dk gy-brr sbang, v ca bl cut, mod
ft
7700
Survey
9831'
91.14°
12.64°
7372.47'
Survey
MD 9927'
INC 89.78°
AZM 10.75°
TVD 7371.70'
Survey
MD 10023'
INC 89.56°
AZM 6.11°
TVD 7373.92'



3092u
C1: 74.5%
C2: 15.3%
C3: 9.6%
C4: 0.5%
MIN/FT
0
5
3551u
3587u
3753u
2291u
UNITS
0
5000
PPM
0
500000
40
50
60
70
80
90
10100
10
20
30
40
50
60
70
80
90
10200
10
20
30
40
125
112
50
API
250
WT 10.1 / VIS 41
WT 10.0 / VIS 40
-brn, blky-sbplty, sft-firm, sbrd-
l fri, v calc, occ calc incl, CHK:
, blky-sbplty, sft-firm, sbrd-
lc, occ fos frag, abnt bent, stmg
bl ring
MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-
sbang, mod fri, v calc, occ calc incl, CHK:
m-dk gy-brn, blky-sbplty, sft-firm, sbrd-
sbang, v calc, occ fos frag, tr bent, stmg bl
cut, mod bl ring
CHK: m-dk gy-brn, bl
sbrd-sbang, v calc, M
sbplty, sft-firm, sbrd-s
occ calc incl, occ fos
cut, mod bl ring
7000
ft
7700
Survey
MD 10119'
INC 87.44°
AZM 4.03°
TVD 7378.10'
Survey
MD 10214'
INC 87.53°
AZM 1.45°
TVD 7382.27'





WT 10.0+ / VIS 38

ky-sbplty, sft-firm,
RL: dk gy-brn, blky-
sbang, mod fri, v calc,
frag, tr bent, stmg bl

WT 10.0 / VIS 39

CHK: lt-dk gy-brn, blky-sbplty, sft-firm, sbrd -sbang, v calc, MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, occ fos frag, tr bent, stmg bl cut, mod bl ring

7000

WT 10.0 / VIS 3

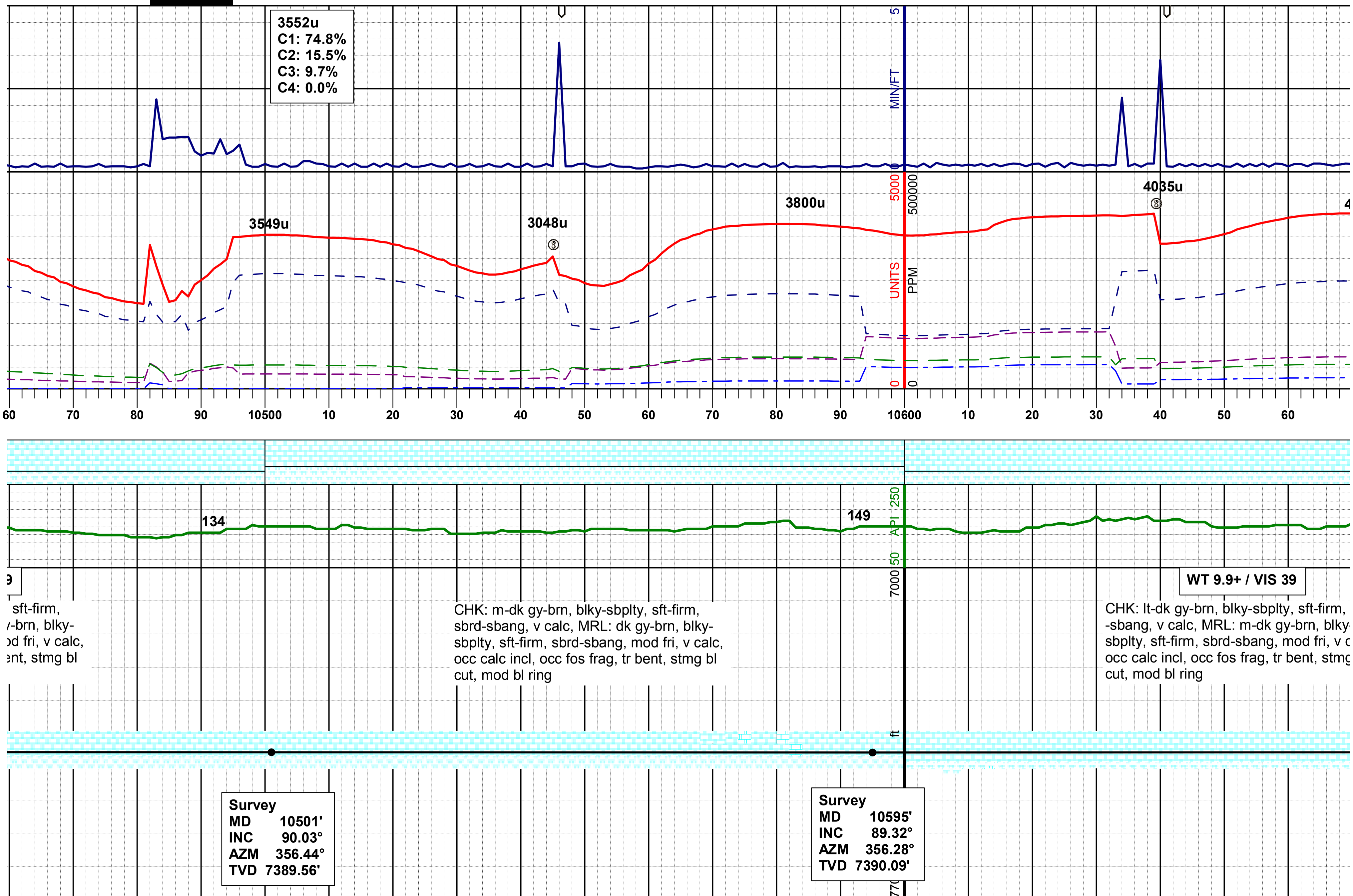
CHK: m-dk gy-brn, blky-sbplty,
sbrd-sbang, v calc, MRL: dk gy
sbplty, sft-firm, sbrd-sbang, mo
occ calc incl, occ fos frag, tr be
cut, mod bl ring

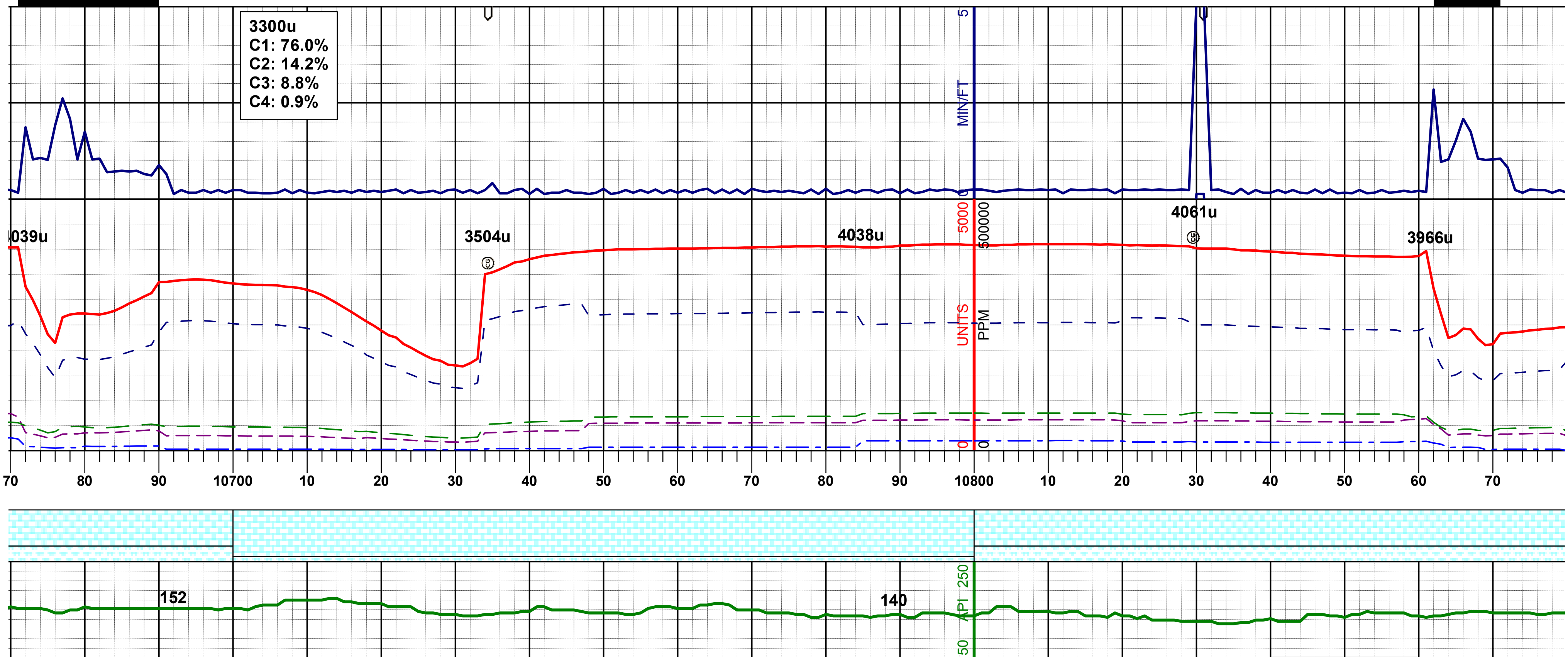
ft

Survey
MD 10310'
INC 87.71°
AZM 359.90°
TVD 7386.25'

770

Survey
MD 10405'
INC 89.14°
AZM 358.21°
TVD 7388.86'


3552u
C1: 74.8%
C2: 15.5%
C3: 9.7%
C4: 0.0%
MIN/FT
5
0
5000
500000
UNITS
PPM
0
0
3549u
3048u
3800u
4035u
60
70
80
90
10500
10
20
30
40
50
60
70
80
90
10600
10
20
30
40
50
60
134
149
250
API
50
7000
WT 9.9+ / VIS 39
sft-firm,
-brn, blky-
od fri, v calc,
ent, stmg bl
CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, occ fos frag, tr bent, stmg bl cut, mod bl ring
CHK: lt-dk gy-brn, blky-sbplty, sft-firm, -sbang, v calc, MRL: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v c occ calc incl, occ fos frag, tr bent, stmg cut, mod bl ring
ft
Survey
MD 10501'
INC 90.03°
AZM 356.44°
TVD 7389.56'
Survey
MD 10595'
INC 89.32°
AZM 356.28°
TVD 7390.09'



WT 10.0 / VIS 39

sbrd
-
alc,
j bl

CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ fos frag, tr bent, stmg bl cut, mod bl ring

CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ fos frag, stmg bl cut, mod bl ring

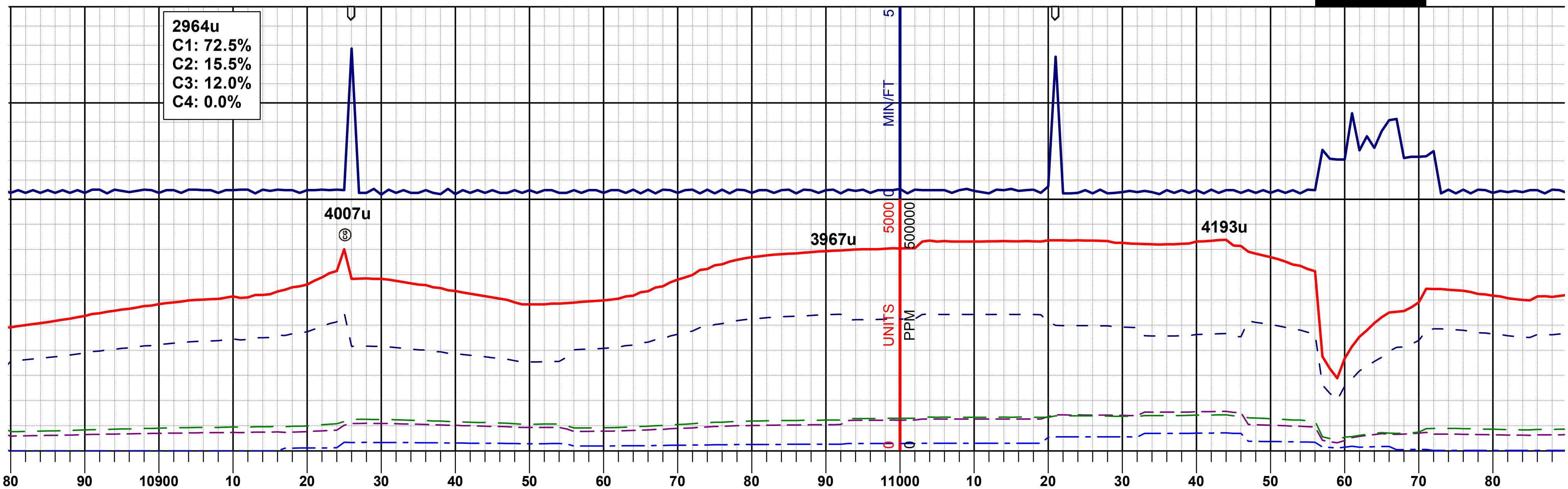
ft

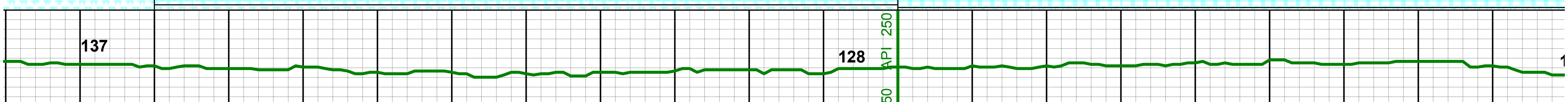
Survey
MD 10690'
INC 91.39°
AZM 356.65°
TVD 7389.50'

Survey
MD 10785'
INC 91.51°
AZM 356.12°
TVD 7387.10'

Surve
MD
INC
AZM
TVD 7

7700





7000

WT 10.0 / VIS 38

CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ fos frag, stmg bl cut, mod bl ring

CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ fos frag, stmg bl cut, mod bl ring

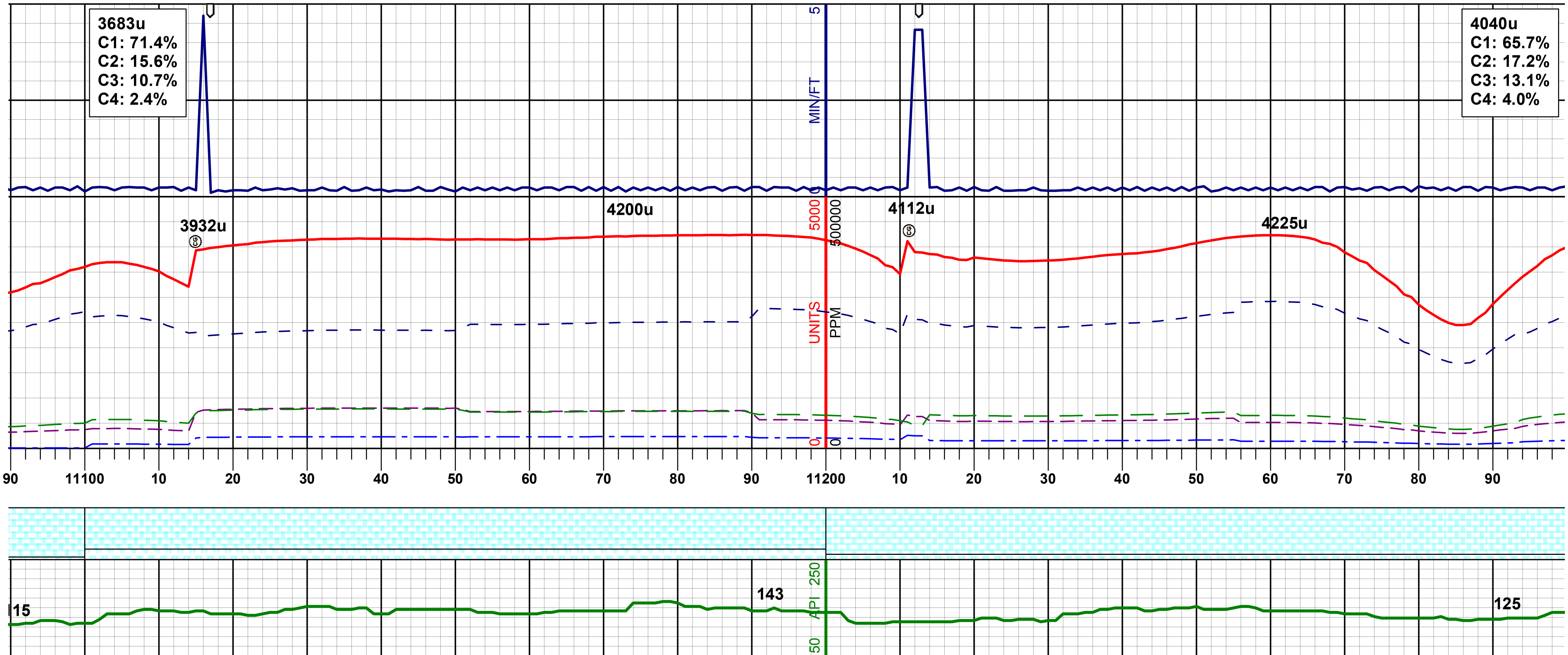
ft

y
10880'
90.28°
354.95°
7385.61'

Survey
MD 10975'
INC 91.17°
AZM 355.17°
TVD 7384.41'

Survey
MD 11071'
INC 89.91°
AZM 352.51°
TVD 7383.51'

7700



7000

CHK: lt-dk gy-brn, blky-sbplty, sft-firm, sbrd -sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, tr fos frag, stmg bl cut, mod bl ring

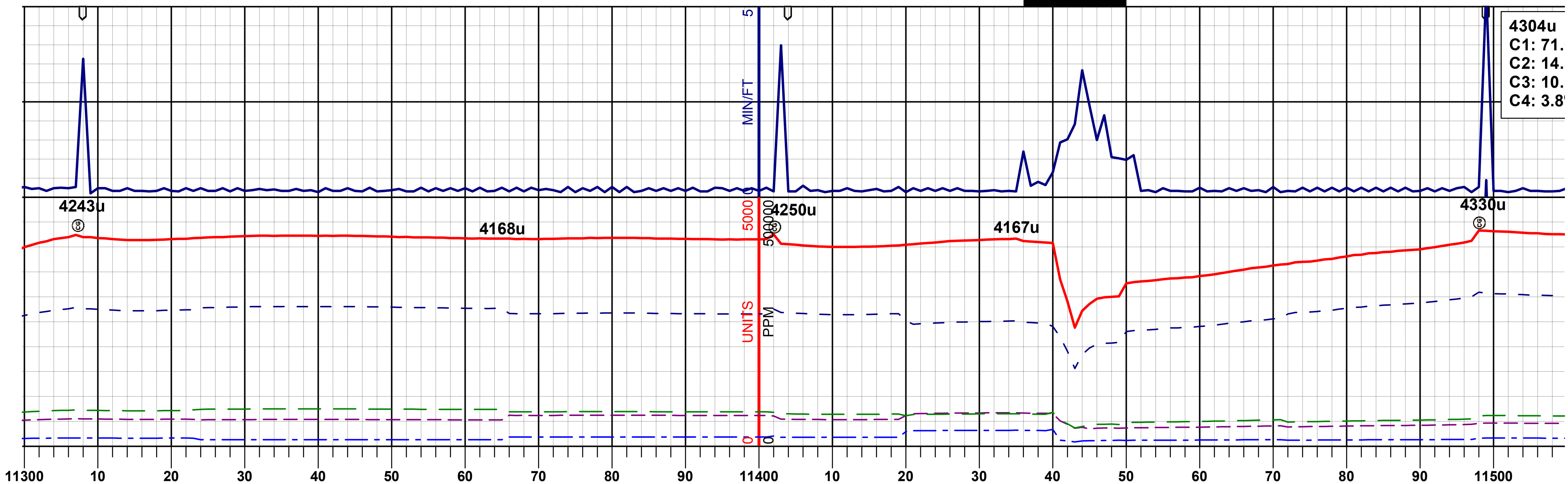
CHK: lt-dk gy-brn, blky-sbplty, sft-firm, sbrd -sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, tr fos frag, stmg bl cut, mod bl ring

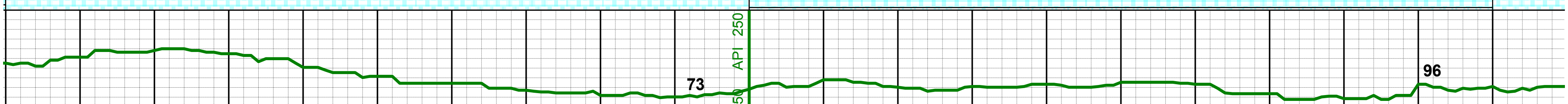
ft

Survey
MD 11167'
INC 89.72°
AZM 351.89°
TVD 7383.82'

Survey
MD 11262'
INC 89.63°
AZM 351.56°
TVD 7384.35'

7700





WT 10.0 / VIS 40

CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, tr MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, tr fos frag, stmg bl cut, mod bl ring

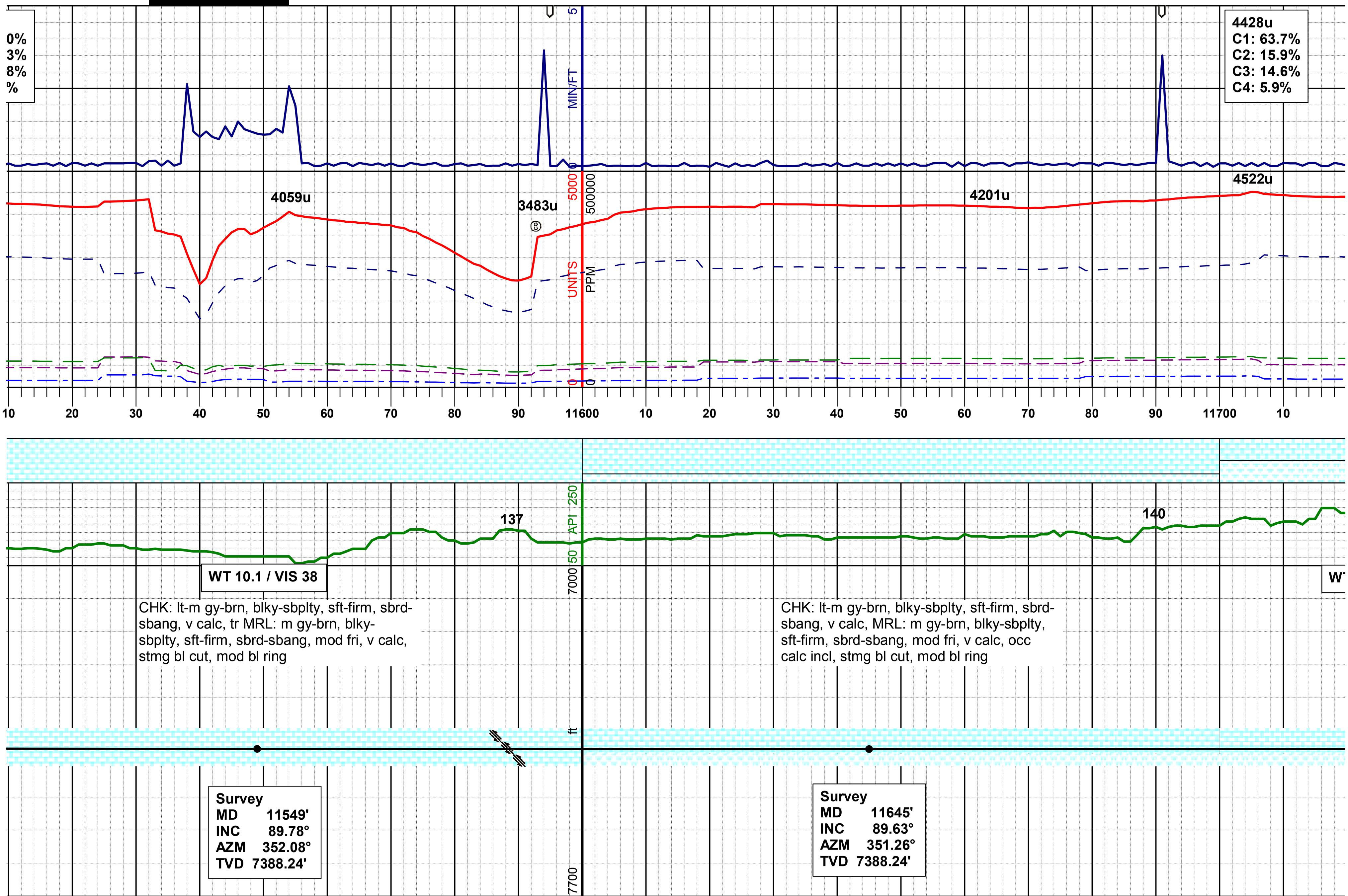
WT 10.0 / VIS 39

CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, tr fos frag, stmg bl cut, mod bl ring

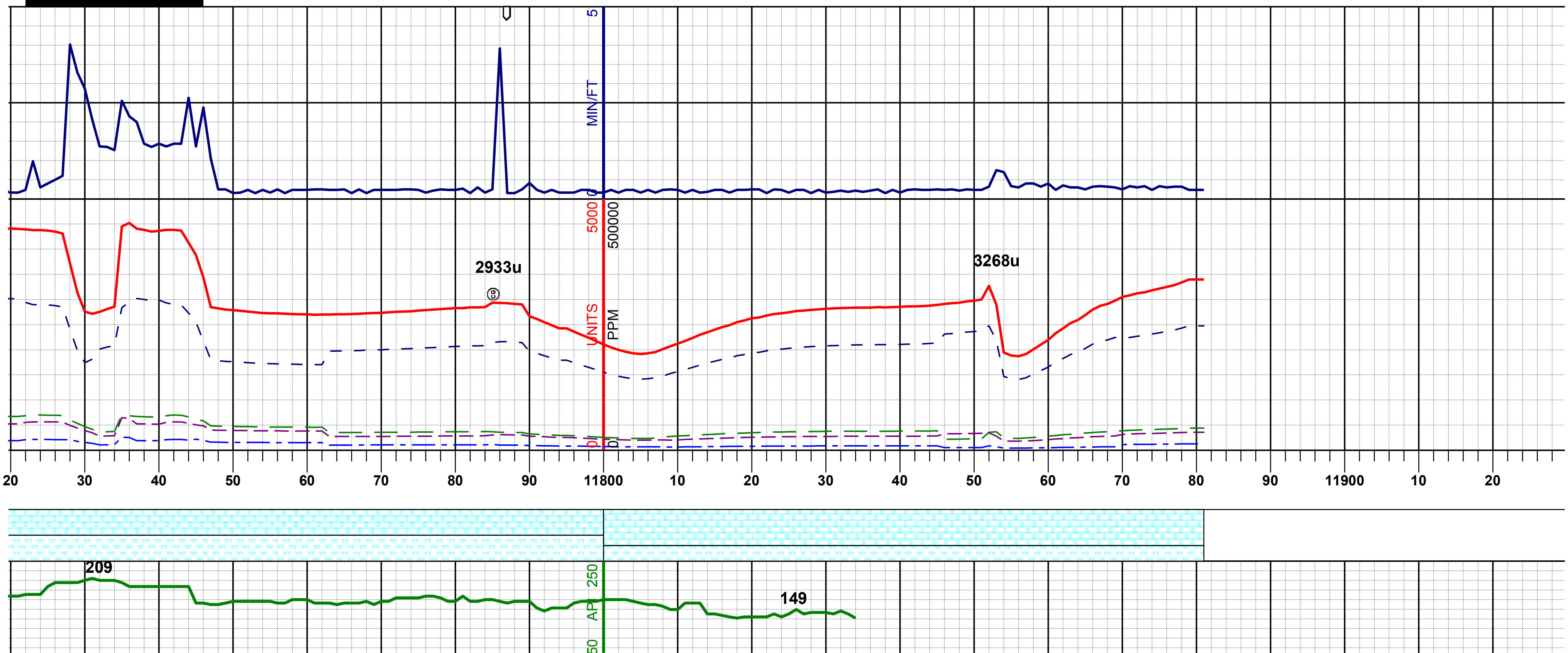
7000 ft 7700

Survey
MD 11358'
INC 89.32°
AZM 351.52°
TVD 7385.23'

Survey
MD 11453'
INC 88.64°
AZM 351.66°
TVD 7386.92'



0%
3%
8%
%
4428u
C1: 63.7%
C2: 15.9%
C3: 14.6%
C4: 5.9%
0 MIN/FT 5
0 UNITS 5000
0 PPM 500000
4059u
3483u
4201u
4522u
10 20 30 40 50 60 70 80 90 11600 10 20 30 40 50 60 70 80 90 11700 10
50 API 250
137
140
7000 ft 7700
WT 10.1 / VIS 38
CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, tr MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, stmg bl cut, mod bl ring
CHK: lt-m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: m gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, occ calc incl, stmg bl cut, mod bl ring
Survey
MD 11549'
INC 89.78°
AZM 352.08°
TVD 7388.24'
Survey
MD 11645'
INC 89.63°
AZM 351.26°
TVD 7388.24'



T 10.1 / VIS 38

CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, abnt calc incl, abnt fos frag, abnt bent, stmg bl cut, mod bl ring

WT 10.0 / VIS 38

CHK: m-dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, v calc, MRL: dk gy-brn, blky-sbplty, sft-firm, sbrd-sbang, mod fri, v calc, tr calc incl, occ fos frag, tr bent, stmg bl cut, mod bl ring

7000

ft

7700

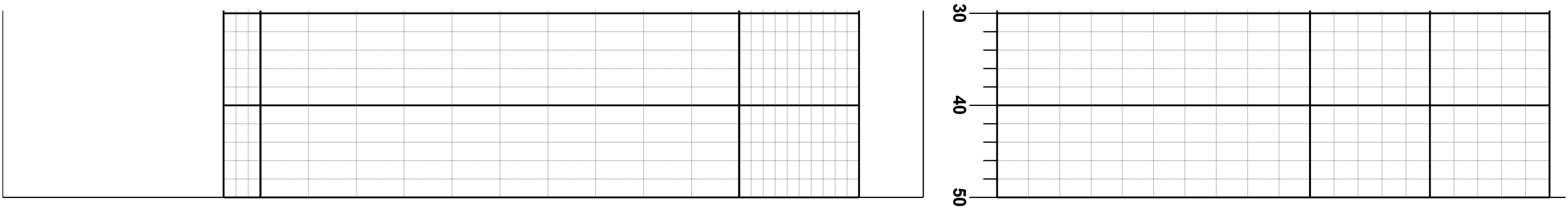
Survey
MD 11741'
INC 90.12°
AZM 353.10°
TVD 7388.94'

Survey
MD 11836'
INC 89.75°
AZM 353.29°
TVD 7389.04'

Projection to Bit
MD 11881'
INC 89.75°
AZM 353.29°
TVD 7389.24'

ANADARKO
GOBBLER 28N - 23HZ
WELL TD @ 11881' MD
ON 07/08/2013 @ 1240 HRS

THANK YOU FOR USING
COLUMBINE LOGGING INC


30
40
50