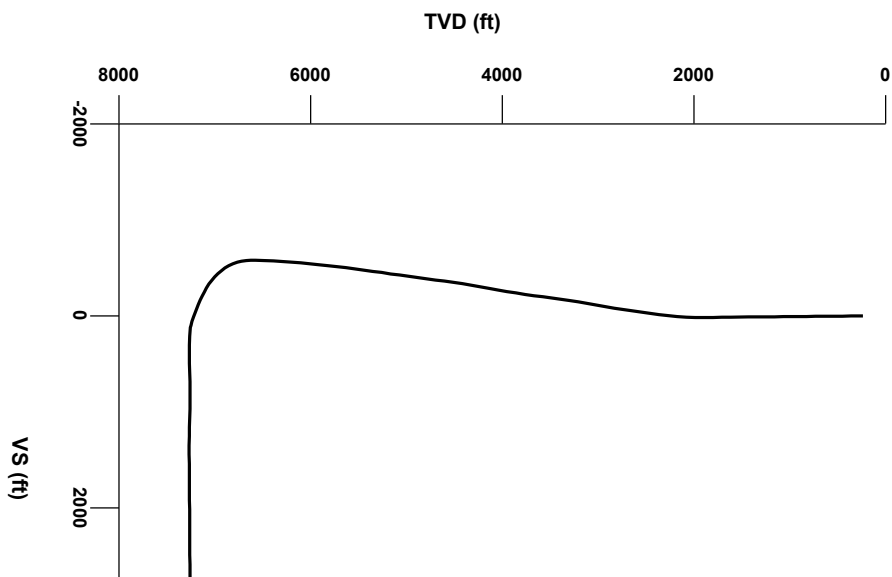




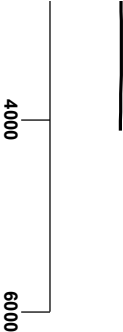
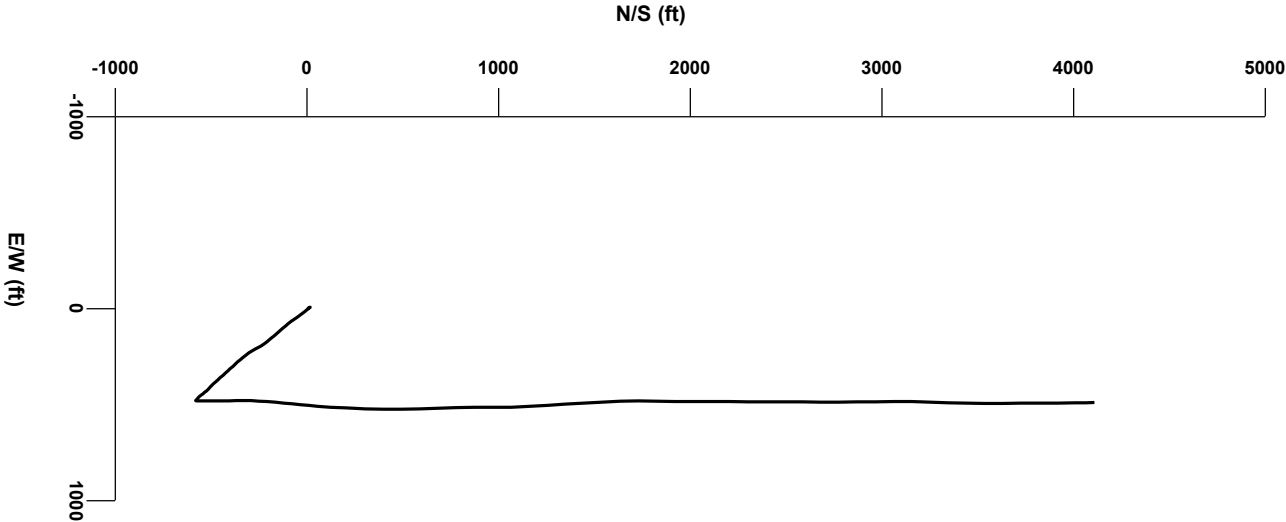
LOG created using LPLOT VH Version 3.0, August 13, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

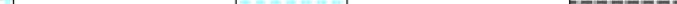
OPERATOR: ANADARKO PETROLEUM CORPORATION
WELL: USA FED 28N-36HZ
LOCATION: SESW SEC 36, T3N, R66W
COUNTY: WELD
STATE: COLORADO
SPOT: 664' FSL, 1931' FWL
ELEVATION: GR 5005', KB 5022'
FIELD: WATTENBERG
SPUD DATE: 08/05/2013
TD DATE: 08/12/2013
DATES LOGGED: 08/08/2013 - 08/12/2013
DEPTHS LOGGED: 6711' MD - 11703' MD
LOGGERS: SHANA SWIRIN, LIZ VAN DIEPEN
DRILLING FLUID: FSLN
DRILLING RIG: ENSIGN 132
API: 05-123-36846
LOG TYPE: HORIZONTAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: WELLSITE GEOLOGICAL SERVICES
PROVIDED BY COLUMBINE LOGGING INC.



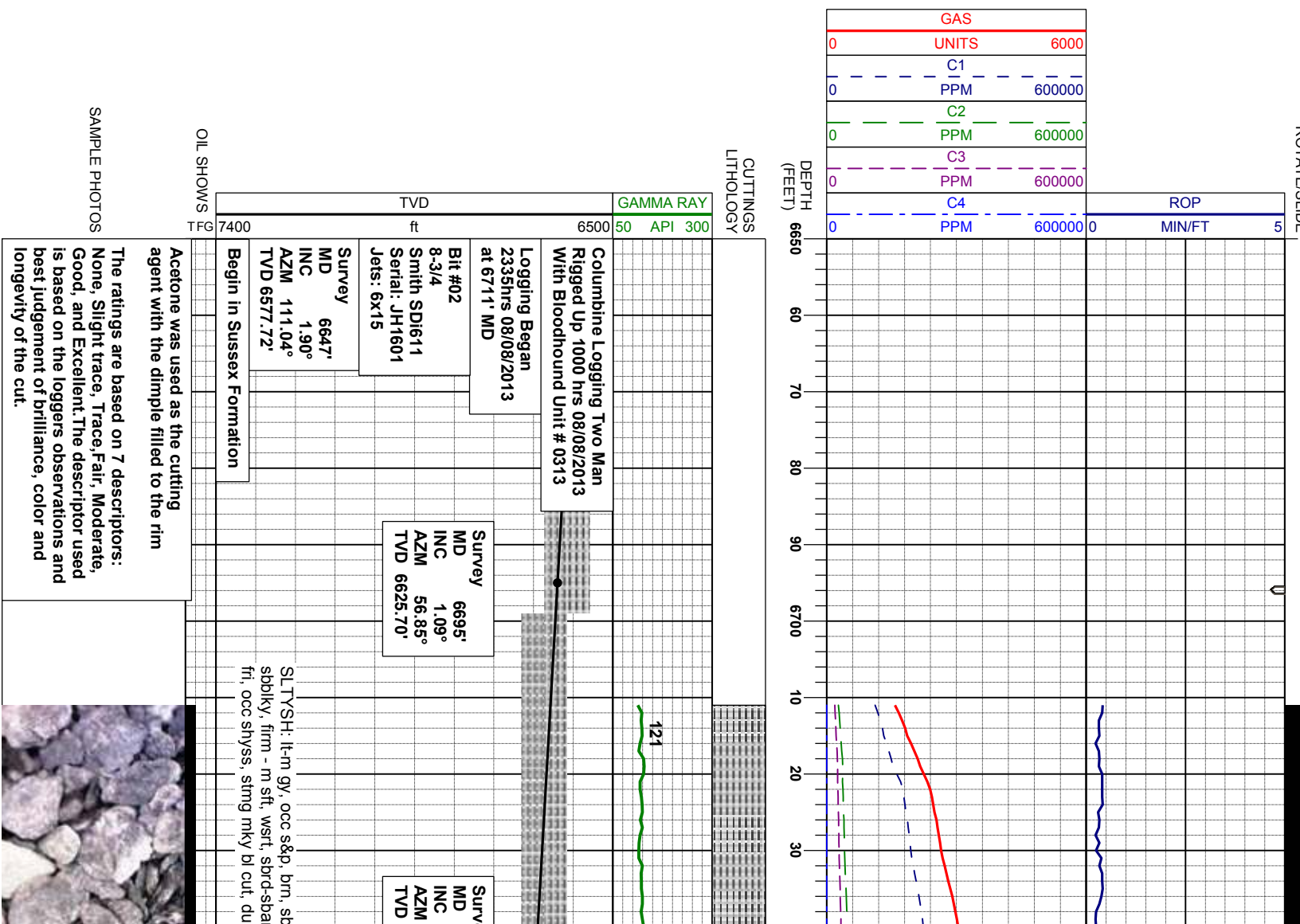
Survey Elevation

Survey Plan



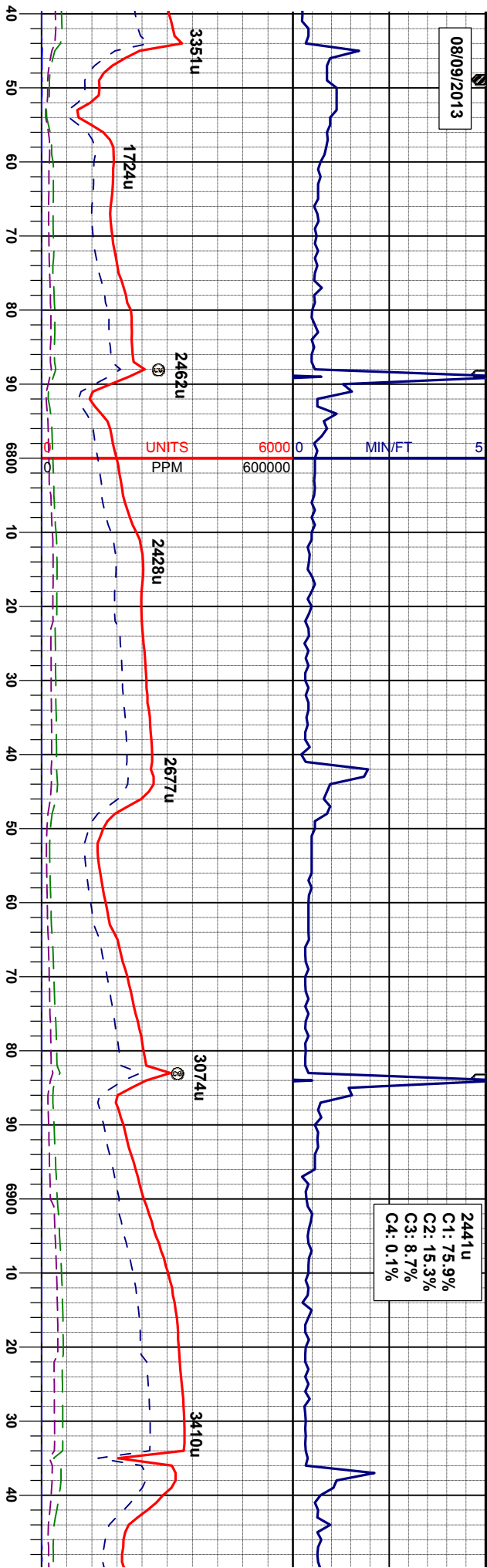


	Casing		Casing		Connection
	Connection Gas		Midnight Depth		Normal Fault



08/09/2013

2441u
C1: 75.9%
C2: 15.3%
C3: 8.7%
C4: 0.1%



WT 9.0/ VIS 32

WT 9.0/ VIS 35

ey 6742'
5.25°
4.48°
6672.62'

Survey 6790'
MD 6790'
INC 10.89°
AZM 2.46°
TVD 6720.13'

Survey 6837'
MD 6837'
INC 16.34°
AZM 359.54°
TVD 6765.79'

Survey 6885'
MD 6885'
INC 23.03°
AZM 357.87°
TVD 6810.96'

Survey 6932'
MD 6932'
INC 28.46°
AZM 359.31°
TVD 6853.28'

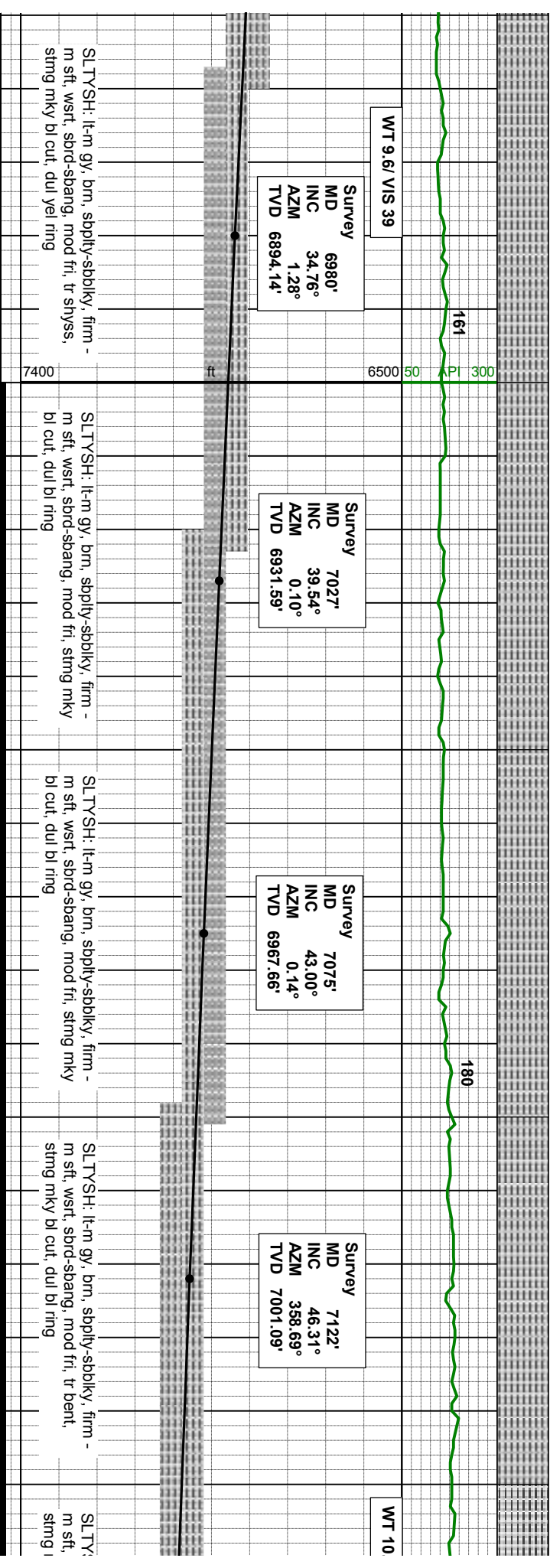
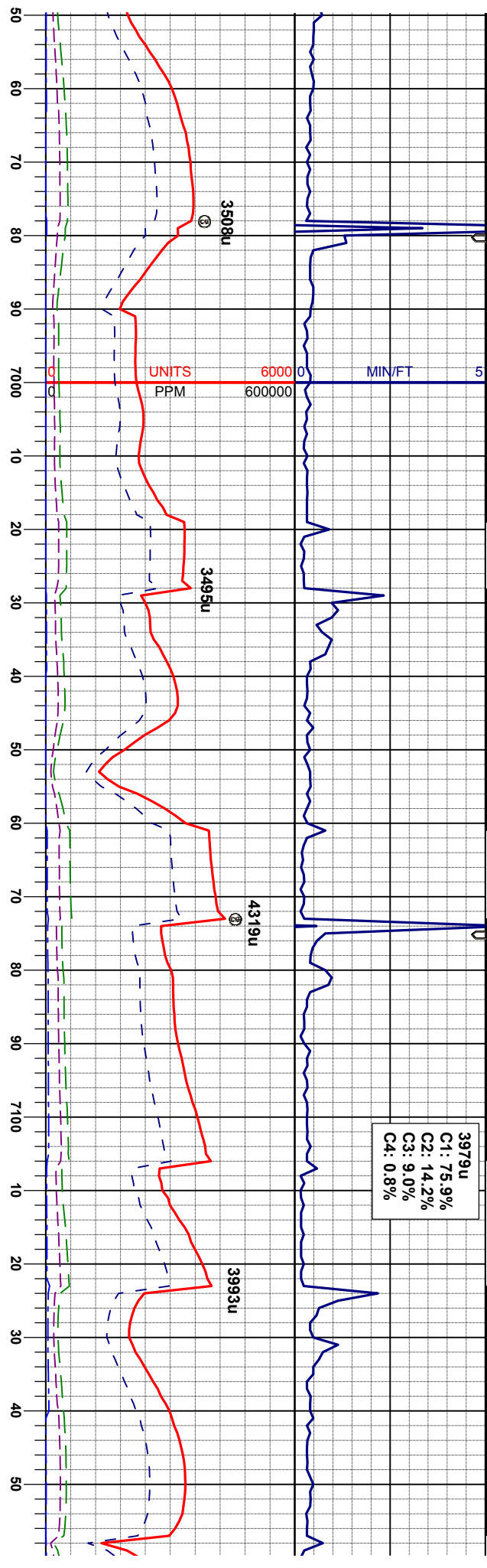
SLTYSH: lt-m gy, occ s&p, brn, sbply-
ng, mod sbblky, firm - m sft, wst, sbd-sbang, mod
yel ring fri, tr shys, sting mky bl cut, dul yel ring

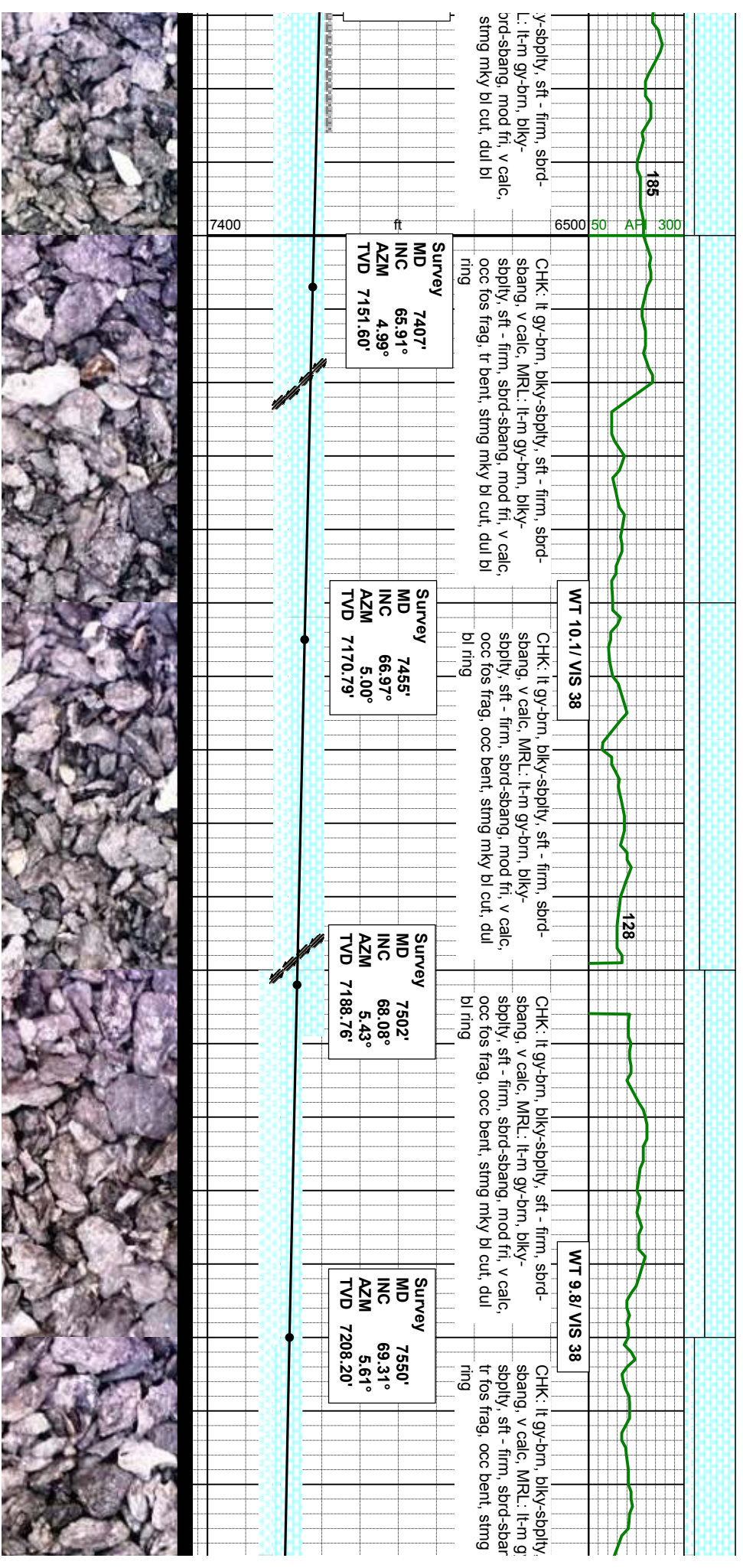
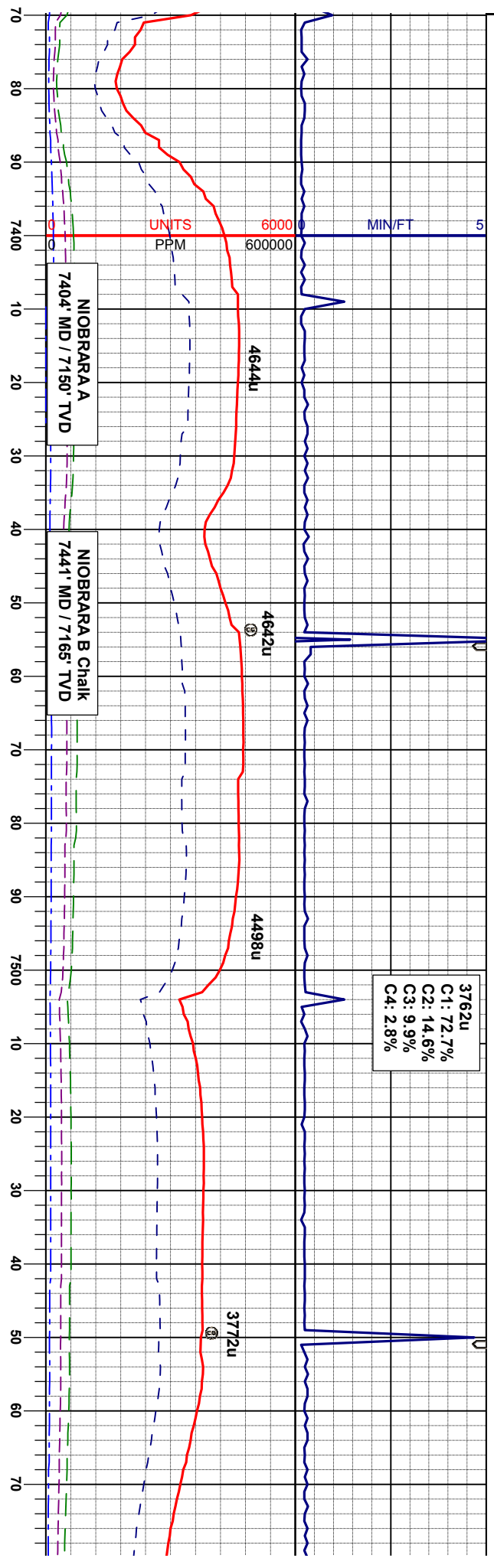
SLTYSH: lt-m gy, tr s&p, brn, sbply-sbblky,
firm - m sft, wst, sbd-sbang, mod fri, tr
shys, sting mky bl cut, dul yel ring

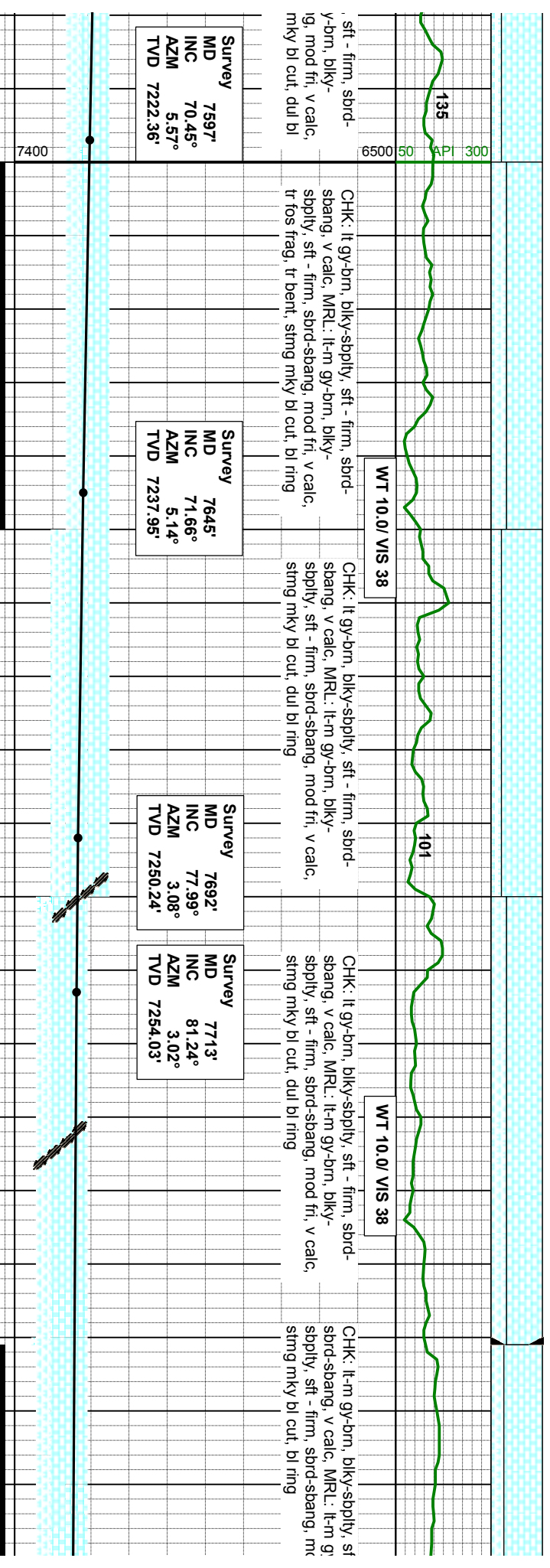
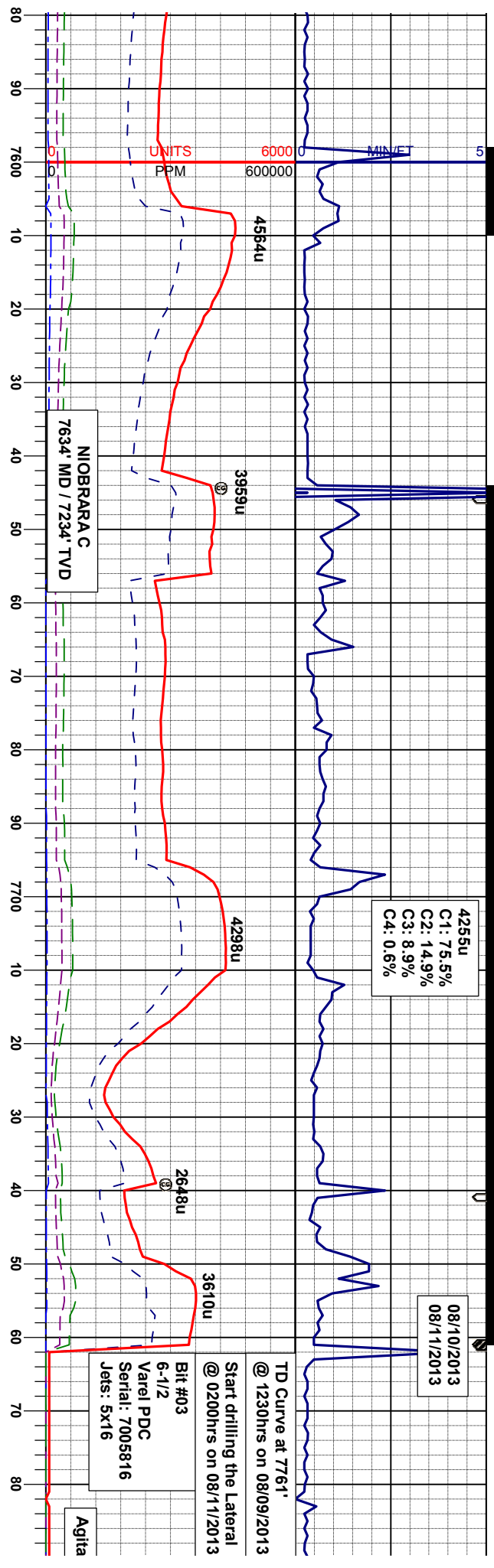
SLTYSH: lt-m gy, brn, sbply-sbblky, firm -
m sft, wst, sbd-sbang, mod fri, tr shys,
sting mky bl cut, dul yel ring

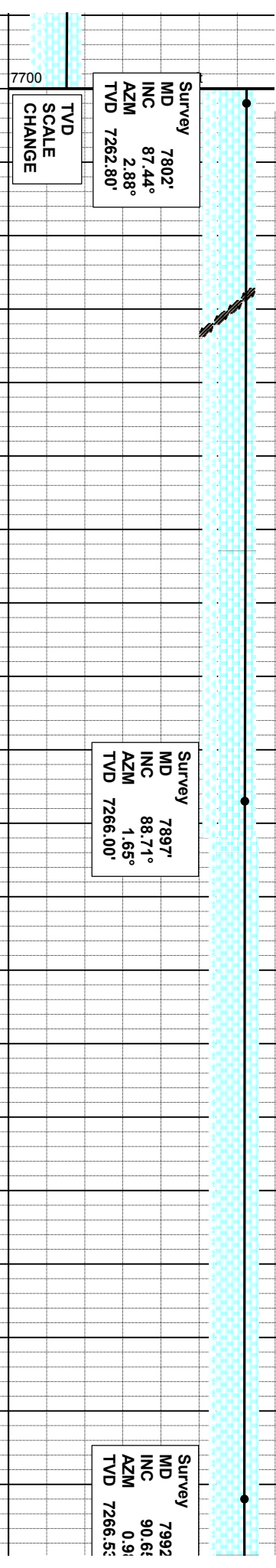
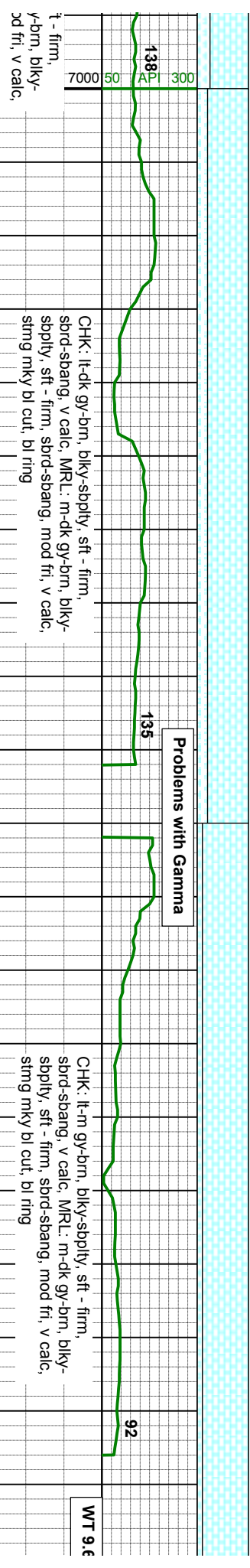
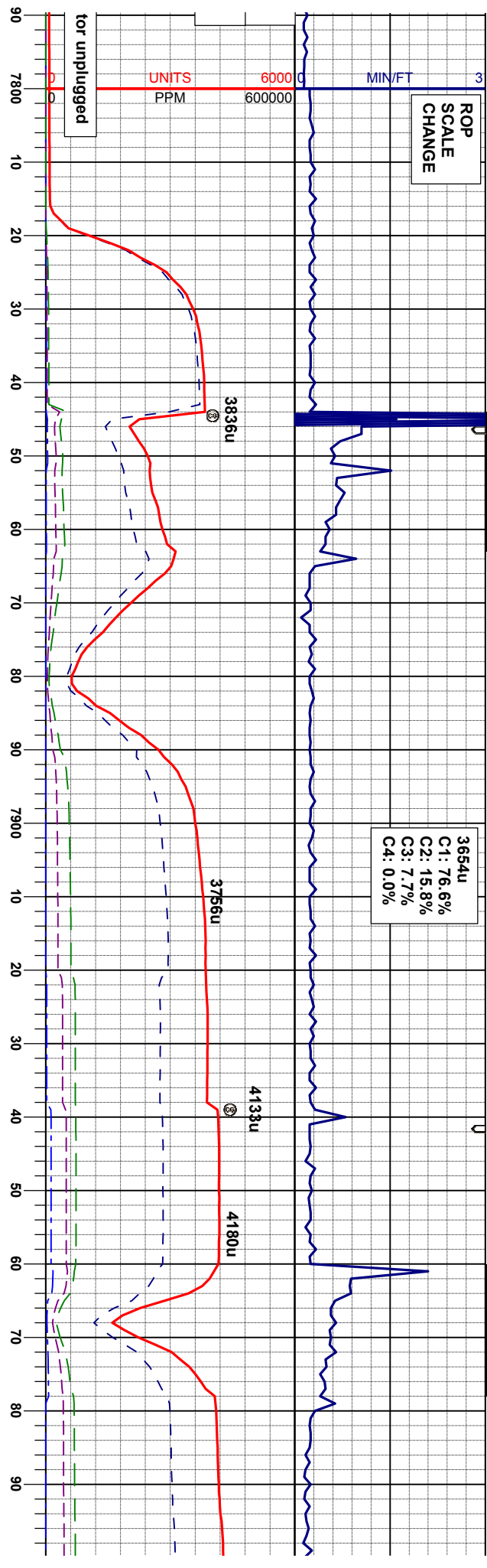
SLTYSH: lt-m gy, brn, sbply-sbblky, firm -
m sft, wst, sbd-sbang, mod fri, tr shys,
sting mky bl cut, dul yel ring

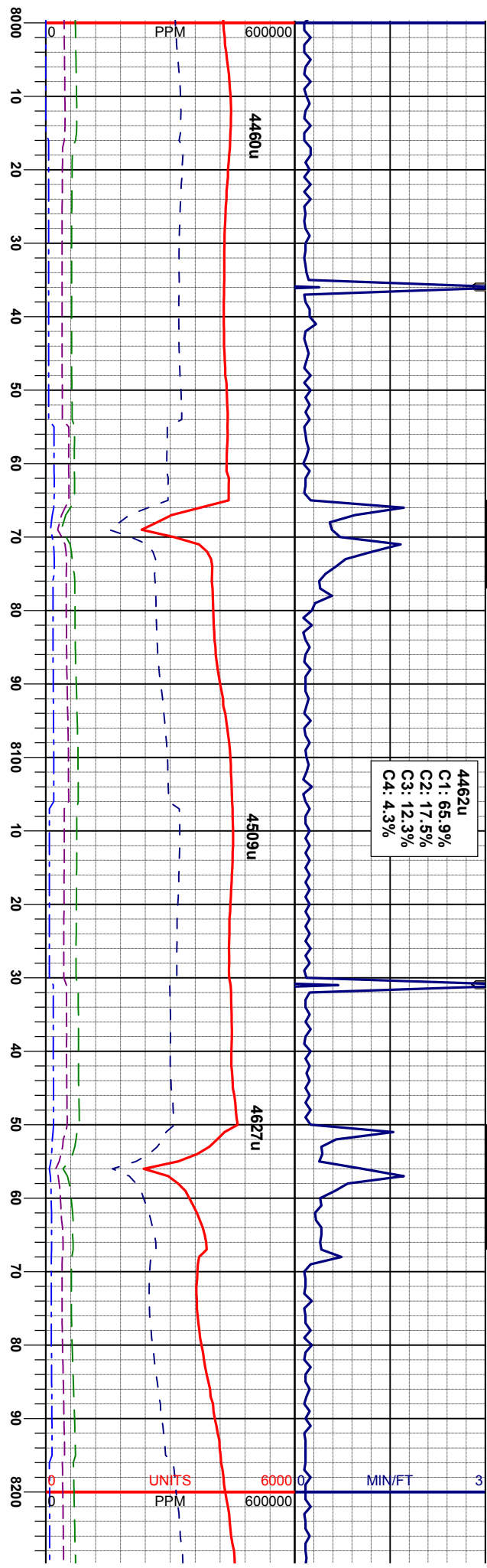












Problems with Gamma

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, mod fri, v calc, sting mky bl cut, bl ring

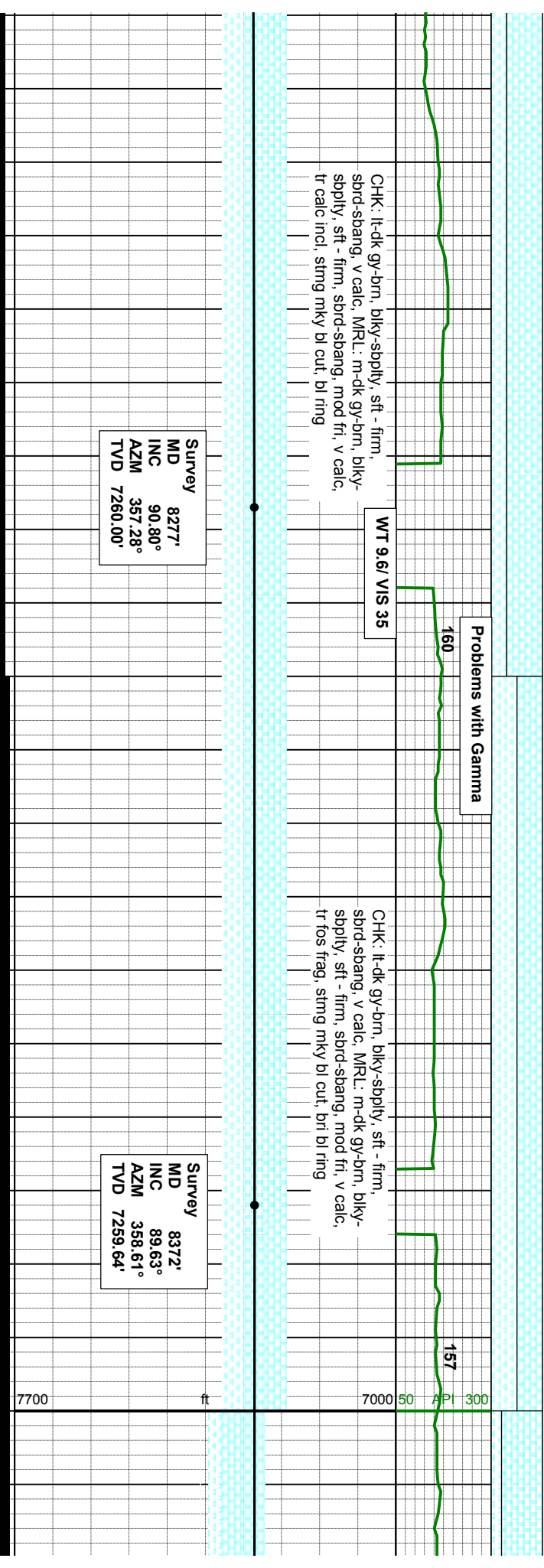
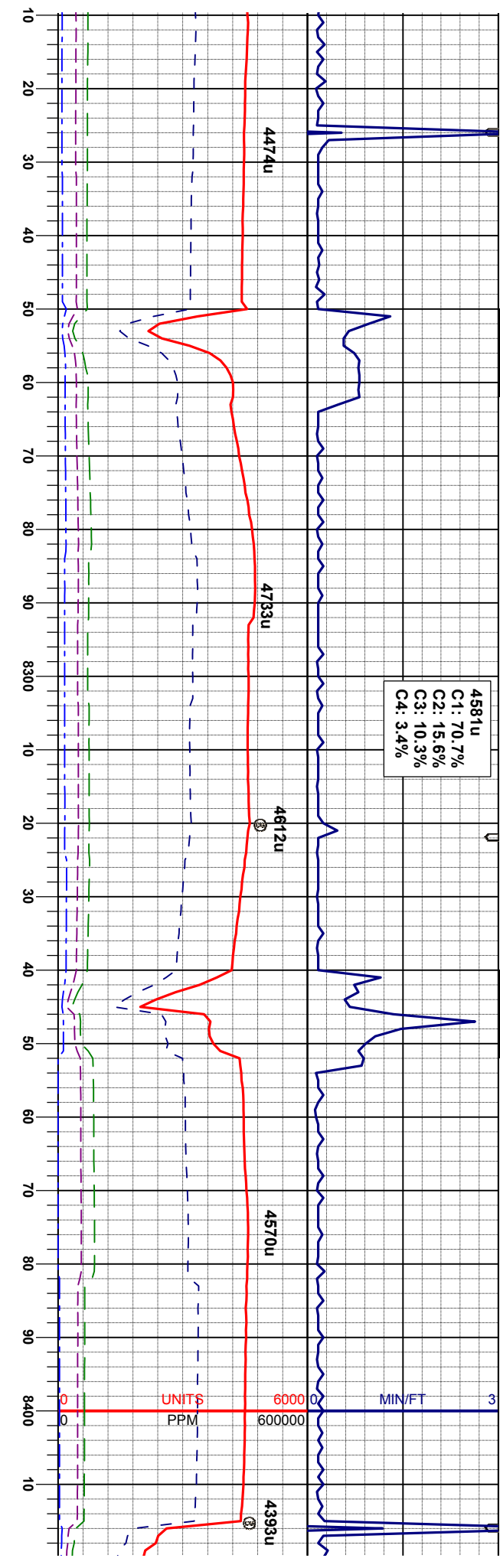
CHK: lt-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, mod fri, v calc, sting mky bl cut, bl ring

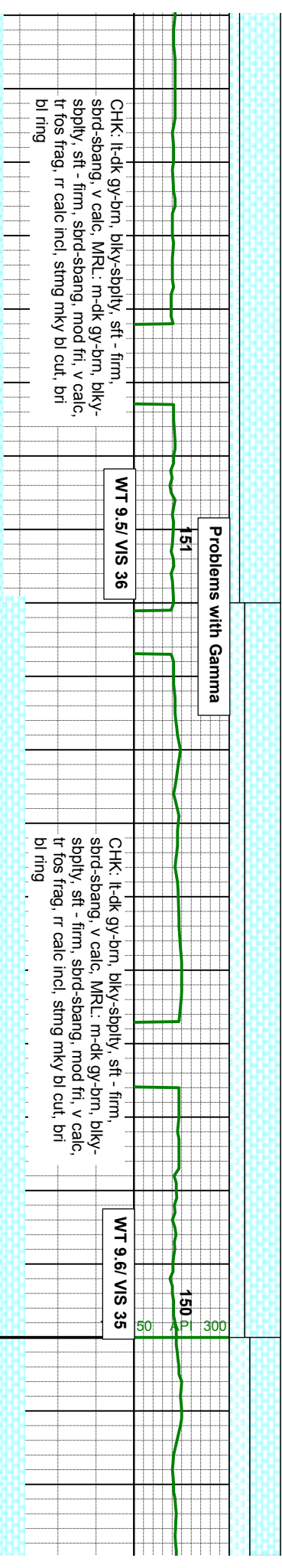
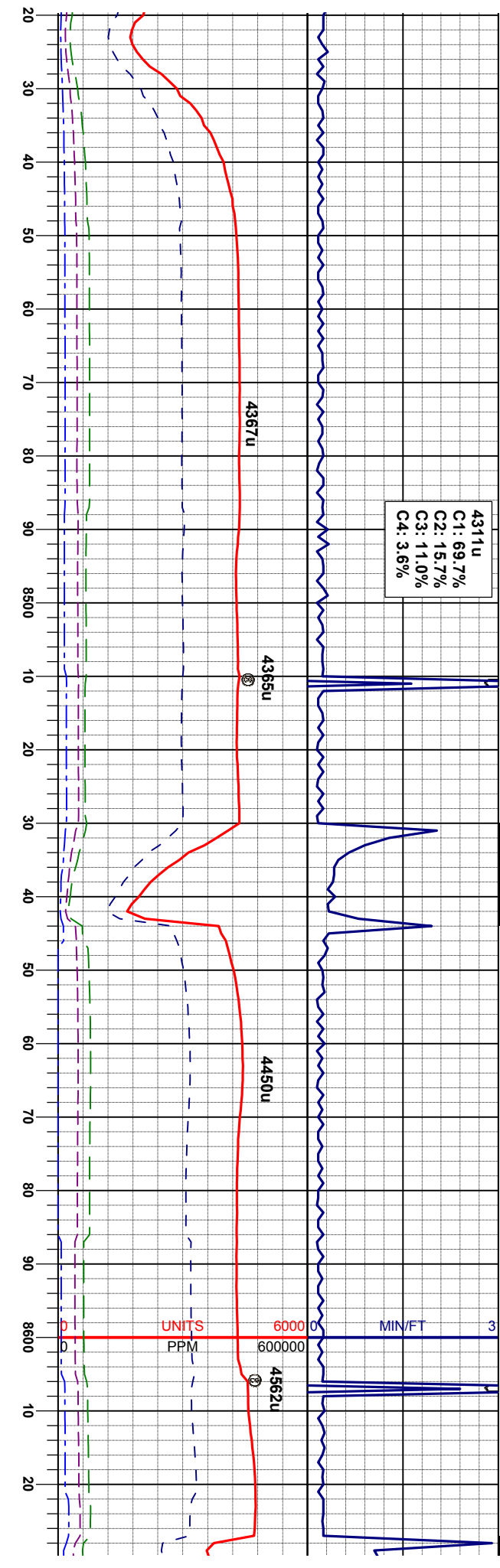
Survey
MD 8087'
INC 91.45°
AZM 359.58°
TVD 7264.78'

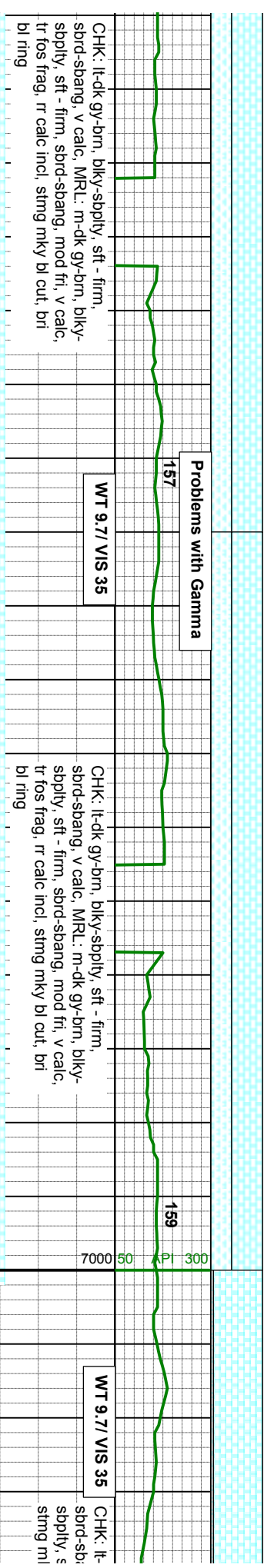
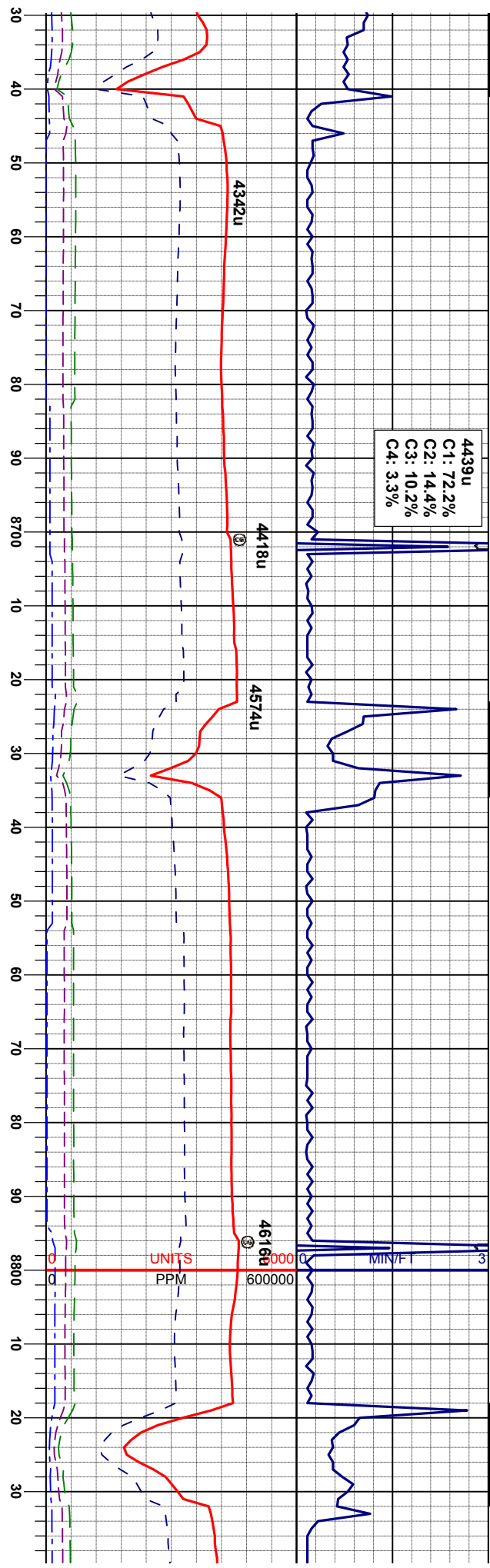
Survey
MD 8182'
INC 91.76°
AZM 357.99°
TVD 7262.12'

7700 ft 7000 50 API 300







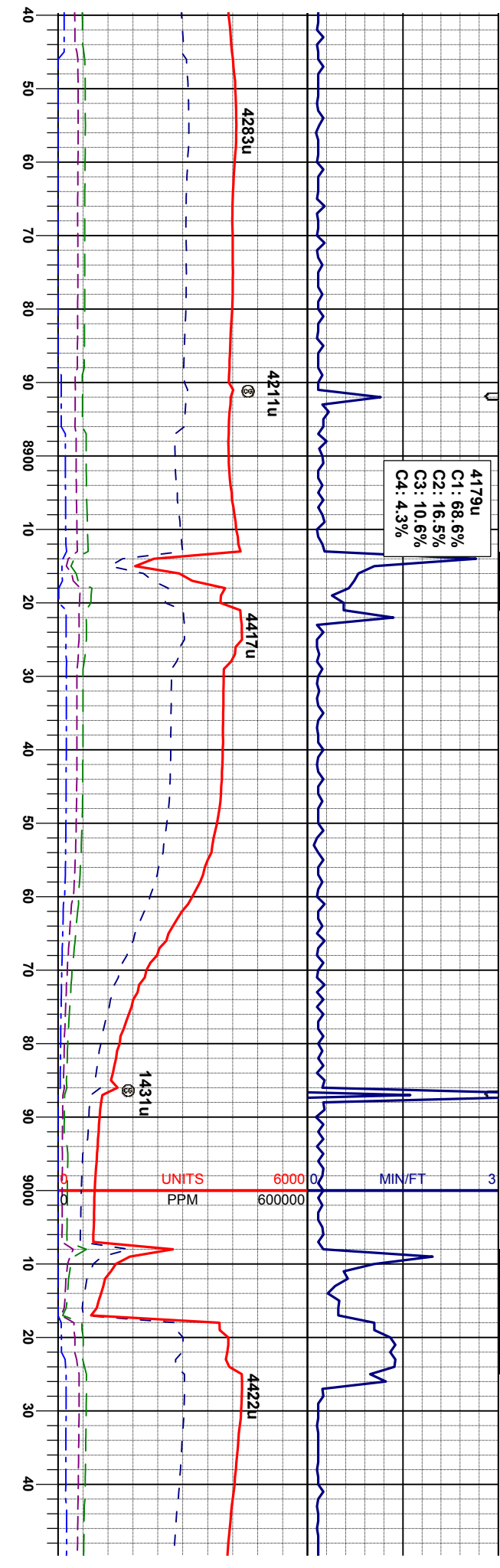


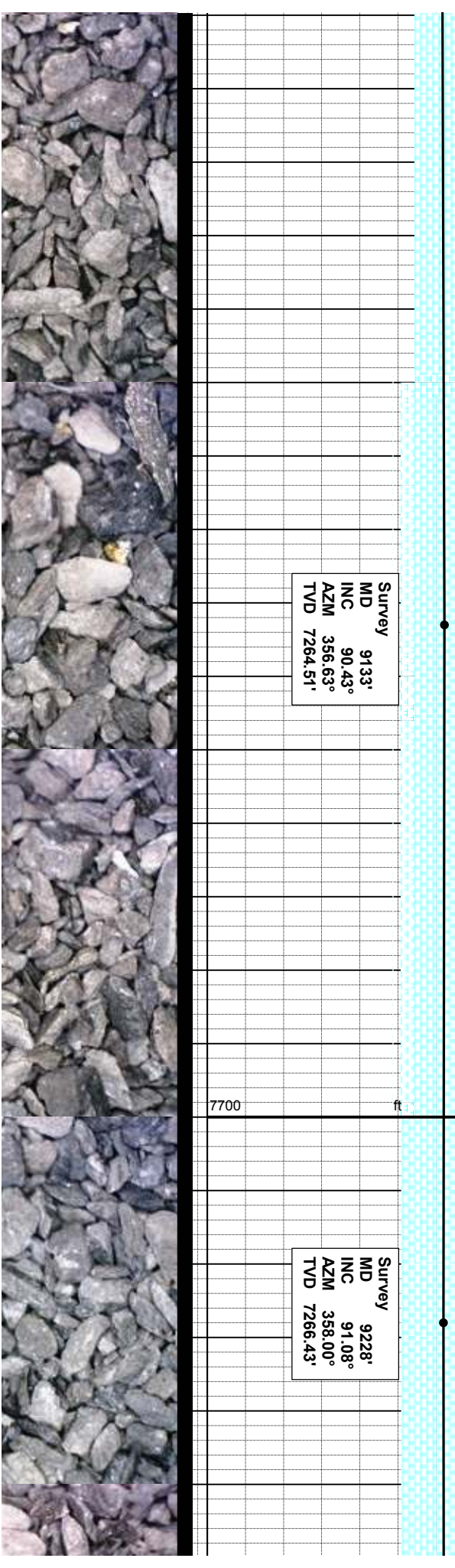
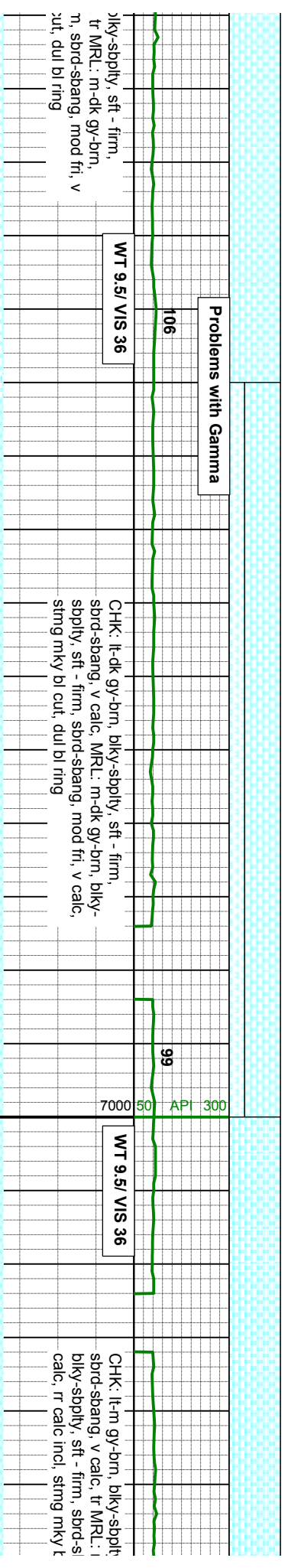
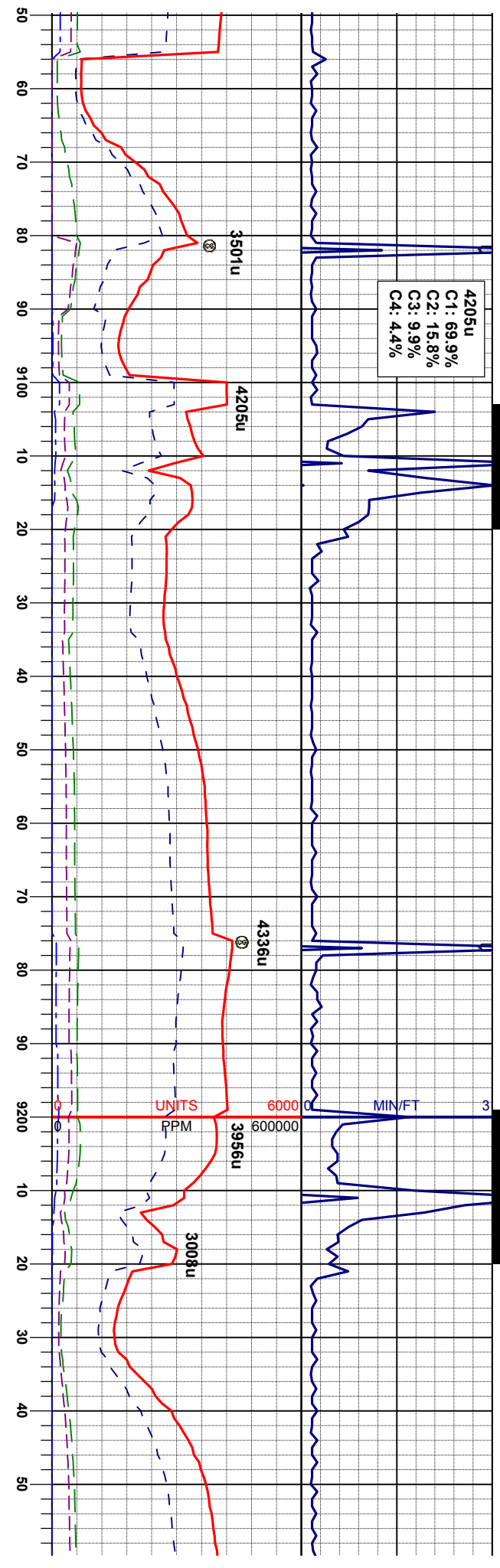
Survey
MD 8658'
INC 88.09°
AZM 358.07°
TVD 7260.57'

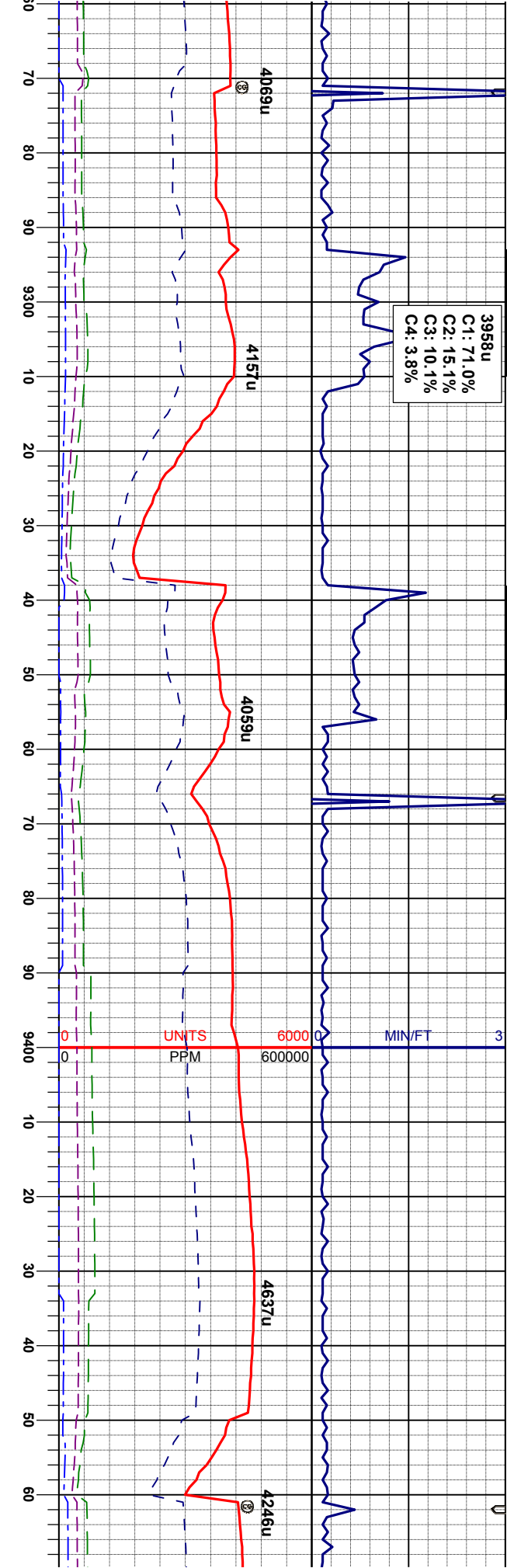
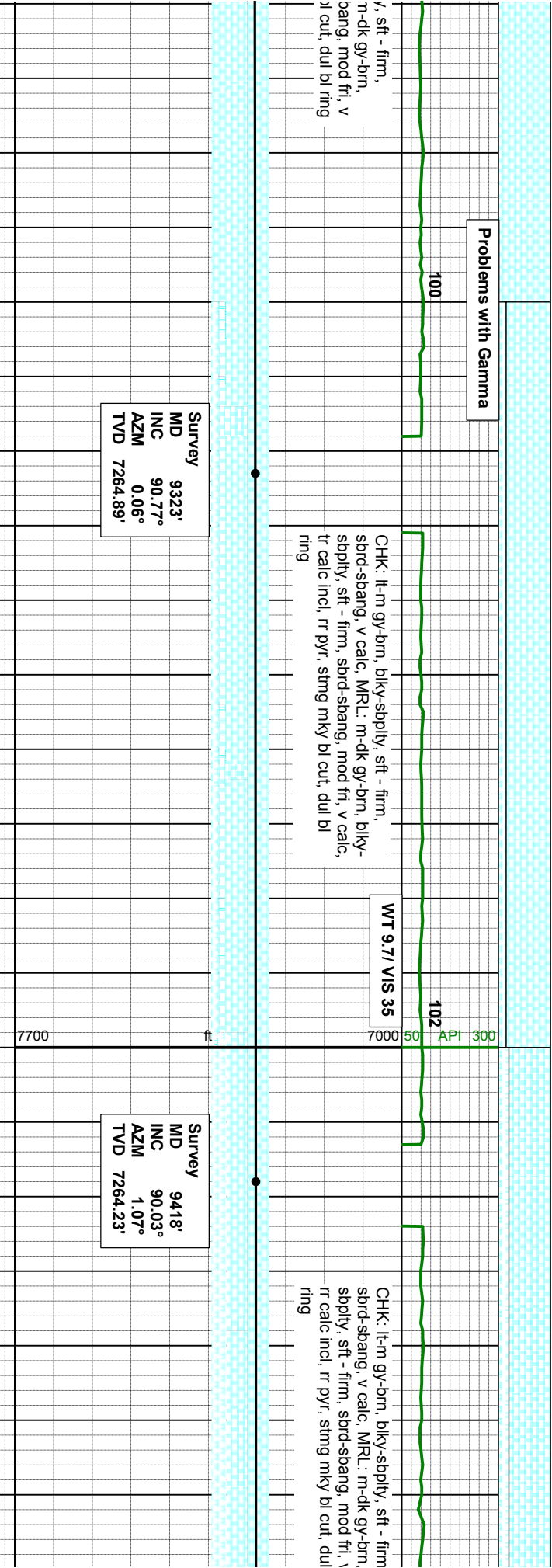
Survey
MD 8753'
INC 88.03°
AZM 357.08°
TVD 7263.79'

7700 ft

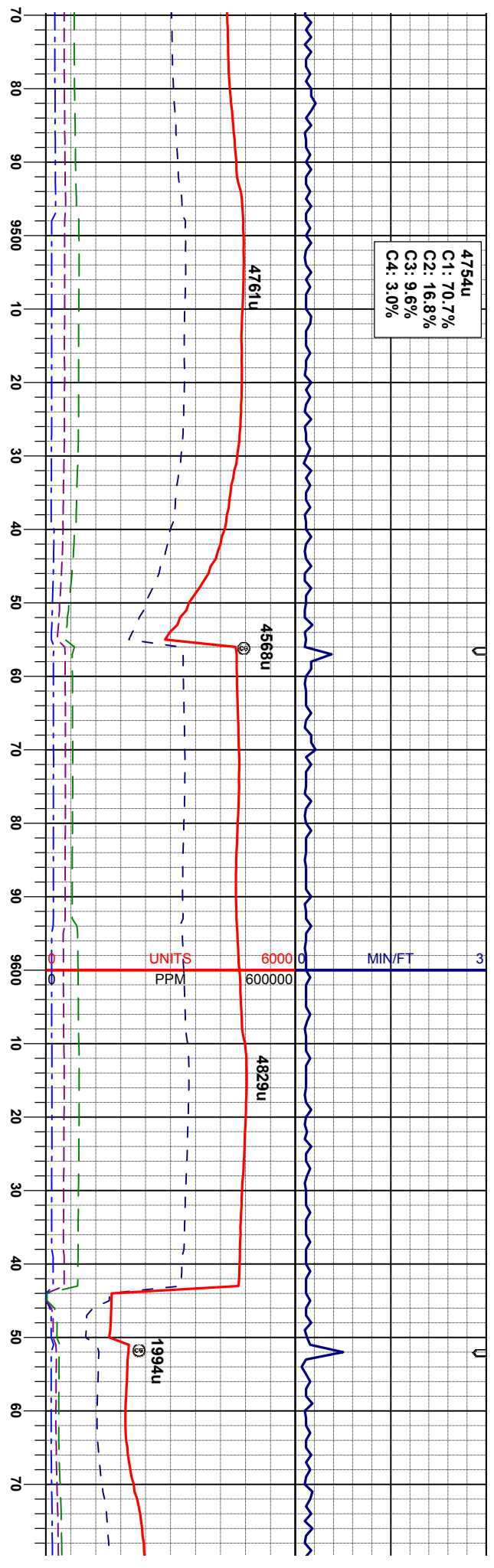








4754u
C1: 70.7%
C2: 16.8%
C3: 9.6%
C4: 3.0%



Problems with Gamma

WT 9.6/ VIS 35

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, mod fri, v calc, occ fos frag, rr pyr, sting mky bl cut, dul bl ring

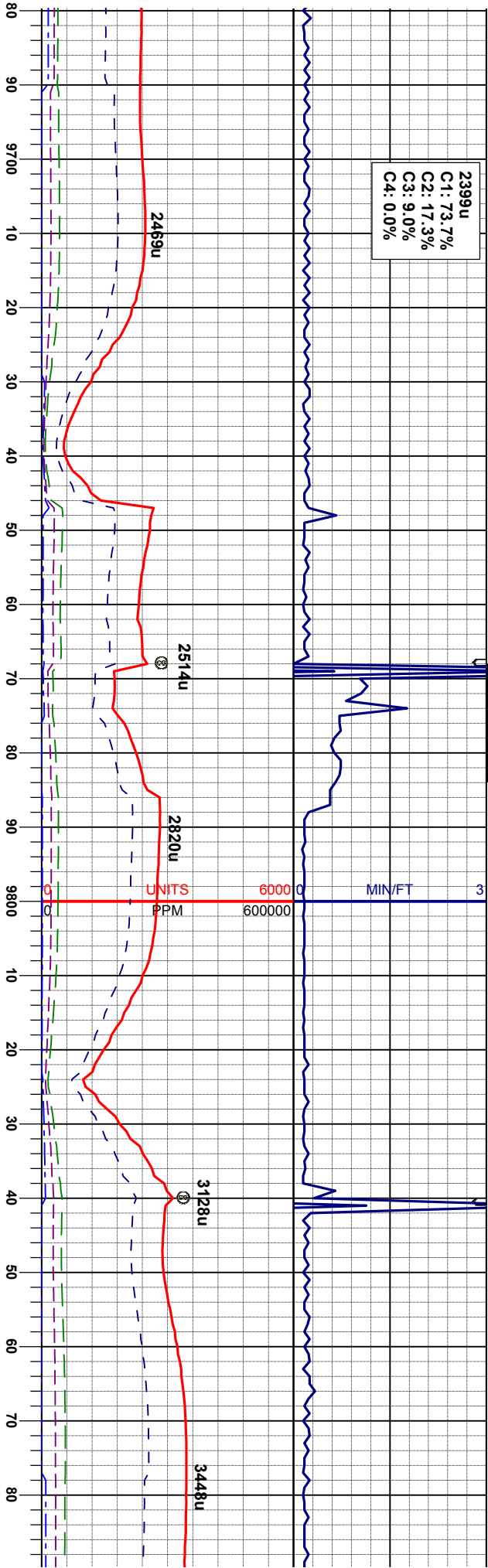
Survey
MD 9513'
INC 90.49°
AZM 0.94°
TVD 7263.80'

Survey
MD 9608'
INC 90.68°
AZM 0.35°
TVD 7262.83'

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, mod fri, v calc, rr fos frag, sting mky bl cut, dul bl ring



2399u
C1: 73.7%
C2: 17.3%
C3: 9.0%
C4: 0.0%



Problems with Gamma

99

100

101

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbd-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbd-sbang, mod fri, v calc, occ fos frag, tr pyr, stmg mky bl cut, dul bl ring

WT 9.8+ / VIS 38

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbd-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbd-sbang, mod fri, v calc, tr calc incl, rr fos frag, stmg mky bl cut, dul bl ring

Survey
MD 9704'
INC 90.31°
AZM 358.90°
TVD 7262.00'

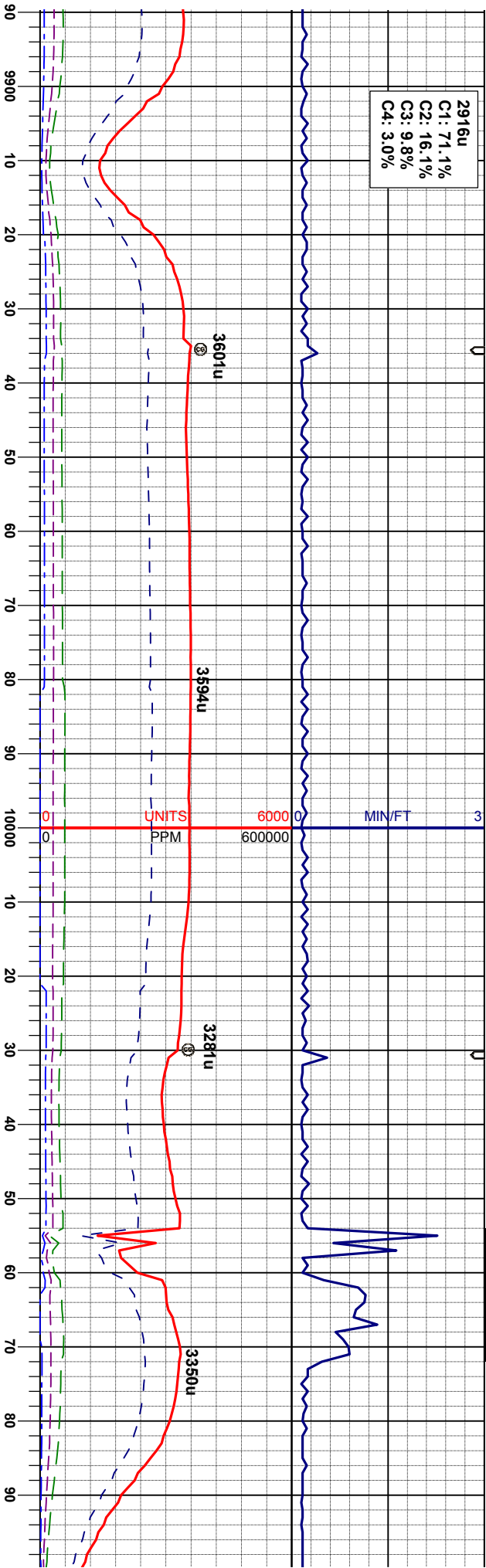
Survey
MD 9798'
INC 90.25°
AZM 1.01°
TVD 7261.54'

Sur
MD
INC
AZM
TVD

7700



2916u
C1: 71.1%
C2: 16.1%
C3: 9.8%
C4: 3.0%



Problems with Gamma

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, mod fr, v calc, occ calc incl, rr pyr, stng mky bl cut, dul bl ring

99

API 300

WT 9.7+ / VIS 36

CHK: lt-m gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, v calc, MRL: m-dk gy-brn, blk-y-sbply, sft - firm, sbdr-sbang, mod fr, v calc, occ calc incl, rr pyr, rr fos frag, stng mky bl cut, dul bl ring

104

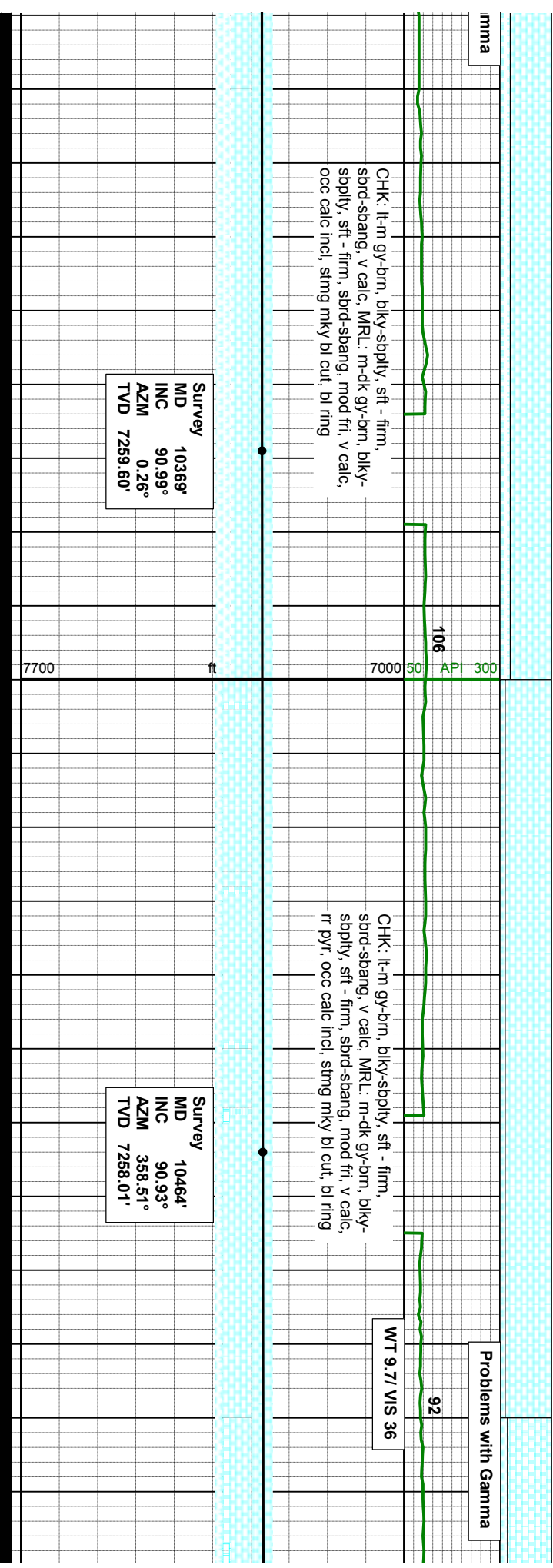
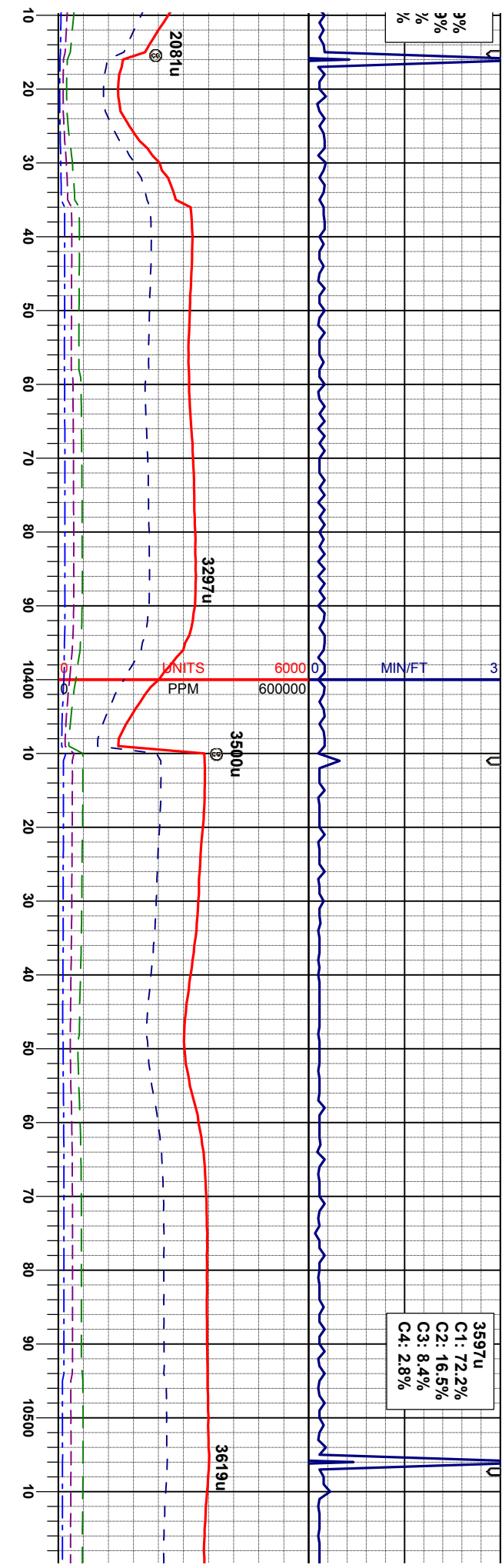
Problem

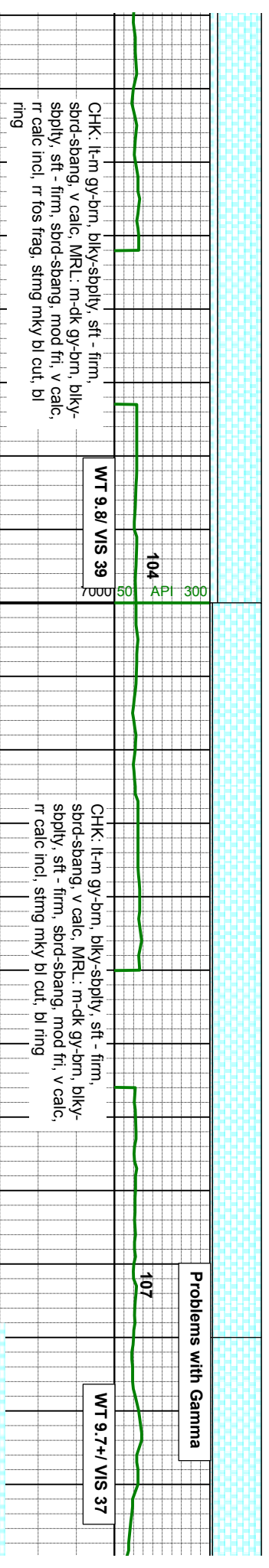
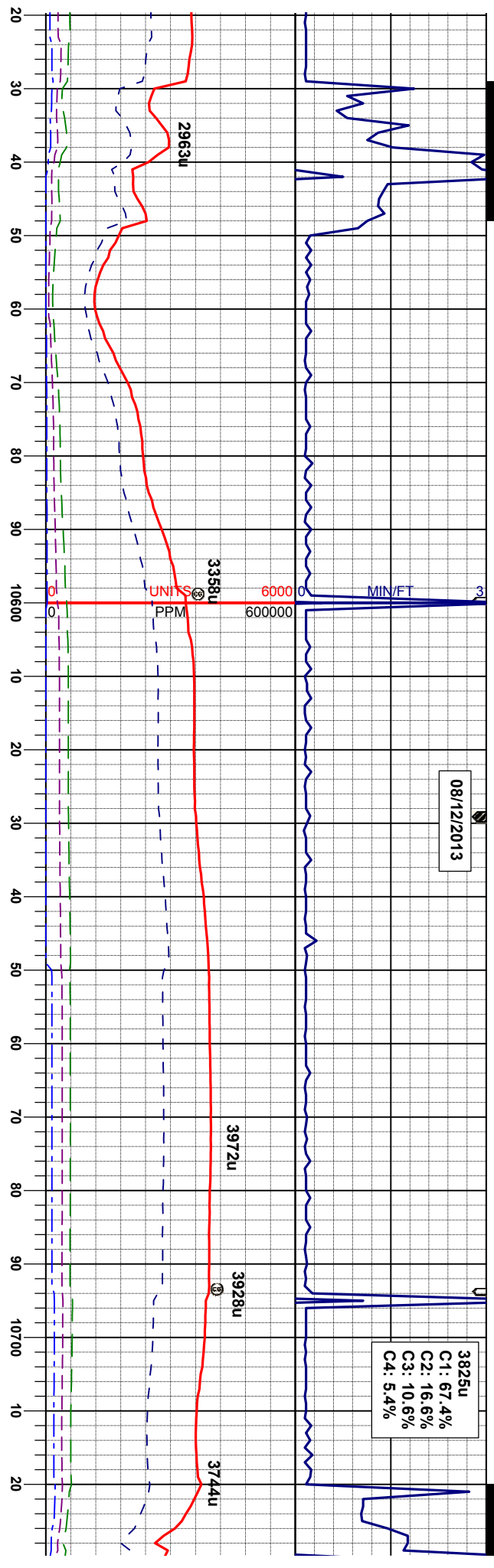
vey 9894'
90.43°
0.58°
7260.97'

Survey 9989'
MD 9989'
INC 89.75°
AZM 359.56°
TVD 7260.82'

7700

Survey 10084'
MD 10084'
INC 90.65°
AZM 0.34°
TVD 7260.50'





Survey
MD 10559'
INC 91.05°
AZM 0.30°
TVD 7256.37'

Survey
MD 10654'
INC 90.59°
AZM 358.66°
TVD 7255.01'



