



Weatherford®

COMPOSITE LOG

COMPANY		SUEMAUR EXPLORATION & PRODUCTION, LLC			
WELL		LUCKY SEVEN LLC #1-20			
FIELD		WILDCAT			
PROVINCE/COUNTY		SHERIDAN			
COUNTRY/STATE		USA / KANSAS			
LOCATION		993' FNL & 1989' FWL NAD 27 KS-N			
SEC 20	TWP 6S	RGE 28W	Other Services		
Latitude		39.521308590		Elevations: KB 2754.00 DF 2752.00 GL 2749.00	
Longitude		-100.471813461			
API Number		15-179-21436			
Permanent Datum GL, Elevation 2749 feet					
Log Measured From KB, 5.00 feet above Permanent Datum					
Drilling Measured From KB					
Date	10-JUN-2017				
Run Number	ONE				
Service Order	7452-184333484				
Depth Driller	4500.00	feet			
Depth Logger	4499.00	feet			
First Reading	4496.00	feet			
Last Reading	260.00	feet			
Casing Driller	261.00	feet			
Casing Logger	260.00	feet			
Bit Size	7.875	inches			
Hole Fluid Type	WBM				
Density / Viscosity	9.30	lb/USg	69.00	s/qt	
PH / Fluid Loss	10.50		6.00	ml/30Min	
Sample Source	MUD PIT				
Rm @ Measured Temp	0.80 @ 99.0	ohm-m			
Rmf @ Measured Temp	0.64 @ 99.0	ohm-m			
Rmc @ Measured Temp	0.96 @ 99.0	ohm-m			
Source Rmf / Rmc	CALC	CALC			
Rm @ BHT	0.67 @119.0	ohm-m			
Time Since Circulation	FOUR HOURS				
Max Recorded Temp	119.00	deg F			
Equipment / Base	13057	OKC			
Recorded By	NICHOLAS RUPERT				
Witnessed By	BOB PETERSEN				

Elevations:	
KB	2754.00 feet
DF	2752.00
GL	2749.00

BOREHOLE RECORD

Last Edited: 10-JUN-2017 19:54

Bit Size inches	Depth From feet	Depth To feet
12.250	0.00	261.00
7.875	261.00	4500.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	261.00	24.00

REMARKS

TOOLSTRING: SHA, MCG, MMR, MDN, MVC, MPD (8" PROFILE PLATE), MFE (ONE 0.5" STANDOFF), MSS (TWO 0.5" STANDOFFS), MAI (TWO 0.5" STANDOFFS)

ALL INTERVALS LOGGED AND SCALED PER CLIENT REQUEST.

REQUESTED INTERVALS:

REPEAT / HIGH RESOLUTION: TD - 3500 FT

DEN/NEU/MICRO MAIN PASS: TD - 3200 FT

IND/SONIC/CALI MAIN PASS: TD - CSG

LIMESTONE MATRIX USED FOR POROSITY CALCULATION, 2.71 G/CC, 47.6 uS/FT.

TOTAL HOLE VOLUME FROM TD TO SURFACE CASING: 1490 CU FT.

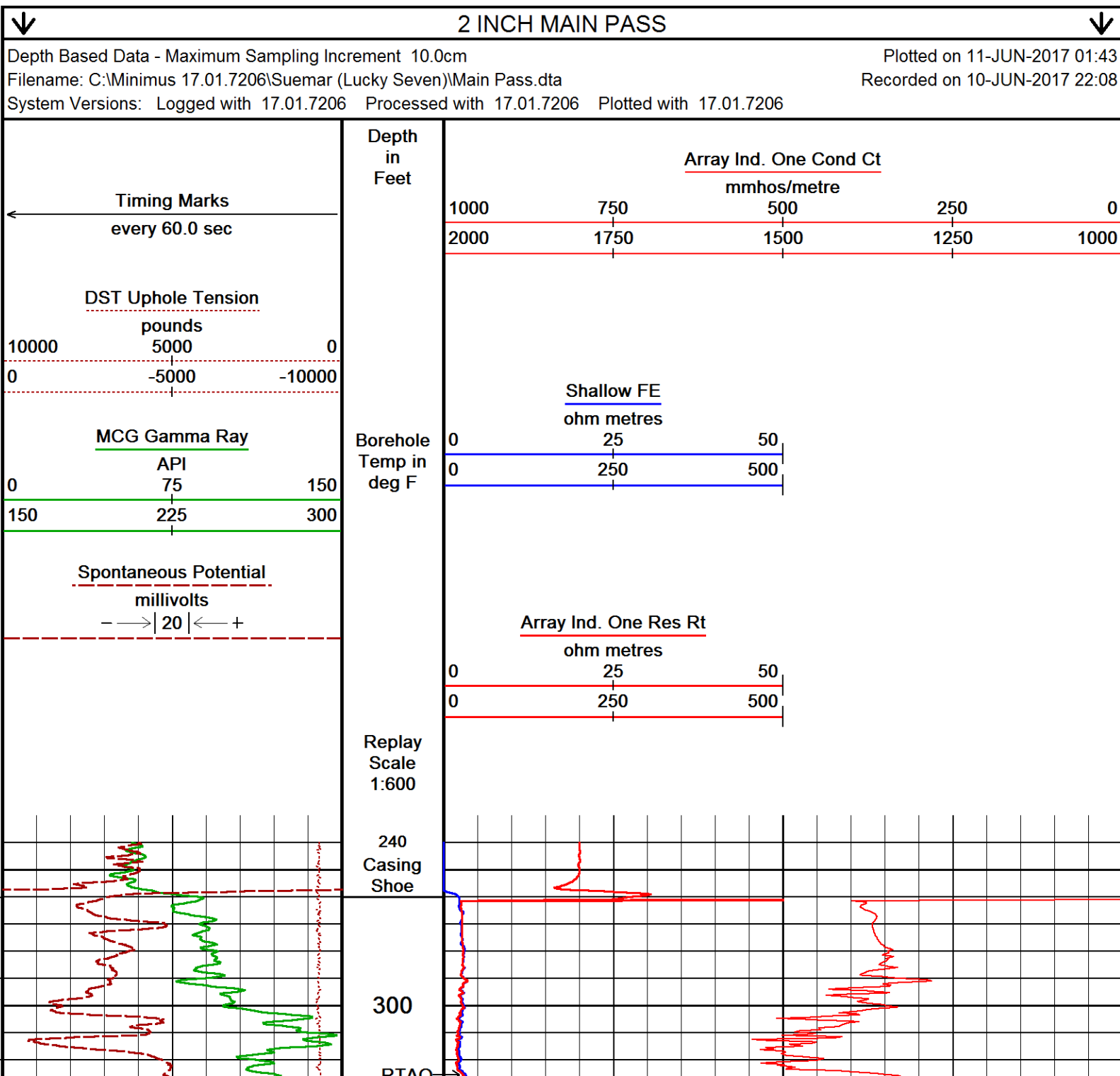
ANNULAR HOLE VOLUME FROM TD TO SURFACE CASING WITH 5.5" PRODUCTION CASING: 800 CU FT.

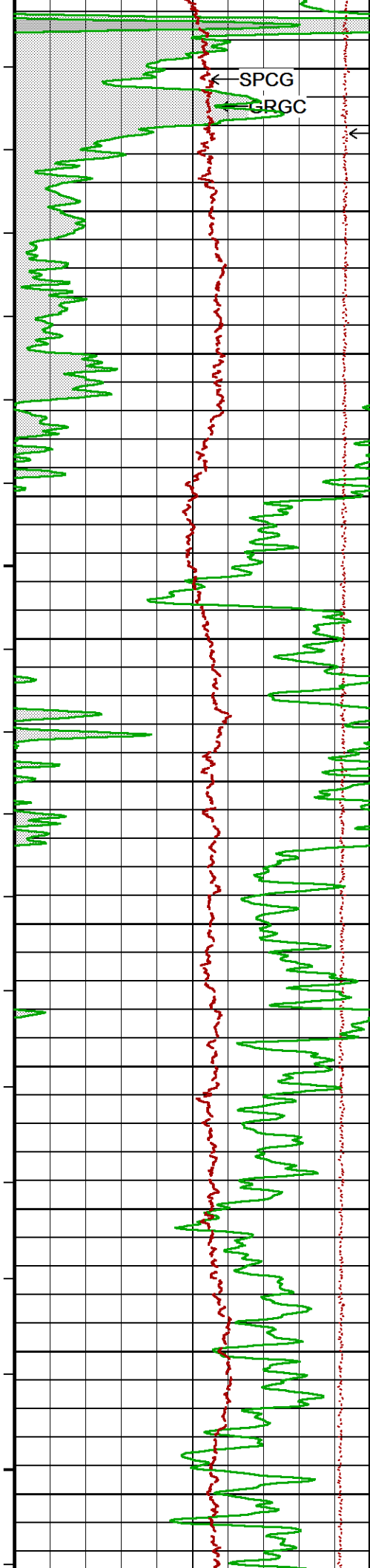
MUD PROPERTIES:

CHLORIDES: 1100 PPM

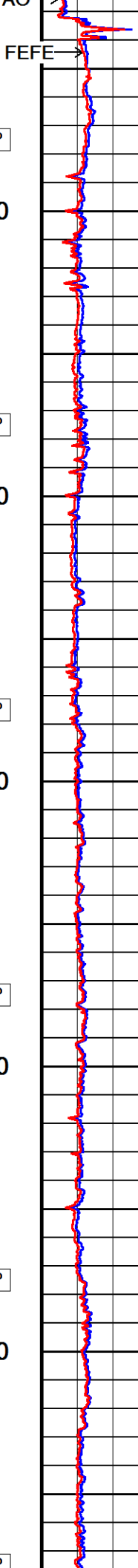
LCM: 6.0 LB/BB

In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.

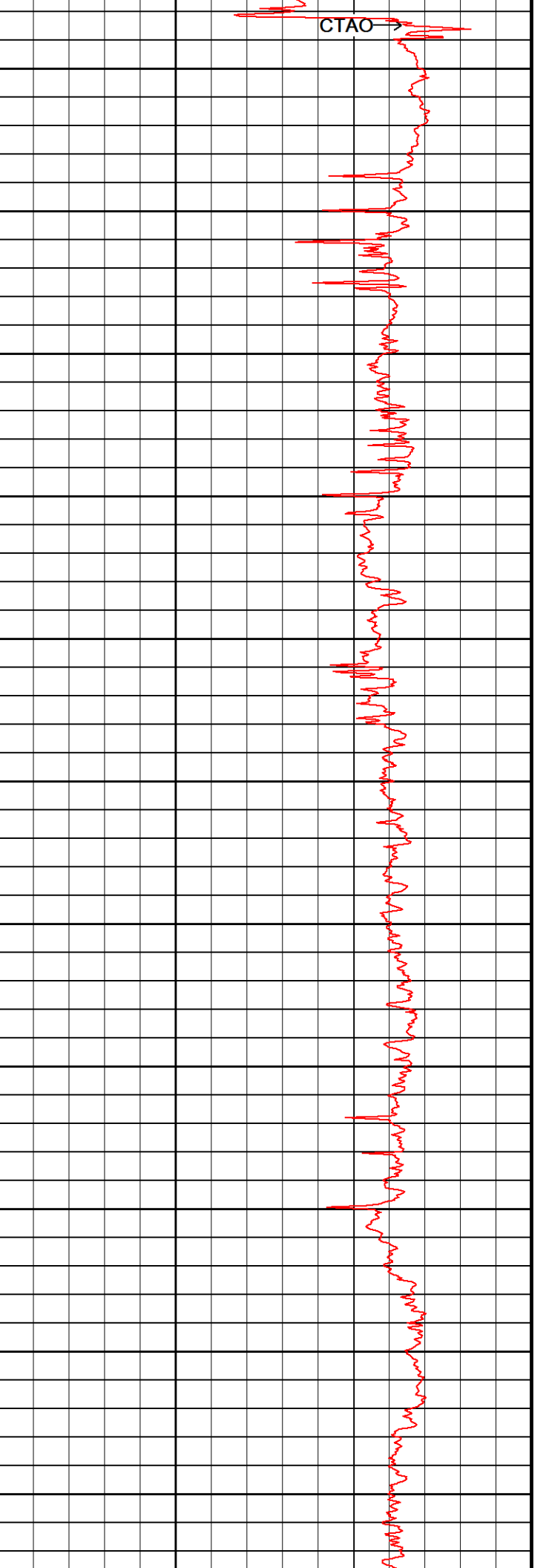




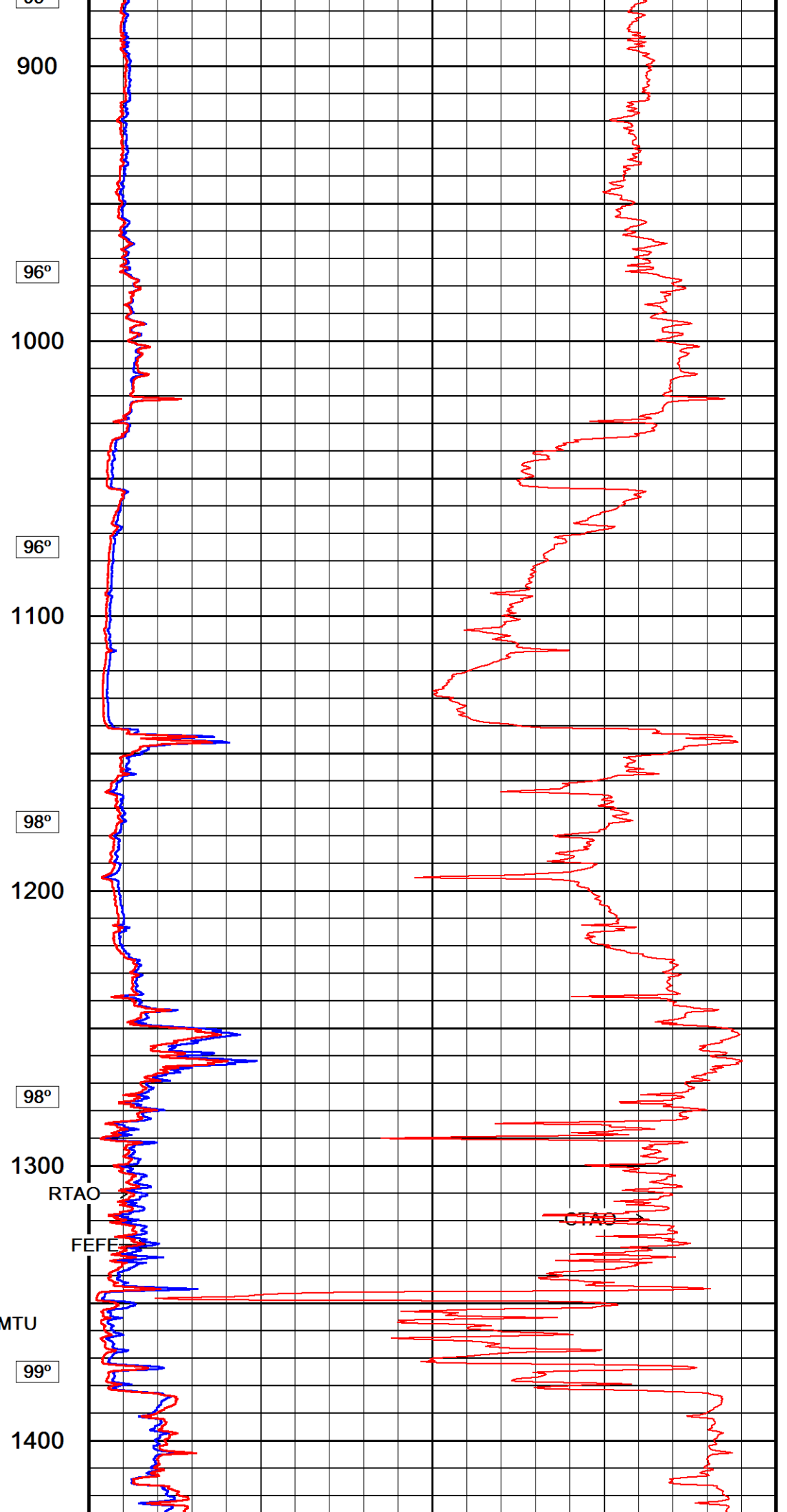
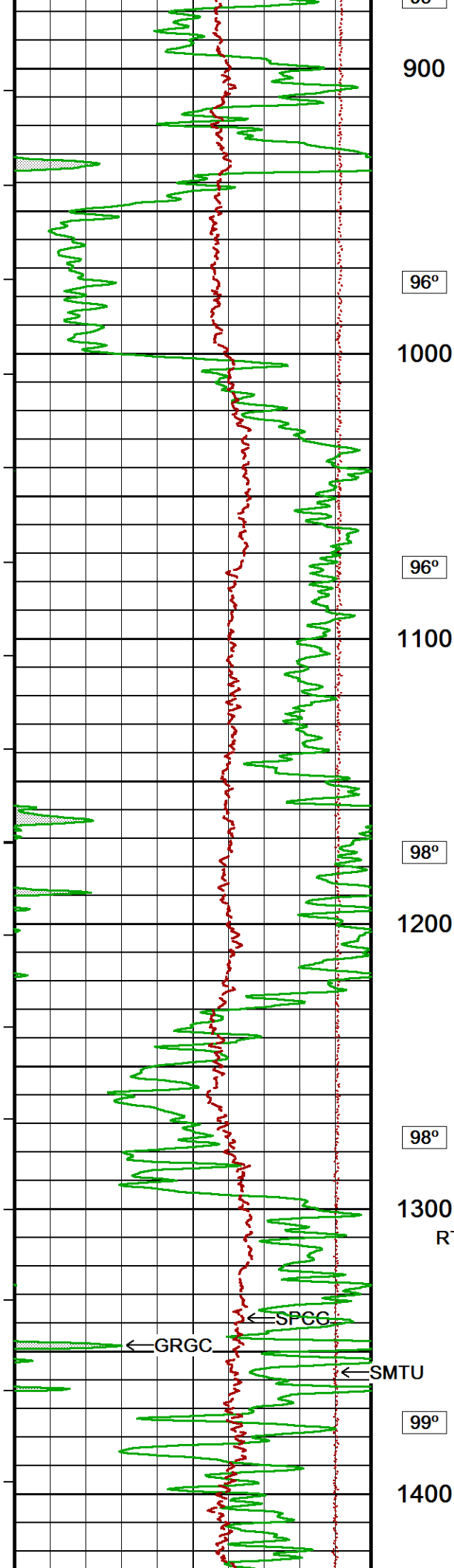
SPCG
GRGC
SM 92°
400
92°
500
94°
600
95°
700
95°
800
95°

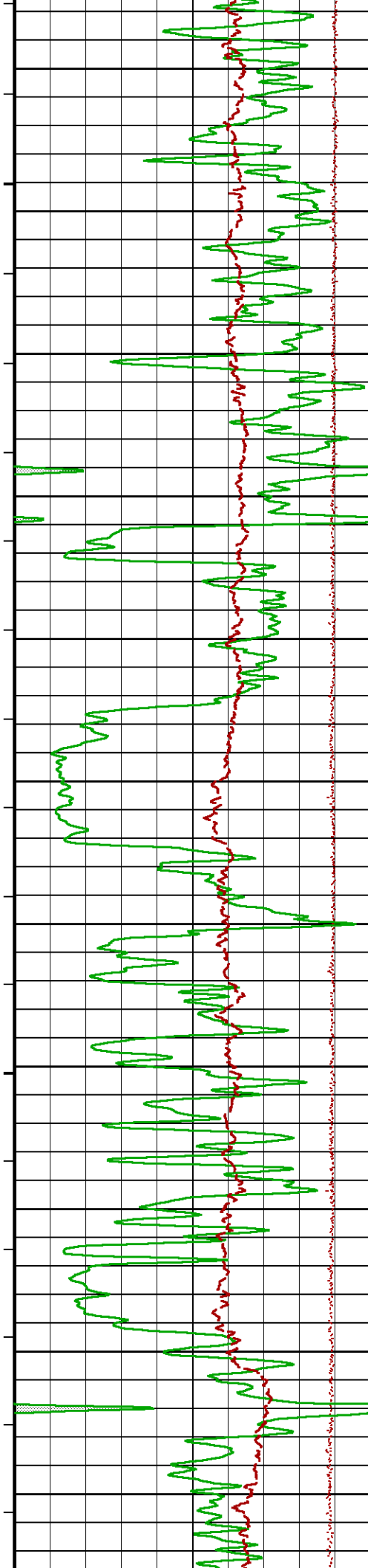


FEFE
92°
94°
95°
95°



CTAO
92°
94°
95°
95°





100°

1500

100°

1600

101°

1700

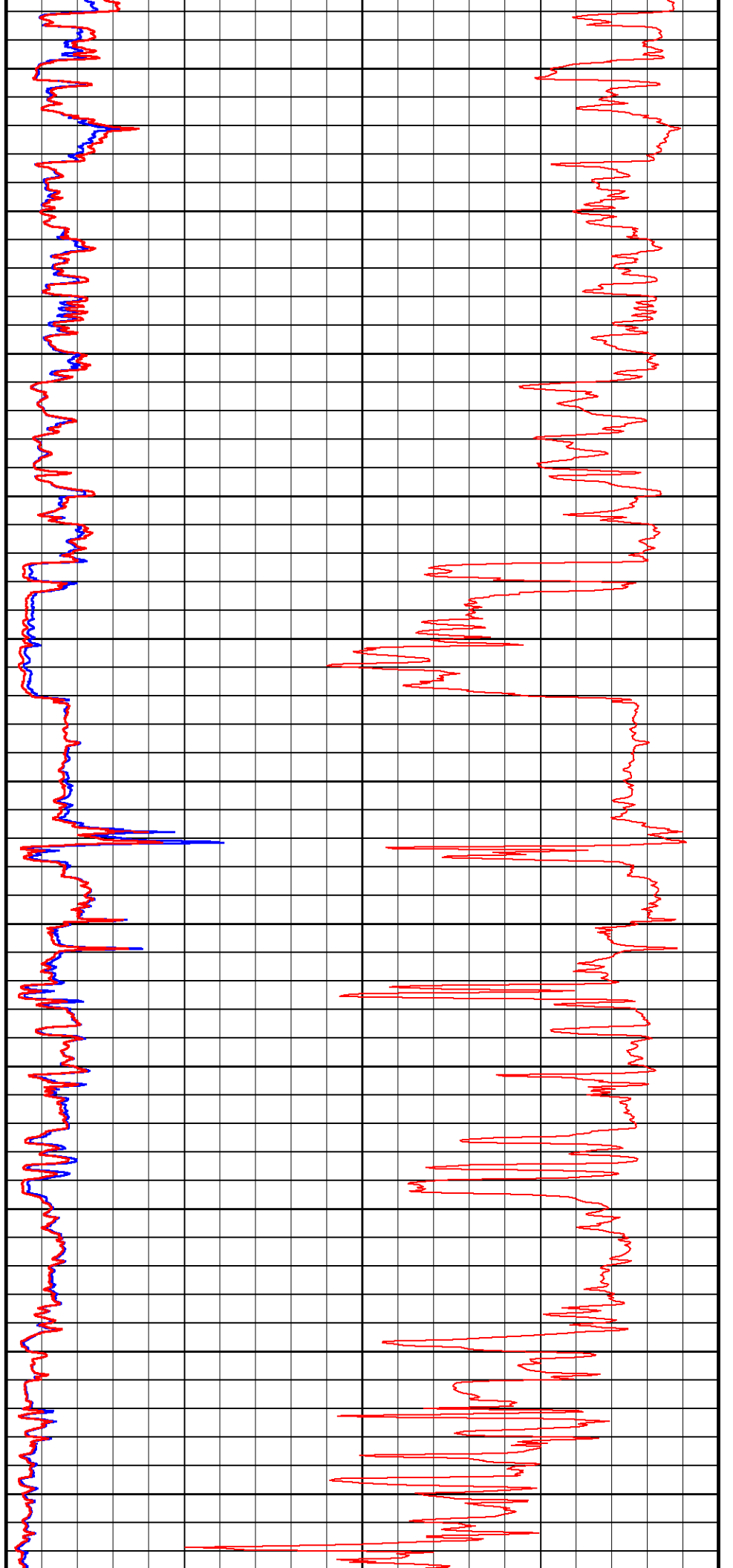
102°

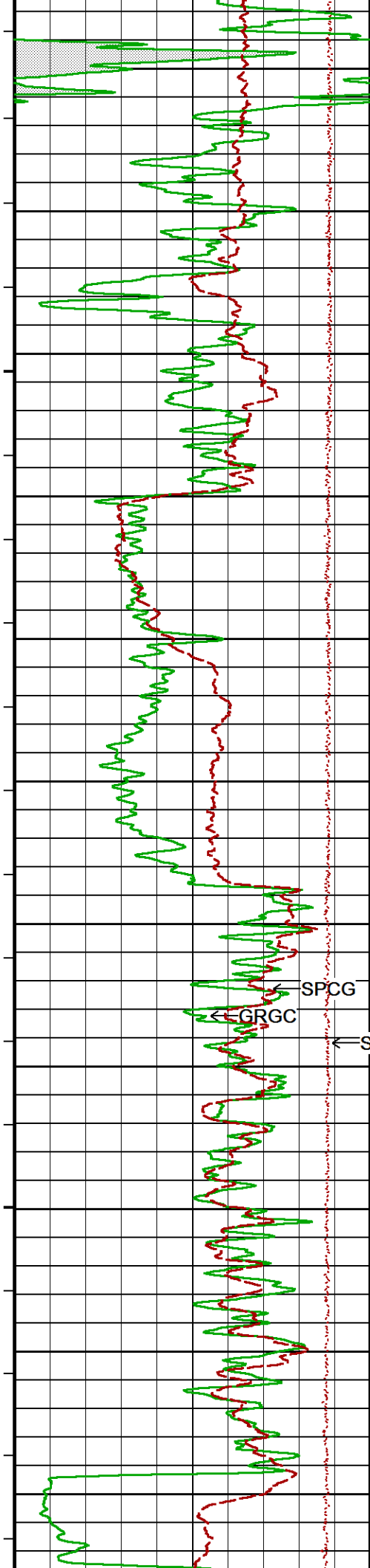
1800

102°

1900

103°



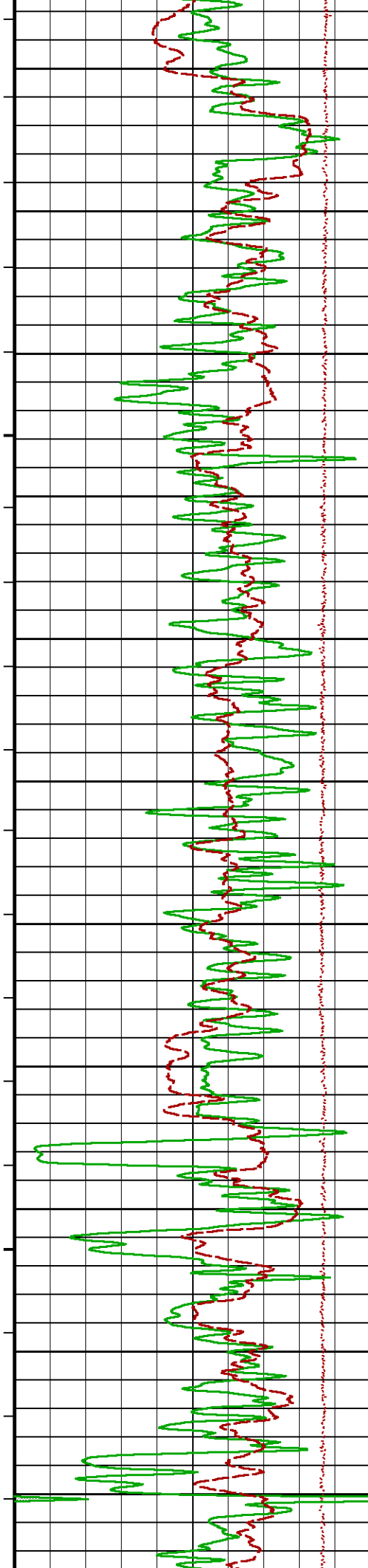


2000
104°
2100
104°
2200
105°
DTAO
2300
FEFE
SPCG
← GRGC
← SMTU

DTAO
FEFE

CTAO →

105°
2400
106°
2500



107°

2600

107°

2700

108°

2800

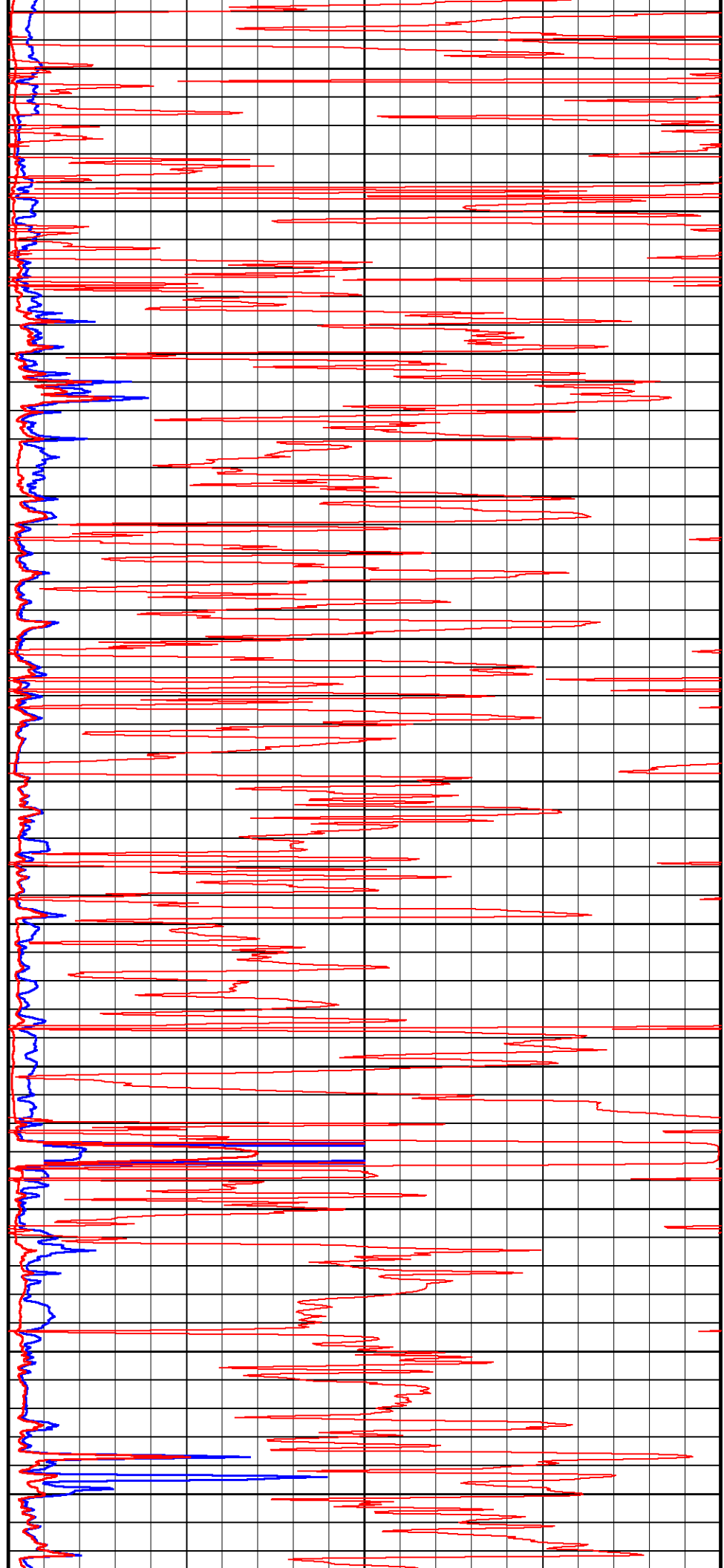
109°

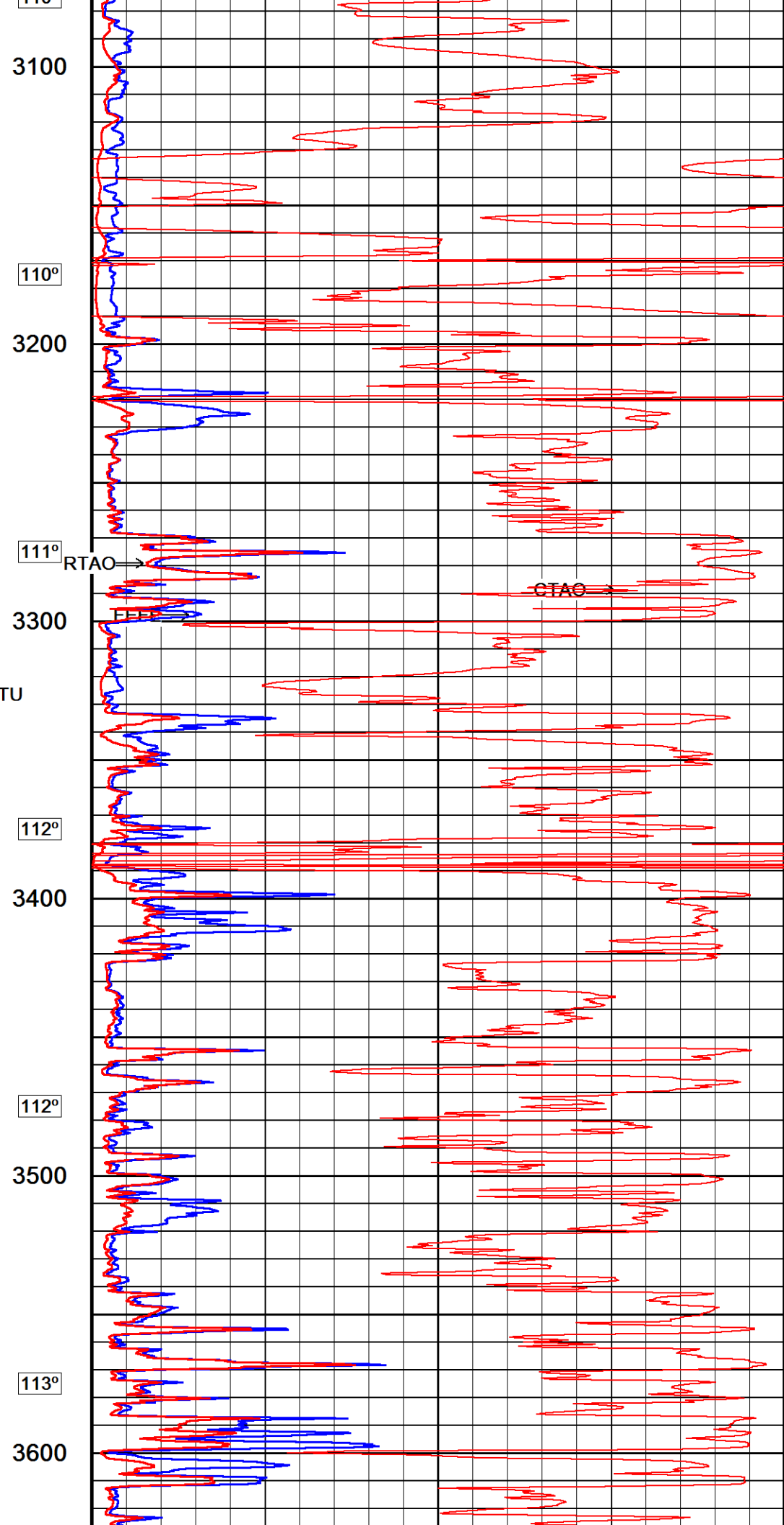
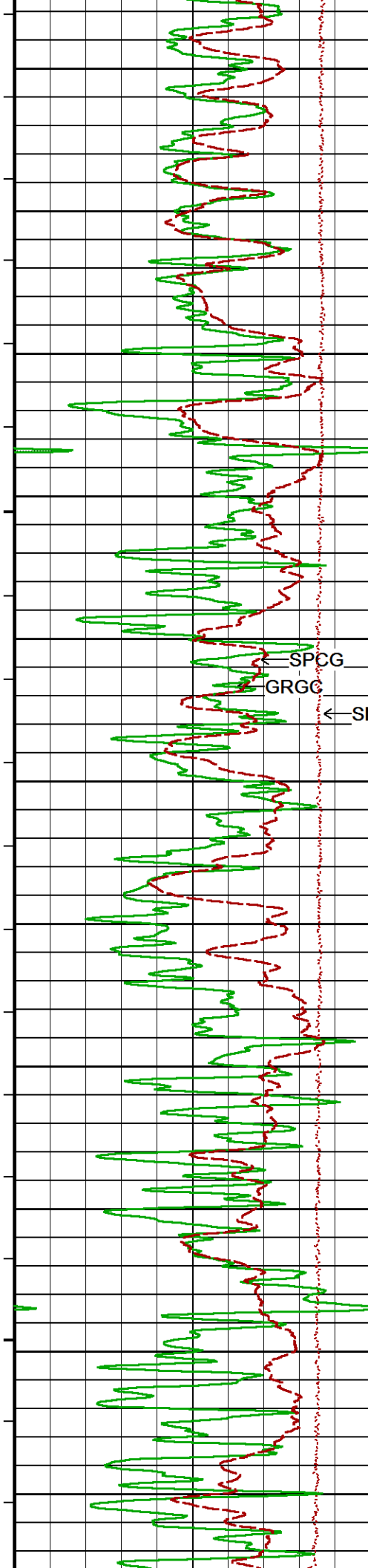
2900

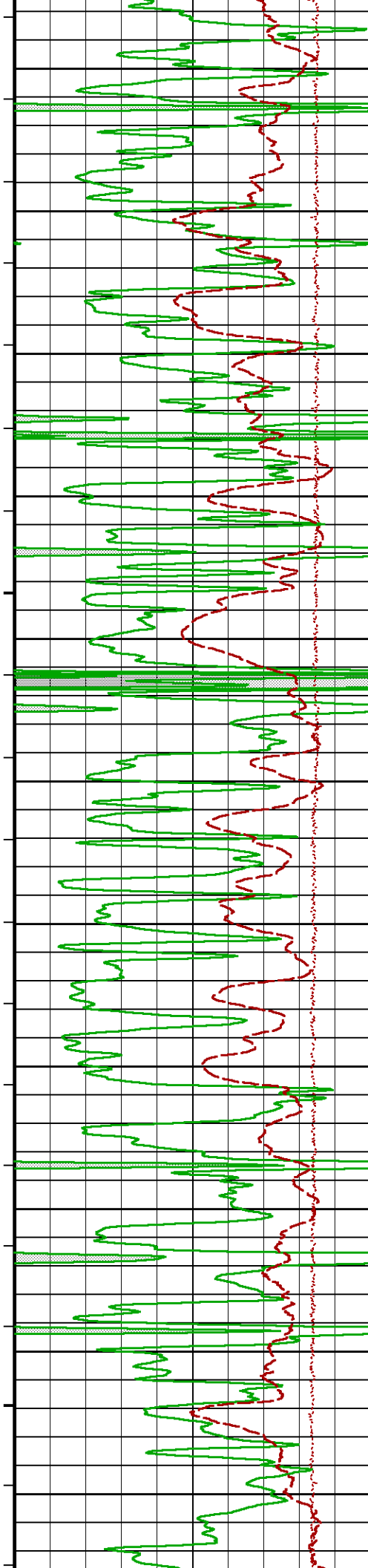
109°

3000

110°







114°

3700

115°

3800

115°

3900

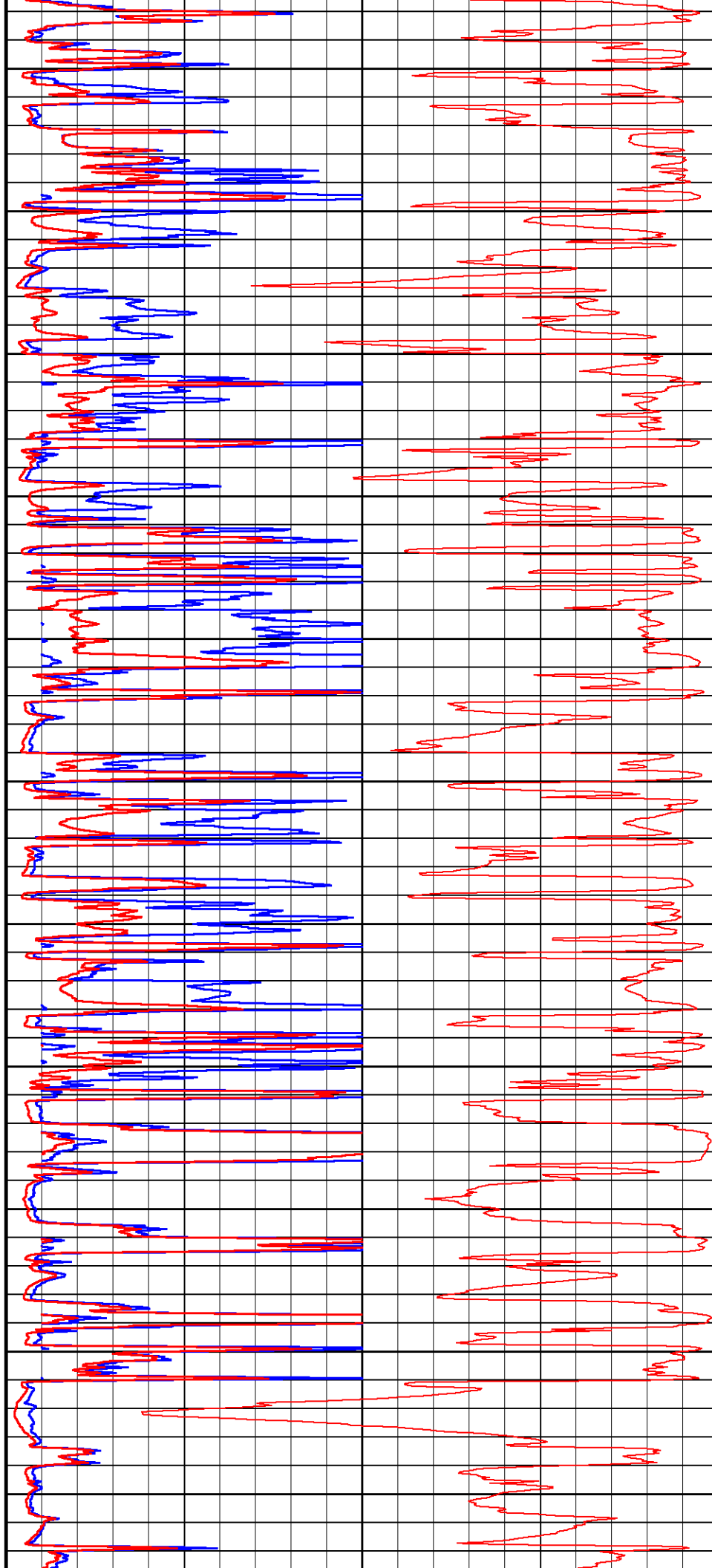
116°

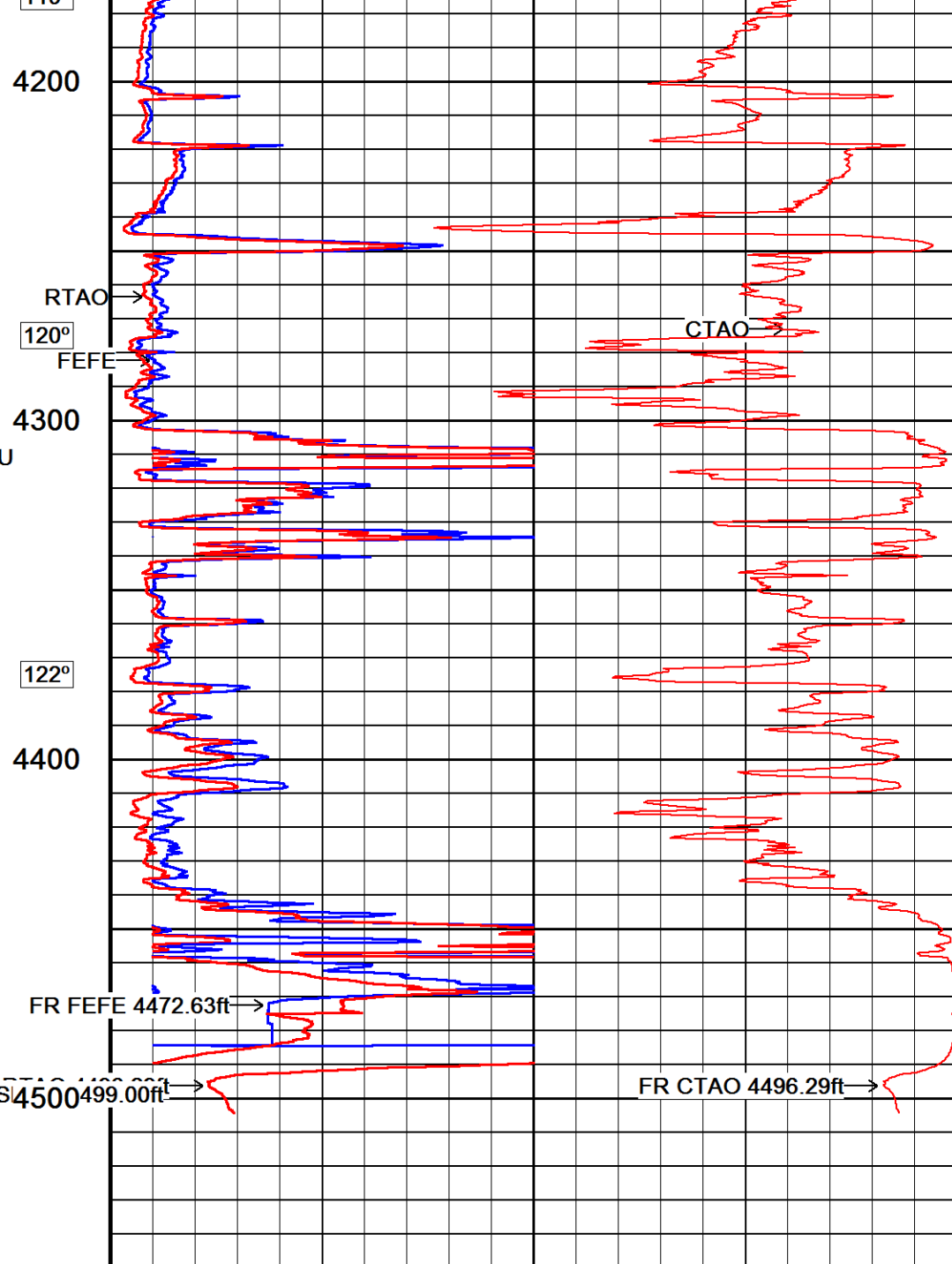
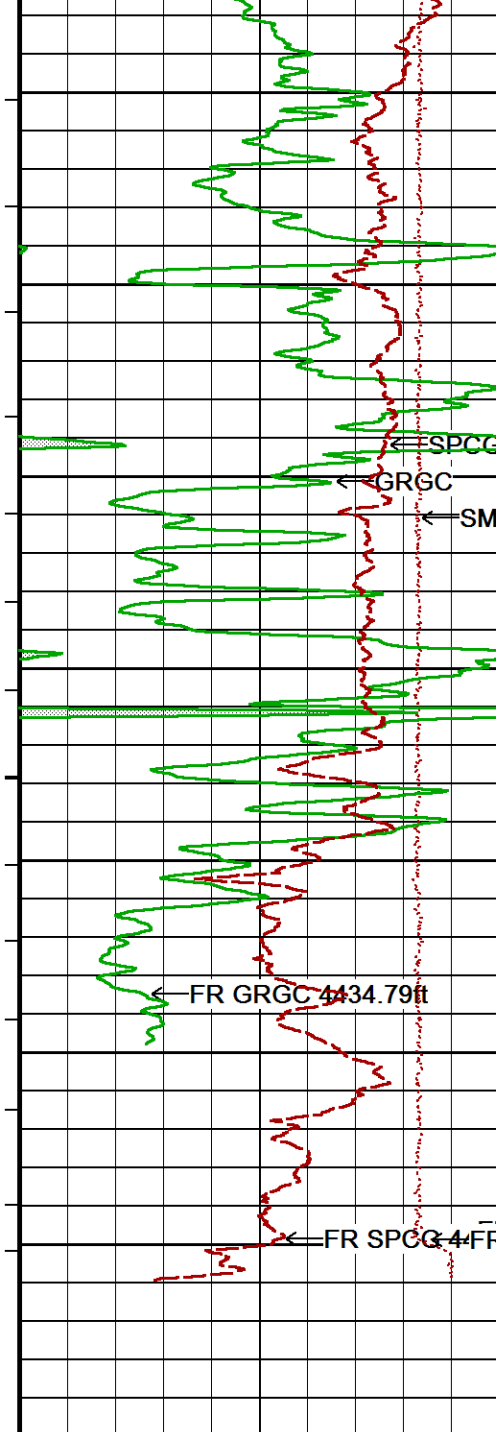
4000

118°

4100

119°





Timing Marks
every 60.0 sec

DST Uphole Tension
pounds

10000 5000 0
0 -5000 -10000

MCG Gamma Ray

0 API 150
75
150 225 300

Spontaneous Potential
millivolts

Depth
in
Feet

Borehole
Temp in
deg F

Array Ind. One Cond Ct

mmhos/metre

1000 750 500 250 0
2000 1750 1500 1250 1000

Shallow FE
ohm metres

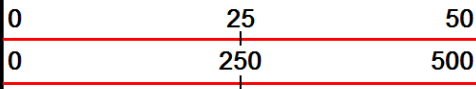
0 25 50
0 250 500

millivolts

— —> | 20 | <— +

Array Ind. One Res Rt

ohm metres



Replay
Scale
1:600

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 11-JUN-2017 01:43

Filename: C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Main Pass.dta

Recorded on 10-JUN-2017 22:08

System Versions: Logged with 17.01.7206 Processed with 17.01.7206 Plotted with 17.01.7206



2 INCH MAIN PASS



5 INCH MAIN PASS



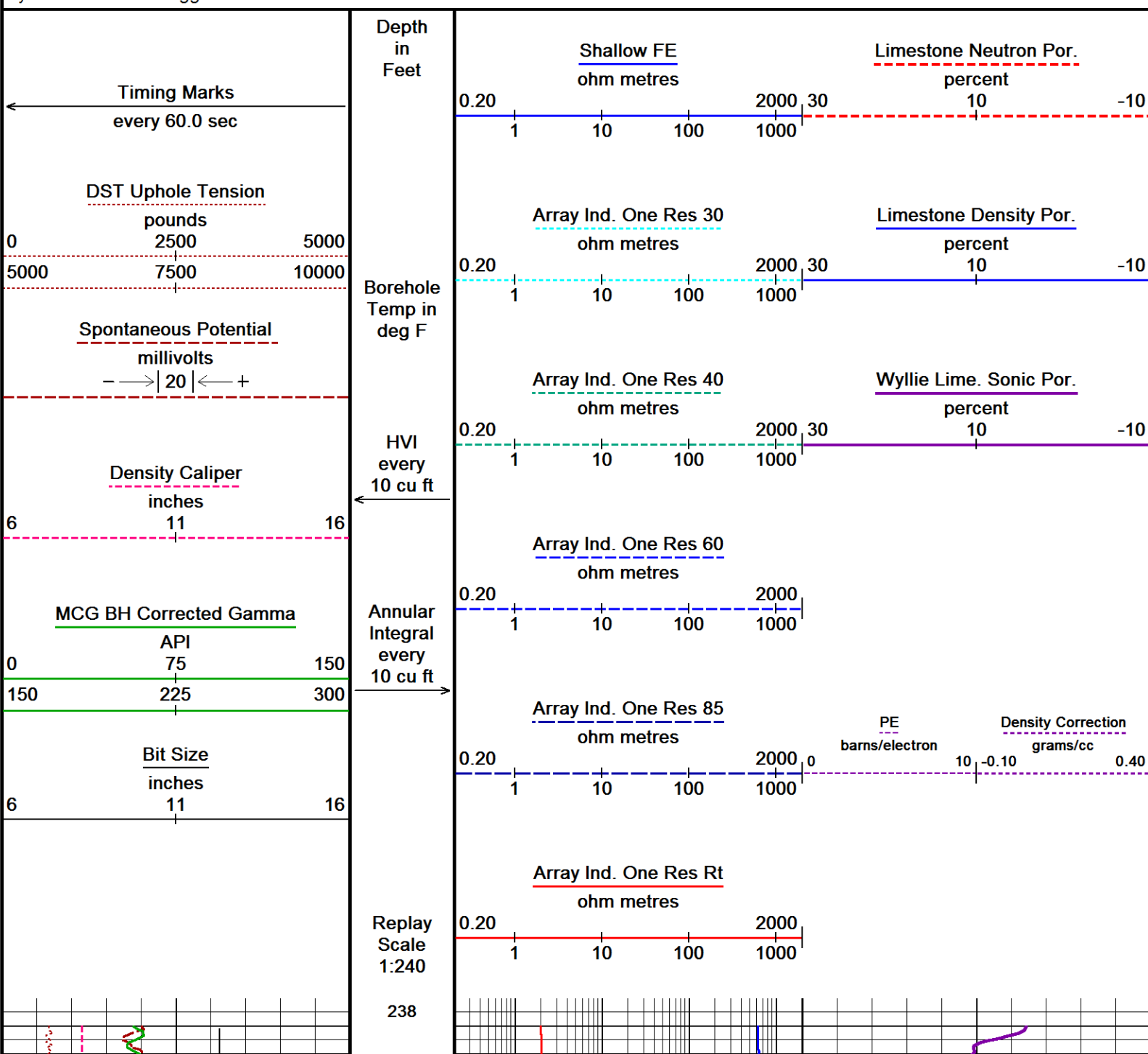
Depth Based Data - Maximum Sampling Increment 10.0cm

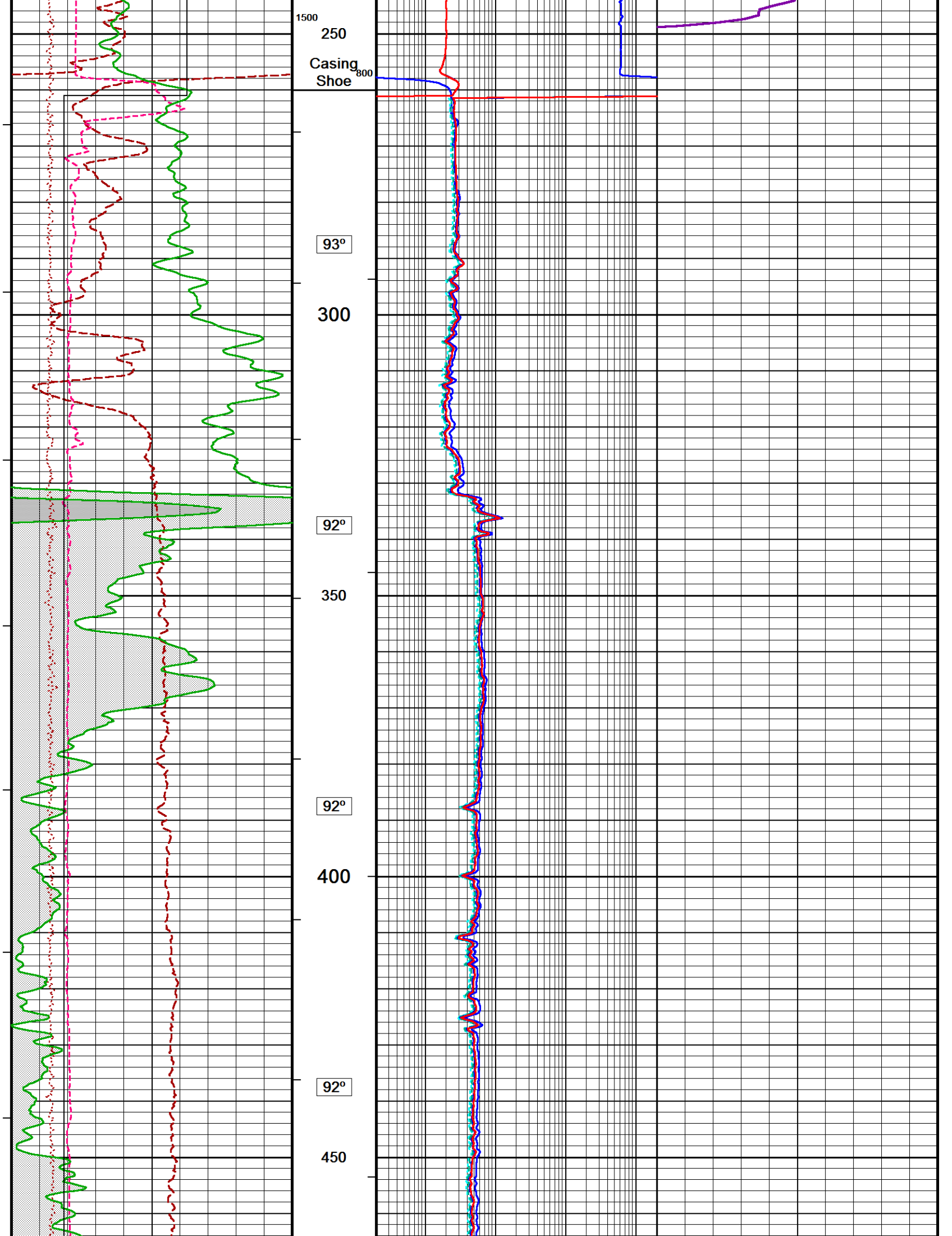
Plotted on 11-JUN-2017 01:43

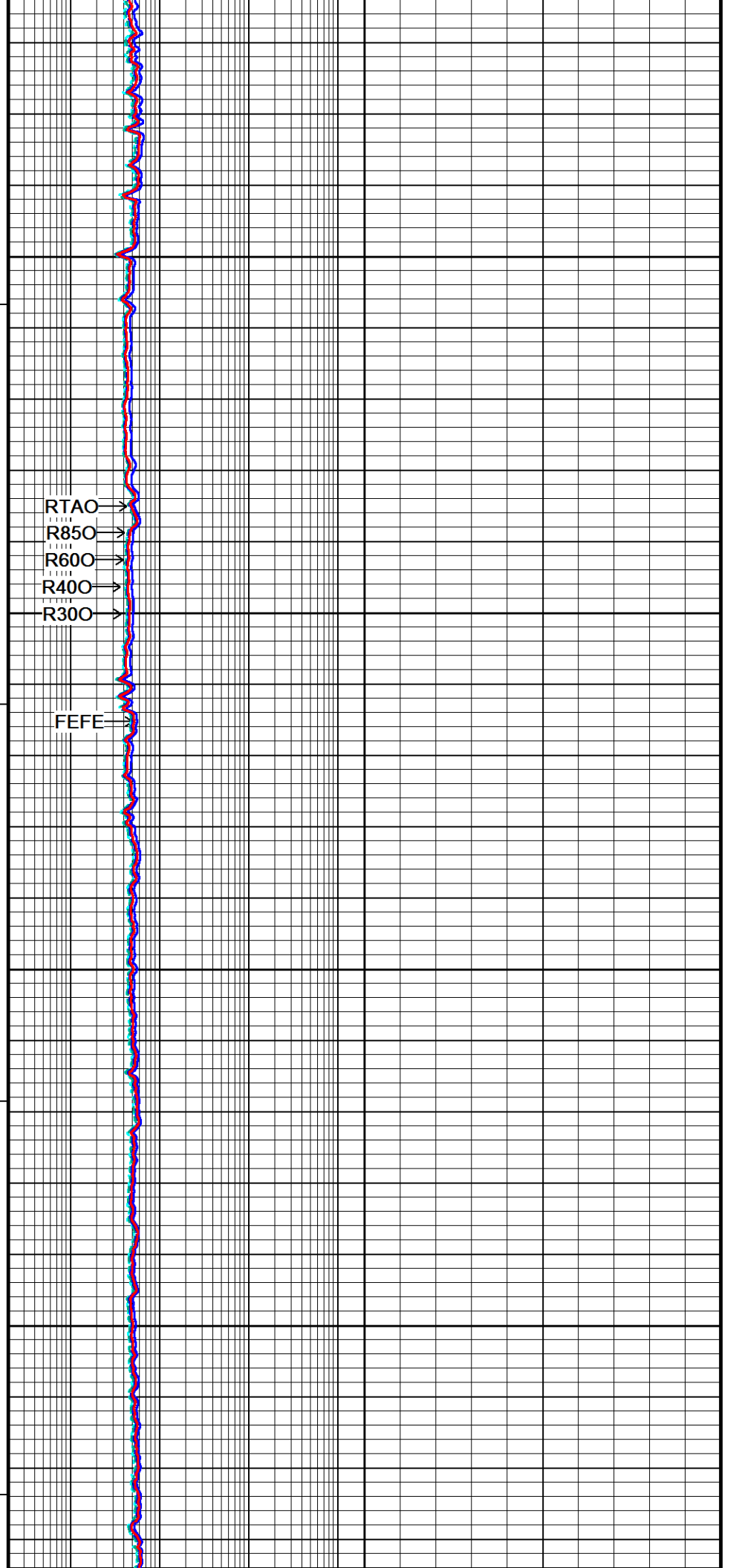
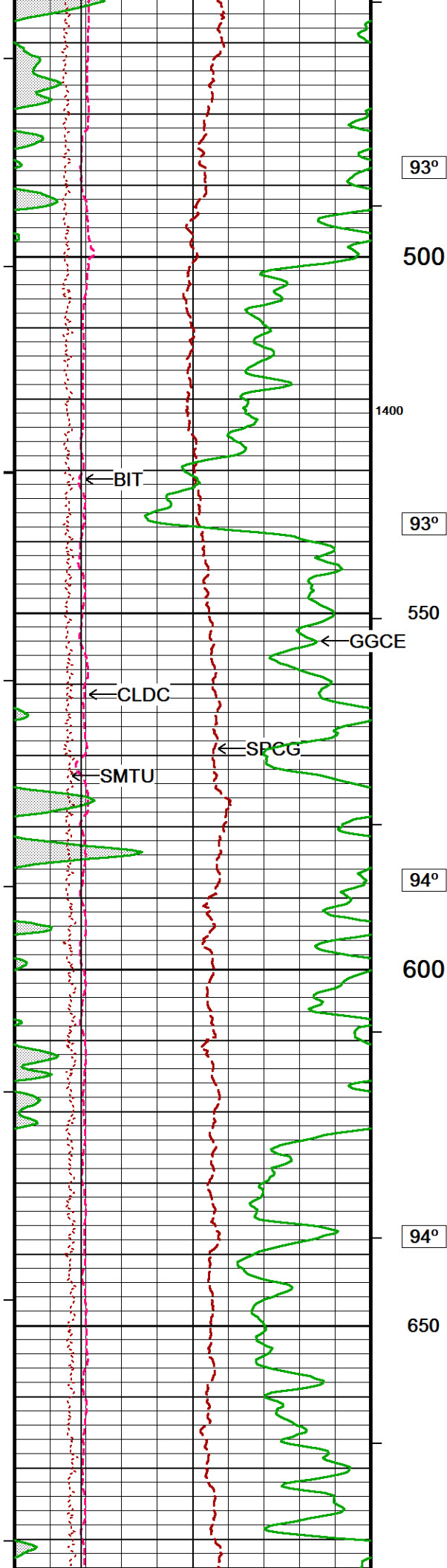
Filename: C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Main Pass.dta

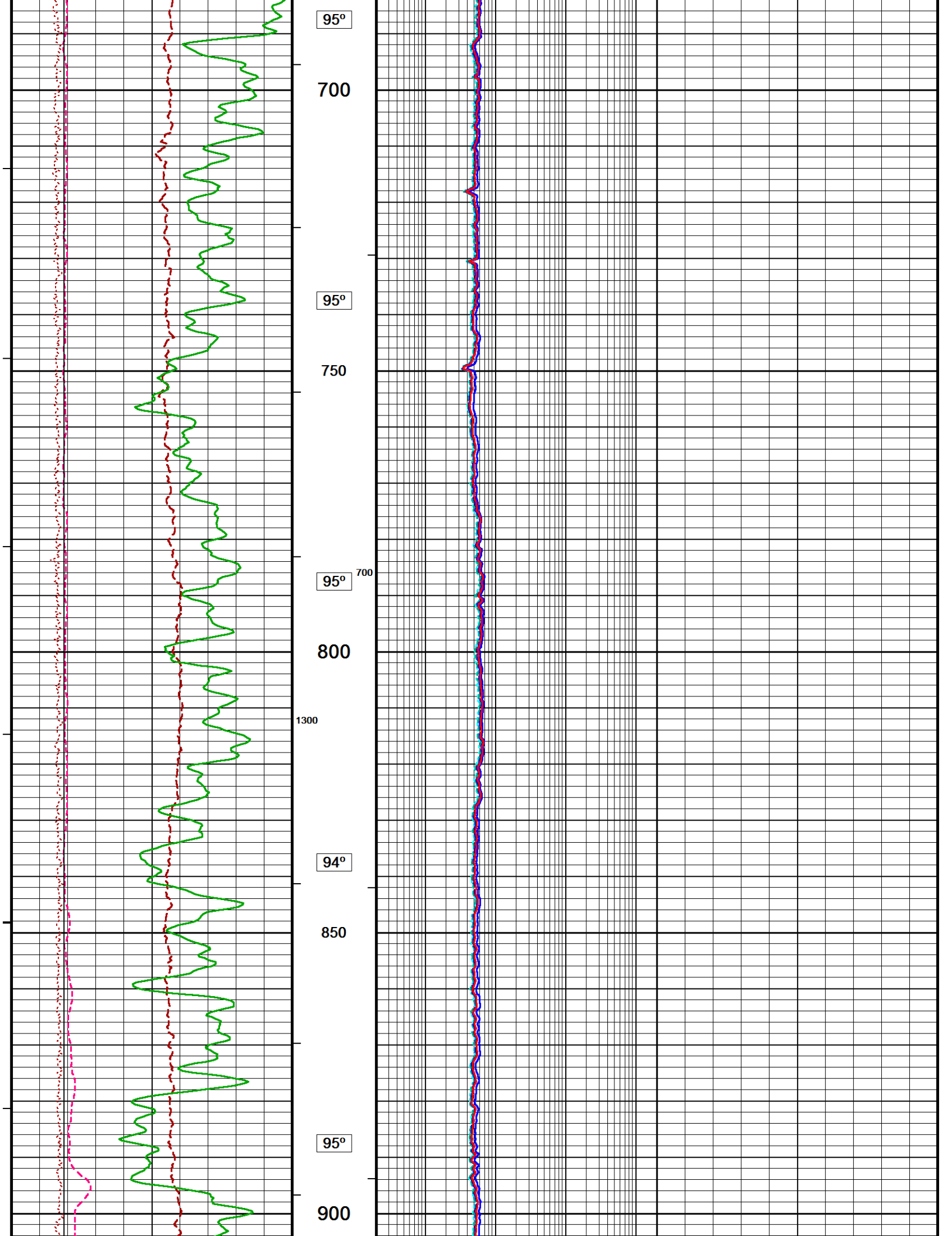
Recorded on 10-JUN-2017 22:08

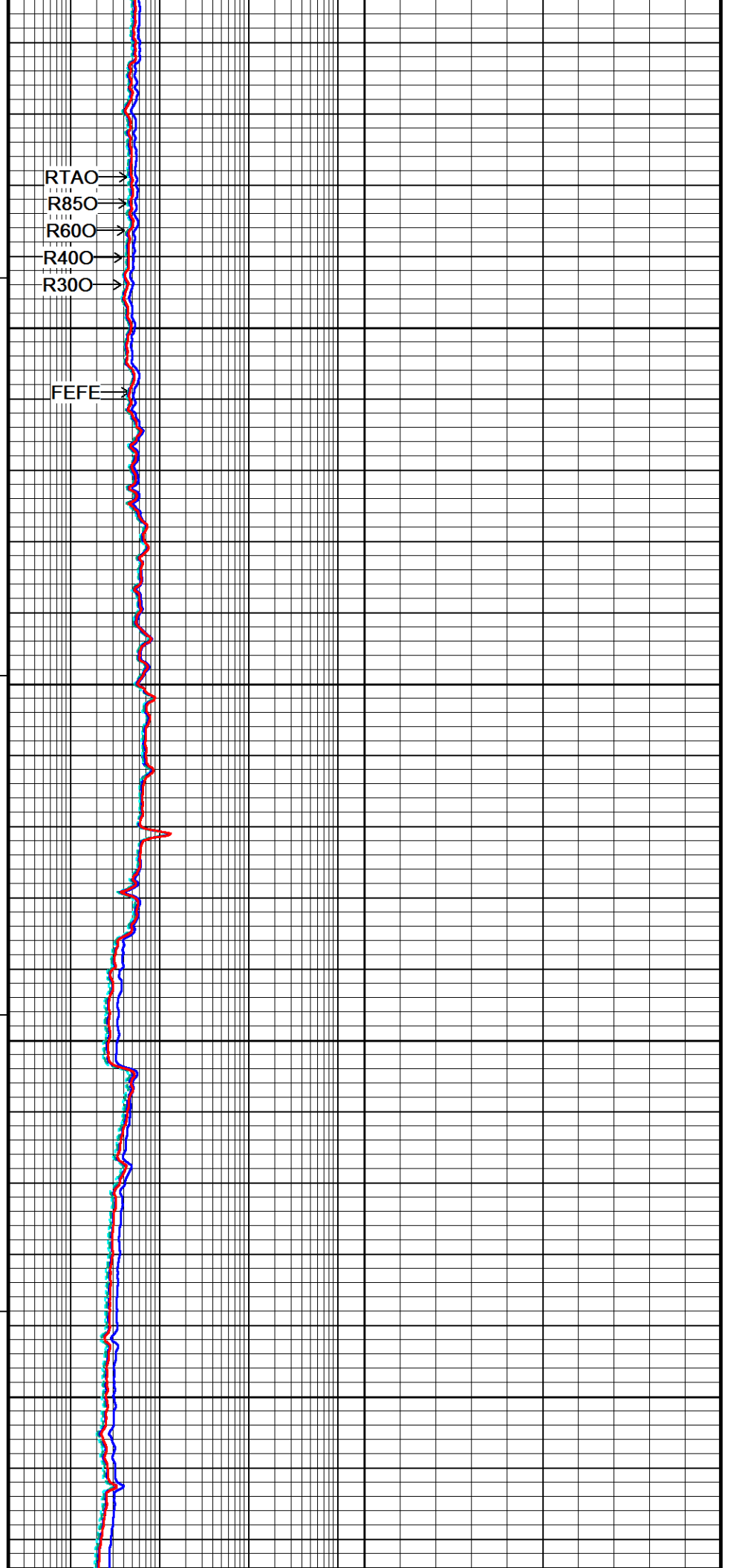
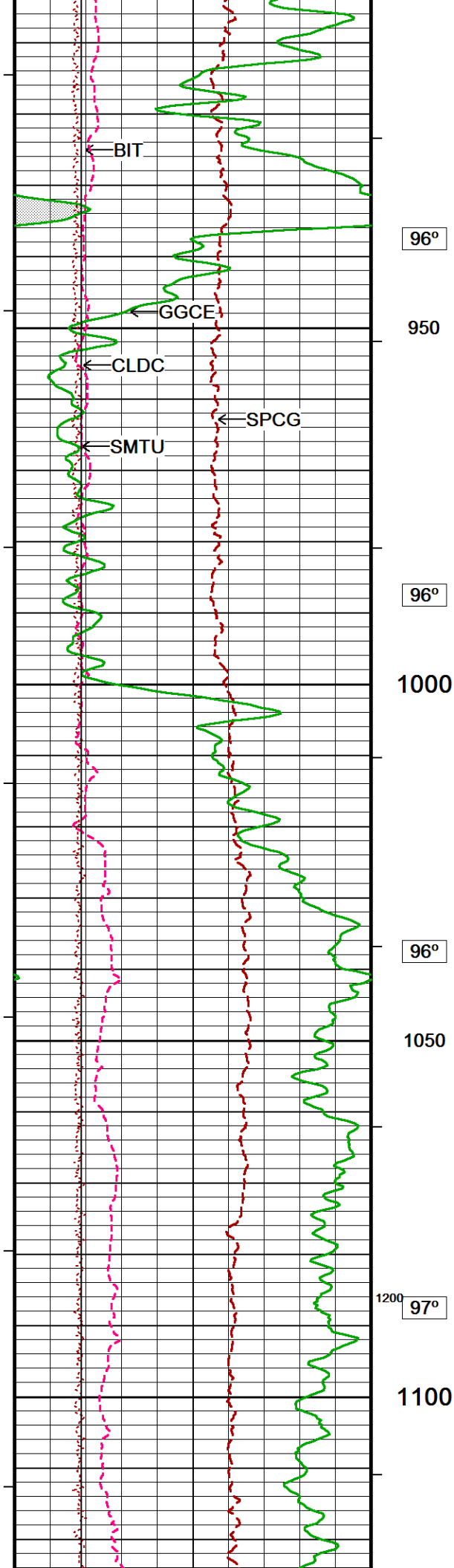
System Versions: Logged with 17.01.7206 Processed with 17.01.7206 Plotted with 17.01.7206

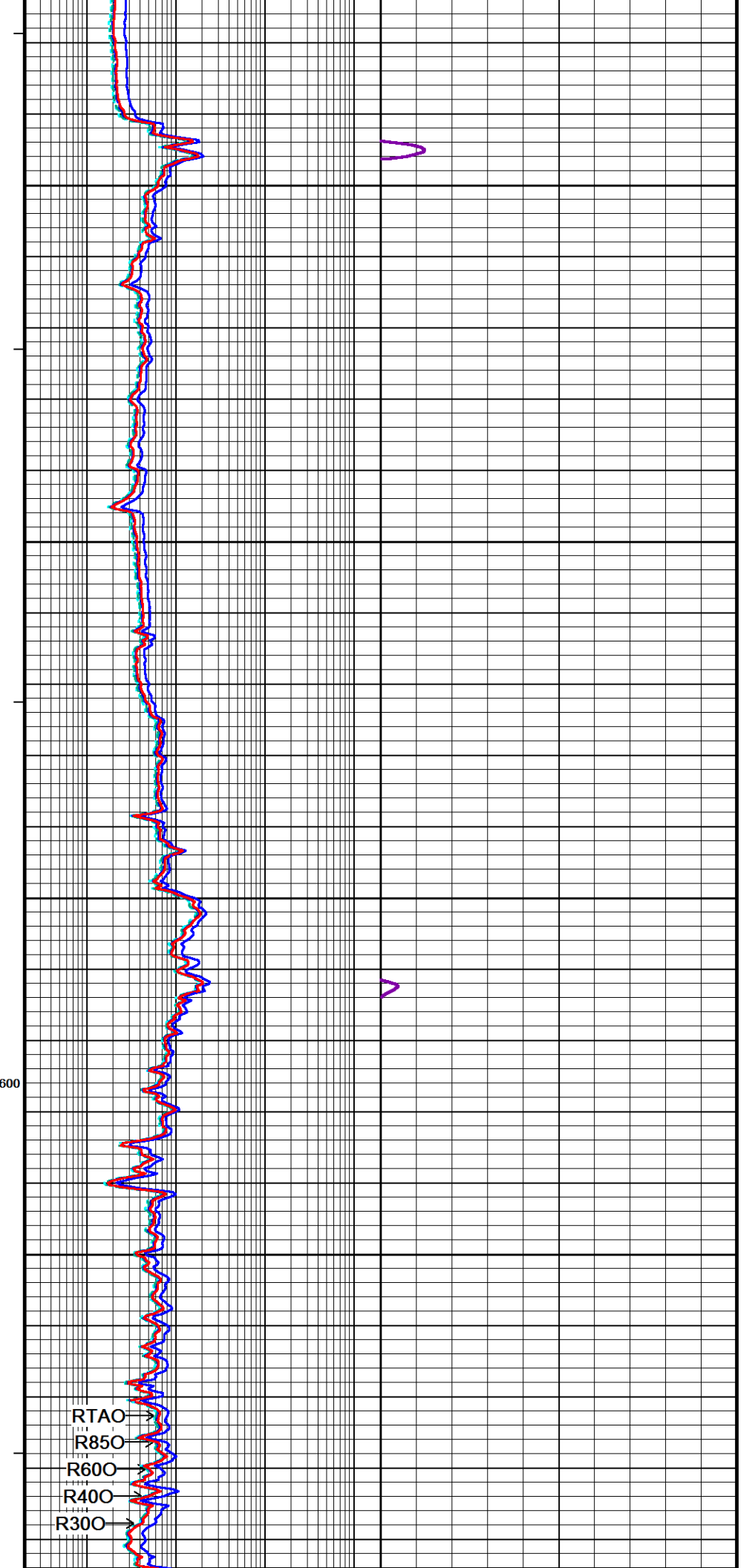
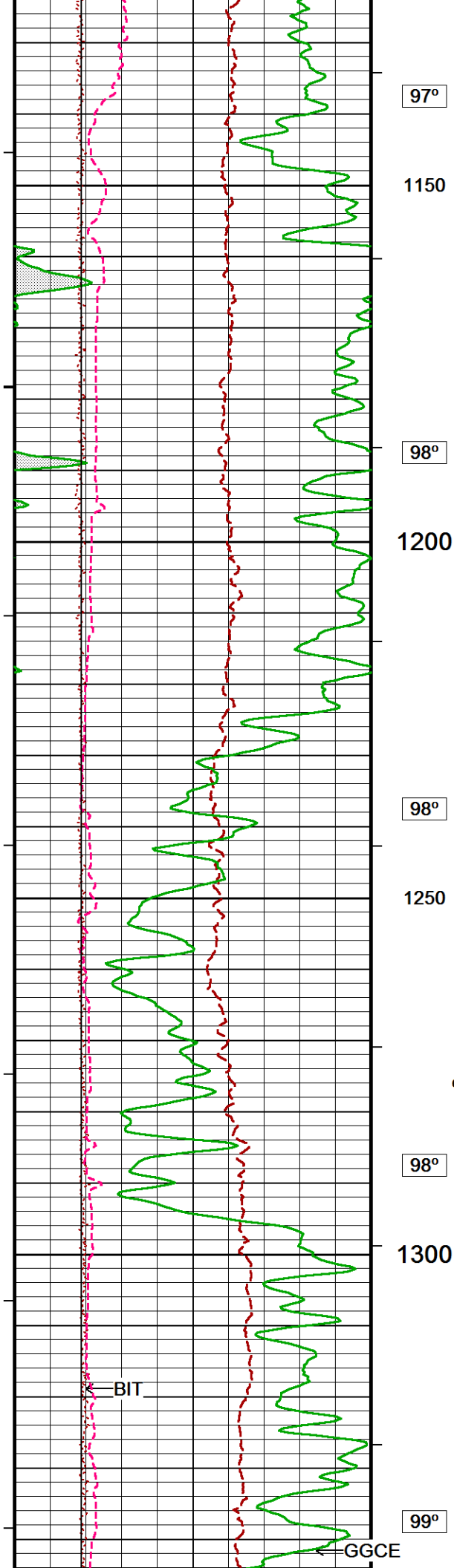


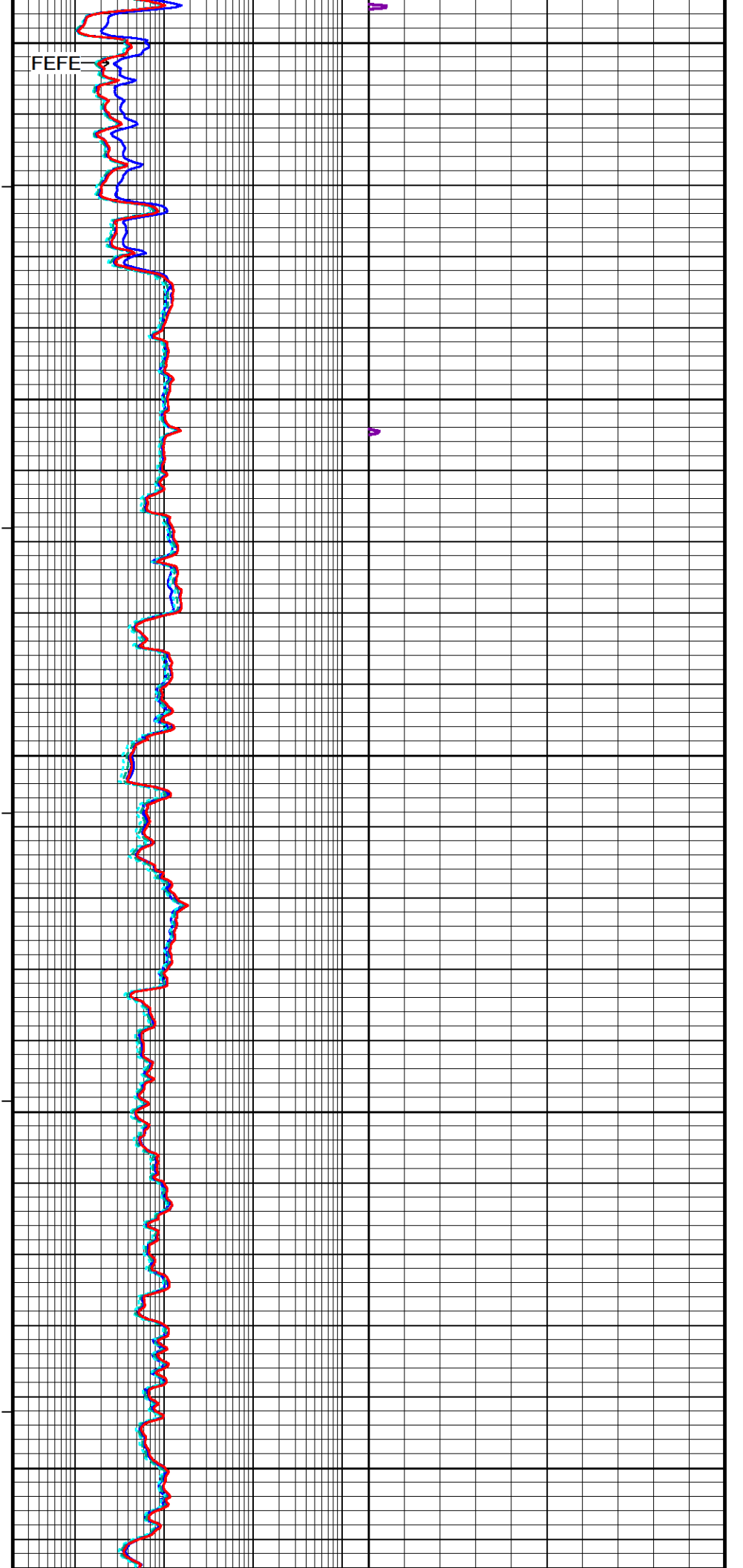
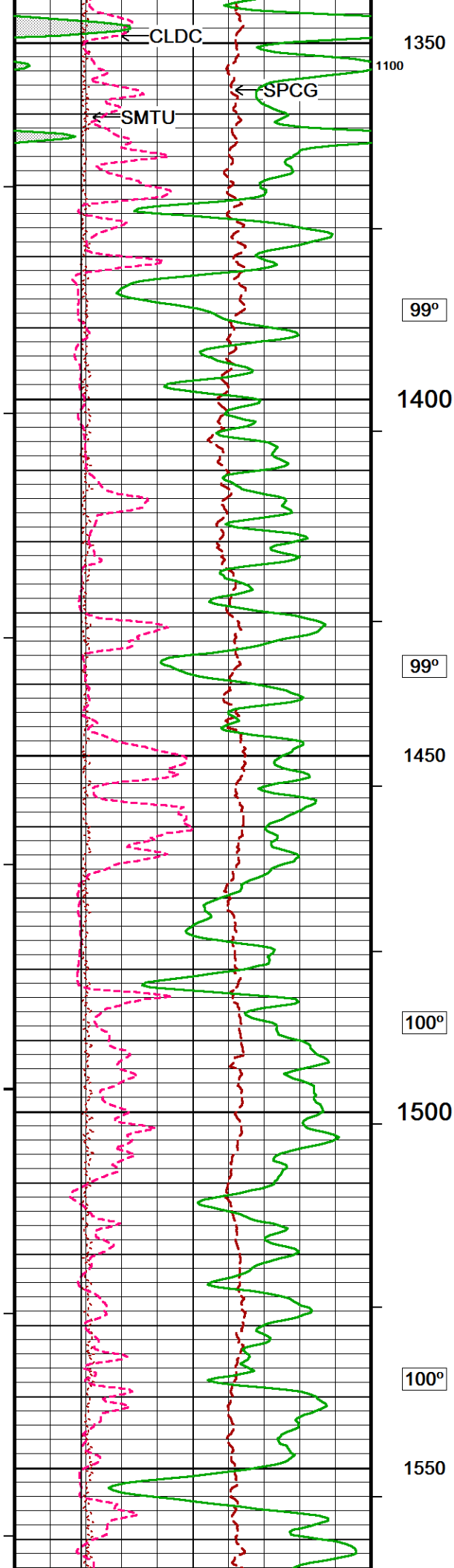


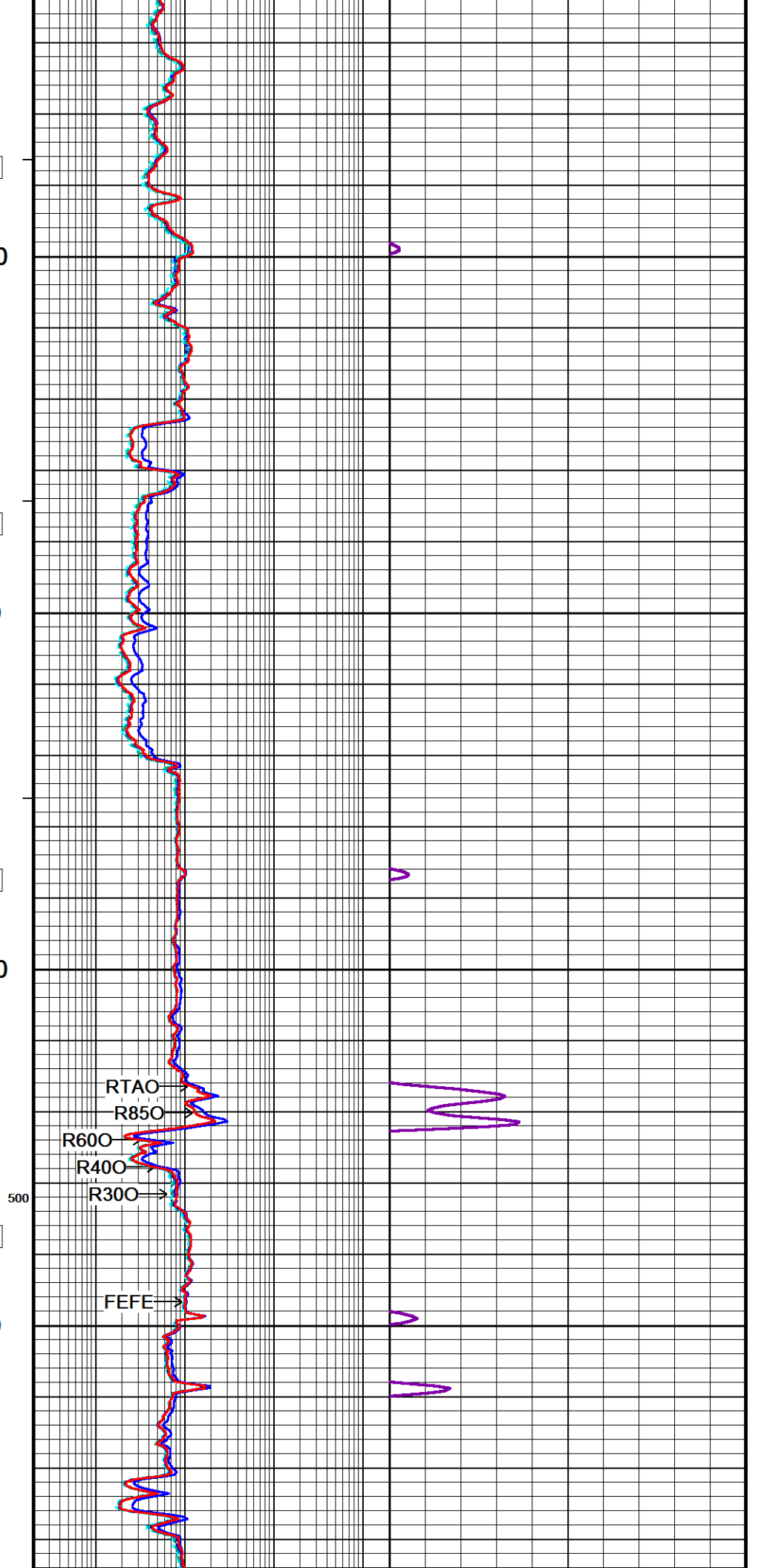
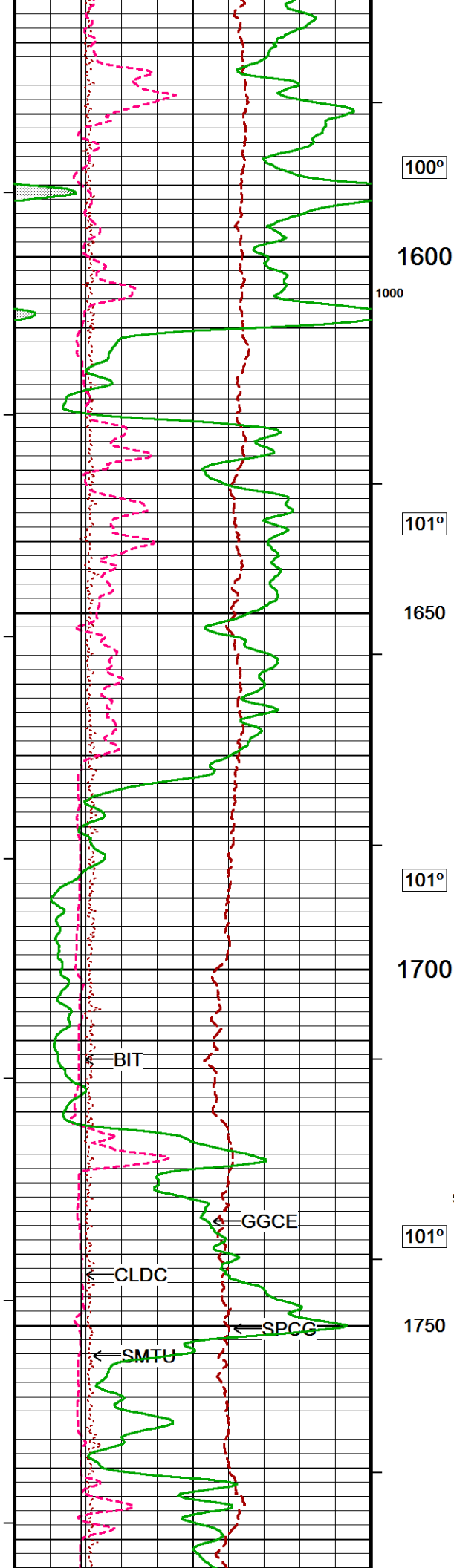


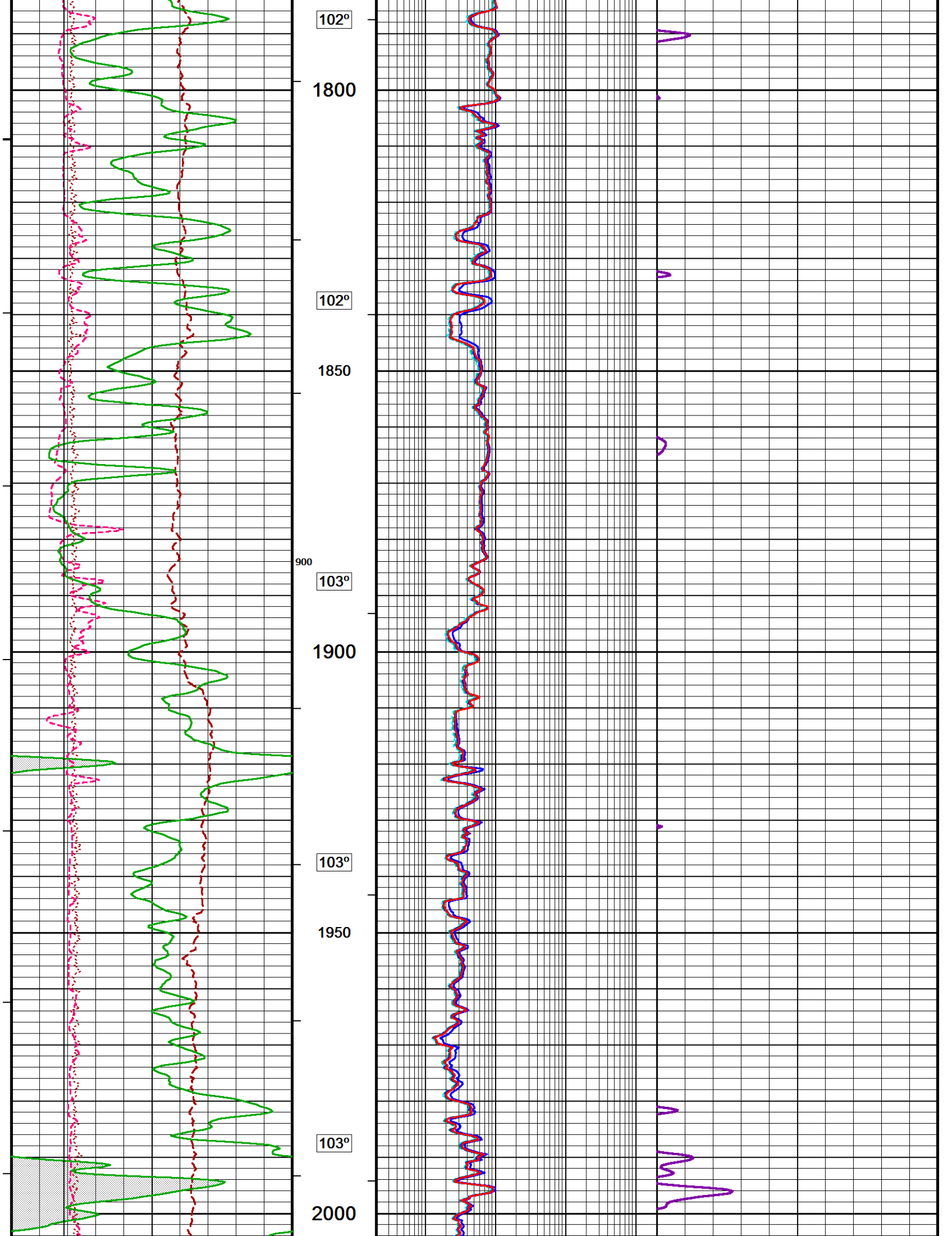


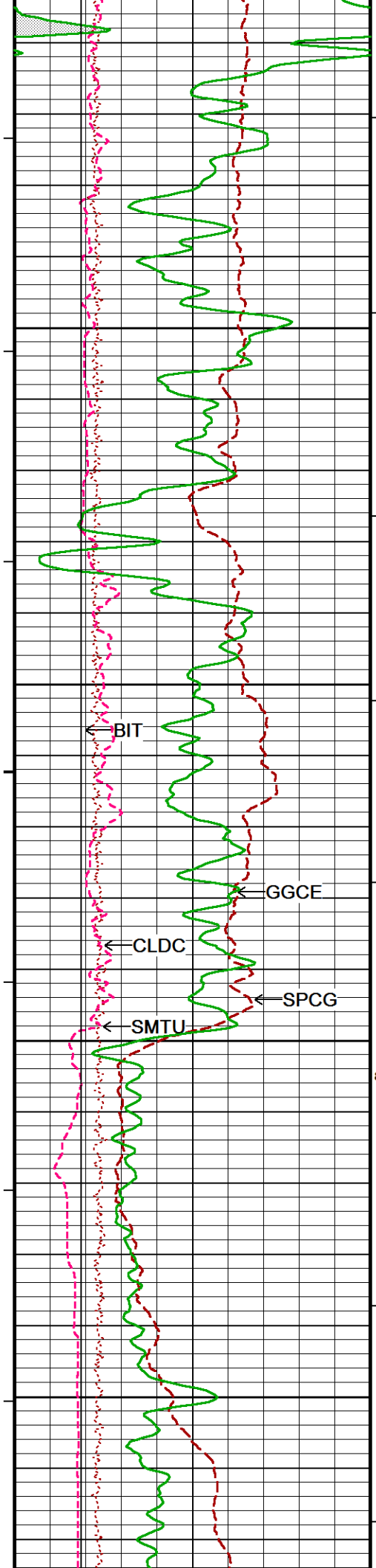




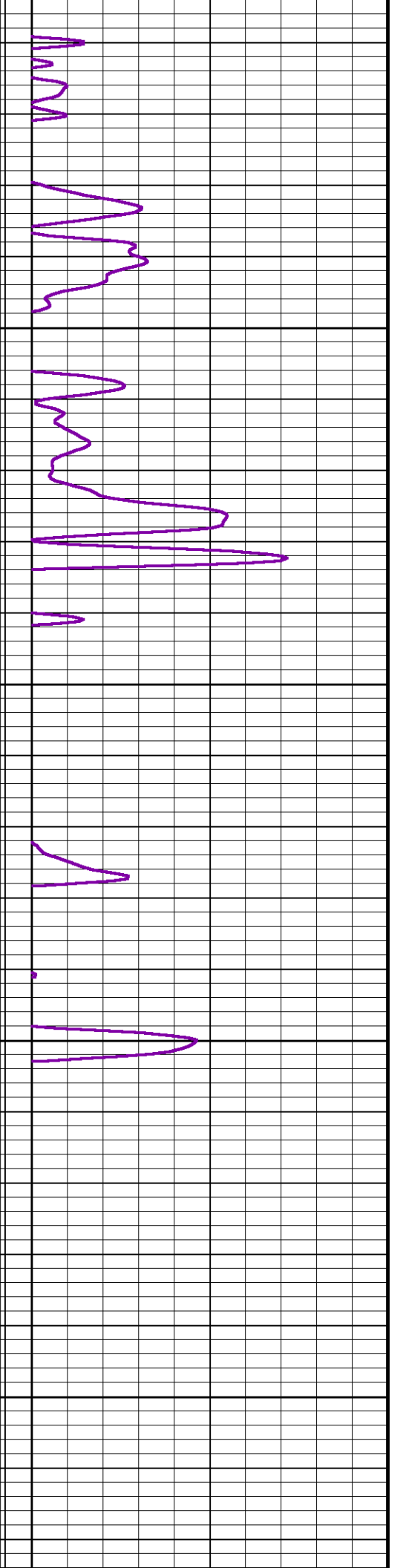
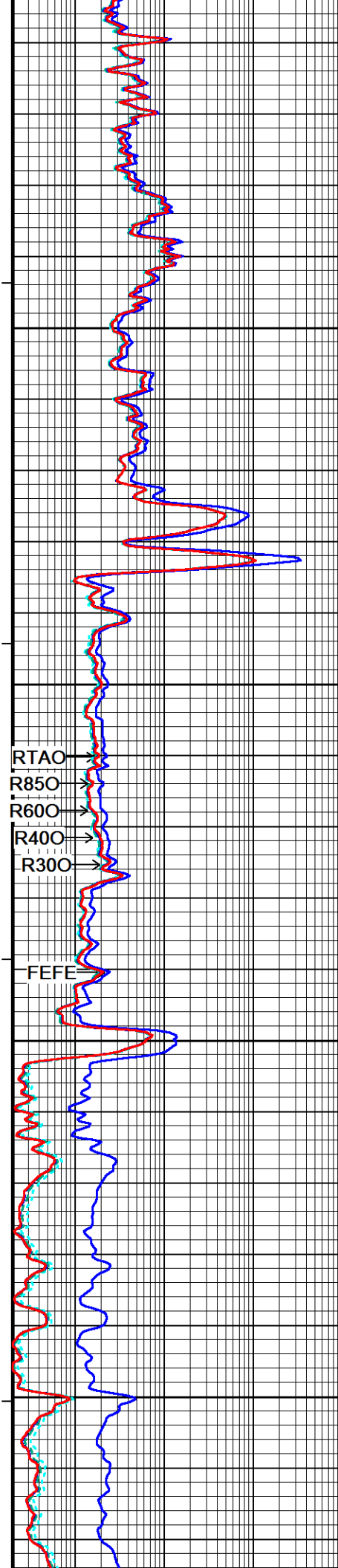


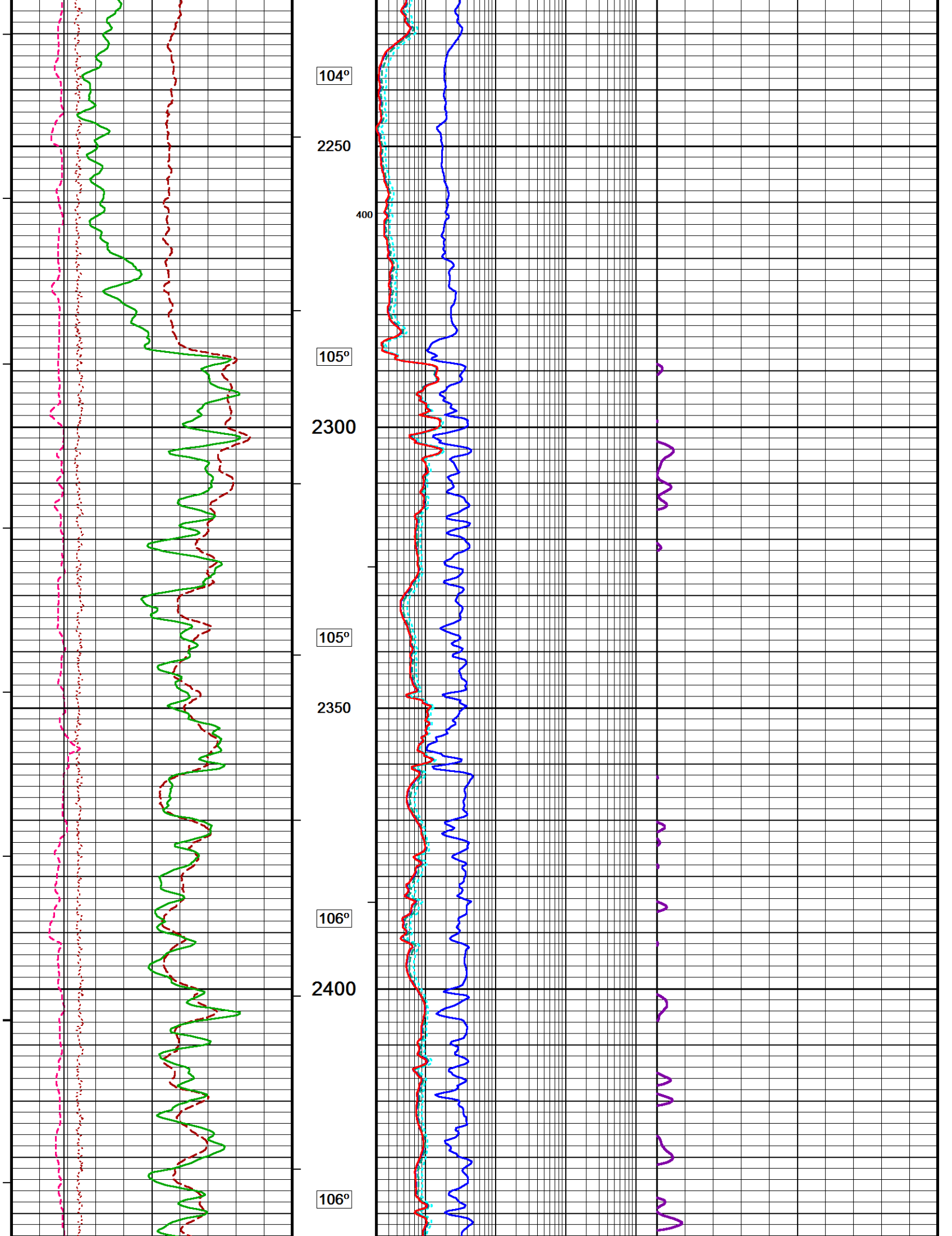


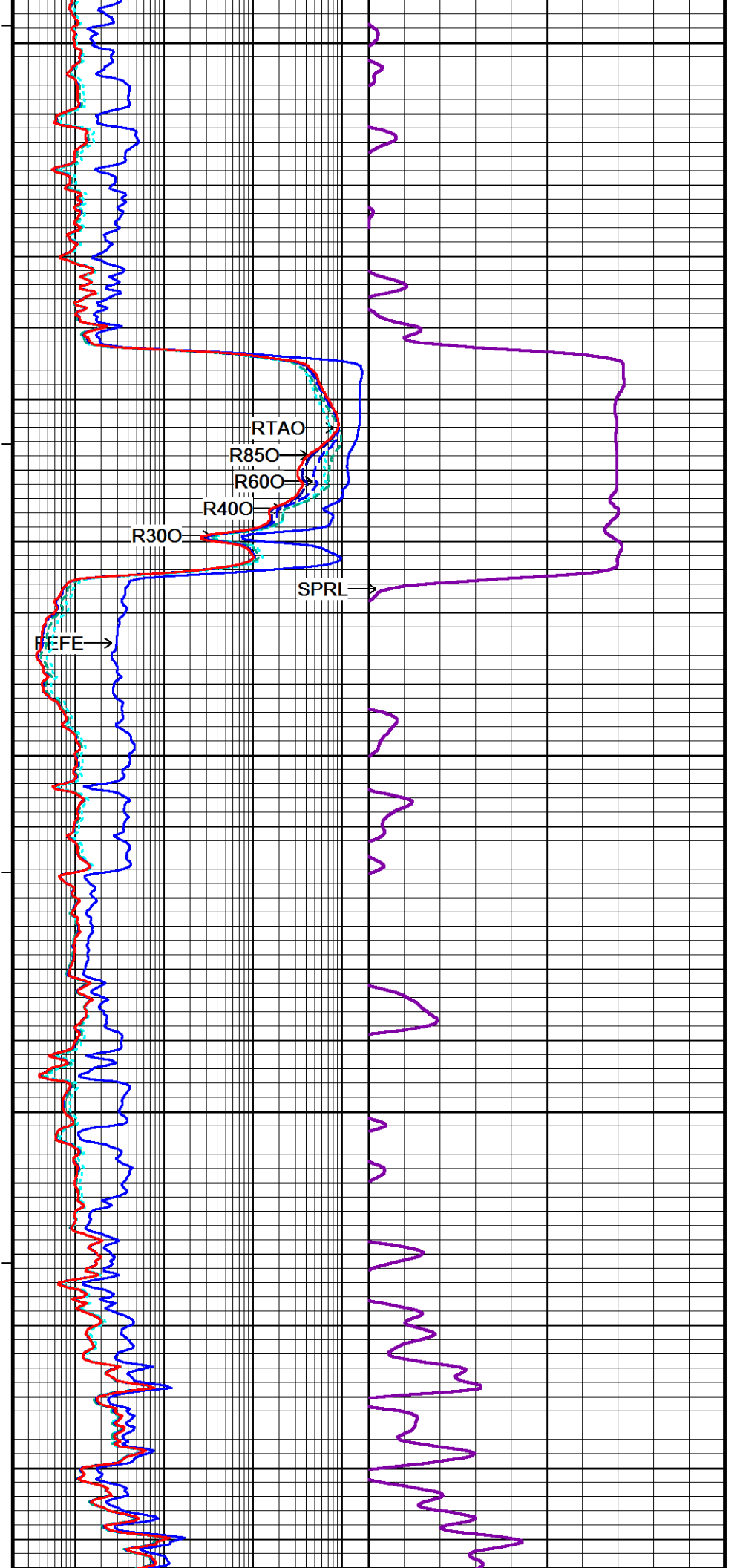
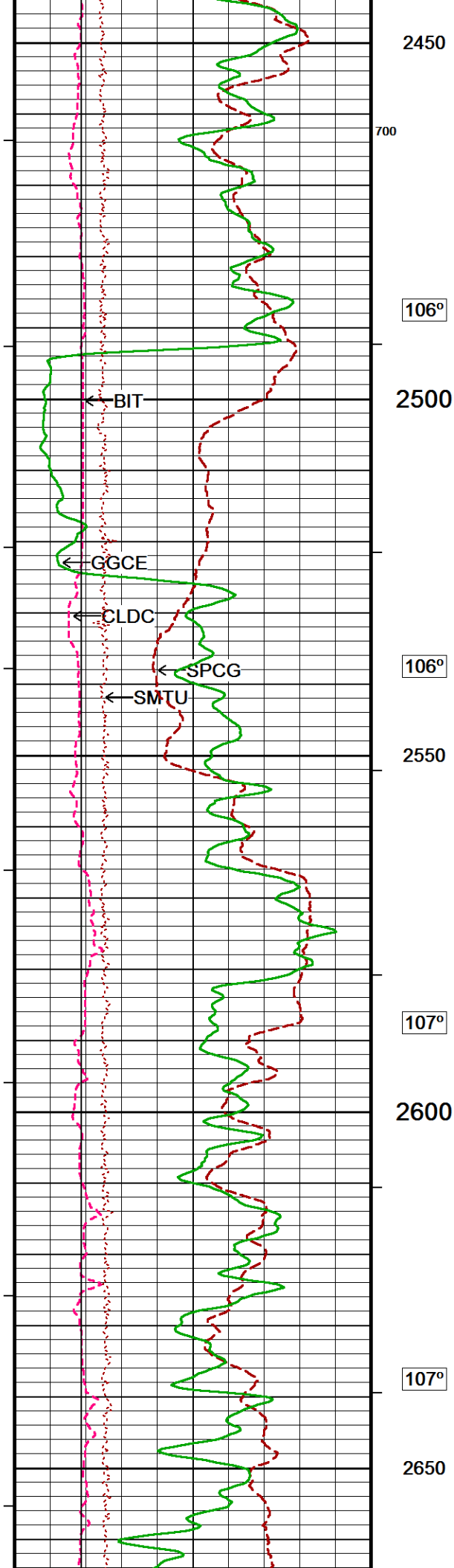


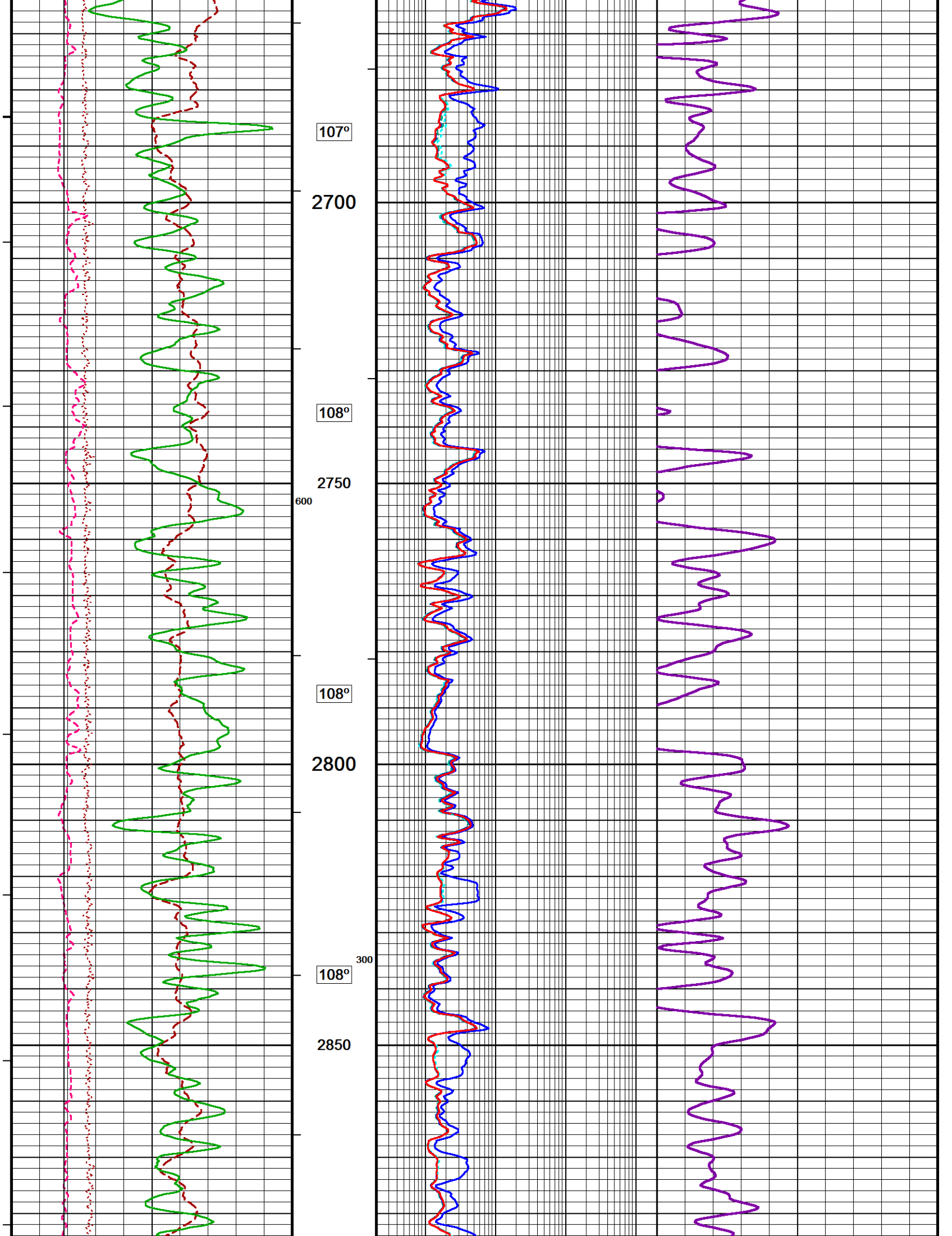


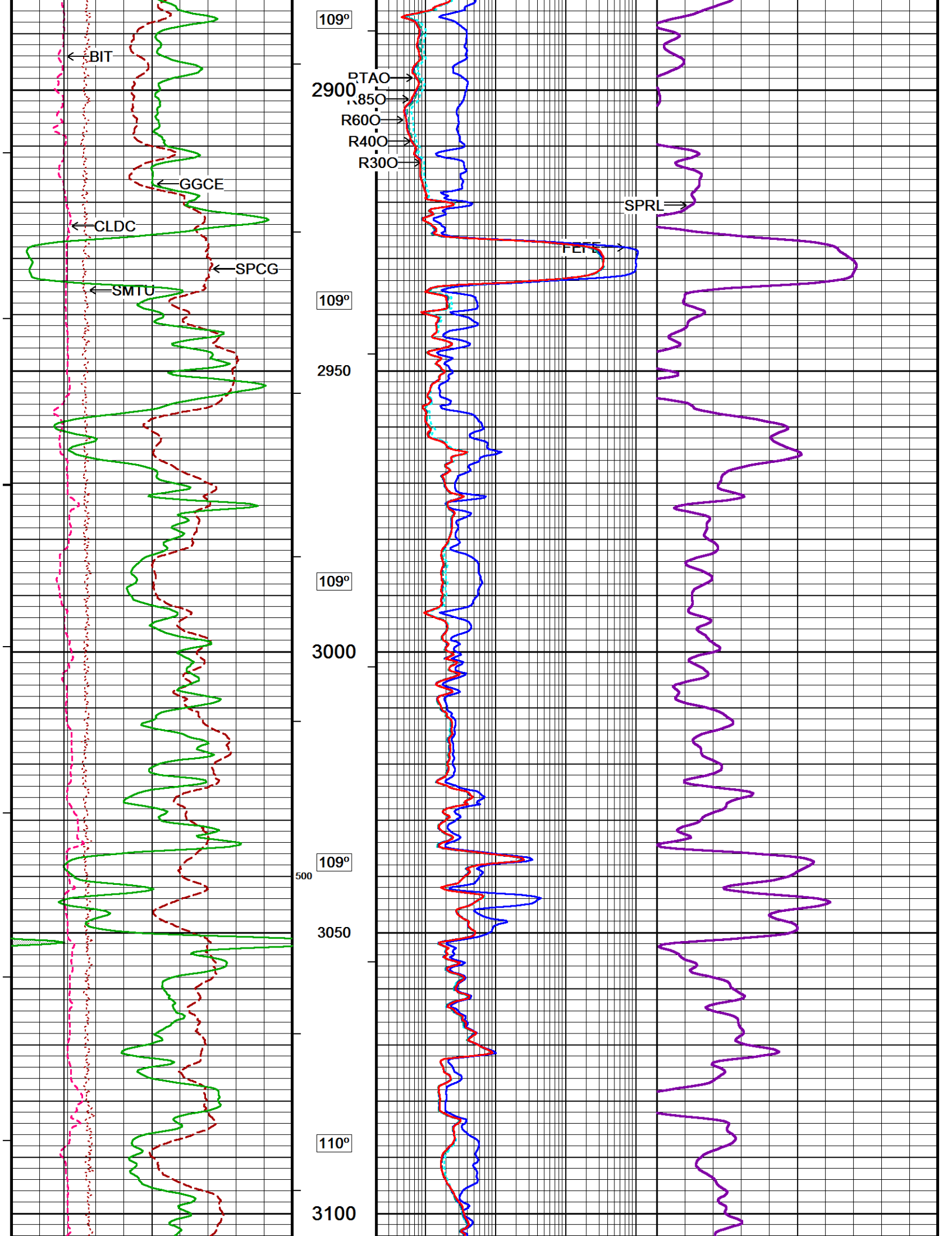
103°
2050
104°
2100
104°
2150
800
104°
2200

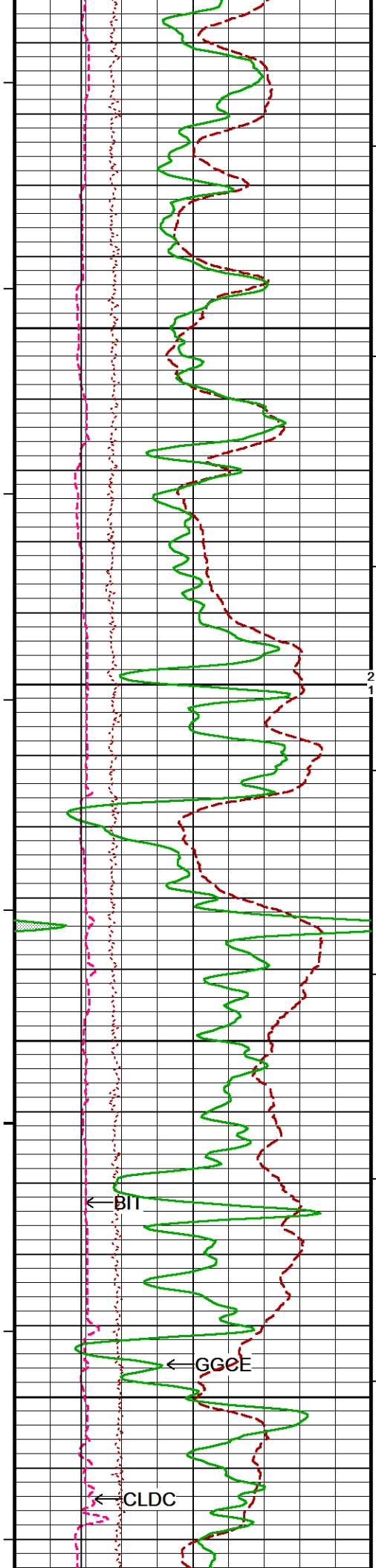




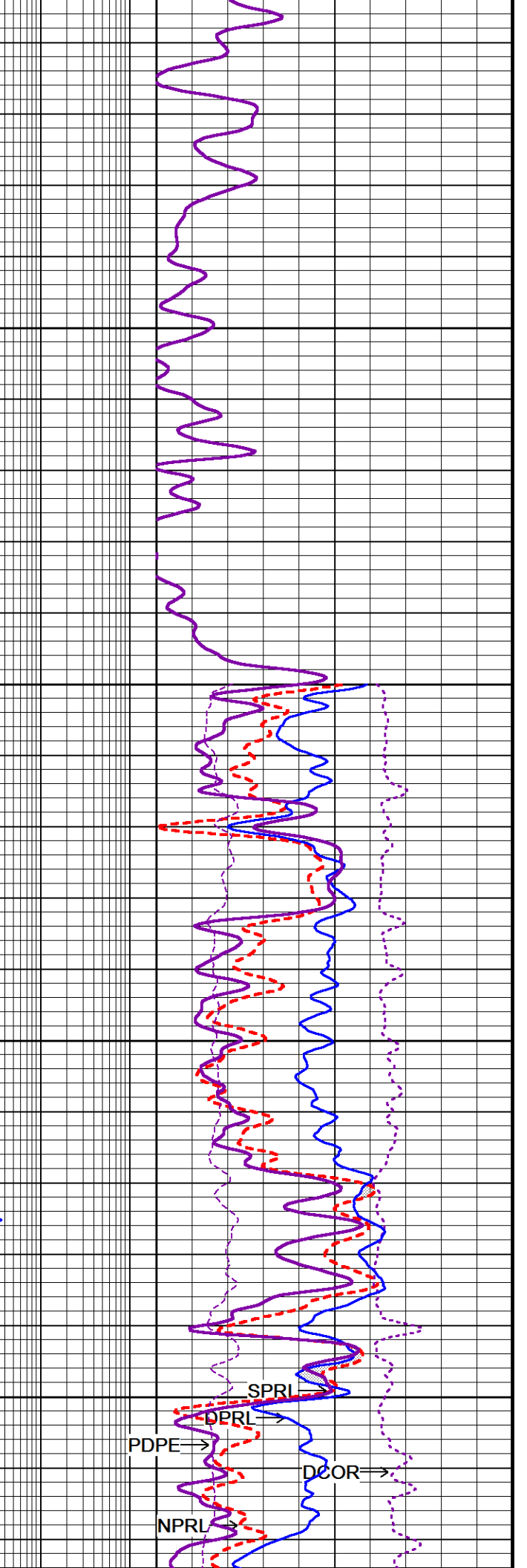
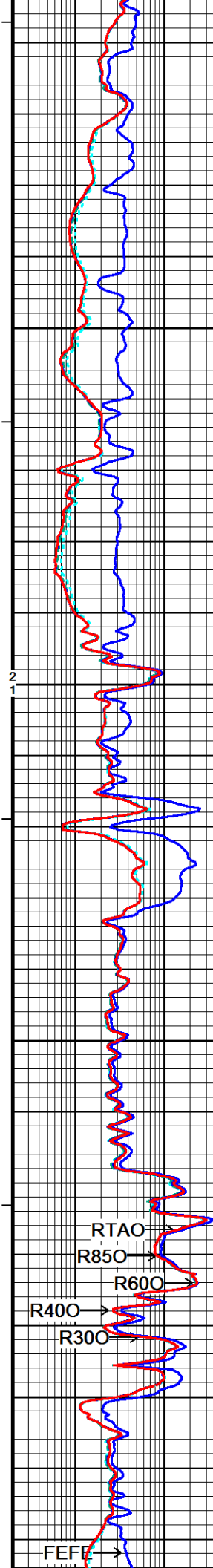


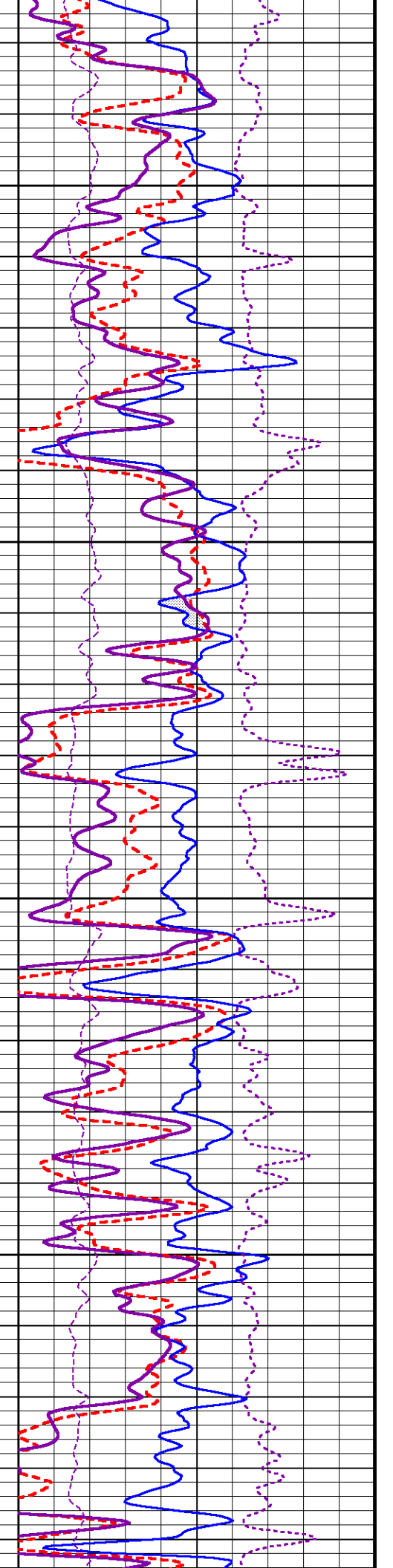
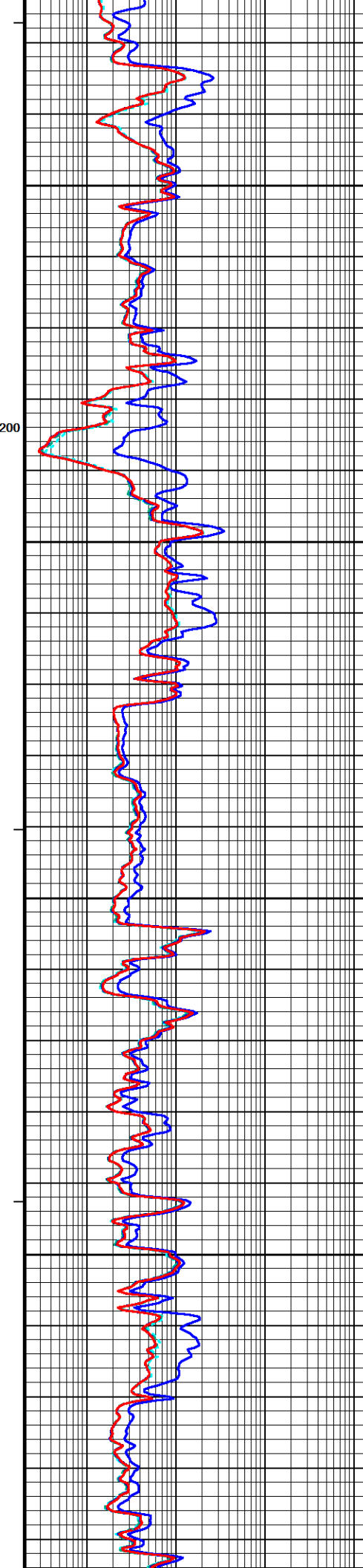
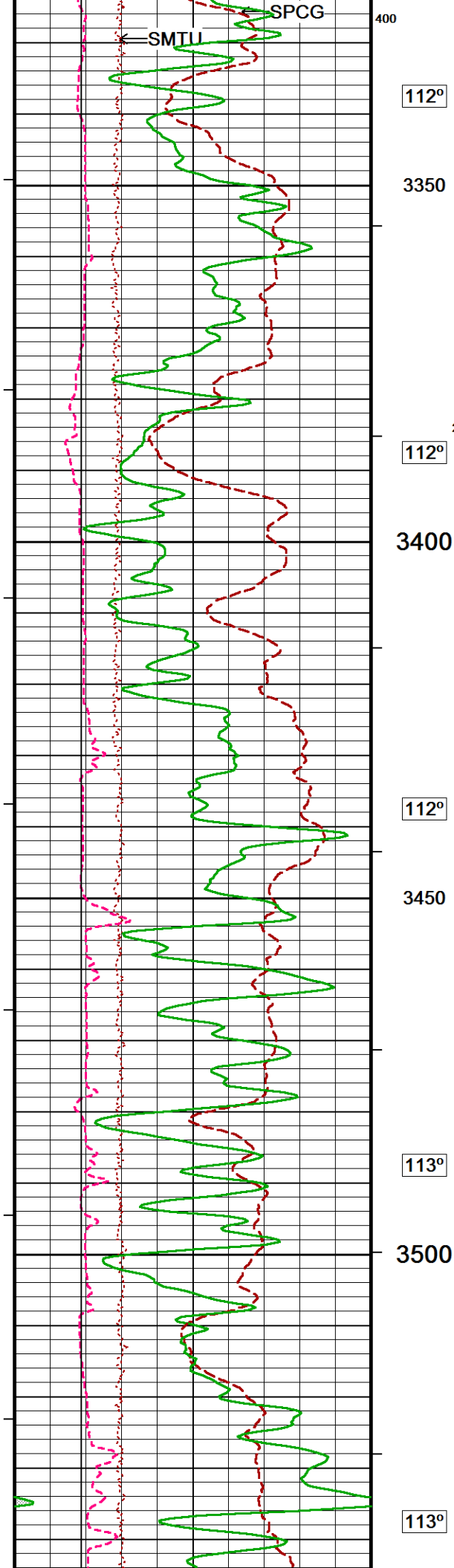


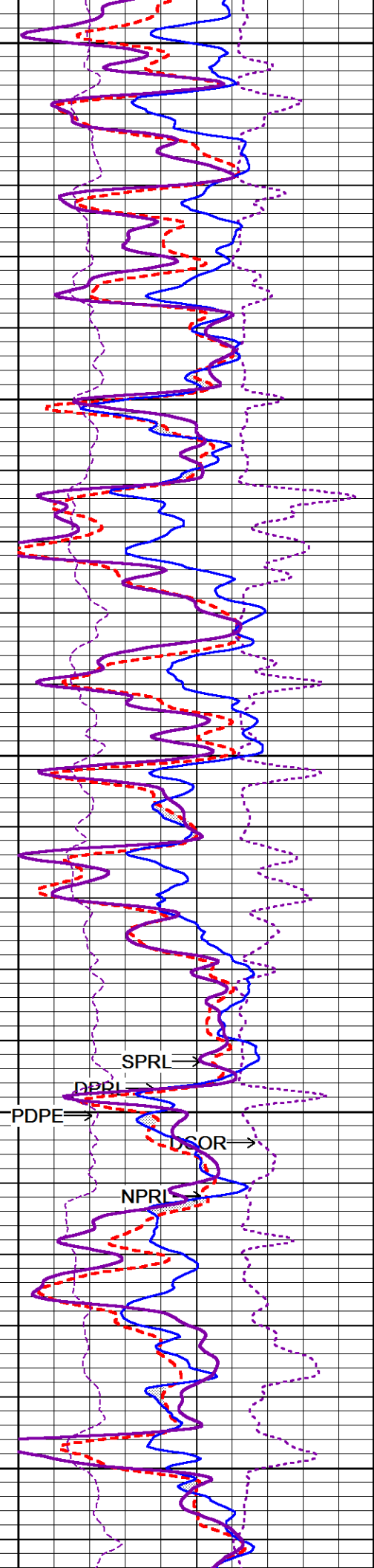
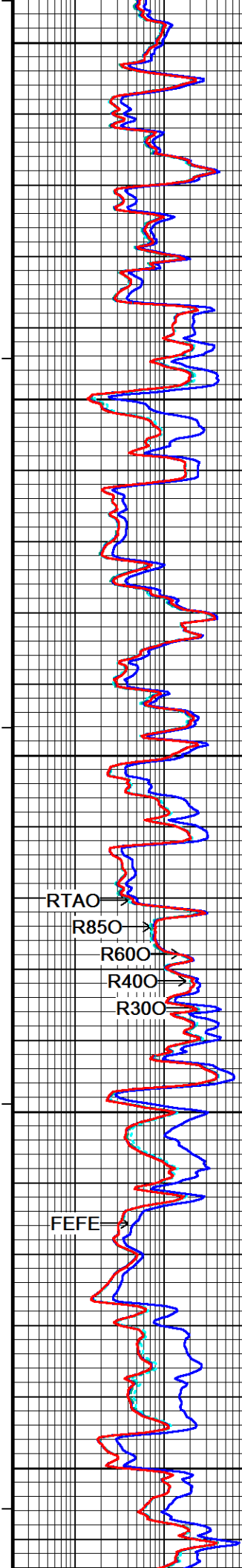
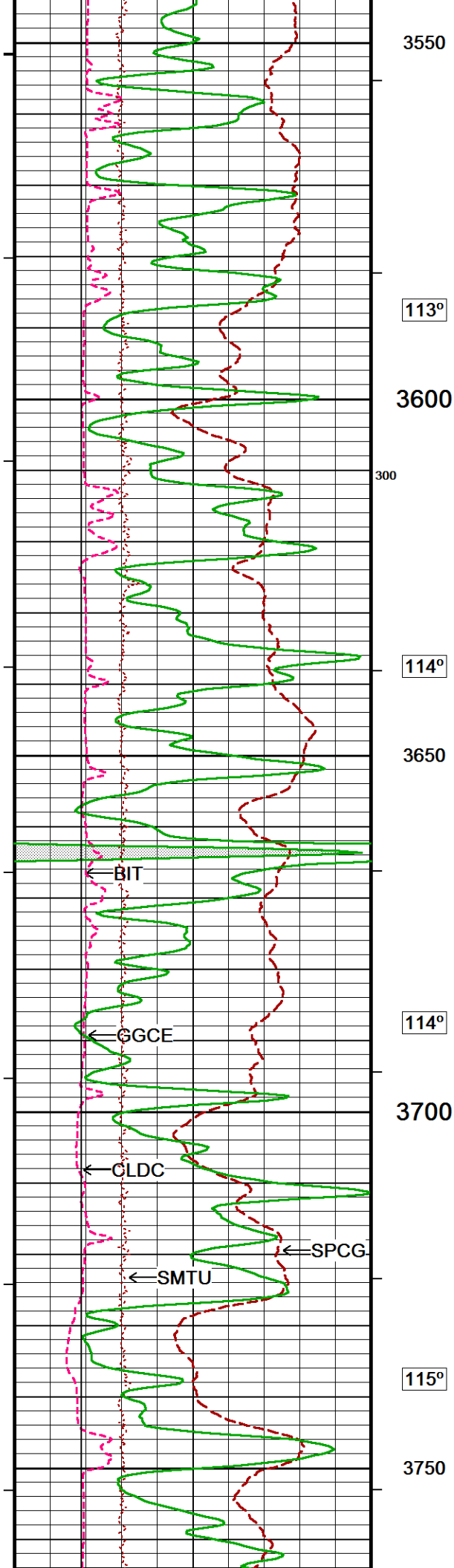


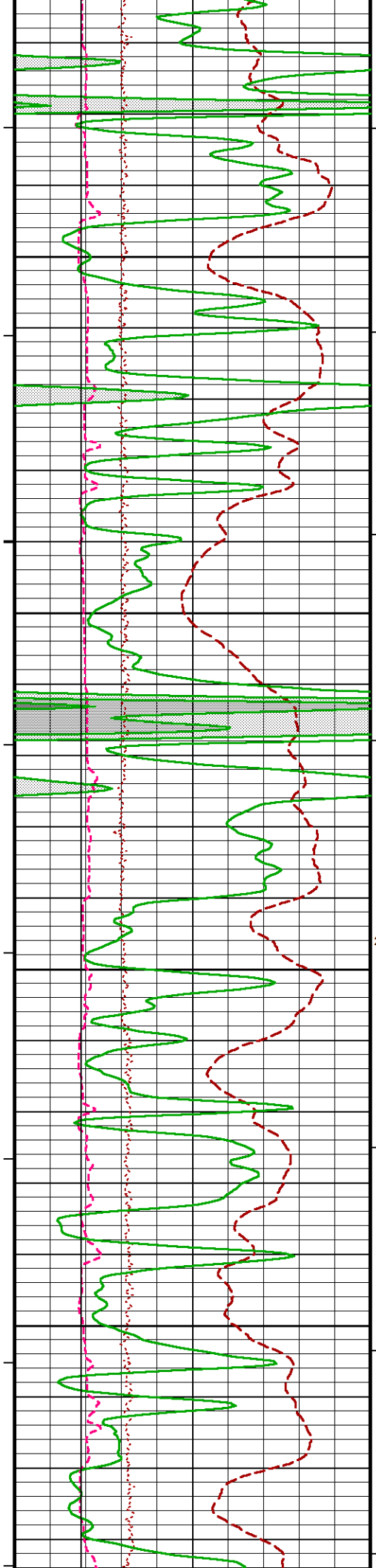


110°
3150
110°
3200
111°
3250
111°
3300









115°

3800

115°

3850

116°

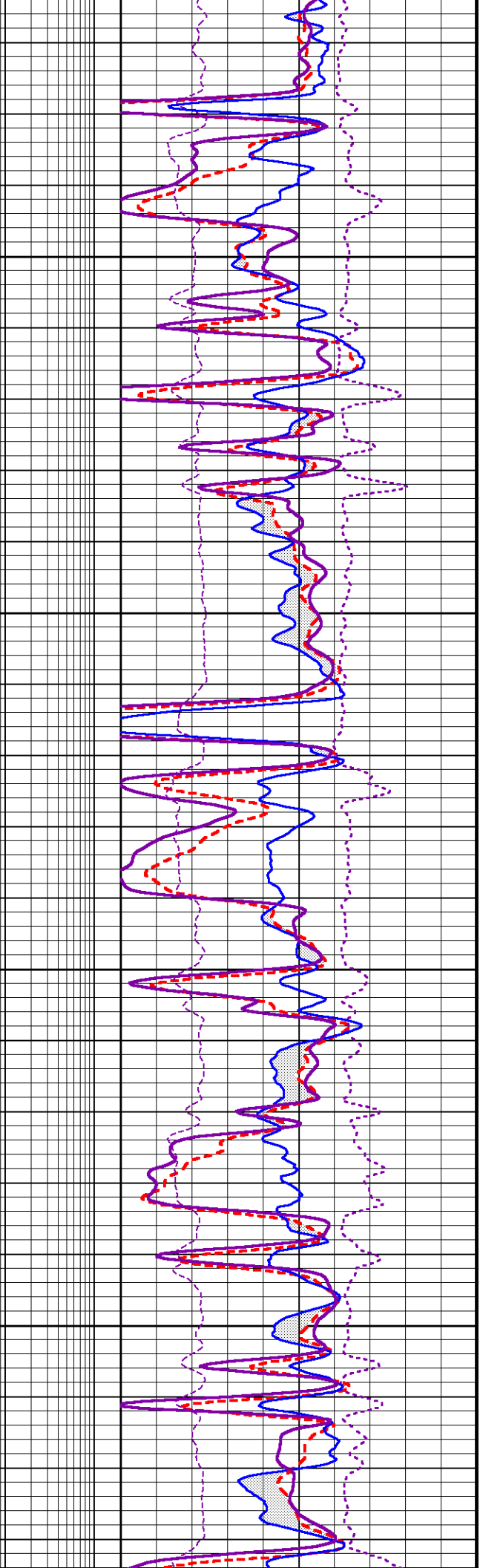
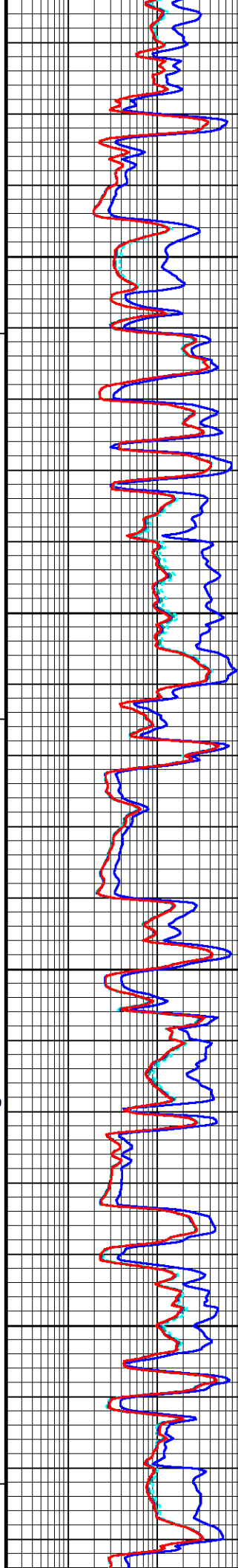
200

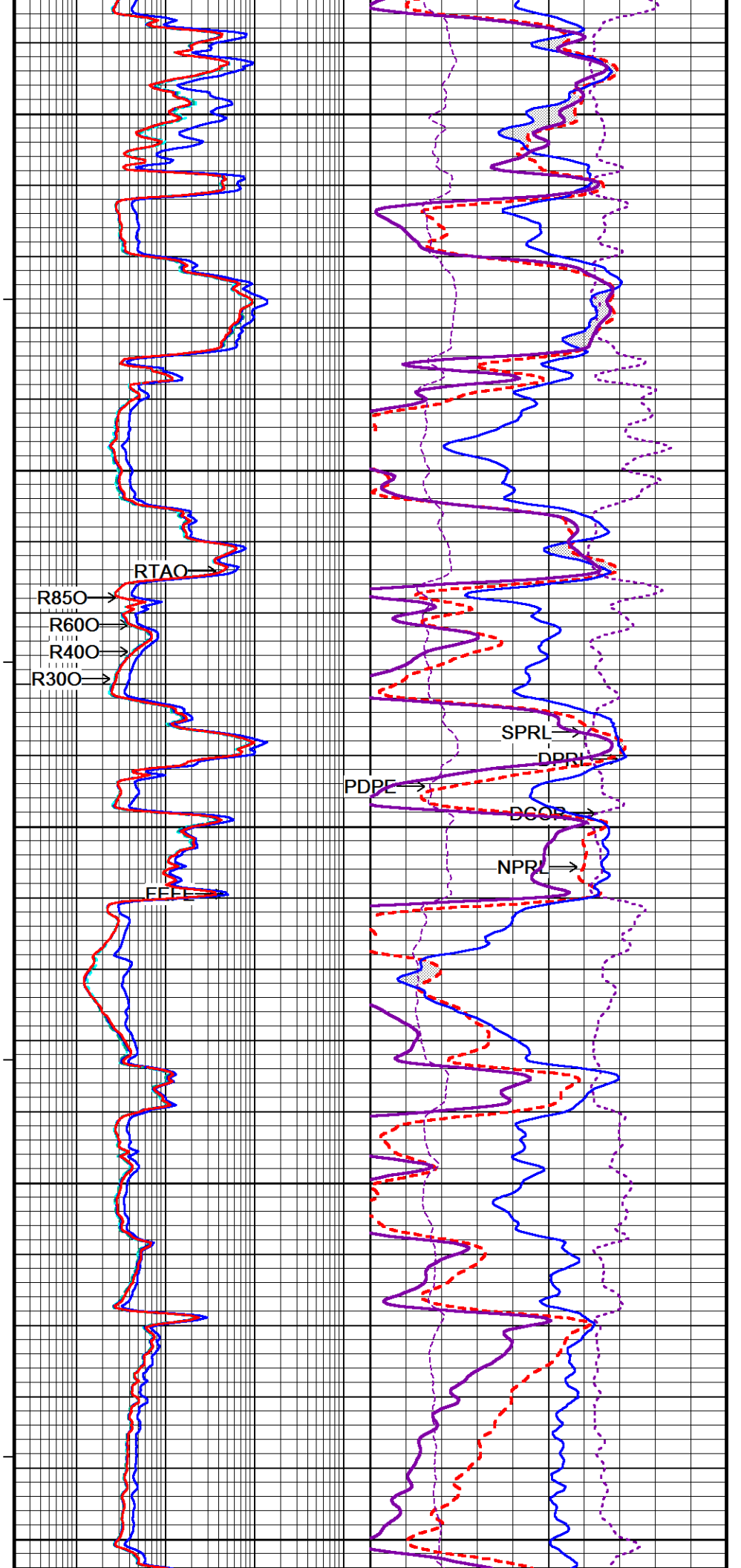
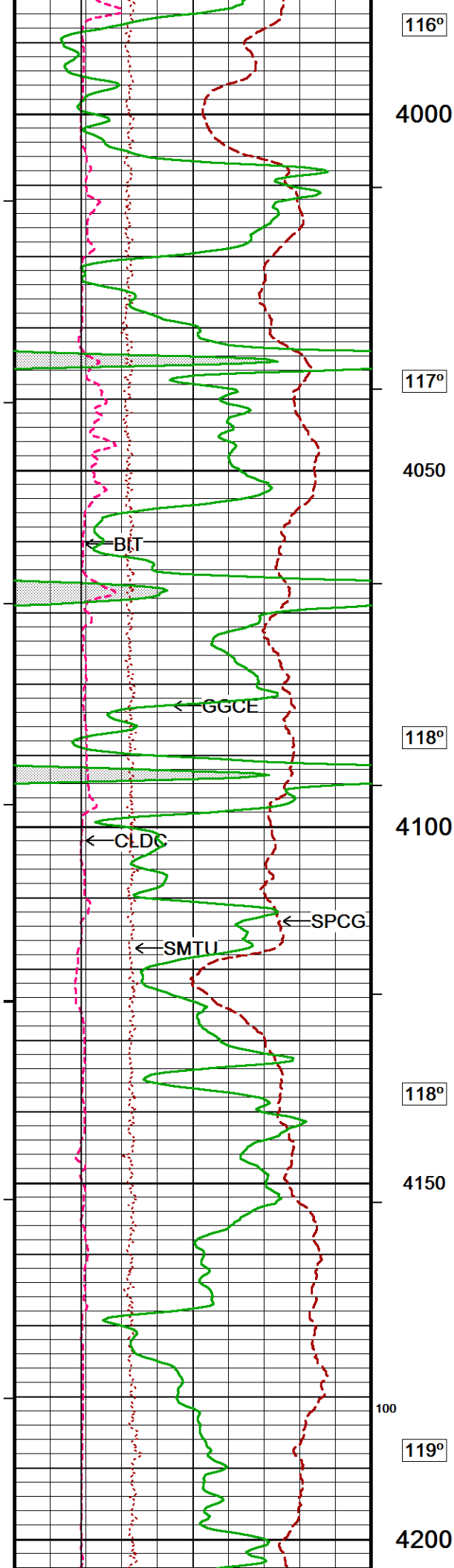
3900

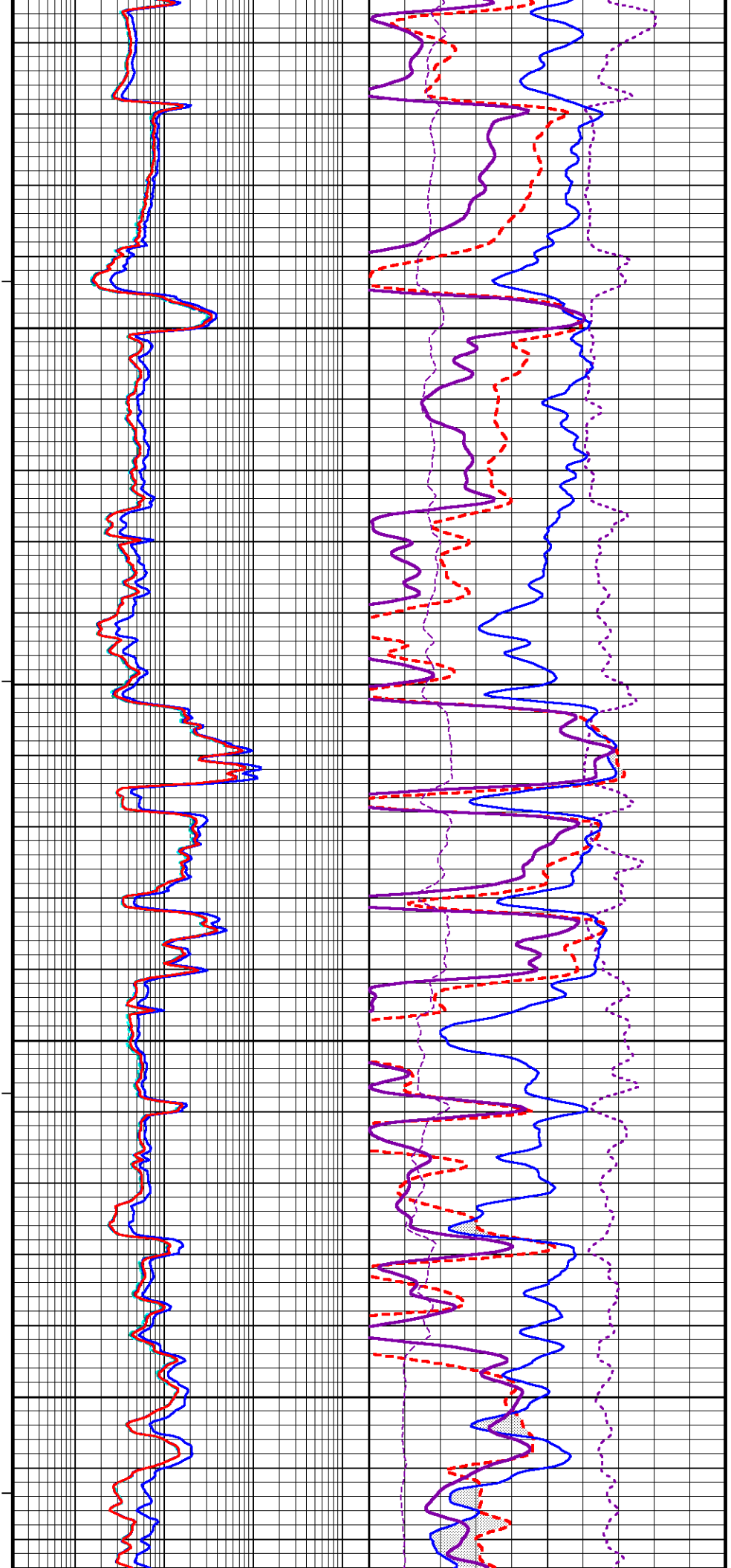
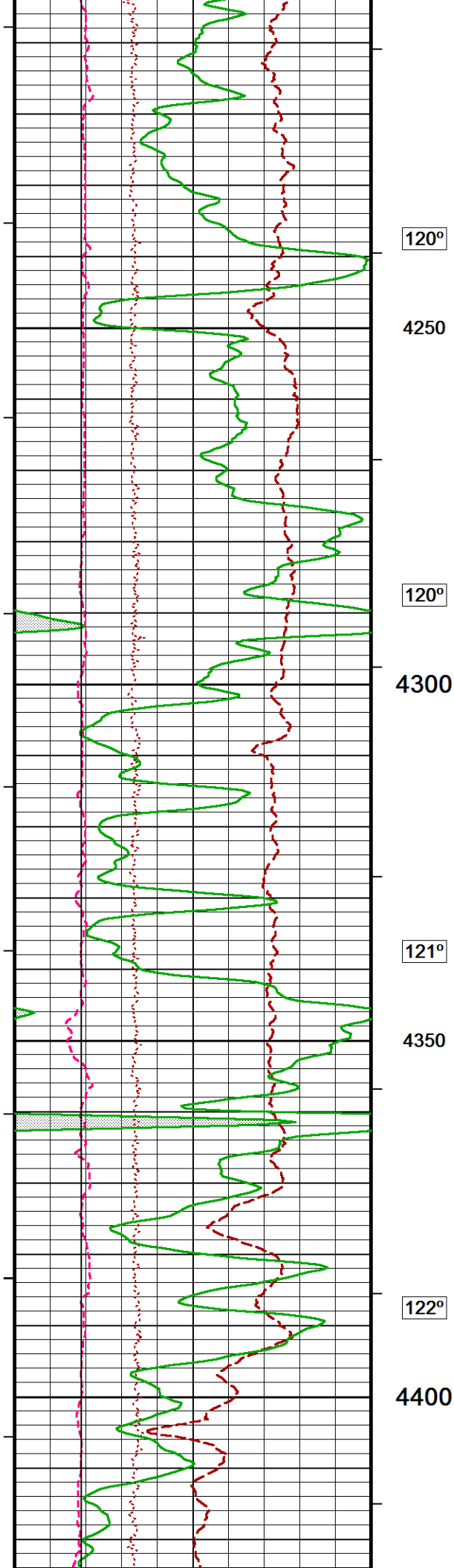
100

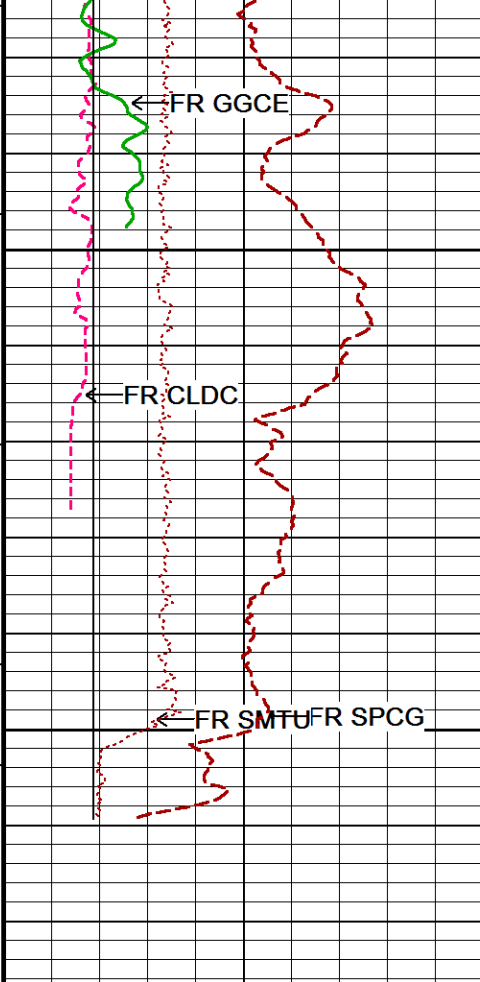
116°

3950









121°

4450

TD
4500

Depth
in
Feet

Timing Marks
every 60.0 sec

DST Uphole Tension
pounds
0 2500 5000
5000 7500 10000

Spontaneous Potential
millivolts
- -> | 20 | <- +

Density Caliper
inches
6 11 16

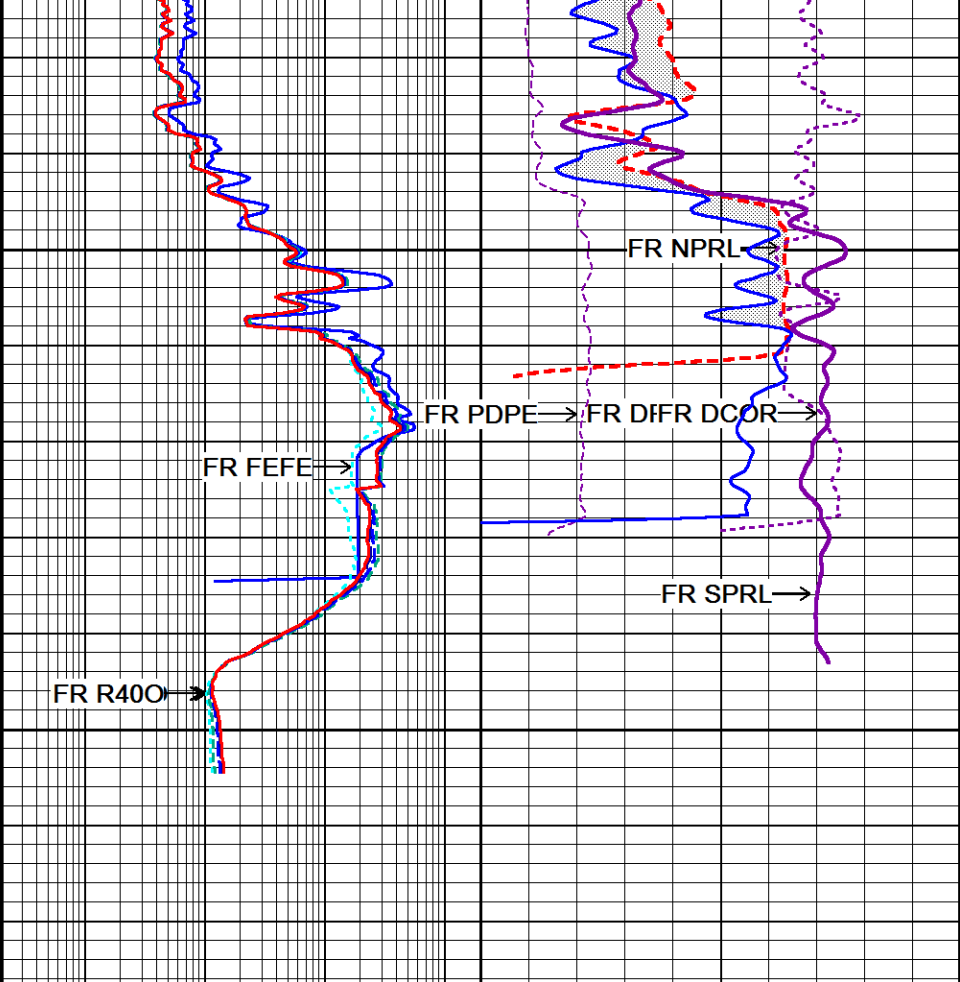
MCG BH Corrected Gamma
API
0 75 150
150 225 300

Bit Size
inches
6 11 16

Borehole
Temp in
deg F

HVI
every
10 cu ft

Annular
Integral
every
10 cu ft



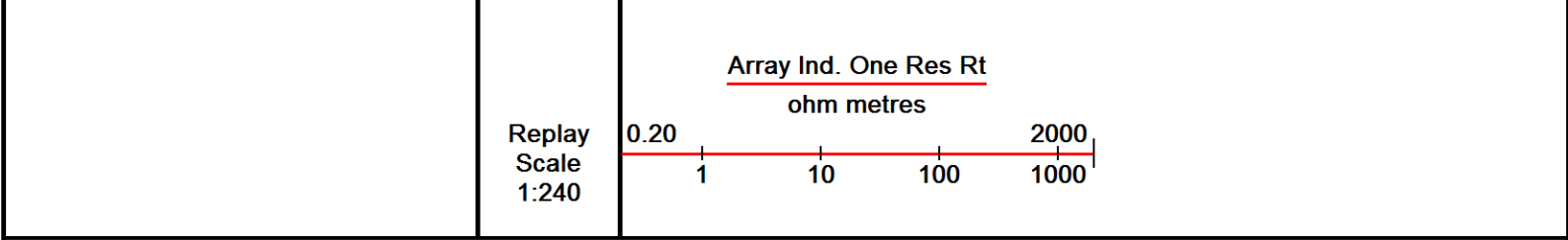
Shallow FE
ohm metres
0.20 1 10 100 1000 2000 30
Limestone Neutron Por.
percent
10 -10

Array Ind. One Res 30
ohm metres
0.20 1 10 100 1000 2000 30
Limestone Density Por.
percent
10 -10

Array Ind. One Res 40
ohm metres
0.20 1 10 100 1000 2000 30
Wyllie Lime. Sonic Por.
percent
10 -10

Array Ind. One Res 60
ohm metres
0.20 1 10 100 1000 2000

Array Ind. One Res 85
ohm metres
0.20 1 10 100 1000 2000
PE
barns/electron
Density Correction
grams/cc
0 -0.10 0.40



Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 11-JUN-2017 01:43

Filename: C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Main Pass.dta

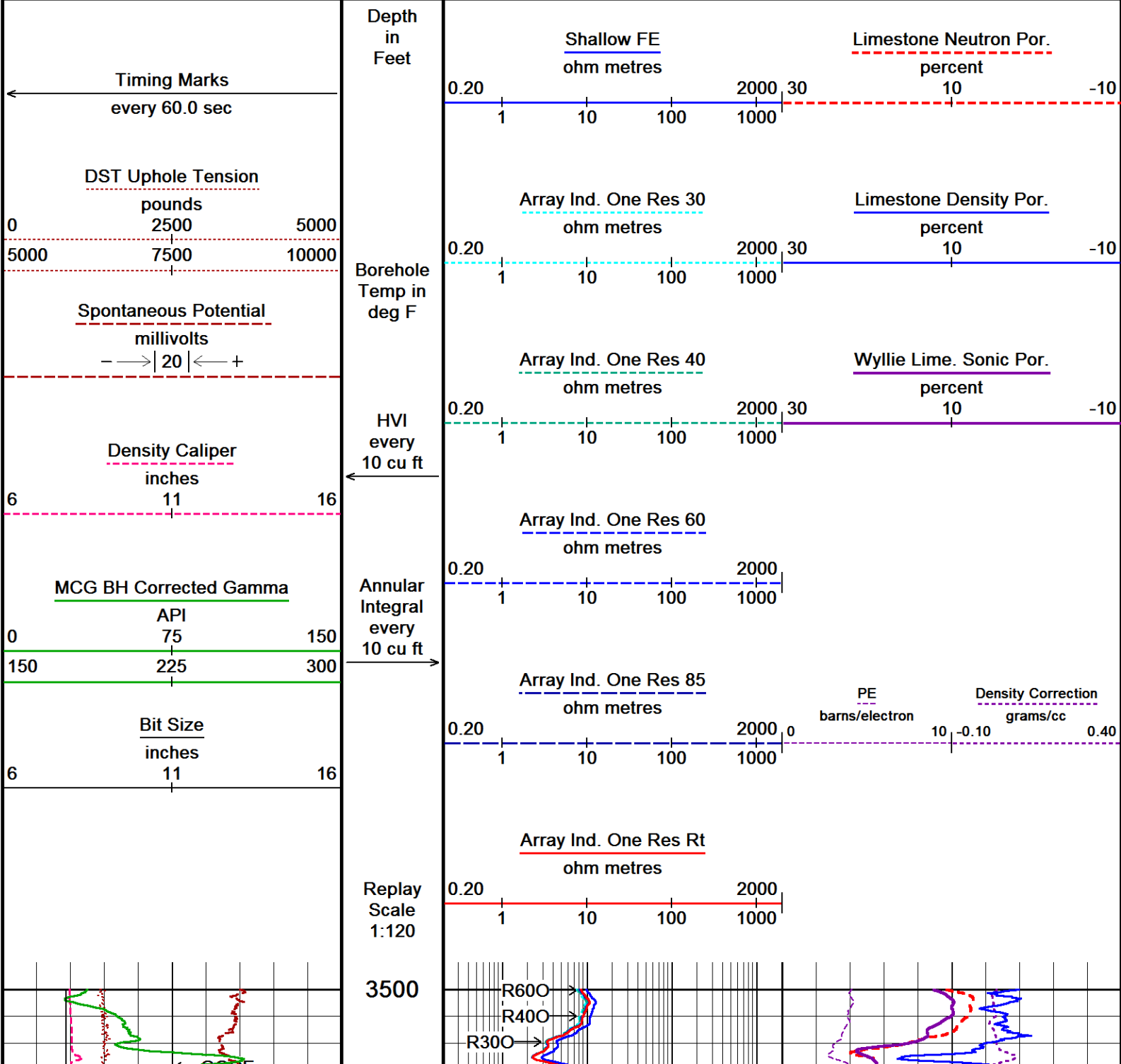
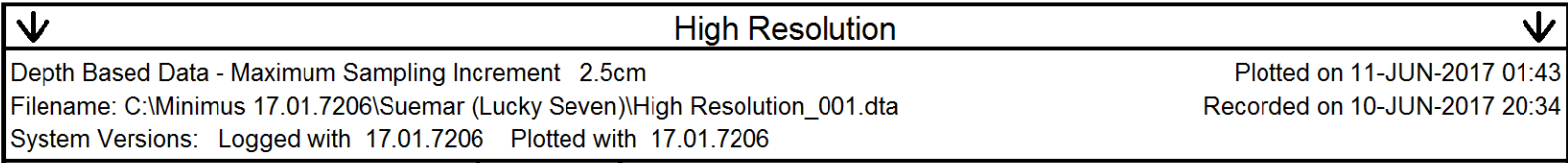
Recorded on 10-JUN-2017 22:08

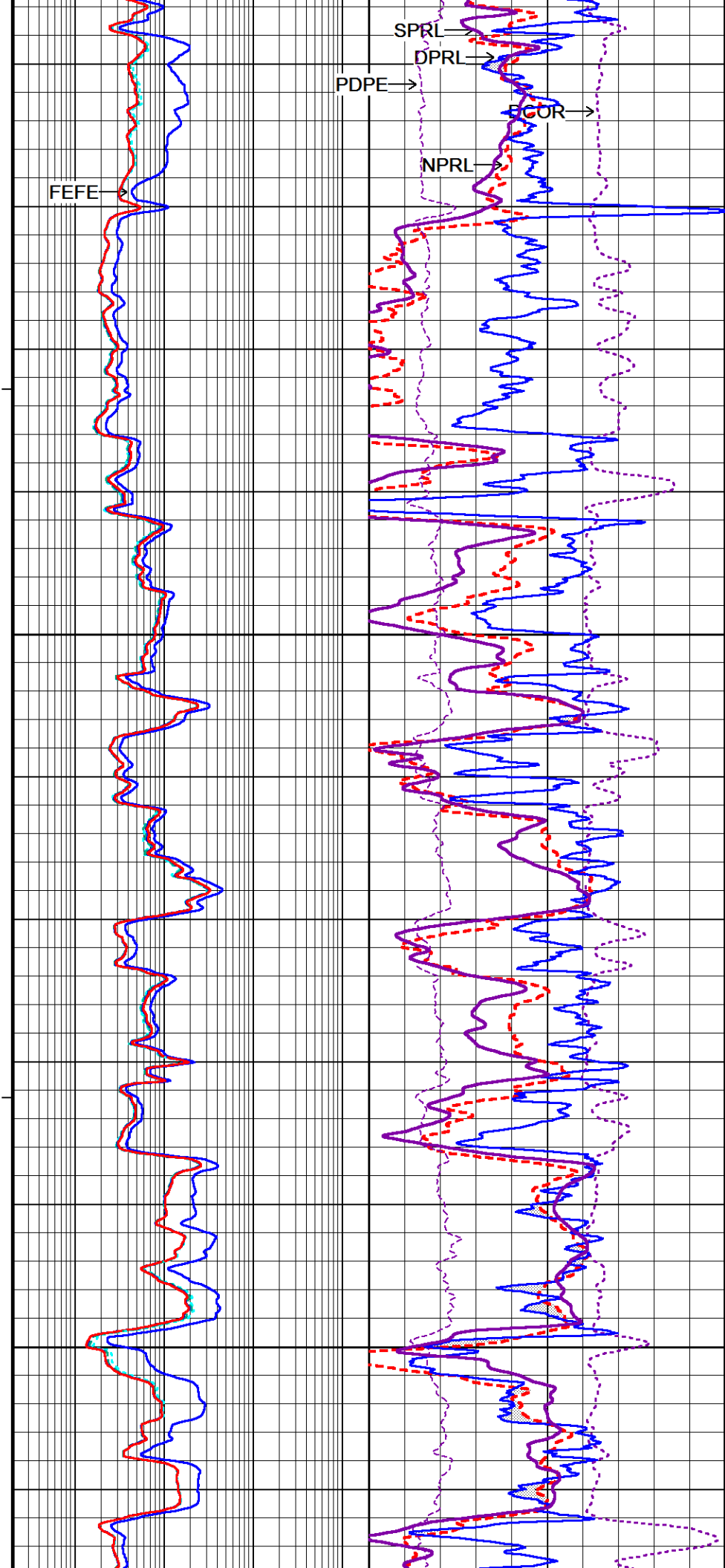
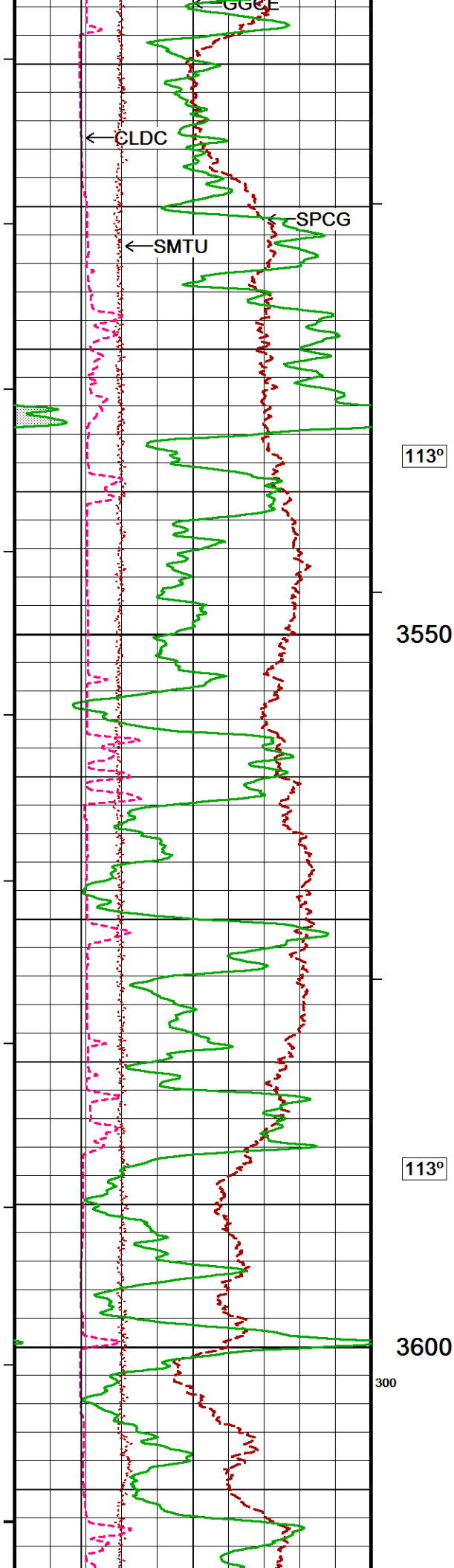
System Versions: Logged with 17.01.7206 Processed with 17.01.7206 Plotted with 17.01.7206

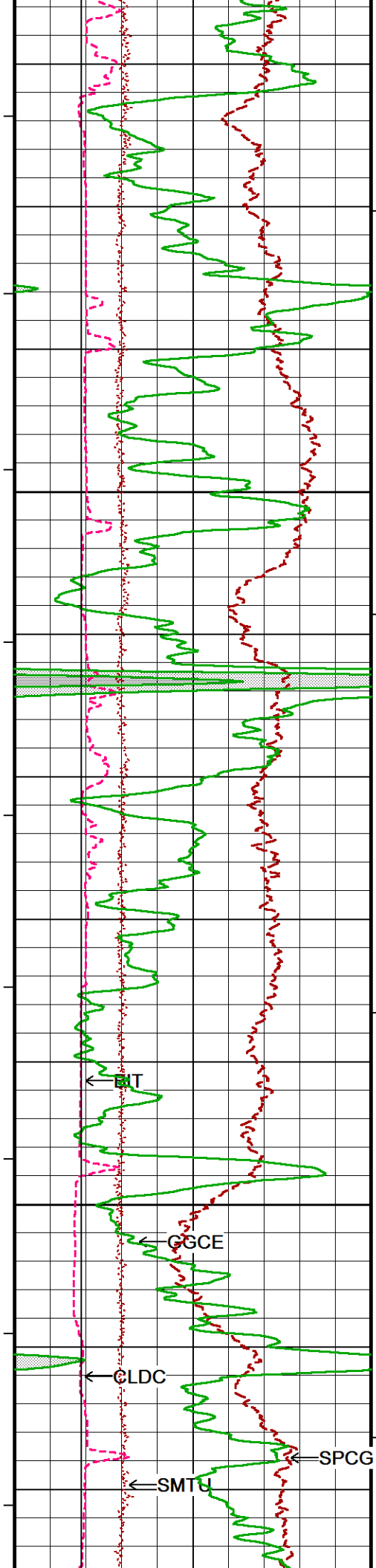
↑

5 INCH MAIN PASS

↑







113°

3650

113°

3700

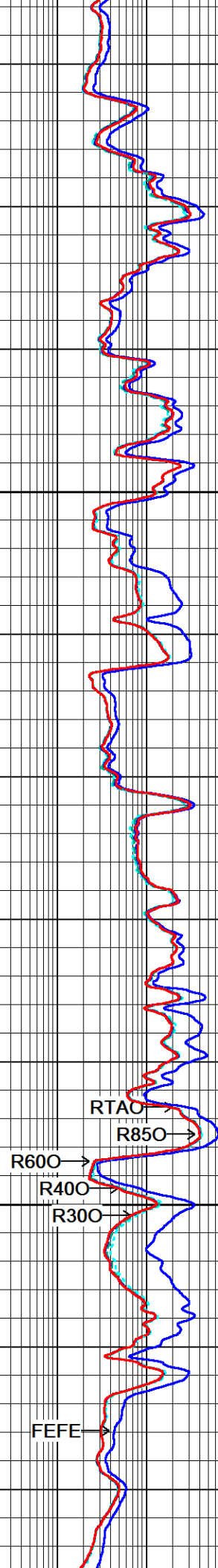
SPCG

SMTU

CLDC

GGCE

T



RTAO

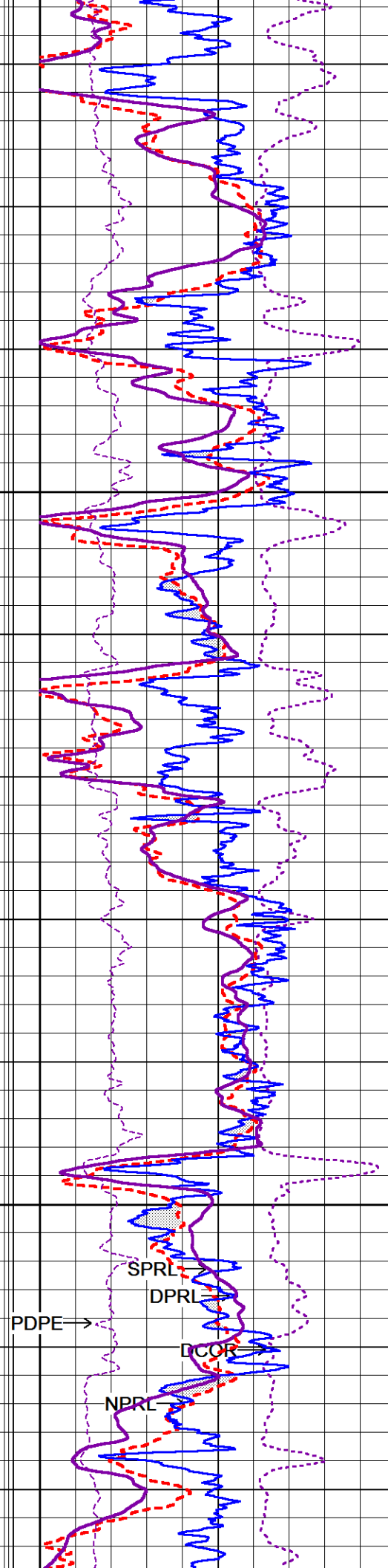
R850

R600

R400

R300

FEFE



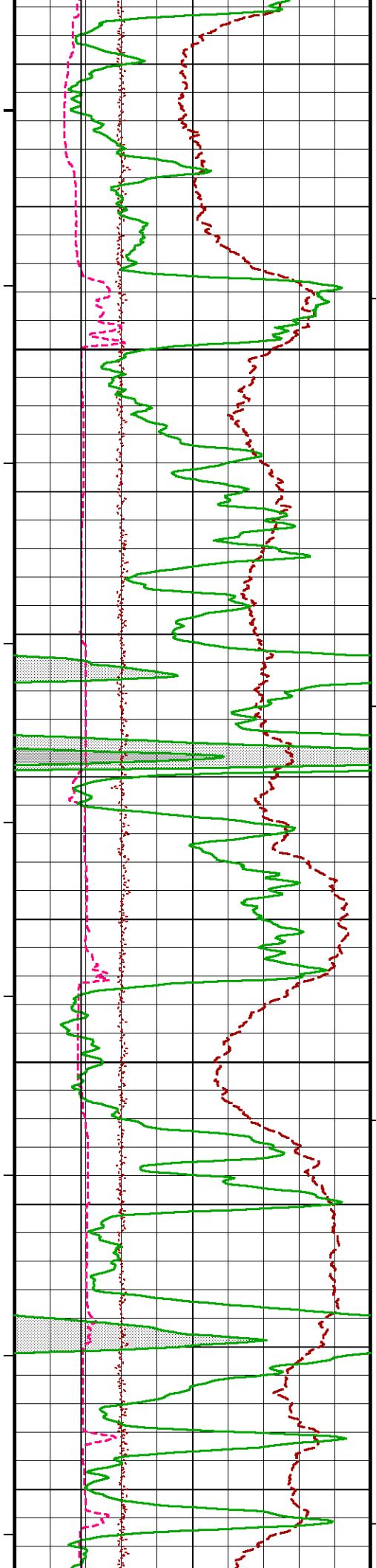
SPRL

DPRL

PDPE

DCOR

NPRL

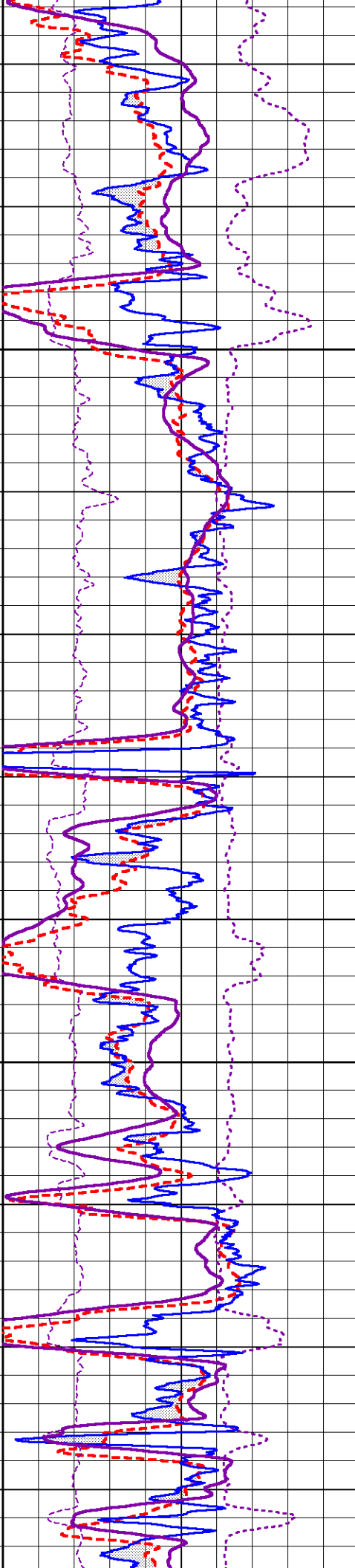
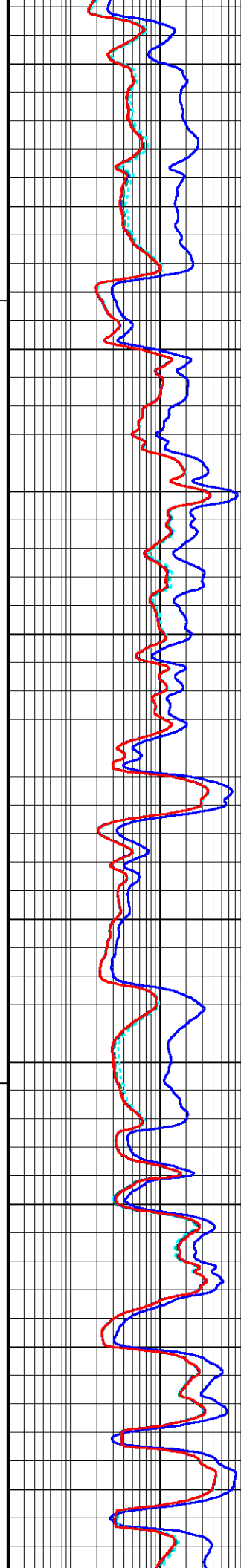


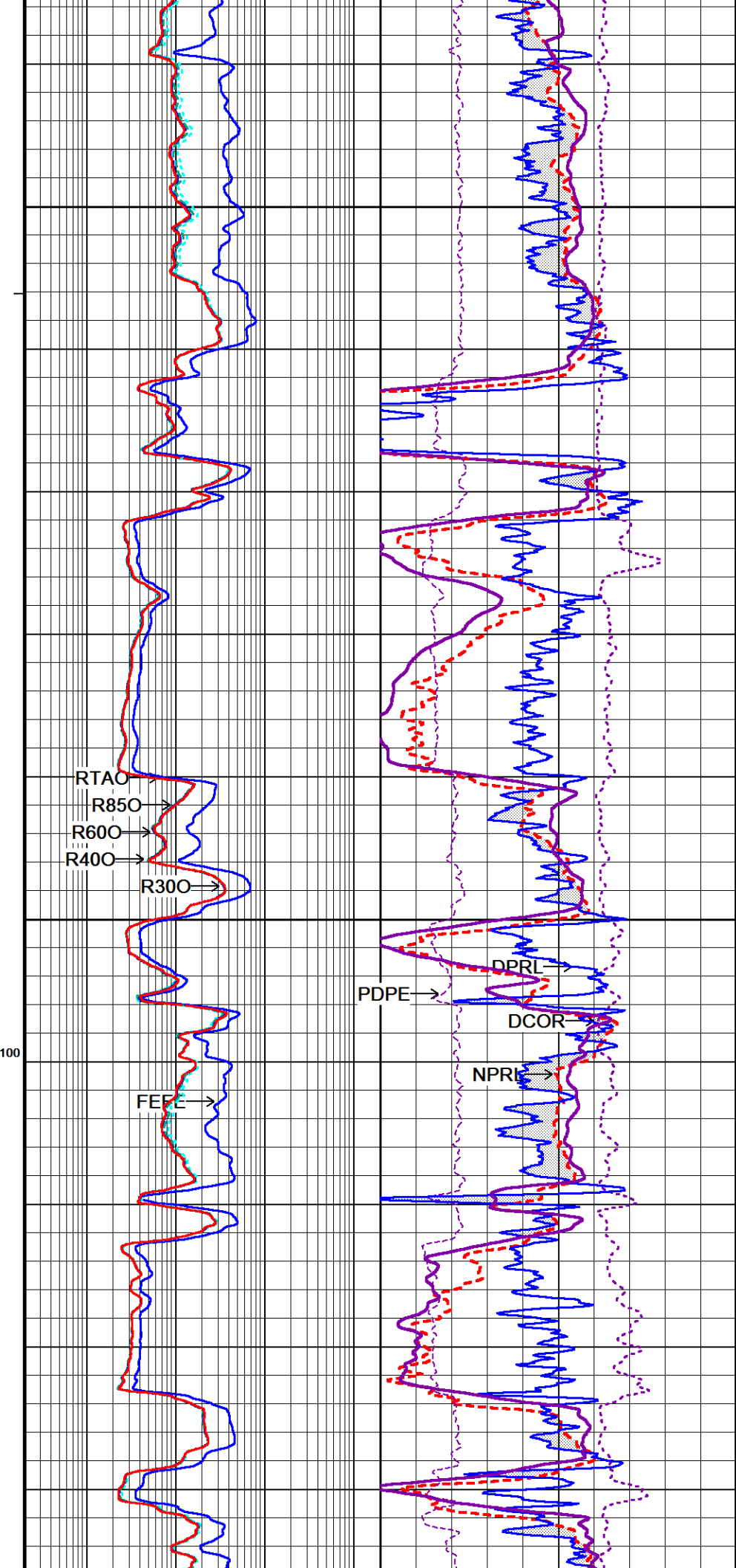
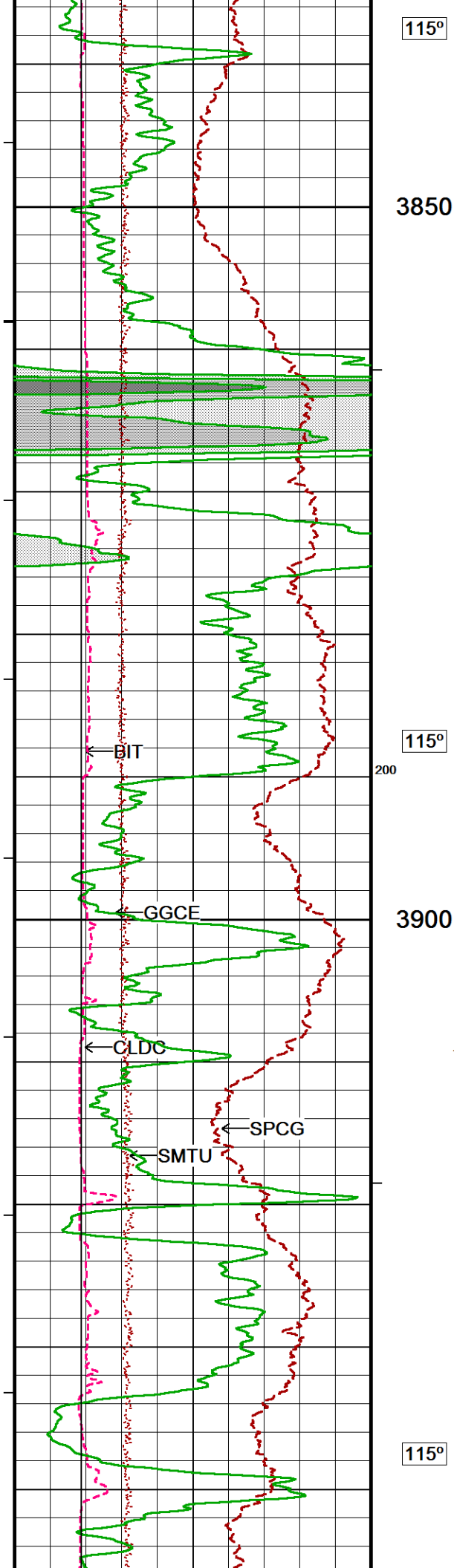
114°

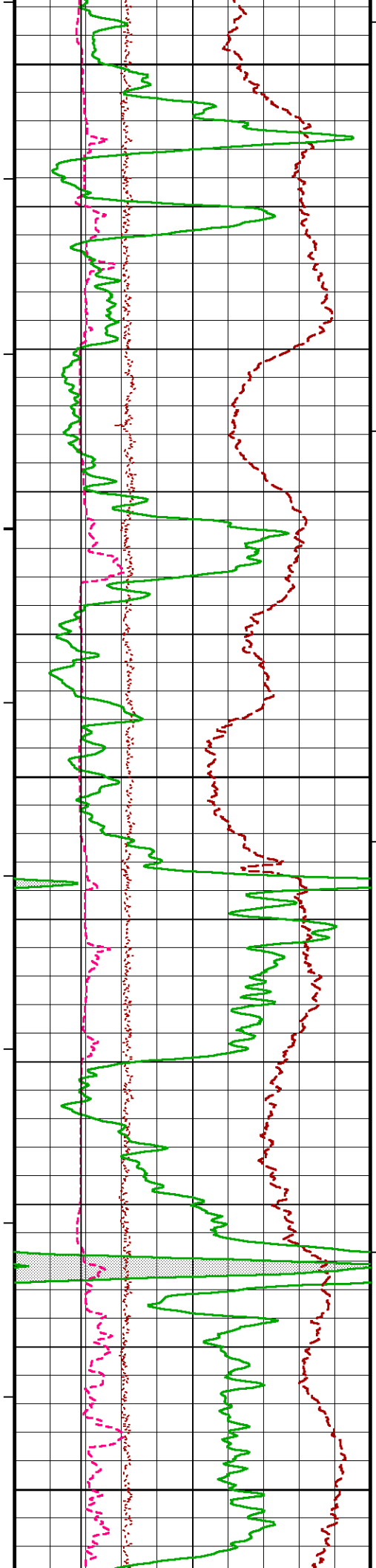
3750

114°

3800







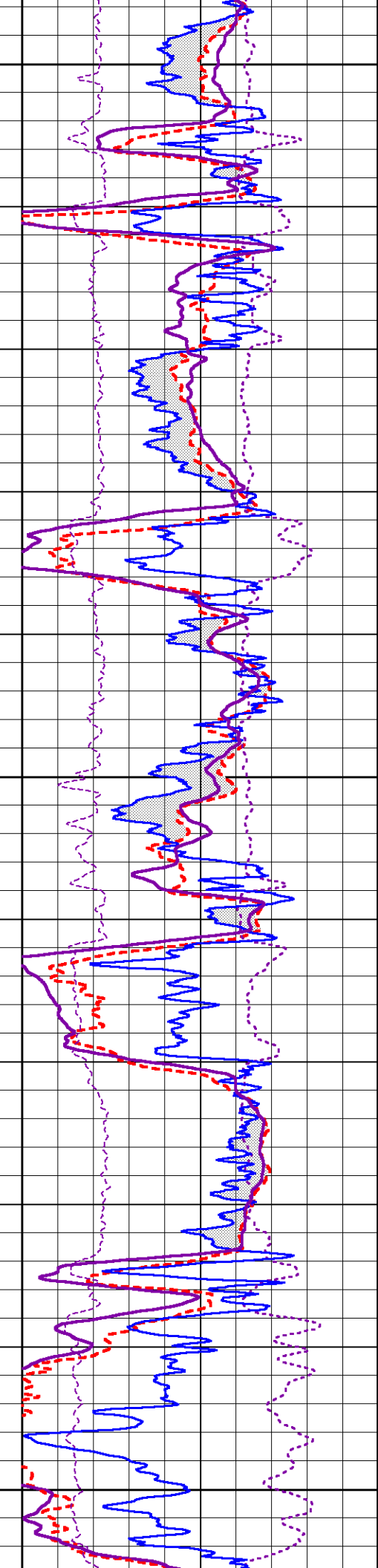
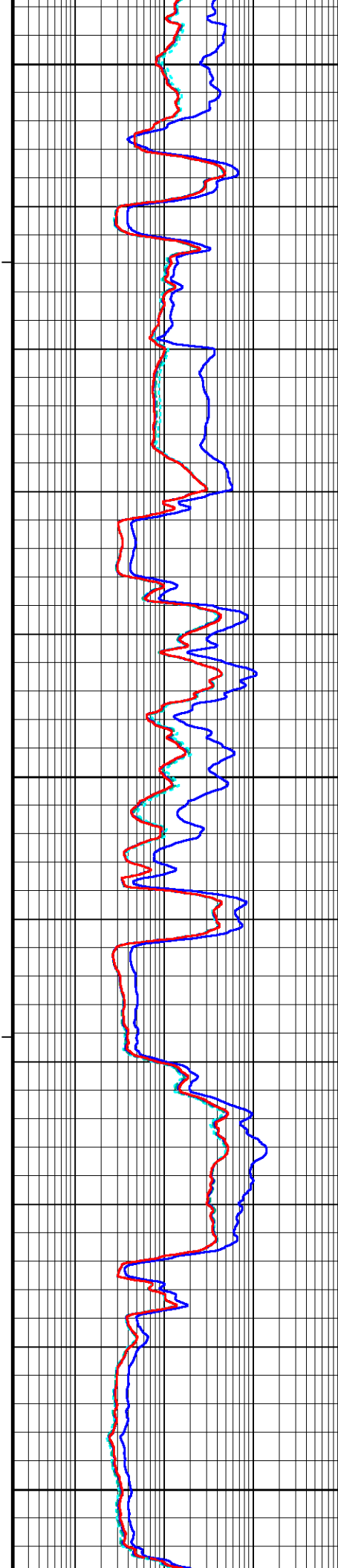
3950

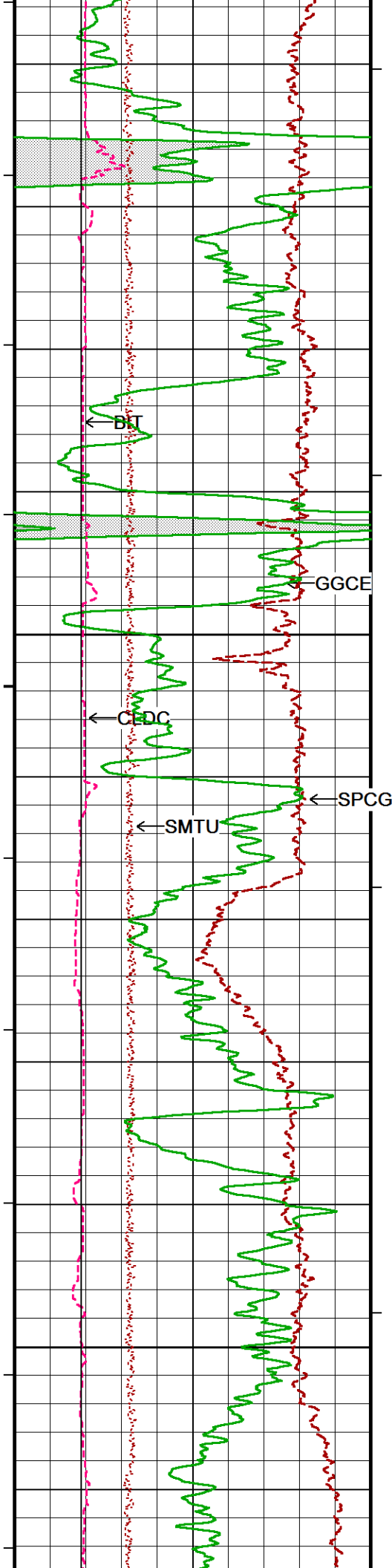
116°

4000

116°

4050



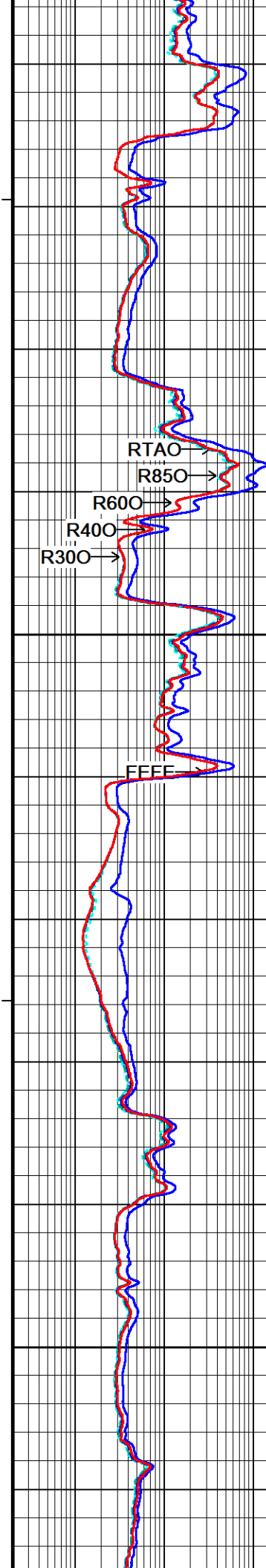


116°

4100

117°

4150



RTAO

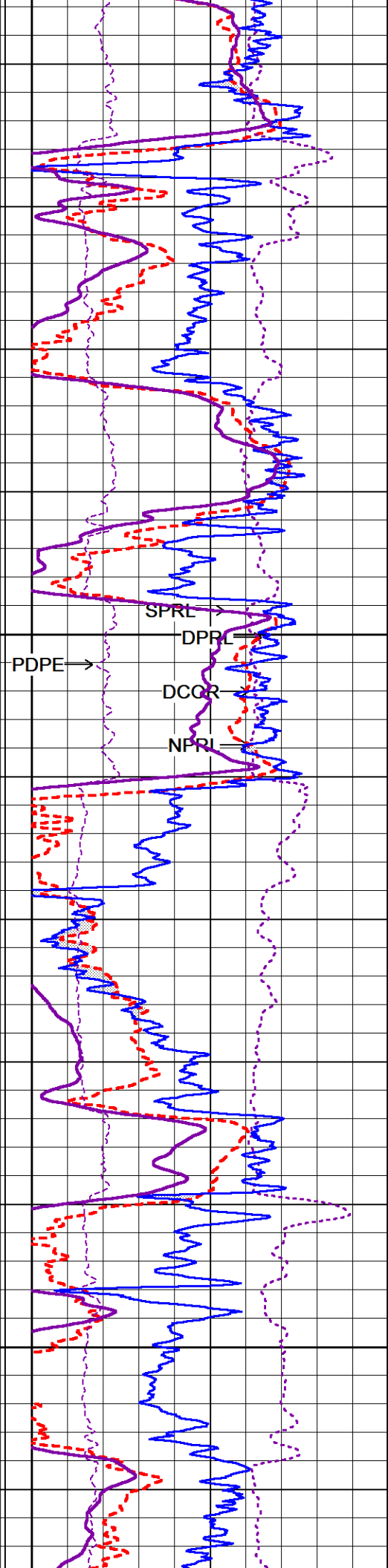
R85O

R60O

R40O

R30O

FFFF



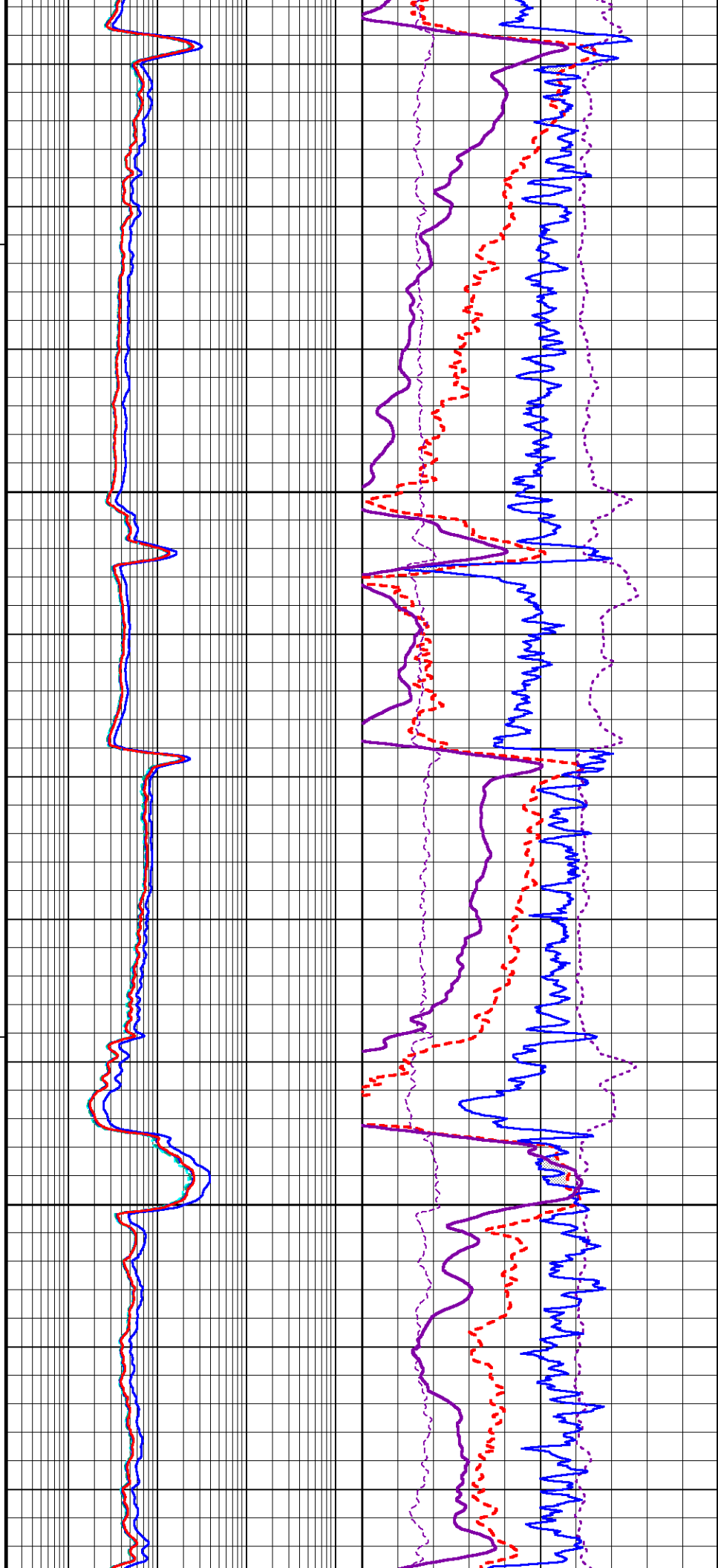
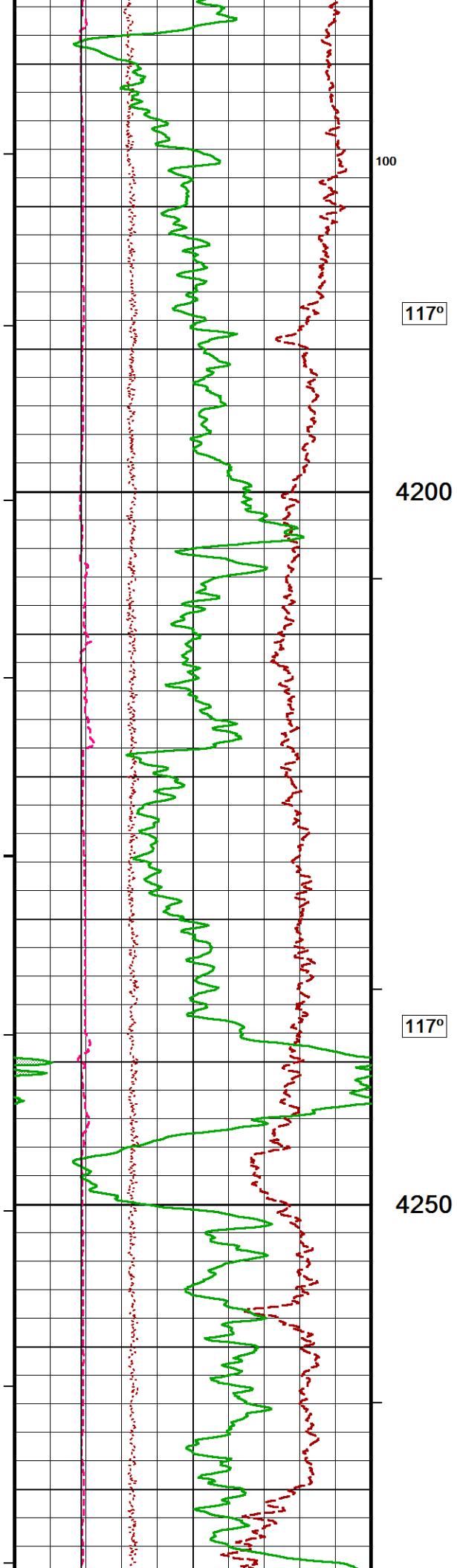
SPRL

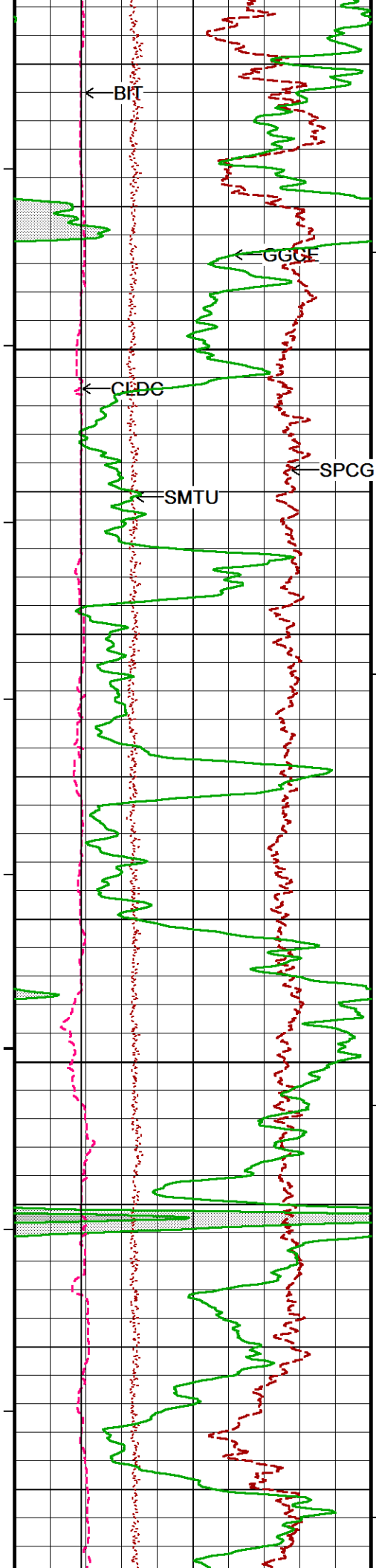
DPR

DCOR

NPRI

PDPE





118°

4300

119°

4350

RTAO
R850
R600
R400
R300

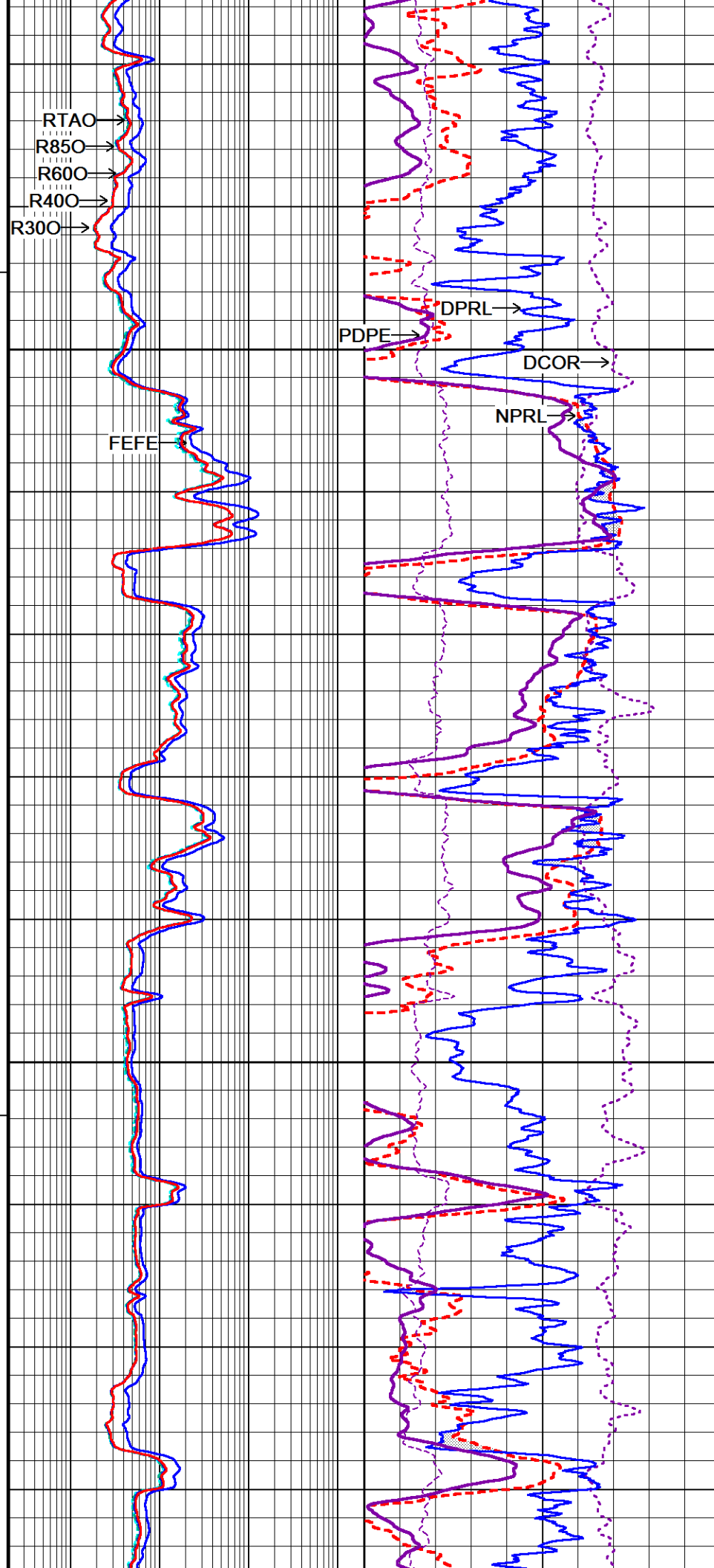
FEFE

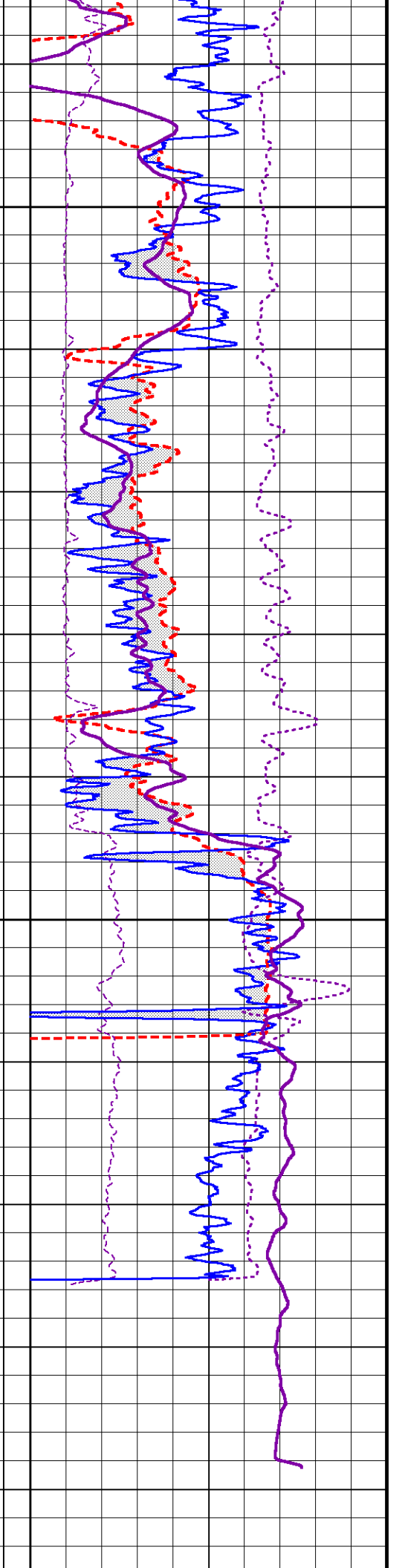
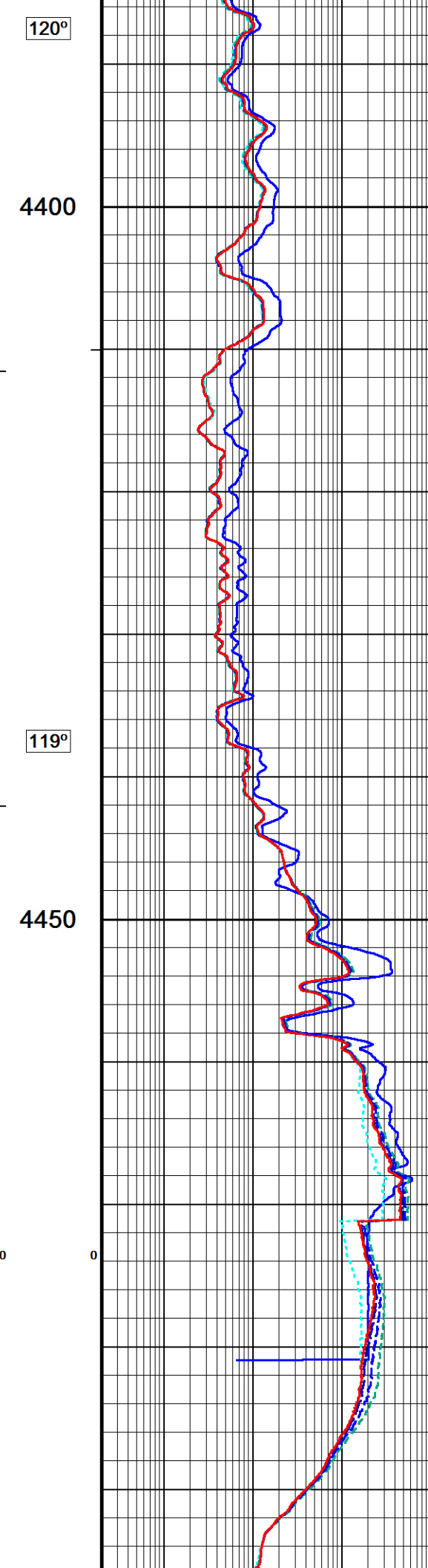
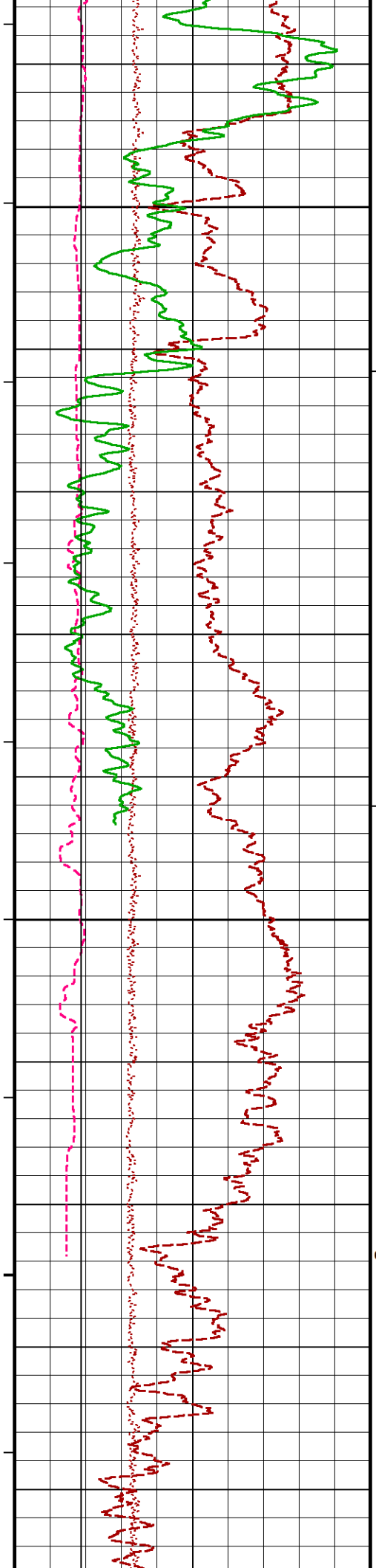
PDPE

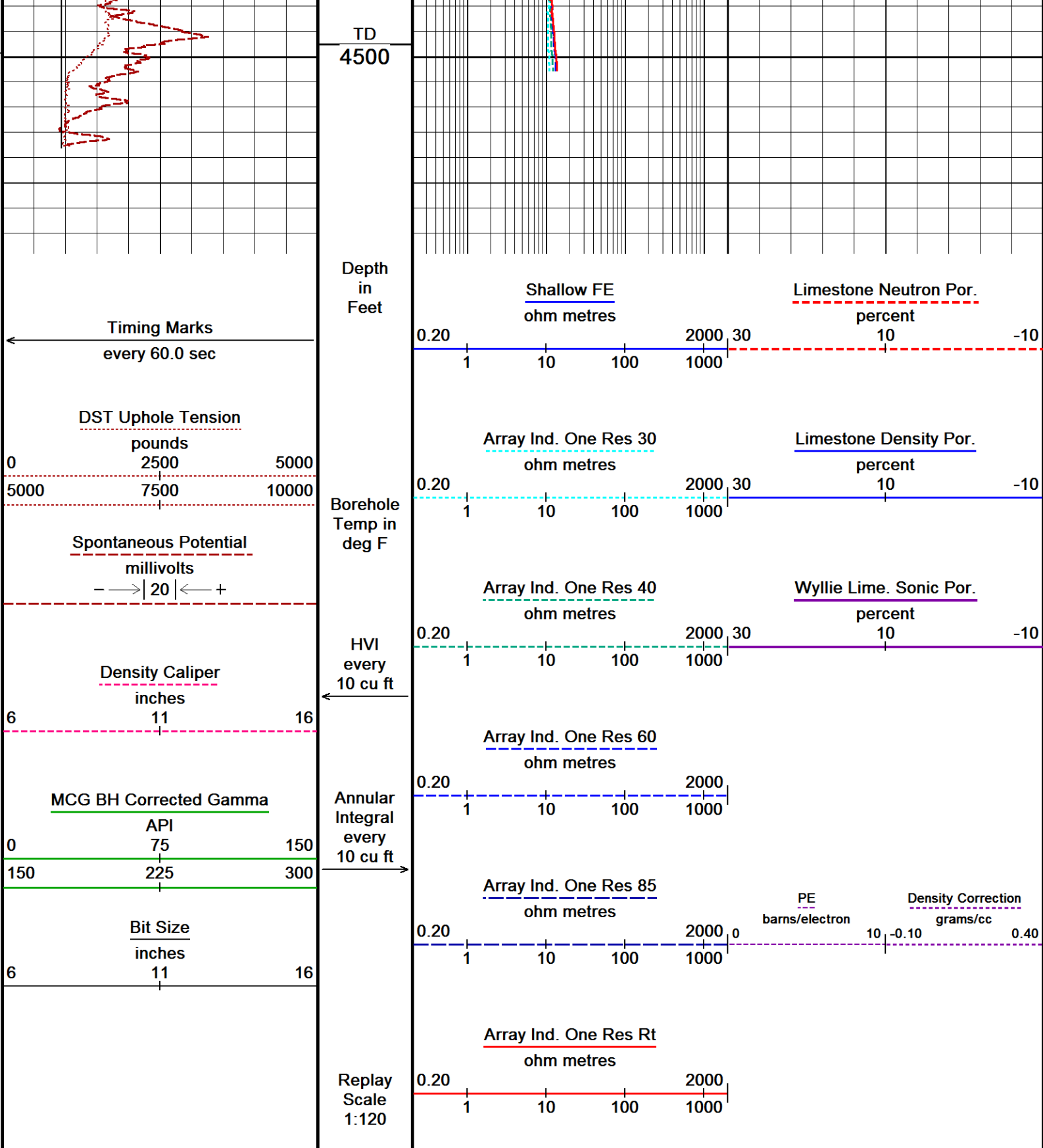
DPRL

DCOR

NPRL



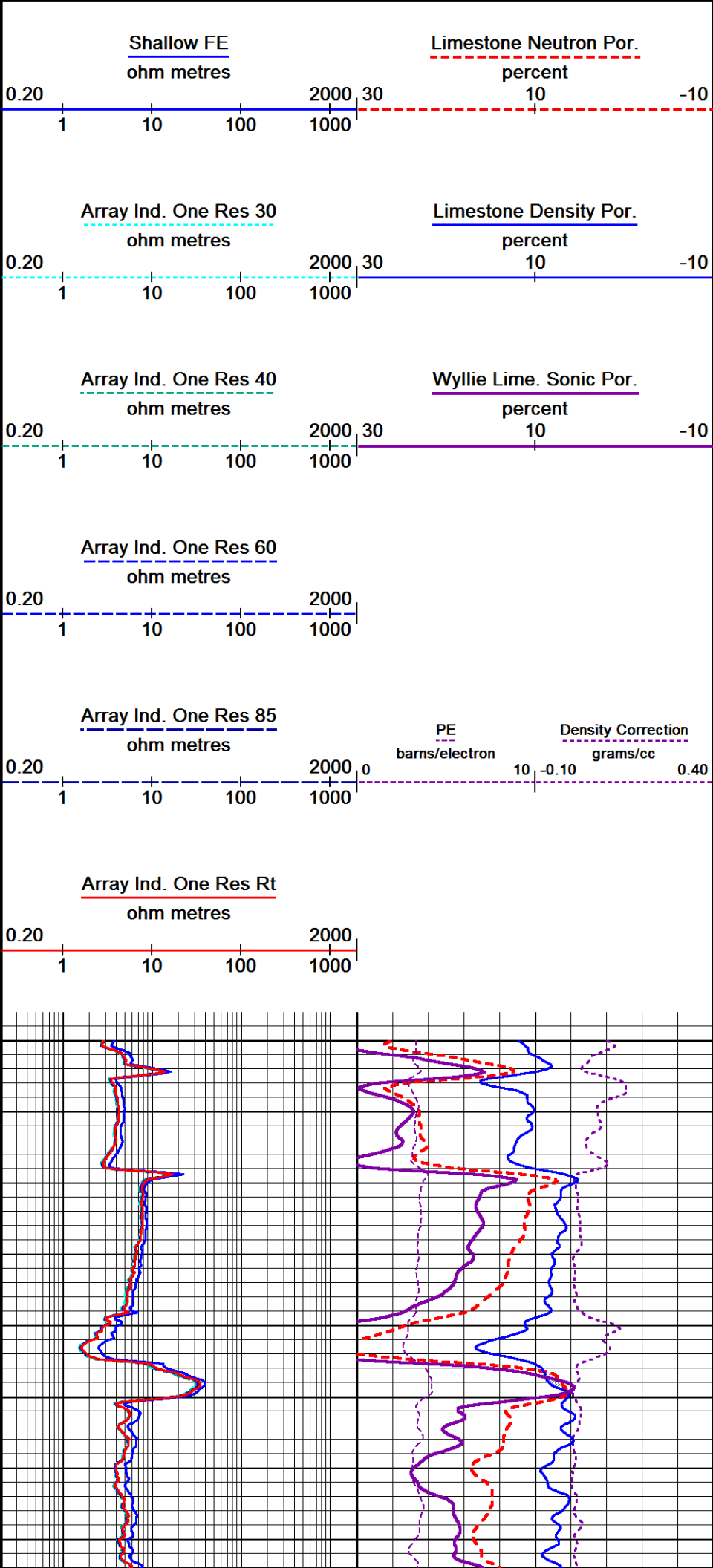
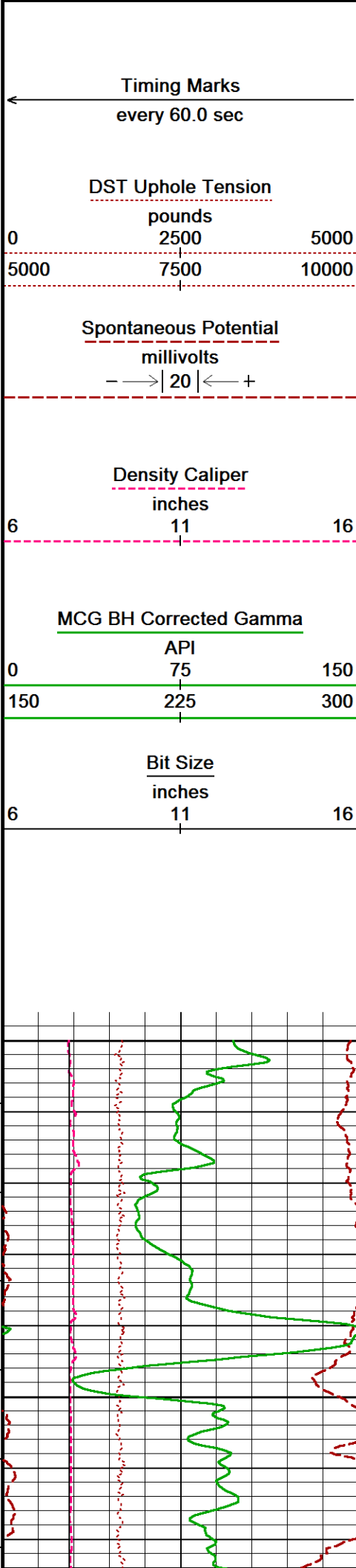


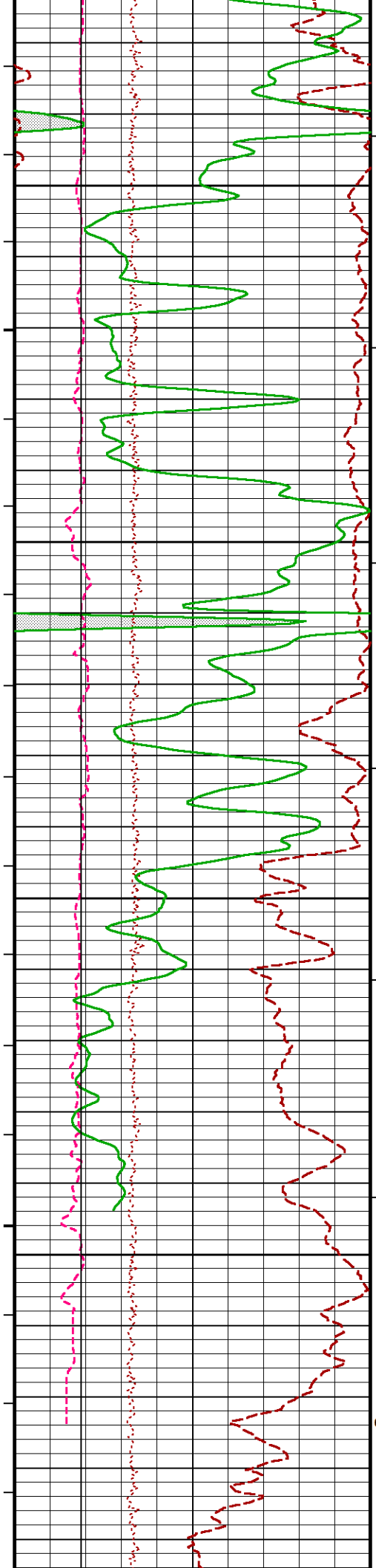


Depth Based Data - Maximum Sampling Increment 2.5cm	Plotted on 11-JUN-2017 01:43
Filename: C:\Minimus 17.01.7206\Suemar (Lucky Seven)\High Resolution_001.dta	Recorded on 10-JUN-2017 20:34
System Versions: Logged with 17.01.7206 Plotted with 17.01.7206	

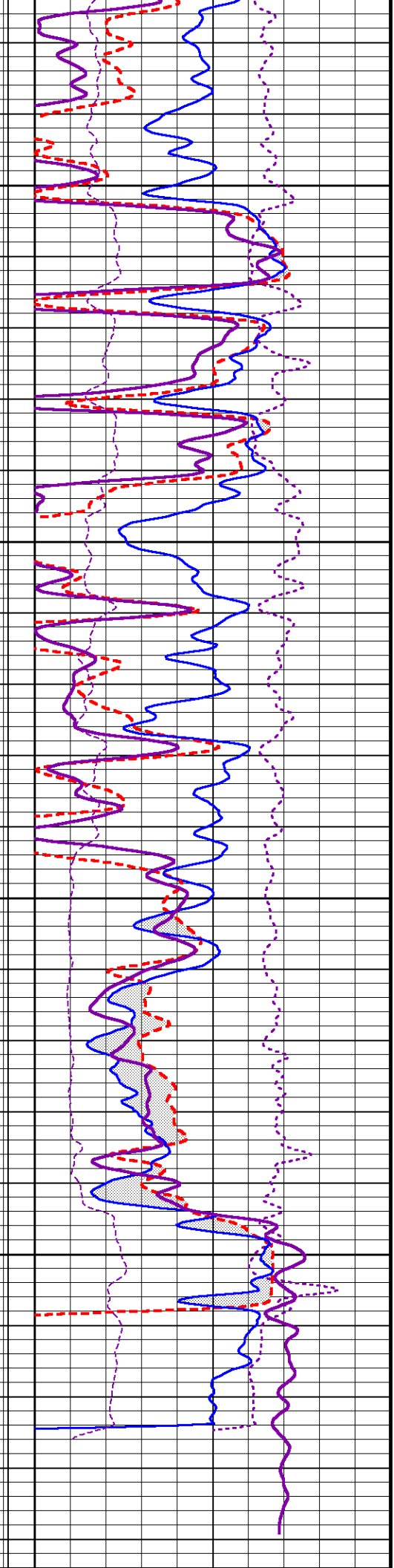
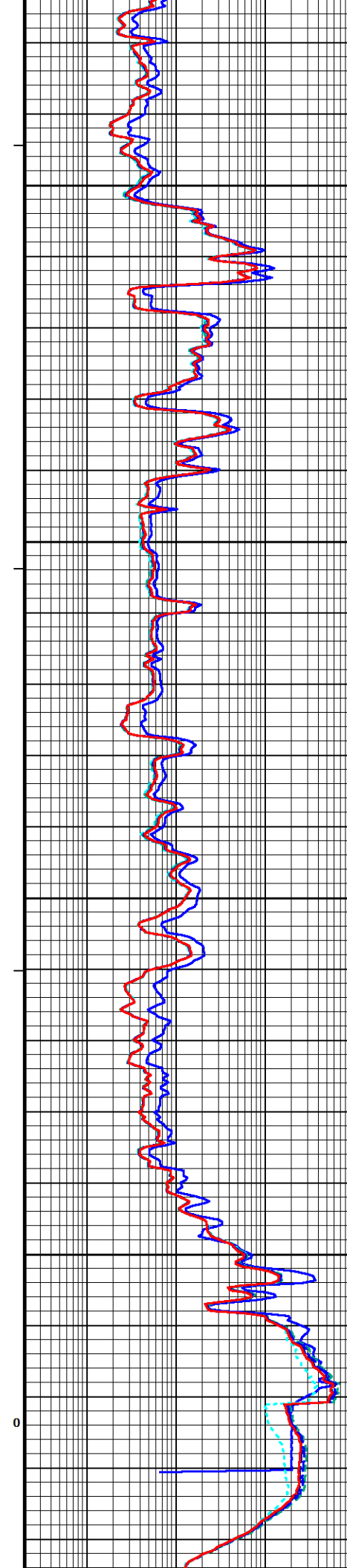
↑	High Resolution	↑
---	-----------------	---

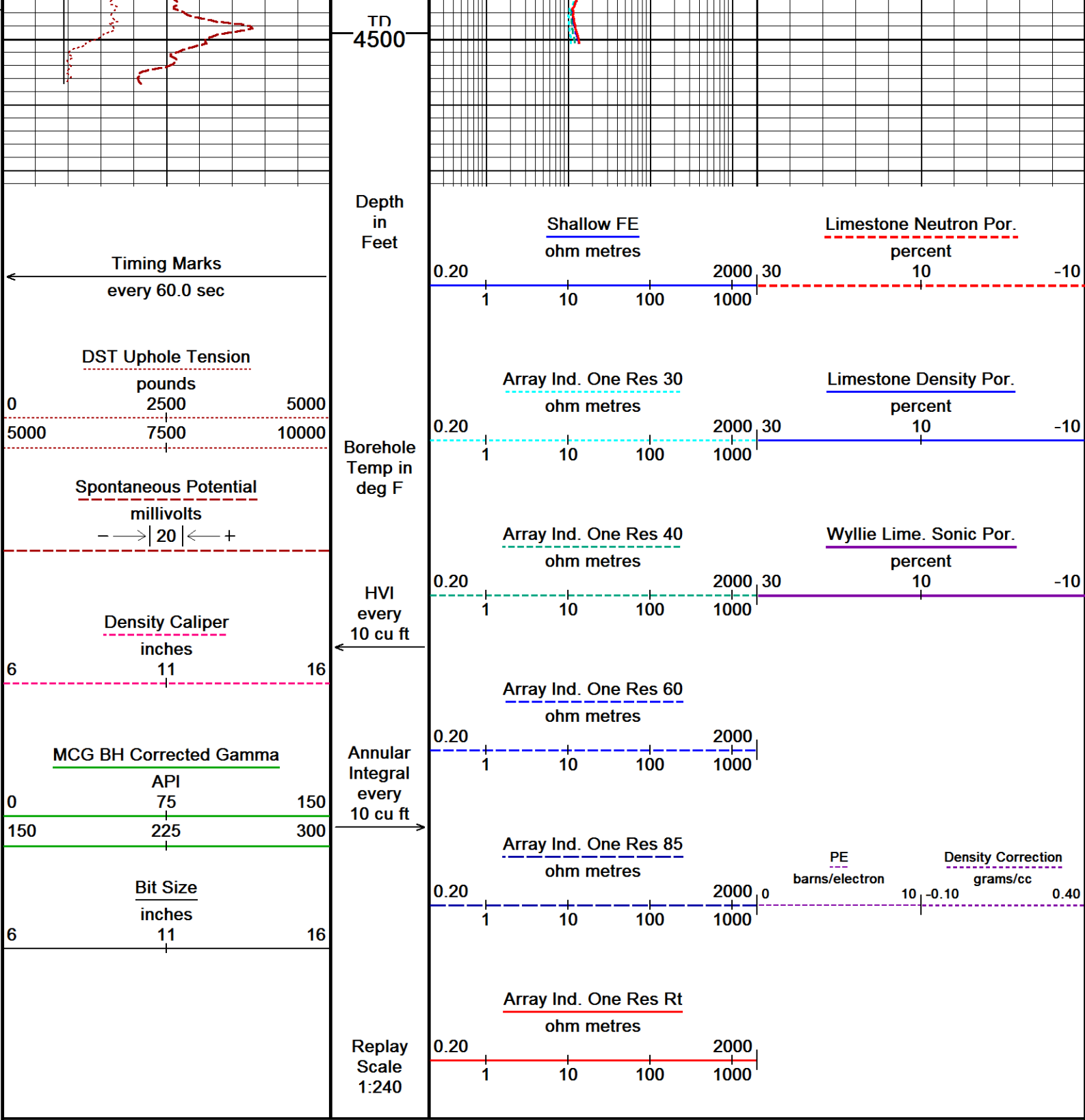
↓	REPEAT PASS	↓
Depth Based Data - Maximum Sampling Increment 10.0cm	Plotted on 11-JUN-2017 01:43	
Filename: C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Repeat Pass.dta	Recorded on 10-JUN-2017 20:34	
System Versions: Logged with 17.01.7206 Processed with 17.01.7206 Plotted with 17.01.7206		





118°
4300
119°
4350
120°
4400
119°
4450
0





Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 11-JUN-2017 01:43

Filename: C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Repeat Pass.dta

Recorded on 10-JUN-2017 20:34

System Versions: Logged with 17.01.7206 Processed with 17.01.7206 Plotted with 17.01.7206

REPEAT PASS

BEFORE SURVEY CALIBRATION

C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Main Pass.dta

General Constants All 000

Last Edited on 10-JUN-2017,19:55

General Parameters

Mud Resistivity	0.800	ohm-metres
Mud Resistivity Temperature	99.000	degrees F
Water Level	0.000	feet

Water Level	0.000	feet
Borehole Fluid Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Method	Single Caliper	
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	5.500	inches
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Base Density Porosity	
Resistivity used	Array Ind. Two Res Rt	
RWA Constant A	0.620	
RWA Constant M	2.150	
SW/APOR Tool Source	0.000	

High Resolution Temperature Calibration MCG-D.K 475

Field Calibration on 01-JUN-2017,10:28

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	212.00	212.00

High Resolution Temperature Constants MCG-D.K 475

Last Edited on 11-MAY-2016,11:23

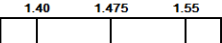
Pre-filter Length 11

Gamma Calibration MCG-D.K 475

Field Calibration on 10-JUN-2017,08:44

	Measured	Calibrated (API)
Background	31	21
Calibrator (Gross)	1892	1282
Calibrator (Net)	1861	1261

Gamma Calibration Tolerances MCG-D.K 475

Ratio 1.476  Counts/API

The scale shows values 1.40, 1.475, and 1.55. The value 1.476 is indicated on the scale.

Gamma Constants MCG-D.K 475

Last Edited on 10-JUN-2017,18:44

Gamma Calibrator Number	GRC.C 46	
GRC-M Calibrator Jig in Use?	NO	
Inactive Background Jig in Use?	NO	
Mud Density	1.09	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Potassium Equivalence	Chloride	
K Mud Concentration	0.00	%

Neutron Calibration MDN-B.J 388

Base Calibration on 22-MAY-2017 15:13

Field Check on 10-JUN-2017,08:45

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3037	92	3714	110
Ratio	32.997		33.764	

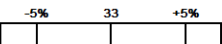
Field Calibrator at Base

	Calibrated (cps)
	1233 1781
Ratio	0.692

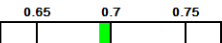
Field Check

	Calibrated (cps)
	1234 1834
Ratio	0.673

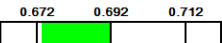
Neutron Calibration Tolerances MDN-B.J 388

Ratio 32.997 

The scale shows values -5%, 33, and +5%. The value 32.997 is indicated on the scale.

Base Check 0.692 

The scale shows values 0.65, 0.7, and 0.75. The value 0.692 is indicated on the scale.

Field Check 0.673 

The scale shows values 0.672, 0.692, and 0.712. The value 0.673 is indicated on the scale.

Neutron Source Id	P14033B	
Neutron Jig Number	NEC 13	
Air Hole Processing	Modified Ratio	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Salinity Correction	Not Applied	
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

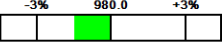
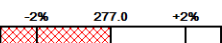
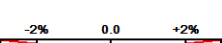
FE Calibration MFE-B.A 261

Base Calibration on 01-JUN-2017 10:53

Field Check on 10-JUN-2017 08:37

Base Calibration		
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	965.5	126.8
Base Check		
Field Check		280.7

FE Calibration Tolerances MFE-B.A 261

Reference 2	965.5		ohm
Base Check	0.0		ohm-m
Field Check	280.7		ohm-m

FE Constants MFE-B.A 261

Last Edited on 10-JUN-2017,08:36

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Borehole Correction Constants		
Sonde Position	0.5	inches
Hole Size Source	Density Caliper	
Hole Size Constant Value	N/A	inches
Rm Source	Global Value: Temperature Corrected	
Temp. for Rm Corr.	MCG External Temperature	

Sonic Constants MSS-C.A 147

Last Edited on 02-OCT-2016,20:33

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec
Hunt-Raymer Constant	83.13	micro-sec/ft
Sonde Mode	Compensated	
Hole Type	Open Hole	

Sonde Parameters

Sonde Parameters

	Measured	Calibrated
Offset	N/A	0.0000
Free Pipe	N/A	N/A
Peak Amplitude Source	N/A	

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A
5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing	N/A			
Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	Depth (ft)	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	
N/A	N/A	N/A	0.00	

Full Waveform Parameters

Use 3' Waveform to derive TR	N/A	
Use 4' Waveform to derive TR	N/A	
Use 5' Waveform to derive TR	N/A	
Use 6' Waveform to derive TR	N/A	
3' Waveform Discriminator Level	N/A	mV
4' Waveform Discriminator Level	N/A	mV
5' Waveform Discriminator Level	N/A	mV
6' Waveform Discriminator Level	N/A	mV

Waveform Discriminator Filter	Not Applied	
Semblance Window Width	N/A	micro-sec
Sonic Despiker	N/A	N/A

Induction Calibration MAI-B.J 426

Base Calibration on 15-MAY-2017,23:17
Field Check on 10-JUN-2017 08:36

Base Calibration

Test Loop Calibration

Channel	Measured		Calibrated (mmho/m)	
	Low	High	Low	High
1	15.9	452.0	9.3	966.2
2	5.1	359.5	7.6	821.4
3	3.0	246.4	5.2	566.0
4	2.1	128.2	2.6	279.2

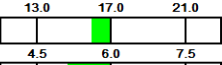
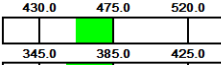
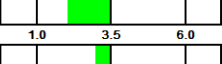
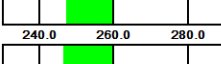
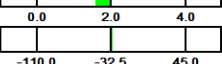
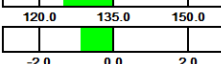
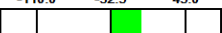
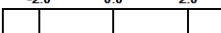
Array Temperature 74.8 Deg F

Test Loop Calibration Verified

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1			13.7	4020.9
2			31.8	3749.5
3			29.1	3212.0
4			18.7	2161.0
Deep			15.9	2048.8
Medium			44.2	4276.9
Shallow			50.1	5606.2

Array Temperature 0.0 74.2 Deg F

Induction Calibration Tolerances MAI-B.J 426

Low Conductivity 1	15.9		mmho/m High Conductivity 1	452.0		mmho/m
Low Conductivity 2	5.1		mmho/m High Conductivity 2	359.5		mmho/m
Low Conductivity 3	3.0		mmho/m High Conductivity 3	246.4		mmho/m
Low Conductivity 4	2.1		mmho/m High Conductivity 4	128.2		mmho/m
Background Vx 1	0.0		mmho/m Phase Check Loop 1	0.0		%

Background Vx 2	0.0		mmho/m Phase Check Loop 2	0.0		%
Background Vx 3	0.0		mmho/m Phase Check Loop 3	0.0		%
Background Vx 4	0.0		mmho/m Phase Check Loop 4	0.0		%

Induction Constants MAI-B.J 426

Last Edited on 10-JUN-2017,18:43

Induction Model RtAP-WBM

Borehole Correction Constants

Tool Centred	No	
Hole Size Source	Density Caliper	
Hole Size Constant Value	N/A	inches
Stand-off Type	Fins	
Stand-off	0.50	inches
Number of Fins on Stand-off	6.0000	
Stand-off Fin Angle	60.00	degrees
Stand-off Fin Width	0.5000	inches
Rm Source	Global Value: Temperature Corrected	
Temp. for Rm Corr.	MCG External Temperature	
Squasher Start	0.0050	mhos/metre
Squasher Offset	N/A	mhos/metre

Borehole Normalisation

DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre
Channel 4	0.00	mmhos/metre

Symmetrised Receiver Gains

Receiver 1	1.00
Receiver 2	1.00
Receiver 3	1.00
Receiver 4	1.00

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	
Source for Rxo	0.00	

Caliper Calibration MPD-B 120

Base Calibration on 22-MAY-2017 14:31

Field Calibration on 10-JUN-2017 08:42

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	18945	4.01
2	27440	5.96
3	36320	7.98
4	44656	9.86
5	53757	11.88
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
5.96	5.96

Caliper Calibration Tolerances MPD-B 120

Long Arm Field Cal. 5.96

5.56	5.96	6.36
------	------	------

 in

Photo Density Calibration MPD-B 120

Base Calibration on 22-MAY-2017 14:19

Field Check on 10-JUN-2017 08:41

Density Calibration

Base Calibration

Measured

Calibrated (sdu)

Near

Far

Near

Far

Background

907

1140

Reference 1

49374

24204

59494

30754

Reference 2

20320

2257

24557

2522

Field Check at Base

906.9

1140.5

Field Check

912.7

1135.2

PE Calibration

Base Calibration

Measured

Calibrated

WS

WH

Ratio

Ratio

Background

163

809

Reference 1

18728

49229

0.383

0.367

Reference 2

5342

20213

0.267

0.271

Field Check at Base

163.4

809.4

Field Check

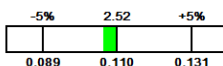
162.8

813.1

Photo Density Calibration Tolerances MPD-B 120

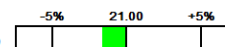
Near Density Ratio

2.50



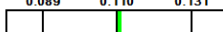
Far Density Ratio

20.65



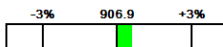
PE Calibration

0.111



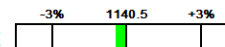
Near Den. Field Check

912.7



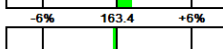
Far Den. Field Check

1135.2



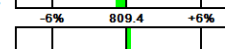
PE WS Field Check

162.8



PE WH Field Check

813.1



Density Constants MPD-B 120

Last Edited on 10-JUN-2017,18:44

Density Source Id

P15771B

Nylon Calibrator Number

766

Aluminium Calibrator Number

633

Density Shoe Profile

8 inch

Caliper Source for Processing

Density Caliper

PE Correction to Density

Not Applied

Mud Density

1.09

gm/cc

Mud Density Type

Mud Filtrate Density

1.00

gm/cc

Dry Hole Mud Filtrate Density

1.00

gm/cc

DNCT

0.00

gm/cc

CRCT

0.00

gm/cc

Density Z/A Correction

Hybrid

Precision Enhanced Density Processing

Not Applied

Matrix Density (gm/cc)

Depth (ft)

2.71

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

DOWNHOLE EQUIPMENT

C:\Minimus 17.01.7206\Suemar (Lucky Seven)\Main Pass.dta

11B Tension Cablehead
MCB-A 1 LG: 2.18 ft WT: 19.8 lb OD: 2.240 in

Compact Swivel Head Adaptor
SHA-J.B 595 LG: 2.30 ft WT: 22.0 lb OD: 2.240 in

Compact Comms Gamma
MCG-D.K 475 LG: 8.70 ft WT: 63.9 lb OD: 2.240 in

Compact Micro-Resistivity
MMR-A 11 LG: 8.59 ft WT: 81.6 lb OD: 4.882 in

Compact Neutron
MDN-B.J 388 LG: 5.04 ft WT: 50.7 lb OD: 2.240 in

Compact Vee Arm Caliper
MVC-A.A 139 LG: 8.06 ft WT: 61.7 lb OD: 2.244 in

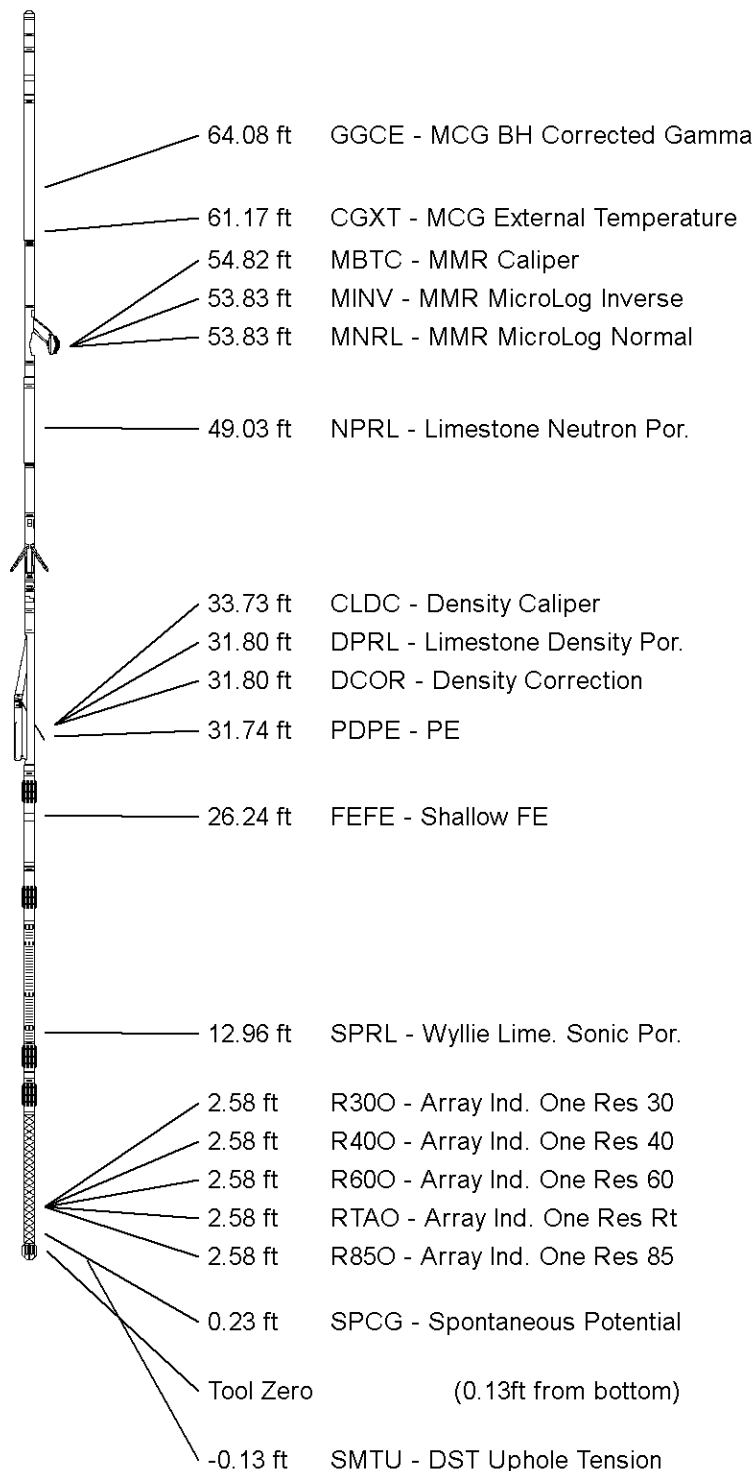
Compact Density/Caliper
MPD-B 120 LG: 9.59 ft WT: 90.4 lb OD: 2.449 in

Compact Focussed Electric
MFE-B.A 261 LG: 6.05 ft WT: 48.5 lb OD: 2.244 in

Compact Sonic
MSS-C.A 147 LG: 12.52 ft WT: 72.8 lb OD: 2.244 in

Compact Induction
MAI-B.J 426 LG: 10.81 ft WT: 48.5 lb OD: 2.240 in

Total Length: 73.84 ft Weight: 560.0 lb



All measurements relative to tool zero.

COMPANY	SUEMAUR EXPLORATION & PRODUCTION, LLC
WELL	LUCKY SEVEN LLC #1-20
FIELD	WILDCAT
PROVINCE/COUNTY	SHERIDAN
COUNTRY/STATE	USA / KANSAS

Elevation Kelly Bushing	2754	feet	First Reading	4496.00	feet
Elevation Drill Floor	2752	feet	Depth Driller	4500.00	feet
Elevation Ground Level	2749	feet	Depth Logger	4499.00	feet



COMPOSITE LOG

