



FILE NO: OH098850	COMPANY COACHMAN ENERGY OPERATING COMPANY
API NO: 05103122750000	WELL SHAVETAIL FEDERAL 34-34
	FIELD WILDCAT
	COUNTY RIO BLANCO
	STATE COLORADO

Ver. 4.01	LOCATION: SHL: 650' FSL 1453' FEL	OTHER SERVICES HDL ZDL CN STAR
	SEC 34 TWP 1N RGE 103W	

PERMANENT DATUM	GL	ELEVATION	5818 FT	ELEVATIONS:
LOG MEASURED FROM	KB	15 FT	ABOVE P.D.	KB 5833 FT
DRILL. MEAS. FROM	KB			DF
				GL 5818 FT

DATE	02-SEP-2015		
RUN	TRIP	2	1
SERVICE ORDER	US098850J		
DEPTH DRILLER	4620 FT		
DEPTH LOGGER	4617 FT		
BOTTOM LOGGED INTERVAL	4614 FT		
TOP LOGGED INTERVAL	0 FT		
CASING DRILLER	8.625 IN @ 526 FT		
CASING LOGGER	544 FT		
BIT SIZE	7.875 IN		
TYPE OF FLUID IN HOLE	LSND		
DENSITY	VISCOSITY	9.95 LB/G	56 CP
PH	FLUID LOSS	8.3	6.4 C3
SOURCE OF SAMPLE	MUD TANK		
RM AT MEAS. TEMP.	1.43 OHMM @ 70 DEGF		
RMF AT MEAS. TEMP.	1.07 OHMM @ 70 DEGF		
RMC AT MEAS. TEMP.	1.79 OHMM @ 70 DEGF		
SOURCE OF RMF	RMC	CALCULATED	CALCULATED
RM AT BHT	1.1 OHMM @ 116.4 DEGF		
TIME SINCE CIRCULATION	8 HOURS		
MAX. RECORDED TEMP.	116.4 DEGF		
EQUIP. NO.	LOCATION	6685	GRAND JCT
RECORDED BY	W. QUIGLEY		
WITNESSED BY	MR. PAT BLACKMER		

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BOREHOLE RECORD		
BIT SIZE	FROM	TO
7.875 IN	526 FT	4620 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
8.625 IN	24 LB/F	J-55	0 FT	526 FT

REMARKS
RUN 2 TRIP 1: STAR XMAC GR RAN IN COMBINATION
BVOL CVOL CALCULATED IN CUBIC FT CVOL CALCULATED USING PROPOSED 4.5" CASING CALIPERS VERIFIED INSIDE CASING
DT MATRIX: LIMESTONE (47.6 US/FT) WYLLIE POROSITY DT24 FOUND USING FIRST ARRIVALS
THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES CREW: OLSON/FAVORITE/QUIGLEY RIG: CAPSTAR 314

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PWR ADAPTER	4430XA	1249477	FREE
1	1	SWIVEL	3944XD	10195796	FREE
1	1	TTRM	3981XA	10516527	FREE
1	1	TELEMETRY	3514XB	10240730	FREE
1	1	GAMMA RAY	1329XA	10169896	FREE
1	1	CENTRALIZER	4341XA	10202020	CENTRALIZER
1	1	XMAC EA	1677EA	10076613	CENTRALIZED
1	1	XMAC RCVR	1678MC	10175410	CENTRALIZED
1	1	ACOU ISO	1678PB	10086347	CENTRALIZED
1	1	XMAC XMIT	1678BA	10332647	CENTRALIZED
1	1	XMIT EA	1678FA	370875	CENTRALIZED
1	1	CENTRALIZER	4341XA	10239054	CENTRALIZER
1	1	ORIENTATION	4401XA	186393	FREE
1	1	STAR PWR	1022PB	10565895	FREE
1	1	STAR EA	1036EB	12554832	FREE
1	1	STAR	4236MB	10211442	PAD DEVICE

MAIN LOG 5"/100FT SCALE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 7

Plotted: Wed Sep 2 20:22:24 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/0H098850/XMAC_STARR02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 519.129 ft BOTTOM DEPTH: 4622.652 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TENSION	FILTER (j)	medium (1)		TOP	BOTTOM
	FILTER (.j)	medium (1)		"	"
	FILTER (.k)	medium (1)		"	"
GR	FILTER (j)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
DT24	FILTER (j)	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	4.500	in	TOP	BOTTOM
MULTI-ARM (6) CALIPER PROCESSING	CALC. METHOD	CHAD (SPLINE FIT)		"	"
BIT SIZE	BIT SIZE	7.875	in	"	"

ACOUSTIC POROSITY

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACOUSTIC POROSITY	POROSITY TYPE	WYLLIE		TOP	BOTTOM
	DTmatrix	47.60	us/ft	"	"
	DTfluid	190.00	us/ft	"	"
	DTshale	100.00	us/ft	"	"
	MOD. WYLLIE PARM	2.25		"	"
	MOD. R-H-G PARM	2.00		"	"
DELTA T CURVE SELECTION	DT24 SOURCE	FIRST ARRIVAL DT24		"	"

ACOUSTIC AVAN CORRELATION

ACOUSTIC AVAR CORRELATION					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
MONOPOLE DELTA T	FORMATION TYPE	GENERIC (MEDIUM)		TOP	BOTTOM
	CORRELATION METHOD	NTH ROOT		"	"
	RESET TAPERS	RESET TAPERS		"	"
	TAPER - LEFT END	10	us/ft	"	"
	TAPER - RIGHT END	120	us/ft	"	"
	FLOOR (UNIV. OPTION)	0.050		"	"
MONOPOLE COMPRESSIONAL	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	CORRELATION METHOD	NTH ROOT		"	"
	RESET TAPERS	RESET TAPERS		"	"
	TAPER - LEFT END	10	us/ft	"	"
	TAPER - RIGHT END	120	us/ft	"	"
	FLOOR (UNIV. OPTION)	0.050		"	"
MONOPOLE SHEAR	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	GUIDE CURVE	DO NOT USE GUIDE		"	"
	RESET TAPERS			"	"
	TAPER - LEFT END	100	us/ft	"	"
	TAPER - RIGHT END	190	us/ft	"	"
MONOPOLE STONLEY	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	RESET TAPERS			"	"
	TAPER - LEFT END	170	us/ft	"	"
	TAPER - RIGHT END	510	us/ft	"	"
DIPOLE SHEAR	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	CORRELATION METHOD	NTH ROOT		"	"
	GUIDE CURVE	DO NOT USE GUIDE		"	"
	RESET TAPERS			"	"
	TAPER - LEFT END	100	us/ft	"	"
	TAPER - RIGHT END	700	us/ft	"	"

ACOUSTIC PICK CONTROL					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DELTA-T REJECTION RANGE	REJECTION DTmin	40	us/ft	TOP	BOTTOM
	REJECTION DTmax	180	us/ft	"	"
FIRST ARRIVAL PICK	SEARCH START OFFSET (sfan1*)	100	us	TOP	489.750
		0	us	489.750	516.250
		174	us	516.250	519.250
		0	us	519.250	3340.842
		50	us	3340.842	BOTTOM
	SEARCH START OFFSET (sfan2*)	100	us	TOP	489.250
		0	us	489.250	515.750
		174	us	515.750	518.750
		0	us	518.750	3340.342
		50	us	3340.342	BOTTOM
	SEARCH START OFFSET (sfan3*)	100	us	TOP	488.750
		0	us	488.750	515.250
		174	us	515.250	518.250
		0	us	518.250	3339.842
		50	us	3339.842	BOTTOM
	SEARCH START OFFSET (sfan4*)	100	us	TOP	488.250
		0	us	488.250	514.750
		174	us	514.750	517.750
		0	us	517.750	3339.342
		50	us	3339.342	BOTTOM
	SEARCH WINDOW LENGTH	1000	us	TOP	1801.747
		1013	us	1801.747	1804.113
		932	us	1804.113	1805.058
		800	us	1805.058	BOTTOM
	THRESHOLD FACTOR	0.30		TOP	BOTTOM
	THRESHOLD MINIMUM (sfan1*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfan2*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfan3*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfan4*)	1.8	pct	"	"
	E3 THRESHOLD	OFF		"	"

ACOUSTIC QUALITY CONTROL				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
CYCLE SKIP LIMIT	CYCLE SKIP LIMIT	100	us	TOP BOTTOM
ACOUSTIC DIFF TEN LIMIT	DIFF TENSION LIMIT	500	lbf	" "

ACOUSTIC WAVEFORM FILTER				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP BOTTOM
	LOW FREQ CUTOFF	4000	Hz	" "
	HIGH FREQ CUTOFF	20000	Hz	" "
WAVEFORM FILTER - FULLWAVE	SURFACE WAVE FILTER	ON		" "

	LOW FREQ CUTOFF	2000	Hz	"	"
	HIGH FREQ CUTOFF	20000	Hz	"	"
WAVEFORM FILTER - STONELEY	SURFACE WAVE FILTER	ON		"	"
	LOW FREQ CUTOFF	500	Hz	"	"
	HIGH FREQ CUTOFF	5500	Hz	"	"
WAVEFORM FILTER - DIPOLE	SURFACE WAVE FILTER	ON		"	"
	LOW FREQ CUTOFF	1500	Hz	"	"
	HIGH FREQ CUTOFF	5000	Hz	"	"

ACOUSTIC TCC CONTROL PARAMETERS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GENERAL TCC PARAMETERS	AGC	ON		TOP	BOTTOM
	SUBCYCLE LENGTH	50		"	"
	SUBSET	1		"	"
GENERAL MONOPOLE TCC PARAMETERS	STACK LEVEL	2		"	"
	DSP FILTER	ON		"	"
DELTA T TCC PARAMETERS	ACG WINDOW	896	us	TOP	1217.000
		688	us	1217.000	BOTTOM
	MOVEOUT	16	us/ft	TOP	BOTTOM
	SAMPLE PERIOD	16		"	"
	RX DELAY	592	us	"	"
FULL WAVE MONOPOLE TCC PARAMETERS	ACG WINDOW	8064	us	"	"
	SAMPLE PERIOD	24		"	"
	RX DELAY	0	us	"	"
GENERAL DIPOLE TCC PARAMETERS	STACK LEVEL	2		"	"
	DSP FILTER	ON		"	"
INLINE DIPOLE TCC PARAMETERS	ACG WINDOW	0	us	"	"
	SAMPLE PERIOD	64		"	"
	RX DELAY	0	us	"	"
CROSS DIPOLE TCC PARAMETERS	ACG WINDOW	14400	us	"	"
	SAMPLE PERIOD	72		"	"
	RX DELAY	0	us	"	"

CURVE DESCRIPTION REPORT

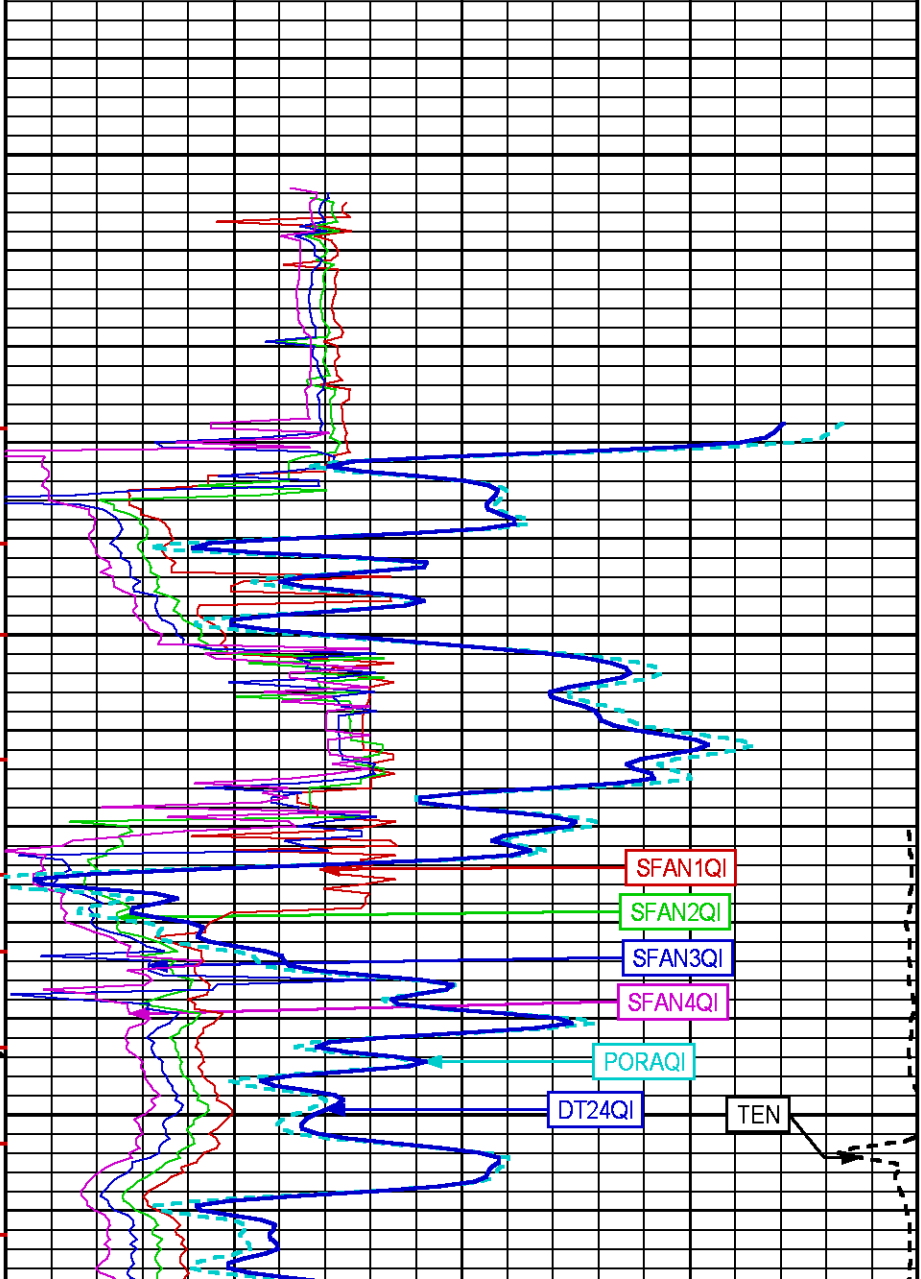
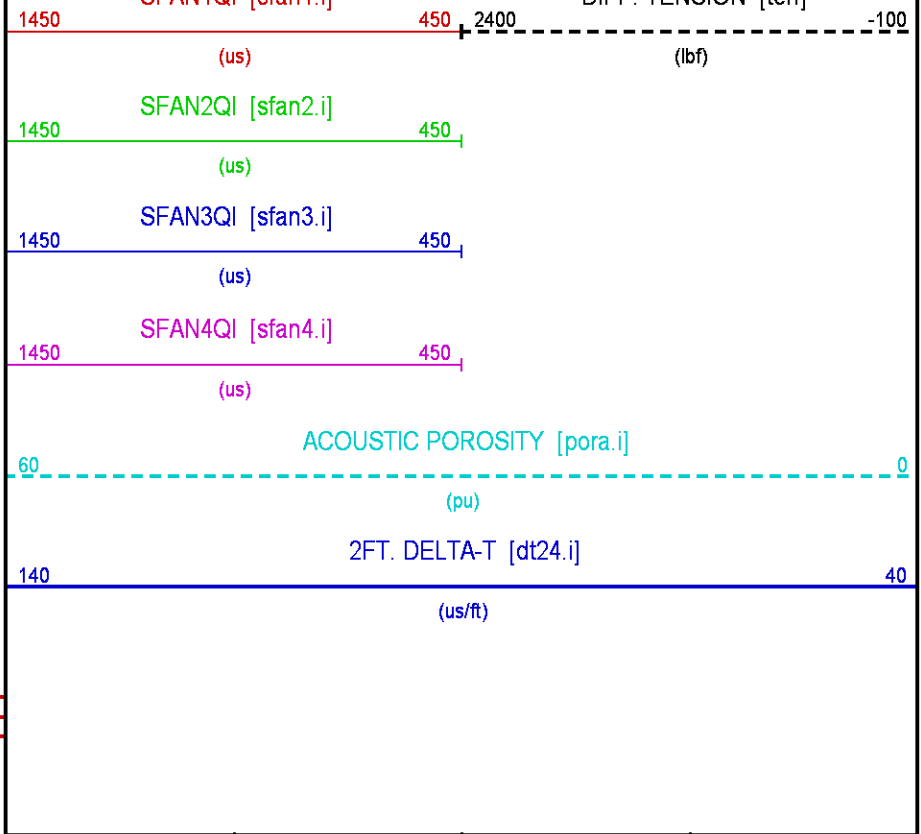
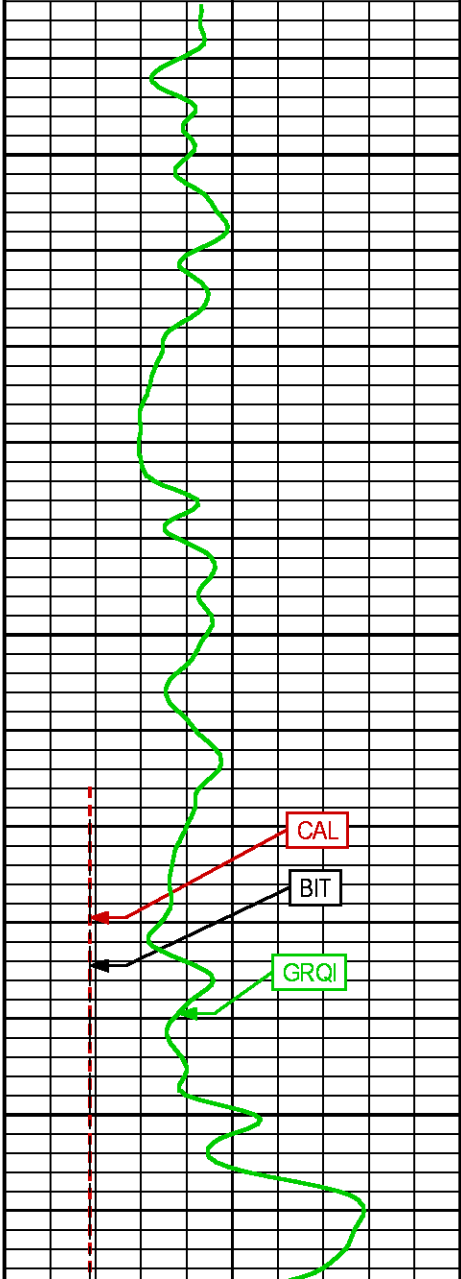
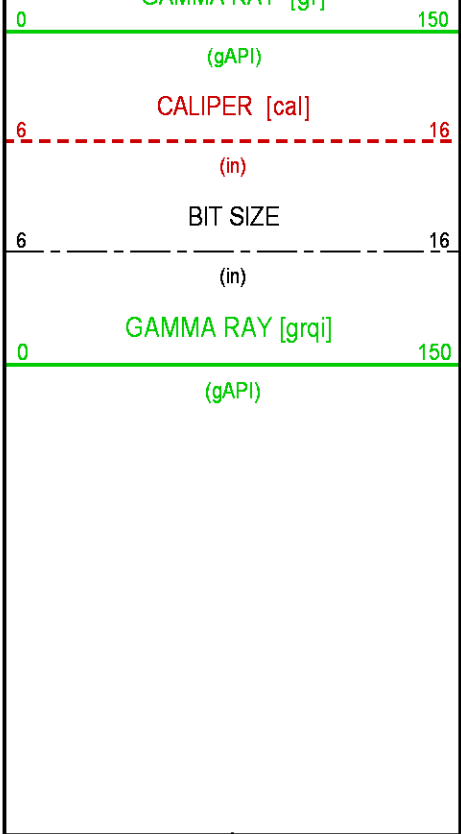
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Sep 2 18:46:34 2015	BIT SIZE
F1:CAL	Sep 2 18:46:34 2015	CALIPER
F1:DT24QI	Sep 2 18:46:34 2015	SLOWNESS OVER 24-INCH INTERVAL
F1:GR	Sep 2 18:46:34 2015	GAMMA RAY
F1:GRQI	Sep 2 18:46:34 2015	GAMMA RAY
F1:PORAQI	Sep 2 18:46:34 2015	ACOUSTIC POROSITY
F1:SFAN1QI	Sep 2 18:46:34 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R1
F1:SFAN2QI	Sep 2 18:46:34 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R2
F1:SFAN3QI	Sep 2 18:46:34 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R3
F1:SFAN4QI	Sep 2 18:46:34 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R4
F1:TEN	Sep 2 18:46:34 2015	DIFFERENTIAL TENSION
F1:TTQI	Sep 2 18:46:34 2015	INTEGRATED TRAVELTIME FROM ACOUSTIC SLOWNESS

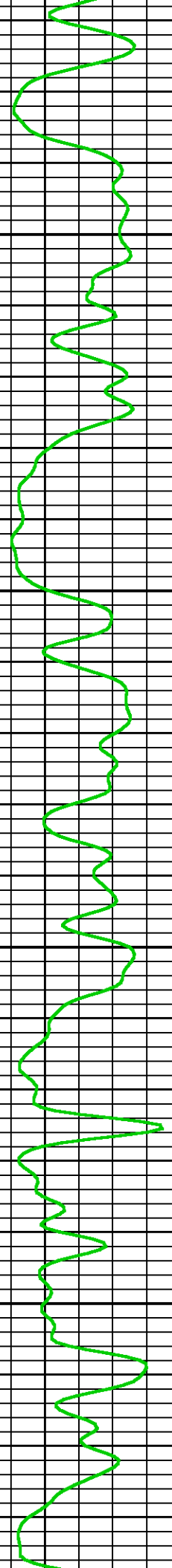
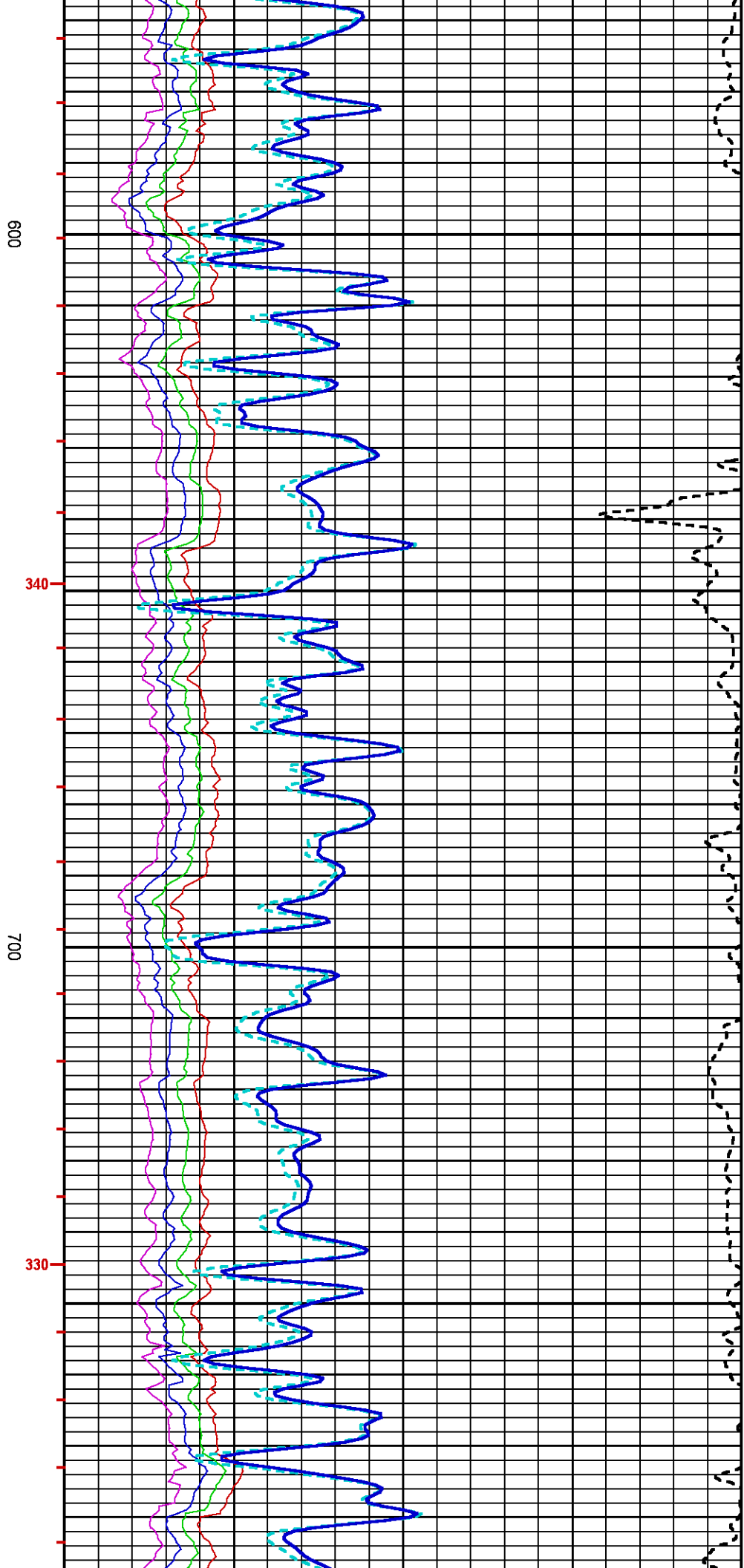
CURVE MEASURE POINT OFFSET

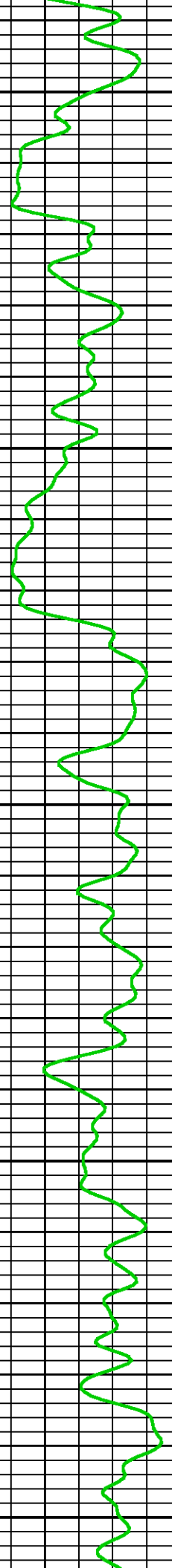
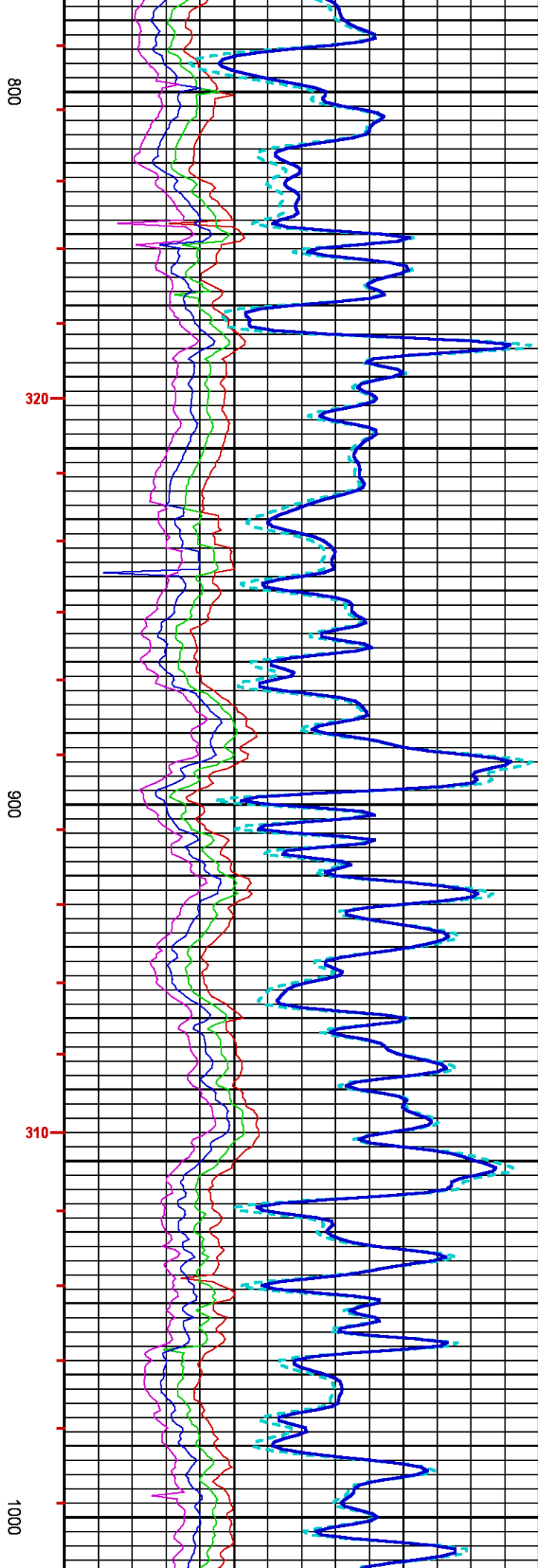
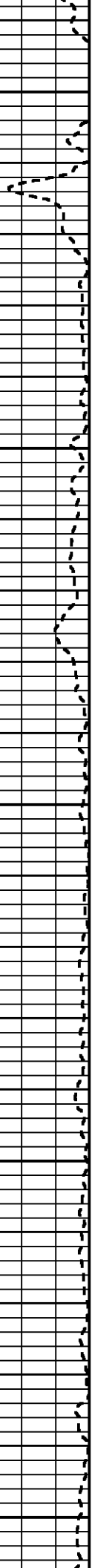
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	87.25	SFAN1QI	60.50	SFAN4QI	61.50
CAL	3.25	GRQI	87.50	SFAN2QI	61.00	TEN	0.00
DT24QI	58.50	PORAQI	58.50	SFAN3QI	61.00		

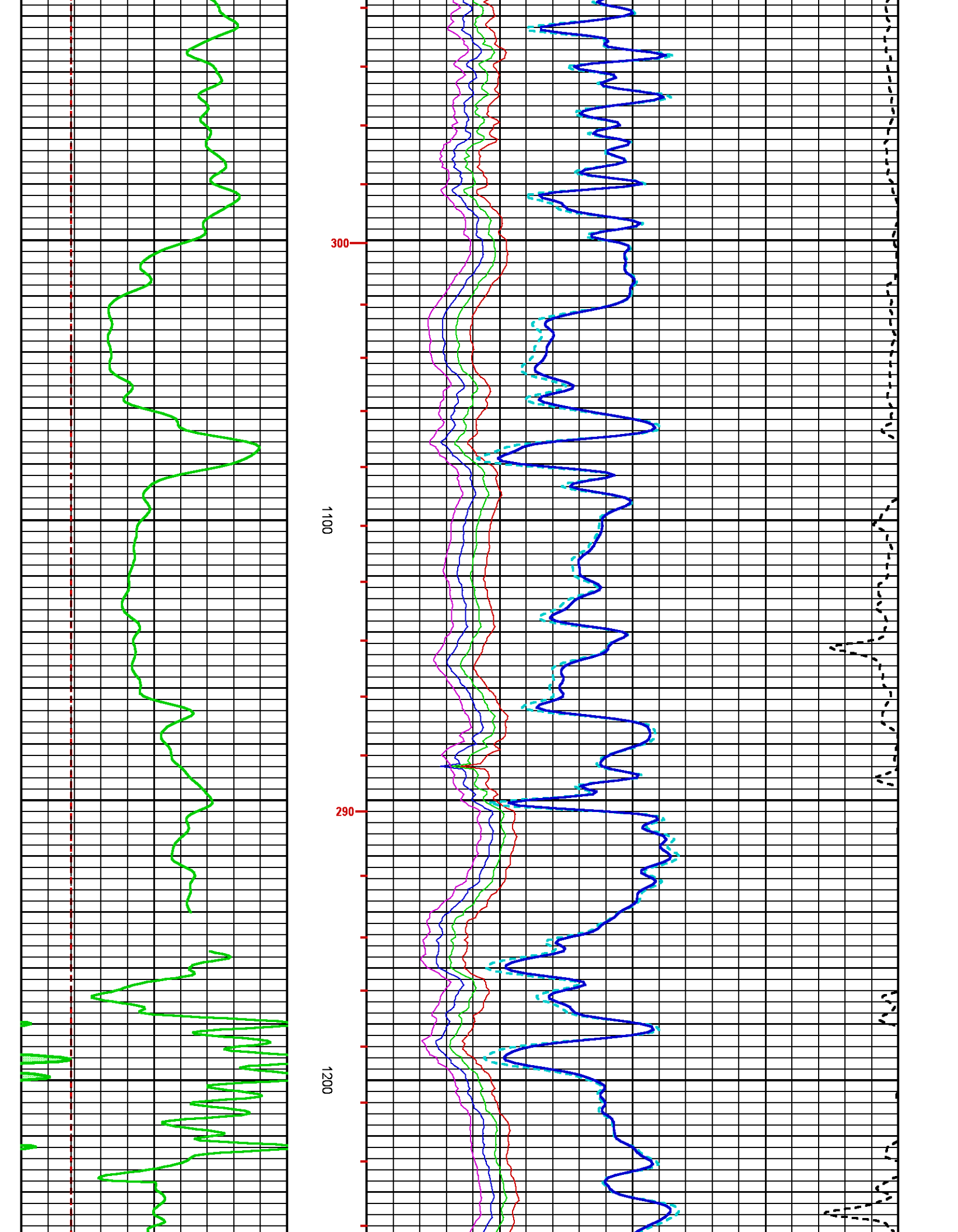
Presentation	: cas6685:/dat1a/0H098850/XMAC_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 434.5 - 4622.5 Feet
Data File 1	: F1 : cas6685:/dat1a/0H098850/XMAC_STARR02_MAIN.xtf
Created On	: Sep 2 18:46:34 2015
Company	: COACHMAN ENERGY OPERATING COMPANY
Well	: SHAVETAIL FEDERAL 34-34
Field	: WILDCAT
File Interval	: 418.5 - 4622.5 Feet
OCT	: XMAC_STA

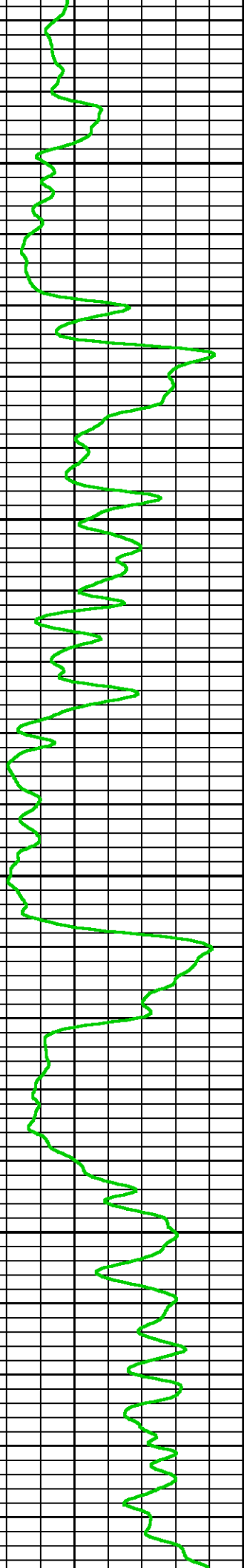
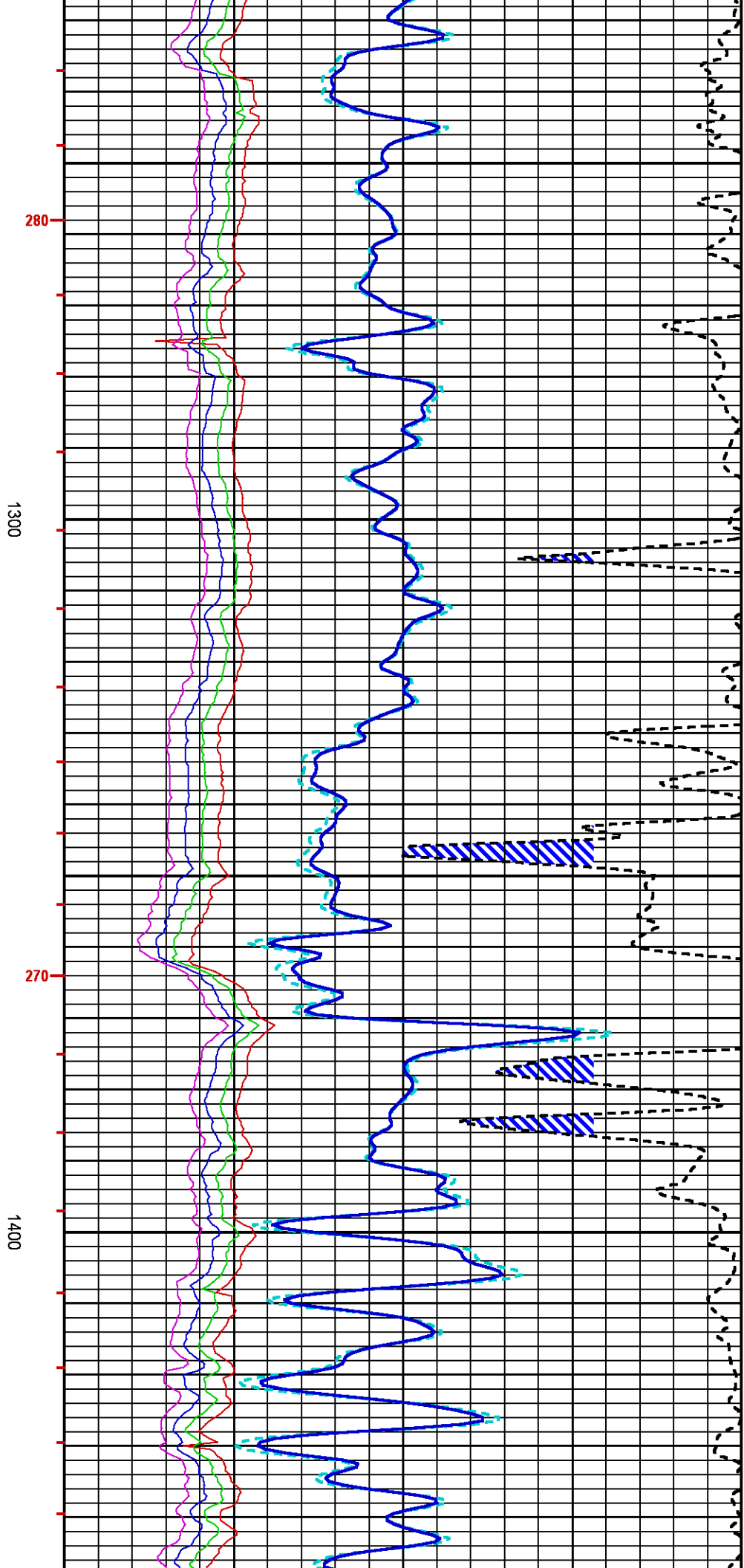
GR BACKUP	FEET	TOOL STICKING
GAMMA RAY [gr]		DIFF TENSION [ten]

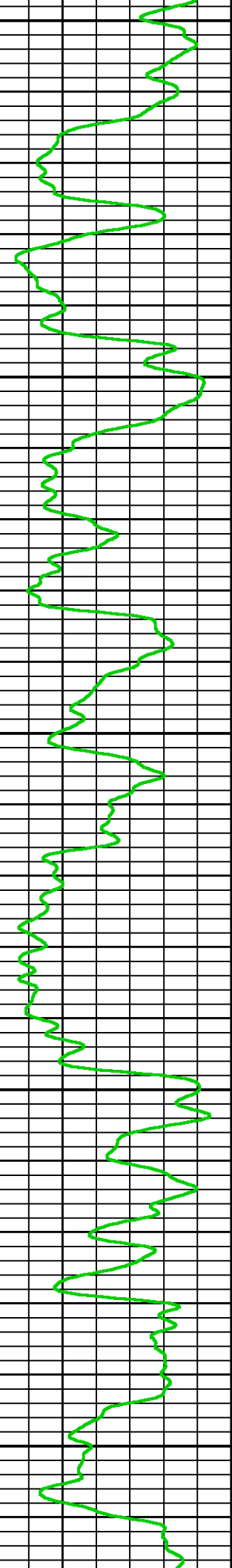
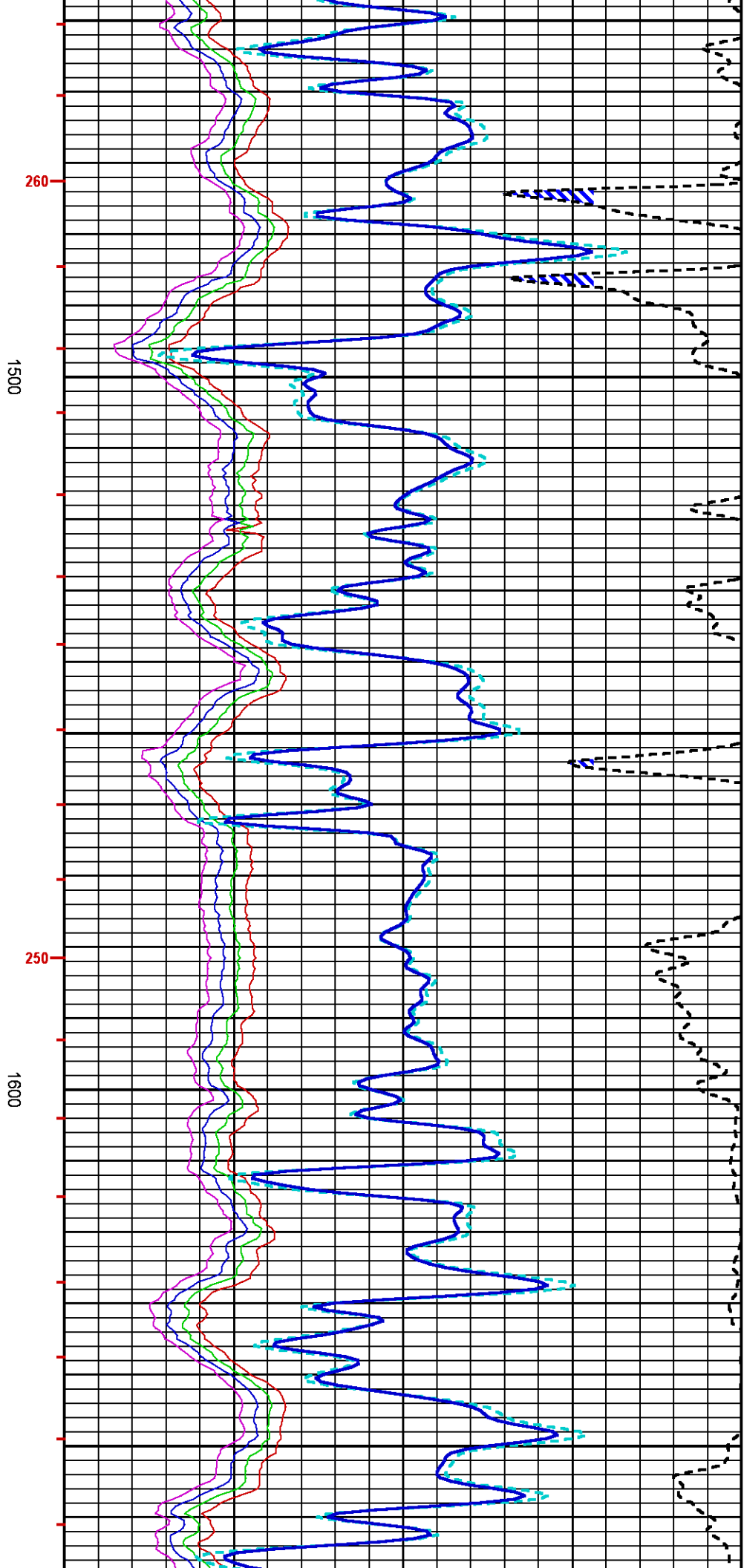


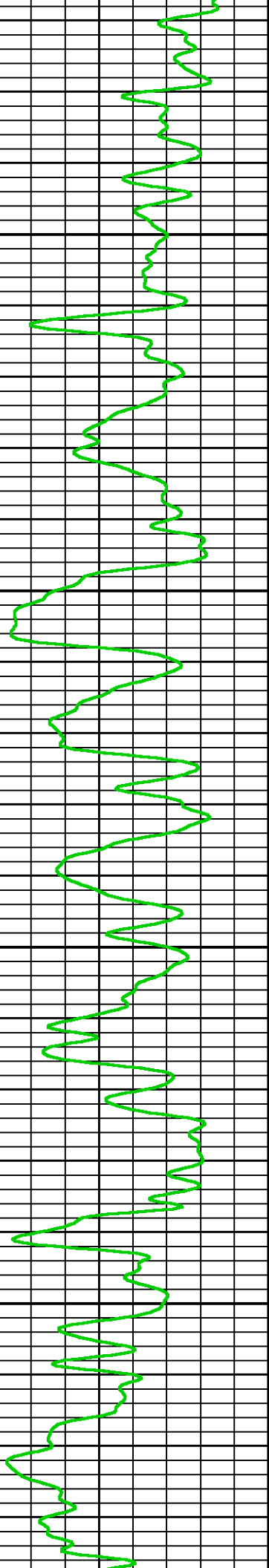
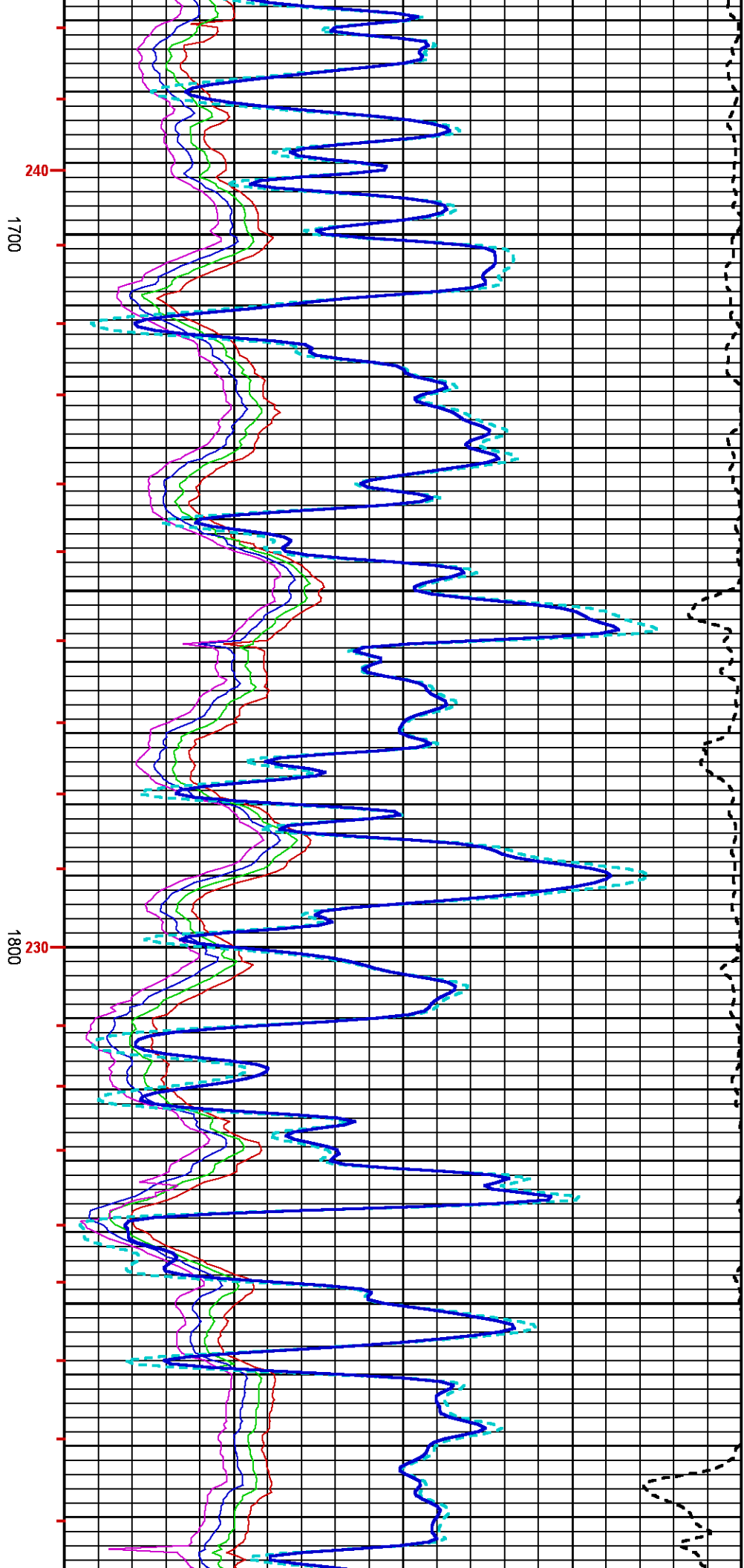


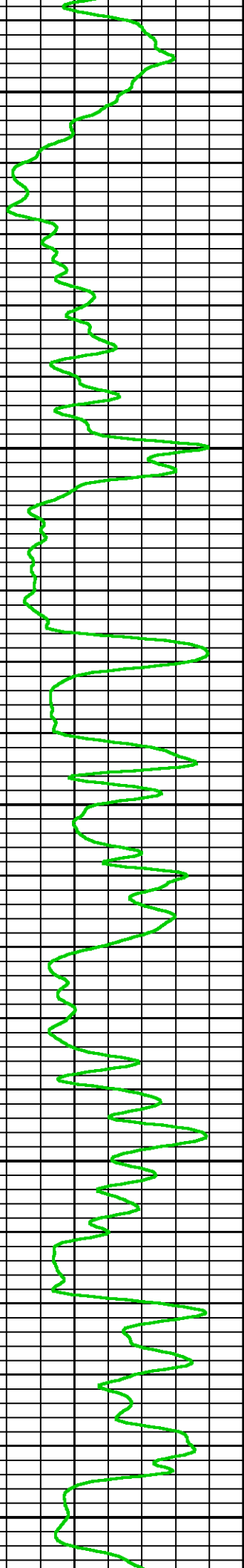
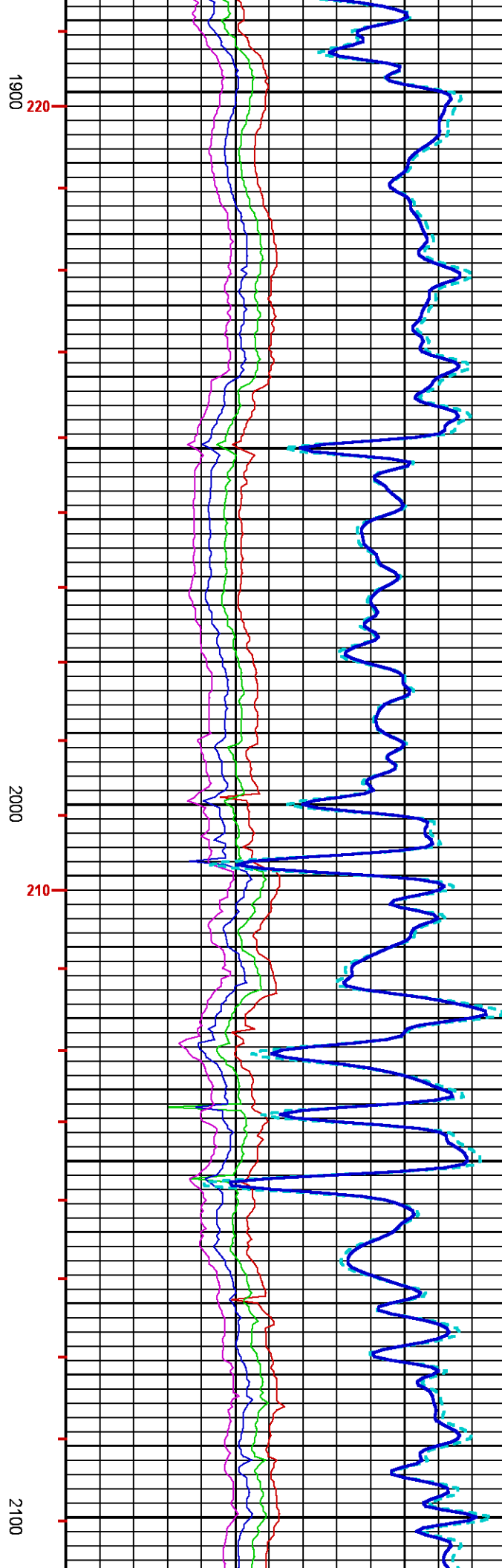
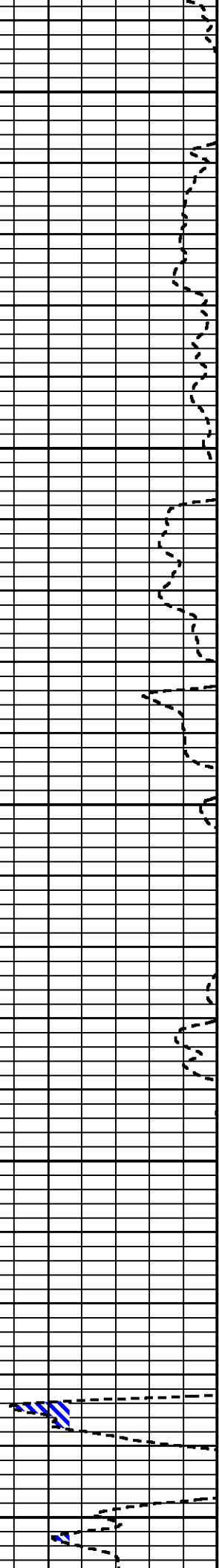


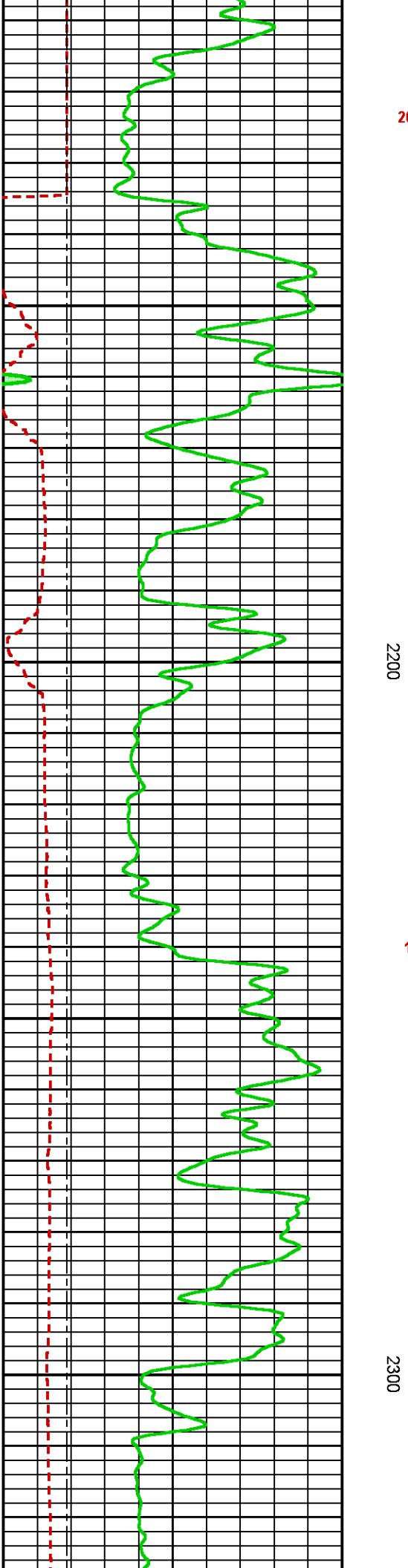
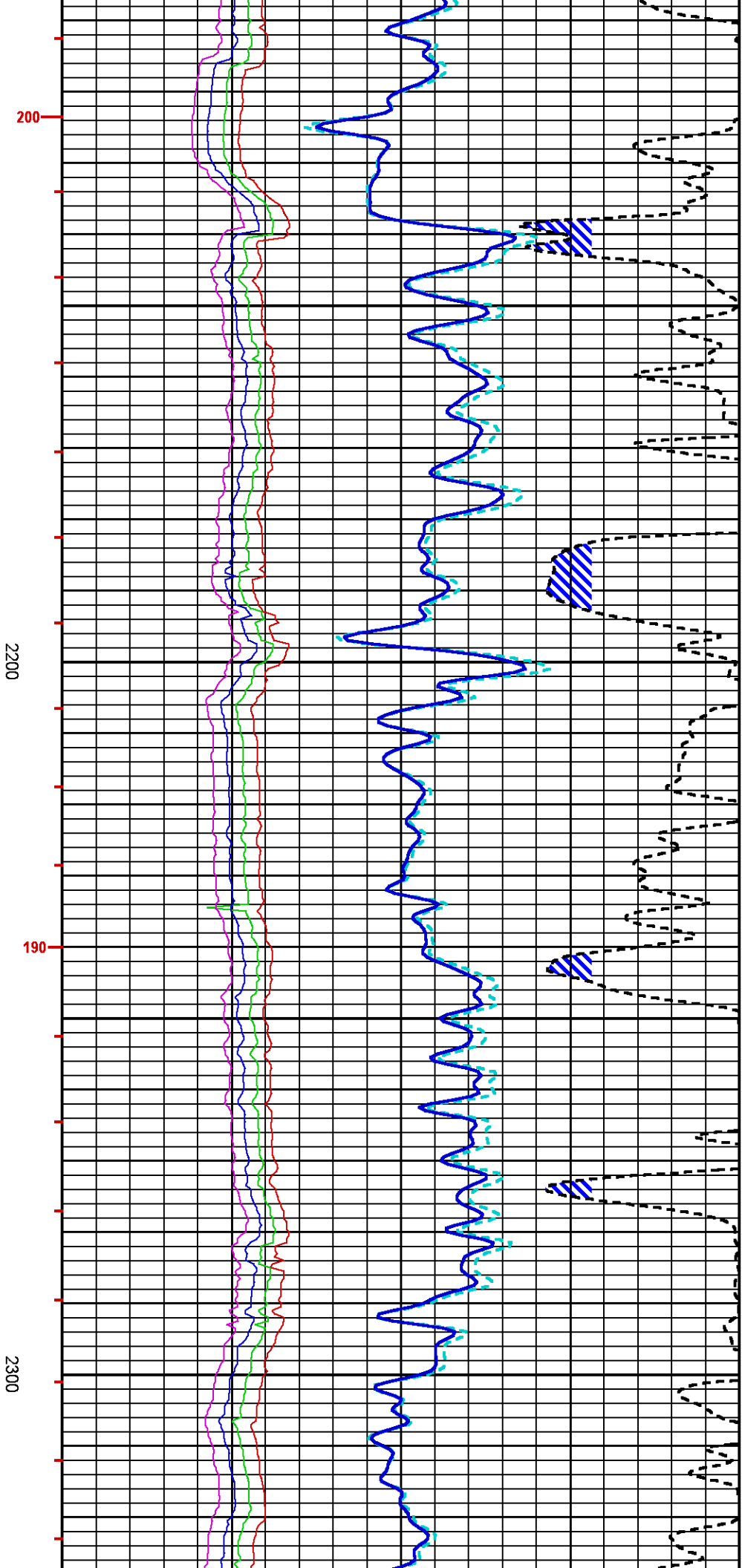


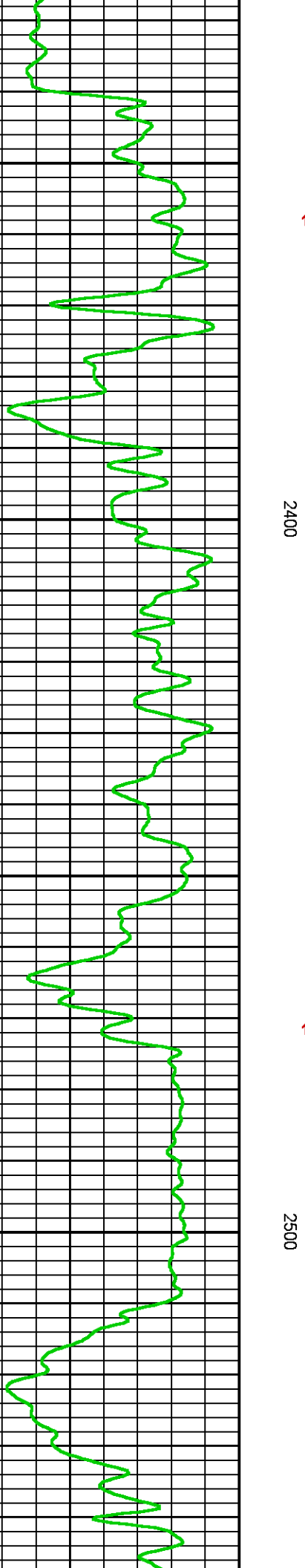
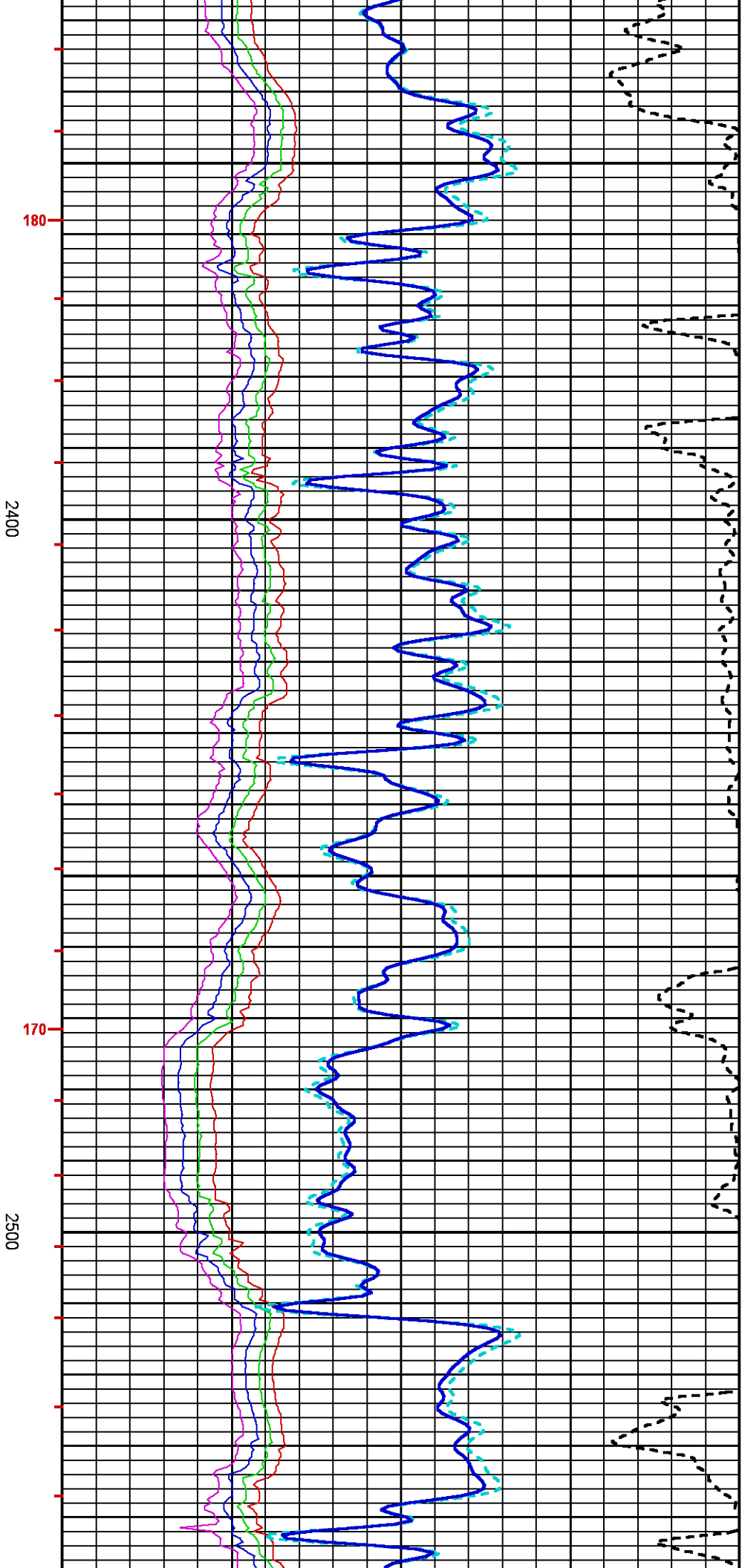


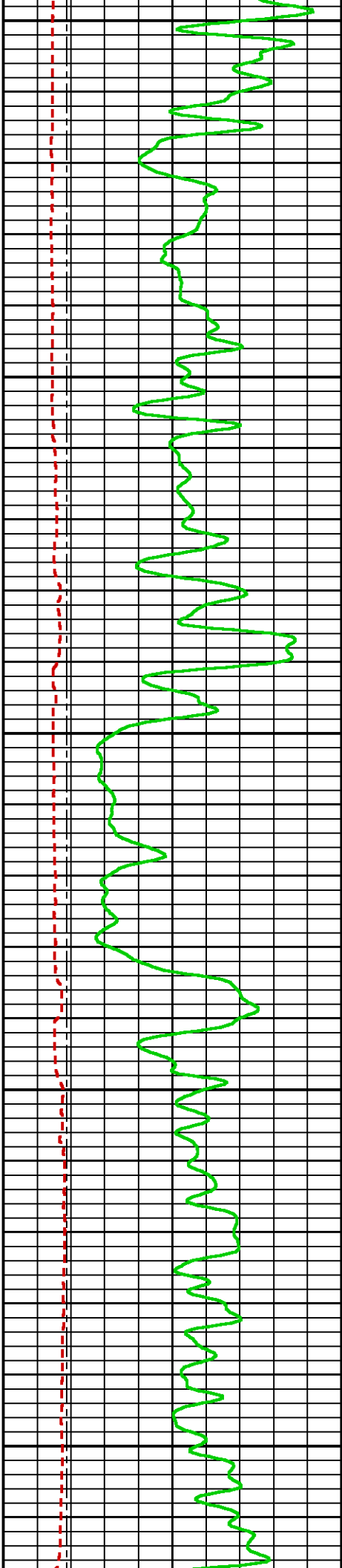
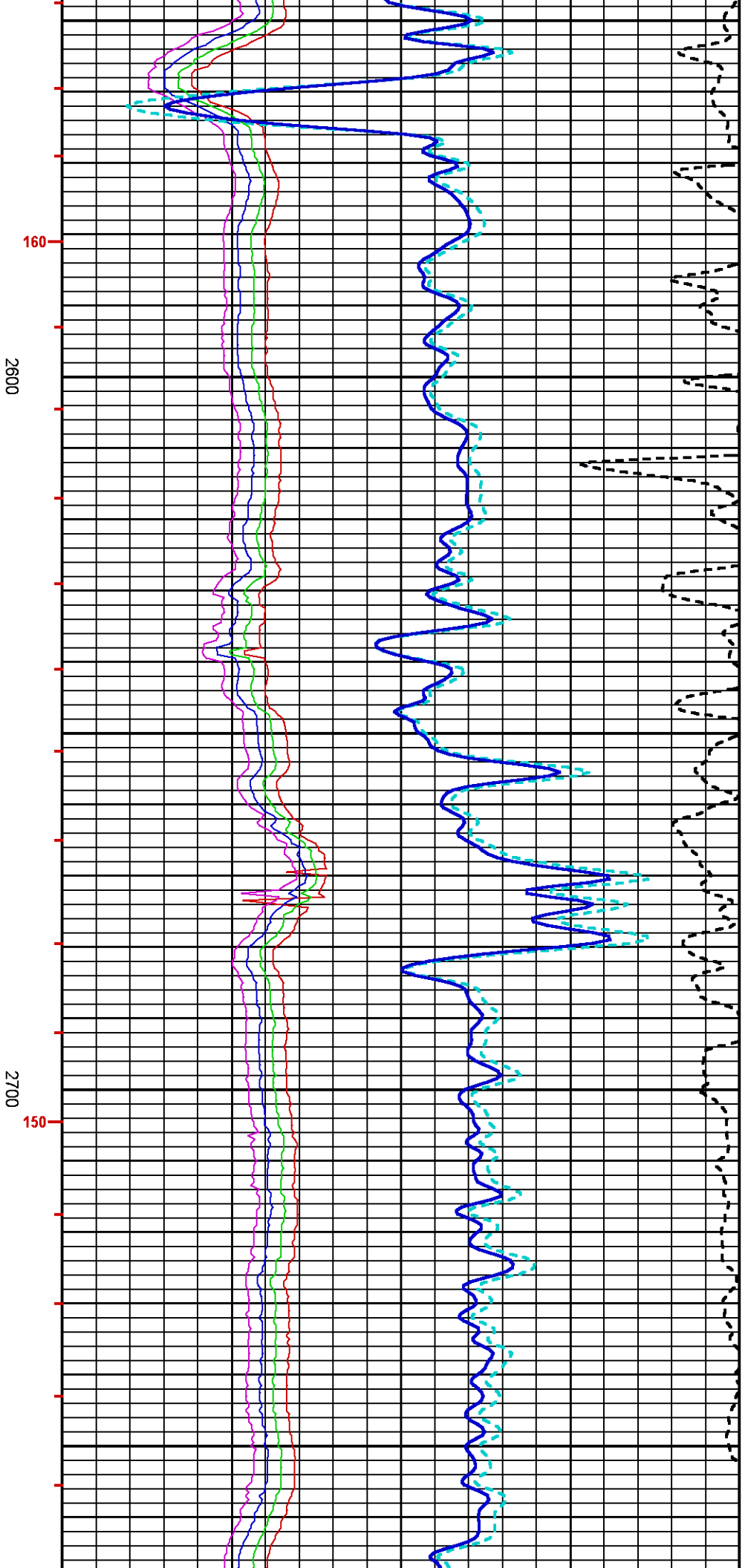


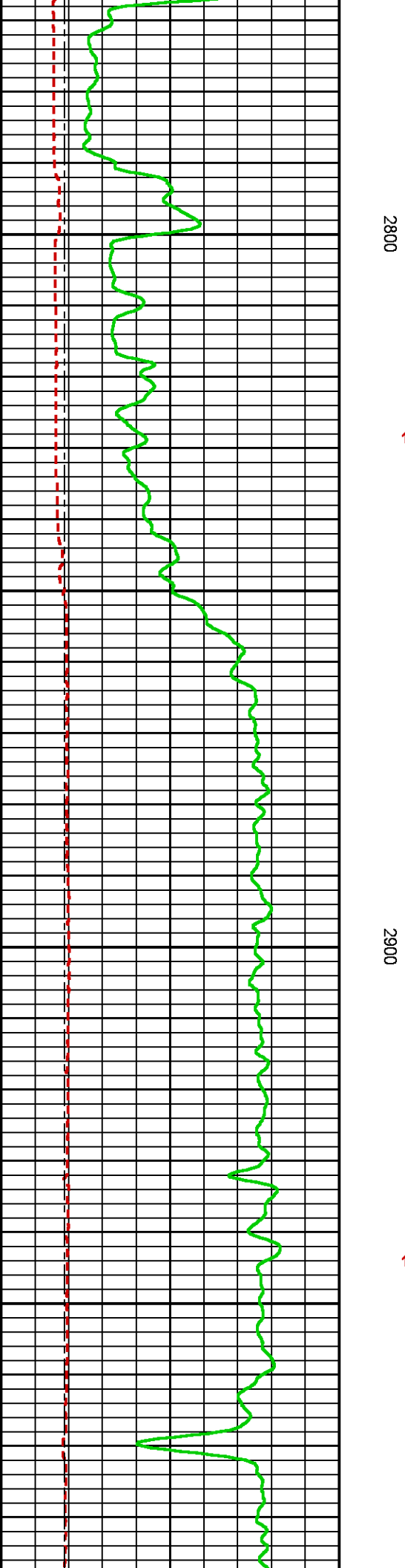
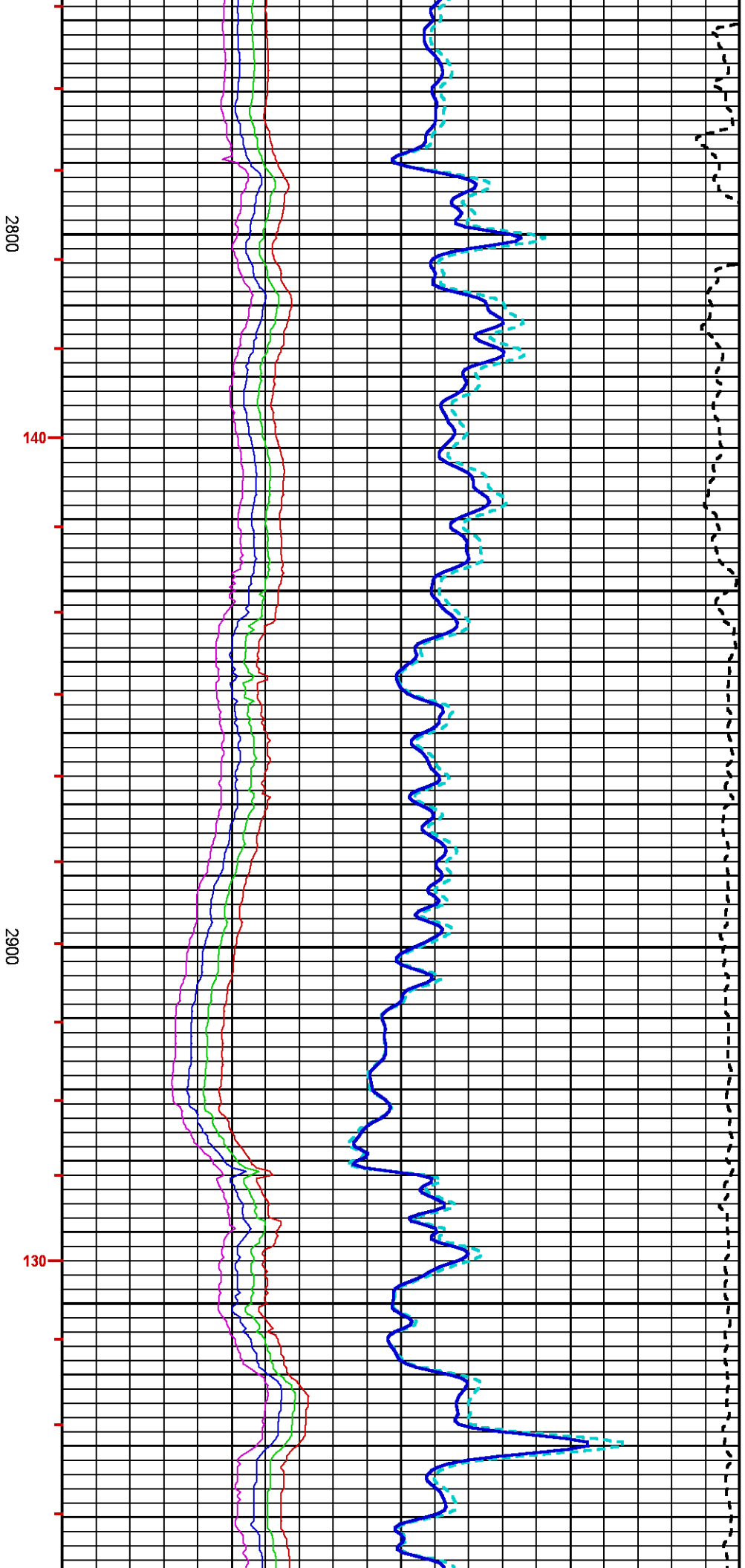


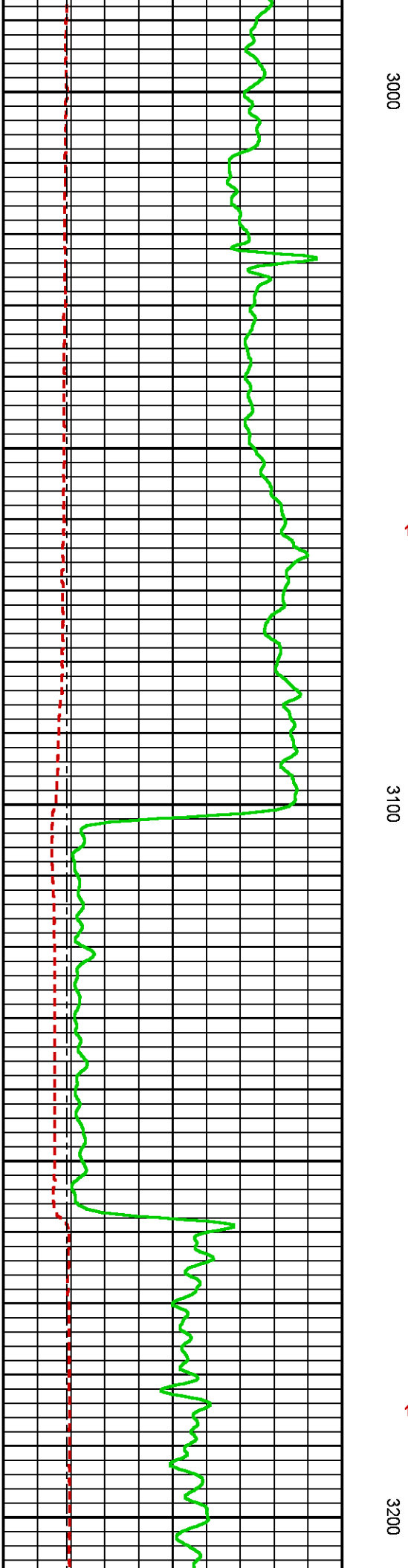
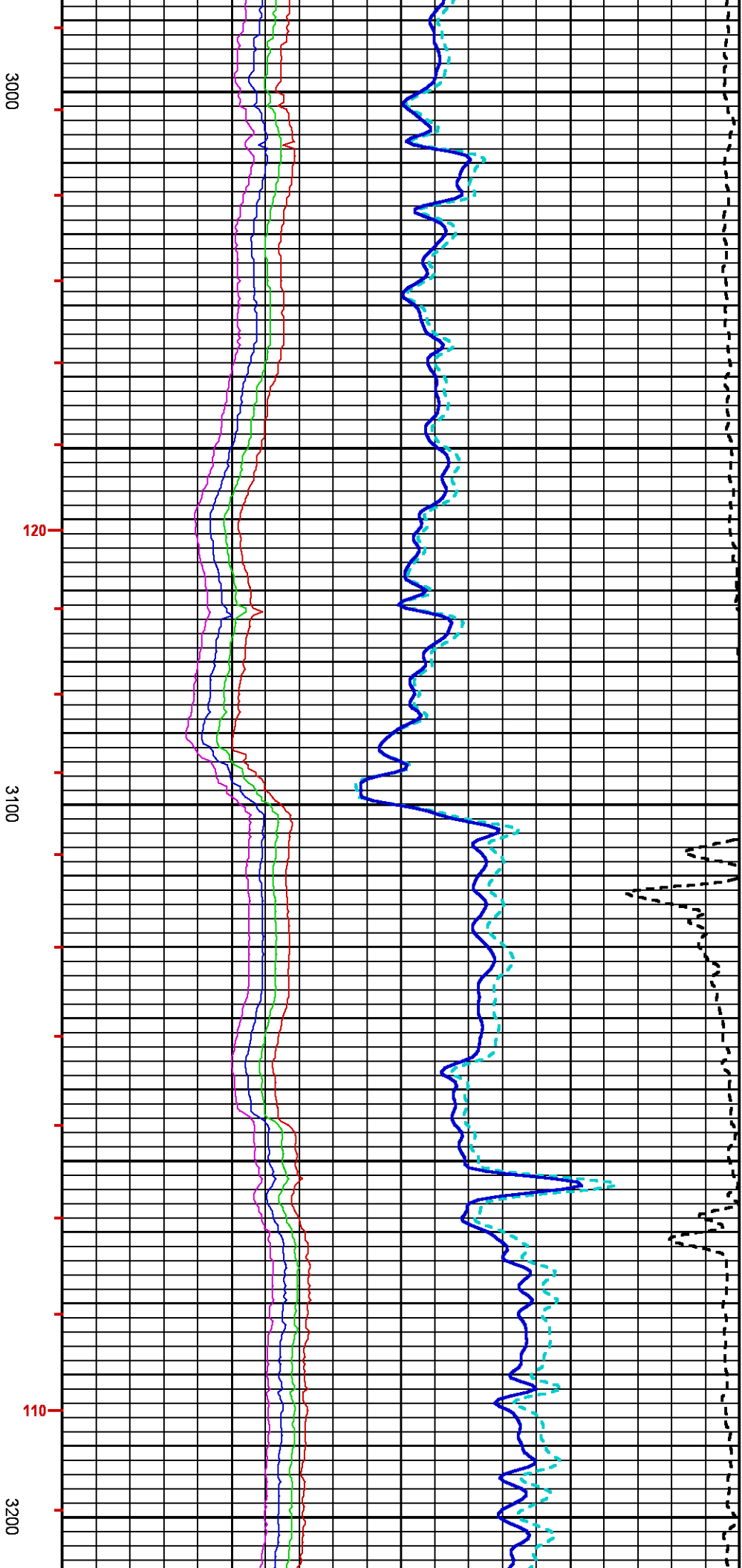


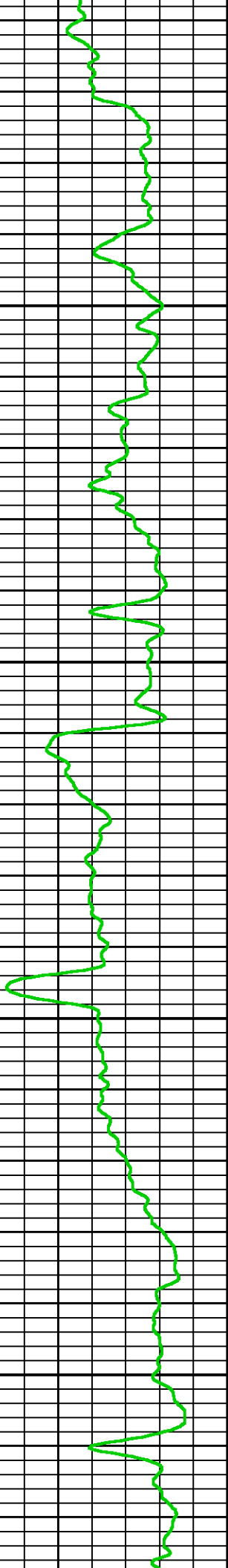
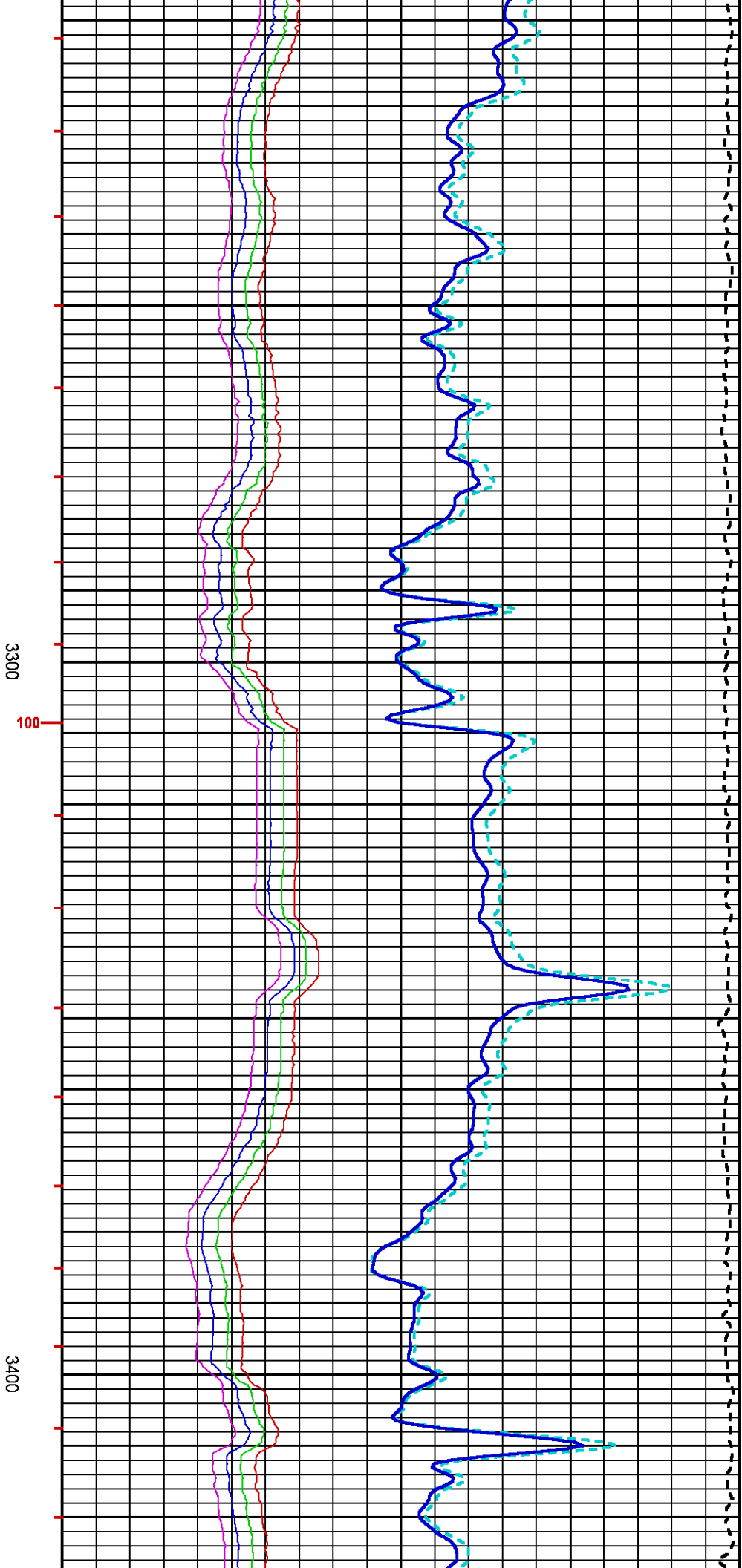


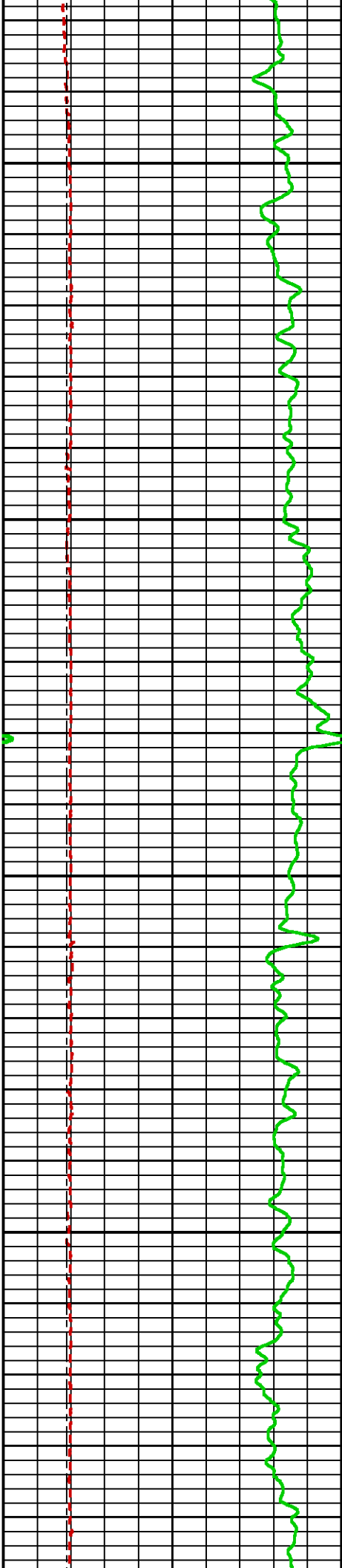
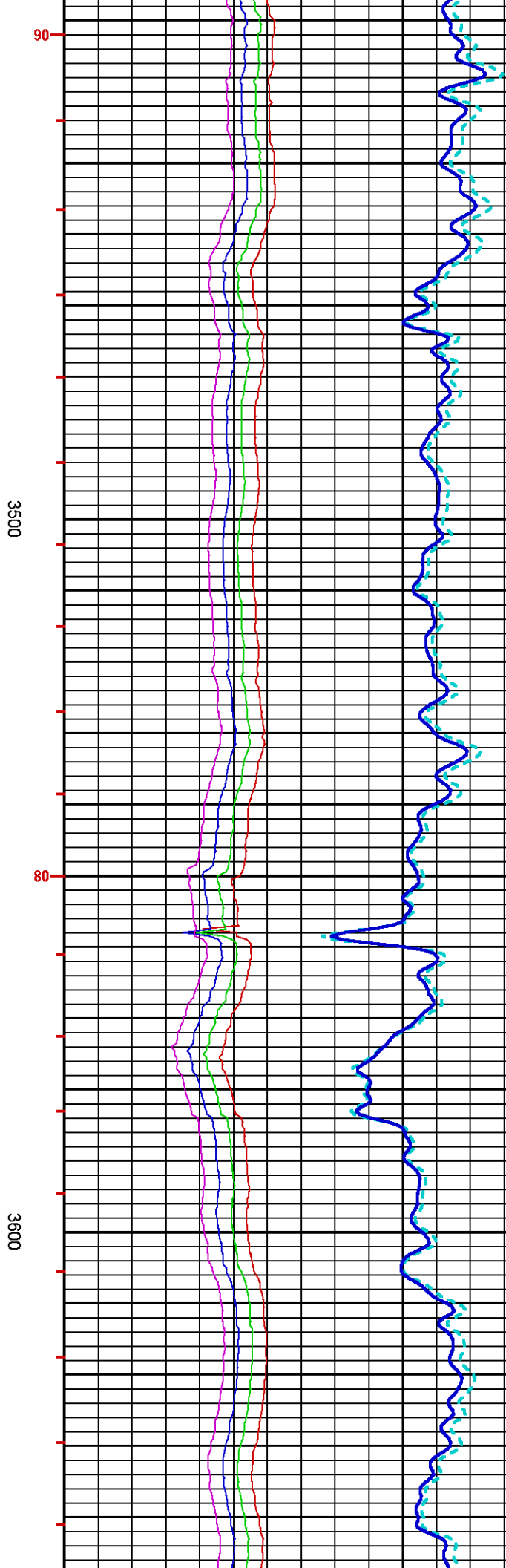
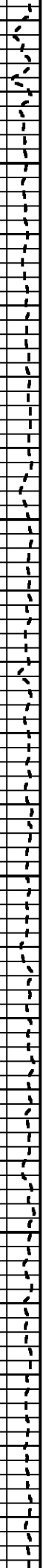


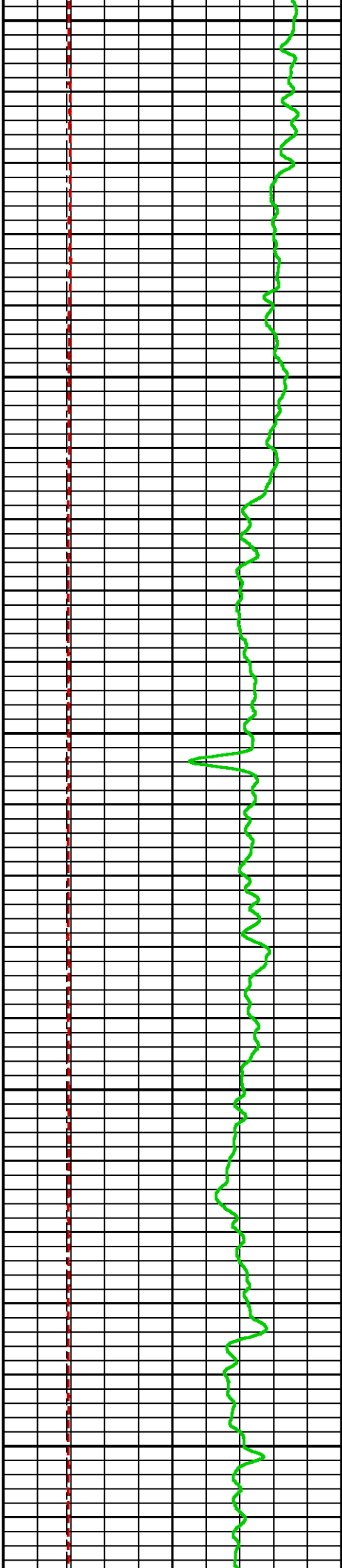
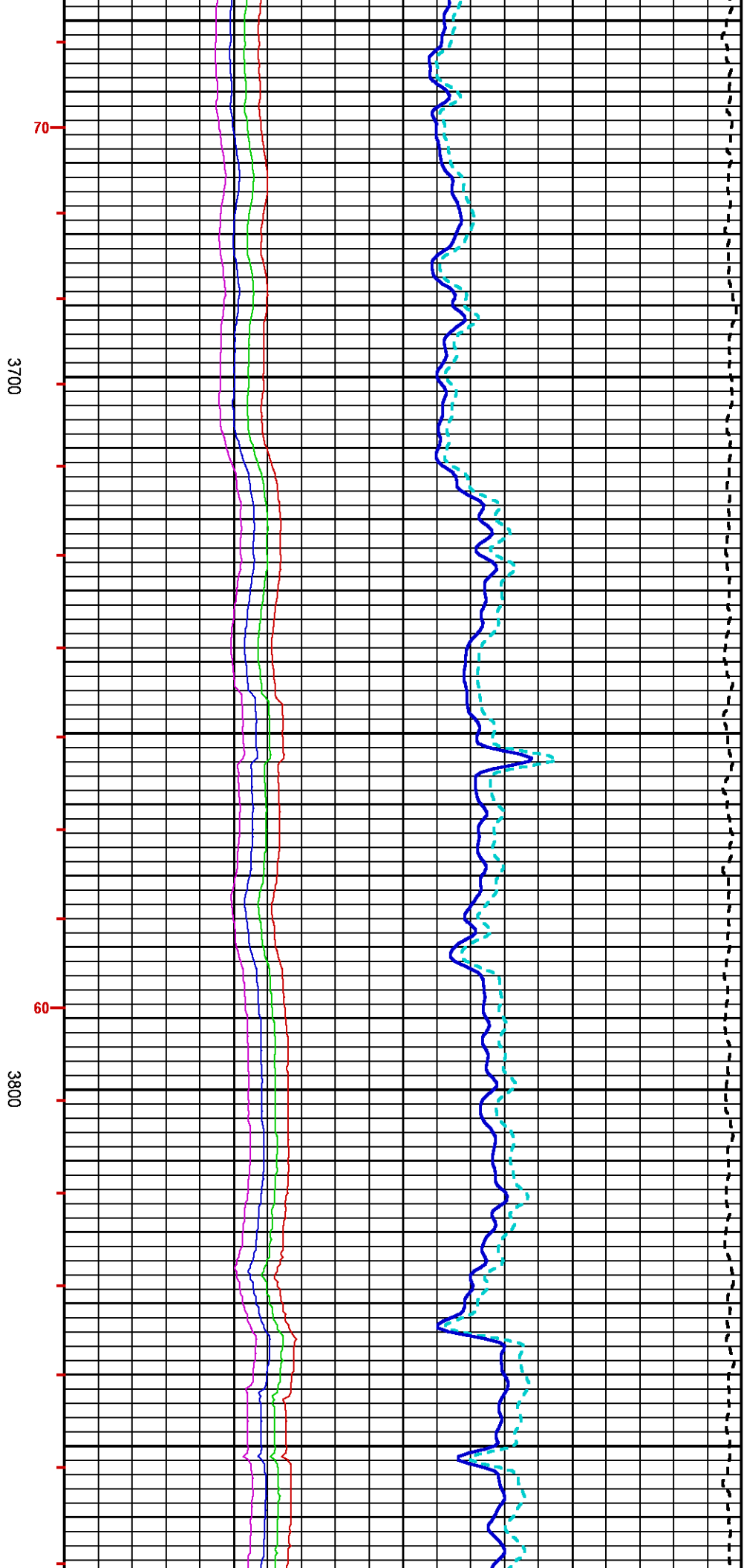


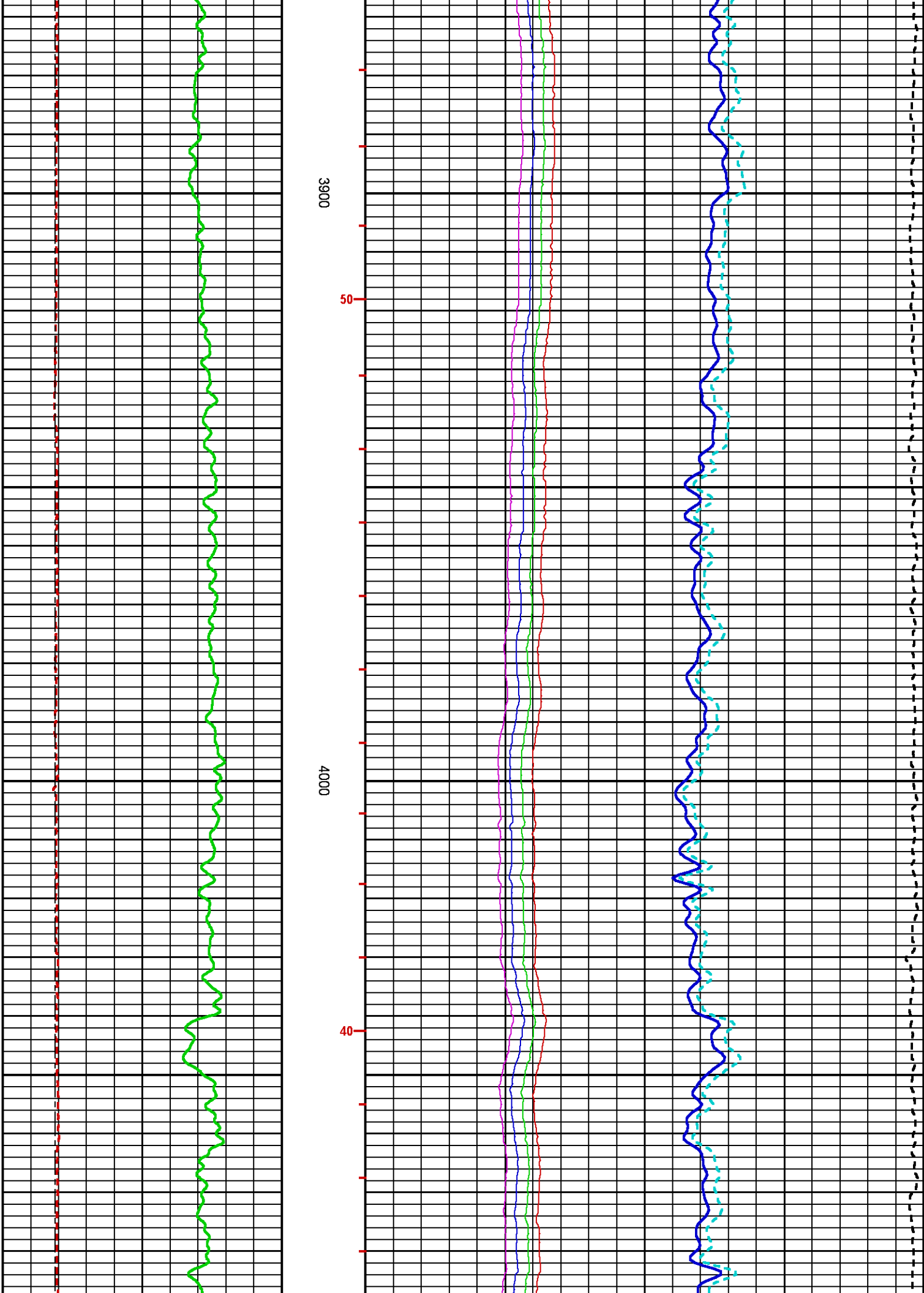


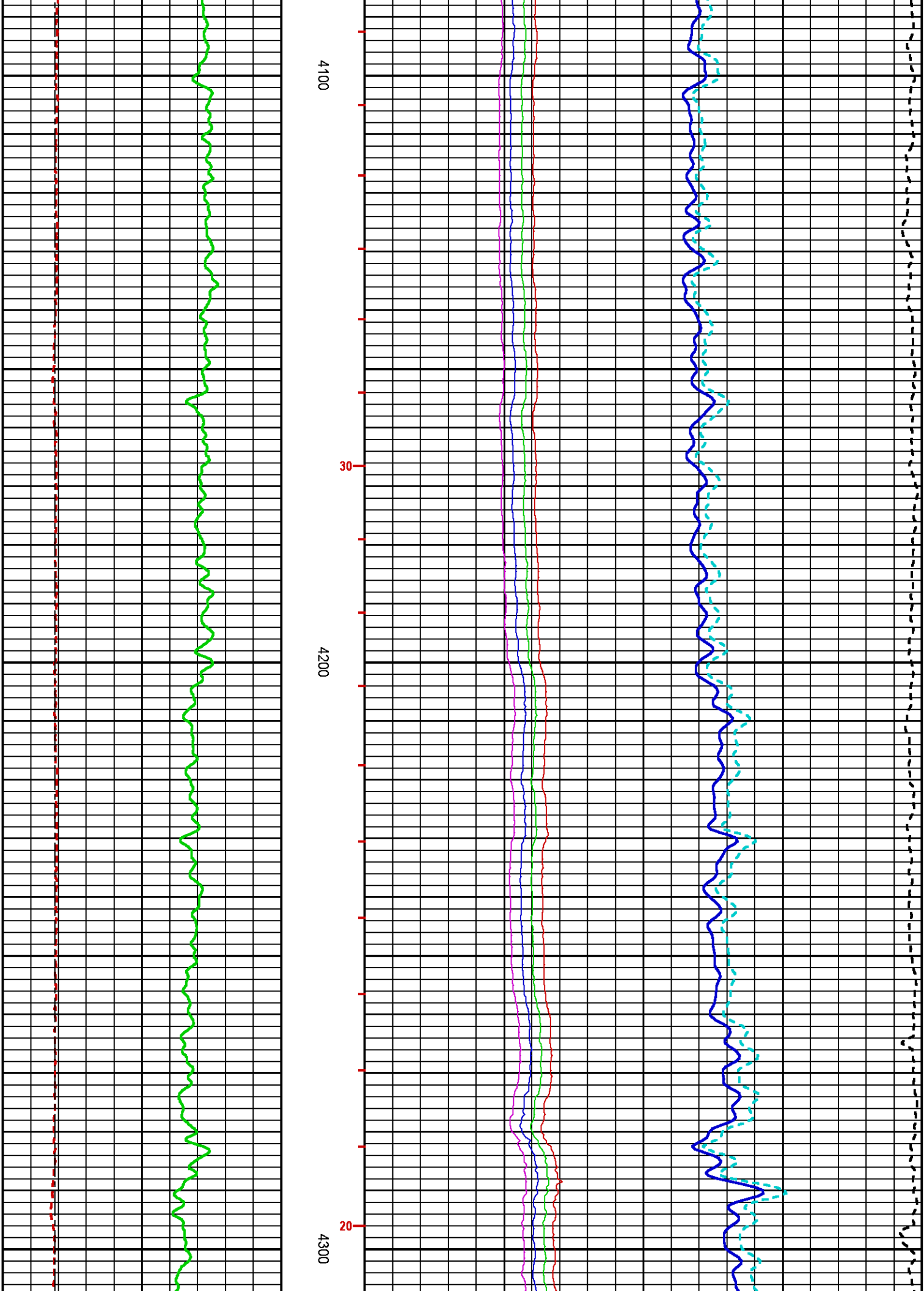


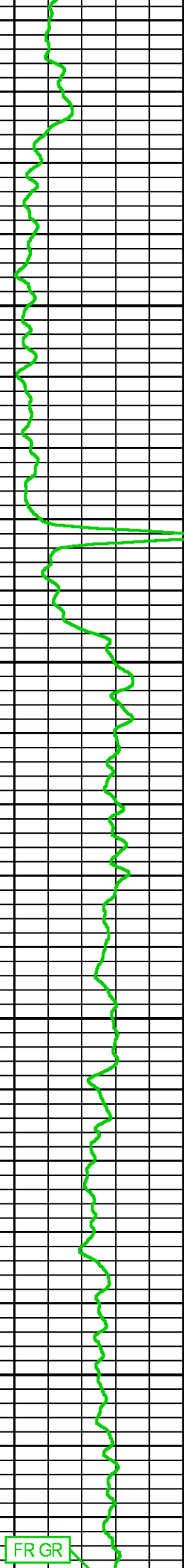
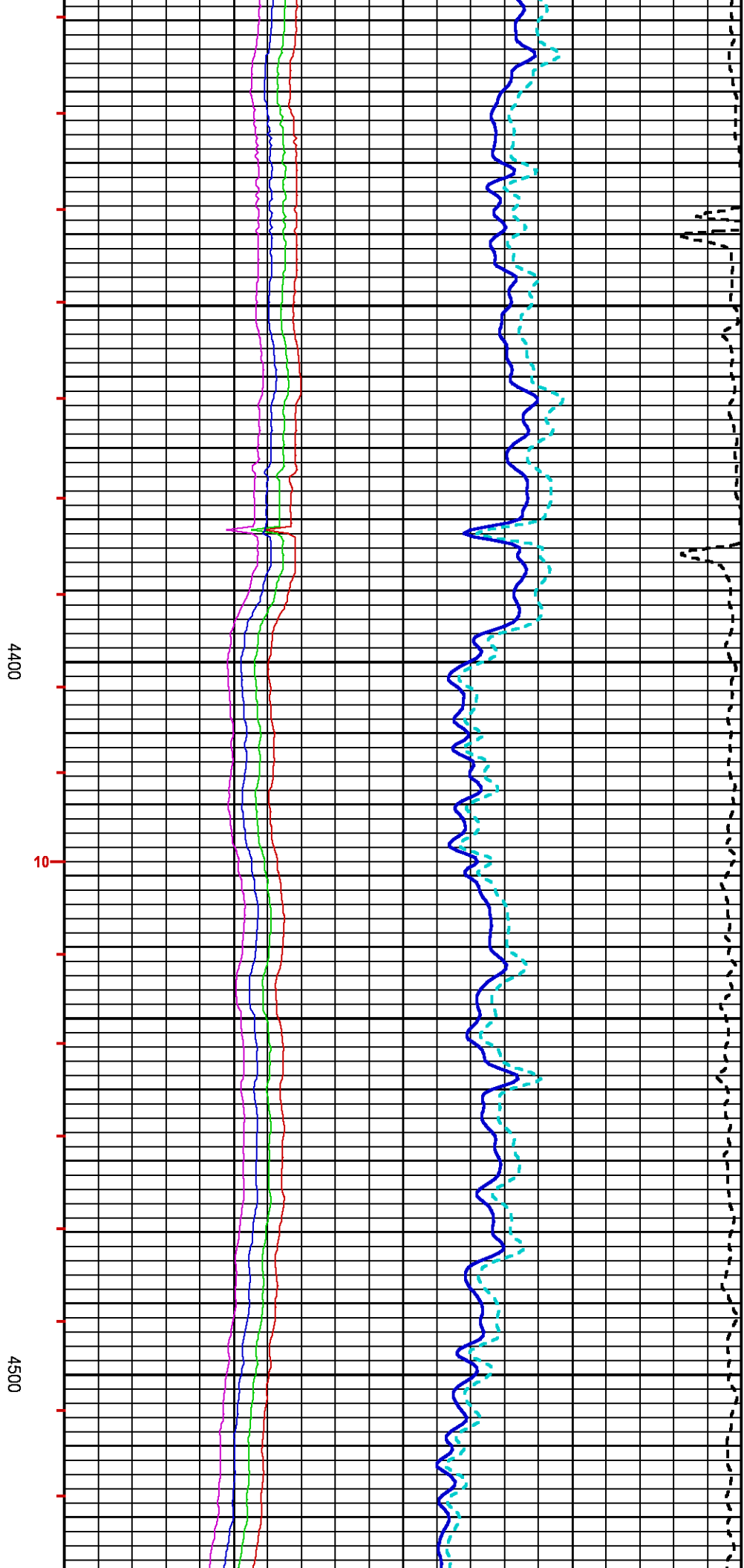




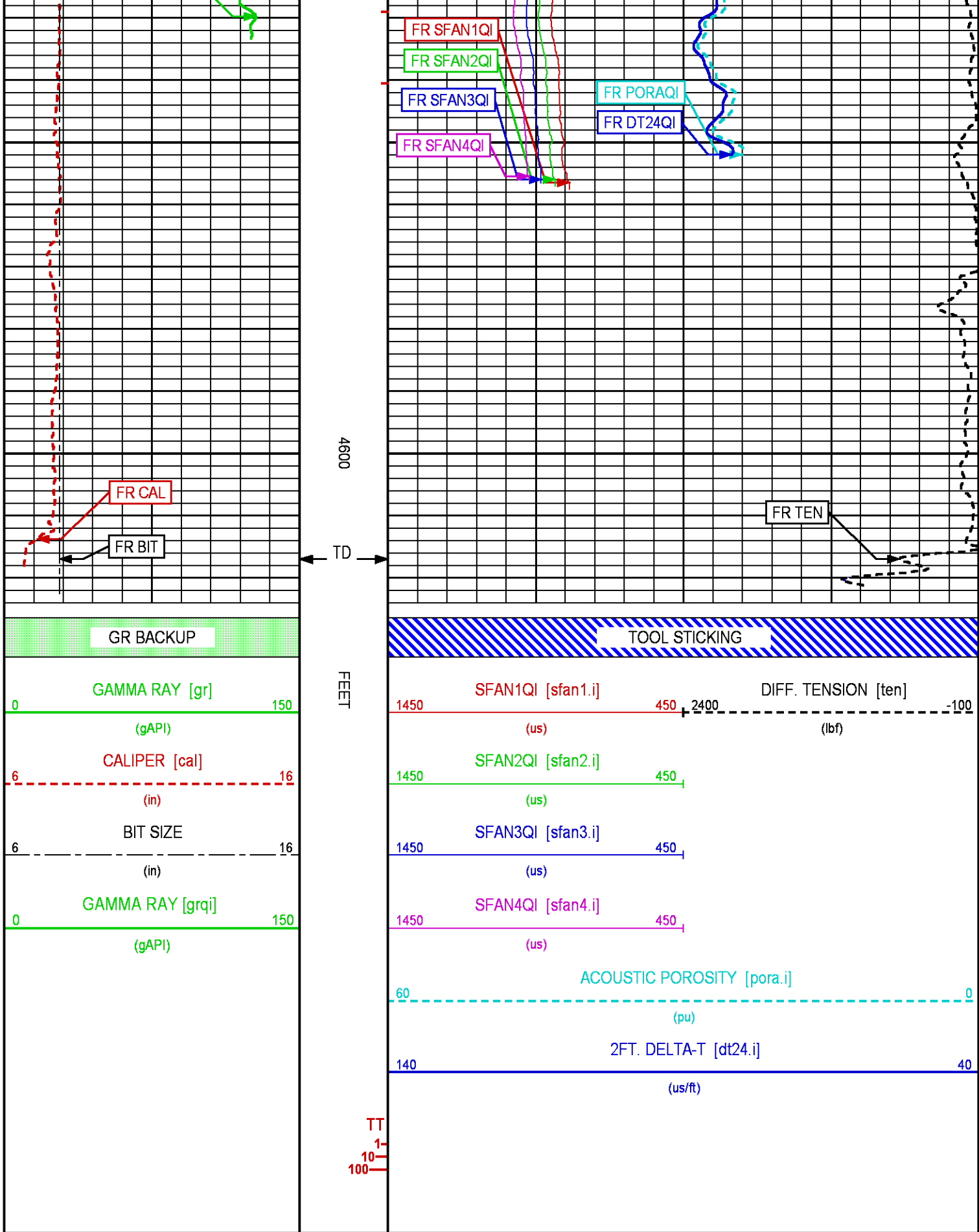








FR GR



ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 7

Plotted: Wed Sep 2 20:22:54 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/0H098850/XMAC_STARR01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 4399.733 ft BOTTOM DEPTH: 4623.380 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TENSION	FILTER (.)	medium (1)		TOP	BOTTOM
	FILTER (.j)	medium (1)		"	"
	FILTER (.k)	medium (1)		"	"
GR	FILTER (.)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
DT24	FILTER (.)	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	4.500	in	TOP	BOTTOM
MULTI-ARM (6) CALIPER PROCESSING	CALC. METHOD	CHAD (SPLINE FIT)		"	"
BIT SIZE	BIT SIZE	7.875	in	"	"

ACOUSTIC POROSITY

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACOUSTIC POROSITY	POROSITY TYPE	WYLLIE		TOP	BOTTOM
	DTmatrix	47.60	us/ft	"	"
	DTfluid	190.00	us/ft	"	"
	DTshale	100.00	us/ft	"	"
	MOD. WYLLIE PARM	2.25		"	"
	MOD. R-H-G PARM	2.00		"	"
DELTA T CURVE SELECTION	DT24 SOURCE	FIRST ARRIVAL DT24		"	"

ACOUSTIC AVAN CORRELATON

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
MONOPOLE DELTA T	FORMATION TYPE	GENERIC (MEDIUM)		TOP	BOTTOM
	CORRELATION METHOD	NTH ROOT		"	"
	RESET TAPERS	RESET TAPERS		"	"
	TAPER - LEFT END	10	us/ft	"	"
	TAPER - RIGHT END	120	us/ft	"	"
	FLOOR (UNIV. OPTION)	0.050		"	"
MONOPOLE COMPRESSIONAL	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	CORRELATION METHOD	NTH ROOT		"	"
	RESET TAPERS	RESET TAPERS		"	"
	TAPER - LEFT END	10	us/ft	"	"
	TAPER - RIGHT END	120	us/ft	"	"
	FLOOR (UNIV. OPTION)	0.050		"	"
MONOPOLE SHEAR	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	GUIDE CURVE	DO NOT USE GUIDE		"	"
	RESET TAPERS			"	"
	TAPER - LEFT END	100	us/ft	"	"
MONOPOLE STONLEY	TAPER - RIGHT END	190	us/ft	"	"
	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	RESET TAPERS			"	"
	TAPER - LEFT END	170	us/ft	"	"
DIPOLE SHEAR	TAPER - RIGHT END	510	us/ft	"	"
	FORMATION TYPE	GENERIC (MEDIUM)		"	"
	CORRELATION METHOD	NTH ROOT		"	"
	GUIDE CURVE	DO NOT USE GUIDE		"	"
	RESET TAPERS			"	"
	TAPER - LEFT END	100	us/ft	"	"
	TAPER - RIGHT END	700	us/ft	"	"

ACOUSTIC PICK CONTROL					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DELTA-T REJECTION RANGE	REJECTION DTmin	40	us/ft	TOP	BOTTOM
	REJECTION DTmax	180	us/ft	"	"
FIRST ARRIVAL PICK	SEARCH START OFFSET (sfan1*)	50	us	"	"
	SEARCH START OFFSET (sfan2*)	50	us	"	"
	SEARCH START OFFSET (sfan3*)	50	us	"	"
	SEARCH START OFFSET (sfan4*)	50	us	"	"
	SEARCH WINDOW LENGTH	800	us	"	"
	THRESHOLD FACTOR	0.30		"	"
	THRESHOLD MINIMUM (sfan1*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfan2*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfan3*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfan4*)	1.8	pct	"	"
	E3 THRESHOLD	OFF		"	"

ACOUSTIC QUALITY CONTROL					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CYCLE SKIP LIMIT	CYCLE SKIP LIMIT	100	us	TOP	BOTTOM
ACOUSTIC DIFF TEN LIMIT	DIFF TENSION LIMIT	500	lbf	"	"

ACOUSTIC WAVEFORM FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP	BOTTOM
	LOW FREQ CUTOFF	4000	Hz	"	"
	HIGH FREQ CUTOFF	20000	Hz	"	"
WAVEFORM FILTER - FULLWAVE	SURFACE WAVE FILTER	ON		"	"
	LOW FREQ CUTOFF	2000	Hz	"	"
	HIGH FREQ CUTOFF	20000	Hz	"	"
WAVEFORM FILTER - STONELEY	SURFACE WAVE FILTER	ON		"	"
	LOW FREQ CUTOFF	500	Hz	"	"
	HIGH FREQ CUTOFF	5500	Hz	"	"
WAVEFORM FILTER - DIPOLE	SURFACE WAVE FILTER	ON		"	"
	LOW FREQ CUTOFF	1500	Hz	"	"
	HIGH FREQ CUTOFF	5000	Hz	"	"

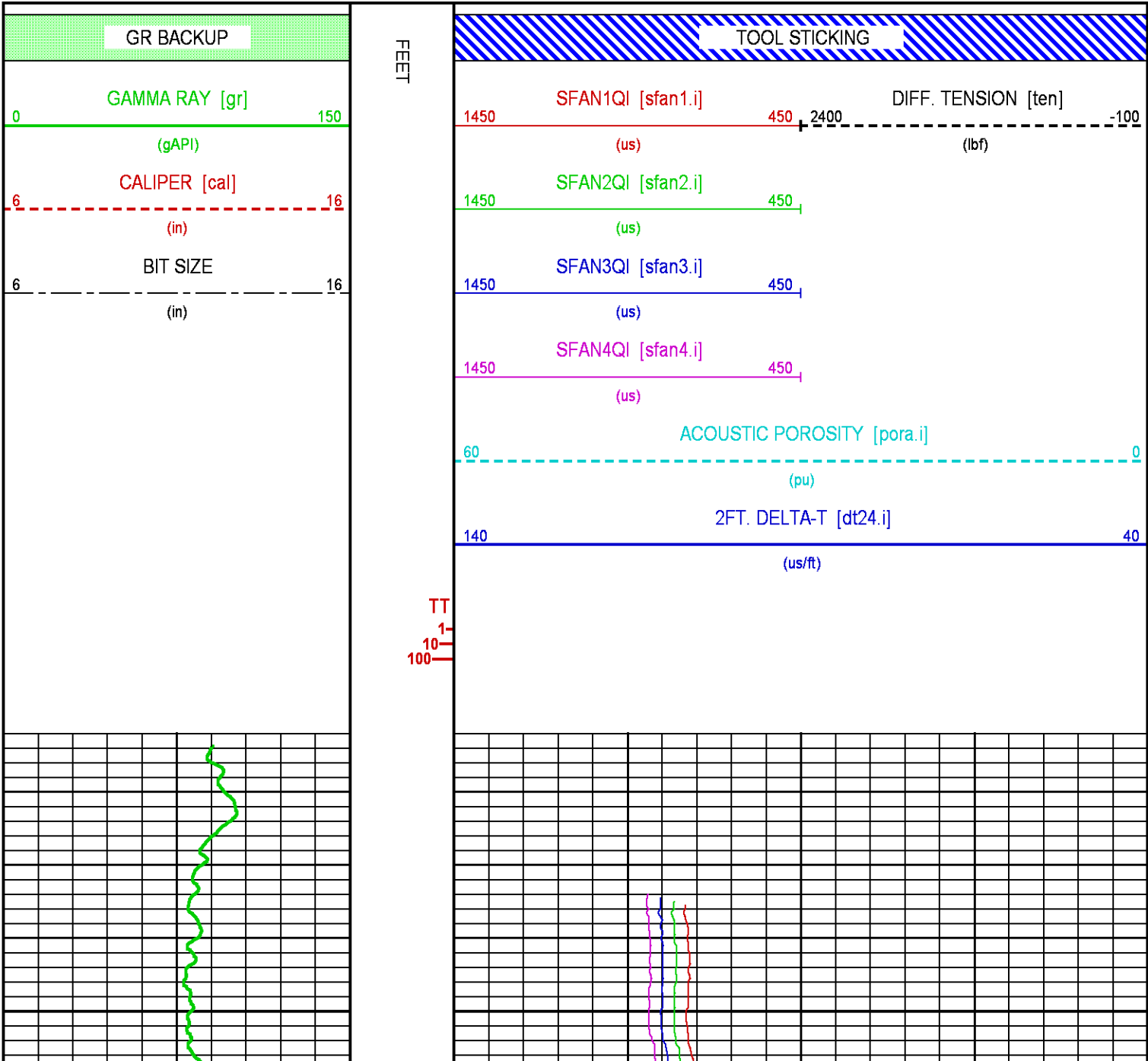
ACOUSTIC TCC CONTROL PARAMETERS					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GENERAL TCC PARAMETERS	AGC	ON		TOP	BOTTOM
	SUBCYCLE LENGTH	50		"	"
	SUBSET	1		"	"
GENERAL MONOPOLE TCC PARAMETERS	STACK LEVEL	2		"	"
	DSP FILTER	ON		"	"
DELTA T TCC PARAMETERS	ACG WINDOW	688	us	"	"
	MOVEOUT	16	us/ft	"	"
	SAMPLE PERIOD	16		"	"
	RX DELAY	592	us	"	"
FULL WAVE MONOPOLE TCC PARAMETERS	ACG WINDOW	8064	us	"	"
	SAMPLE PERIOD	24		"	"
	RX DELAY	0	us	"	"
GENERAL DIPOLE TCC PARAMETERS	STACK LEVEL	2		"	"
	DSP FILTER	ON		"	"
INLINE DIPOLE TCC PARAMETERS	ACG WINDOW	0	us	"	"
	SAMPLE PERIOD	64		"	"
	RX DELAY	0	us	"	"
CROSS DIPOLE TCC PARAMETERS	ACG WINDOW	14400	us	"	"
	SAMPLE PERIOD	72		"	"
	RX DELAY	0	us	"	"

CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Sep 2 18:29:35 2015	BIT SIZE
F1:CAL	Sep 2 18:29:35 2015	CALIPER
F1:DT24QI	Sep 2 18:29:35 2015	SLOWNESS OVER 24-INCH INTERVAL
F1:GR	Sep 2 18:29:35 2015	GAMMA RAY
F1:PORAQI	Sep 2 18:29:35 2015	ACOUSTIC POROSITY

F1:SFAN1QI	Sep 2 18:29:35 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R1
F1:SFAN2QI	Sep 2 18:29:35 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R2
F1:SFAN3QI	Sep 2 18:29:35 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R3
F1:SFAN4QI	Sep 2 18:29:35 2015	SURFACE PICK 1ST ARRIVAL TIME, T2R4
F1:TEN	Sep 2 18:29:35 2015	DIFFERENTIAL TENSION
F1:TTQI	Sep 2 18:29:35 2015	INTEGRATED TRAVELTIME FROM ACOUSTIC SLOWNESS

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	87.25	SFAN2QI	61.00	TEN	0.00
CAL	3.25	PORAQI	58.50	SFAN3QI	61.00		
DT24QI	58.50	SFAN1QI	60.50	SFAN4QI	61.50		

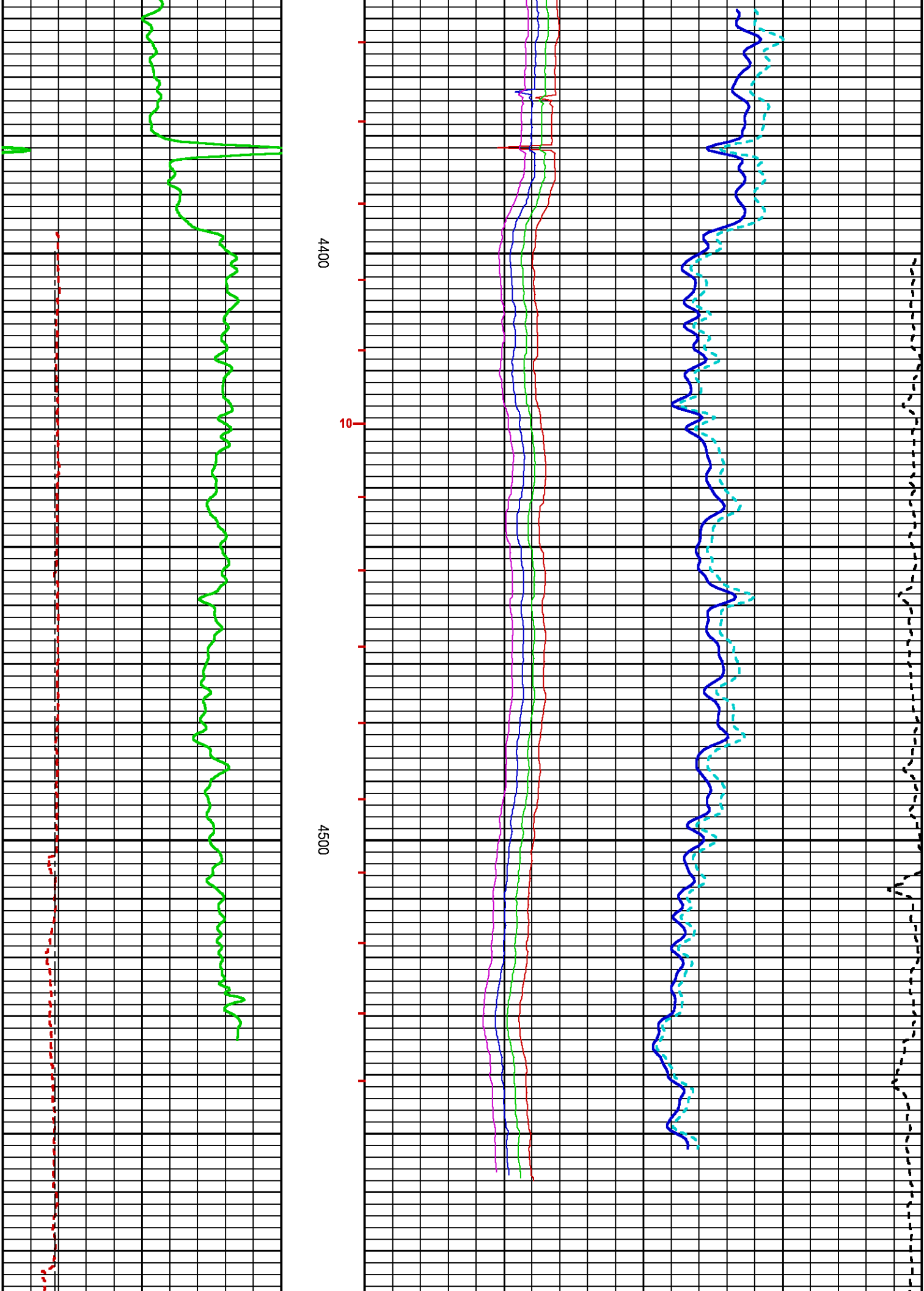
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Plot Interval	: 4313.75 - 4623.25 Feet
Data File 1	: F1 : cas6685:/dat1a/0H098850/XMAC_STARR01.aff
Created On	: Sep 2 18:29:35 2015
Company	: COACHMAN ENERGY OPERATING COMPANY
Well	: SHAVETAIL FEDERAL 34-34
Field	: WILDCAT
File Interval	: 4299 - 4623.25 Feet
OCT	: XMAC_STA

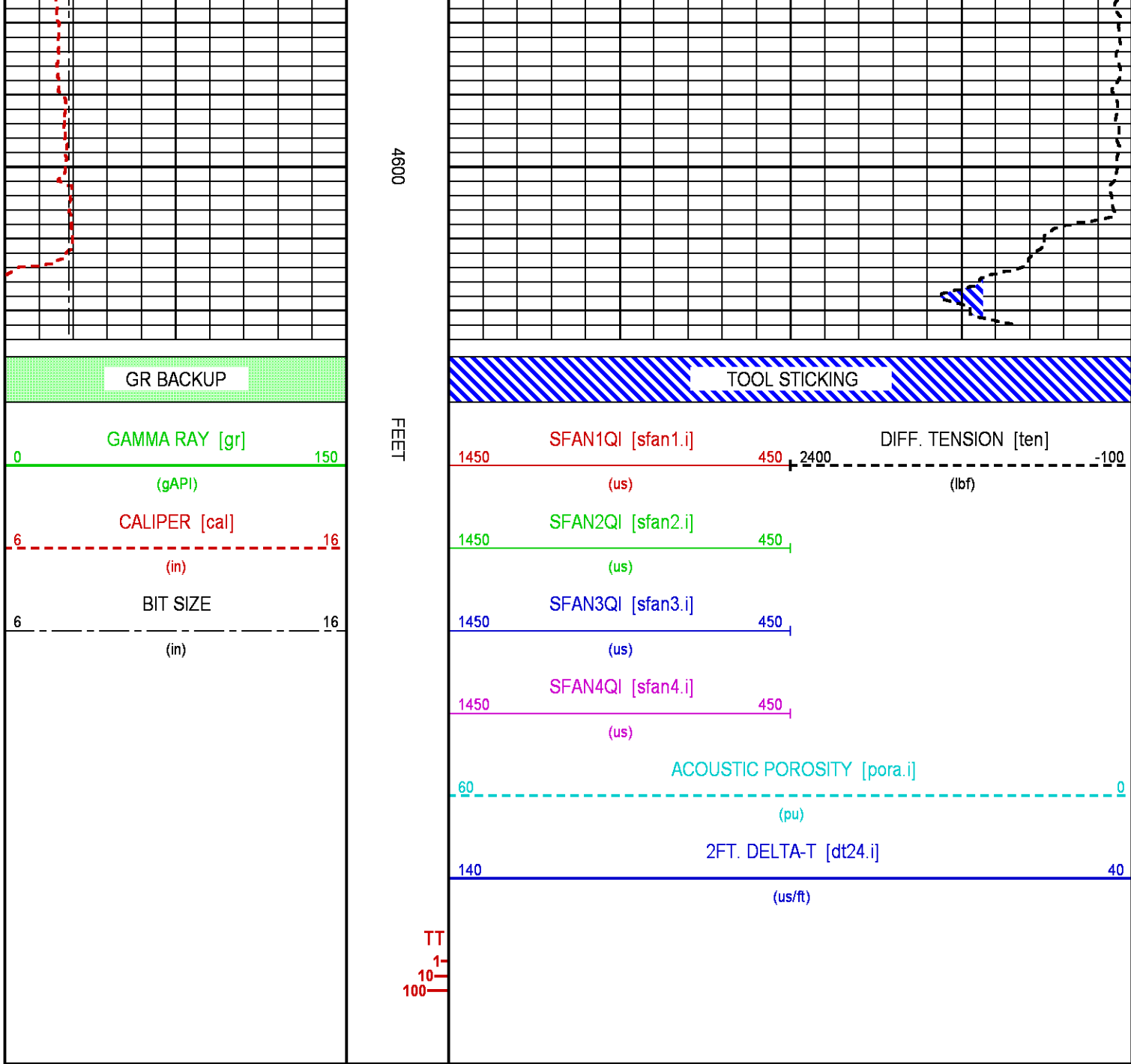


4400

4500

10





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/0H098850/XMAC_STAR.tp1

CHT PRIMARY CALIBRATION SUMMARY

TOOL #: 3981XA 10516527

DATE/TIME PERFORMED: Mon Aug 31 11:40:49 2015

UNIT #: 3885TC 6685

	Signal Low (raw)	Signal High (raw)	Scale Mult	Scale Add	Engr Low (lbf)	Engr High (lbf)
CHT	-157.47	261.37	4.18	407.95	-250.00	1500.00

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10196895 DATE/TIME PERFORMED: Wed Sep 2 18:14:47 2015

UNIT #: 3885TC 6685 CALB JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBTR ON (gAPI)	CALBTR (gAPI)
GR	193.44	1085.11	891.7 890.0 960.0	0.168	32.54	182.54	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 10196895 DATE/TIME PERFORMED: Wed Sep 2 18:16:56 2015

UNIT #: 3885TC 6685 VERI JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBTR ON (gAPI)	DIFF. (gAPI)
GR	197.24	1083.20	0.168	33.18	182.22	149.04 140.00 160.00

XMACE_OR PRIMARY CALIBRATION SUMMARY

TOOL #: 1678MC 10175410 DATE/TIME PERFORMED: Tue Sep 1 09:29:06 2015

UNIT #: 3885TC 6685 ORIENTATION #: 4401XB 186393

	DEV (deg)	QA (mG)	MEAS RB (deg)	RB OFFSET (deg)	ROTATED RB (deg)
ORIT TBM CHECK	90.2	1001.0 990.0 1010.0	0.4 357.5 2.5		
XMACE-F1 ORIENT			68.7	68.7	0.0

INSTRUMENT CONFIGURATION

CABLEHEAD

Diameter : 3.38"
 Length : 5.50'
 Weight : 24 lbs
 Series : CABL338
 Mnemonic : CBLH
 Measure Point: 2.75': CABLEHEAD TOP

CABLEHEAD TOP 114.97'

DOWNHOLE POWER ADAPTER

Diameter : 3.62"
 Length : 5.27'
 Weight : 86 lbs
 Series : 4430XB
 Mnemonic : DHPA

SWIVEL

Diameter : 3.38"
 Length : 3.50'
 Weight : 68 lbs
 Series : 3944XD
 Mnemonic : SWVL

TTRM SUB

Diameter : 3.63"
 Length : 3.83'
 Weight : 62 lbs
 Series : 3981XA
 Mnemonic : TTRM
 Measure Point: 1.38': TEMP MP
 Measure Point: 1.13': RM MP

TEMP MP 101.00'
 RM MP 100.75'

WTS COMMON REMOTE

Diameter : 3.63"
 Length : 6.36'
 Weight : 126 lbs
 Series : 3514XB
 Mnemonic : WTS

DIGITAL SPECTRALOG

Diameter : 3.63"
 Length : 7.31'
 Weight : 130 lbs
 Series : 1329XA
 Mnemonic : DSL
 Measure Point: 1.60': GR MP

GR MP 87.55'

4 ARM BOW SPRING CENTRALIZER

Diameter : 3.38"
 Length : 4.12'
 Weight : 72 lbs
 Series : 4341XA
 Mnemonic : CENT

ARRAY ACOUSTILOG ELECTRONICS, 8 CHANNEL

Diameter : 3.38"
 Length : 7.82'
 Weight : 102 lbs
 Series : 1677EA
 Mnemonic : XMAC

CROSS MULTIPOLE ARRAY ACOUSTILOG

Diameter : 3.75"
 Length : 10.91'
 Weight : 224 lbs
 Series : 1678MC
 Mnemonic : XME1
 Measure Point: 5.50': R8
 Measure Point: 5.00': R7
 Measure Point: 4.50': R6
 Measure Point: 4.00': R5
 Measure Point: 3.50': R4

R8 68.61'
 R7 68.11'
 R6 67.61'
 R5 67.11'
 R4 66.61'

117.72'

Measure Point: 3.00': R3
Measure Point: 2.50': R2
Measure Point: 2.00': R1

R3 66.11'
R2 65.61'
R1 65.11'

SHEAR WAVE ACOUSTIC LOG

Diameter : 3.63"
Length : 5.00'
Weight : 135 lbs
Series : 1678PB
Mnemonic : XMAC

MULTI-POLE ARRAY ACOUSTIC

Diameter : 3.88"
Length : 7.92'
Weight : 170 lbs
Series : 1678BA
Mnemonic : XMAC
Measure Point: 6.42': QUADRUPOLE T5
Measure Point: 6.42': MONOPOLE T2
Measure Point: 4.67': Y-DIPOLE T4
Measure Point: 4.67': X-DIPOLE T3
Measure Point: 2.92': MONOPOLE T1

MONOPOLE T2 56.61'
QUADRUPOLE T5 56.61'

X-DIPOLE T3 54.86'
Y-DIPOLE T4 54.86'

MONOPOLE T1 53.11'

MULTI-POLE ARRAY ACOUSTIC

Diameter : 3.38"
Length : 4.32'
Weight : 58 lbs
Series : 1678FA
Mnemonic : MAC

4 ARM BOW SPRING CENTRALIZER

Diameter : 3.38"
Length : 4.12'
Weight : 72 lbs
Series : 4341XA
Mnemonic : CENT

DIGITAL ORIENTATION

Diameter : 3.38"
Length : 10.81'
Weight : 110 lbs
Series : 4401XB
Mnemonic : ORIT
Measure Point: 0.00': ORIENT MP

ORIENT MP 30.95'

C6PC IMAGER POWER SUPPLY

Diameter : 3.62"
Length : 9.08'
Weight : 116 lbs
Series : 1022PB
Mnemonic : C6PC

C6PC IMAGER ELECTRONICS

Diameter : 3.62"
Length : 9.08'
Weight : 94 lbs
Series : 1036EB
Mnemonic : C6PC

C6PC IMAGER MANDREL

Diameter : 5.25"
Length : 12.50'
Weight : 278 lbs
Series : 4236MB
Mnemonic : C6PC
Measure Point: 3.31': PAD MP



PAD MP 3.59'

BULL PLUG 3 3/8

0.00'

TOTAL LENGTH: 117.72'
TOTAL WEIGHT: 1929 lbs
MAX DIAMETER: 0" 5.25"



COMPANY **COACHMAN ENERGY OPERATING COMPANY**
WELL **SHAVETAIL FEDERAL 34-34**
FIELD **WILDCAT**
COUNTY **RIO BLANCO** STATE **COLORADO**

FILE NO:

OH098850

API NO:

05103122750000

LOCATION:

SHL: 650' FSL 1453' FEL

ELEVATIONS:

KB **5833 FT**

DF

GL **5818 FT**

SEC **34** TWP **1N** RGE **103W**

DATE **02-SEP-2015**