

# HALLIBURTON

## MICRO LOG

<b>COMPANY</b>	<b>SANDRIDGE ENERGY</b>		
<b>WELL</b>	<b>ALEXANDER 3114 1-1</b>		
<b>FIELD/BLOCK</b>	<b>SKINNER</b>		
<b>COUNTY</b>	<b>BARBER</b>		
<b>STATE</b>	<b>KANSAS</b>		
<b>COMPANY</b>	<b>SANDRIDGE ENERGY</b>	<b>WELL</b>	<b>ALEXANDER 3114 1-1</b>
<b>FIELD/BLOCK</b>	<b>SKINNER</b>	<b>COUNTY</b>	<b>BARBER</b>
<b>STATE</b>	<b>KANSAS</b>		
<b>API No.</b>	15007241200000		
<b>Location</b>	SW-SW-SE-SE 200' FSL 1056' FEL		
<b>Other Services:</b>	ACRT DSNT/SDLT CSNG MRIL		
<b>Sect. 1</b>	<b>Twp. 31S</b>	<b>Rge. 14W</b>	<b>Elev. 1668.0 ft</b>
<b>GL</b>	<b>KB</b>	<b>KB</b>	<b>D.F. 1683.0 ft</b>
<b>Drilling measured from</b>	<b>KB</b>	<b>17.0 ft above perm. Datum</b>	<b>G.L. 1668.0 ft</b>

<b>Date</b>	02-Feb-14	
<b>Run No.</b>	ONE	
<b>Depth - Driller</b>	4782.00 ft	
<b>Depth - Logger</b>	4776.0 ft	
<b>Bottom - Logged Interval</b>	4753.0 ft	
<b>Top - Logged Interval</b>	1048.0 ft	
<b>Casing - Driller</b>	9.625 in @ 1052.0 ft	
<b>Casing - Logger</b>	1048.0 ft	
<b>Bit Size</b>	8.750 in	@
<b>Type Fluid in Hole</b>	WATER BASED MUD	
<b>Density</b>	9.3 ppq	50.00 s/qt
<b>PH</b>	10.50 pH	5.2 cp/m
<b>Source of Sample</b>	MUD PIT	
<b>Rm @ Meas. Temperature</b>	0.450 ohmm @ 60.00 degF	@
<b>Rmf @ Meas. Temperature</b>	0.40 ohmm @ 60.00 degF	@
<b>Rmc @ Meas. Temperature</b>	0.520 ohmm @ 60.00 degF	@
<b>Source Rmf</b>	MEASURED	MEASURED
<b>Rm @ BHT</b>	0.26 ohmm @ 108.0 degF	@
<b>Time Since Circulation</b>	5.0 hr	
<b>Time on Bottom</b>	03-Feb-14 03:50	
<b>Max. Rec. Temperature</b>	108.0 degF @ 4776.0 ft	@
<b>Equipment</b>	11072142 LIBERAL	
<b>Recorded By</b>	THOMAS HYDE	
<b>Witnessed By</b>	B. TOMLISON	
		T. BOARDMAN

Fold here

Service Ticket No.: 901088163      API Serial No.: 15007241200000      PGM Version: WL INSITE R3.8.4 (Build 5)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE					RESISTIVITY SCALE CHANGES				
Date	Sample No.				Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth-Driller									
Type Fluid in Hole									
Density	Viscosity								
Ph	Fluid Loss								
Source of Sample					RESISTIVITY EQUIPMENT DATA				
Rm @ Meas. Temp		@		@	Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
Rmf @ Meas. Temp.		@		@	ONE	MICRO	RUBBER	ADJ.	N/A
Rmc @ Meas. Temp.		@		@		10950489			
Source Rmf	Rmc								
Rm @ BHT		@		@					
Rmf @ BHT		@		@					
Rmc @ BHT		@		@					

EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.		Run No.	
Serial No.	11021139	Serial No.		Serial No.		Serial No.	
Model No.	GTET	Model No.		Model No.		Model No.	
Diameter	3.625"	No. of Cent.		Diameter		Diameter	
Detector Model No.	T-102	Spacing		Log Type		Log Type	
Type	SCINT			Source Type		Source Type	
Length	8"	LSA [Y/N]		Serial No.		Serial No.	
Distance to Source	18'	FWDA [Y/N]		Strength		Strength	

LOGGING DATA

GENERAL			GAMMA		ACOUSTIC		DENSITY			NEUTRON				
Run No.	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	4776	1048	REC	0	150									

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: CHLORIDES REPORTED AT 4000 MG/L

TODAY'S CREW M. GRAHAM F. VILLA

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KANSAS 620-624-8123

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

HALLIBURTON



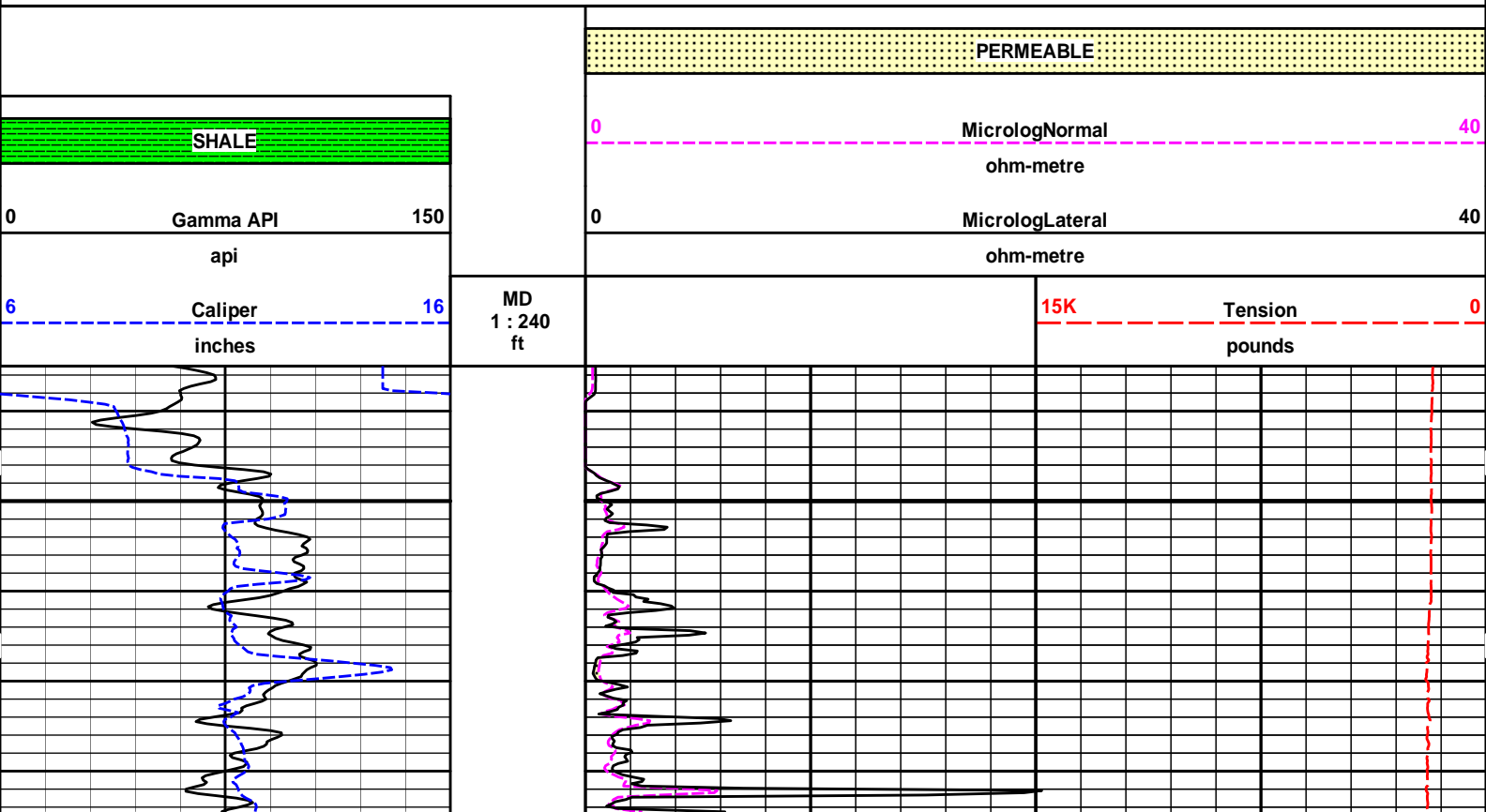
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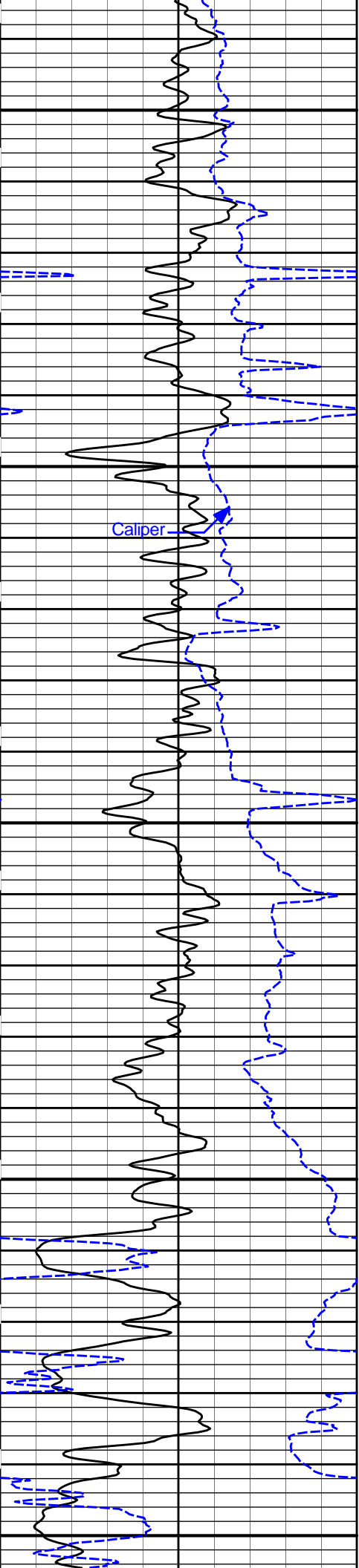
Plot Range: 1035 ft to 4778.33 ft

Data: ALEXANDER\_3114\Well Based\DAQ-0001-004\

Plot File: \\LOCAL-ALEXANDER\_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNMICROMicrolog\_IQ\_5\_main\_lib

# 5 INCH MAIN LOG

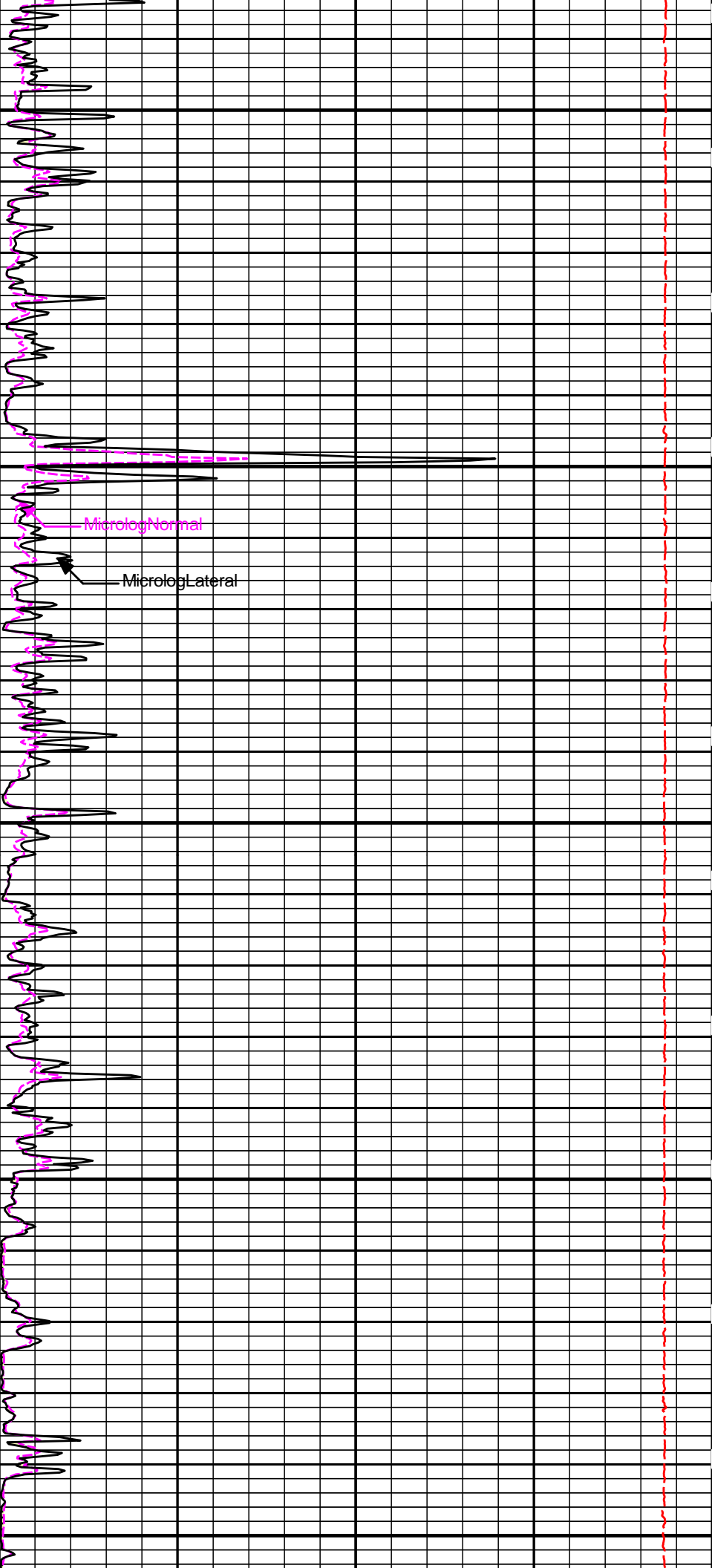




1100

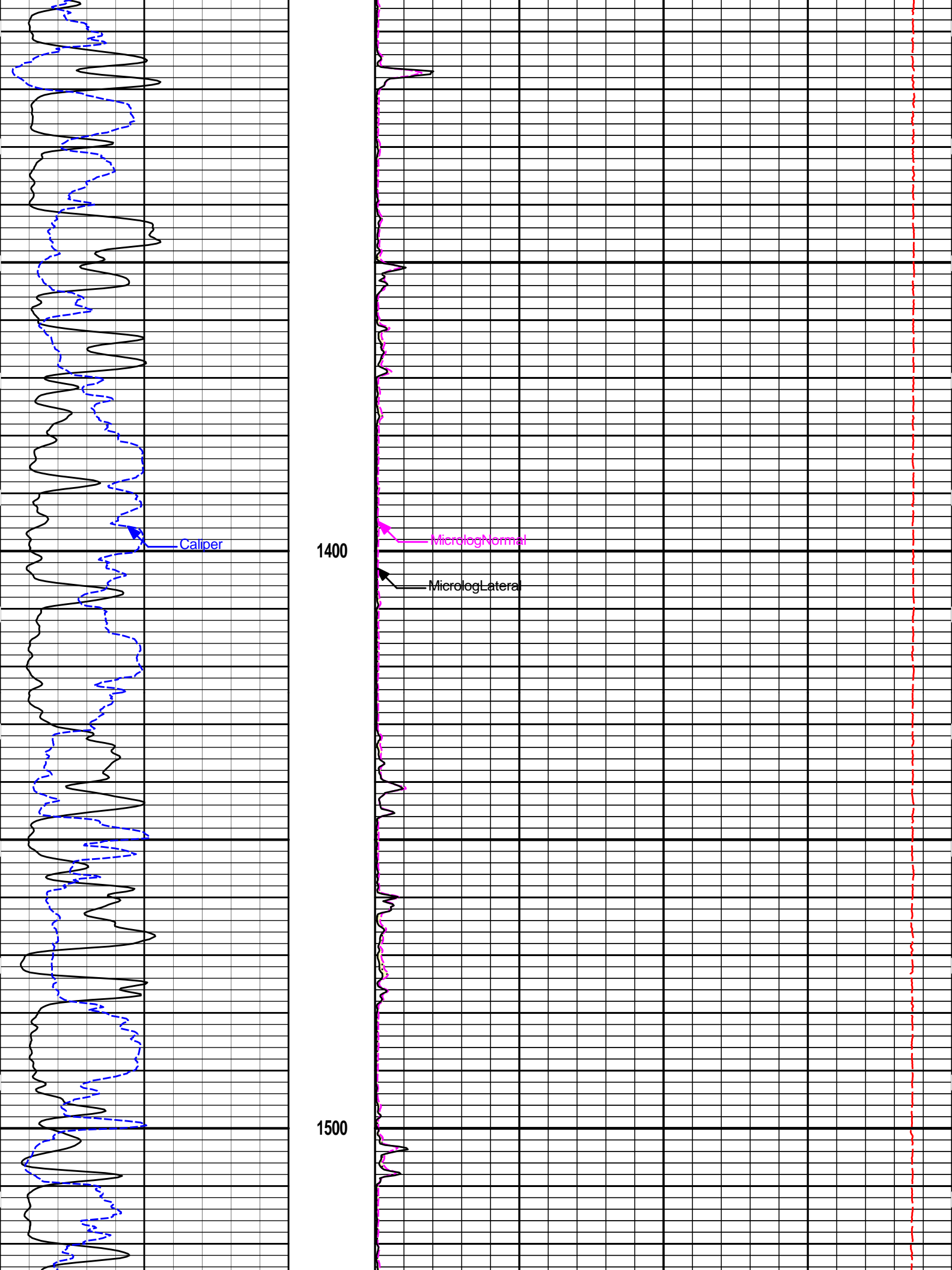
1200

1300



MicrologNormal

MicrologLateral



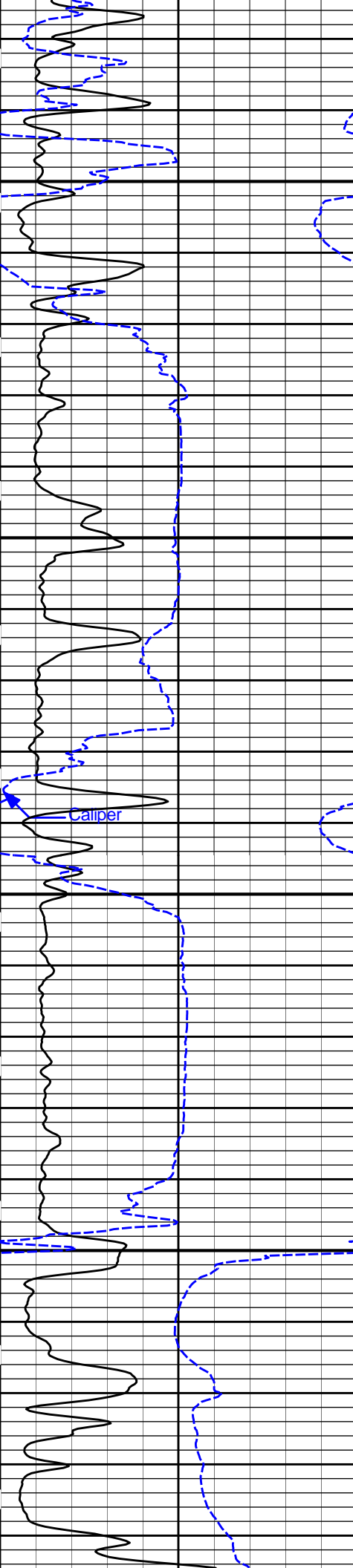
Caliper

1400

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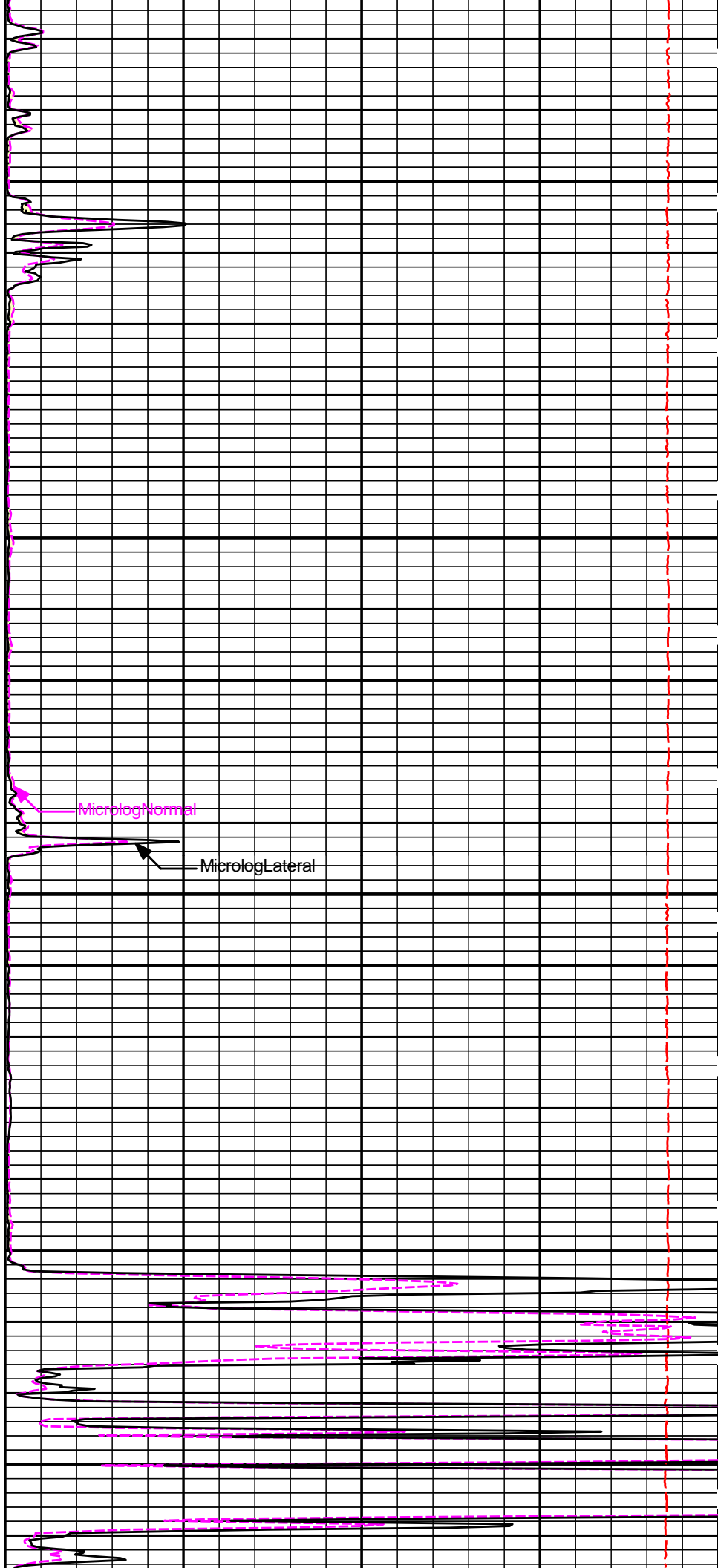
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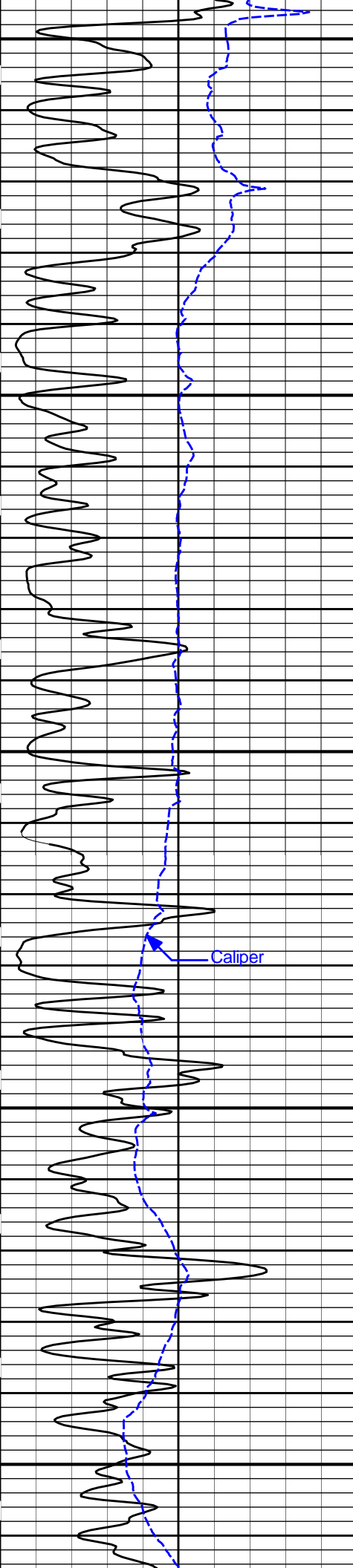
1500



1600

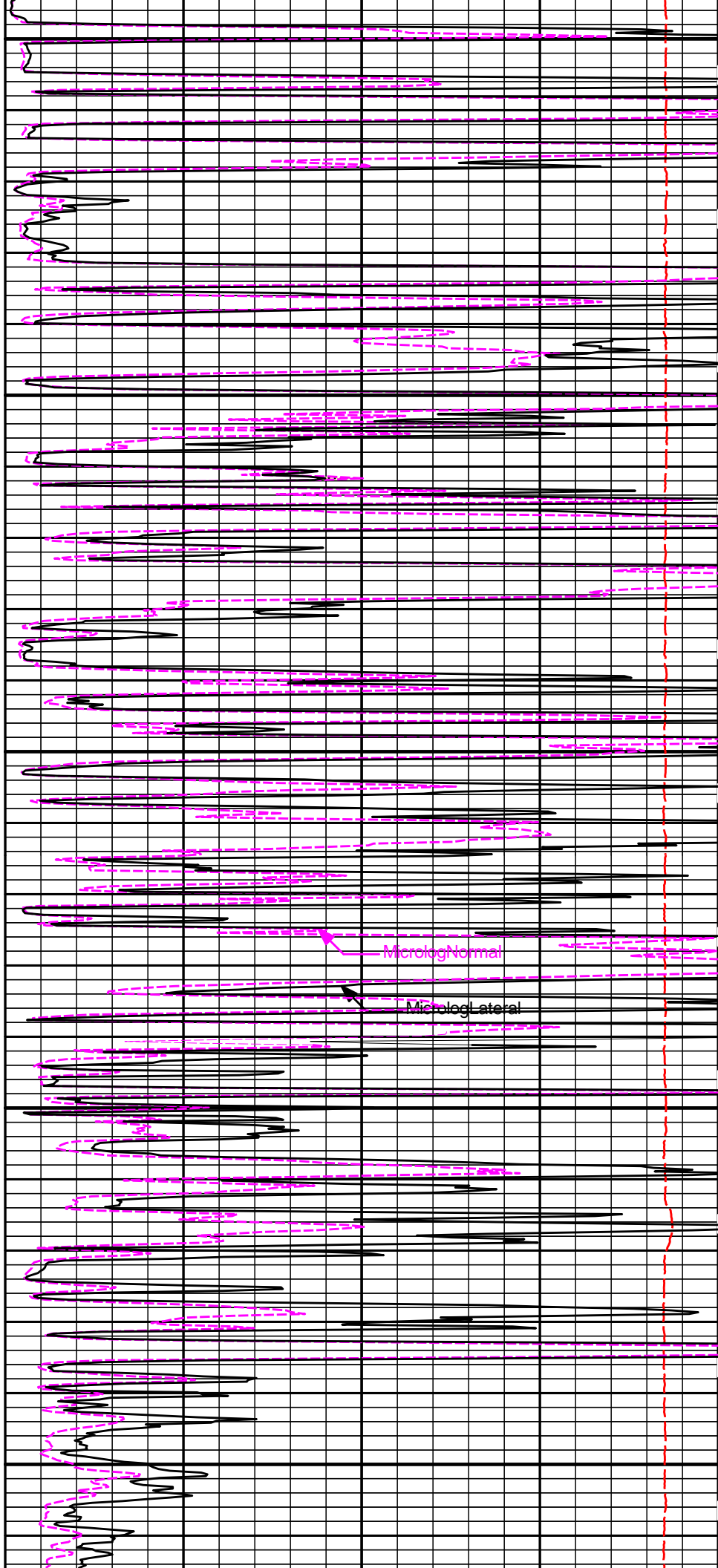
1700





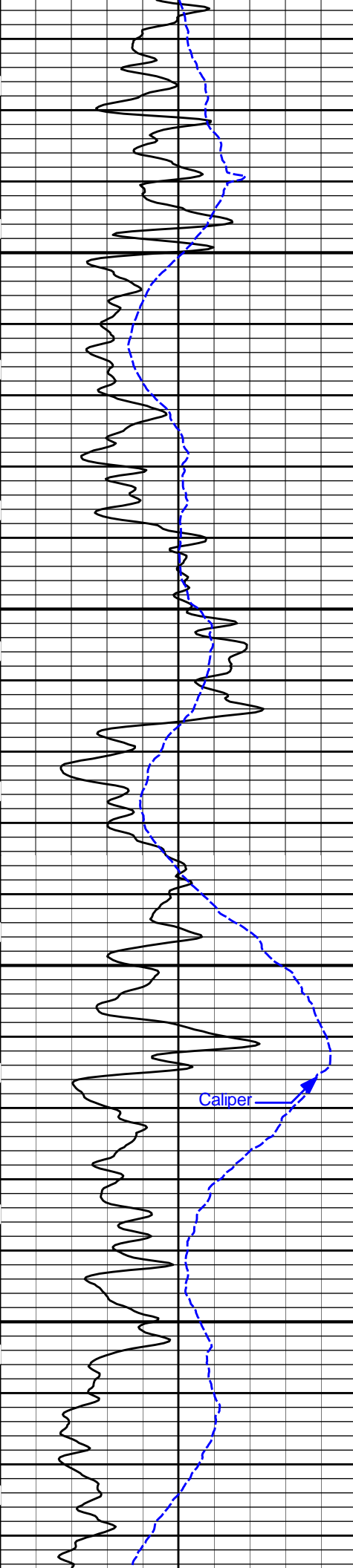
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1900



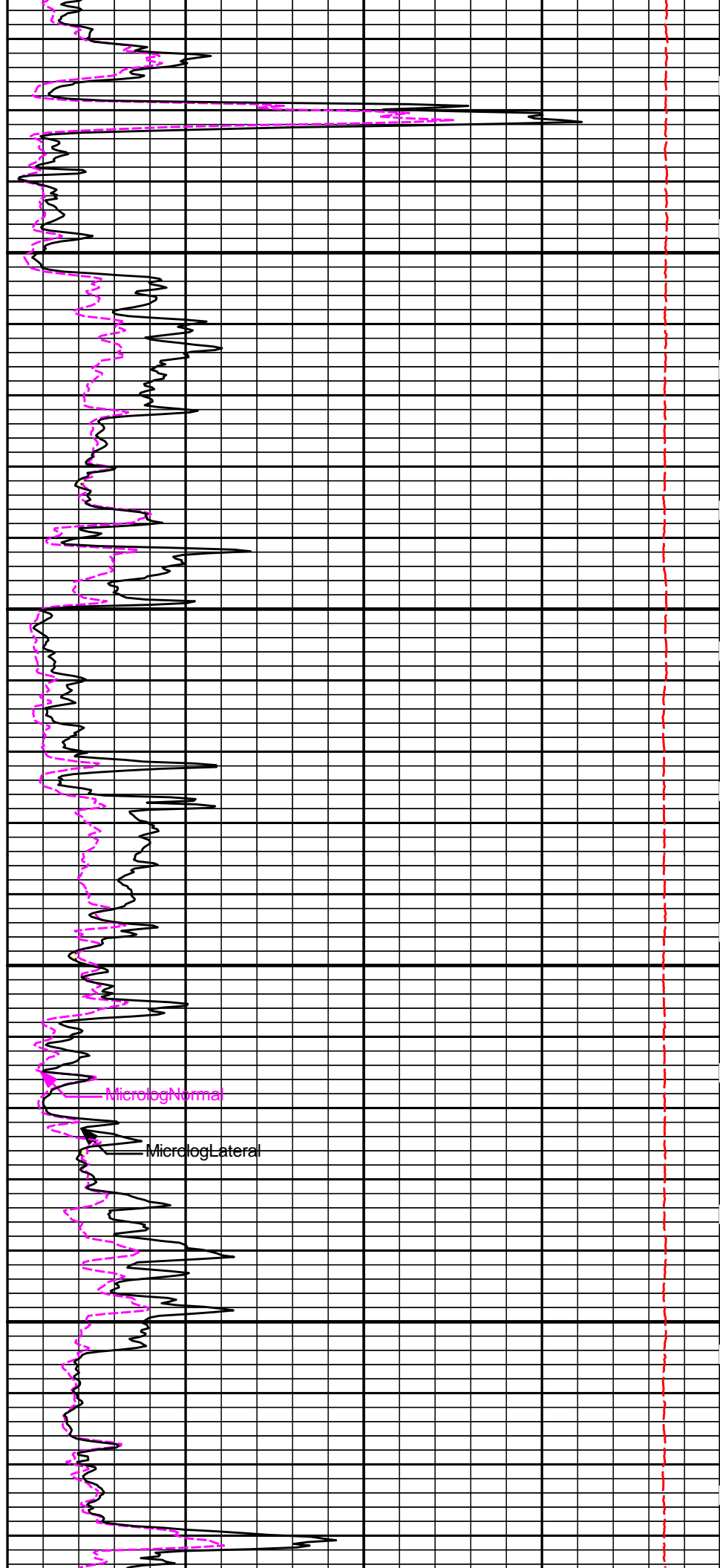
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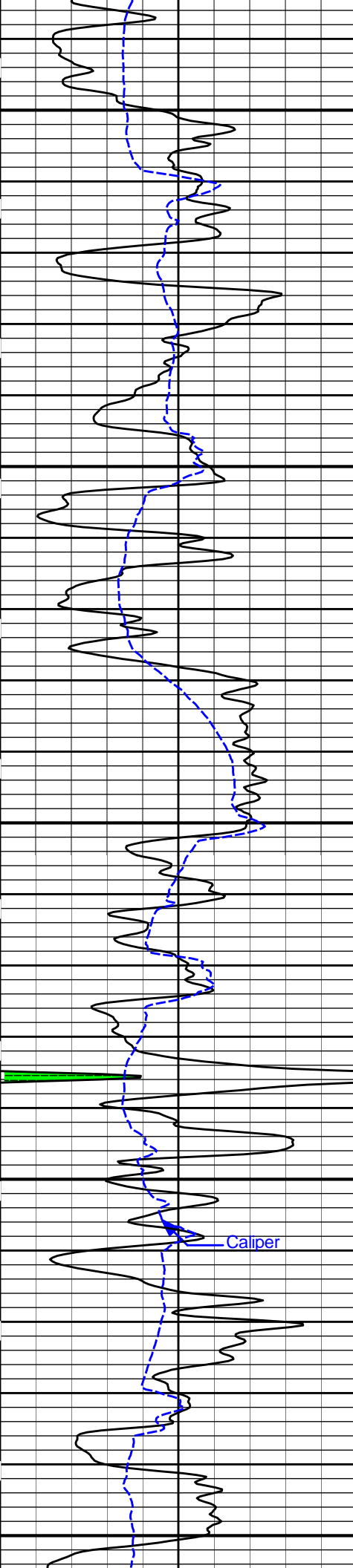
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2100



MicrologNormal

MicrologLateral

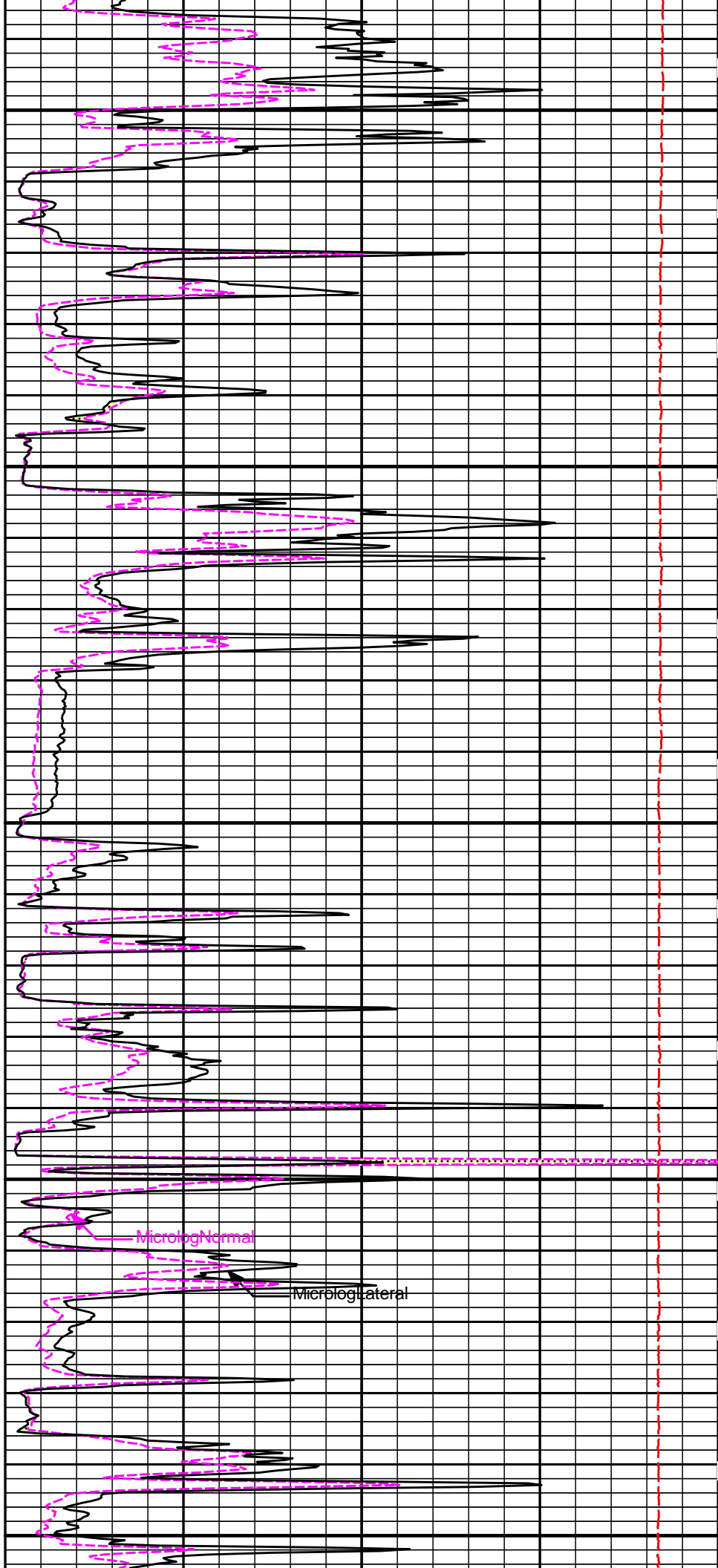


2200

2300

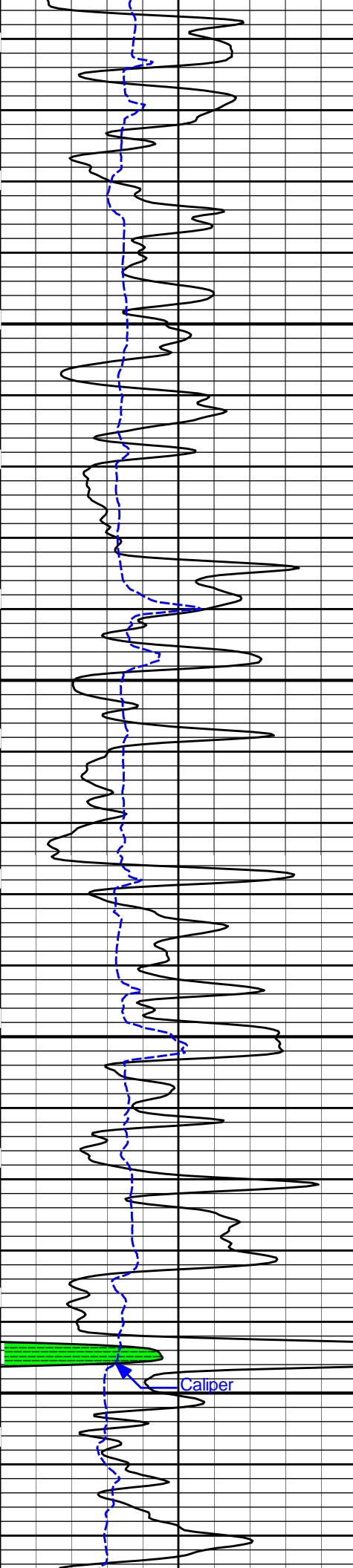
2400

Caliper



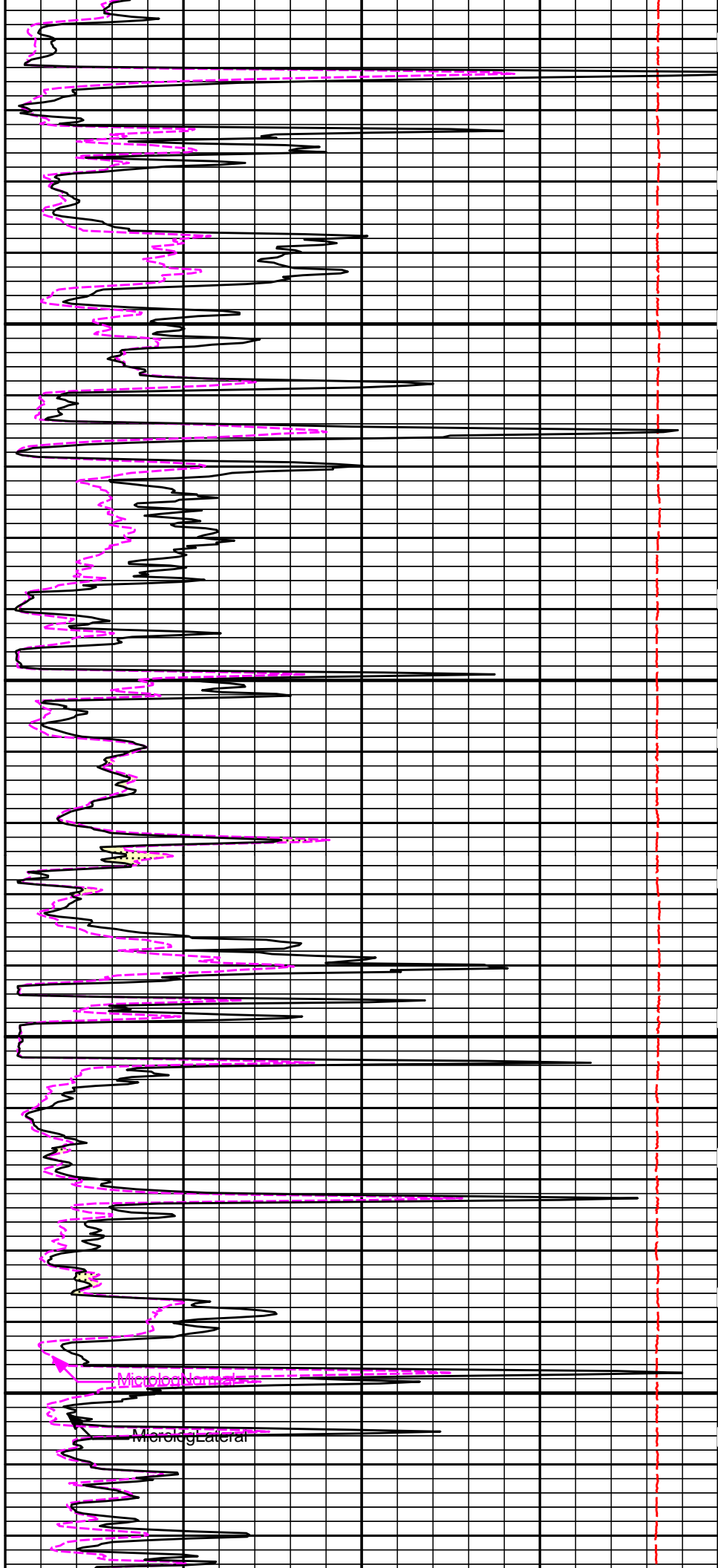
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MicrologLateral



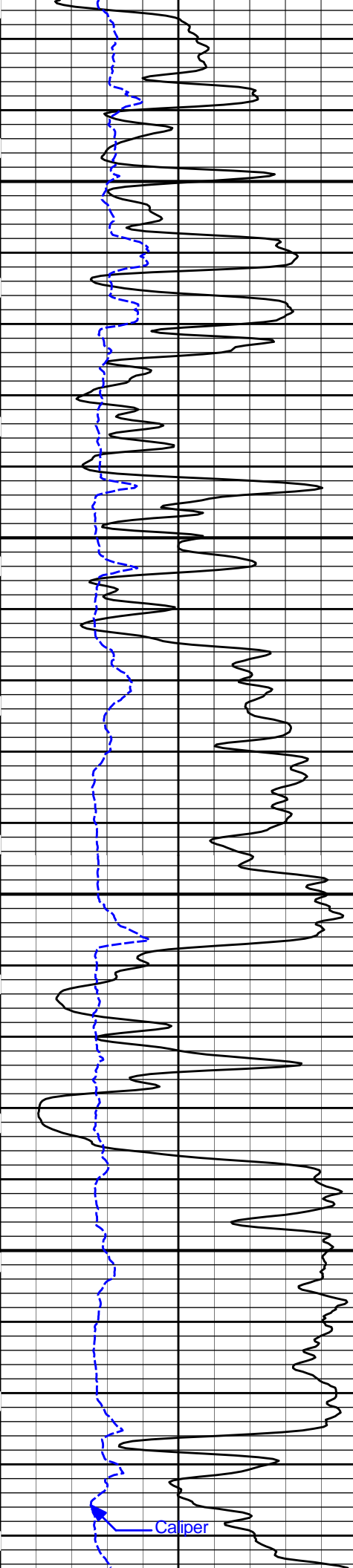
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2600



Microboremeter

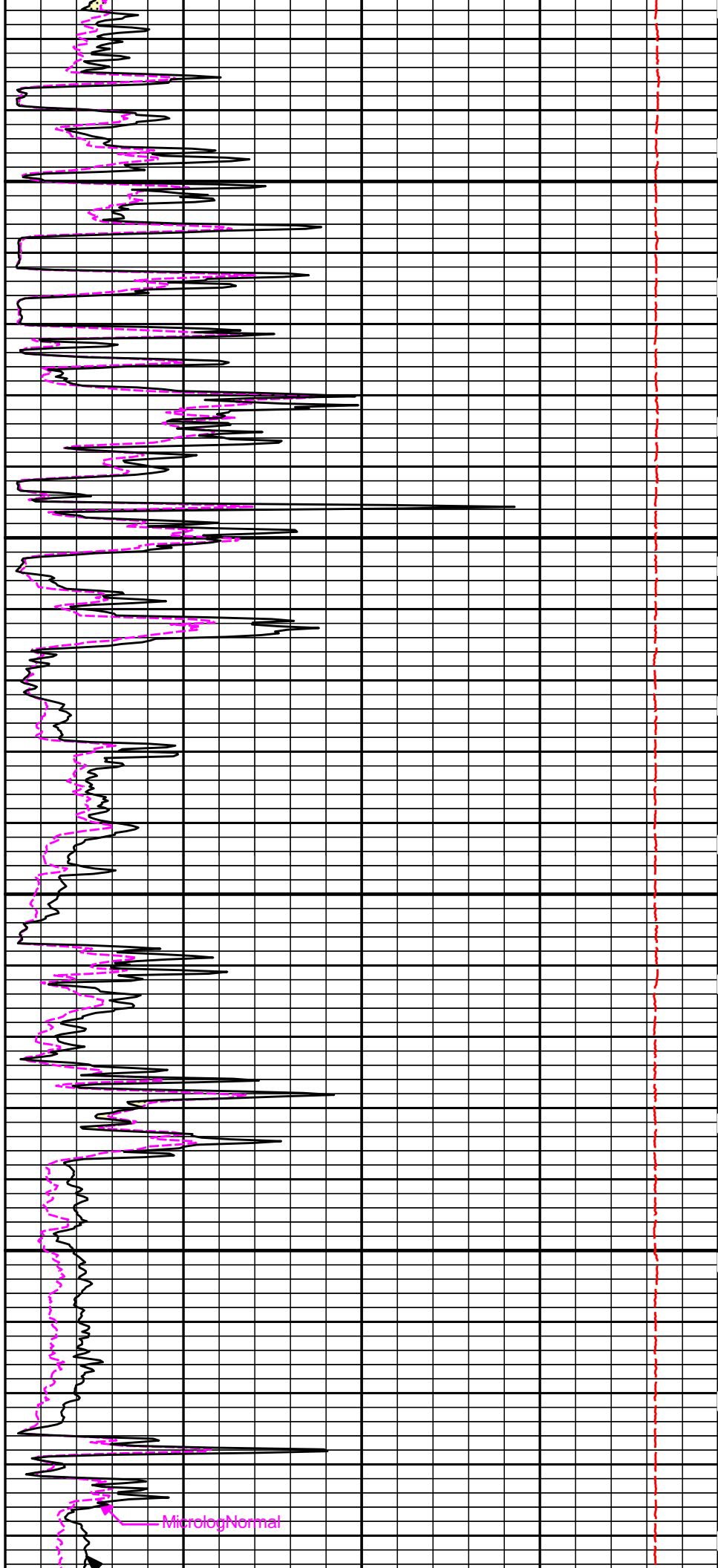
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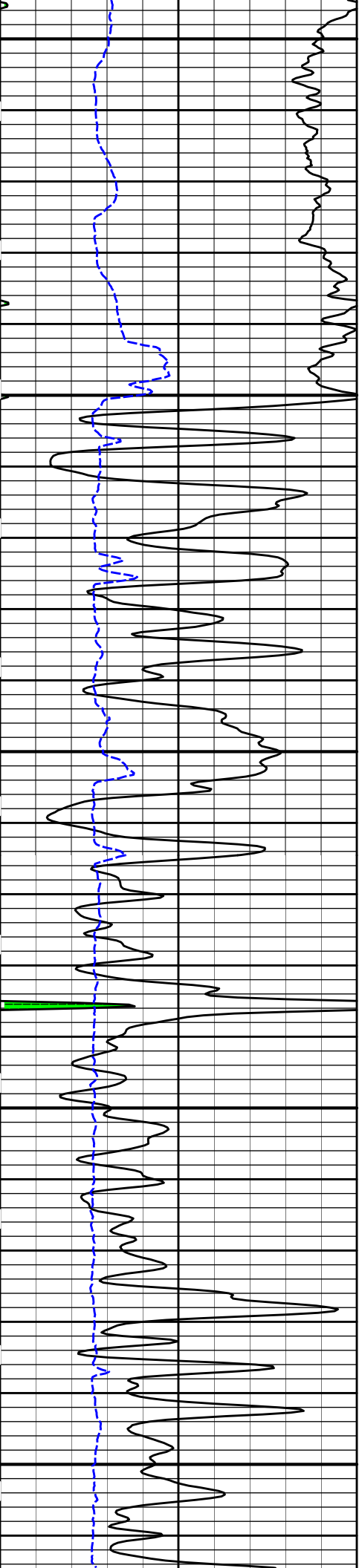
2700

2800

Caliper

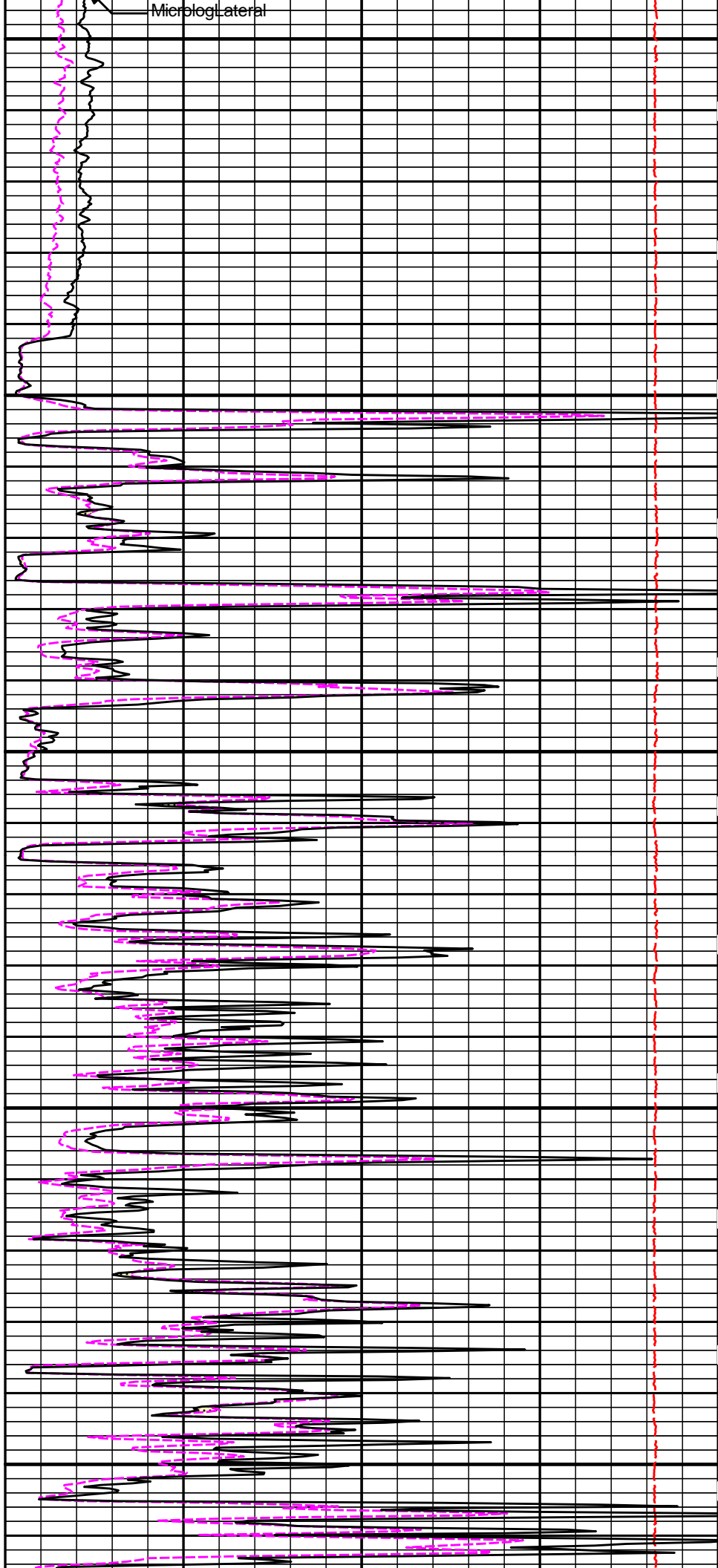


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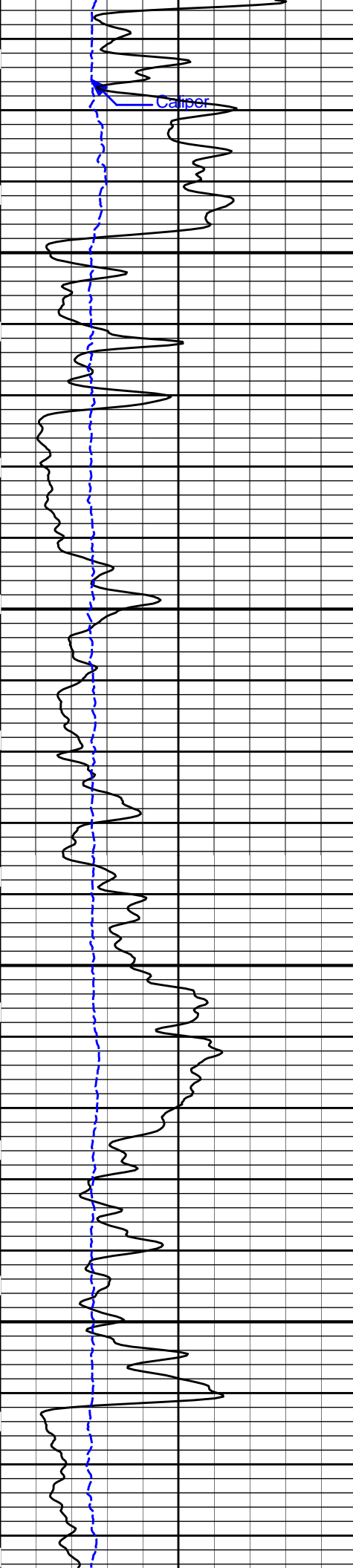


2900

3000

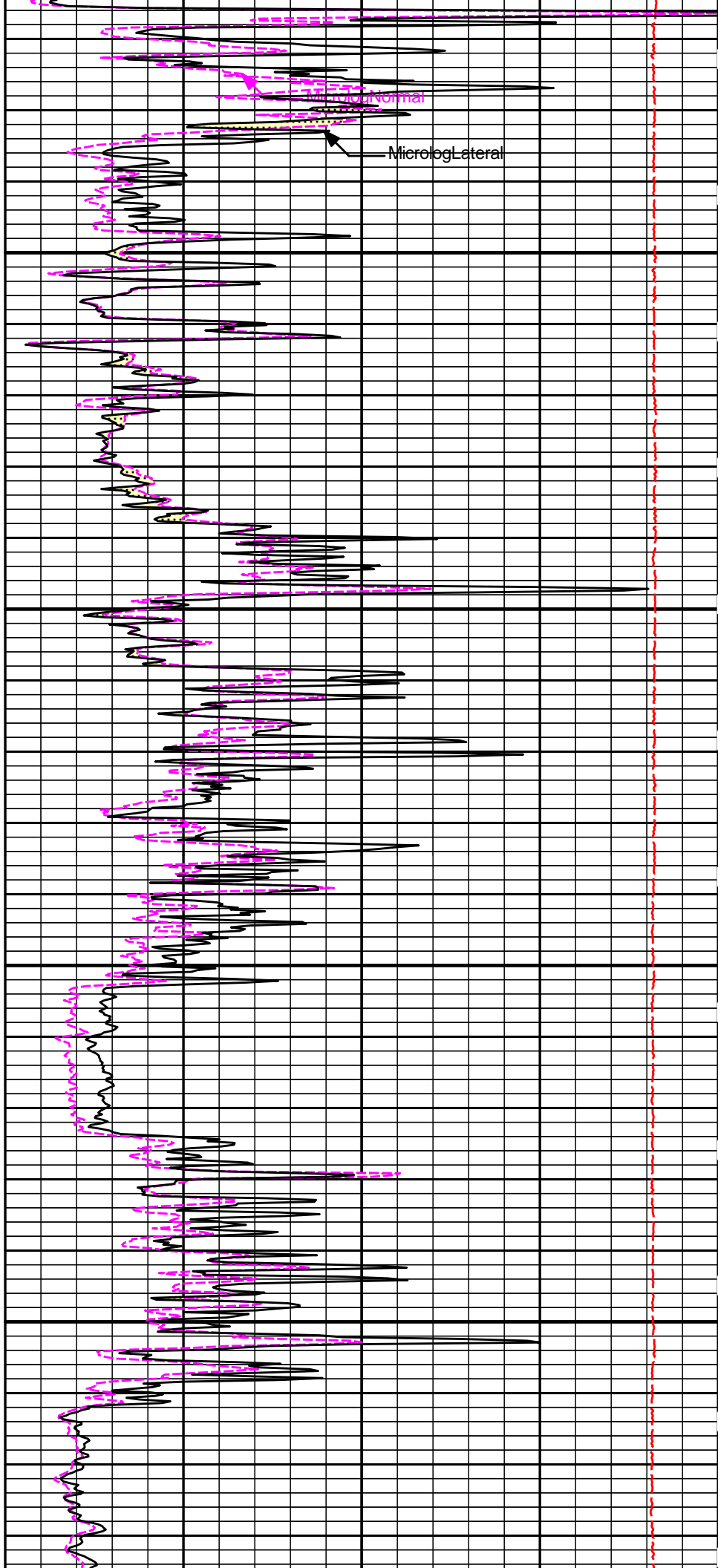


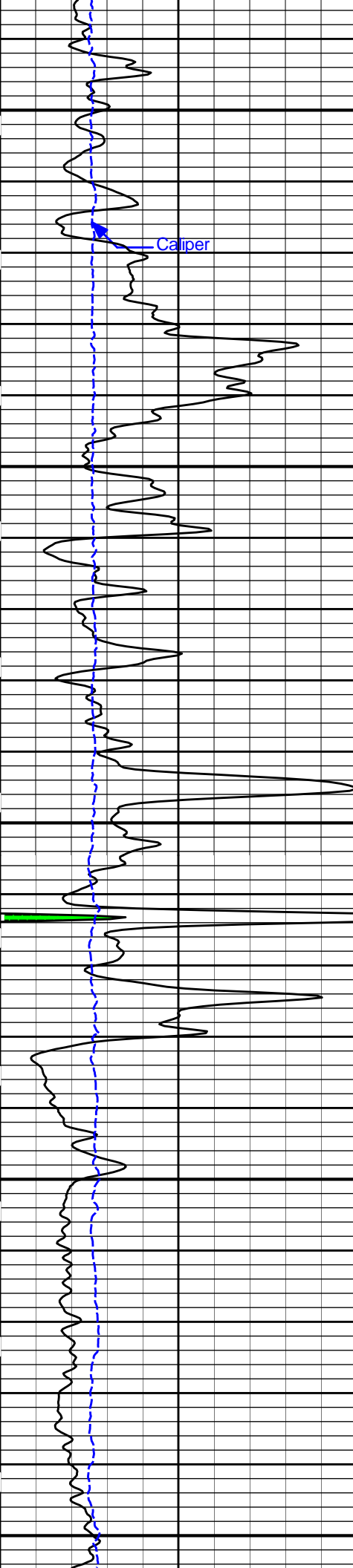
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3100

3200

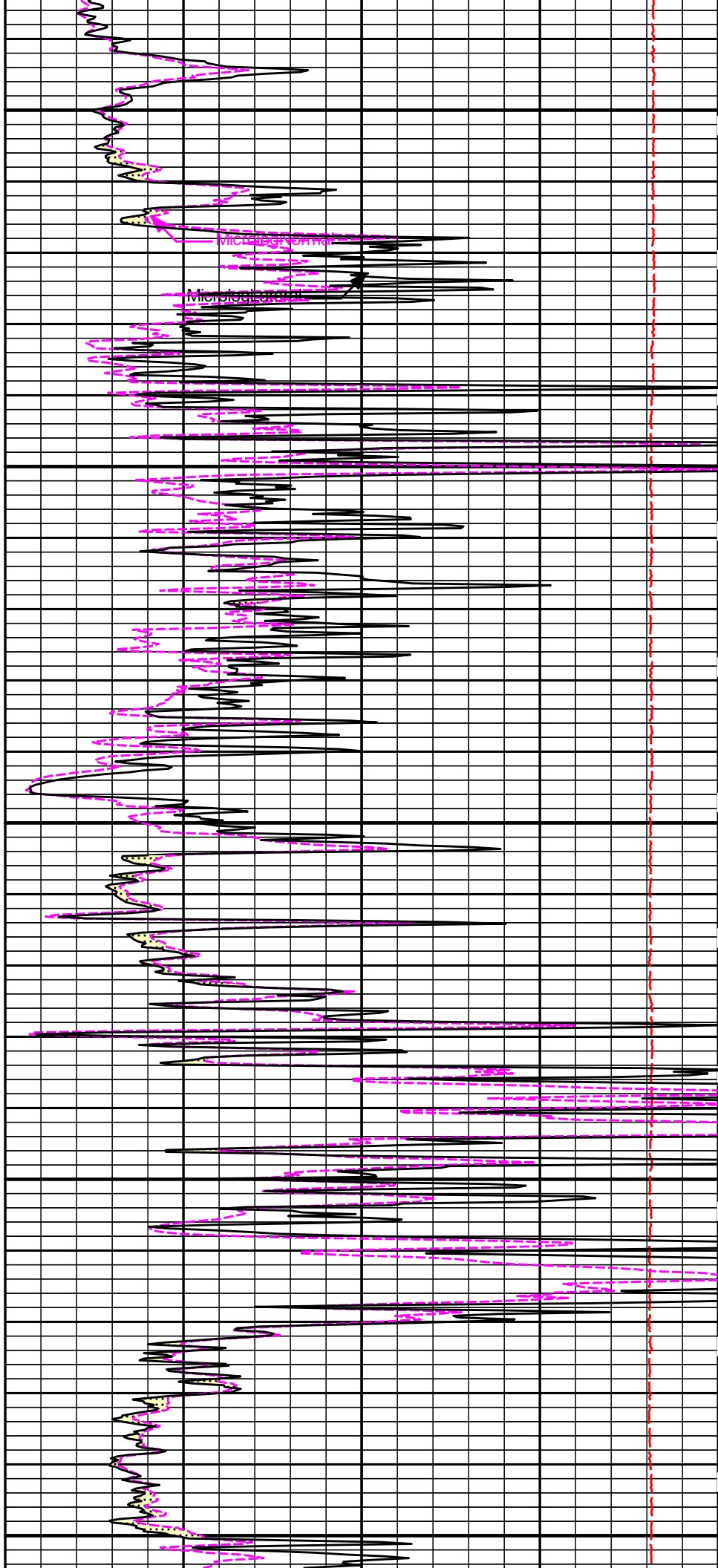


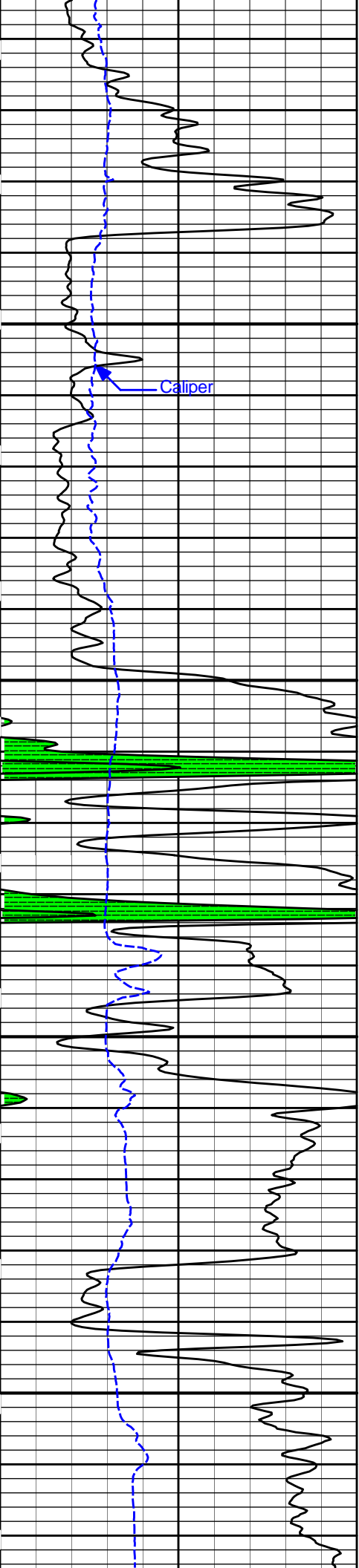


3300

3400

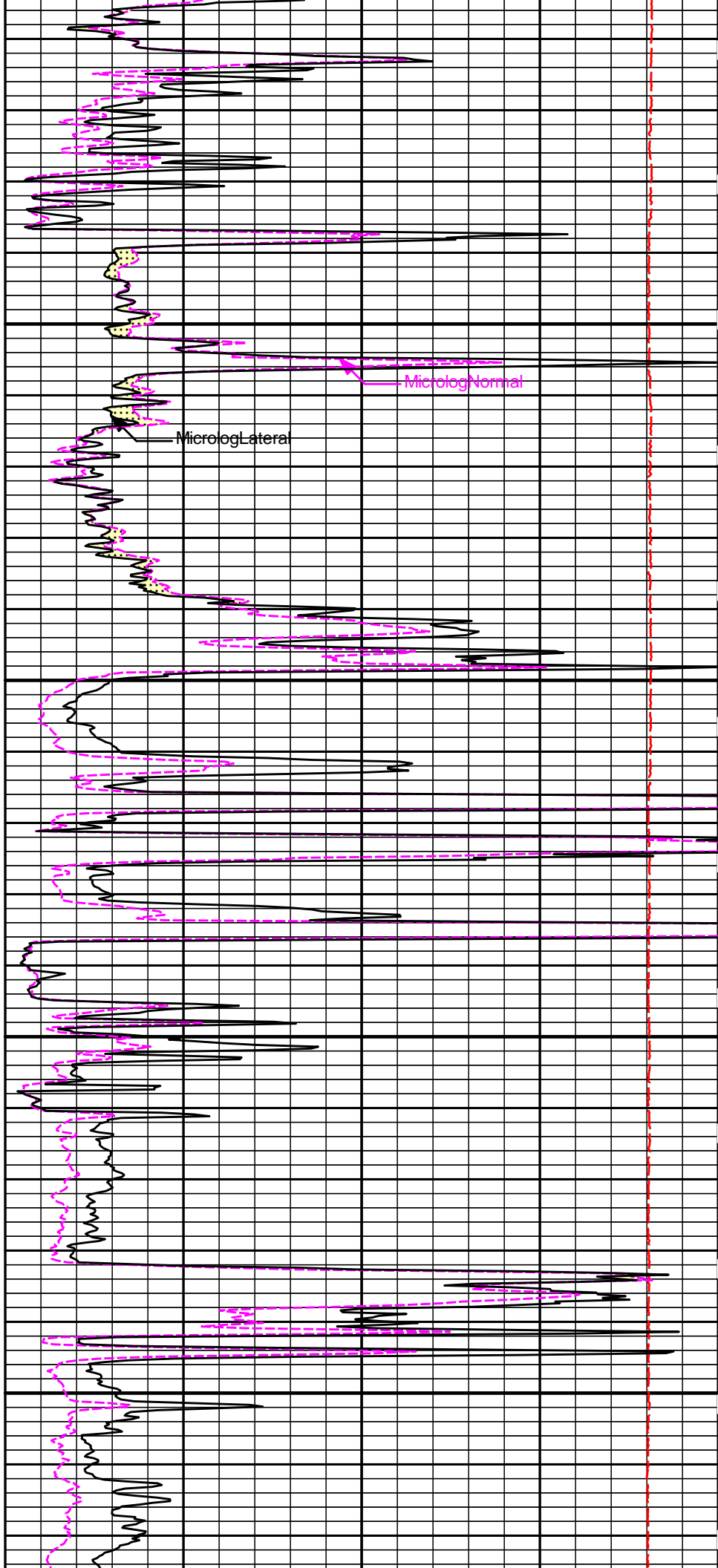
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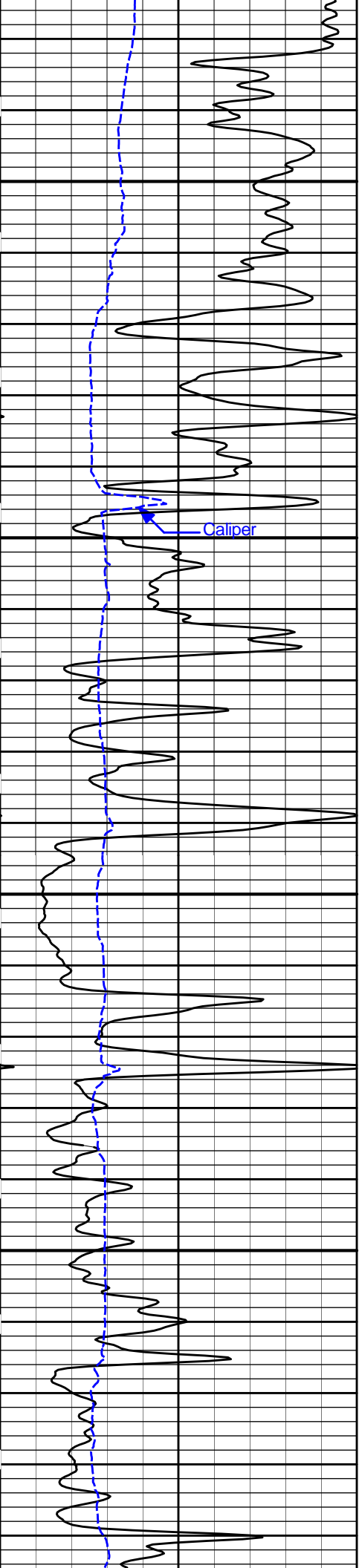
3600

3700



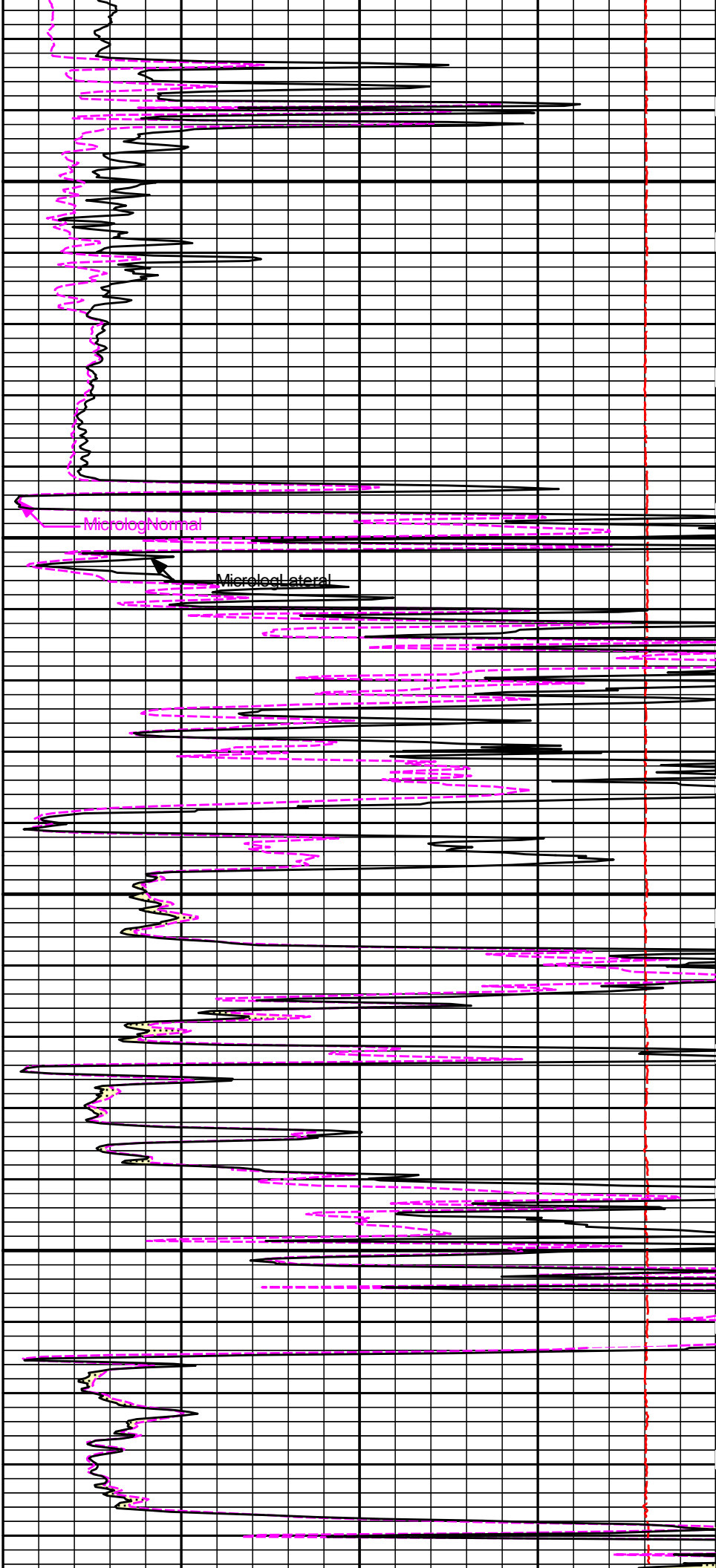
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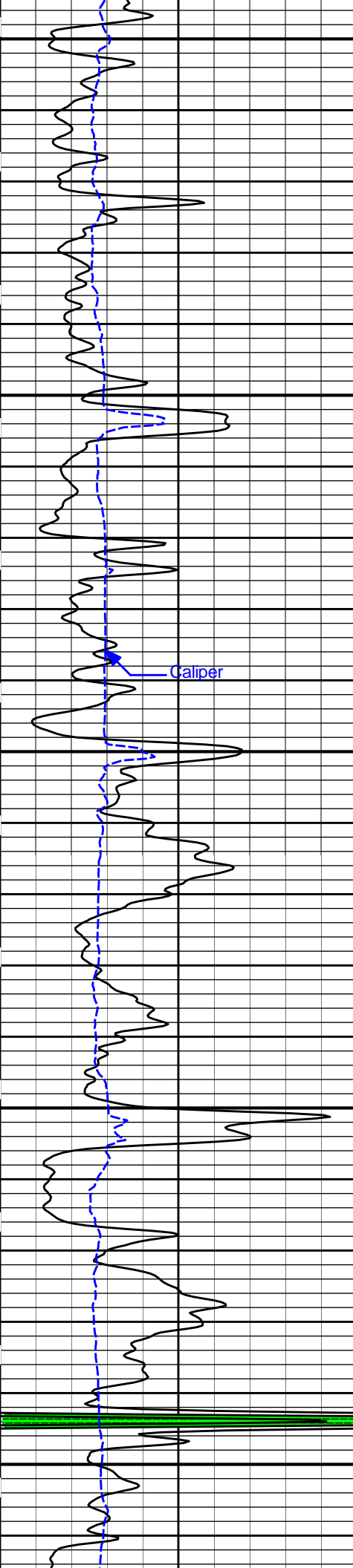
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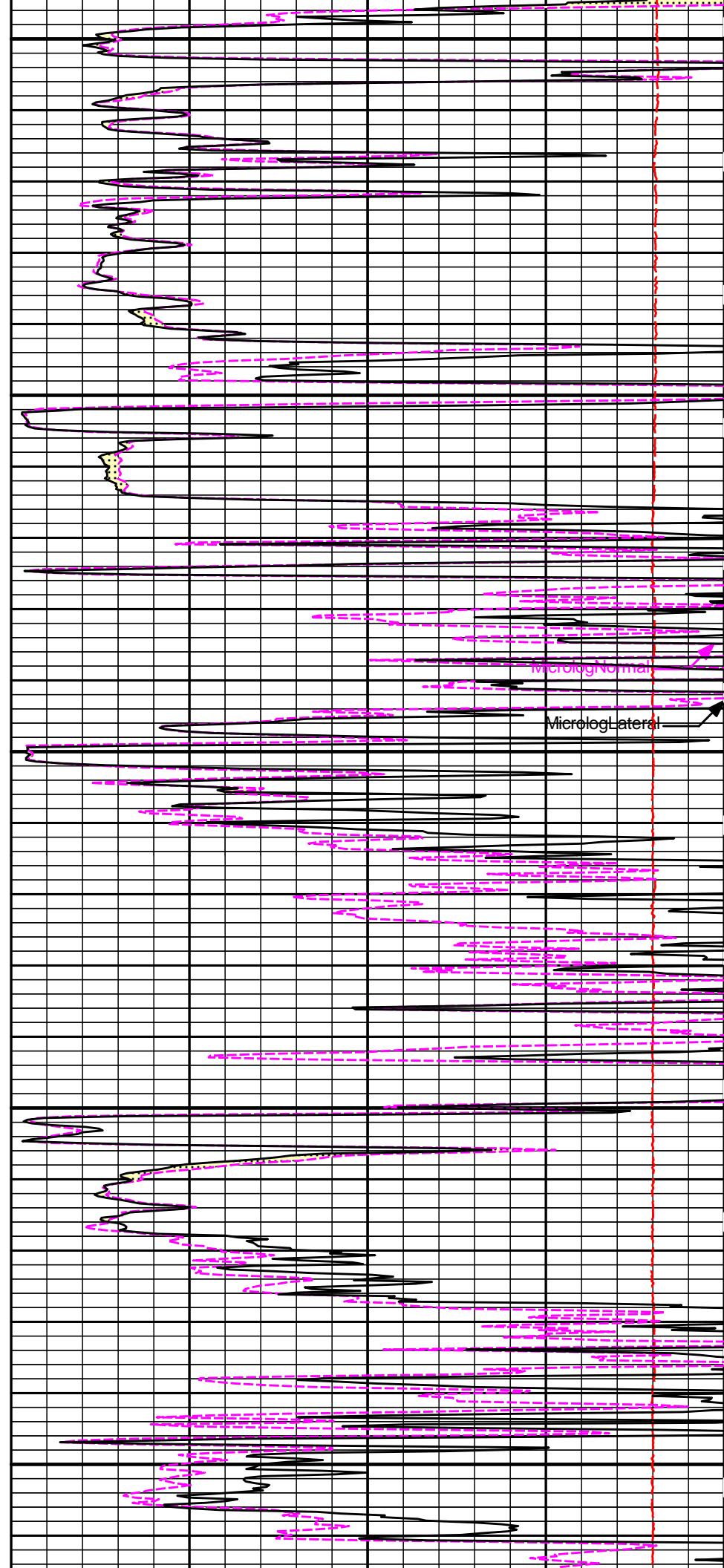
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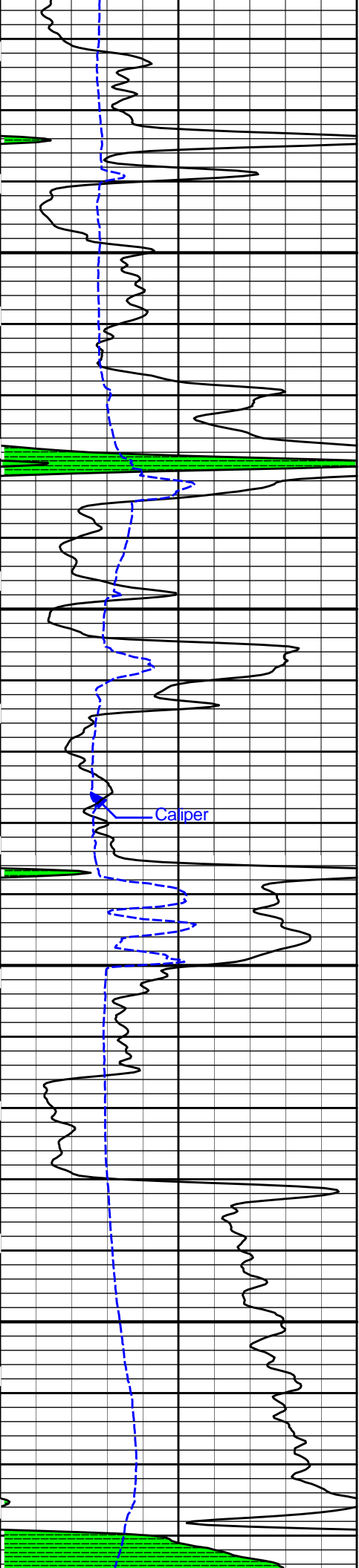




4000

4100

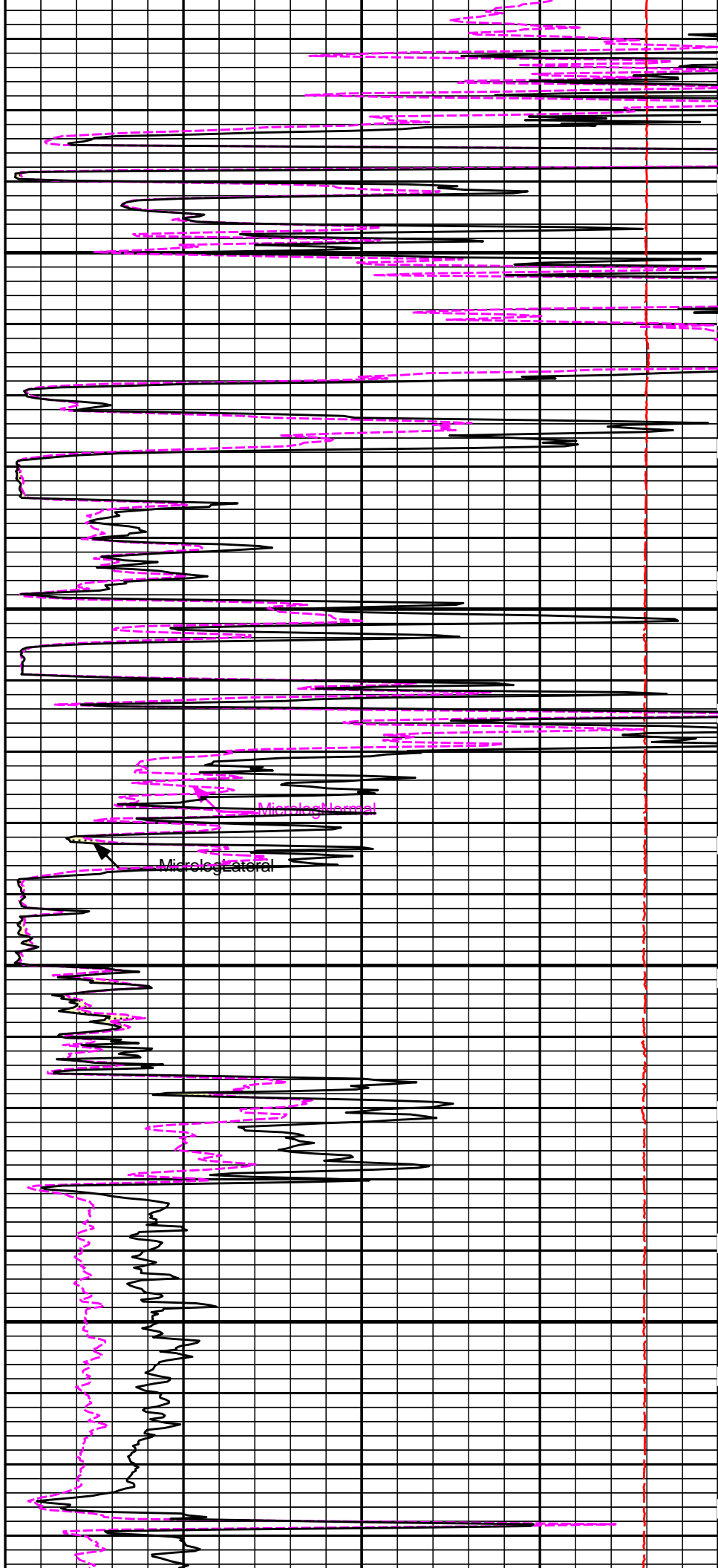




4200

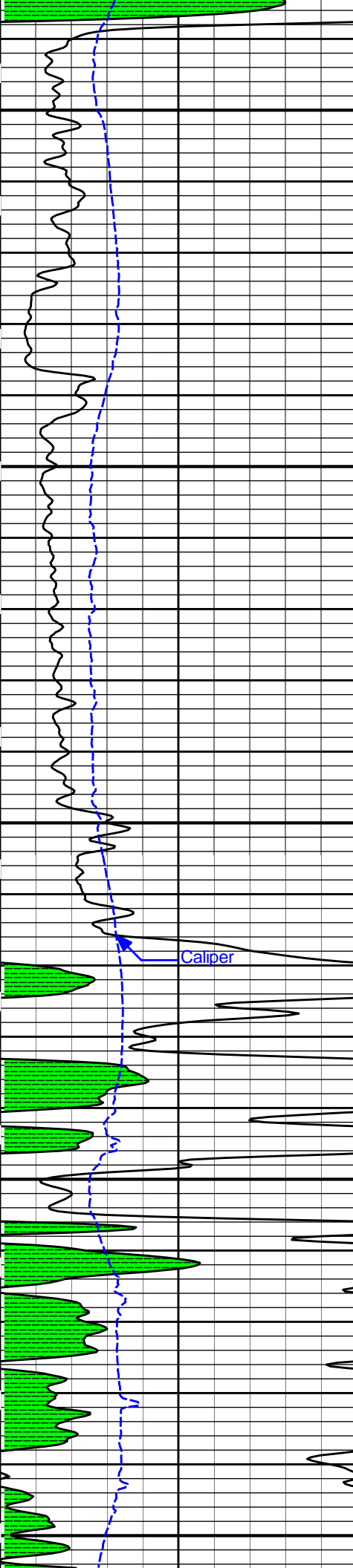
Caliper

4300



Microlog Lateral

Microlog Lateral

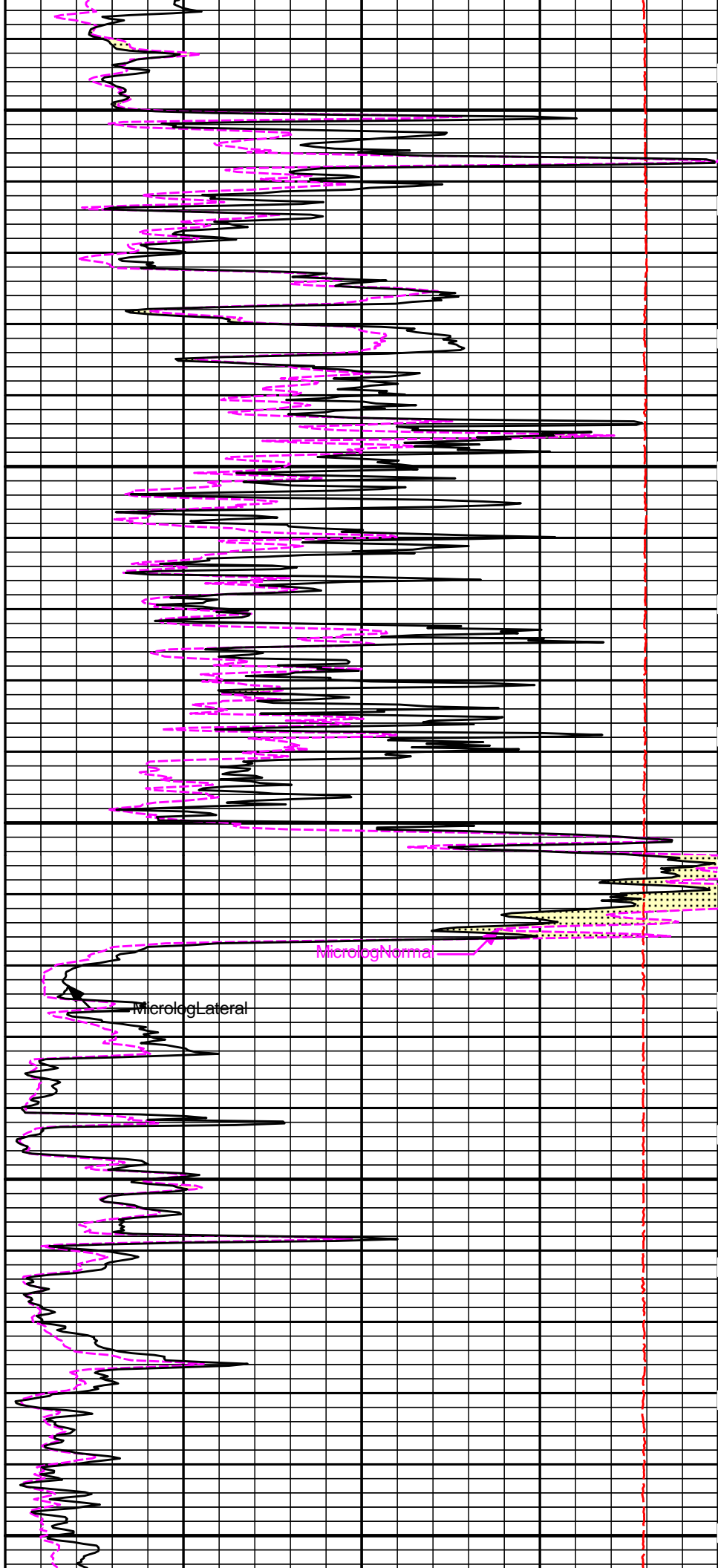


4400

4500

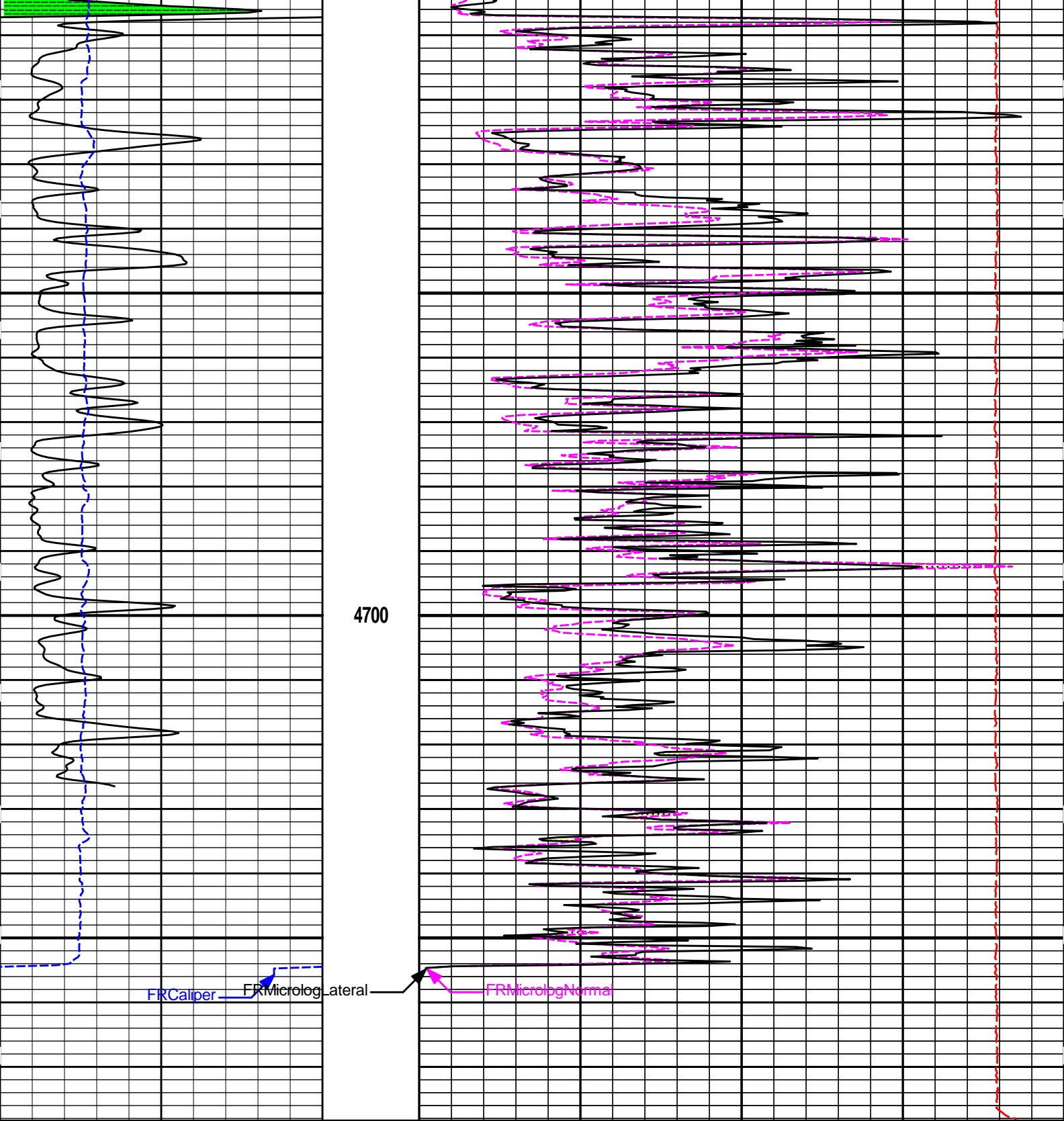
4600

Caliper



MicrologNormal

MicrologLateral



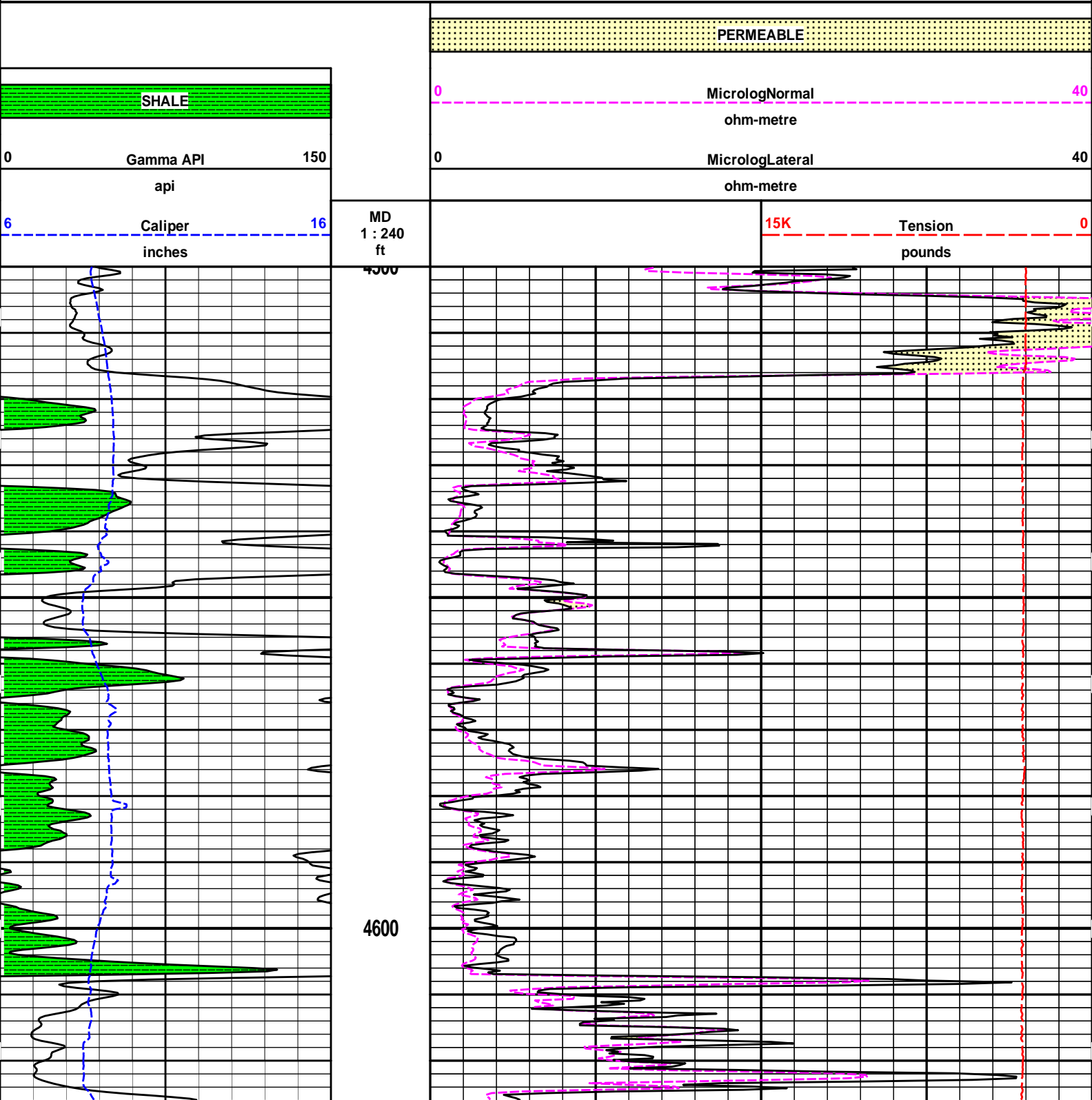
6	Caliper	16	MD	15K	Tension	0
	inches		1 : 240		pounds	
			ft			
0	Gamma API	150	0	MicrologLateral		40
	api			ohm-metre		
	SHALE		0	MicrologNormal		40
				ohm-metre		
				PERMEABLE		

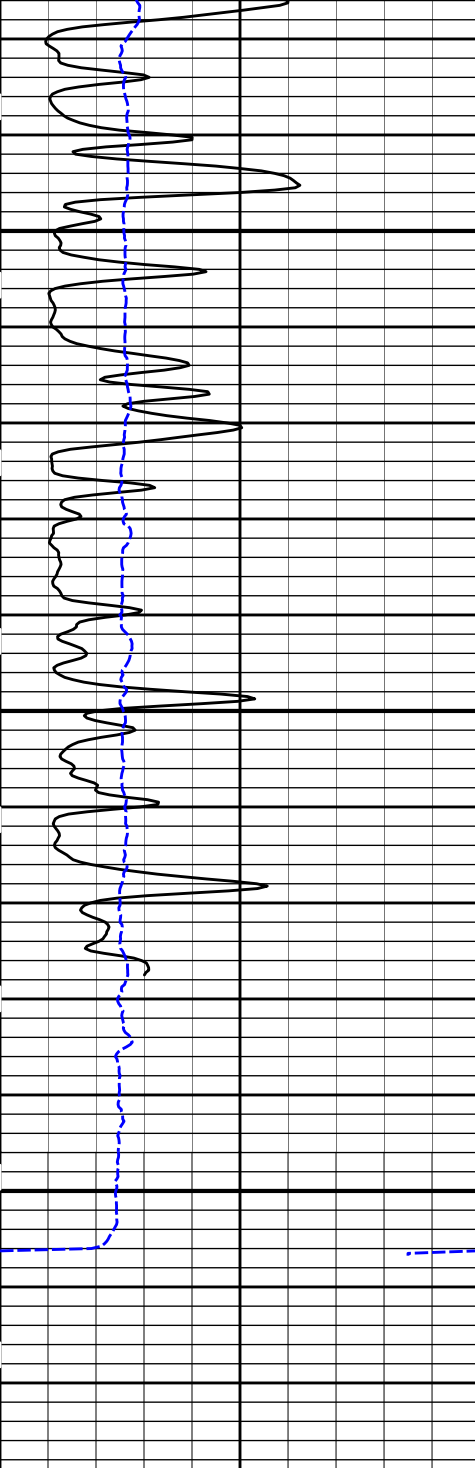
# 5 INCH MAIN LOG

**HALLIBURTON**

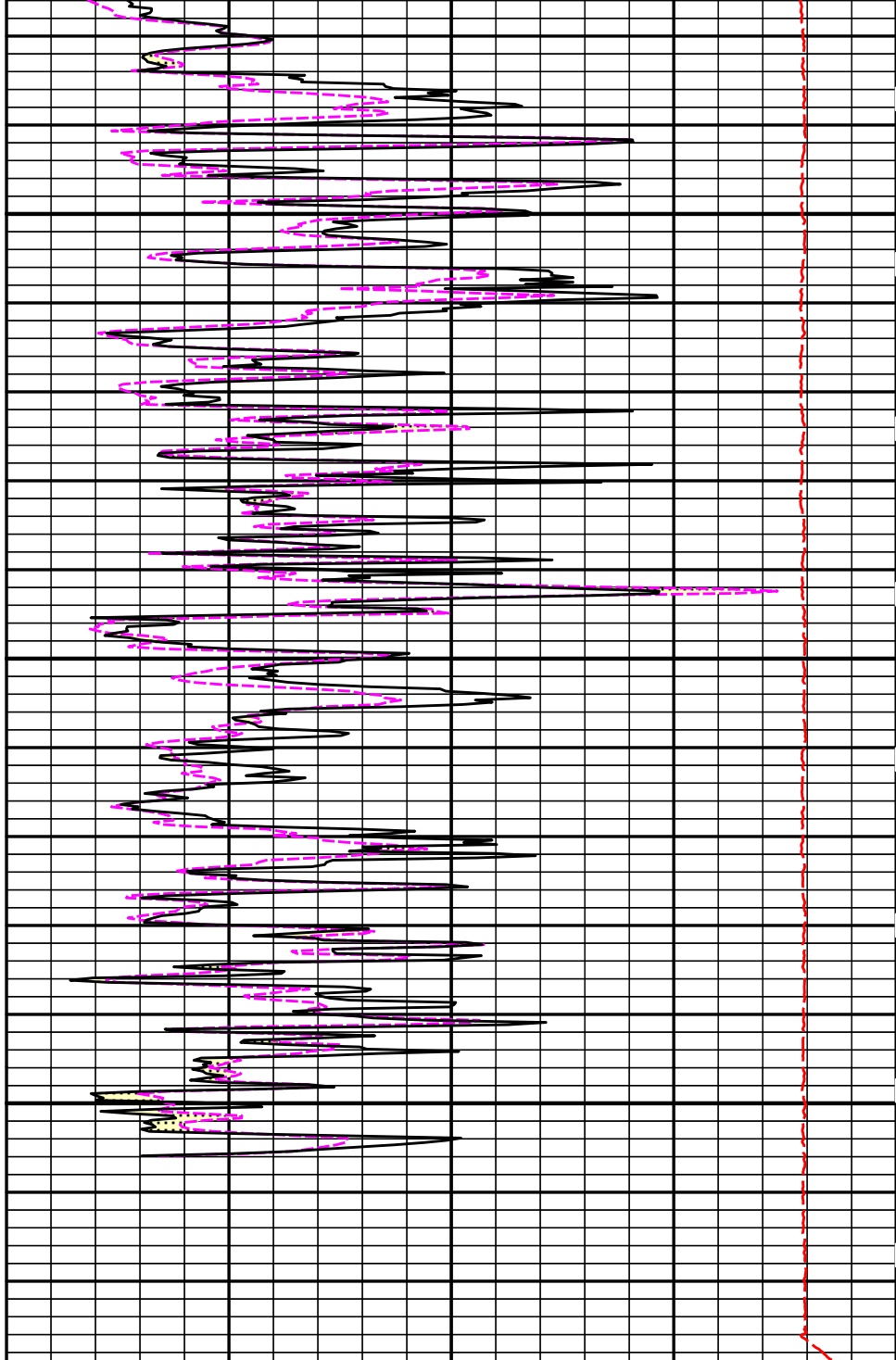
Plot Time: 03-Feb-14 07:12:22  
Plot Range: 4500 ft to 4779.17 ft  
Data: ALEXANDER\_3114\Well Based\DAQ-0001-002\  
Plot File: \\LOCAL-ALEXANDER\_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNMICROMicrolog\_IQ\_5\_rep\_lib

## REPEAT SECTION





4700



6	Caliper	16
	inches	
0	Gamma API	150
	api	
SHALE		

MD  
1 : 240  
ft

15K	Tension	0
	pounds	
0	MicrologLateral	40
	ohm-metre	
0	MicrologNormal	40
	ohm-metre	
PERMEABLE		

**HALLIBURTON**

Plot Time: 03-Feb-14 07:12:26  
 Plot Range: 4500 ft to 4779.17 ft  
 Data: ALEXANDER\_3114\Well Based\DAQ-0001-002\  
 Plot File: \\-LOCAL-ALEXANDER\_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNMICROMicrolog\_IQ\_5\_rep\_lib

**REPEAT SECTION**



ACRt Instrument-  
11055059  
50.00 lbs

Regal Standoff 6\_75-  
00000044  
20.00 lbs

ACRt Sonde-  
11038385  
200.00 lbs

Bull Nose-00000029  
5.00 lbs

Ø 3.625 in →

Ø 6.750 in\* →

Ø 3.625 in →

Ø 2.750 in →



← Mud Resistivity @ 13.19 ft

← ACRt @ 9.21 ft

5.03 ft

14.55 ft

14.22 ft

0.33 ft

0.33 ft

0.00 ft

Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max. Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	12156658	135.00	6.25	60.51	300.00
SP	SP Sub	00000029	60.00	3.74	56.77	300.00
GTET	Gamma Telemetry Tool	11021139	165.00	8.52	48.25	60.00
CSNG	Compensated Spectral Natural Gamma	10965402	114.00	8.17	40.08	15.00
DSNT	Dual Spaced Neutron	11019643	174.00	9.69	30.40	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13	33.73	300.00
SDLT	Spectral Density Tool	10950489	360.00	10.81	19.58	60.00
SDLP	Density Insite Pad	10844781	65.00	2.55	21.79	60.00
MICP	Microlog Pad	10950489	8.00	1.00	22.08	60.00
ACRt	Array Compensated True Resistivity Instrument Section	11055059	50.00	5.03	14.55	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11038385	200.00	14.22	0.33	300.00
RSOF	Regal Standoff 6.75in	00000044	20.00	0.52	13.48	300.00
BLNS	Bull Nose	00000029	5.00	0.33	0.00	300.00
<b>Total</b>			<b>1,362.60</b>	<b>66.76</b>		

\* Not included in Total Length and Length Accumulation.

Data: ALEXANDER\_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BN\IDLE Date: 02-Feb-14 22:30:32

**HALLIBURTON**

**CALIBRATION REPORT**

**NATURAL GAMMA RAY TOOL SHOP CALIBRATION**

Tool Name: GTET - 11021139

Reference Calibration Date: 16-Nov-13 17:40:06

Engineer: SHELDON INGERSOLL

Calibration Date: 10-Jan-14 15:05:07

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Calibrator Source S/N: TB146

Calibrator API Reference: 265.00 api

Equivalent Calibrator API Reference: 269.6 api

Measurement	Measured	Calibrated	Units
Background	82.2	84.2	api

Background + Calibrator	345.4	353.9	api
Calibrator	263.2	269.6	api

### NATURAL GAMMA RAY TOOL FIELD CALIBRATION

<b>Tool Name:</b> GTET - 11021139	<b>Reference Calibration Date:</b> 10-Jan-14 15:05:07
<b>Engineer:</b> THOMAS HYDE	<b>Calibration Date:</b> 02-Feb-14 07:30:28
<b>Software Version:</b> WL INSITE R3.8.4 (Build 5)	<b>Calibration Version:</b> 1

Calibrator Source S/N: TB146  
 Calibrator API Reference:265.00 api  
 Equivalent Calibrator API Reference:269.6 api

Field Verification	Shop	Field	Units
Background	84.2	52.9	api
Background + Calibrator	353.9	320.1	api
Calibrator	269.6	267.2	api

Shop	Field	Difference	Tolerance
269.6	267.2	2.4	+/- 9.00

### MICRO LOG SHOP CALIBRATION

<b>Tool Name:</b> Microlog Pad - 10950489	<b>Reference Calibration Date:</b> 10-Jan-14 11:22:17
<b>Engineer:</b> THOMAS HYDE	<b>Calibration Date:</b> 02-Feb-14 07:27:49
<b>Software Version:</b> WL INSITE R3.8.4 (Build 5)	<b>Calibration Version:</b> 1
<b>Host Tool Name:</b> DSNT - 11019643	

#### CALIBRATION COEFFICIENT SUMMARY

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.06	-0.06	-0.00	-0.01	ohmm
Calibration Point #1	0.00	0.00	0.00	0.00	ohmm
Calibration Point #2	19.84	20.00	19.83	20.00	ohmm
Internal Reference	19.91	20.07	19.91	20.08	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	-0.10	2.13	V
Calibration Point #1	16.62	3.92	V
Calibration Point #2	5299.17	6947.48	V
Internal Reference	5318.22	6975.78	V

### MICRO LOG FIELD CHECK

<b>Tool Name:</b> Microlog Pad - 10950489	<b>Reference Calibration Date:</b> 02-Feb-14 07:27:49
<b>Engineer:</b> THOMAS HYDE	<b>Calibration Date:</b> 02-Feb-14 07:35:20
<b>Software Version:</b> WL INSITE R3.8.4 (Build 5)	<b>Calibration Version:</b> 1

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Shop	Field	Shop	Field	
Tool Zero	-0.06	-0.06	-0.01	-0.01	ohmm
Internal Reference	20.07	20.08	20.08	20.09	ohmm

Summary				
Signal	Shop	Field	Difference	Tolerance
Microlog Normal	20.07	20.08	-0.01	+/- 0.80
Microlog Lateral	20.08	20.09	-0.01	+/- 0.80

# CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11021139						
Gamma Ray Calibrator	269.6	267.2	-----	2.4	+/- 9.00	api
Microlog Pad-10950489						
MicroLog Normal	20.07	20.08	-----	-0.01	+/-0.80	ohmm
MicroLog Lateral	20.08	20.09	-----	-0.01	+/-0.80	ohmm

Data: ALEXANDER\_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNIDLE Date: 02-Feb-14 22:43:59

## HALLIBURTON

### PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP-----					
	SHARED	BS	Bit Size	8.750	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.300	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	0.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	75.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	5.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	4672.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	CSNG	CGOK	Process CSNG Data?	Yes	
	CSNG	CENT	Is Tool Centralized?	No	
	CSNG	CROK	Gamma Environmental Corrections?	Yes	

CSNG	GBOK	Gamma Environmental Corrections?	Yes	
CSNG	BARF	Barite Correction Factor	1.00	
CSNG	ORDG	Use Fixed Gain	No	
CSNG	ORDO	Use Fixed Offset	No	
CSNG	ORDR	Use Fixed Resolution Degradation Factor	No	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	No	
DSNT	NLIT	Neutron Lithology	Limestone	
DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
DSNT	DNTP	Temperature Correction Type	None	
DSNT	DPRS	DSN Pressure Correction Type	None	
DSNT	SHCO	View More Correction Options	No	
DSNT	UTVD	Use TVD for Gradient Corrections?	No	
DSNT	LHWT	Logging Horizontal Water Tank?	No	
SDLT	CLOK	Process Caliper Outputs?	Yes	
SDLT Pad	DNOK	Process Density?	Yes	
SDLT Pad	DNOK	Process Density EVR?	No	
SDLT Pad	CB	Logging Calibration Blocks?	No	
SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Up	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm

BOTTOM\_\_\_\_\_

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**INPUTS, DELAYS AND FILTERS TABLE**

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
<b>Depth Panel</b>				
TENS	Tension	0.00	NO	
<b>RWCH</b>				
DHTN	DownholeTension	0.00	BLK	0.000
<b>SP Sub</b>				
PLTC	Plot Control Mask	58.73	NO	
SP	Spontaneous Potential	58.73	BLK	1.250
SPR	Raw Spontaneous Potential	58.73	NO	
SPO	Spontaneous Potential Offset	58.73	NO	
<b>GTET</b>				
TPUL	Tension Pull	50.71	NO	

GR	Natural Gamma Ray API	50.71	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	50.71	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	50.71	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
<b>CSNG</b>				
TPUL	Tension Pull	42.62	NO	
STAT	Status	42.62	NO	
FRMC	Tool Frame Count	42.62	BLK	0.250
TFRM	Total Frames	42.62	NO	
LSPD	Line Speed	42.62	BLK	0.250
CTIM	Accumulation time for sample	42.62	BLK	0.250
NOIS	Spectral Noise	42.62	BLK	0.250
STAB	Stabilizer Voltage in mv	42.62	BLK	0.250
STBP	Stabilizer 60 KEV Peak	42.62	BLK	0.250
AMER	Americium	42.62	BLK	0.250
FTMP	Flask PCB Temperature	42.62	BLK	0.250
SPEL	Low Energy Spectrum	42.62	BLK	0.250
SPEH	High Energy Spectrum	42.62	BLK	0.250
SSP	Stabilization Energy Spectrum	42.62	BLK	0.250
CSPC	CSNG Lo Hi Spectrum Data	42.62	NO	
<b>DSNT</b>				
TPUL	Tension Pull	32.30	NO	
RNDS	Near Detector Telemetry Counts	32.40	BLK	1.417
RFDS	Far Detector Telemetry Counts	33.15	TRI	0.583
DNTT	DSN Tool Temperature	32.40	NO	
DSNS	DSN Tool Status	32.30	NO	
ERND	Near Detector Telemetry Counts EVR	32.40	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	33.15	BLK	0.000
ENTM	DSN Tool Temperature EVR	32.40	NO	
<b>SDLT</b>				
TPUL	Tension Pull	22.40	NO	
PCAL	Pad Caliper	22.40	TRI	0.250
ACAL	Arm Caliper	22.40	TRI	0.250
<b>ACRt Sonde</b>				
TPUL	Tension Pull	2.73	NO	
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	8.98	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.48	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.48	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	4.98	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	4.98	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	3.98	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	3.98	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.48	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.48	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.23	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.23	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	8.98	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	8.98	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.48	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.48	BLK	0.000

F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.48	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	4.98	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	4.98	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Current Raw 12K X Receiver	2.73	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.73	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.73	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.73	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.73	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.73	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.73	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.73	BLK	0.000
ITMP	Instrument Temperature	2.73	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.73	NO	
TIDV	Instrument Temperature Derivative	2.73	NO	
TUDV	Upper Temperature Derivative	2.73	NO	
TLDV	Lower Temperature Derivative	2.73	NO	
TRBD	Receiver Board Temperature	2.73	NO	
<b>SDLT Pad</b>				
TPUL	Tension Pull	22.39	NO	
NAB	Near Above	22.21	BLK	0.920
NHI	Near Cesium High	22.21	BLK	0.920
NLO	Near Cesium Low	22.21	BLK	0.920
NVA	Near Valley	22.21	BLK	0.920
NBA	Near Barite	22.21	BLK	0.920
NDE	Near Density	22.21	BLK	0.920
NPK	Near Peak	22.21	BLK	0.920
NLI	Near Lithology	22.21	BLK	0.920
NBAU	Near Barite Unfiltered	22.21	BLK	0.250
NLIU	Near Lithology Unfiltered	22.21	BLK	0.250
FAB	Far Above	22.56	BLK	0.250
FHI	Far Cesium High	22.56	BLK	0.250
FLO	Far Cesium Low	22.56	BLK	0.250
FVA	Far Valley	22.56	BLK	0.250
FBA	Far Barite	22.56	BLK	0.250
FDE	Far Density	22.56	BLK	0.250
FPK	Far Peak	22.56	BLK	0.250

FLI	Far Lithology	22.56	BLK	0.250
PTMP	Pad Temperature	22.40	BLK	0.920
NHV	Near Detector High Voltage	21.79	NO	
FHV	Far Detector High Voltage	21.79	NO	
ITMP	Instrument Temperature	21.79	NO	
DDHV	Detector High Voltage	21.79	NO	

**Microlog Pad**

TPUL	Tension Pull	22.58	NO	
MINV	Microlog Lateral	22.58	BLK	0.750
MNOR	Microlog Normal	22.58	BLK	0.750

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COMPANY	<b>SANDRIDGE ENERGY</b>		
WELL	<b>ALEXANDER 3114 1-1</b>		
FIELD	<b>SKINNER</b>		
COUNTY	<b>BARBER</b>	STATE	<b>KANSAS</b>

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