



MICRORESISTIVITY LOG

MIDWEST WIRELINE

Company LB Exploration Inc.
Well Sandy 31-1
Field Unknown
County Ellsworth
State Kansas

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Well Sandy 31-1
Field Unknown
County Ellsworth State Kansas

Location: API #: 15-053-21395-00-00
1440 FSL & 1885 FWL
SEC 31 TWP 16S RGE 8W
Permanent Datum Ground Level Elevation 1784
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
CNL/CDL
DIL/BHCS
Elevation
K.B. 1792
D.F.
G.L. 1784

Date	6/1/2024		
Run Number	One		
Depth Driller	2490		
Depth Logger	2490		
Bottom Logged Interval	2489		
Top Log Interval	1000		
Casing Driller	8.625 @ 250		
Casing Logger	260		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	5000		
Density / Viscosity	9.2 54		
pH / Fluid Loss	10 8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.75 @ 79		
Rmt @ Meas. Temp	.56 @ 79		
Rmc @ Meas. Temp	1.01 @ 79		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	.59 @ 101		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	101		
Equipment Number	P-108		
Location	HAYS		
Recorded By	J. Henrickson		
Witnessed By	Jim Musgrove		

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All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest Wireline LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Hollyrood KS
8.4 East, North Into

Log Measured From: Kelly Bushing 8 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: J. Henrickson
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Jim Musgrove
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

BOREID in 7.875	BOTTEMP degF 101	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 0	SNDERRM mmho/m 0	SPSHIFT mV 490	SRFTEMP degF 68	SZCOR Off	TDEPTH ft 2490		

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select

PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

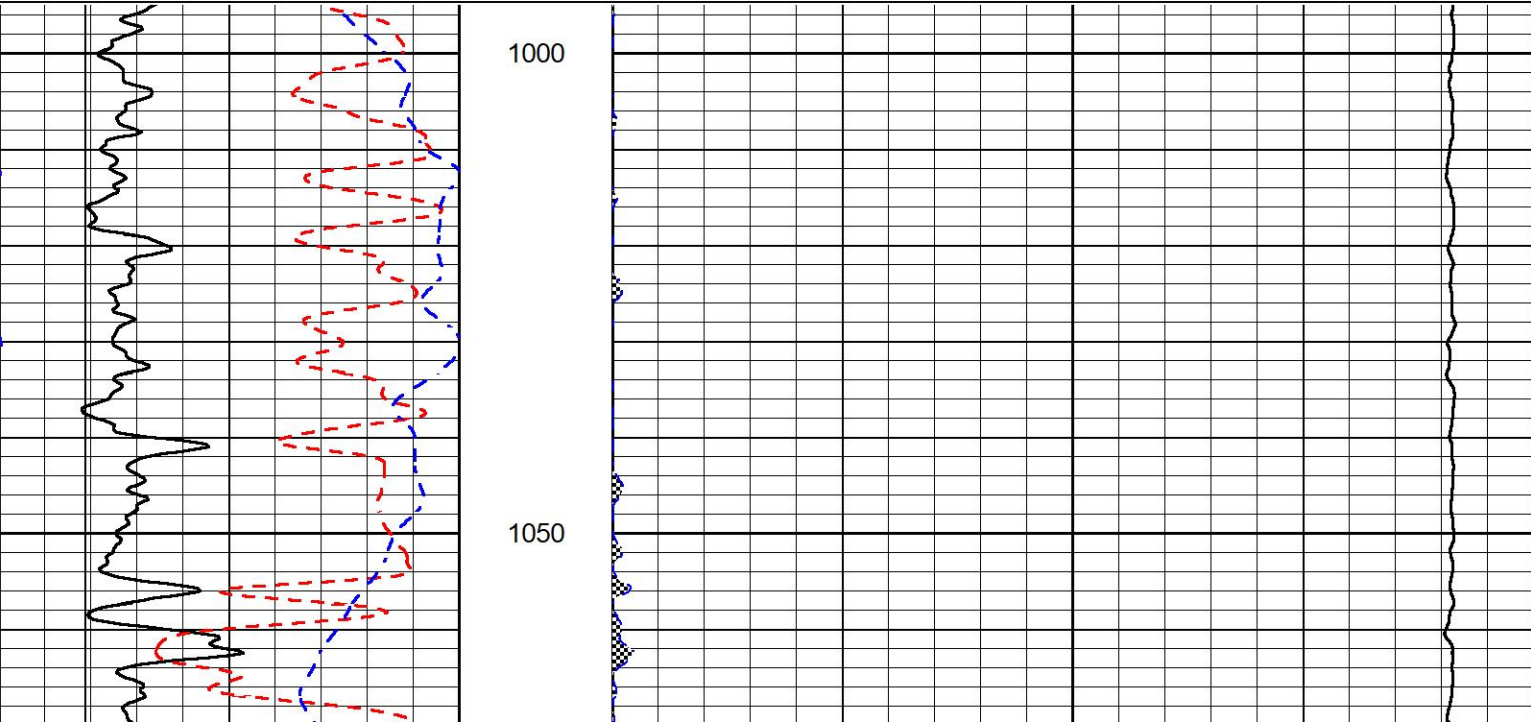


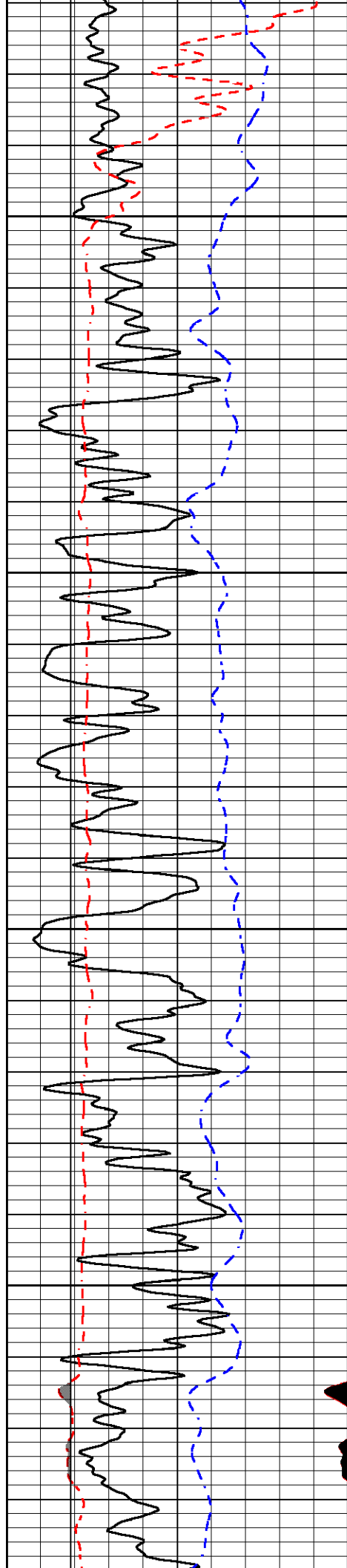
DETAIL SECTION

MAIN PASS

Database Filelb_sandy_31_1.db
Dataset PathnameStackmlPE/pass3.1
Presentation Format_micro
Dataset CreationSat Jun 01 20:41:46 2024
Charted byDepth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	0	Micro Inverse 1 X 1 (Ohm-m)	20
6	Micro Caliper (in)	16	0	Micro Normal 2" (Ohm-m)	20
2.875	mccl (in)	7.875	10000	Line Weight (lb)	0
-200	SP (mV)	0			



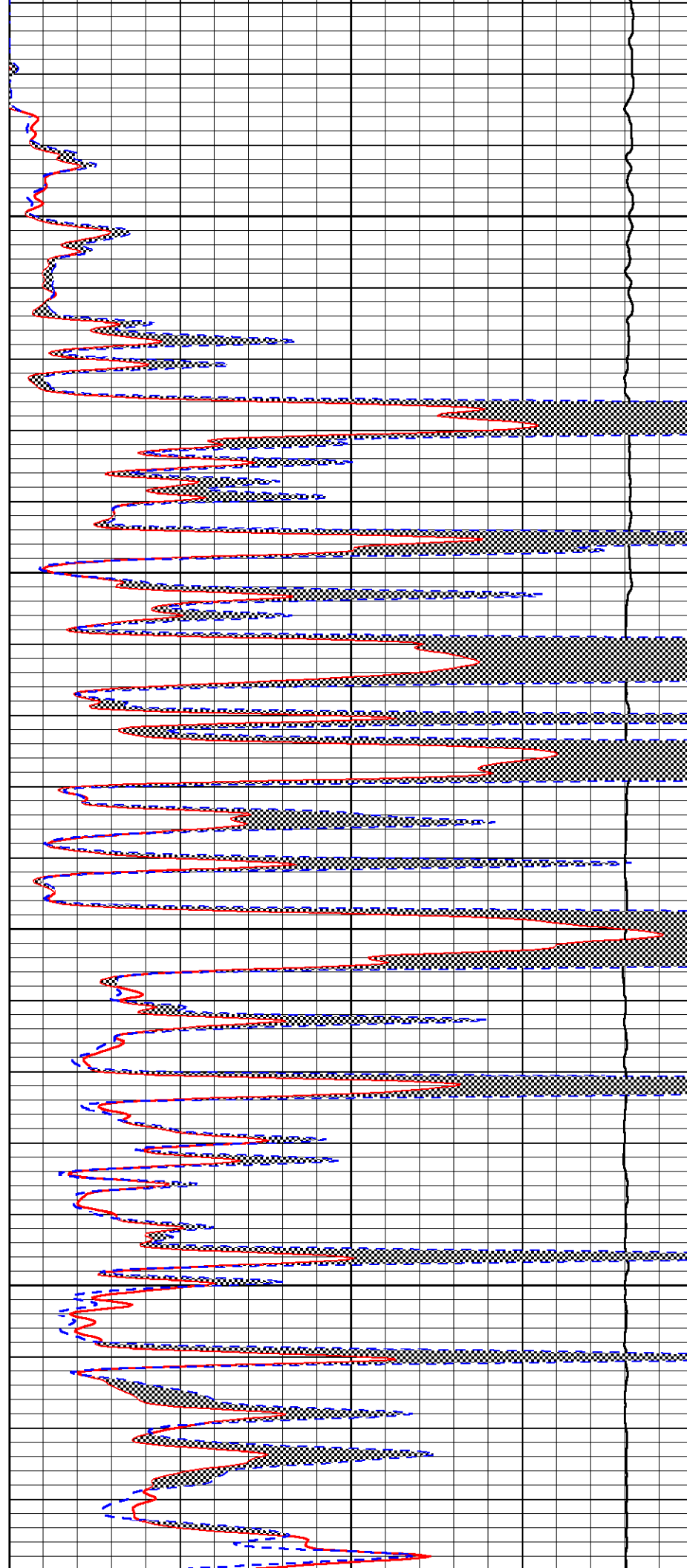


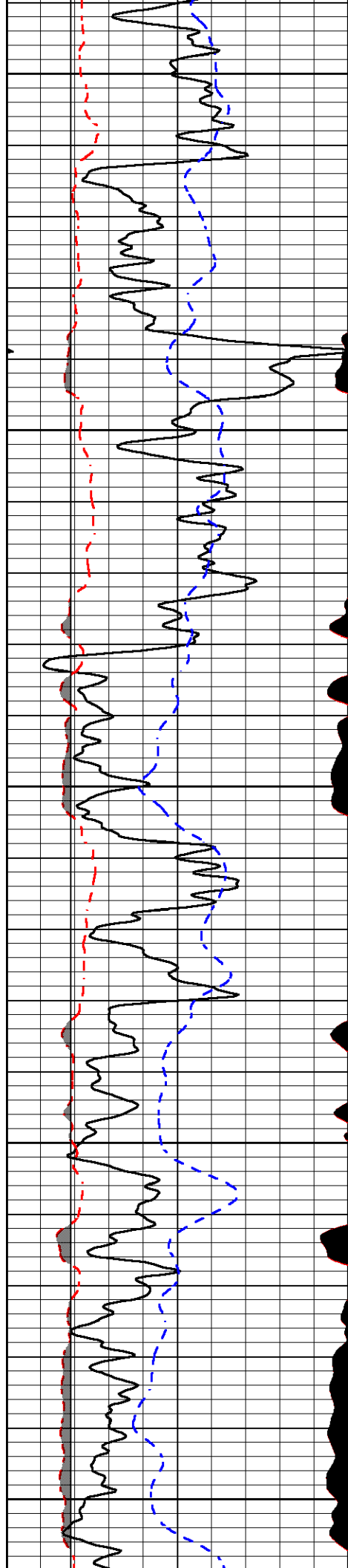
1100

1150

1200

1250





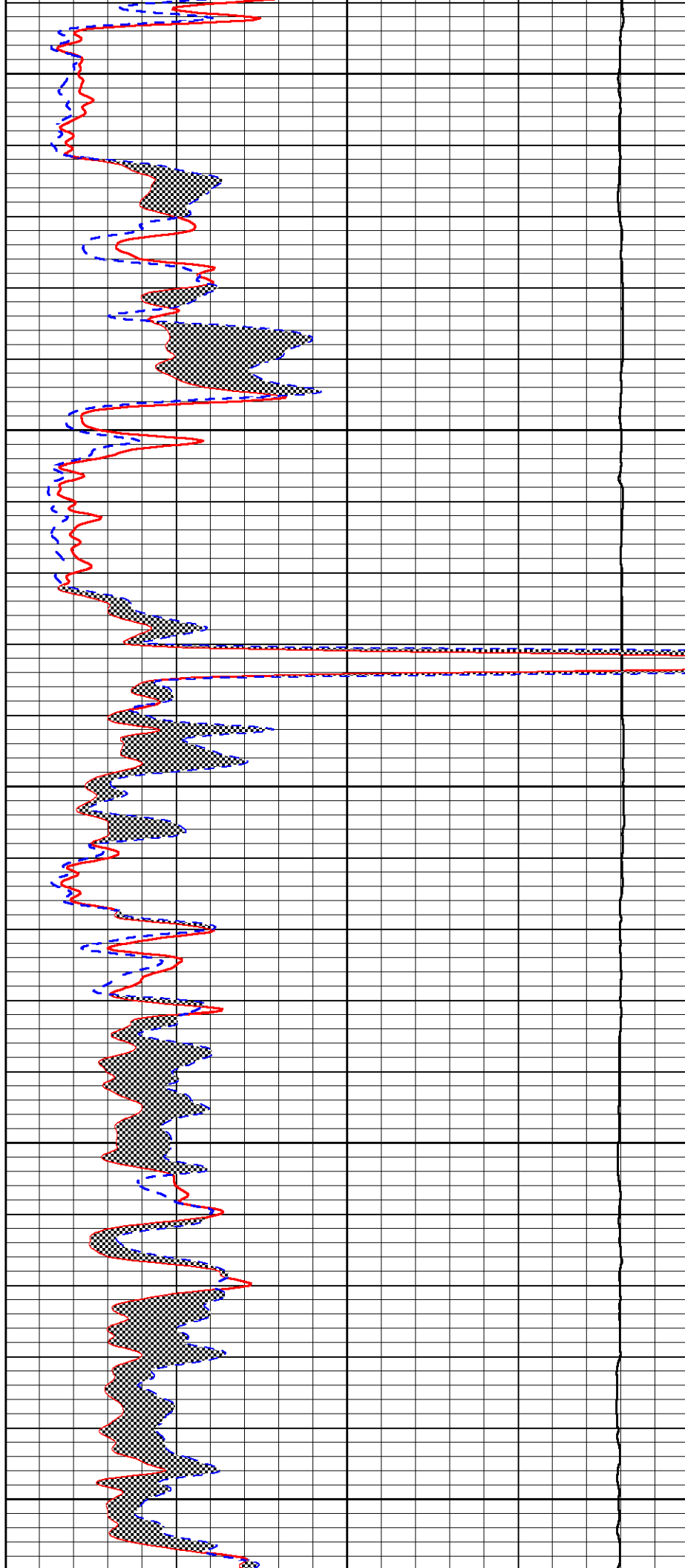
1300

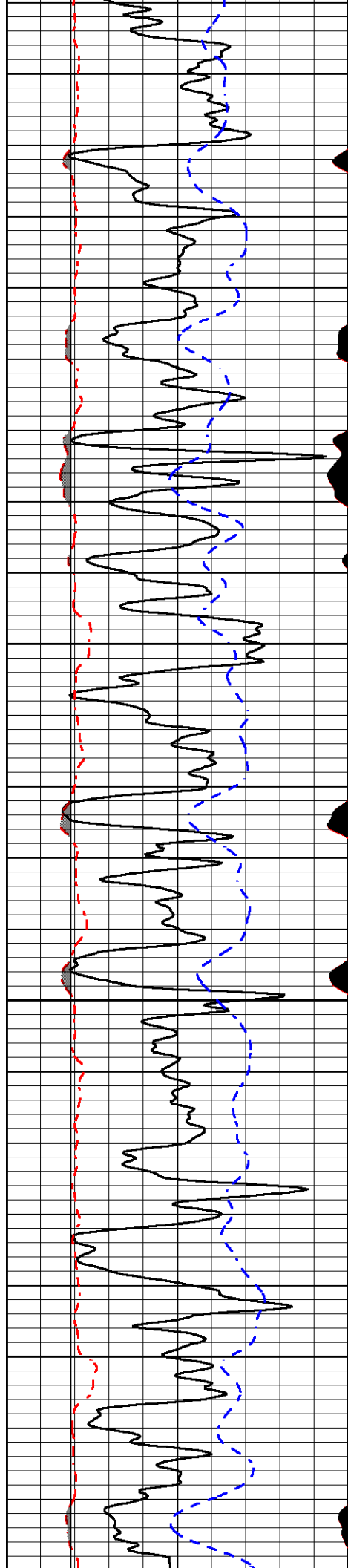
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1400

1450

1500



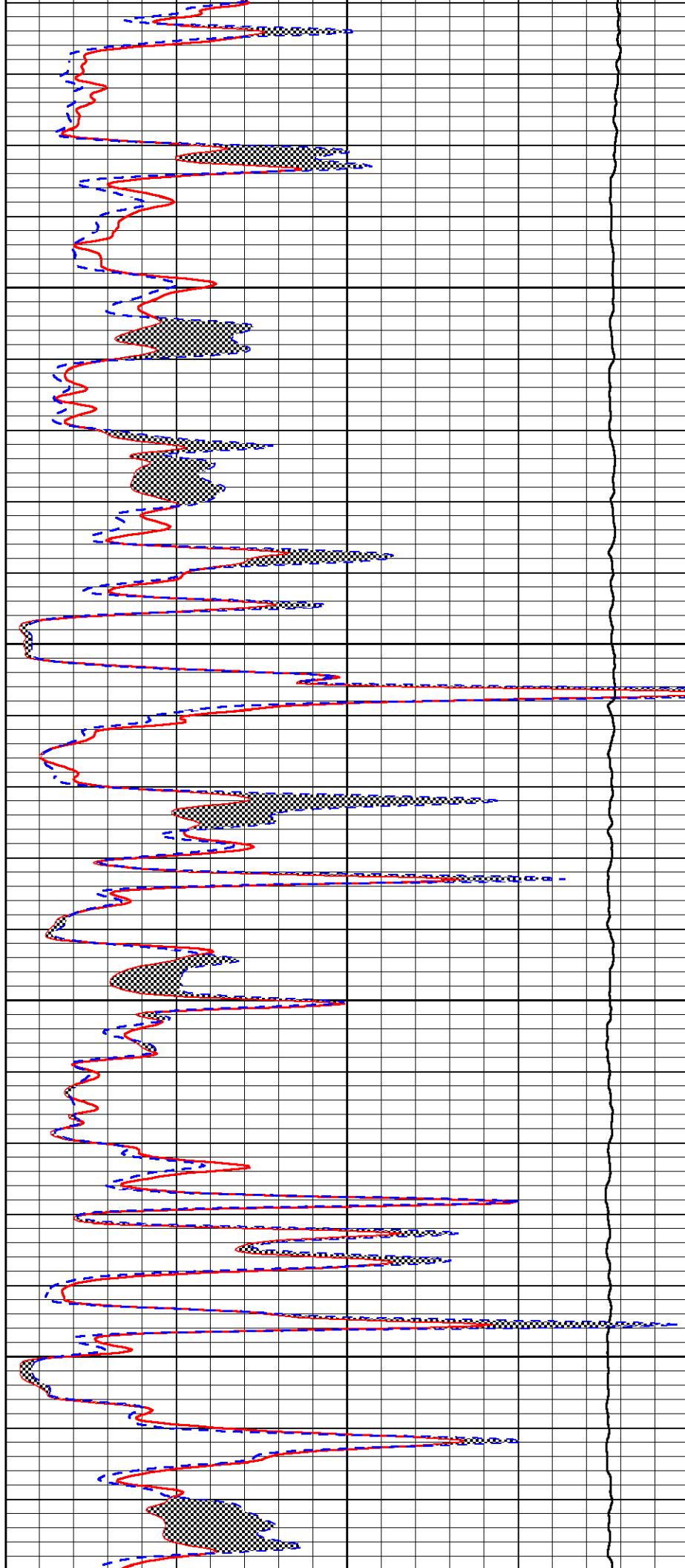


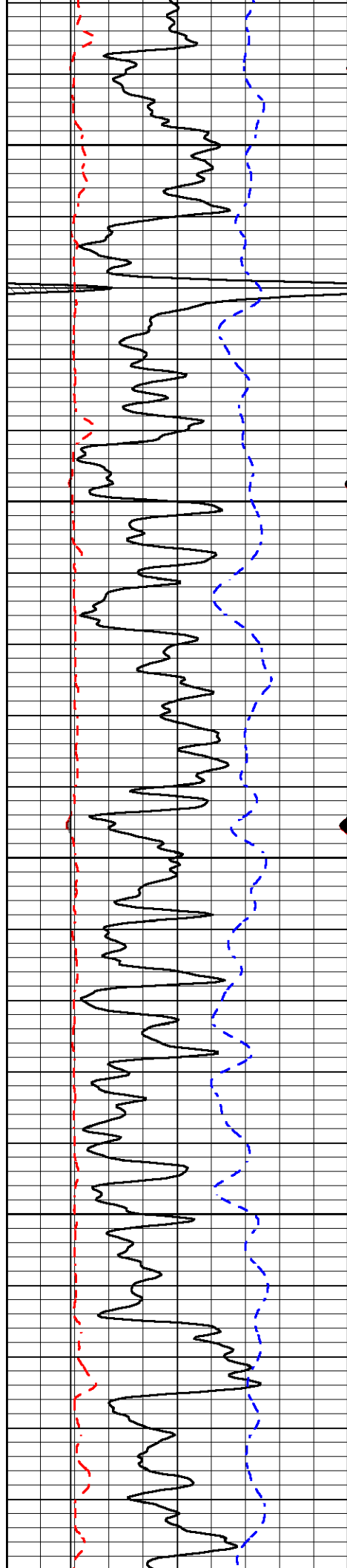
1550

1600

1650

1700





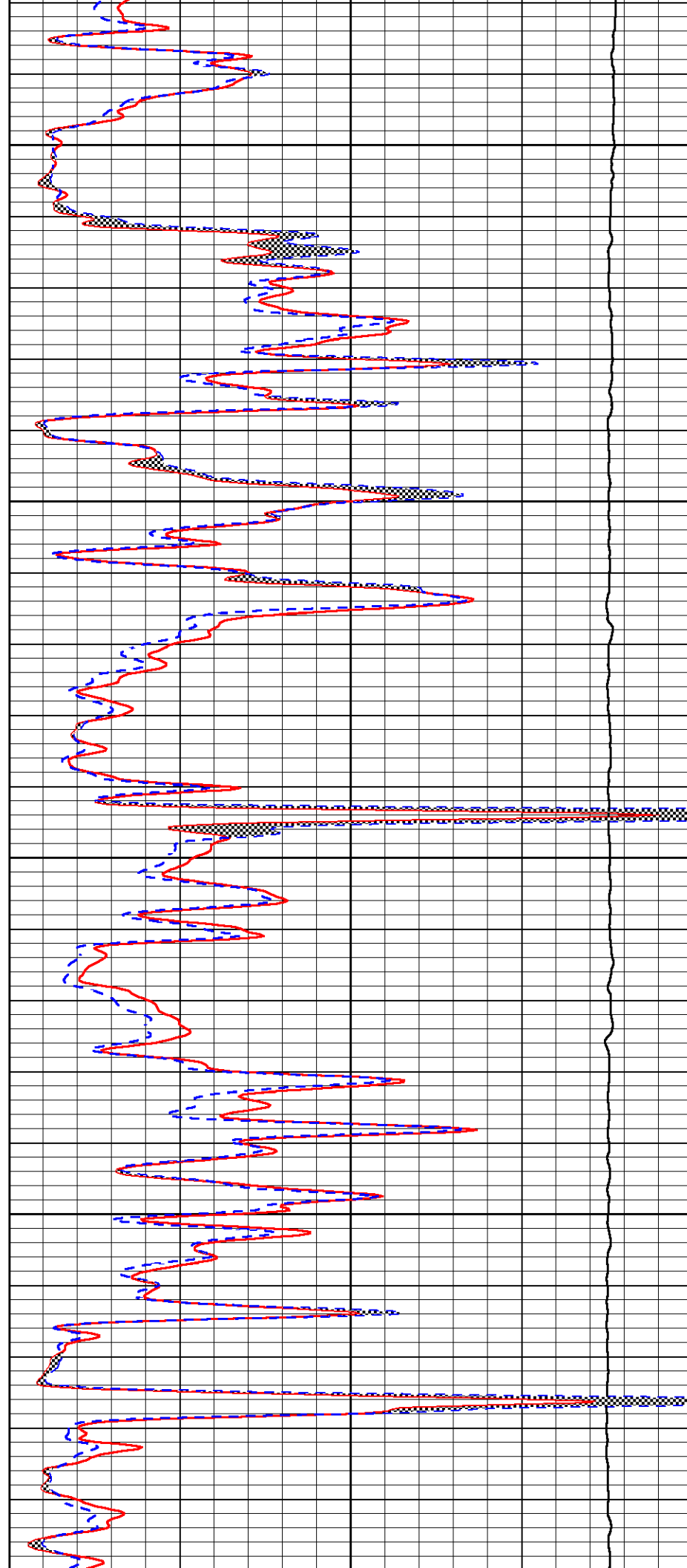
1750

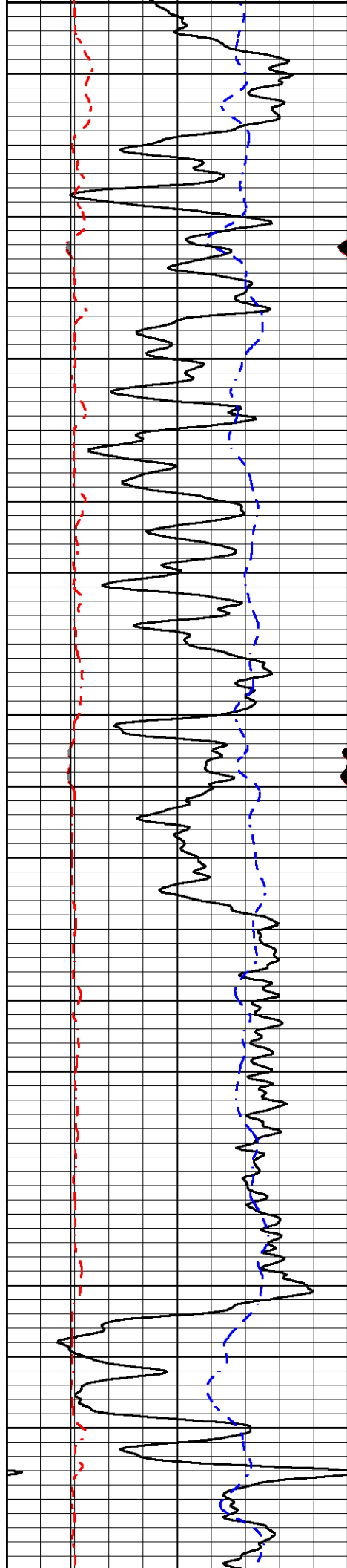
1800

1850

1900

1950





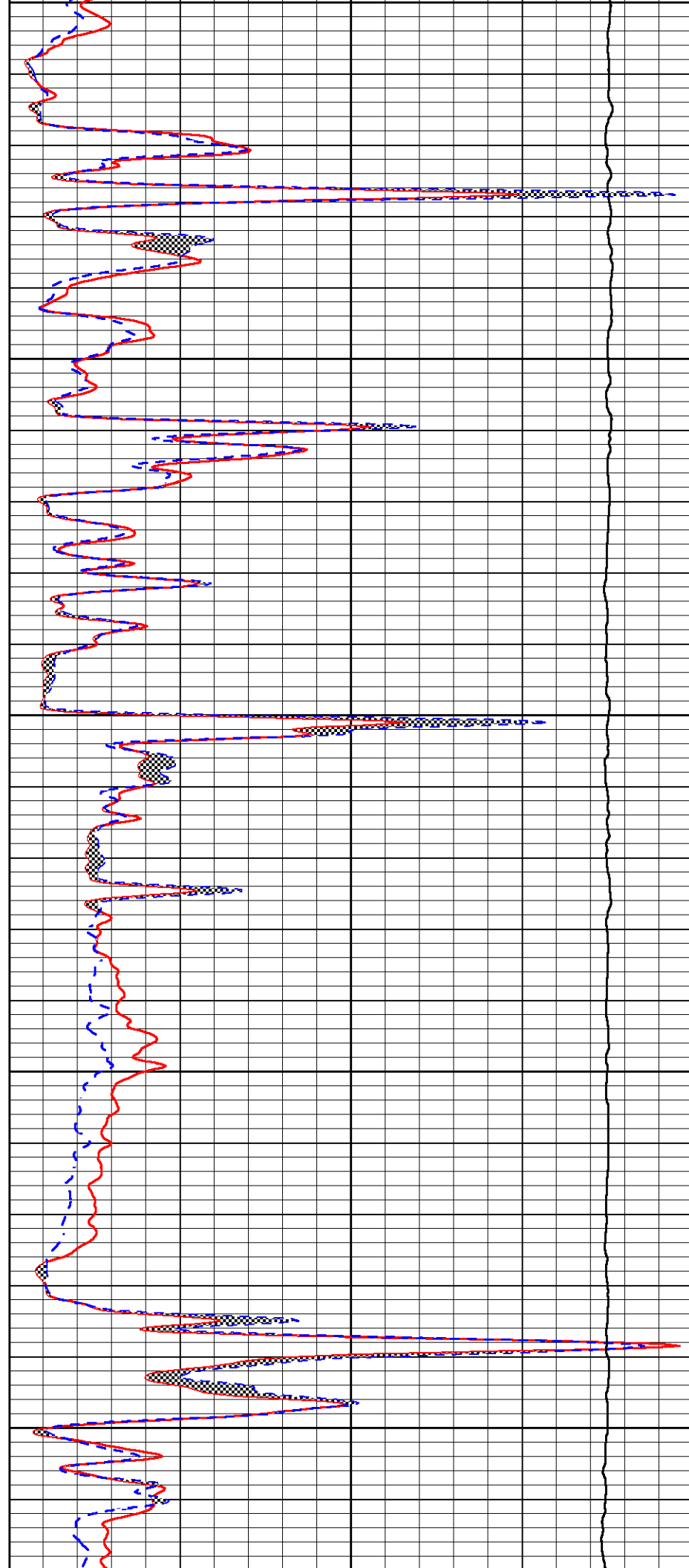
1950

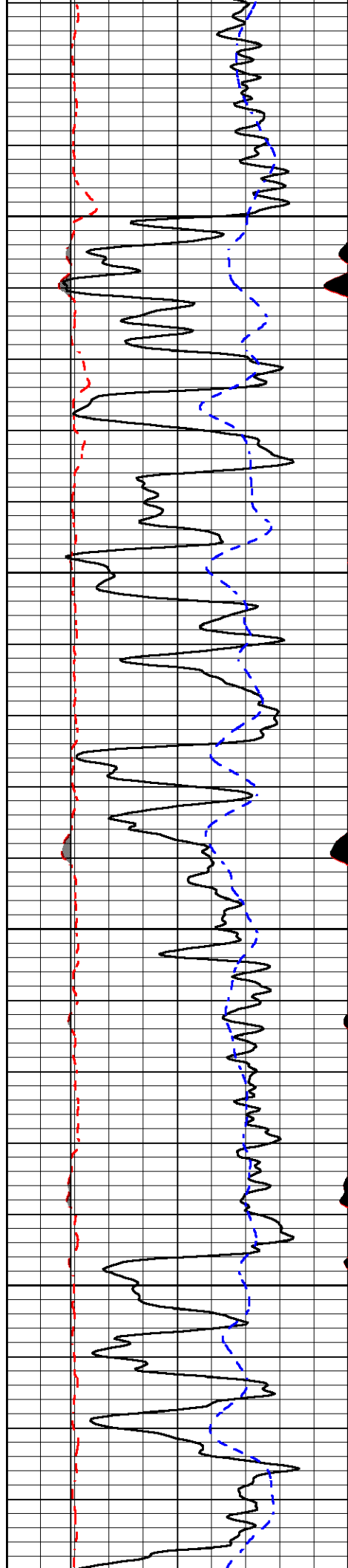
2000

2050

2100

2150



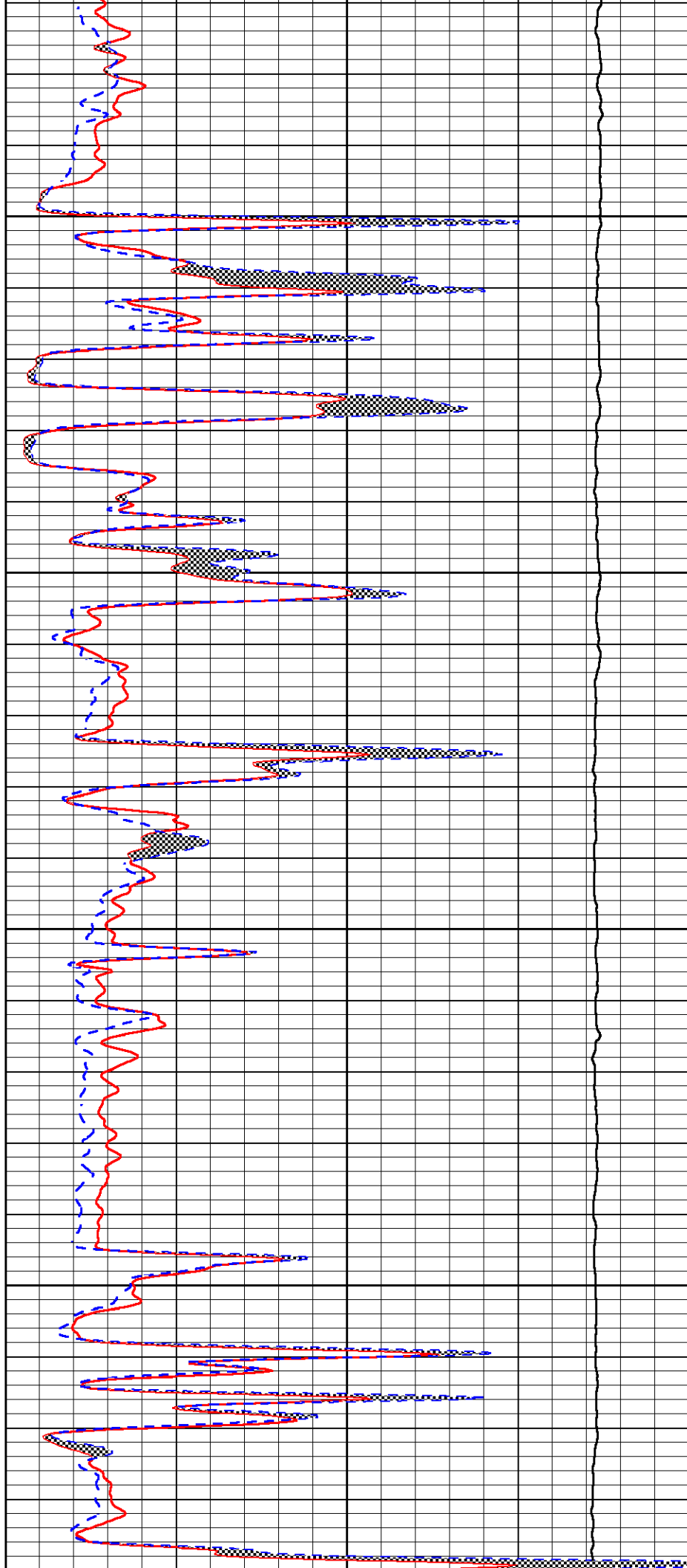


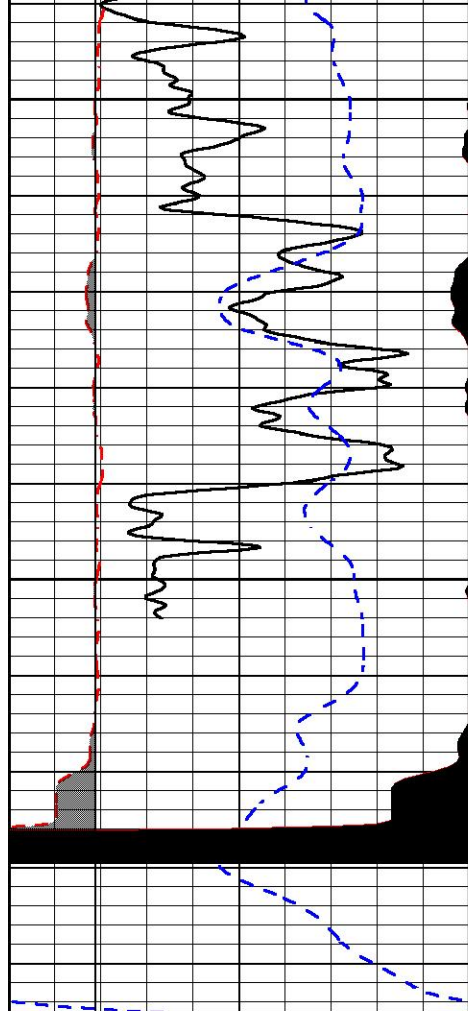
2200

2250

2300

2350

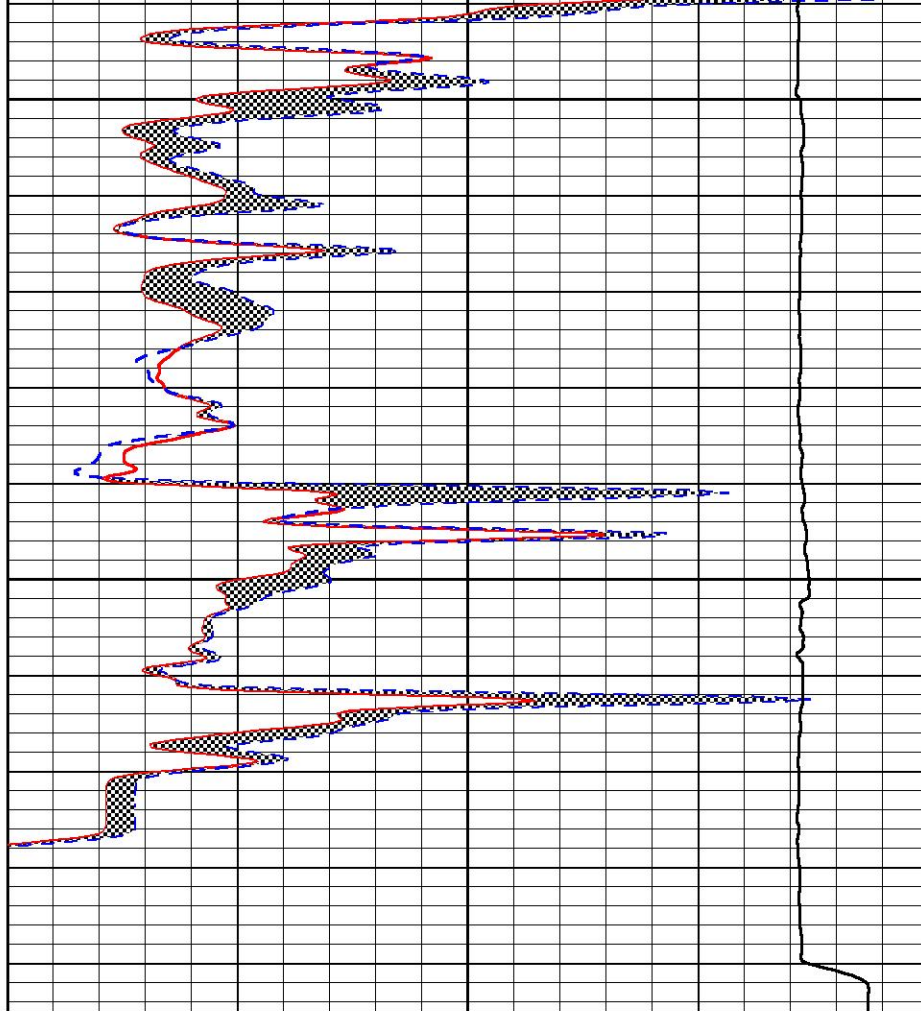




0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

2400

2450



0	Micro Inverse 1 X 1 (Ohm-m)	20
0	Micro Normal 2" (Ohm-m)	20
10000	Line Weight (lb)	0



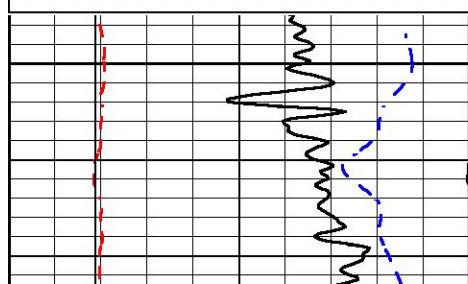
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

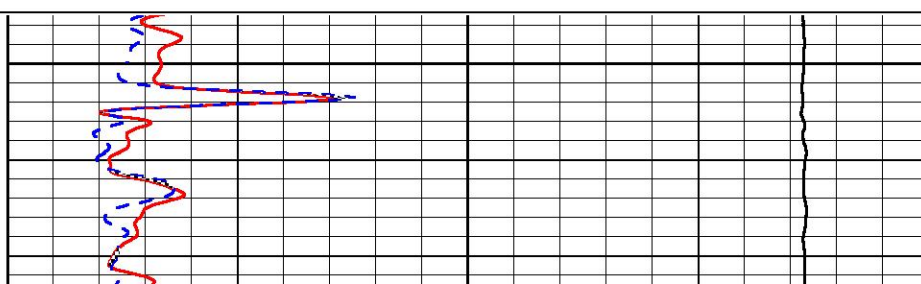
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 Charted by Depth in Feet scaled 1:240

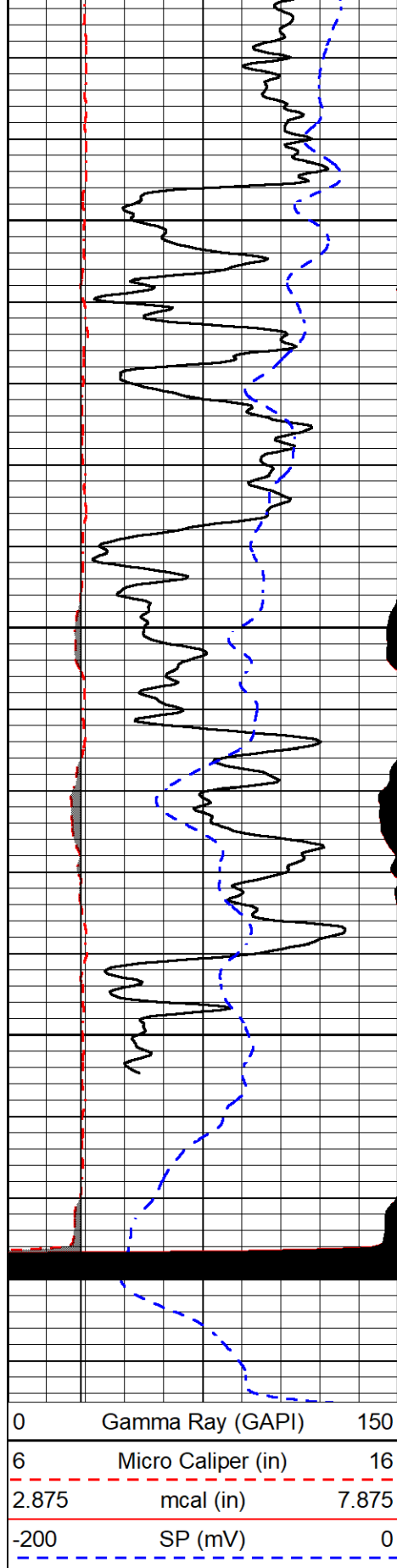
0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0



2300

0	Micro Inverse 1 X 1 (Ohm-m)	20
0	Micro Normal 2" (Ohm-m)	20
10000	Line Weight (lb)	0

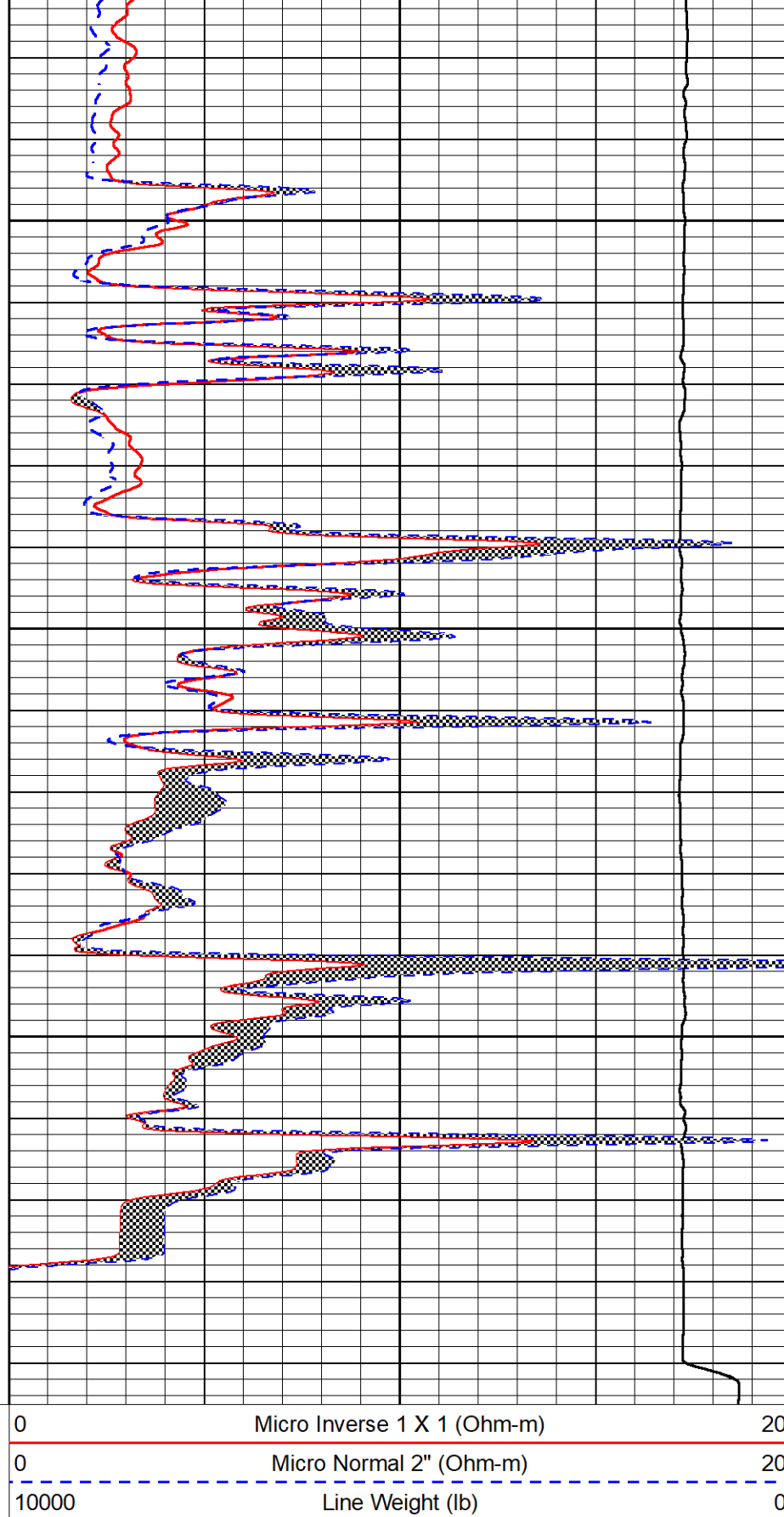




2350

2400

2450



Calibration Report

Database File lb_sandy_31_1.db
 Dataset Pathname StackmIPE/pass3.1
 Dataset Creation Sat Jun 01 20:41:46 2024

Serial-Model: Surface Cal Performed:				507-M&W Fri Jul 14 14:17:56 2023					
Readings			References			Results			
Loop:	Air	Loop		Air	Loop	m	b		
Deep	68.570	638.100		0.000	255.800	mmho/m	0.500		
Medium	184.288	716.191		0.000	255.800	mmho/m	-37.000		
							-79.000		
Microlog Calibration Report									
Serial-Model: Performed:				401-PSIML Wed Apr 24 15:49:52 2024					
Readings			References			Results			
	Zero	Cal		Zero	Cal	m	b		
Normal	0.0000	1.0000		0.0000	1.0000	Ohm-m	10000.0000		
Inverse	0.0000	1.0000		0.0000	1.0000	Ohm-m	8500.0000		
Caliper	1.0052	1.0858		5.0000	16.5000	in	-139.1200		
LITHODENSITY Calibration Report									
Serial Number:		704-10							
Tool Model:		STEP LITHO							
Performed:		Wed May 15 12:34:43 2024							
Source:									
	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	51	55	197	245	22	70	40	1	cps
LS:	86	96	359	462	54	146	91	3	cps
Aluminum:									
SS:	853	1002	2288	1979	39	72	43	2	cps
LS:	1052	1836	3294	1549	61	144	96	5	cps
Magnesium:									
SS:	1445	1656	3774	2905	41	71	43	3	cps
LS:	4605	7622	13008	4914	101	132	89	12	cps
Aluminum+Iron:									
SS:	527	693	1862	1689	37	70	45	1	cps
LS:	603	1287	2745	1370	58	143	93	5	cps
		Density			PE				
		Actual	Calibrated		Actual	Calibrated	Quality		
Background:									
SS:							0.274		
LS:							0.231		
Aluminum:									
SS:		2.6000	2.6000	g/cc			0.247		
LS:		2.6000	2.6000	g/cc			0.200		
Magnesium:									
SS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.241		
LS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.195		
Aluminum+Iron:									
SS:						6.1800	0.211		
LS:						6.1800	0.212		
Caliper:								Reference:	
Small Ring:								6.0 in	
Large Ring:								16.0 in	
Reading:									
								0.2	
								0.8	

Gain:	16.161
Offset:	1.050

Compensated Neutron Calibration Report
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Serial Number:	207
Tool Model:	M&W

CALIBRATION					
Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Gamma Ray Calibration Report

Serial Number:	102	
Tool Model:	M&W	
Performed:	Fri May 17 01:58:13 2024	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5300	GAPI/cps

 MIDWEST WIRELINE	Company	LB Exploration Inc.
	Well	Sandy 31-1
	Field	Unknown
	County	Ellsworth
	State	Kansas