



MIDWEST WIRELINE

MICRORESISTIVITY
LOG

Company RAMA Operating Co., Inc.		Company RAMA Operating Co., Inc.	
Well	HJB #1-20	Well	HJB #1-20
Field	Mueller	Field	Mueller
County	Stafford	County	Stafford
State	Kansas	State	Kansas
Location: API #: 15-185-24082-00-00		Other Services	
SEC 20 TWP 21S RGE 12W		CNL/CDL DIL	
Permanent Datum	Ground Level	Elevation	1856'
Log Measured From	Kelly Bushing	K.B.	1867'
Drilling Measured From	Kelly Bushing	D.F.	N/A
		G.L.	1856'
Date	7/21/2021		
Run Number	Two		
Depth Driller	3700'		
Depth Logger	3700'		
Bottom Logged Interval	3699'		
Top Log Interval	2700'		
Casing Driller	8.625" @ 330'		
Casing Logger	329'		
Bit Size	7.875"		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	7500		
Density / Viscosity	9.2 66		
pH / Fluid Loss	9.0 10.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.30 @ 70		
Rmt @ Meas. Temp	0.23 @ 70		
Rmc @ Meas. Temp	0.41 @ 70		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.19 @ 113		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	113		
Equipment Number	P-24		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	Josh Austin		

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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

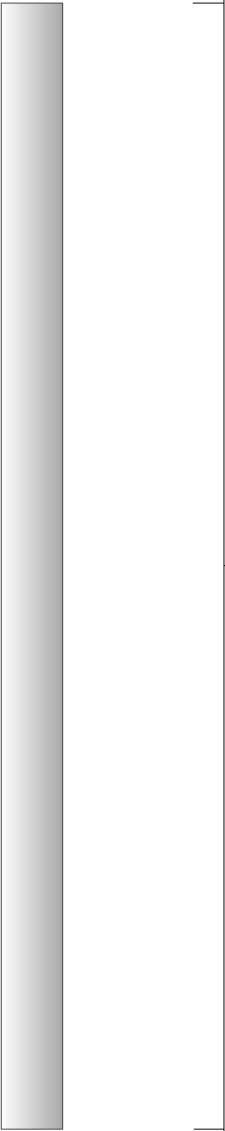
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Great Bend,
South to County Line, South to 180th,
4 1/4 East, South into

Log Measured From: Kelly Bushing 11 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew		This Log Record Was Witnessed By	
Engineer: D. Schmidt		Primary Witness: Josh Austin	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	1.00 1.00 1.00		ML-Pengo (Pengo3)	5.50	3.50	100.00
Dataset: rama_hjb 1-20.db: field/well/mel/pass2 Total length: 5.50 ft Total weight: 100.00 lb O.D.: 3.50 in						

Log Variables

DatabaseC:\ProgramData\Warrior\Data\rama_hjb 1-20.db

Dataset field/well/stkml/pass3.3/_vars_

Top - Bottom							
A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	113	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	268	70		3700

Variable Description

A : Cement Factor (a)

BOREID : Borehole I.D.

BOTTEMP : Bottom Hole Temperature

CASEOD : Casing O.D.

CASETHCK : Casing Thickness

FLUIDDEN : Fluid Density

M : Cement Exp (m)

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



MIDWEST WIRELINE

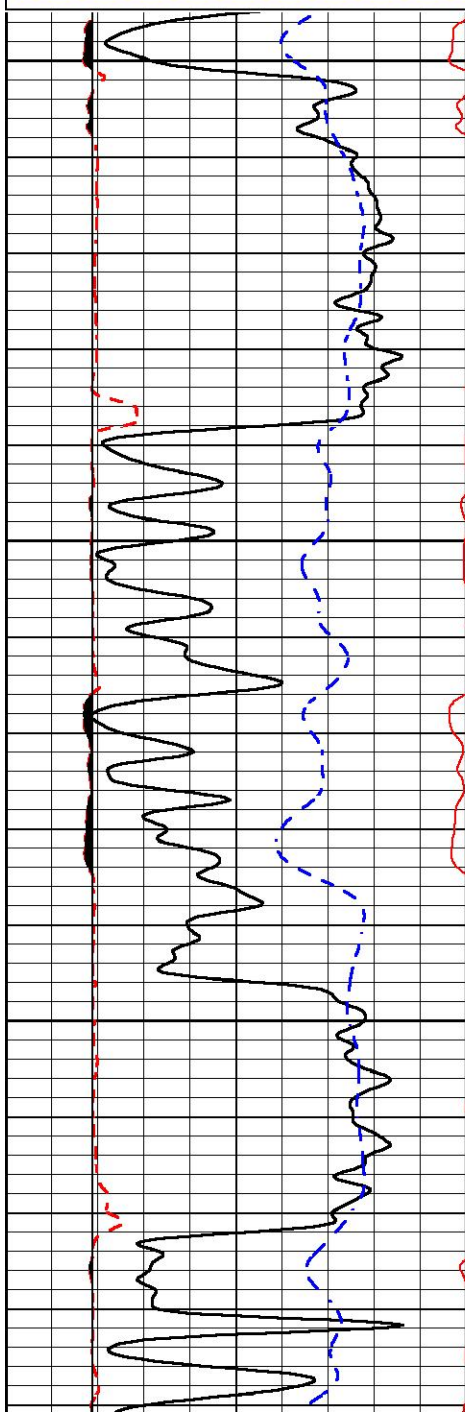
DETAIL SECTION

MAIN PASS

Database File rama_hjb 1-20.db
 Dataset Pathname stkml/pass3.1
 Presentation Format _micro
 Dataset Creation Wed Jul 21 02:23:03 2021
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
2.875	MCAL (in)	7.875
6	Bit Size (in)	16
-200	sp (mV)	0

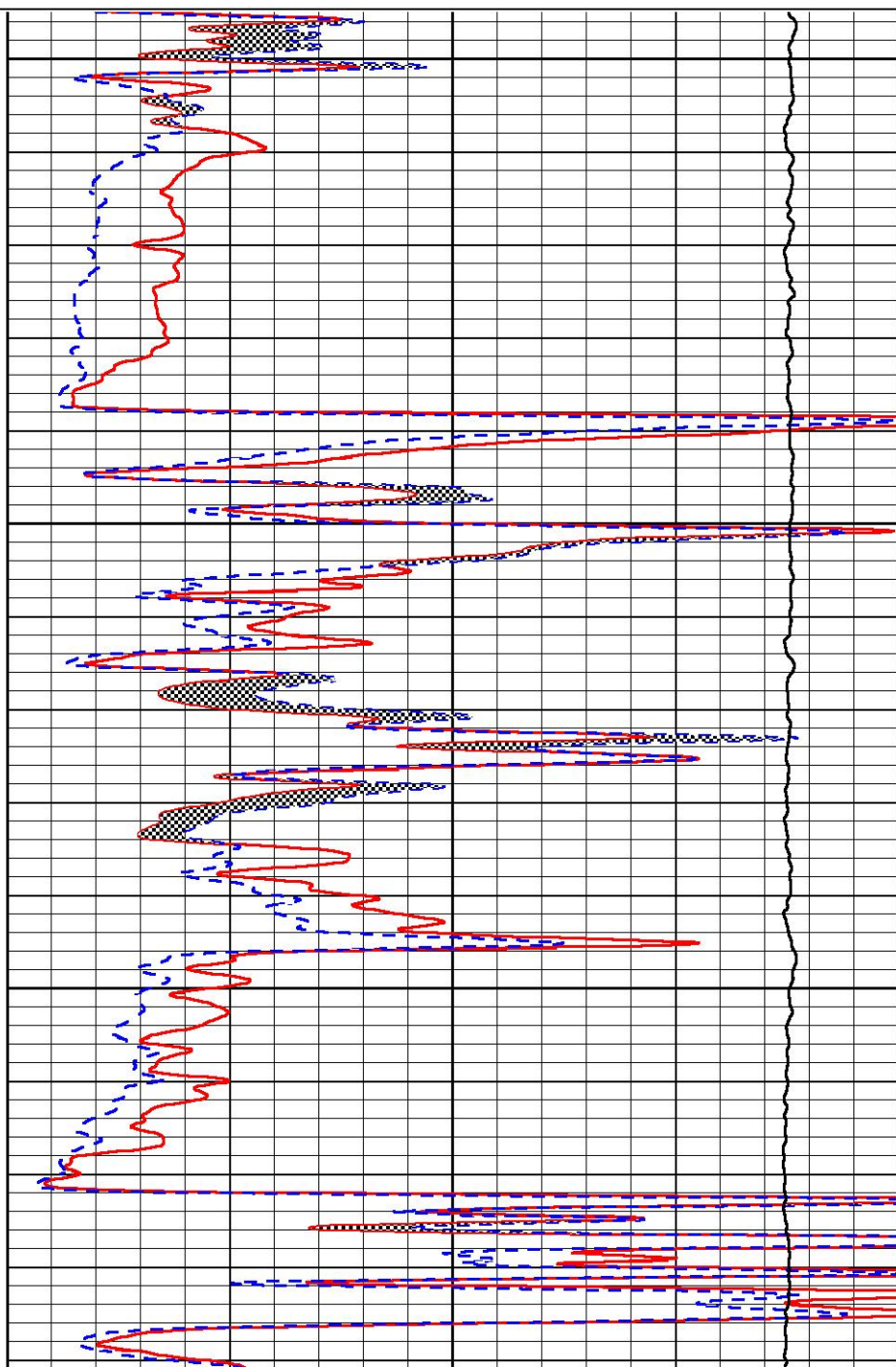
0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
10000	Line Weight (lb)	0

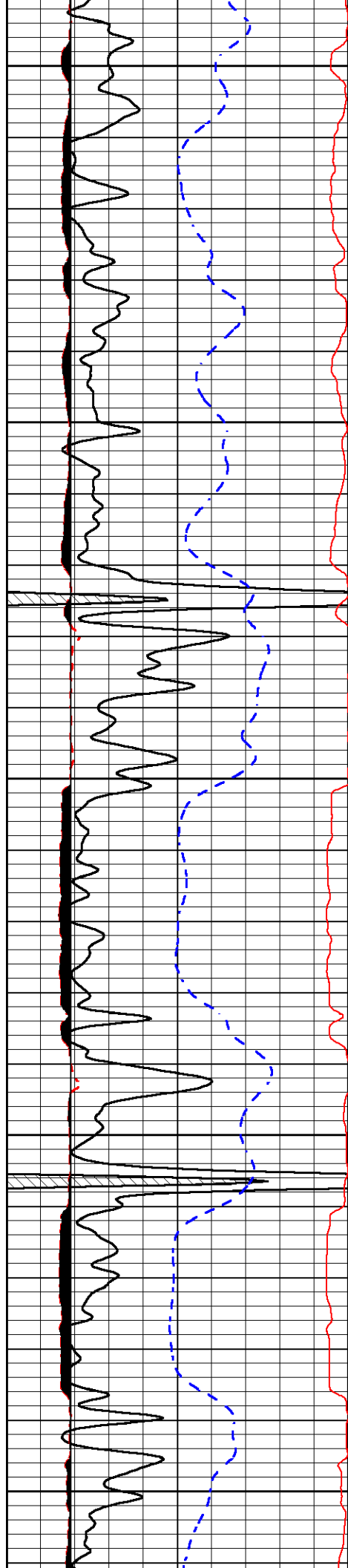


2700

2750

2800





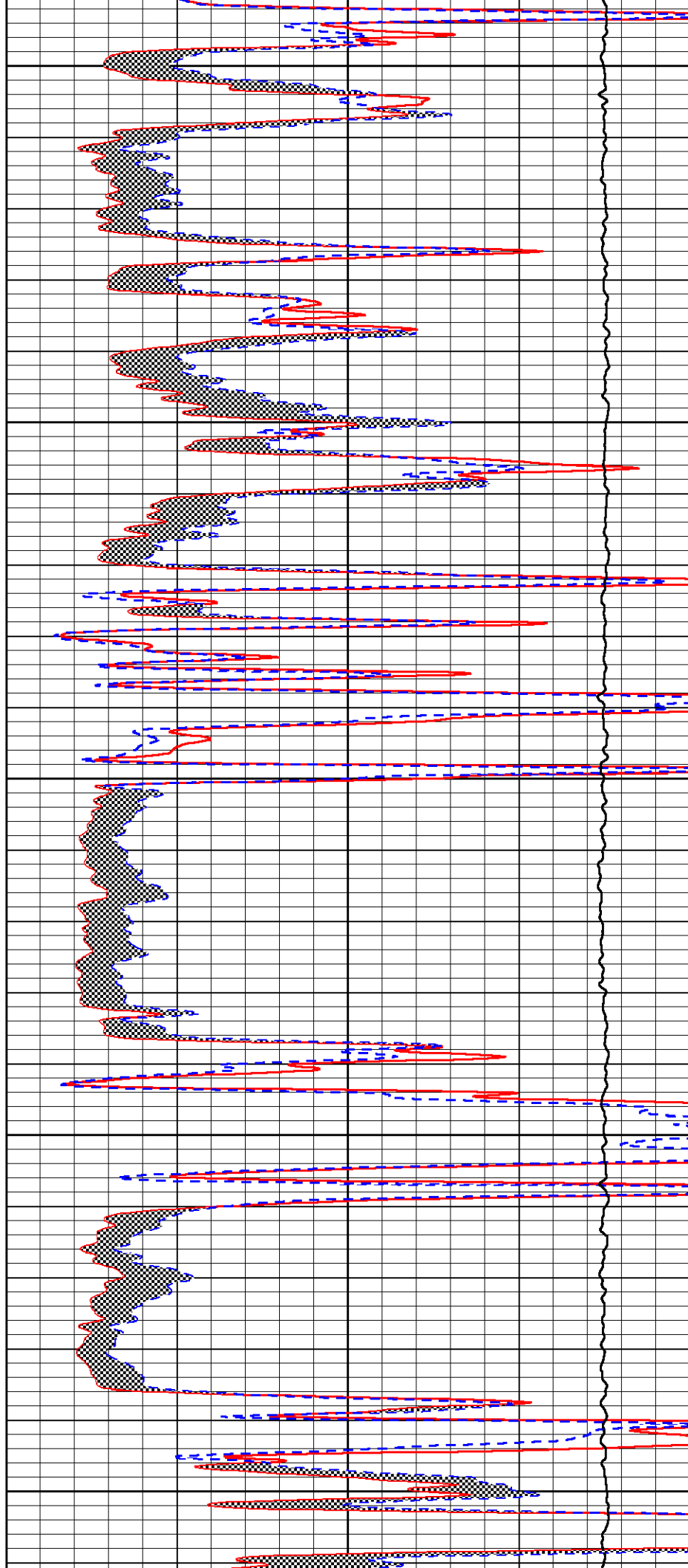
2850

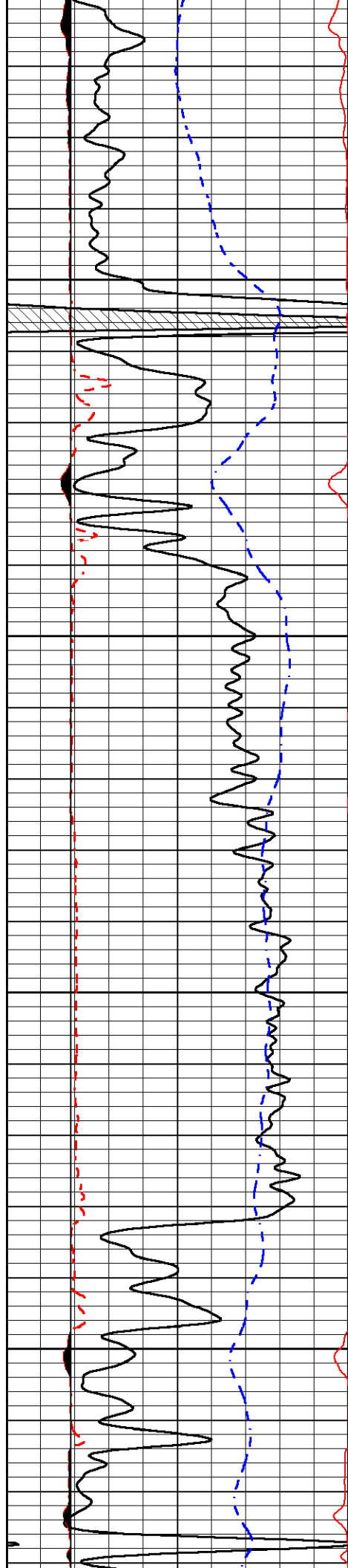
2900

2950

3000

3050



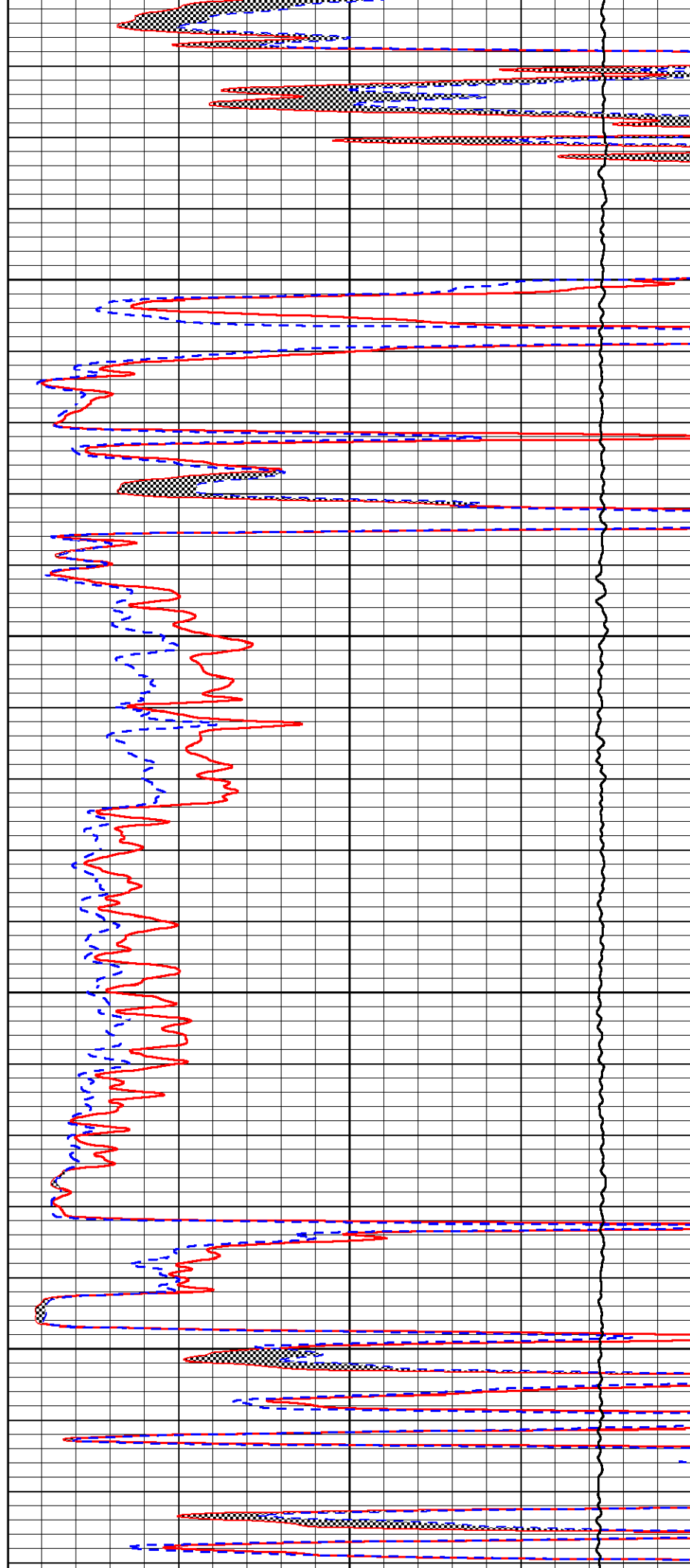


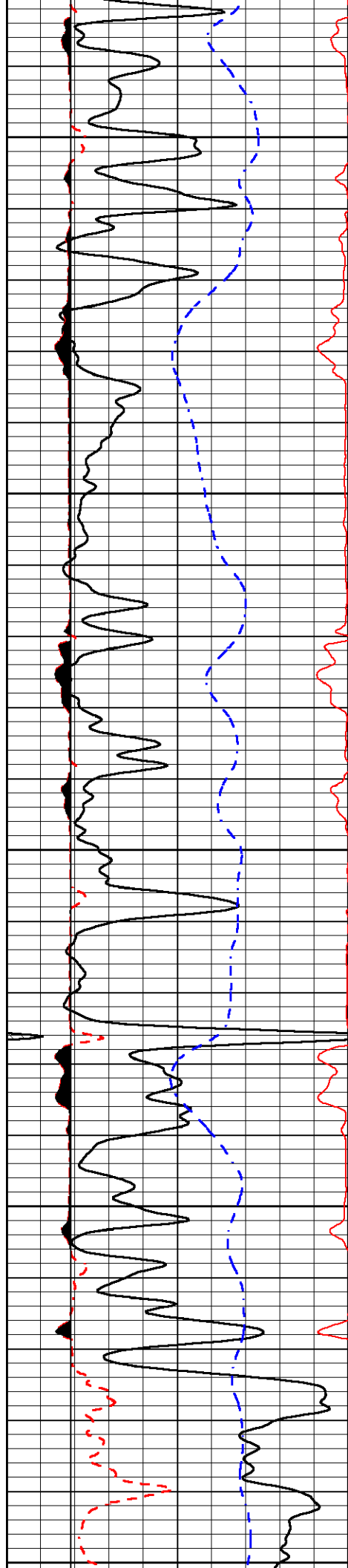
3100

3150

3200

3250





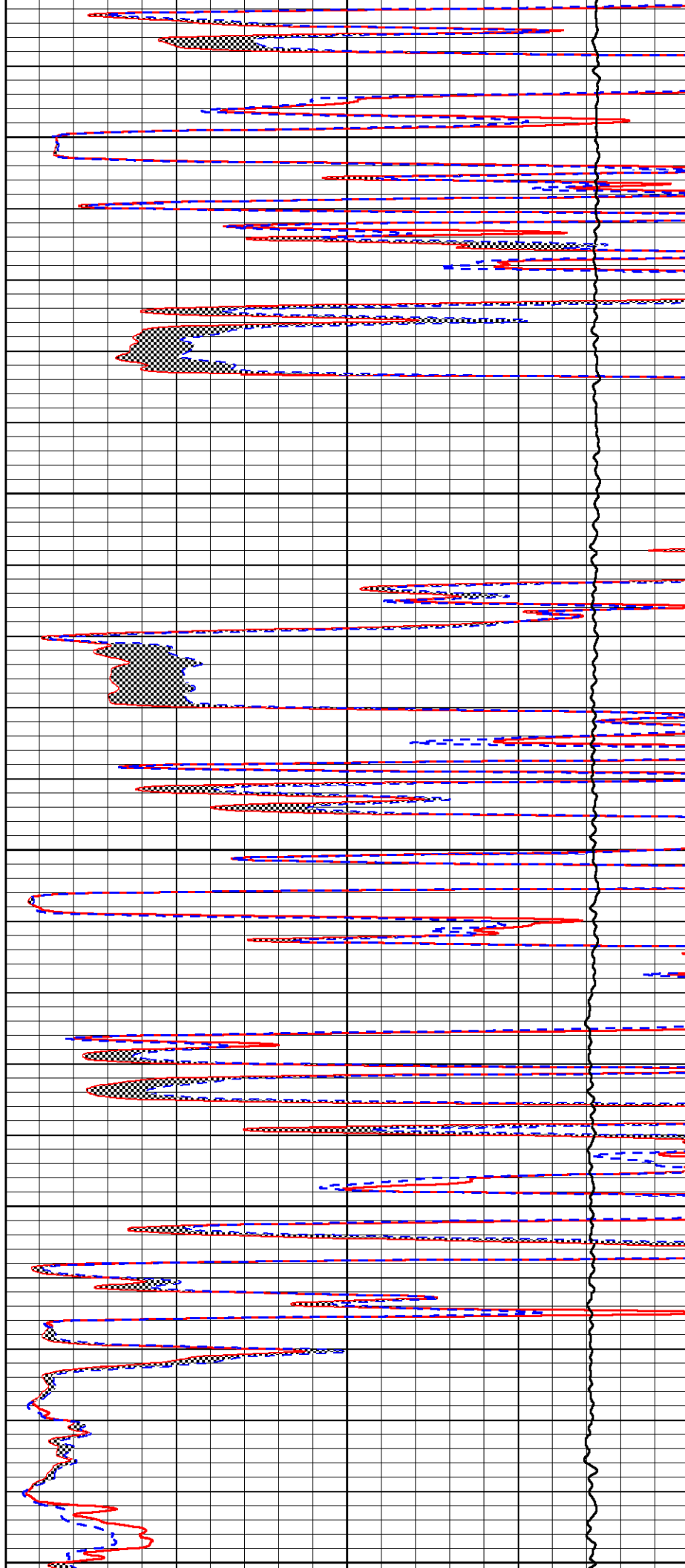
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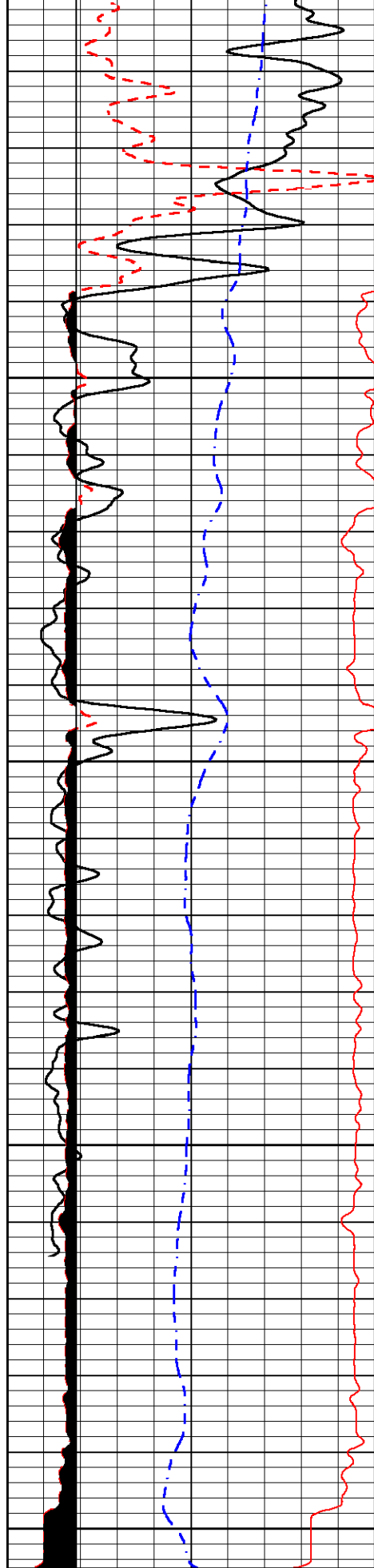
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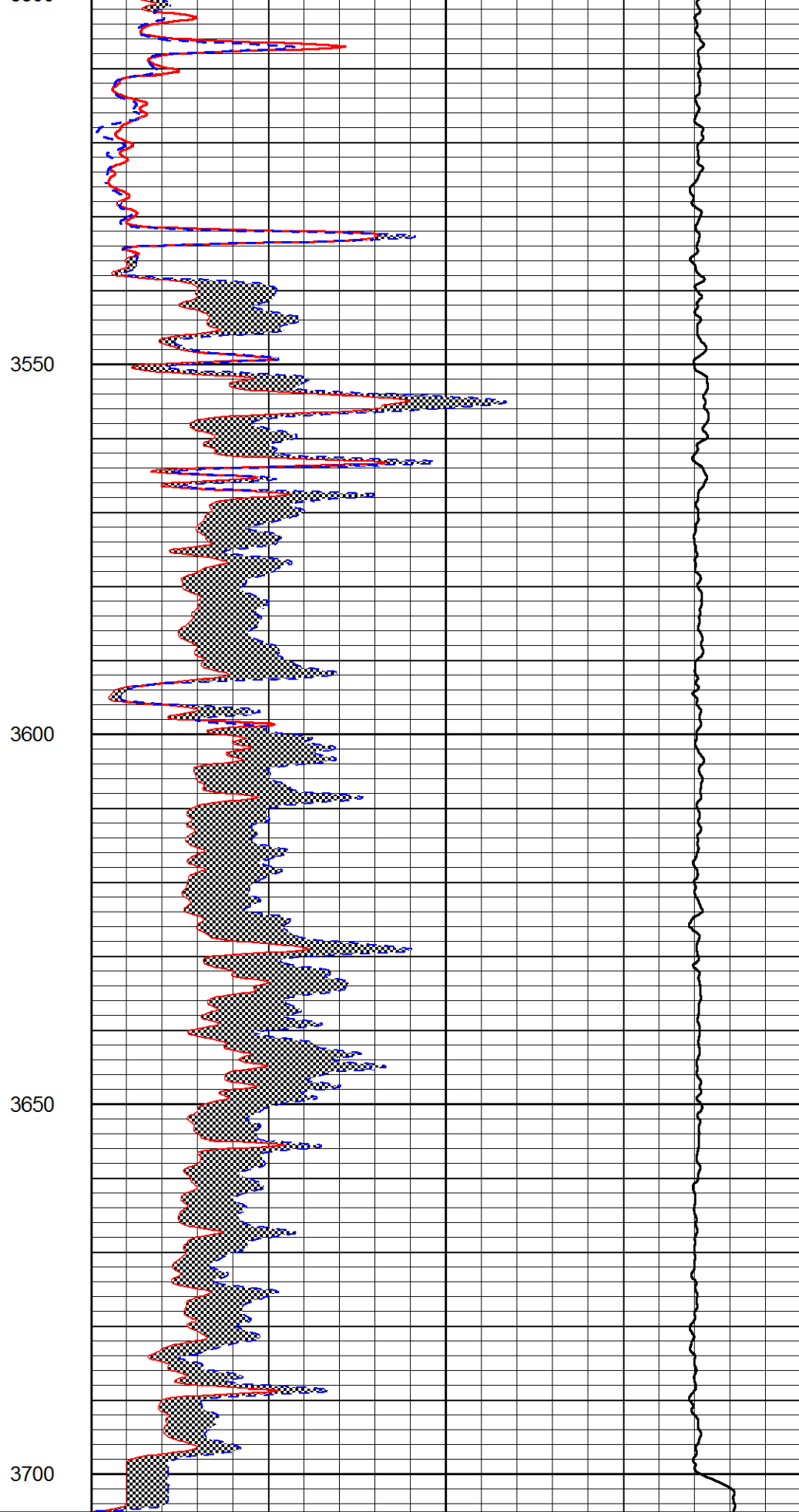
3450

3500





0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
2.875	MCAL (in)	7.875



0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
10000	Line Weight (lb)	0

6	Bit Size (in)	16
-200	sp (mV)	0
<hr style="border-top: 1px dashed blue;"/>		



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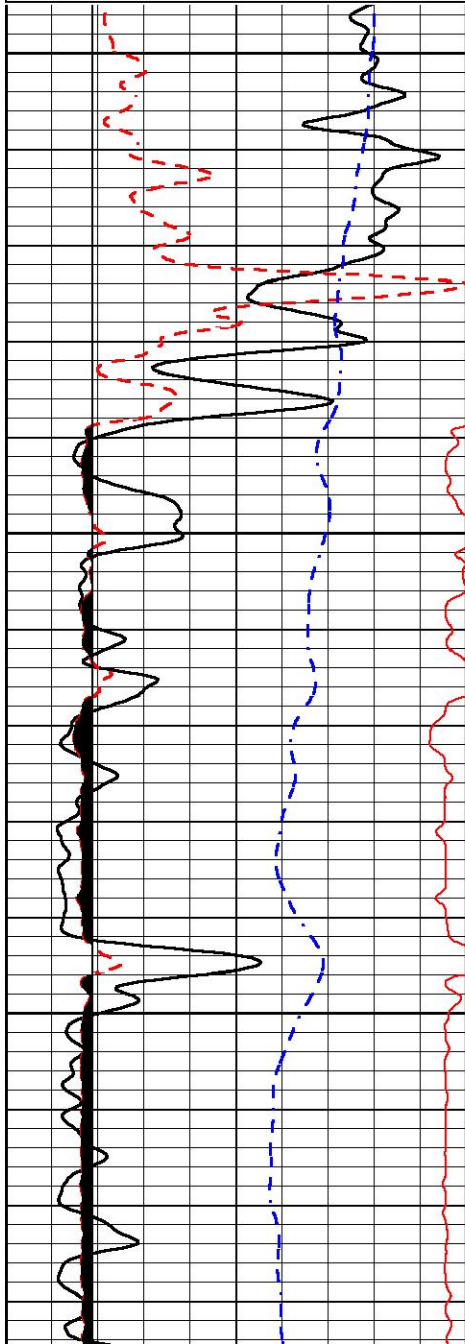
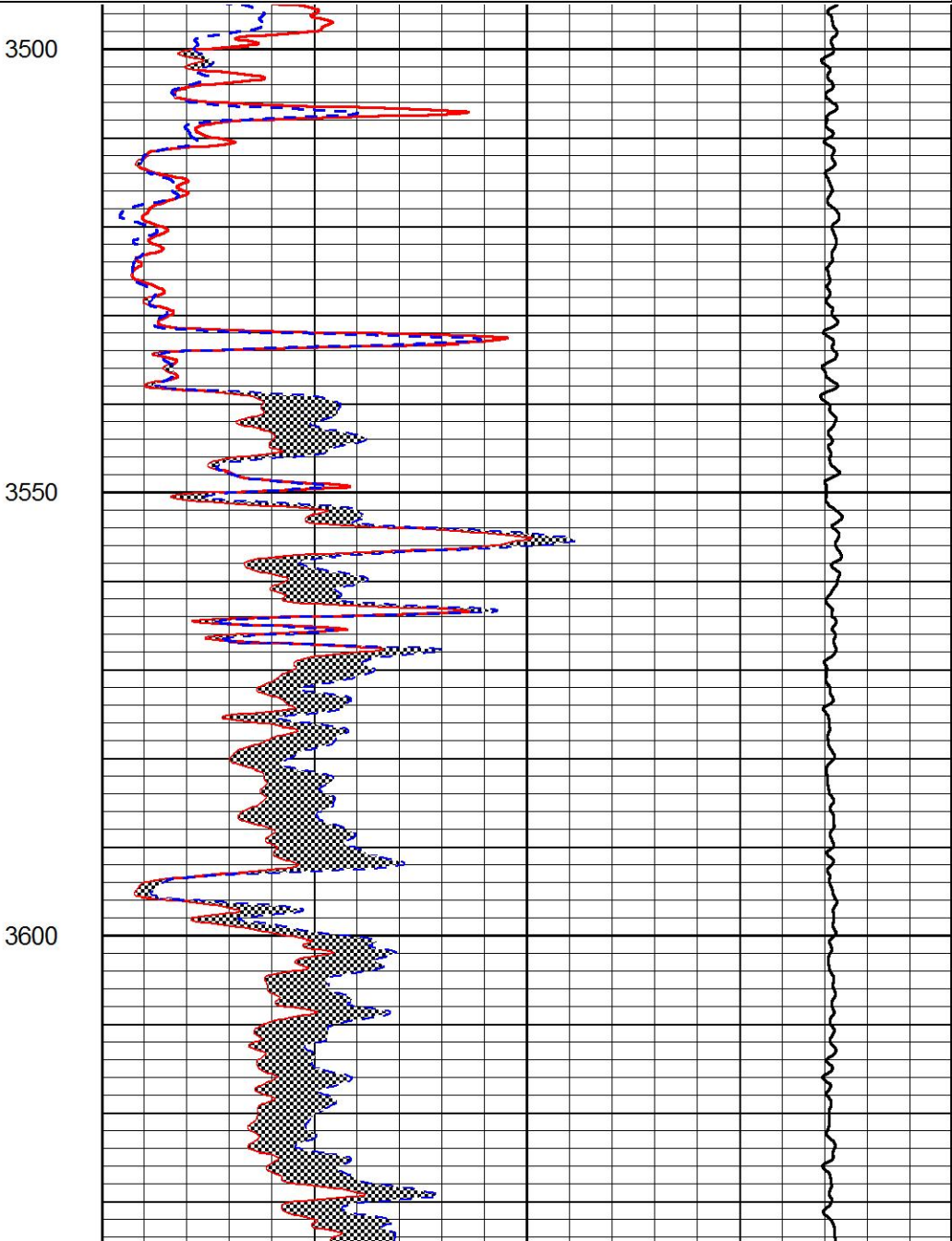
REPEAT SECTION

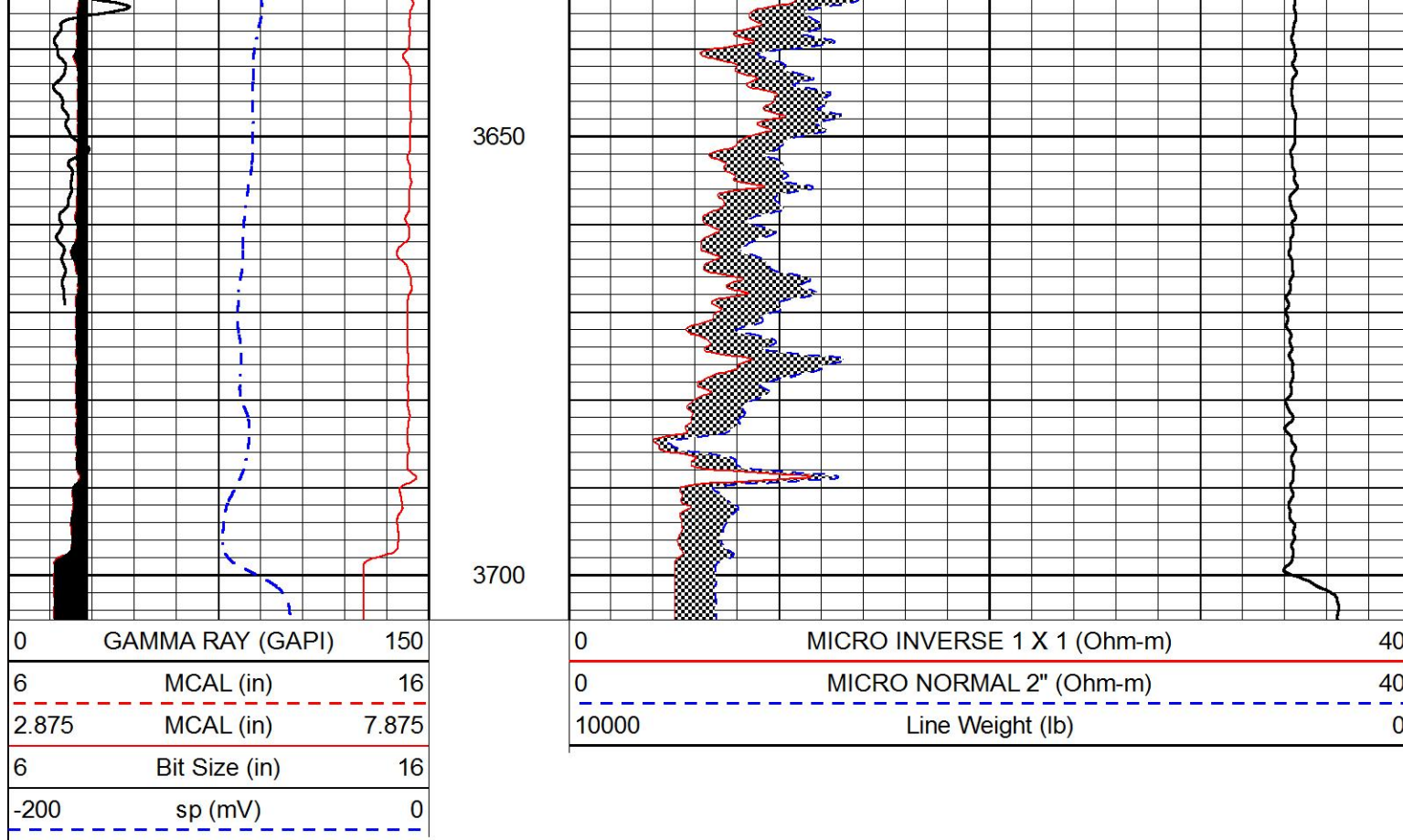
REPEAT PASS

Database File rama_hjb 1-20.db
Dataset Pathname stkm1/pass2.1
Presentation Format _micro
Dataset Creation Wed Jul 21 02:09:56 2021
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
<hr style="border-top: 1px dashed red;"/>		
2.875	MCAL (in)	7.875
6	Bit Size (in)	16
-200	sp (mV)	0
<hr style="border-top: 1px dashed blue;"/>		

0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
<hr style="border-top: 1px dashed blue;"/>		
10000	Line Weight (lb)	0





Company RAMA Operating Co., Inc.
Well HJB #1-20
Field Mueller
County Stafford
State Kansas