



MIDWEST WIRELINE

MICRORESISTIVITY LOG

Company Cholla Production, LLC
 Well Wrangler #1-24
 Field Nicholson
 County Trego
 State Kansas

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Location: API #: 15-195-23116-00-00
 1203' FSL & 2493' FEL
 SEC 24 TWP 11S RGE 21W
 Other Services
 CNI/CDL
 DIL/BHCS

Date	8/30/2021
Run Number	Two
Depth Driller	3875'
Depth Logger	3875'
Bottom Logged Interval	3874'
Top Log Interval	3000'
Casing Driller	8.625" @ 305'
Casing Logger	302'
Bit Size	7.875"
Type Fluid in Hole	Chemical
Salinity, ppm CL	4900
Density / Viscosity	9.4 60
pH / Fluid Loss	10.0 7.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.50 @ 74
Rmt @ Meas. Temp	0.38 @ 74
Rmc @ Meas. Temp	0.68 @ 74
Source of Rmf / Rmc	CHARTS
Rm @ BHT	0.32 @ 115
Operating Rig Time	4 Hours
Max Rec. Temp. F	115
Equipment Number	P-24
Location	HAYS
Recorded By	D. Schmidt
Witnessed By	Charlie Sturdavant

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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.

Ellis,
 North to Sleepy Hollow Rd,
 West to county line, 1.6 North,
 West 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: D. Schmidt
 Operator:
 Operator:
 Operator:

This Log Record Was Witnessed By

Primary Witness: Charlie Sturdavant
 Secondary Witness:
 Secondary Witness:
 Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	28.00 28.00 28.00		ML-Pengo (Pengo3)	5.50	3.50	100.00
			CENT-PENGO (4-PENGO)	5.50	3.00	70.00
WVF4 WVF1	13.50 13.50		SLT-PENGO (0001)	16.00	3.50	300.00
WVF3 WVF2	11.50 11.50		CENT-PENGO (3-PENGO)	5.50	3.00	70.00

Dataset: cholla_wrangler 1-24.db: field/well/sonmel/pass2
 Total length: 32.50 ft
 Total weight: 540.00 lb
 O.D.: 3.50 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\cholla_wrangler 1-24.db
 Dataset field/well/stack/pass4.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	115	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	355	80	Off	3875

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



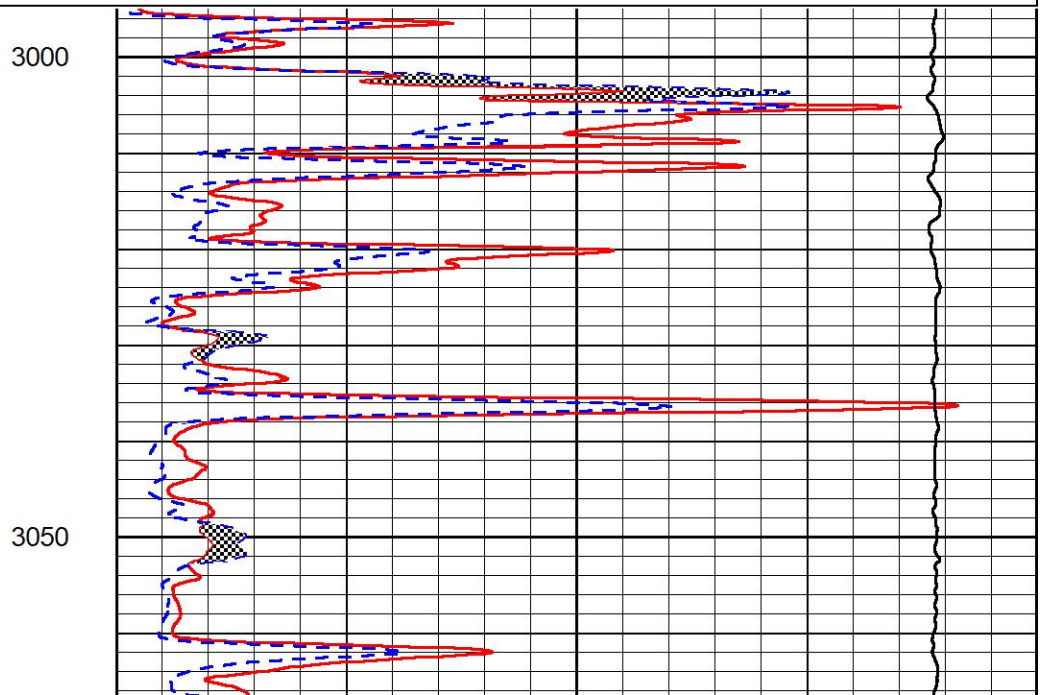
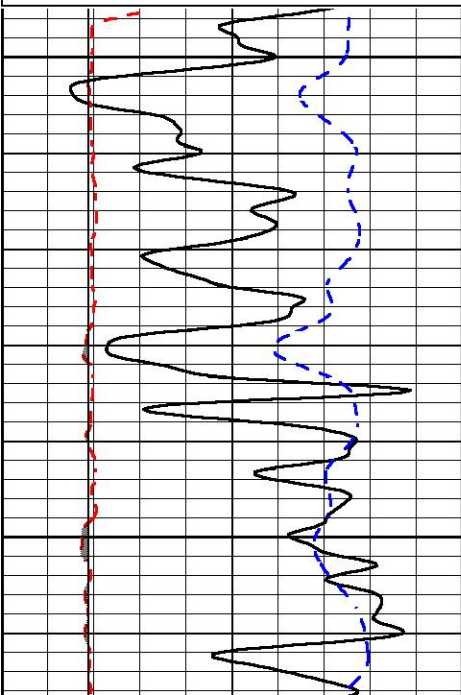
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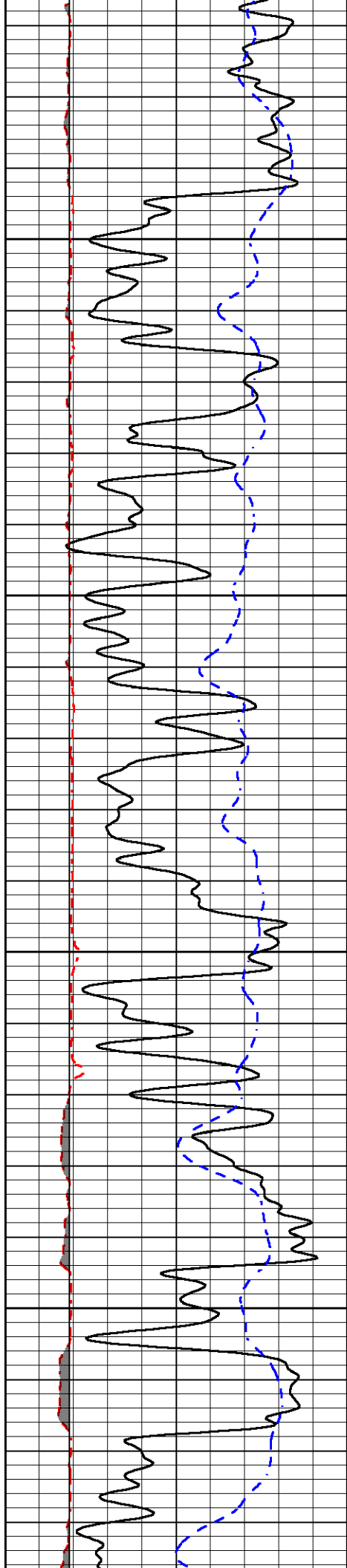
MAIN PASS

Database File cholla_wrangler 1-24.db
 Dataset Pathname stack/pass4.1
 Presentation Format _micro
 Dataset Creation Mon Aug 30 07:38:50 2021
 Charted by Depth in Feet scaled 1:240

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



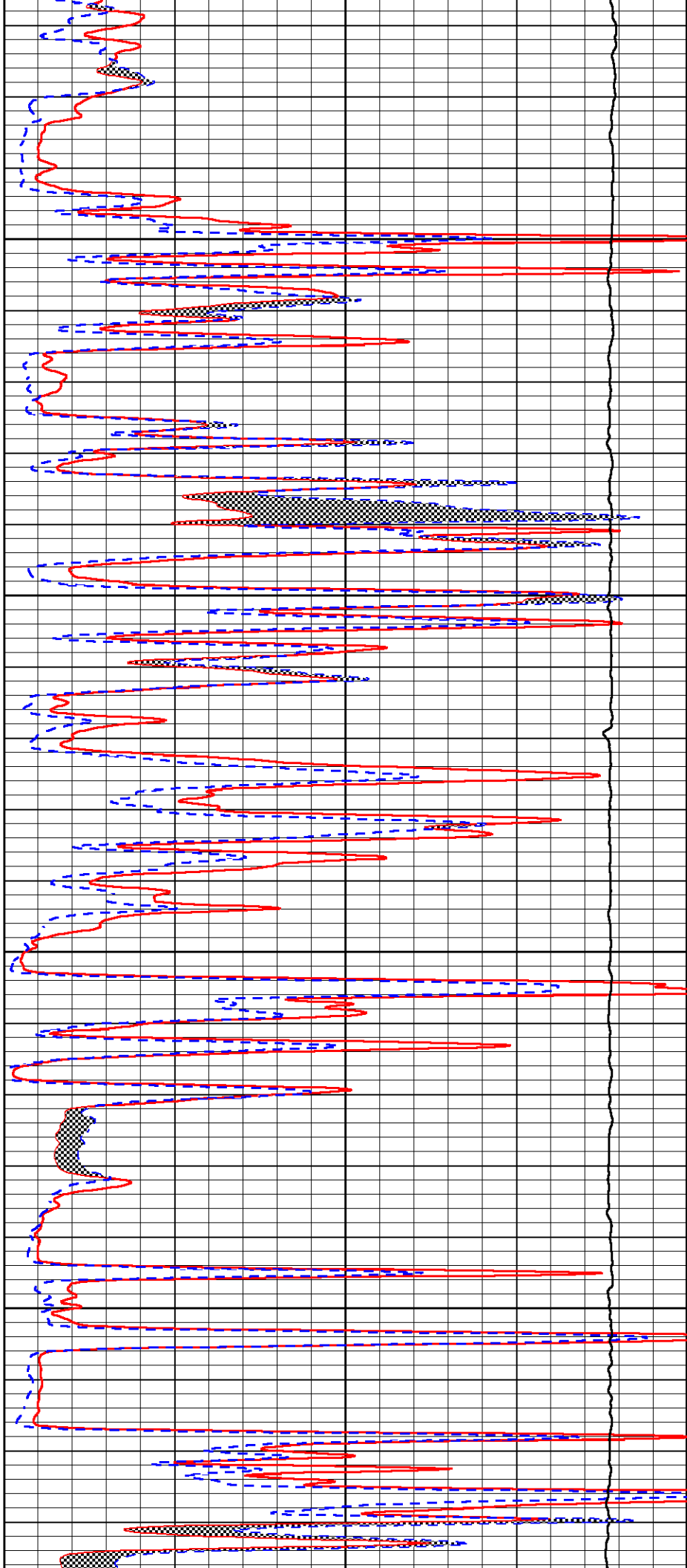


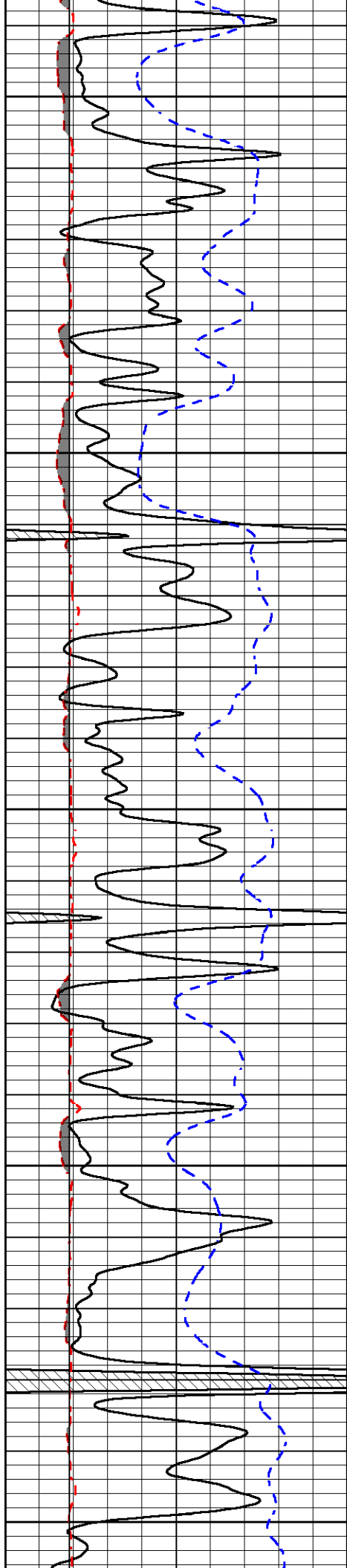
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3150

3200

3250





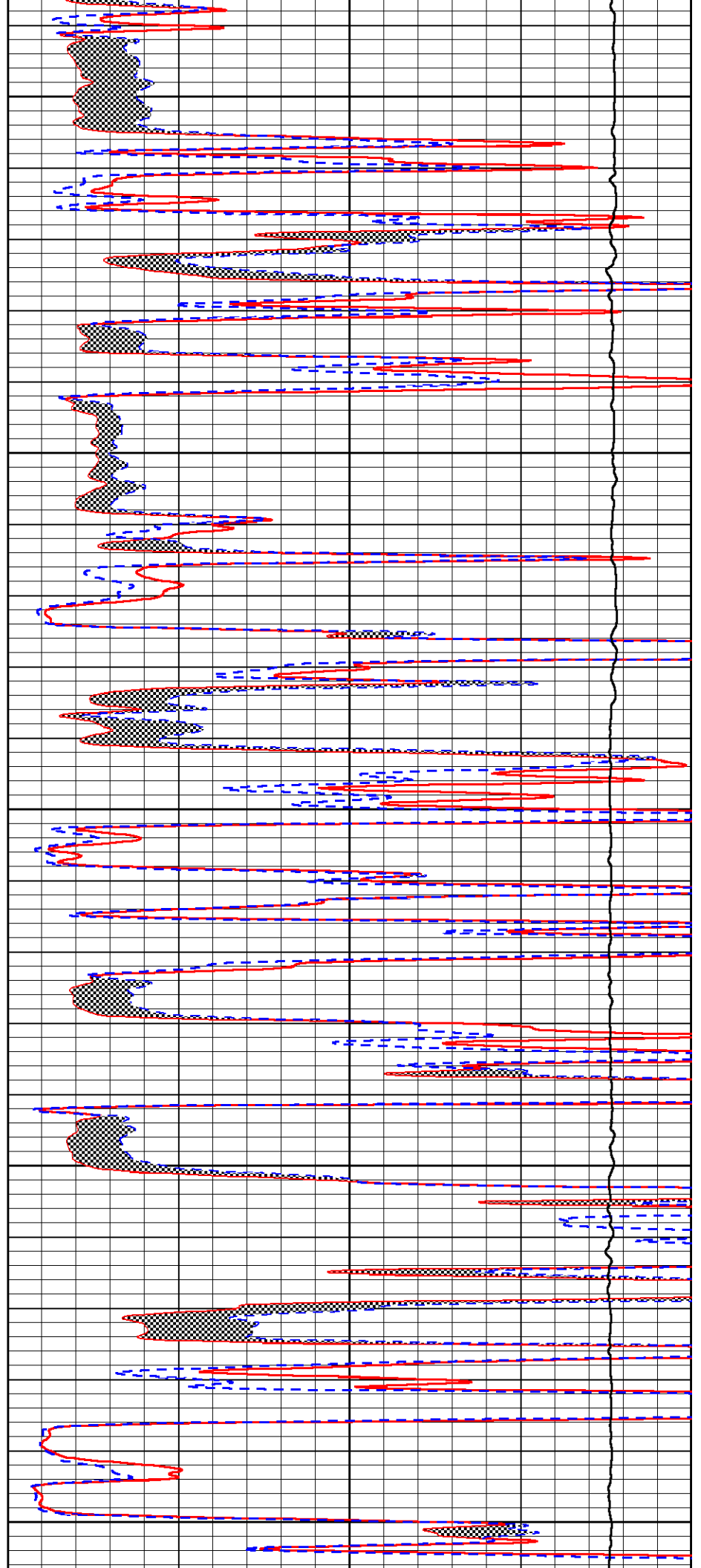
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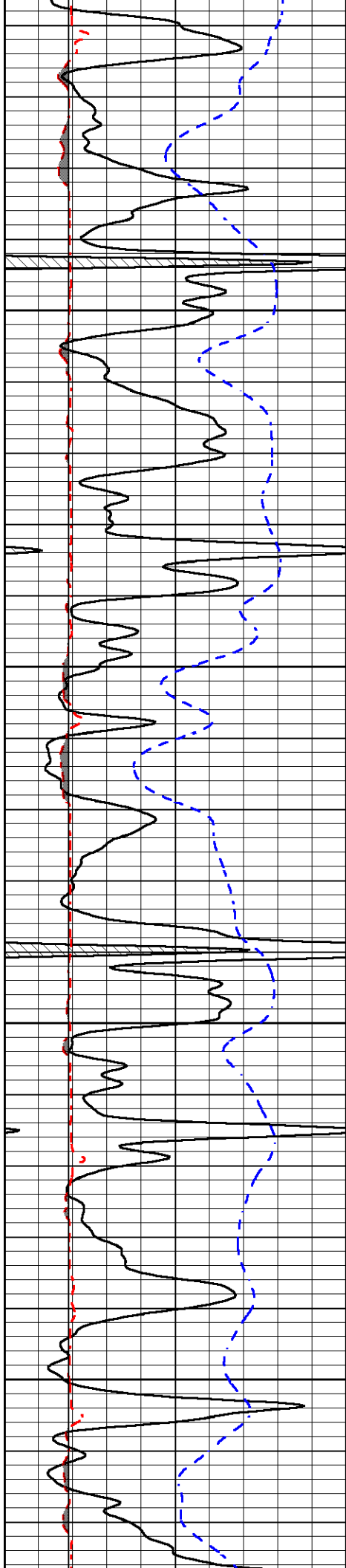
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3450

3500



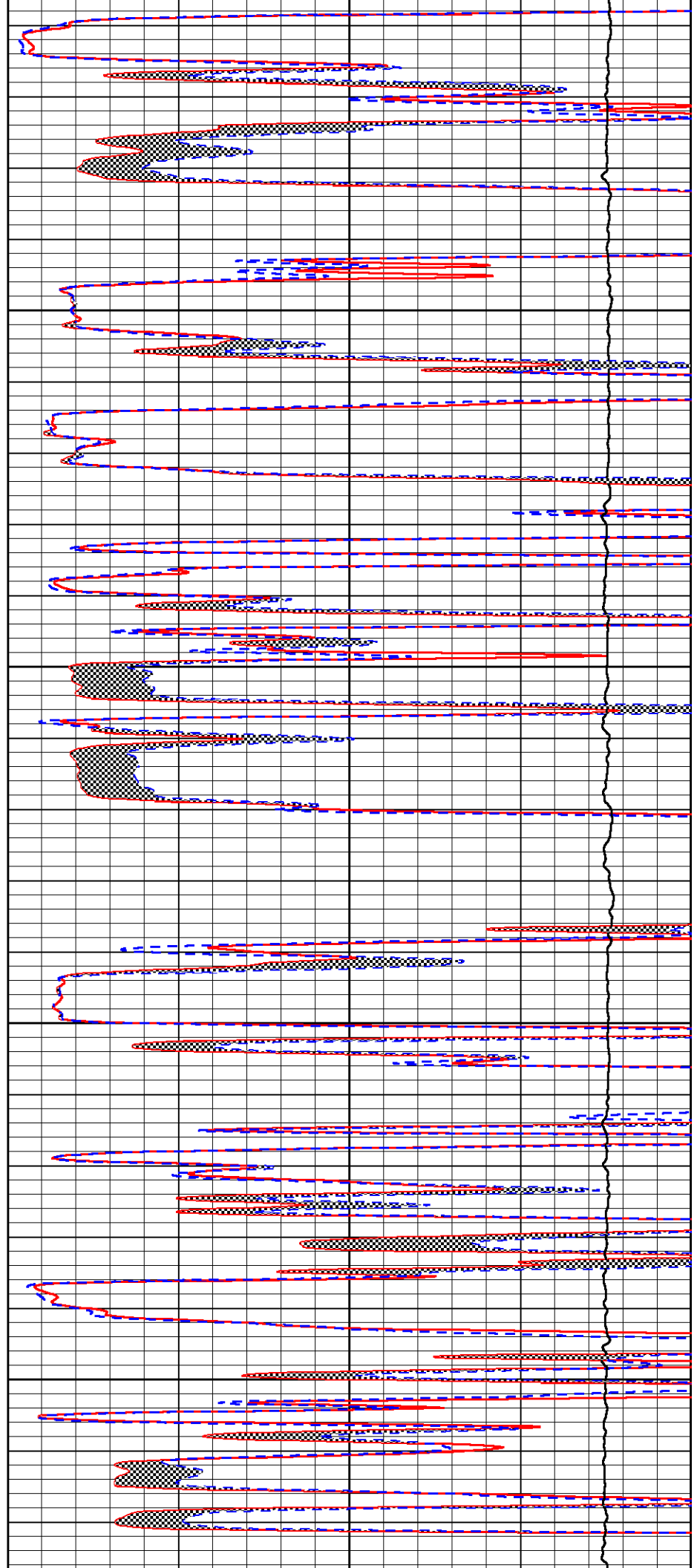


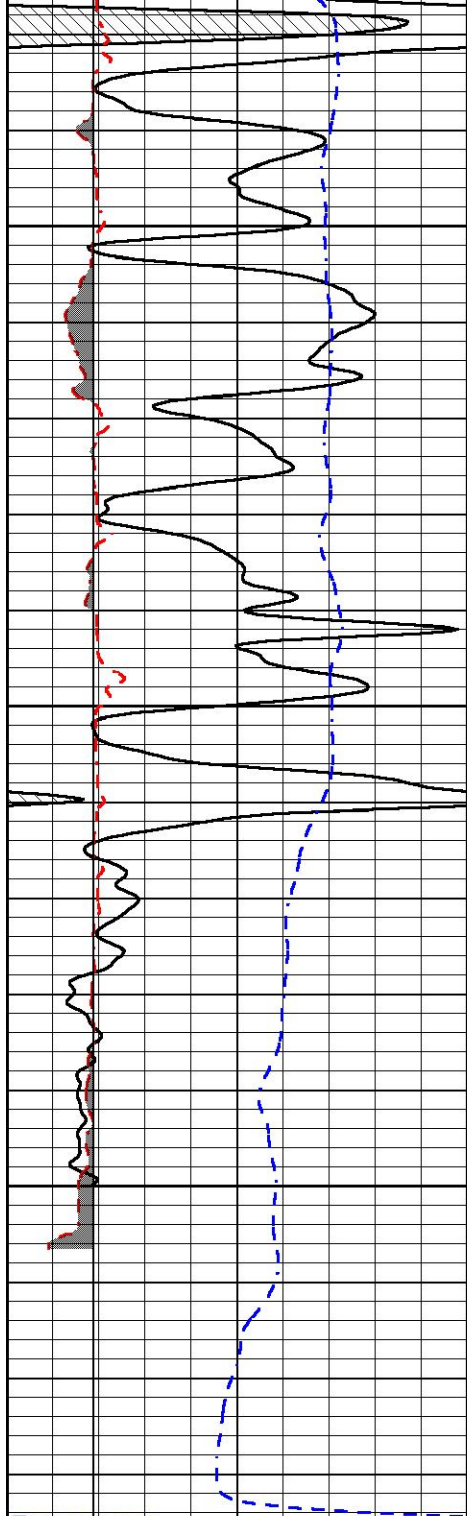
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3600

3650

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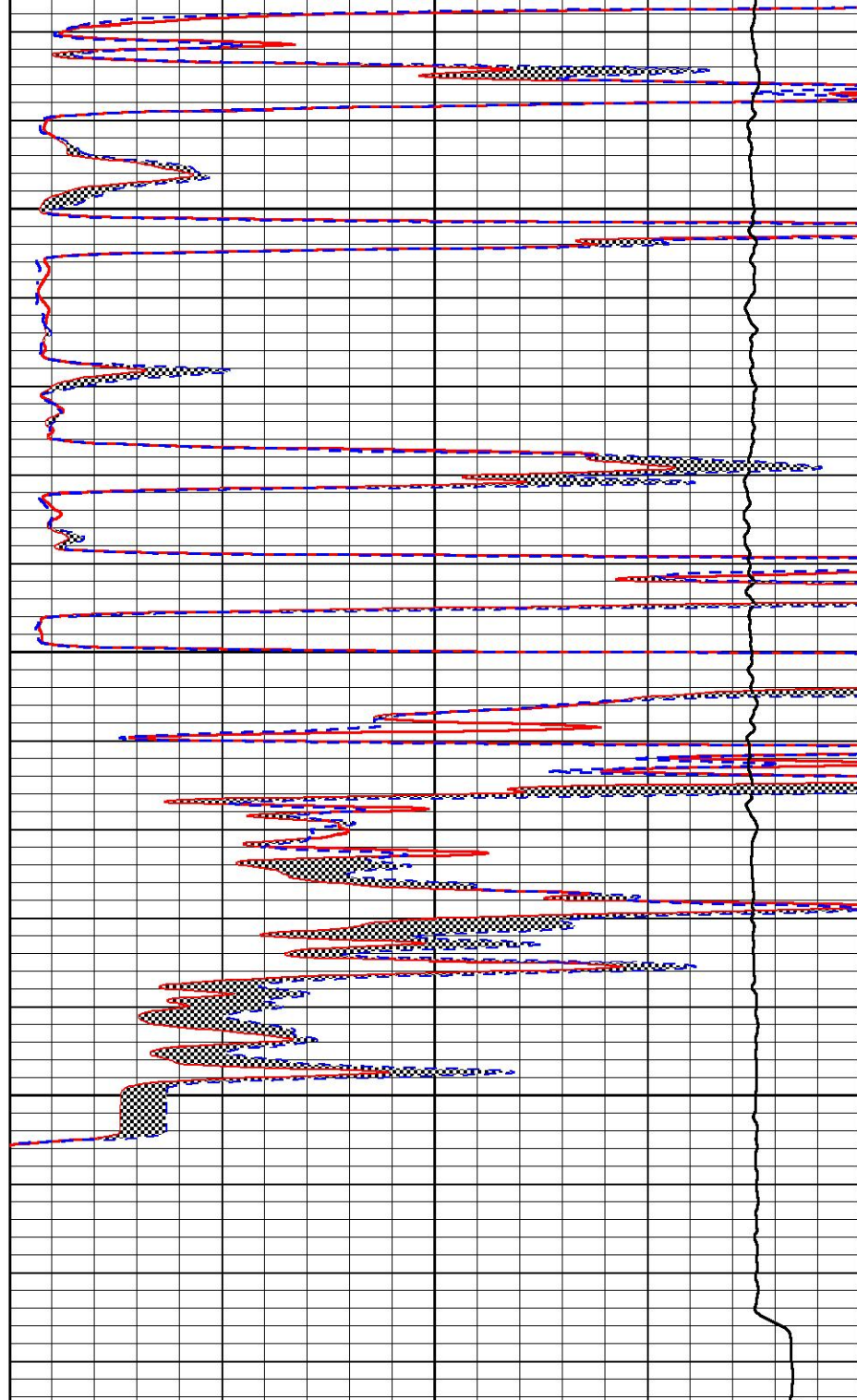


3750

3800

3850

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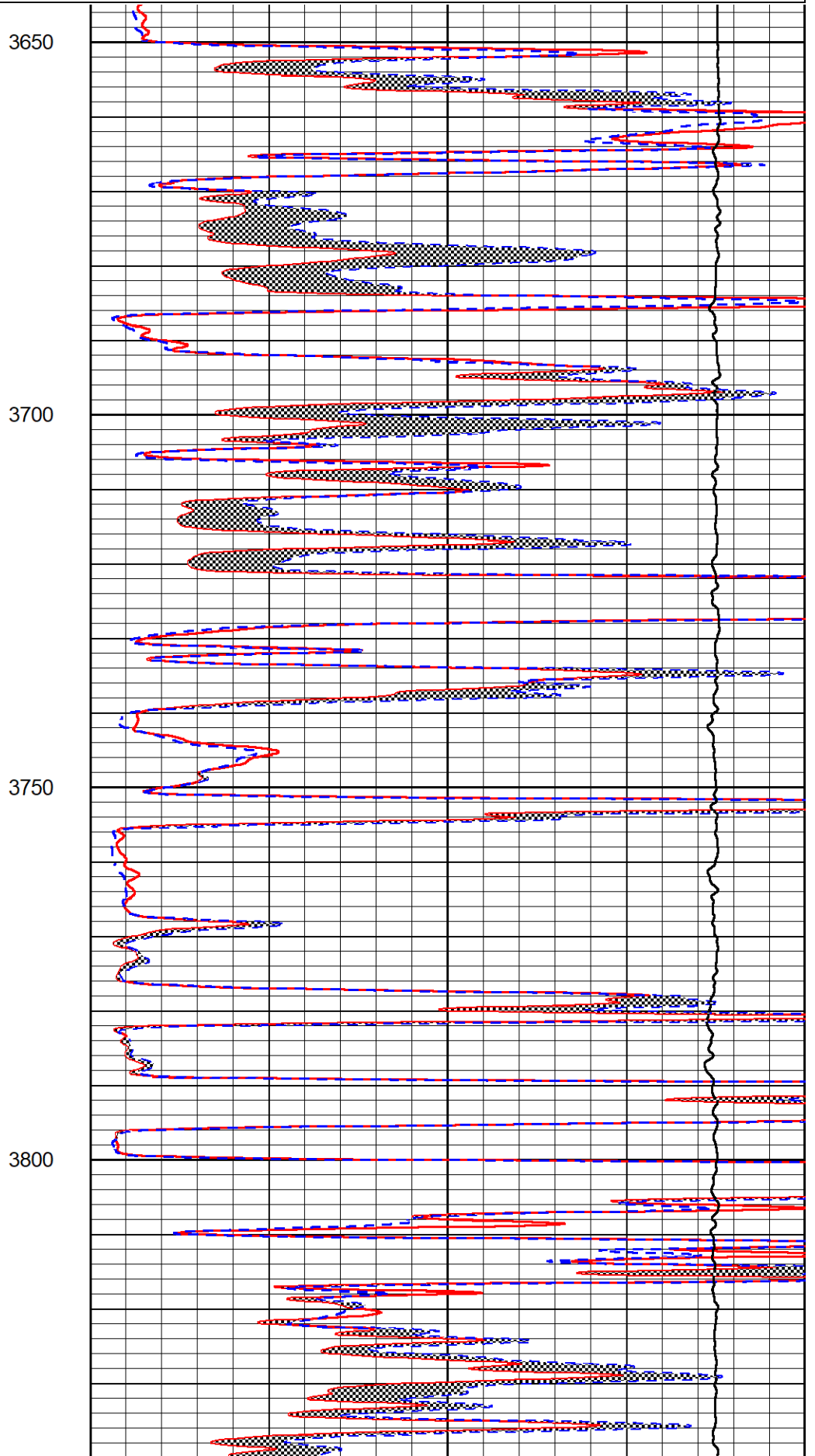
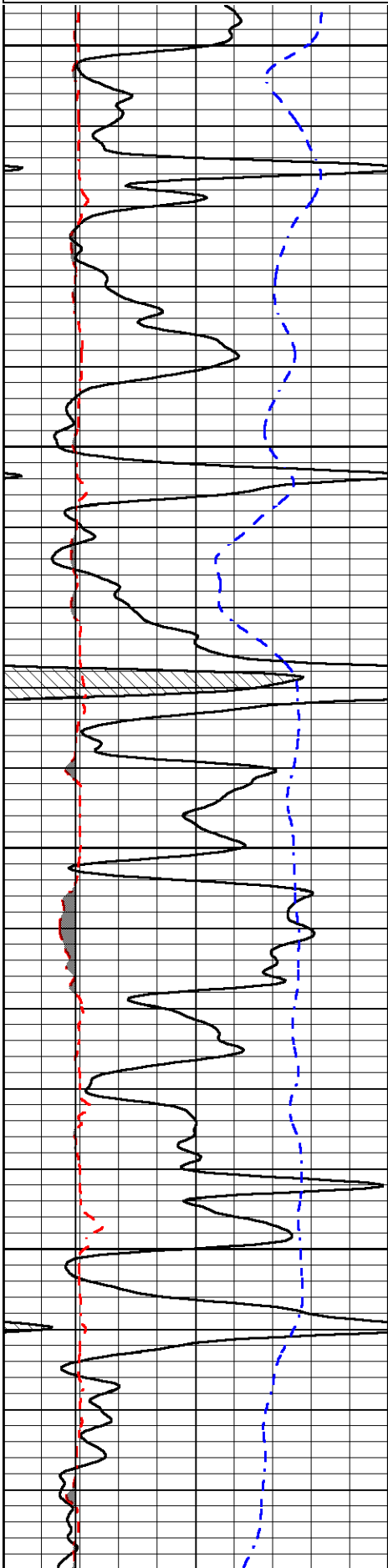
REPEAT SECTION

REPEAT PASS

Database File cholla_wrangler 1-24.db
 Dataset Pathname stack/pass3.2
 Presentation Format _micro
 Dataset Creation Mon Aug 30 07:42:12 2021
 Charted by Depth in Feet scaled 1:240

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

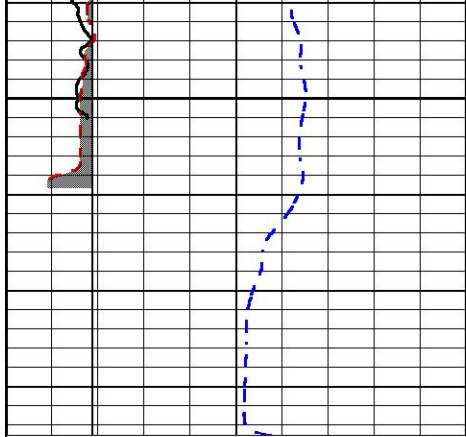


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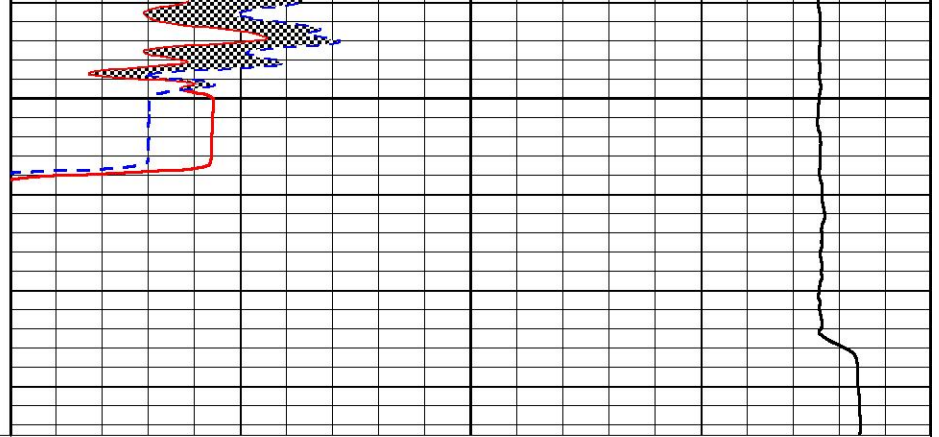
3700

3750

3800



3850



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