



MIDWEST WIRELINE

MICRORESISTIVITY

Company Castle Resources, Inc.
 Well Mollhagen #3
 Field Geneseo-Edward
 County Ellsworth
 State Kansas

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Location: API #: 15-053-21400-00-00
 SE NW SE NW
 1750 FNL & 3390 FEL
 SEC 9 TWP 17S RGE 8W
 Permanent Datum Ground Level Elevation 1720
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 CNL/CDL
 DIL
 Elevation
 K.B. 1725
 D.F.
 G.L. 1720

Date	7/23/2024
Run Number	One
Depth Driller	3350
Depth Logger	3346
Bottom Logged Interval	3345
Top Log Interval	2200
Casing Driller	8:625 @ 220
Casing Logger	208
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	6000
Density / Viscosity	9.0 44
pH / Fluid Loss	11.0 10.4
Source of Sample	Flowline
Rm @ Meas. Temp	0.85 @ 80
Rmt @ Meas. Temp	0.64 @ 80
Rmc @ Meas. Temp	1.15 @ 80
Source of Rmf / Rmc	Charts
Rm @ BHT	0.62 @ 110
Operating Rig Time	2 Hours
Max Rec. Temp. F	110
Equipment Number	P-24
Location	Hays
Recorded By	T. Martin
Witnessed By	Jerry Green

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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.

Ellsworth, KS, S on 14 to Rd T,
 1/2 E, S into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: T. Martin
 Operator:
 Operator:
 Operator:

This Log Record Was Witnessed By

Primary Witness: Jerry Green
 Secondary Witness:
 Secondary Witness:
 Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (105)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (201-M&W)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (305-24)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (401)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-M&W (507)	18.25	3.50	220.00
CILM	4.50					
SP	0.20					

Dataset: castle_mollhagen #3.db: field/well/StkMI2/pass3.1
 Total length: 42.33 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\castle_mollhagen #3.db
 Dataset field/well/StkMI2/pass3.1/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 110	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 3	SNDERRM mmho/m -6	SPSHIFT mV 180	SRFTEMP degF 70	SZCOR Off	TDEPTH ft 3346		

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



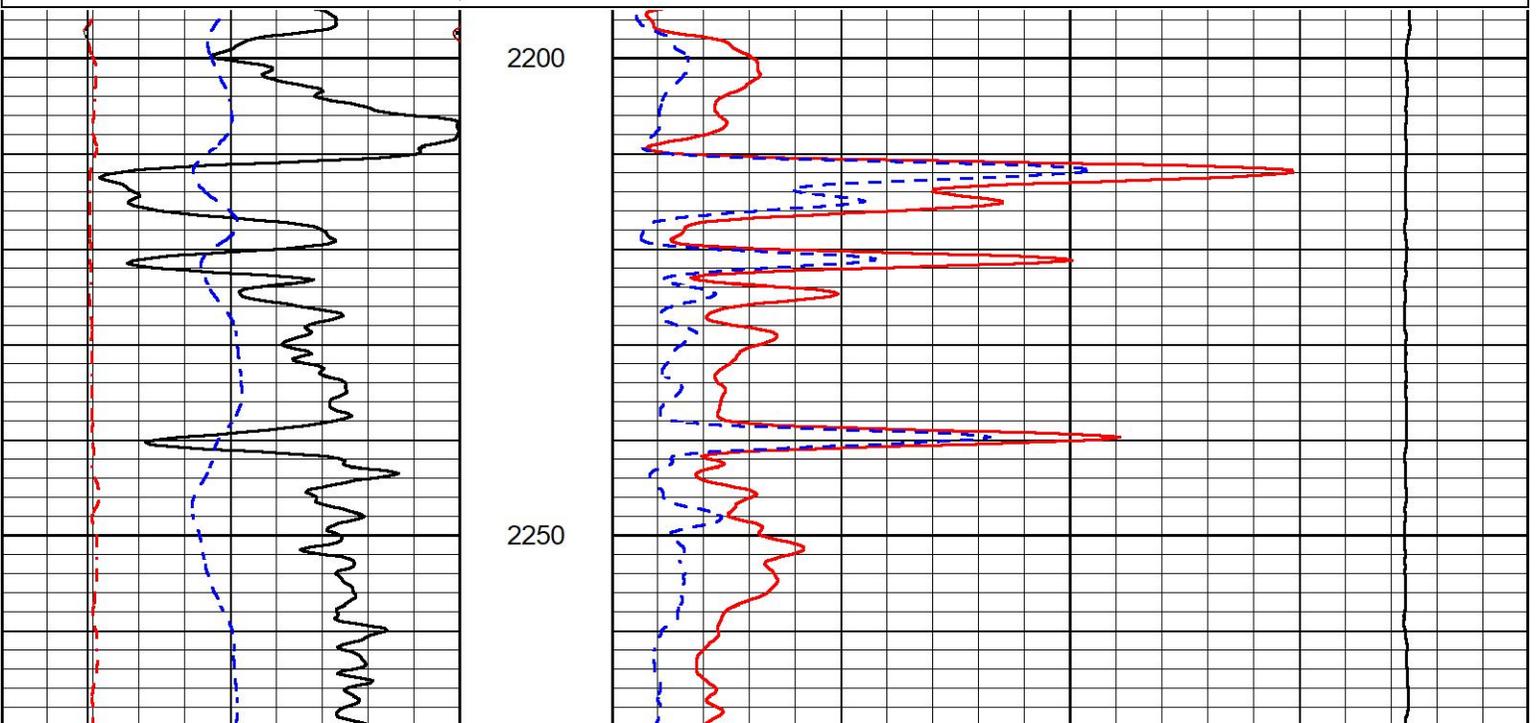
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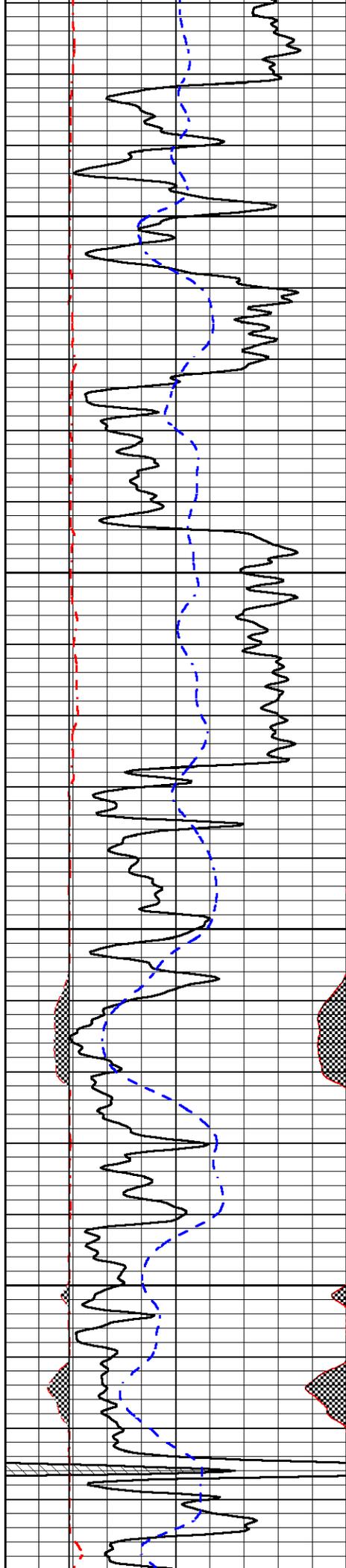
MAIN PASS

Database File castle_mollhagen #3.db
 Dataset Pathname StkMI2/pass3.1
 Presentation Format _micro
 Dataset Creation Tue Jul 23 07:39:24 2024
 Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-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



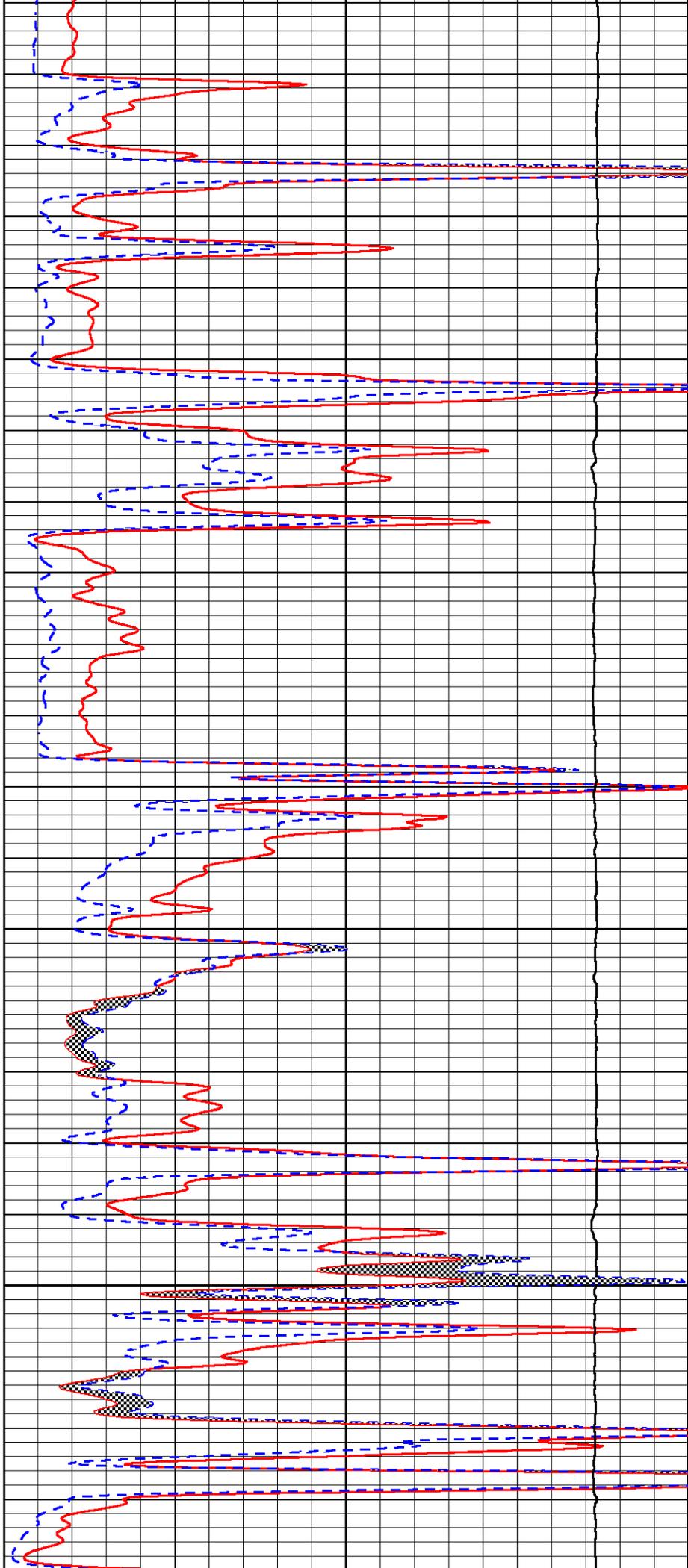


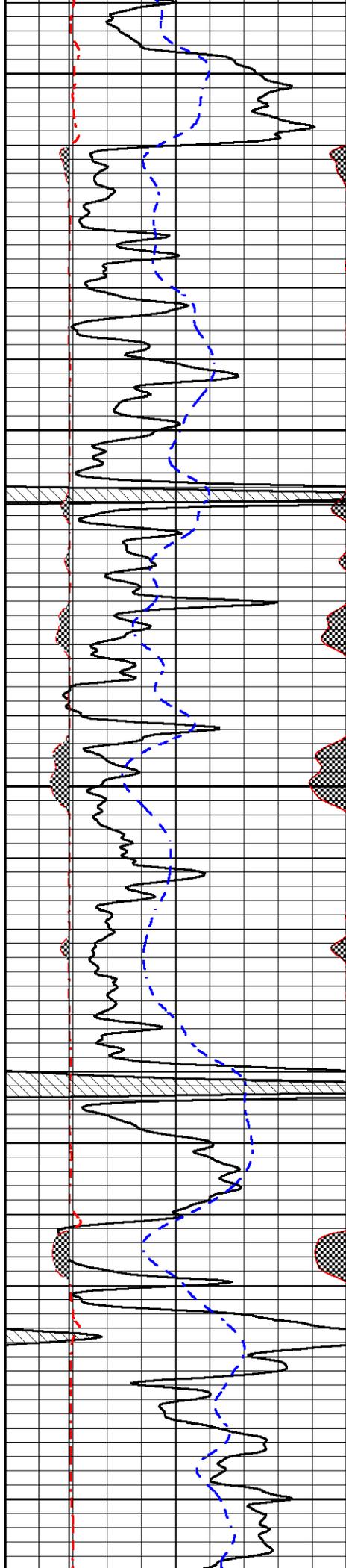
2300

2350

2400

2450





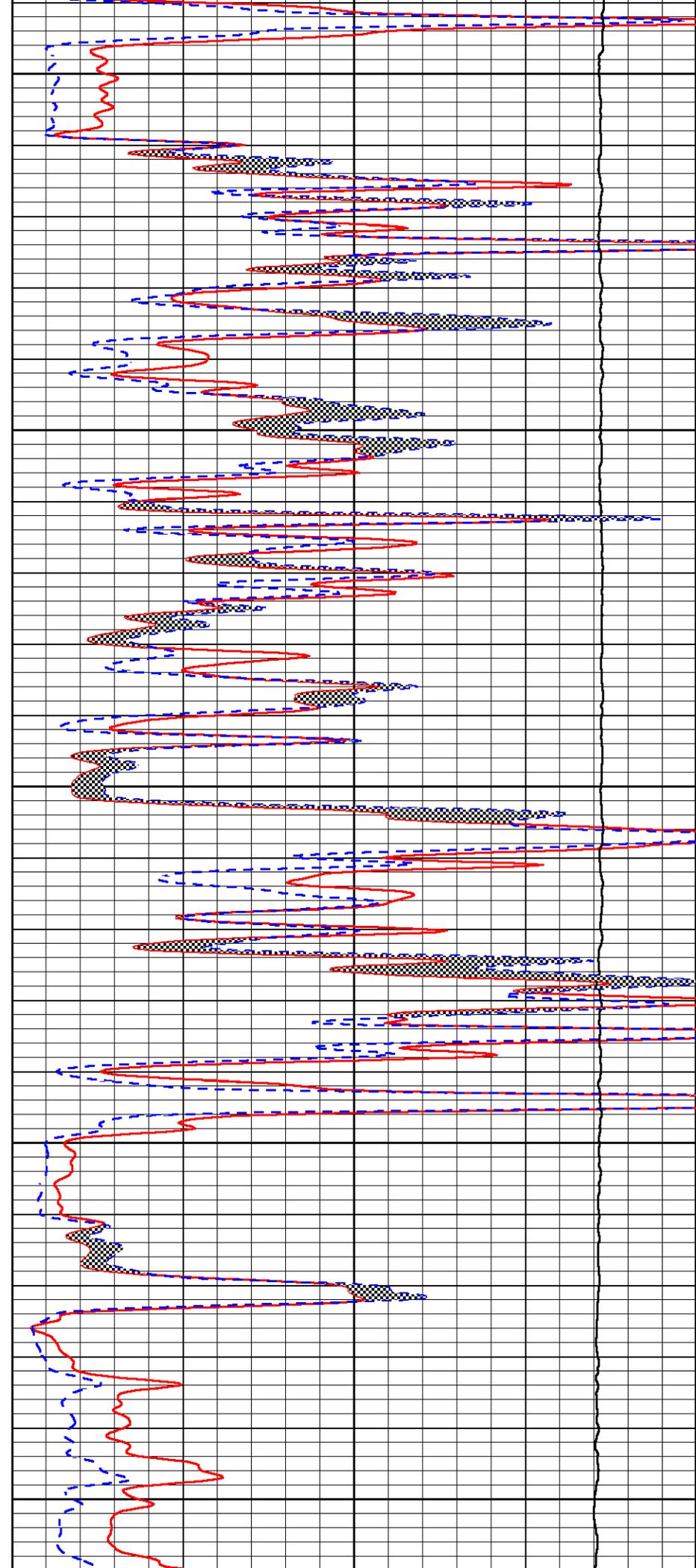
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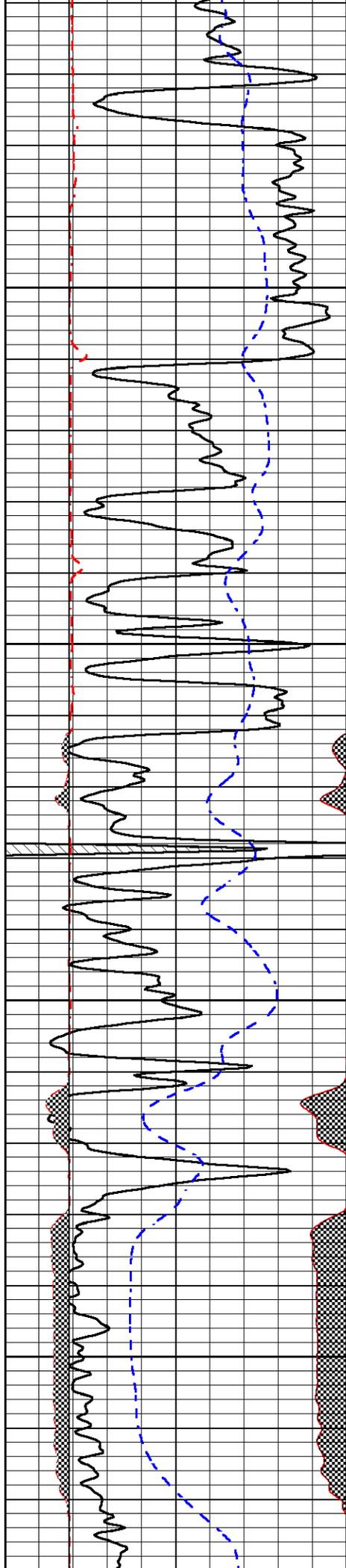
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2600

2650

2700



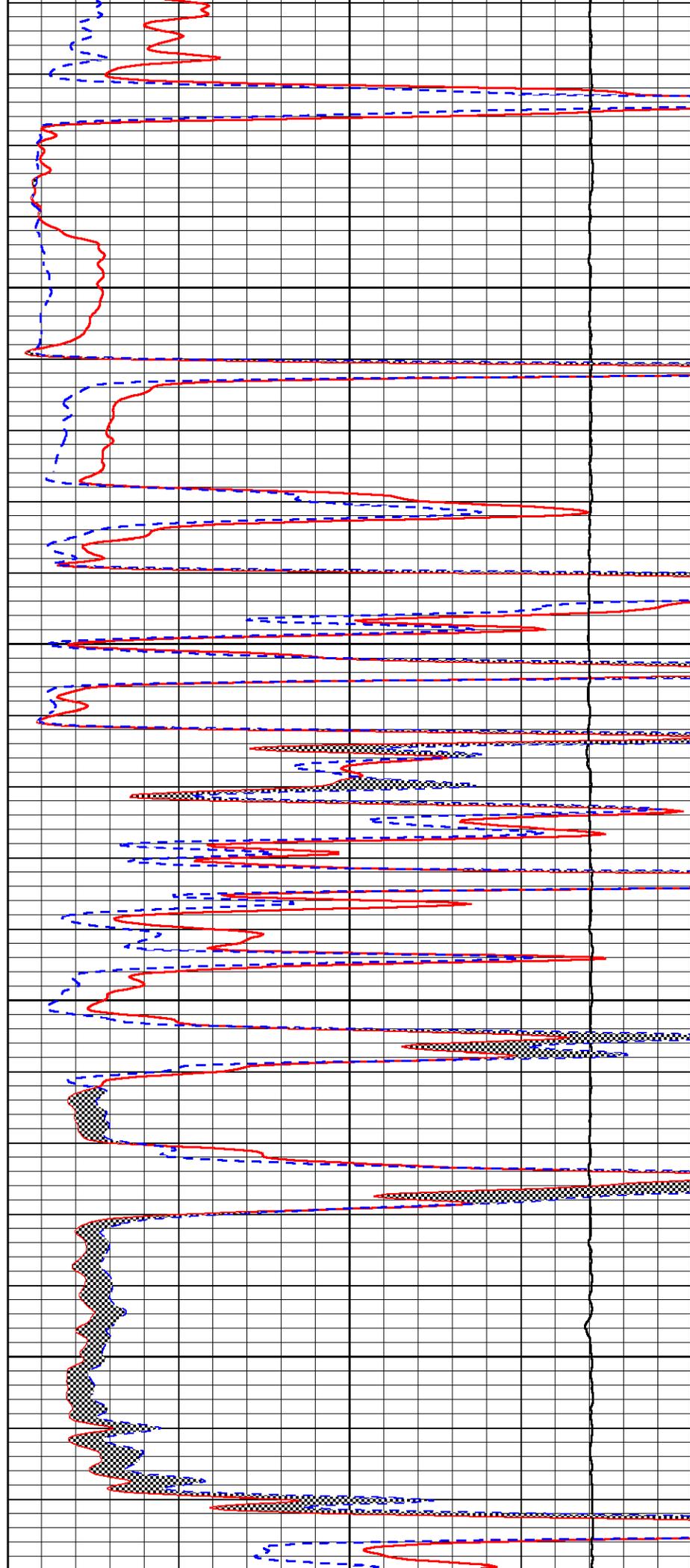


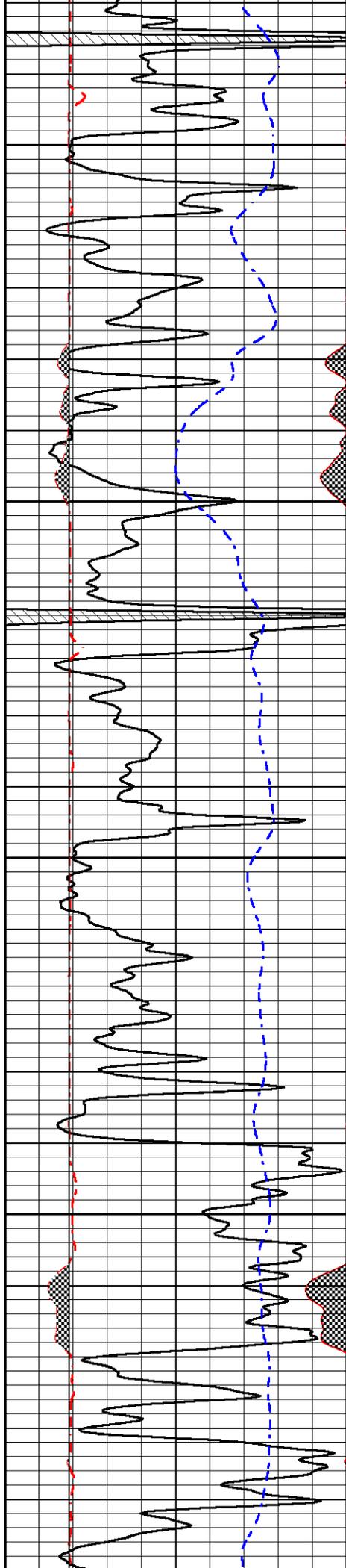
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2800

2850

2900





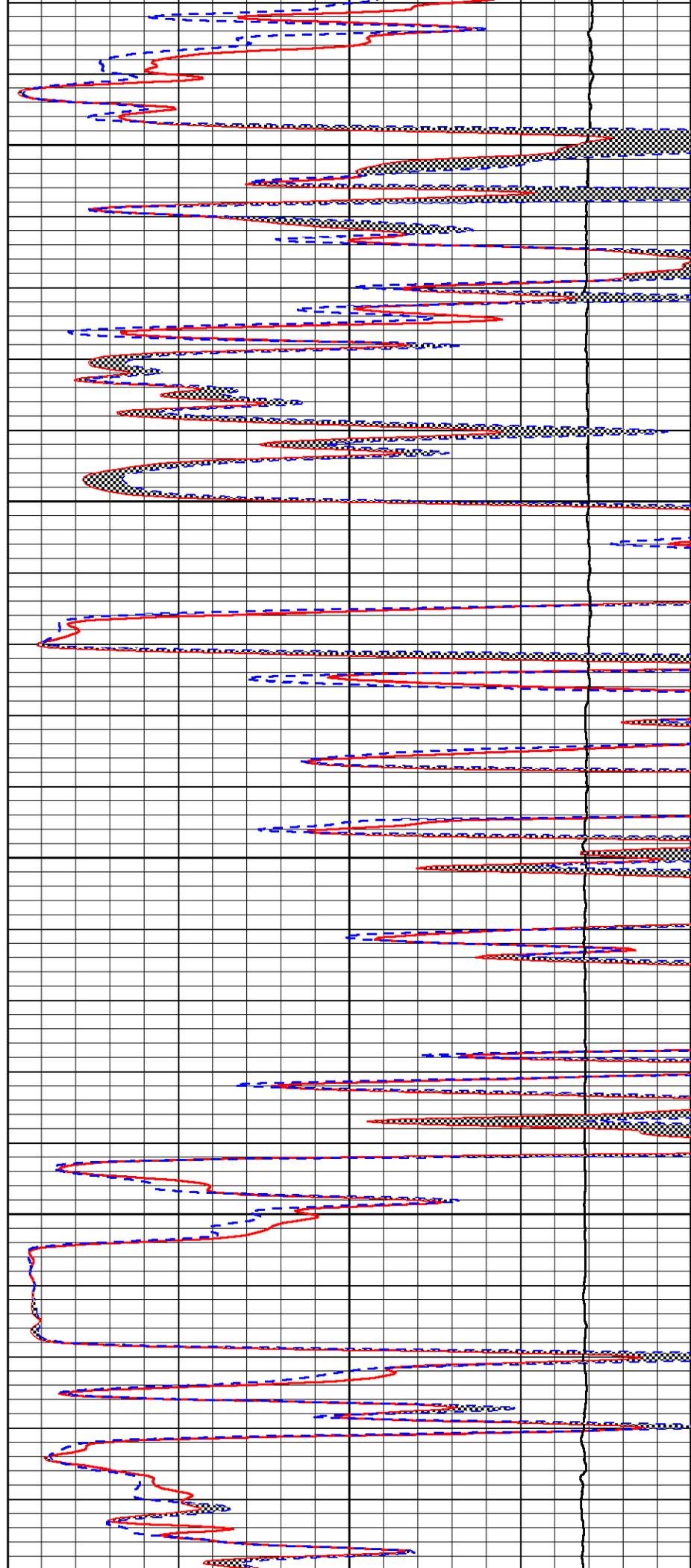
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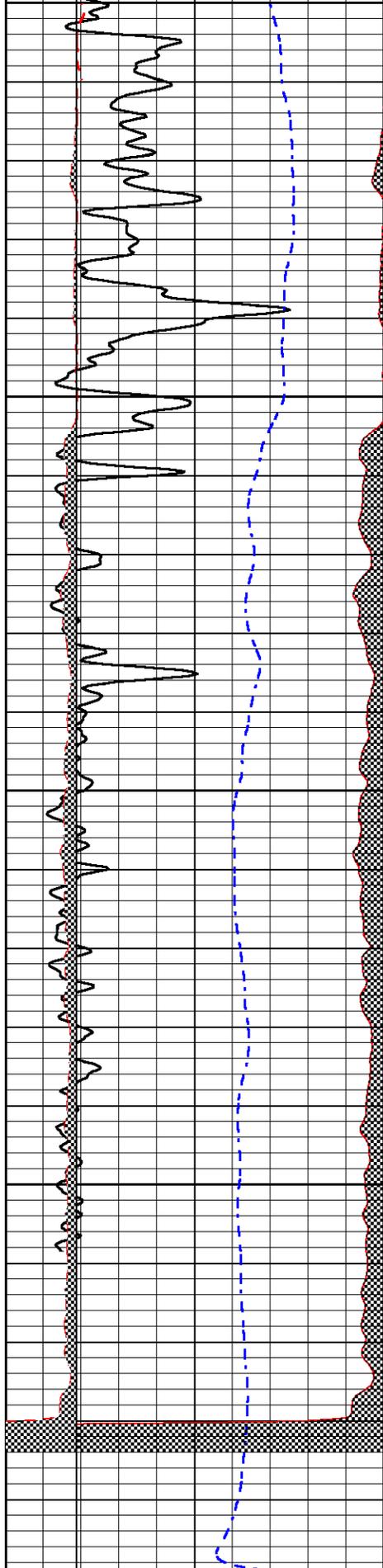
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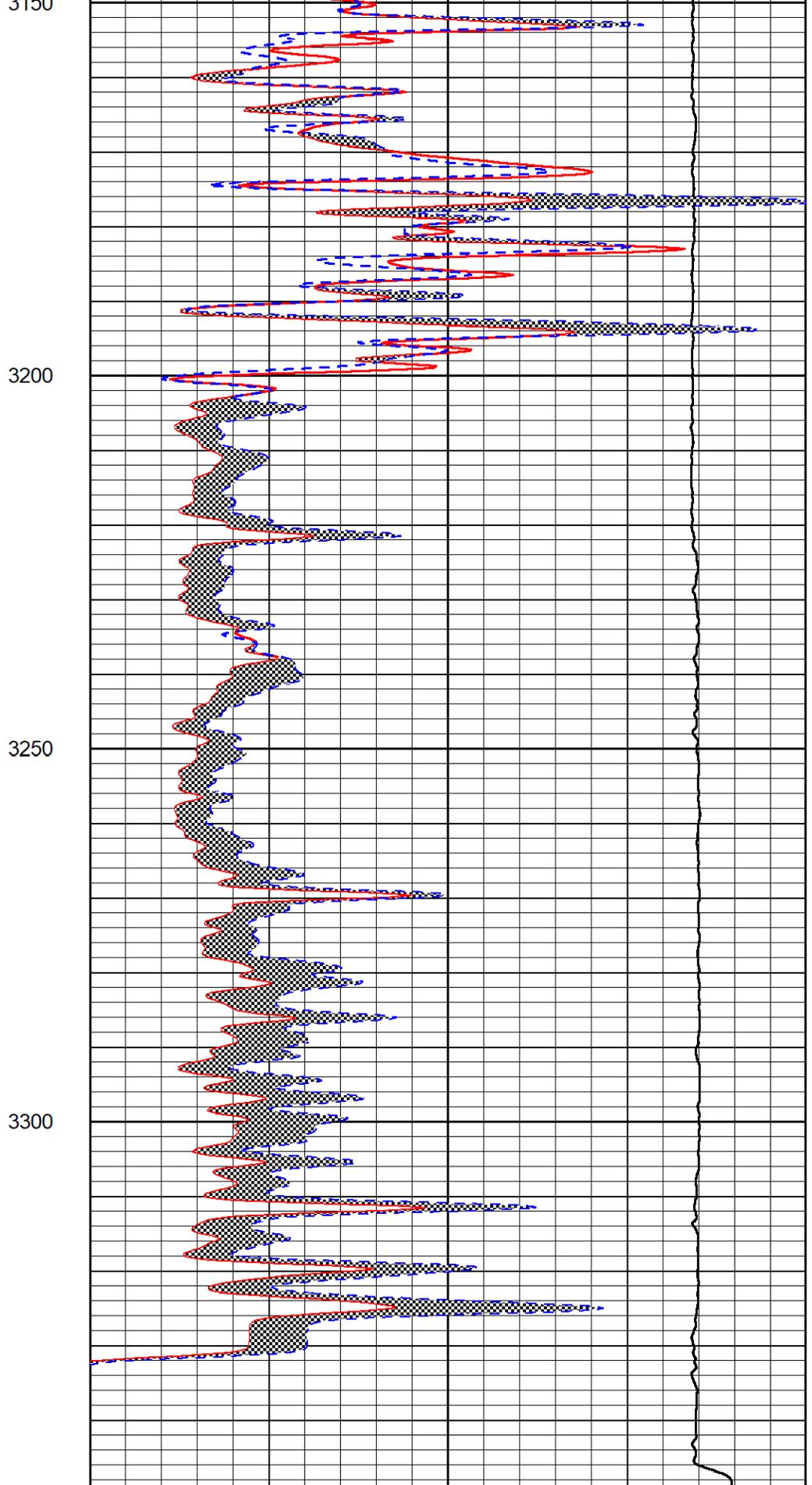
3100

3150





0	GR (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-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



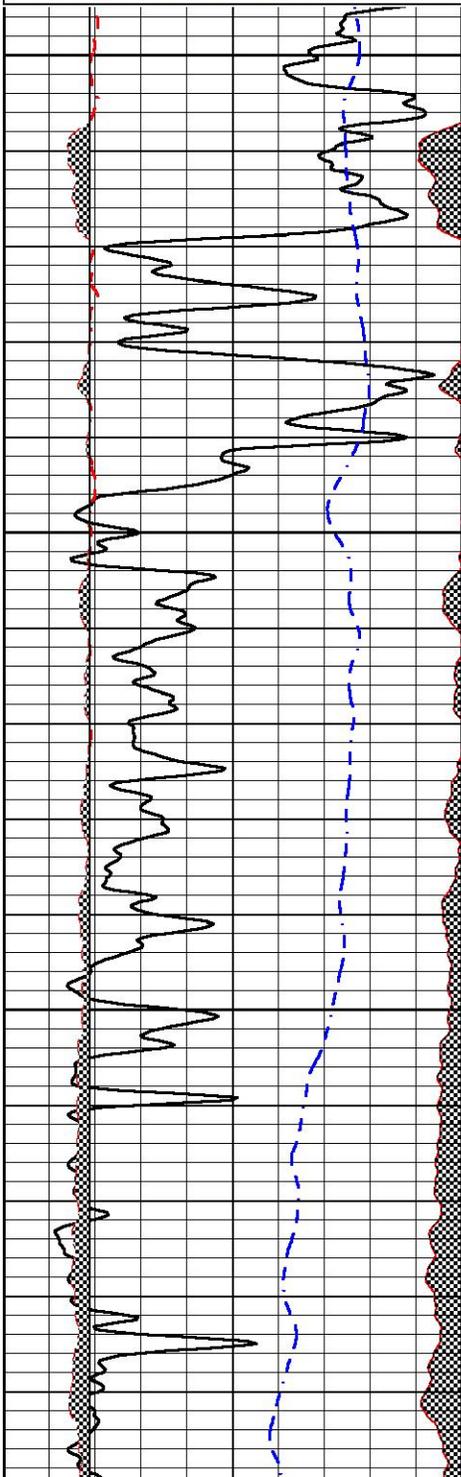
REPEAT SECTION

REPEAT PASS

Database File castle_mollhagen #3.db
 Dataset Pathname StkMI/pass3.1
 Presentation Format _micro
 Dataset Creation Tue Jul 23 06:52:50 2024
 Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

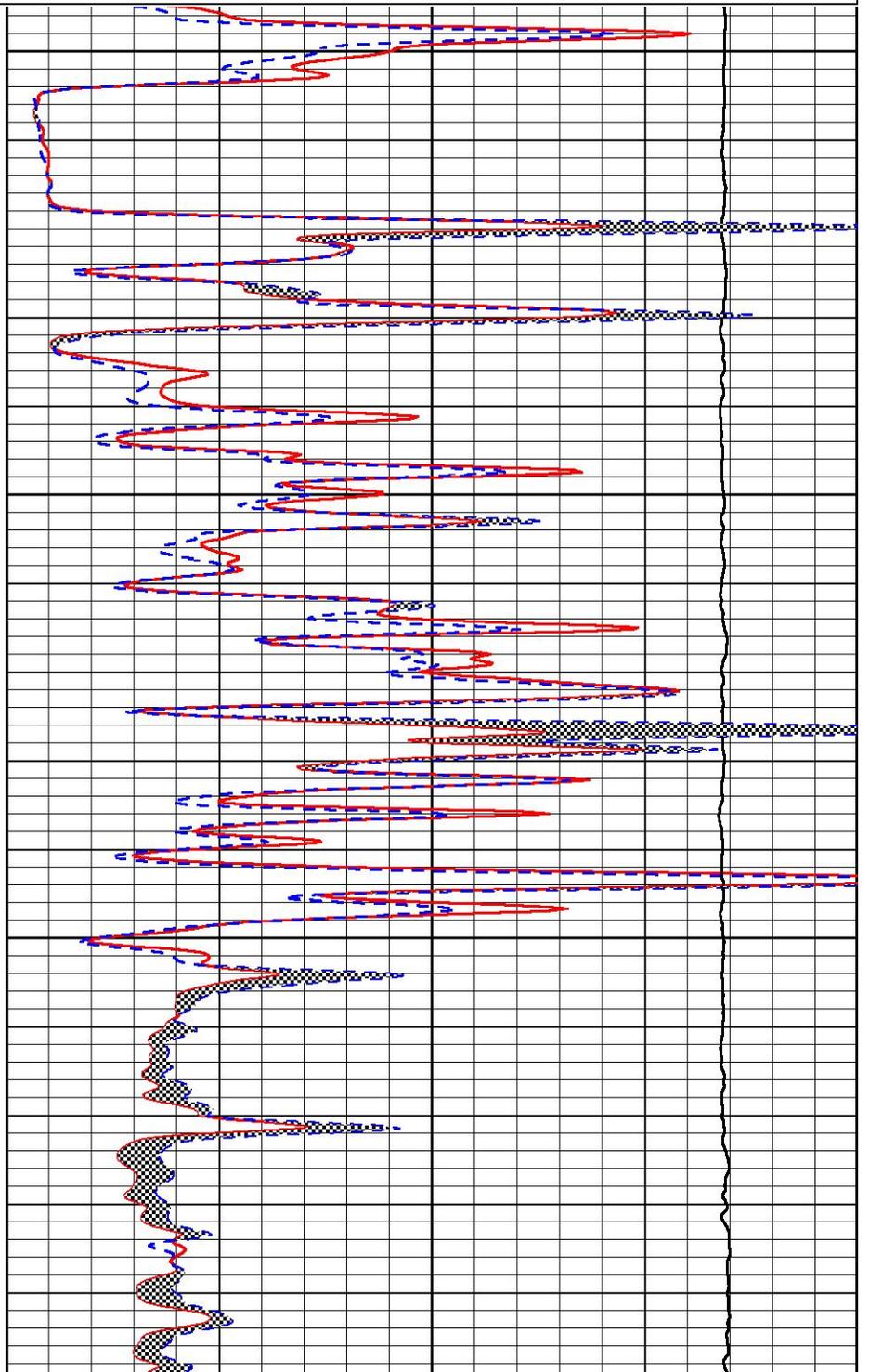
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



3100

3150

3200



Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	24000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	in	142.7190	-1.2500
Caliper	1.0052	1.0858	5.0000	16.5000			-139.1500

Compensated Density Calibration Report

Serial-Model: 305-24-M&W
Source / Verifier: 20762B / 2ci
Master Calibration Performed: Tue Feb 6 18:43:03 2024
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.680	g/cc	5028.88	5761.57	cps
Aluminum	2.560	g/cc	1122.37	3952.02	cps
Spine Angle = 75.89			Density/Spine Ratio = 0.569		
	Size		Reading		
Small Ring	4.00	in	1.74		
Large Ring	14.00	in	1.38		

Compensated Neutron Calibration Report

Serial Number: 201-M&W
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

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	pu
3)	Short Space	cps		
	Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 105
Tool Model: M&W

Performed: Mon Aug 7 20:46:01 2023

Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6000	GAPI/cps



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Well	Mollhagen #3
Field	Geneseo-Edward
County	Ellsworth
State	Kansas