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Pioneer Energy Services

MICRORESISTIVITY LOG

Company CASTLE RESOURCES, INC.
Well DOC HOLIDAY/FISCHER #1
Field UNNAMED
County FORD State KANSAS

Location: API # : 15-057-21041-00-00
2300' FNL & 330' FEL
SEC 11 TWP 25S RGE 24W

Other Services
CNL/CDL
DIL

Permanent Datum GROUND LEVEL Elevation 2372'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2377'
D.F. N/A
G.L. 2372'

Date	7/6/2020		
Run Number	ONE		
Depth Driller	4850'		
Depth Logger	4849'		
Bottom Logged Interval	4848'		
Top Log Interval	3800'		
Casing Driller	8.625" @ 220'		
Casing Logger	220'		
Bit Size	7.875"		
Type Fluid in Hole	CHEMICAL		
Salinity,ppm CL	8000		
Density / Viscosity	9.2 55		
pH / Fluid Loss	9.7 15.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.40 @ 80		
Rmf @ Meas. Temp	0.30 @ 80		
Rmc @ Meas. Temp	0.54 @ 80		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.26 @ 125		
Operating Rig Time	3 HOURS		
Max Rec. Temp. F	125		
Equipment Number	P-24		
Location	HAYS		
Recorded By	D. SCHMIDT		
Witnessed By	JERRY GREEN		

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, 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.

JETMORE,
SOUTH TO COUNTY LINE, 1 SOUTH, 1 WEST, 1/2 SOUTH,
WEST INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneeres.com 785-625-3858

Your Pioneer Energy Services Crew	This Log Record Was Witnessed By
Engineer: D. SCHMIDT	Primary Witness: JERRY GREEN
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			GR-M&W (233-M&W)	3.00	3.50	50.00
GR	40.58					
CNLSC	37.48		CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73					
			CDL-M&W (817-947)	8.50	4.00	250.00
LSD	28.43					
DCAL	28.42					
SSD	27.93					
			ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
MCAL	19.83					
MI	19.83					
MN	19.83					
RLL3F	15.80					
RLL3	15.80					
			DIL-PSI HIGH TEMP (952-828)	18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					

Dataset: castle_doc holiday fischer 1.db: field/well/STKML/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\castle_doc holiday fischer 1.db
Dataset field/well/STKML/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	100	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	260	0	Off	0

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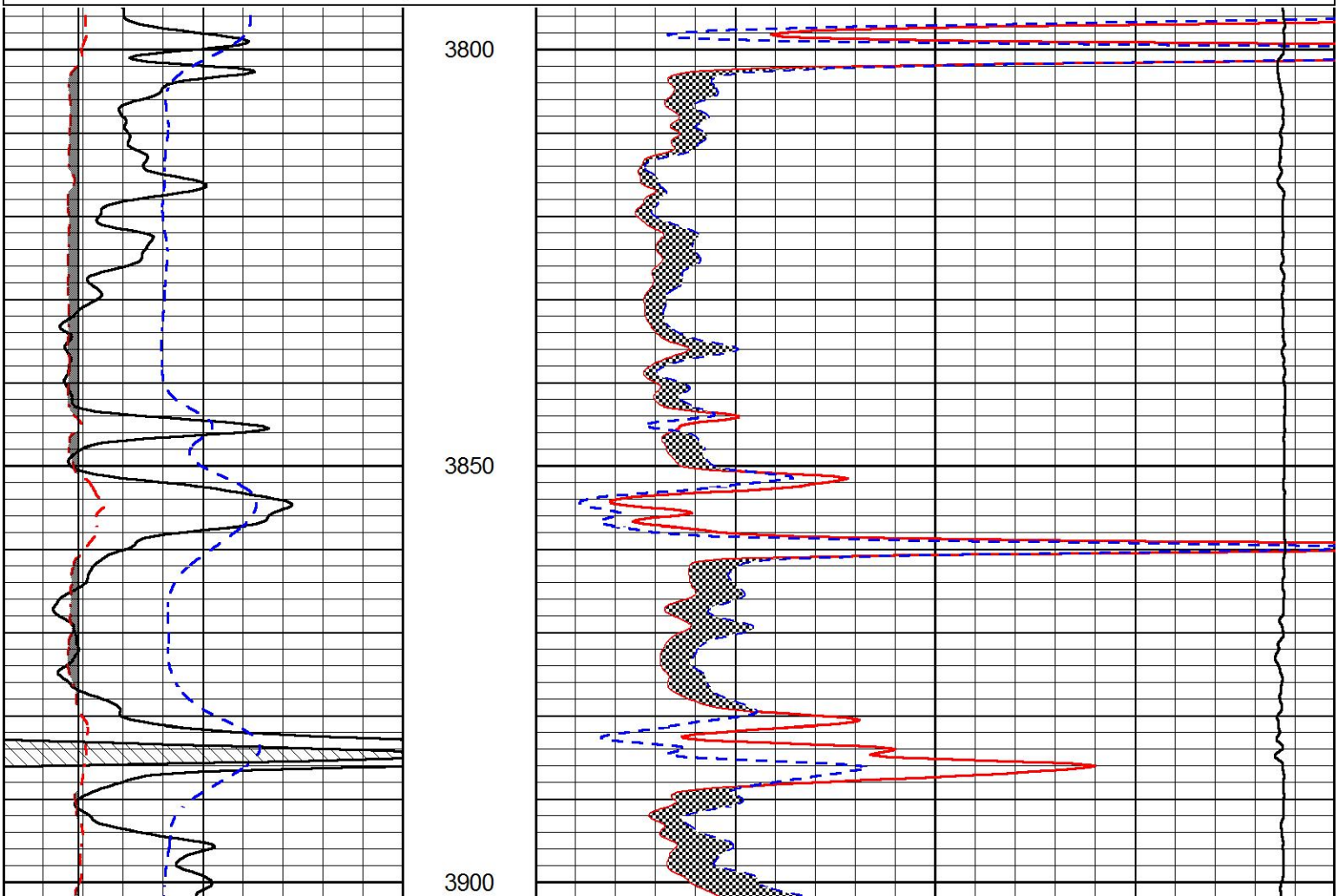
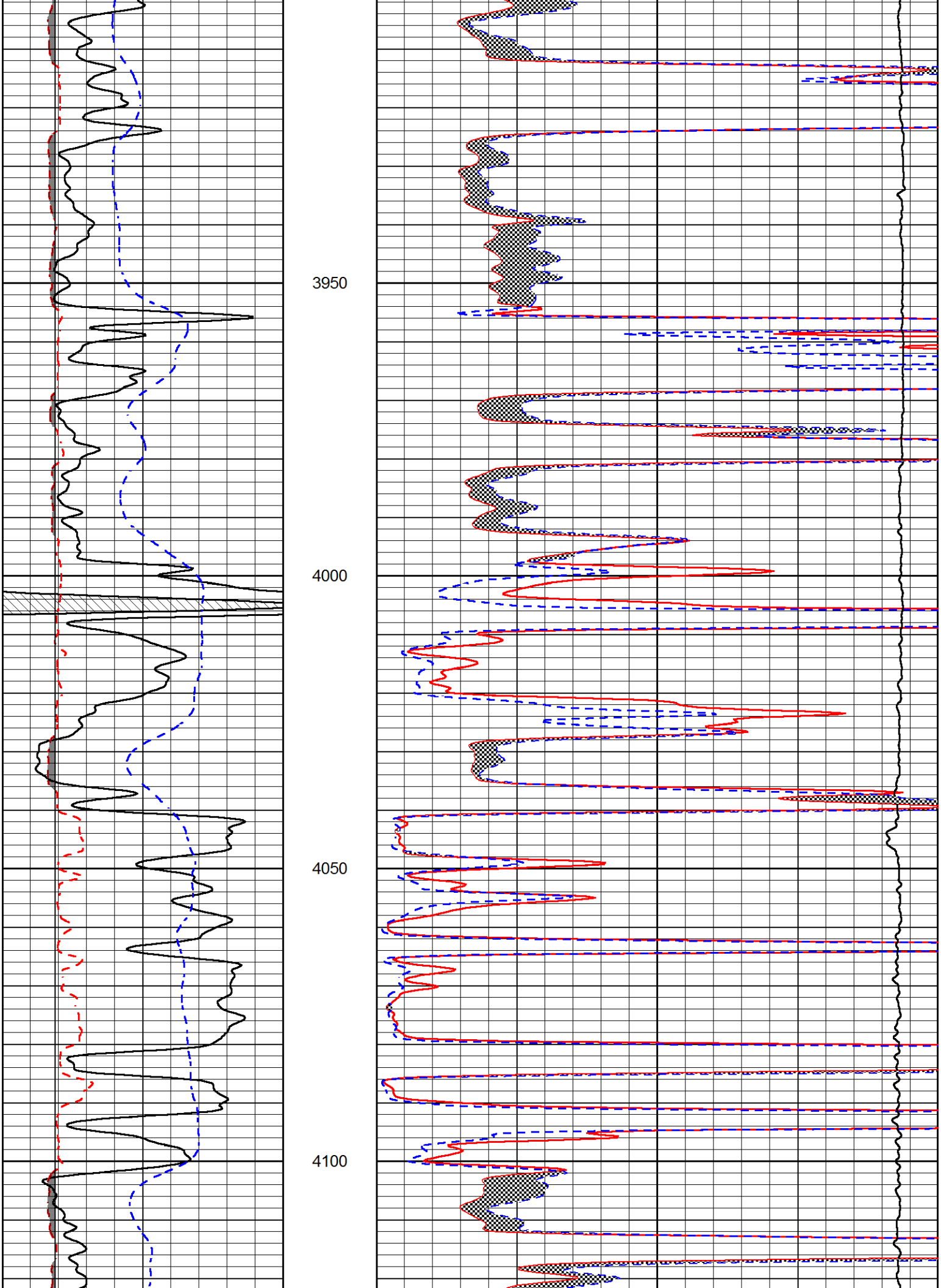
MAIN PASS

Database File	castle_doc holiday fischer 1.db
Dataset Pathname	STKML/pass3.1
Presentation Format	_micro
Dataset Creation	Mon Jul 06 20:16:40 2020
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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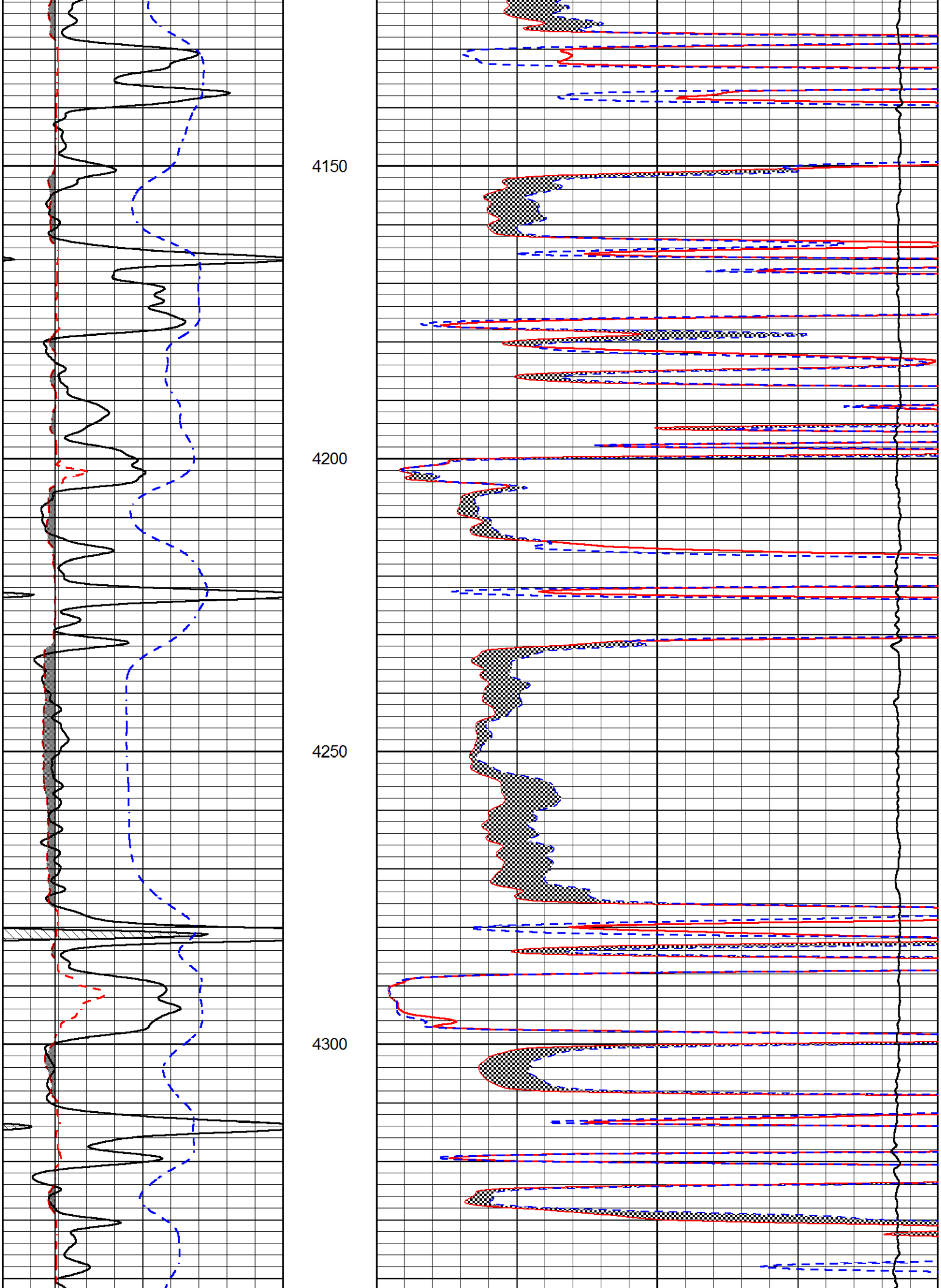
4050
4100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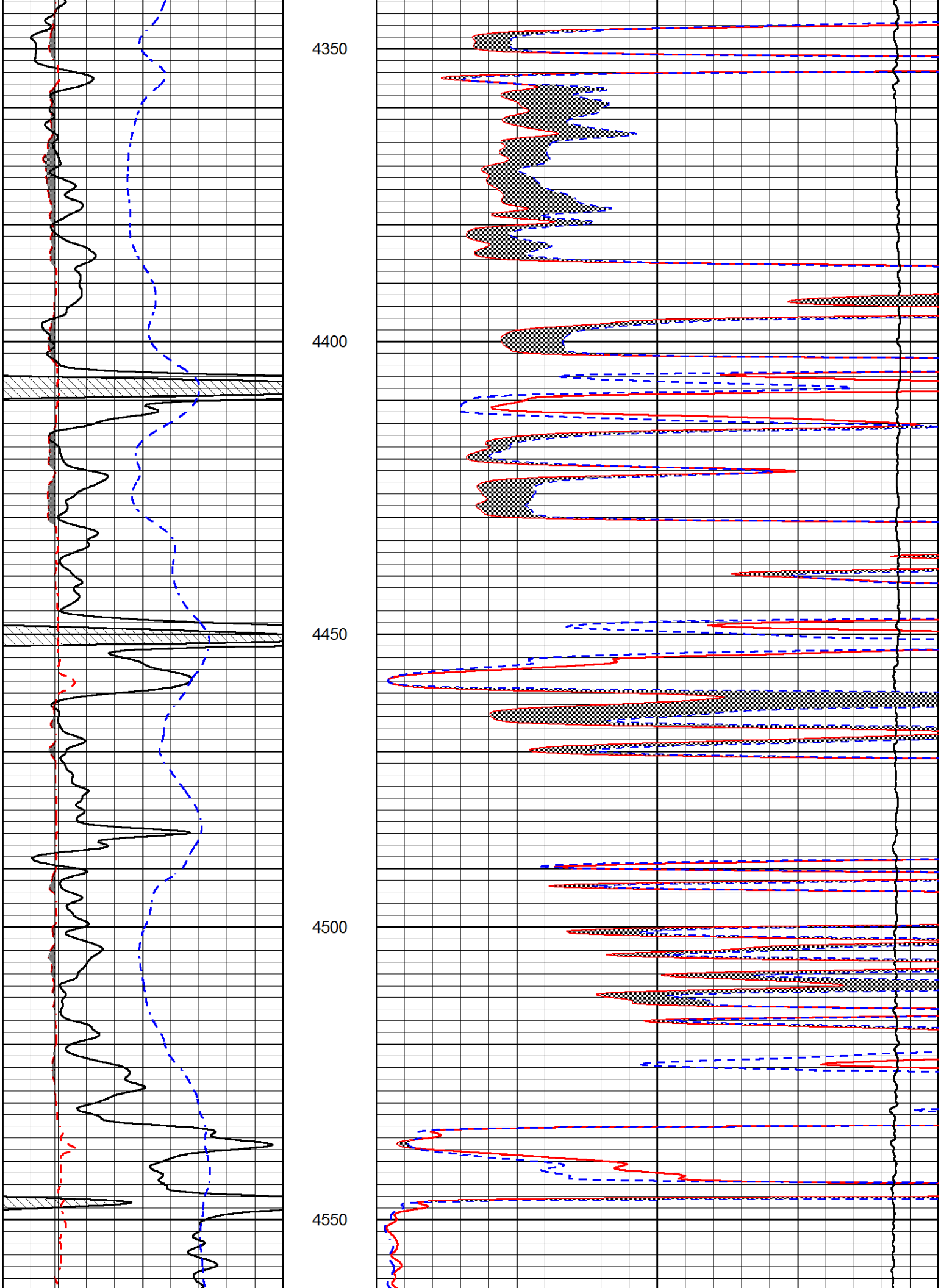
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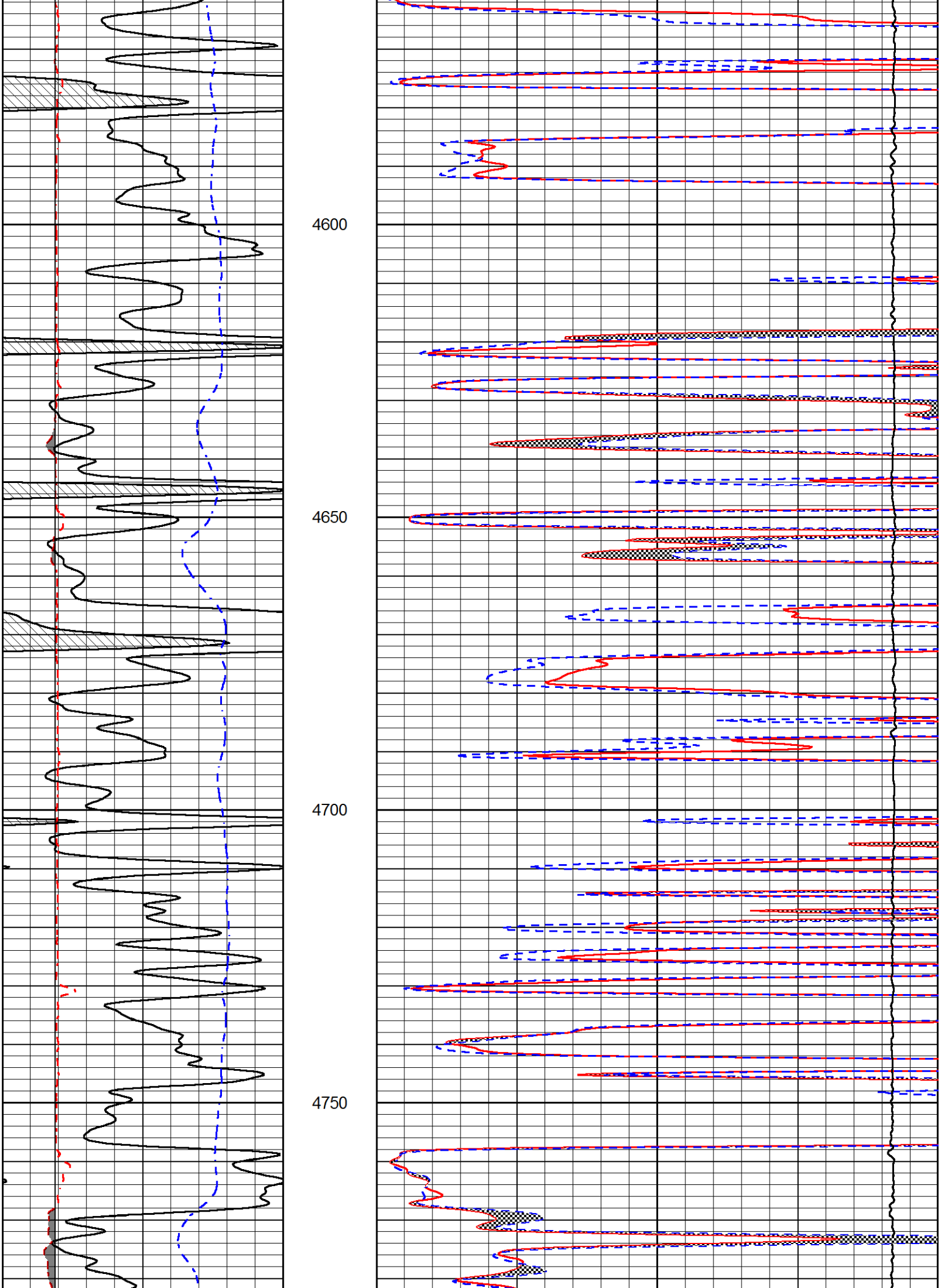
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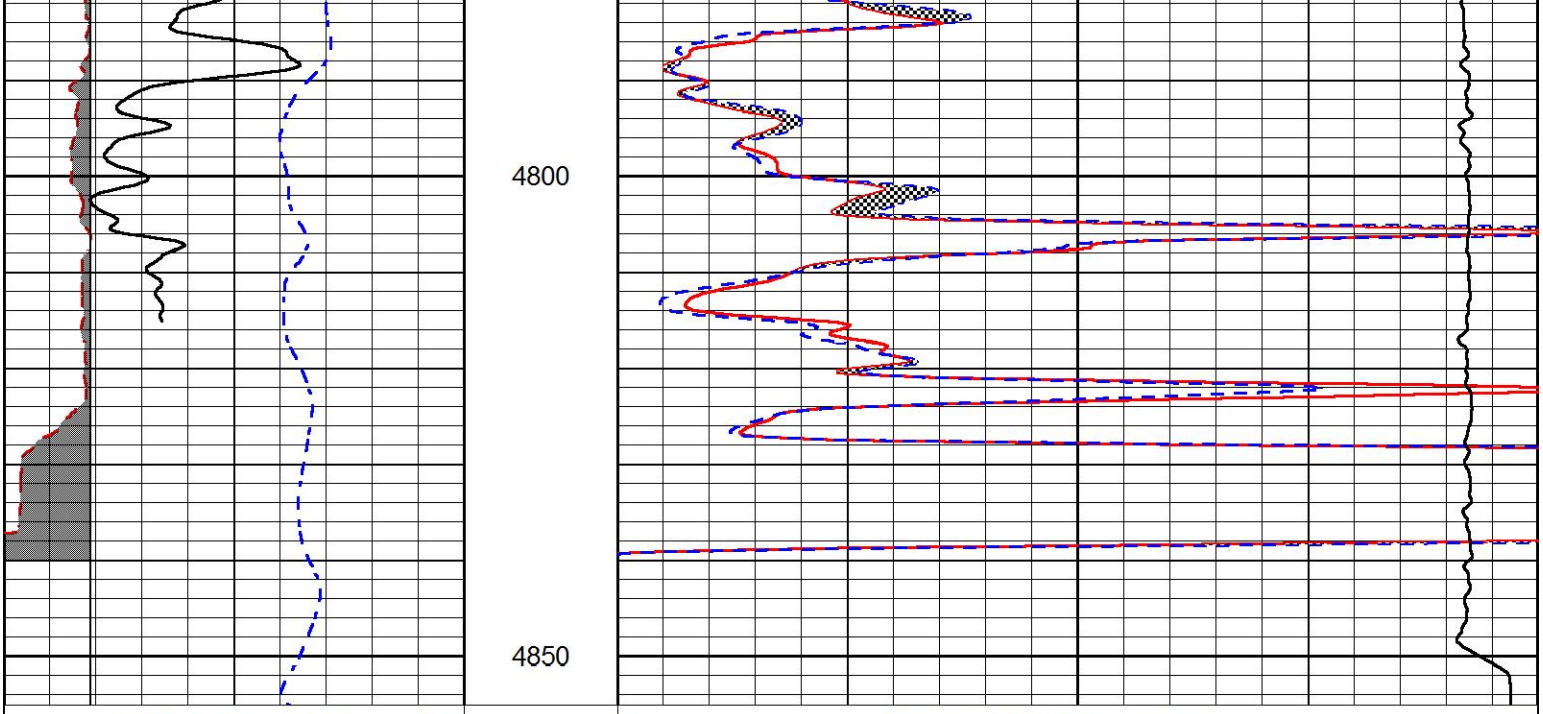

0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
6	Bit Size (in)	16
-200	sp (mV)	0

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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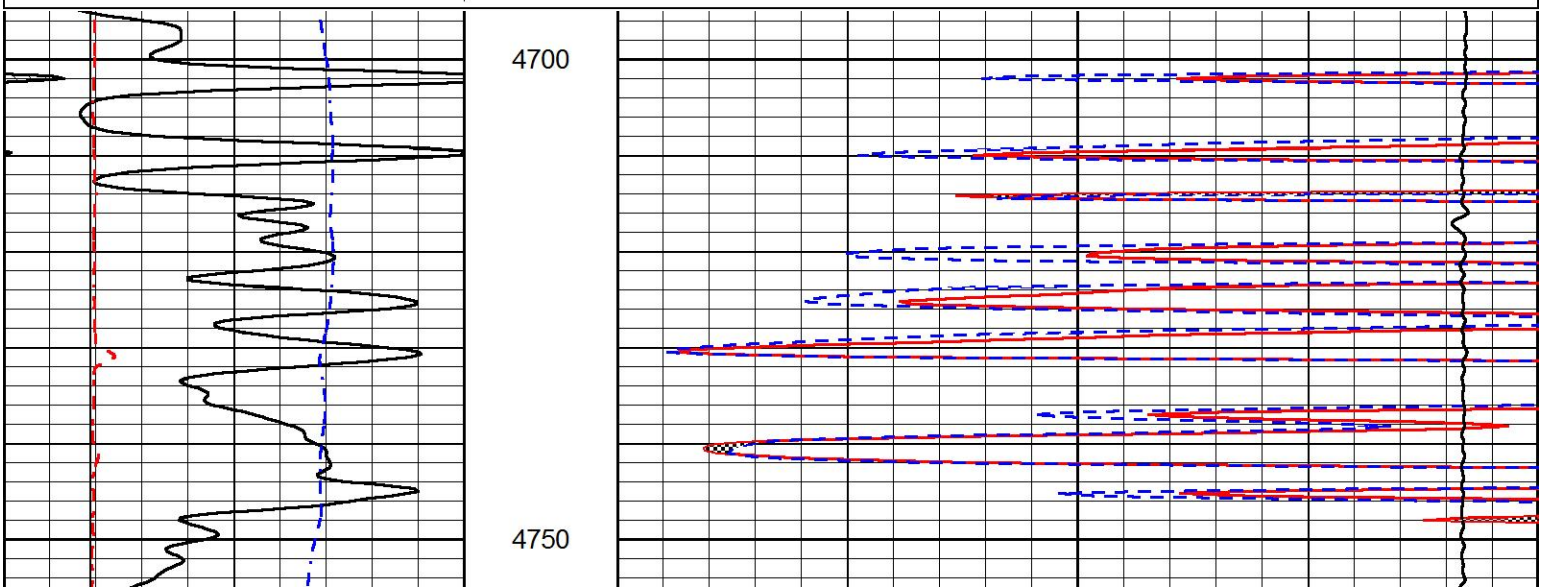
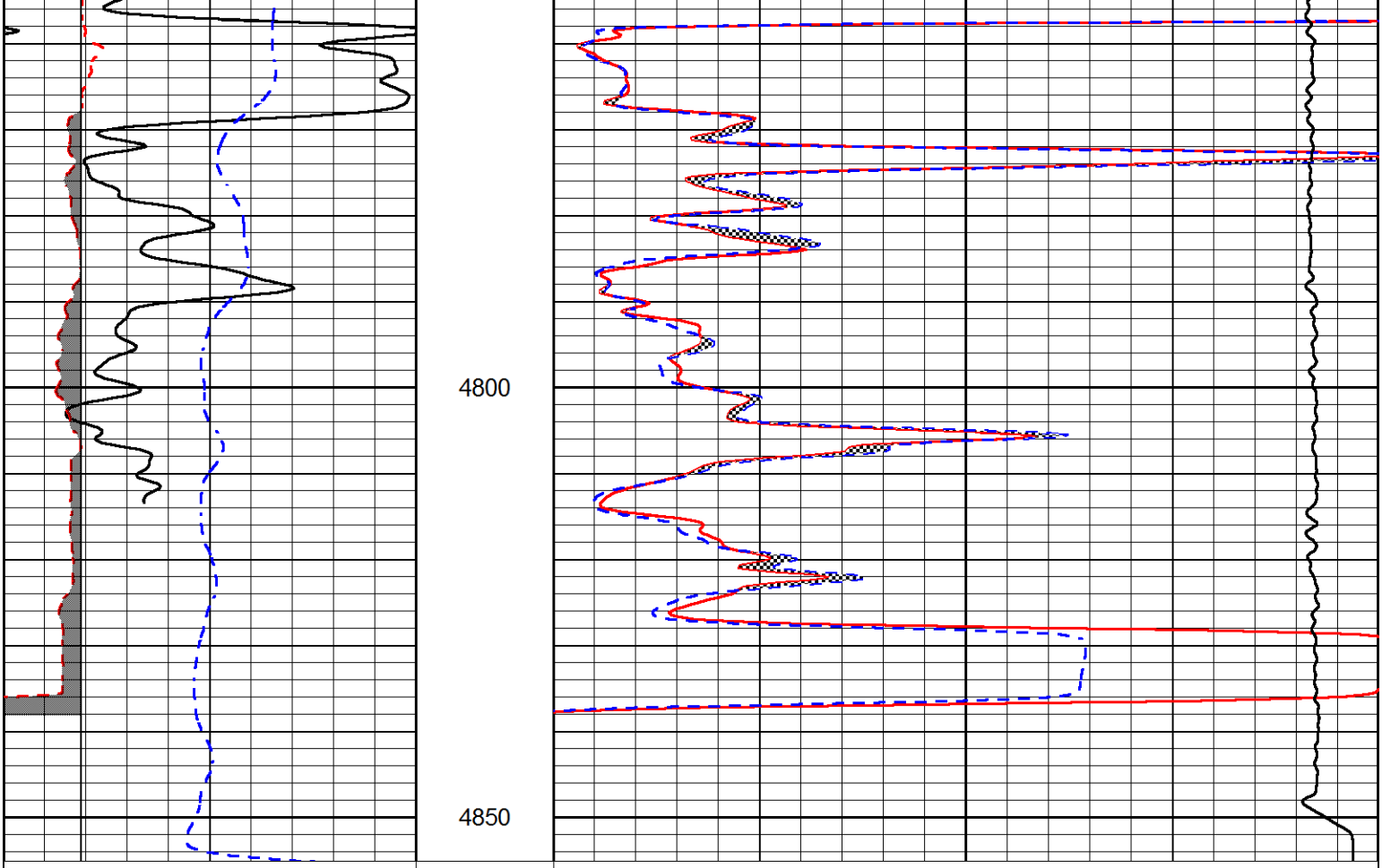
REPEAT SECTION

Database File	castle_doc holiday fischer 1.db
Dataset Pathname	STKML/pass2.1
Presentation Format	_micro
Dataset Creation	Mon Jul 06 20:02:34 2020
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





Calibration Report

Database File	castle_doc holiday fischer 1.db
Dataset Pathname	STKML/pass3.1
Dataset Creation	Mon Jul 06 20:16:40 2020

Dual Induction Calibration Report

Serial-Model:	952-828-PSI HIGH TEMP
Calibration Performed:	Sun Jun 28 08:39:24 2020

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.000	mmho/m	0.455	-30.000
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.325	-28.000

Microlog Calibration Report

Serial-Model:	PSI-01-PSIML
Performed:	Tue Jun 16 01:32:04 2020

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	17000.0000	-1.5000

Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	20000.0000	-1.3000
Caliper	1.0033	1.0841	5.0000	16.5000	in	142.3500	-138.5000

Compensated Density Calibration Report

Serial-Model: 817-947-M&W
Source / Verifier: 16955B / 2ci
Master Calibration Performed: Tue Sep 24 21:18:50 2019

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	6127.15	5922.31	cps
Aluminum	2.680	g/cc	1141.85	3762.09	cps

Spine Angle = 74.89 Density/Spine Ratio = 0.532

	Size		Reading
Small Ring	4.50	in	1.02
Large Ring	14.50	in	1.23

Compensated Neutron Calibration Report

Serial Number: 207-MW
Tool Model: M&W
Calibration Performed: WED FEB 13 10:30:30 2019

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: 233-M&W
Tool Model: M&W
Calibration Performed: Fri Feb 07 01:42:40 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5500 GAPI/cps

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Company	CASTLE RESOURCES, INC.
Well	DOC HOLIDAY/FISCHER #1
Field	UNNAMED
County	FORD
State	KANSAS