



MIDWEST WIRELINE

# MICRORESISTIVITY LOG

Company Pioneer Oil Company, Inc.  
 Well Schamberger Sheep Head Unit #1-7  
 Field  
 County Sheridan  
 State Kansas

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 Field  
 County Sheridan State Kansas

Location: API #: 15-179-21478-00-00  
 NE SE SE NE  
 2207 FNL & 109 FEL  
 SEC 7 TWP 9S RGE 28W  
 Permanent Datum Ground Level Elevation 2800  
 Log Measured From Kelly Bushing  
 Drilling Measured From Kelly Bushing  
 Other Services  
 CNL/CDL  
 DIL/BHCS  
 Elevation  
 K.B. 2808  
 D.F.  
 G.L. 2800

Date	4/9/2022
Run Number	Two
Depth Driller	4245
Depth Logger	4249
Bottom Logged Interval	4248
Top Log Interval	3200
Casing Driller	8.625 @ 271
Casing Logger	266
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	3400
Density / Viscosity	9.5 54
pH / Fluid Loss	10.5 8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.85 @ 68
Rmt @ Meas. Temp	0.64 @ 68
Rmc @ Meas. Temp	1.15 @ 68
Source of Rmf / Rmc	CHARTS
Rm @ BHT	0.49 @ 118
Operating Rig Time	4.5 Hours
Max Rec. Temp. F	118
Equipment Number	P-24
Location	Hays
Recorded By	T. Martin
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.

Hoxie, KS, 3.5 S to Rd 45 S,  
 2 W to Rd 20 W, 1 S, W 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		This Log Record Was Witnessed By	
Engineer: T. Martin	Operator:	Primary Witness: Jim Musgrove	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Operator	Offset (ft)	Substrate	Description	Length (ft)	C.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	25.42 25.42 25.42		ML-GO (0002G)	5.00	3.50	100.00
			CENT-PENGO (4-PENGO)	4.25	3.00	70.00
WVF4 WVF1	12.50 12.50		SLT-PENGO (603)	15.92	3.50	300.00
WVF3 WVF2	10.50 10.50					
			CENT-PENGO (3-PENGO)	4.25	3.00	70.00

Dataset: pioneer\_schamberger sheep head unit #1-7.db: field/well/Sommel/pass3  
 Total length: 29.42 ft  
 Total weight: 540.00 lb  
 O.D.: 3.50 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\pioneer\_schamberger sheep head unit #1-7.db  
 Dataset field/well/Stack/pass3.1/\_vars\_

## Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	118	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	-240	50	Off	4249

## 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



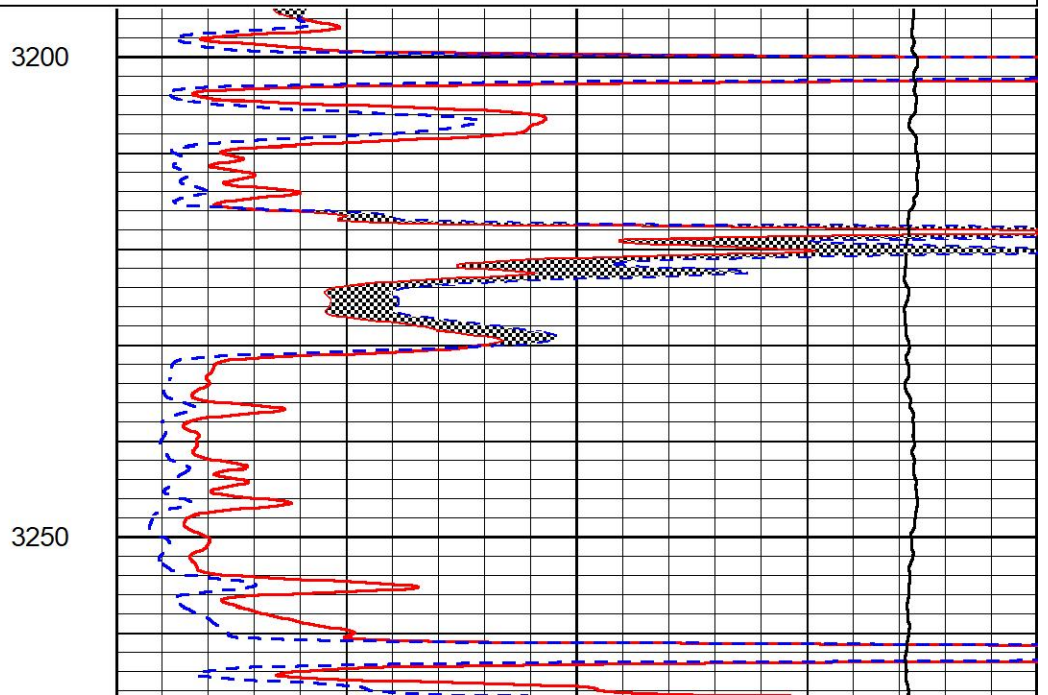
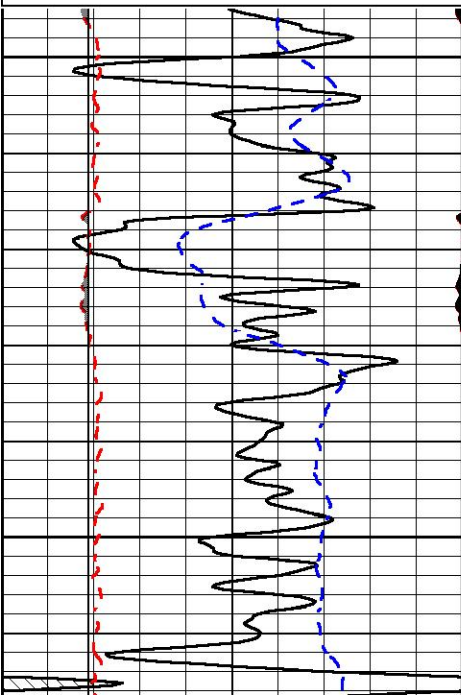
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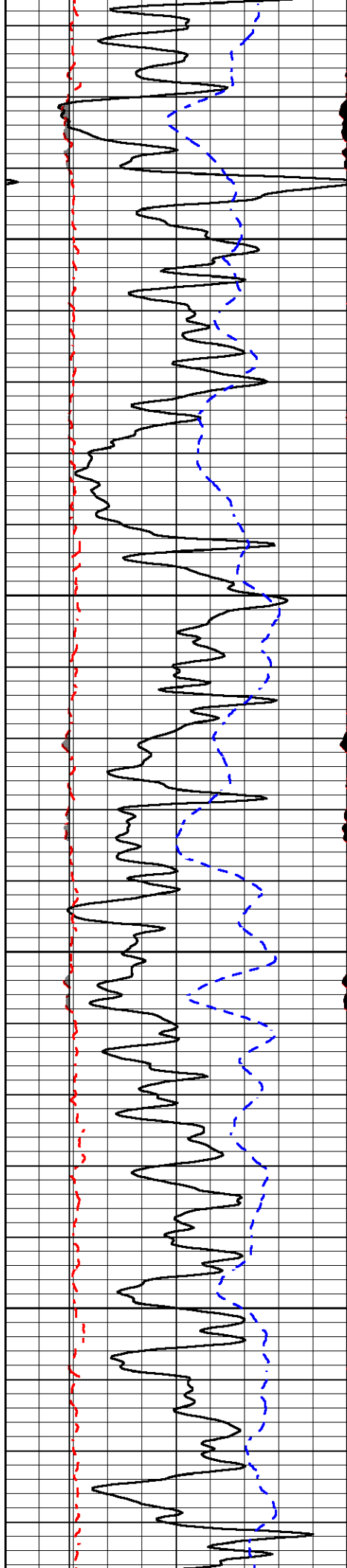
### MAIN PASS

Database File pioneer\_schamberger sheep head unit #1-7.db  
 Dataset Pathname Stack/pass3.1  
 Presentation Format \_micro  
 Dataset Creation Sat Apr 09 02:58:47 2022  
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (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



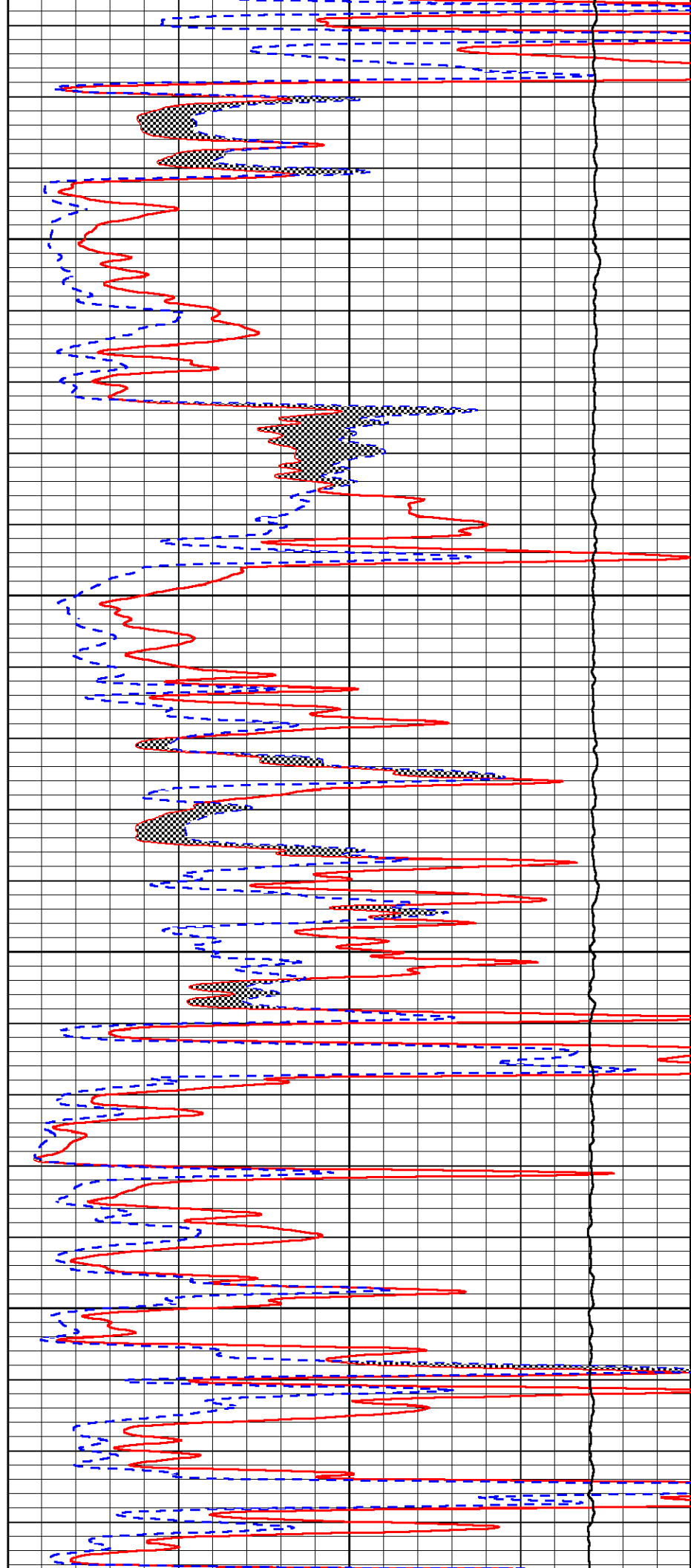


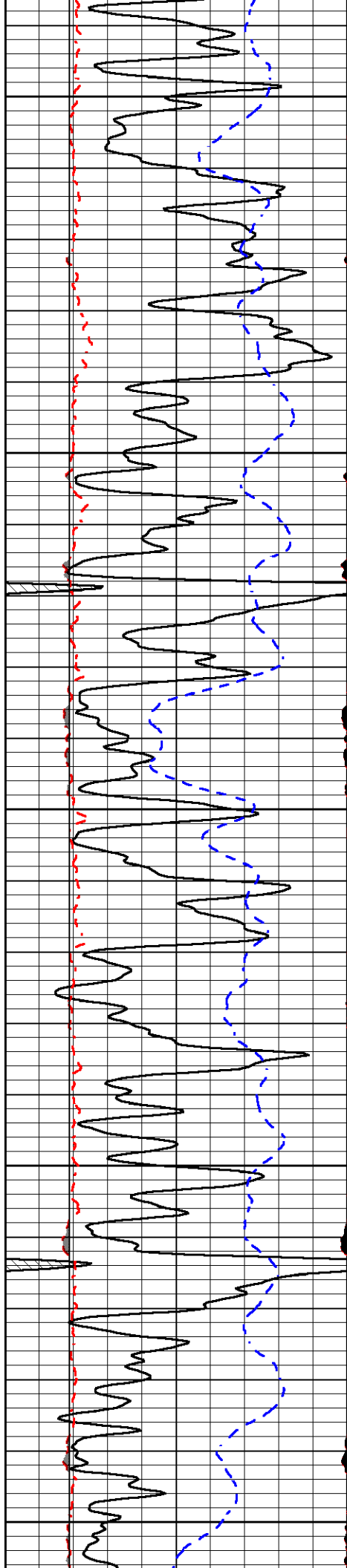
3300

3350

3400

3450





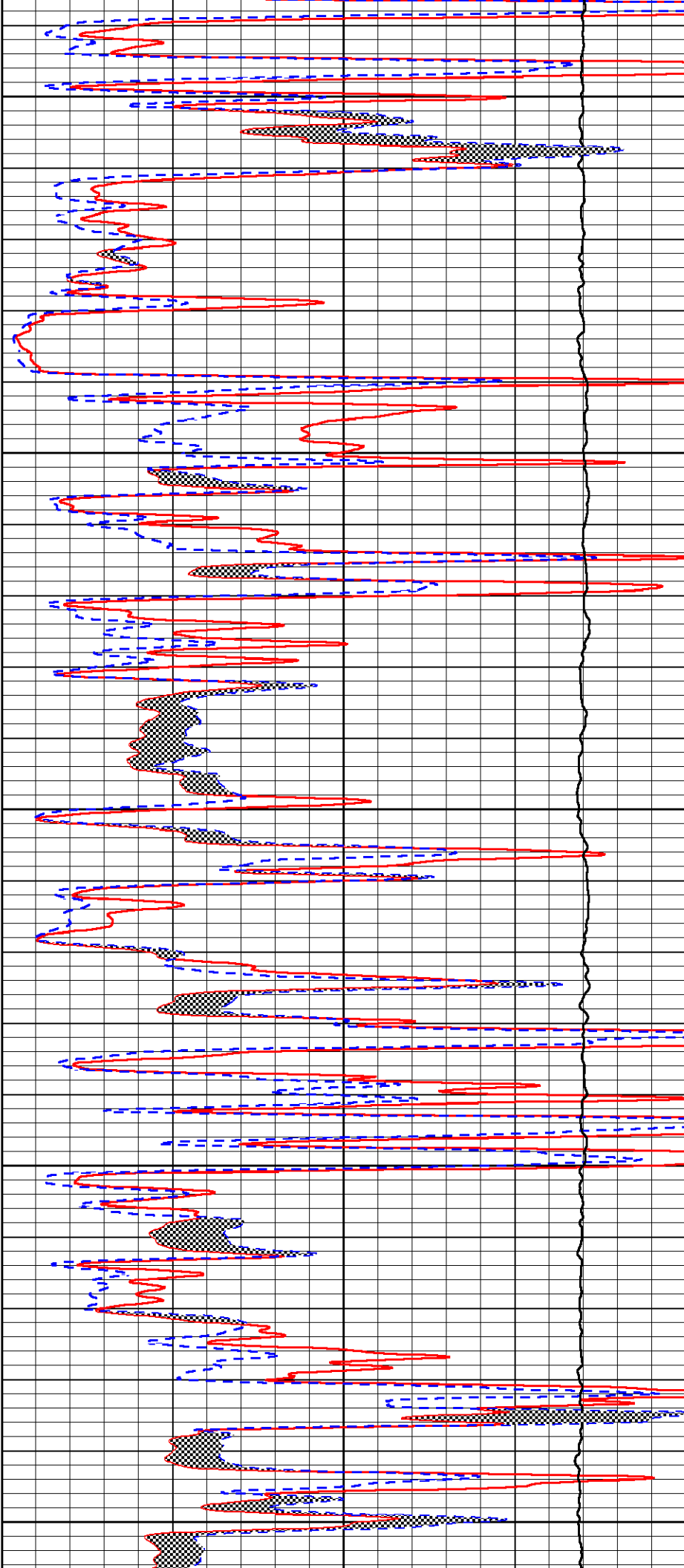
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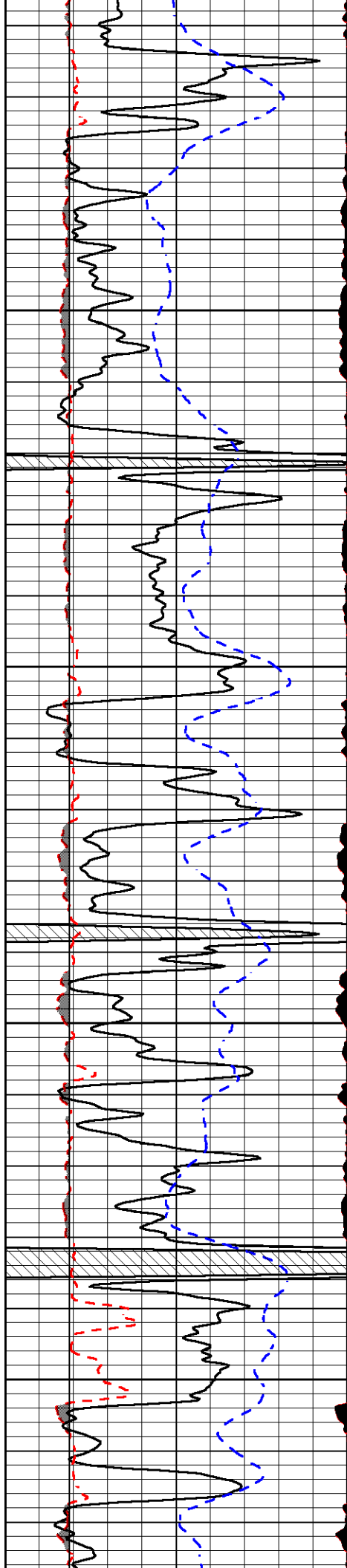
3550

3600

3650

3700



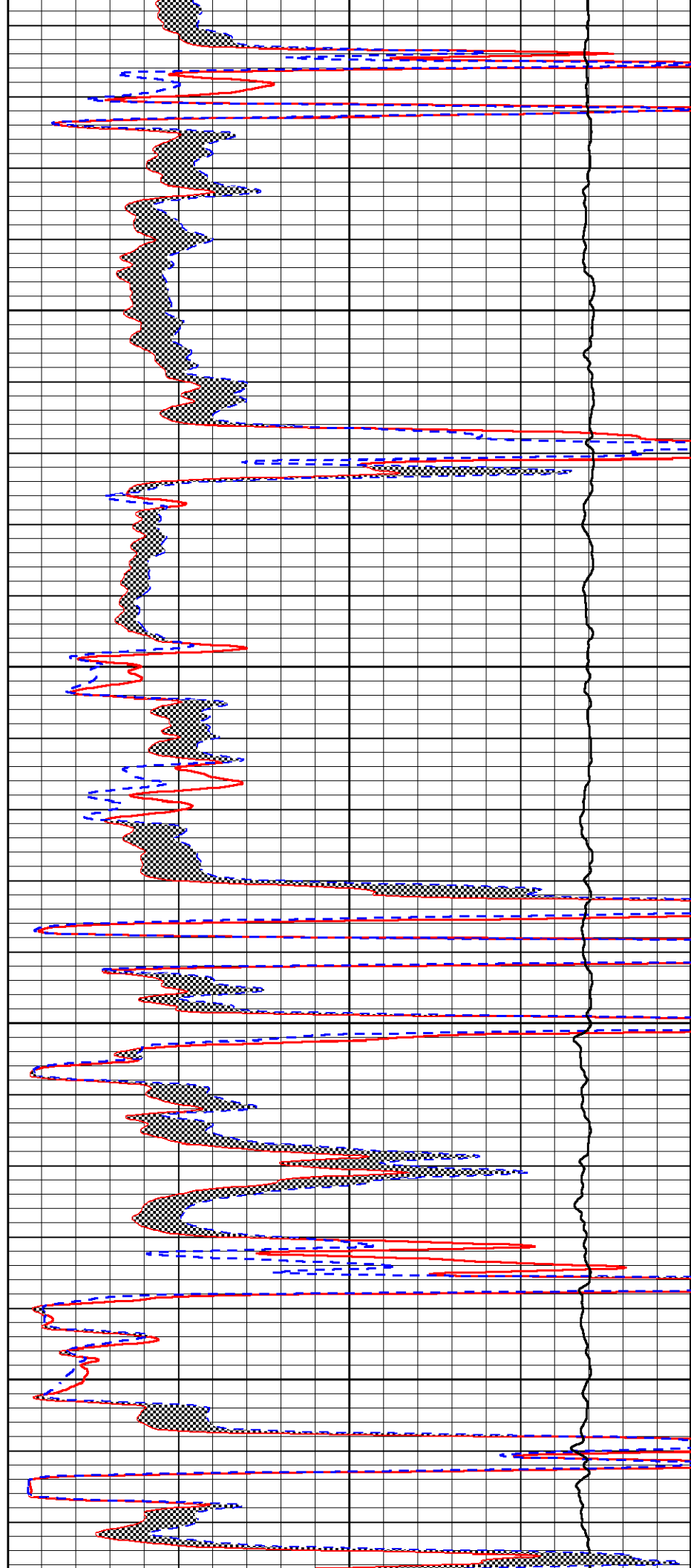


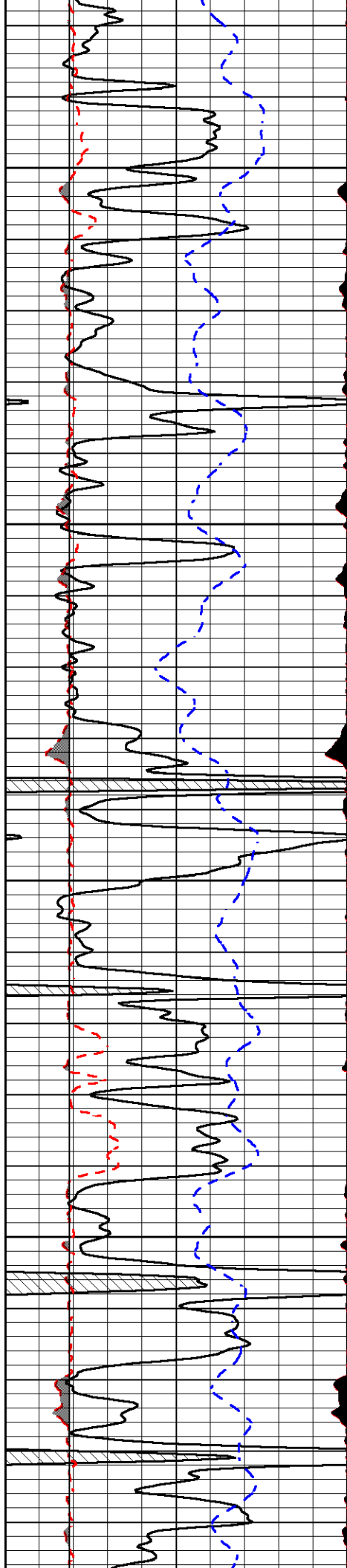
3750

3800

3850

3900



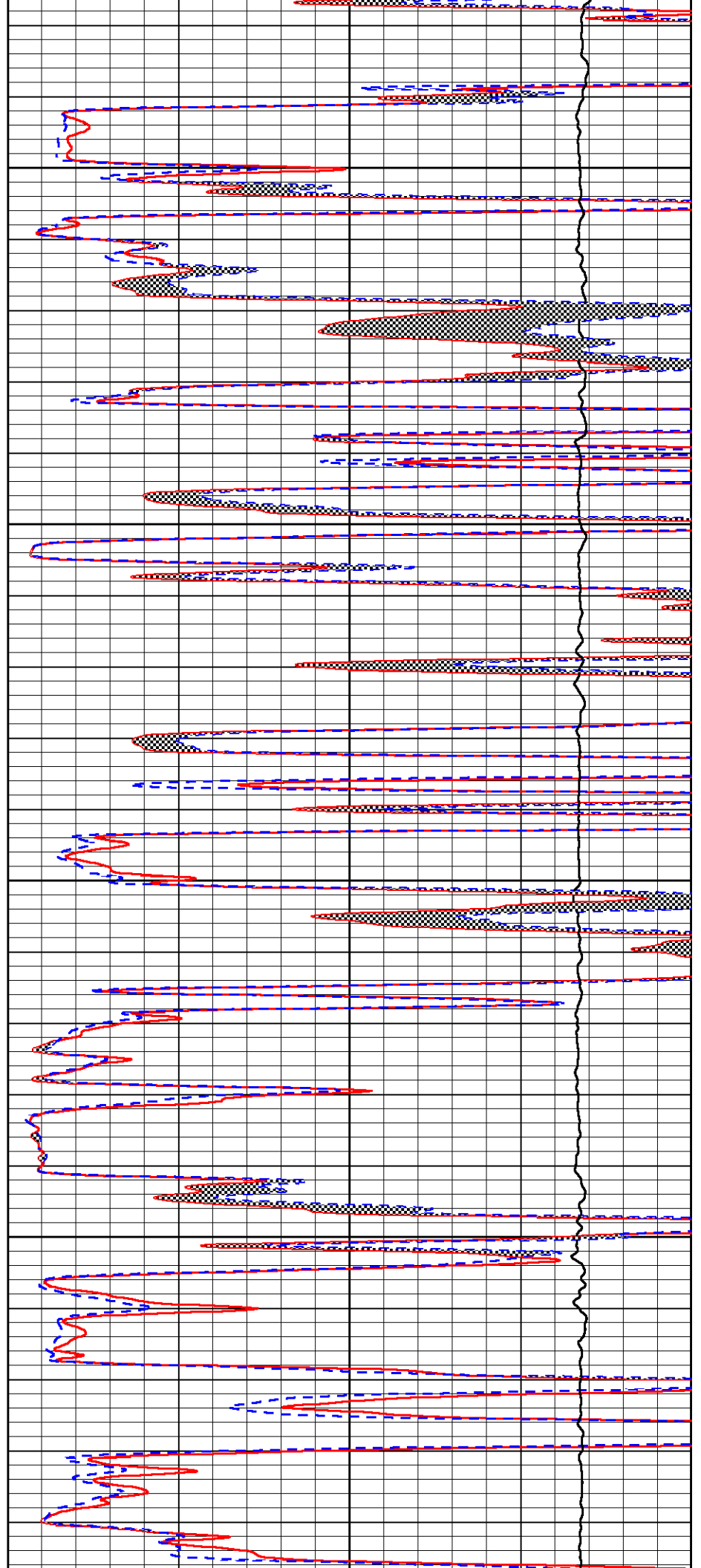


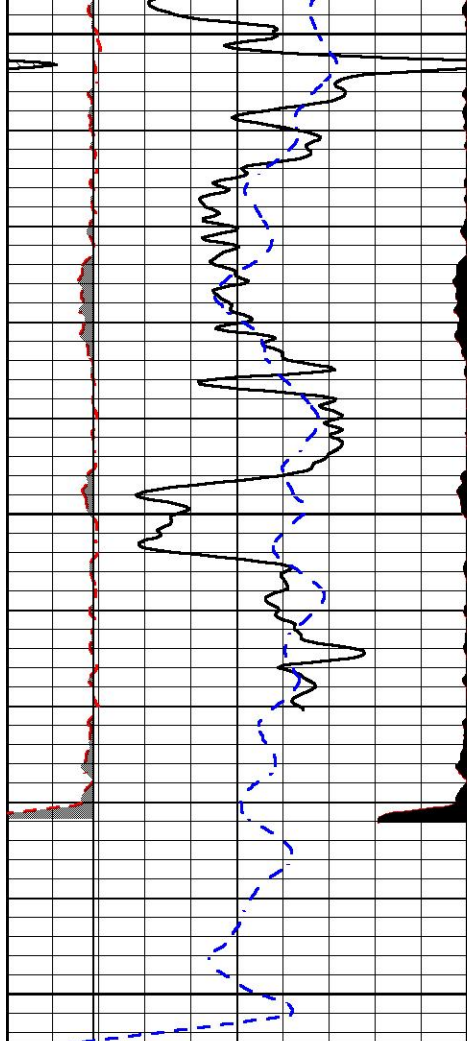
3950

4000

4050

4100



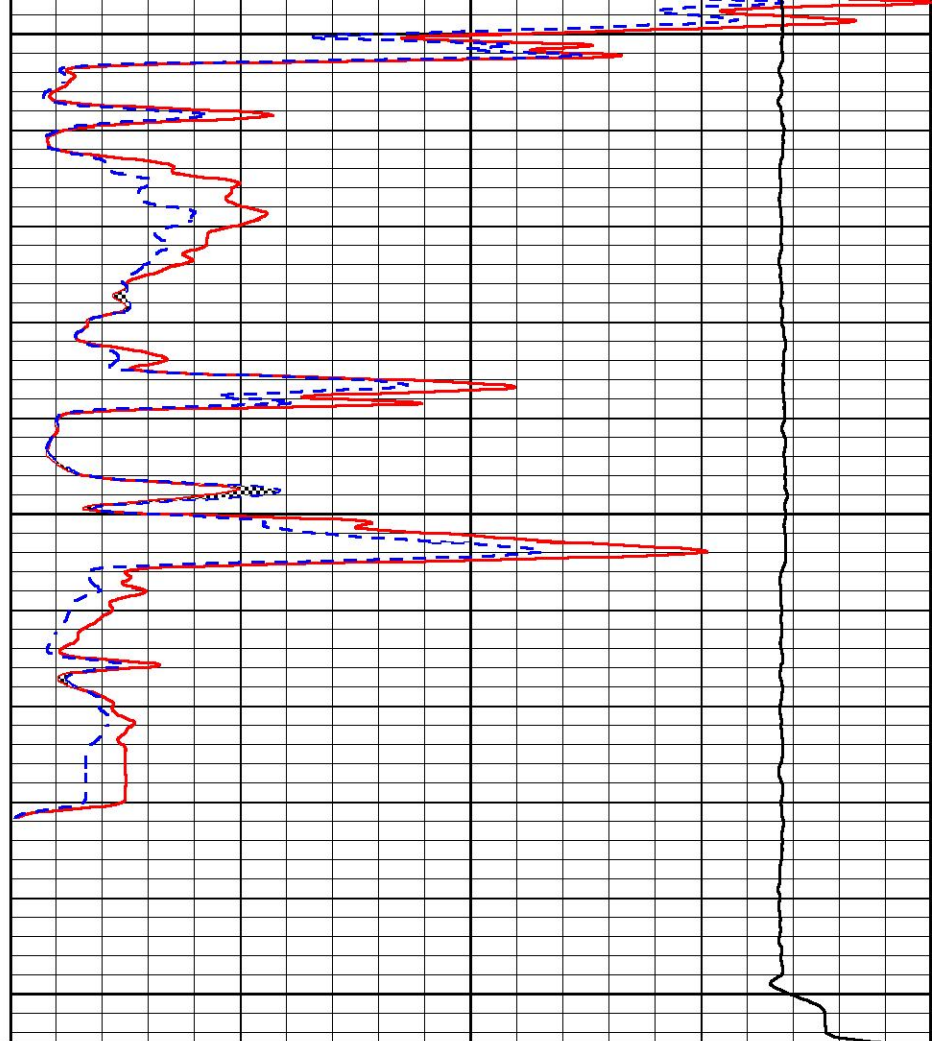


4150

4200

4250

0	Gamma Ray (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



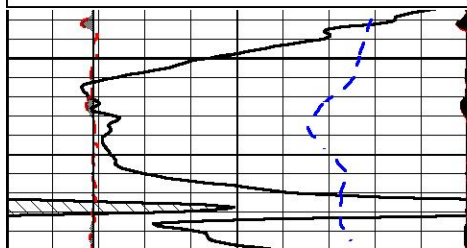
## REPEAT SECTION

### REPEAT PASS

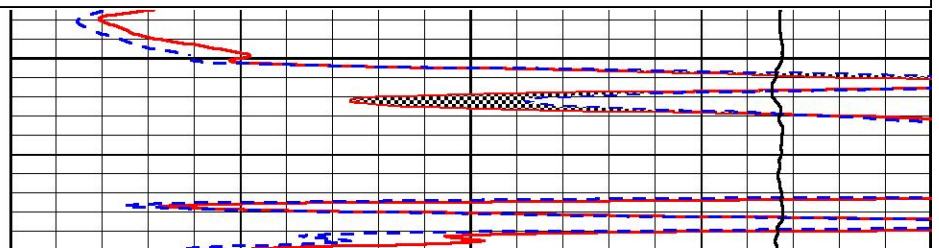
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 Dataset Pathname Stack/pass2.1  
 Presentation Format \_micro  
 Dataset Creation Sat Apr 09 02:16:18 2022  
 Charted by Depth in Feet scaled 1:240

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

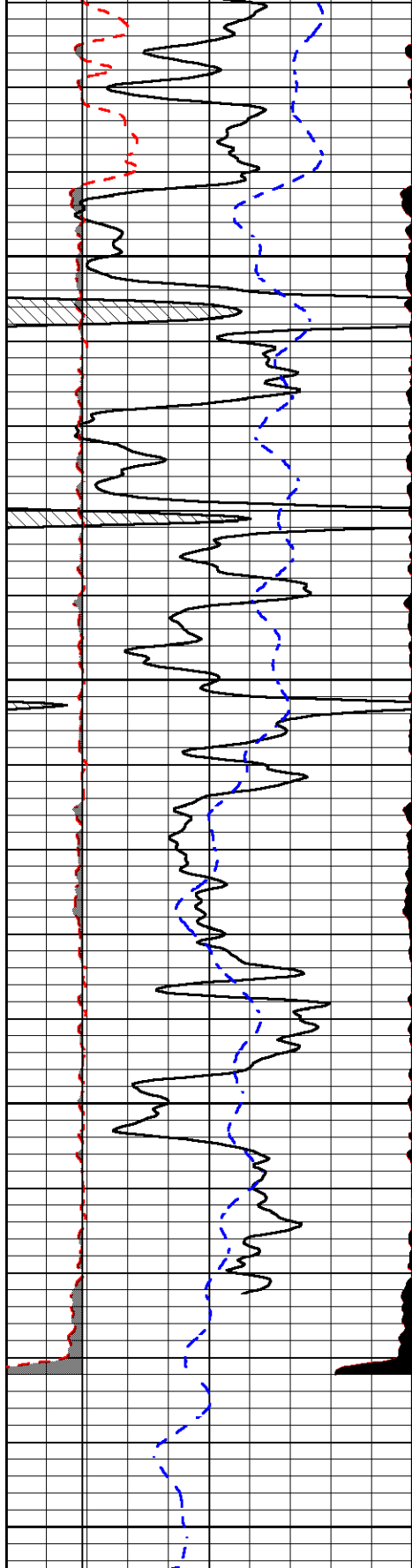
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



4050







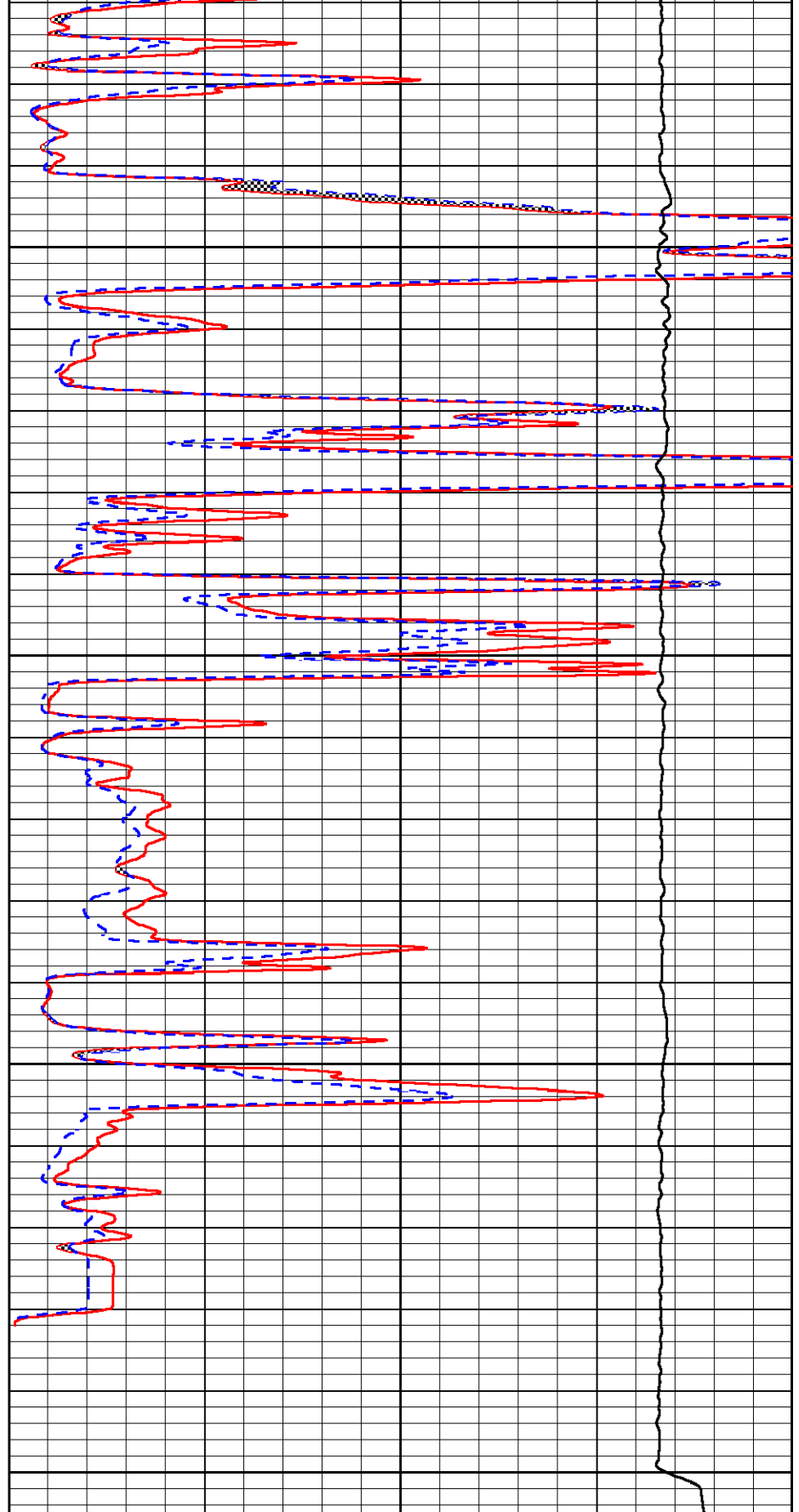
4100

4150

4200

4250

0	Gamma Ray (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



Company Pioneer Oil Company, Inc.



Well	Schamberger Sheep Head Unit #1-7
Field	
County	Sheridan
State	Kansas