



PIONEER

Pioneer Energy Services

RADIATION GUARD LOG

Company BEREXCO, LLC		Company BEREXCO, LLC	
Well PETRACEK #7		Well PETRACEK #7	
Field PETRACEK		Field PETRACEK	
County DECATUR		County DECATUR	
State KANSAS		State KANSAS	
Location: API #: 15-039-21257-00-00		Other Services	
1330' FNL & 2530' FWL		CNL/CDL DIL/MEL	
SEC 9 TWP 4S RGE 27W			
Permanent Datum	GROUND LEVEL	Elevation	2660'
Log Measured From	KELLY BUSHING	K.B.	2668'
Drilling Measured From	KELLY BUSHING	D.F.	N/A
		G.L.	2660'
Date	3/16/2019		
Run Number	ONE		
Depth Driller	3860'		
Depth Logger	3860'		
Bottom Logged Interval	3859'		
Top Log Interval	300'		
Casing Driller	8.625" @ 325'		
Casing Logger	327'		
Bit Size	7.875"		
Type Fluid in Hole	CHEMICAL		
Salinity, ppm CL	1800		
Density / Viscosity	9.1 75		
pH / Fluid Loss	10.5 6.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.80 @ 60		
Rmt @ Meas. Temp	0.60 @ 60		
Rmc @ Meas. Temp	1.08 @ 60		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.42 @ 115		
Operating Rig Time	3 HOURS		
Max Rec. Temp. F	115		
Equipment Number	P-24		
Location	HAYS		
Recorded By	D. SCHMIDT		
Witnessed By	BRYAN BYNOG		

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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.

JENNINGS,
WEST TO 1330 RD, 2 NORTH, 3/4 WEST, 1 NORTH, 3/4 WEST,
SOUTH INTO

Log Measured From: KELLY BUSHING 8 Ft. Above Permanent Datum

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

Your Pioneer Energy Services Crew

Engineer: D. SCHMIDT
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: BRYAN BYNOG
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 115	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV 285	degF 40	Off	ft 3860

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58			GR-M&W (89)	3.00	3.50	50.00
CNLSC	37.48			CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73						
LSD	28.43			CDL-M&W (96-916)	8.50	4.00	250.00
	28.42						
	27.93						
MCAL	19.83			ML-PSIML (PSI-01)	7.58	4.00	65.00
	19.83			GO Micro log tools converted to Simplec electronics			
	19.83						
RLL3F	15.80						
RLL3	15.80						
CILD	8.00			DIL-PSI HIGH TEMP (967 (HT))	18.50	3.50	220.00

CILM

4.70

SP

0.20

Dataset: berexco_petracek 7.db: field/well/STKML/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in



MAIN PASS

Database File berexco_petracek 7.db
Dataset Pathname STKML/pass4.1
Presentation Format dil2in
Dataset Creation Sat Mar 16 16:54:20 2019
Charted by Depth in Feet scaled 1:600

GAMMA RAY

0 (GAPI) 150

1000 CONDUCTIVITY (mmho/m) 0

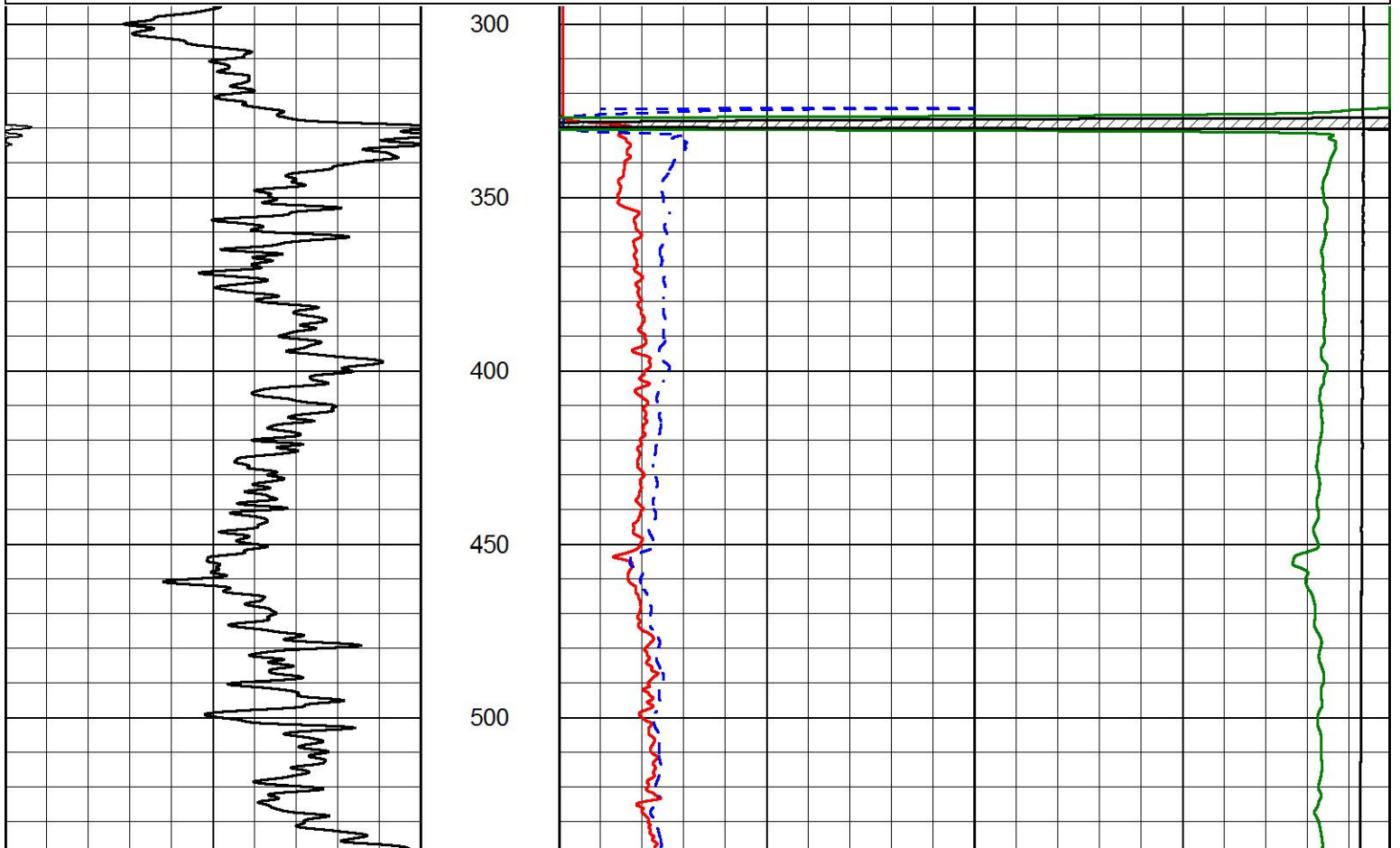
15000 Line Tension (lb) 0

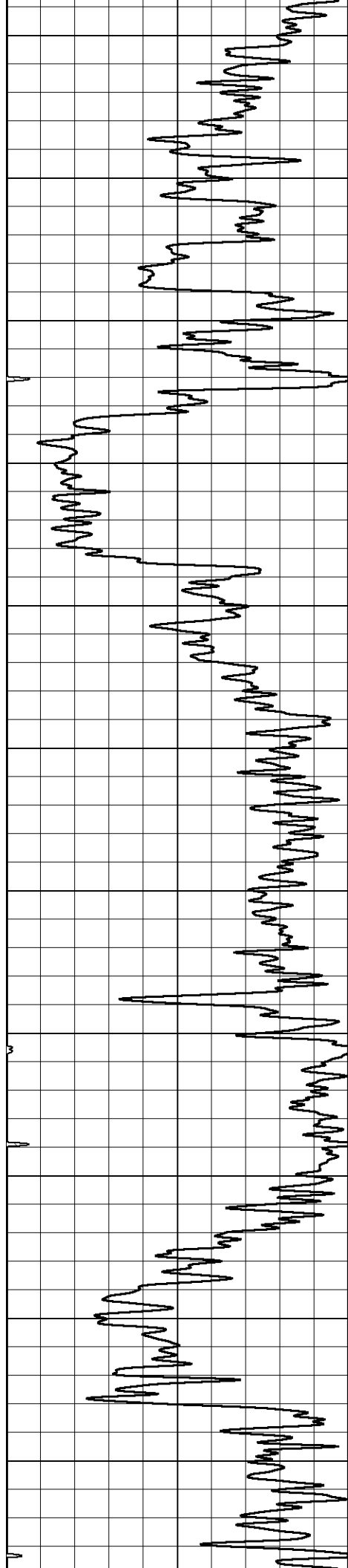
0 RLL3 (Ohm-m) 50

0 DEEP RESISTIVITY (Ohm-m) 50

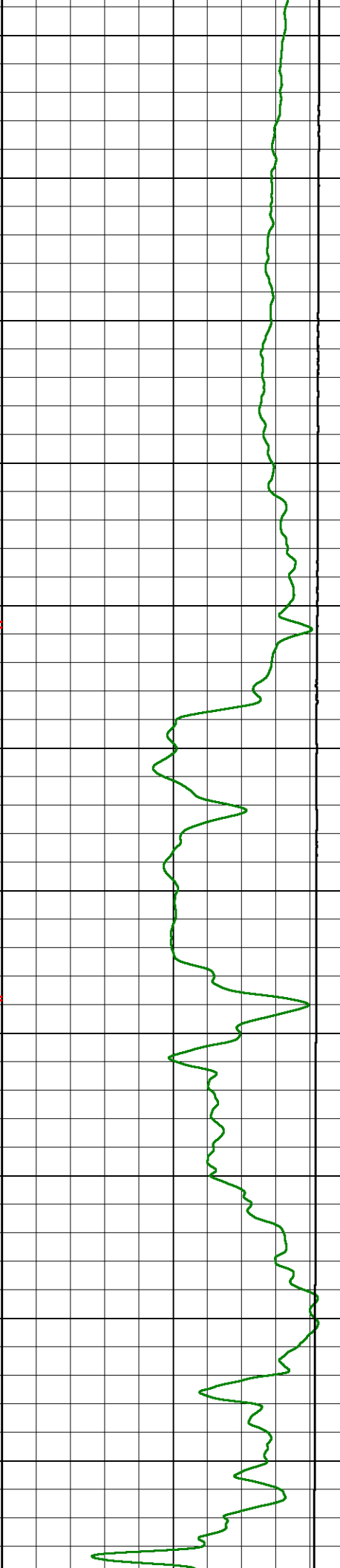
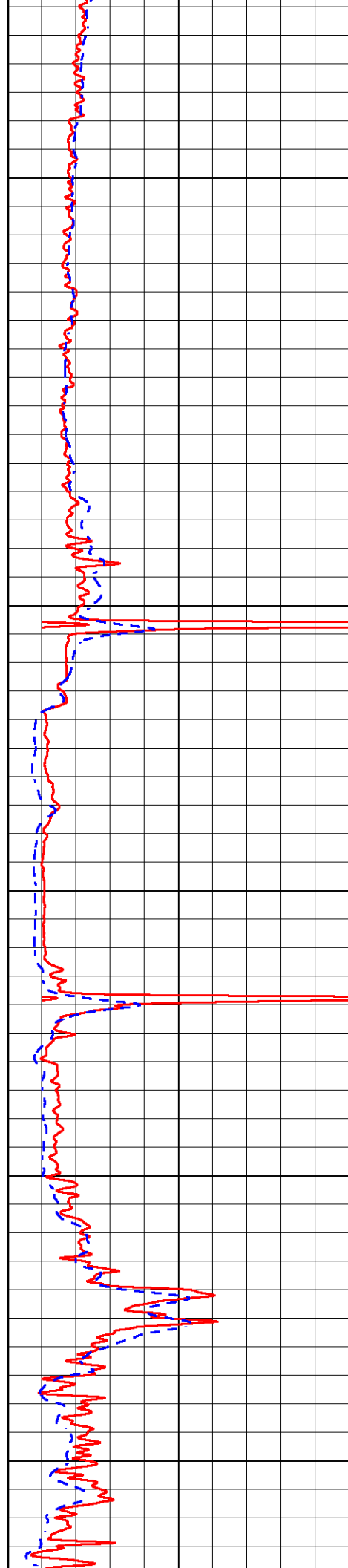
50 RLL3 (Ohm-m) 500

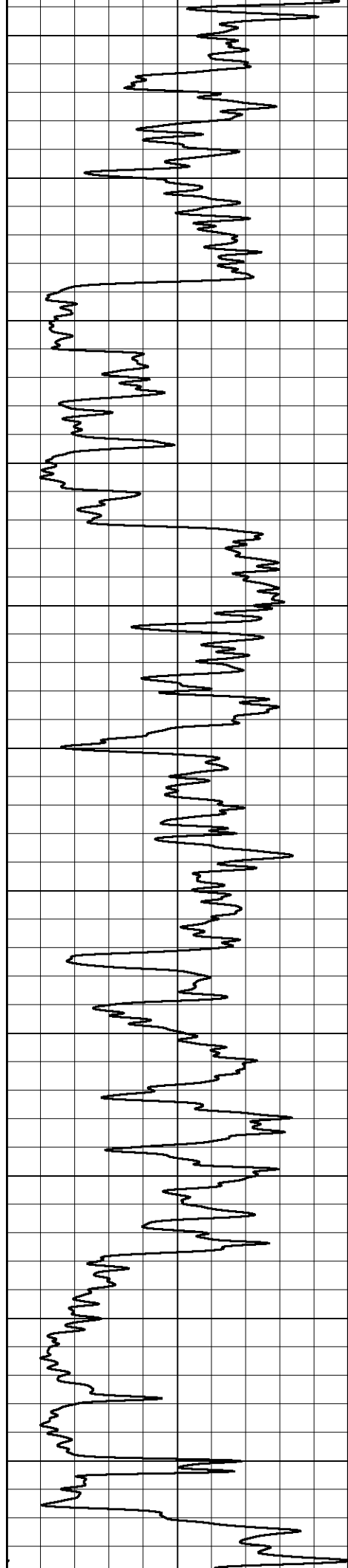
50 Deep Resistivity (Ohm-m) 500



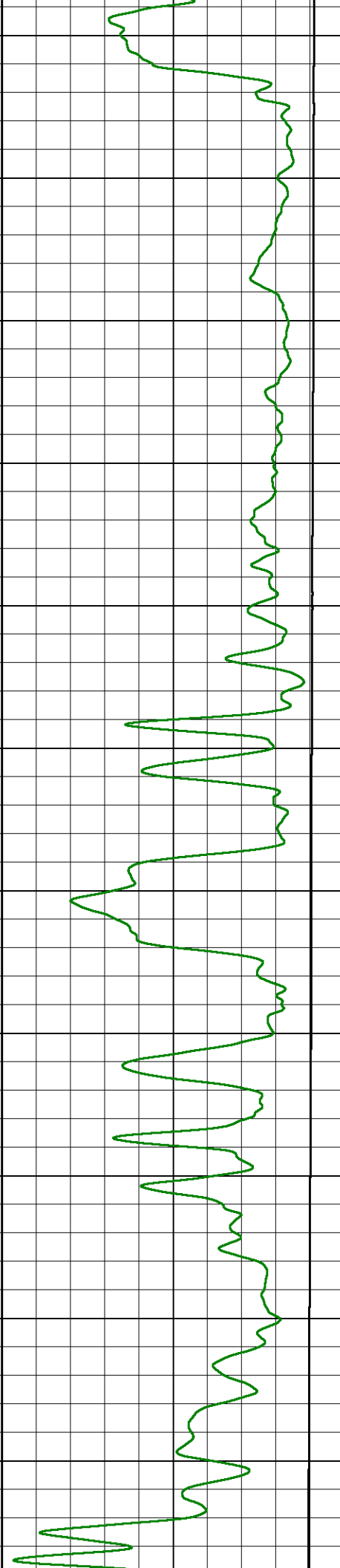
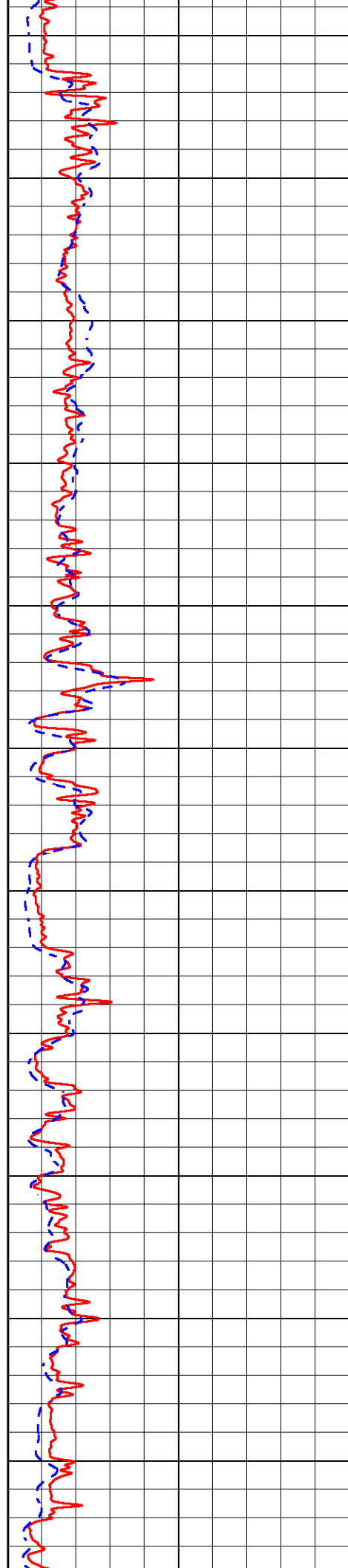


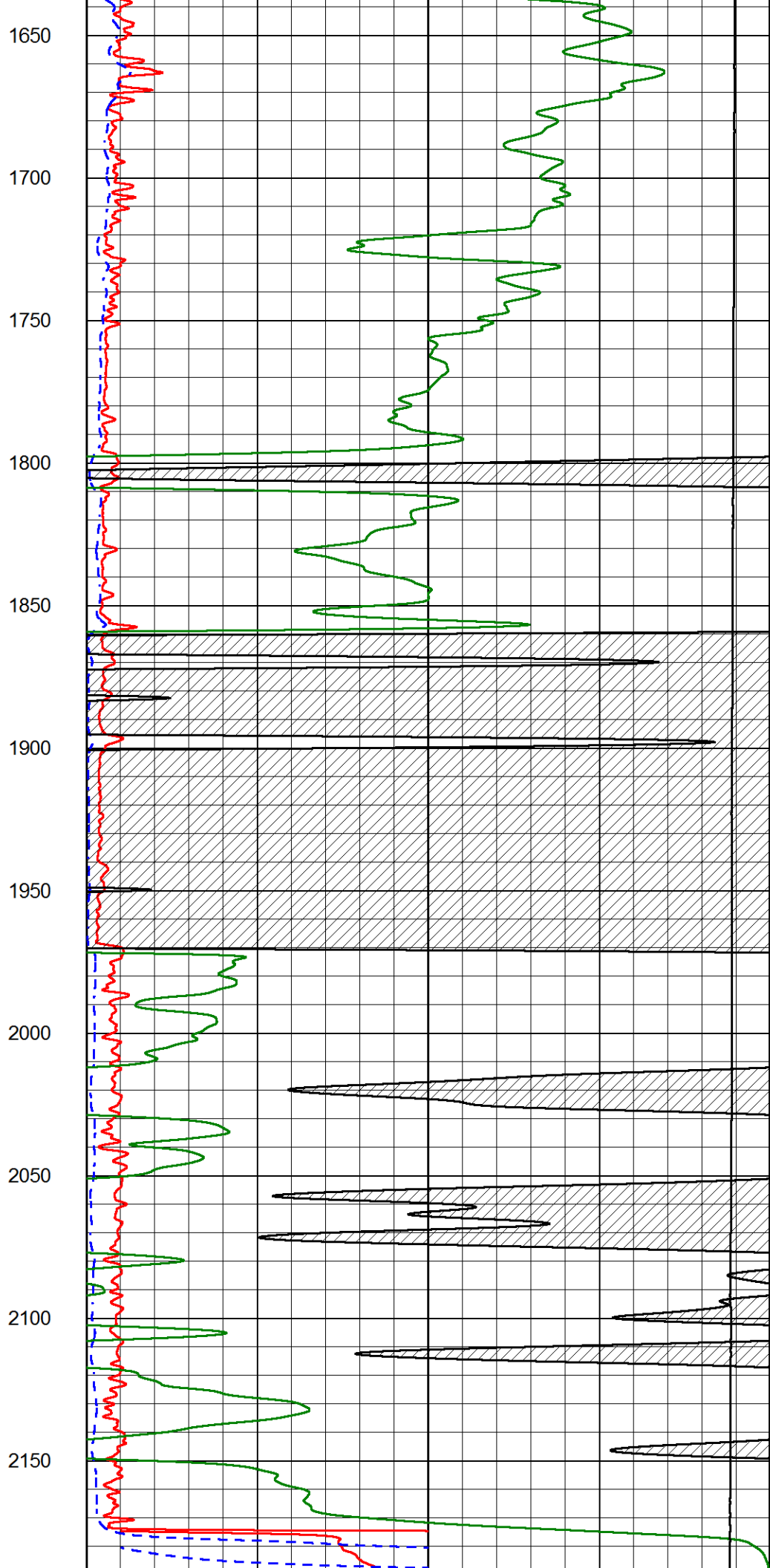
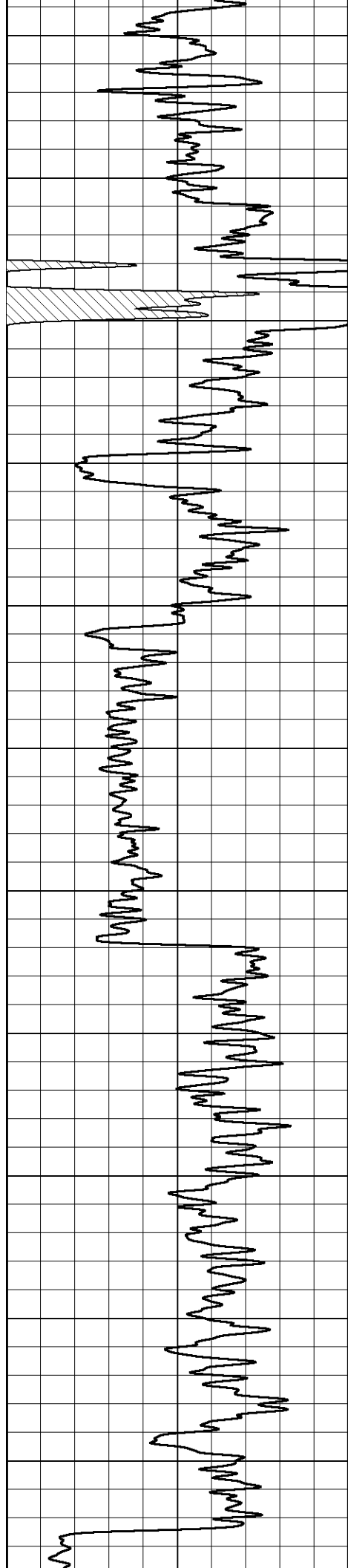
550
600
650
700
750
800
850
900
950
1000
1050

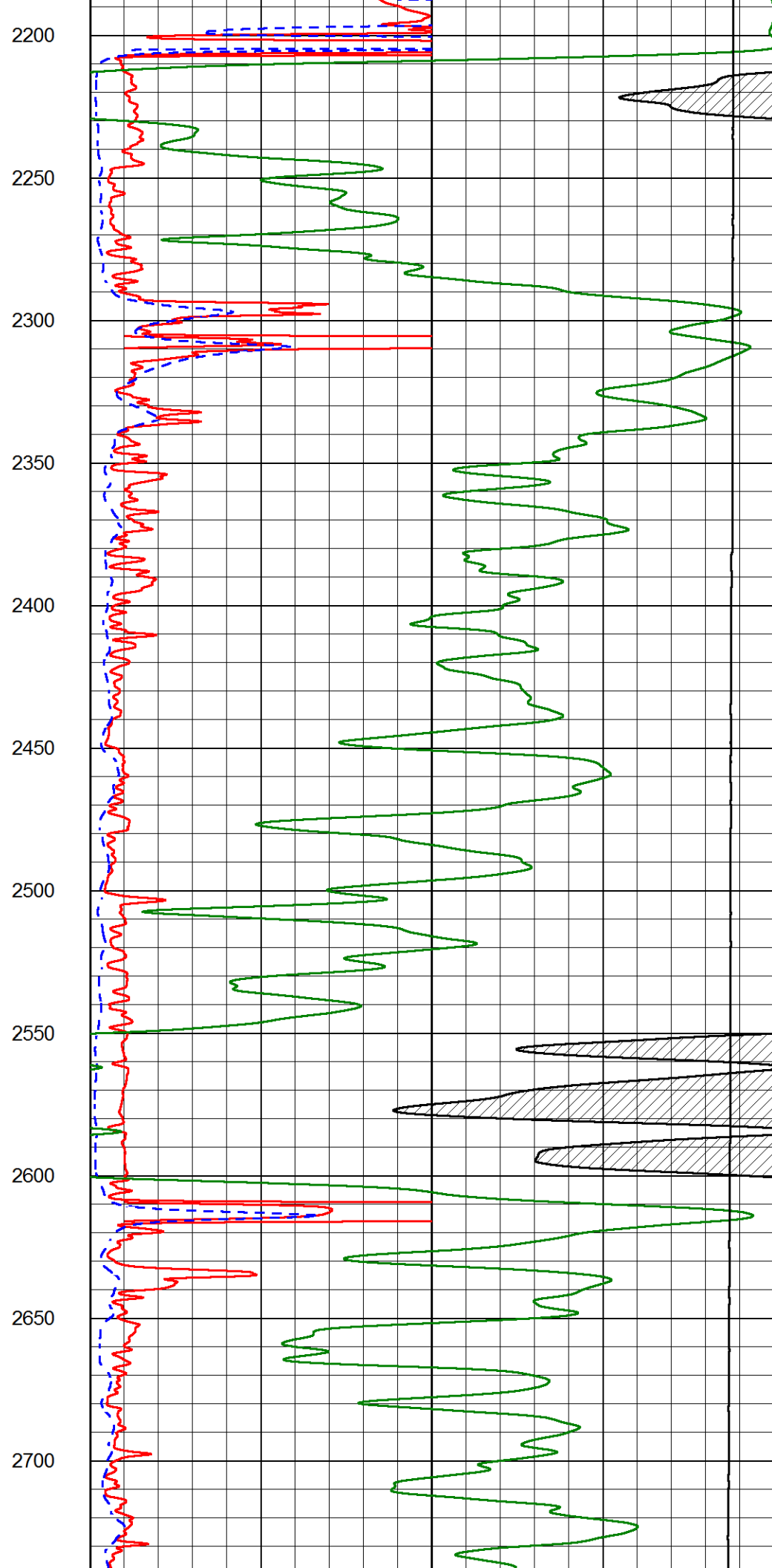
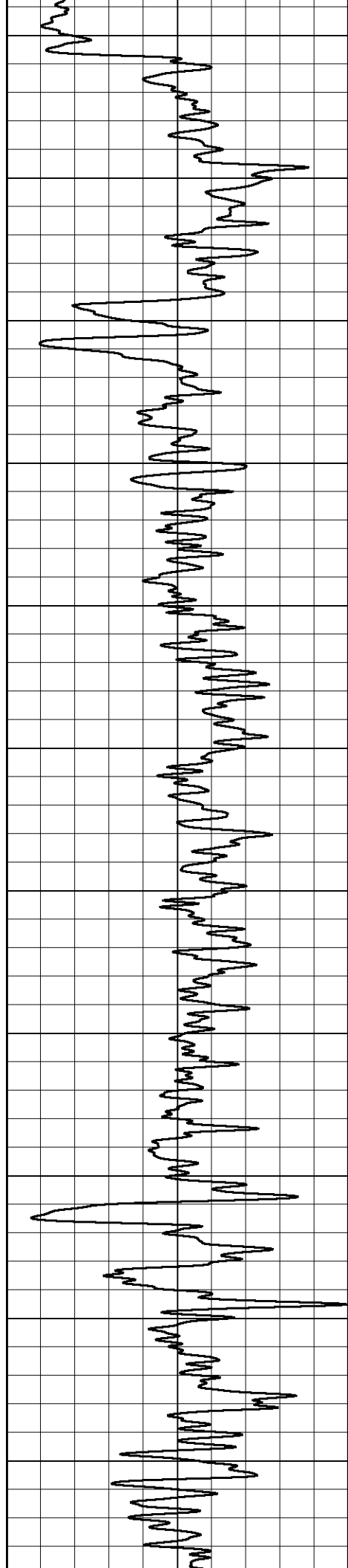


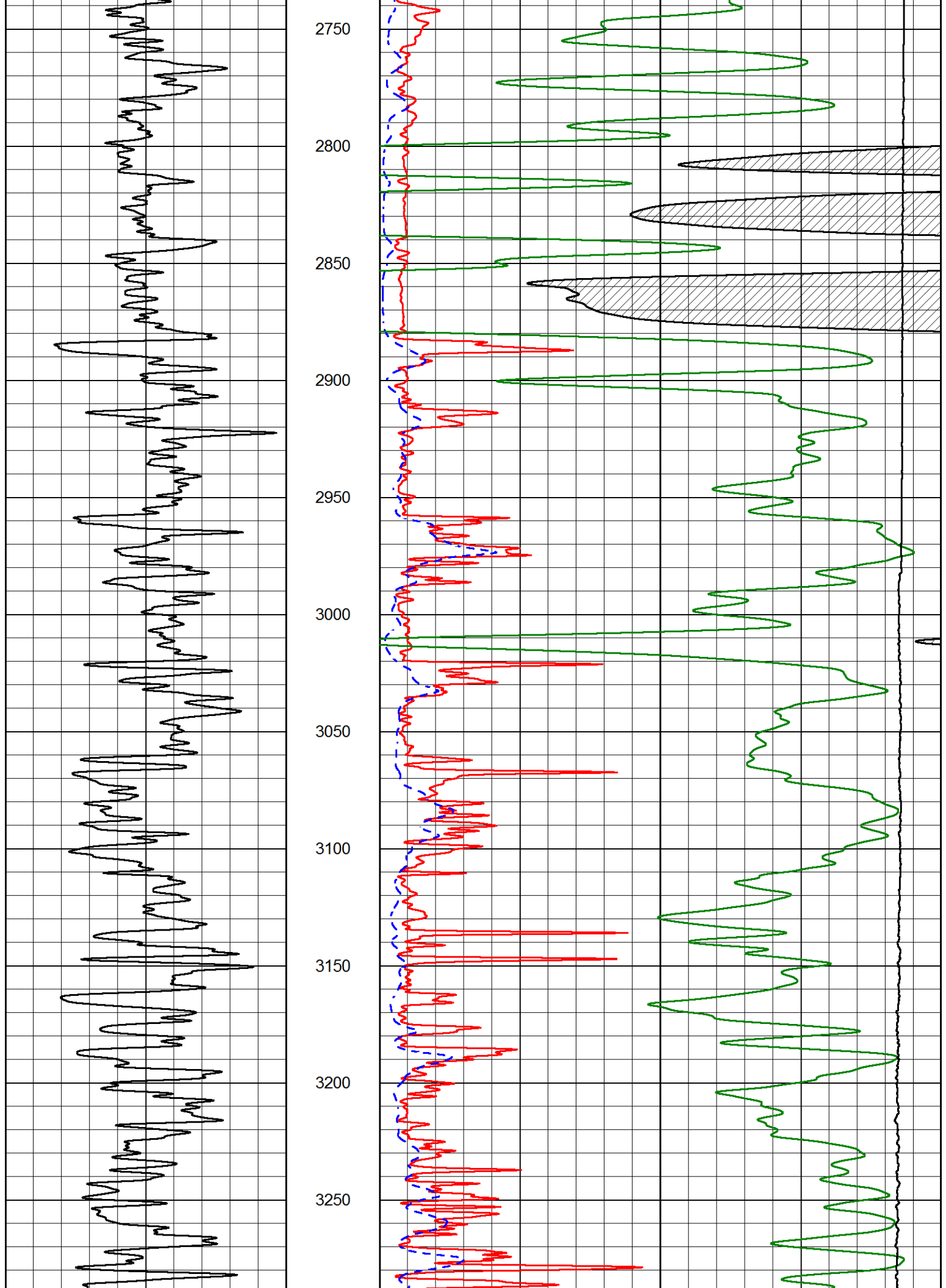


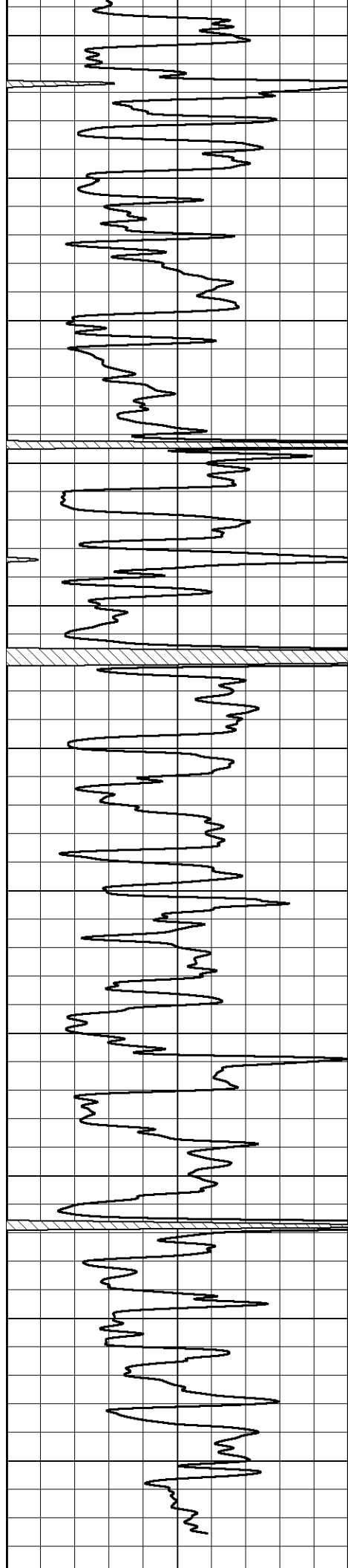
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550
1600











3300

3350

3400

3450

3500

3550

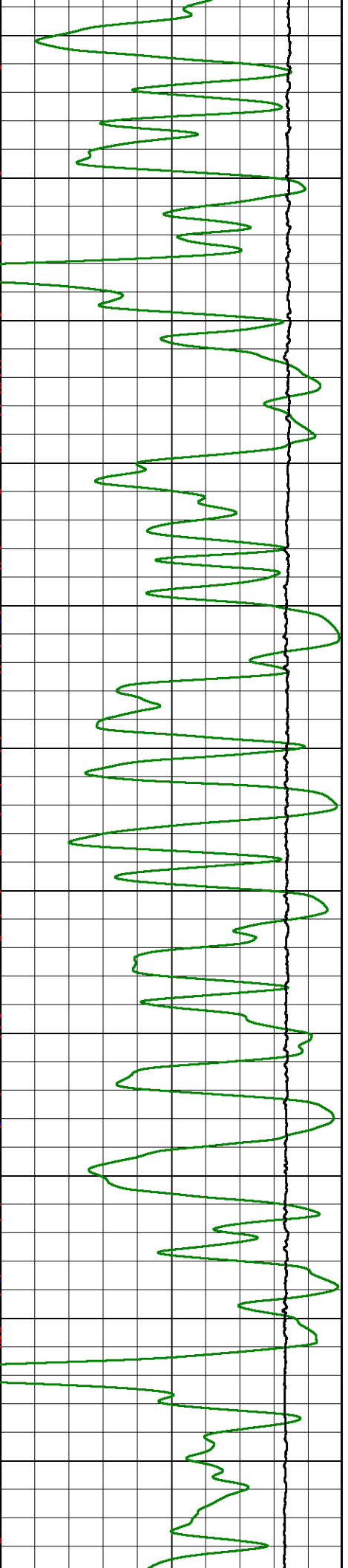
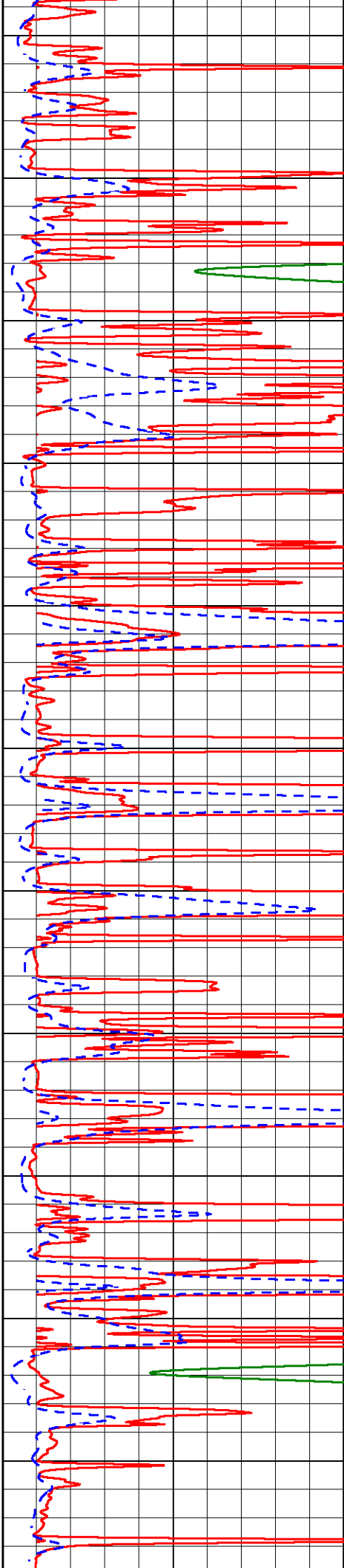
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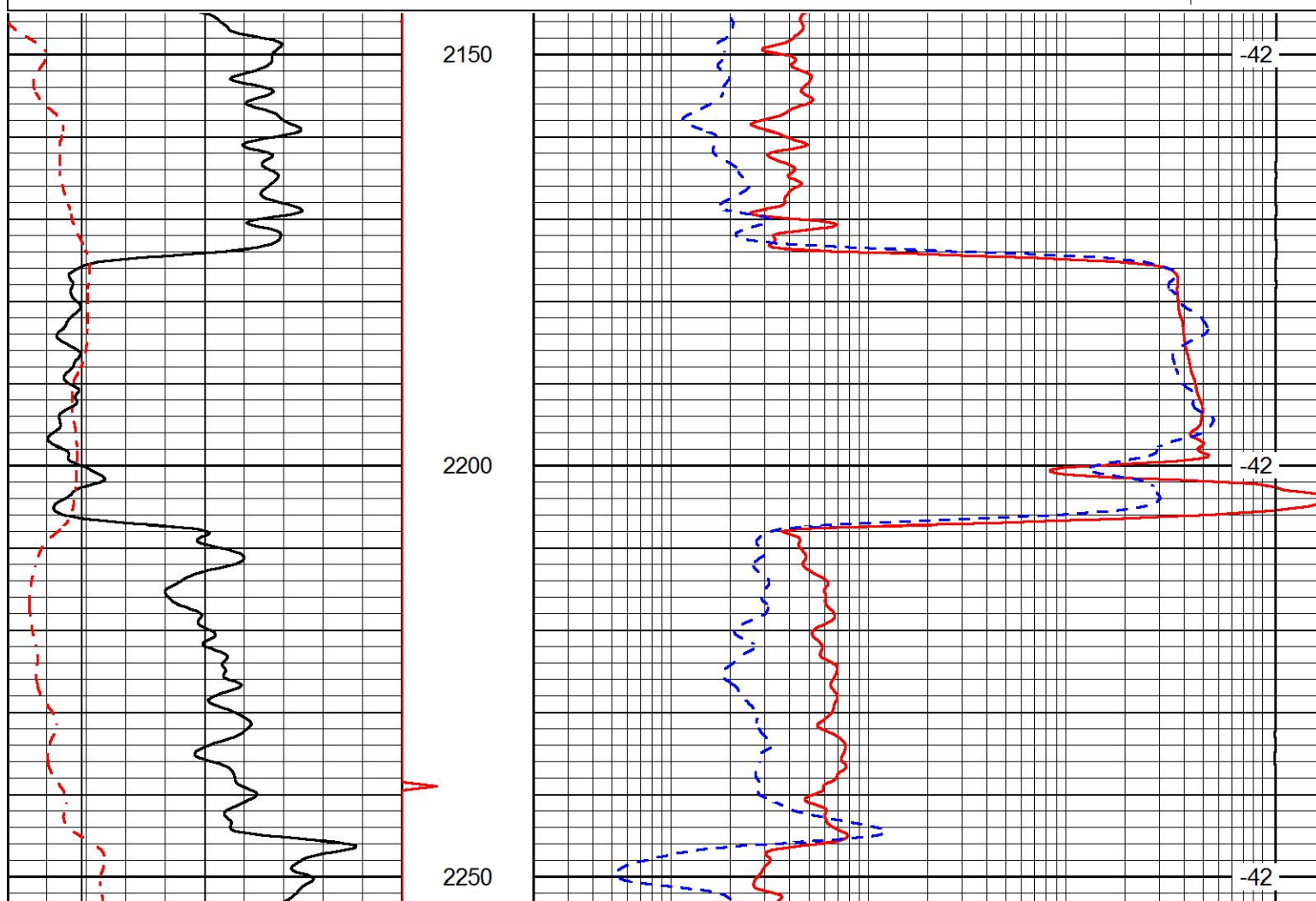
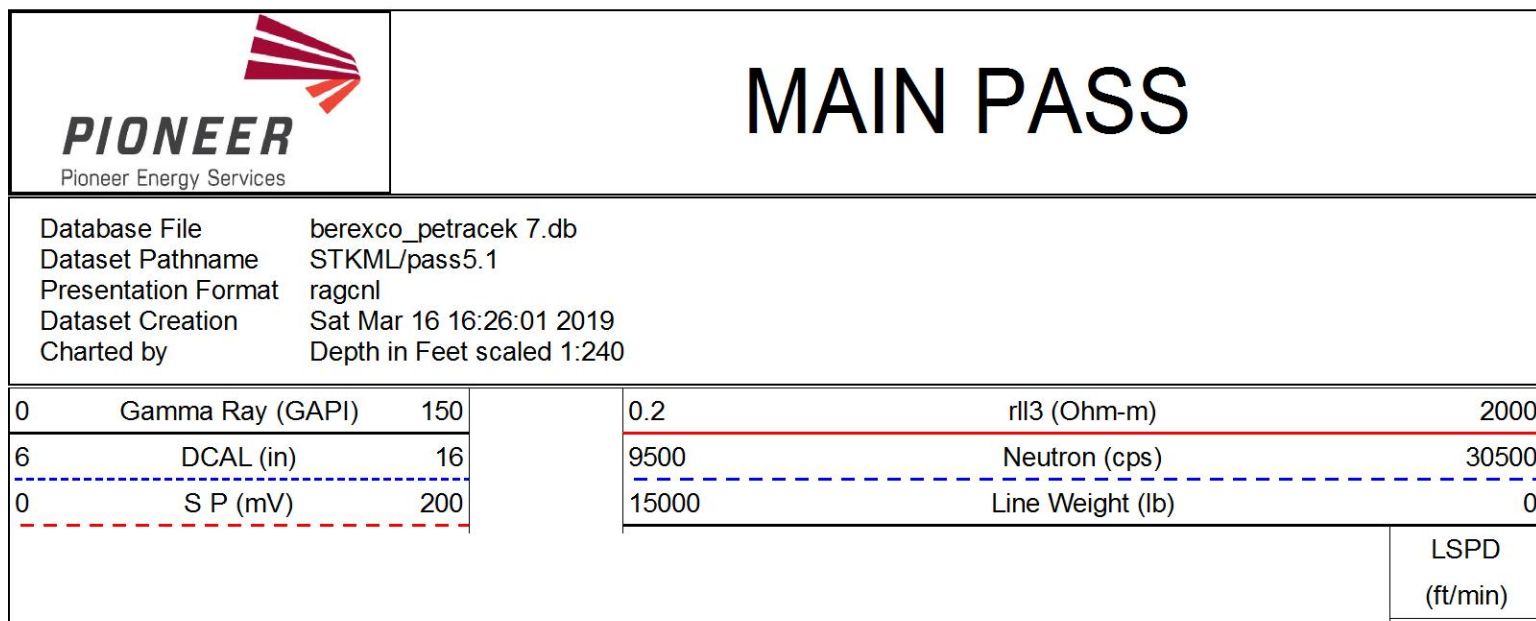
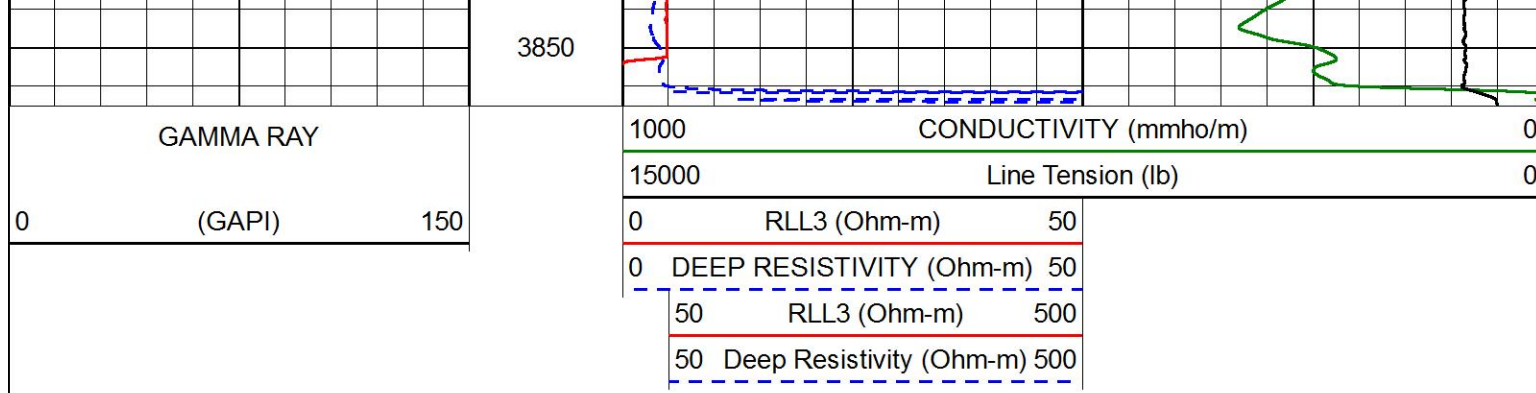
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3700

3750

3800





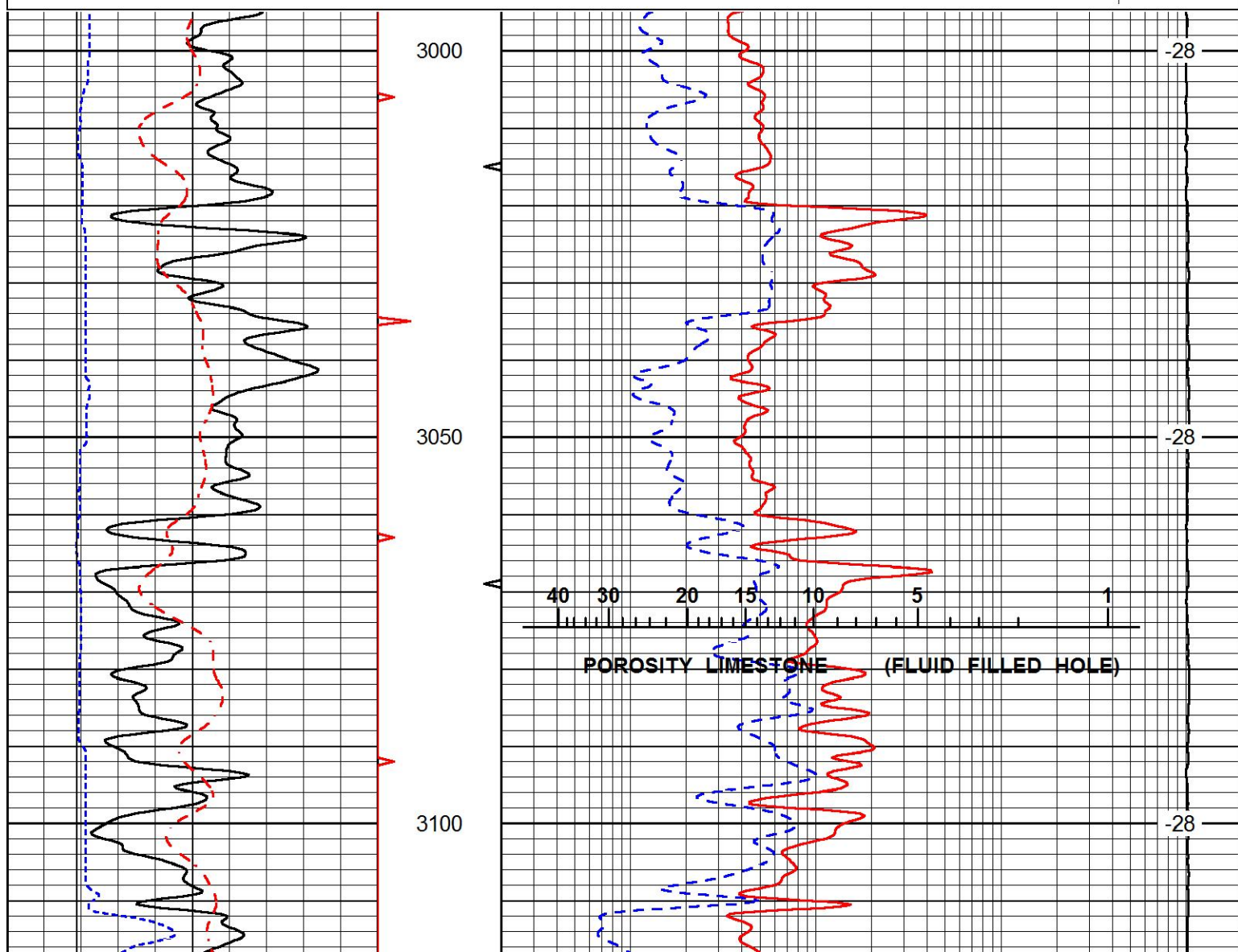
0	Gamma Ray (GAPI)	150	0.2	rlI3 (Ohm-m)	2000
6	DCAL (in)	16	9500	Neutron (cps)	30500
0	S P (mV)	200	15000	Line Weight (lb)	0
					LSPD (ft/min)

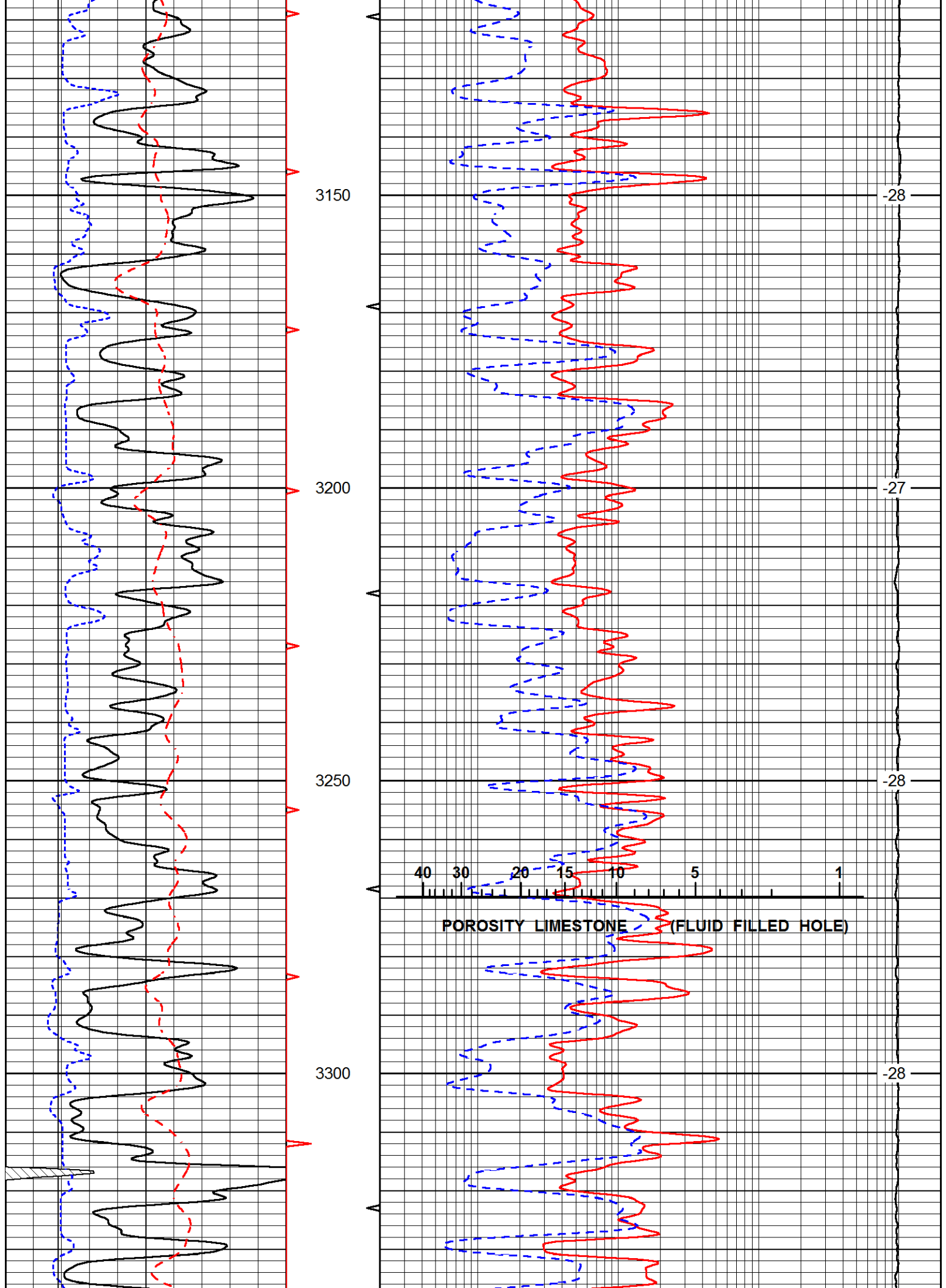


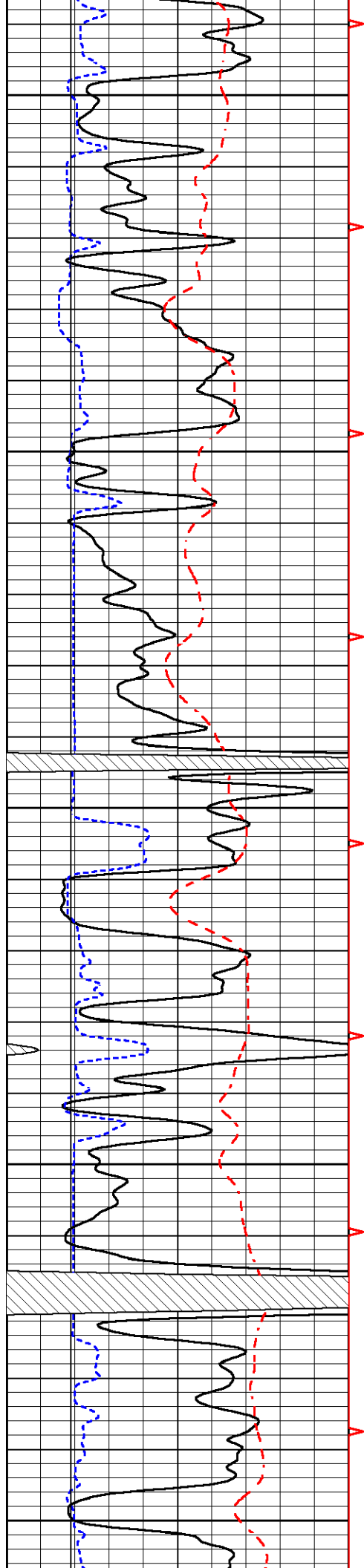
MAIN PASS

Database File berexco_petracek 7.db
Dataset Pathname STKML/pass5.1
Presentation Format ragcnl
Dataset Creation Sat Mar 16 16:26:01 2019
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	0.2	rlI3 (Ohm-m)	2000
6	DCAL (in)	16	9500	Neutron (cps)	30500
0	S P (mV)	200	15000	Line Weight (lb)	0
					LSPD (ft/min)







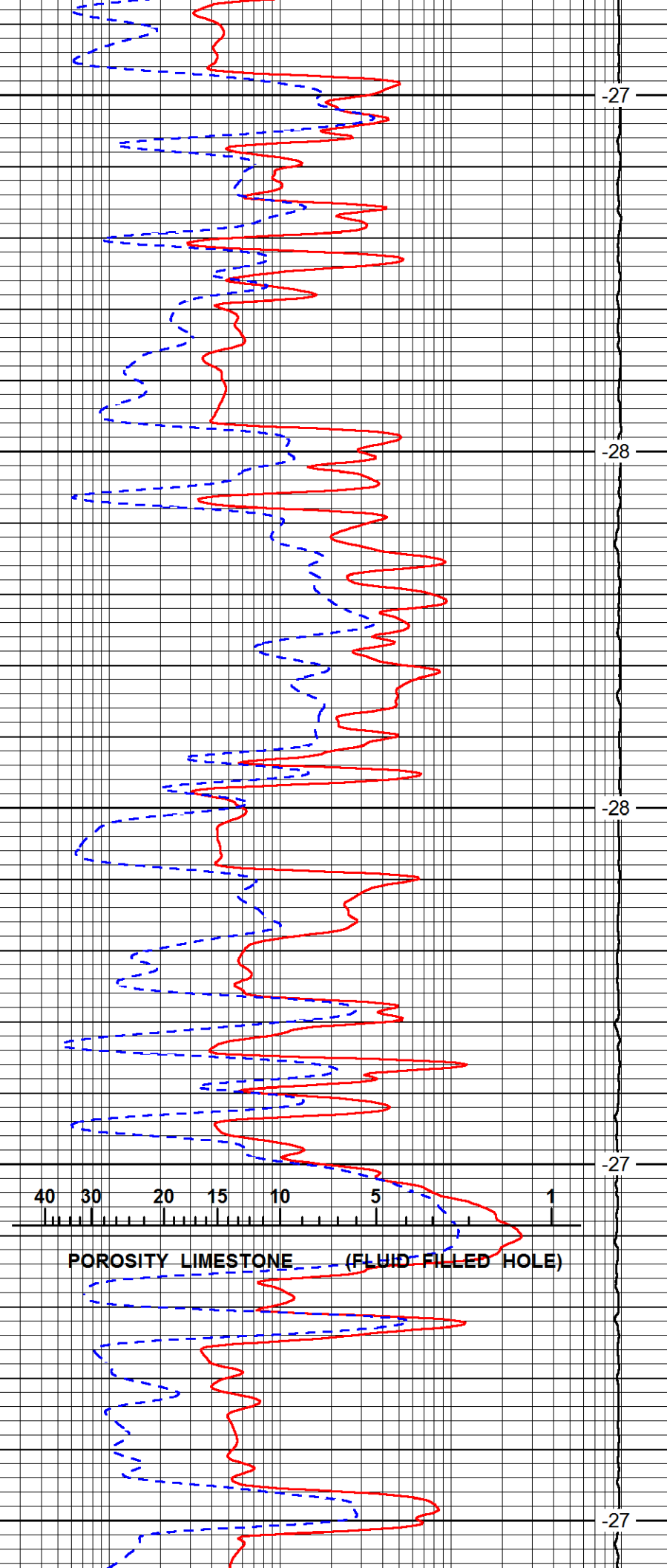
3350

3400

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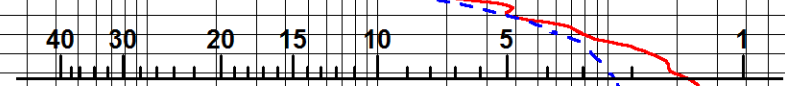
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-28

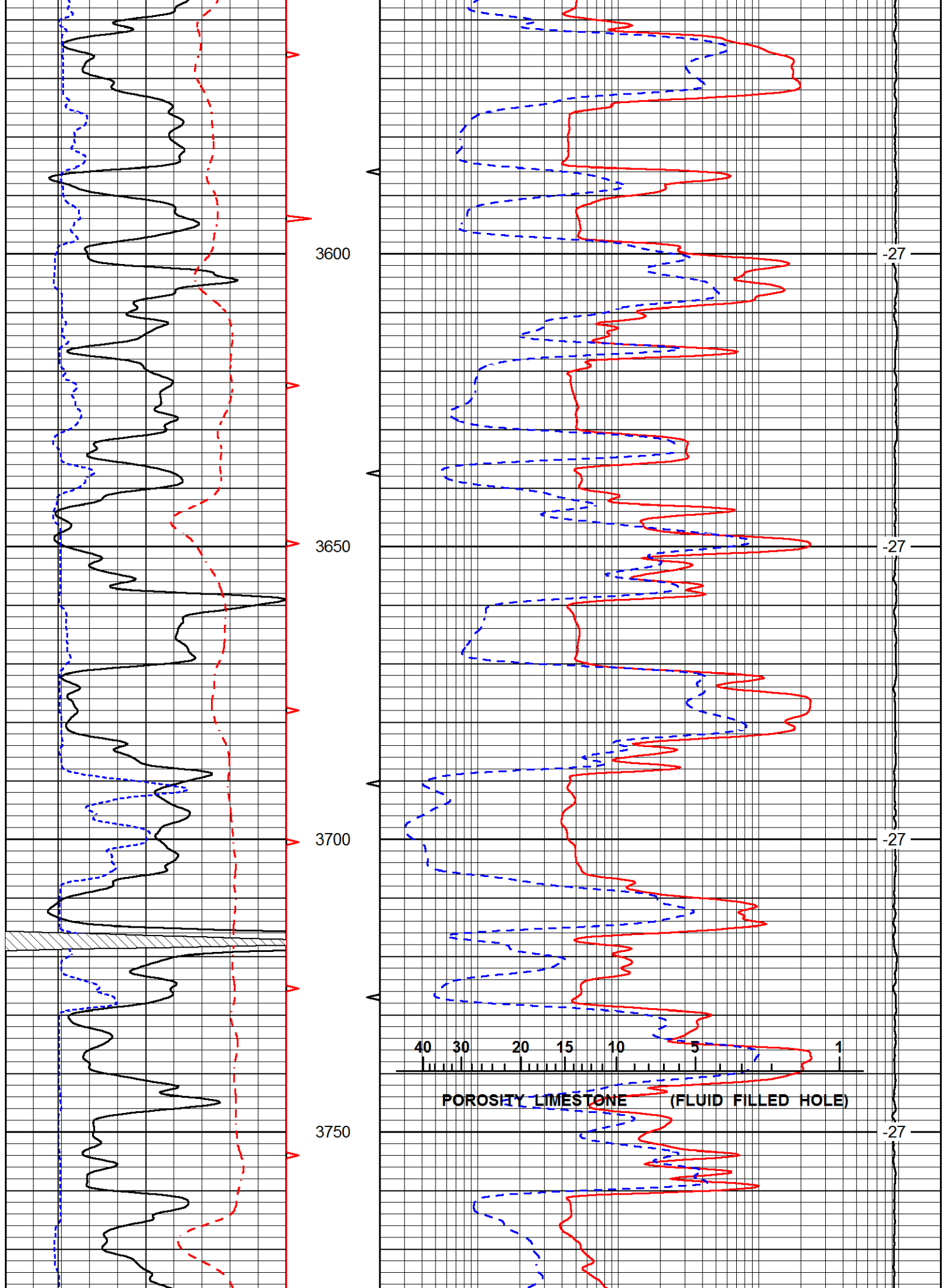
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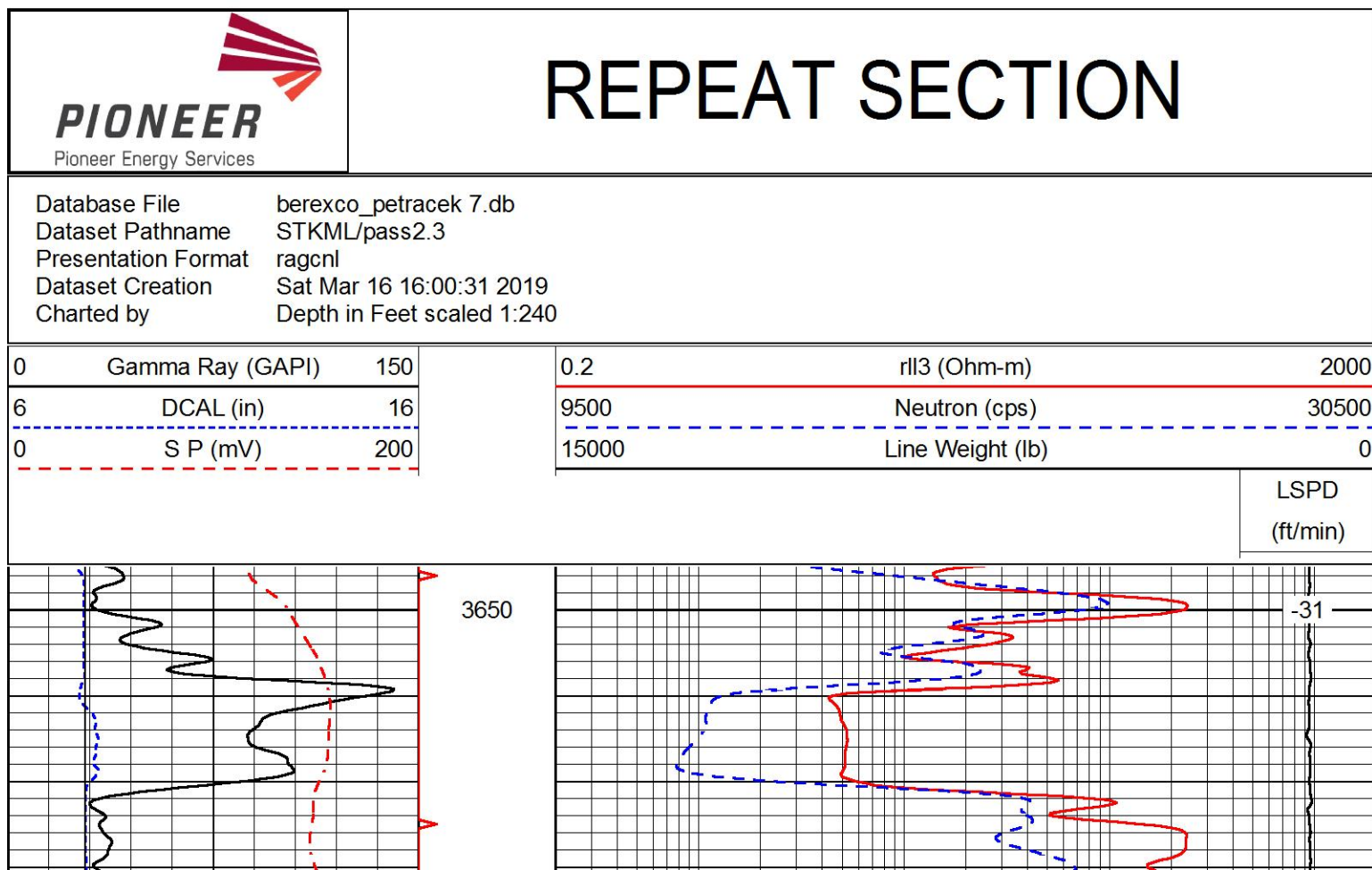
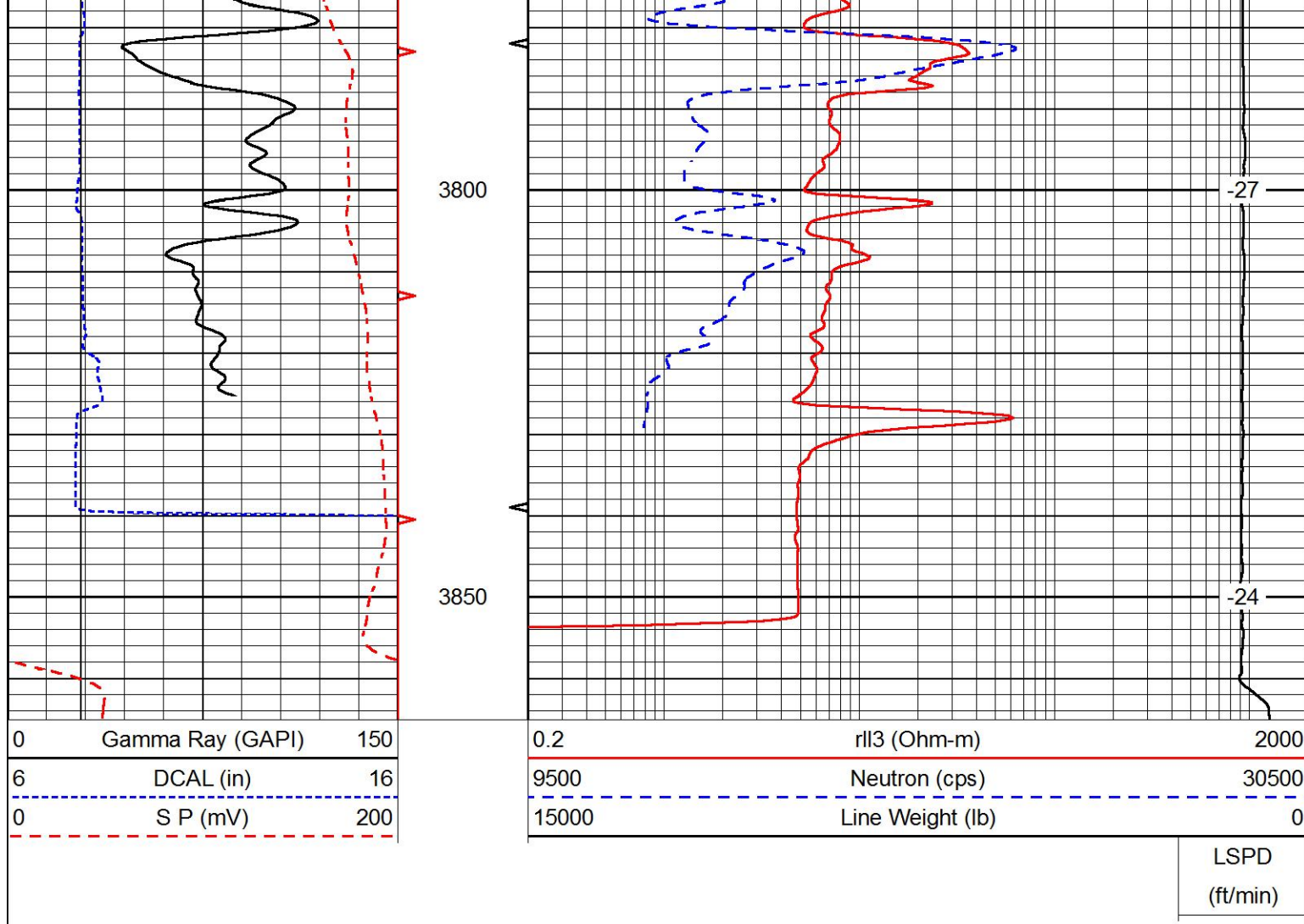
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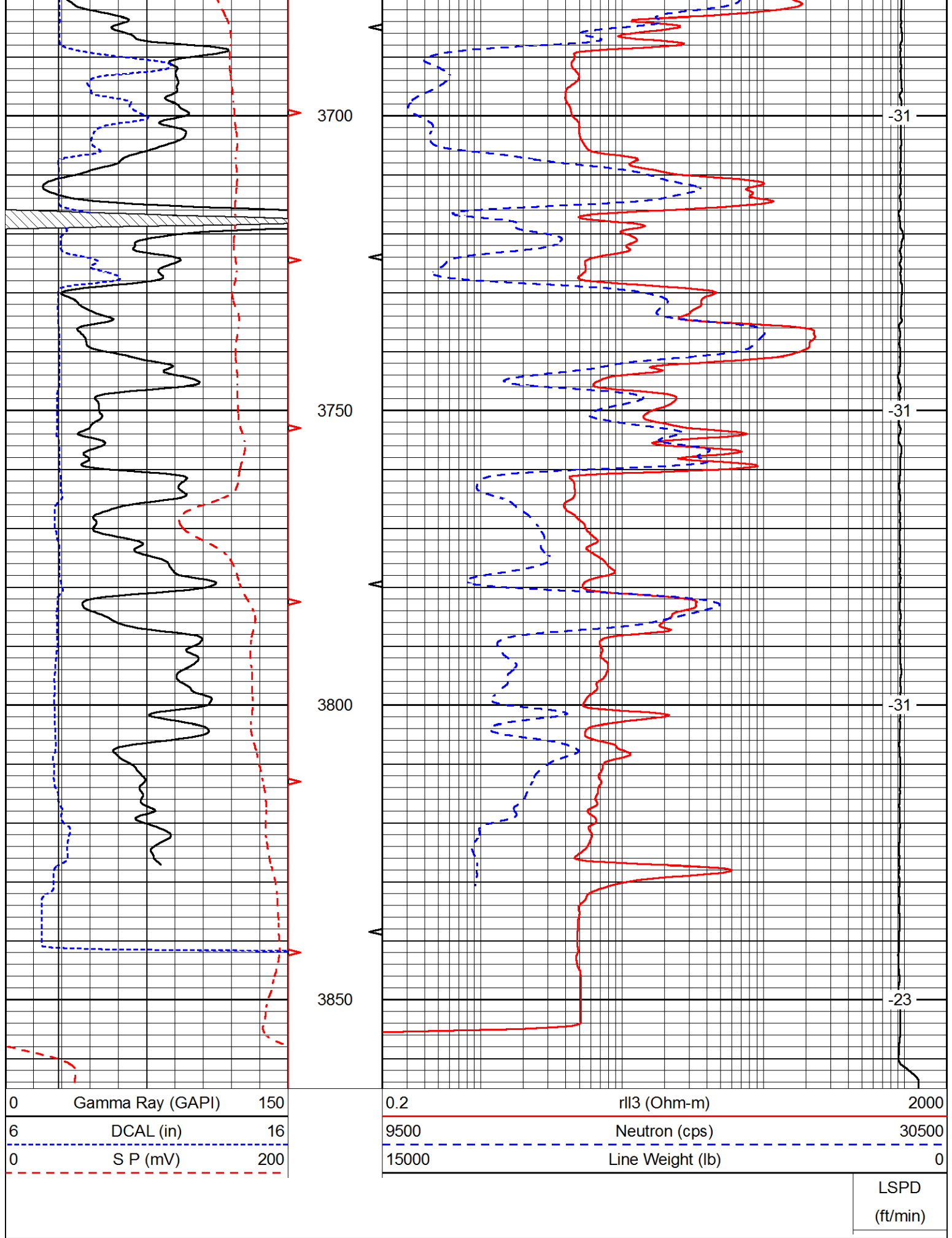
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POROSITY LIMESTONE (FLUID FILLED HOLE)







Database File berexco_petracek 7.db
Dataset Pathname STKML/pass3.1
Dataset Creation Sat Mar 16 15:58:19 2019

Dual Induction Calibration Report

Serial-Model: 967 (HT)-PSI HIGH TEMP
Calibration Performed: Sun Oct 07 20:24:22 2018

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.565	-19.000
Medium	0.000	1348.000	142.000	255.800	mmho/m	0.390	-42.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
Performed: Sun Feb 24 10:53:40 2019

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	26000.0000	-1.7000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	30000.0000	-1.3000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-65.8500

Compensated Density Calibration Report

Serial-Model: 96-916-M&W
Source / Verifier: 16955B / 2ci
Master Calibration Performed: Sat Feb 09 06:25:40 2019

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	8943.64	10054.60	cps
Aluminum	2.665	g/cc	1595.61	6242.82	cps
Spine Angle = 74.54			Density/Spine Ratio = 0.509		
	Size		Reading		
Small Ring	6.00	in	1.75		
Large Ring	16.00	in	1.46		

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:	89
Tool Model:	M&W
Calibration Performed:	Fri Aug 24 12:16:10 2018

Calibrator Value:	1.0	GAPI
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Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps

Sensitivity:	0.6000	GAPI/cps
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Company	BEREXCO, LLC
Well	PETRACEK #7
Field	PETRACEK
County	DECATUR
State	KANSAS