



DUAL INDUCTION LOG

Company RANGE OIL COMPANY, INC.		Company RANGE OIL COMPANY, INC.	
Well	JACOBSON #1	Well	JACOBSON #1
Field	PANTHER RANCH SW	Field	PANTHER RANCH SW
County	CHASE	County	CHASE
State	KANSAS	State	KANSAS
Location:		API # : 15-017-20922-00-00	Other Services
2870' FNL & 1570' FWL		CNL/CDL MEL	
SEC 31	TWP 19S	RGE 6E	
Permanent Datum	GROUND LEVEL	Elevation	1452
Log Measured From	KELLY BUSHING	K.B.	1458
Drilling Measured From	KELLY BUSHING	D.F.	N/A
		G.L.	1452
Date	6/12/2015		
Run Number	ONE		
Depth Driller	2310		
Depth Logger	2310		
Bottom Logged Interval	2309	700	
Top Log Interval	200	500	
Casing Driller	8.625 @ 202		
Casing Logger	208		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL		
Salinity, ppm CL	1000		
Density / Viscosity	9.3	48	
pH / Fluid Loss	8.9	8.2	
Source of Sample	Flowline		
Rm @ Meas. Temp	1.40 @ 68		
Rmf @ Meas. Temp	1.05 @ 68		
Rmc @ Meas. Temp	1.89 @ 68		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.96 @ 99		
Operating Rig Time	3 HOURS		
Max Rec. Temp. F	99		
Equipment Number	91		
Location	HAYS		
Recorded By	D. SCHMIDT		
Witnessed By	KEN WALLACE		

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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.

MARION,
EAST TO HWY 77 & HWY 150 JUNCTION, 8 1/4 EAST,
SOUTH INTO

Log Measured From: KELLY BUSHING 6 Ft. Above Permanent Datum

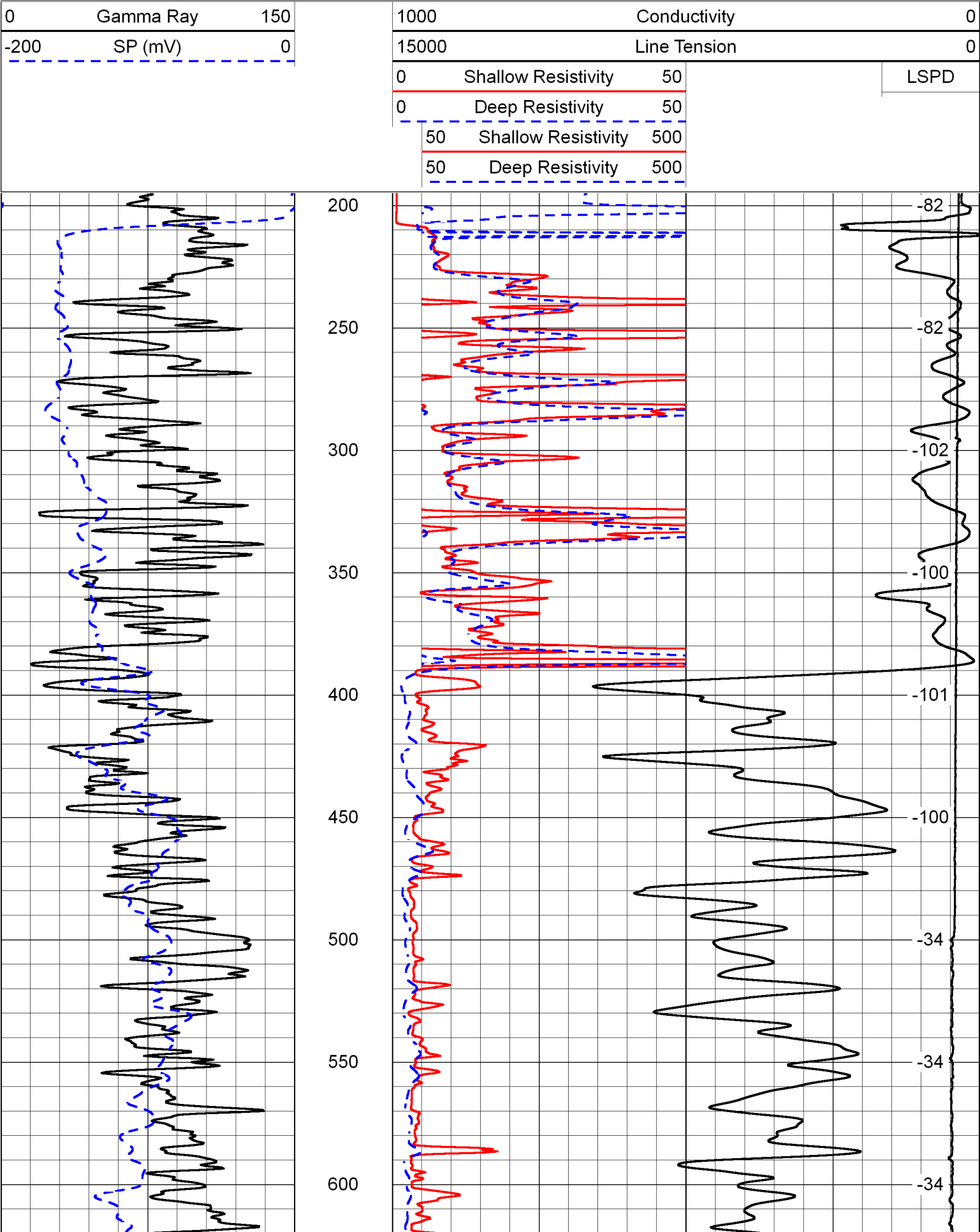
THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

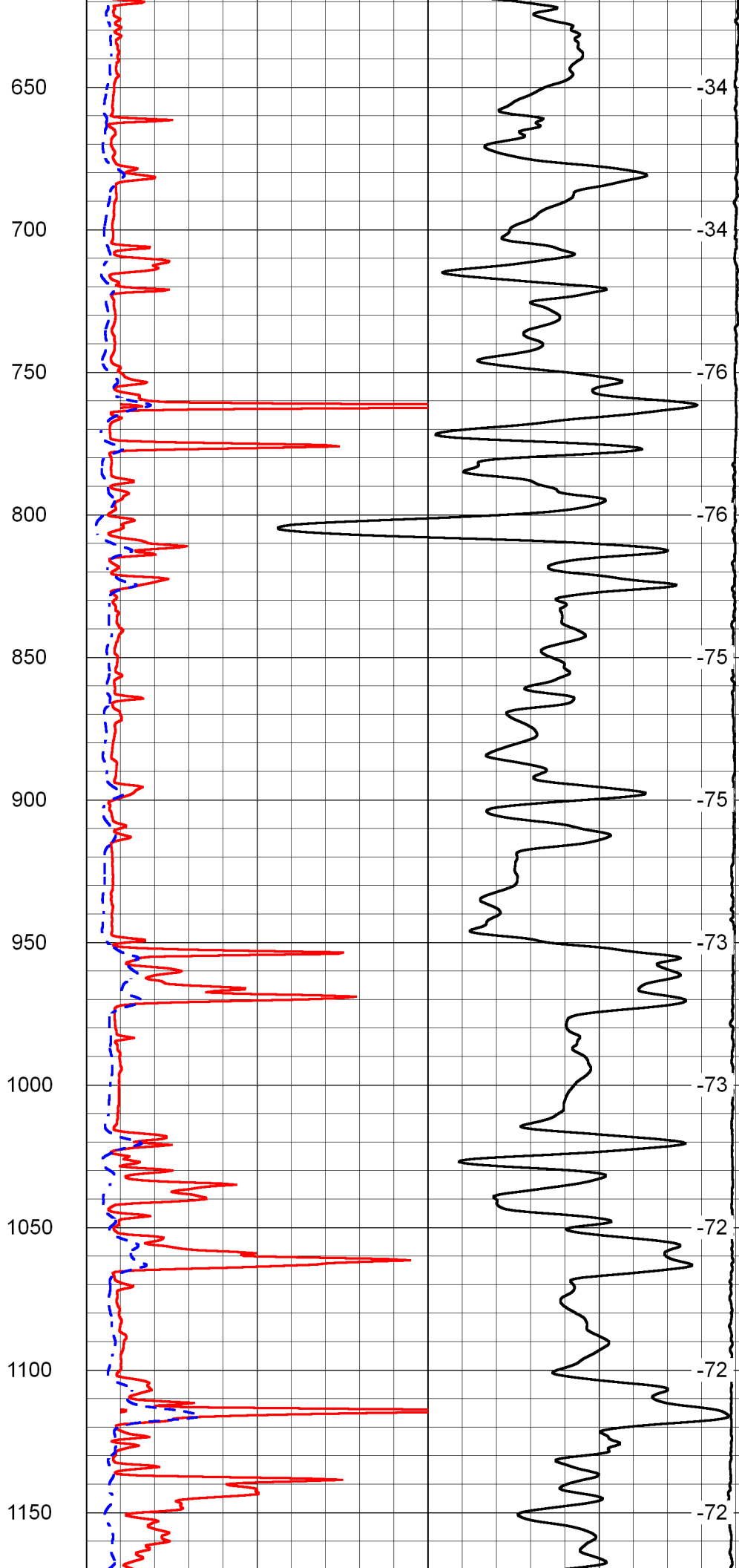
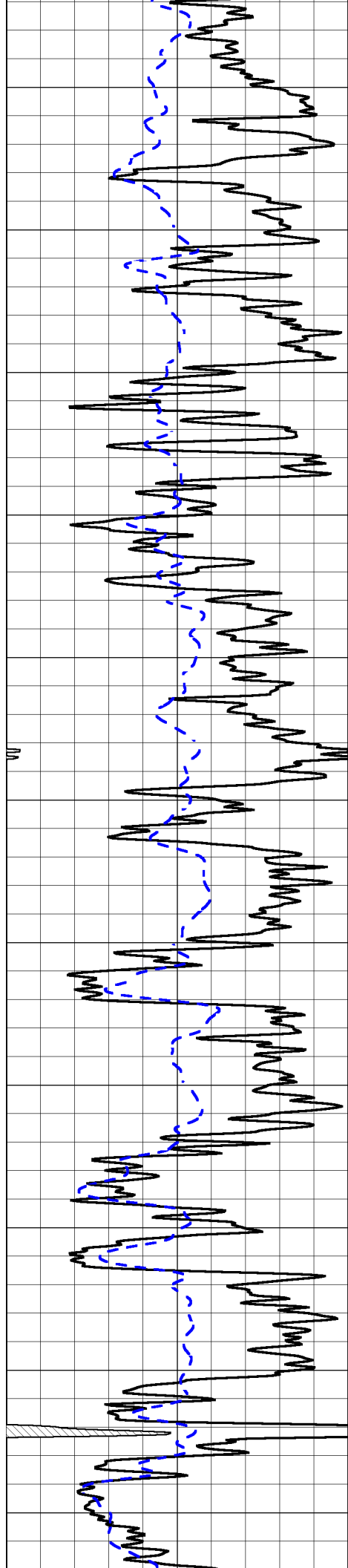
Your Pioneer Energy Services Crew

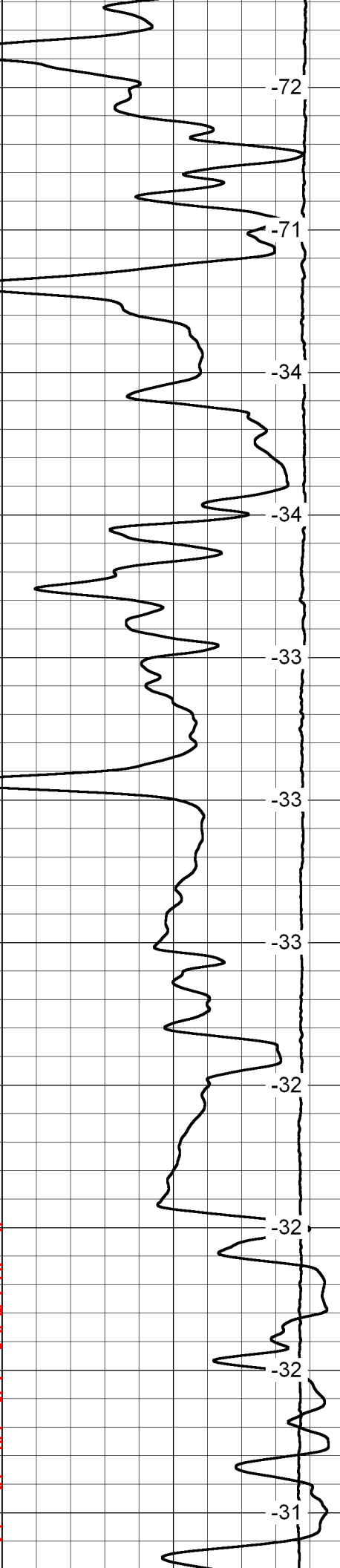
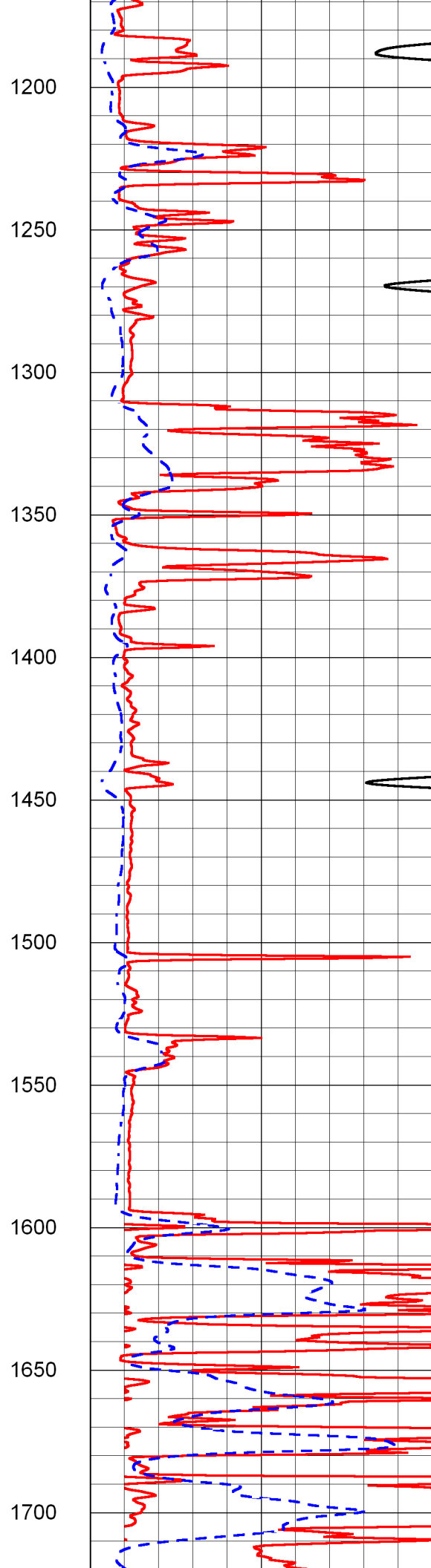
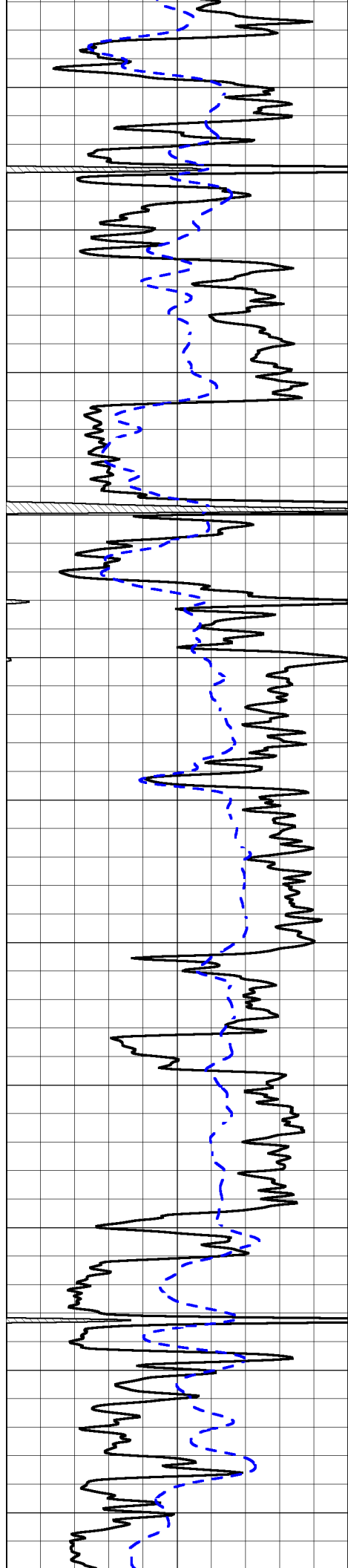
Engineer: D. SCHMIDT
Operator:
Operator:
Operator:

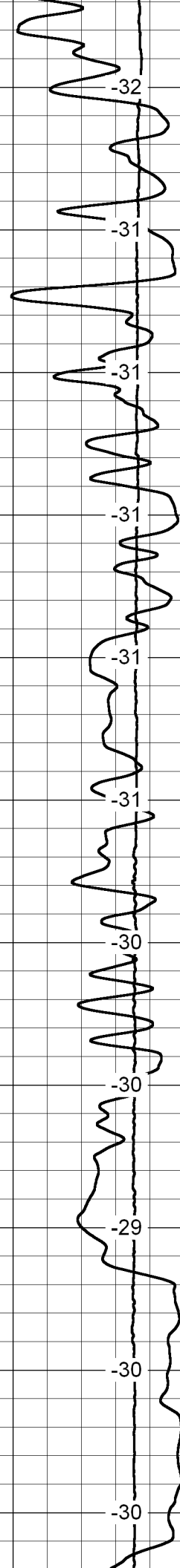
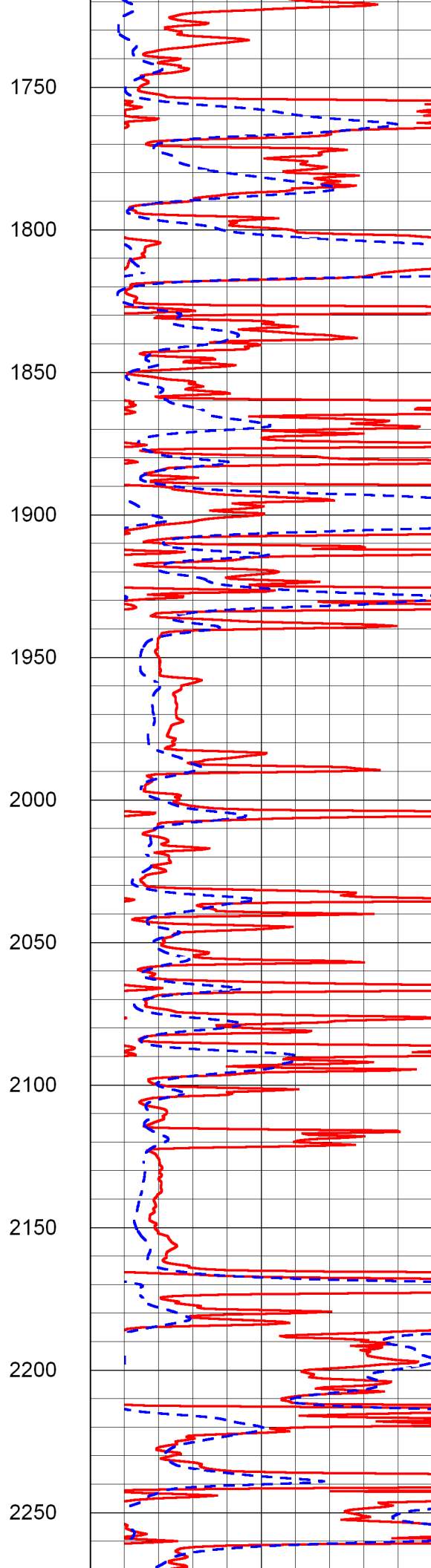
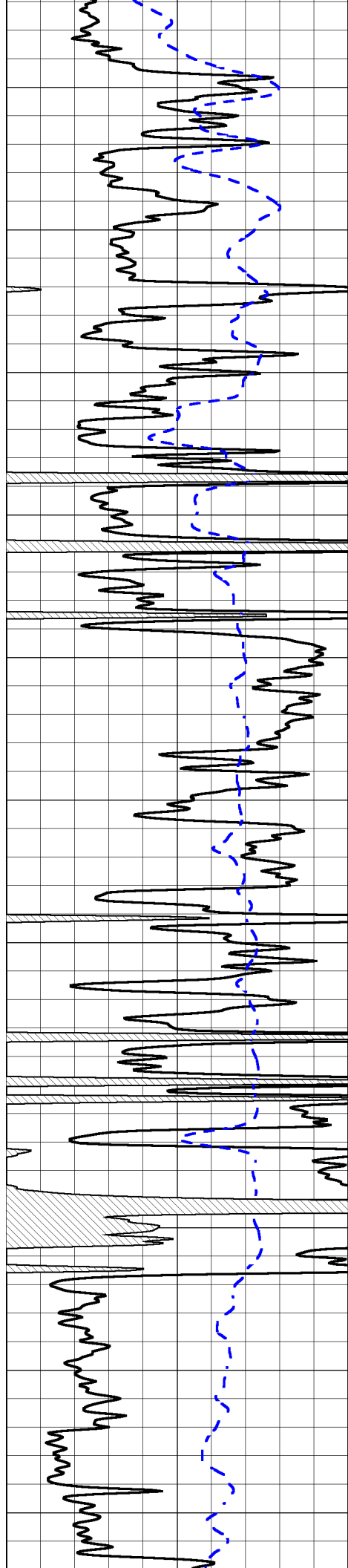
This Log Record Was Witnessed By

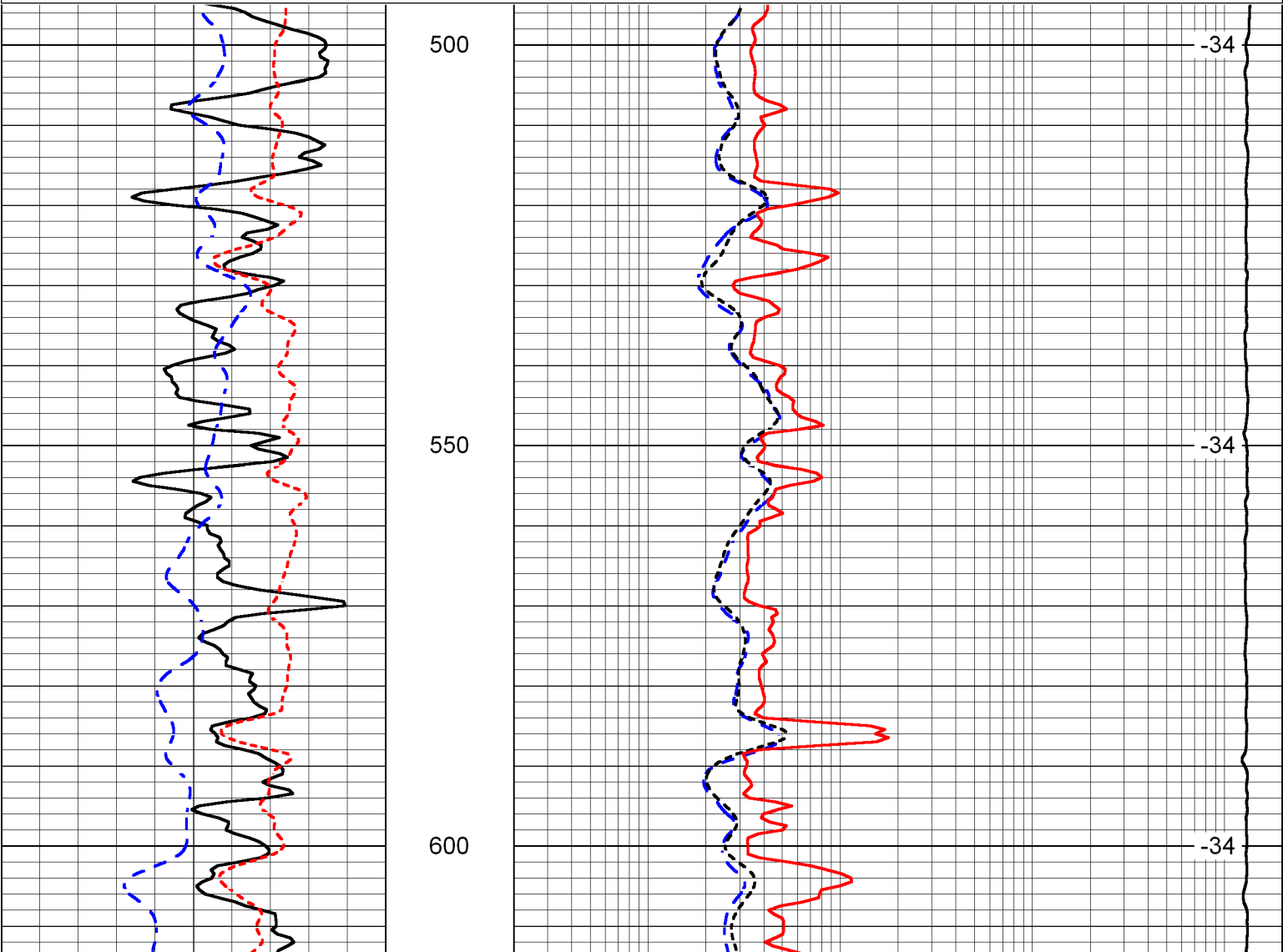
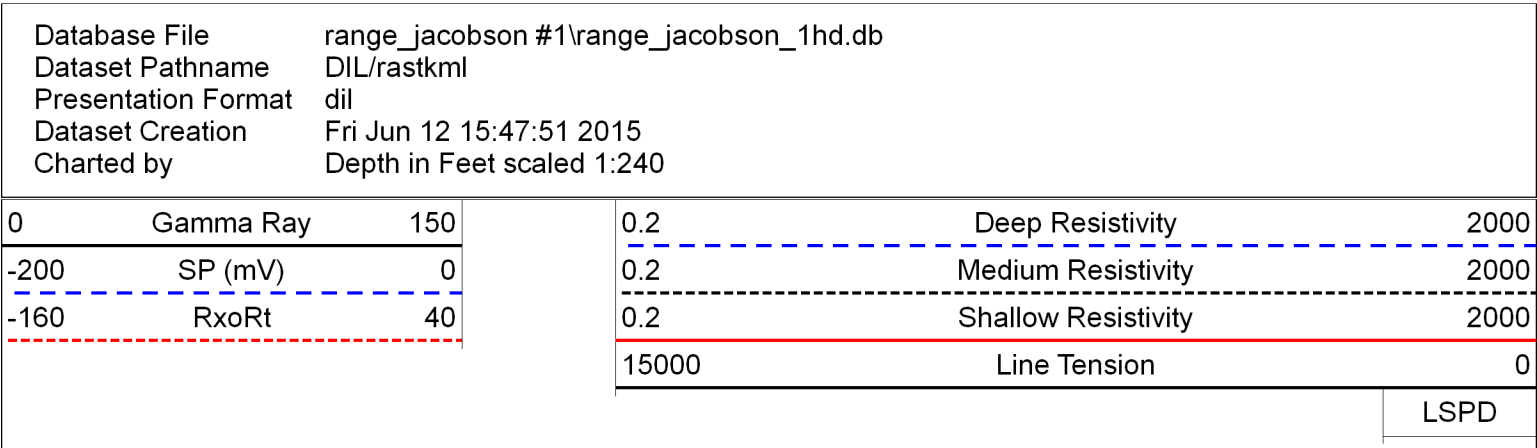
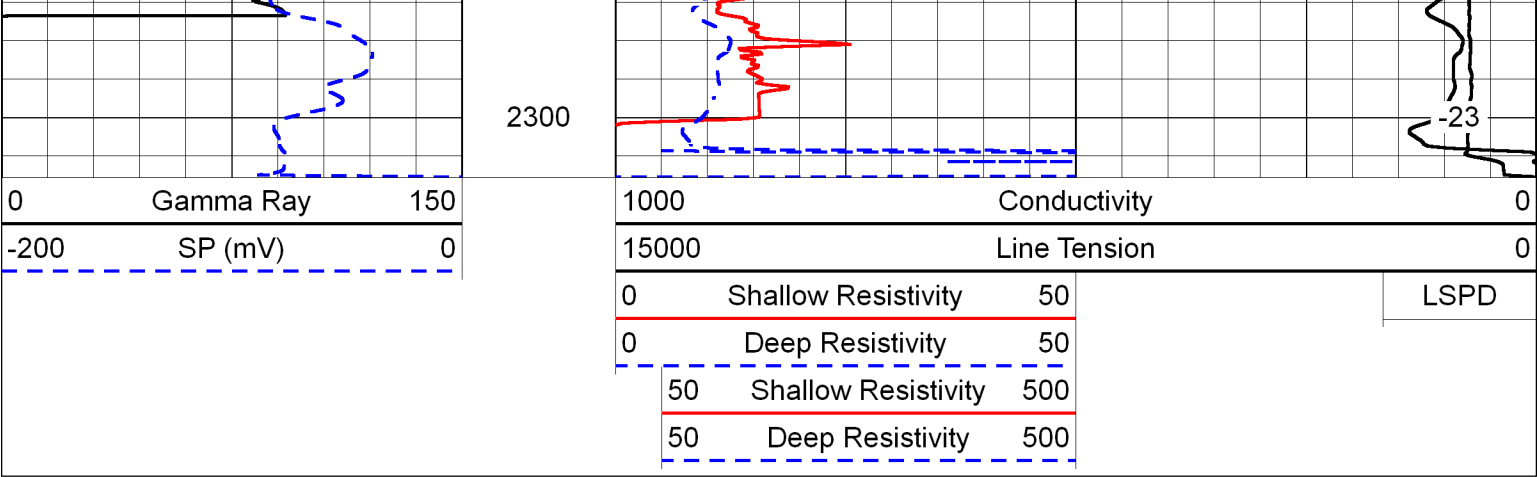
Primary Witness: KEN WALLACE
Secondary Witness:
Secondary Witness:
Secondary Witness:

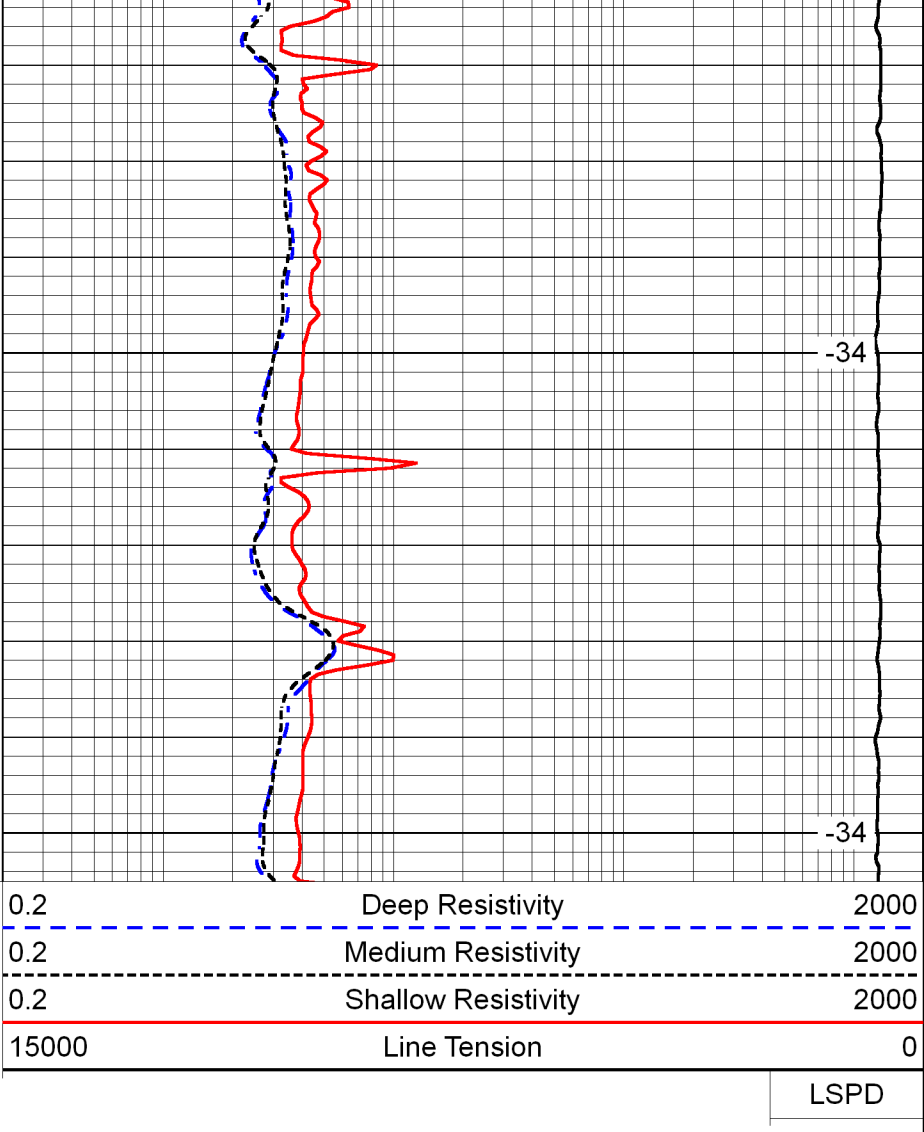
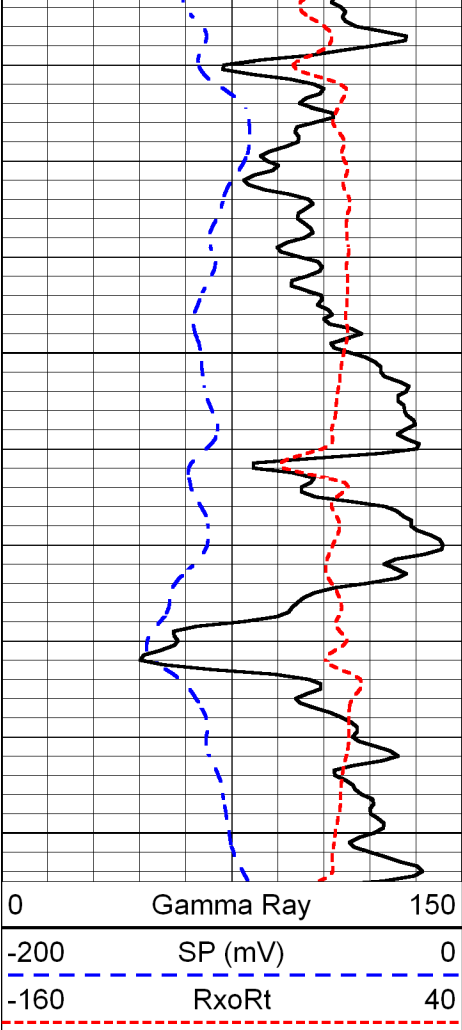










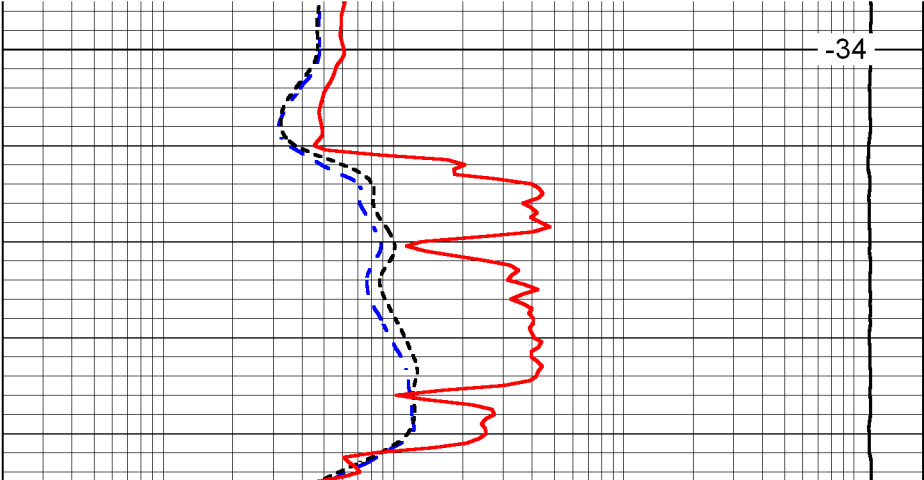
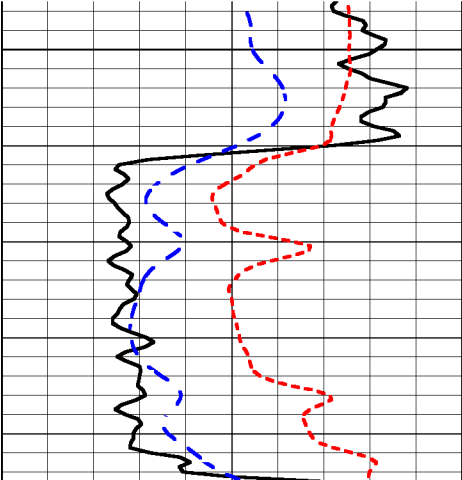


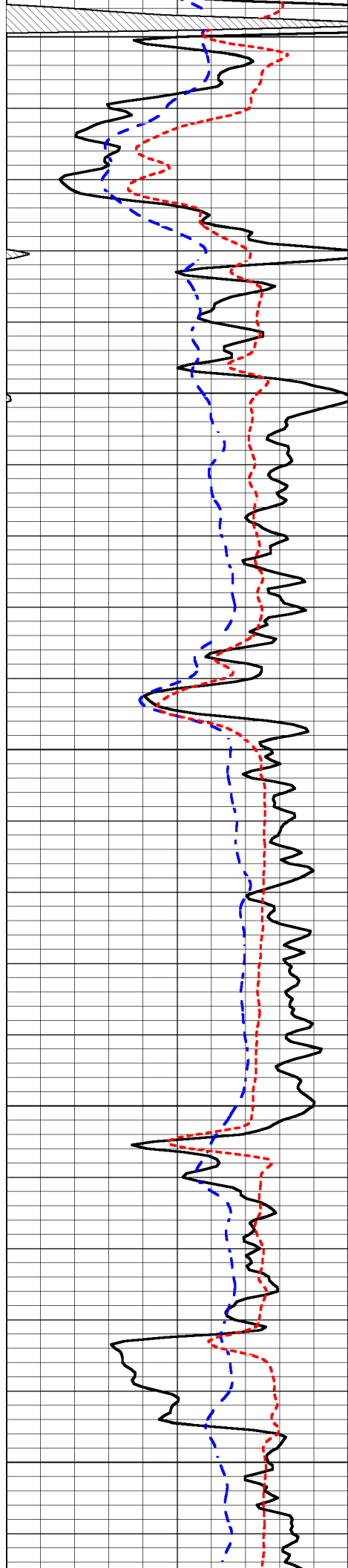
Database File	range_jacobson #1\range_jacobson_1hd.db
Dataset Pathname	DIL/rastkml
Presentation Format	dil
Dataset Creation	Fri Jun 12 15:47:51 2015
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD





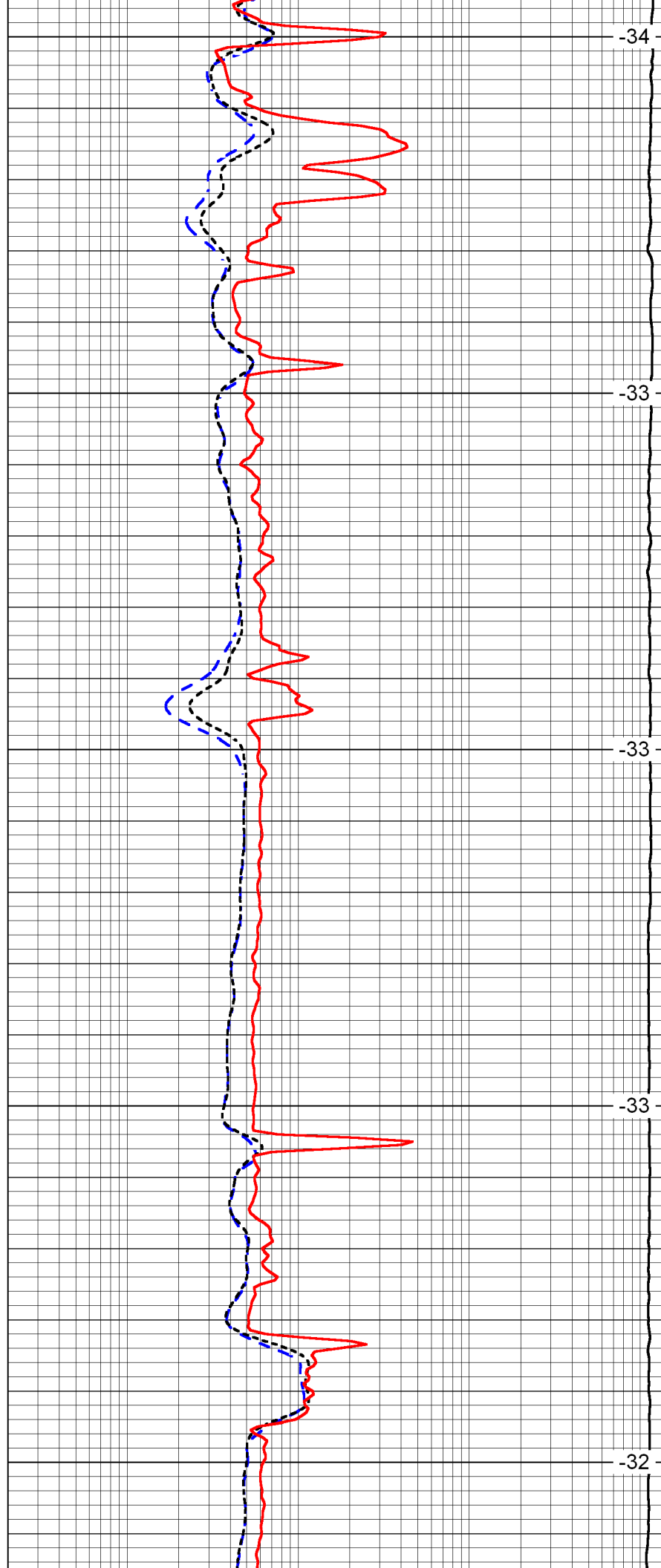
1350

1400

1450

1500

1550



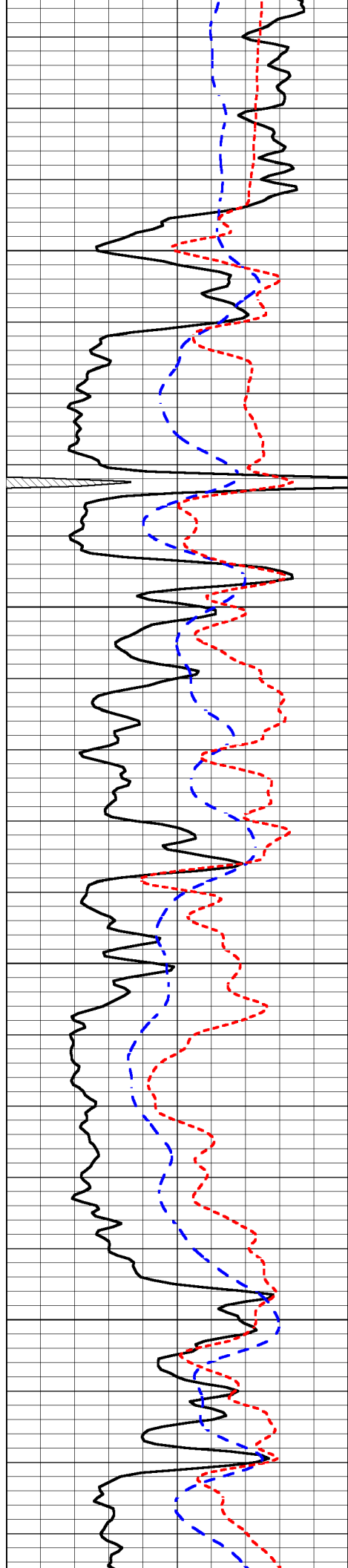
-34

-33

-33

-33

-32

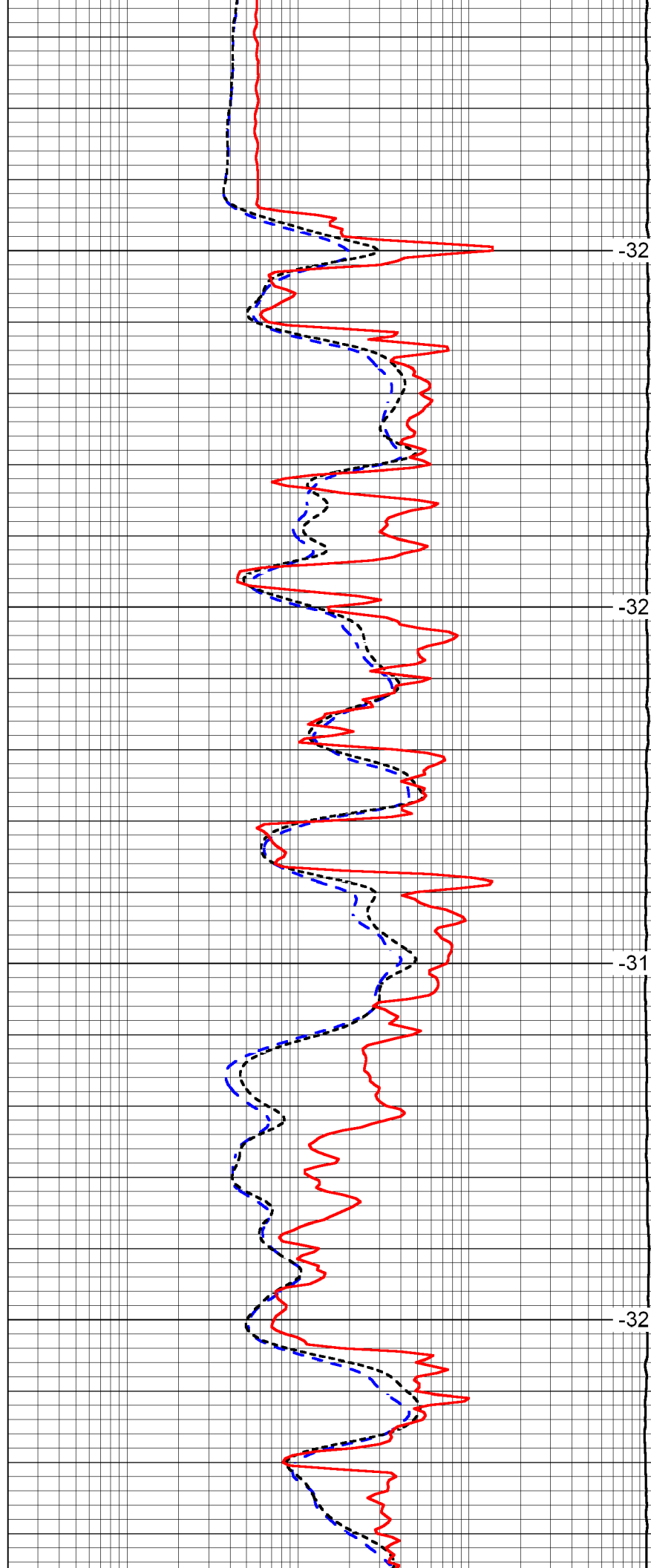


1600

1650

1700

1750

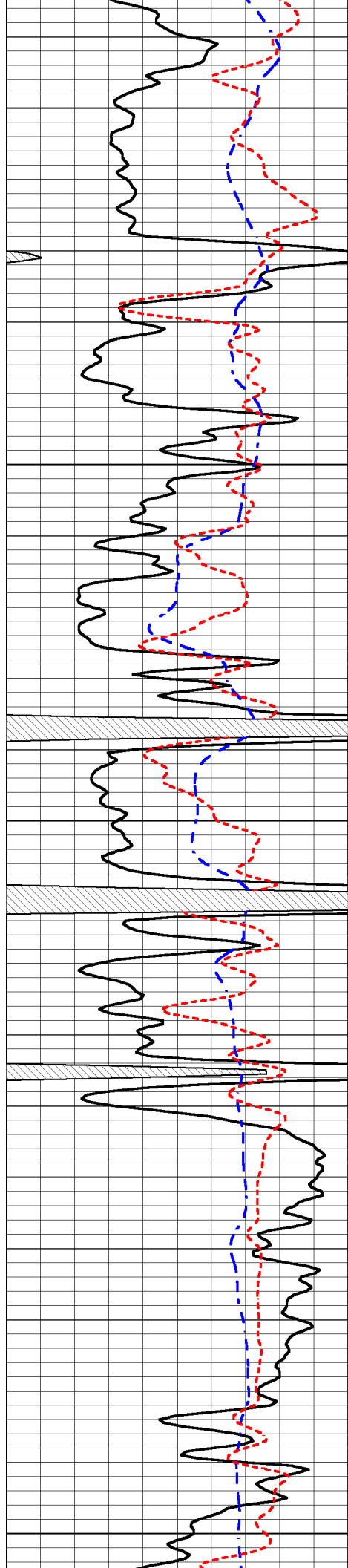


-32

-32

-31

-32



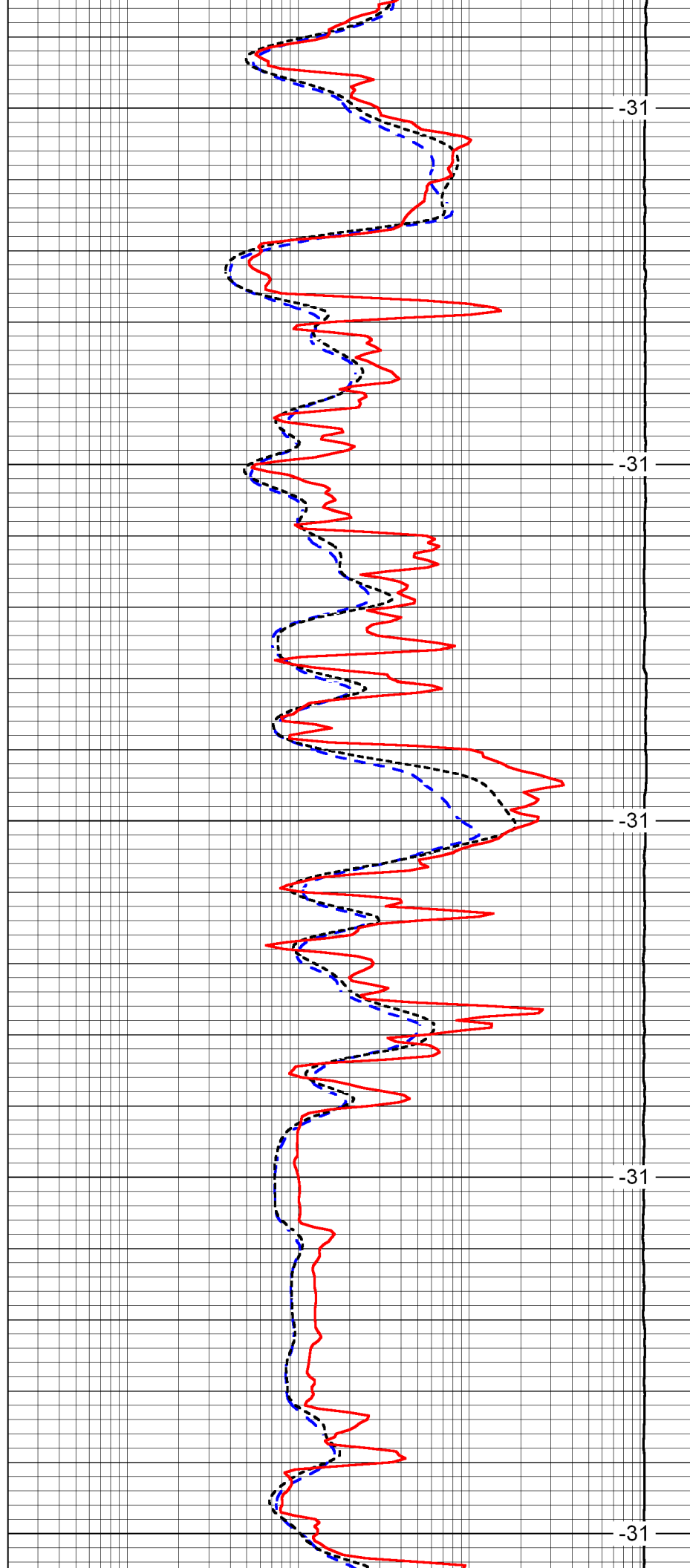
1800

1850

1900

1950

2000



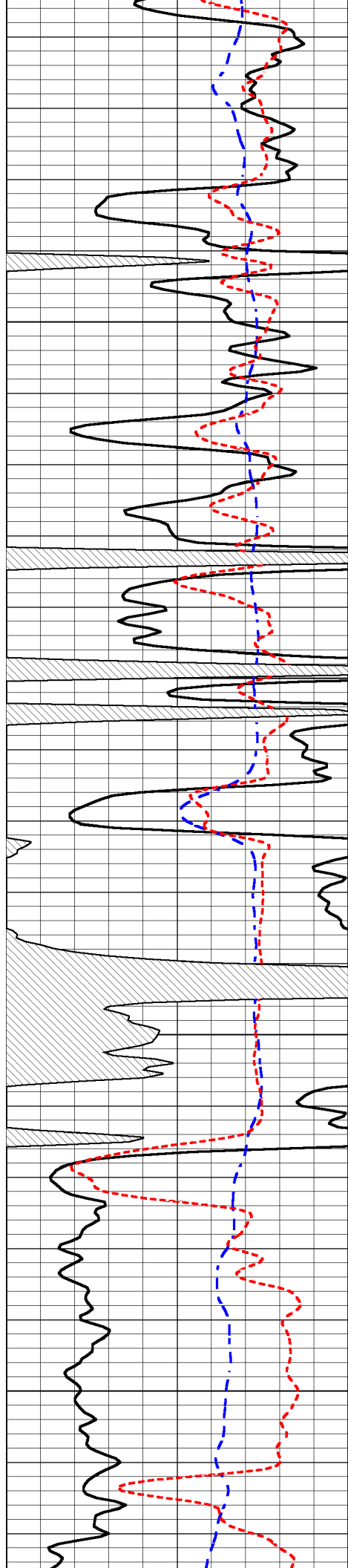
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-31

-31

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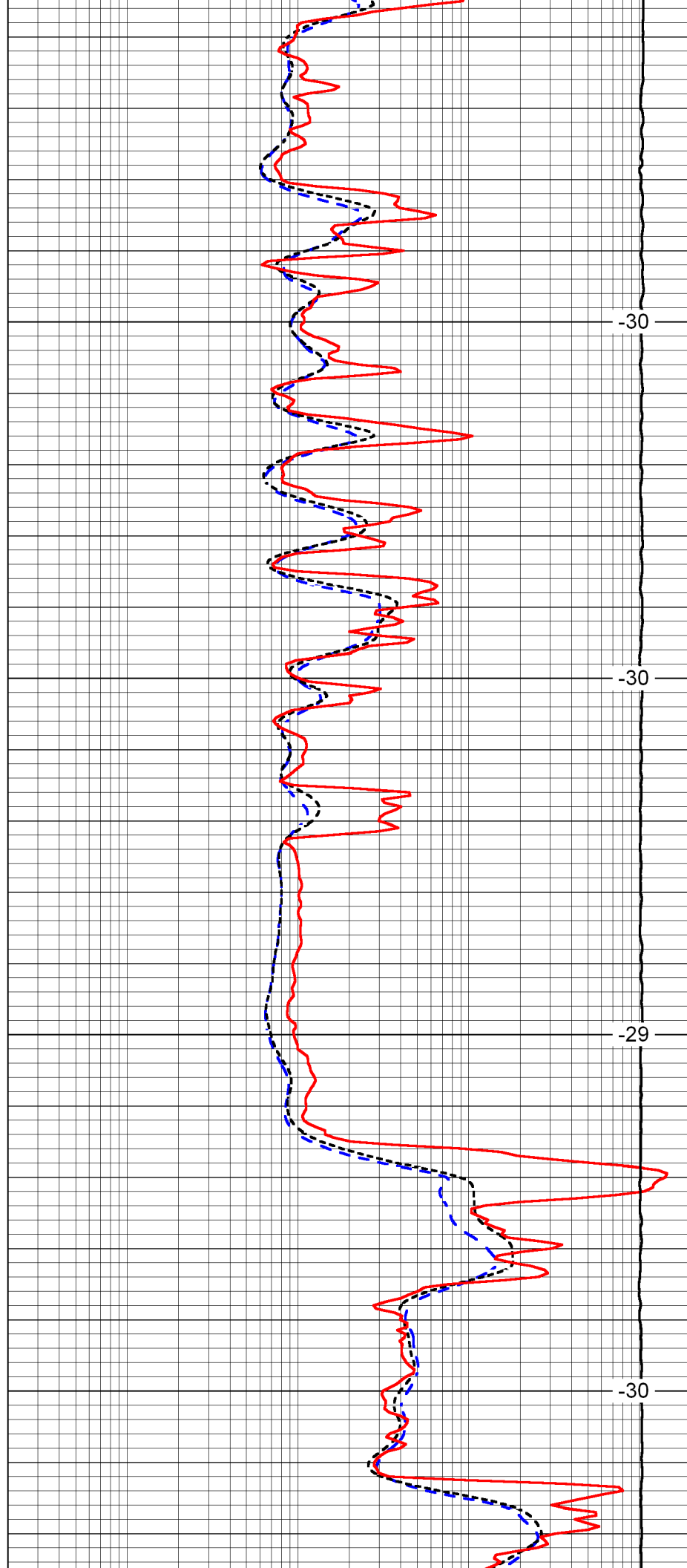


2050

2100

2150

2200

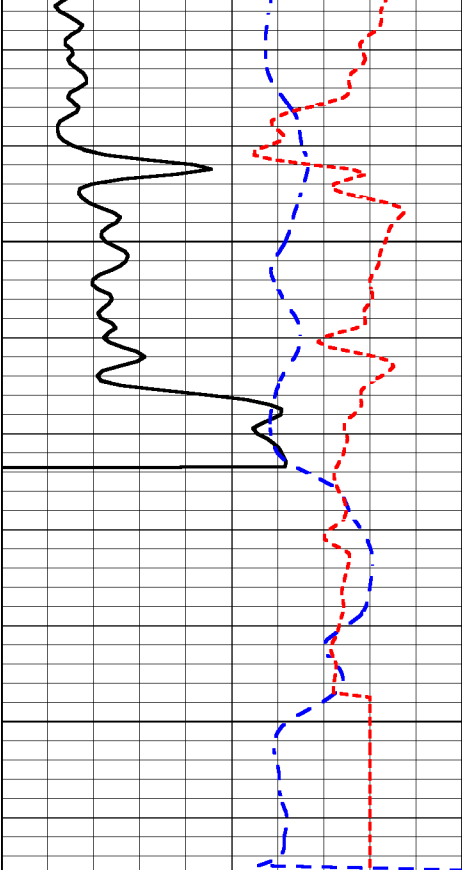


-30

-30

-29

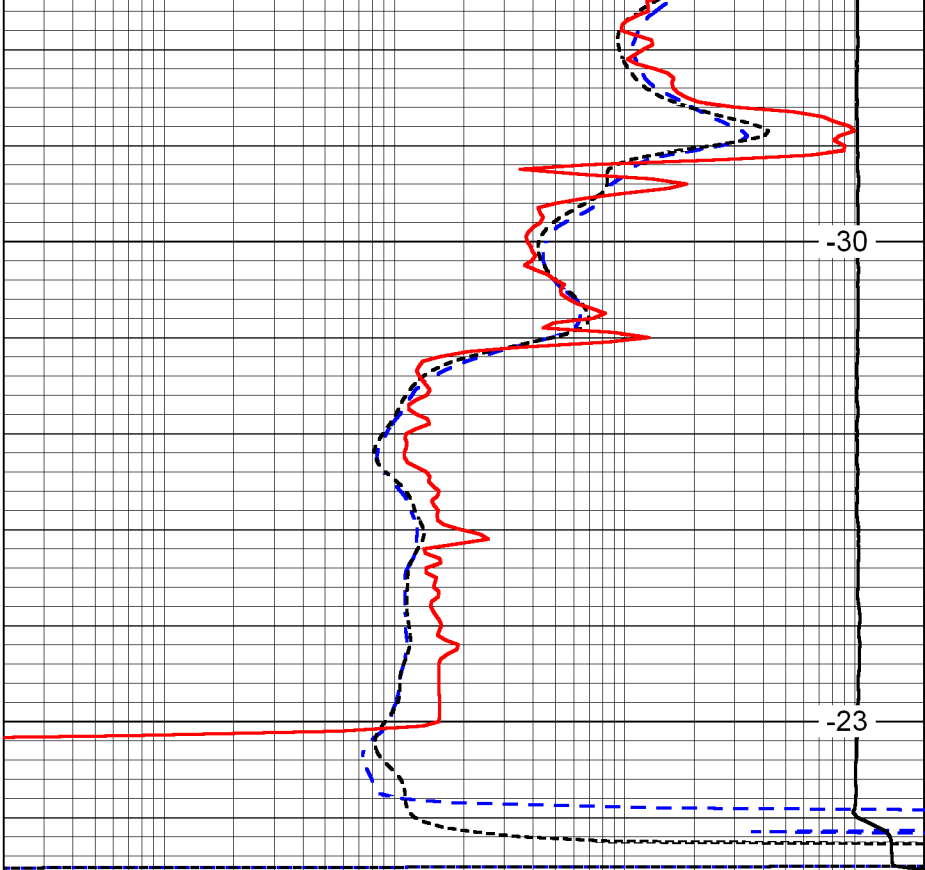
-30



0	Gamma Ray	150
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2250

2300



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