SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

COMPENSATED DENSITY NEUTRON LOG

Company XTO Energy Inc.
Well Apache Canyon 04-02
Field Purgatoire River
County Las Animas
State Colorado

Company XTO Energy Inc.

Well Apache Canyon 04-02

Field Purgatoire River

County Las Animas State Colorado

Location: API # : 05 071 09634 00

1305' FNL & 2444' FEL

SEC 04 TWP 34S RGE 67W

Other Services

dil

Permanent Datum	Ground Level	Elevation	7323'
Log Measured From	Ground Level		
Drilling Measured From	Ground Level		

Elevation

K.B. ------
D.F. ------
G.L. 7323'

Date	8-16-08		
Run Number	One		
Depth Driller	1925'		
Depth Logger	1926'		
Bottom Logged Interval	1902'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 500'		
Casing Logger	500'		
Bit Size	7 7/8"		
Type Fluid in Hole	Water		
Density / Viscosity	///		
pH / Fluid Loss	///		
Source of Sample	///		
Rm @ Meas. Temp	///		
Rmf @ Meas. Temp	///		
Rmc @ Meas. Temp	///		
Source of Rmf / Rmc	///		
Rm @ BHT	///		
Time Circulation Stopped	3:00 P.M.		
Time Logger on Bottom	6:15 P.M.		
Maximum Recorded Temperature	110 DEG F		
Equipment Number	T0701		
Location	Trinidad		
Recorded By	L.Smith		
Witnessed By	Mr. Don Johnson		

<<< Fold Here >>>

Comments

Compensated Density Neutron Porosity Presented On Sandstone Matrix.
ABHV Calculated For 5 1/2" Casing.
Neutron Porosity Invalid from 1104' to 1300' due to foam.
Well Directions:
First Bosque Entrance, turn right up Alamacito Canyon,first right.

Main Pass

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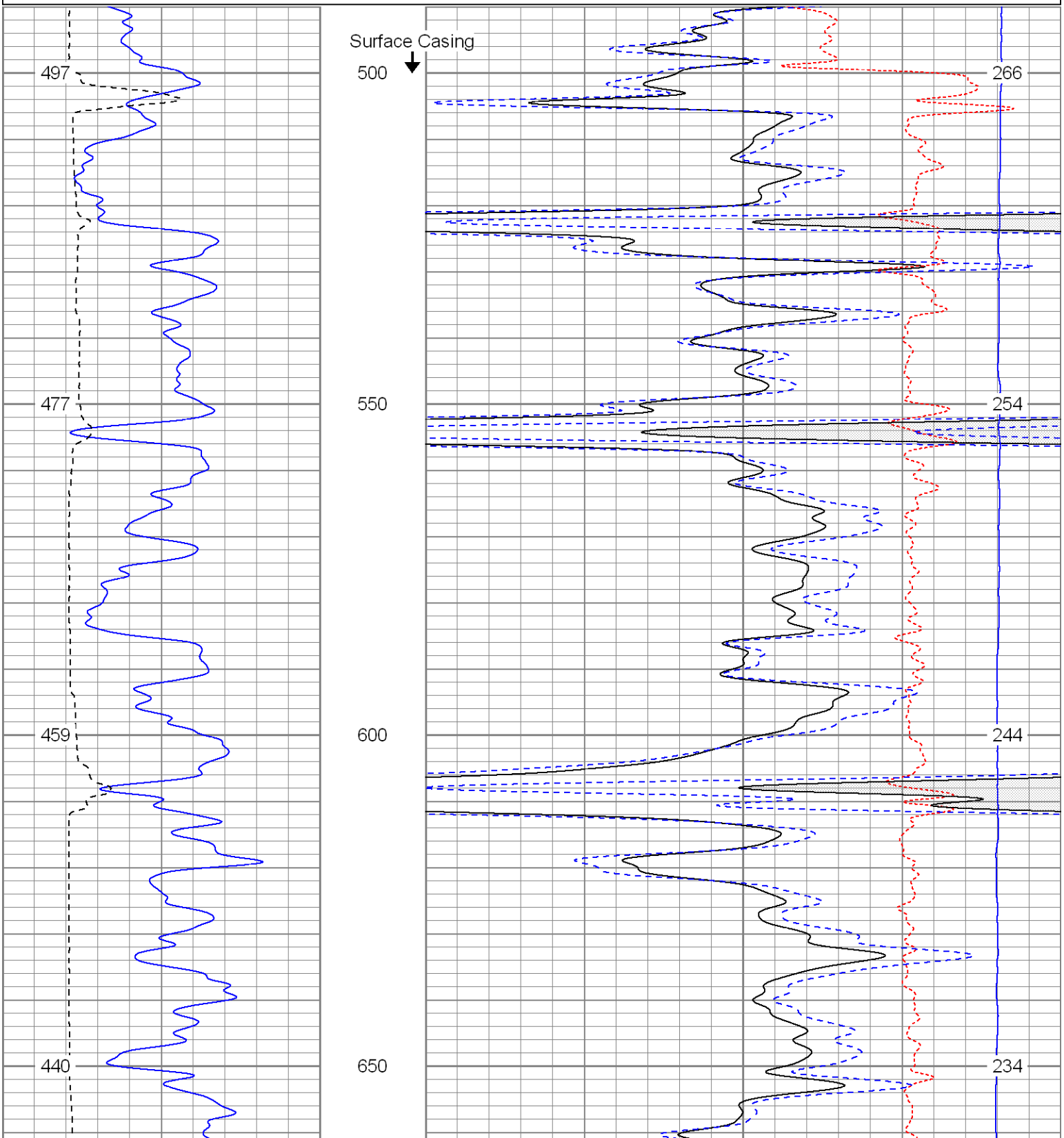
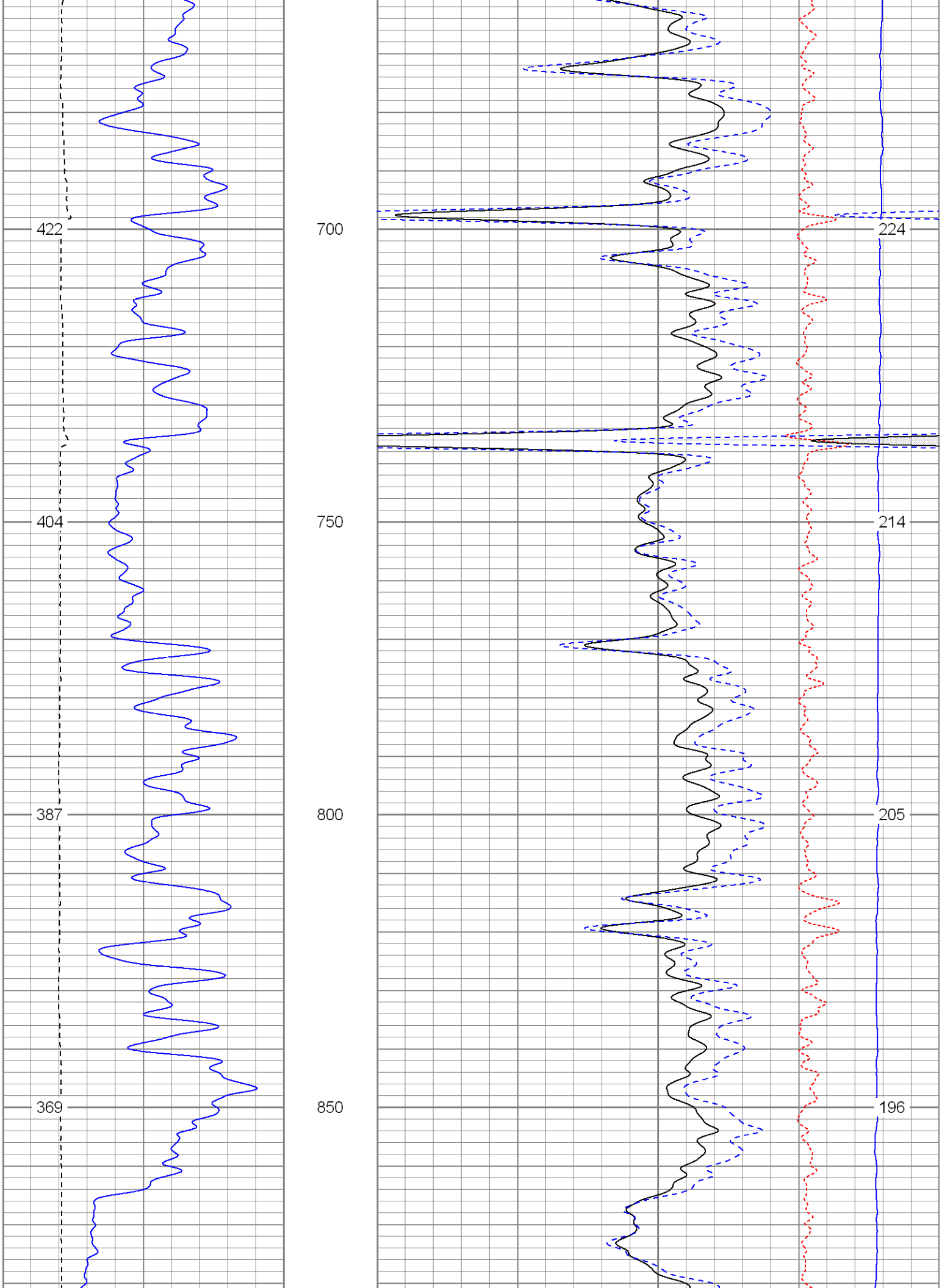
Database File:	xtoac0402.db
Dataset Pathname:	pass2.1
Presentation Format:	cdl
Dataset Creation:	Sat Aug 16 19:55:40 2008 by Calc Open-Cased 070814
Charted by:	Depth in Feet scaled 1:240

0	GR (GAPI)	200
6	DCAL (in)	16
	TBHV (ft3)	

2	RHOB (g/cc)	3
1	RHOB (g/cc)	2
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
	ABHV (ft3)	

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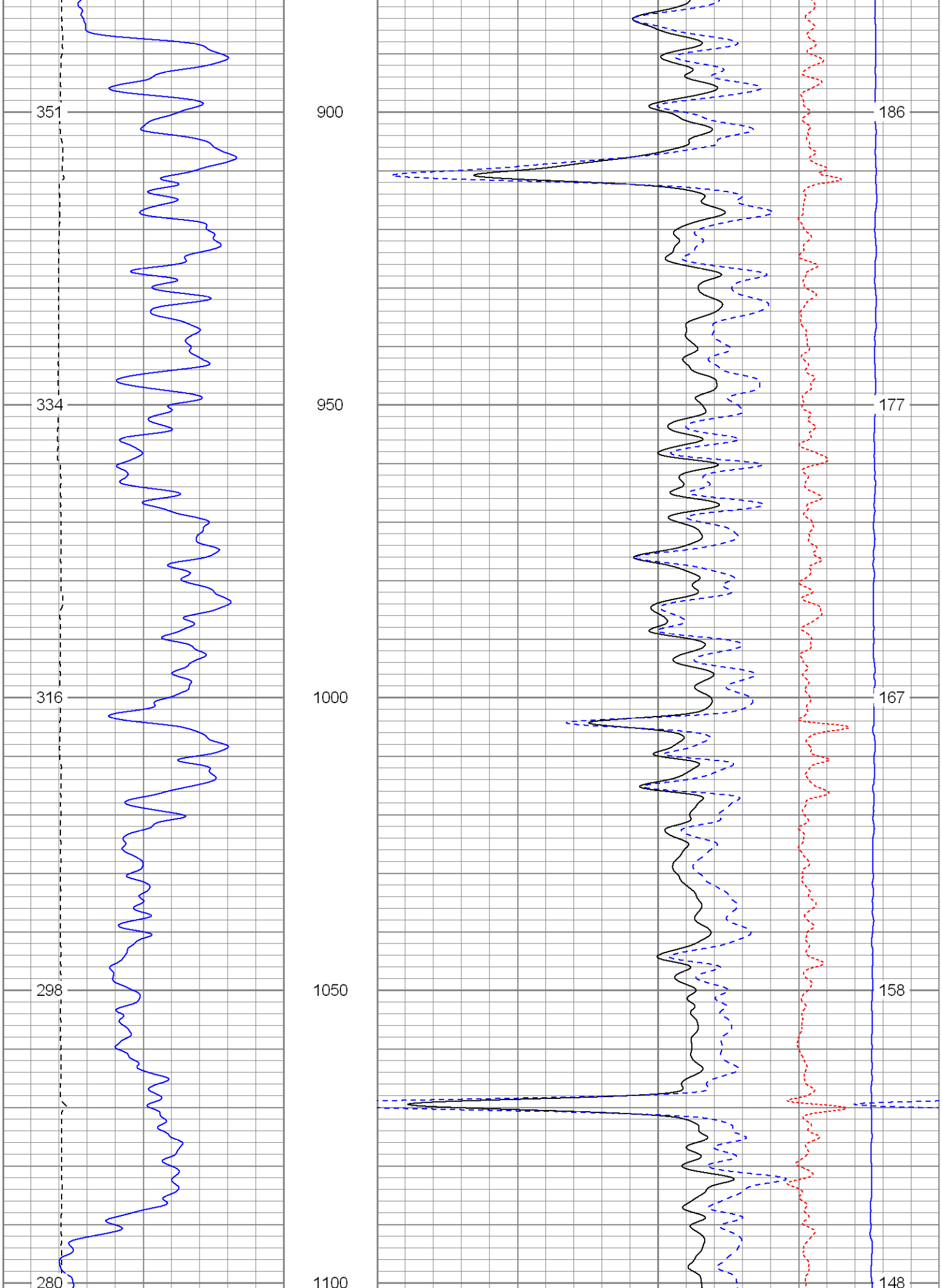
214
205
196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900
950
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1050
1100
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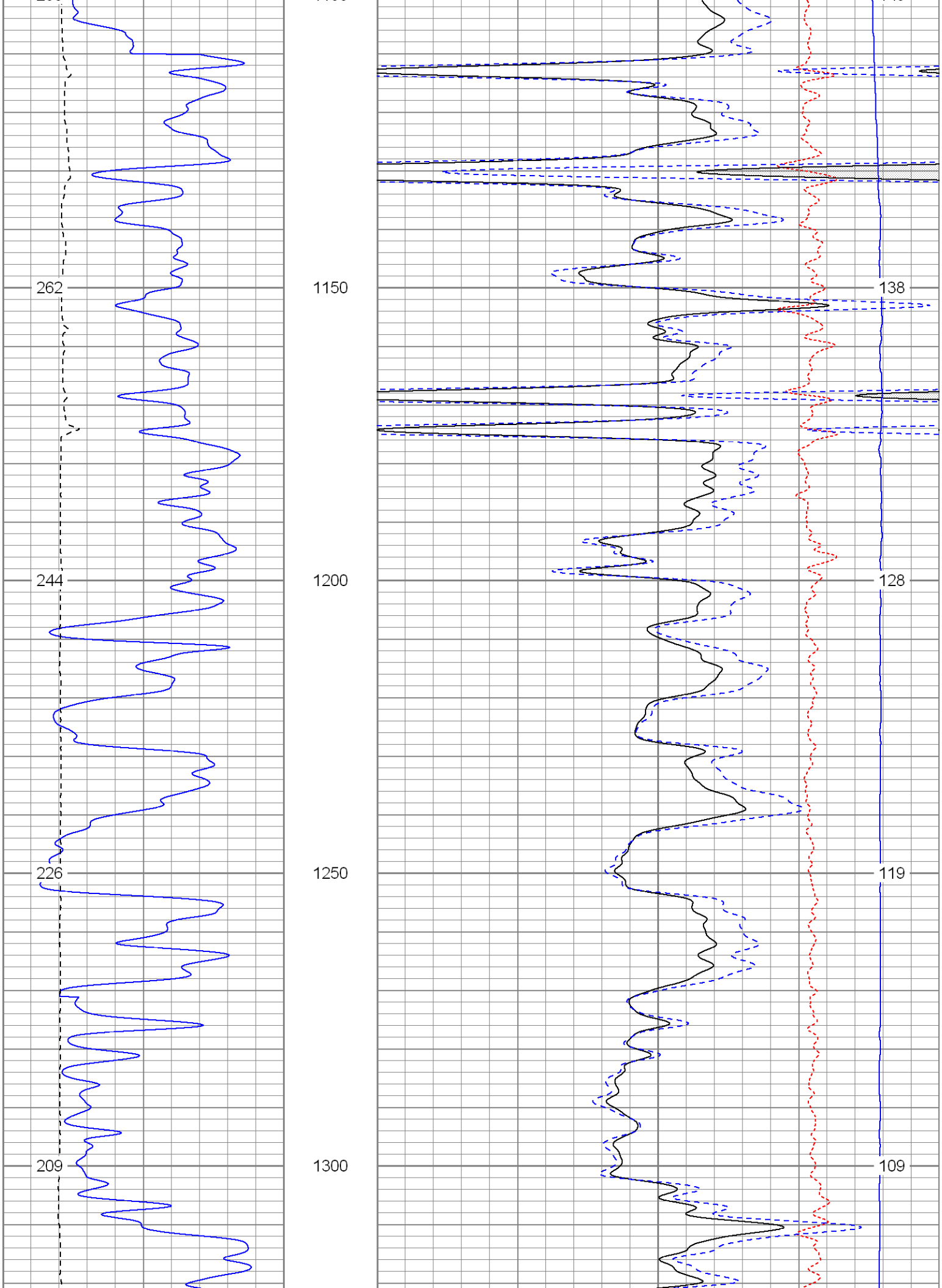
177
167
158
148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1250
1300
138
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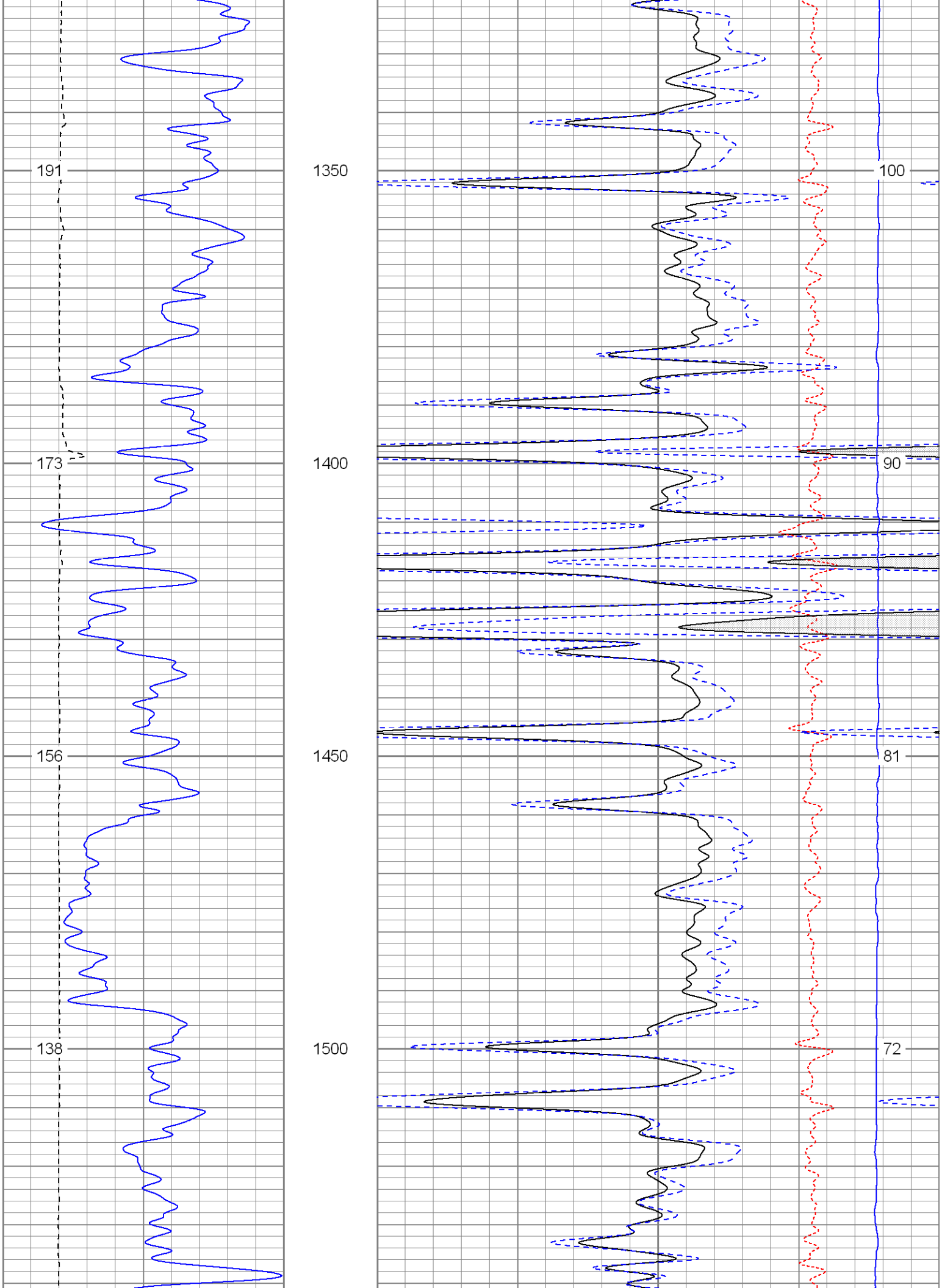
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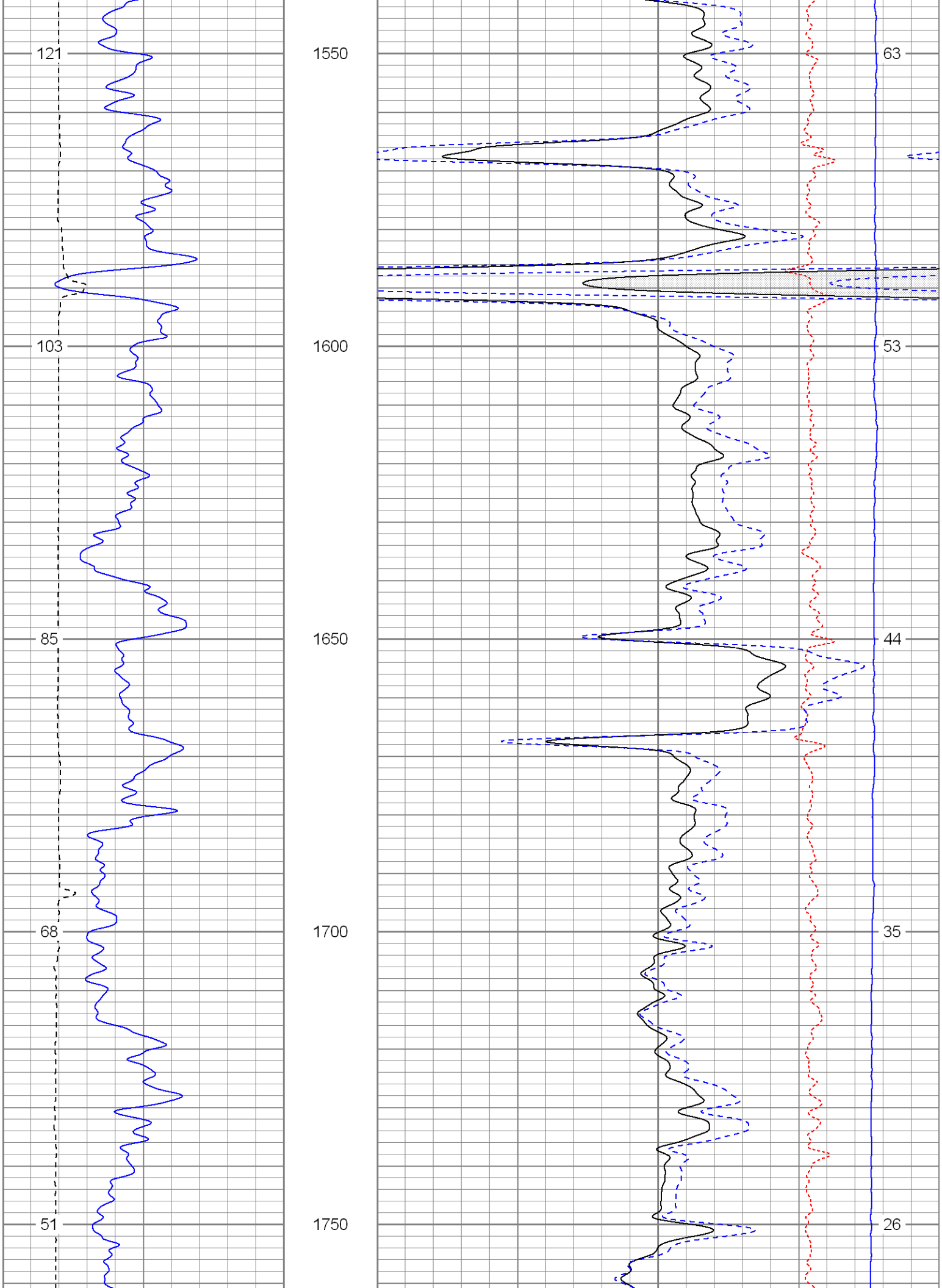
1350
1400
1450
1500
100
90
81
72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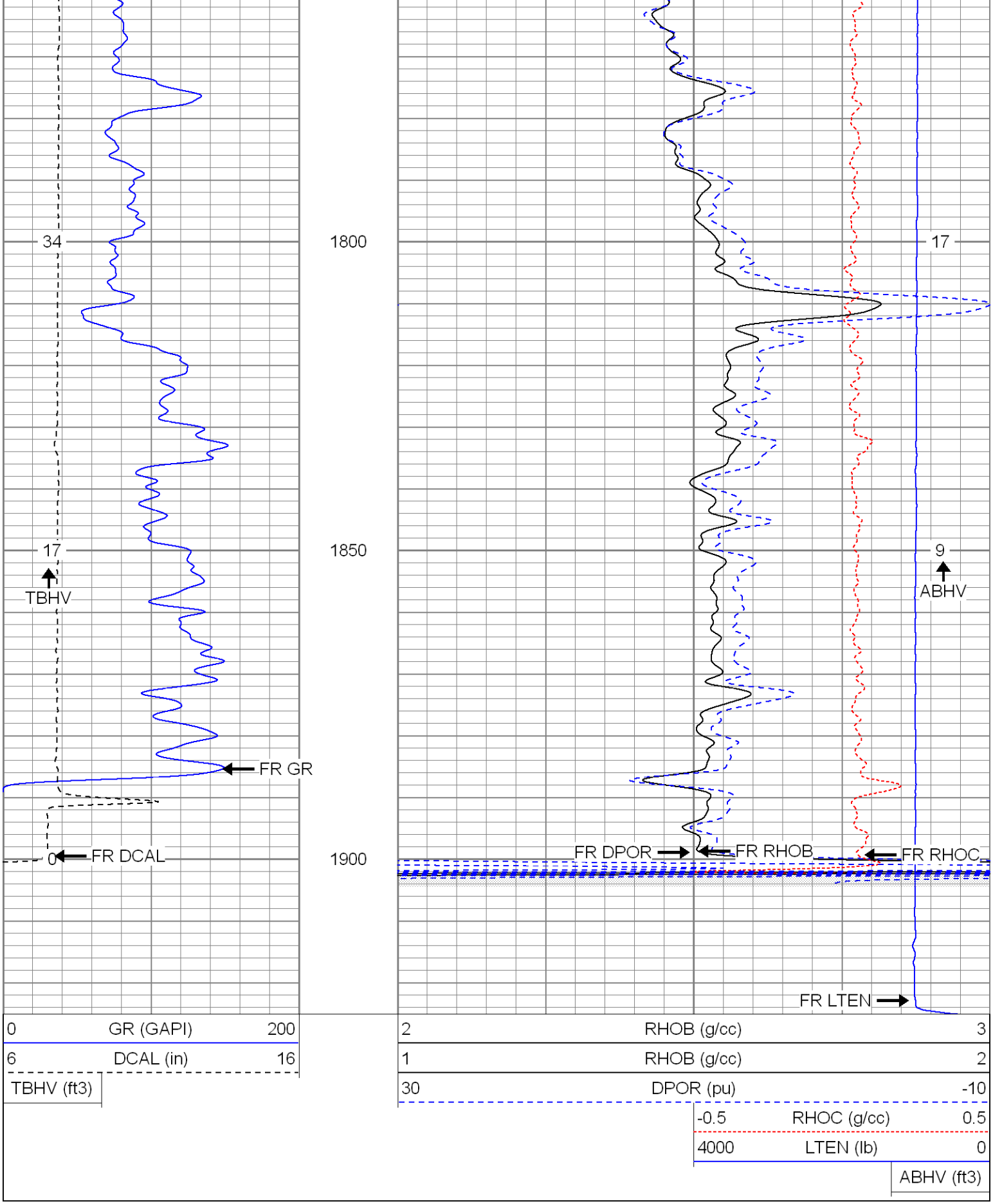

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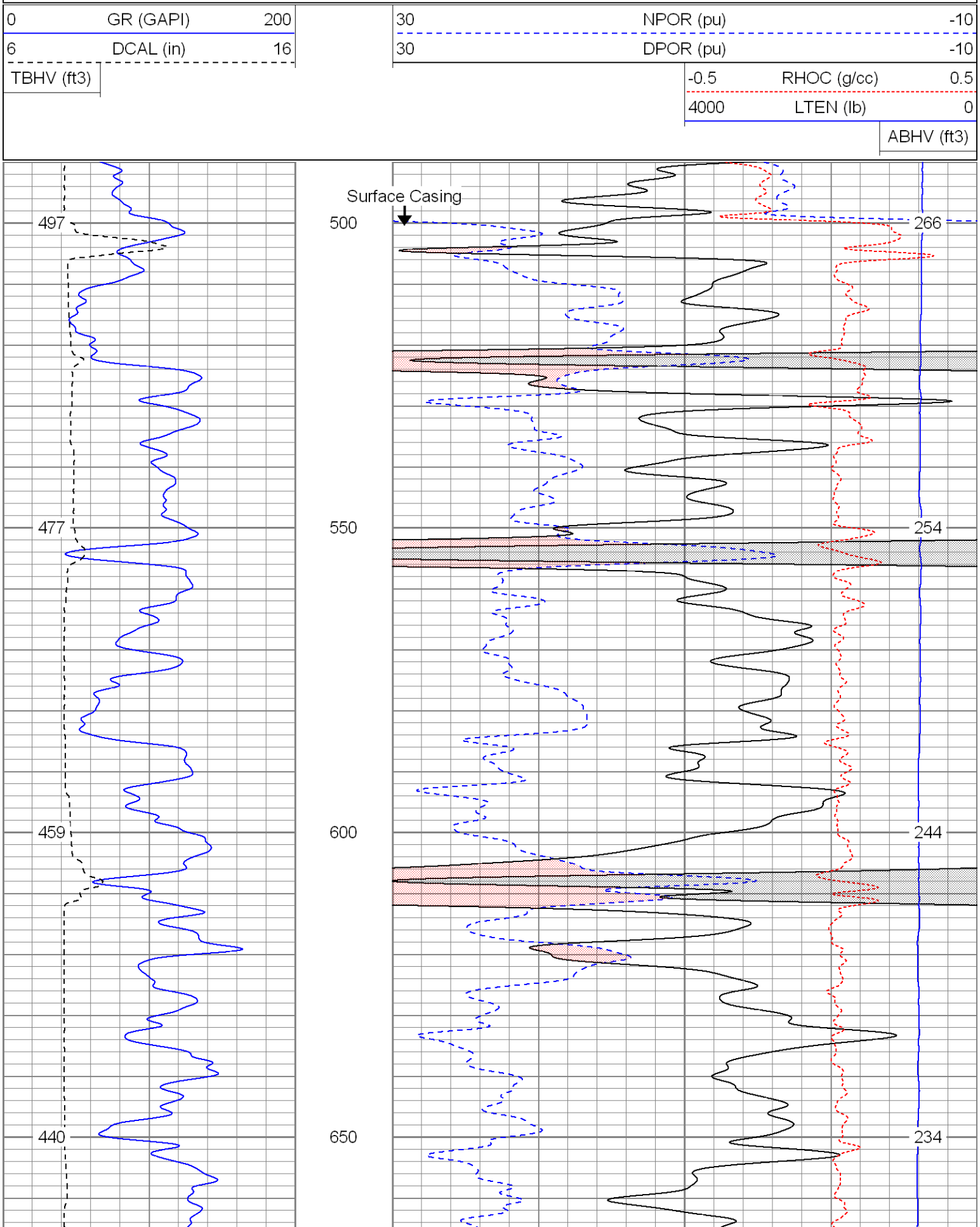
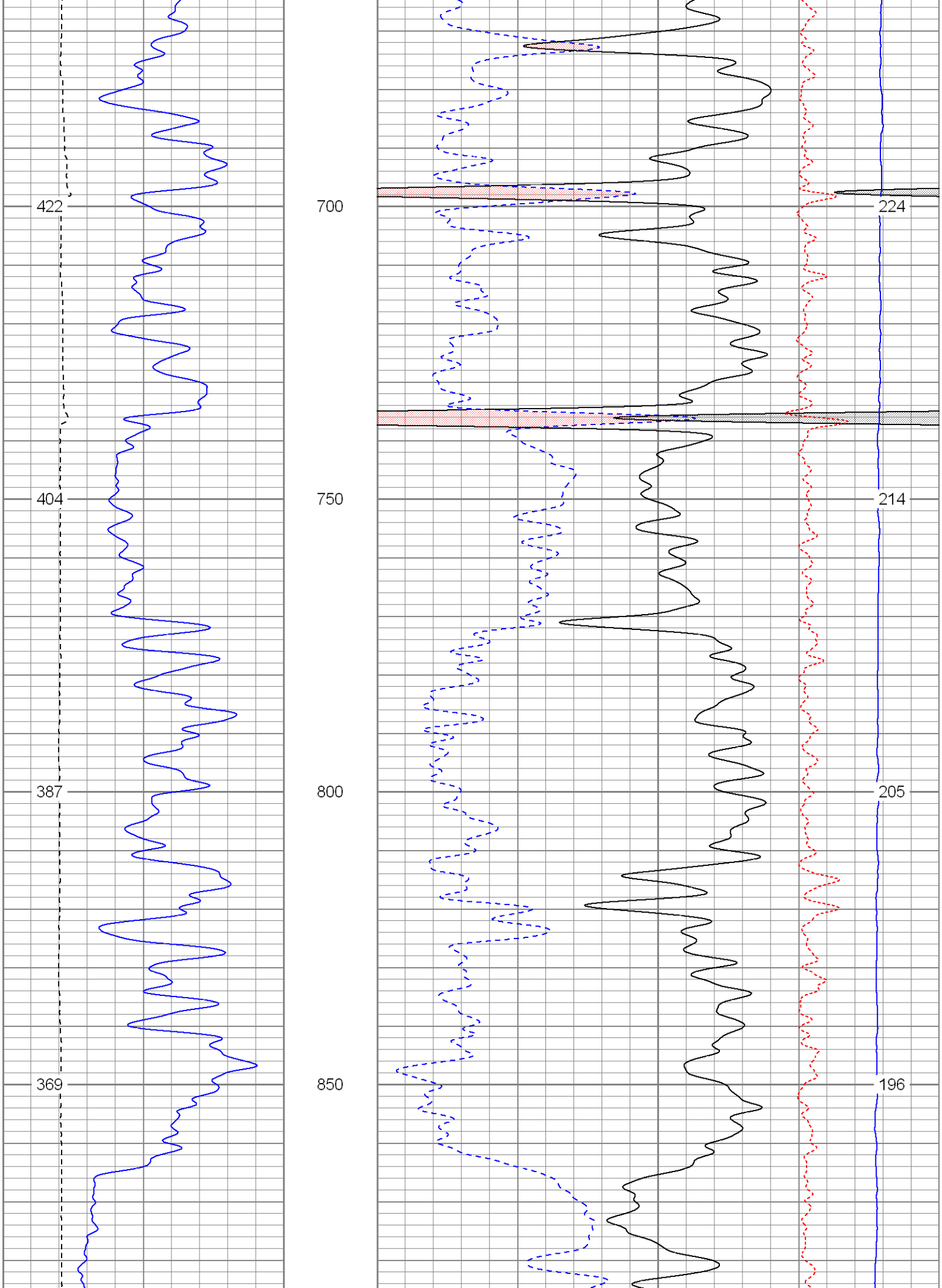
Main Pass

Database File:	xtoac0402.db
Dataset Pathname:	pass2.1
Presentation Format:	cdnl
Dataset Creation:	Sat Aug 16 19:55:40 2008 by Calc Open-Cased 070814
Charted by:	Depth in Feet scaled 1:240

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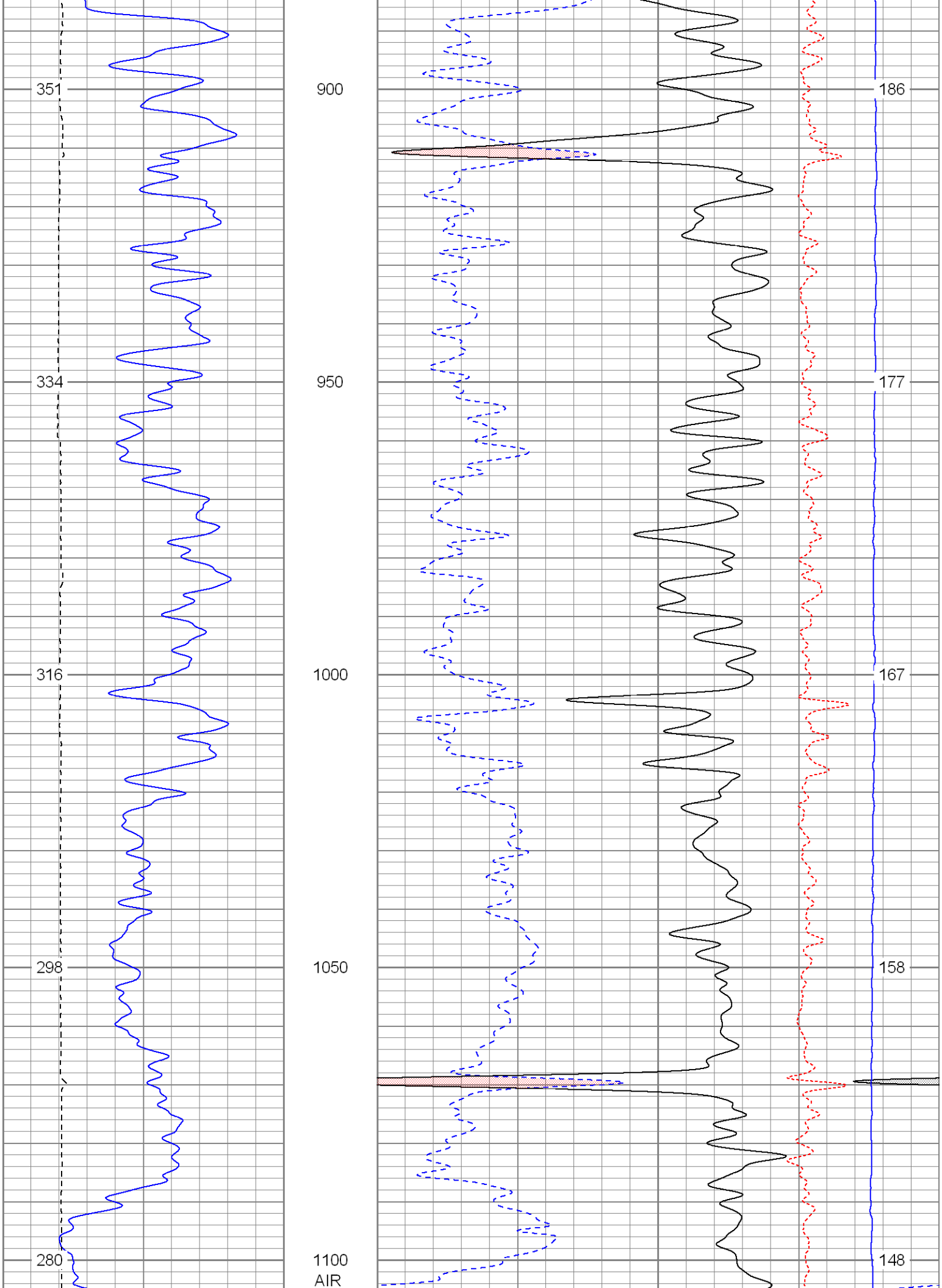
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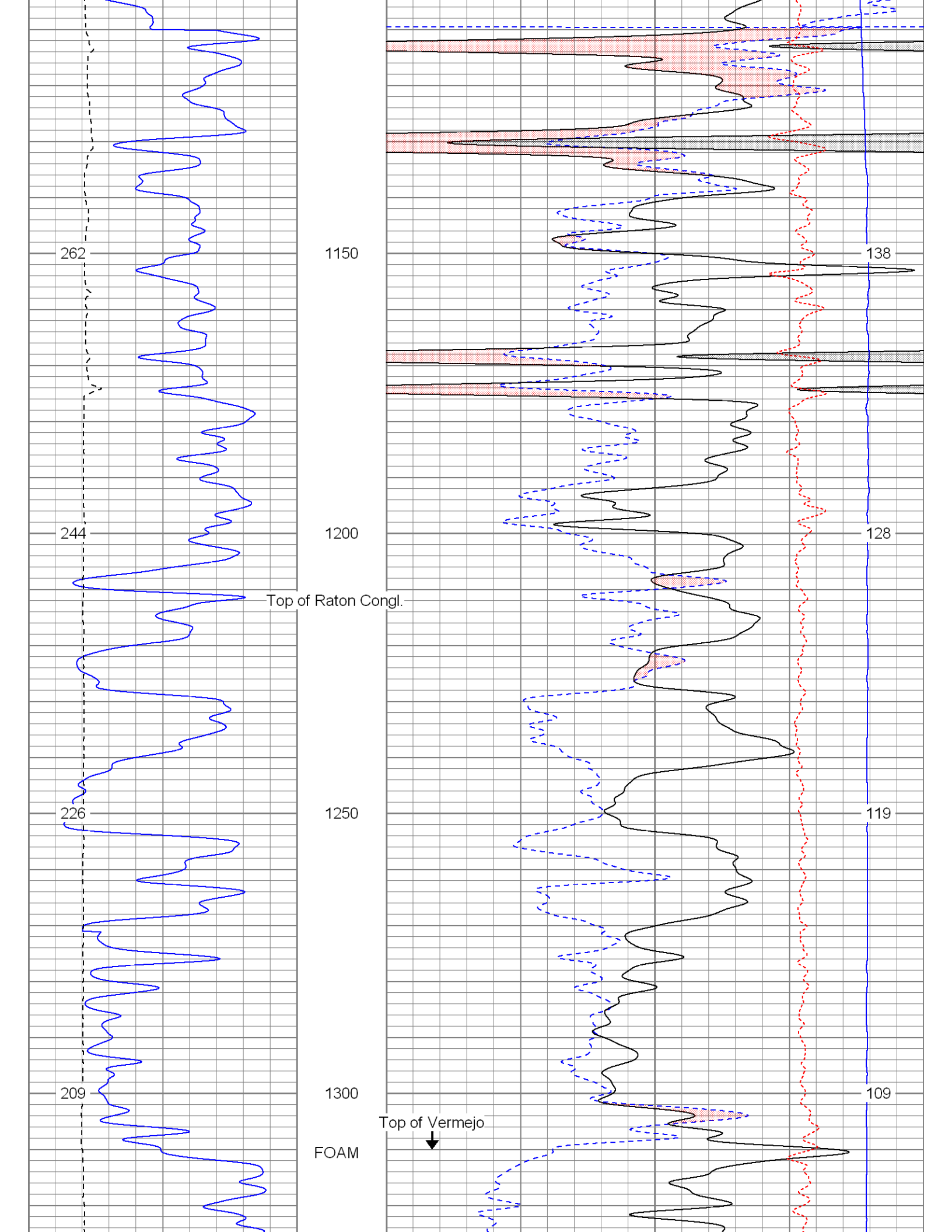
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1150
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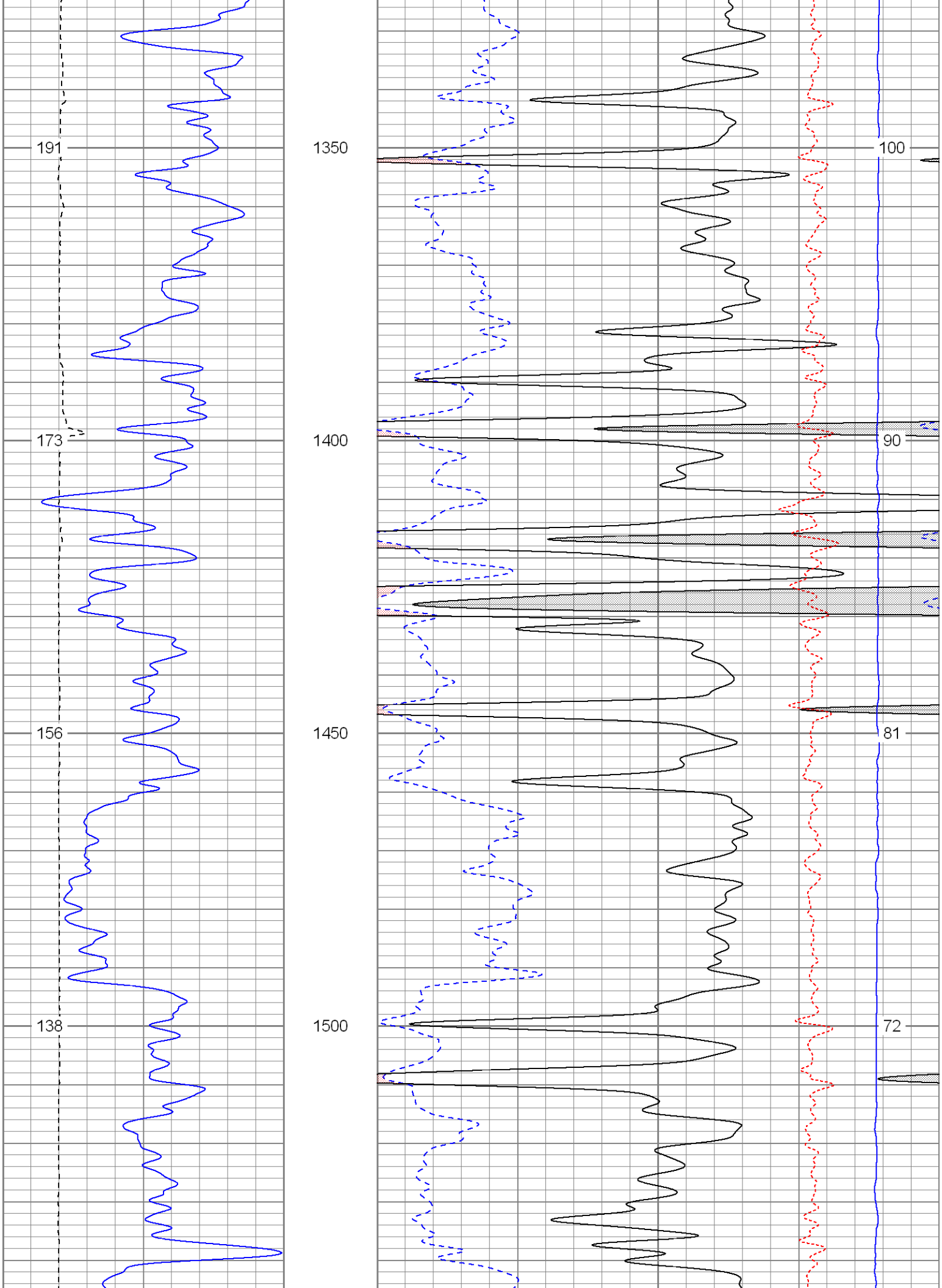
244
1200
128
Top of Raton Congl.
226
1250
119
209
1300
109
Top of Vermejo
FOAM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1450
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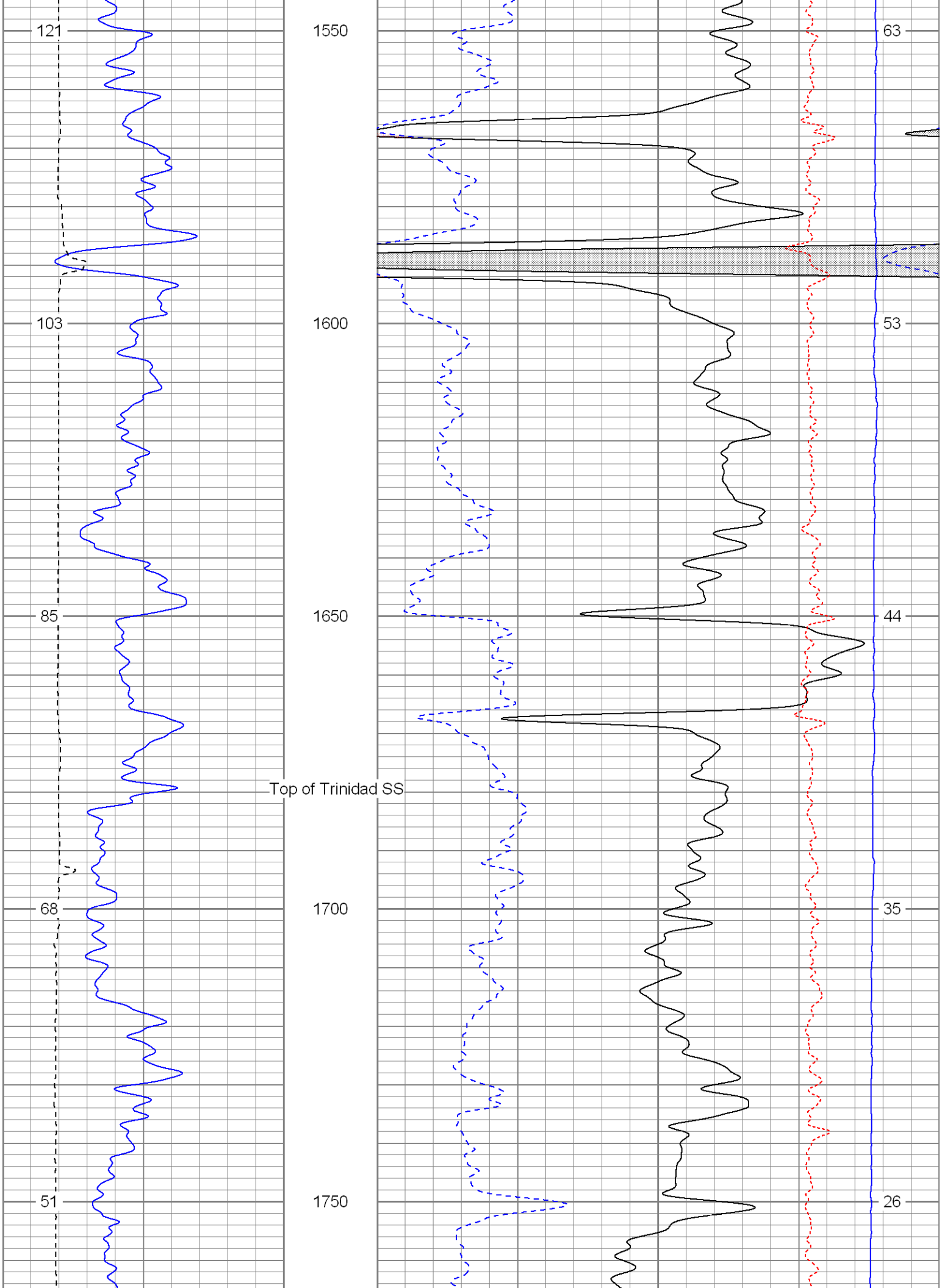
90
81
72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103
85
68
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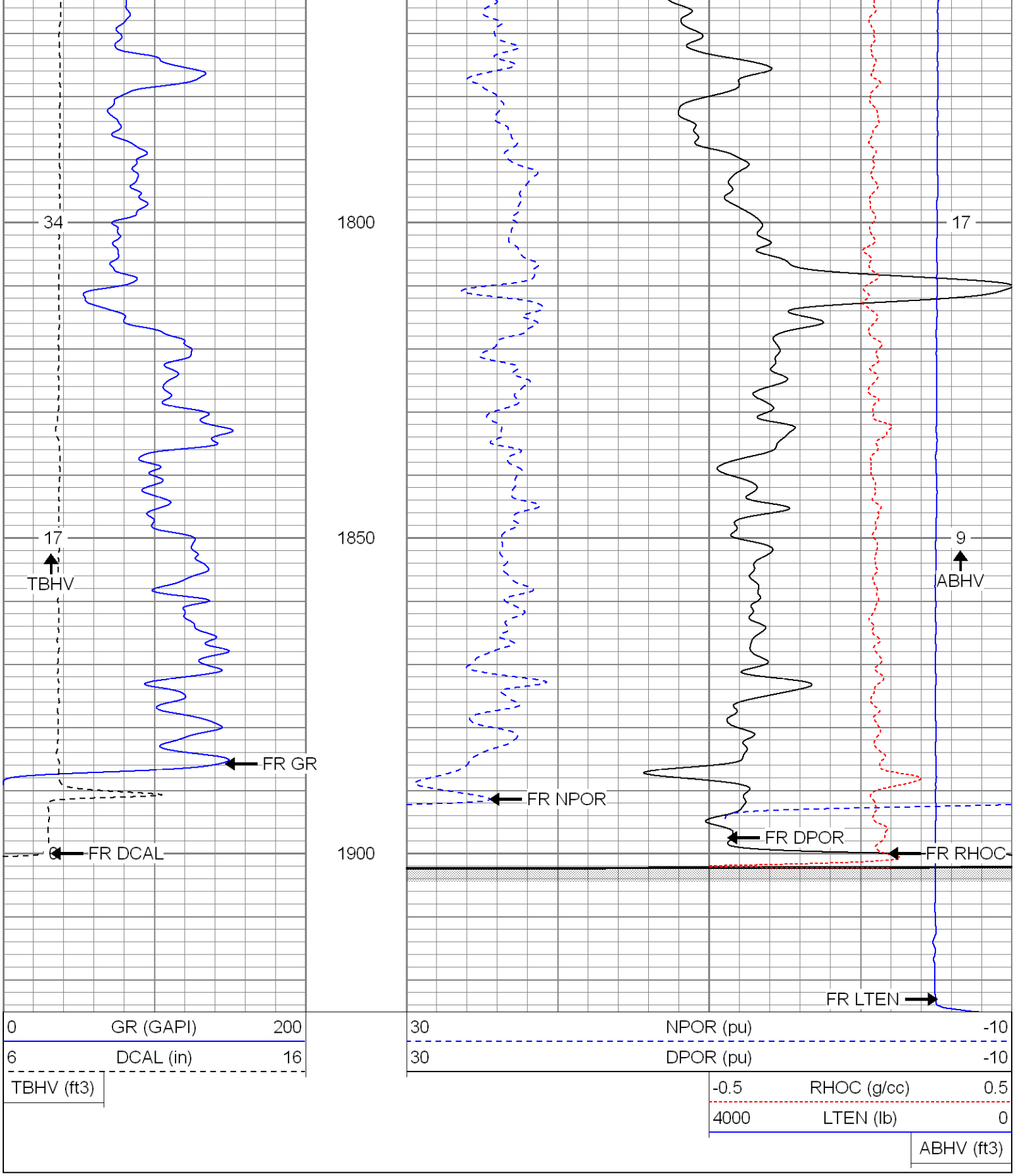
1550
1600
1650
1700
1750
63
53
44
35
26
Top of Trinidad SS



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Repeat Pass

Database File: xtoac0402.db
Dataset Pathname: pass1.1

Presentation Format: cdhl
Dataset Creation: Sat Aug 16 20:04:55 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

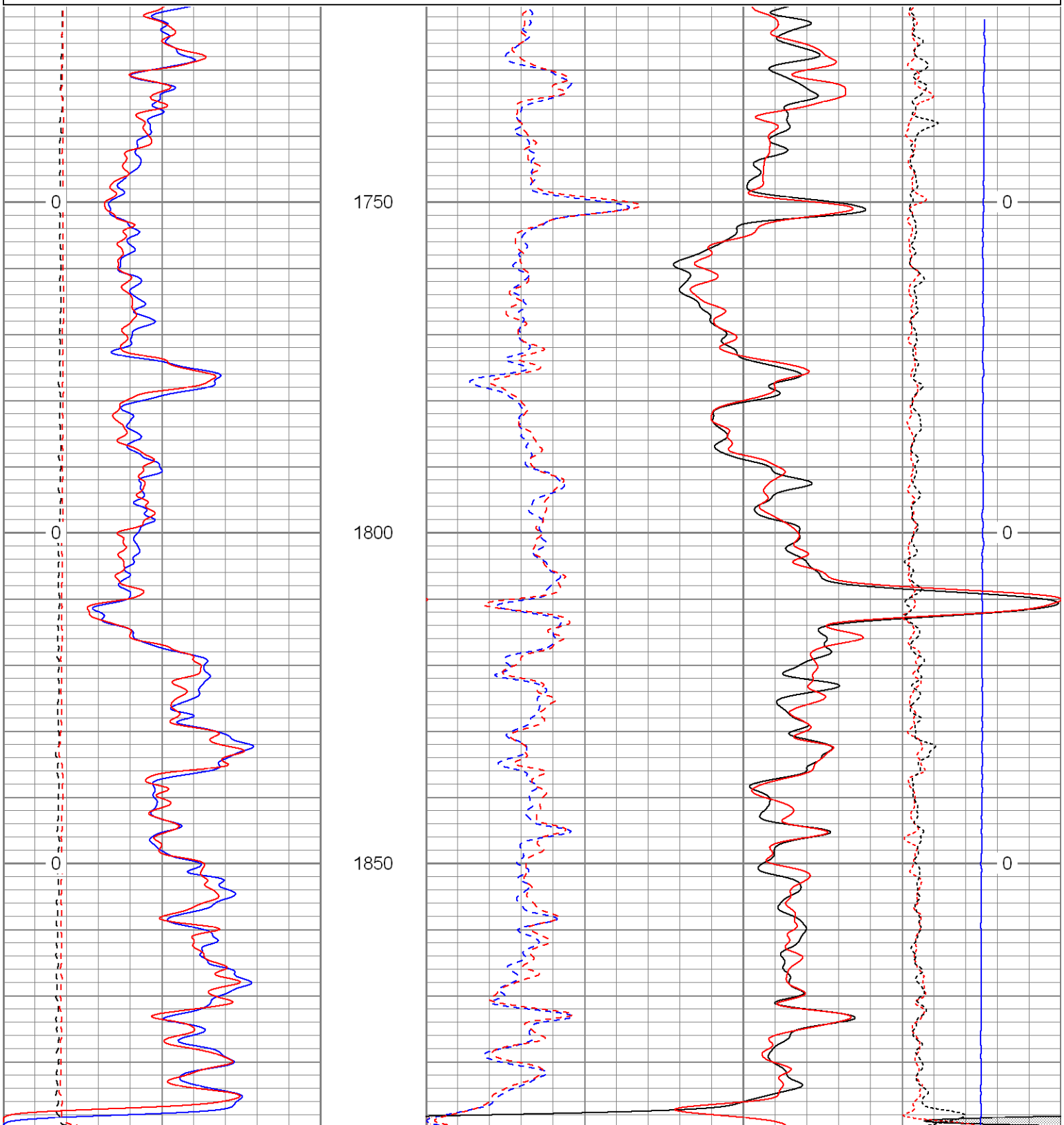
0	GR (GAPI)	200
6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16

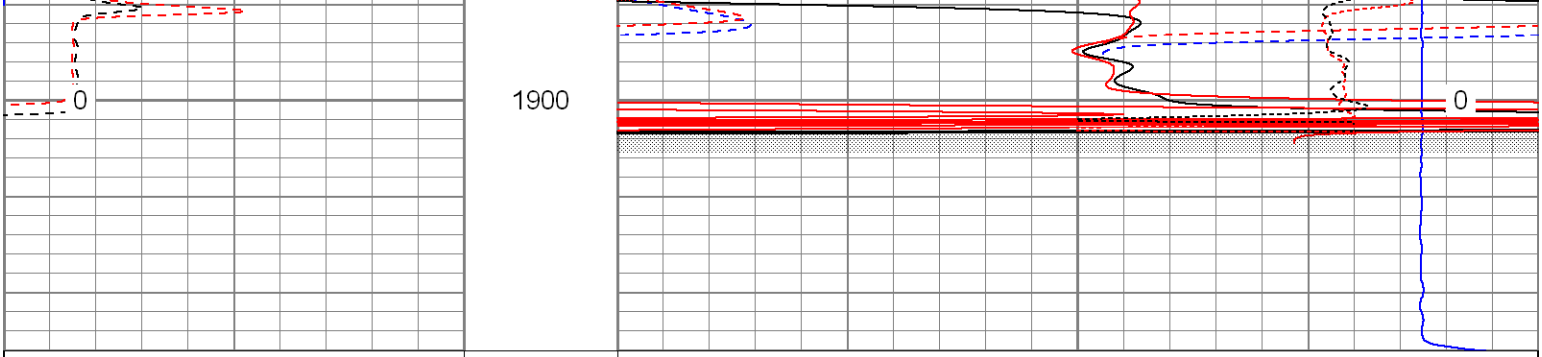
TBHV (ft3)

30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10

-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5

ABHV (ft3)





0	GR (GAPI)	200
6	DCAL (in)	16
0	GR-repeat (GAPI)	200
6	DCAL-repeat (in)	16
TBHV (ft3)		

30	NPOR (pu)	-10
30	DPOR (pu)	-10
30	NPOR-repeat (pu)	-10
30	DPOR-repeat (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
-0.5	RHOC-repeat (g/cc)	0.5
ABHV (ft3)		

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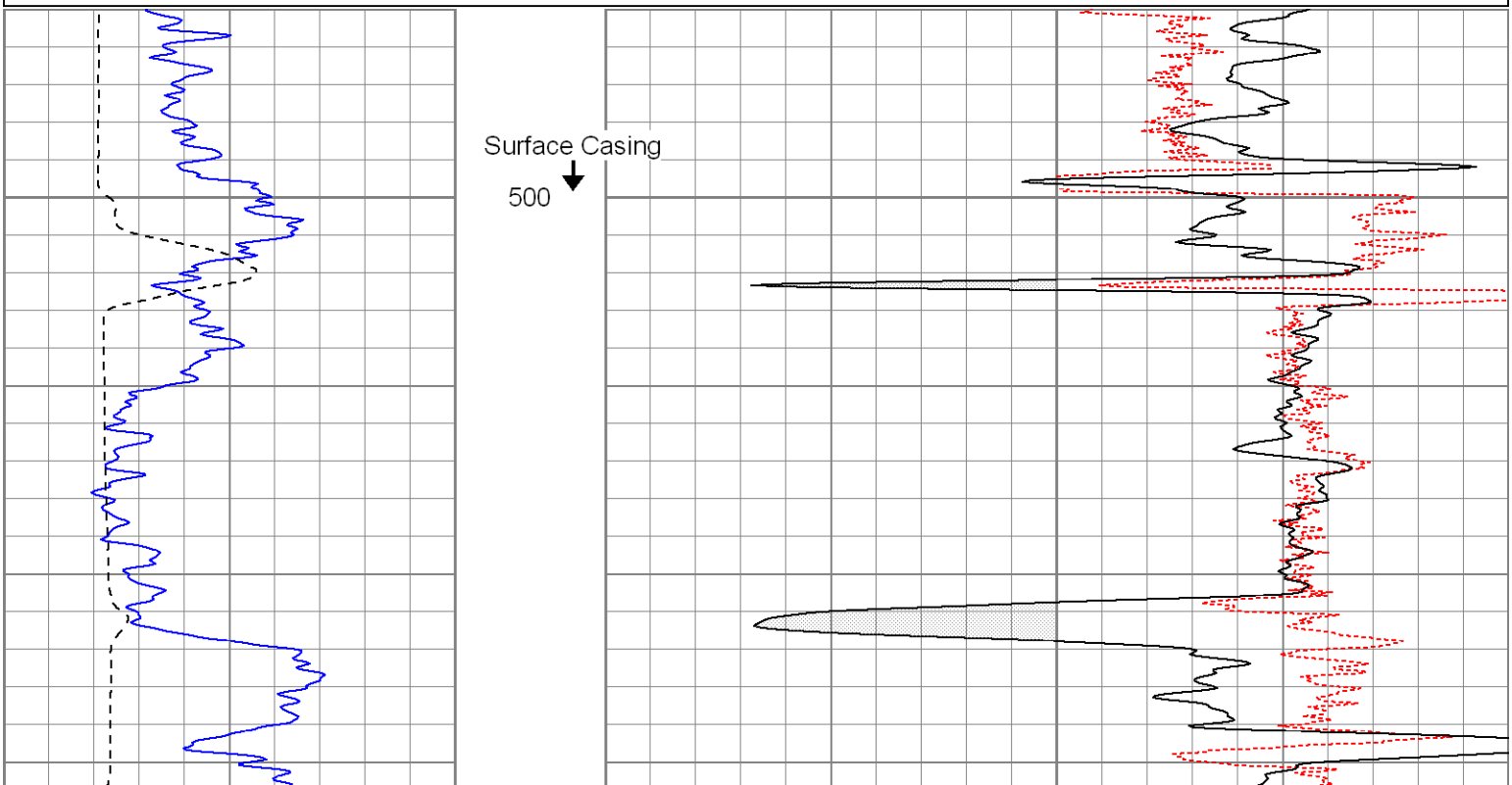
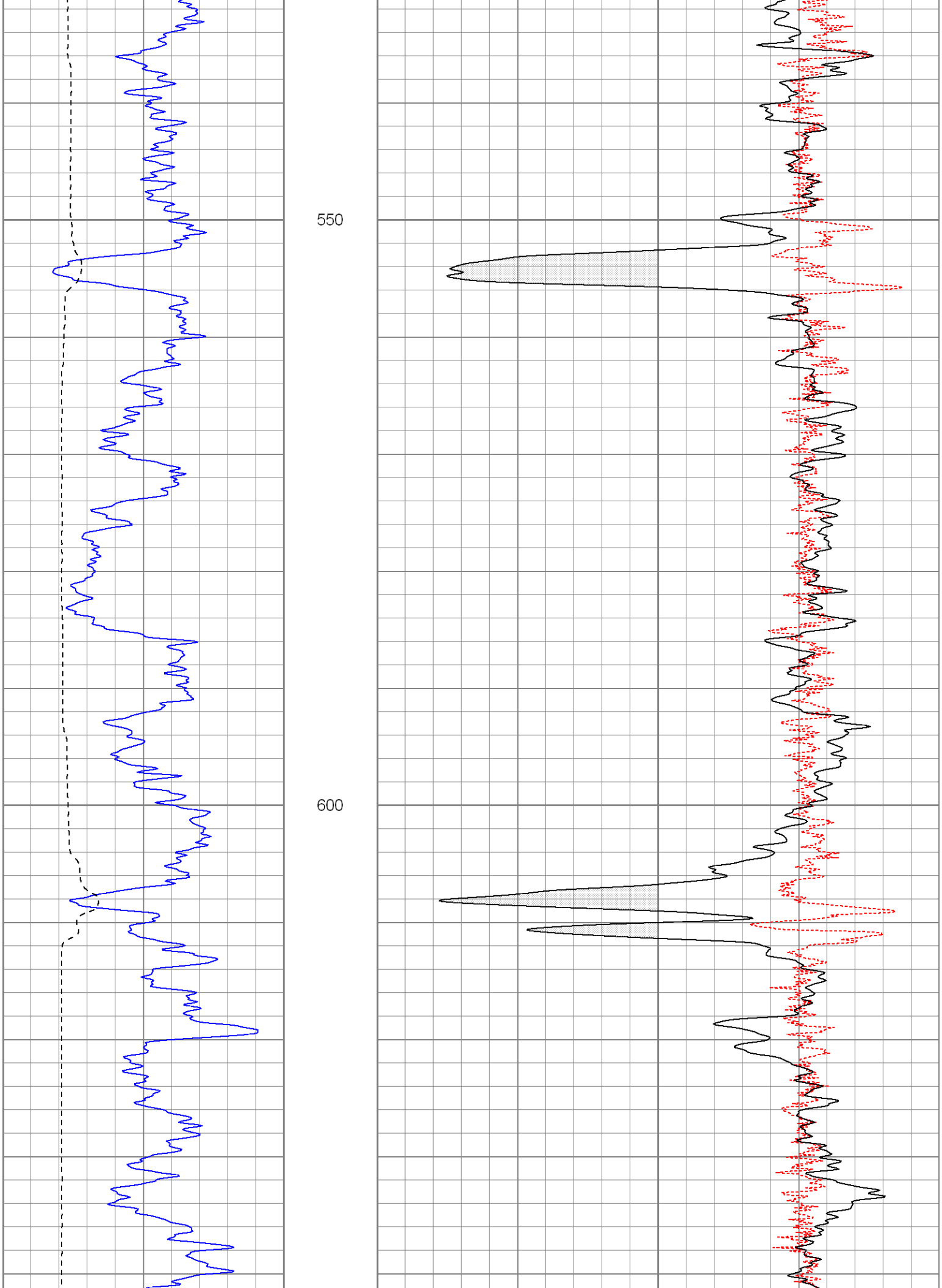
High Resolution Pass

Database File:	xtoac0402.db
Dataset Pathname:	pass2.2
Presentation Format:	cdlhr
Dataset Creation:	Mon Aug 18 08:04:59 2008 by Calc Open-Cased 070814
Charted by:	Depth in Feet scaled 1:120

0	GR (GAPI)	200
6	DCAL (in)	16

1	RHOB (g/cc)	3
-0.5	RHOC (g/cc)	0.5

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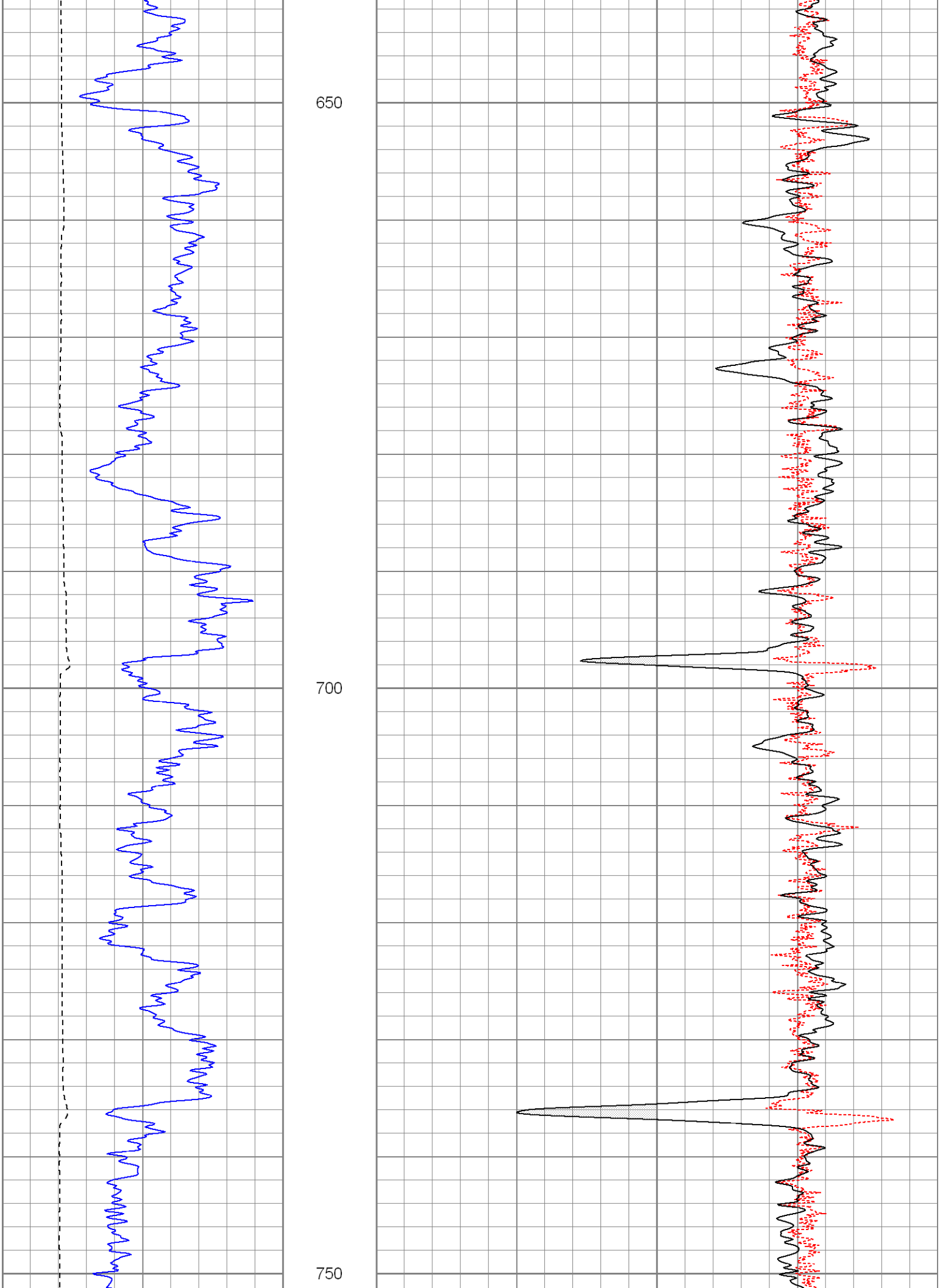
600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700
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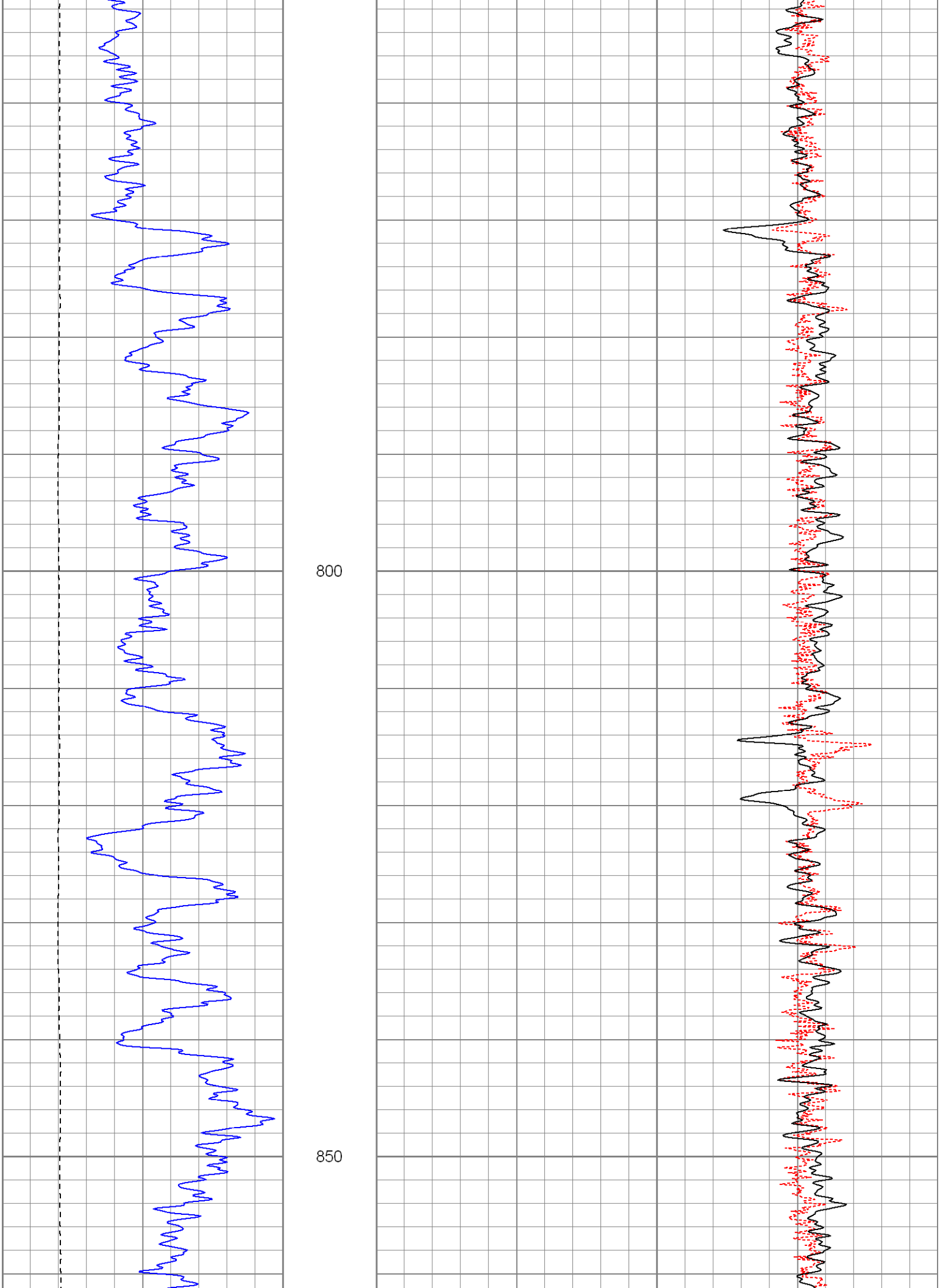
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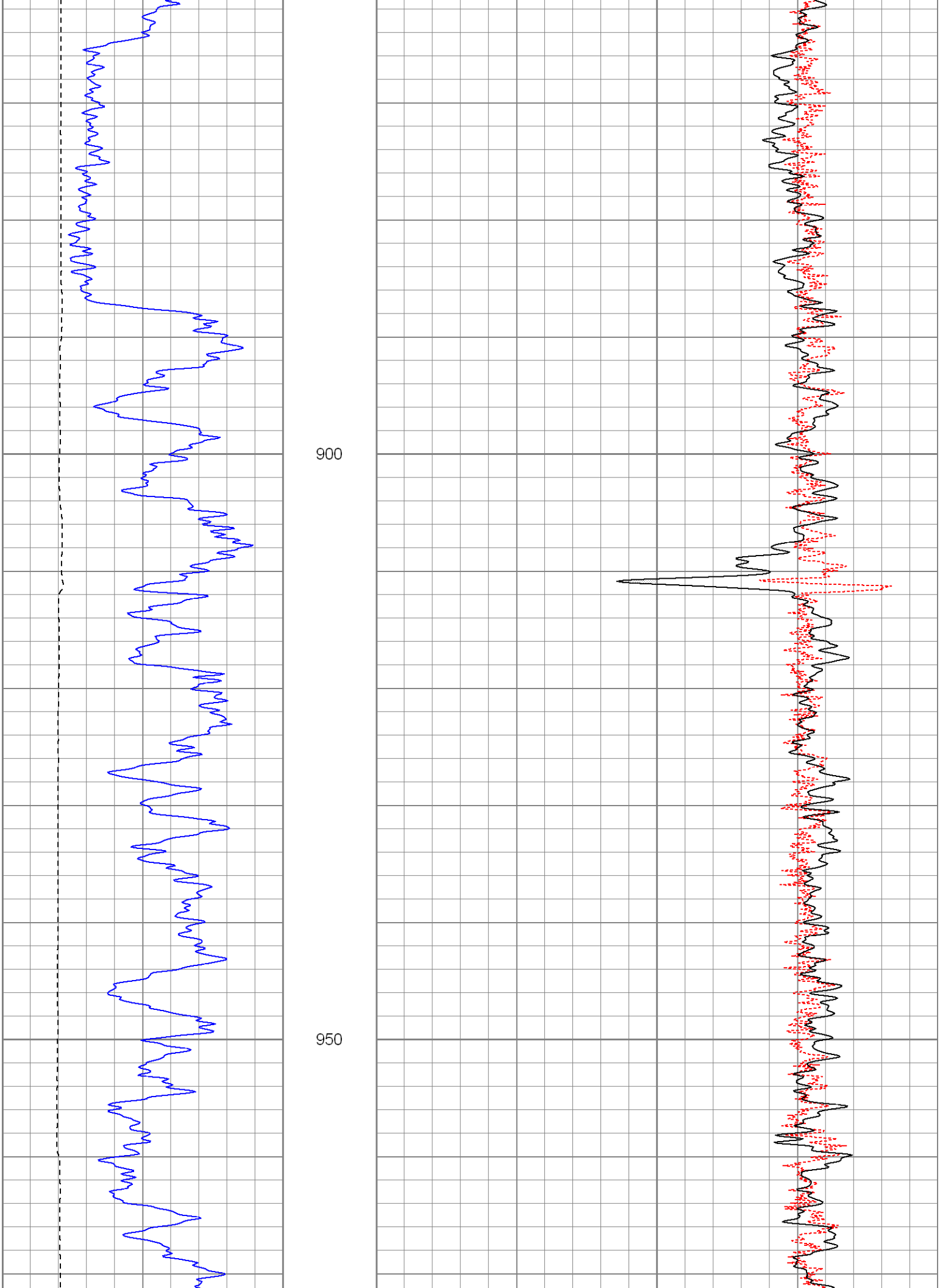
900
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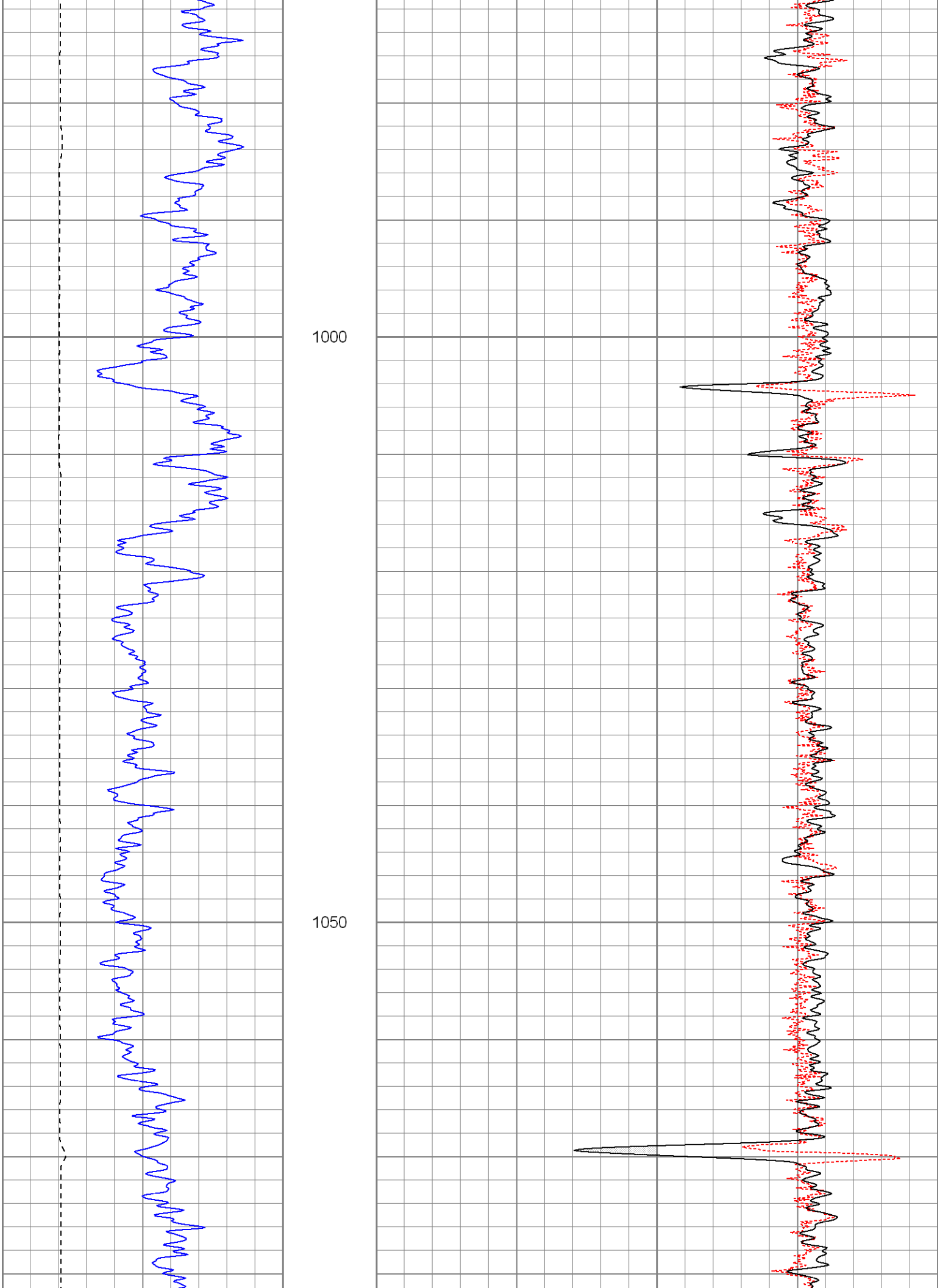
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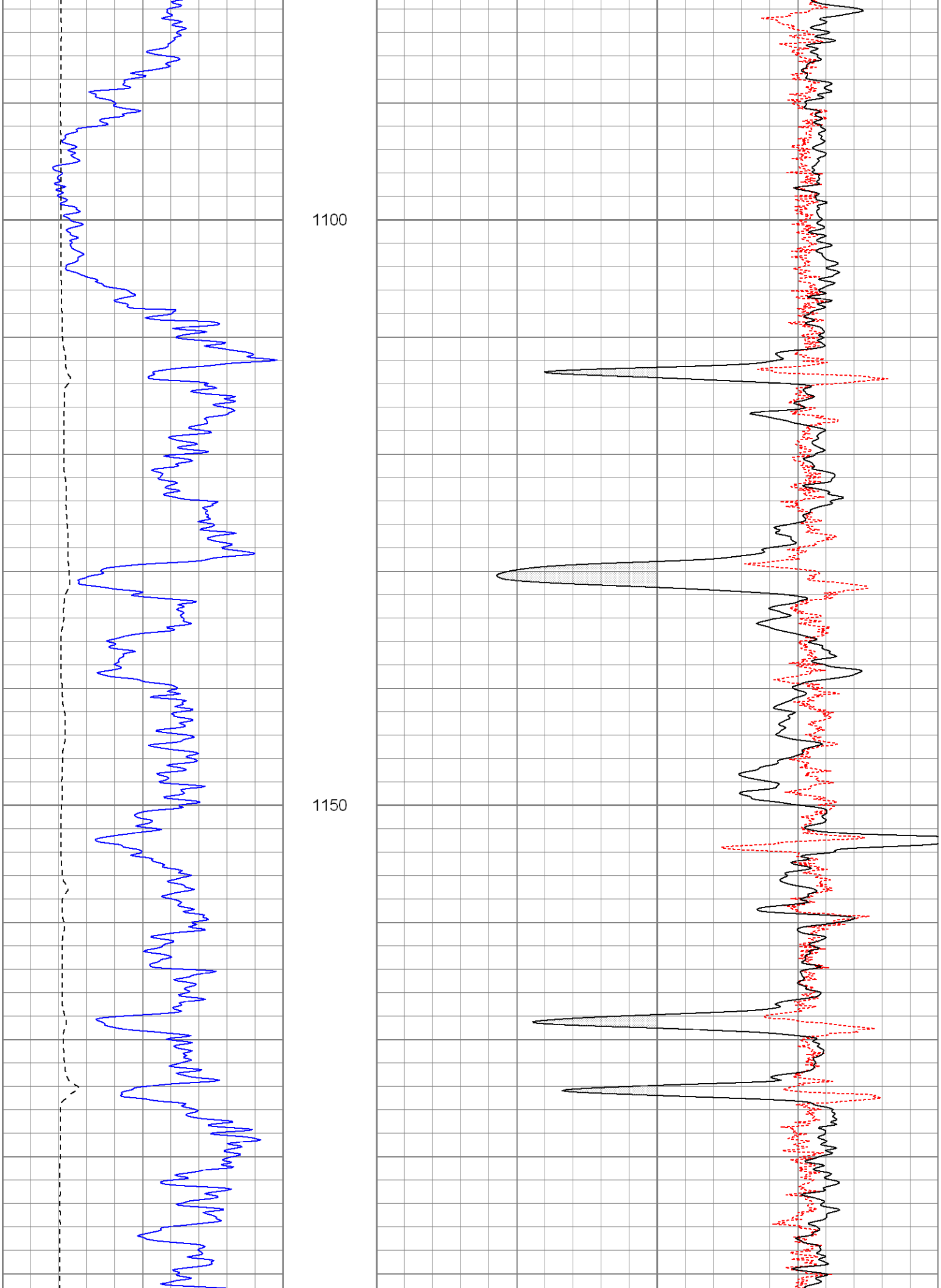
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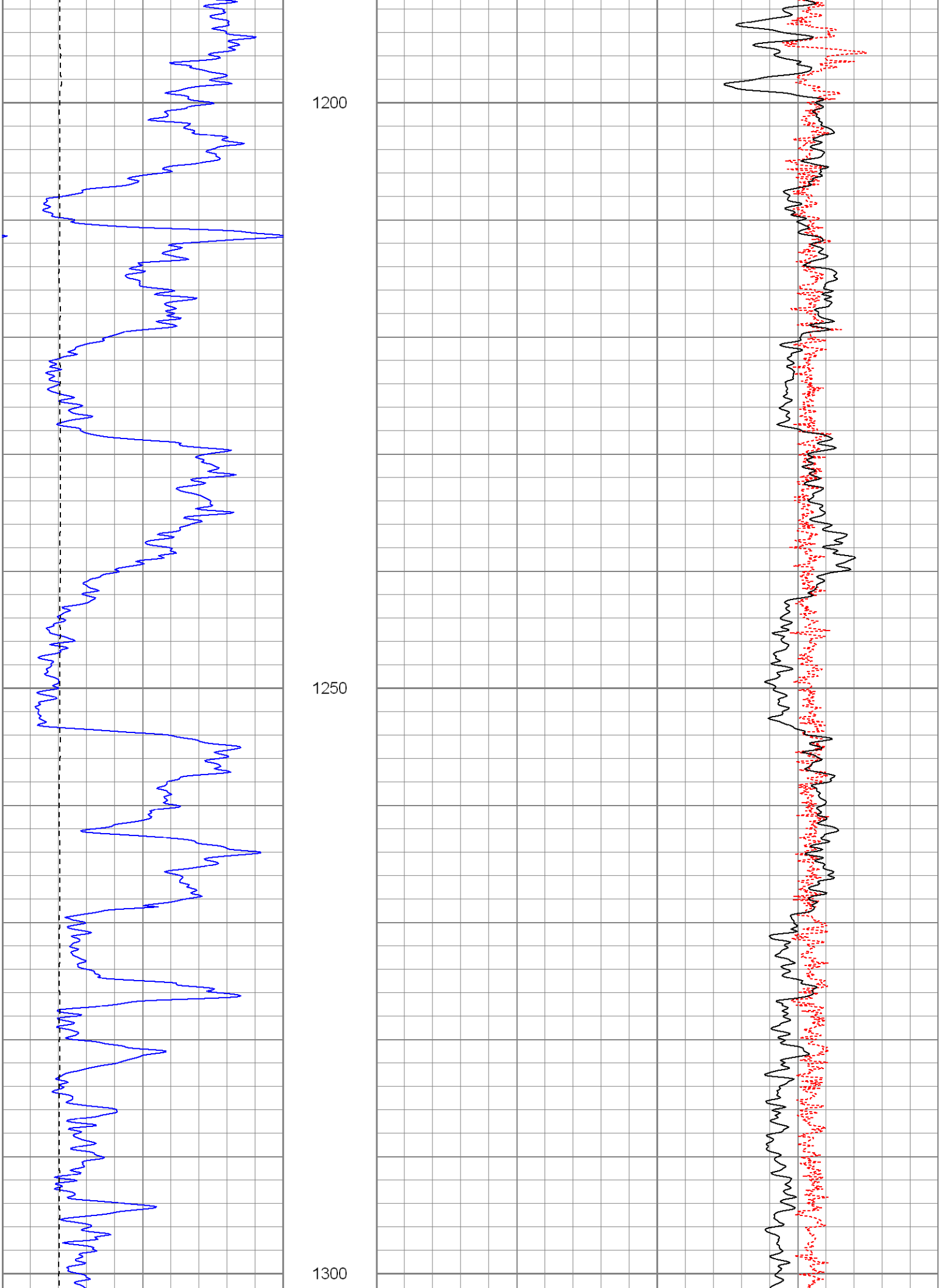
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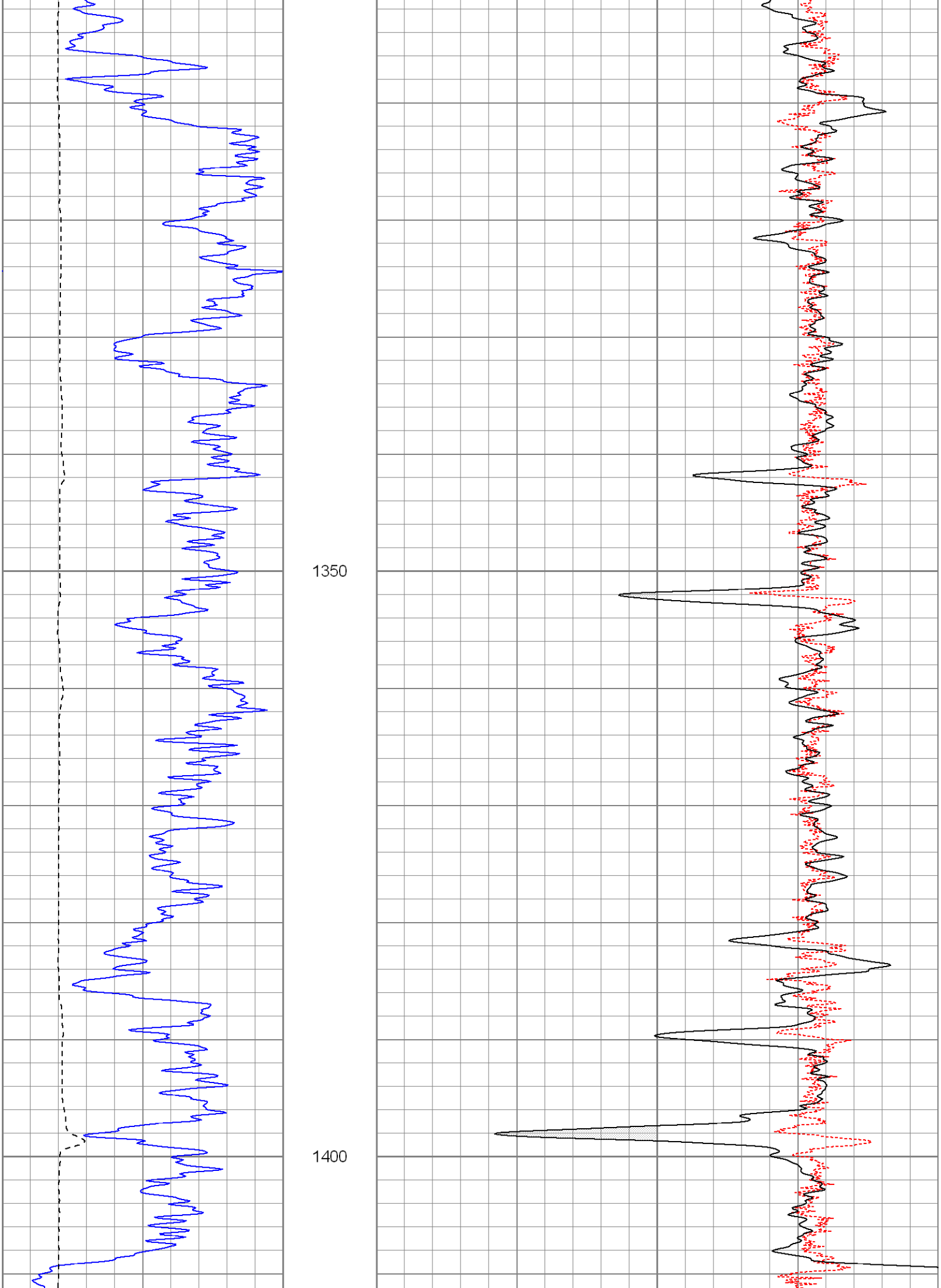
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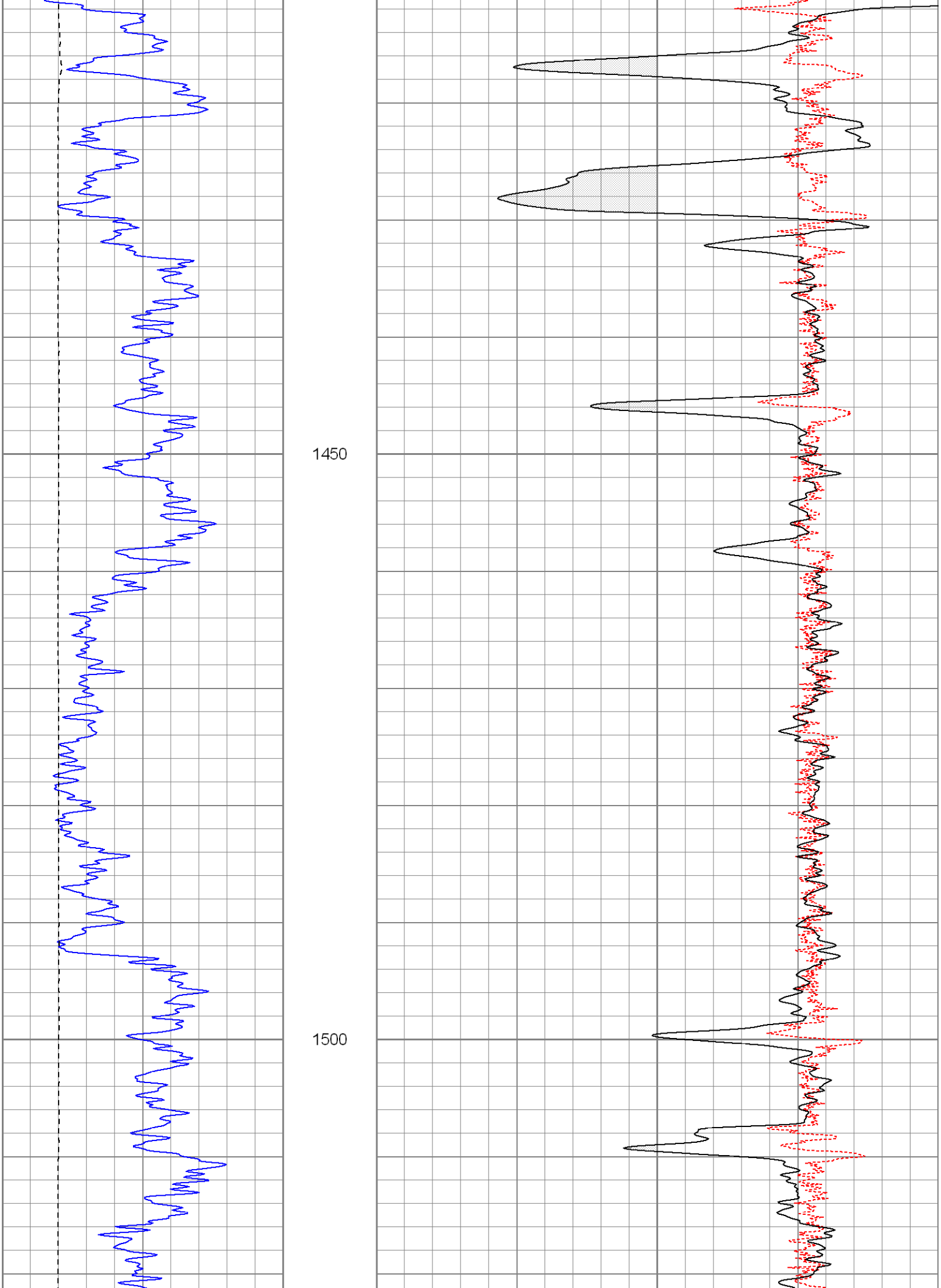
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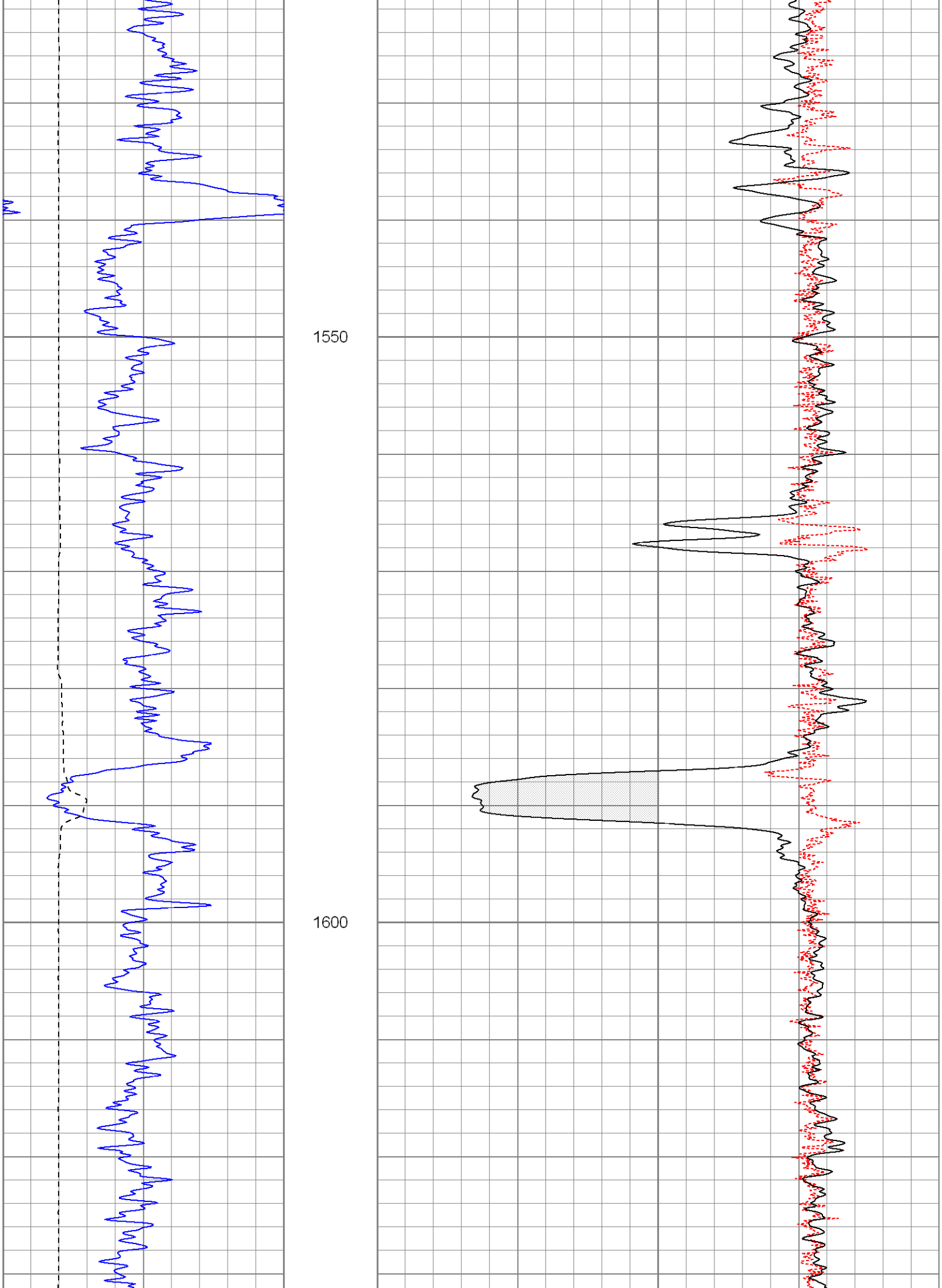
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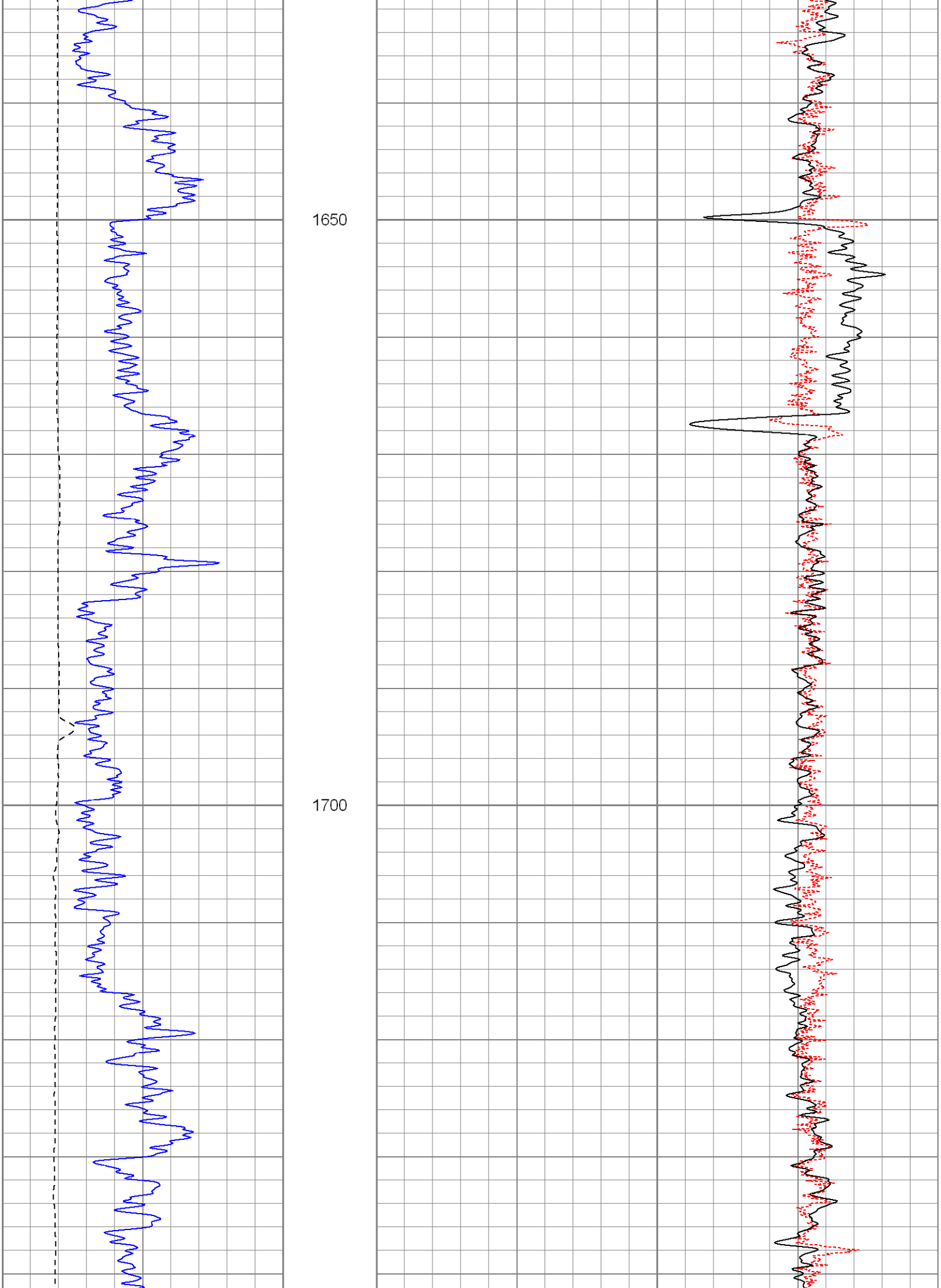
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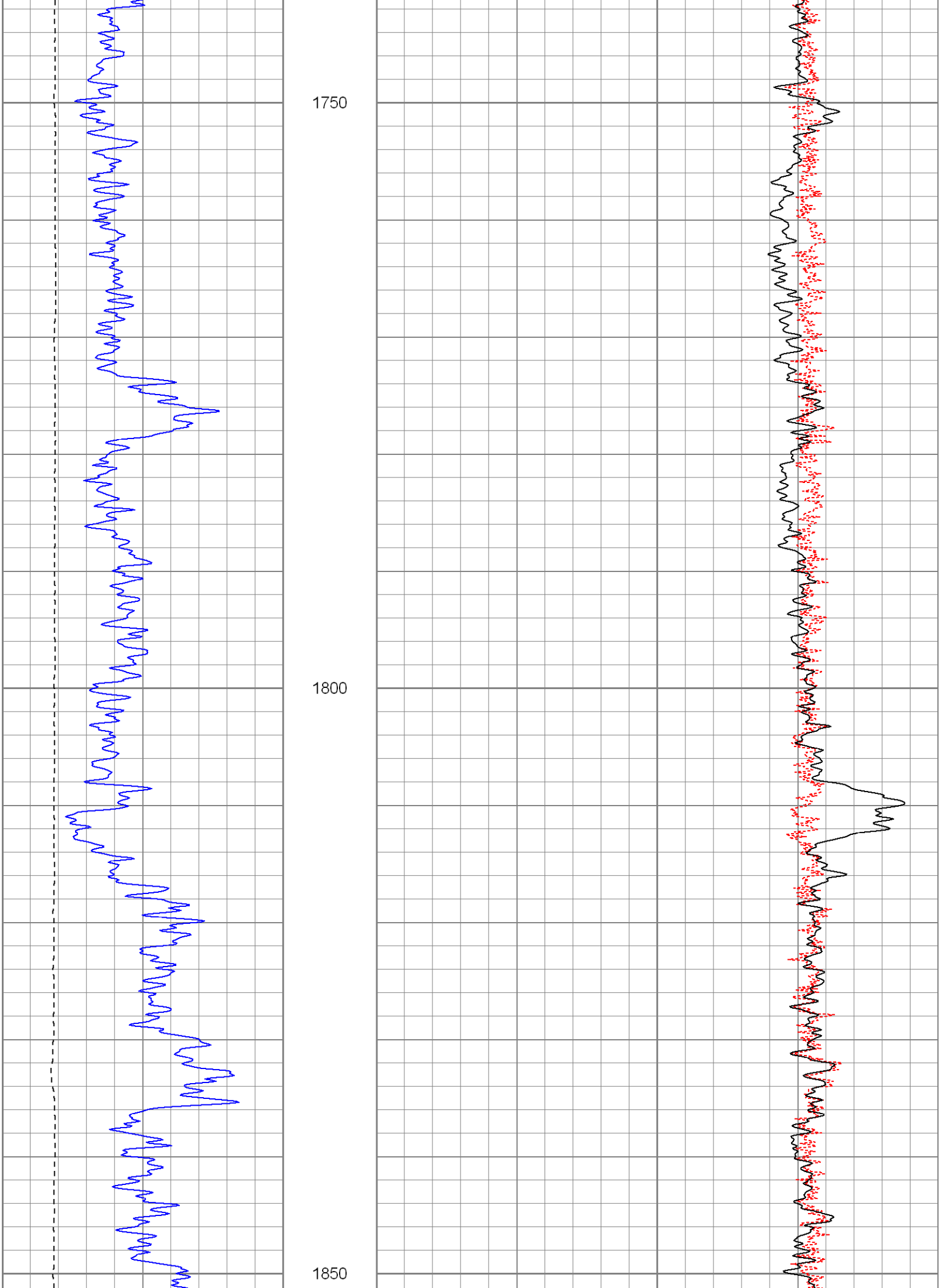
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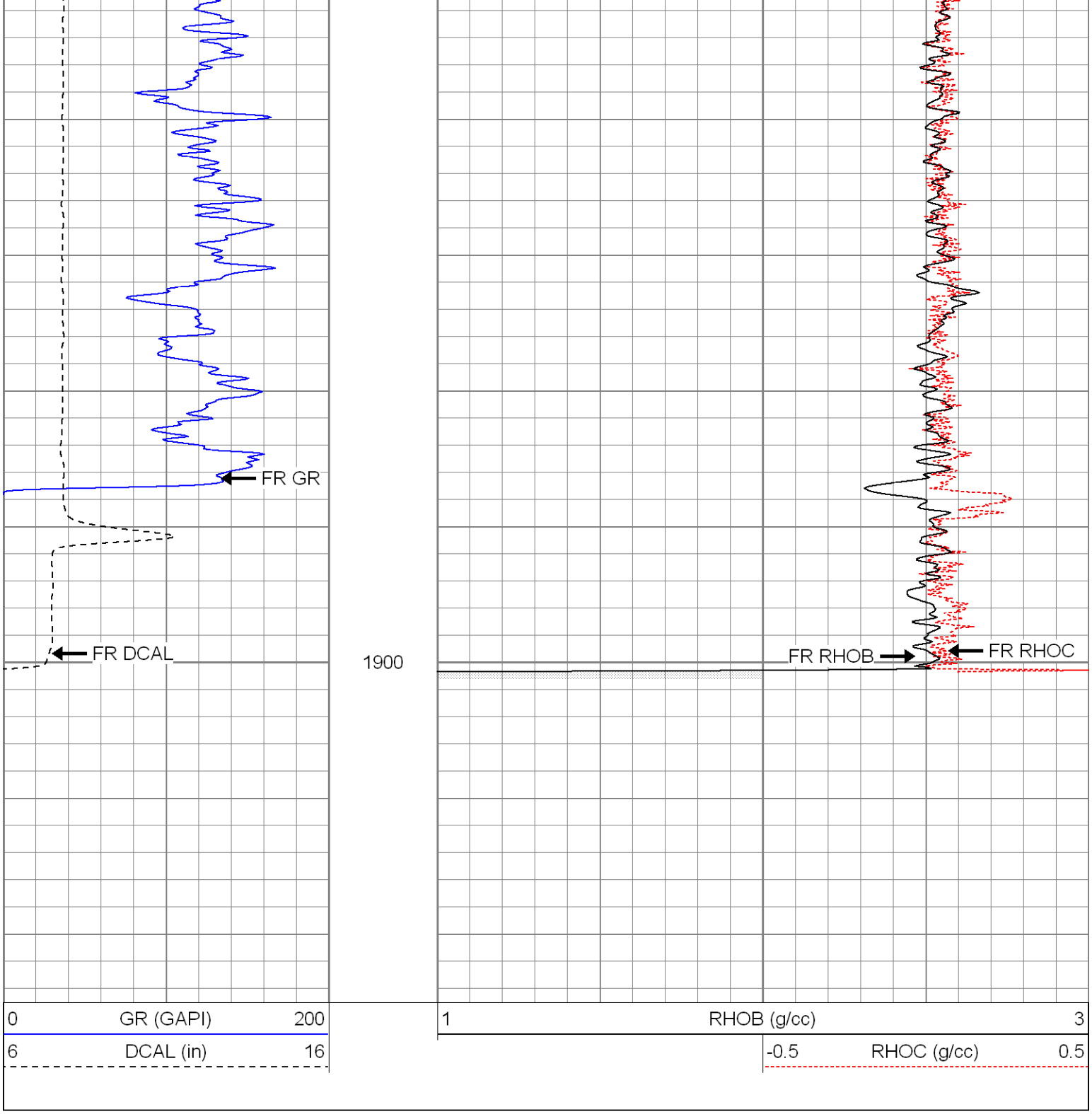


Calibration Report

Database File: xtoac0402.db
Dataset Pathname: pass1
Dataset Creation: Sat Aug 16 18:22:41 2008 by Log Open-Cased 070814

Dual Induction Calibration Report

Serial-Model:	5375-G
Surface Cal Performed:	Sat Aug 16 17:58:22 2008
Downhole Cal Performed:	Sat Aug 16 17:58:59 2008

Surface Calibration

Readings	References	Results

Loop:	Air	Loop		Air	Loop		m	b
Deep	0.007	0.626	V	0.000	500.000	mmho-m	808.272	-6.019
Medium	0.009	0.750	V	0.000	550.000	mmho-m	742.800	-6.787

Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.627	V	0.000	500.000	mmho-m	807.324	-5.997
Medium	0.009	0.750	V	0.000	550.000	mmho-m	742.396	-6.883

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.020	500.730	mmho-m	-0.015	500.572	mmho-m	1.000	0.005
Medium	0.231	550.032	mmho-m	0.100	550.399	mmho-m	1.001	-0.132
Shallow	2.510	0.016	V	500.000	2.000	Ohm-m	159.679	-7.400

Compensated Density Calibration Report

Serial-Model:	901-2.75POH
Source / Verifier:	/
Master Calibration Performed:	Sat Aug 16 17:41:42 2008

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1044.92	534.39	cps
Aluminum	2.590	g/cc	190.27	268.70	cps

Spine Angle = 68.02 Density/Spine Ratio = 0.479

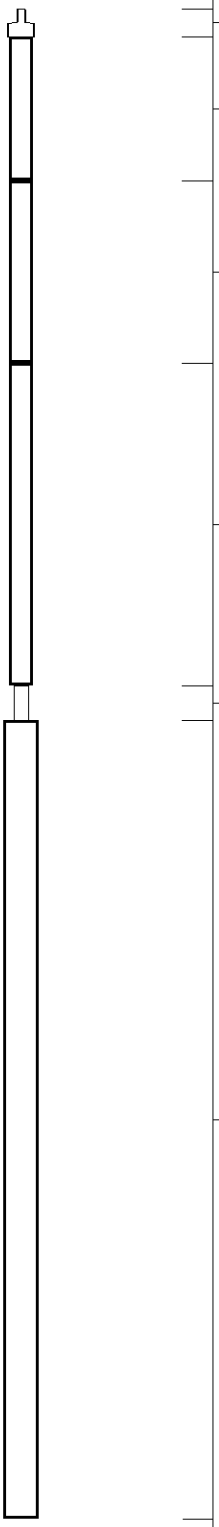
	Size		Reading	
Small Ring	8.00	in	2.48	V
Large Ring	17.00	in	4.28	V

Neutron Calibration Report

Serial Number:	803	
Tool Model:	2.75POH	
Performed:	Sun Aug 10 17:42:42 2008	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Gamma Ray Calibration Report

Serial Number:	801	
Tool Model:	2.75POH	
Performed:	Wed Aug 13 17:42:21 2008	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8000	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			None	0.75	1.50	5.00
GR	37.81		GR-2.75POH (801) Probe	3.73	2.75	43.00
NEU	32.27		NEU-2.75POH (803) Probe Epithermal	4.75	2.75	58.00
			CDL-2.75POH (901) Probe	8.43	2.75	106.00
LSD	24.44					
DCAL	24.16					
SSD	23.91					
			Probe	0.89	3.50	20.00
CILD	10.60		DIL-G (5375) Gearhart	20.80	4.00	345.00
SP	10.60					
CILM	6.89					
RLL3	1.70					

Dataset:	xtoac0402.db: field/well/run1/pass1
Total Length:	39.34 ft
Total Weight:	577.00 lb
O.D.	4.00 in