ALLIED WIRELINE

Composite Log

Company Taos Resources Operating Co.
Well Kubik 1-27
Field Eden Road
County Sumner
State Kansas

Company	Taos Resources Operating Co.
Well	Kubik 1-27
Field	Eden Road
County	Sumner
State	Kansas

Location: API # : 15-191-21483
1980' FNL & 1980' FEL
SW NE
SEC 27 TWP 34S RGE 4W

Permanent Datum G.L. Elevation 1223 ft.
Log Measured From K.B. , 10 ft. above perm. datum
Drilling Measured From K.B.

Other Services
ABHV

Elevation
K.B. 1233 ft.
D.F. 1231 ft.
G.L. 1223 ft.

Date	12/20/2013			
Run Number	One			
Depth Driller	4928'			
Depth Logger	4930'			
Bottom Logged Interval	4929'			
Top Log Interval	292'			
Casing Driller	8.625" @ 280'	@	@	@
Casing Logger	292'			
Bit Size	7.875"	@	@	@
Type Fluid in Hole	WBM			
Density / Viscosity	9.1 / 52			
pH / Fluid Loss	9.0 / n/a			
Source of Sample	Active Tank			
Rm @ Meas. Temp	0.3 @ 75 degF	@	@	@
Rmf @ Meas. Temp	0.2 @ 75 degF	@	@	@
Rmc @ Meas. Temp	0.4 @ 75 degF	@	@	@
Source of Rmf / Rmc	Calculated			
Rm @ BHT	.17 @ 135 degF	@	@	@
Time Circulation Stopped	0830			
Time Logger on Bottom	1300			
Maximum Recorded Temperature	135 degF			
Equipment Number	10001			
Location	OKC			
Recorded By	M.Gardner			
Witnessed By	D.Griffith			

<<< Fold Here >>>

Equipment and Log Data

Service Order: 12128

Gamma		Density		Neutron		Sonic		IAT	
Run No.	One	Run No.	One	Run No.	One	Run No.	One	Run No.	One
Serial No.	47	Serial No.	112	Serial No.	88	Serial No.		Serial No.	107
O.D.	3.375 in.	Source No.	129	Source No.	44	Centralizers		Standoffs	2 @ 0.75
		O.D.	4.5 in.	O.D.	3.375 in.	O.D.	3.375 in.	O.D	3.875 in.

Logging Pass Data

General			Gamma		Density			Neutron			Sonic			IAT	
			Scales		Scales			Scales			Scales			Scales	
Run	Depths		Left	Right	Left	Right	Matrix	Left	Right	Matrix	Left	Right	Matrix	Left	Right
One	4930	292	0	150	30	-10	2.71	30	-10	Lime				0.2	2000

Comments

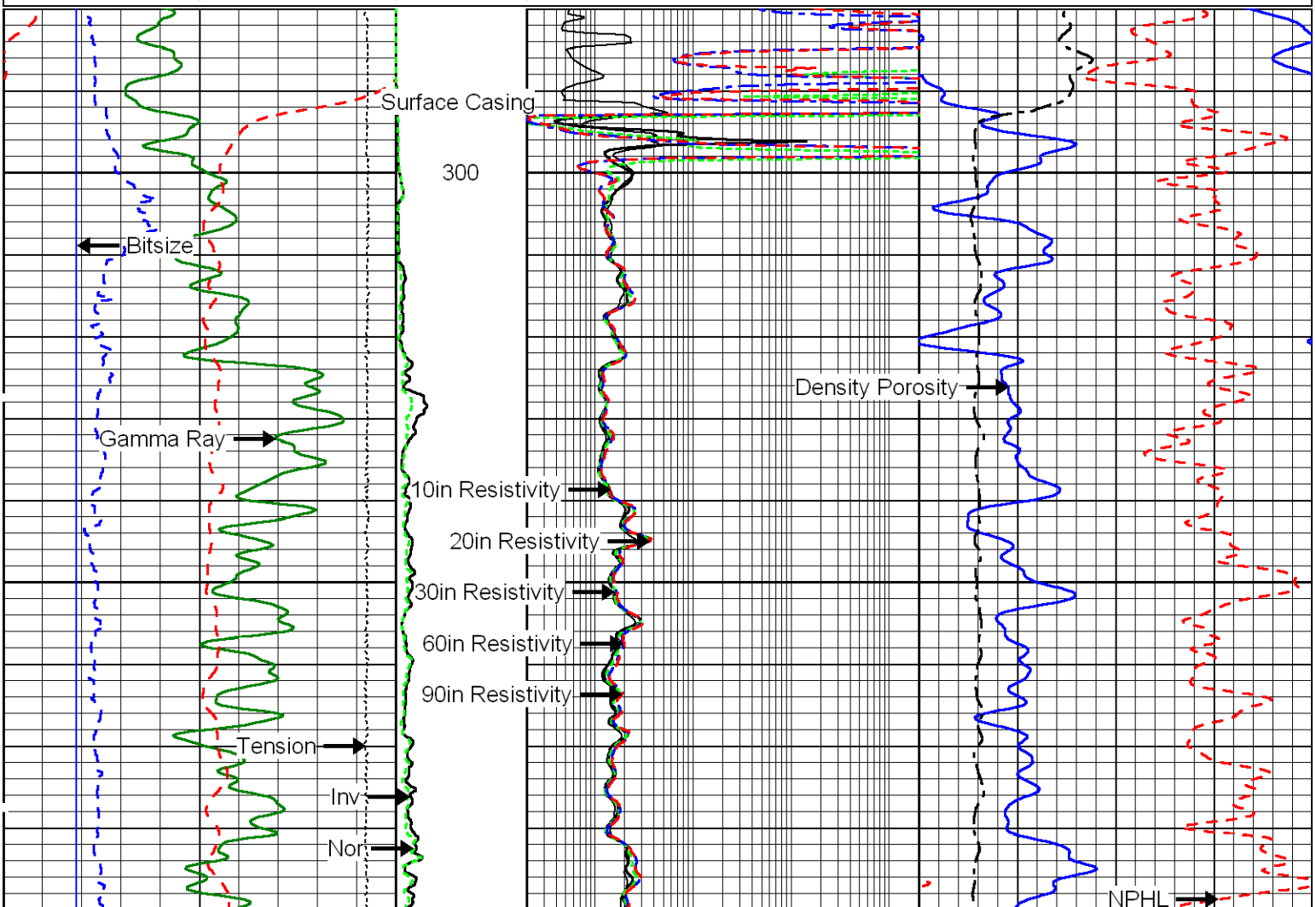
GR, CNL, LDT, IAT, MEL, were run in combination
Neutron decentralized with bowspring
AHV calculated for 5.5 in production casing
Chlorides Concentration = 50,000 ppm
LCM Reported at 10lbs/bbl

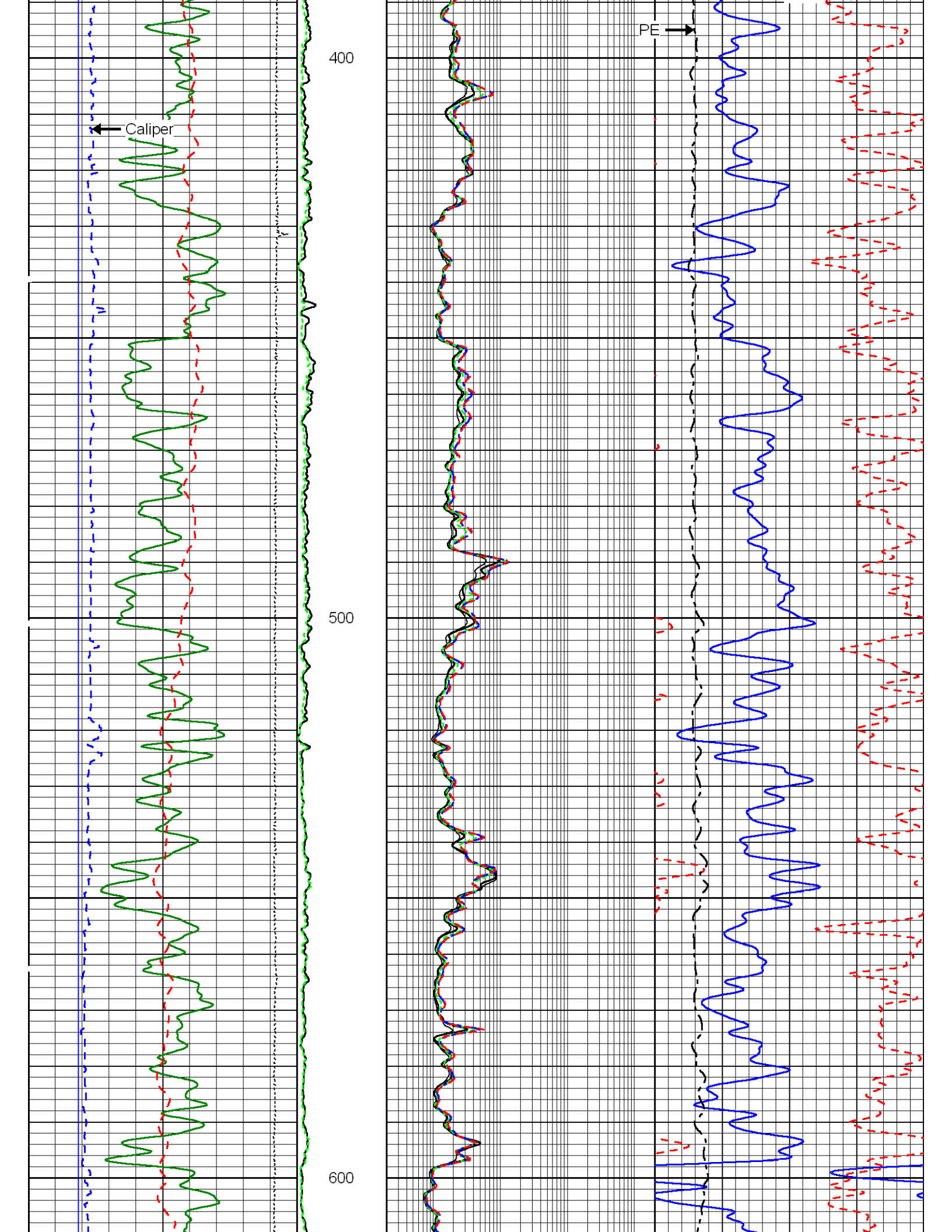
YOUR CREW TODAY: J.Brewer, D.Eastep
THANK YOU FOR CHOOSING ALLIED WIRELINE. OKLAHOMA CITY, OK. (405) 445-7135.

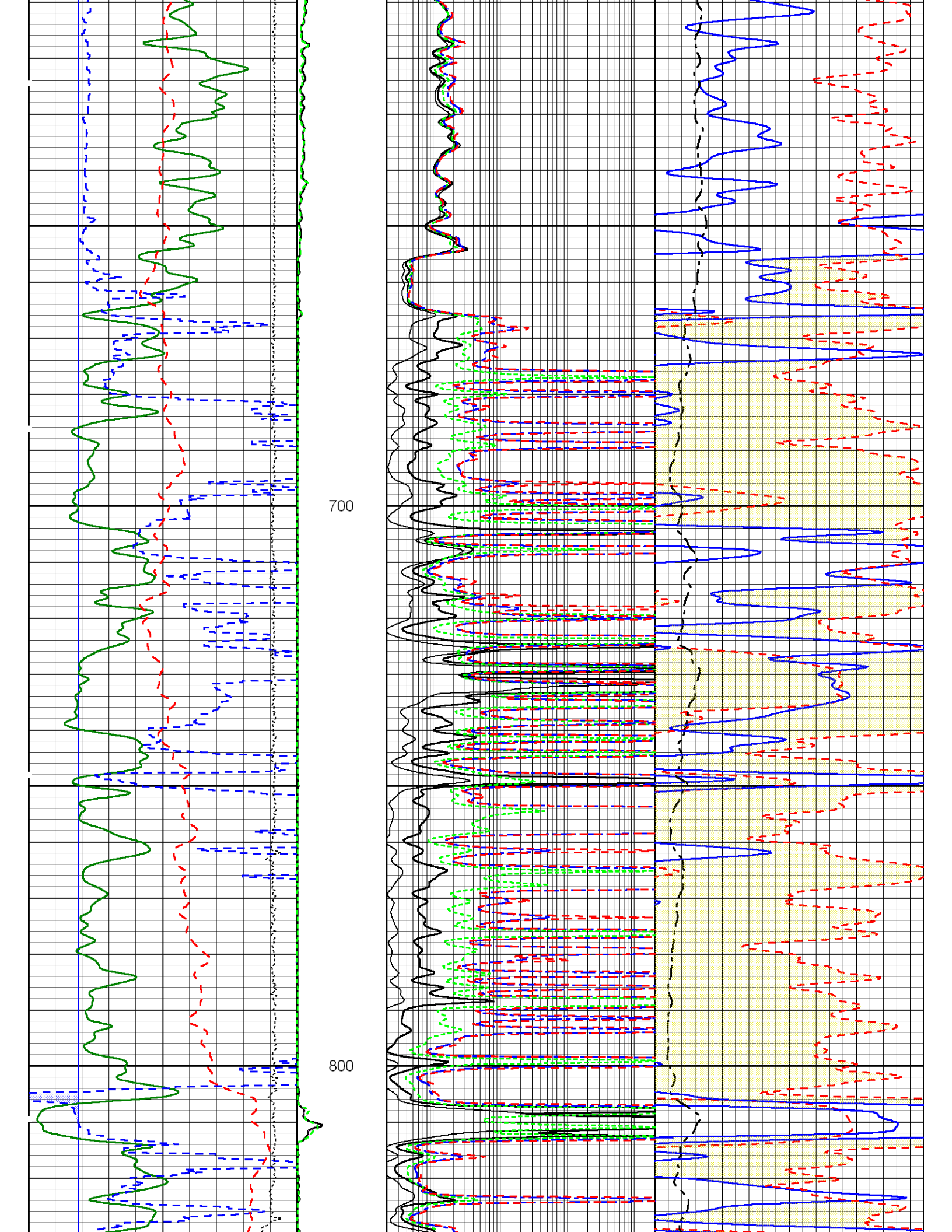
Main Pass

Database File:	taoskubik1-27.db
Dataset Pathname:	./../main.1
Presentation Format:	a3com_t
Dataset Creation:	Fri Dec 20 16:58:00 2013 by Calc Sondex V7.03
Charted by:	Depth in Feet scaled 1:240

6 Bitsize (in) 16	Inv (Ohm-m) 0 20	0.2 10in Resistivity (Ohm-m) 2000	30 Neutron Porosity (pu) -10
0 Gamma Ray (GAPI) 150		0.2 20in Resistivity (Ohm-m) 2000	30 Density Porosity (pu) -10
6 Caliper (in) 16		0.2 30in Resistivity (Ohm-m) 2000	0 PE 10
SP [-20mV+]	Nor (Ohm-m) 0 20	0.2 60in Resistivity (Ohm-m) 2000	
Tension 10000 (lb) 0		0.2 90in Resistivity (Ohm-m) 2000	




Caliper
PE
400
500
600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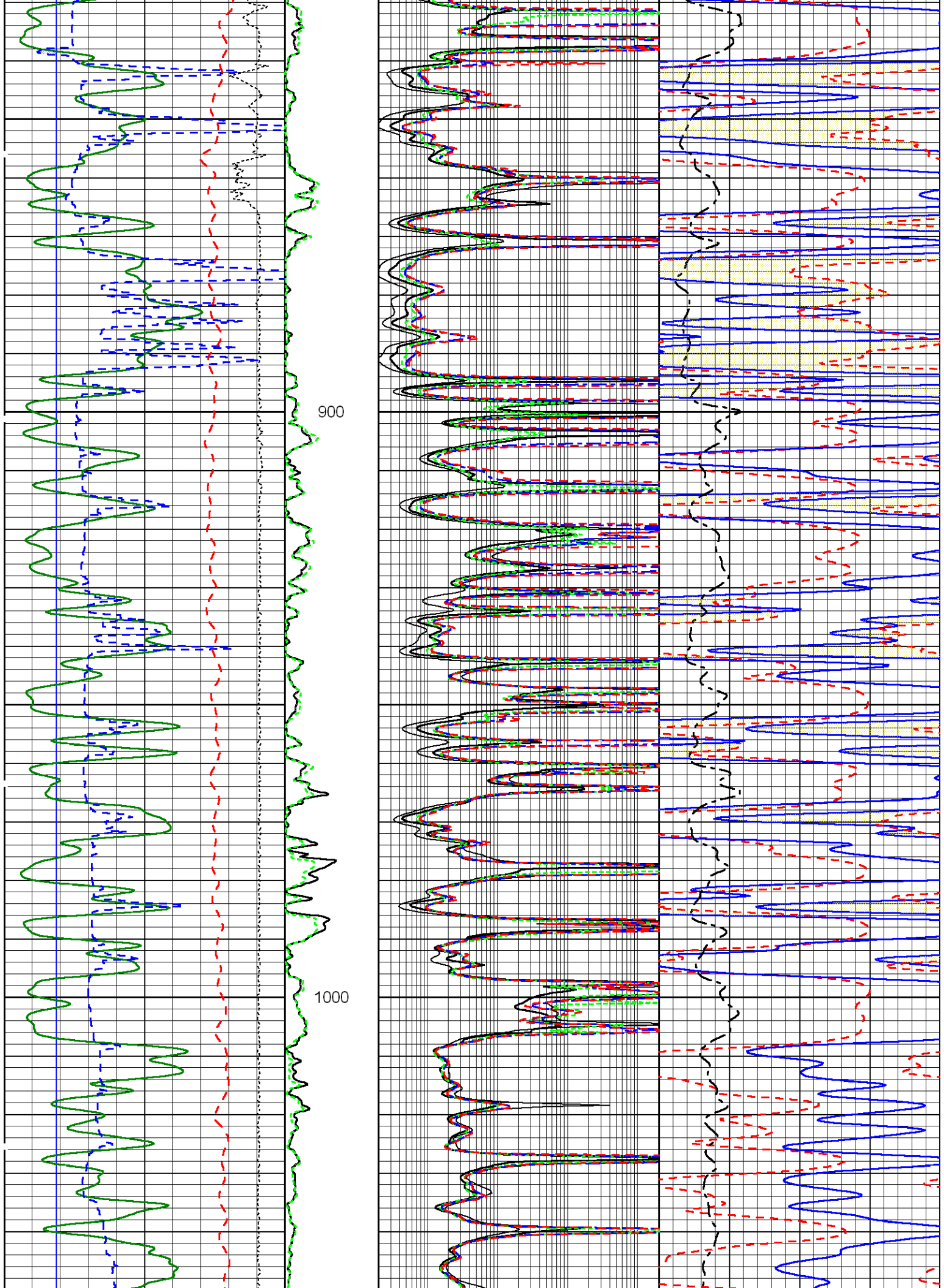
800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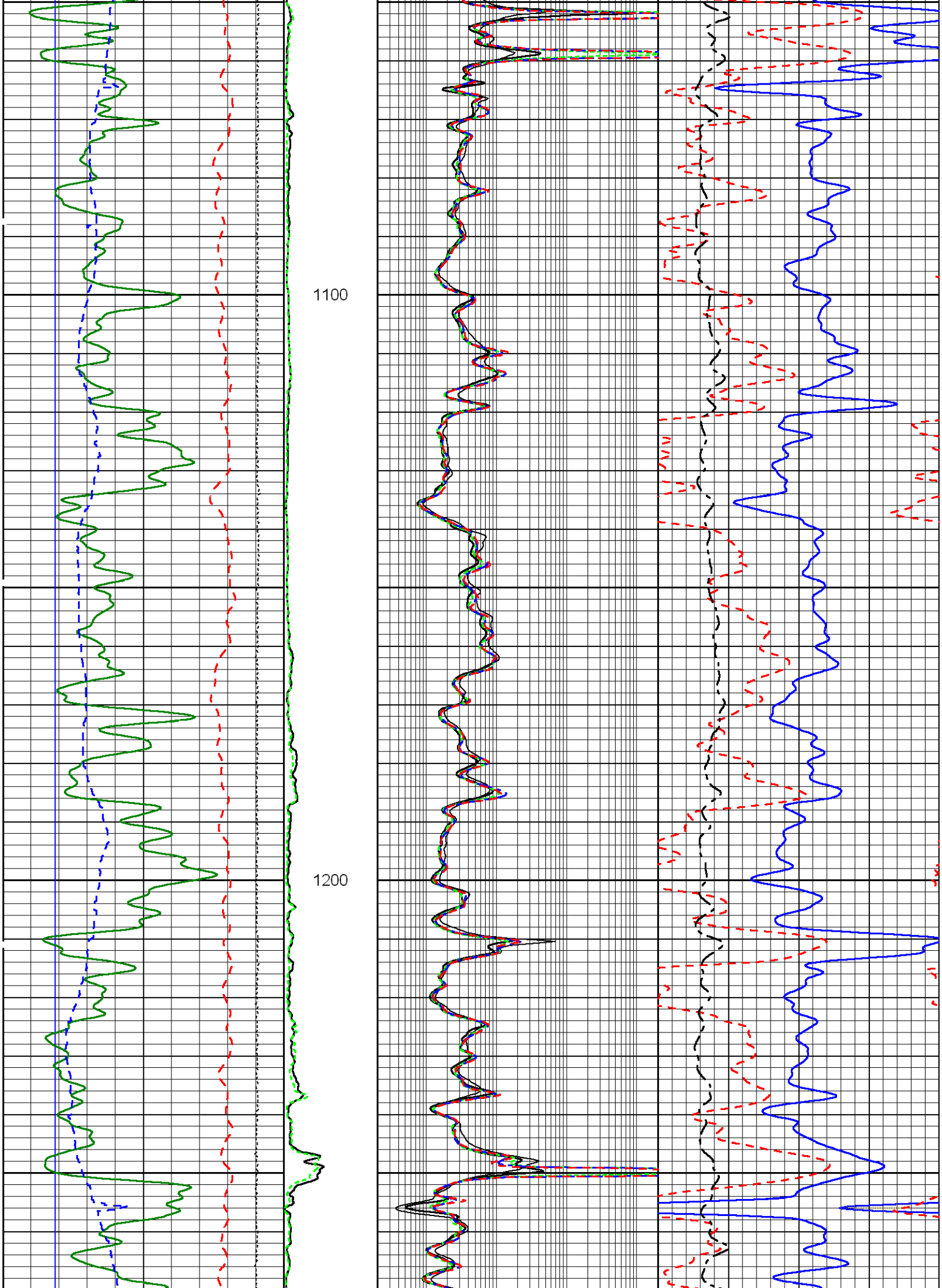
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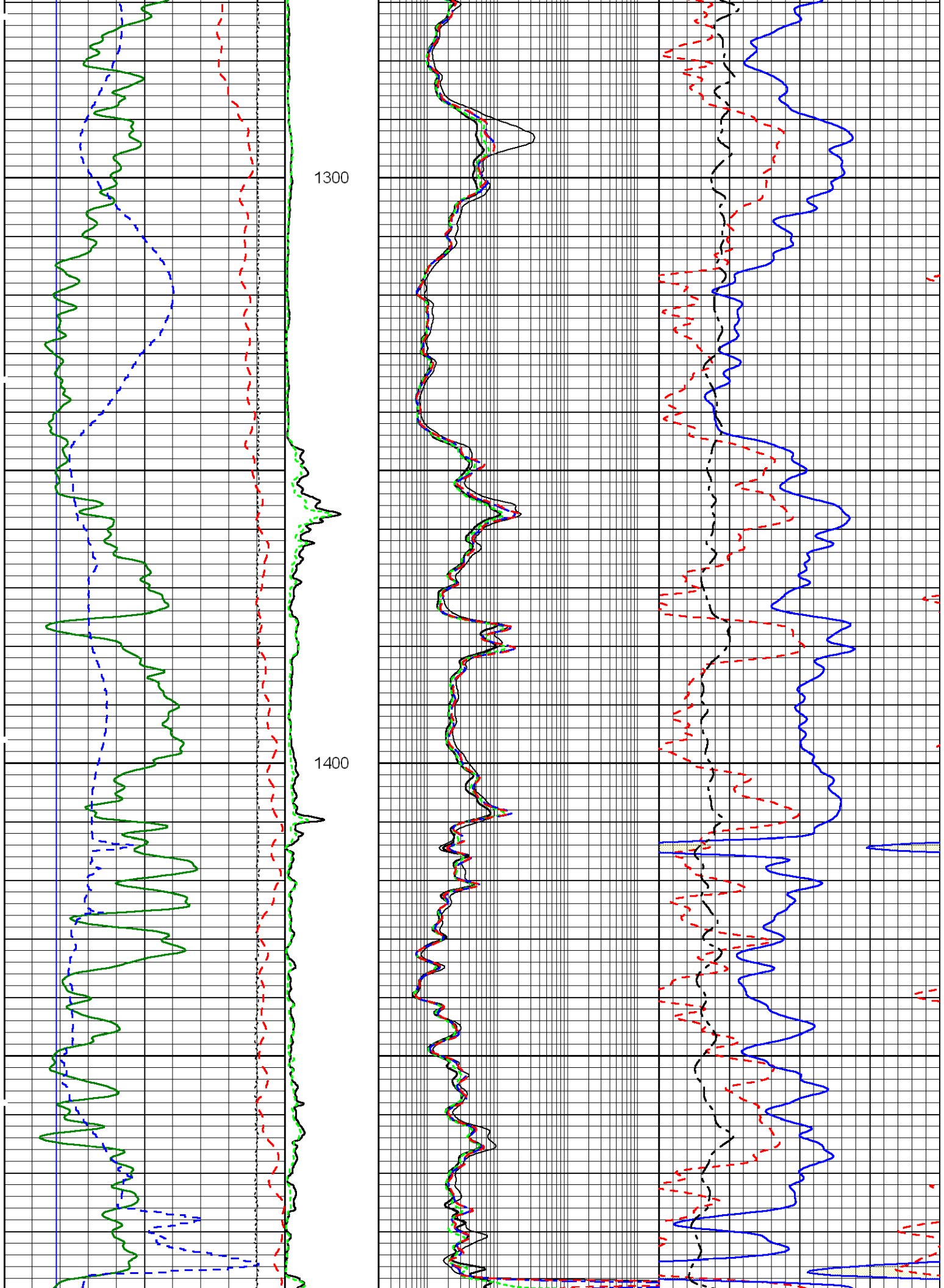
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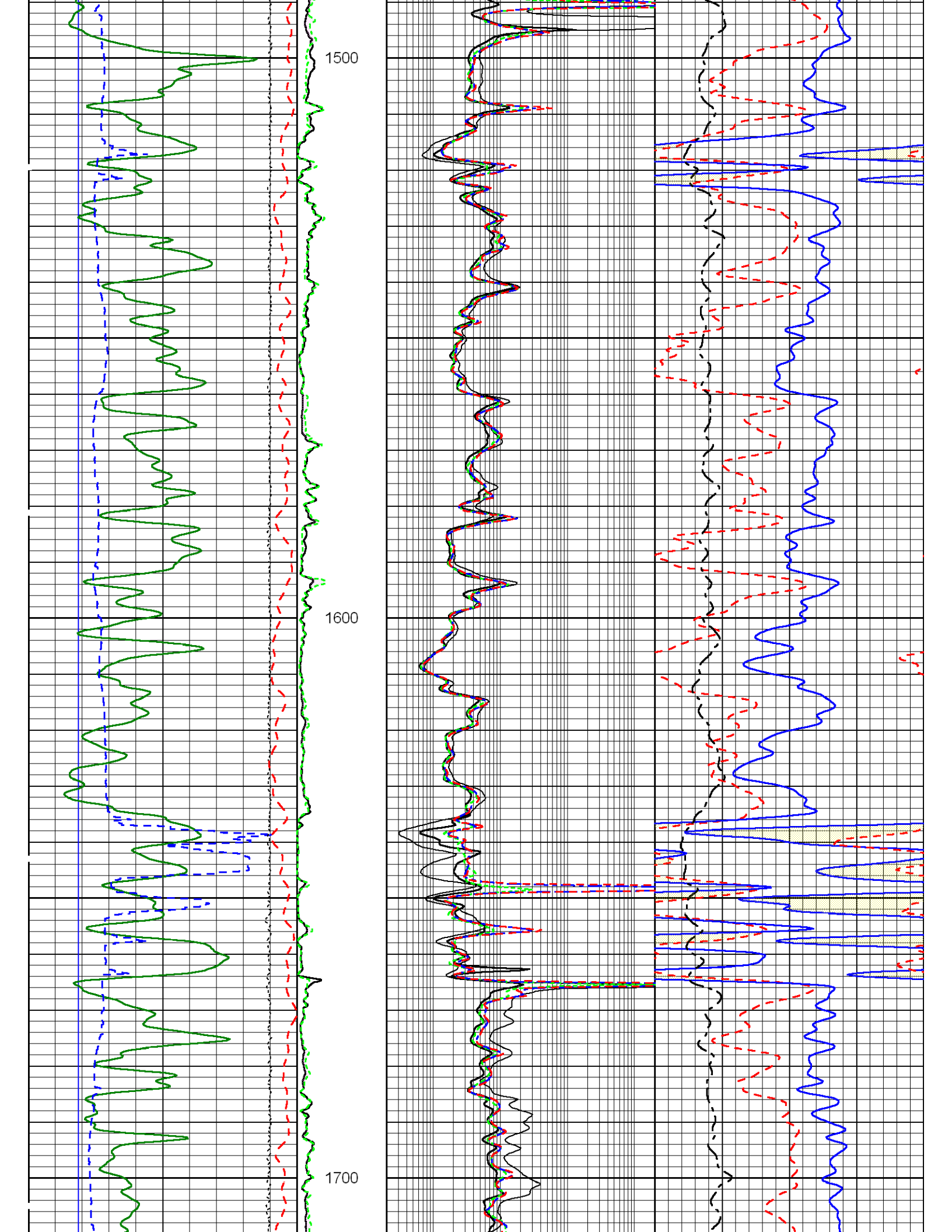
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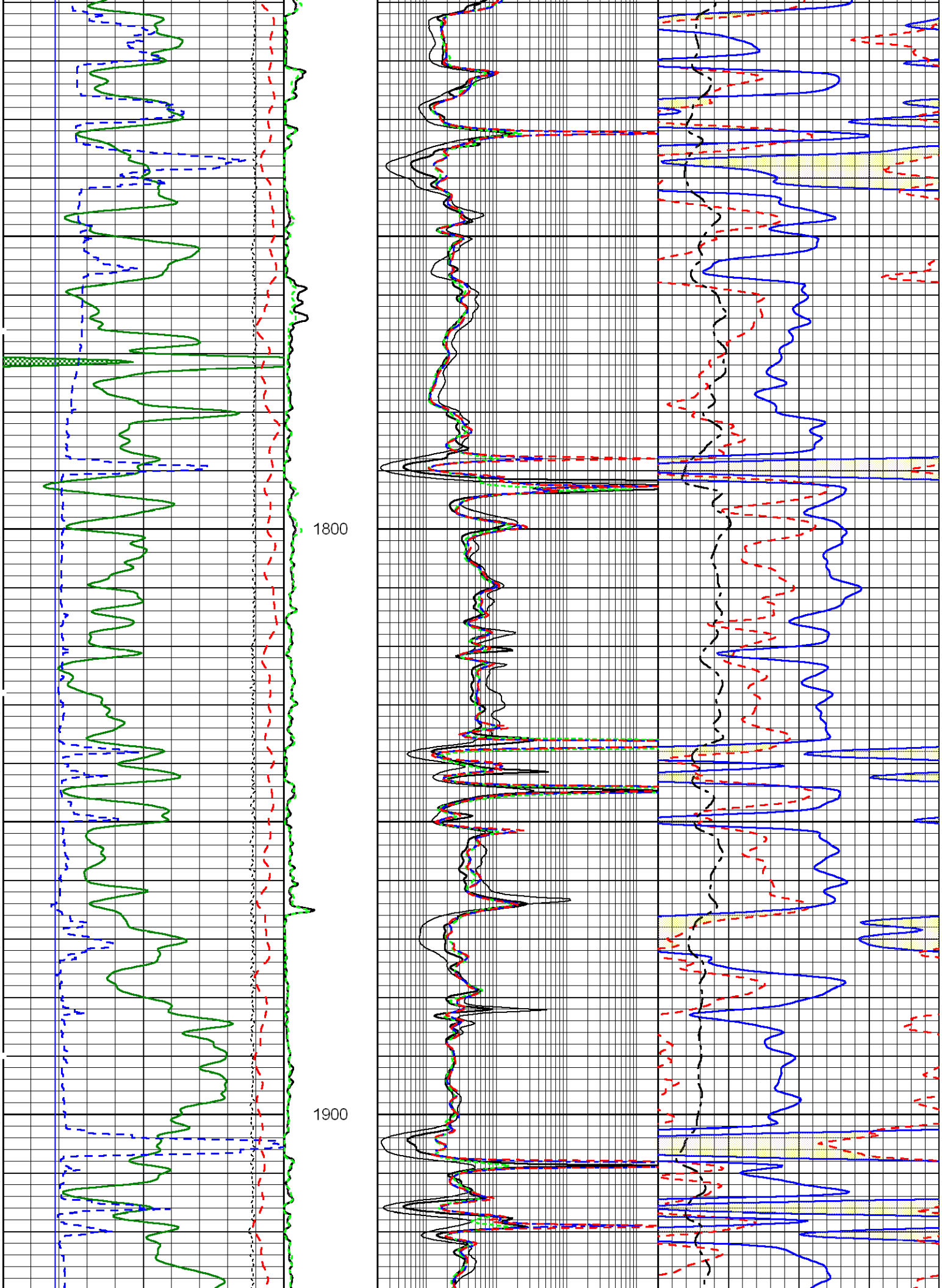
1600
1700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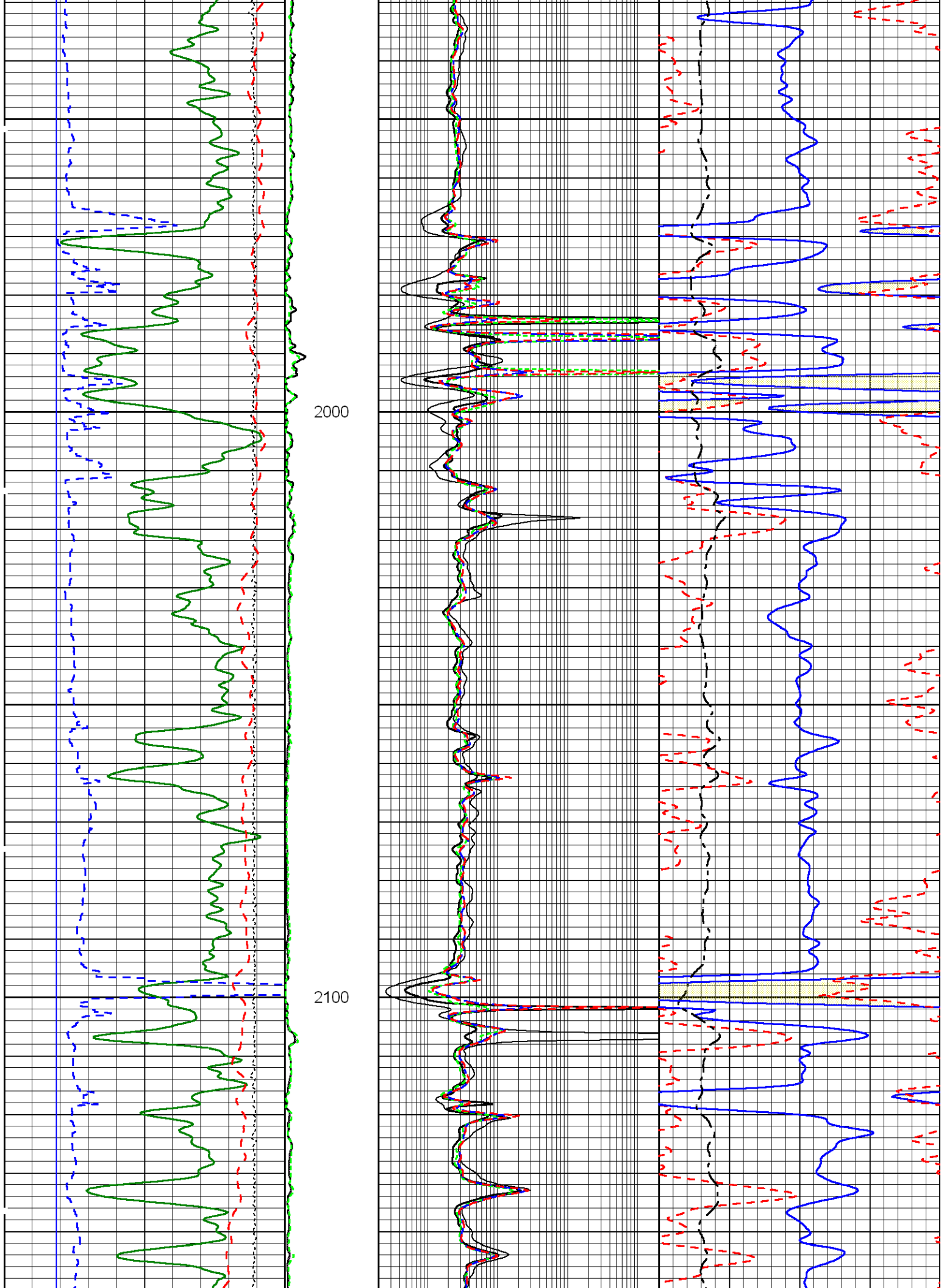
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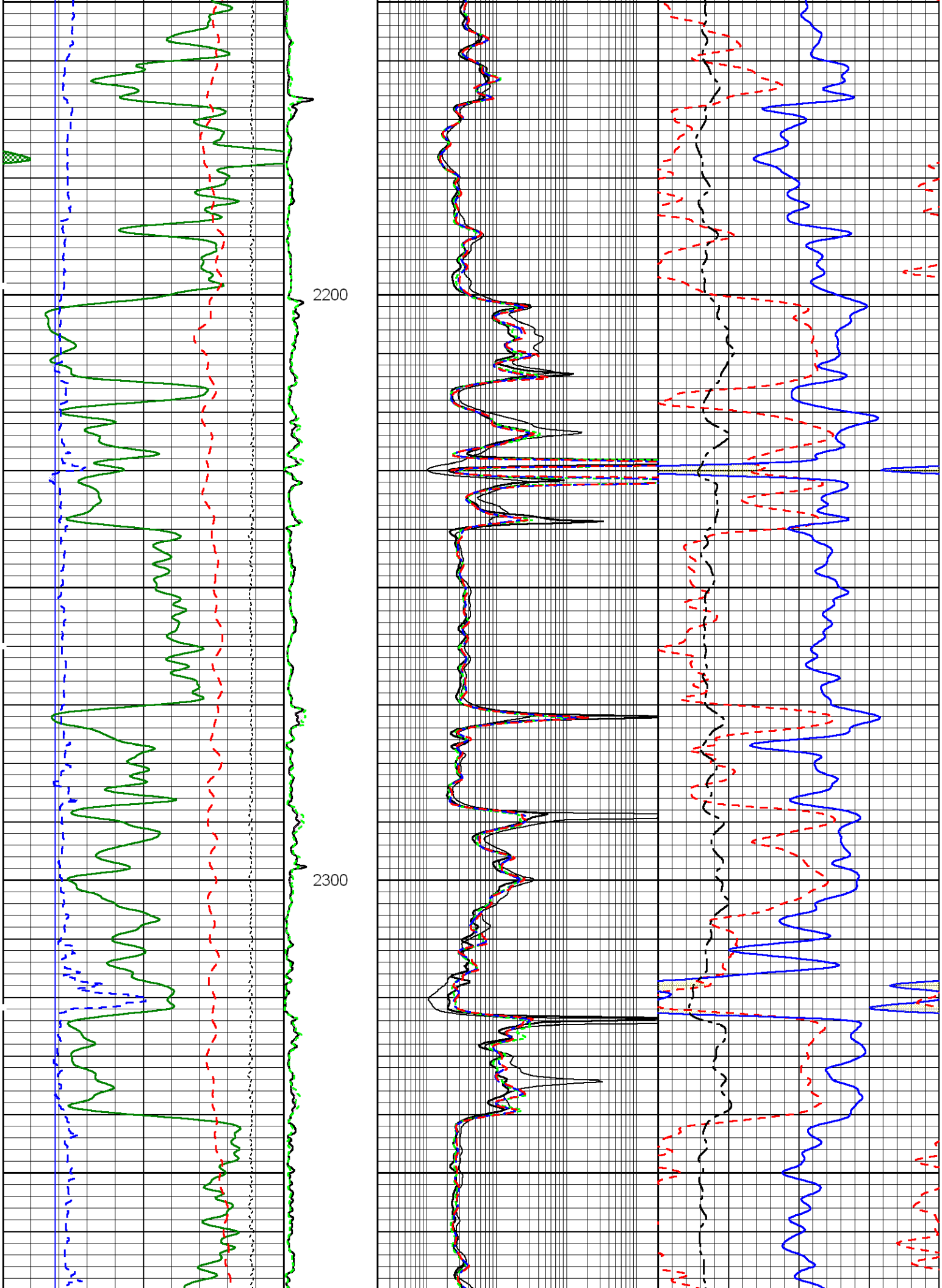
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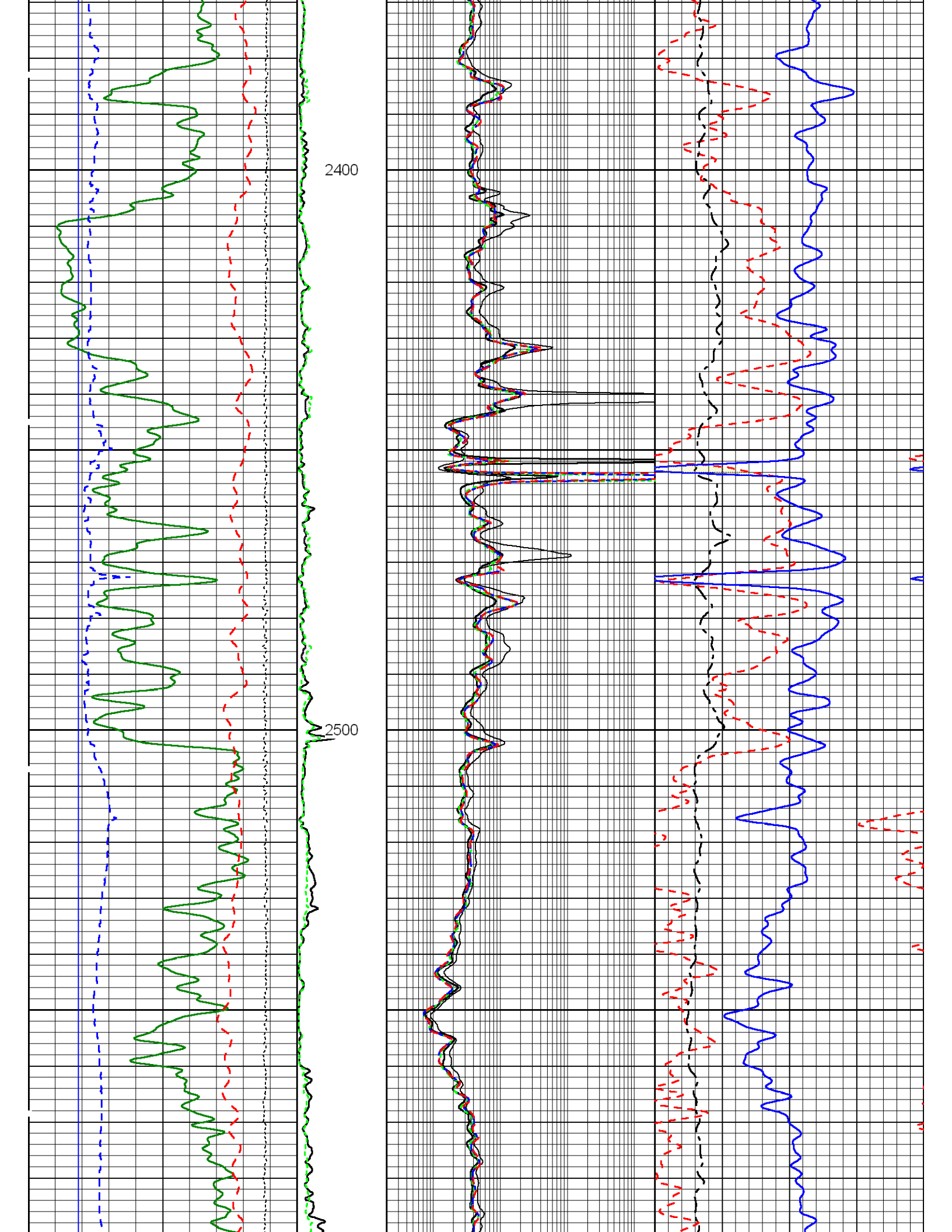
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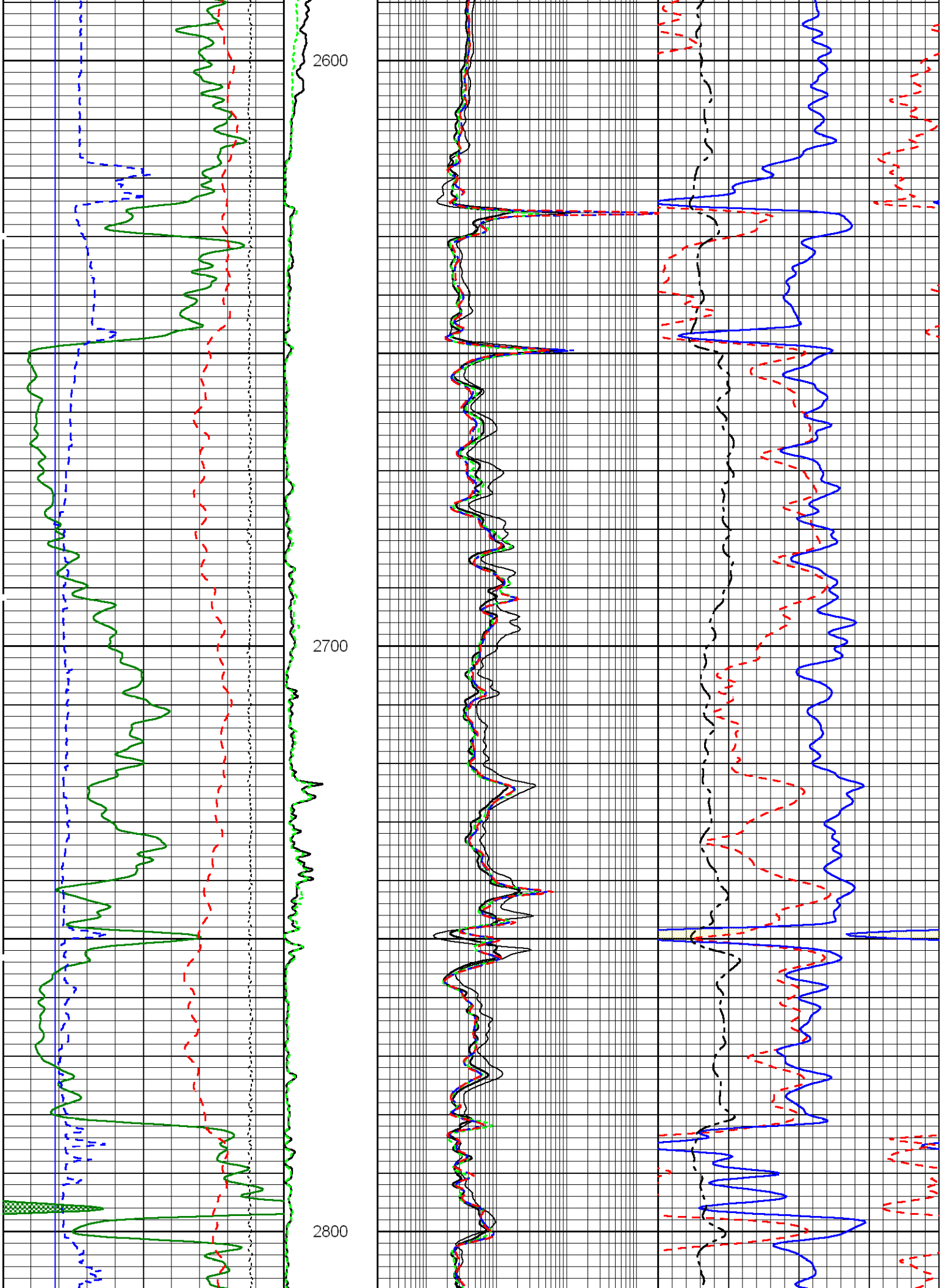
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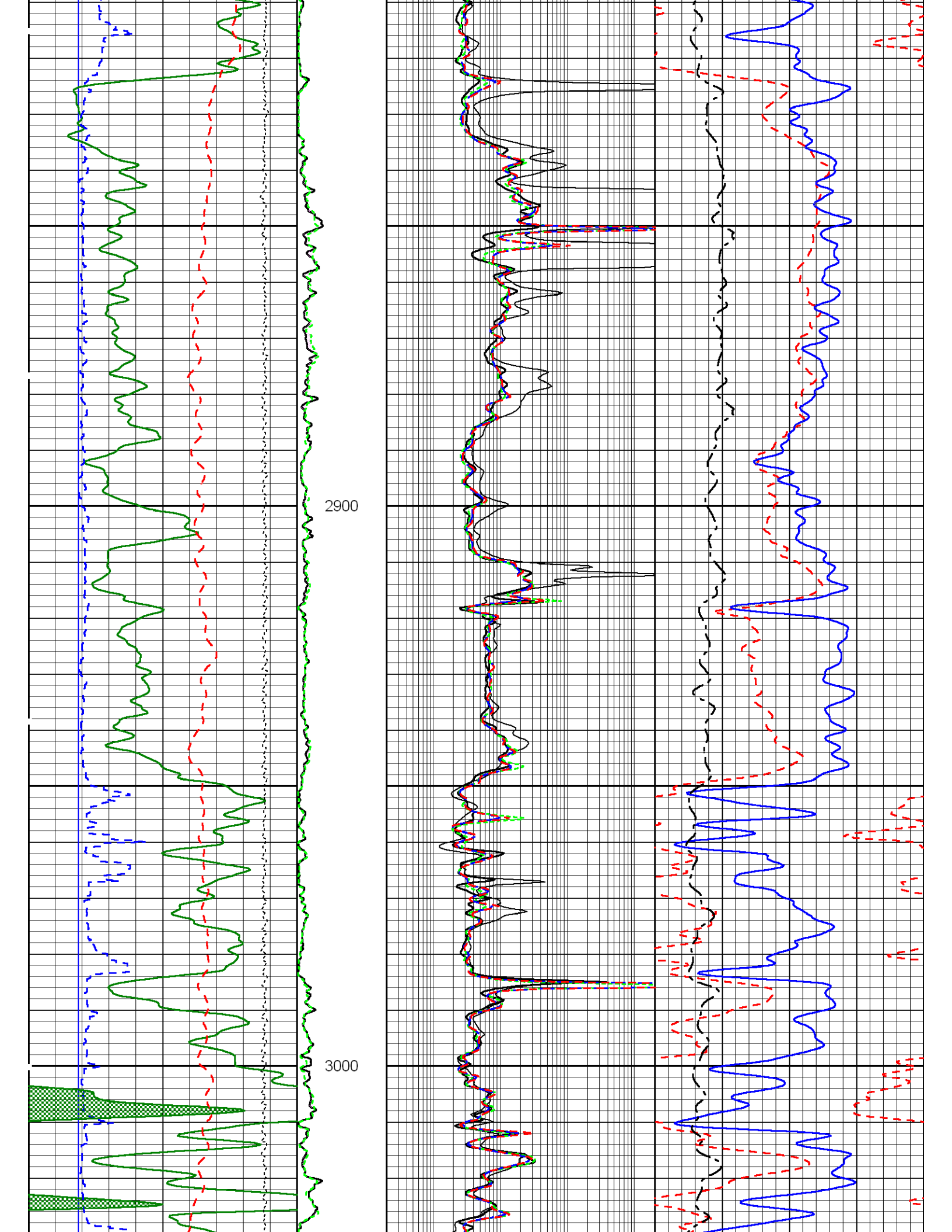
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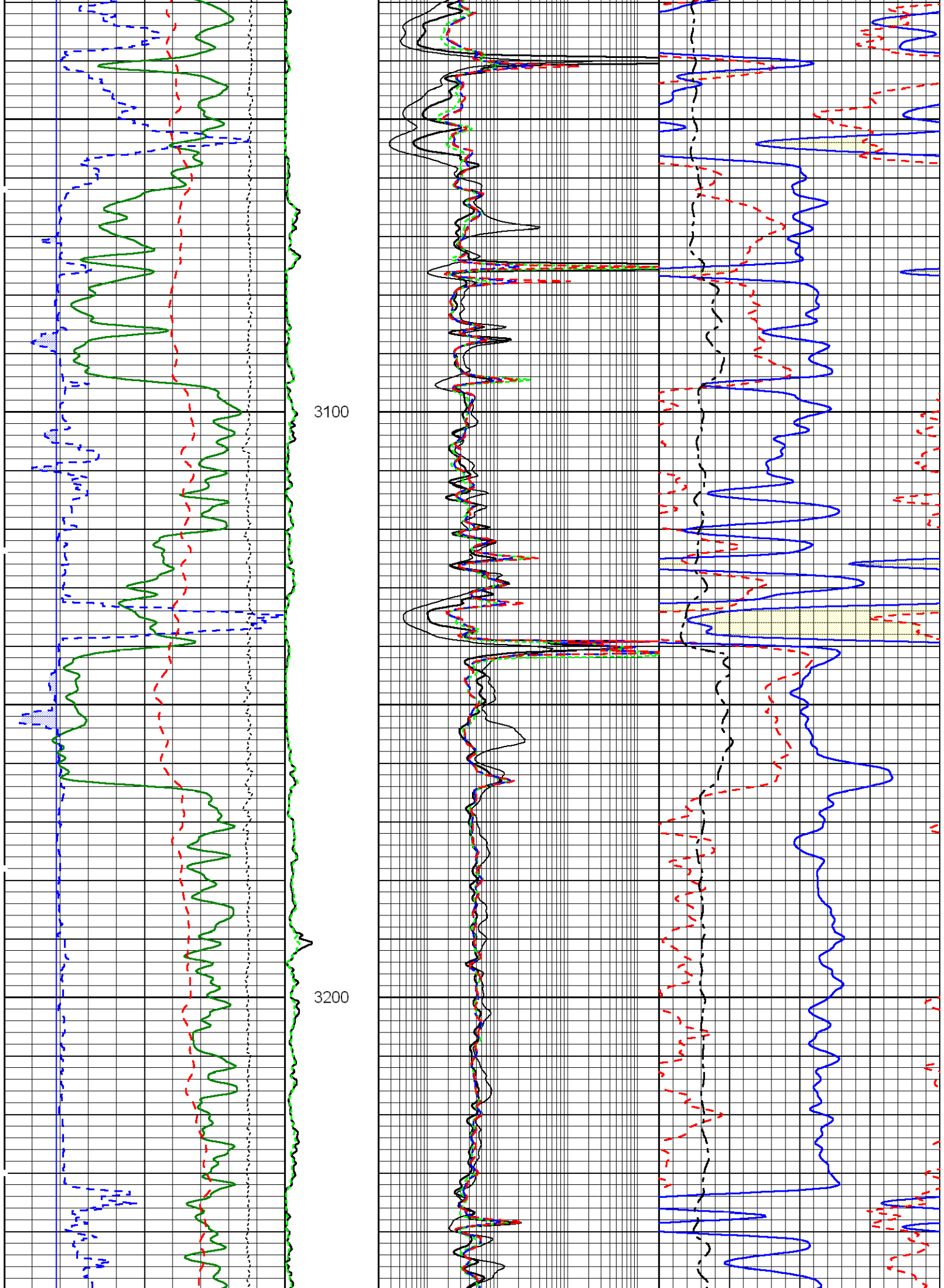
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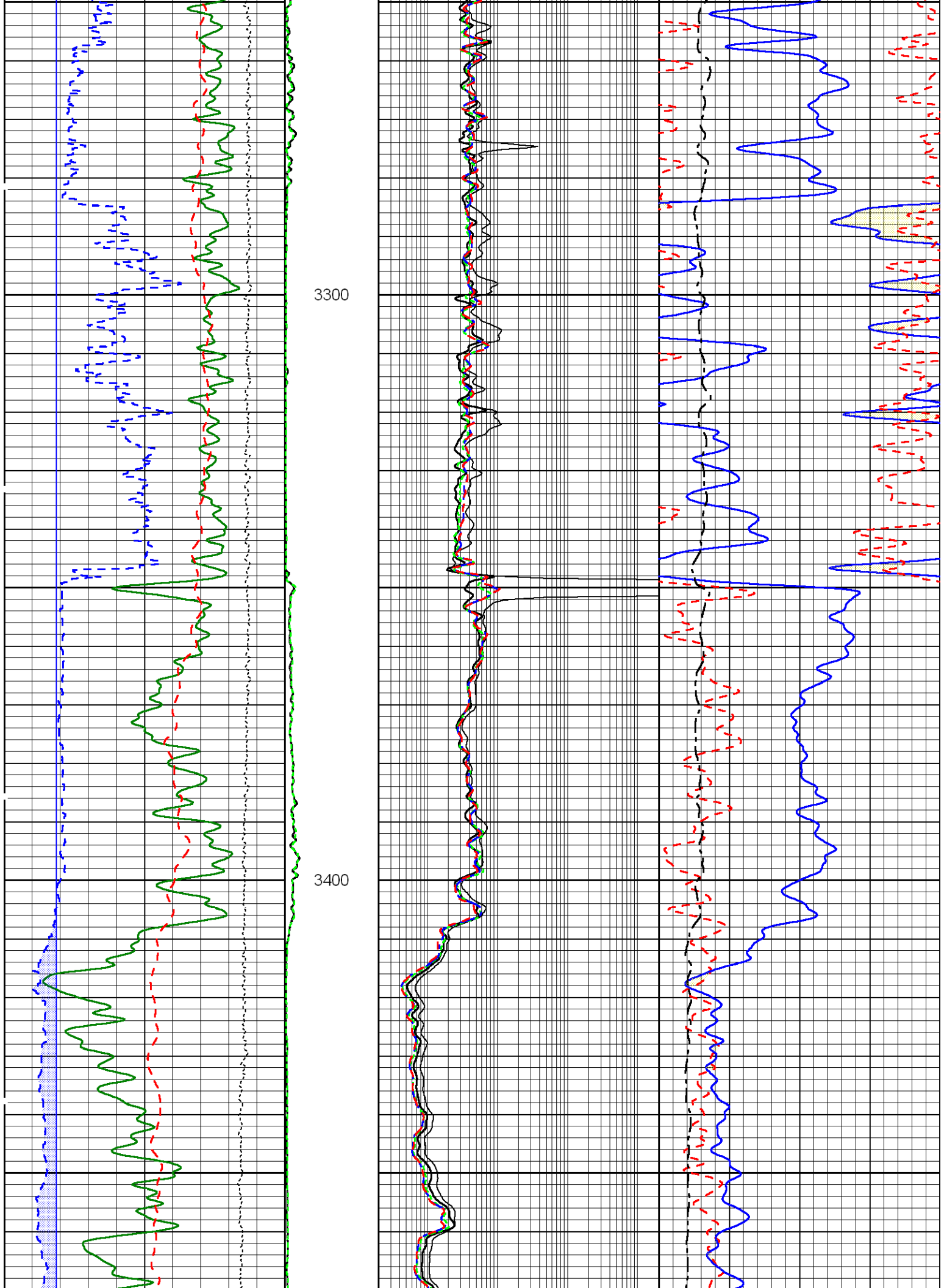
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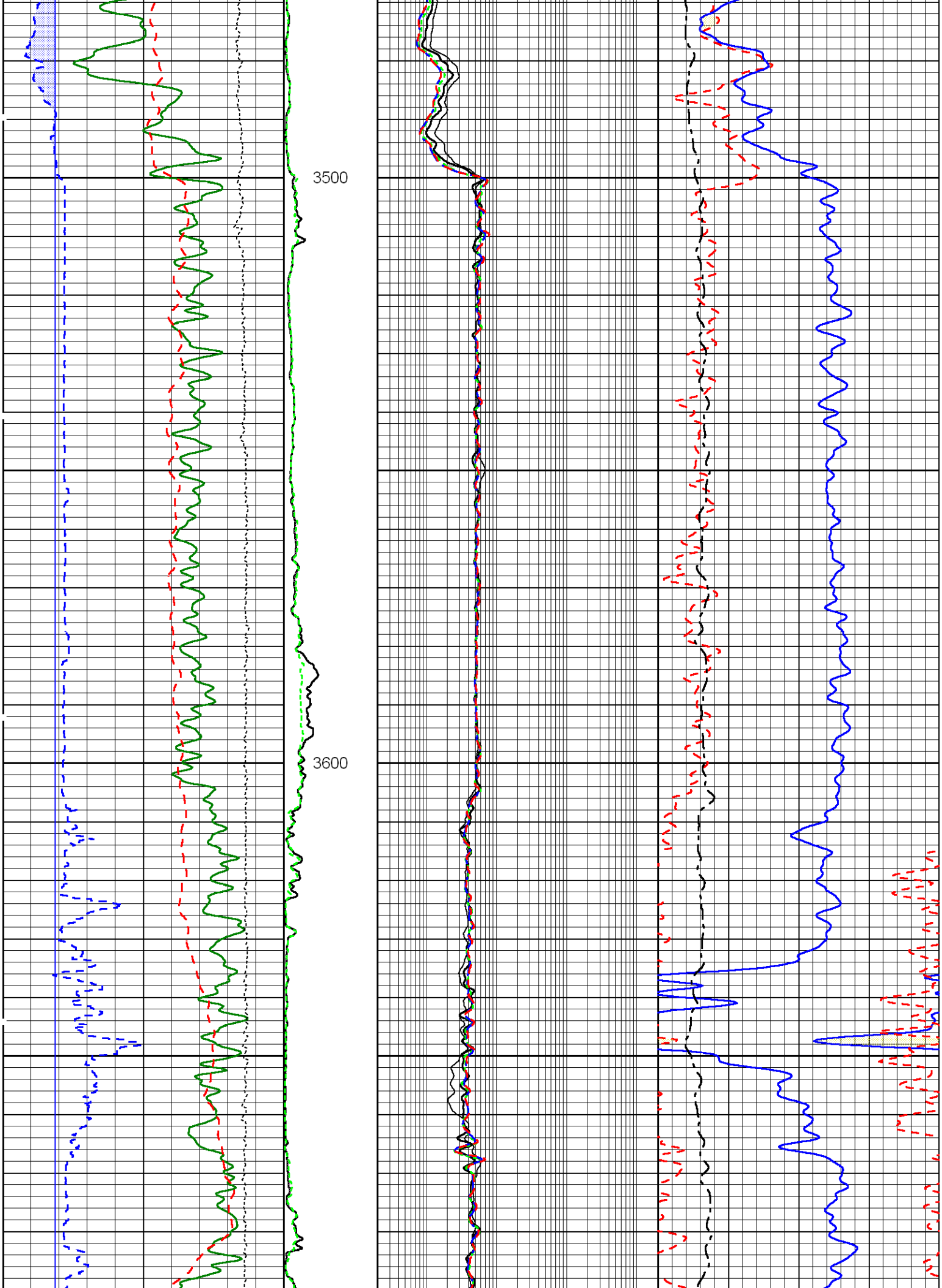
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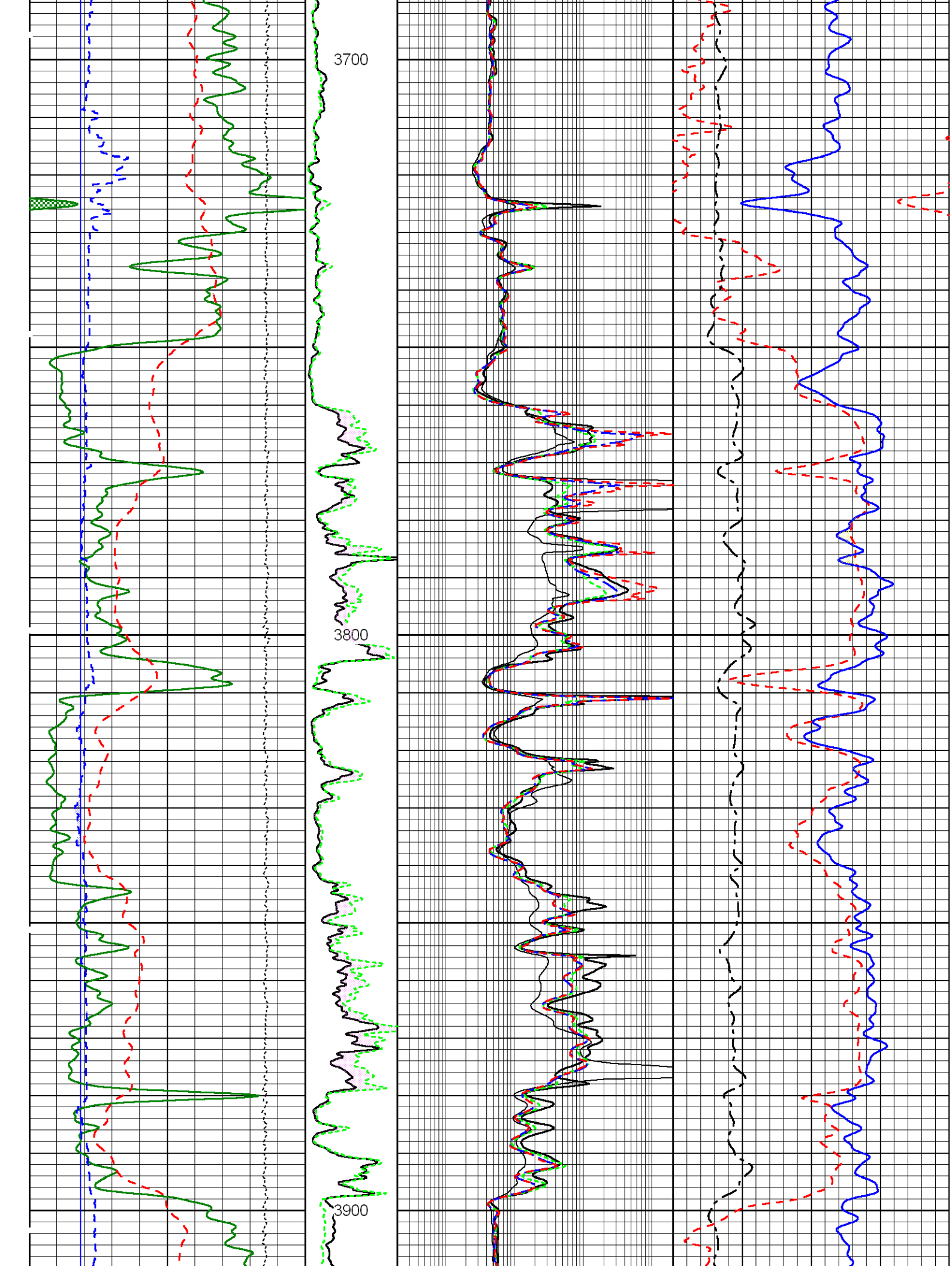
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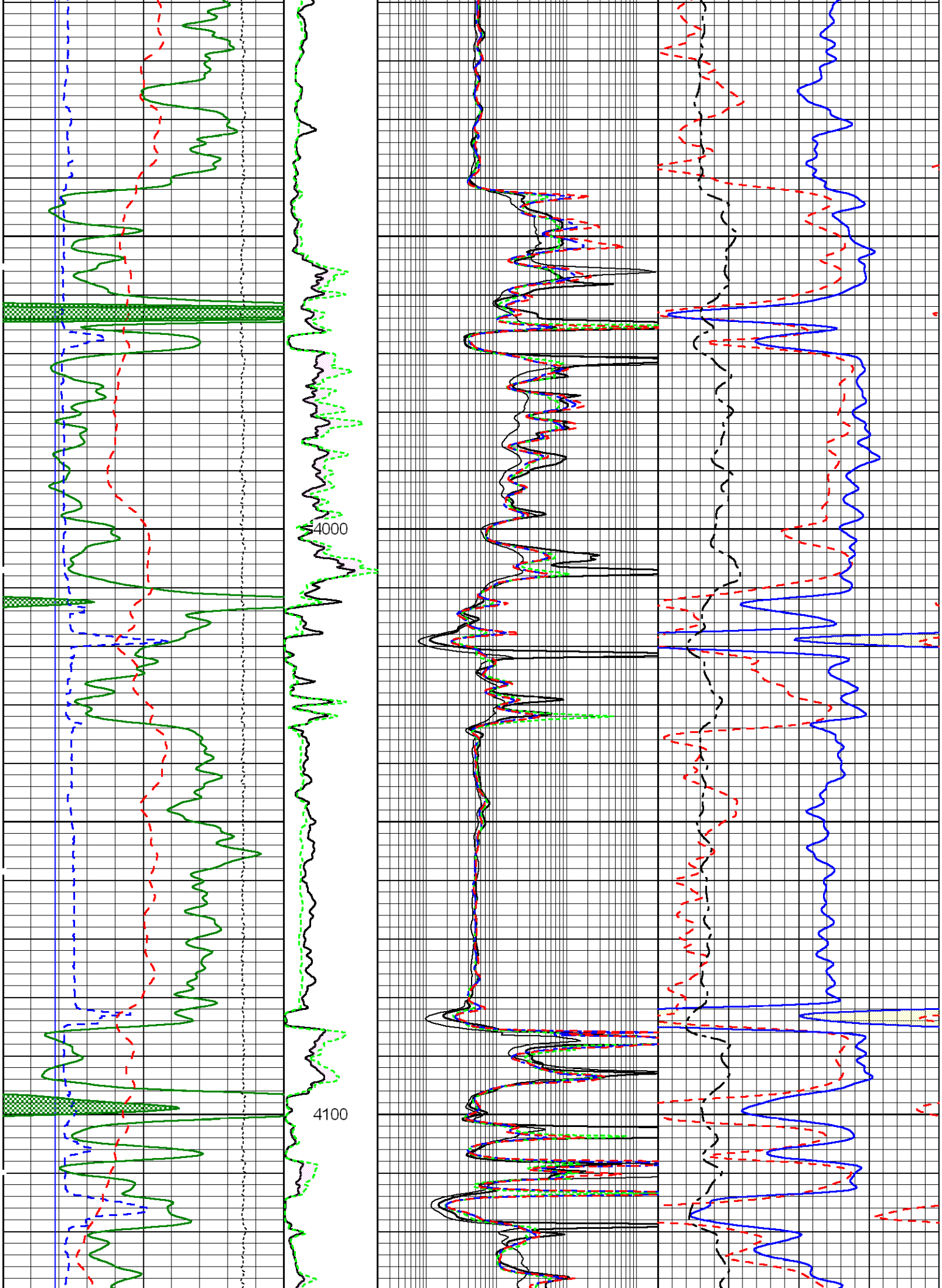
3800
3900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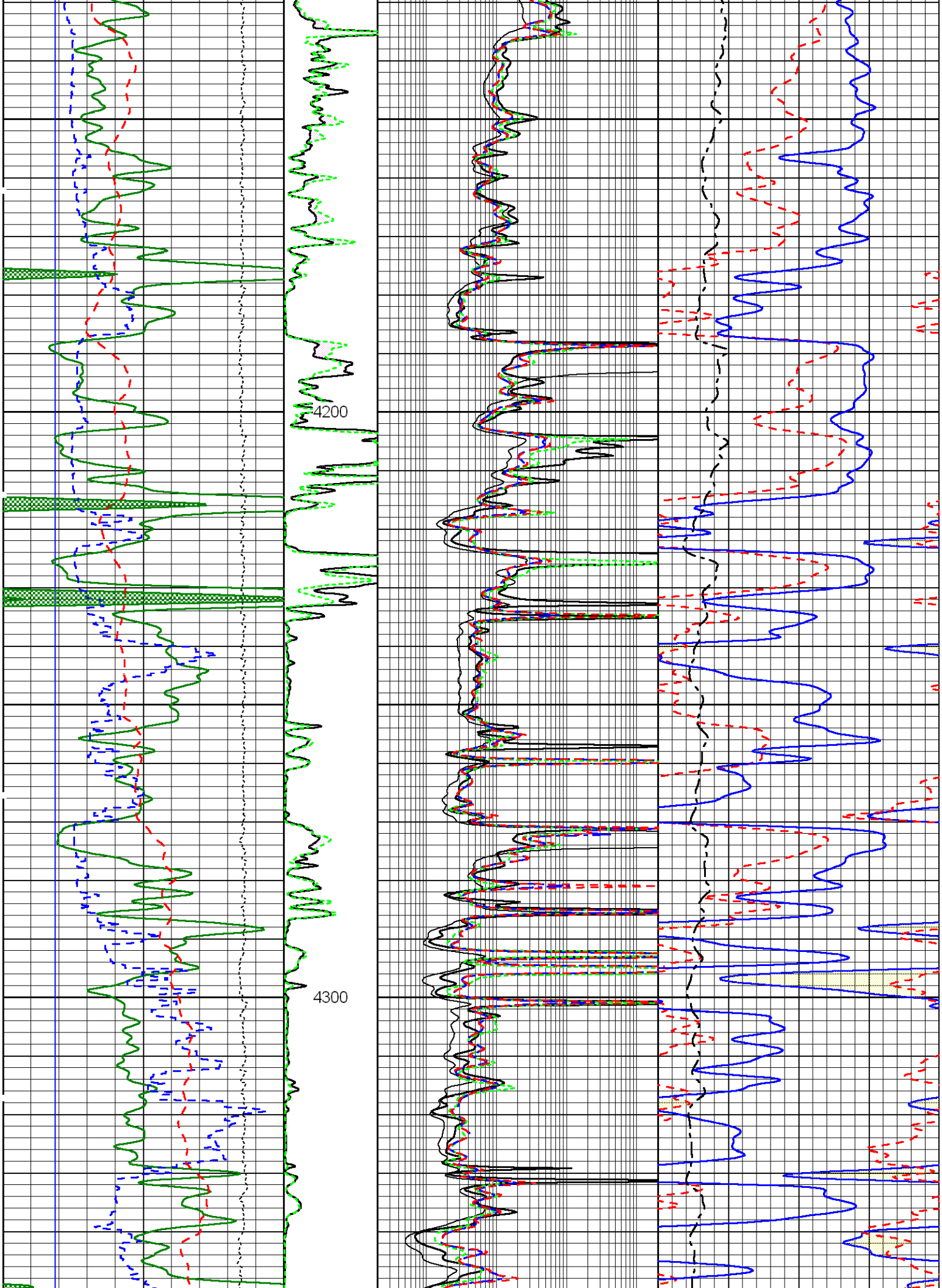
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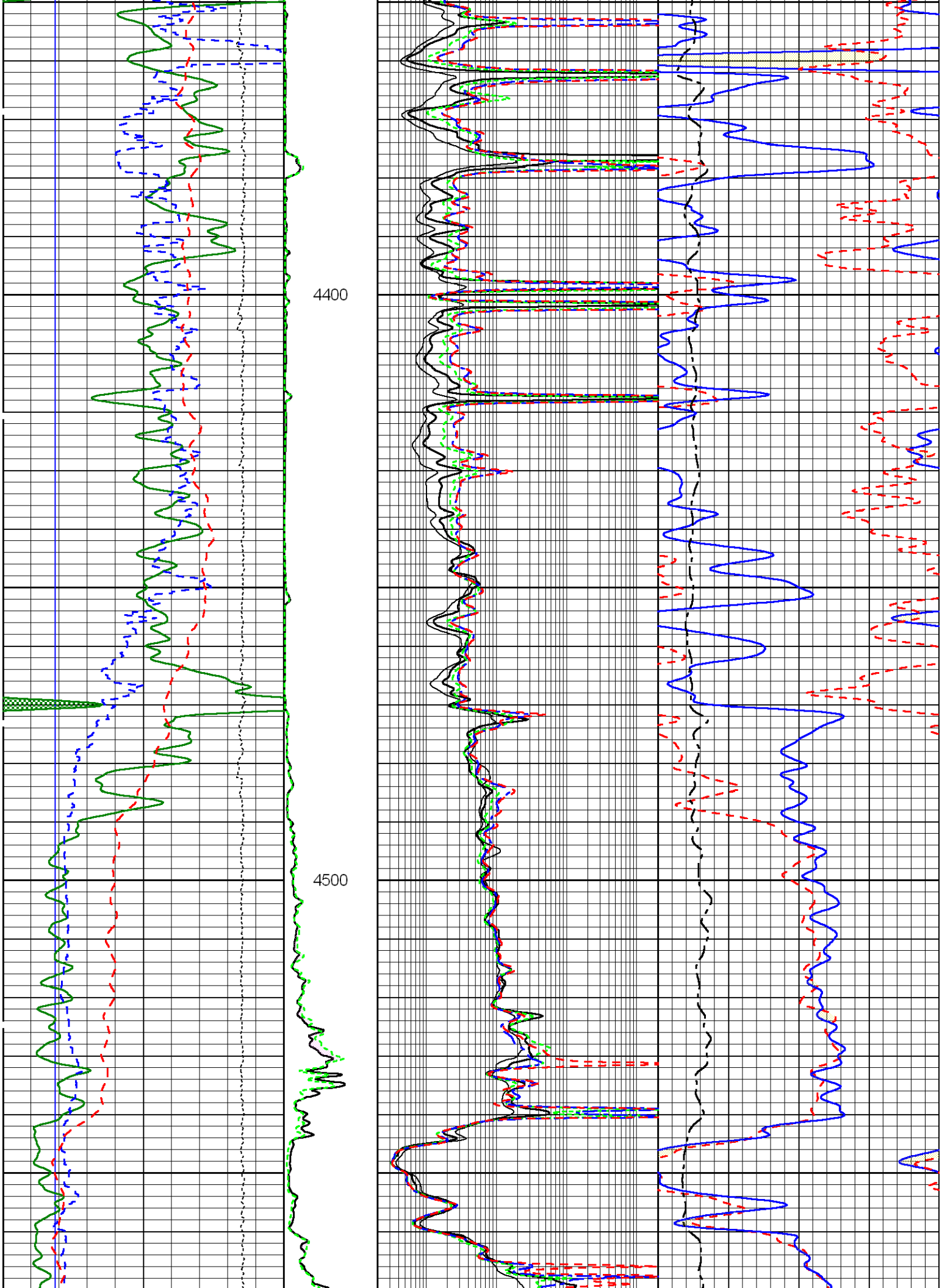
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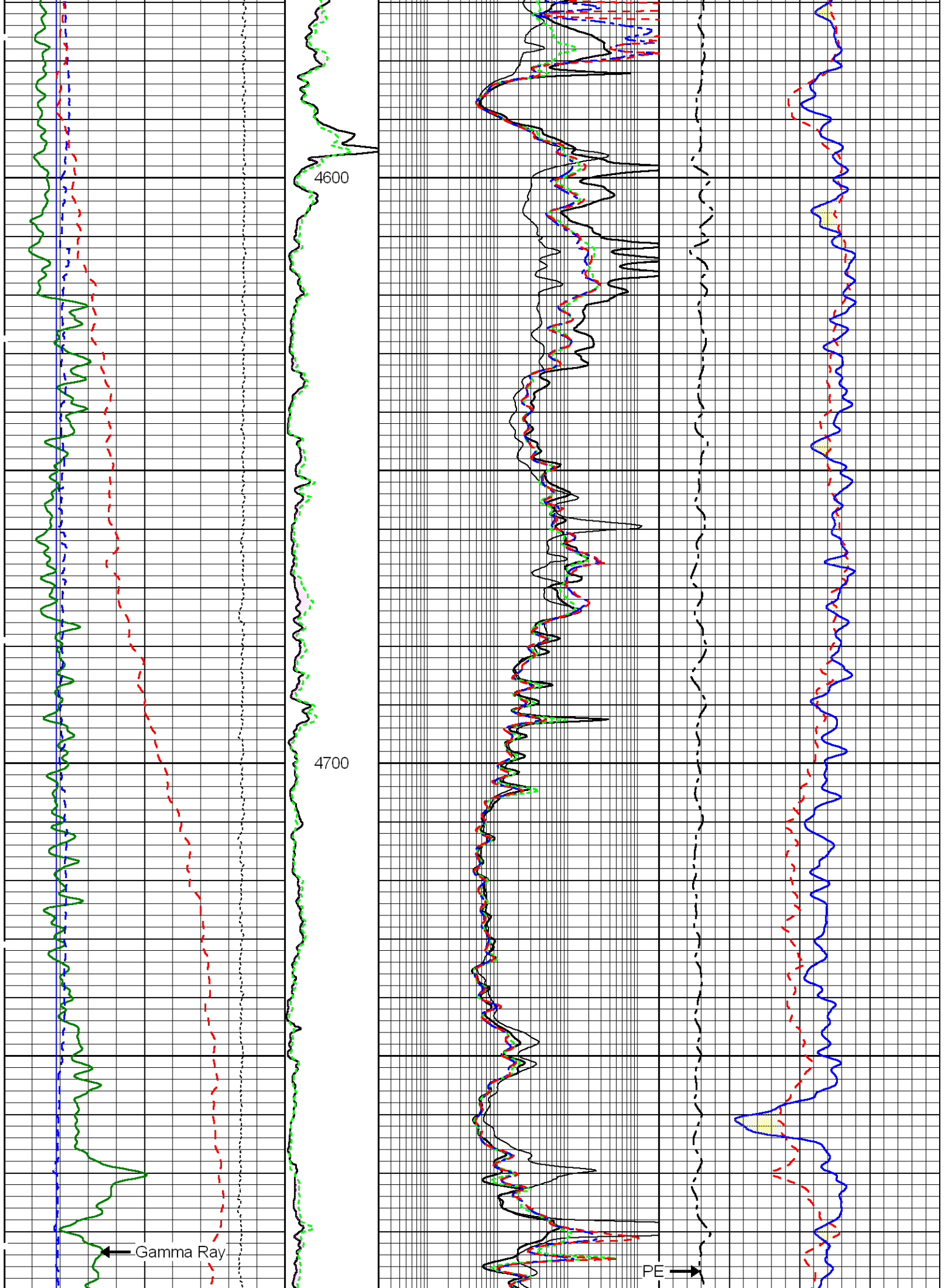
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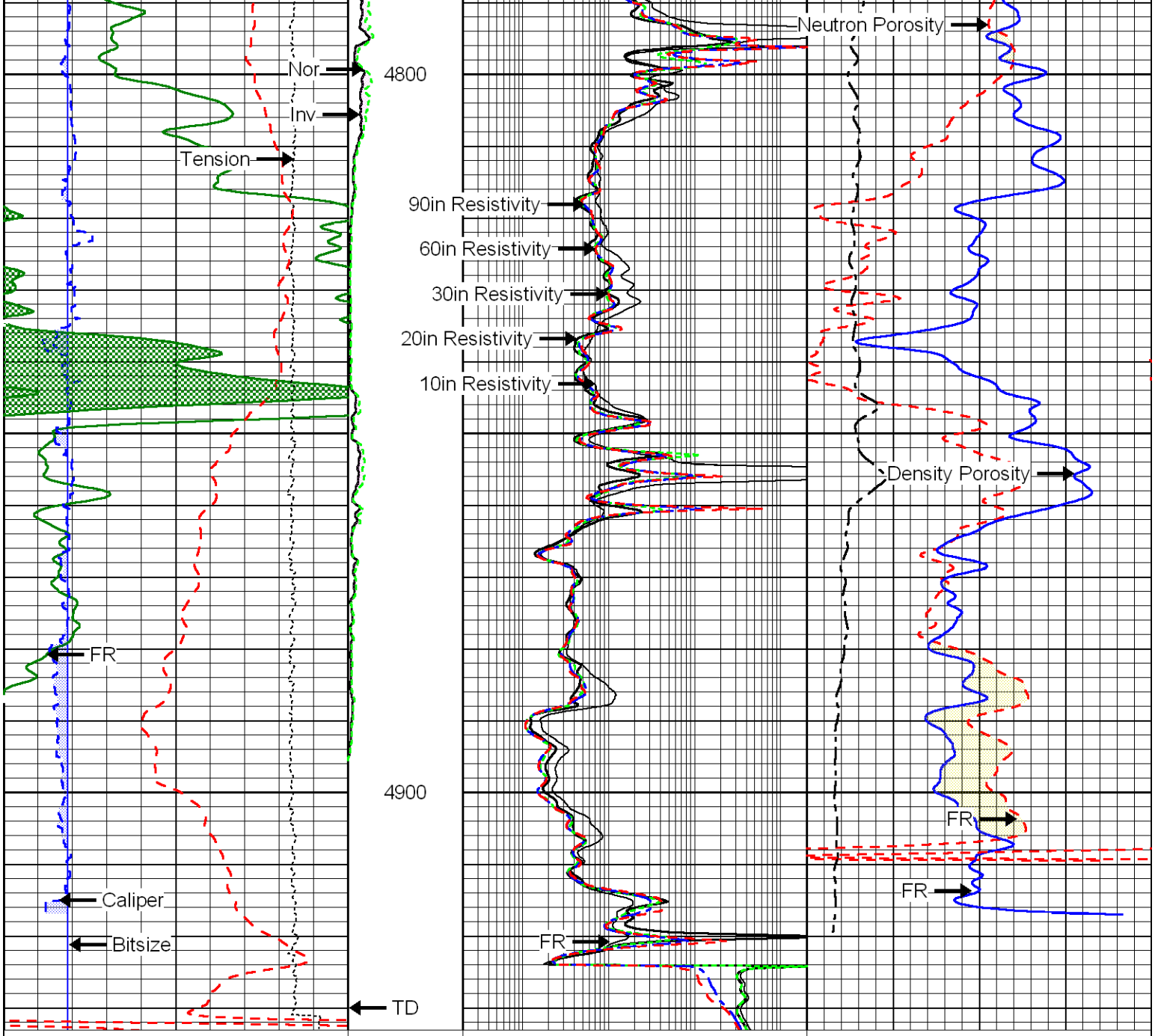
Gamma Ray
PE



ALLIED WIRELINE

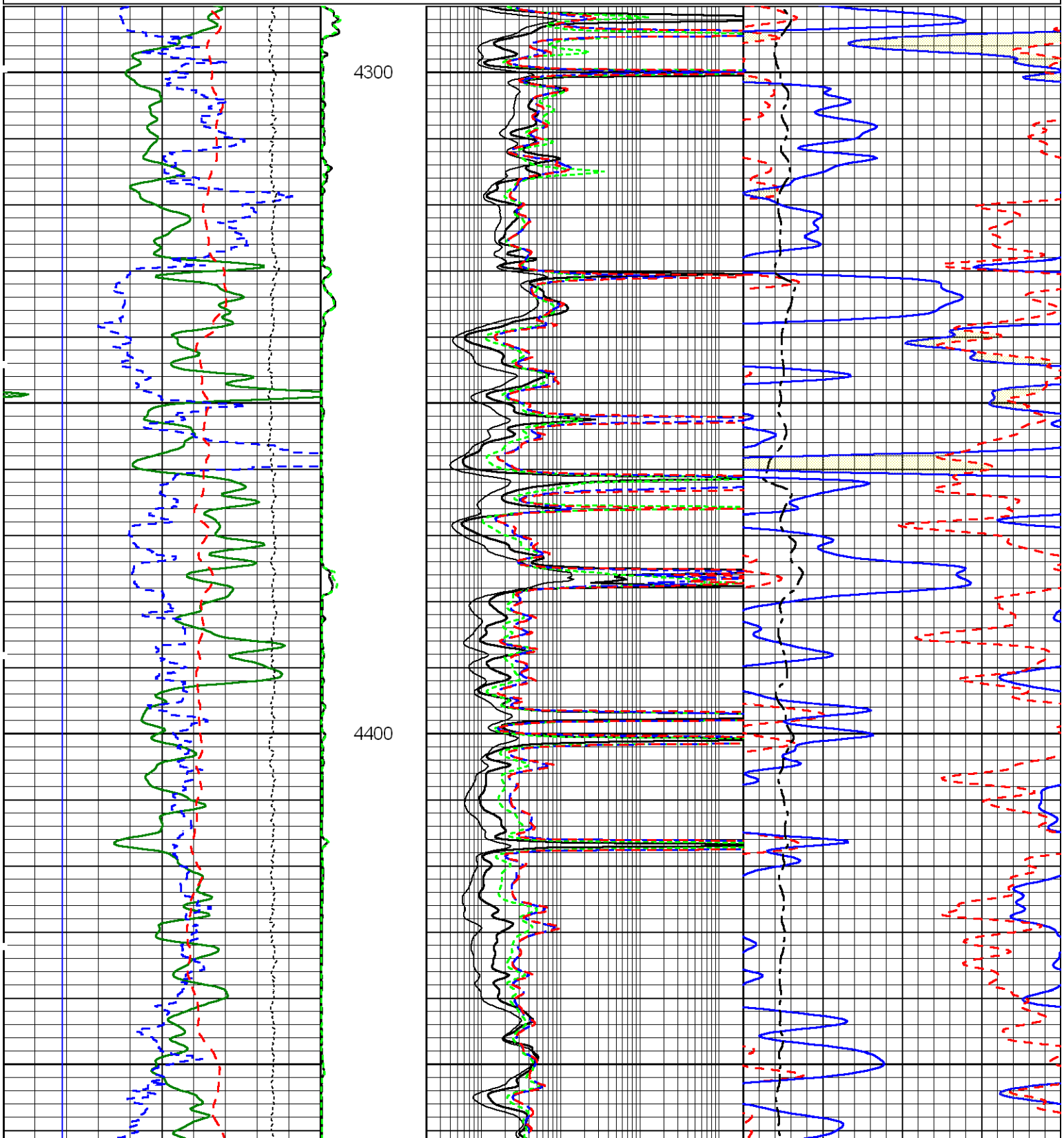
Main Pass

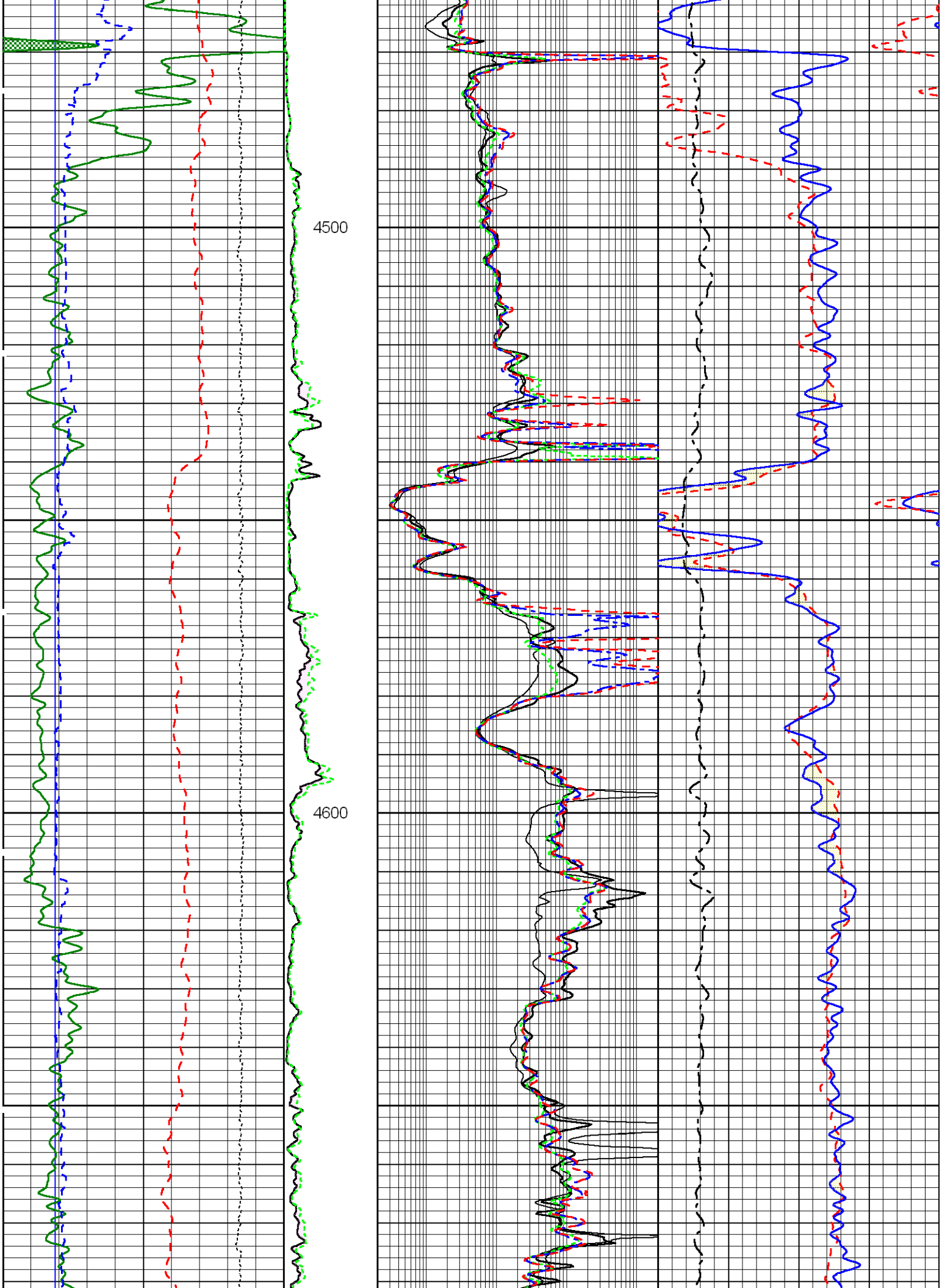
ALLIED WIRELINE

Repeat Pass

Database File:	taoskubik1-27.db
Dataset Pathname:	rpt4
Presentation Format:	a3com_t
Dataset Creation:	Fri Dec 20 14:46:24 2013 by Calc Sondex V7.03
Charted by:	Depth in Feet scaled 1:240

6 Bitsize (in) 16	Inv (Ohm-m)	0.2 10in Resistivity (Ohm-m) 2000	30 Neutron Porosity (pu) -10		
0 Gamma Ray (GAPI) 150		0.2 20in Resistivity (Ohm-m) 2000	30 Density Porosity (pu) -10		
6 Caliper (in) 16	0 20	0.2 30in Resistivity (Ohm-m) 2000	0 PE 10		
SP [-20mV+]	Nor (Ohm-m)	0.2 60in Resistivity (Ohm-m) 2000			
Tension 10000 (lb) 0	0 20	0.2 90in Resistivity (Ohm-m) 2000			

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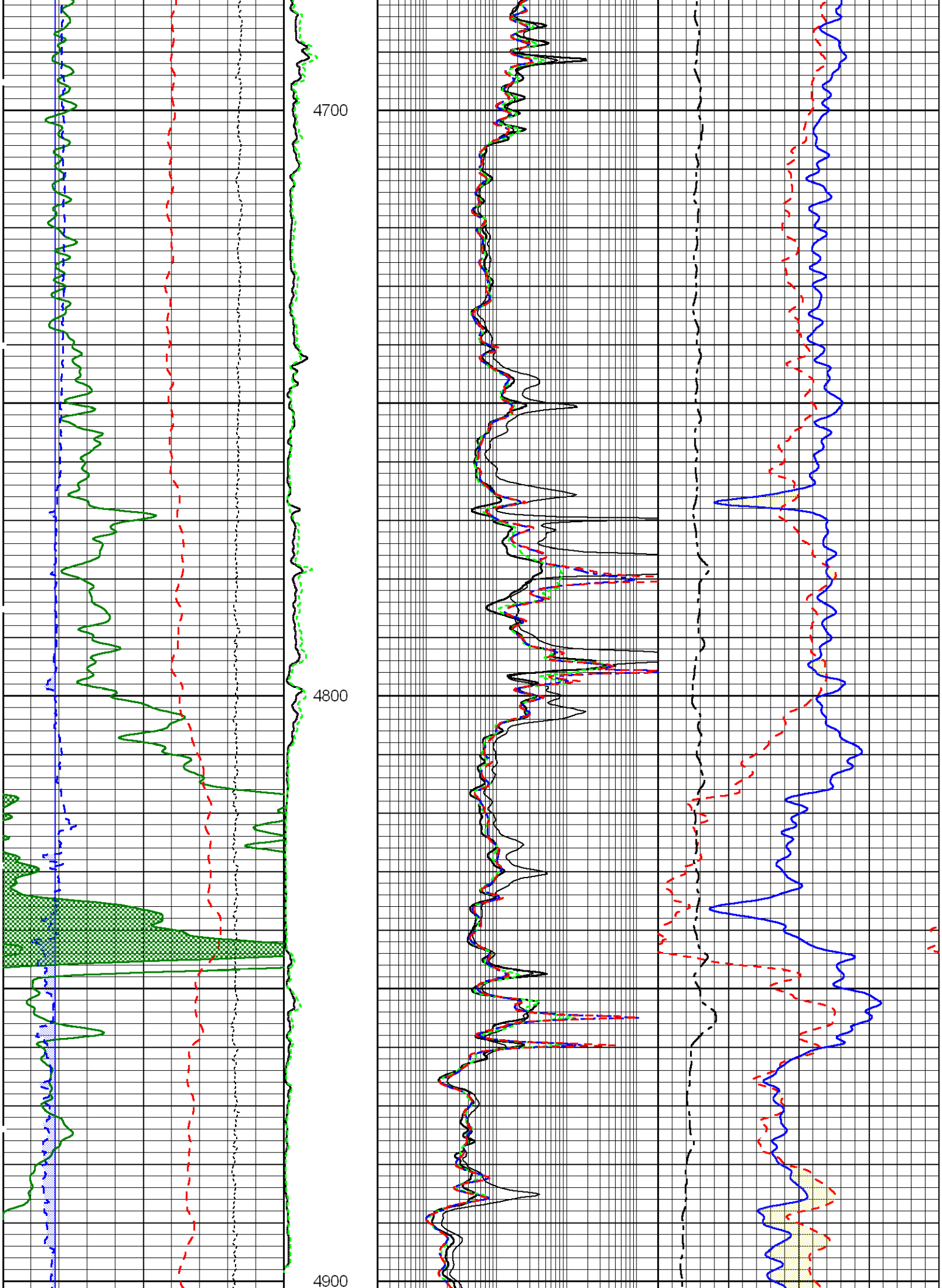
4600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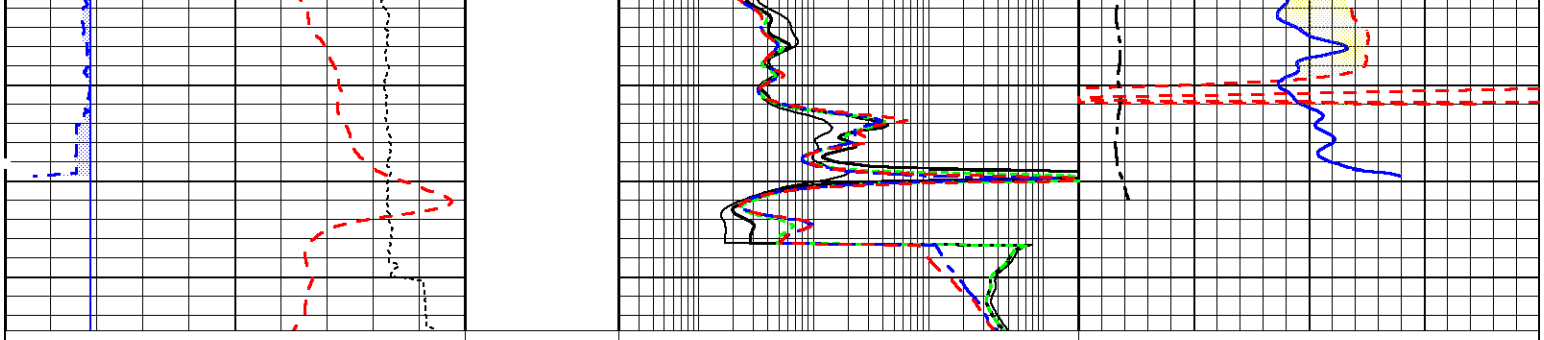
4800
4900



ALLIED WIRELINE

Repeat Pass

Log Variables

Database:C:\Warrior\Data\taoskubik1-27.db
Dataset: ./../main.1

Top - 56.80 ft

AIR_HOLE?	**BOREID**	**BOTTEMP**	CASED?	**CASEOD**	**CASEWGHT**	**DE-CENT**	DEVI
	in	**degF**		**in**	**lb/ft**		°
No	**0**	**0**	No	**0**	**0**	**No**	0
FLUIDDEN	FRMSALIN	**MATRXDEN**	MUDSALIN	**MudWgt**	**NPORSEL**	PERFS	**SO**
g/cc	kppm	**g/cc**	kppm	**lb/gal**			**in**
0	0	**0**	0	**0**	**Limestone**	0	**0**
SPSHIFT	**SRFTEMP**	**TDEPTH**					
mV	**degF**	**ft**					
0	**0**	**0**					

56.80 ft - 5012.00 ft

AIR_HOLE?	**BOREID**	**BOTTEMP**	CASED?	**CASEOD**	**CASEWGHT**	**DE-CENT**	DEVI
	in	**degF**		**in**	**lb/ft**		°
No	**7.875**	**108**	No	**5.5**	**15.5**	**Yes**	0
FLUIDDEN	FRMSALIN	**MATRXDEN**	MUDSALIN	**MudWgt**	**NPORSEL**	PERFS	**SO**
g/cc	kppm	**g/cc**	kppm	**lb/gal**			**in**
1	0	**2.71**	0	**9.1**	**Limestone**	0	**0.25**
SPSHIFT	**SRFTEMP**	**TDEPTH**					
mV	**degF**	**ft**					
-115	**68**	**4928**					

5012.00 ft - Bottom

AIR_HOLE?	BOREID	BOTTEMP	CASED?	CASEOD	CASEWGHT	DE-CENT	DEVI
	in	degF		in	lb/ft		°
No	0	0	No	0	0	No	0

FLUIDDEN g/cc	FRMSALIN kppm	MATRXDEN g/cc	MUDSALIN kppm	MudWgt lb/gal	NPORSEL	PERFS	SO in
0	0	0	0	0	Limestone	0	0

SPSHIFT mV	SRFTEMP degF	TDEPTH ft
0	0	0

Calibration Report

Database File: taoskubik1-27.db
Dataset Pathname: ./../main.1
Dataset Creation: Fri Dec 20 16:58:00 2013 by Calc Sondex V7.03

Induction Array Tool Calibration Report

Serial Number: B10107
Tool Model: 002

Master Calibration Performed: Thu Oct 11 11:32:19 2012
Temperature: 69.9 degF

Sonde Error:

Array	1	2	3	4	5	6	7	
Real	203.0	-10.5	-39.0	-13.0	-0.3	3.2	6.8	mmho/m
Imaginary	183.8	91.8	-2.5	20.2	8.1	19.7	2.3	mmho/m

Loop Gain:

Array	1	2	3	4	5	6	7	
Loop (real)	537.7	678.5	1295.3	1394.1	1144.8	712.8	404.8	mmho/m
Loop (imaginary)	73.3	92.5	389.8	419.5	344.5	214.5	121.8	mmho/m
Real	760.2	719.5	1253.7	1371.8	1162.7	739.4	424.4	mmho/m
Imaginary	251.4	186.8	384.3	435.7	356.0	241.9	127.6	mmho/m
Gain (real)	0.965	0.929	1.002	1.007	0.984	0.968	0.969	
Gain (imaginary)	1.084	0.974	1.008	1.010	0.990	0.965	0.972	

Before Survey Verification Performed: Mon Aug 12 20:30:09 2013
Sonde 1 Temperature: 90.5 degF
Sonde 2 Temperature: 88.9 degF
Array 1 Temperature: 87.3 degF

Array	1	2	3	4	5	6	7
TxIR	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
TxIX	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Tx Magnitude	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Gain	124.5	159.5	190.0	190.0	190.0	190.0	190.0
RxCR	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
RxCX	0.2	0.1	0.2	0.2	0.2	0.2	0.2
RxC Magnitude	0.2	0.1	0.2	0.2	0.2	0.2	0.2

Tool Module Parameters

Software Version: 1.9.3.0
Borehole Size Source: CALI
Mud Resistivity Source: Hilchie
Mud Resistivity At Surface: 0.30 Ohm-m
Mud Resistivity Surface Temperature: 60.0 degF
Borehole Corrections: Automatic
Minimum Standoff: 0.4 in

Litho Density Tool Calibration Report

Serial Number: B10112S50129B
Tool Model: 002

Caliper Calibration Performed: Tue Dec 17 16:08:38 2013

	Diameter		Reading	
Small Ring:	6.000	in	1391.200	cps
Large Ring:	13.000	in	2105.400	cps
Gain:	0.0098			
Offset:	-7.6354			

Master Calibration Performed: Tue Dec 17 15:51:57 2013

Source Number: 50129B
Medium: Water
Al Block Density: 2.6023 g/cc

	Background	Al Block	Al Block + Fe	
SS1	764.2	4537.2	3857.6	cps
SS2	2164.7	31783.4	27030.8	cps
SSTOTAL	5052.1	50588.4	42695.5	cps
LITH	107.7	530.6	325.5	cps
LL	211.1	894.1	789.7	cps
LU	607.3	1187.5	1108.9	cps
LS	818.3	2081.6	1898.7	cps
LSTOTAL	1545.0	5027.6	4125.8	cps
SSHV	1459.0	1461.7	1462.7	V
LSHV	1406.0	1407.9	1408.5	V
SSFF	0.004	0.002	-0.001	
LSFF	-0.005	-0.003	-0.001	

Before Survey Verification Performed: Fri Dec 20 03:32:56 2013
After Survey Verification Performed:

	Master Background	Before Survey Background	After Survey Background	
SS1	764.2	763.2		cps
SS2	2164.7	2163.7		cps
SSTOTAL	5052.1	5062.8		cps
LITH	107.7	107.7		cps
LL	211.1	211.8		cps
LU	607.3	612.2		cps
LS	818.3	824.0		cps
LSTOTAL	1545.0	1545.3		cps
SSHV	1459.0	1456.3		V
LSHV	1406.0	1402.3		V
SSFF	0.004	0.020		
LSFF	-0.005	0.019		

Tool Module Parameters

Software Version: 2.5.1.0
Borehole Size Source: CALI
Pad Type: 2

Compensated Neutron Tool Calibration Report

Serial Number: C10088
Tool Model: 009

Master Calibration Performed: Thu Nov 21 18:26:47 2013

Source Number: 80244B

Short Spacing Counts:	6481.45	cps
Long Spacing Counts:	256.47	cps
High Voltage:	1336.43	V
Target Ratio:	27.2000	
Ratio:	25.2716	
K-Factor:	1.0763	

Before Survey Verification Performed: Fri Dec 20 03:29:03 2013
After Survey Verification Performed:

Verifier Number: 6493

Verifier Values	Master Cal	Before Survey	After Survey	
Short Spacing Counts:	266.14	261.07		cps
Long Spacing Counts:	260.41	253.81		cps
High Voltage:	1336.44	1336.35		V
Ratio:	1.0220	1.0286		

Tool Module Parameters

Software Version:	1.5.0.0
Borehole Size Source:	CALI
Clip Crossplot Porosity:	YES

Micro Electric Log Calibration Report

Serial Number:	000002
Tool Model:	001

Caliper Calibration Performed: Fri Dec 13 13:35:50 2013

	Pad Arm			Backup Arm		
	Radius		Reading	Radius		Reading
Small Jig:	3.000	in	1320.400	3.000	in	1366.900
Large Jig:	8.000	in	1429.900	8.000	in	1484.400
Gain:			0.0457			0.0426
Offset:			-57.2922			-55.1660

Pad Calibration

	Inverse	Normal
Gain:	1.5000	0.9000
Offset:	0.0000	0.0000

Tool Module Parameters

Software Version: 1.1.0.0

Gamma Ray Calibration Report

Serial Number:	C10047
Tool Model:	001

Performed: Mon Dec 02 13:35:35 2013

Calibrator Value:	147.0	GAPI
Background Reading:	76.5	cps
Calibrator Reading:	523.2	cps
Sensitivity:	0.3291	GAPI/cps

Borehole Fluid Resistivity Calibration Report

Serial Number: P003

Tool Model:	002

Master Calibration Performed: Mon Sep 19 10:59:23 2011

Resistivity Polynomial Equation:

$$0.0136x^3 - 0.0315x^2 + 0.6797x - 0.0602$$

Temperature Calibration:

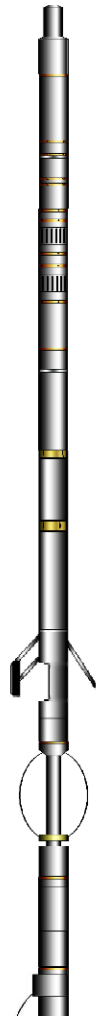
Reference		Reading	
78.80	degF	558.20	bits
212.00	degF	700.00	bits

Head Tension Unit Calibration Report

Serial Number:	00001
Tool Model:	011

Performed: Mon Mar 04 10:52:43 2013

Point #	Reference		Reading	
1	-19894.000	lb	8957.860	cps
2	-15010.000	lb	13965.100	cps
3	-9998.000	lb	19079.100	cps
4	-5007.000	lb	24133.000	cps
5	-1009.000	lb	28232.100	cps
6	1017.000	lb	30185.400	cps
7	5040.000	lb	34439.700	cps
8	9970.000	lb	39346.900	cps
9	14955.000	lb	44466.000	cps
10	19770.000	lb	49397.800	cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CHD-001 (000004) Cable Head	2.19	3.38	35.00
			XTU-008 (C10067) Crossover Ultrawire Toolbus to Ultralink	2.08	3.38	47.00
HTEN	54.44		HTU-011 (00001) Head Tension Unit	2.18	3.38	55.00
BFR	50.80		BFR-002 (P003)	4.39	3.38	94.00
GR	48.02		GRT-001 (C10047) Gamma Ray Tool	3.22	3.38	69.00
			MEL-001 (000002) Micro Electric Log	9.17	3.38	190.00
MEL	38.03					
			CEN-001 (000001) Inline OH Springbow Centraliser	4.27	3.38	66.00
			KJT-001 (000001) Knuckle Joint	2.86	3.38	72.00

CNLSC CNSSC	26.08 25.58		CNL-009 (C10088) Compensated Neutron Logging Tool	5.27	3.38	125.00
LDT	15.92		LDT-002 (B10112S50129B) Litho Density Tool	9.75	4.50	310.00
IAT	8.74		IAT-002 (B10107) Induction Array Tool	13.42	3.88	200.00
SP	0.93		BN-SOFF (000001) Bottom Nose Standoff	0.67	6.88	6.00

Dataset:	taoskubik1-27.db: ./../main.1
Total Length:	59.47 ft
Total Weight:	1269.00 lb
O.D.	6.88 in

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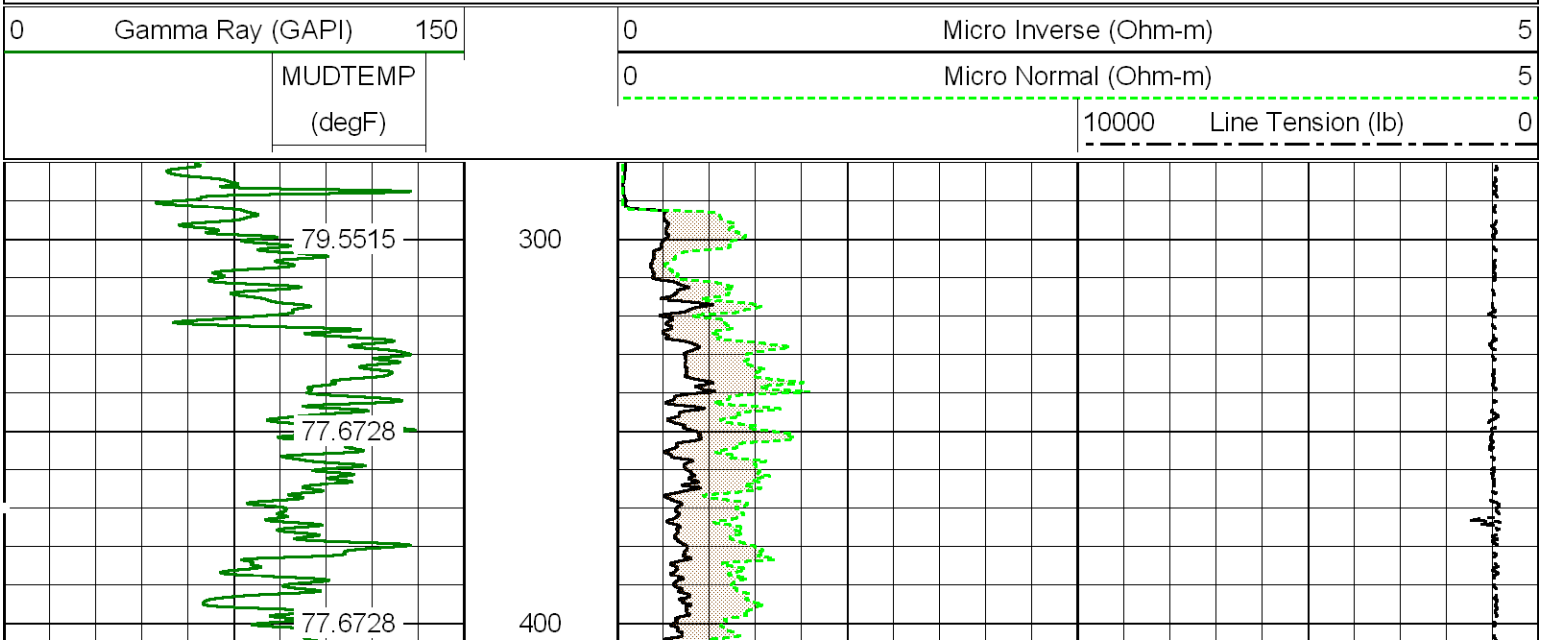
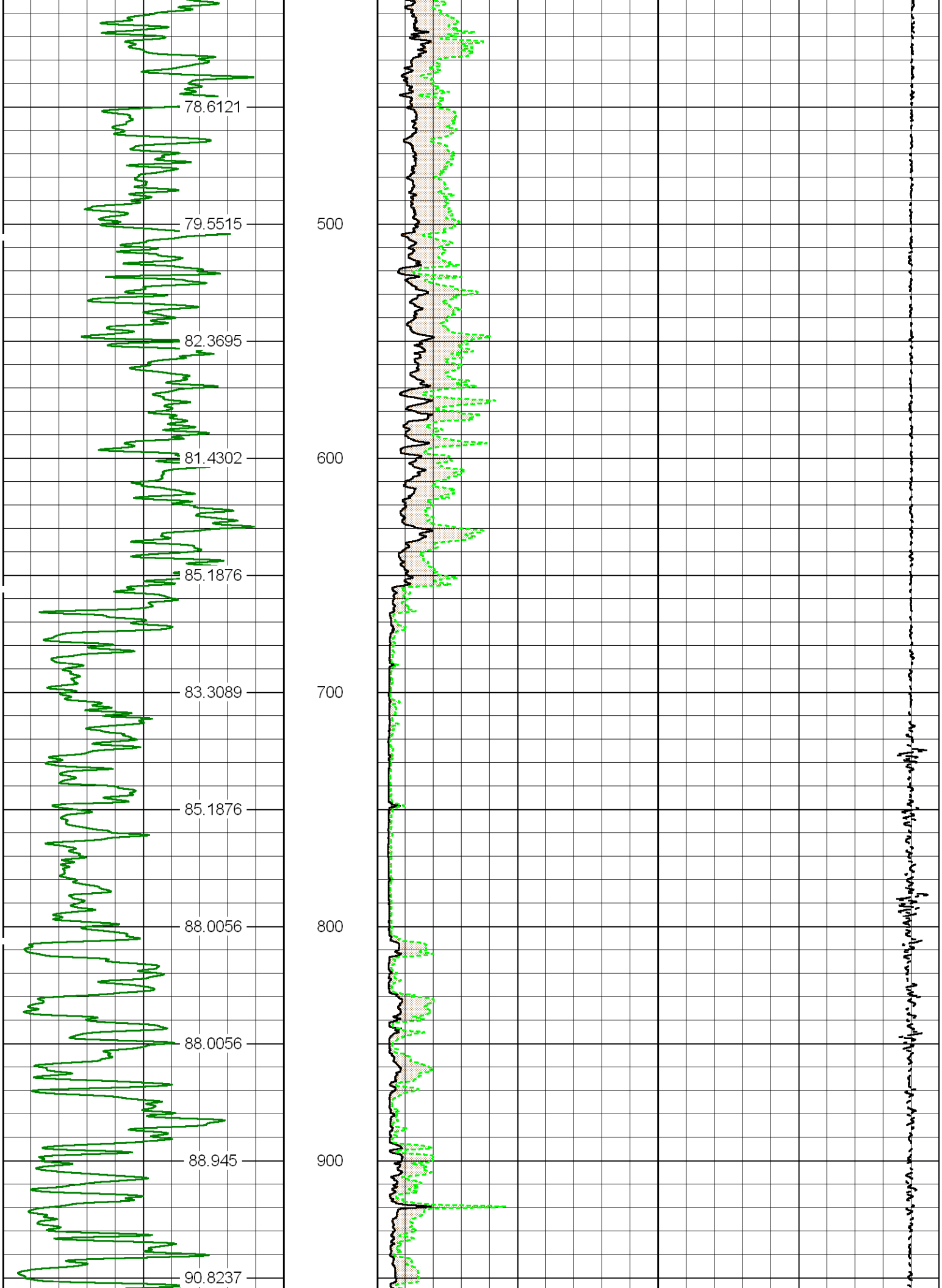
MEL Mud Log

Database File:	taoskubik1-27.db
Dataset Pathname:	pass2
Presentation Format:	melmud
Dataset Creation:	Fri Dec 20 12:27:16 2013 by Log Sondex V7.03
Charted by:	Depth in Feet scaled 1:600

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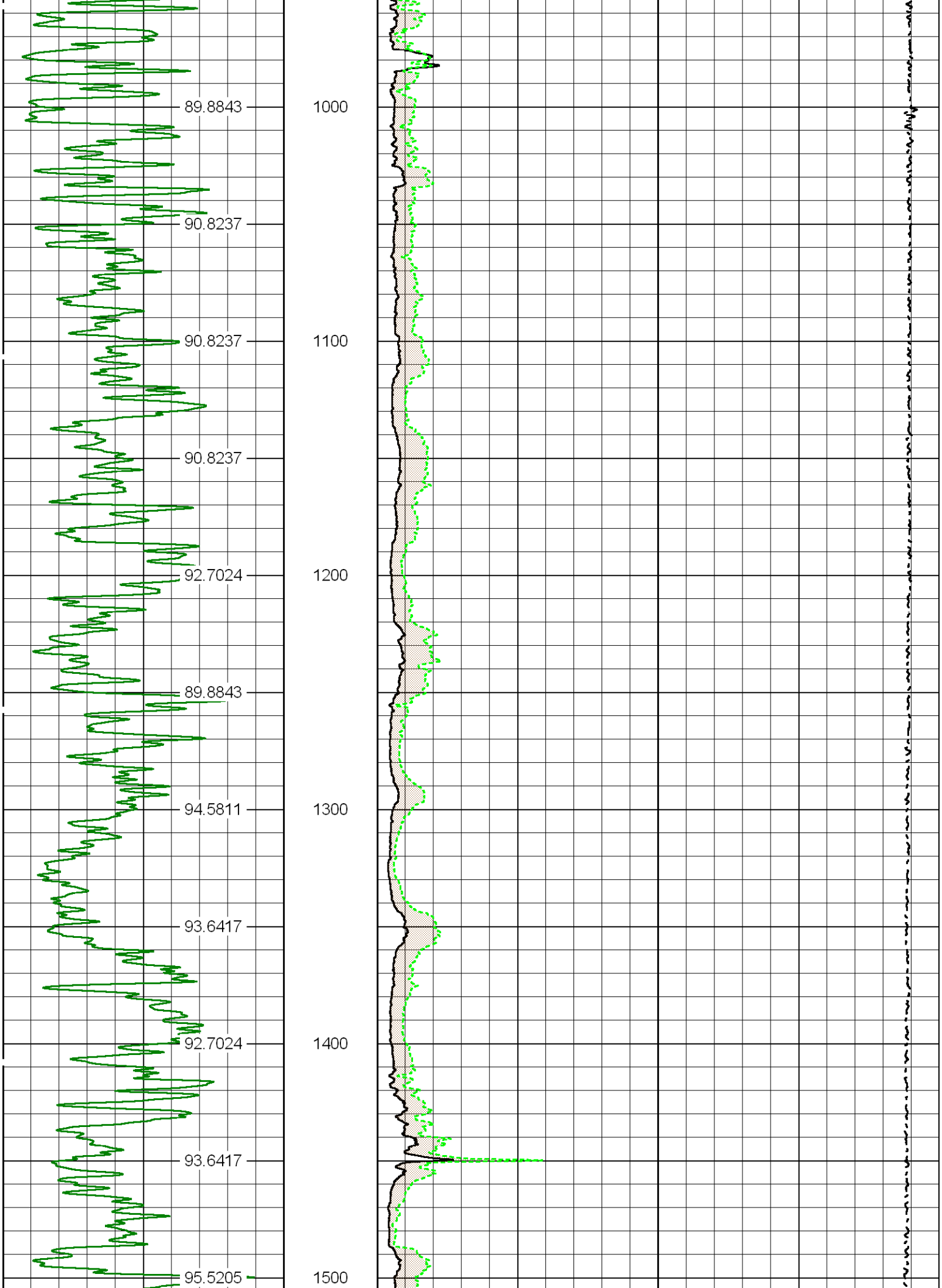
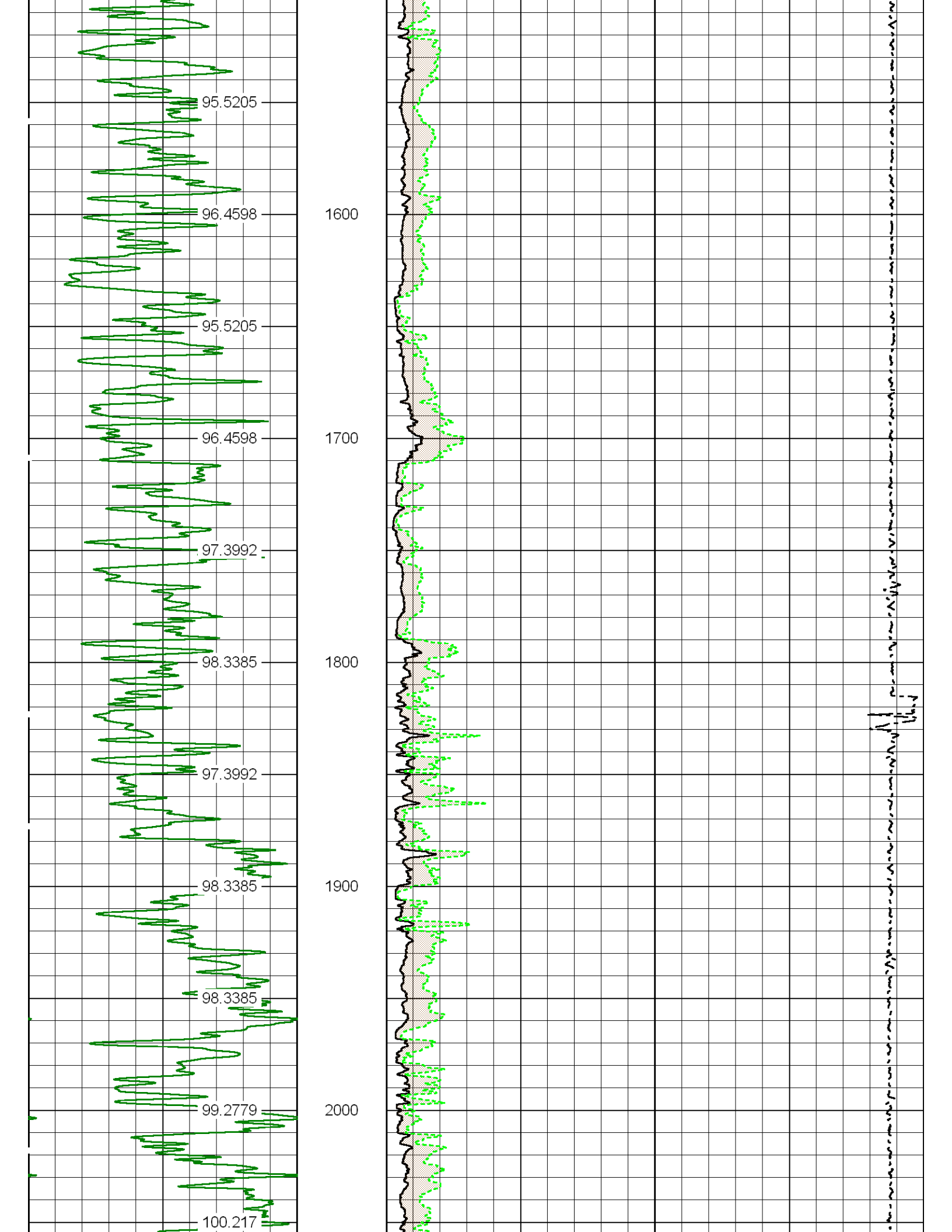
79.5515
500
82.3695
81.4302
600
85.1876
83.3089
700
85.1876
88.0056
800
88.0056
88.945
900
90.8237


89.8843
90.8237
90.8237
90.8237
92.7024
89.8843
94.5811
93.6417
92.7024
93.6417
95.5205
1000
1100
1200
1300
1400
1500


95.5205
96.4598
1600
95.5205
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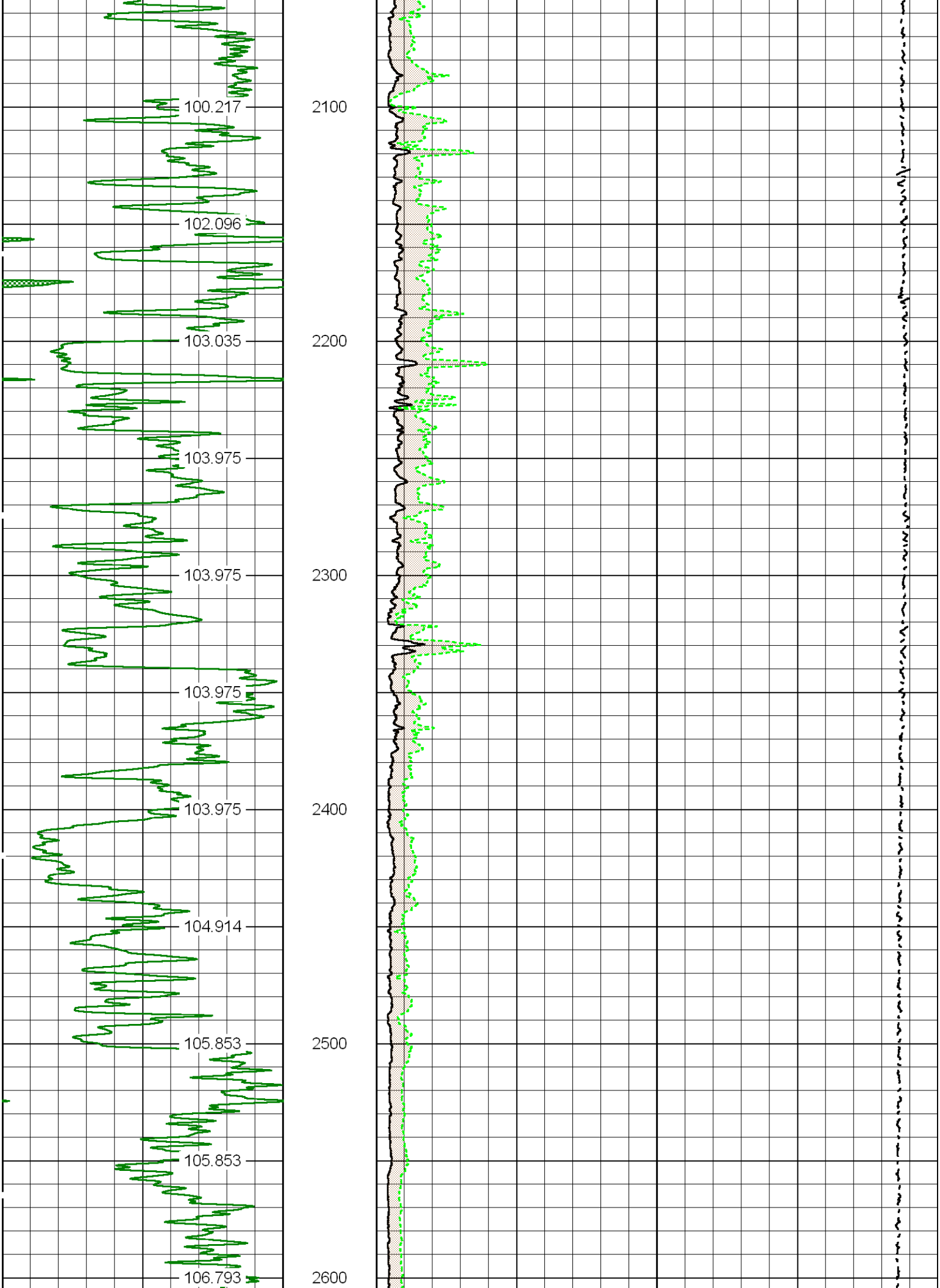
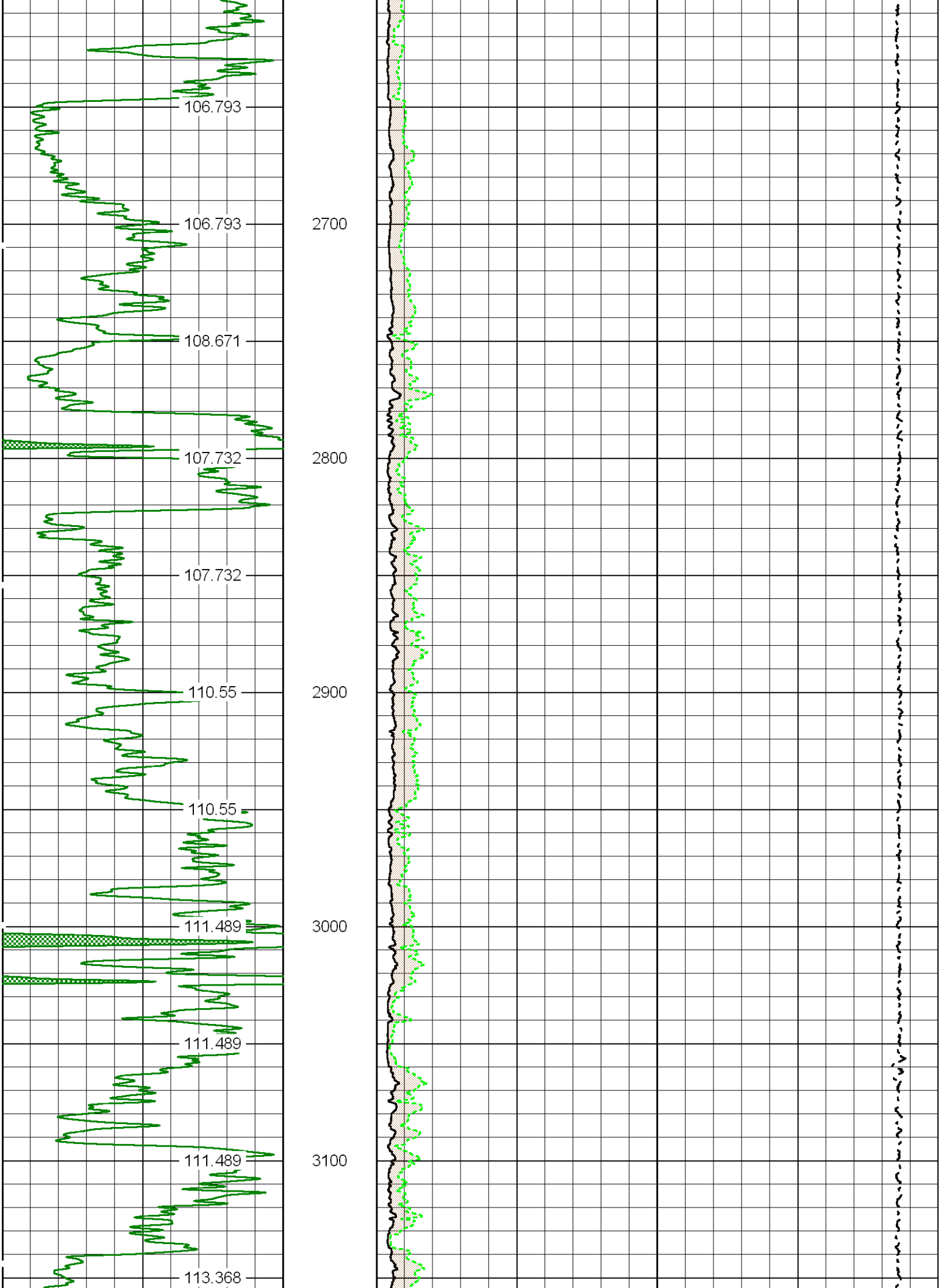
98.3385
1800
97.3992
98.3385
1900
98.3385
99.2779
2000
100.217


100.217
102.096
103.035
103.975
103.975
103.975
103.975
104.914
105.853
105.853
106.793
2100
2200
2300
2400
2500
2600


106.793
106.793
2700
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2800
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2900
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3000
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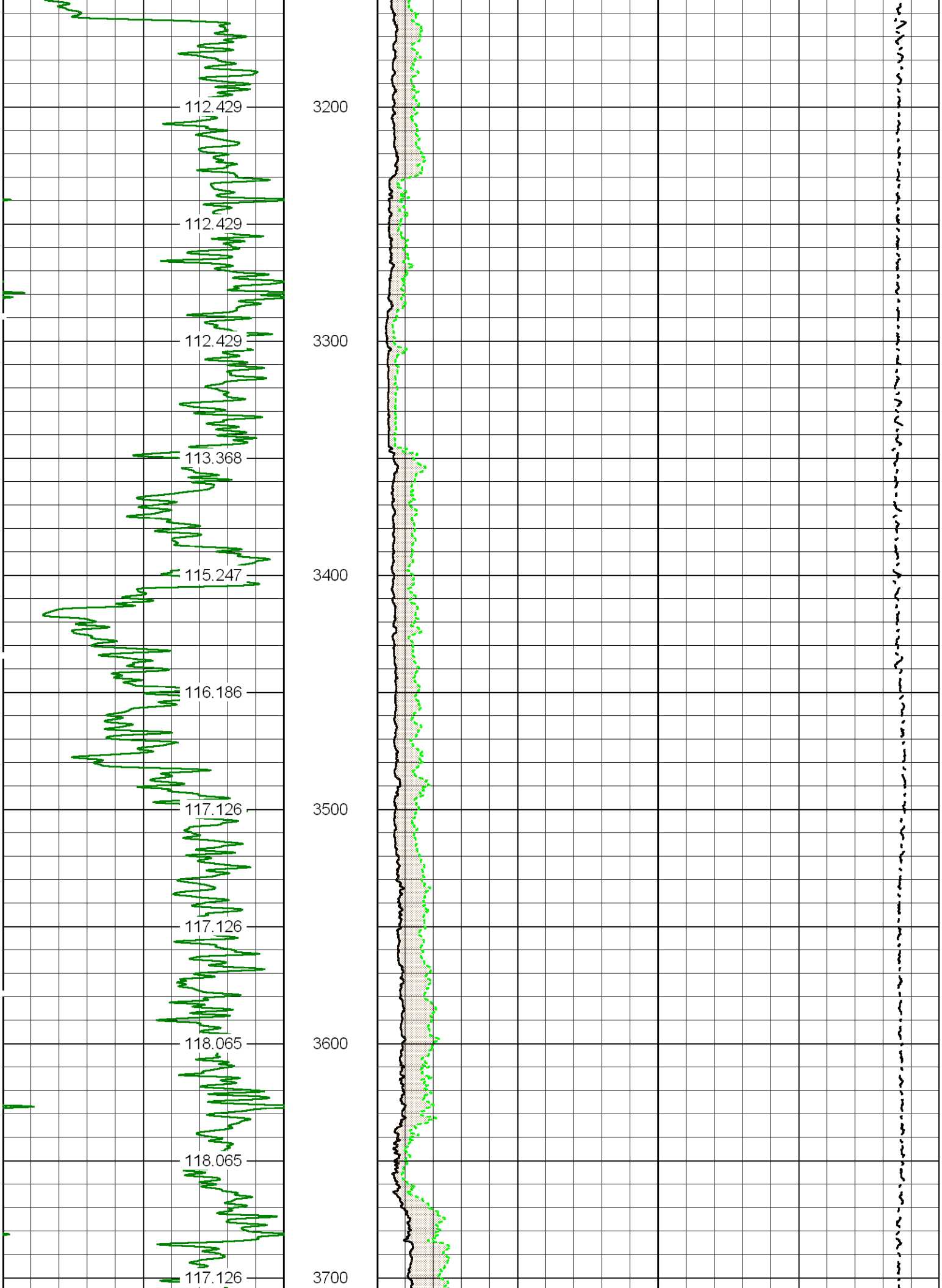
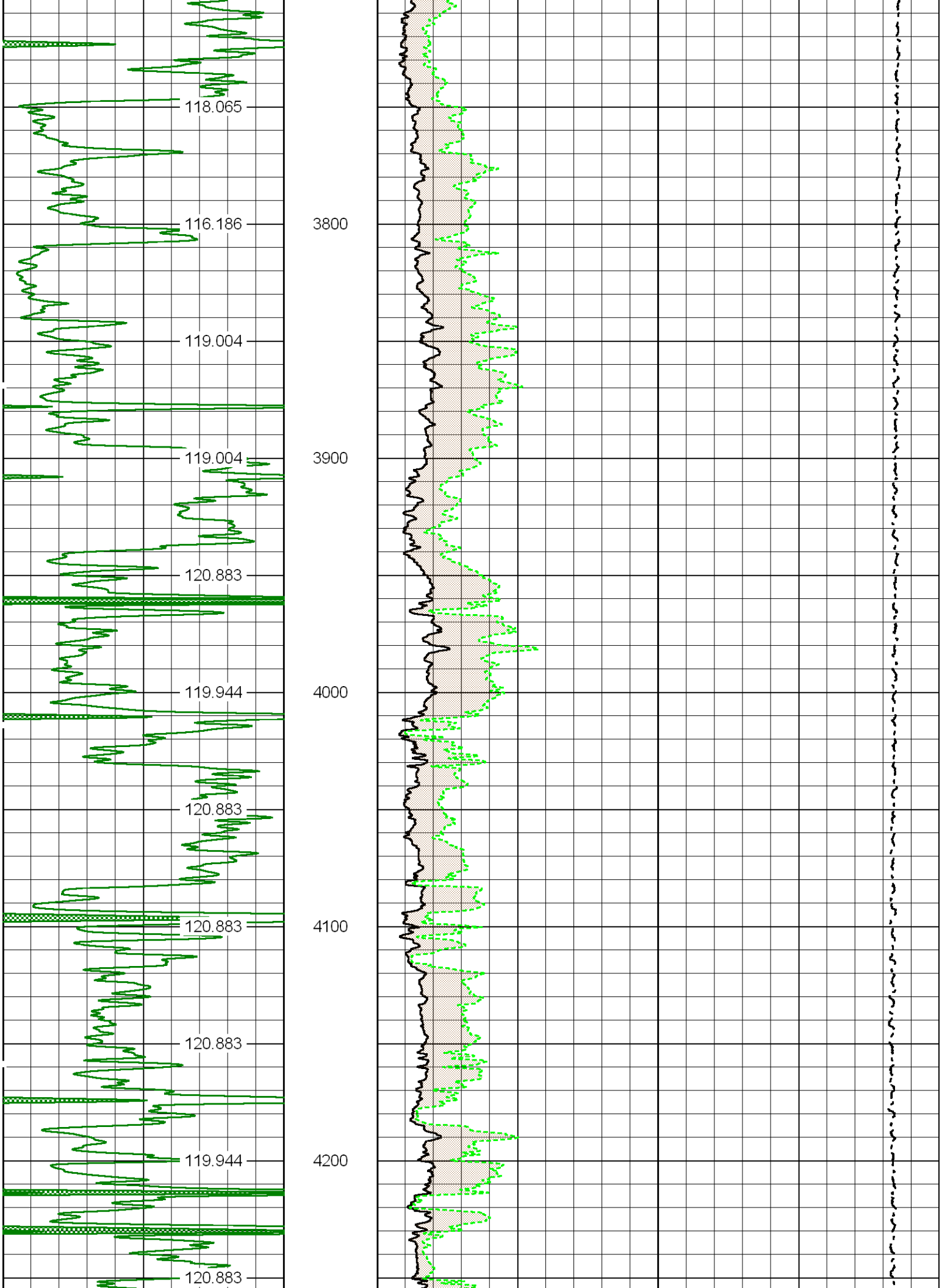
111.489
3100
113.368


112.429
112.429
112.429
113.368
115.247
116.186
117.126
117.126
118.065
118.065
117.126
3200
3300
3400
3500
3600
3700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116.186
3800
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4100
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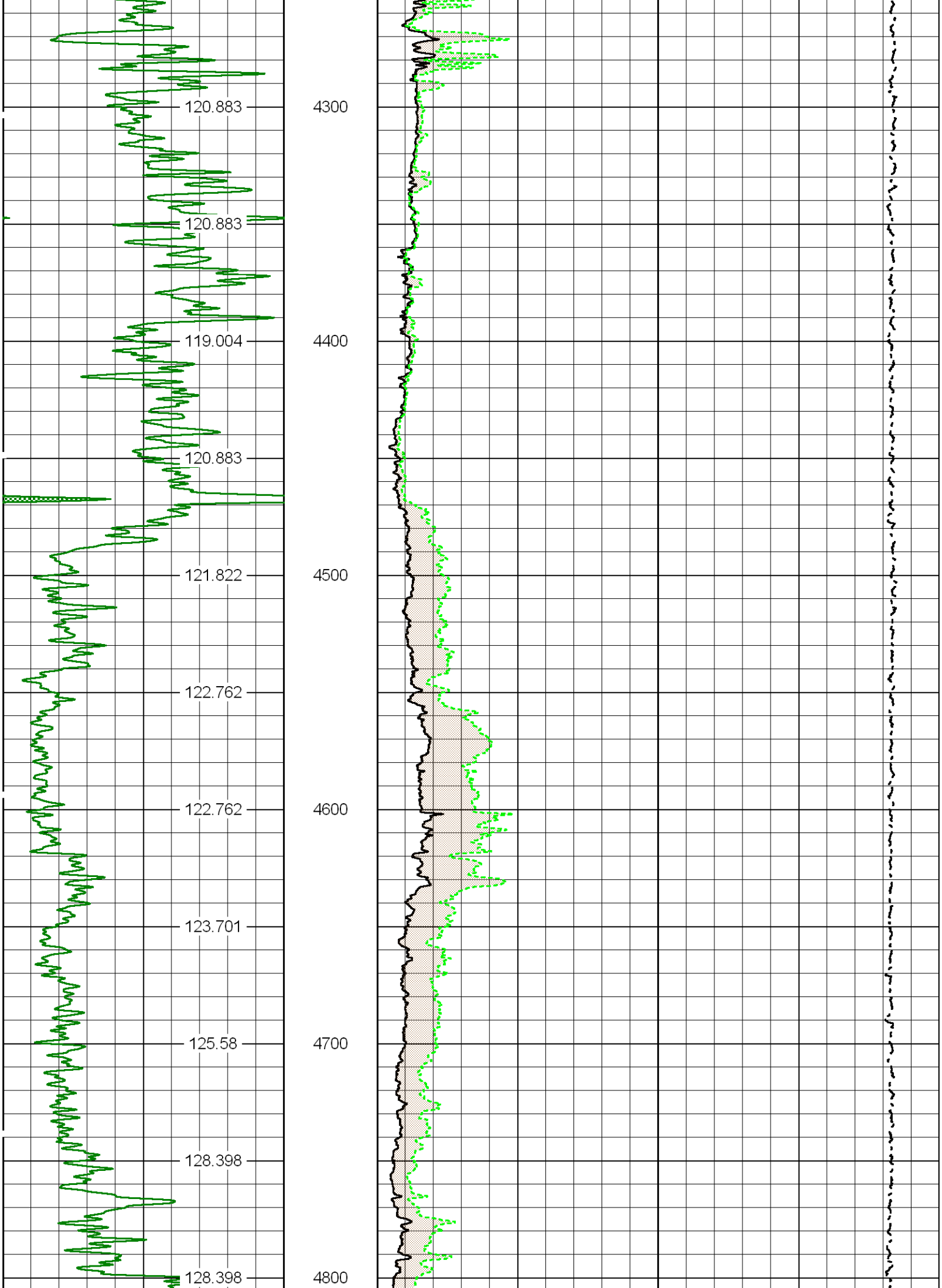
119.944
4200
120.883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120.883
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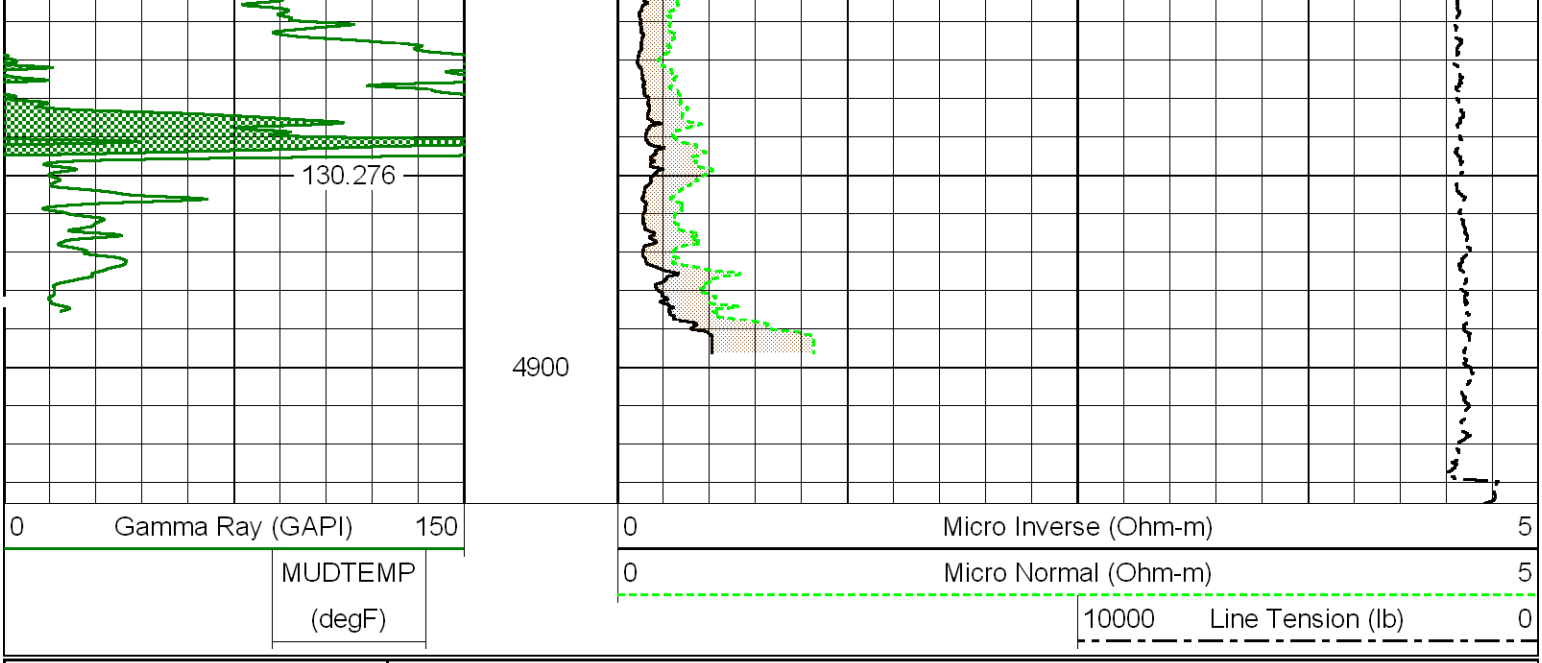
128.398
4300
4400
4500
4600
4700
4800



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MEL Mud Log