HALLIBURTON | Sperry Drilling

AGR Azimuthal Gamma Ray
XBAT Bi-Modal Acoustic
EWR-M5

Powered by INSITE™

1 : 200

Country	: Japan
Field	: Nankai Trough
Location	: Lat: 33° 18' 3.04" North Long: 136° 38' 12.17" East
Well	: C0002P
Company	: JAMSTEC
Rig	: CHIKYU

Company : **JAMSTEC**
Rig : **CHIKYU**
Well : **C0002P**
Field : **Nankai Trough**
Country : **Japan**
DOE Number :

LOCATION

Latitude : **33° 18' 3.04" North**
Longitude : **136° 38' 12.17" East**

UTM Easting = 652382.4 m
UTM Northing = 3685834.6 m

Other Services
Directional Drilling
DDSr Drillstring Dynamics

Permanent Datum : **Mean Sea Level** Elevation : **0.00 m**
Log Measured From : **Drill Floor** **28.50 m** Above Permanent Datum
Drilling Measured From : **Drill Floor**

TVDss LOG

Elev. KB **0.00 m**
DF **28.50 m**
GL **0.00 m**
WD **1939.00 m**

Depth Logged : **4,156.11 m** To **4,995.59 m**
Date Logged : **26-Dec-13** To **02-Jan-14**
Total Depth MD : **5,026.00 m** TVD : **5,024.09 m**
Spud Date : **11-Oct-13**

Unit No. : **0003501** Job No. : **JP-XX-0900526576**
Plot Type : **Final**
Plot Date : **13-Jan-14**

Run No.	Borehole Record (TVDss) Size	From	To
4	12.250 in	4,156.11 m	4,995.59 m

Run No.	Borehole Record (TVDss) Size	From	To

Casing Record (TVDss) Size	Weight	From	To
36.000 in	822.35 kgpm	1,934.32 m	1,992.50 m
20.000 in	192.39 kgpm	1,934.32 m	2,799.30 m
13.375 in	101.19 kgpm	2,799.30 m	3,874.39 m

WELL INFORMATION

MWD Run Number																											
Date run completed																											
Rig Bit Number																											
Bit Size (in)																											
Tool Nominal OD (in)																											
Log Start Depth (TVD, m)																											
Log End Depth (TVD, m)																											
Drill or Wipe																											
Drill/Wipe Start Date and Time																											
Drill/Wipe End Date and Time																											
Min Inc (deg) @ Depth (TVD, m)																											
Max Inc (deg) @ Depth (TVD, m)																											
Bit TFA(cm2) / Bit Type																											
Flow Rate (m3pm)																											
Max AV (mps) / CV (mps) @ MWD																											
Fluid Type																											
Density (ppg) / Viscosity (spl)																											
Filtrate CL (ppm)																											
pH / Fluid Loss (m3pm)																											
PV (mPsec) / YP (pa)																											
% Solids / % Sand																											
% Oil / Oil:Water Ratio																											
Rm @ Measured Temp (degC)																											
Rmf @ Measured Temp (degC)																											
Rmc @ Measured Temp (degC)																											
Max Tool Temp (degC) / Source																											
Rm @ Max Tool Temp (degC)																											
Lead MWD Engineer																											
Customer Representative																											

SENSOR INFORMATION

Downhole Processor Information

Tool Type	HCIM				
Software Version	88.56				
Sub Serial Number	11952679				
Insert Serial Number	11790865				
Date and Time Initialized	26-Dec-13 16:50				
Date and Time Read	02-Jan-14 05:24				
ECMB SW Version	N/A				

Directional Sensor Information

Tool Type	PCDC				
Distance From Bit (m)	31.450				
Software Version	6.21				
Sub Serial Number	11025002				
Sonde Serial Number	11902126				
Sensor ID Number	N/A				
Toolface Offset (deg)	0				

Gamma Ray Sensor Information

Tool Type	AGR				
Distance From Bit (m)	16.230				
Recorded Sample Period (sec)	10				
Software Version	9.23				
Sub Serial Number	11952679				
Insert/Sonde Serial Number	239879				

Resistivity Sensor Information

Tool Type	EWR-M5				
Distance From Bit (m)	19.030				
Recorded Sample Period (sec)	12				
Software Version	1.56				
Sub Serial Number	11952679				
Receiver Insert Serial Number	208050				
Transmitter Insert Serial Number	239879				
Receiver Orientation	Down				

Sonic Sensor Information

Tool Type	XBAT				
Distance From Bit (m)	26.84				
Recorded Sample Period (sec)	20				
Sub Serial Number	N/A				
Receiver Insert Serial Number	12108405				
Transmitter Insert Serial Number	11215811				
MIT File	4:M11_D5				
Config File	N/A				
Real-Time Window (us/m)	N/A - N/A				
Battery Insert Serial Number	11816955				
MCM Software Version	N/A				
DAQ1/DAQ2 Software Version	N/A / N/A				
DSM Software Version	N/A				

REMARKS

1. All depths are referenced to driller's pipe tally. No correction has been made for pipe stretch or squat.

2. The following smoothing parameters have been applied to the data:
   Sonic curves 0.1524m interval, 0.4 coercion distance

3. XCAL data had been office processed.

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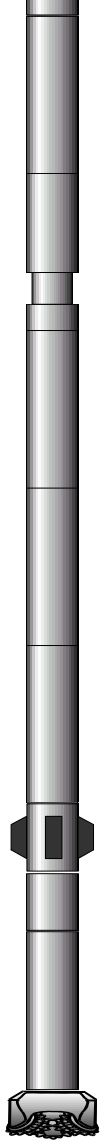
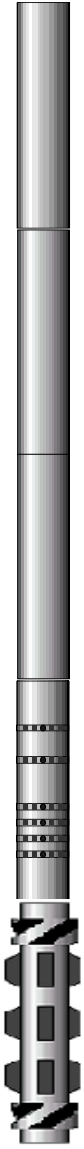
MWD RUN 400 - BHA

	Component Length (m)	Cumulative Length (m)
		5251.15
Drill Pipe 6.6250 in OD	940.000	
		4311.15
Sub 8.5000 in OD	.800	
		4310.35
Drill Pipe 5.5000 in OD	902.400	
		3407.95
Sub 7.5000 in OD	.800	
		3407.15
Drill Pipe 5.5000 in OD	789.600	
		2617.55
Drill Pipe 5.0000 in OD	2,331.200	
		286.35
Sub 8.5000 in OD	.910	
		285.44
Drill Pipe 5.6800 in OD	108.390	
		177.05
Sub 8.5000 in OD	.610	

MWD RUN 400 - MWD

	Sensor Measure Point Distance To Bit (m)
MWD - Directional SN# 11902126	31.450
MWD - Processor SN# 10996871	
MWD - Telemetry SN# 10450009	
MWD - Sonic SN# 11816955	
MWD - Processor	





XCAL Max Ellipse Diameter
10 inches 20

XCAL Min Ellipse Diameter
10 inches 20

XCAL Hole Diameter
10 inches 20

XCAL Ellipticity
0.5 0

XCAL Tool Displacement Y
-2 inches 2

XCAL Maj Axis Orientation
-180 degrees 180

XCAL Tool Displacement X
-2 inches 2

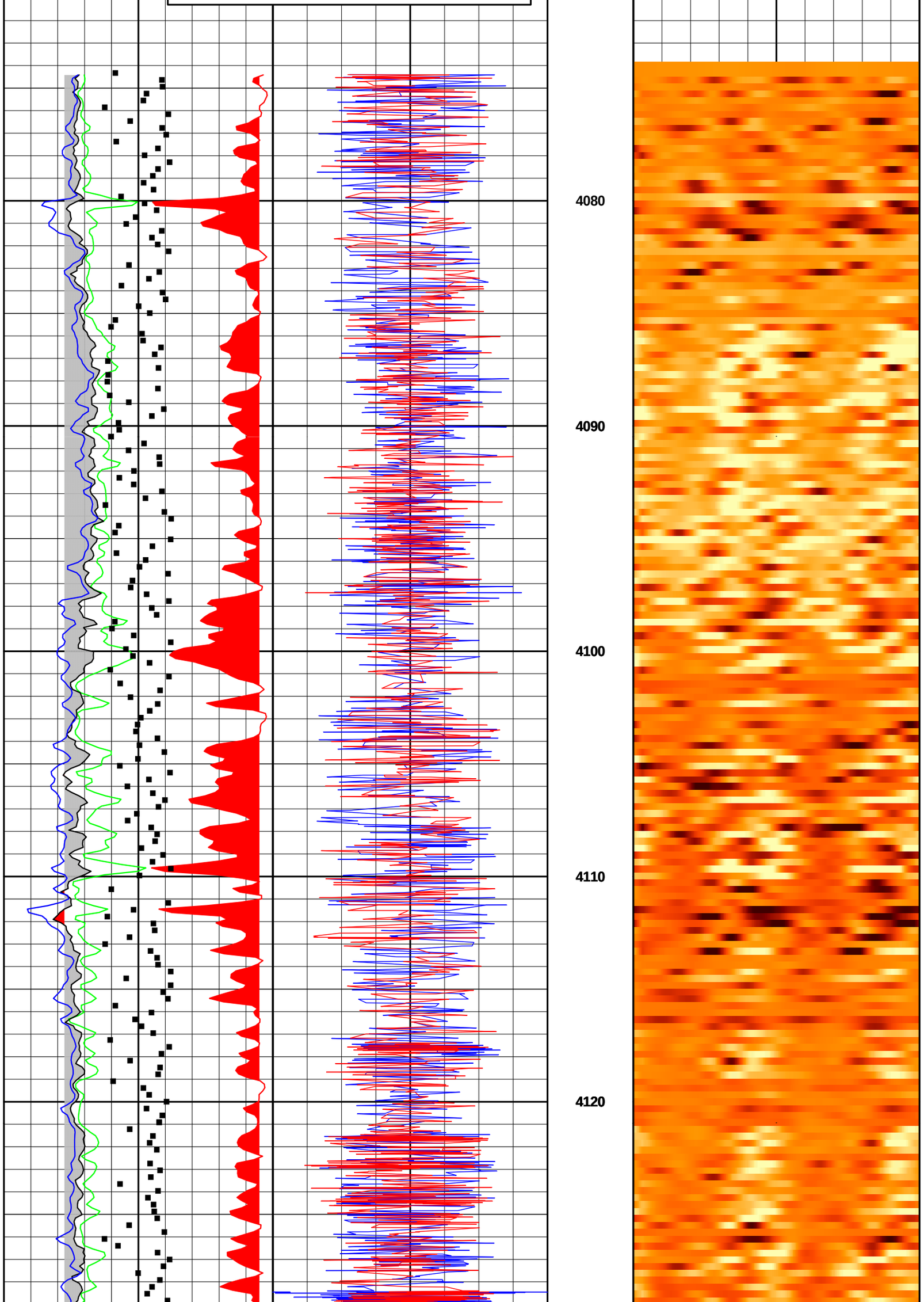
1 : 200
TVDss
m

XCAL Radius Array
N E S W N
5.5 inches 7

4060

4070

Start 12.25" hole @ 4156.11 mBRT / 4186 mRT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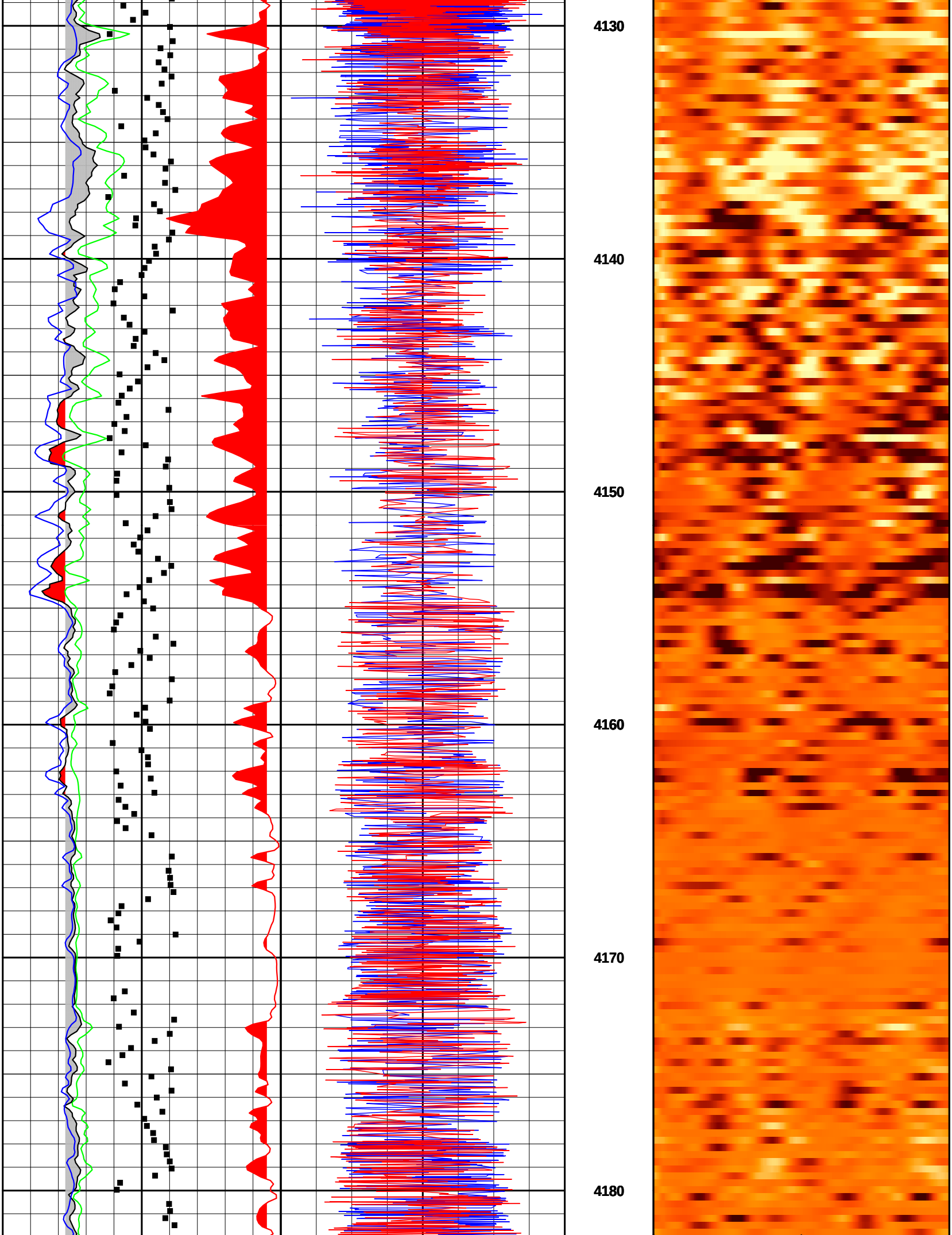
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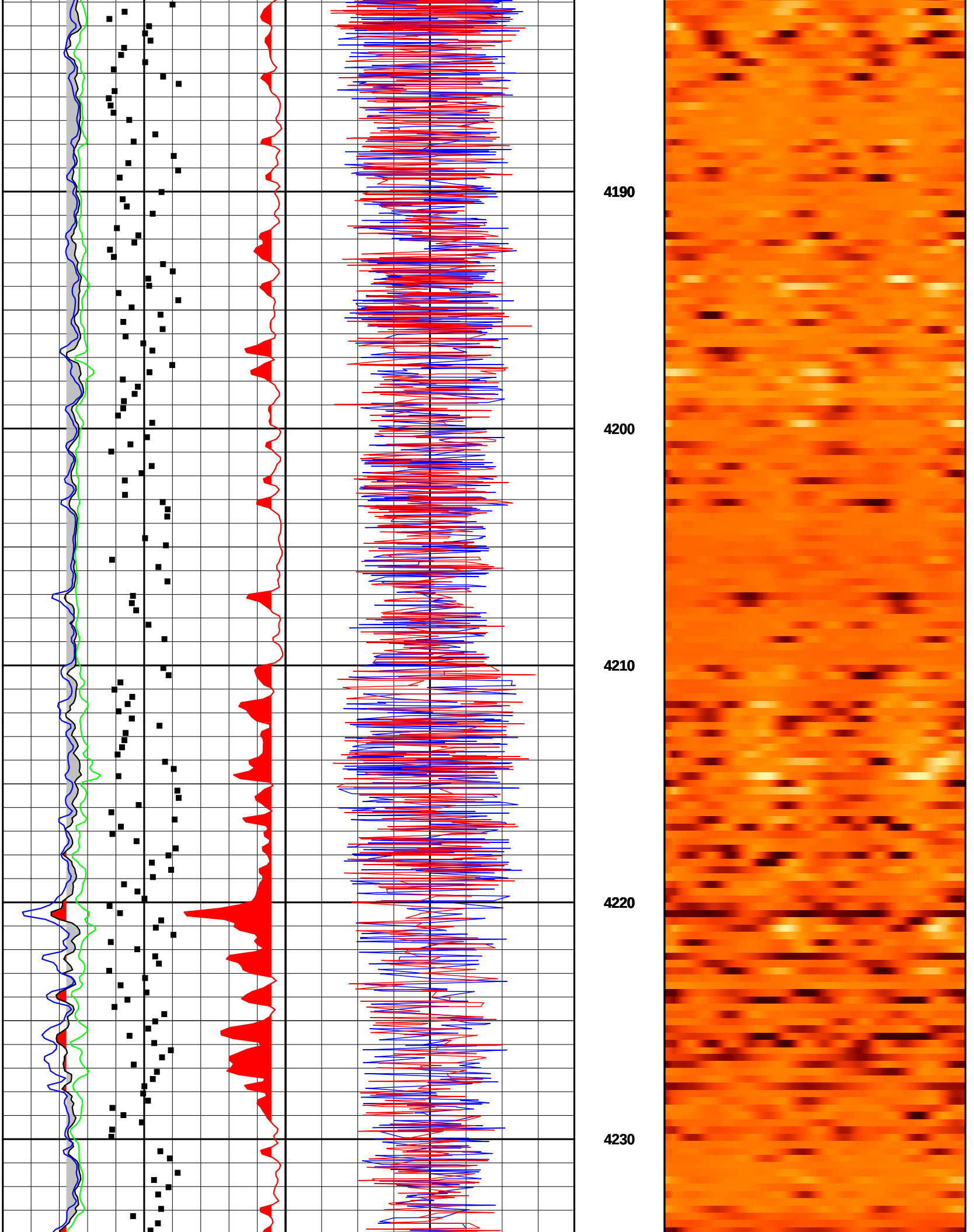
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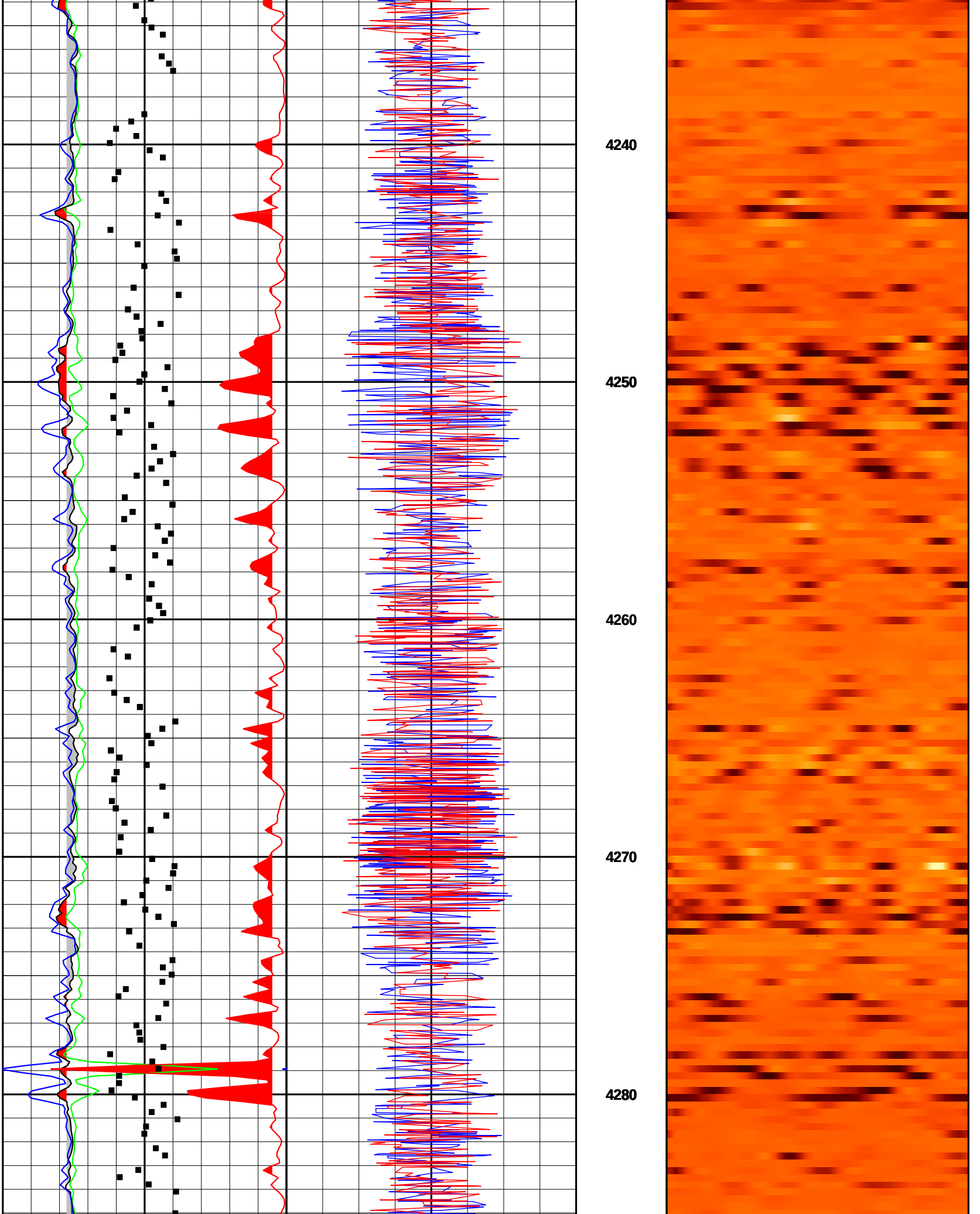
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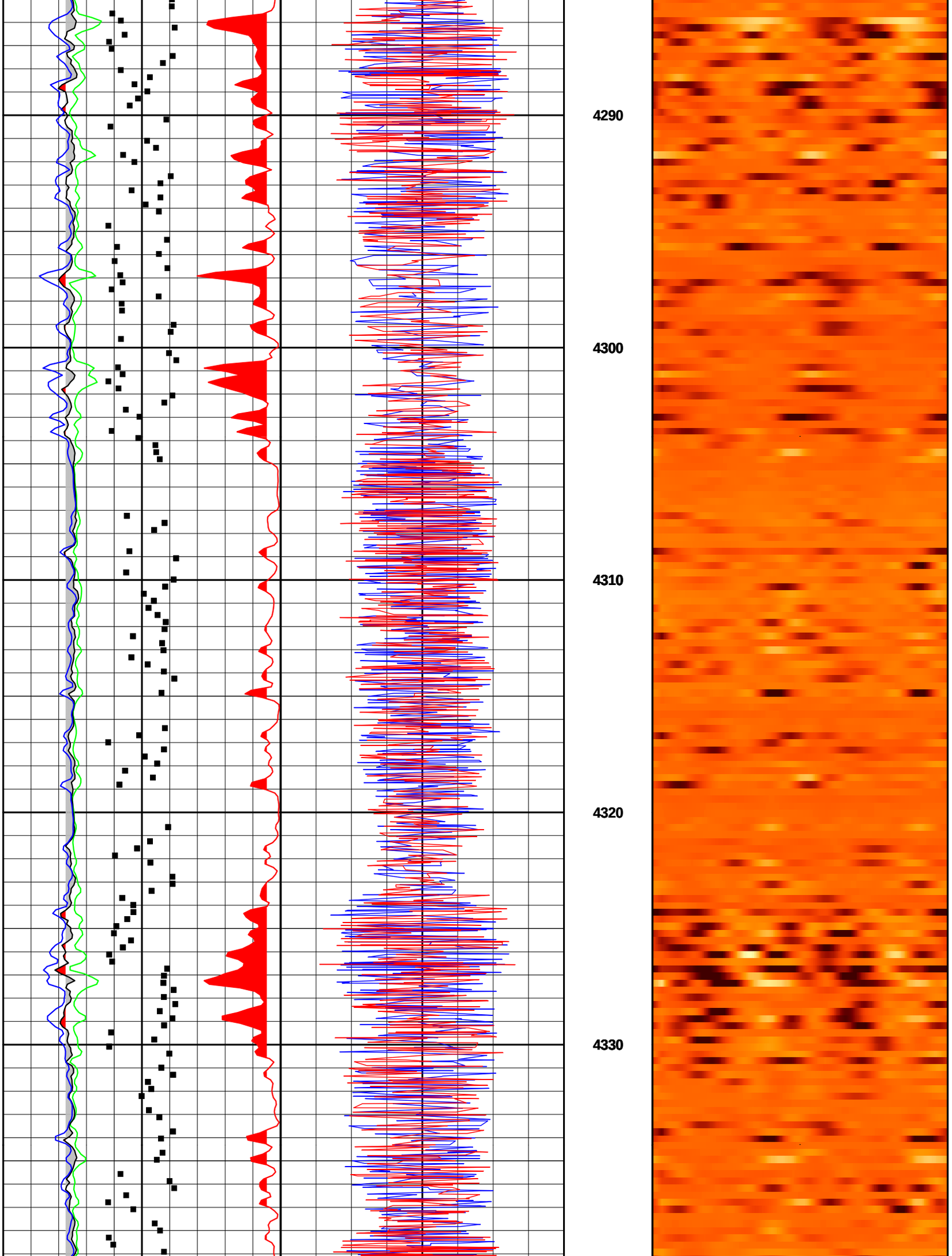
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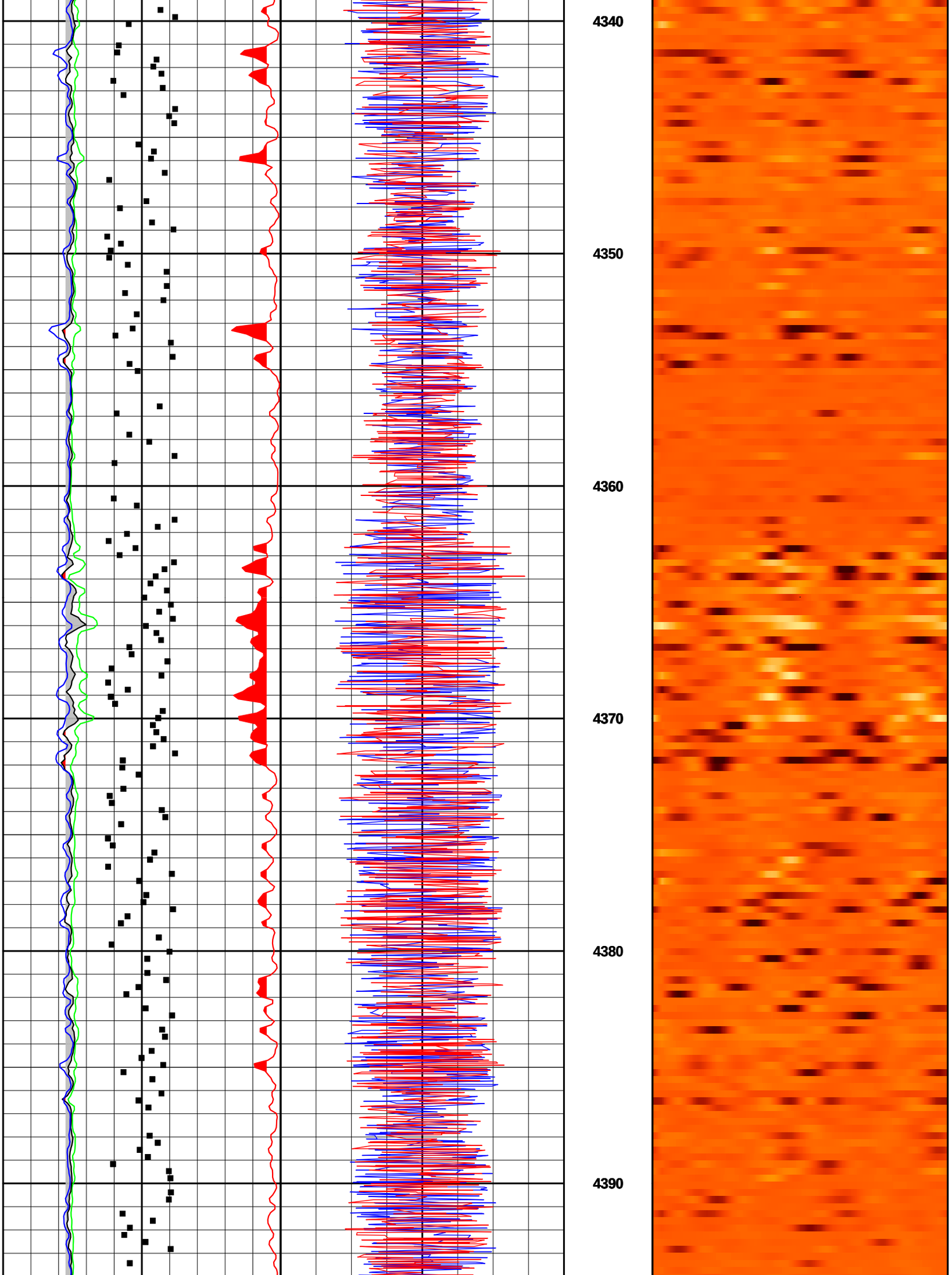
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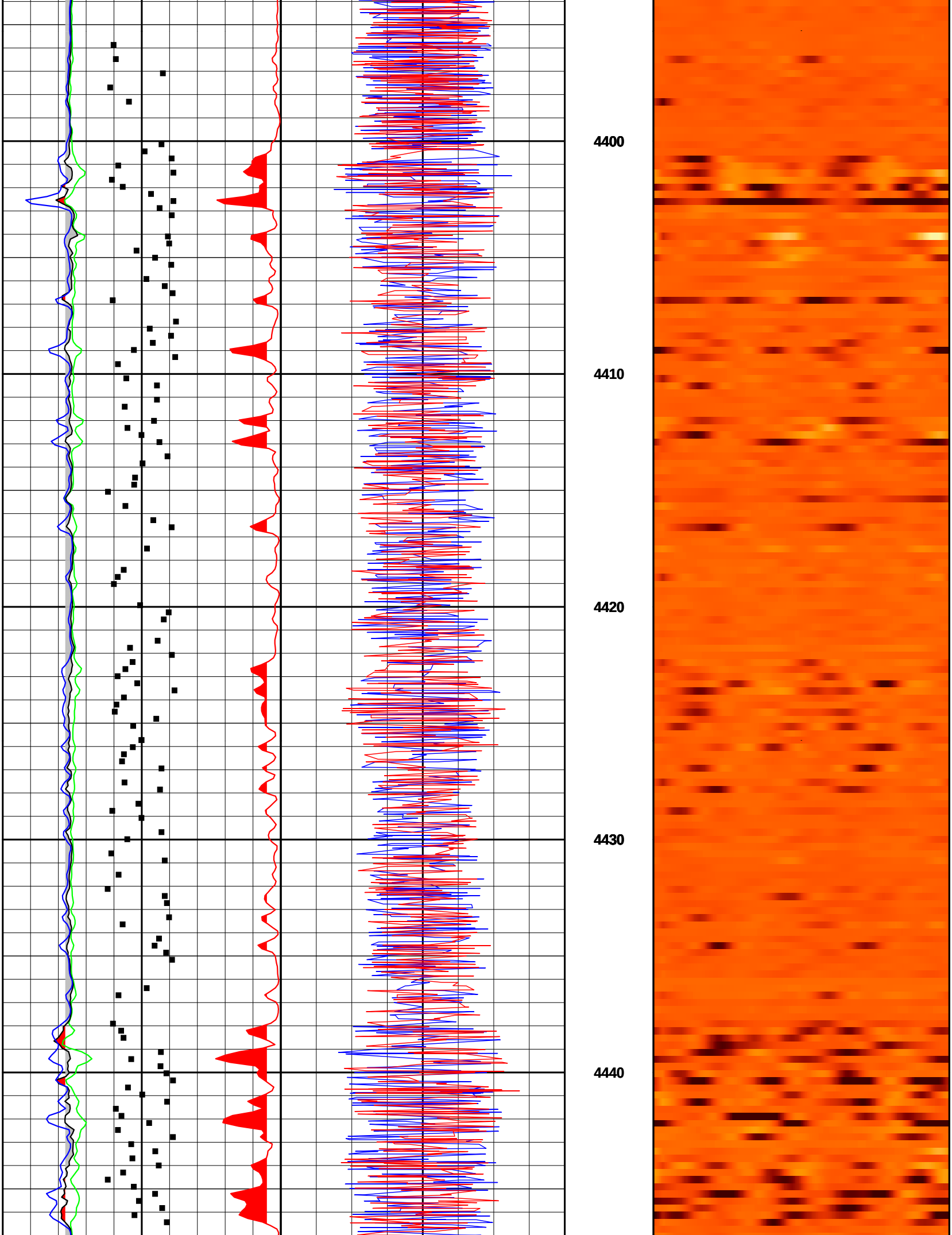
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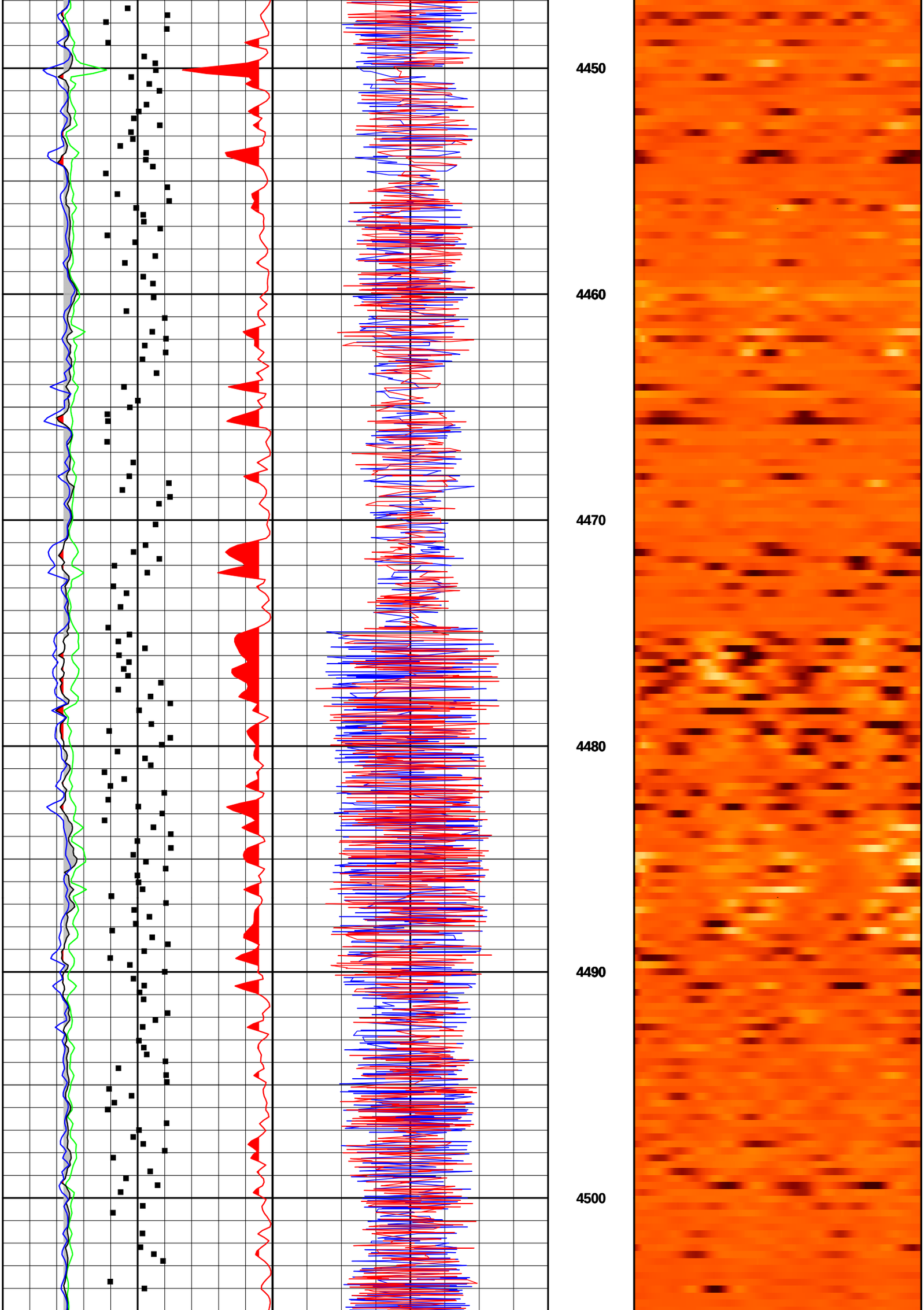
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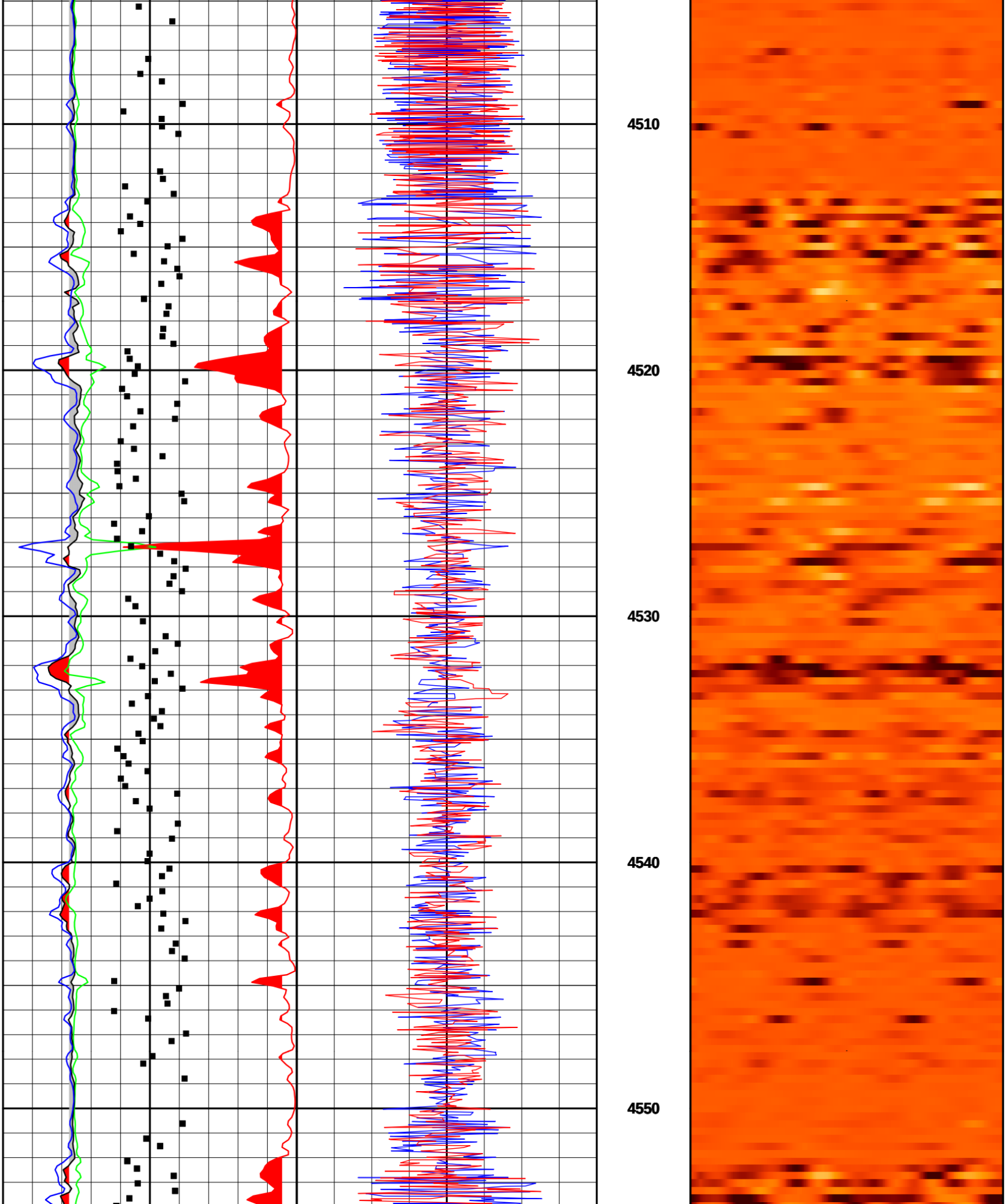
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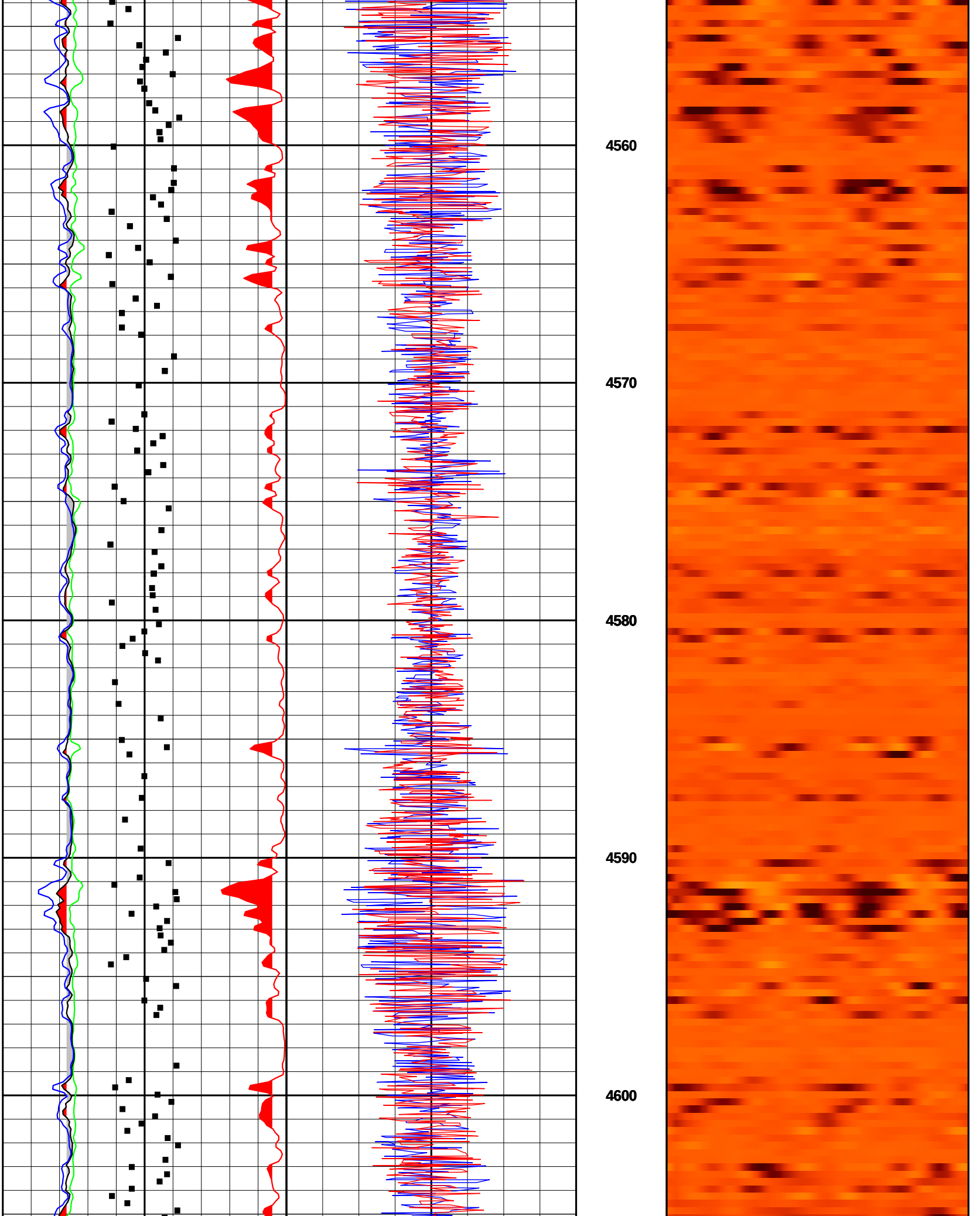
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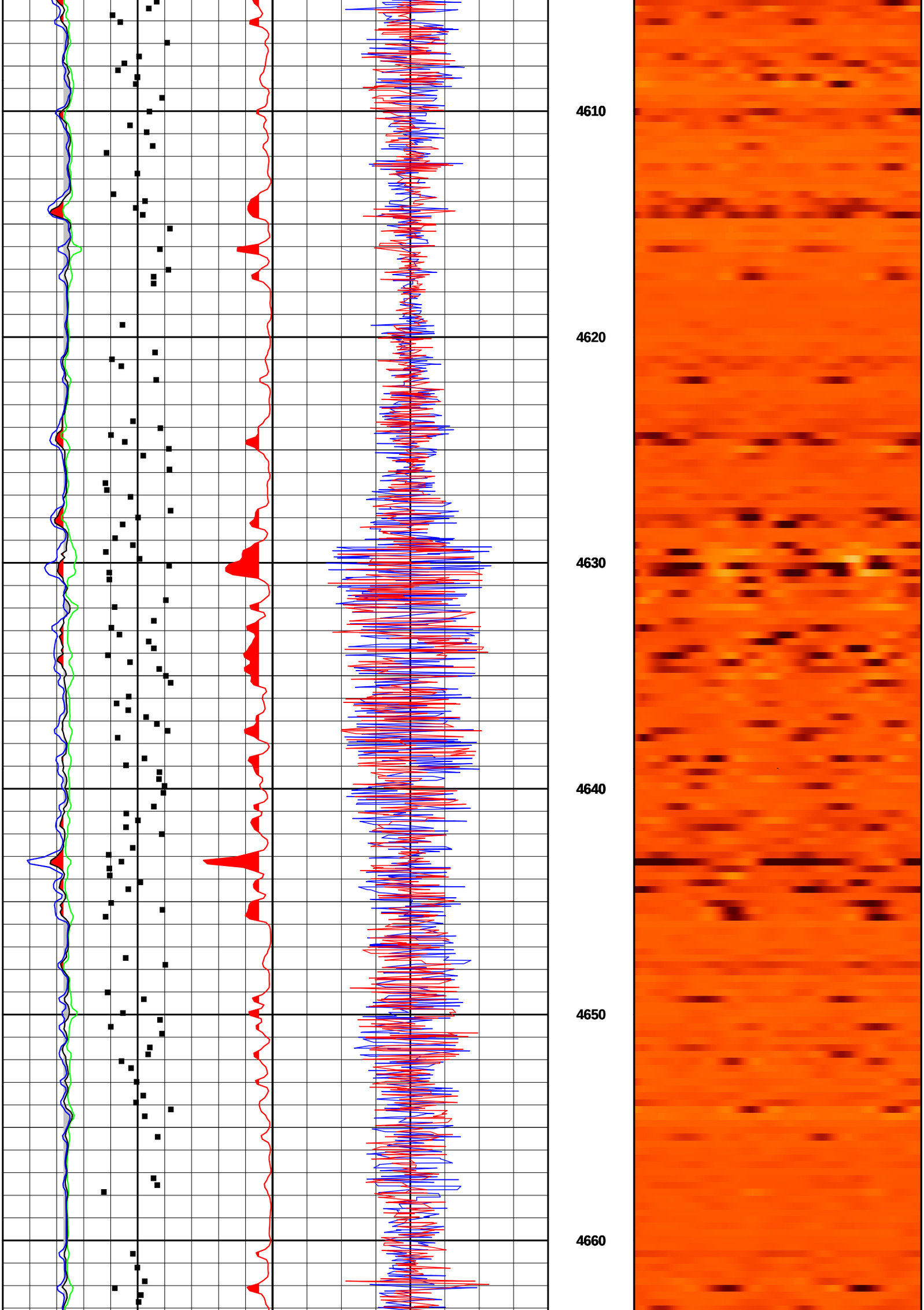
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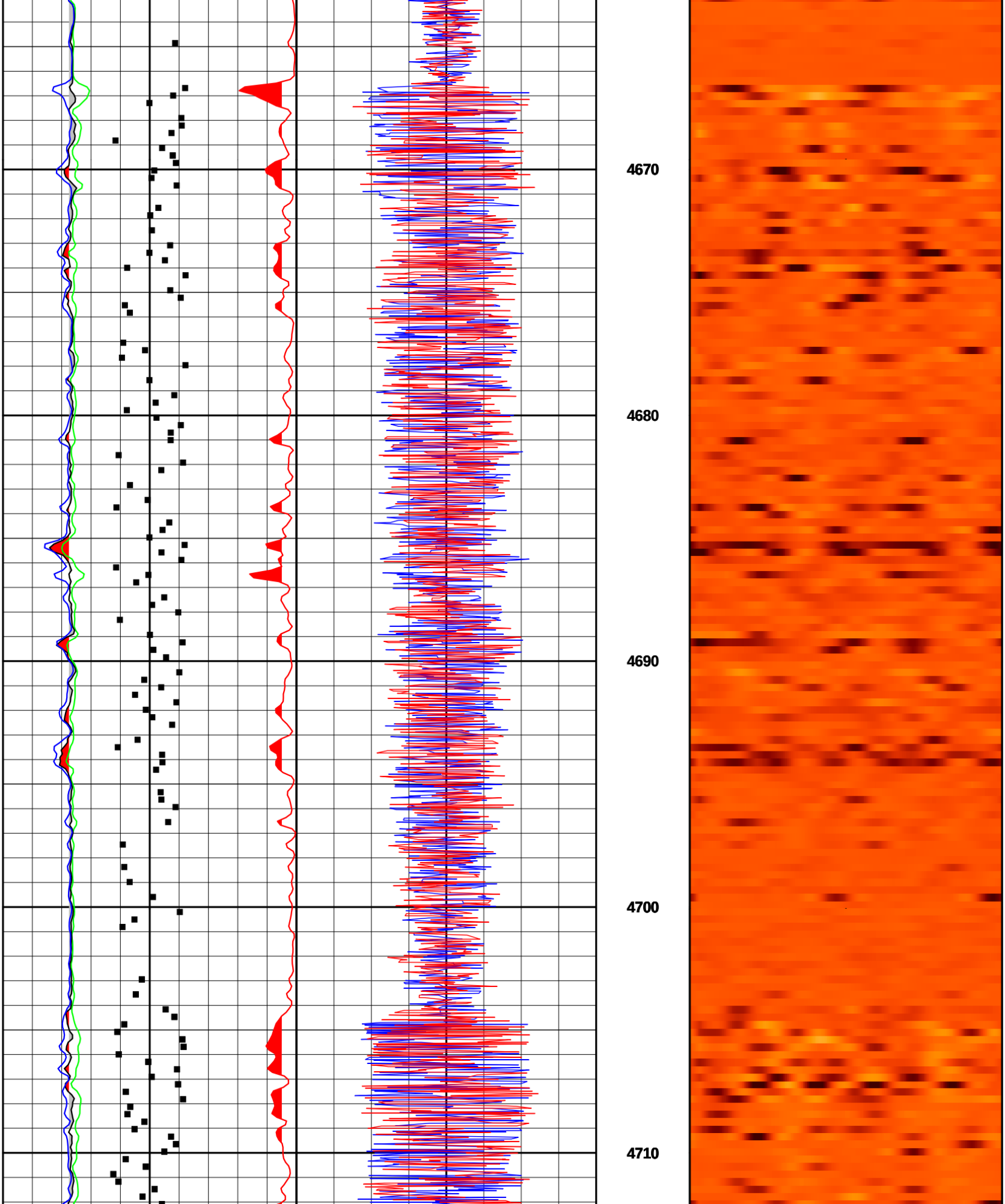
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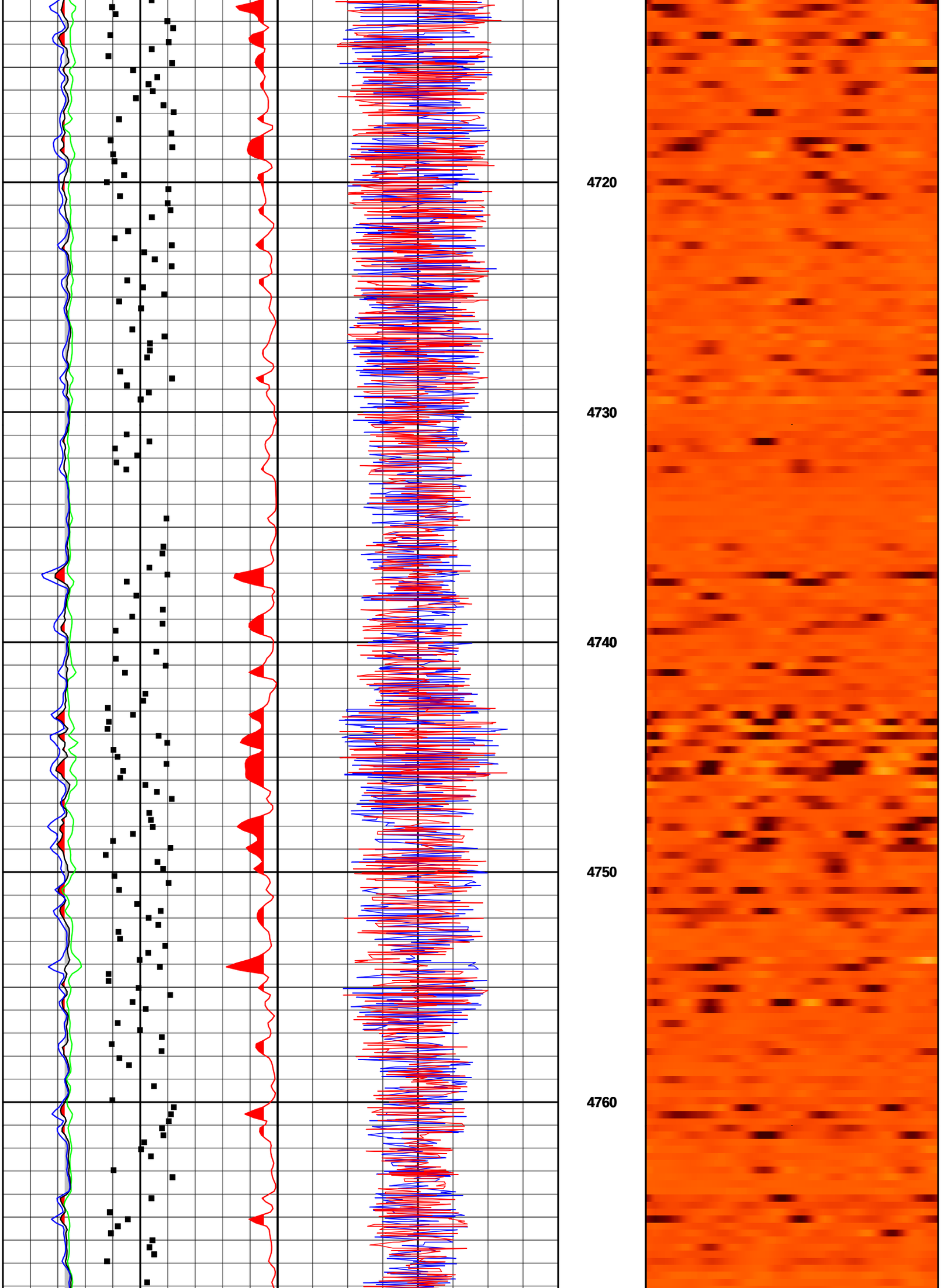
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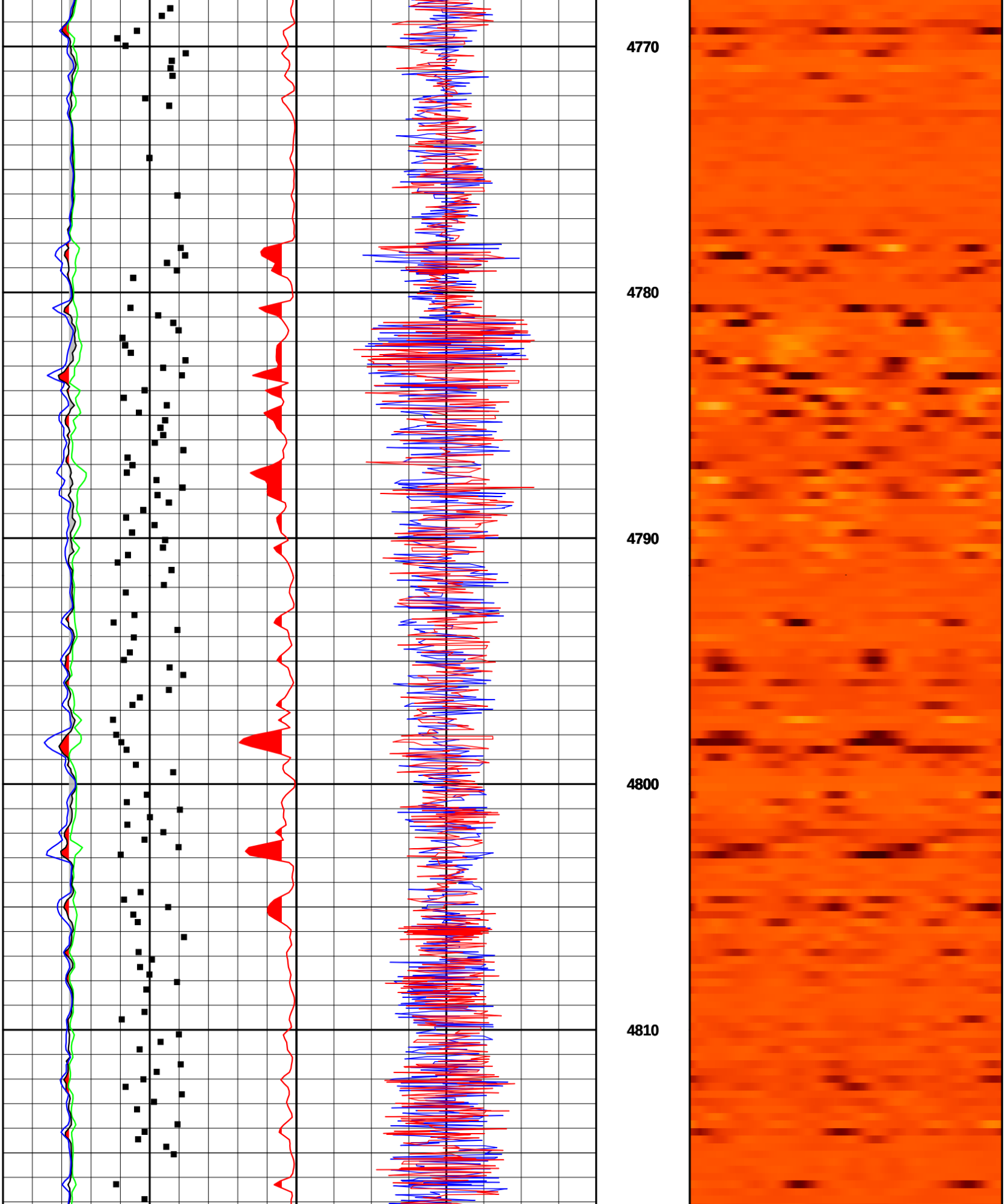
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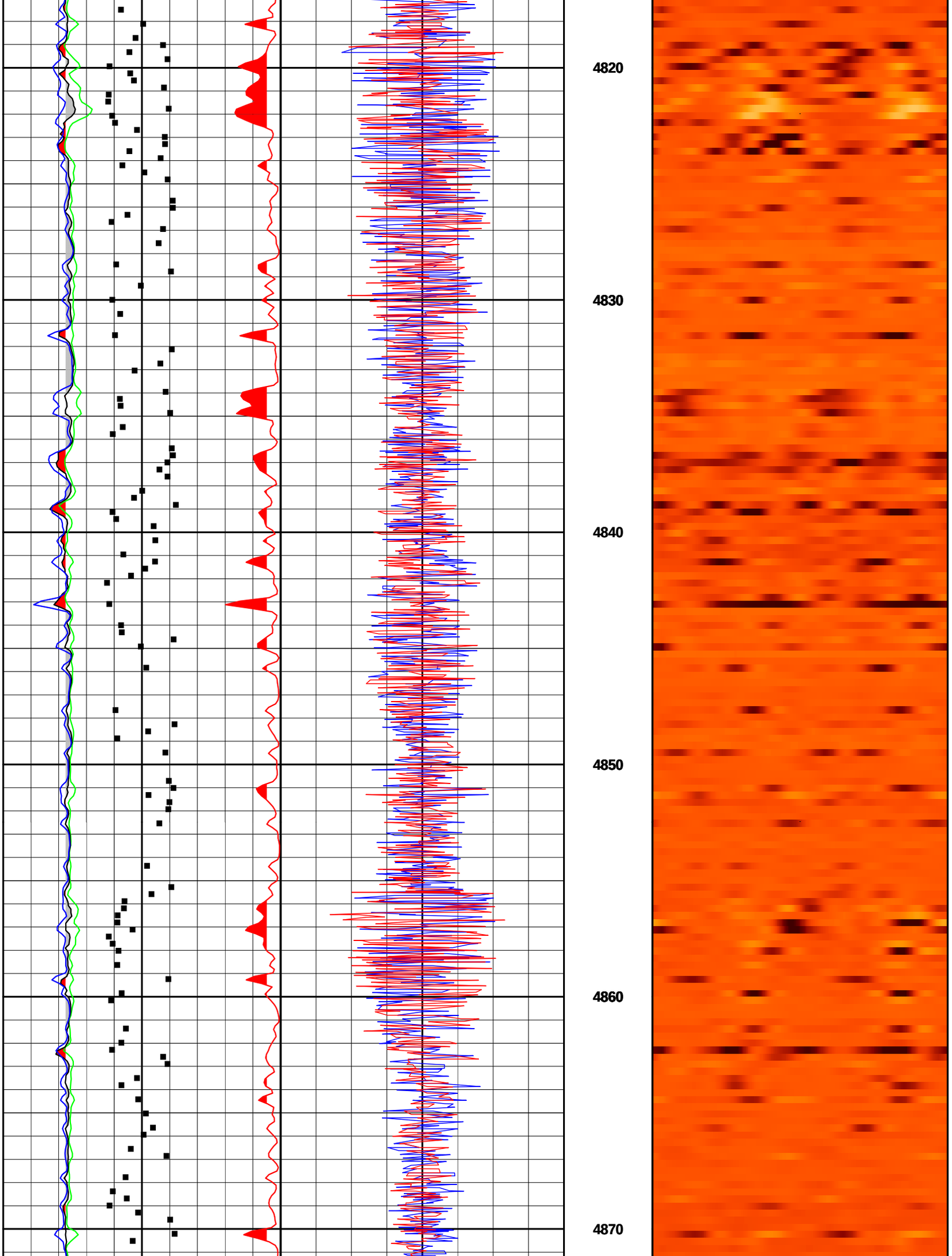
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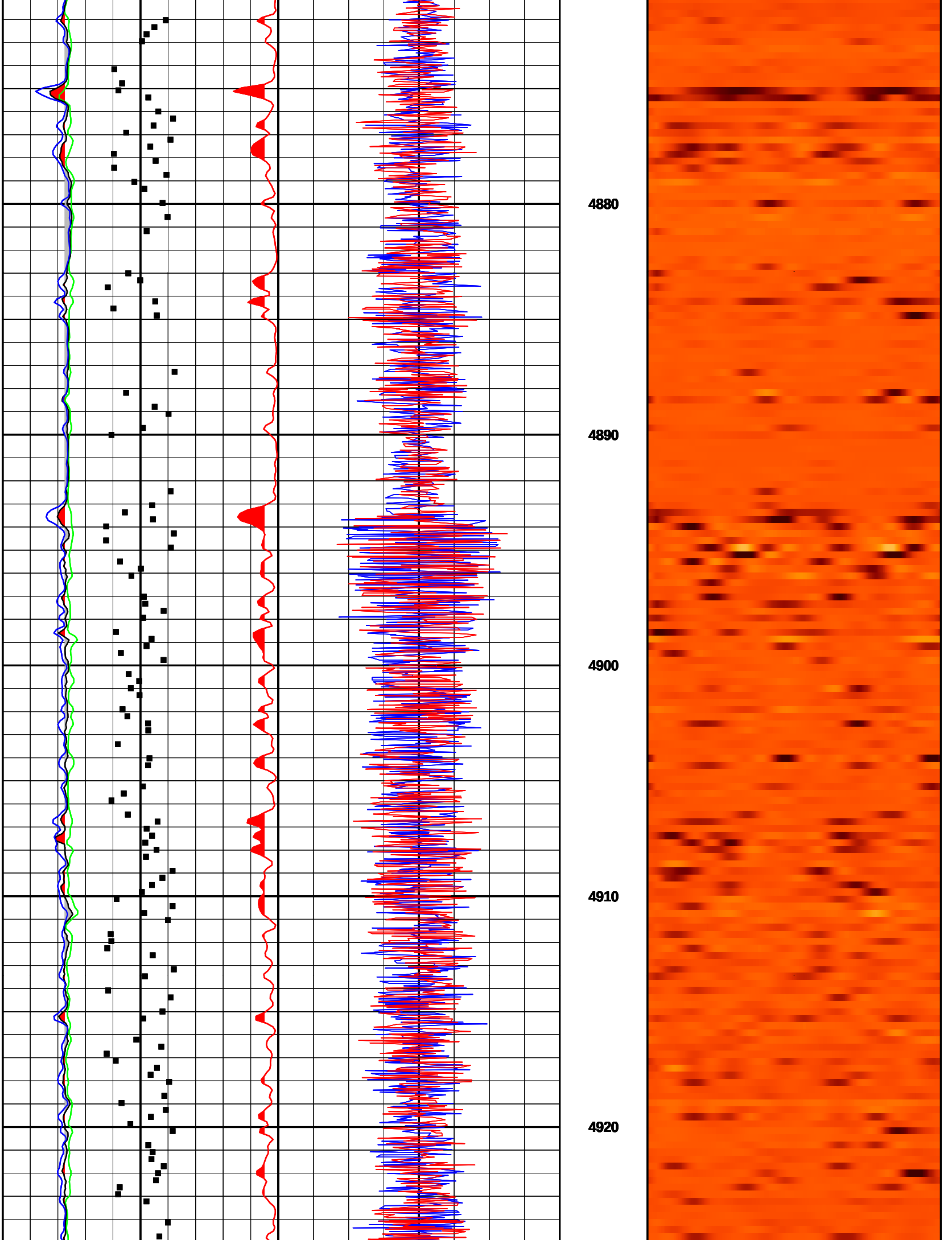
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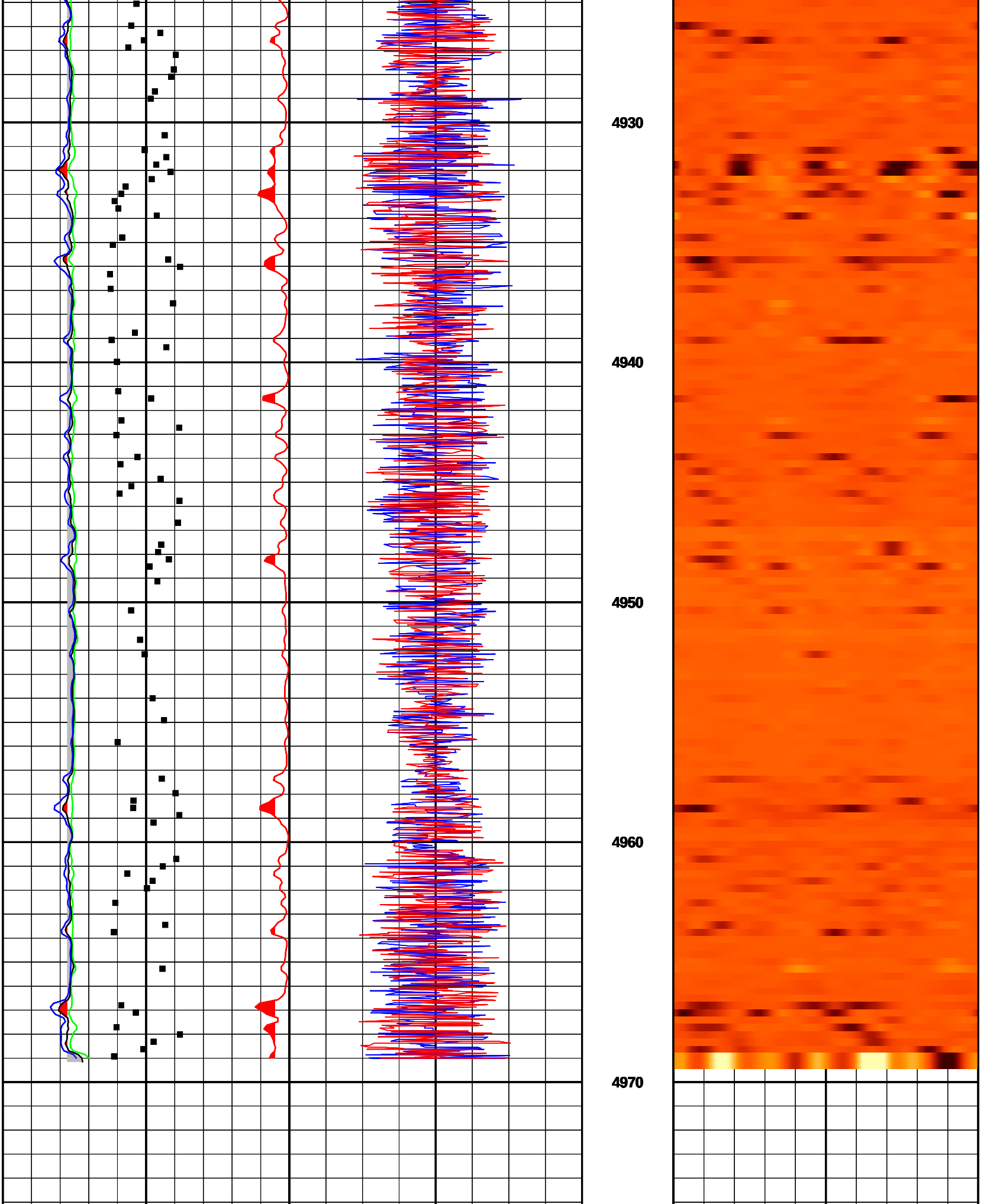
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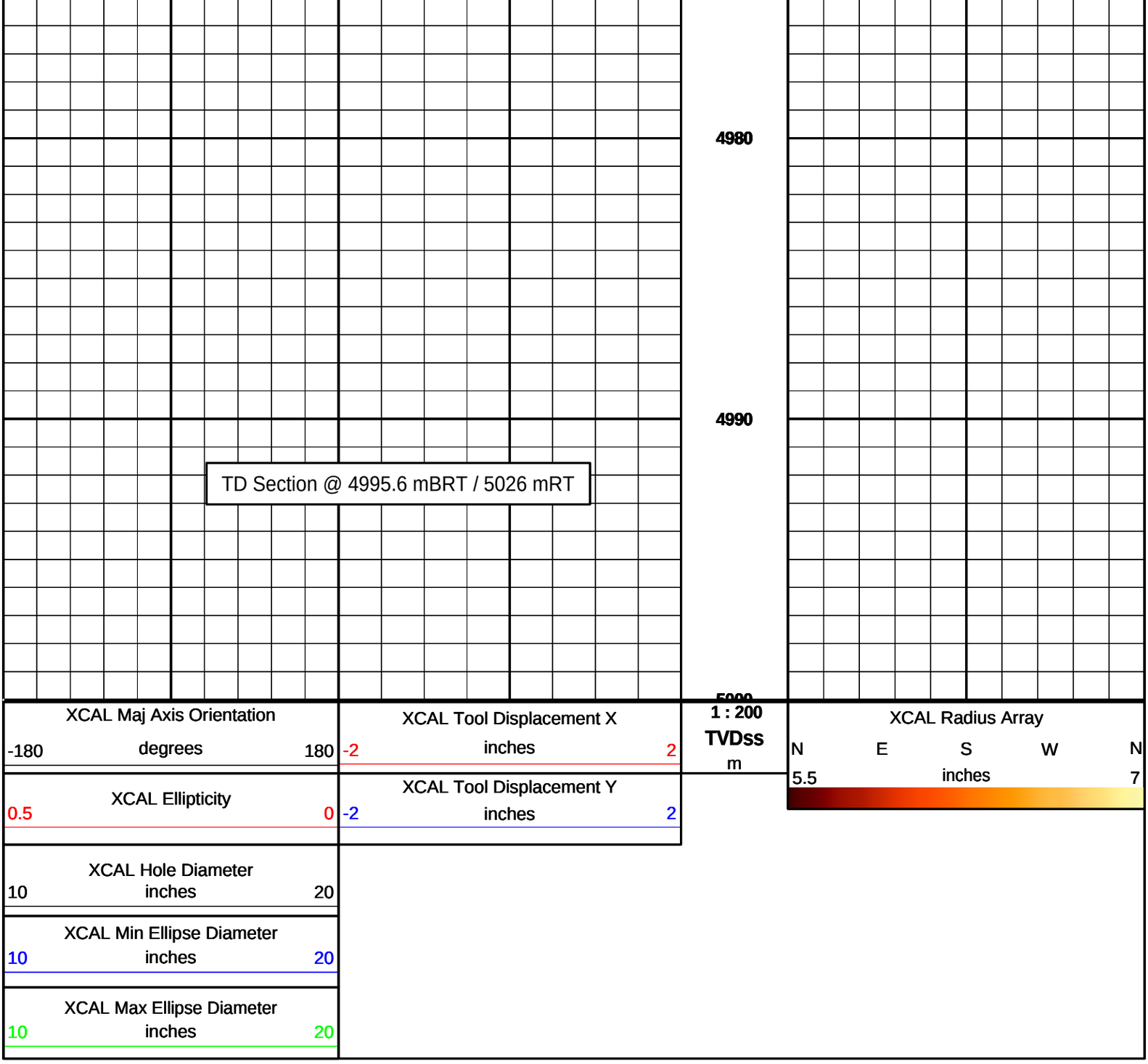

HALLIBURTON

DIRECTIONAL SURVEY REPORT

JAMSTEC
C0002P
Nankai Trough
Japan
JP-XX-0900526576

Measured Depth (metres)	*Inclination (degrees)*	*Direction (degrees)*	*Vertical Depth (metres)*	*Latitude (metres)*	*Departure (metres)*	*Vertical Section (metres)*	*Dogleg (deg/30m)*
2827.800	0.00	0.00	2827.800	0.000 N	0.000 E	0.000	TIE-IN
2890.590	3.40	159.39	2890.553	1.743 S	0.656 E	-1.743	1.62
2928.740	5.12	140.76	2928.598	4.121 S	2.131 E	-4.121	1.72
2966.900	5.18	106.59	2966.613	5.932 S	4.859 E	-5.932	2.38
3010.810	5.07	76.58	3010.355	6.048 S	8.647 E	-6.048	1.81
3043.630	5.11	51.56	3043.050	4.802 S	11.203 E	-4.802	2.01
3084.170	5.36	38.78	3083.422	2.204 S	13.803 E	-2.204	0.88
3123.580	4.98	25.39	3122.673	0.777 N	15.689 E	0.777	0.96
3162.080	4.18	4.38	3161.052	3.686 N	16.513 E	3.686	1.44
3199.710	2.00	1.06	3198.625	5.710 N	16.630 E	5.710	1.74

3238.190	0.31	209.19	3237.098	6.290 N	16.592 E	6.290	1.78
3276.890	0.44	239.16	3275.798	6.123 N	16.413 E	6.123	0.18
3314.850	0.41	269.76	3313.757	6.048 N	16.152 E	6.048	0.18
3353.040	0.12	310.15	3351.946	6.073 N	15.985 E	6.073	0.26
3391.260	0.56	336.21	3390.165	6.270 N	15.879 E	6.270	0.36
3429.140	0.50	334.26	3428.044	6.588 N	15.732 E	6.588	0.05
3468.360	0.62	352.84	3467.262	6.952 N	15.632 E	6.952	0.17
3505.570	0.31	333.27	3504.471	7.242 N	15.561 E	7.242	0.28
3544.480	0.19	98.24	3543.381	7.327 N	15.578 E	7.327	0.34
3581.980	0.25	209.19	3580.880	7.247 N	15.599 E	7.247	0.29
3620.060	0.31	210.19	3618.960	7.085 N	15.507 E	7.085	0.05
3657.980	0.84	245.28	3656.878	6.880 N	15.203 E	6.880	0.48
3691.660	0.36	224.61	3690.556	6.702 N	14.905 E	6.702	0.46
3729.630	0.25	132.00	3728.526	6.561 N	14.882 E	6.561	0.35
3767.900	0.44	166.60	3766.795	6.362 N	14.978 E	6.362	0.21
3887.570	0.31	300.87	3886.464	6.081 N	14.807 E	6.081	0.17
3904.000	0.22	301.45	3902.894	6.121 N	14.742 E	6.121	0.16
3996.760	2.38	94.61	3995.629	6.059 N	16.513 E	6.059	0.83
4010.460	1.46	75.41	4009.321	6.080 N	16.966 E	6.080	2.44
4039.630	3.59	105.91	4038.462	5.923 N	18.204 E	5.923	2.52
4074.320	3.88	104.24	4073.078	5.336 N	20.386 E	5.336	0.27
4114.770	2.47	97.13	4113.466	4.891 N	22.578 E	4.891	1.08
4153.753	2.93	97.28	4152.405	4.661 N	24.399 E	4.661	0.35
4190.770	2.85	92.40	4189.375	4.503 N	26.256 E	4.503	0.21
4228.710	2.82	92.05	4227.269	4.430 N	28.132 E	4.430	0.03
4267.620	2.72	91.98	4266.133	4.364 N	30.013 E	4.364	0.08
4305.530	2.53	93.65	4304.003	4.279 N	31.748 E	4.279	0.16
4343.840	2.36	93.75	4342.278	4.174 N	33.379 E	4.174	0.13
4382.200	2.25	92.32	4380.607	4.091 N	34.920 E	4.091	0.10
4416.740	1.97	92.61	4415.124	4.037 N	36.192 E	4.037	0.24
4458.160	2.10	92.74	4456.517	3.968 N	37.663 E	3.968	0.09
4494.780	2.10	91.96	4493.113	3.913 N	39.004 E	3.913	0.02
4535.180	1.97	89.62	4533.488	3.892 N	40.437 E	3.892	0.11
4572.710	1.83	90.94	4570.997	3.887 N	41.679 E	3.887	0.12
4610.770	1.73	90.61	4609.039	3.871 N	42.861 E	3.871	0.07
4649.220	1.82	89.80	4647.470	3.867 N	44.054 E	3.867	0.07
4686.700	1.70	90.44	4684.933	3.865 N	45.206 E	3.865	0.10
4724.760	1.62	93.01	4722.976	3.832 N	46.310 E	3.832	0.09
4762.960	1.77	95.87	4761.160	3.743 N	47.436 E	3.743	0.13
4801.260	1.71	92.70	4799.442	3.656 N	48.596 E	3.656	0.09
4838.540	1.67	90.73	4836.706	3.623 N	49.696 E	3.623	0.06
4913.640	1.53	90.52	4911.776	3.600 N	51.795 E	3.600	0.06
4949.730	1.40	87.84	4947.855	3.612 N	52.720 E	3.612	0.12
4990.290	1.74	80.10	4988.400	3.736 N	53.822 E	3.736	0.29
5026.000	1.74	80.10	5024.093	3.923 N	54.889 E	3.923	0.00

CALCULATION BASED ON MINIMUM CURVATURE METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 0.00 DEGREES (GRID)
A TOTAL CORRECTION OF -7.66 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 5026.000 METRES
IS 55.029 METRES ALONG 85.91 DEGREES (GRID)

Date Printed:13 January 2014