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OTHER SERVICES1  
 OS1: MSS/HRLA/HLDS/APS  
 OS2: FMS/DSI/HNGS  
 OS3:  
 OS4:  
 OS5:

OTHER SERVICES2  
 OS1:  
 OS2:  
 OS3:  
 OS4:  
 OS5:

REMARKS: RUN NUMBER 1  
 Hole drilled with RCB BHA at 9 7/8" BS  
  
 Drill pipe set at 2652.6 mbrf.  
  
 Depth recorded from drill floor; logs presented as-logged without depth corrections or shifts, as per client instructions.  
 All logs presented in wireline measured depth below rig floor (MDBRF).  
 Only 1 pass made due to sticking mud on rotational sensor sub fouling it and prevention of rotation.  
  
 AHC used from TD then switched off to facilitate pipe entry.

REMARKS: RUN NUMBER 2

RUN 1

SERVICE ORDER #: \_\_\_\_\_  
 PROGRAM VERSION: 19C0-187  
 FLUID LEVEL: \_\_\_\_\_

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #: \_\_\_\_\_  
 PROGRAM VERSION: \_\_\_\_\_  
 FLUID LEVEL: \_\_\_\_\_

LOGGED INTERVAL	START	STOP

## EQUIPMENT DESCRIPTION





RUN 1

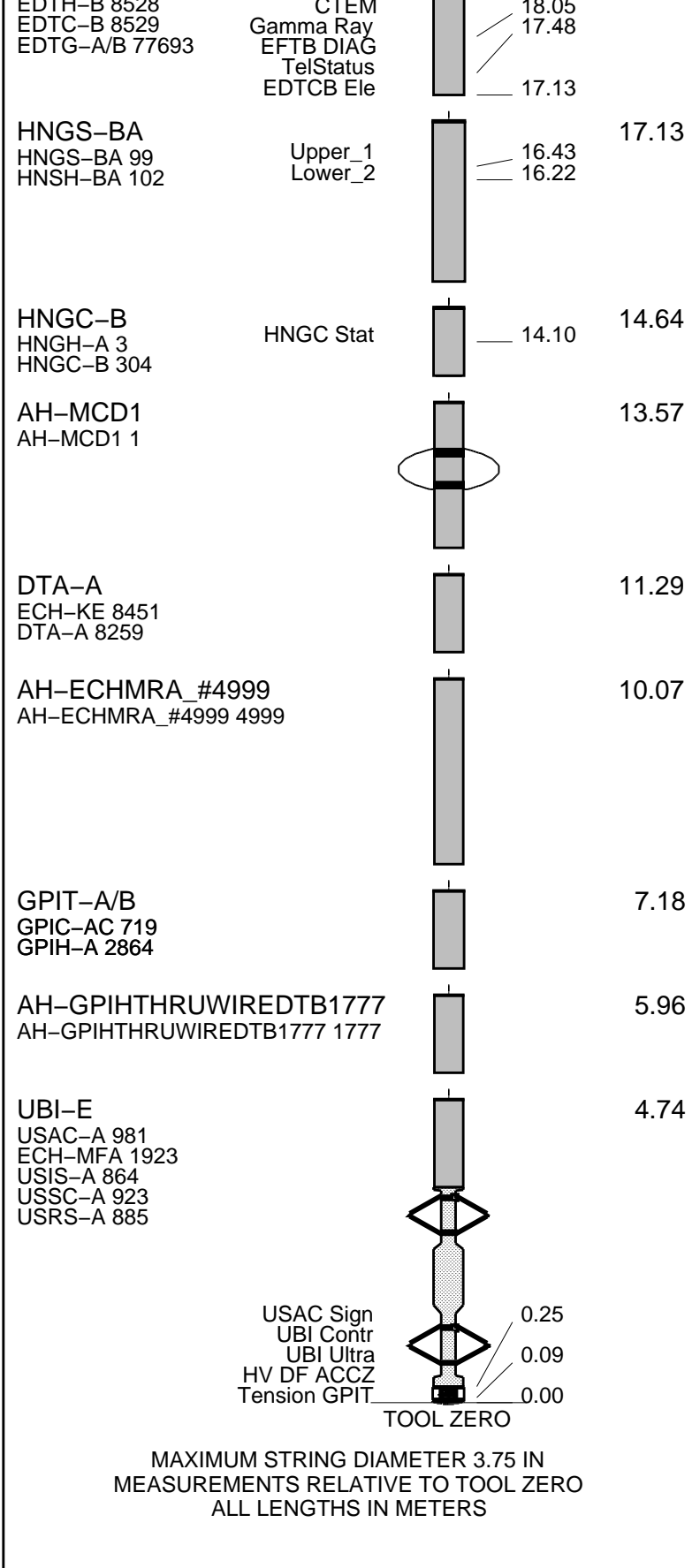
**SURFACE EQUIPMENT**

GSR-U 6098  
 WITM (EDTS)-A 1

RUN 2

**DOWNHOLE EQUIPMENT**

LEH-QT LEH-QT 301		20.44
AH-369		19.55
MDSB_EDTC Mud Tempe		19.12
EDTC-B EDTL D-2500		19.12



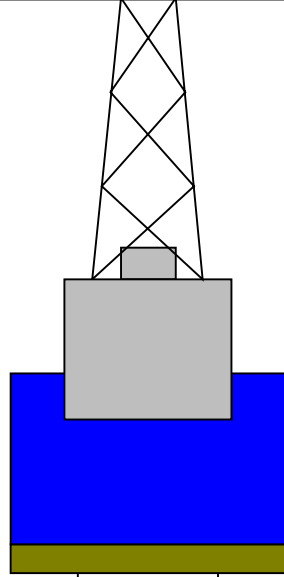
Production String	(in)	(M)	Well Schematic	(M)	(in)	Casing String
	OD	ID		MD	MD	

Kelly Bushing Elevation  
Derrick Floor Elevation

Mean Sea Level

0  
0

11



4.1



2571.5 4.1

2652.6 9.875

3105.4

Sea Floor

Open Hole

Total Depth

### Output DLIS Files

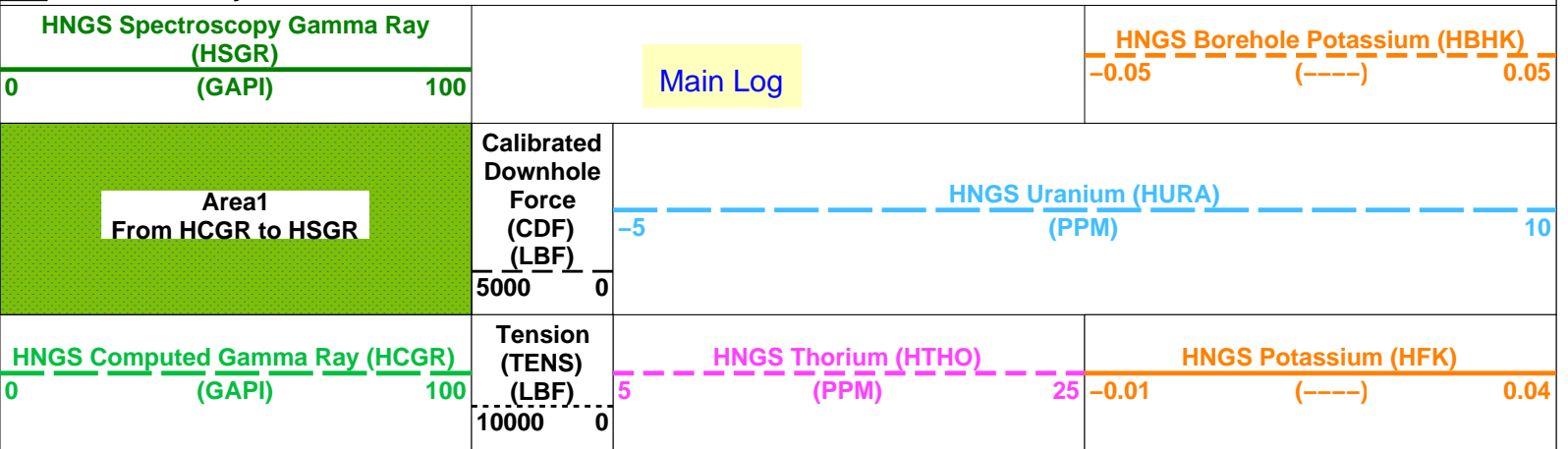
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BACKUP	UBI_NGS_040LUP	FN:62	PRODUCER	06-Mar-2022 19:58	3074.7 M	2956.6 M

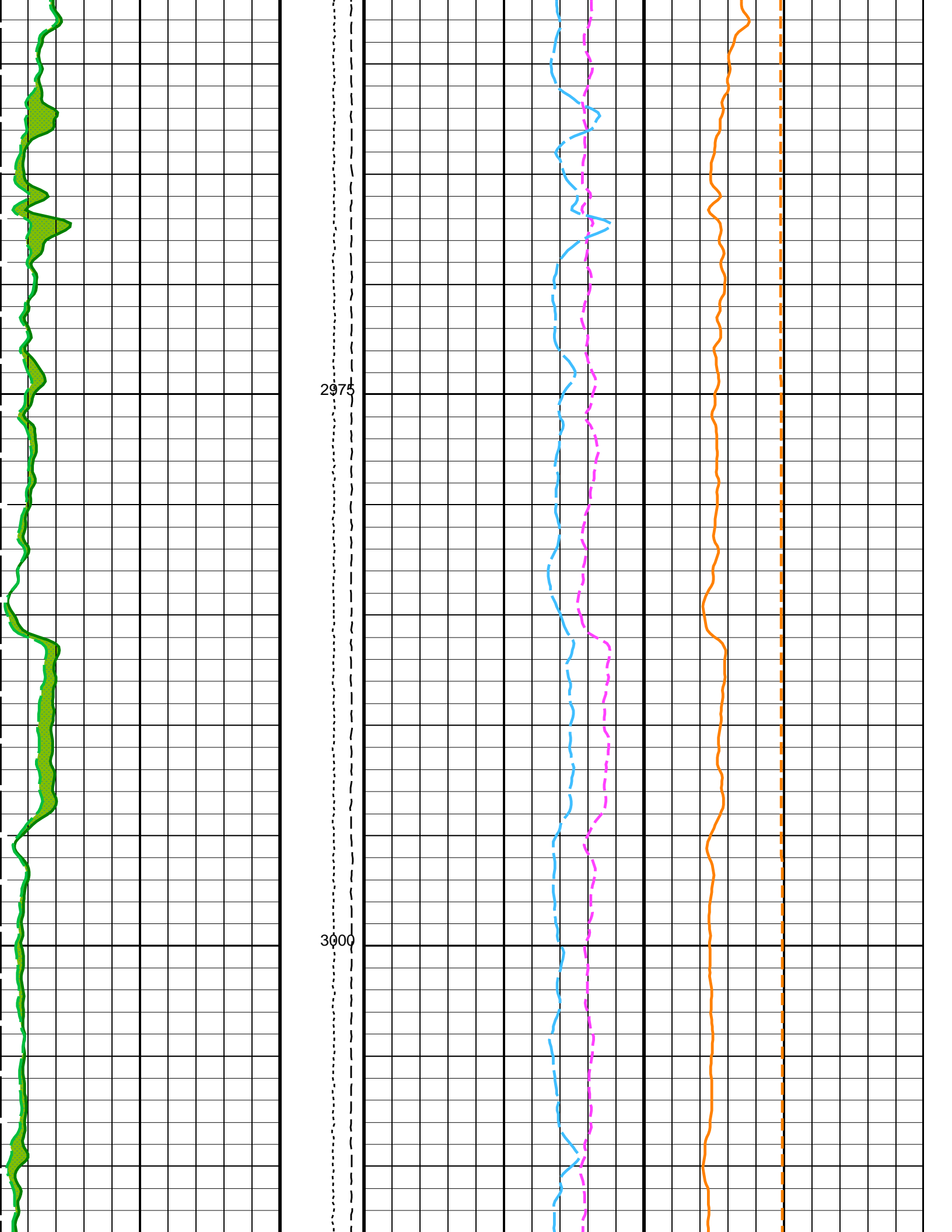
### OP System Version: 19C0-187

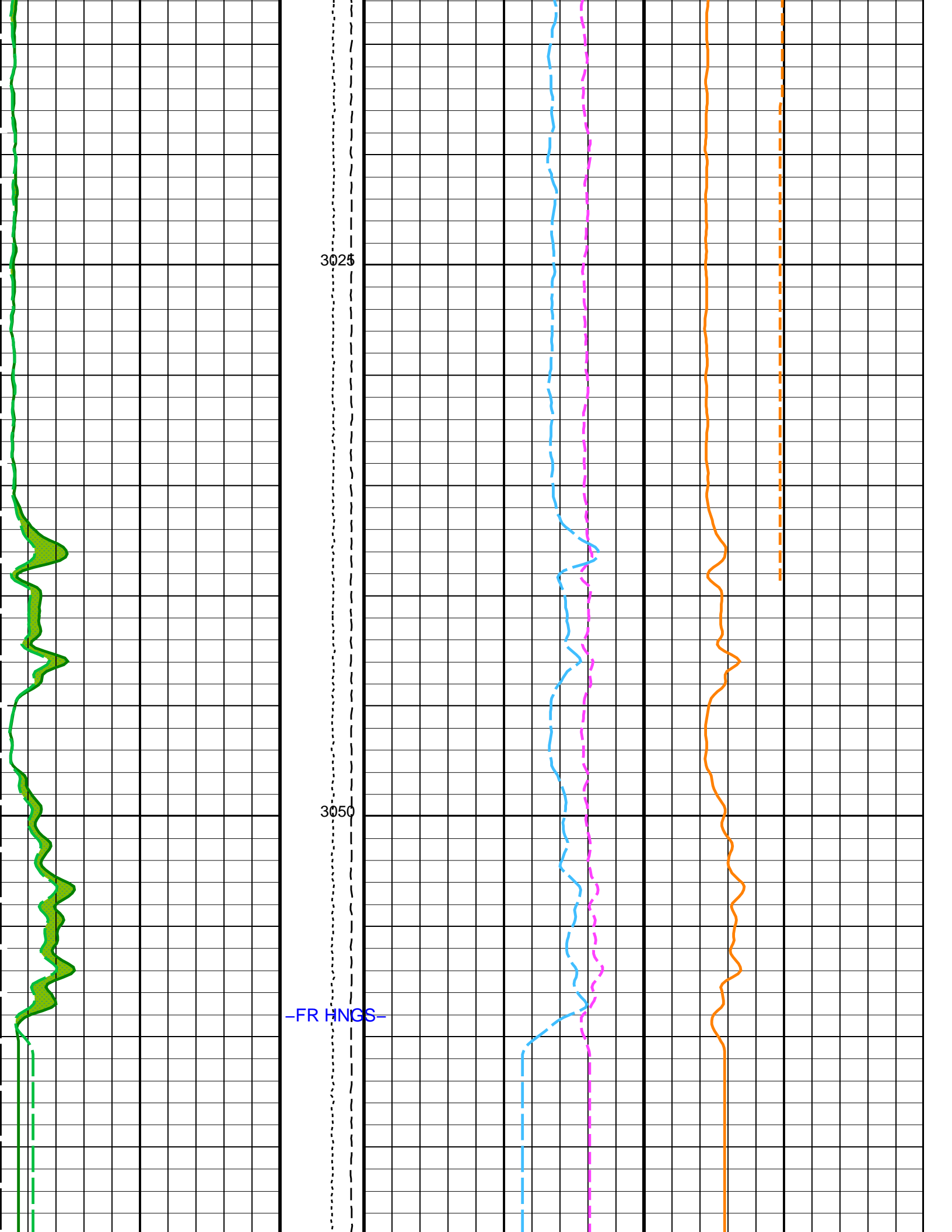
UBI-E	SRPC-5095-H2-2011-OP19	GPIT-A/B	19C0-187
DTA-A	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

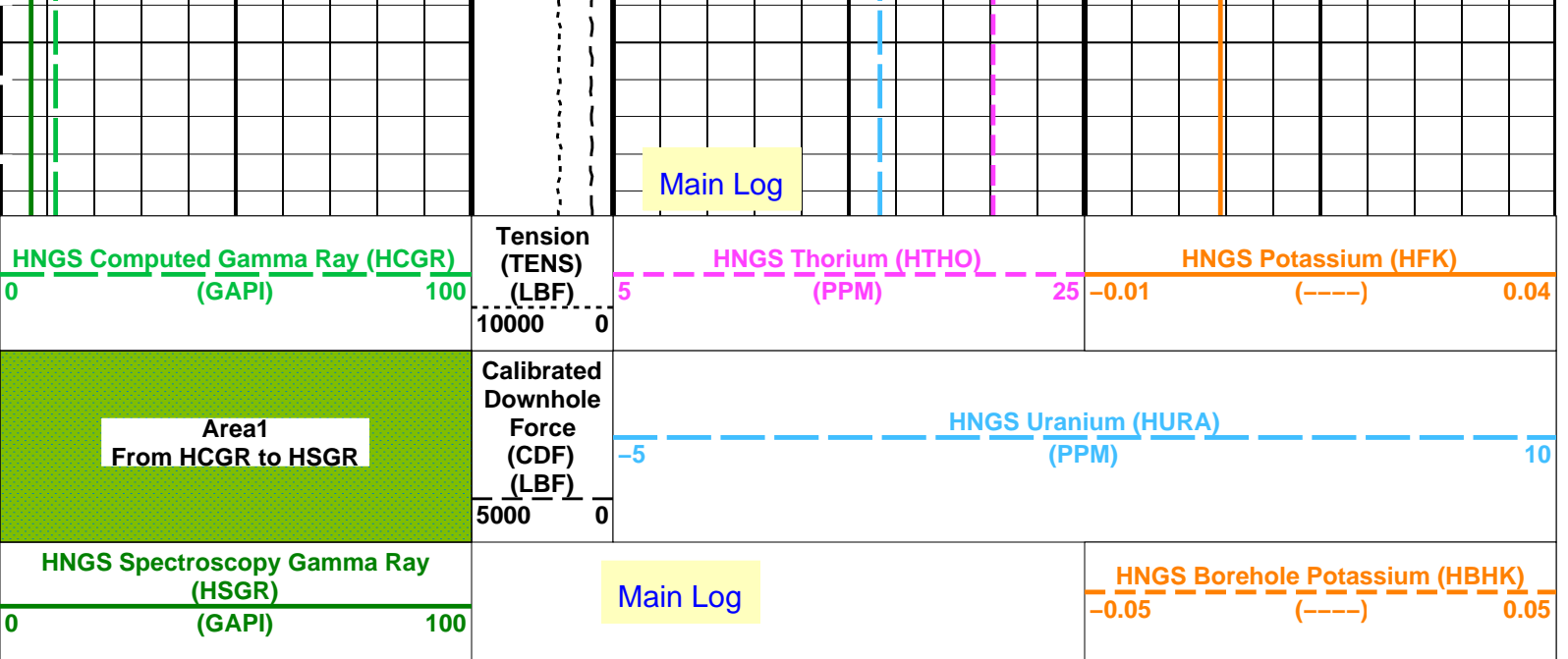
### PIP SUMMARY

Time Mark Every 60 S









PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 IN
CSD2	Outer Casing Outer Diameter	0 IN
CSW1	Inner Casing Weight	0 LB/F
CSW2	Outer Casing Weight	0 LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	BS
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	0.00230596
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	NATU
HNPE	HNGS Processing Enable	YES
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3 CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3 CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES
TPOS	Tool Position	CENT
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.952401
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	2.78357
EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
System and Miscellaneous		
BS	Bit Size	9.875 IN
DFD	Drilling Fluid Density	1.03 G/C3

Format: HNGSYields

Vertical Scale: 1:200

Graphics File Created: 06-Mar-2022 19:58

OP System Version: 19C0-187

UBI-E	SRPC-5095-H2-2011-OP19	GPIT-A/B	19C0-187
DTA-A	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	UBI_NGS_040LUP	FN:61	PRODUCER	06-Mar-2022 19:58
BACKUP	UBI_NGS_040LUP	FN:62	PRODUCER	06-Mar-2022 19:58



### Output DLIS Files

DEFAULT	UBI_NGS_040LUP	FN:61	PRODUCER	06-Mar-2022 19:58	3074.7 M	2956.6 M
BACKUP	UBI_NGS_040LUP	FN:62	PRODUCER	06-Mar-2022 19:58	3074.7 M	2956.6 M

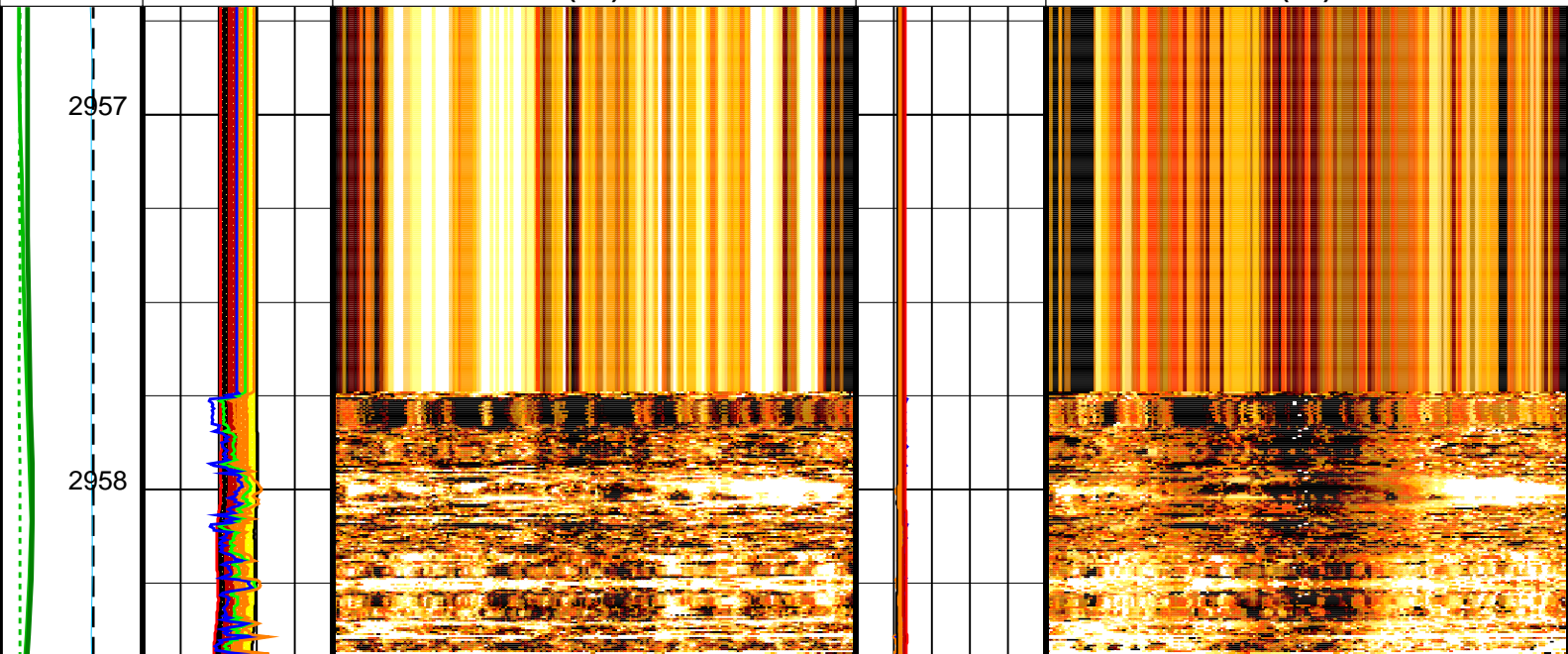
### OP System Version: 19C0-187

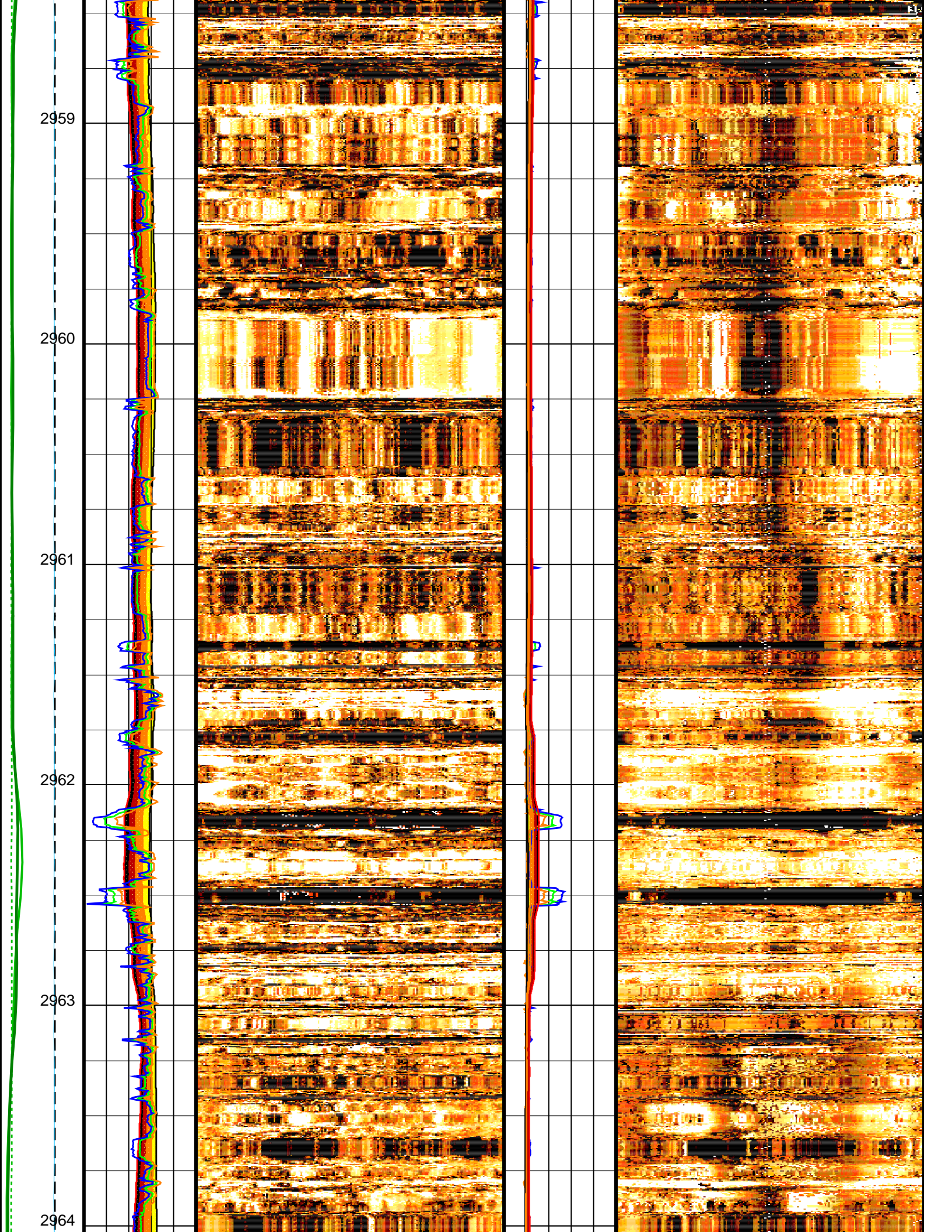
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DTA-A	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

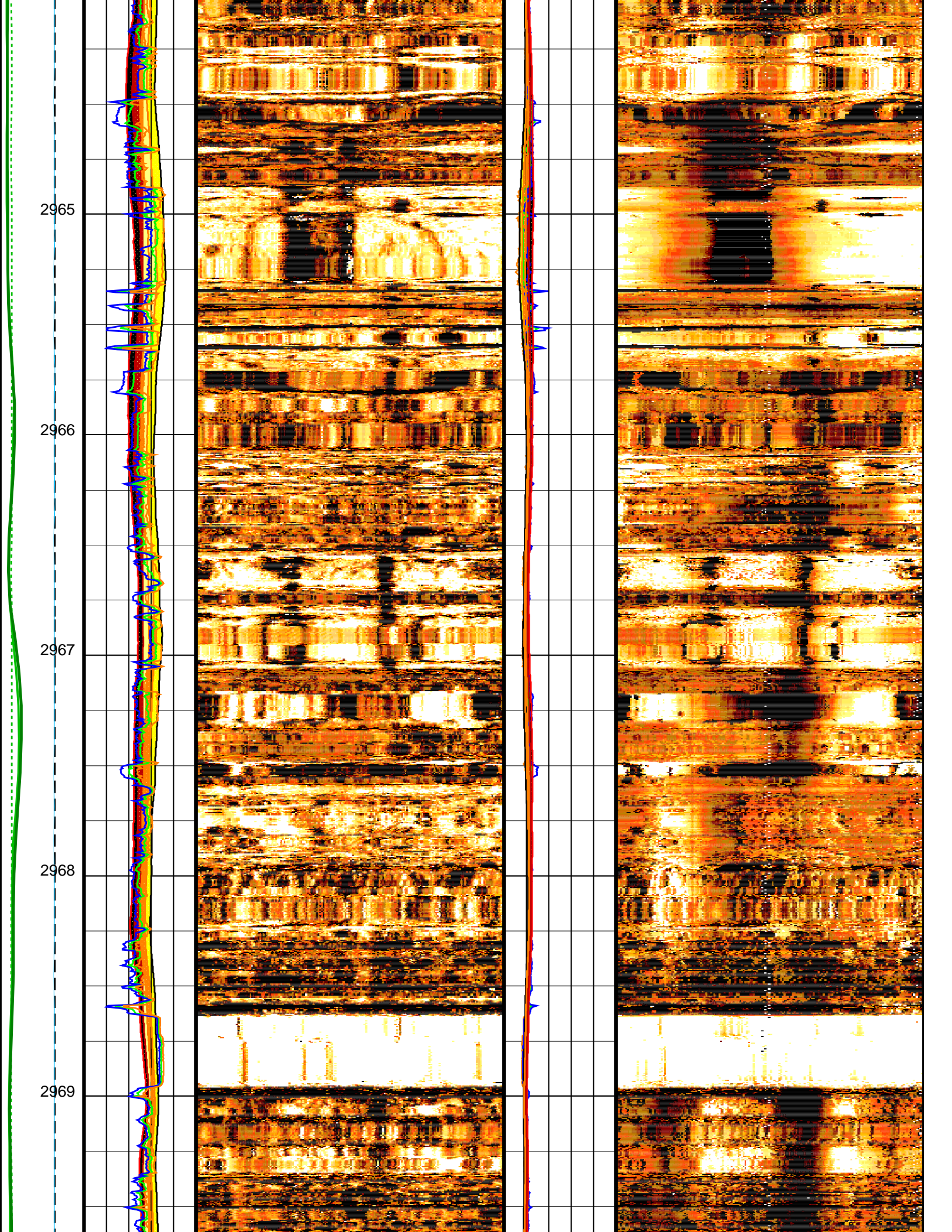
### Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
EMXV	30 V	20 V	3045.9 20:14:08

<b>HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)</b> 0 100 <b>HIGH Amplitude (FA75)</b> 0 (DB) 50	Main Uplog Pass	<b>Radius max (UTMX)</b> 4 (IN) 8
<b>Gamma Ray (GR_EDTC) (GAPI)</b> 0 100 <b>MEDIAN of Amplitude (FAED)</b> 0 (DB) 50		<b>Radius min (UTMN)</b> 4 (IN) 8
<b>Fluid velocity (CFVL) (US/F)</b> 150 250 <b>Maximum of Amplitude (UAMX)</b> 0 (DB) 50		<b>Radius HIGH (FT75)</b> 4 (IN) 8
<b>Cable Speed (CS) (M/HR)</b> 0 1000 <b>Min. of Amplitude (UAMN)</b> 0 (DB) 50		<b>Radius LOW (FT25)</b> 4 (IN) 8
<b>Rev. speed (RSAV) (RPS)</b> 6 (RPS) 8 <b>LOW Amplitude (FA25)</b> 0 (DB) 50	-500.0000 0.0000 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.0000 11.0000 12.0000 13.0000 14.0000 15.0000 Corrected Amplitude (AWCN) (DB)	<b>MEDIAN Radius (FTED)</b> 4 (IN) 8 -500.0000 0.0000 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.0000 11.0000 12.0000 13.0000 14.0000 15.0000 Corrected transit time (TTCN) (US)







2970

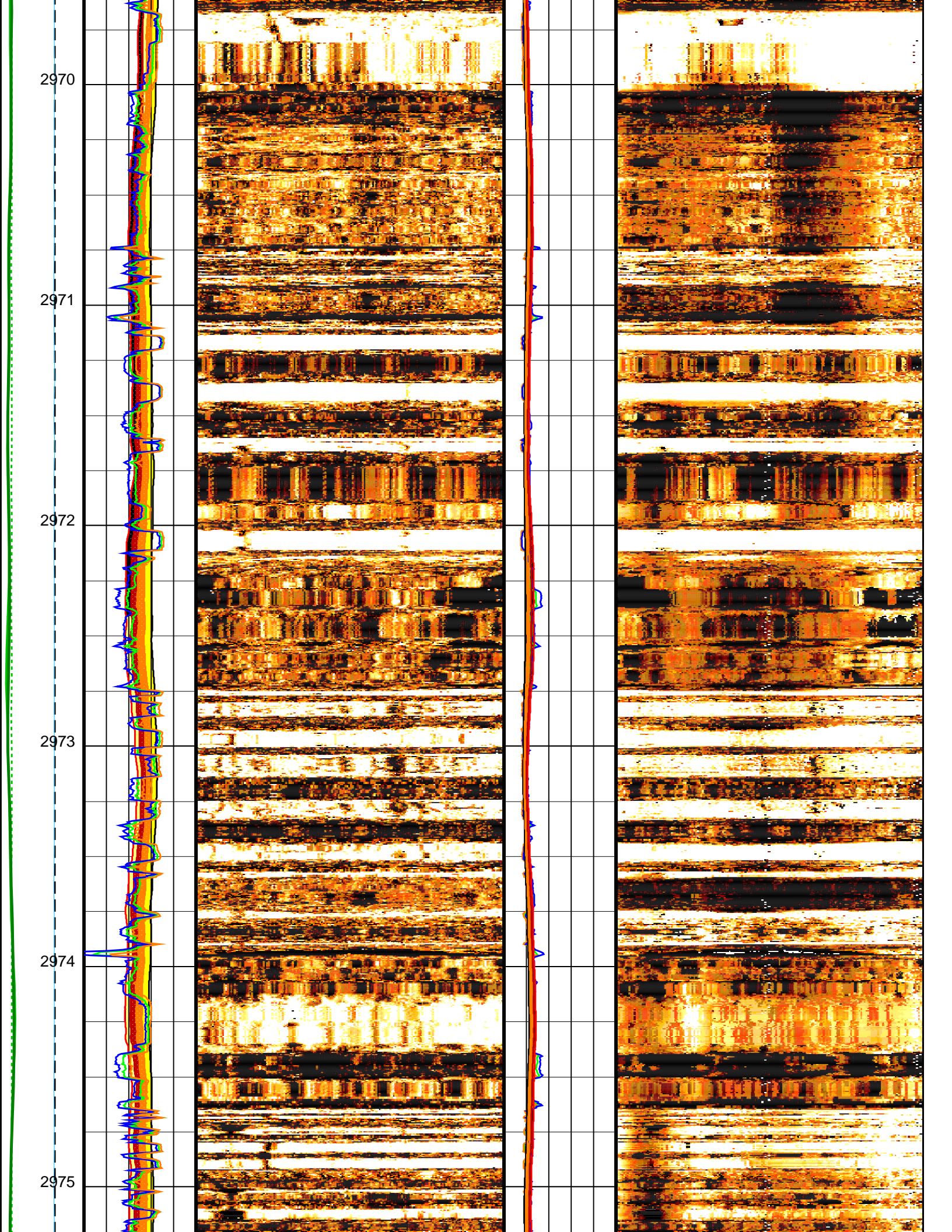
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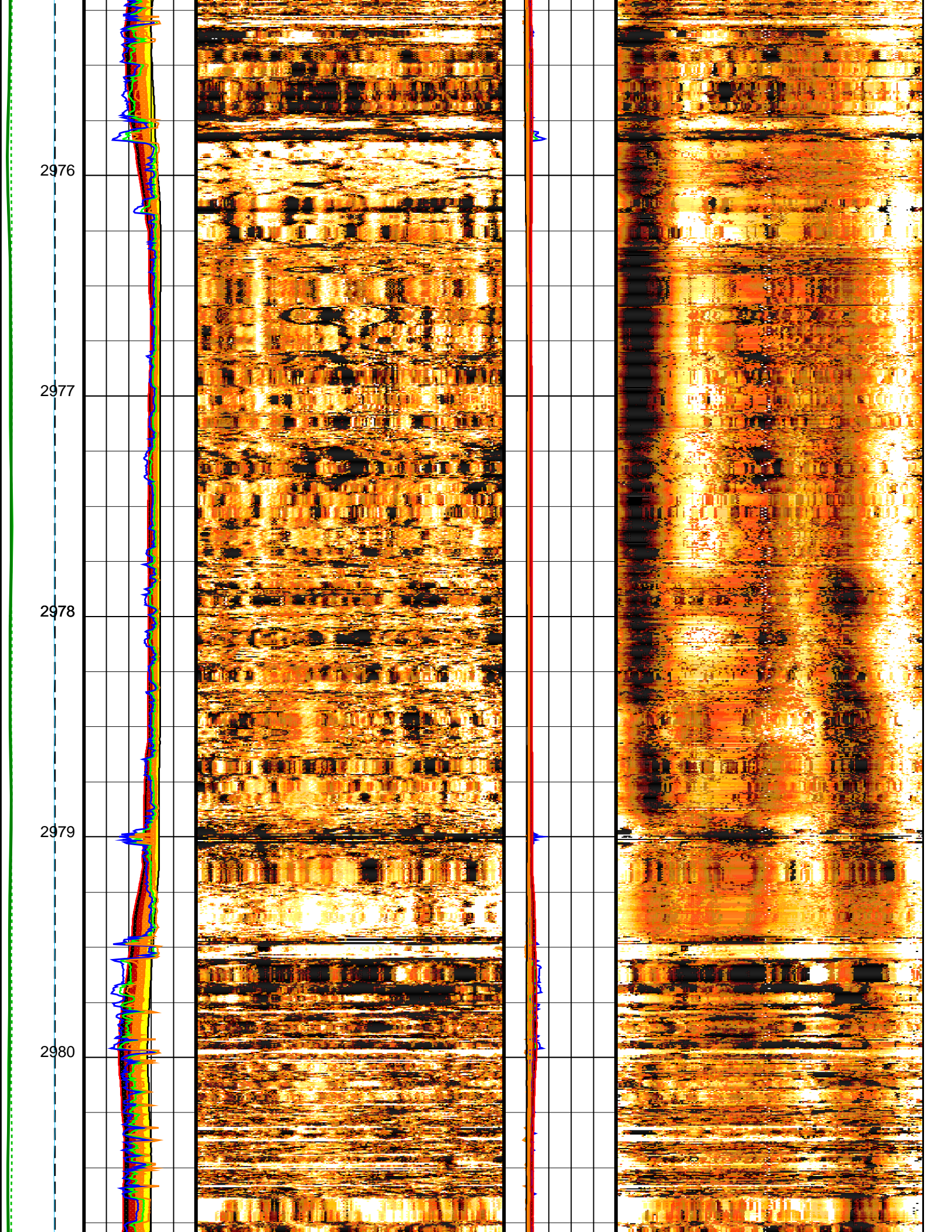
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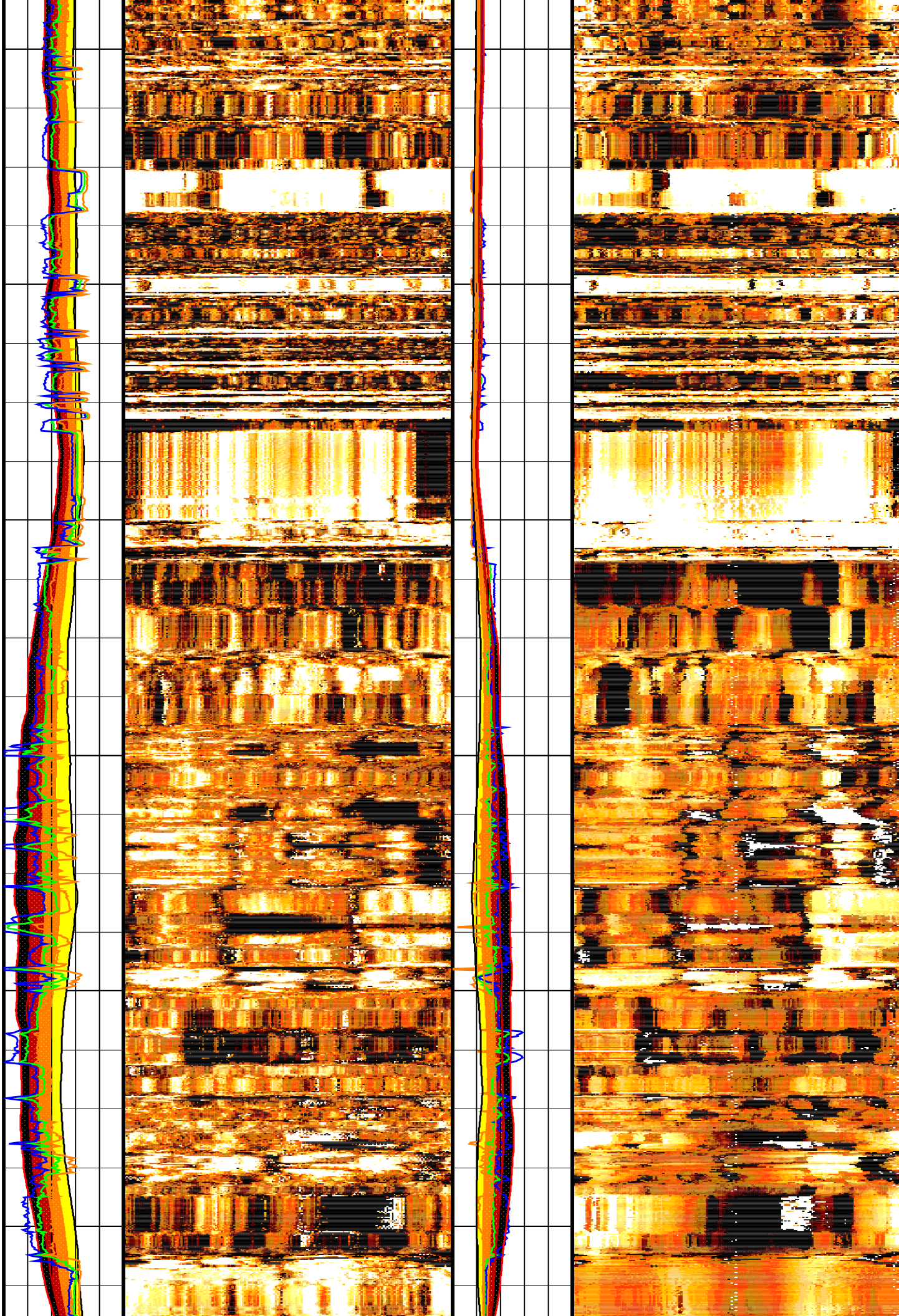
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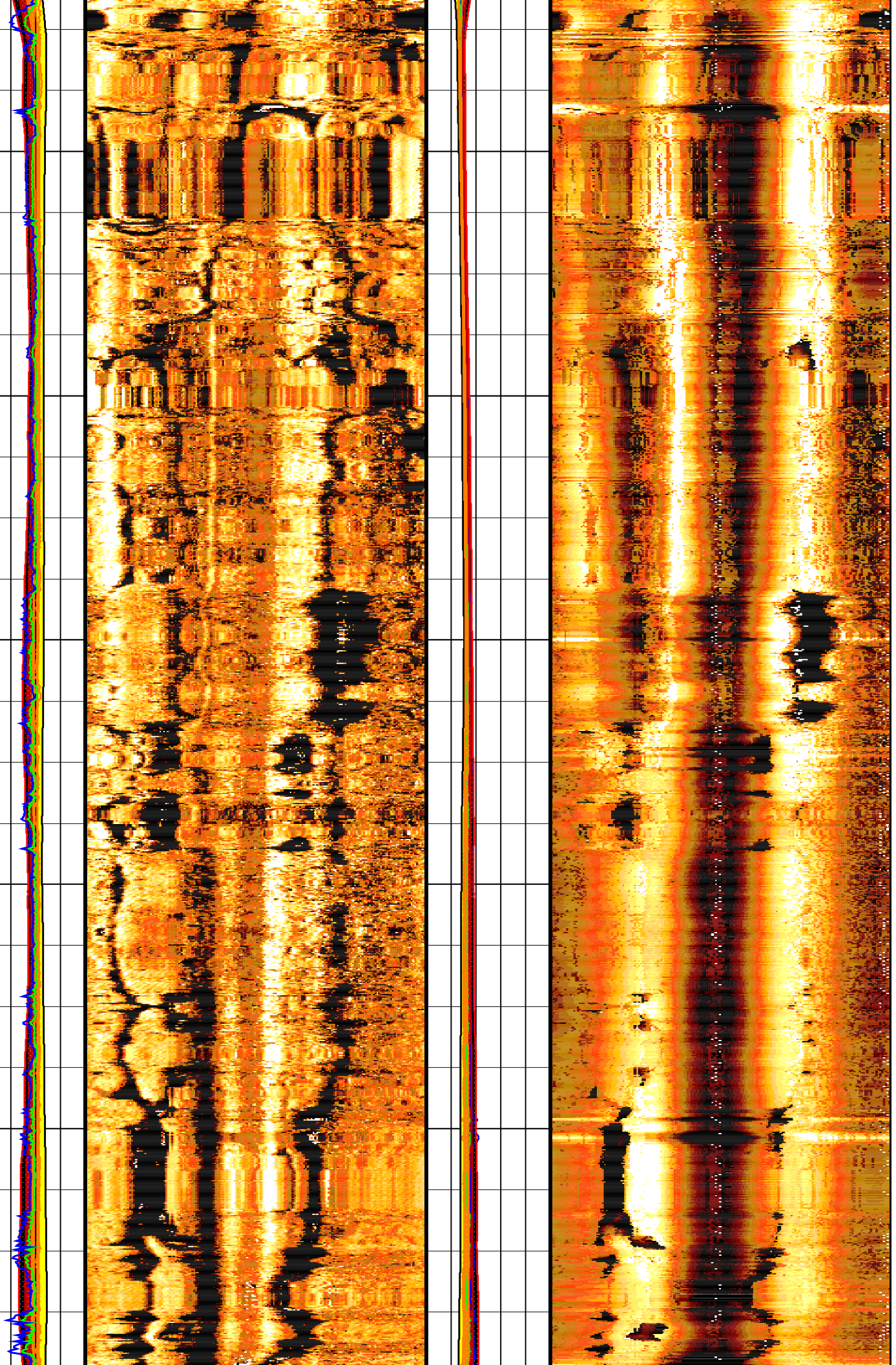
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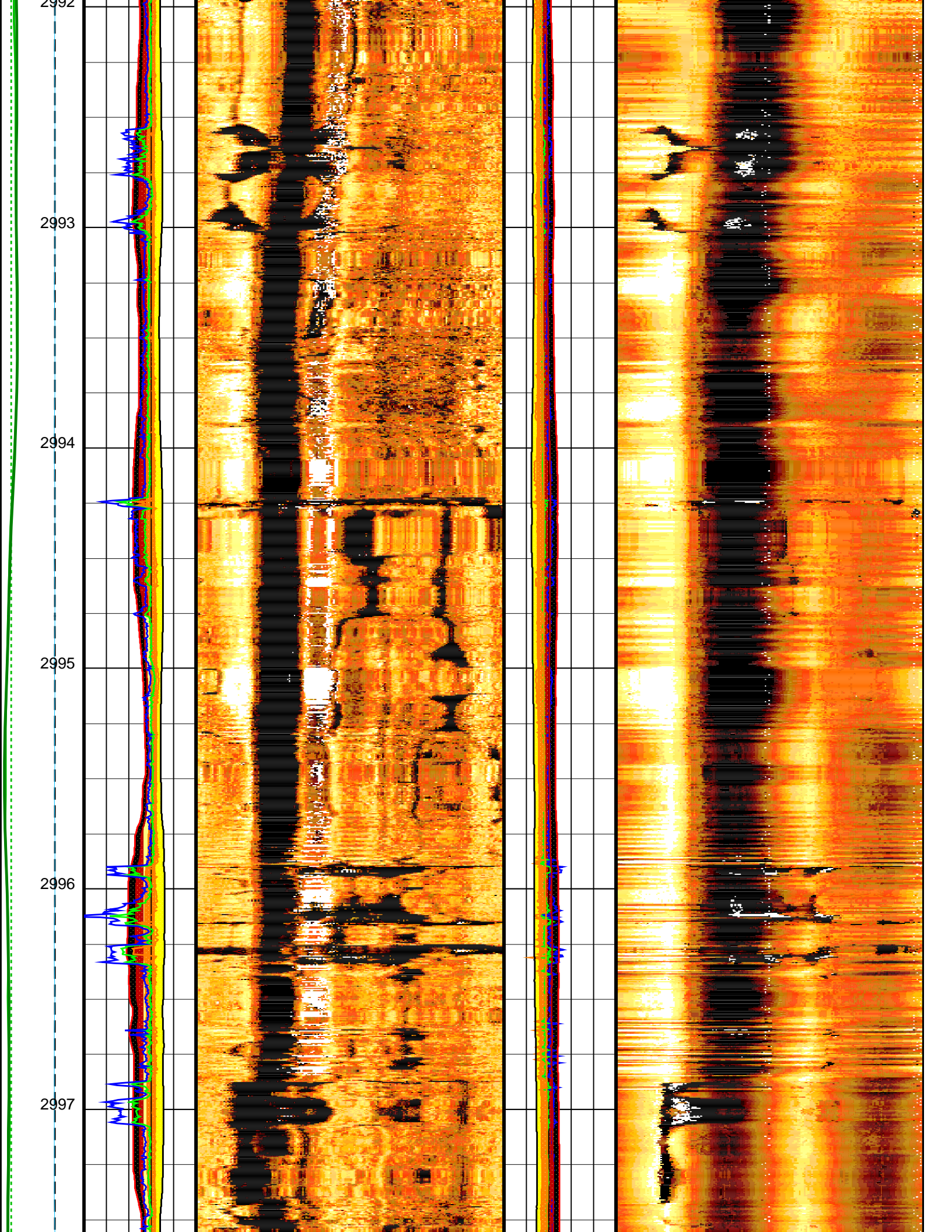
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2998

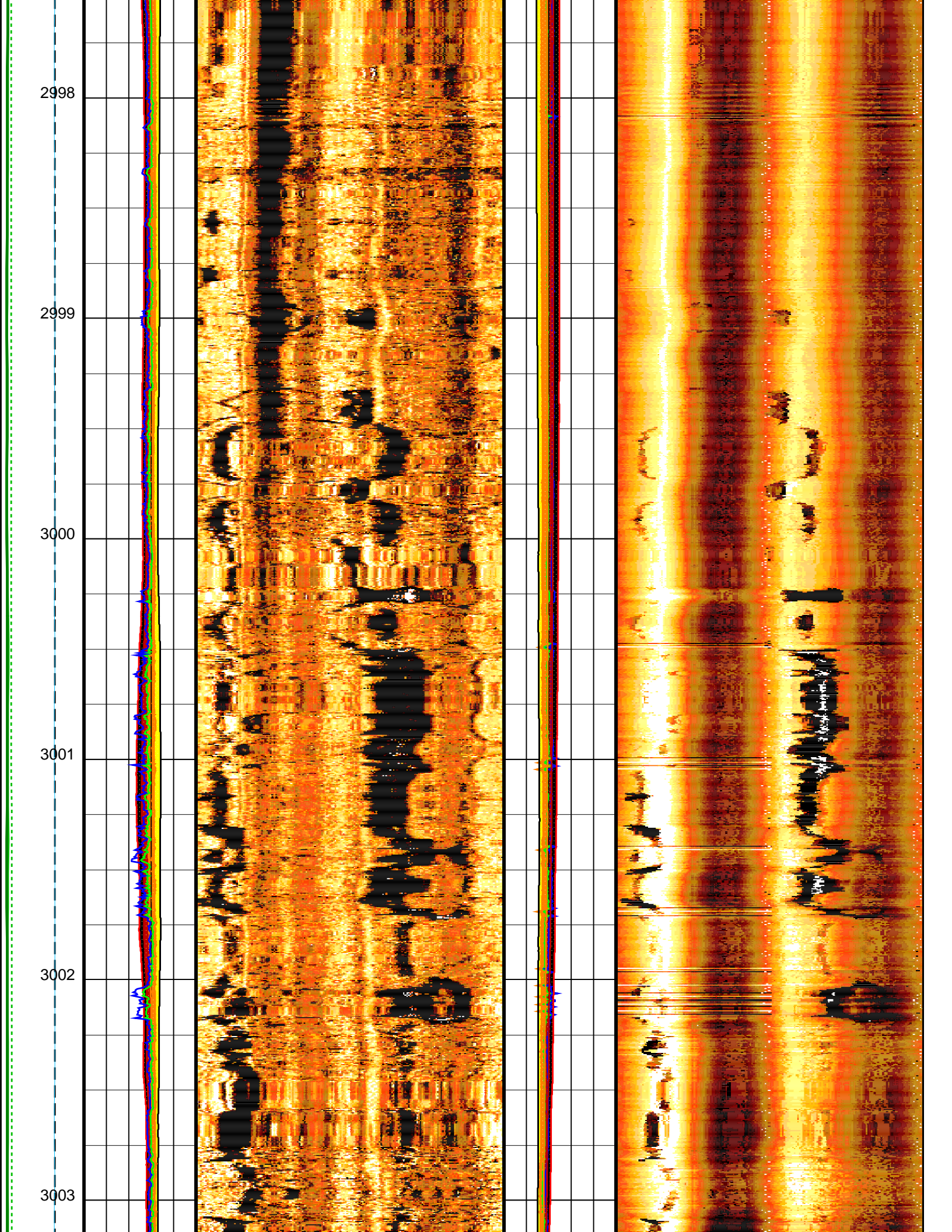
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3000

3001

3002

3003



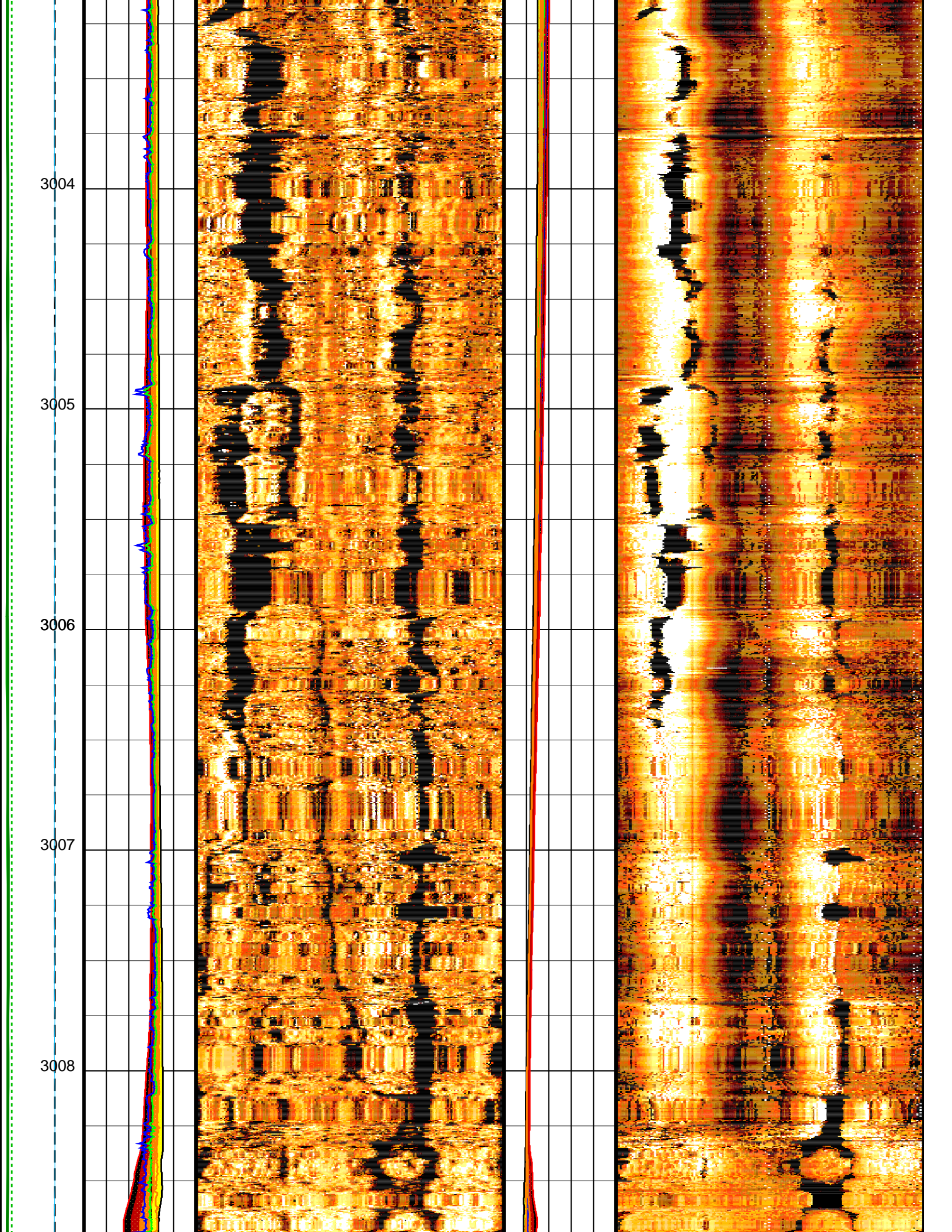
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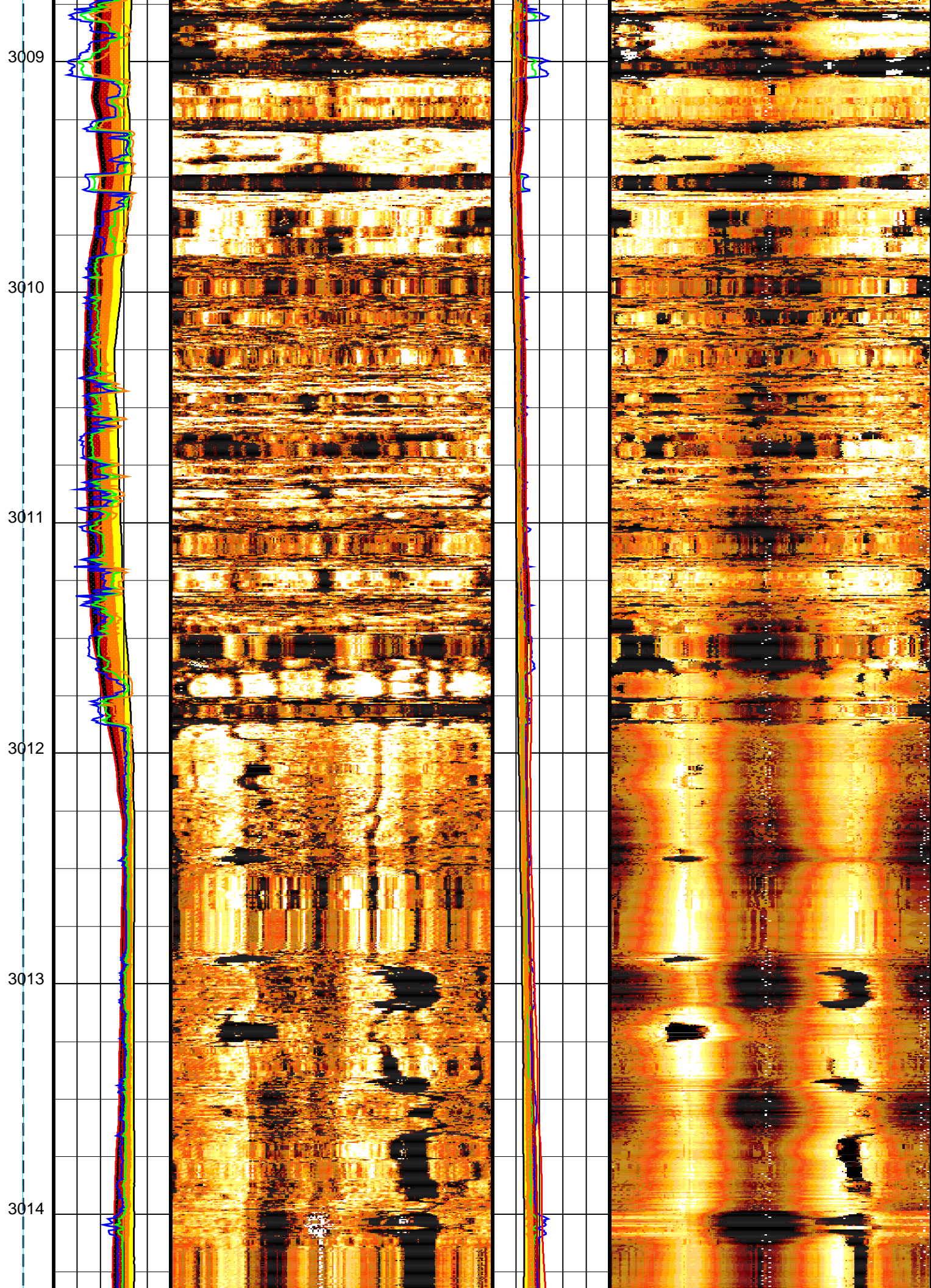
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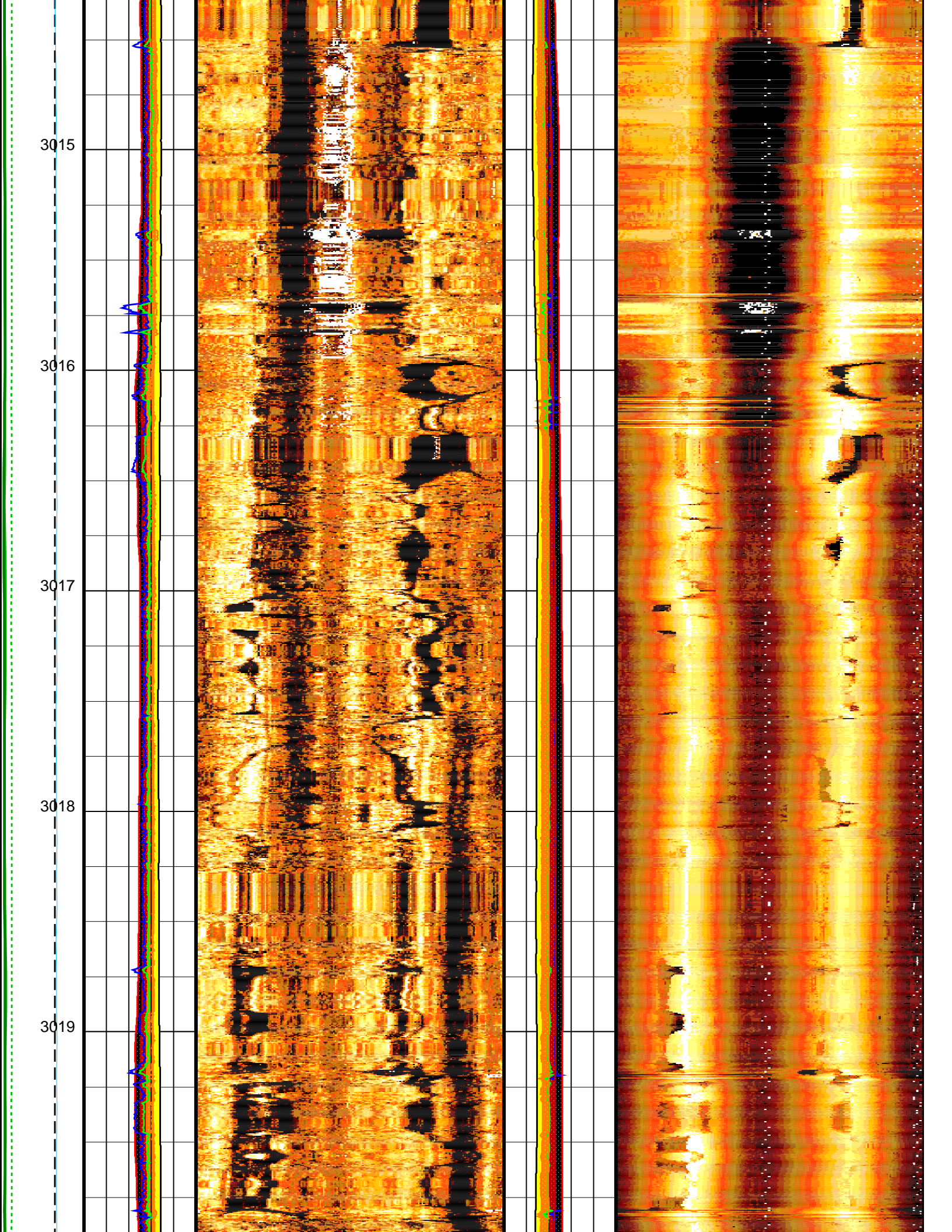
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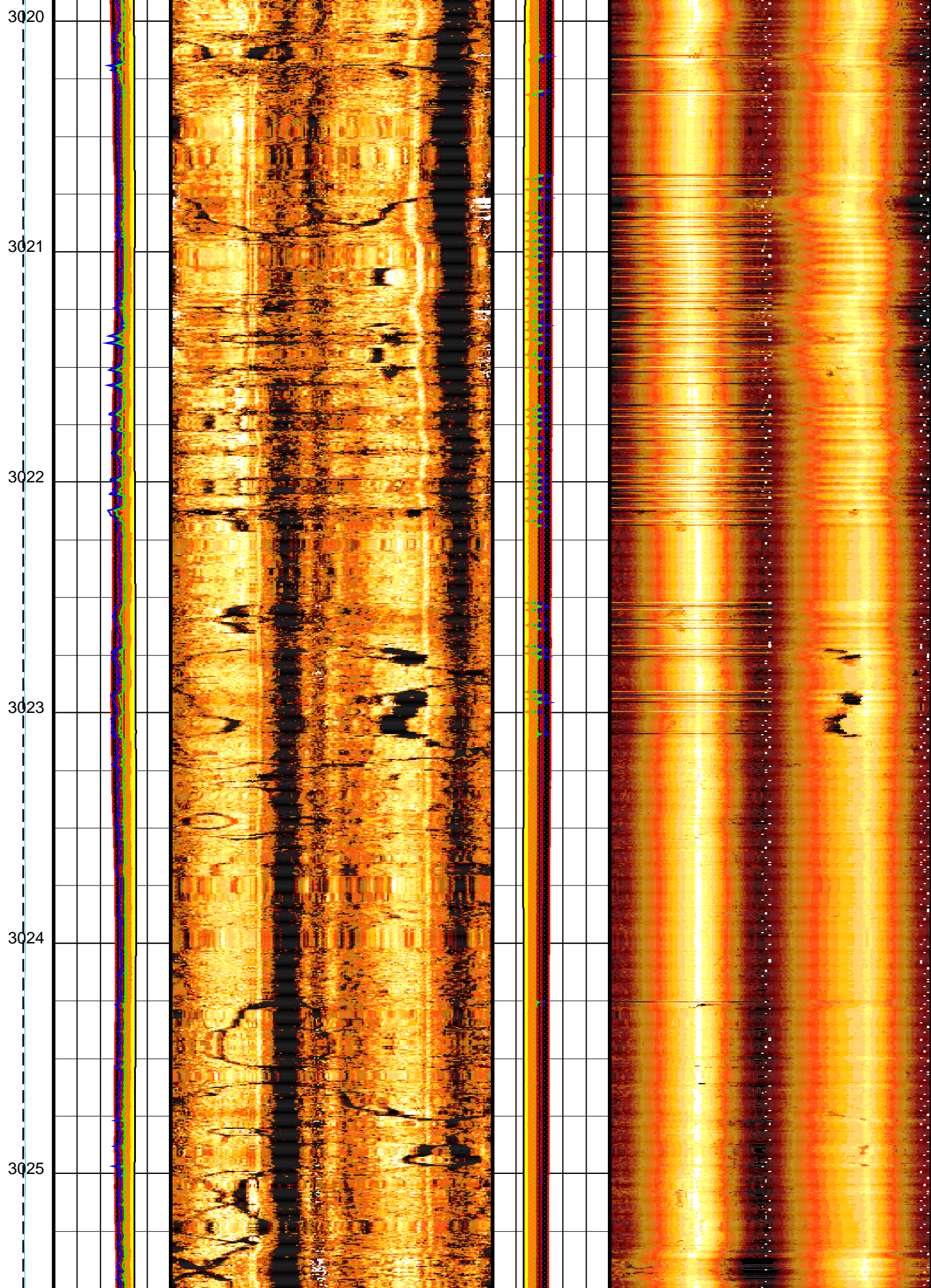
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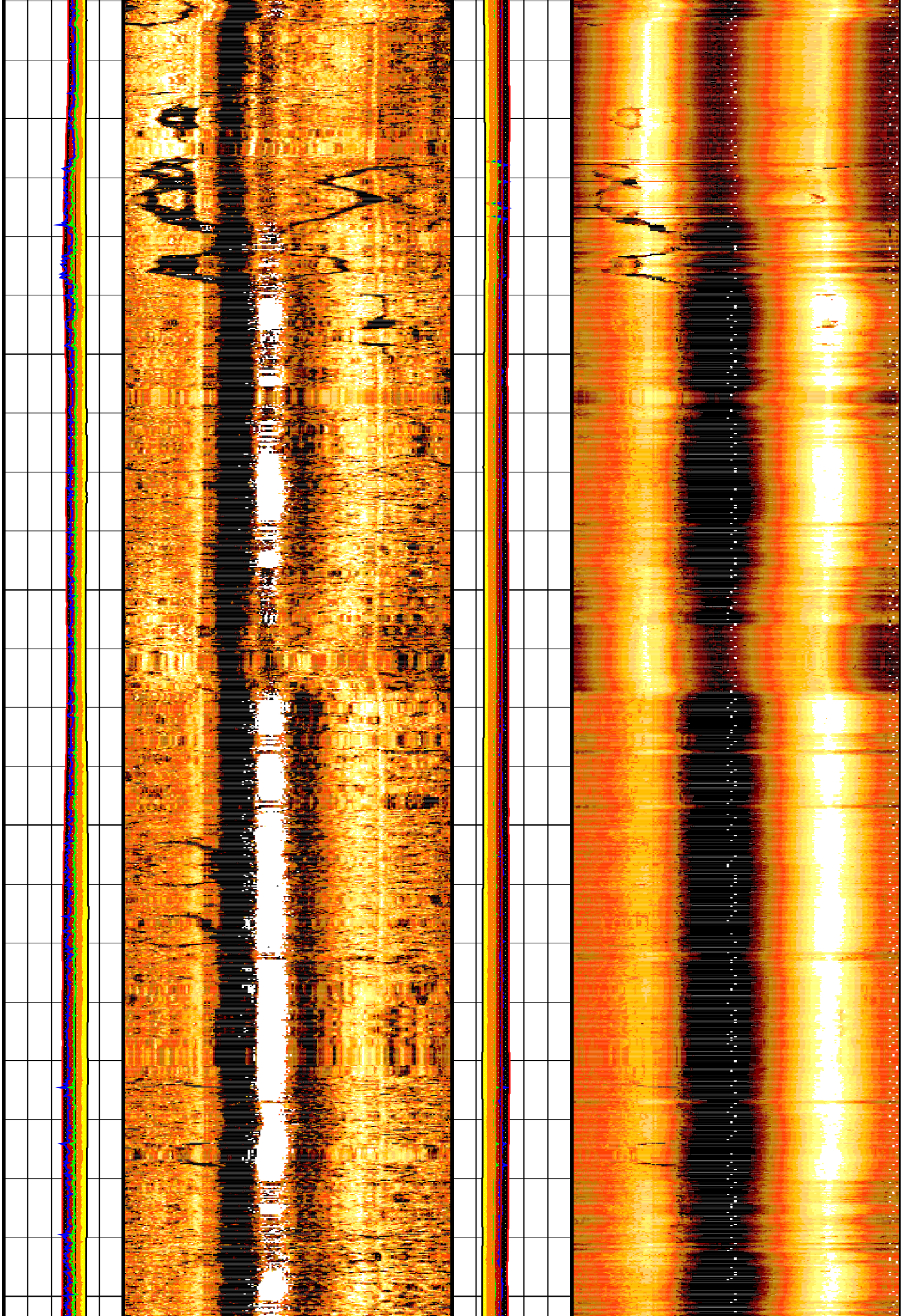
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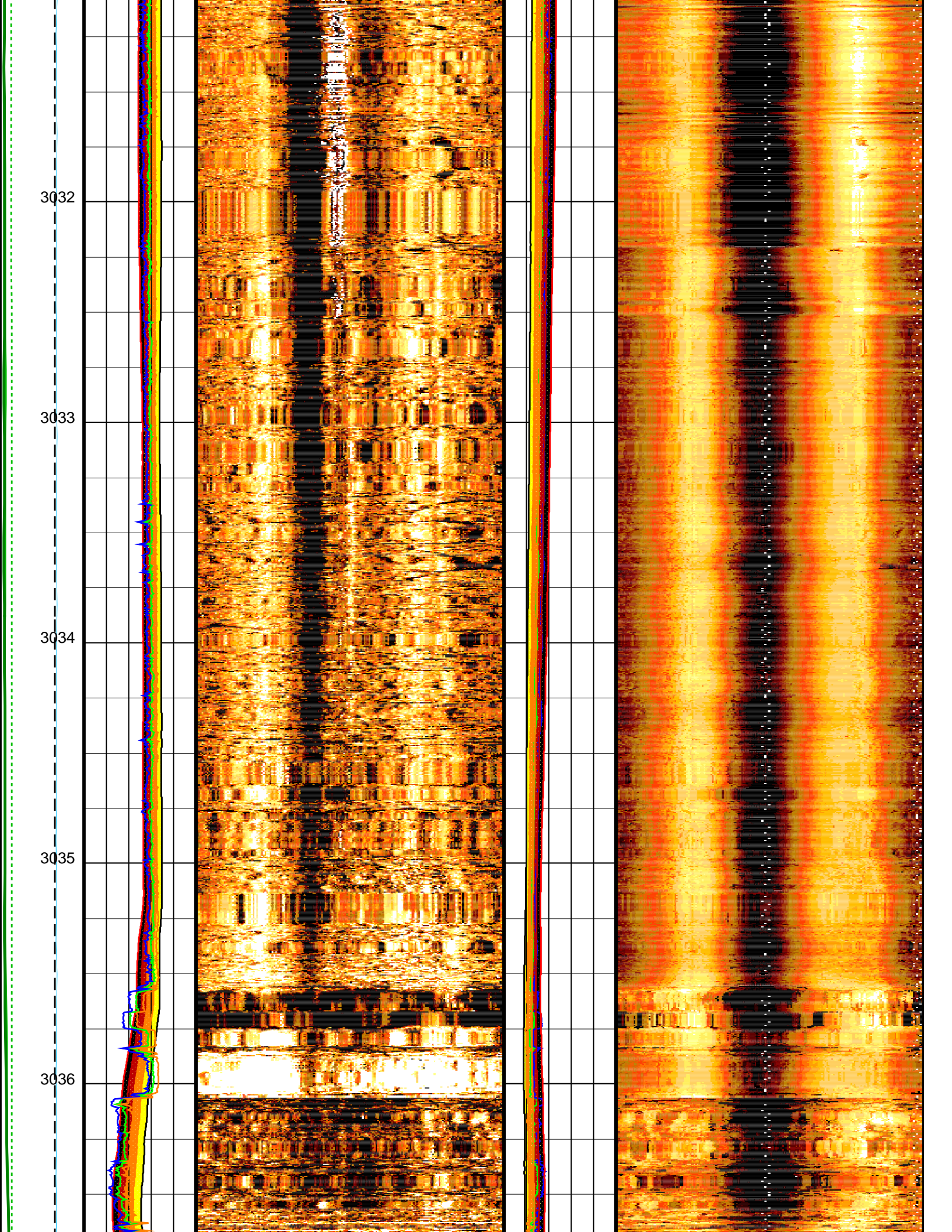
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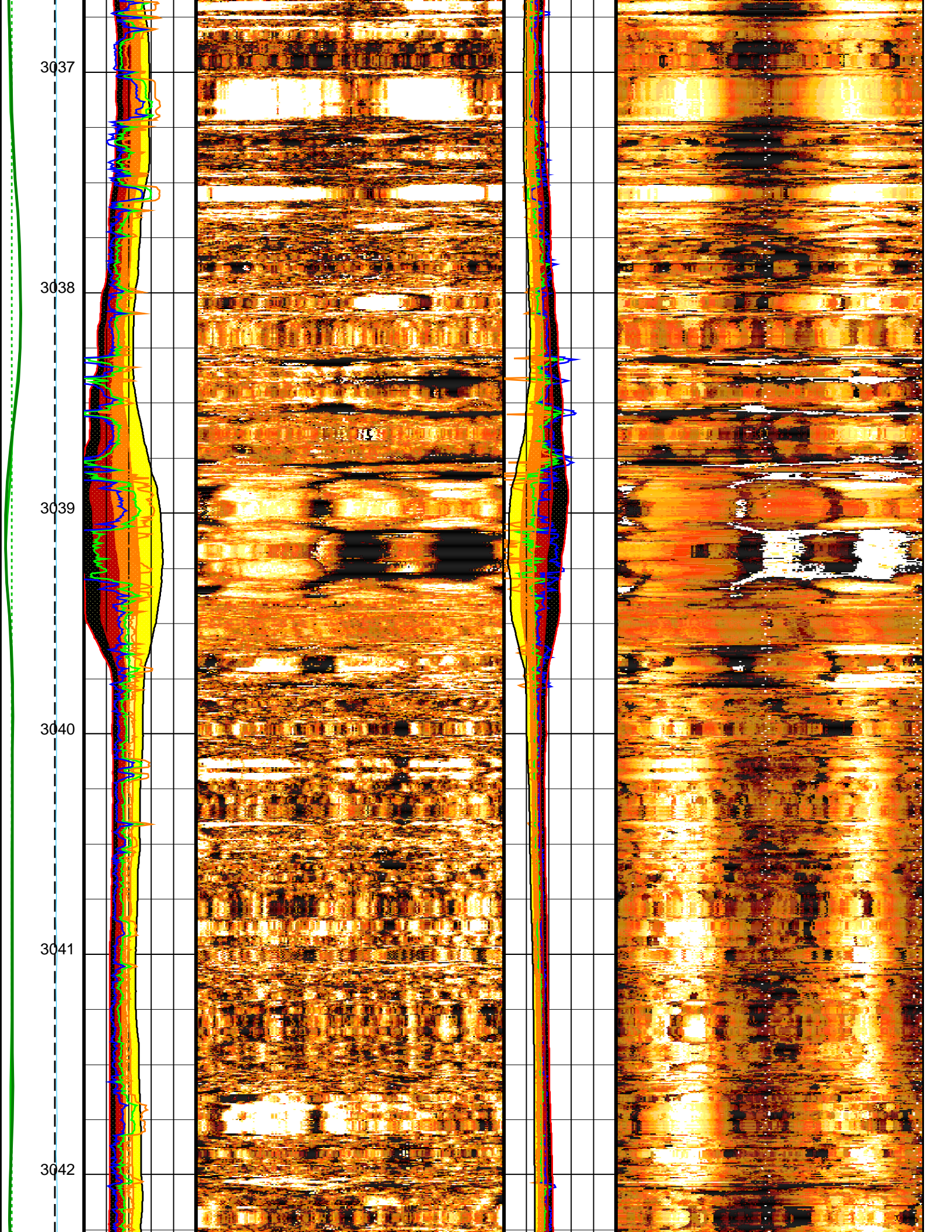
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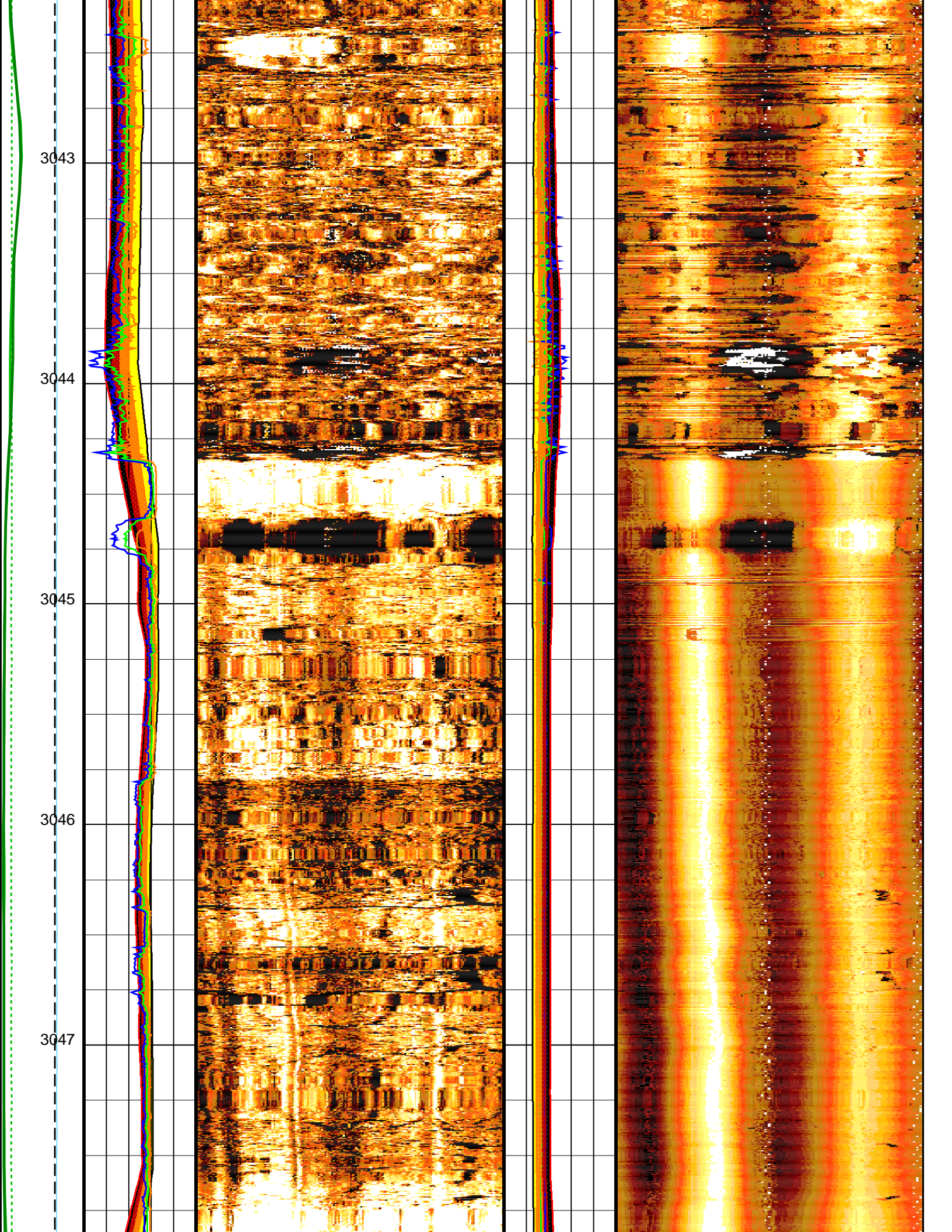
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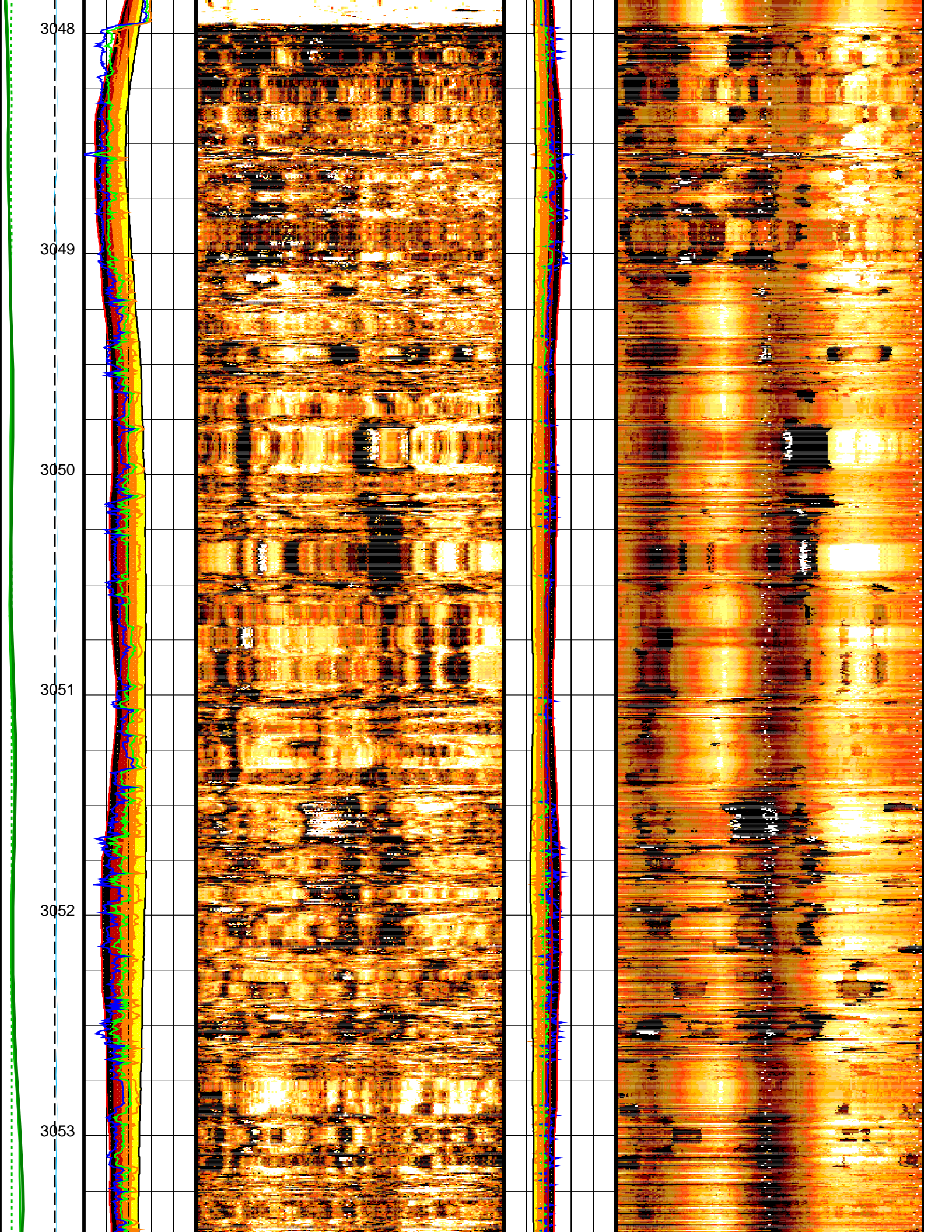
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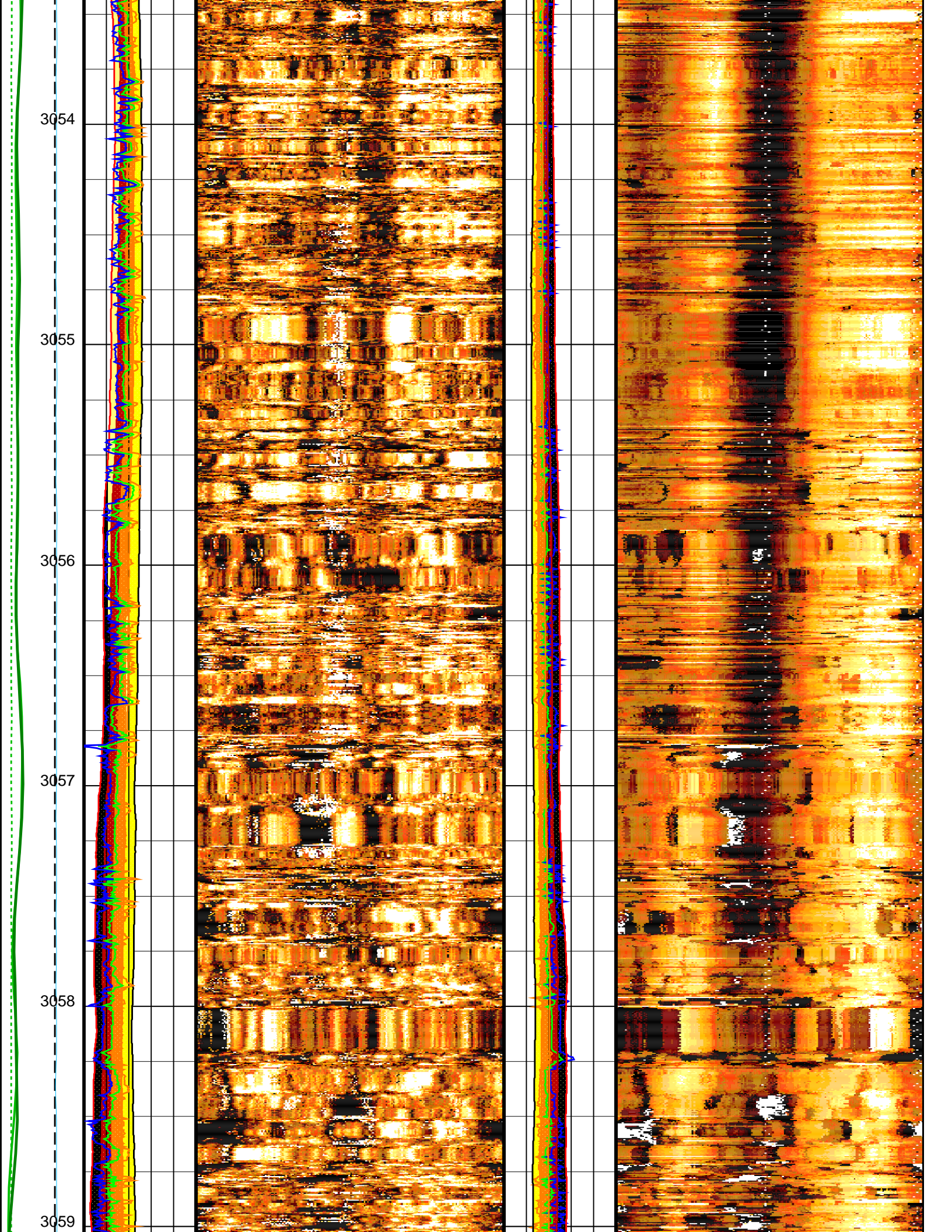
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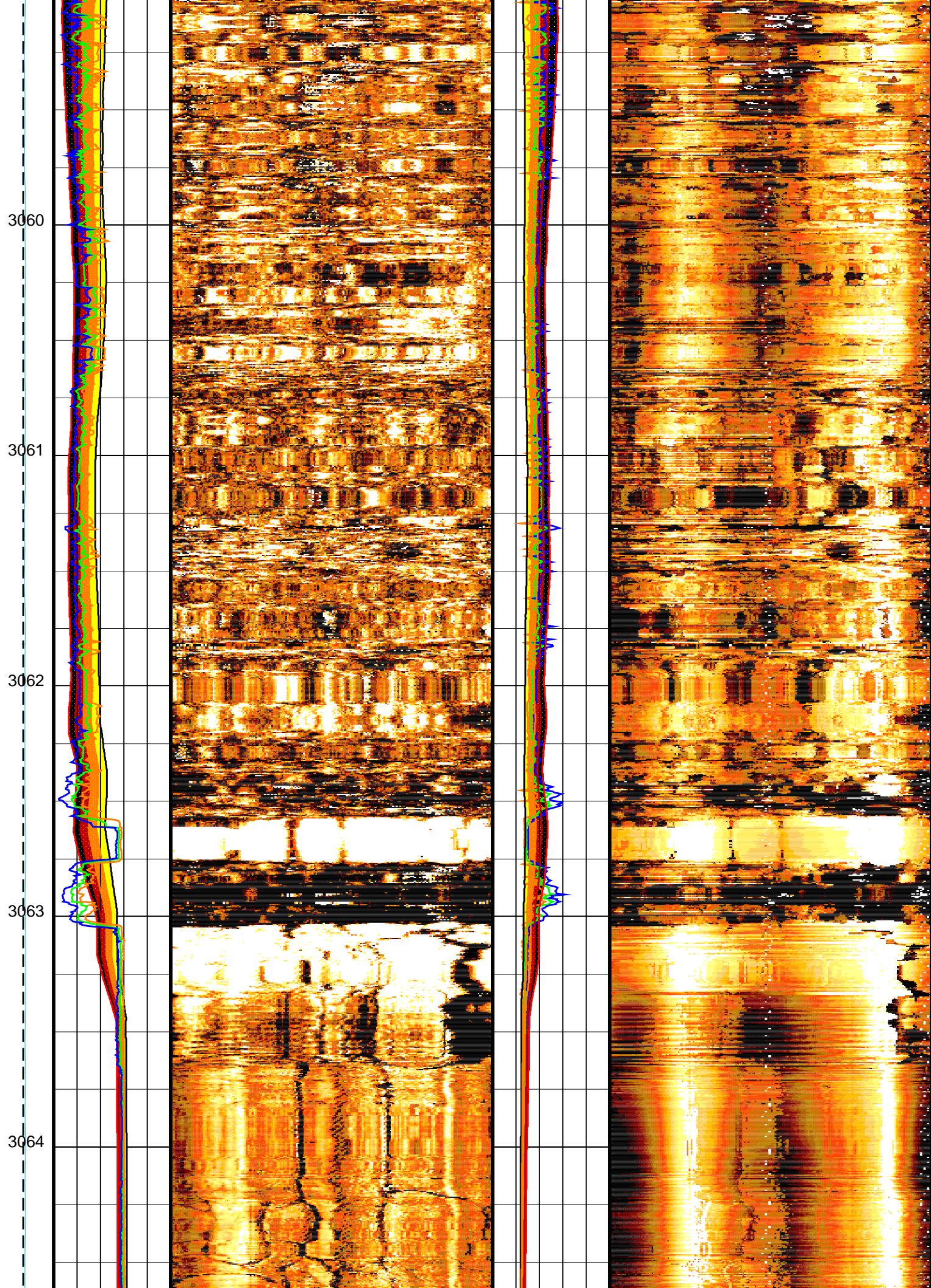
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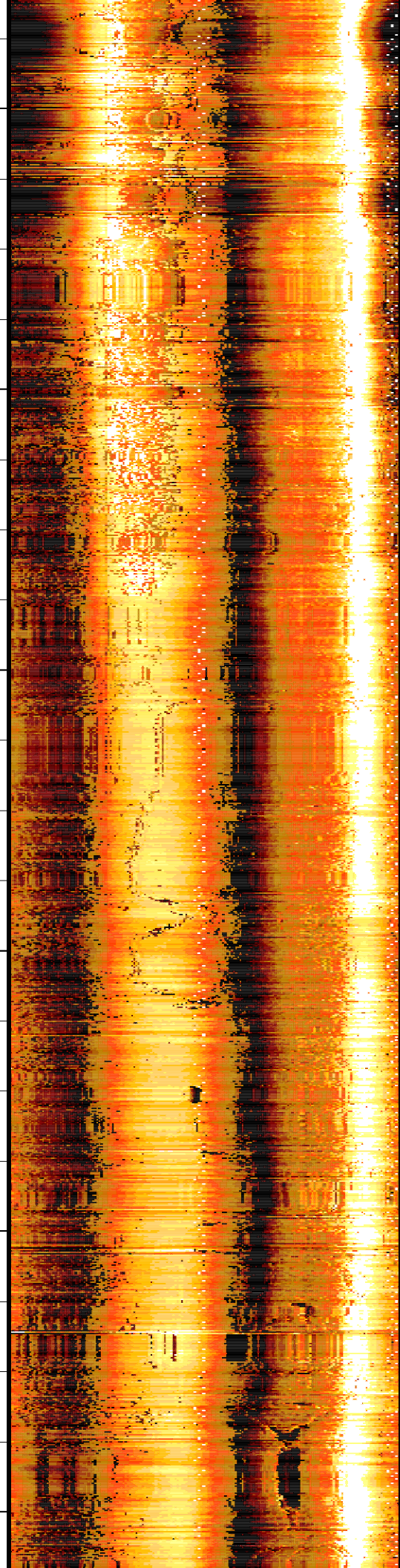
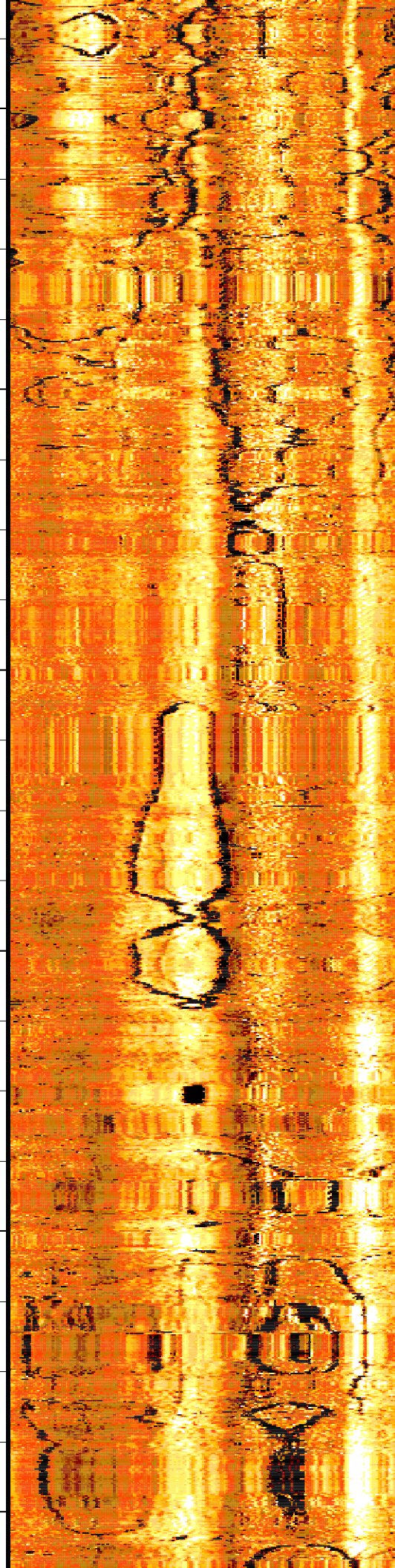
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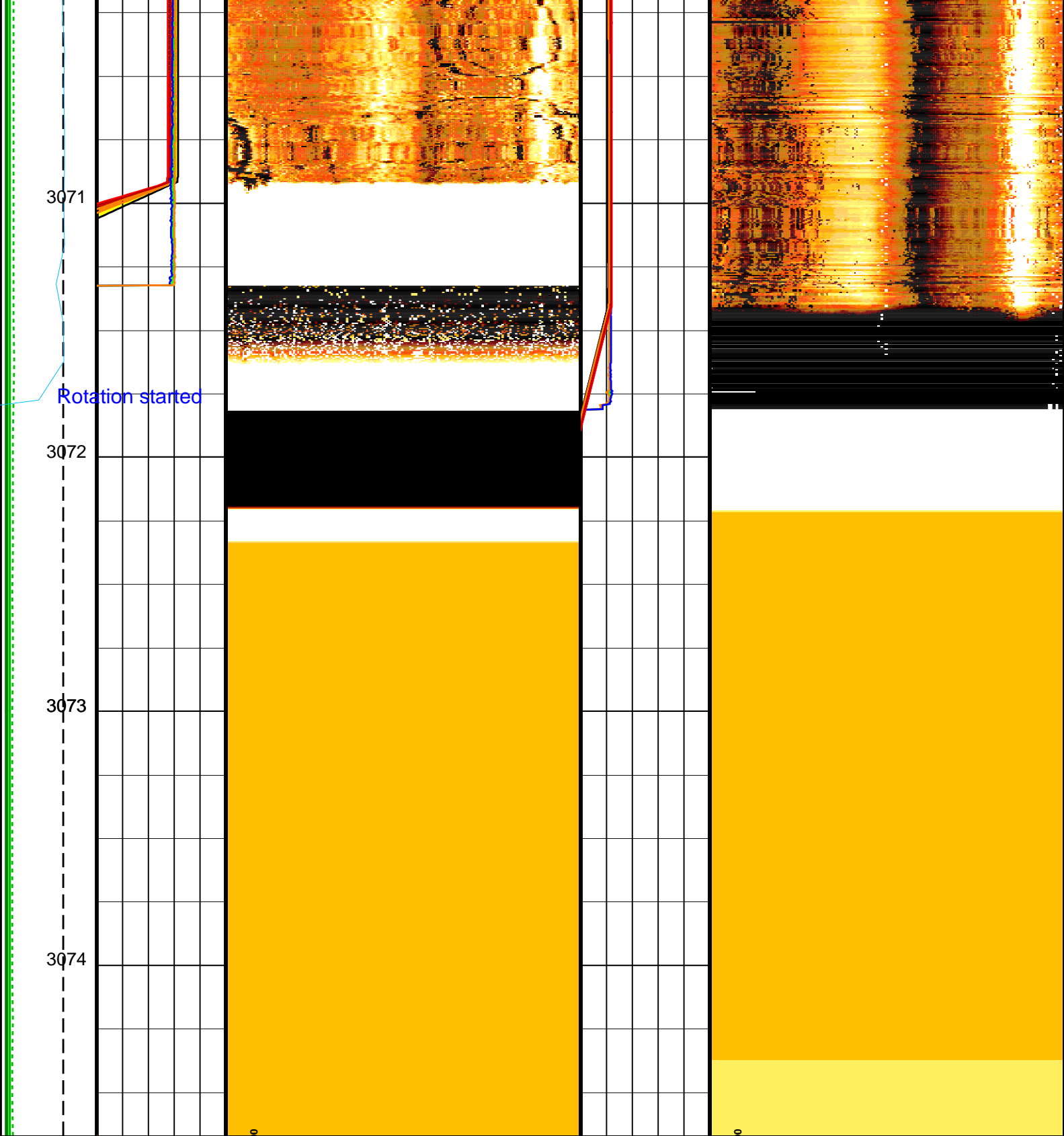
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Rev. speed (RSAV) 6 (RPS) 8  
 LOW Amplitude (FA25) 0 (DB) 50

Corrected Amplitude (AWCN) (DB)  
 -500.0000 0.0000 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.0000 11.0000 12.0000 13.0000 14.0000 15.0000

MEDIAN Radius (FTED) 4 (IN) 8  
 Corrected transit time (TTCN) (US)  
 -500.0000 0.0000 1.0000 2.0000 3.0000 4.0000 5.0000 6.0000 7.0000 8.0000 9.0000 10.0000 11.0000 12.0000 13.0000 14.0000 15.0000

Cable Speed (CS) (M/HR) 0 1000  
 Min. of Amplitude (UAMN) 0 (DB) 50

Main Uplog Pass

Radius LOW (FT25) 4 (IN) 8

Fluid velocity (CFVL) (US/F) 0 50  
 Maximum of Amplitude (UAMX) 0 (DB) 50

Radius HIGH (FT75) 4 (IN) 8

150	250	0	(DB)	50
Gamma Ray (GR_EDTC) (GAPI)		MEDIAN of Amplitude (FAED) (DB) 50		
0	100	0	(DB)	50
HNCS Spectroscopy Gamma Ray (HSGR) (GAPI)		HIGH Amplitude (FA75) (DB) 50		
0	100	0	(DB)	50

Radius min (UTMN)		
4	(IN)	8
Radius max (UTMX)		
4	(IN)	8

Format: UBI\_Image      Vertical Scale: 1:20      Graphics File Created: 06-Mar-2022 19:58

## OP System Version: 19C0-187

UBI-E	SRPC-5095-H2-2011-OP19	GPIT-A/B	19C0-187
DTA-A	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

### Parameters

DLIS Name	Description	Value
UBI-E: Ultrasonic Borehole Imager - E		
	UBI Tool Working Mode for FPM	UBIC_FW500_140_RAW
	Default Fluid Velocity	215 US/F
	UBI Tool Working Mode for Measurement	UBI7_SW500_180_1
	Vertical Resolution	IN: 0.2
AAMN	Automatic Amplitude Minimum Scale	2 DB
AGMN	Minimum Gain of Cartridge	-12DB
AGMX	Maximum Gain of Cartridge	48DB
AMCM	Amplitude - max color scale minimum	-6 DB
AMCX	Amplitude - max color scale maximum	0.2 DB
ANGO	Angular Offset	20 DEG
ATMN	Automatic Transit Time Minimum Scale	2 US
AWMN	Amplitude Color Scale Minimum	20 DB
AWMX	Amplitude Color Scale Maximum	55 DB
CACN	Corrected Amplitude Color Scale Minimum	0 DB
CACX	Corrected Amplitude Color Scale Maximum	50 DB
CRCN	Corrected Radii Color Scale Minimum	3 IN
CRCX	Corrected Radii Color Scale Maximum	4.5 IN
CSID	Casing Inner Diameter	0 IN
DCMN	Window Decrement Down	0.8
DCMX	Window Decrement Up	0.6
DFVL	Default Fluid Velocity	215 US/F
DISI	Radial Plot Depth Increment	120
DISR	Radial Plot Display Requested	0
DOT	Diameter of Tool	1.85 IN
ECRL	Eccentering Correction Level	FIRST
EMXV	EMEX Voltage	20 V
ERDB	Eccentering Rejection	12 DB
FDOS	FVEL Depth Offset	0 M
FMOS	FVEL Measurement Offset	0 US/F
FVLM	Fluid Velocity Filter	MEAN
GCSW	Gain Correction	ON
HFLT	FVEL Filter Size	10
ICMN	Internal Corrosion Color Scale Minimum	-0.15 IN
ICMX	Internal Corrosion Color Scale Maximum	0.15 IN
IMAR	Image Rotation	OFF
INHT	FIFO Inhibition Time	Inh_29us
LIM1	Minimum Limit Control	AUTO
LIM2	Maximum Limit Control	MANUAL
MLCN	Metal Loss Color Scale Minimum	-0.15 IN
MLCX	Metal Loss Color Scale Maximum	0.15 IN
NBCD	Color Correction Depth Level	80
NBLD	Eccentering Correction Depth Level	1
NCDI	Noise Correction Depth Interval	30
PNSW	Processing Noise Correction	ON
RCSO	Reference Calibrator Standoff	0.795 IN
RJ60	60 Hz Correction	ON
RRCN	Radii Color Scale Minimum	3 IN
RRCX	Radii Color Scale Maximum	4.5 IN
SUBT	UBI Sub type	Sub_5_inch_S
SWI V	Sliding Window Minimum	Inh_18us

SWMX	Sliding Window Maximum	Inh_167us	
UBI_USAC_TASK_ALLOW	UBI USAC Allow Task after Power Up	YES	
UBI_USAC_TASK_TIMEOUT	UBI USAC Task Timeout (in seconds) FOR TEST REPORT	600	
UFON	UBI Flagging of Lost Echoes	OFF	
UGOS	UBI/UCI GPIT Offset	3.63	IN
UMFR	Modulation Frequency	500000	HZ
UPAT	Emission Pattern	Pattern_500K	
USFR	Sampling Frequency	2e+006	HZ
USTO	Ultrasonic Time Offset	-3	US
USUB	UBI Sub Identifier	Sub_5_inch	
UWKM	Current Working Mode	UBI7_SW500_180_1	
VERR	acq VERTical Resolution	IN: 0.2	
WFVS	Vertical Sampling	0.2	IN
WINB	Window Beginning Time	18.5	US
WINE	Window end time	36	US
GPIT-A/B: General Purpose Inclinator			
ACPP	Accelerometer PROM Presence	PRESENT	
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ART	Accelerometer Reference Temperature	20	DEGC
GLM	GPIT Logging Mode	DIPM	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MAPP	Magnetometer PROM Presence	PRESENT	
MDEC	Magnetic Field Declination	-35.0569	DEG
MRTE	Magneto Reference Temperature	19	DEGC
TEMS	GPIT Temperature Sensor Used	BOTH	
U-GPOF	Playback OLD VERSION GPIT FILE (BEFORE OP14 + SRPC-3098-FEB_2006_C) ?	NO	

HNGS-BA: Hostile Natural Gamma Ray Sonde

BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0.00230596	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	CENT	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.952401	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	2.78357	

EDTC-B: Enhanced DTS Cartridge

BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	YES	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCC	Standoff Correction Option	NO	



SOCO	Standard Correction Option		
TPOS_EDTC	EDTC Tool Centered/Eccentered	Centered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
UHSV: UBI Hole Shape Analysis			
	UBI Tool Working Mode for FPM	UBIC_FW500_140_RAW	
	Default Fluid Velocity	215	US/F
	UBI Tool Working Mode for Measurement	UBI7_SW500_180_1	
	Vertical Resolution	IN: 0.2	
AAMN	Automatic Amplitude Minimum Scale	2	DB
AGMN	Minimum Gain of Cartridge	-12DB	
AGMX	Maximum Gain of Cartridge	48DB	
AMCM	Amplitude - max color scale minimum	-6	DB
AMCX	Amplitude - max color scale maximum	0.2	DB
ANGO	Angular Offset	20	DEG
ATMN	Automatic Transit Time Minimum Scale	2	US
AWMN	Amplitude Color Scale Minimum	20	DB
AWMX	Amplitude Color Scale Maximum	55	DB
CACN	Corrected Amplitude Color Scale Minimum	0	DB
CACX	Corrected Amplitude Color Scale Maximum	50	DB
CRCN	Corrected Radii Color Scale Minimum	3	IN
CRCX	Corrected Radii Color Scale Maximum	4.5	IN
CSID	Casing Inner Diameter	0	IN
DCMN	Window Decrement Down	0.8	
DCMX	Window Decrement Up	0.6	
DFVL	Default Fluid Velocity	215	US/F
DISI	Radial Plot Depth Increment	120	
DISR	Radial Plot Display Requested	0	
DOT	Diameter of Tool	1.85	IN
ECRL	Eccentering Correction Level	FIRST	
EMXV	EMEX Voltage	20	V
ERDB	Eccentering Rejection	12	DB
FDOS	FVEL Depth Offset	0	M
FMOS	FVEL Measurement Offset	0	US/F
FVLM	Fluid Velocity Filter	MEAN	
GCSW	Gain Correction	ON	
HFLT	FVEL Filter Size	10	
ICMN	Internal Corrosion Color Scale Minimum	-0.15	IN
ICMX	Internal Corrosion Color Scale Maximum	0.15	IN
IMAR	Image Rotation	OFF	
INHT	FIFO Inhibition Time	Inh_29us	
LIM1	Minimum Limit Control	AUTO	
LIM2	Maximum Limit Control	MANUAL	
MLCN	Metal Loss Color Scale Minimum	-0.15	IN
MLCX	Metal Loss Color Scale Maximum	0.15	IN
NBCD	Color Correction Depth Level	80	
NBLD	Eccentering Correction Depth Level	1	
NCDI	Noise Correction Depth Interval	30	
PNSW	Processing Noise Correction	ON	
RCSO	Reference Calibrator Standoff	0.795	IN
RJ60	60 Hz Correction	ON	
RRCN	Radii Color Scale Minimum	3	IN
RRCX	Radii Color Scale Maximum	4.5	IN
SUBT	UBI Sub type	Sub_5_inch_S	
SWLV	Sliding Window Minimum	Inh_18us	
SWMX	Sliding Window Maximum	Inh_167us	
UFON	UBI Flagging of Lost Echoes	OFF	
UGOS	UBI/UCI GPIT Offset	3.63	IN
UMFR	Modulation Frequency	500000	HZ
UPAT	Emission Pattern	Pattern_500K	
USFR	Sampling Frequency	2e+006	HZ
USTO	Ultrasonic Time Offset	-3	US
USUB	UBI Sub Identifier	Sub_5_inch	
UWKM	Current Working Mode	UBI7_SW500_180_1	
VERR	acq VERTical Resolution	IN: 0.2	
WFVS	Vertical Sampling	0.2	IN
WINB	Window Beginning Time	18.5	US
WINE	Window end time	36	US
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.03	G/C3
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	9345.14	FT
TDD	Total Depth - Driller	3105.40	M
TDL	Total Depth - Logger	3106.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

# Output DLIS Files

<b>DEFAULT</b>	<b>UBI_NGS_040LUP</b>	<b>FN:61</b>	<b>PRODUCER</b>	<b>06-Mar-2022 19:58</b>
<b>BACKUP</b>	<b>UBI_NGS_040LUP</b>	<b>FN:62</b>	<b>PRODUCER</b>	<b>06-Mar-2022 19:58</b>

## Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
<b>General Purpose Inclinator Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY</b>							
Before: 6-Mar-2022 17:07							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	
<b>General Purpose Inclinator Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY</b>							
Before: 6-Mar-2022 17:06							
TEMPERATURE REFERENCE :	N/A	N/A	19	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	
<b>Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check</b>							
Master: 13-Feb-2022 23:25 Before: 13-Feb-2022 23:31							
Na 511 Peak Loc	40.00	39.60	39.35	N/A	N/A	1.000	
Na 511 Peak Res	15.50	17.00	17.03	N/A	N/A	2.000	%
High Voltage	1150	1202	1203	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.6	141.9	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.539	8.461	N/A	N/A	2.000	%
Temperature	15.50	27.53	27.56	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	10.98	10.73	N/A	N/A	8.000	CPS
<b>Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check</b>							
Master: 13-Feb-2022 23:25 Before: 13-Feb-2022 23:31							
Na 511 Peak Loc	40.00	40.51	40.45	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.47	16.18	N/A	N/A	2.000	%
High Voltage	1150	1129	1129	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	145.0	144.7	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.043	10.12	N/A	N/A	2.000	%
Temperature	15.50	28.33	28.25	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	11.22	11.24	N/A	N/A	8.000	CPS
<b>Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2</b>							
Master: 13-Feb-2022 23:25 Before: 13-Feb-2022 23:31							
Coincidence Count Rate Ratio	1.000	0.9687	0.9517	N/A	N/A	0.05000	
<b>Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration</b>							
Master: 13-Feb-2022 23:19							
Na 511 Peak Set Point	40.00	41.00	---	---	---	---	
Th Peak Loc	209.6	210.2	---	---	---	---	
Th Peak Res	7.000	7.307	---	---	---	---	%
Background Count Rate	142.5	22.81	---	---	---	---	CPS
Gain Ratio	1.000	1.009	---	---	---	---	
<b>Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration</b>							
Master: 13-Feb-2022 23:19							
Na 511 Peak Set Point	40.00	42.00	---	---	---	---	
Th Peak Loc	209.6	211.1	---	---	---	---	
Th Peak Res	7.000	7.436	---	---	---	---	%
Background Count Rate	142.5	22.96	---	---	---	---	CPS
Gain Ratio	1.000	0.9914	---	---	---	---	
<b>Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration</b>							
Before: 6-Mar-2022 17:08							
EDTC Z-Axis Acceleration	9.810	N/A	9.840	N/A	N/A	N/A	M/S2
<b>Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration</b>							
Before: 13-Feb-2022 22:35							
Gamma Ray (Jig – Bkg)	163.4	N/A	163.4	N/A	N/A	14.86	GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	N/A	N/A	15.00	GAPI

General Purpose Inclinator / Equipment Identification

Primary Equipment: GPIT Cartridge – AC	GPIC – AC	719
Auxiliary Equipment: GPIT Housing	GPIH – A	2864

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment: HNGC Cartridge	HNGC – B	304
Auxiliary Equipment: HNGC Housing	HNGH – A	3

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment: HNGS Sonde	HNGS – BA	99
Auxiliary Equipment: HNGS Sonde Housing Gamma Source Radioactive	HNSH – BA GSR – U	102 6098

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.60	Master		17.00	Master		1202
Before		39.35	Before		17.03	Before		1203
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		142.6	Master		9.539	Master		27.53
Before		141.9	Before		8.461	Before		27.56
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		10.98						
Before		10.73						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 13-Feb-2022 23:25			Before: 13-Feb-2022 23:31					

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		40.51	Master		16.47	Master		1129
Before		40.45	Before		16.18	Before		1129
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		145.0	Master		9.043	Master		28.33
Before		144.7	Before		10.12	Before		28.25
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		11.22						
Before		11.24						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9687
Before		0.9517
	0.9500 (Minimum)      1.000 (Nominal)      1.050 (Maximum)	
Master: 13-Feb-2022 23:25		
Before: 13-Feb-2022 23:31		

Hostile Natural Gamma Ray Sonde Master Calibration								
Detector 1 Calibration								
Phase	Na 511 Peak Set Point	Value	Phase	Th Peak Loc	Value	Phase	Th Peak Res %	Value
Master		41.00	Master		210.2	Master		7.307
	38.00 (Minimum)      40.00 (Nominal)      43.00 (Maximum)			201.0 (Minimum)      209.6 (Nominal)      218.3 (Maximum)			5.000 (Minimum)      7.000 (Nominal)      9.000 (Maximum)	
Phase	Background Count Rate CPS	Value	Phase	Gain Ratio	Value			
Master		22.81	Master		1.009			
	10.00 (Minimum)      142.5 (Nominal)      265.0 (Maximum)			0.9400 (Minimum)      1.000 (Nominal)      1.060 (Maximum)				
Master: 13-Feb-2022 23:19								

Hostile Natural Gamma Ray Sonde Master Calibration								
Detector 2 Calibration								
Phase	Na 511 Peak Set Point	Value	Phase	Th Peak Loc	Value	Phase	Th Peak Res %	Value
Master		42.00	Master		211.1	Master		7.436
	38.00 (Minimum)      40.00 (Nominal)      43.00 (Maximum)			201.0 (Minimum)      209.6 (Nominal)      218.3 (Maximum)			5.000 (Minimum)      7.000 (Nominal)      9.000 (Maximum)	
Phase	Background Count Rate CPS	Value	Phase	Gain Ratio	Value			
Master		22.96	Master		0.9914			
	10.00 (Minimum)      142.5 (Nominal)      265.0 (Maximum)			0.9400 (Minimum)      1.000 (Nominal)      1.060 (Maximum)				
Master: 13-Feb-2022 23:19								

Enhanced DTS Cartridge / Equipment Identification			
Primary Equipment:			
EDTC Gamma Ray Detector	EDTG - A/B	77693	
Enhanced DTS Cartridge	EDTC - B	8529	
Auxiliary Equipment:			
EDTC Housing	EDTH - B	8528	

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.840
	9.610 (Minimum)      9.810 (Nominal)      10.01 (Maximum)	
Before: 6-Mar-2022 17:08		

Enhanced DTS Cartridge Wellsite Calibration								
Detector Calibration								
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		8.029	Before		163.4	Before		164.0
	0 (Minimum)      30.00 (Nominal)      120.0 (Maximum)			148.6 (Minimum)      163.4 (Nominal)      178.3 (Maximum)			149.0 (Minimum)      164.0 (Nominal)      179.0 (Maximum)	
Before: 13-Feb-2022 22:35								

Company: **International Ocean Discovery Program**

**Schlumberger**

Well: **Expedition 392, Site U1580 A**

Field: **Agulhas Plateau Cretaceous Climate**

Rig: **JOIDES Resolution**

Ocean: **Southern**

Ultrasonic Borehole Imager (UBI)

Natural Gamma /(HNGS)