

Company: Lamont Doherty

Well: Expedition 336, Site U1383C

Field: North Pond

Rig: JOIDES Resolution Country: USA

FMS Micro-Image

Rig: JOIDES Resolution
Field: North Pond
Location: Latitude: N 22° 48.1241'
Well: Expedition 336, Site U1383C
Company: Lamont Doherty

LOCATION			
Latitude: N 22° 48.1241'	Elev.:	K.B.	11.00 m
Longitude: W 46° 3.1662'	G.L.	-4425.20 m	
Permanent Datum: _____	Mean Sea Level	_____	
Log Measured From: _____	Drill Floor	_____	
Drilling Measured From: _____	Drill Floor	_____	
Ocean: Atlantic	Max. Well Deviation	0 deg	
	Longitude	W 46° 3.1662'	Latitude
			N 22° 48.1241'
	Elev.:	0.00 m	
		11.00 m	above Perm. Datum

PVT DATA		
Oil Density		Run 1
Water Salinity		
Gas Gravity		
Bo		
Bw		
1/Bg		
Bubble Point Pressure		
Bubble Point Temperature		
Solution GOR		
Maximum Deviation	0 deg	
CEMENTING DATA		
Primary/Squeeze	Primary	
Casing String No		
Lead Cement Type		
Volume		
Density		
Water Loss		
Additives		
Tail Cement Type		
Volume		
Density		
Water Loss		
Additives		
Expected Cement Top		

Logging Date	3-Nov-2011	
Run Number	2	
Depth Driller	332 m	
Schlumberger Depth	331.2 m	
Bottom Log Interval	330 m	
Top Log Interval	66 m	
Casing Fluid Type	Seawater	
Salinity		
Density	1.05 g/cm3	
Fluid Level		
BIT/CASING/TUBING STRING		
Bit Size	9.875 in	
From		
To		
Casing/Tubing Size	10.750 in	
Weight	43 lbn/ft	
Grade		
From		
To		
Maximum Recorded Temperatures	15 degC	
Logger On Bottom	3-Nov-2011	18:00
Unit Number	625003	Houston
Recorded By	C. Fuman	
Witnessed By	L. Anderson	

Logging Date	3-Nov-2011	
Run Number	2	
Depth Driller	332 m	
Schlumberger Depth	331.2 m	
Bottom Log Interval	330 m	
Top Log Interval	66 m	
Casing Fluid Type	Seawater	
Salinity		
Density	1.05 g/cm3	
Fluid Level		
BIT/CASING/TUBING STRING		
Bit Size	9.875 in	
From		
To		
Casing/Tubing Size	10.750 in	
Weight	43 lbn/ft	
Grade		
From		
To		
Maximum Recorded Temperatures	15 degC	
Logger On Bottom	3-Nov-2011	18:00
Unit Number	625003	Houston
Recorded By	C. Fuman	
Witnessed By	L. Anderson	

DISCLAIMER

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OTHER SERVICES1

- OS1: DSI
- OS2: DEBIT
- OS3: HLDS
- OS4: HNGS

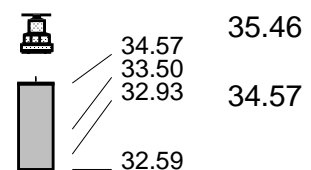
REMARKS: RUN NUMBER 1

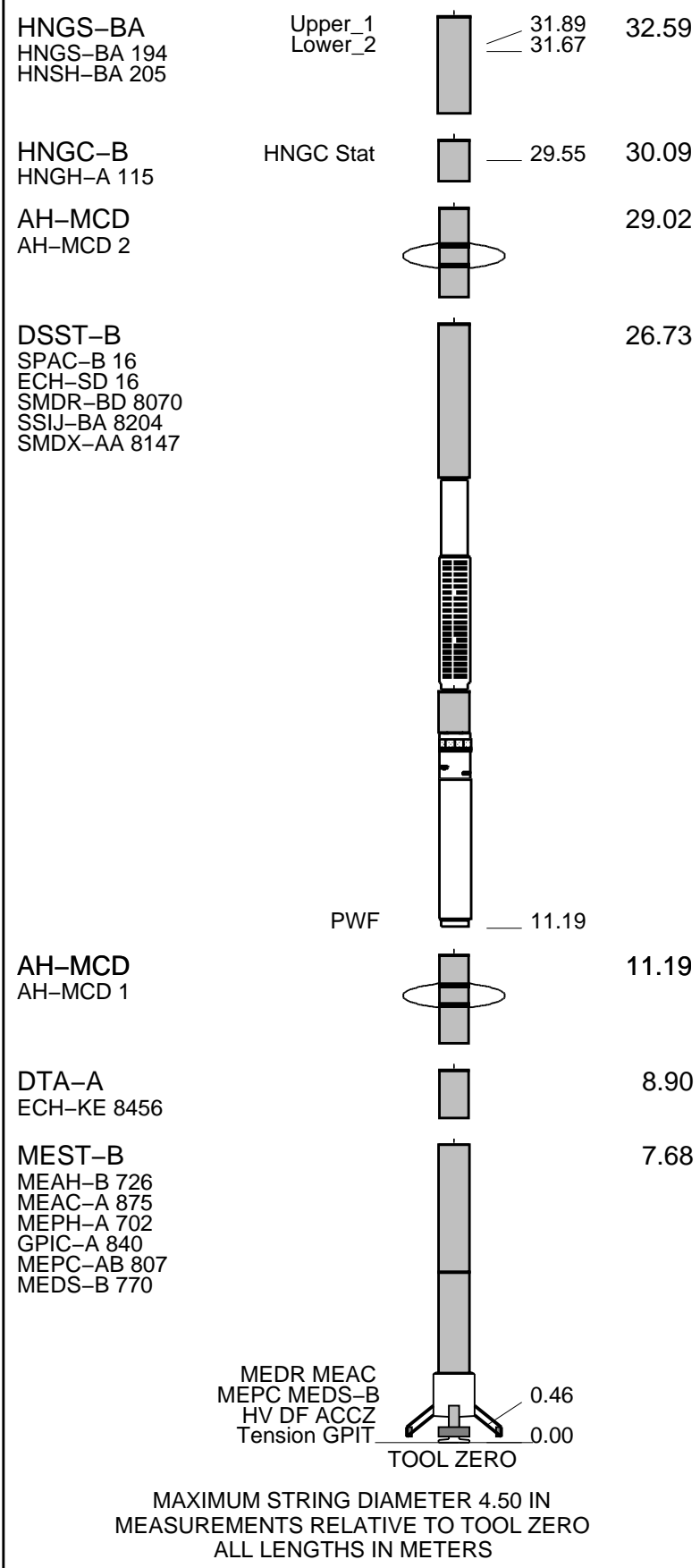
Hole 1383C was drilled for the purpose of installing a CORK; logs run to determine packer positions.
 Logs conducted to run experimental microbiology tool "DEBI-T" from JPL / USC.
 Primary objective of this run was to collect structural data, especially caliper data to be used for CORK packer depth picks.
 DSI was run with the following modes, as per client instructions:
 SAM1: Lower Dipole in Standard Frequency, Even Array, Receiver processing
 SAM2: Upper Dipole in Standard Frequency, Odd Array, Receiver processing
 SAM3: Stoneley in Standard Frequency, Odd Array, Receiver processing
 SAM4: P&S in Standard Frequency, Even Array, DDBHC (Depth-Derived Borehole Compensated) processing
 FMS was run with calipers close and EMEX off during the down log, as per standard practice.
 FMS calipers were opened after tagging TD during first up pass, but had to be closed and re-opened due to tool sticking.
 TD was tagged at 331.2mbsf and the up log was started before opening the calipers on the second pass.
 Calipers opened and EMEX applied at 330m during Pass #2. EMEX cut off at 66mbsf and calipers closed at 60mbsf during Pass #1.
 Tool initially had difficulty re-entering pipe (head was catching on bit), so calipers were closed and EMEX switched off lower during second up pass in order to facilitate re-entry; tool entered safely and without damage on second attempt.
 Logs were depth matched to the second up pass from the first run, which was taken to be the reference pass for this job.

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION: 19C0-187			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT	
GSR-U 616008 WITM (EDTS)-A	

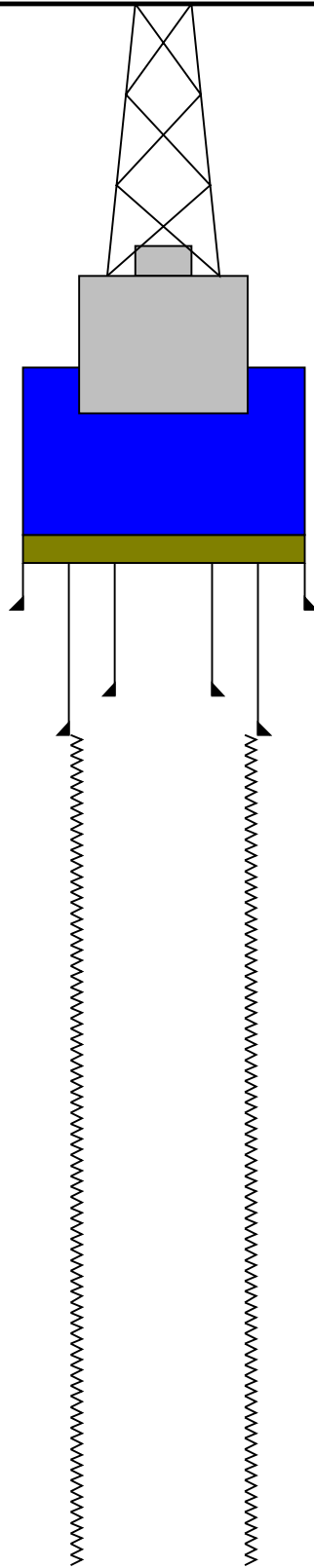
RUN 1	RUN 2
DOWNHOLE EQUIPMENT	
LEH-QT MP LEH-QT 301 EDTC-B EDTH-B 8528 EDTC-B 8529 EDTG-A/B	 MDSB_EDTC Mud Tempe CTEM Gamma Ray EFTB DIAG TelStatus EDTCB Ele
	34.57 35.46 33.50 32.93 34.57 32.59



Production String	(in) (m)	Well Schematic	(m) (in)	Casing String
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Kelly Bushing Elevation
Derrick Floor Elevation
Mean Sea Level

-4421.5
-4421.5
-4410.5



0.0
13.0
55.0
60.0

16.000
5.500
10.750

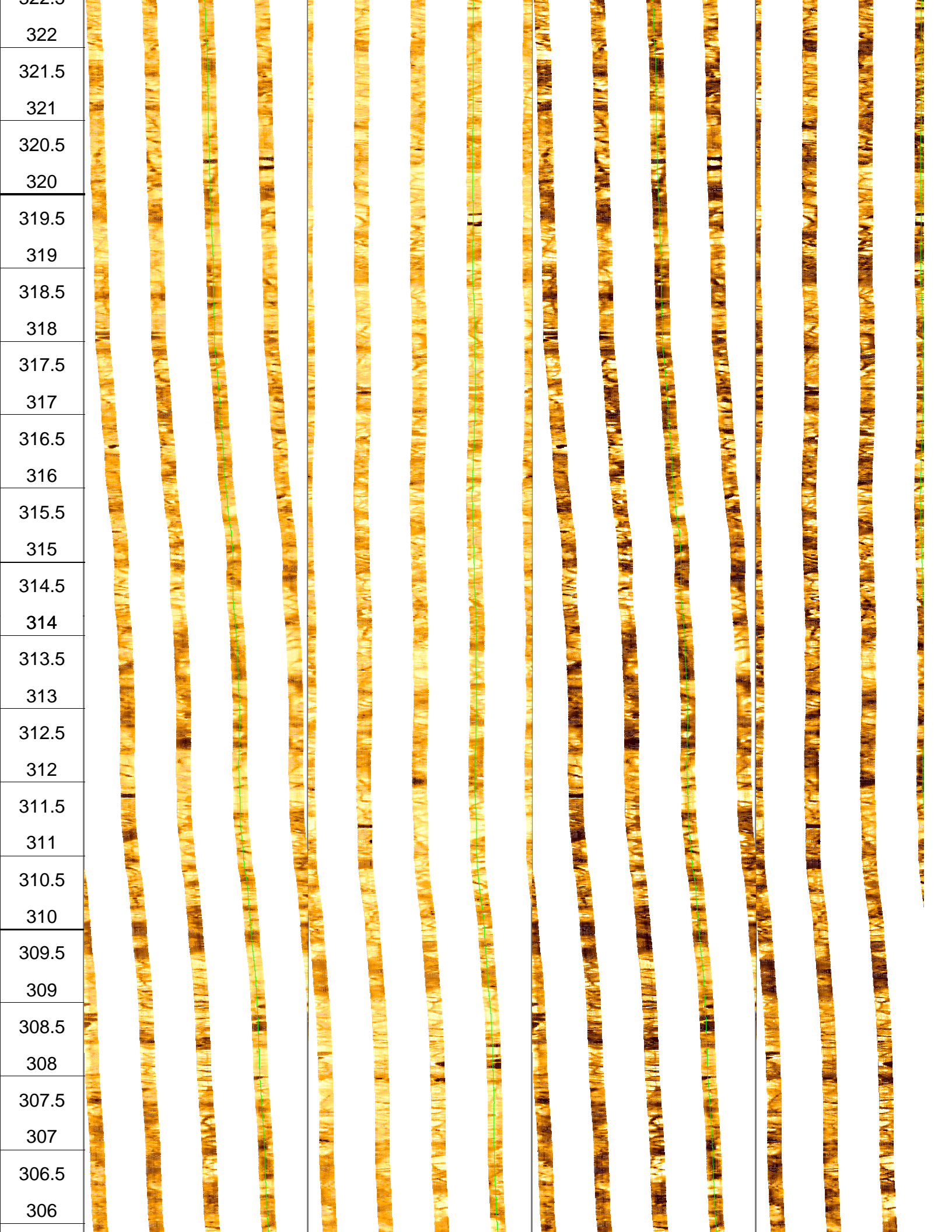
Sea Bed
Casing Shoe

Logging Bit
Casing Shoe

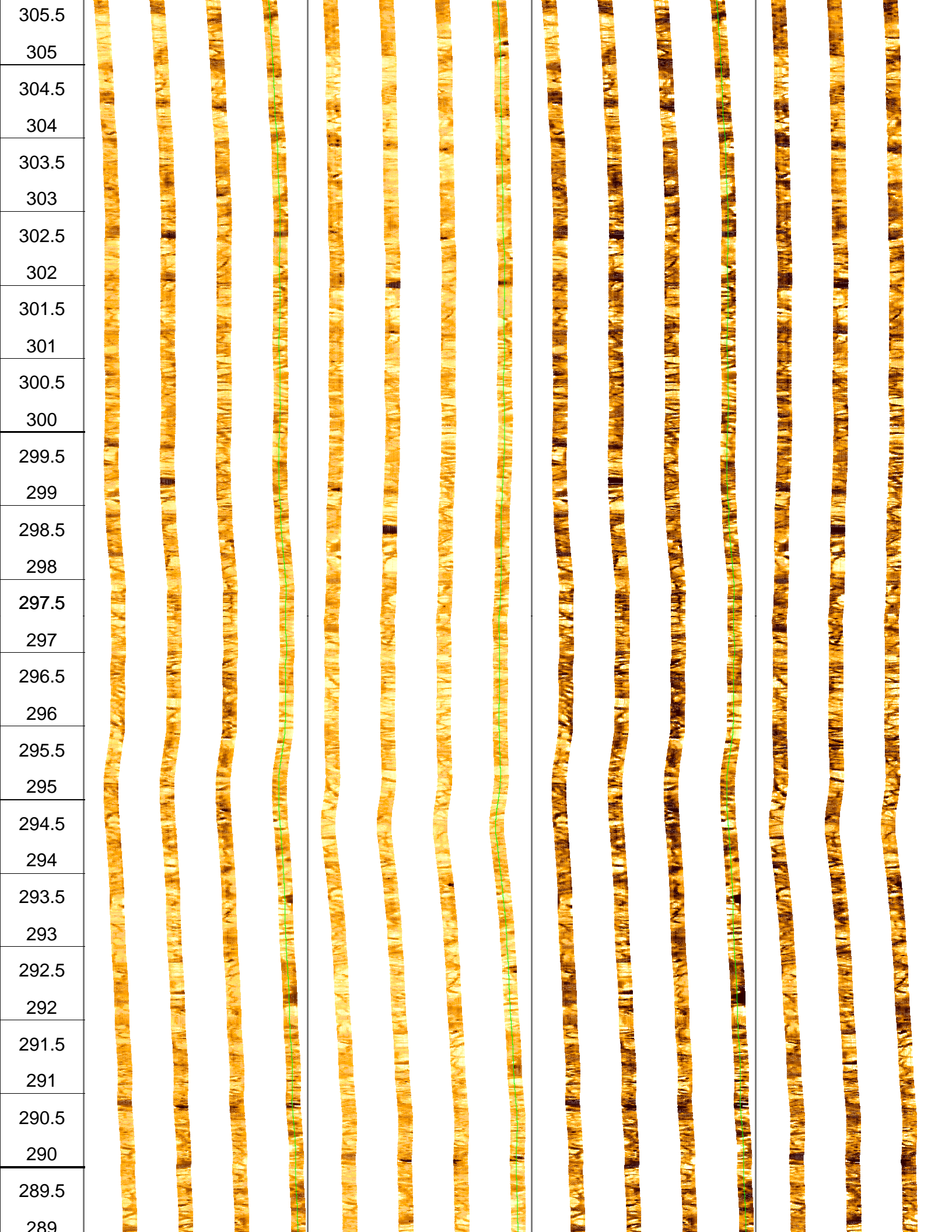
332.0 9.875

Total Depth - Driller

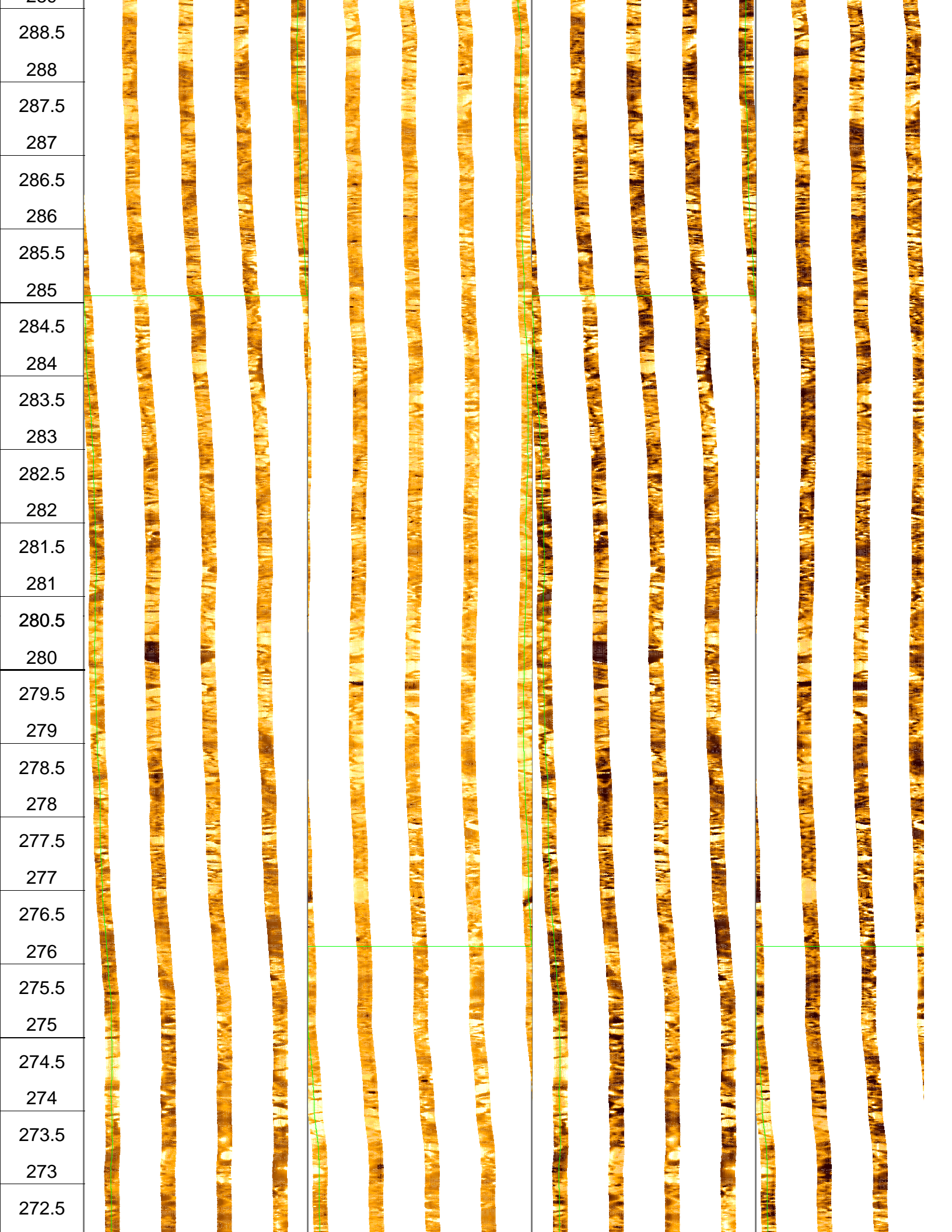




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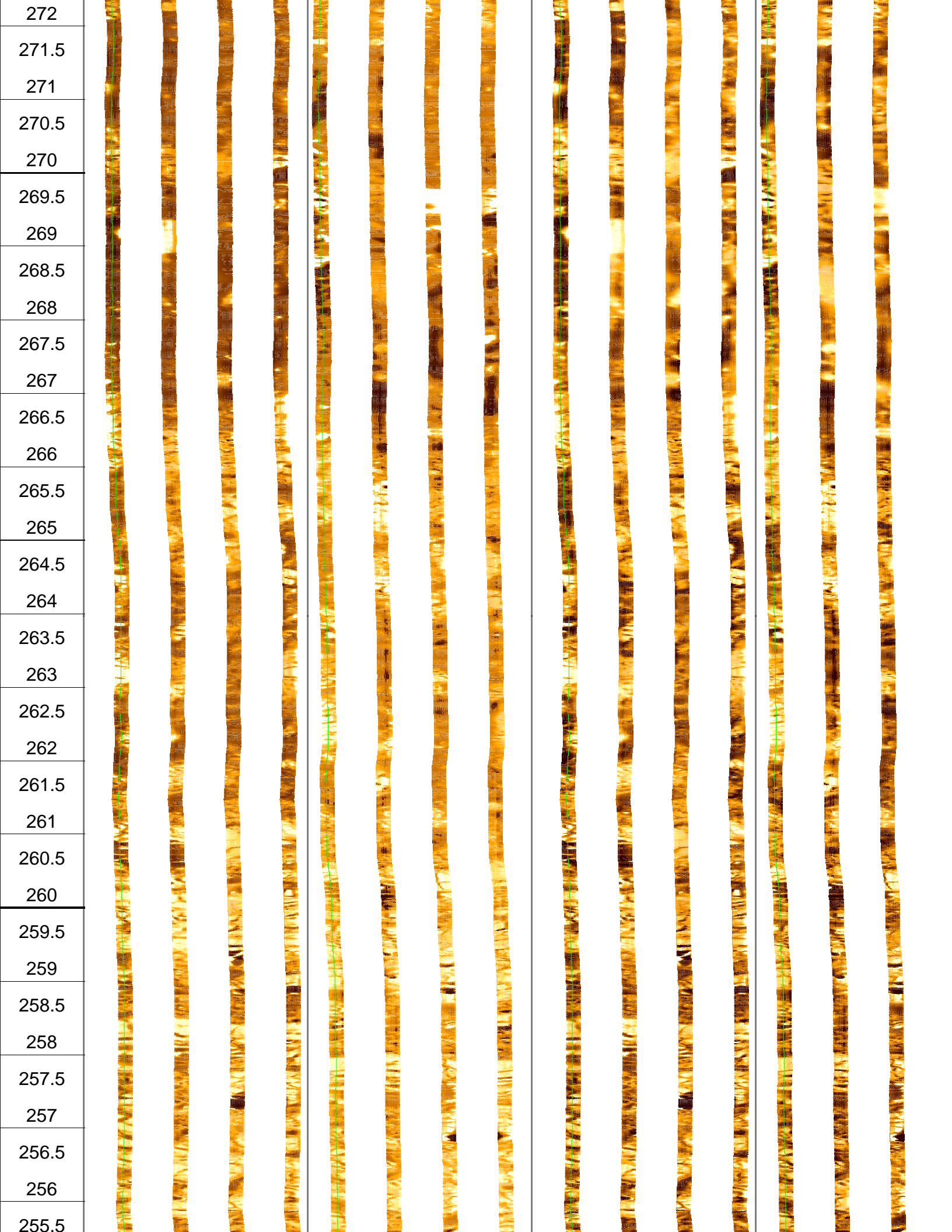
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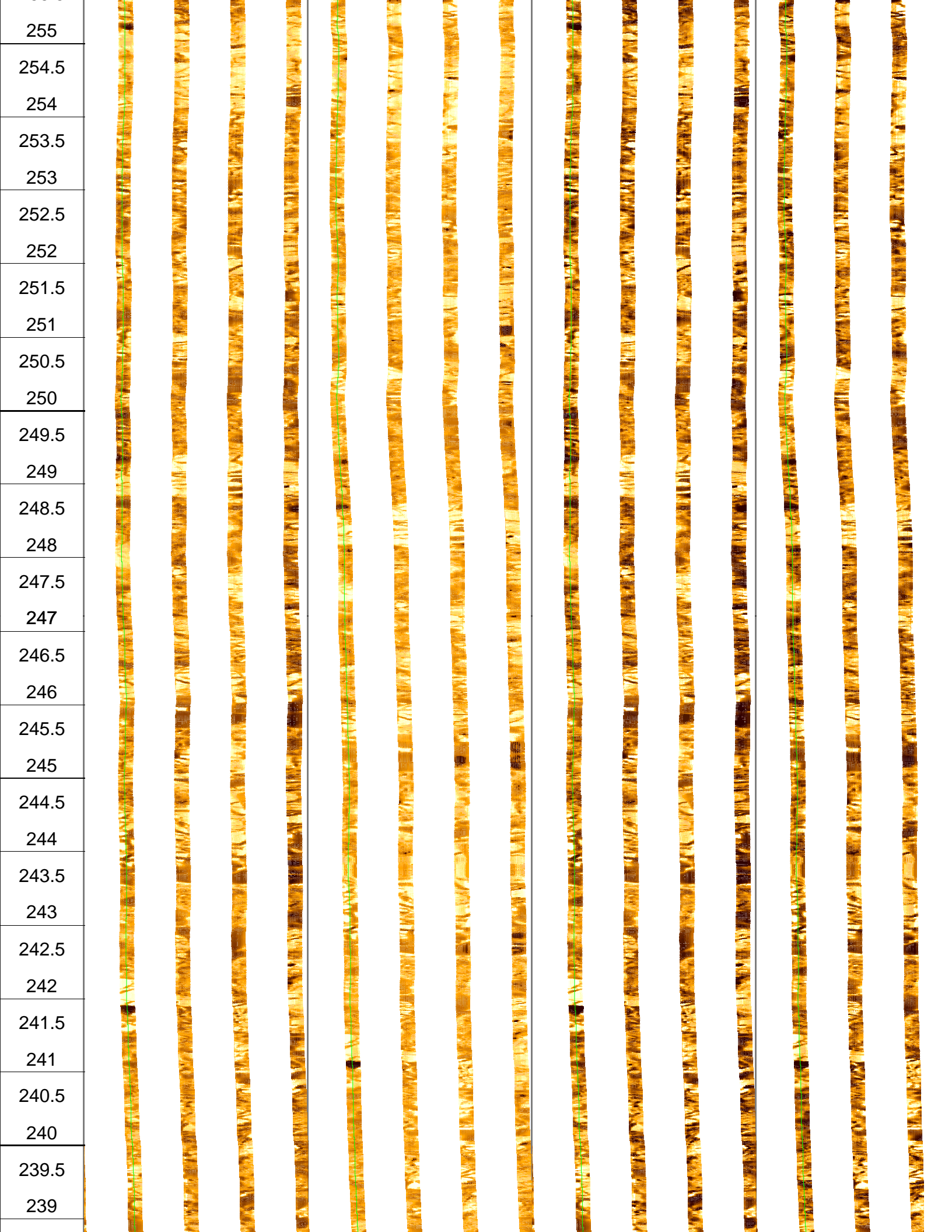
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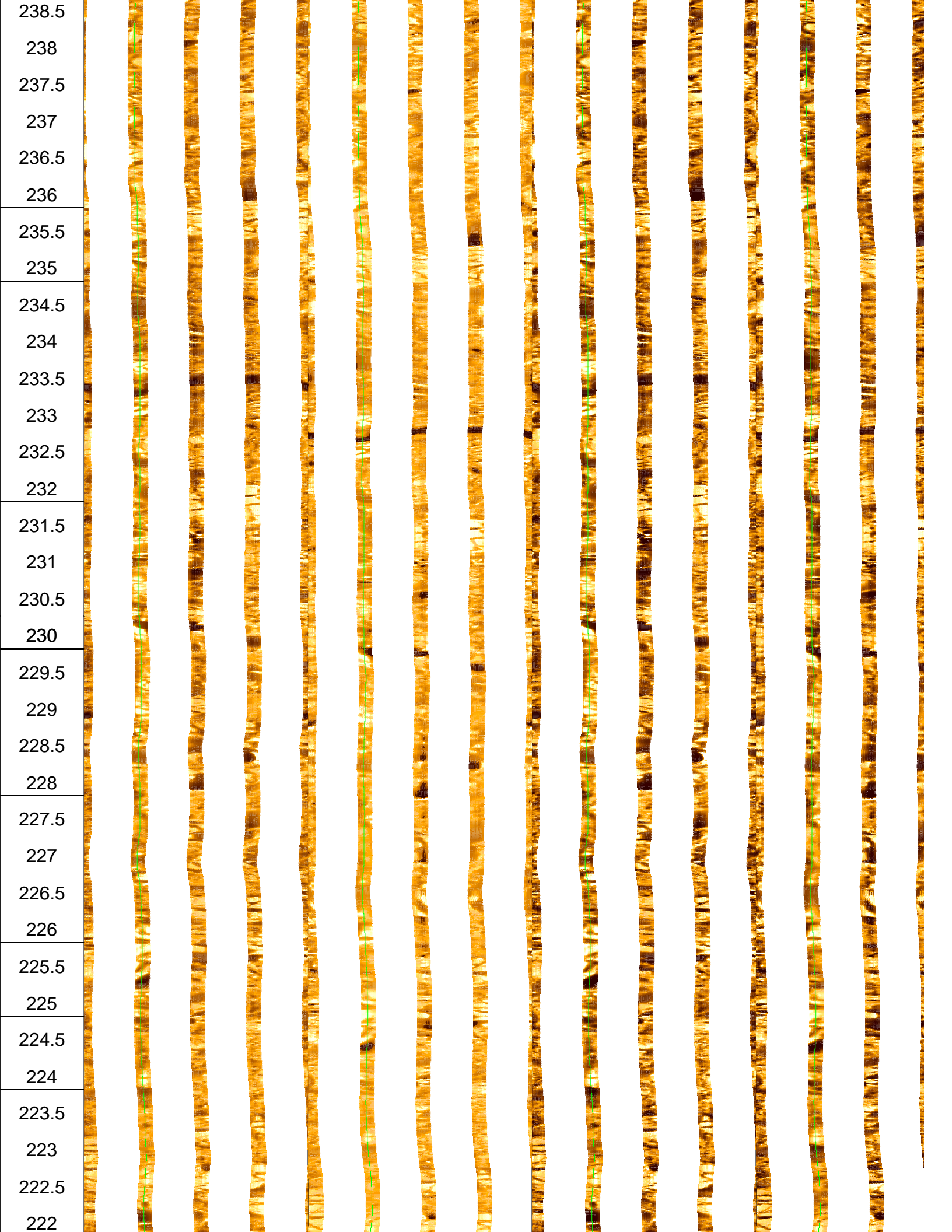
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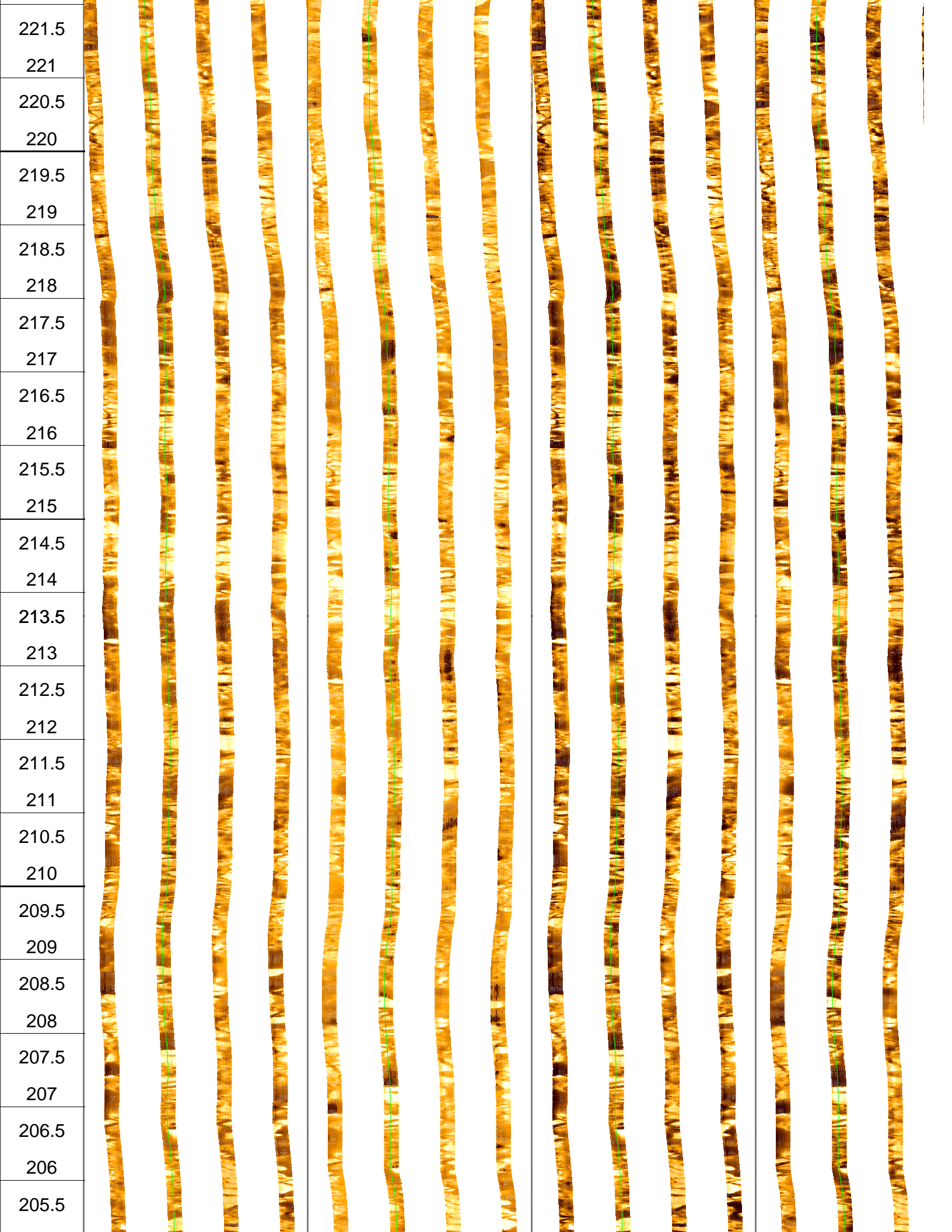
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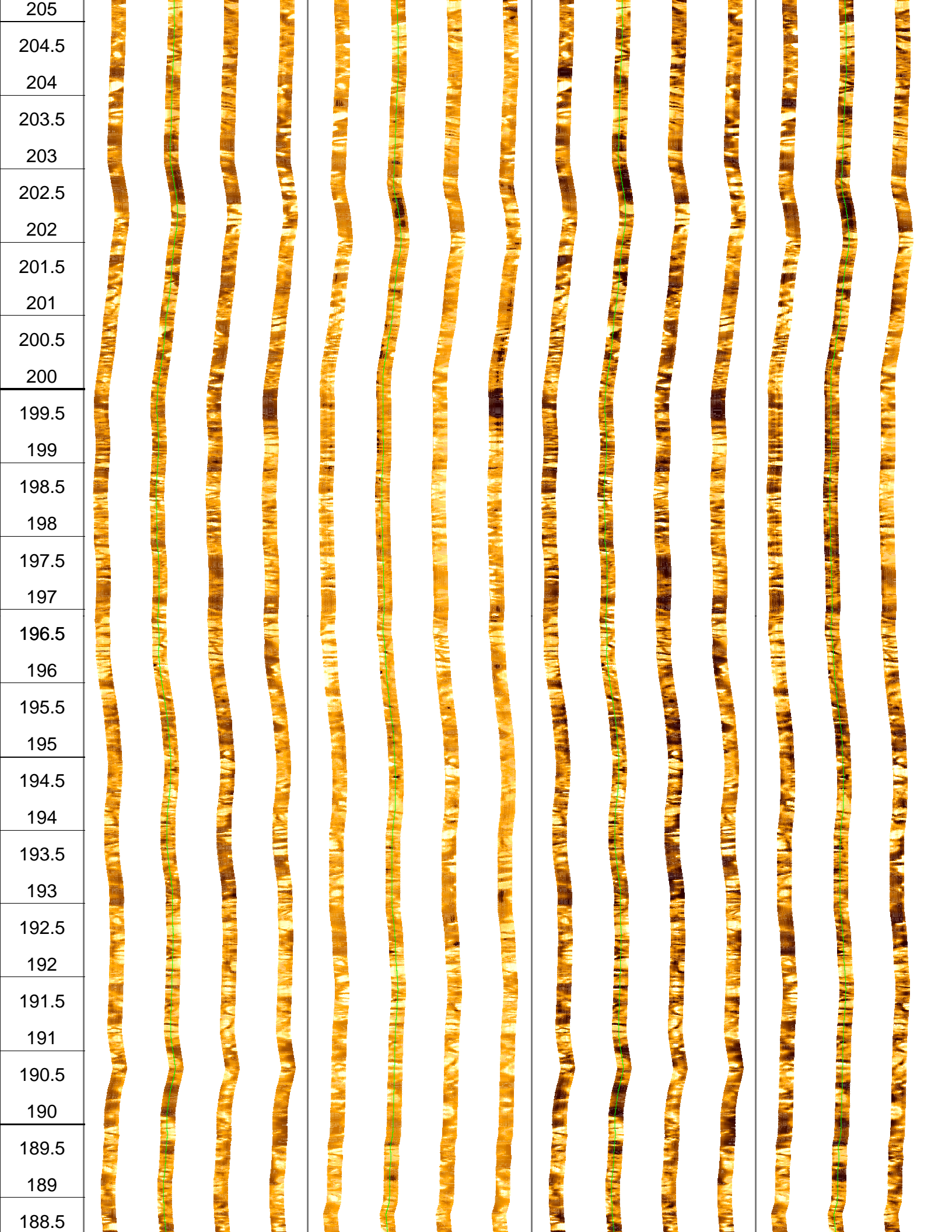
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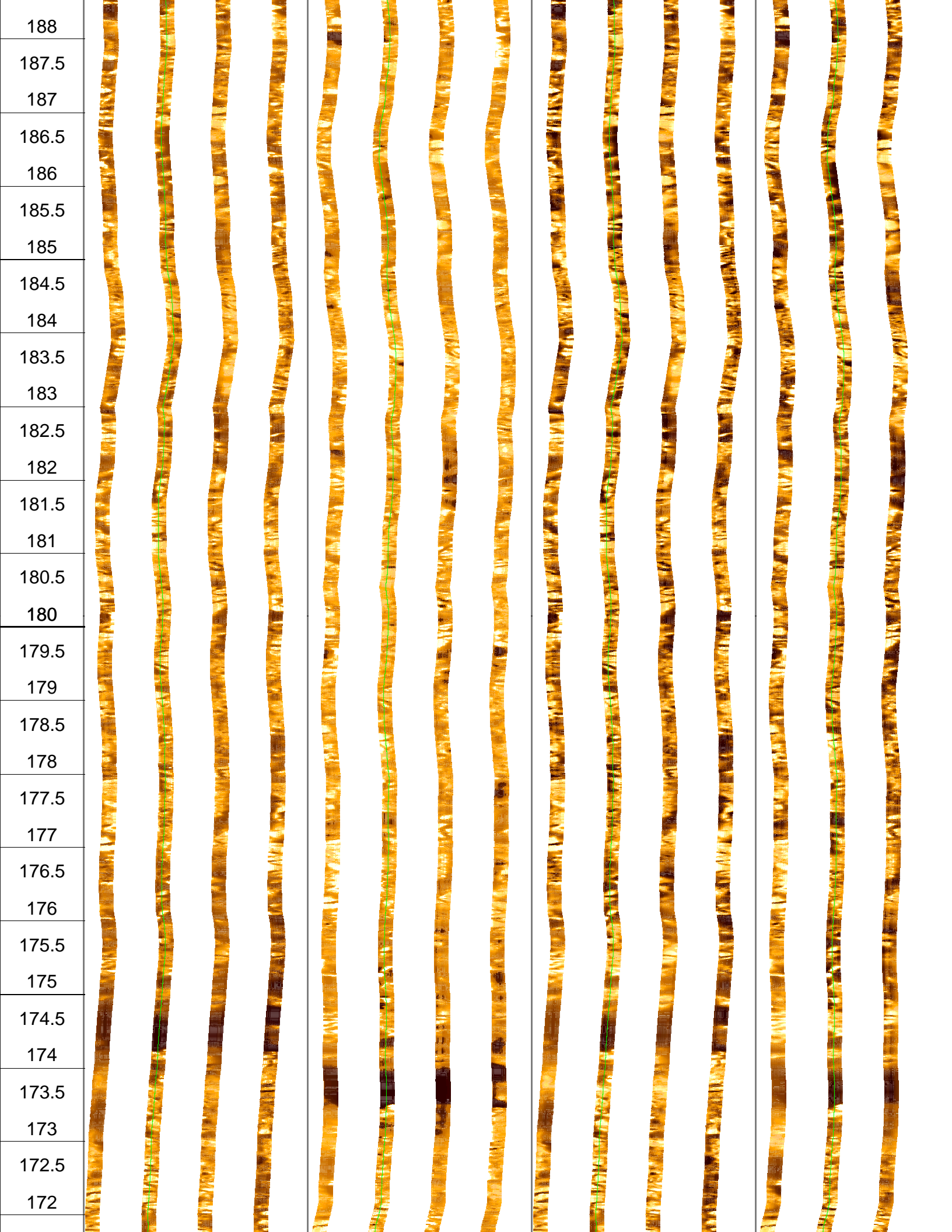
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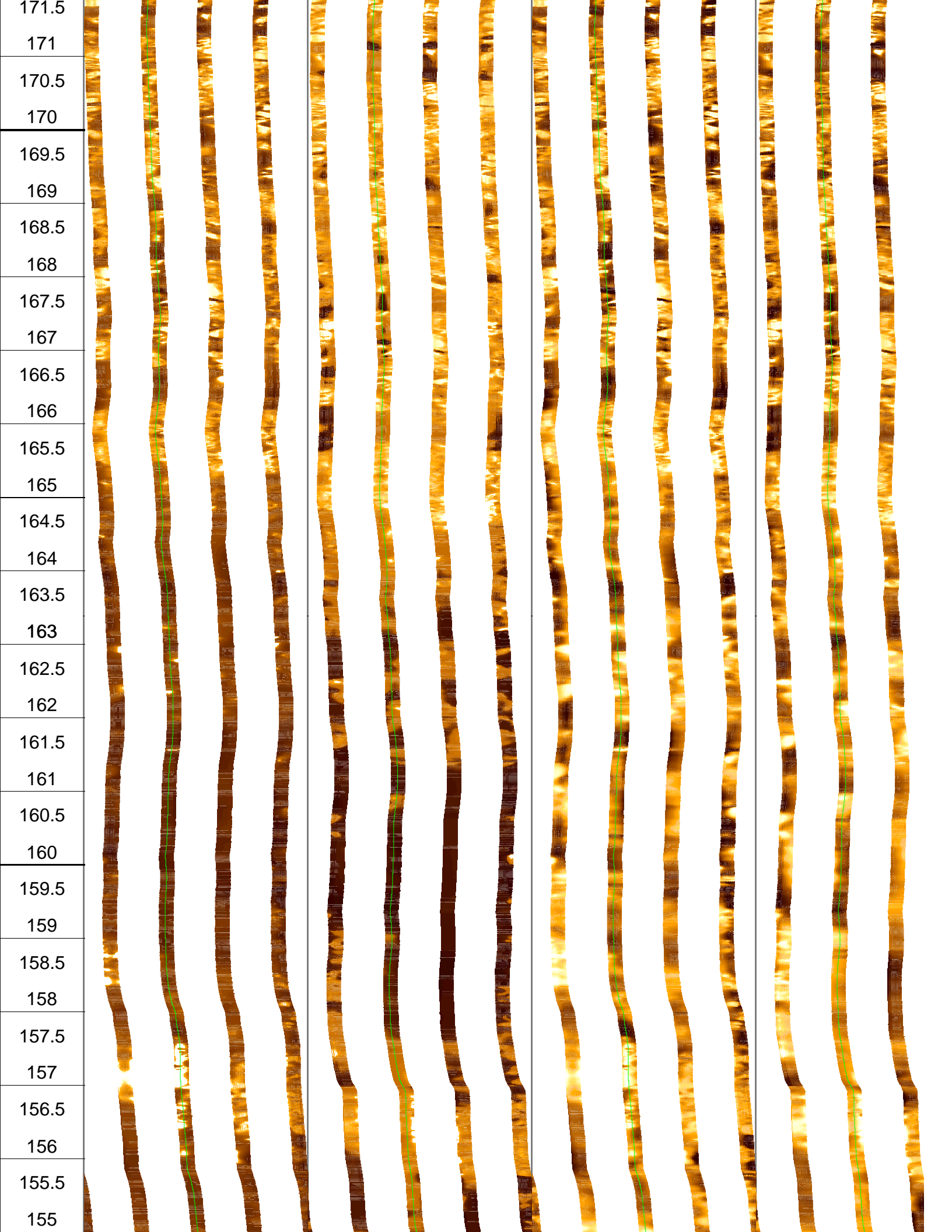
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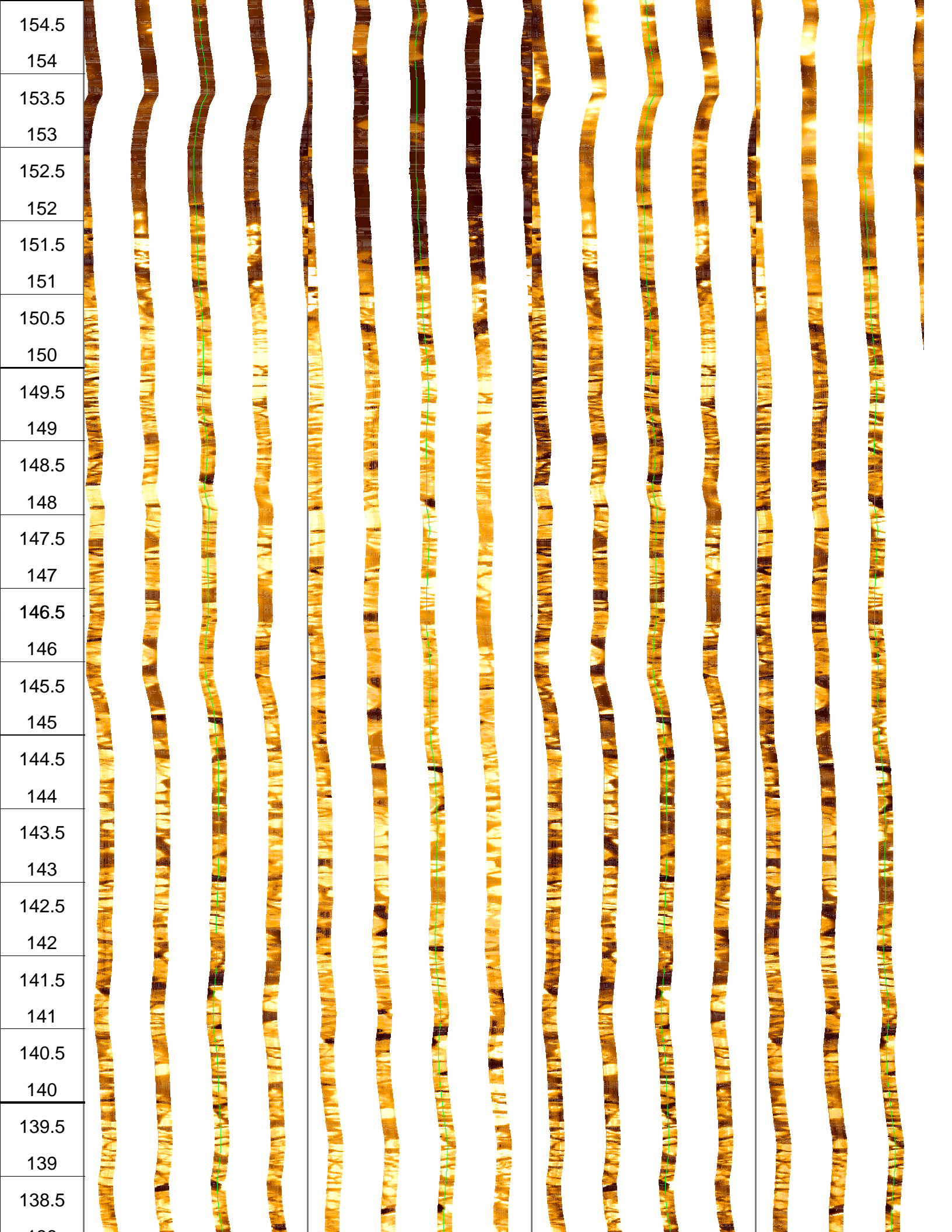
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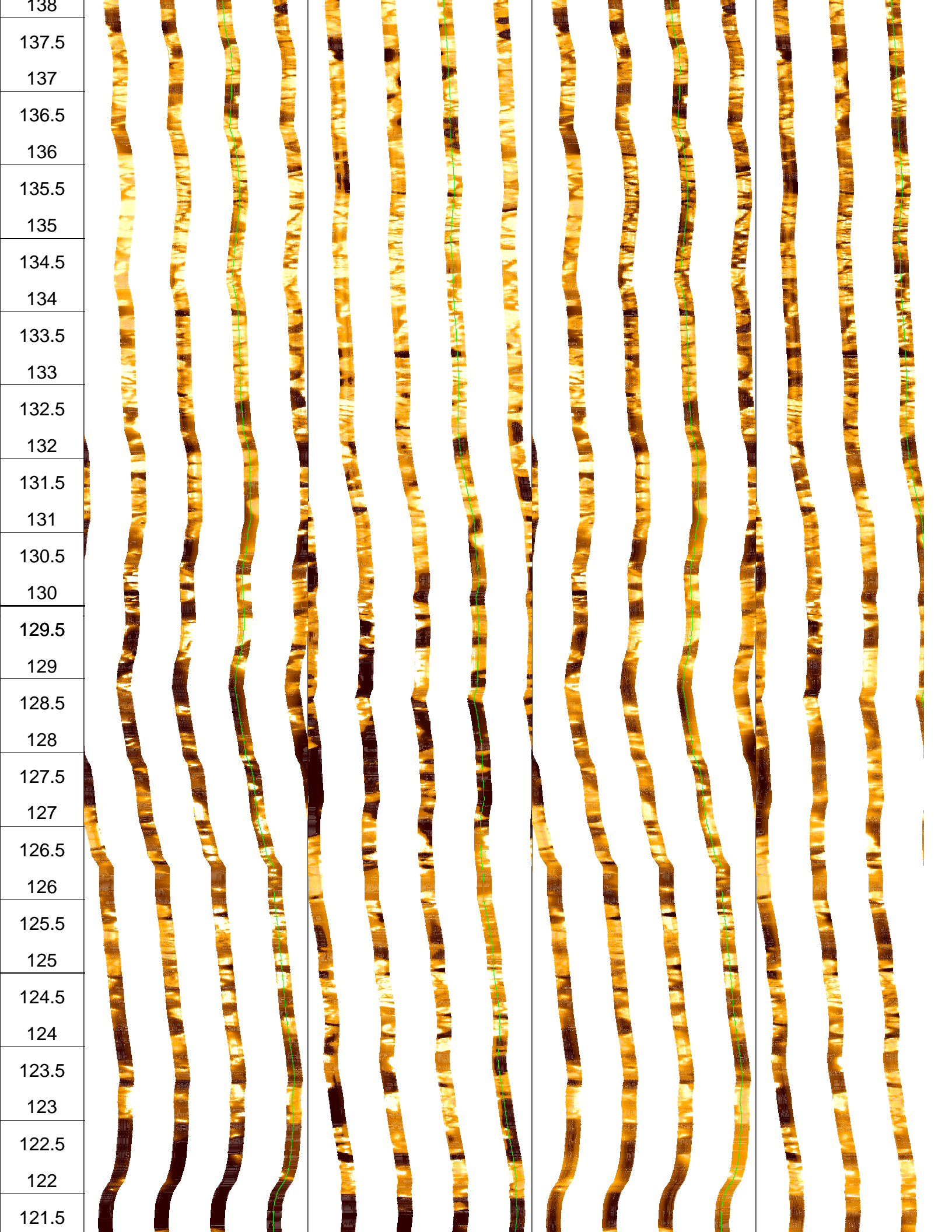
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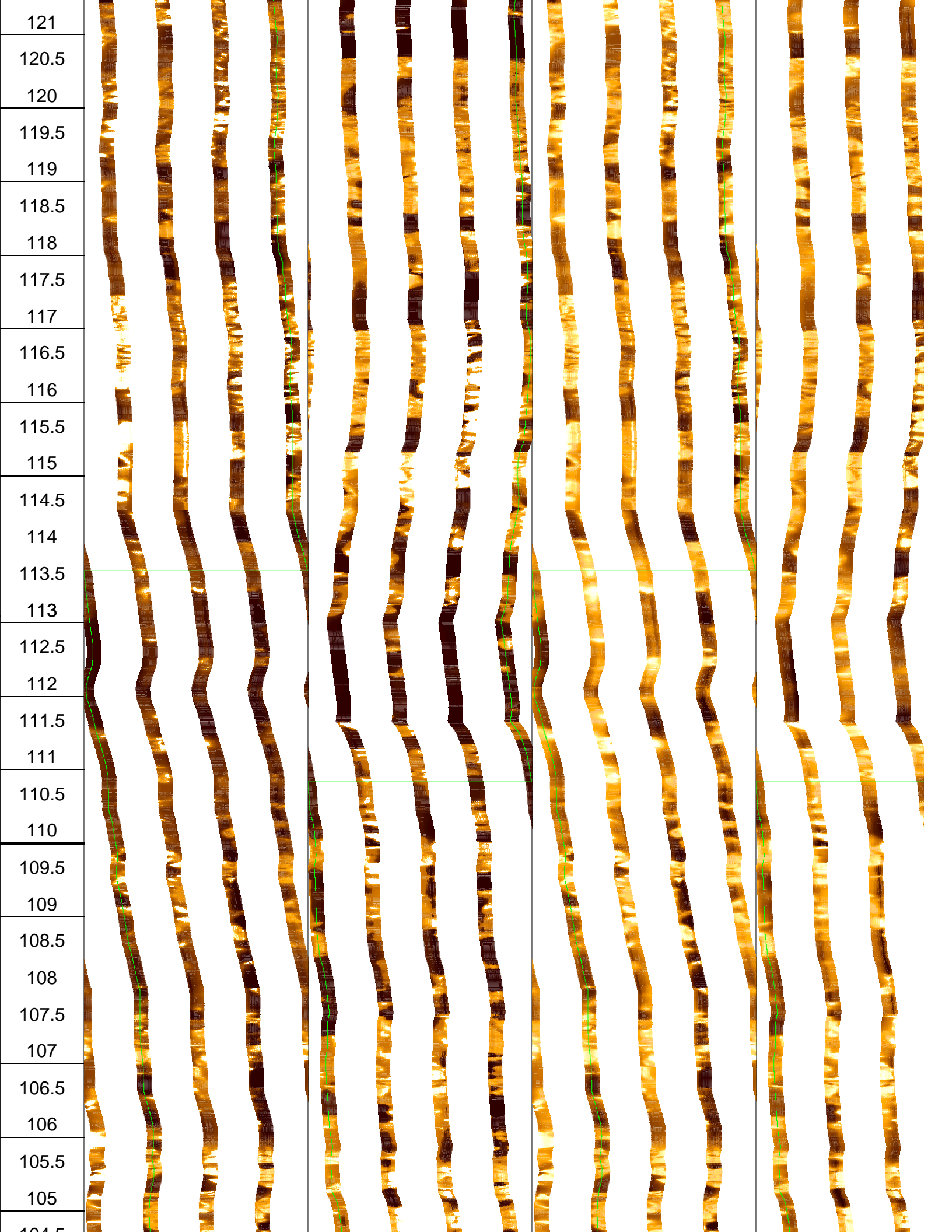
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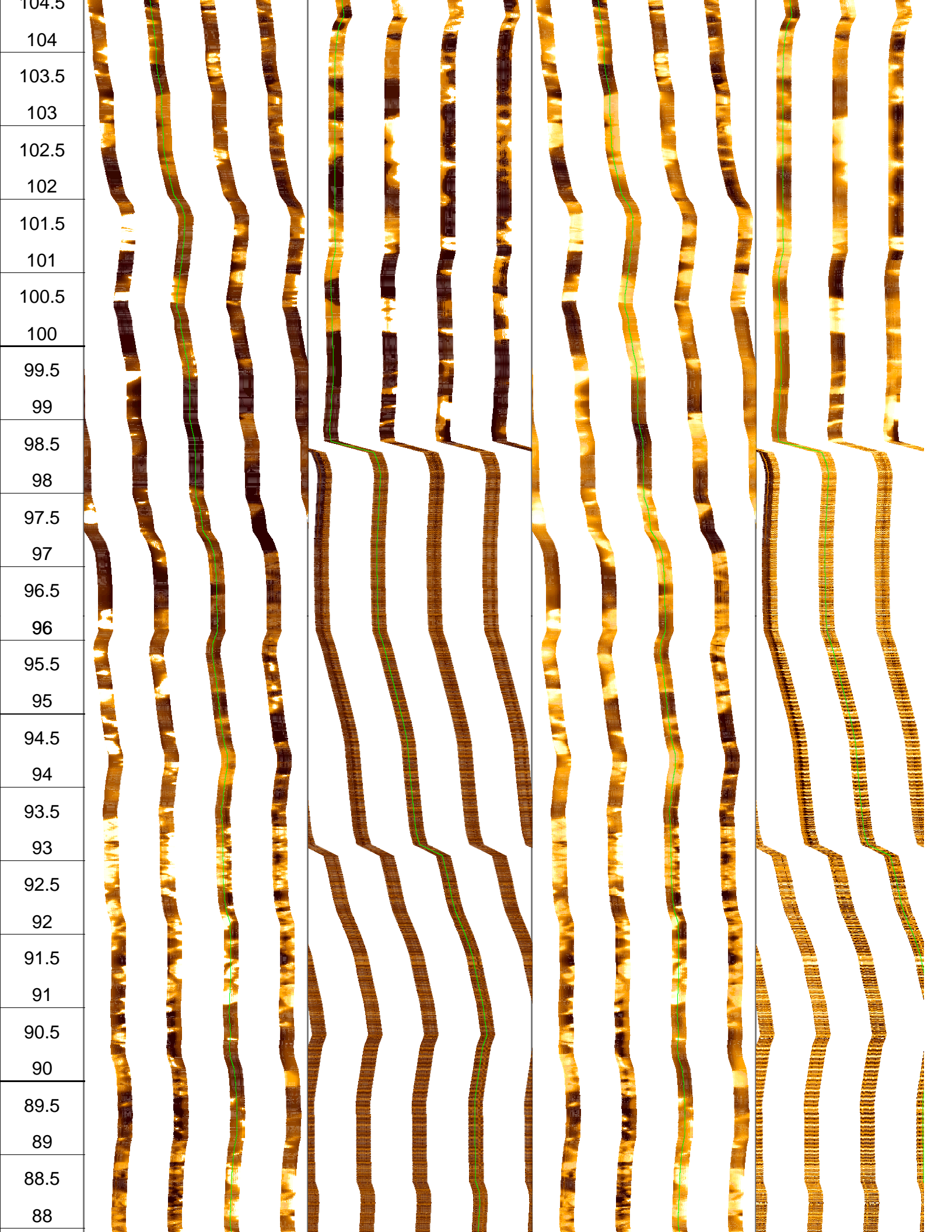
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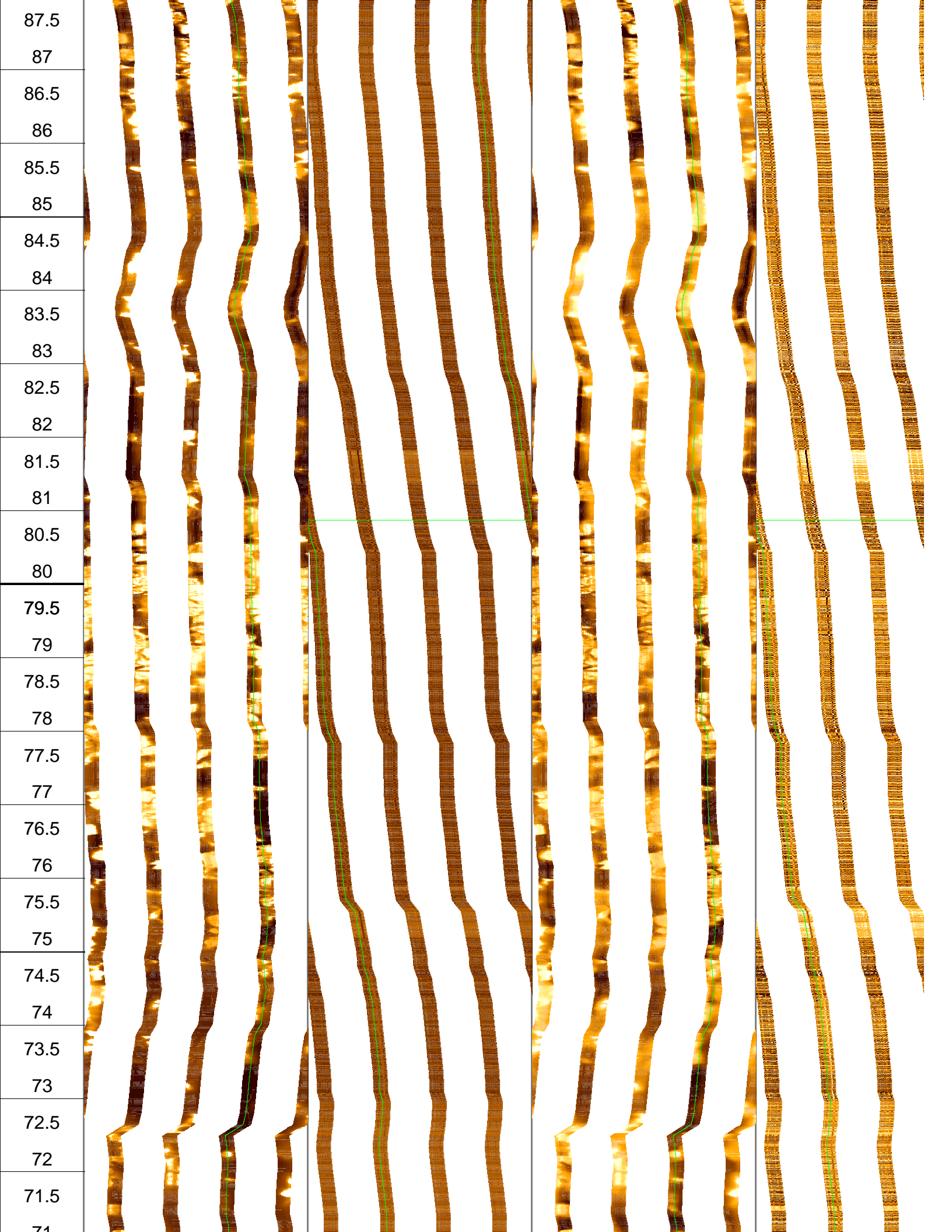
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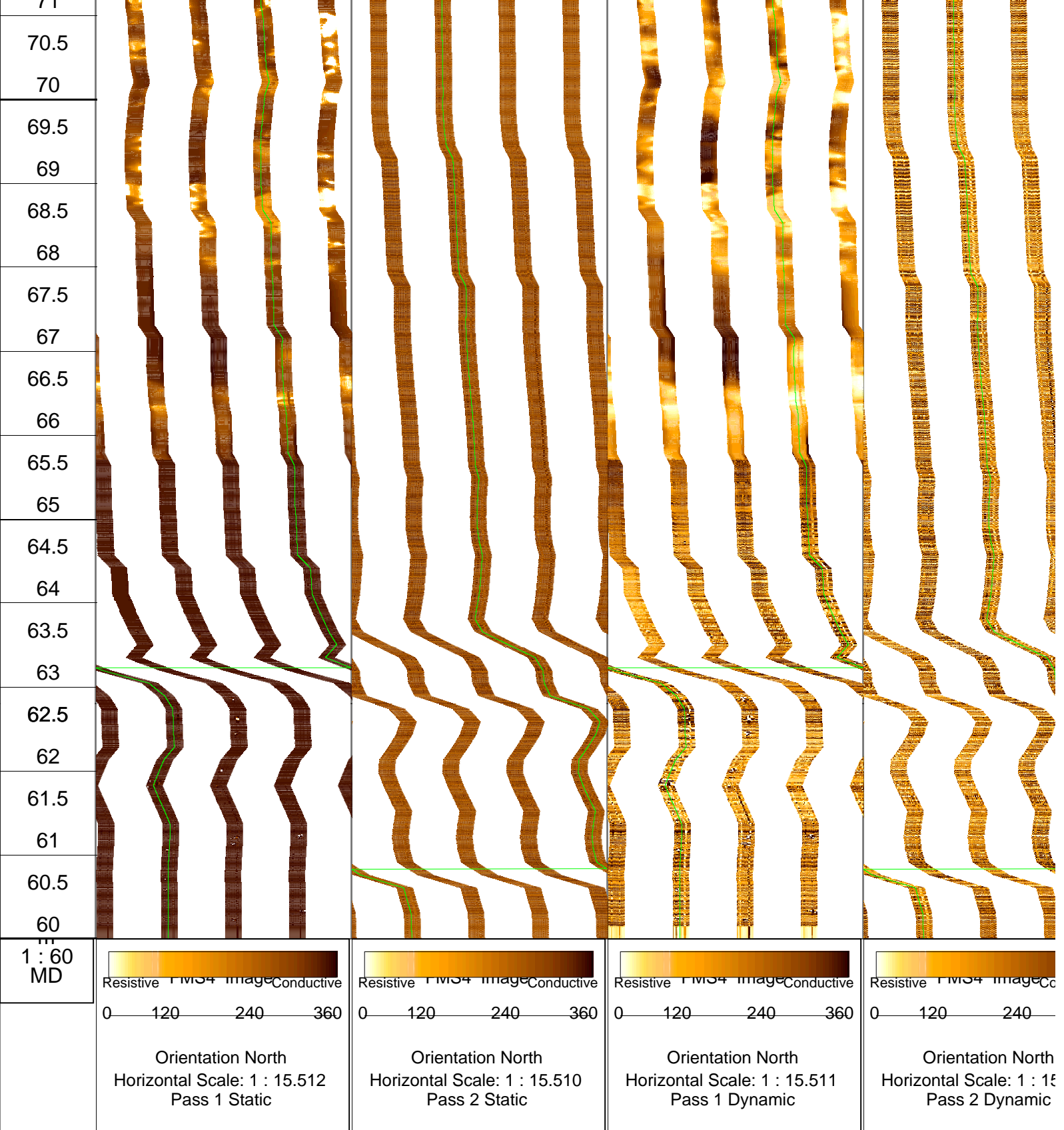
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Calibrations

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
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Micro Electrical Scanner – B (Slim) Wellsite Calibration – Caliper Calibration

Before: 25-Oct-2011 2:04

Caliper 1 Zero Measurement	12.00	N/A	12.06	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	12.00	N/A	12.10	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.19	N/A	15.24	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.19	N/A	15.39	N/A	N/A	N/A	IN

Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY

Before: 3-Nov-2011 17:07

TEMPERATURE REFERENCE :	N/A	N/A	20	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	3	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	743	N/A	N/A	N/A	

Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY

Before: 3-Nov-2011 17:07

TEMPERATURE REFERENCE :	N/A	N/A	23	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	9	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	507	N/A	N/A	N/A	

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check

Master: 15-Sep-2011 14:01 Before: 3-Nov-2011 17:16 After: 3-Nov-2011 23:20

Na 511 Peak Loc	40.00	39.54	39.70	39.69	-0.002346	1.000	
Na 511 Peak Res	15.50	16.51	15.16	15.04	-0.1195	2.000	%
High Voltage	1150	1190	1179	1177	-2.204	N/A	V
Na 1785 Peak Loc	142.6	141.9	142.6	142.0	-0.6493	7.000	
Na 1785 Peak Res	8.500	8.871	7.721	8.436	0.7150	2.000	%
Temperature	15.50	35.19	30.01	29.00	-1.011	N/A	DEGC
Na Count Rate	45.00	22.03	19.93	19.01	-0.9185	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check

Master: 15-Sep-2011 14:01 Before: 3-Nov-2011 17:16 After: 3-Nov-2011 23:20

Na 511 Peak Loc	40.00	39.52	39.46	39.62	0.1623	1.000	
Na 511 Peak Res	15.50	16.45	15.61	16.48	0.8699	2.000	%
High Voltage	1150	1121	1111	1110	-0.9961	N/A	V
Na 1785 Peak Loc	142.6	142.5	142.9	142.5	-0.3818	7.000	
Na 1785 Peak Res	8.500	8.764	7.834	8.489	0.6548	2.000	%
Temperature	15.50	35.72	31.24	30.68	-0.5593	N/A	DEGC
Na Count Rate	45.00	22.83	20.04	19.20	-0.8319	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2

Master: 15-Sep-2011 14:01 Before: 3-Nov-2011 17:16 After: 3-Nov-2011 23:20

Coincidence Count Rate Ratio	1.000	0.9670	0.9932	0.9903	-0.002906	0.05000	
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Micro Electrical Scanner – B (Slim) / Equipment Identification

Primary Equipment:

MEST Sonde – B	MEDS – B	770
MEST Preamplifier Cartridge – AB	MEPC – AB	807
GPIT Cartridge – A	GPIC – A	840
MEST Acquisition Cartridge – A	MEAC – A	875

Auxiliary Equipment:

MEST-B Preamplifier Cartridge Housing	MEPH – A	702
MEST Acquisition Cartridge Housing (Slim)	MEAH – B	726

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment:

HNGC Cartridge	HNGC – B	300
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Auxiliary Equipment:

HNGC Housing	HNGH – A	115
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Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:
HNGS Sonde

HNGS – BA 194

Auxiliary Equipment:
HNGS Sonde Housing
Gamma Source Radioactive

HNSH – BA 205
GSR – U 616008

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		39.54	Master		16.51	Master		1190
Before		39.70	Before		15.16	Before		1179
After		39.69	After		15.04	After		1177
	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		141.9	Master		8.871	Master		35.19
Before		142.6	Before		7.721	Before		30.01
After		142.0	After		8.436	After		29.00
	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		22.03						
Before		19.93						
After		19.01						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 15-Sep-2011 14:01			Before: 3-Nov-2011 17:16			After: 3-Nov-2011 23:20		

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		39.52	Master		16.45	Master		1121
Before		39.46	Before		15.61	Before		1111
After		39.62	After		16.48	After		1110
	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		142.5	Master		8.764	Master		35.72
Before		142.9	Before		7.834	Before		31.24
After		142.5	After		8.489	After		30.68
	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		22.83						
Before		20.04						
After		19.20						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 15-Sep-2011 14:01			Before: 3-Nov-2011 17:16			After: 3-Nov-2011 23:20		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9670
Before		0.9932

After		0.9903
0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 15-Sep-2011 14:01		
Before: 3-Nov-2011 17:16		
After: 3-Nov-2011 23:20		

Company: **Lamont Doherty**

Schlumberger

Well: **Expedition 336, Site U1383C**

Field: **North Pond**

Rig: **JOIDES Resolution**

Country: **USA**

FMS Micro-Image