Company: Lamont Doherty

Well: ODP Leg 196, Site 1173B and 1173C

Field: Nankai Trough

Country: Japan Ocean: Pacific

Company: Lamont Doherty
Well: ODP Leg 196, Site 1173B and 1
Location: Offshore Japan
Field: Nankai Trough
Country: Japan

Schlumberger

RAB / ADN
Scale 1: 200 Measured Depth
Recorded Data

Location

Total depth:	5539 m
Spud date:	15 May 2001
Runs:	1 To 2

Elevation

K.B.	11.2 m
G.L.	-4790.7 m
D.F.	11.2 m

Permanent datum:	Mean Sea Level	Elev.:	0 m
Log measured from:	Drill Floor	11.2 m	above Perm. datum
Depth reference:	Driller's Depth		

API serial no.		Longitude	Latitude
		E 135° 01.5085'	N 32° 14.6634'

Depth logged:	4922.5 m To 5538.3 m	Mag decl:	-6.16
Date logged:	15 May 01 To 18 May 01	Mag dip:	45.40

Other services:

Bore hole record

Hole size	from	to
9.875 in.	4925.4 m	5539 m

Casing record

Size	Density	from	to
20 in.	94.0 lbm/ft	4801.9 m	4922 m

Mud record

Type	from	to
Sea Water	4801.9 m	5539 m

Borehole deviation record

Min	Max	from	to

Surface equipment		Software record	
Unit	None	IDEAL Wis	id6_1c_08
Depth system	PDA	SPM	6.1C-08
		LWD	5.0B/4.0B
		MWD	6.2B-01

IDEAL
services from
Anadrill

Bit Run Summary

Run number		1	2
Bit size	in.	9.875	9.875
Bit start depth	m	4925.4	4801.9
Bit end depth	m	5539	4976.9
Top interval logged	m	4925.4	4801.9
Bottom interval logged	m	5538.3	4976.2
Begin log: time		15:06:42	23:20:10
Begin log: date		16 May-01	17 May-01
End log: time		15:38:26	05:00:53
End log: date		17 May-01	18 May-01
Mud data			
Depth	m	4925.4	4801.9
Type		Seawater	Seawater
Mud weight	ppg	8.5	8.5
Solids			
Chlorides			
Rm			
Rmf			
Rmc			

Potassium											
Environmental data											
GR											
Mud weight	ppg	8.5	8.5								
Bit size	in.	9.875	9.875								
Resistivity											
Neutron porosity											
Hole Size	in.	9.875	9.875								
Mud weight	ppg	8.5	8.5								
Temperature	℃	31.37	7.84								
Mud salinity											
Formation salinity											
Recording rate 1	SEC	GR/Res/10									
Recording rate 2	SEC	Neu/Den/10									
Filtering GR		3 pt									
Filtering density		3 pt									
Filtering Neutron		3 pt									
Company representative		Dave Goldberg	Sanny Saito								
Anadrill personnel		N. Thaiprasert	Gary Ong								

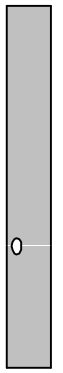
OTHER SERVICES FOR RUN 1	OTHER SERVICES FOR RUN 2	OTHER SERVICES FOR RUN
This is for Site 1173-B.	This is for Site 1173-C.	

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2	REMARKS: RUN NUMBER
Depth reference is Driller's depth. Sensor offsets and tools' serial number are described on the toolsketch below. Gamma Ray measurement is corrected for mud weight and bit size. RING_resistivity measurement are environmentally corrected. BIT_resistivity is good for qualitative interpretation only. Neutron Porosity is environmentally corrected for mud salinity, matrix density, temperature, bit size and tool size. Maximum bottom hole temperature was 31.37℃. ROP was slowed down to approximately 30 m/hr from 5152 m to 5252 m. Total depth was 5539 m.	Depth reference is Driller's depth. Sensor offsets and tools' serial number are described on the toolsketch below. Gamma Ray measurement is corrected for mud weight and bit size. RING_resistivity measurement are environmentally corrected. BIT_resistivity is good for qualitative interpretation only. Neutron Porosity is environmentally corrected for mud salinity, matrix density, temperature, bit size and tool size. Maximum bottom hole temperature was 7.84℃. Total depth was 4976 m.	

EQUIPMENT DESCRIPTION

RUN1	RUN2	RUN

DOWNHOLE EQUIPMENT



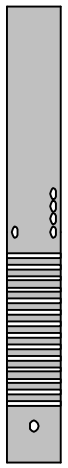
ADN-BA-6.75 in. 26.00

S/N 119

NSR-M A0149

GSR-J A2097

Neutron F	24.26
Neutron N	24.10
Density S	23.24
Density L	23.14
UltraSoni	22.76
R-O Port	22.00



ISONIC-6.75 in. 19.98

S/N 642

RX array	16.62
R-O port	16.22
Xmitter	13.18

PowerPulse-6.75 in. 12.38

S/N 282

D&I	8.20

Shallow	2.53
Medium	2.41
Deep	2.23
Ring Res	2.05
R-O port	1.92
GR	1.70

RAB6-BA-6.75 in. 4.03

S/N 012

Bit Res	0.60

Bit Sub 1.03

	0.00

Bit-Mill Tooth 0.27

MAXIMUM STRING DIAMETER 9.875 in.

ALL LENGTHS IN METERS

DOWNHOLE EQUIPMENT

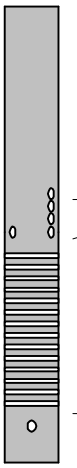
ADN-BA-6.75 in. 26.00

S/N 119

NSR-M A0149

GSR-J A2097

Neutron F	24.26
Neutron N	24.10
Density S	23.24
Density L	23.14
UltraSoni	22.76
R-O Port	22.00



ISONIC-6.75 in. 19.98

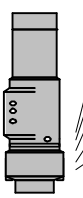
S/N 642

RX array	16.62
R-O port	16.22
Xmitter	13.18

PowerPulse-6.75 in. 12.38

S/N 282

D&I	8.20



Shallow	2.53
Medium	2.41
Deep	2.23
Ring Res	2.05
R-O port	1.92
GR	1.70

RAB6-BA-6.75 in. 4.03

S/N 012

Bit Res	0.60

Bit Sub 1.03

	0.00

Bit-Mill Tooth 0.27

MAXIMUM STRING DIAMETER 9.875 in.

ALL LENGTHS IN METERS

IDEAL Version: ID6_1C_08

IDF

RAB id6_1c_08

Format: RAB ADN 1:200 Vertical Scale: 1:200 Graphics File Created: 19-May-2001 19:46

PIP SUMMARY

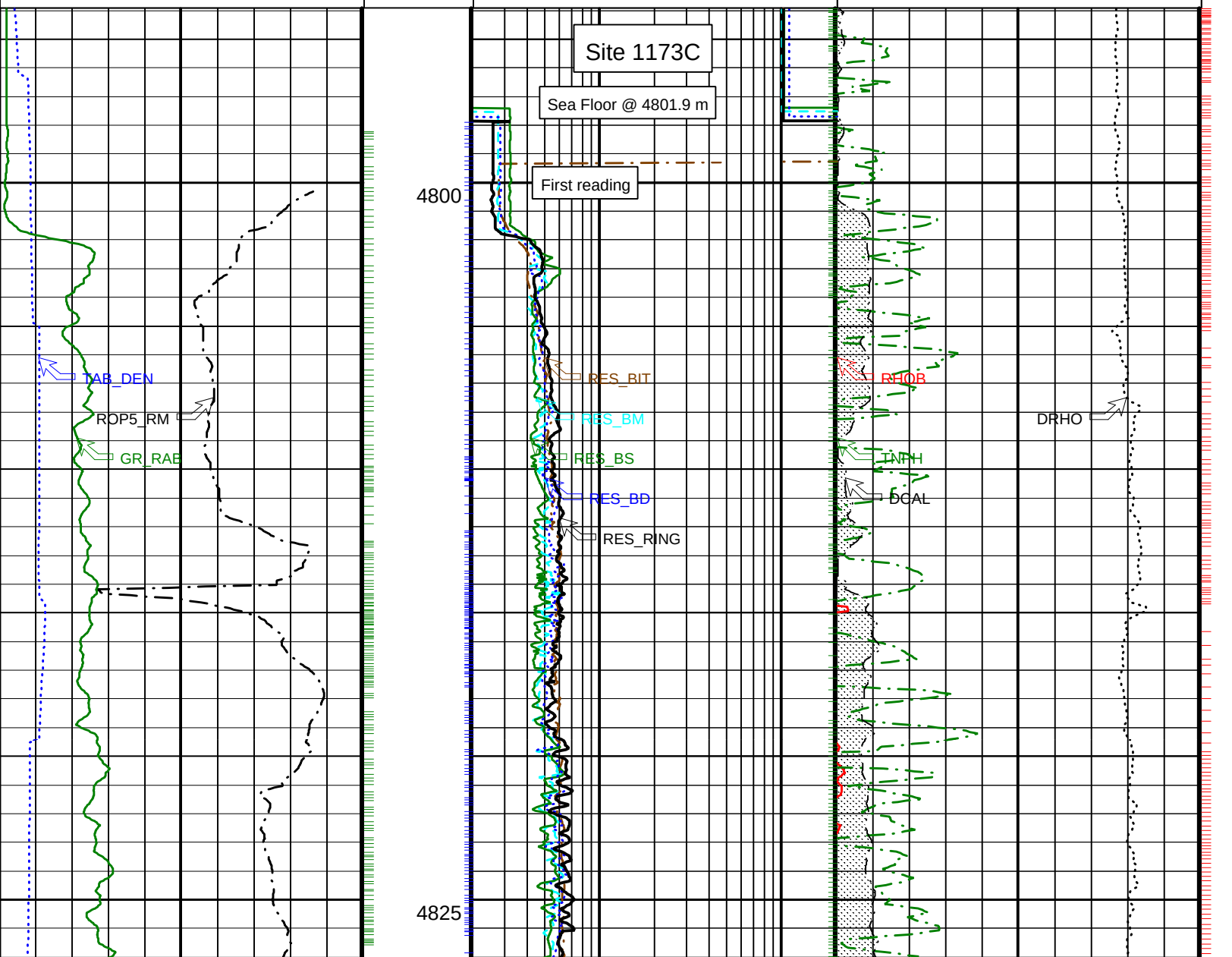
Density Ticks, 0.1-ft

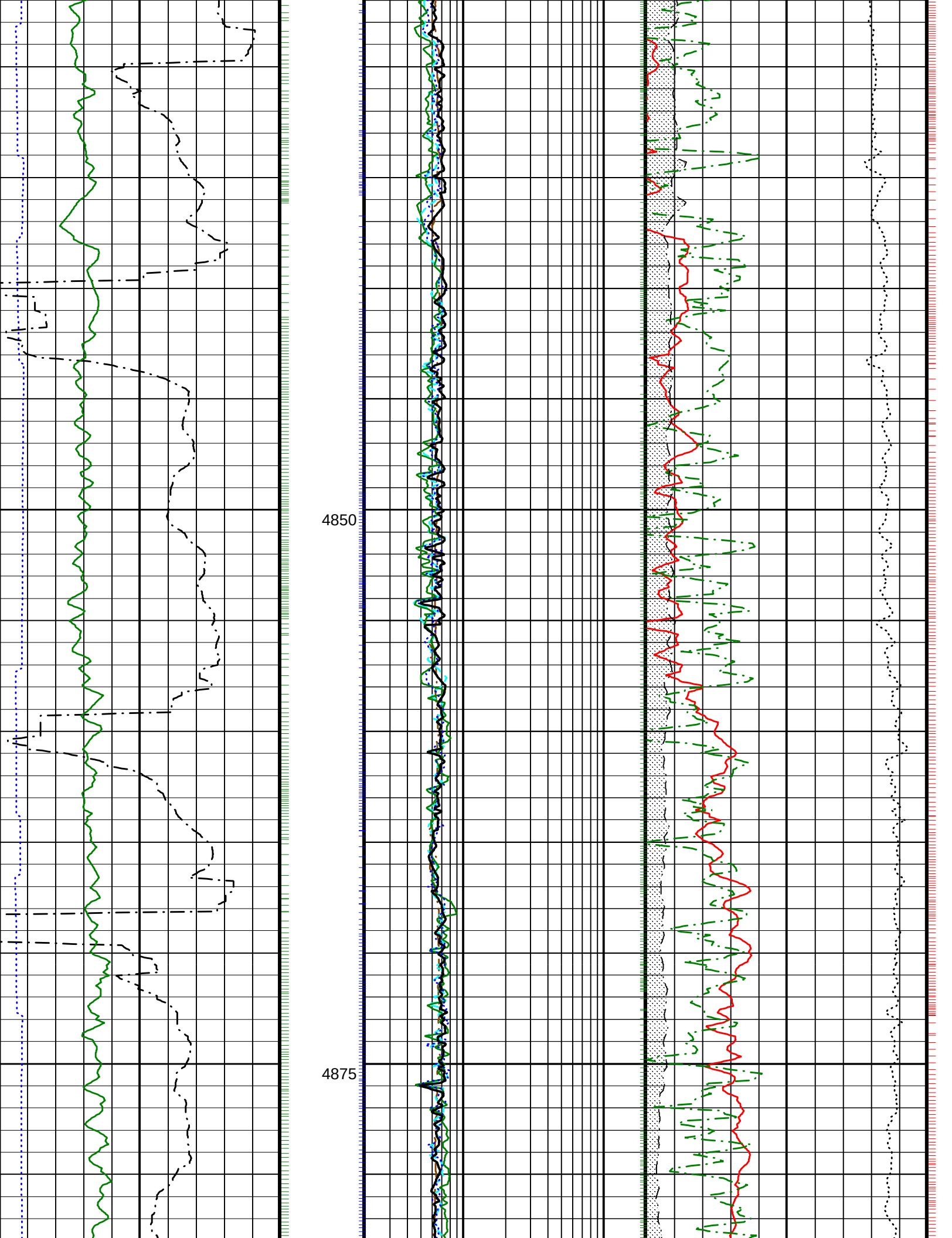
Neutron Ticks, 0.1-ft

Gamma Ray Samples

RAB samples

Rate of Penetration, Averaged over Last 5ft (ROP5_RM) 500 (F/HR) 0	Ring Resistivity (RES_RING) 0.2 (OHMM) 20	
	Deep Button Resistivity (RES_BD) 0.2 (OHMM) 20	Differential Caliper (DCAL) 0 (IN) 20
	Shallow Button Resistivity (RES_BS) 0.2 (OHMM) 20	Thermal Neutron Porosity (TNPH) 75 (PU) 15
RAB Gamma Ray (GR_RAB) 0 (GAPI) 150	Medium Button Resistivity (RES_BM) 0.2 (OHMM) 20	Bulk Density Correction (DRHO) -0.8 (G/C3) 0.2
Density Time After Bit (TAB_DEN) 0 (HR) 10	Bit Resistivity (RES_BIT) 0.2 (OHMM) 20	Bulk Density (RHOB) 1.4 (G/C3) 2.4

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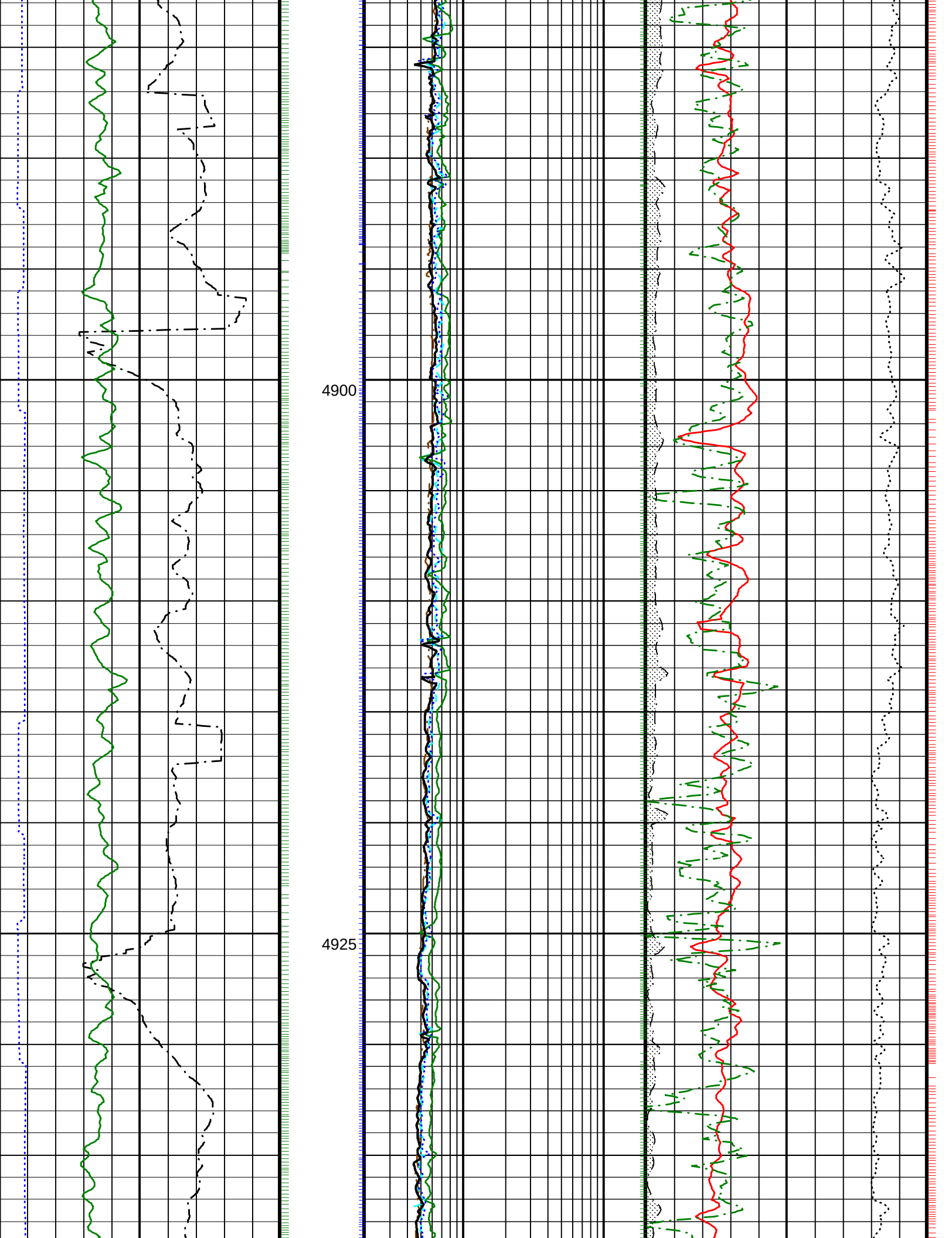
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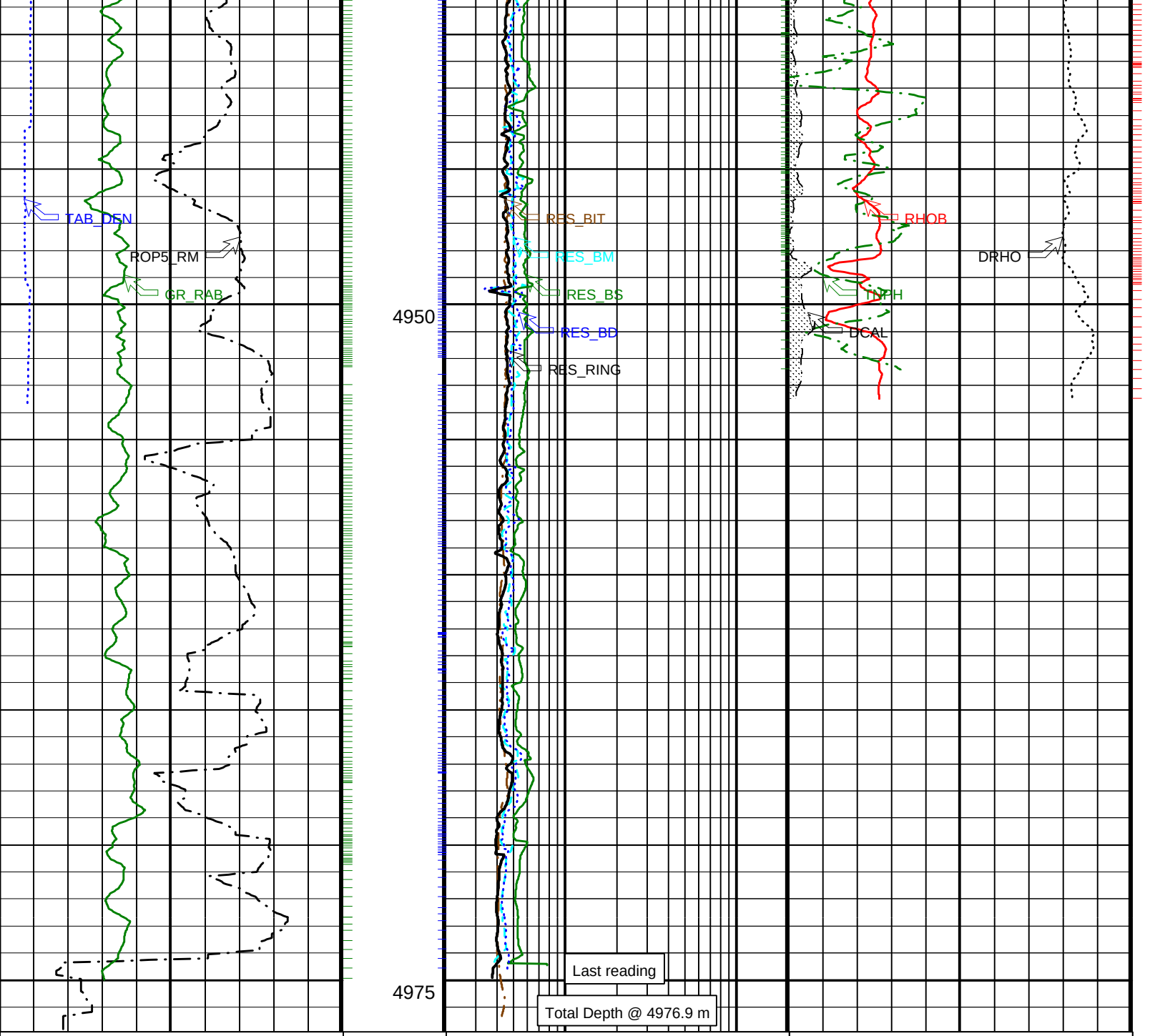


Density Time After Bit (TAB_DEN)
0 (HR) 10

RAB Gamma Ray (GR_RAB)
0 (GAPI) 150

Rate of Penetration, Averaged over Last 5ft (ROP5_RM)
500 (F/HR) 0

Bit Resistivity (RES_BIT)
0.2 (OHMM) 20

Medium Button Resistivity (RES_BM)
0.2 (OHMM) 20

Shallow Button Resistivity (RES_BS)
0.2 (OHMM) 20

Deep Button Resistivity (RES_BD)
0.2 (OHMM) 20

Ring Resistivity (RES_RING)
0.2 (OHMM) 20

Bulk Density (RHOB)
1.4 (G/C3) 2.4

Bulk Density Correction (DRHO)
-0.8 (G/C3) 0.2

Thermal Neutron Porosity (TNPH)
75 (PU) 15

Differential Caliper (DCAL)
0 (IN) 20

PIP SUMMARY

Density Ticks, 0.1-ft

Neutron Ticks, 0.1-ft

Gamma Ray Samples

RAB samples

IDEAL Version: ID6_1C_08

IDF

RAB id6_1c_08

IDEAL Version: ID6_1C_08

IDF

RAB id6_1c_08

Format: RAB ADN 1:200 Vertical Scale: 1:200 Graphics File Created: 19-May-2001 19:40

PIP SUMMARY

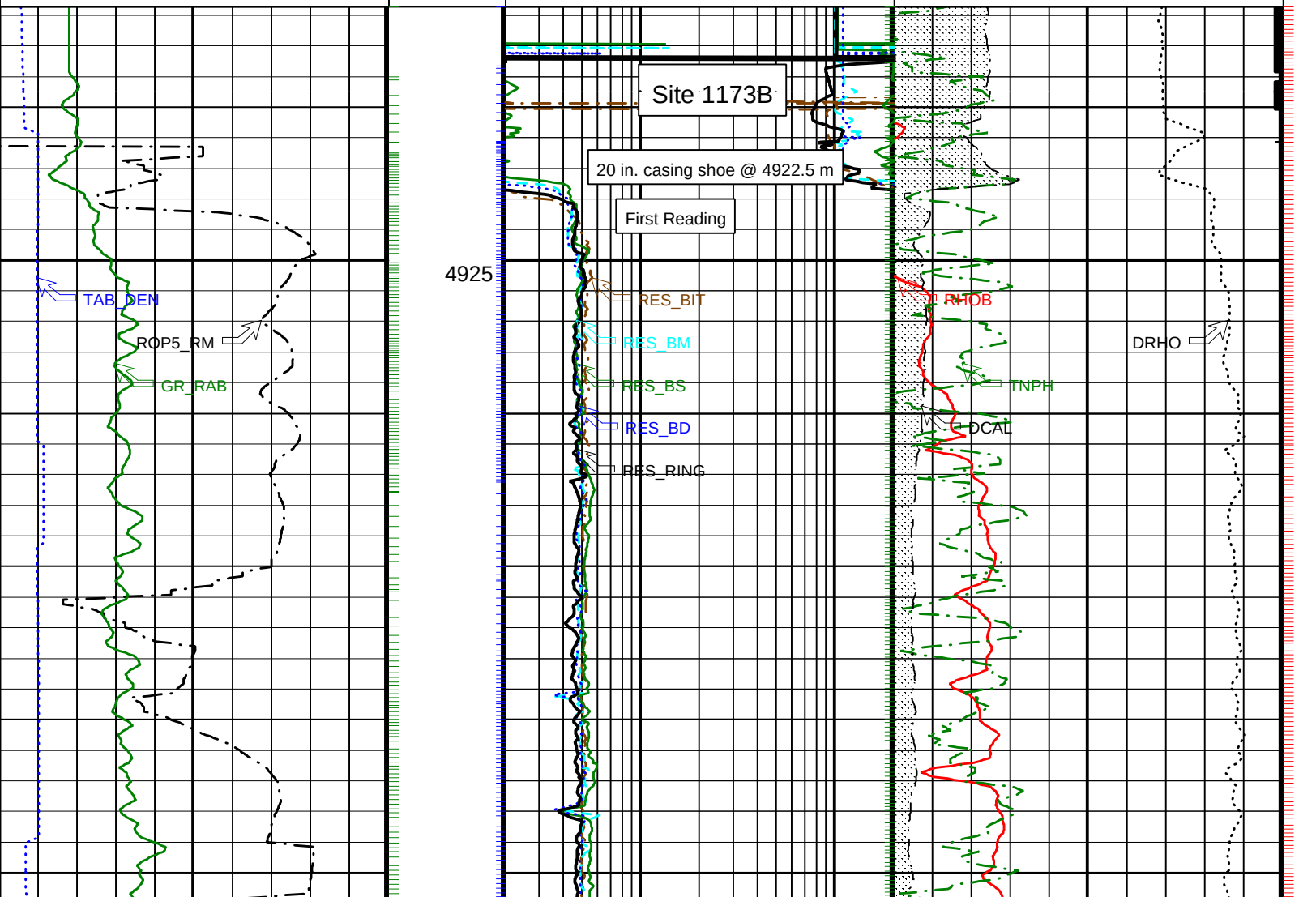
Density Ticks, 0.1-ft

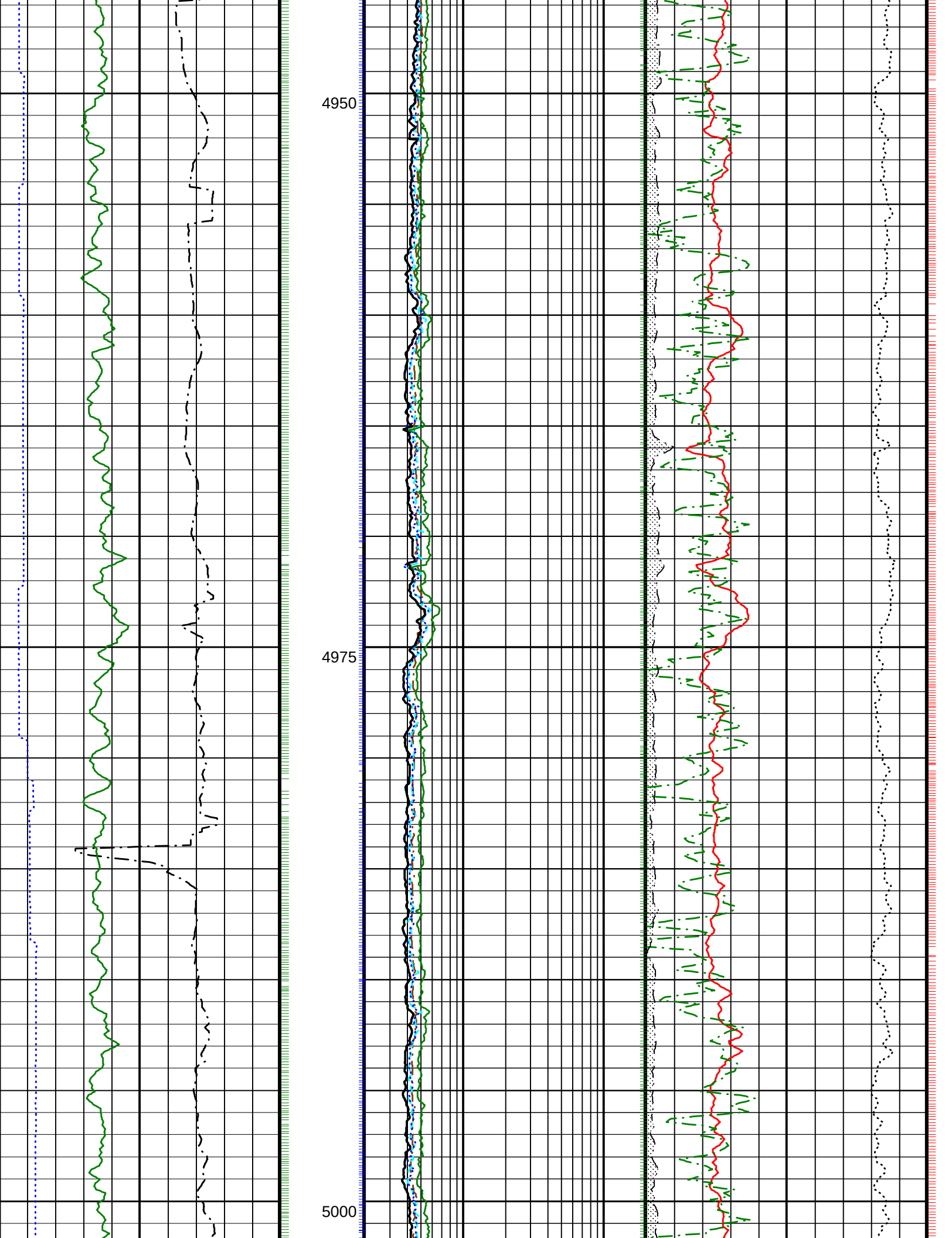
Neutron Ticks, 0.1-ft

Gamma Ray Samples

RAB samples

	Ring Resistivity (RES_RING) 0.2 (OHMM) 20	
	Deep Button Resistivity (RES_BD) 0.2 (OHMM) 20	Differential Caliper (DCAL) 0 (IN) 20
Rate of Penetration, Averaged over Last 5ft (ROP5_RM) 500 (F/HR) 0	Shallow Button Resistivity (RES_BS) 0.2 (OHMM) 20	Thermal Neutron Porosity (TNPH) 75 (PU) 15
RAB Gamma Ray (GR_RAB) 0 (GAPI) 150	Medium Button Resistivity (RES_BM) 0.2 (OHMM) 20	Bulk Density Correction (DRHO) -0.8 (G/C3) 0.2
Density Time After Bit (TAB_DEN) 0 (HR) 10	Bit Resistivity (RES_BIT) 0.2 (OHMM) 20	Bulk Density (RHOB) 1.4 (G/C3) 2.4

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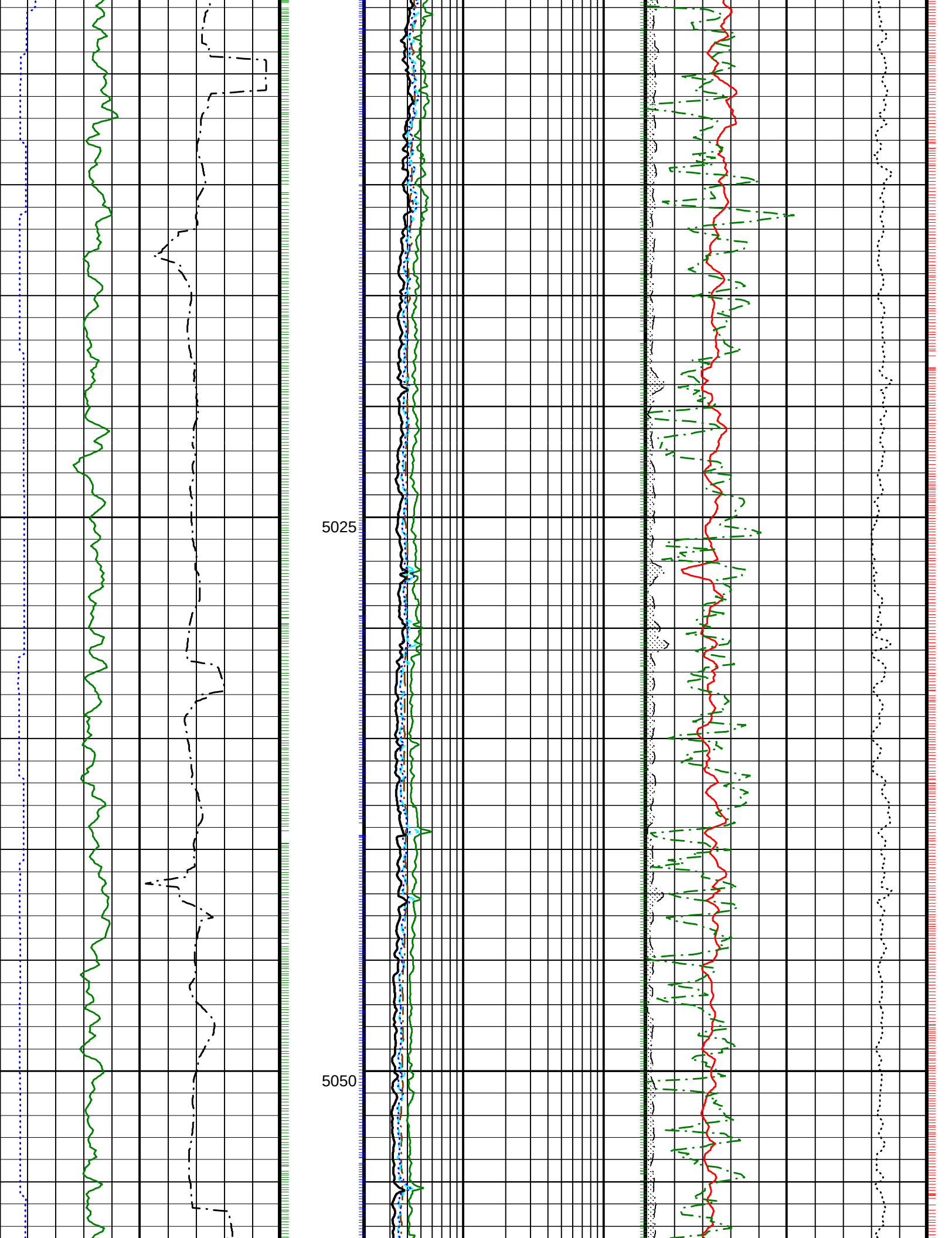
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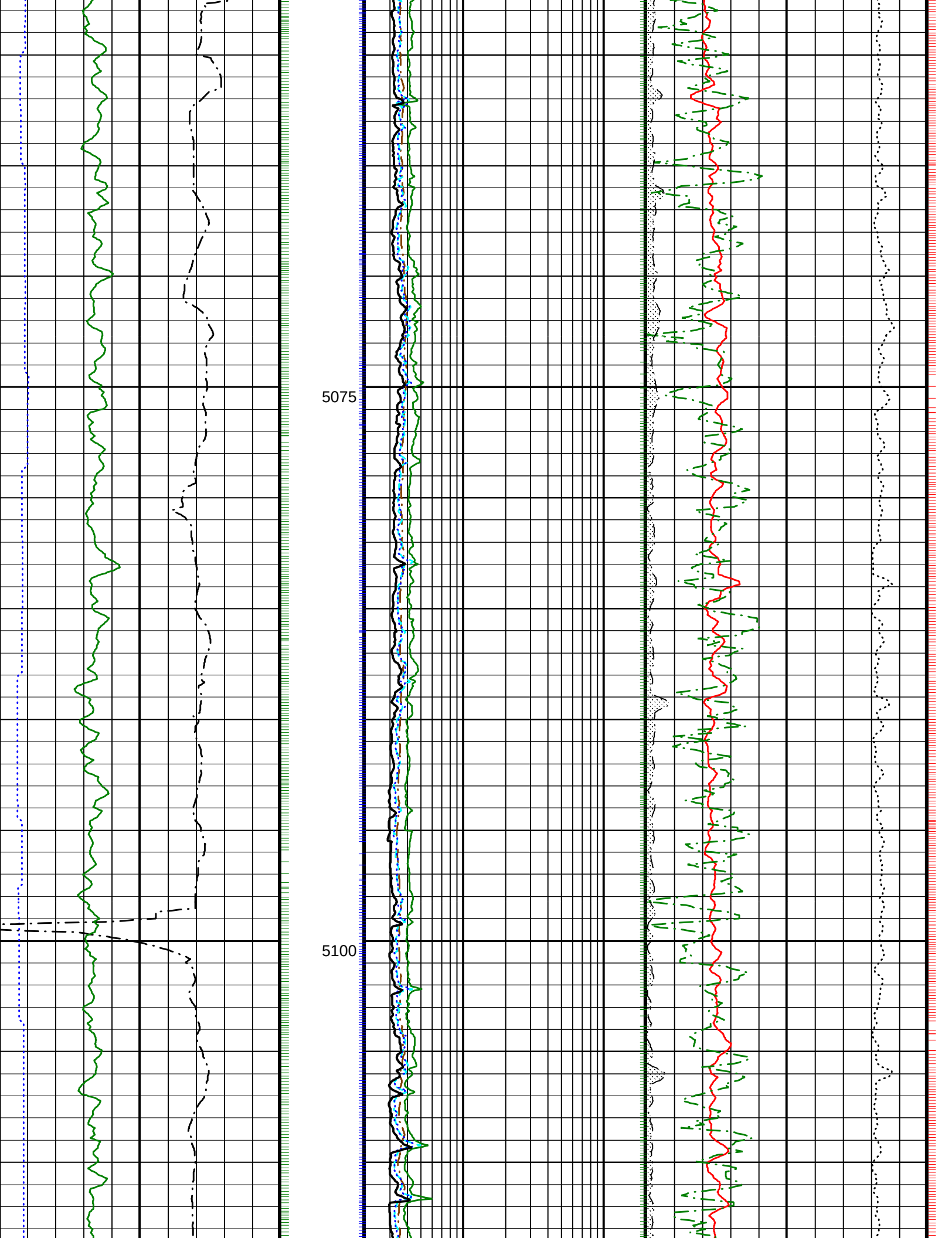
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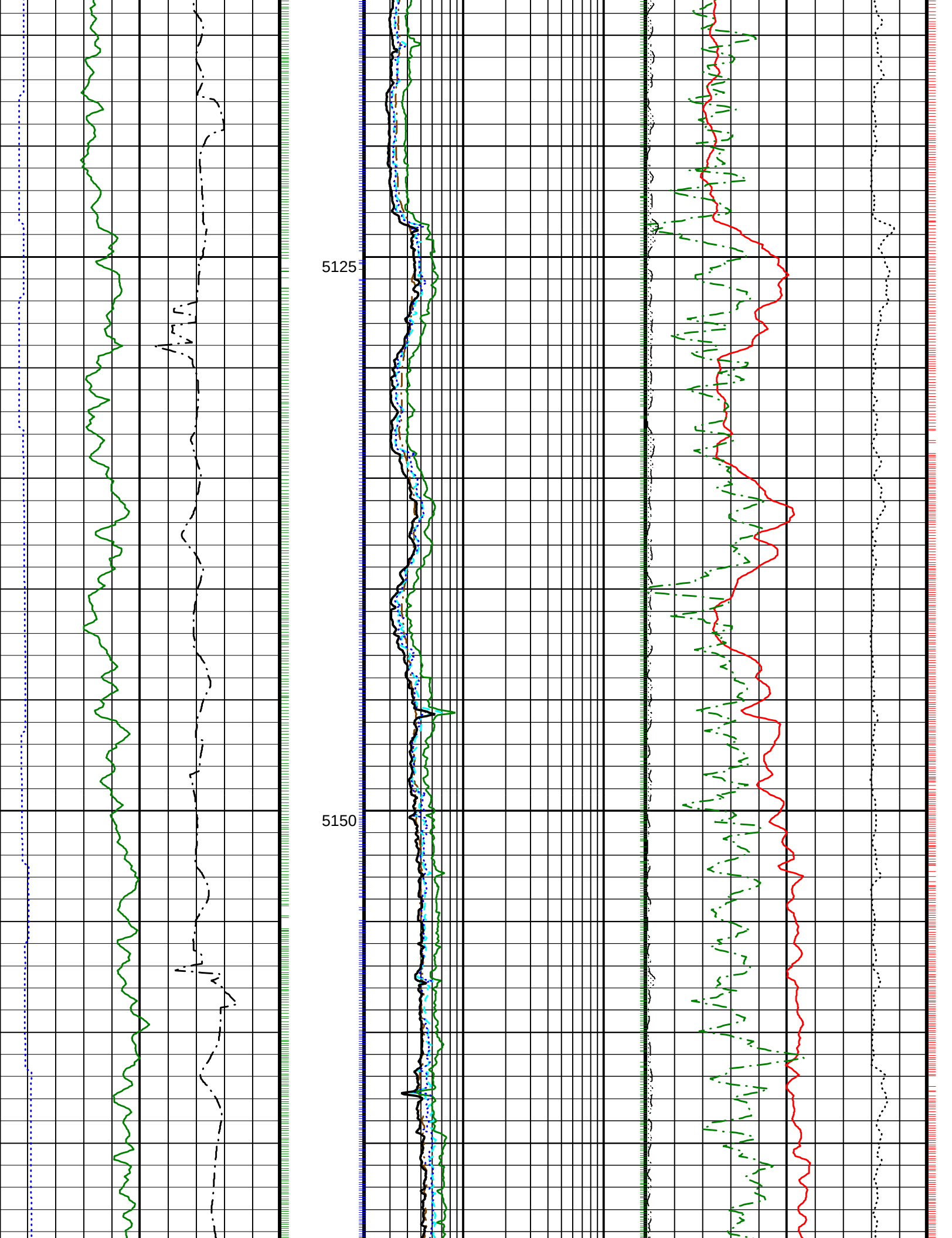
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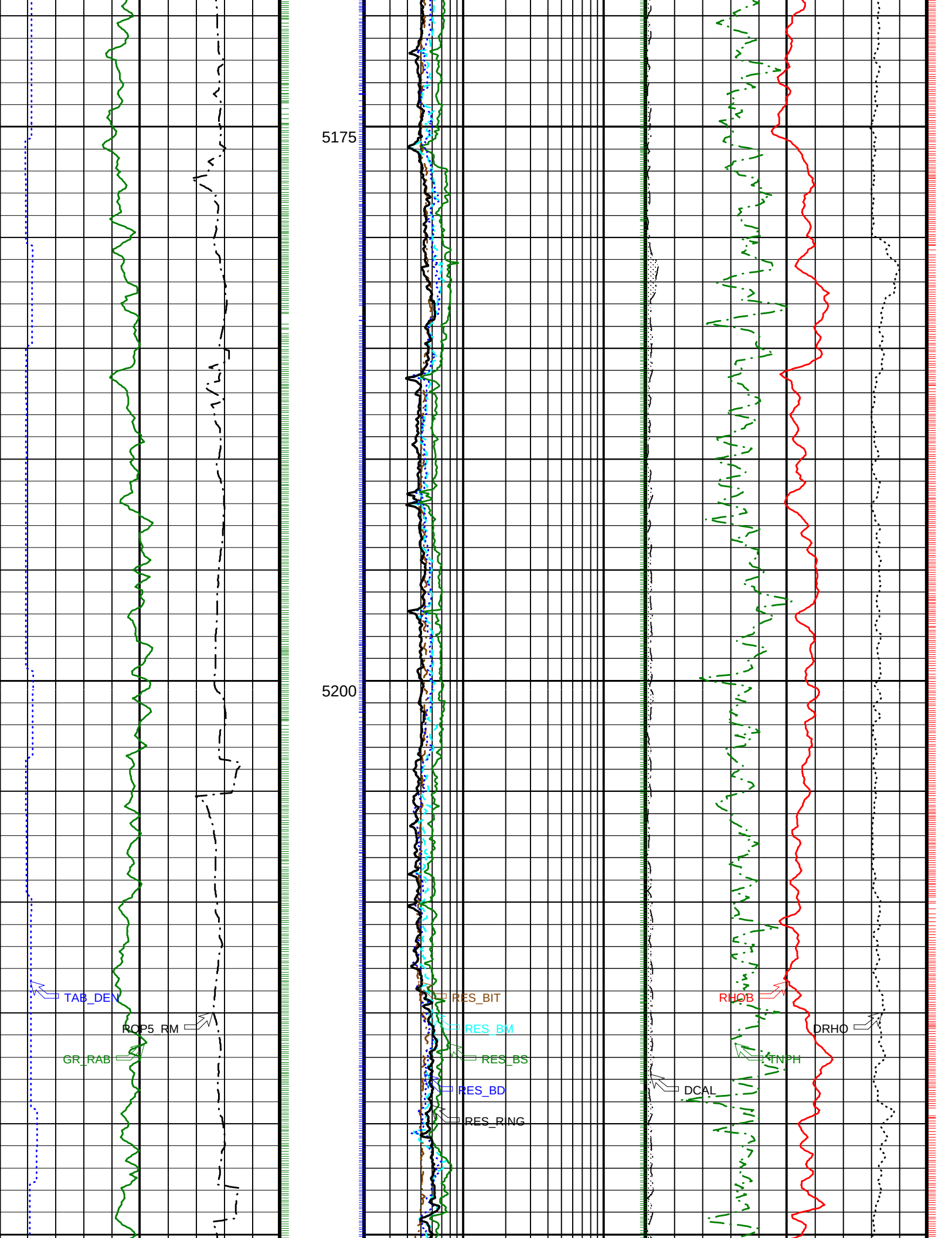
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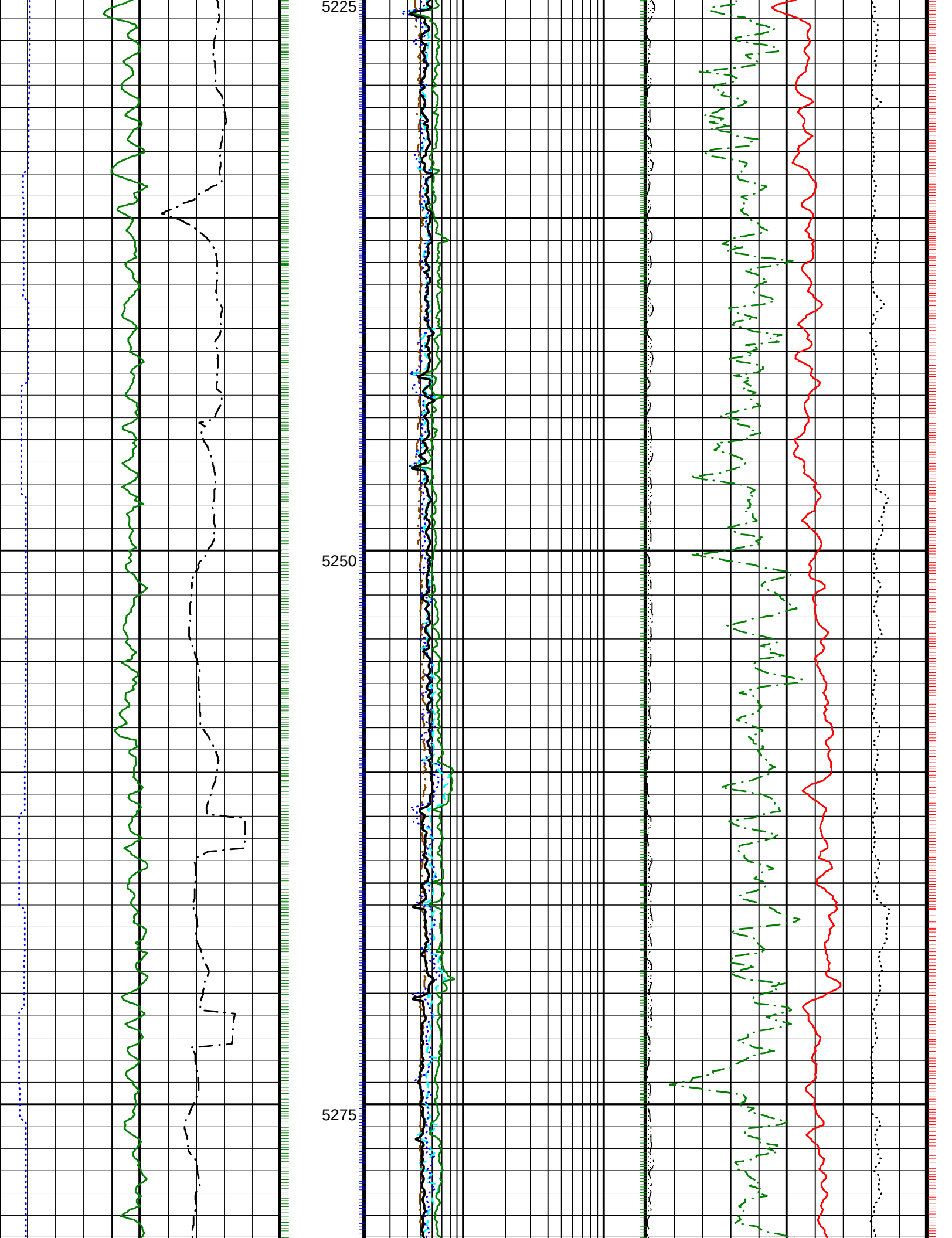
5200
TAB_DEN
ROP5_RM
GR_RAB
RES_BIT
RES_BM
RES_BS
RES_BD
RES_RING
RHOB
DRHO
TNPH
DCAL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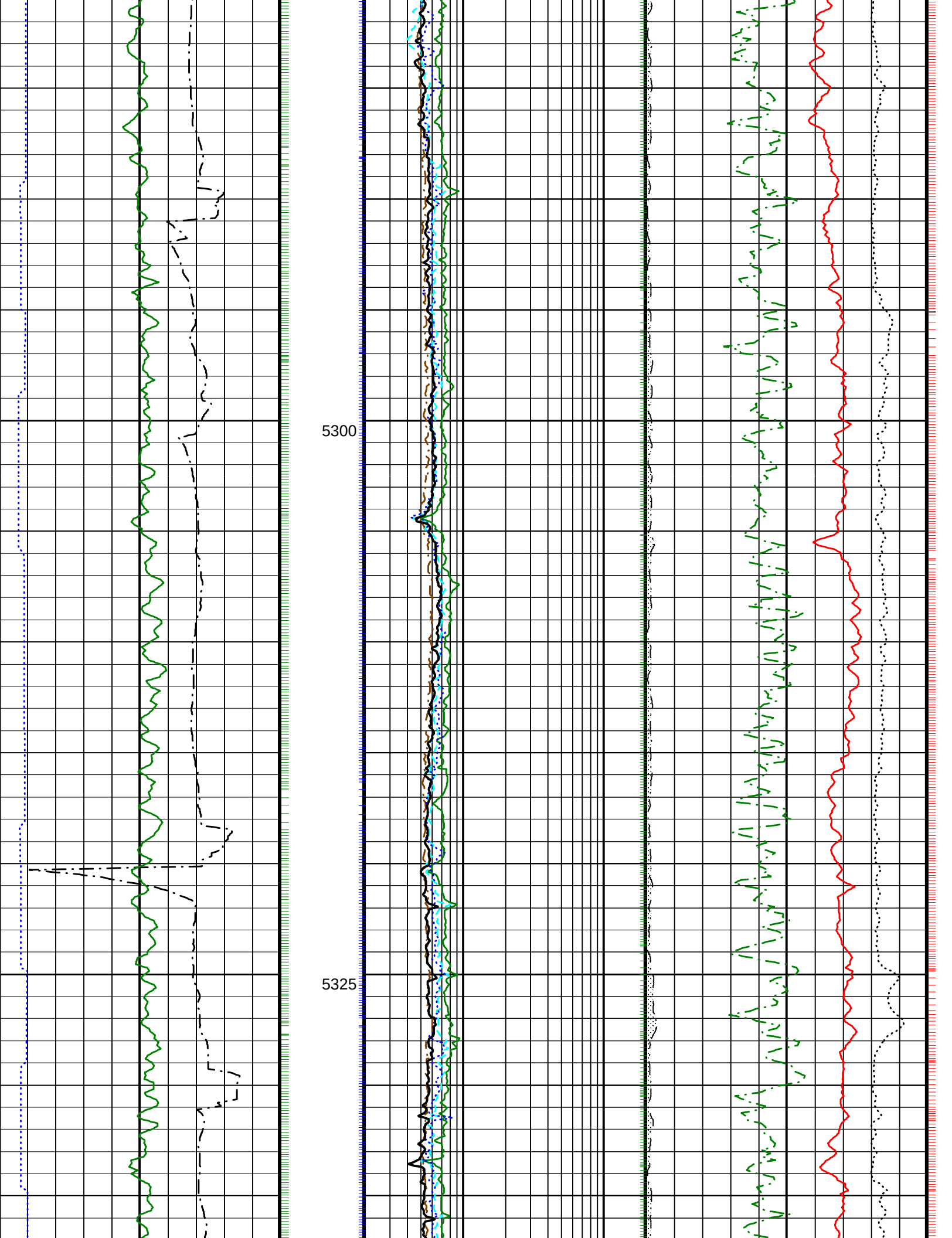
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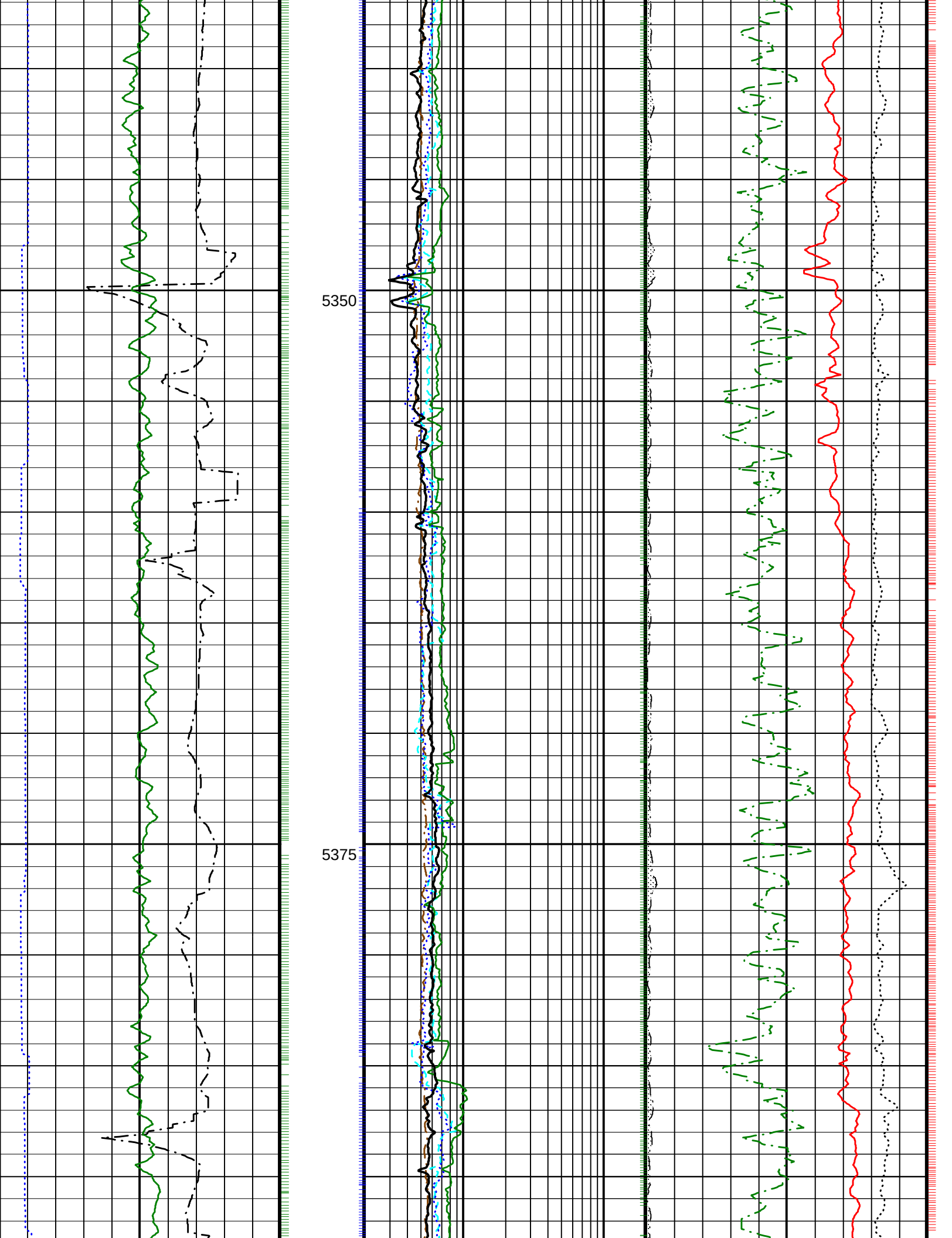
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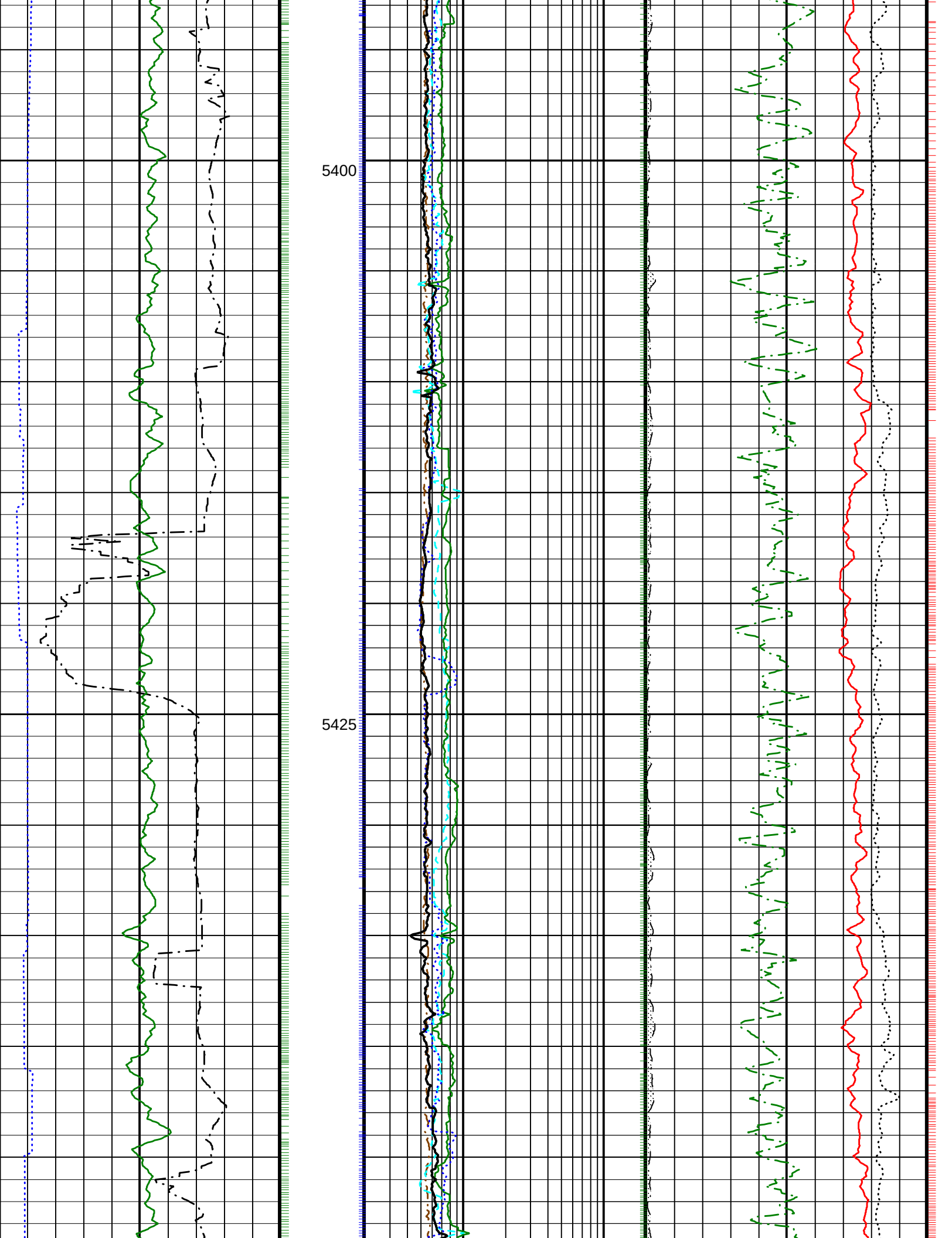
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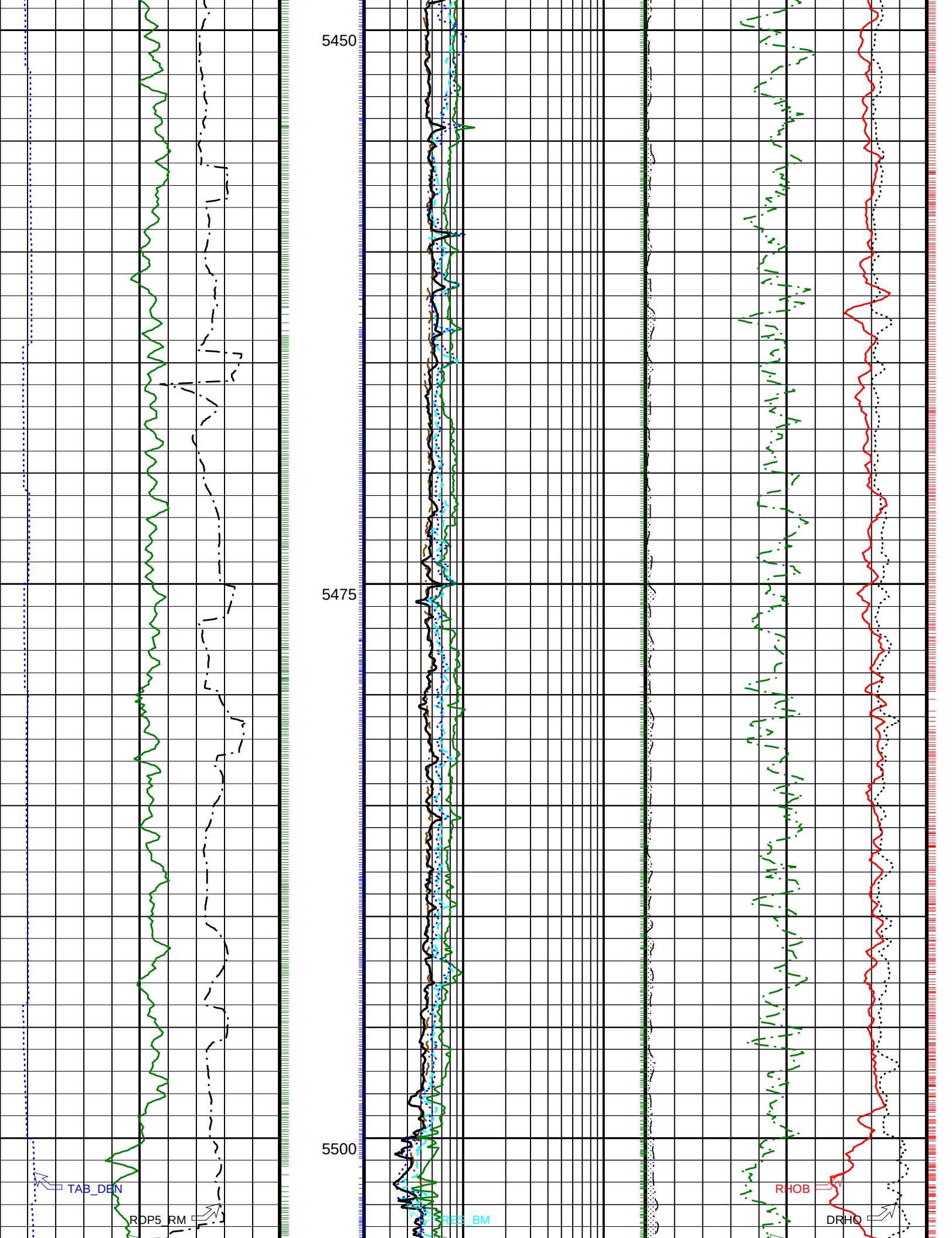
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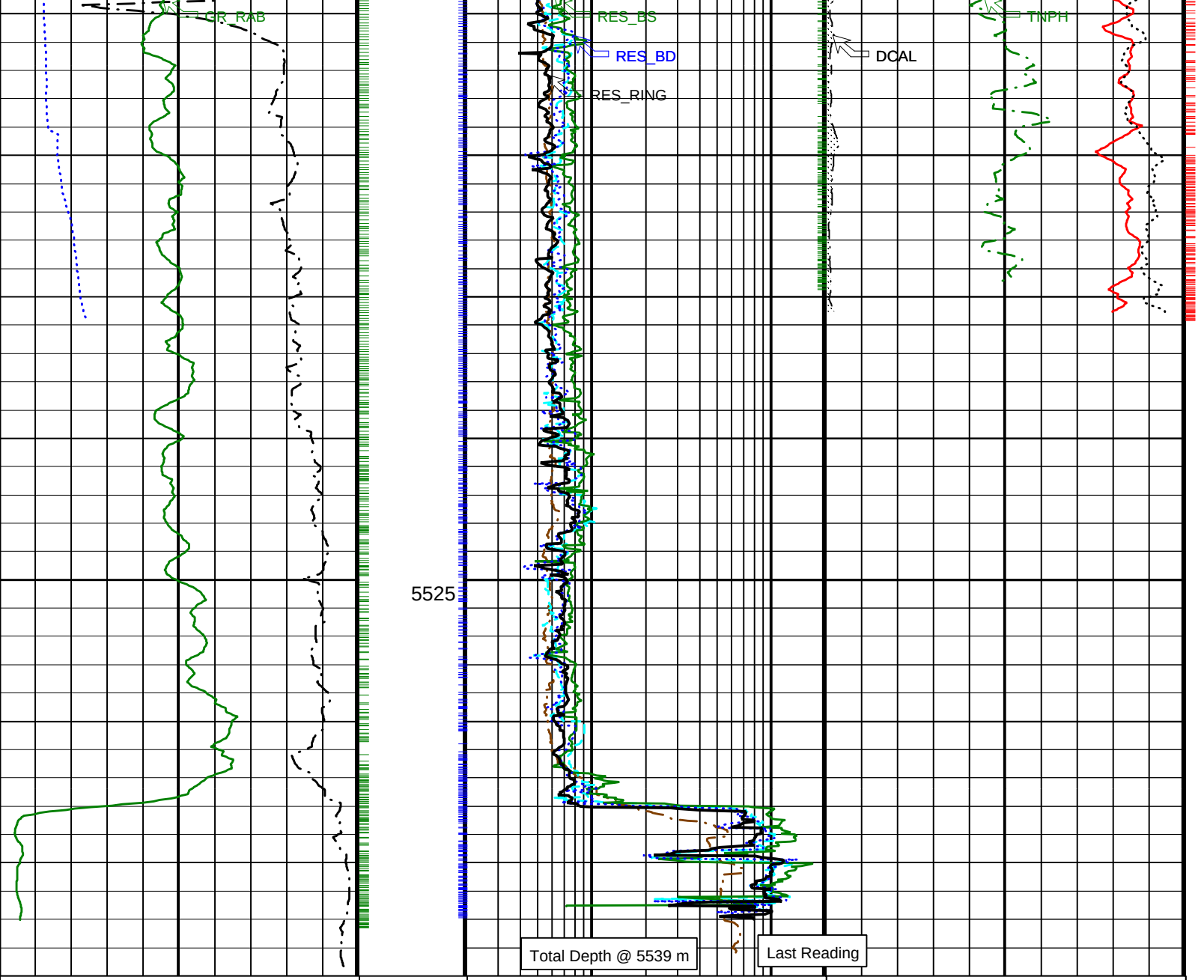
TAB_DEN
RDP5_RM
RES_BM
RHOB
DRHO



Density Time After Bit (TAB_DEN) 0 (HR) 10	Bit Resistivity (RES_BIT) 0.2 (OHMM) 20	Bulk Density (RHOB) 1.4 (G/C3) 2.4
RAB Gamma Ray (GR_RAB) 0 (GAPI) 150	Medium Button Resistivity (RES_BM) 0.2 (OHMM) 20	Bulk Density Correction (DRHO) -0.8 (G/C3) 0.2
Rate of Penetration, Averaged over Last 5ft (ROP5_RM) 500 (F/HR) 0	Shallow Button Resistivity (RES_BS) 0.2 (OHMM) 20	Thermal Neutron Porosity (TNPH) 75 (PU) 15
	Deep Button Resistivity (RES_BD) 0.2 (OHMM) 20	Differential Caliper (DCAL) 0 (IN) 20
	Ring Resistivity (RES_RING) 0.2 (OHMM) 20	

PIP SUMMARY

Density Ticks, 0.1-ft

Neutron Ticks, 0.1-ft

Gamma Ray Samples

RAB samples

IDEAL Version: ID6_1C_08

IDF

RAB id6_1c_08

6.75-in. Resistivity At-the-Bit / Equipment Identification

Primary Equipment:		
Tool Name and Serial Number	RAB6 - BA	SN 012
Calibration Status	Good	

Master: 10-APR-2001 10:12

6.75-in. Resistivity At-the-Bit Calibration

Resistivity: Fixture

Phase	Ring/T1 factor	Value
Master		0.01096
	0.009500 (Minimum) / 0.01100 (Nominal) / 0.01250 (Maximum)	

Phase	Ring/T2 factor	Value
Master		0.01115
	0.009500 (Minimum) / 0.01100 (Nominal) / 0.01250 (Maximum)	

Phase	M0/T1 factor	Value
Master		1.107
	0.9000 (Minimum) / 1.050 (Nominal) / 1.200 (Maximum)	

Phase	M0/T2 factor	Value
Master		1.100
	0.9000 (Minimum) / 1.050 (Nominal) / 1.200 (Maximum)	

Phase	M2/T1 factor	Value
Master		1.016
	0.8500 (Minimum) / 1.000 (Nominal) / 1.150 (Maximum)	

Phase	M2/T2 factor	Value
Master		1.021
	0.8500 (Minimum) / 1.000 (Nominal) / 1.150 (Maximum)	

Phase	BTN shallow/T1 factor	Value
Master		0.0006580
	0.0005700 (Minimum) / 0.0006700 (Nominal) / 0.0007700 (Maximum)	

Phase	BTN shallow/T2 factor	Value
Master		0.0006760
	0.0005700 (Minimum) / 0.0006700 (Nominal) / 0.0007700 (Maximum)	

Phase	BTN medium/T1 factor	Value
Master		0.0006450
	0.0005700 (Minimum) / 0.0006700 (Nominal) / 0.0007700 (Maximum)	

Phase	BTN medium/T2 factor	Value
Master		0.0006610
	0.0005700 (Minimum) / 0.0006700 (Nominal) / 0.0007700 (Maximum)	

Phase	BTN deep/T1 factor	Value
Master		0.0006480
	0.0005700 (Minimum) / 0.0006700 (Nominal) / 0.0007700 (Maximum)	

Phase	BTN deep/T2 factor	Value
Master		0.0006640
	0.0005700 (Minimum) / 0.0006700 (Nominal) / 0.0007700 (Maximum)	

Master: 10-APR-2001 10:12

6.75-in. Resistivity At-the-Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor	Value
Master		4.210
	3.500 (Minimum) / 4.500 (Nominal) / 5.500 (Maximum)	

6.75-in. Azimuthal Density Neutron / Equipment Identification

Primary Equipment:		
Tool Name and Serial Number	ADN6 - BA	119
Neutron Logging Source	NSR - M	A0149
Density Logging Source	GSR - J/Z	A2097
Stabilizer Size	9.63 - in.	
Calibration Status	Good	

Master: 10-APR-2001 22:25

6.75-in. Azimuthal Density Neutron Calibration

Density: Magnesium Block

Phase	LS window 3 - Mg CPS	Value
Master		642.3
	250.0 (Minimum) / 4125 (Nominal) / 8000 (Maximum)	

Phase	SS window 1 - Mg CPS	Value
Master		2016
	700.0 (Minimum) / 9350 (Nominal) / 18000 (Maximum)	

Phase	SS window 3 - Mg CPS	Value
Master		5009
	2500 (Minimum) / 23750 (Nominal) / 45000 (Maximum)	

Master: 10-APR-2001 22:25

6.75-in. Azimuthal Density Neutron Calibration

Density: Aluminum Block

Phase	LS window 3 - Al CPS	Value
Master		105.3
	50.00 (Minimum) / 725.0 (Nominal) / 1400 (Maximum)	

Phase	SS window 1 - Al CPS	Value
Master		1185
	500.0 (Minimum) / 4250 (Nominal) / 8000 (Maximum)	

Phase	SS window 3 - Al CPS	Value
Master		3524
	1500 (Minimum) / 15750 (Nominal) / 30000 (Maximum)	

Master: 10-APR-2001 22:25

6.75-in. Azimuthal Density Neutron Calibration

Density: Background

Phase	LS window 3 - Background CPS	Value
Master		42.83
	15.00 (Minimum) 82.50 (Nominal) 150.0 (Maximum)	

Phase	SS window 1 - Background CPS	Value
Master		96.15
	40.00 (Minimum) 220.0 (Nominal) 400.0 (Maximum)	

Phase	SS window 3 - Background CPS	Value
Master		408.0
	150.0 (Minimum) 825.0 (Nominal) 1500 (Maximum)	

Master: 10-APR-2001 22:25

6.75-in. Azimuthal Density Neutron Calibration

Density: Water Block Check

Phase	Long spacing water density G/C3	Value
Master		1.014
	0.9844 (Minimum) 0.9994 (Nominal) 1.014 (Maximum)	

Phase	Short spacing water density G/C3	Value
Master		1.101
	1.071 (Minimum) 1.096 (Nominal) 1.121 (Maximum)	

Master: 10-APR-2001 22:25

6.75-in. Azimuthal Density Neutron Calibration

Neutron: Water Tank

Phase	Far 1 tube 1 gain	Value
Master		1.067
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Far 1 tube 1 offset CPS	Value
Master		-0.8720
	-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	

Phase	Far 1 tube 2 gain	Value
Master		1.047
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Far 1 tube 2 offset CPS	Value
Master		-0.9180
	-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	

Phase	Far 1 tube 3 gain	Value
Master		1.094
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Far 1 tube 3 offset CPS	Value
Master		-0.8480
	-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	

Phase	Far 2 tube 1 gain	Value
Master		1.081
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Far 2 tube 1 offset CPS	Value
Master		-0.8230
	-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	

Phase	Far 2 tube 2 gain	Value
Master		1.079
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Far 2 tube 2 offset CPS	Value
Master		-0.8700
	-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	

Phase	Far 2 tube 3 gain	Value
Master		1.028
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Far 2 tube 3 offset CPS	Value
Master		-0.7570
	-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	

Phase	Near 1 tube 1 gain	Value
Master		0.9810
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Phase	Near 2 tube 1 gain	Value
Master		1.025
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)	

Company: Lamont Doherty

Well: ODP Leg 196, Site 1173B and 1173C

Field: Nankai Trough

Country: Japan

Ocean: Pacific

IDEAL services from Anadrill

RAB / ADN

Scale 1: 200 Measured Depth

Recorded Data

Schlumberger