



**DUAL INDUCTION  
LL3/GR LOG**

Company LONE WOLF OIL & GAS CO., LLC Well KEMPTON A3 Field MOLINE County ELK State KANSAS	Company LONE WOLF OIL & GAS CO., LLC Well KEMPTON A3 Field MOLINE County ELK State KANSAS
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<b>Location:</b> API #: 15-049-22626 NW NE SW SE 1185' FSL & 1965' FEL SEC 5 TWP 31S RGE 10E	Permanent Datum GL Log Measured From KB Drilling Measured From KB Elevation 1205 Other Services CDLN MEL Elevation K.B. 1214 D.F. 1213 G.L. 1205
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Date	3-22-22
Run Number	ONE
Depth Driller	2575
Depth Logger	2572
Bottom Logged Interval	2570
Top Log Interval	SURFACE
Casing Driller	8 5/8" @ 40
Casing Logger	8 5/8" @ 40
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL
Density / Viscosity	9.4 / 52
pH / Fluid Loss	9.5 / 8.4
Source of Sample	FLOWLINE
Rm @ Meas. Temp	2.5 @ 70
Rmf @ Meas. Temp	3.1 @ 70
Rmc @ Meas. Temp	1.9 @ 70
Source of Rmf / Rmc	CAL
Rm @ BHT	2.05 @ 98
Time Circulation Stopped	6:30 AM
Time Logger on Bottom	9:30 AM
Maximum Recorded Temperature	98
Equipment Number	OW2
Location	HOMINY OK
Recorded By	MACKAY
Witnessed By	MR. WOLFE
	KIDD
	TAFIT

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

**Comments**

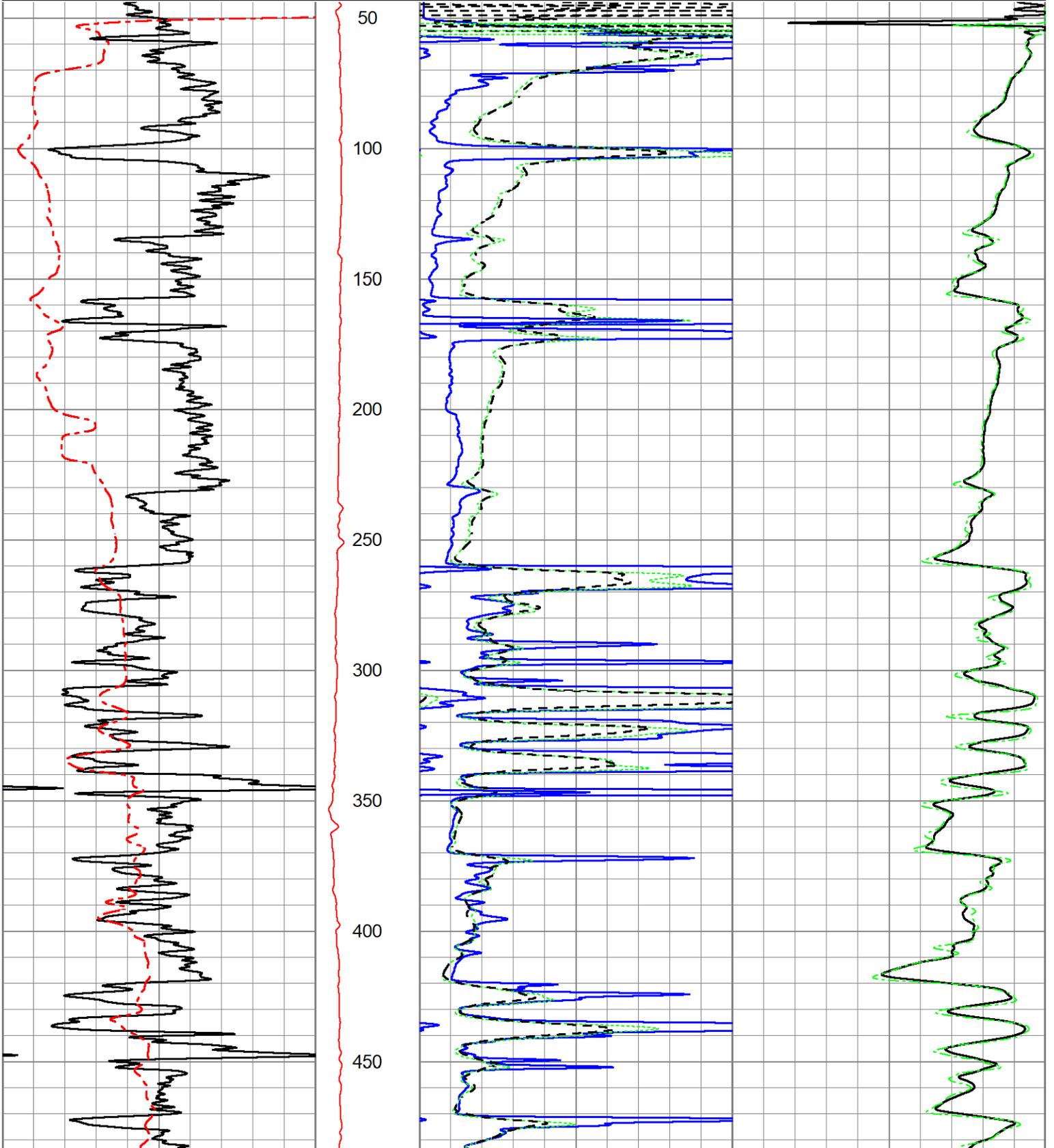
OW2-9028 LONE WOLF  
THANK YOU FOR USING OSAGE WIRELINE INC.

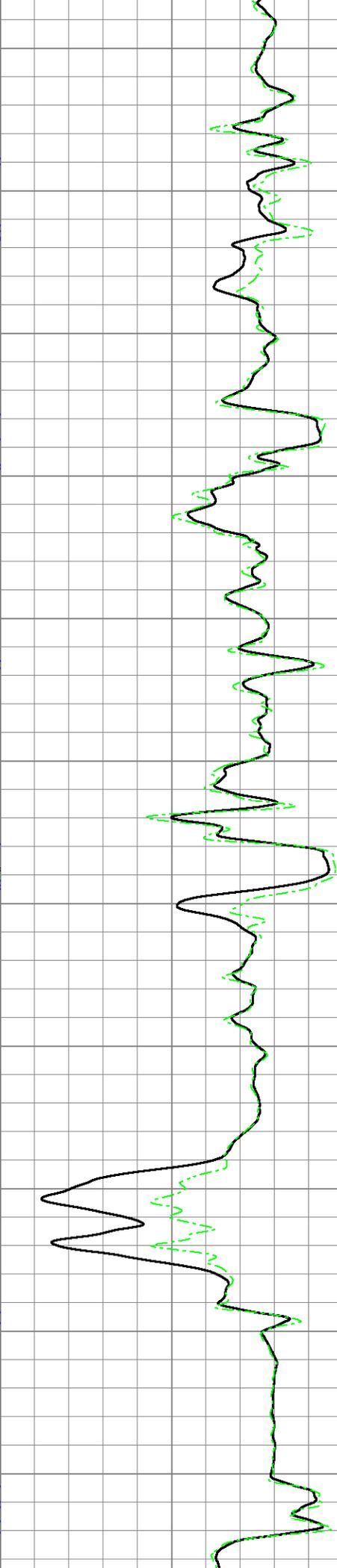
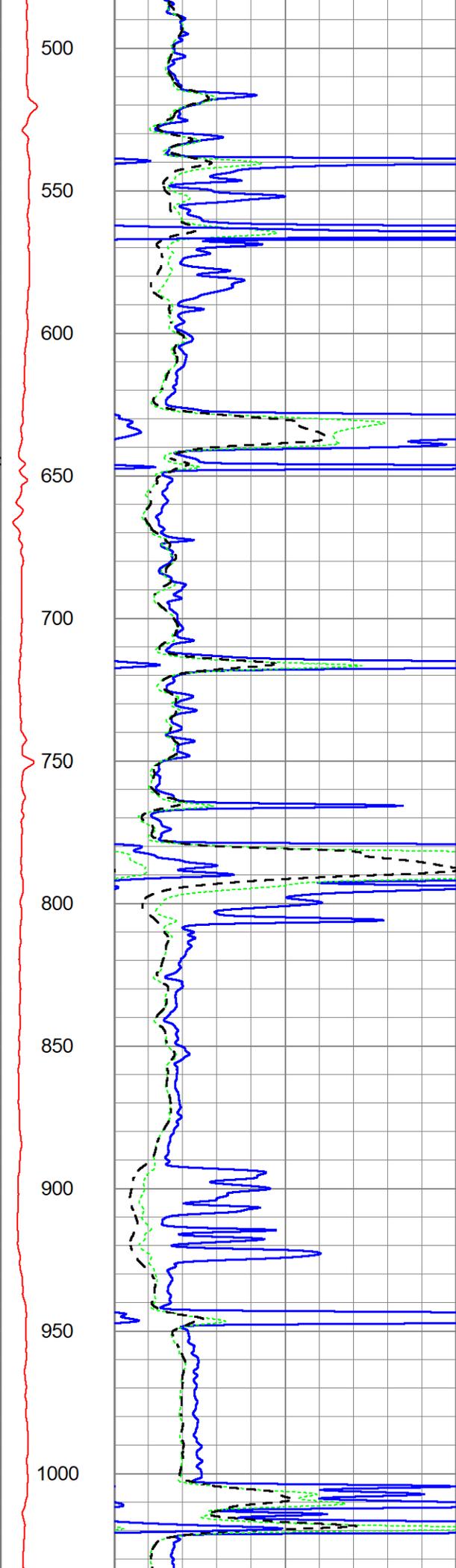
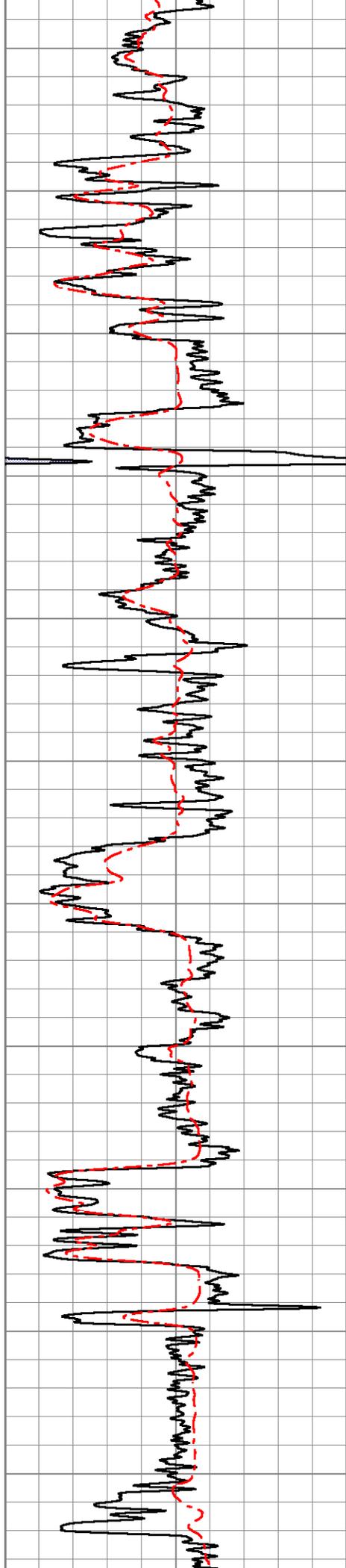


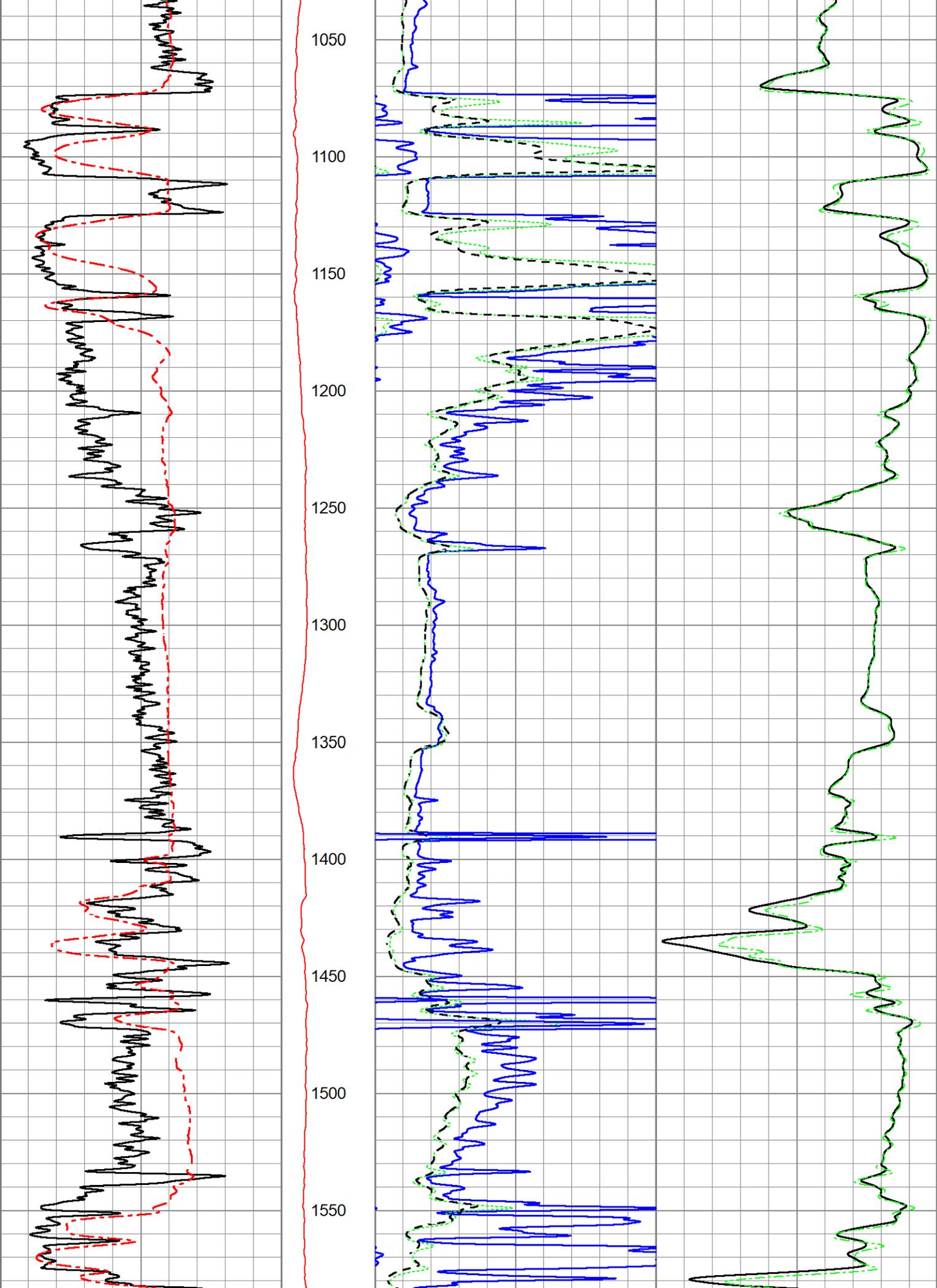
# 2" DUAL INDUCTION LOG

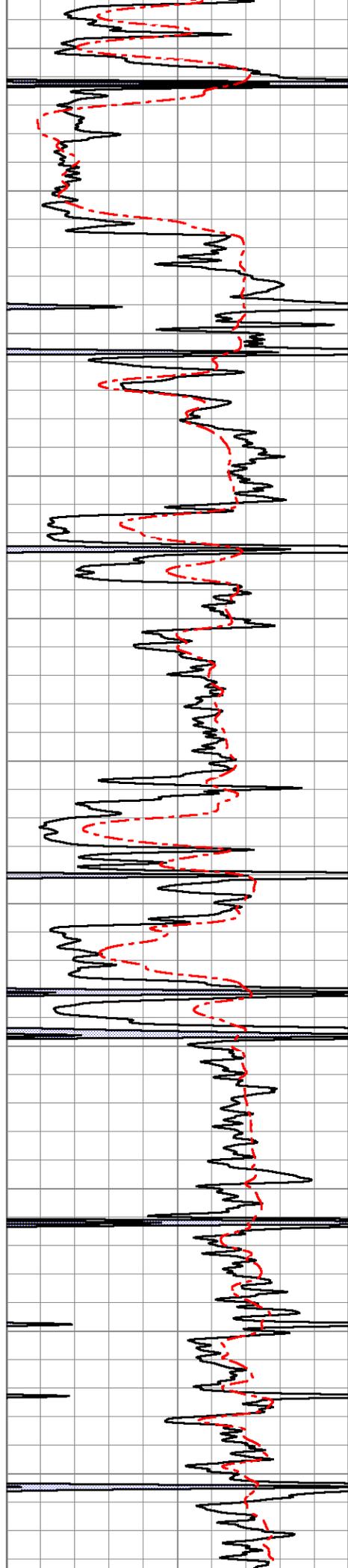
Database File ow2-9028 lone wolf.db  
 Dataset Pathname pass2.5  
 Presentation Format mmdil2  
 Dataset Creation Tue Mar 22 10:27:59 2022  
 Charted by Depth in Feet scaled 1:600

0	GR (GAPI)	150	DEVI	1000	CILD (mmho/m)	0
0	Spontaneous Potential (mV)	150	0 (deg)	10	CILM (mmho/m)	0
0				0	RLL3 (Ohm-m)	50
0				0	RILM (Ohm-m)	50
0				0	RILD (Ohm-m)	50

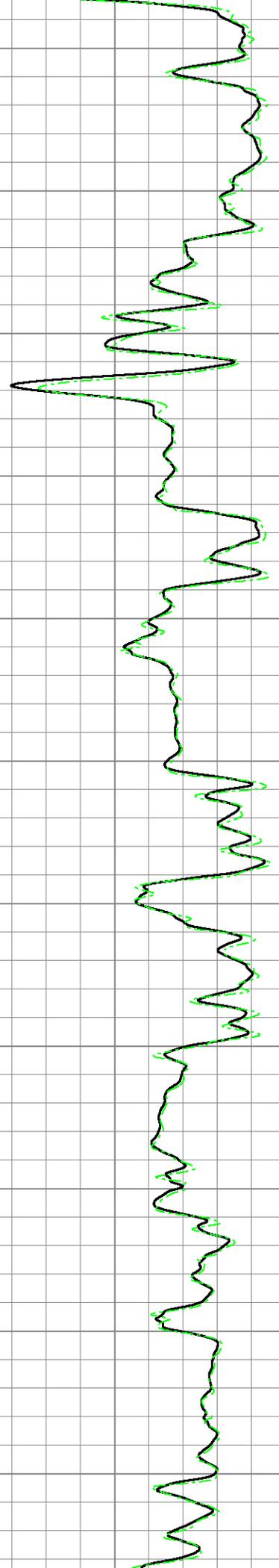
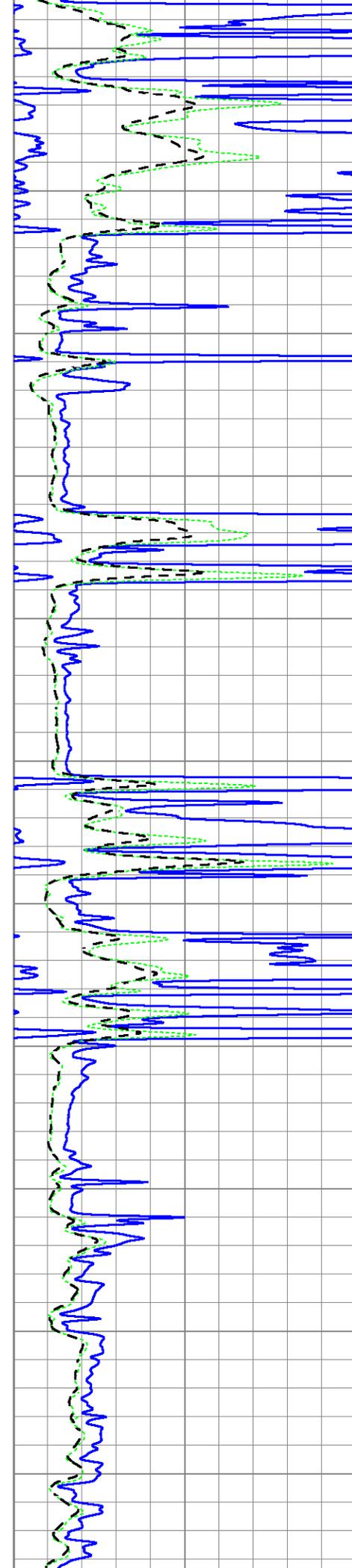


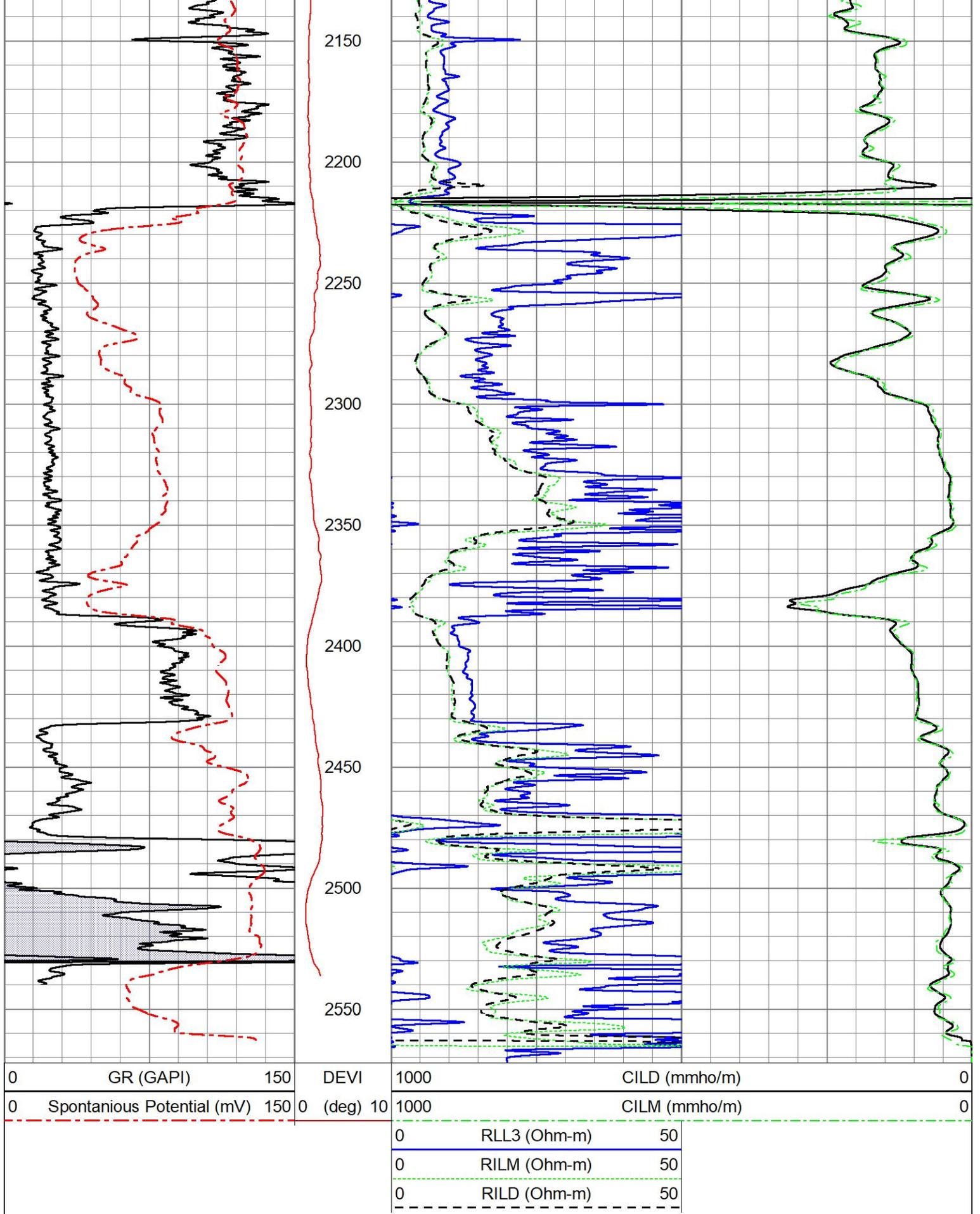






1600  
1650  
1700  
1750  
1800  
1850  
1900  
1950  
2000  
2050  
2100

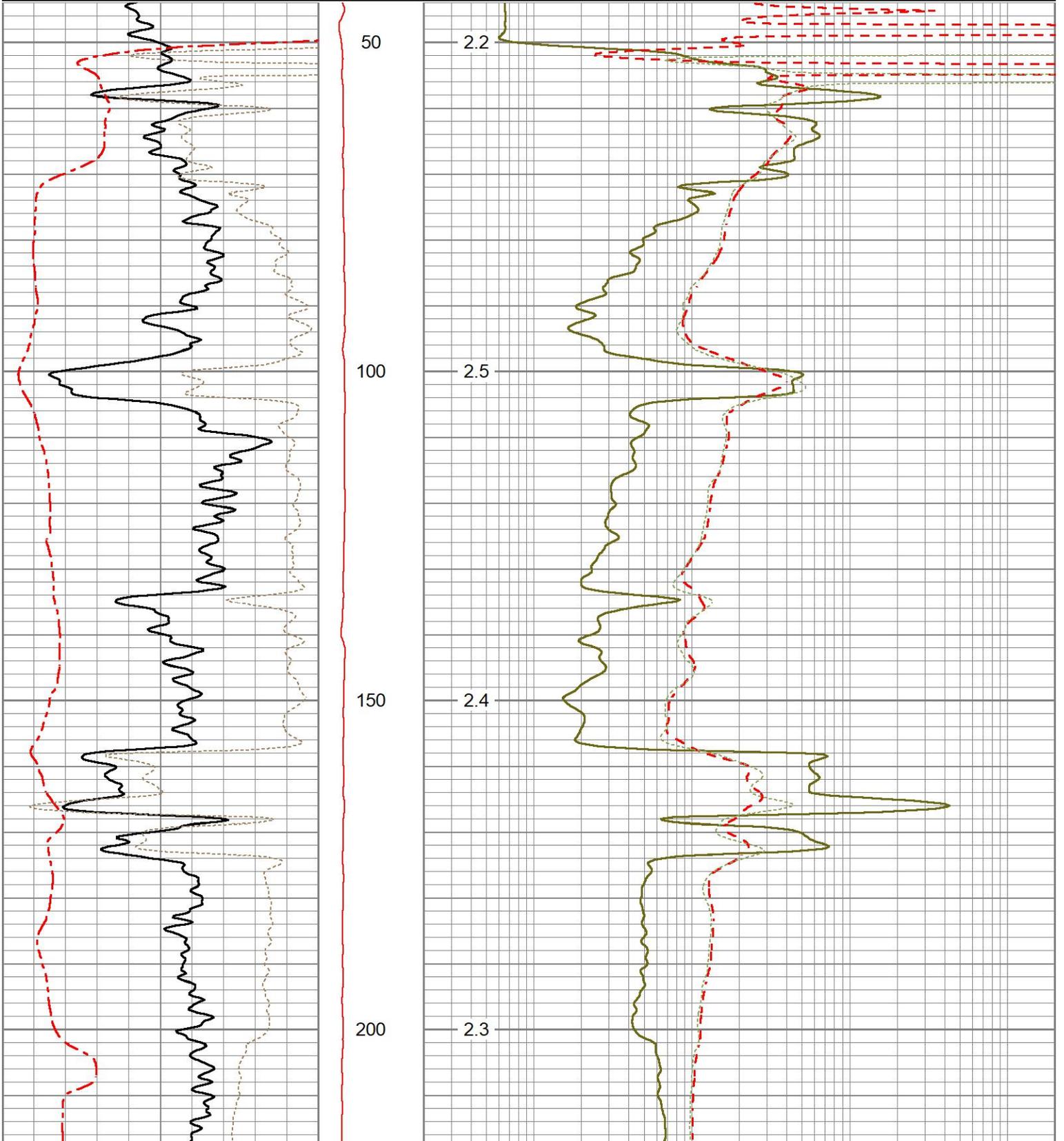


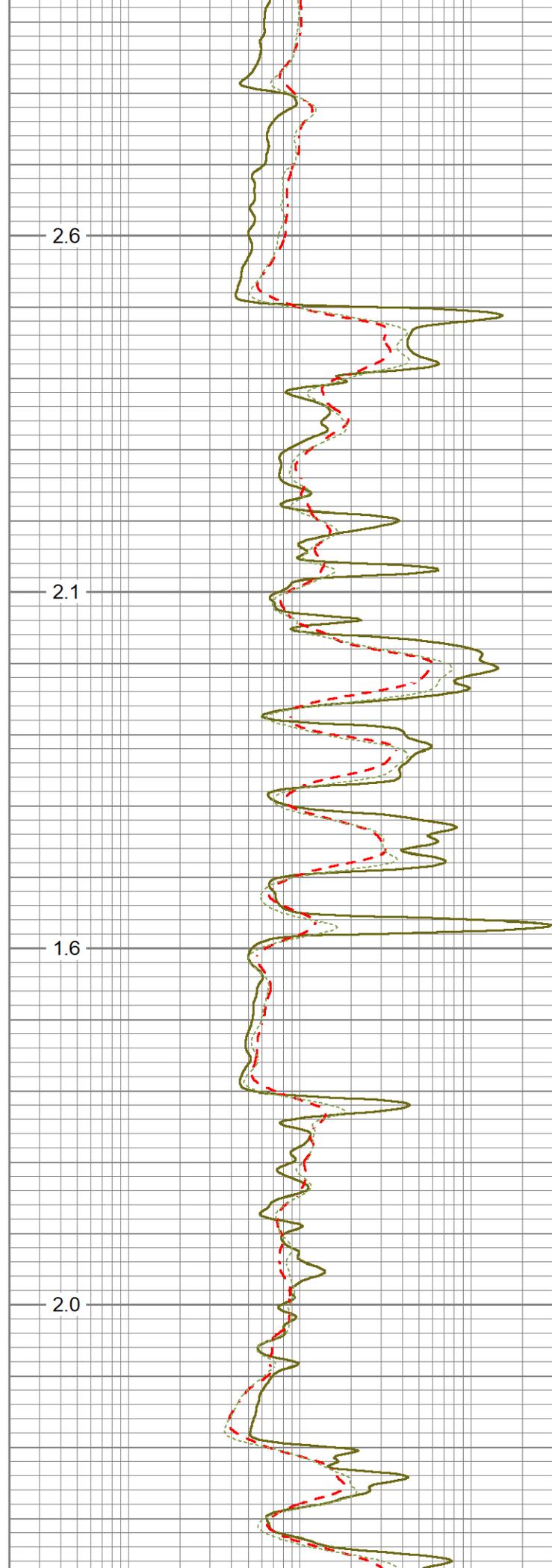
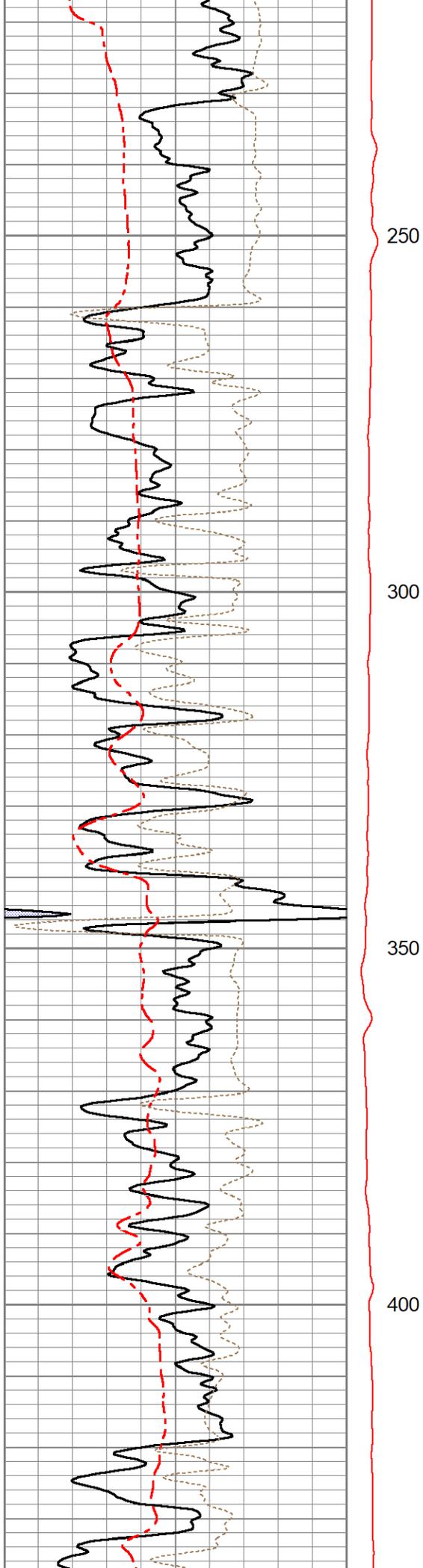


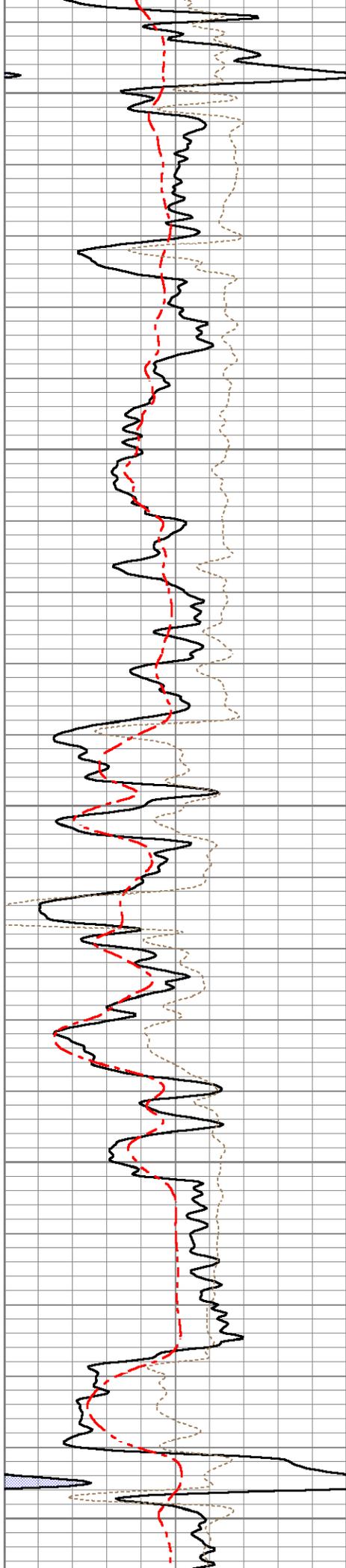
# 5" DUAL INDUCTION LOG

Database File ow2-9028 lone wolf.db  
 Dataset Pathname pass2.6  
 Presentation Format mmdil5  
 Dataset Creation Tue Mar 22 10:28:15 2022  
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	DEVI	0.2	Shallow Resistivity (Ohm-m)	2000
0	Spontaneous Potential (mV)	150	0 (deg)	10	Deep Resistivity (Ohm-m)	2000
-130	Rxo\Rt	70		0.2	Medium Resistivity (Ohm-m)	2000
			DEVI (deg)			







450

500

550

600

650

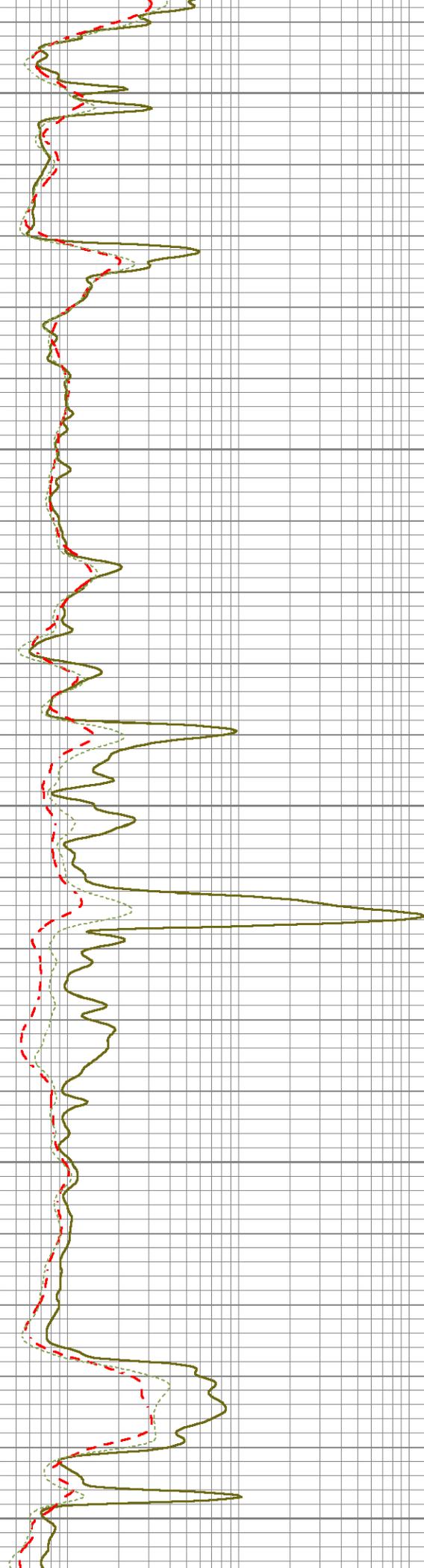
2.4

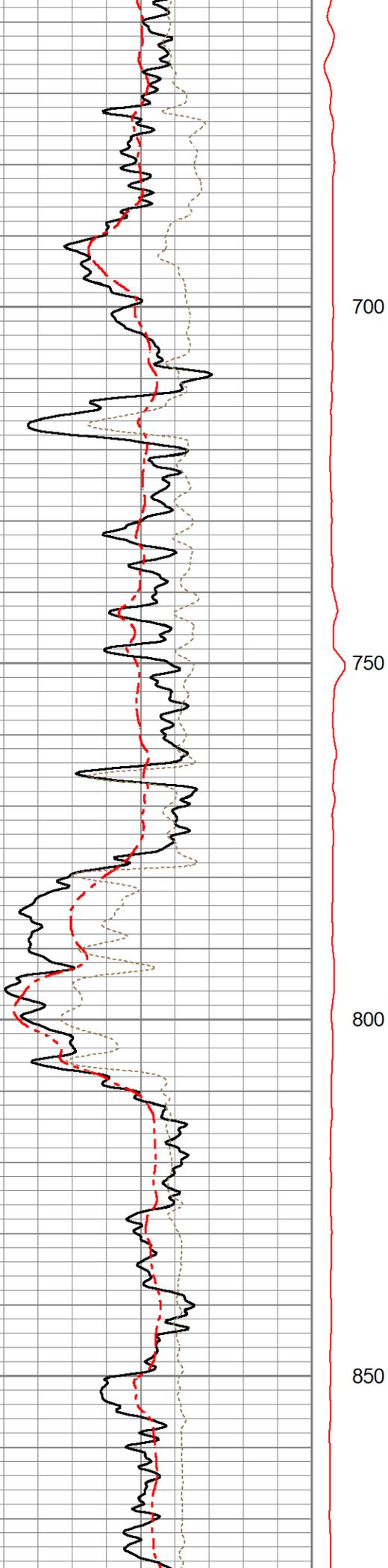
2.4

2.5

2.4

2.0





700

750

800

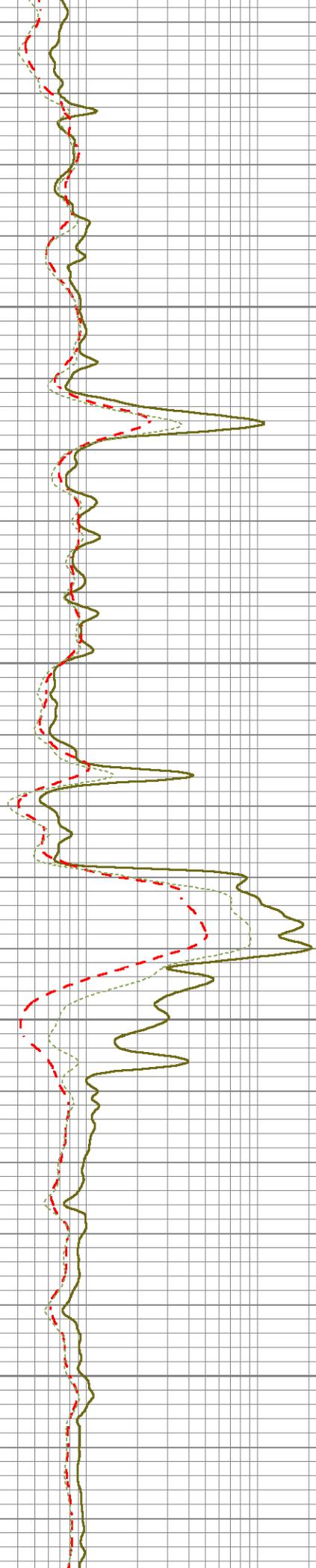
850

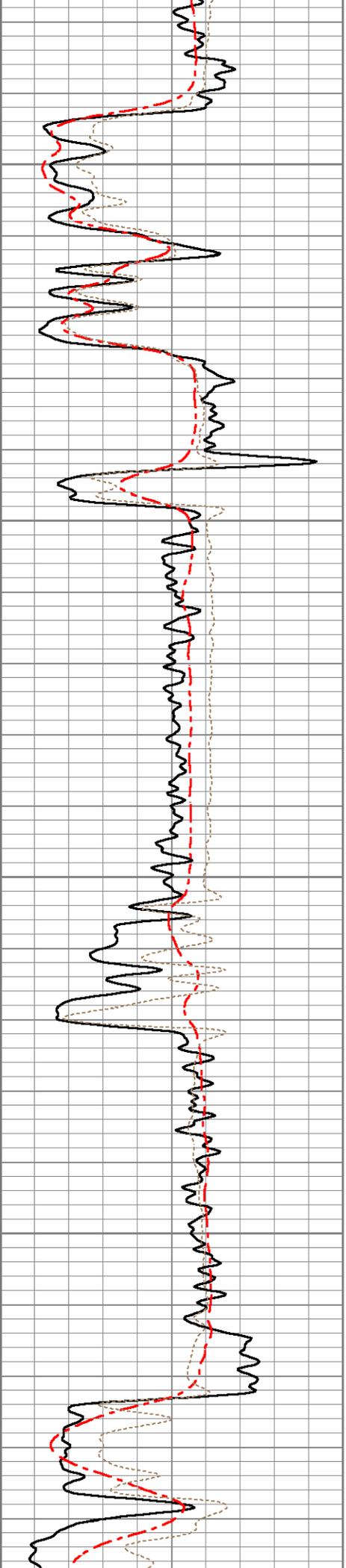
1.9

2.9

1.7

1.7





900

950

1000

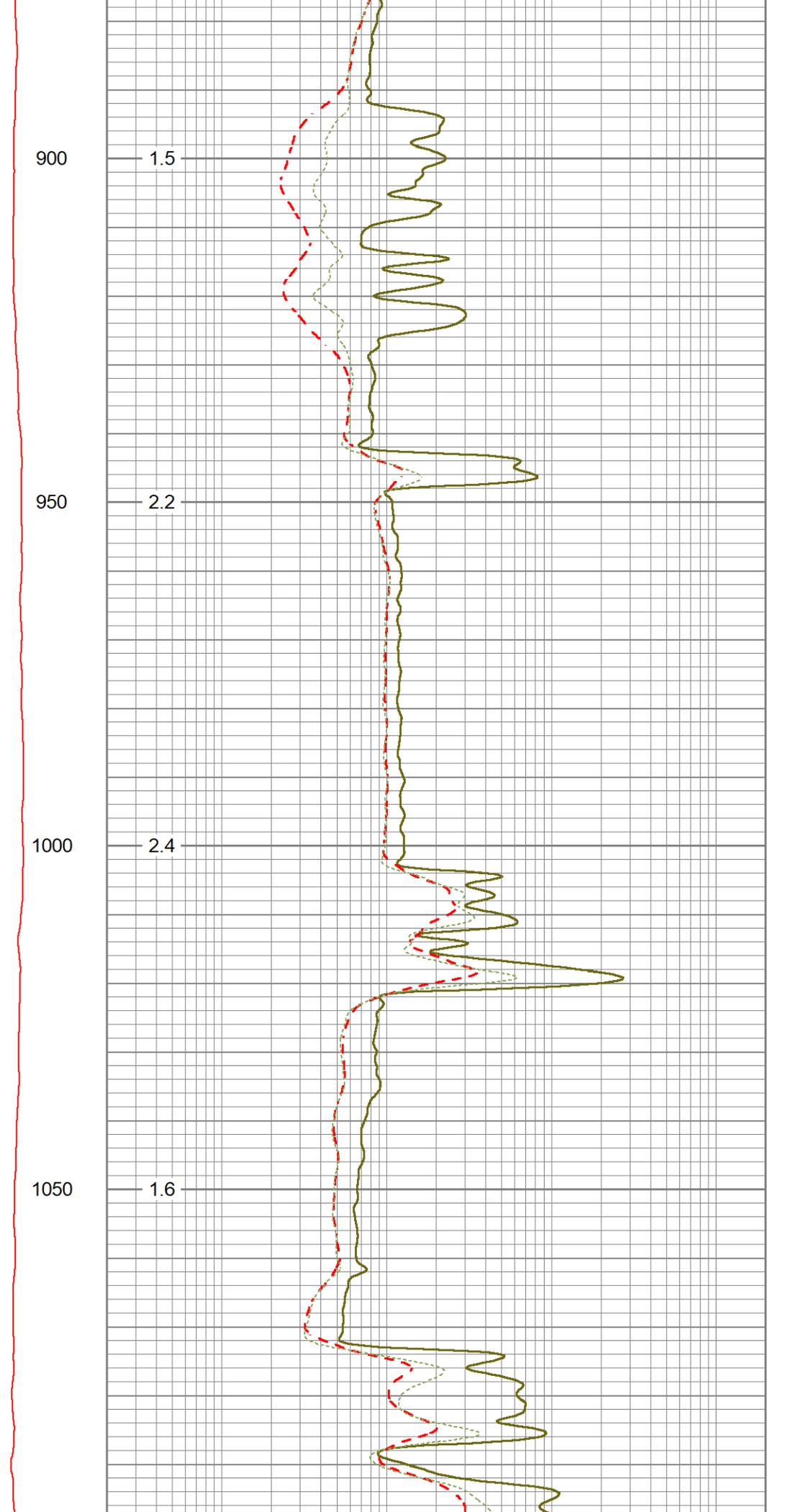
1050

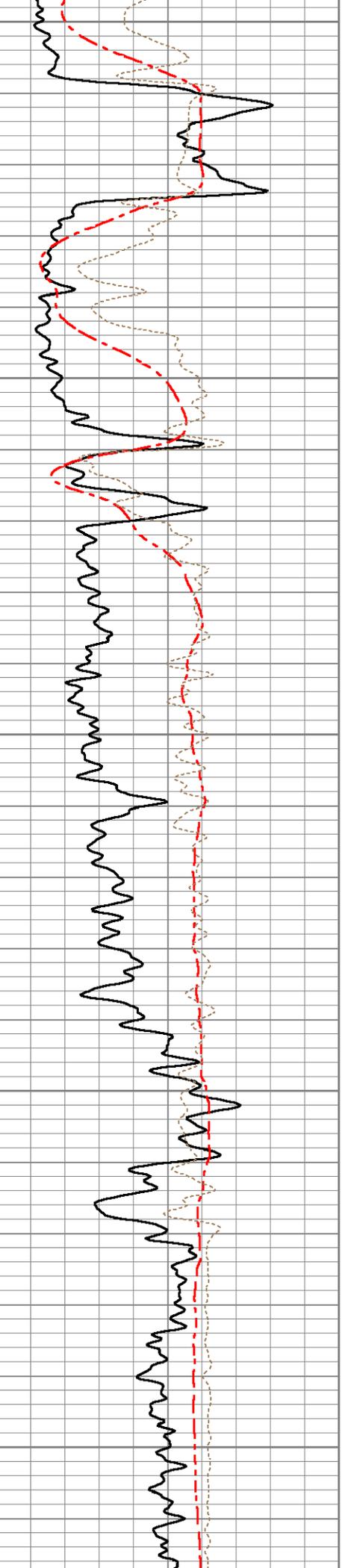
1.5

2.2

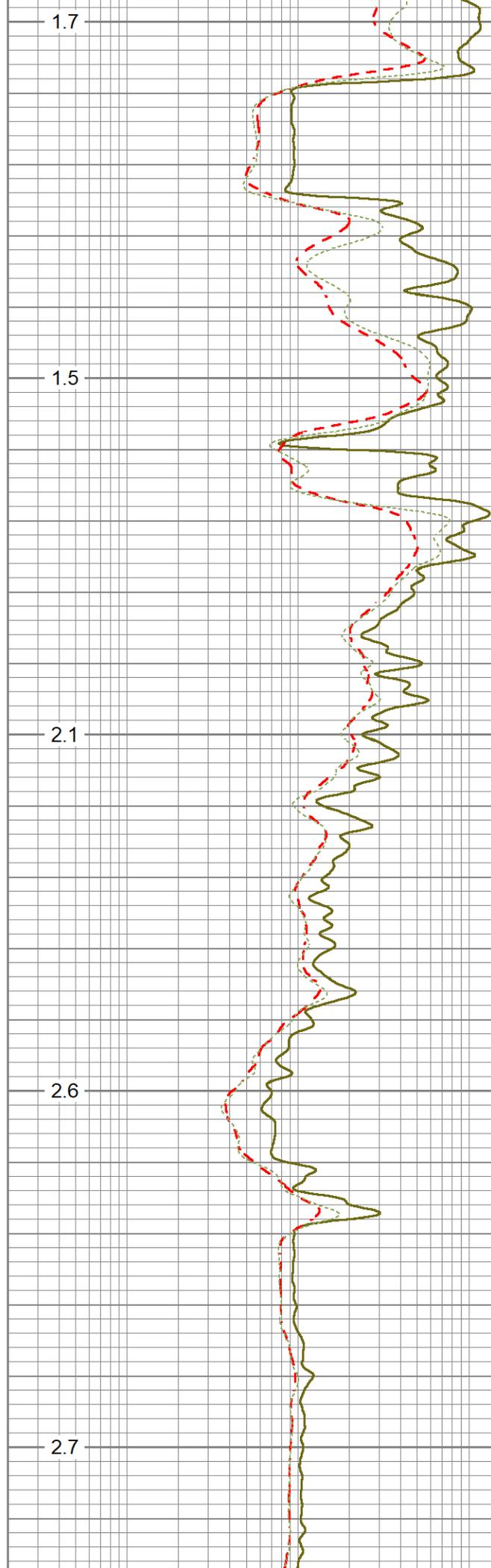
2.4

1.6

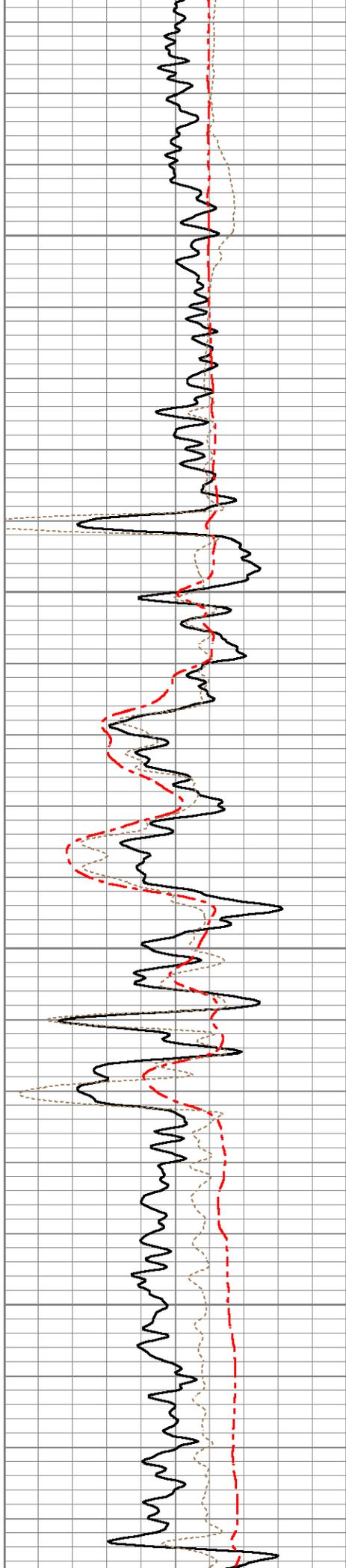




1100  
1150  
1200  
1250  
1300



1.7  
1.5  
2.1  
2.6  
2.7

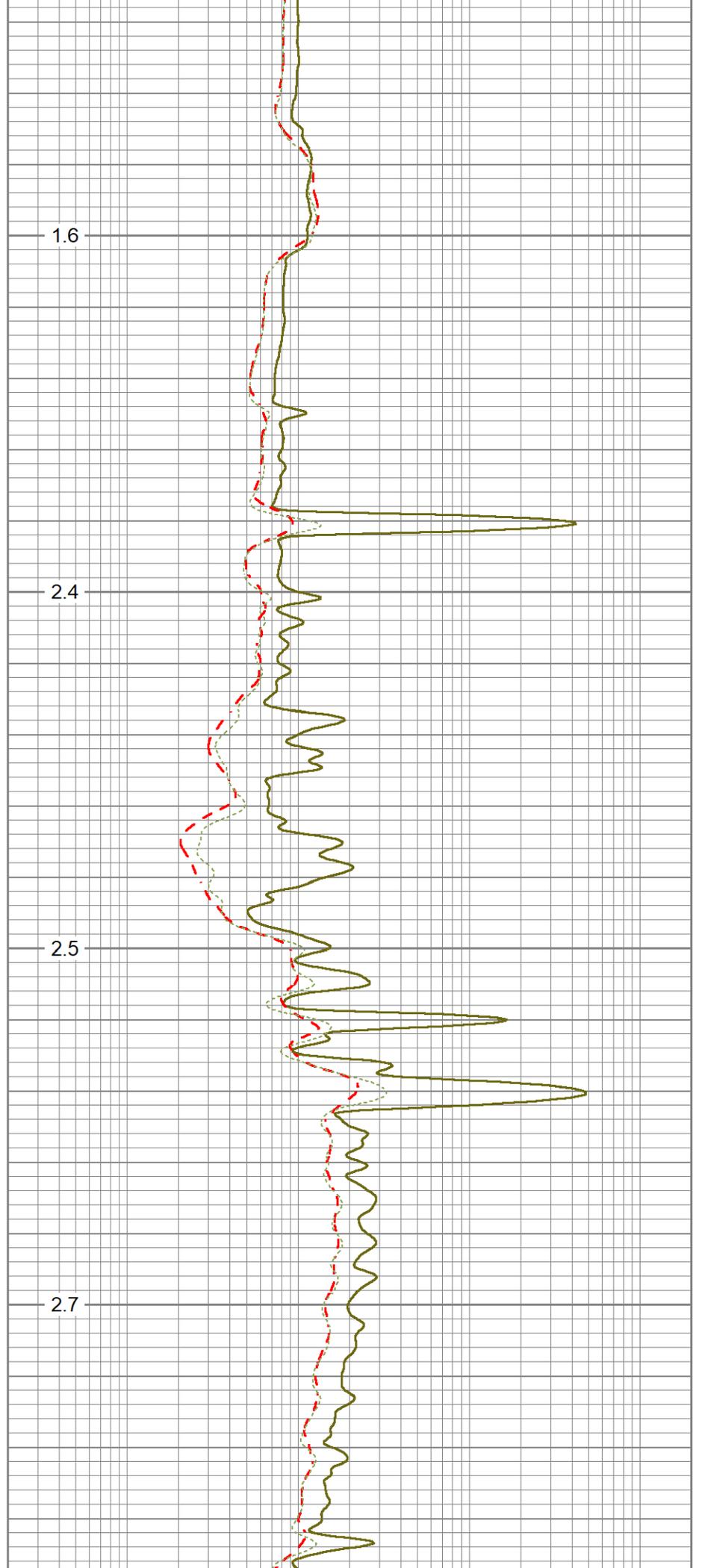


1350

1400

1450

1500

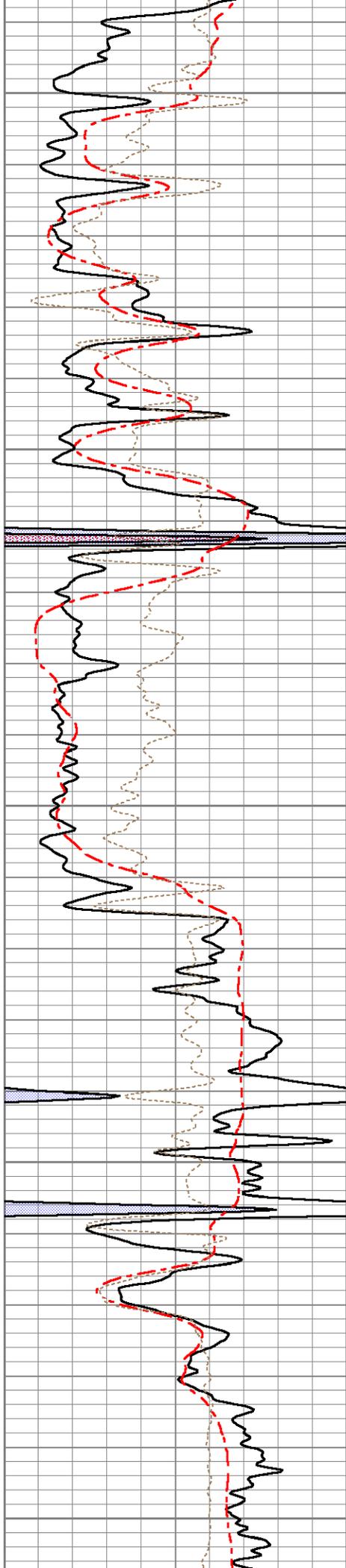


1.6

2.4

2.5

2.7



1550

1600

1650

1700

1750

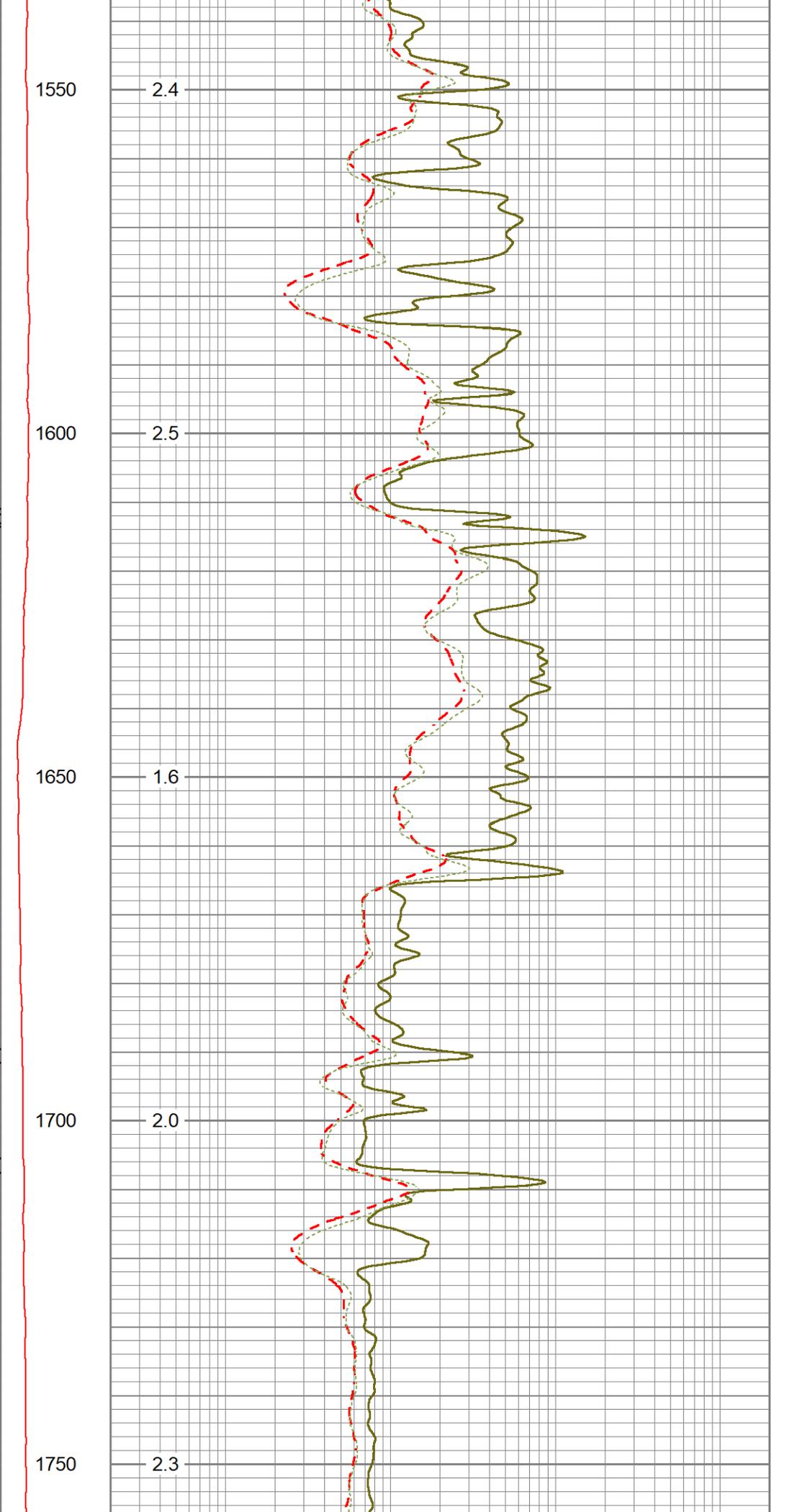
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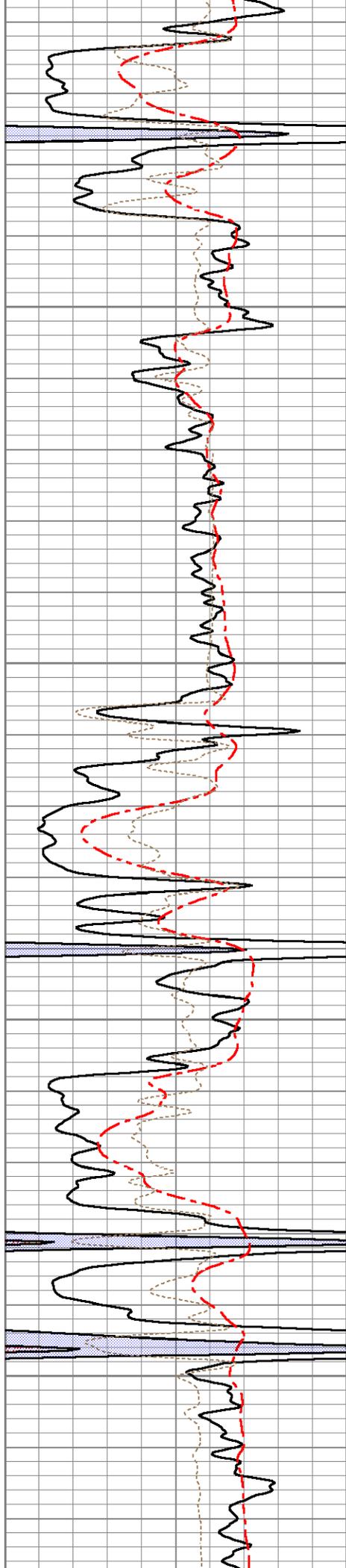
2.5

1.6

2.0

2.3





1800

1850

1900

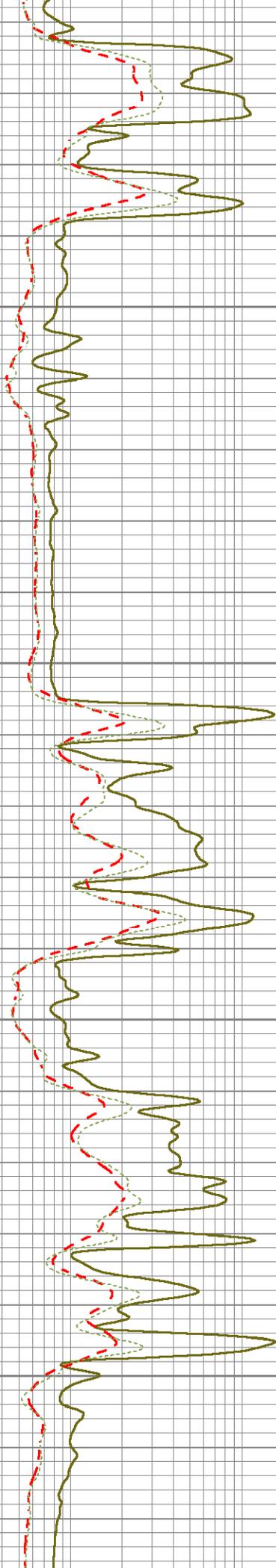
1950

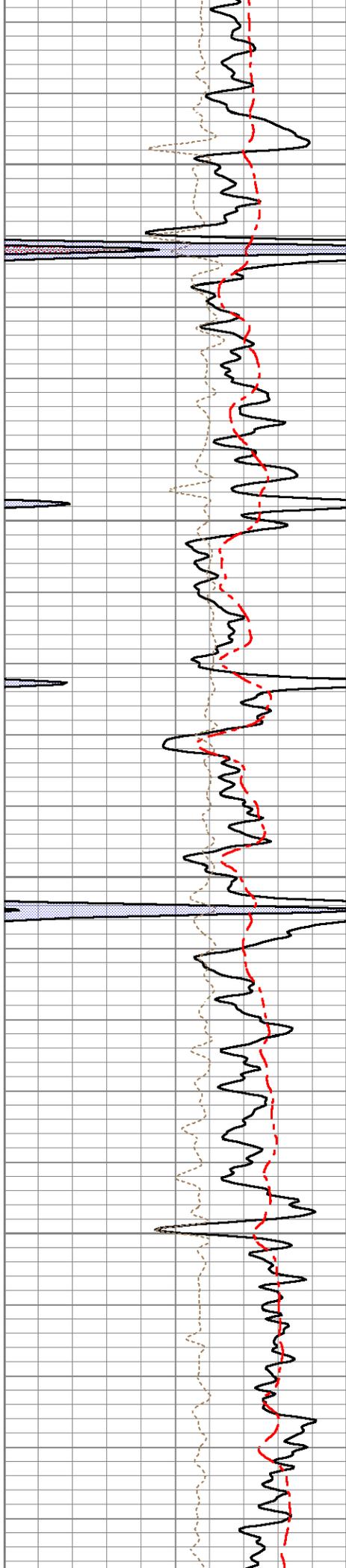
2.5

2.1

1.5

2.0





2000

2050

2100

2150

2.4

2.5

2.0

1.5





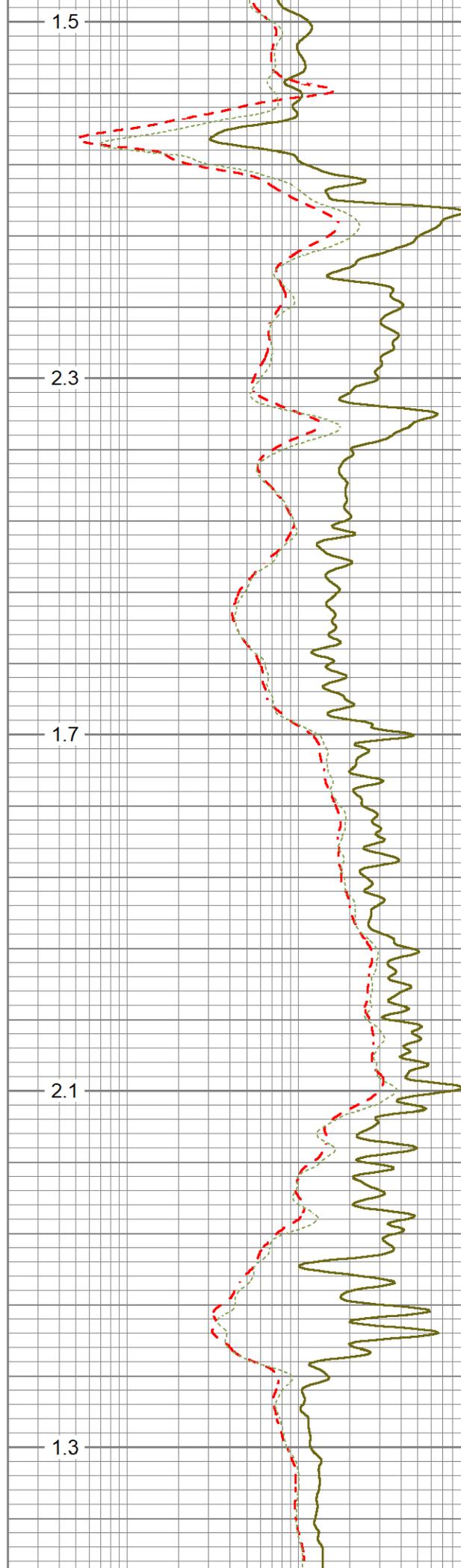
2200

2250

2300

2350

2400



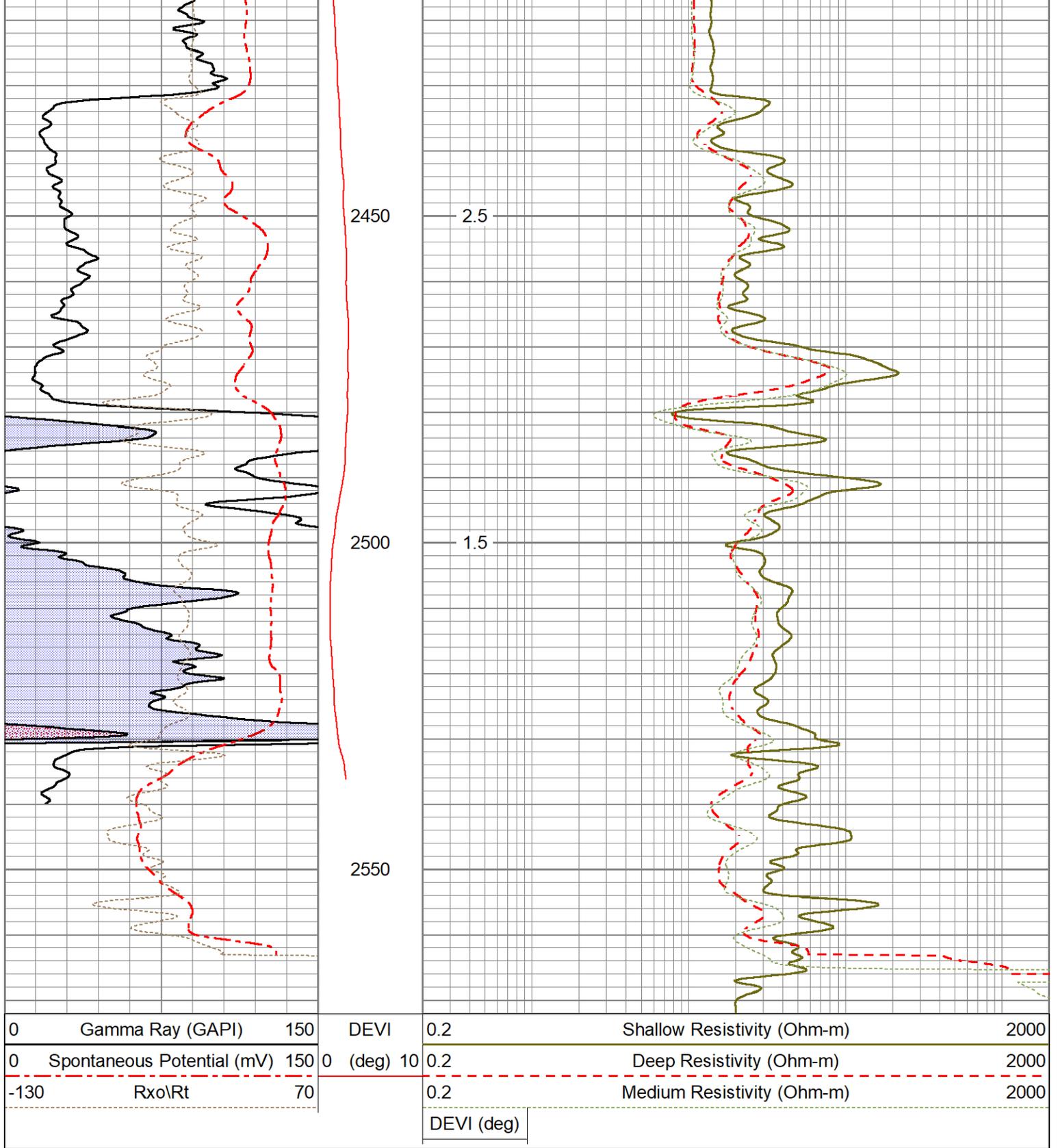
1.5

2.3

1.7

2.1

1.3



### Calibration Report

Database File ow2-9028 lone wolf.db  
 Dataset Pathname pass2  
 Dataset Creation Tue Mar 22 09:35:47 2022

### Dual Induction Calibration Report

Serial-Model: 5375-G  
 Surface Cal Performed: Sun Mar 20 17:25:38 2022  
 Downhole Cal Performed: Tue Nov 17 10:50:14 2020  
 After Survey Verification Performed: Tue Nov 17 10:50:14 2020

Surface Calibration								
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.007	0.642	V	16.000	380.000	mmho/m	573.346	12.032
Medium	0.010	0.728	V	-13.000	430.000	mmho/m	616.358	-18.970
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.642	V	0.000	350.000	mmho/m	550.717	-3.768
Medium	0.010	0.729	V	0.000	550.000	mmho/m	764.510	-7.354

Downhole Calibration								
Readings				References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-2.869	354.028	mmho/m	-0.044	350.323	mmho/m	0.982	2.773
Medium	-3.741	414.629	mmho/m	-0.037	400.340	mmho/m	0.957	3.543
LL3		9.500	V		2000.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-9.500	V		5000.000	mmho-m		

After Survey Verification								
Readings				Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-2.869	354.028	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-3.741	414.629	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		2.000	Ohm-m		
		0.000	Ohm-m		500.000	Ohm-m		
		0.000	mmho-m		1.000	mmho-m		

**Microlog Calibration Report**

Serial-Model: Performed:	01-Osage Sat Mar 12 10:36:52 2022
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Readings				References			Results	
	Zero	Cal		Zero	Cal		m	b
Normal	0.0000	0.1000	V	0.0000	10.0000	Ohm-m	100.0000	0.0000
Inverse	0.0000	0.1000	V	0.0000	10.0000	Ohm-m	100.0000	0.0000
Caliper	0.3482	9.1366	V	5.4000	20.5000	in	1.7182	4.8017

**Inclinometer Calibration Report**

Performed:	Thu Oct 8 13:57:38 2020					
	Low Read.	High Read.		Low Ref.	High Ref.	
X Accelerometer	205.00	1843.00		-1.00	1.00	gee
Y Accelerometer	205.00	1843.00		-1.00	1.00	gee
Z Accelerometer						gee

**Gamma Ray Calibration Report**

Serial Number: Tool Model:	Refurb01 OSAGE_01
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Performed: Mon Jan 18 09:02:16 2021

Calibrator Value: 150.0 GAPI

Background Reading: 125.0 cps

Calibrator Reading: 875.0 cps

Sensitivity: 0.2000 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ACCY	31.04		ADMYR_TELEMETRY-OSAGE_01 (Refurb01) Admyr Telemetry With Gr, Deviation, ADC board and Pulses Board in it.	3.69	3.25	53.00
ACCX	31.04					
GR	29.86					
FRAMES	28.54					
SSTAT	28.54		MICRO_DIG-Osage (01) Digital Microlog	7.21	5.13	137.00
PSTAT	28.54					
ASTAT	28.54					
MI	23.00					
MN	23.00					
MCAL	22.00					
ASTAT2	21.33					
SP	10.92		DIL-G (5375) Gearhart	21.33	4.00	290.00
CILD	10.92					
CILM	7.00					
RLL3	1.65					
TR_Mon	0.00					

Dataset: ow2-9028 lone wolf.db: field/well/run1/pass2

Total length: 32.23 ft

Total weight: 480.00 lb

O.D.: 5.13 in



# 1" INDUCTION LOG

Database File ow2-9028 lone wolf.db

Dataset Pathname pass2.4

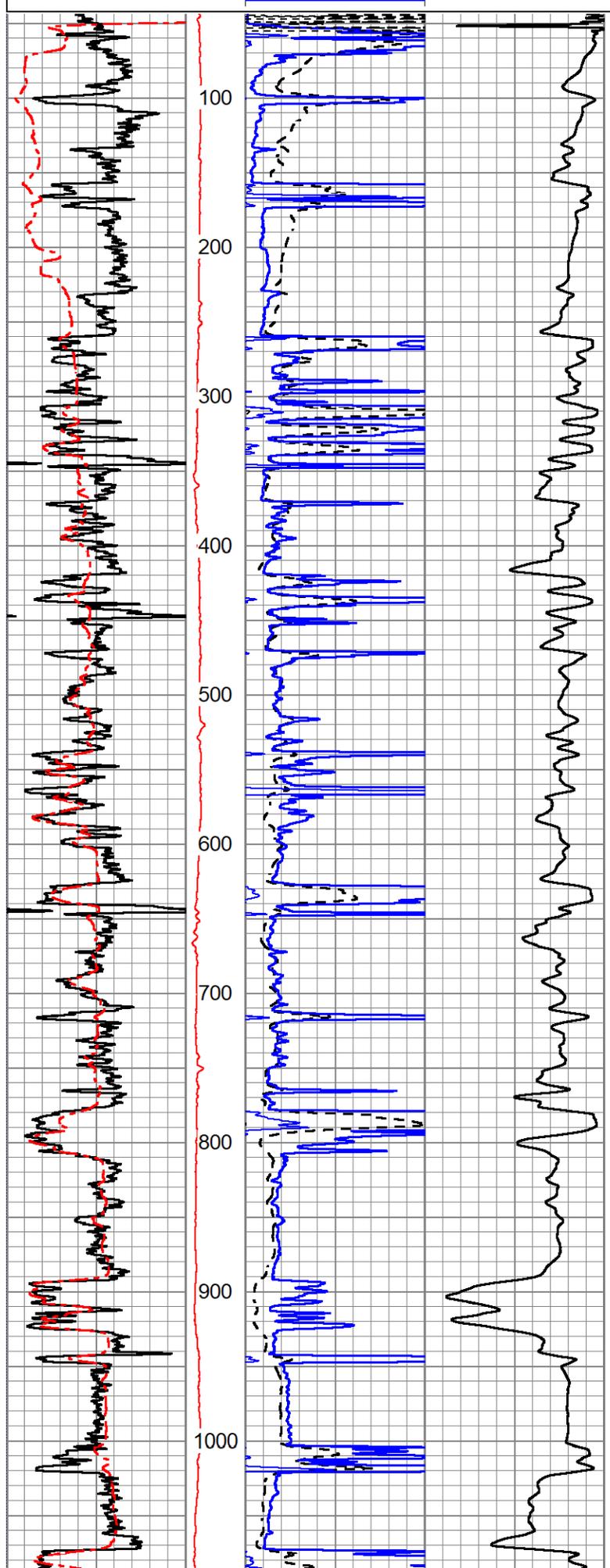
Presentation Format mmdil1

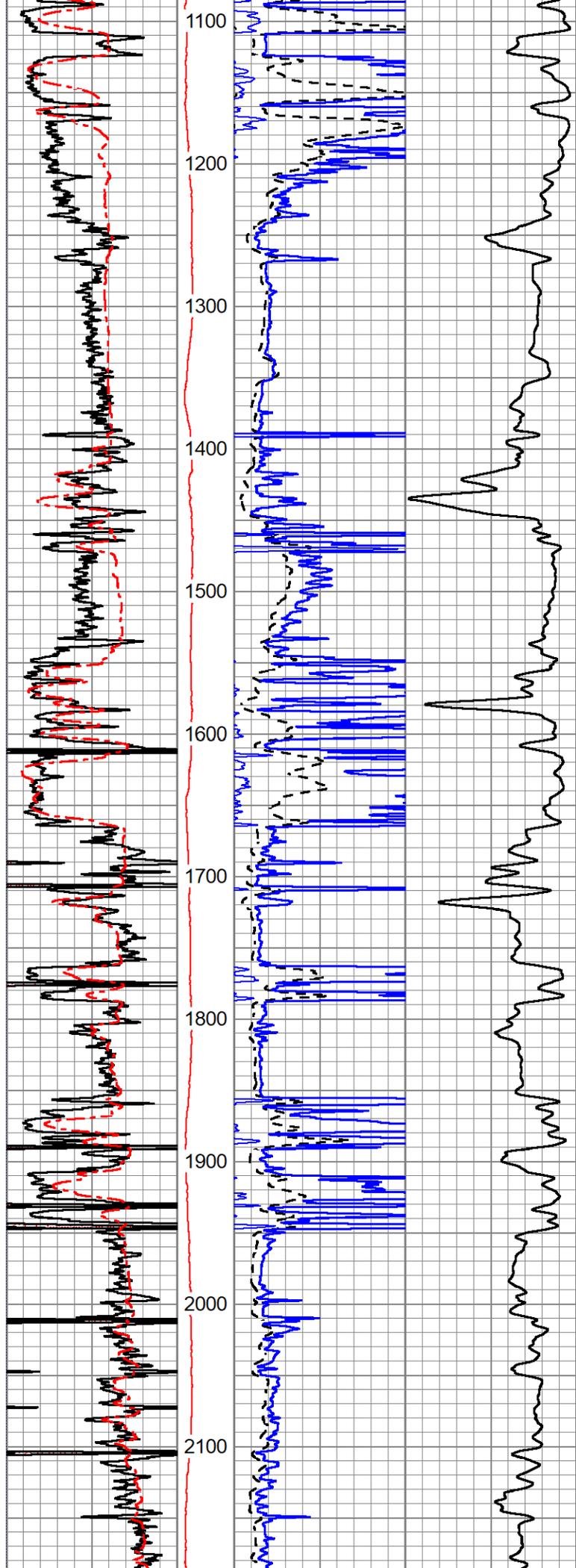
Dataset Creation Tue Mar 22 10:27:43 2022

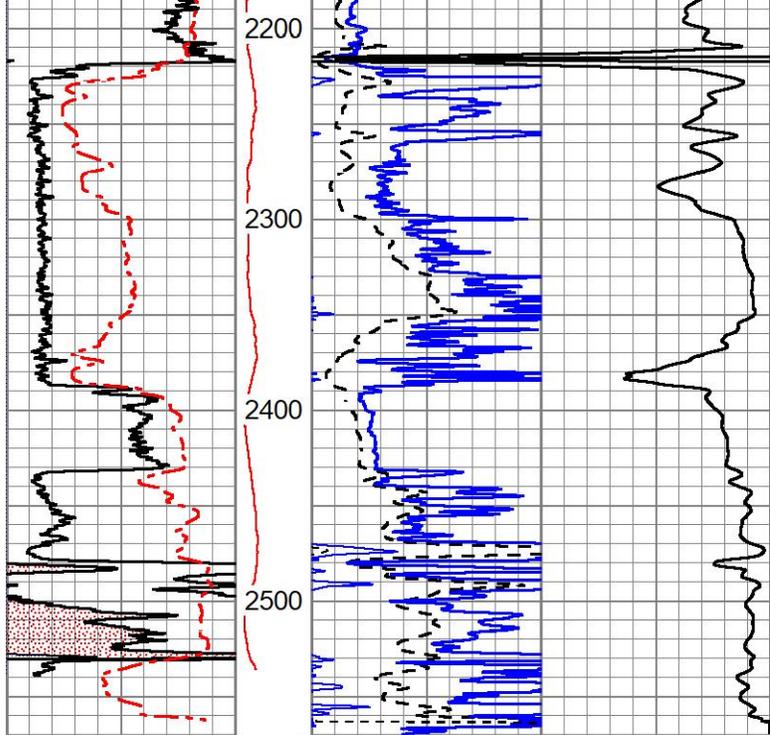
Charted by Depth in Feet scaled 1:1200

0	GR (GAPI)150	DEVI	1000	CILD (mmho/m)	0
0	SP (mV) 150	(deg)		RILD	
		0 10	0	(Ohm-m) 50	

RLL3  
0 (Ohm-m) 50







0	GR (GAPI) 150	DEVI	1000	CILD (mmho/m)	0
0	SP (mV) 150	(deg)		RILD	
0		0 10		(Ohm-m)	50
				RLL3	
				(Ohm-m)	50



# 1" INDUCTION LOG