DUAL INDUCTION LOG

Company K & N PETROLEUM, INC.
Well SOEKEN #21-2 OWWO
Field KRAFT-PRUSA
County BARTON State KANSAS

Location: API # : 15-009-24538-0001
1653' FNL & 937' FEL
SE - NW - SE - NE
SEC 21 TWP 17S RGE 11W

Other Services
CDL/CNL
MEL

Elevation
K.B. 1842
D.F. 1840
G.L. 1831

Permanent Datum GROUND LEVEL Elevation 1831
Log Measured From KELLY BUSHING 11' A.G.L
Drilling Measured From KELLY BUSHING

Company K & N PETROLEUM, INC.
Well SOEKEN #21-2 OWWO
Field KRAFT-PRUSA
County BARTON
State KANSAS

Date	3/6/23		
Run Number	ONE		
Depth Driller	3800		
Depth Logger	3799		
Bottom Logged Interval	3797		
Top Log Interval	00		
Casing Driller	8 5/8" @ 390		
Casing Logger	390		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,500 PPM	
Density / Viscosity	9.7/75		
pH / Fluid Loss	8.5/9.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.750 @ 75F		
Rmf @ Meas. Temp	.563 @ 75F		
Rmc @ Meas. Temp	.900 @ 75F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	1.14 @ 114F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	2:00 P.M.		
Maximum Recorded Temperature	114F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	COLE ROBBEN		
Witnessed By	JIM MUSGROVE	JOSHUA AUSTIN	

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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

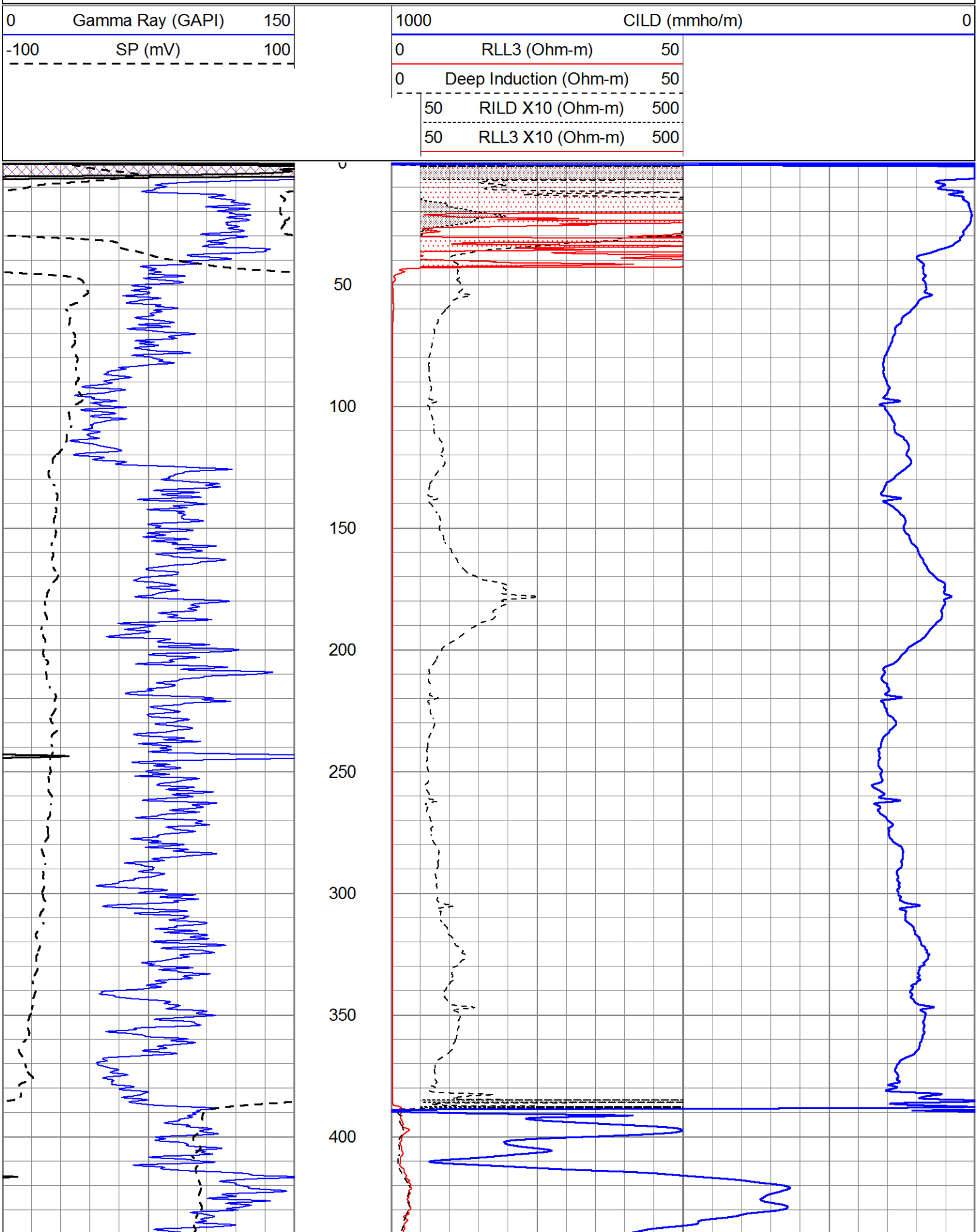
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

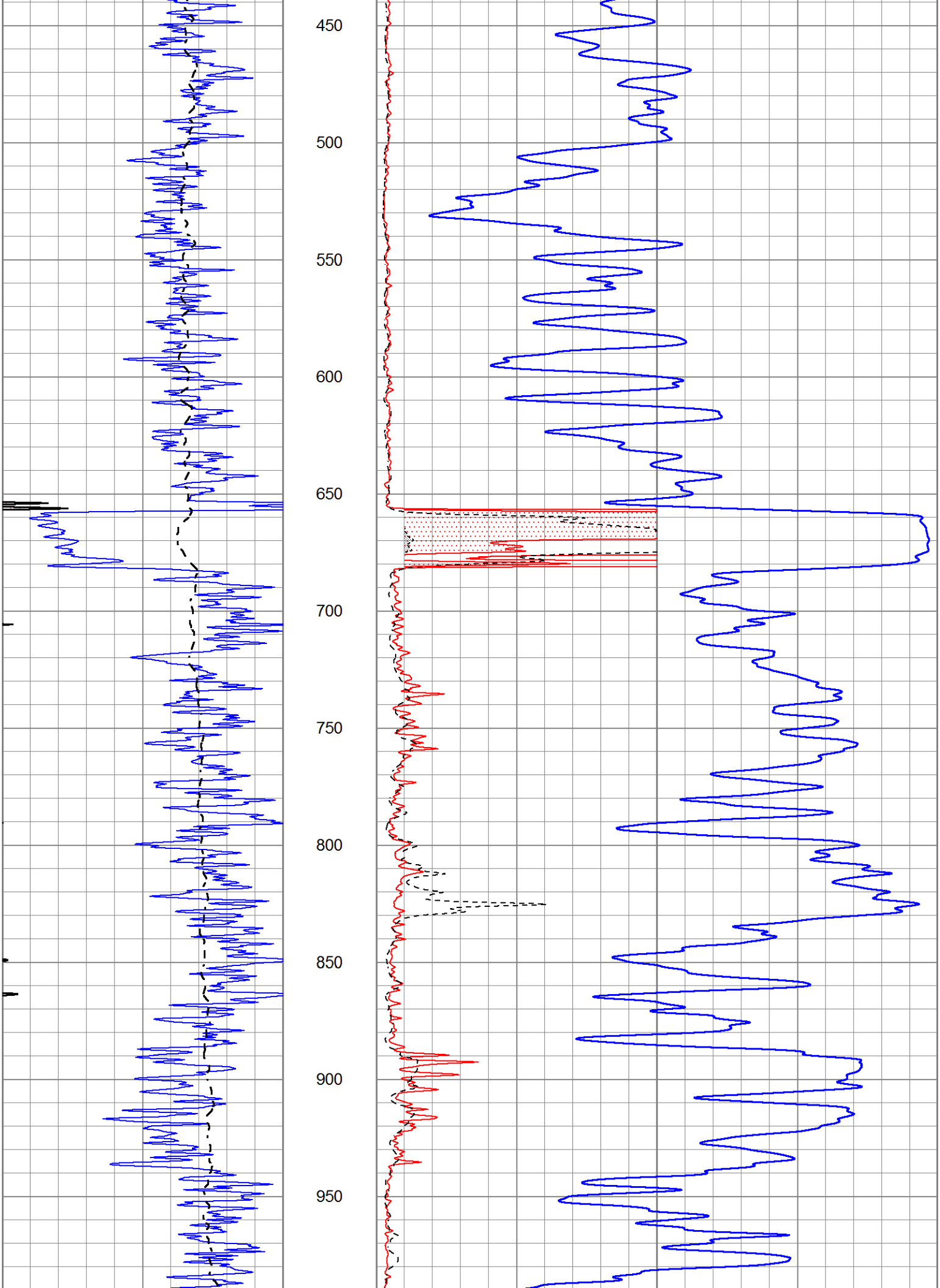
DIRECTIONS:

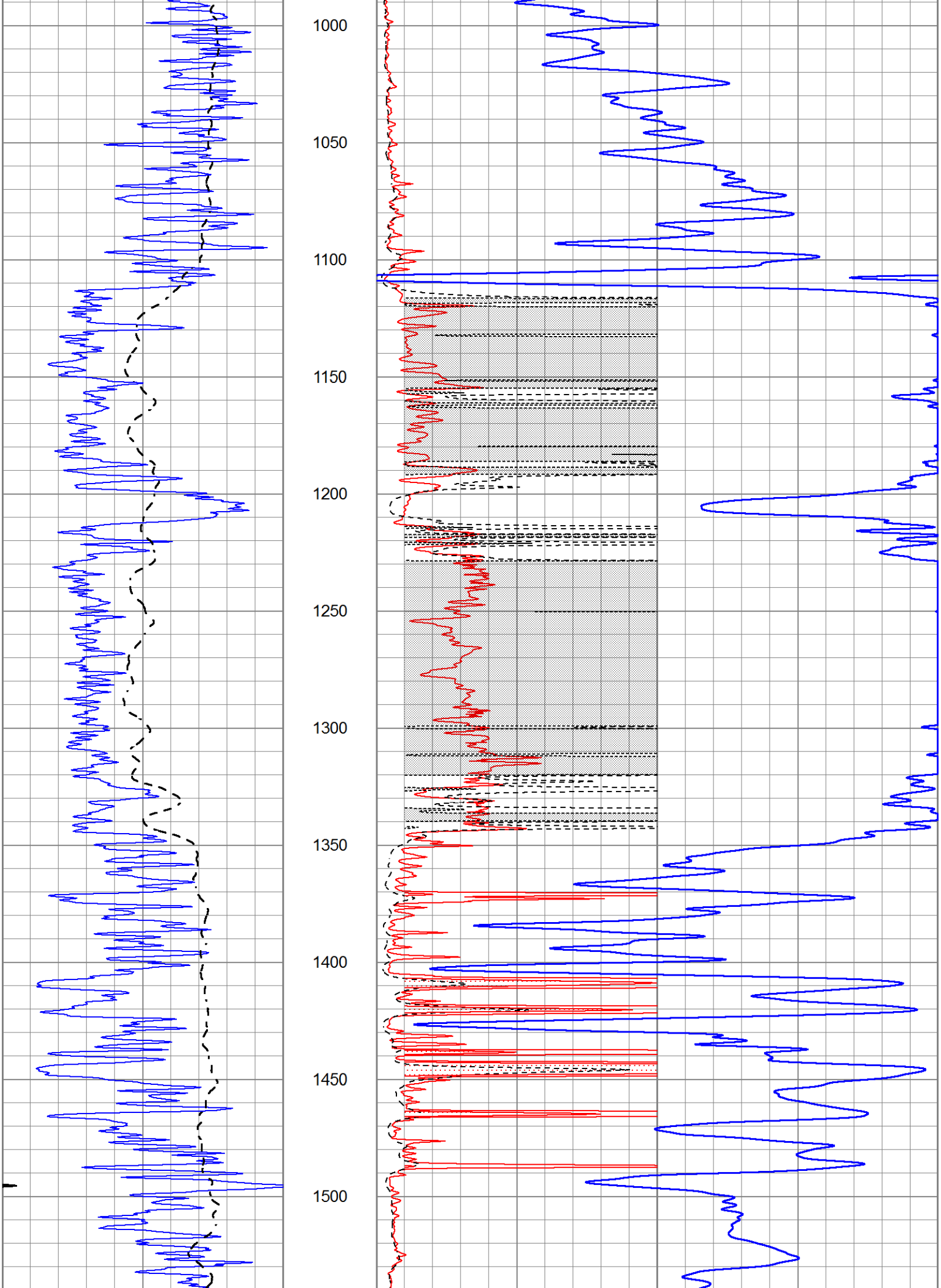
FROM CLAFLIN, KANSAS GO NORTH ON NE 130 AVENUE FOR 2 3/4 MILES, WEST INTO

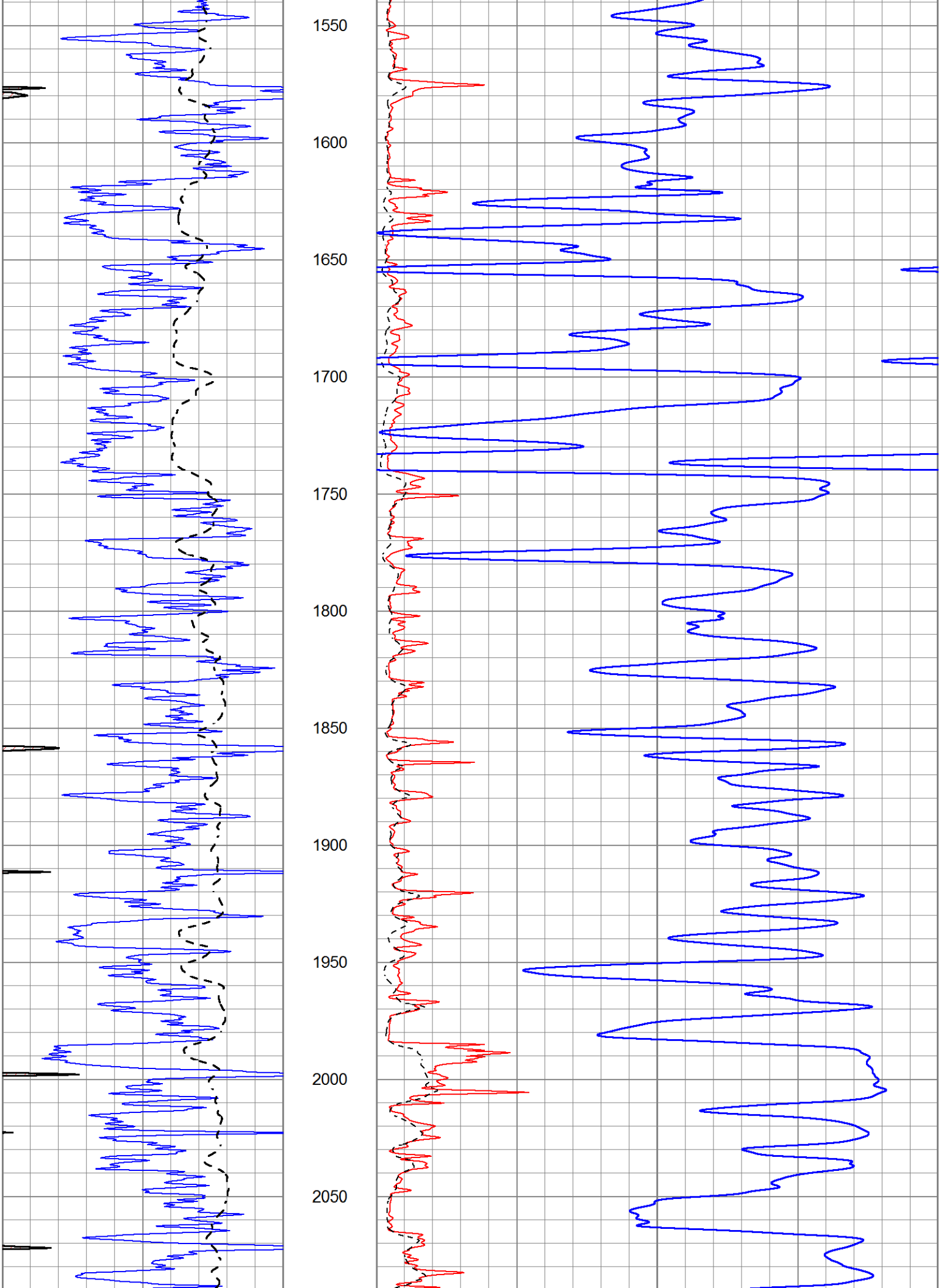
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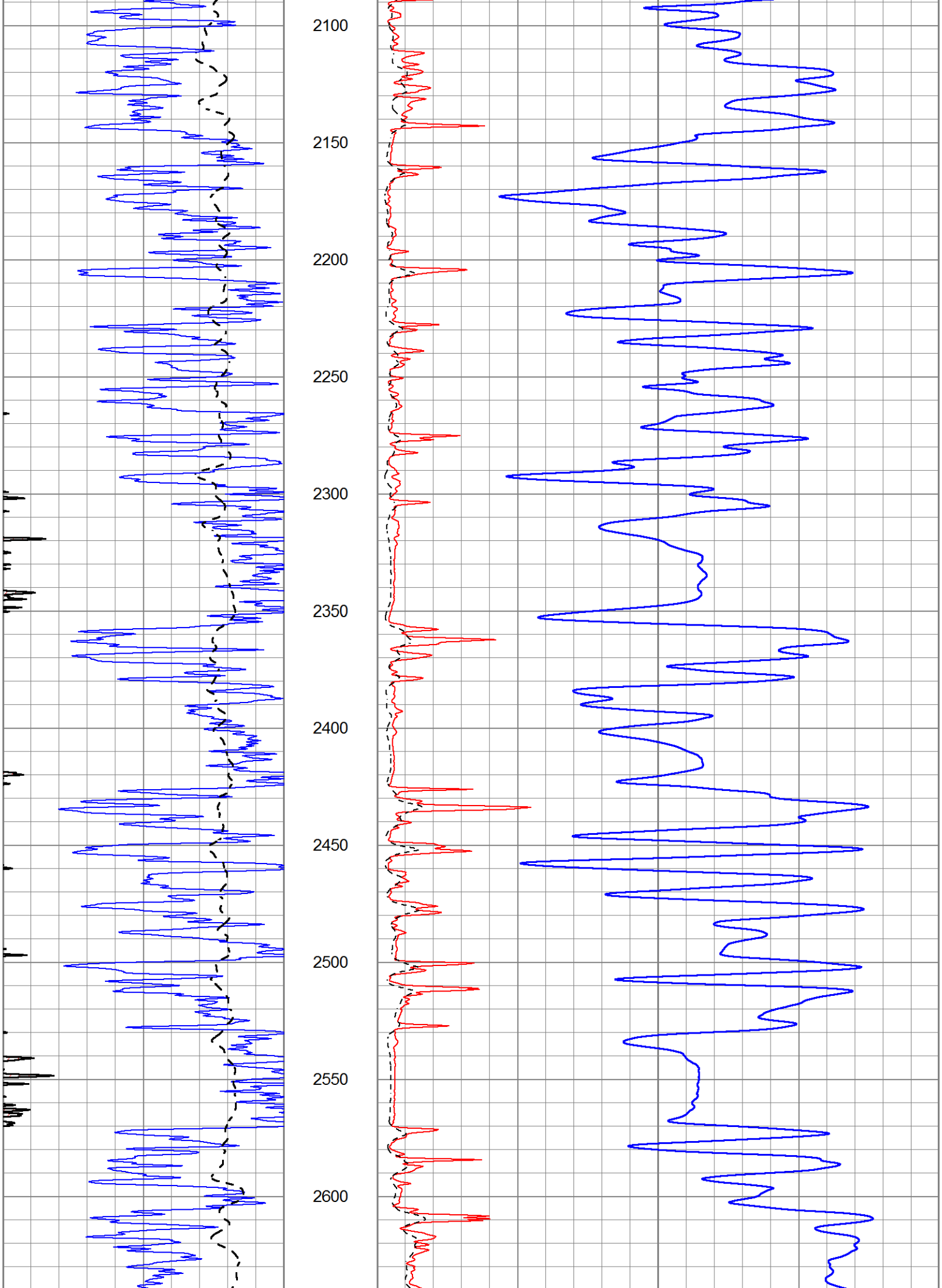
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Presentation Format	_dil2
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Charted by	Depth in Feet scaled 1:600

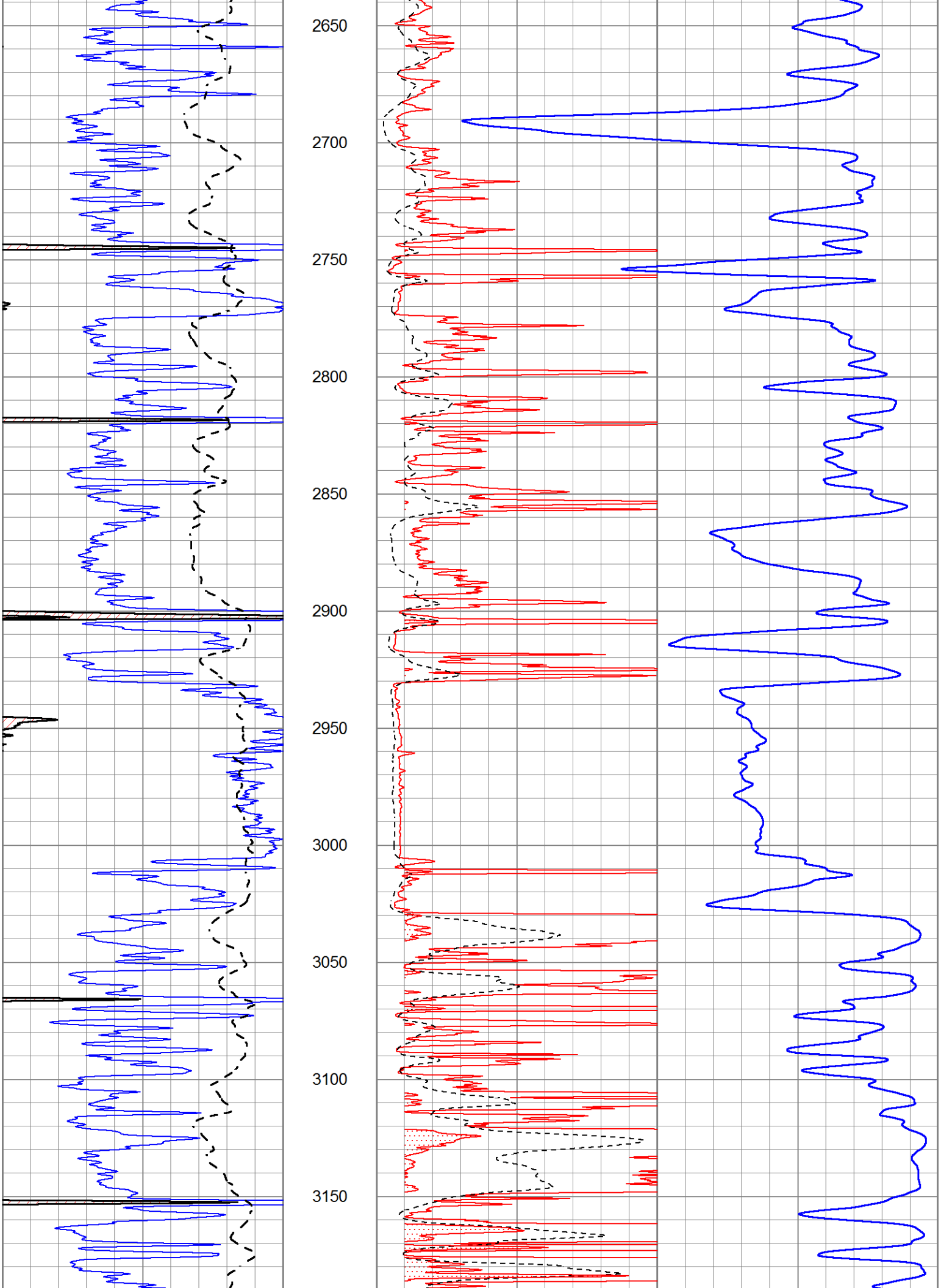


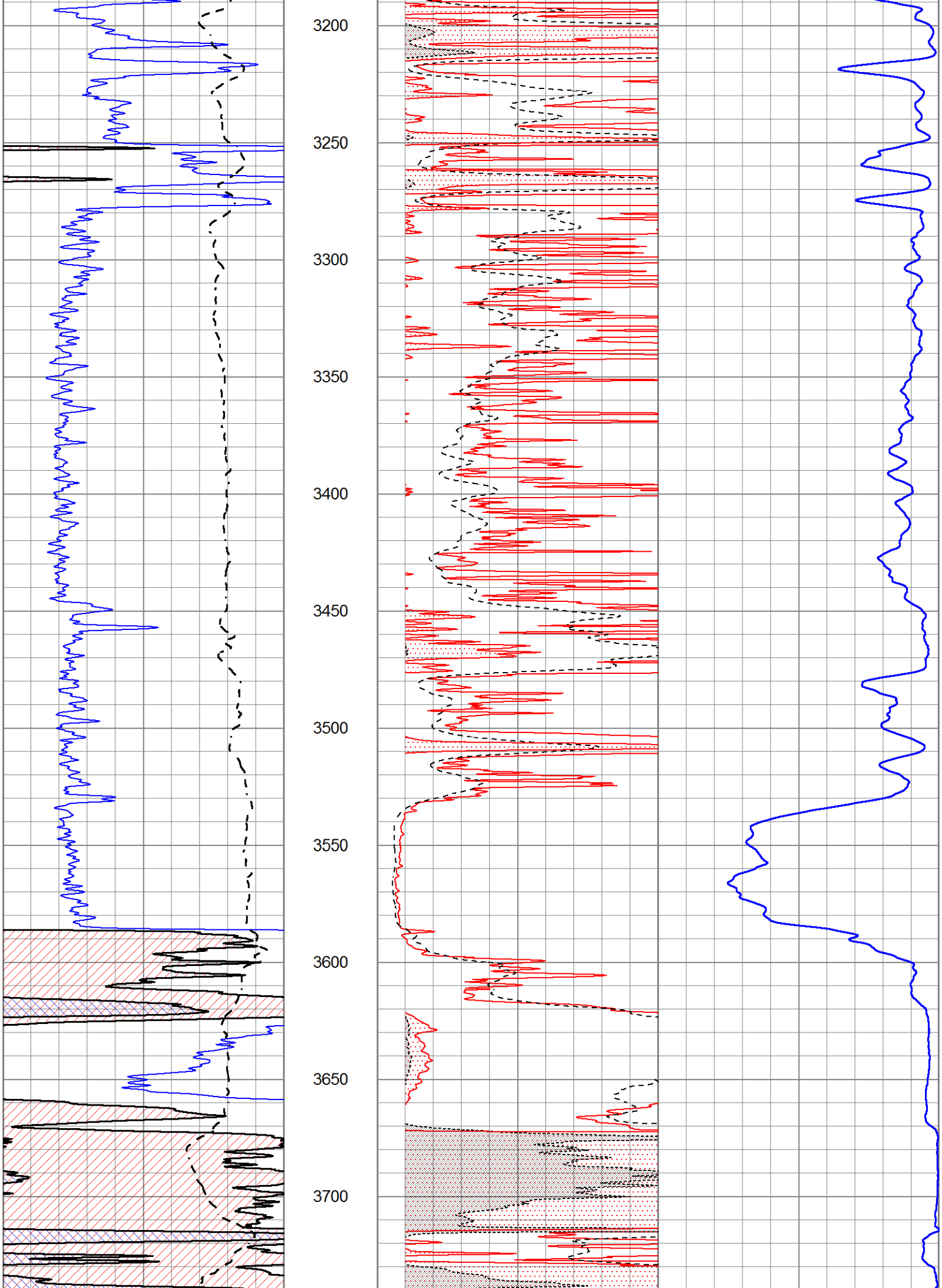

450
500
550
600
650
700
750
800
850
900
950

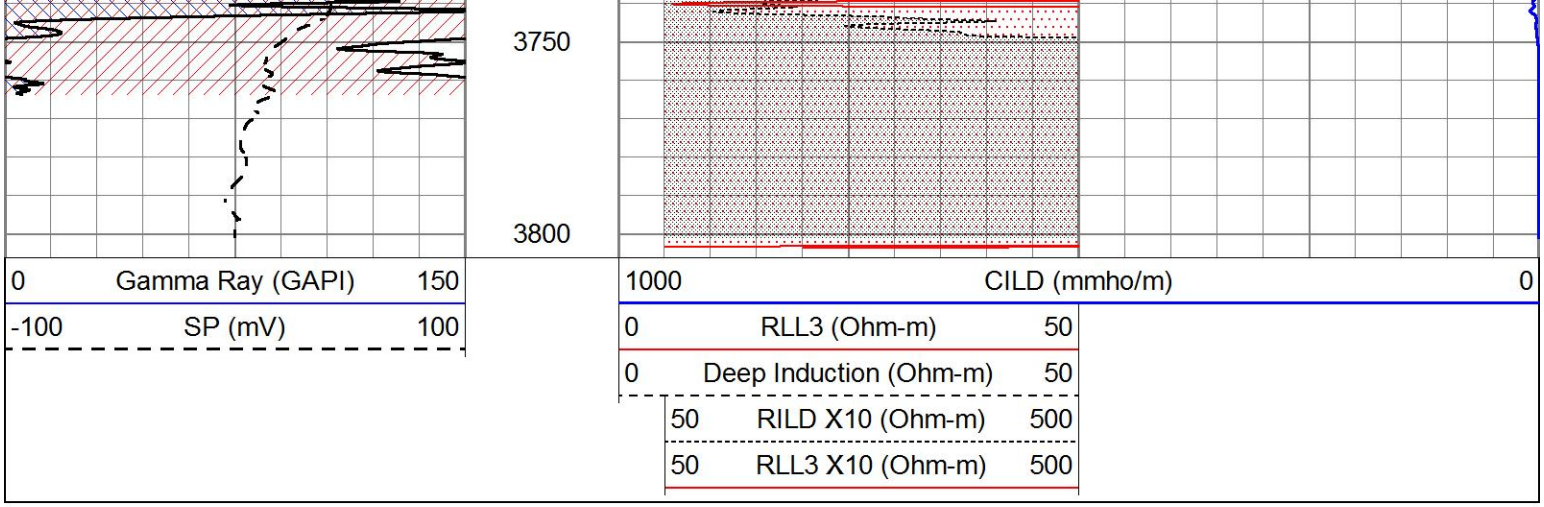

1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500


1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050


2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600

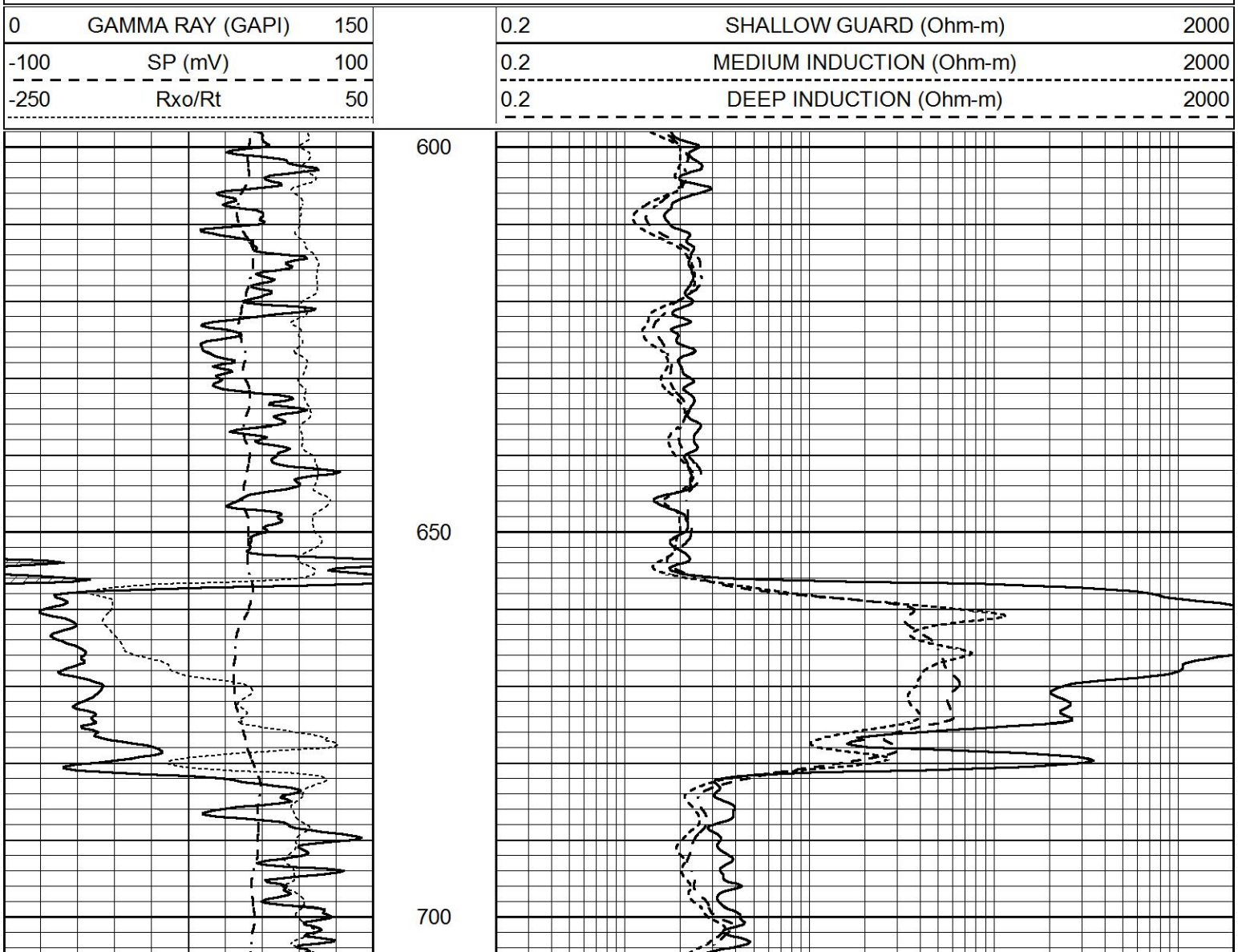

2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150


3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700



ANHYDRITE

Database File	7654ddn.db
Dataset Pathname	pass3A
Presentation Format	_dil
Dataset Creation	Mon Mar 06 15:24:38 2023
Charted by	Depth in Feet scaled 1:240



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

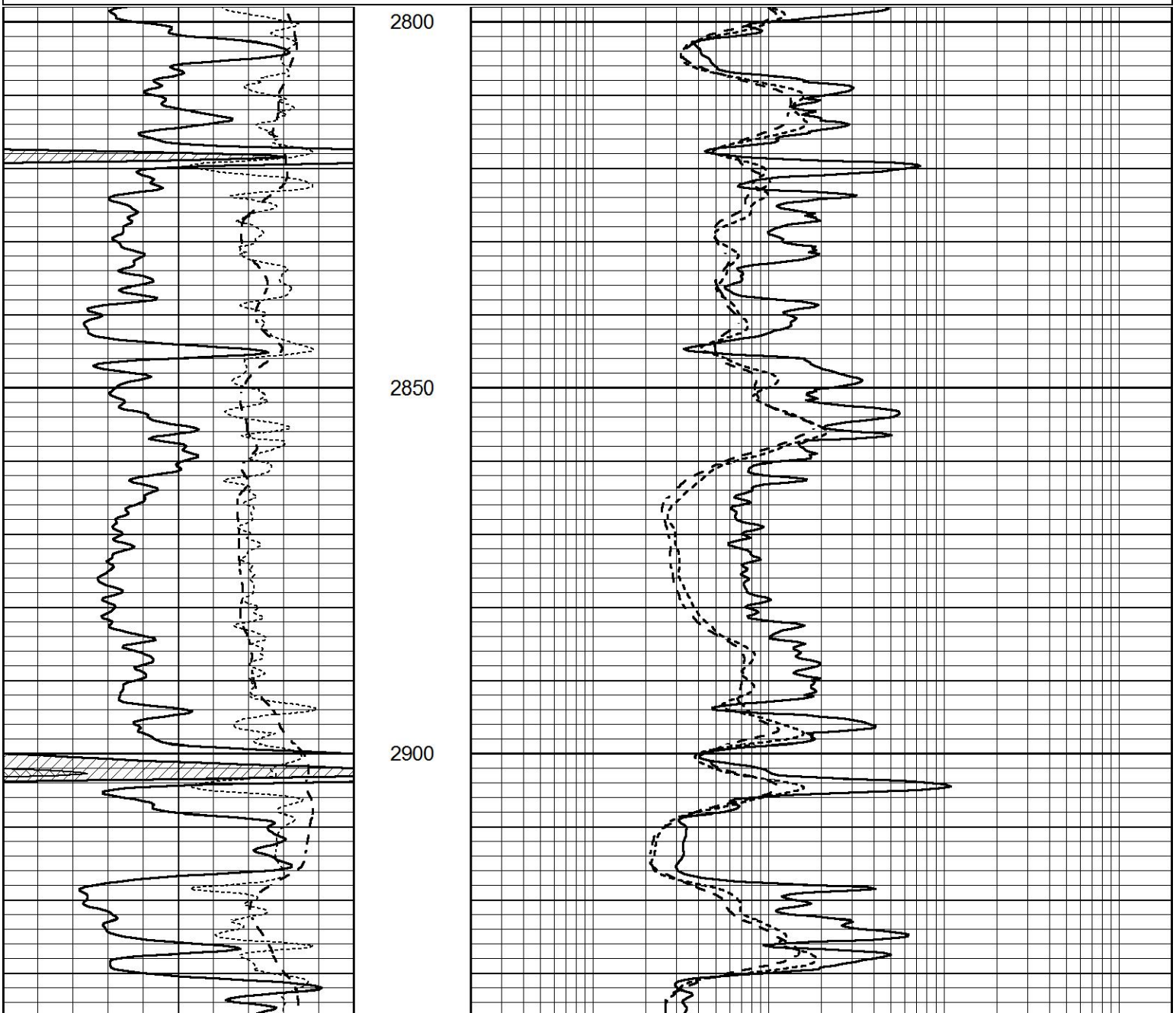
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

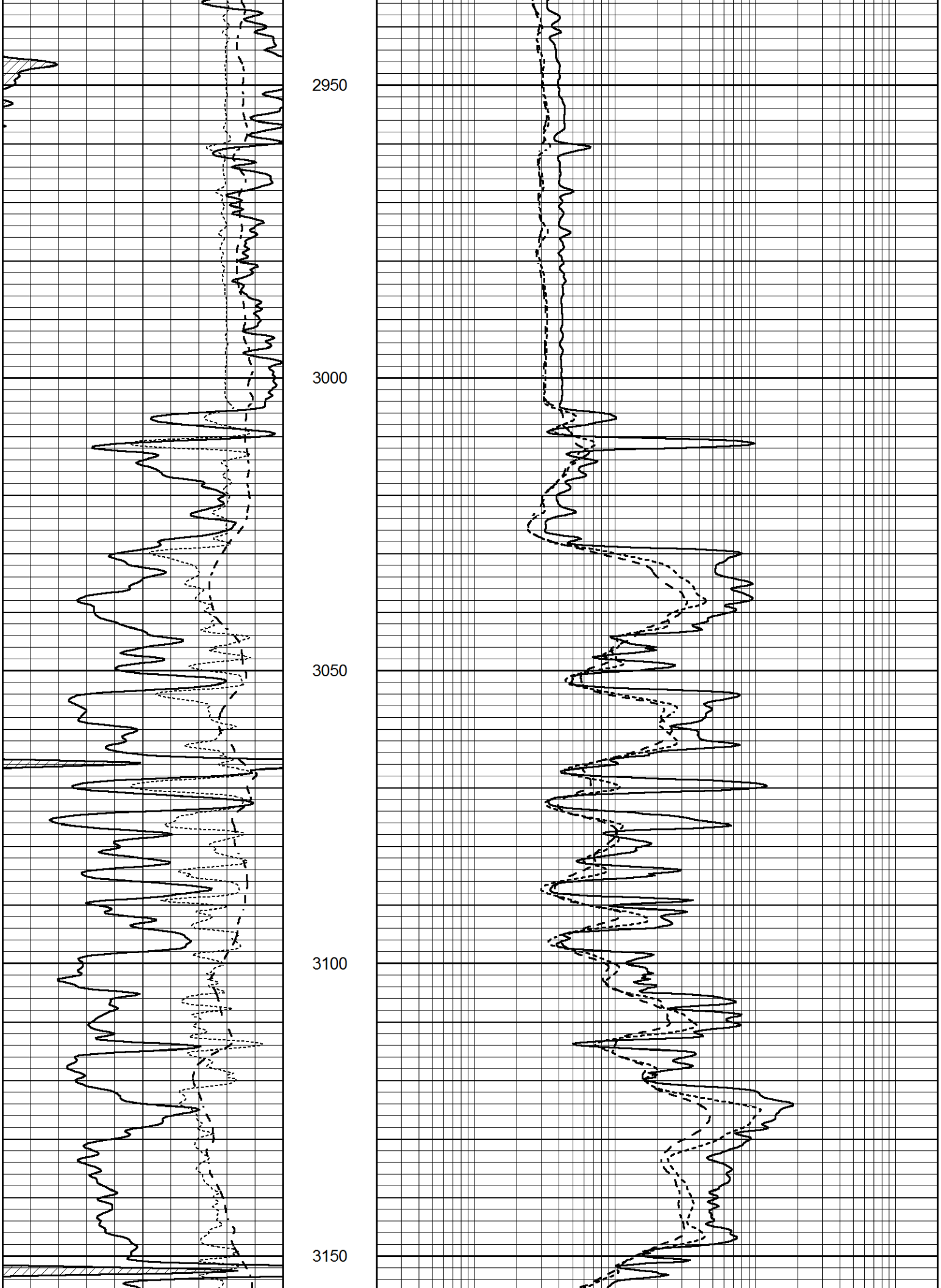
MAIN SECTION

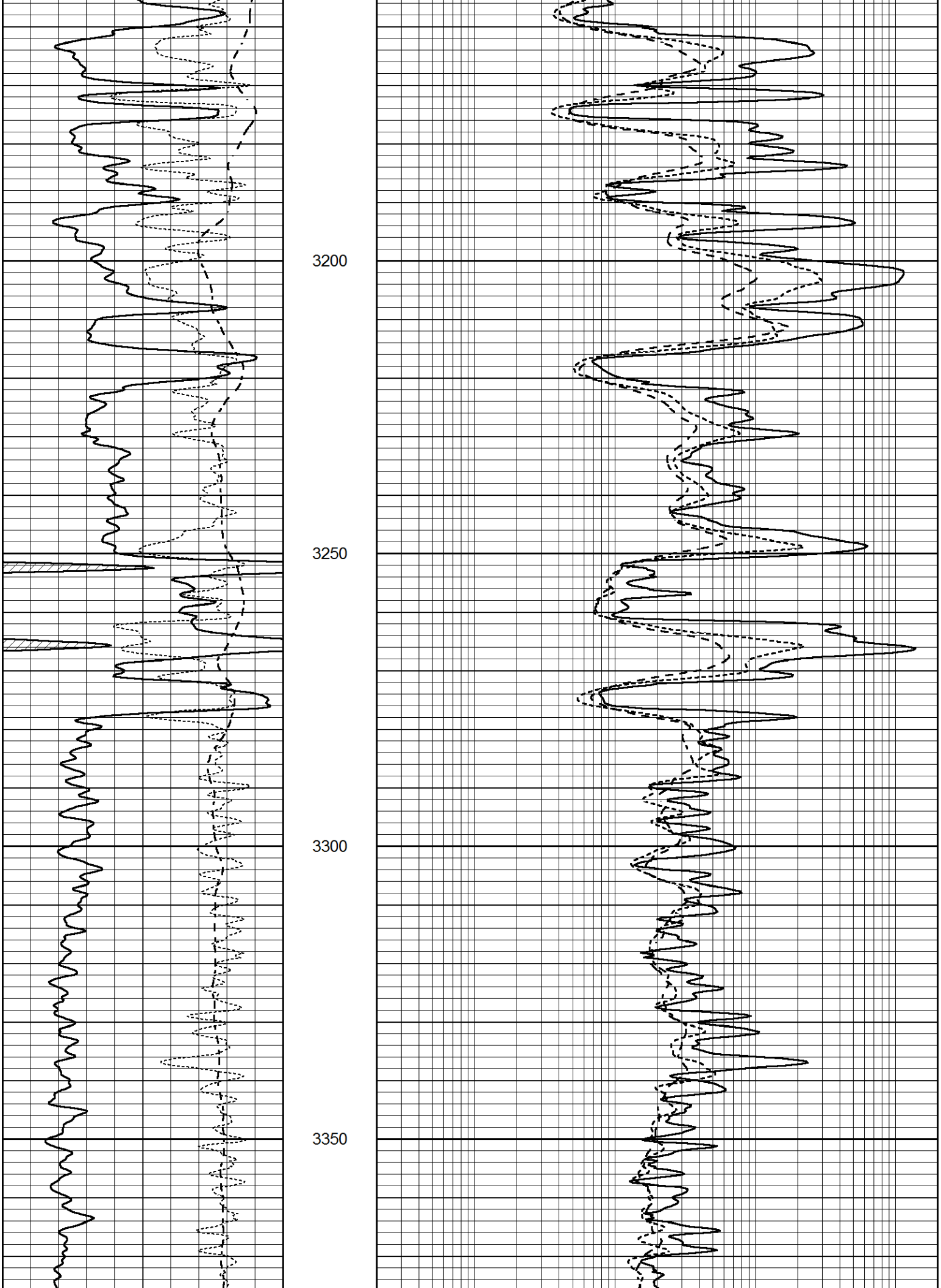
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Presentation Format	_dil
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Charted by	Depth in Feet scaled 1:240

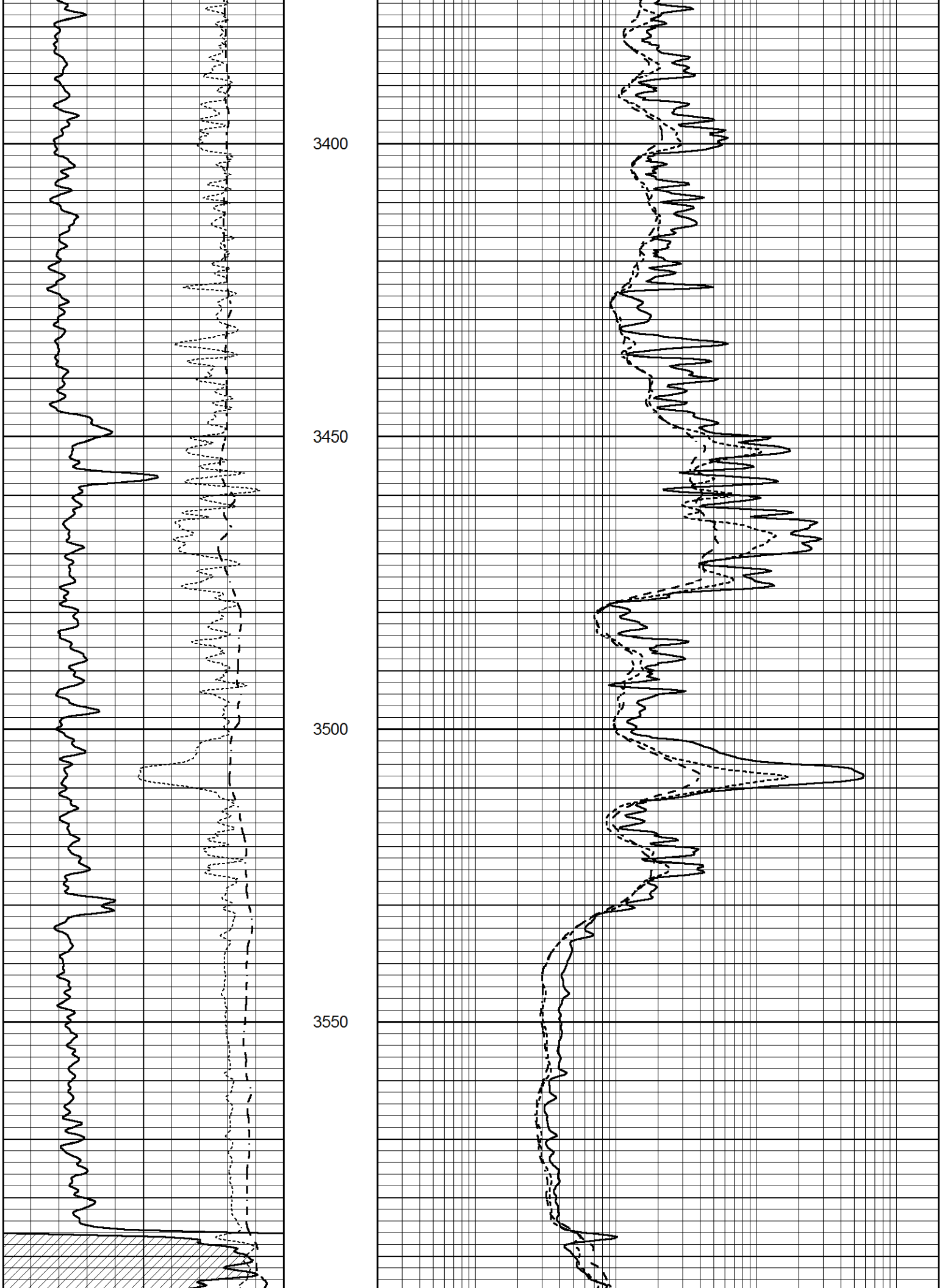
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

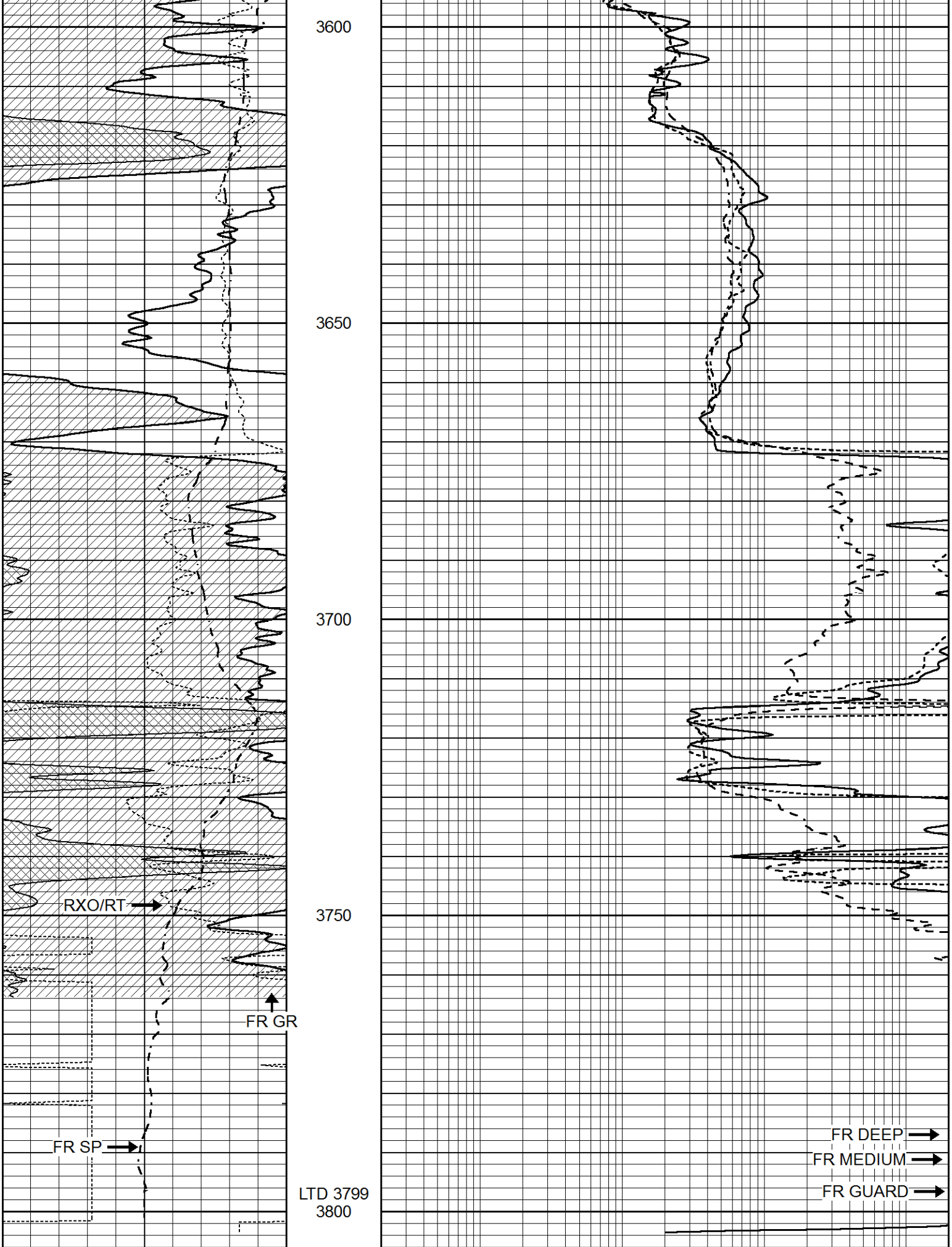
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000




2950
3000
3050
3100
3150


3200
3250
3300
3350


3400
3450
3500
3550



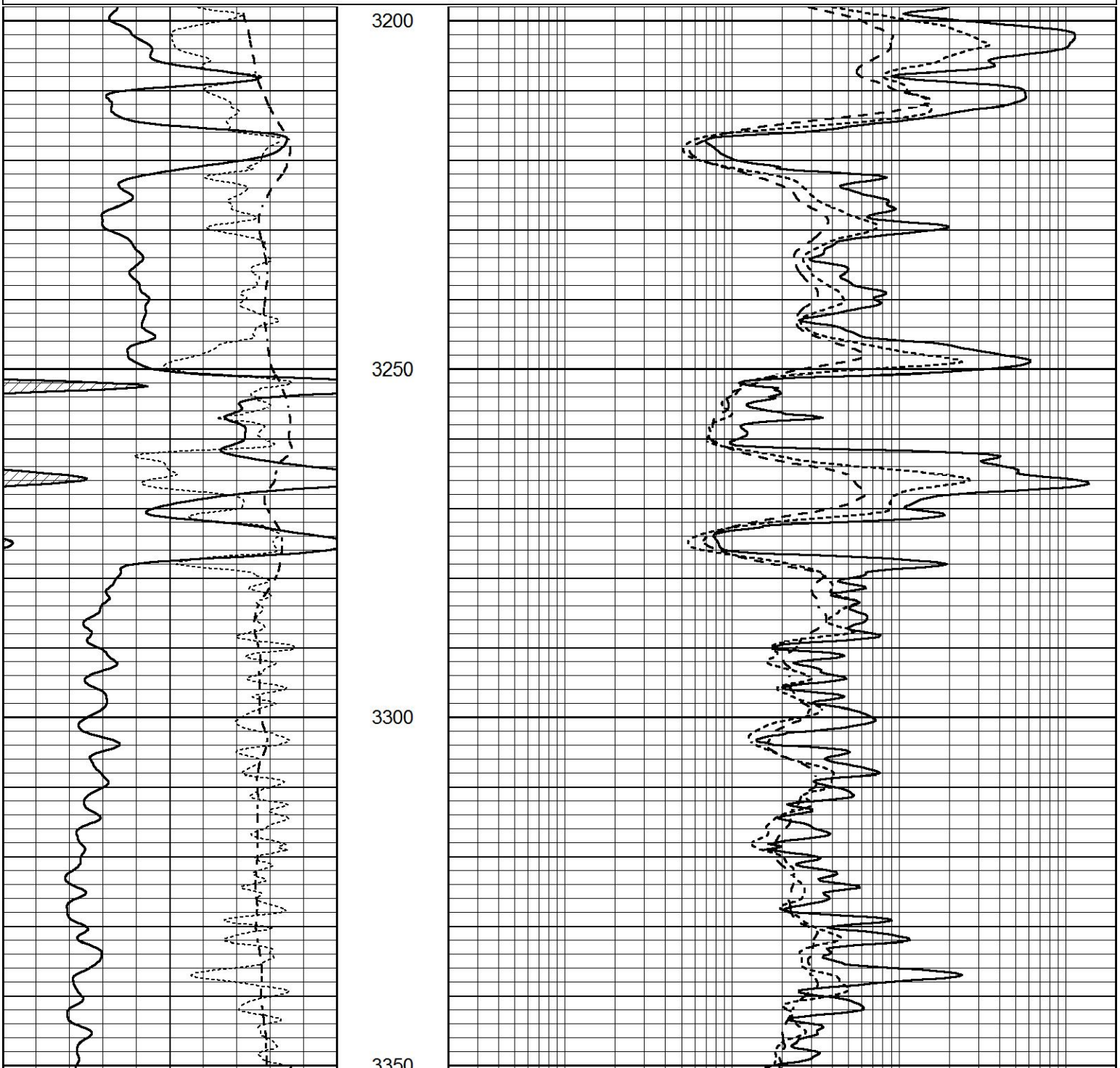
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

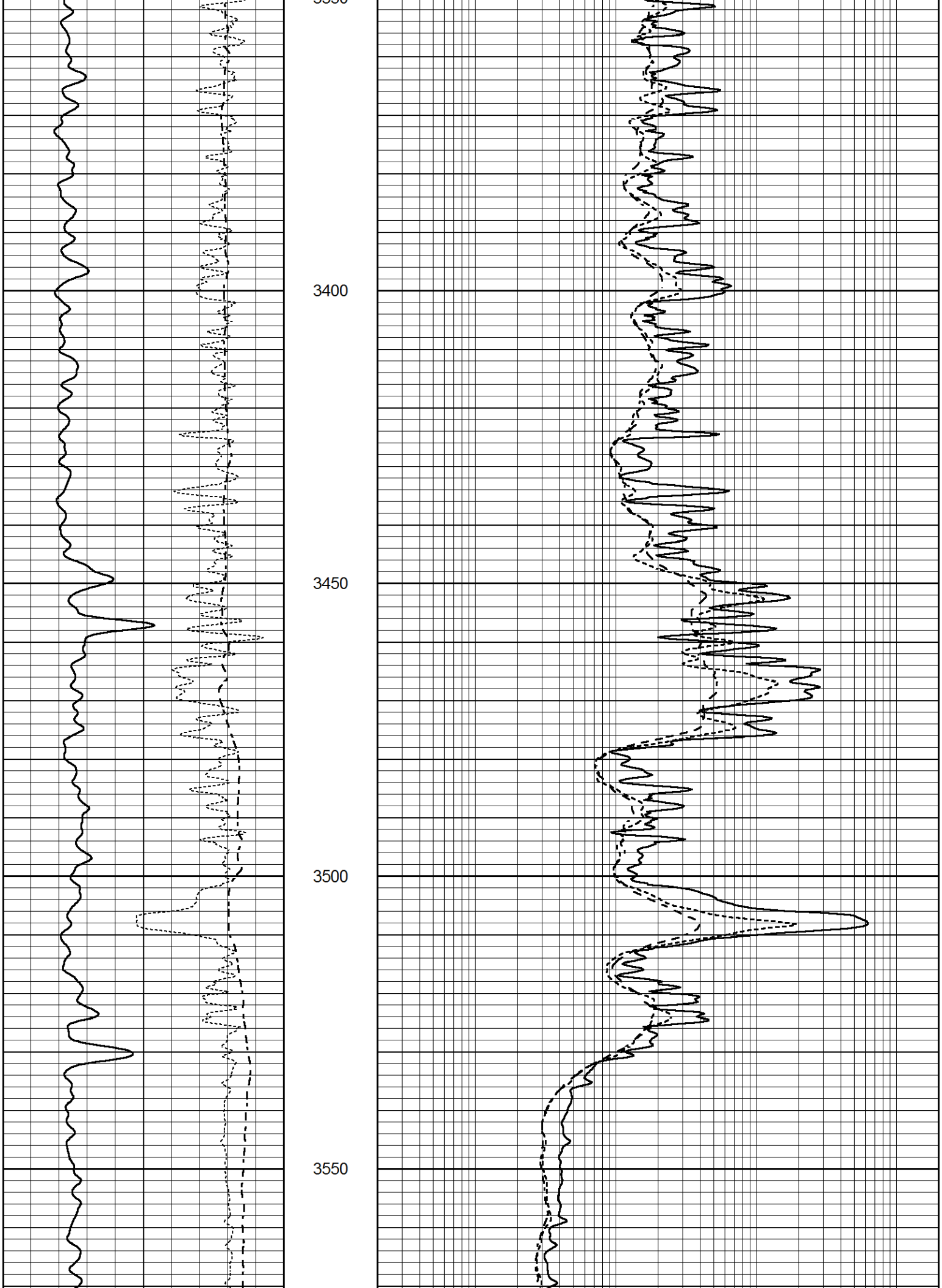
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

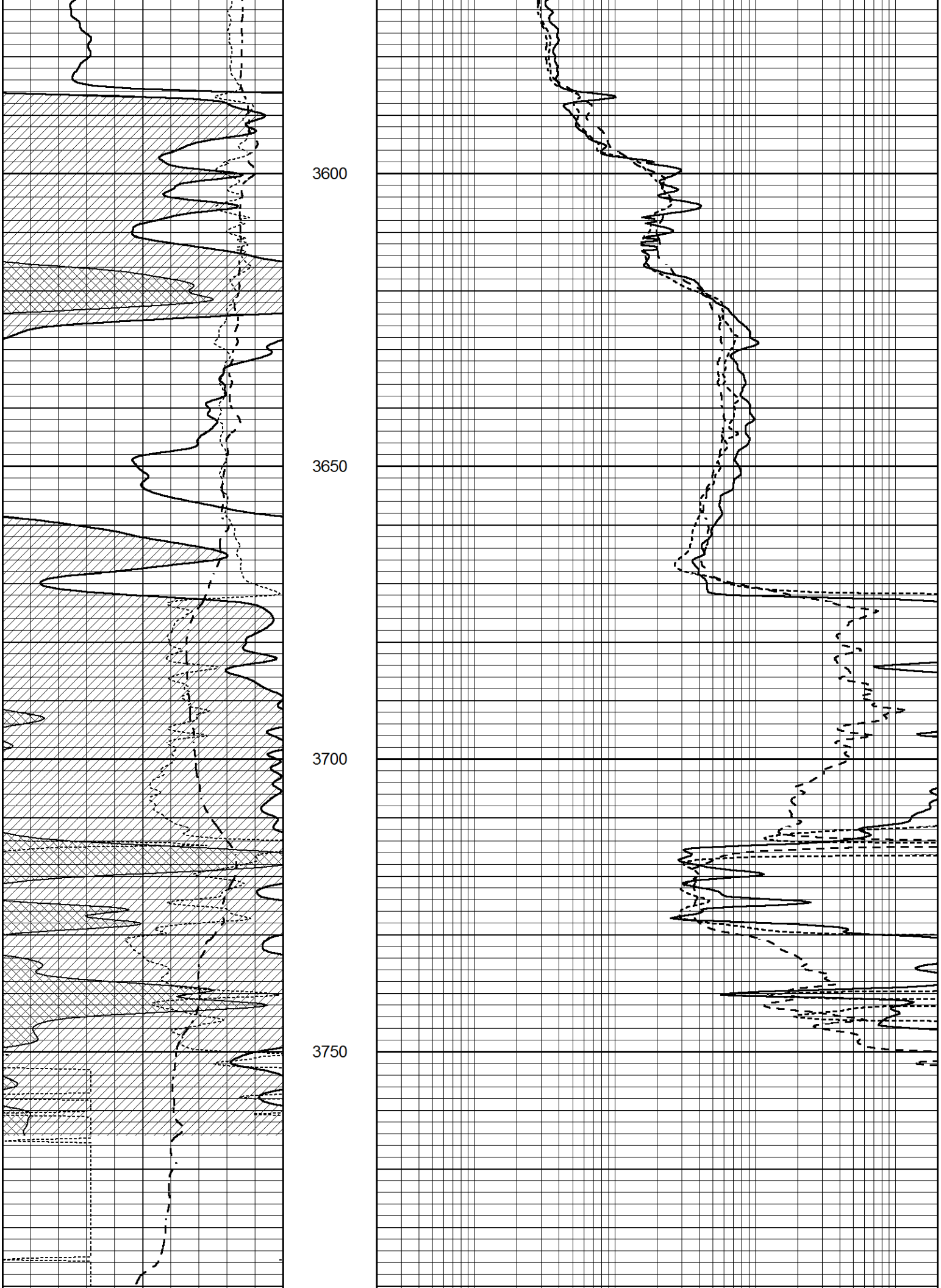
REPEAT SECTION

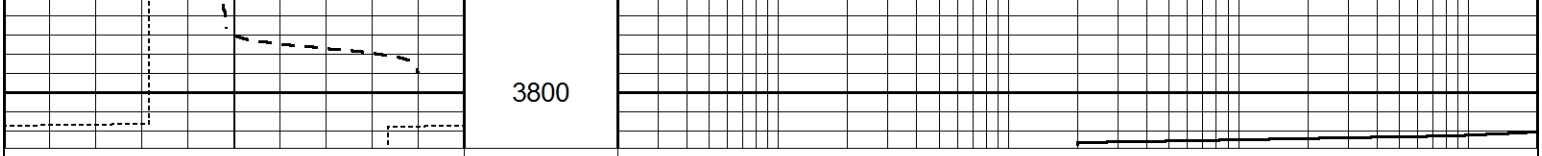
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Dataset Pathname	pass2DR
Presentation Format	_dil
Dataset Creation	Mon Mar 06 14:33:22 2023
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000




3400
3450
3500
3550


3600
3650
3700
3750



0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

Calibration Report

Database File 7654ddn.db
Dataset Pathname pass3M
Dataset Creation Mon Mar 06 15:27:28 2023

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
Surface Cal Performed: Thu Jun 30 01:48:00 2022
Downhole Cal Performed: Tue Feb 19 11:44:24 2019
After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	650.000	-3.000
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	-10.500
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report

Serial: 140704
Model: V4_10P
Source Number: 74GBq-19

Master Calibration

Performed: Mon Jan 16 12:13:16 2023

	Background	Aluminum	Magnesium	
Window 1	510.34	5430.90	23328.68	cps

Window 2	43.13	1220.81	5782.94	cps
Window 4	220.94	1221.84	5140.68	cps
Window 5	541.58	7453.23	13730.42	cps
Window 6	40.88	1109.92	2626.60	cps
Window 8	256.72	2483.83	4003.08	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha: : -1.8151 SS Alpha: : -0.5949 LS CPE: : 1.1494
LS Beta: : 115604.5658 SS Beta: : 10827.9221 SS CPE: : 1.7503

Before Survey Backround Counts Verification Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

After Survey Background Counts Verification Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

Lithodensity Caliper Calibration Performed: Mon Jan 16 12:13:16 2023

Results	Readings	References (in)			
Low	High	Low	High	Gain	Offset
7710.6	11244.4	8.0	14.0	0.0	-6.4

Before Survey Caliper Verification Performed:

	Reference	Reading
Caliper (in)		

After Survey Caliper Verification Performed:

	Reference	Reading
Caliper (in)		

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		

Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Sat Mar 04 18:09:40 2023	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3600	GAPI/cps