MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Alan Vonfeldt Oil
Well Boxberger H #19
Field Hall-Gurney
County Russell
State Kansas

Location: API # : 15-167-24137-00-00
E2 NW NW SW
2310 FSL & 360 FWL
SEC 3 TWP 14S RGE 14W

Permanent Datum Ground Level Elevation 1829
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
MEL

Elevation
K.B. 1837
D.F.
G.L. 1829

Date	12/10/2023		
Run Number	One		
Depth Driller	3220		
Depth Logger	3216		
Bottom Logged Interval	3215		
Top Log Interval	400		
Casing Driller	8.625 @ 440		
Casing Logger	439		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	6300		
Density / Viscosity	9.0 / 49		
pH / Fluid Loss	11.0 / 5.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.65 @ 68		
Rmf @ Meas. Temp	0.49 @ 68		
Rmc @ Meas. Temp	0.88 @ 68		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.41 @ 108		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	108		
Equipment Number	P-108		
Location	HAYS		
Recorded By	Justin Trout		
Witnessed By	Herb Deines		

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All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest Wireline LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Russell, Ks South on 283 to I 70 Rd, West to 184th,
North 1/4 East into

Log Measured From: Kelly Bushing 8 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: Justin Trout	Primary Witness: Herb Deines
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	40.33		GR-M&W (105)	3.00	3.50	50.00
CNLSC	37.23		CNT-M&W (210)	5.00	3.50	100.00
CNSSC	36.48					
			CDL-M&W (303-03)	8.50	4.00	250.00
LSD	28.18					
DCAL	28.17					
SSD	27.68					
			ML-PSI STKBL ML (402)	7.58	4.00	65.00
MCAL	19.58					
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (504 HT)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: alan vonfeldt oil_boxberger h #17.db: field/well/STKML/pass3.1
Total length: 42.33 ft
Total weight: 685.00 lb
O.D.: 4.00 in

Calibration Report

Database File	alan vonfeldt oil_boxberger h #17.db
Dataset Pathname	STKML/pass3.3
Dataset Creation	Sun Dec 10 17:31:30 2023

Dual Induction Calibration Report

Serial-Model:	504 HT-M&W
Surface Cal Performed:	Wed Jun 7 06:28:44 2023

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	178.615	710.235	0.000	255.800	mmho/m	1.100	-4.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.750	-35.000

Microlog Calibration Report

Serial-Model:	402-PSI STKBL ML
Performed:	Sat Dec 2 02:32:23 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	21500.0000	-0.5000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	21000.0000	0.0000
Caliper	1.0046	1.1419	5.5000	20.0000	in	50.0000	-44.5250

Compensated Density Calibration Report

Serial-Model:	303-03-M&W
Source #:	21170B
Master Calibration Performed:	Sat Oct 21 23:47:58 2023

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.680	g/cc	4197.87	5510.19	cps
Aluminum	2.585	g/cc	938.23	3815.19	cps

Spine Angle = 76.22

Density/Spine Ratio = 0.587

	Size		Reading
Small Ring	4.00	in	1.17
Large Ring	14.00	in	1.07

Compensated Neutron Calibration Report

Serial Number:	210
Tool Model:	M&W

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Gamma Ray Calibration Report

Serial Number:	105	
Tool Model:	M&W	
Performed:	Sat Oct 21 23:48:19 2023	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.5400	GAPI/cps

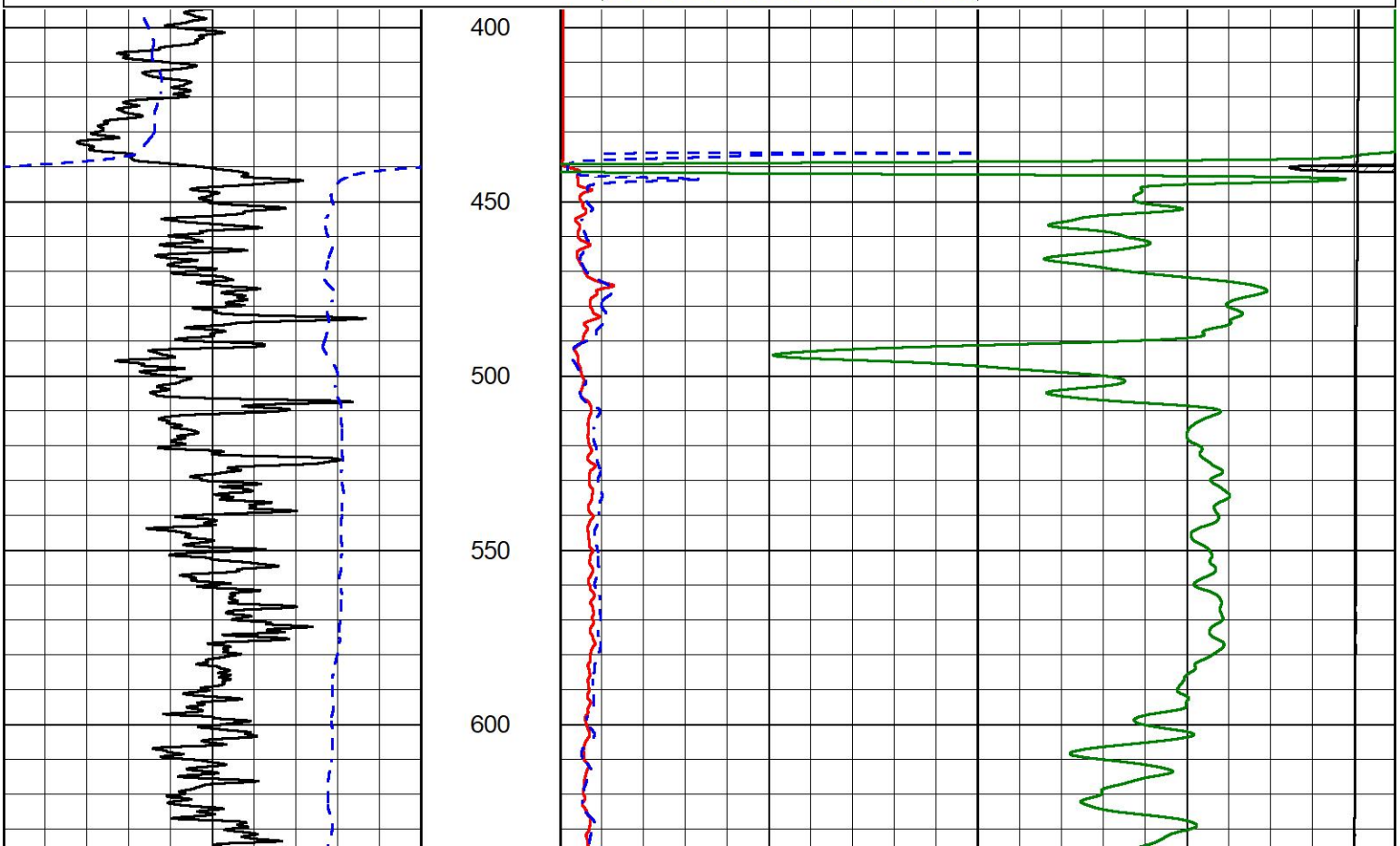
MIDWEST WIRELINE

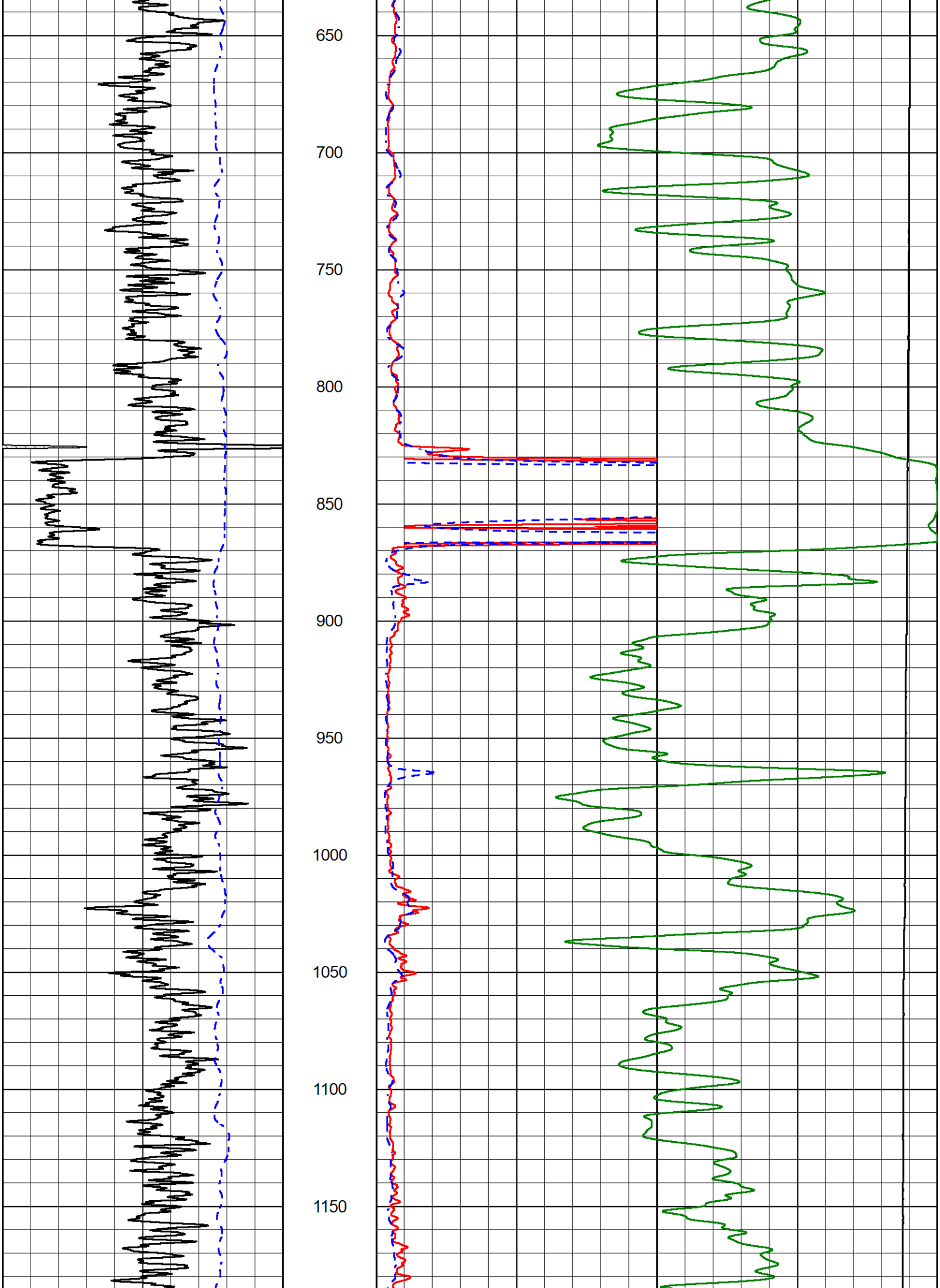
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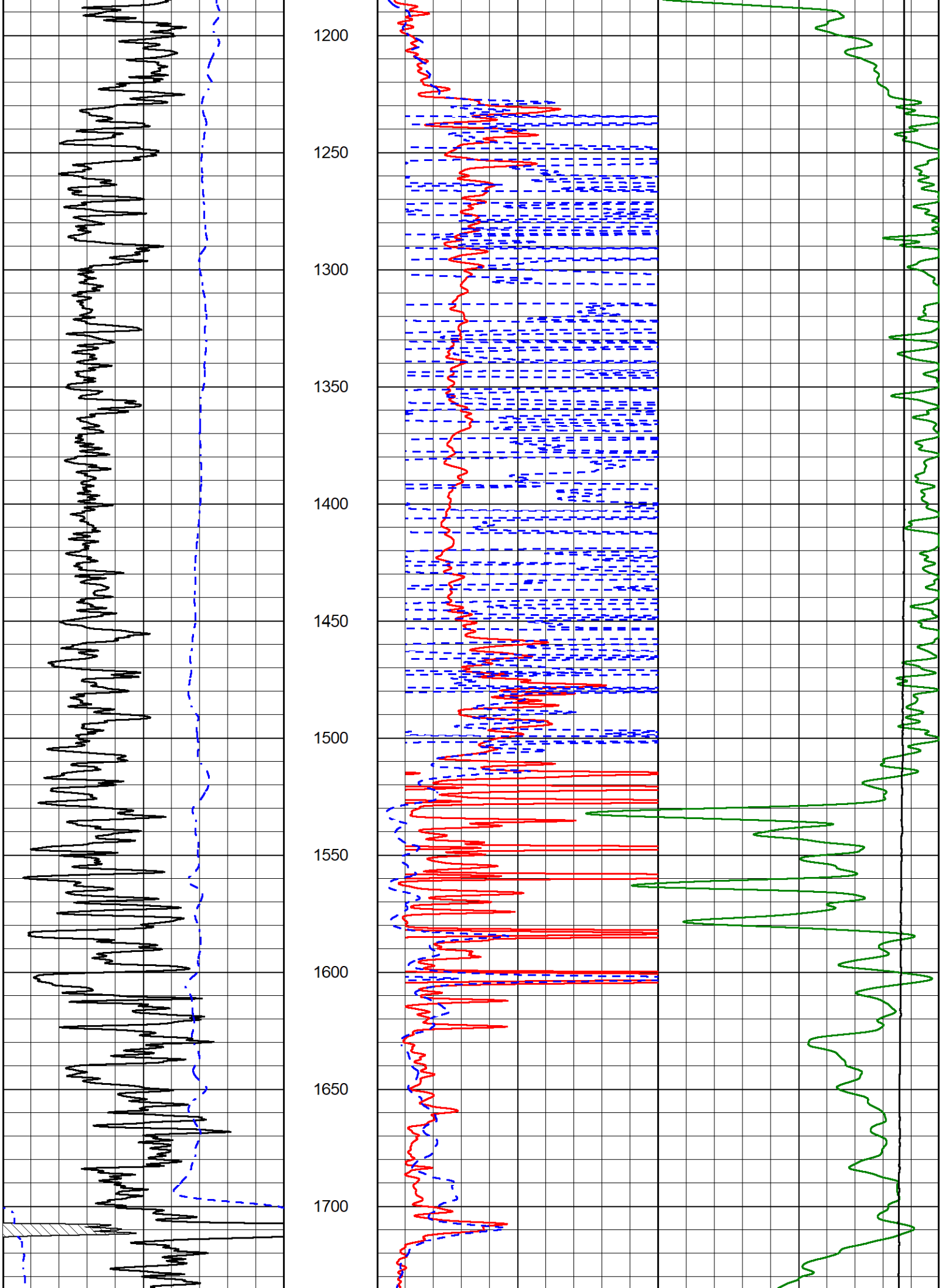
MAIN PASS

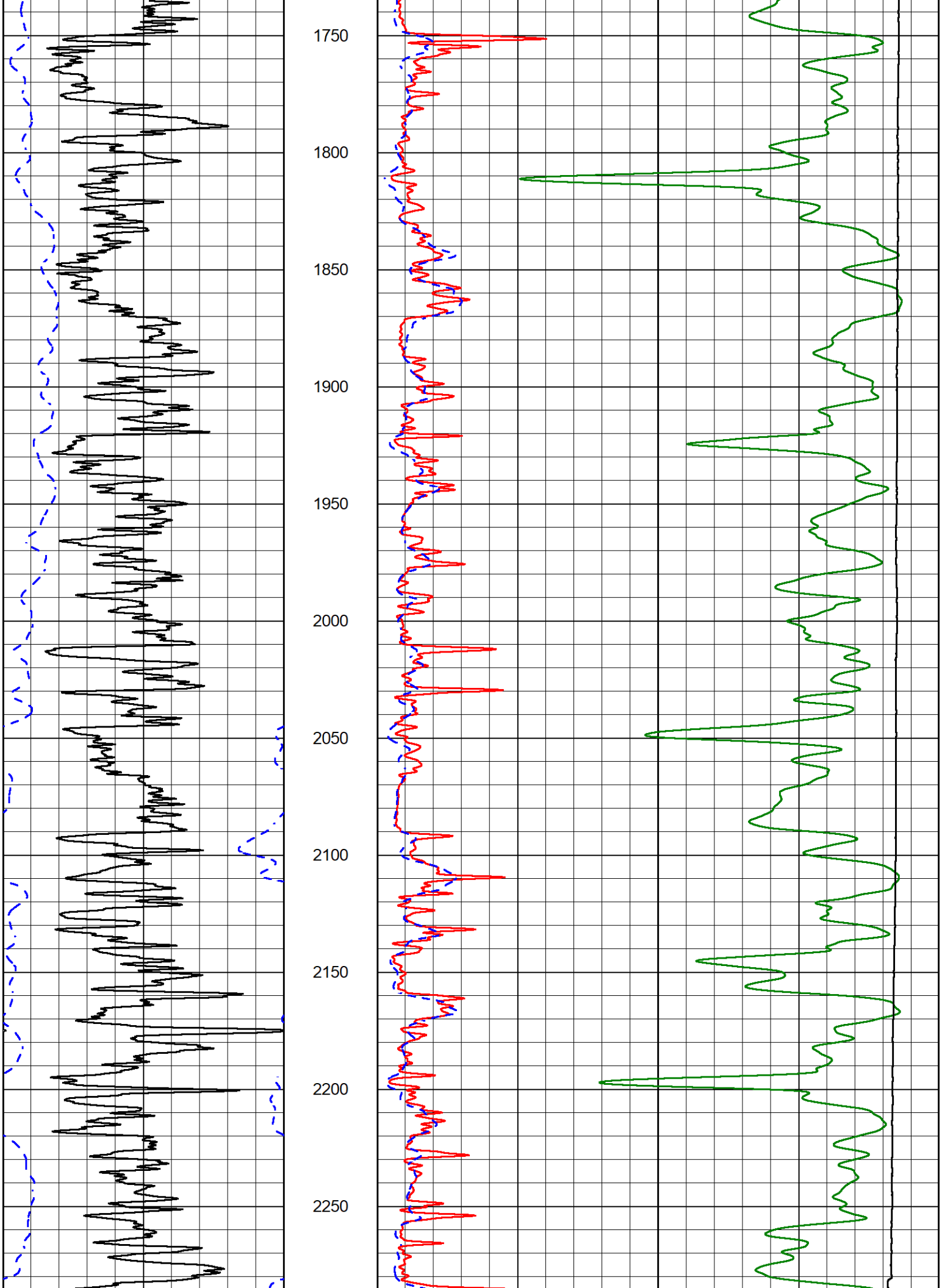
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Presentation Format	_dil2in
Dataset Creation	Sun Dec 10 17:56:37 2023
Charted by	Depth in Feet scaled 1:600

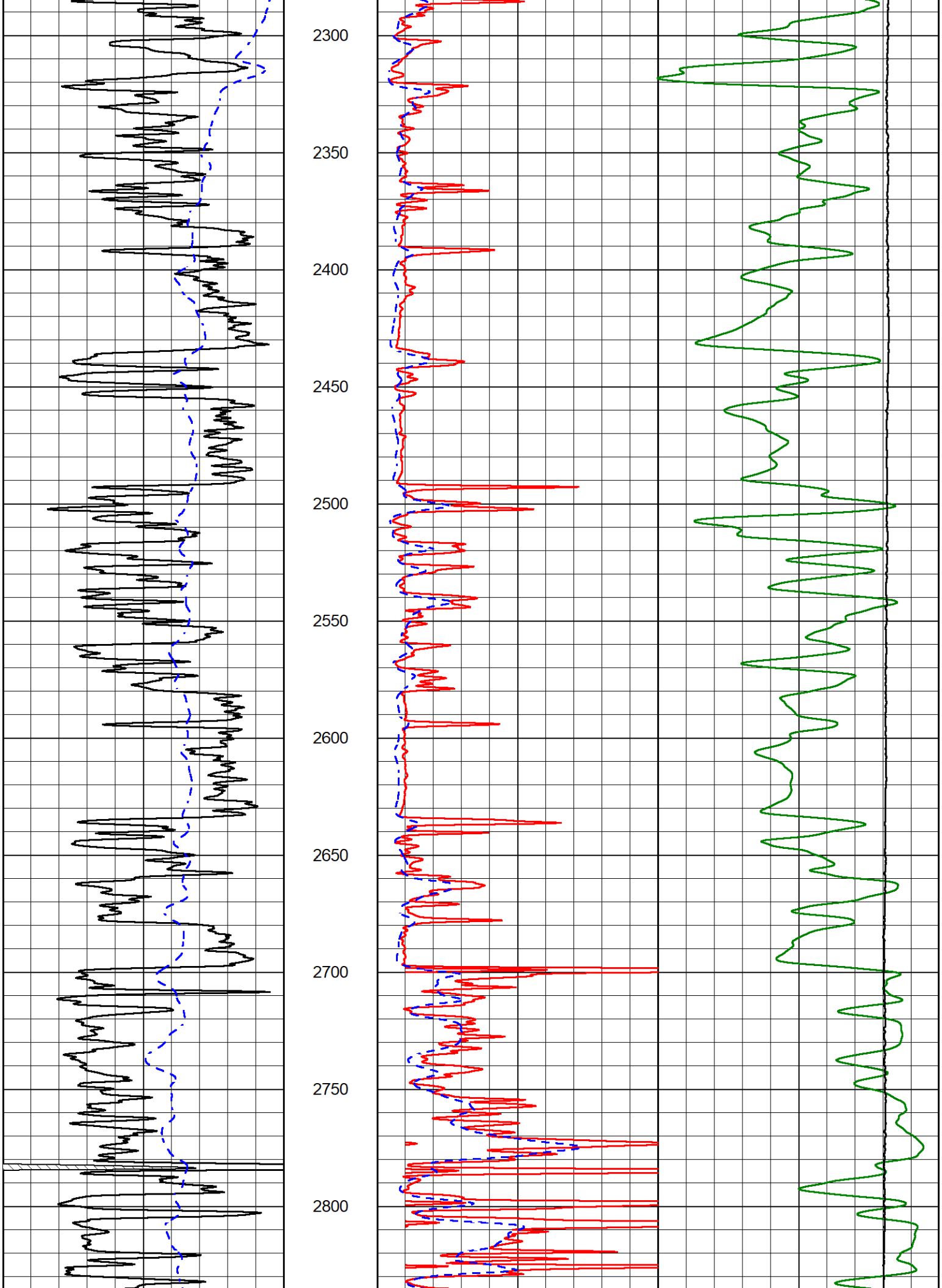
0	Gamma Ray (GAPI)	150
-200	SP (mV)	0
1000	Conductivity (mmho/m)	0
15000	Line Tension (lb)	0
0	Shallow Resisitivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
50	Shallow Resistivity (Ohm-m)	200
50	Deep Resistivity (Ohm-m)	200

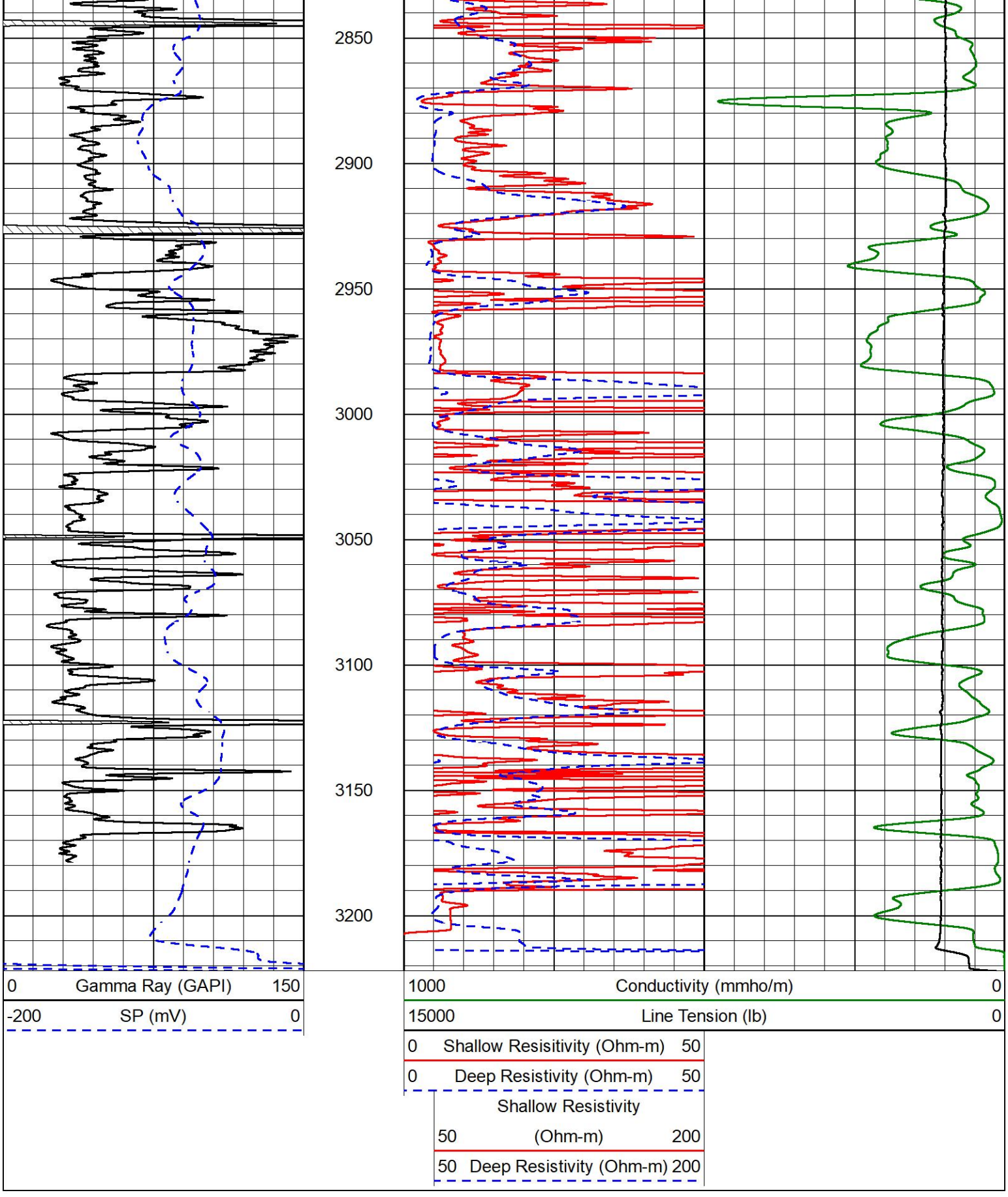



650
700
750
800
850
900
950
1000
1050
1100
1150


1200
1250
1300
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1500
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1600
1650
1700


1750
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1900
1950
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2050
2100
2150
2200
2250


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2600
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2750
2800



MIDWEST WIRELINE

ANHYDRITE SECTION

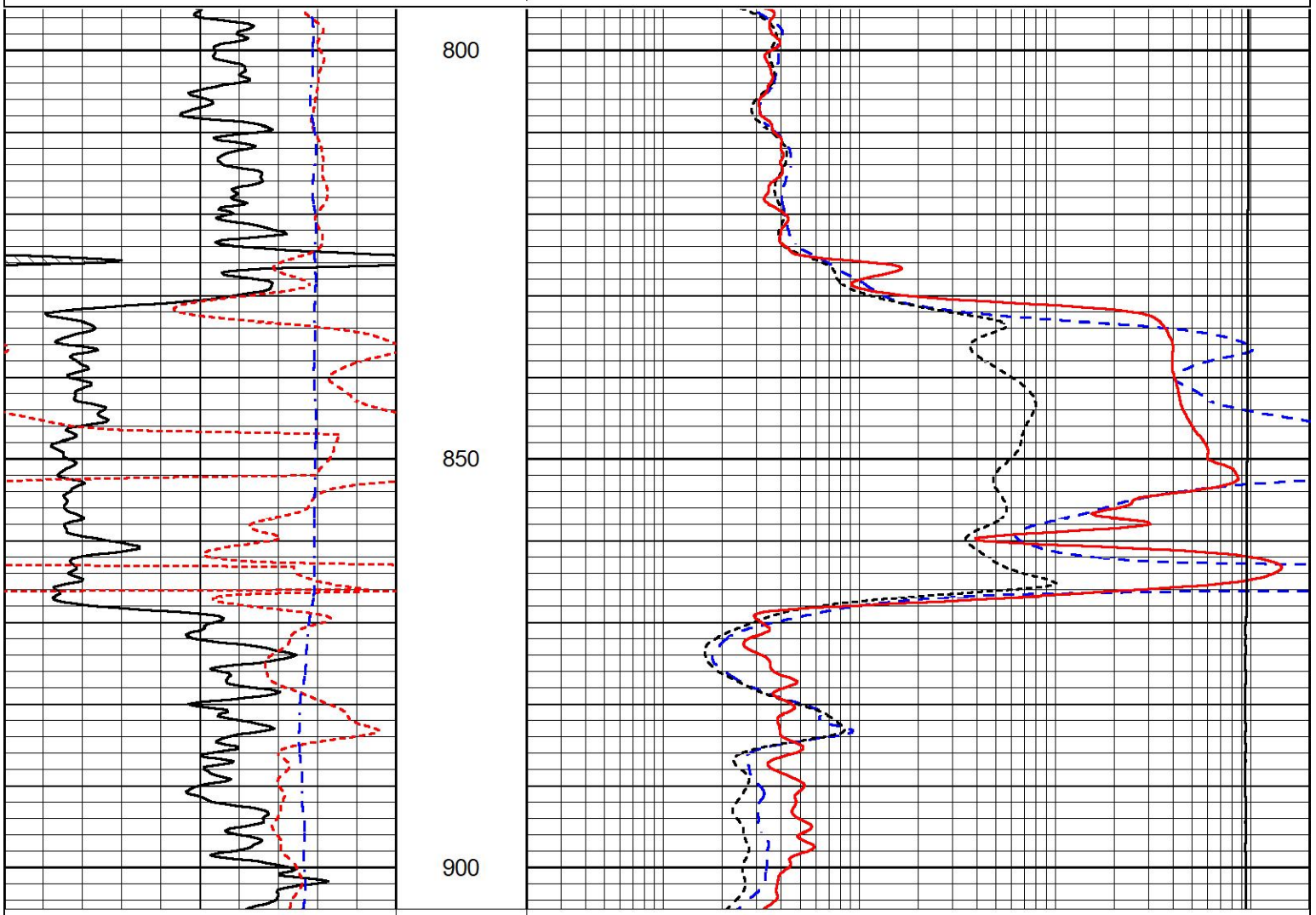
MAIN PASS

Database File	alan vonfeldt oil_boxberger h #17.db

Dataset Pathname	STKML/pass3.4
Presentation Format	_dil
Dataset Creation	Sun Dec 10 17:55:04 2023
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
50	RXORT	250
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0



0	Gamma Ray (GAPI)	150
50	RXORT	250
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

MIDWEST WIRELINE

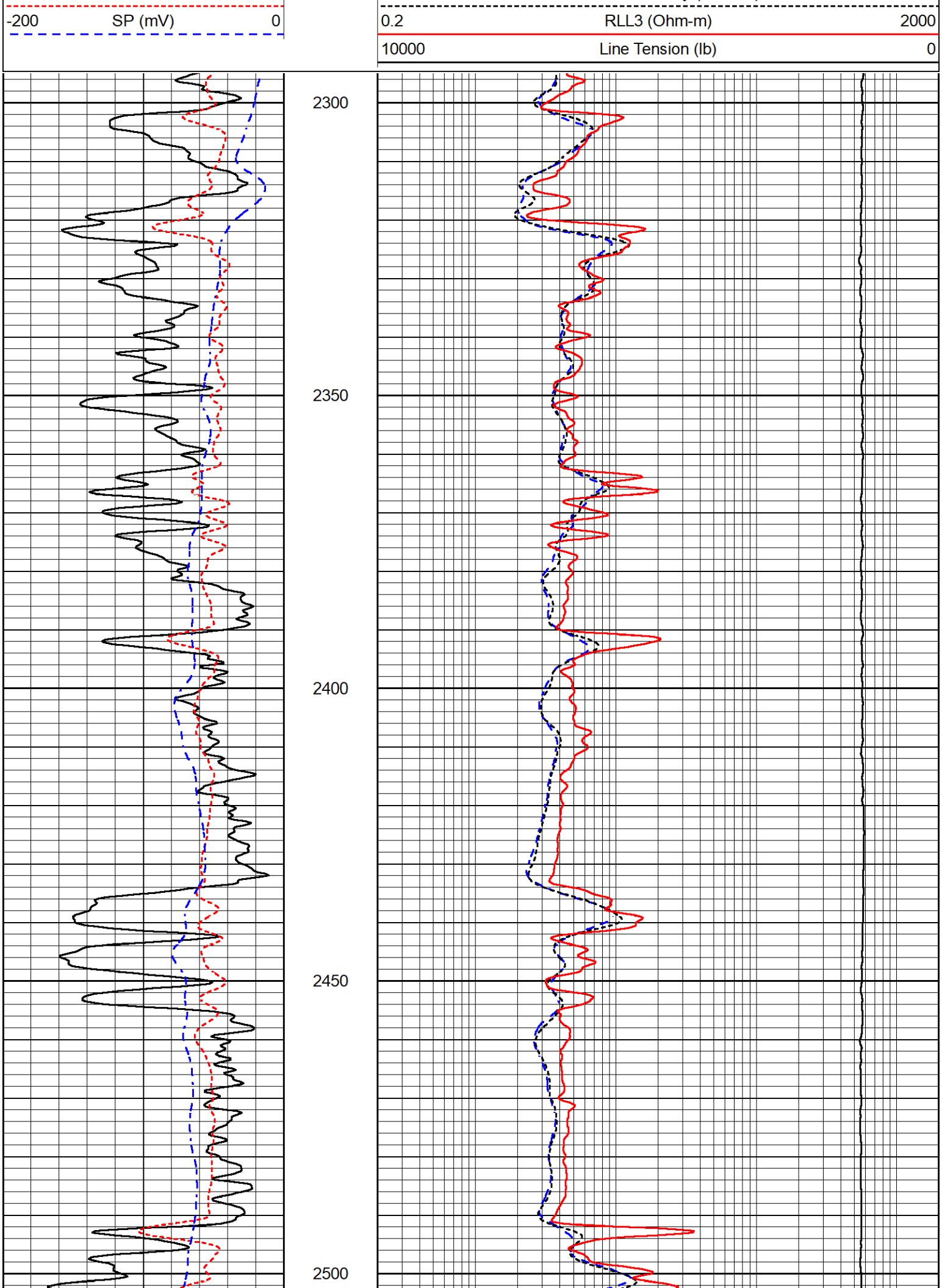
DETAIL SECTION

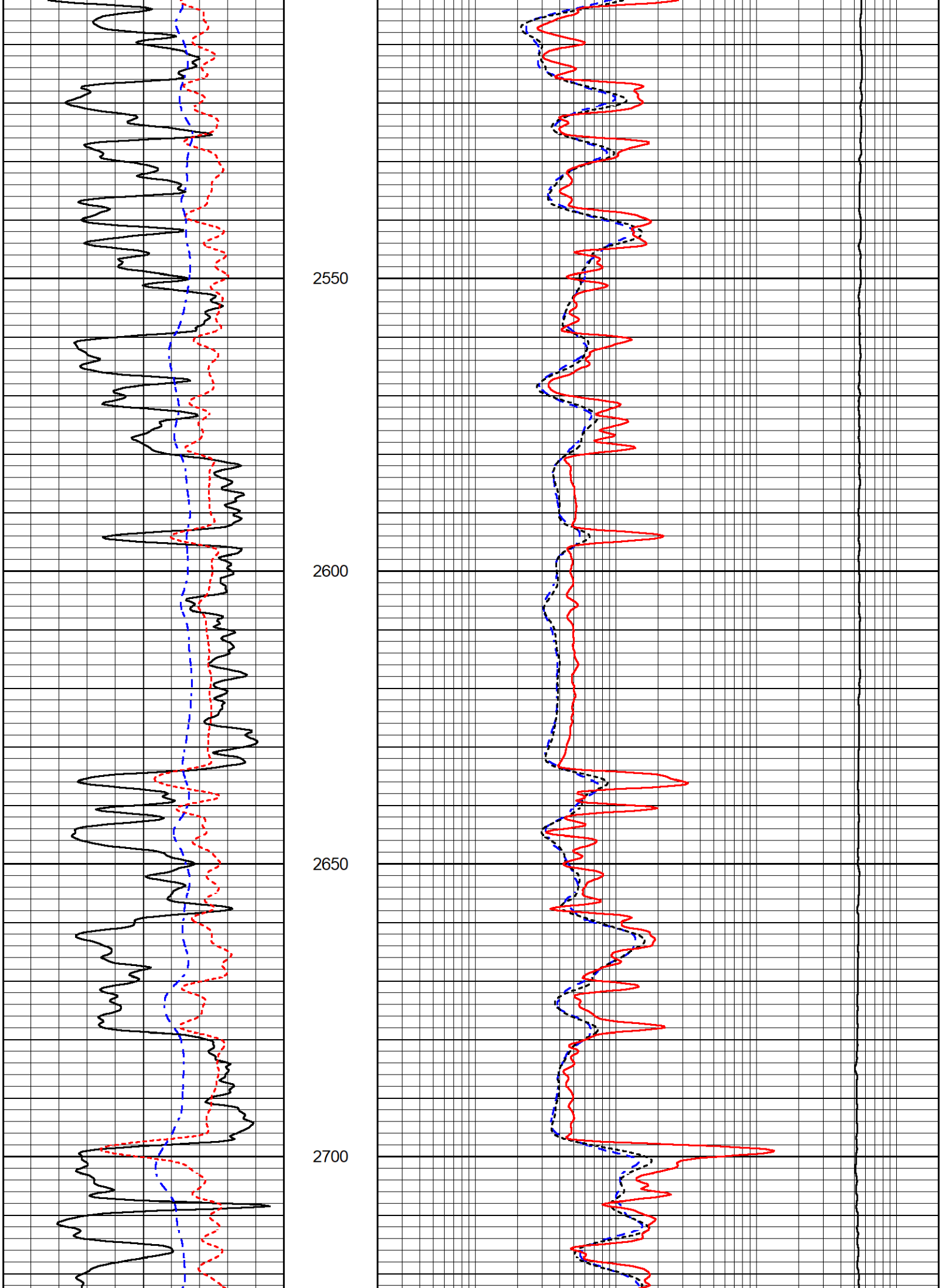
MAIN PASS

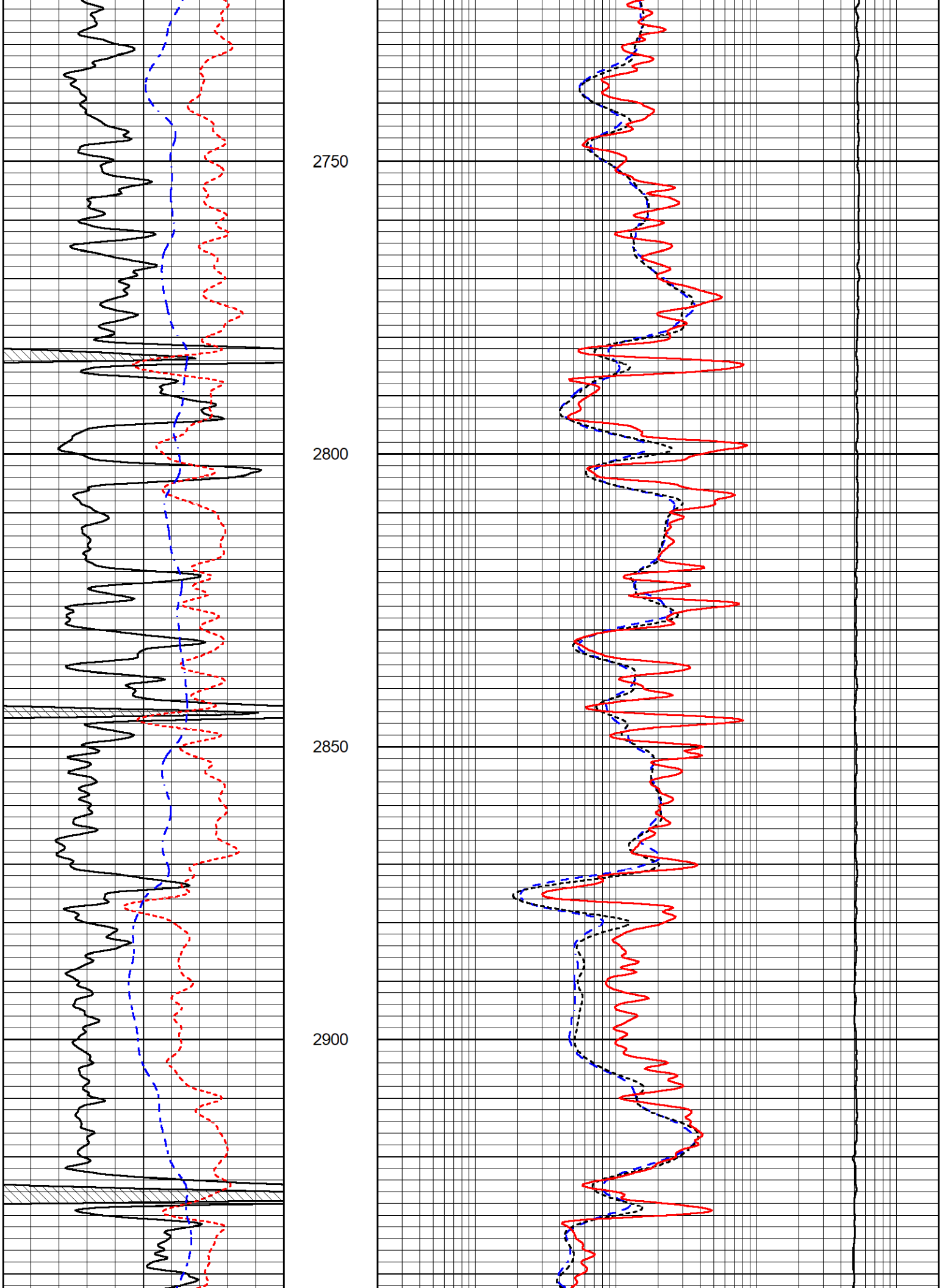
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Dataset Pathname	STKML/pass3.1
Presentation Format	_dil
Dataset Creation	Sun Dec 10 18:01:00 2023
Charted by	Depth in Feet scaled 1:240

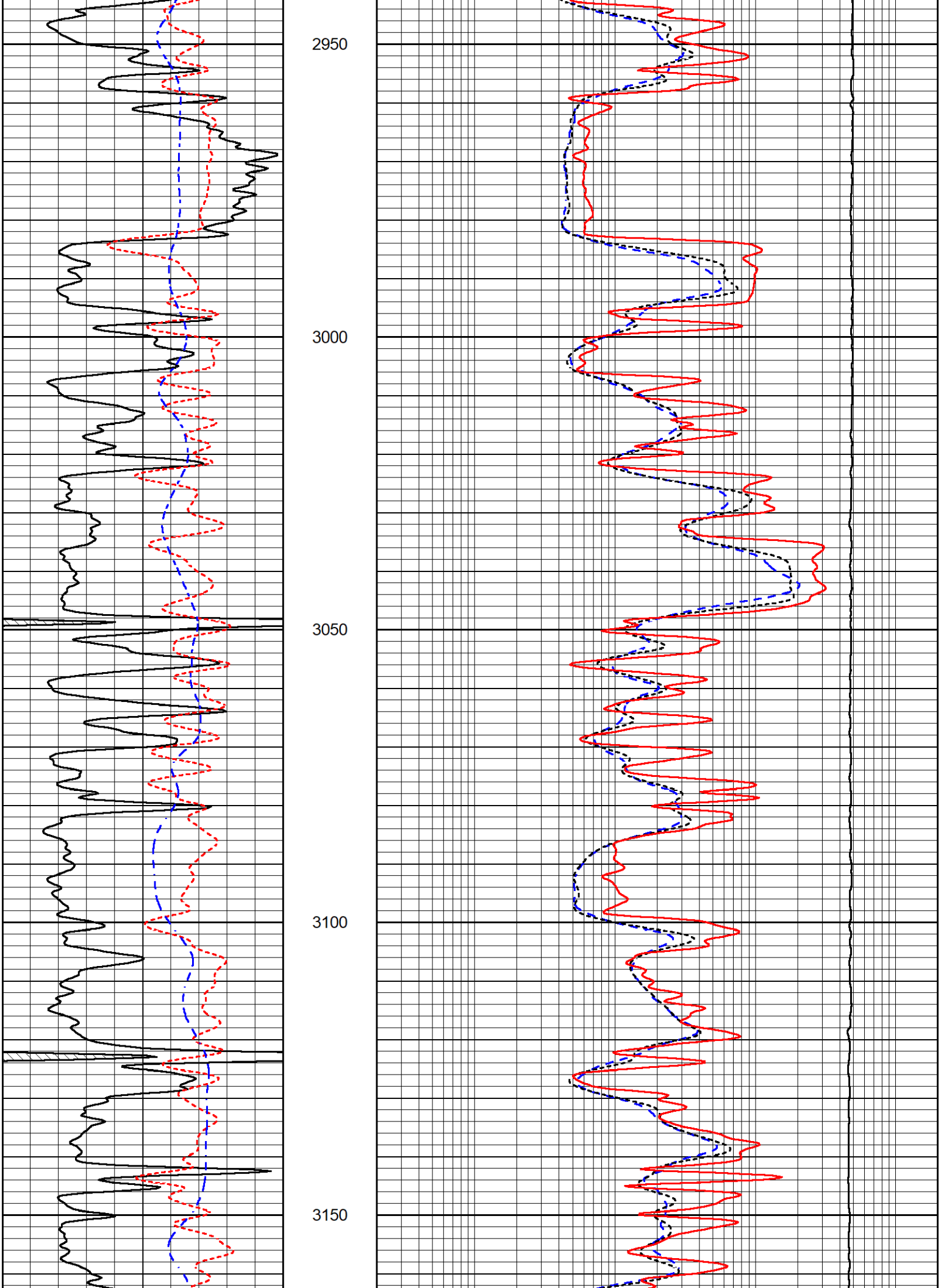
0	Gamma Ray (GAPI)	150
50	RXORT	250

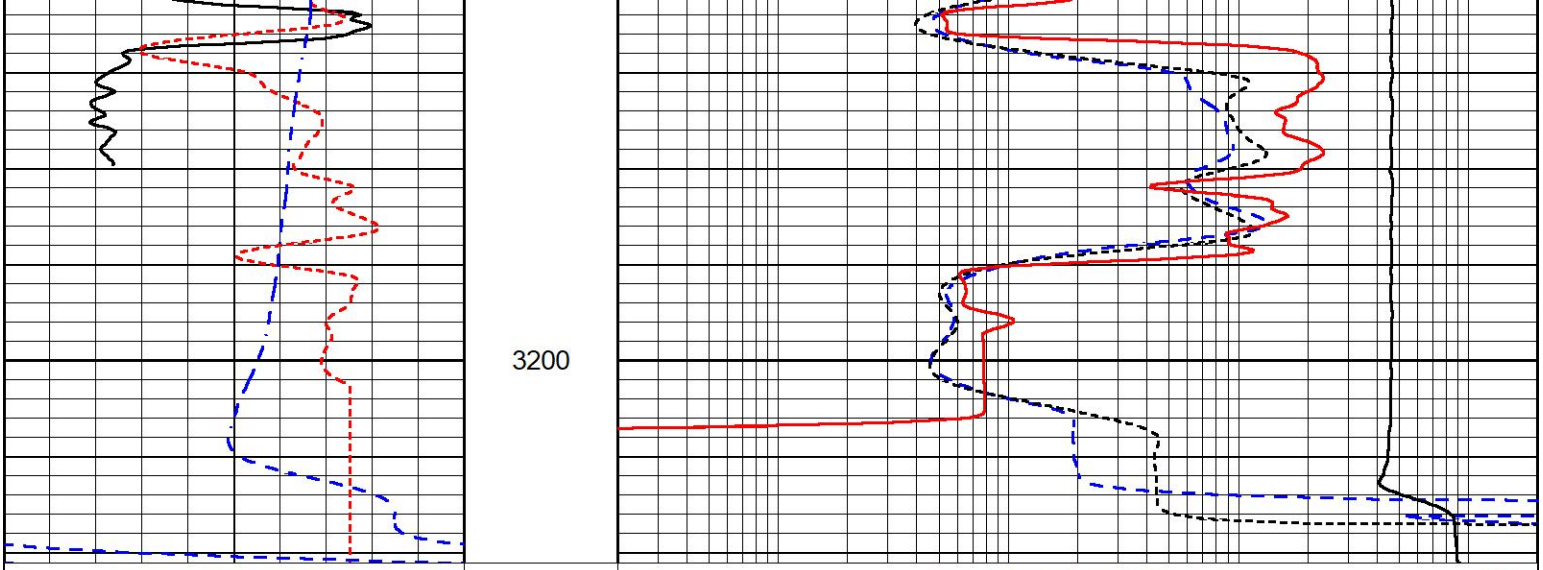
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000


-200
SP (mV)
0
0.2
RLL3 (Ohm-m)
2000
10000
Line Tension (lb)
0
2300
2350
2400
2450
2500


2550
2600
2650
2700


2750
2800
2850
2900


2950
3000
3050
3100
3150



0	Gamma Ray (GAPI)	150
50	RXORT	250
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

MIDWEST WIRELINE

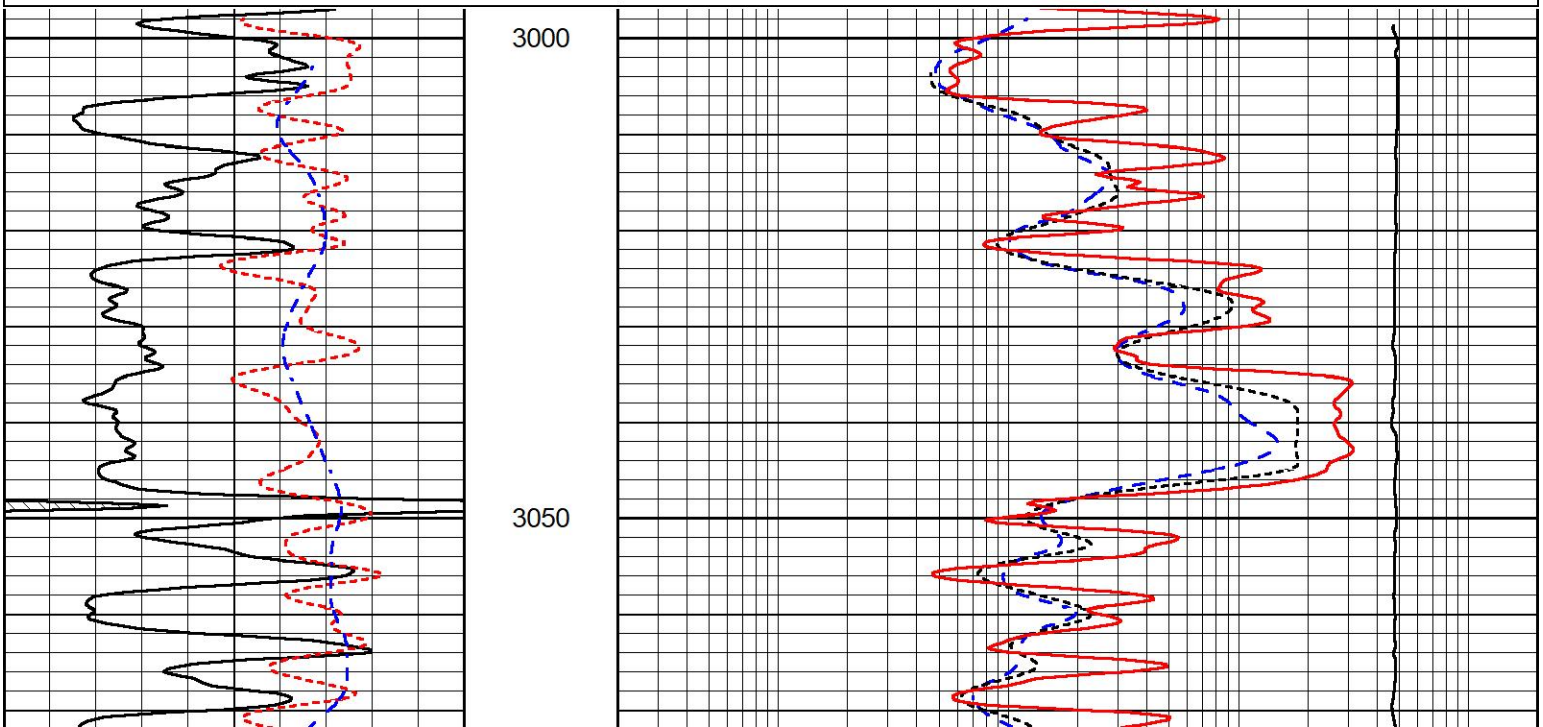
REPEAT SECTION

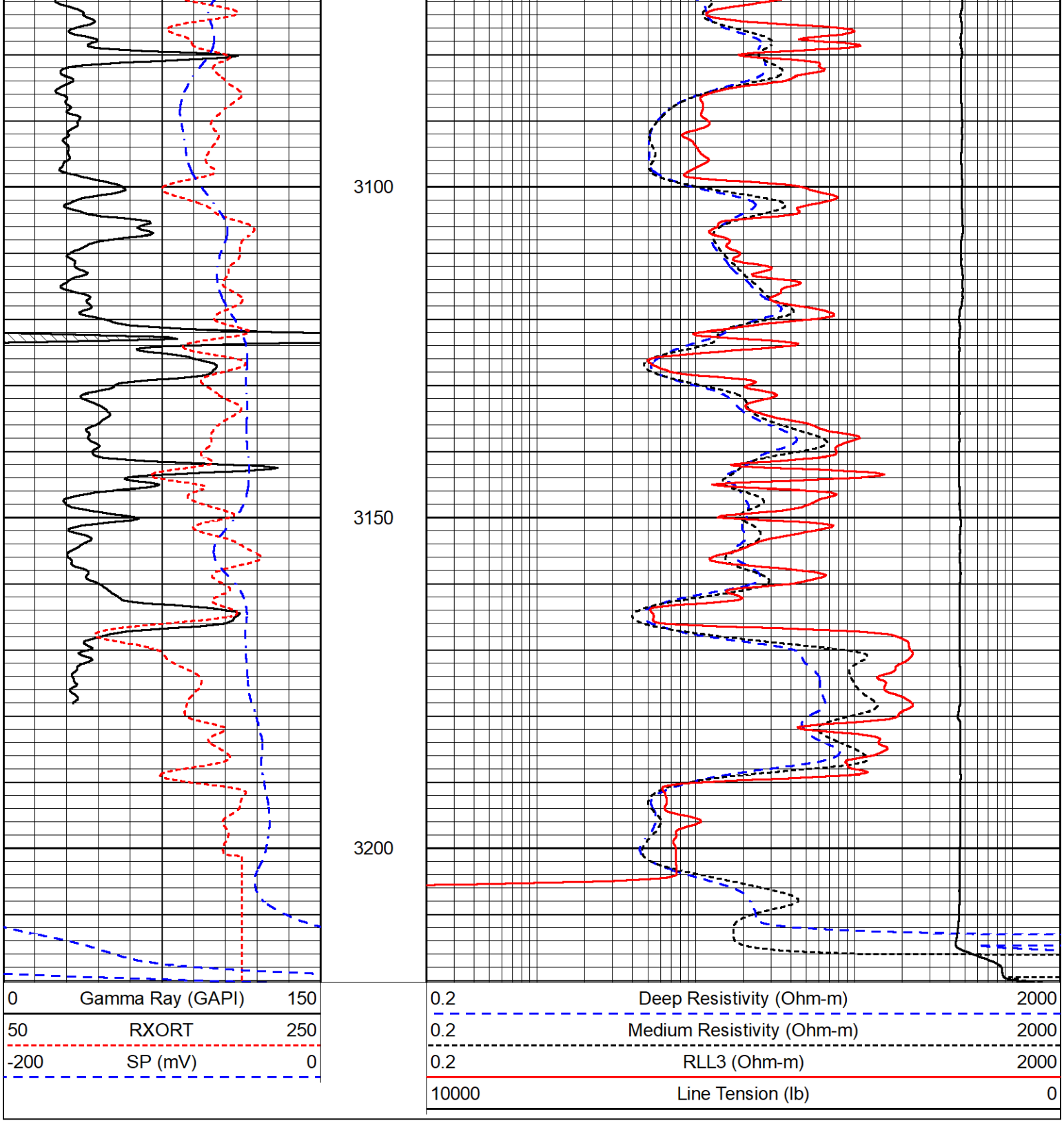
REPEAT PASS

Database File	alan vonfeldt oil_boxberger h #17.db
Dataset Pathname	STKML/pass2.1
Presentation Format	_dil
Dataset Creation	Sun Dec 10 17:25:35 2023
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
50	RXORT	250
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0





Calibration Report

Database File	alan vonfeldt oil_boxberger h #17.db
Dataset Pathname	STKML/pass3.3
Dataset Creation	Sun Dec 10 17:31:30 2023

Dual Induction Calibration Report

Serial-Model:	504 HT-M&W
Surface Cal Performed:	Wed Jun 7 06:28:44 2023

	Readings		References		Results	
Loop:	Air	Loop	Air	Loop	m	b

	Air	Loop	Air	Loop		m	b
Deep	178.615	710.235	0.000	255.800	mmho/m	1.100	-4.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.750	-35.000

Microlog Calibration Report

Serial-Model: 402-PSI STKBL ML
Performed: Sat Dec 2 02:32:23 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	21500.0000	-0.5000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	21000.0000	0.0000
Caliper	1.0046	1.1419	5.5000	20.0000	in	50.0000	-44.5250

Compensated Density Calibration Report

Serial-Model: 303-03-M&W
Source #: 21170B
Master Calibration Performed: Sat Oct 21 23:47:58 2023

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.680	g/cc	4197.87	5510.19	cps
Aluminum	2.585	g/cc	938.23	3815.19	cps

Spine Angle = 76.22 Density/Spine Ratio = 0.587

	Size		Reading
Small Ring	4.00	in	1.17
Large Ring	14.00	in	1.07

Compensated Neutron Calibration Report

Serial Number: 210
Tool Model: M&W

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Gamma Ray Calibration Report

Serial Number: 105
Tool Model: M&W
Performed: Sat Oct 21 23:48:19 2023

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
Calibrator Reading: 637.0 cps

Sensitivity: 0.5400 GAPI/cps



Company	Alan Vonfeldt Oil
Well	Boxberger H #19
Field	Hall-Gurney
County	Russell
State	Kansas