MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Gore Oil Company
Well Lynd #9
Field Zeman North
County Trego
State Kansas

Company Gore Oil Company
Well Lynd #9
Field Zeman North
County Trego State Kansas

Location: API # : 15-195-23132-00-00
993 FSL & 867 FEL
SEC 28 TWP 11S RGE 21W

Other Services
CNL/CDL
MEL/BHCS

Permanent Datum Ground Level Elevation 2322
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation
K.B. 2330
D.F.
G.L. 2322

Date	3/10/2022		
Run Number	One		
Depth Driller	4100		
Depth Logger	4101		
Bottom Logged Interval	4100		
Top Log Interval	300		
Casing Driller	8.625 @ 308		
Casing Logger	302		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	4000		
Density / Viscosity	9.1 / 56		
pH / Fluid Loss	10.0 / 6.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.40 @ 68		
Rmf @ Meas. Temp	.30 @ 68		
Rmc @ Meas. Temp	.54 @ 68		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	.23 @ 117		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	117		
Equipment Number	P-108		
Location	HAYS		
Recorded By	J. Henrickson		
Witnessed By	Marc Downing		

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Riga Exit I70
6 North to F, 1/4 West,
North 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: J. Henrickson	Primary Witness: Marc Downing
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\gore_lynd_9.db
Dataset field/well/stackml/pass4.1/_vars_

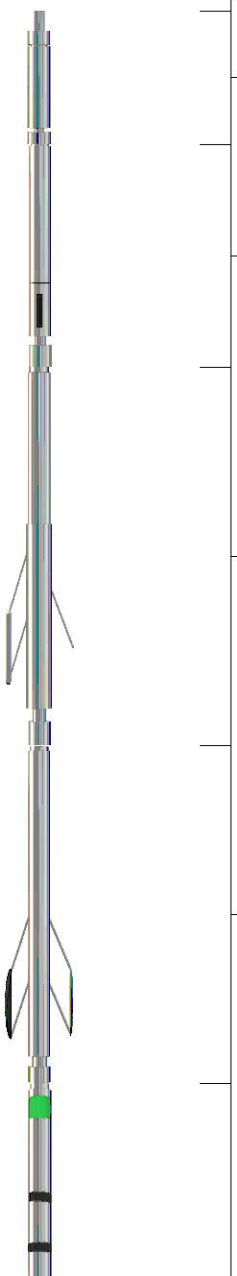
Top - Bottom

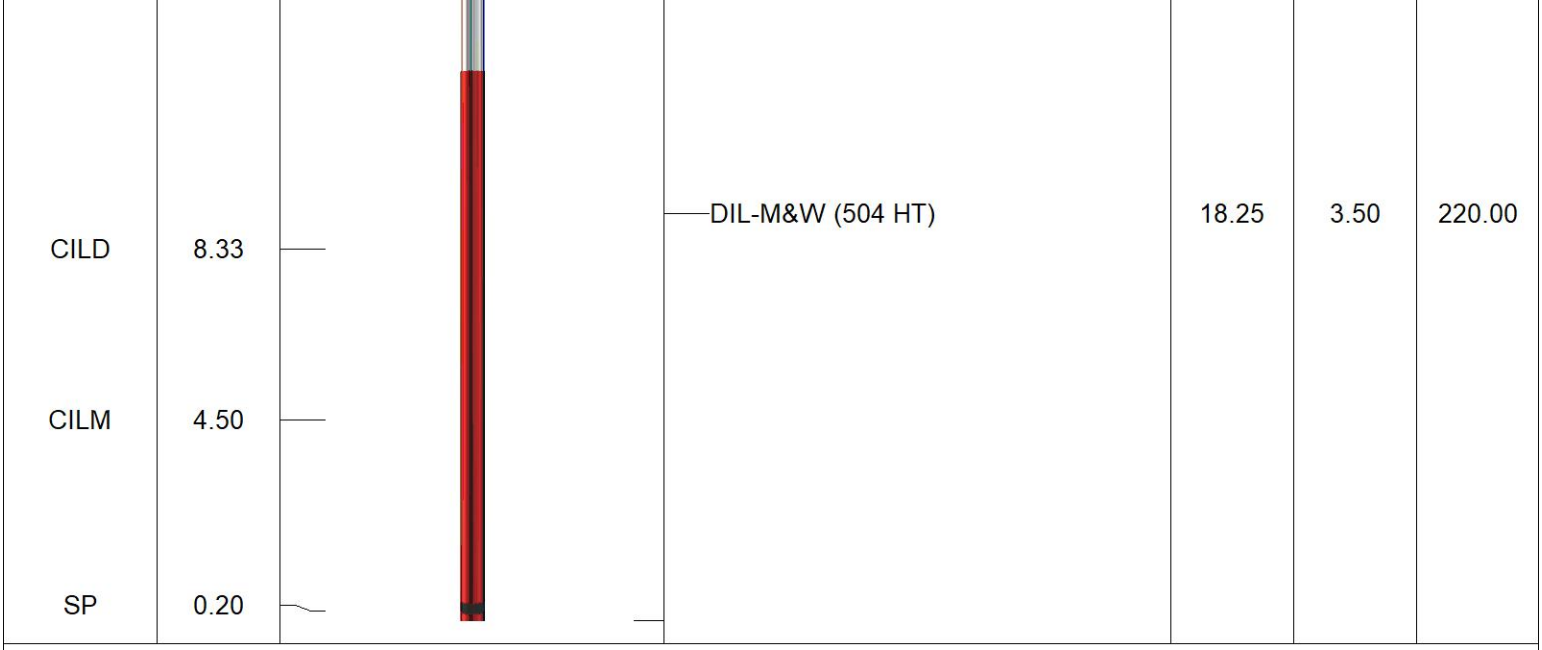
A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	114	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	400	50	Off	4101

Variable Description

A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	40.33		GR-M&W (103)	3.00	3.50	50.00
CNLSC	37.23		CNT-M&W (210)	5.00	3.50	100.00
CNSSC	36.48					
LSD	28.18		CDL-M&W (306-06)	8.50	4.00	250.00
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					



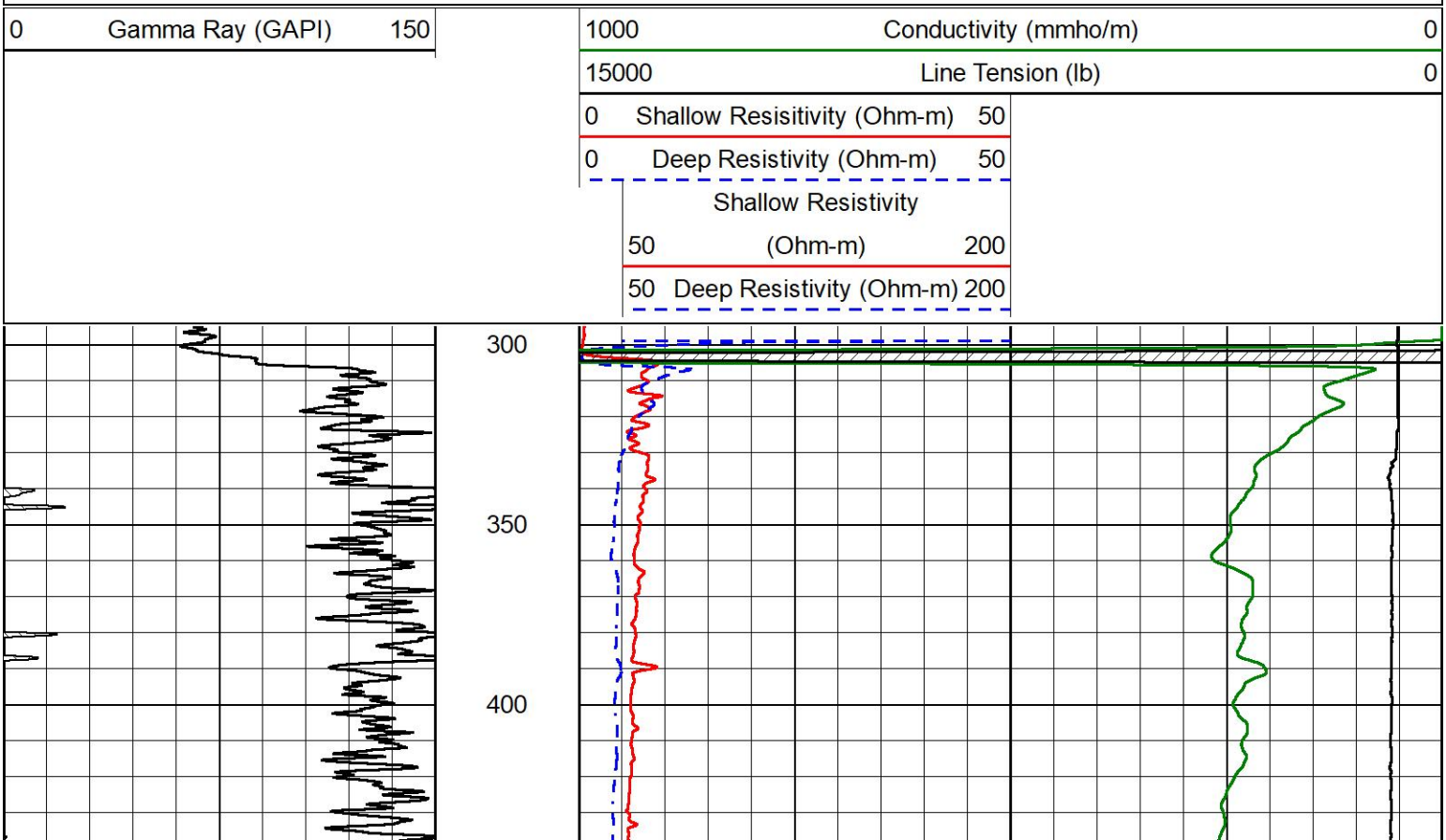
Dataset:	gore_lynd_9.db: field/well/stackml/pass4.1
Total length:	42.33 ft
Total weight:	685.00 lb
O.D.:	4.00 in

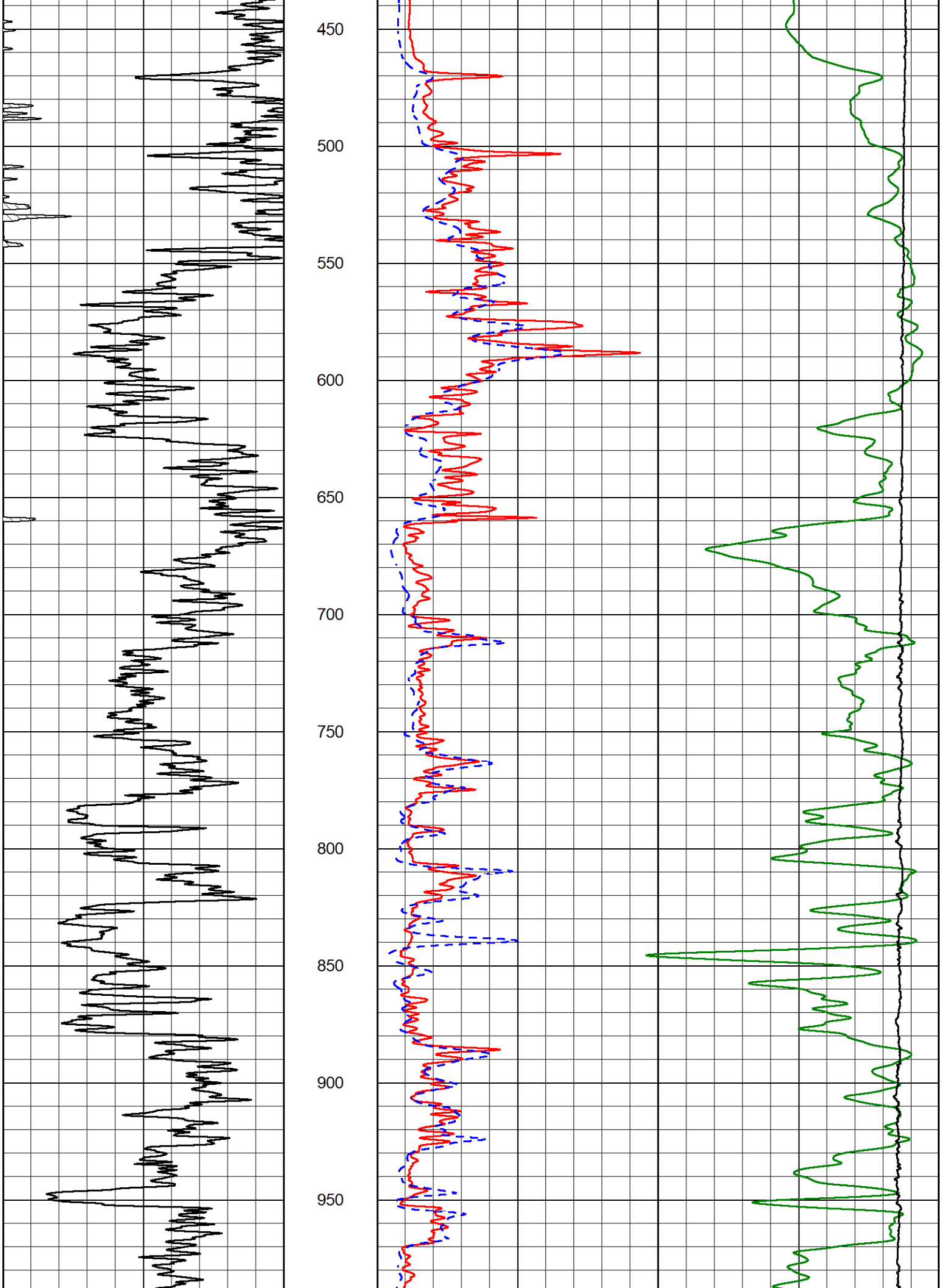
MIDWEST WIRELINE

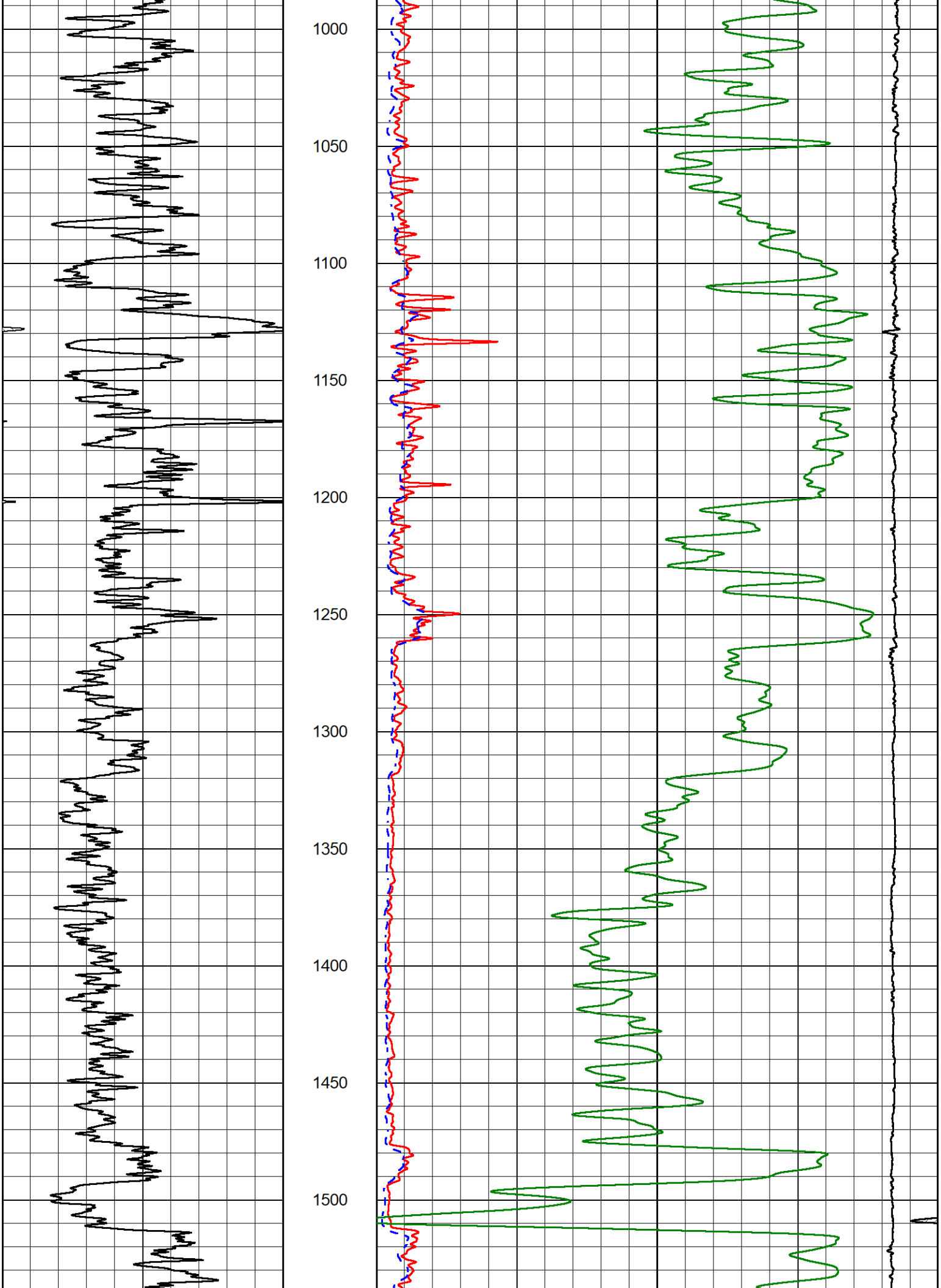
2" SCALE RESISTIVITY

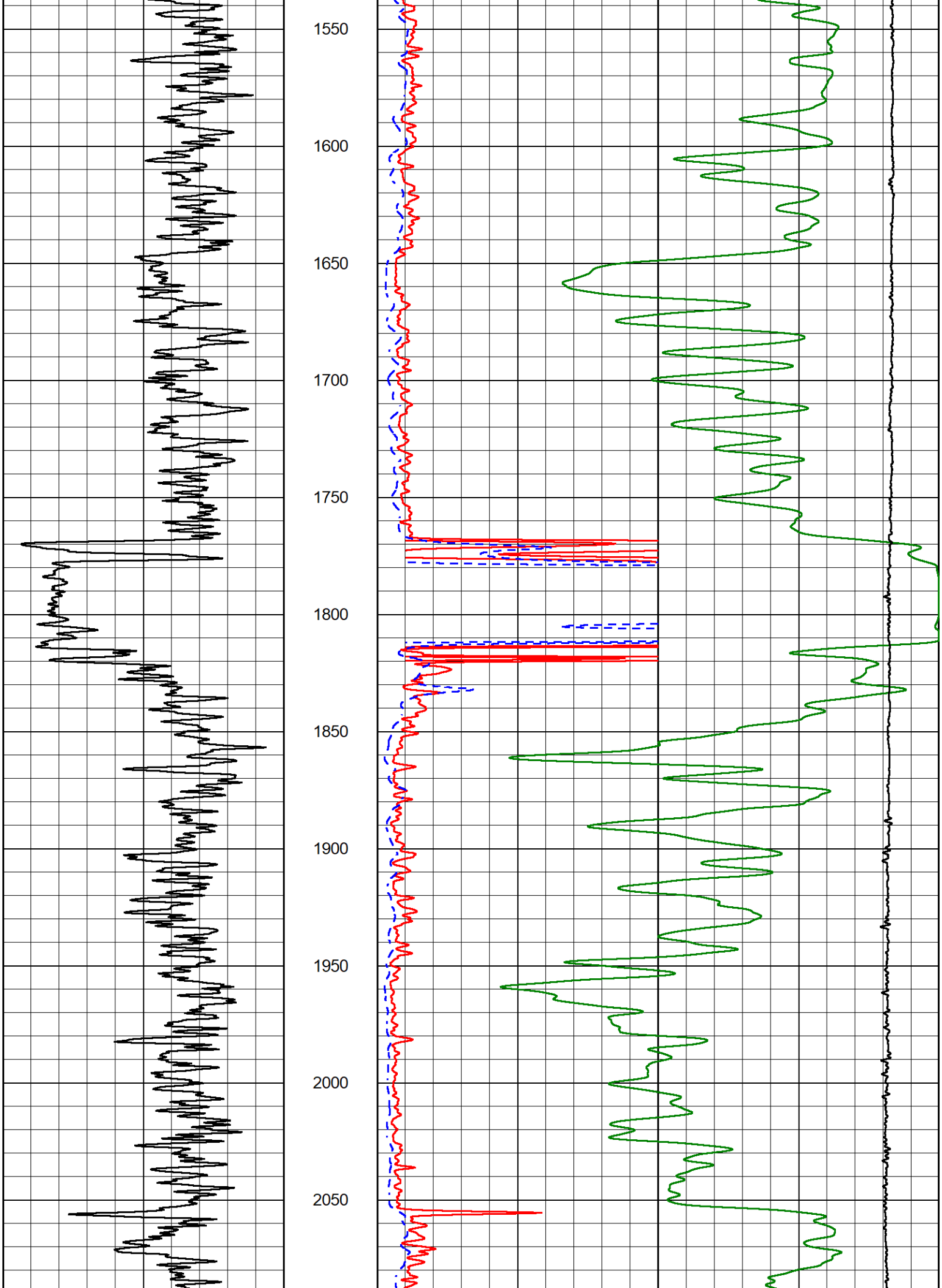
MAIN PASS

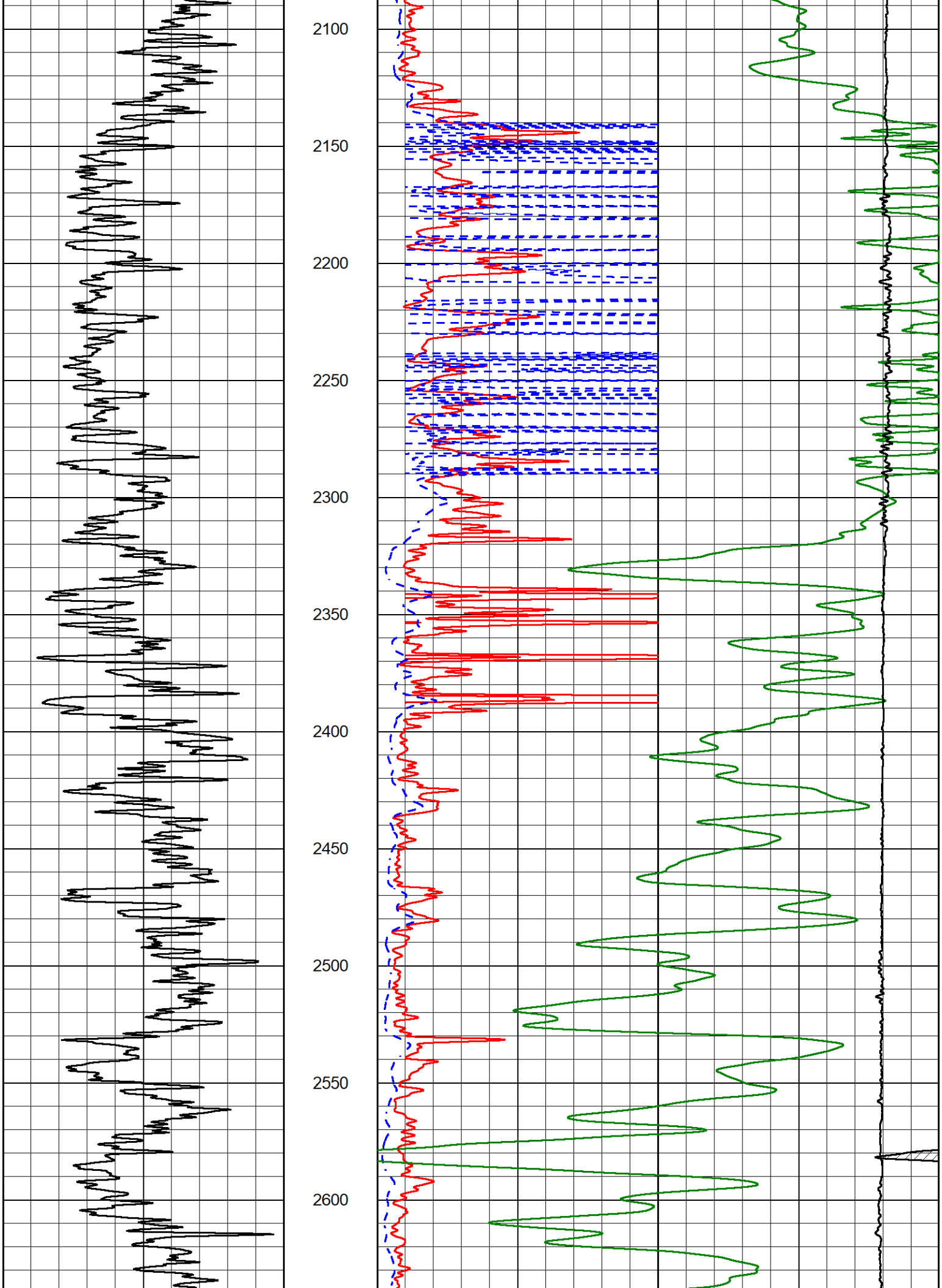
Database File	gore_lynd_9.db
Dataset Pathname	stackml/pass6.1
Presentation Format	_dil2in
Dataset Creation	Fri Mar 11 01:29:48 2022
Charted by	Depth in Feet scaled 1:600

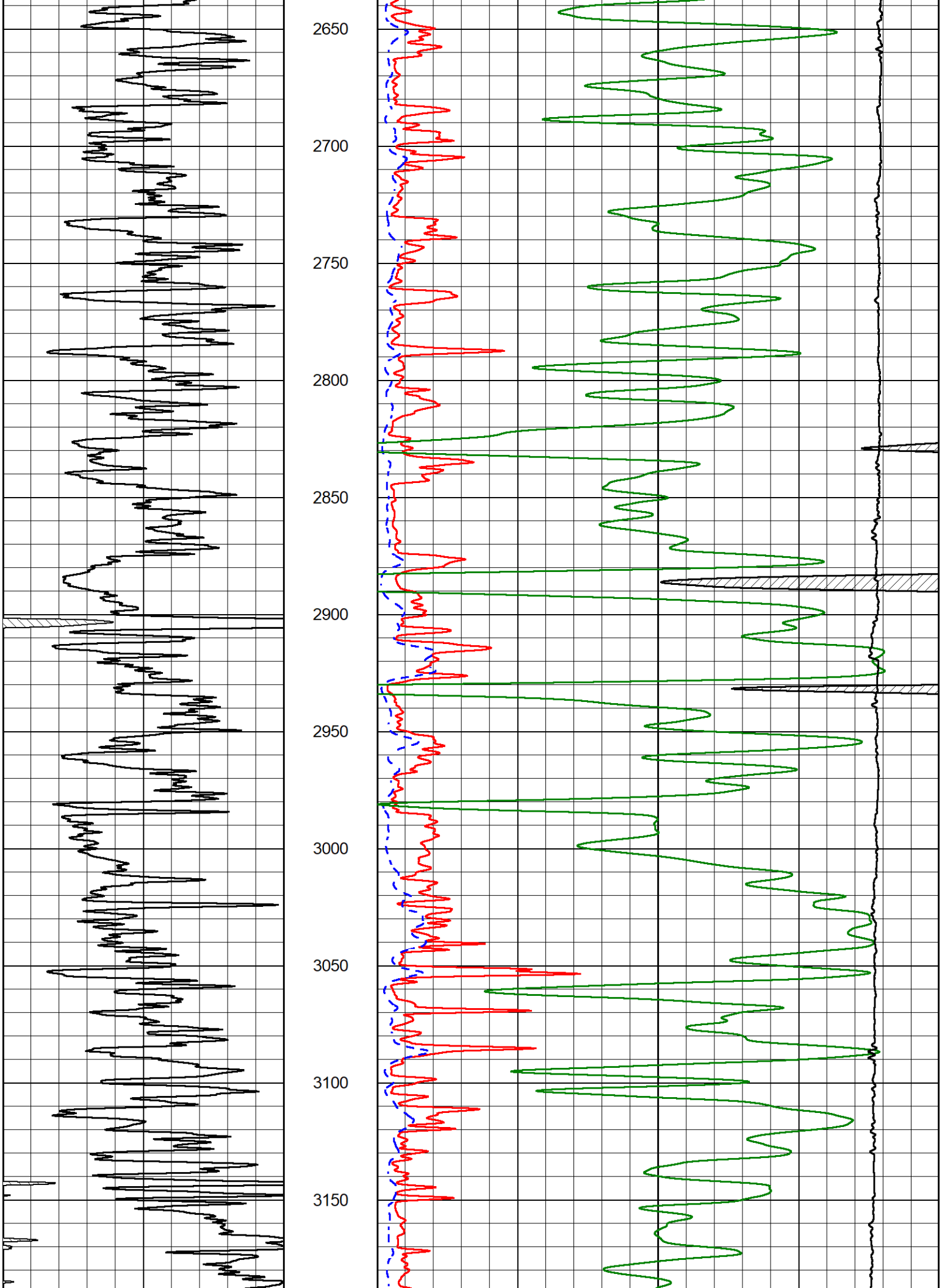


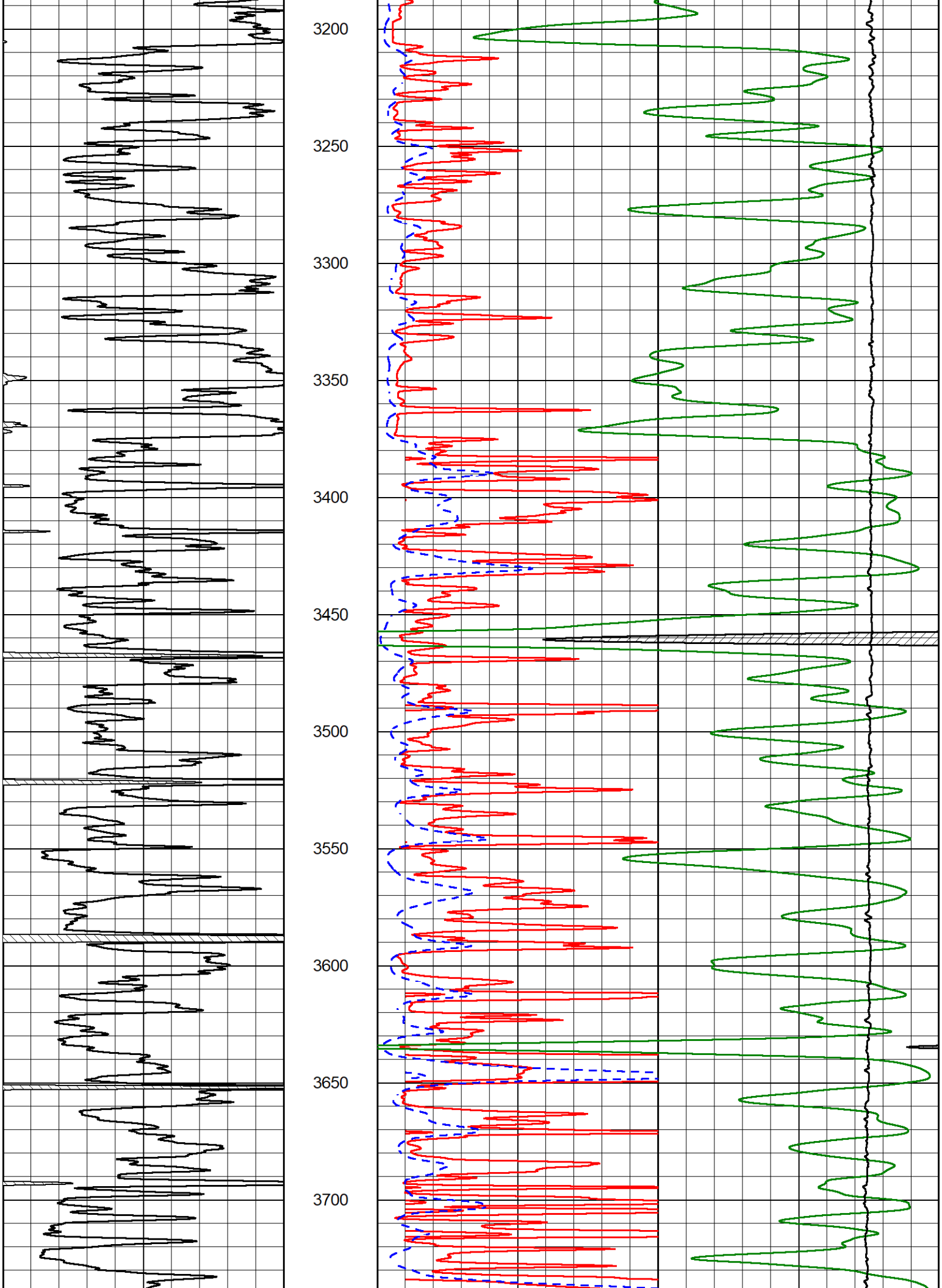

450
500
550
600
650
700
750
800
850
900
950

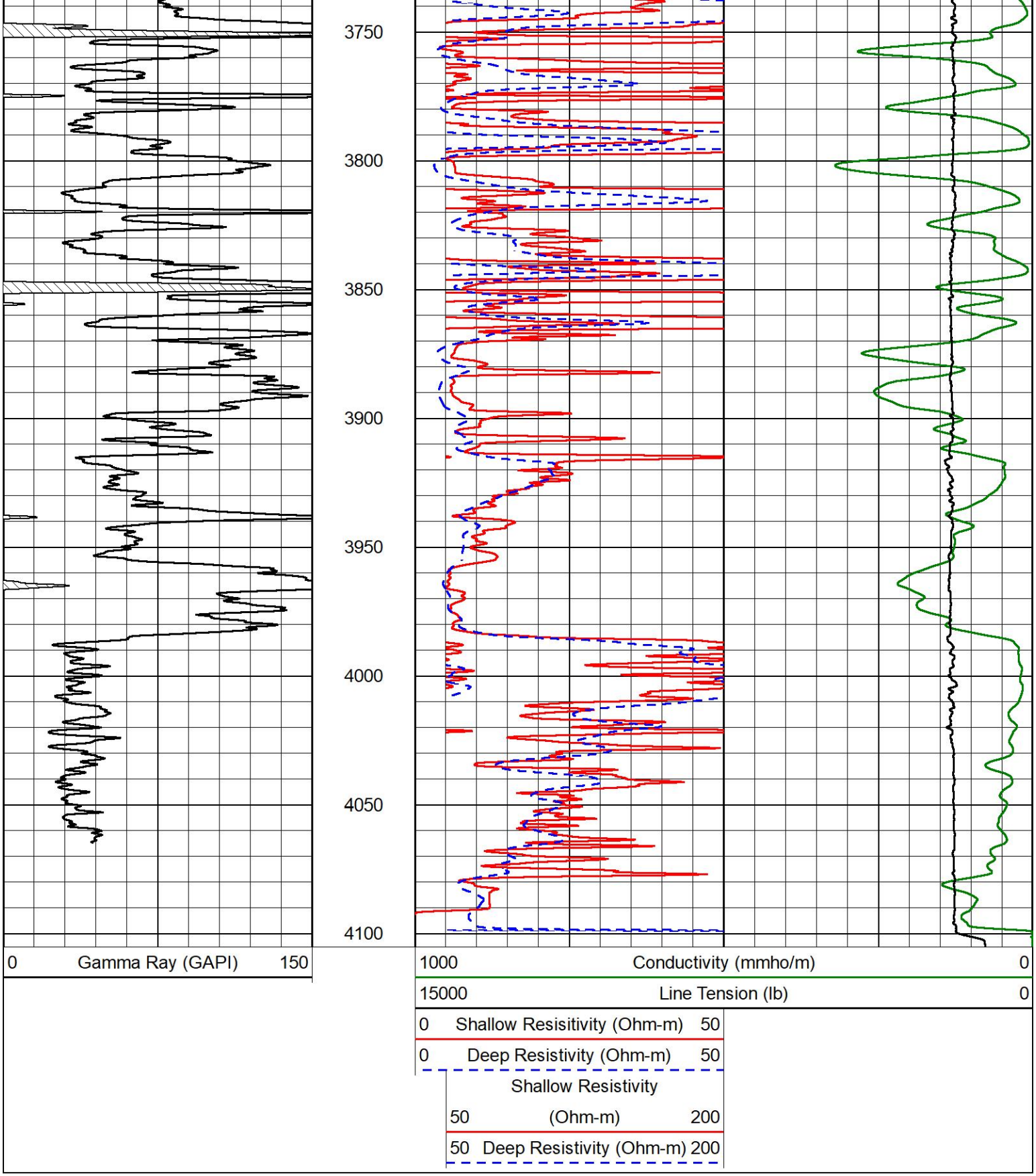

1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500


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



MIDWEST WIRELINE

ANHYDRITE SECTION

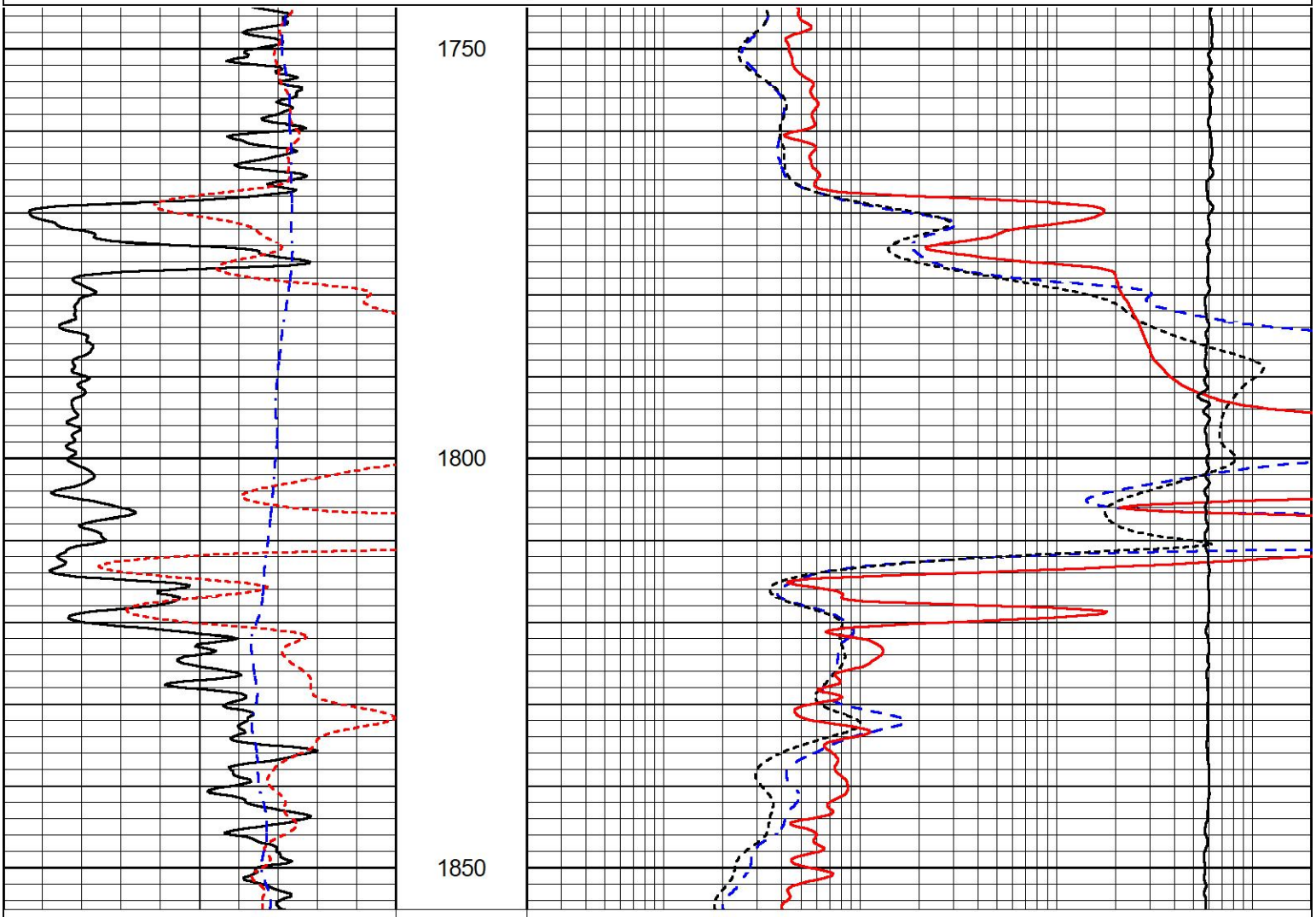
MAIN PASS

Database File	gore_lynd_9.db
Dataset Pathname	stackml/pass5.1
Presentation Format	_dil
Dataset Creation	Fri Mar 11 01:29:15 2022

Dataset Creation Fri Mar 11 01:29:15 2022
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

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



0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

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

MIDWEST WIRELINE

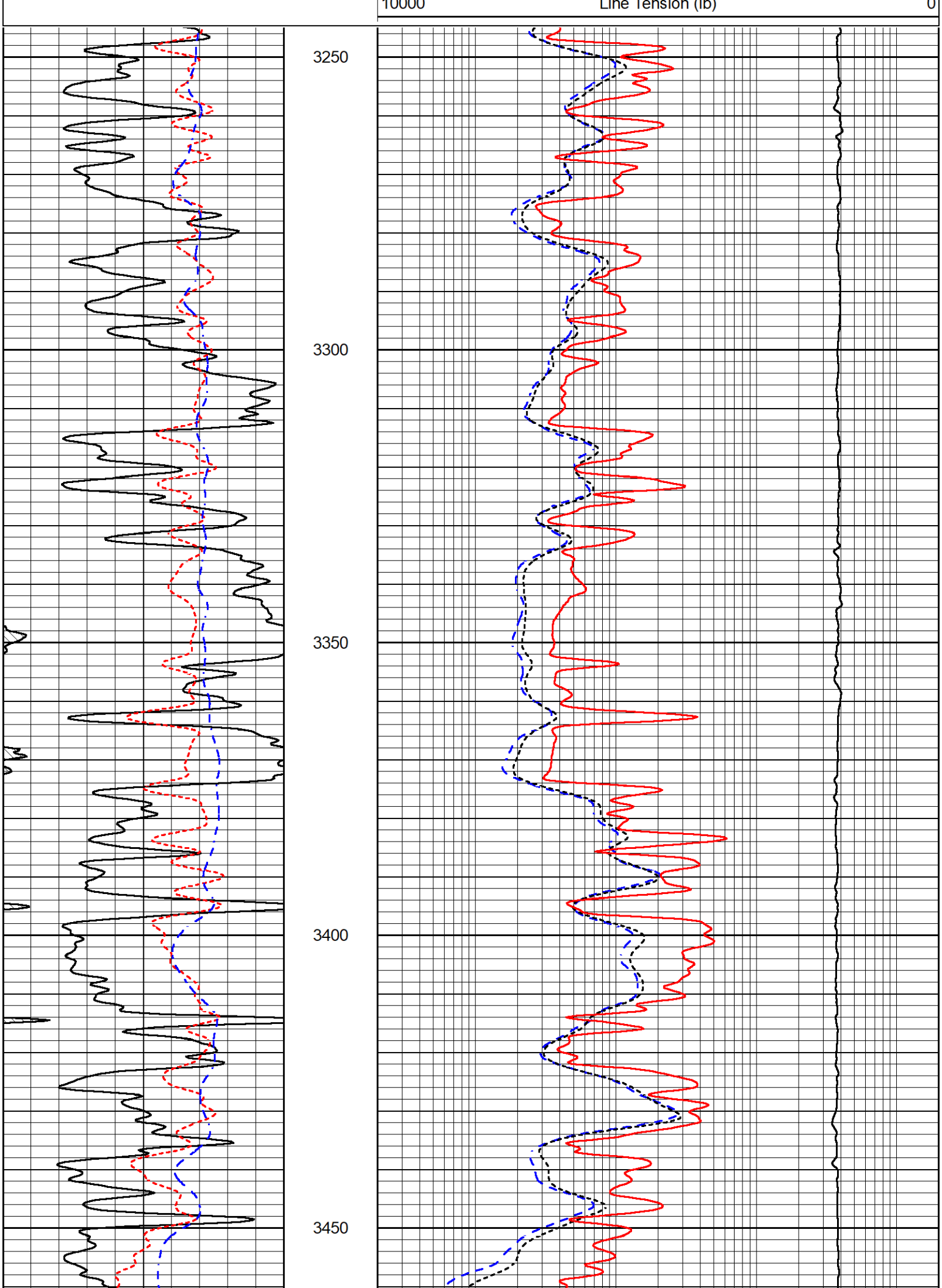
DETAIL SECTION

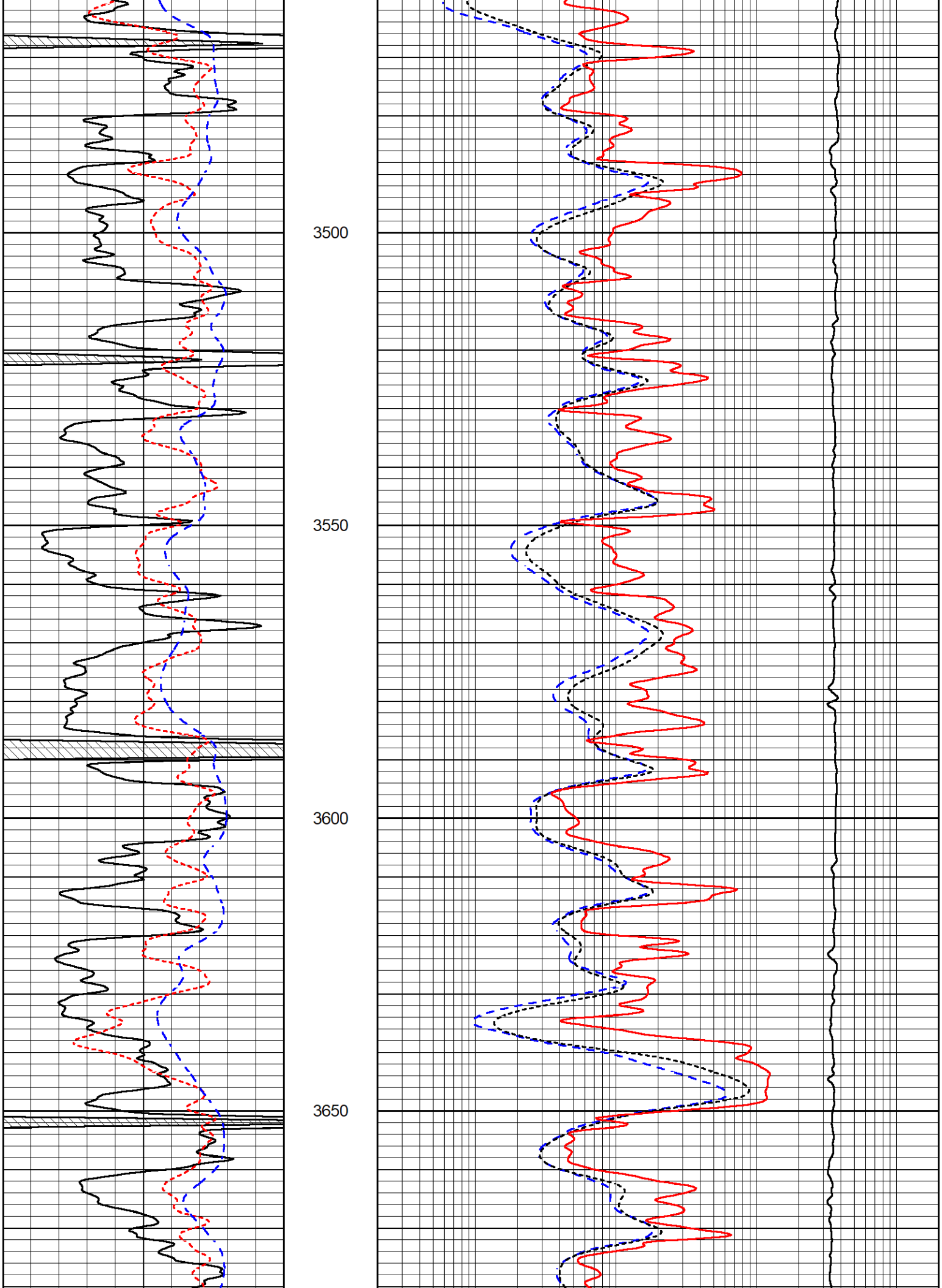
MAIN PASS

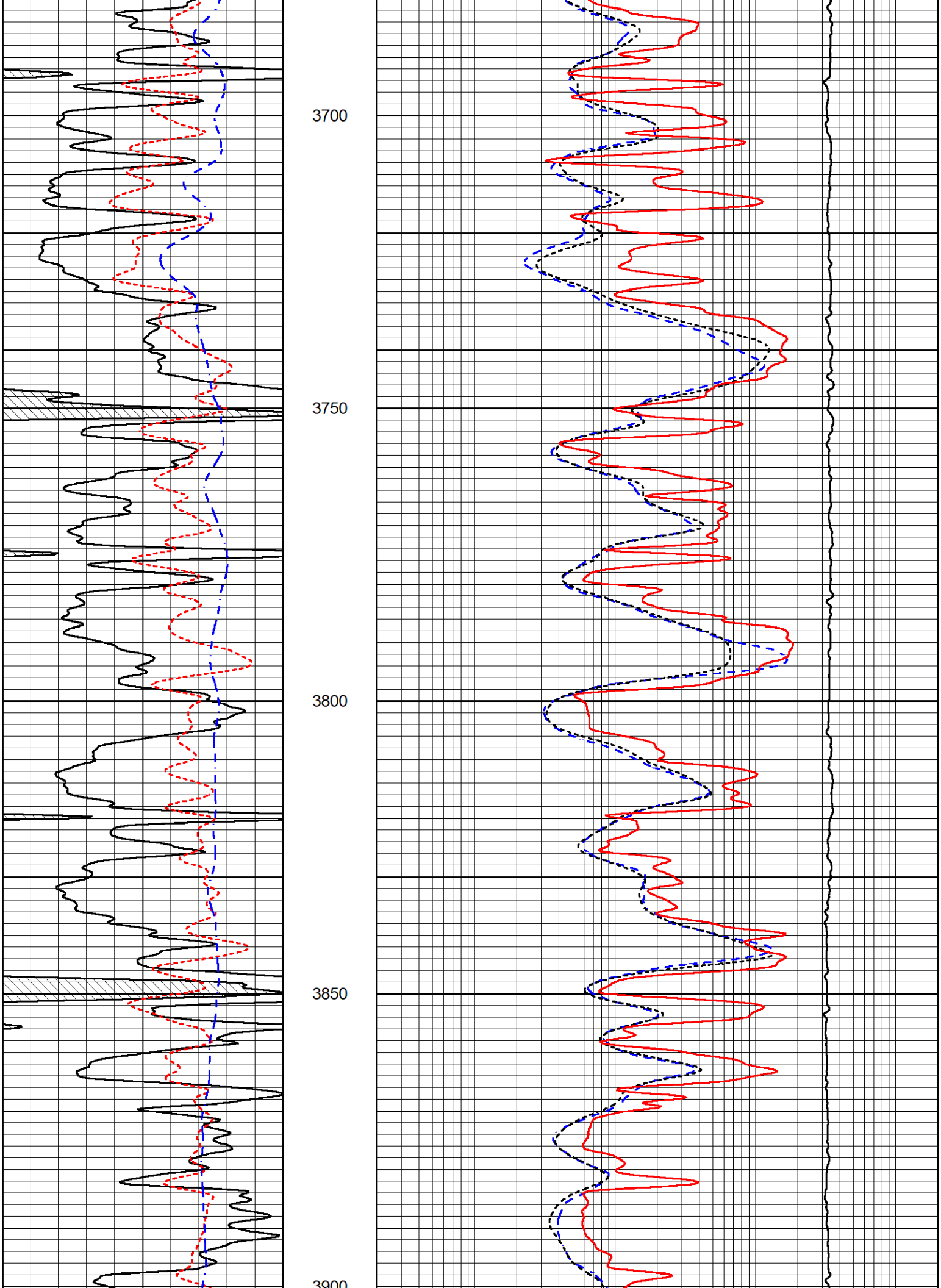
Database File gore_lynd_9.db
Dataset Pathname stackml/pass4.1
Presentation Format _dil
Dataset Creation Fri Mar 11 00:50:20 2022
Charted by Depth in Feet scaled 1:240

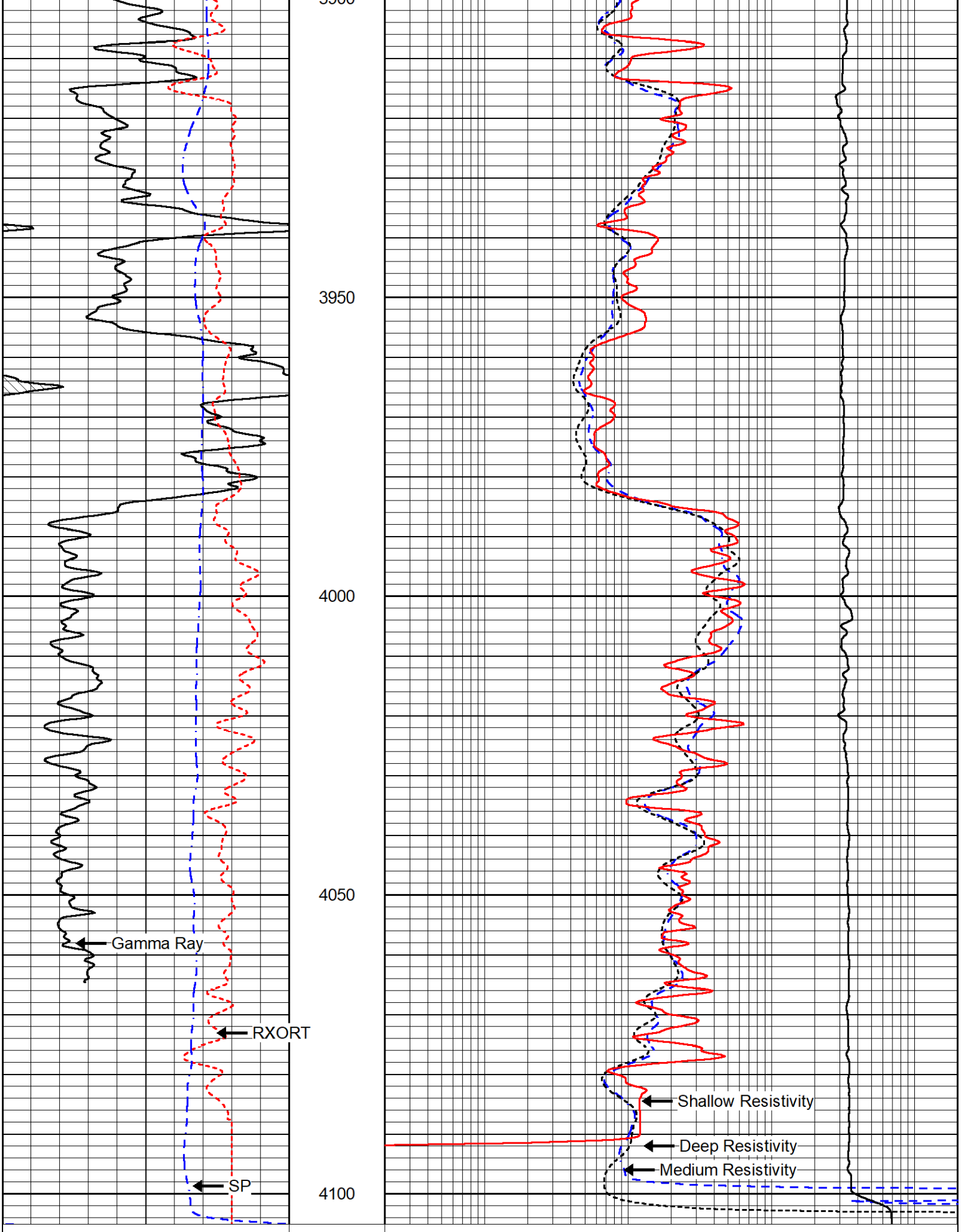
0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

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


10000
Line Tension (lb)
0
3250
3300
3350
3400
3450


3500
3550
3600
3650


3700
3750
3800
3850
3900



0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000

10000	Line Tension (lb)	0

MIDWEST WIRELINE

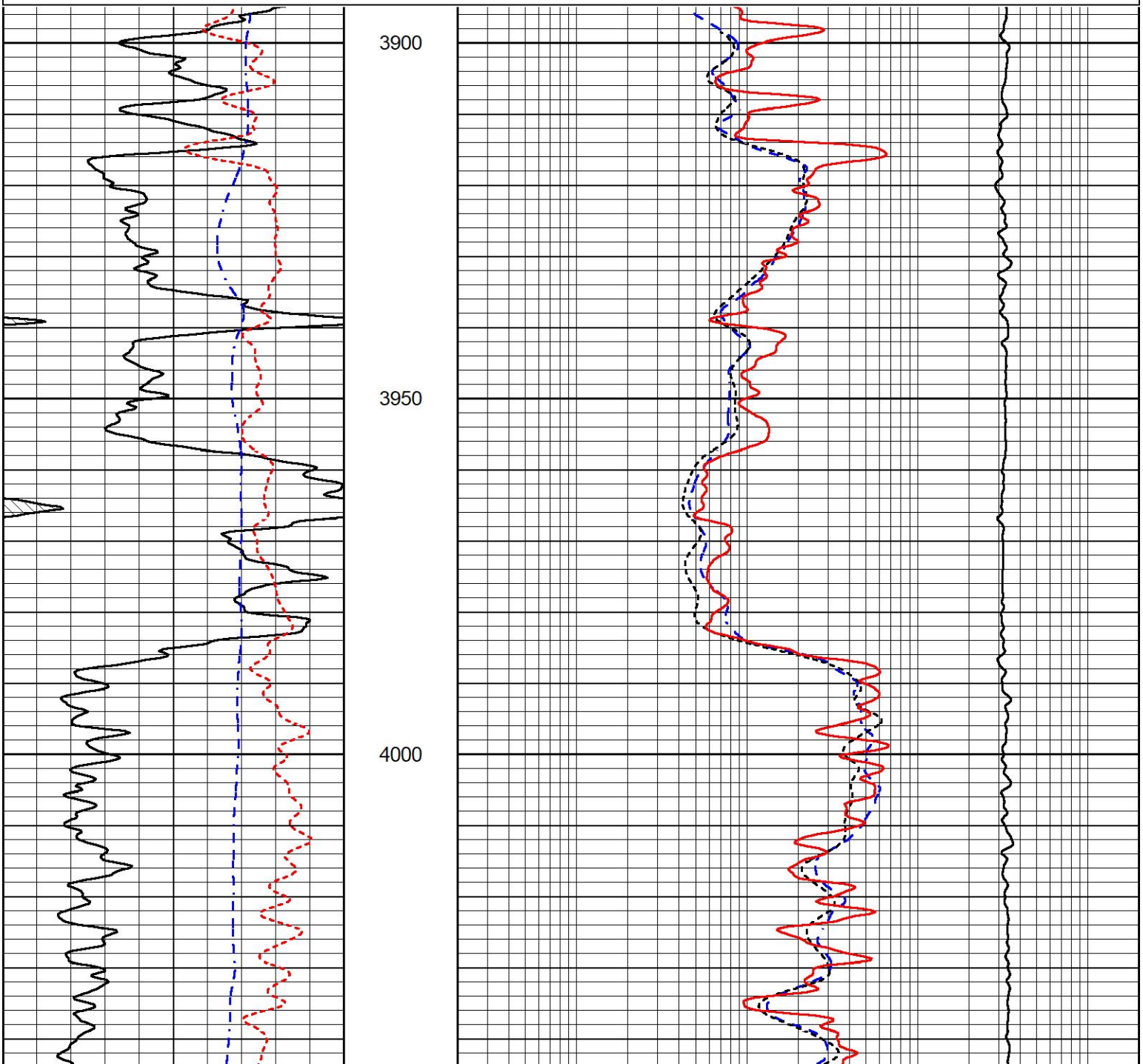
REPEAT SECTION

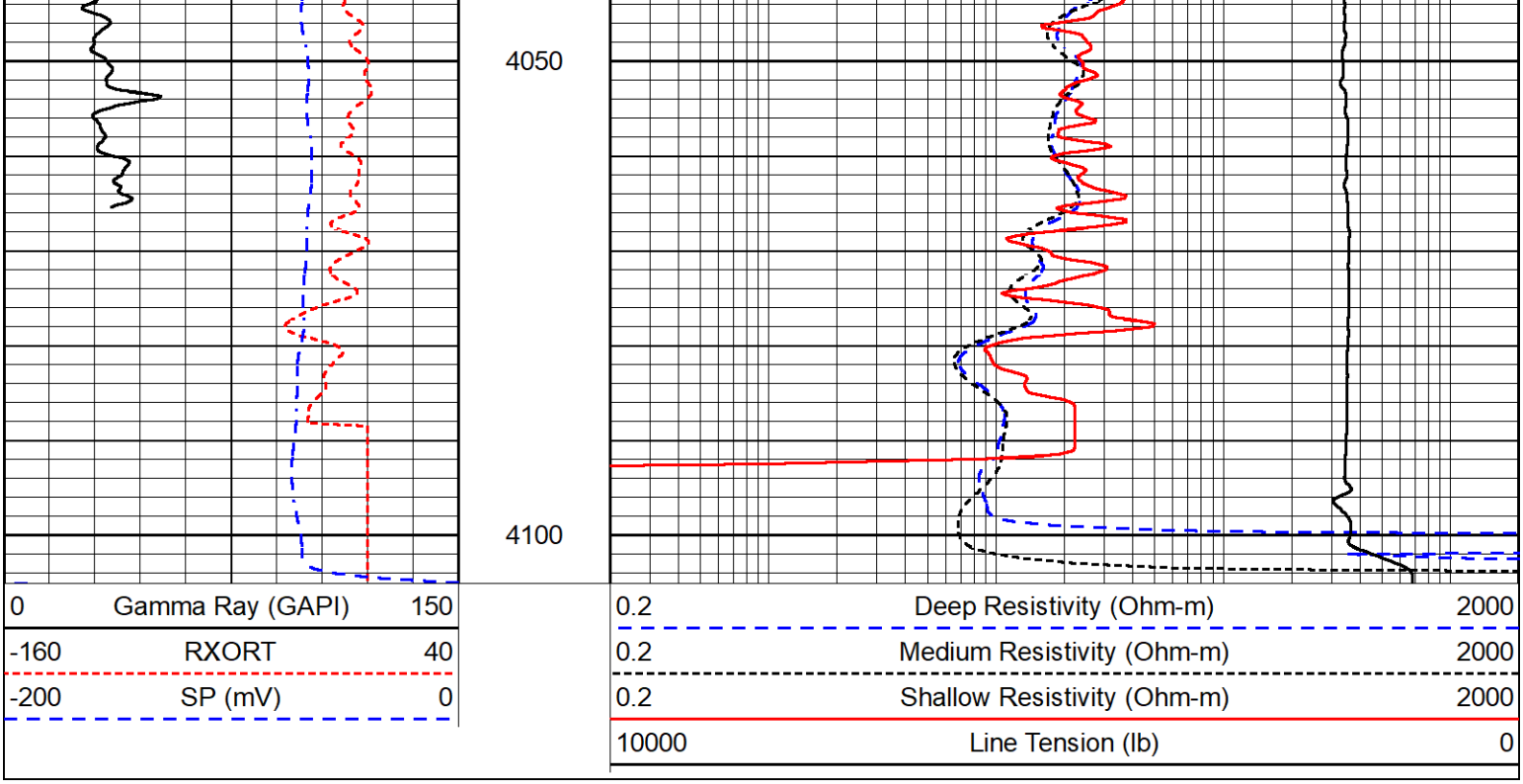
REPEAT PASS

Database File	gore_lynd_9.db
Dataset Pathname	stackml/pass2.1
Presentation Format	_dil
Dataset Creation	Fri Mar 11 00:48:56 2022
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

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





Calibration Report

Database File	gore_lynd_9.db
Dataset Pathname	stackml/pass4.1
Dataset Creation	Fri Mar 11 00:50:20 2022

Dual Induction Calibration Report

Serial-Model:	504 HT-M&W
Surface Cal Performed:	Thu Dec 16 22:32:49 2021

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	178.615	710.235	0.000	255.800	mmho/m	0.650	-19.000
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.450	-45.500

Microlog Calibration Report

Serial-Model:	402-PSI STKBL ML
Performed:	Thu Dec 16 22:29:48 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	24000.0000	-1.0000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	20000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1520	-131.2000

Compensated Density Calibration Report

Serial-Model:	306-06-M&W
Source #:	21170B
Master Calibration Performed:	Tue Dec 14 14:05:52 2021

Master Calibration

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	5193.26	4968.12	cps
Aluminum	2.650	g/cc	962.25	3144.87	cps

Spine Angle = 74.82 Density/Spine Ratio = 0.512

	Size		Reading
Small Ring	4.00	in	1.02
Large Ring	14.00	in	1.11

Compensated Neutron Calibration Report

Serial-Model:	210-M&W
Source #:	N-1238
Master Calibration Performed:	Fri Dec 3 09:16:24 2021

Master 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:	103	
Tool Model:	M&W	
Performed:	Fri Dec 3 12:13:24 2021	
Calibrator Value:	500.0	GAPI
Background Reading:	28.0	cps
Calibrator Reading:	986.0	cps
Sensitivity:	0.5700	GAPI/cps

MIDWEST WIRELINE

Company	Gore Oil Company
Well	Lynd #9
Field	Zeman North
County	Trego
State	Kansas