MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company TDI, Inc.
Well Jerome #2
Field Ruder
County Ellis State Kansas

Location: 330 FSL & 1035 FEL
SEC 7 TWP 15S RGE 18W

API #: 15-051-27036-00-00

Other Services: DIL/MEL

Elevation: K.B. 2036, D.F., G.L. 2026

Permanent Datum: Ground Level
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Elevation: 2026

Company	TDI, Inc.
Well	Jerome #2
Field	Ruder
County	Ellis
State	Kansas
Date	10/4/2022
Run Number	One
Type Log	CNL/CDL
Depth Driller	3730
Depth Logger	3730
Bottom Logged Interval	3701
Top Logged Interval	2900
Type Fluid In Hole	Chemical
Salinity, PPM CL	4600
Density	9.2
Level	Full
Max. Rec. Temp. F	113
Operating Rig Time	3 Hours
Equipment -- Location	P-24 | Hays
Recorded By	D. Schmidt
Witnessed By	Tom Denning

Borehole Record

Run No.	Bit	From	To
One	12.25	0	225
Two	7.875	225	TD

Casing Record

Size	Wgt.	From	To
8.625	23	0	225

Herb Deines

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Hays,
South to Norfolk Rd, 1 1/8 West,
North into

Log Measured From: Kelly Bushing 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: D. Schmidt	Primary Witness: Tom Denning
Operator:	Secondary Witness: Herb Deines
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 (106)	3.00	3.50	50.00
CNLSC	37.23		CNT-M&W (207-MW)	5.00	3.50	100.00
CNSSC	36.48					
			CDL-M&W (307-11)	8.50	4.00	250.00
LSD	28.18					
DCAL	28.17					
SSD	27.68					
			ML-PSIML (401)	7.58	4.00	65.00
MCAL	19.58					
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (501 HT)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset:	tdi_jerome 2.db: field/well/stkml/pass3.15
Total length:	42.33 ft
Total weight:	685.00 lb
O.D.:	4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\tdi_jerome 2.db
Dataset field/well/stkml/pass3.15/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	113	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	173	70	Off	3730

Variable Description

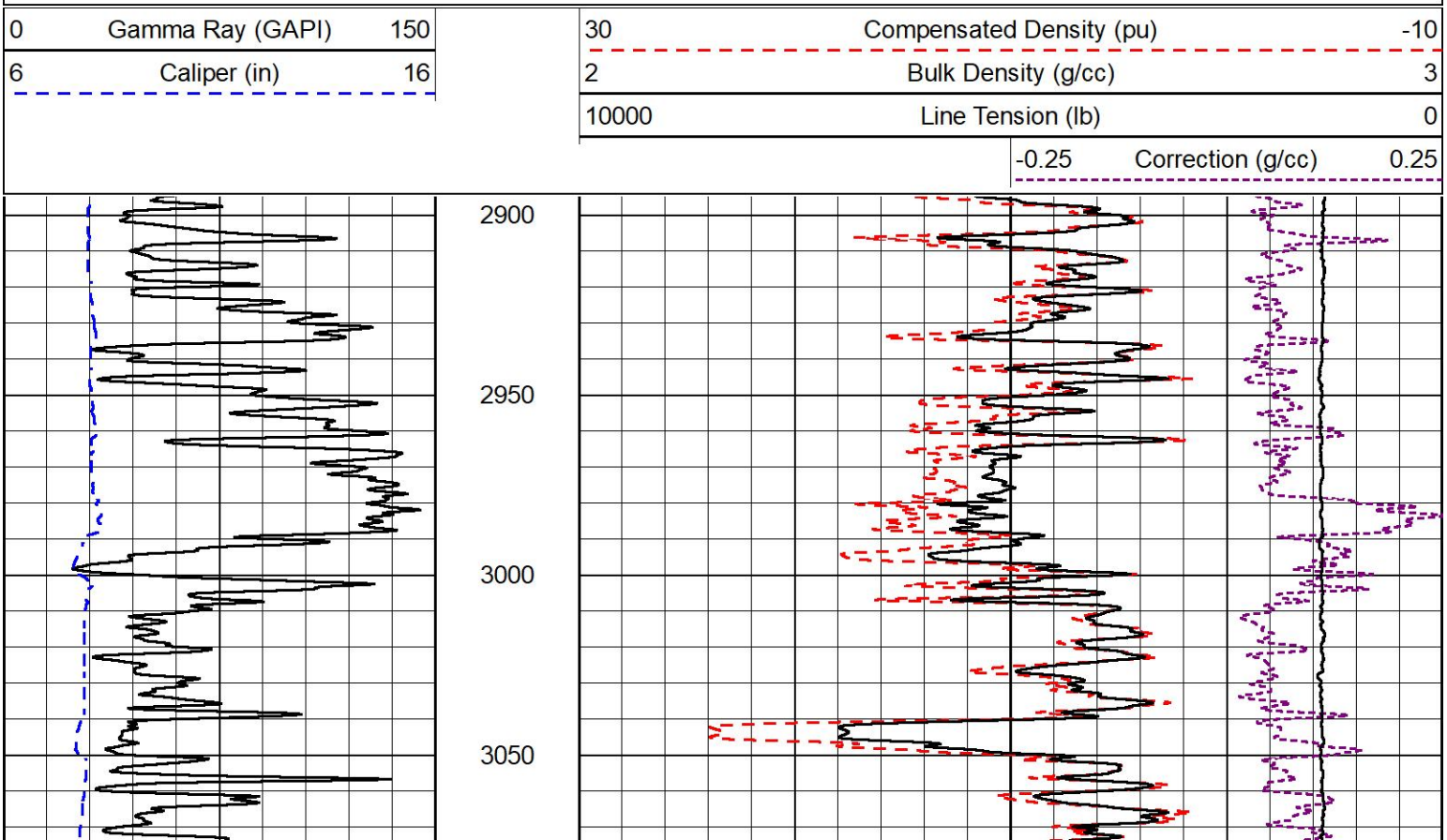
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM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

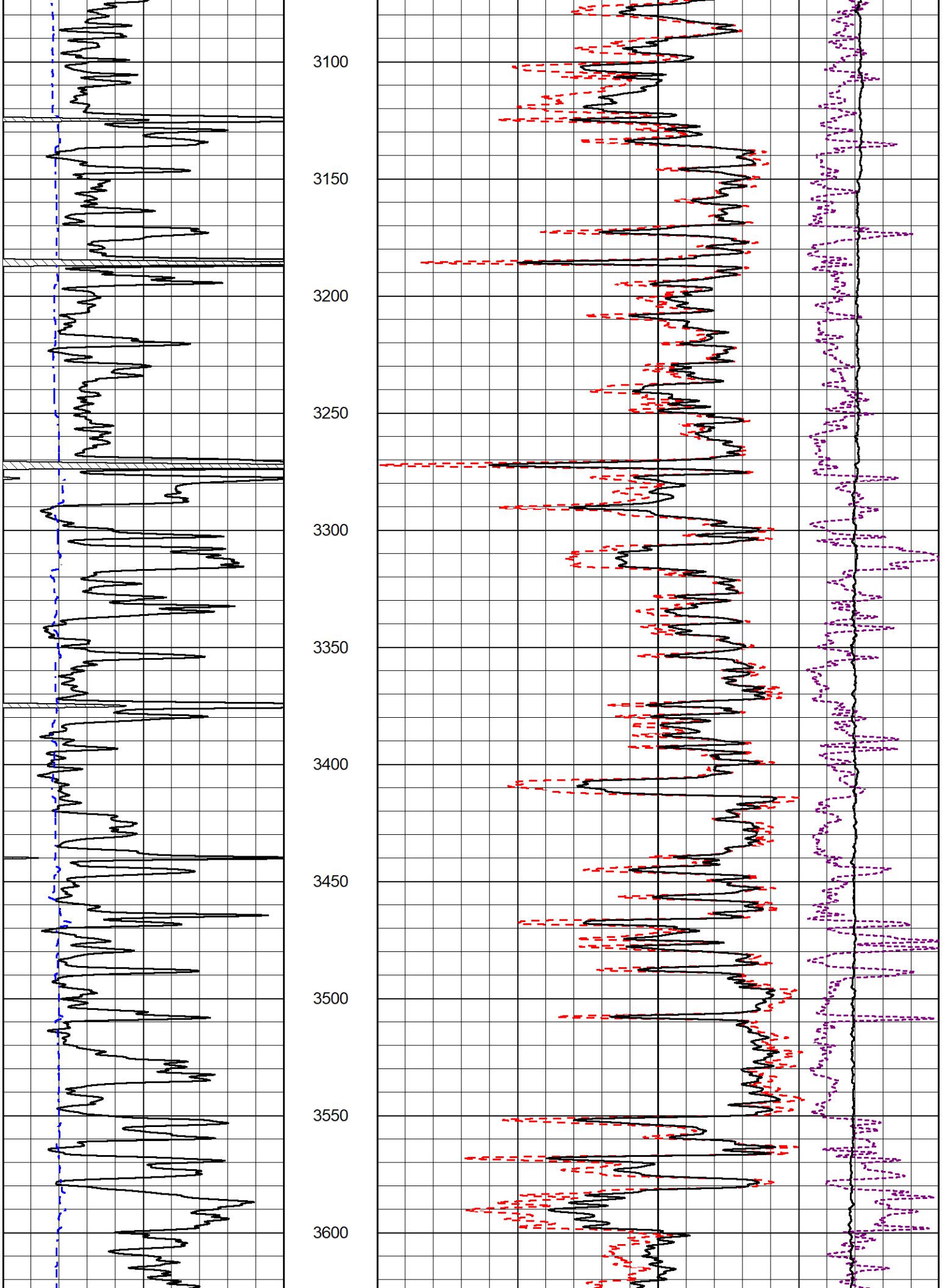
MIDWEST WIRELINE

2" SCALE BULK DENSITY

MAIN PASS

Database File	tdi_jerome 2.db
Dataset Pathname	stkml/pass3.2
Presentation Format	_cdl
Dataset Creation	Tue Oct 04 22:19:14 2022
Charted by	Depth in Feet scaled 1:600

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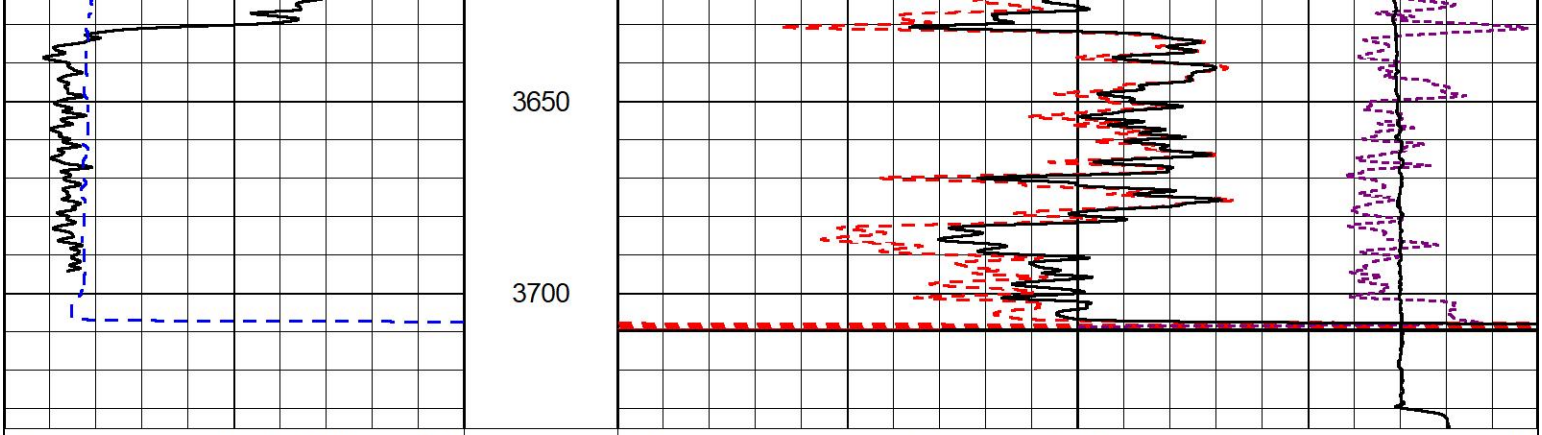
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600



0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	Compensated Density (pu)	-10
2	Bulk Density (g/cc)	3
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25

MIDWEST WIRELINE

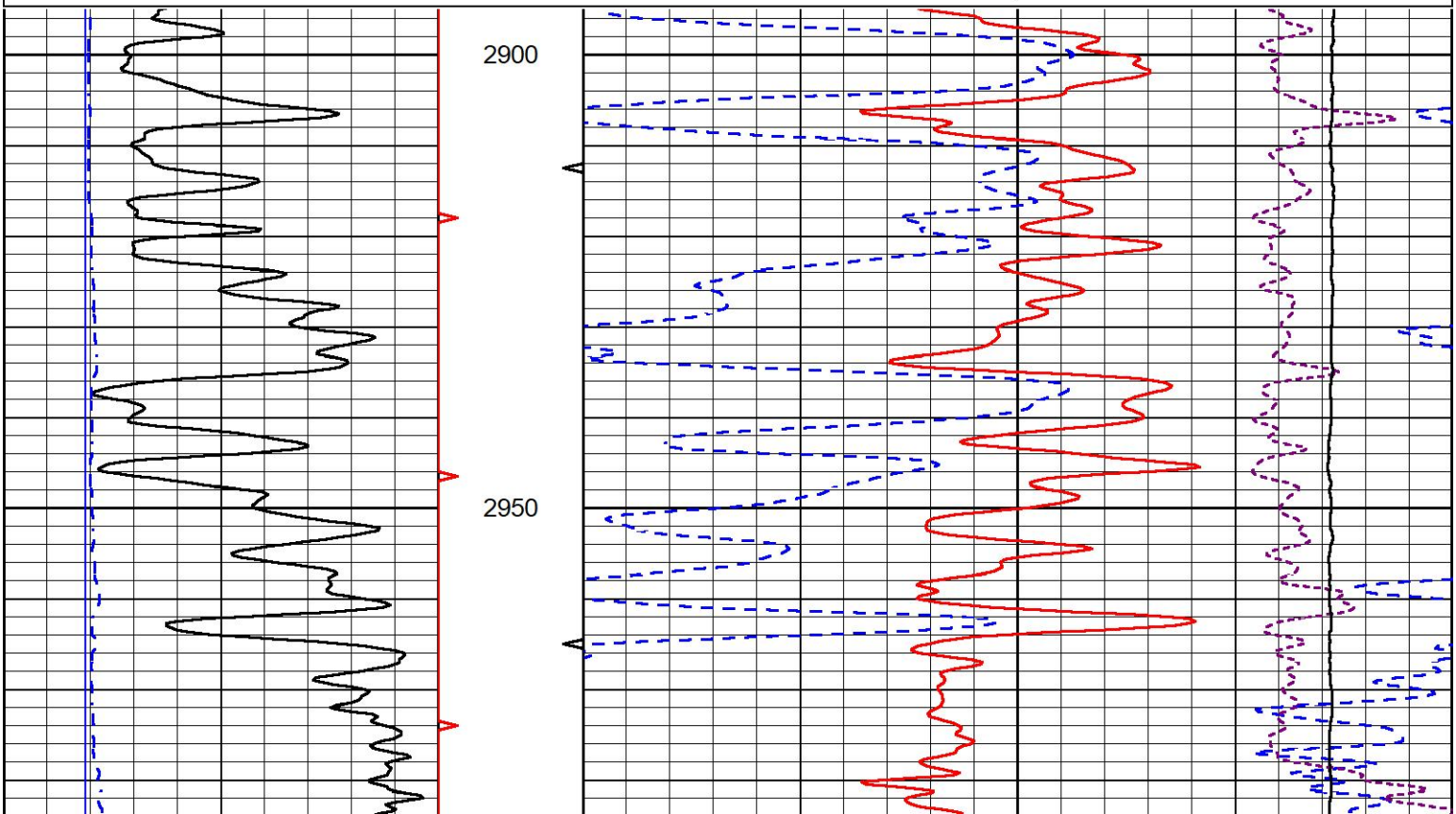
DETAIL SECTION

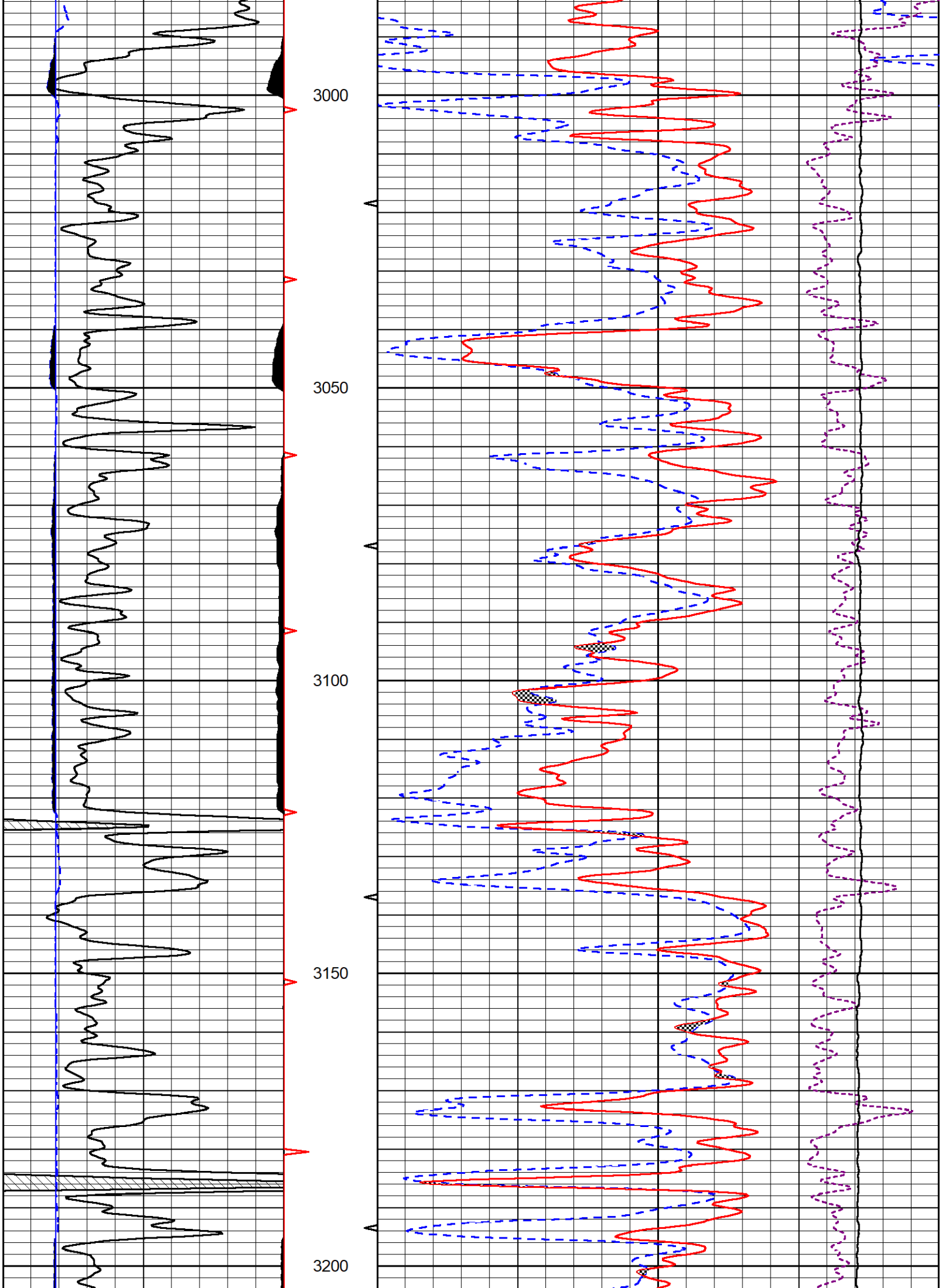
MAIN PASS

Database File	tdi_jerome 2.db
Dataset Pathname	stkml/pass3.5
Presentation Format	_CNDLS~1
Dataset Creation	Tue Oct 04 22:19:22 2022
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	DCAL (in)	7.875

30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25

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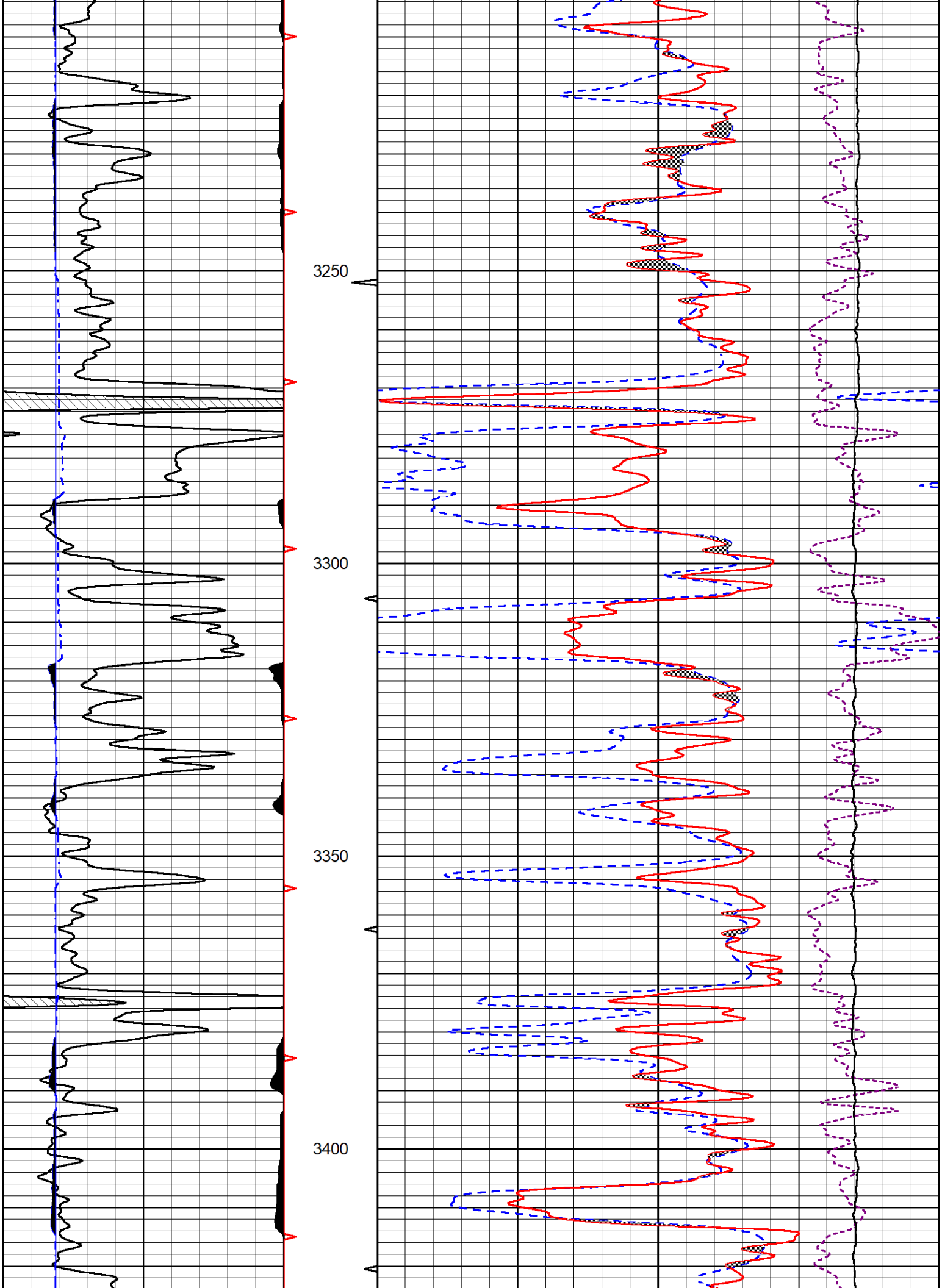
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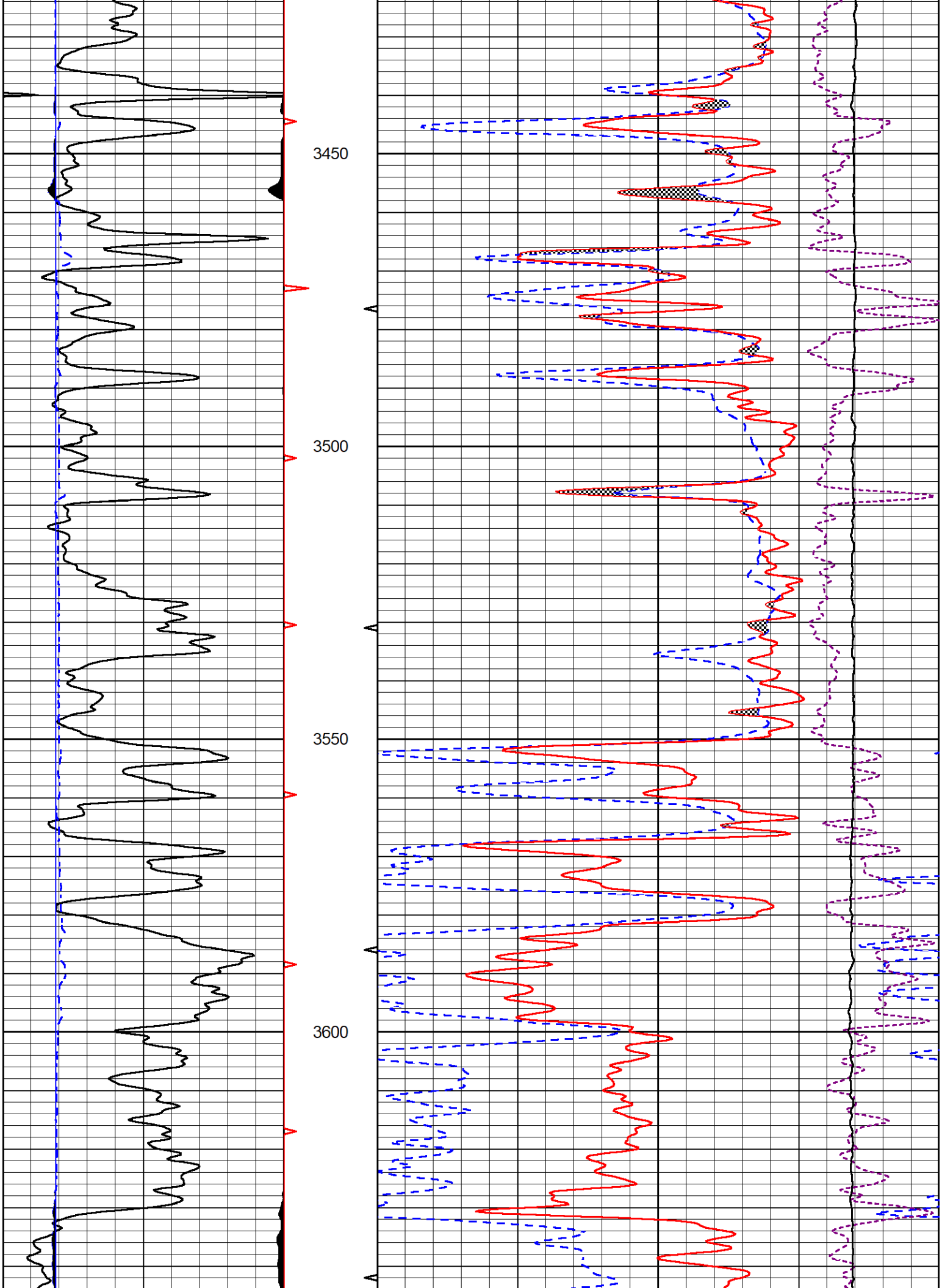
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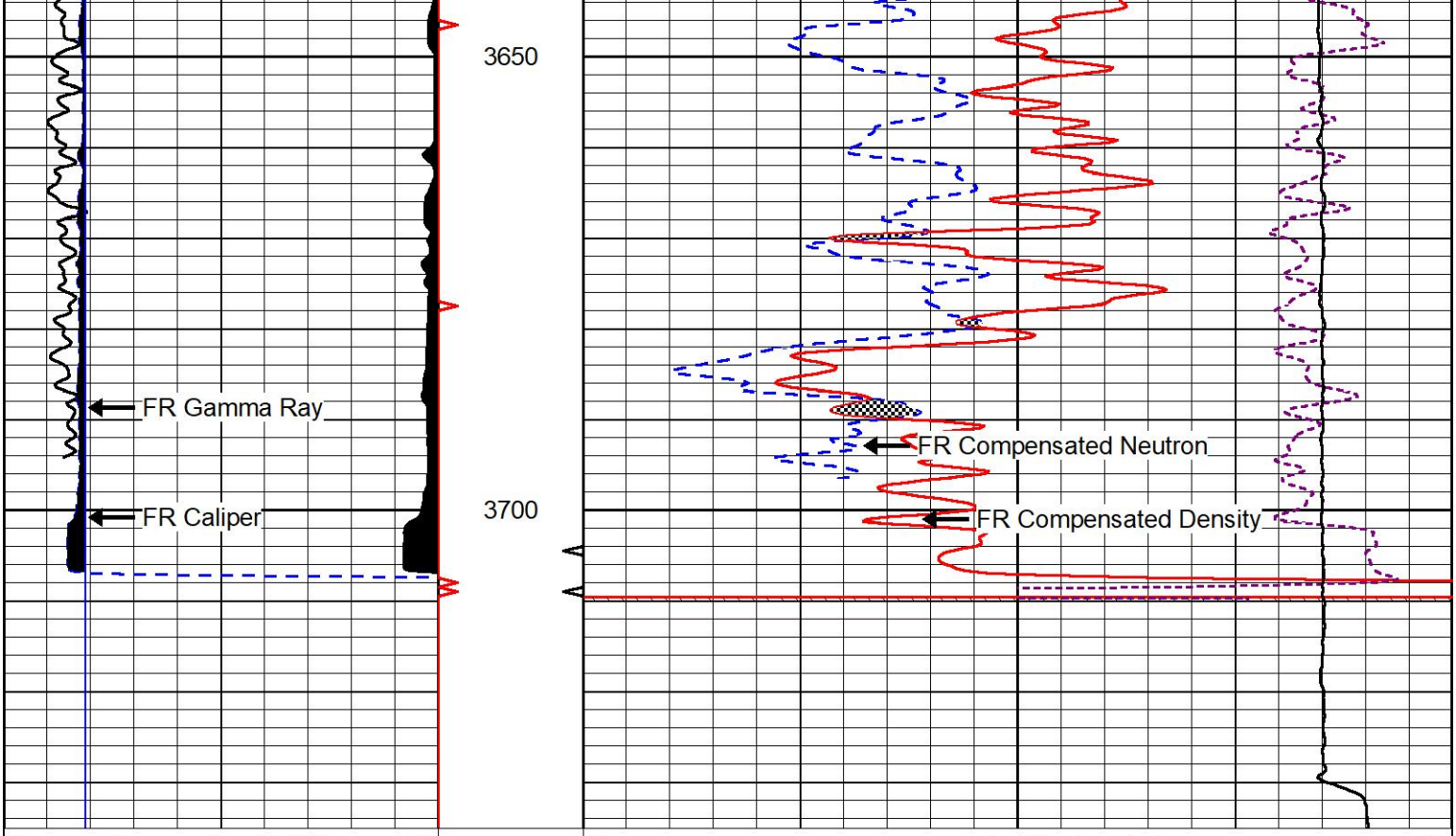


0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	DCAL (in)	7.875

30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25

MIDWEST WIRELINE

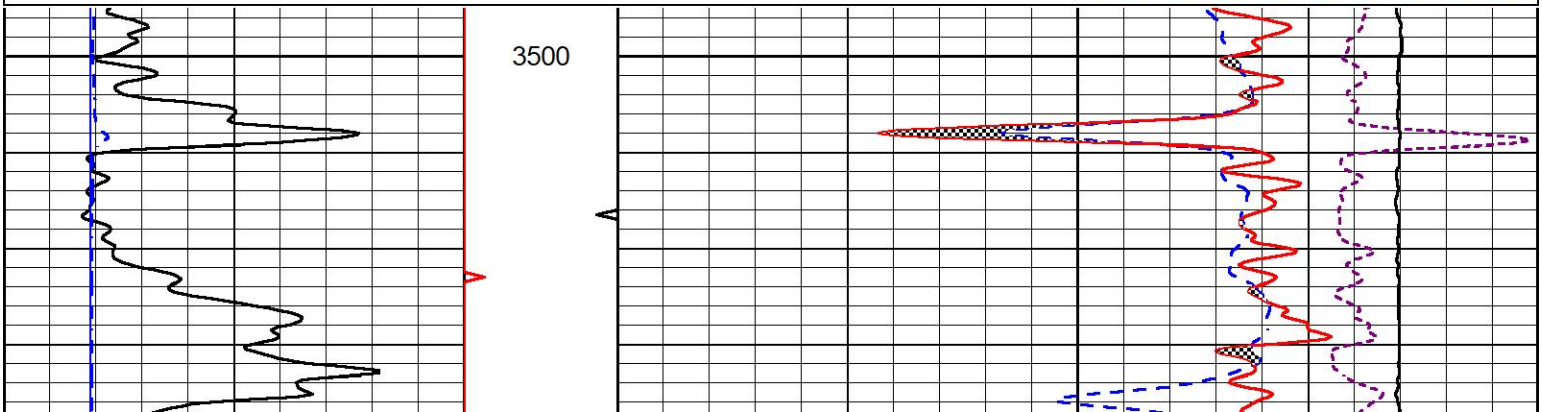
REPEAT SECTION

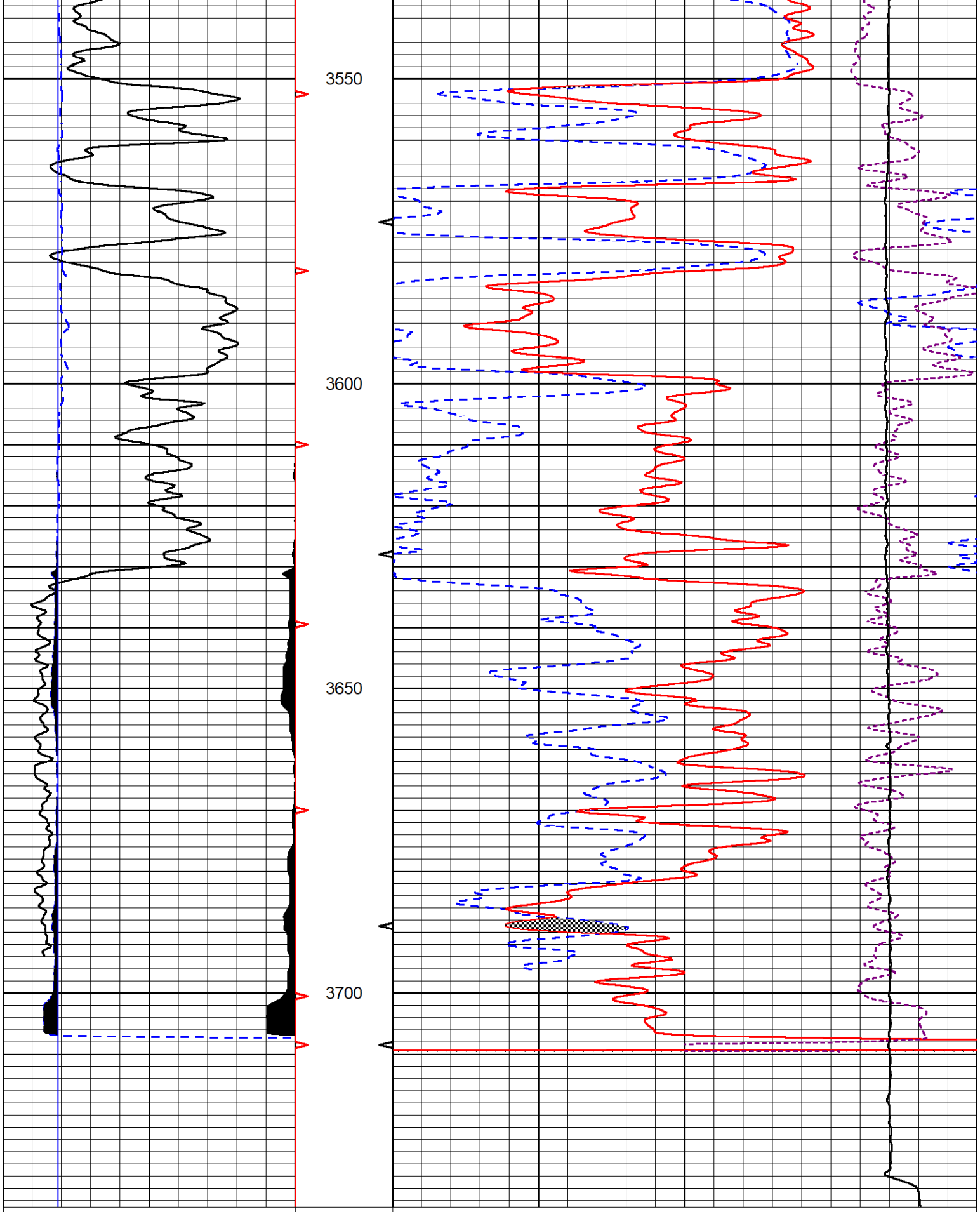
REPEAT PASS

Database File	tdi_jerome 2.db
Dataset Pathname	stkml/pass2.13
Presentation Format	_CNDLS~1
Dataset Creation	Tue Oct 04 22:10:09 2022
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	DCAL (in)	7.875

30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25




3550
3600
3650
3700
0 Gamma Ray (GAPI) 150
6 Caliper (in) 16
2.875 DCAL (in) 7.875
30 Compensated Neutron (pu) -10
30 Compensated Density (pu) -10
10000 Line Tension (lb) 0
-0.25 Correction (g/cc) 0.25

Calibration Report

Database File tdi_jerome 2.db
Dataset Pathname stkml/pass3.15
Dataset Creation Tue Oct 04 22:08:41 2022

Dual Induction Calibration Report

Serial-Model: 501 HT-M&W
Surface Cal Performed: Thu Sep 22 17:20:27 2022

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.455	-37.000
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.305	-32.000

Microlog Calibration Report

Serial-Model: 401-PSIML
Performed: Mon Jun 27 17:53:09 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	17000.0000	-0.6500
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	21000.0000	-0.5000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-141.4000

Compensated Density Calibration Report

Serial-Model: 307-11-M&W
Source #: 20762B
Master Calibration Performed: Sat Aug 27 10:20:16 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3600.52	4768.22	cps
Aluminum	2.670	g/cc	693.98	3106.20	cps

Spine Angle = 75.41

Density/Spine Ratio = 0.538

	Size		Reading
Small Ring	6.00	in	1.16
Large Ring	18.00	in	1.01

Compensated Neutron Calibration Report

Serial Number: 207-MW
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

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	pu
3)	Short Space	cps		
	Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	106	
Tool Model:	M&W	
Performed:	Fri Dec 3 15:10:46 2021	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.5500	GAPI/cps

MIDWEST WIRELINE

Company	TDI, Inc.
Well	Jerome #2
Field	Ruder
County	Ellis
State	Kansas