



PIONEER
Pioneer Energy Services

DUAL INDUCTION LOG

Company **CHARLES N. GRIFFIN**
Well **JAZMYNE NO. 1**
Field **TONI-MIKE**
County **BARBER** State **KANSAS**

Location: API #: 15-007-24302-00-00

Other Services

SE NE SW
1,650' FSL & 2,310' FWL
SEC 34 TWP 32S RGE 12W

CNL/CDL

Permanent Datum GROUND LEVEL Elevation 1586'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1591'
D.F. N/A
G.L. 1586'

Date	5/12/2016	
Run Number	ONE	
Depth Driller	4905'	
Depth Logger	4908'	
Bottom Logged Interval	4907'	
Top Log Interval	250'	
Casing Driller	8.625" @ 287'	
Casing Logger	289'	
Bit Size	7.875"	
Type Fluid in Hole	CHEMICAL	
Salinity, ppm CL	5000	
Density / Viscosity	9.3 69	
pH / Fluid Loss	11.5 9.8	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	.46 @ 76	
Rmt @ Meas. Temp	.35 @ 76	
Rmc @ Meas. Temp	.62 @ 76	
Source of Rmt / Rmc	CHARTS	
Rm @ BHT	.28 @ 125	
Operating Rig Time	2 1/2 HOURS	
Max Rec. Temp. F	125	
Equipment Number	108	
Location	COLBY	
Recorded By	J. LONG	
Witnessed By	BRUCE REED	CHARLES N. GRIFFIN

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

MEDICINE LODGE, 4 1/2 SOUTH TO COLLEGE HILL ROAD, 1 1/2 WEST PAST GAS PLANT,
NORTH INTO, FOLLOW LEASE ROAD EAST THEN NORTH THEN WEST

Log Measured From: KELLY BUSHING

5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES

www.pioneerenergy.com

785-625-3858

Your Pioneer Energy Services Crew

Engineer: J. LONG
Operator: J. HENRICKSON
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: BRUCE REED
Secondary Witness: CHARLES N. GRIFFIN
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 125	in 4.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV -716	degF 70	Off	ft 4908

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	33.00			GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC CNSSC	29.90			CNT-M&W (tk10-MW)	5.50	3.50	100.00
	29.15						
LSD DCAL SSD	20.85 20.83 20.35			CDL-M&W (71-914)	8.50	4.00	250.00
RLL3 RLL3F	15.80 15.79						
CILD	8.00			DIL-M&W (1987)	18.50	3.50	220.00

CILM	4.70								
SP	0.20								
Dataset: charlesngriffin_jazmyne_1.db: field/well/stack/pass3.1 Total length: 35.50 ft Total weight: 620.00 lb O.D.: 4.00 in									

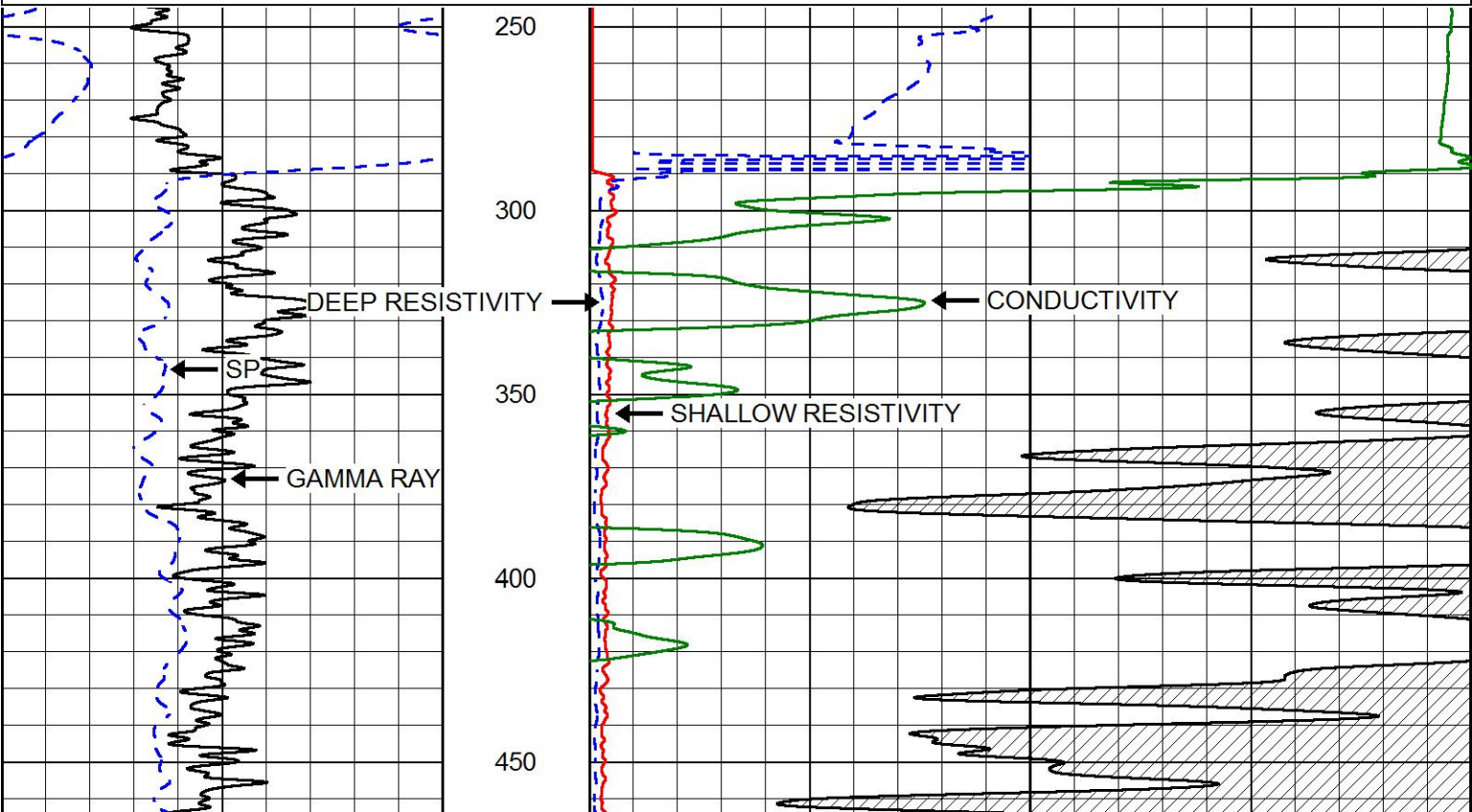


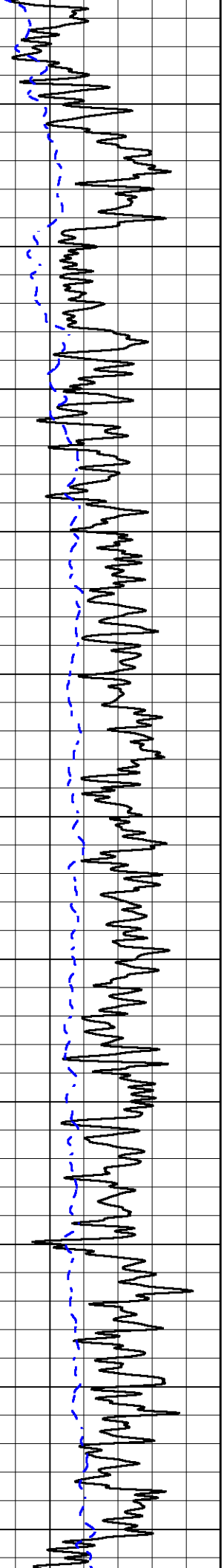
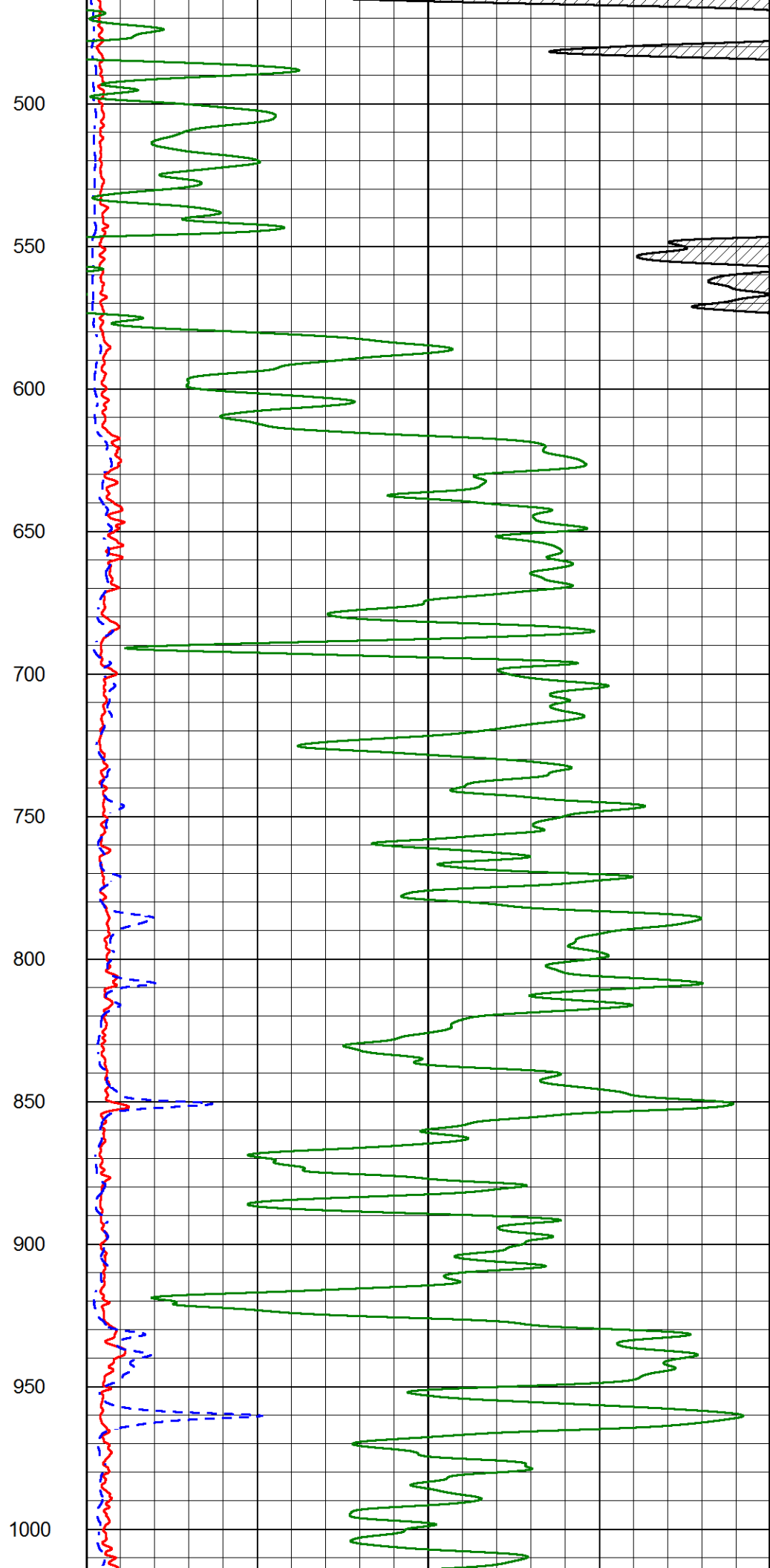
MAIN PASS

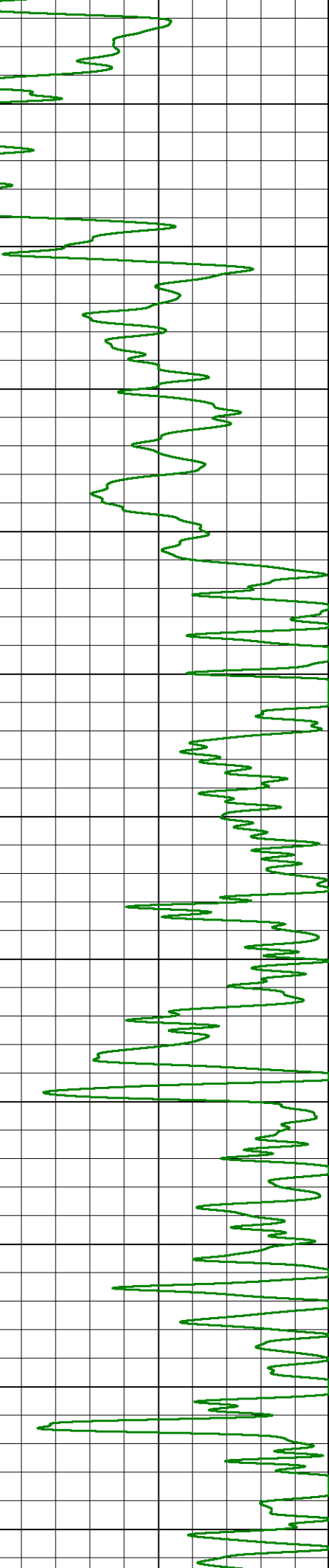
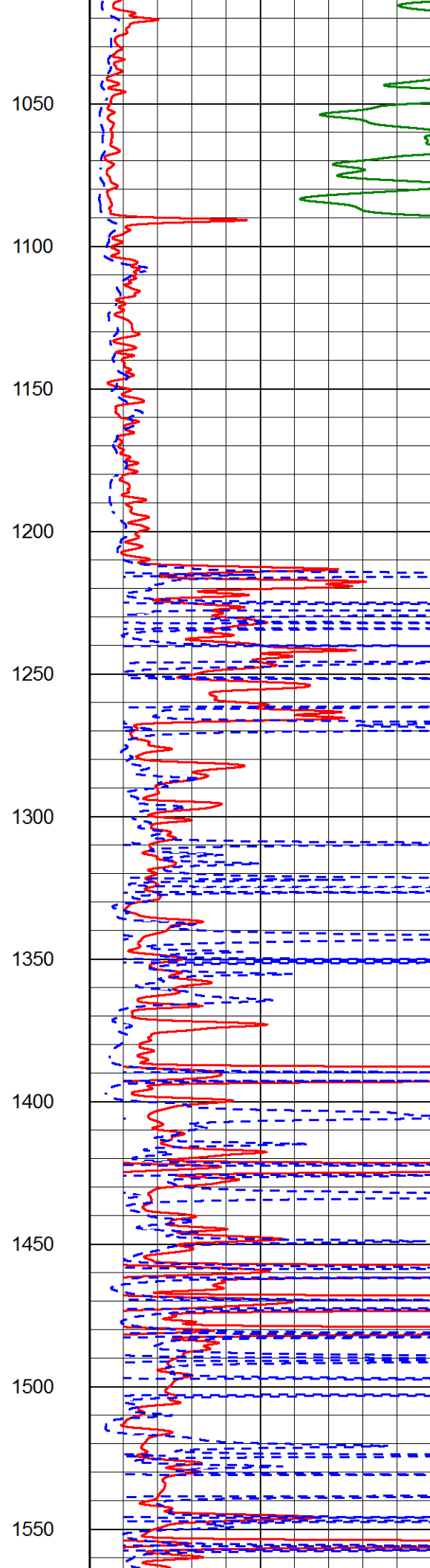
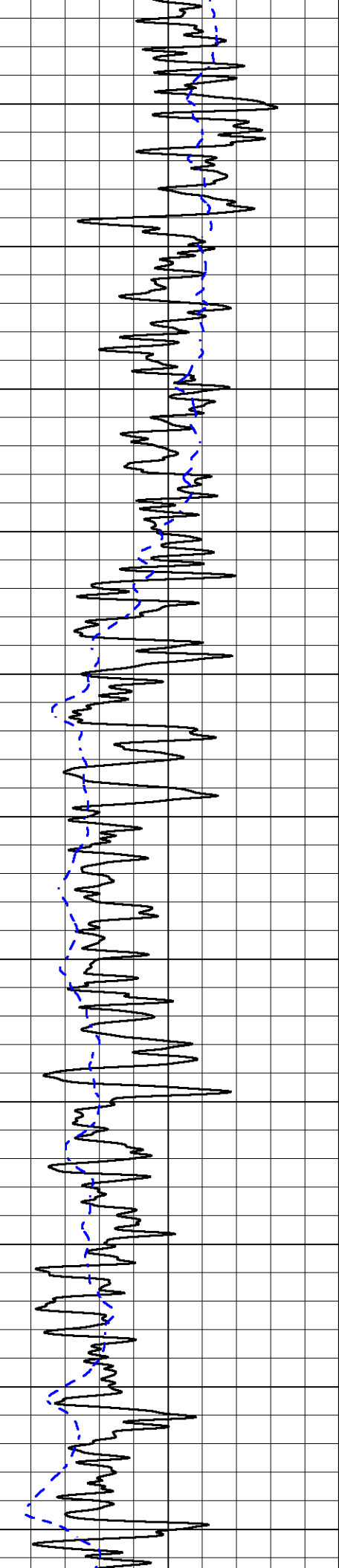
2" SCALE RESISTIVITY

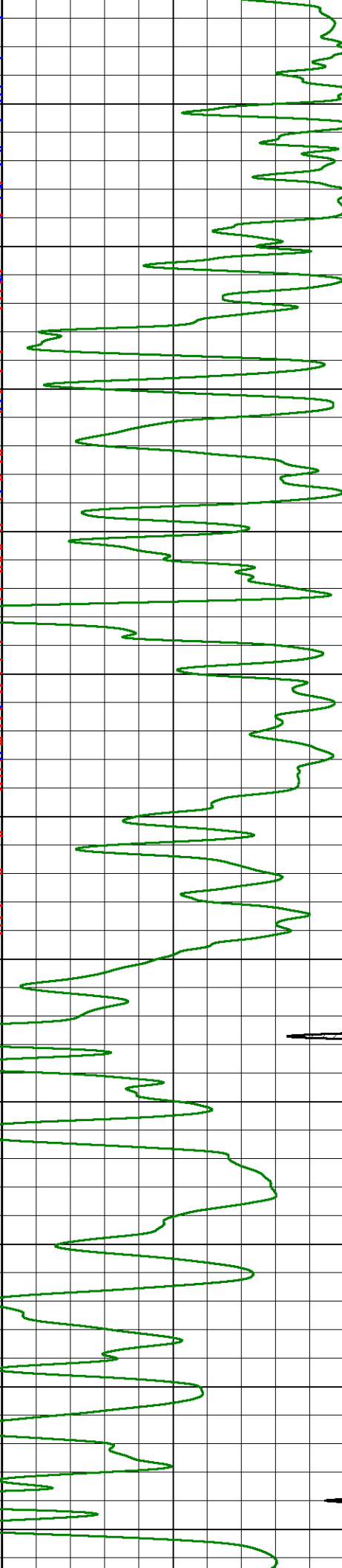
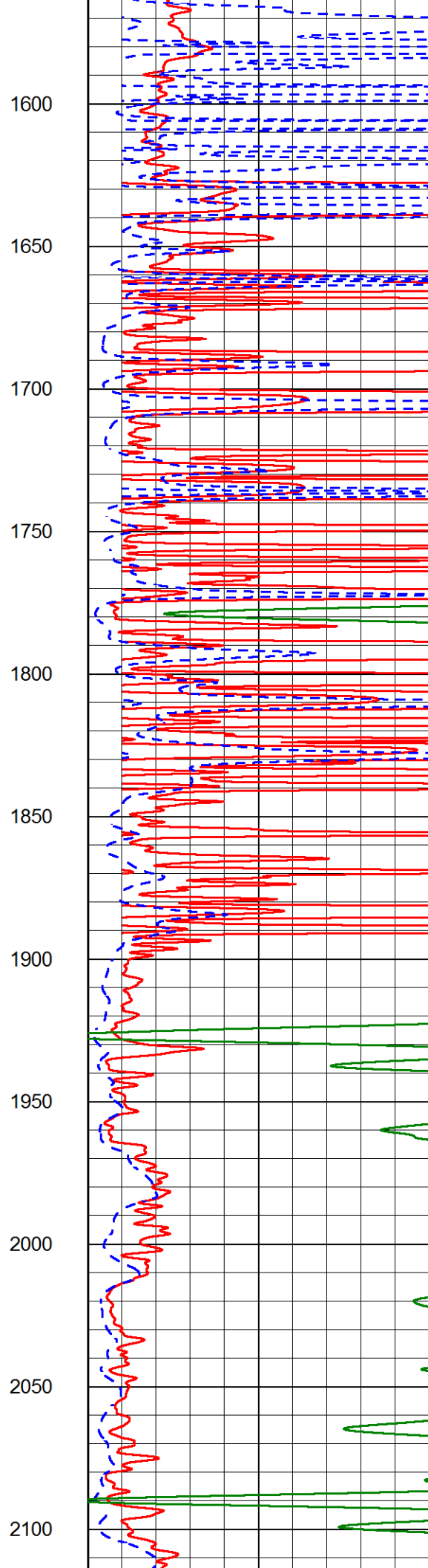
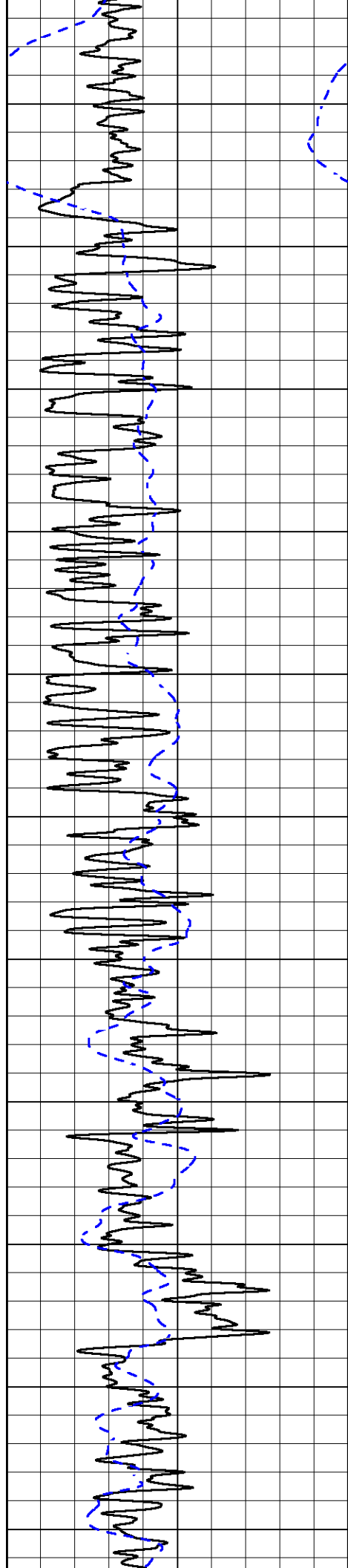
Database File	charlesngriffin_jazmyne_1.db
Dataset Pathname	stack/pass3.2
Presentation Format	dil2in
Dataset Creation	Thu May 12 16:46:02 2016
Charted by	Depth in Feet scaled 1:600

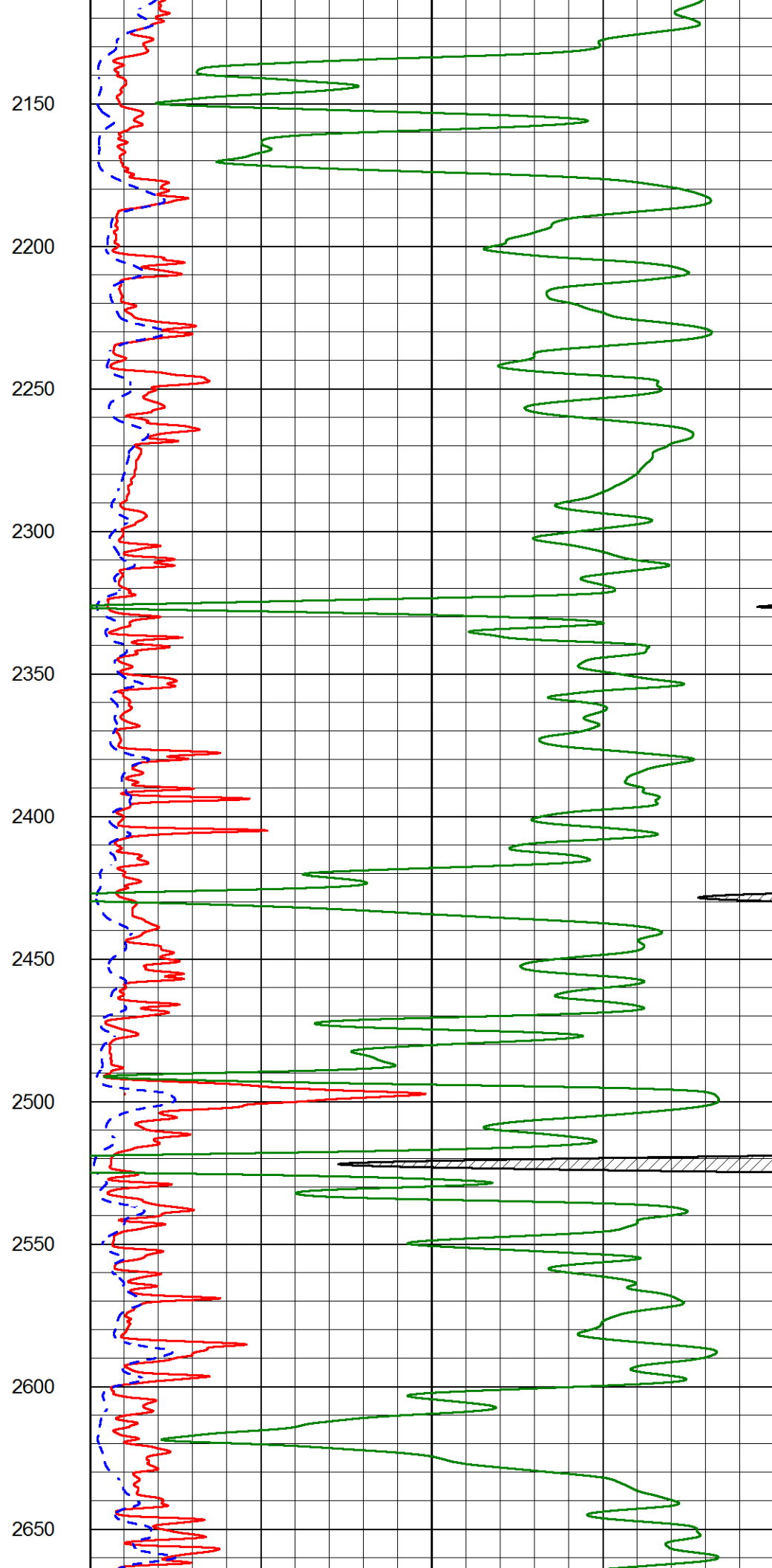
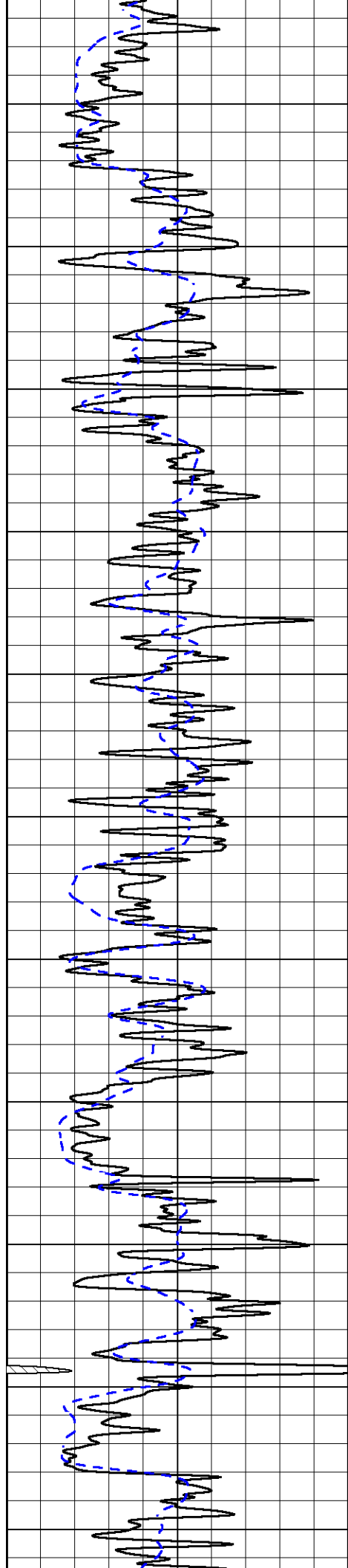
0	GAMMA RAY (GAPI)	150	1000	CONDUCTIVITY (mmho/m)	0
-200	SP (mV)	0	SHALLOW RESISTIVITY		
			0 (Ohm-m)	50	
			0 DEEP RESISTIVITY (Ohm-m)	50	
			SHALLOW RESISTIVITY		
			50 (Ohm-m)	500	
			DEEP RESISTIVITY		
			50 (Ohm-m)	500	

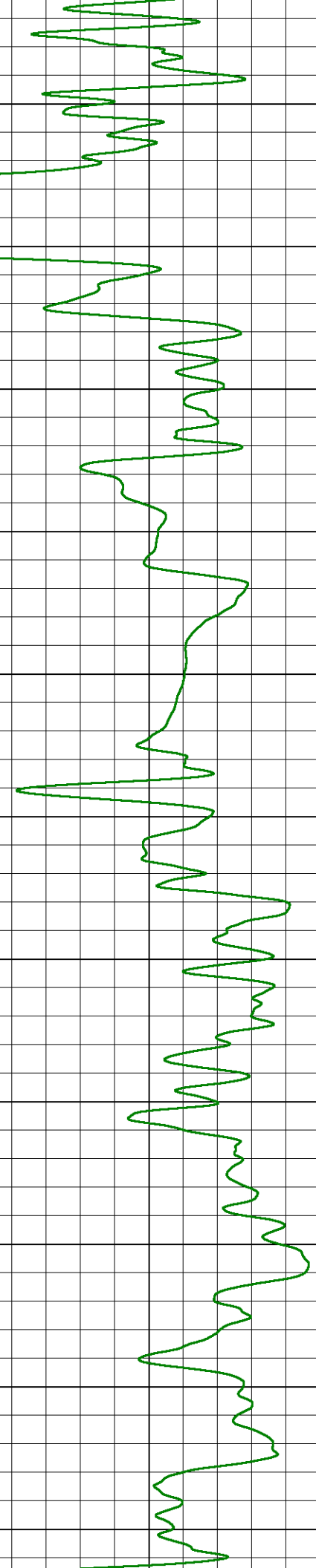
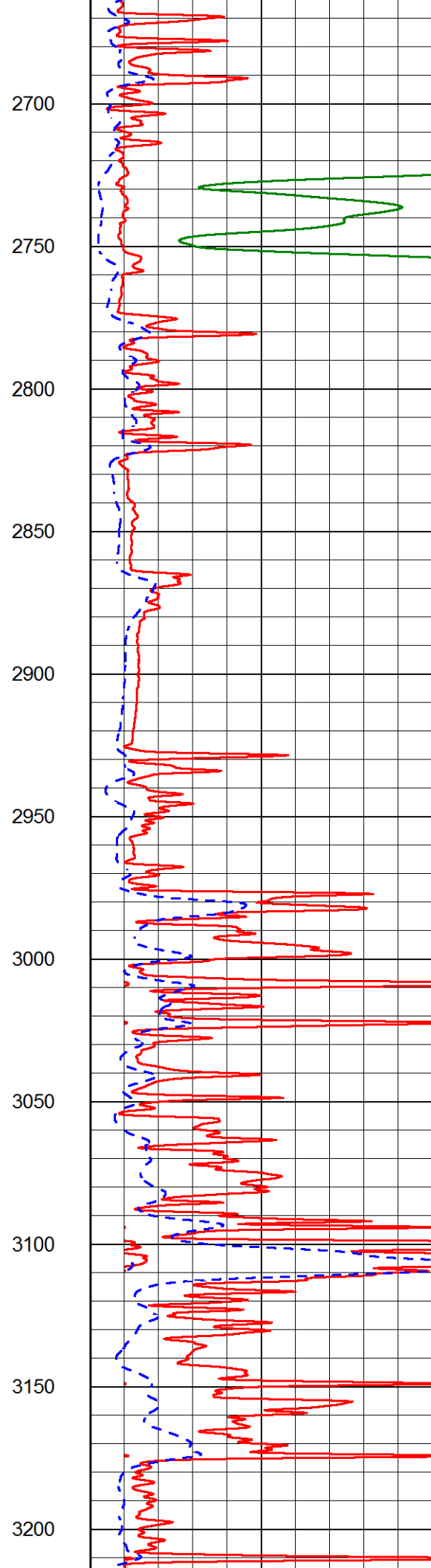
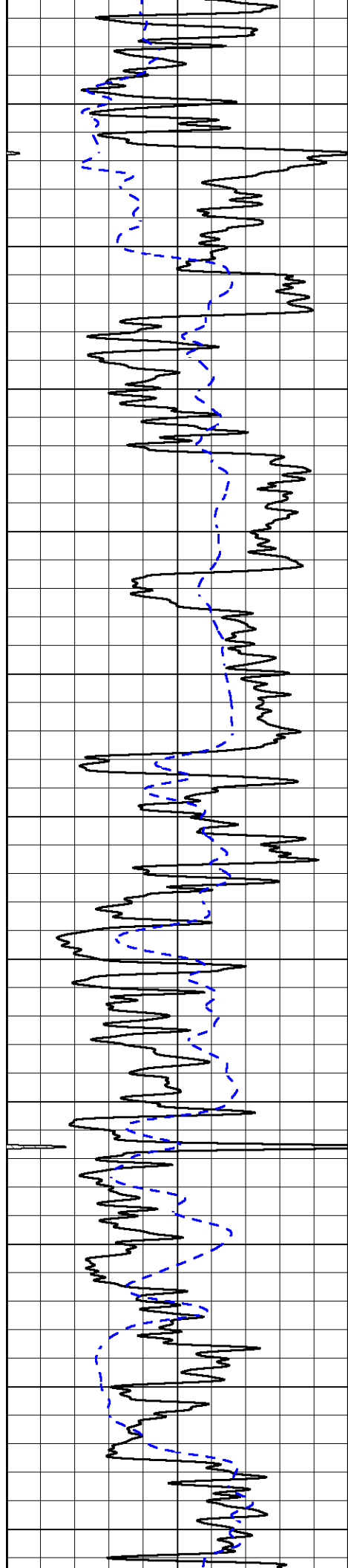


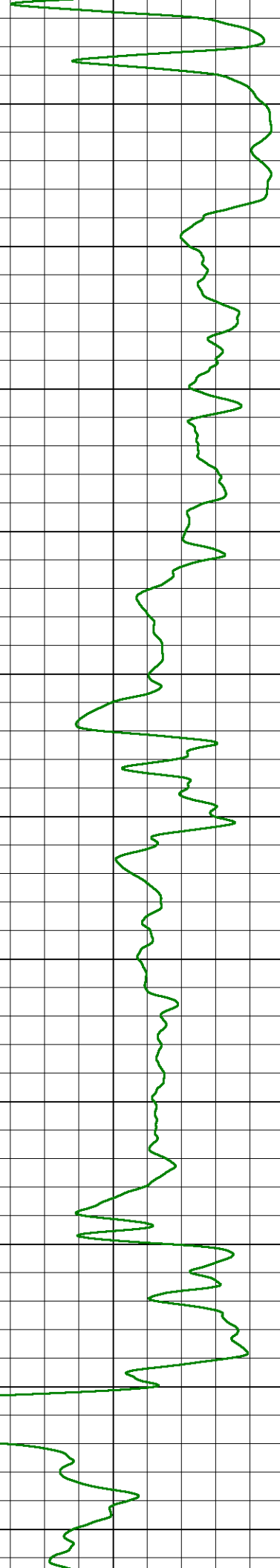
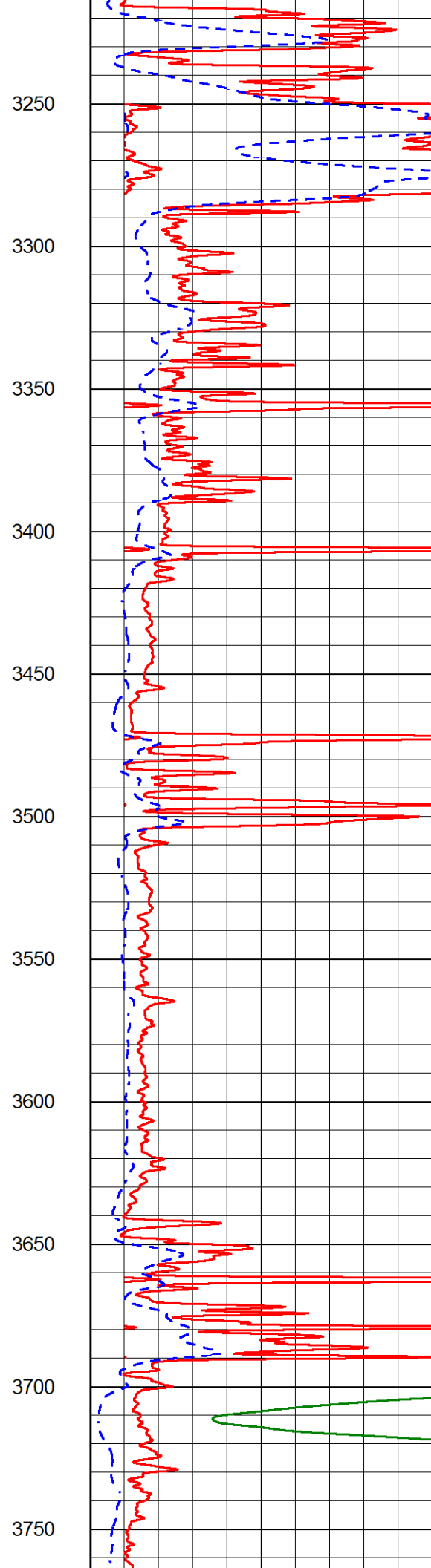
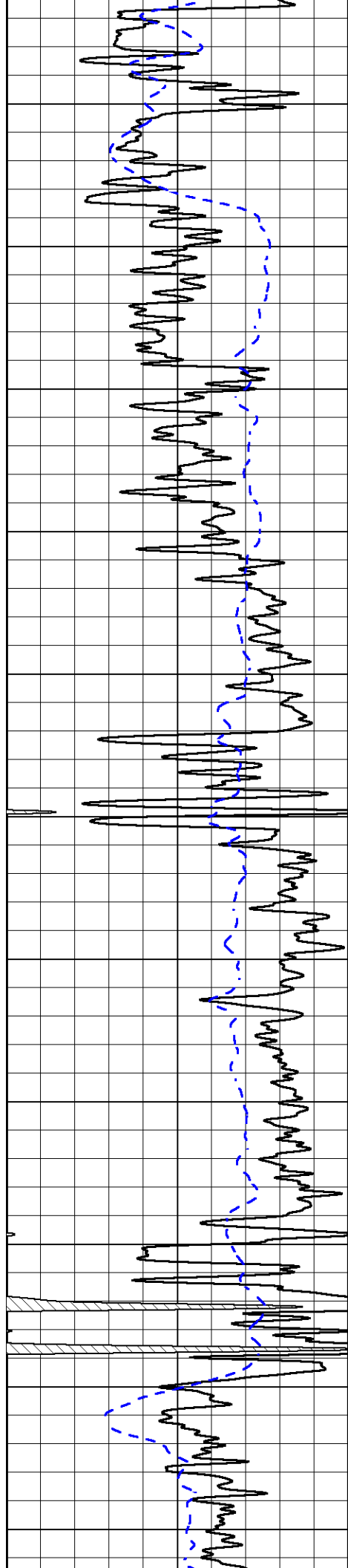


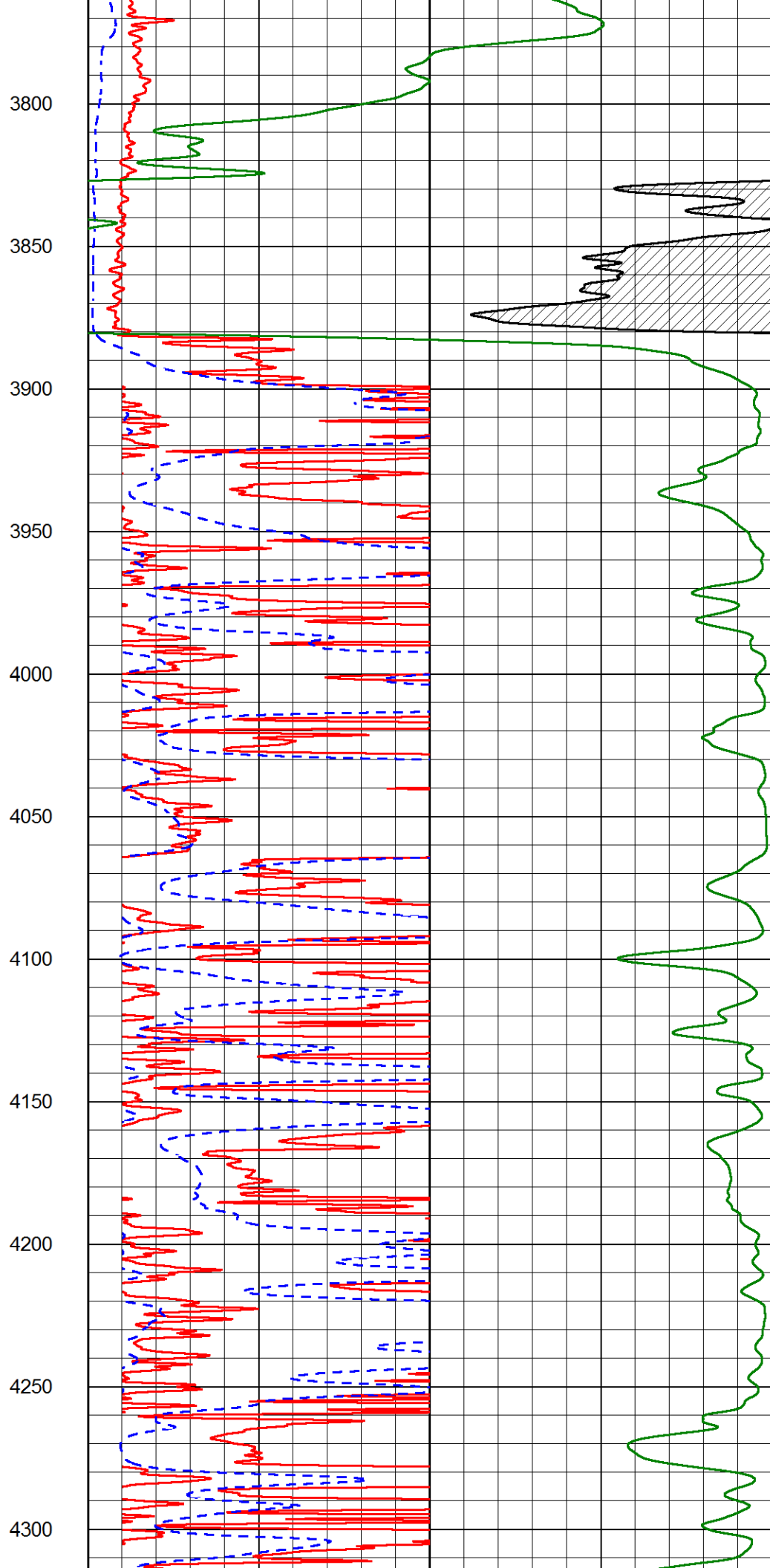
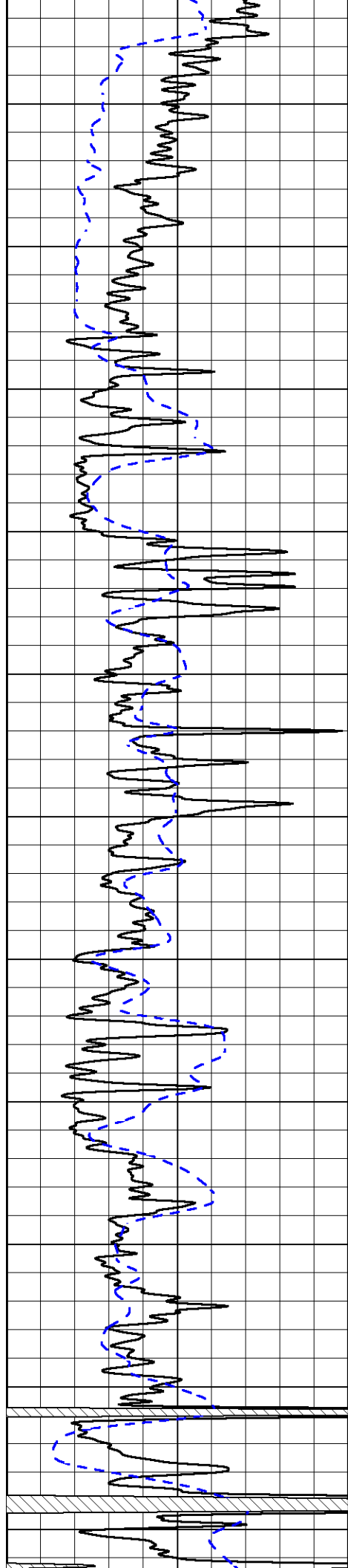


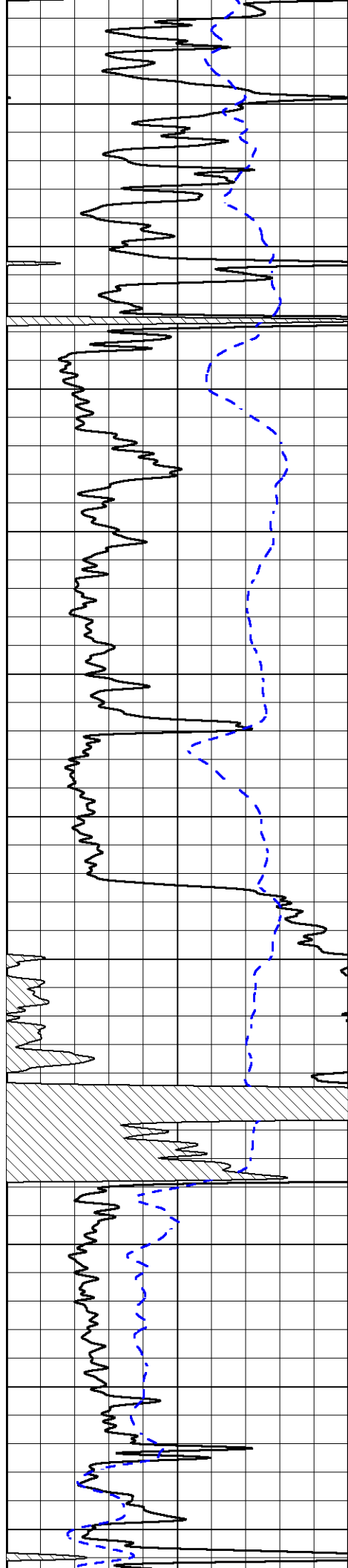












4350

4400

4450

4500

4550

4600

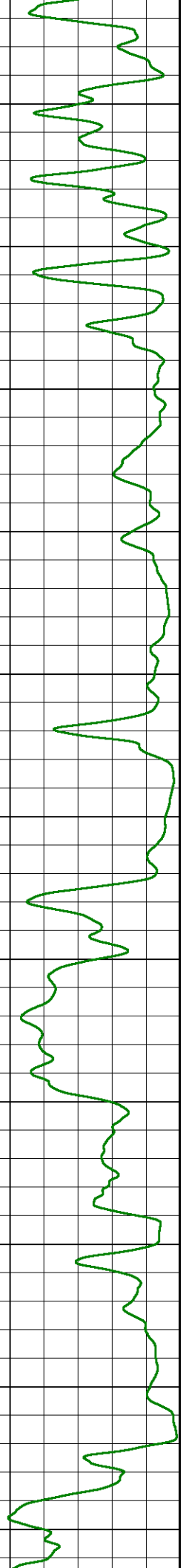
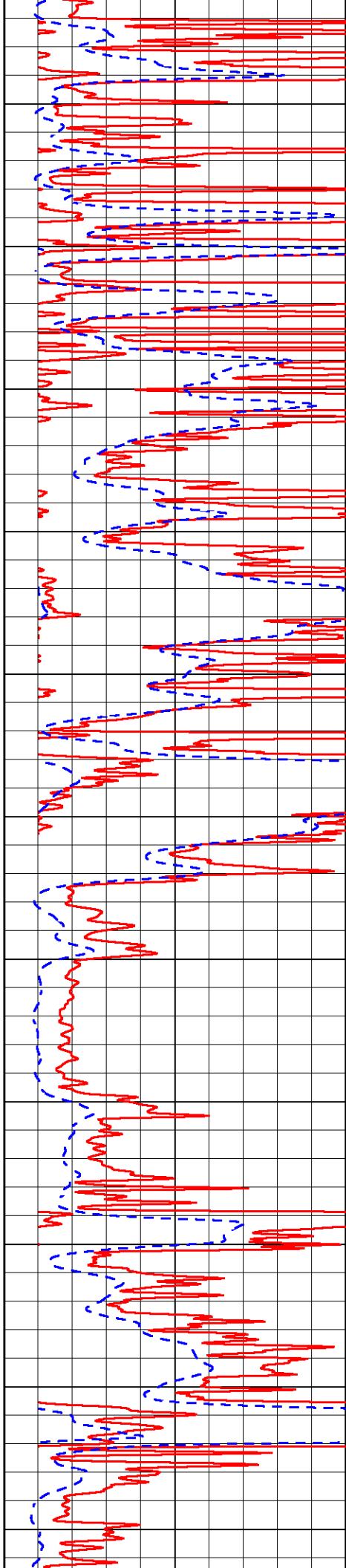
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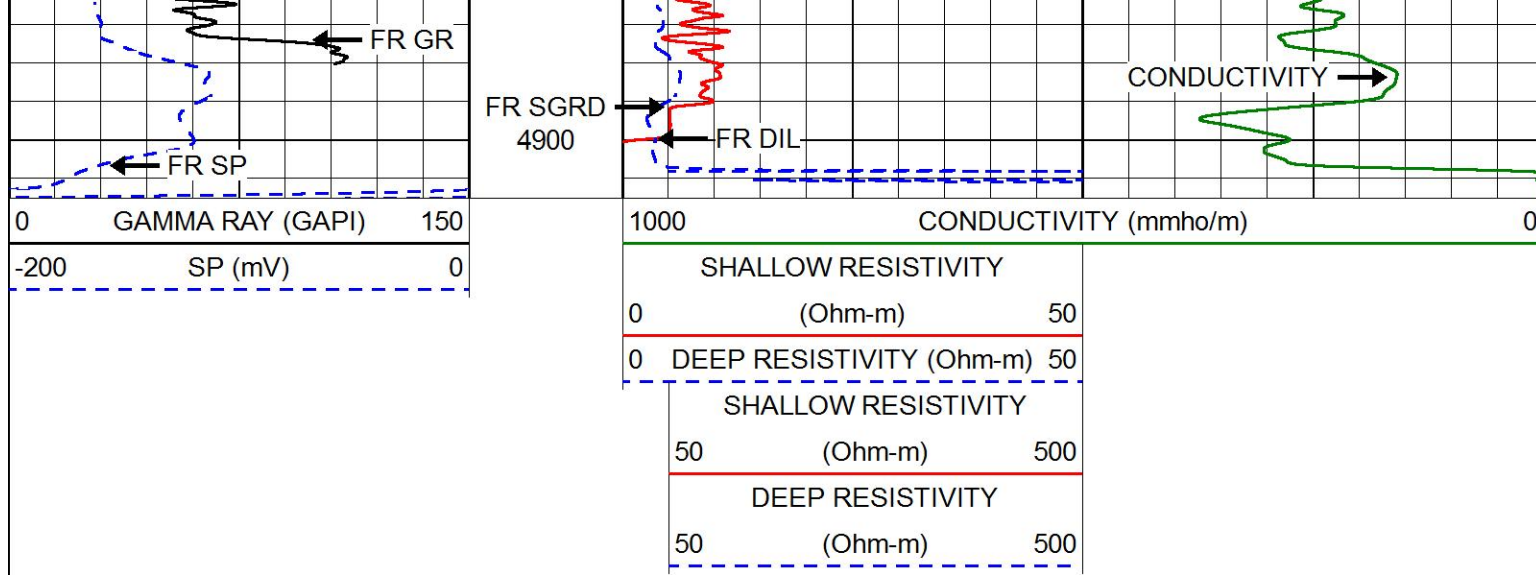
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4850

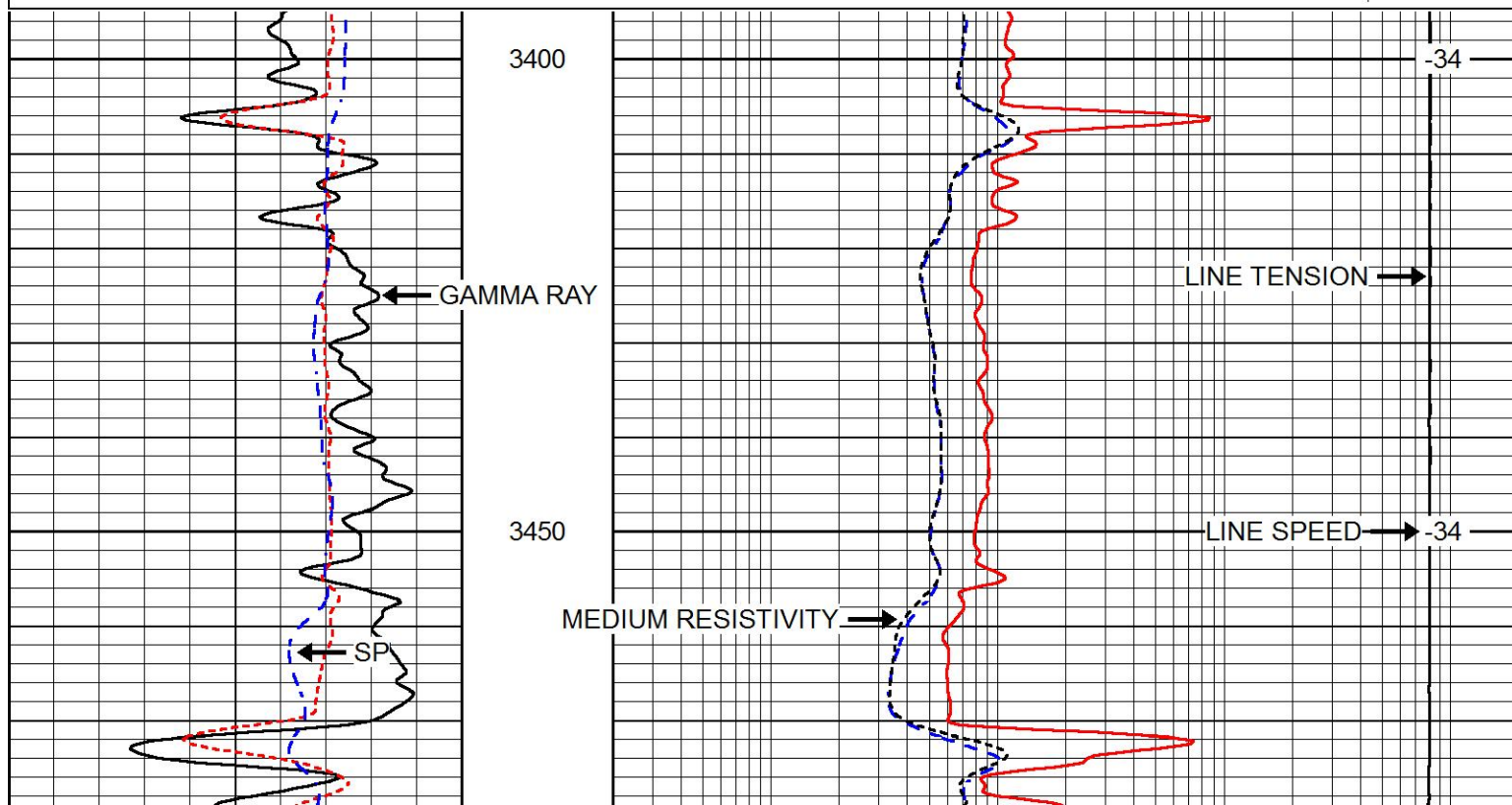


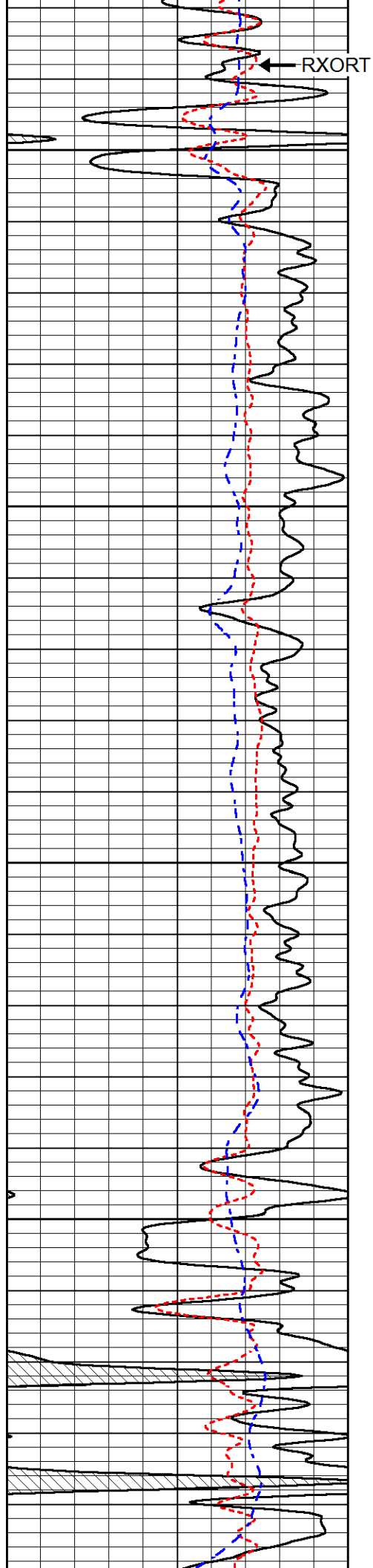


MAIN PASS

Database File: charlesngriffin_jazmyne_1.db
 Dataset Pathname: stack/pass3.1
 Presentation Format: dil
 Dataset Creation: Thu May 12 16:20:38 2016
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	DEEP RESISTIVITY (Ohm-m)	2000
-160	RX / ORT	40	0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
-200	SP (mV)	0	0.2	SHALLOW RESISTIVITY (Ohm-m)	2000
			15000	LINE TENSION (lb)	0
					LINE SPEED (ft/min)





3500

3550

3600

3650

DEEP RESISTIVITY

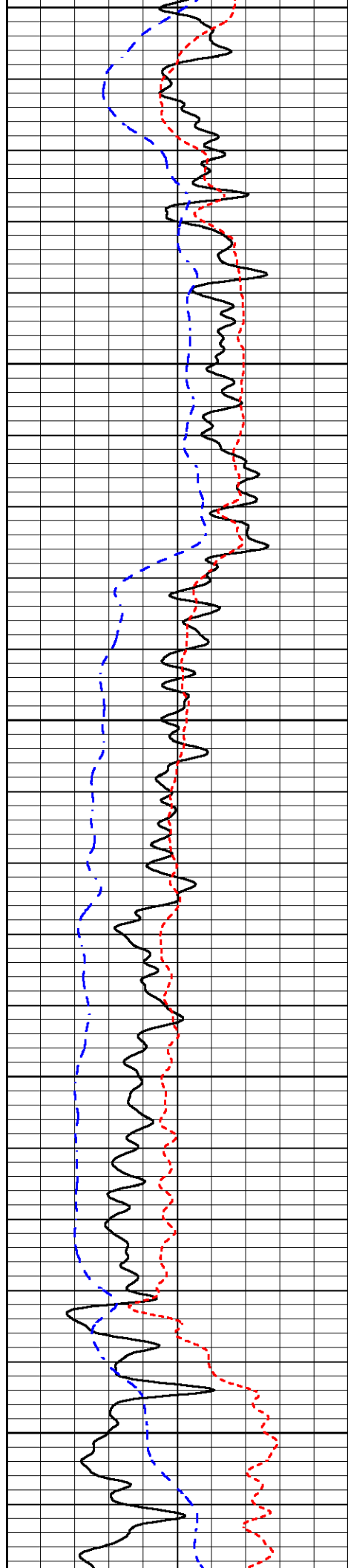
SHALLOW RESISTIVITY

34

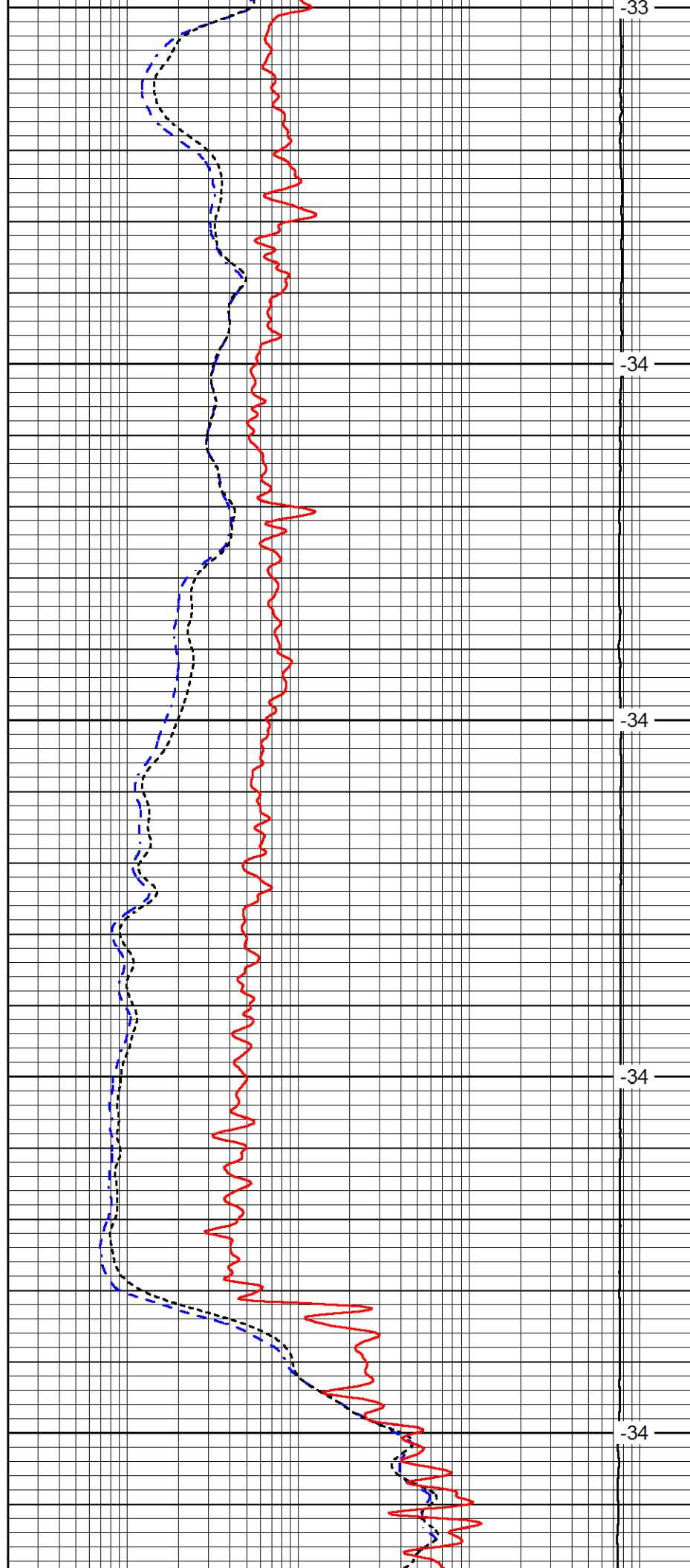
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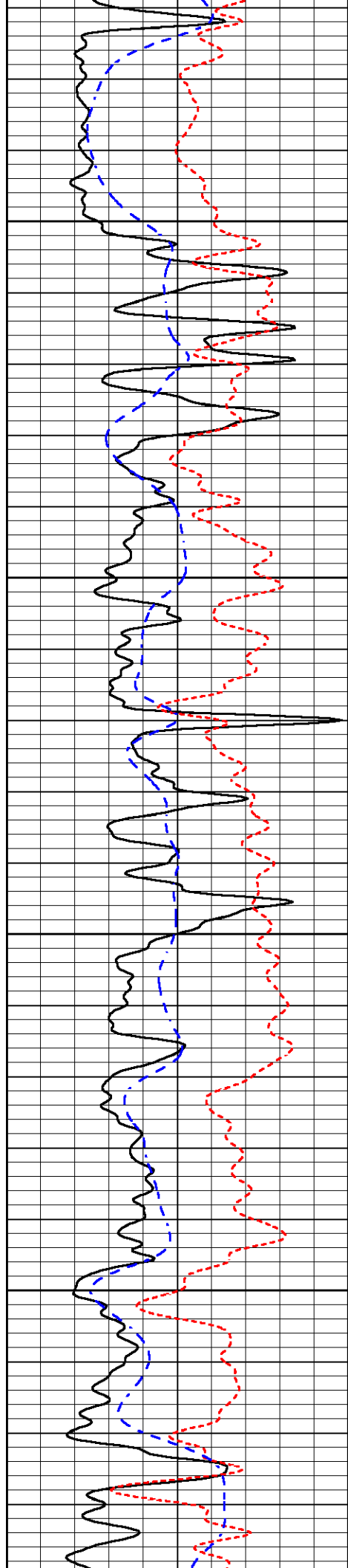
34



3700
3750
3800
3850
3900



33
34
34
34
34

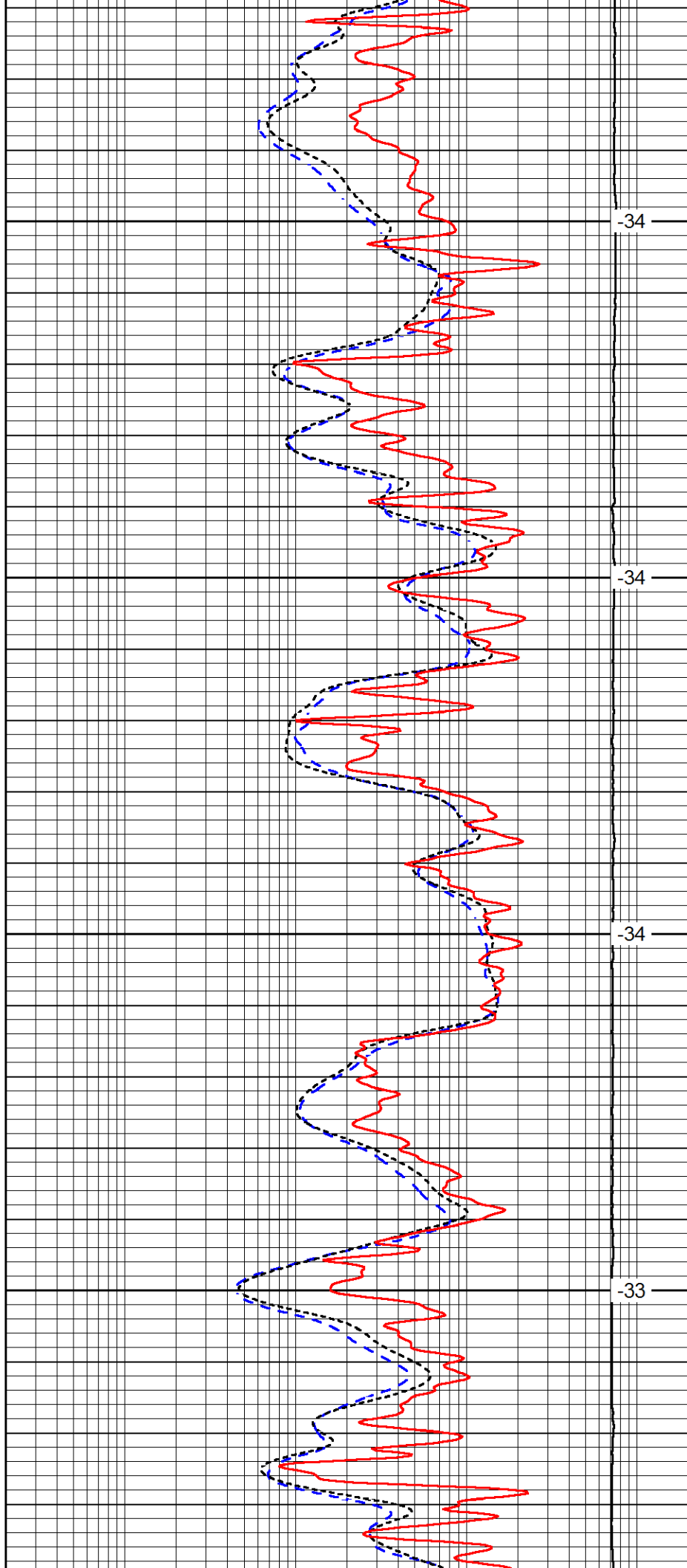


3950

4000

4050

4100

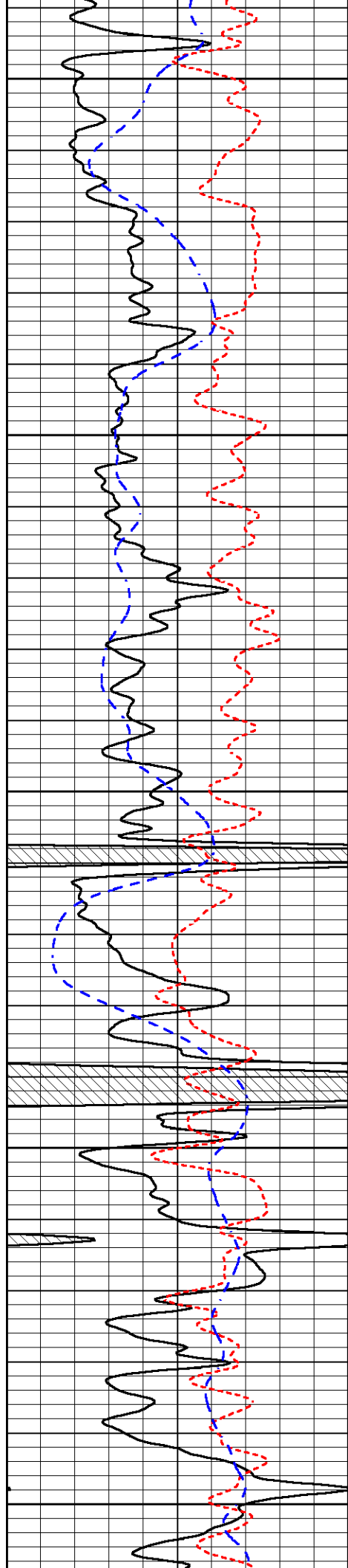


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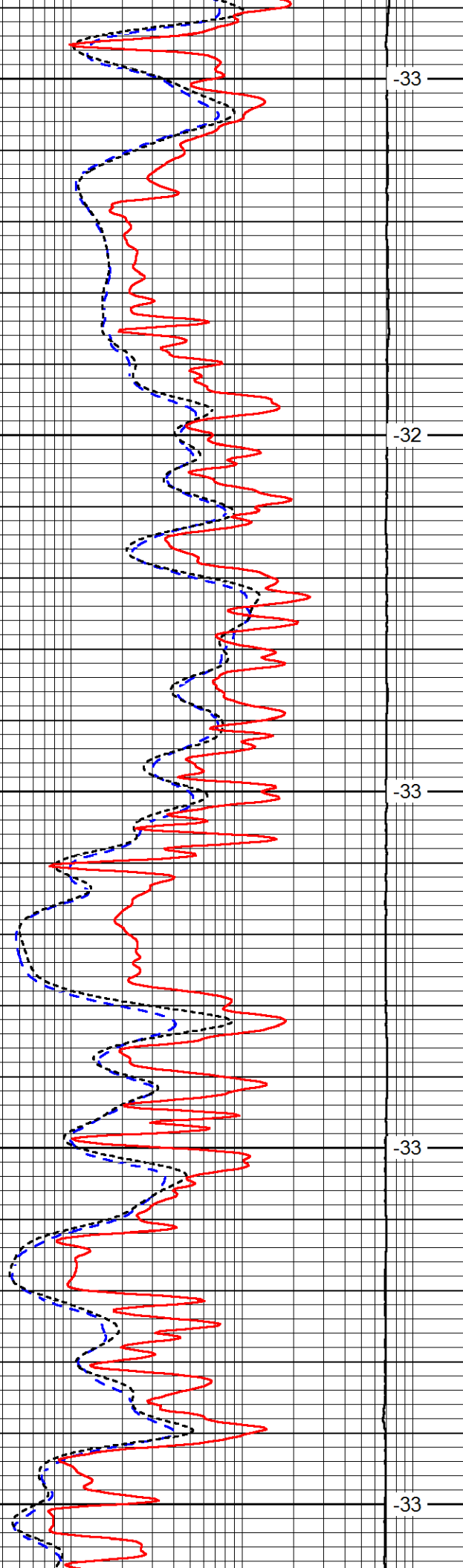
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4200

4250

4300

4350



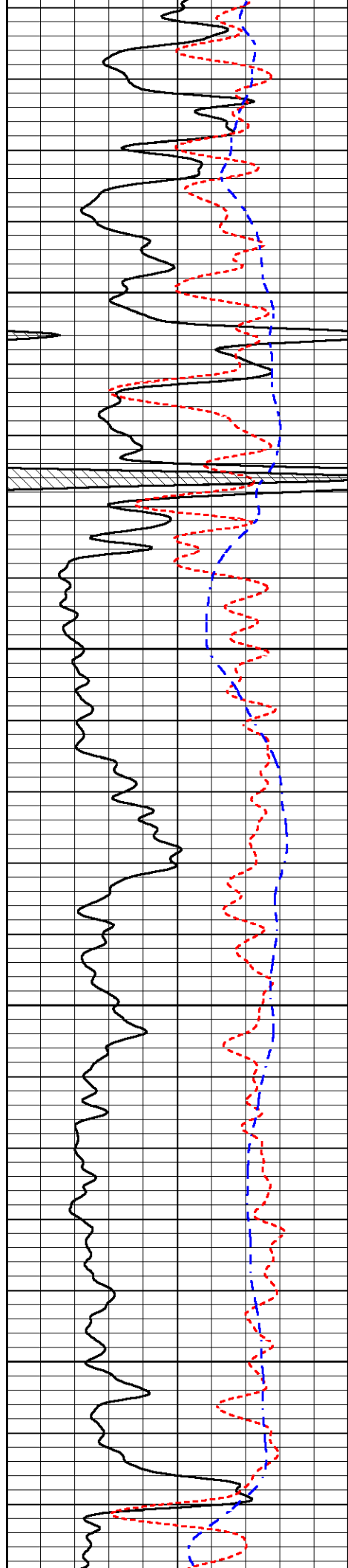
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-32

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-33

-33

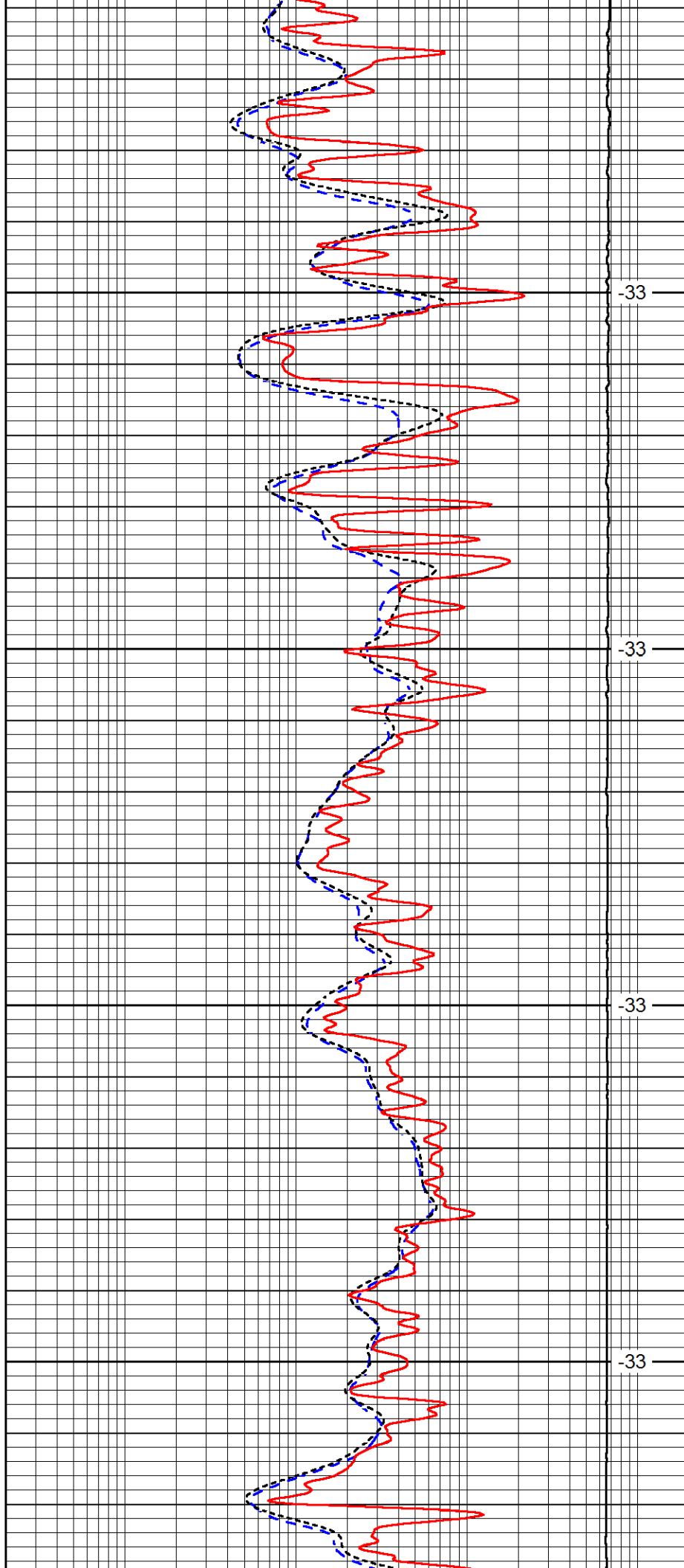


4400

4450

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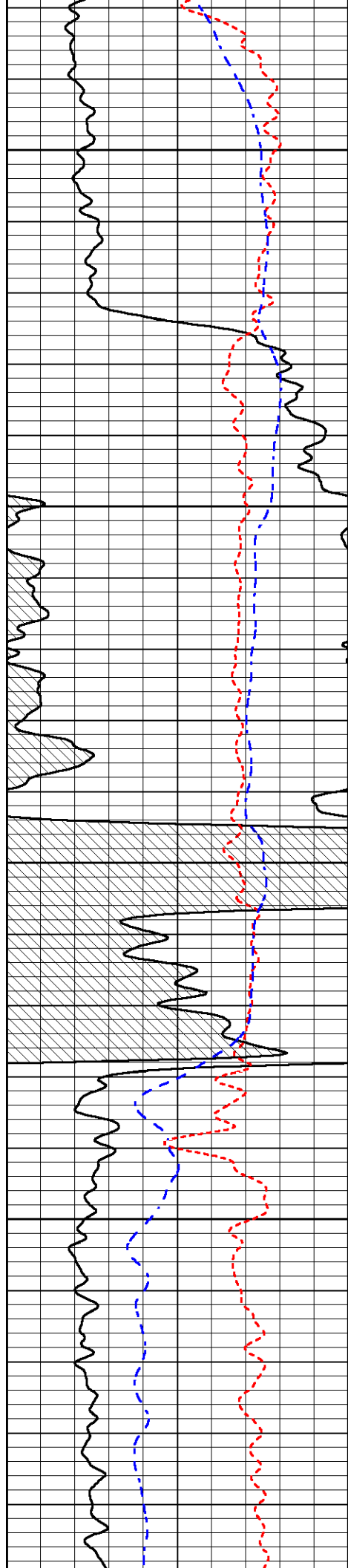


-33

-33

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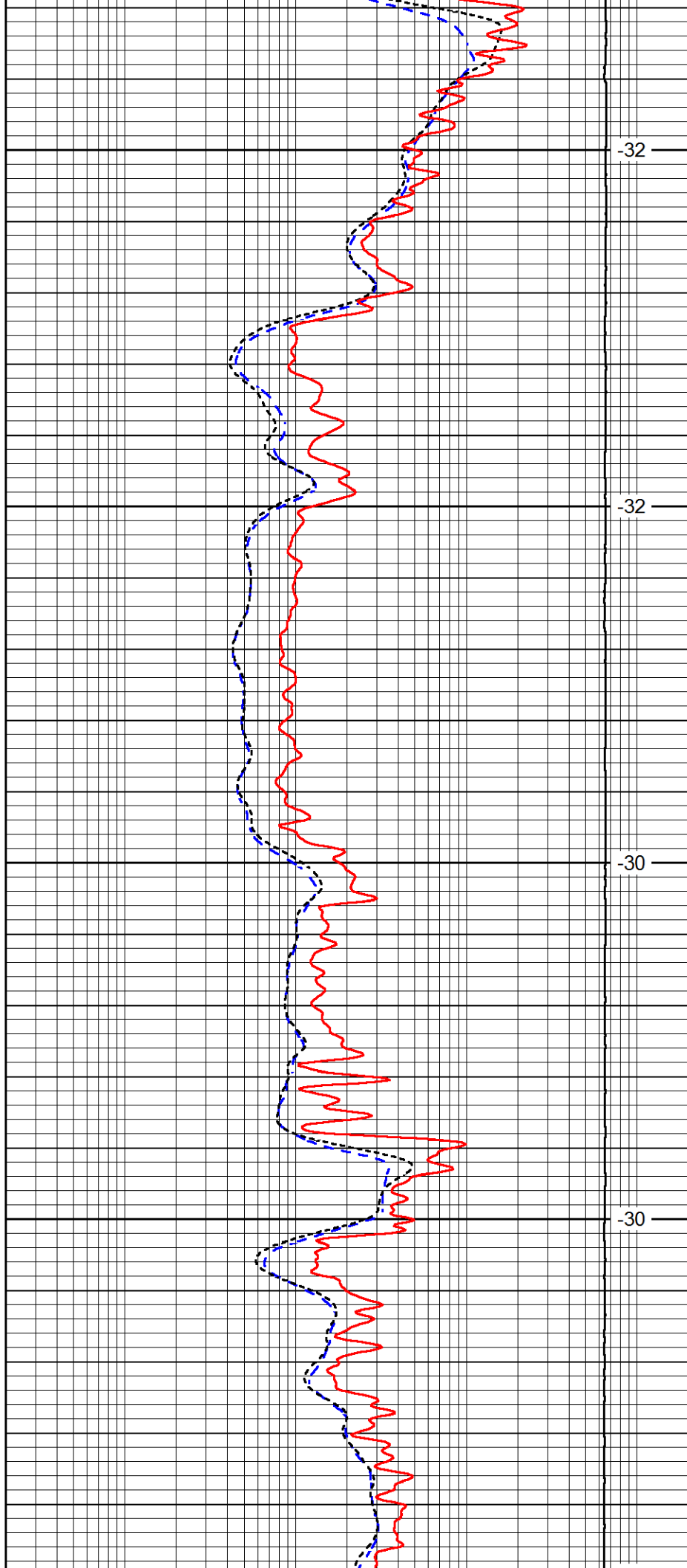


4600

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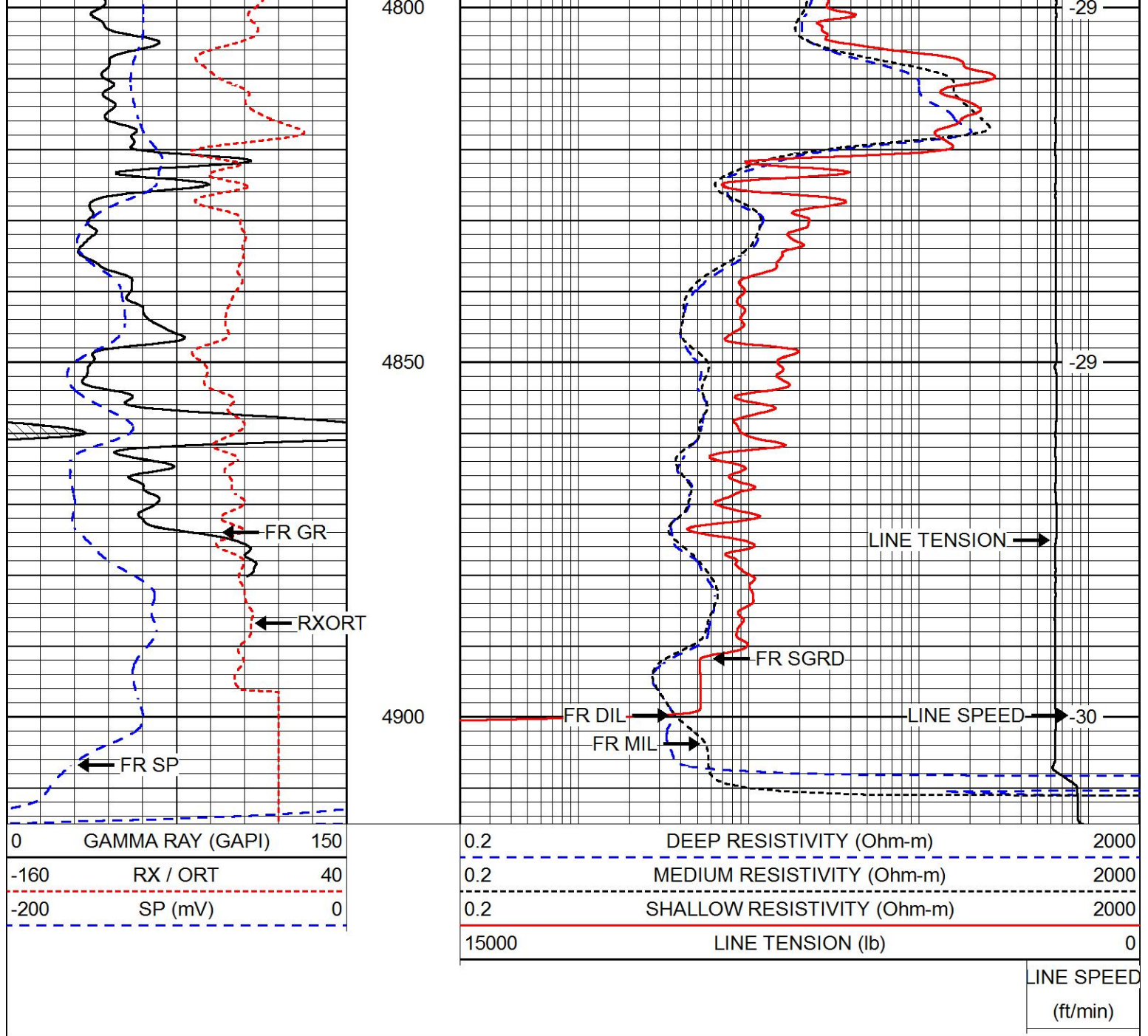


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-30





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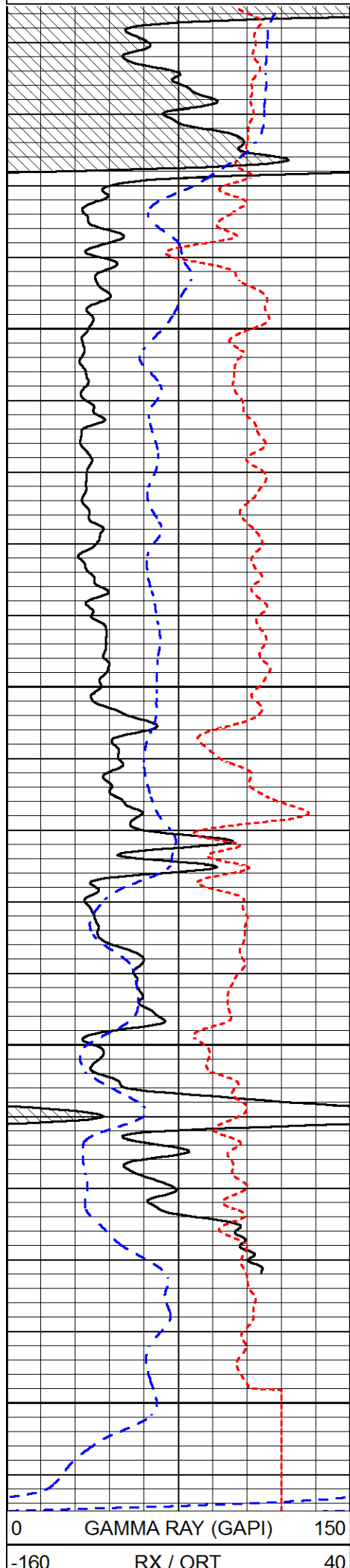
REPEAT SECTION

Database File	charlesngriffin_jazmyne_1.db		
Dataset Pathname	stack/pass2.1		
Presentation Format	dil		
Dataset Creation	Thu May 12 16:04:01 2016		
Charted by	Depth in Feet scaled 1:240		

0	GAMMA RAY (GAPI)	150
-160	RX / ORT	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
15000	LINE TENSION (lb)	0

LINE SPEED
(ft/min)

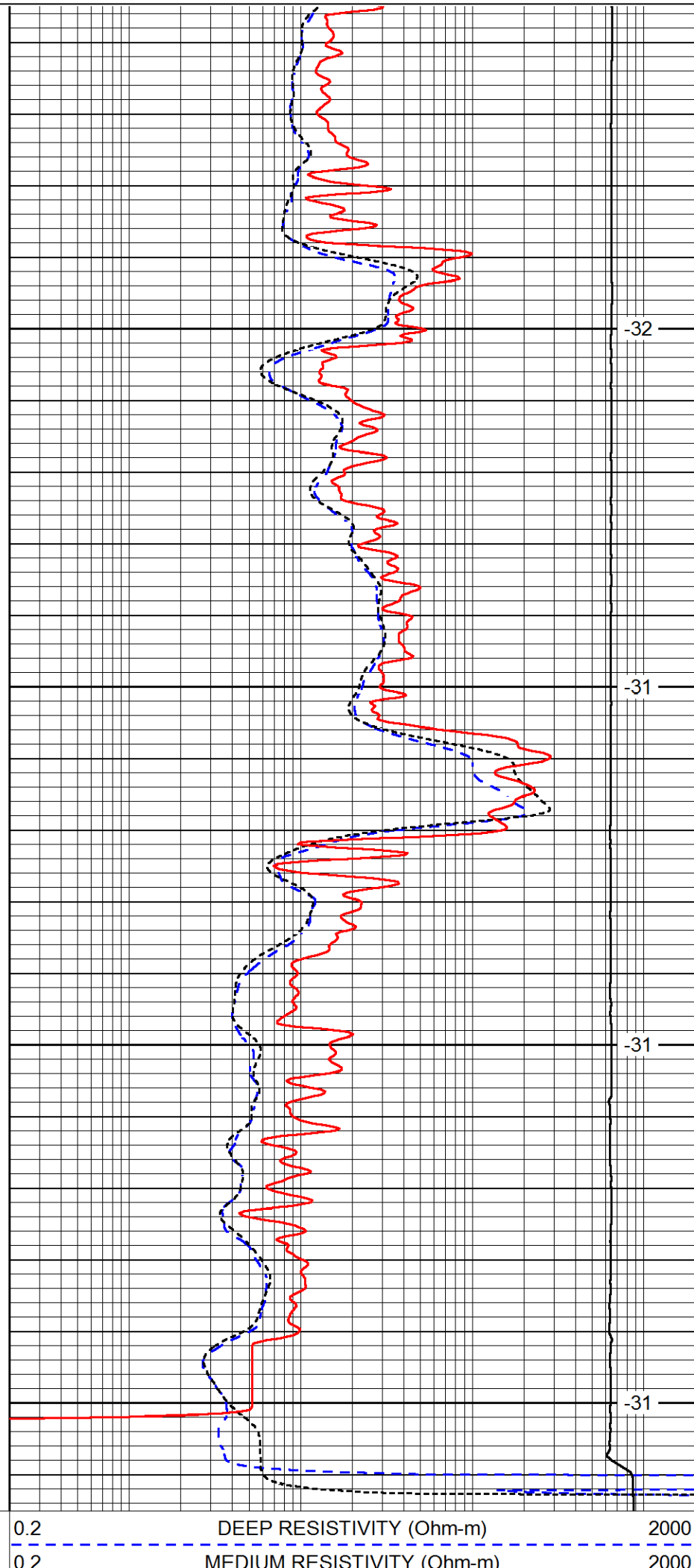


4750

4800

4850

4900



-32

-31

-31

-31

-200	SP (mV)	0	0.2	SHALLOW RESISTIVITY (Ohm-m)	2000
			15000	LINE TENSION (lb)	0
					LINE SPEED
					(ft/min)

Database File		charlesngriffin_jazmyne_1.db
Dataset Pathname		stack/pass3.1
Dataset Creation		Thu May 12 16:20:38 2016

Dual Induction Calibration Report

Serial-Model:	1987-M&W
Calibration Performed:	Thu May 05 13:07:05 2016

		Readings		References		Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.530	-37.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.440	-111.500

Compensated Density Calibration Report

Serial-Model:	71-914-M&W
Source / Verifier:	/
Master Calibration Performed:	Thu Mar 31 16:30:19 2016

Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4314.49	5307.52	cps
Aluminum	2.670	g/cc	822.19	3456.36	cps
Spine Angle = 75.49			Density/Spine Ratio = 0.534		
	Size		Reading		
Small Ring	4.00	in	1.16		
Large Ring	14.00	in	1.57		

Compensated Neutron Calibration Report

Serial Number:	tk10-MW
Tool Model:	M&W
Calibration Performed:	Wed May 4 11:04:05 2016

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:	89-M&W
Tool Model:	M&W
Calibration Performed:	Thu Mar 31 15:29:33 2016

Calibrator Value:	1000.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	6.2	cps
Sensitivity:	0.5200	GAPI/cps



Company	CHARLES N. GRIFFIN
Well	JAZMYNE NO. 1
Field	TONI-MIKE
County	BARBER
State	KANSAS