



PIONEER

Pioneer Energy Services

RADIATION GUARD LOG

Company Well Field County State		BRUCE OIL COMPANY, LLC ANNE MARIE #1 UNKNOWN OSBORNE KANSAS	
Location:		API #: 15-141-20486-00-00 1320' FSL & 300' FWL SEC 5 TWP 9S RGE 12W	
Permanent Datum Log Measured From Drilling Measured From		GROUND LEVEL KELLY BUSHING KELLY BUSHING	
Elevation		1700'	
Other Services		NONE	
K.B. D.F. G.L.		1705' N/A 1700'	
Date	7/7/2019		
Run Number	ONE		
Depth Driller	2970'		
Depth Logger	2970'		
Bottom Logged Interval	2969'		
Top Log Interval	200'		
Casing Driller	8.625" @ 220'		
Casing Logger	220'		
Bit Size	7.875"		
Type Fluid in Hole	CHEMICAL		
Salinity, ppm CL	6900		
Density / Viscosity	9.2 60		
pH / Fluid Loss	10.5 8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.40 @ 80		
Rmf @ Meas. Temp	0.30 @ 80		
Rmc @ Meas. Temp	0.54 @ 80		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.30 @ 106		
Operating Rig Time	2 HOURS		
Max Rec. Temp. F	106		
Equipment Number	P-24		
Location	HAYS		
Recorded By	D. SCHMIDT		
Witnessed By	BOB PETERSEN		

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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.

LURAY,
13 NORTH, 1 EAST,
SOUTH AND WEST INTO

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: D. SCHMIDT
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: BOB PETERSEN
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	15.00		GR-M&W (89)	3.00	3.50	50.00
LGRD	11.00		LGRD-M&W (177) Simlec Long Guard	4.00	3.50	40.00
SCAL	5.10		SWN-M&W-SP (SP162-87)	10.50	4.00	190.00
SWN	4.45					
SP	0.20					
Dataset: bruce_anne marie .db: field/well/RAG/pass5 Total length: 17.50 ft Total weight: 280.00 lb O.D.: 4.00 in						

Log Variables

DatabaseC:\ProgramData\Warrior\Data\bruce_anne marie .db
Dataset field/well/RAG/pass5/_vars_

Top - Bottom

AIR_HOLE? No	BOREID in 7.875	BOTTEMP degF 106	CASEOD in 5.5	CASETHCK in 0	MudWgt lb/gal 9.5	NPORSEL Limestone	PERFS 0
SPSHIFT mV 260	SRFTEMP degF 0	TDEPTH ft 2970					



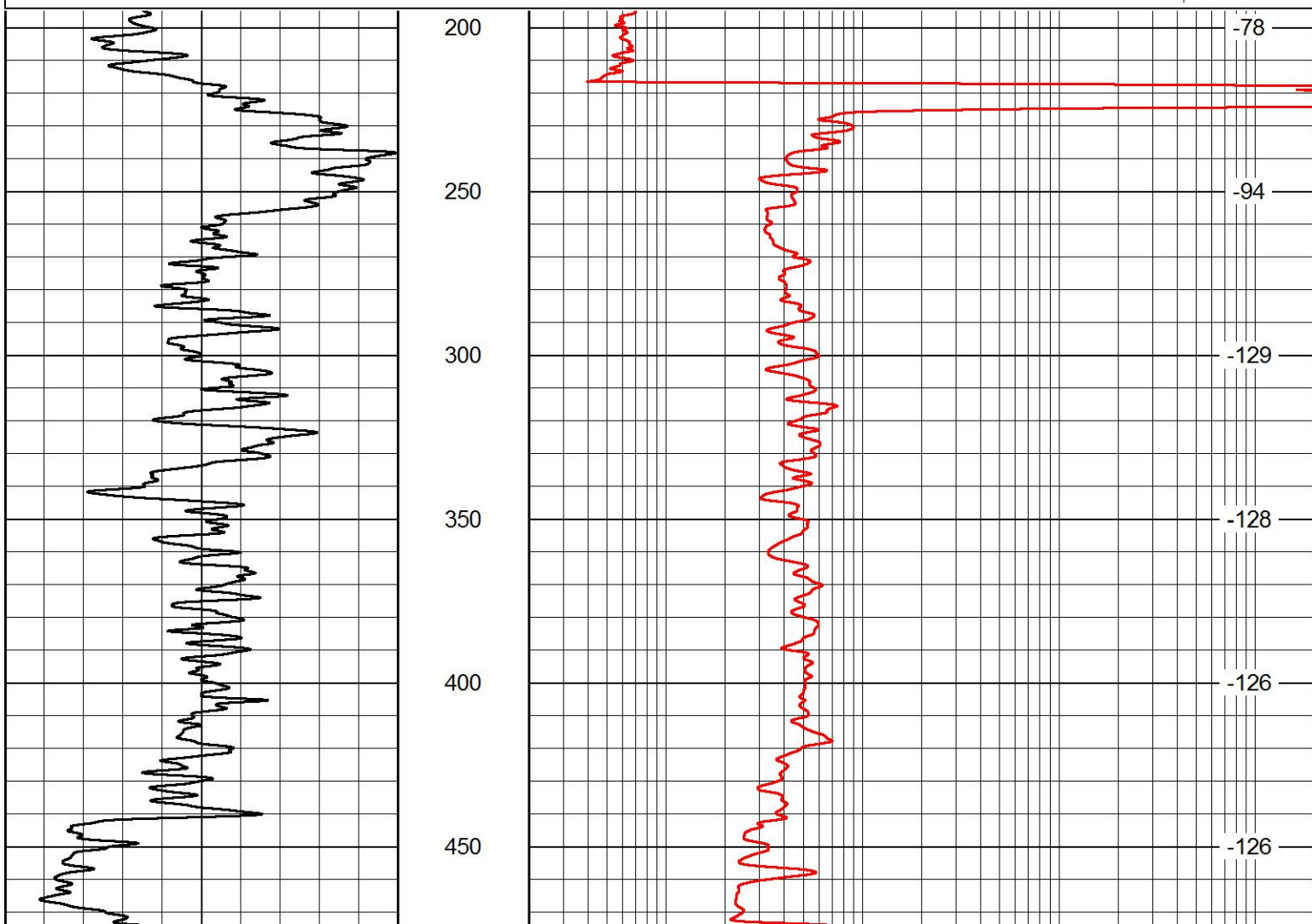
MAIN PASS

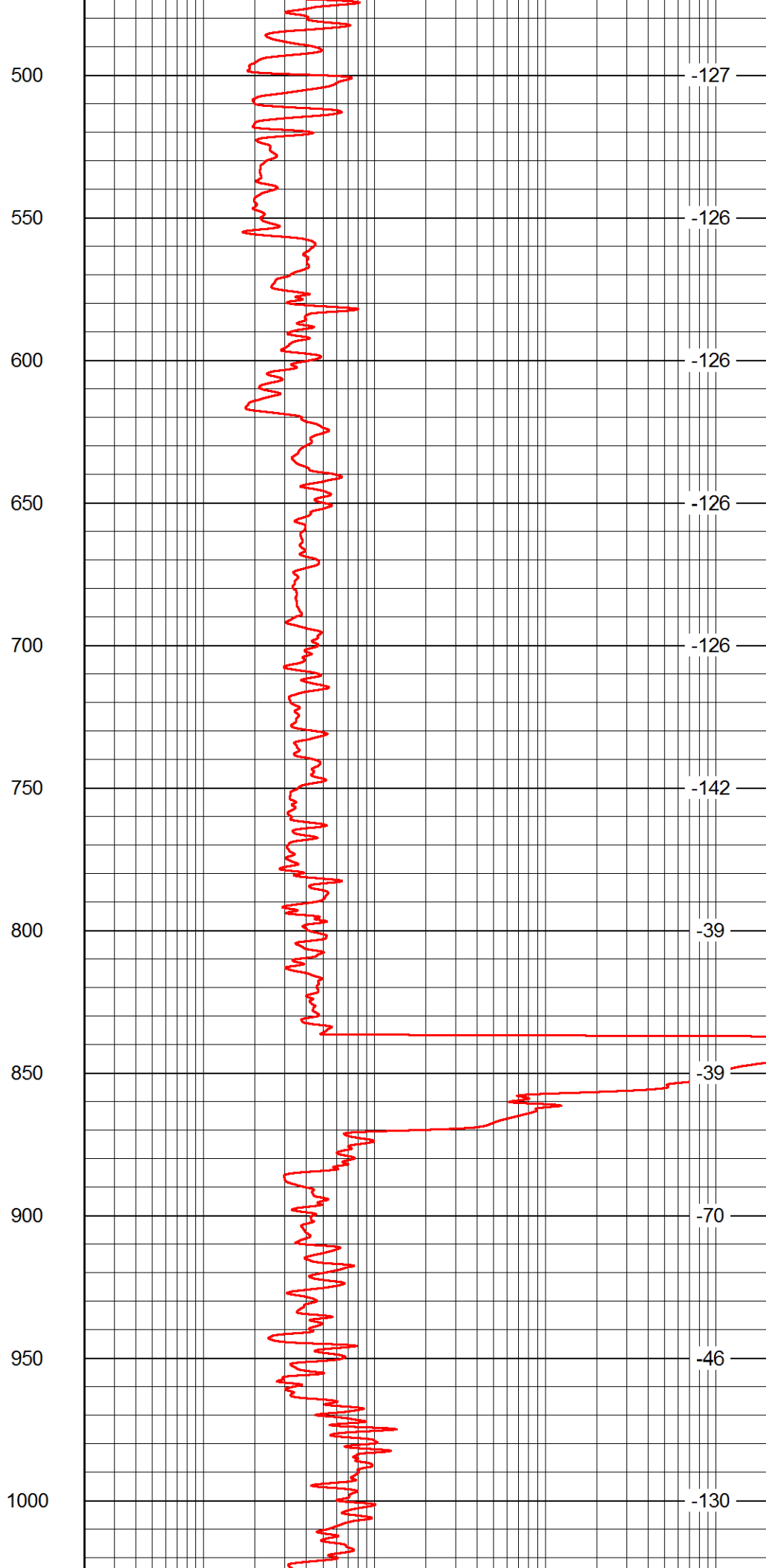
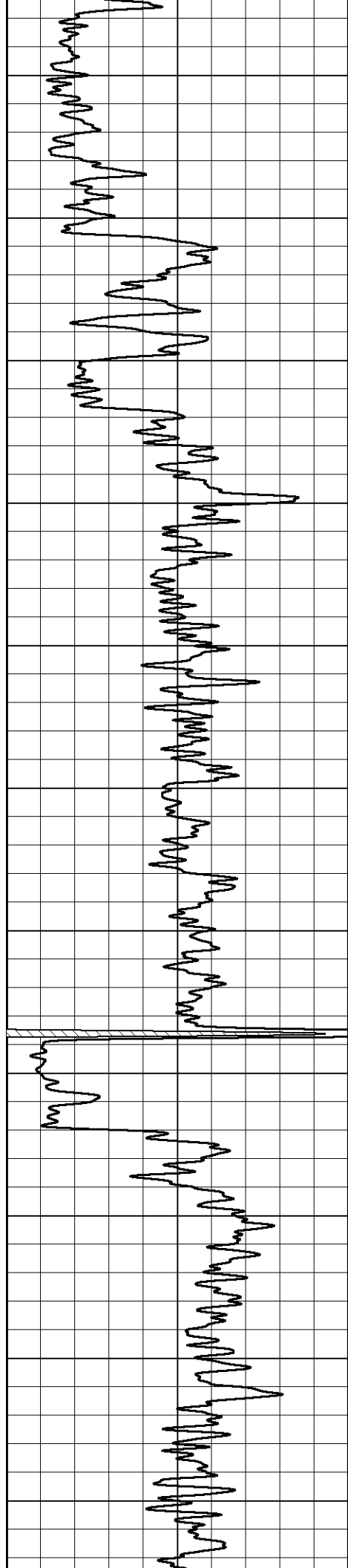
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Dataset Pathname RAG/pass5.1
Presentation Format rag2in
Dataset Creation Sun Jul 07 21:00:44 2019
Charted by Depth in Feet scaled 1:600

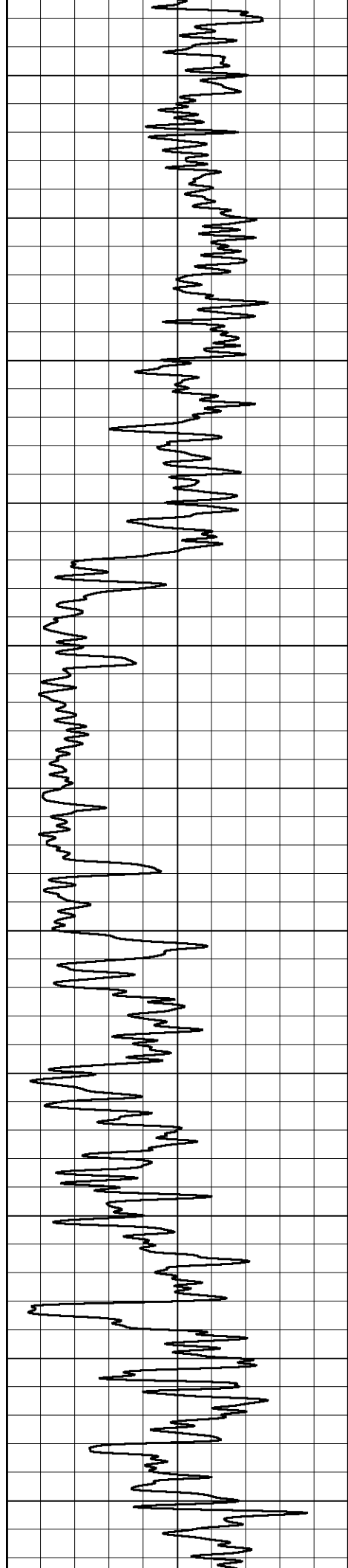
0 GAMMA RAY (GAPI) 150

0.2 LONG GUARD (Ohm-m) 2000

LINE SPEED
(ft/min)







1050

1100

1150

1200

1250

1300

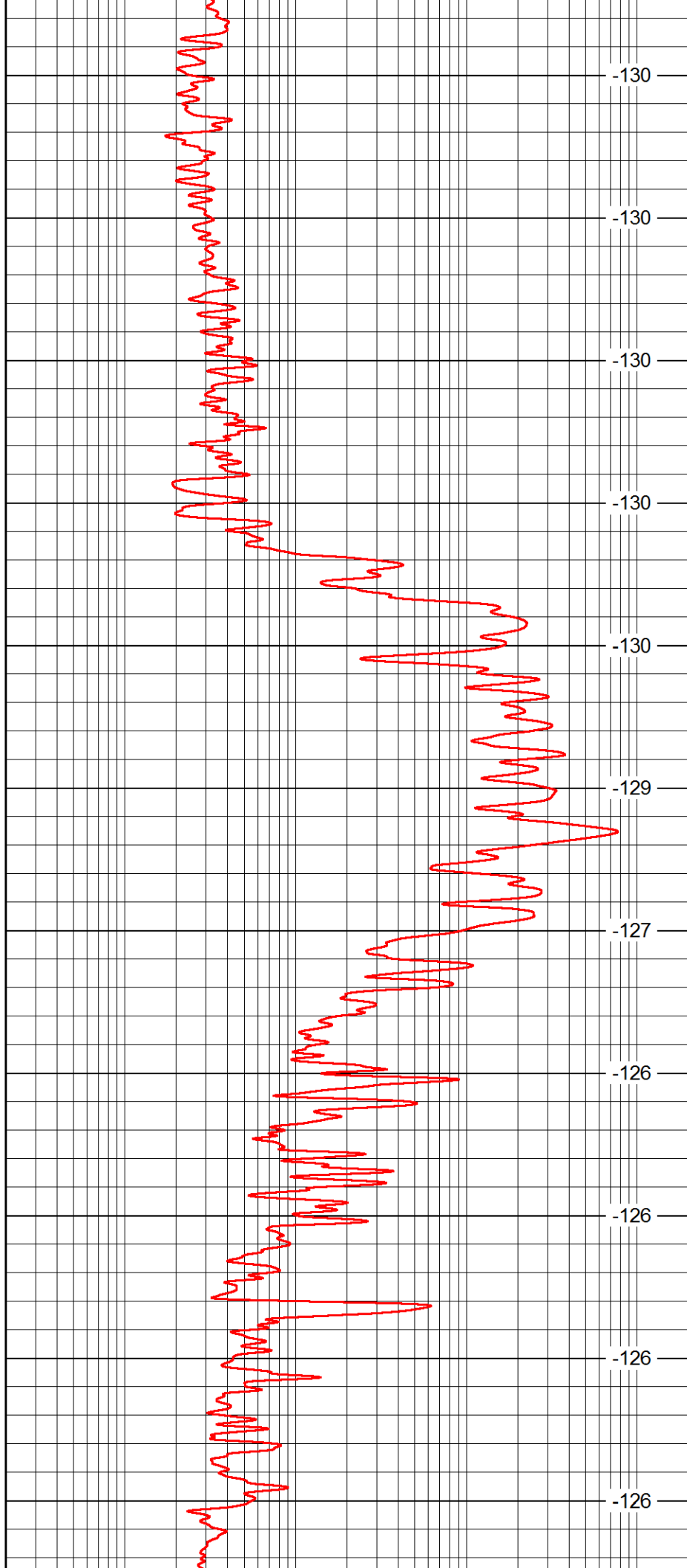
1350

1400

1450

1500

1550



-130

-130

-130

-130

-130

-129

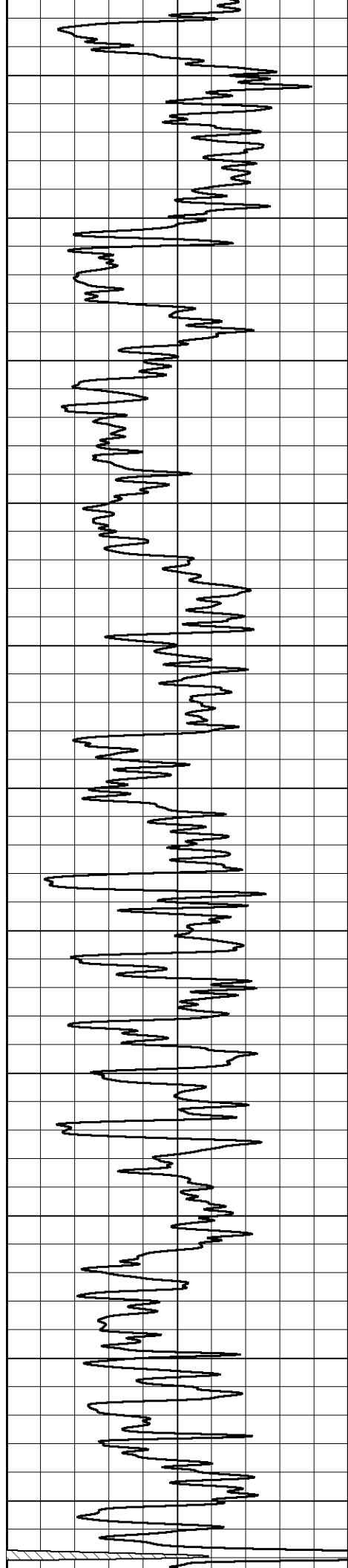
-127

-126

-126

-126

-126



1600

1650

1700

1750

1800

1850

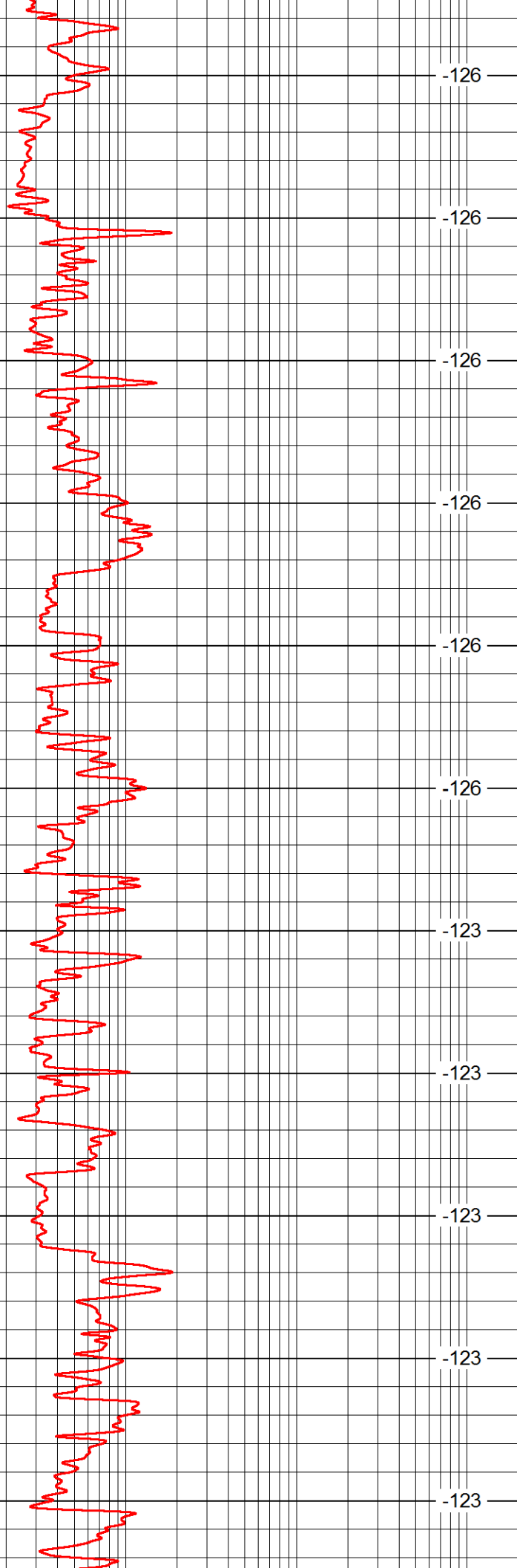
1900

1950

2000

2050

2100



-126

-126

-126

-126

-126

-126

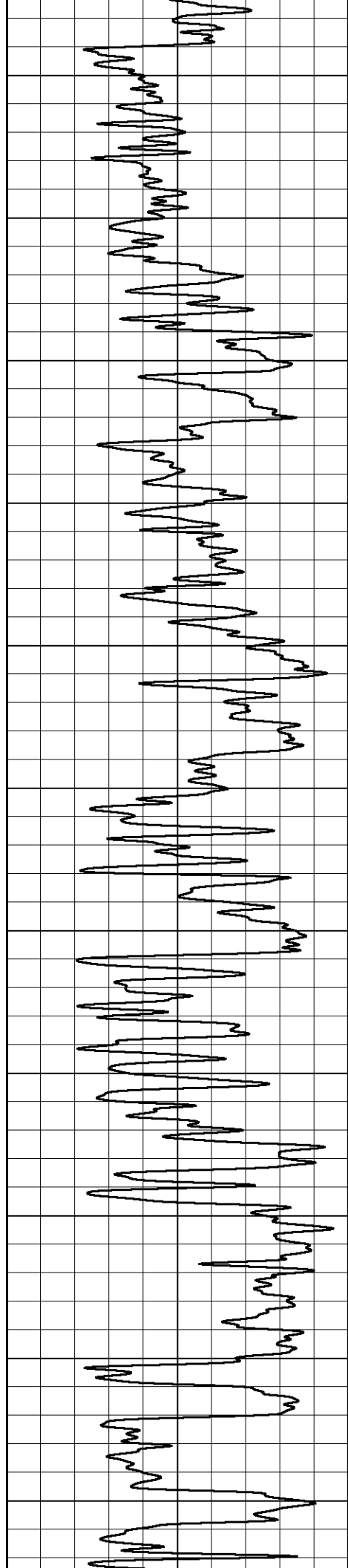
-123

-123

-123

-123

-123



2150

2200

2250

2300

2350

2400

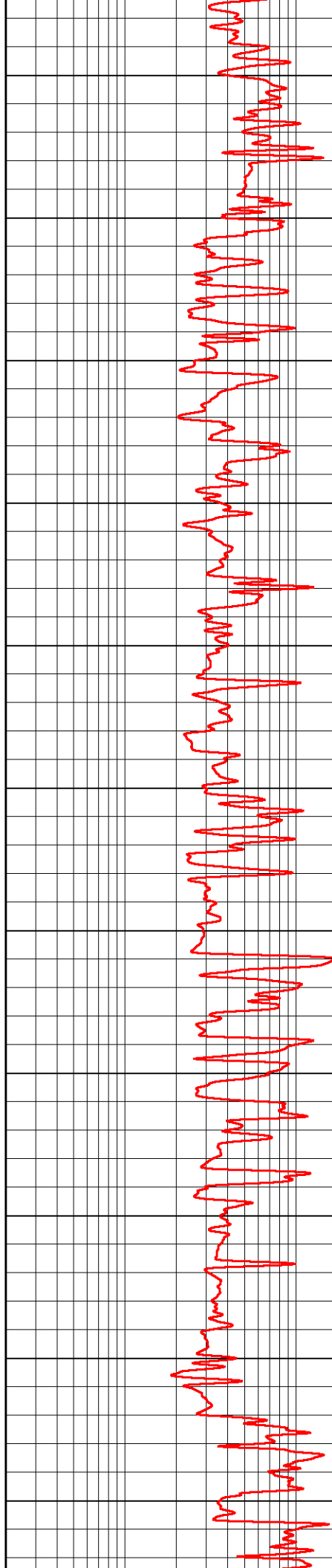
2450

2500

2550

2600

2650



-123

-38

-38

-38

-38

-38

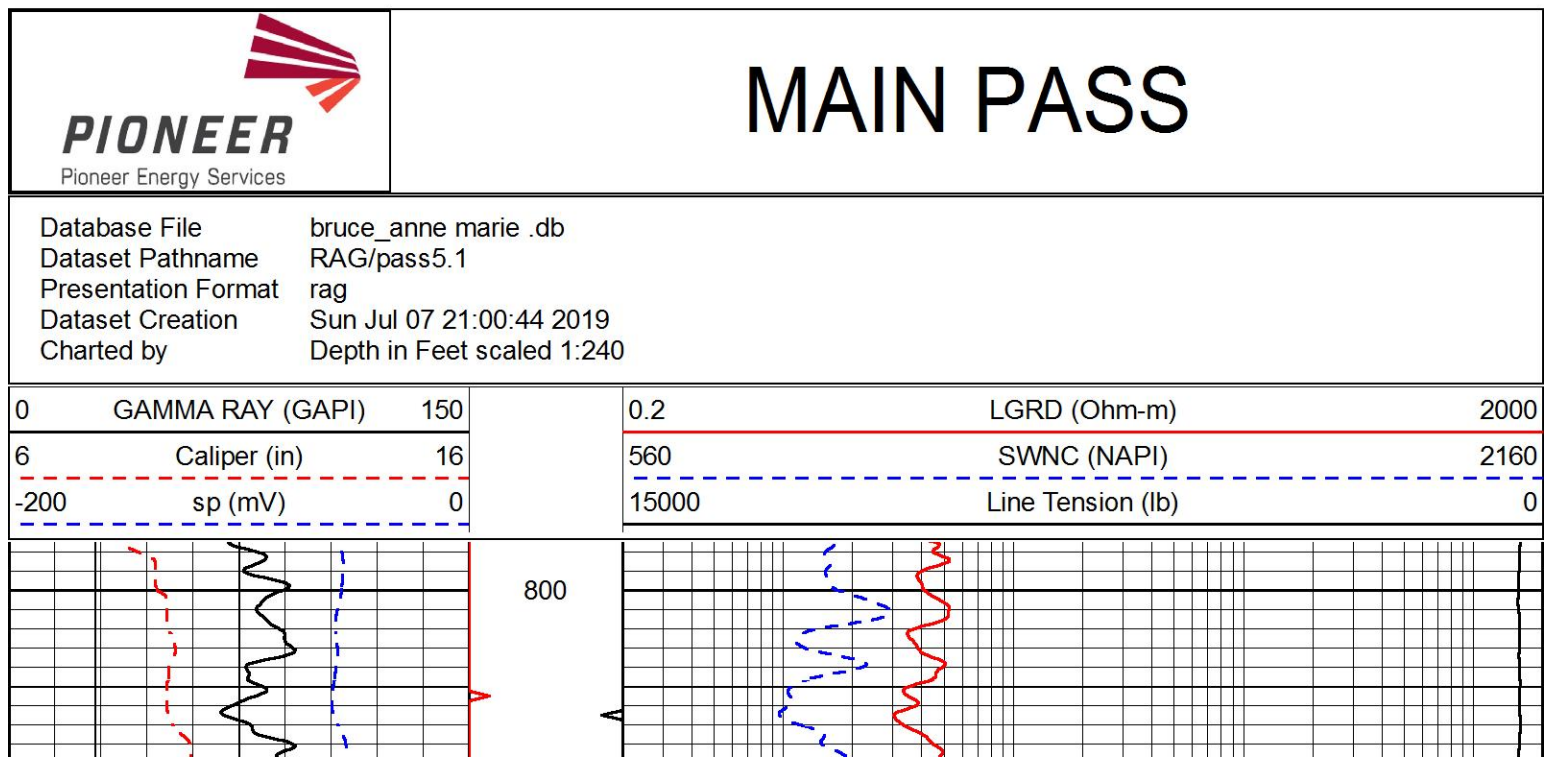
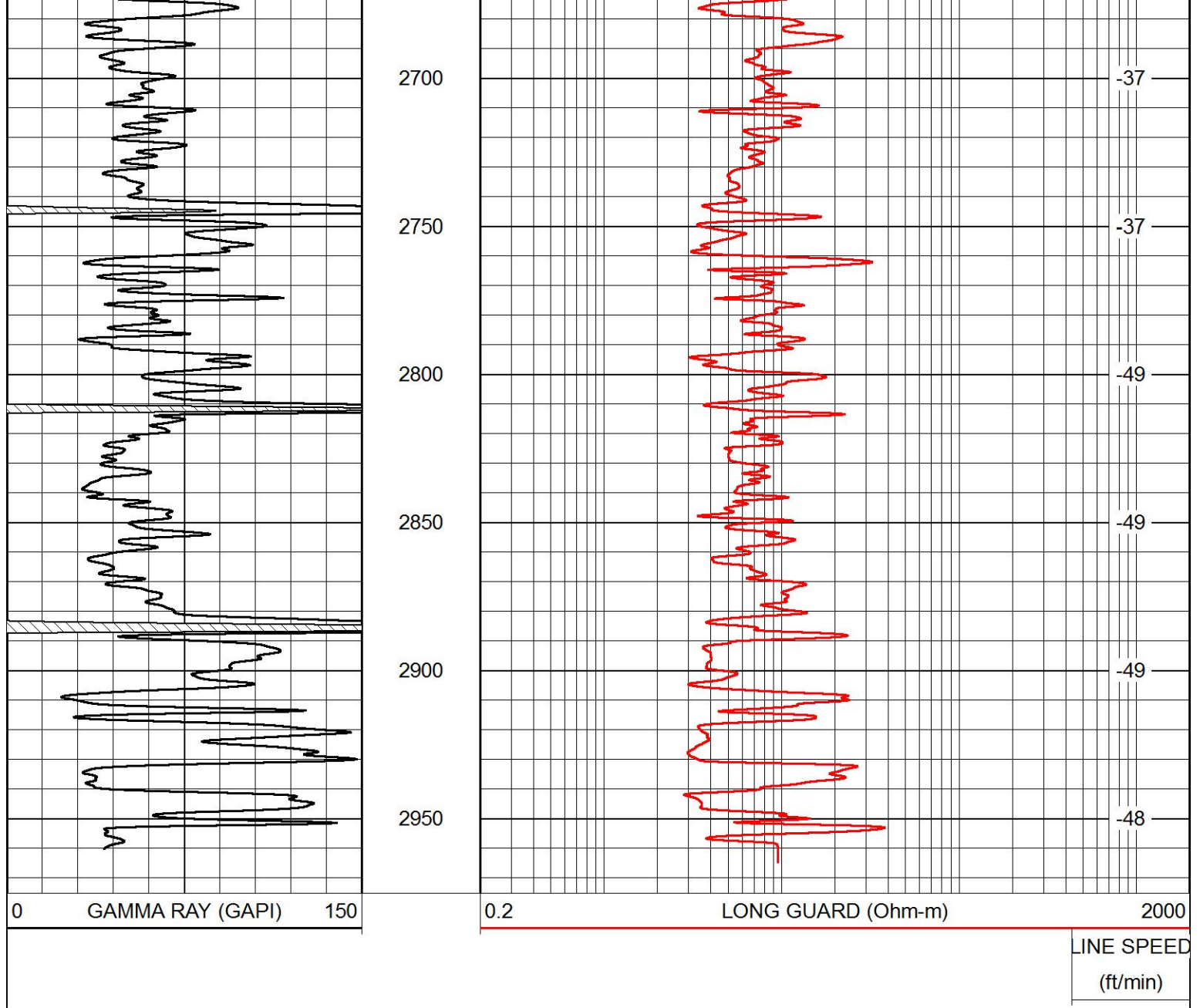
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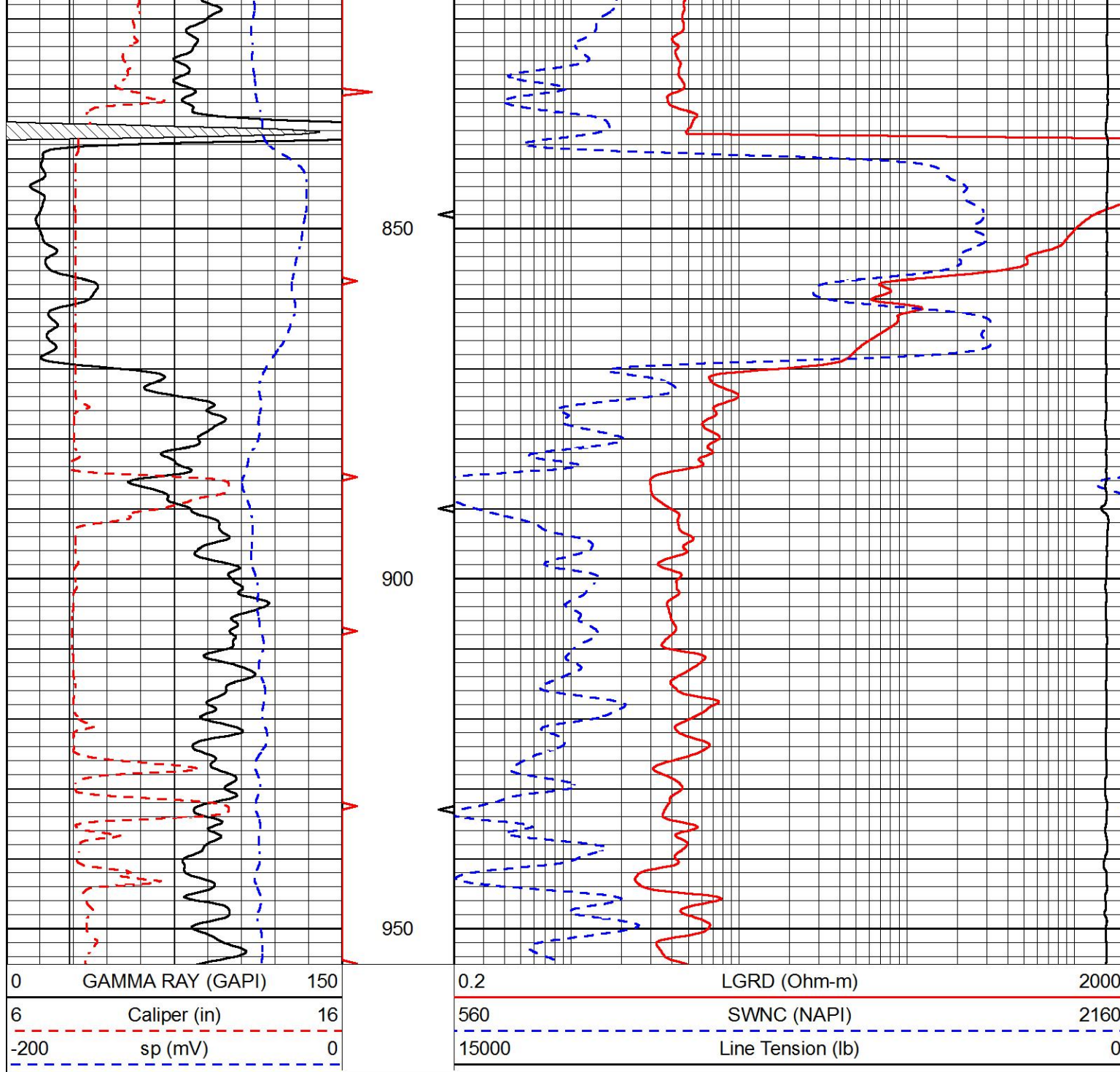
-37

-37

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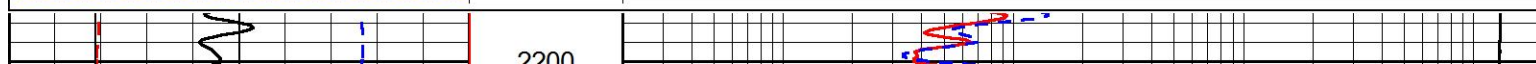
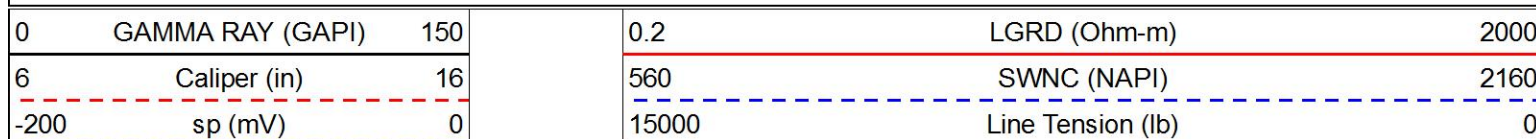
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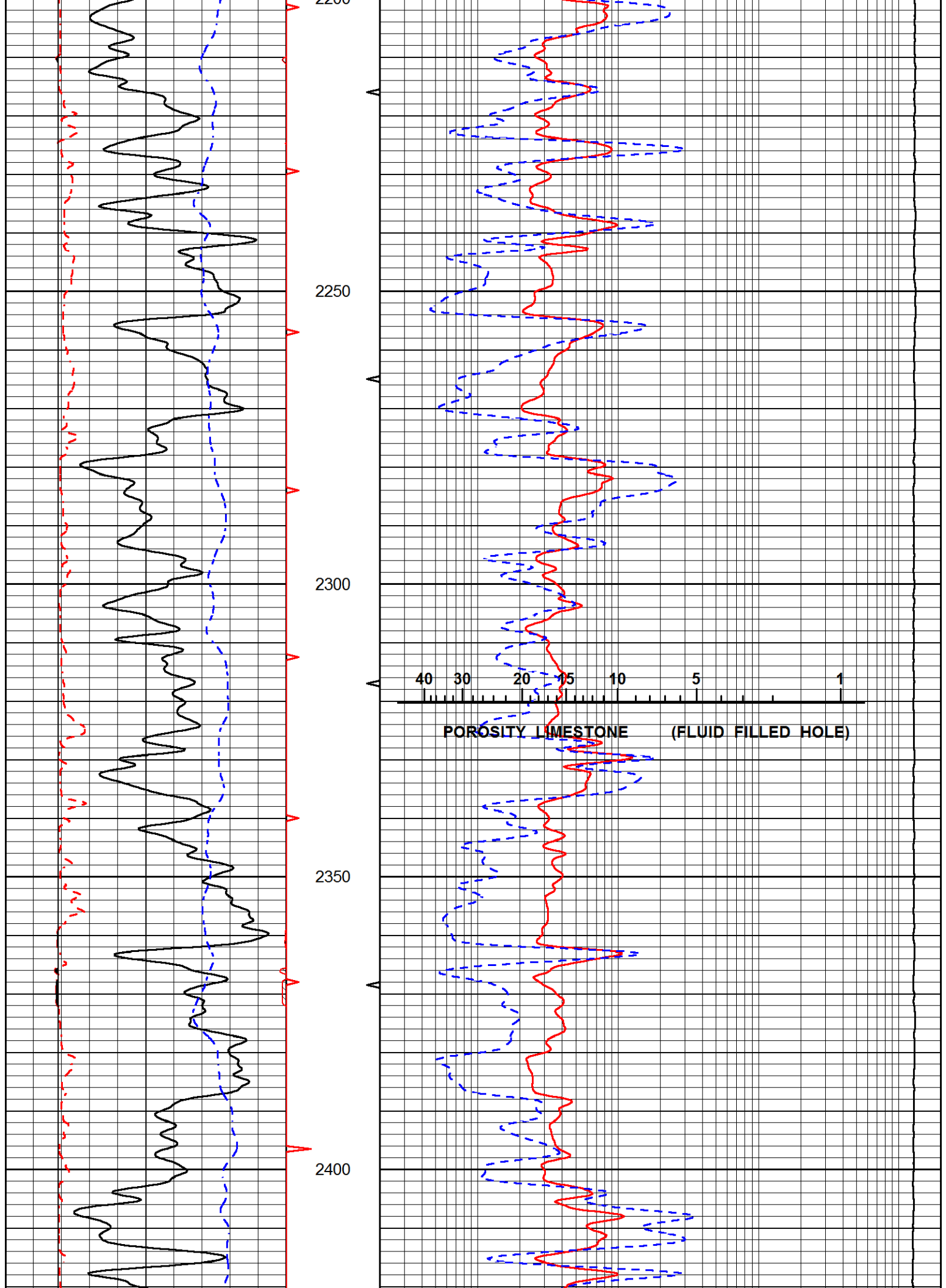


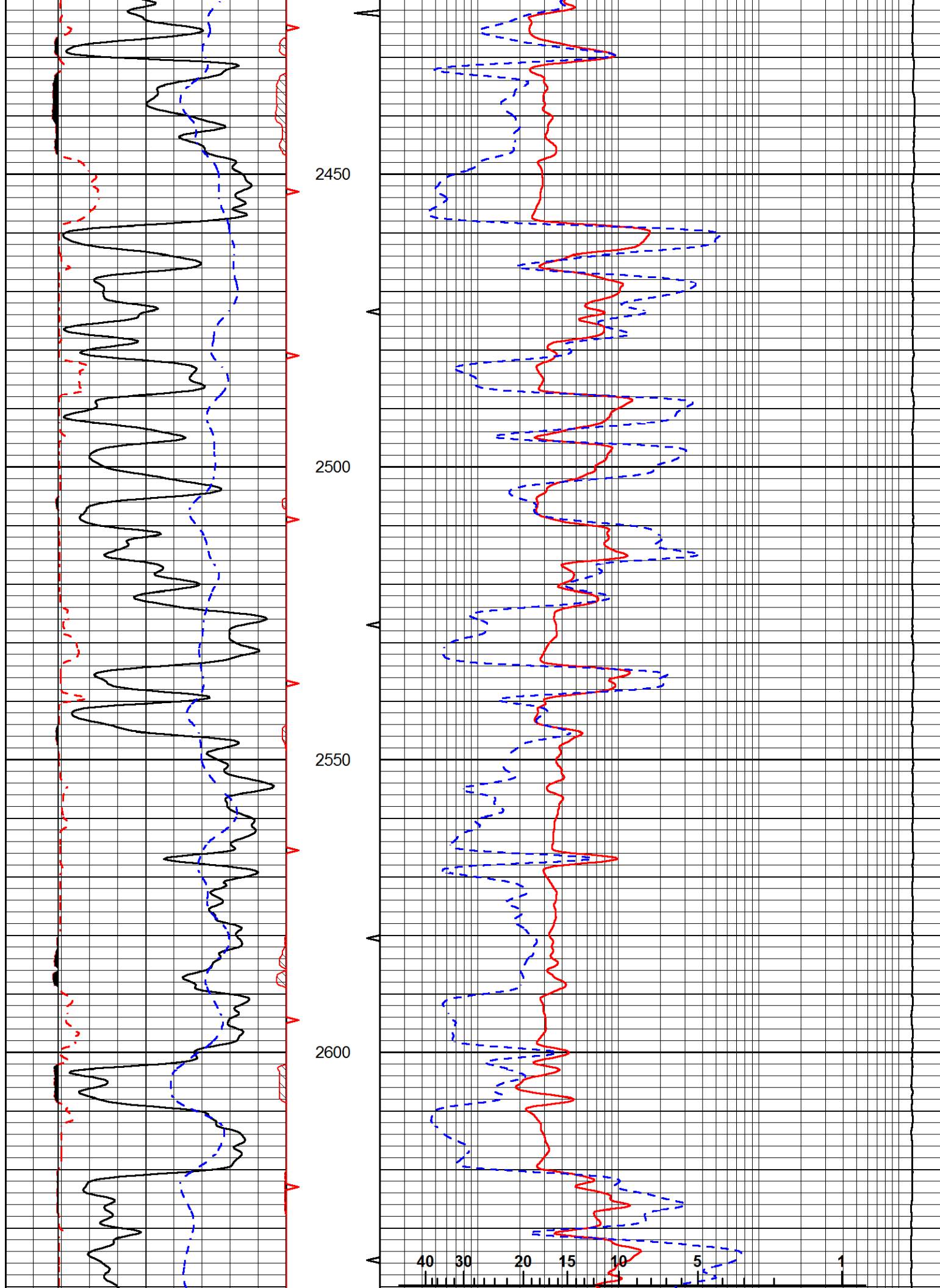


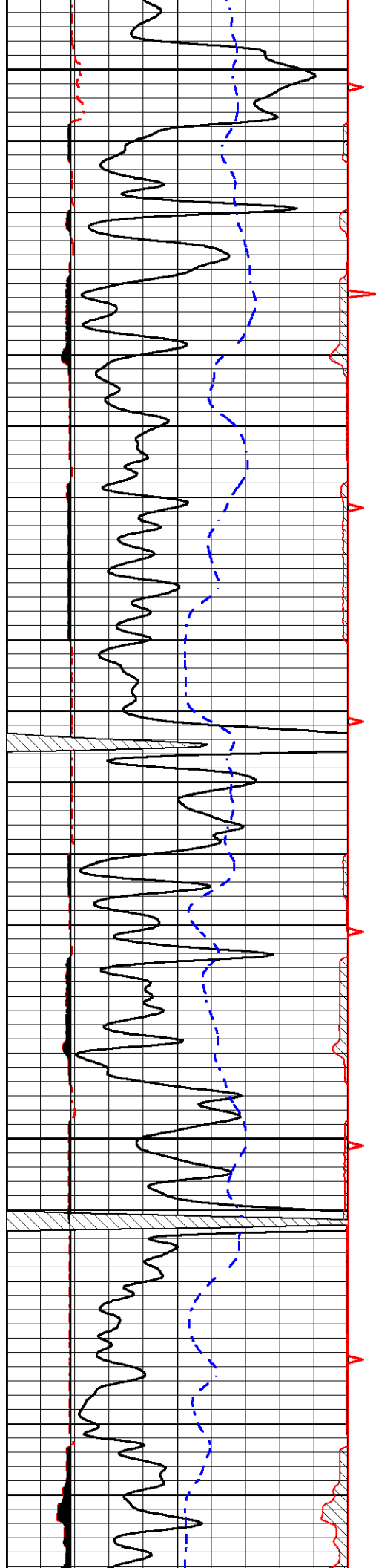
MAIN PASS

Database File bruce_anne marie .db
 Dataset Pathname RAG/pass5.1
 Presentation Format rag
 Dataset Creation Sun Jul 07 21:00:44 2019
 Charted by Depth in Feet scaled 1:240









2650

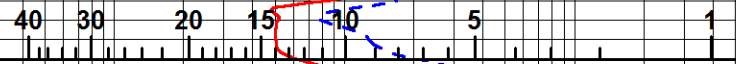
2700

2750

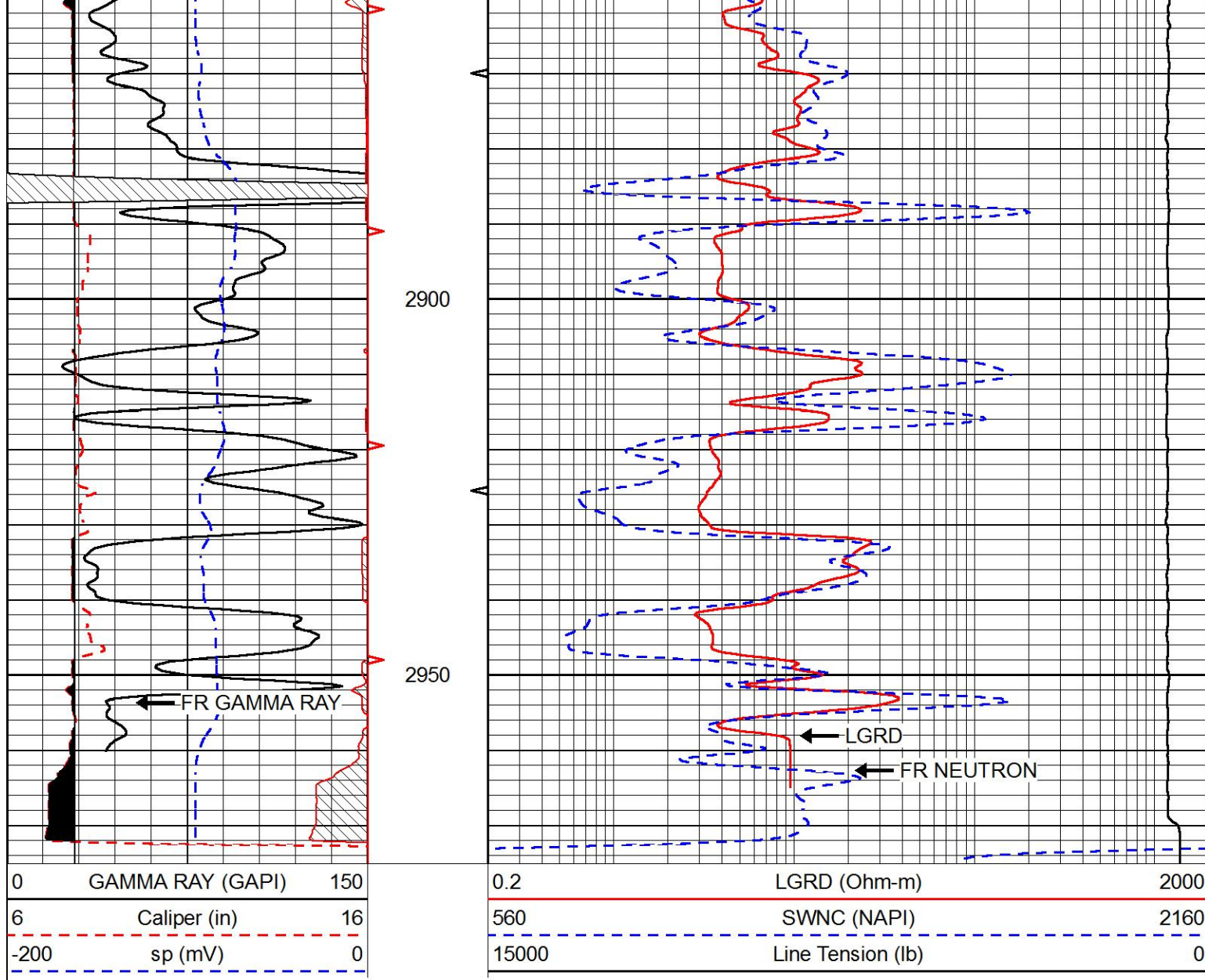
2800

2850

POROSITY LIMESTONE (FLUID FILLED HOLE)



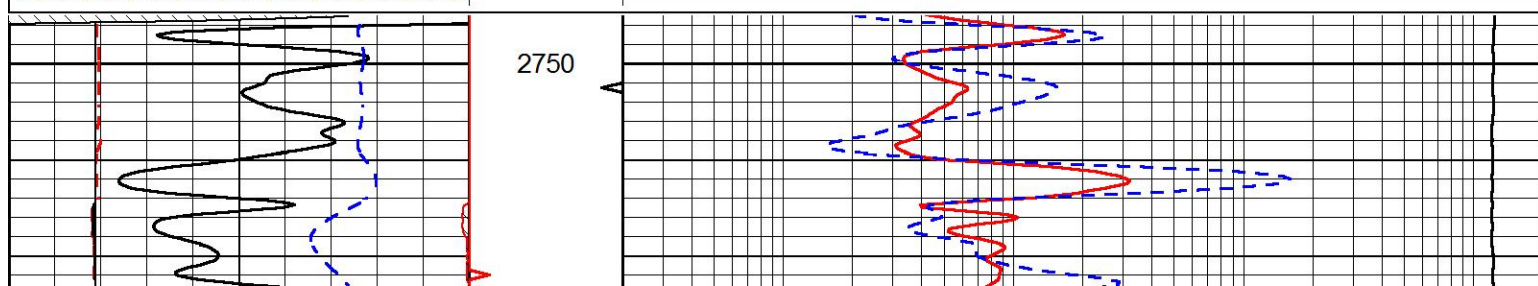
POROSITY LIMESTONE (FLUID FILLED HOLE)

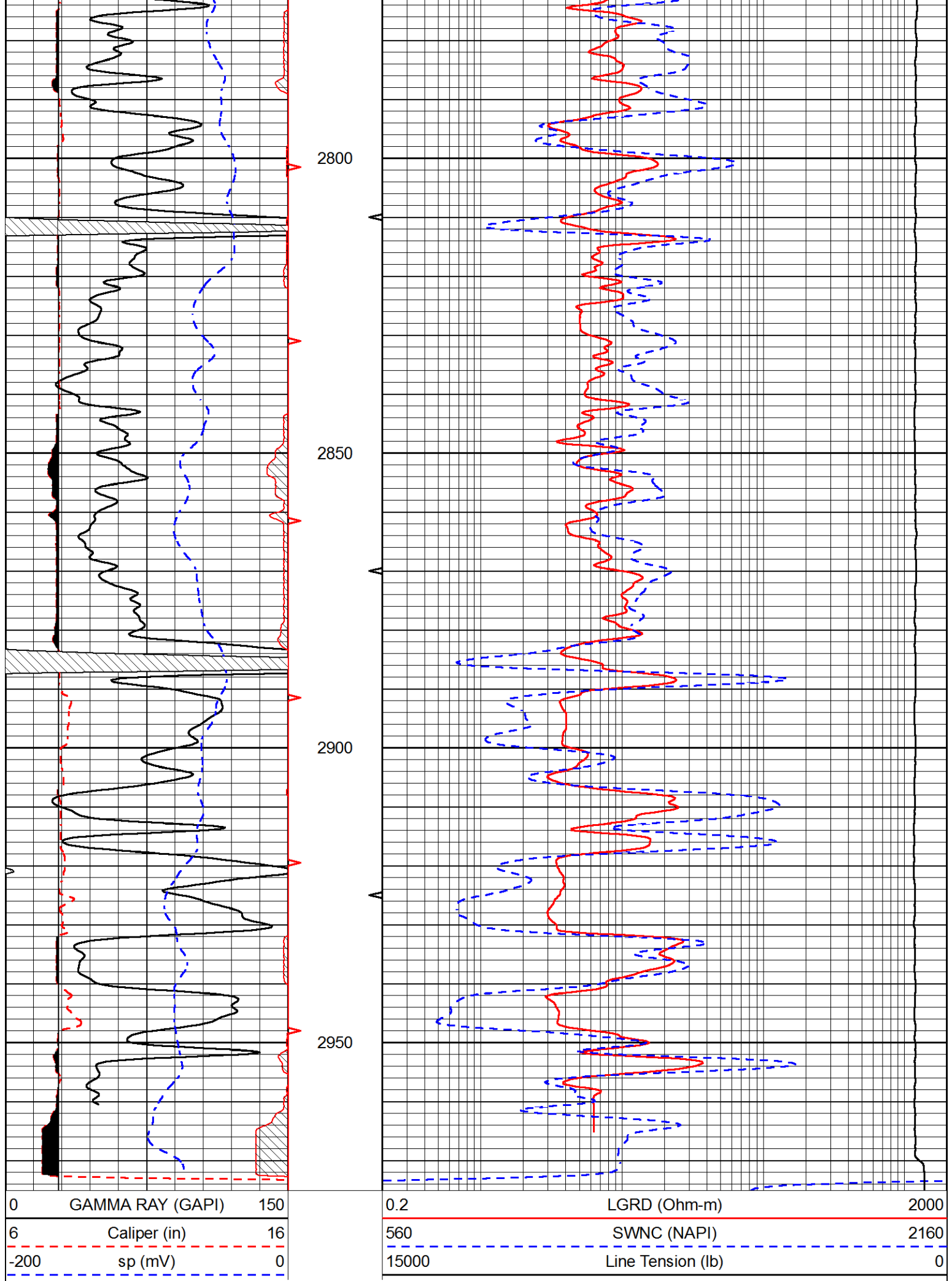


REPEAT SECTION

Database File	bruce_anne marie .db
Dataset Pathname	RAG/pass3.1
Presentation Format	rag
Dataset Creation	Sun Jul 07 21:00:18 2019
Charted by	Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150	0.2 LGRD (Ohm-m) 2000
6 Caliper (in) 16	560 SWNC (NAPI) 2160
-200 sp (mV) 0	15000 Line Tension (lb) 0





Calibration Report

Database File bruce_anne marie .db
Dataset Pathname RAG/pass5.1
Dataset Creation Sun Jul 07 21:00:44 2019

Sidewall Neutron Calibration Report

Serial Number: SP162-87
Tool Model: M&W-SP

SWN Calibration Mon Aug 08 12:41:49 2016

Readings	Target	Normalization
2566.42 cps	1085.00 cps	0.5700

Caliper Calibration Mon Aug 08 12:41:49 2016

Readings	Reference	Gain	Offset
0.85	4.00	-18.40	18.50
0.31	14.00		

Gamma Ray Calibration Report

Serial Number: 89
Tool Model: M&W
Calibration Performed: Fri Aug 24 11:16:10 2018

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps



Company	BRUCE OIL COMPANY, LLC
Well	ANNE MARIE #1
Field	UNKNOWN
County	OSBORNE
State	KANSAS