



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **CASTLE RESOURCES, INC.**
Well **EAGLE 1 MOORE #1**
Field **WILDCAT**
County **DECATUR** State **KANSAS**

Location: API #: 15-039-21242-00-00

Other Services

SEC 15 TWP 1S RGE 29W
935' FNL & 2460' FWL

DIL/MEL

Permanent Datum **GROUND LEVEL** Elevation **2581'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**

Elevation
K.B. 2586'
D.F. N/A
G.L. 2581

Date **9/12/2017**

Run Number **ONE**

Type Log **CNL/CDL**

Depth Driller **4175'**

Depth Logger **4175'**

Bottom Logged Interval **4146'**

Top Logged Interval **2800'**

Type Fluid In Hole **CHEMICAL**

Salinity, PPM CL **2500**

Density **8.7**

Level **FULL**

Max. Rec. Temp. F **114**

Operating Rig Time **3 HOURS**

Equipment -- Location **91 HAYS**

Recorded By **D. SCHMIDT**

Witnessed By **JERRY GREEN**

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0'	207'	8.625"	23#	0'	207'
TWO	7.875"	207'	TD				

<<< Fold Here >>>

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.

CEDAR BLUFFS,
200 YARDS SOUTH, 200 WEST,
SOUTH TO LOCATION

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

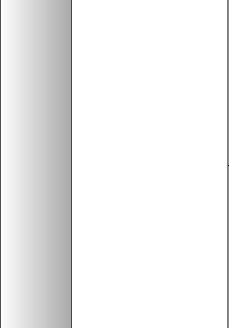
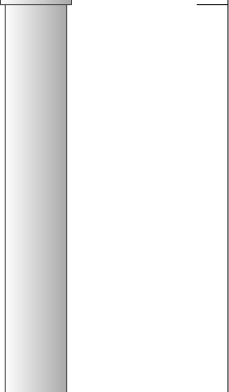
Engineer: **D. SCHMIDT**
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: **JERRY GREEN**
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	365	0
SNDERR mmho/m	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	80	0	5.5	0	3759	114	7.875

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58		GR-M&W (89)	3.00	3.50	50.00
CNLSC CNSSC	37.48 36.73		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	28.43 28.42 27.93		CDL-M&W (90-1031)	8.50	4.00	250.00
MCAL MI MN	19.83 19.83 19.83		ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
RLL3F RLL3	15.80 15.80					

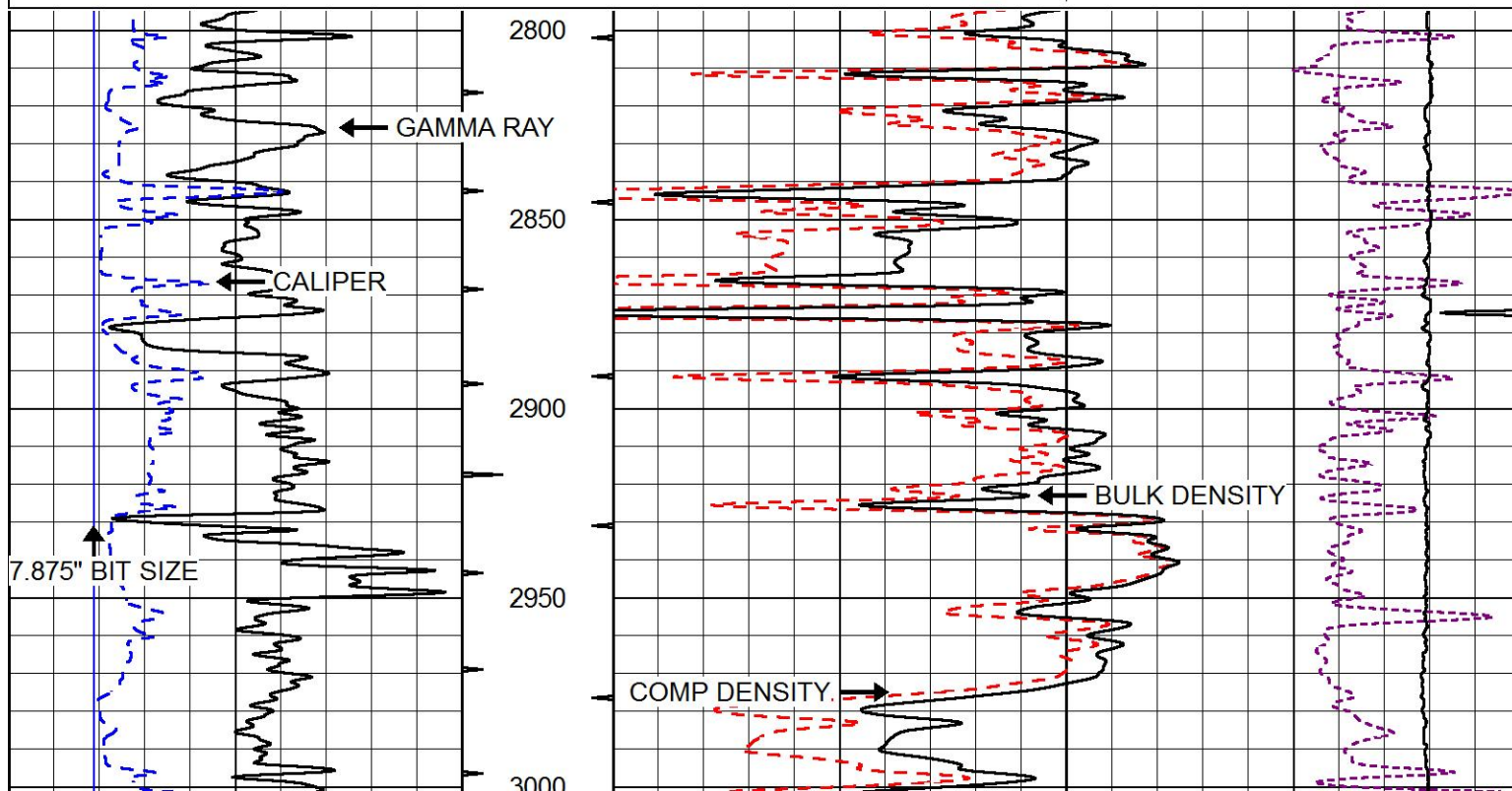
			DIL-M&W (PSI 91)	18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					
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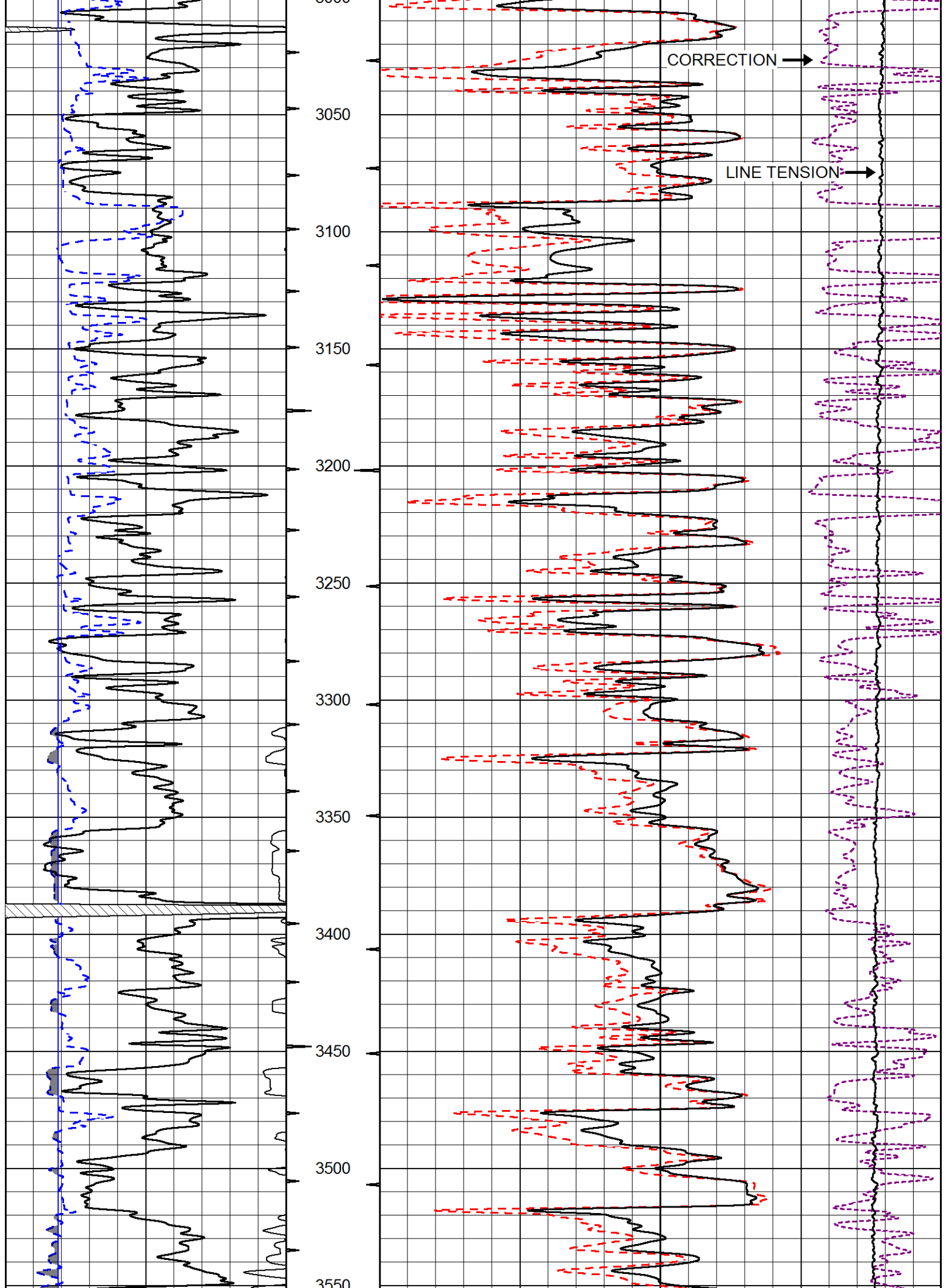


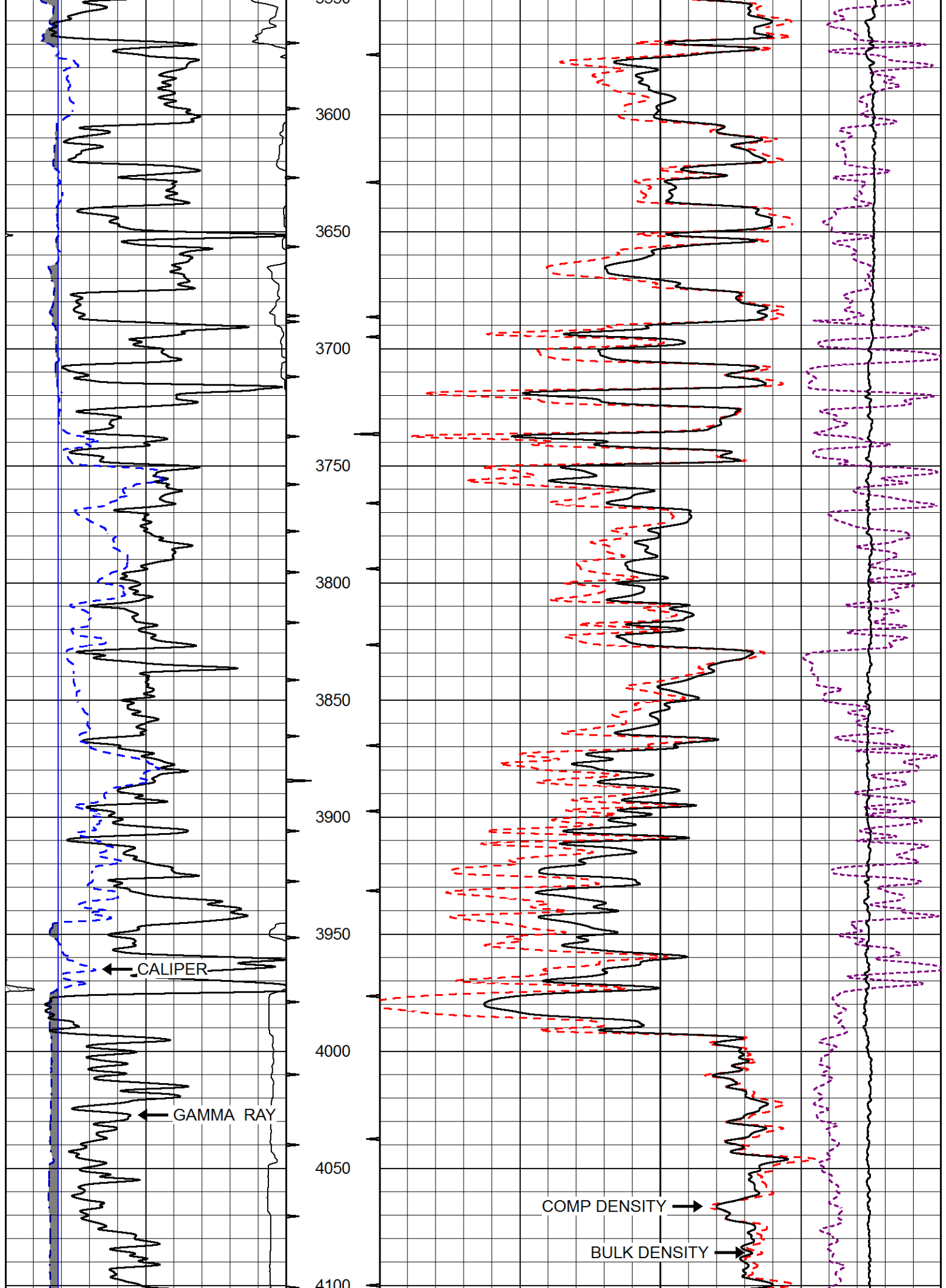
MAIN PASS

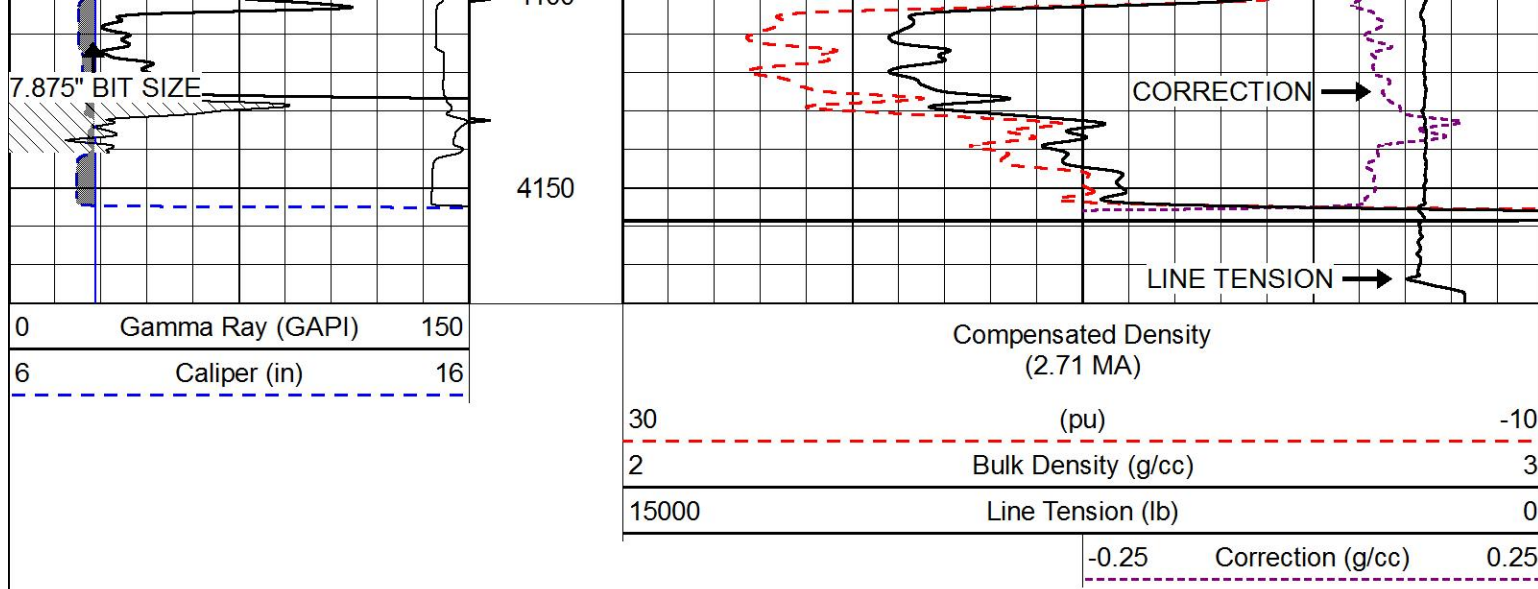
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Dataset Pathname	STKML/pass5.1
Presentation Format	cdl
Dataset Creation	Mon Sep 11 03:22:26 2017
Charted by	Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150			
6	Caliper (in)	16			
			Compensated Density (2.71 MA)		
			30	(pu)	-10
			2	Bulk Density (g/cc)	3
			15000	Line Tension (lb)	0
			-0.25	Correction (g/cc)	0.25





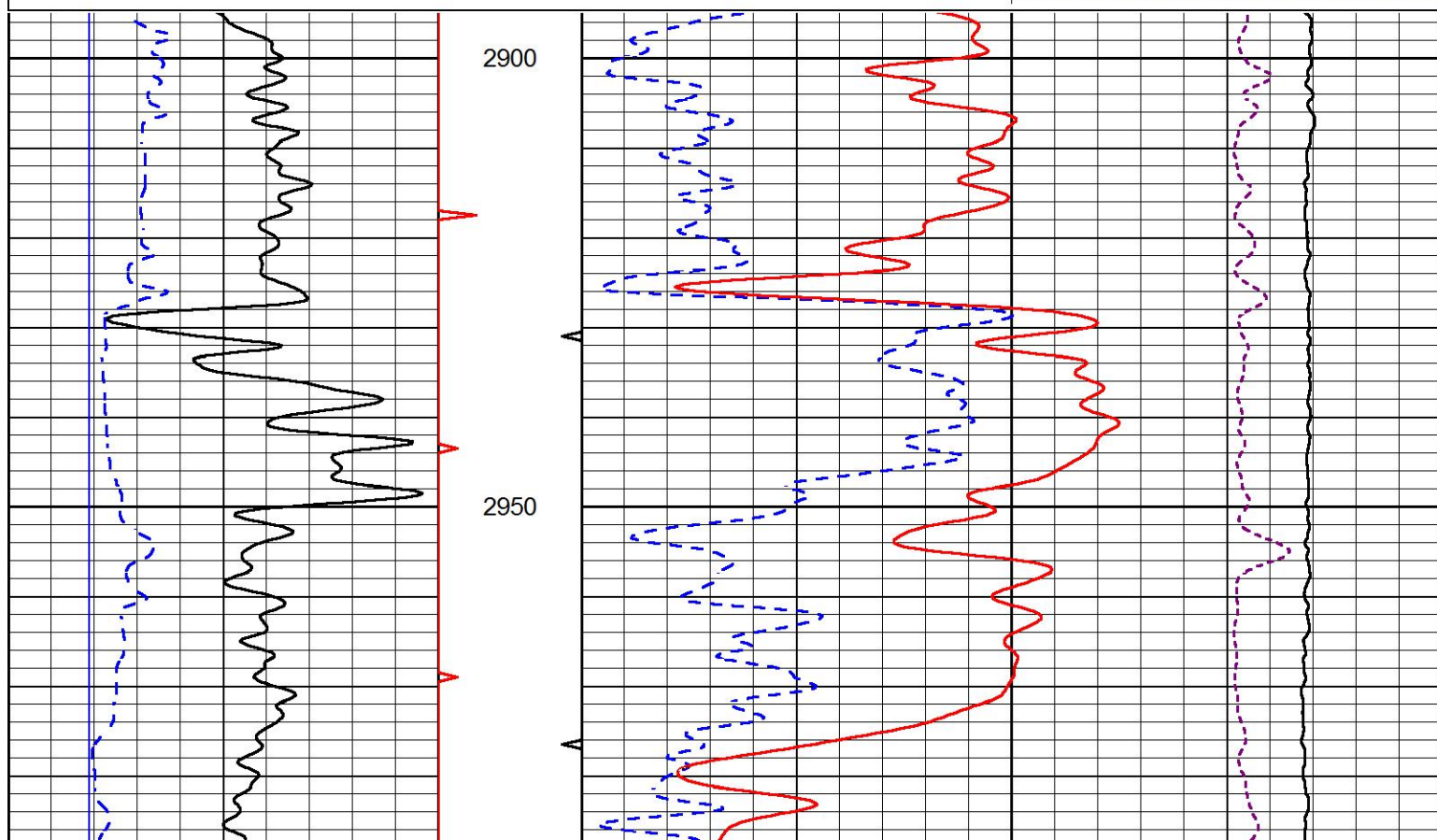
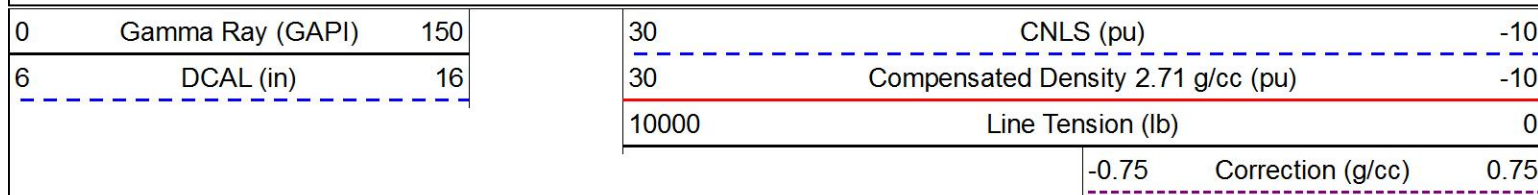


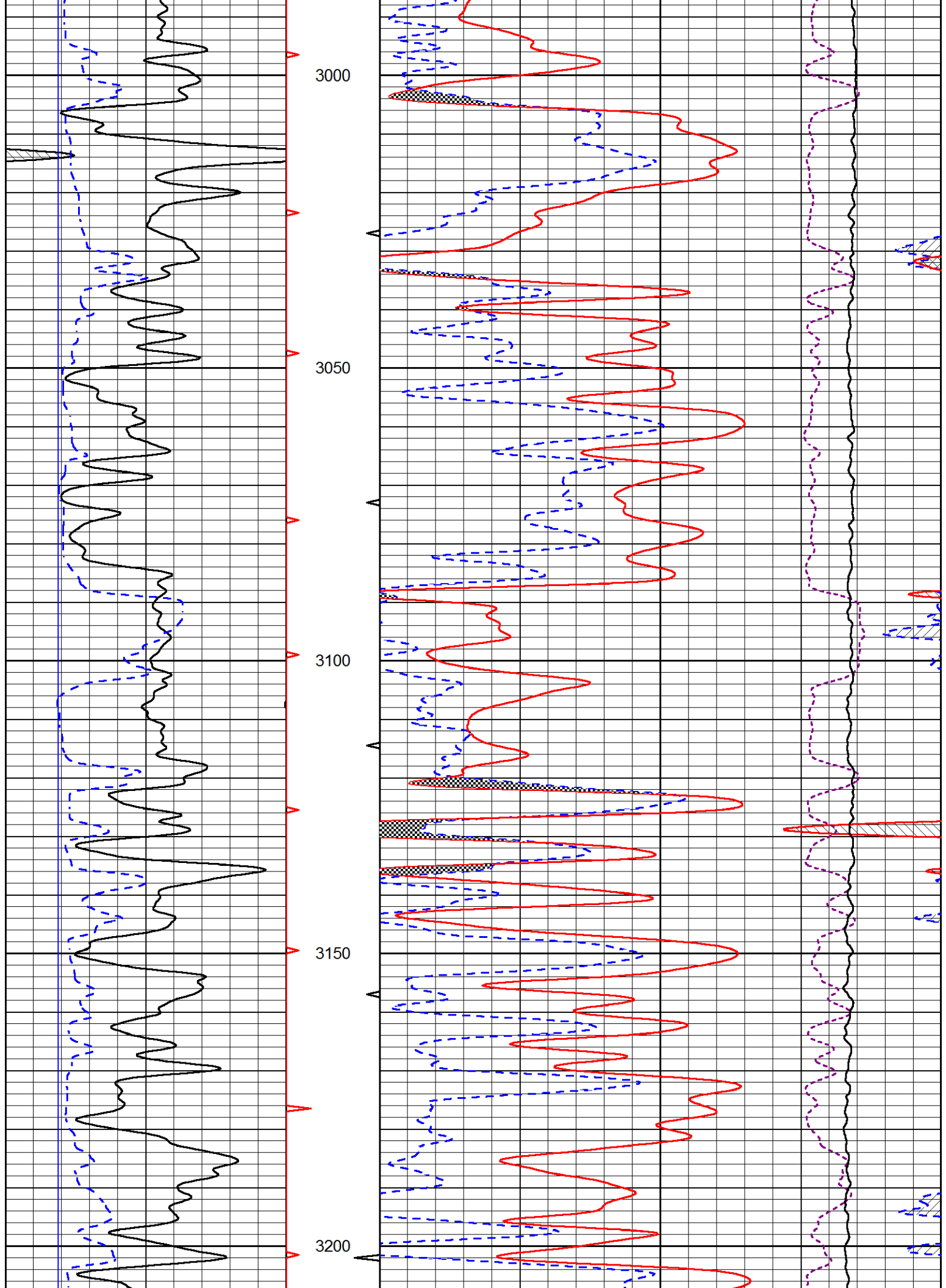


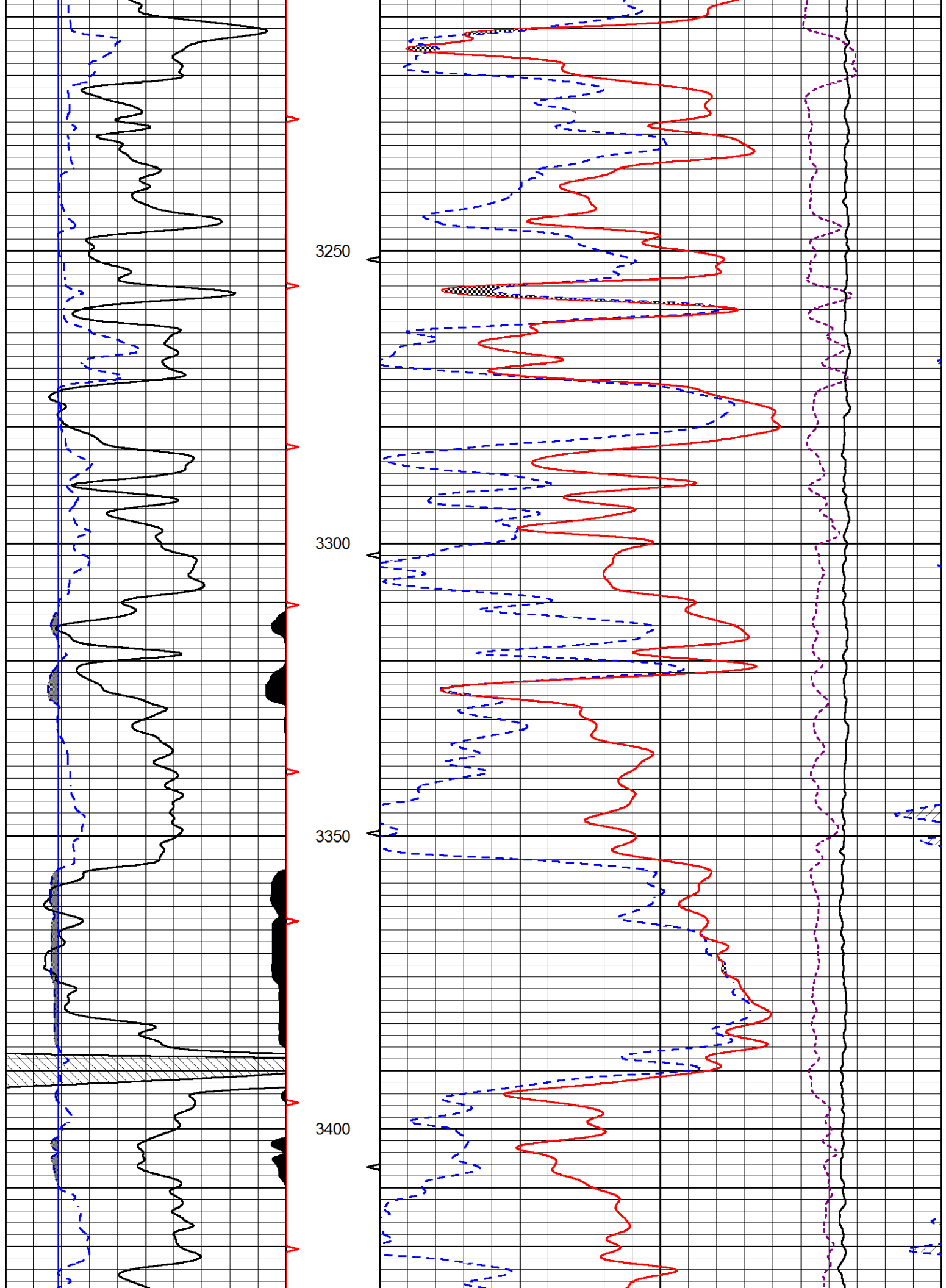


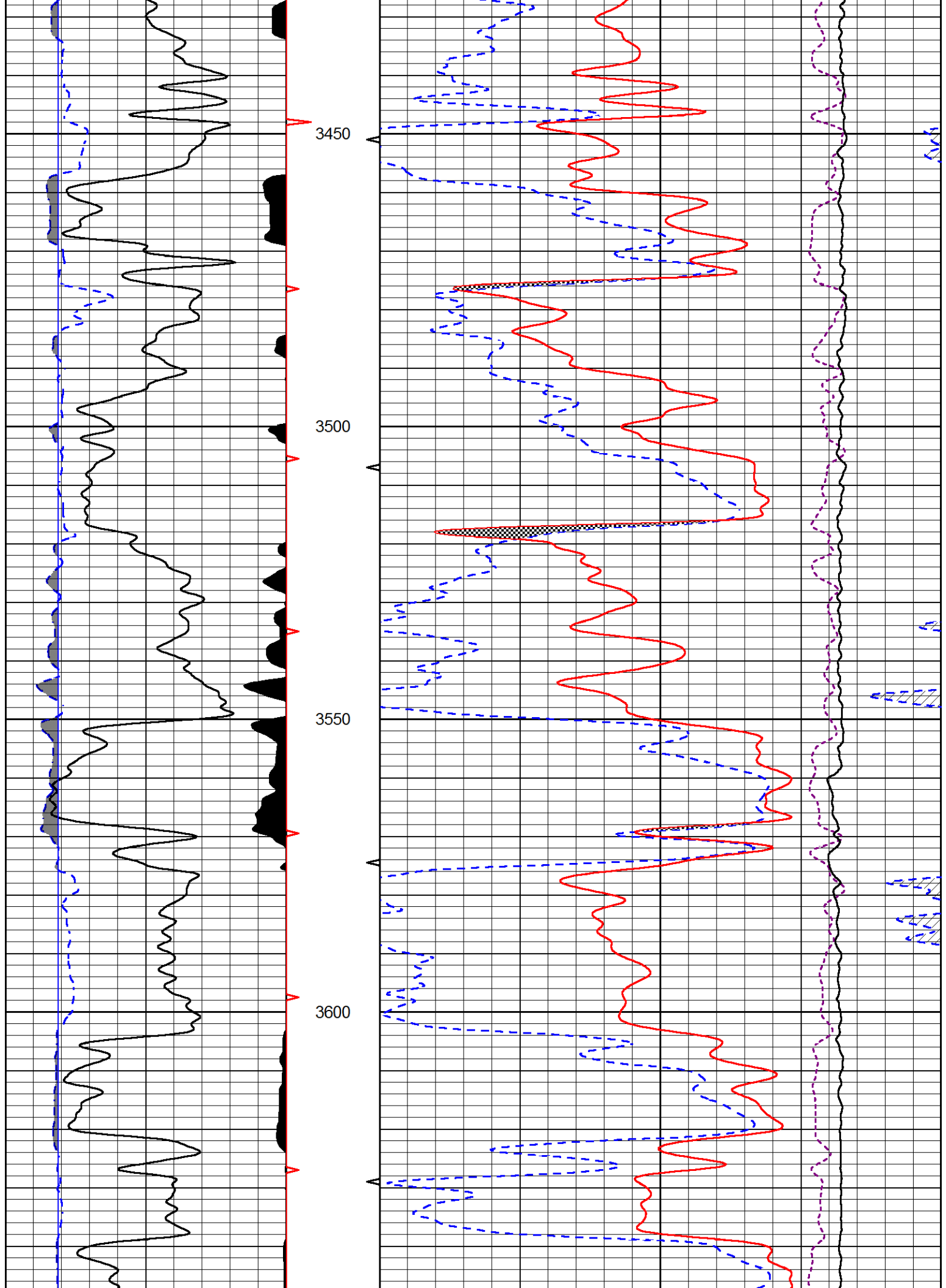
MAIN PASS

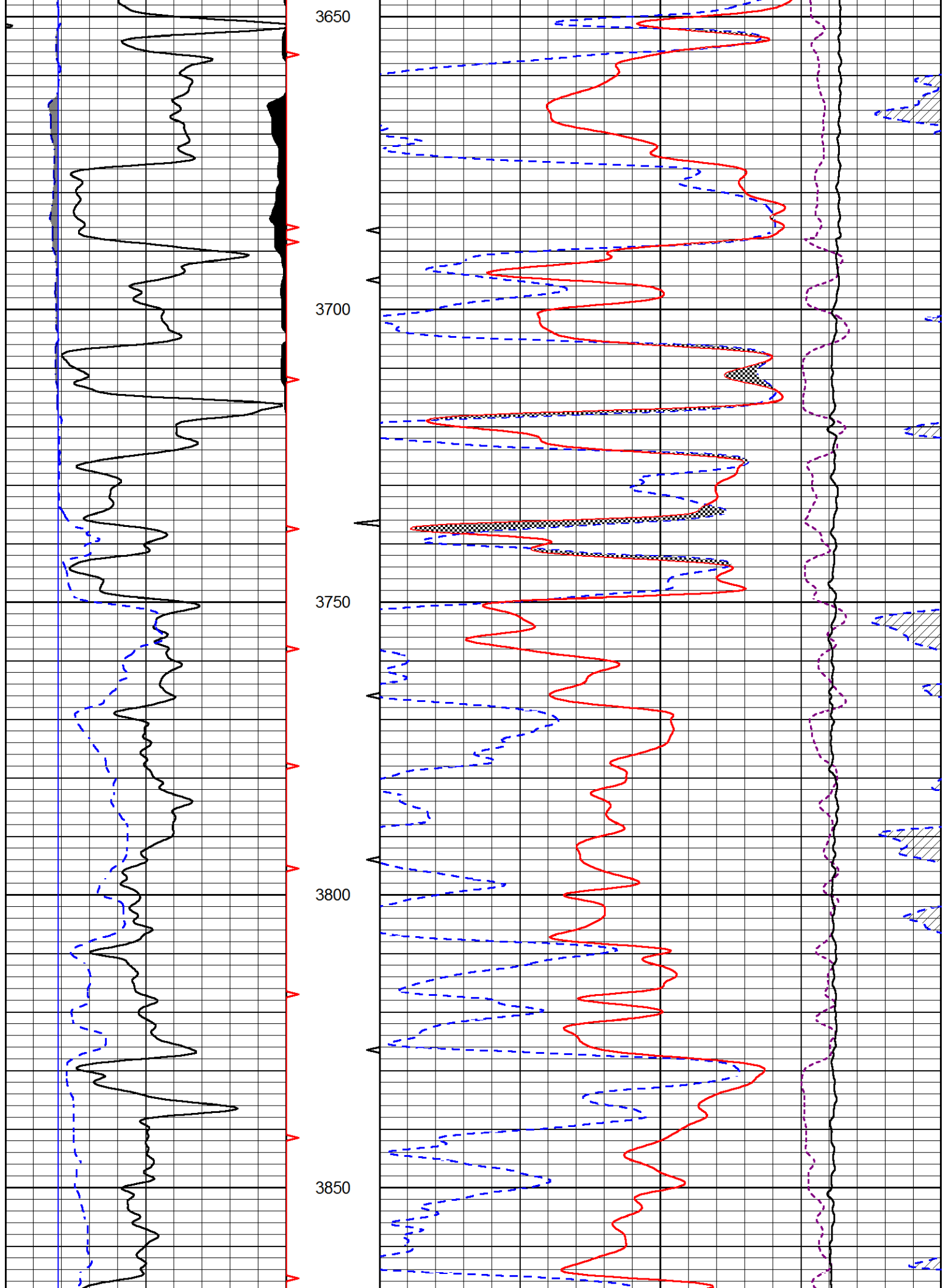
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 Presentation Format cndlspec
 Dataset Creation Mon Sep 11 03:22:26 2017
 Charted by Depth in Feet scaled 1:240

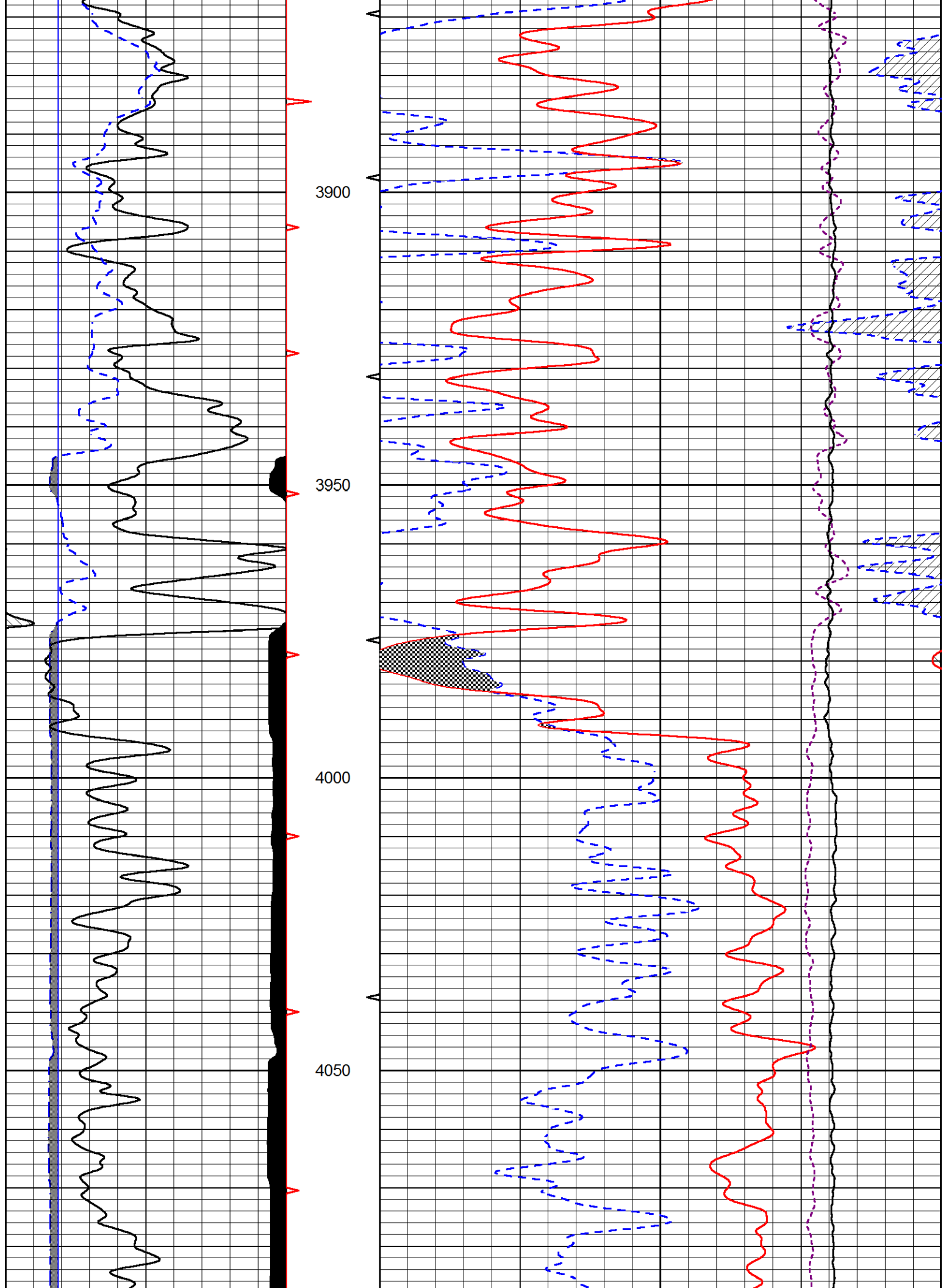


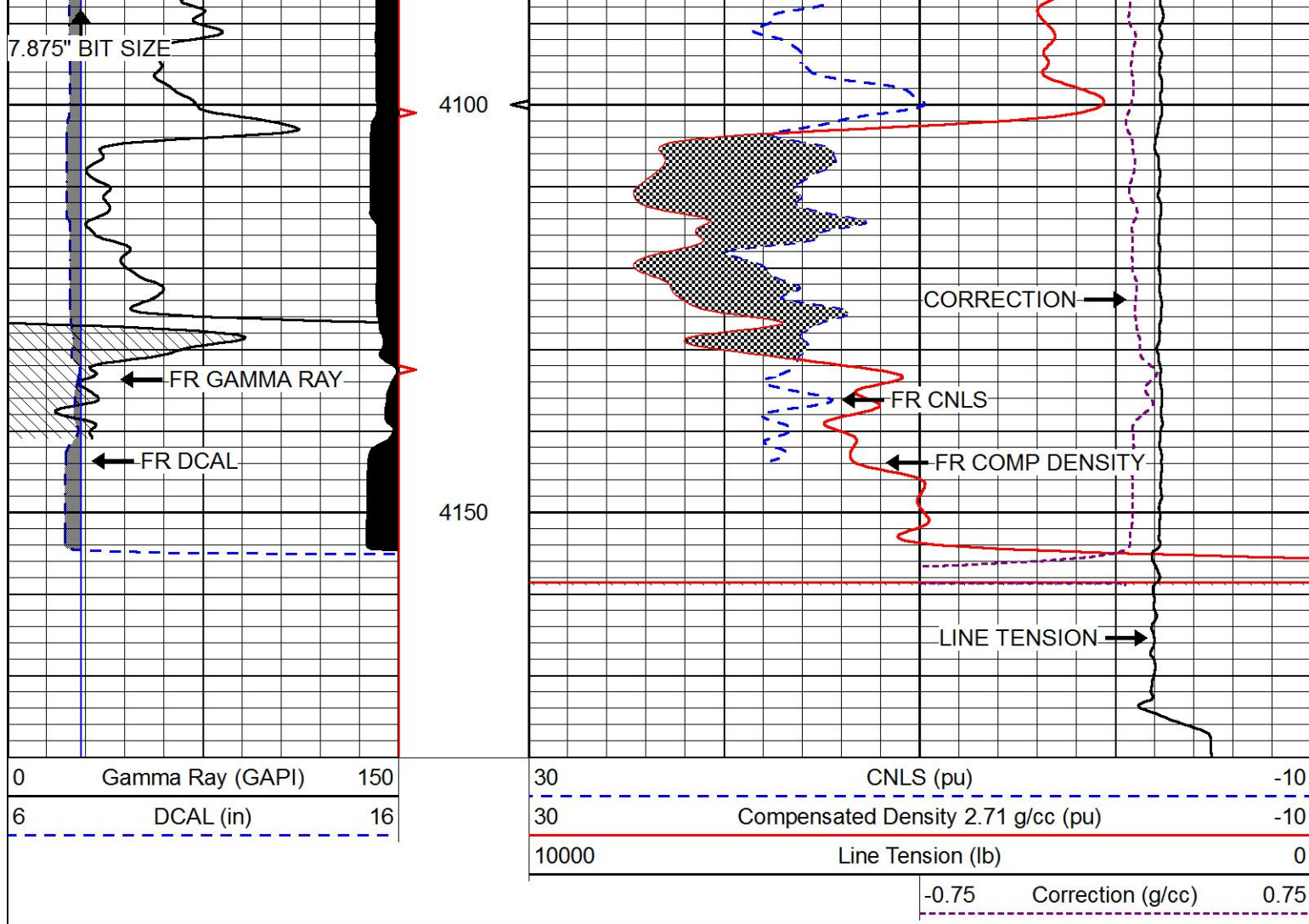






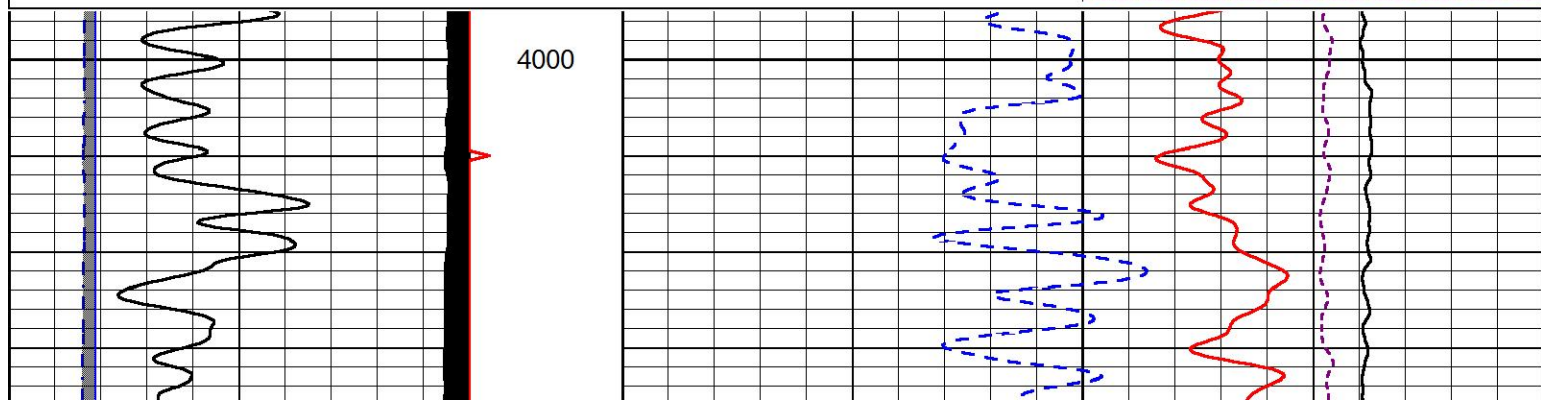
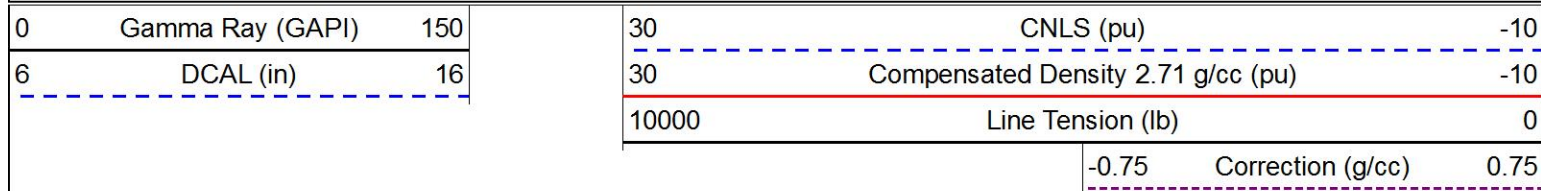


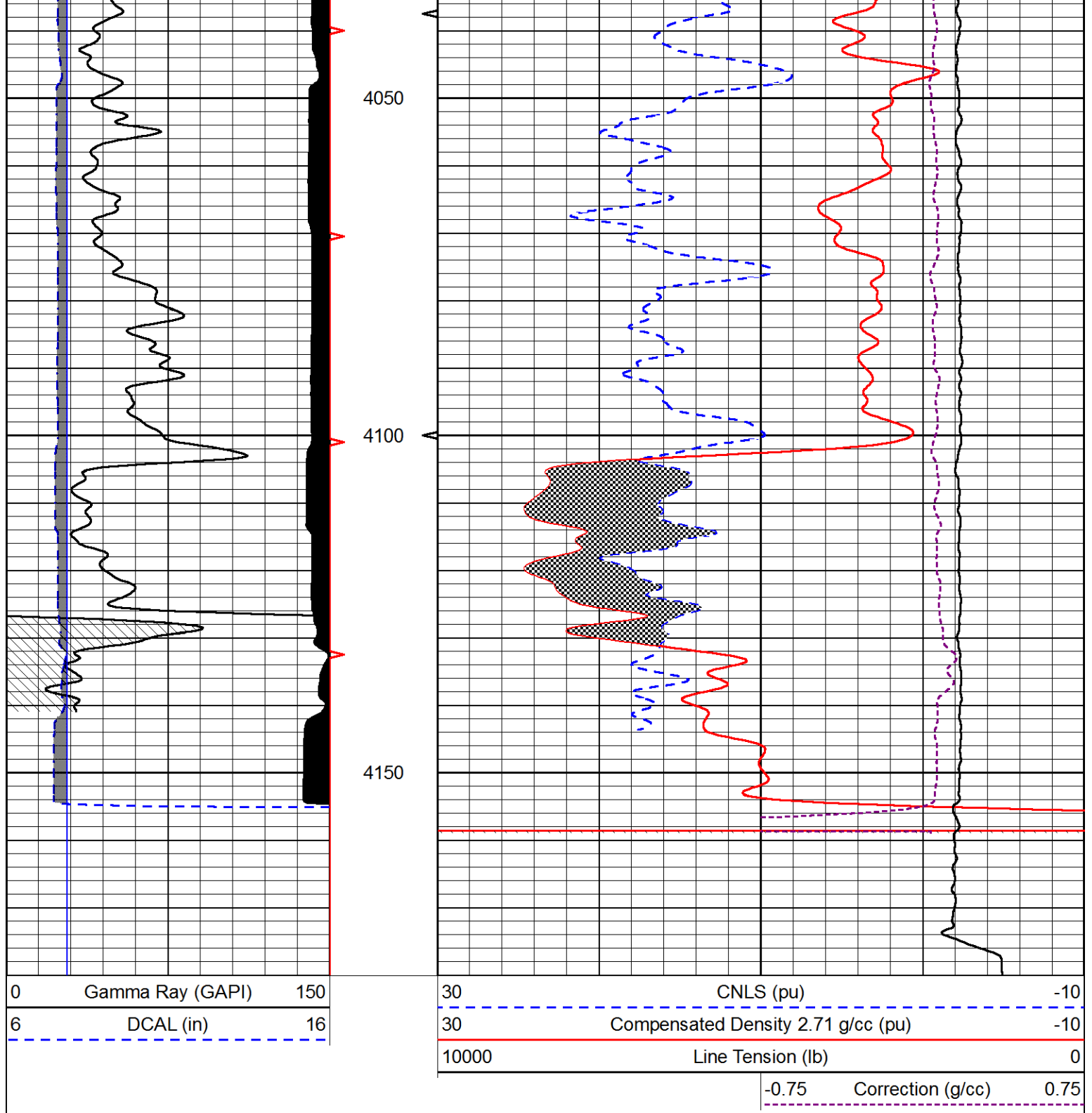




REPEAT SECTION

Database File: castle resources_eagle 1 moore_1.db
 Dataset Pathname: STKML2/pass2.1
 Presentation Format: cndlspec
 Dataset Creation: Tue Sep 12 08:21:53 2017
 Charted by: Depth in Feet scaled 1:240





Calibration Report						
Database File	castle resources_eagle 1 moore_1.db					
Dataset Pathname	STKML/pass4.1					
Dataset Creation	Mon Sep 11 02:52:16 2017					
Dual Induction Calibration Report						
Serial-Model:			PSI 91-M&W			
Calibration Performed:			Wed Sep 06 19:50:36 2017			
Readings			References		Results	
Loop:	Air	Loop	Air	Loop	Gain	Offset

Deep	166.796	835.089	0.000	255.800	mmho/m	0.430	-34.500
Medium	142.009	1348.560	0.000	255.800	mmho/m	0.360	-31.000

Microlog Calibration Report

Serial-Model: Performed:	PSI-01-PSIML Wed Sep 06 19:50:56 2017
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	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	32000.0000	-1.5000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	41000.0000	-1.3000
Caliper	1.0001	1.1397	6.5000	18.5000	in	100.0000	-97.2350

Compensated Density Calibration Report

Serial-Model: Source / Verifier: Master Calibration Performed:	90-1031-M&W 16955B / 2ci Wed Sep 06 19:51:03 2017
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Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.755	g/cc		4903.44	6153.79	cps
Aluminum	2.685	g/cc		934.50	4021.31	cps
	Spine Angle = 75.61			Density/Spine Ratio = 0.543		
	Size			Reading		
Small Ring	8.00	in		1.84		
Large Ring	22.00	in		1.46		

Compensated Neutron Calibration Report

Serial Number: Tool Model: Calibration Performed:	207-MW M&W WED SEP 6 10:30:30 2017
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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	
Tool Model:	M&W	
Calibration Performed:	Wed Sep 06 19:51:14 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6000	GAPI/cps



Company	CASTLE RESOURCES, INC.
Well	EAGLE 1 MOORE #1
Field	WILDCAT
County	DECATUR
State	KANSAS