



DUAL COMPENSATED
POROSITY w/PE

MIDWEST WIRELINE

Company Berexco LLC		Company Berexco LLC					
Well Herman #1-13		Well Herman #1-13					
Field		Field					
County Gove		County Gove					
State Kansas		State Kansas					
Location: API #: 15-063-22446-00-00		Other Services					
SE NE SW NE 3530 FSL & 1535 FEL		DIL MEL/BHCS					
SEC 13 TWP 15S RGE 30W							
Permanent Datum	Ground Level	Elevation	2517				
Log Measured From	Kelly Bushing						
Drilling Measured From	Kelly Bushing	K.B.	2527				
		D.F.					
		G.L.	2517				
Date	8/3/2024						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4310						
Depth Logger	4310						
Bottom Logged Interval	4289						
Top Logged Interval	3300						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	2200						
Density	9.0						
Level	250						
Max. Rec. Temp. F	119						
Operating Rig Time	4 Hours						
Equipment -- Location	P-24 Hays						
Recorded By	T. Martin						
Witnessed By	Chad Counts						
Borehole Record		Casing Record					
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	393	8.625	23	00	393
Two	7.875	393	TD				

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

Gove City, S to I Rd, 6 W to Rd 32,
5 S, 1 E, S into

Log Measured From: Kelly Bushing 10 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: T. Martin
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Chad Counts
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\berexco_herman #1-13.db
Dataset field/well/Stack/pass3.1/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 119	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 0	SNDERRM mmho/m -8	SPSHIFT mV 350	SRFTEMP degF 80	SZCOR Off	TDEPTH ft 4310		

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
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



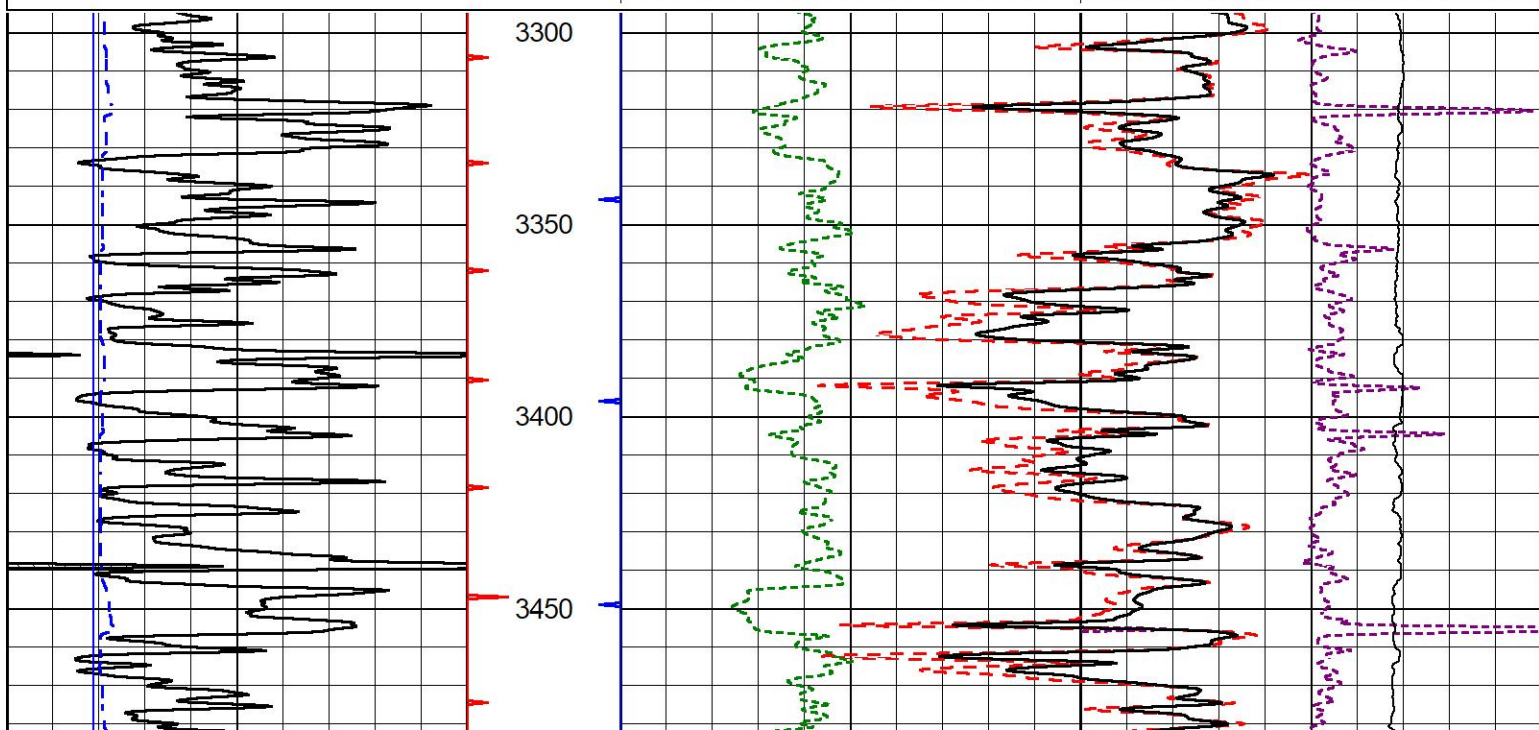
MIDWEST WIRELINE

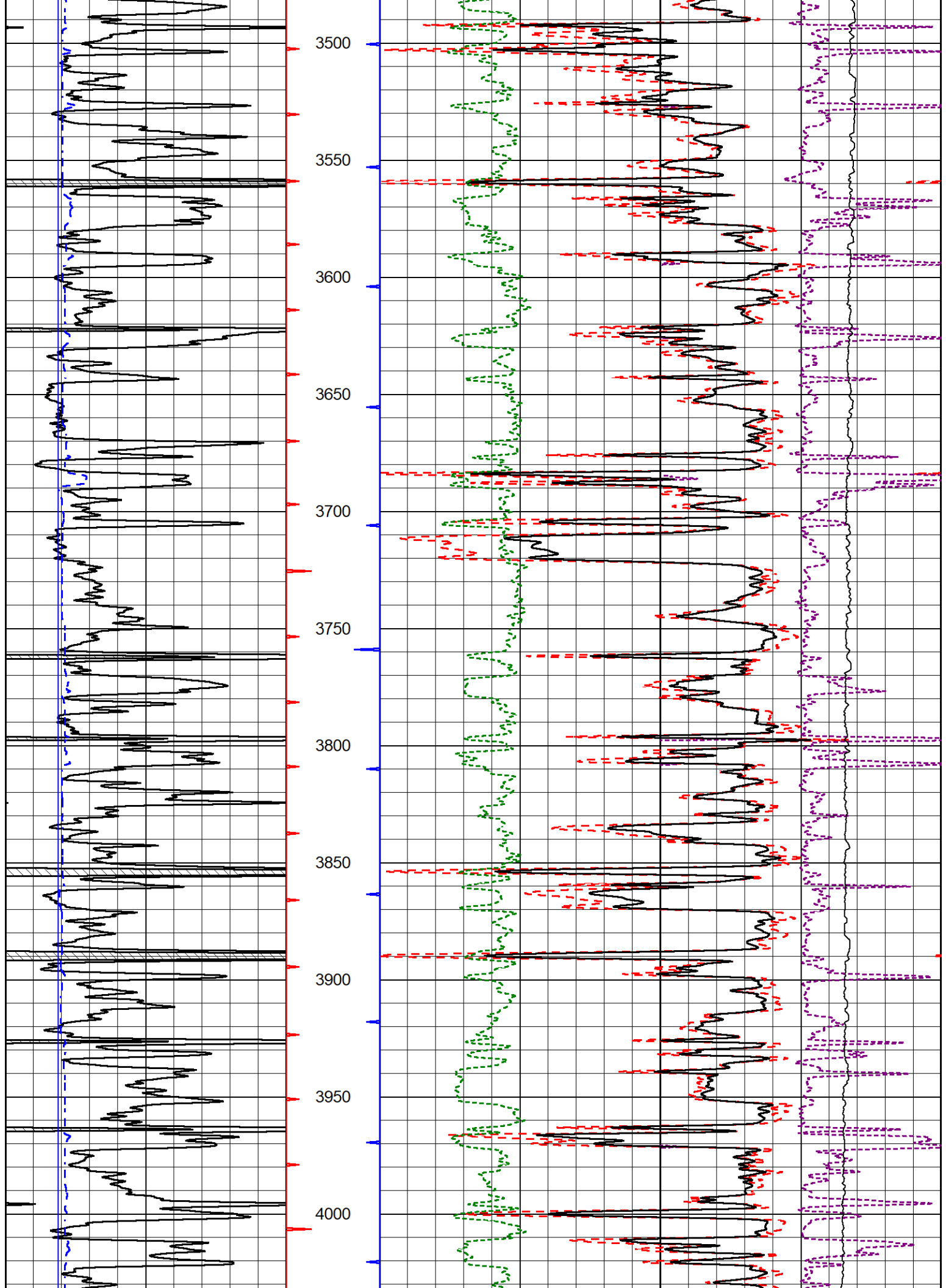
2" SCALE BULK DENSITY

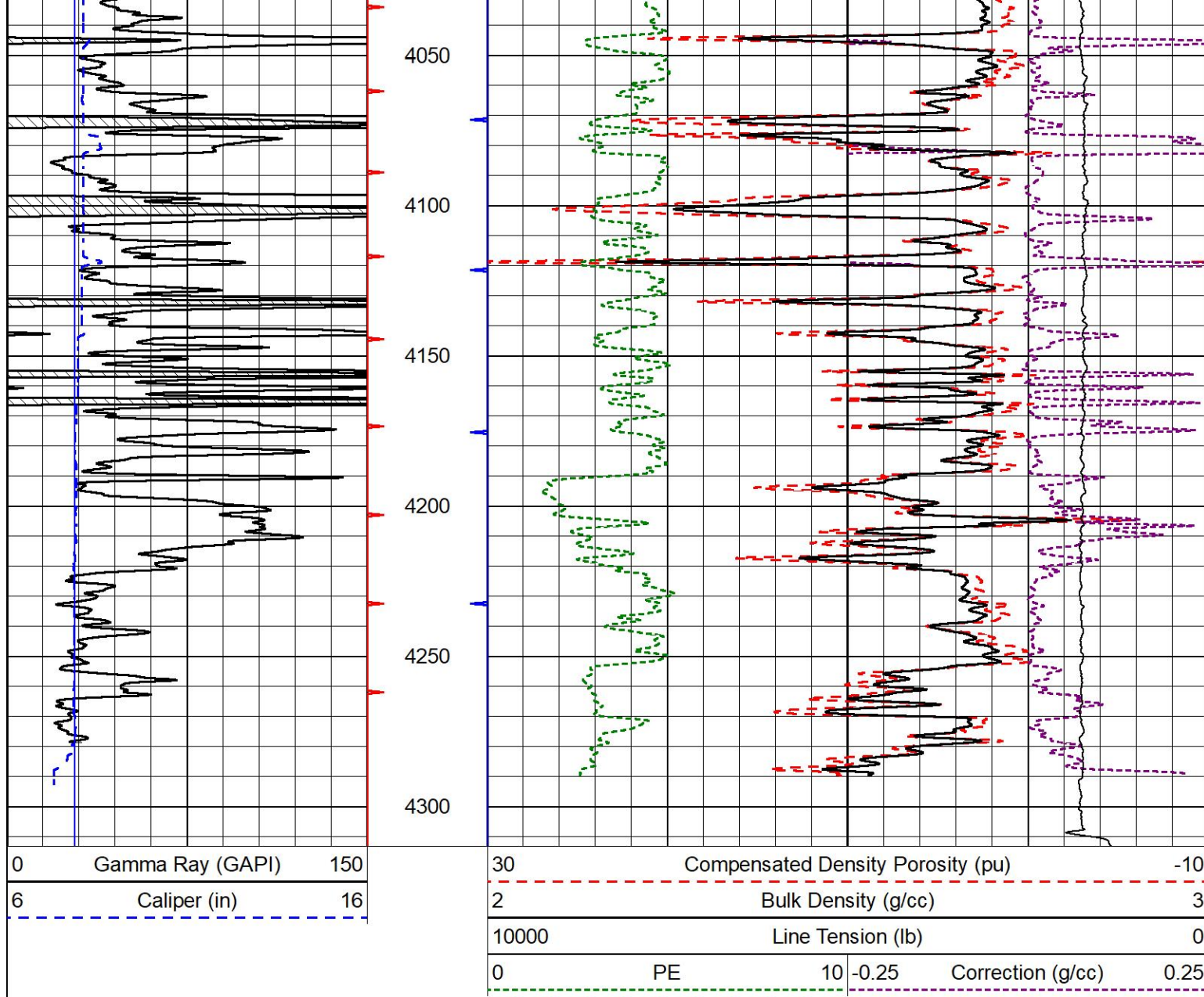
MAIN PASS

Database File berexco_herman #1-13.db
Dataset Pathname Stack/pass3.3
Presentation Format _cdlpe
Dataset Creation Sat Aug 03 23:18:05 2024
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	30	Compensated Density Porosity (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			10000	Line Tension (lb)	0
			0	PE	10 -0.25
				Correction (g/cc)	0.25



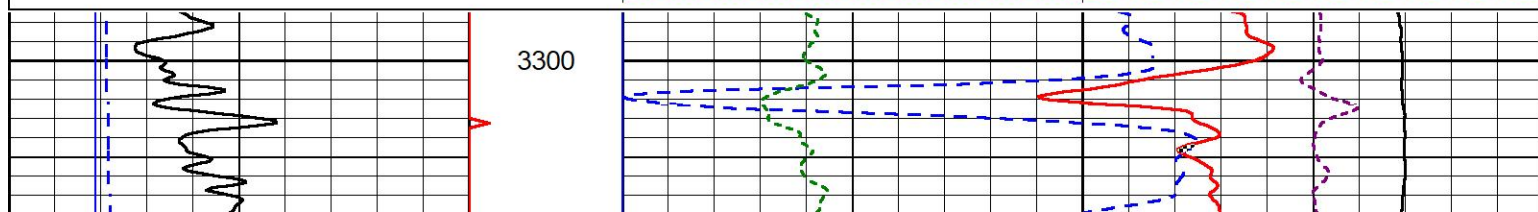
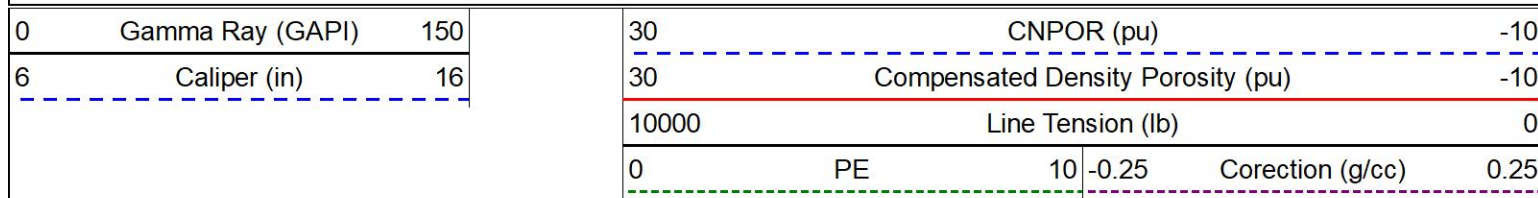


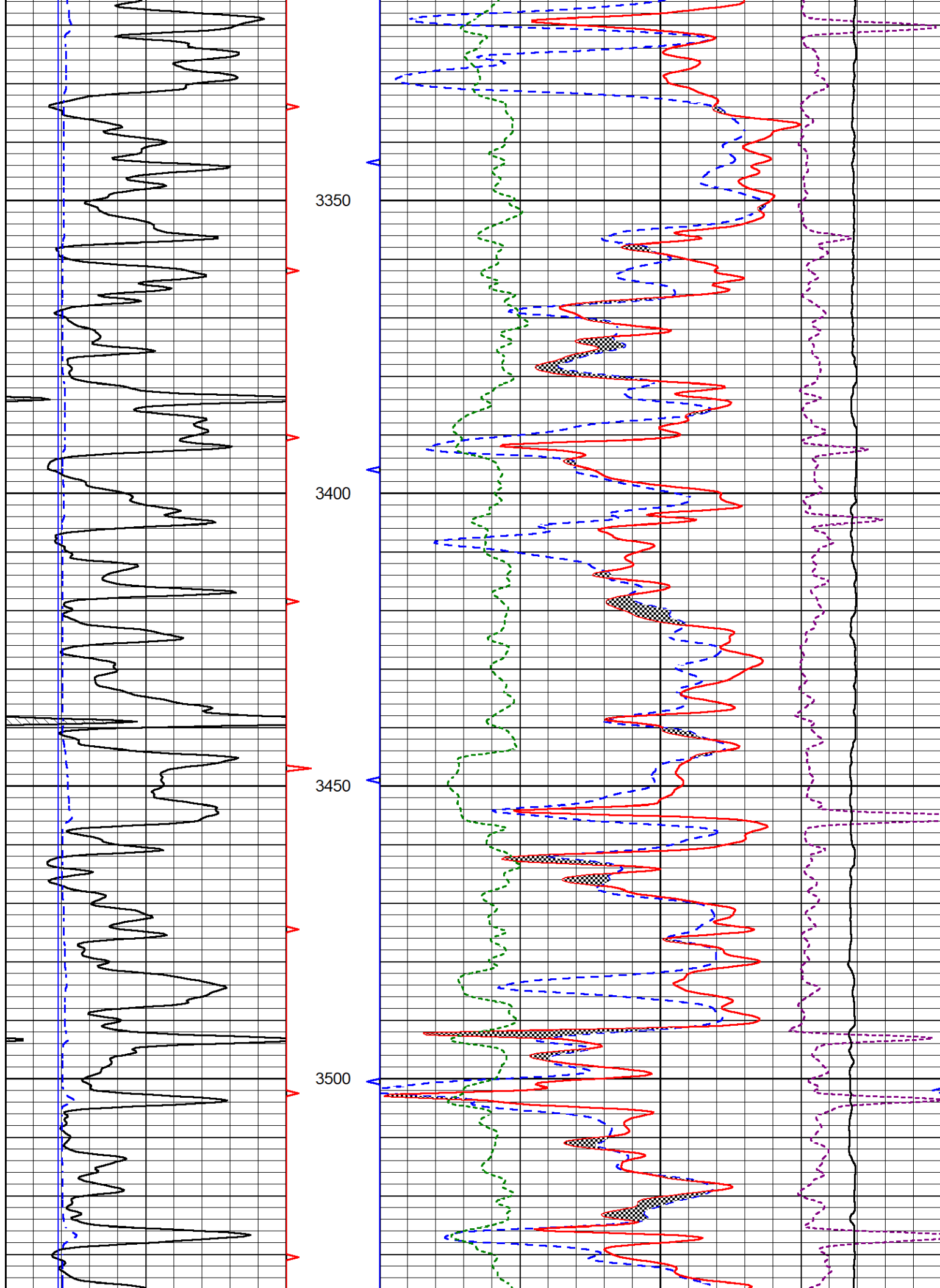


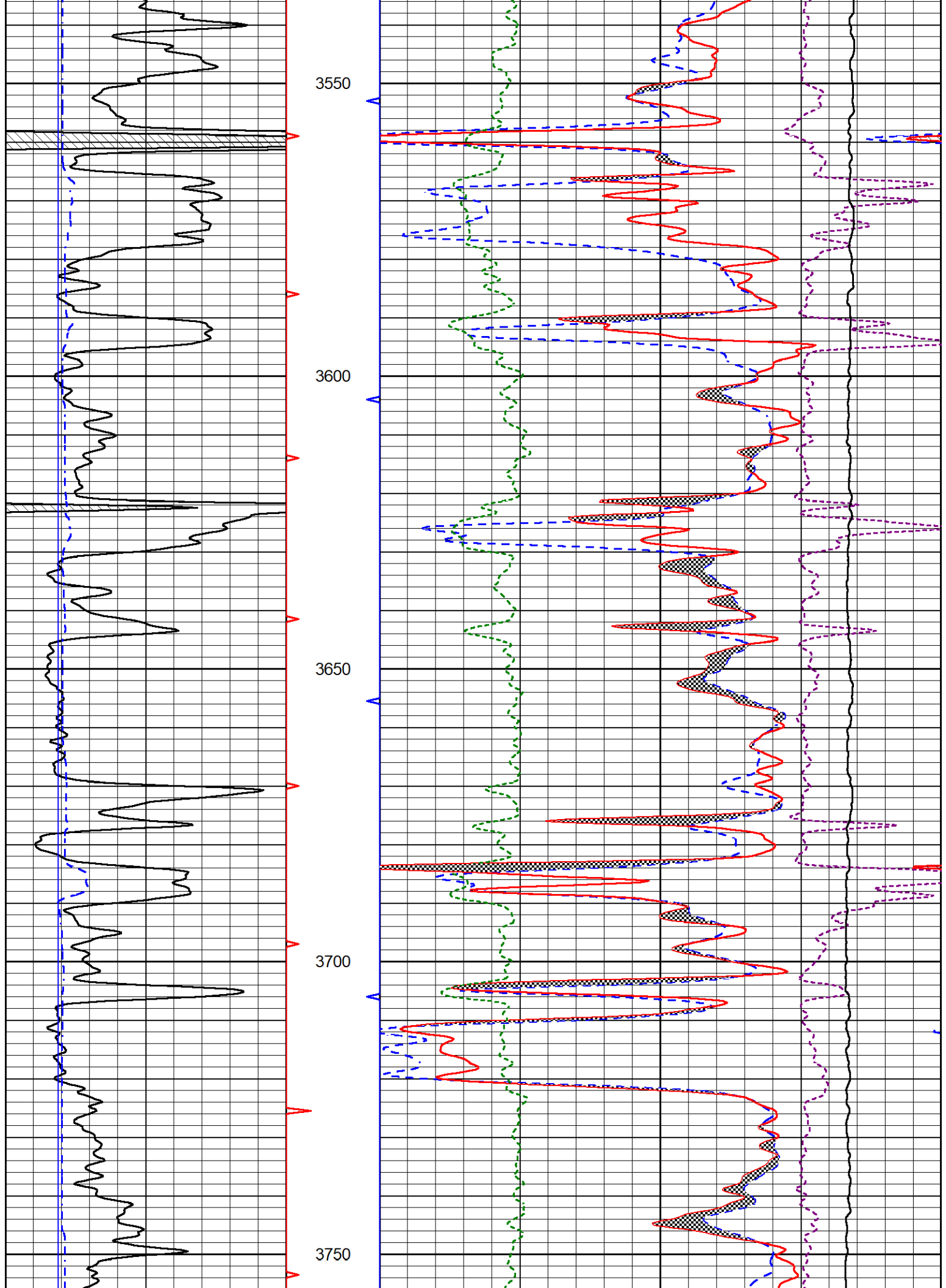
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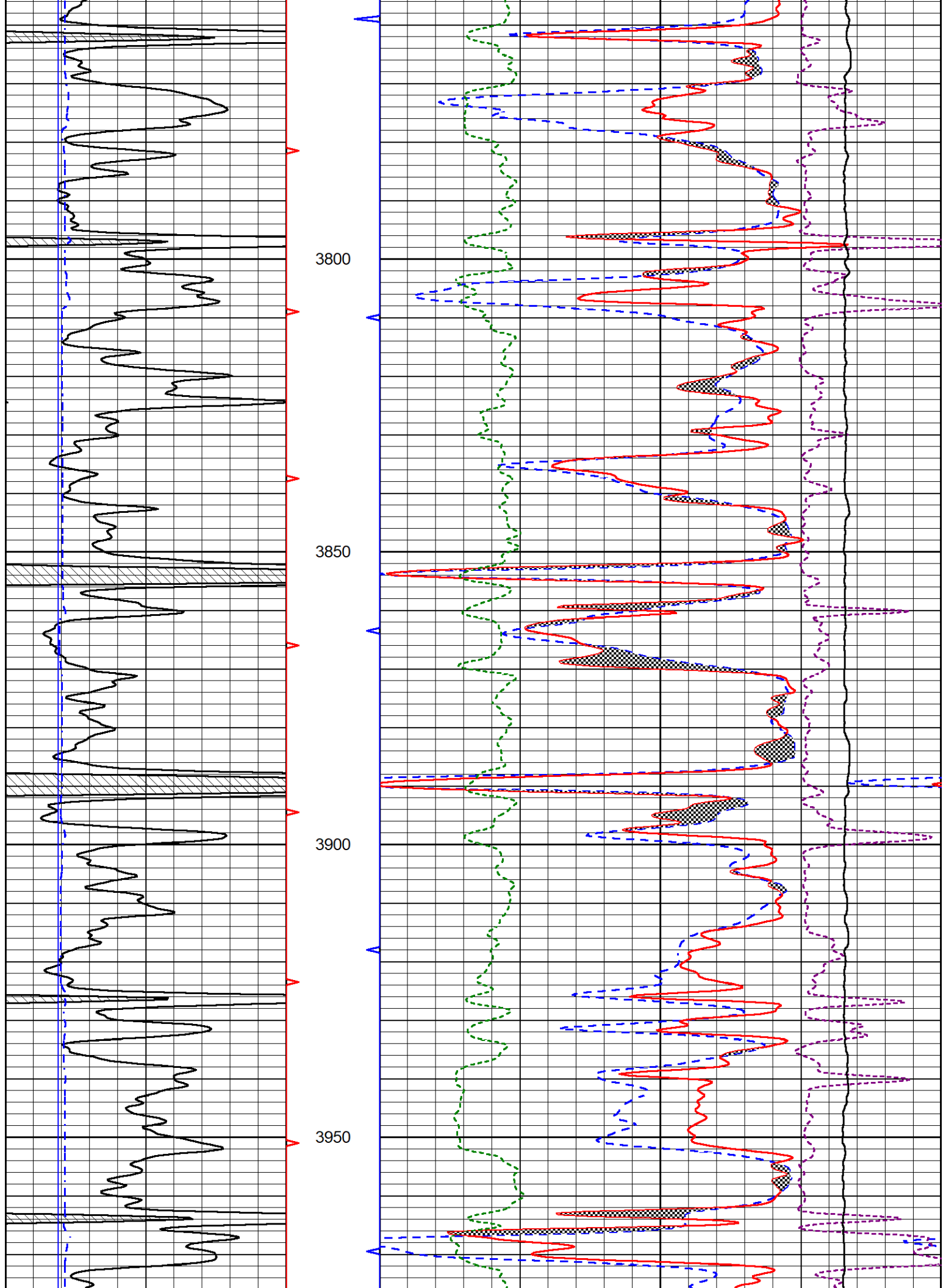
MAIN PASS

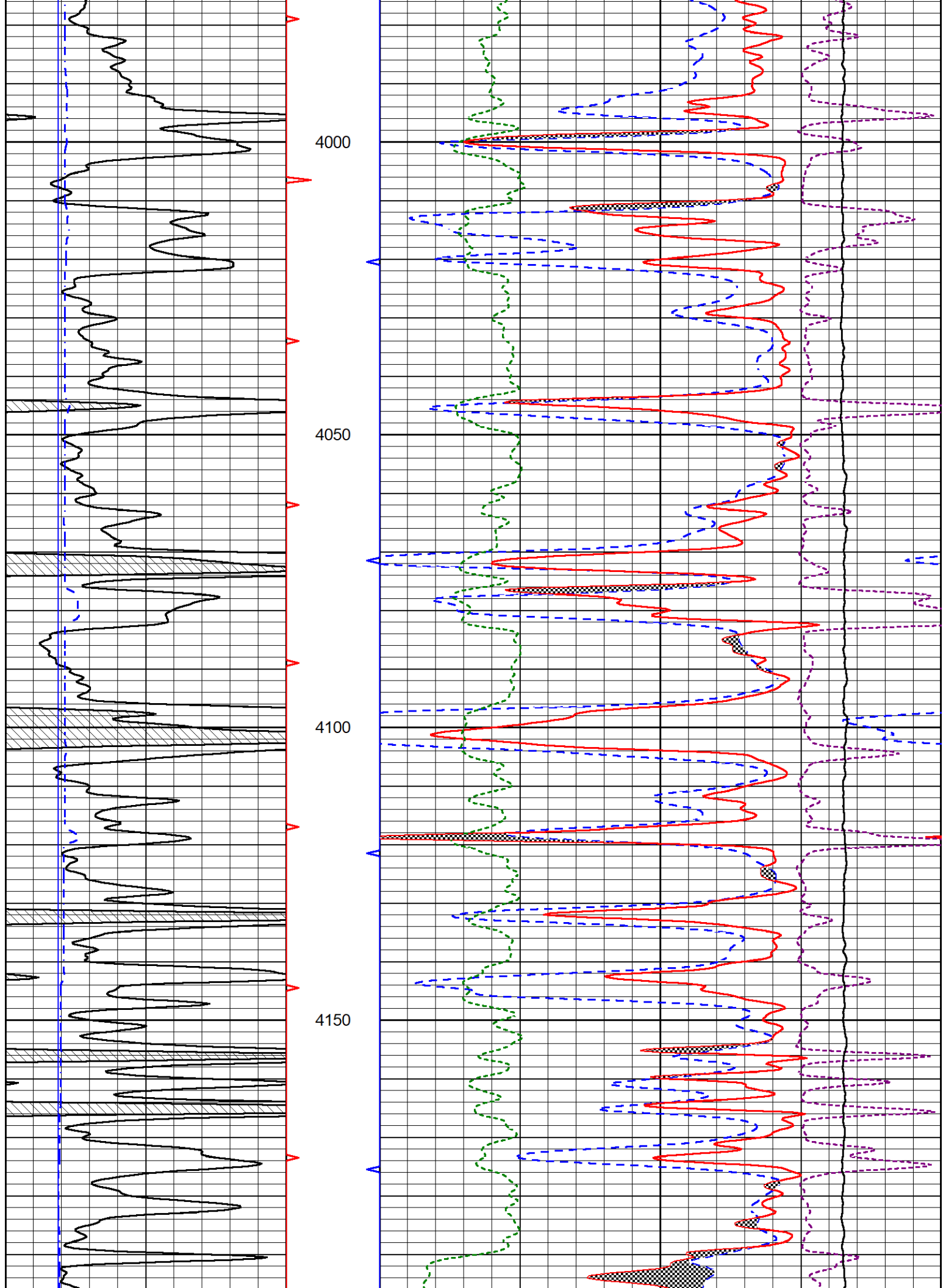
Database File: berexco_herman #1-13.db
 Dataset Pathname: Stack/pass3.1
 Presentation Format: _CNDLS~4
 Dataset Creation: Sat Aug 03 23:56:41 2024
 Charted by: Depth in Feet scaled 1:240

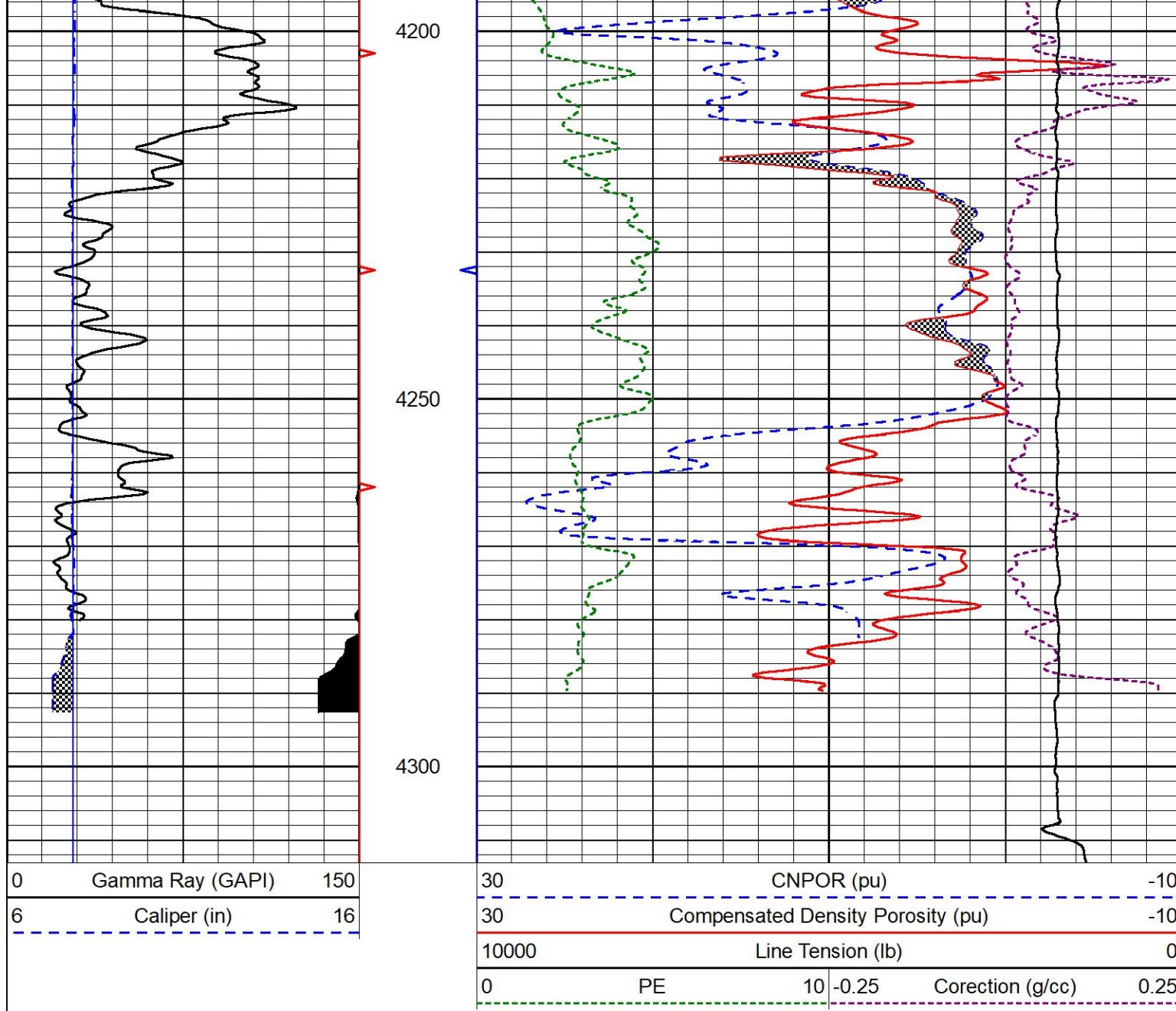








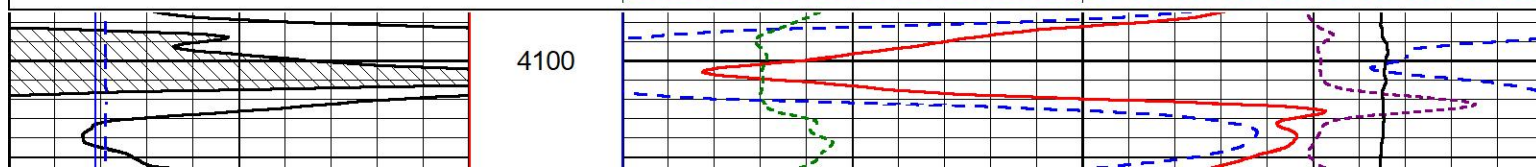
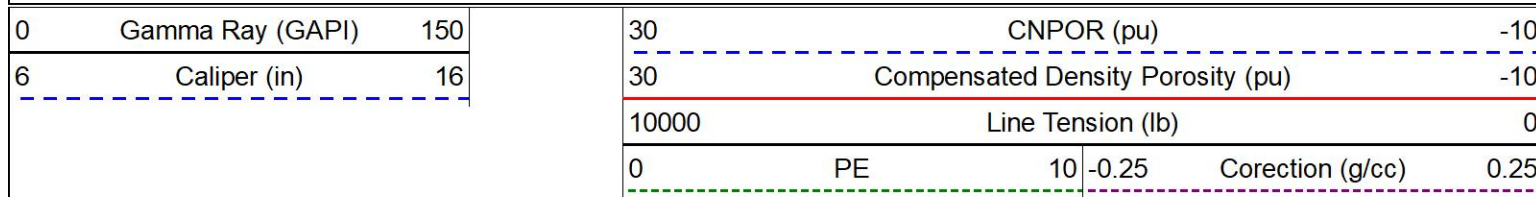


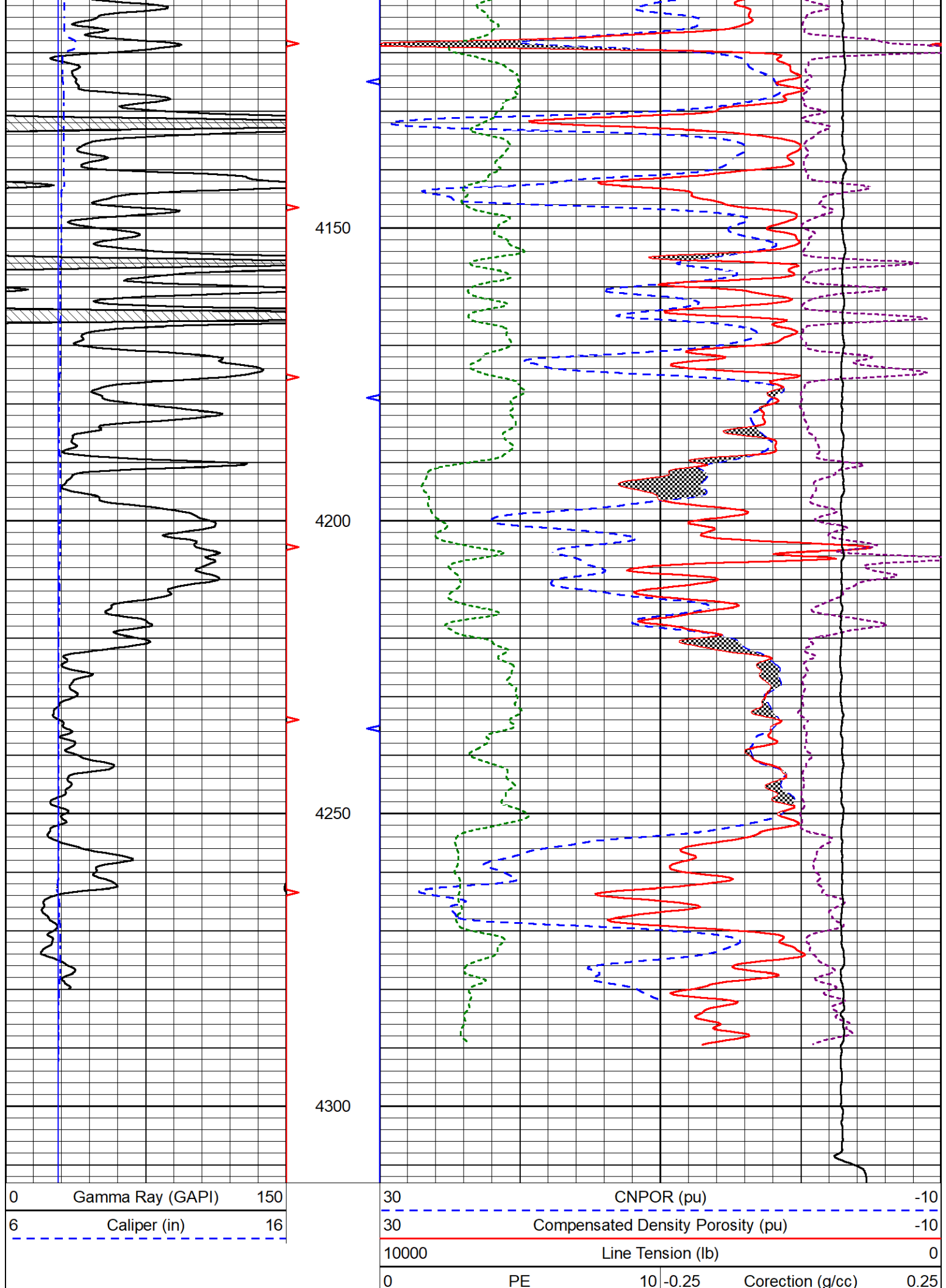


REPEAT SECTION

REPEAT PASS

Database File berexco_herman #1-13.db
Dataset Pathname Stack/pass2.1
Presentation Format _CNDLS~4
Dataset Creation Sat Aug 03 23:11:17 2024
Charted by Depth in Feet scaled 1:240





Database File	berexco_herman #1-13.db
Dataset Pathname	Stack/pass3.1
Dataset Creation	Sat Aug 03 23:56:41 2024

Serial-Model: 507-M&W
Surface Cal Performed:

		Readings		References		Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	68.570	638.100	0.000	255.800	mmho/m	0.500	-37.000
Medium	184.288	716.191	0.000	255.800	mmho/m	0.450	-79.000

Serial Number: 704-10
Tool Model: STEP LITHO
Performed: Wed Oct 11 14:52:04 2023

	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	52	56	202	260	22	71	45	1	cps
LS:	82	93	356	462	52	144	94	3	cps

Aluminum:

SS:	868	1009	2312	2012	39	73	47	2	cps
LS:	1063	1847	3324	1556	63	146	95	6	cps

Magnesium:

SS:	1458	1686	3853	2923	42	73	48	3	cps
LS:	4604	7631	13124	4967	100	134	94	14	cps

Aluminum+Iron:									
SS:	538	708	1910	1720	37	73	47	1	cps
LS:	619	1309	2817	1400	60	147	97	5	cps

	Density			PE		
	Actual	Calibrated		Actual	Calibrated	Quality
Background:						
SS:						0.225
LS:						0.208
Aluminum:						
SS:	2.6000	2.6000	g/cc			0.210
LS:	2.6000	2.6000	g/cc			0.210
Magnesium:						
SS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.207
LS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.173
Aluminum+Iron:						
SS:					6.1800	0.215
LS:					6.1800	0.205

Before Survey
Performed: Wed Feb 9 13:15:42 2022

SS:	0	0	0	0	0	0	0	cps
LS:	1370	1580	3705	3037	48	80	50	4 cps

After Survey
Performed: Wed Feb 9 13:16:03 2023

Performed: 0 0 0 0 0 0 0 0 0 cps LS: 1400 1600 3800 3100 60 100 70 6 cps									
Caliper: Reference: Reading: Small Ring: 6.0 in 0.2 Large Ring: 16.0 in 0.8 Gain: 16.161 Offset: 1.100									
Compensated Neutron Calibration Report									
Serial Number: 201-M&W 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		 pu		 pu			
	Long Space	 cps		 pu		 pu			
2)	Short Space	 cps		 pu		 pu			
	Long Space	 cps		 pu		 pu			
3)	Short Space	 cps		 pu		 pu			
	Long Space	 cps		 pu		 pu			
POST-SURVEY VERIFICATION									
Detector		Readings		Measured		Target			
1)	Short Space	 cps		 pu		 pu			
	Long Space	 cps		 pu		 pu			
2)	Short Space	 cps		 pu		 pu			
	Long Space	 cps		 pu		 pu			
3)	Short Space	 cps		 pu		 pu			
	Long Space	 cps		 pu		 pu			
Gamma Ray Calibration Report									
Serial Number:		105							
Tool Model:		M&W							
Performed:		Mon Aug 7 20:46:01 2023							
Calibrator Value:		500.0		GAPI					
Background Reading:		24.0		cps					
Calibrator Reading:		637.0		cps					
Sensitivity:		0.6000		GAPI/cps					

	Company	Berexco LLC
	Well	Herman #1-13
	Field	



County
State

Gove
Kansas