



County Weld State Colorado

Other Services

None

Permanent Datum	Ground Level	Elevation	4907
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Drilling Measured From	Kelly Bushing	G.L. 4907
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Date	04-AUG-2016
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Depth Driller	8029 FT
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Depth Logged	2024 FT
Bottom Logged Interval	2020 FT

Open Hole Size	7 875"
Log Interval	Surface

Type Fluid	Water
Density, ρ (lbm/ft ³)	62.4

Max. Recorded Temp.	101°F
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Time Well Ready	ROA
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Equipment Number	HD-0324
Time Logged on Bottom	07:30

Recorded By	Sam Hanner
Location	Fort Lupton, CO

Witnessed By	Mike Lee
Reschedule Record	

Run Number	Bit	From	To

[illegible]

Surface Casing	8 5/8	24	
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intermediate #1	4 1/2	1.0	
intermediate #2			

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Comments

Log ran as per customer request
Depth referenced to JW Wireline CBL dated 26-OCT-2009
Adjusted log -14 FT to correlate with JW Wireline log
Log ran from 2020 FT to surface
Log ran with 0 PSI surface induced pressure
Logging tools were clean and free of any debris upon completion of operations

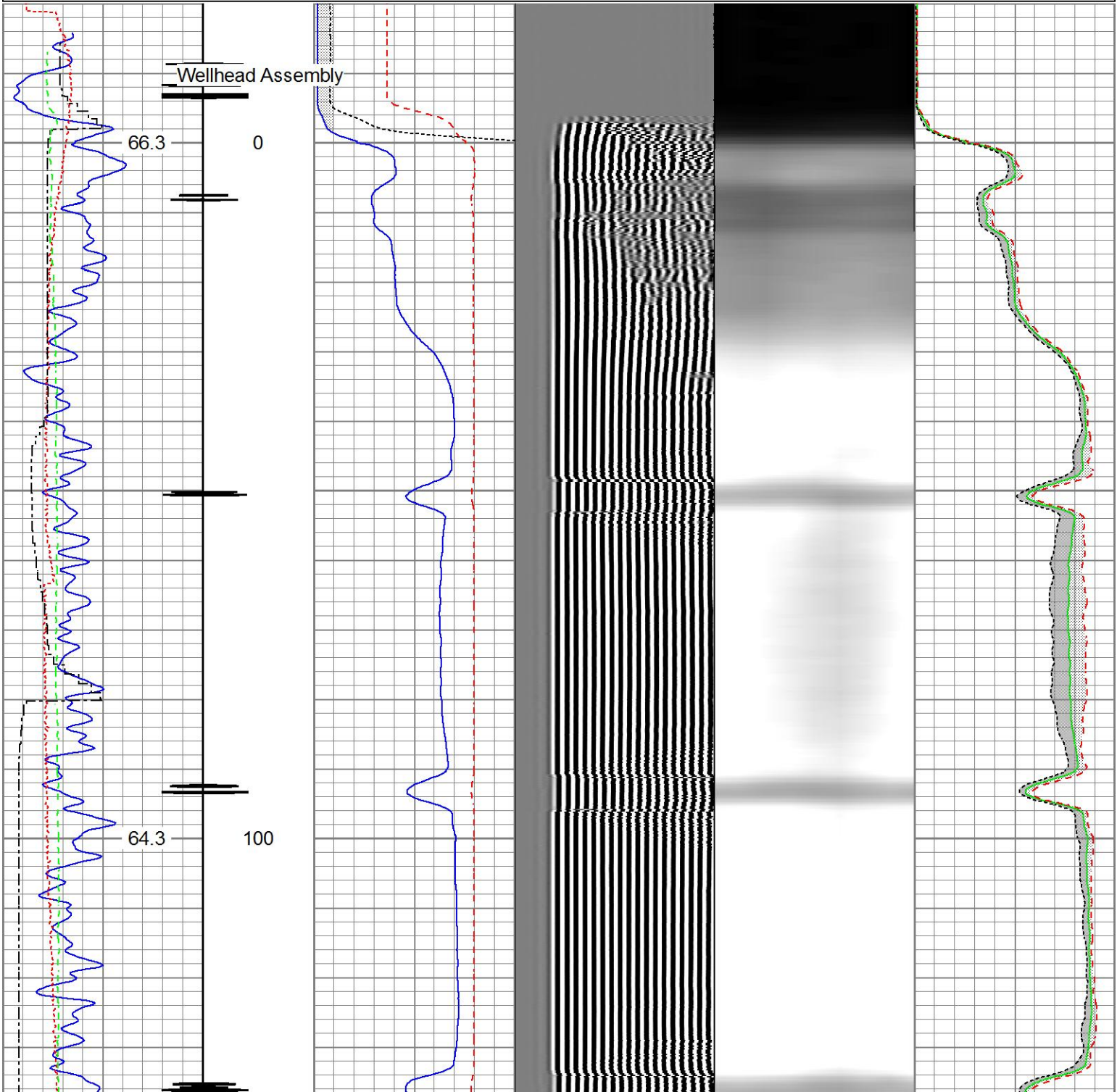
Thank you for choosing Reliance Oilfield Services, LLC!!

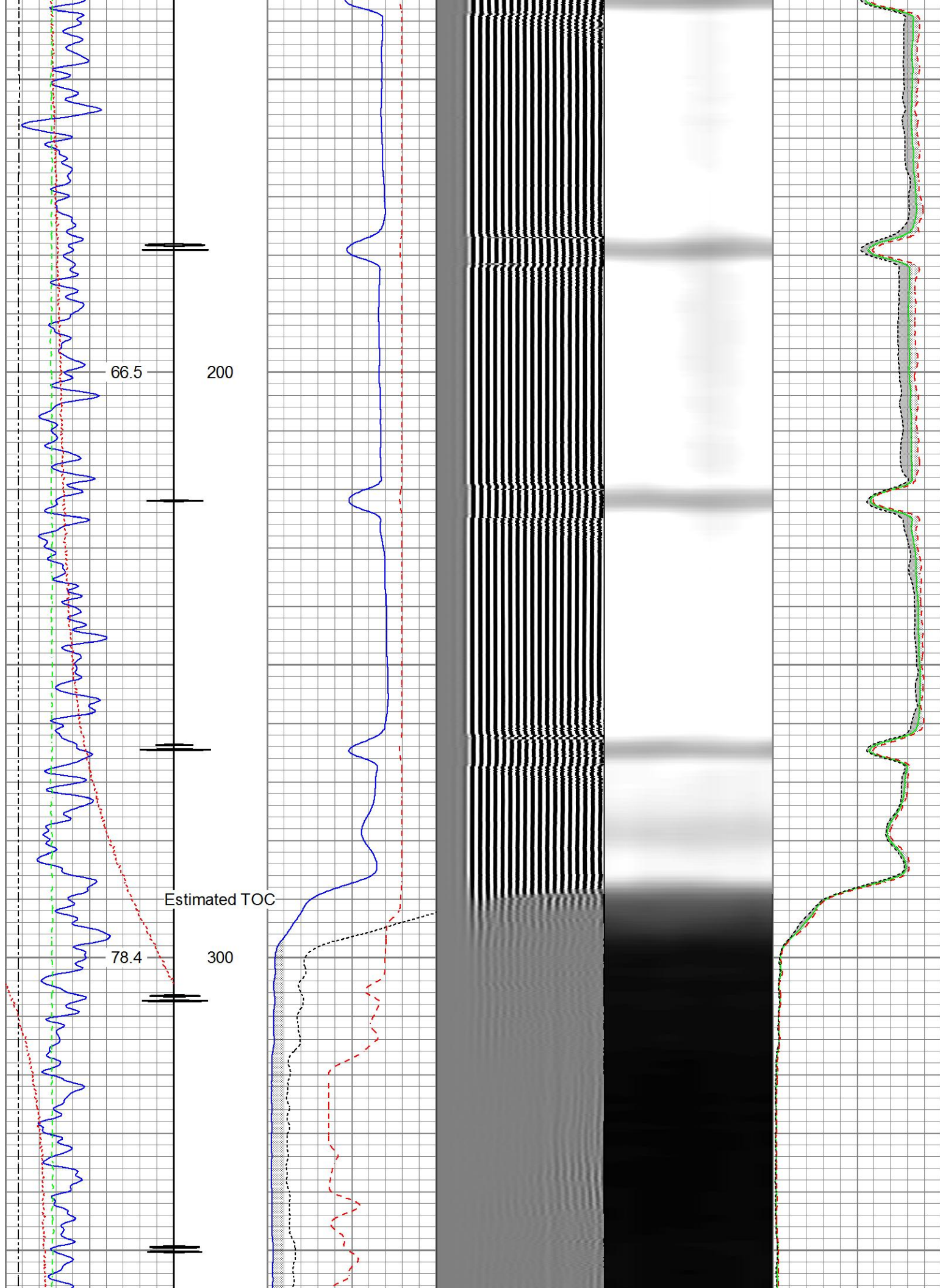
Main Pass

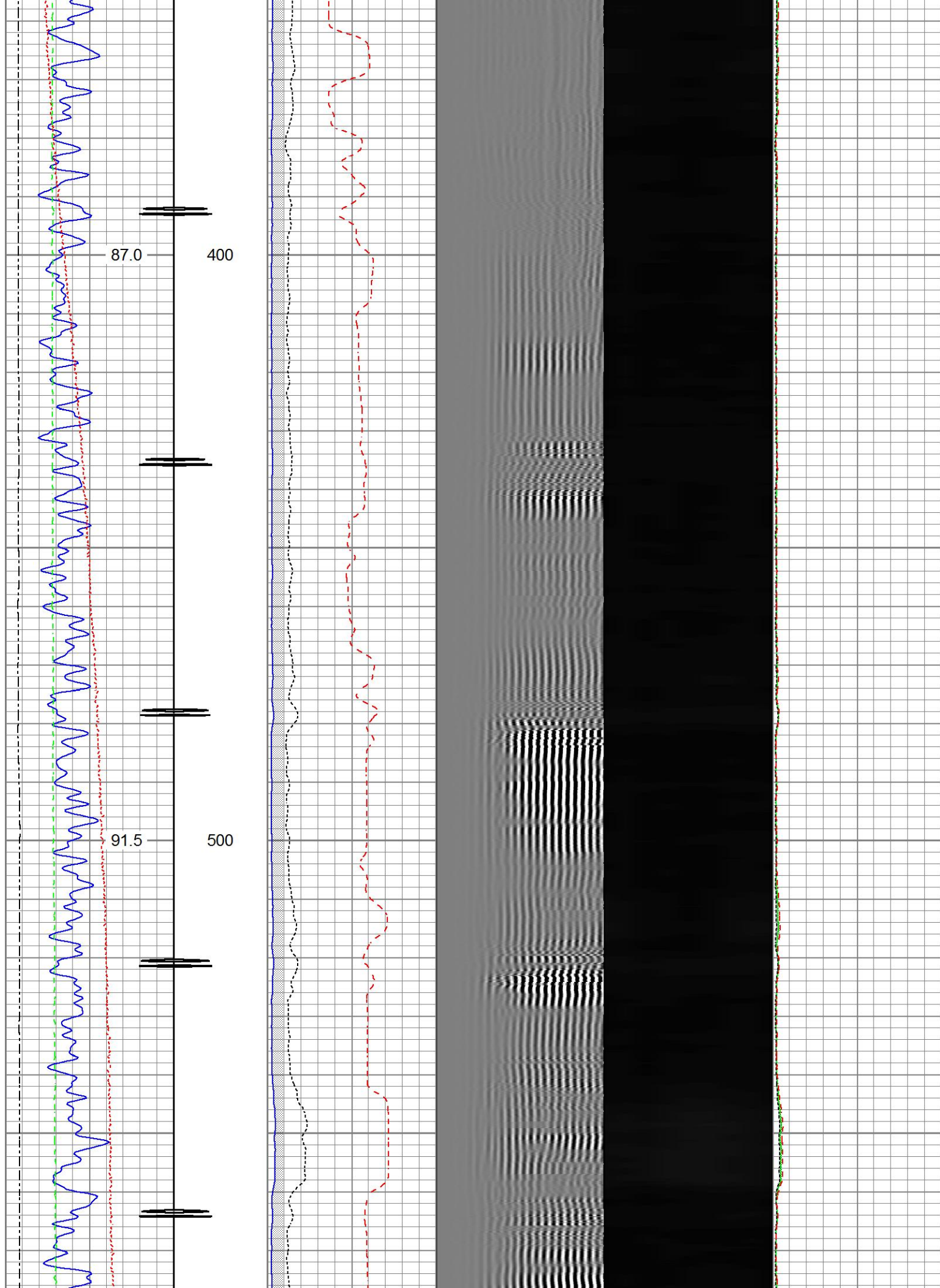
Recorded With 0 PSI Surface Induced Pressure

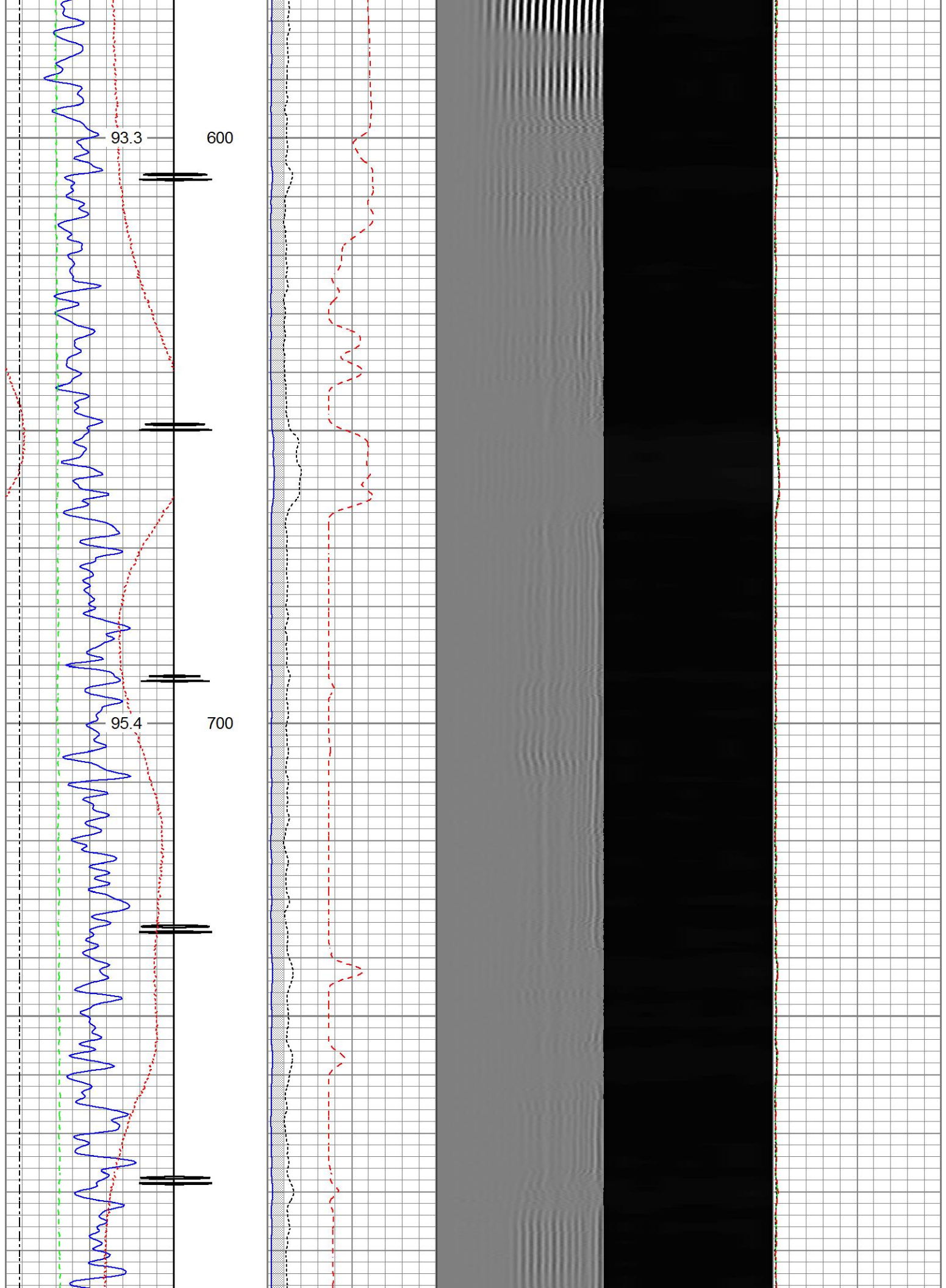


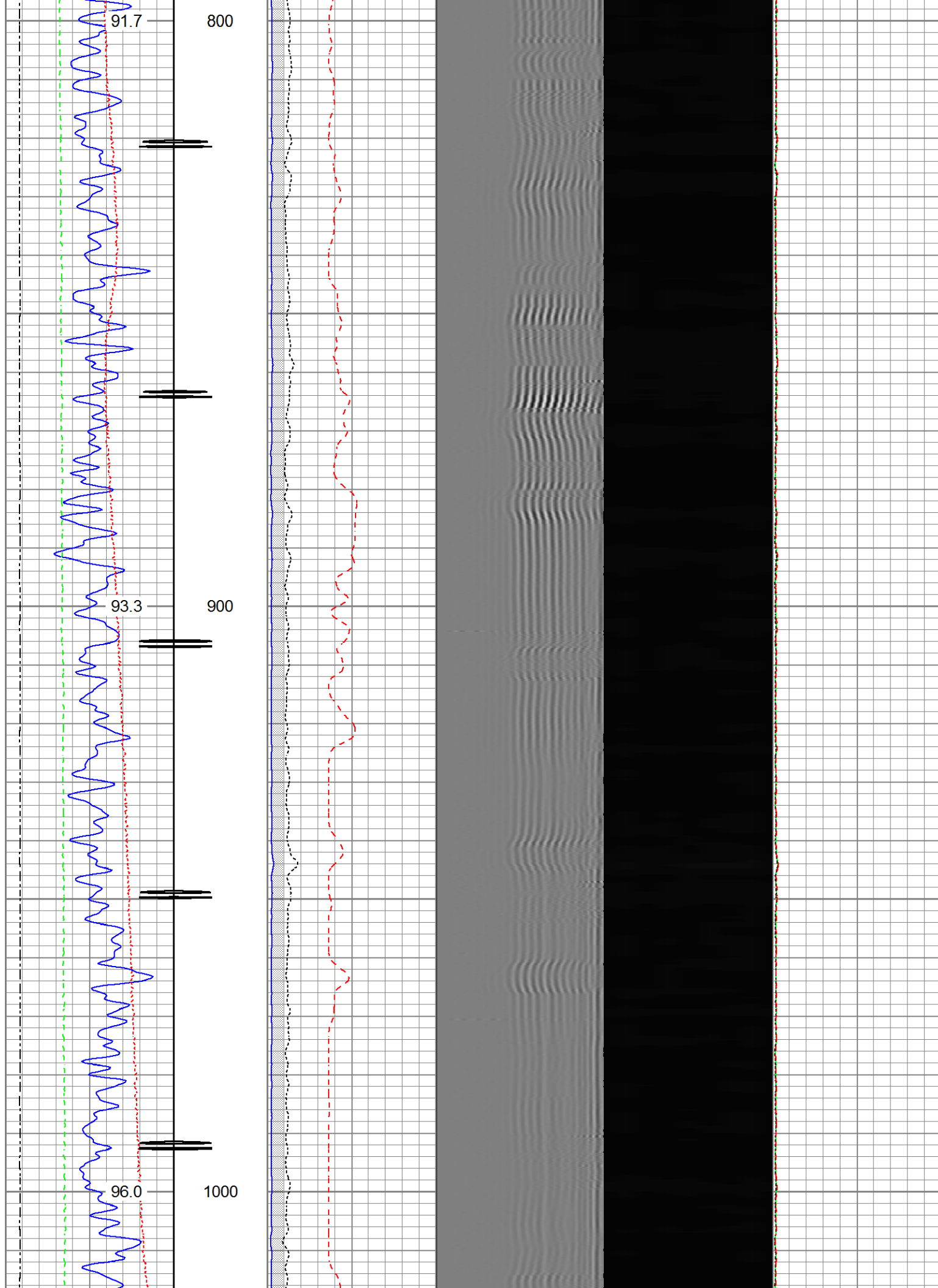
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150				
Line Tension				
0 (lb) 2000				

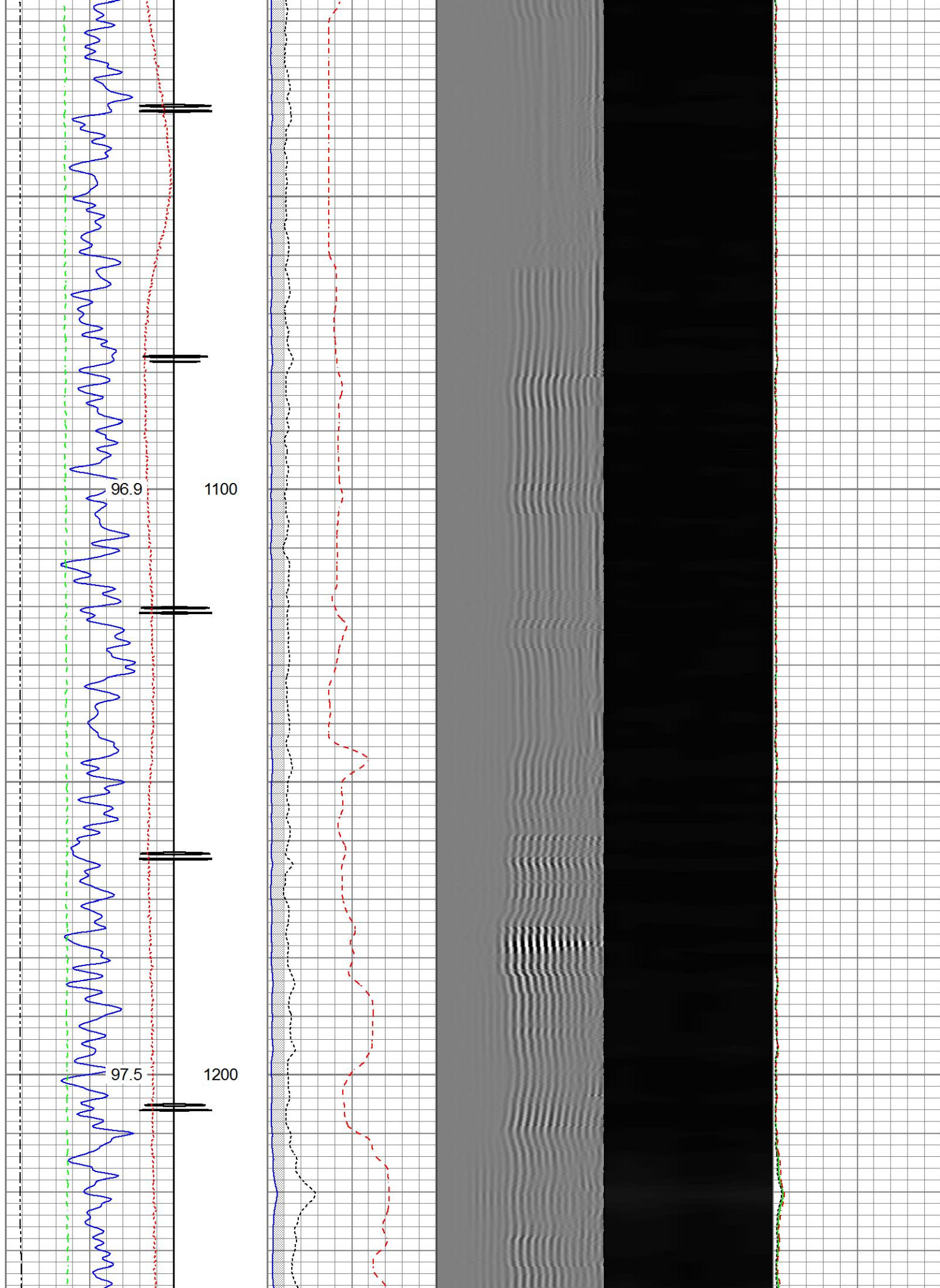


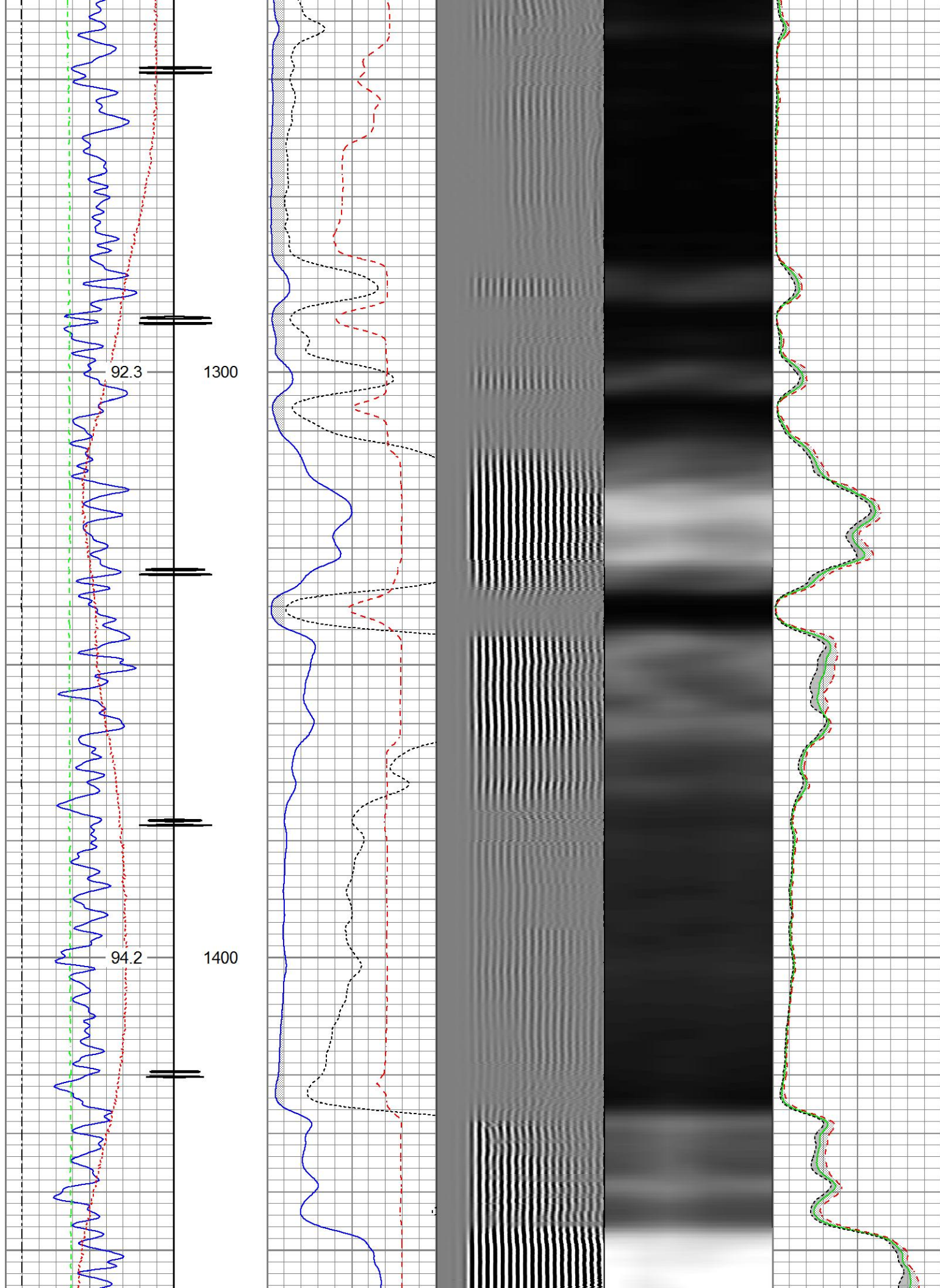


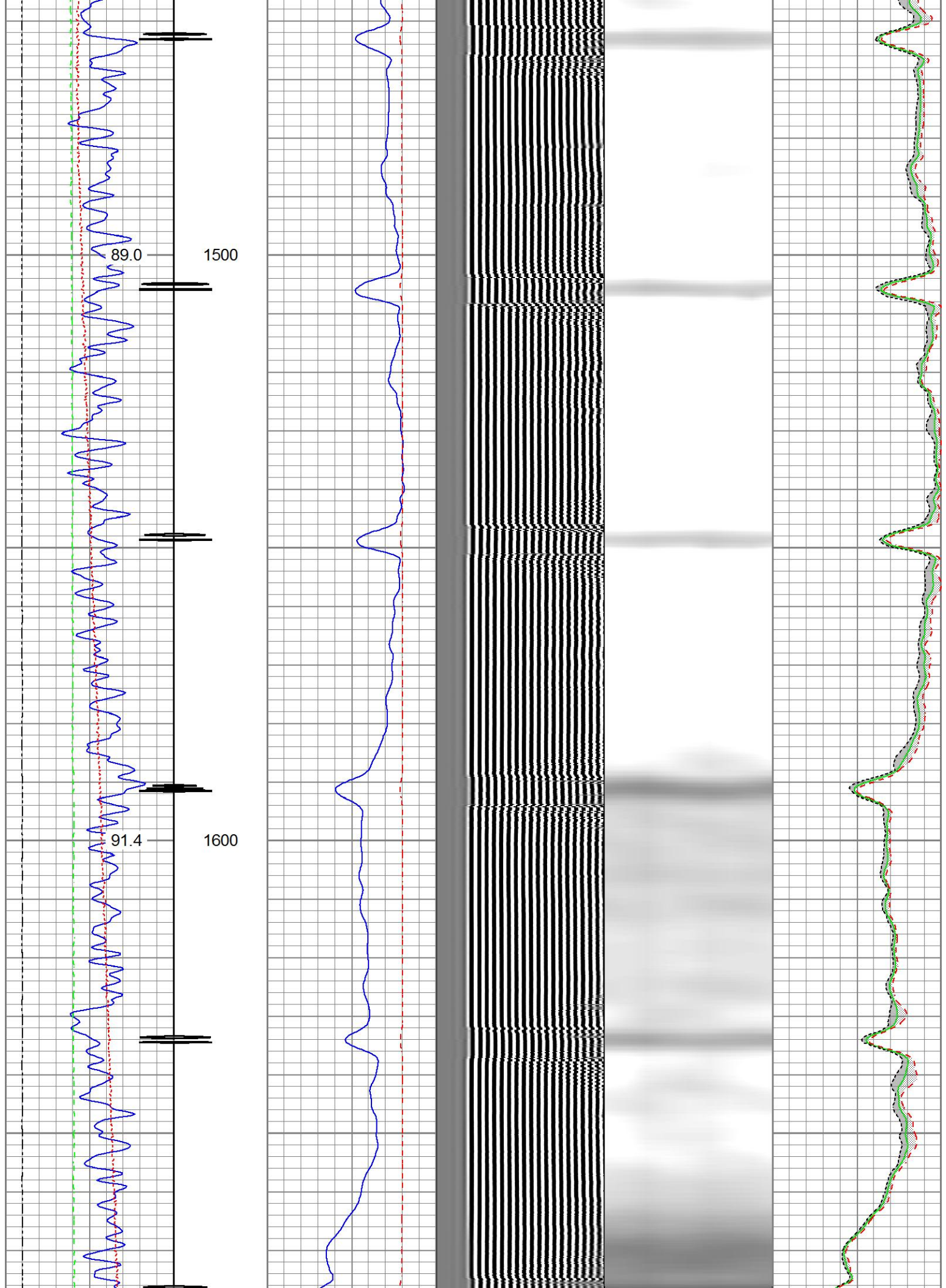


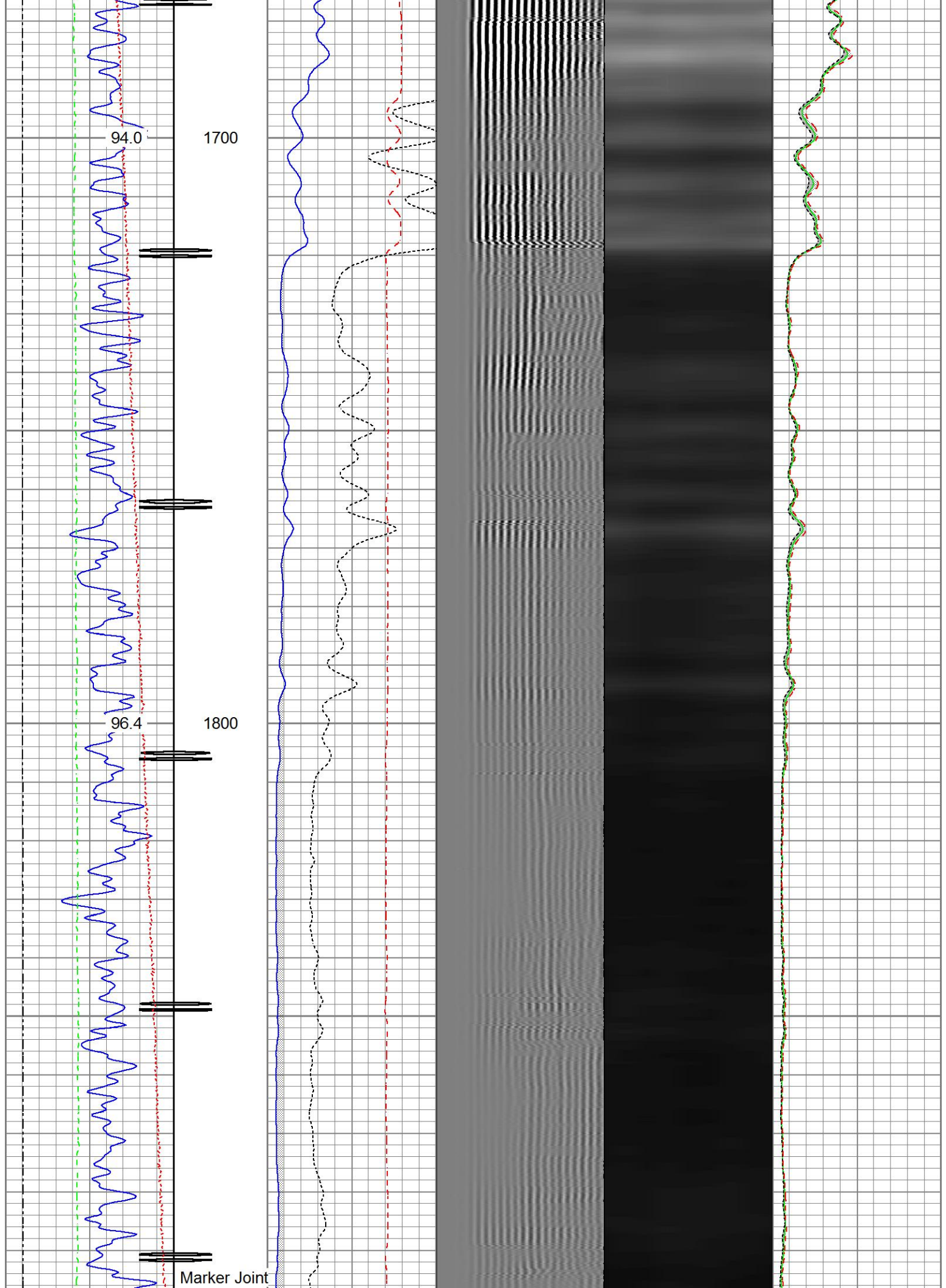


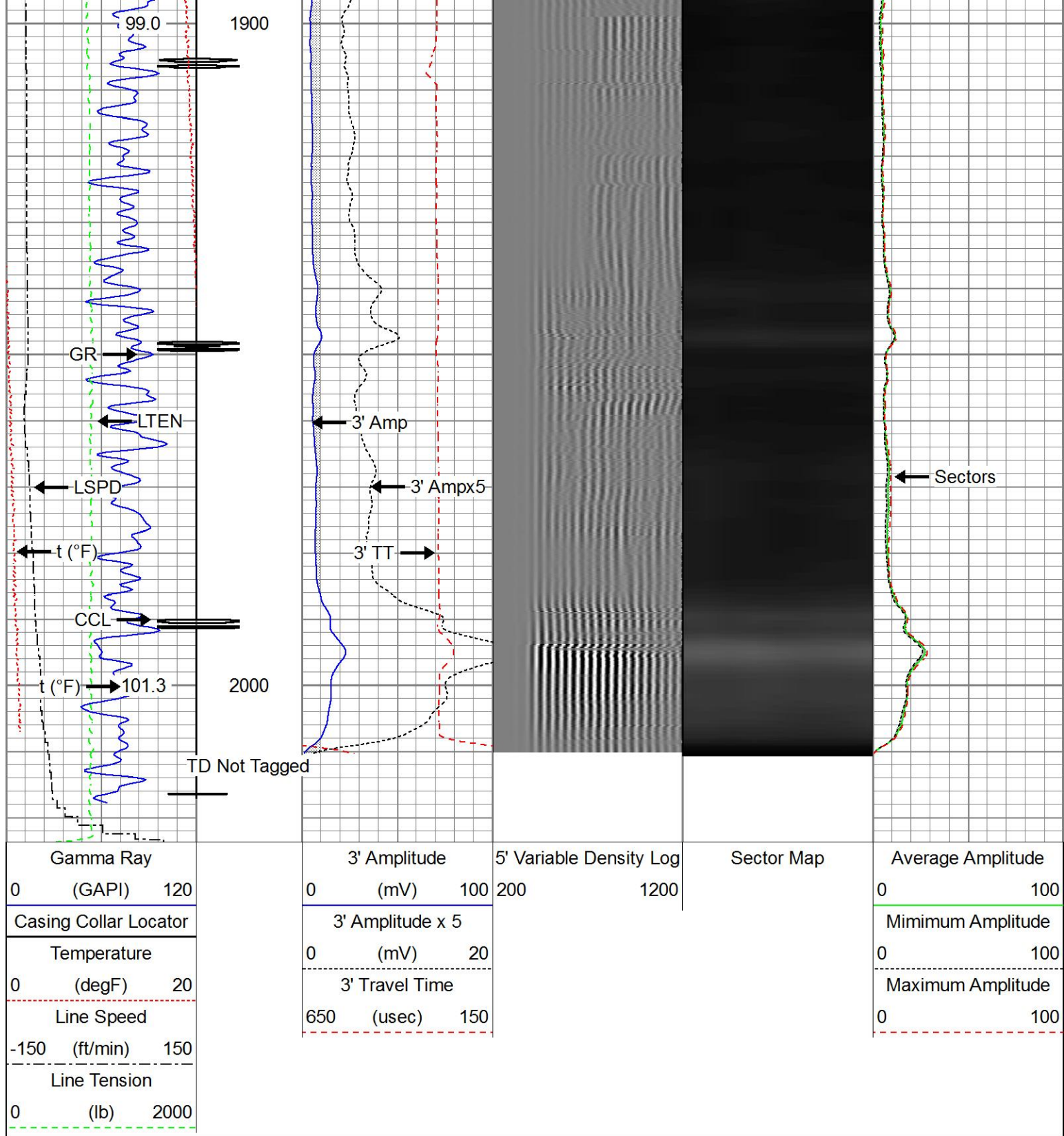








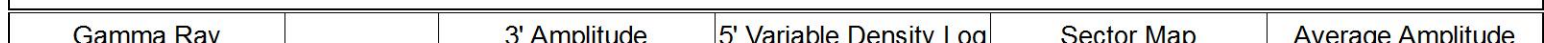




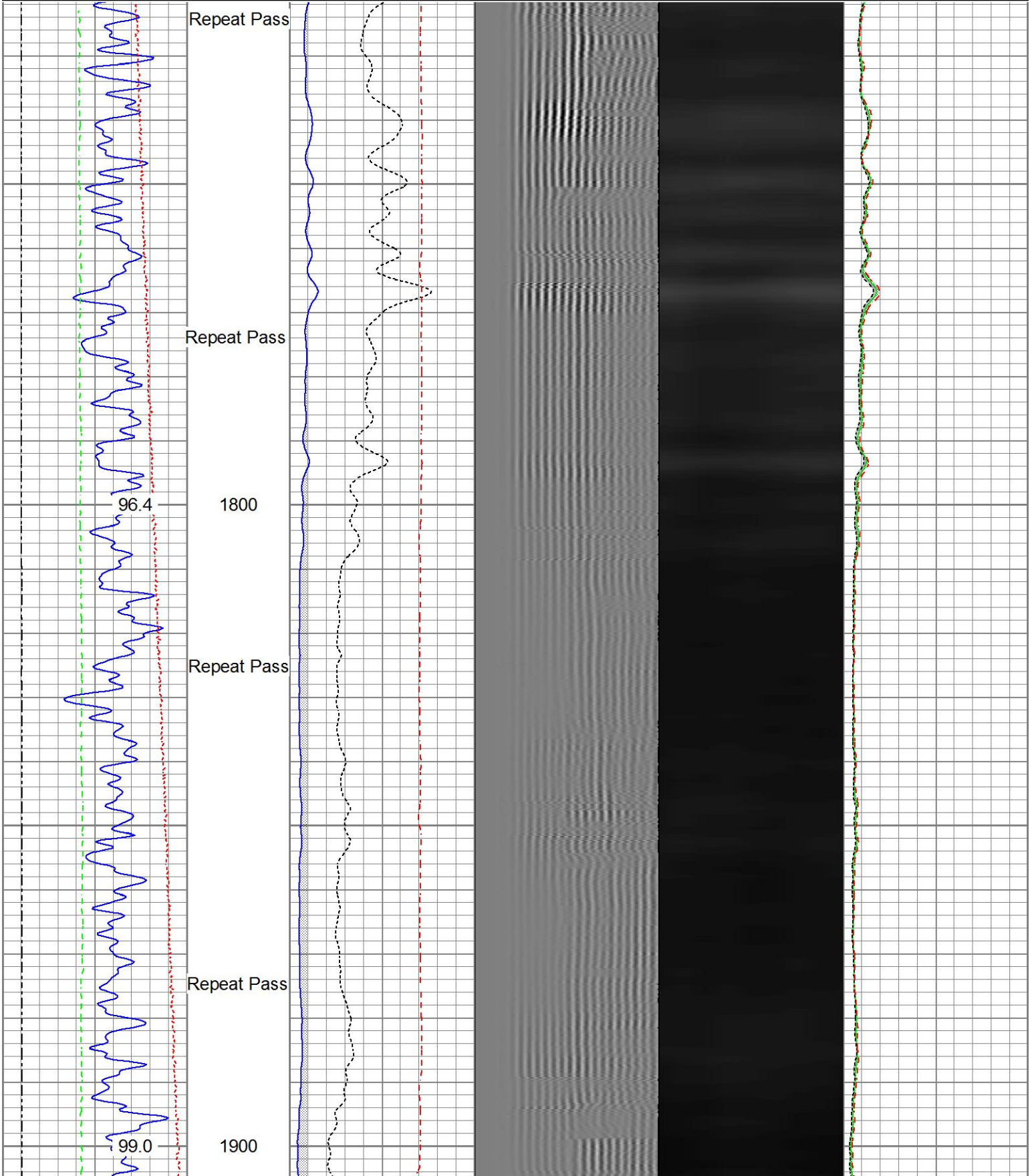
Repeat Pass

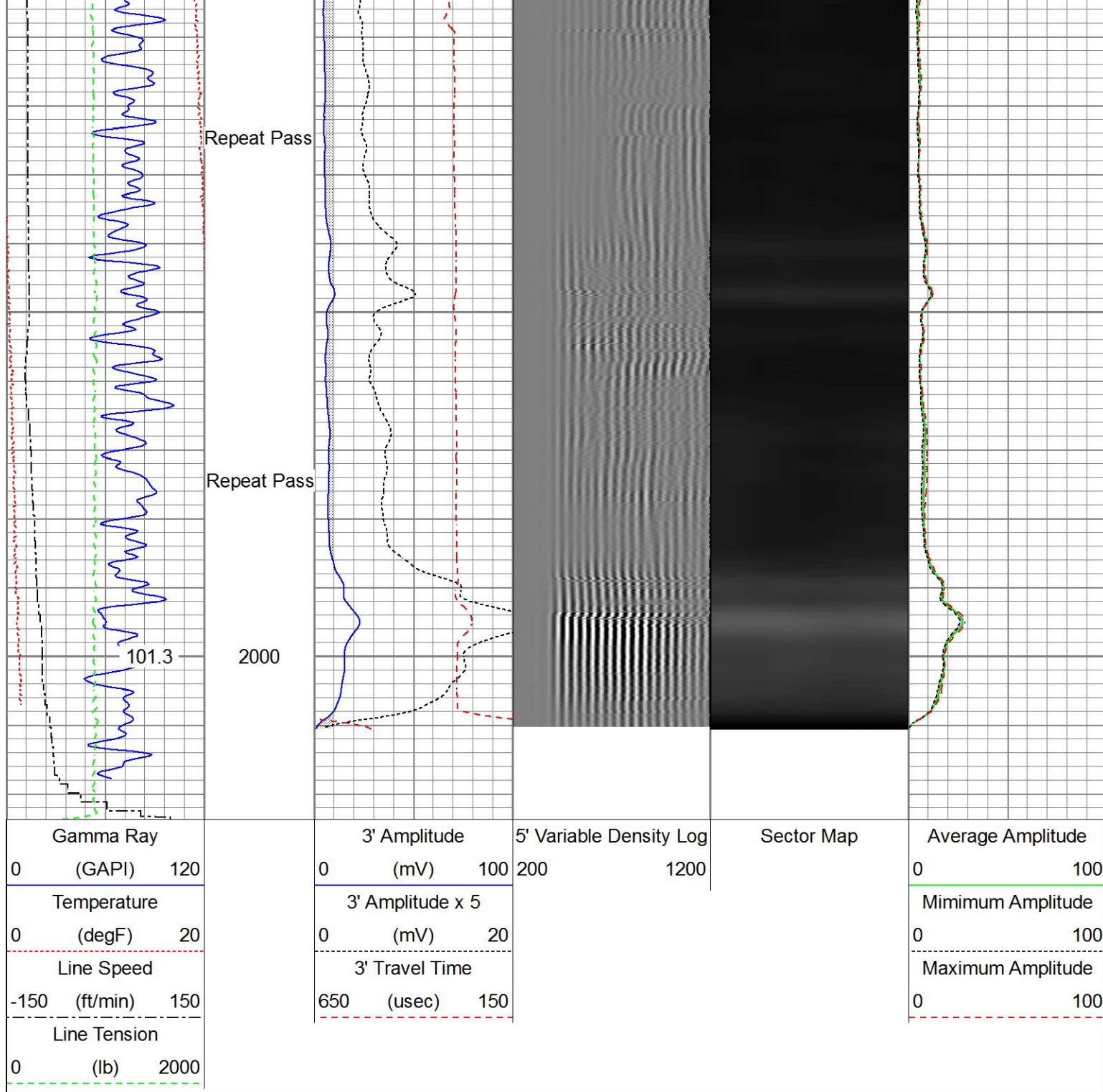
Recorded With 0 PSI Surface Induced Pressure

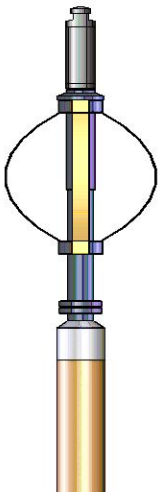
Database File: anadarko_miller | 29-22_04-aug-2016_vert_rbl_w8.db
 Dataset Pathname: pass2.1
 Presentation Format: ros_radrii
 Dataset Creation: Thu Aug 04 07:59:56 2016
 Charted by: Depth in Feet scaled 1:240

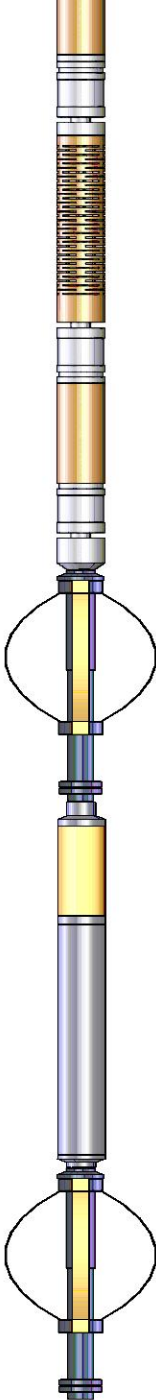


0 (GAPI) 120			0 (mV) 100			200 1200			0 100		
Temperature			3' Amplitude x 5						Minimum Amplitude		
0 (degF) 20			0 (mV) 20						0 100		
Line Speed			3' Travel Time						Maximum Amplitude		
-150 (ft/min) 150			650 (usec) 150						0 100		
Line Tension											
0 (lb) 2000											





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-11/161.03 Electric Cable Head with 1" Fishing Neck	1.69	1.69	5.40
			Probe_ELine_BowSpring_Centralizer-P-EE2.88_275 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.75	2.75	20.00

Temp	16.72				
WVFS8	14.55		Probe_RADII-C-P_RBT_2750 (FW1302-009.19)	2.75	105.00
WVFS7	14.55		Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe		
WVFS6	14.55				
WVFS5	14.55				
WVFS4	14.55				
WVFS3	14.55				
WVFS2	14.55				
WVFS1	14.55				
WVFCAL	14.55				
WVF3FT	14.55				
WVF5FT	13.55				
HeadVolt	10.30				
DCCL	6.51		Probe_ELine_BowSpring_Centralizer-P-EE2.88.275	2.75	20.00
CCL	6.51		Probe 2-3/4" Electric Inline Bowspring Centralizer		
GR	3.77		Probe_GR_CCL-P_CGR_2750_S (FW1214.543)	2.75	55.00
			Probe 2-3/4" Digital CCL / Gamma Ray Combined		
			Probe_ELine_BowSpring_Centralizer-P-EE2.88.275	2.75	20.00
			Probe 2-3/4" Electric Inline Bowspring Centralizer		
Dataset: anadarko_miller 29-22_04-aug-2016_vert_rbl_w8.db: field/well/run1/pass3.1					
Total length: 23.40 ft					
Total weight: 225.40 lb					
O.D.: 2.75 in					

Calibration Report		
Database File	anadarko_miller 29-22_04-aug-2016_vert_rbl_w8.db	
Dataset Pathname	pass3.1	
Dataset Creation	Thu Aug 04 07:58:50 2016	
Gamma Ray Calibration Report		
Serial Number:	FW1212-026	
Tool Model:	P_CGR_2750_S	
Performed:	Sat Feb 06 11:32:54 2016	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.6	cps

Sensitivity:

0.6061

GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1302-002
Tool Model: P_RBT_2750

Calibration Casing Diameter: 4.500 in
Calibration Depth: 36.400 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.581	0.800	81.196	138.763	0.590
CAL	0.007	0.738				
5'	0.000	0.472	0.800	81.196	170.628	0.744
SUM						
S1	0.001	0.561	0.000	100.000	178.755	-0.257
S2	0.001	0.579	0.000	100.000	173.156	-0.254
S3	0.002	0.615	0.000	100.000	162.934	-0.282
S4	0.002	0.620	0.000	100.000	161.660	-0.298
S5	0.002	0.628	0.000	100.000	159.724	-0.288
S6	0.002	0.618	0.000	100.000	162.186	-0.257
S7	0.001	0.583	0.000	100.000	171.895	-0.250
S8	0.002	0.566	0.000	100.000	177.033	-0.281

Internal Reference Calibration, performed Thu Aug 04 07:15:32 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.006	0.760	0.007	0.738	0.971	0.000

Air Zero Calibration, performed Thu Aug 04 07:14:51 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.007		0.000		0.000	
5'	0.007		0.000		-0.000	
SUM						
S1	0.007		0.000		0.000	
S2	0.007		0.000		0.000	
S3	0.007		0.000		0.000	
S4	0.007		0.000		0.000	
S5	0.006		0.000		0.000	
S6	0.007		0.000		0.000	
S7	0.007		0.000		0.000	
S8	0.007		0.000		0.000	



Company Kerr-McGee Oil & Gas Onshore, L.P.
Well Miller L 29-22
Field Wattenberg
County Weld
State Colorado

