



**Radial Cement Bond
Gamma Ray
Casing Collar Log**

Company Kerr-McGee Oil & Gas Onshore, L.P.
Well Mayer X 33-15DI
Field Wattenberg
County Weld
State Colorado

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Location: API #: 05-123-19629
SEC 33 TWP 2N RGE 65W
Permanent Datum Ground Level Elevation 4898'
Log Measured From Kelly Bushing 12 FT
Drilling Measured From Kelly Bushing
Other Services
Elevation
K.B. 4910'
D.F. 4909'
G.L. 4898'

Date	10-May-2016
Run Number	One
Depth Driller	8050 FT
Depth Logger	1330 FT
Bottom Logged Interval	1330 FT
Top Log Interval	Surface
Open Hole Size	---
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	83°F
Estimated Cement Top	918 FT
Time Well Ready	ROA
Time Logger on Bottom	7:50
Equipment Number	HD-0343
Location	Fort Lupton, CO
Recorded By	Robert Fogarty
Witnessed By	Sam Sloan

Run Number	Borehole Record		Tubing Record				
	Bit	From	To	Size	Weight	From	To
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom		
Surface Casing	8 5/8	24	---	12 FT	912 FT		
Intermediate #1	4 1/2	13.5	N-80	12 FT	794.7 FT		
Intermediate #2							
Liner							

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Log ran as per customer request
Depth referenced to Kelly Bushing at 12 FT
Adjusted +2 FT to correlate with Kelly Bushing
Log ran from 1330 FT to surface
Recorded with 0 PSI Surface Induced Pressure
Logging tools were clean and free of any debris upon completion of operations

Thank you for choosing FMC Technologies Surface Integrated Services.

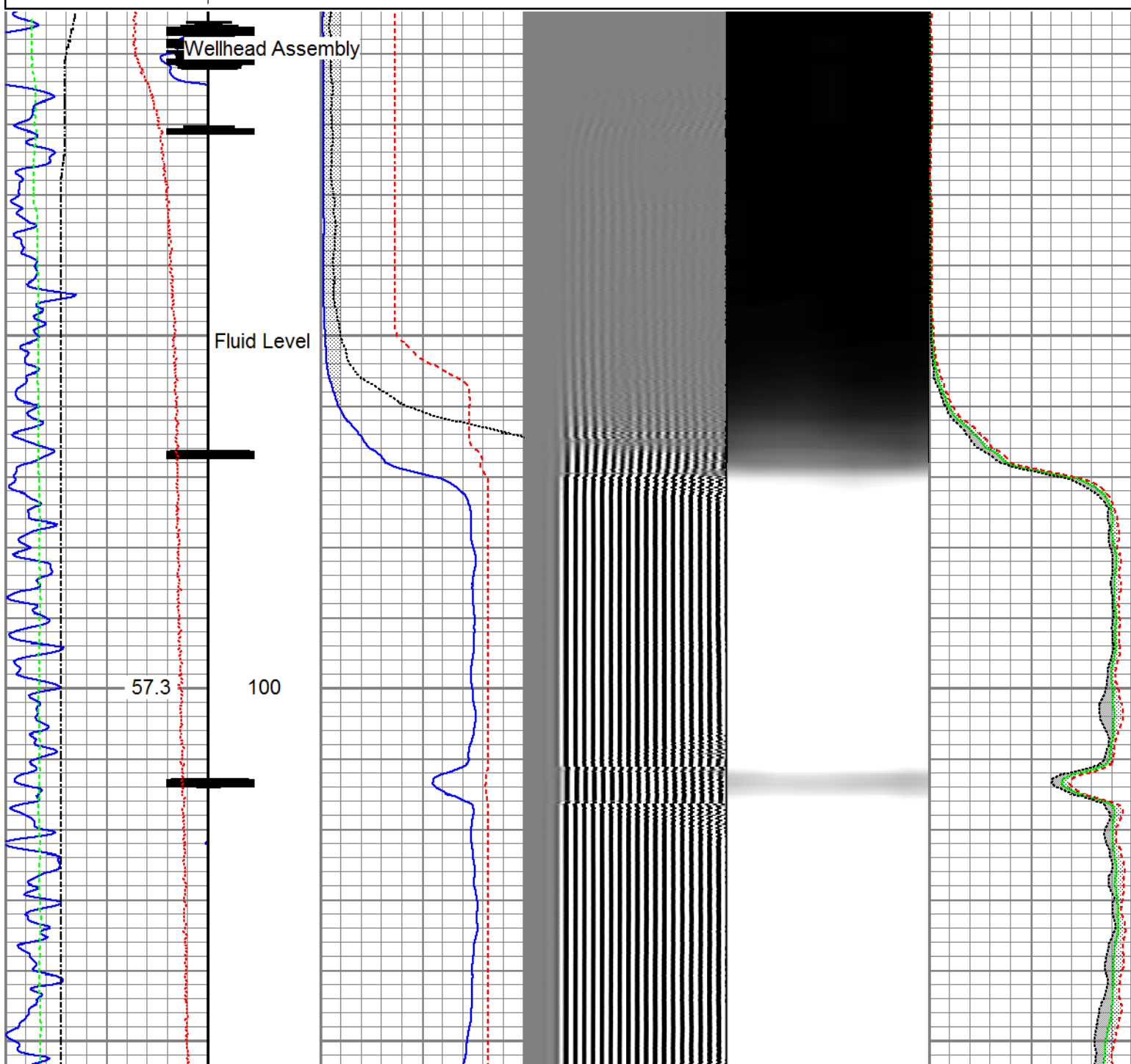


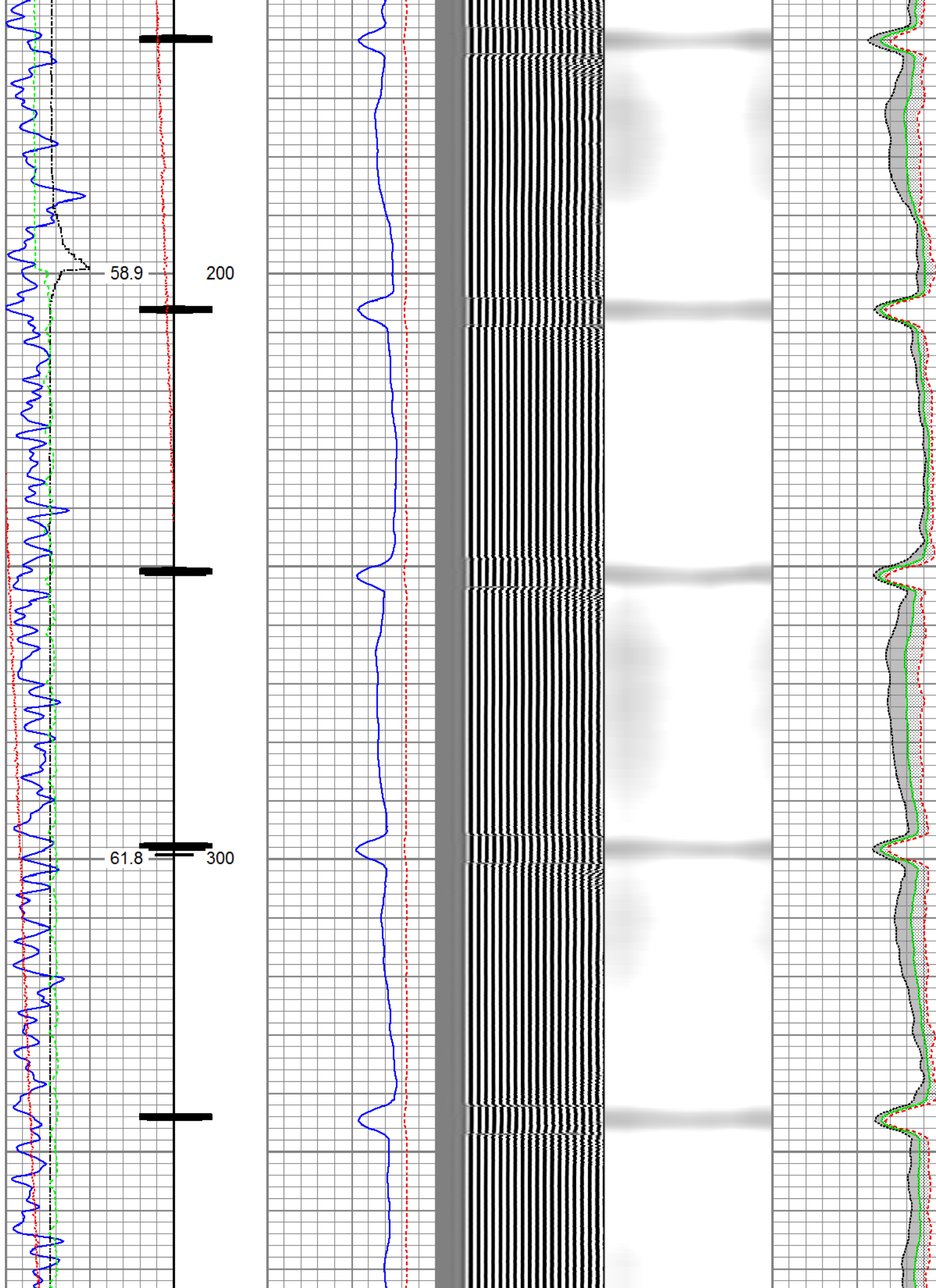
Main Pass

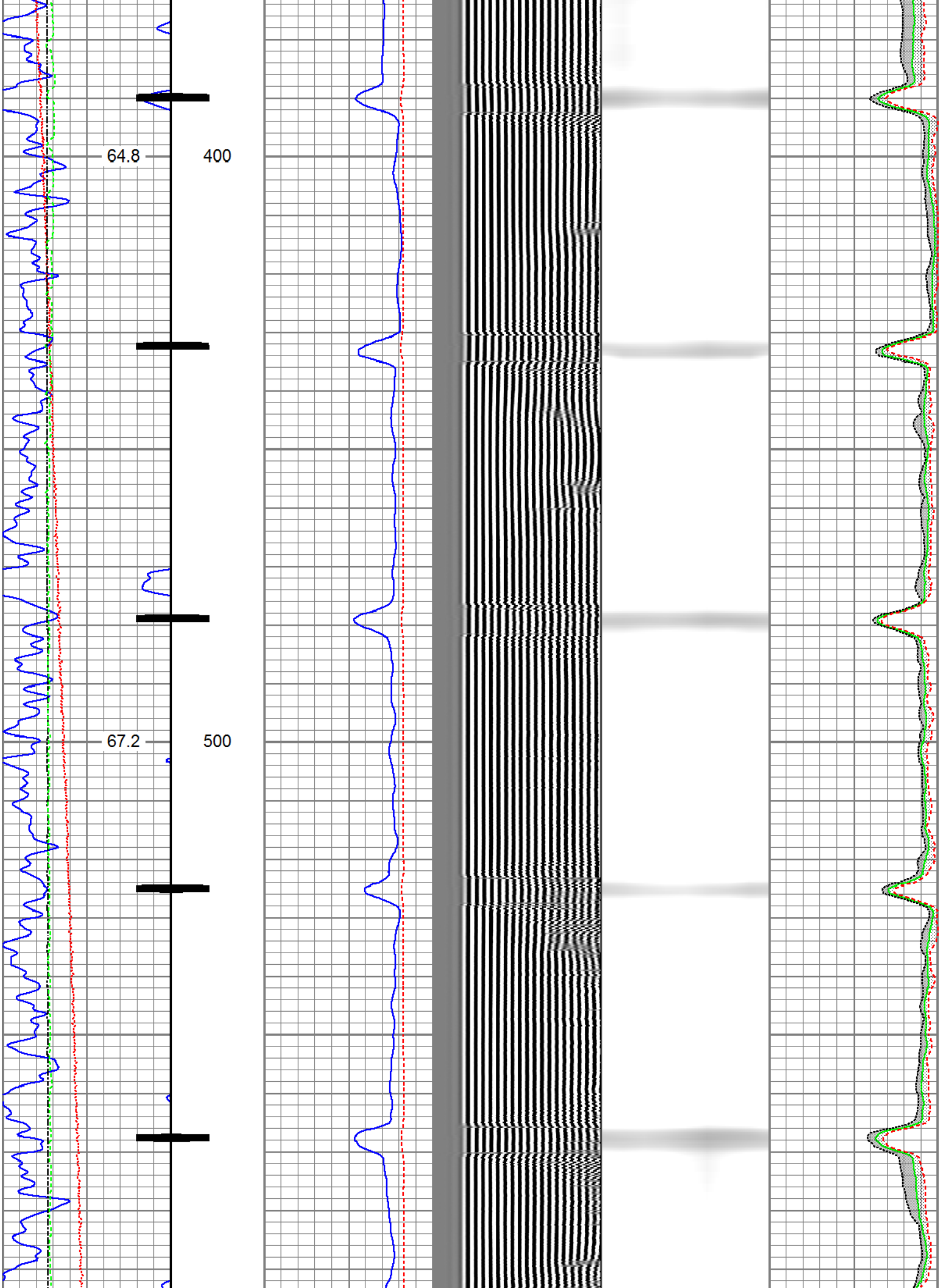
Recorded with 0 PSI Surface Induced Pressure

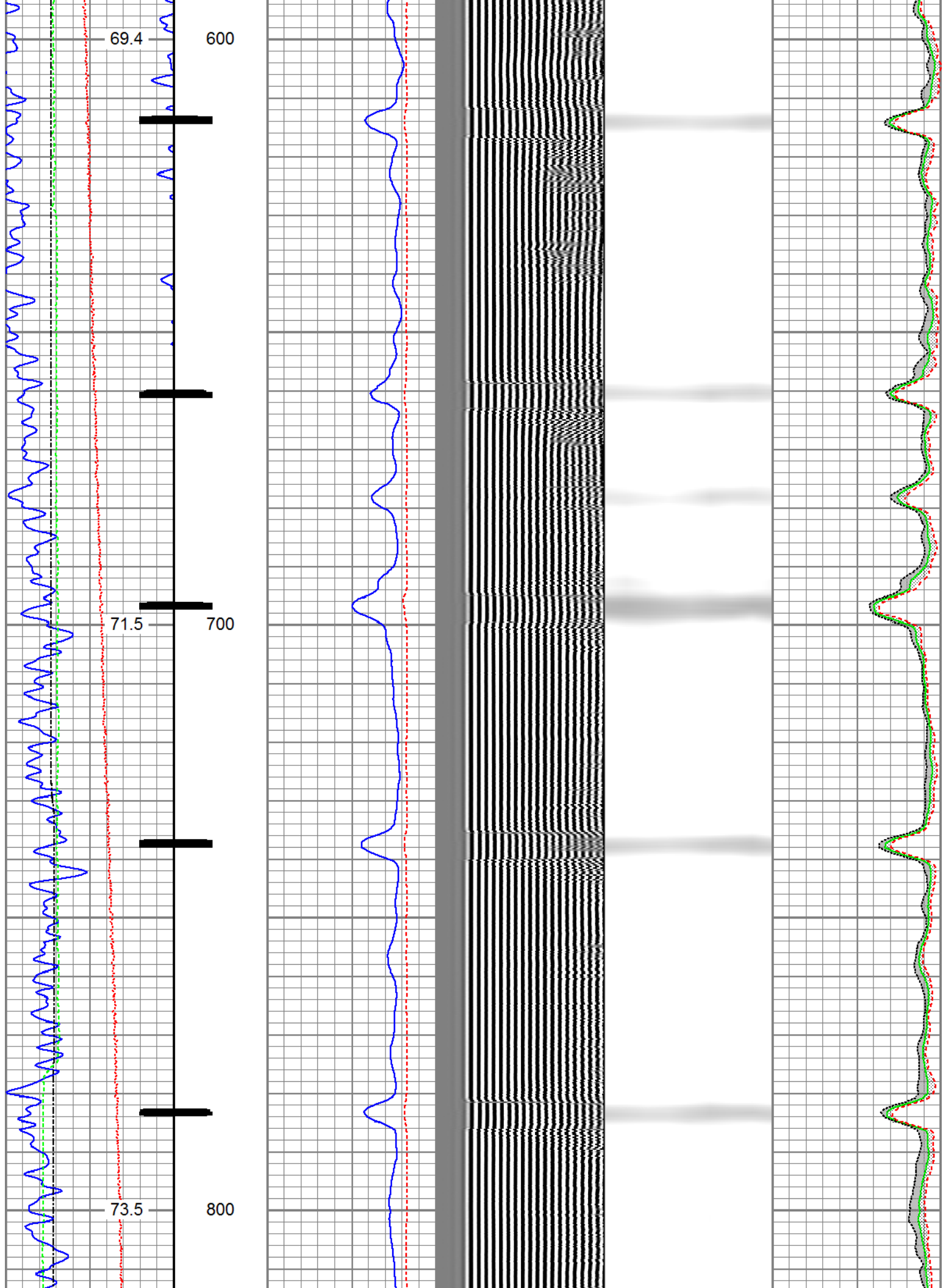
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 Dataset Pathname pass5.1
 Presentation Format fmc_radii_vert
 Dataset Creation Tue May 10 08:14:54 2016
 Charted by Depth in Feet scaled 1:240

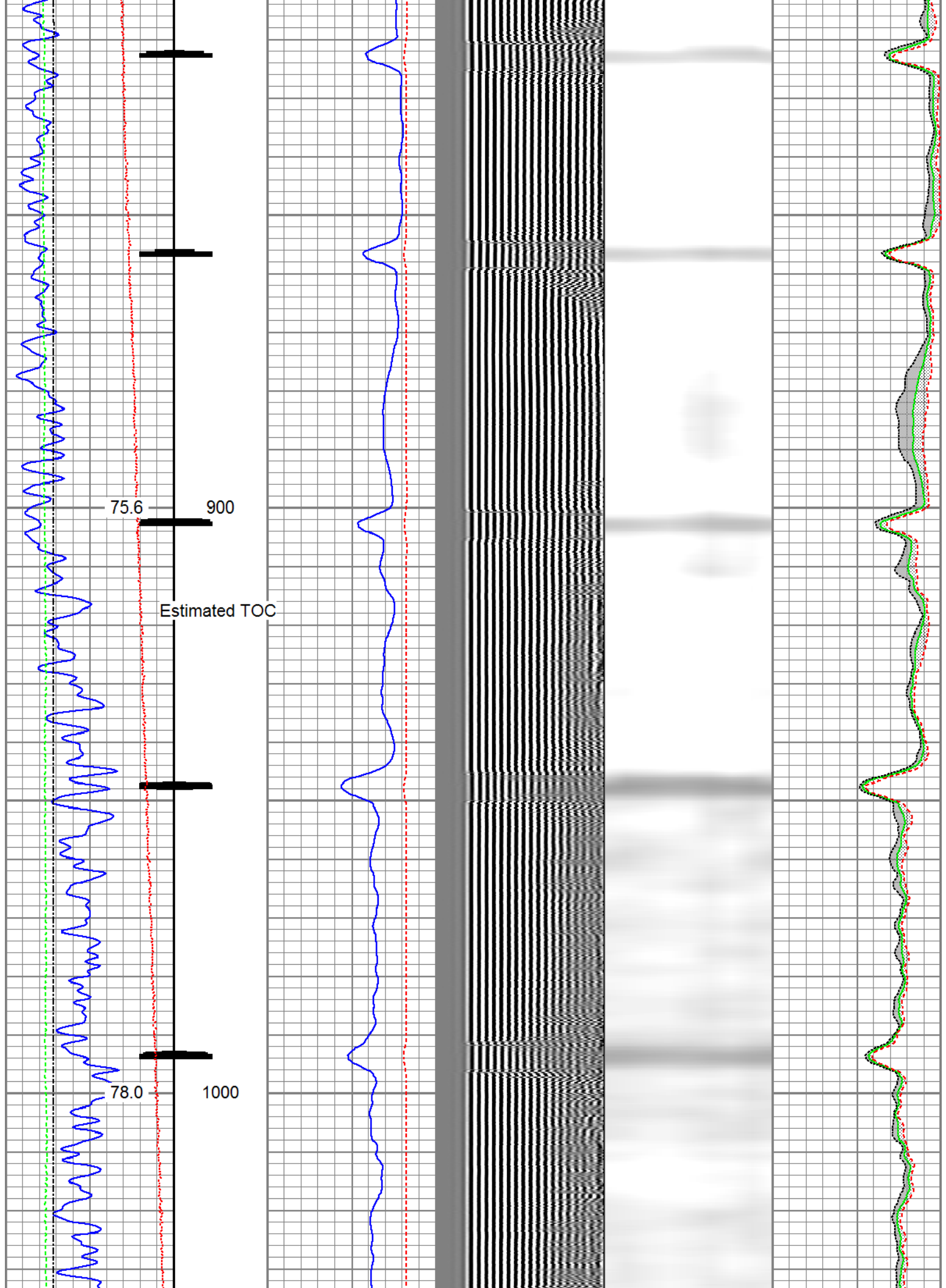
Gamma Ray 30 (GAPI) 130	3' Amplitude 0 (mV) 100	5' Variable Density Log 200 1200	Sector Map	Average Amplitude 0 100
Casing Collar Locator	3' Amplitude x 5 0 (mV) 20			Minimum Amplitude 0 100
Temperature 0 (degF) 20	3' Travel Time 650 (usec) 150			Maximum Amplitude 0 100
Line Speed -150 (ft/min) 150				
Line Tension 0 (lb) 2000				

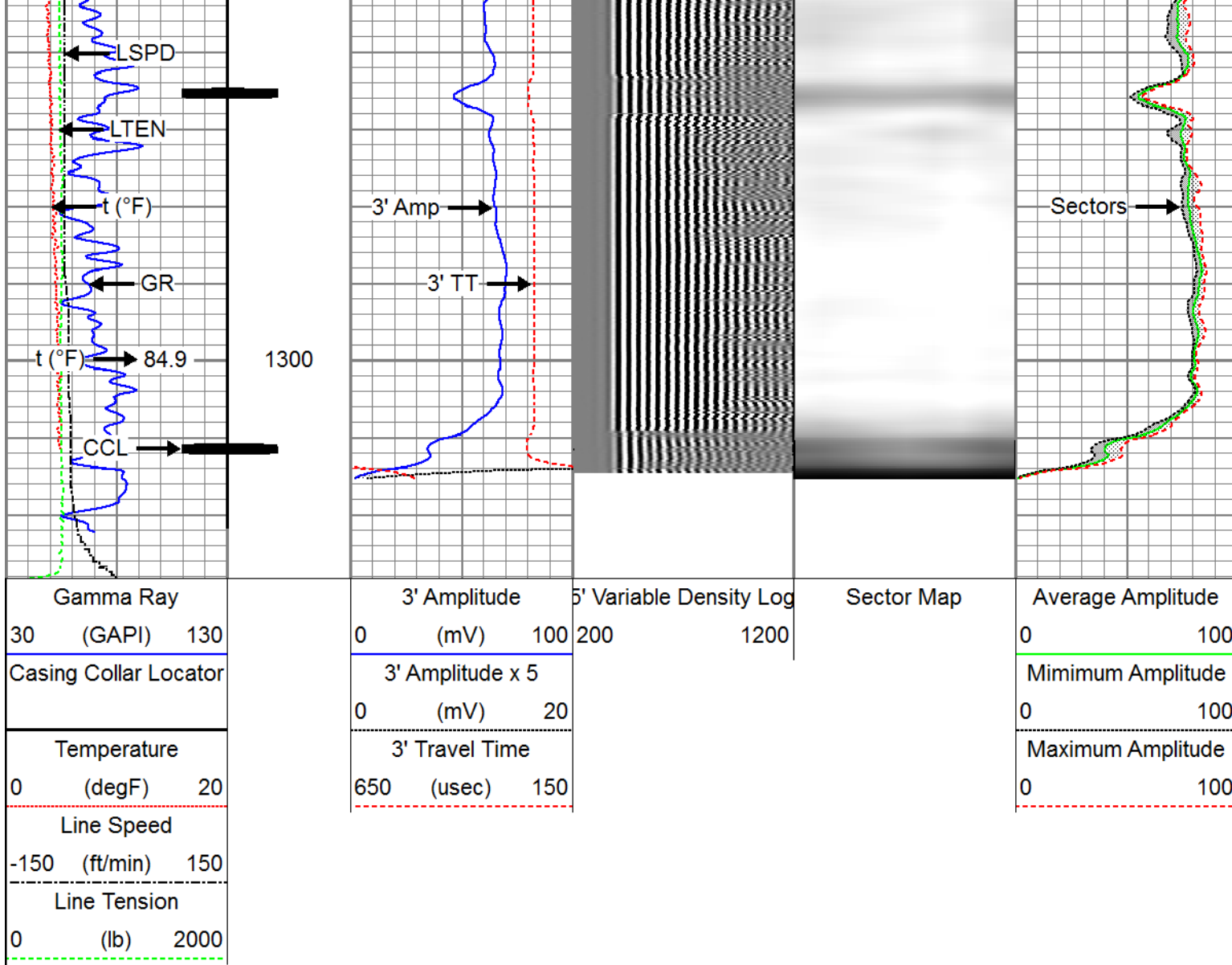








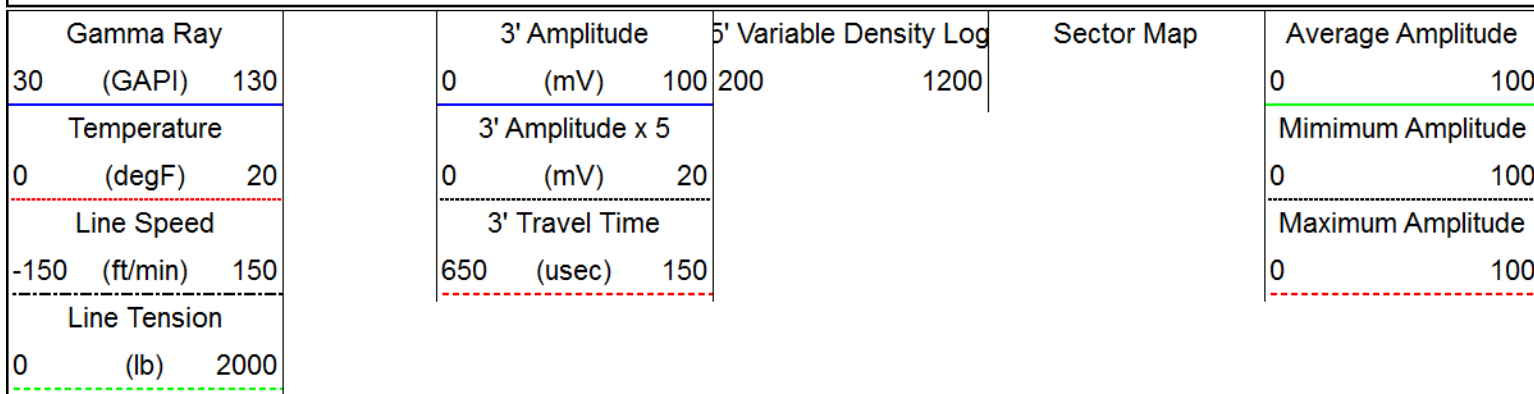


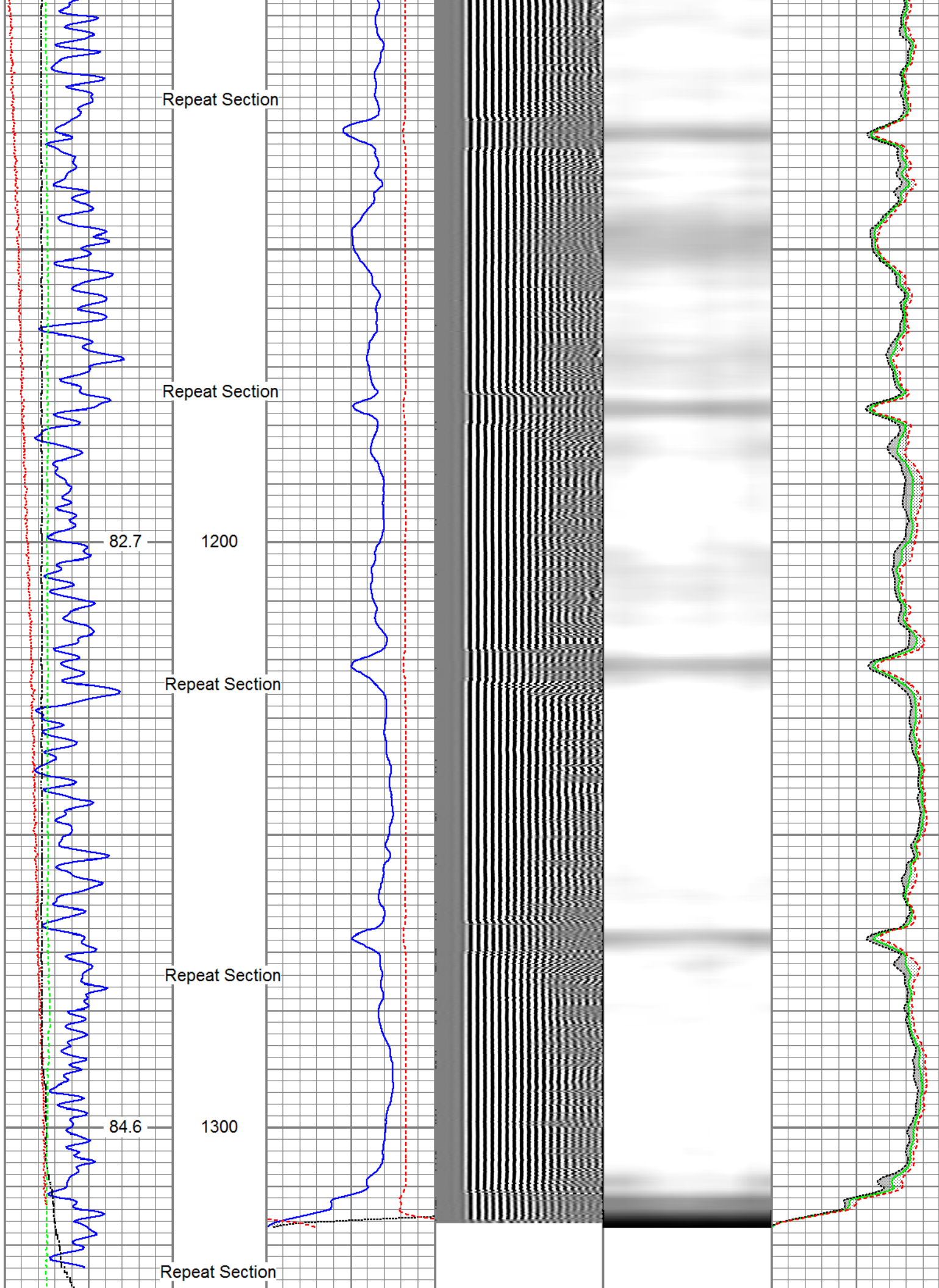


Repeat Section

Recorded with 0 PSI Surface Induced Pressure

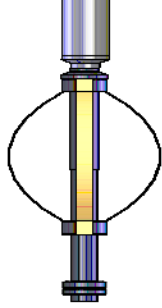
Database File 0512319629_anadarko_mayer x 33-15di_05-10-16_rbl_w8.db
 Dataset Pathname pass4.1
 Presentation Format fmc_radii_vert
 Dataset Creation Tue May 10 10:46:06 2016
 Charted by Depth in Feet scaled 1:240





Gamma Ray 30 (GAPI) 130	3' Amplitude 0 (mV) 100	5' Variable Density Log 200 1200	Sector Map	Average Amplitude 0 100
Temperature 0 (degF) 20	3' Amplitude x 5 0 (mV) 20			Minimum Amplitude 0 100
Line Speed -150 (ft/min) 150	3' Travel Time 650 (usec) 150			Maximum Amplitude 0 100
Line Tension 0 (lb) 2000				

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-11/16" 1.03 Electric Cable Head with 1" Fishing Neck	1.03	1.69	5.40
			Probe_ELine_BowSpring_Centralizer-P_EB\$2.8875 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.8875	2.75	20.00
Temp	16.72		Probe_RADII-C-P_RBT_2750 (FW1302-0029.19) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	2.75	2.75	105.00
WVFS8	14.55					
WVFS7	14.55					
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					
		Probe_ELine_BowSpring_Centralizer-P_EB\$2.8875 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.8875	2.75	20.00	
DCCL	6.51					
CCL	6.51					
		Probe_GR_CCL-P_CGR_2750_S (FW12124.54) Probe 2-3/4" Digital CCL / Gamma Ray Combined	2.75	2.75	55.00	
GR	3.77					



Probe ELine_BowSpring_Centralizer-P_EB52.8875 2.75 20.00
 Probe 2-3/4" Electric Inline Bowspring Centralizer

Dataset: 0512319629_Anadarko_Mayer X 33-15DI_05-10-16_RBL_W8.db: field/well/run1/pass5.1
 Total length: 23.40 ft
 Total weight: 225.40 lb
 O.D.: 2.75 in

Calibration Report

Database File 0512319629_Anadarko_Mayer X 33-15DI_05-10-16_RBL_W8.db
 Dataset Pathname pass5.1
 Dataset Creation Tue May 10 08:14:54 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: 417.523 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.412	0.800	81.196	196.335	0.345
CAL	0.703	0.703				
5'	0.001	0.364	0.800	81.196	221.600	0.502
SUM						
S1	0.000	0.454	0.000	100.000	220.433	-0.088
S2	0.003	0.409	0.000	100.000	245.901	-0.619
S3	0.002	0.383	0.000	100.000	262.599	-0.543
S4	0.001	0.385	0.000	100.000	260.620	-0.370
S5	0.000	0.415	0.000	100.000	241.347	-0.054
S6	0.003	0.468	0.000	100.000	215.255	-0.751
S7	0.002	0.501	0.000	100.000	200.393	-0.369
S8	0.003	0.511	0.000	100.000	196.836	-0.520

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.703	0.703	1.000	0.000

Air Zero Calibration, performed Tue May 10 07:26:20 2016:

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



Company	Kerr-McGee Oil & Gas Onshore, L.P.		
Well	Mayer X 33-15DI		
Field	Wattenberg		
County	Weld		
State	Colorado	Country	USA