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Pioneer Energy Services

Sonic Cement Bond Log

API No.

15-065-24022-00-00

Company Cobalt Energy, LLC.

Well KT Unit "A" # 1-18

Field High Hill Northwest

County Graham State Kansas

Location

864' FNL & 1290' FEL

Sec: 18 Twp: 10S Rge: 24W

Other Services

Perforate

Elevation

K.B. 2465
D.F.
G.L. 2456

Permanent Datum Ground Level Elevation 2456
Log Measured From Kelly Bushing 9 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Run Number	One		
Date Survey	04/18/2014		
Date Cementing	04/10/2014		
Type Cementing Operation	Primary		
Depth Driller	4050		
Depth Logger	3997		
Logged Interval	3996 to 3000		to
Casing Driller	5.5 @ T.D.		@
Float Collar -- D.V. Tool	////	2060	
Squeeze Depth	////		
Amount & Type Cement	////		
Amount & Type Admix	////		
Type Fluid In Hole	Water		
Fluid Level	300		
Salinity PPM CL	////		
Weight lb/gal -- Vis.	////	////	
Approx. Logged Cement Top	3144		
Calculated Cement Top	////		
Max. Hole Temperature	116		
Tool No.	RBT 4-Shop		
Spacing Recorded	3'-5'		
Equipment -- Location	12	Hays	
Recorded By	D.Walker		
Witnessed By	Brett Hildebrand		

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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

Thank you for using Pioneer Energy Services
785.625.3858

Wakeeney, Kansas
10 North To C Rd. 6 West, 2 North, 3 1/2 West,
South Into

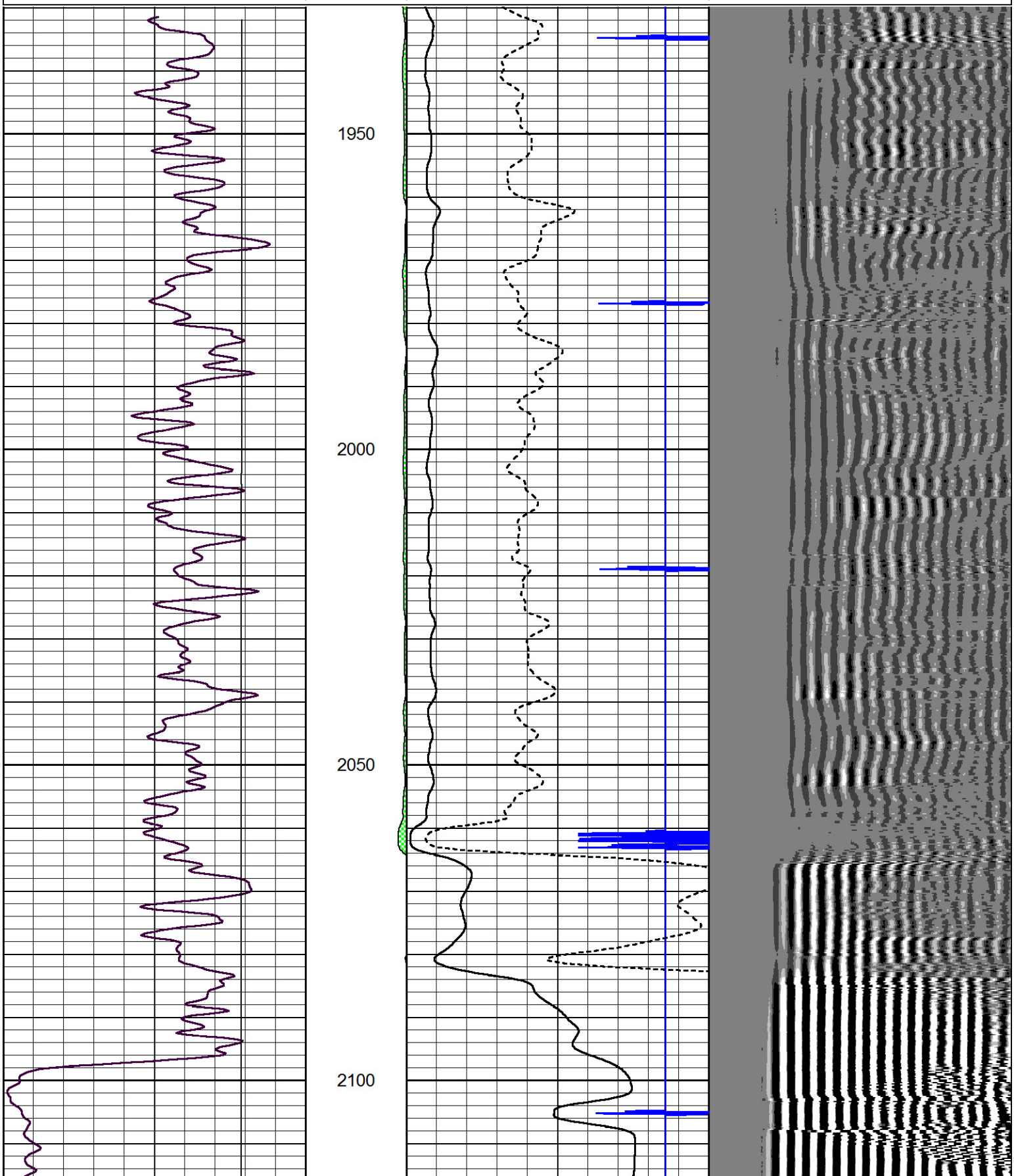
DV Tool @2060

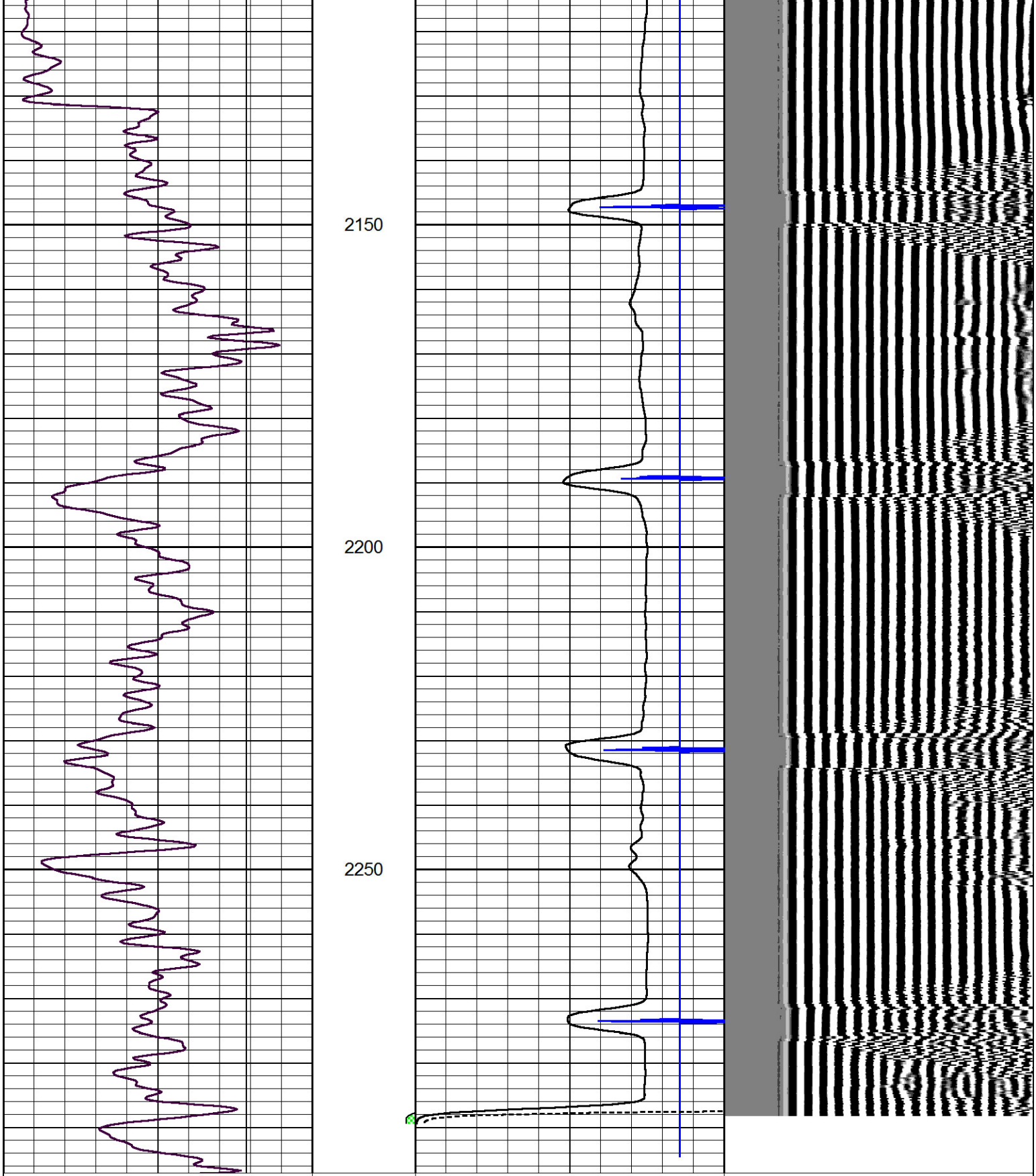
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Database File:	cobalt_kt_a_1-18_cbl.db
Dataset Pathname:	pass4
Presentation Format:	cbldr
Dataset Creation:	Fri Apr 18 08:57:42 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

0	Gamma Ray	150	amp3ft	3	Casing Collars	-0.5	200	wvf5ft	1200
4000	LTEN (lb)	0	(mV)	0	Pipe Amplitude (mV)	100			
			-100 10	0	Amplified Amplitude (mV)	20			





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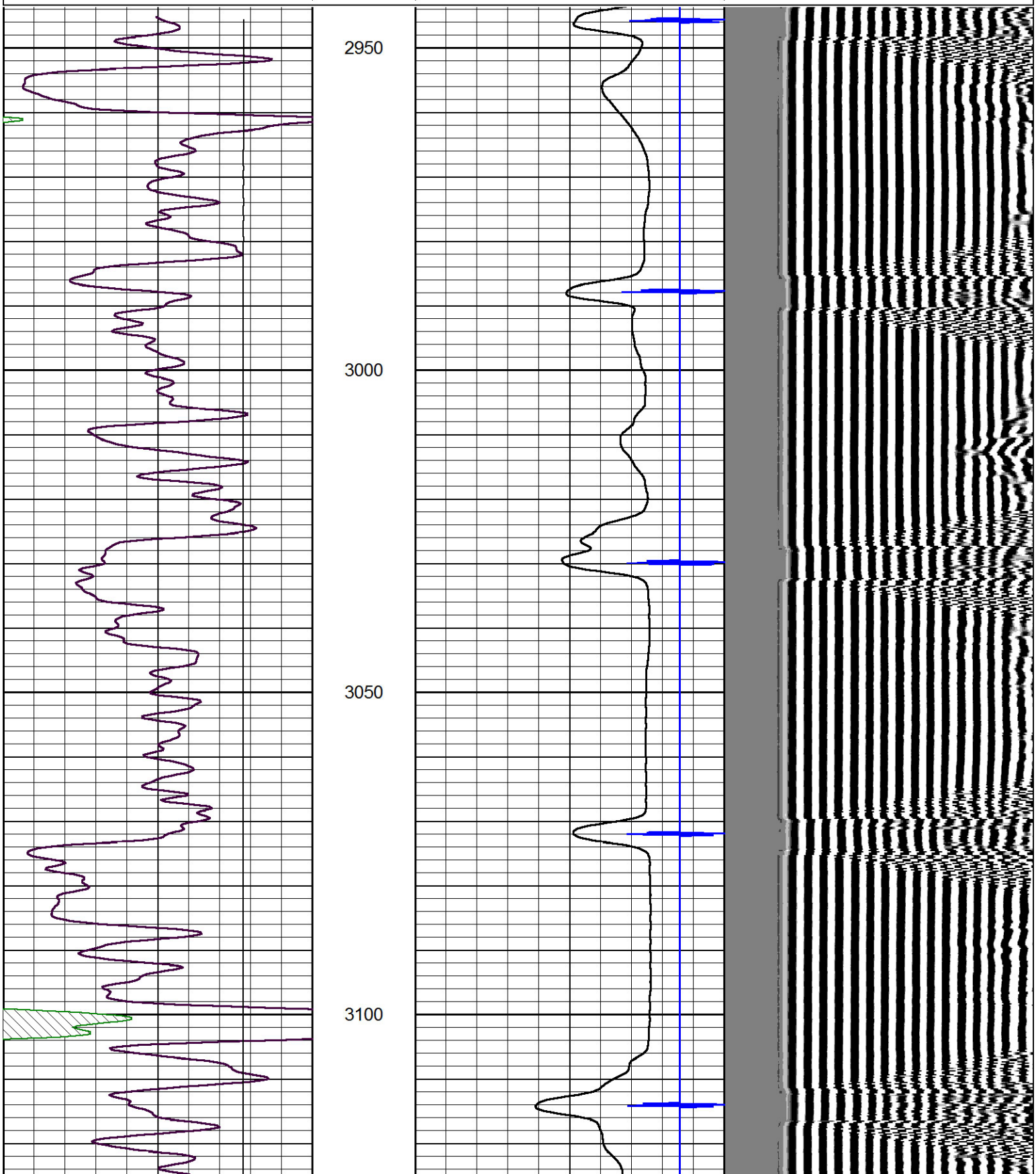
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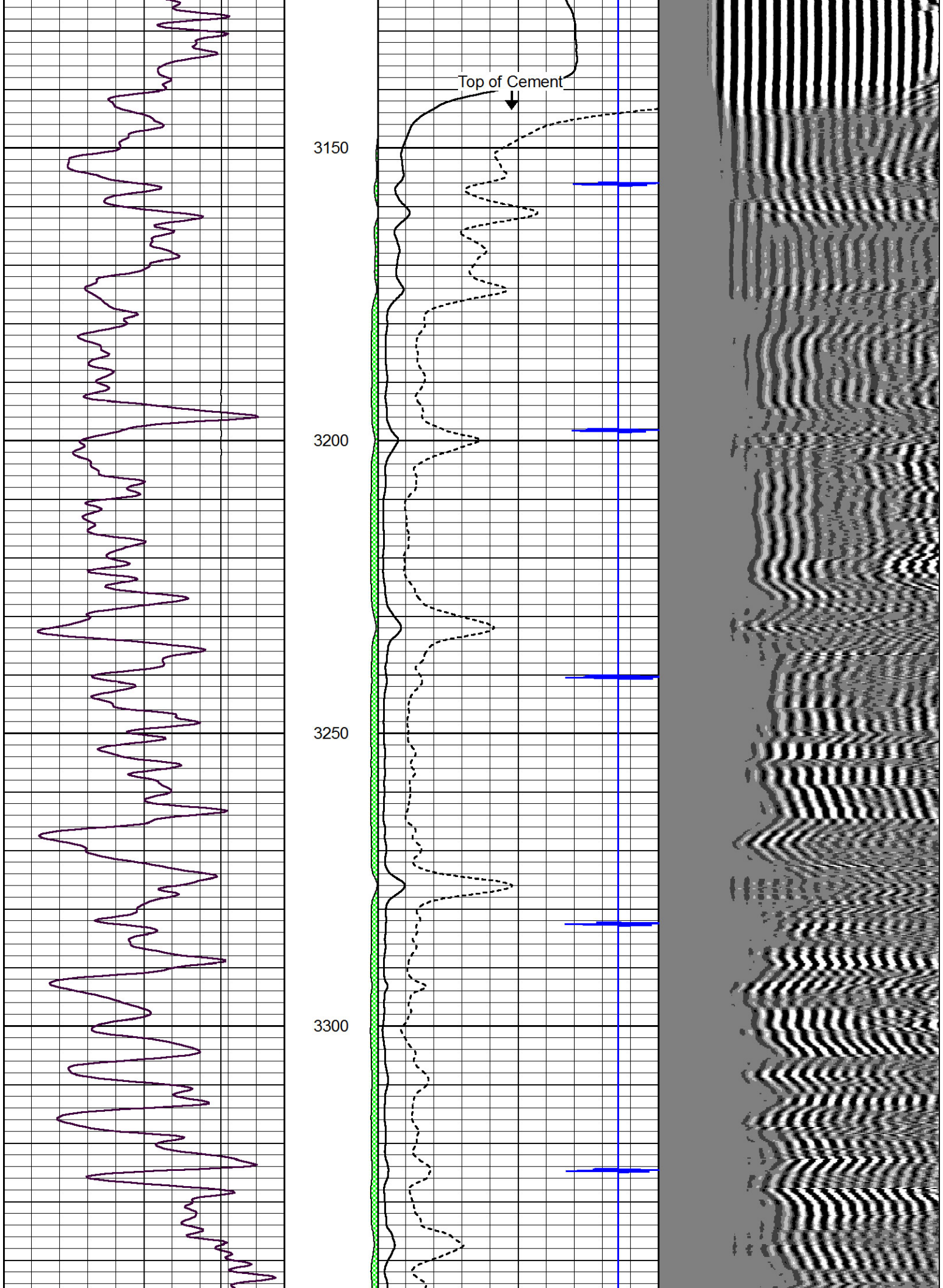
Main Pass

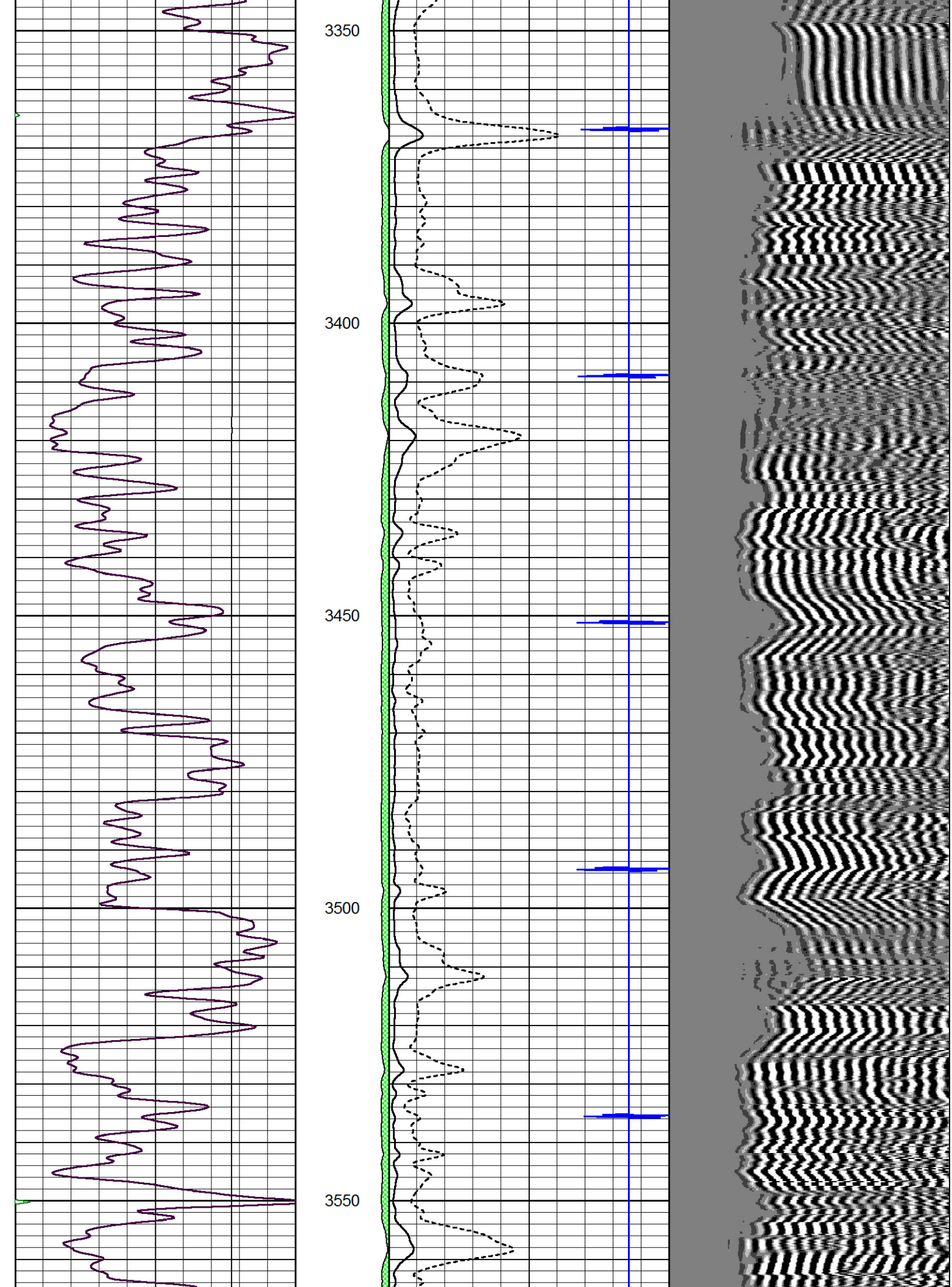
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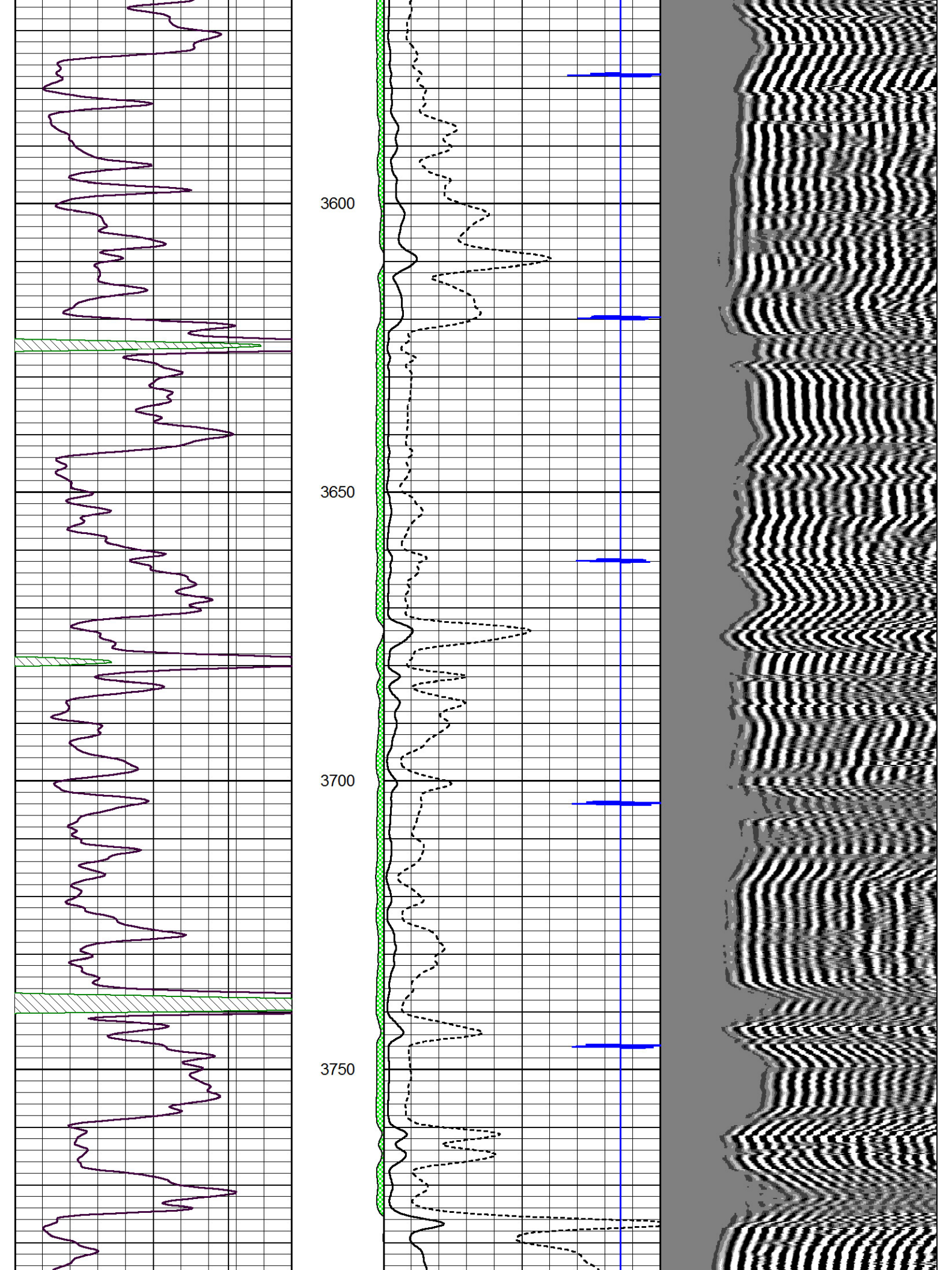
Database File:	cobalt_kt_a_1-18_cbl.db
Dataset Pathname:	pass3
Presentation Format:	cbldr
Dataset Creation:	Fri Apr 18 08:29:33 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

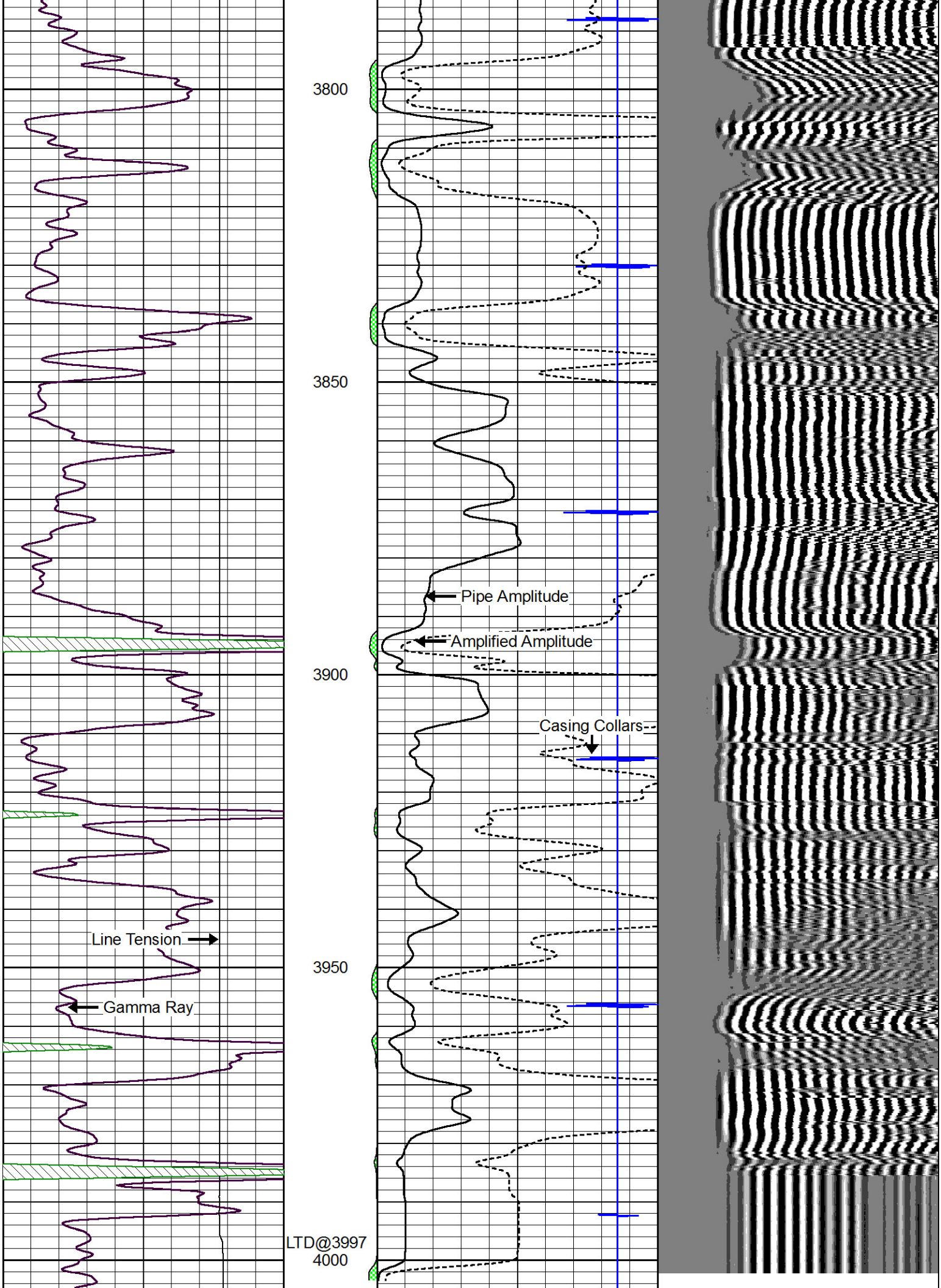
0	Gamma Ray	150	amp3ft	3	Casing Collars	-0.5	200	wvf5ft	1200
4000	LTEN (lb)	0	(mV)	0	Pipe Amplitude (mV)	100			
			-100 10	0	Amplified Amplitude (mV)	20			

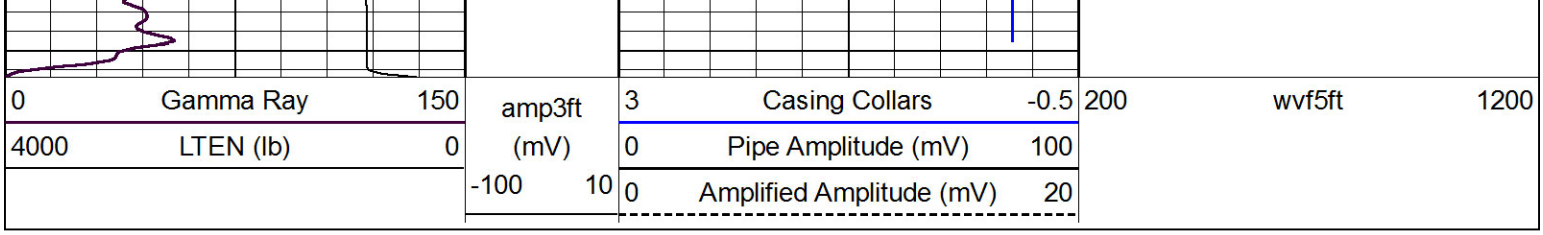



Top of Cement
3150
3200
3250
3300


3350
3400
3450
3500
3550


3600
3650
3700
3750


3800
3850
Pipe Amplitude
Amplified Amplitude
3900
Casing Collars
Line Tension
3950
Gamma Ray
LTD@3997
4000

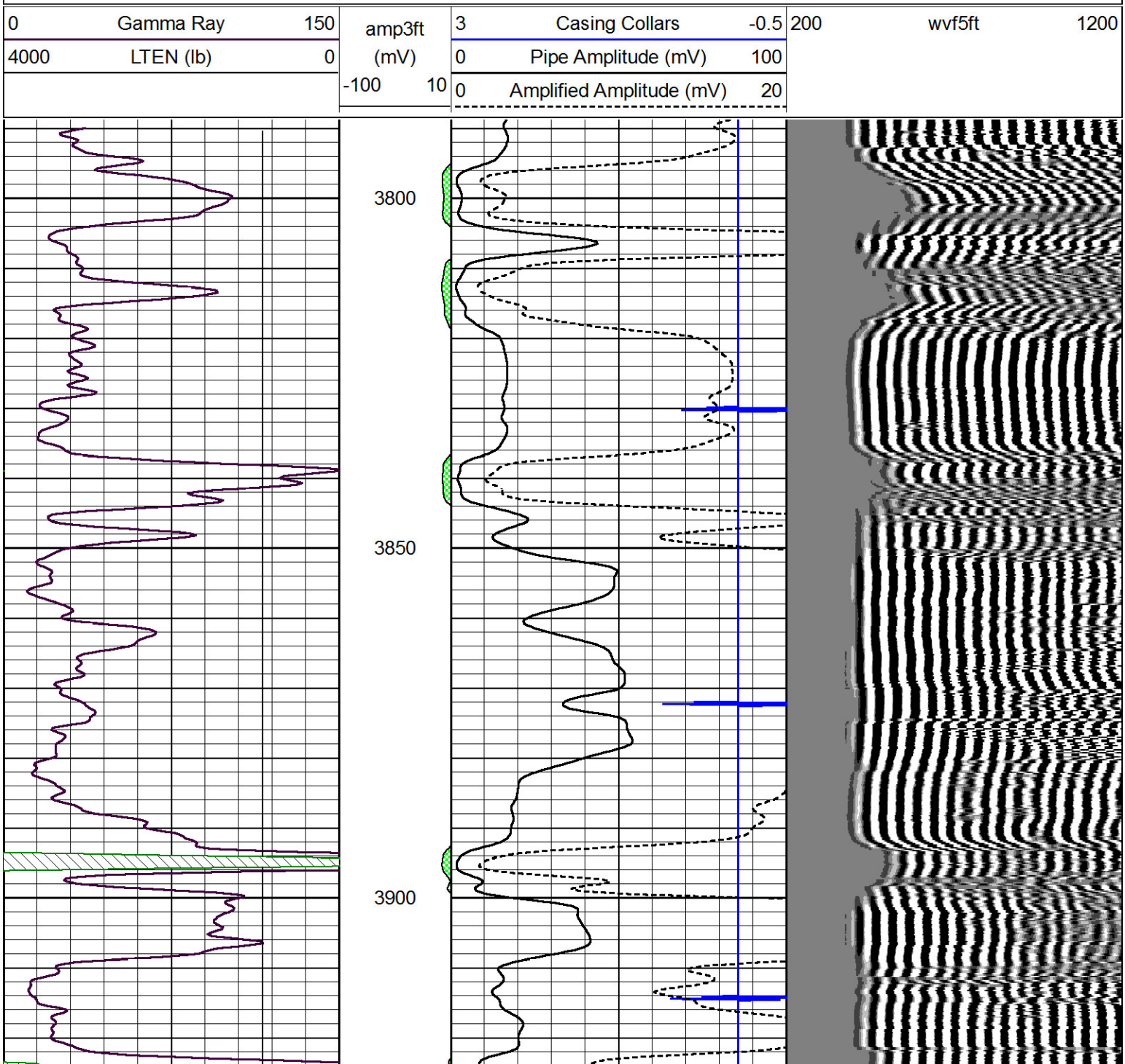


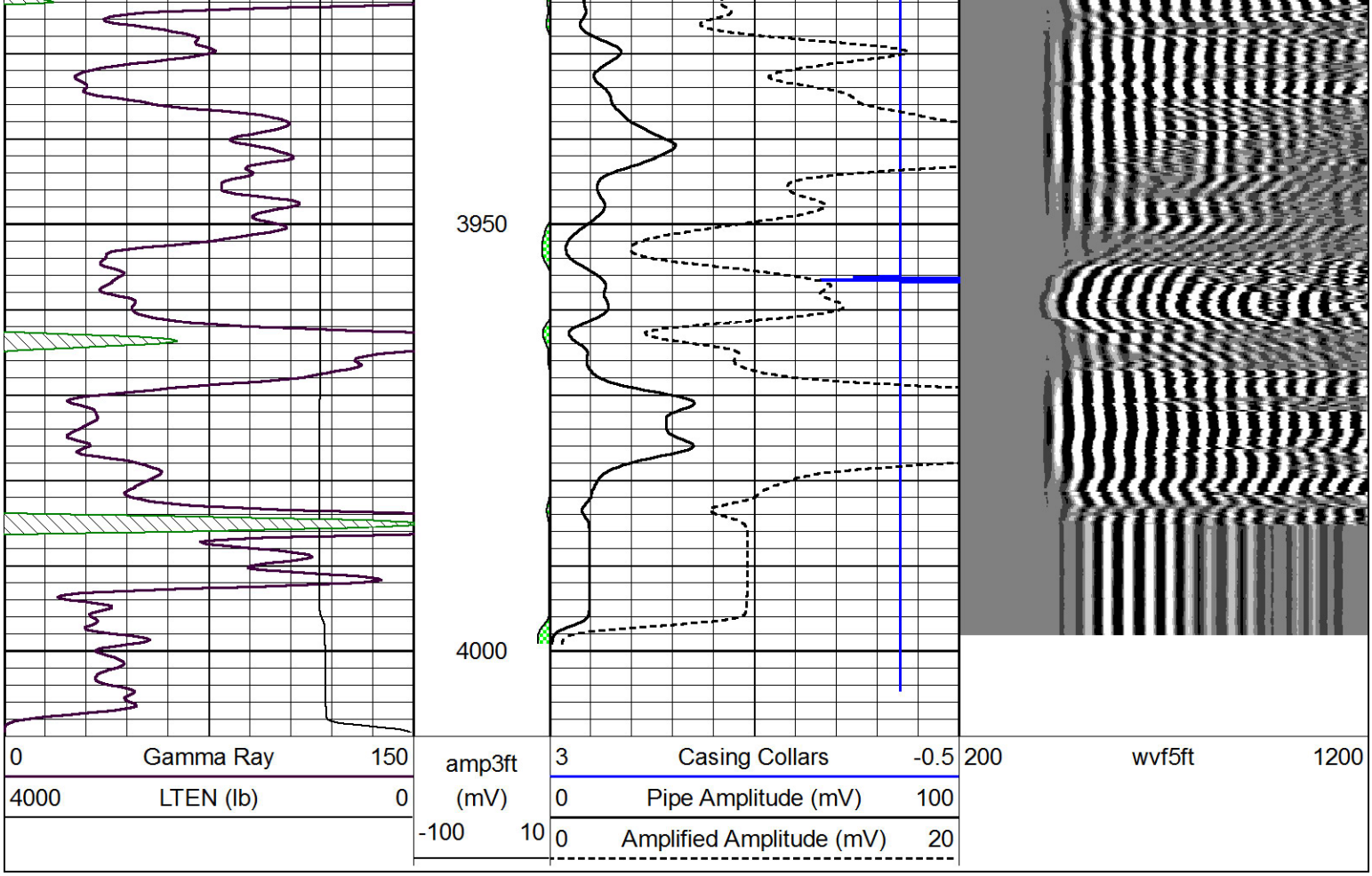
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Repeat Section

Database File: cobalt_kt_a_1-18_cbl.db
Dataset Pathname: pass2
Presentation Format: cbldr
Dataset Creation: Fri Apr 18 08:23:36 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240




3950
4000
0
Gamma Ray
150
4000
LTEN (lb)
0
amp3ft
(mV)
-100
10
3
Casing Collars
-0.5
0
Pipe Amplitude (mV)
100
0
Amplified Amplitude (mV)
20
200
wvf5ft
1200