RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMA RAY / CCL

Company	Verdad Resources, LLC		
Well	County Line 3130-05H		
Field	Wattenberg		
County	Weld	State	Colorado
Location:	API #: 05-123-51177 FSL: 340' & FEL: 1730' SEC 31 TWP 01N RGE 60W	Other Services	None
Permanent Datum	Ground Level	Elevation 5037'	Elevation K.B. N/A D.F. N/A G.L. 5037'
Log Measured From	Ground Level	Ft Above PD	
Drilling Measured From	K.B		

Date	21-MAR-2022
Run Number	One
Depth Driller	17767'
Present Depth Driller	N/A
Depth Logger	7831'
Bottom Logged Interval	7831'
Top Log Interval	Surface
Fluid Level	25'
Type Fluid	Water
Max. Recorded Temp.	221 Deg F
Estimated Cement Top	650'
Equipment Number	222
Location	Johnstown, Co
Recorded By	Lance Schubert
Witnessed By	Jason Turner

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				9 5/8"	36#	Surface	2382'
				5 1/2"	20#	Surface	17754'

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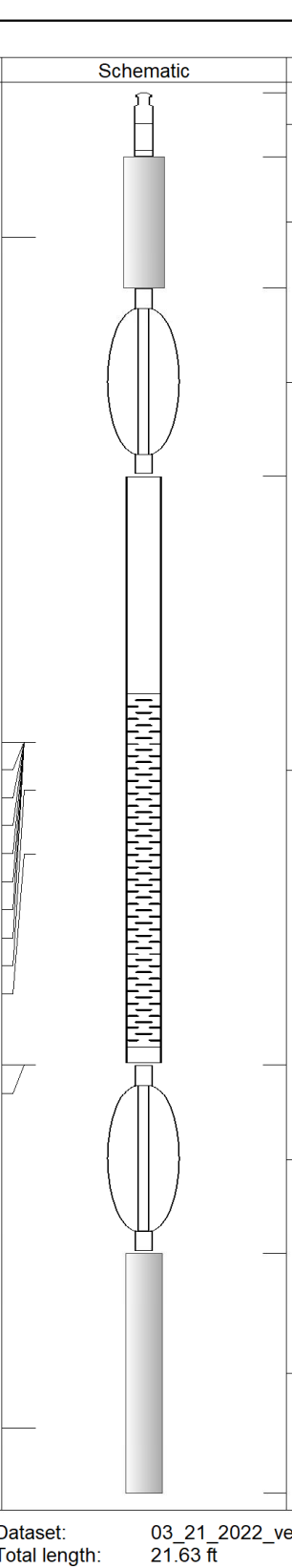
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

WARRIOR 7.0 SOFTWARE - Comments

This log was correlated to ground level
Main pass scale is 5"=100'
CSG PSI = Static main pass
Top of Cement: 650'

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			CHD-STNDRD Standard Cable Head	1.00	1.43	2.00
CCL	19.40		CCL-3.125_APPLIED (40-01NB)	2.03	3.13	45.00
			CENT-TITAN_234 TITAN 2 3/4" BOWSPRING CENT	2.92	2.75	25.00
WVFS8 WVFS7 WVFS6 WVFS5 WVFS4 WVFS3 WVFS2 WVFS1 WVF3FT WVF5FT	11.60 11.60 11.60 11.60 11.60 11.60 11.60 11.60 10.85 9.85		SCBLTEKCO-TEKCO (TEKCO234_3024) Tekco 2 3/4" Radial Bond	9.08	2.75	50.00
WVFSYNC WVFCAL	6.60 6.60					
			CENT-TITAN_234 TITAN 2 3/4" BOWSPRING CENT	2.92	2.75	25.00
GR	1.00		GR-TEKCO234 (TEKCO234_314) Tekco 2 3/4" Gamma Ray	3.69	2.75	20.00

Dataset:	03_21_2022_veridad_countyline_3130-5h.db: field/well/run1/pass4
Total length:	21.63 ft
Total weight:	167.00 lb
O.D.:	3.13 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\03_21_2022_veridad_countyline_3130-5h.db
Dataset field/well/run1/pass4/_vars_

Top - Bottom

BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft
7.875	220	5.5	0	20	0	1	0.8

PERFS	PPT usec	SRFTEMP degF	TDEPTH ft
No	0	0	7800

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude
MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

RMWS
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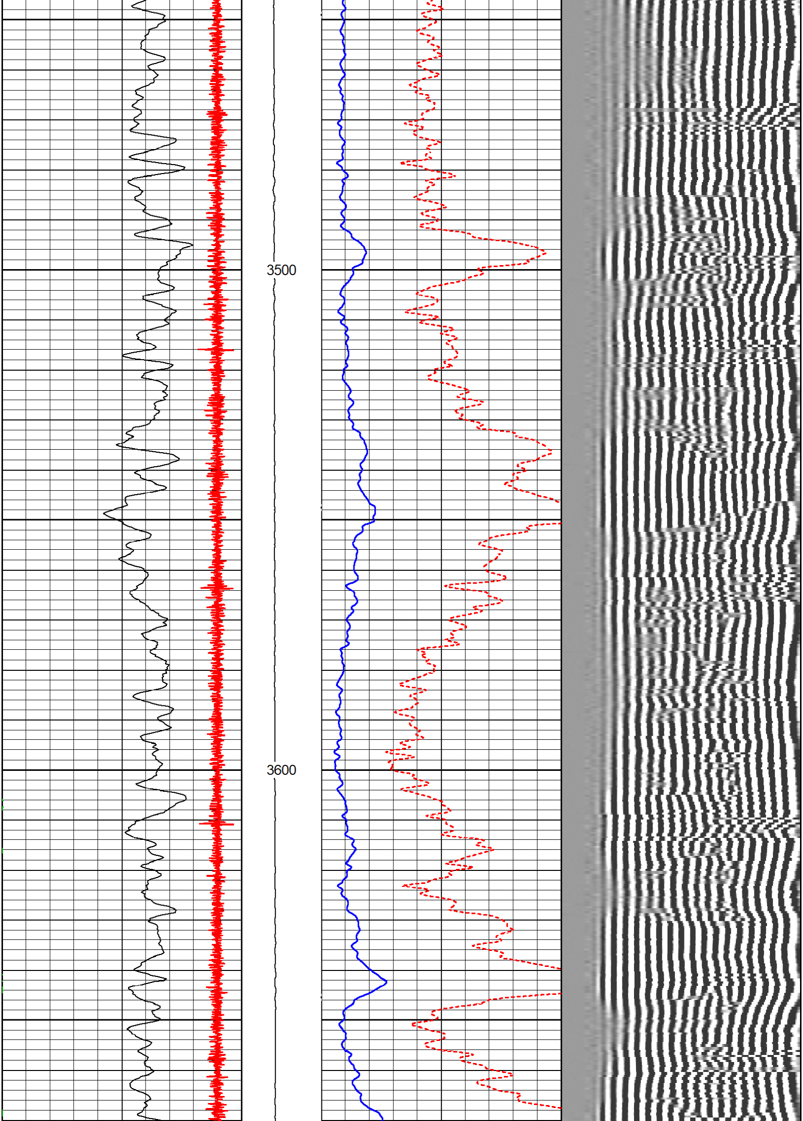
MAIN PASS

Database File	03_21_2022_veridad_countyline_3130-5h.db
Dataset Pathname	pass4
Presentation Format	rmws_dsc
Dataset Creation	Mon Mar 21 07:47:02 2022
Charted by	Depth in Feet scaled 1:240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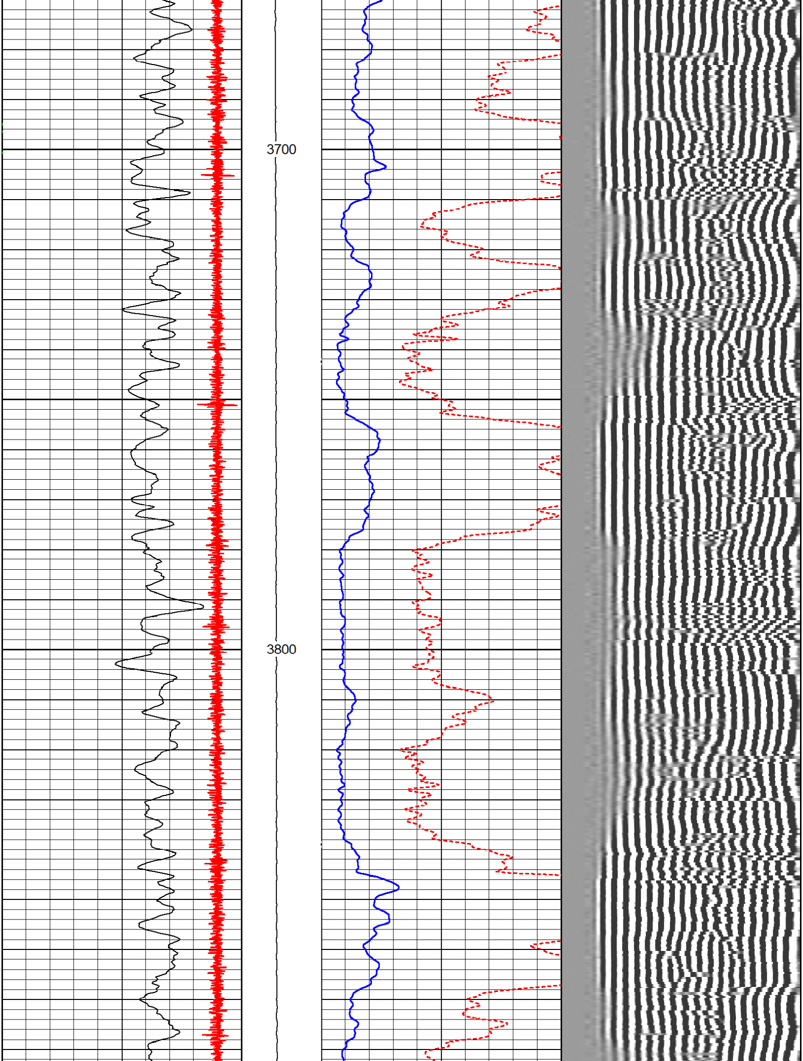
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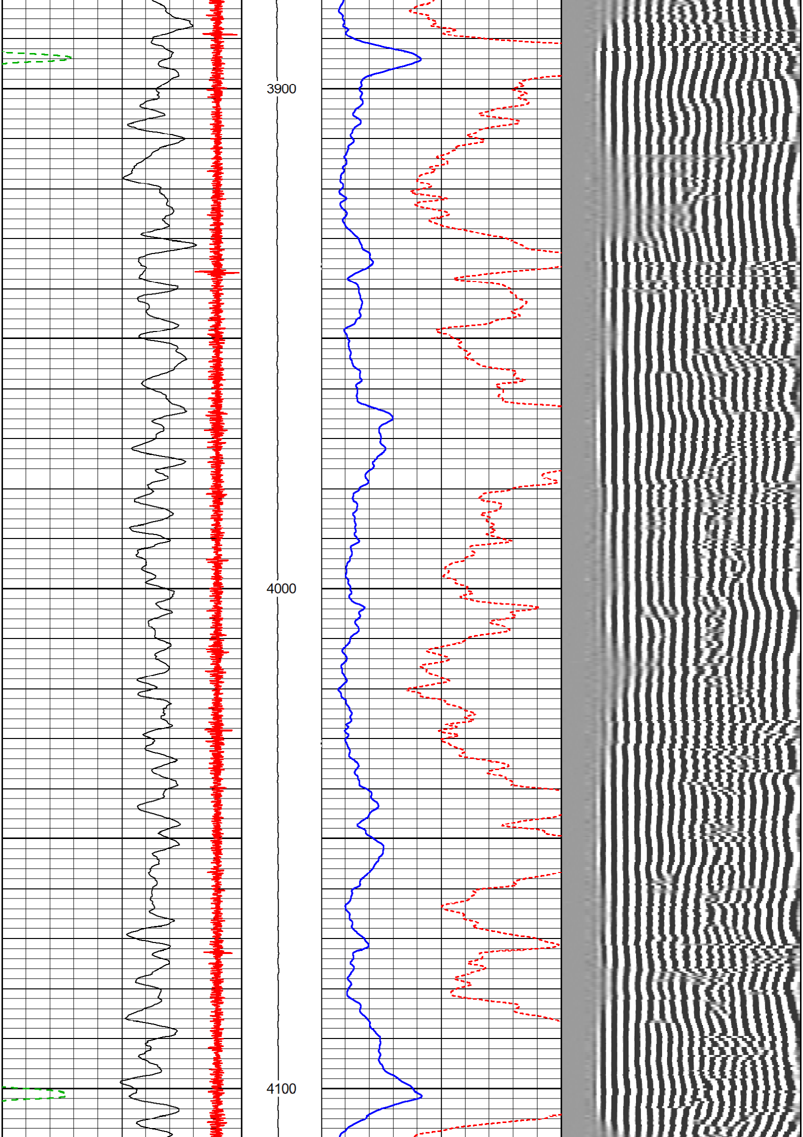
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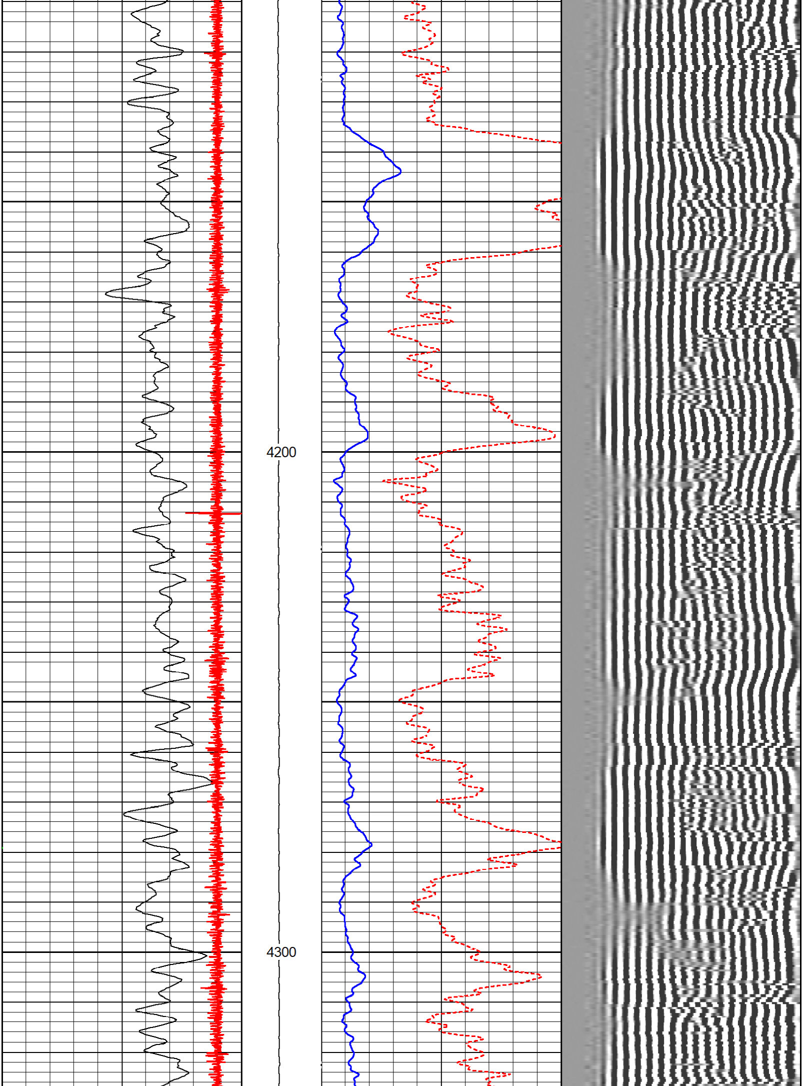

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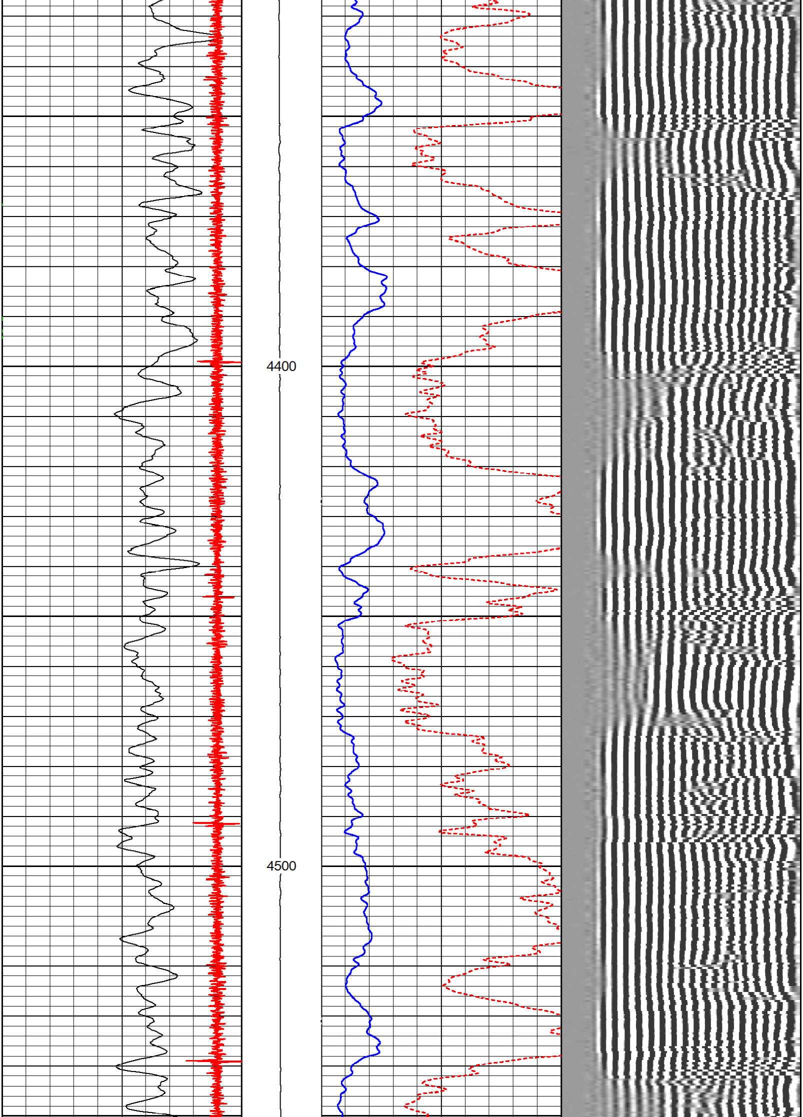
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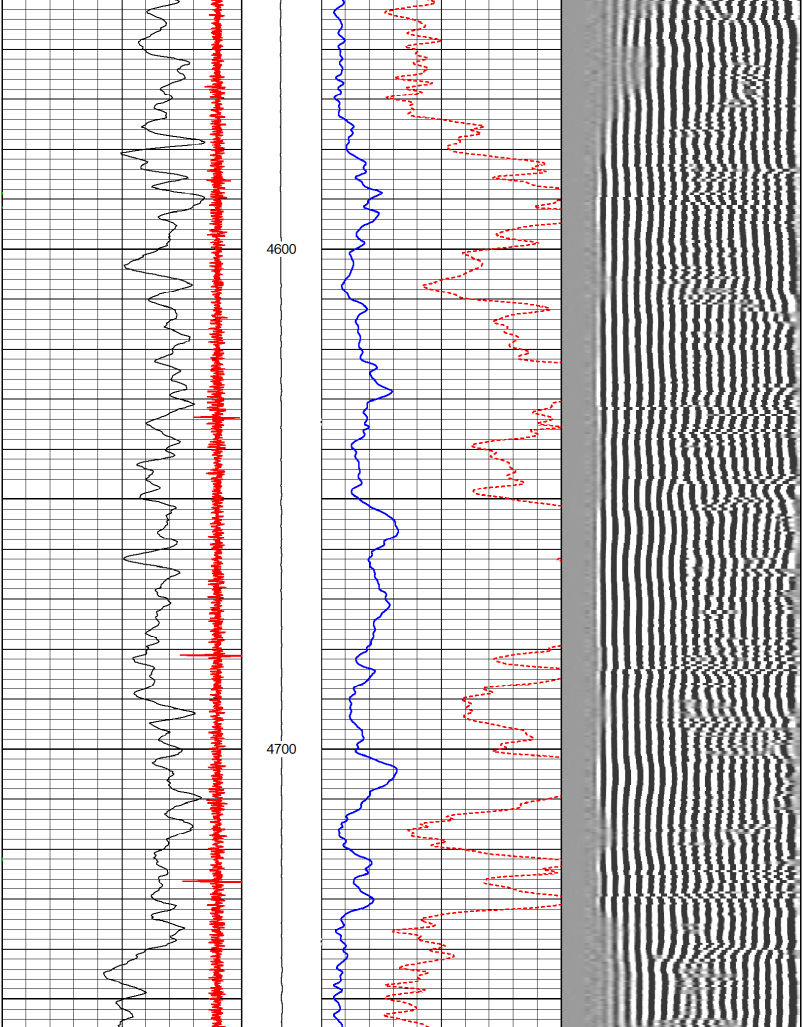
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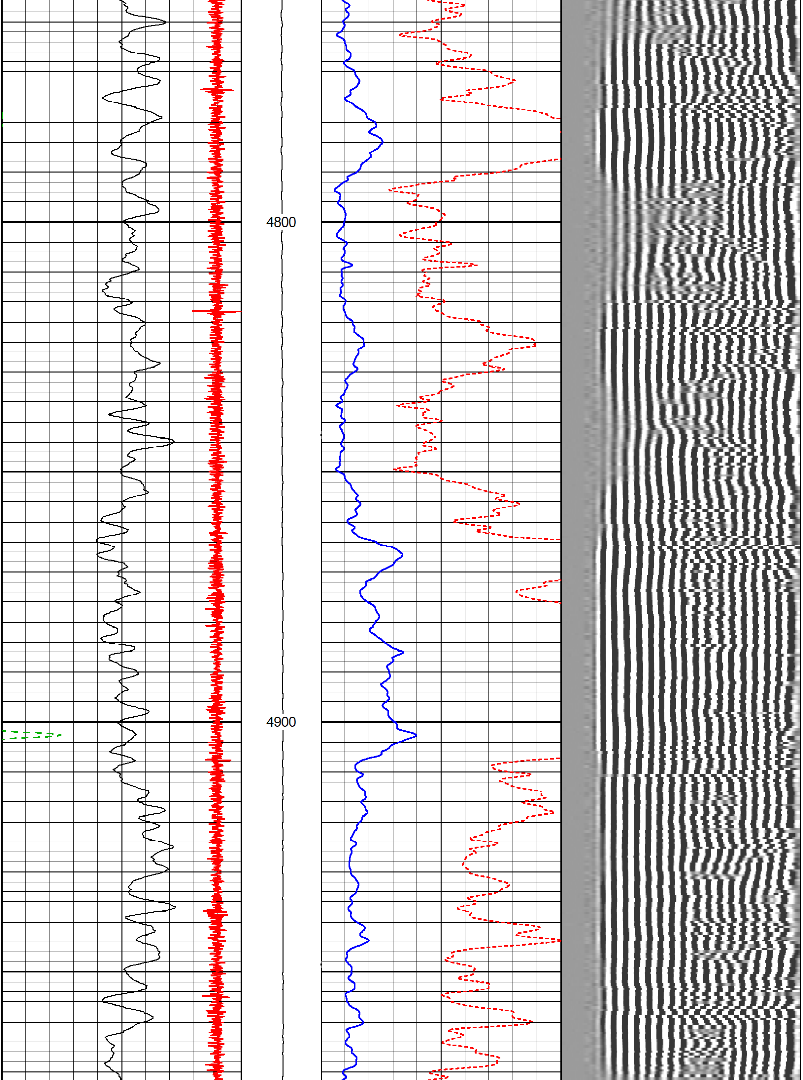
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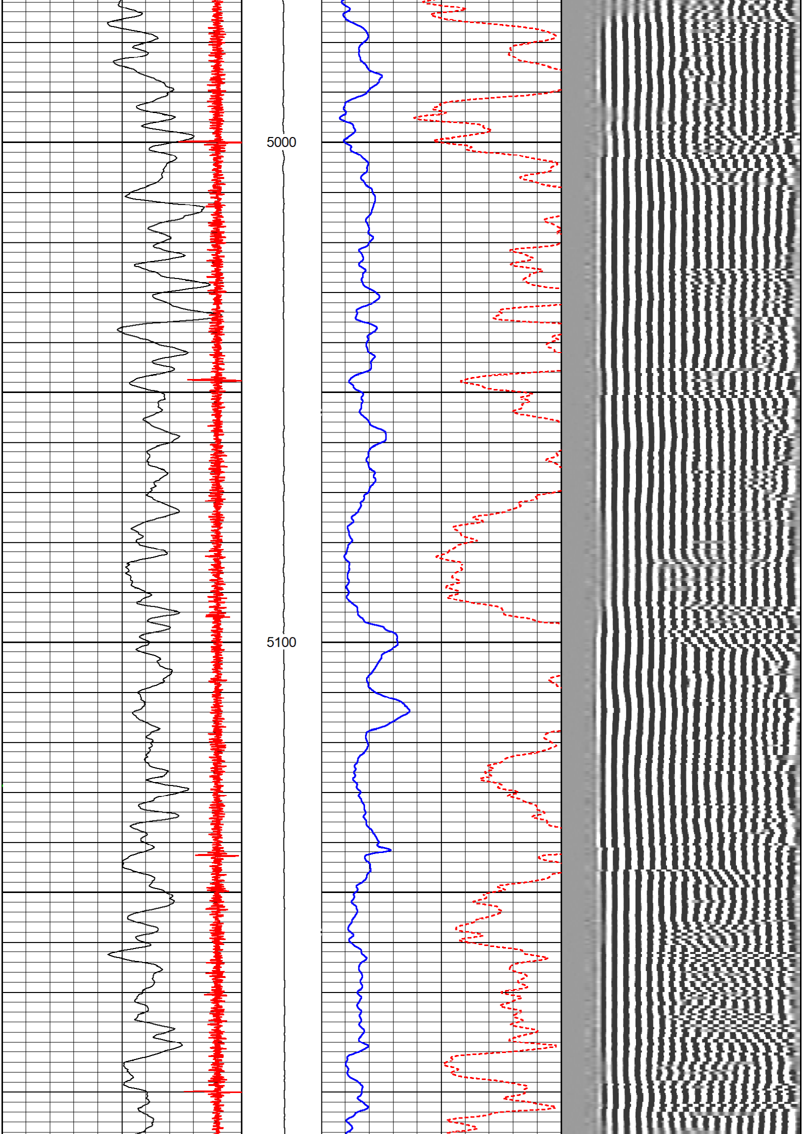
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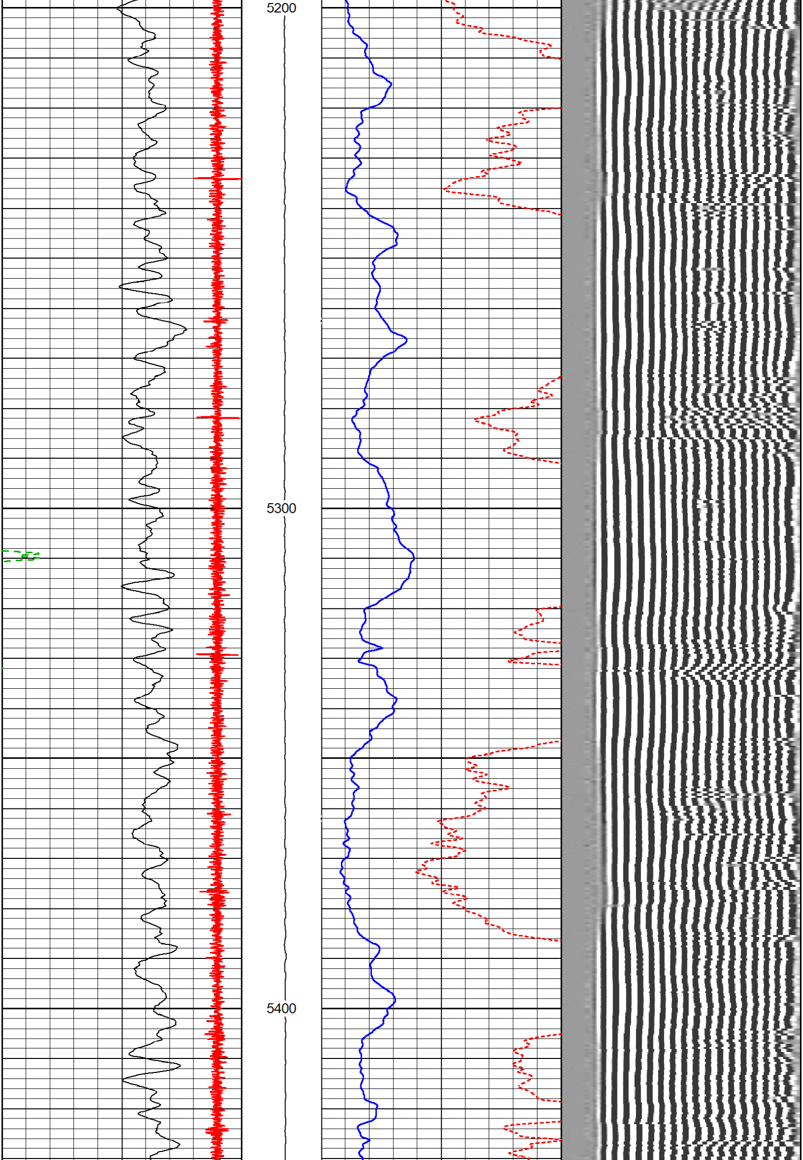
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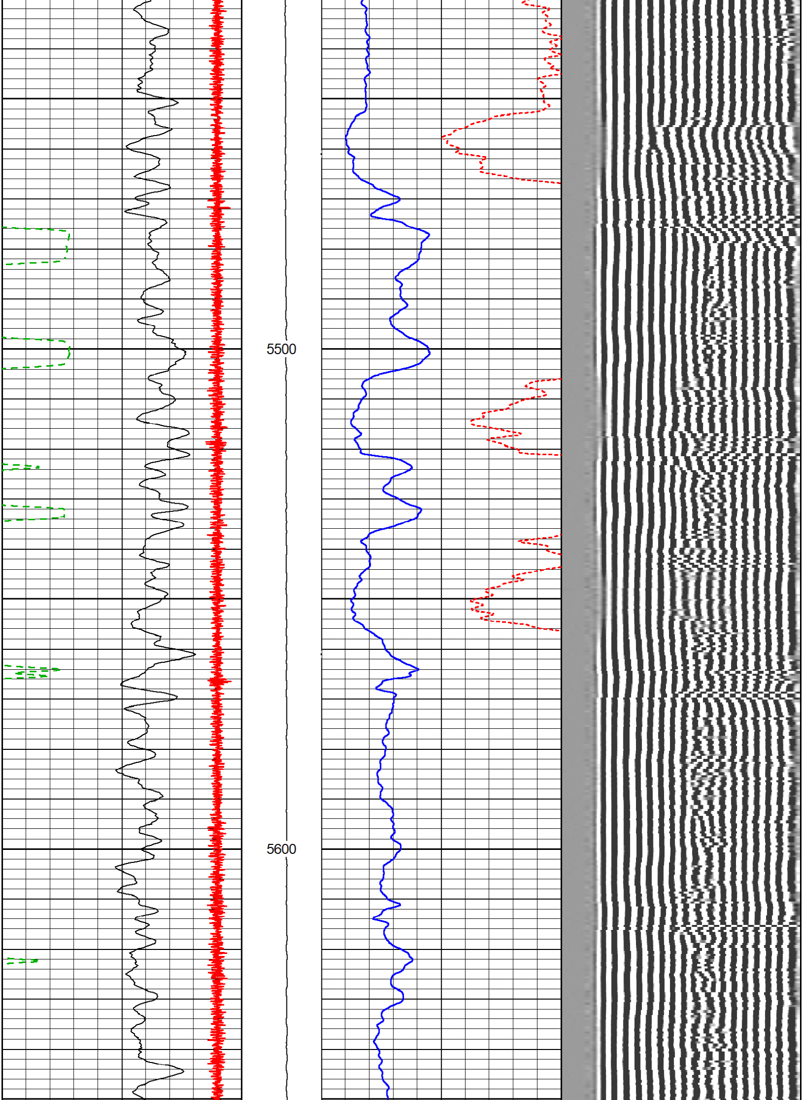
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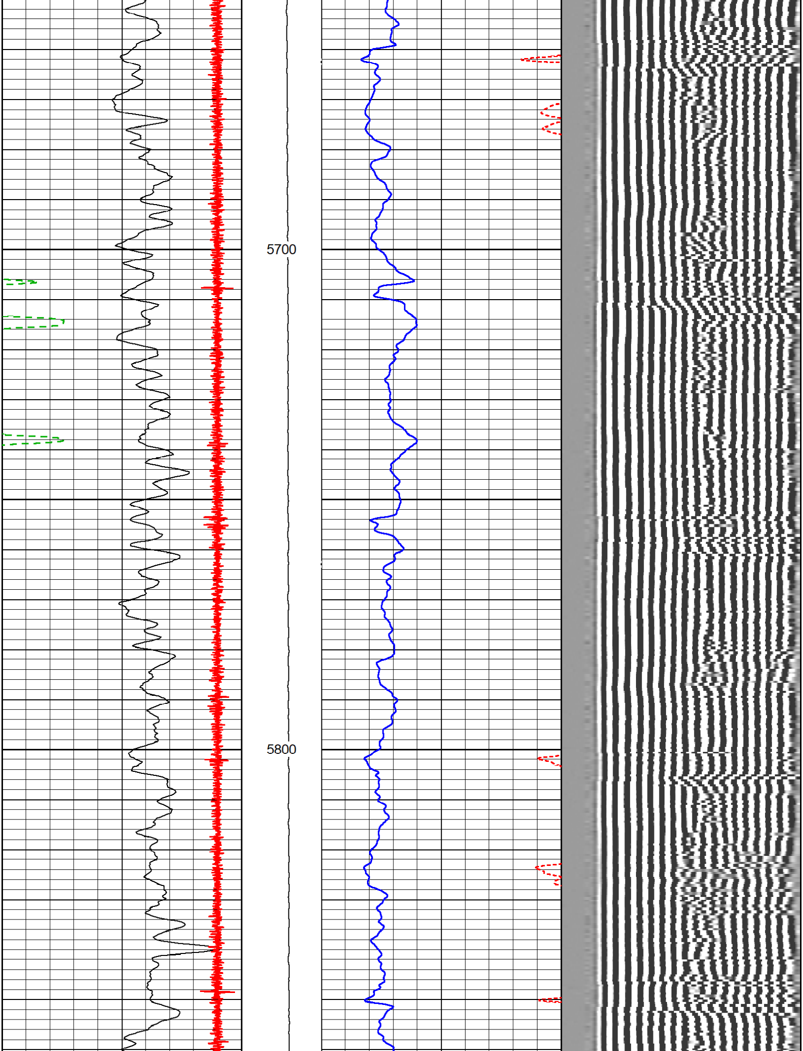
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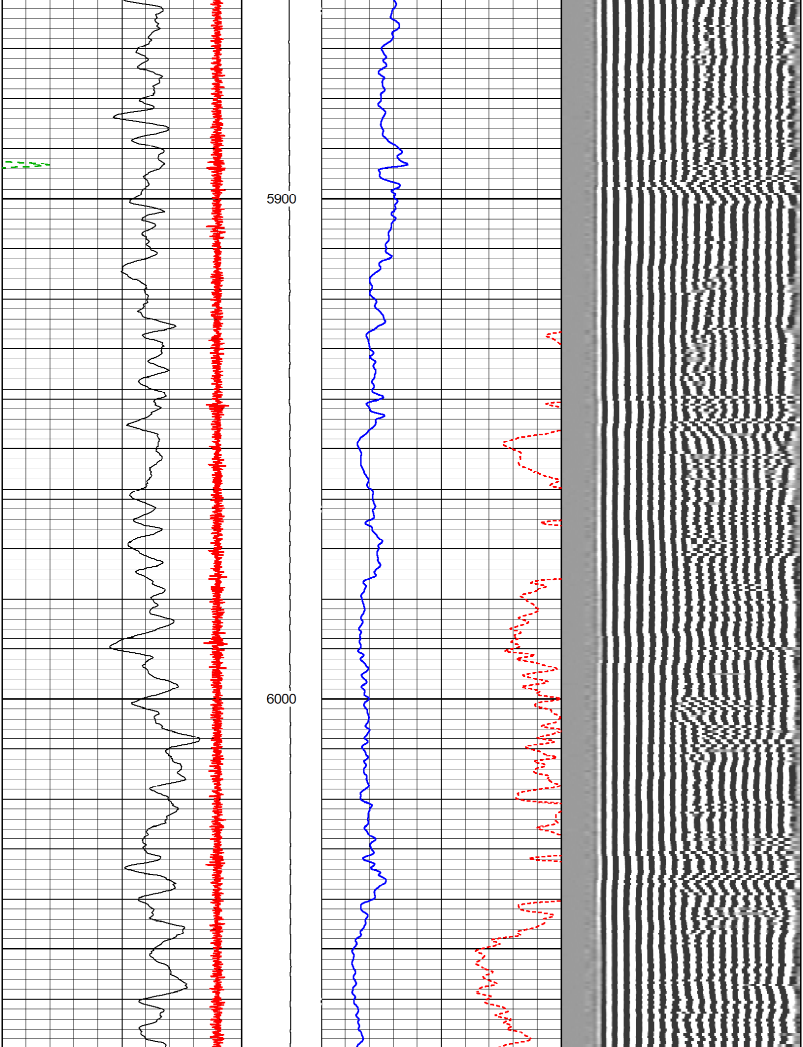
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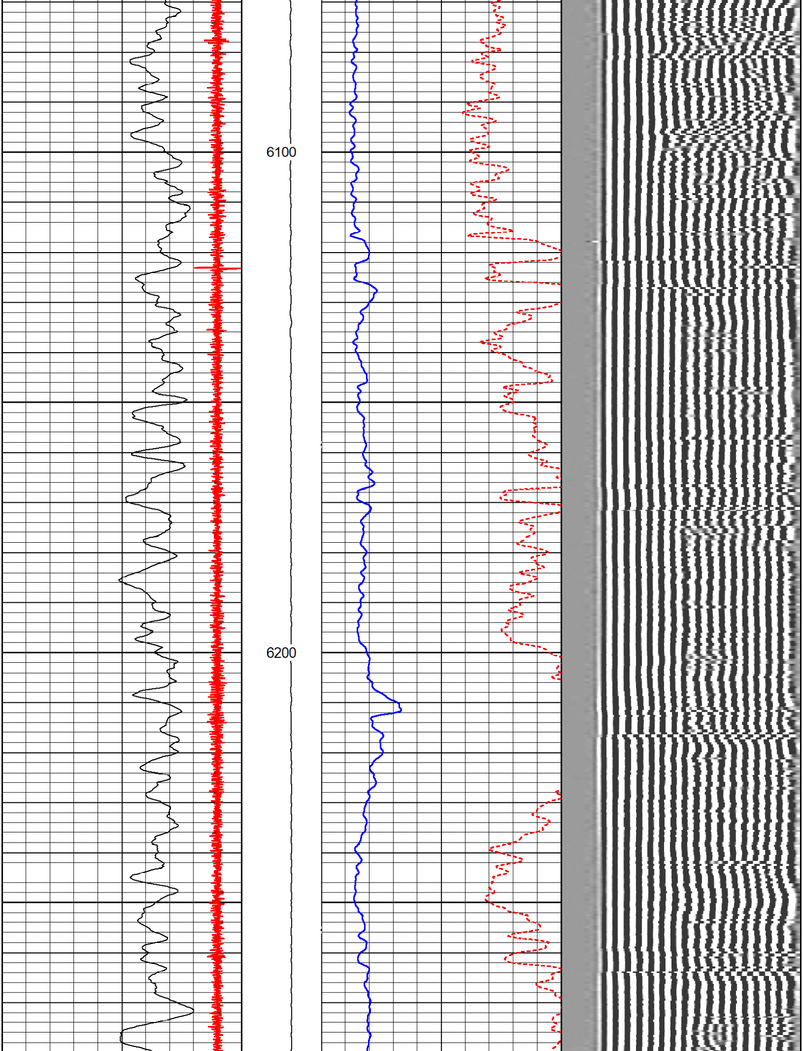
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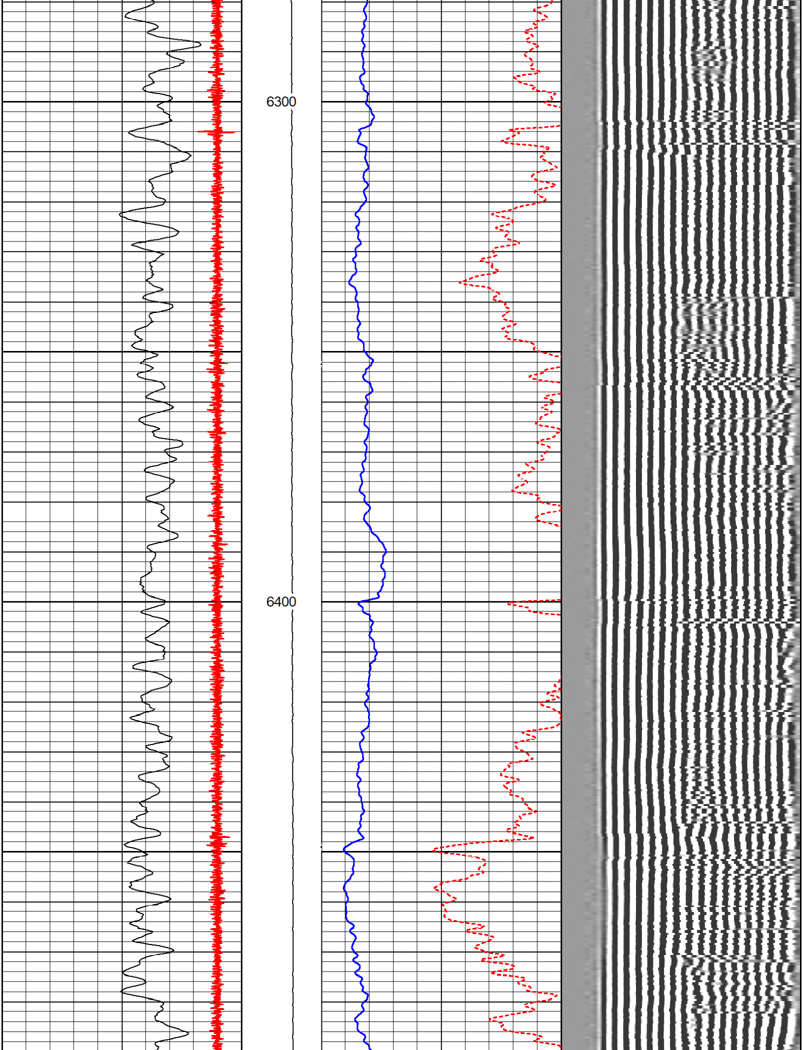
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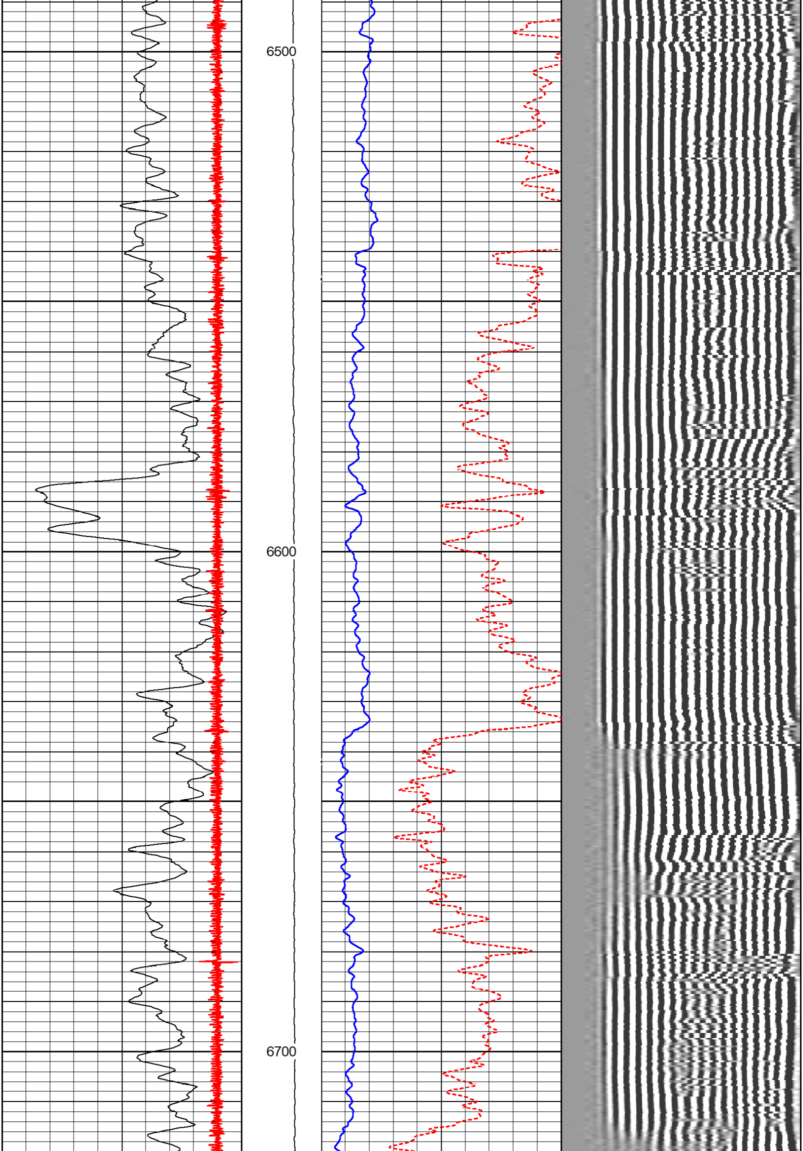
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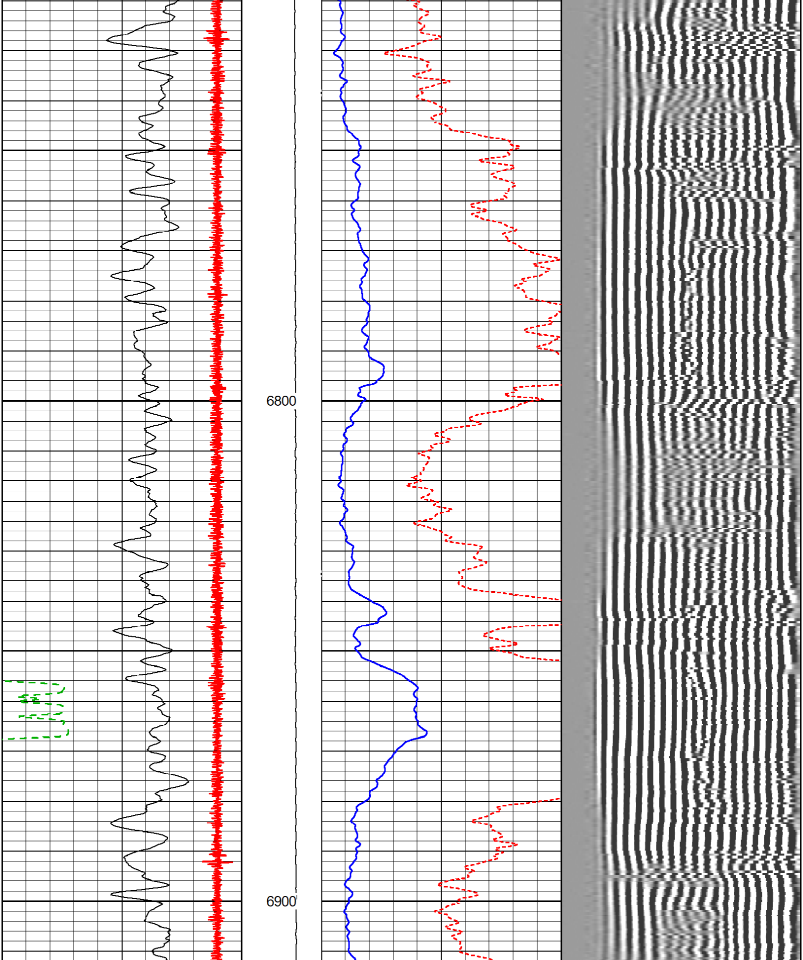
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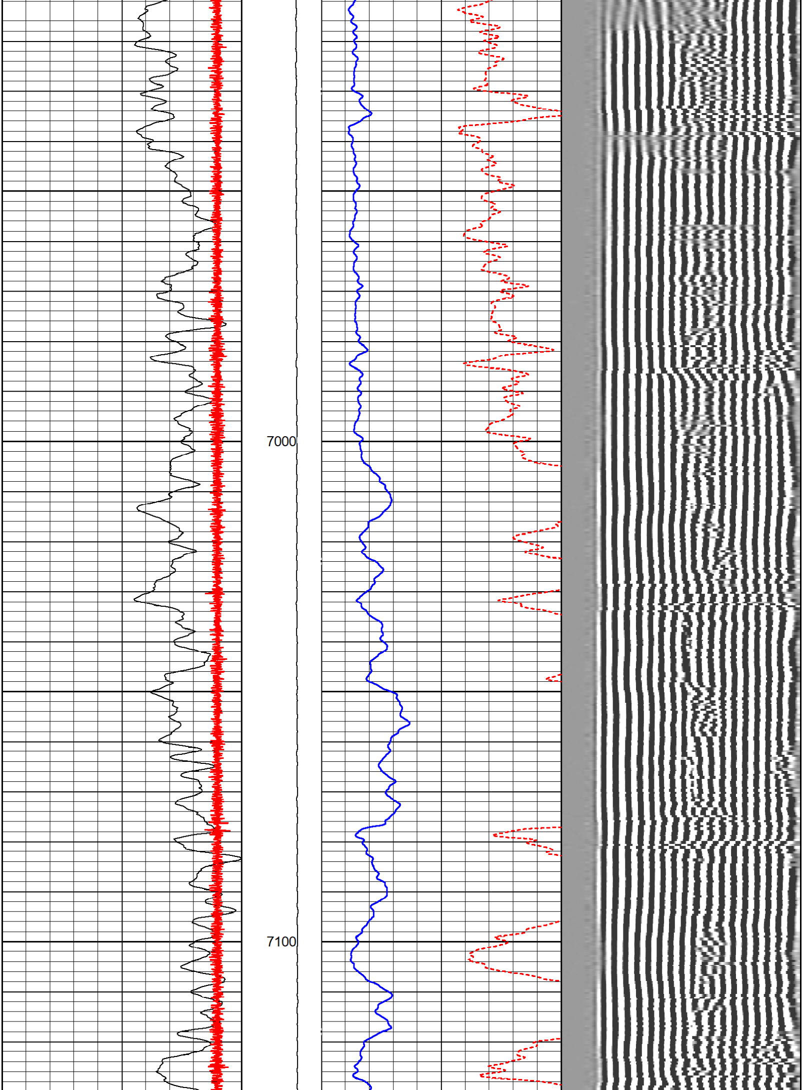
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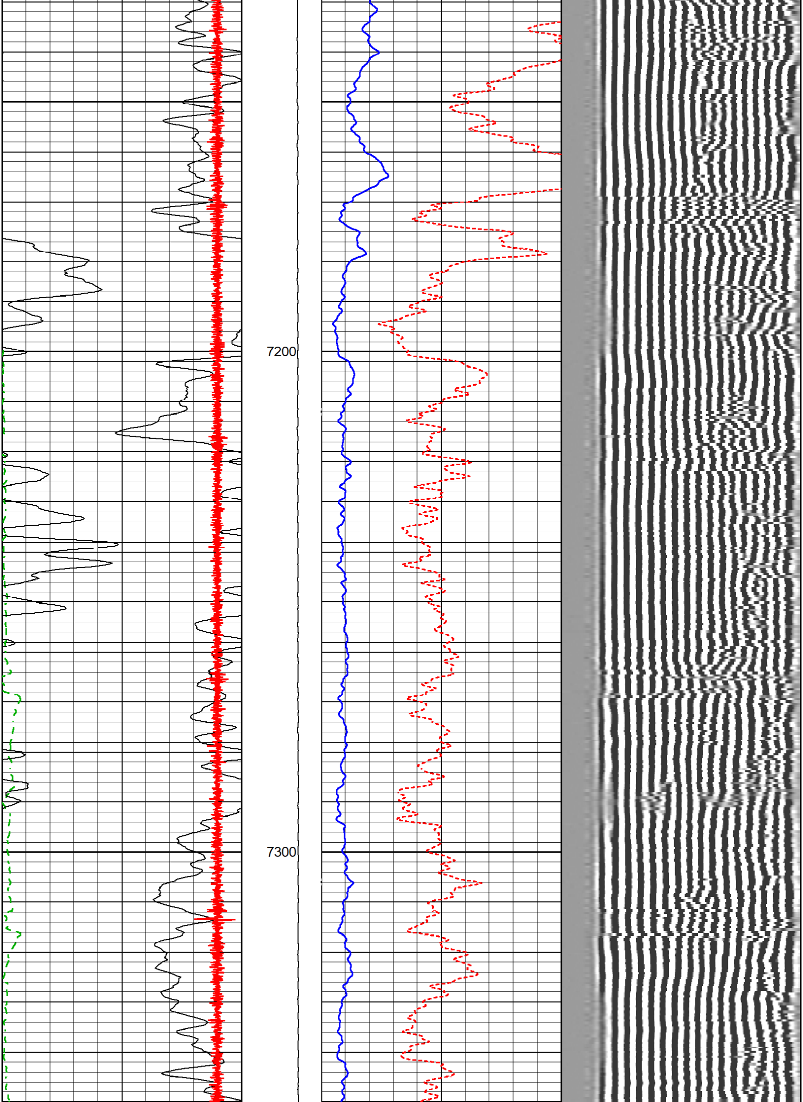
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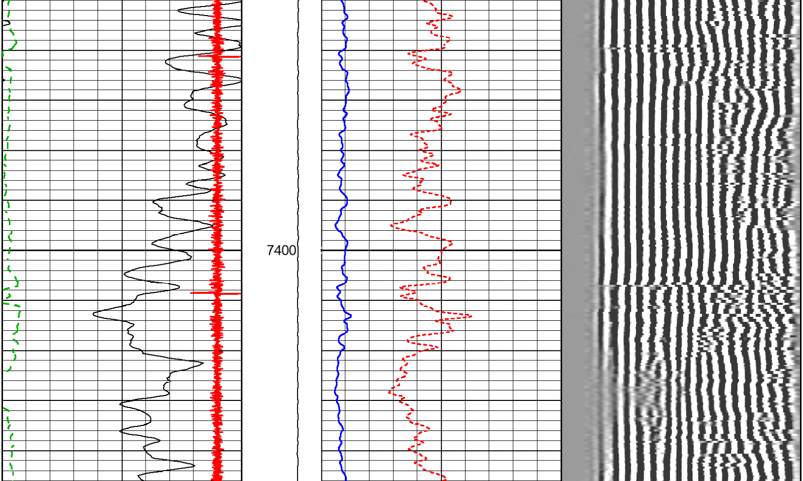
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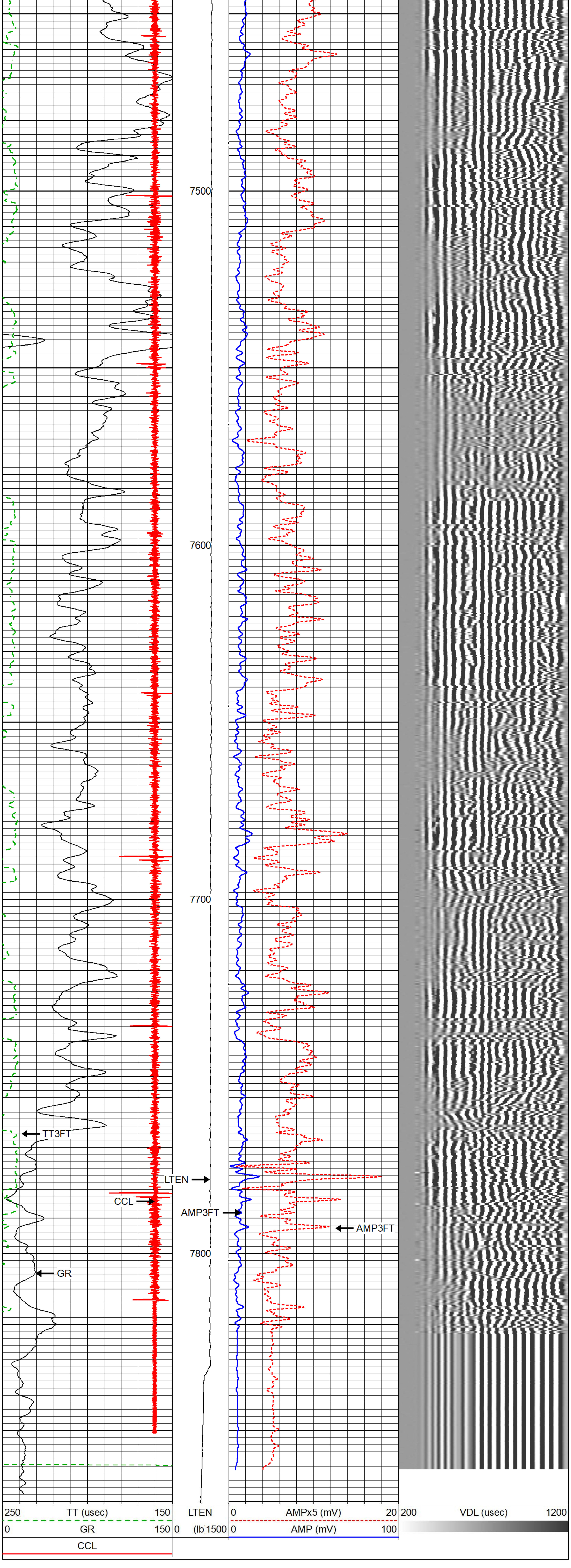
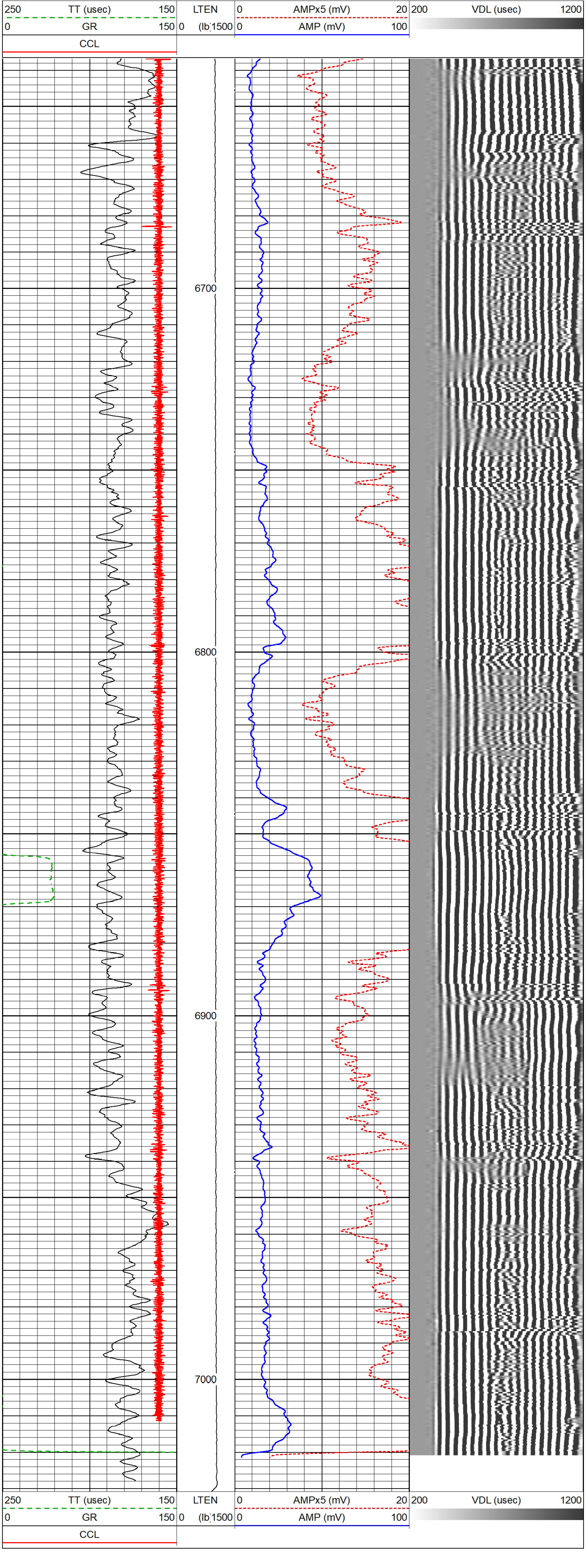


250 TT (usec) 150	LTEN	0 AMPx5 (mV) 20	200 VDL (usec) 1200
0 GR 150	0 (lb 1500	0 AMP (mV) 100	
CCL			

REPEAT PASS

Database File 03_21_2022_veridad_countyline_3130-5h.db
Dataset Pathname pass2
Presentation Format rmws_dsc
Dataset Creation Mon Mar 21 07:38:31 2022
Charted by Depth in Feet scaled 1:240

250 TT (usec) 150	LTEN	0 AMPx5 (mV) 20	200 VDL (usec) 1200
0 GR 150	0 (lb 1500	0 AMP (mV) 100	
CCL			



250 TT (usec) 150	LTEN	0 AMPx5 (mV) 20	200 VDL (usec) 1200
0 GR 150	0 (lb 1500	0 AMP (mV) 100	
CCL			

Calibration Report

Database File 03_21_2022_veridad_countyline_3130-5h.db
Dataset Pathname pass4
Dataset Creation Mon Mar 21 07:47:02 2022

Segmented Cement Bond Log Calibration Report

Serial Number: TEKCO234_3024
Tool Model: TEKCO

Calibration Casing Diameter: 5.500 in
Calibration Depth: 218.842 ft

Master Calibration, performed Sun Mar 20 13:49:11 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.001	0.832	4.000	71.921	81.584	4.055
CAL	-0.001	0.933				
5'	0.021	1.348	1.000	71.921	53.442	-0.140
SUM						
S1	0.001	1.492	0.000	100.000	67.061	-0.039
S2	0.018	1.314	0.000	100.000	77.112	-1.363
S3	0.032	1.055	0.000	100.000	97.760	-3.109
S4	0.004	0.921	0.000	100.000	109.107	-0.437
S5	0.012	0.924	0.000	100.000	109.561	-1.264
S6	0.008	0.962	0.000	100.000	104.792	-0.793
S7	0.010	1.103	0.000	100.000	91.496	-0.916
S8	0.008	1.334	0.000	100.000	75.428	-0.590

Internal Reference Calibration, performed Tue Feb 05 14:47:36 2008:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.001	0.933	1.000	0.000

Air Zero Calibration, performed Fri Mar 18 09:43:52 2022:

	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

RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

Company	Verdad Resources, LLC
Well	County Line 3130-05H
Field	Wattenberg
County	Weld
State	Colorado