



# CEMENT BOND LOG GAMMA RAY / CCL

Company	GREAT WESTERN OIL & GAS, LLC.		Country	U.S.A.			
Well	GREAT WESTERN 23-44						
Field	WATTENBERG						
County	WELD						
State	COLORADO						
Company GREAT WESTERN OIL & GAS, LLC. Well GREAT WESTERN 23-44 Field WATTENBERG County WELD State COLORADO			Country U.S.A.				
Location:			API # : 05-123-24723				
SHL: 775' FNL & 660' FEL NE NE BHL: 660' FSL & 658' FEL SE NE SEC 26 TWP 6N RGE 67W			Other Services NONE				
Permanent Datum	G.L.	Elevation	4761'				
Log Measured From	K.B.						
Drilling Measured From	K.B.						
Elevation	4761'		K.B. 4776' D.F. 4775' G.L. 4761'				
Date	1-16-2016						
Run Number	TWO						
Depth Driller	7463'						
Depth Logger	1615'						
Bottom Logged Interval	1600'						
Top Log Interval	SURFACE						
Open Hole Size	N/A						
Type Fluid	WATER						
Density / Viscosity	N/A						
Max. Recorded Temp.	N/A						
Estimated Cement Top							
Time Well Ready	7:00AM						
Time Logger on Bottom	3:30PM						
Equipment Number	41						
location	JOHNSTOWN						
Recorded By	WILLIAMS						
Witnessed By	MR. LINDSEY						
Borehole Record			Tubing Record				
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String							
Prot. String							
Production String							
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

NOTE: THIS LOG WAS NOT CORRELATED TO ANY OTHER LOG

MAIN PASS: 5" = 100'  
CSG PSI: 800 PSI

## Calibration Report

Database File: 11616\_greatwestern\_23-44.db  
Dataset Pathname: mainpress/pass1  
Dataset Creation: Sat Jan 16 15:16:00 2016 by Log Std Casedhole 10081

Serial Number:
Tool Model:
Performed:

080221
Probe
Sun Jun 13 13:33:21 1993

Calibrator Value:

1.0
GAPI

Background Reading:
Calibrator Reading:

0.0
1.0
cps
cps

Sensitivity:

1.0000
GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:
Tool Model:

120303
Probe

Calibration Casing Diameter:
Calibration Depth:

4.500
1441.608
in
ft

Master Calibration, performed Sat Jan 16 15:13:18 2016:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.223	0.700	81.196	365.231	-0.094
CAL	0.001	0.683				
5'	0.004	0.182	0.700	81.196	452.373	-1.106
SUM						
S1	0.004	0.303	0.000	100.000	334.340	-1.412
S2	0.004	0.218	0.000	100.000	467.607	-1.981
S3	0.004	0.245	0.000	100.000	415.943	-1.782
S4	0.005	0.253	0.000	100.000	403.090	-1.860
S5	0.003	0.245	0.000	100.000	414.344	-1.345
S6	0.003	0.235	0.000	100.000	430.456	-1.214
S7	0.002	0.246	0.000	100.000	408.395	-0.663
S8	0.002	0.245	0.000	100.000	410.977	-0.843

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.001	0.683	1.000	0.000

Air Zero Calibration, performed Sat Jan 16 08:46:33 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

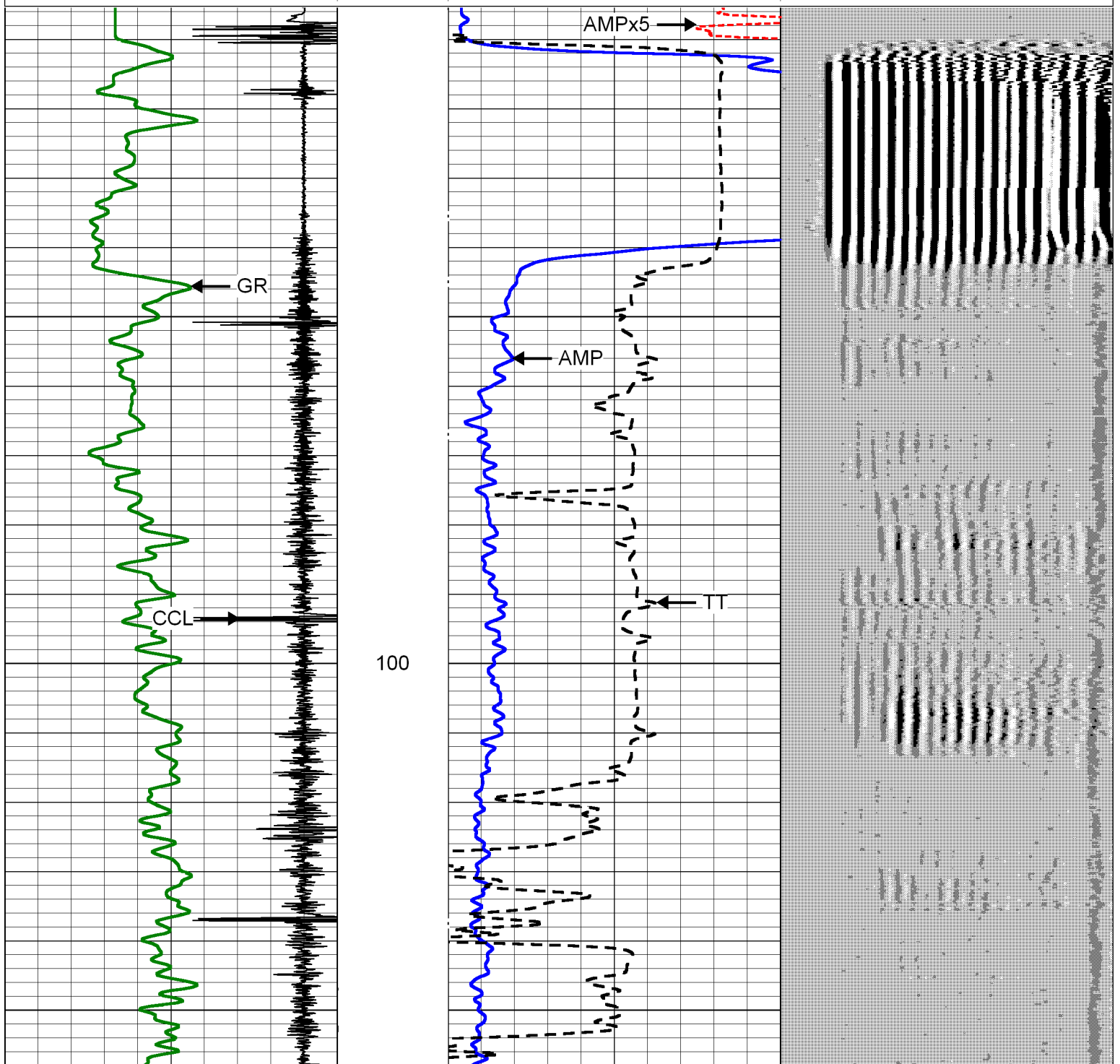
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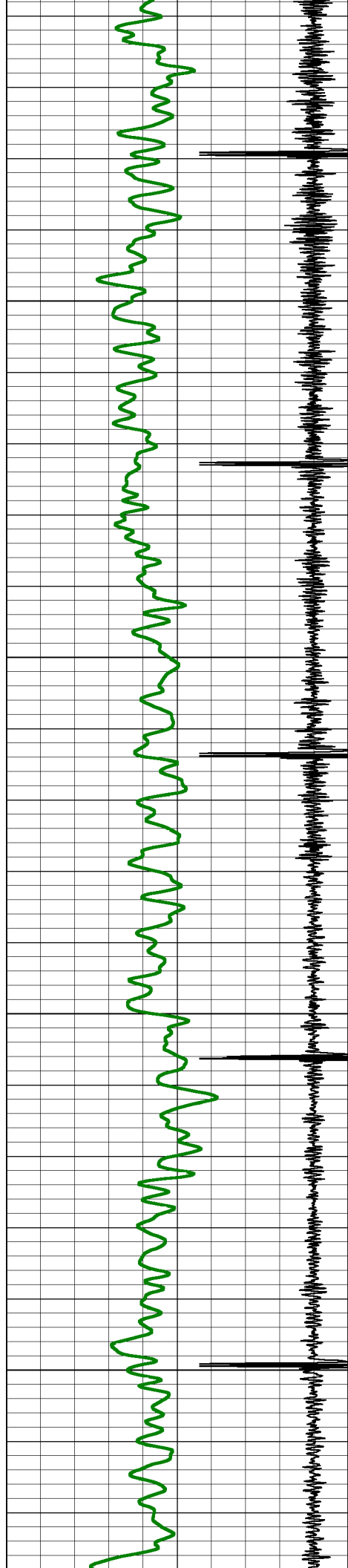


# MAIN PASS 800PSI

Database File: 11616\_greatwestern\_23-44.db  
Dataset Pathname: mainpress/pass2.1  
Presentation Format: rmws\_dsc  
Dataset Creation: Sat Jan 16 16:07:55 2016 by Calc Std Casedhole 10081  
Charted by: Depth in Feet scaled 1:240

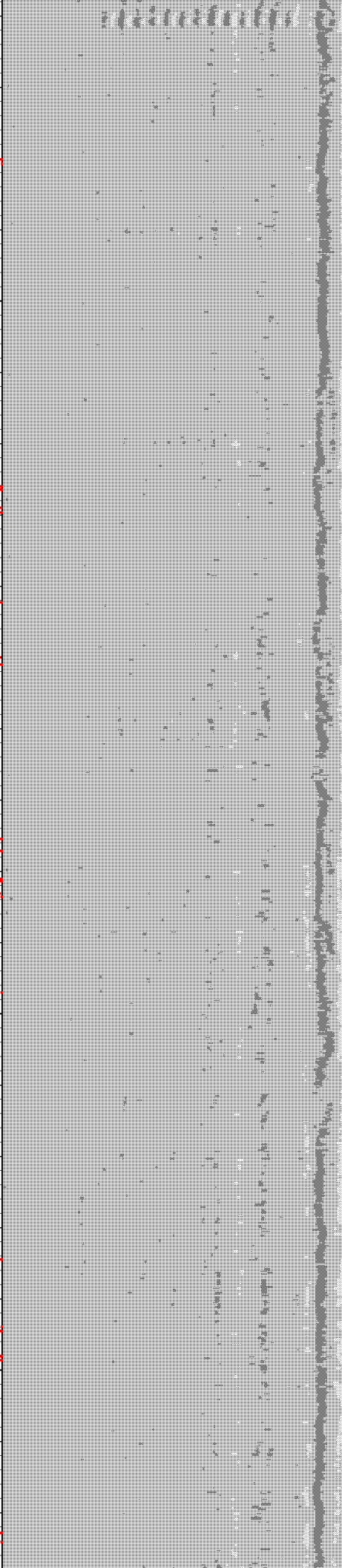
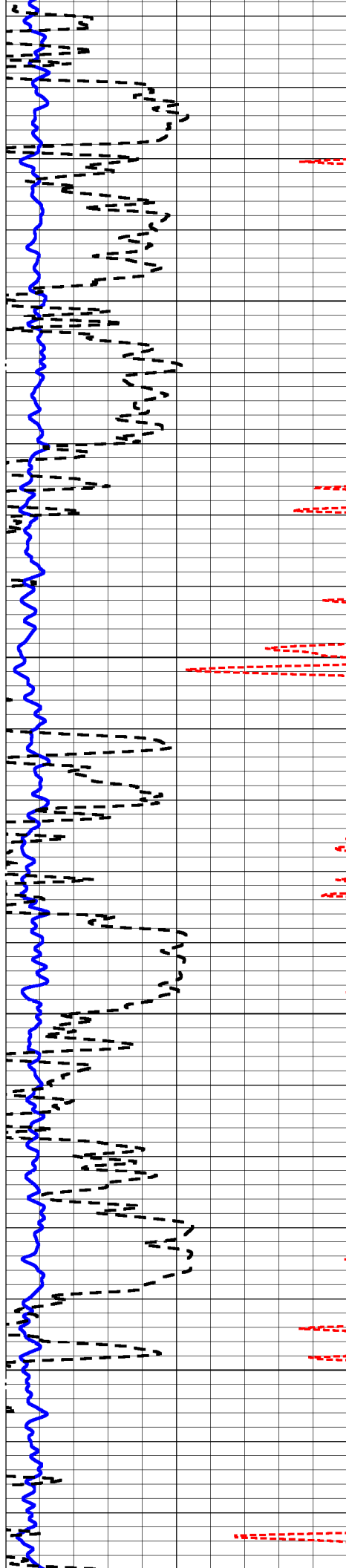
-27	CCL	3	LTEN	0	AMPx5 (mV)	5	200	VDL	1200
0	GR (GAPI)	150	(lb)	0	AMP (mV)	100			
			0	4000	380	TT (usec)	180		

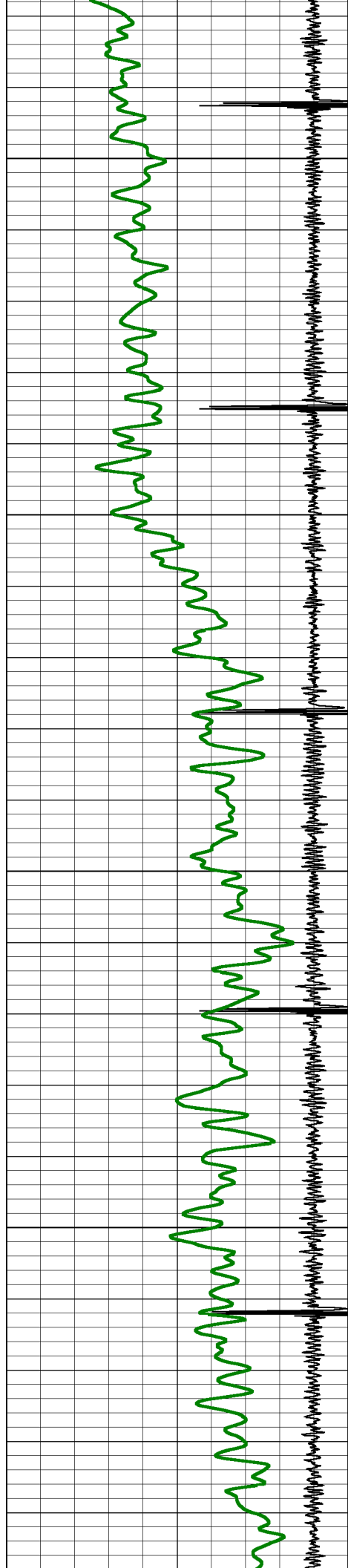




200

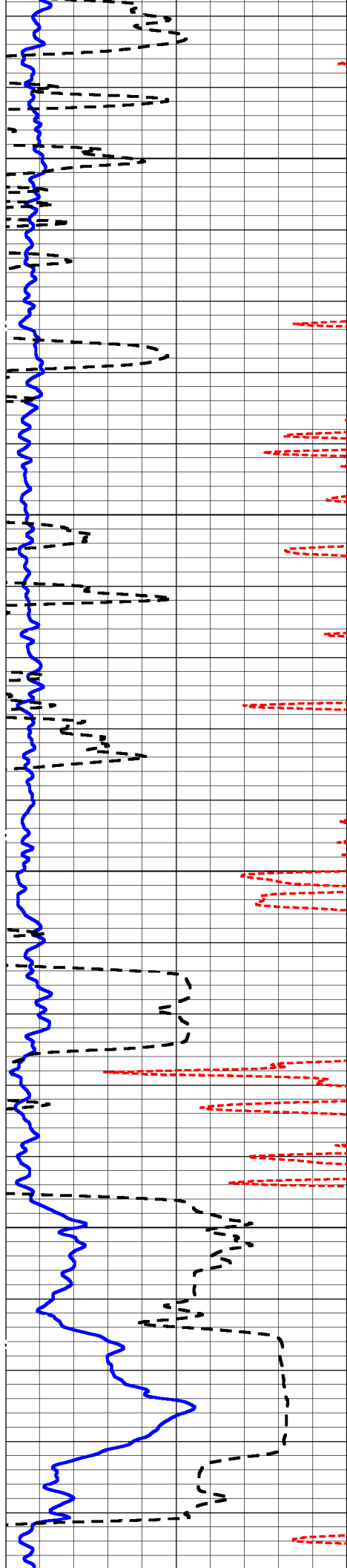
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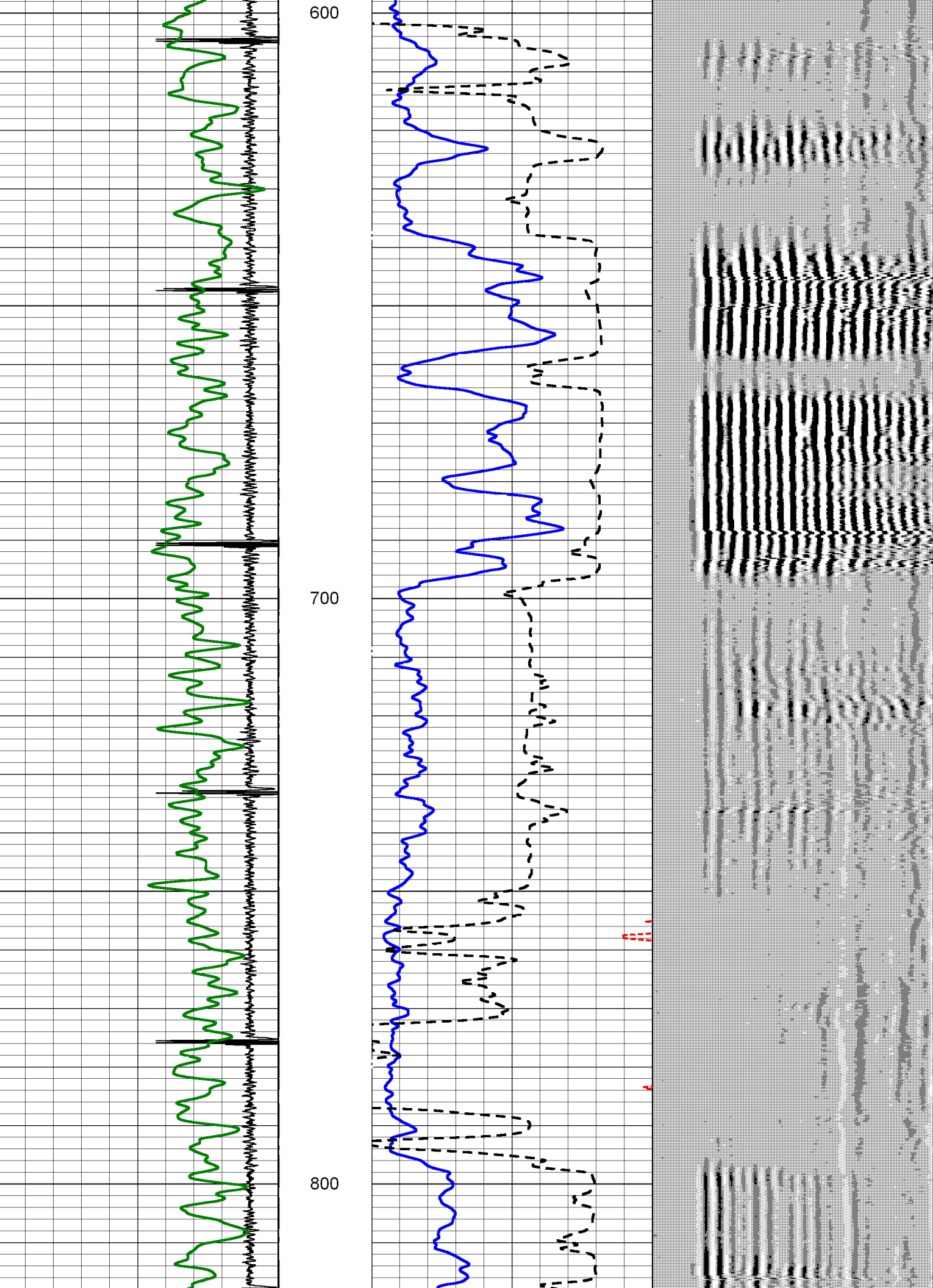


400

500







GR

CCL

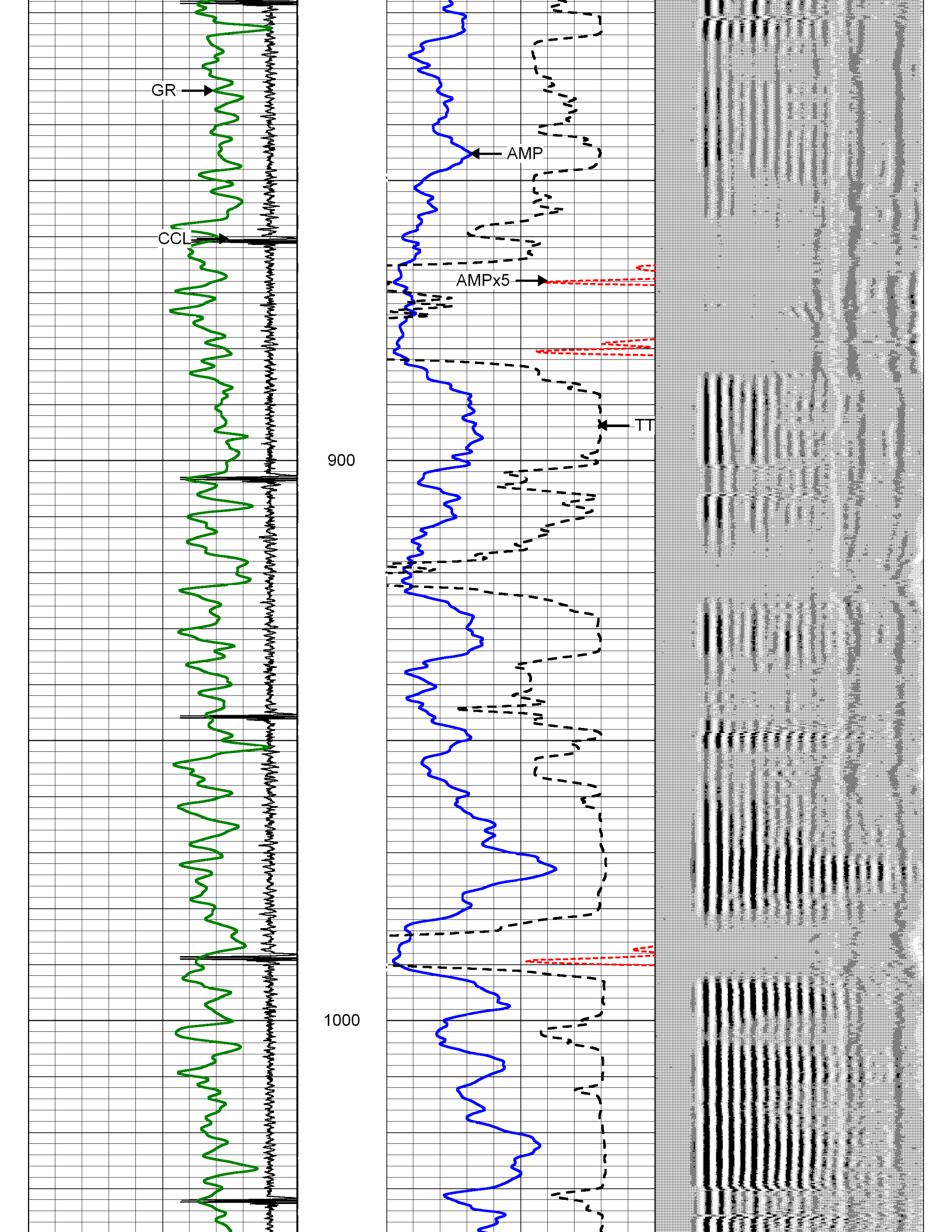
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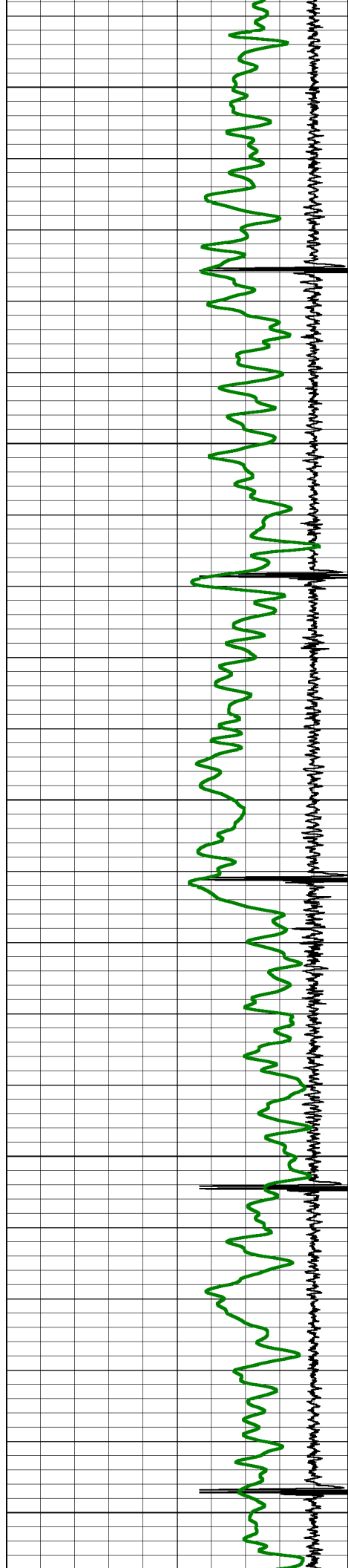
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AMP

AMPx5

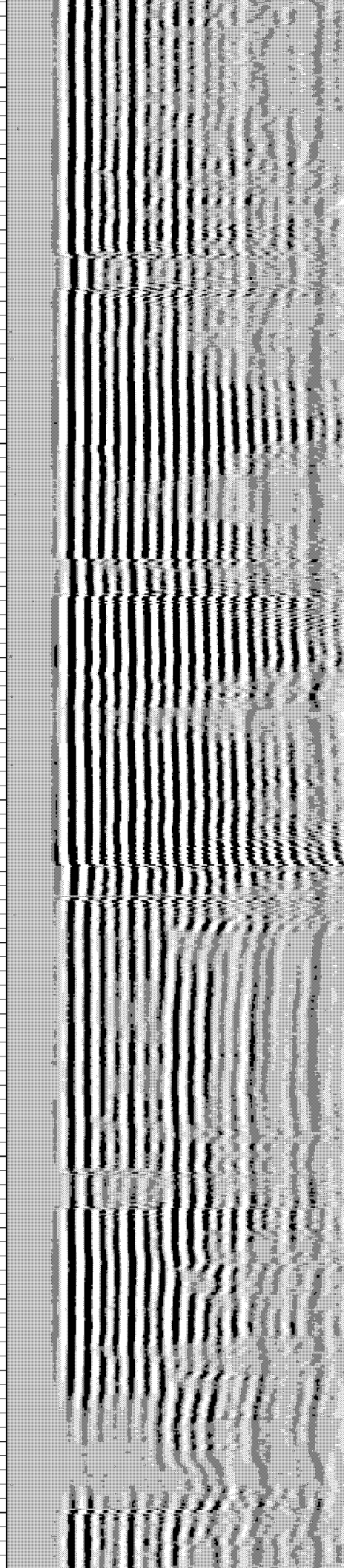
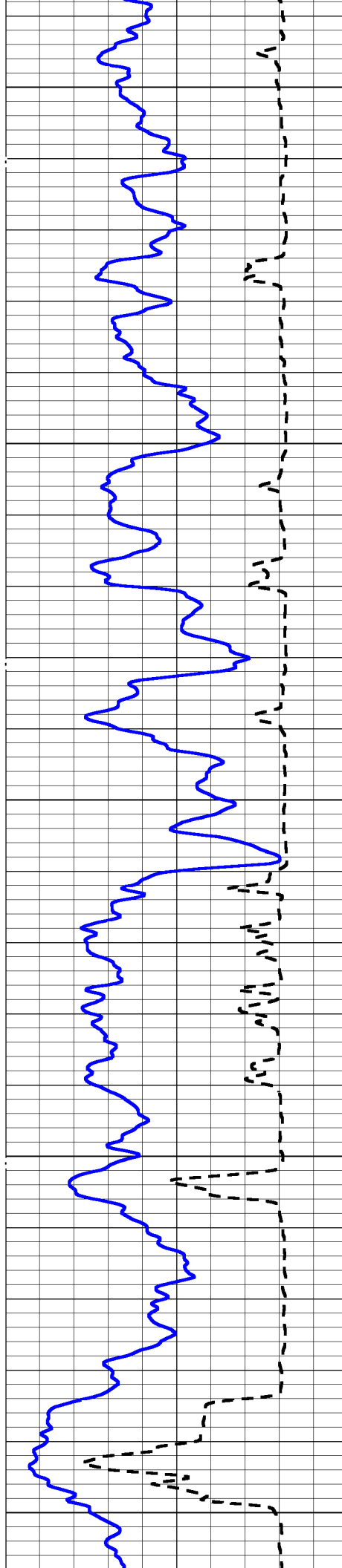
TT



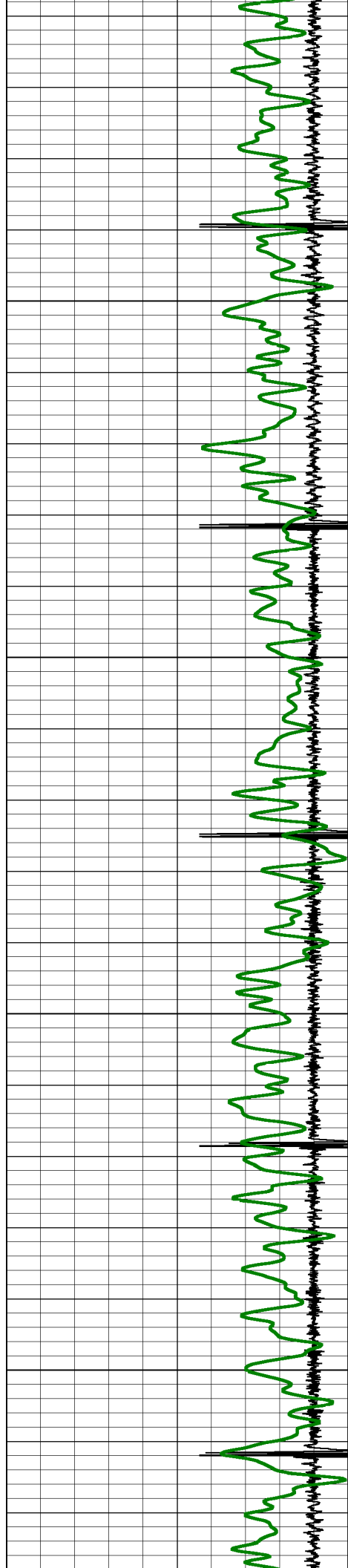


1100

1200

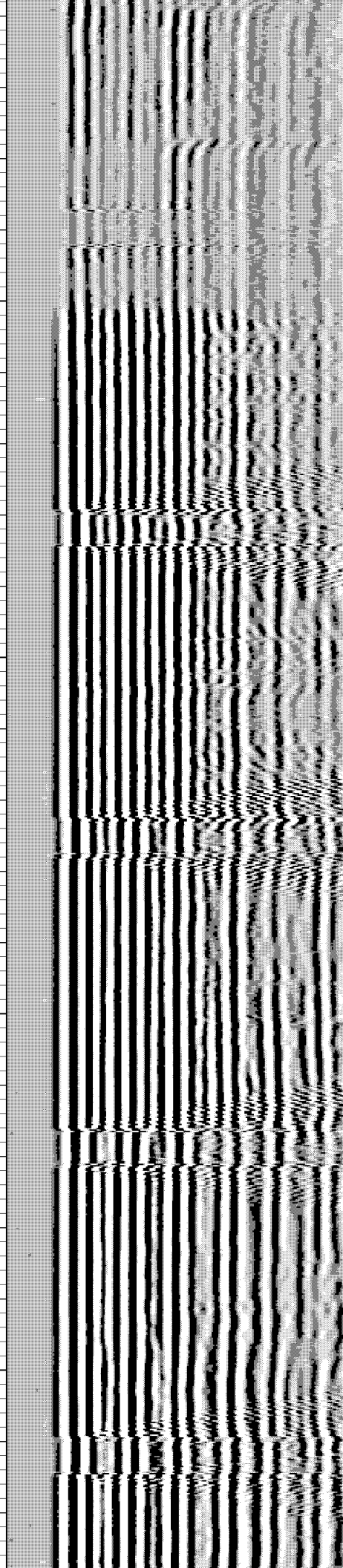
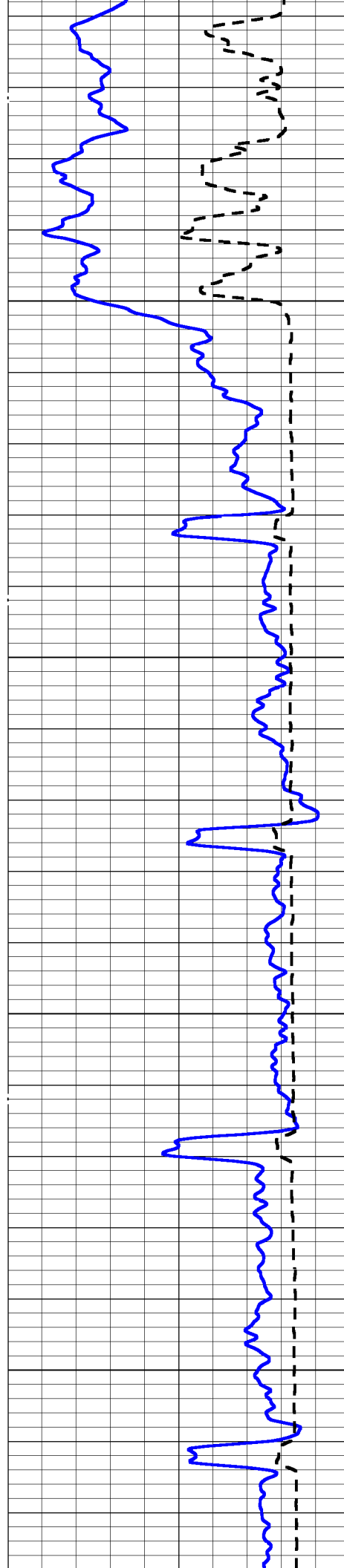


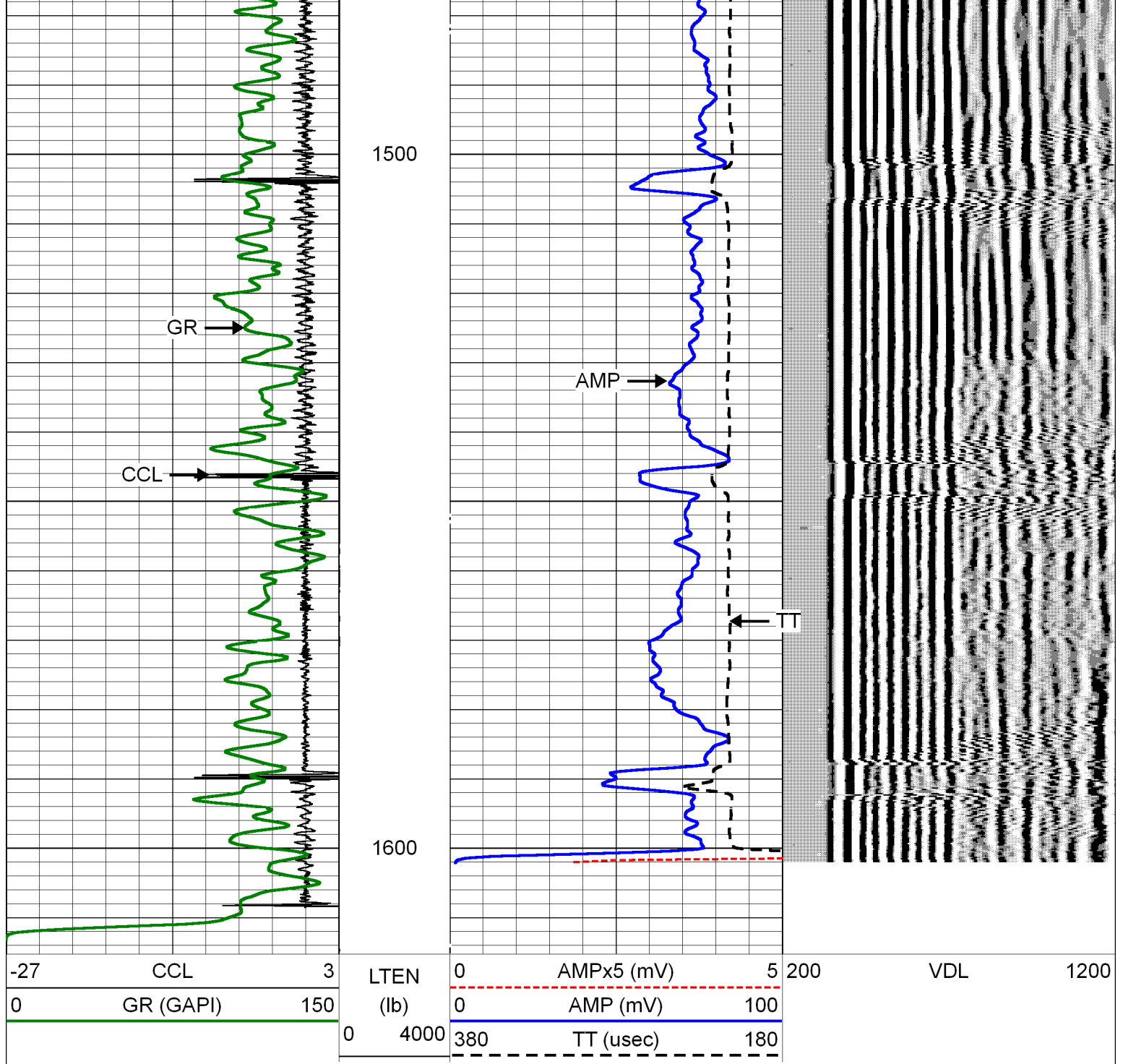




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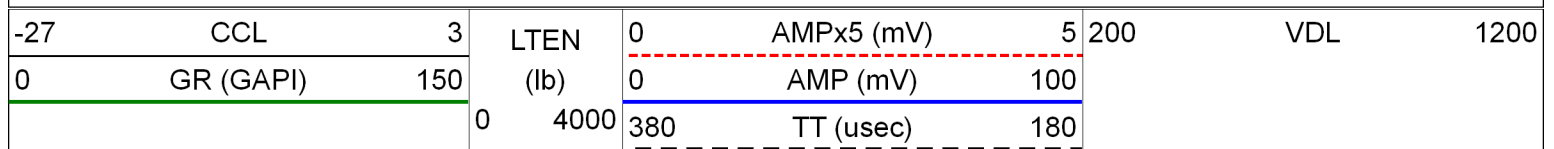
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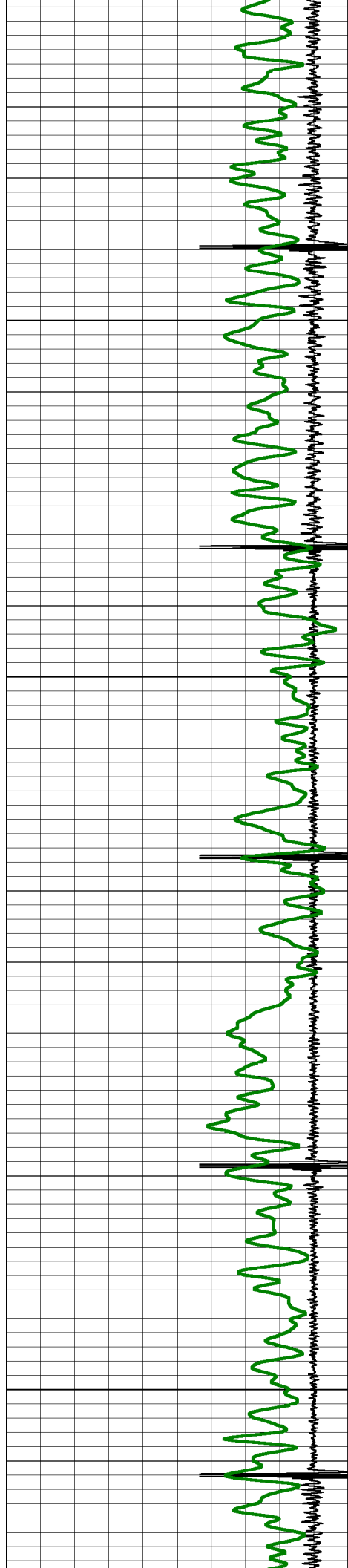




# REPEAT PASS 0 PSI

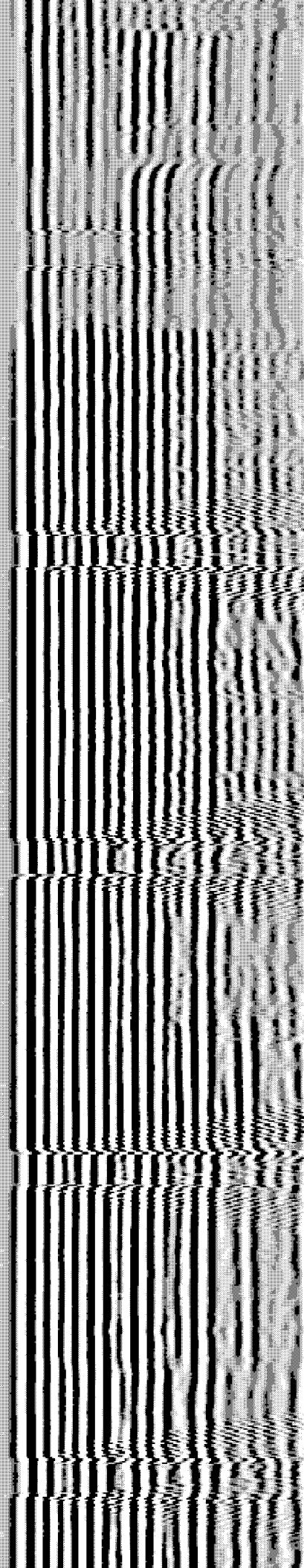
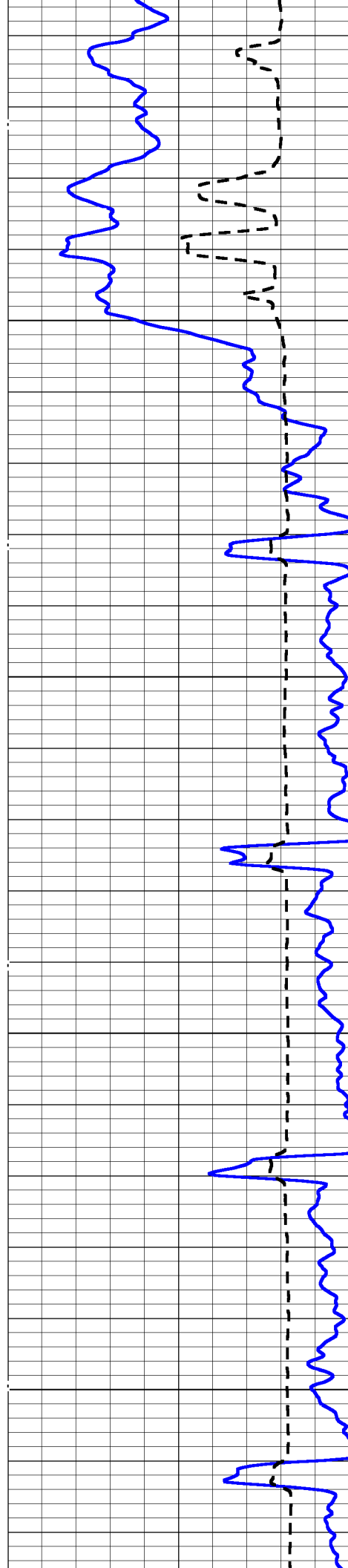
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 Dataset Pathname: repeat/pass1  
 Presentation Format: rmws\_dsc  
 Dataset Creation: Sat Jan 16 11:28:50 2016  
 Charted by: Depth in Feet scaled 1:240



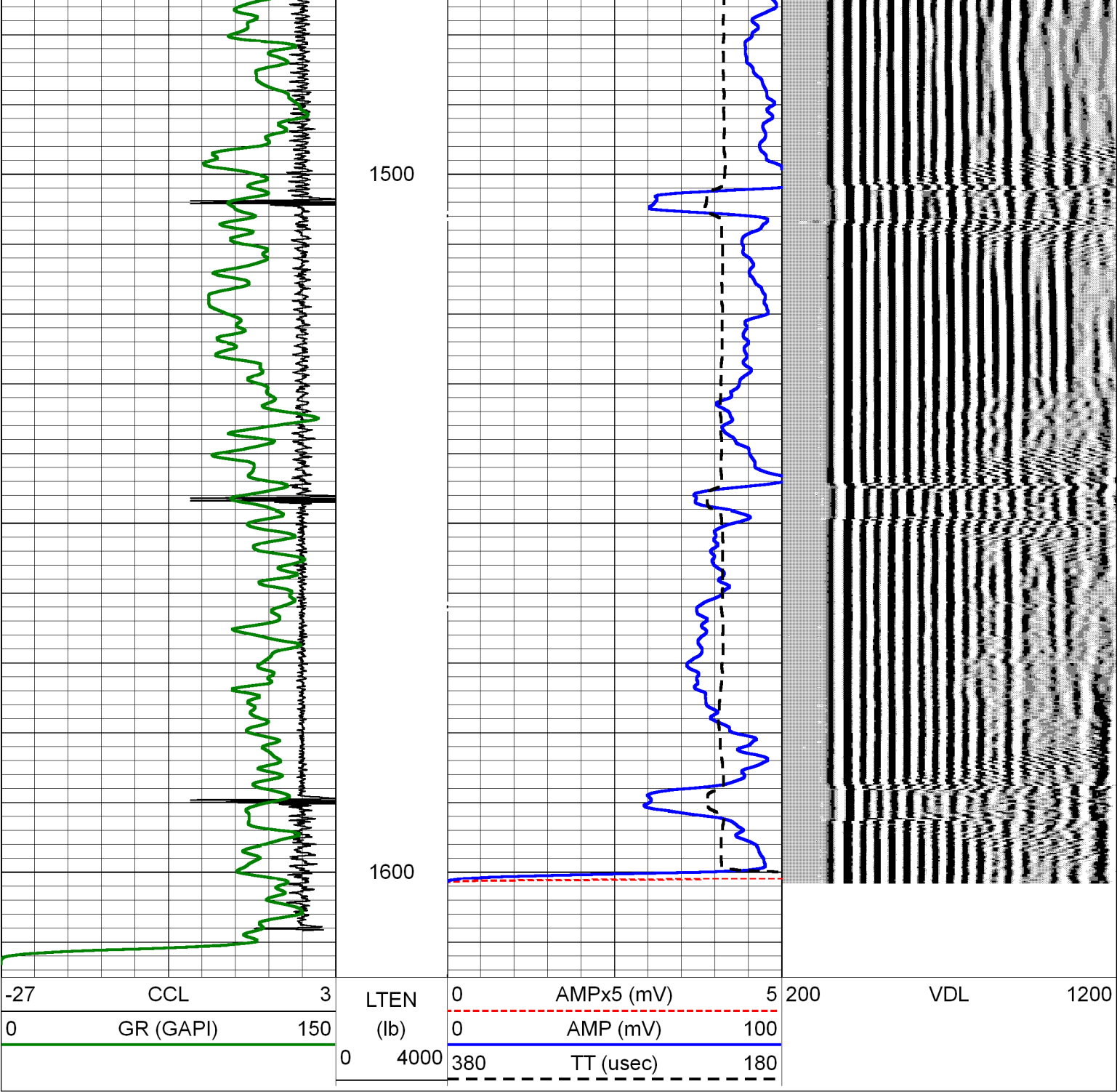



1300

1400

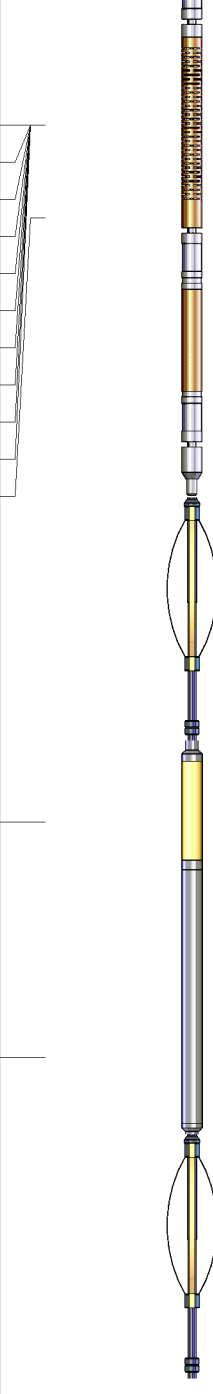






Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	



WVF3FT	14.58		RBT-Probe (120303) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	14.58					
WVFS1	14.58					
WVFS2	14.58					
WVFS3	14.58					
WVFS4	14.58					
WVFS5	14.58					
WVFS6	14.58					
WVFS7	14.58					
WVFS8	14.58					
WVF5FT	13.50					
			PTS275	2.83	2.75	
CCL	6.47					
			GR-Probe (080221) Probe 2.75" 4 Channel Pulse	4.58	2.75	30.00
GR	3.73					
			PTS275	2.83	2.75	
Dataset: 11616_greatwestern_23-44.db: field/well/mainpress/pass2.1 Total Length: 22.00 ft Total Weight: 120.00 lb O.D. 2.75 in						

	Company	GREAT WESTERN OIL & GAS, LLC.				
	Well	GREAT WESTERN 23-44				
	Field	WATTENBERG				
	County	WELD				
	State	COLORADO				Country U.S.A.