

HALLIBURTON

CEMENT BOND LOG

Company	CARRIZO	Company	CARRIZO	Well	BRINGELSON 2-32-9-58	Field	WILDCAT	County	WELD	State	CO
Well	BRINGELSON 2-32-9-58	Field	WILDCAT	County	WELD	State	CO	API No.:	05-123-36625	Serv #:	900304169
Location:	SHL 650' FFSL 650' FFELL	BHL 650' FFNLL 650' FFELL									Other Services
Permanent Datum	GL	Elevation	4785								N/A
Log Measured From	KB	17	Ft. above perm. datum								
Drilling Measured From	KB										
Date @ Time Logged	22-MAR-2013	Type Fluid in Hole	FRESH WATER								
Run No.	ONE	Density of Fluid	8.33								
Depth - Driller	10135	Fluid Level	SURFACE								
Depth - Logger	5381	Cement Top Est. Logged	1950								
Bottom - Logged Interval	5269	Equipment / Location	11874896 / BRIGHTON								
Top - Log Interval	380	Recorded by	JOSHUA MCDANIEL								
Max. Recorded Temp.	117	Witnessed by	KIRK WILLIAMS								
CEMENTING DATA	Surface String	Protection String	Production String								Liner
Date / Time Cemented											
Primary / Squeeze											
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs								
Cement Volume	534 SACKS	552 SACKS									
Cement Type / Weight	/	/	/								
Formulation											
Mud Type / Mud Wgt.	/	/	/								
Run Number	Bit From To	Size	Weight	From To							
	12.25 0 1400	9.625	36	0	1400						
	8.75 0 5983	7	23	0	5983						
	6.25 5245 10135	4.5	11.6	5245	10135						

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HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

Comments

FIRST LOG IN THE WELL

GAMMA CALLIBRATED TO BLANKET VALUE 241 GAPI
TOL @ 5160'
FREE PIPE CAL @ 687' HYDROSTATIC ONLY
ESTIMATED TOP OF CEMENT 1950'

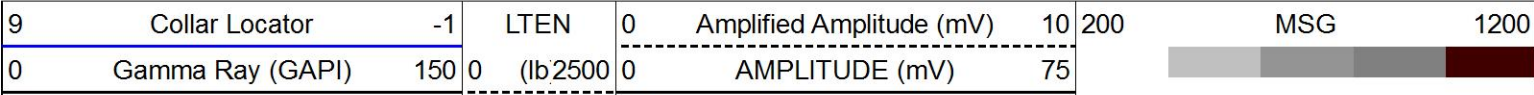
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES!
YOUR CREW TODAY: JOSHUA MCDANIEL, NOLAN RADFORD, BRANDON RIEDEL, JAMESON W

MAIN PASS 1000 PSI

HALLIBURTON

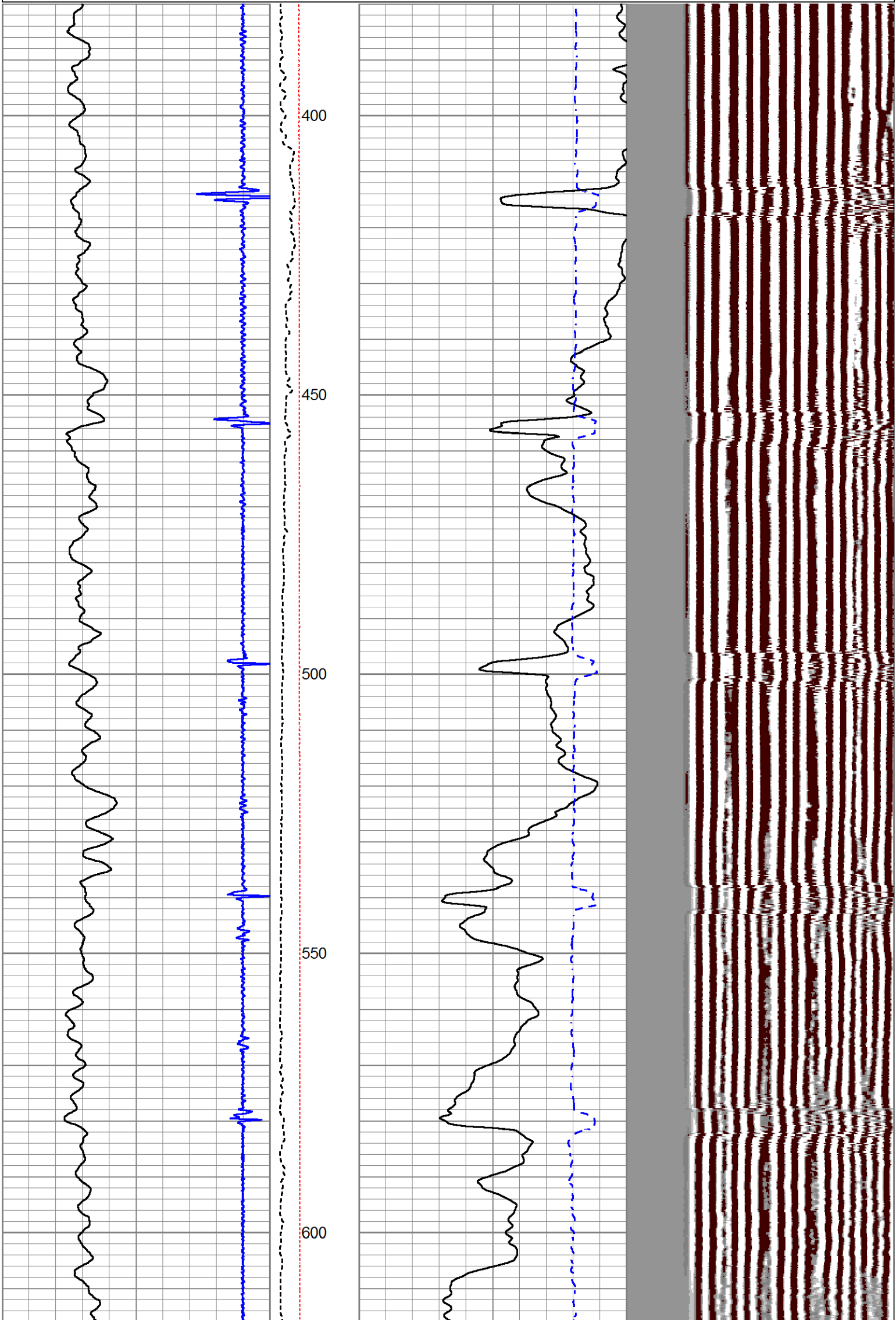
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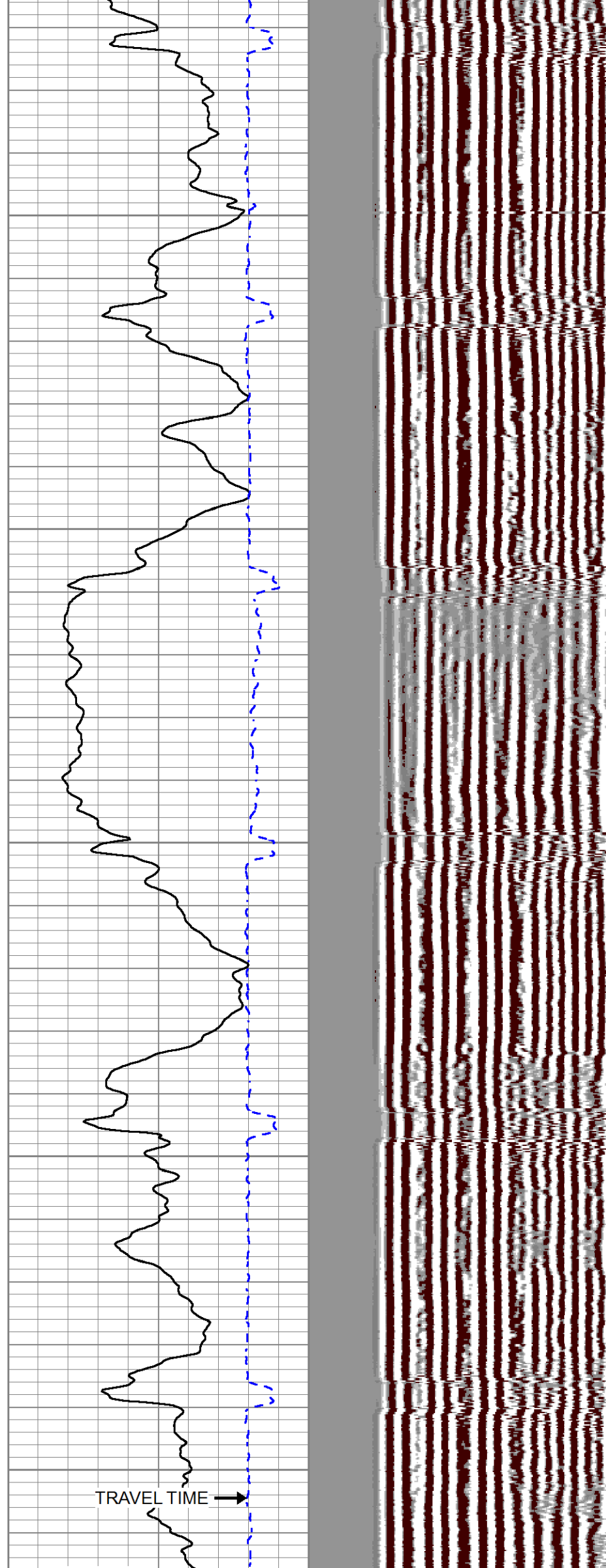
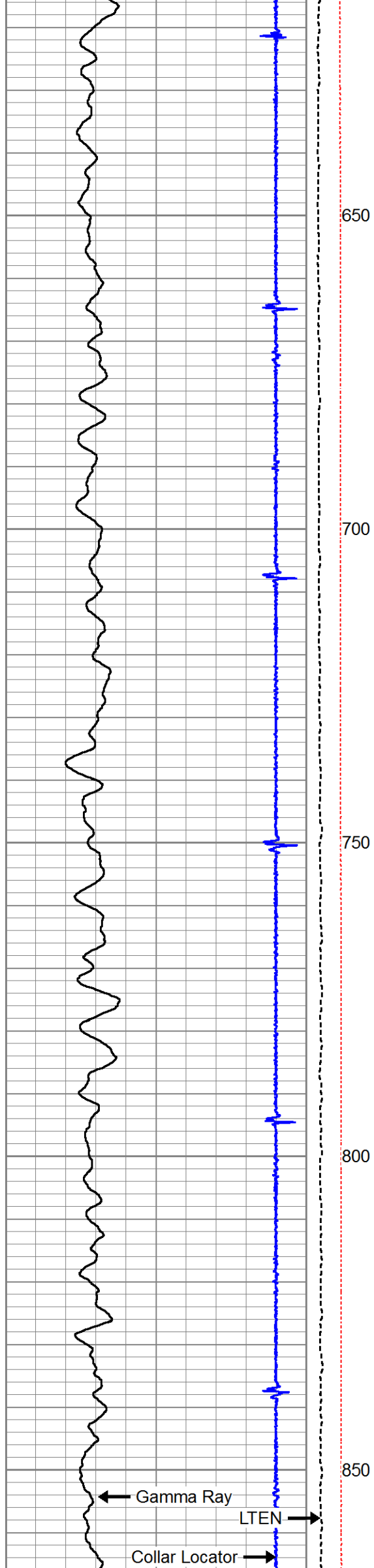
Database File bringelson 2-32_db.db
Dataset Pathname run2/pass12
Presentation Format 1cbl
Dataset Creation Fri Mar 22 11:21:35 2013 by Log Halliburton Casedho
Charted by Depth in Feet scaled 1:240

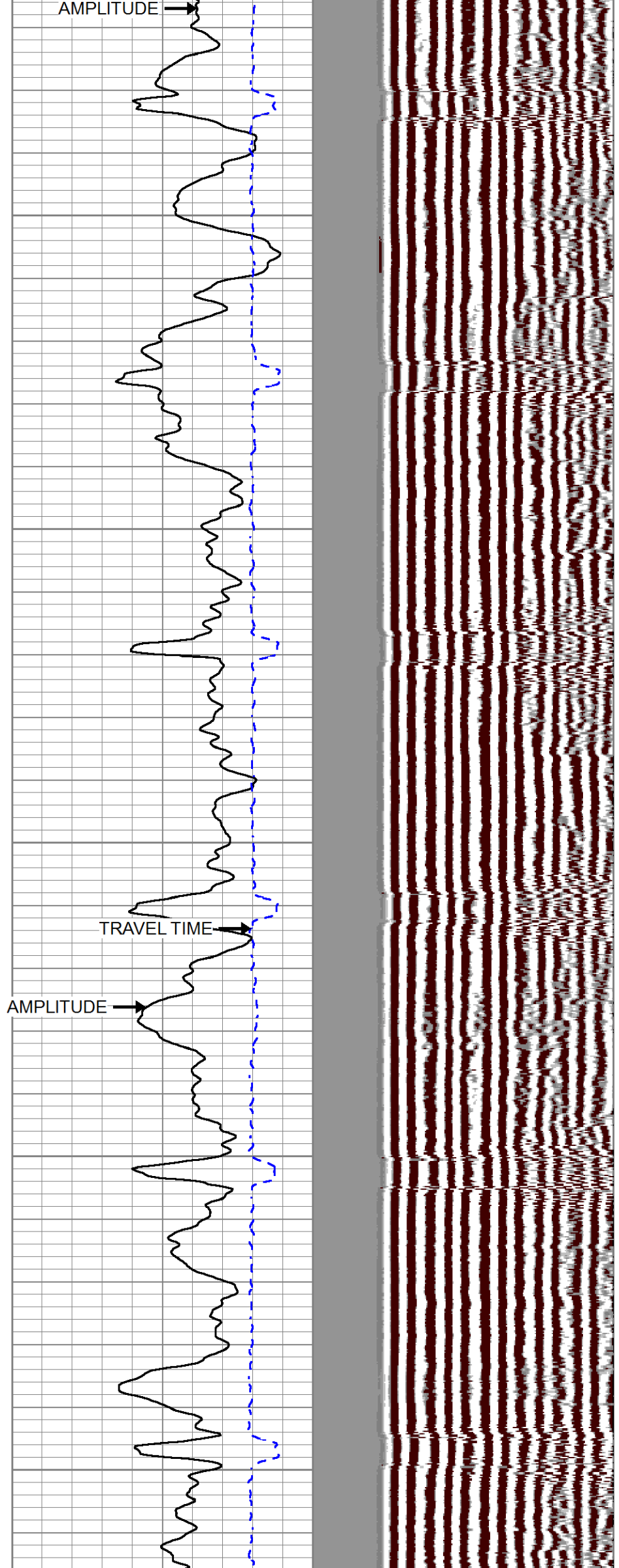
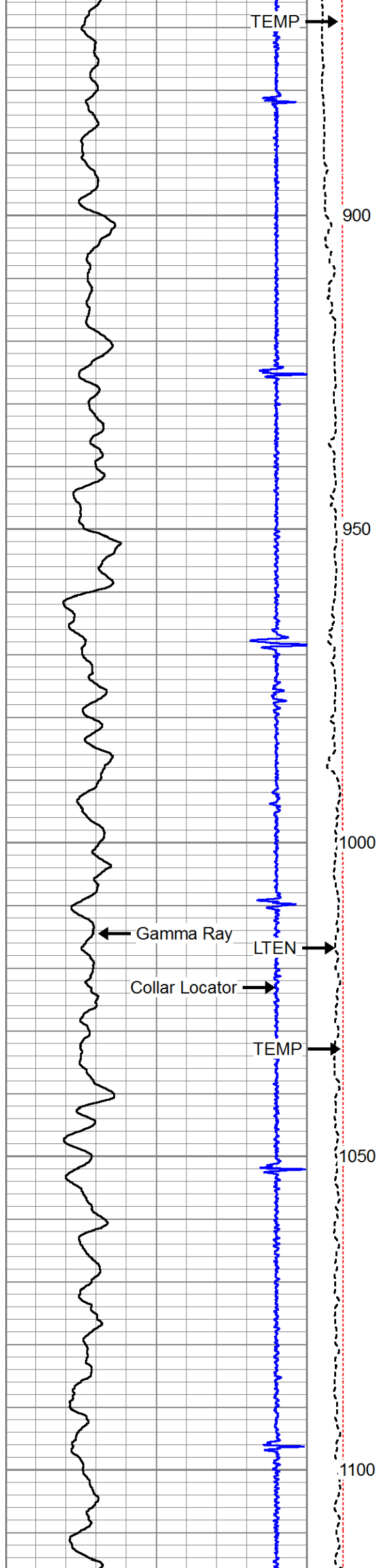


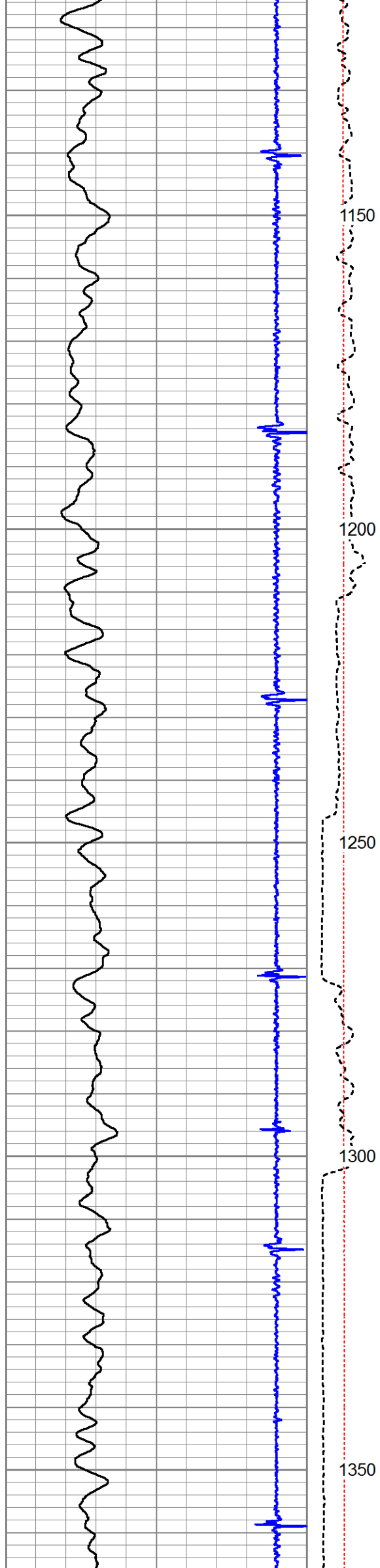
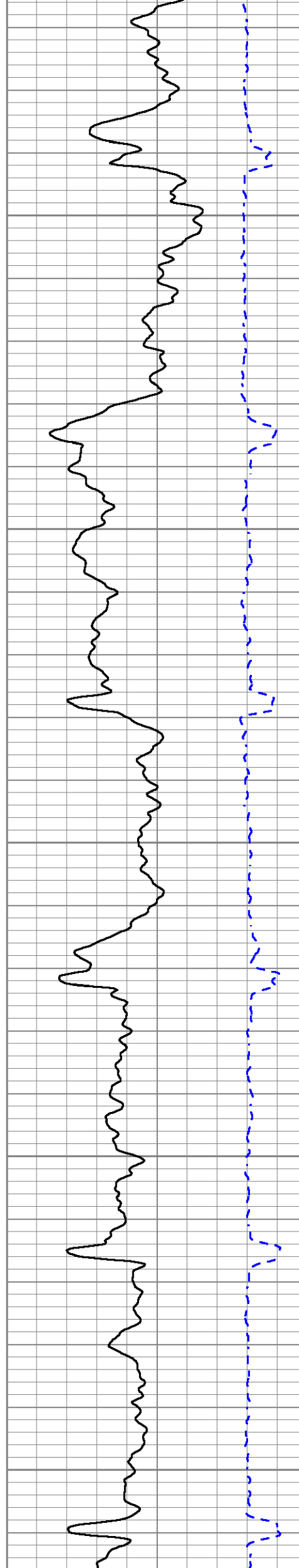
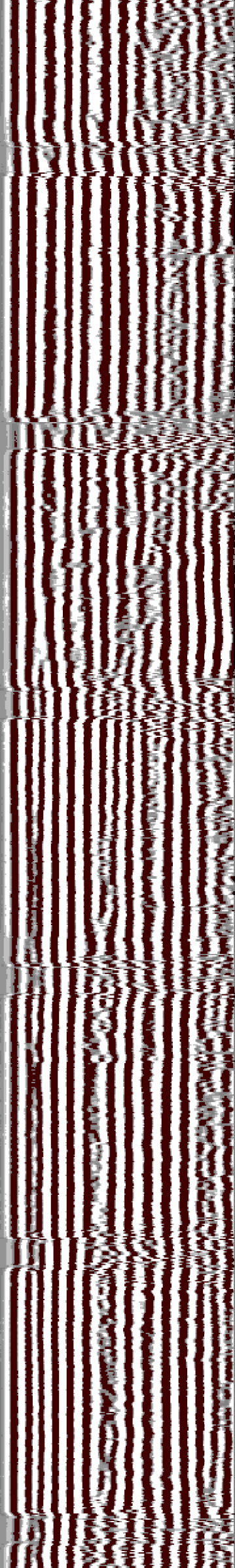
TEMP
(degF)
0 200

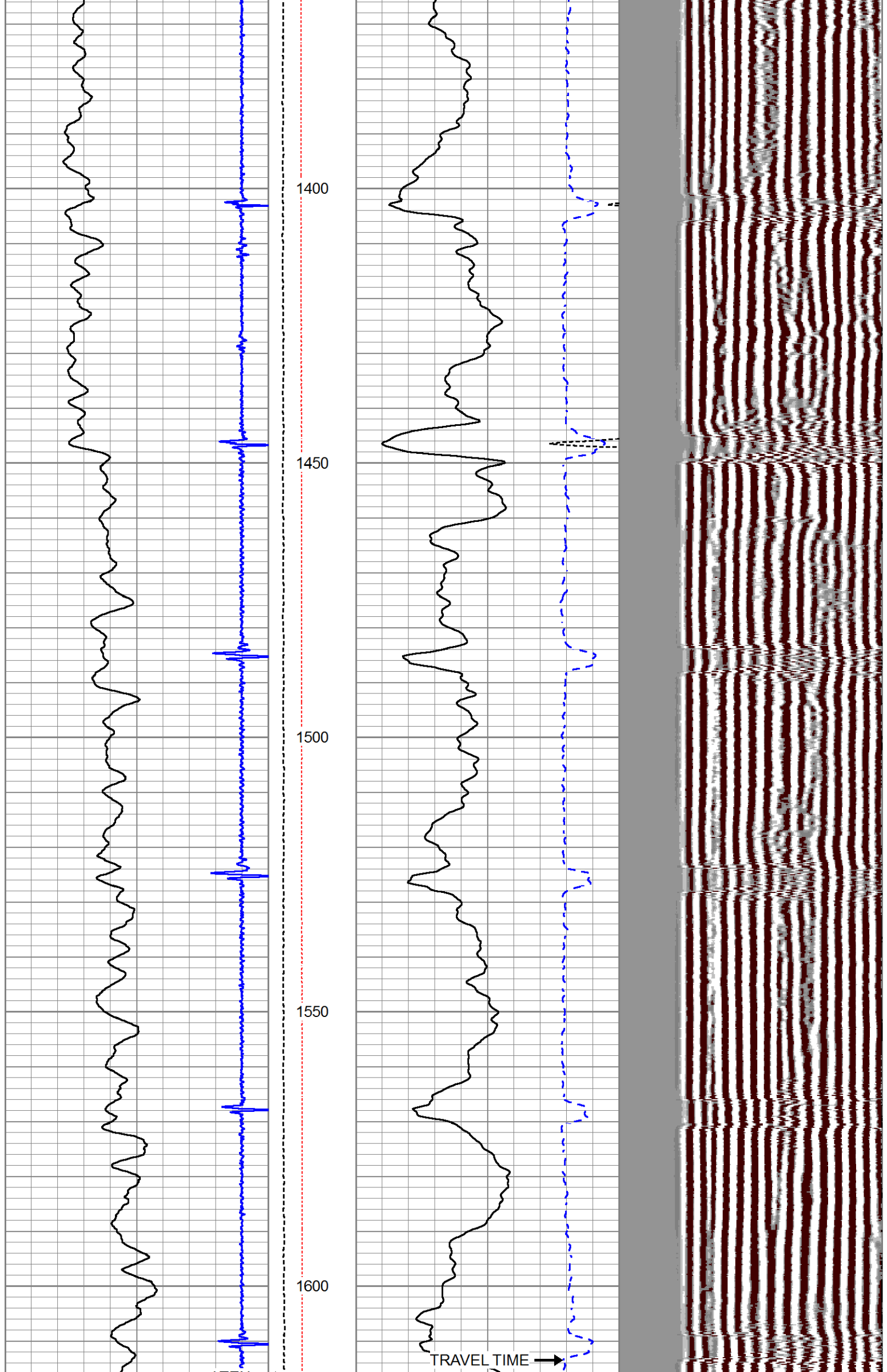
220 TRAVEL TIME (usec) 320

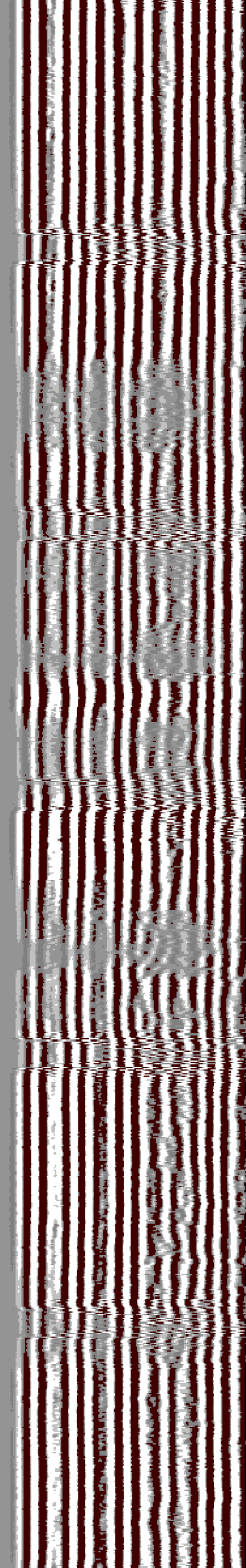
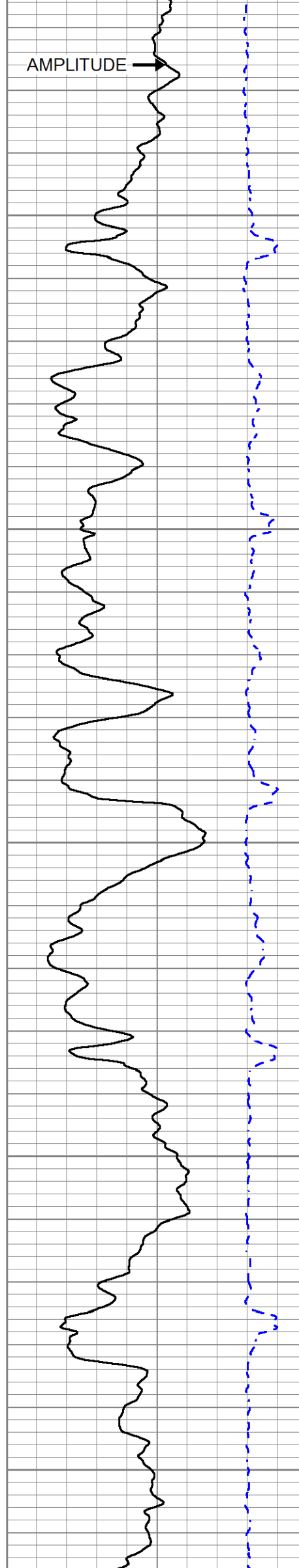
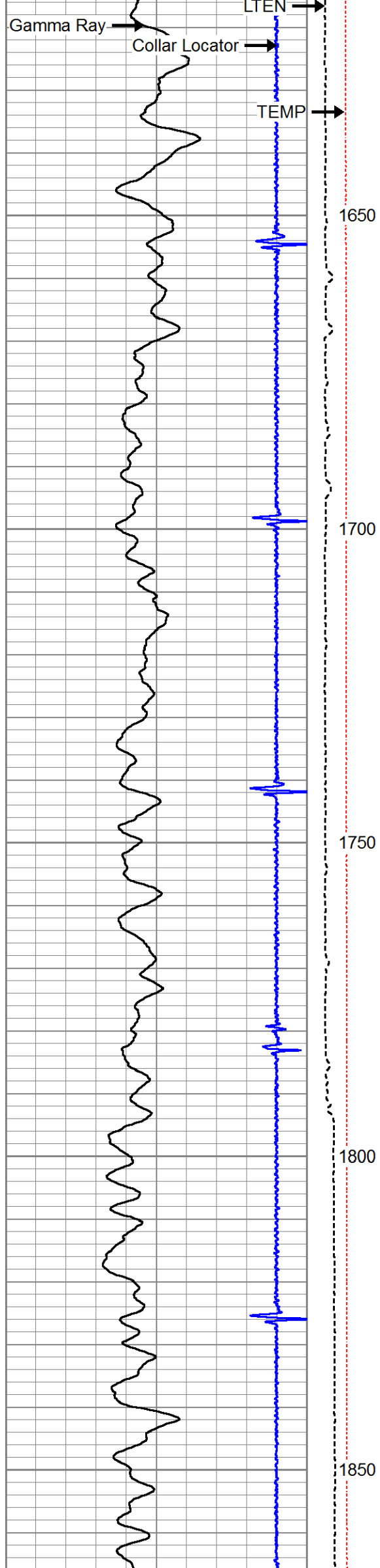














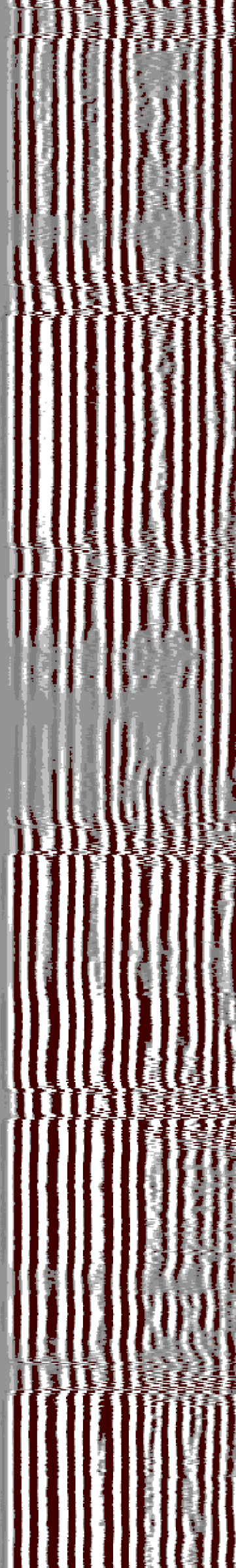
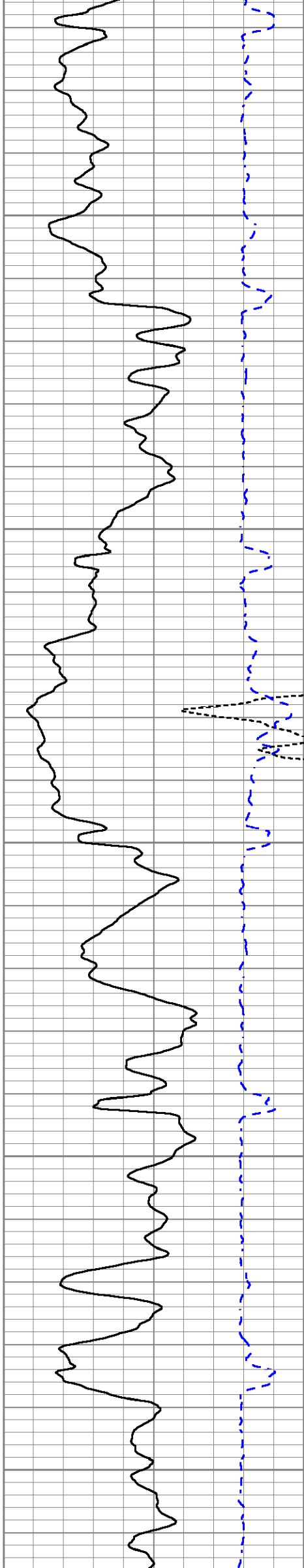
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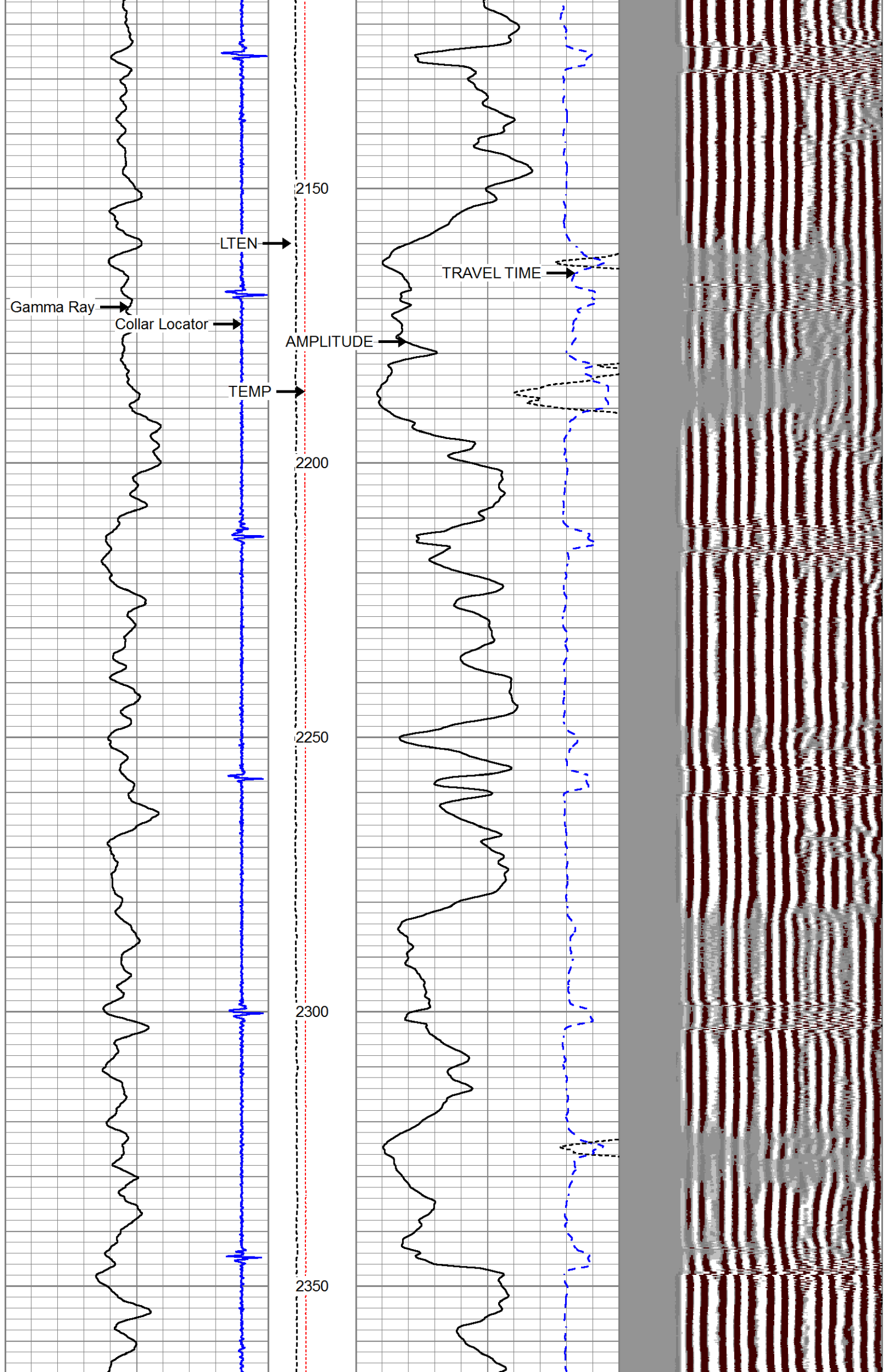
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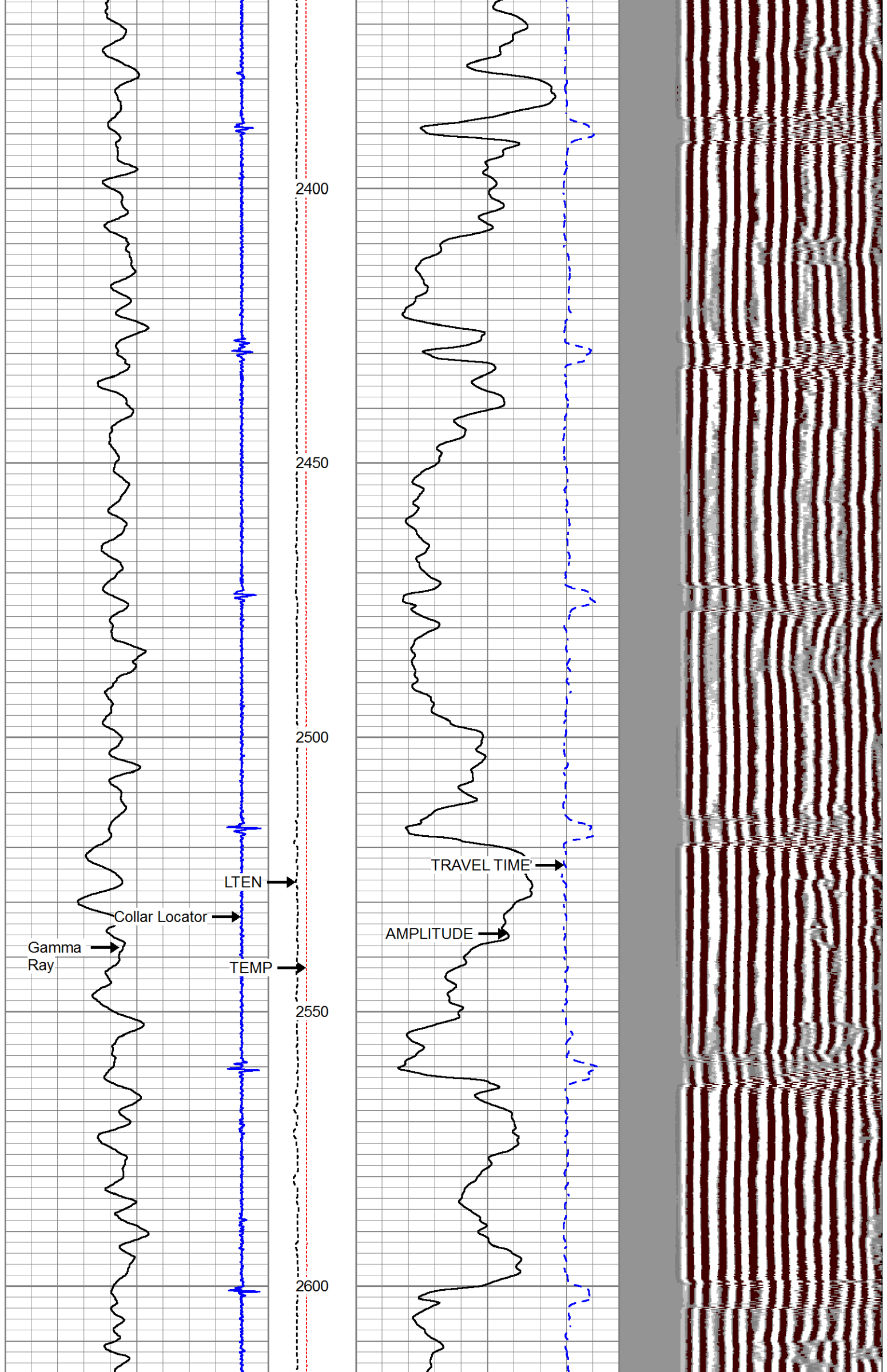
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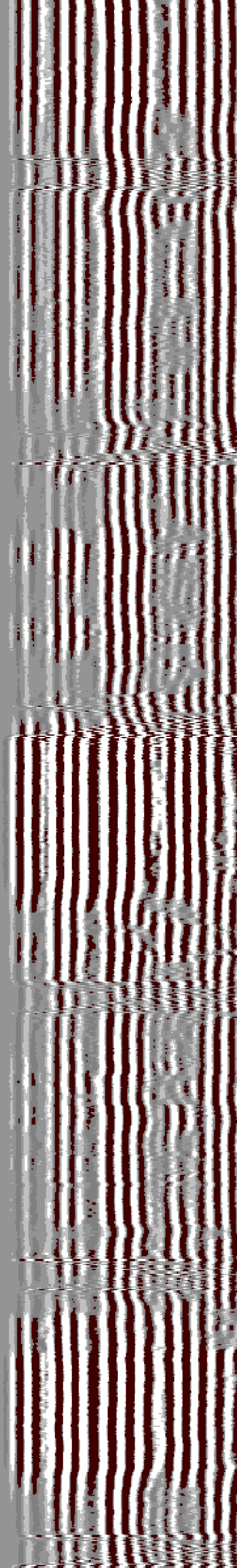
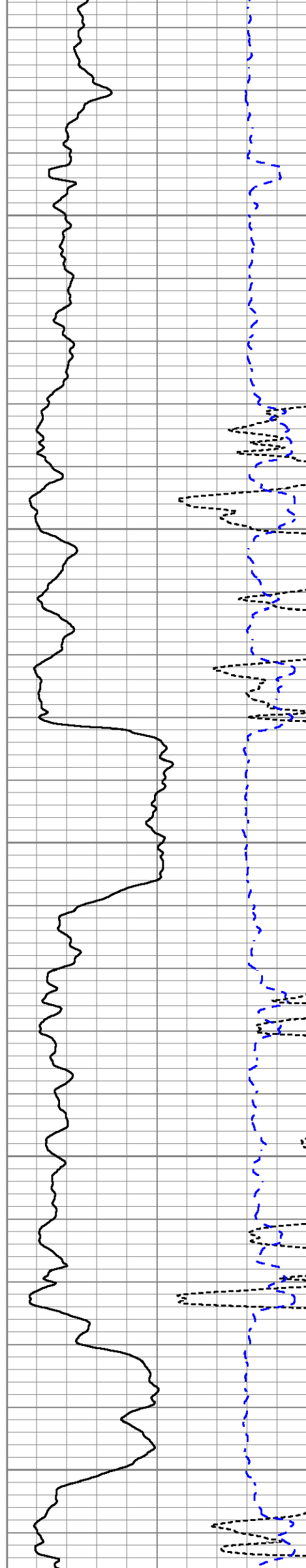
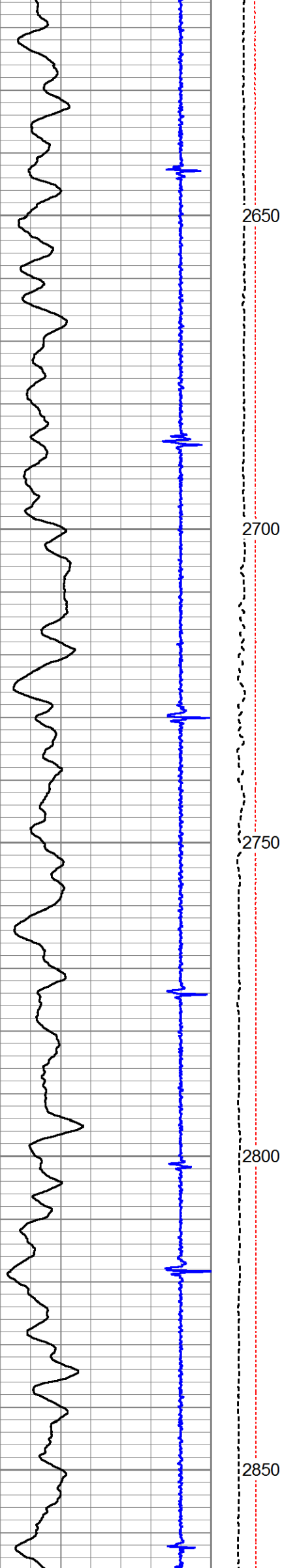
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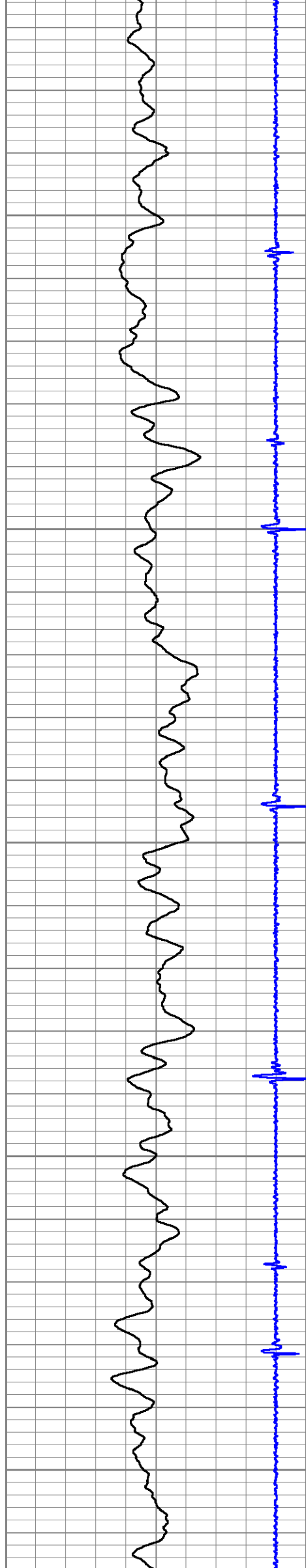
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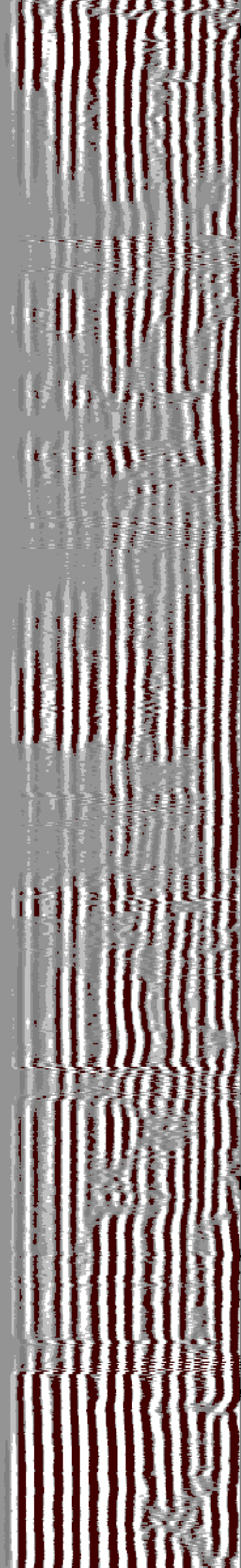
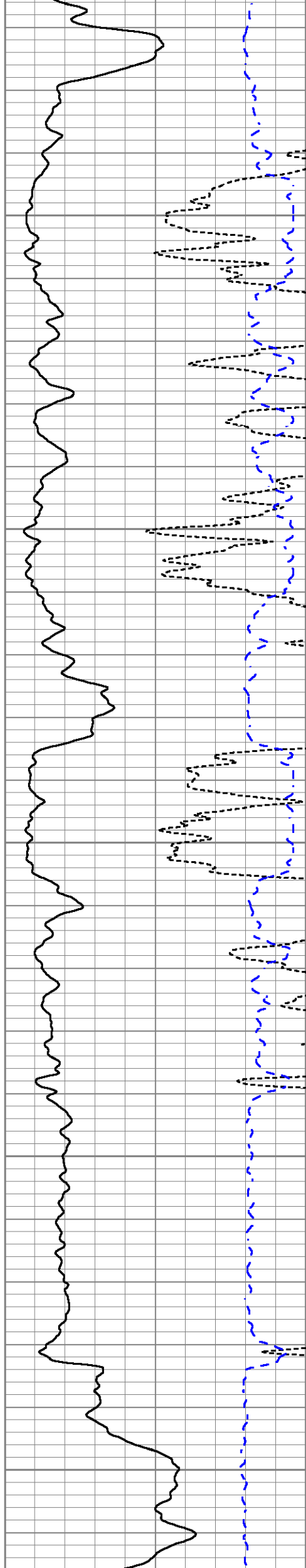
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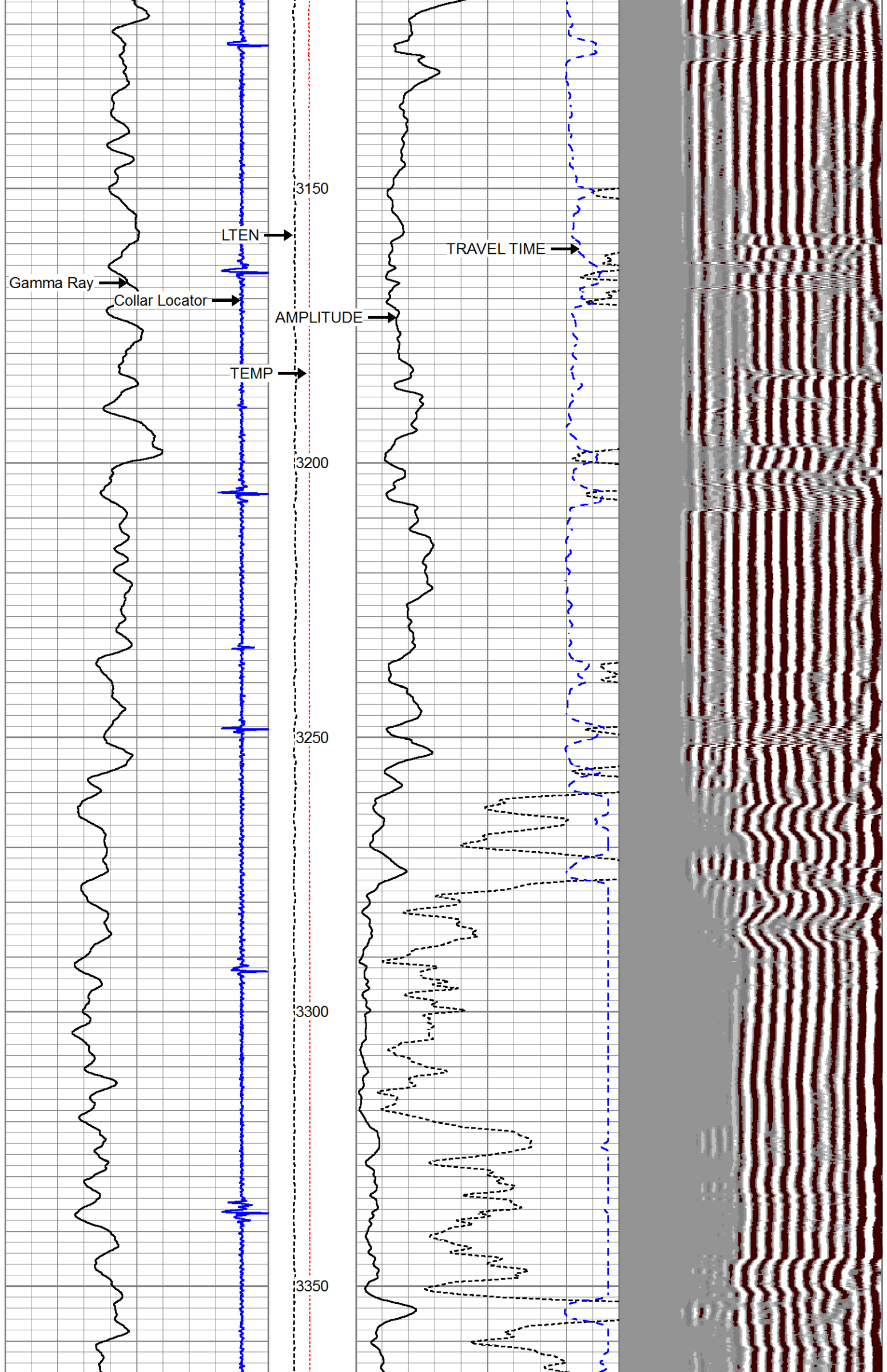
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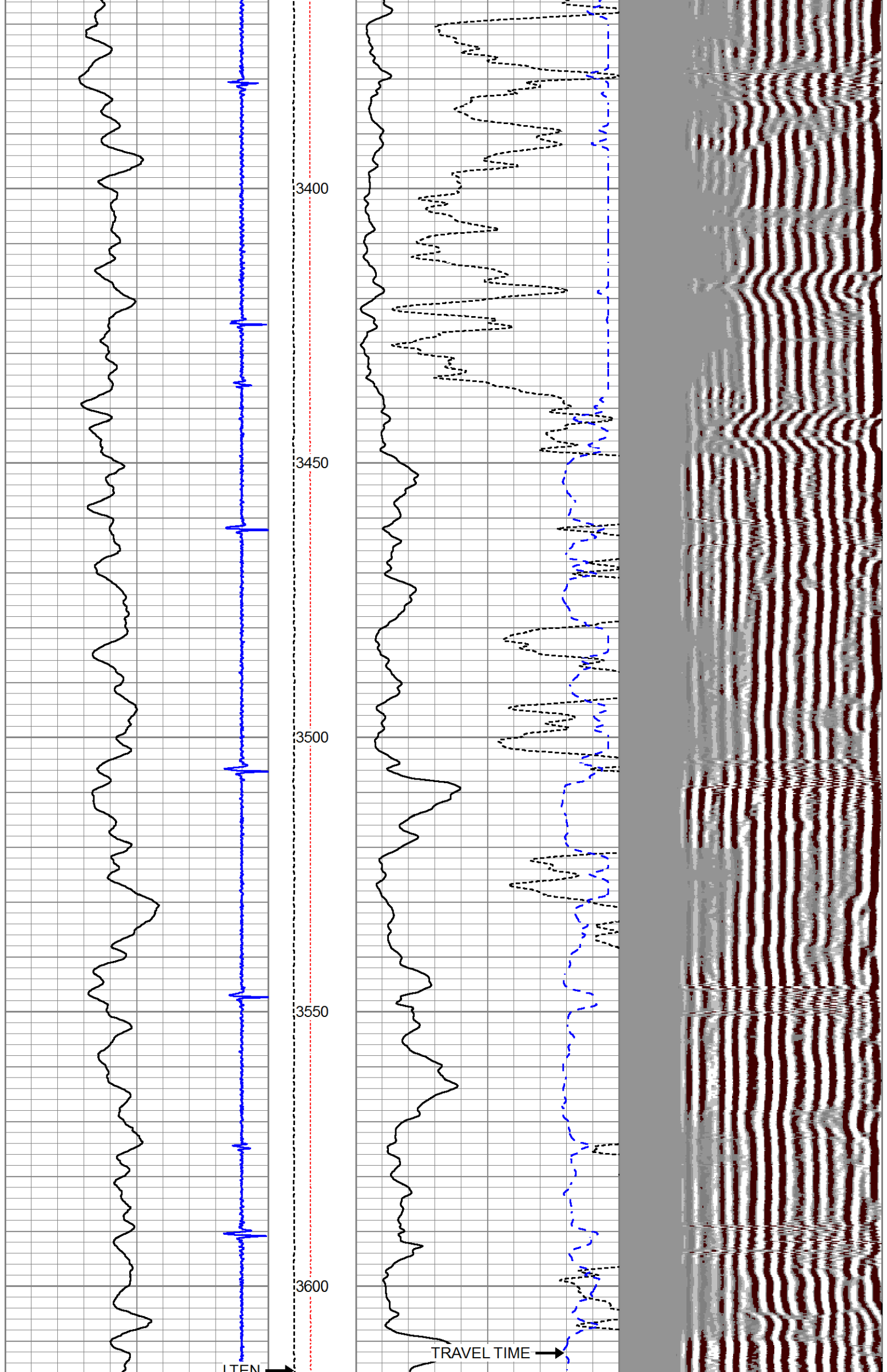
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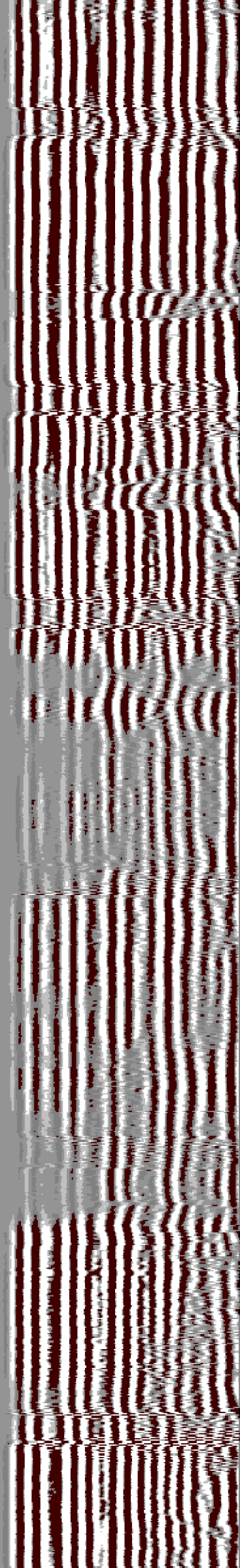
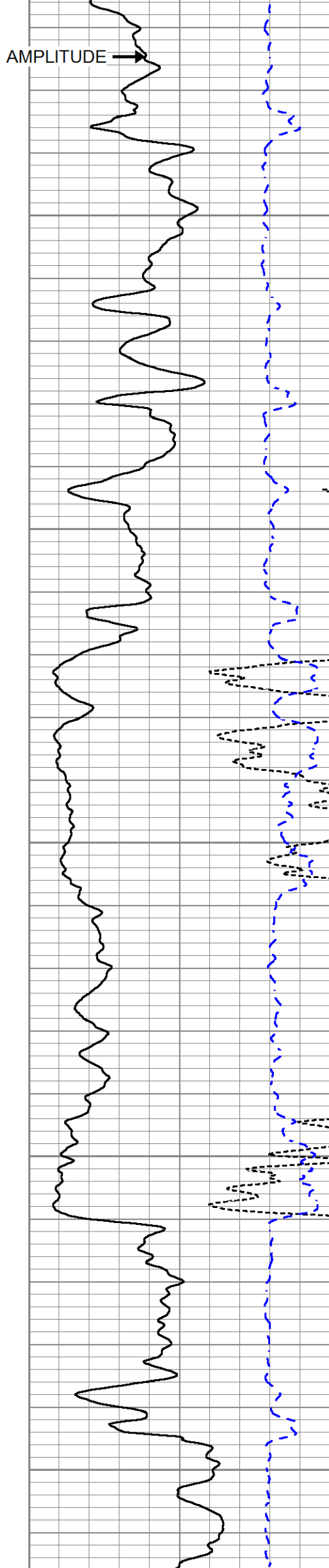
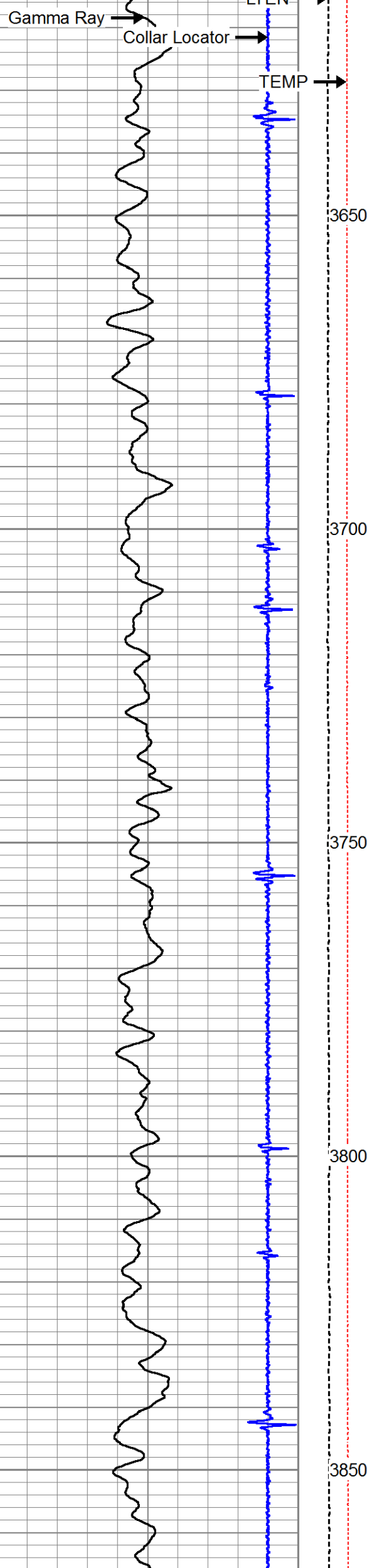
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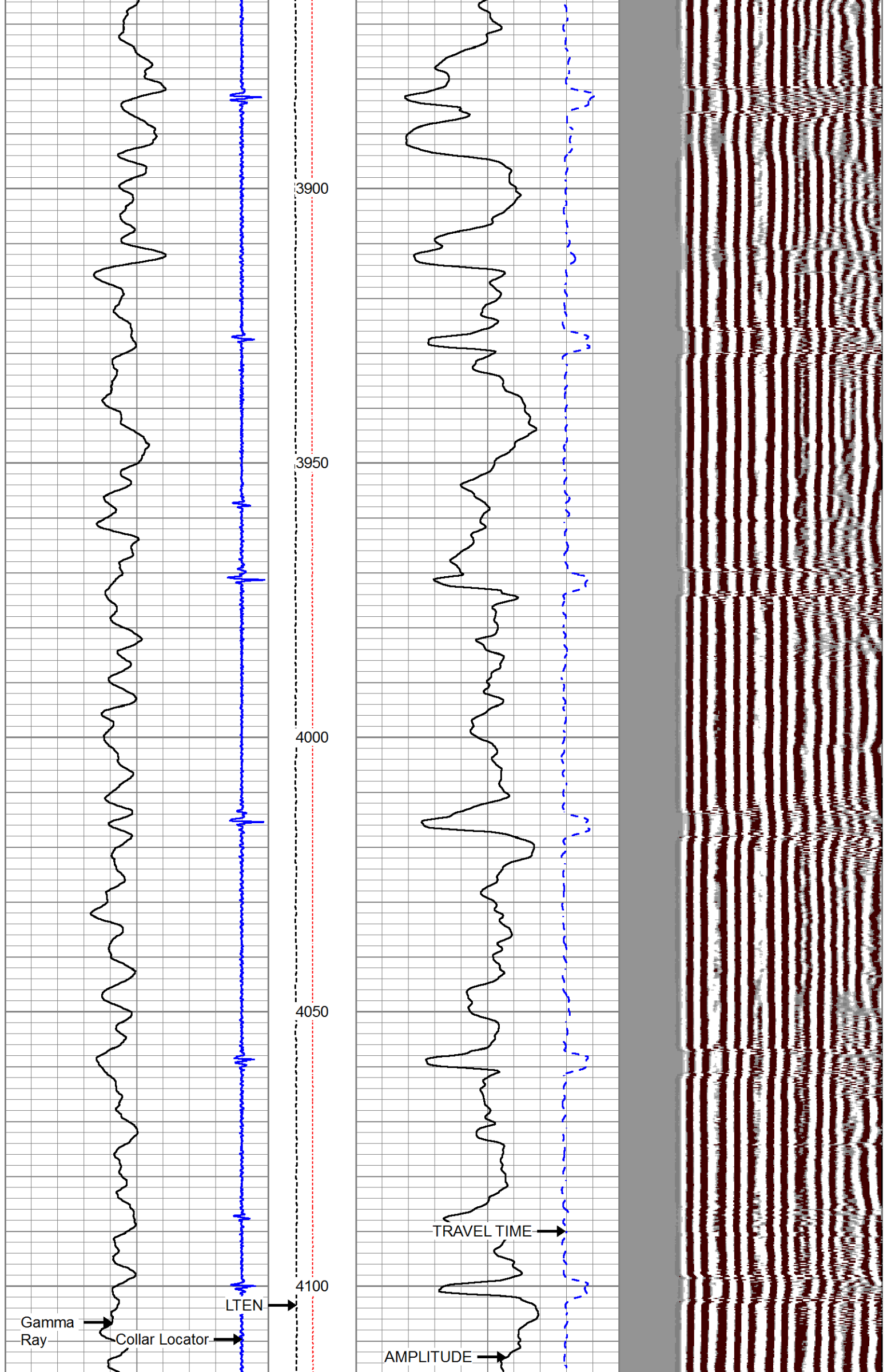
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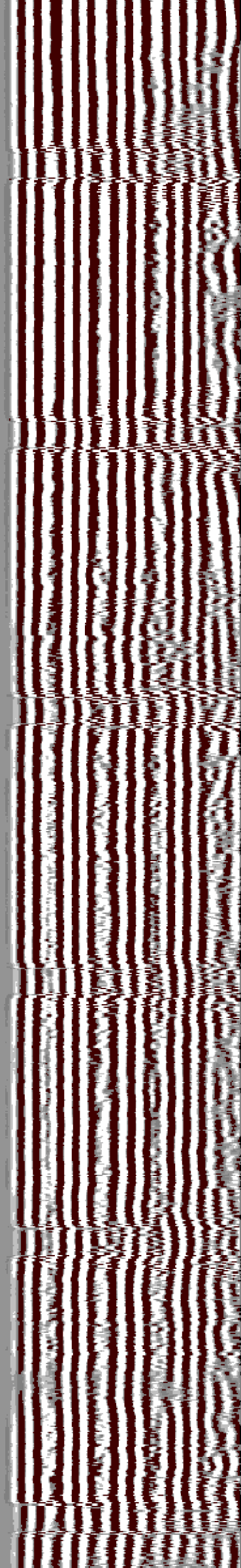
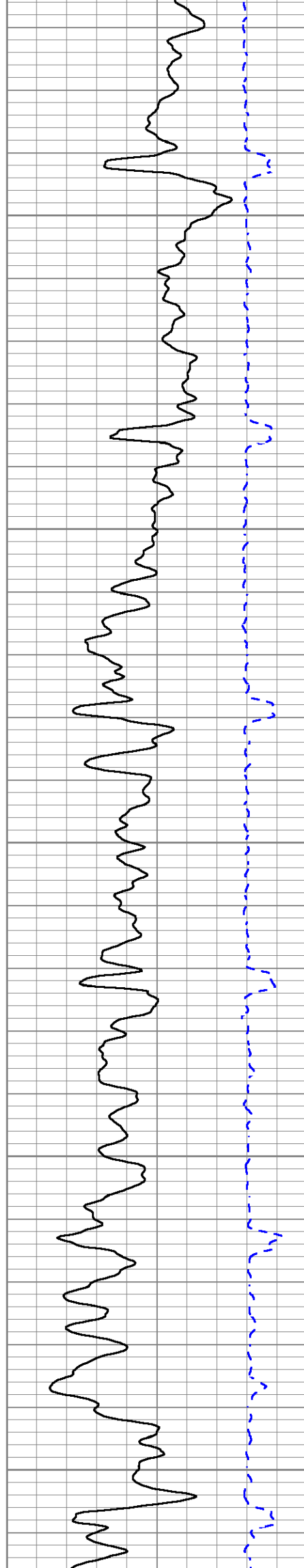
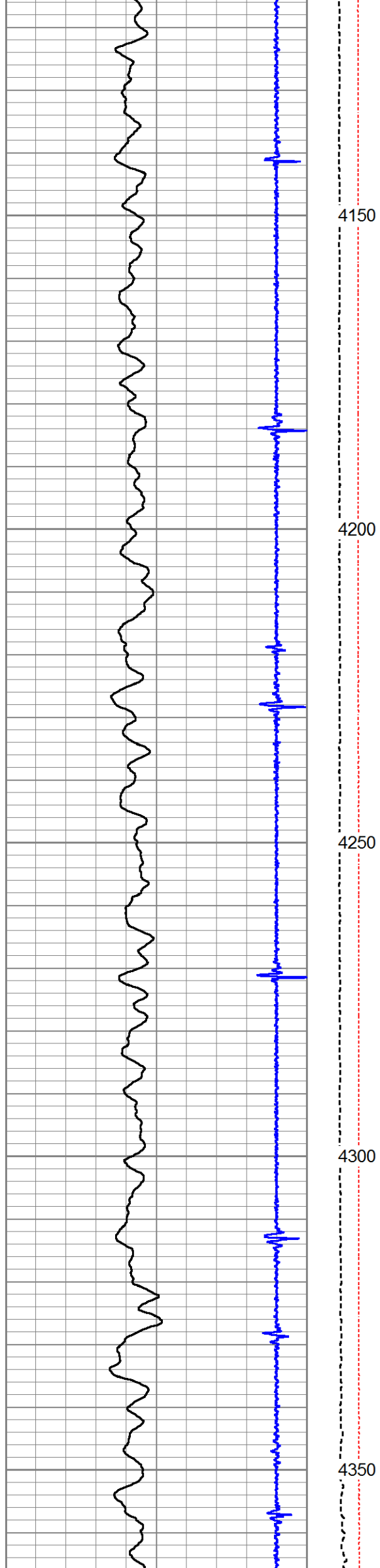


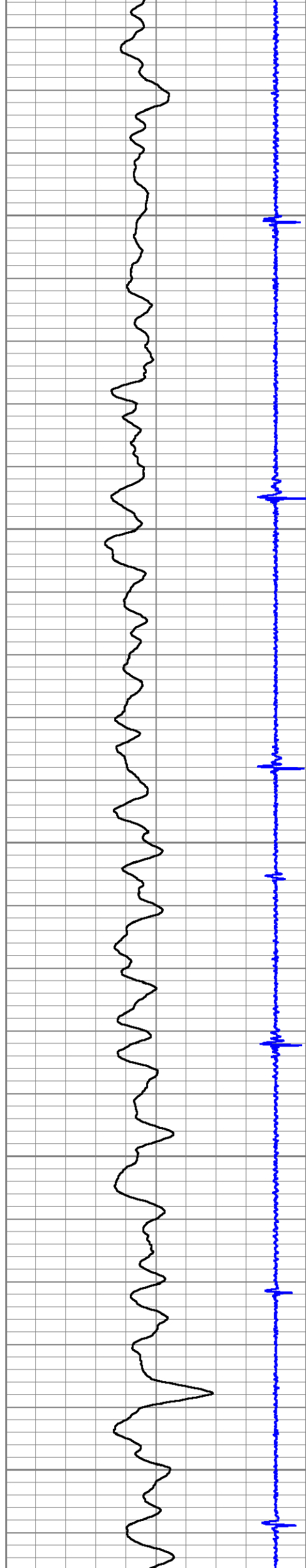












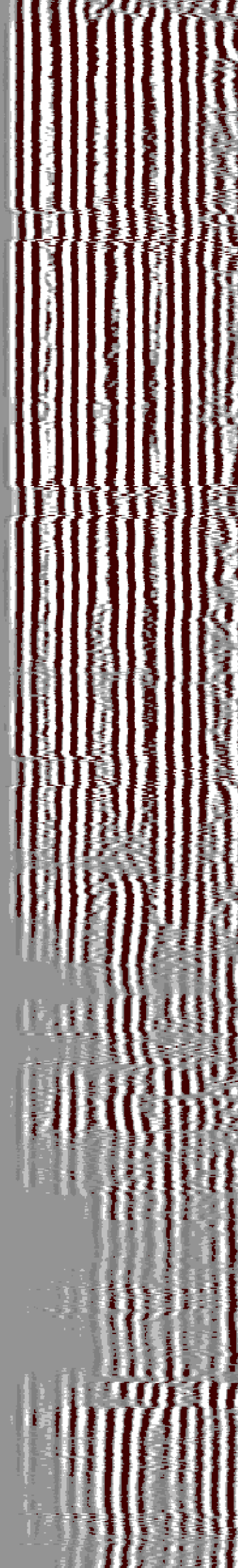
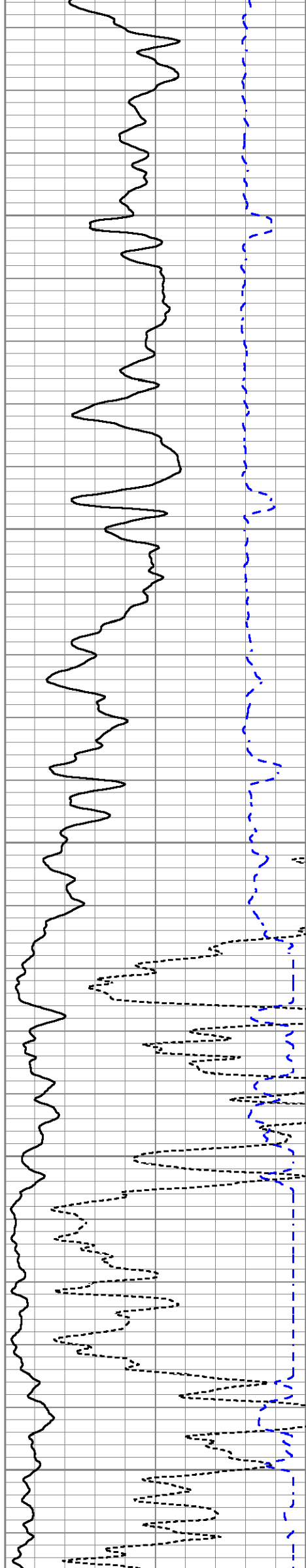
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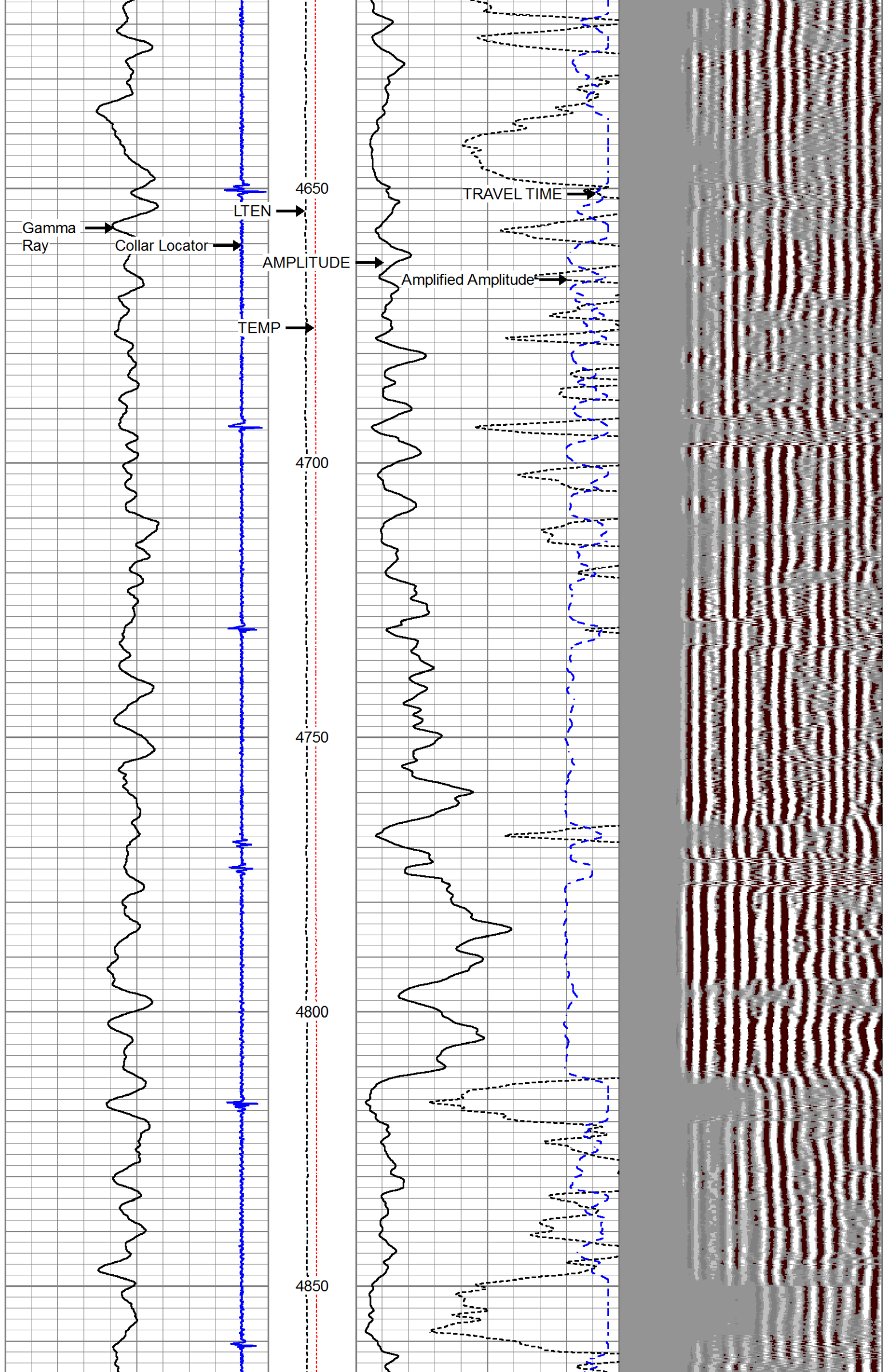
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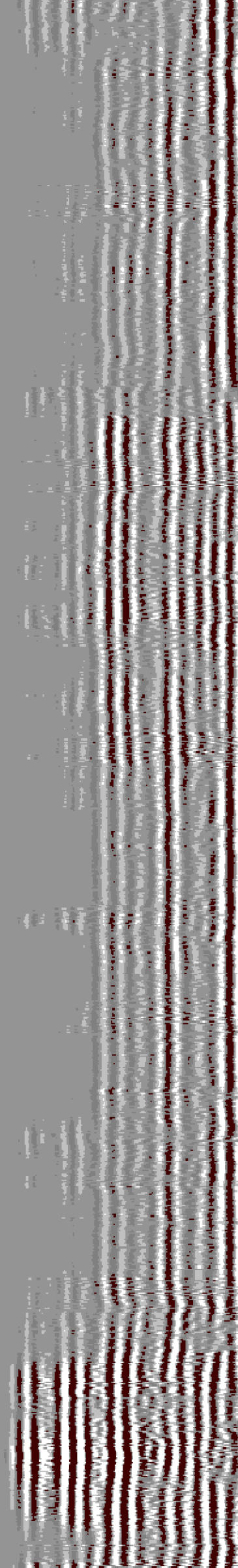
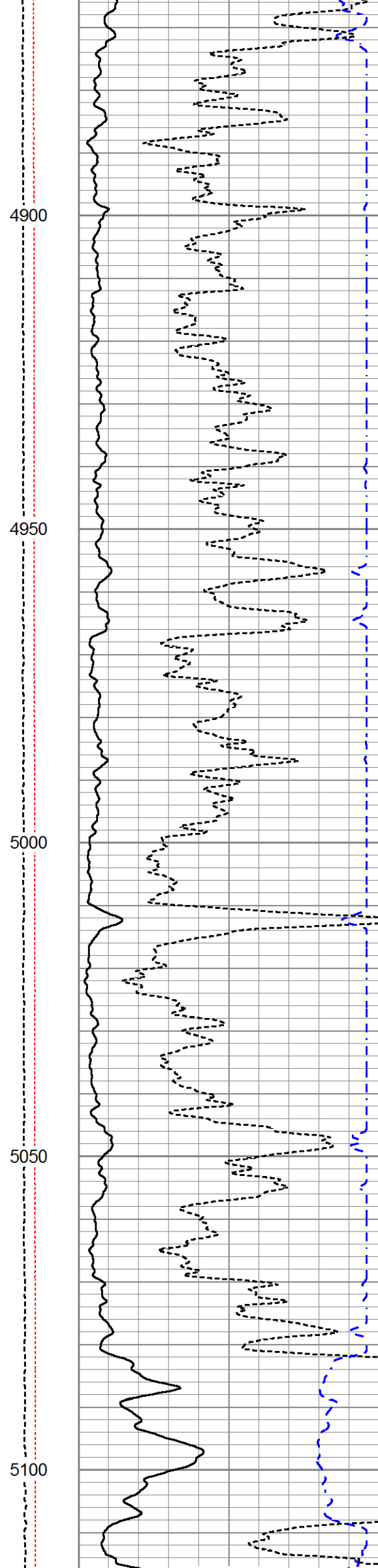
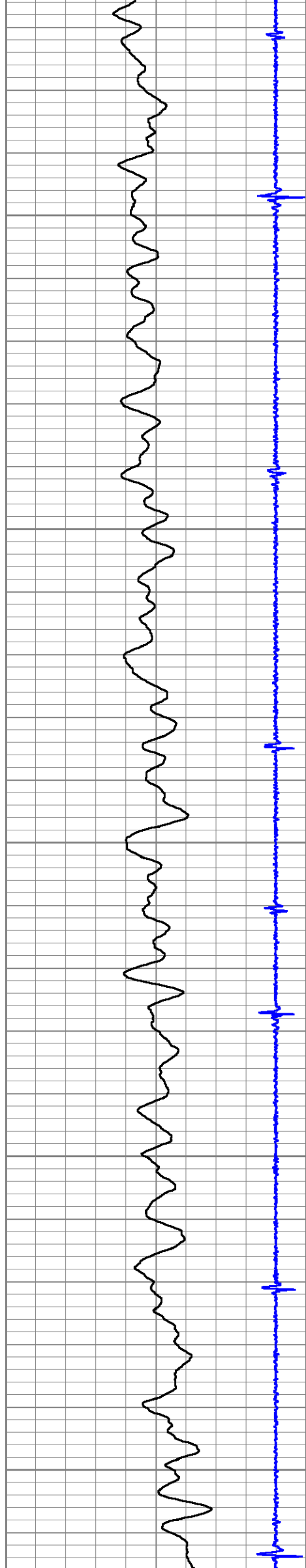
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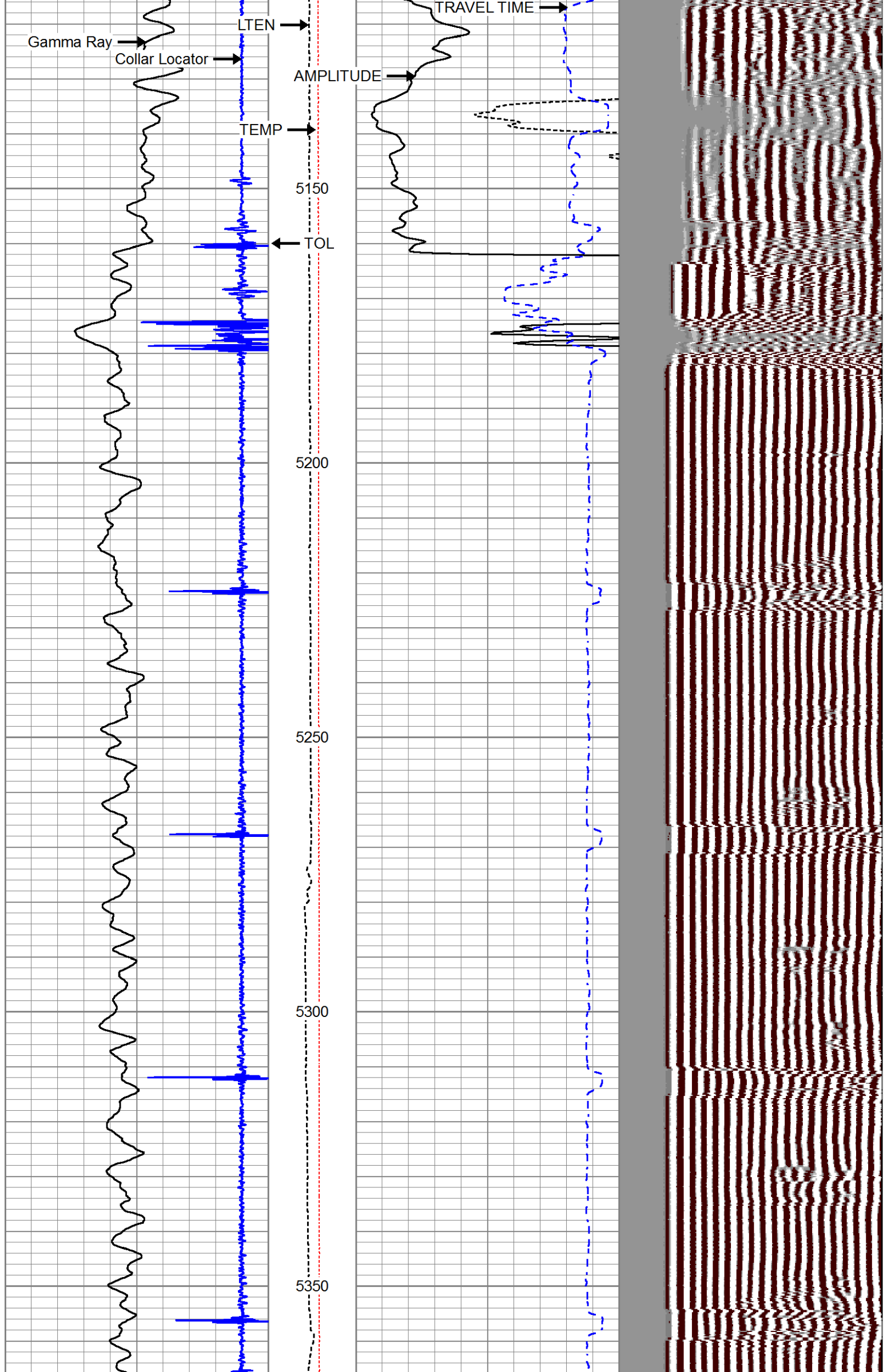
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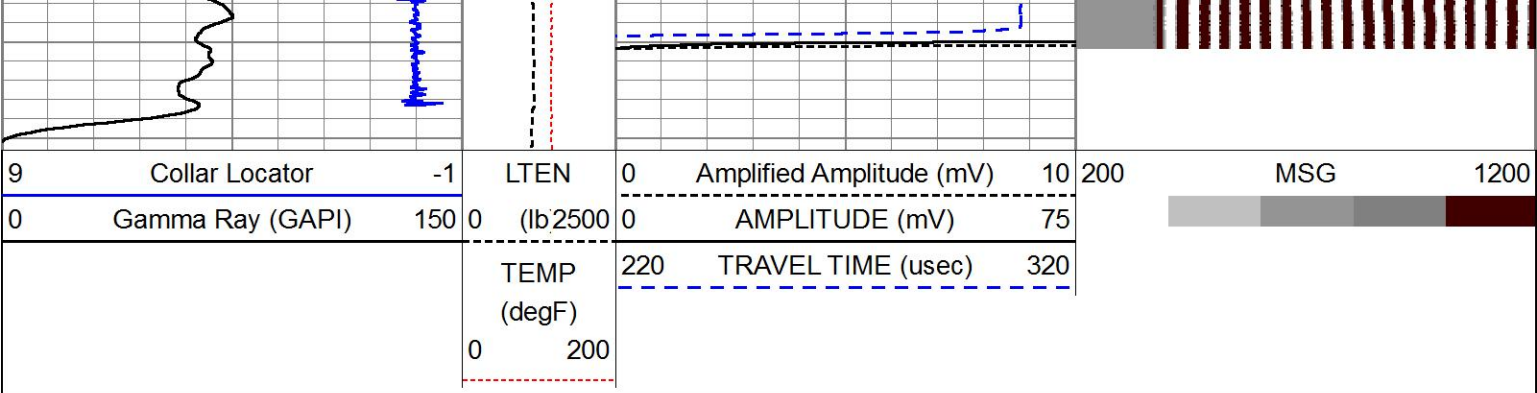
4600











MAIN PASS 1000 PSI

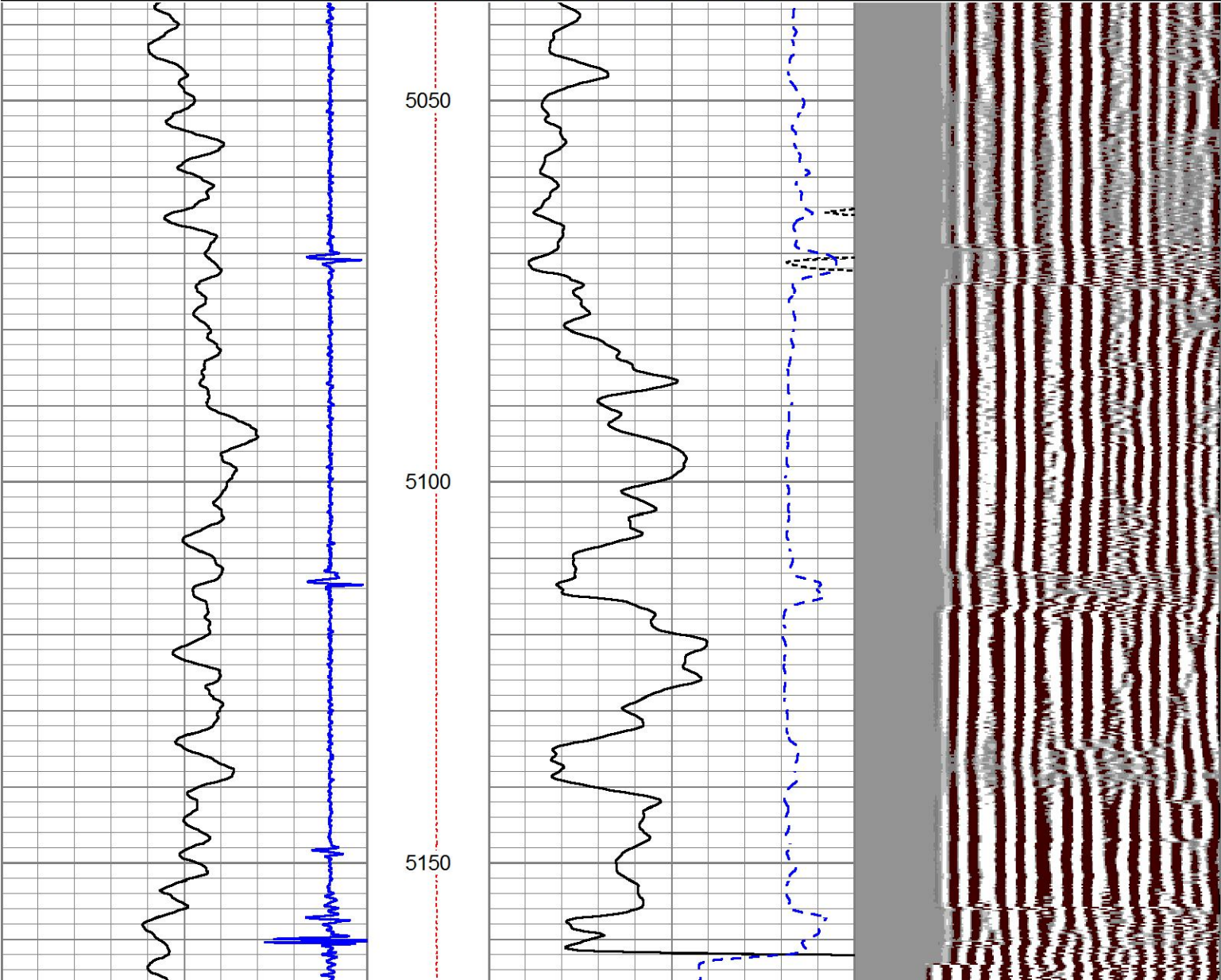
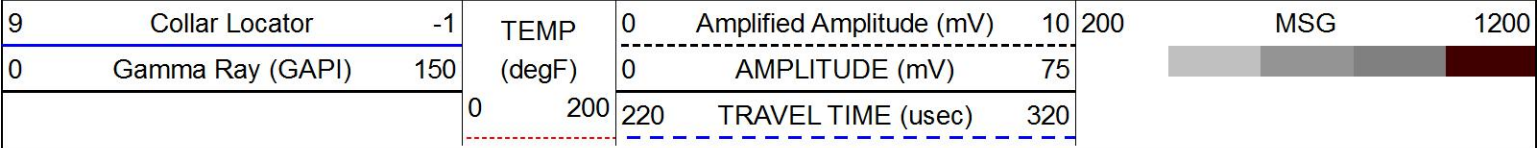
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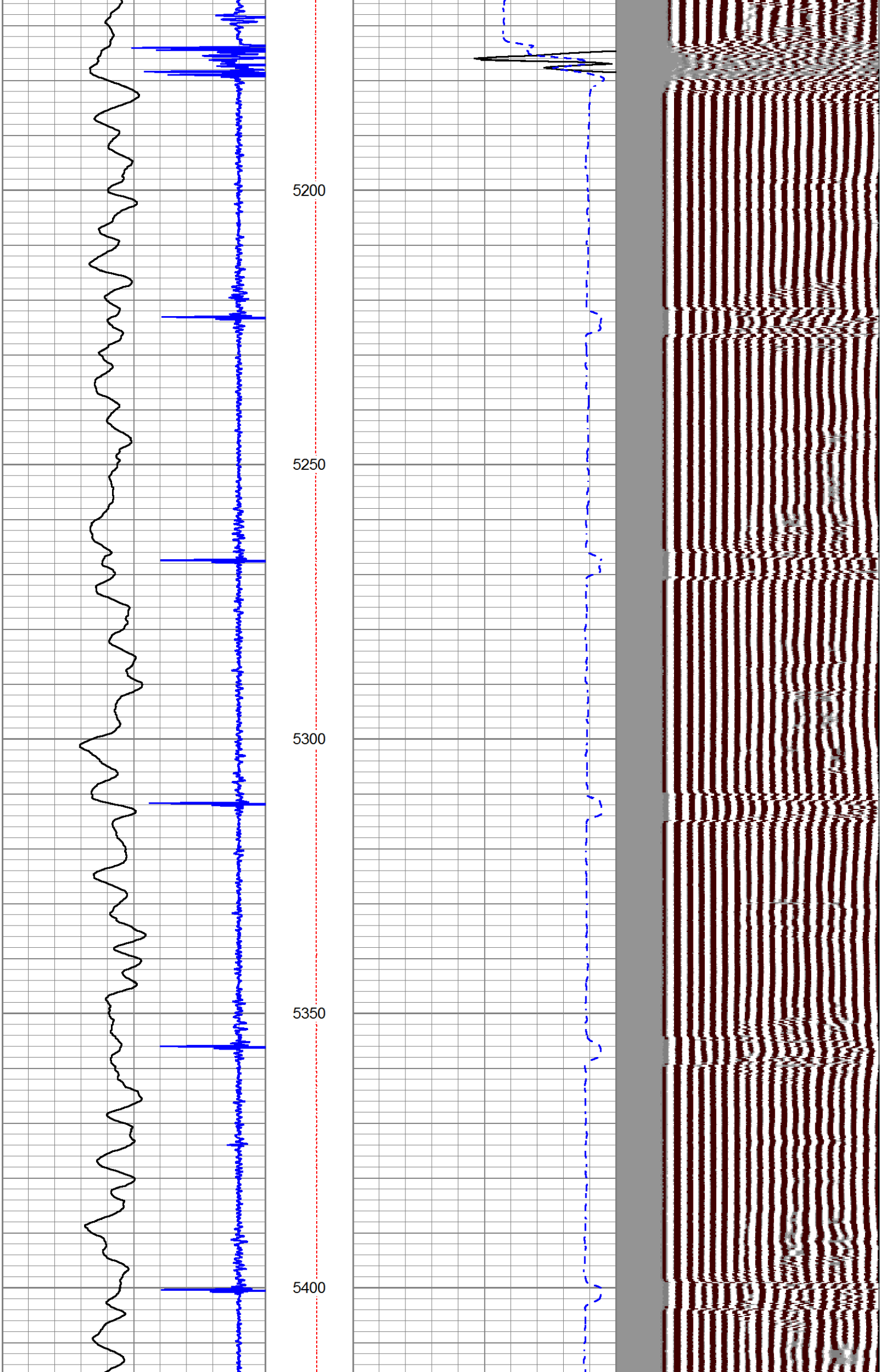
HALLIBURTON

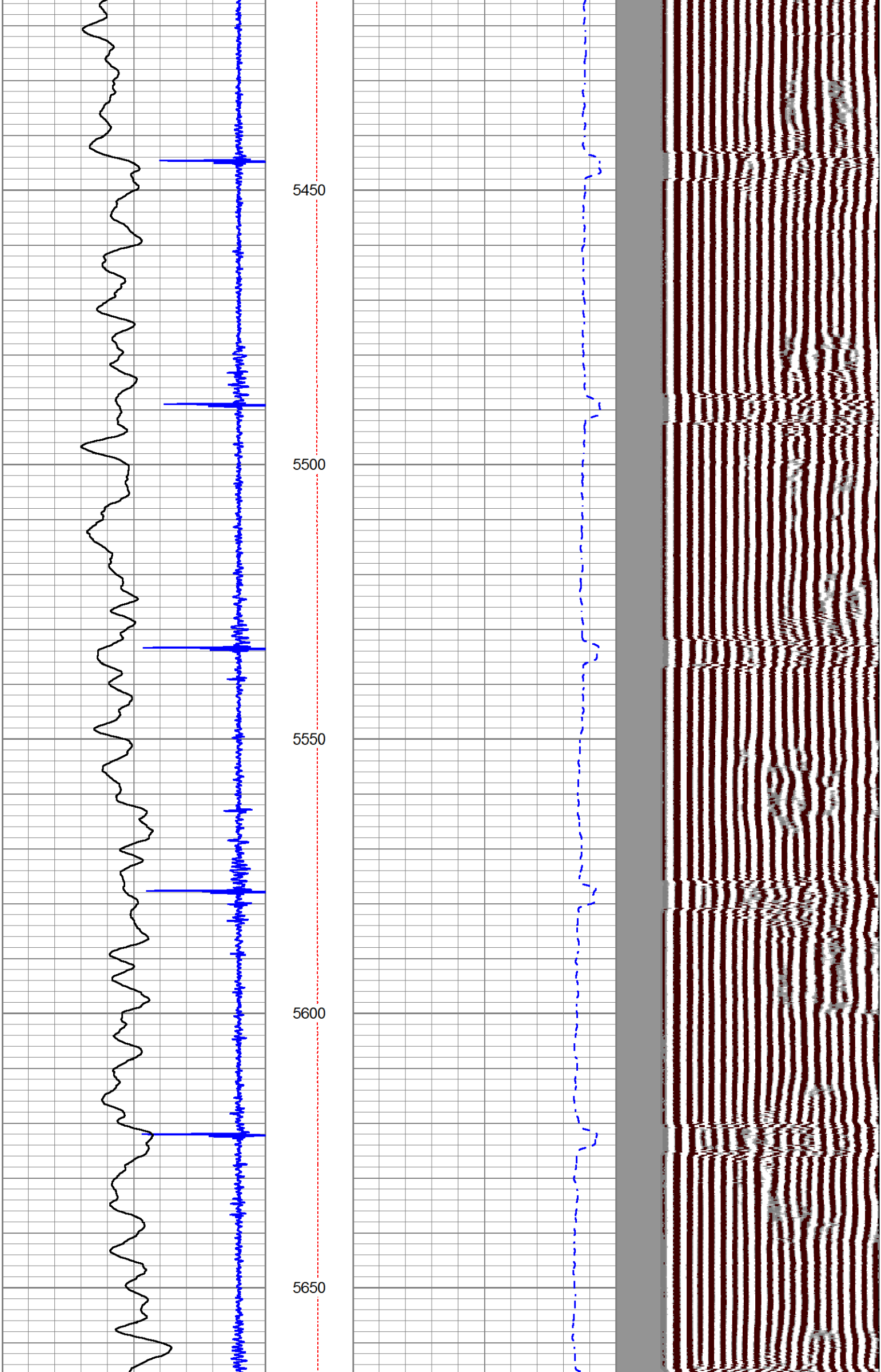
CORRELATION PASS

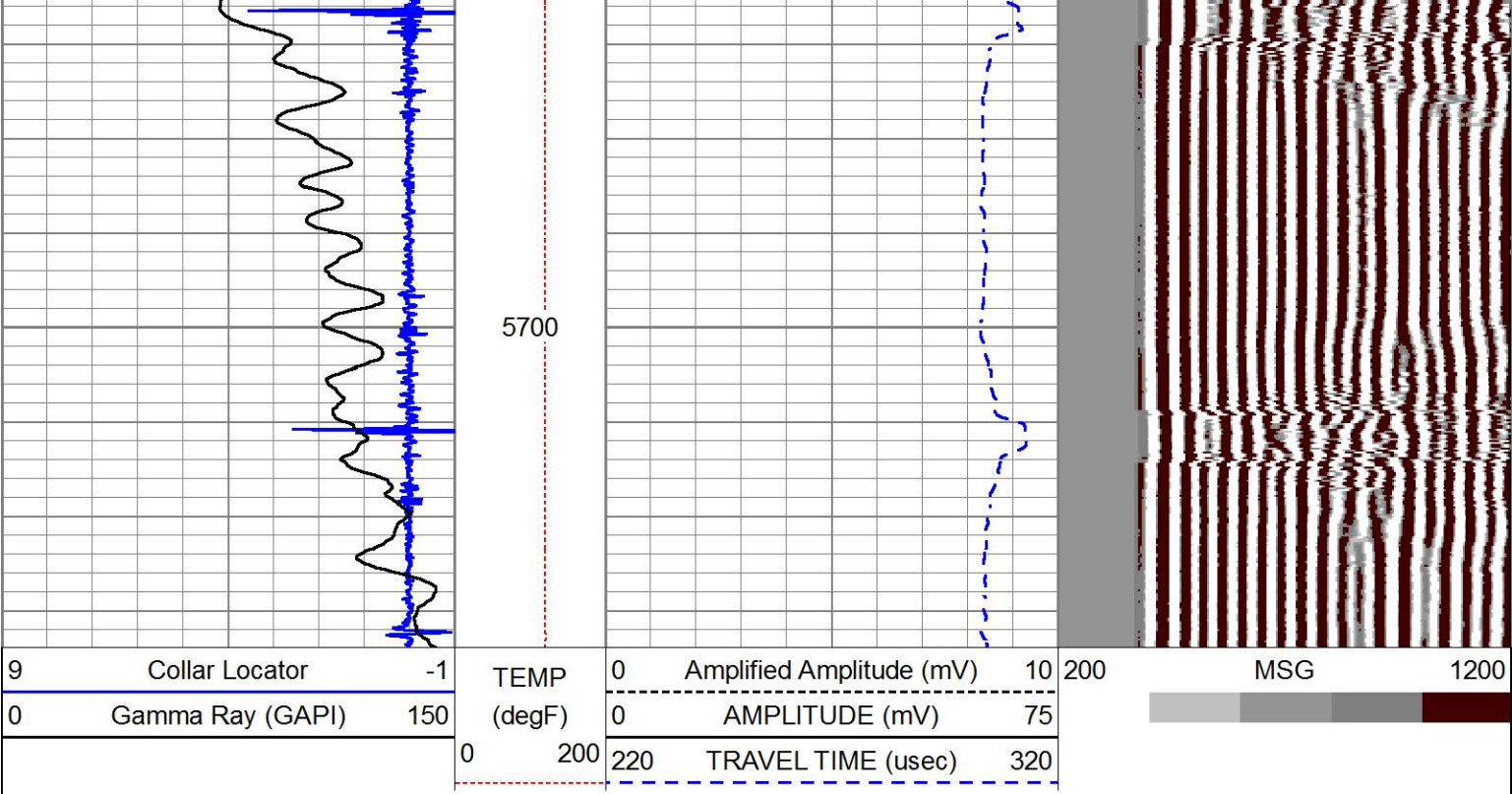
SCALE: 5"=100'

Database File bringelson 2-32_db.db
Dataset Pathname run2/pass11
Presentation Format 1cbl
Dataset Creation Fri Mar 22 11:10:00 2013 by Log Halliburton Casedho
Charted by Depth in Feet scaled 1:240









HALLIBURTON

CORRELATION PASS

SCALE: 5"=100'

Log Variables

DatabaseC:\ProgramData\Warrior\Data\bringelson 2-32_DB.db
Dataset field/well/run2/pass12/_vars_

Top - Bottom

PPT usec 0	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8	CASEOD in 7	PERFS 0	TDEPTH ft 0	BOTTEMP degF 100
BITSIZE in 7.875							

Calibration Report

Database File bringelson 2-32_DB.db
Dataset Pathname run2/pass12
Dataset Creation Fri Mar 22 11:21:35 2013 by Log Halliburton Casedho

Temperature Calibration Report

Serial Number: Tit1.3_02
Tool Model: Titan
Performed: Sun Jan 20 14:20:13 2013

	Reference	Reading
Low Reference:	61.00 degF	558.10 cps
High Reference:	120.00 degF	1975.90cps
Gain:	0.04	
Offset:	37.78	
Delta Spacing	2	

Gamma Ray Calibration Report

Type / Serial: Probe / 275

SHOP CALIBRATION Thu Mar 21 09:43:41 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	59.1				cps

Calibrator	264.9	1.1714	cps GAPI/cps
PRIMARY VERIFICATION		Thu Mar 21 09:47:23 2013	
Background	68.7		cps
Calibrator	309.1		cps
Difference		240.3	GAPI
BEFORE SURVEY VERIFICATION		Thu Mar 21 09:51:41 2013	
Background	69.6		cps
Calibrator	304.8		cps
Difference		235.2	GAPI
AFTER SURVEY VERIFICATION			
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI


Cement Bond Log Calibration Report

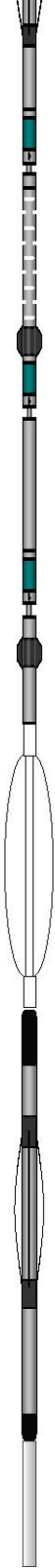
Serial Number:	275		
Tool Model:	Probe		
Performed:	Fri Mar 22 10:53:26 2013		
Depth:	687.002	ft	
Casing Diameter:	7	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.15	0.15	mV
Calibrated Amplitude:	62	62	mV
Reading at Signal Zero:	0.00344238	0.00349121	V
Reading in Free Pipe:	0.378296	0.403101	V
Gain:	164.998	154.776	
Offset:	-0.417986	-0.390356	

Sensor Report

Database File	bringelson 2-32_DB.db
Dataset Pathname	run2/pass12
Dataset Creation	Fri Mar 22 11:21:35 2013 by Log Halliburton Casedho

Sensor Name	Offset
	(ft)
WVF3	12.72
WVF5	11.72
CCL	5.08
GR	3.79
TEMP	0.17
LLMTEN	0
Telemetry	0

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			STNDCH-1_CABLEHEAD 1"OD CABLE HEAD	1.02	1.44	3.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00

WVF3	12.72		CBL-Probe (275) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
WVF5	11.72					
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
CCL	5.08					
GR	3.79		GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00
TEMP LLMTEN	0.17 0.00		TEMP-Titan (Tit1.3_02) Titan Temp 1.3875	1.25	1.39	10.00
Dataset: bringelson 2-32_DB.db: field/well/run2/pass12 Total length: 21.29 ft Total weight: 173.00 lb O.D.: 2.75 in						

Company	CARRIZO				
Well	BRINGELSON 2-32-9-58				
Field					
County	WELD	State	CO		
HALLIBURTON	CEMENT BOND LOG				