

HALLIBURTON

CEMENT BOND LOG

Company	VERDAD OIL AND GAS	Company	VERDAD OIL AND GAS
Well	PASTELAK 3N	Well	PASTELAK 3N
Field	WATTENBURG	Field	WATTENBURG
County	WELD	County	WELD
State	CO	State	CO
Permanent Datum	Sec: 2 Twp: 1N Rge: 64W		
Log Measured From	Elevation 5029		
Drilling Measured From	PERFORATING CCL LOG		
Date @ Time Logged	14-JAN-2015@14:05	Type Fluid in Hole	FRESH WATER
Run No.	RUN 3 PASS 9	Density of Fluid	8.33
Depth - Driller	11438	Fluid Level	SURFACE
Depth - Logger	7080	Cement Top Est. Logged	3100
Bottom - Logged Interval	7050	Equipment / Location	11875120 / BRIGHTON
Top - Log Interval	NA	Recorded by	TONY D./ TONY P.
Max. Recorded Temp.	NA	Witnessed by	WES MOBLEY
CEMENTING DATA	Surface String	Protection String	Production String
Date / Time Cemented			
Primary / Squeeze			
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume			
Cement Type / Weight	/	/	/
Formulation			
Mud Type / Mud Wgt.	/	/	/
Borehole Record			
Run Number	Bit	From	To
			Size
			Weight
			From
			To
			1291'
			7590'
			11420'

<<< Fold Here >>>

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

PRIMARY DEPTH REFERENCE: MJ 4953

ESTIMATED TOP OF CEMENT @ 3100

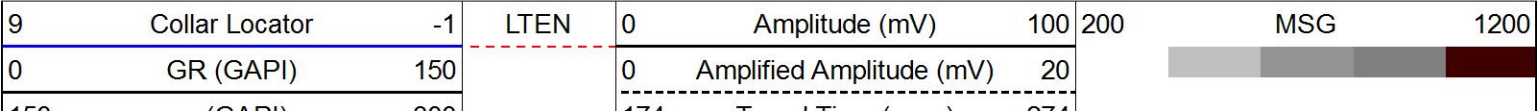
BLANKET VALUE = 236 GAPI

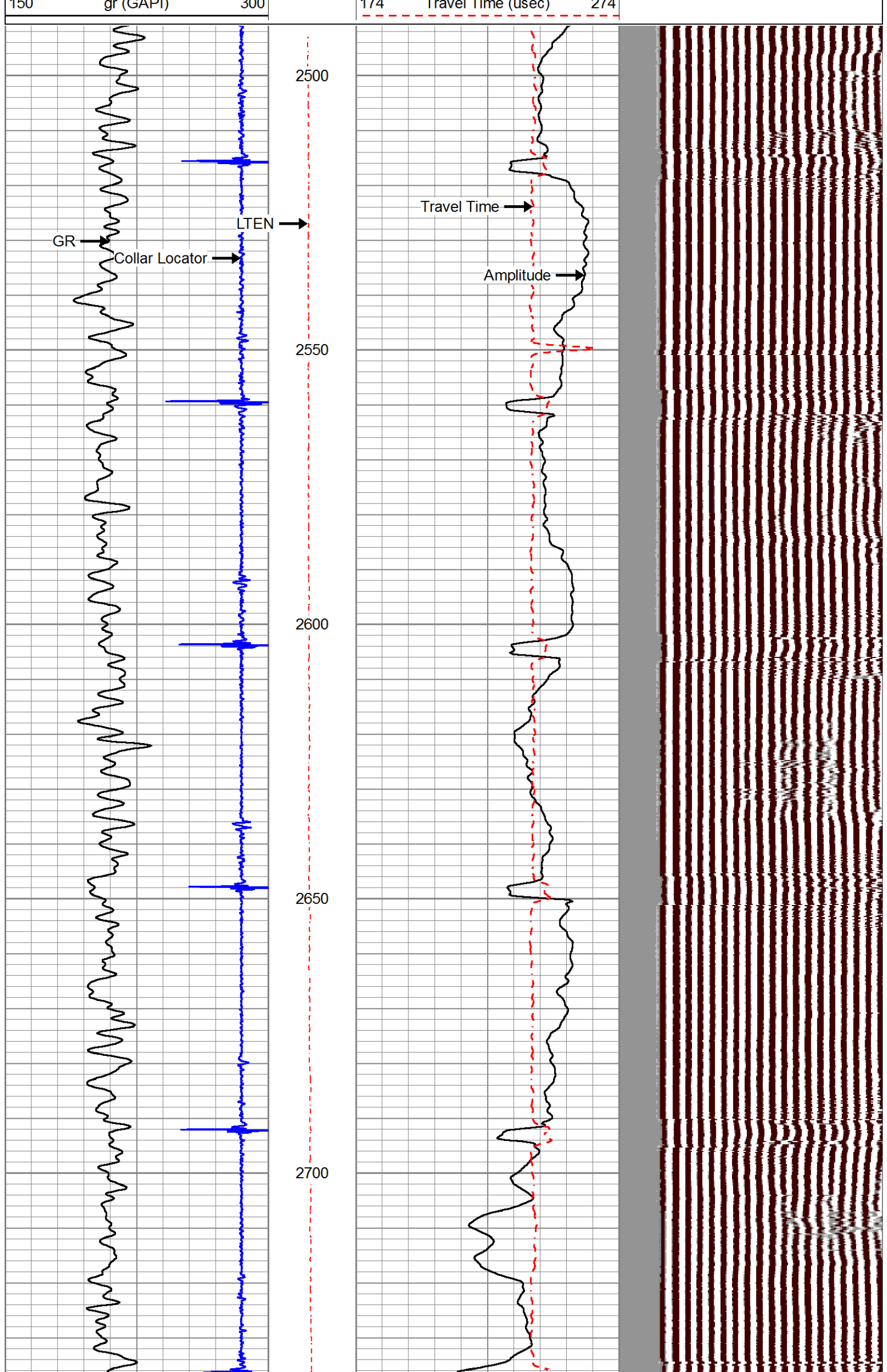
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES!!!  
CREW TODAY: TONY DICAMILLO, TONY PIETRAS,  
E. WARD. T. TRADER. C. BUCANEK.  
G. TATE. J.MCCOMBS

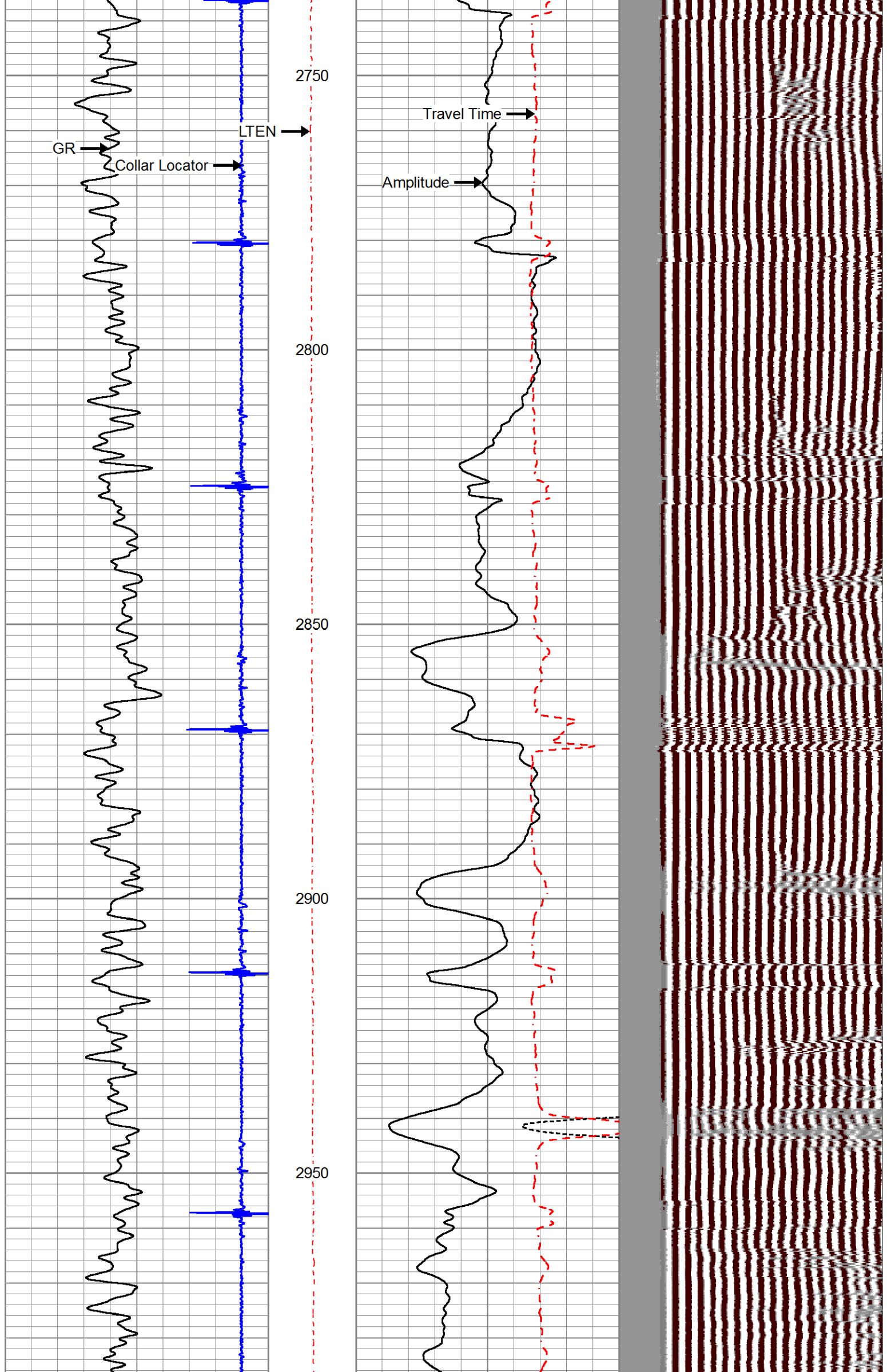
MAIN PASS

SCALE: 5"=100'

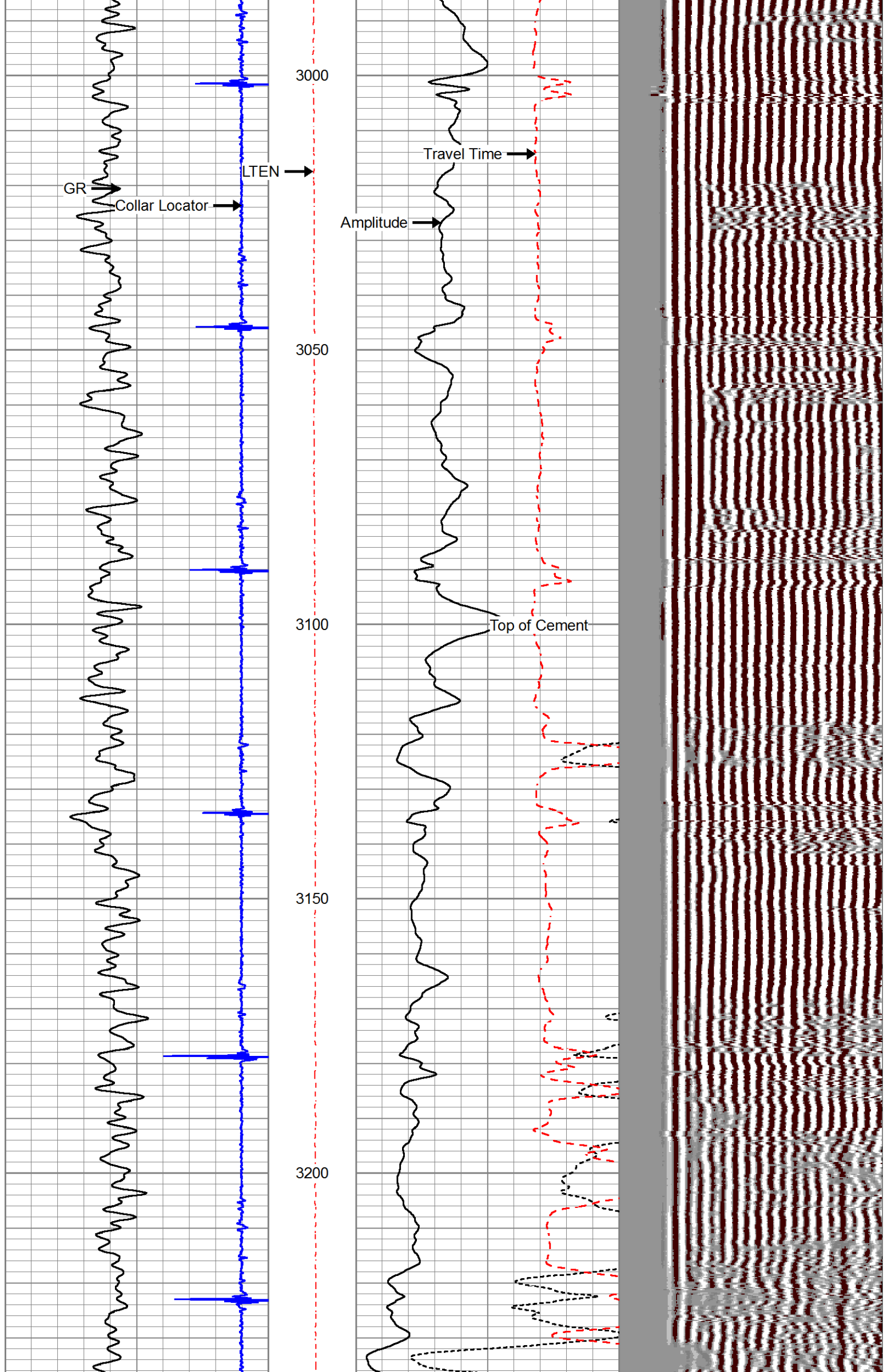
Database File        verdad\_pastelak3n.db  
Dataset Pathname    run3/pass9  
Presentation Format   tony&tony  
Dataset Creation     Wed Jan 14 14:04:54 2015  
Charted by            Depth in Feet scaled 1:240

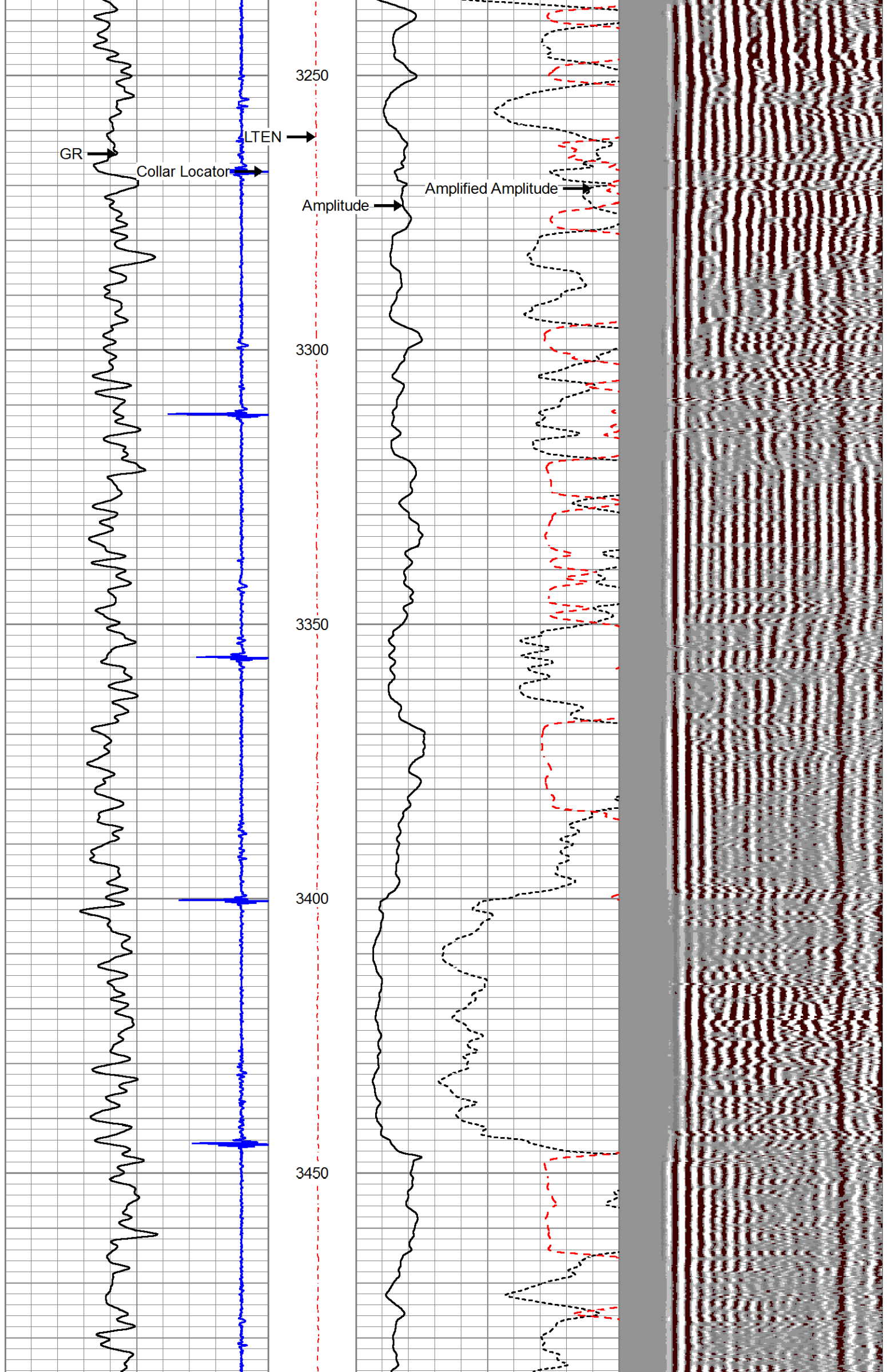


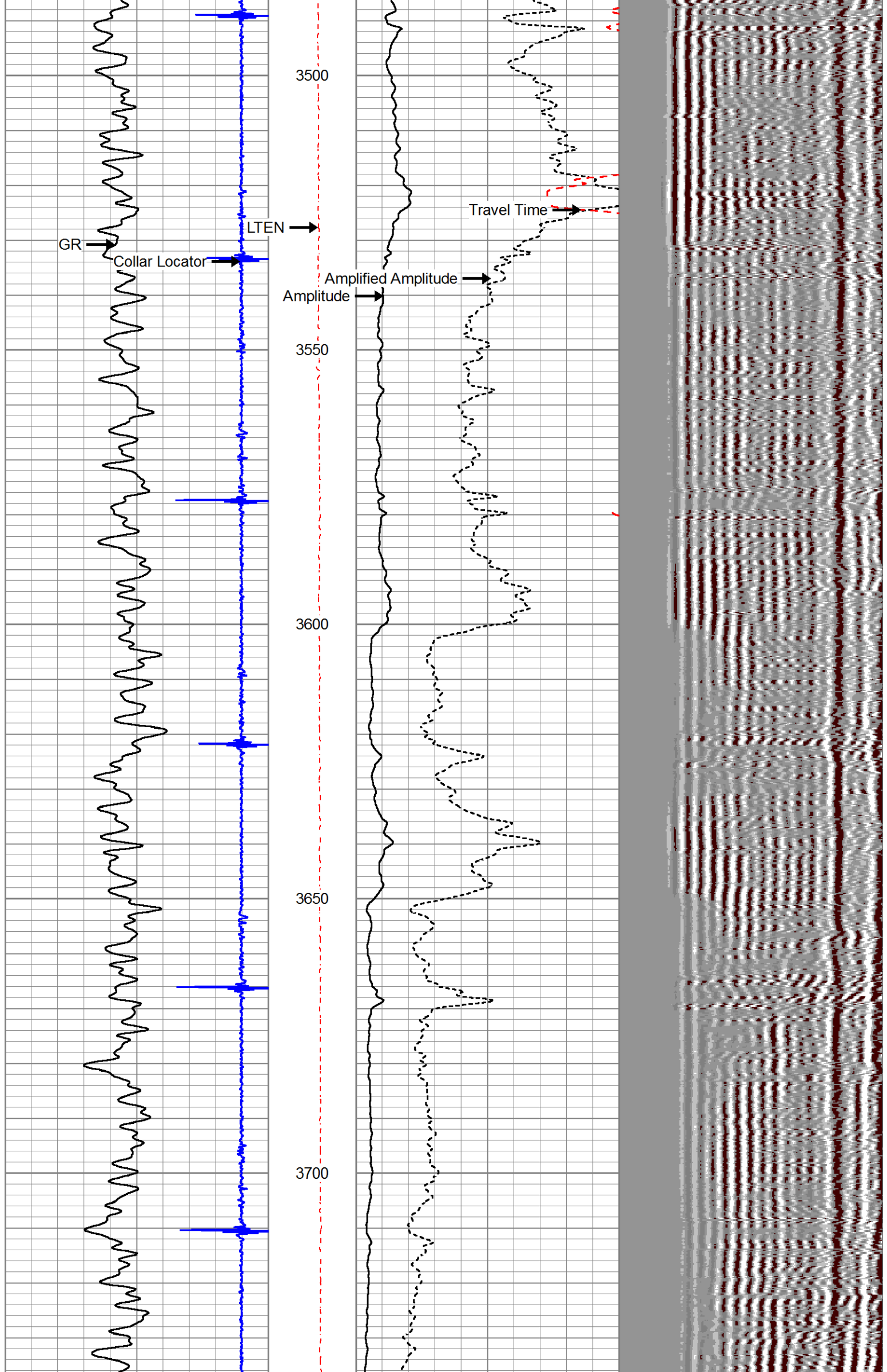


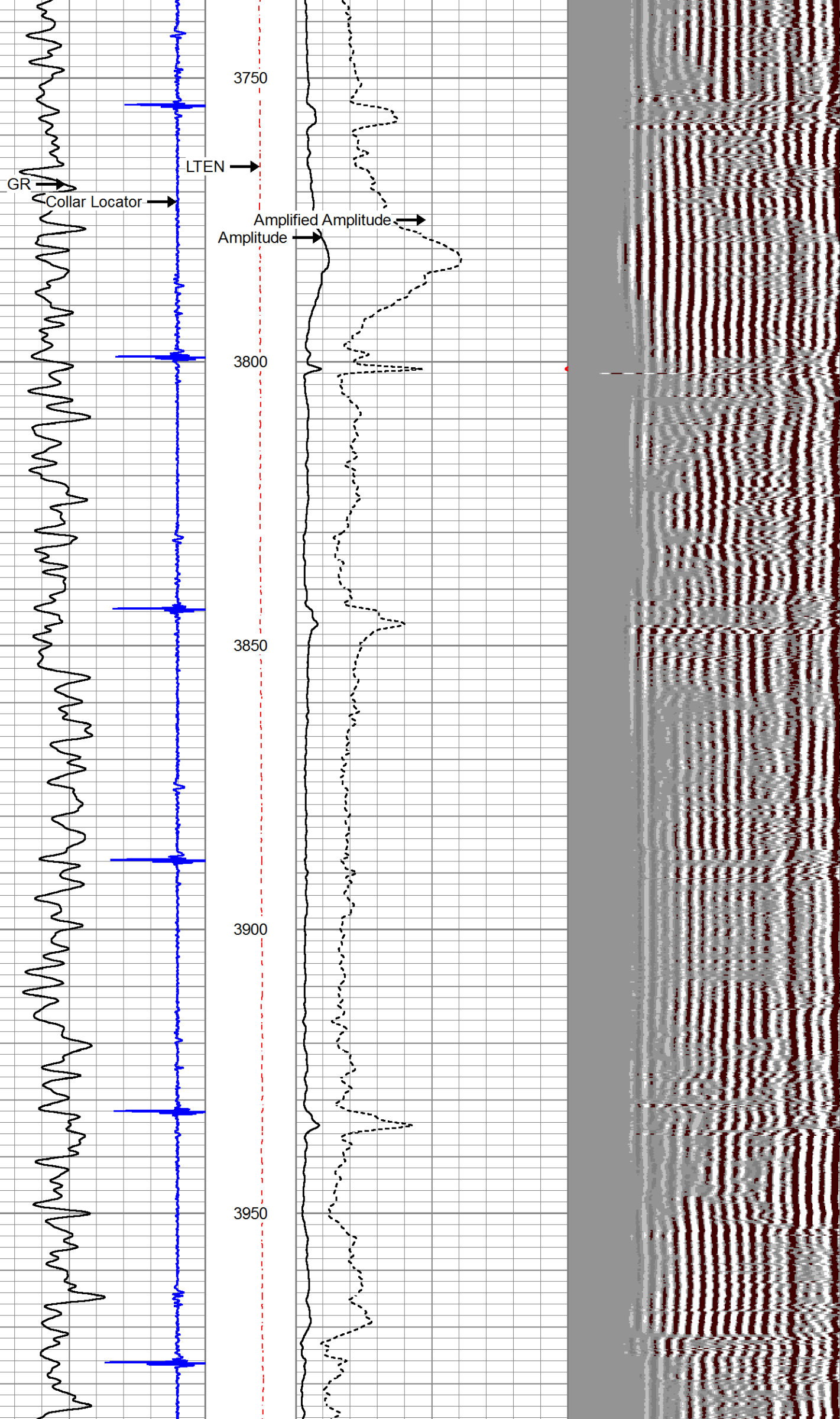














GR

Collar Locator

LTEN

Amplified Amplitude  
Amplitude

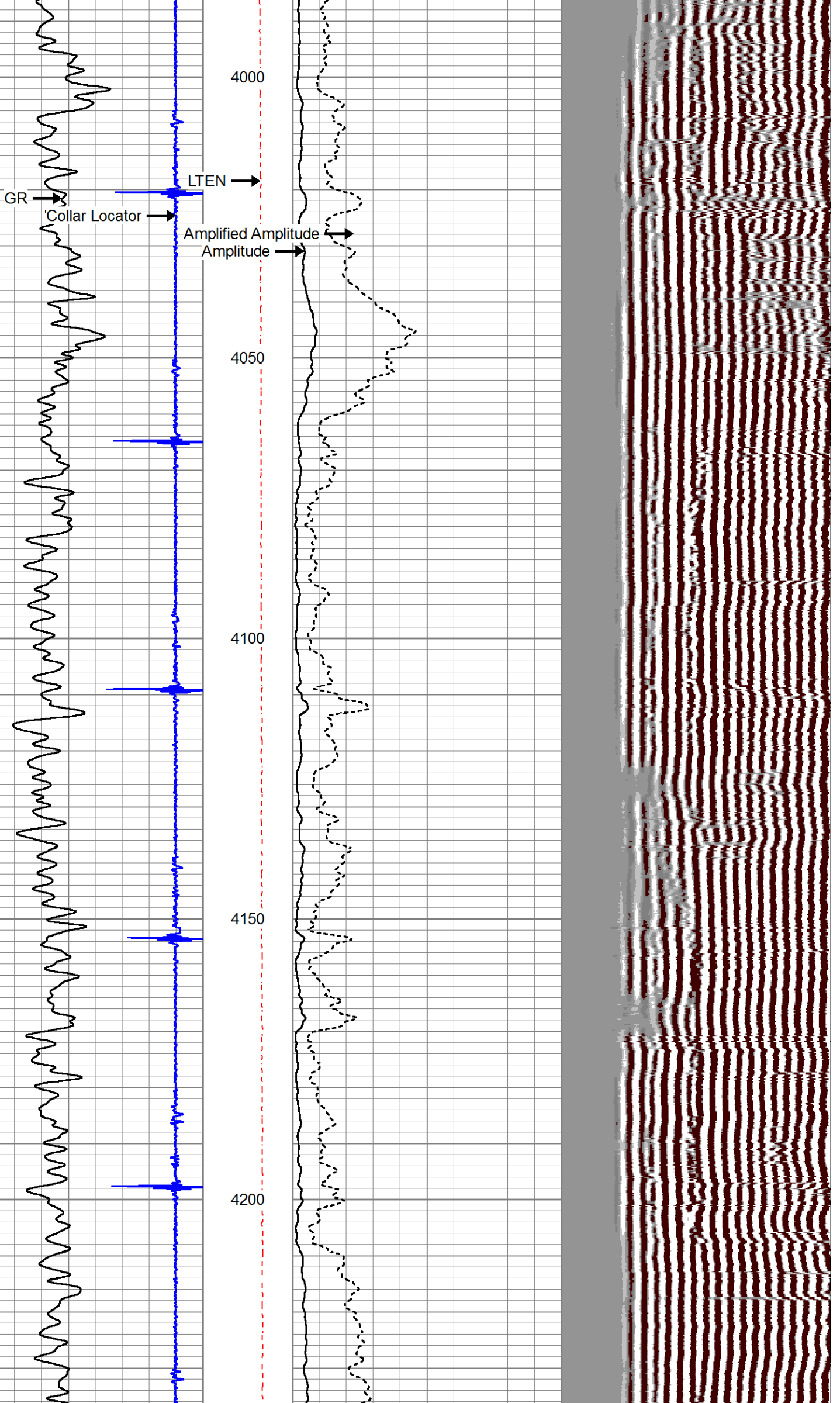
4000

4050

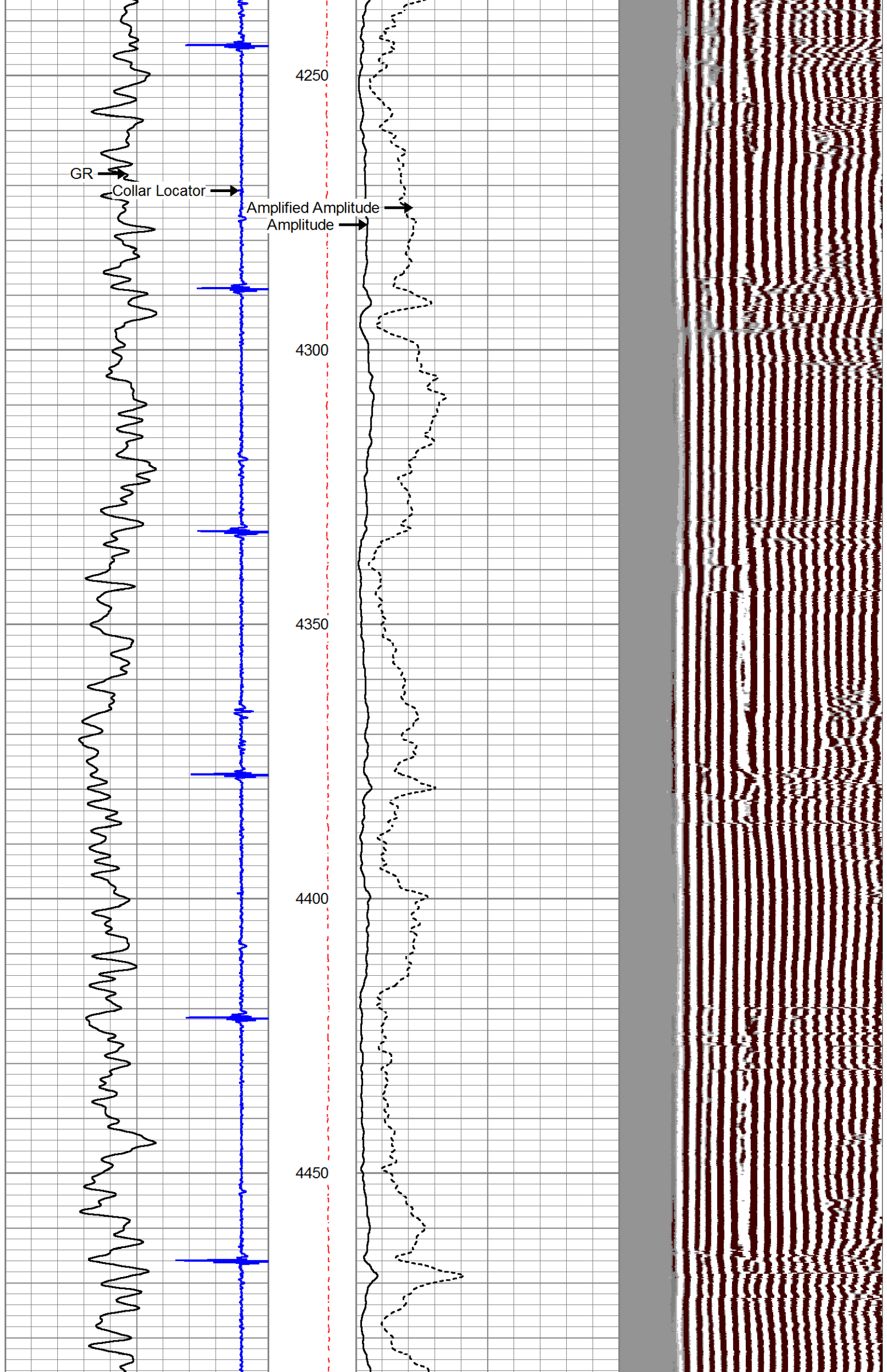
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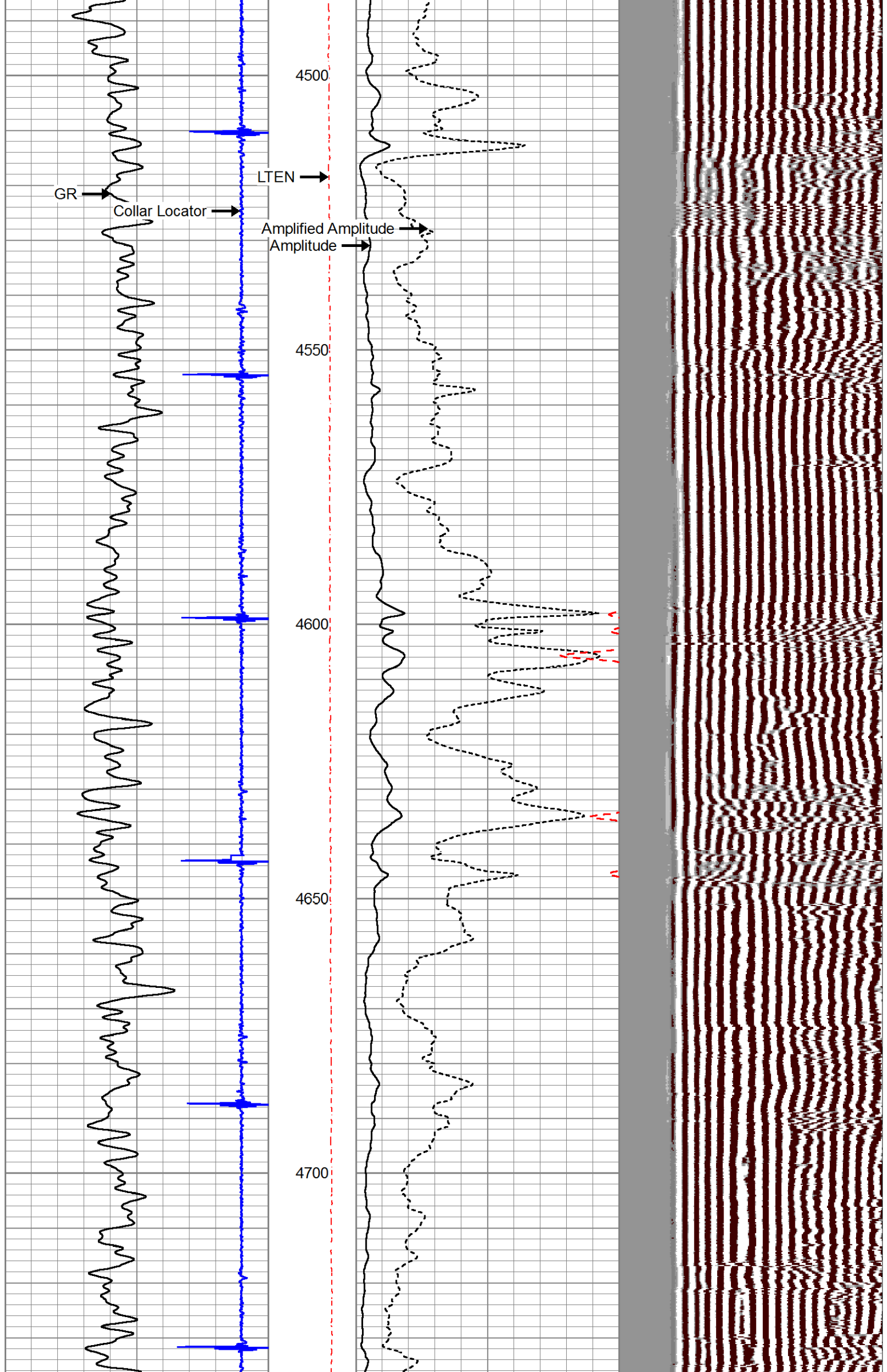
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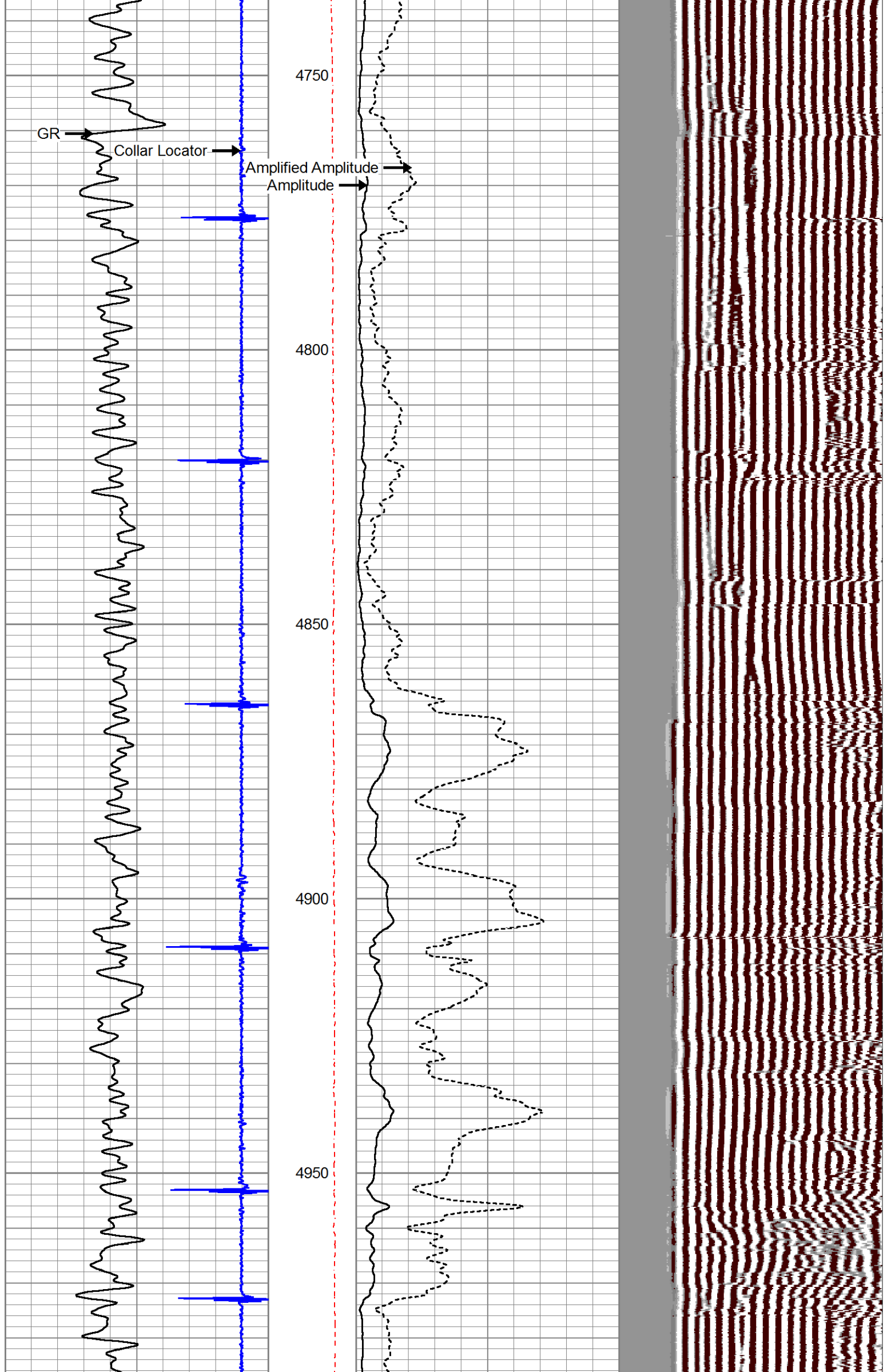
4200













GR →

Collar Locator →

LTEN →

Amplified Amplitude →

Amplitude →

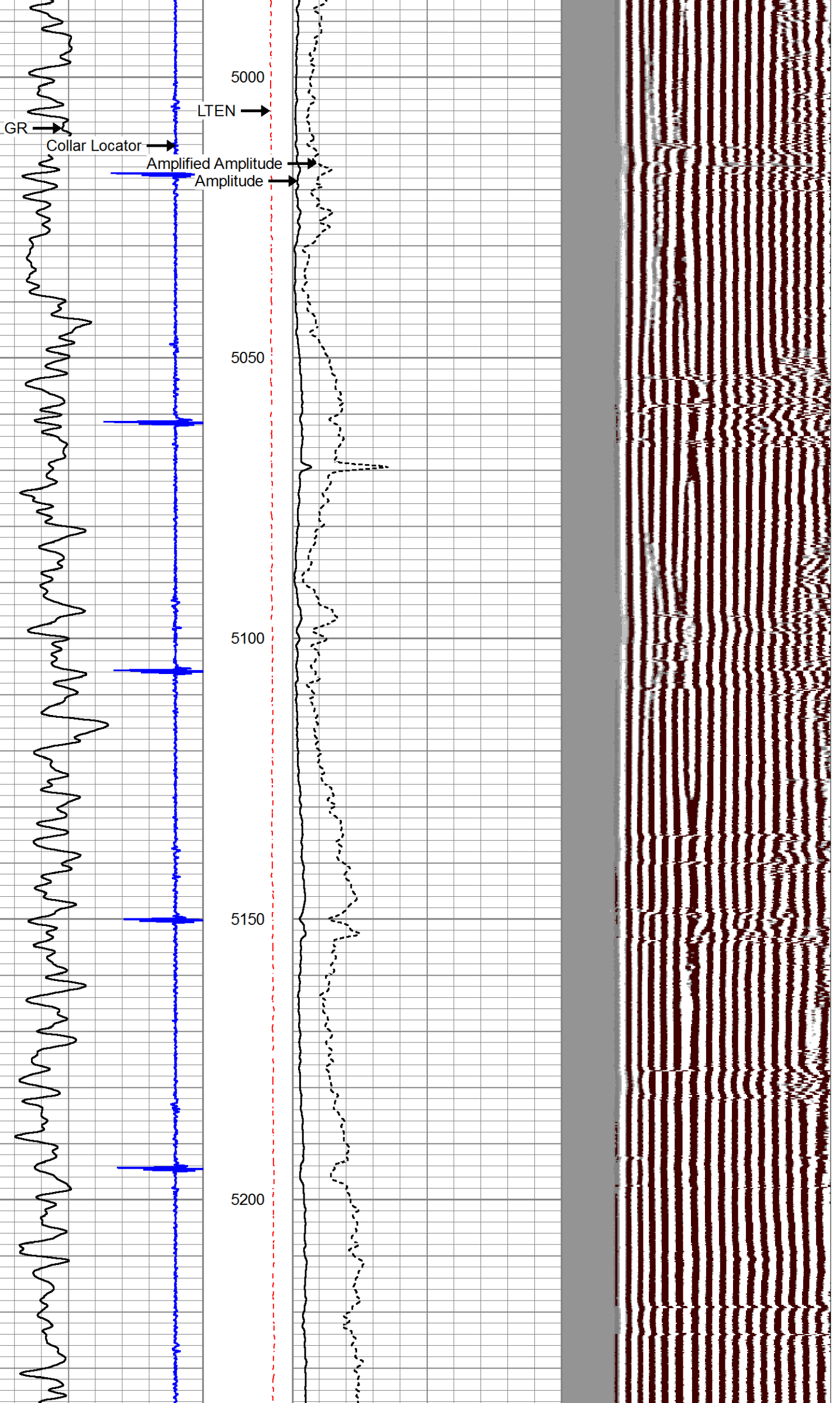
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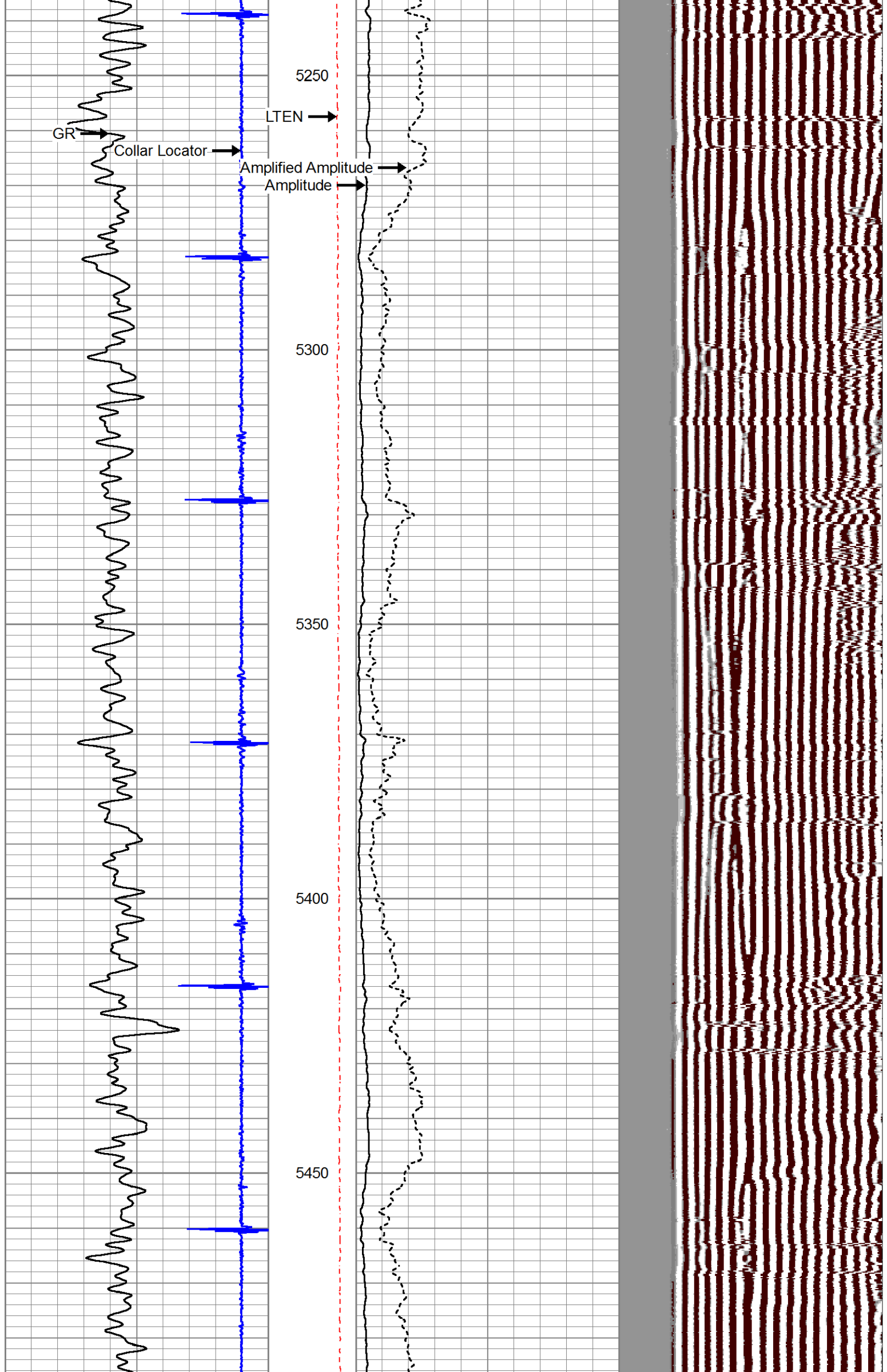
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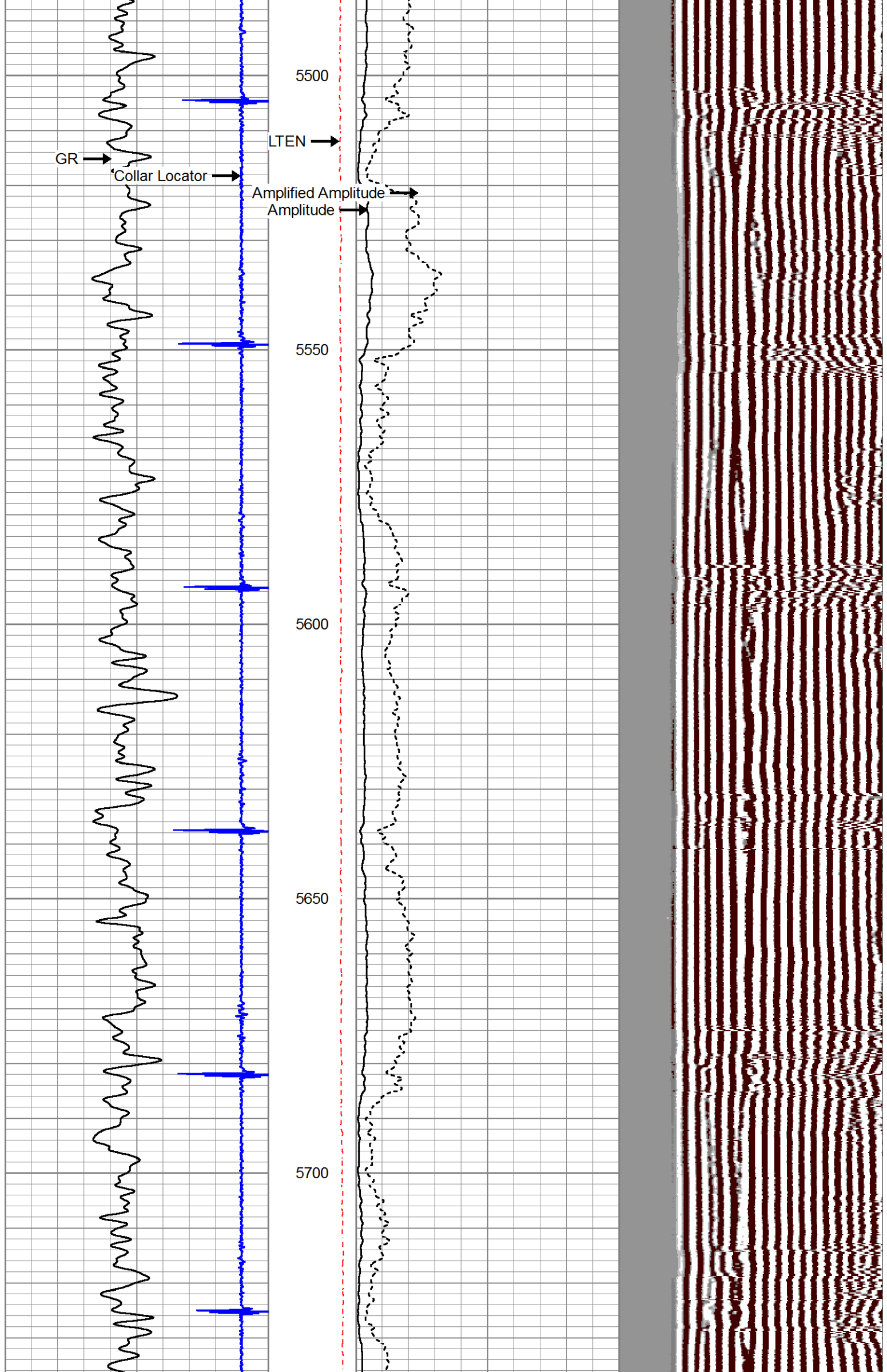
5100

5150

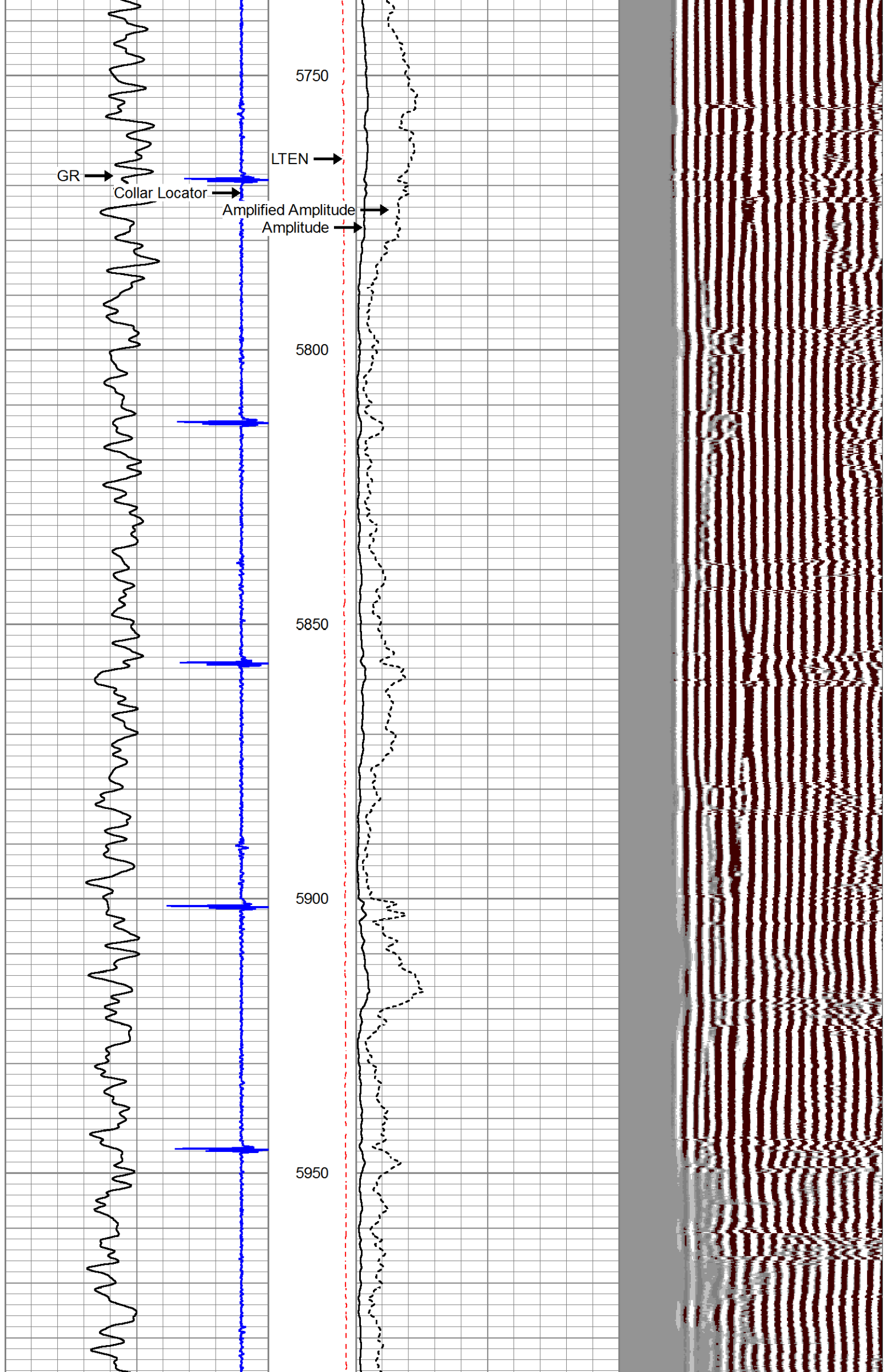
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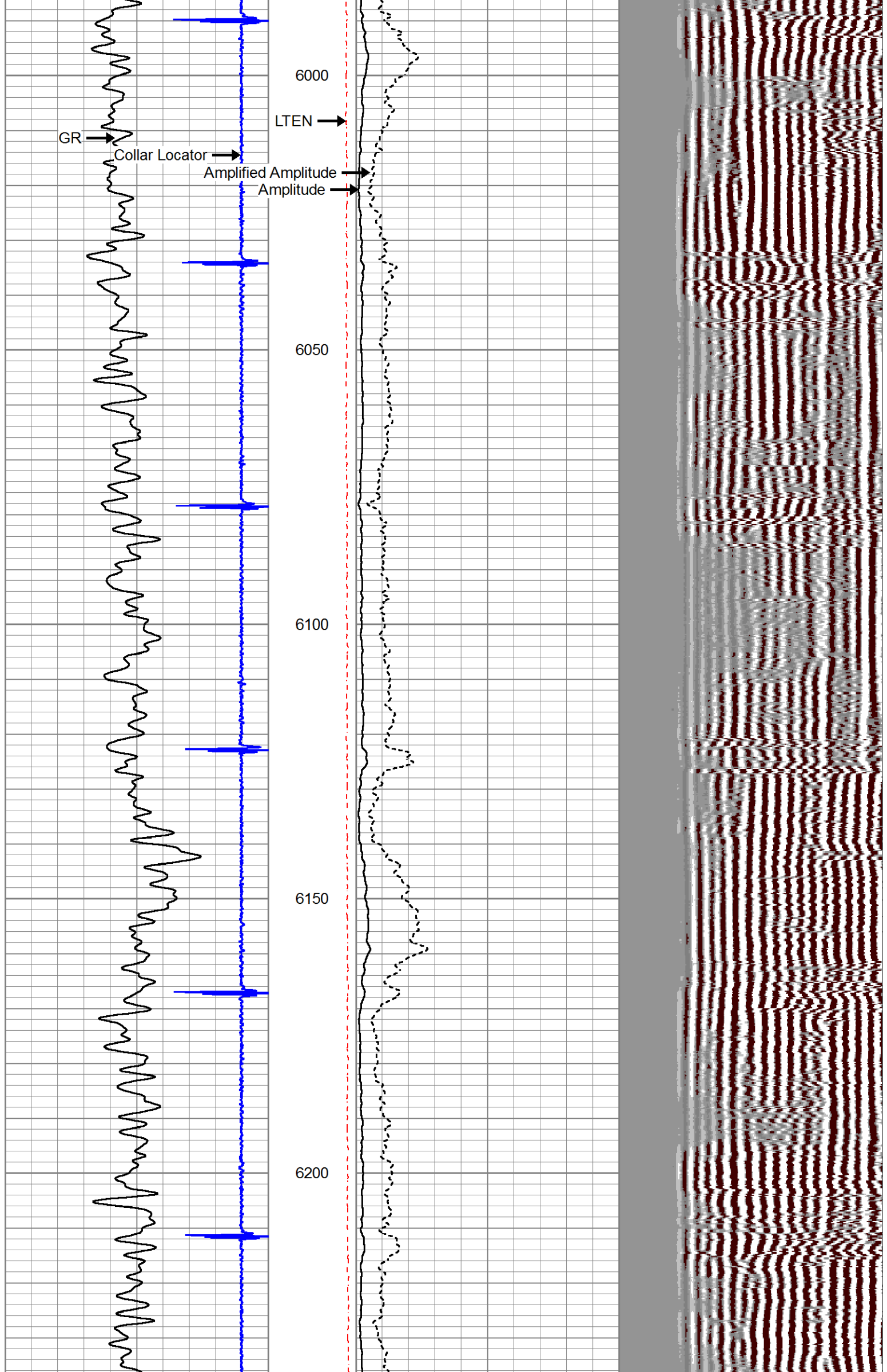


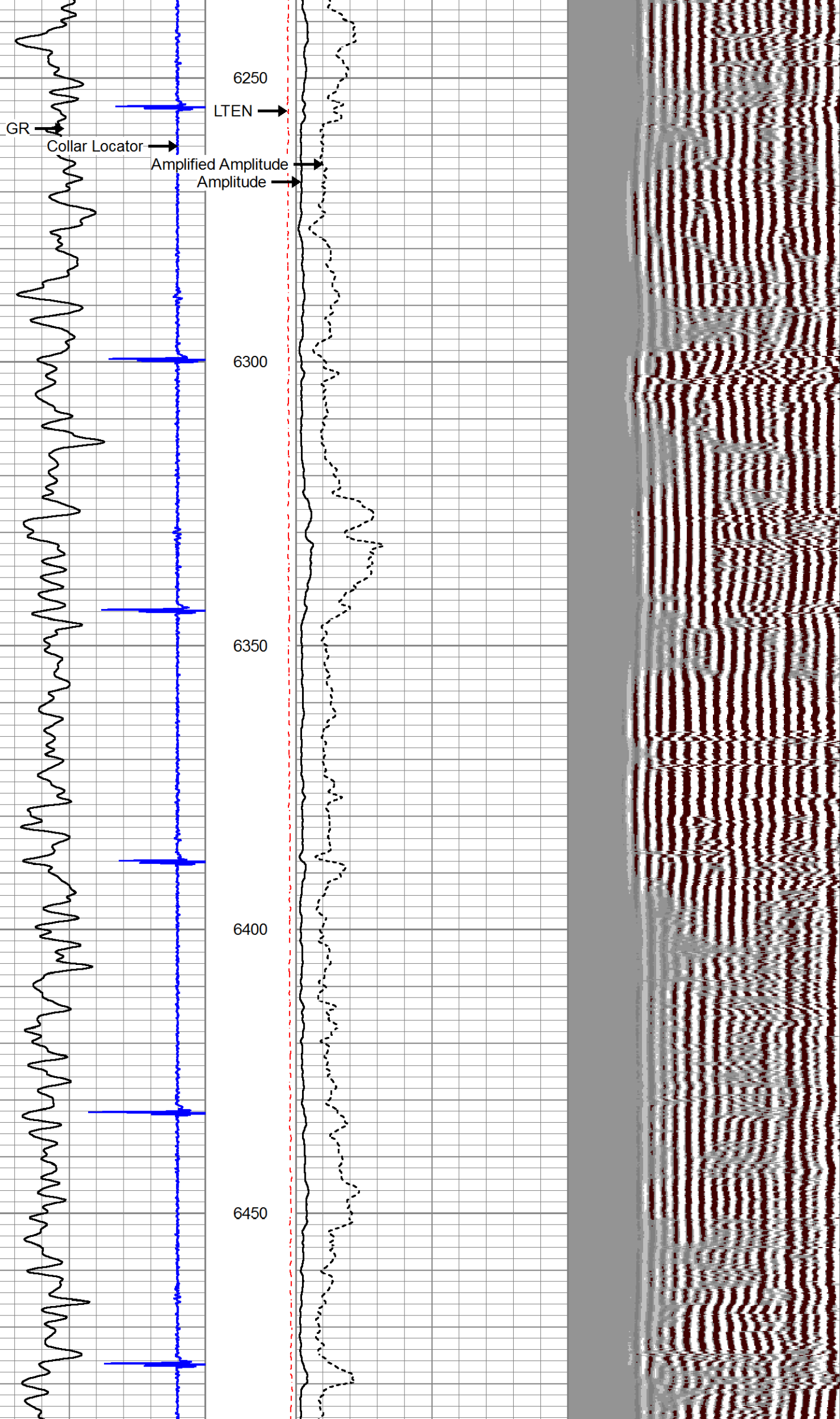




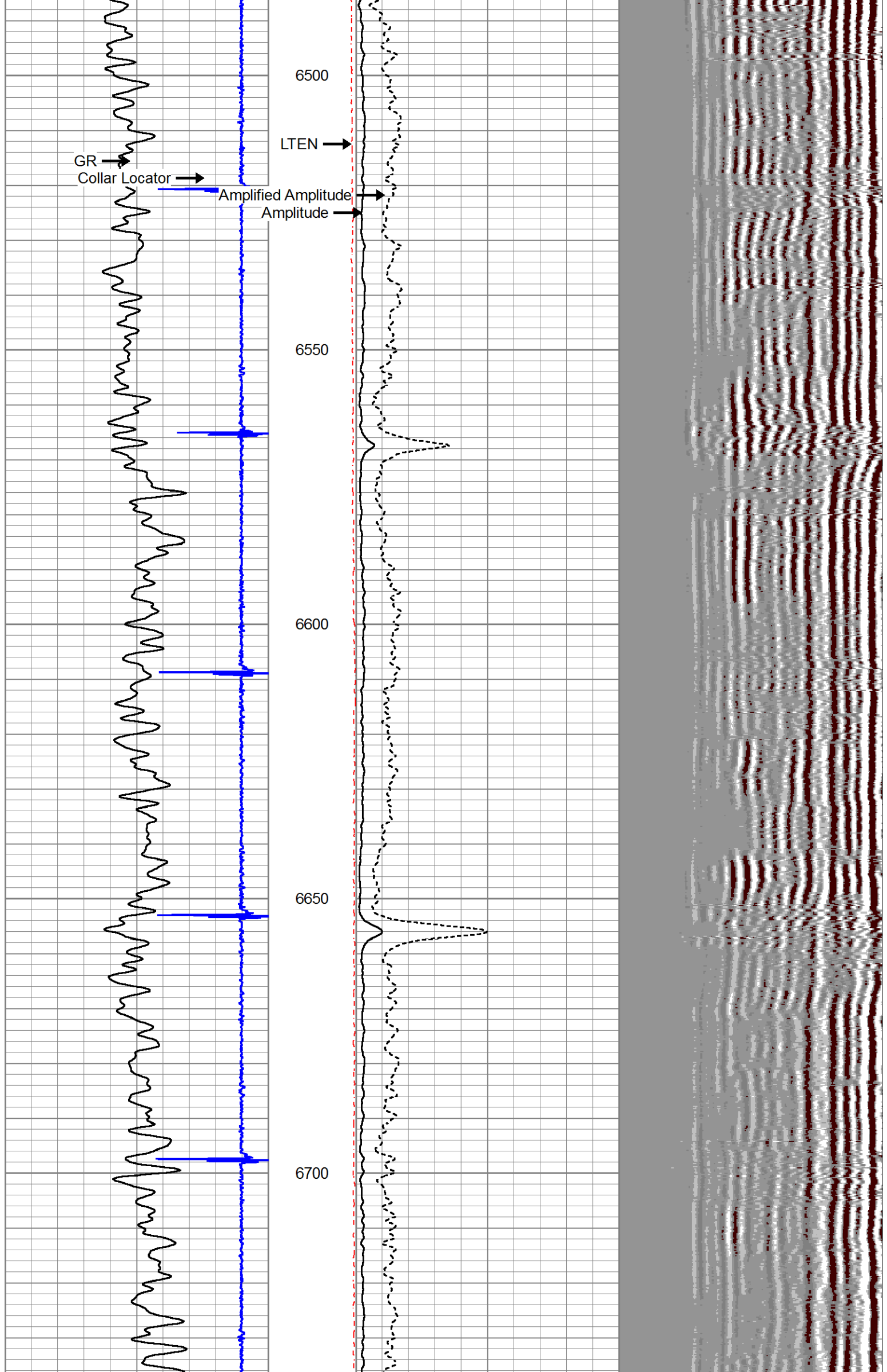


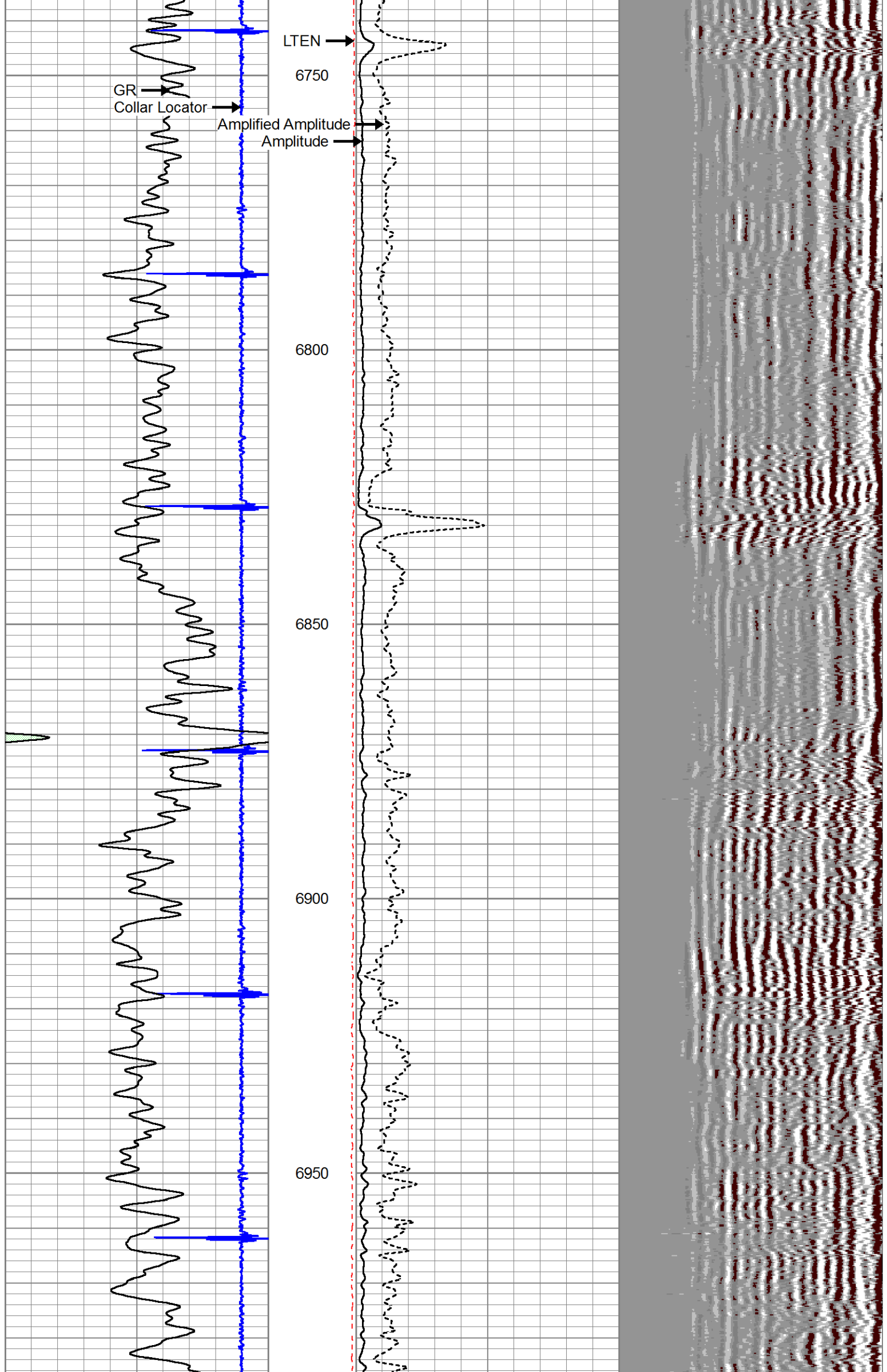


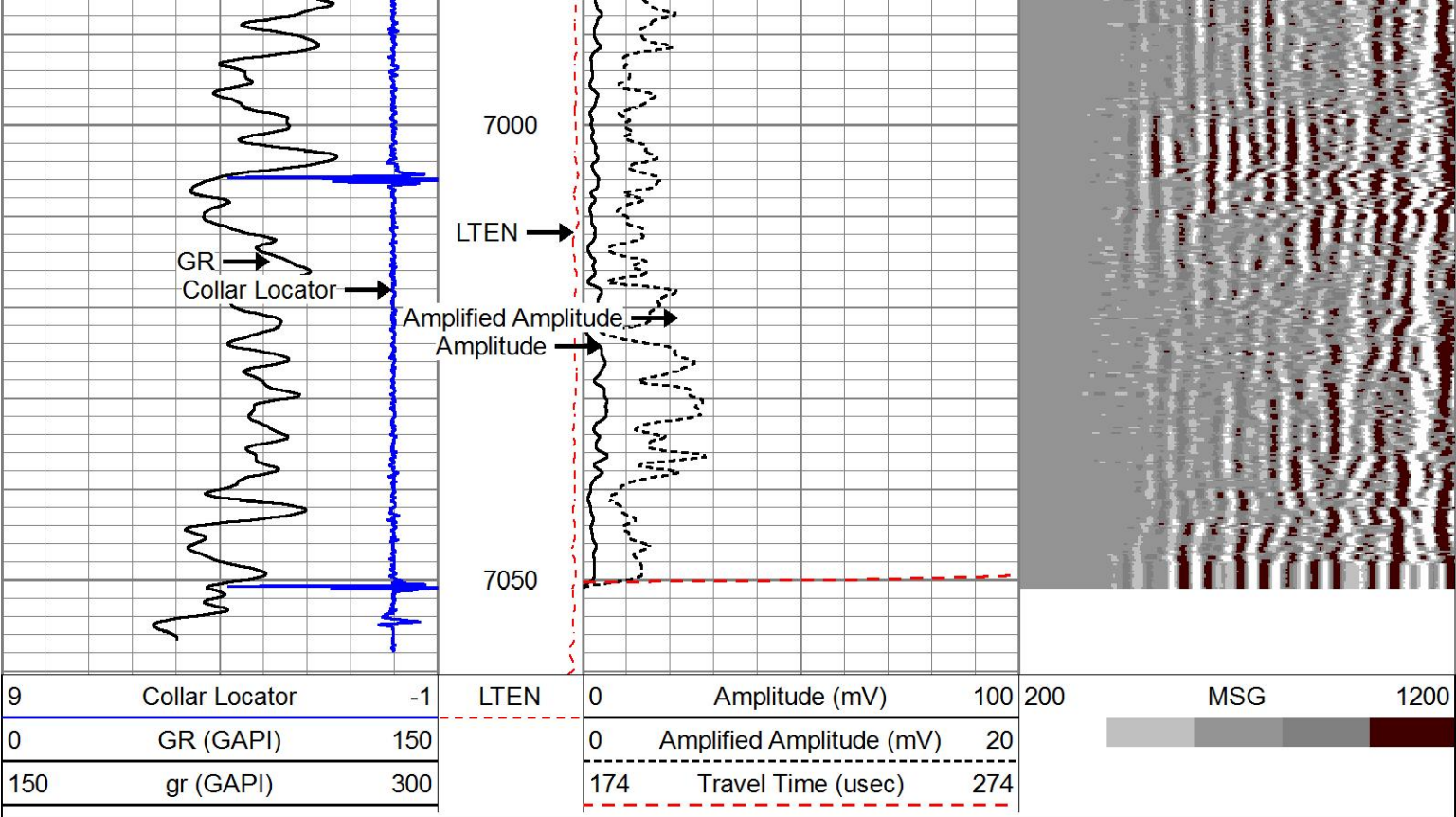






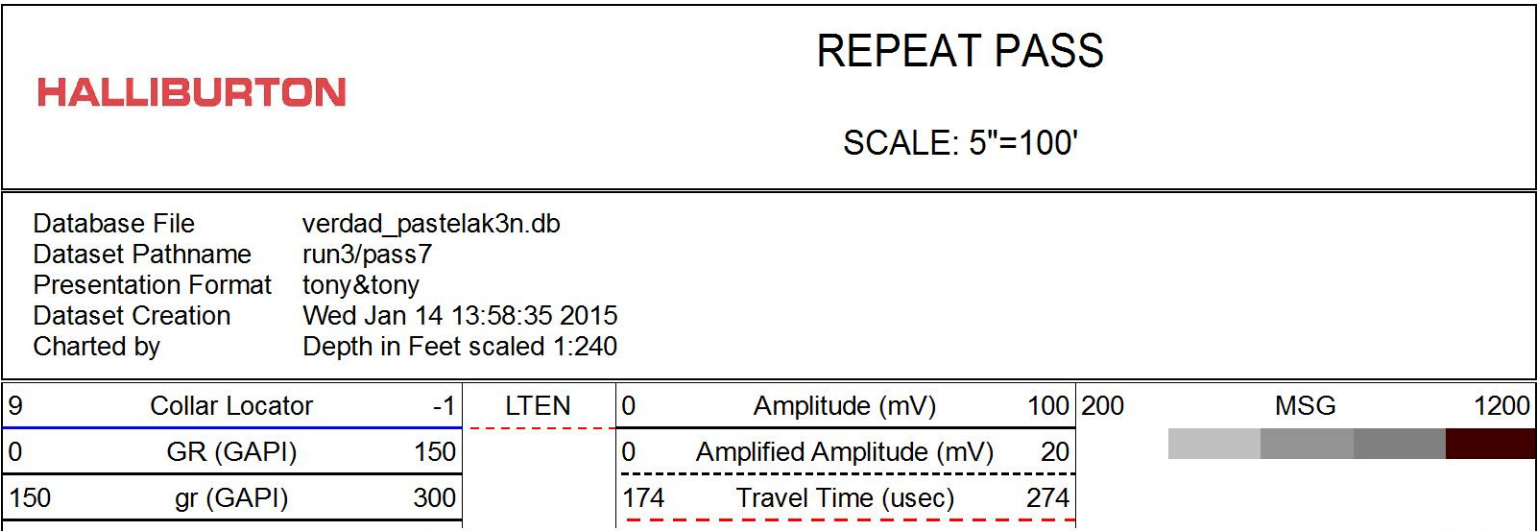






MAIN PASS

SCALE 5"=100'

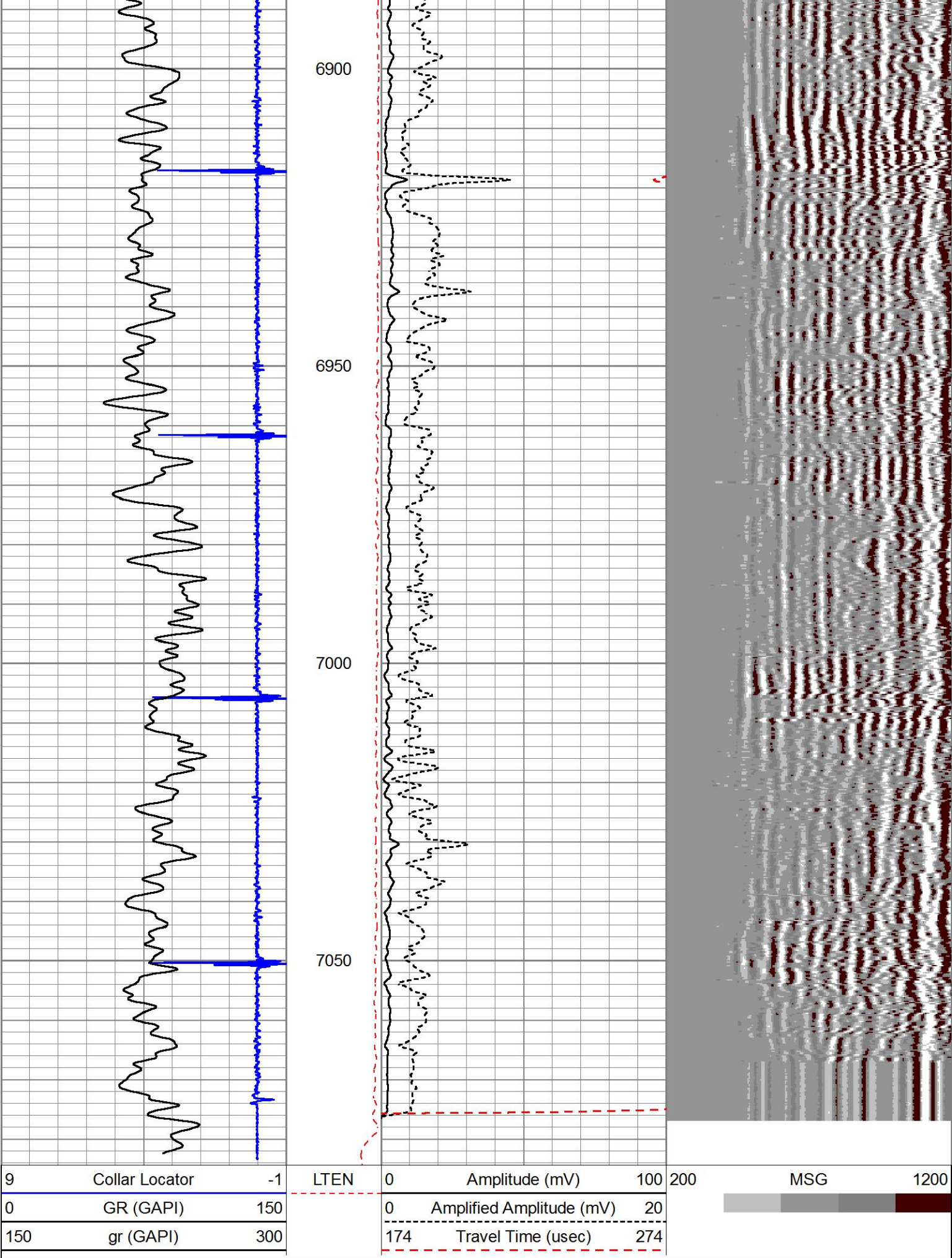


REPEAT PASS

SCALE: 5"=100'

Database File        verdad\_pastelak3n.db  
Dataset Pathname    run3/pass7  
Presentation Format   tony&tony  
Dataset Creation     Wed Jan 14 13:58:35 2015  
Charted by           Depth in Feet scaled 1:240





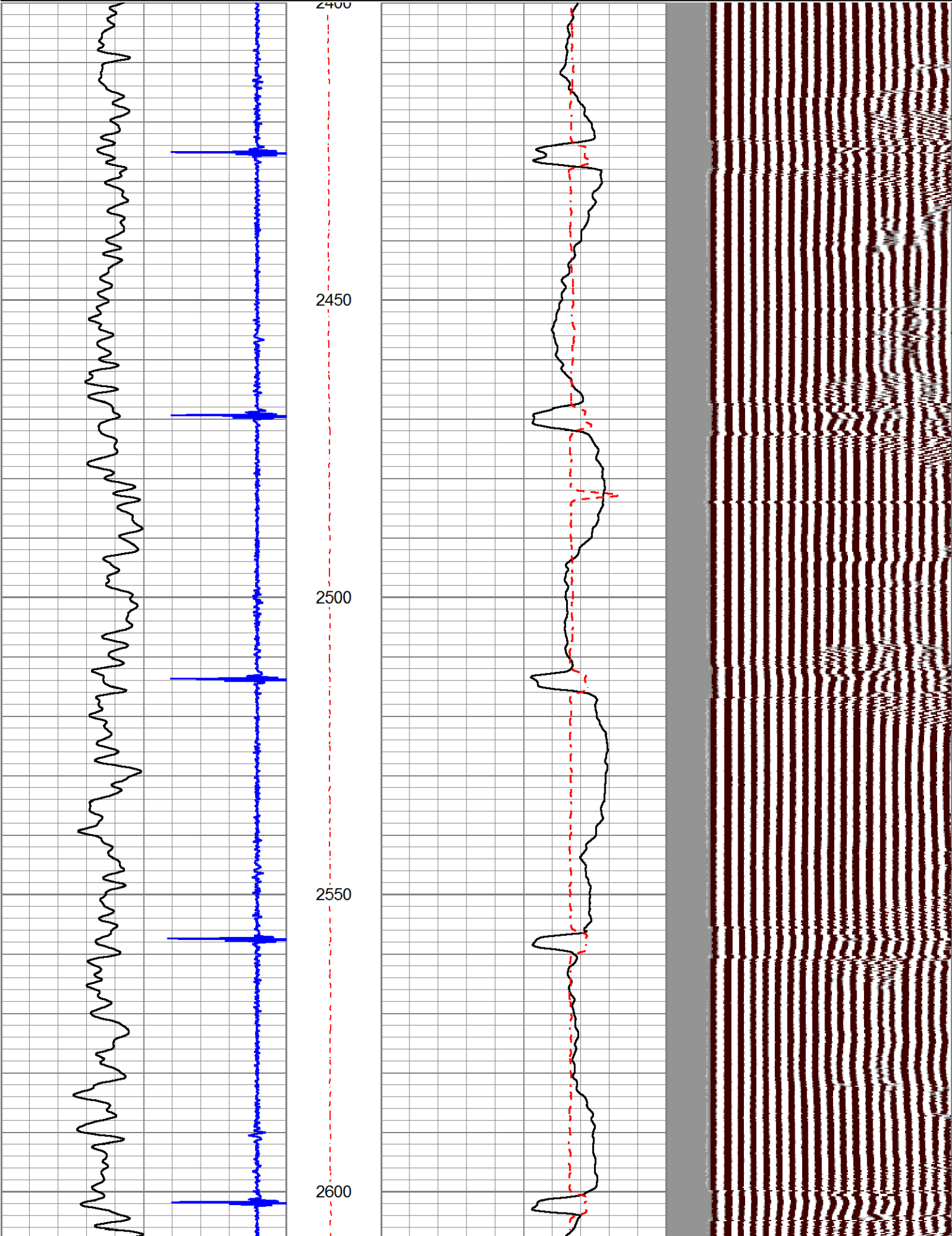
REPEAT PASS

SCALE: 5"=100'

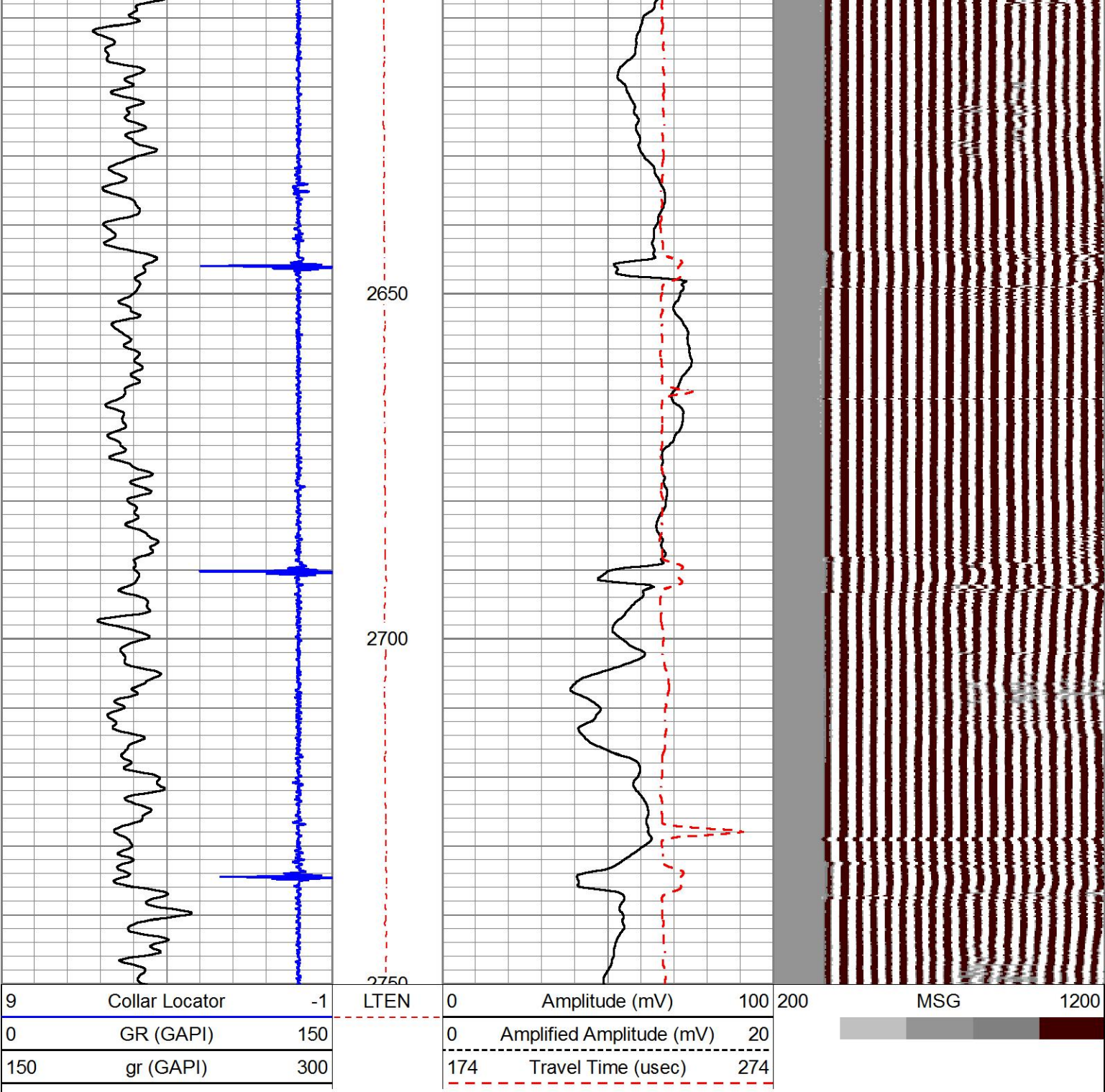
FREE PIPE PASS

Database File        verdad\_pastelak3n.db  
Dataset Pathname    run3/pass5  
Presentation Format   tony&tony  
Dataset Creation     Wed Jan 14 13:29:56 2015  
Charted by           Depth in Feet scaled 1:240

9	Collar Locator	-1	LTEN	0	Amplitude (mV)	100	200	MSG	1200
0	GR (GAPI)	150		0	Amplified Amplitude (mV)	20			
150	gr (GAPI)	300		174	Travel Time (usec)	274			







FREE PIPE PASS

HALLIBURTON

SCALE: 5"=100'

Log Variables

DatabaseC:\ProgramData\Warrior\Data\verdad\_pastelak3n.db  
Dataset field/well/run3/pass9

Top - Bottom

BHTEMP_Src 1	PPT usec 254	CASEWGHT lb/ft 13.5	MAXAMPL mV 82	MINAMPL mV 0	MINATTN db/ft 1	SRFTEMP degF 40	MudWgt lb/gal 8.33
CASETHCK in 0.58	CASEOD in 4.5	PERFS 0	TDEPTH ft 0	BOTTEMP degF 200	BITSIZE in 7.875		

Calibration Report

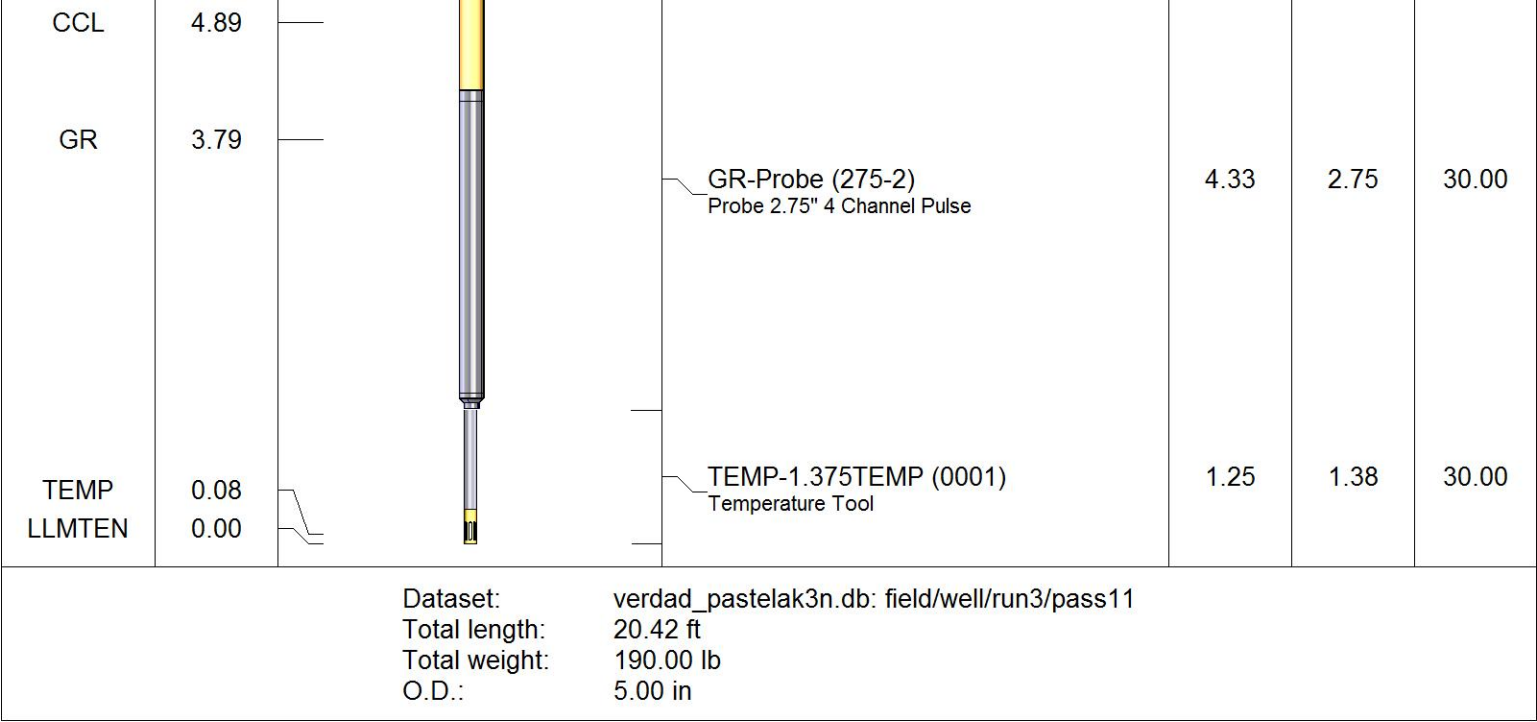
Database File        verdad\_pastelak3n.db  
Dataset Pathname    run3/pass11  
Dataset Creation    Wed Jan 14 15:27:04 2015

Temperature Calibration Report						
Serial Number:		0001				
Tool Model:		1.375TEMP				
Performed:		Tue Jan 13 13:17:08 2015				
		Reference		Reading		
Low Reference:		0.00	degF	0.00	cps	
High Reference:		100.00	degF	1000.00	cps	
Gain:		0.10				
Offset:		0.00				
Delta Spacing		2				
Gamma Ray Calibration Report						
Type / Serial:		Probe / 275-2				
SHOP CALIBRATION		Wed Jan 14 12:43:56 2015				
Background Calibrator	Counts/Sec.	Gain	Offset	Jig	Units	
	116.2				cps	
	435.1				cps	
		0.7400			GAPI/cps	
PRIMARY VERIFICATION		Wed Jan 14 12:47:30 2015				
Background Calibrator Difference	86.7				cps	
	325.8				cps	
				239.2	GAPI	
BEFORE SURVEY VERIFICATION		Wed Jan 14 12:51:09 2015				
Background Calibrator Difference	87.6				cps	
	327.4				cps	
				239.8	GAPI	
AFTER SURVEY VERIFICATION		Wed Jan 14 15:27:00 2015				
Background Calibrator Difference	85.7				cps	
	331.6				cps	
				245.9	GAPI	
Segmented Cement Bond Log Calibration Report						
Serial Number:		ProbeDIG_001				
Tool Model:		Digital				
Calibration Casing Diameter:		4.500		in		
Calibration Depth:		2022.225		ft		
Master Calibration, performed Wed Jan 14 13:25:19 2015:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.743	0.000	81.196	109.695	-0.299
CAL						
5'	0.004	0.665	0.000	81.196	122.902	-0.528
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						
Internal Reference Calibration, performed (Not Performed):						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset



CAL			
Air Zero Calibration, performed Wed Jan 14 13:00:14 2015:			
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CENT-Probe_275 (00001) Inline Centralizer	2.83	5.00	15.00
WVF3FT	12.67		PRBDIGCBL-Digital (ProbeDIG_001) Probe 3' and 5' with Digital Telemetry	9.17	2.75	100.00
WVF5FT	11.67					
			CENT-Probe_275 (00001) Inline Centralizer	2.83	5.00	15.00



Company	VERDAD OIL AND GAS				
Well	PASTELAK 3N				
Field	WATTENBURG				
County	WELD	State	CO		
HALLIBURTON		CEMENT BOND LOG			