



CEMENT BOND LOG  
W/ VARIABLE DENSITY,  
GAMMA RAY & CCL

Company		PCR OPERATING LLC	
Well		CLAR L-7	
Field		ADENA	
County		MORGAN	
State		CO	
Location:		API # : 05-087-05260	
Permanent Datum		GL	Elevation
Log Measured From		KB	4584'
Drilling Measured From		KB	
SESE SEC 14 TWN 1N RGE 58W		Other Services	
		N/A	
Date			
Run Number		25-JUL-2018	
Depth Driller		ONE	
Depth Logger		5810'	
Bottom Logged Interval		5790'	
Top Log Interval		5786'	
Open Hole Size		4400'	
Type Fluid		7-7/8'	
Density / Viscosity		WATER	
Max. Recorded Temp.		8.4#	
Estimated Cement Top		N/A	
Time Well Ready		4630'	
Time Logger on Bottom		07:00 AM	
Equipment Number		08:20 AM	
location		40	
Recorded By		PLATTEVILLE	
Witnessed By		C. SCHAAF	
		B. HEITSCHMIDT	
Run Number		Borehole Record	
Bit		From	To
		Size	Weight
		From	To
Casing Record		Size	Wgt/Ft
Surface String		8-5/8"	24#
Prot. String			
Production String		5.5"	15.5#
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

TOOLSTRING RUN AS PER TOOL DIAGRAM  
CENTRALIZED WITH 2 X BOWSPRING CENTRALIZERS  
LOGS CORRELATED TO E-LOG BY SCHLUMBERGER, RECORDED 07-23-54  
KB = 11FT  
TOOLSTRING TAGGED AT 5790FT  
APPROXIMATE TOP OF CEMENT AT 4630FT

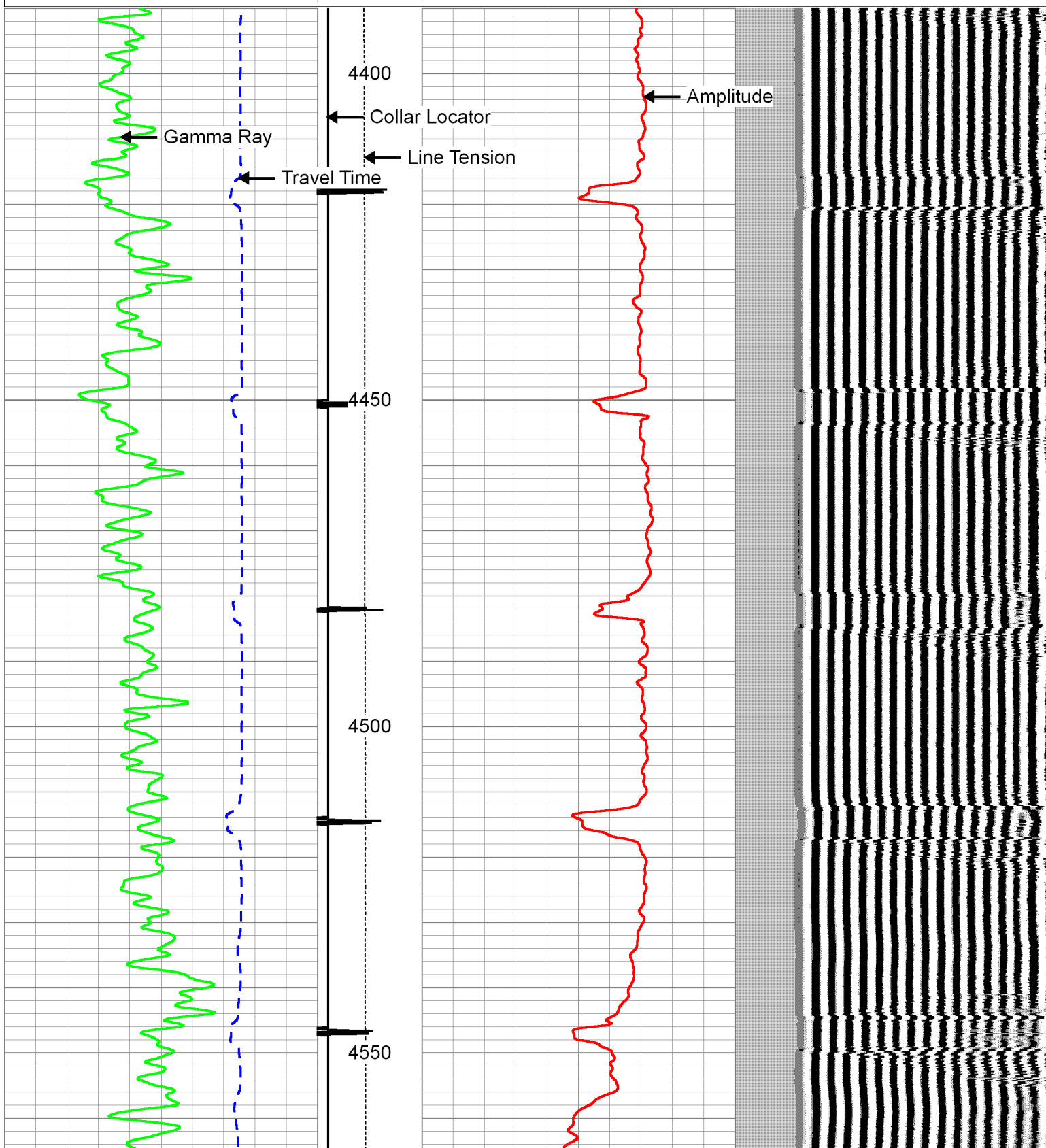
THANKS FOR CHOOSING KLX ENERGY SERVICES

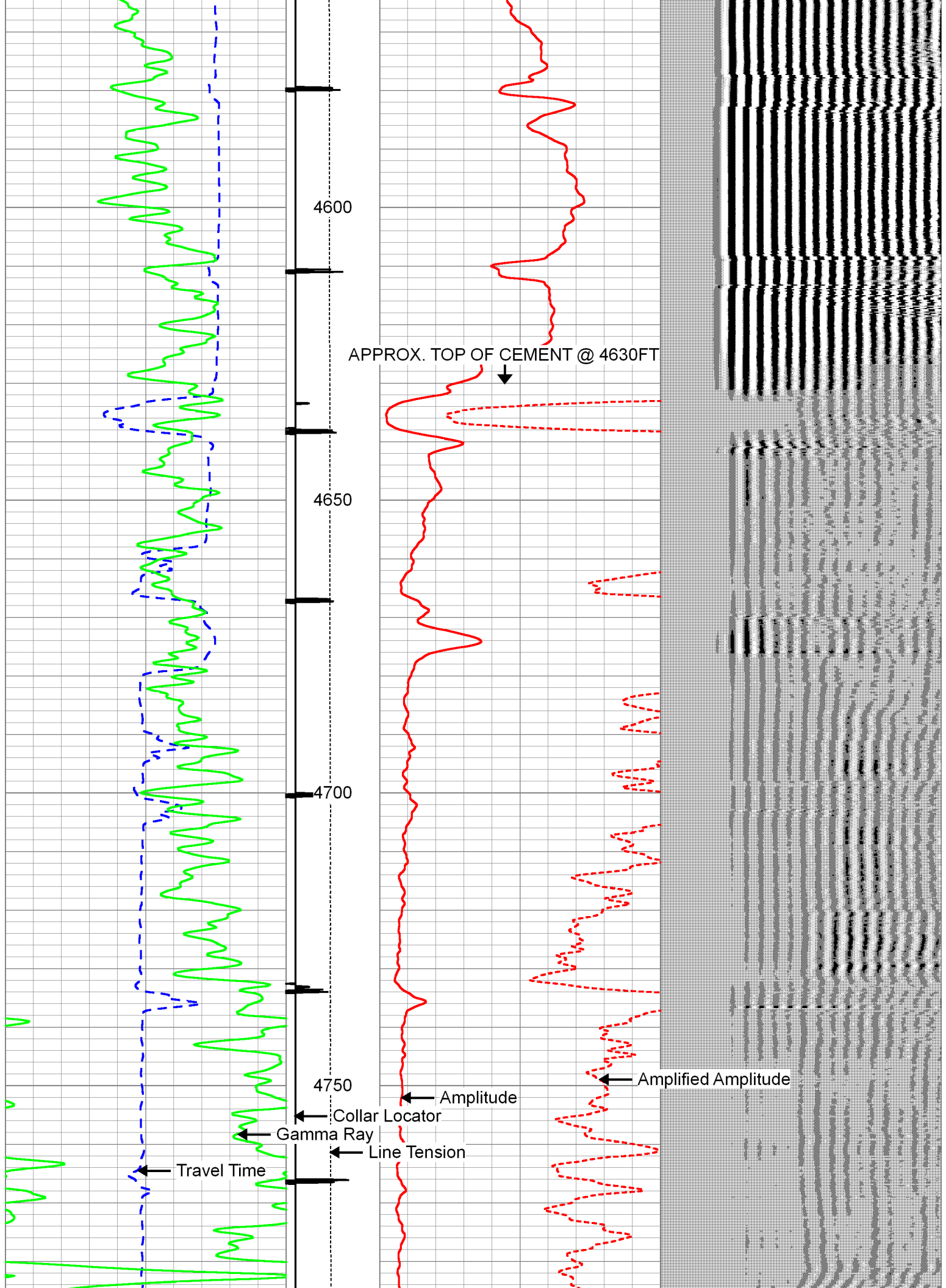


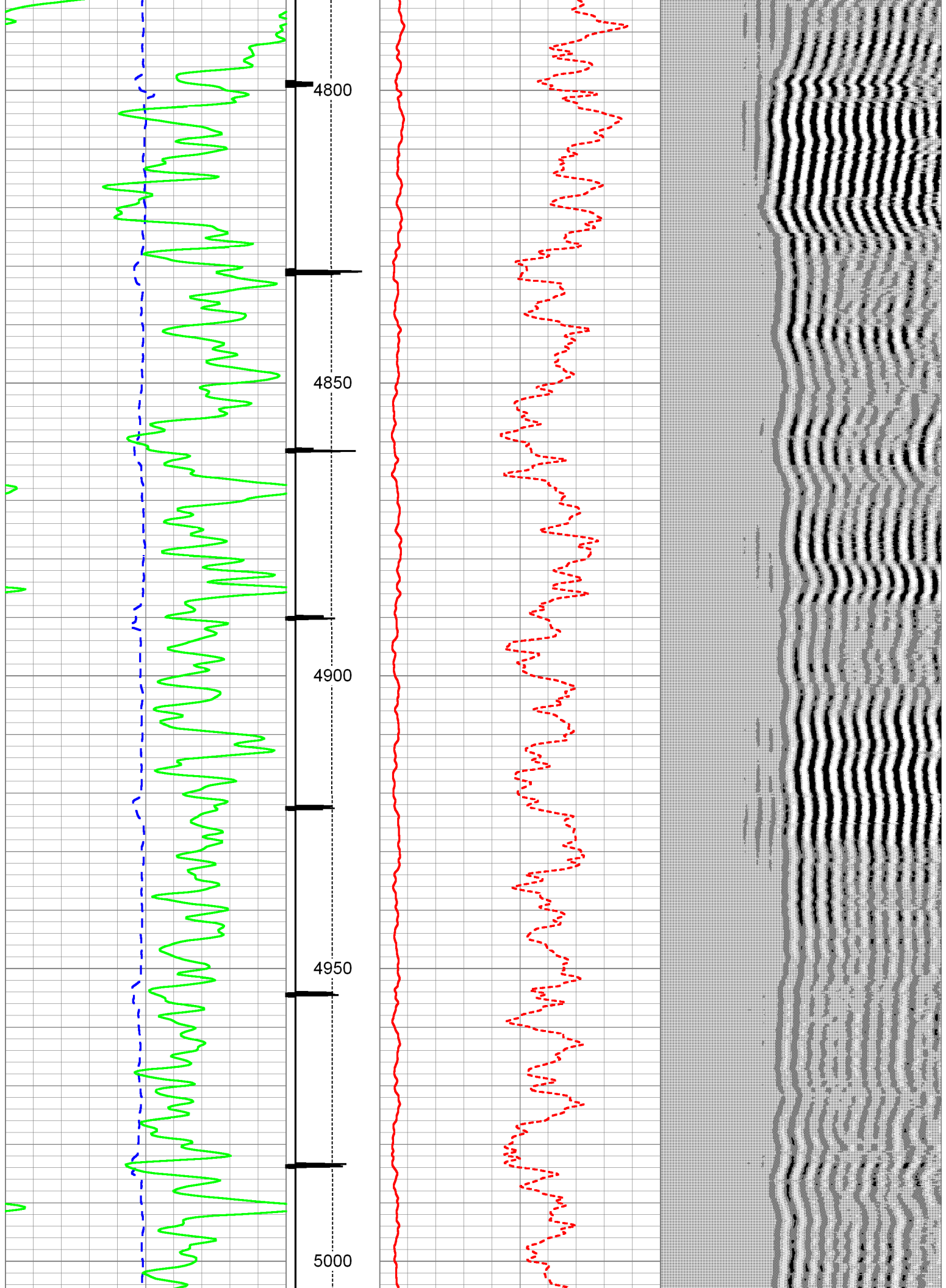
MAIN PASS - 5 INCH

Database File: passcreek\_072518.db  
Dataset Pathname: CLARL7/run1cbl/pass7  
Presentation Format: CBL\_PA~1  
Dataset Creation: Wed Jul 25 08:33:33 2018 by Log 0  
Charted by: Depth in Feet scaled 1:240

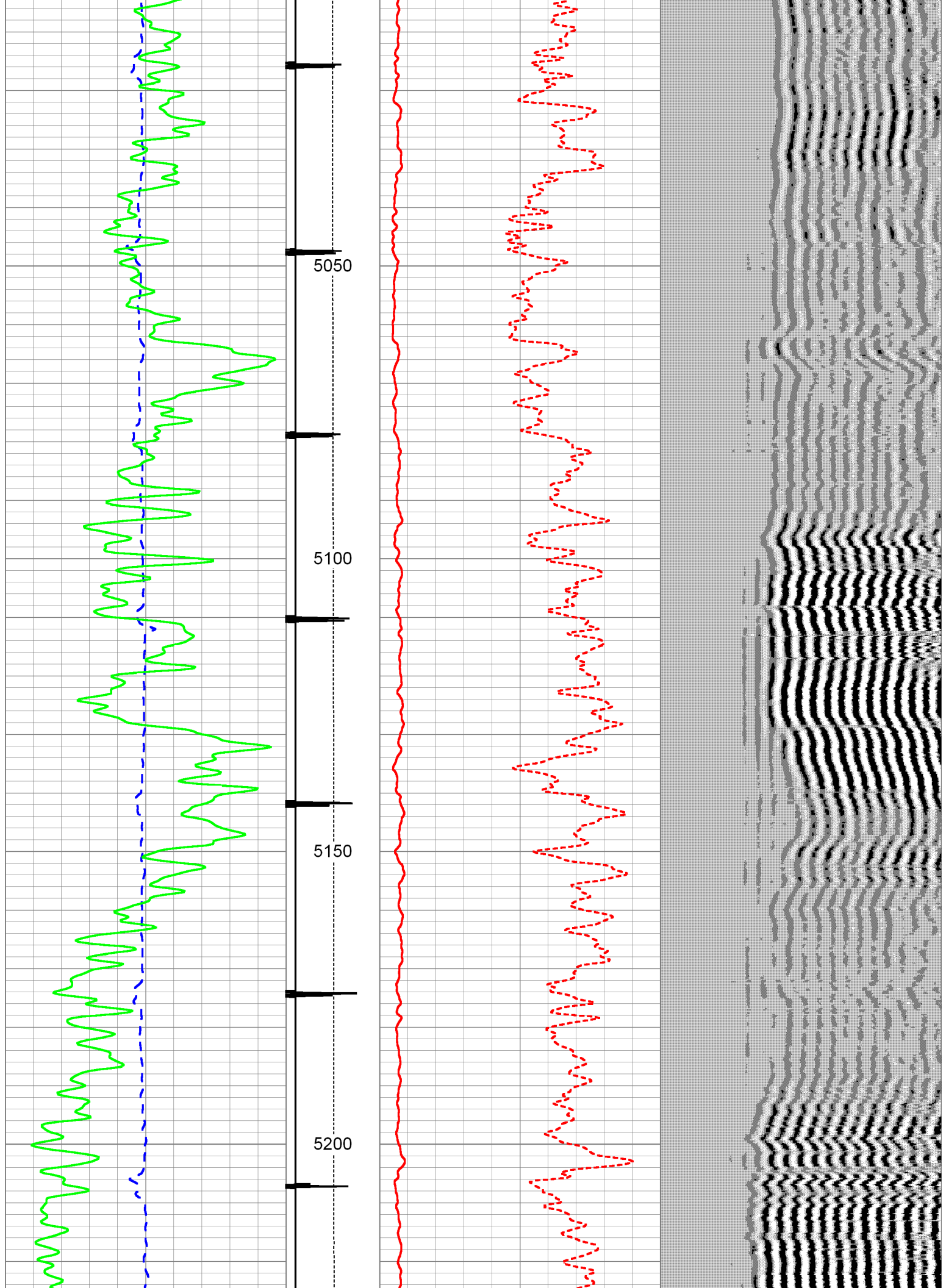
430	Travel Time (usec)	230	Collar Locator	0	Amplified Amplitude (mV)	10	200	VDL	1200
0	Gamma Ray (GAPI)	250	-1	9	0	Amplitude (mV)	100		
			Line Tension						
			(lb)						
			0	1500					

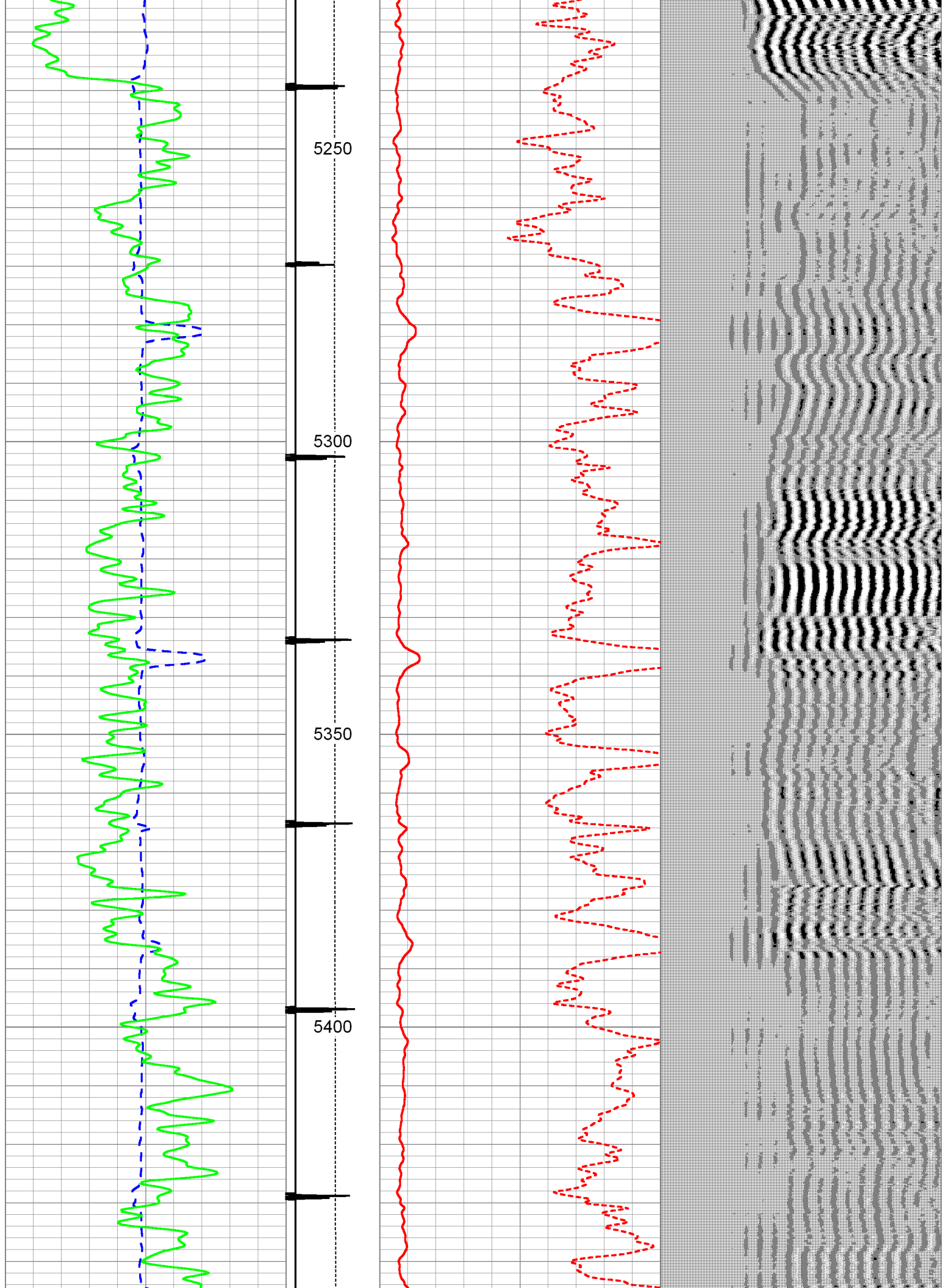


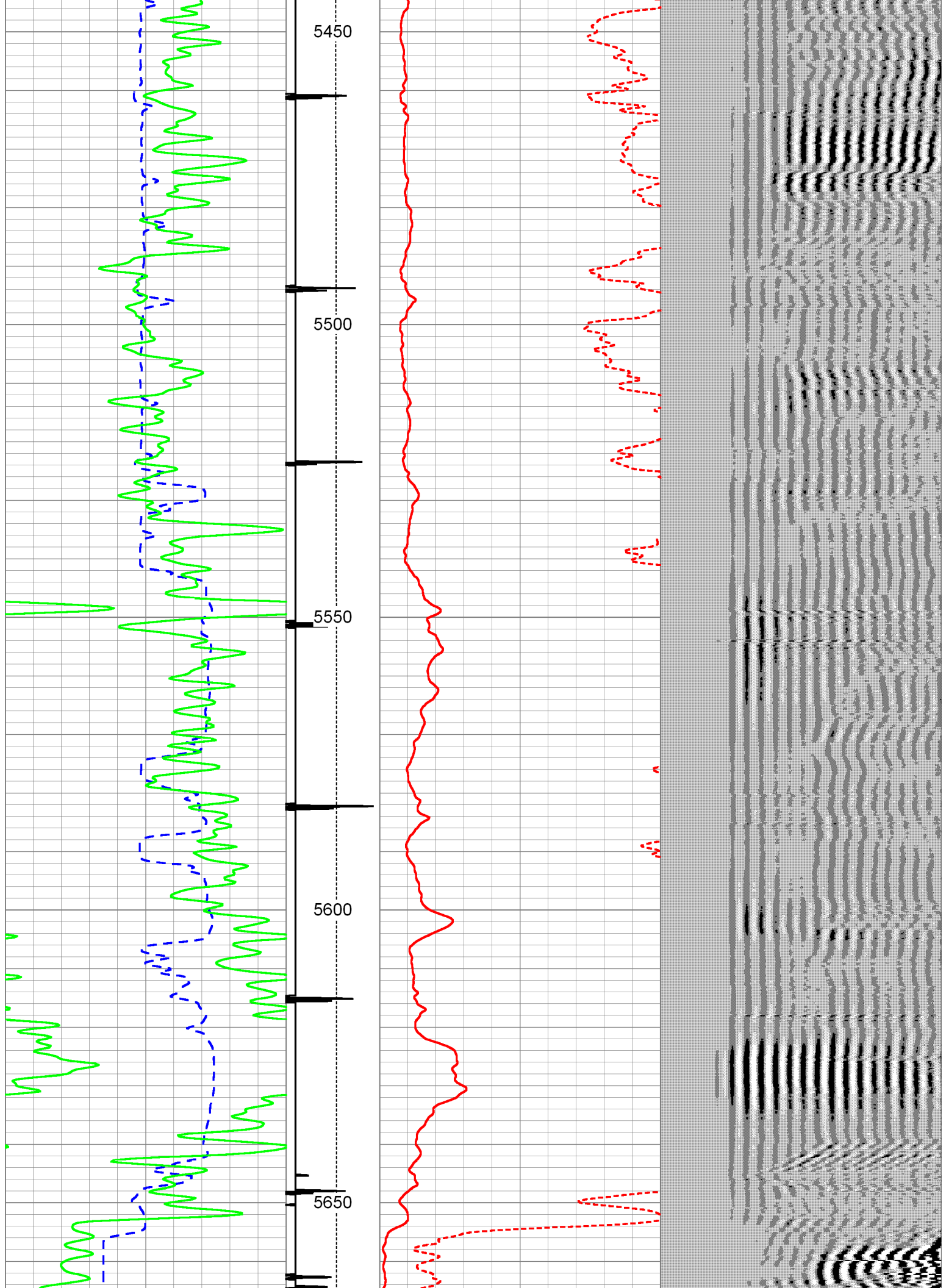




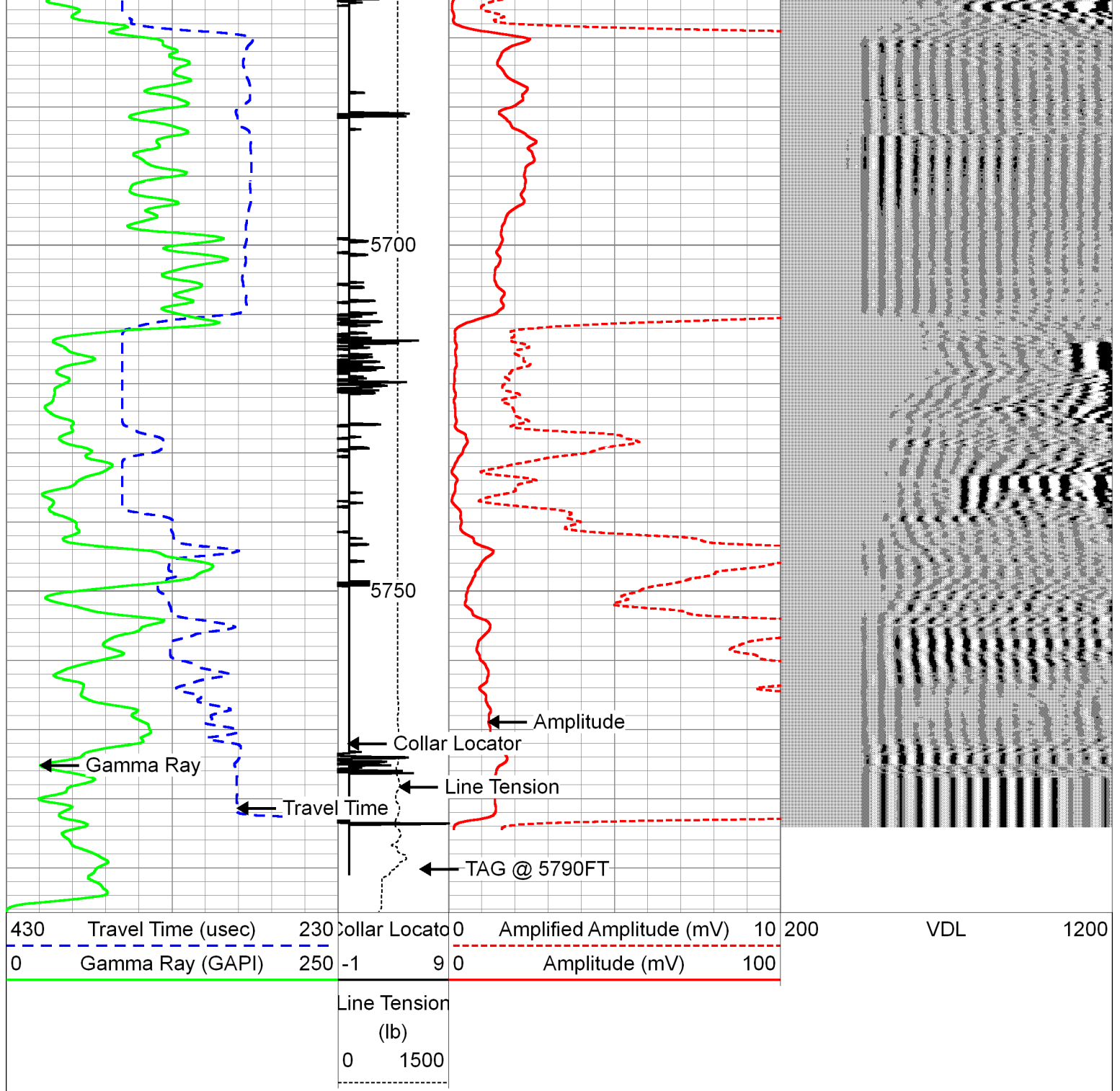






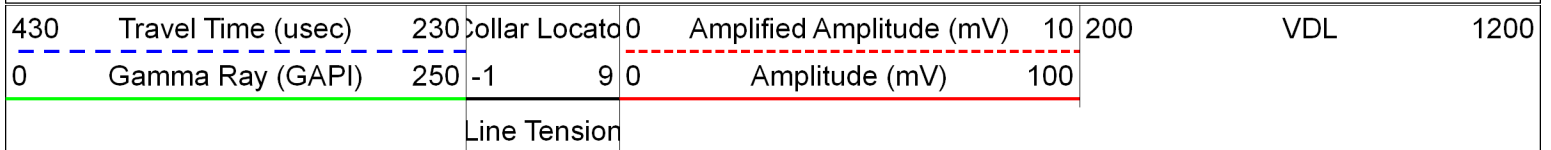






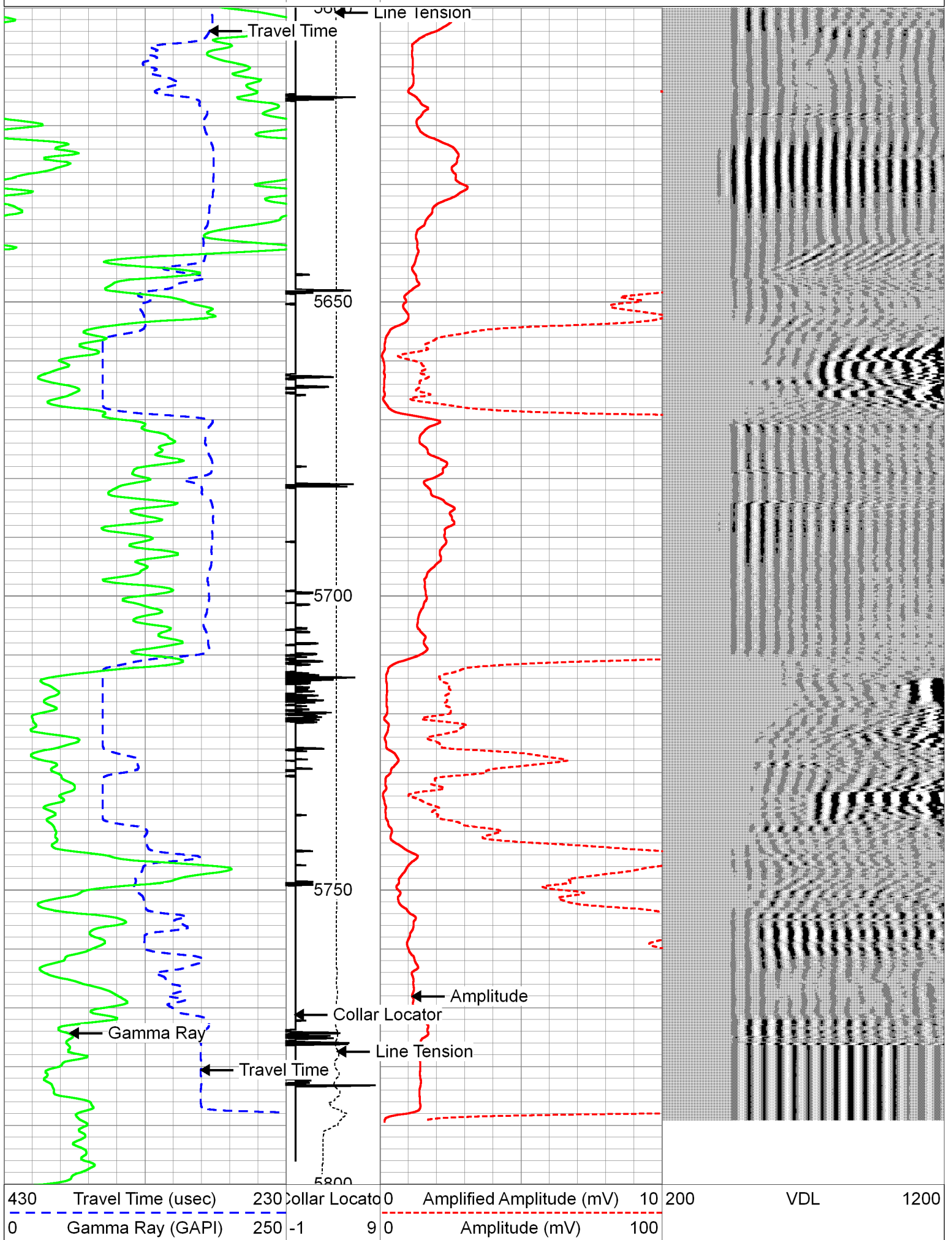
# REPEAT PASS - 5 INCH

Database File: passcreek\_072518.db  
 Dataset Pathname: CLARL7/run1cbl/pass6  
 Presentation Format: CBL\_PA~1  
 Dataset Creation: Wed Jul 25 08:26:37 2018 by Log 0  
 Charted by: Depth in Feet scaled 1:240





(lb)  
0 1500



Line Tension
(lb)
0 1500
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# Calibration Report

Database File: passcreek\_072518.db  
Dataset Pathname: CLARL7/run1cbl/pass7  
Dataset Creation: Wed Jul 25 08:33:33 2018 by Log 0

## Gamma Ray Calibration Report

Type / Serial: Probe275dig / 080829

### SHOP CALIBRATION

Thu Apr 19 07:51:18 2012

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			GAPI/cps

### PRIMARY VERIFICATION

Background	0.0			cps
Calibrator	0.0			cps
Difference			0.0	GAPI

### BEFORE SURVEY VERIFICATION

Background	0.0			cps
Calibrator	0.0			cps
Difference			0.0	GAPI

### AFTER SURVEY VERIFICATION

Background	0.0			cps
Calibrator	0.0			cps
Difference			0.0	GAPI

## Segmented Cement Bond Log Calibration Report

Serial Number: 080835  
Tool Model: Probe  
Calibration Casing Diameter: 5.500 in  
Calibration Depth: 4489.867 ft

Master Calibration, performed Wed Jul 25 08:19:22 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.003	0.325	1.000	71.921	216.599	1.611
CAL	-0.003	0.526				
5'	-0.002	0.276	1.000	71.921	254.572	1.553
SUM						
S1	0.036	0.356	2.000	71.900	217.876	-5.750
S2	-0.006	0.304	2.000	71.900	225.131	3.369
S3	-0.001	0.309	2.000	71.900	225.486	2.173
S4	-0.002	0.319	2.000	71.900	217.388	2.496
S5	-0.003	0.329	2.000	71.900	210.375	2.724
S6	-0.004	0.337	2.000	71.900	204.807	2.780

S7	-0.003	0.334	2.000	71.900	206.999	2.695
S8	-0.004	0.331	2.000	71.900	208.864	2.770
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	-0.003	0.526	1.000	0.000
Air Zero Calibration, performed Wed Sep 17 16:29:48 2008:						
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


Log Variables

Database:C:\Warrior\Data\passcreek\_072518.db

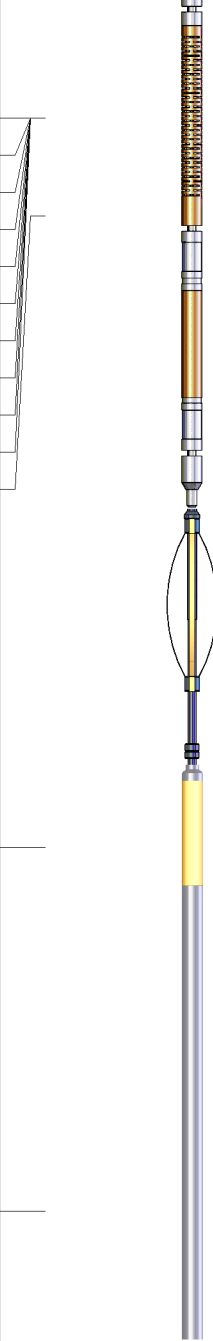
Dataset: field/CLARL7/run1cbl/pass7


Top - Bottom

PPT usec 0	CASEWGHT lb/ft 15.5	MAXAMPL mV 71.9	MINAMPL mV 1	MINATTN db/ft 0.8	SRFTEMP degF 70	CASEOD in 5.5
PERFS  0	TDEPTH ft 5800	BOTTEMP degF 180	BOREID in 7.875			

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



WVF3FT	13.53		RBT-Probe (080835) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	13.53					
WVFS1	13.53					
WVFS2	13.53					
WVFS3	13.53					
WVFS4	13.53					
WVFS5	13.53					
WVFS6	13.53					
WVFS7	13.53					
WVFS8	13.53					
WVF5FT	12.44					
			PTS275	2.83	2.75	
CCL	5.44					
			GR-Probe275dig (080829) Probe 2.75 High Temperature	6.36	2.75	57.00
GR	1.42					
Dataset: passcreek_072518.db: field/CLARL7/run1cbl/pass7 Total Length: 20.94 ft Total Weight: 147.00 lb O.D. 2.75 in						

	Company	PCR OPERATING LLC				
	Well	CLAR L-7				
	Field	ADENA				
	County	MORGAN				
	State	CO				
						Country USA