



PIONEER

Pioneer Energy Services

**CEMENT BOND LOG
WITH GAMMA RAY**

Comp. RENEGADE OIL & GAS		Company RENEGADE OIL & GAS	
Well STATE OF COLORADO #3-33		Well STATE OF COLORADO #3-33	
Field BRAVE		Field BRAVE	
Par. ARAPAHOE		Parish ARAPAHOE	
State COLORADO		State COLORADO	
Date of Service	Location:	API # : 05-005-07364-00	Other Services
	600' FNL & 720' FWL		
	SEC 33	TWP 5S	RGE 64W
	PERF		
Run Number	ONE		
Depth Driller or PBTD	8650'		
Depth Logger	8655'		
Bottom Log Interval	8570'		
Top Log Interval	6600'		
Open Hole Size	N/A		
Type Fluid	WATER		
Fluid Level	2500'		
Fluid Density	N/A		
Max. Recorded Temperature	N/A		
Max. Wellhead Pressure	0PSI		
Wellhead Connection	OPEN		
Estimated Cement Top	6920'		
Unit Number	P-129		
Wireline Size	.28"		
Location	FORT MORGAN		
Recorded By	KYLE HARRIS		
Witnessed By	ED INGVE		
Size		Wt/Ft	Top
Tubing Record		N/A	N/A
Surface Casing		N/A	N/A
Production Casing		4.5"	11.6#
Liner Record		N/A	N/A

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
CEMENT WITH 300 50/50 POS 20% SILICA FLOUR

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: KYLE HARRIS	CBL	141167
Operator: JUSTIN PAXTON	GR	090702
Operator: GABRIEL SOTO		
Operator:		

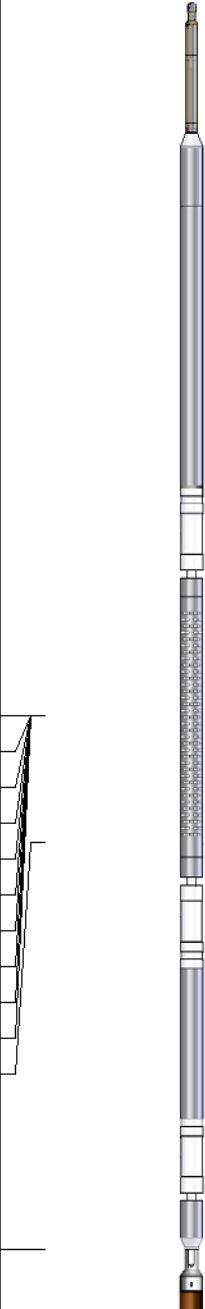
Top - Bottom


BOREID in 7.875	BOTTEMP degF 100	CASEOD in 4.5	CASETHCK in 0	CASEWGHT lb/ft 11.6	MAXAMPL mV 0	MINAMPL mV 1
MINATTN db/ft 0.08	PERFS 0	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0		

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

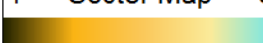
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
WVFS8	9.27		PROBE-RBT-DIGITAL-RBL-DC (FW1401-48.75) Probe 2 3/4" Radii Bond-Corrosion Package	48.75	2.75	100.00
WVFS7	9.27					
WVFS6	9.27					
WVFS5	9.27					
WVFS4	9.27					
WVFS3	9.27					
WVFS2	9.27					
WVFS1	9.27					
WVFCAL	9.27					
WVF3FT	9.27					
WVF5FT	8.27					
HEADVOLT	5.08					

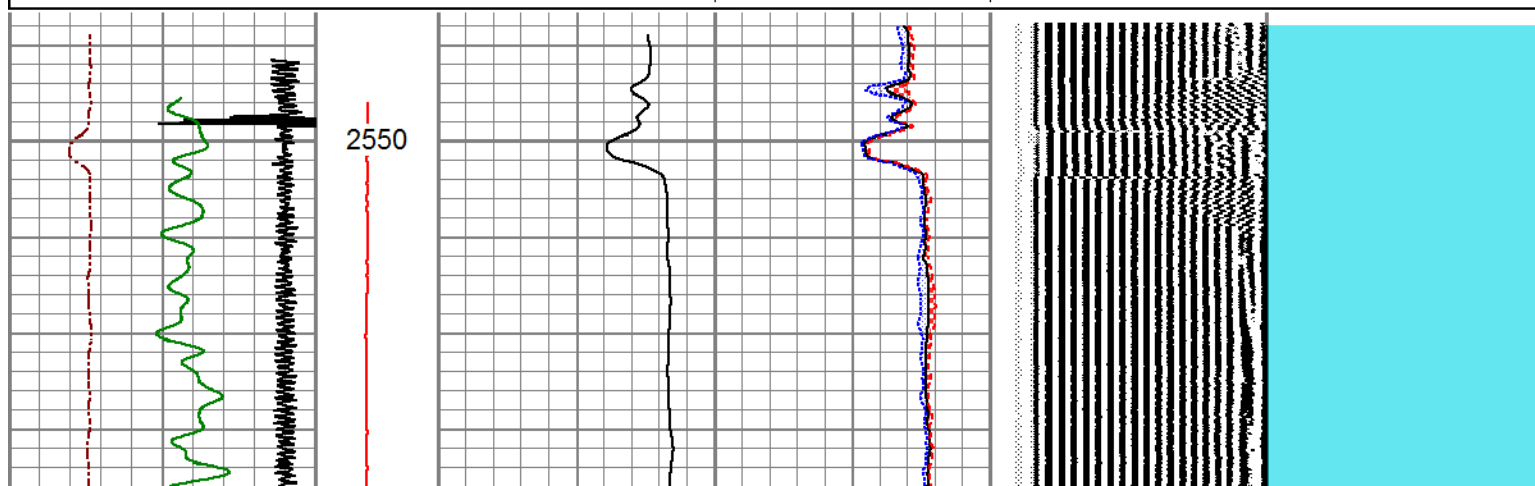
CCL	4.20					
GCT_TEMP	3.41					
GR	2.83					
			PROBE-GR/CCL-DIGITAL-275 Probe GCT 4.75588) 2.75 Probe 2 3/4" Gamma Ray/Temp/CCL	2.75	60.00	
			Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00
Dataset: renegade__state of colorado 3-33_10072018_050050736400_cbl.db: field/well/MAIN/pass2 Total length: 14.86 ft Total weight: 163.00 lb O.D.: 2.75 in						

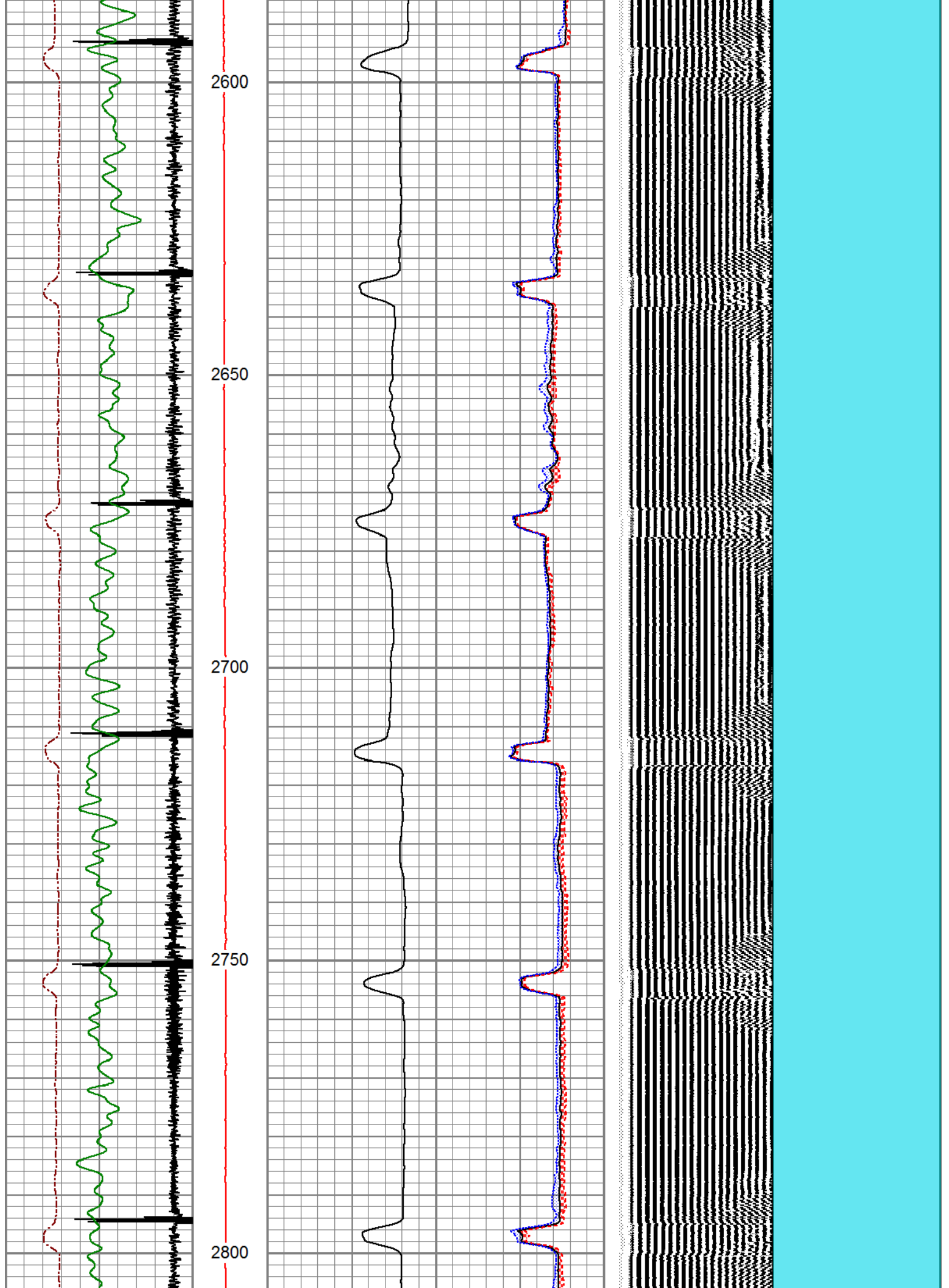


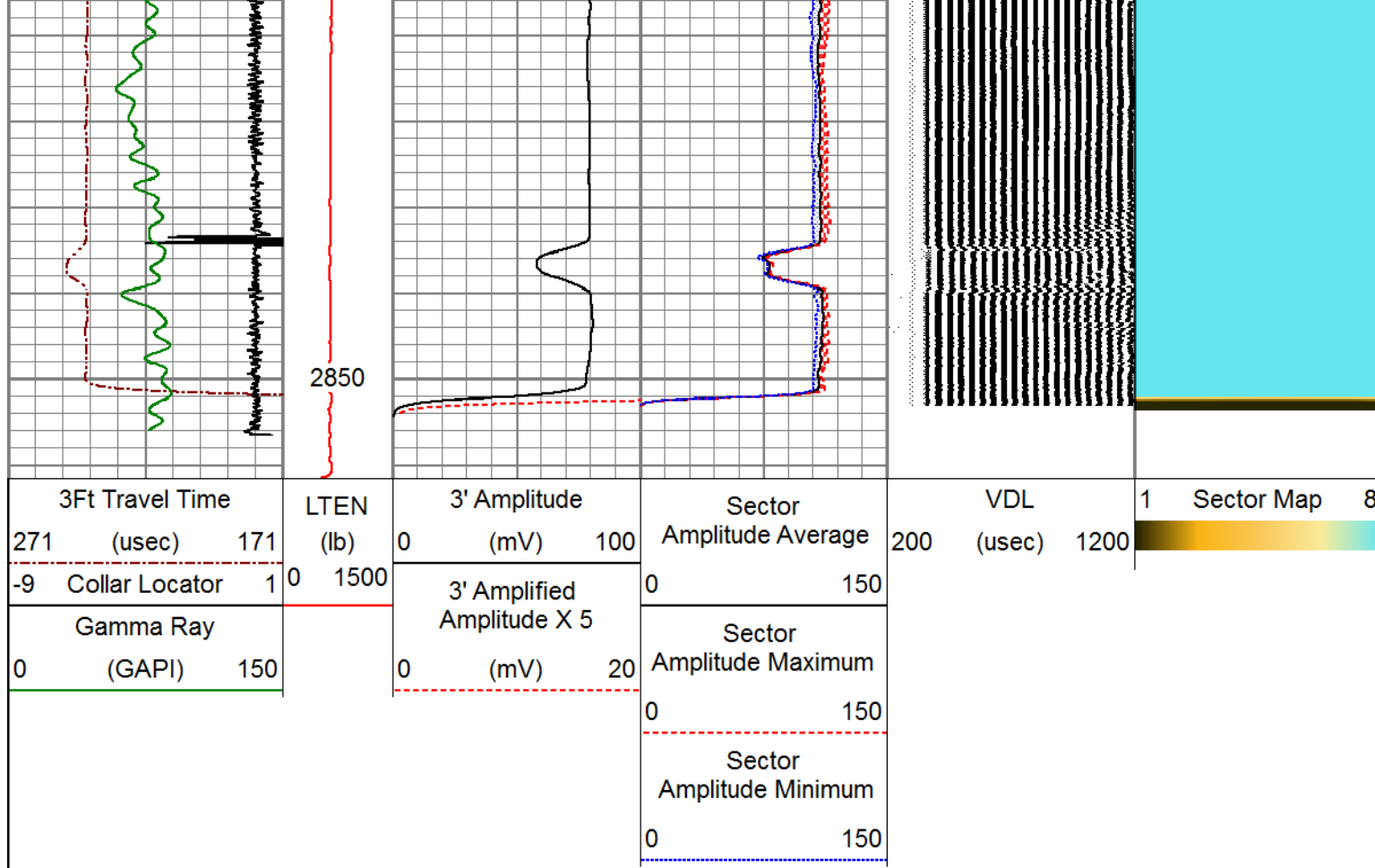
FREE PIPE SECTION


Database File	renegade__state of colorado 3-33_10072018_050050736400_cbl.db
Dataset Pathname	FREE/pass1
Presentation Format	pinr_scbl
Dataset Creation	Sun Oct 07 12:09:56 2018
Charted by	Depth in Feet scaled 1:240

3Ft Travel Time	LTEN	3' Amplitude	Sector	VDL	1	Sector Map	8
271 (usec) 171	(lb)	0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator 1	0 1500	3' Amplified Amplitude X 5	0 150				
Gamma Ray		0 (mV) 20	Sector Amplitude Maximum				
0 (GAPI) 150			0 150				
			Sector Amplitude Minimum				
			0 150				





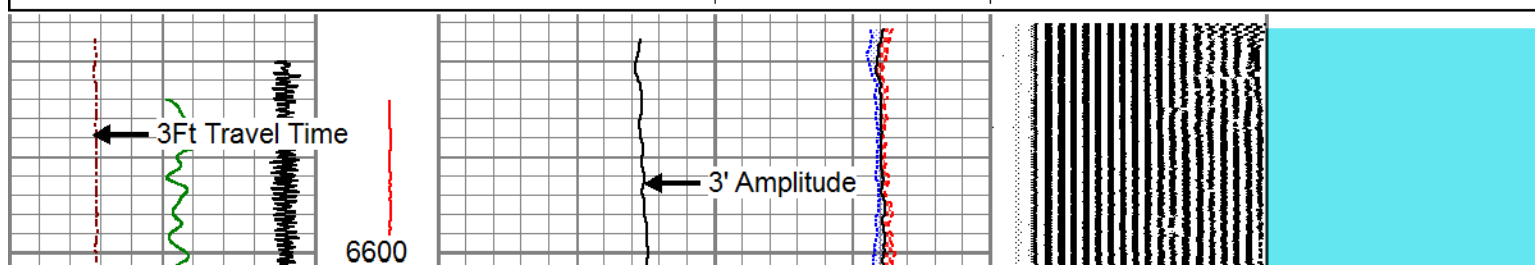
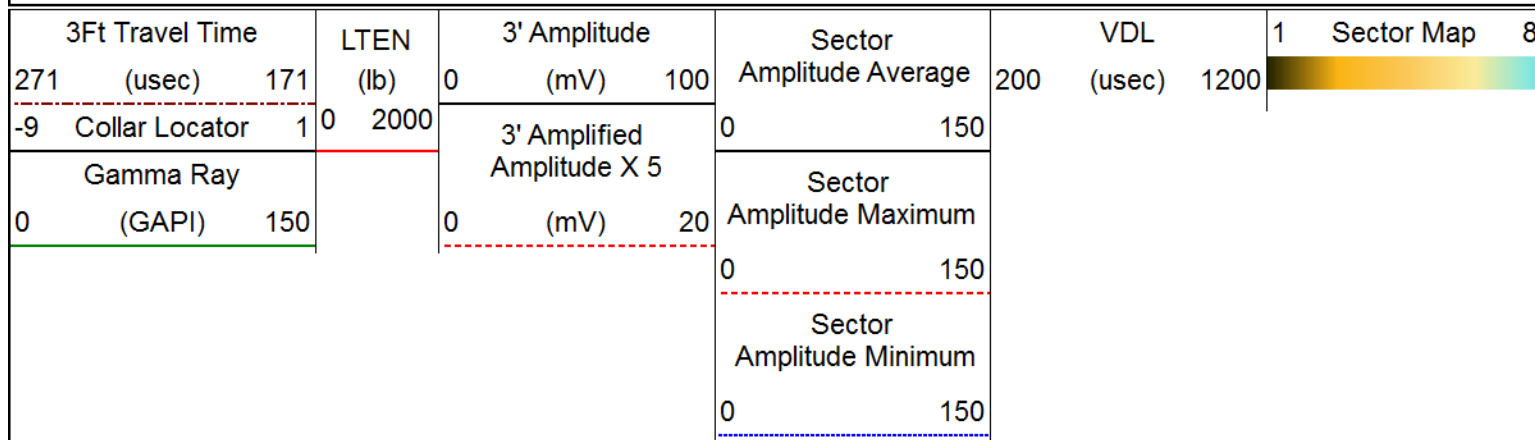


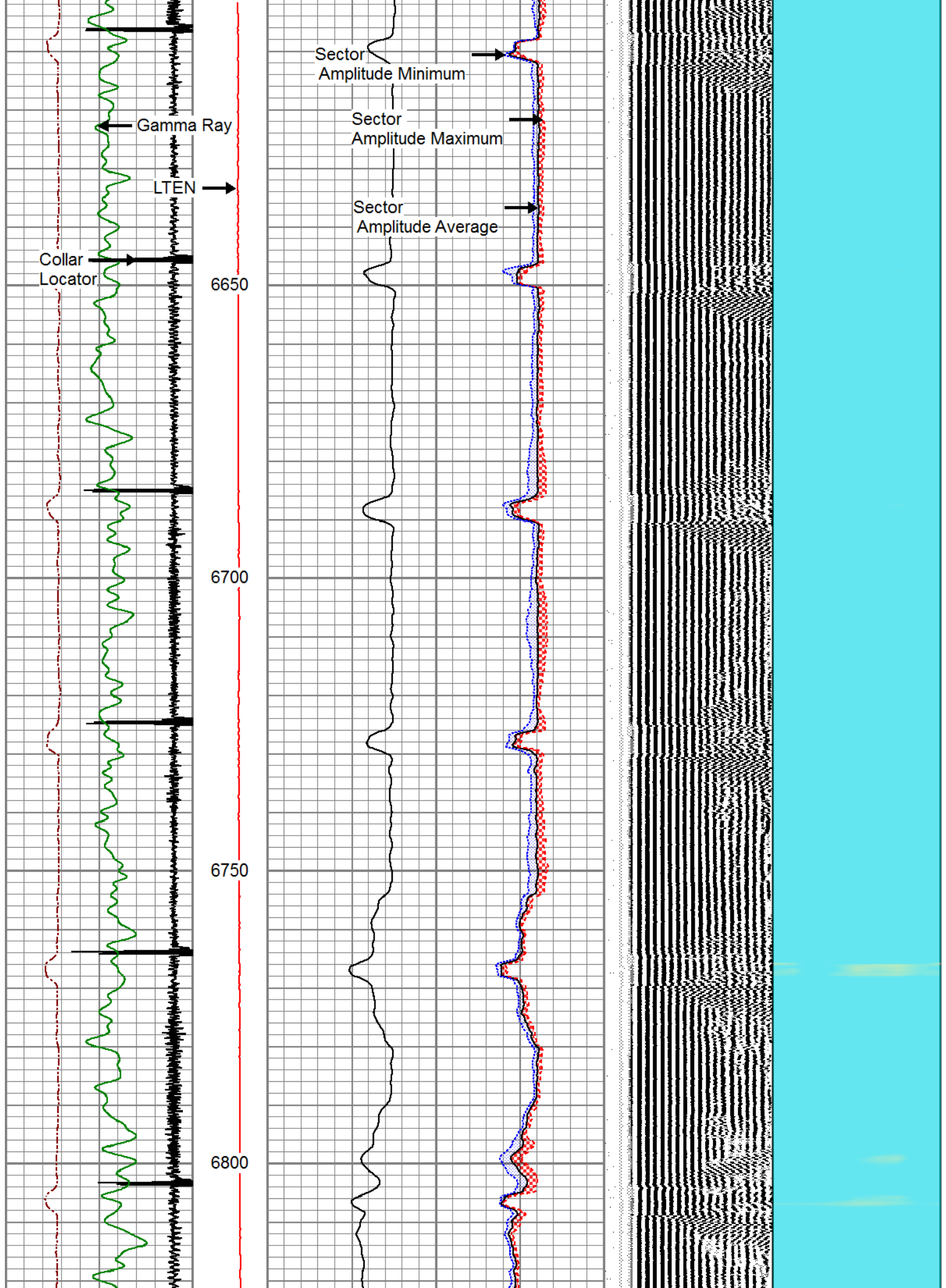


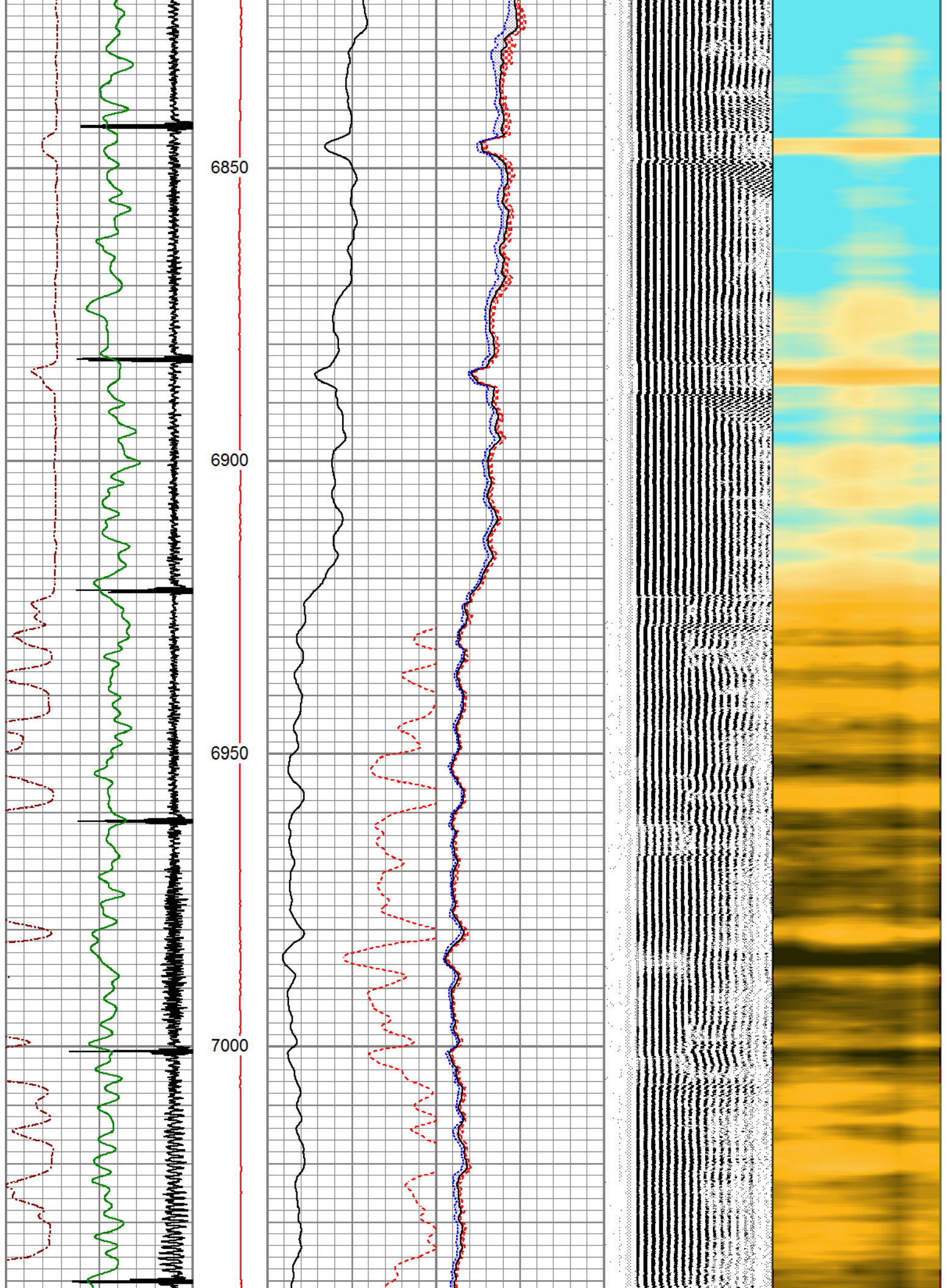
MAIN LOG

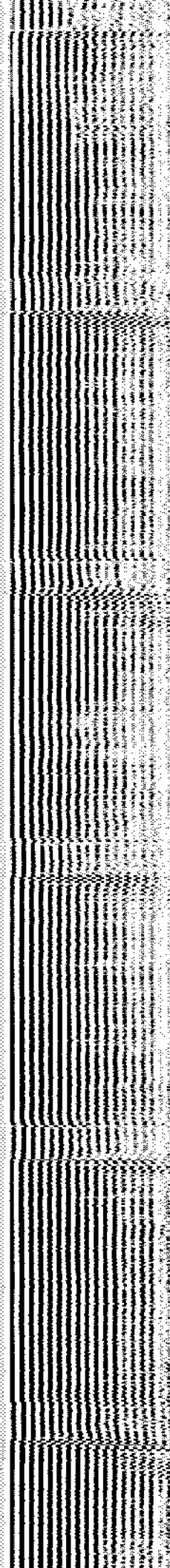
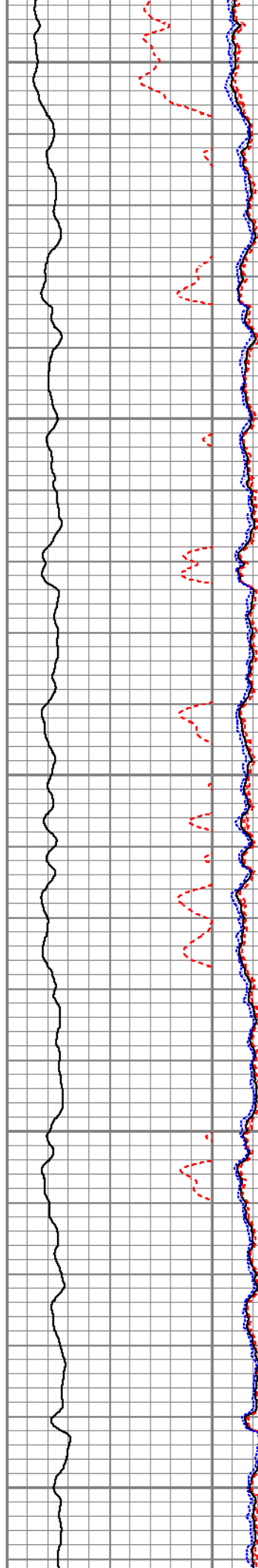
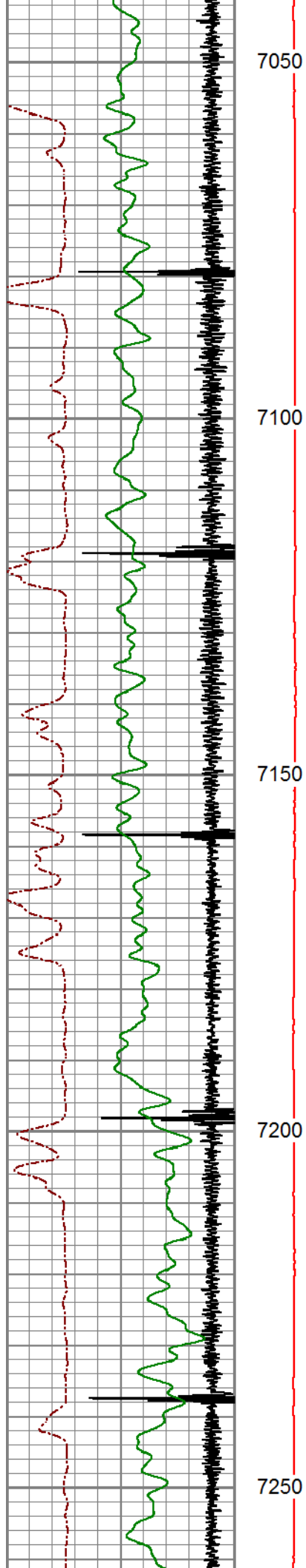
LOG WITH 0 PSI

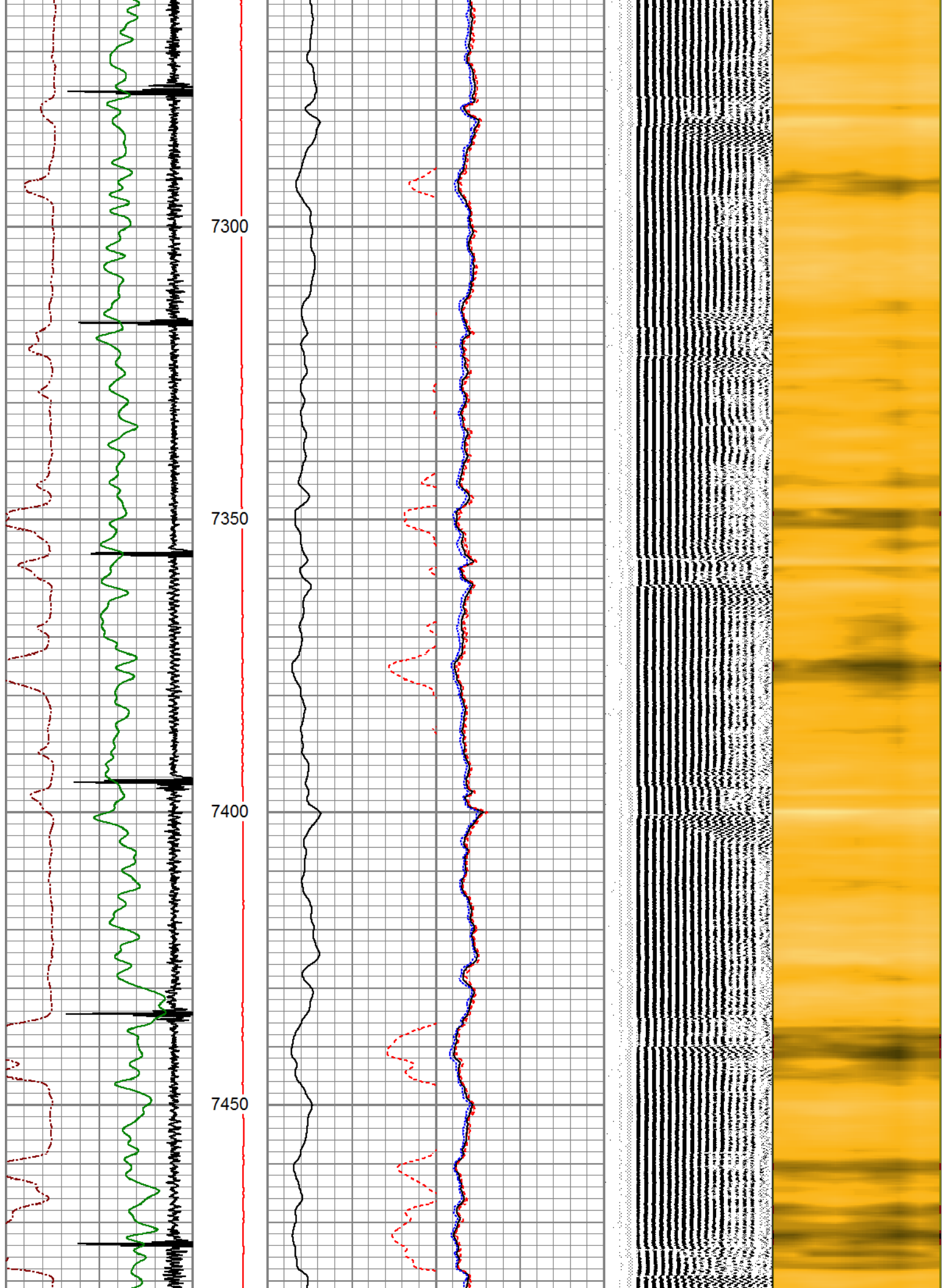
Database File	renegade__state of colorado 3-33_10072018_050050736400_cbl.db
Dataset Pathname	MAIN/pass2
Presentation Format	pinr_scbl
Dataset Creation	Sun Oct 07 12:46:09 2018
Charted by	Depth in Feet scaled 1:240

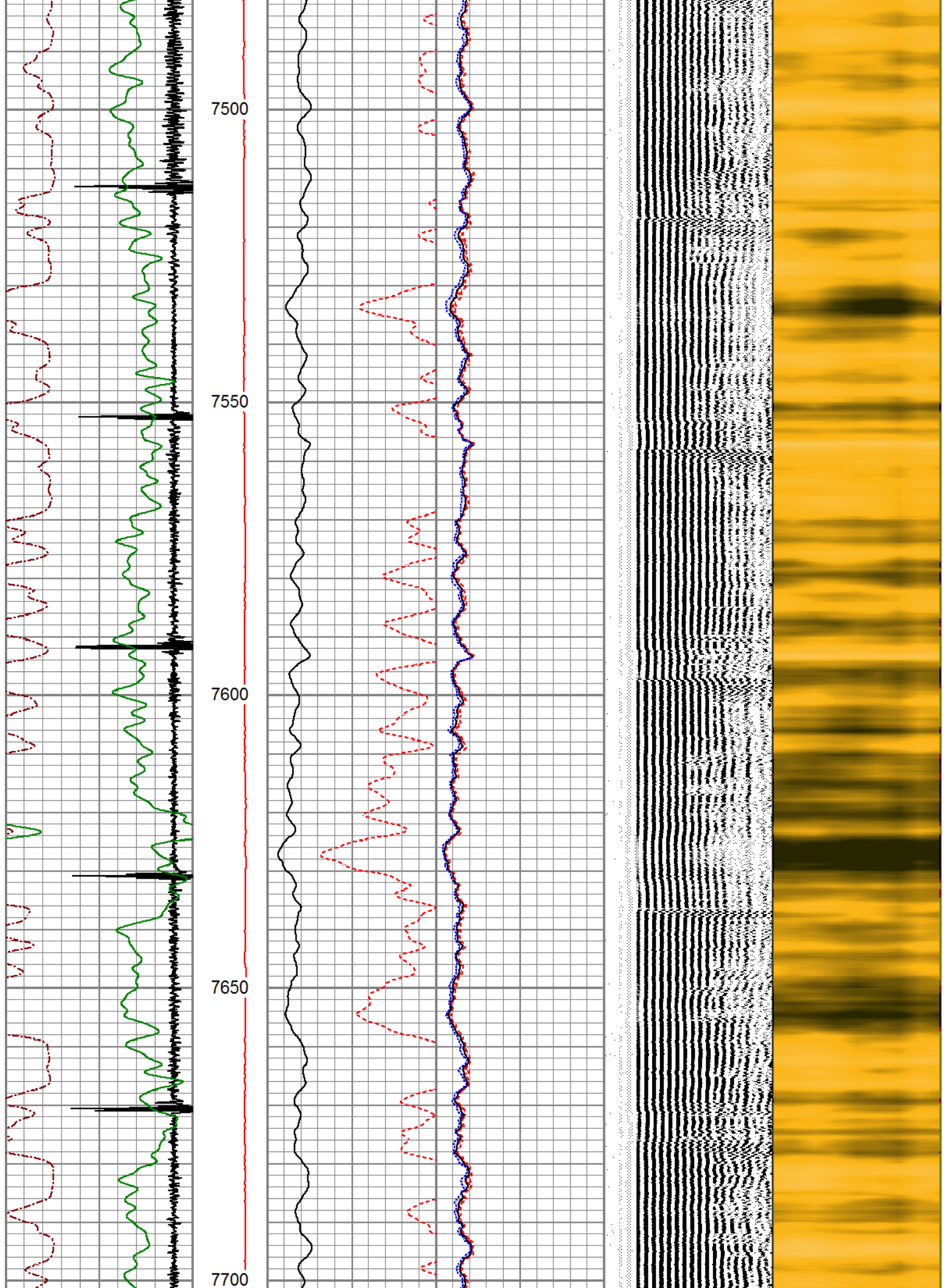


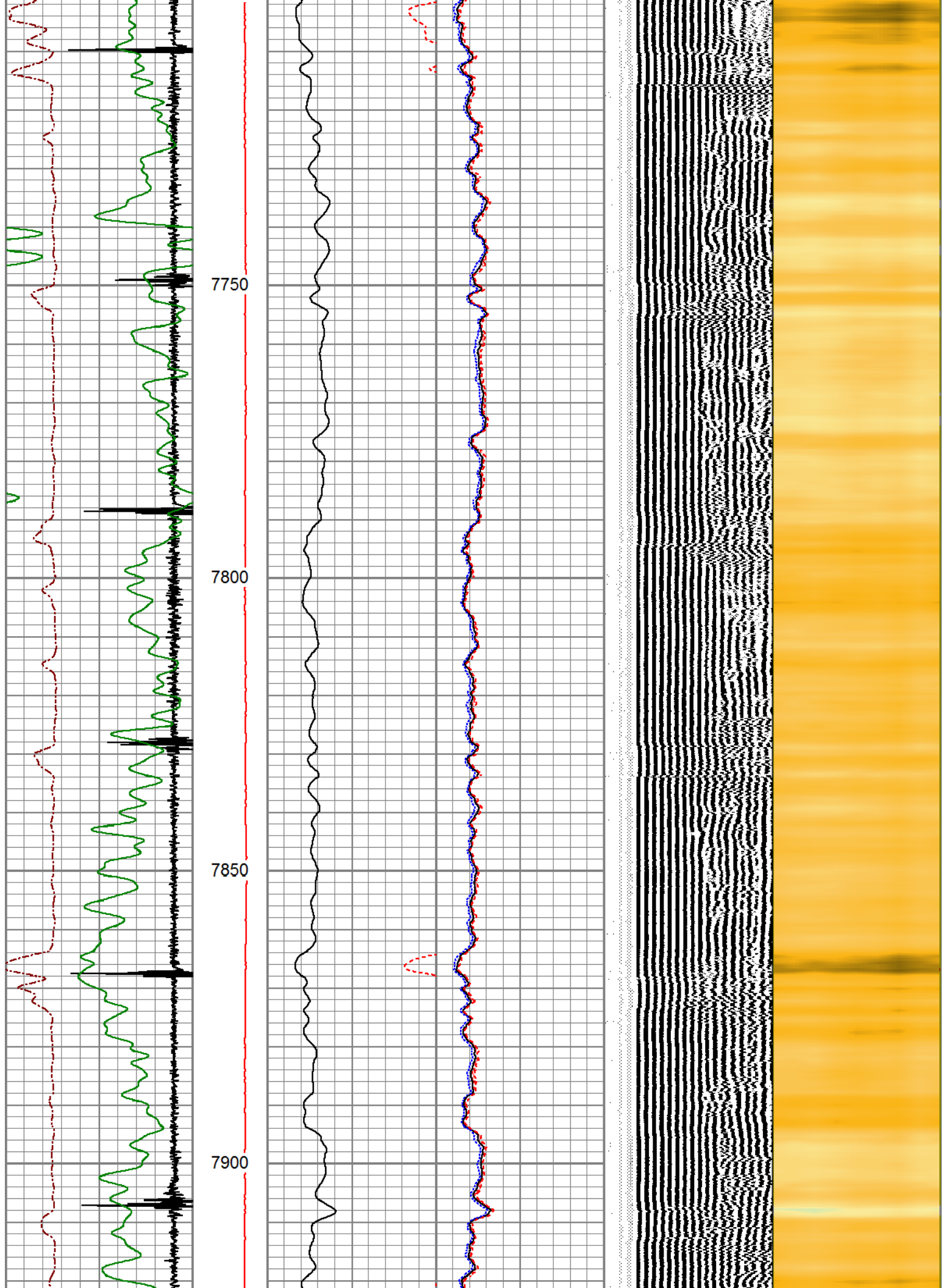


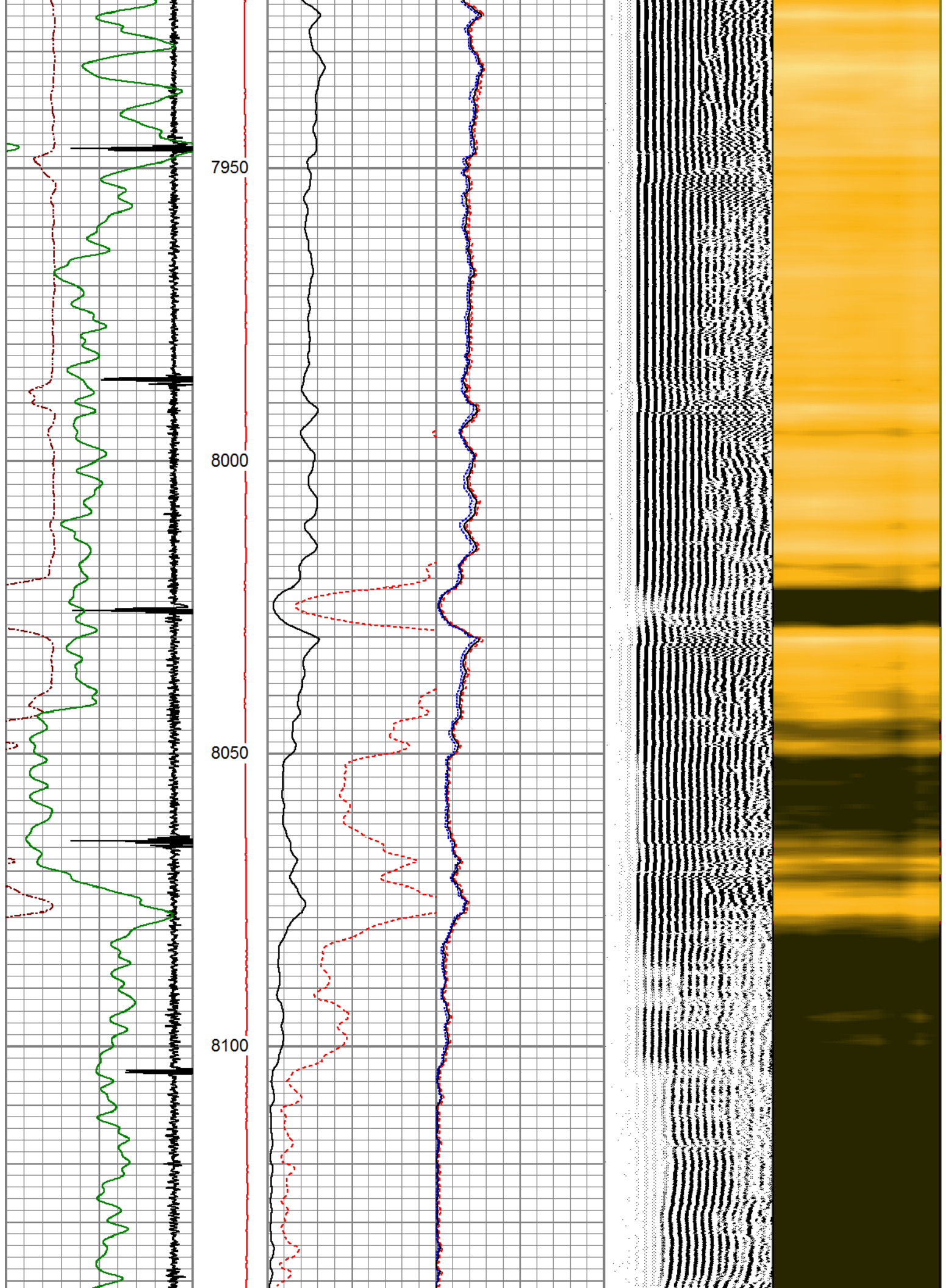


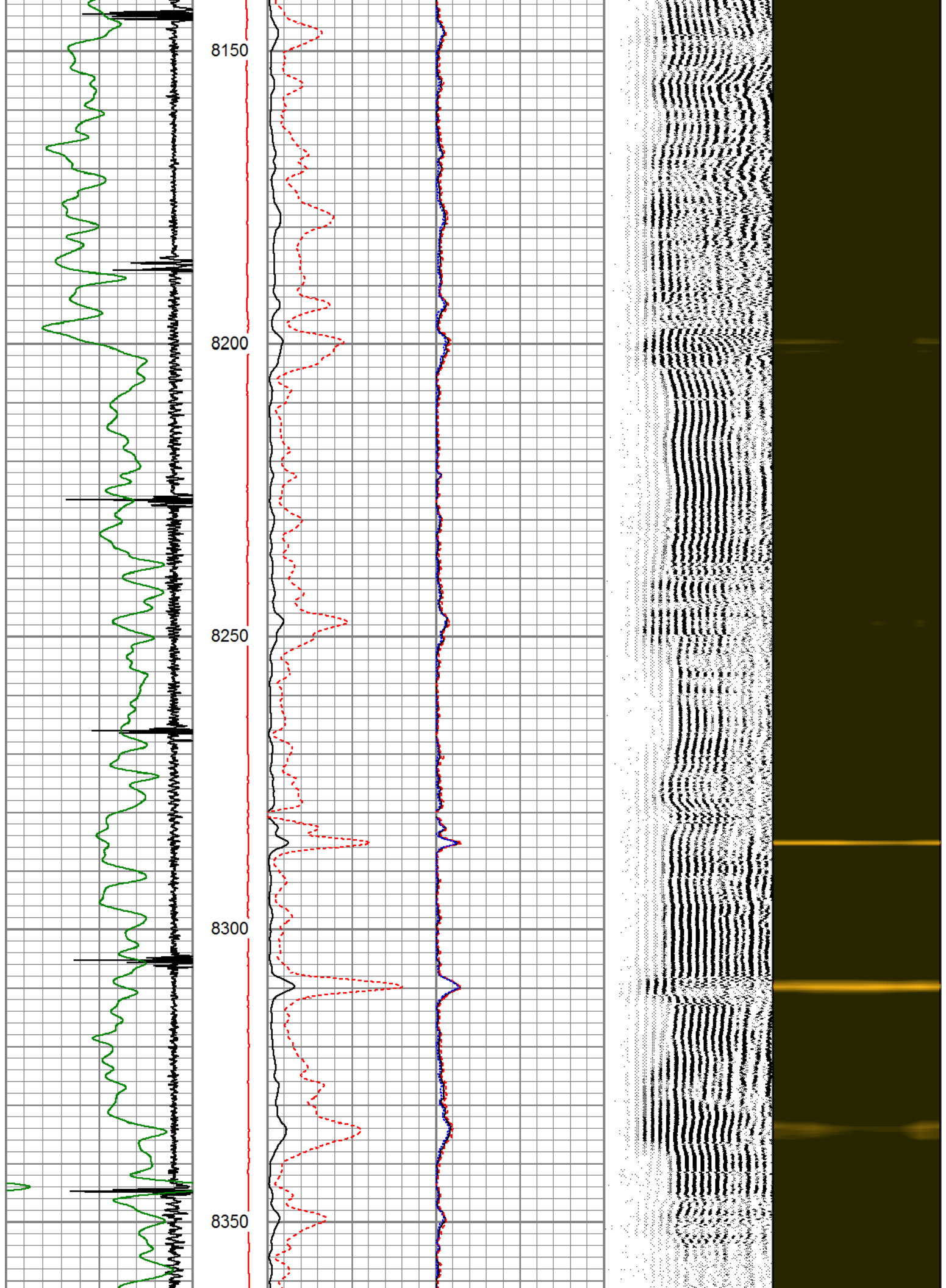


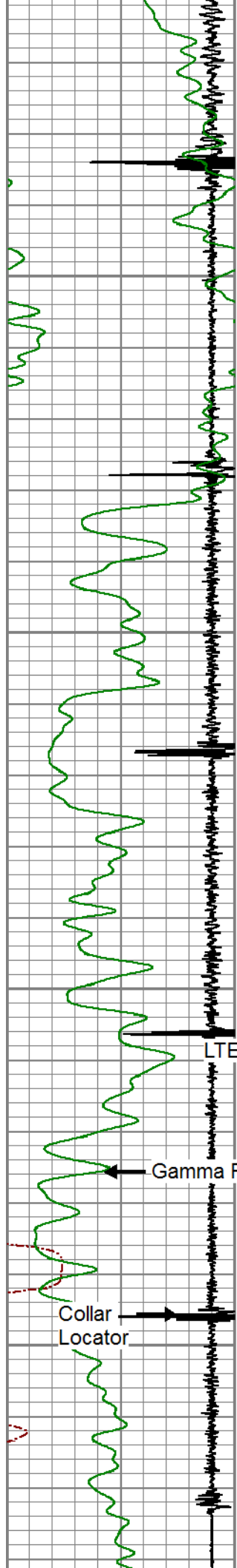












8400

8450

8500

8550

LTEN →

Gamma Ray

Collar
Locator

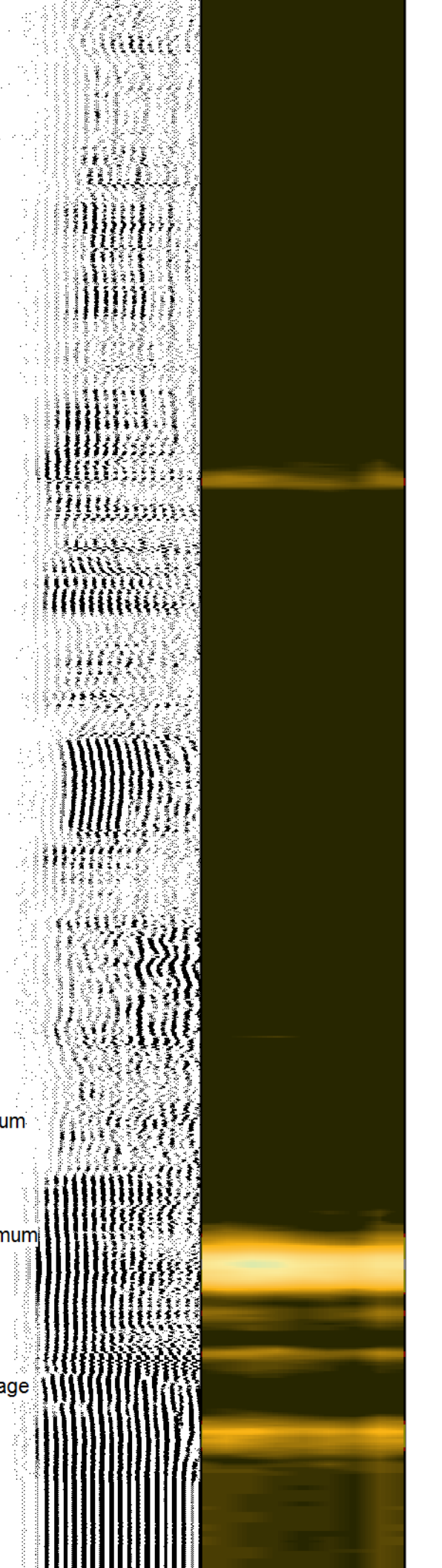
3' Amplified
Amplitude X 5

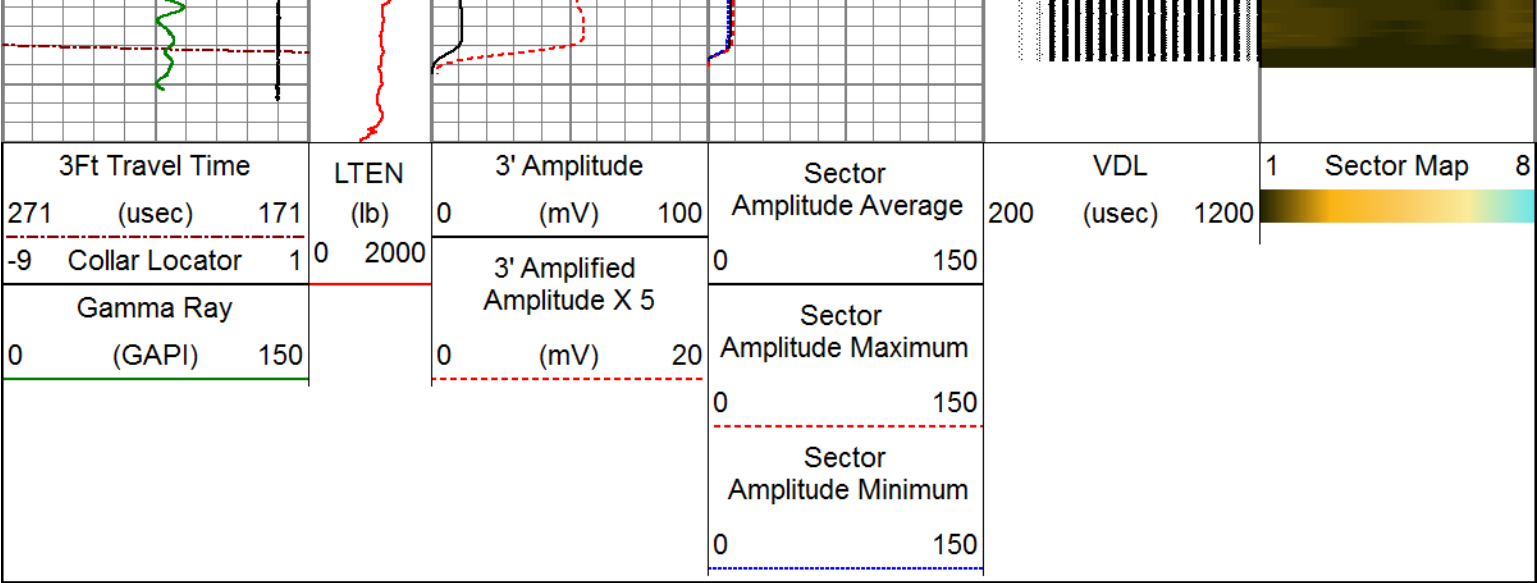
Sector
Amplitude Minimum

Sector
Amplitude Maximum

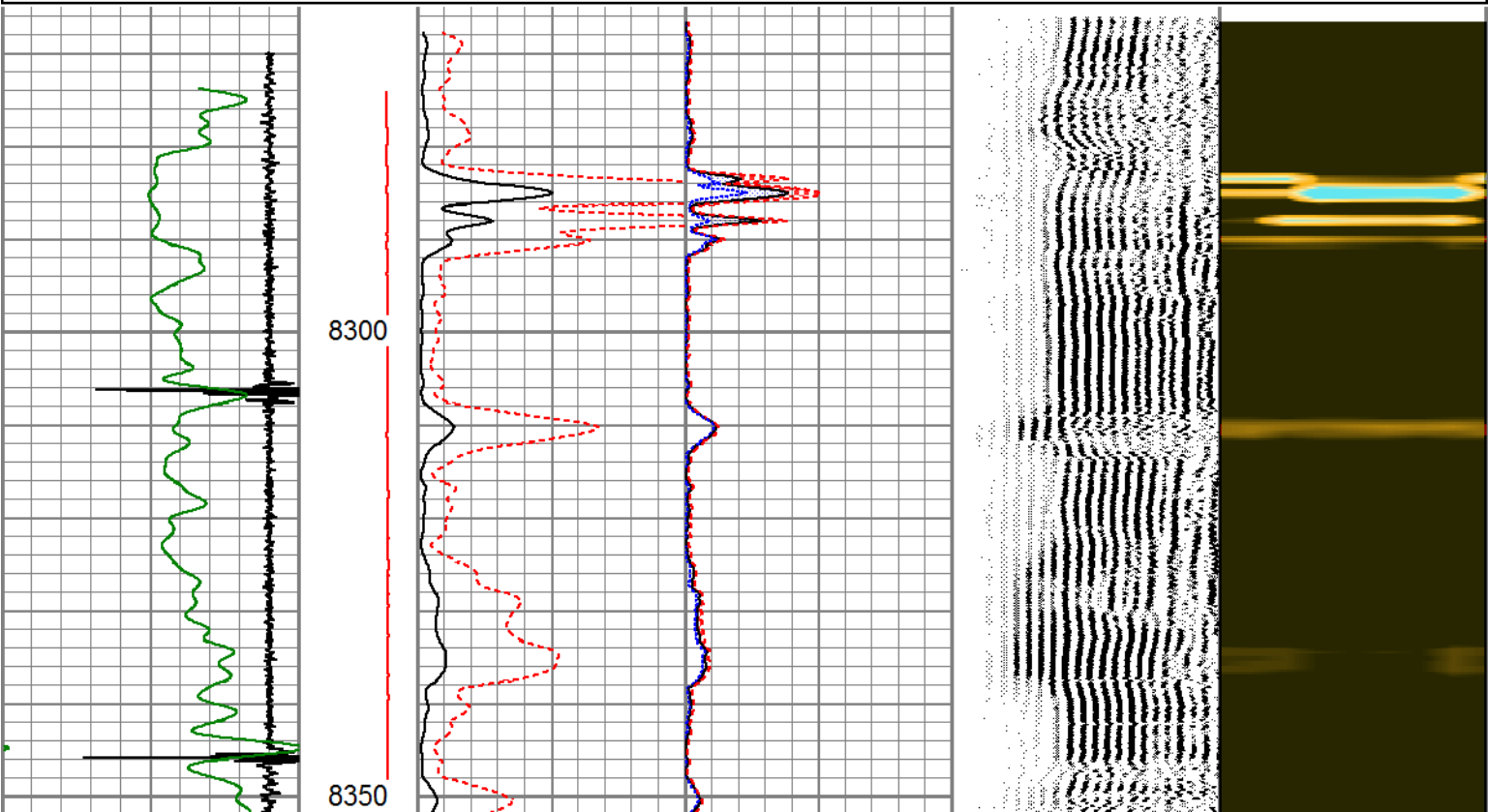
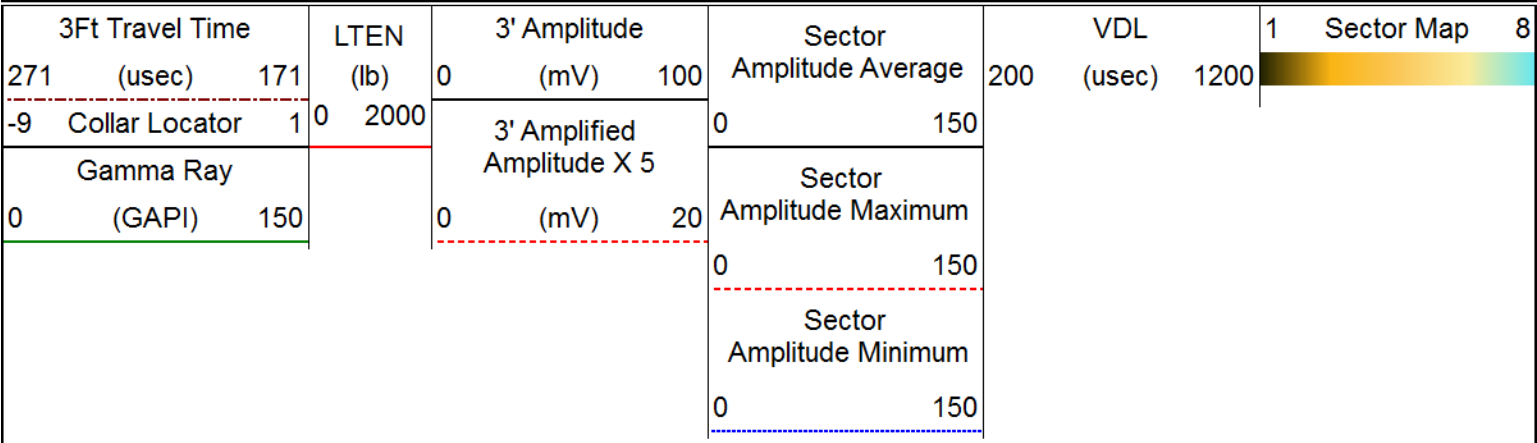
3' Amplitude

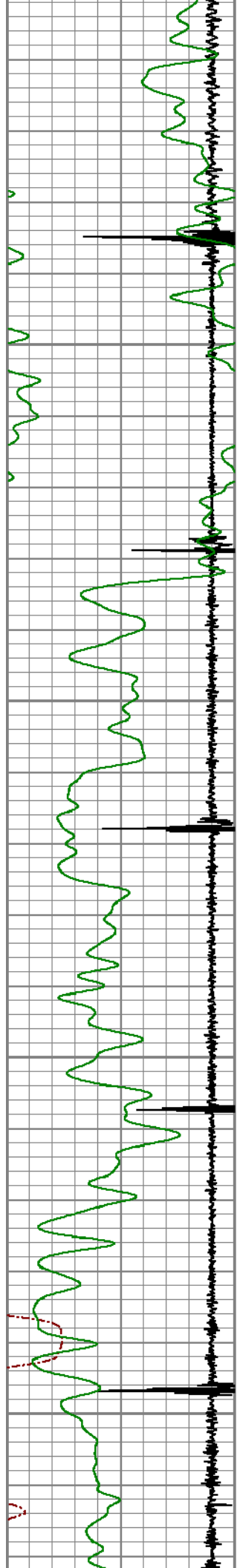
Sector
Amplitude Average





Database File renegade__state of colorado 3-33_10072018_050050736400_cbl.db
Dataset Pathname REPEAT/pass2
Presentation Format pinr_scbl
Dataset Creation Sun Oct 07 12:38:32 2018
Charted by Depth in Feet scaled 1:240



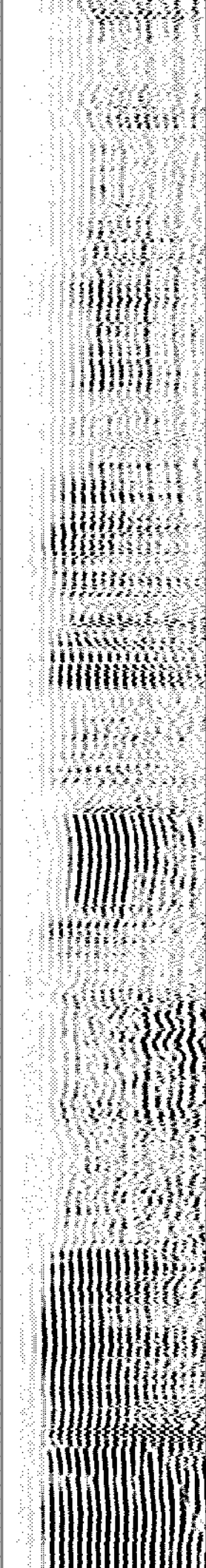
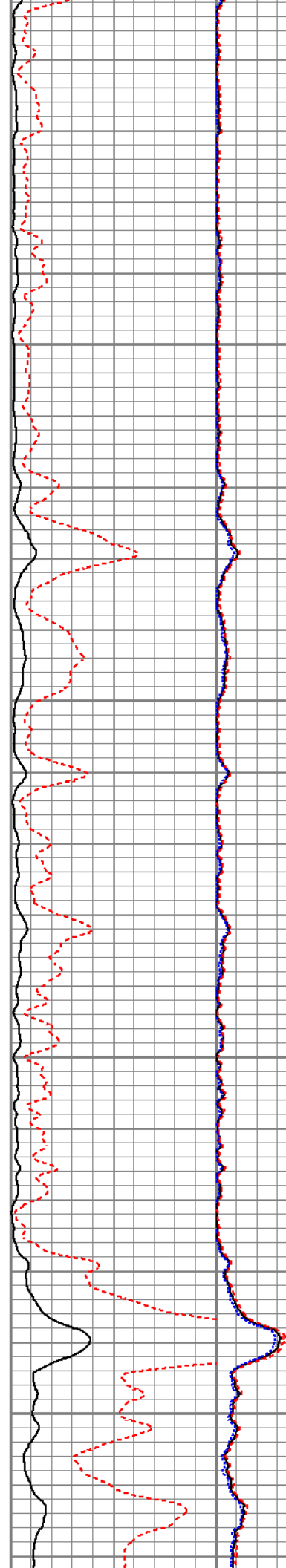


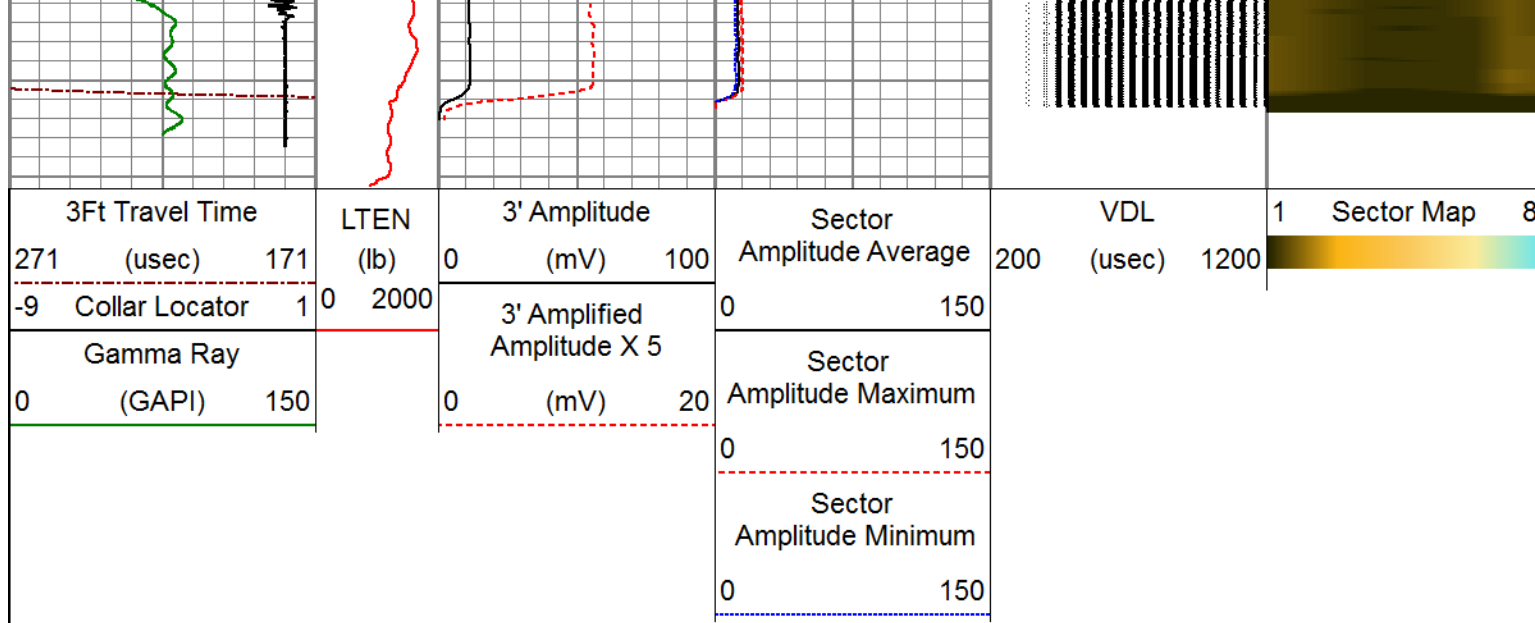
8400

8450


8500

8550





Calibration Report		
Database File	renegade__state of colorado 3-33_10072018_050050736400_cbl.db	
Dataset Pathname	MAIN/pass3	
Dataset Creation	Sun Oct 07 13:39:42 2018	
Gamma Ray Calibration Report		
Serial Number:	Titan-275-SC	
Tool Model:	275 DF Titan SC	
Performed:	(Not Performed)	
Calibrator Value:	1.0	cps
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	cps/cps

	Company	RENEGADE OIL & GAS	
	Well	STATE OF COLORADO #3-33	
	Field	BRAVE	
	County	ARAPAHOE	
	State	COLORADO	
			Country