



**RADIAL CEMENT BOND LOG
VARIABLE DENSITY LOG
GAMMA/CCL/TEMP**

Company ANTERO RESOURCES
Well MARGERY-GLARMDRING 1H
Field RABBIT EARS
County TYLER State WV

Location: API #: 47-095-02742

39.520117, -80.834338 (ENTERANCE)

SEC	TWP	RGE	Elevation
Permanent Datum	GROUND LEVEL	Elevation	K.B. 1650.5
Log Measured From	KELLY BUSHING		D.F. 1650.5
Drilling Measured From	KELLY BUSHING		G.L. 1625

Company	ANTERO RESOURCES		
Well	MARGERY-GLARMDRING 1H		
Field	RABBIT EARS		
County	TYLER		
State	WV		
Date	DECEMBER 3, 2021		
Run Number	1		
Depth Driller	21227		
Depth Logger	7152		
Bottom Logged Interval	7140		
Top Log Interval	SURFACE		
Open Hole Size	NA		
Type Fluid	FRESH WATER		
Density / Viscosity	8.6 LB/GAL		
Max. Recorded Temp.	148		
Estimated Cement Top	4594		
Time Well Ready	UPON ARRIVAL		
Time Logger on Bottom	1:35 PM		
Equipment Number	116		
Location	CHARLEROI, PA		
Recorded By	JAKE BELLI		
Witnessed By	MR. BRYAN CARTER		
Run Number	Borehole Record		Tubing Record
Bit	From	To	Size
			Weight
			From
			To
Casing Record	Size	Vgt/ft	Top
Surface String	NAA	NA	NA
Prot. String	NA	NA	NA
Production String	5.5	23#	SURFACE
Liner			21227

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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

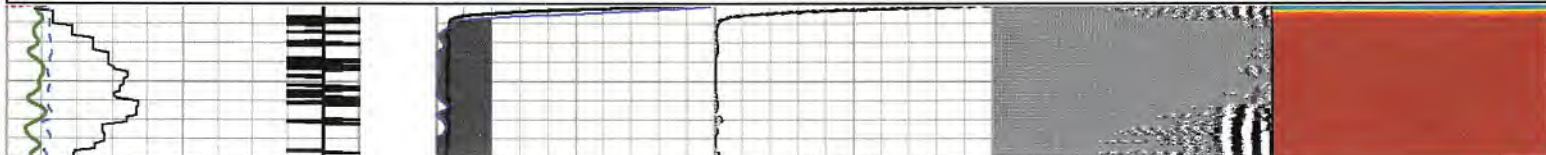
LOG CORRELATED TO MARKER JOINT
 DEPTH SHIFT +2
 MARKER JOINT 5903-5913
 ALL PASSES MADE WITH 1500 PSI
 THANK YOU FOR USING NINE ENERGY SERVICES

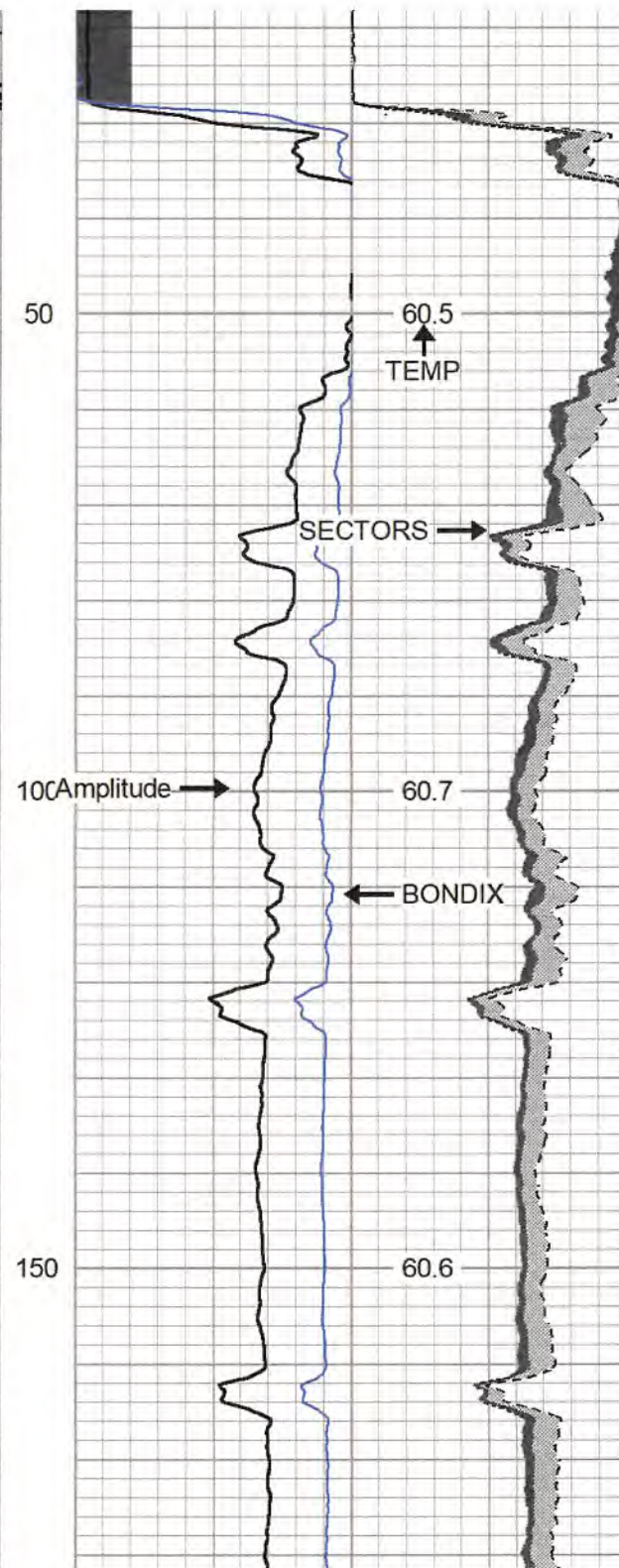
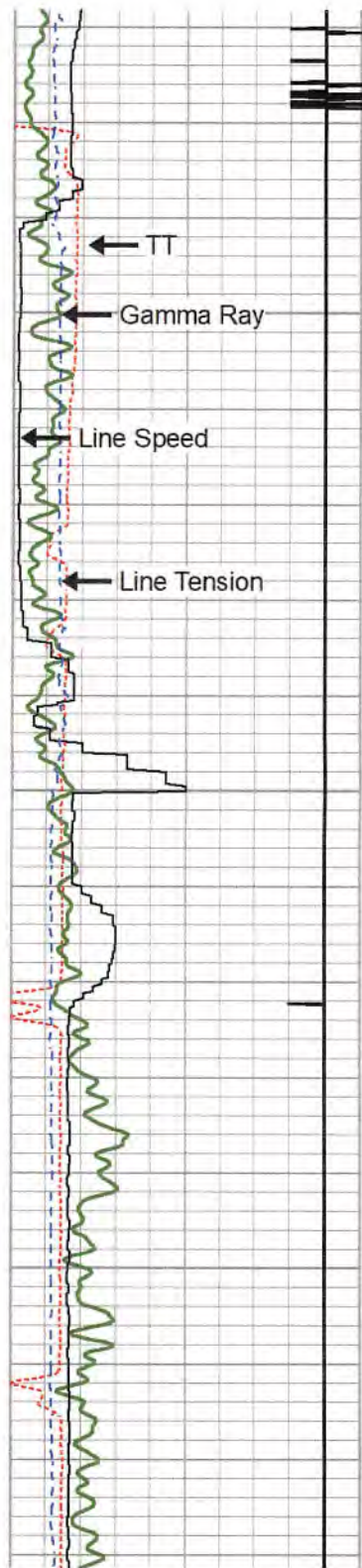


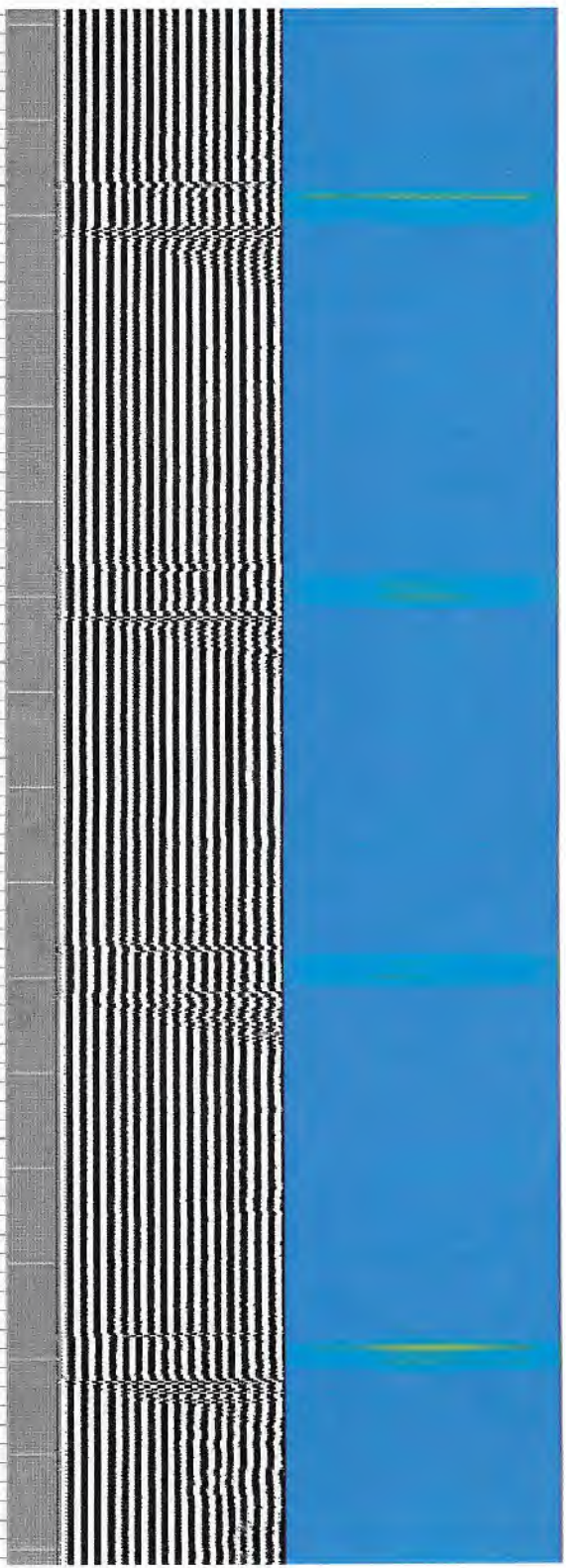
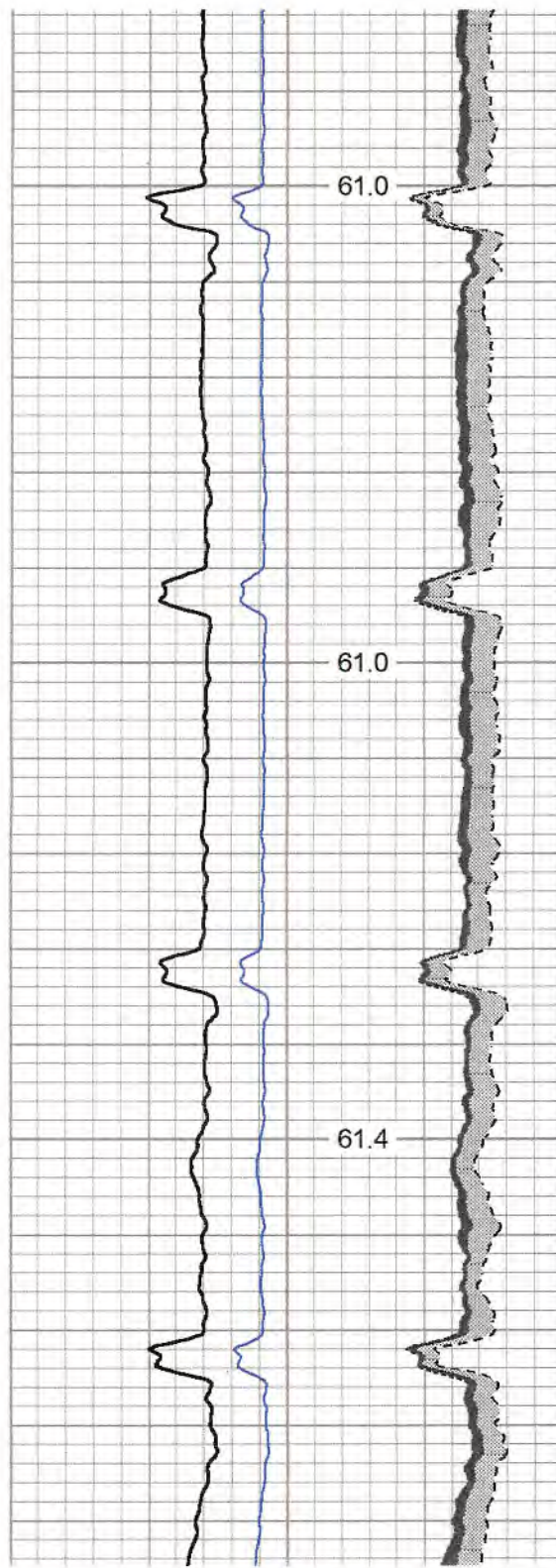
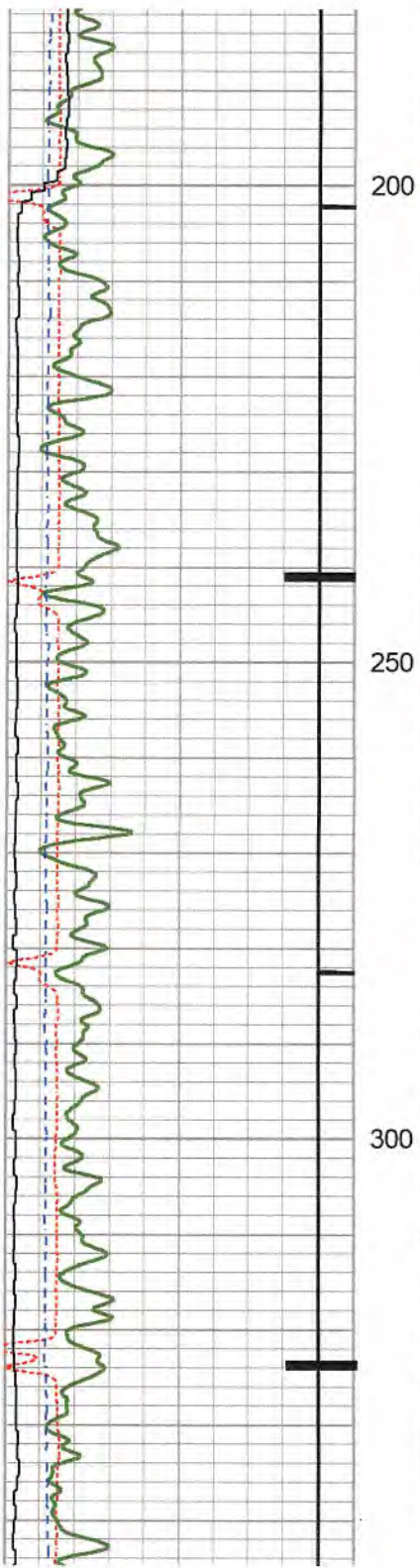
MAIN PASS-1500 PSI

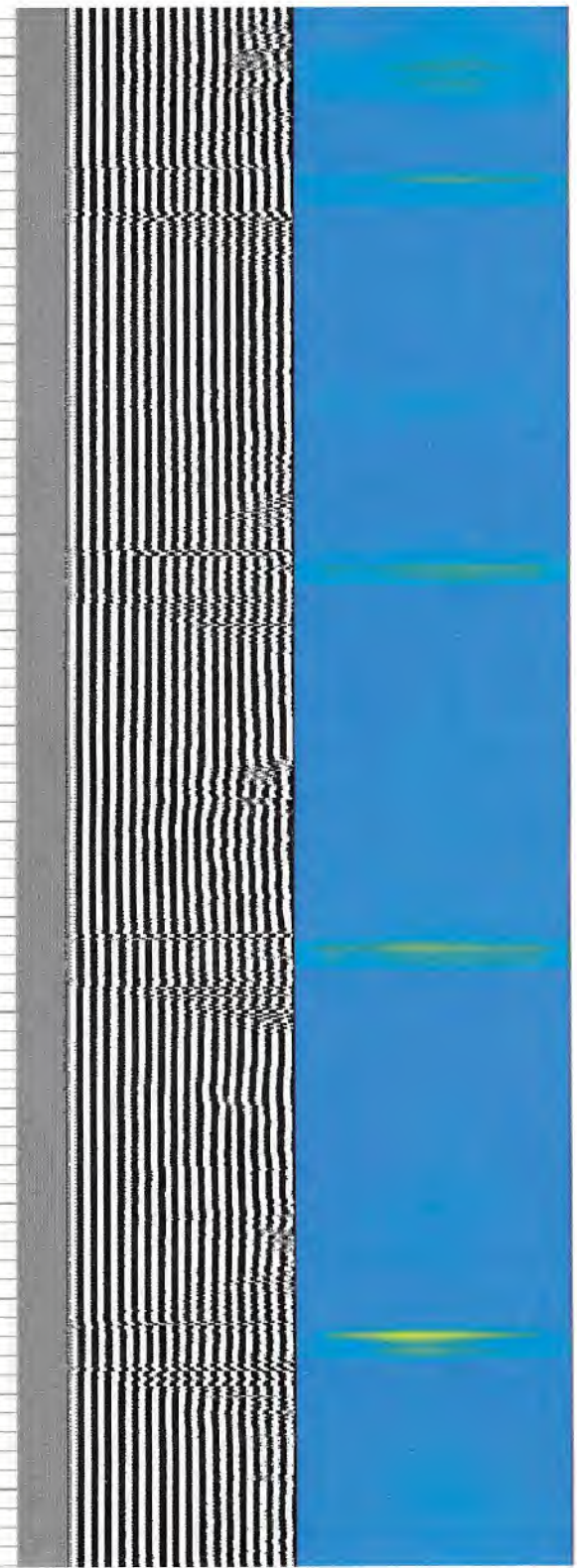
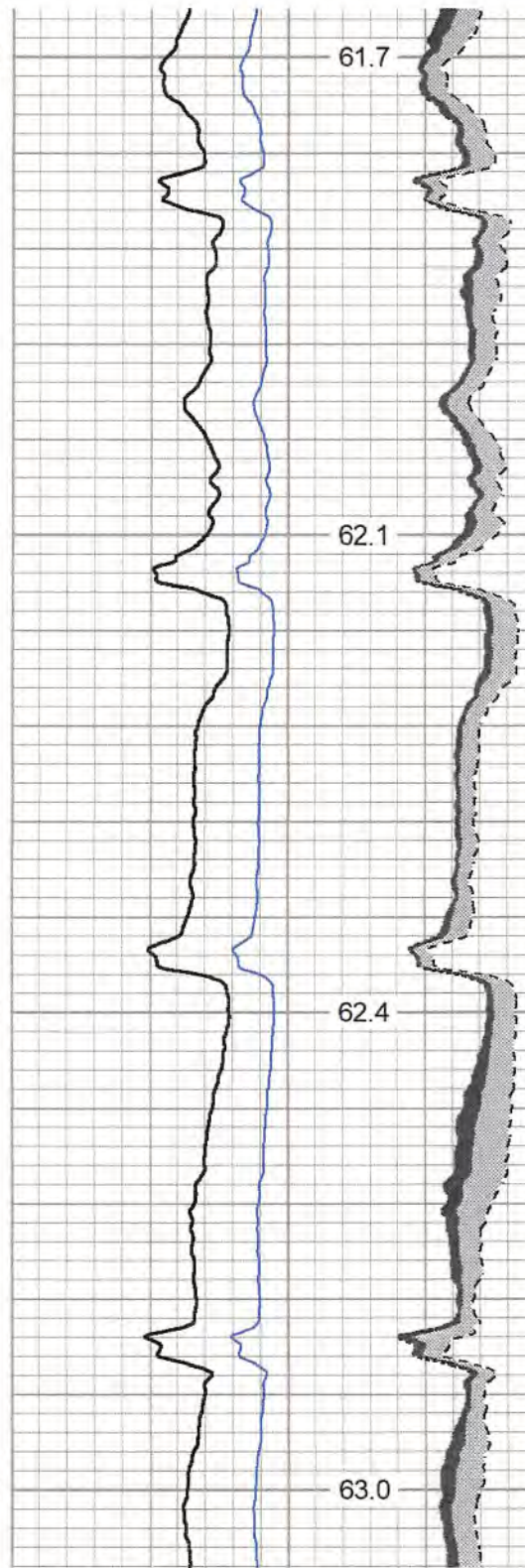
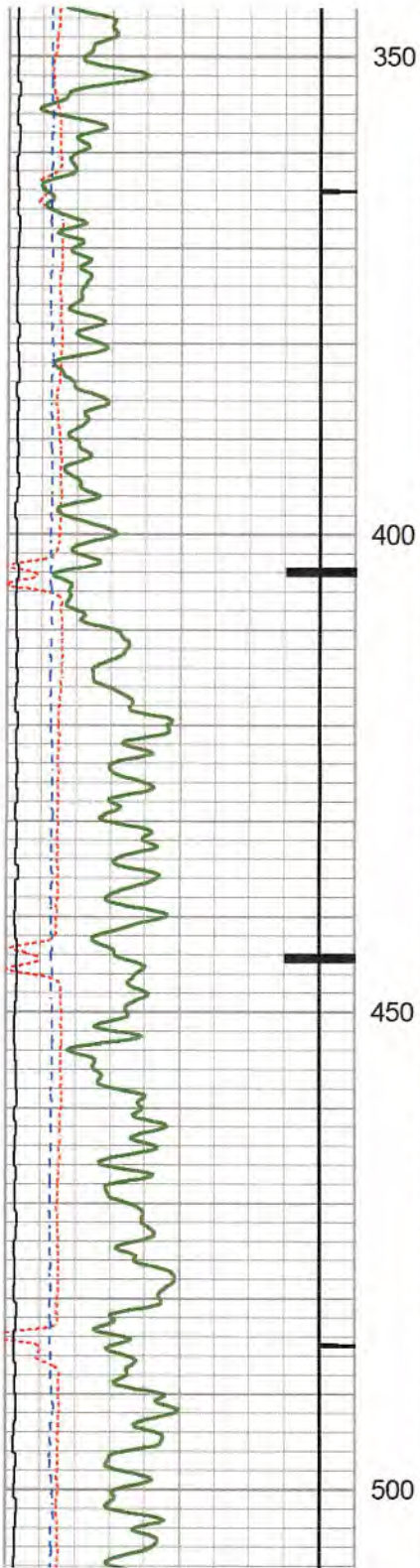
Database File antero-glamdring 1h-12-3-21.db
 Dataset Pathname GLAMDRING_1H/RCBL/pass6
 Presentation Format ANTERO~1
 Dataset Creation Fri Dec 03 14:52:05 2021
 Charted by Depth in Feet scaled 1:240

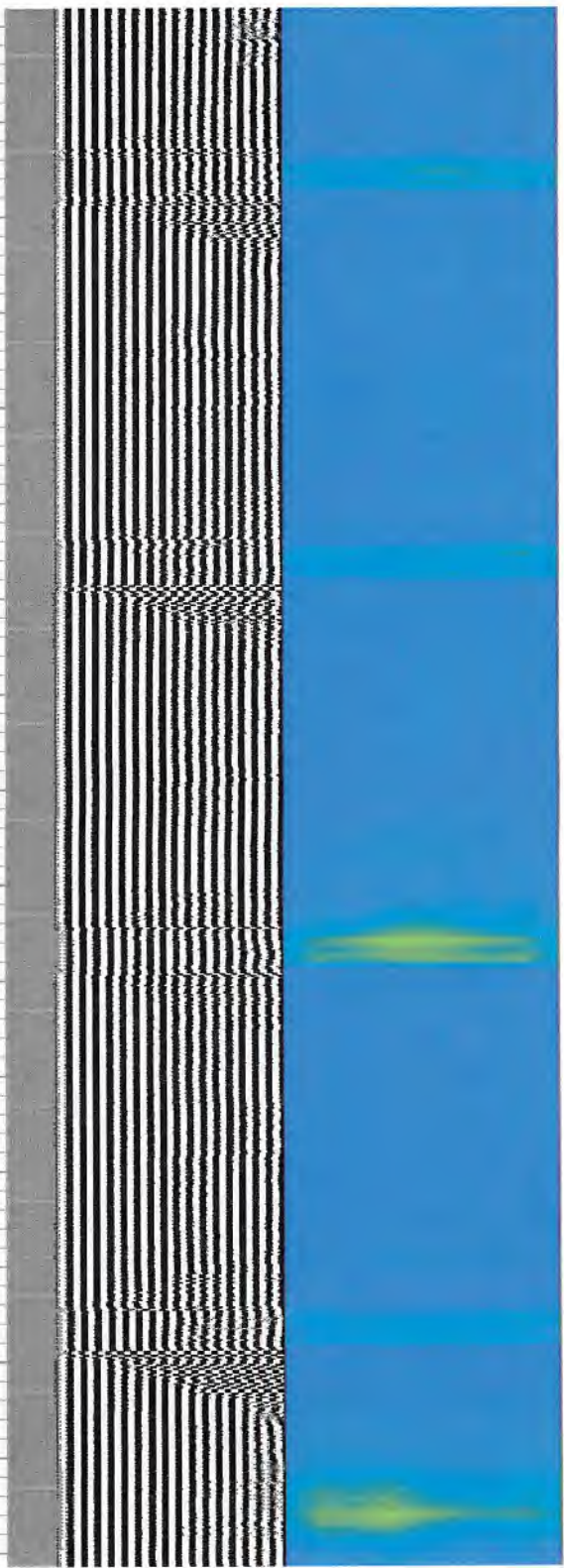
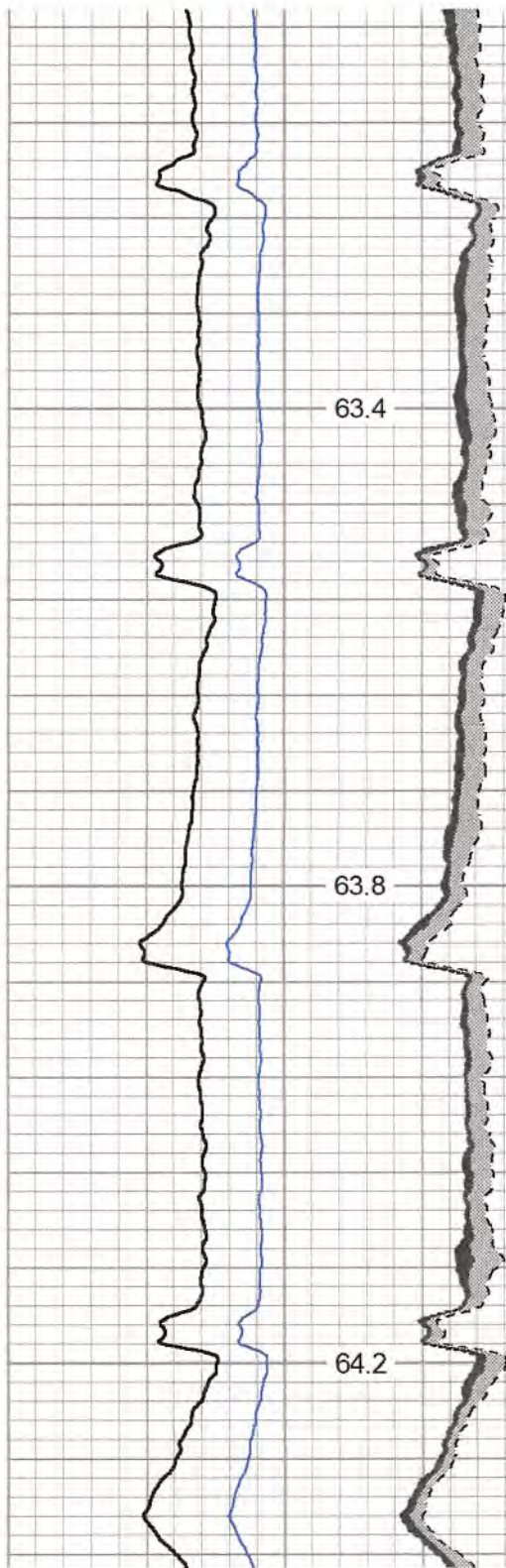
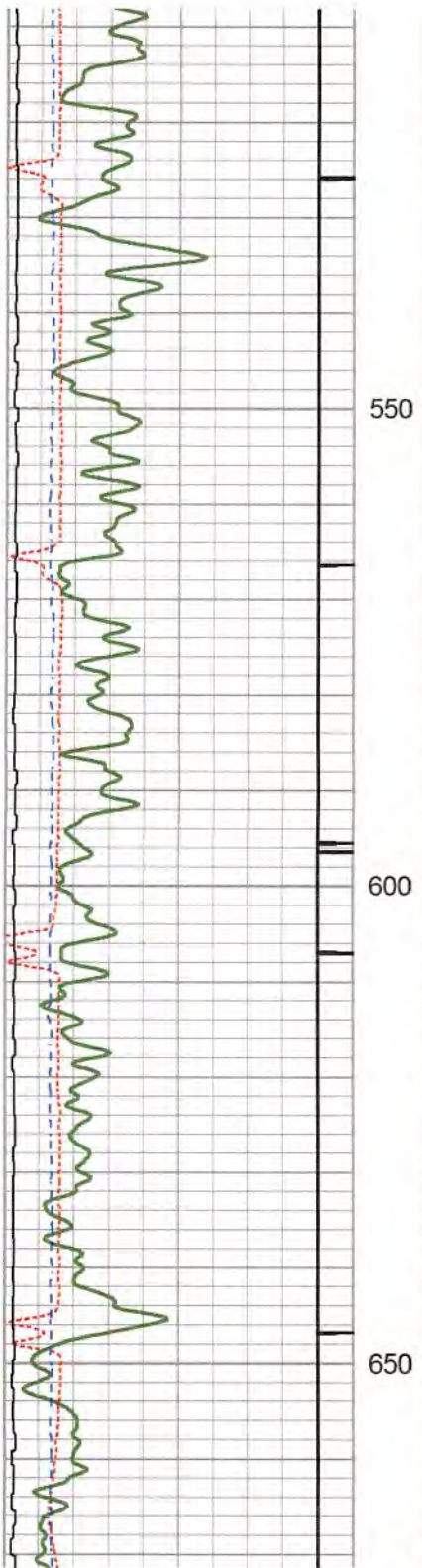
270	Travel Time (usec)	160	0	Amplitude (mV)	100	0	AMPMIN	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1	1	BONDIX	0	0	AMPMAX	150	200 (usec)	1200		
0	Gamma Ray (GAPI)	150				0	AMPAVG	150				
	Line Speed						TEMP					
-100	(ft/min)	100					(degF)					
0	Line Tension (lb)	2000										

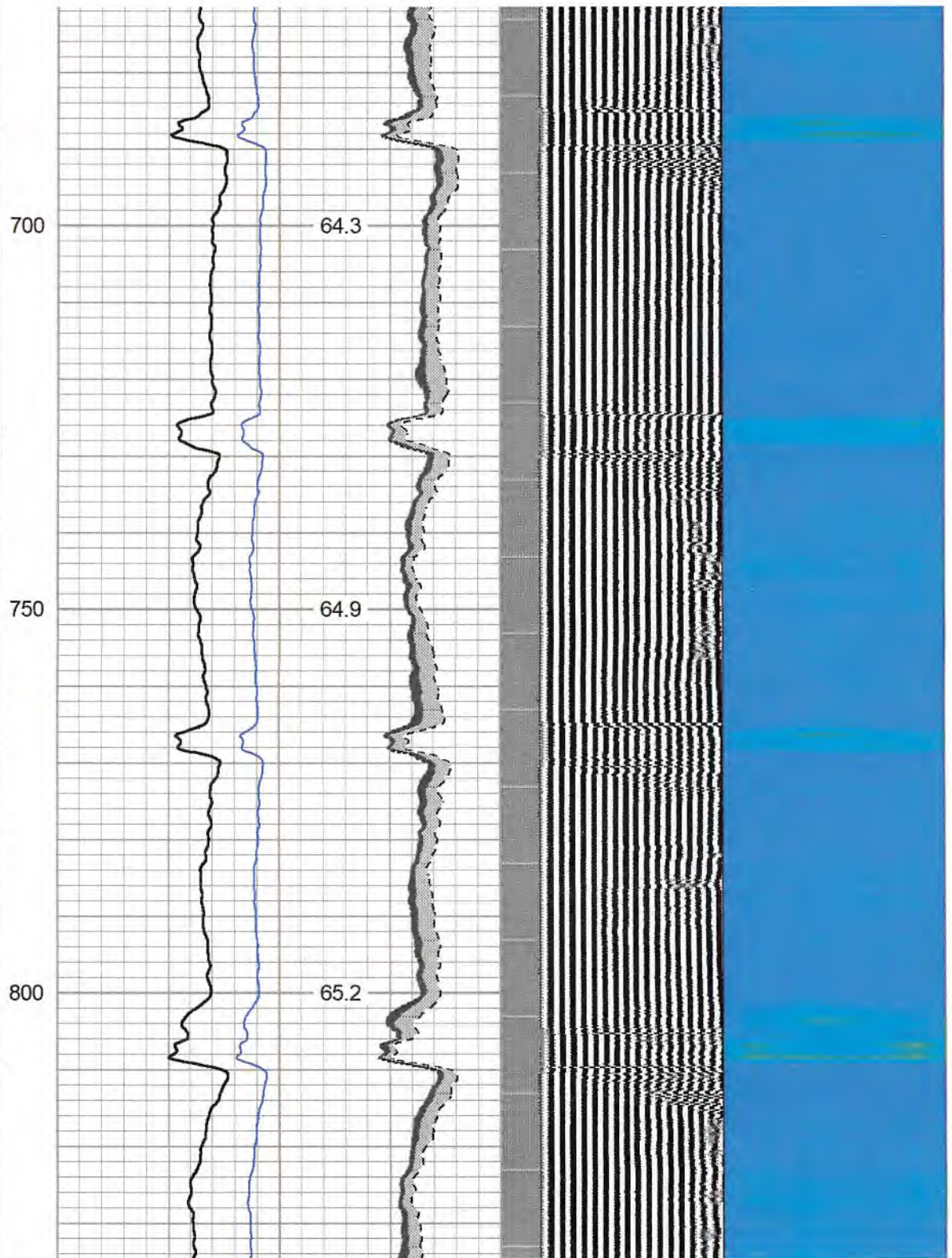
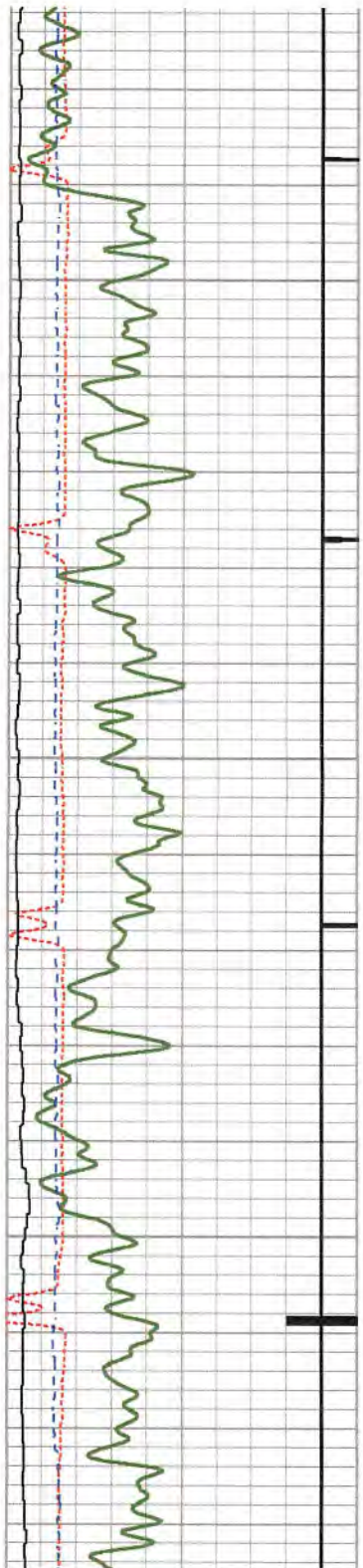


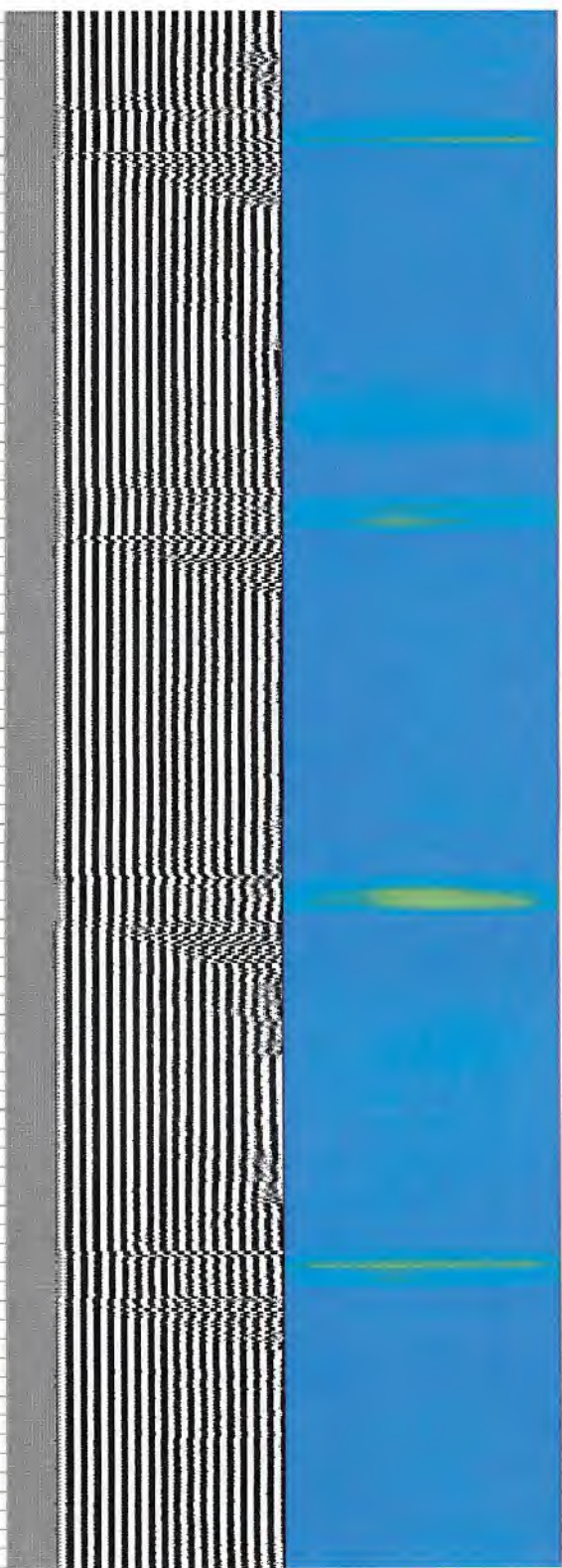
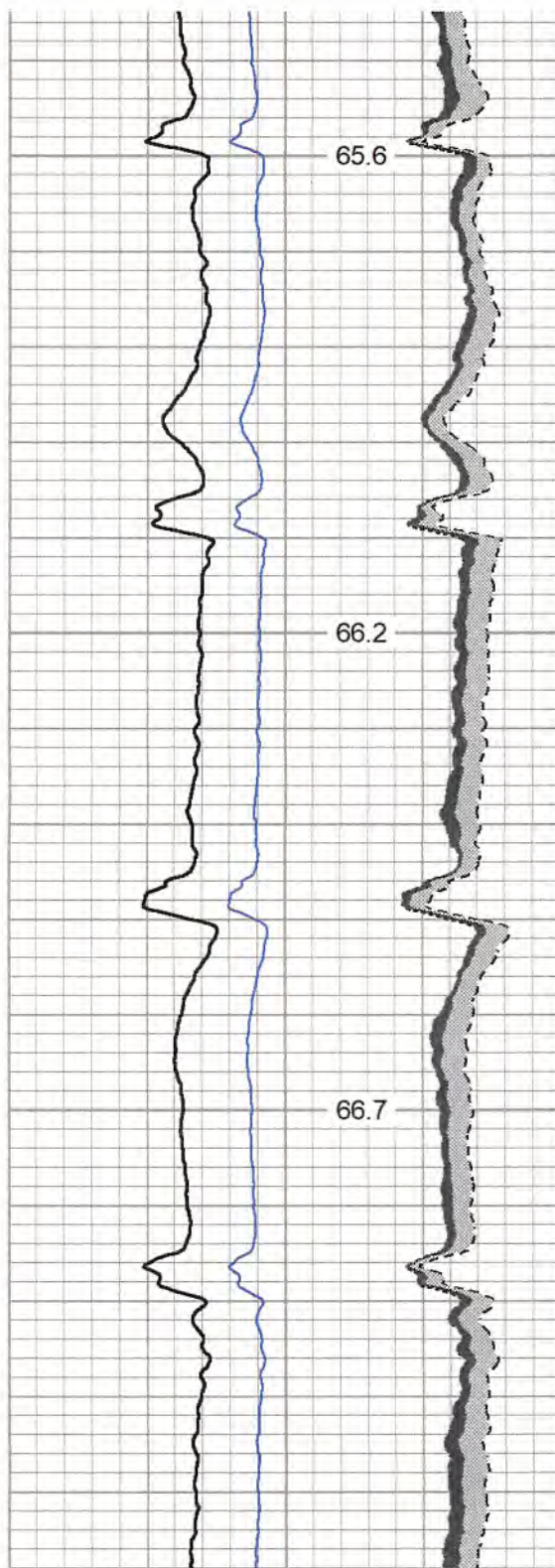
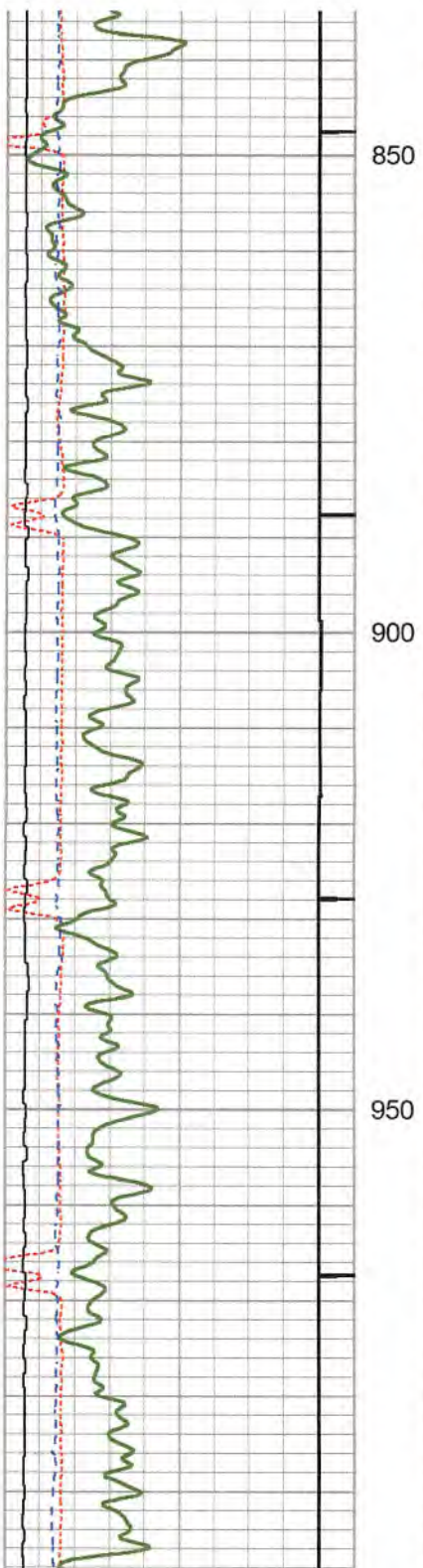


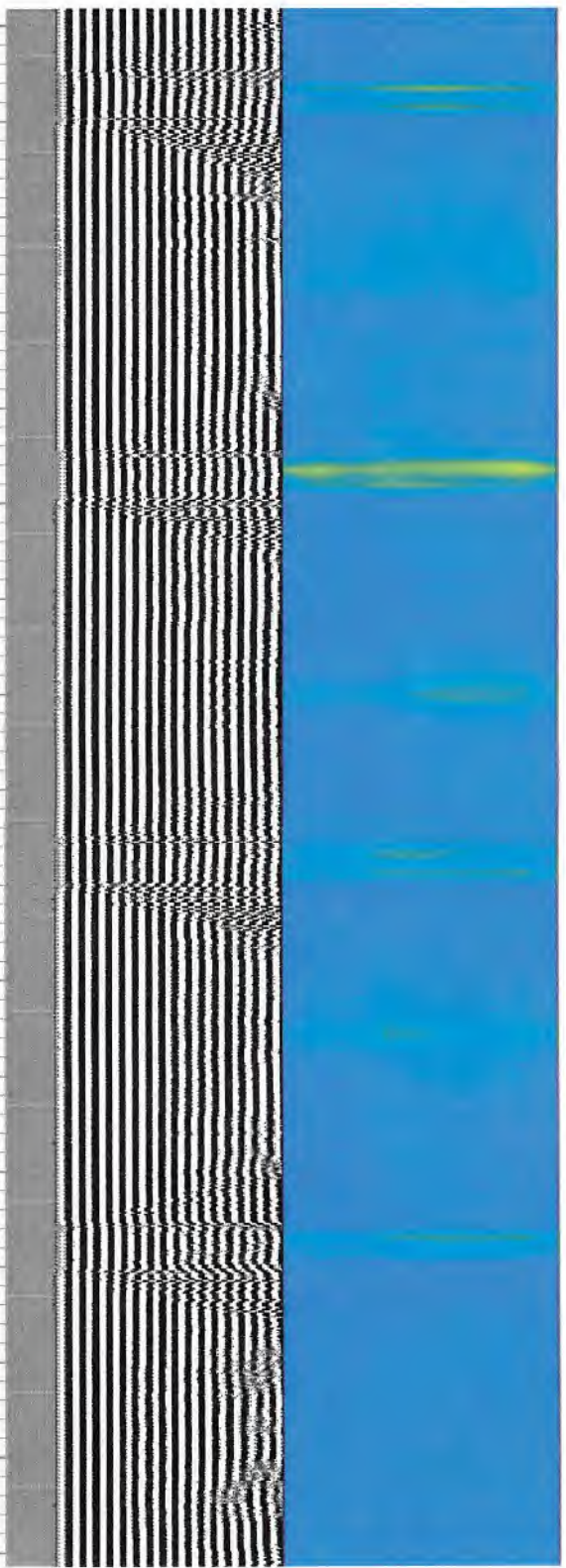
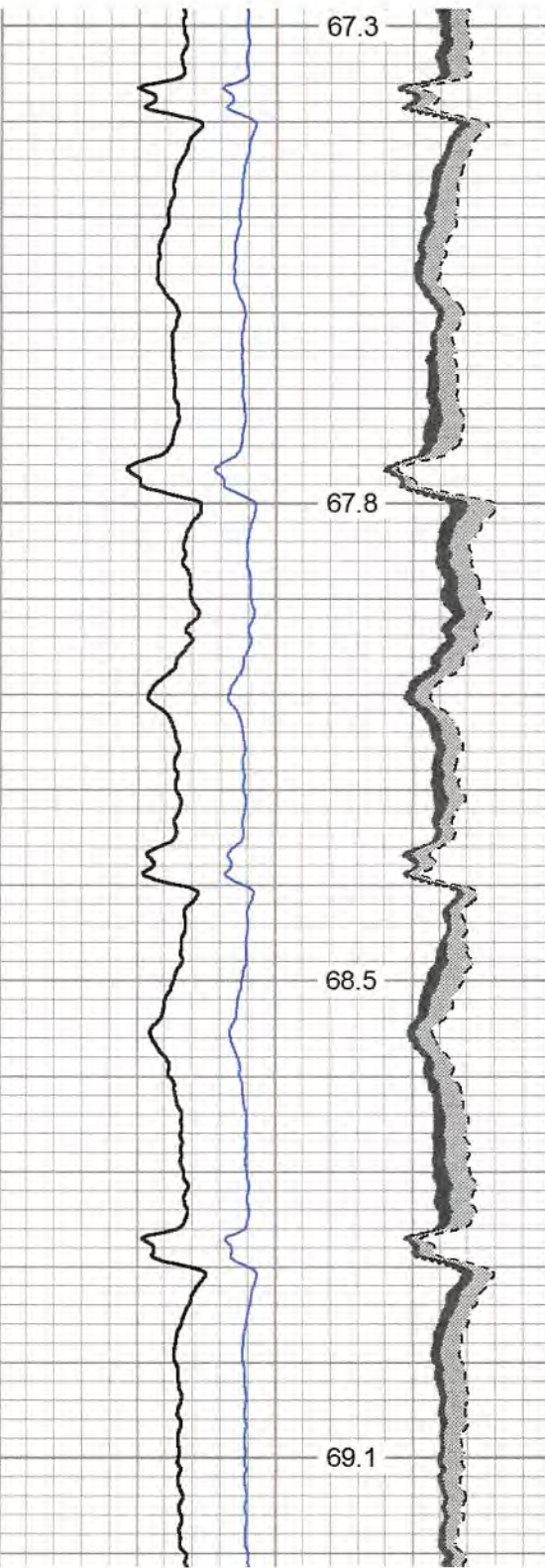
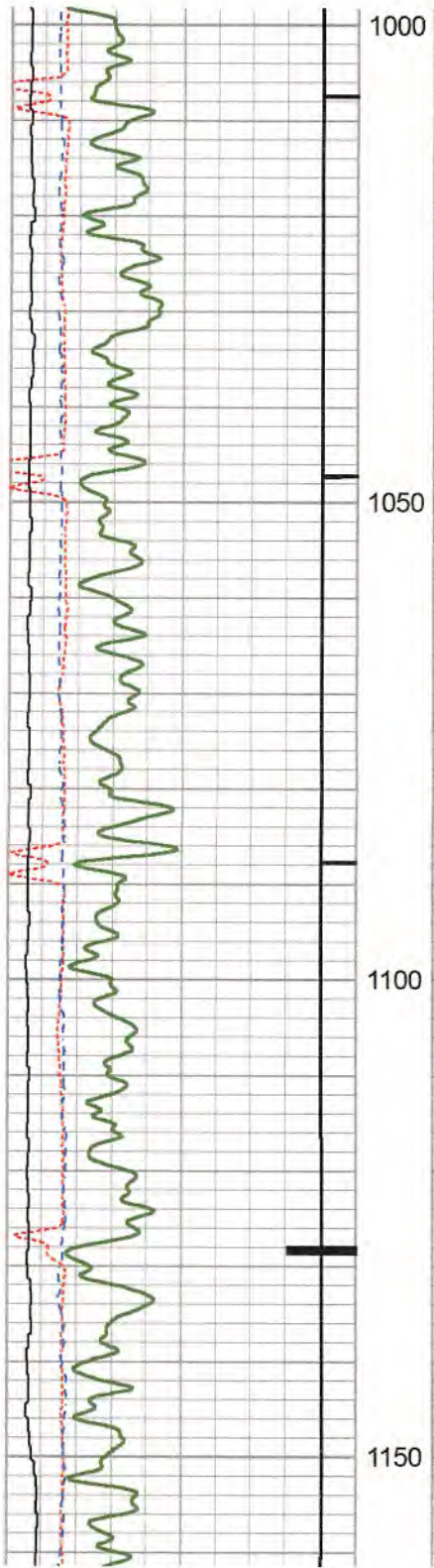


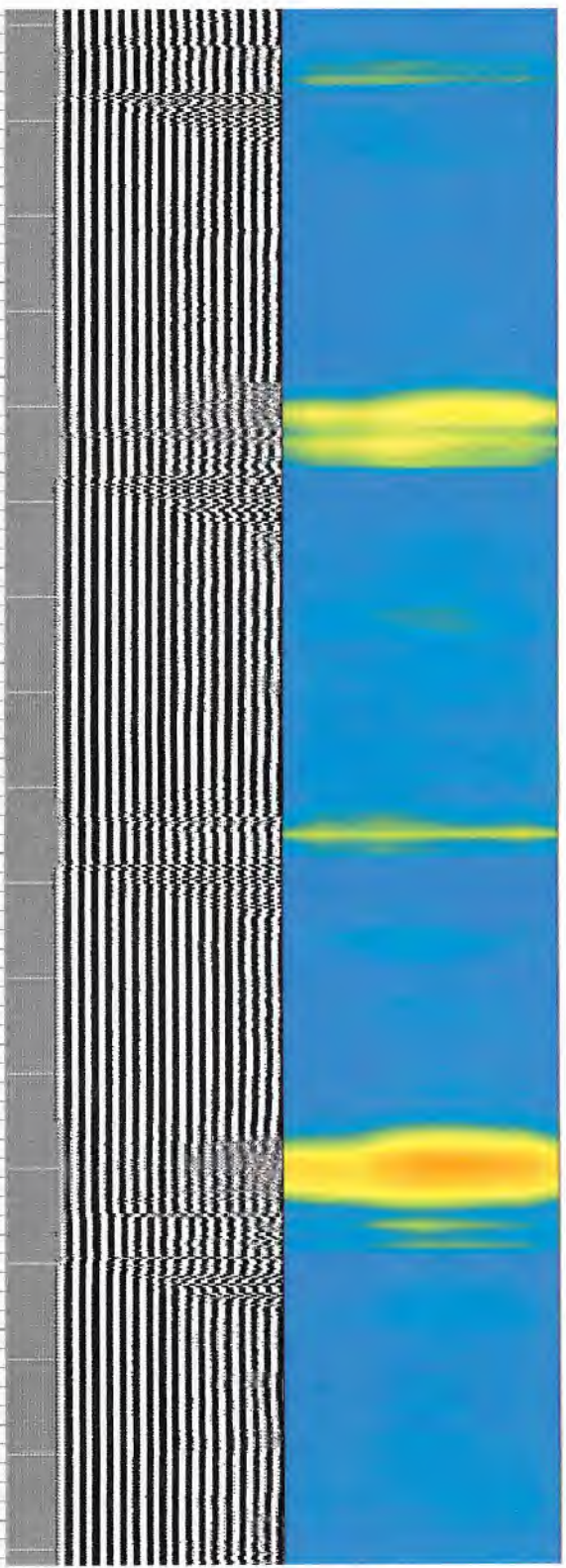
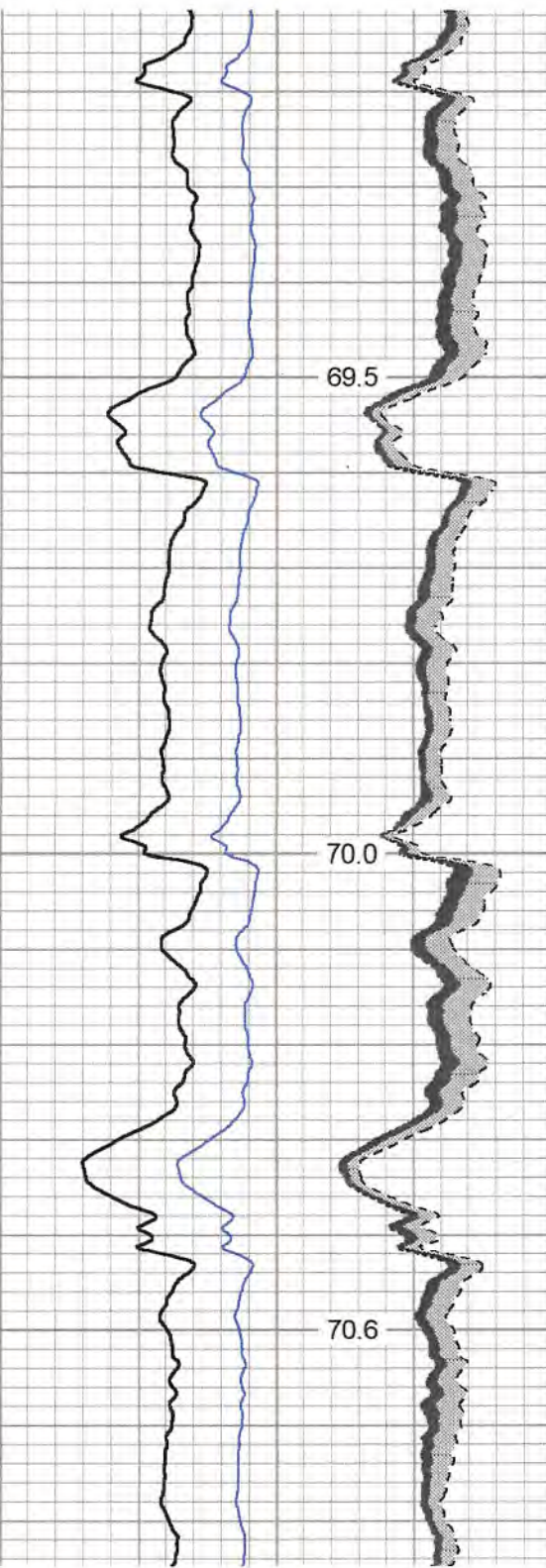
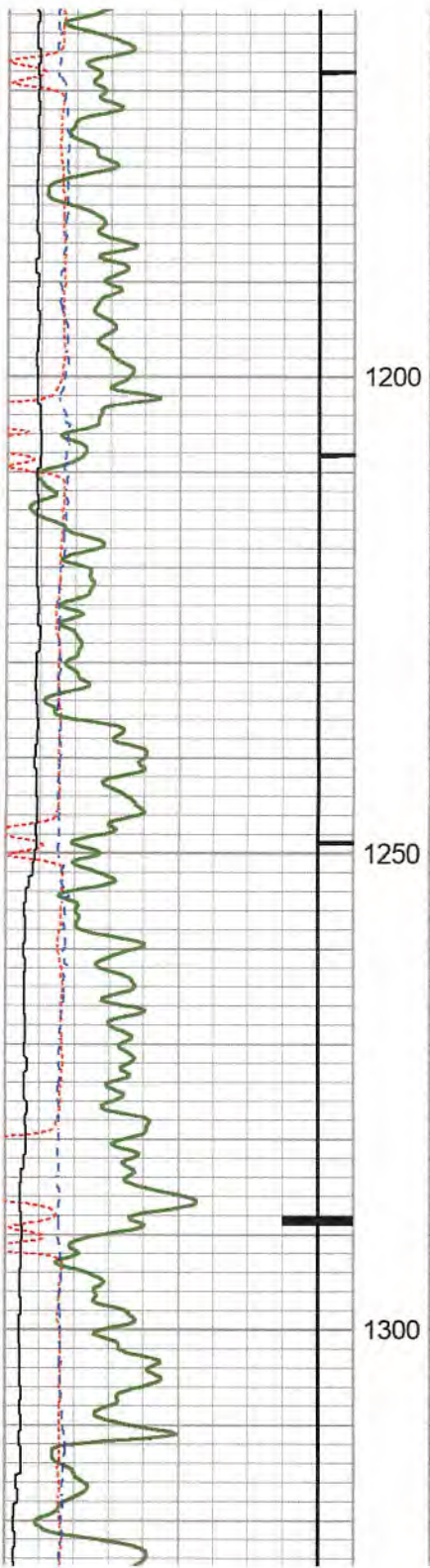


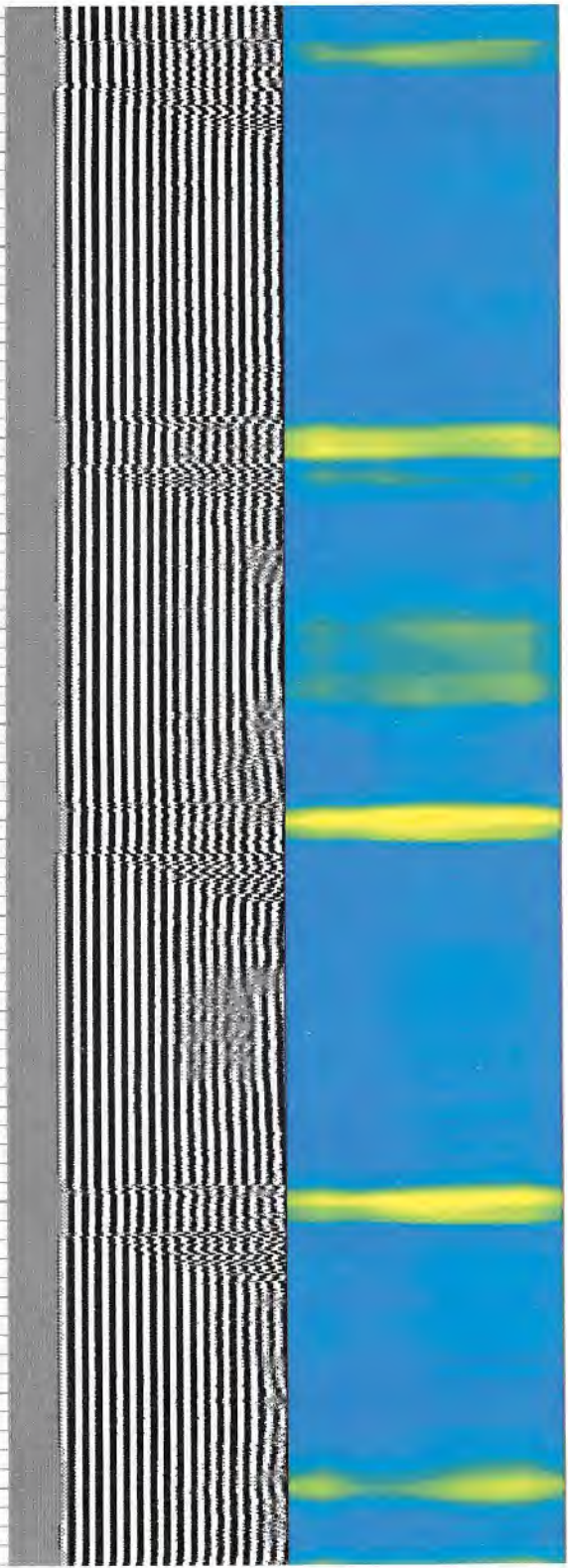
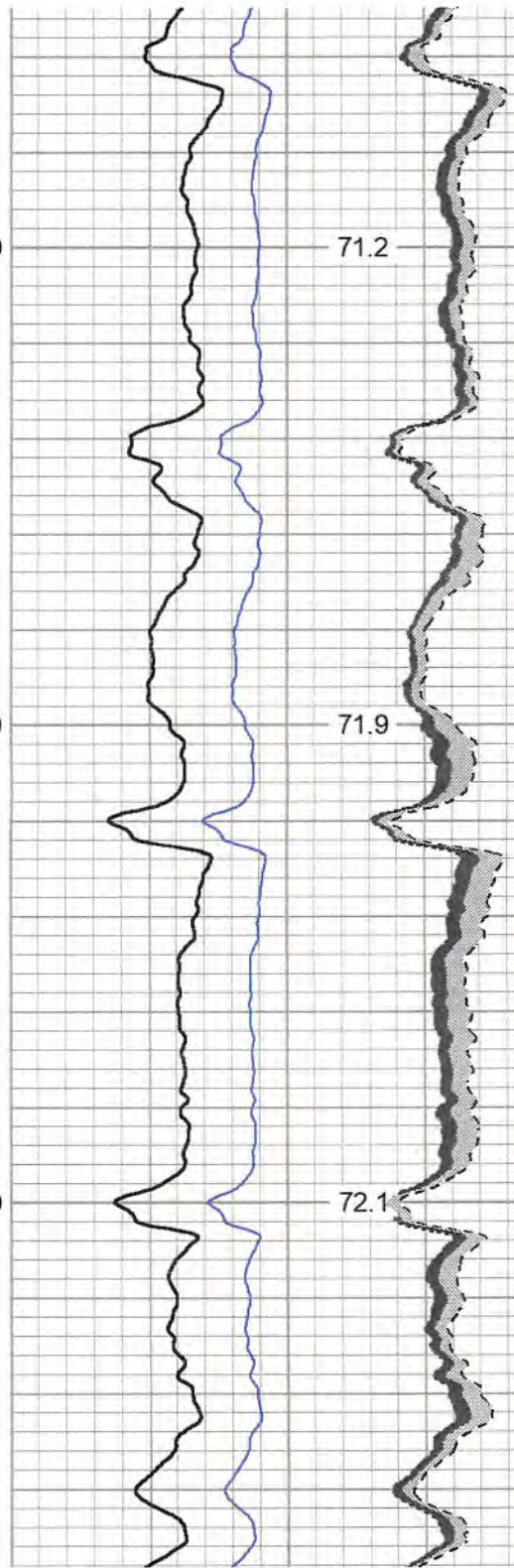
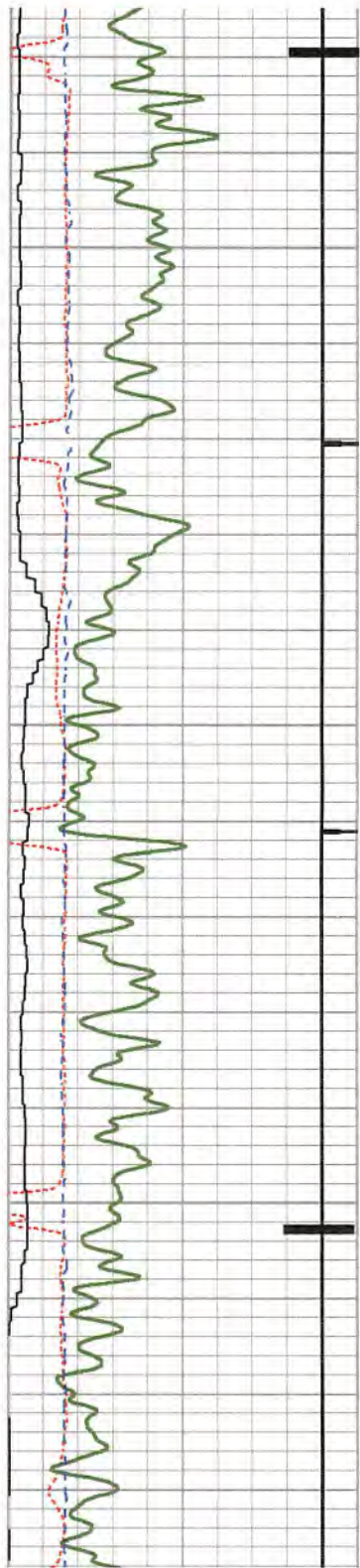


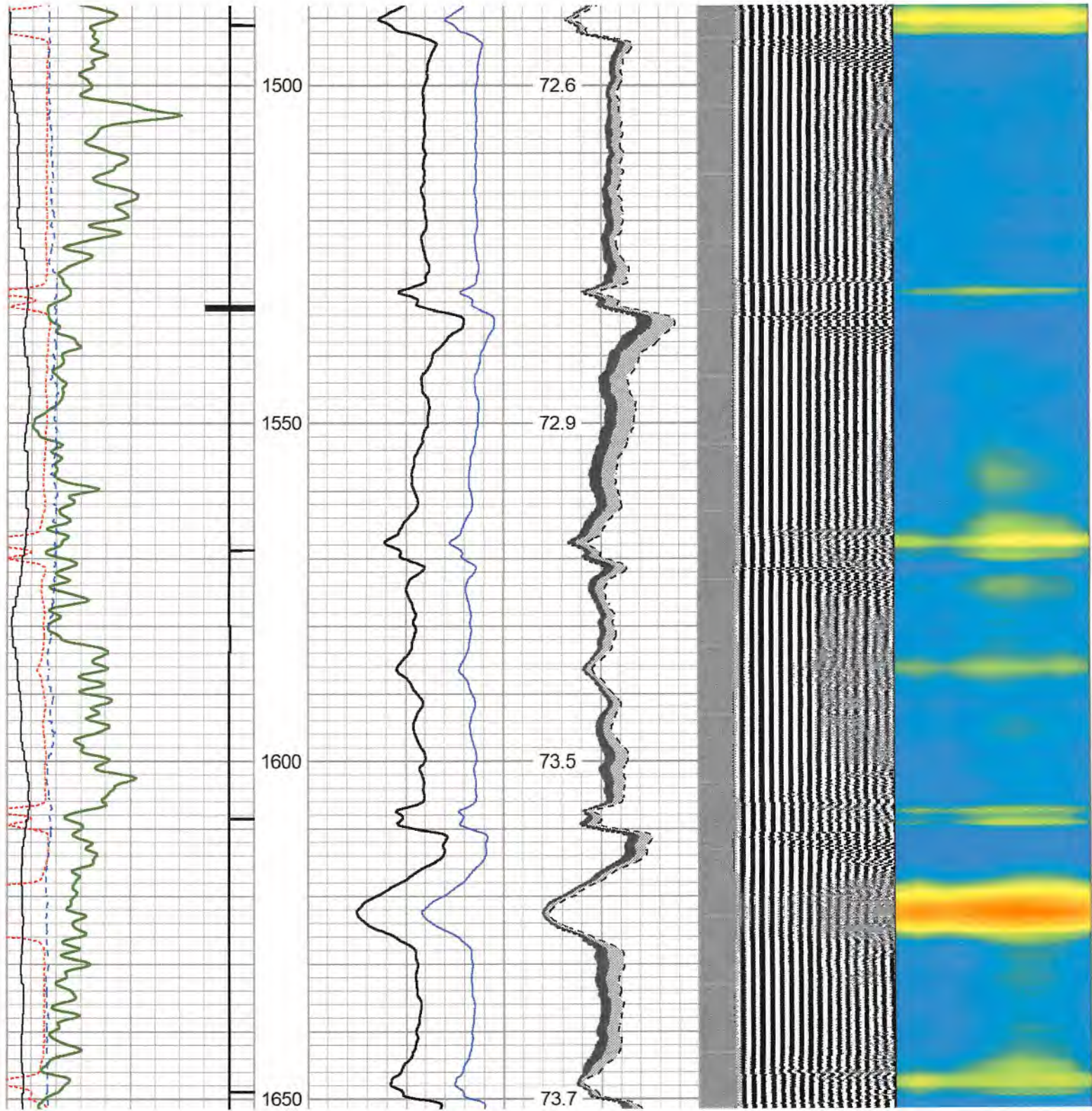


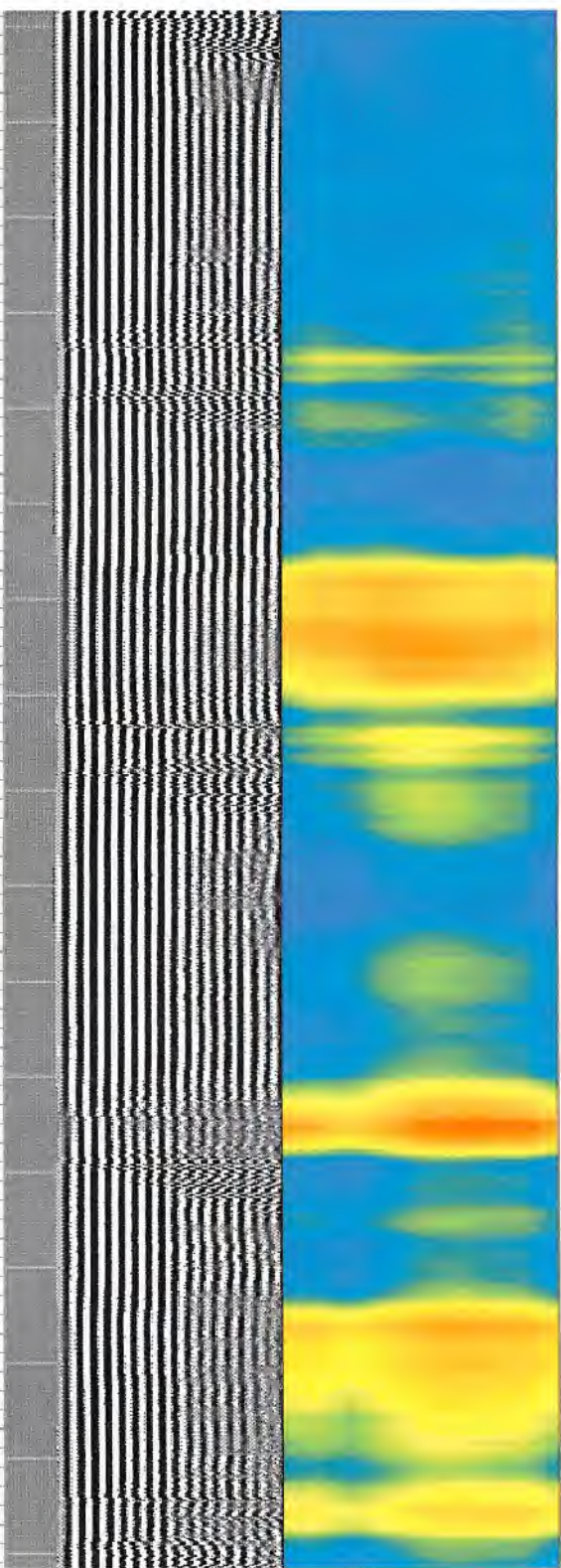
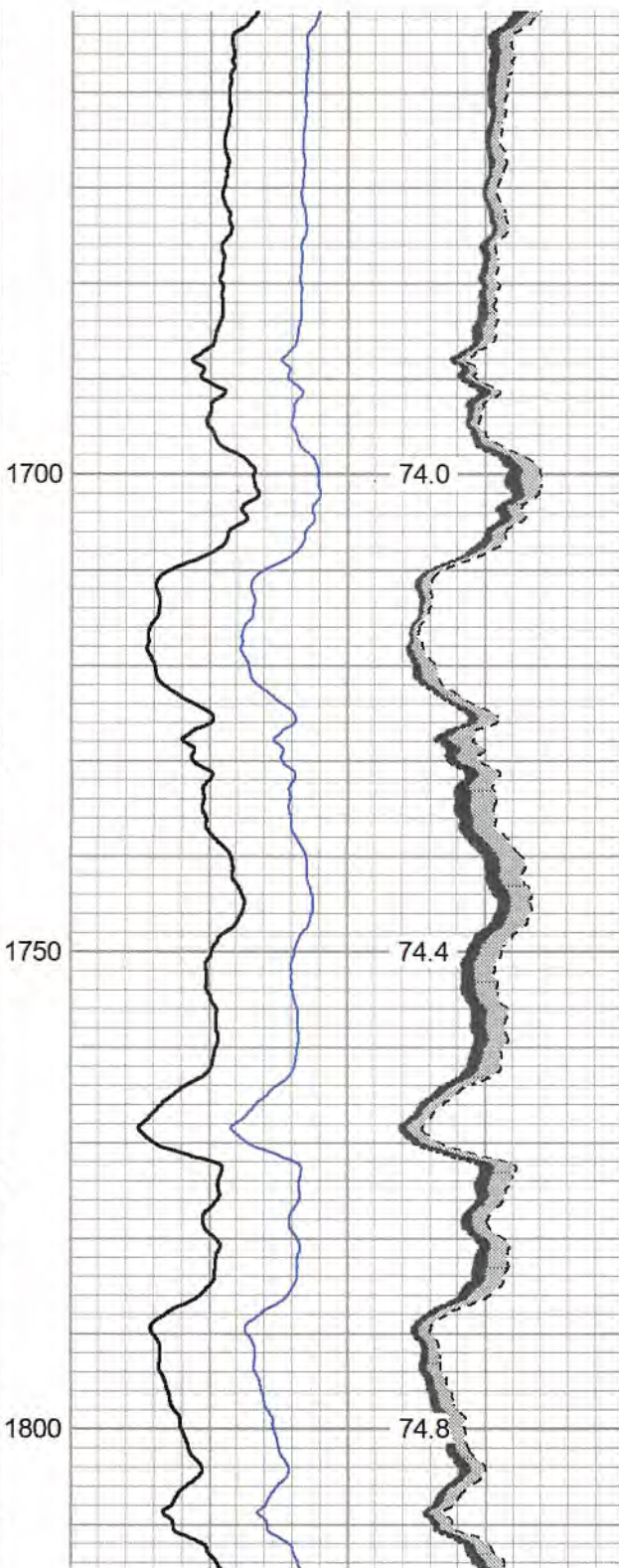
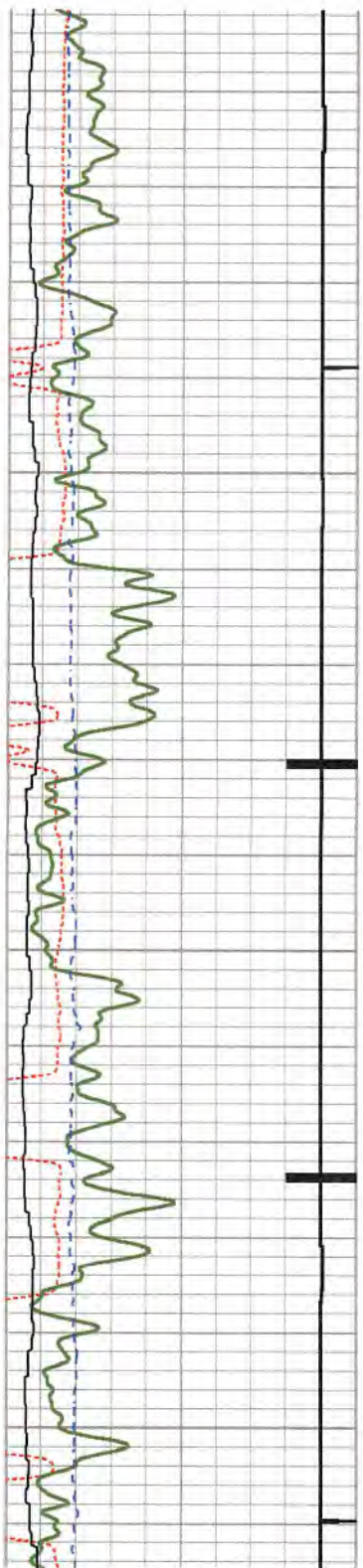


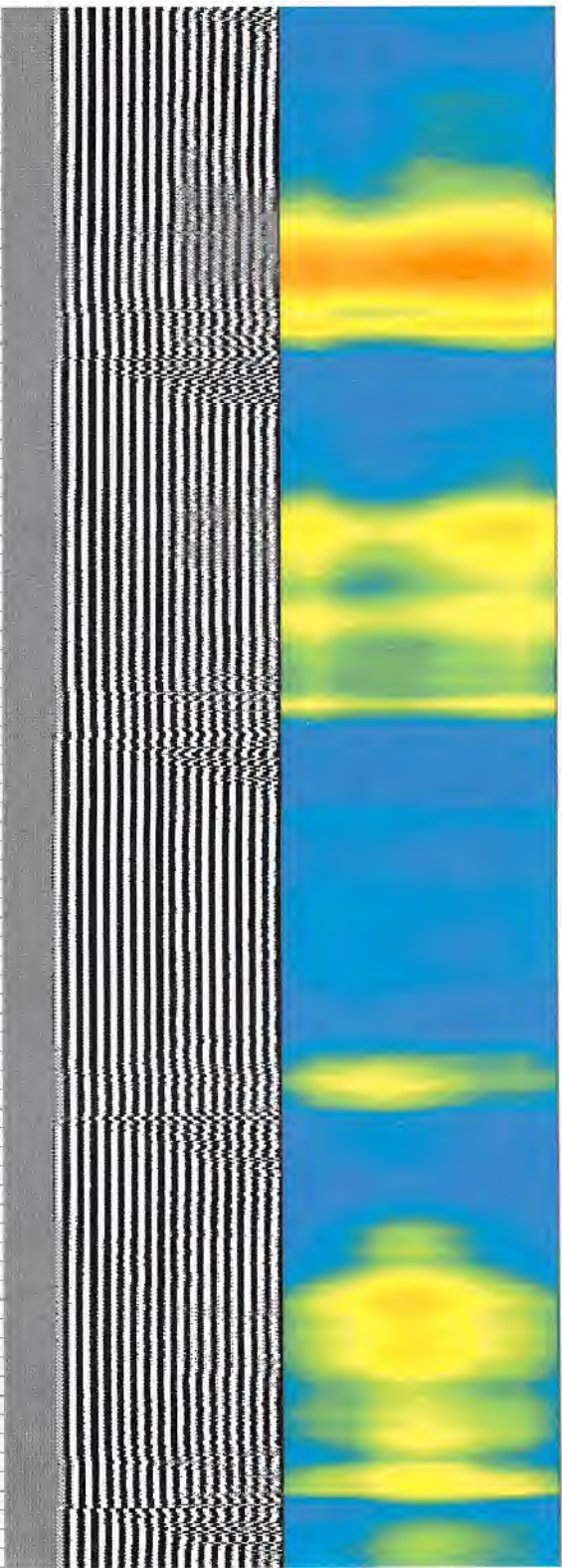
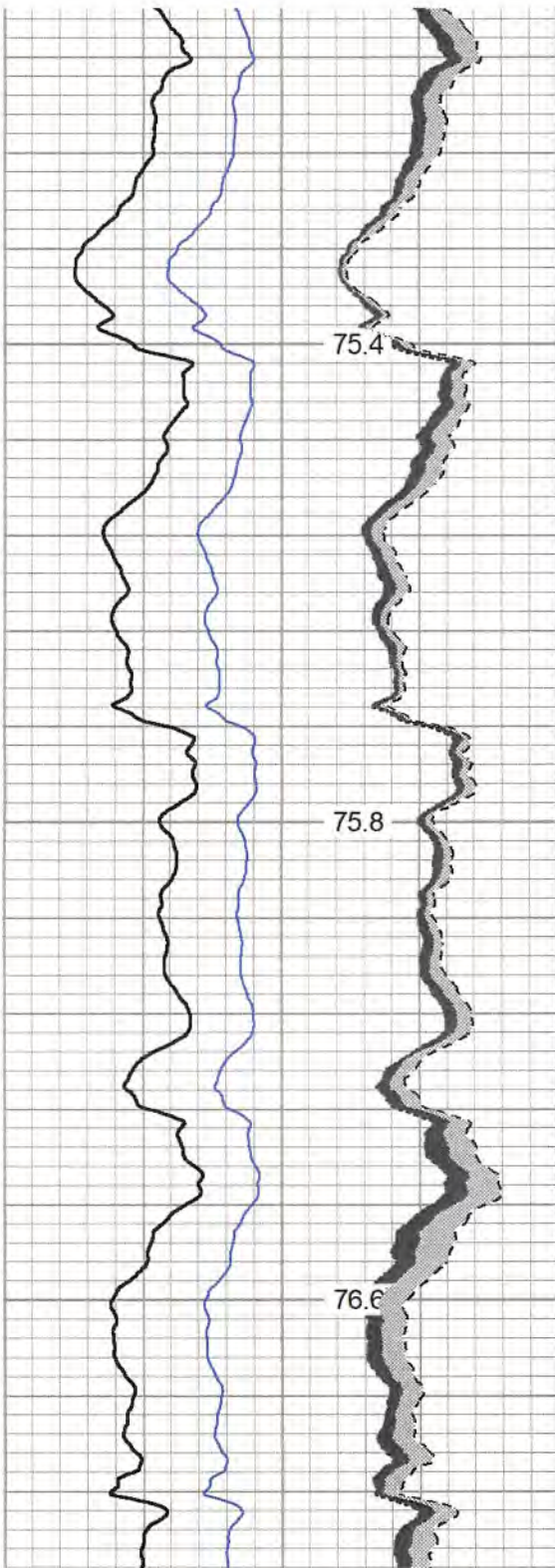
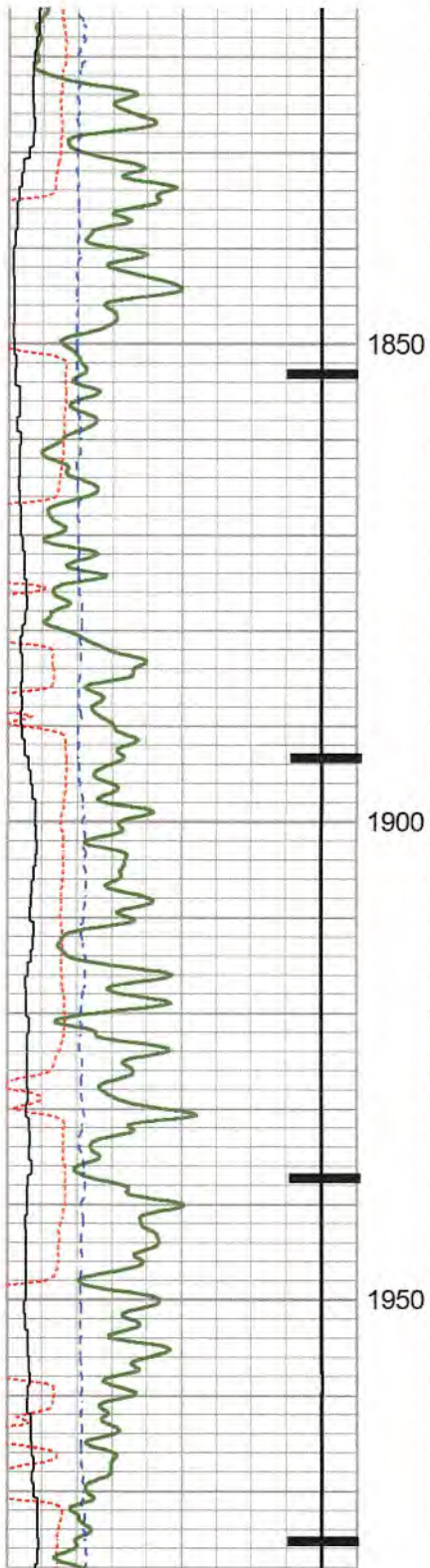


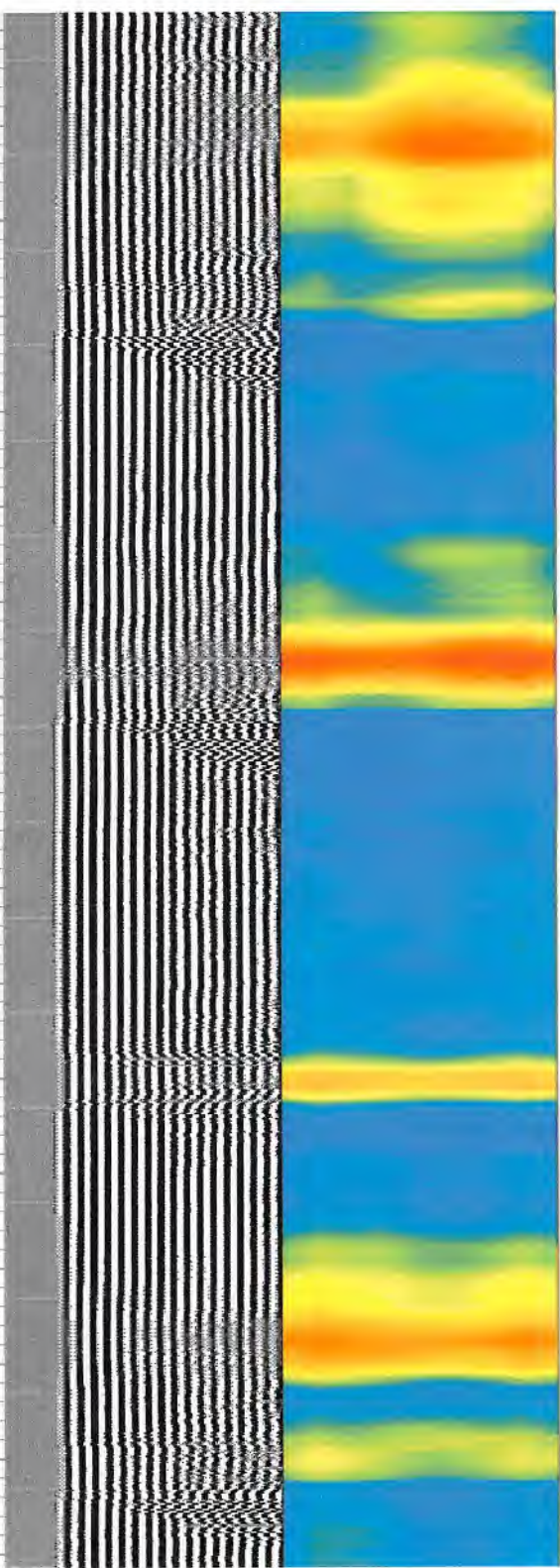
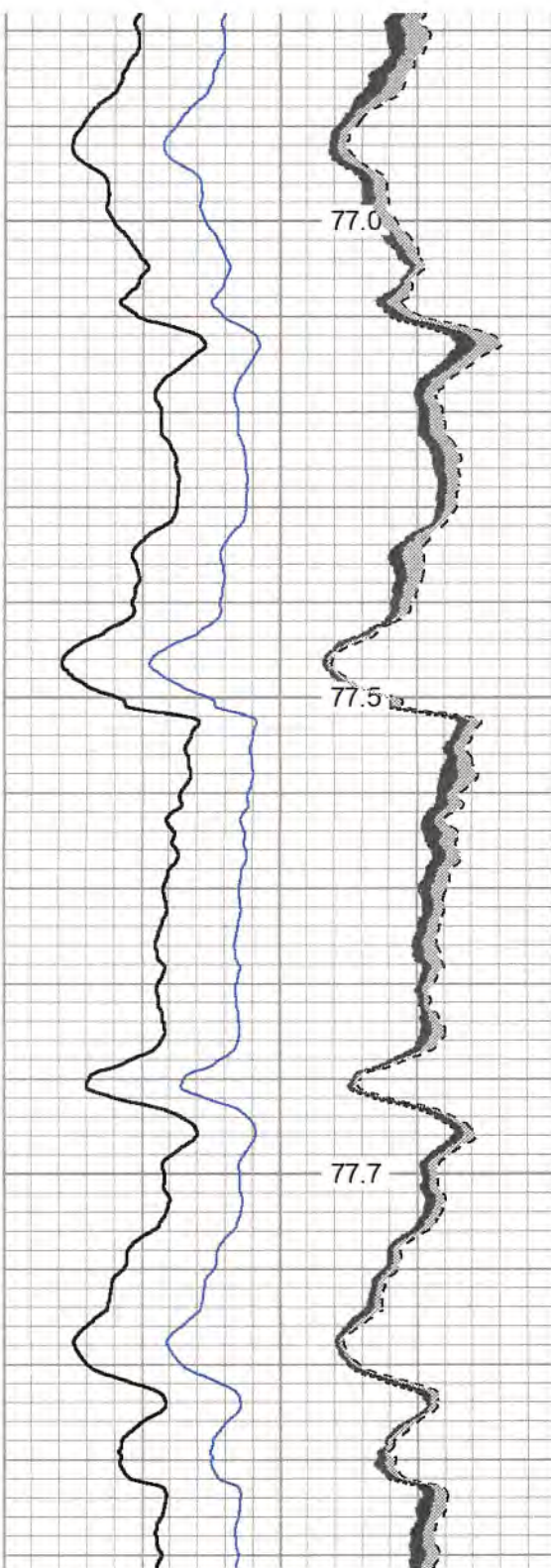
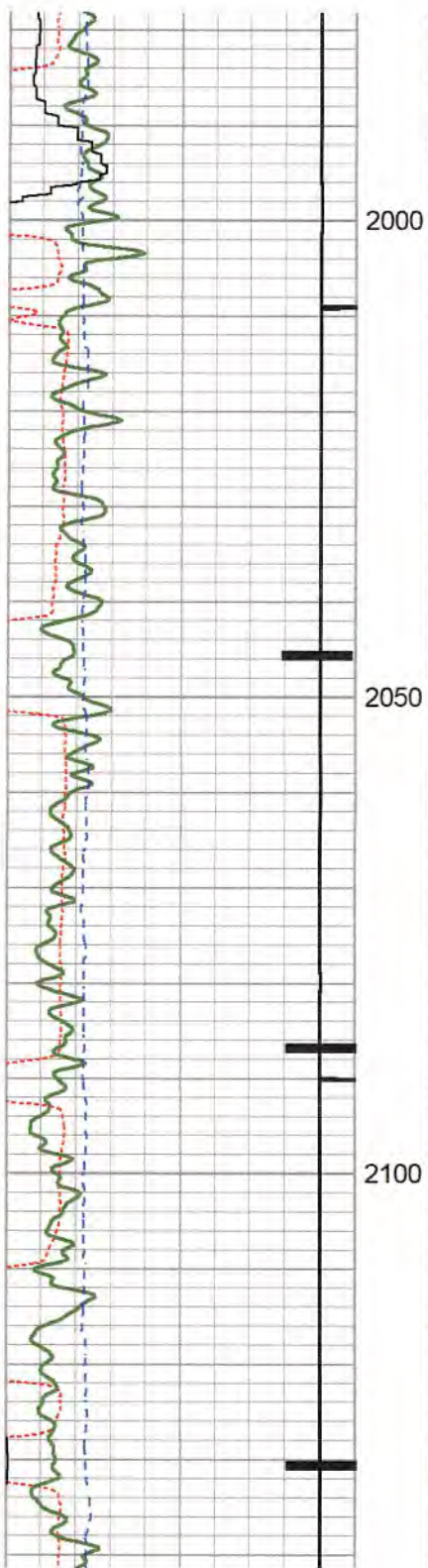


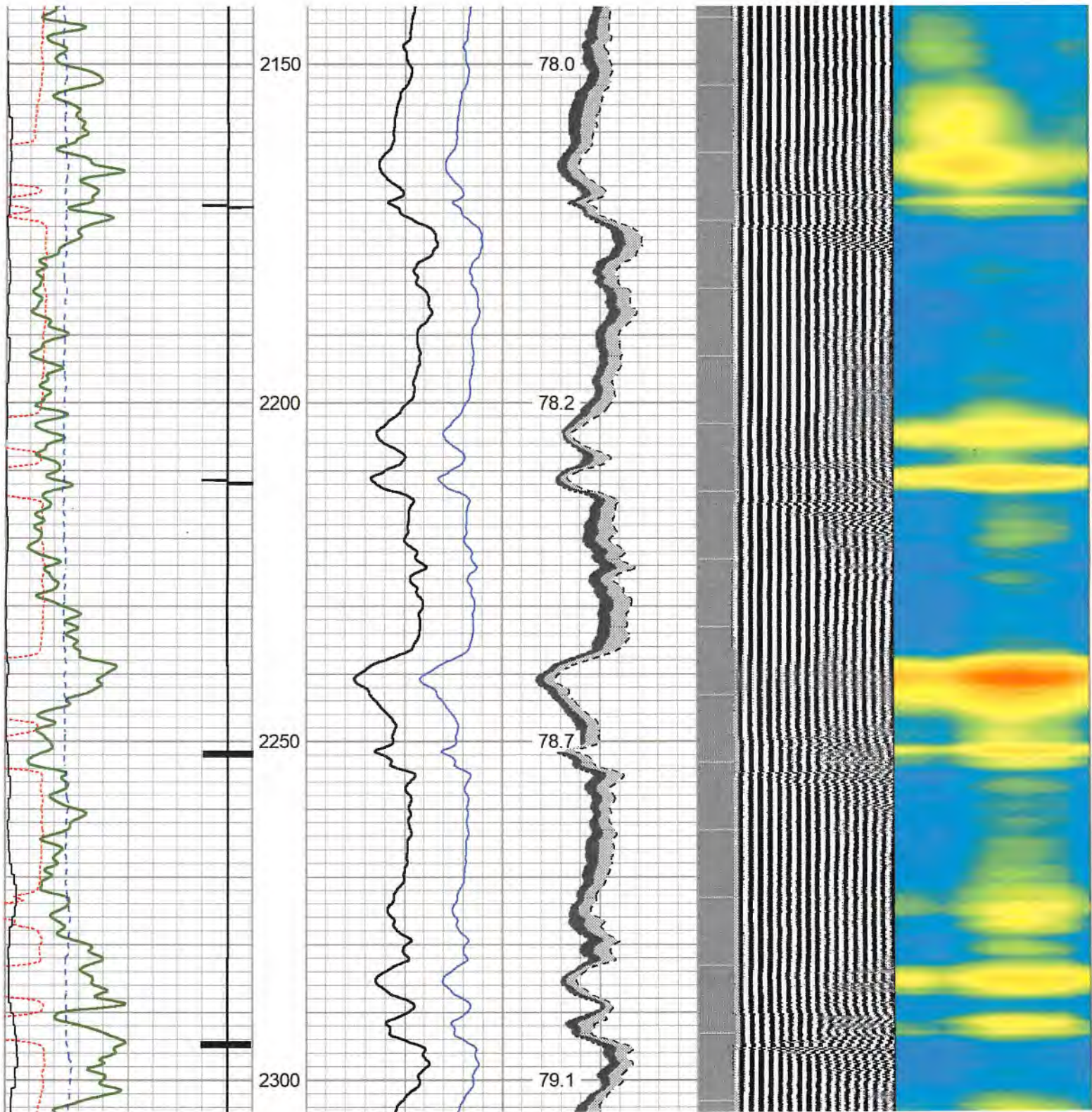


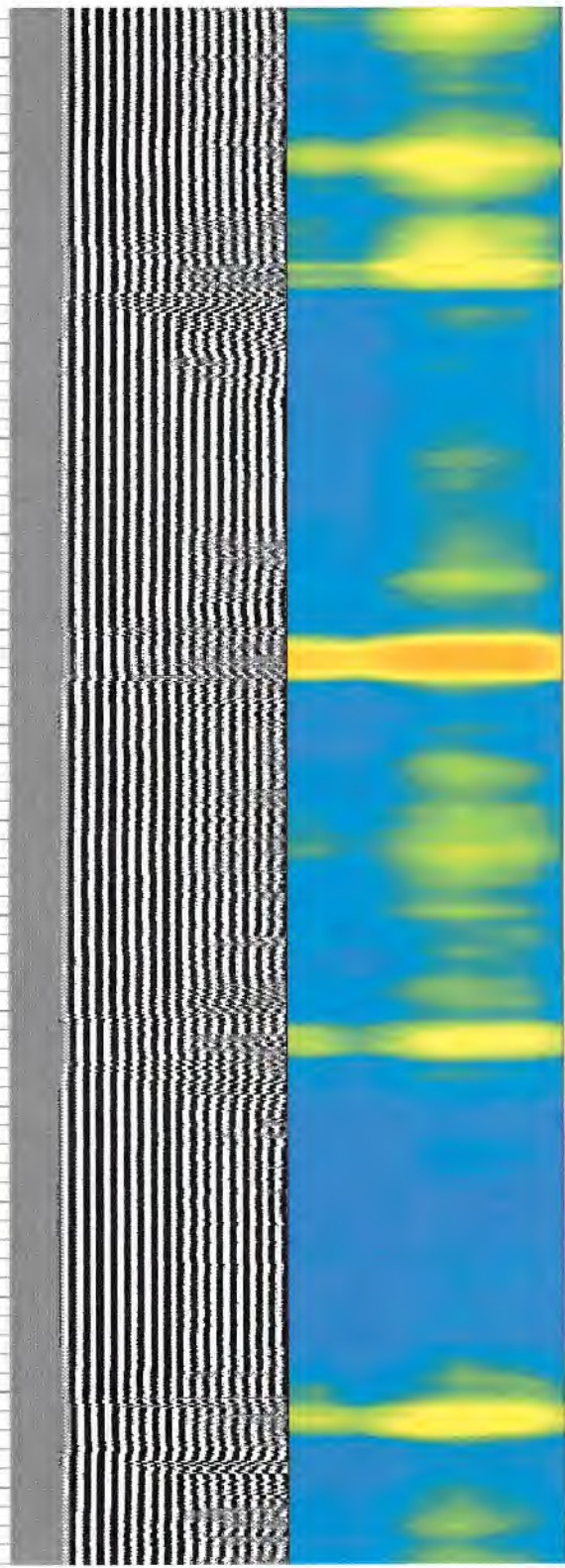
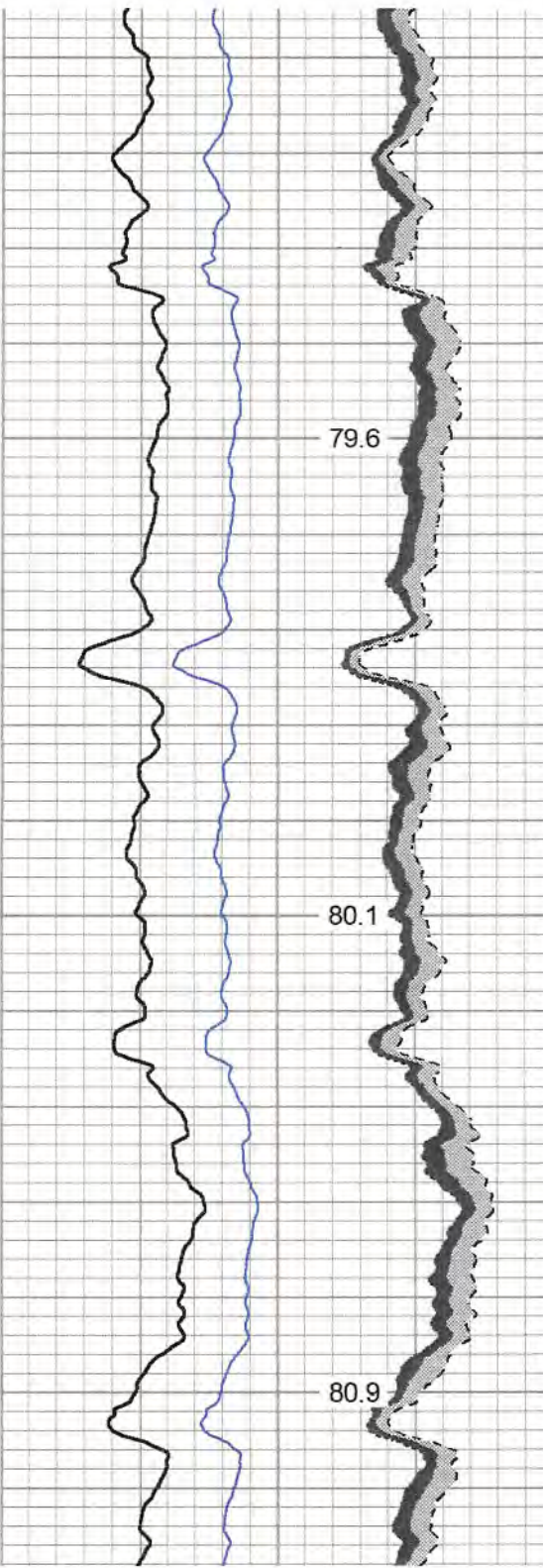
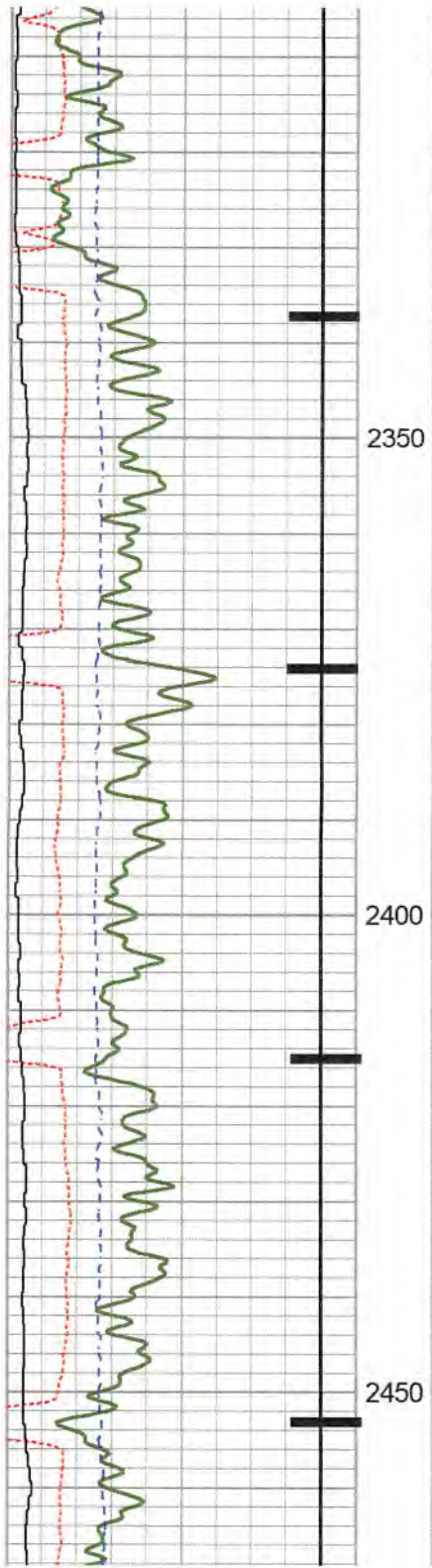


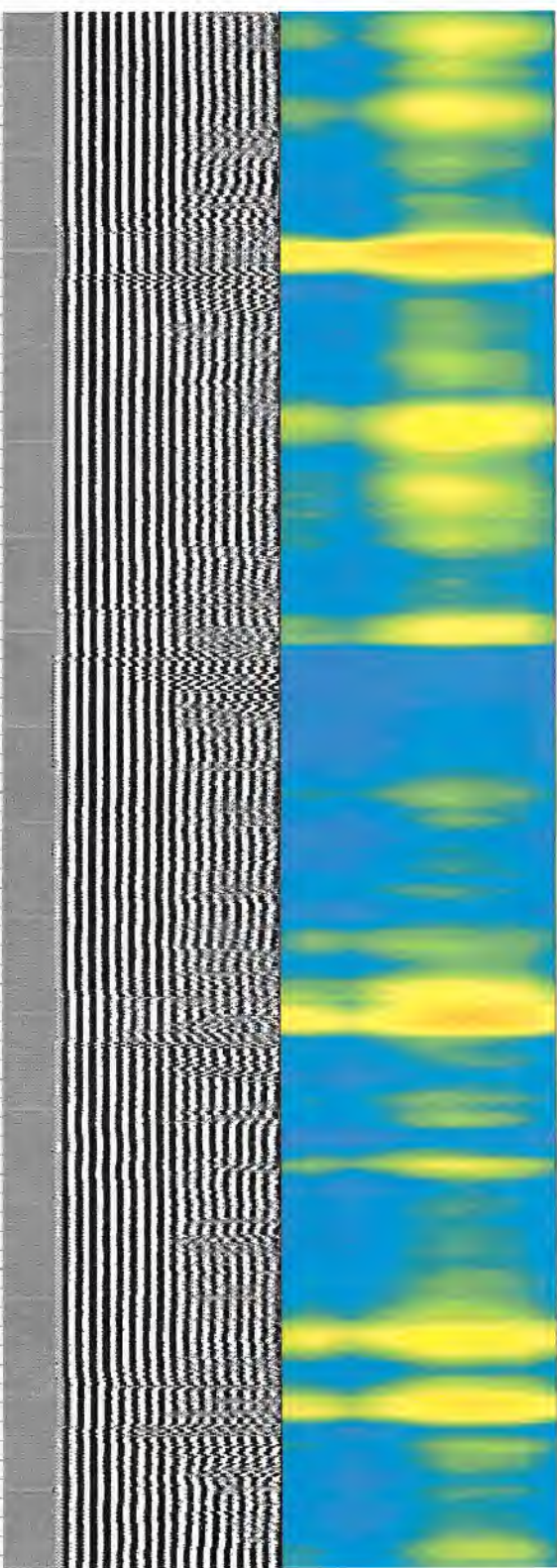
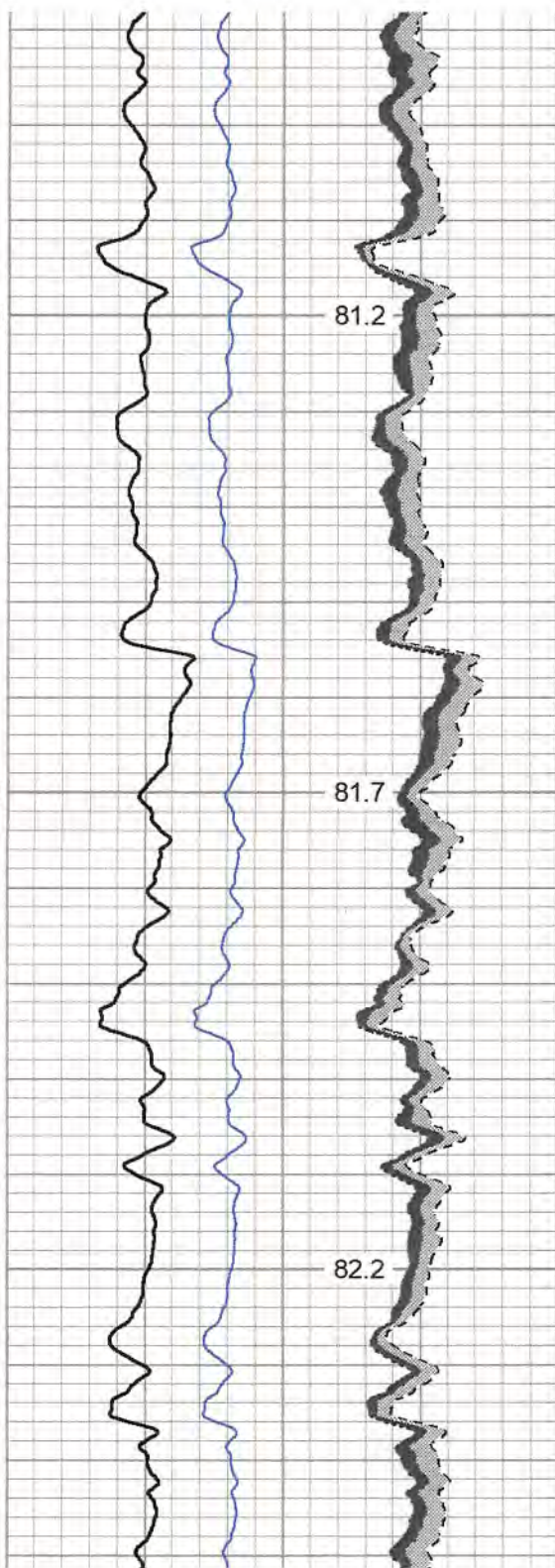
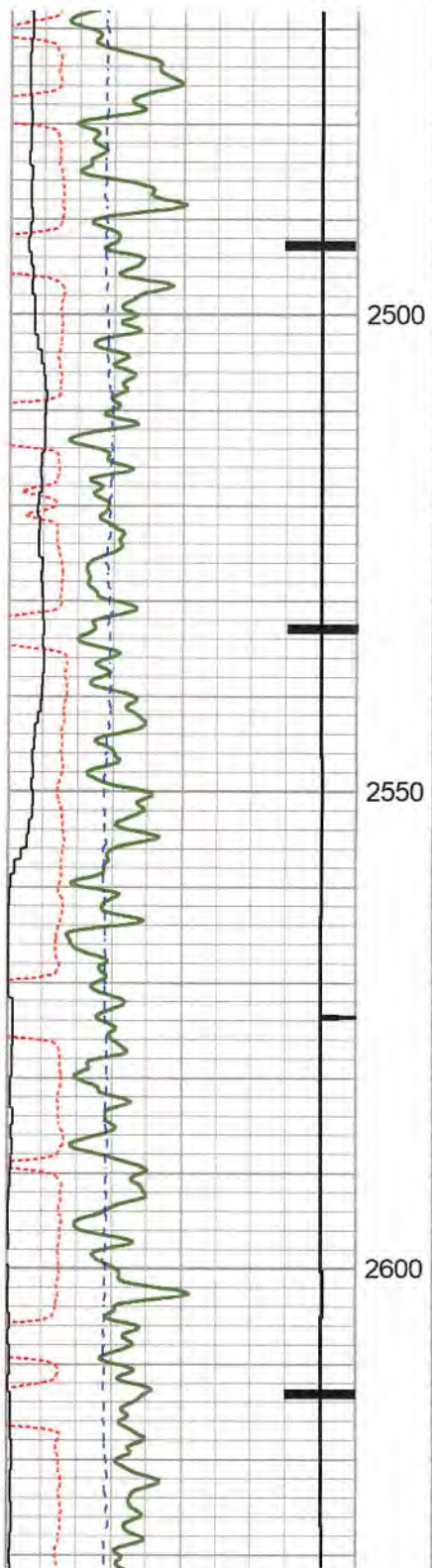


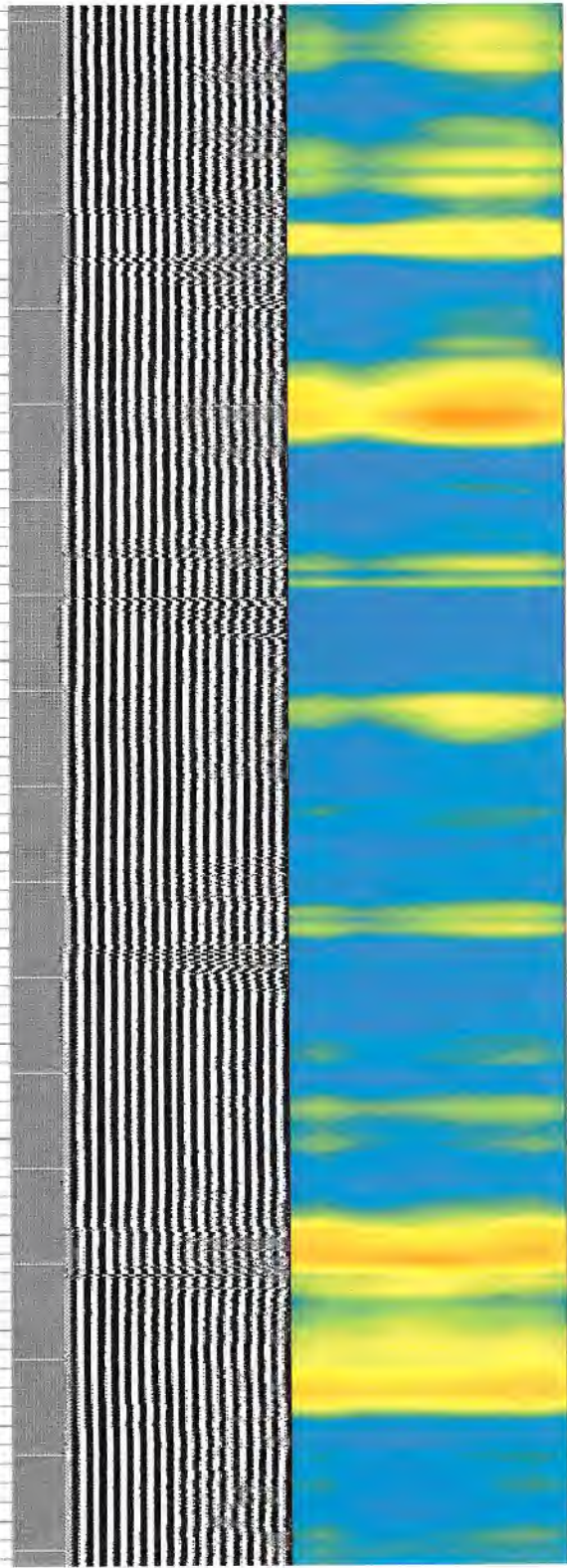
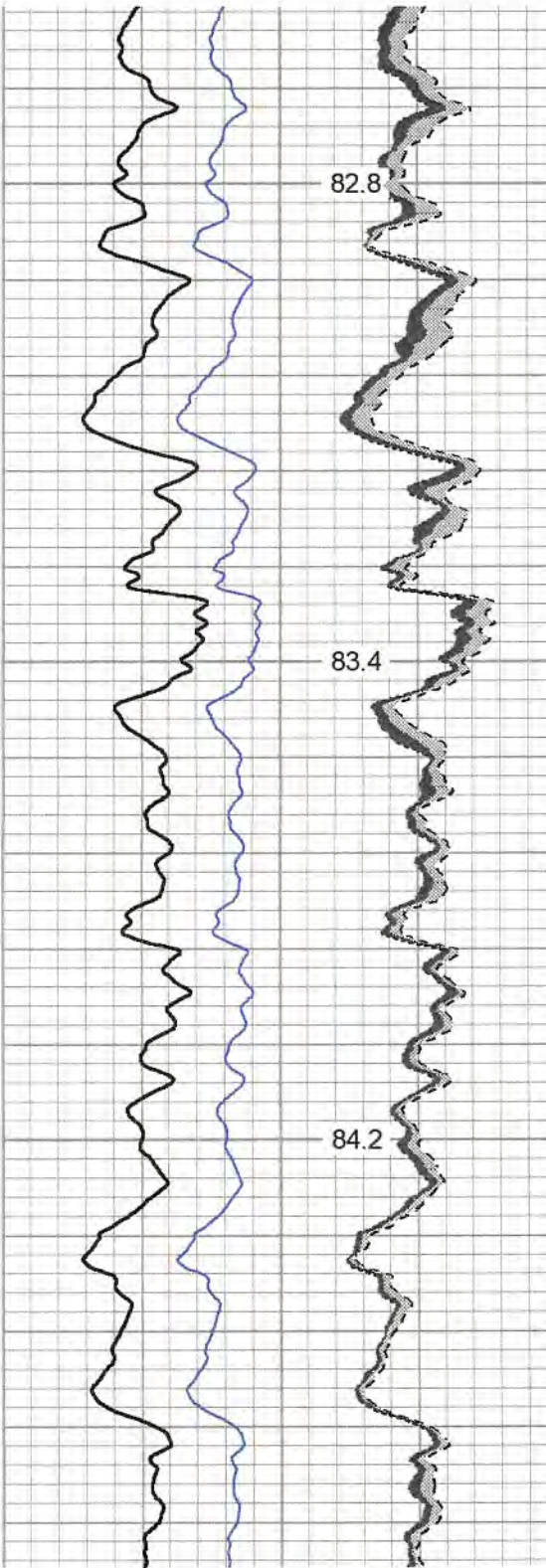
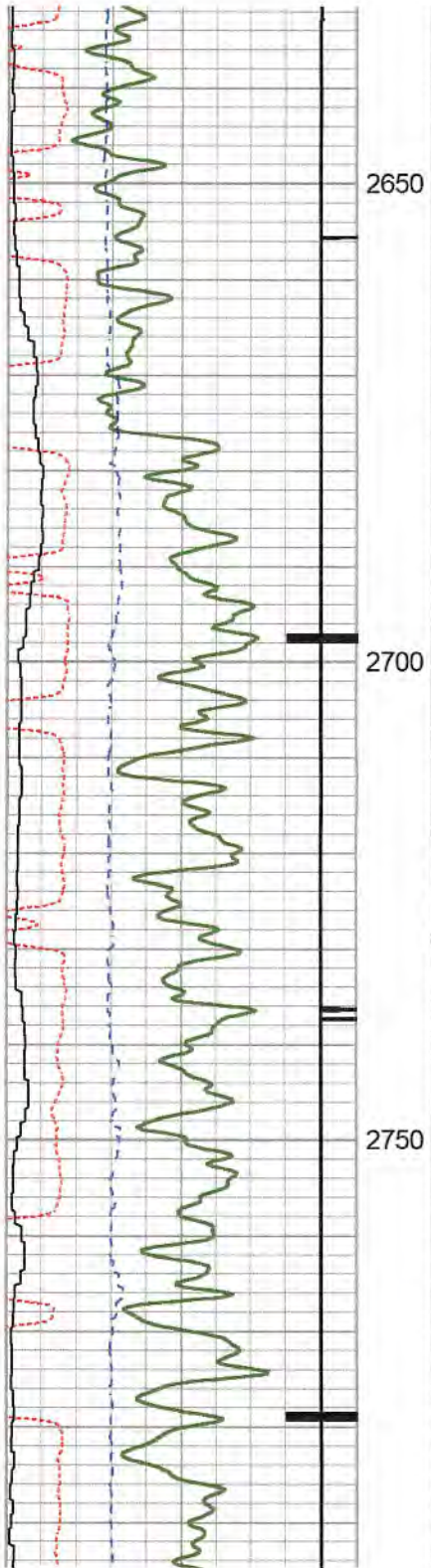


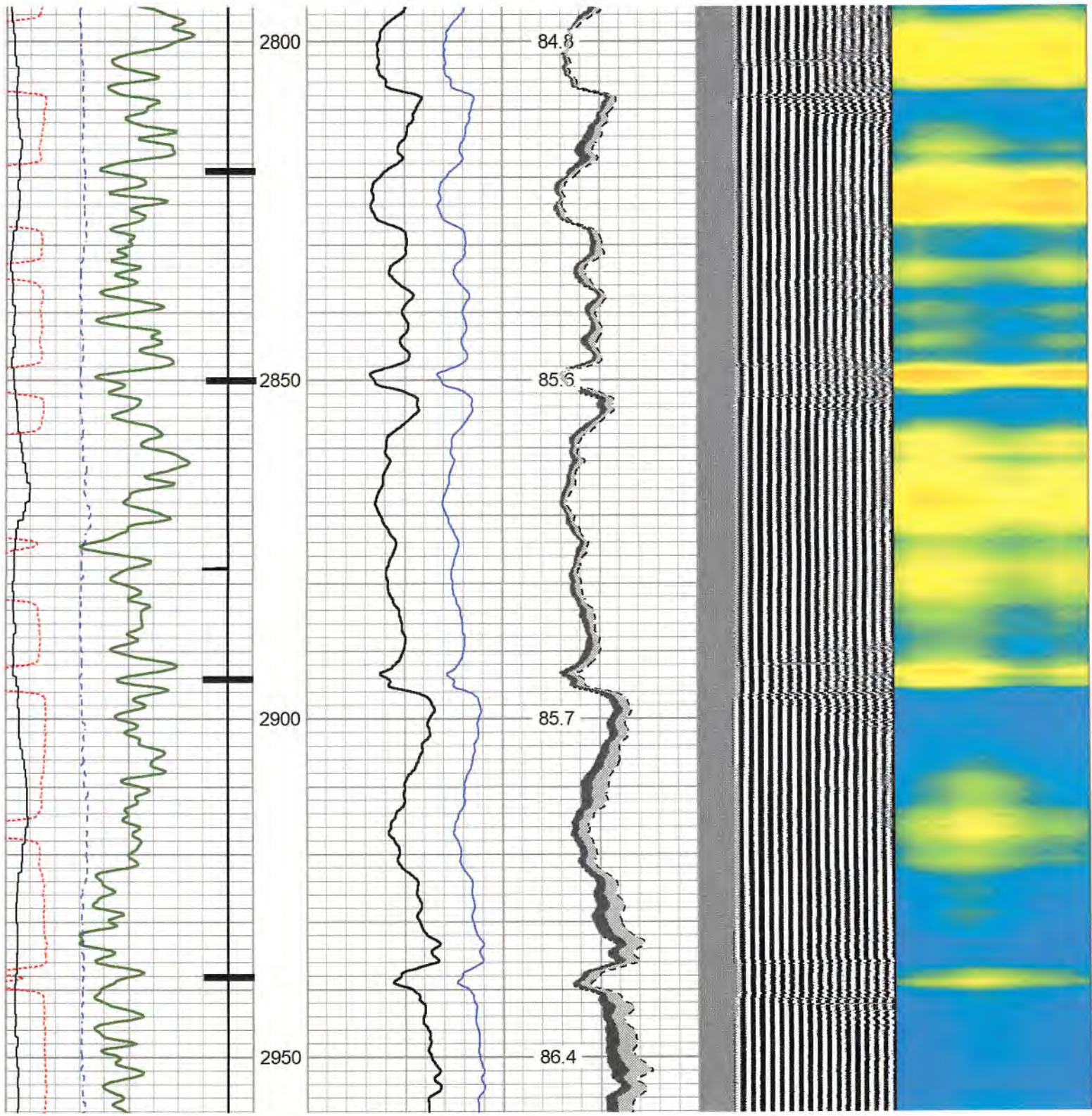


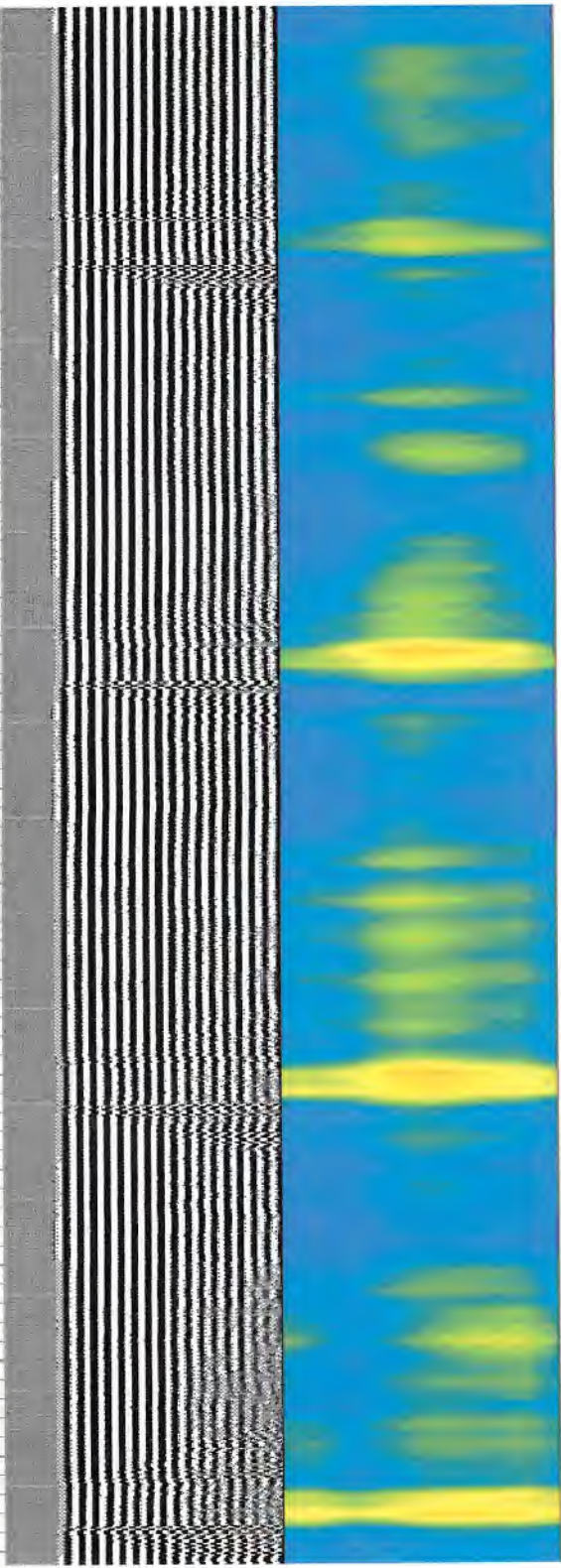
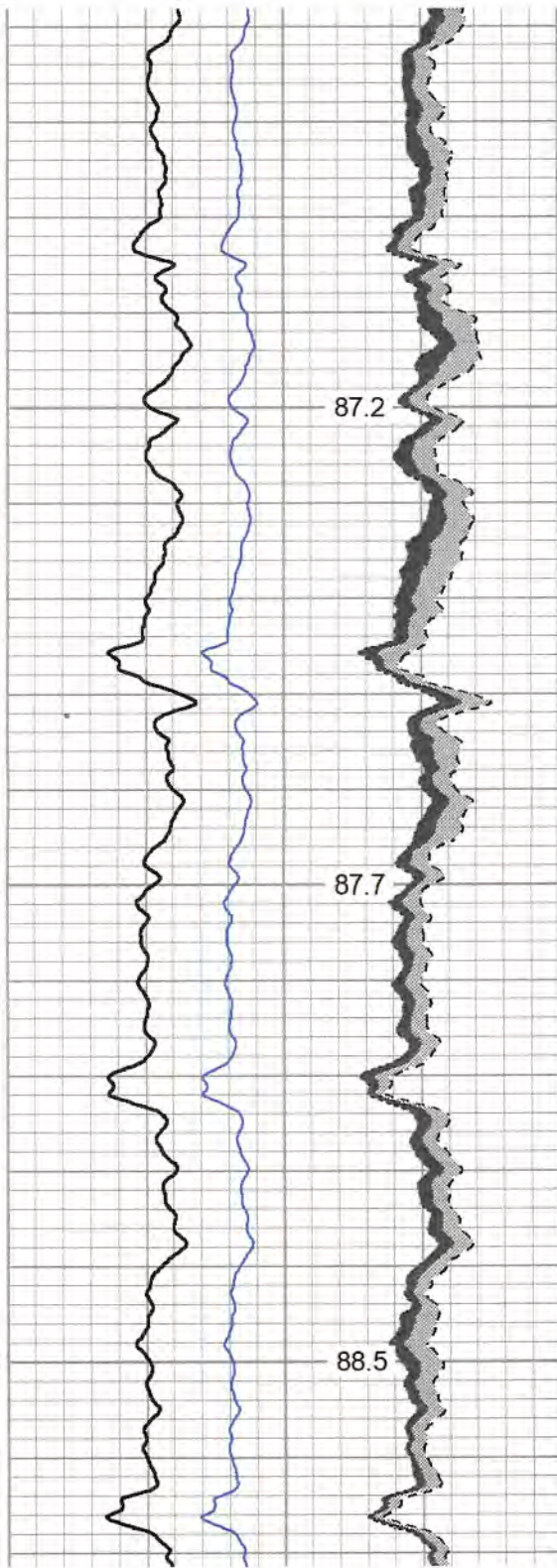
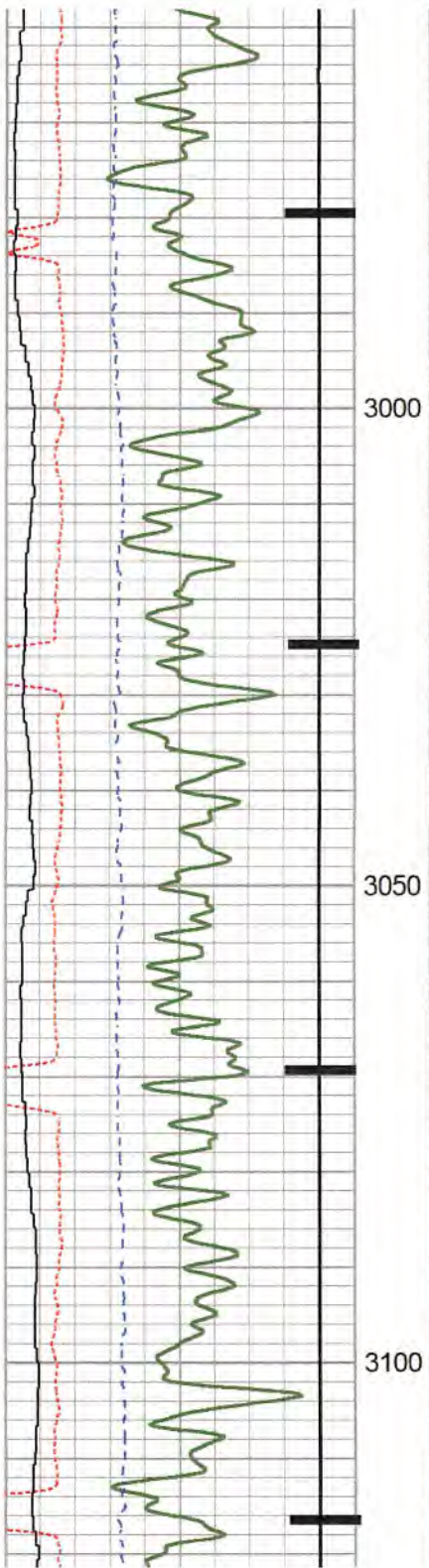


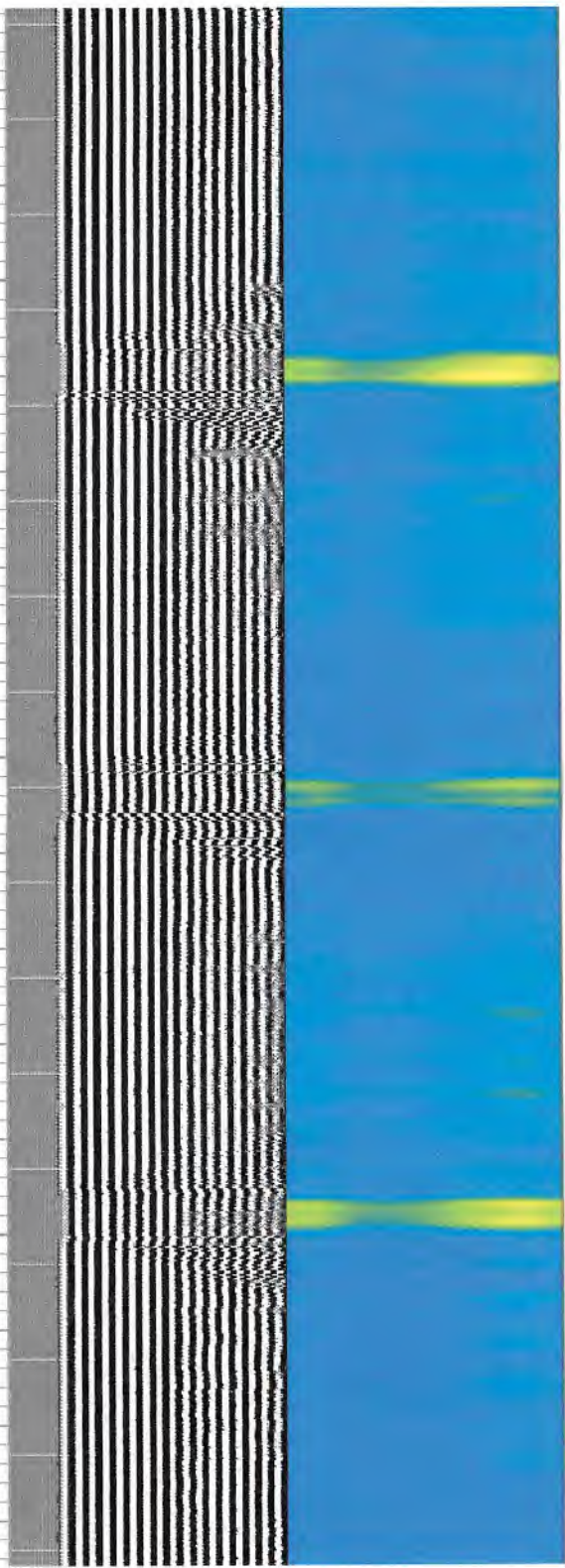
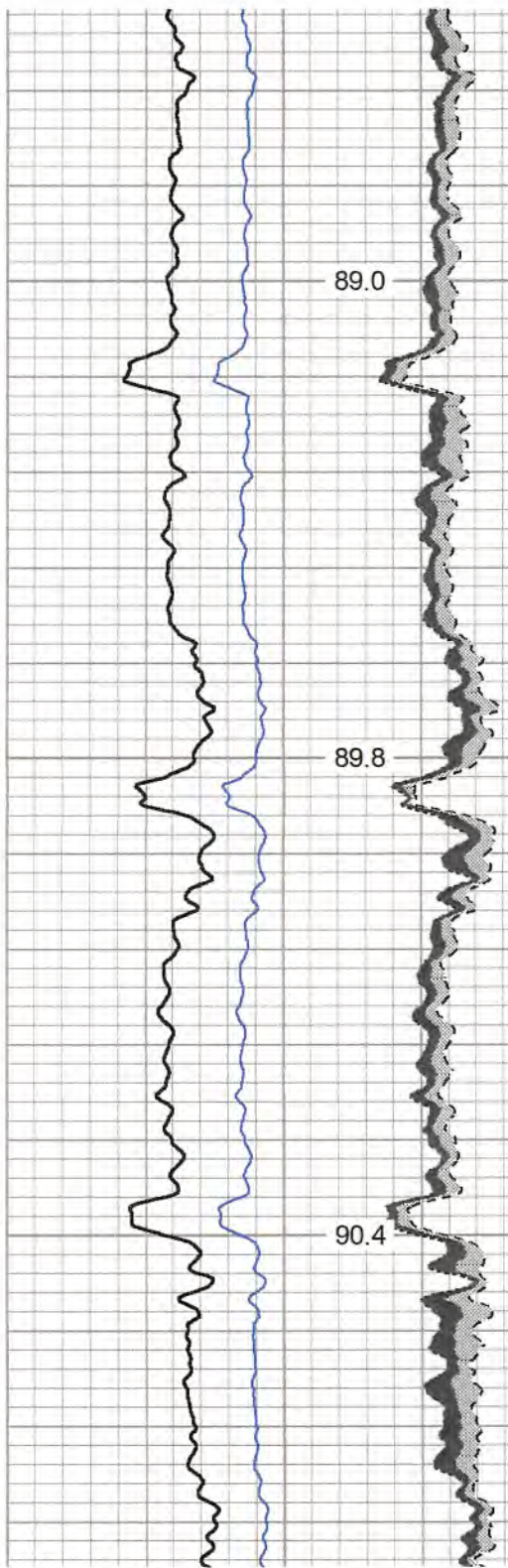
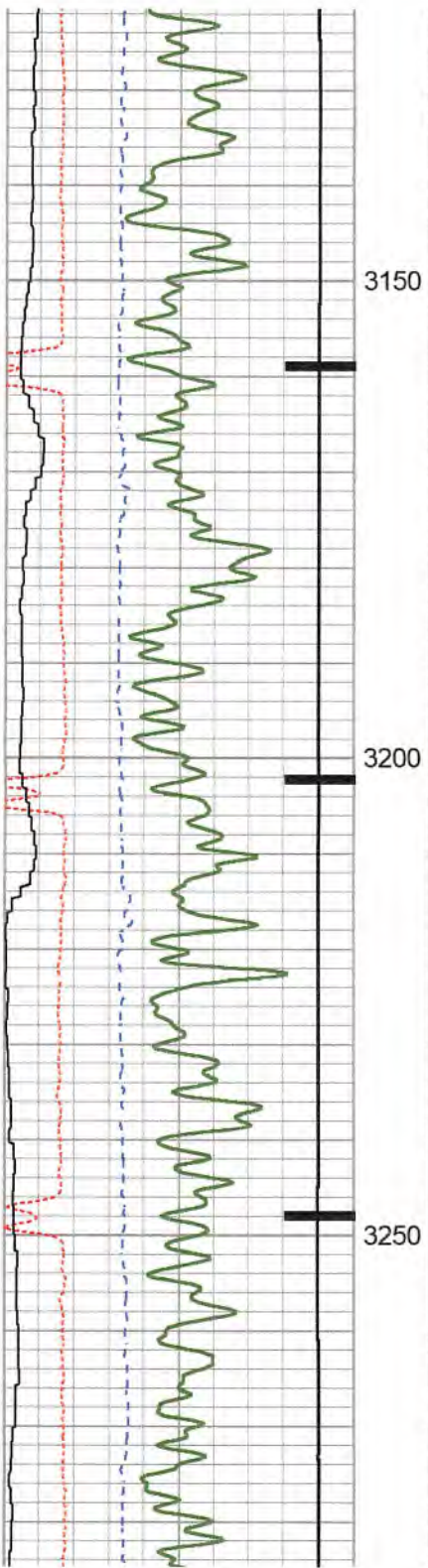


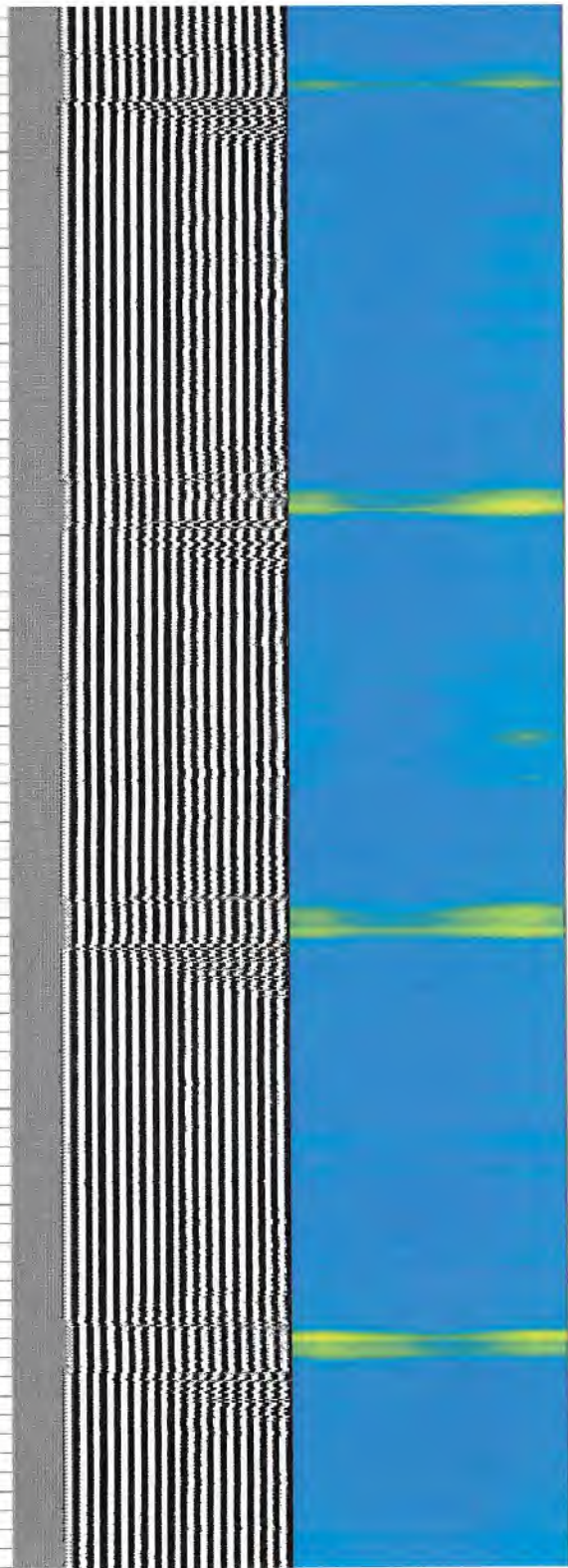
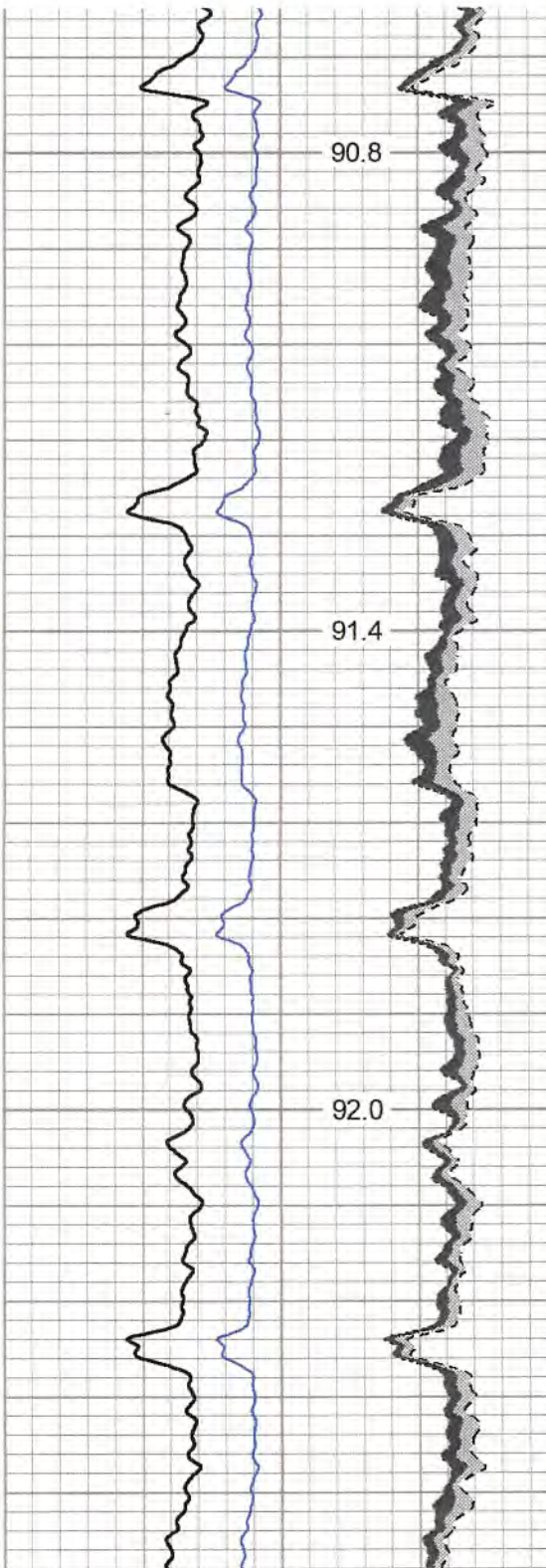
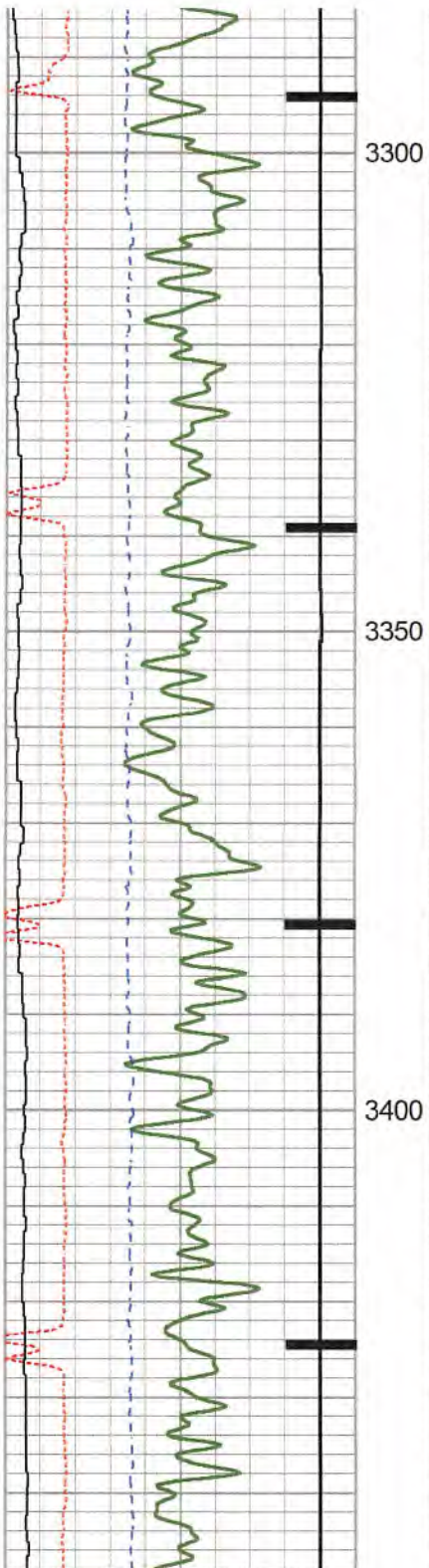


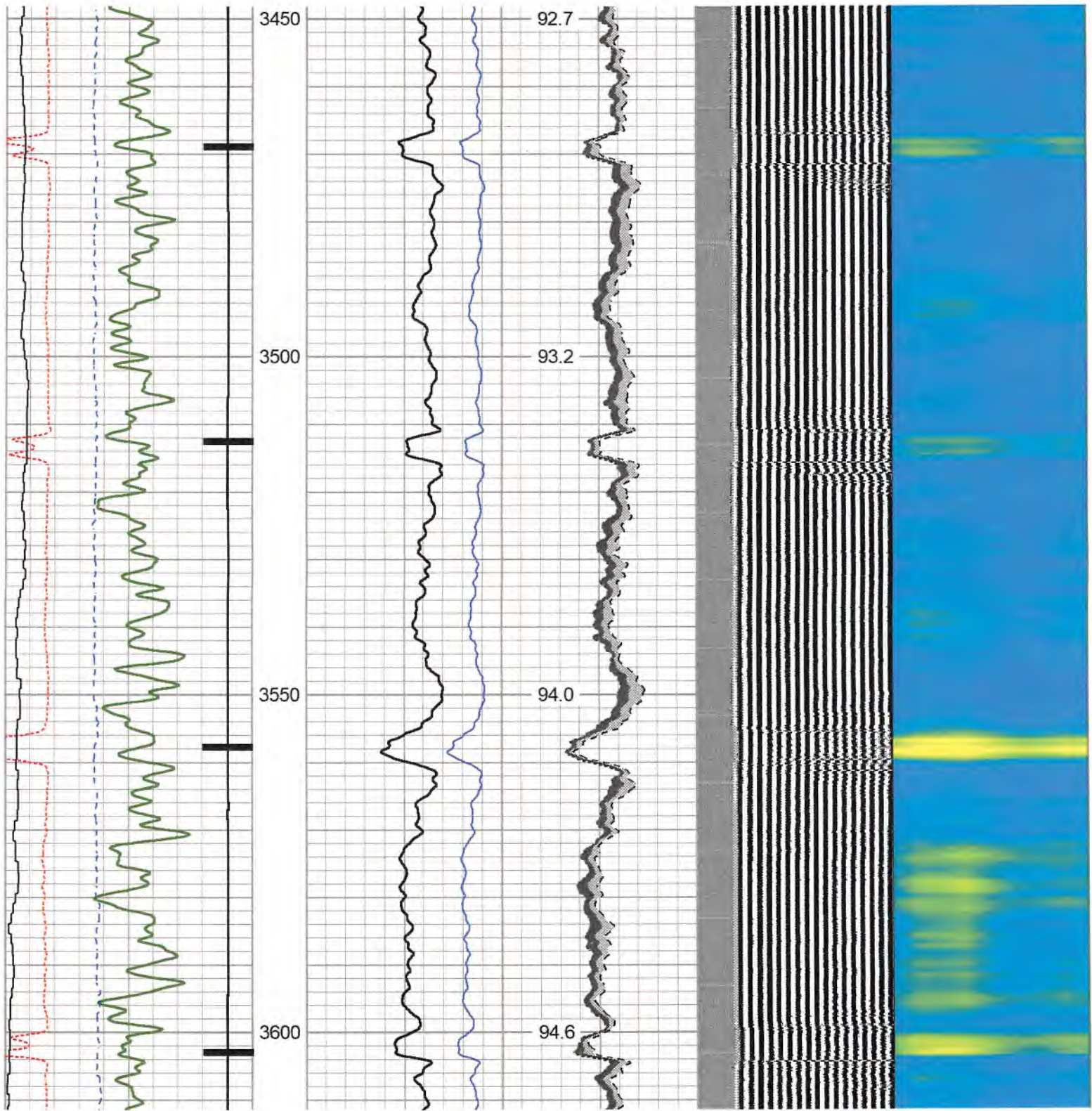


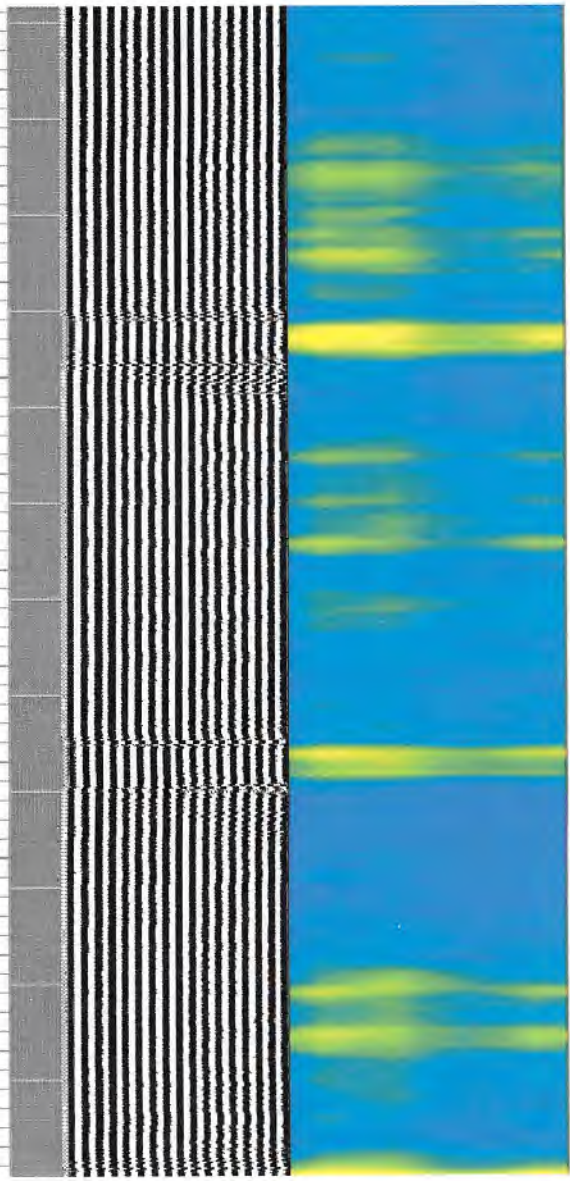
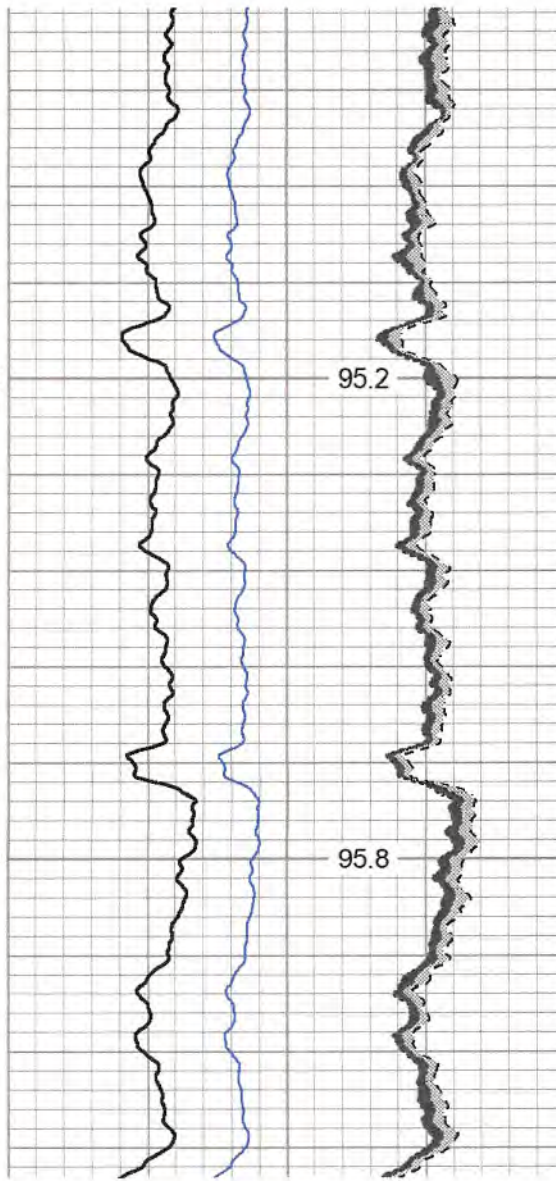
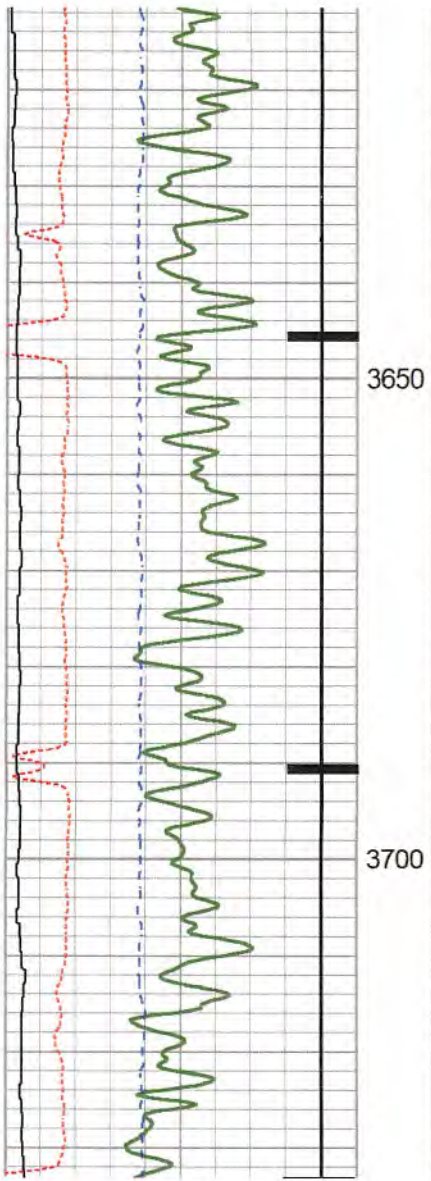


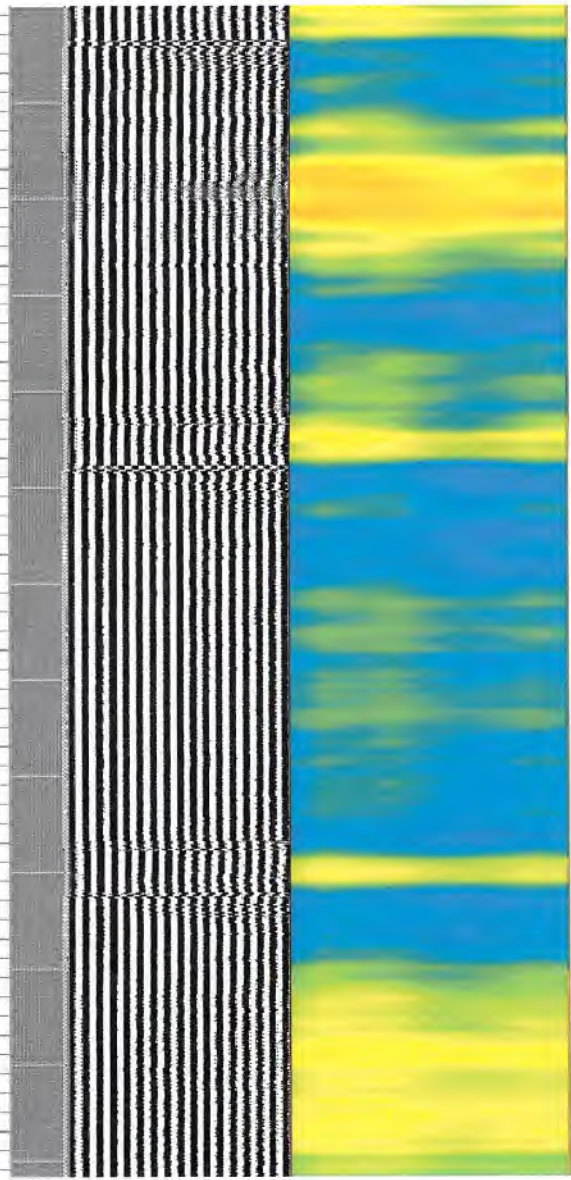
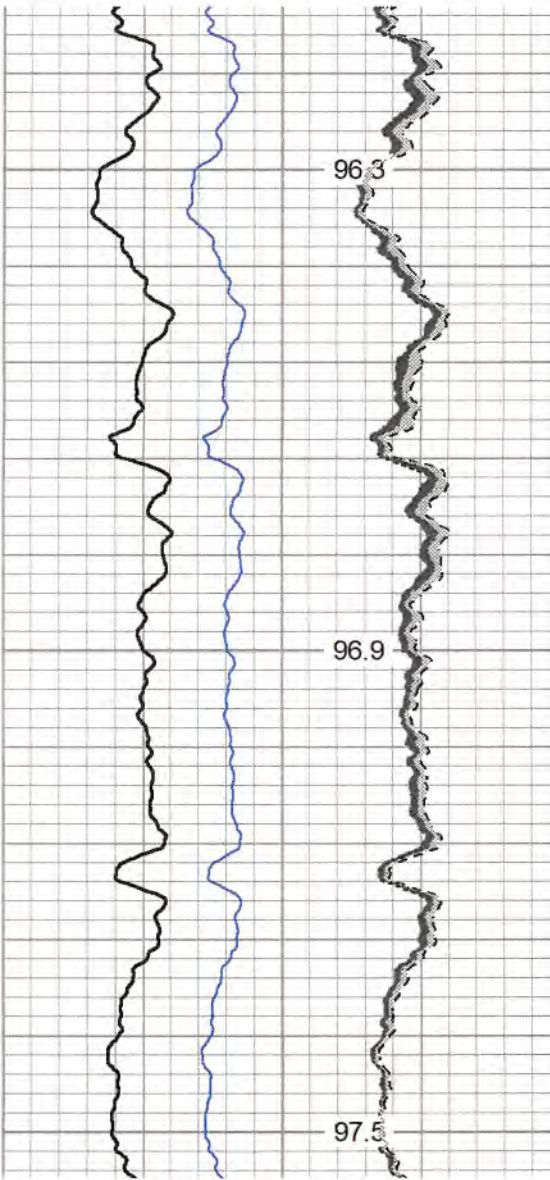
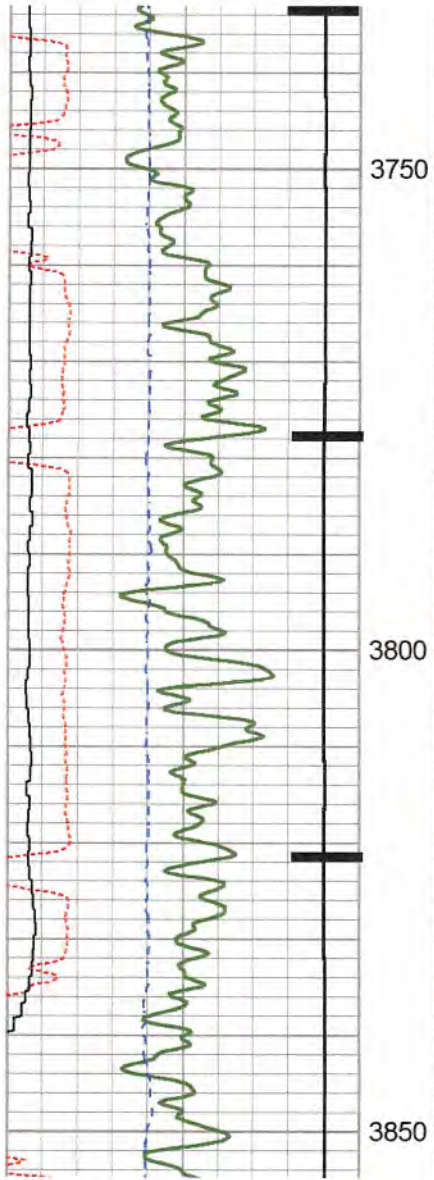


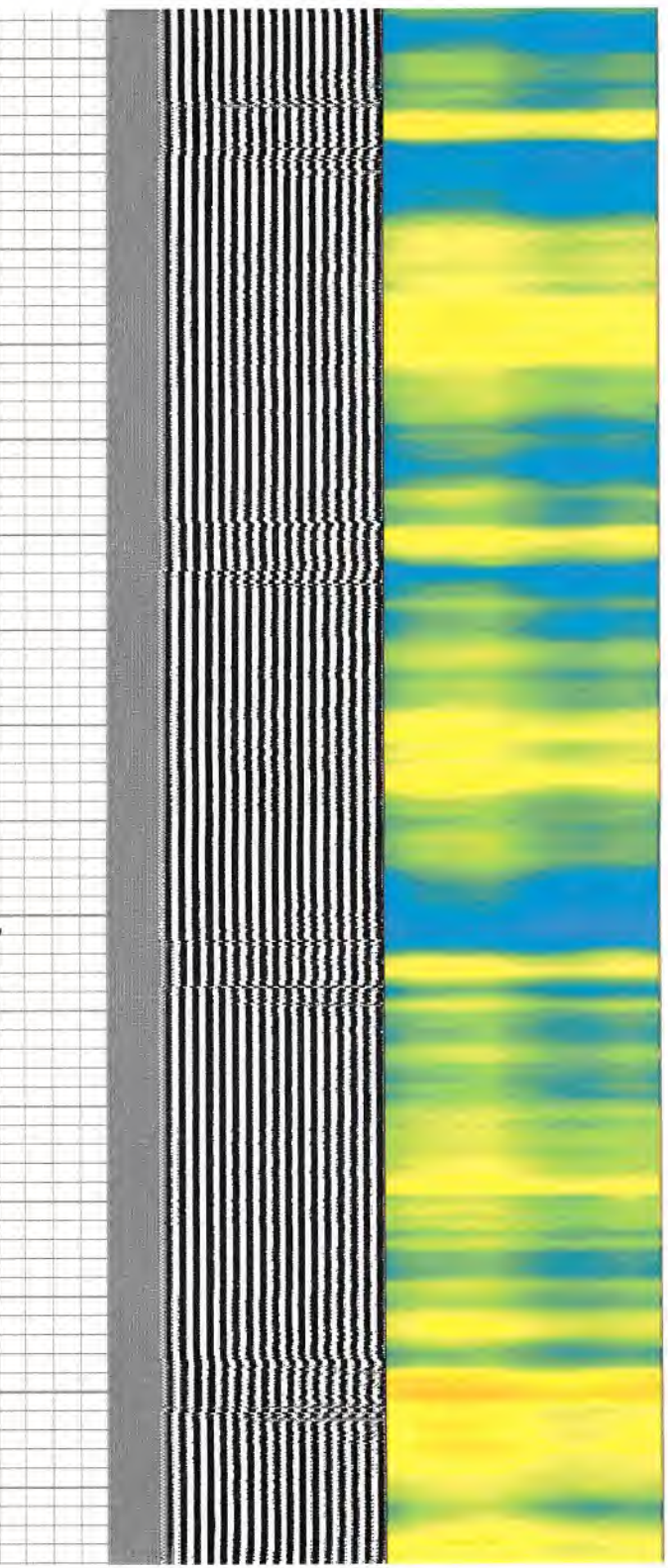
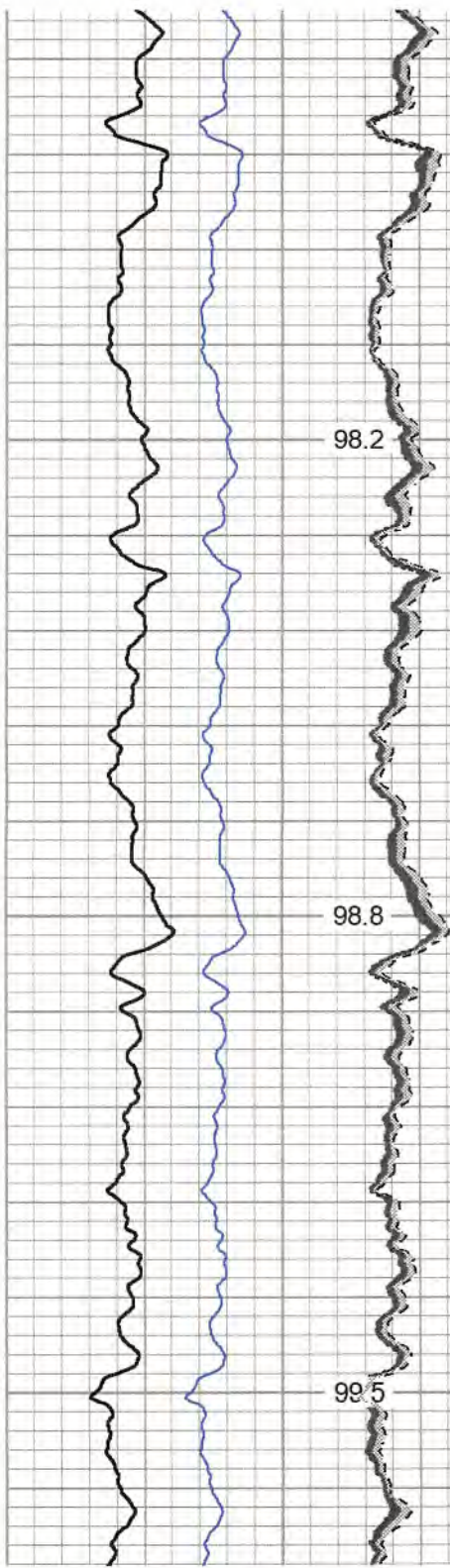
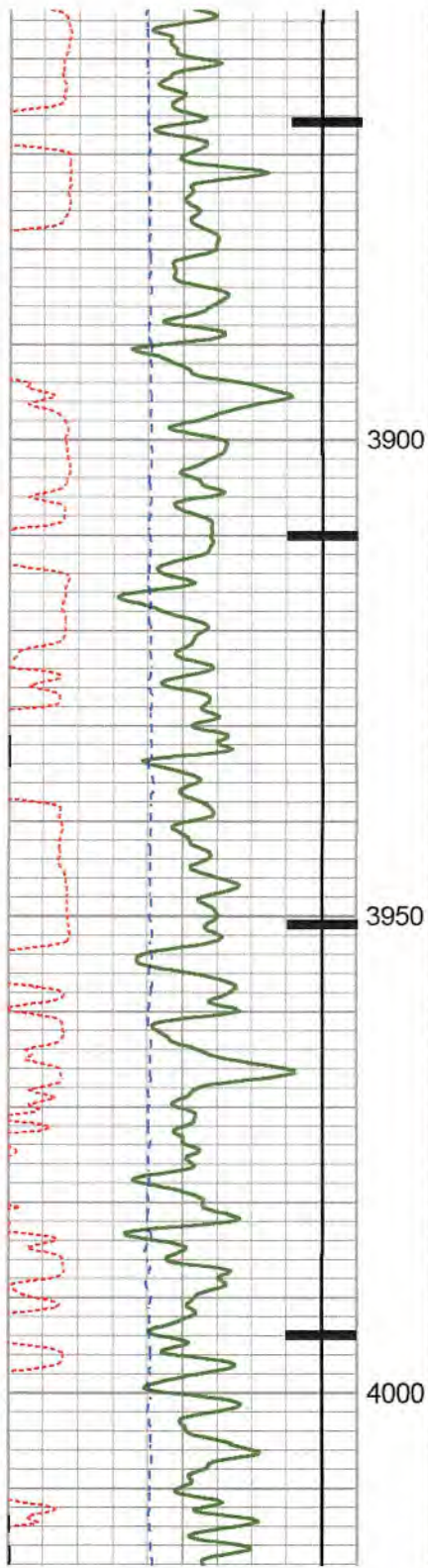


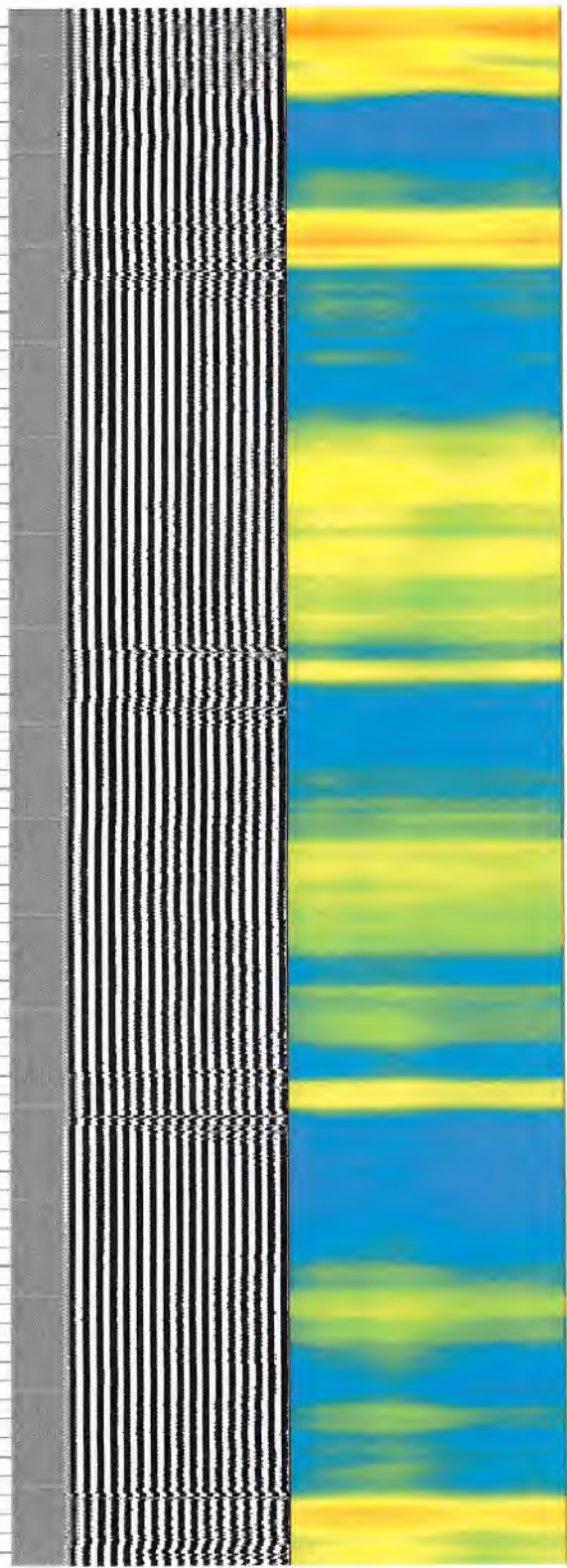
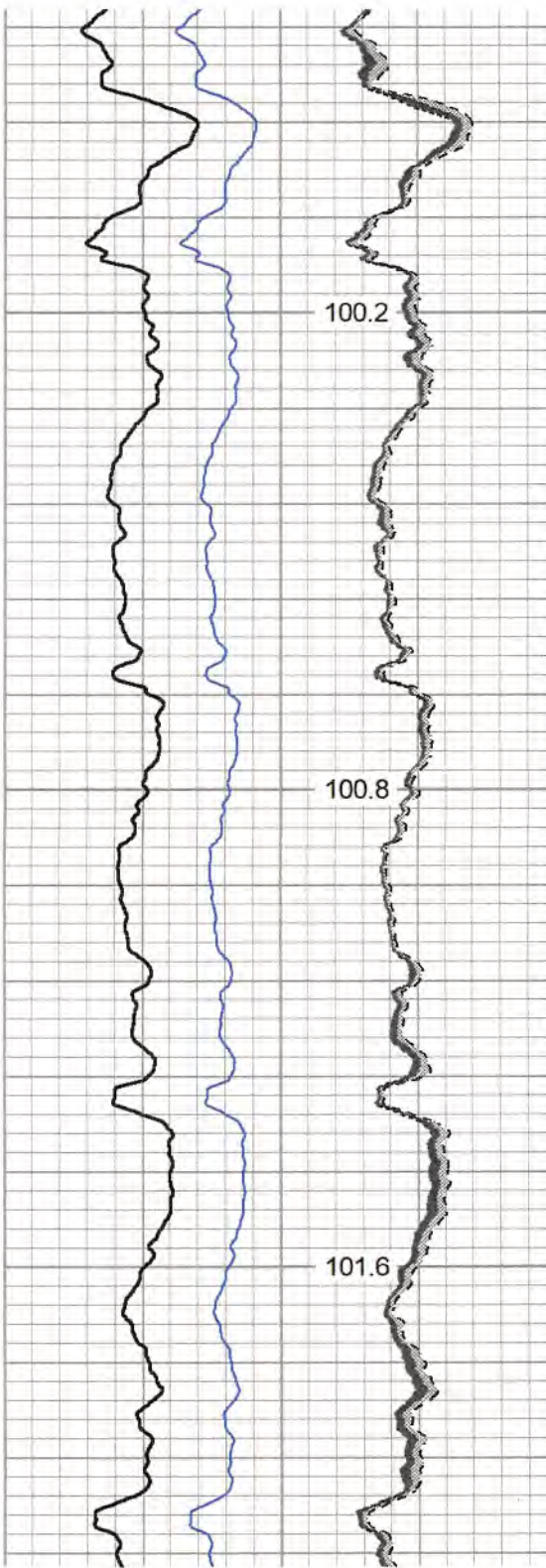
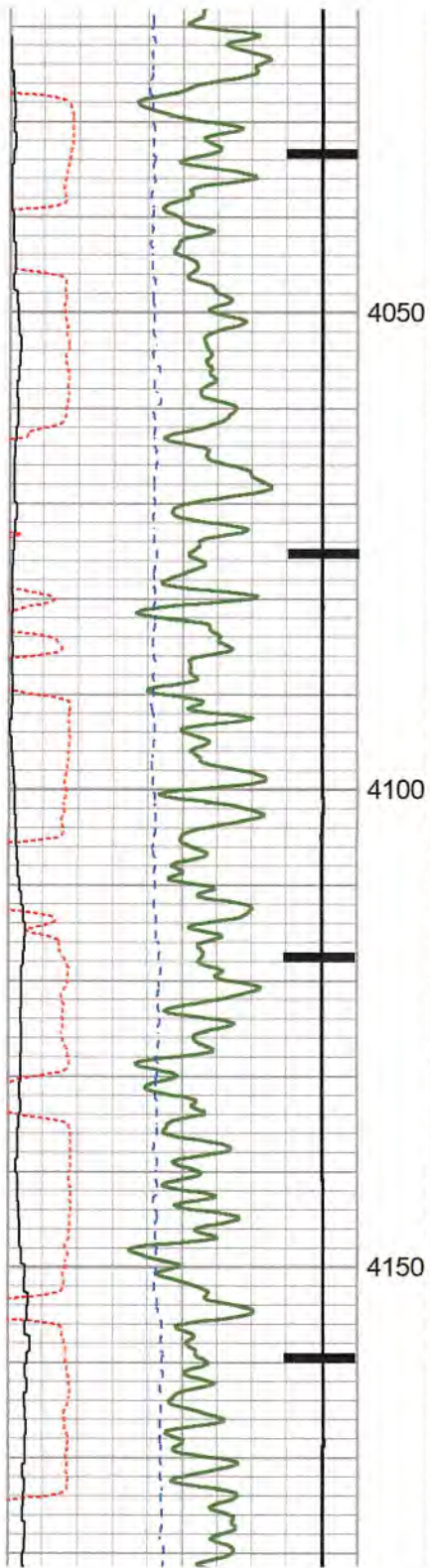


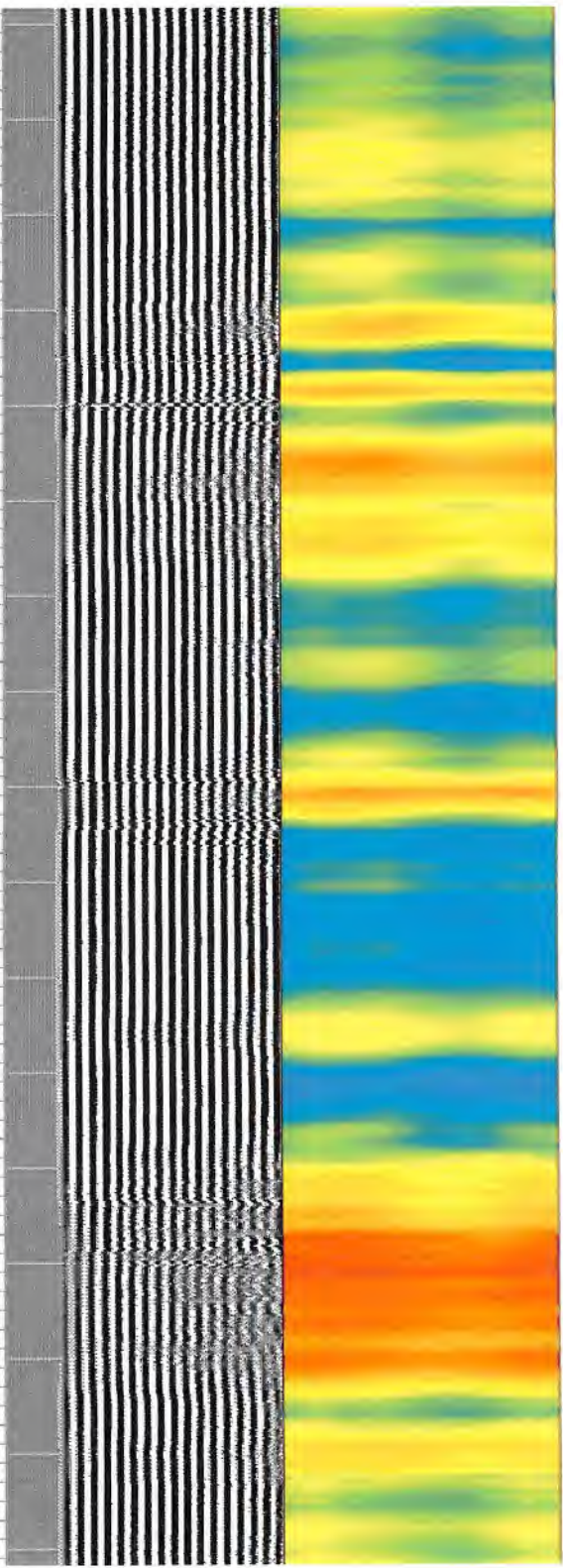
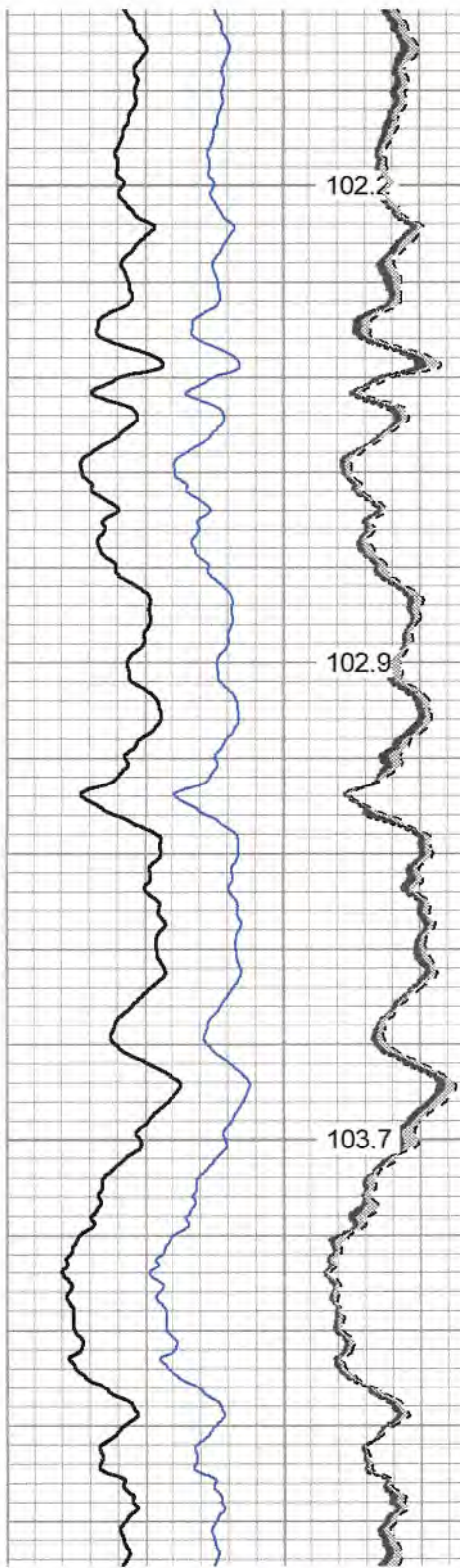
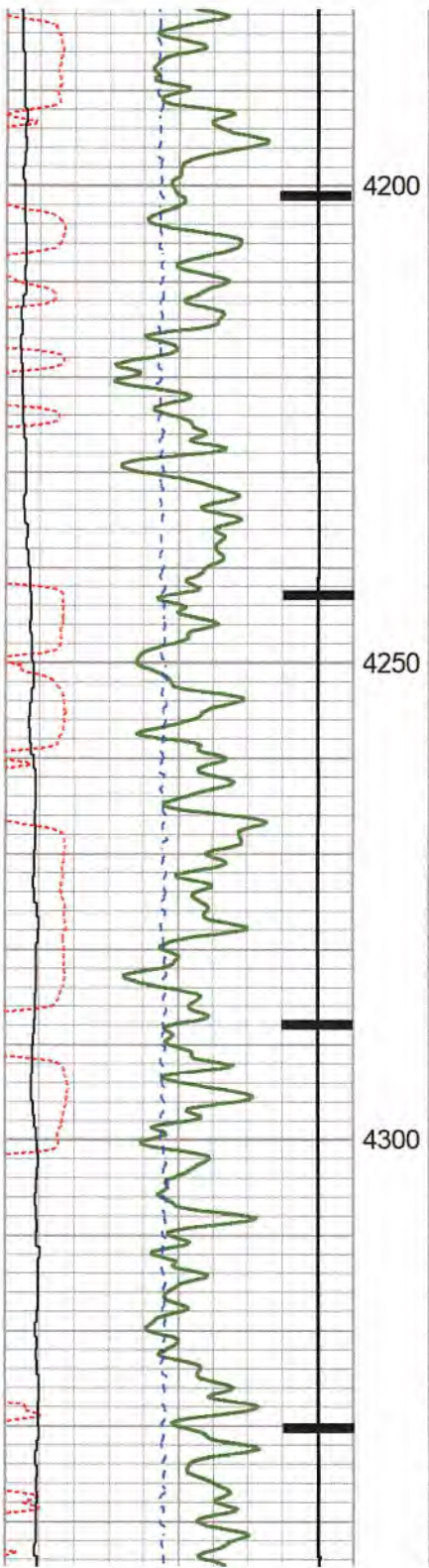


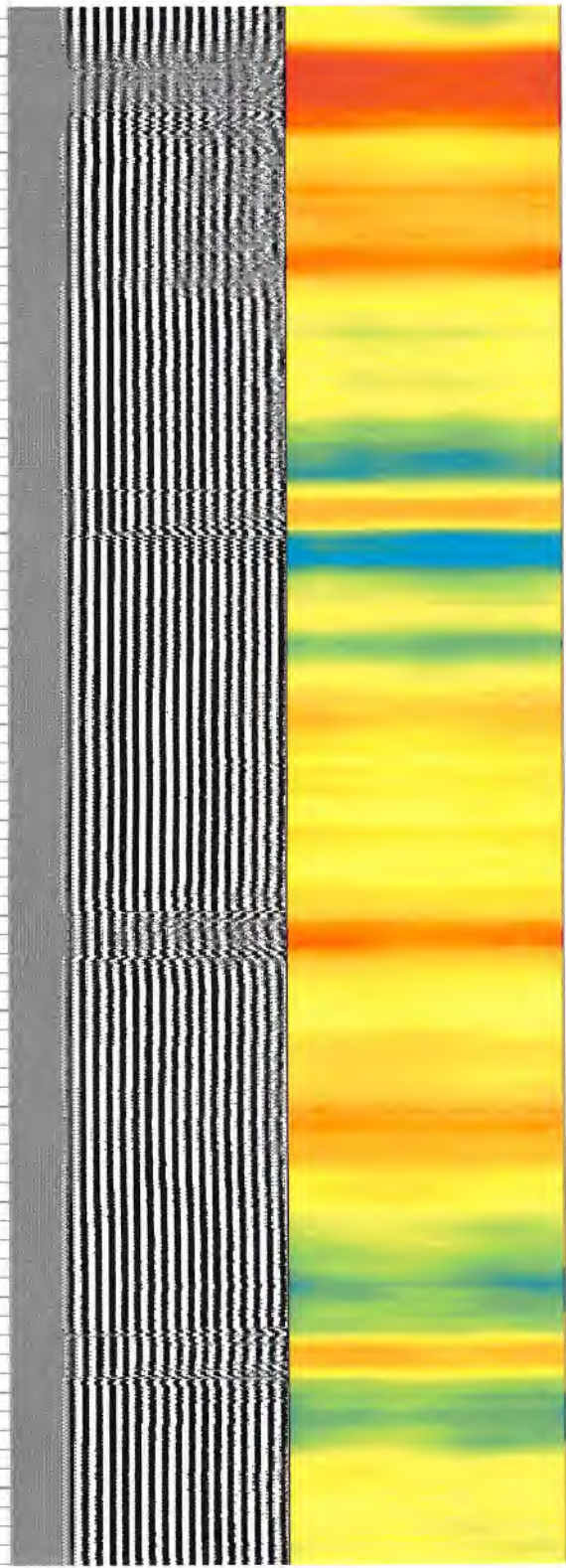
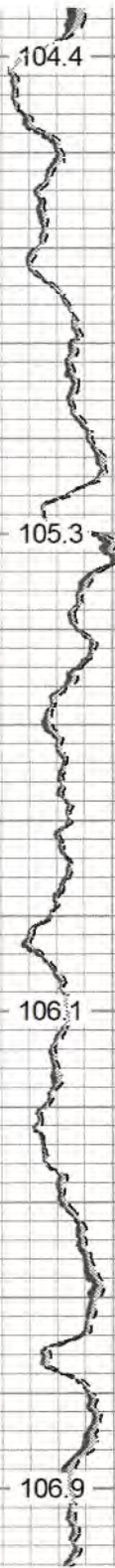
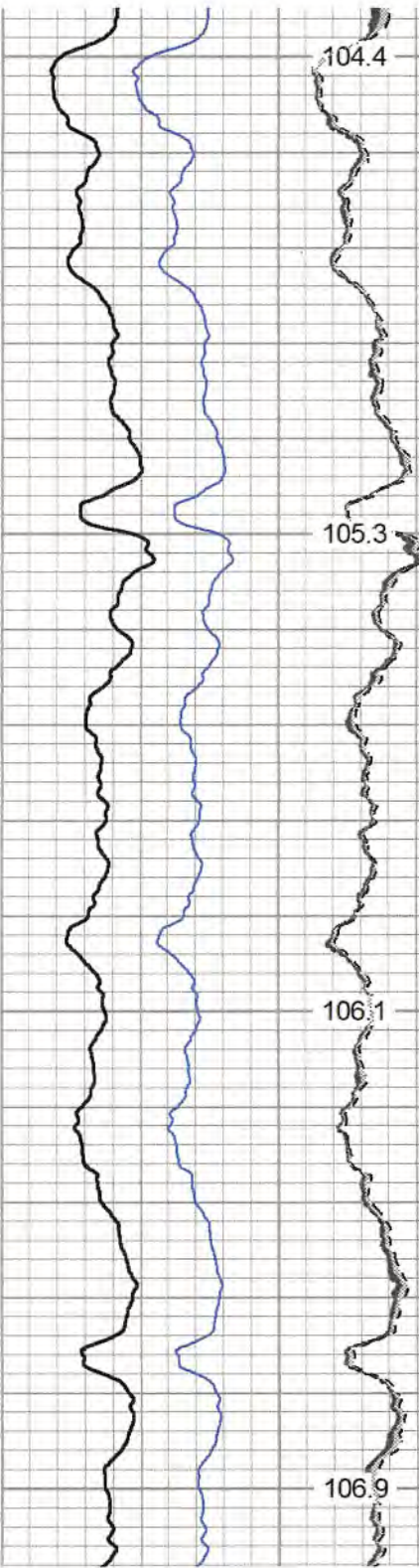
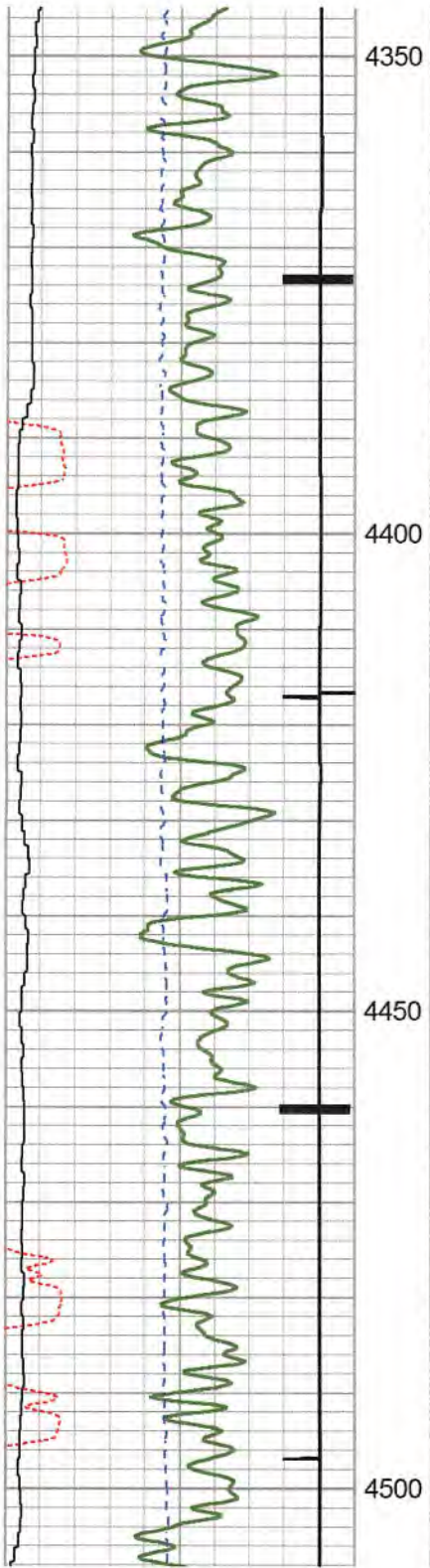


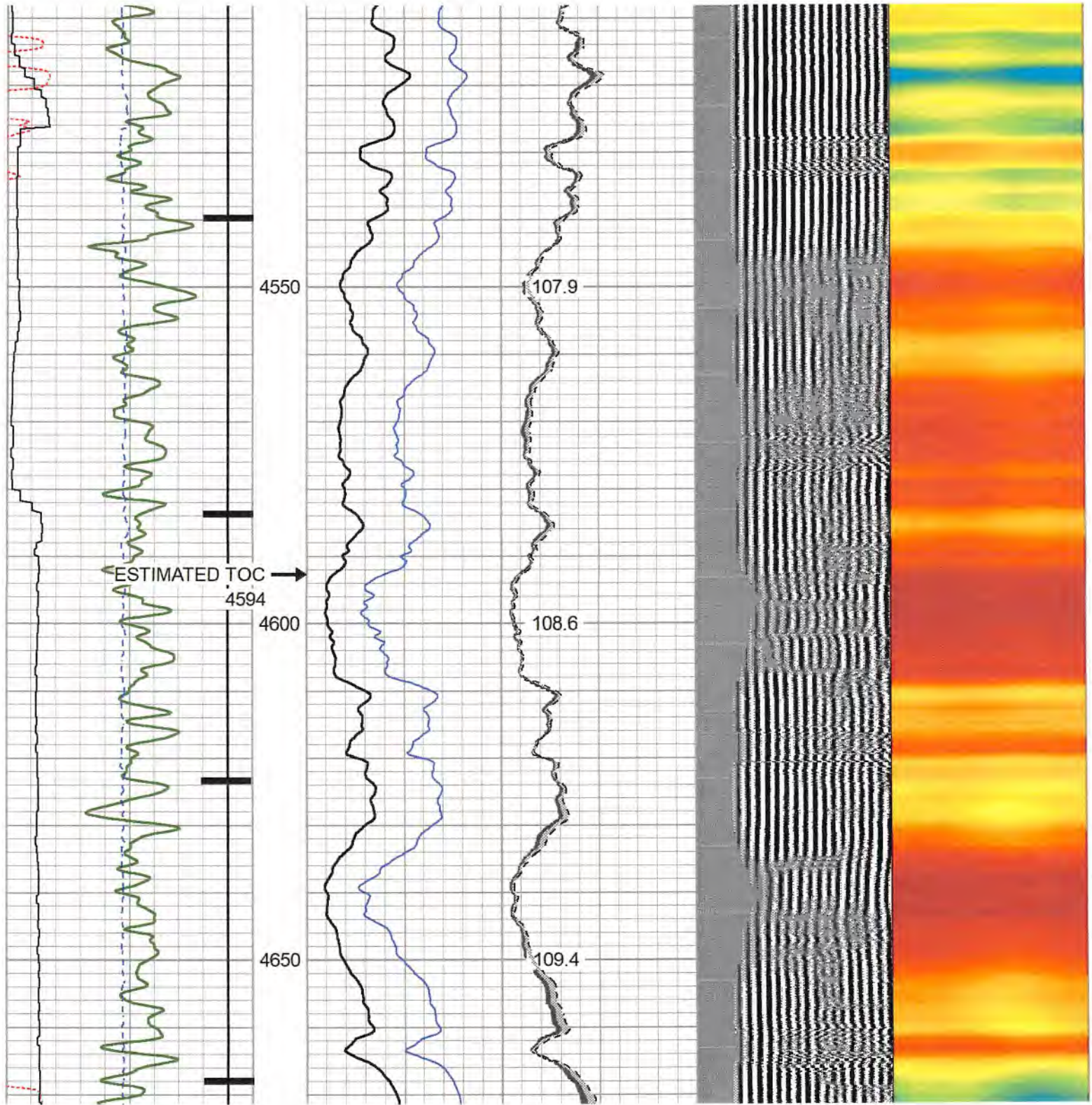


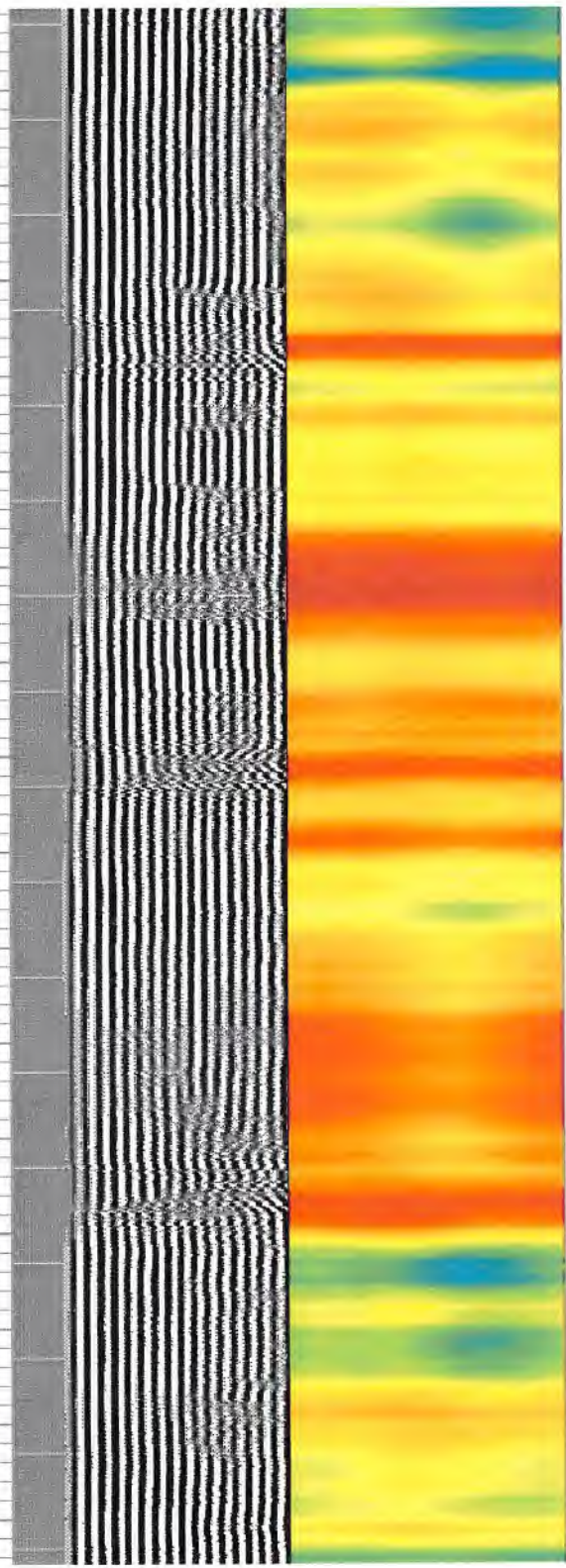
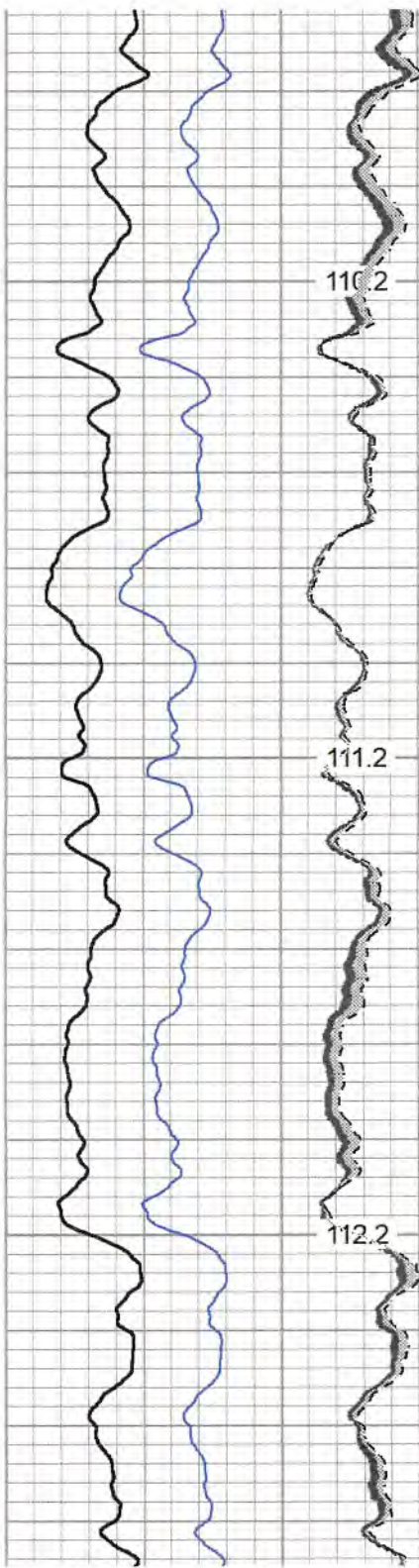
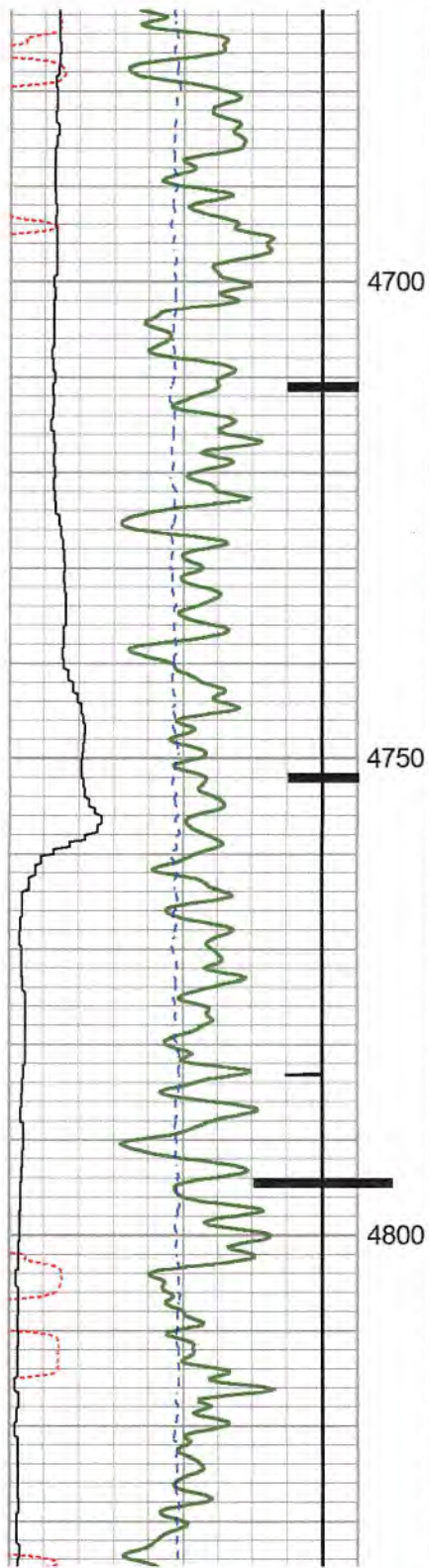


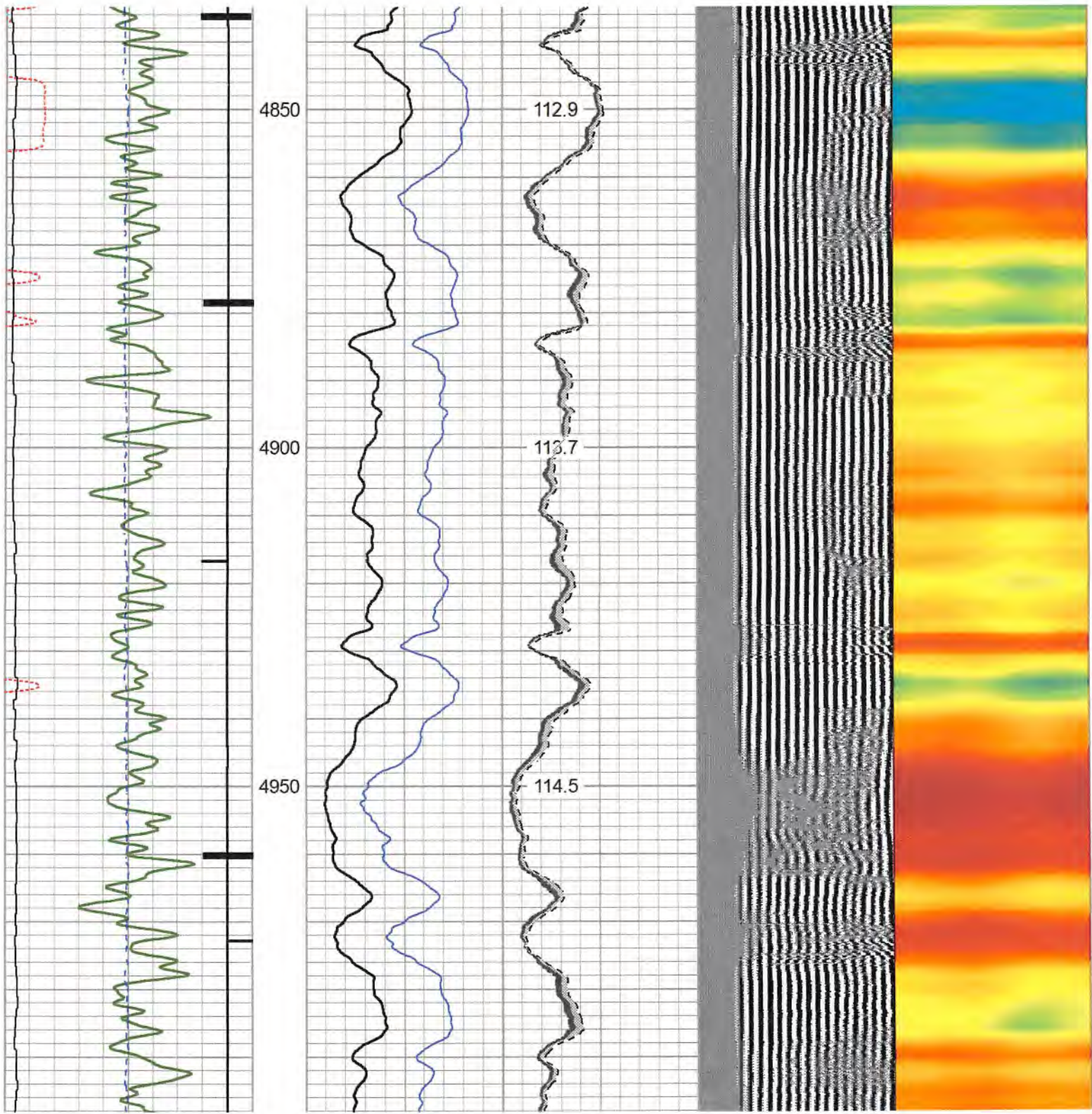


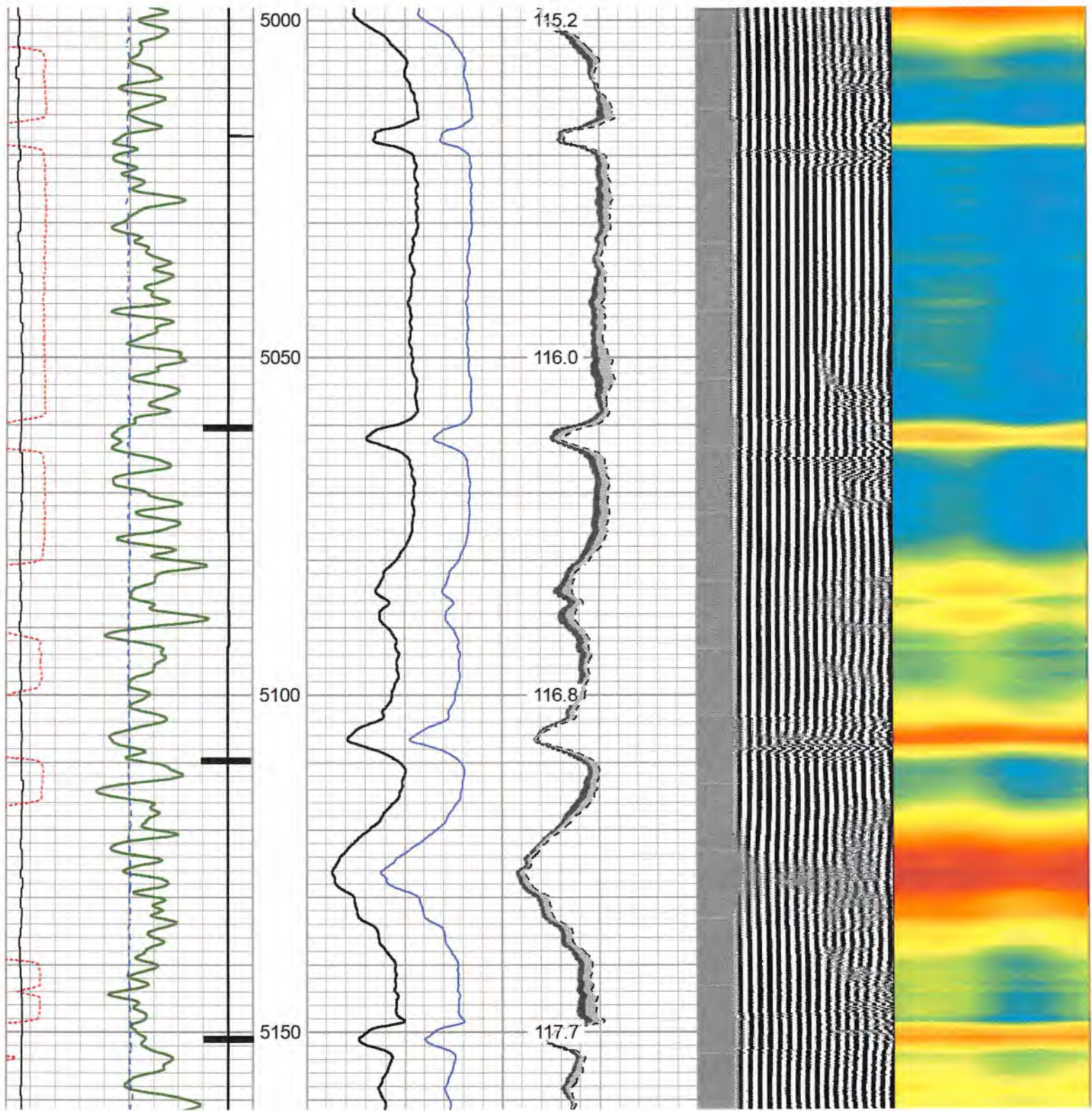


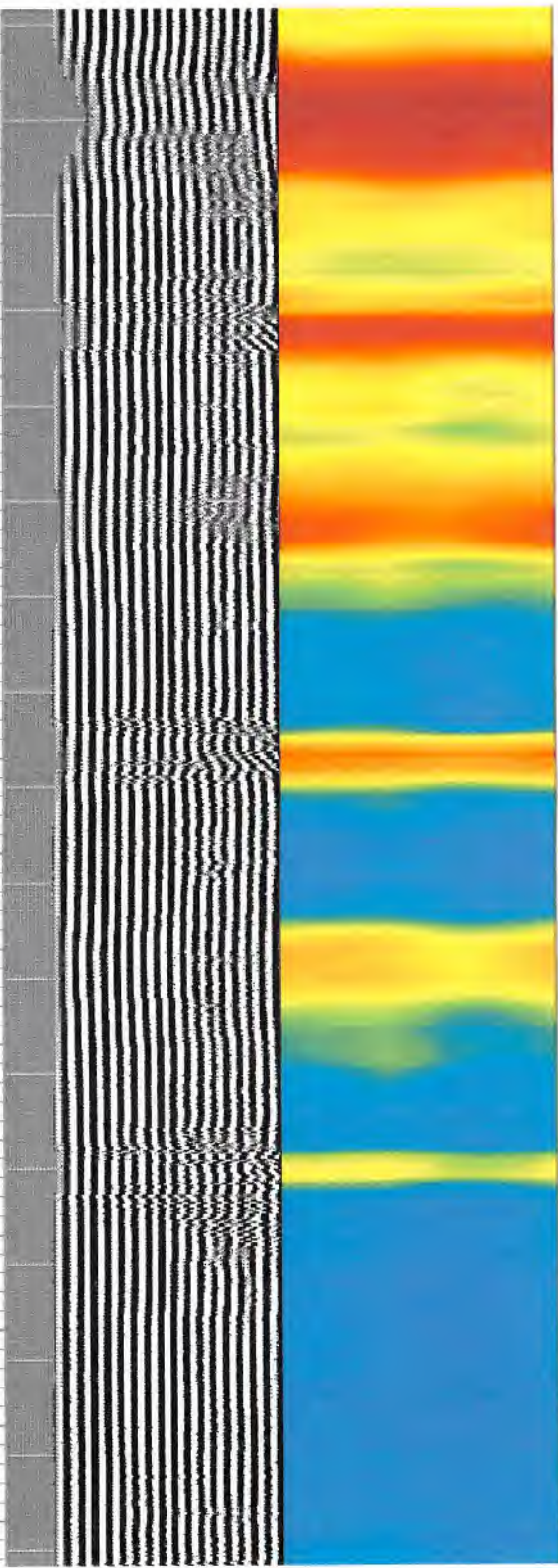
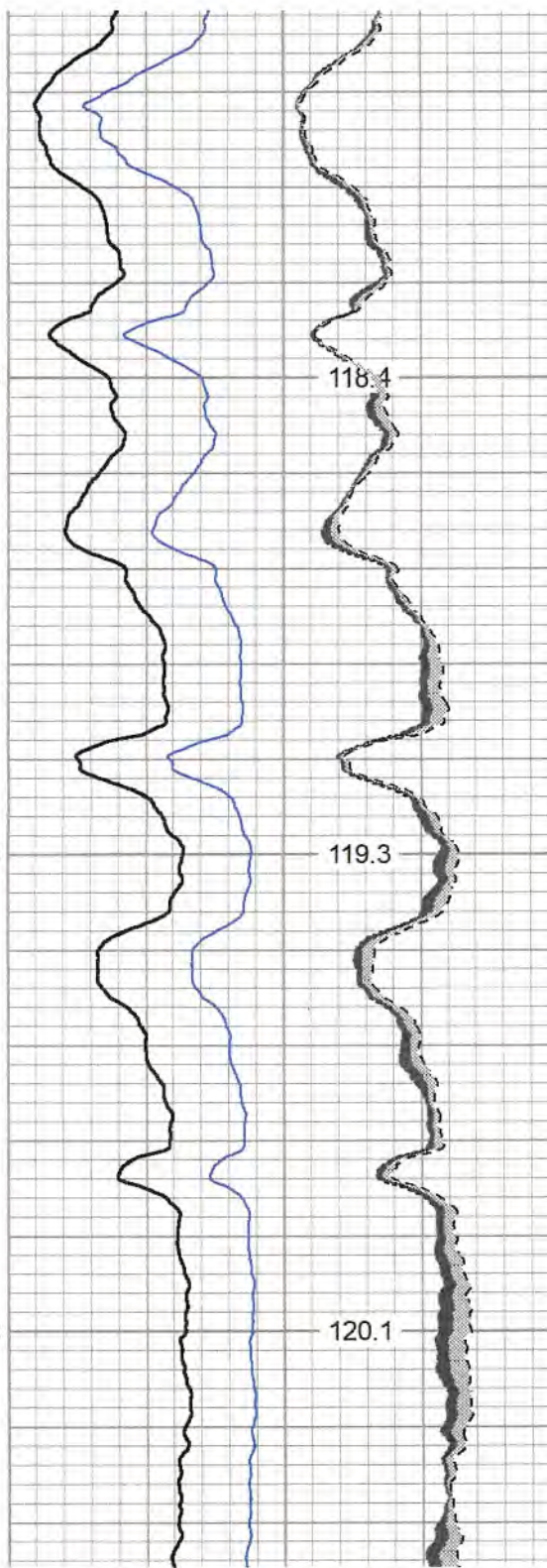
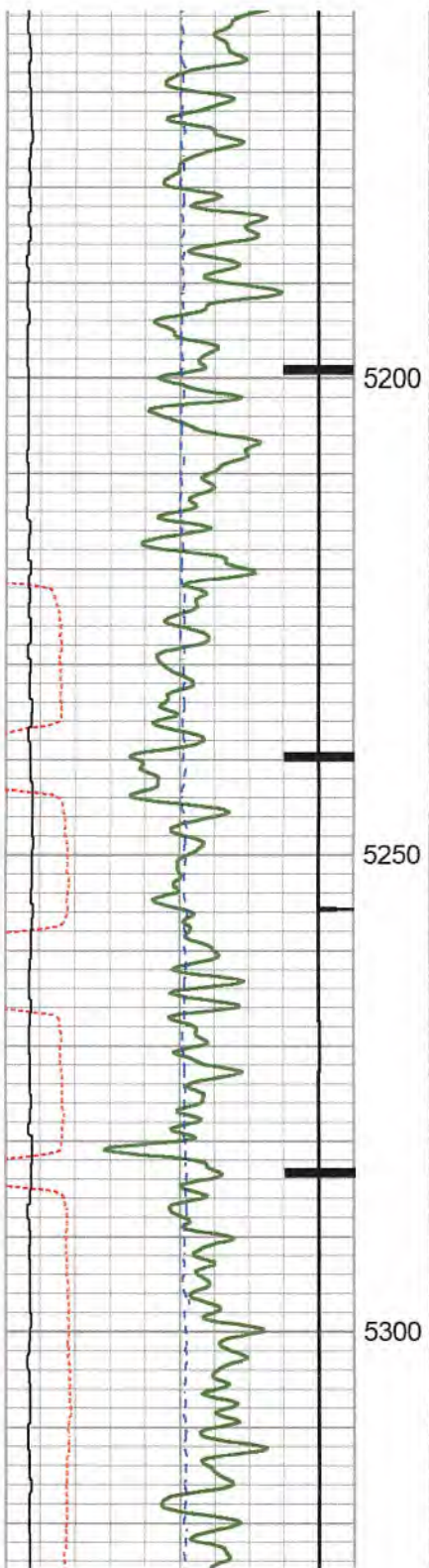


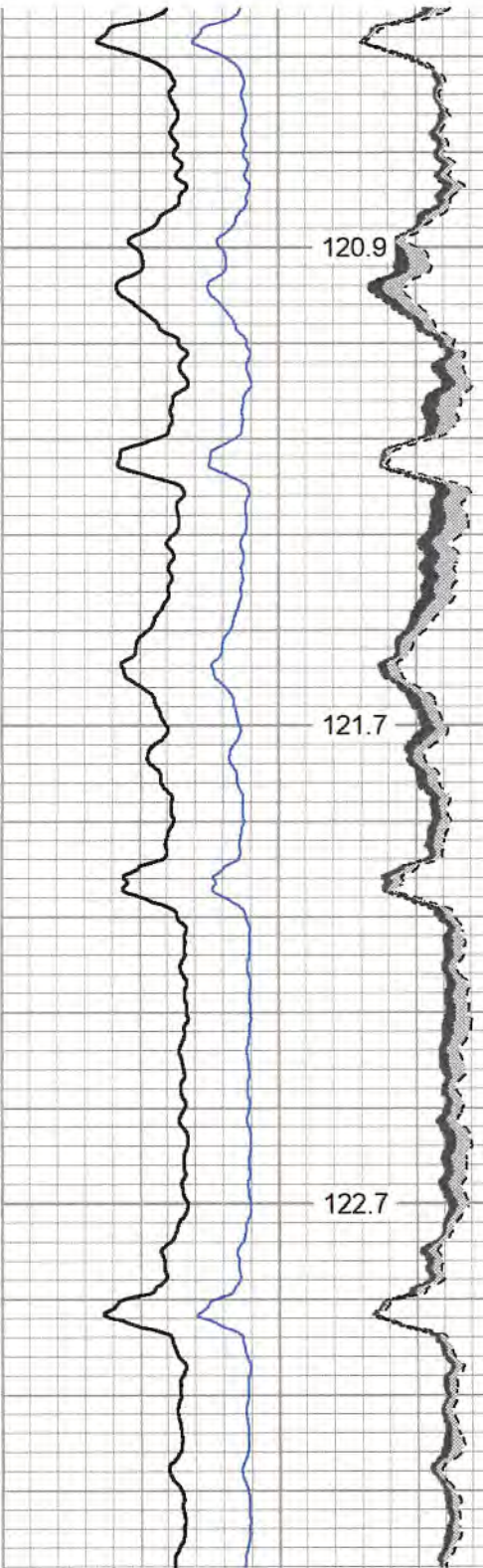
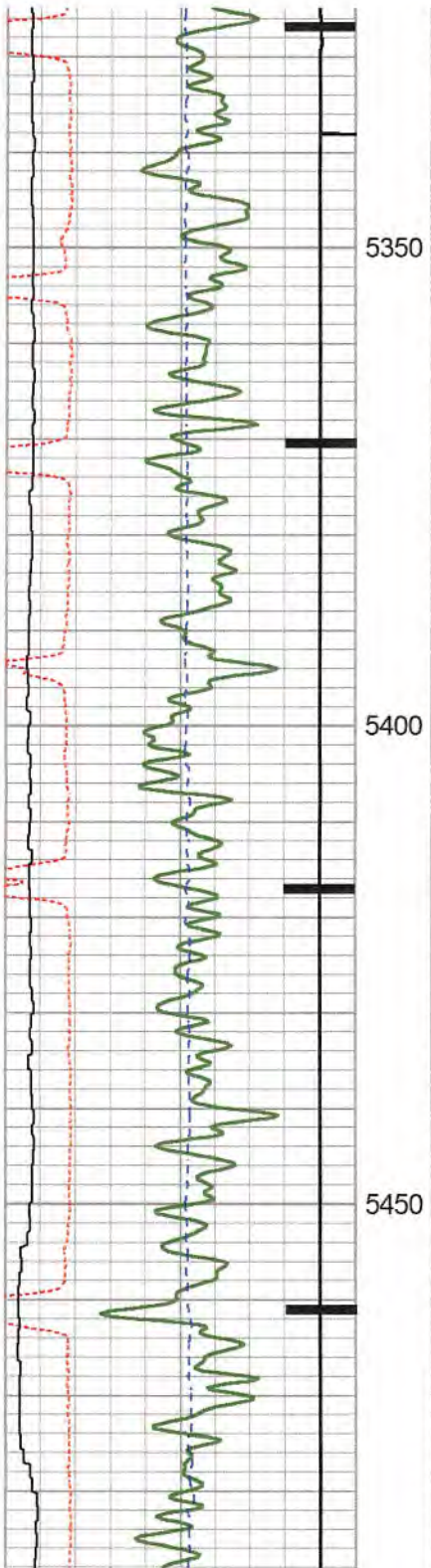








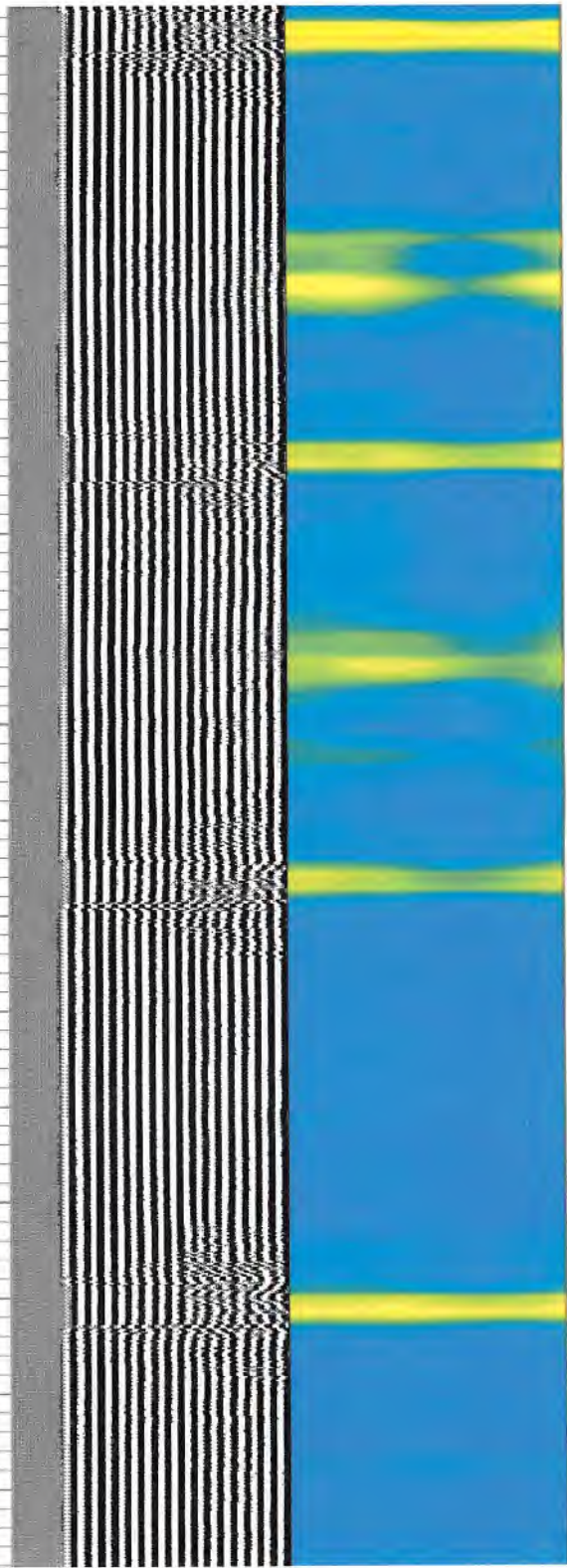


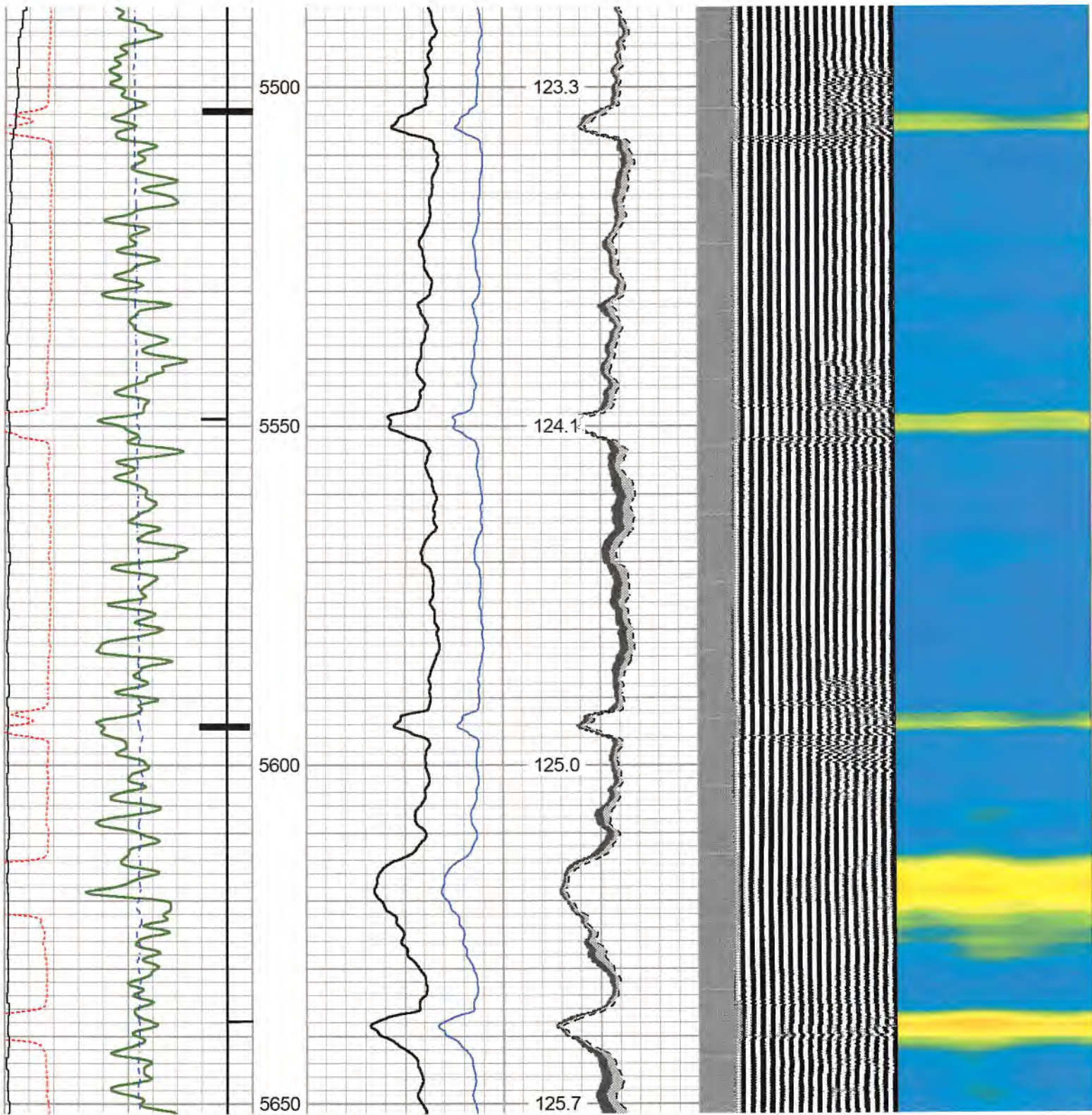


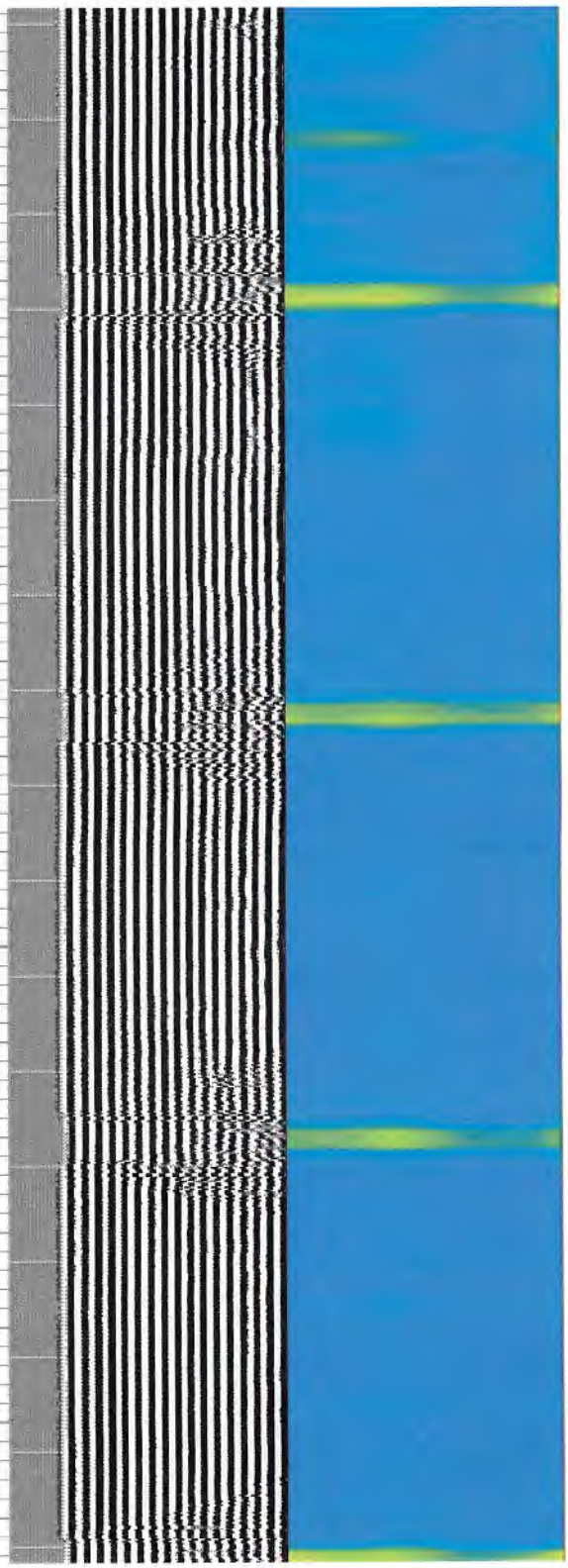
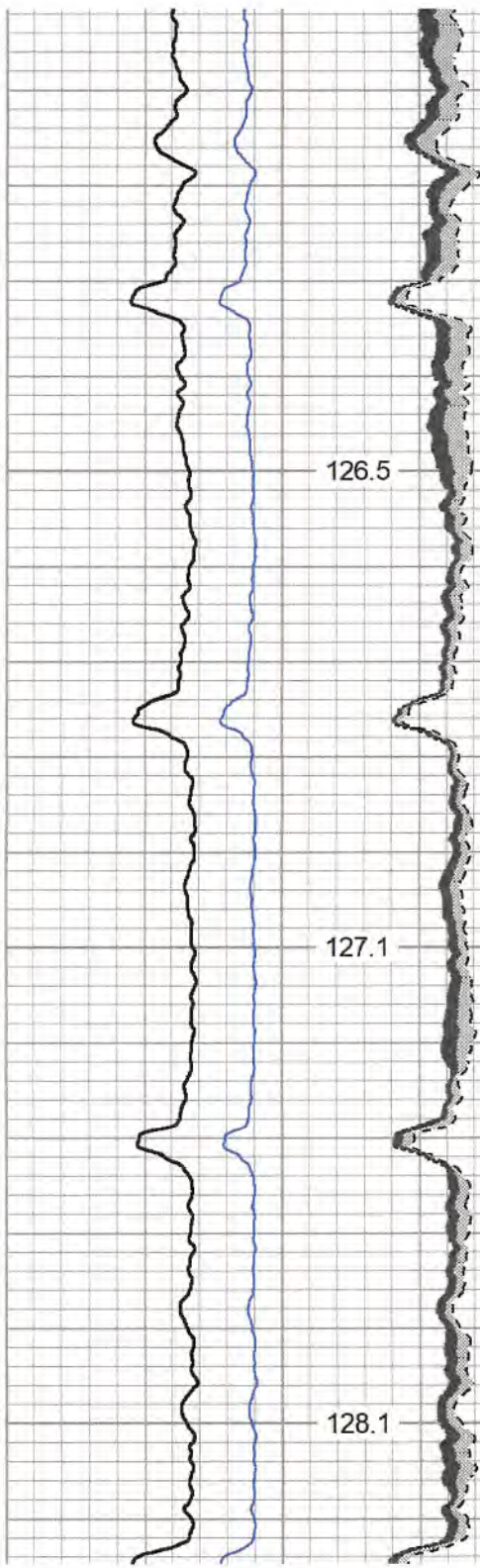
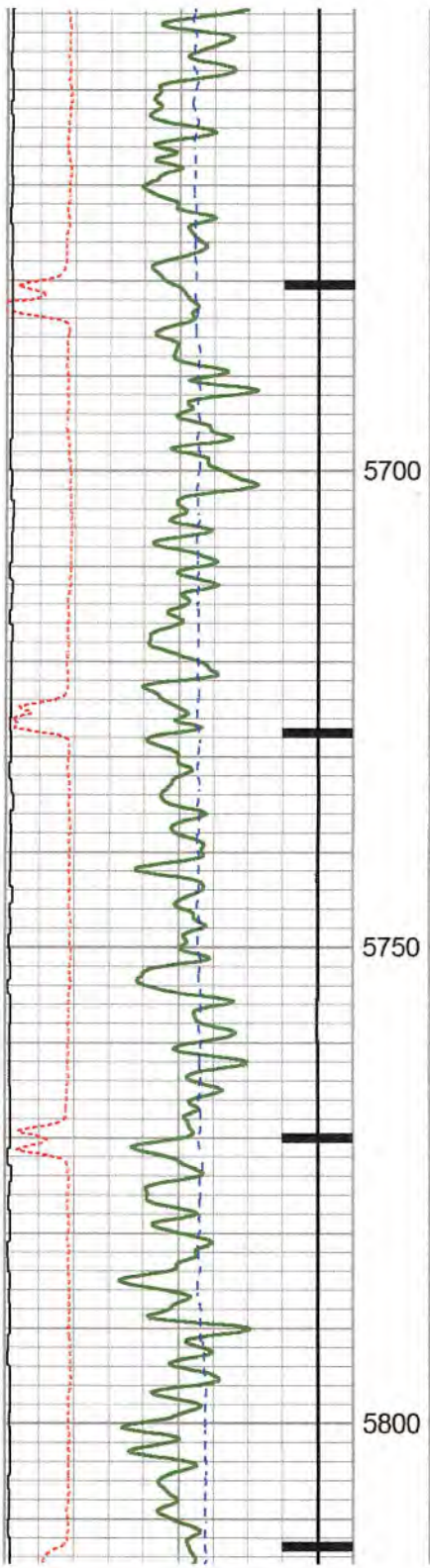
120.9

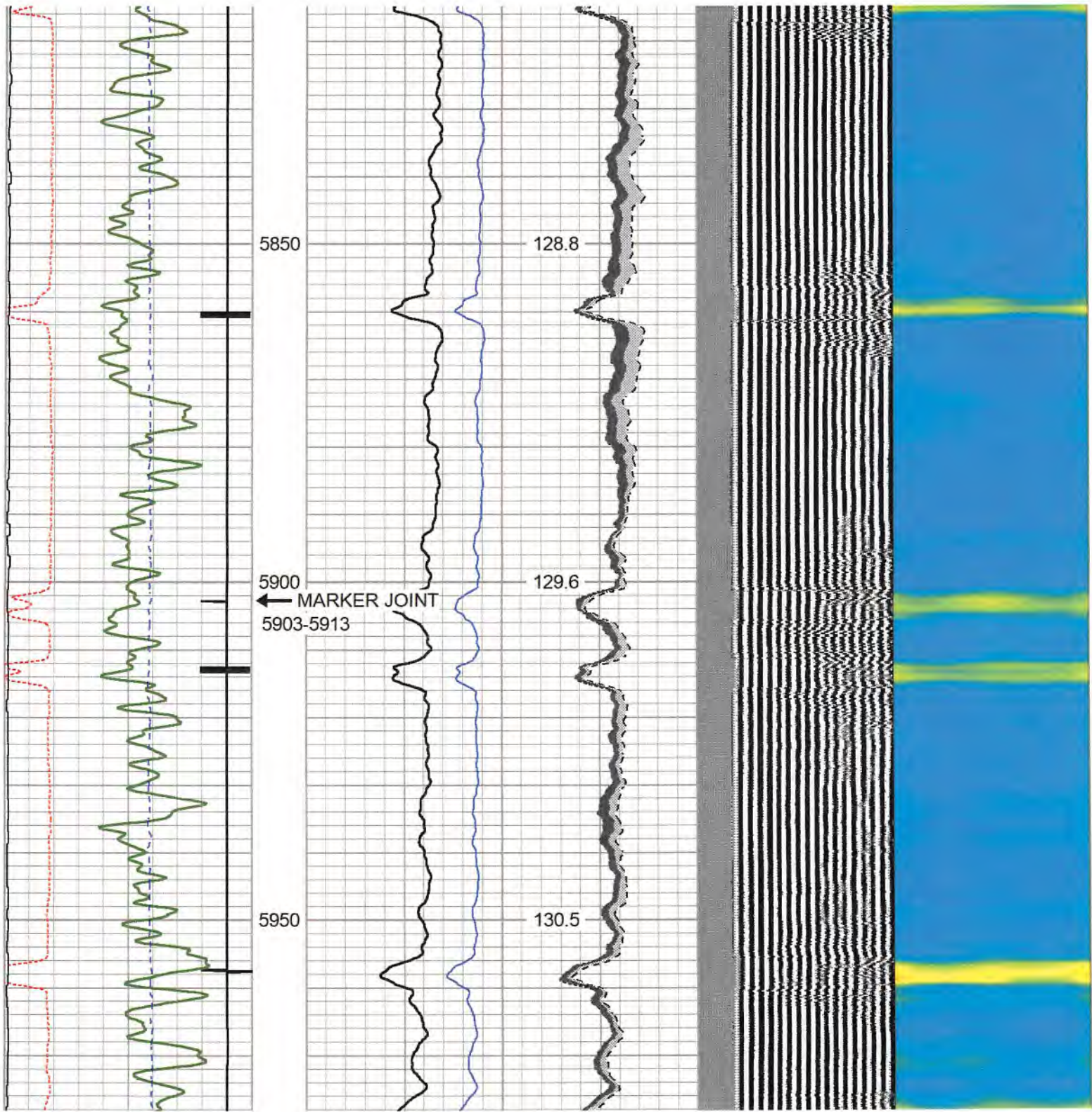
121.7

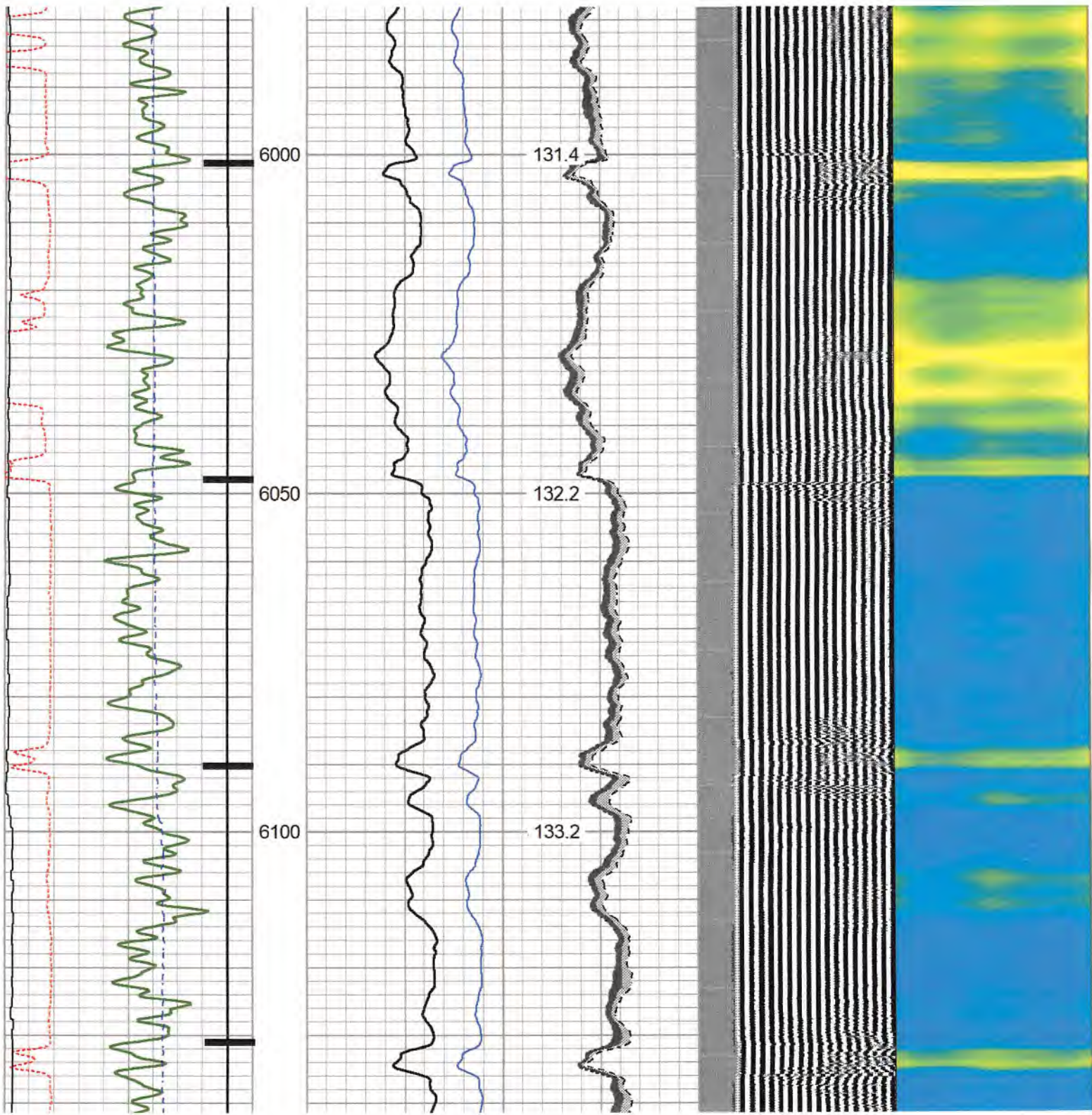
122.7

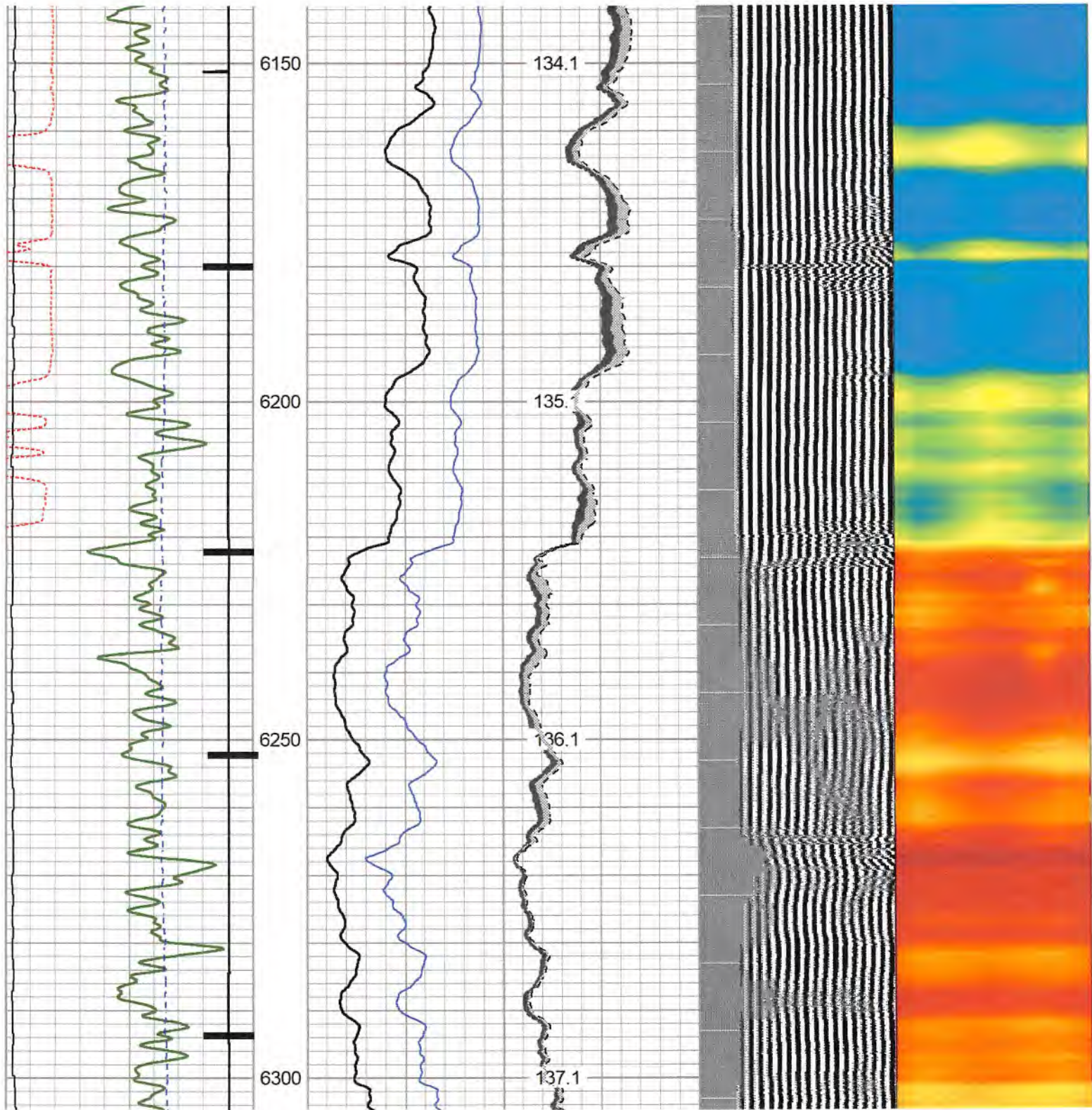


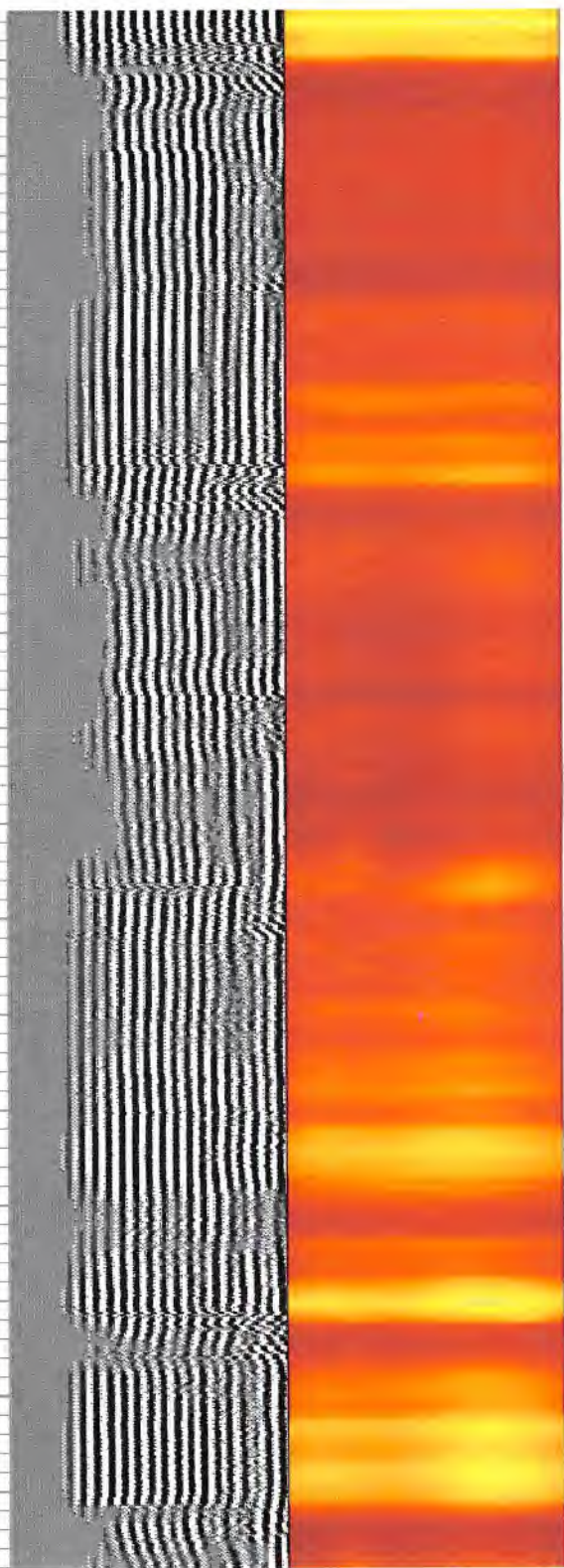
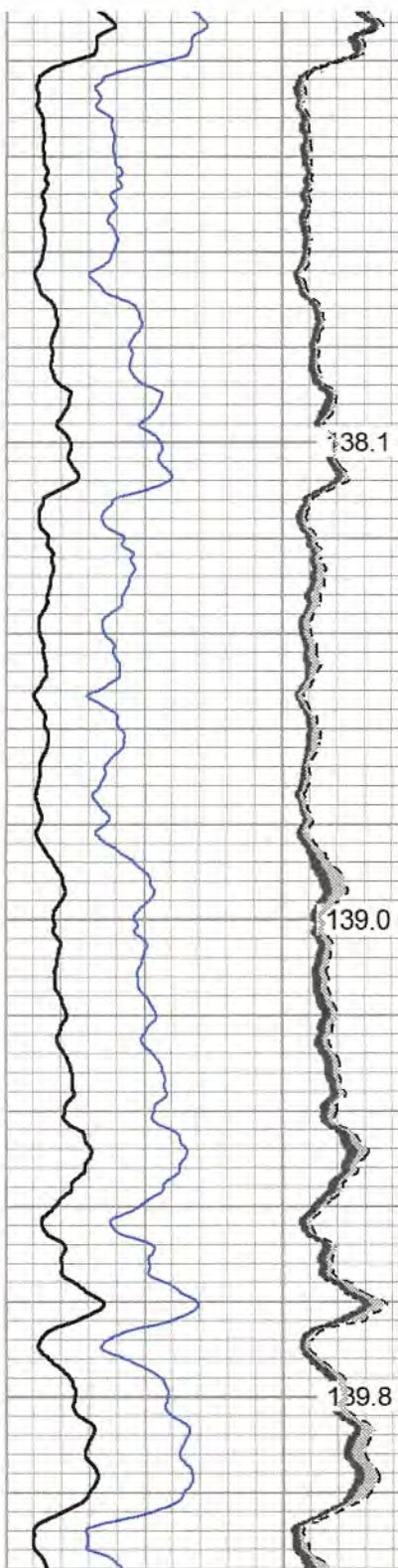
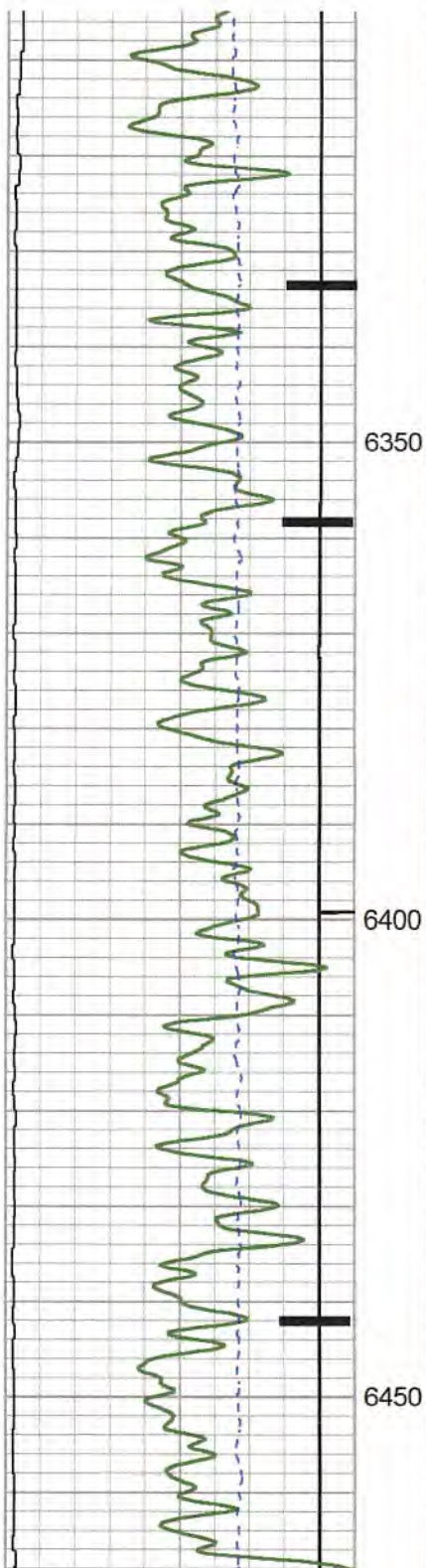


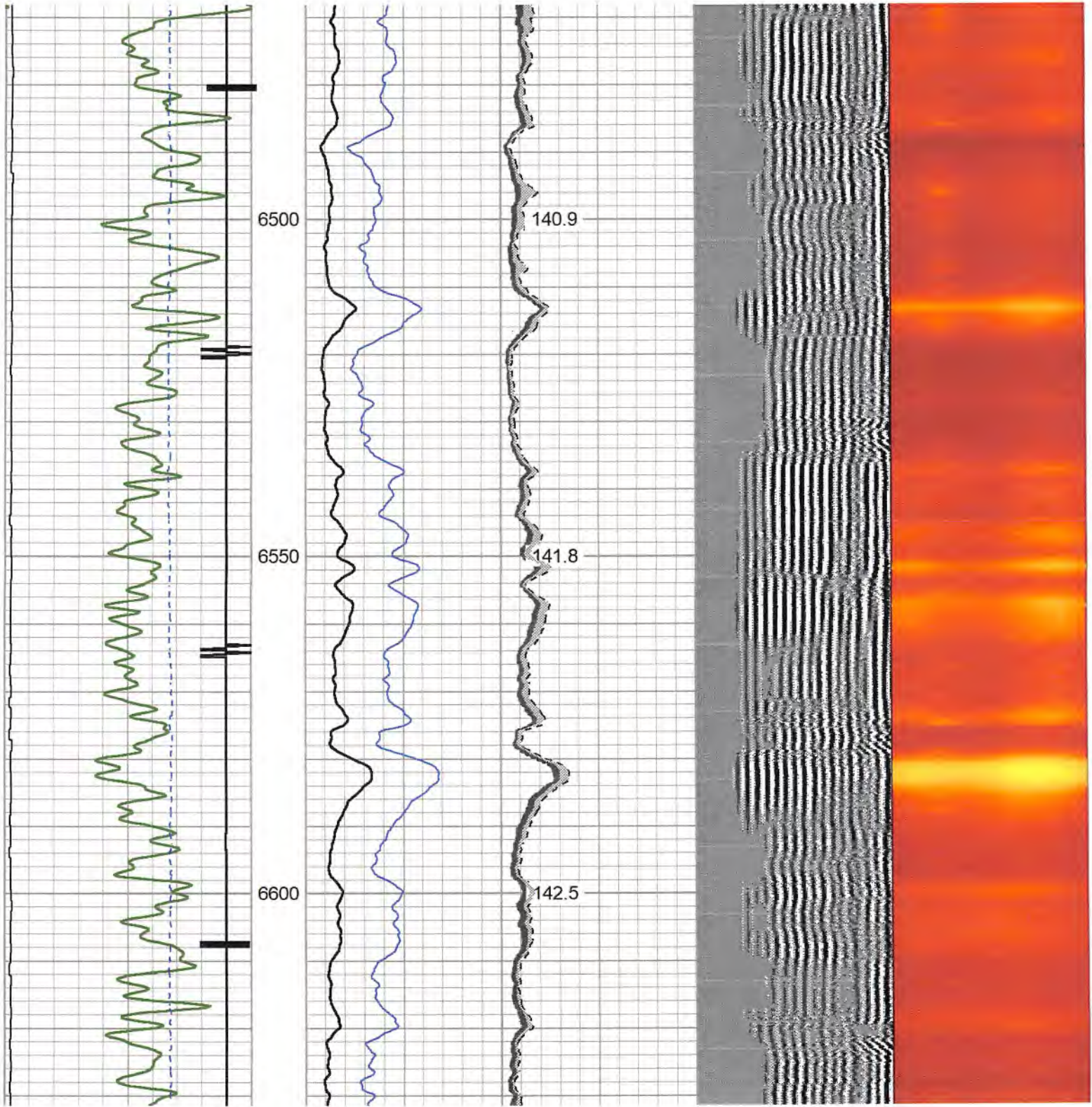


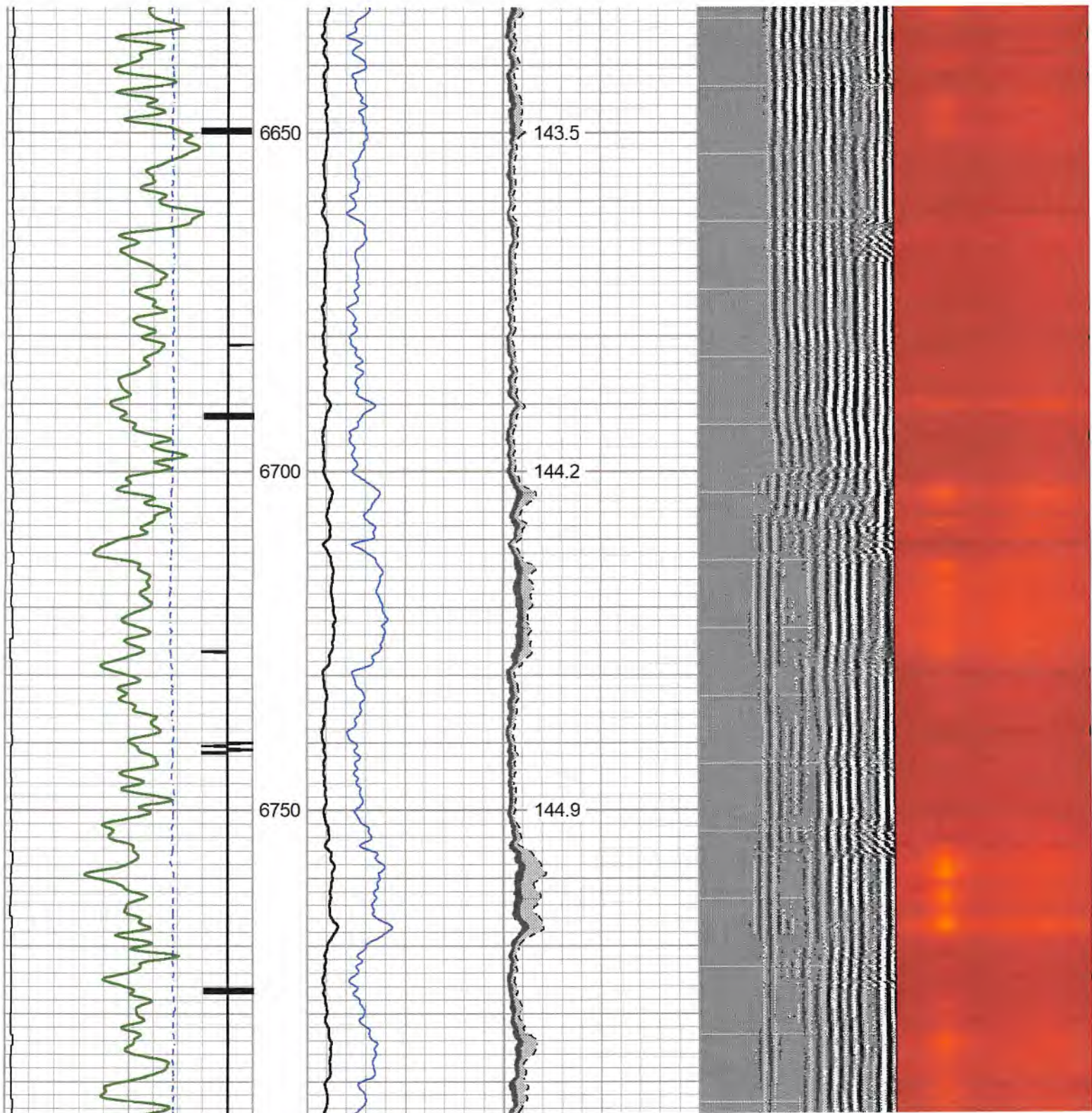


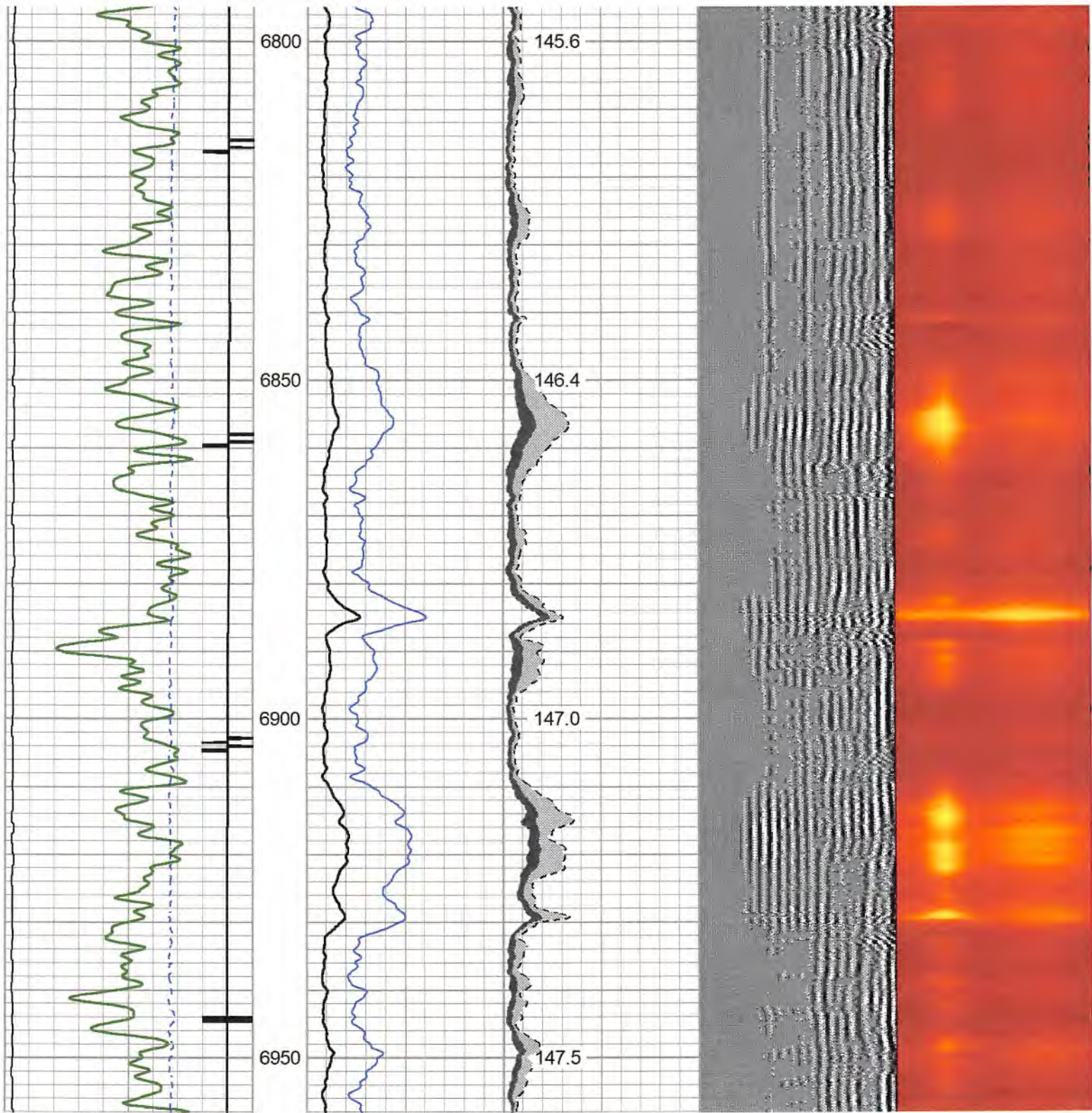


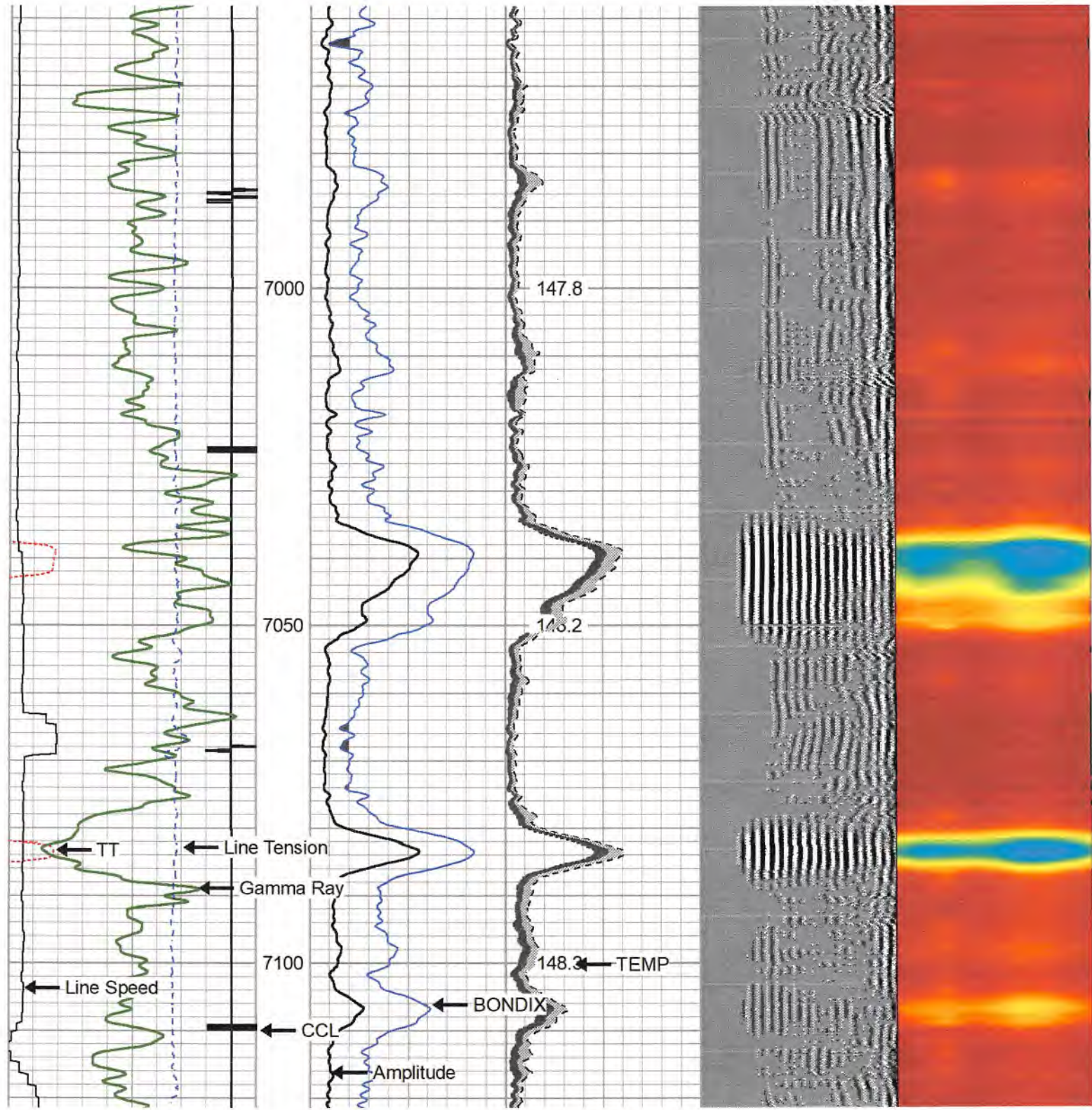


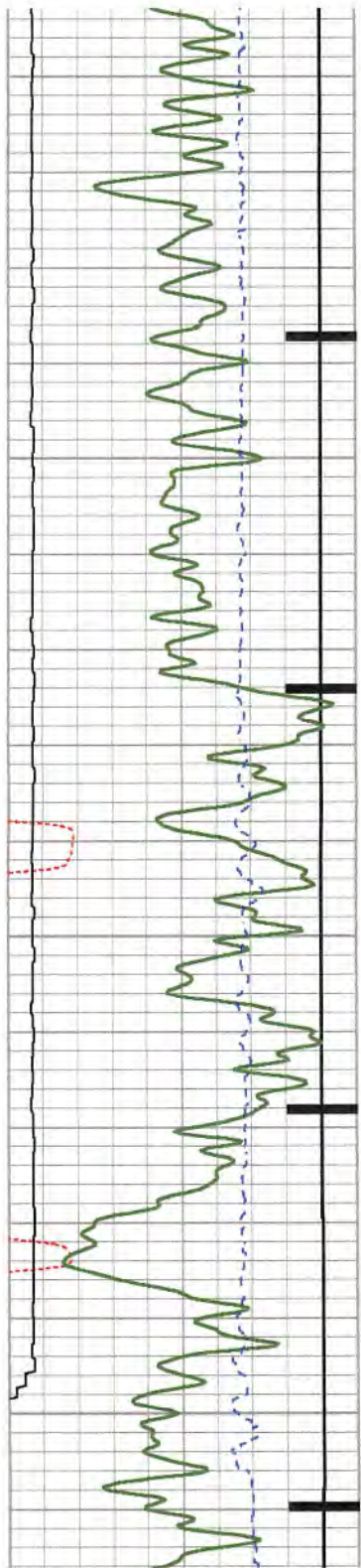








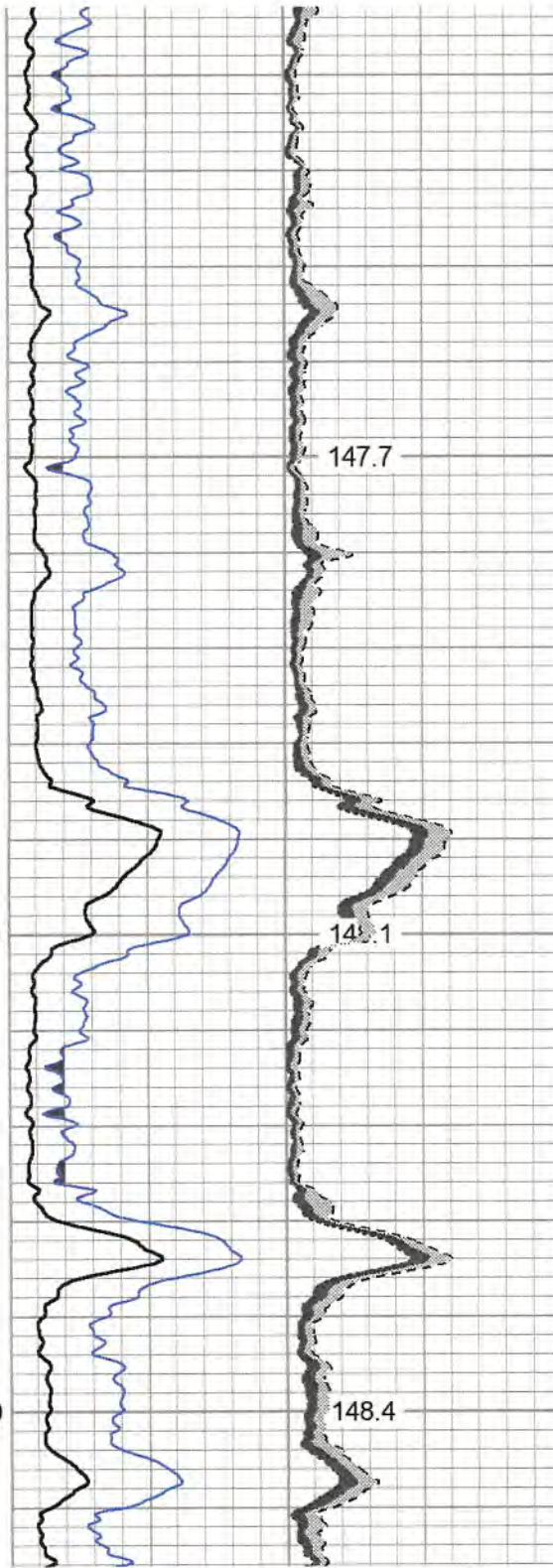




7000

7050

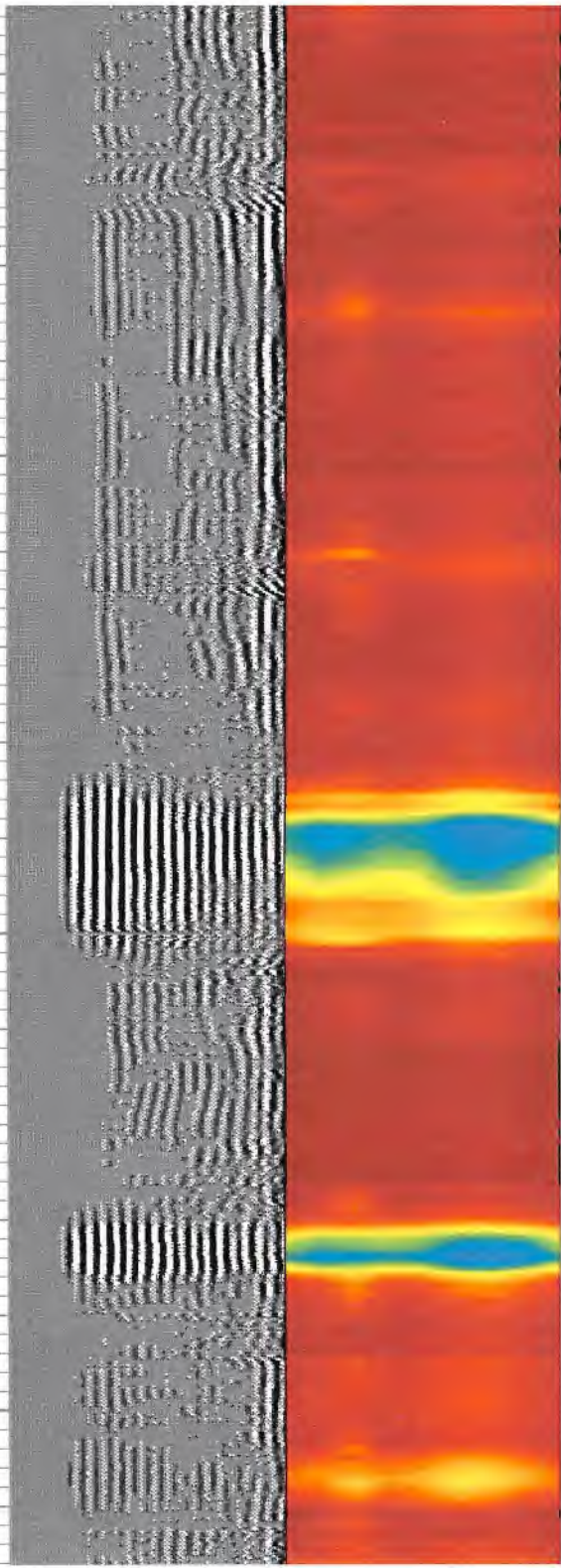
7100

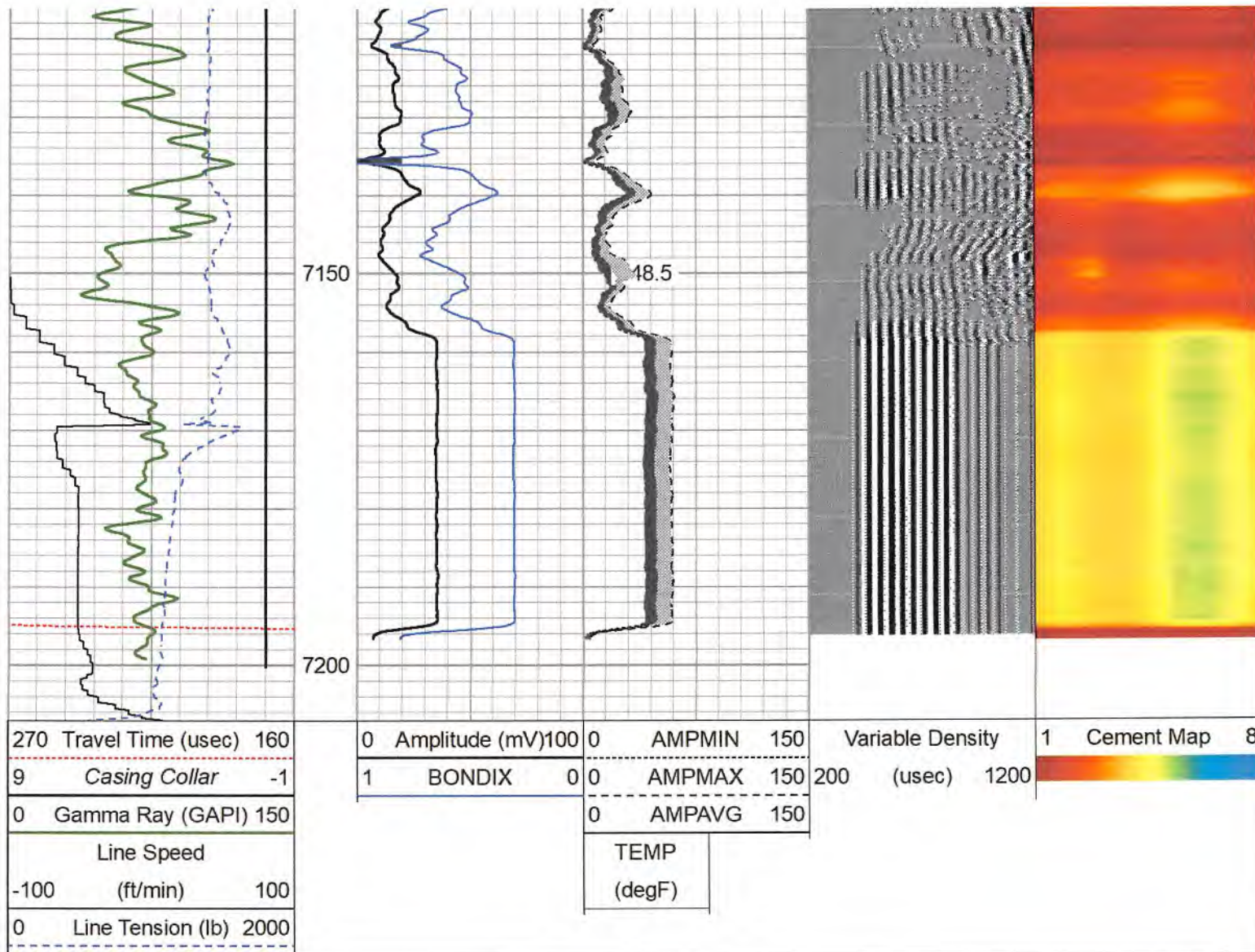


147.7

148.1

148.4





Calibration Report	
Database File	antero-glamdring 1h-12-3-21.db
Dataset Pathname	GLAMDRING_1H/RCBL/pass6
Dataset Creation	Fri Dec 03 14:52:05 2021
Gamma Ray Calibration Report	
Serial Number:	FW1211-86
Tool Model:	Probe
Performed:	Mon Nov 15 11:21:05 2021

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Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	2.75"
Tool Model:	Probe275T
Calibration Casing Diameter:	5.500 in
Calibration Depth:	826.783 ft

Master Calibration, performed Fri Dec 03 09:44:38 2021:

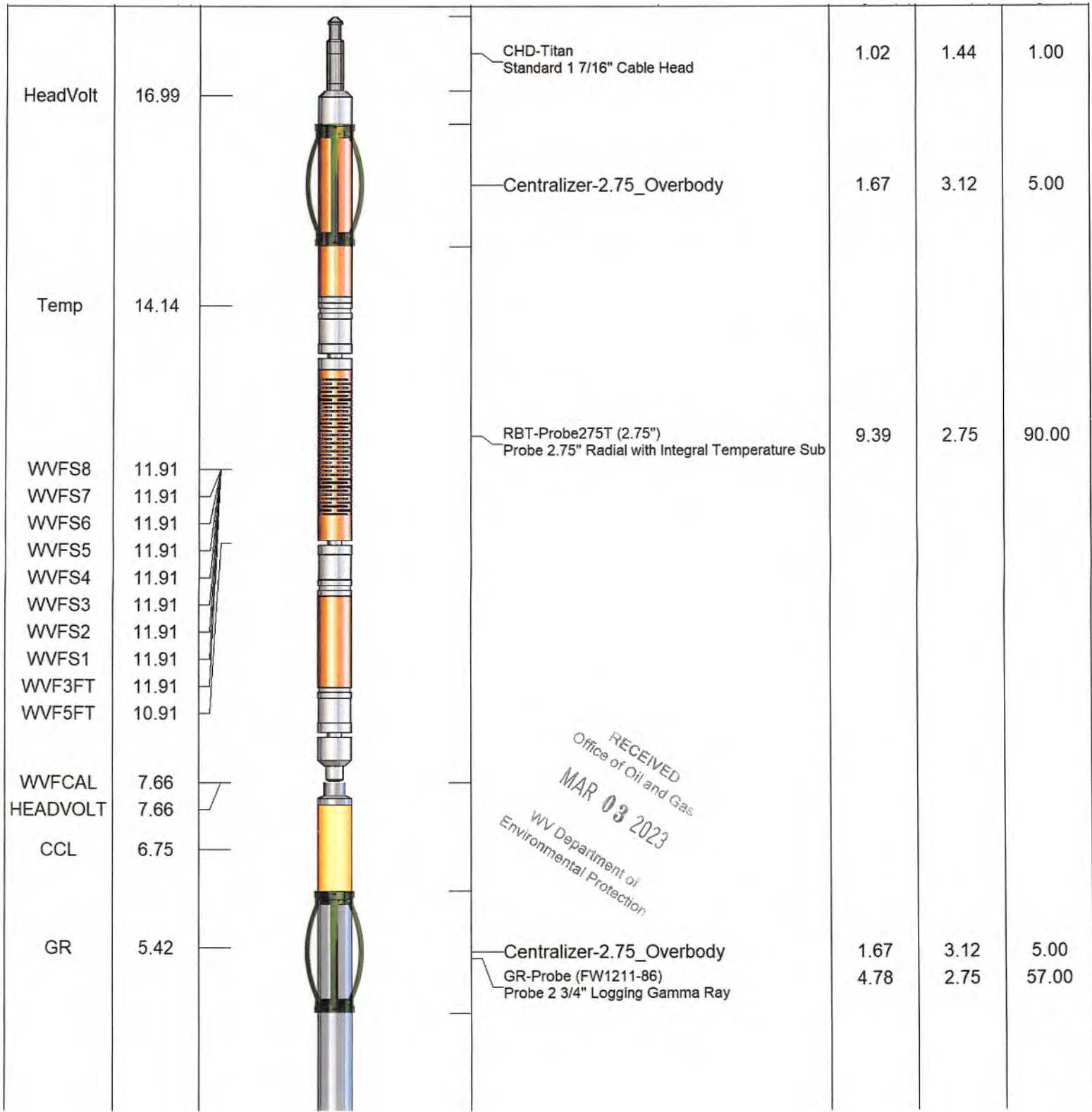
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.015	0.288	4.000	70.000	218.083	7.224
CAL	0.490	0.493				
5'	-0.014	0.281	4.000	70.000	223.695	7.045
SUM						
S1	-0.004	0.251	0.000	100.000	393.203	1.402
S2	-0.012	0.277	0.000	100.000	345.639	4.164
S3	-0.014	0.285	0.000	100.000	334.149	4.654
S4	-0.014	0.307	0.000	100.000	311.471	4.224
S5	-0.013	0.309	0.000	100.000	310.045	4.057
S6	-0.014	0.308	0.000	100.000	310.856	4.277
S7	-0.014	0.291	0.000	100.000	328.205	4.623
S8	-0.014	0.286	0.000	100.000	334.136	4.585

Internal Reference Calibration, performed Wed Nov 23 14:17:52 2011:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.490	0.493	1.000	0.000
Air Zero Calibration, performed Fri Dec 03 08:57:17 2021:						
	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	

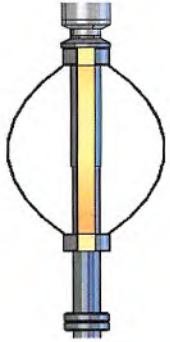
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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HeadVolt	16.99	CHD-Titan Standard 1 7/16" Cable Head	1.02	1.44	1.00
		Centralizer-2.75_Overbody	1.67	3.12	5.00
Temp	14.14				
		RBT-Probe275T (2.75") Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	90.00
WVFS8	11.91				
WVFS7	11.91				
WVFS6	11.91				
WVFS5	11.91				
WVFS4	11.91				
WVFS3	11.91				
WVFS2	11.91				
WVFS1	11.91				
WVF3FT	11.91				
WVF5FT	10.91				
WVFCAL HEADVOLT	7.66 7.66				
CCL	6.75				
GR	5.42	Centralizer-2.75_Overbody	1.67	3.12	5.00
		GR-Probe (FW1211-86) Probe 2 3/4" Logging Gamma Ray	4.78	2.75	57.00

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			<p>CENT-Probe275 2.75" Centralizer</p>	2.88	2.75	20.00
<p>Dataset: antero-glamdring 1h-12-3-21.db: field/GLAMDRING_1H/RCBL/pass6 Total length: 18.07 ft Total weight: 178.00 lb O.D.: 3.12 in</p>						

	<p>Company ANTERO RESOURCES Well MARGERY-GLAMDRING 1H Field RABBIT EARS County TYLER State WV</p>
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