



**SECTOR CEMENT BOND
GAMMA RAY
CCL LOG**

Comp. OCCIDENTAL PETROLEUM CORP.
Well MORTON 17-12
Field WATTENBERG
Co. WELD
State COLORADO

Company **OCCIDENTAL PETROLEUM CORP.**
Well **MORTON 17-12**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API # : 05-123-33919 Other Services
1392' FNL & 1762' FEL
SEC 12 TWP 1N RGE 67W
NONE
Permanent Datum GL Elevation 4905'
Log Measured From KB 15' Above Perm. Datum
Drilling Measured From KB G.L. Elevation 4920'
D.F. N/A
G.L. 4905'

Date of Service	18-JUN-2024
Run Number	ONE
Depth Driller or PBTD	7777'
Depth Logger	5000'
Bottom Log Interval	5000'
Top Log Interval	SURFACE
Open Hole Size	7-7/8"
Type Fluid	H2O
Fluid Level	SURFACE
Fluid Density	N/A
Max. Recorded Temperature	161° F.
Max. Wellhead Pressure	ZERO PSI
Wellhead Connection	7-1/16" 5K
Estimated Cement Top	SEE LOG
Unit Number	L-05
Wireline Size	9/32"
Location	BRIGHTON
Recorded By	J. KOTT
Witnessed By	FIDEL GONZALEZ
Surface Casing	Size 8-5/8" W/Ft 24# Top SURFACE Bottom 882'
Production Casing	Size 4-1/2" W/Ft 11.6# Top SURFACE Bottom 7764'
Liner Casing	
Tubing Record	

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

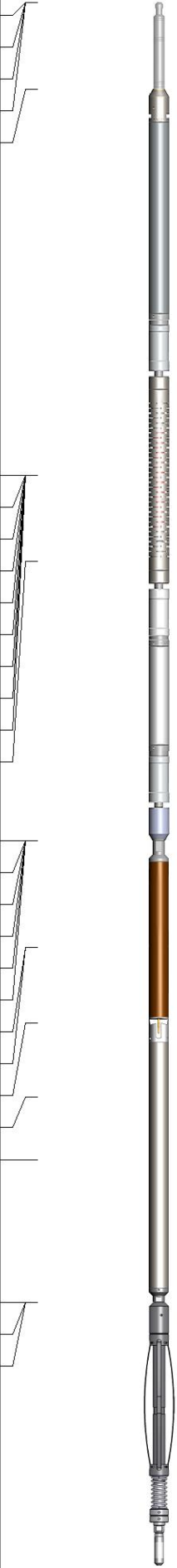
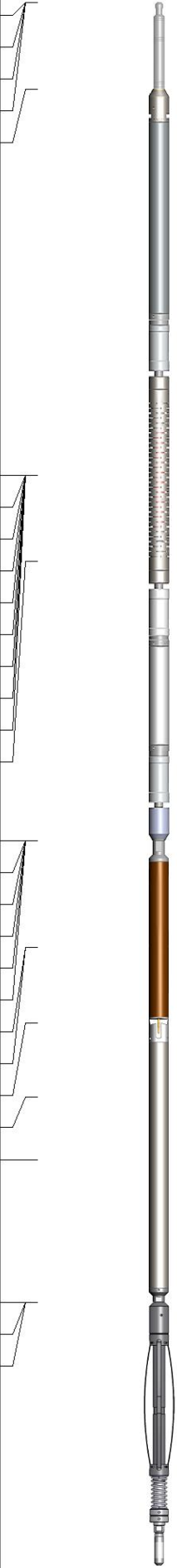
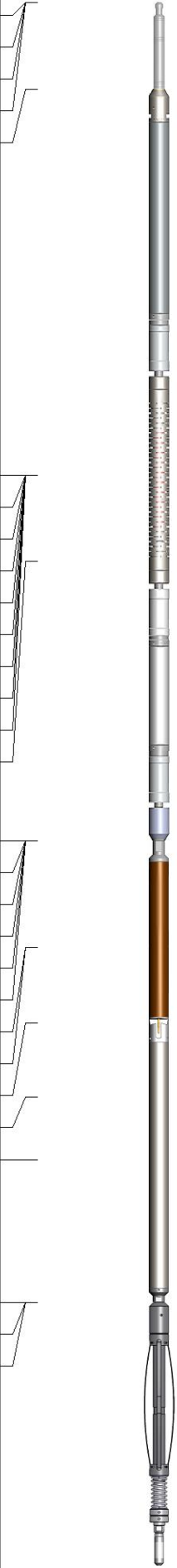
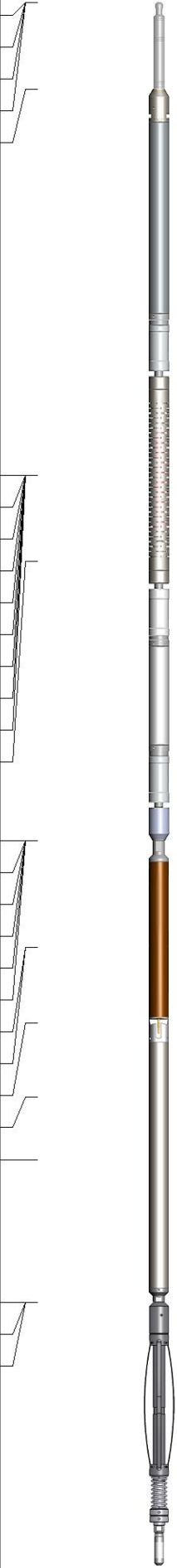
Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
LOG CORRELATED TO KB

THANK YOU FOR USING RANGER ENERGY SERVICES! FIELD TICKET #05-679360

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. KOTT Operator: C. PROPST Operator: C. MARCH Operator:		

Quantity	Offset (ft)	Orientation	Description	Length (ft)	C.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)			
GCT_FMWR	18.21		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31			
mSec_Count	18.21								
RBT_Status	18.21								
Error_Ct	18.21								
RBT_HV	17.20								
WVFS8	12.70						RBT8-RADII-275C (RBT275C_Base) Probe 2.75" RADII 8 Sector Bond Tool	8.75	2.75
WVFS7	12.70								
WVFS6	12.70								
WVFS5	12.70								
WVFS4	12.70								
WVFS3	12.70								
WVFS2	12.70								
WVFS1	12.70								
WVF3FT	12.70								
WVF5FT	11.70								
RBT_ACCZ	8.45		GCacc-GCT275-0BP0 (GCT275-0BP0_base) Probe 2.75" Gamma Ray - CCL (6 magnet) w/Temp	5.38	2.75	59.00			
RBT_ACCY	8.45								
RBT_ACCX	8.45								
GCT_HV	8.45								
WVFSYNC	8.45								
WVFCAL	8.45								
CCL\$2	7.20								
CCL\$1	7.20								
GCT_Temp	6.32								
GR	5.45								
GCT_IntTemp	4.73		Centralizers-8071-275-200 Tekco 2 3/4" Adjustable Centralizer	2.73	2.75	25.00			
GCT_ACCZ	3.06								
GCT_ACCY	3.06								
GCT_ACCX	3.06		Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00			

Dataset: I05-679360_oxy_morton 17-12_0512333919_20240618_scbl-gr-ccl.db: field/well/run1/pass4
 Total length: 18.21 ft
 Total weight: 88.31 lb
 O.D.: 2.75 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\05-679360_oxy_morton 17-12_0512333919_20240618_sc
Dataset field/well/run1/pass4/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 161	CASEOD in 4.5	CASETHCK in 0.25	CASEWGHT lb/ft 11.6	MAXAMPL mV 81.2	MINAMPL mV 0.7	MINATTN db/ft 0.8
PERFS No	PPT usec 249	SRFTEMP degF 75	TDEPTH ft 5000				

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

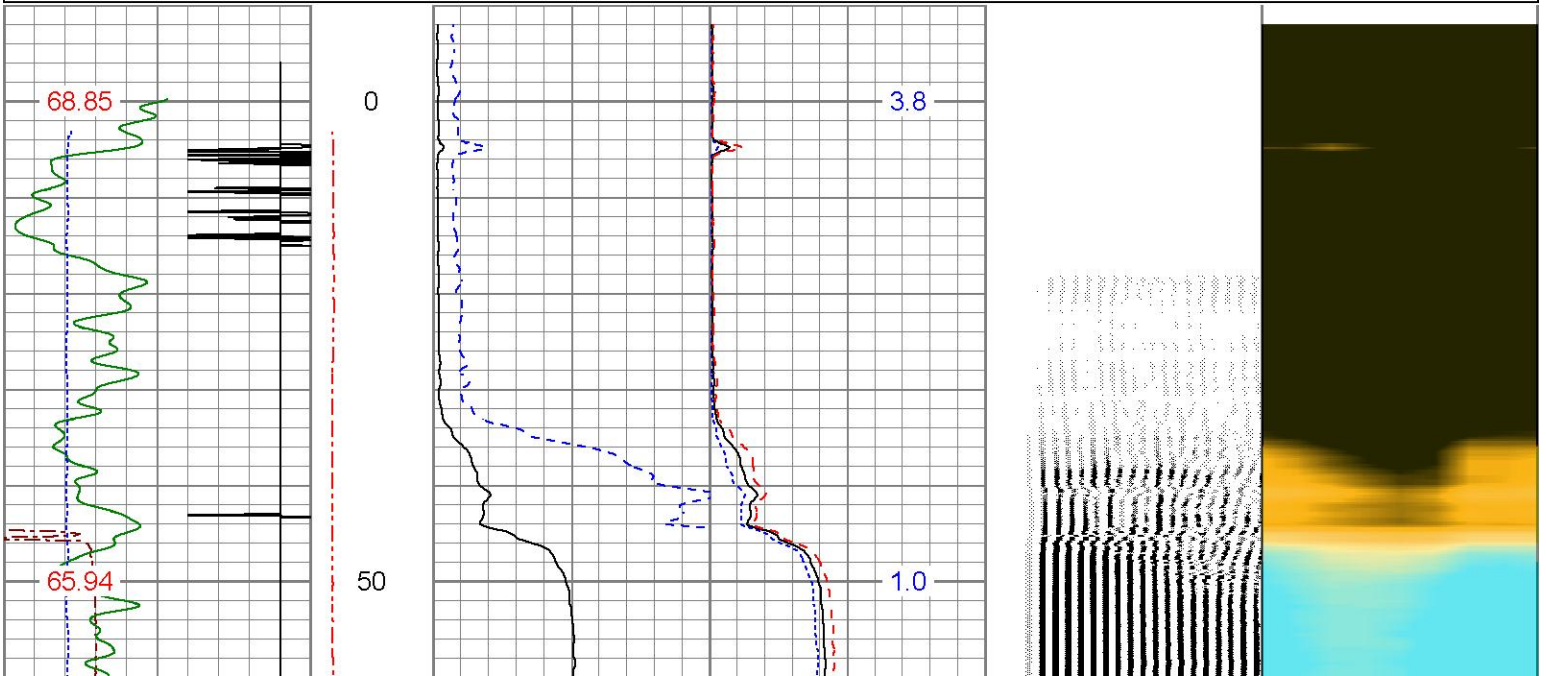


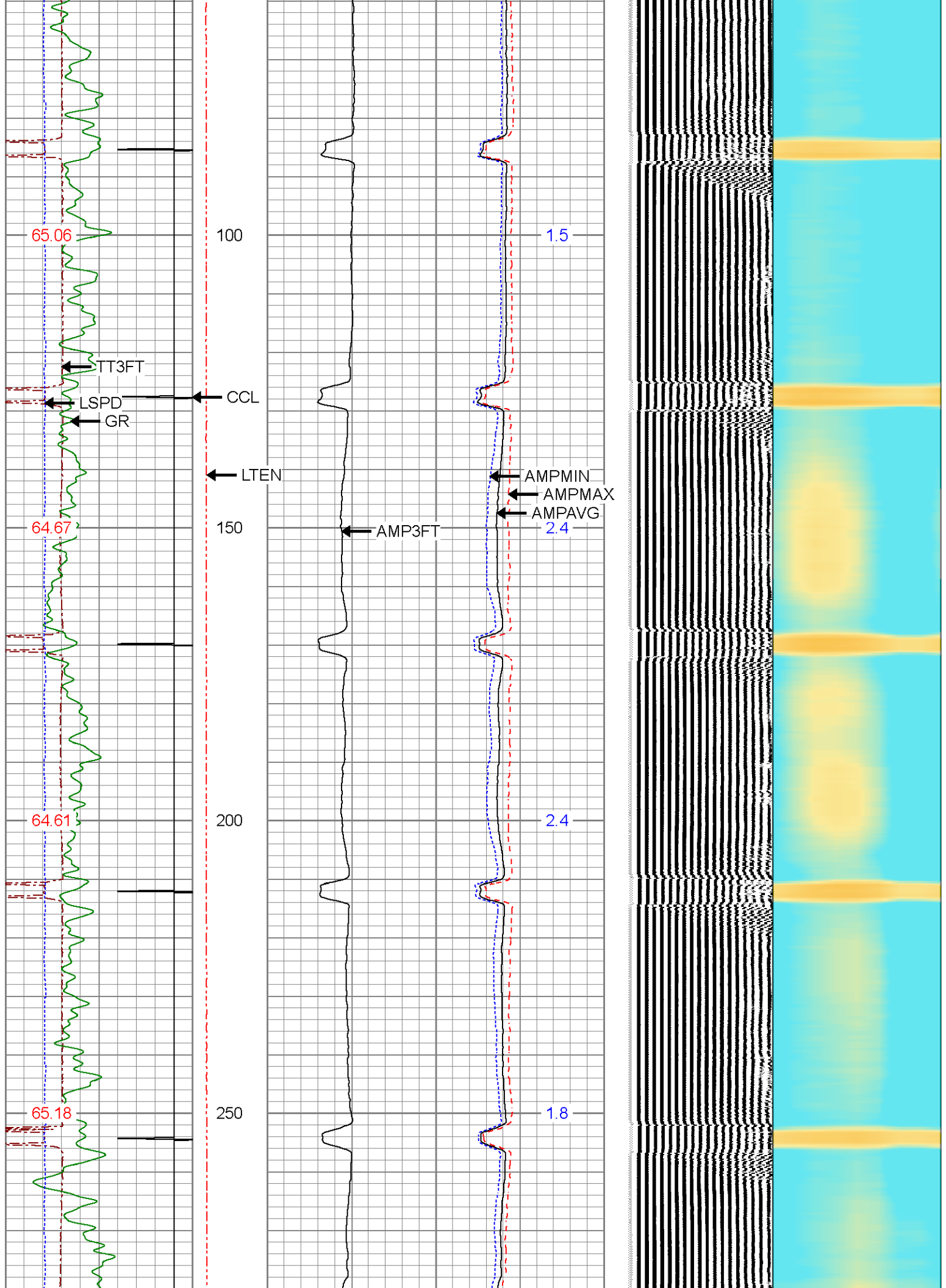
MAIN PASS

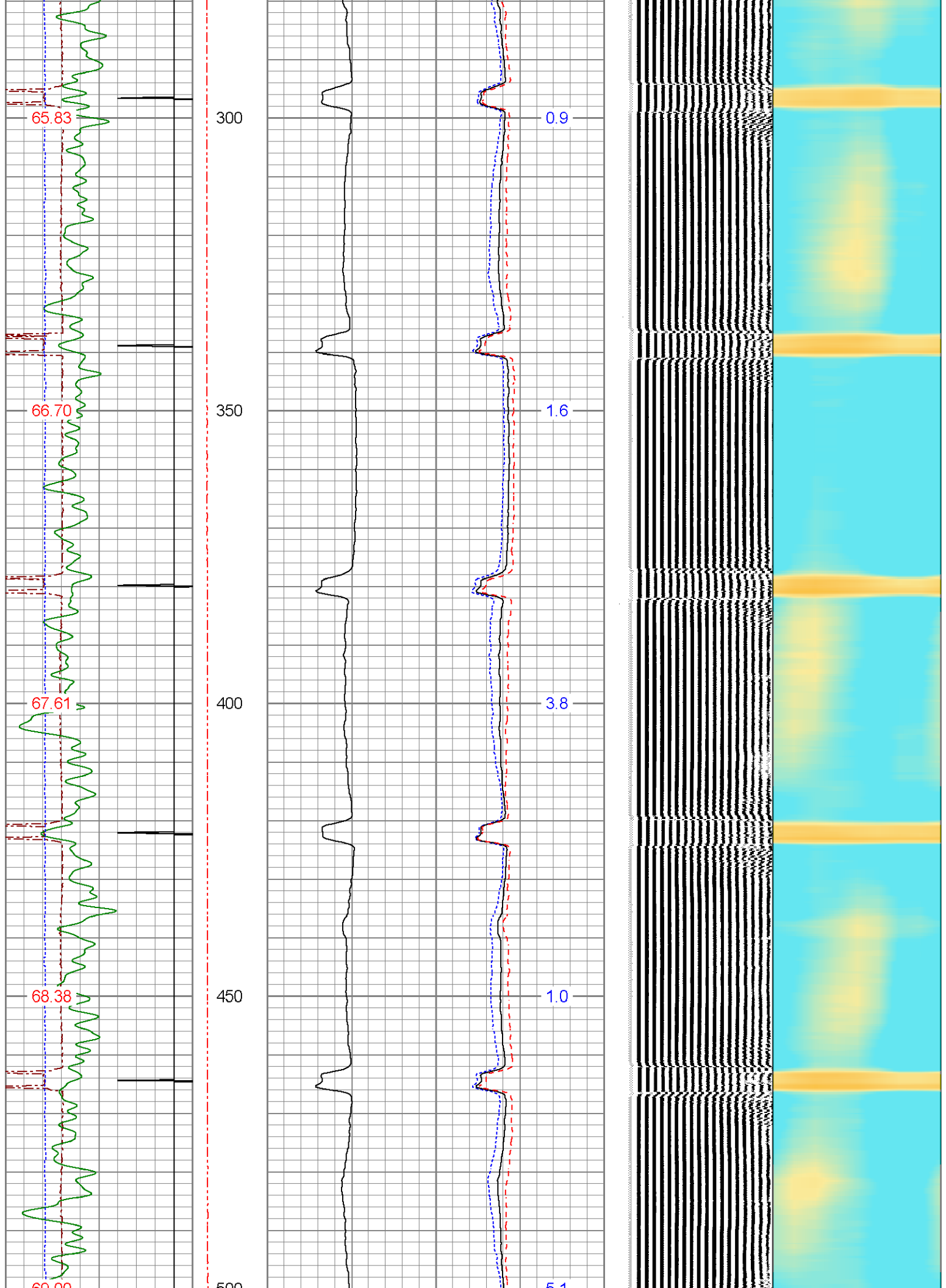
ZERO PSI APPLIED AT SURFACE

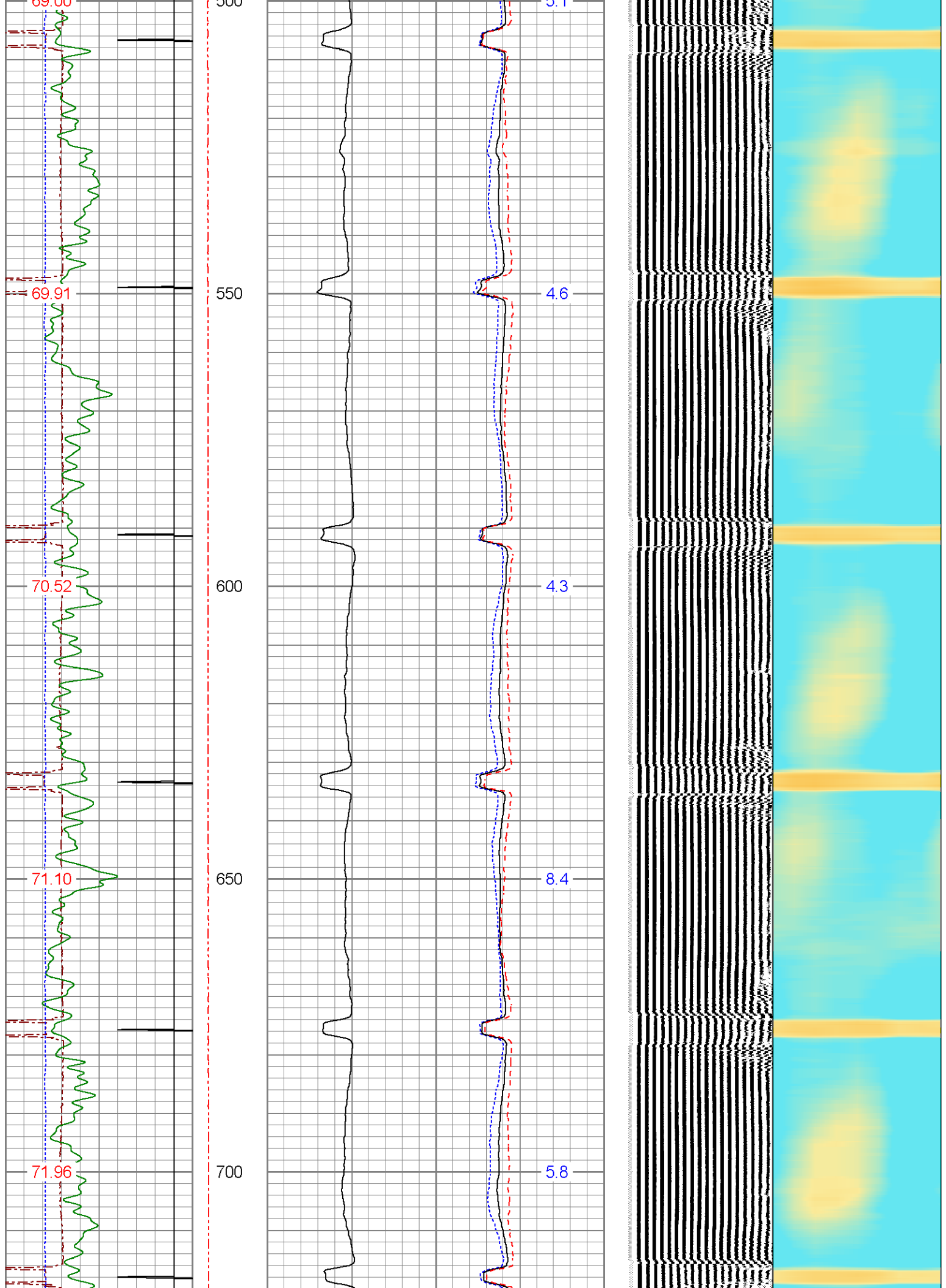
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Dataset Pathname pass4
Presentation Format res_scbl 8sec-gr-ccl
Dataset Creation Tue Jun 18 13:12:04 2024
Charted by Depth in Feet scaled 1:240

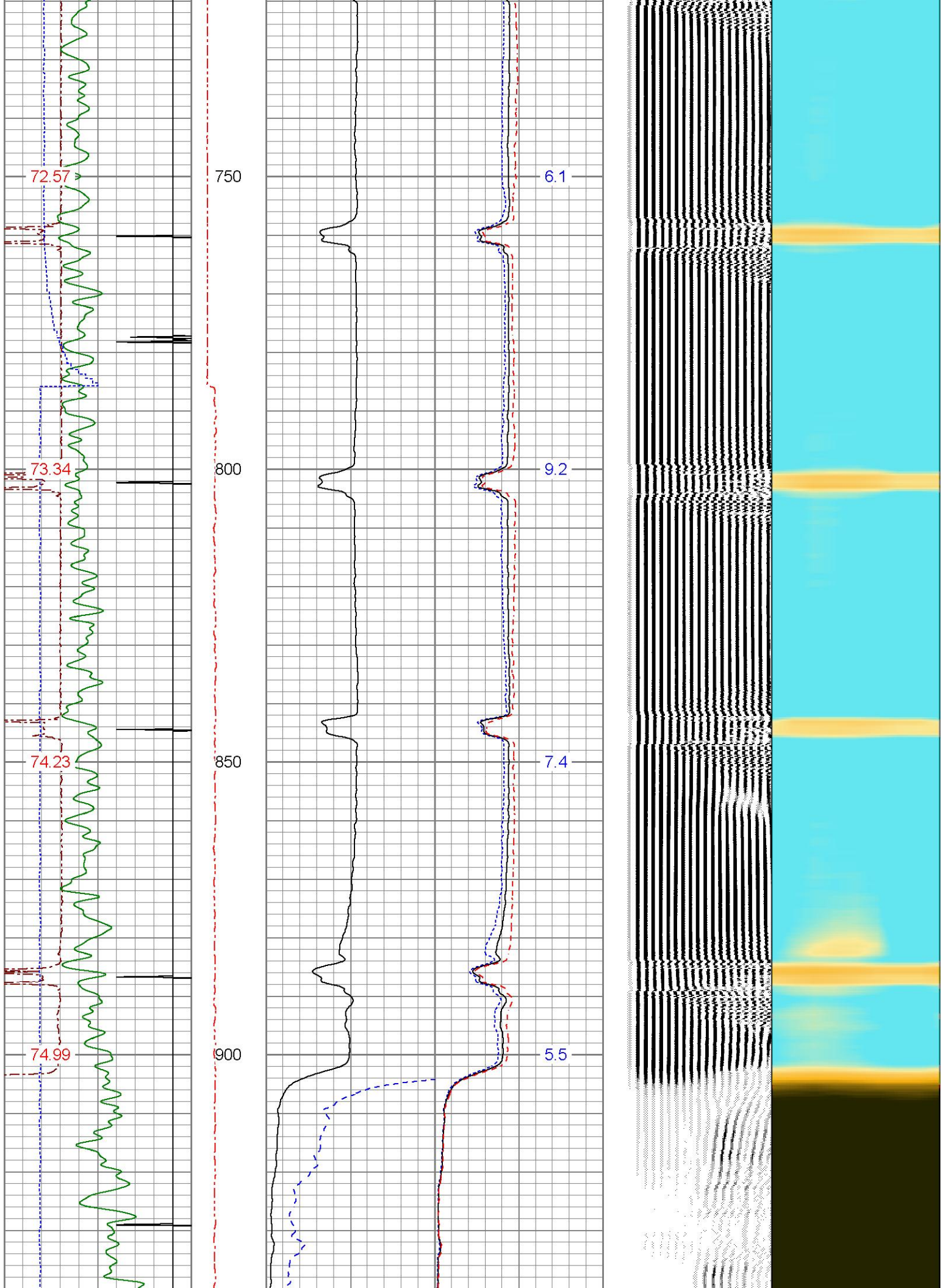
270 3FT TT (usec) 170	LTEN	3' Amplitude	0 Sector Min Amp150	200 VDL (usec) 1200	1 Sector Map 8
0 GR (GAPI) 150	(lb)	(mV) 100	Sector Avg Amp		
-150 LSPD (ft/min) 150	0 2000	3' Amplified	0 150		
-9 CCL\$1 1		Amplitude X 5	Sector Max Amp		
GCT_Temp		(mV) 20	0 150		
(degF)			DEVIATION		
			(deg)		

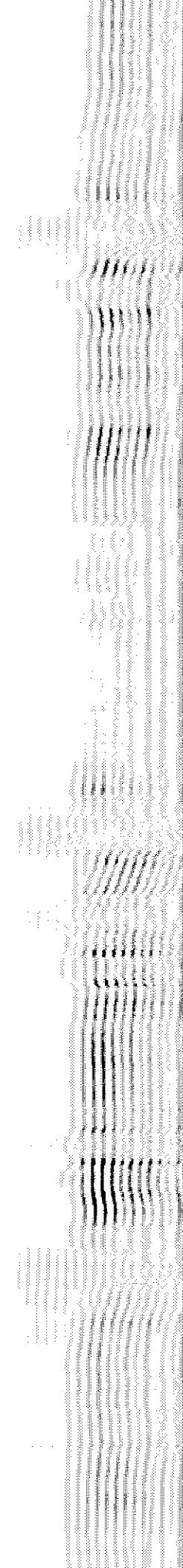
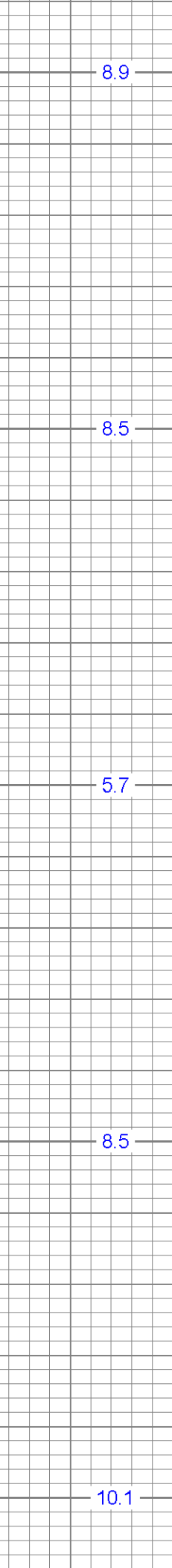
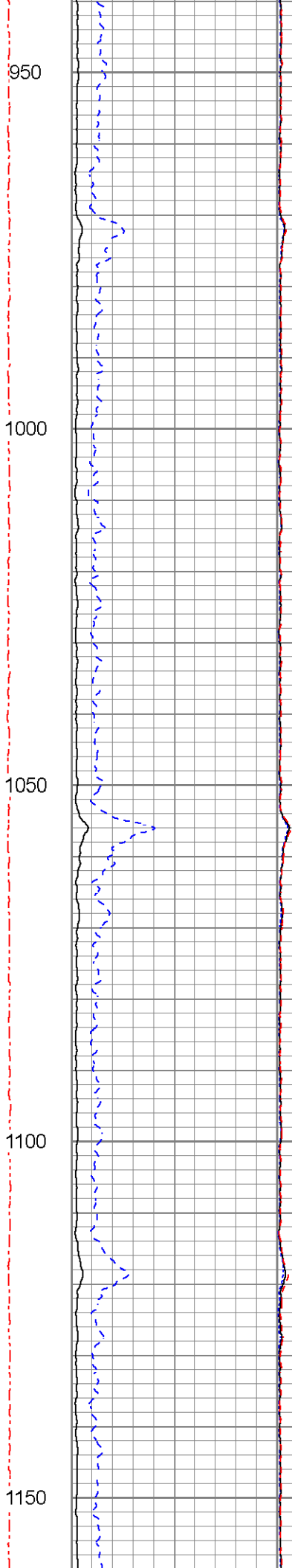
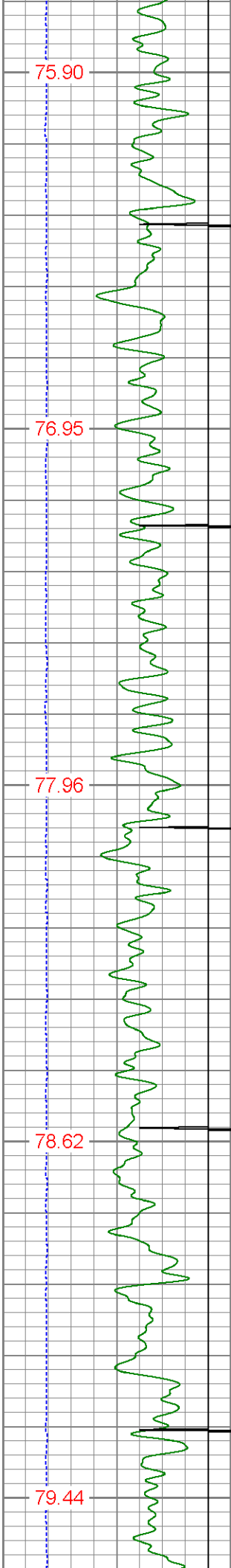


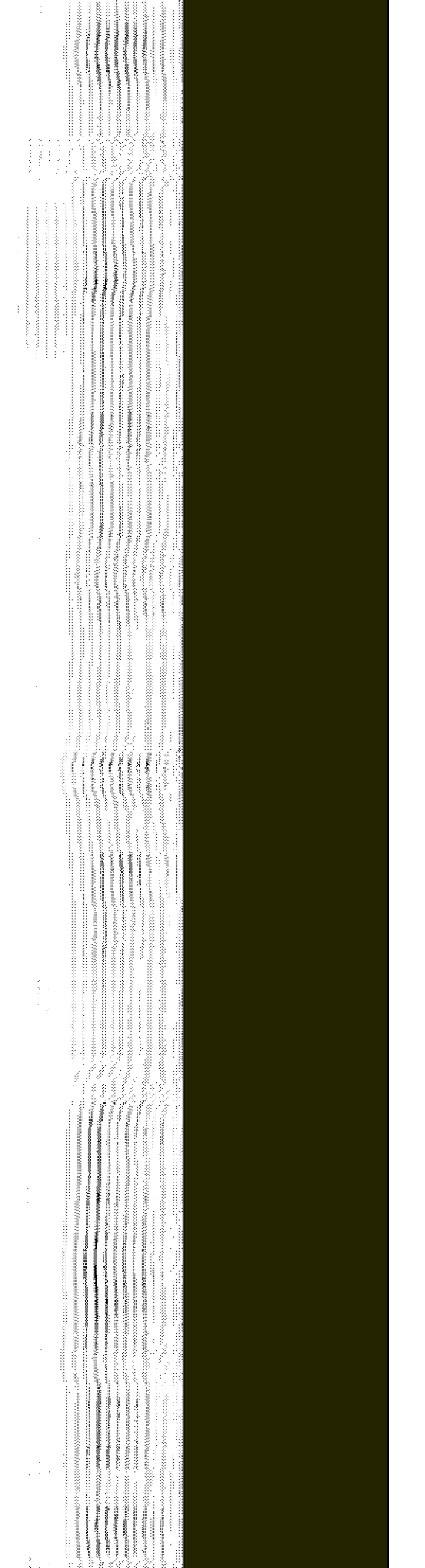
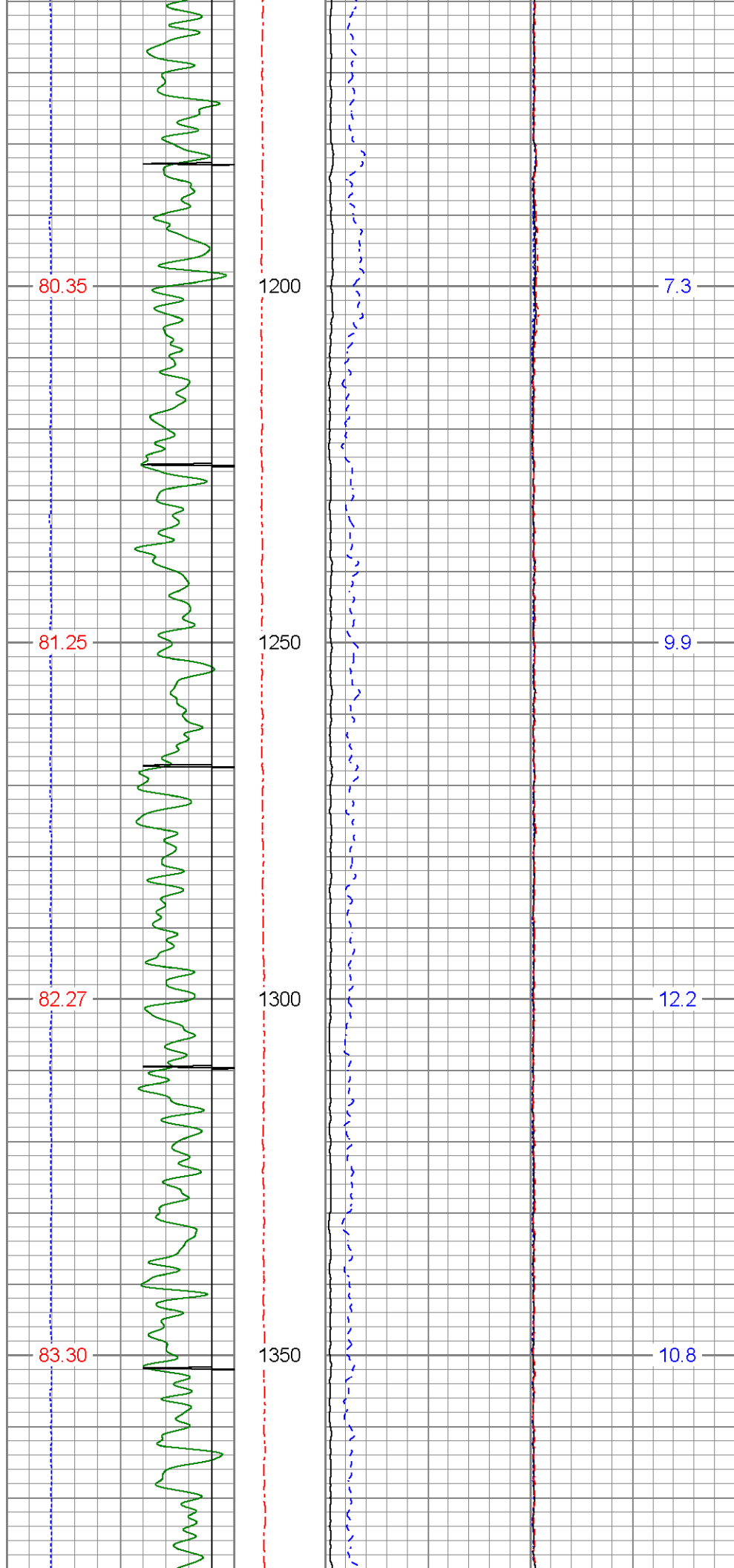


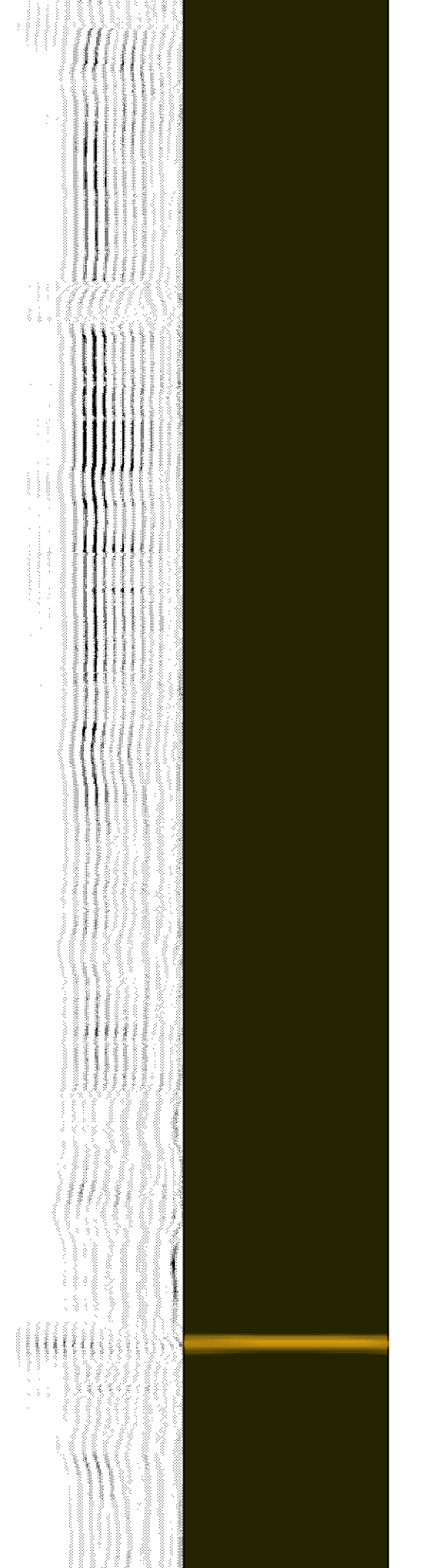
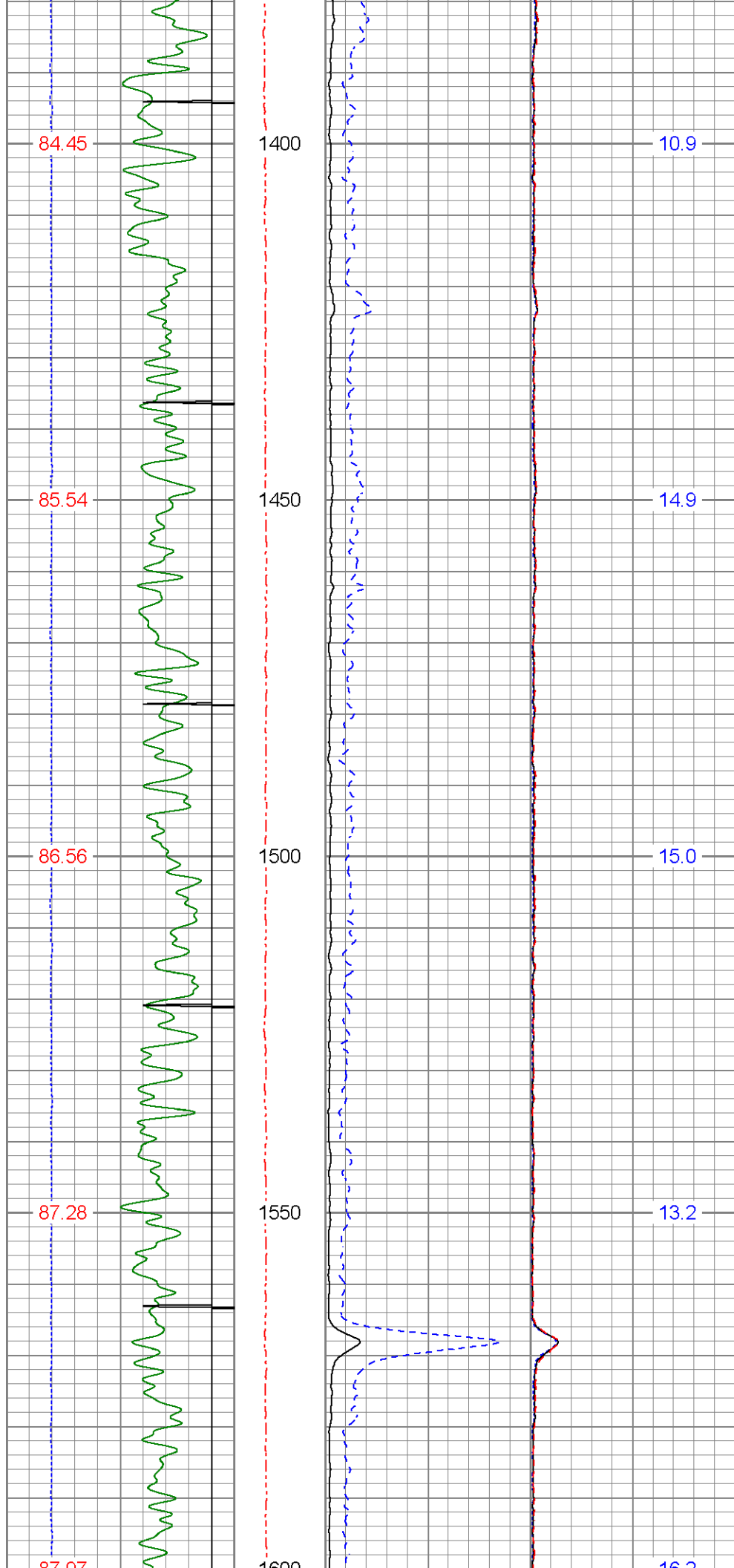


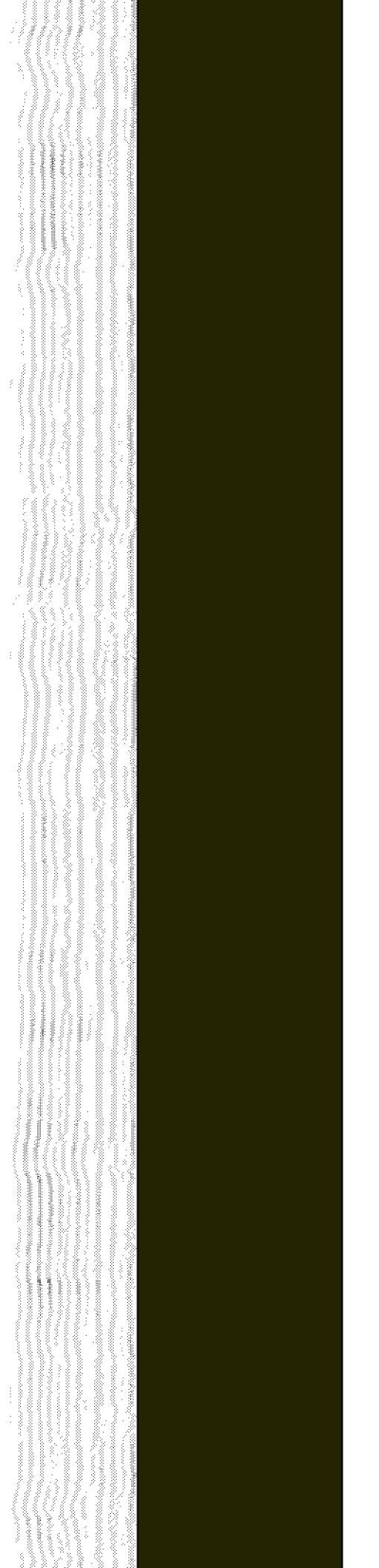
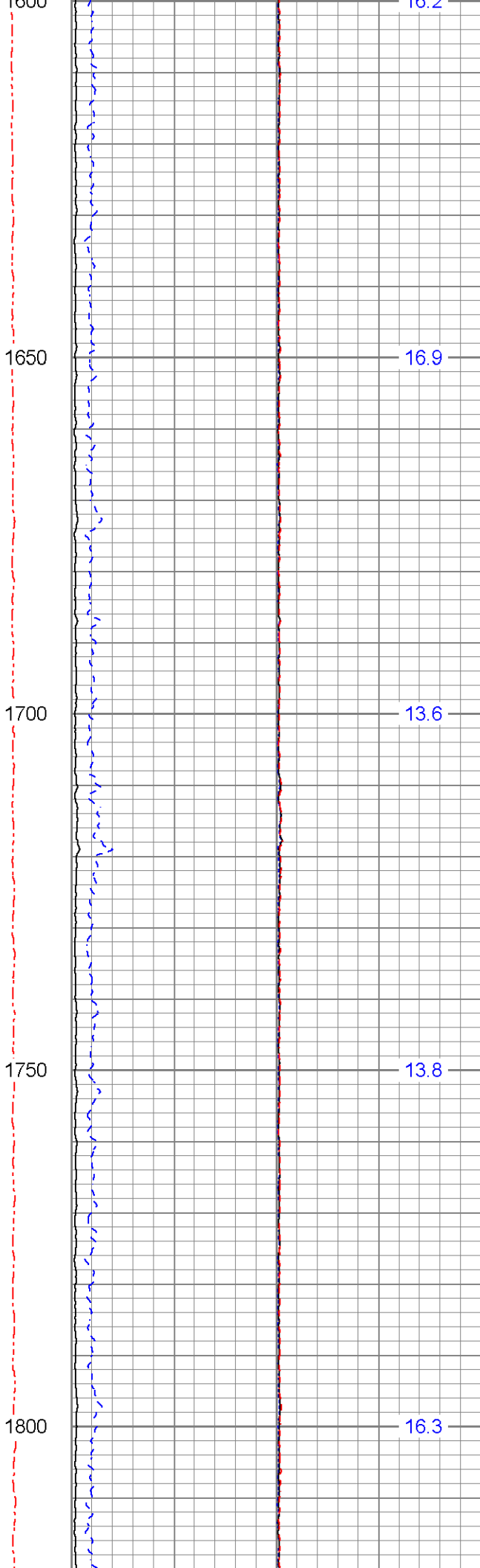
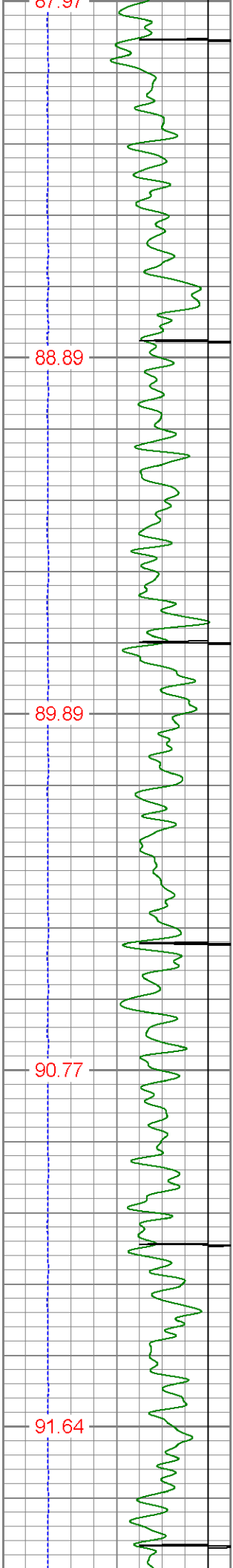


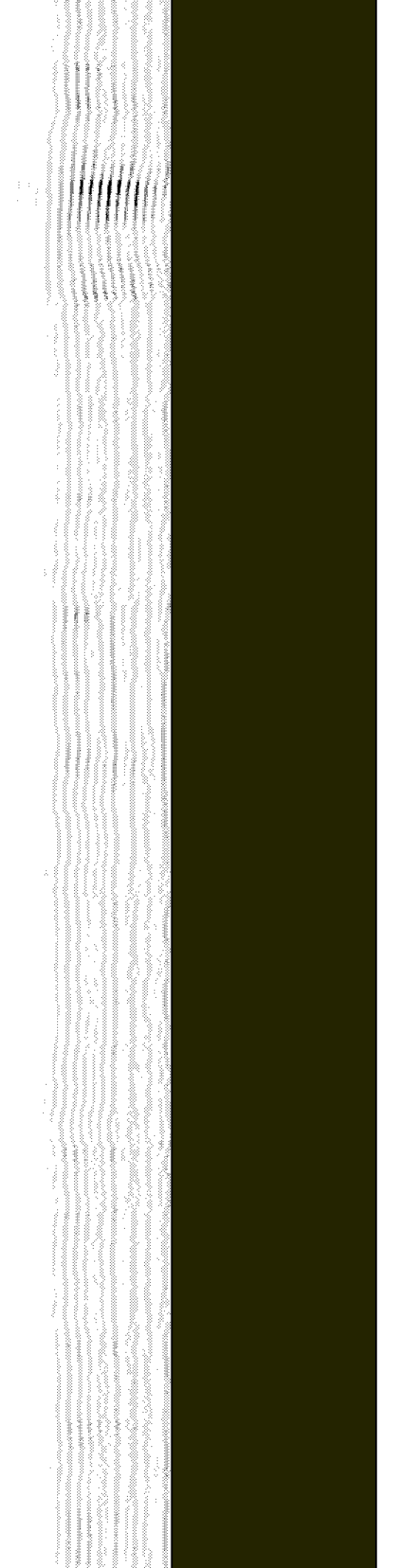
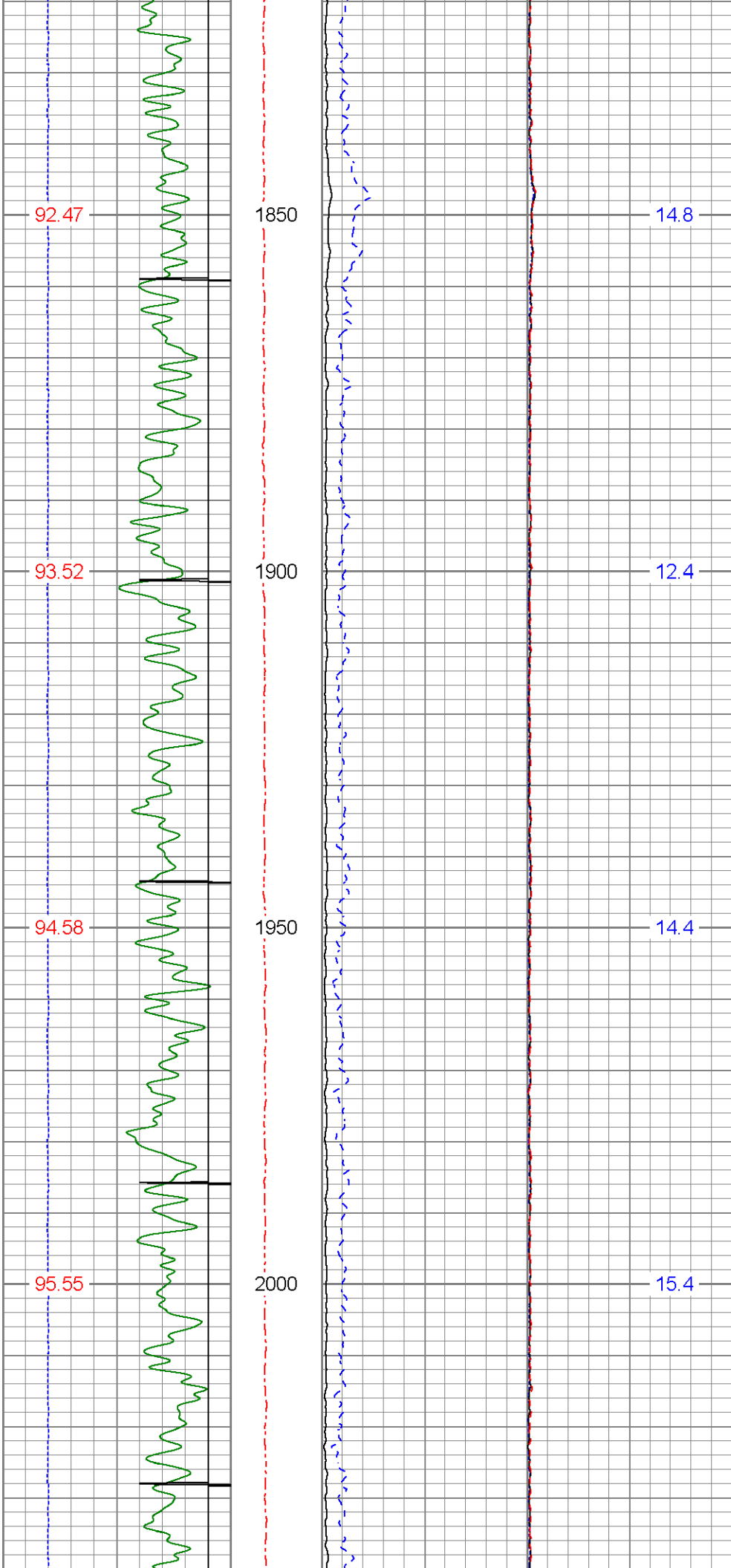


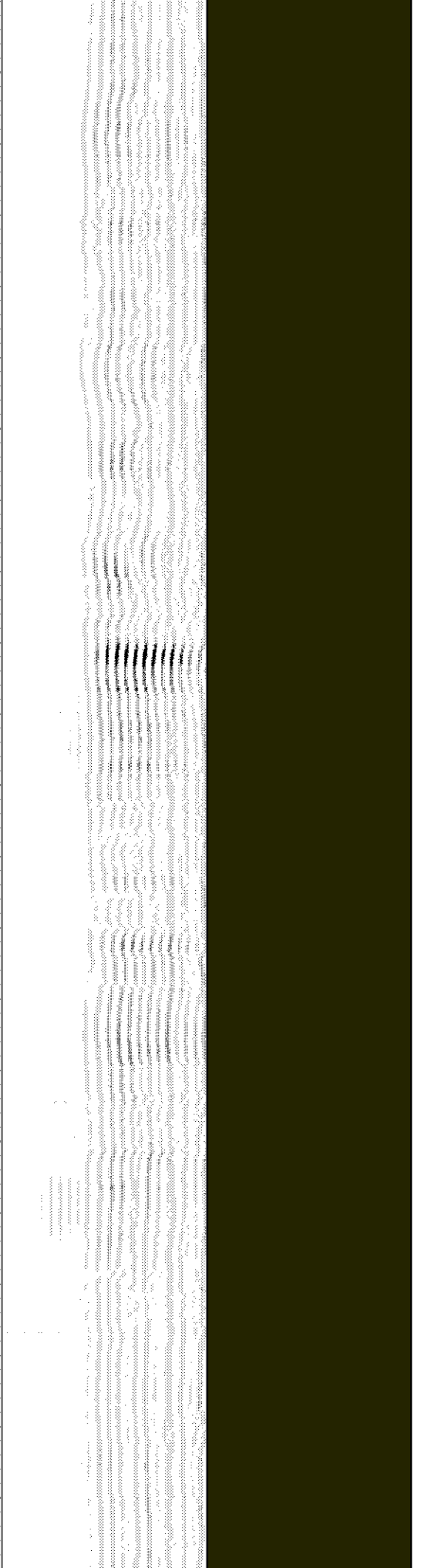
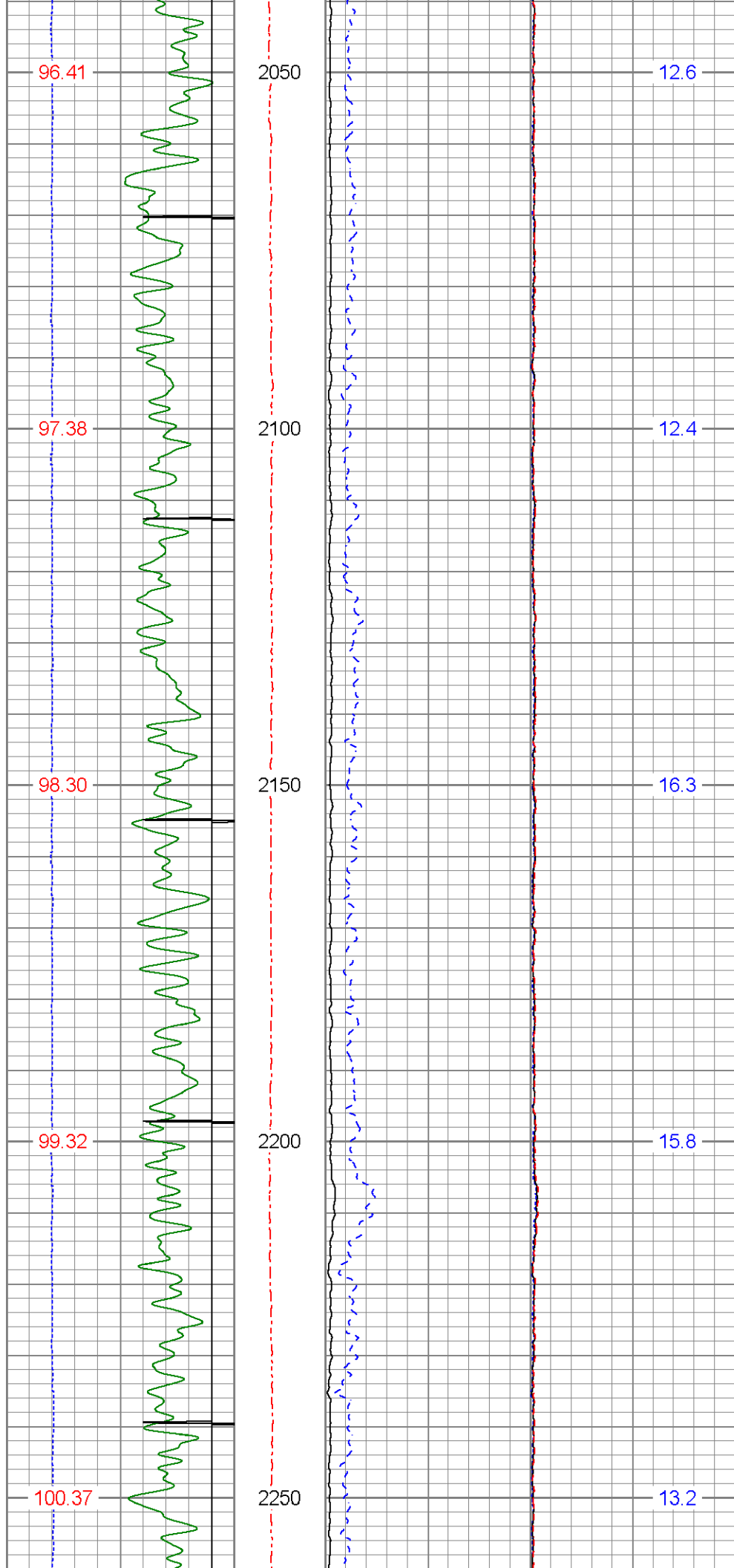


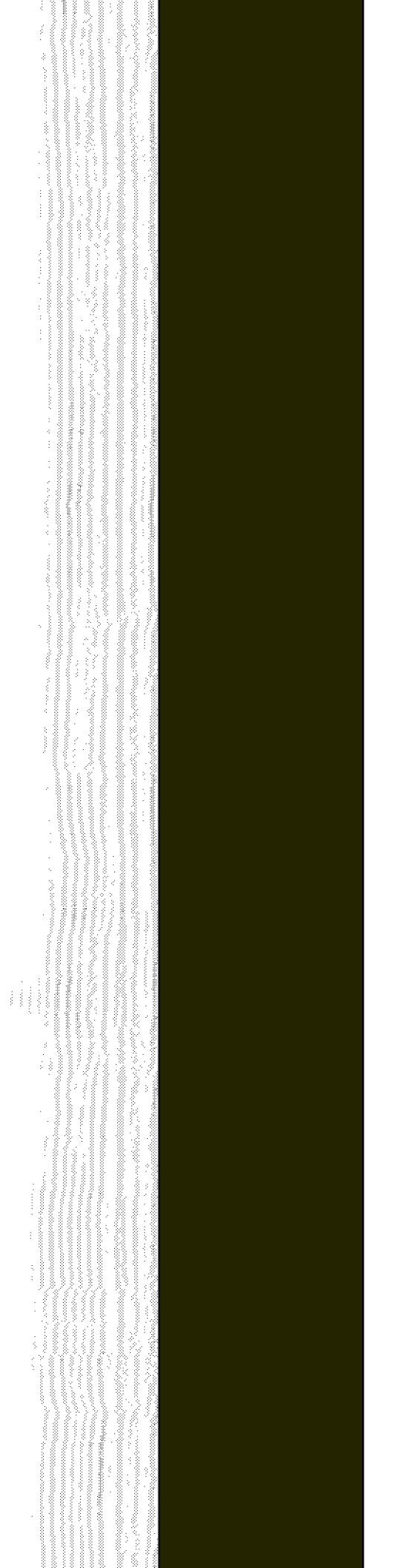
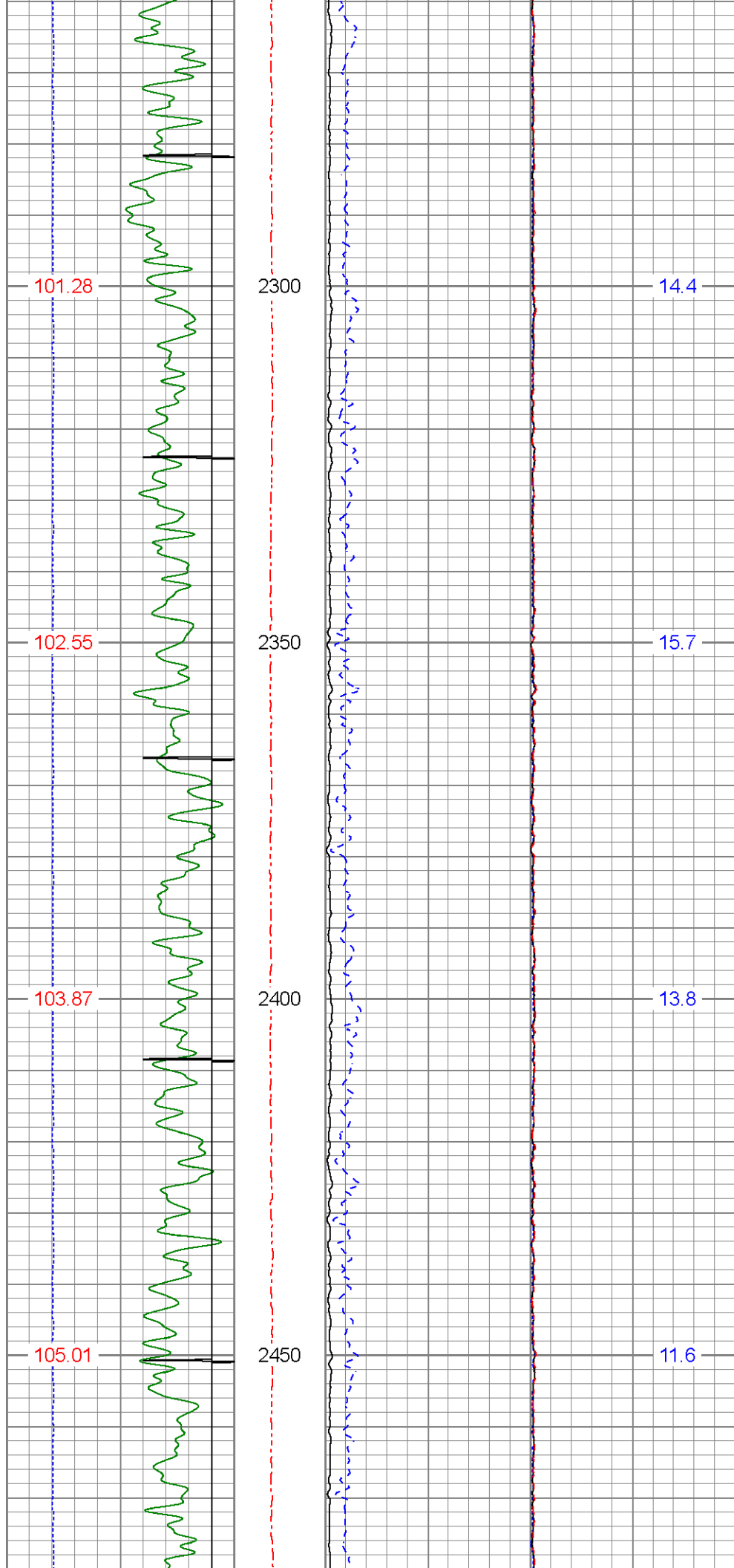


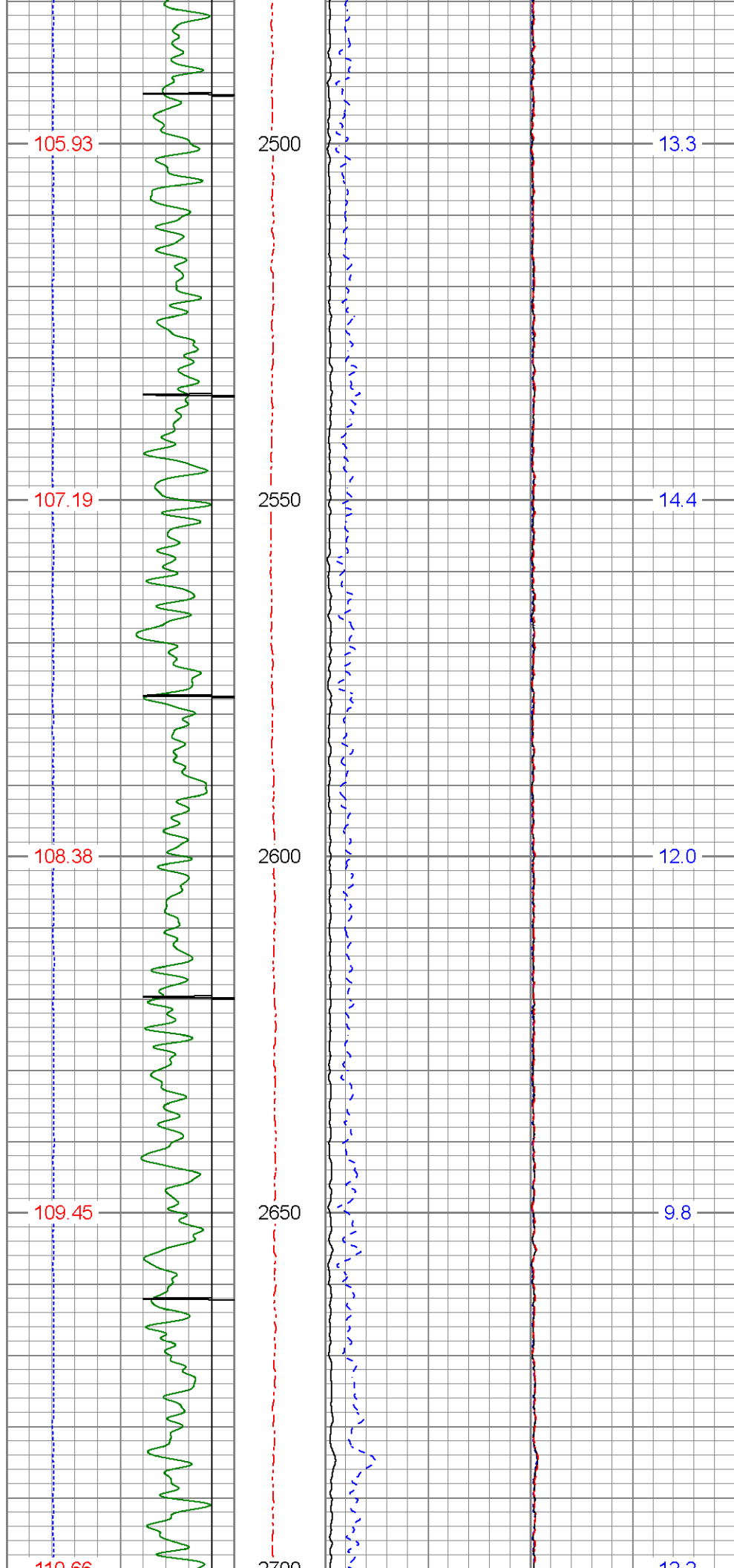


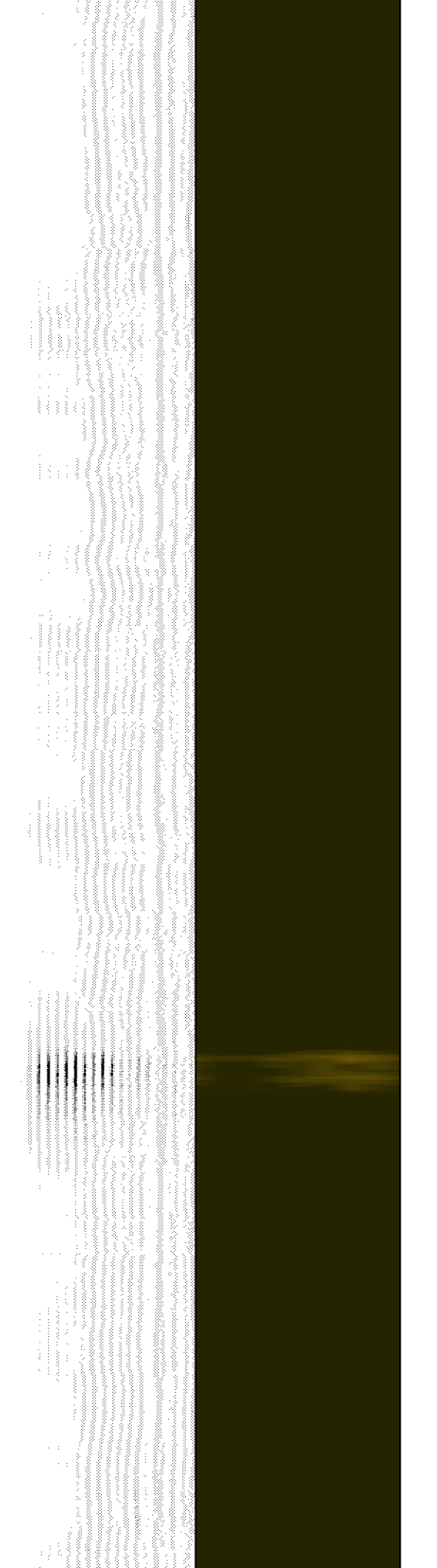
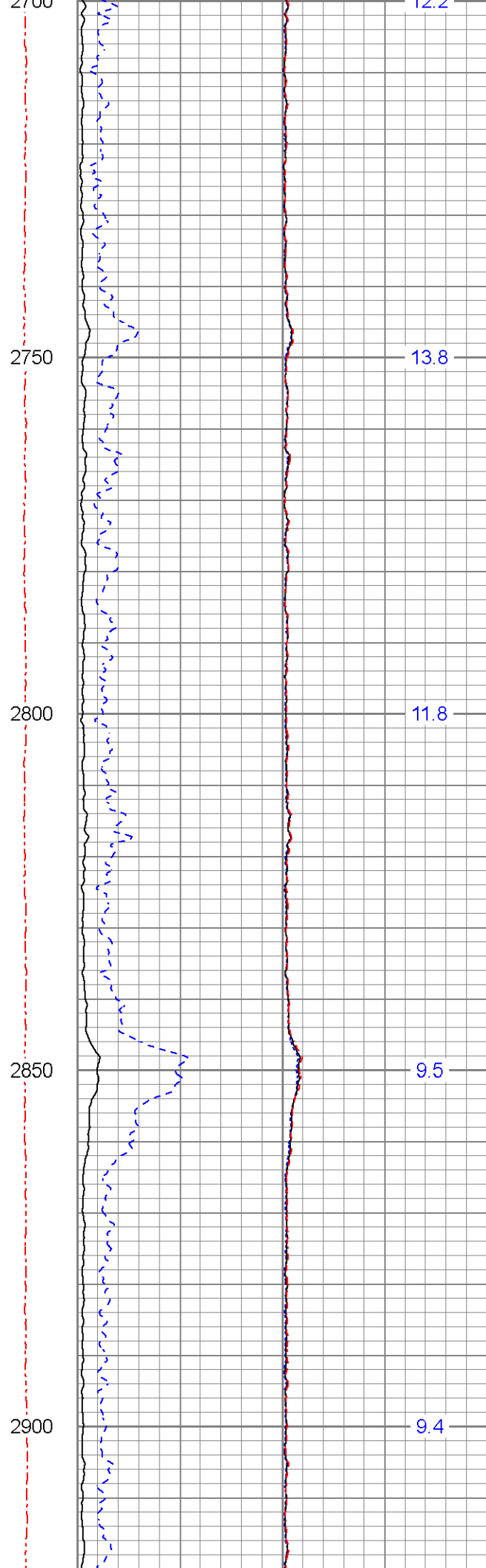
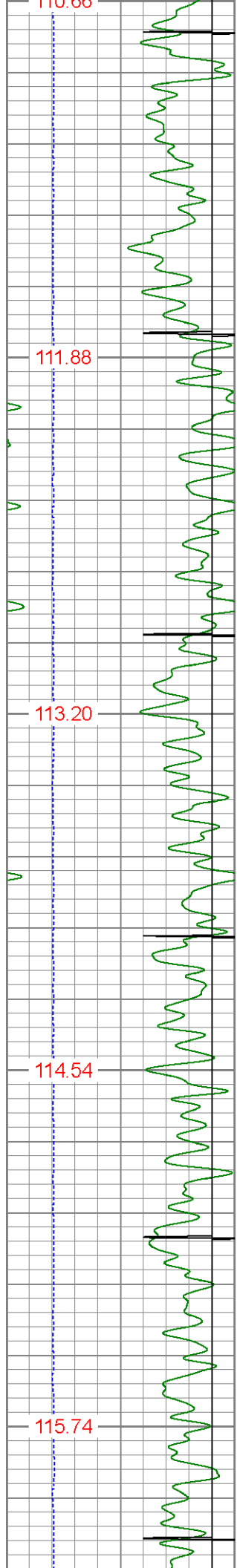


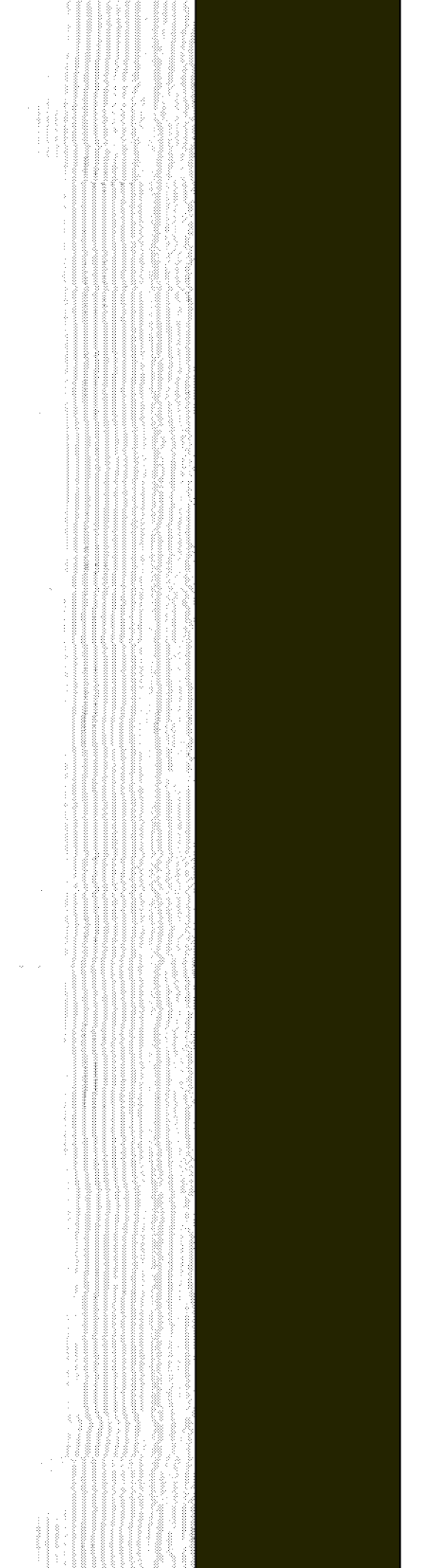
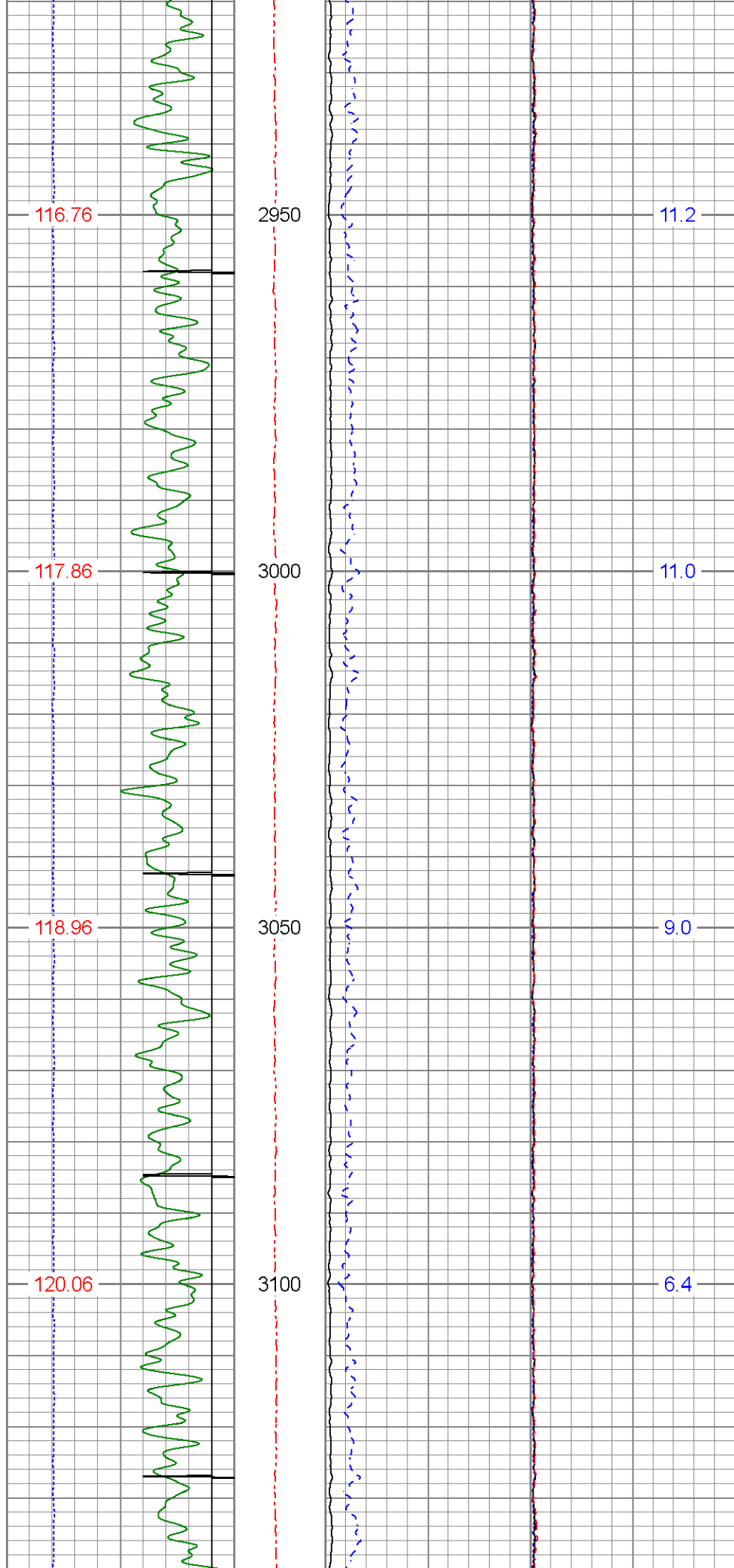


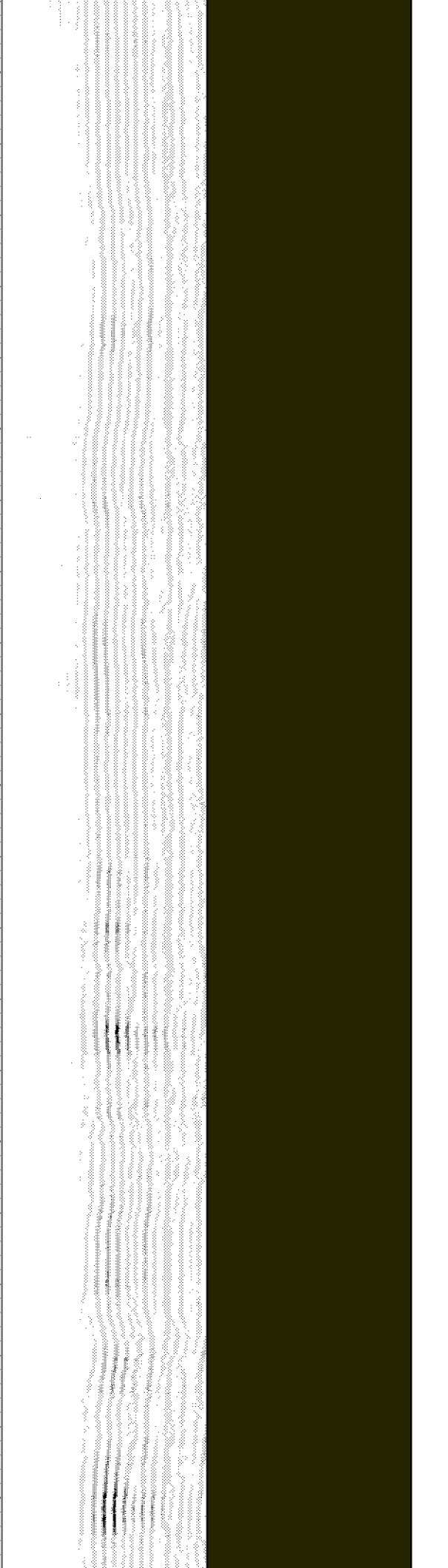
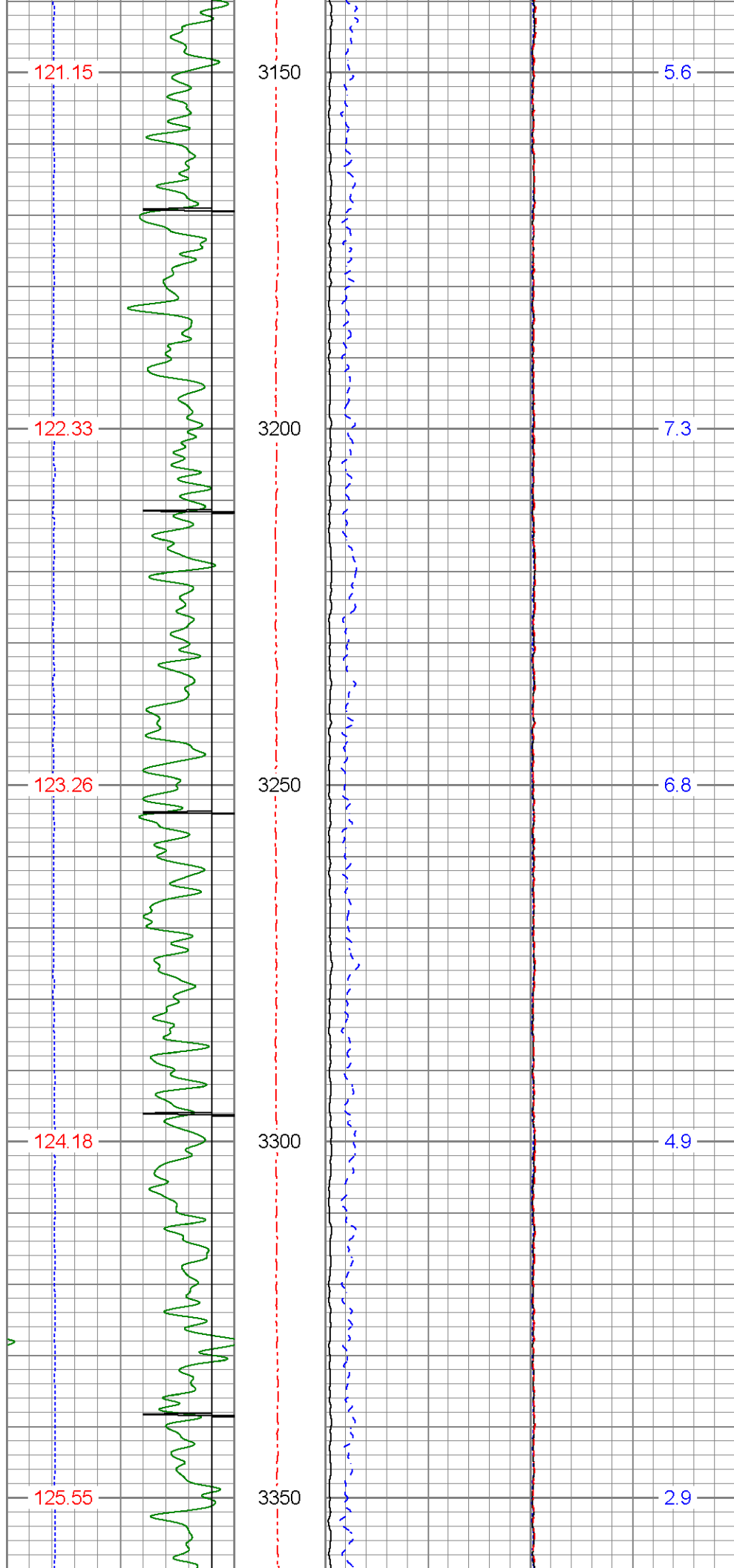


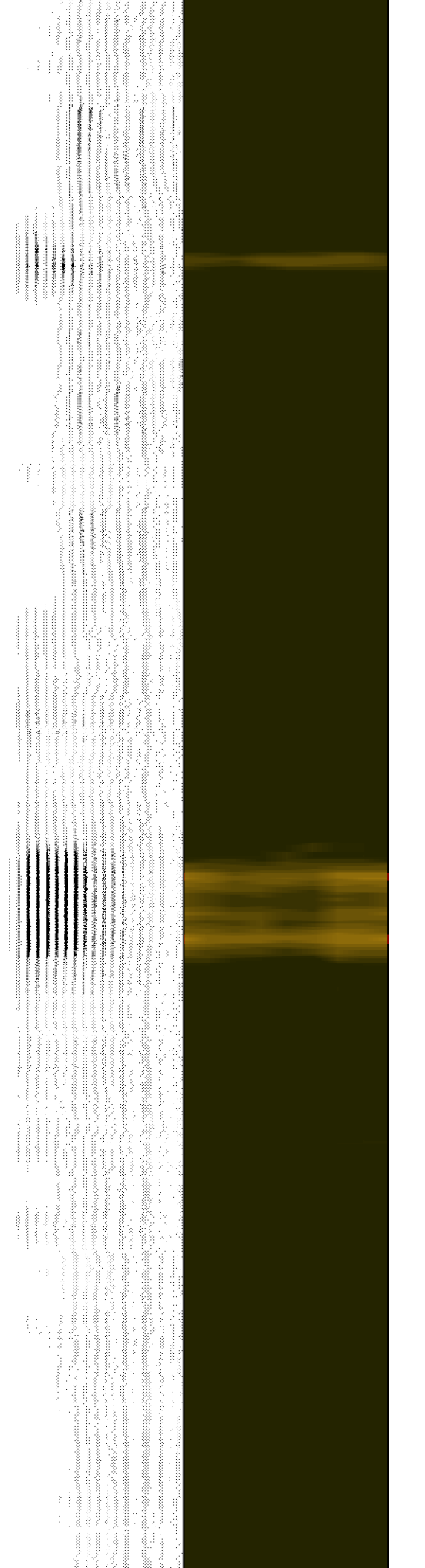
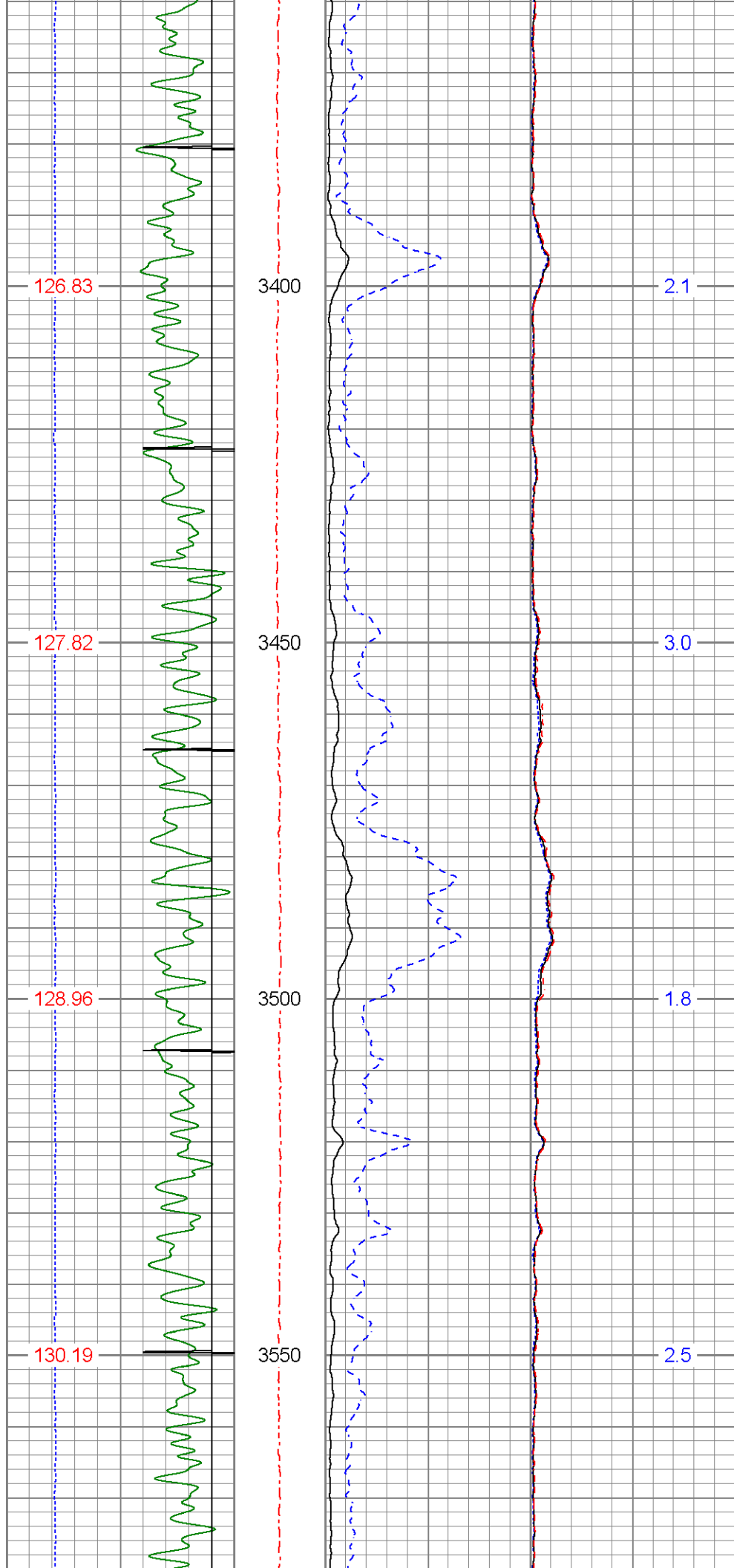


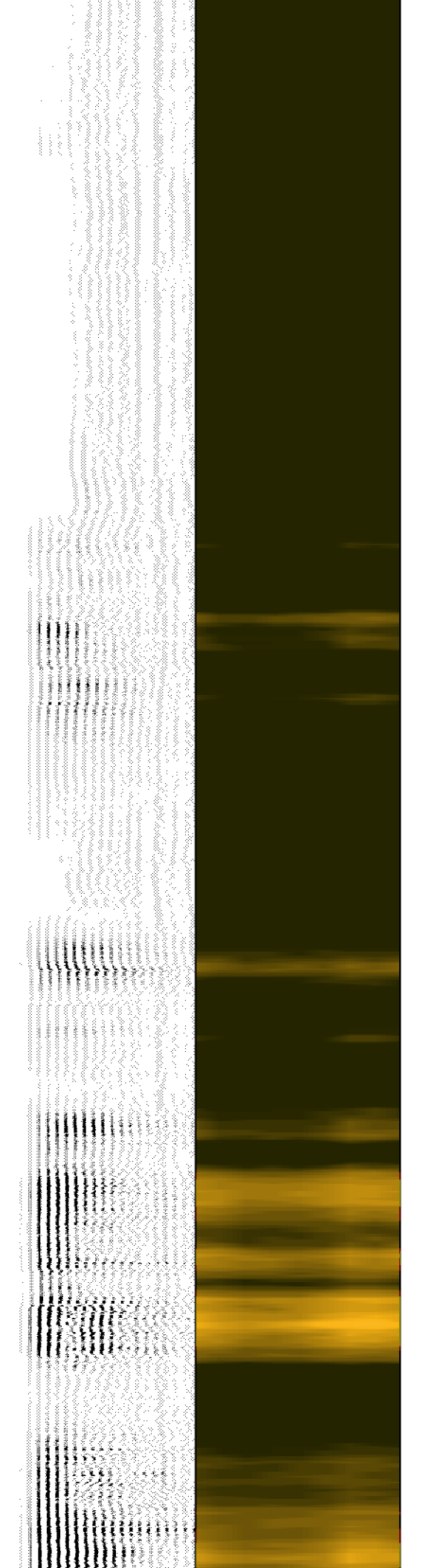
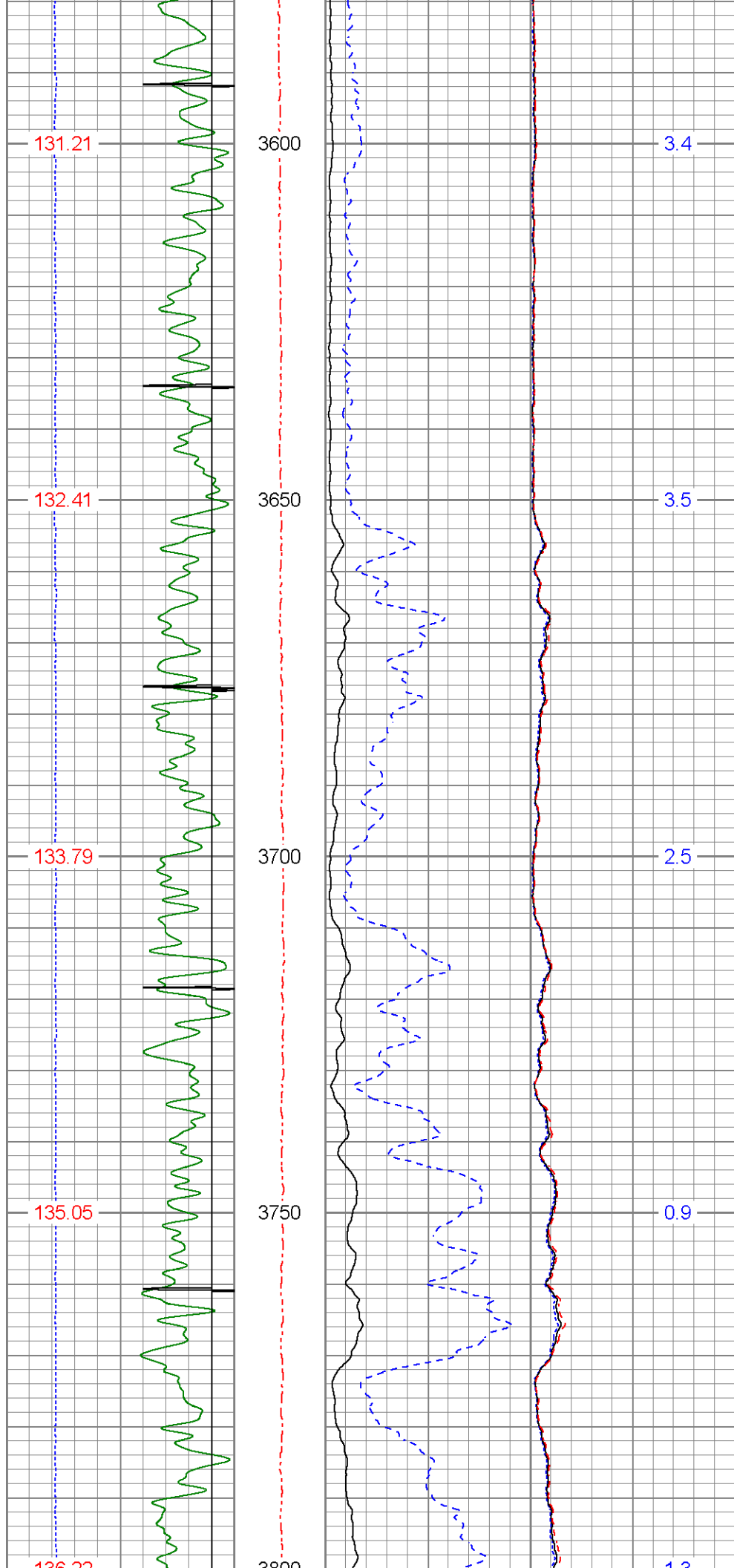


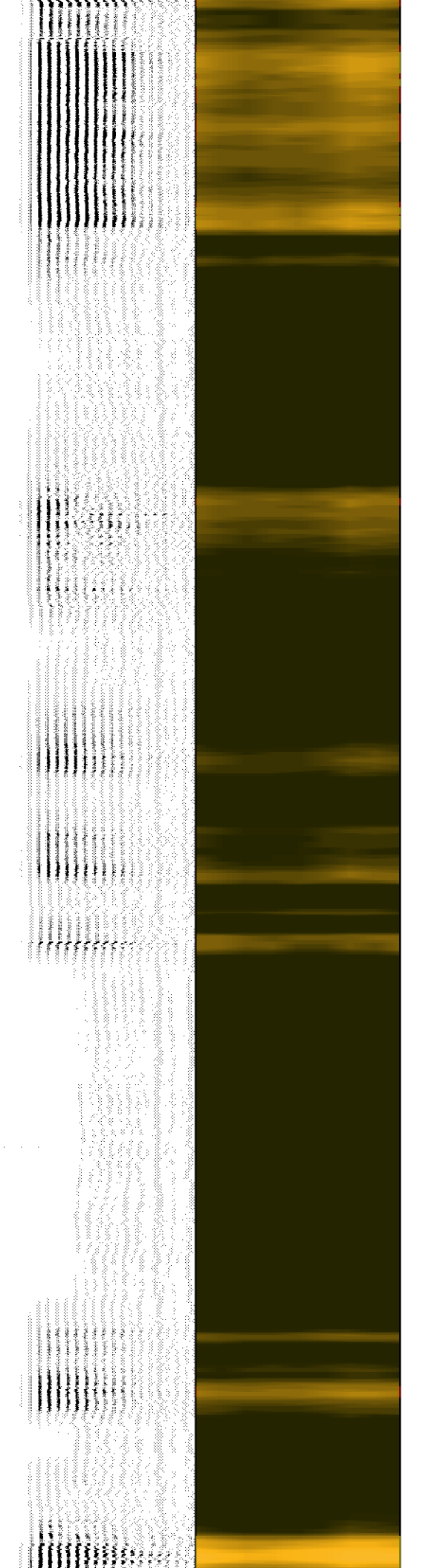
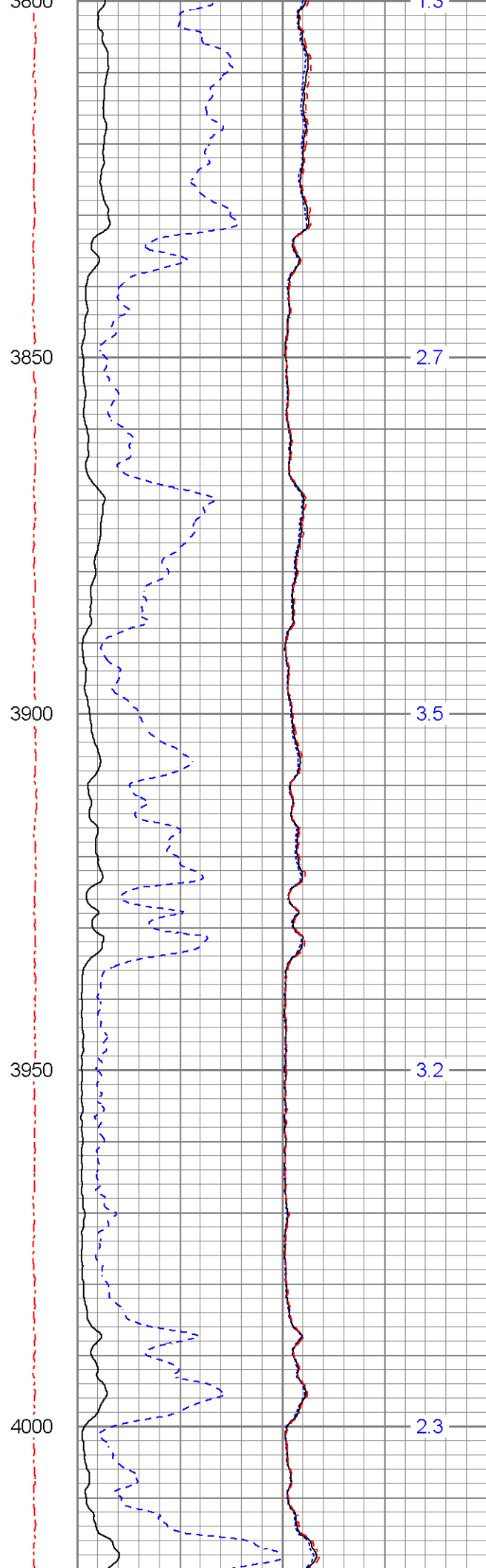
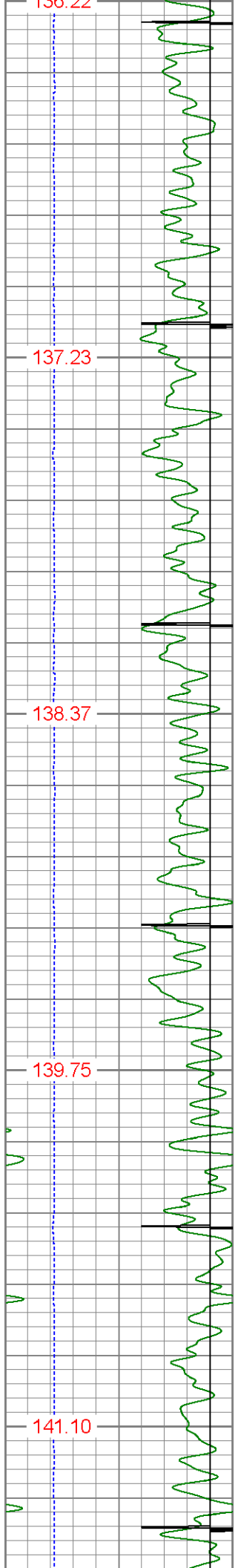


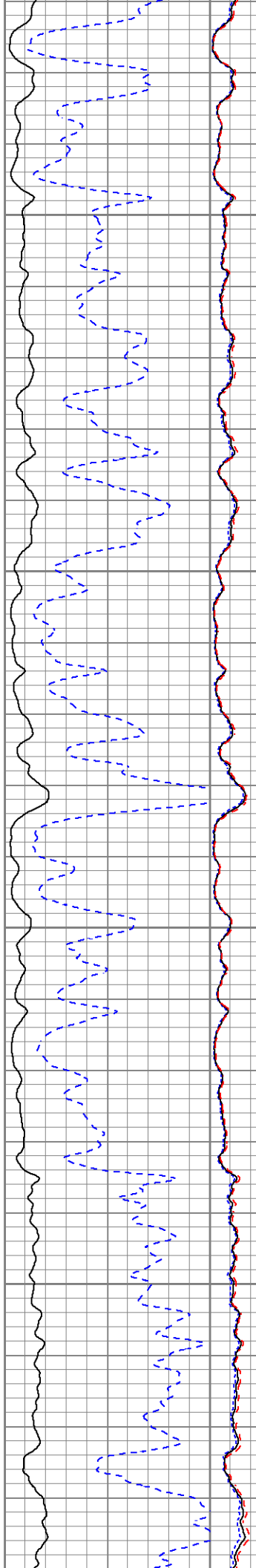
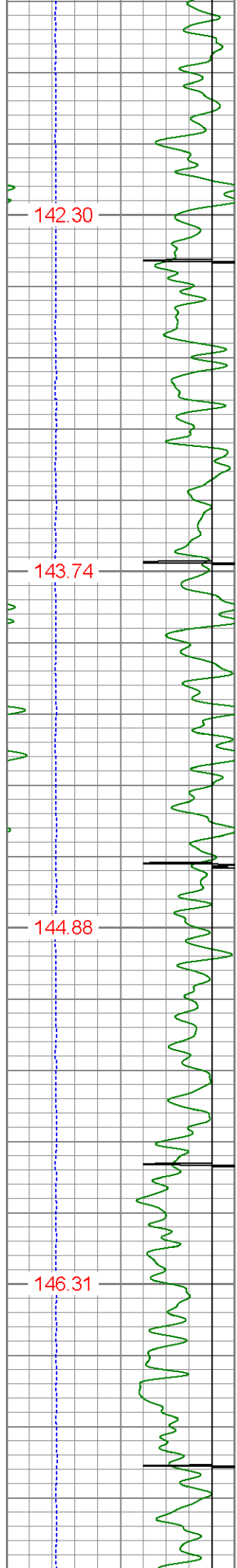




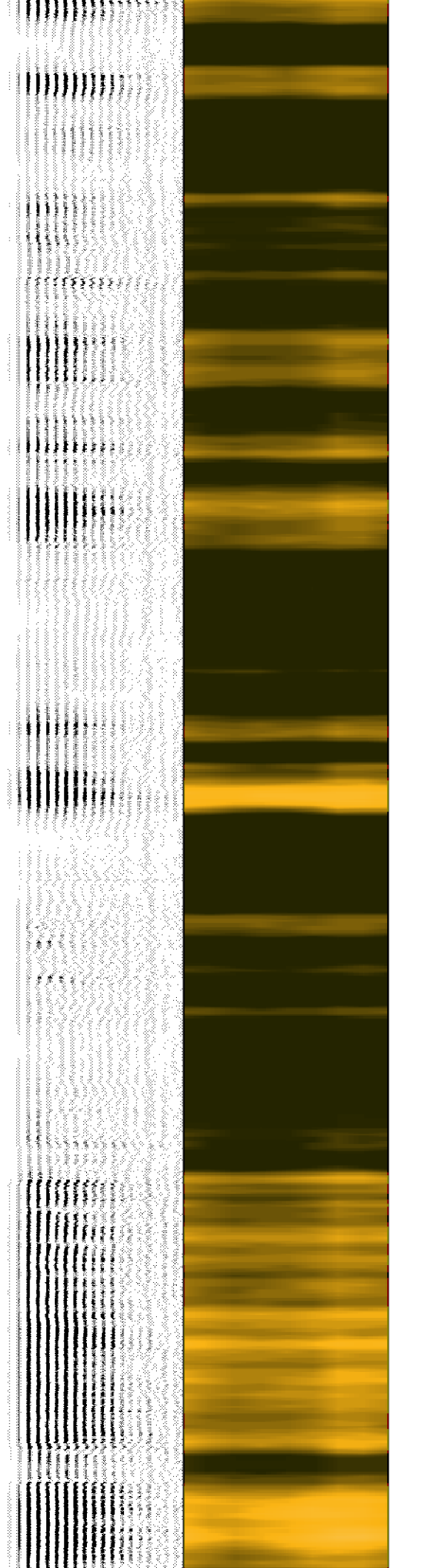


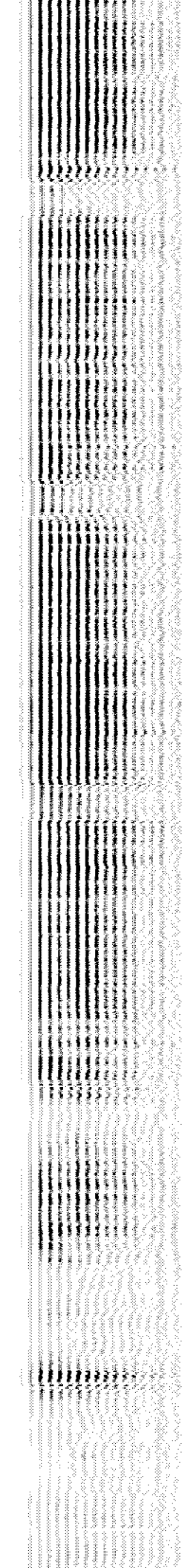
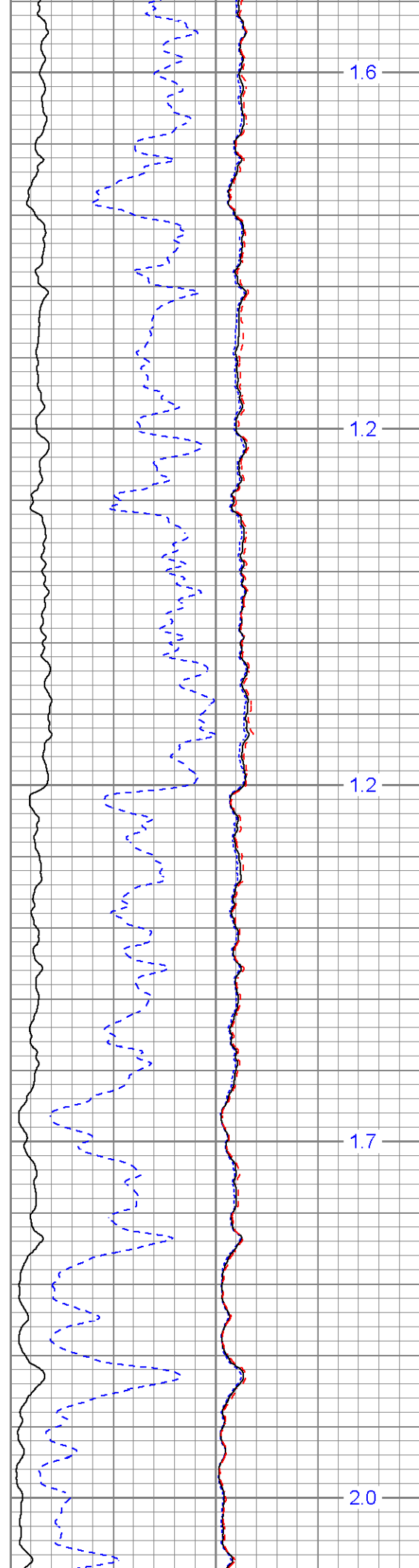
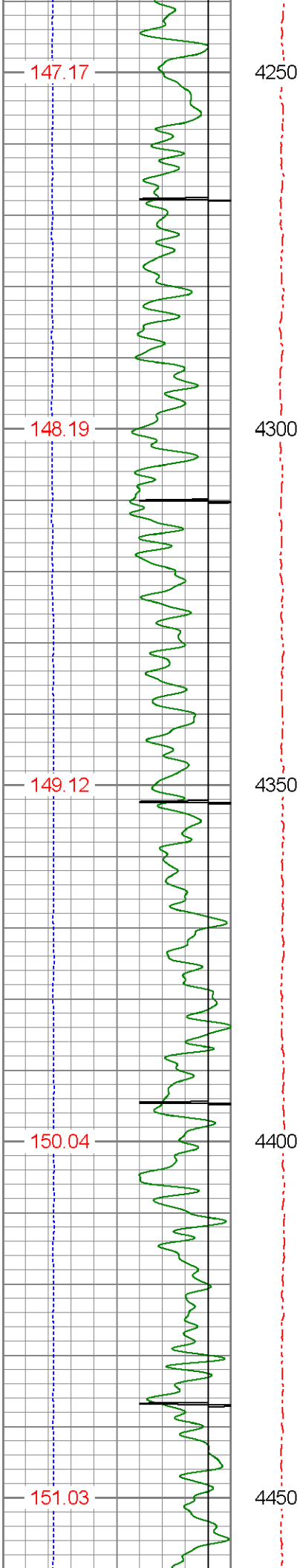


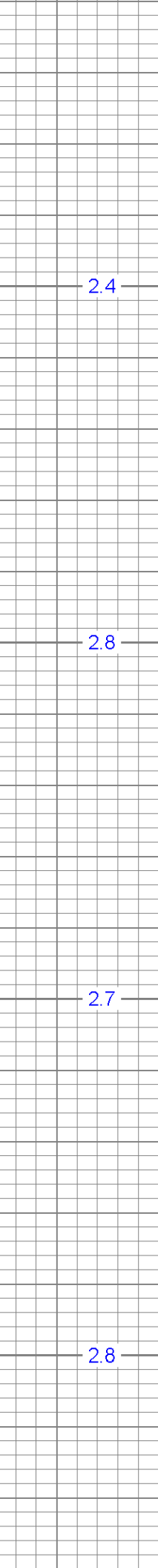
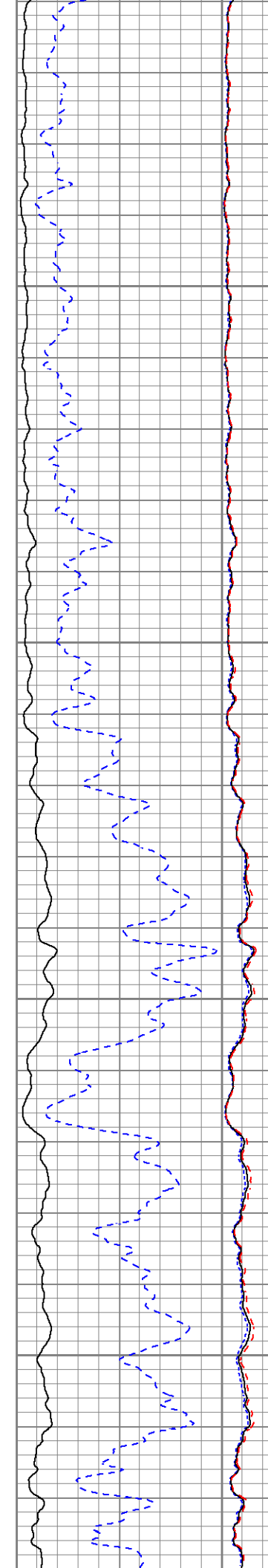
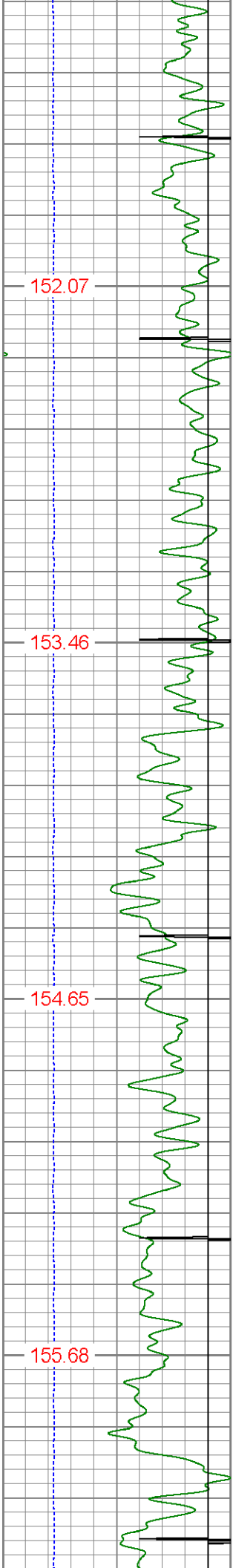




1.0
0.9
2.3
2.1





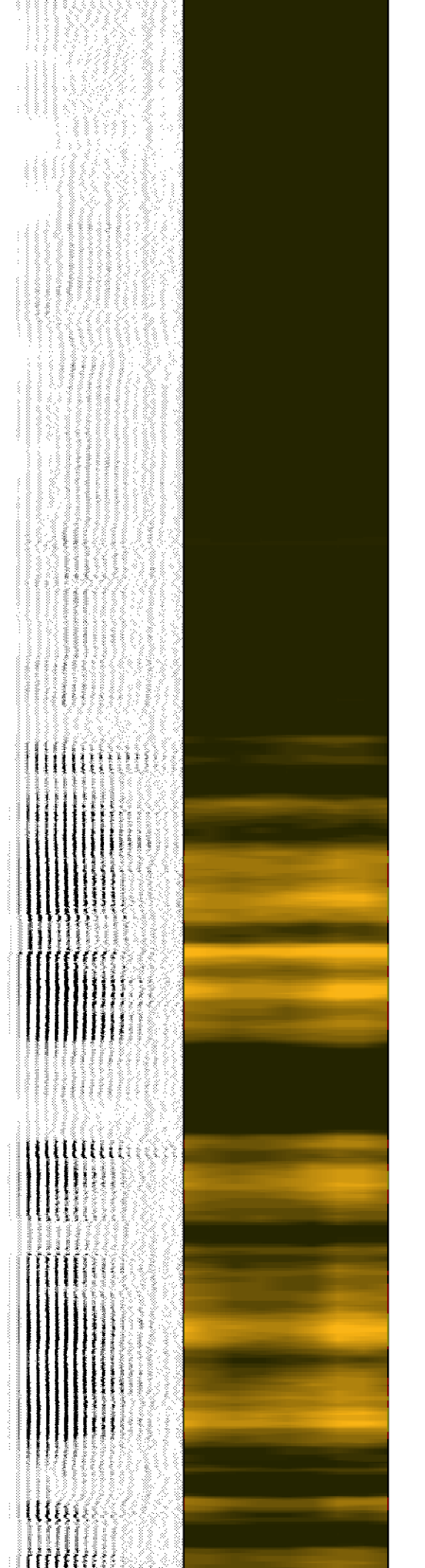


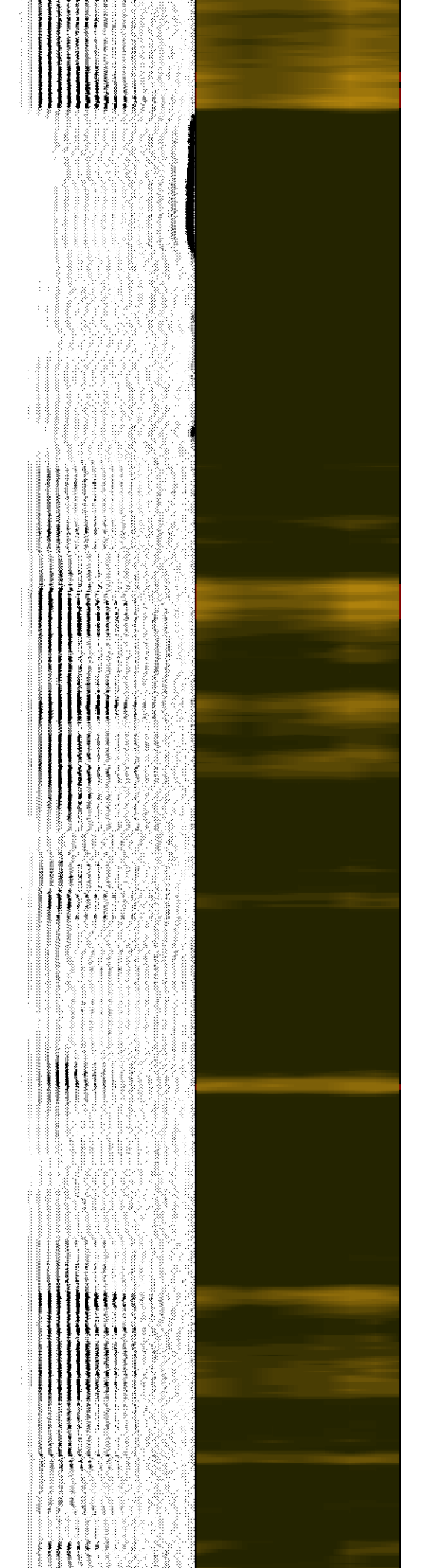
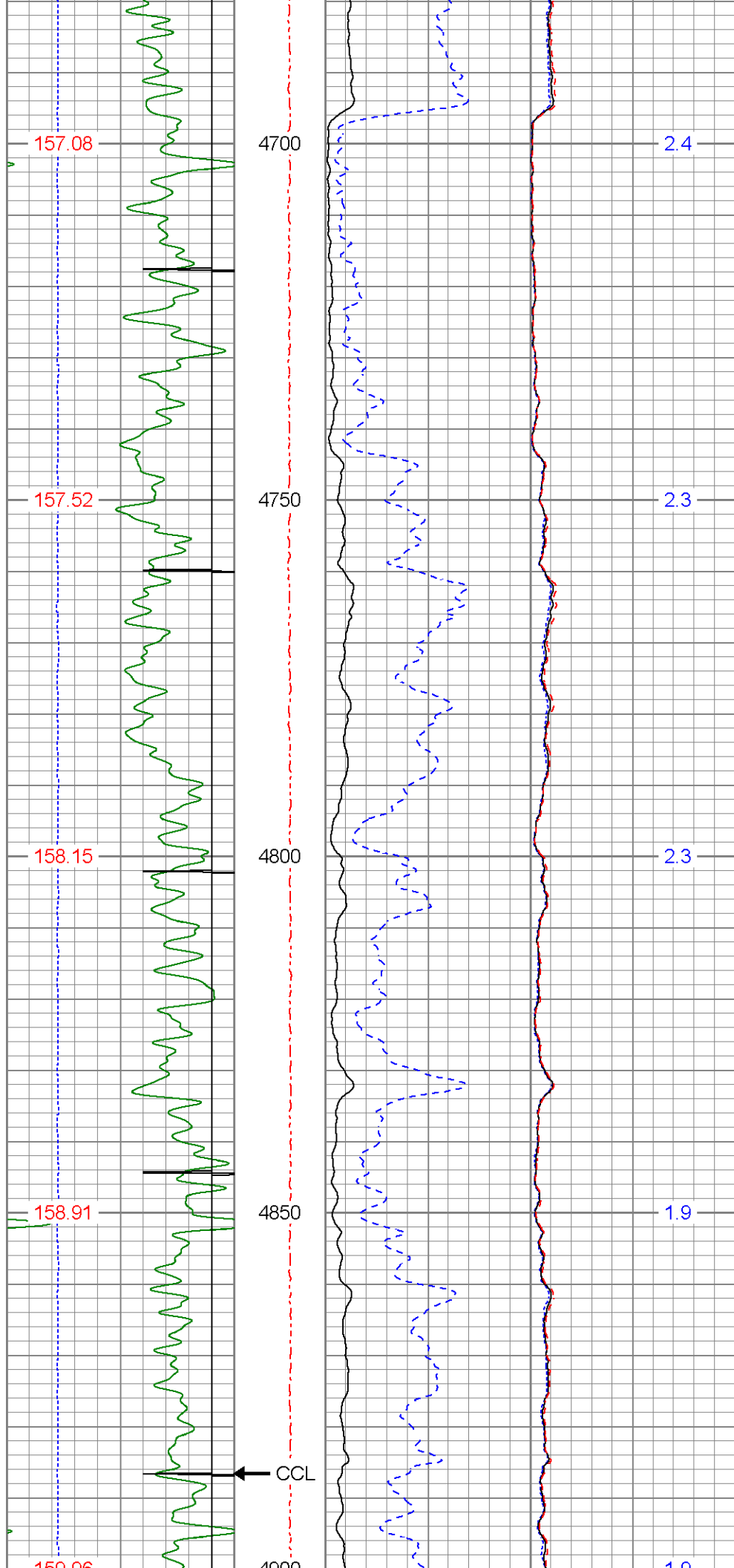
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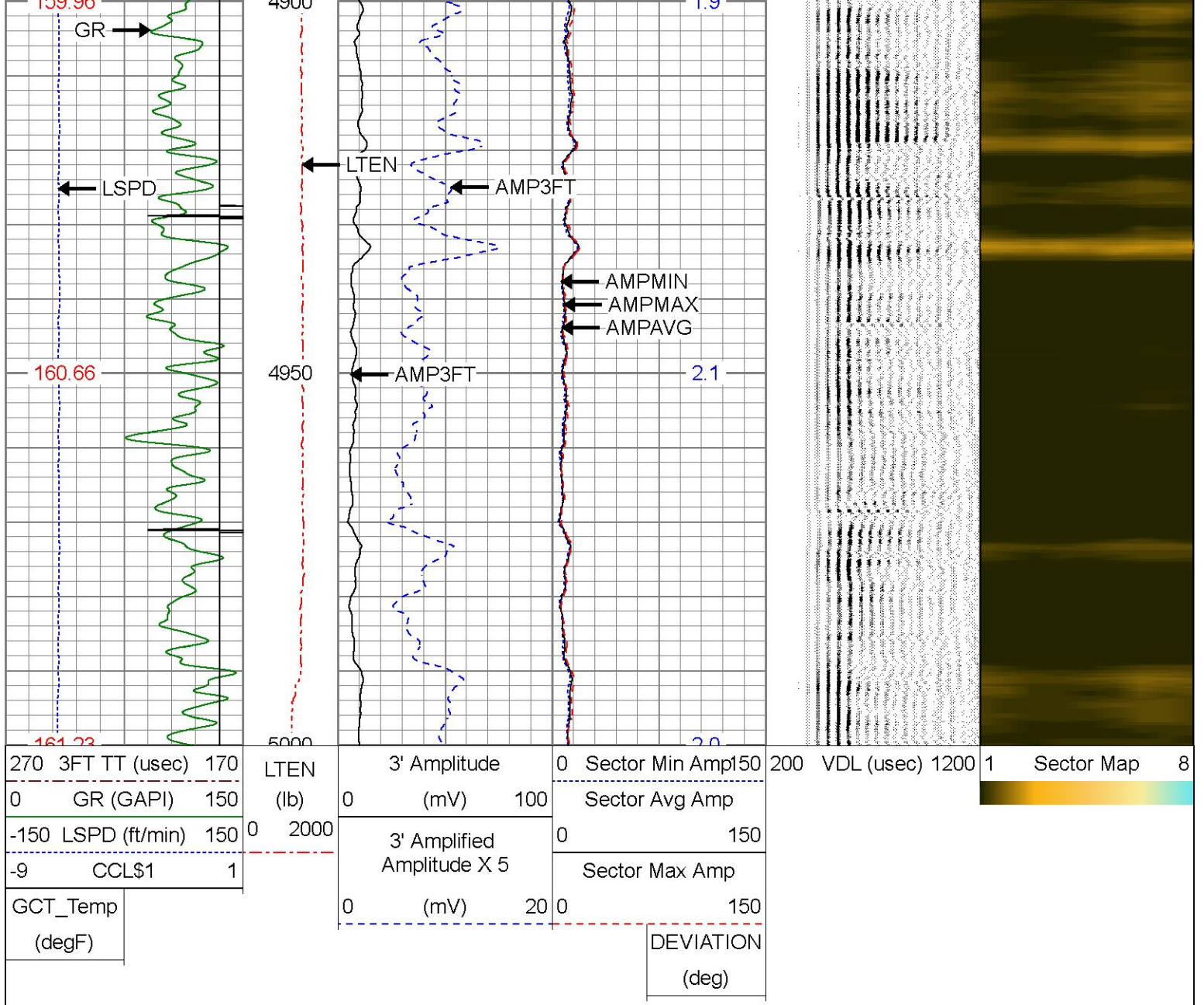
2.8

2.7

2.8



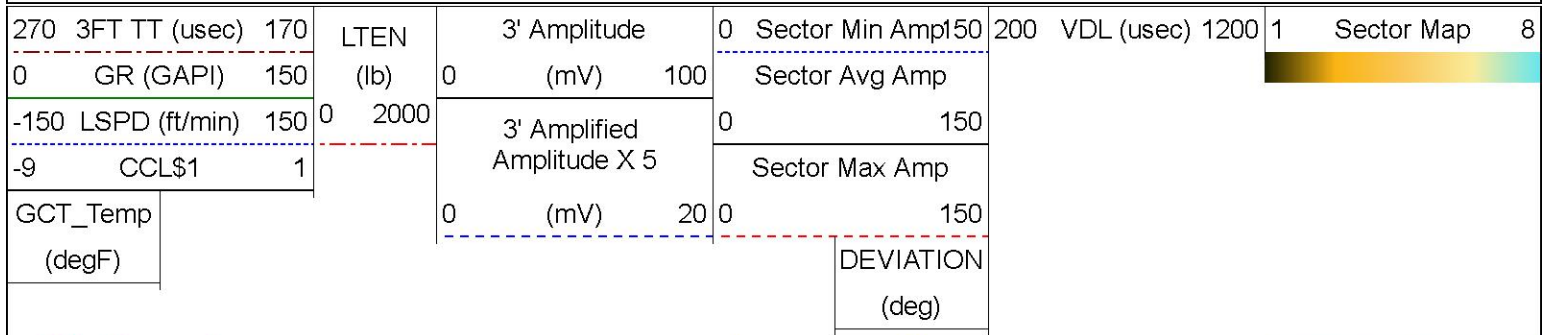


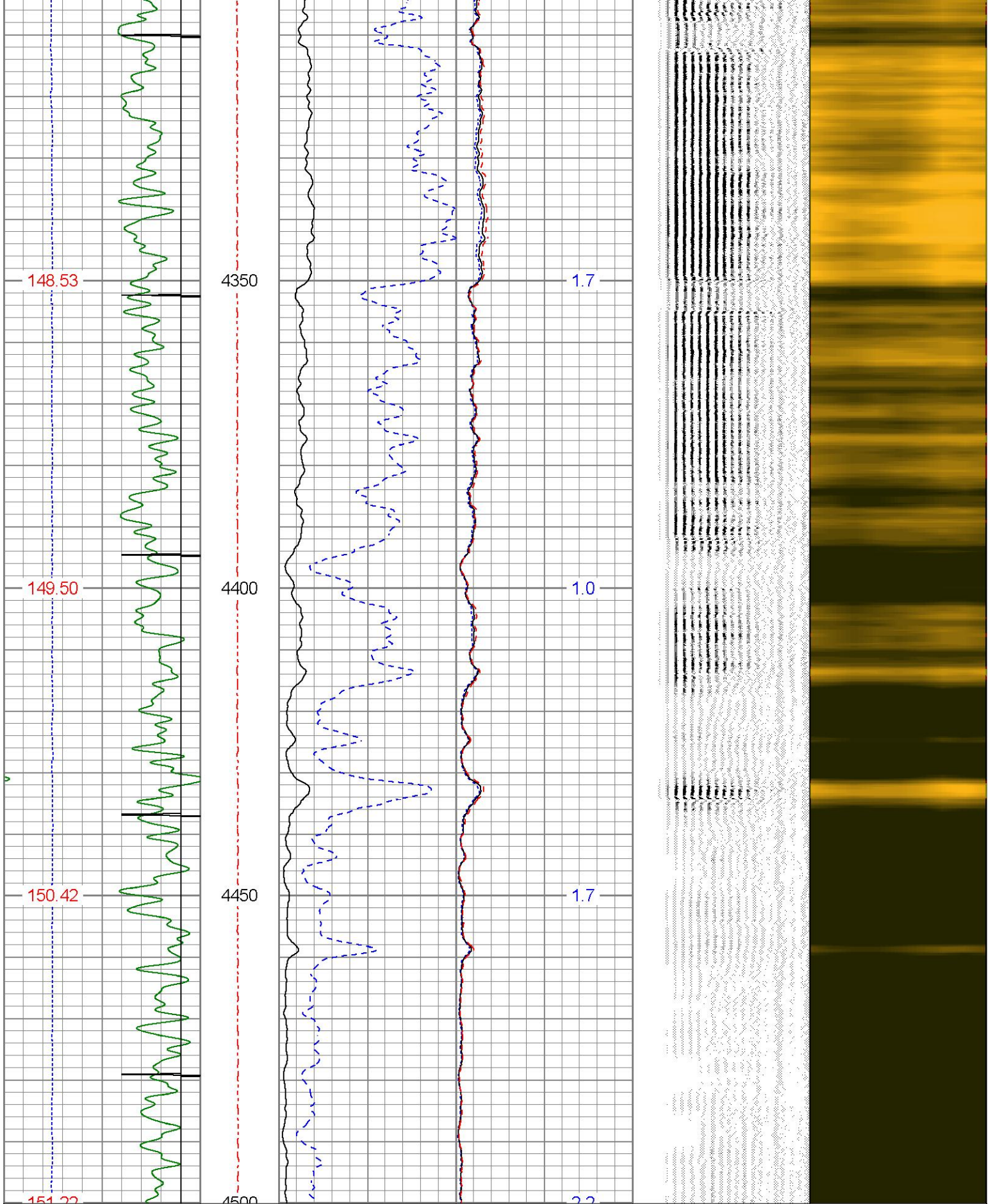


REPEAT PASS

ZERO PSI APPLIED AT SURFACE

Database File: I05-679360_oxy_morton 17-12_0512333919_20240618_scb1-gr-ccl.db
 Dataset Pathname: pass2
 Presentation Format: res_scb1 8sec-gr-ccl
 Dataset Creation: Tue Jun 18 13:05:12 2024
 Charted by: Depth in Feet scaled 1:240





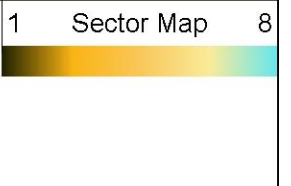
270	3FT TT (usec)	170
0	GR (GAPI)	150
-150	LSPD (ft/min)	150
-9	CCL\$1	1

LTEN	(lb)	0	2000
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3' Amplitude	(mV)	0	100
3' Amplified Amplitude X 5	(mV)	0	20

Sector Min Amp	150
Sector Avg Amp	150
Sector Max Amp	150

VDL (usec)	1200
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(degF)

DEVIATION

(deg)

Calibration Report

Database File I05-679360_oxy_morton 17-12_0512333919_20240618_scbl-gr-ccl.db
Dataset Pathname pass4
Dataset Creation Tue Jun 18 13:12:04 2024

Gamma Ray Calibration Report

Serial Number: GCT275-0BP0_base
Tool Model: GCT275-0BP0
Performed: Wed Apr 24 14:34:11 2024
Calibrator Value: 1.0 GAPI
Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps
Sensitivity: 1.0000 GAPI/cps

Inclinometer Calibration Report

Performed: Mon Jan 9 07:52:31 2023
Low Read. High Read. Low Ref. High Ref.
X Accelerometer -956.00 943.00 -1.00 1.00 gee
Y Accelerometer -965.00 910.00 -1.00 1.00 gee
Z Accelerometer 19.11 -882.49 0.00 1.00 gee

Segmented Cement Bond Log Calibration Report

Serial Number: RBT275C_Base
Tool Model: RADII-275C
Calibration Casing Diameter: 4.500 in
Calibration Depth: 0.092 ft

Master Calibration, performed Tue Jun 18 12:46:01 2024:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.753	0.700	81.196	106.860	0.700
CAL	0.000	0.763				
5'	0.000	0.694	0.700	81.196	115.949	0.700
SUM						
S1	0.000	0.764	0.000	100.000	130.974	0.000
S2	0.000	0.759	0.000	100.000	131.806	0.000
S3	0.000	0.751	0.000	100.000	133.160	0.000
S4	0.000	0.738	0.000	100.000	135.463	0.000
S5	0.000	0.741	0.000	100.000	134.877	0.000
S6	0.000	0.743	0.000	100.000	134.648	0.000
S7	0.000	0.755	0.000	100.000	132.537	0.000
S8	0.000	0.757	0.000	100.000	132.054	0.000

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	0.763	1.000	0.000

Air Zero Calibration, performed Tue Jun 18 12:43:21 2024:

	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	

Inclinometer Calibration Report

Performed:	Mon Jan 9 07:52:41 2023				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-918.00	908.00	-1.00	1.00	gee
Y Accelerometer	-941.00	887.00	-1.00	1.00	gee
Z Accelerometer	1.35	894.18	0.00	1.00	gee



Company
Well
Field
County
State

OCCIDENTAL PETROLEUM CORP.
MORTON 17-12
WATTENBERG
WELD
COLORADO