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RADIAL BOND LOG WITH GAMMA RAY

Comp. ANADARKO PETROLEUM CORP.
Well SARCHET JOHN E UNIT 1
Field WATTENBERG
Co. WELD
State COLORADO

Company **ANADARKO PETROLEUM CORP.**
Well **SARCHET JOHN E UNIT 1**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API # : 0512307389
SHL: SWSW 990 'FSL & 990' FWL
LAT: 40.20600/LONG: -104.76950
SEC 22 TWP 3N RGE 66W

Other Services
CCL

Permanent Datum	GL	Elevation 4922	Elevation
Log Measured From	GL 0	Above Perm. Datum	K.B. 4931
Drilling Measured From	KB		D.F. 4931
			G.L. 4922

Date of Service	15-NOV-2019		
Run Number	ONE		
Depth Driller or PBTD	7980		
Depth Logger	3500		
Bottom Log Interval	3500		
Top Log Interval	0		
Open Hole Size	7.875		
Type Fluid	WATER		
Fluid Level	FULL		
Fluid Density	8.4		
Max. Recorded Temperature	154 degF		
Max. Wellhead Pressure	500 PSI		
Wellhead Connection	TUBING HANGER		
Estimated Cement Top	N/A		
Unit Number	P-57		
Wireline Size	9/32		
Location	FORT MORGAN		
Recorded By	MAX PACE		
Witnessed By	FIDEL GONZALEZ		

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	8.625	24#	0	575
Production Casing	4.5	11.6#	0	7979
Liner Record				

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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.
PROBE RBL-DC 1411-67 CALIBRATED ON 11/3/2019
FREE PIPE PASS PERFORMED AT 2086 FEET

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew

Engineer:
Operator:
Operator:
Operator:

Tool Data - Services

Serial Number

Log Variables

DatabaseC:\ProgramData\Warrior\Data\anadarko_sarchet_john_e_unit1_0512307389_111520
Dataset field/well/run1/pass6/_vars_

Top - Bottom

BHTEMP_Src	BOREID in	BOTTEMP degF	CASED?	CASEOD in	CASETHCK in	CASEWGHT lb/ft
TEMP	7.875	100	Yes	4.5	0	11.6

CMNTTHCK in	CMTTKCOR	CSTKCOR	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	NPORSEL
0	Off	Off	0	1	0.08	Limestone

PERFS	PPT usec	SRFTEMP degF	SZCOR	TDEPTH ft
0	0	0	Off	0

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASED? : Cased hole ?
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
CMNTTHCK : Cement Thickness
CMTTKCOR : CN CemThk. Cor. ?
CSTKCOR : CN CasThk. Cor. ?
MAXAMPL : Maximum Amplitude
MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
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
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
TEMP	17.33					
WVFS8	15.03		PROBE-RBT-DIGITAL-RBL-DCT (FW14 Probe 2 3/4" Radii Bond with Temp-Corrosion Package	11-9.21	2.75	105.00
WVFS7	15.03					
WVFS6	15.03					
WVFS5	15.03					
WVFS4	15.03					
WVFS3	15.03					
WVFS2	15.03					
WVFS1	15.03					
WVFCAL	15.03					
WVF3FT	15.03					

WVF5FT	14.03				
HEADVOLT	10.84				
		Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	7.09				
GCT_TEMP	6.30				
GR	5.71	PROBE-GR/CCL-DIGITAL-275 Probe GCT 4.75210) Probe 2 3/4" Gamma Ray/Temp/CCL		2.75	60.00
		Centralizer-275 TekCo 2 3/4" TekCo Centralizer	2.88	2.75	20.00
		Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00

Dataset: anadarko_sarchet_john_e_unit1_0512307389_11152019_scbl.db: field/well/run1/pass6
Total length: 23.96 ft
Total weight: 218.00 lb
O.D.: 2.75 in

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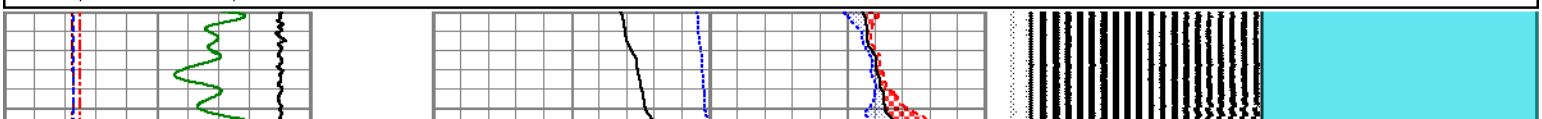
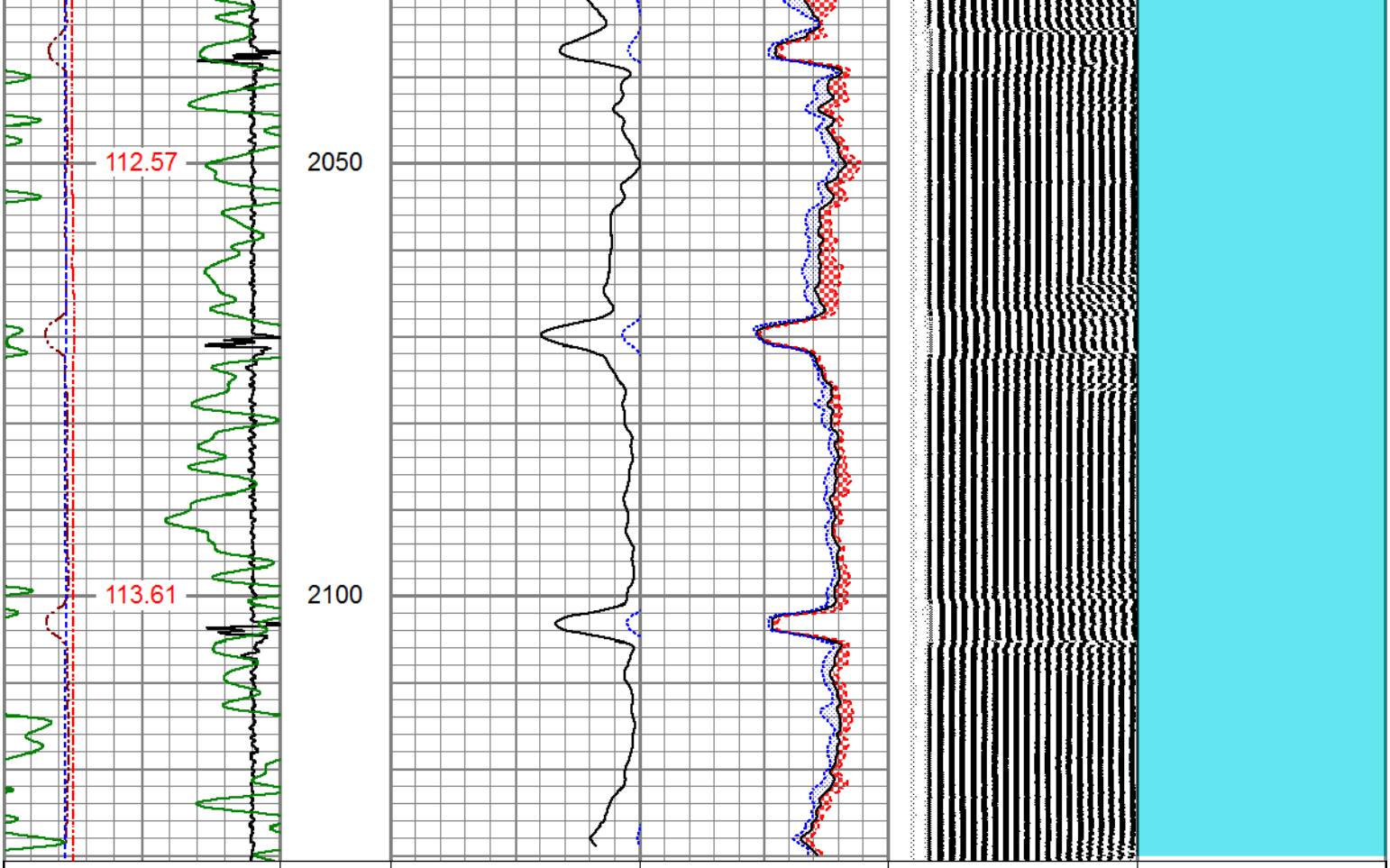
FREE PIPE SECTION

ZERO PSI APPLIED AT SURFACE

Database File	anadarko_sarchet_john_e_unit1_0512307389_11152019_scbl.db
Dataset Pathname	pass3
Presentation Format	pinr_scbl
Dataset Creation	Fri Nov 15 13:25:28 2019
Charted by	Depth in Feet scaled 1:240

3Ft Travel Time	270 (usec) 170	
Collar Locator	-9 1	
Gamma Ray	0 (GAPI) 150	
LineTension	0 (lb) 2000	
Line Speed	-100 (ft/min) 100	
TEMP	(degF)	
3' Amplitude	0 (mV) 100	
3' Amplified Amplitude X 5	0 (mV) 20	
Bond Index	1 0	
Sector Amplitude Average	0 150	
Sector Amplitude Maximum	0 150	
Sector Amplitude Minimum	0 150	
VDL	200 (usec) 1200	
Sector Map	1 8	





3Ft Travel Time	3' Amplitude	Sector Amplitude Average	VDL	1 Sector Map 8
270 (usec) 170	0 (mV) 100	0 150	200 (usec) 1200	
-9 Collar Locator 1	3' Amplified Amplitude X 5	Sector Amplitude Maximum		
Gamma Ray	0 (mV) 20	0 150		
0 (GAPI) 150	1 Bond Index 0	Sector Amplitude Minimum		
LineTension		0 150		
0 (lb) 2000				
Line Speed				
-100 (ft/min) 100				
TEMP (degF)				

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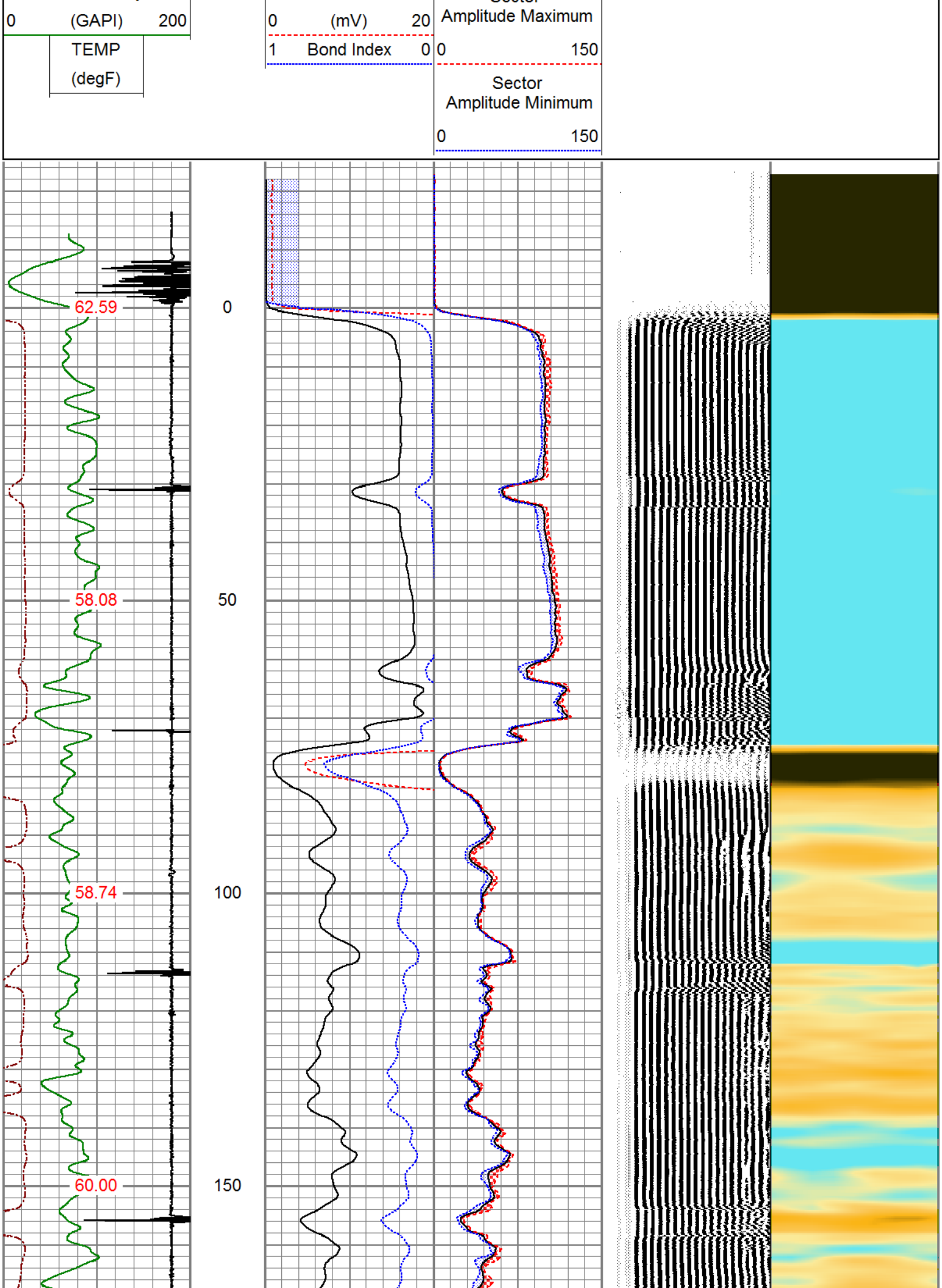
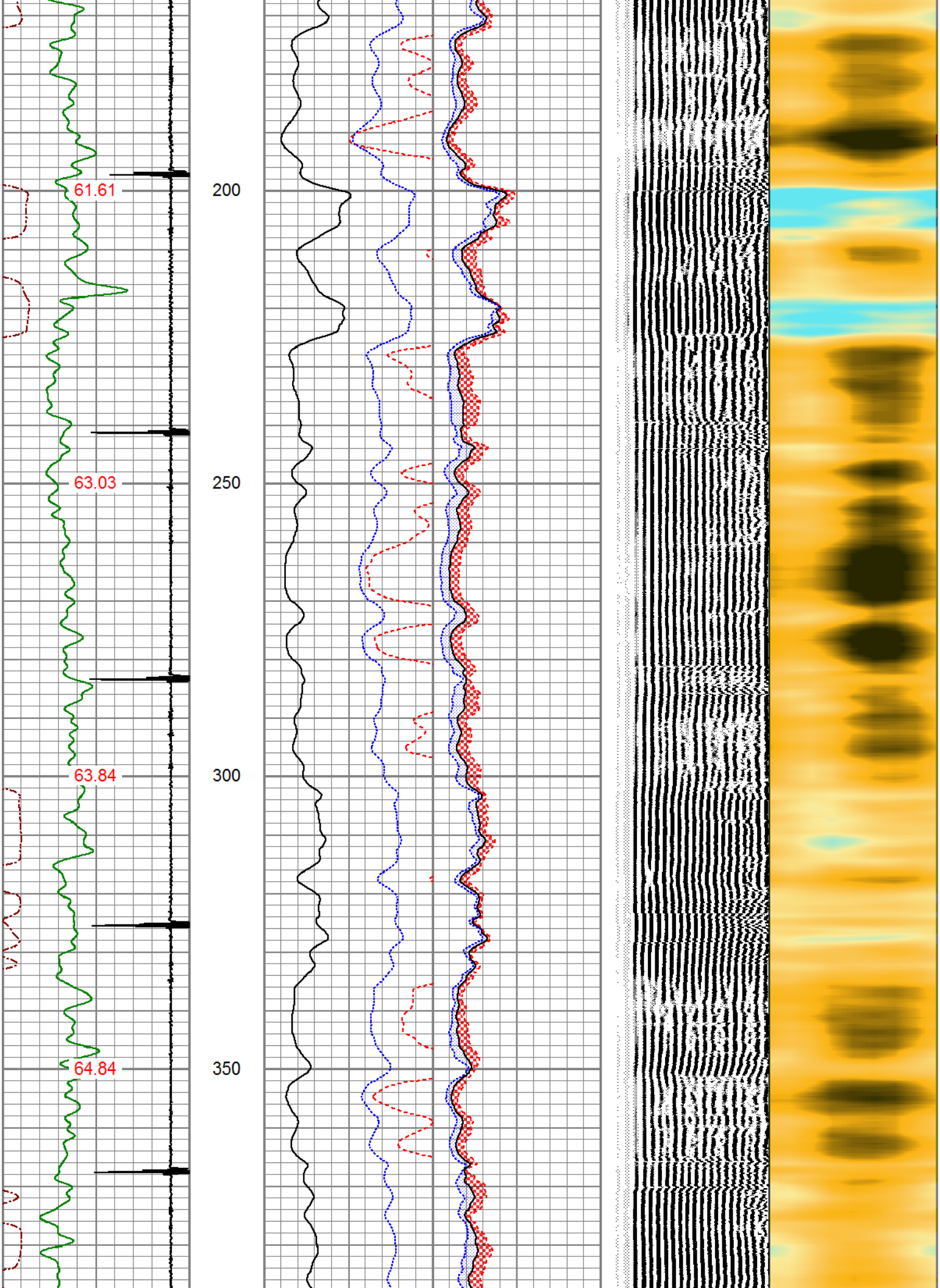
MAIN LOG

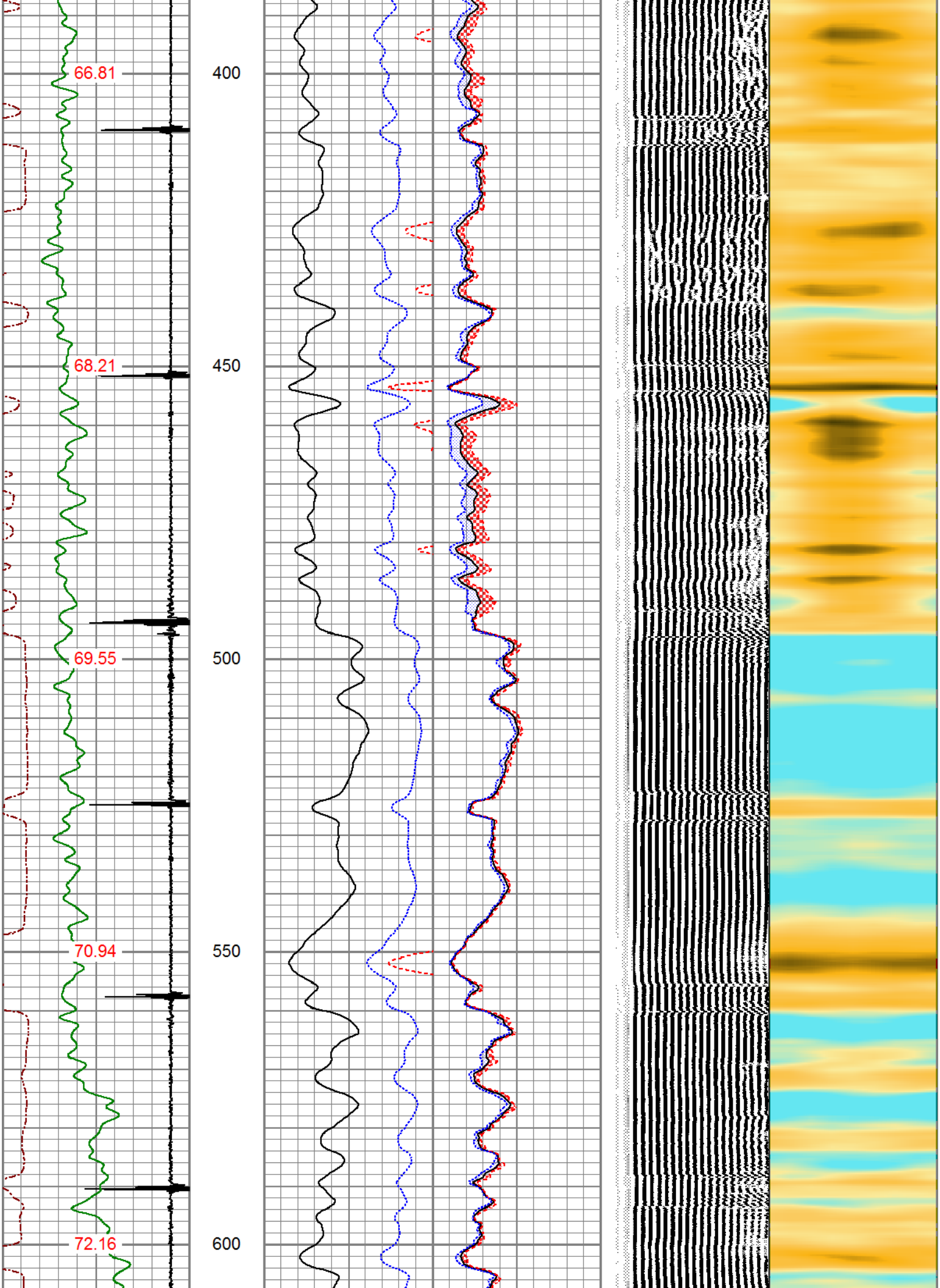
500 PSI APPLIED AT SURFACE

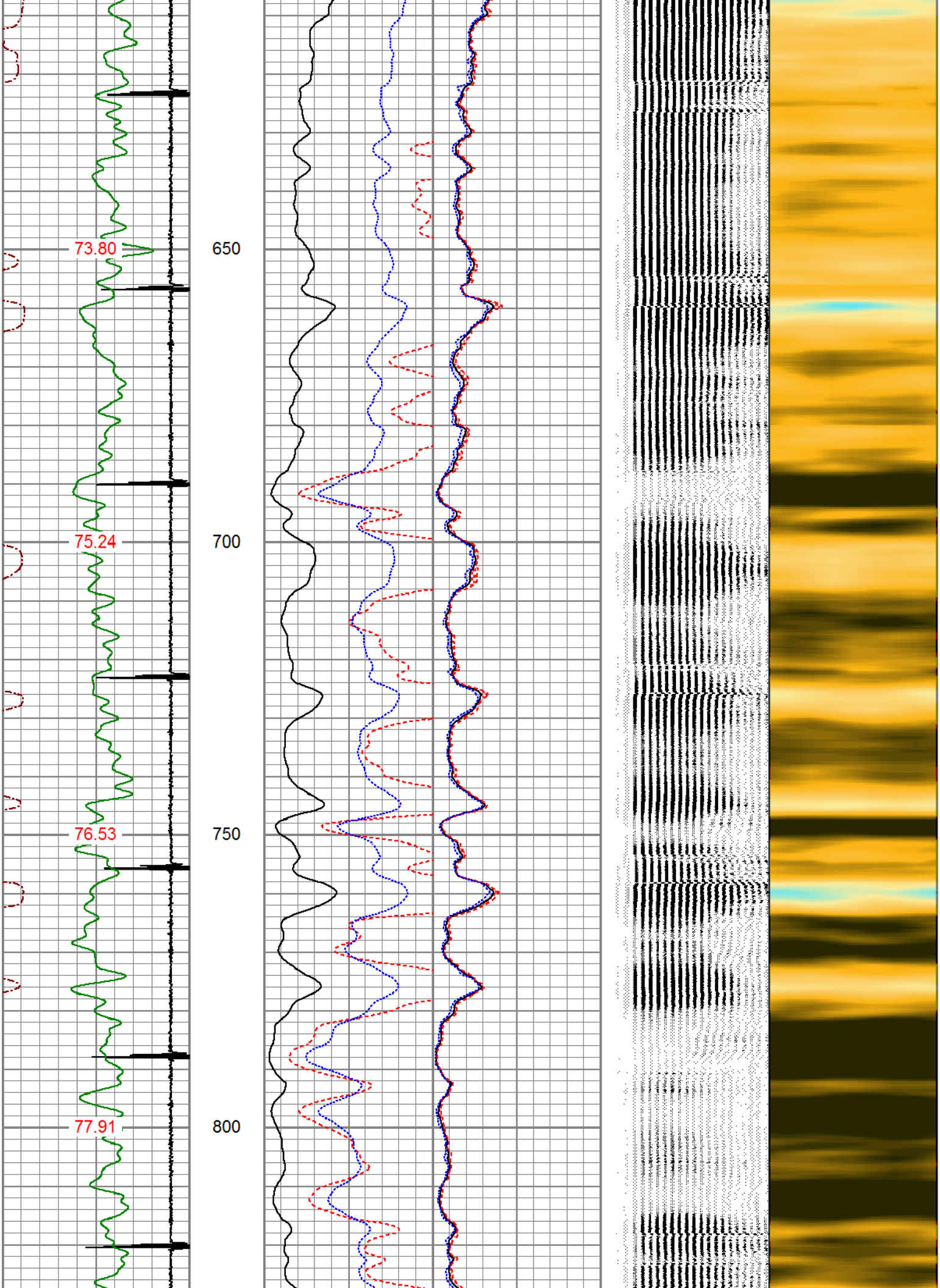
Database File	anadarko_sarchet_john_e_unit1_0512307389_11152019_scbl.db
Dataset Pathname	pass6
Presentation Format	pinr_scbl
Dataset Creation	Fri Nov 15 13:38:13 2019
Charted by	Depth in Feet scaled 1:240

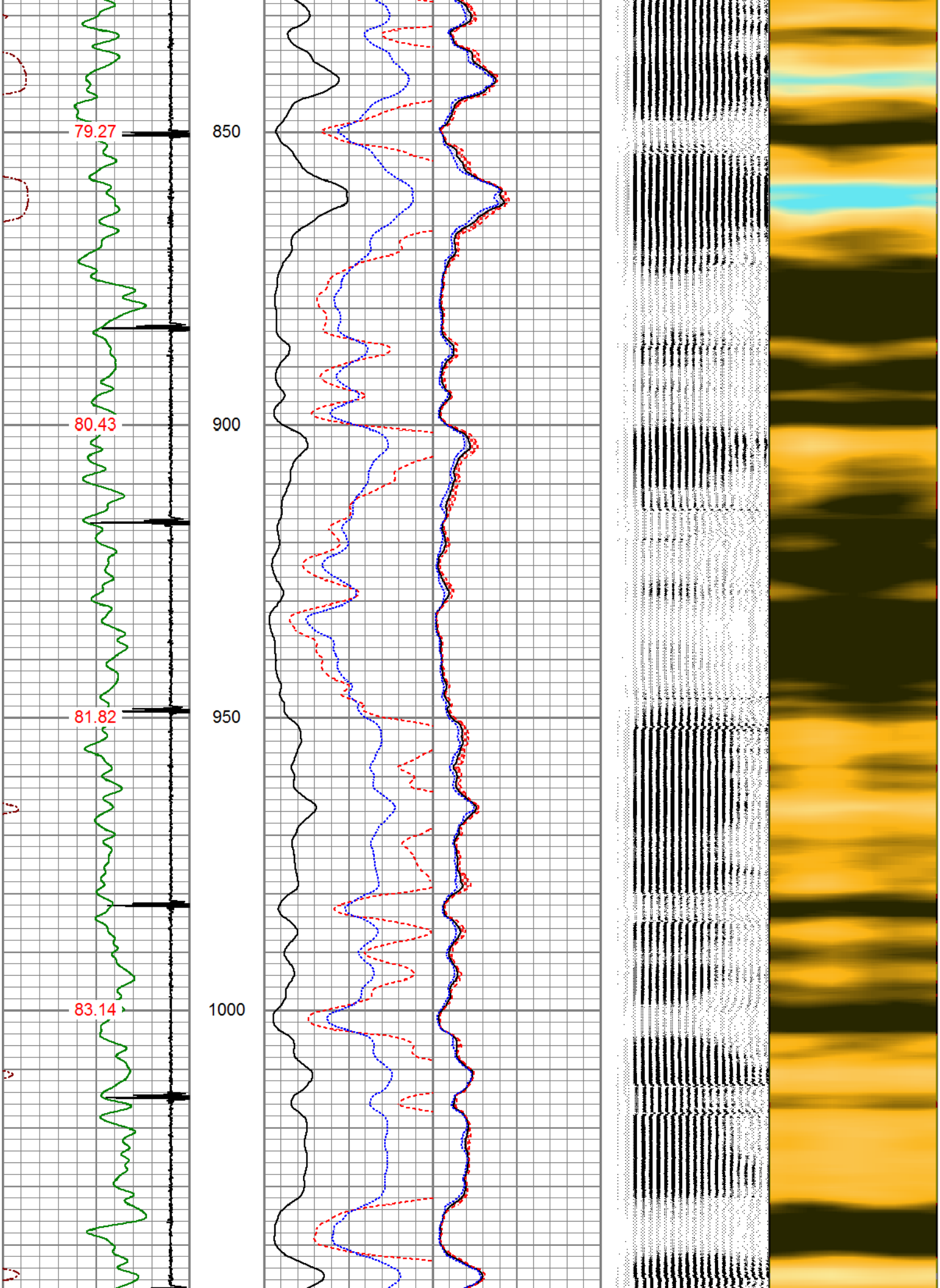
3Ft Travel Time	3' Amplitude	Sector Amplitude Average	VDL	1 Sector Map 8
260 (usec) 160	0 (mV) 100	0 150	200 (usec) 1200	
-9 Collar Locator 1	3' Amplified Amplitude X 5	Sector		
Gamma Ray				

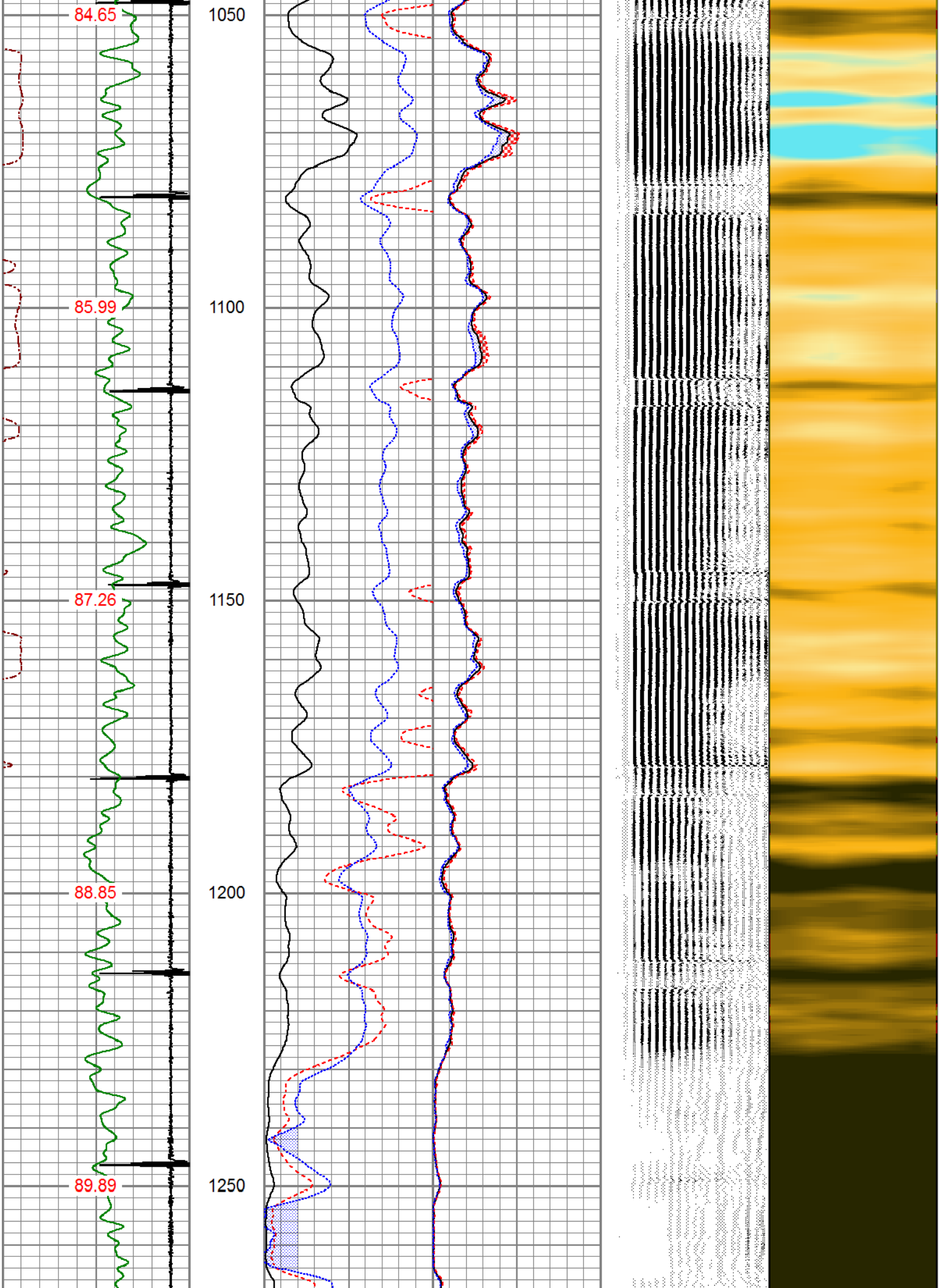

0 (GAPI) 200
TEMP
(degF)
0 (mV) 20
1 Bond Index 0
Sector
Amplitude Maximum
0 150
Sector
Amplitude Minimum
0 150
62.59
58.08
58.74
60.00
0
50
100
150

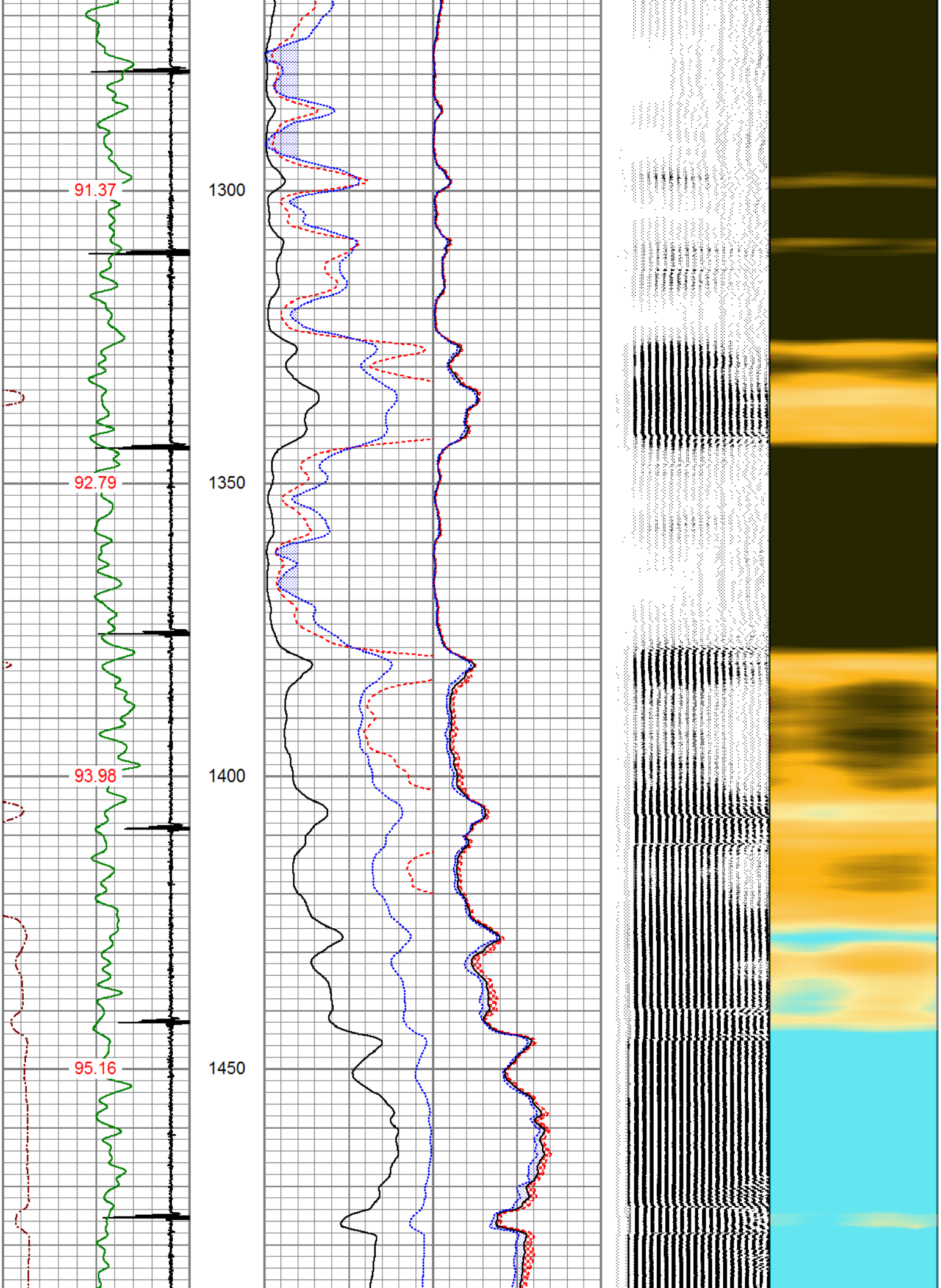

61.61
63.03
63.84
64.84
200
250
300
350

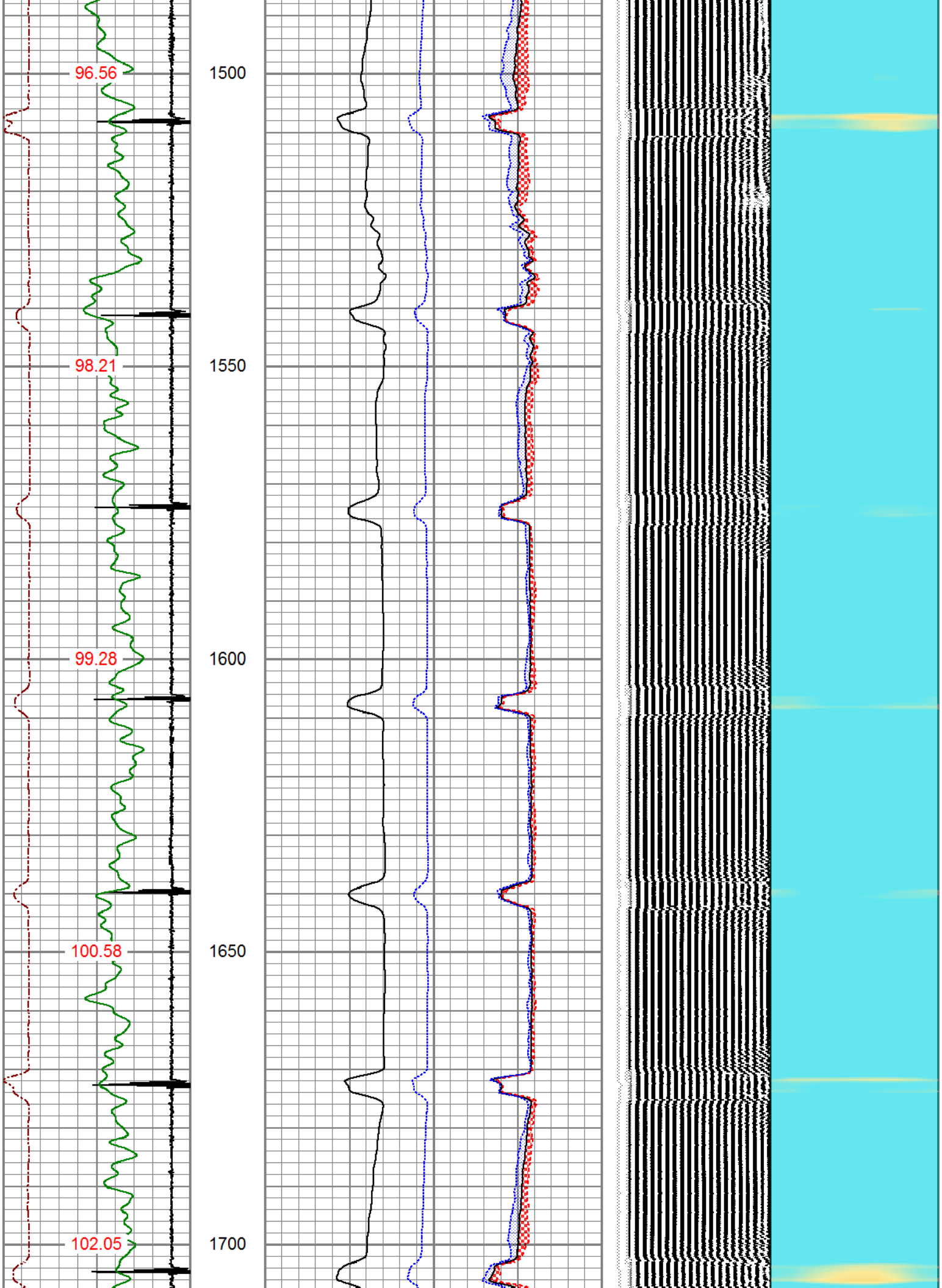

66.81
68.21
69.55
70.94
72.16
400
450
500
550
600

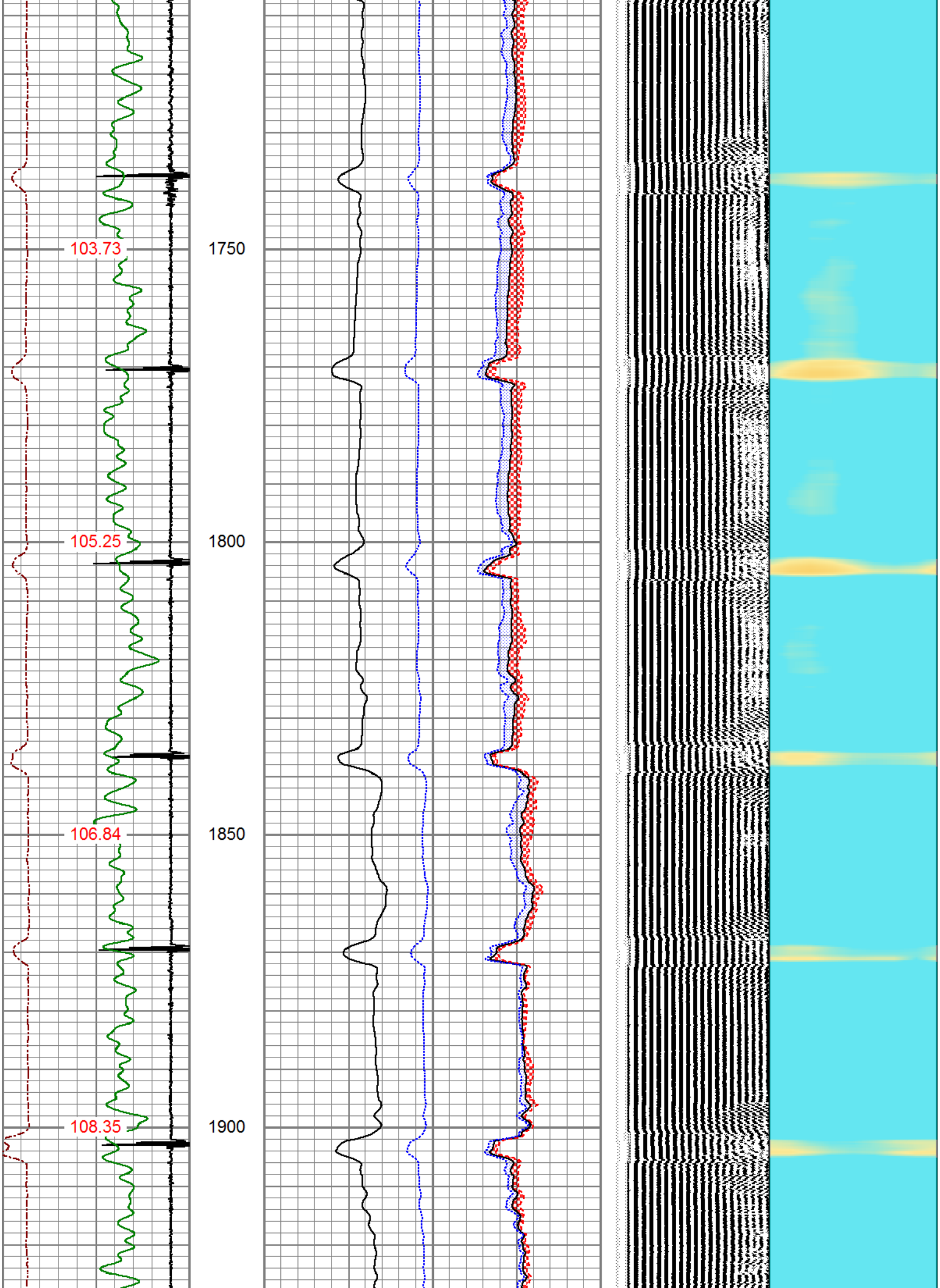

73.80
650
75.24
700
76.53
750
77.91
800

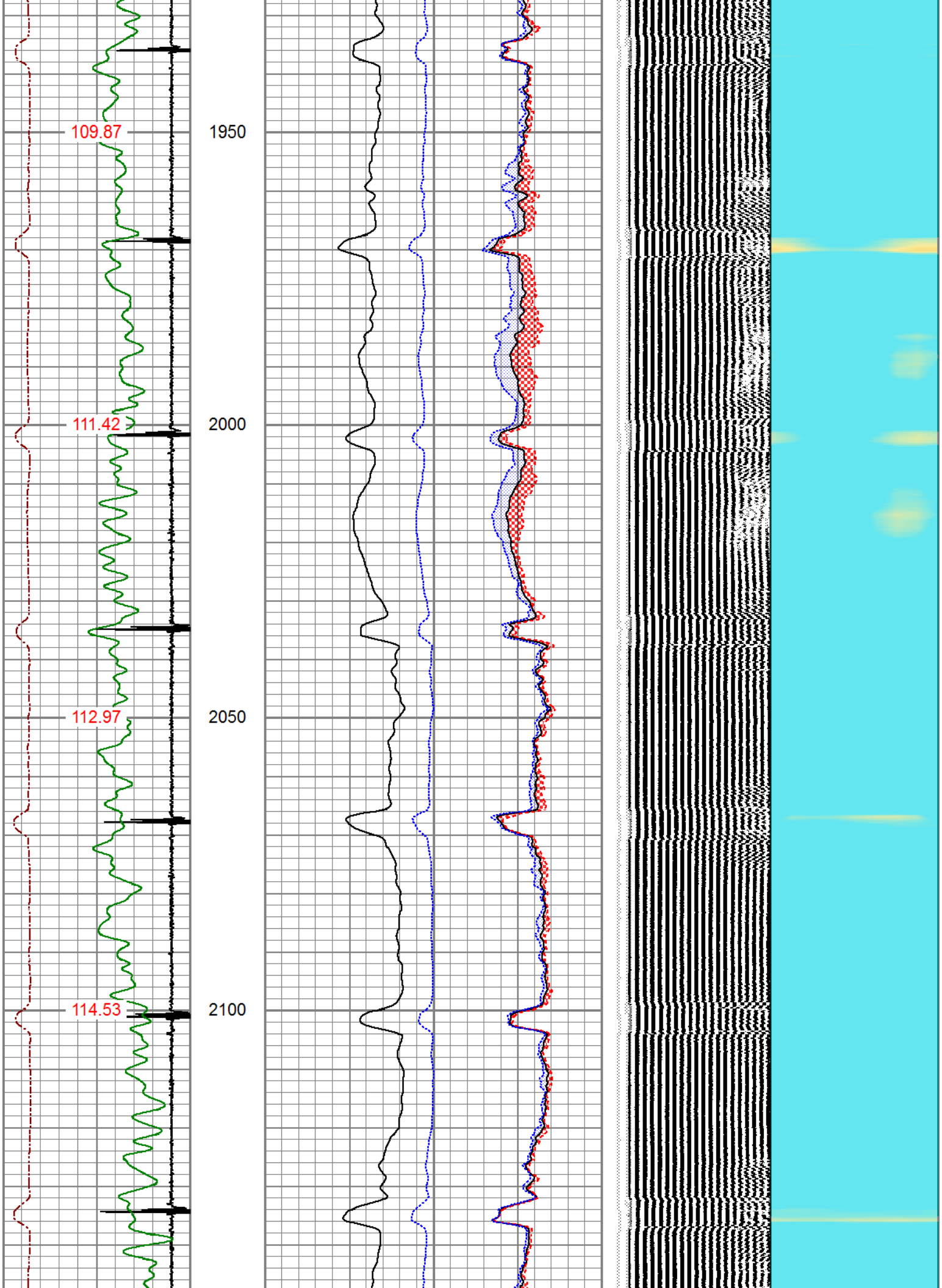

79.27
850
80.43
900
81.82
950
83.14
1000

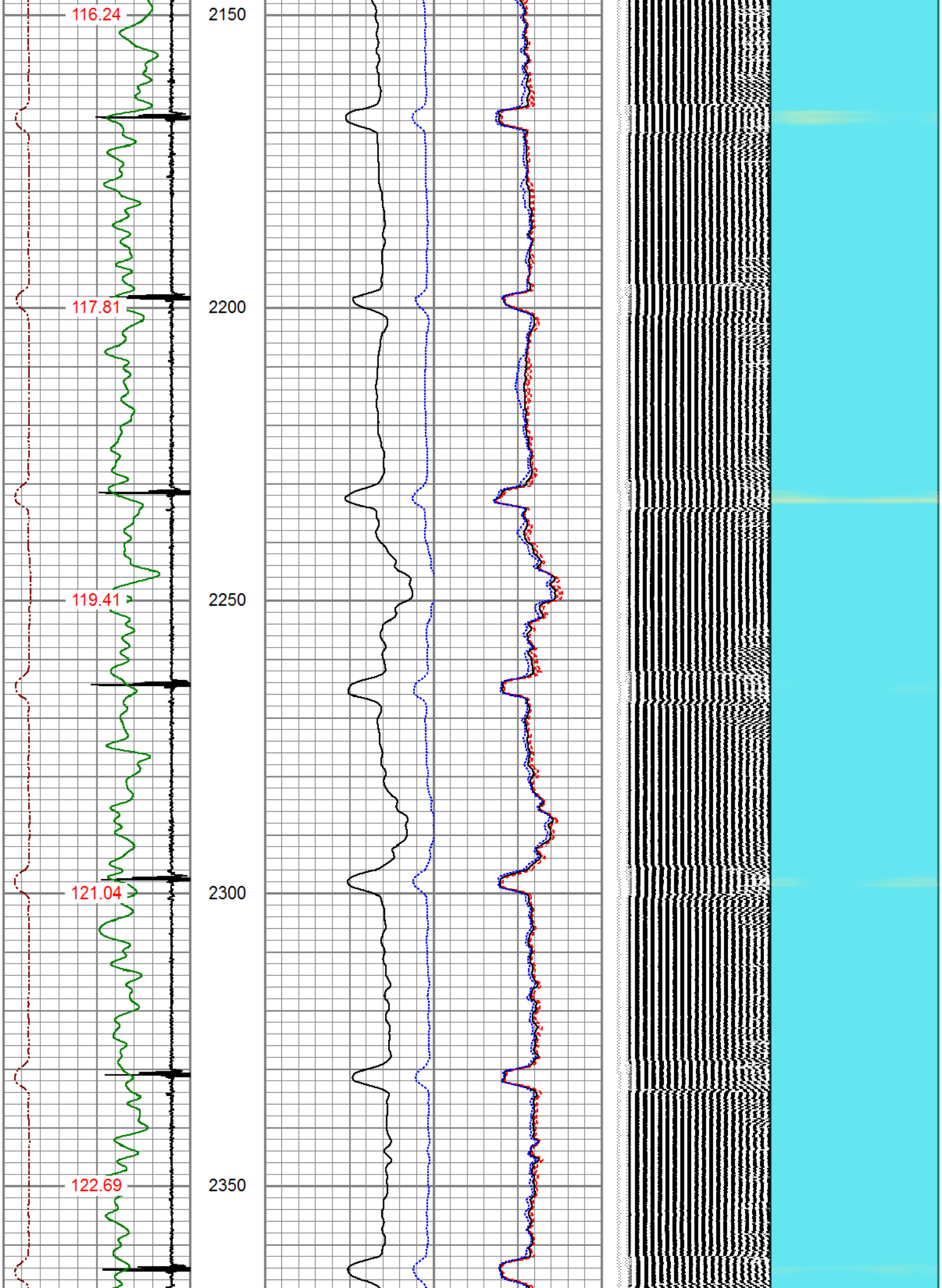

84.65
85.99
87.26
88.85
89.89
1050
1100
1150
1200
1250

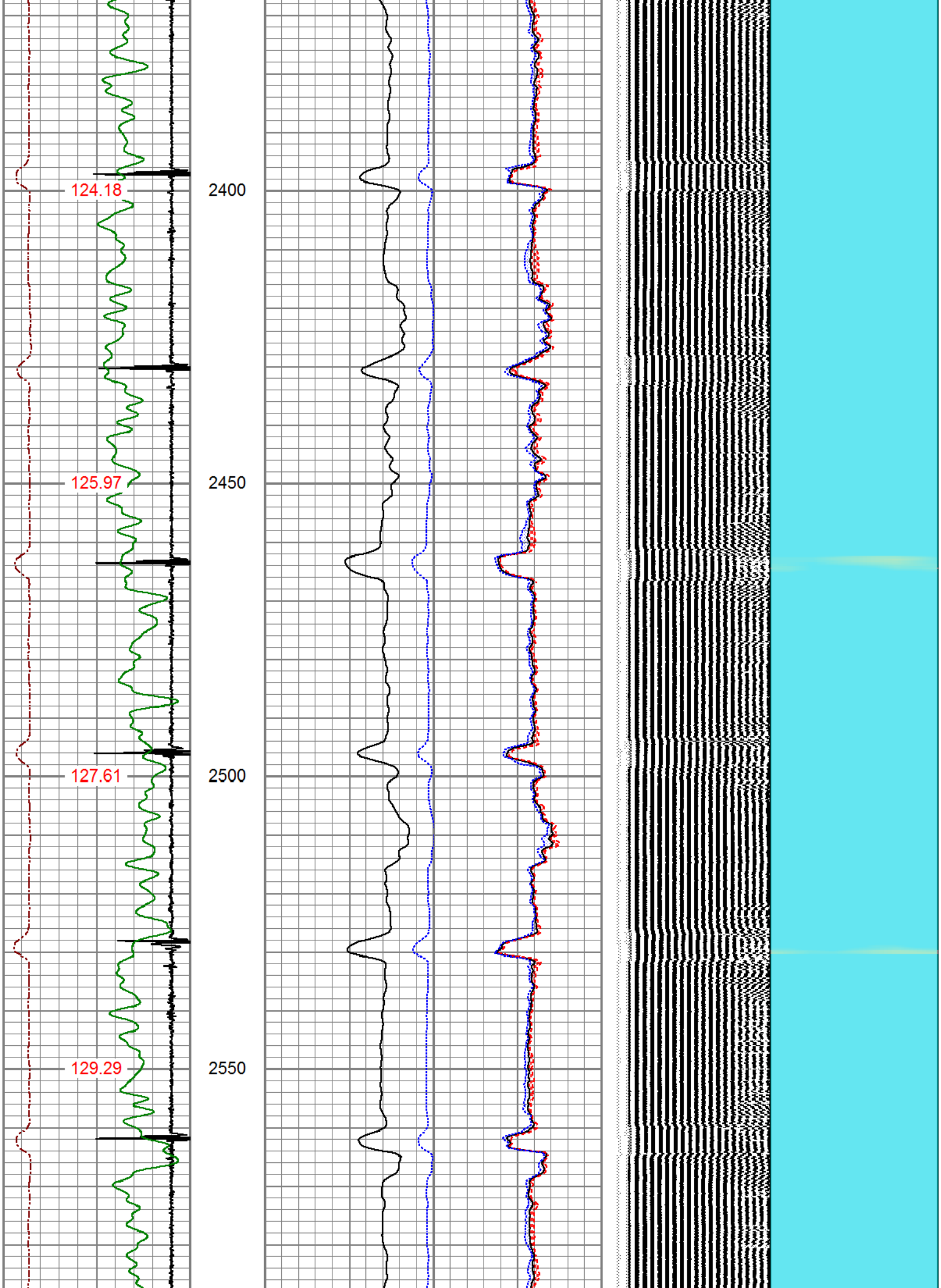

91.37
92.79
93.98
95.16
1300
1350
1400
1450

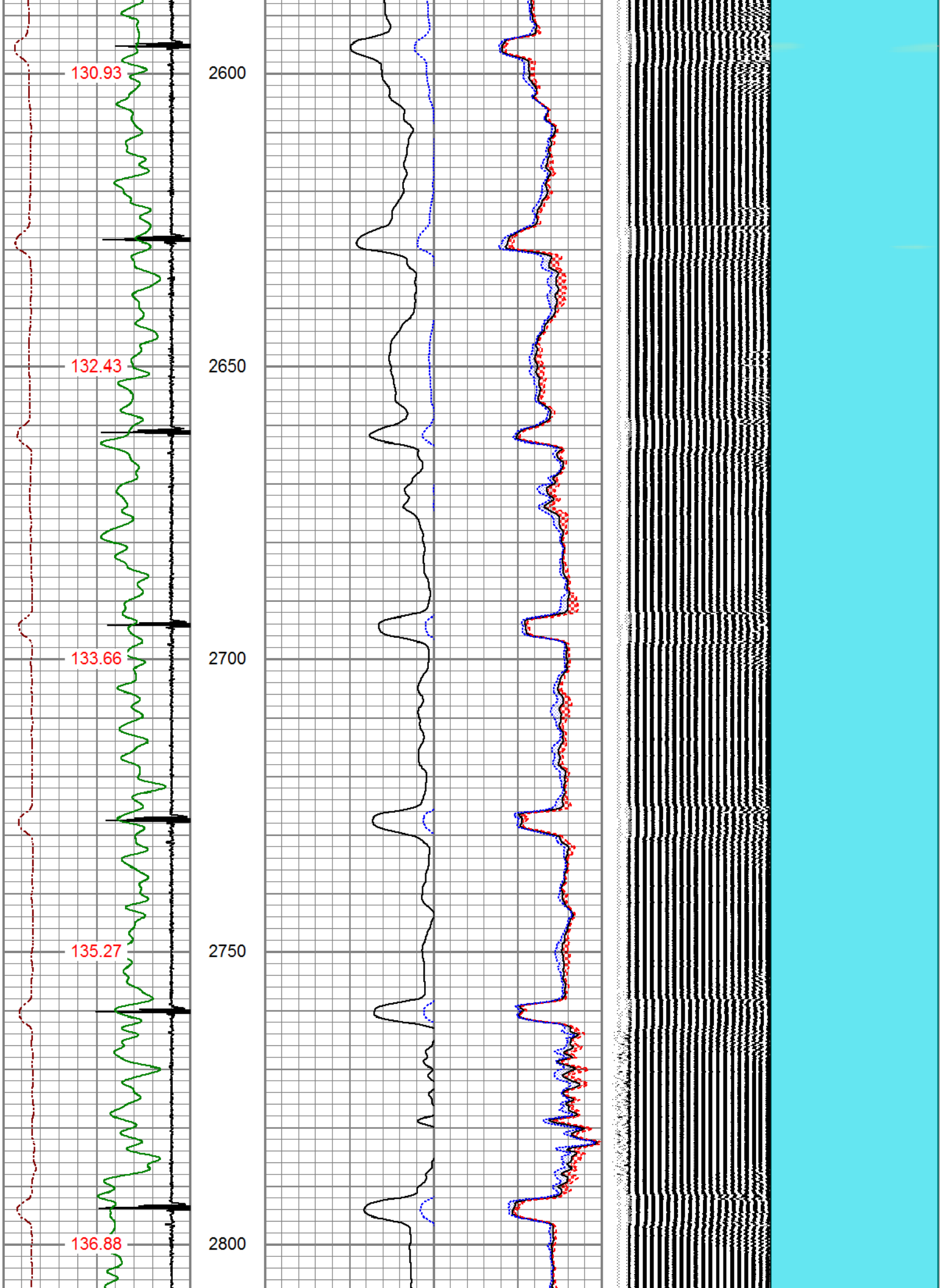

96.56
98.21
99.28
100.58
102.05
1500
1550
1600
1650
1700

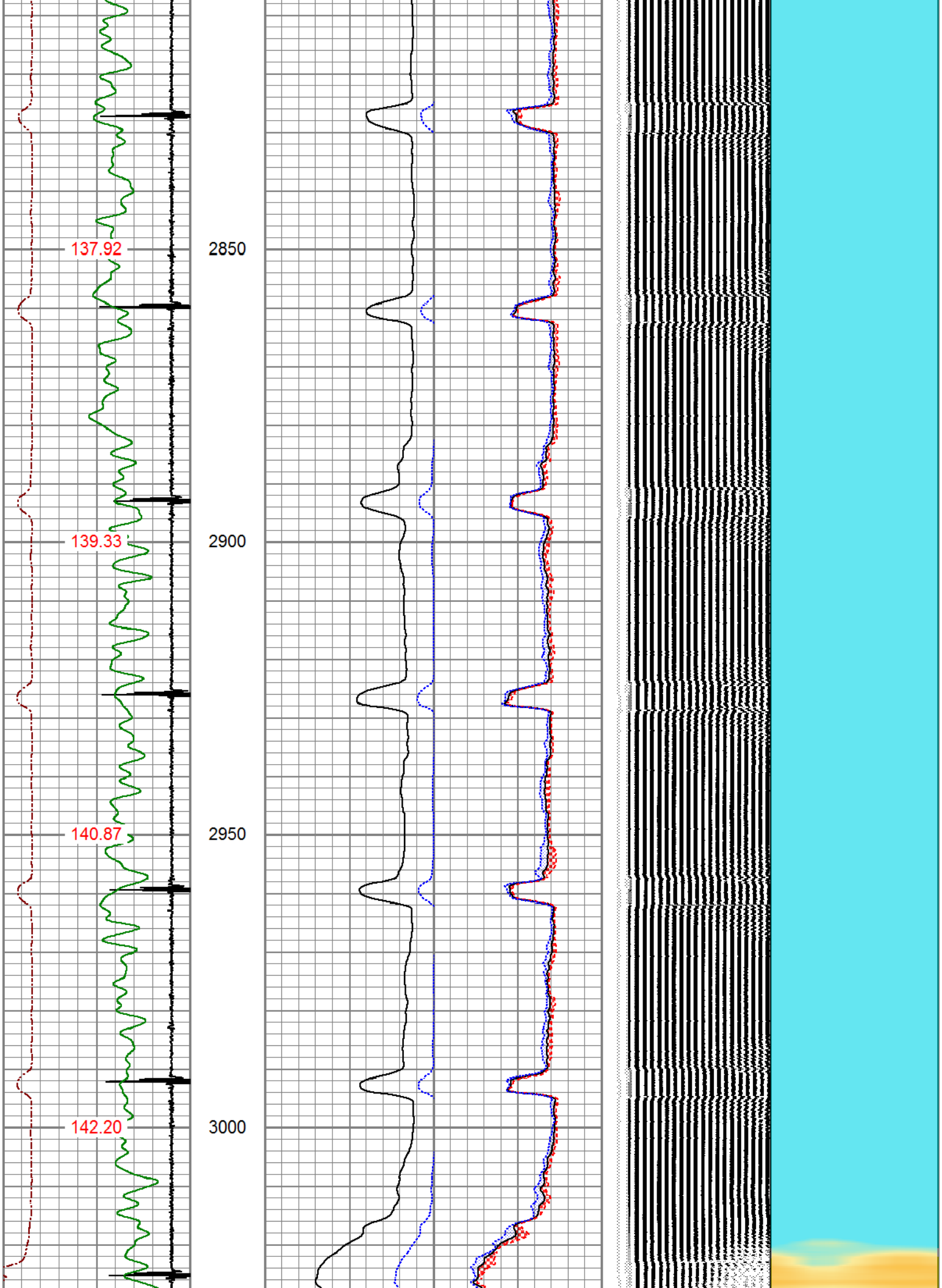

103.73
1750
105.25
1800
106.84
1850
108.35
1900

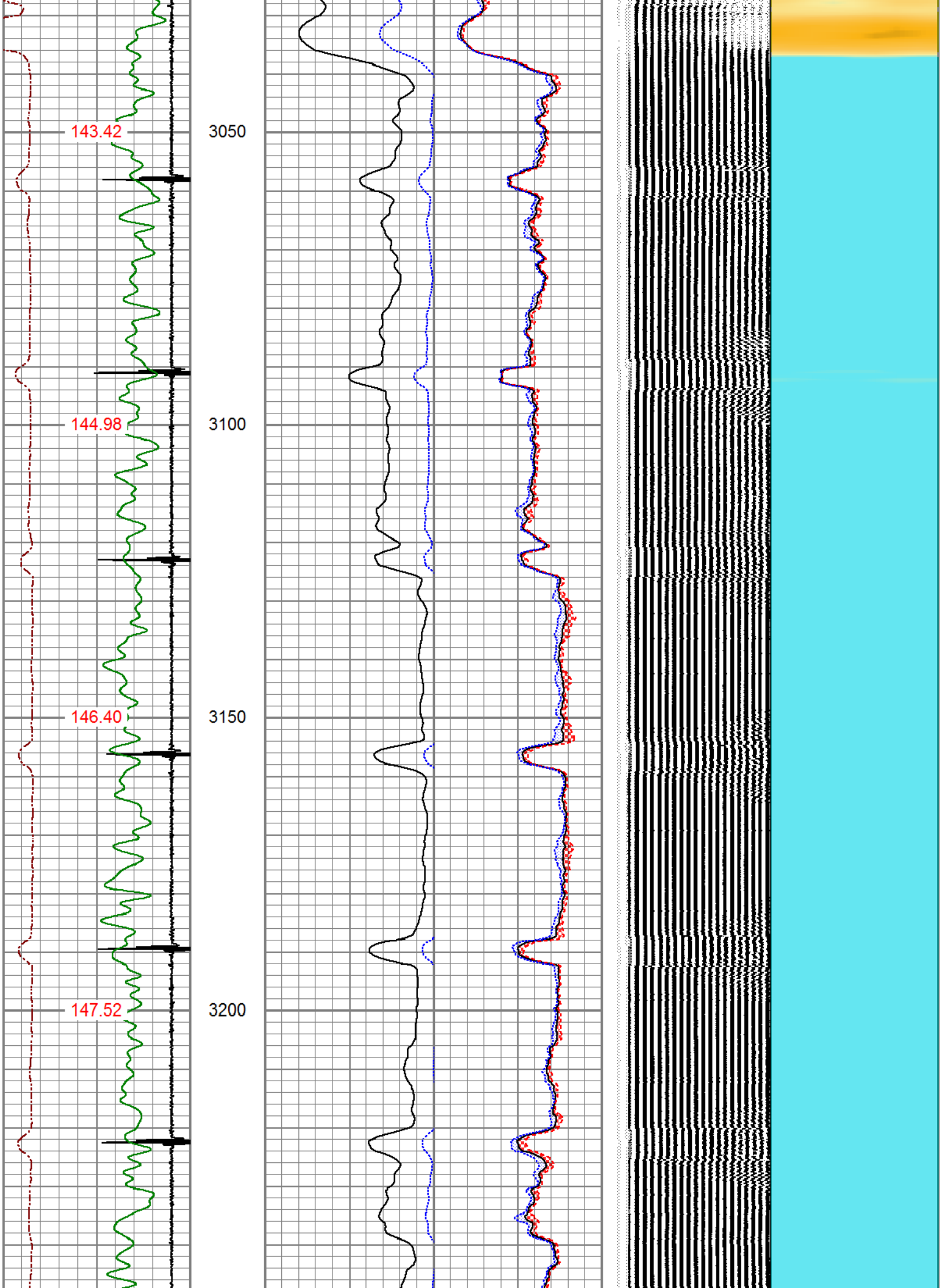

109.87
1950
111.42
2000
112.97
2050
114.53
2100

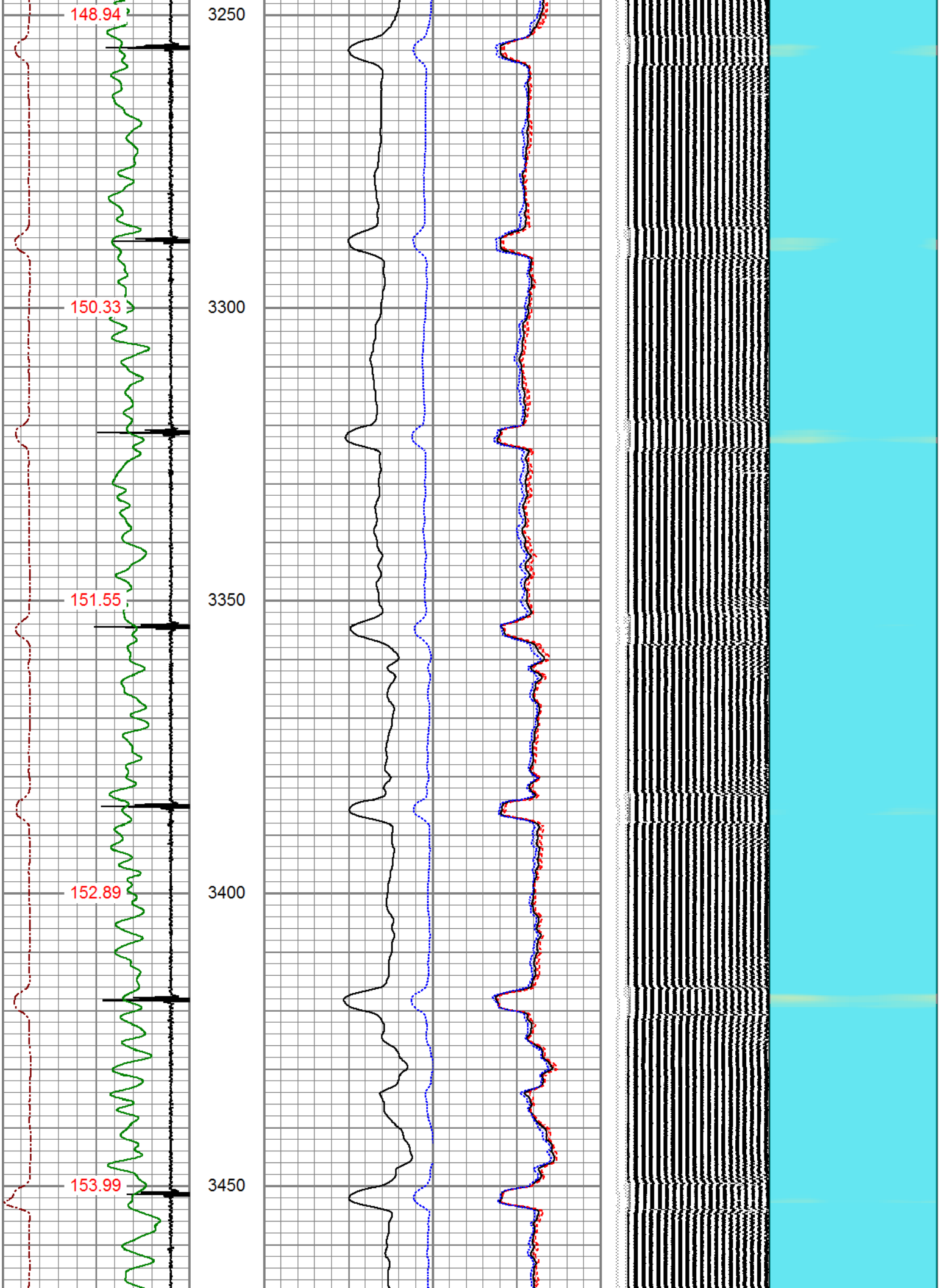

116.24
117.81
119.41
121.04
122.69
2150
2200
2250
2300
2350

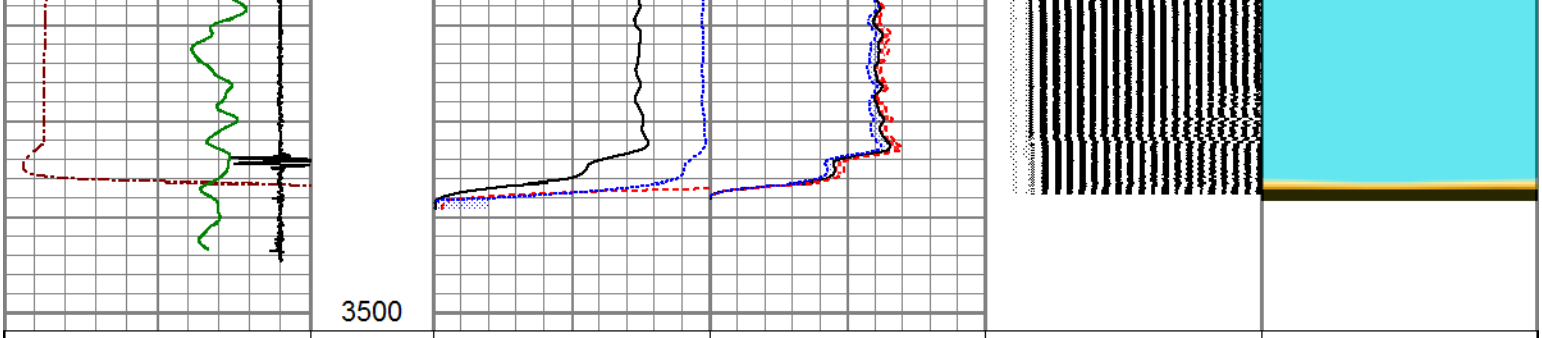

124.18
2400
125.97
2450
127.61
2500
129.29
2550


130.93
2600
132.43
2650
133.66
2700
135.27
2750
136.88
2800


137.92
2850
139.33
2900
140.87
2950
142.20
3000


143.42
3050
144.98
3100
146.40
3150
147.52
3200


148.94
150.33
151.55
152.89
153.99
3250
3300
3350
3400
3450



3Ft Travel Time 260 (usec) 160	3' Amplitude 0 (mV) 100	Sector Amplitude Average 0 150	VDL 200 (usec) 1200	1 Sector Map 8
-9 Collar Locator 1	3' Amplified Amplitude X 5 0 (mV) 20	Sector Amplitude Maximum 0 150		
Gamma Ray 0 (GAPI) 200	1 Bond Index 0	Sector Amplitude Minimum 0 150		
TEMP (degF)				

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MAIN LOG

500 PSI APPLIED AT SURFACE

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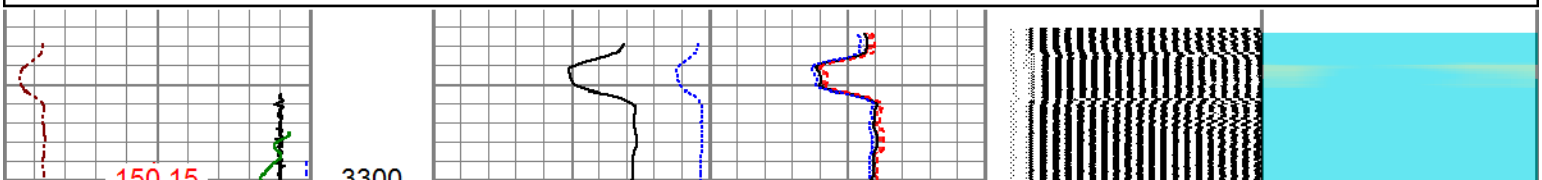
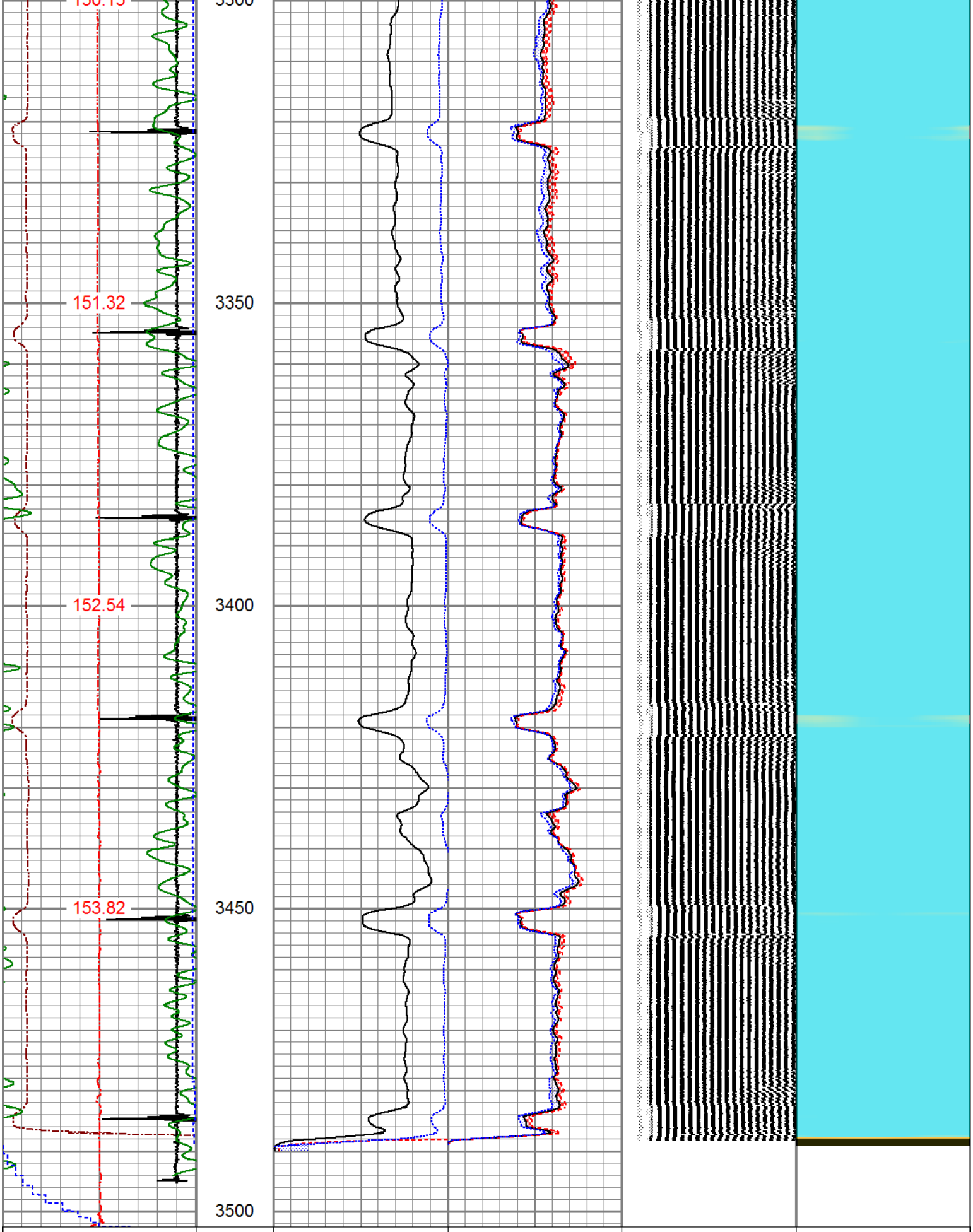
REPEAT SECTION

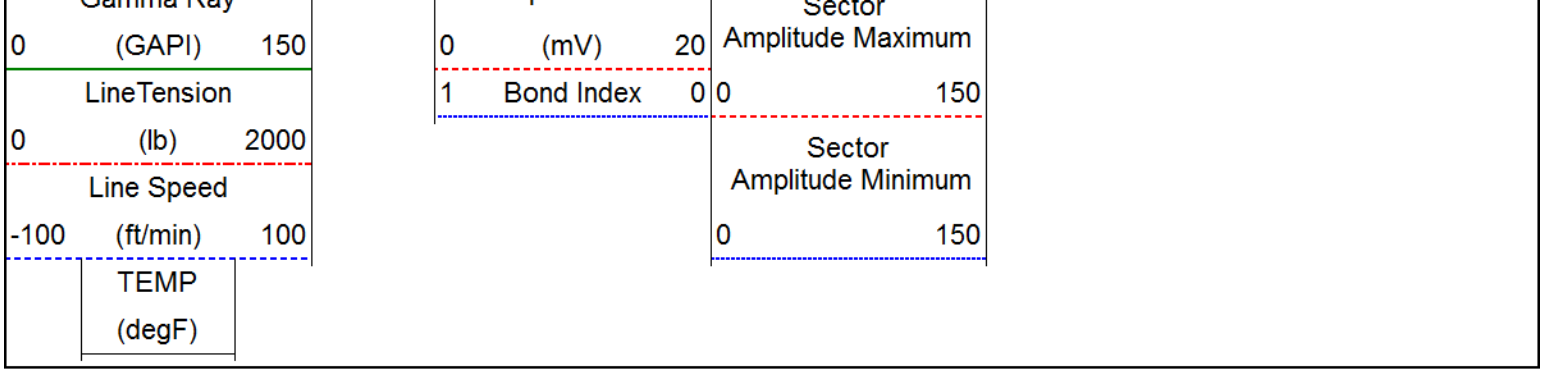
ZERO PSI APPLIED AT SURFACE

Database File	anadarko_sarchet_john_e_unit1_0512307389_11152019_scbl.db
Dataset Pathname	pass5
Presentation Format	pinr_scbl
Dataset Creation	Fri Nov 15 13:33:34 2019
Charted by	Depth in Feet scaled 1:240

3Ft Travel Time 260 (usec) 160	3' Amplitude 0 (mV) 100	Sector Amplitude Average 0 150	VDL 200 (usec) 1200	1 Sector Map 8
-9 Collar Locator 1	3' Amplified Amplitude X 5 0 (mV) 20	Sector Amplitude Maximum 0 150		
Gamma Ray 0 (GAPI) 150	1 Bond Index 0	Sector Amplitude Minimum 0 150		
LineTension 0 (lb) 2000				
Line Speed -100 (ft/min) 100				
TEMP (degF)				




151.32
152.54
153.82
3350
3400
3450
3500
3Ft Travel Time
260 (usec) 160
-9 Collar Locator 1
Gamma Ray
3' Amplitude
0 (mV) 100
3' Amplified Amplitude X 5
Sector Amplitude Average
0 150
VDL
200 (usec) 1200
1 Sector Map 8



Calibration Report

Database File	anadarko_sarchet_john_e_unit1_0512307389_11152019_scbl.db
Dataset Pathname	pass5
Dataset Creation	Fri Nov 15 13:33:34 2019

Gamma Ray Calibration Report

Serial Number:	140210	
Tool Model:	275 Probe GCT	
Performed:	(Not Performed)	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1411-67	
Tool Model:	RBL-DCT	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	2099.136	ft

Master Calibration, performed Fri Nov 15 13:28:13 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.001	1.165	0.700	81.196	69.173	0.611
CAL	1.500	1.499				
5'	0.001	1.152	0.700	81.196	69.931	0.617
SUM						
S1	-0.008	1.227	0.000	100.000	80.979	0.614
S2	0.001	1.288	0.000	100.000	77.703	-0.116
S3	0.001	1.240	0.000	100.000	80.744	-0.111
S4	0.001	1.216	0.000	100.000	82.306	-0.112
S5	0.001	1.218	0.000	100.000	82.171	-0.114
S6	0.001	1.193	0.000	100.000	83.896	-0.112
S7	0.002	1.188	0.000	100.000	84.295	-0.131
S8	0.001	1.182	0.000	100.000	84.671	-0.118

Air Zero Calibration, performed Fri Nov 15 12:47:35 2019:

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

Temperature Calibration Report

Serial Number:	FW1411-67			
Tool Model:	RBL-DCT			
Performed:	(Not Performed)			
	Reference		Reading	
Low Reference:	0.00	degF	0.00	degF
High Reference:	1.00	degF	1.00	degF
Gain:	1.00			
Offset:	0.00			
Delta Spacing	1			

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Company	ANADARKO PETROLEUM CORP.
Well	SARCHET JOHN E UNIT 1
Field	WATTENBERG
County	WELD
State	COLORADO