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Pioneer Energy Services

RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company Keer-McGee Oil & Gas Onshore LP
Well Endsley 32-1J5
Field Wattenberg
County Weld
State Colo.

Company **Keer-McGee Oil & Gas Onshore LP**
Well **Endsley 32-1J5**
Field **Wattenberg**
County **Weld** State **Colo.**

Location: API # : 05123179320000

NE NE

SEC 32 TWP 3n RGE 65w

Other Services

none

Permanent Datum	GL	Elevation 4887	Elevation
Log Measured From	KB		K.B. 4898
Drilling Measured From	KB		D.F.
			G.L. 1887

Date of Service	3-5-15		
Run Number	1		
Depth Driller or PBTD	7340		
Depth Logger	1730		
Bottom Log Interval	1718		
Top Log Interval	Surface		
Open Hole Size	na		
Type Fluid	water		
Fluid Level	surface		
Fluid Density	8.33 ppg.		
Max. Recorded Temperature	114		
Max. Wellhead Pressure	0		
Wellhead Connection	5 k BOP		
Estimated Cement Top	320		
Unit Number	132		
Wireline Size	9/32		
Location	Ft. Morgan		
Recorded By	N.Bivens		
Witnessed By	Courtney Jansson		

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing				
Production Casing	3.5"	7.7	surface	7340
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.
S.O. 2-220126

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer ENERGY Services Crew

Engineer: Bivens
Operator: Krien
Operator: Ramirez
Operator: Brigante

Tool Data - Services

Serial Number

Calibration Report

Database File	05123179320000_endsley_32_1j5_rbl.db
Dataset Pathname	pass4
Dataset Creation	Thu Mar 05 08:49:14 2015

Gamma Ray Calibration Report

Serial Number:	ID6U7-01	
Tool Model:	Tek-Co	
Performed:	Tue Jan 05 15:02:52 2010	
Calibrator Value:	350.0	
Background Reading:	0.0	cps
Calibrator Reading:	420.0	cps
Sensitivity:	0.8333	/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	IBUB4-01	
Tool Model:	169_w_Temp	
Calibration Casing Diameter:	3.500	in
Calibration Depth:	1653.292	ft

Master Calibration, performed Thu Mar 05 08:48:41 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.001	2.011	0.000	94.517	46.991	0.033
CAL	-0.042	-0.035				
5'	0.013	2.424	0.000	94.517	39.197	-0.513
SUM						
S1	0.014	2.093	0.000	100.000	48.090	-0.659
S2	0.015	2.245	0.000	100.000	44.840	-0.681
S3	0.015	2.380	0.000	100.000	42.290	-0.649
S4	0.015	2.174	0.000	100.000	46.318	-0.698
S5	0.016	2.040	0.000	100.000	49.413	-0.788
S6	0.016	2.012	0.000	100.000	50.090	-0.783
S7						
S8						

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.042	-0.035	1.000	0.000

Air Zero Calibration, performed Thu Mar 05 07:34:15 2015:

	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

S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7			
S8			

Temperature Calibration Report

Serial Number:	IBUB4-01			
Tool Model:	169_w_Temp			
Performed:	Thu Mar 05 08:06:18 2015			
	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec
Gain:	0.29			
Offset:	0.00			
Delta Spacing	1			

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			Tek-1.69 1 11/16" Tekco Adjustable Centralizer	2.71	1.69	10.00
TEMP	14.70					
WVFCAL	14.03					
WVFS6	13.28		SCBLTEKSLIM-169_w_Temp (IBUB4-01) 1 11/16" RIB w/ Temp 400 Deg. F	9.75	1.69	63.00
WVFS5	13.28					
WVFS4	13.28					
WVFS3	13.28					
WVFS2	13.28					
WVFS1	13.28					
WVF3FT	12.53					
WVF5FT	11.53					
WVFTEMP	8.20					
			Tek-1.69 1 11/16" Tekco Adjustable Centralizer	2.71	1.69	10.00

CCL	4.43		CCL-168tekco (ICLI9-04) TEKCO 1 11/16" 450 Deg. F CCL	1.67	1.69	10.00
GR	1.00		GR-Tek-Co (ID6U7-01) TEKCO 1 11/16" 400 Deg. F Logging Gamma Ray	3.82	1.68	40.00

Dataset: 05123179320000_endsley_32_1j5_rbl.db: field/well/run1/pass7
Total length: 20.66 ft
Total weight: 133.00 lb
O.D.: 1.69 in

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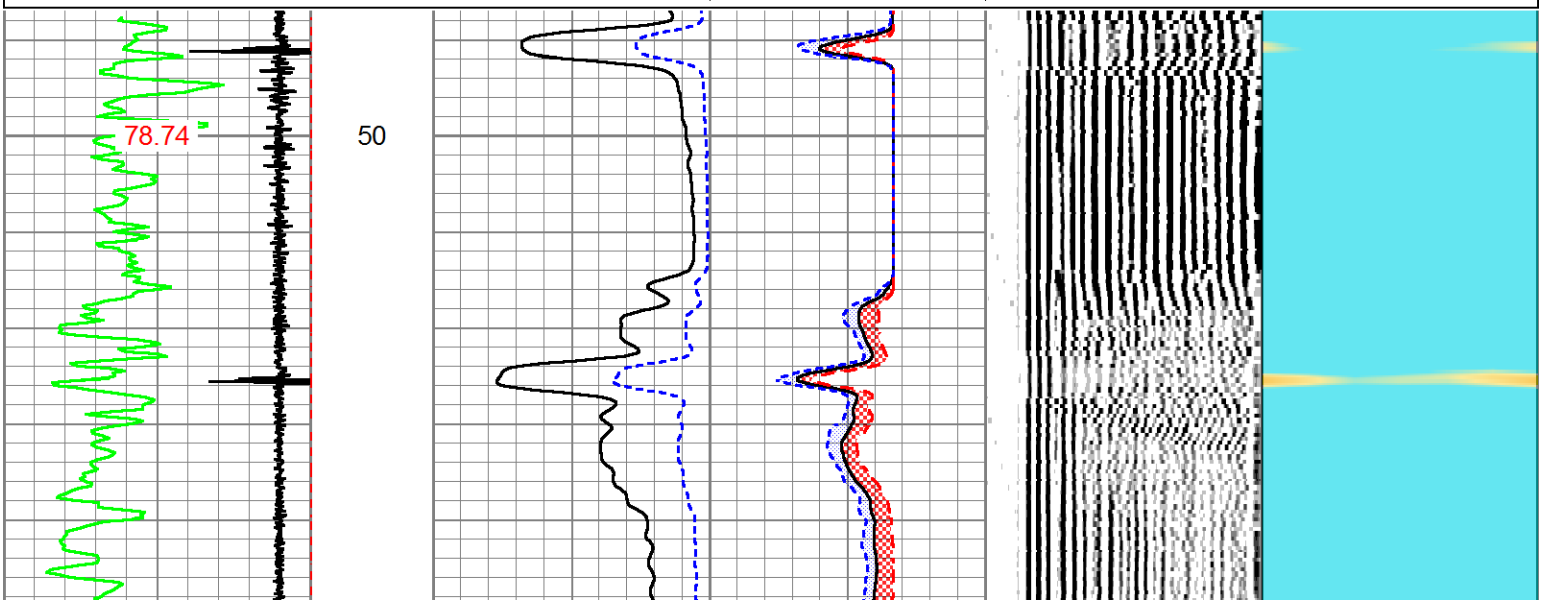
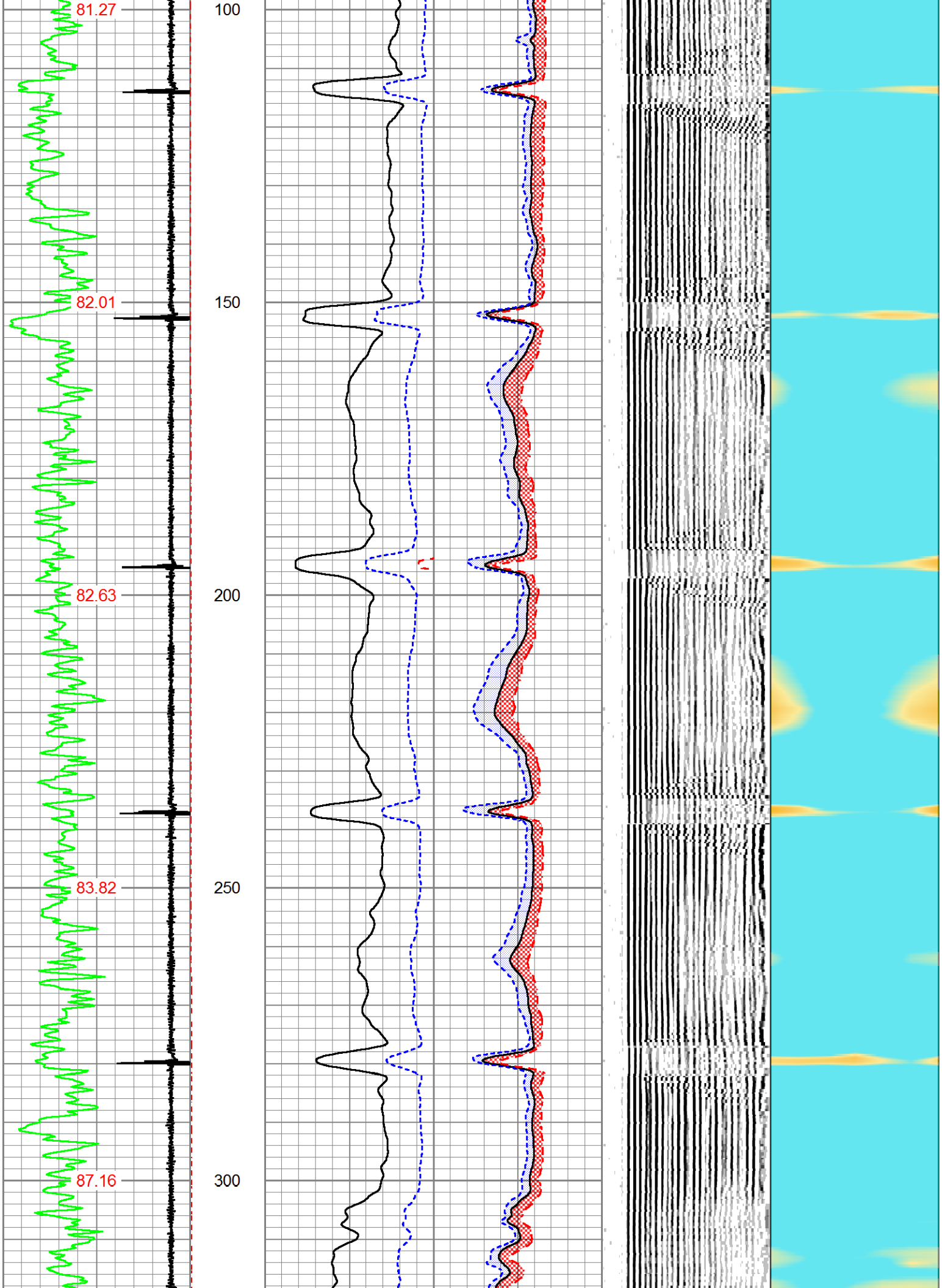
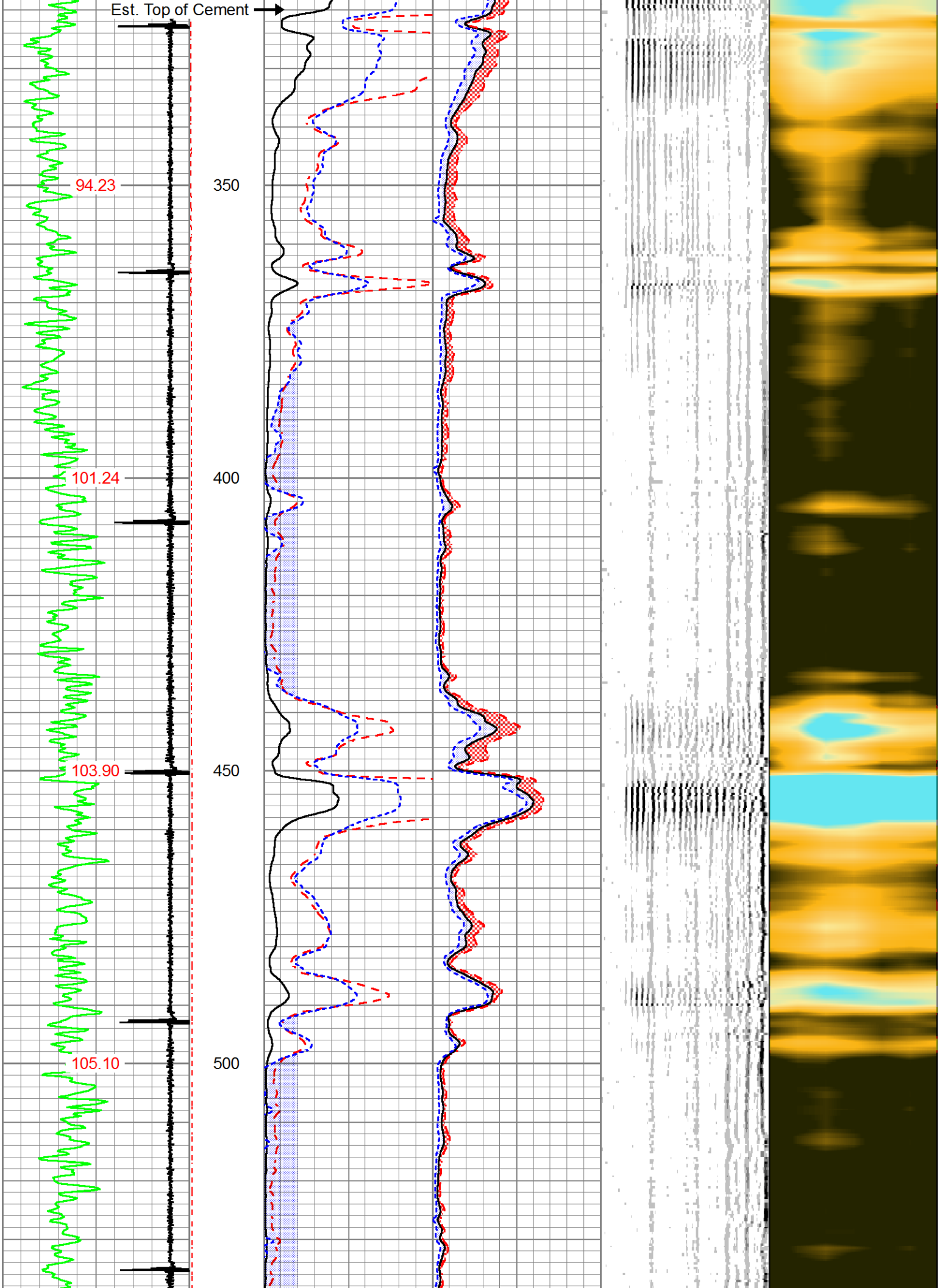
Main Pass

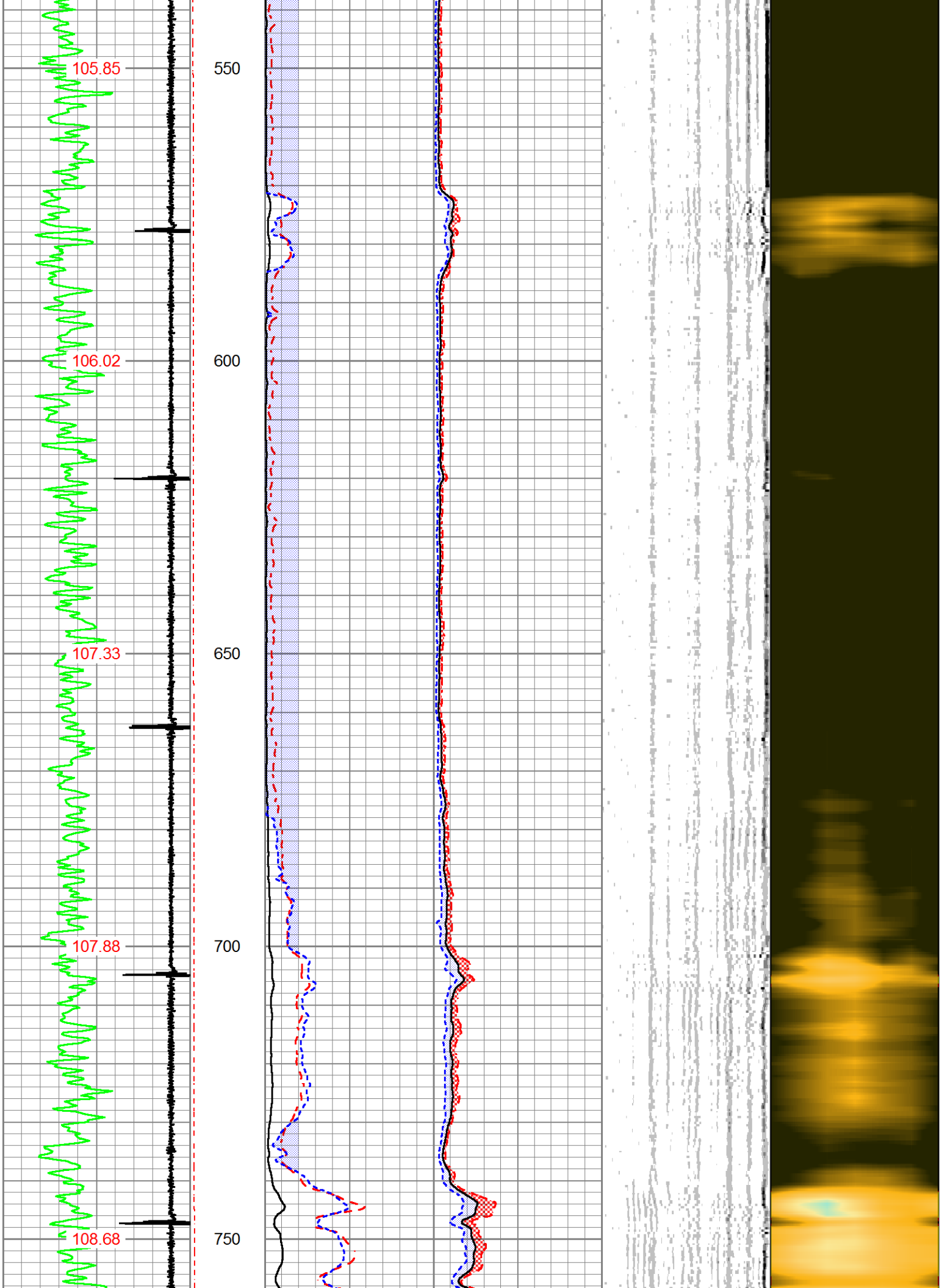
Database File	05123179320000_endsley_32_1j5_rbl.db
Dataset Pathname	pass10
Presentation Format	pnr_scbl
Dataset Creation	Thu Mar 05 09:41:40 2015
Charted by	Depth in Feet scaled 1:240

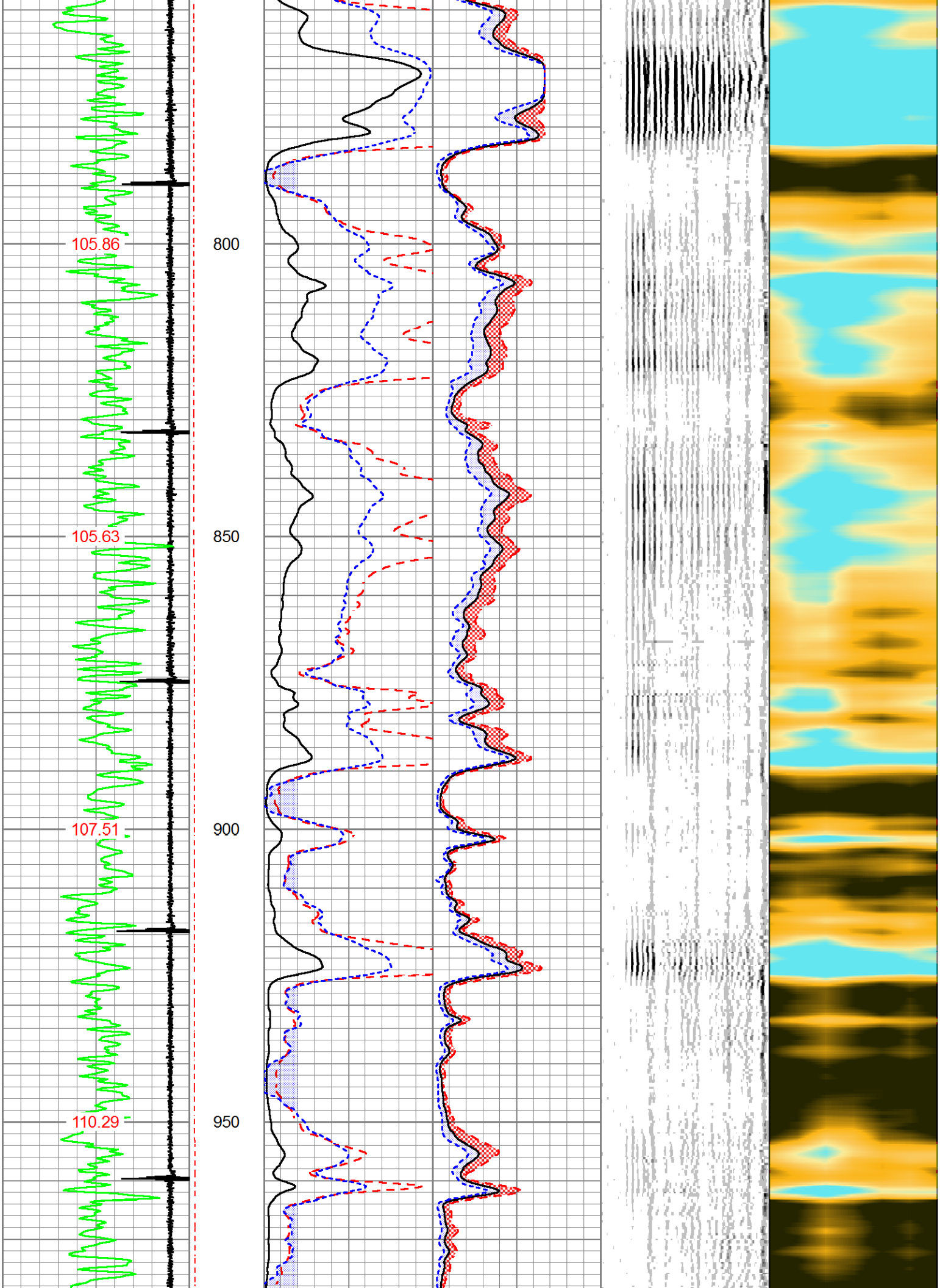
3' Travel Time	Line Tension	3' Amplitude	Sector Amplitude Average	VDL	Sector Map
230 (usec) 130	0 (I2000	0 (mV) 100	0 150	200 1200	1 6
-9 Collar Locator 1		3' Amplified Amplitude X 5	Sector Amplitude Maximum		10 60
0 Gamma Ray 150		0 (mV) 20	0 150		
TEMP (degF)		1 Bond Index 0	Sector Amplitude Minimum		
			0 150		

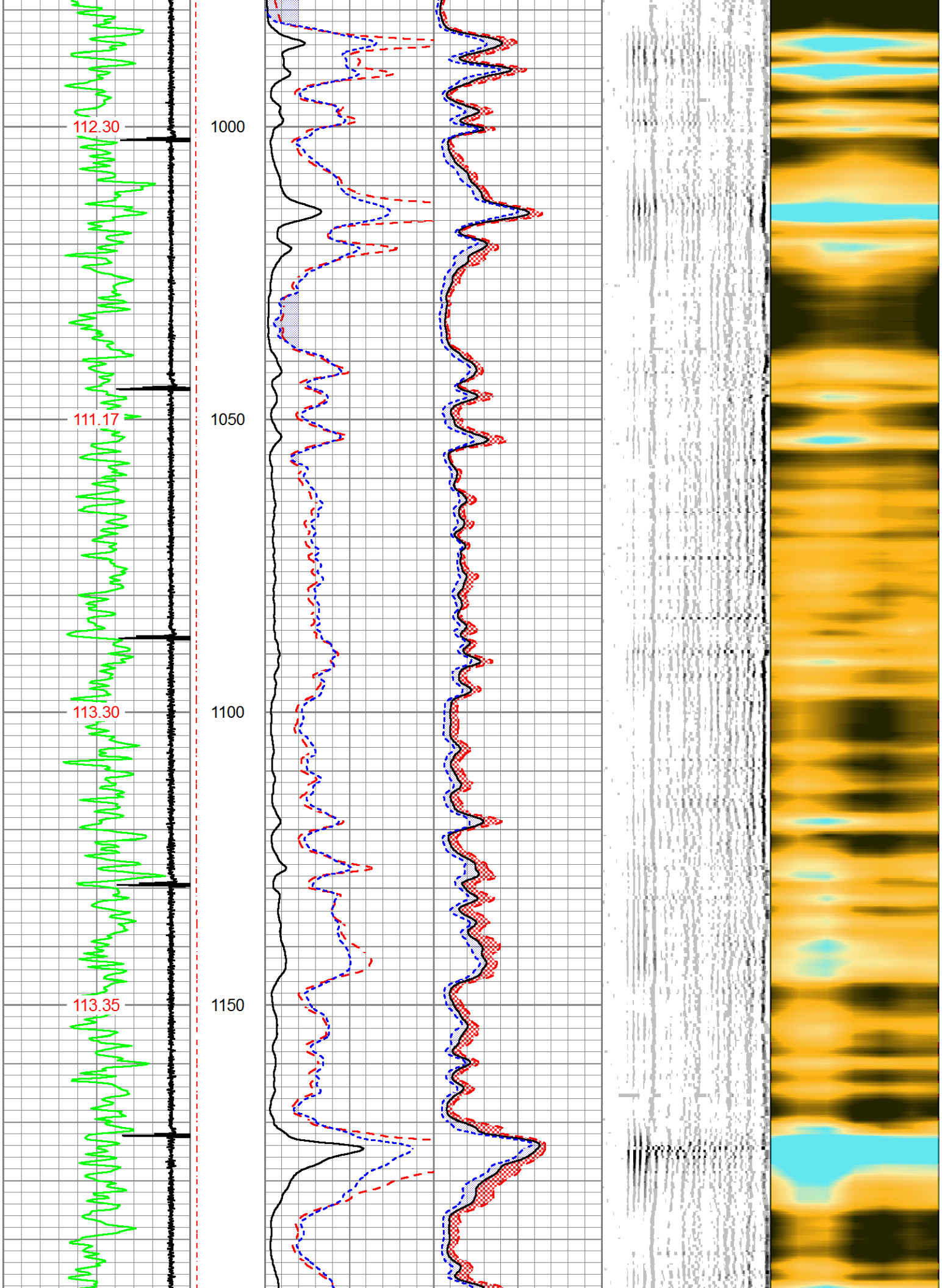


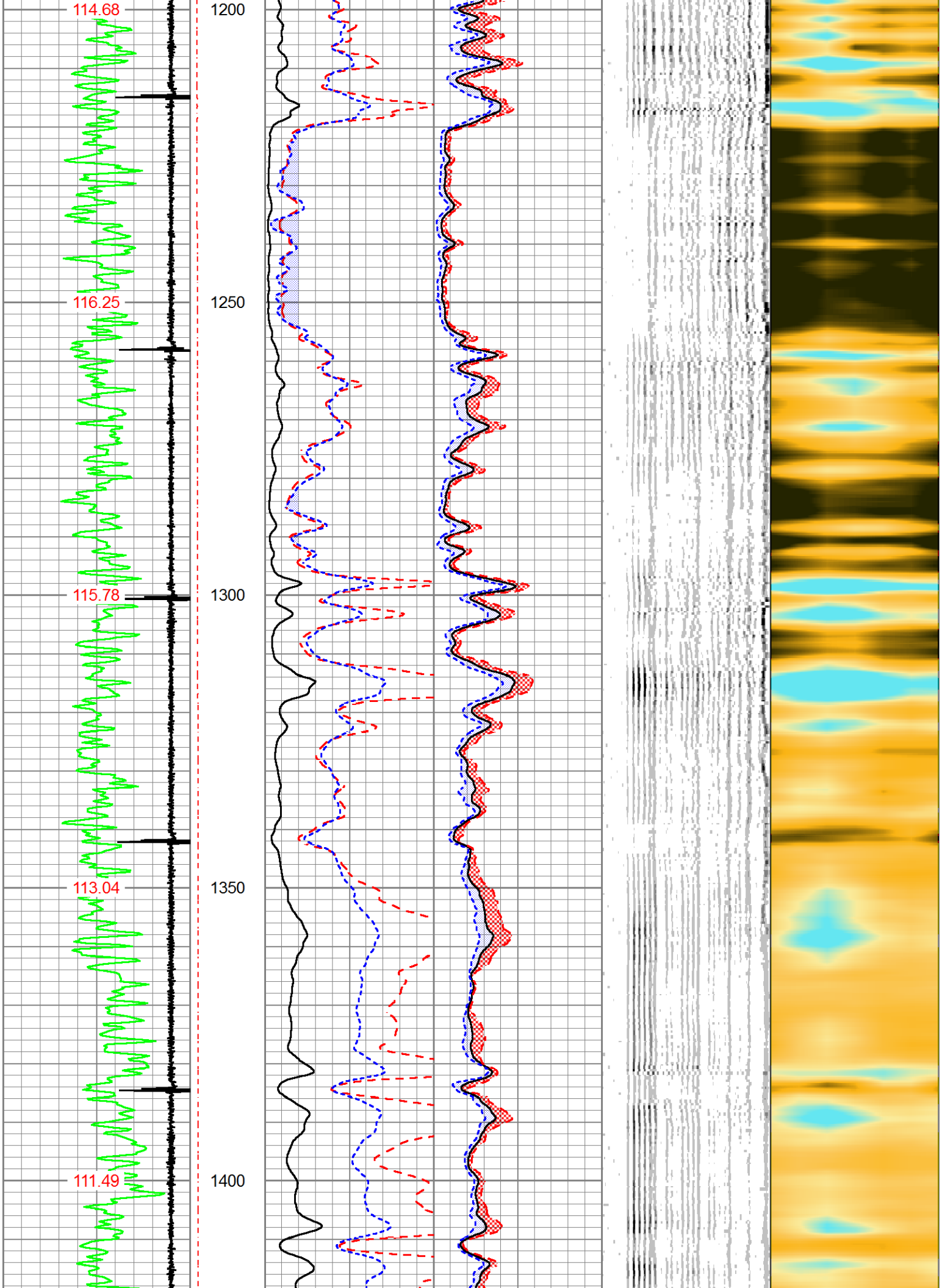

81.27
82.01
82.63
83.82
87.16
100
150
200
250
300

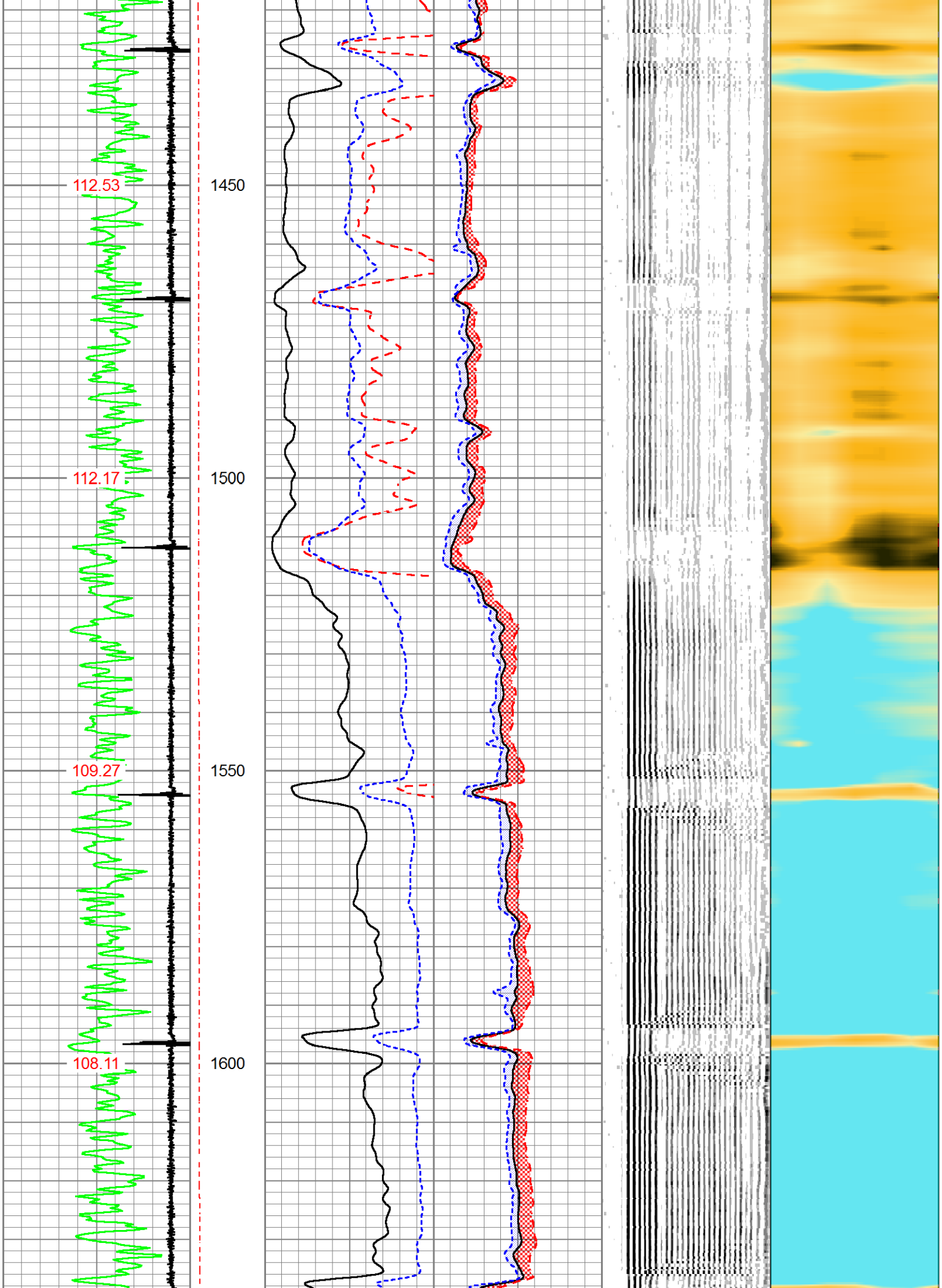

Est. Top of Cement
94.23
101.24
103.90
105.10
350
400
450
500

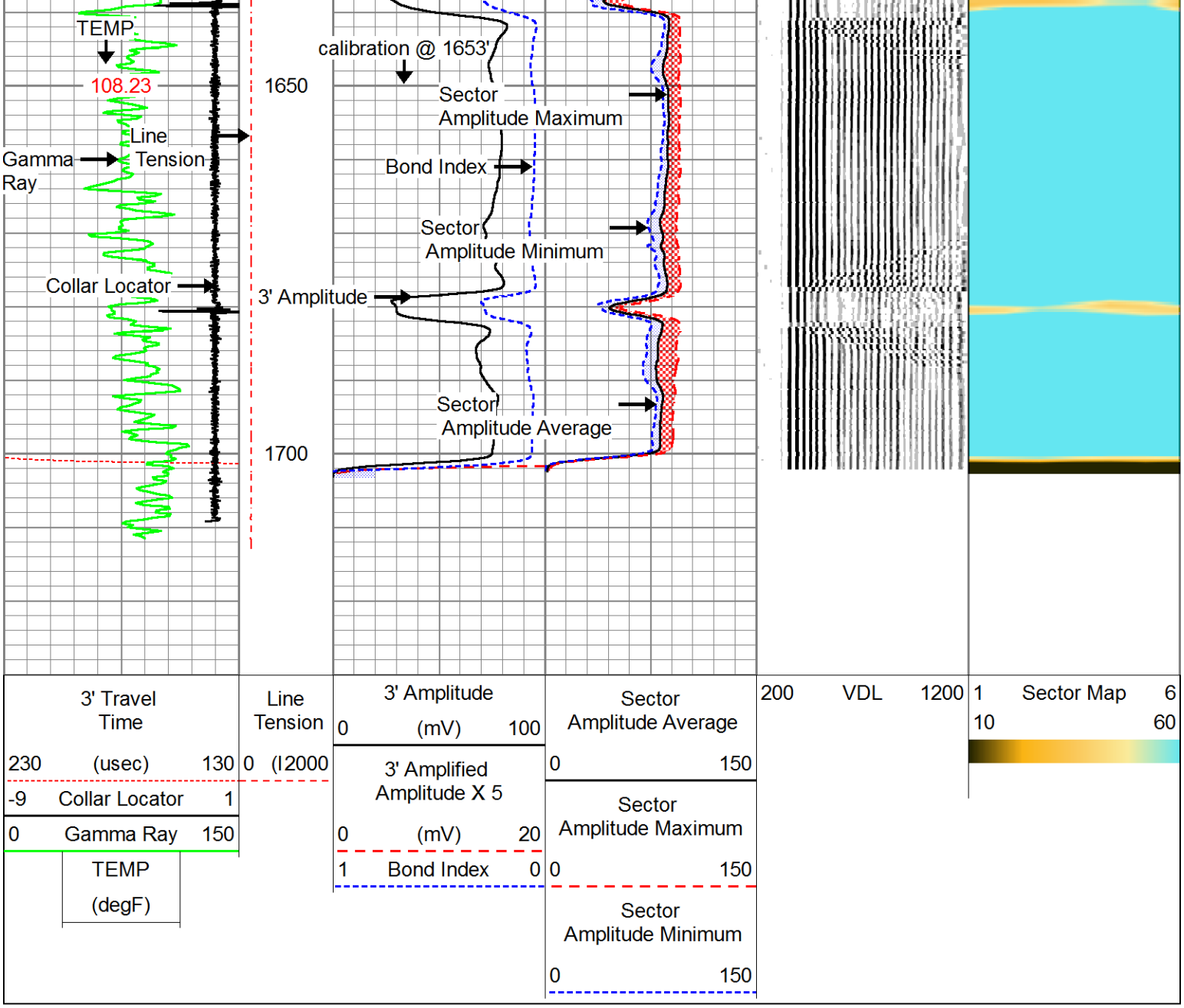

105.85
550
106.02
600
107.33
650
107.88
700
108.68
750


105.86
105.63
107.51
110.29
800
850
900
950


112.30
111.17
113.30
113.35
1000
1050
1100
1150


114.68
116.25
115.78
113.04
111.49
1200
1250
1300
1350
1400


112.53
112.17
109.27
108.11
1450
1500
1550
1600



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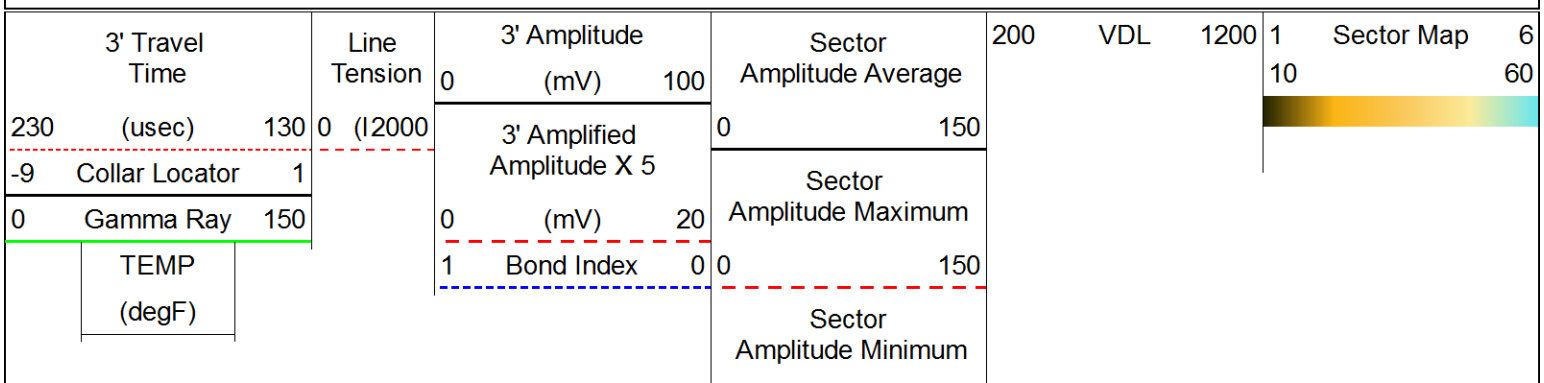
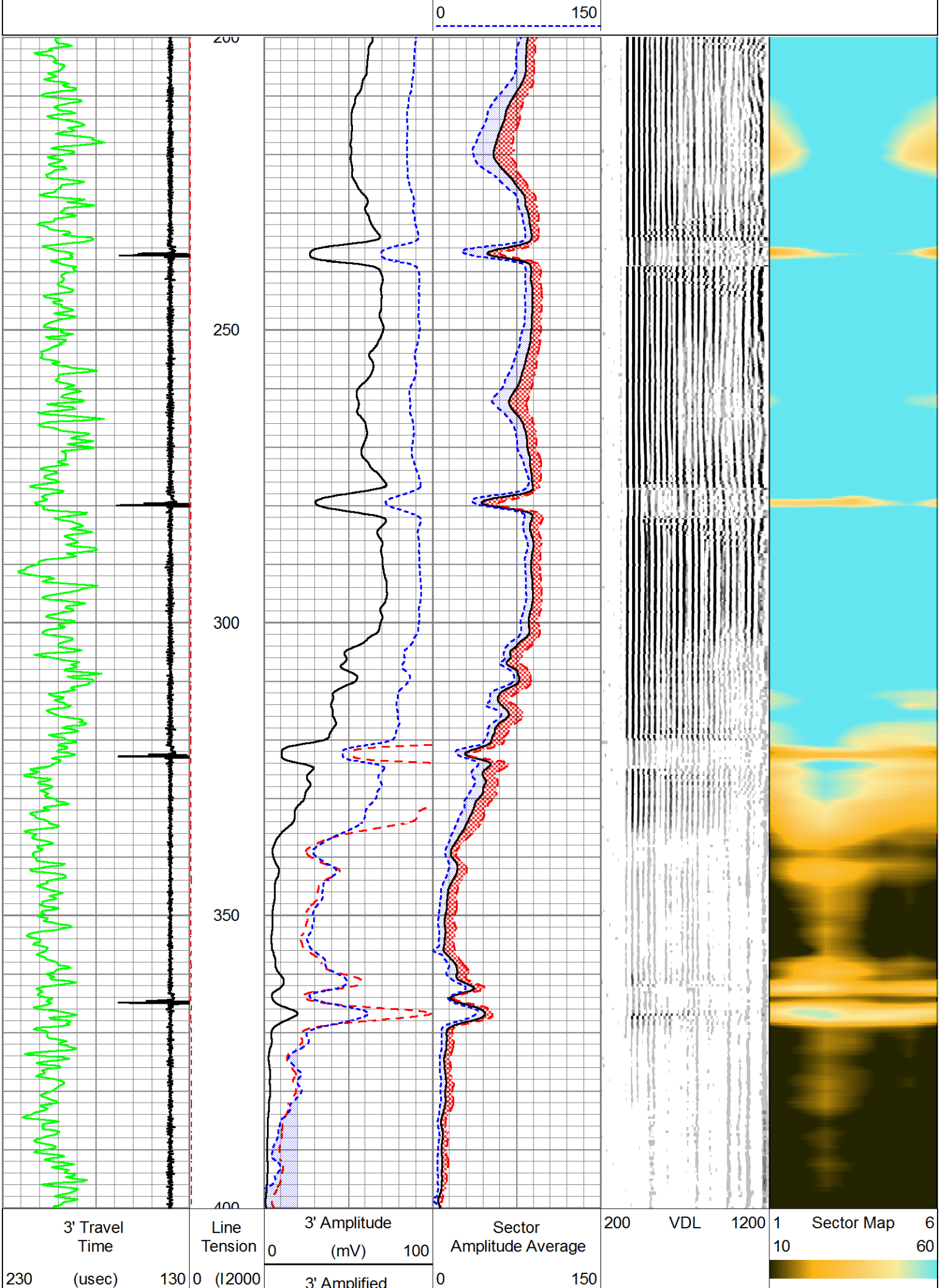
Repeat Pass

Database File	05123179320000_endsley_32_1j5_rbl.db
Dataset Pathname	pass8
Presentation Format	pnr_scbl
Dataset Creation	Thu Mar 05 09:21:51 2015
Charted by	Depth in Feet scaled 1:240




0
150
200
250
300
350
400
3' Travel Time
230 (usec) 130
Line Tension
0 (l2000
3' Amplitude
0 (mV) 100
3' Amplified
Sector Amplitude Average
0 150
200 VDL 1200
1 Sector Map 6
10 60

-9	Collar Locator	1
0	Gamma Ray	150
	TEMP (degF)	

	Amplitude X 5	
0	(mV)	20
1	Bond Index	0

Sector Amplitude Maximum	
0	150
Sector Amplitude Minimum	
0	150

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Company	Keer-McGee Oil & Gas Onshore LP
Well	Endsley 32-1J5
Field	Wattenberg
County	Weld
State	Colo.

Country