CEMENT BOND LOG

Company	Extraction Oil and Gas
Well	VT-Glenmere 3-16-18
Field	Wattenberg
County	Weld
State	CO

Company Extraction Oil and Gas

Well VT-Glenmere 3-16-18

Field Wattenberg

County Weld **State** CO

API # : 05-123-44423

Location: 1879' FNL & 673' FWL
Lat: 40.401330
Long: -104.656460

SEC: 15 TWP: 5N RGE: 65W

Other Services

Elevation
K.B. 4676'
D.F. -----
G.L. 4647'

Permanent Datum: Ground Level Elevation: 4647'
Log Measured From: KB , 29 ft. above Permanent Datum.
Drilling Measured From: KB

Date	13 Aug 2018		
Run Number	One		
Plug Back T.D. Driller	-----		
Plug Back T.D. Logger	-----		
Bottom Logged Interval	8121'		
Top Log Interval	Surface		
Type Fluid	-----		
Density / Viscosity	-----		
Max. Recorded Temp.	244°F		
Time Logger on Bottom	10:30		
Equipment Number	GD 164		
Location	Casper, WY		
Recorded By	J. Baker		
Witnessed By	L. Siegel		

Casing Record				Tubing Record			
Size	Weight	From	To	Size	Weight	From	To
9 5/8"	36#	Surface	1500'				
5 1/2"	20#	Surface	20,703'				

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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.

Ticket # : RM0818PCBW800
Your Crew Today: B. Kennicker, M. Vasquez, D. Hamilton
Log Correlated to: Surface

Cement Data	
Date Cemented	-----
Primary / Squeeze	Primary
Type / Weight	-----
Main Pass Press.	0 psi
Repeat Pass Press.	0 psi

Bond Index	
Index %	Est Top Depth
20 % Bond	602'
40 % Bond	604'
60 % Bond	1391'
80 % Bond	2878'
100 % Bond	-----

Comments

Estimated cement top at 602'
(20% Bond)

Marker Joint located at 7,740'

Thank you for using Gyrodata

Eric Regnier: Rocky Mountain Wireline Manager EricR@Gyrodata.com

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Log Variables

Databasec:\programdata\warrior\data\extraction\2018_08_13_extraction_vt_glenmere_3_16_18_cb
Dataset field/well/run1/pass3/_vars_

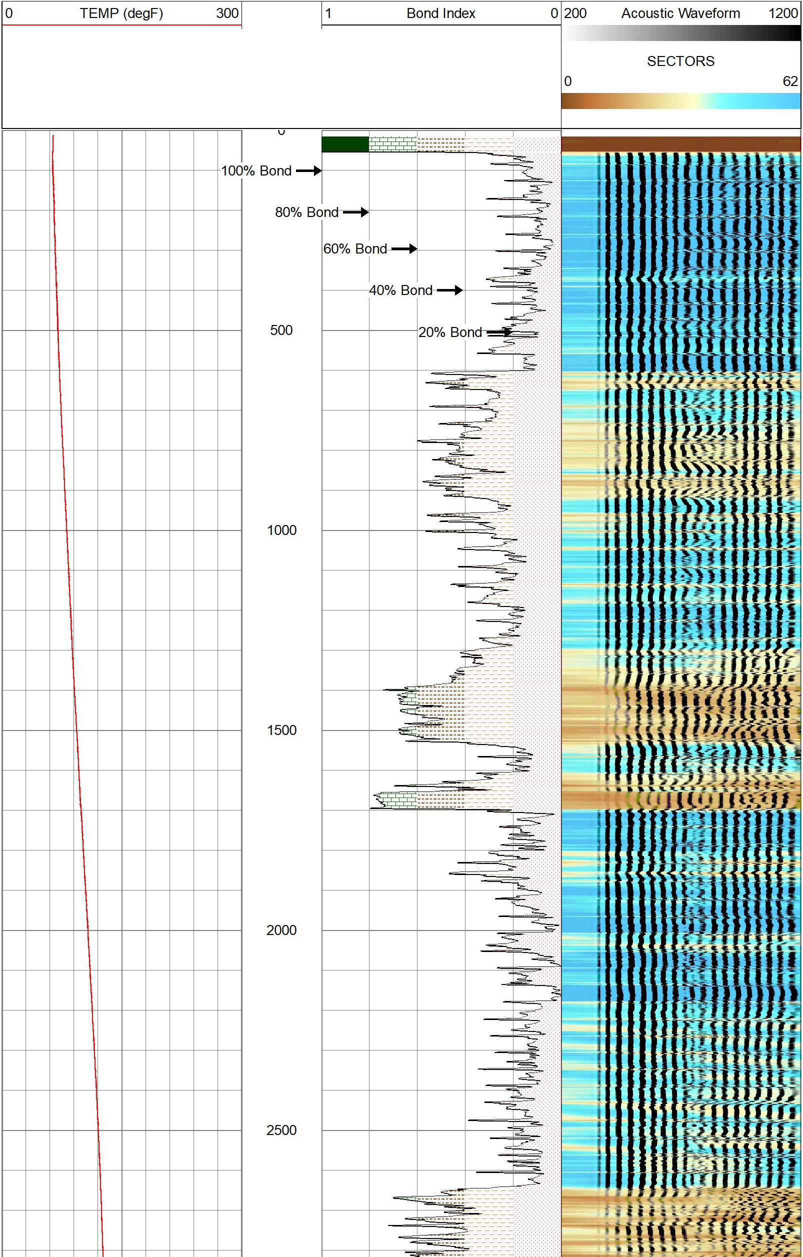
Top - Bottom

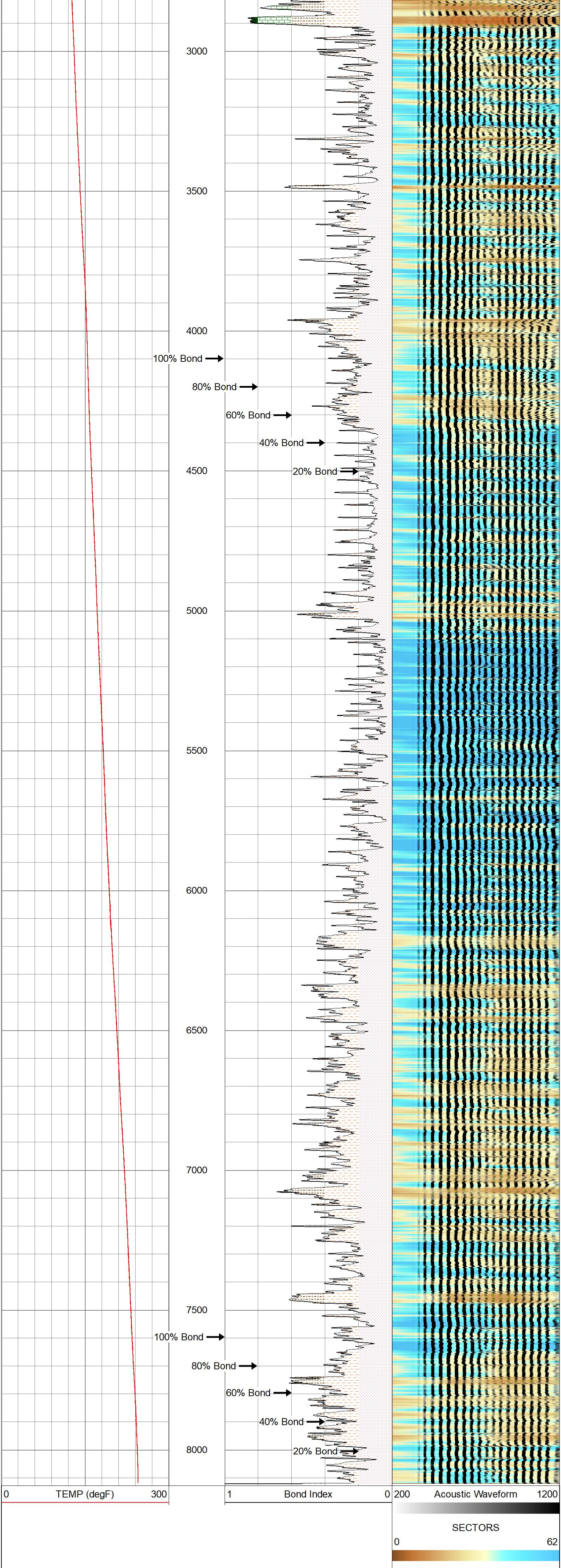
BHTEMP_Src	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV	MaxAPIID in
TEMP	8.5	244	5.5	0.361	20	71.9	4.923

MINAMPL mV	MinAPIID in	MINATTN db/ft	PPT usec	TDEPTH ft
1.9	4.751	0	236	0

BOND INDEX

Database File extraction\2018_08_13_extraction_vt_glenmere_3_16_18_cbl\2018_08_13_extraction_vt_glenmere_3_16_
Dataset Pathname BOND
Presentation Format bndindx_msg-sec
Dataset Creation Mon Aug 13 12:31:21 2018
Charted by Depth in Feet scaled 1:3000



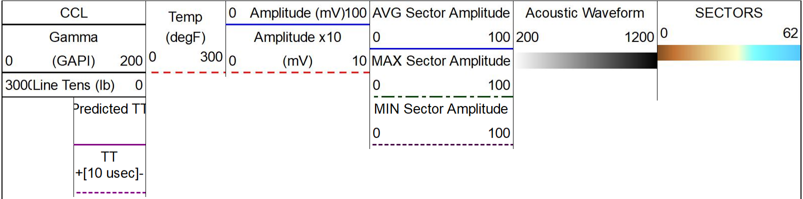


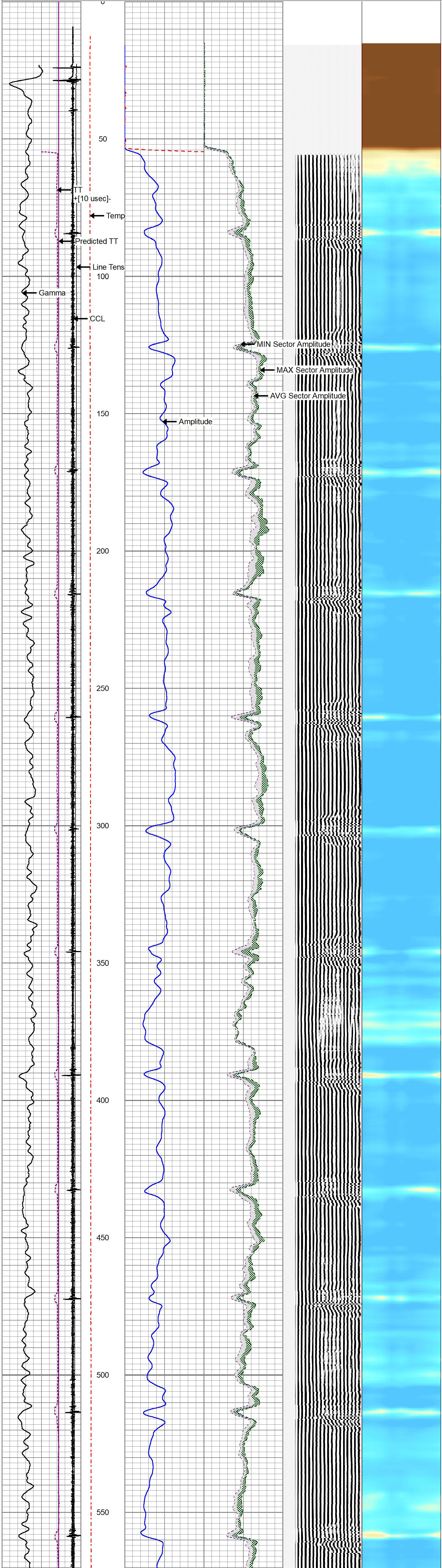
BOND INDEX

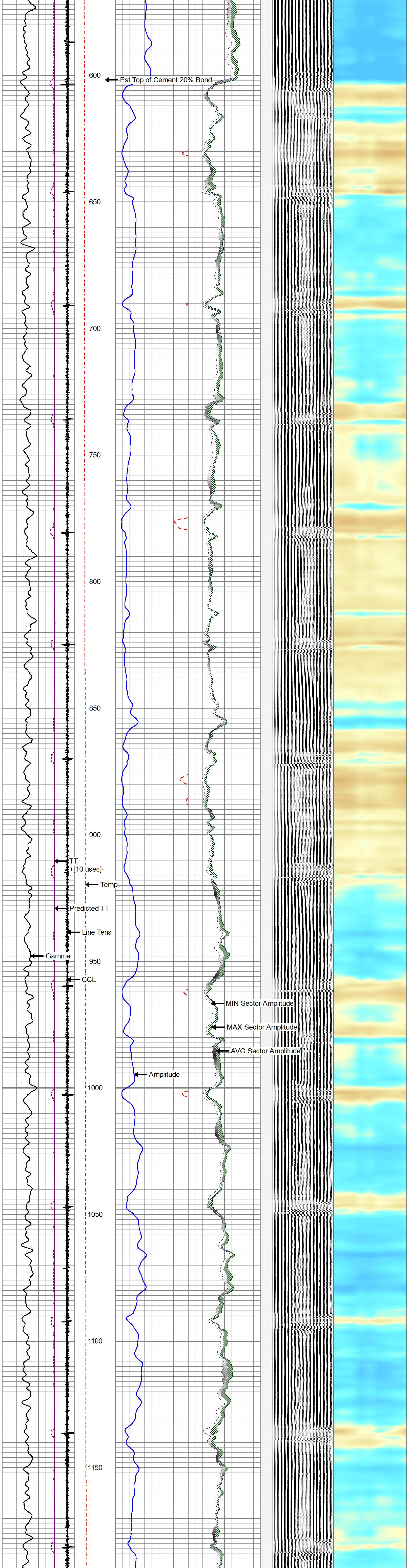
MAIN PASS - Ran with 0 PSI

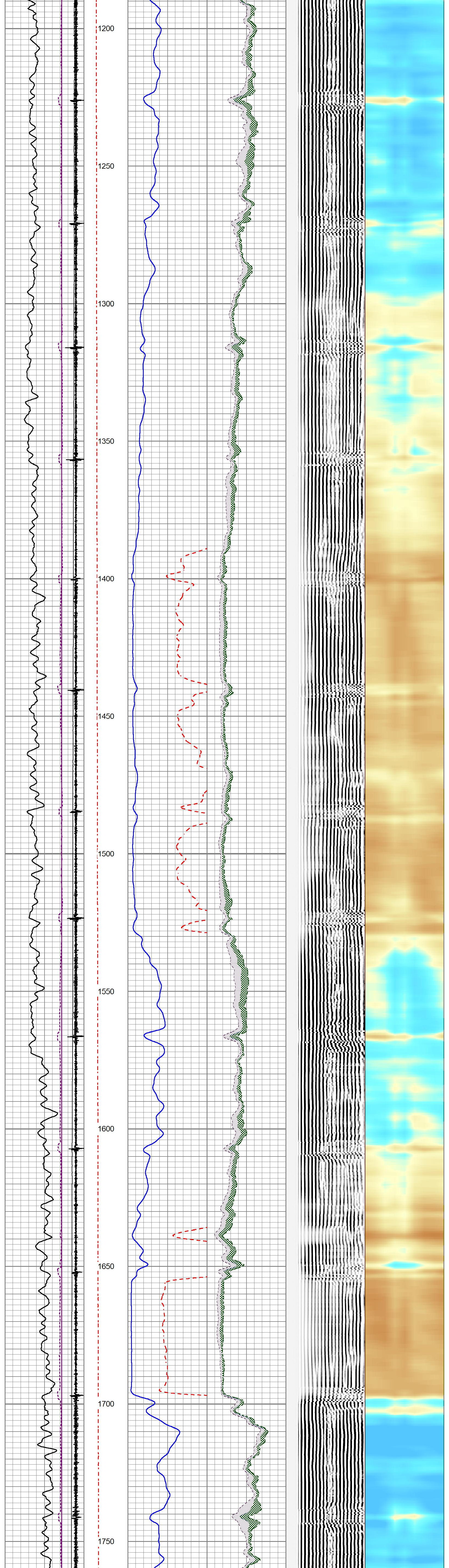
5 in / 100 ft

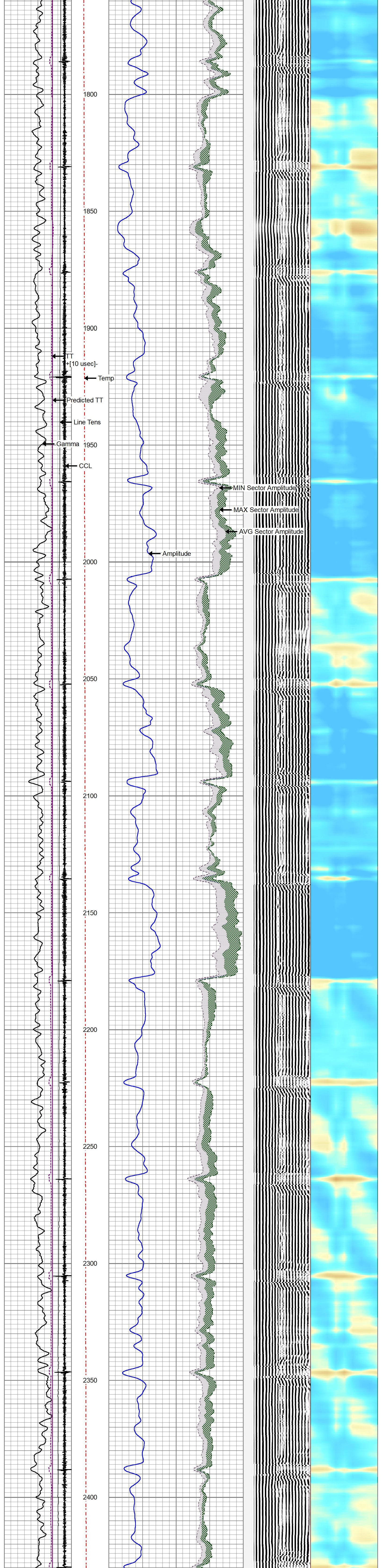
Database File	extraction\2018_08_13_extraction_vt_glenmere_3_16_18_cbl\2018_08_13_extraction_vt_glenmere_3_16_
Dataset Pathname	pass3
Presentation Format	rcbl_8s
Dataset Creation	Mon Aug 13 10:32:53 2018
Charted by	Depth in Feet scaled 1:240

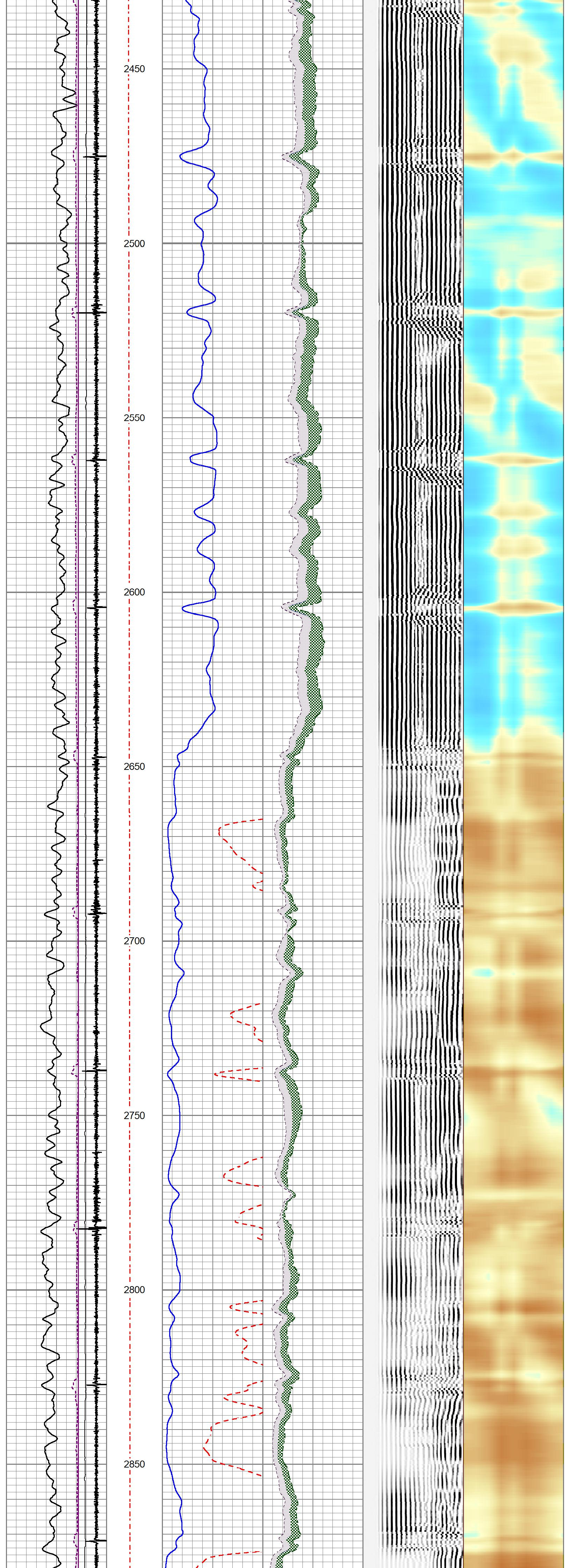


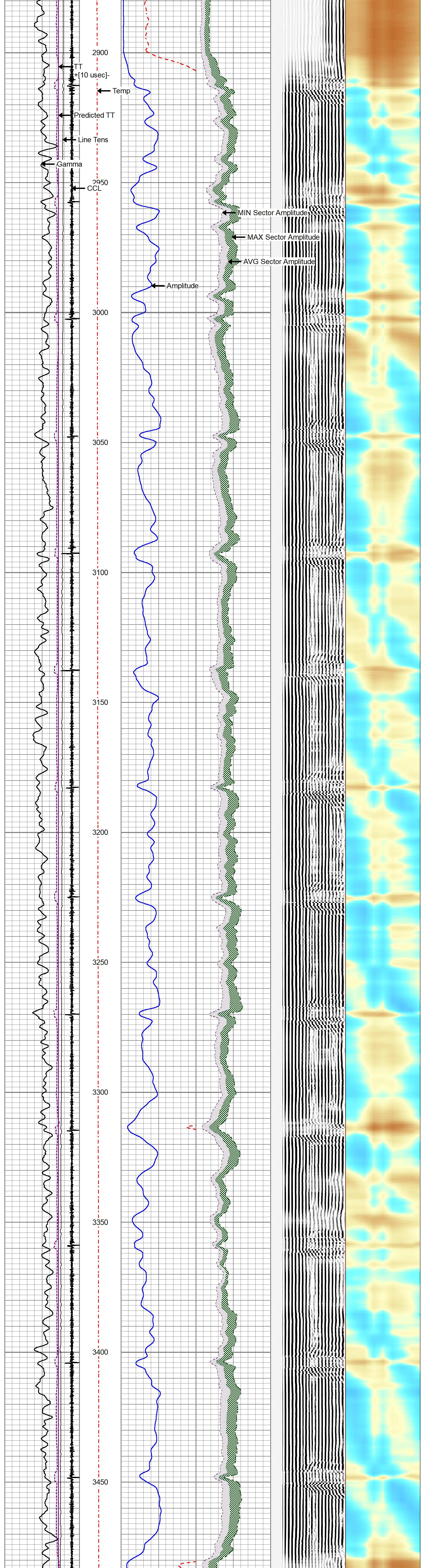


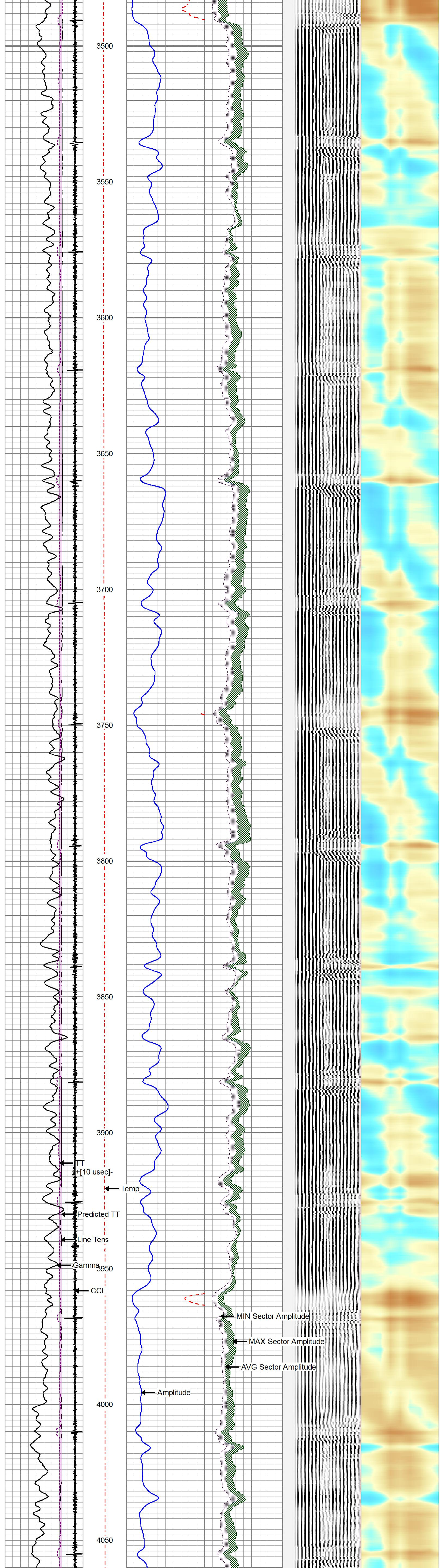


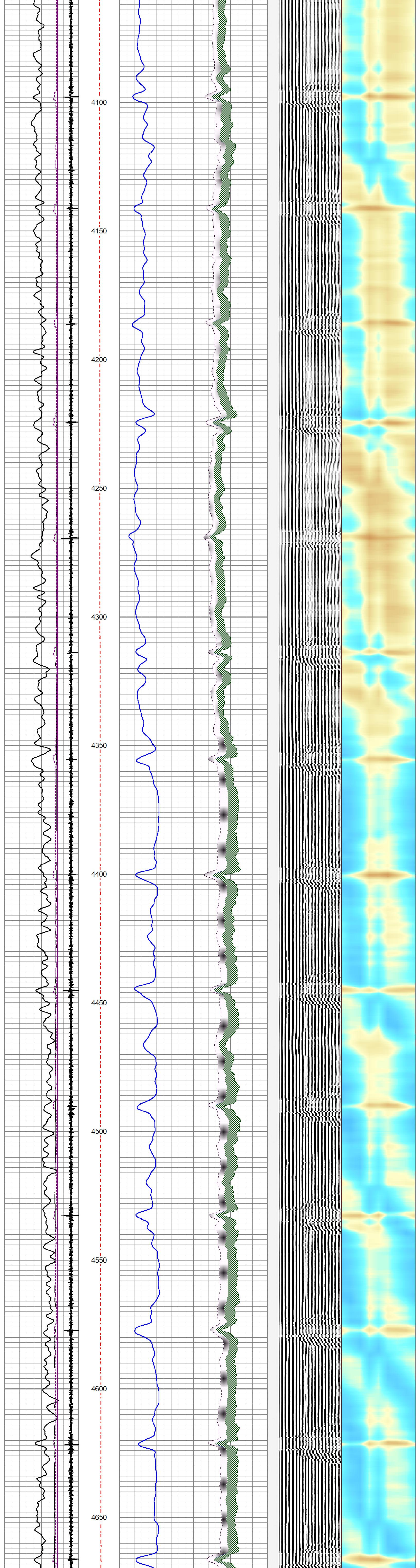


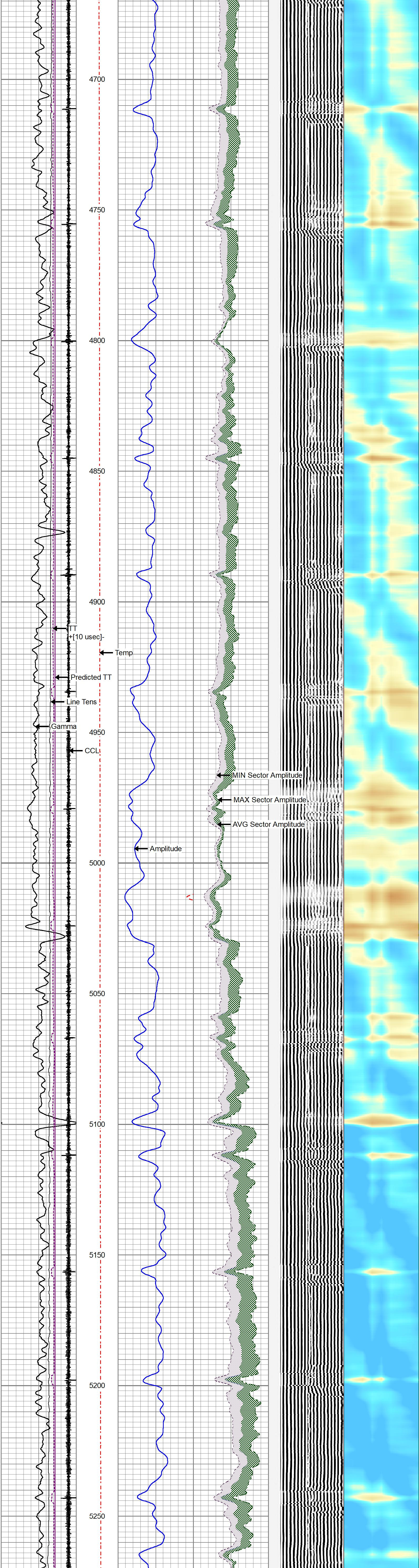


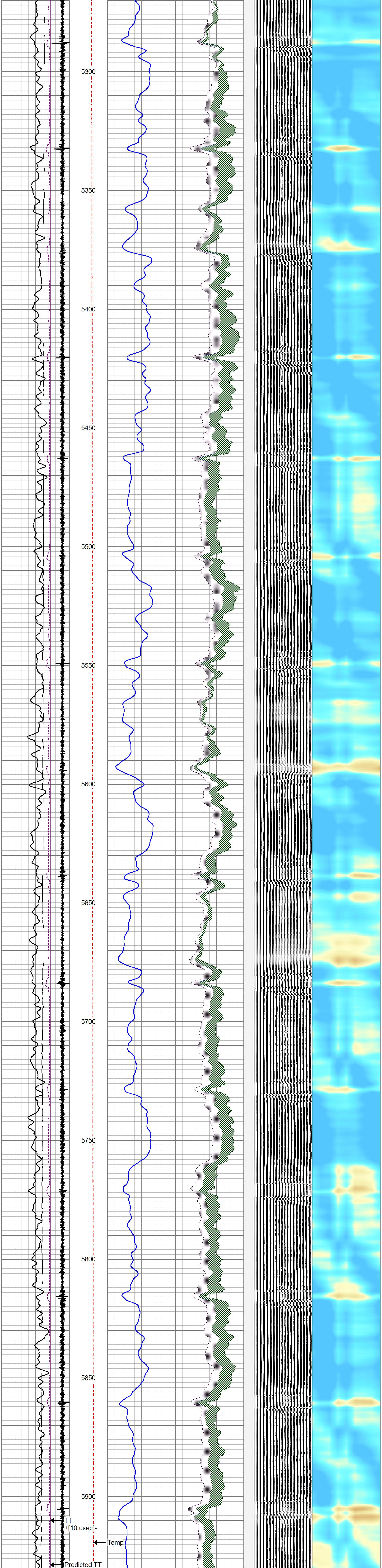


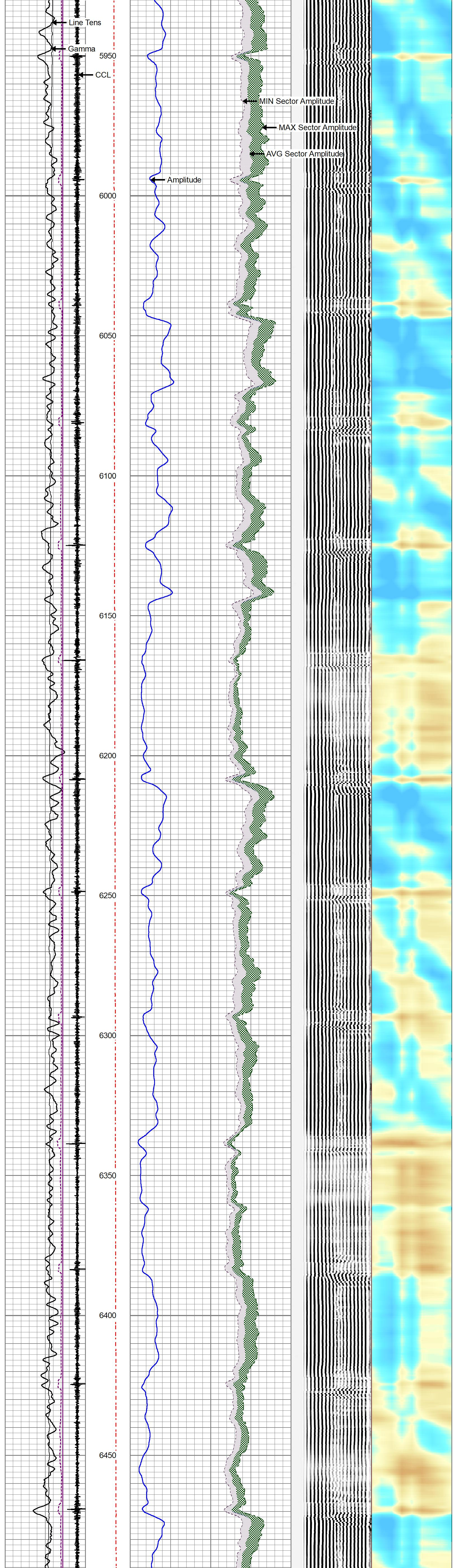

TT
[10 usec]
Temp
Predicted TT
Line Tens
Gamma
CCL
MIN Sector Amplitude
MAX Sector Amplitude
AVG Sector Amplitude
Amplitude
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450


3500
3550
3600
3650
3700
3750
3800
3850
3900
TT
+[10 usec]-
Temp
Predicted TT
Line Tens
Gamma
3950
CCL
MIN Sector Amplitude
MAX Sector Amplitude
AVG Sector Amplitude
Amplitude
4000
4050


4100
4150
4200
4250
4300
4350
4400
4450
4500
4550
4600
4650


4700
4750
4800
4850
4900
TT
+[10 usec]-
Temp
Predicted TT
Line Tens
Gamma
4950
CCL
MIN Sector Amplitude
MAX Sector Amplitude
AVG Sector Amplitude
Amplitude
5000
5050
5100
5150
5200
5250


5300
5350
5400
5450
5500
5550
5600
5650
5700
5750
5800
5850
5900
TT
+[10 usec]-
Temp
Predicted TT


Line Tens
Gamma
CCL
MIN Sector Amplitude
MAX Sector Amplitude
AVG Sector Amplitude
Amplitude
5950
6000
6050
6100
6150
6200
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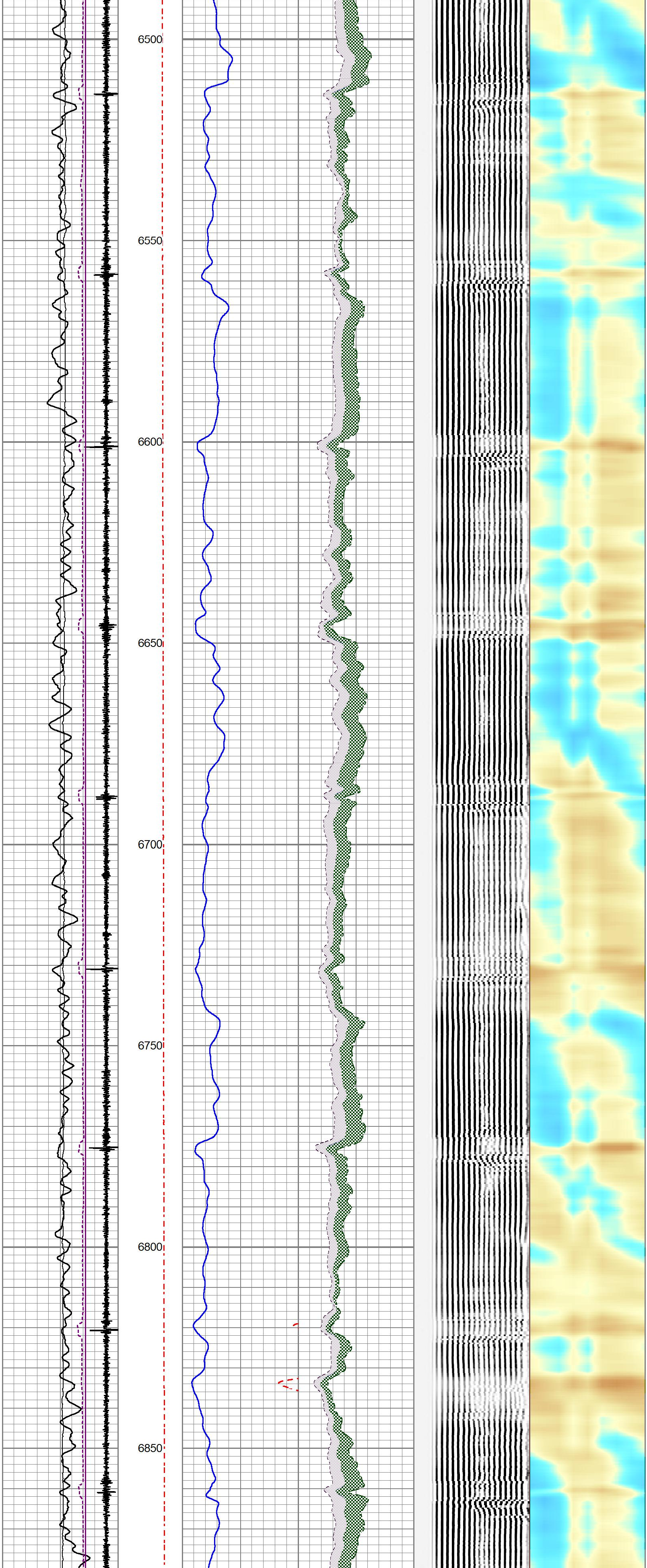
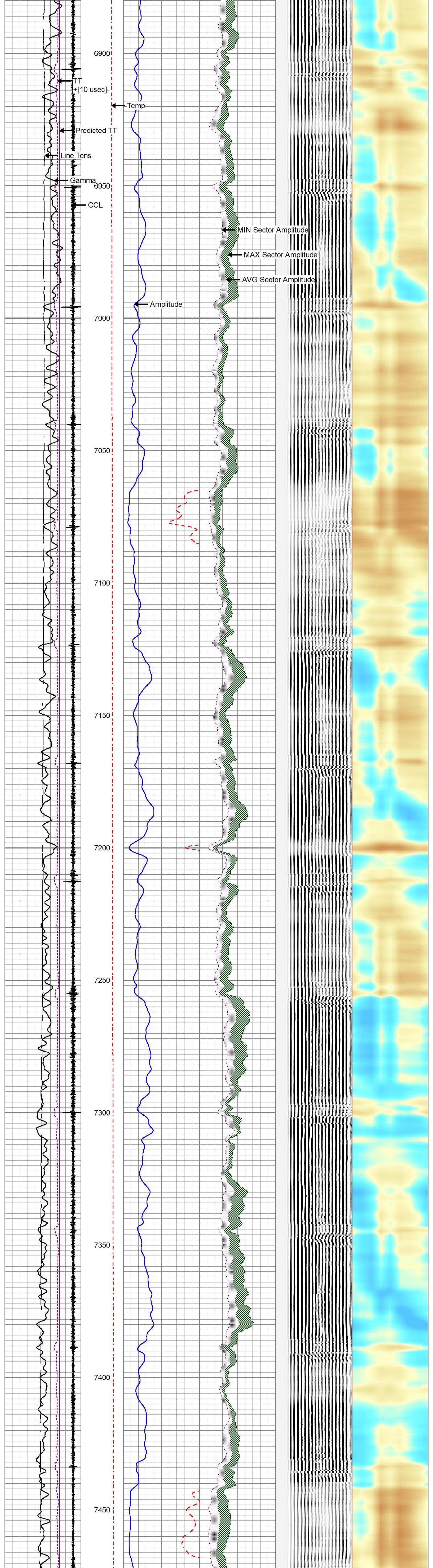
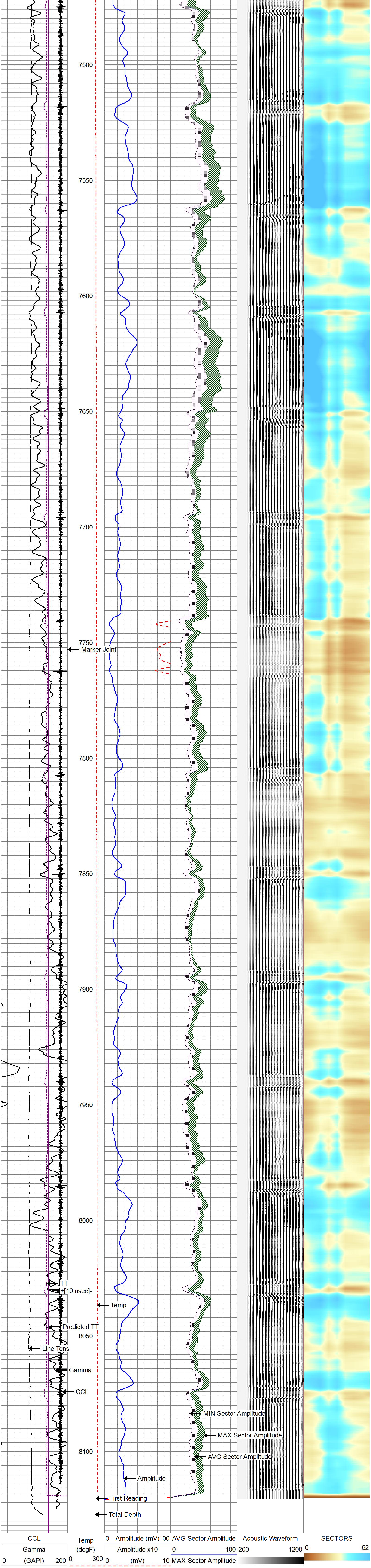
6300
6350
6400
6450


6500
6550
6600
6650
6700
6750
6800
6850





300(Line Tens (lb) 0
Predicted TT
TT
+[10 usec]-

0 100
MIN Sector Amplitude
0 100

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MAIN PASS - Ran with 0 PSI

5 in / 100 ft

gyrodata

REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File	extraction\2018_08_13_extraction_vt_glenmere_3_16_18_cbl\2018_08_13_extraction_vt_glenmere_3_16
Dataset Pathname	pass2
Presentation Format	rcbl_8s
Dataset Creation	Mon Aug 13 10:28:24 2018
Charted by	Depth in Feet scaled 1:240

CCL
Gamma
0 (GAPI) 200
300(Line Tens (lb) 0
Predicted TT
TT
+[10 usec]-

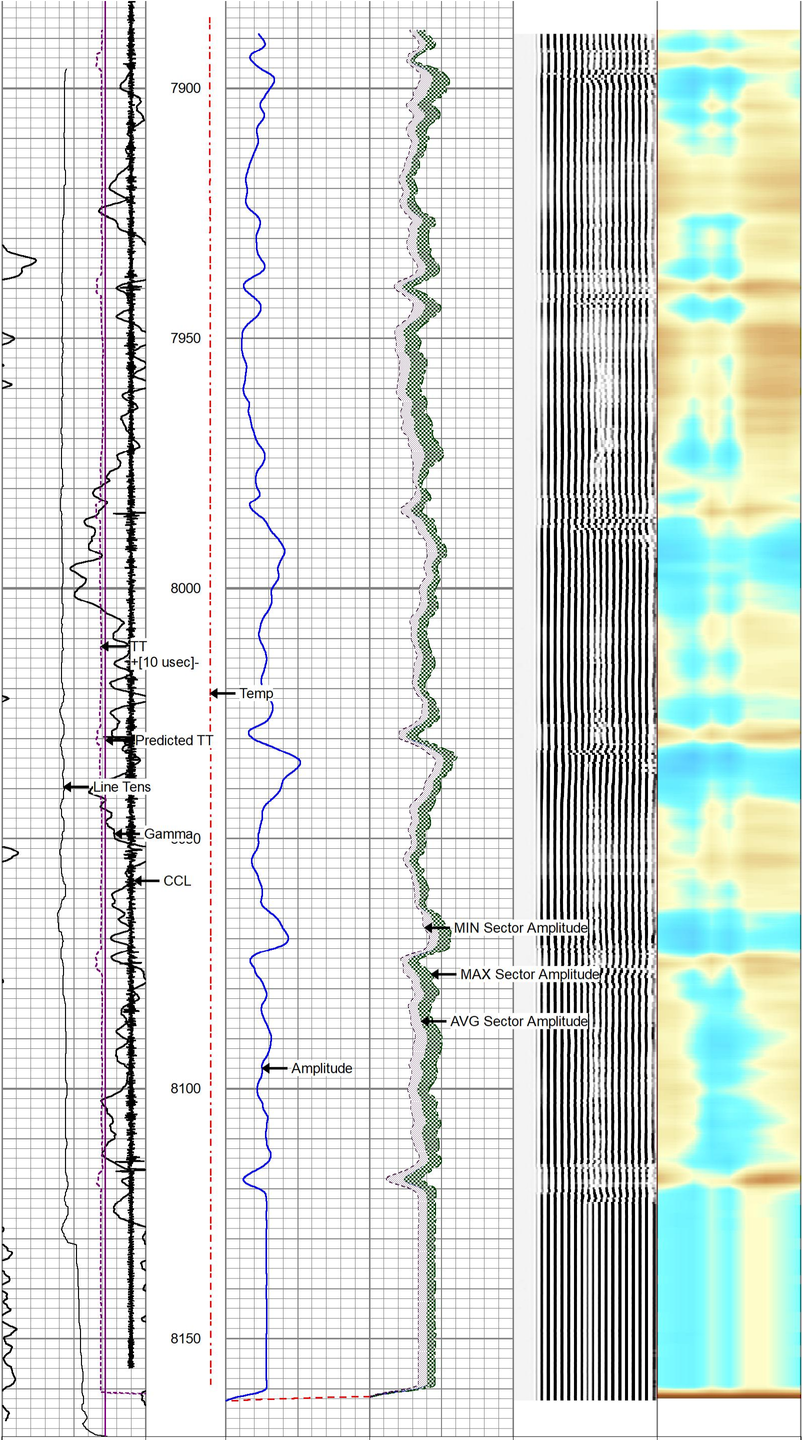
Temp
(degF)
0 300

0 Amplitude (mV)100
Amplitude x10
0 (mV) 10

AVG Sector Amplitude
0 100
MAX Sector Amplitude
0 100
MIN Sector Amplitude
0 100

Acoustic Waveform
200 1200

SECTORS
0 62



CCL
Gamma
0 (GAPI) 200
300(Line Tens (lb) 0
Predicted TT
TT
+[10 usec]-

Temp
(degF)
0 300

0 Amplitude (mV)100
Amplitude x10
0 (mV) 10

AVG Sector Amplitude
0 100
MAX Sector Amplitude
0 100
MIN Sector Amplitude
0 100

Acoustic Waveform
200 1200

SECTORS
0 62

gyrodata

REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Calibration Report

Database File	c:\programdata\warrior\data\extraction\2018_08_13_extraction_vt_glenmere_3_16_18_cbl\2018_08_13_extr
Dataset Pathname	pass3
Dataset Creation	Mon Aug 13 10:32:53 2018

Gamma Ray Calibration Report

Serial Number:	ISHV2-03	
Tool Model:	2 3/4" TekCo	
Performed:	Tue Dec 13 00:23:06 2016	
Calibrator Value:	194.0	GAPI
Background Reading:	58.9	cps
Calibrator Reading:	300.8	cps
Sensitivity:	0.8020	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	IPPO2-01	
Tool Model:	2 3/4" RIB Analog	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	344.560	ft

Master Calibration, performed Sun Aug 12 11:27:33 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	0.908	0.000	71.921	79.912	-0.602
CAL	-0.000	0.503				
5'	0.010	1.188	0.000	71.921	61.037	-0.594
SUM						
S1	0.017	0.905	0.000	72.000	81.059	-1.357
S2	0.015	0.925	0.000	72.000	79.154	-1.187
S3	0.015	0.967	0.000	72.000	75.580	-1.104
S4	0.017	0.992	0.000	72.000	73.893	-1.279
S5	0.015	1.005	0.000	72.000	72.755	-1.102
S6	0.017	0.944	0.000	72.000	77.701	-1.346
S7	0.018	0.873	0.000	72.000	84.266	-1.525
S8	0.018	0.844	0.000	72.000	87.115	-1.550

Internal Reference Calibration, performed Fri Aug 25 16:15:12 2017:

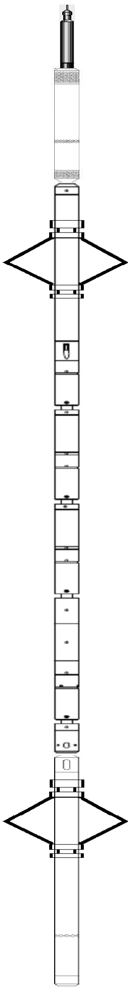
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.000	0.503	1.000	0.000

Air Zero Calibration, performed Fri Aug 25 16:15:12 2017:

	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:	IPPO2-01			
Tool Model:	2 3/4" RIB Analog			
Performed:	Fri Aug 26 11:07:15 2016			
	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec
Gain:	0.33			
Offset:	0.00			
Delta Spacing	1			



Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			CableHead-TitanConeType2	1.03	1.44	3.60
CCL	13.50		CCL_Log-2 3/4" TekCo (IPSN7-03)	1.83	2.75	33.00
			Antelope-Overbody	1.25	2.75	
TEMP	10.05					
WVFS8	8.76					
WVFS7	8.76					
			RBTA-2 3/4" RIB Analog (IPPO2-01)	9.13	2.75	102.00
WVFS6	8.76					
WVFS5	8.76					
WVFS4	8.76					
WVFS3	8.76					
WVFS2	8.76					
WVFS1	8.76					
WVF3FT	8.01					
WVF5FT	7.01					
WVFSYNC	3.68					
WVFTEMP	3.68					
WVFCAL	3.68					
			Antelope-Overbody	1.25	2.75	
			GR_Log-2 3/4" TekCo (ISHV2-03)	3.68	2.75	47.00
GR	1.04					
LOCTIM	0.00					
UTCTIM	0.00					
PMON	0.00					

Dataset:	2018_08_13_extraction_vt_glenmere_3_16_18_cbl.db: field/well/run1/pass3
Total length:	15.67 ft
Total weight:	185.60 lb
O.D.:	2.75 in

gyrodata

Company	**Extraction Oil and Gas**
Well	**VT-Glenmere 3-16-18**
Field	**Wattenberg**
County	**Weld**
State	**CO**
Country	**U.S.A.**