

Company: Noble Energy Inc

Well: Centennial State G34-679

Field: Wattenberg

County: Weld State: Colorado

UltraSonic Summary Print

County:	Weld				
Field:	Wattenberg				
Location:	NENE Sec. 35, T4N, R65W				
Well:	Centennial State G34-679				
Company:	Noble Energy Inc				
		Location:			
		NENE Sec. 35, T4N, R65W			
		SHL: 742' FNL & 10' FEL			
		Lat: 40.27448, Long: -104.62198			
		Permanent Datum:	Ground Level	Elev.:	K.B. 4801.00 ft
		Log Measured From:	Kelly Bushing	30.00 ft	G.L. 4771.00 ft
		Drilling Measured From:	Kelly Bushing		D.F. 4801.00 ft
		API Serial No.	Section:	Township:	Range:
		05-123-44608	35	4N	65W
Logging Date	15-Mar-2018				

Run Number	ONE	
Depth Driller	16977.00 ft	
Schlumberger Depth	6900.00 ft	
Bottom Log Interval	6400.00 ft	
Top Log Interval	150.00 ft	
Casing Fluid Type	Water	
Salinity		
Density	8.4 lbm/gal	
Fluid Level	0.00 ft	
BIT/CASING/TUBING STRING		
Bit Size	8.50 in	
From	1969.00 ft	
To	6900.00 ft	
Casing/Tubing Size	5.5 in	
Weight	20 lbm/ft	
Grade	N/A	
From	30.00 ft	
To	6900.00 ft	
Max Recorded Temperatures	239 degF	
Logger on Bottom	15-Mar-2018	10:20:00
Unit Number	9102	
Recorded By	Camila Lang	Fort Morgan
Witnessed By	Mike Stenger	

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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13.1 Integration Summary

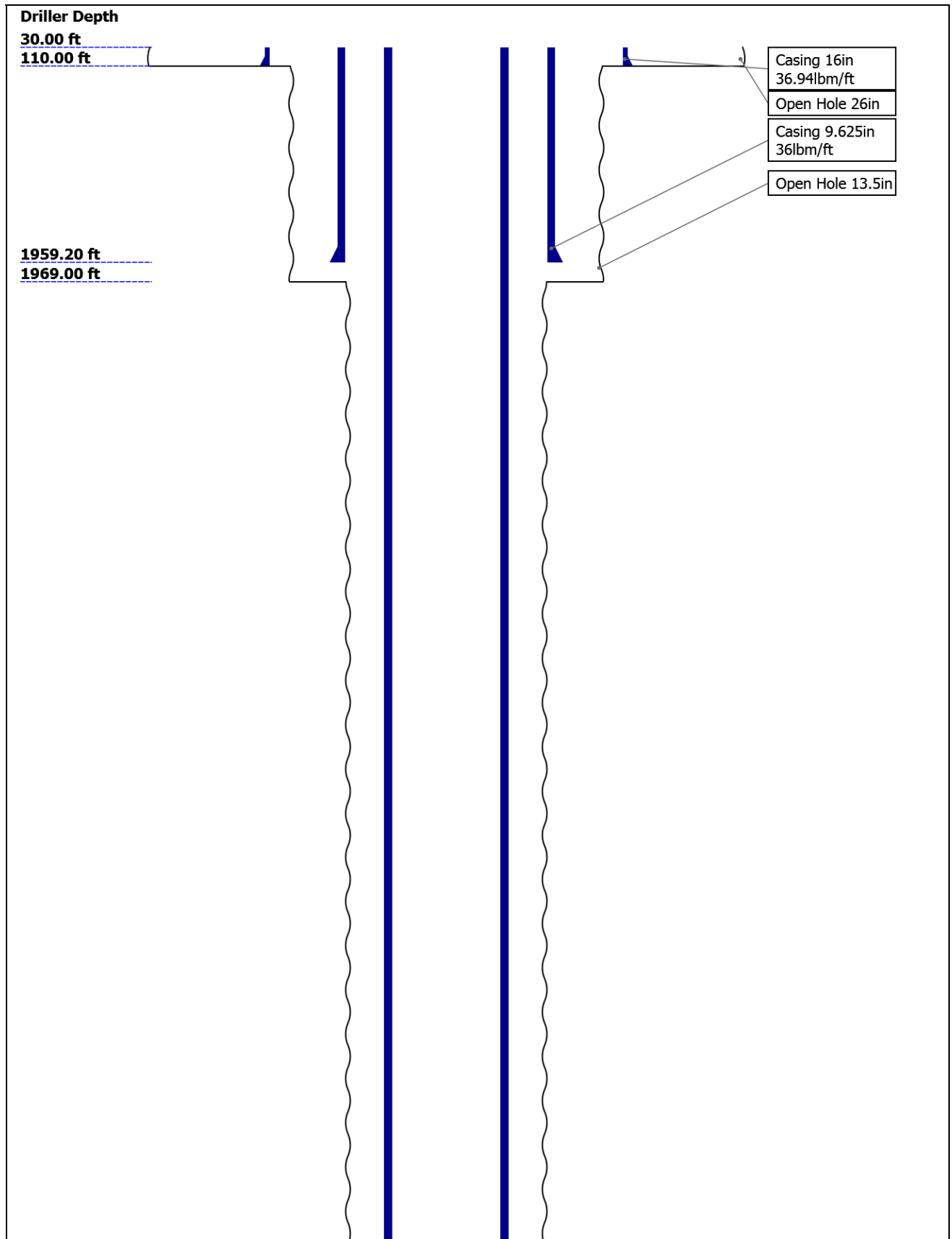
13.2 Software Version

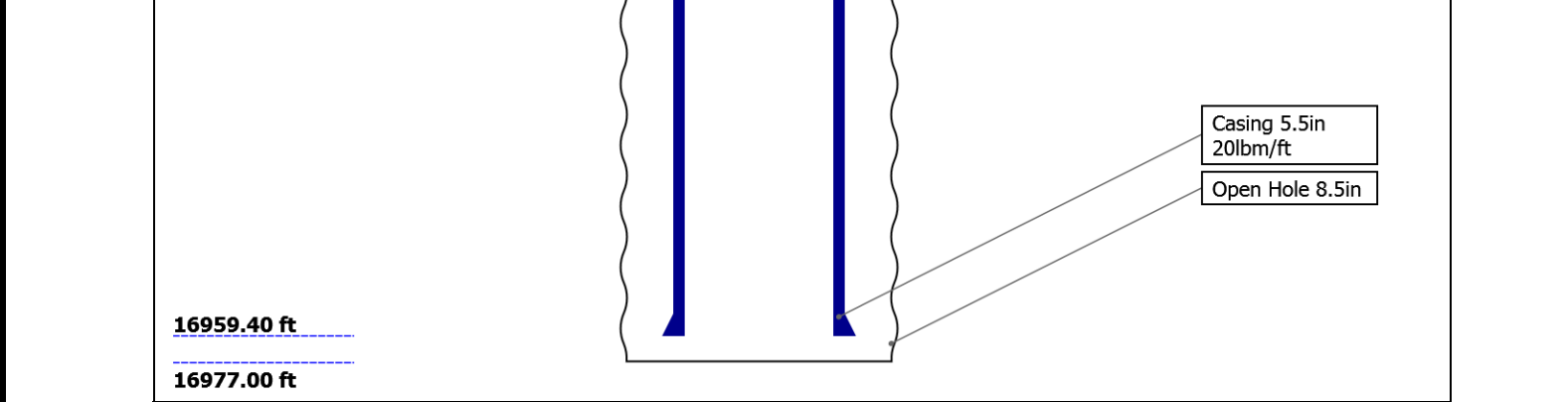
13.3 Composite Summary

13.4 Log (DJ Basin Ultrasonic Cement Summary

Report)

Well Sketch





Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	26	13.5	8.5			
Top Driller (ft)	30	110	1969			
Top Logger (ft)	30	110	1969			
Bottom Driller (ft)	110	1969	16977			
Bottom Logger (ft)	110	1969	6900			
Casing						
Size (in)	16	9.625	5.5			
Weight (lbm/ft)	36.94	36	20			
Inner Diameter (in)	15.572	8.921	4.778			
Grade	N/A	N/A	N/A			
Top Driller (ft)	30	30	30			
Top Logger (ft)	30	30	30			
Bottom Driller (ft)	110	1959.2	16959.4			
Bottom Logger (ft)	110	1959.2	6900			

Operational Run Summary

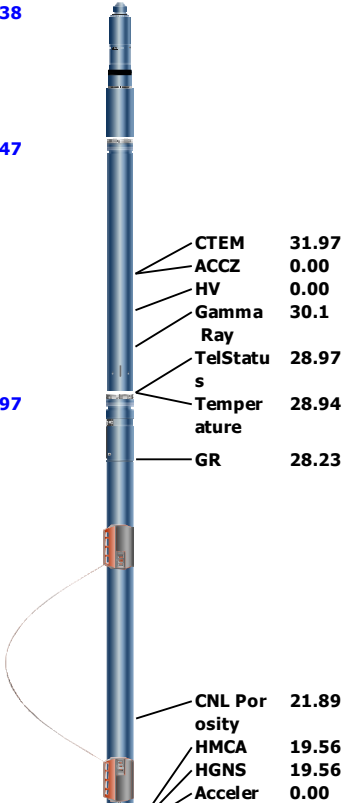
Parameter (unit)	ONE					
Date Log Started	15-Mar-2018					
Time Log Started	09:33:57					
Date Log Finished	15-Mar-2018					
Time Log Finished	11:31:26					
Top Log Interval (ft)	150.00					
Bottom Log Interval (ft)	6400.00					
Total Depth (ft)						
Max Hole Deviation (deg)	0.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (in)	8.500					
Logging Unit Number	9102					
Logging Unit Location	Fort Morgan					
Recorded By	Camila Lang					

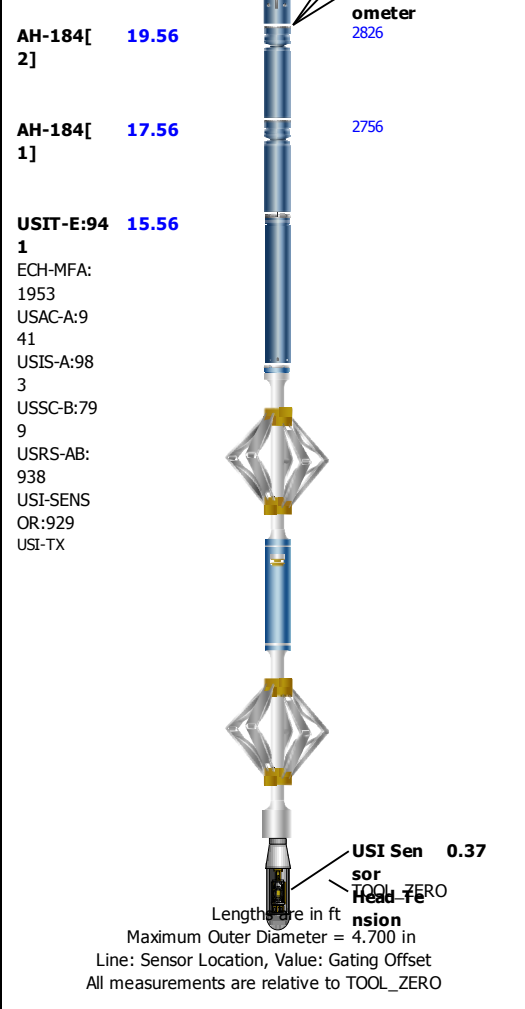
Witnessed By	Mike Stenger					
Service Order Number	E0QY-00006					

Borehole Fluids

Parameter(unit)	ONE					
Fluid Type	Water					
Max Recorded Temperatures (degF)	239					
Source of Sample	Active Tank					
Salinity (ppm)	0					
Density (lbm/gal)	8.4					
Funnel Viscosity (s)	26					
Fluid Loss (cm3)						
PH						
Date/Time Circulation Stopped	NaN					
Date Logger on Bottom	15-Mar-2018					
Time Logger on Bottom	10:20:00					
Source RMF						
RMC	Pressed					
RM @ Meas Temp (ohm.m@degF)	0.2 @ 68					
RMF @ Meas Temp (ohm.m@degF)	0.15 @ 68					
RMC @ Meas Temp (ohm.m@degF)						
RM @ BHT (ohm.m@degF)	0.06 @ 239					
RMF @ BHT (ohm.m@degF)	0.05 @ 239					
RMC @ BHT (ohm.m@degF)	NaN @ 239					
Total Solid (%)						
High Gravity Solids (%)						

Remarks and Equipment Summary

ONE: Toolstring	ONE: Remarks
<p>Equip name Length LEH-QT:2 38.38 353 LEH-QT:23 53</p> <p>EDTC-B:8 35.47 424 EDTH-B:84 32 EDTG-A:7 7303 EDTC-B:84 24</p> <p>HGNS-H 28.97 HGNH NPV-N NSR-F:520 3 HGNS-H HMCA-H HACCZ-H: 5118</p> 	This is the first log in the well.
	Tool ran as per tool sketch.
	Fluid: 8.4 lb/gal Brine
	CS: 9.625" 36lb/ft @ 1959.2' 5.5" 20 lb/ft @ 16959.4'
	Main pass recorded under 2500 PSI, and repeat pass was recorded 0 PSI.
	BHT: 239 degF



Depth Summary

	ONE		
Depth Measuring Device			
Type	IDW-JA		
Serial Number	6174		
Calibration Date	18-OCT-2018		
Calibrator Serial Number	15		
Calibration Cable Type	7-46A-XS		
Wheel Correction 1	-2		
Wheel Correction 2	-3		
Tension Device			
Type	CMTD-B/A		
Serial Number	3872		
Calibration Date	24-FEB-2018		
Calibrator Serial Number	1014		
Number of Calibration Points	10		
Calibration Root Mean Square Error	19		
Calibration Peak Error	11		
Logging Cable			
Type	7-46A-XS		
Serial Number	U717022		
Length	20000.00 ft		
Cable Temperature	Wind		

Conveyance Type	Wireline		
Rig Type	Crane USA		
ONE:Depth Control Parameters		Depth Control Remarks	
Log Sequence	First Log In the Well	All Schlumberger depth control policies and standards were followed.	
Rig Up Length At Surface		IDW used as a a primary depth reference.	
Rig Up Length At Bottom		Z-chart used as a secondary depth reference.	
Rig Up Length Correction			
Stretch Correction			
Tool Zero Check At Surface			

Survey Record

Survey Calculation

Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	True North	Total Correction Formula :	Magnetic Dec

Rig Location

Latitude : 40.274480 degrees Longitude : -104.62198 degrees

Tie In Point

Measured Depth:	0.00 ft	Inclination:	0.00 deg	Azimuth:	0.00 deg
True Vertical Depth:	0.00 ft	North Displacement:	0.00 ft	East Displacement:	0.00 ft

Survey Quality Index

28 : Tie-In Point

Survey Correction Index

0 : No correction

Survey Description Index

0 : Not Flagged Survey

Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/ -S (ft)	E/ -W (ft)	Closure (ft)	at Azim (deg)	DLS deg/100ft	Tool Type	QI	CI	DI
1	0.00	0.00	0.00	----	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP	28	0	0

USIT - Fluid Properties Measurement

Run Name	Pass Name	Start Depth(ft)	Stop Depth(ft)
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Fluid Velocity

Start Depth(ft)	Stop Depth(ft)	Start Value(us/ft)	End Value(us/ft)
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Mud Impedance

Start Depth(ft)	Stop Depth(ft)	Start Value(Mrayl)	End Value(Mrayl)
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ONE

2500 PSI Main Pass

Software Version

Acquisition System	Version
Maxwell 2018	8.0.95333.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[4]:Up	Up	81.83 ft	6932.87 ft	15-Mar-2018 10:27:12 AM	15-Mar-2018 11:21:59 AM	ON	4.73 ft	Yes

All depths are referenced to toolstring zero

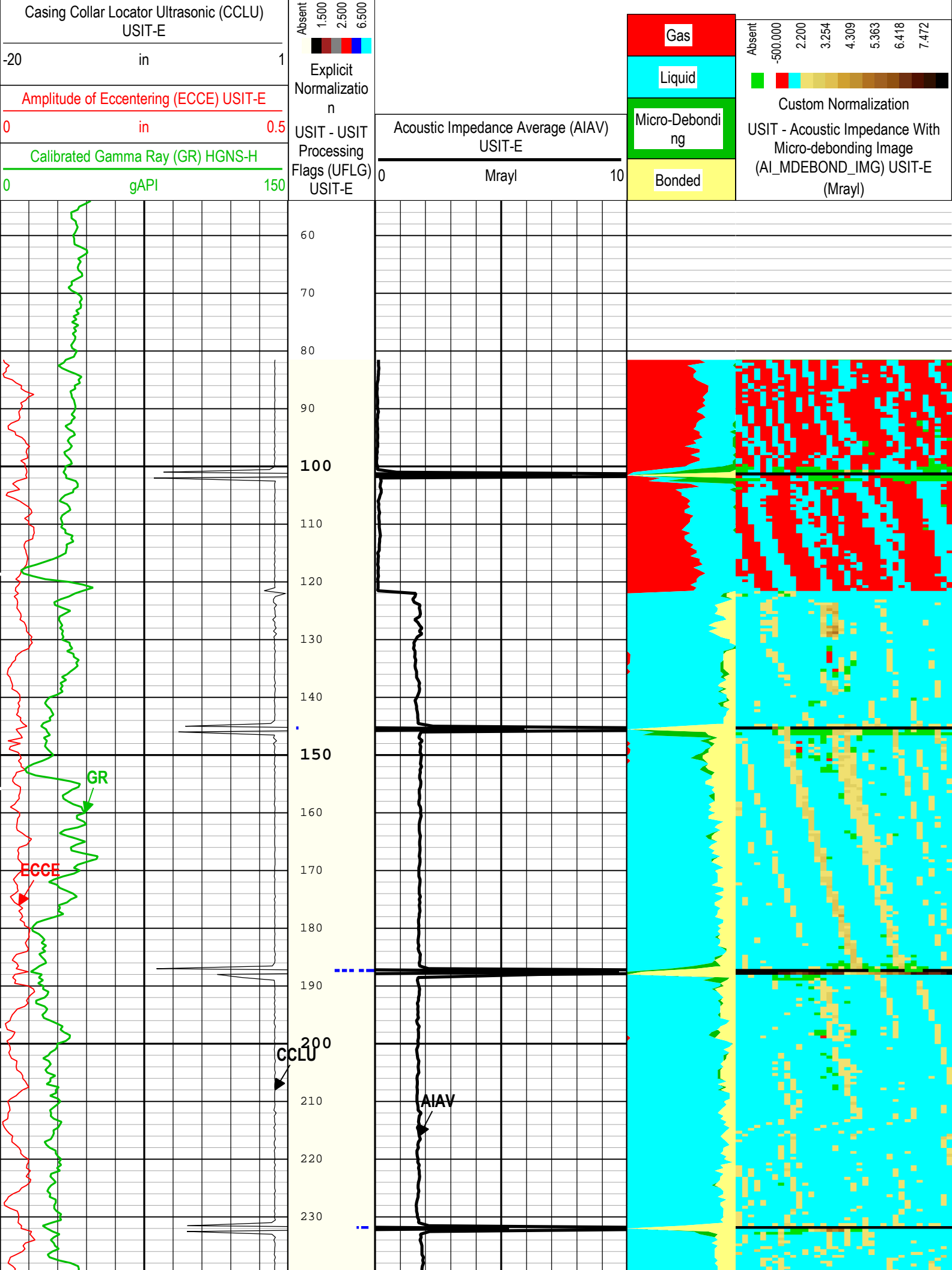
Log

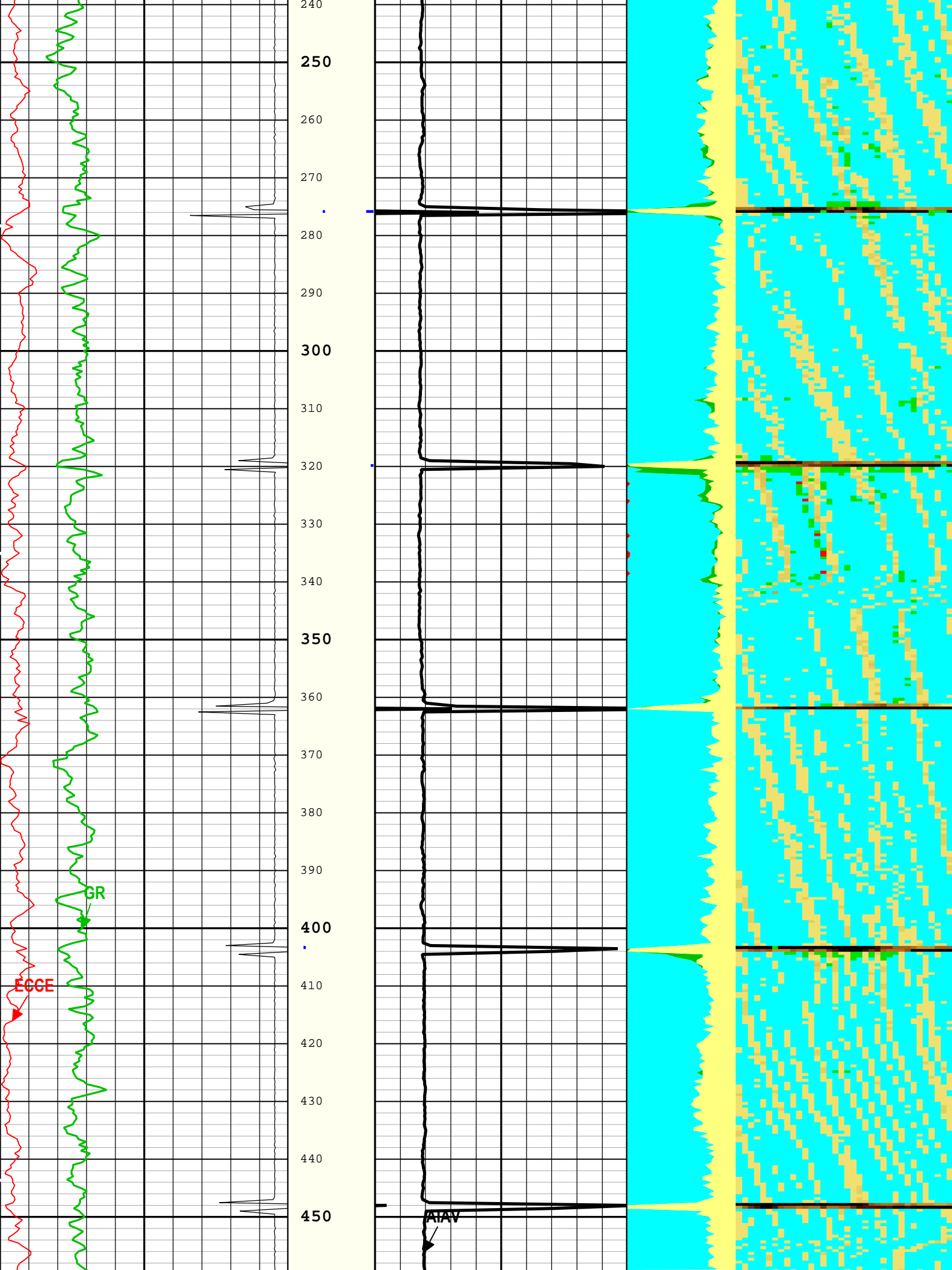
Company:Noble Energy Inc Well:Centennial State G34-679

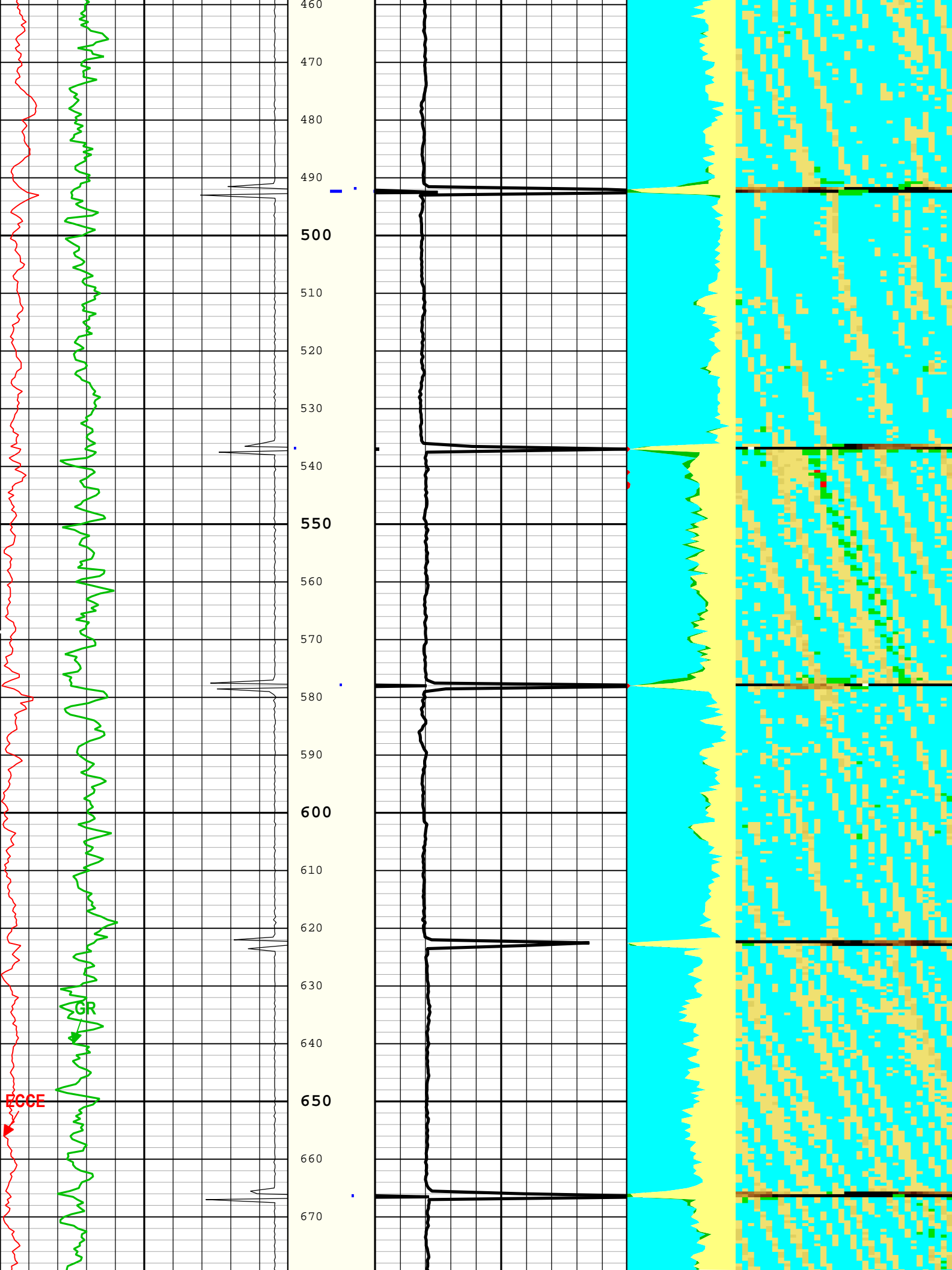
ONE: Log[4]:Up:S006

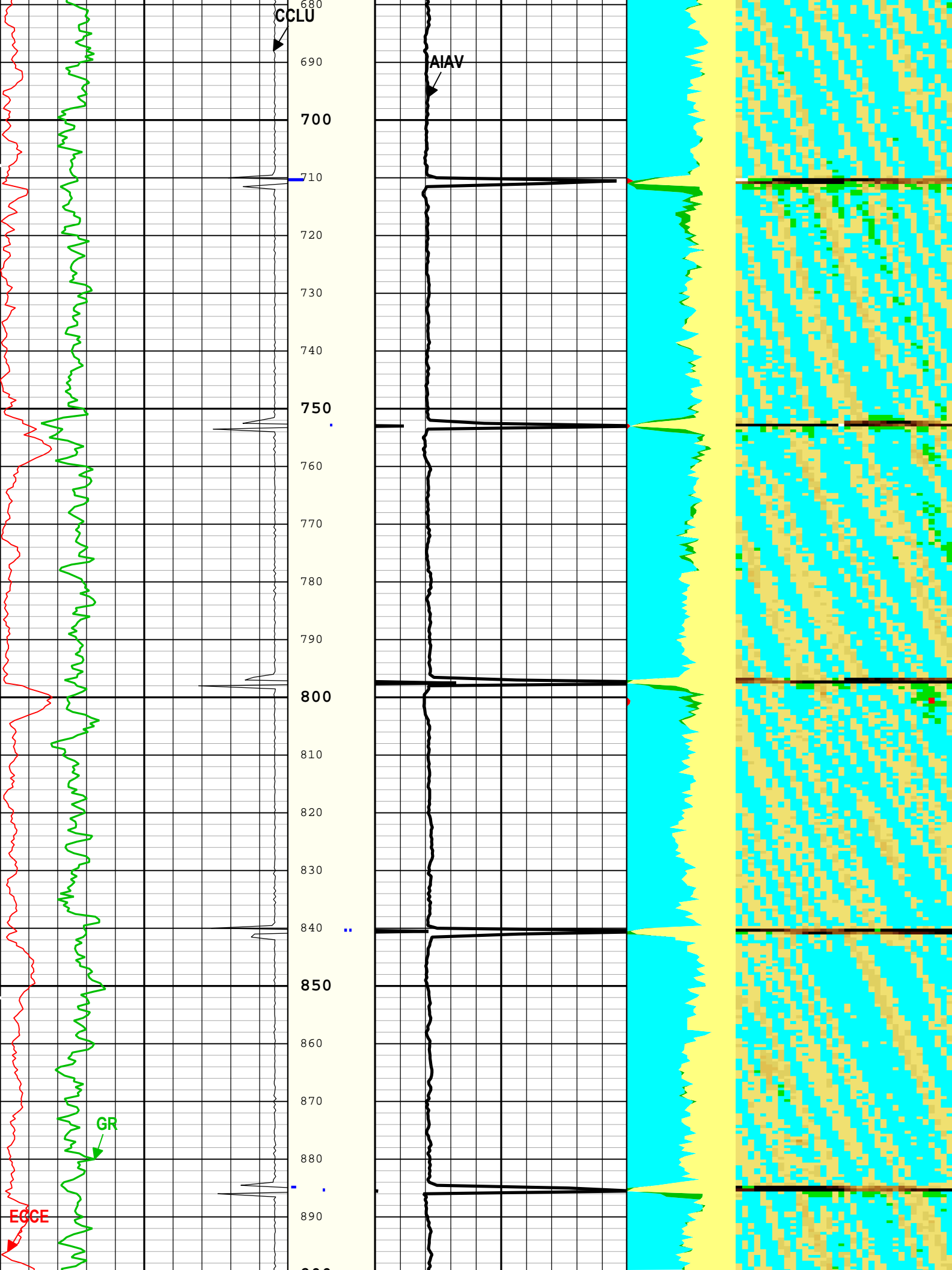
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Creation Date: 15-Mar-2018 18:27:24

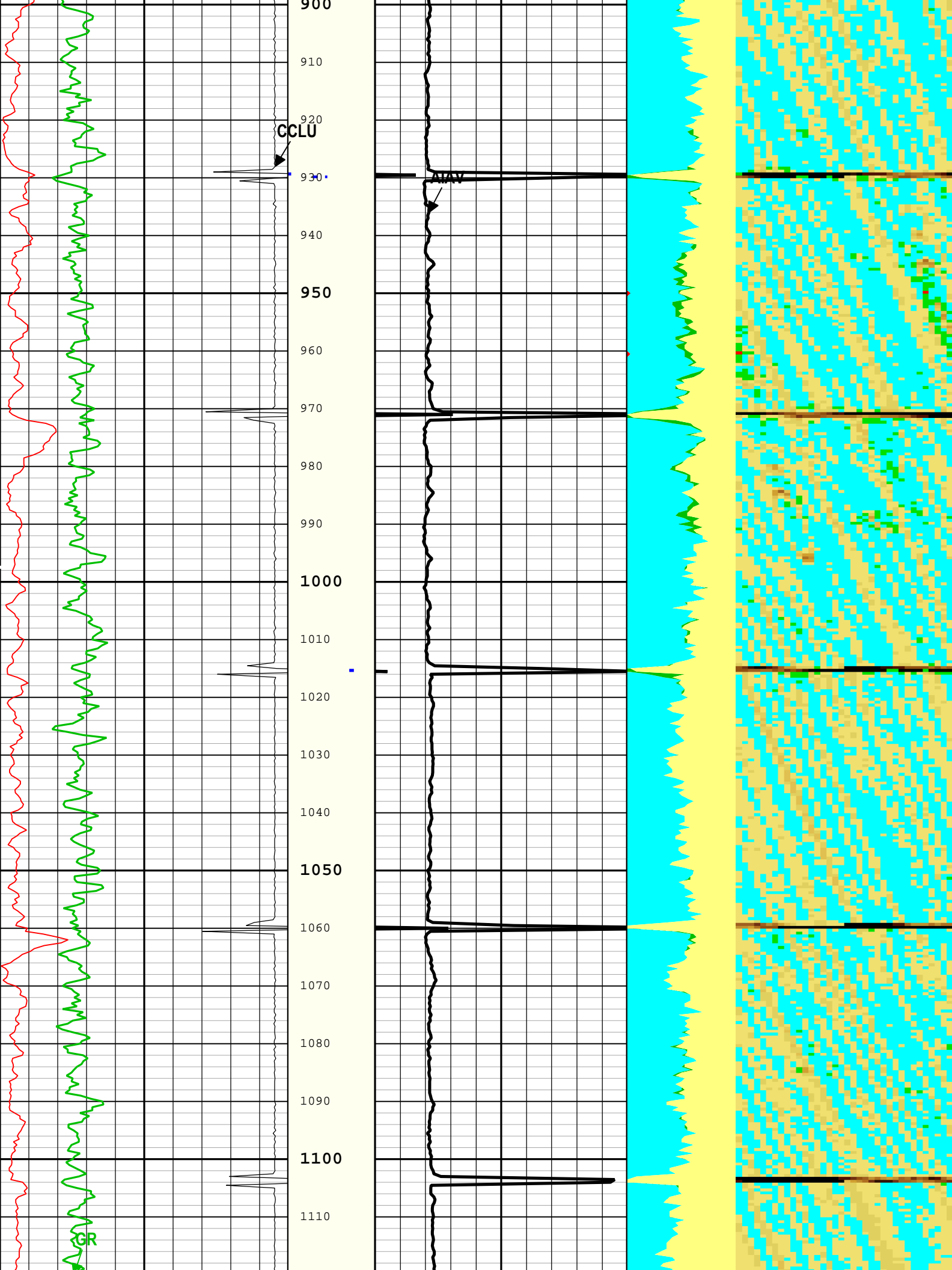
TIME 1900 - Time Marked every 60.00 (s)

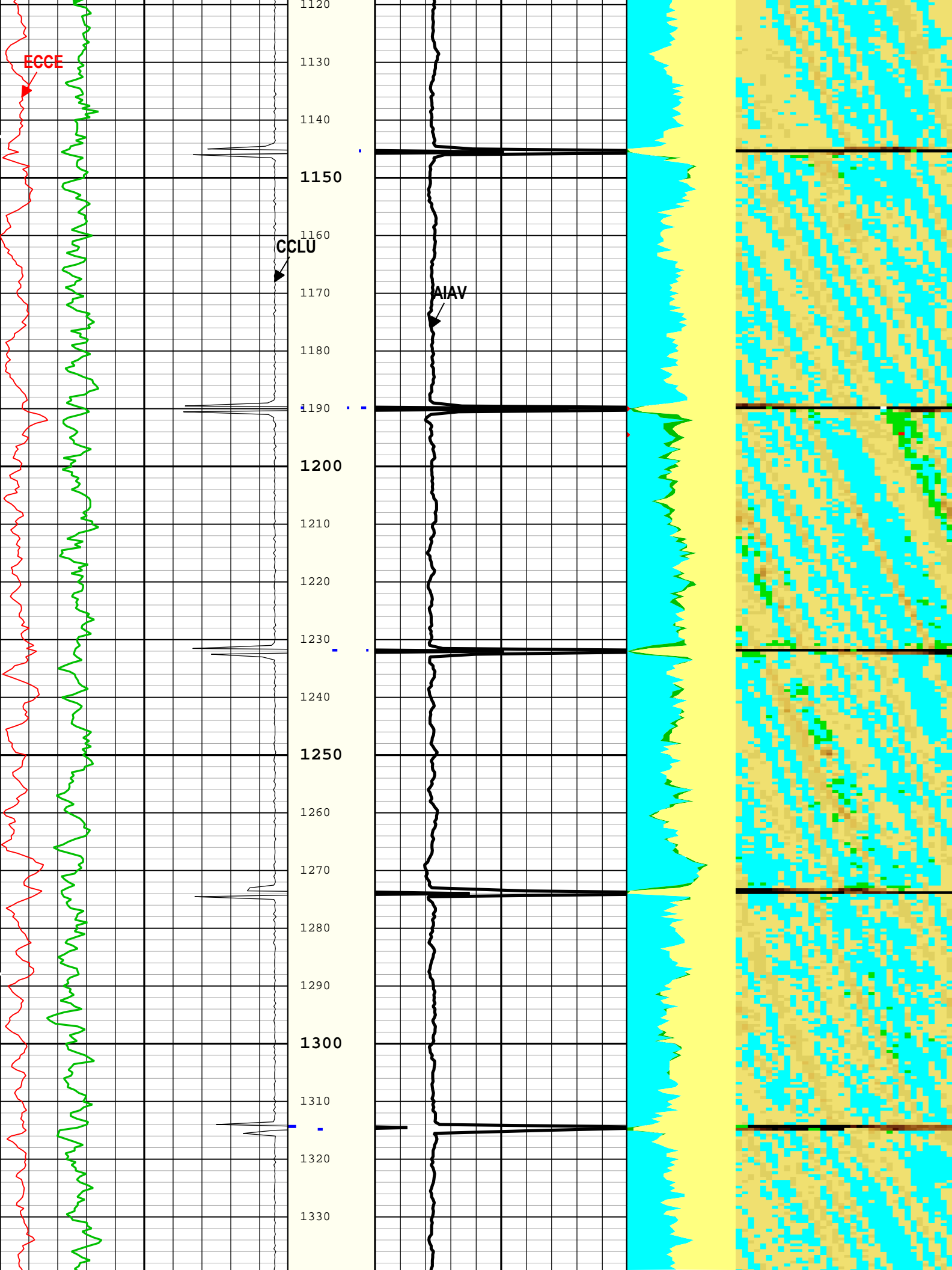


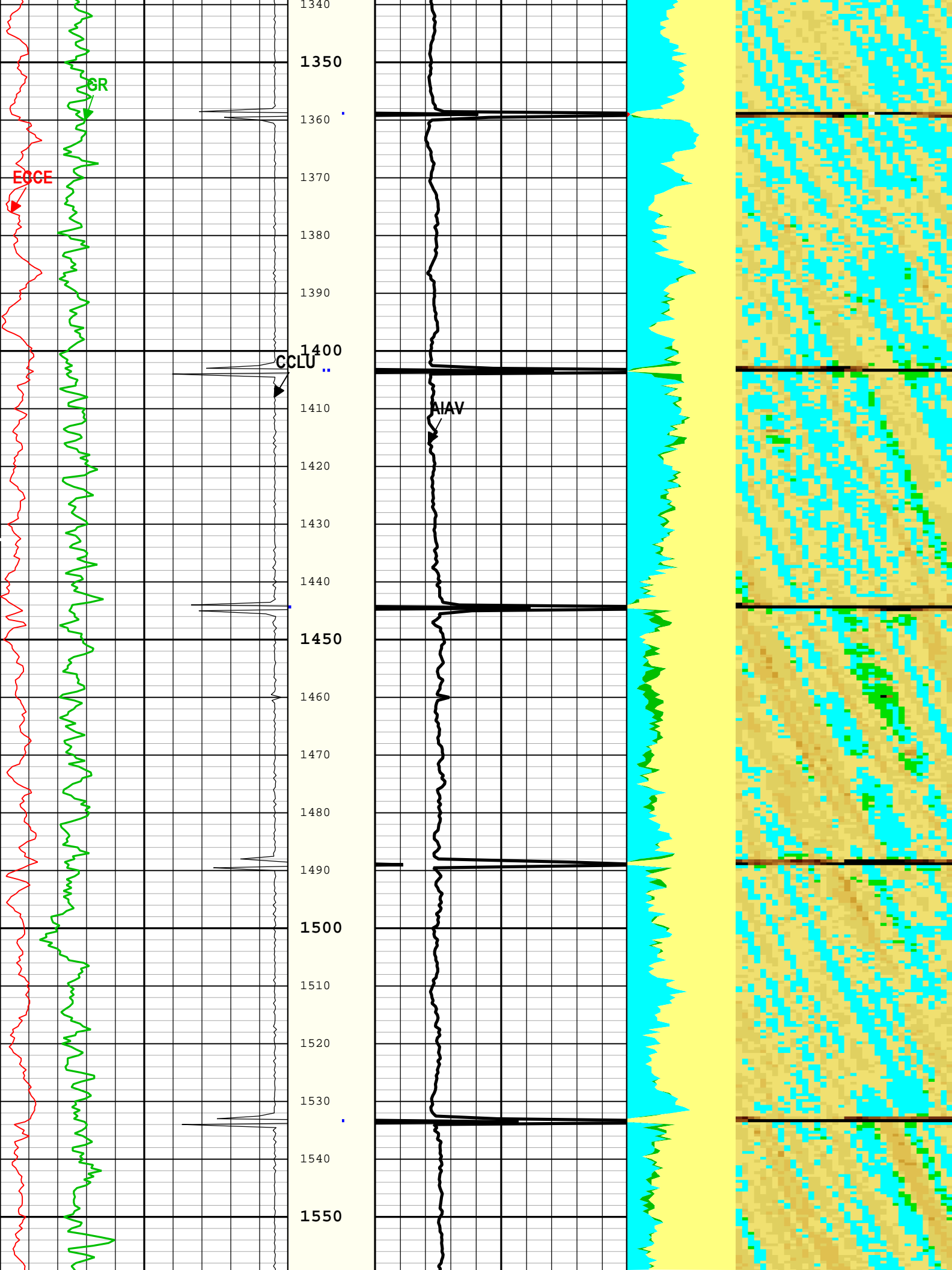


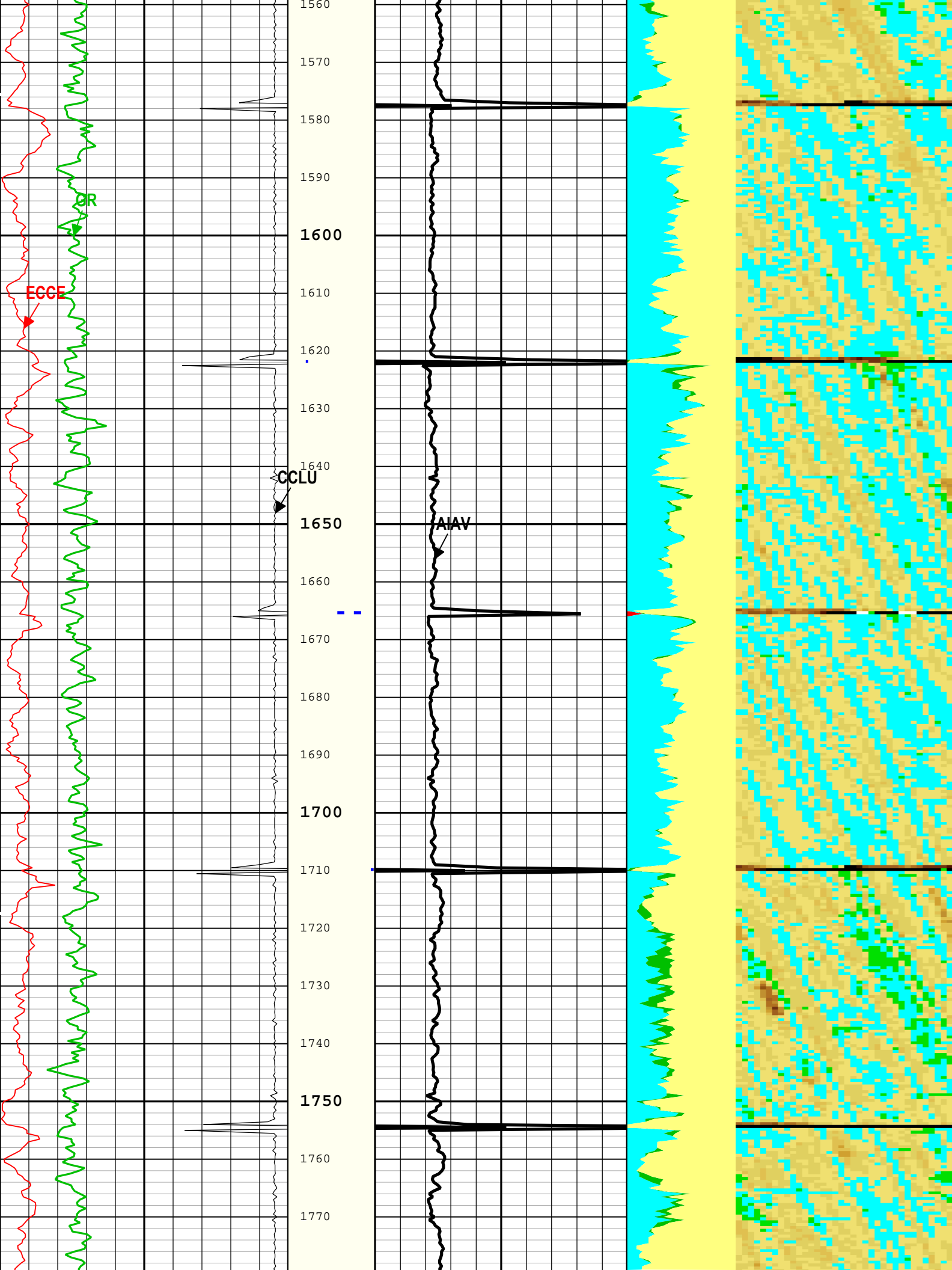


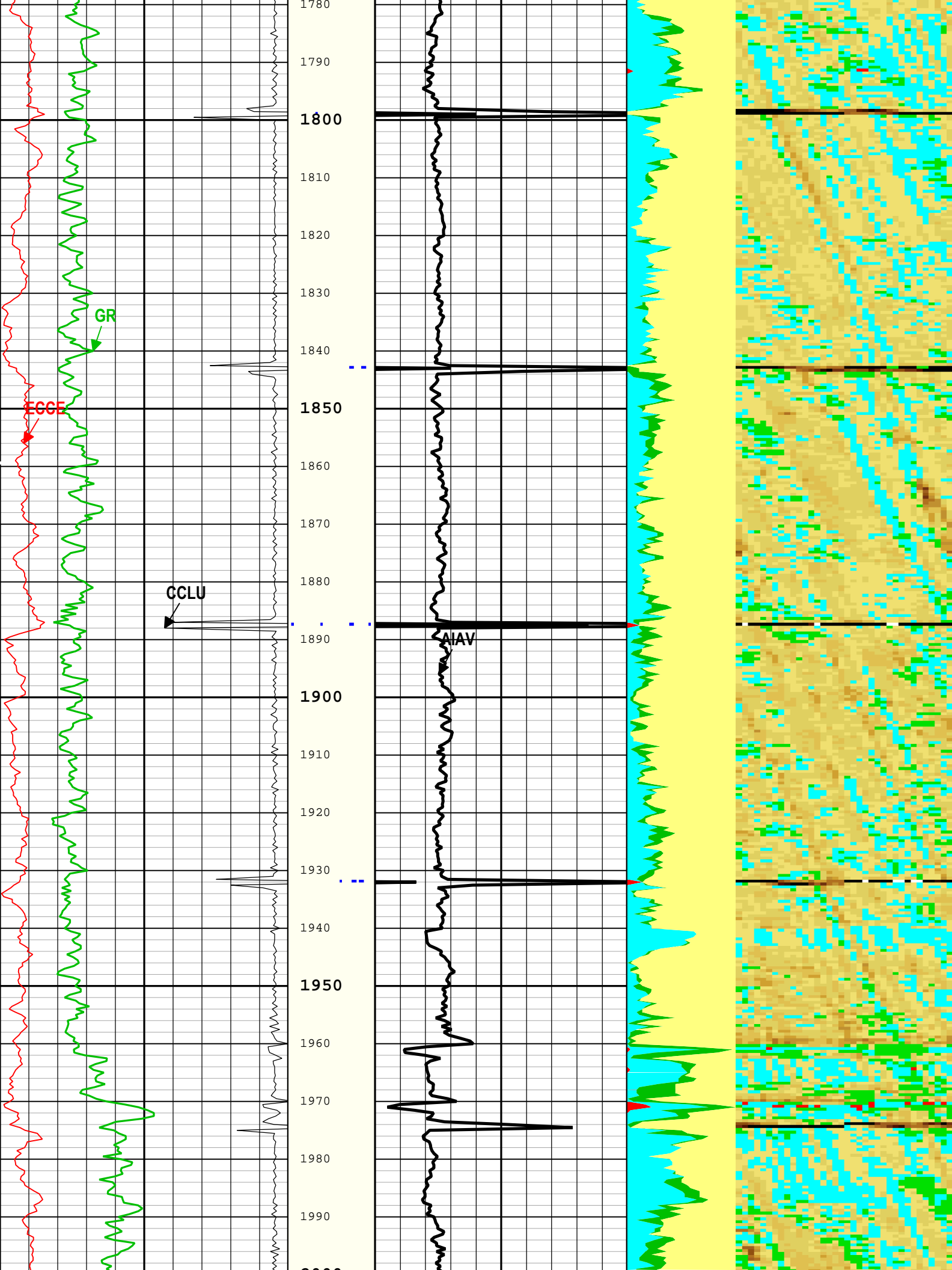


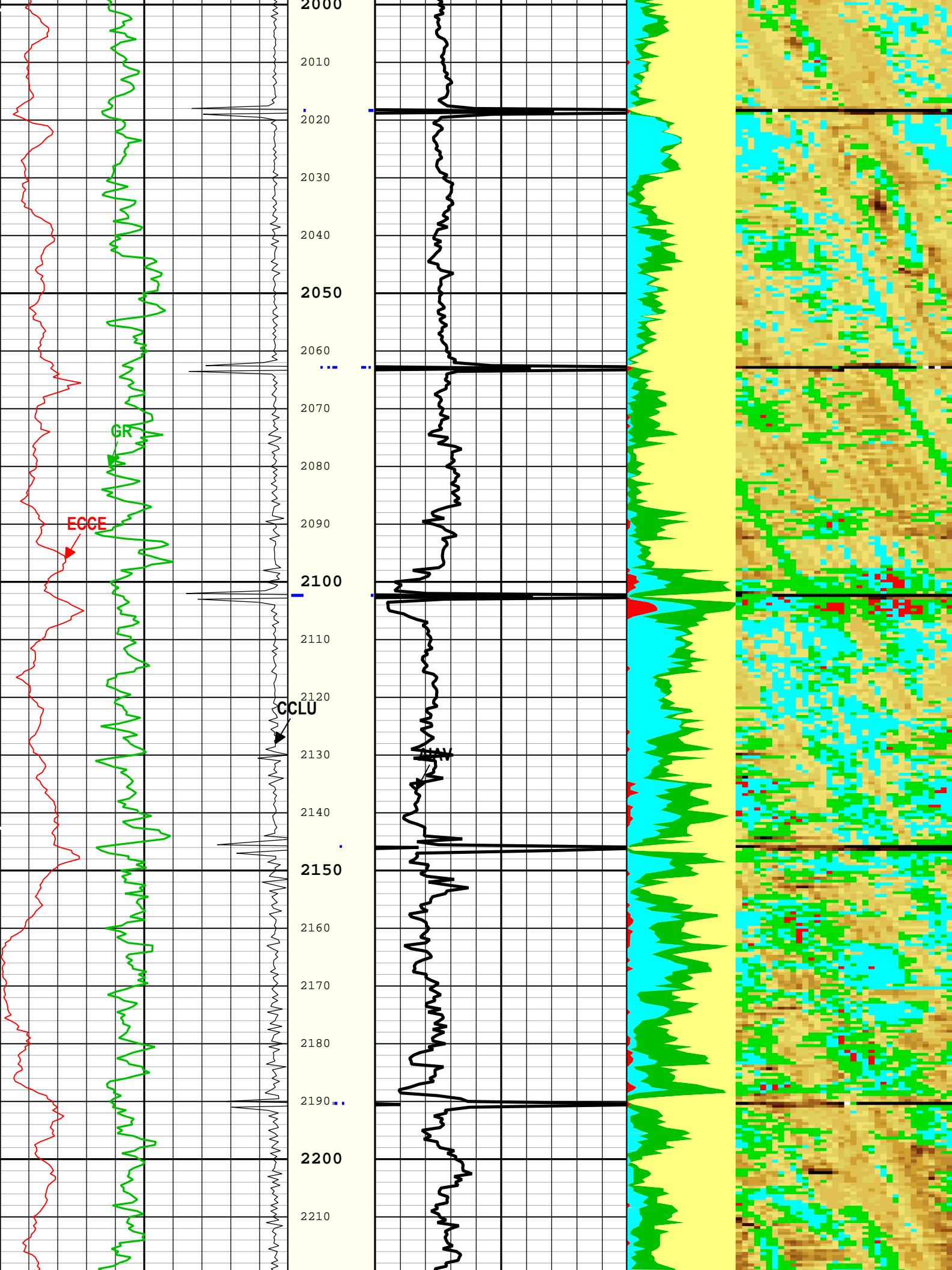


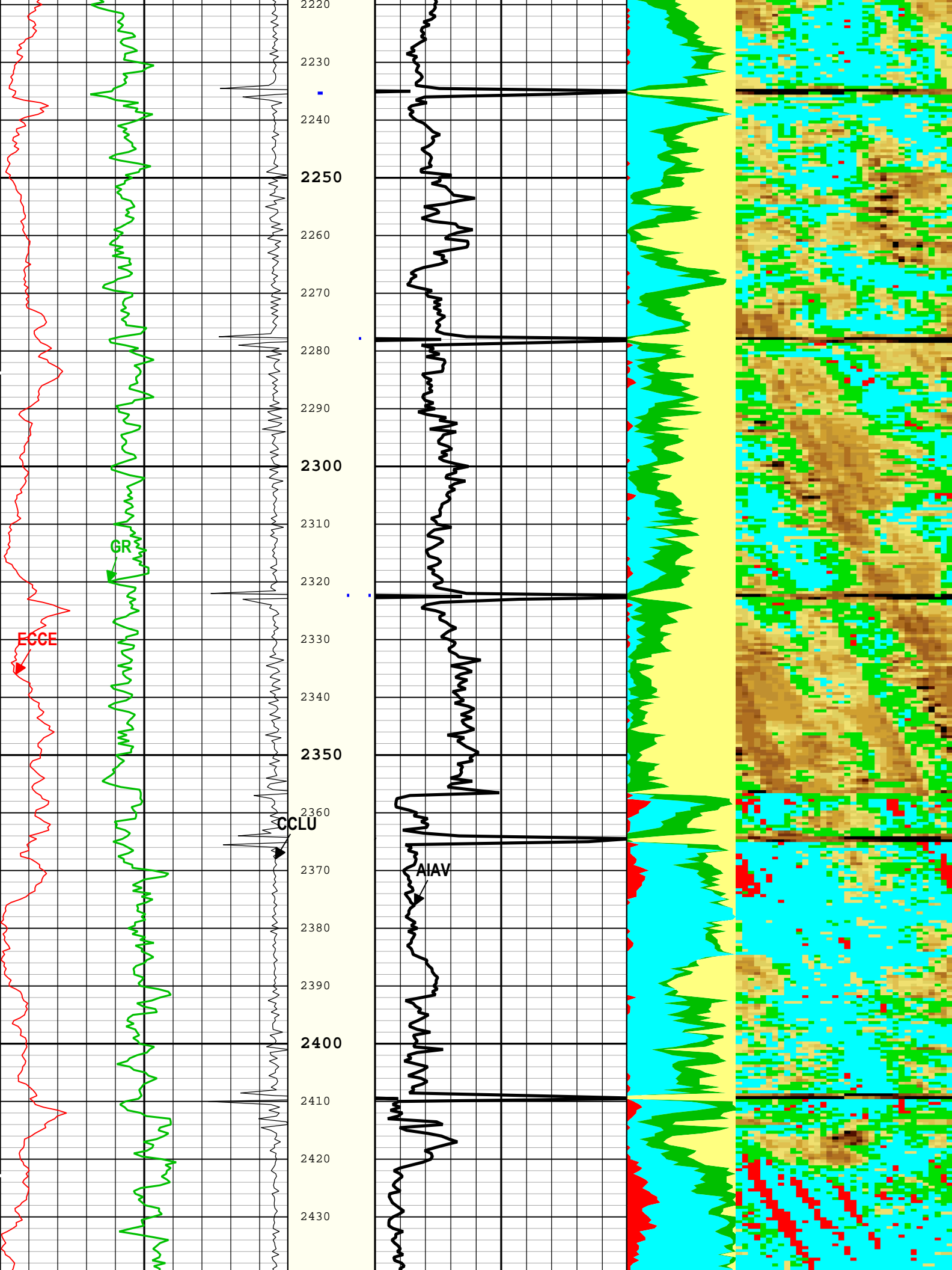


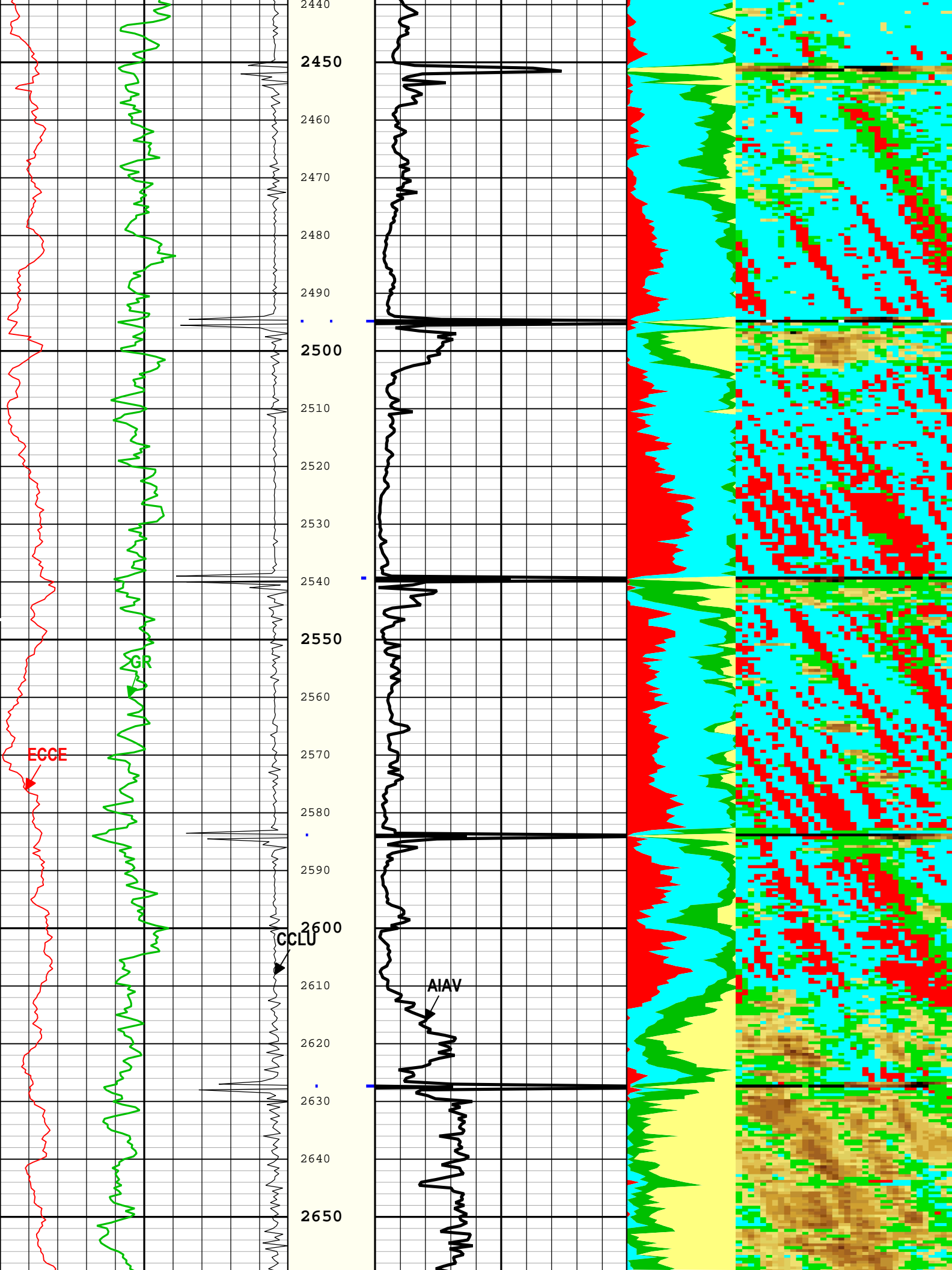


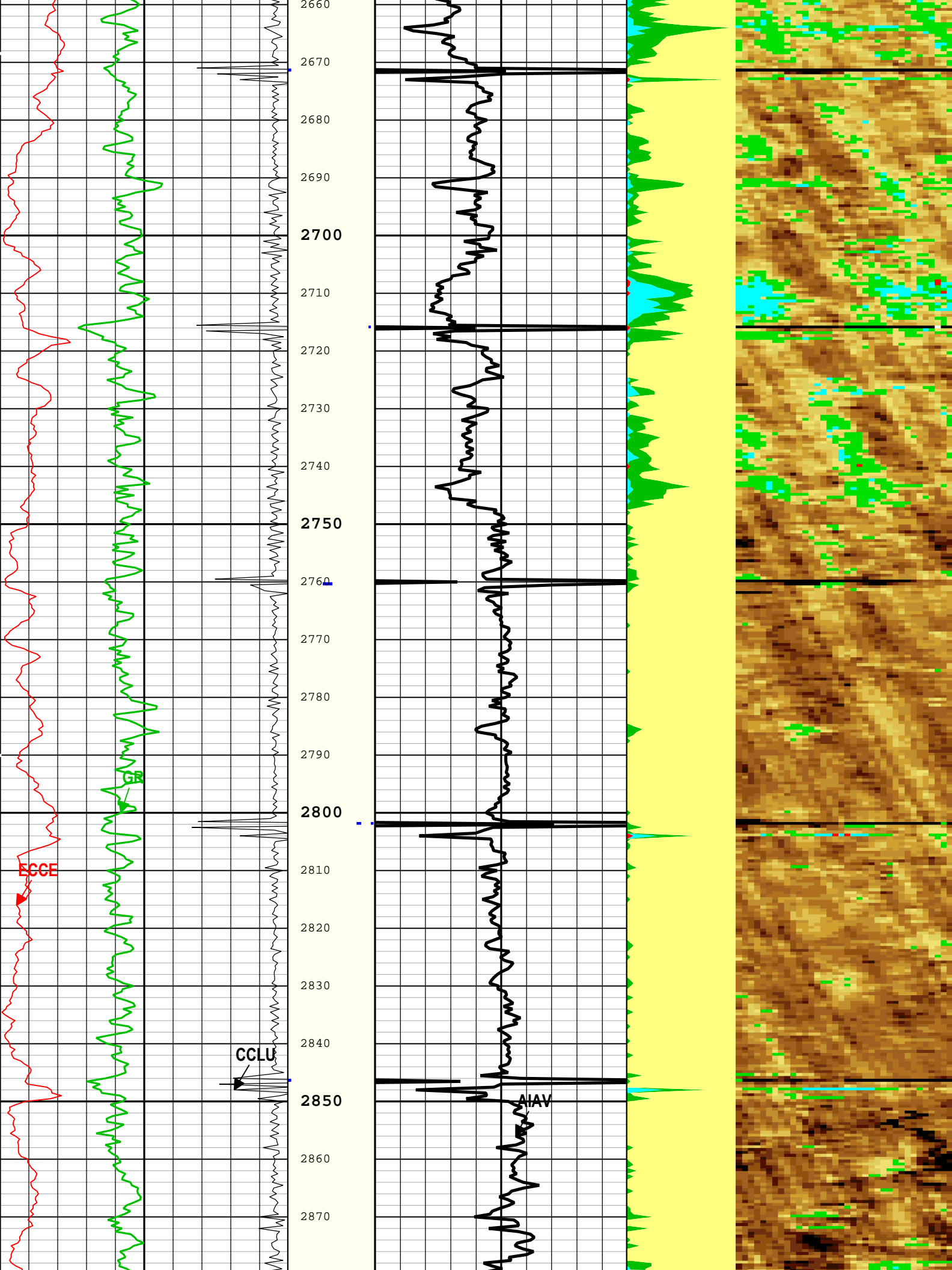


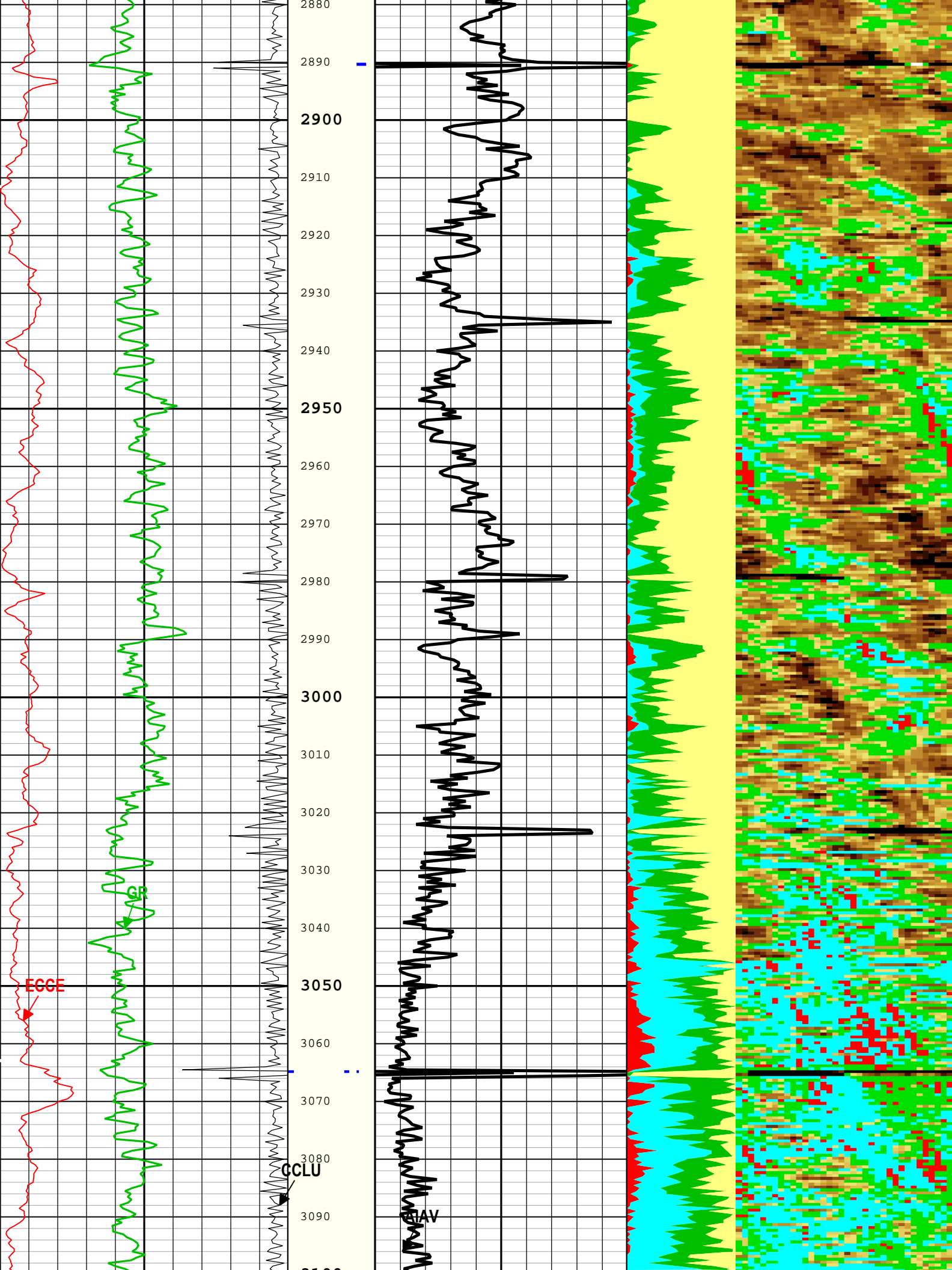


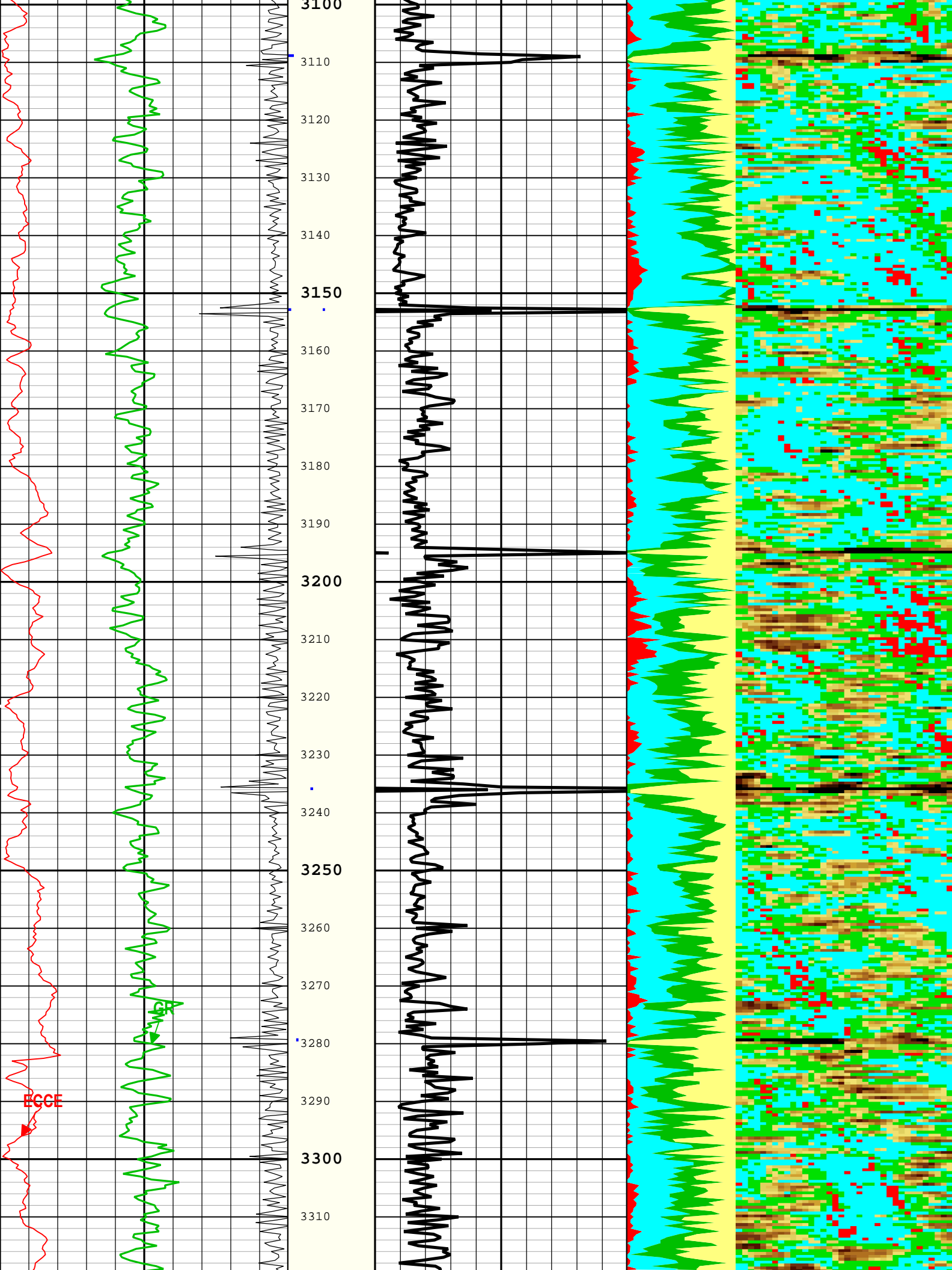


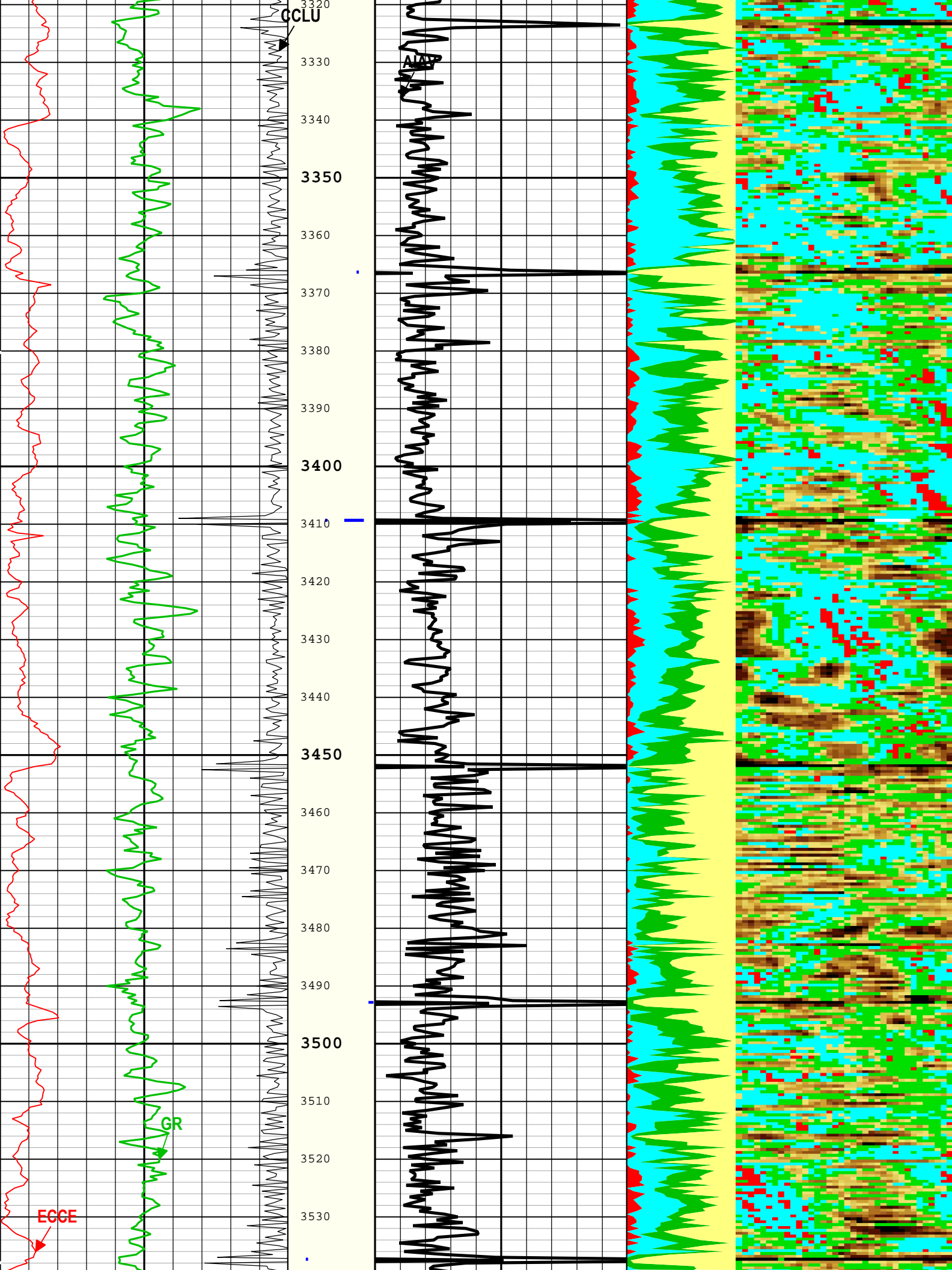


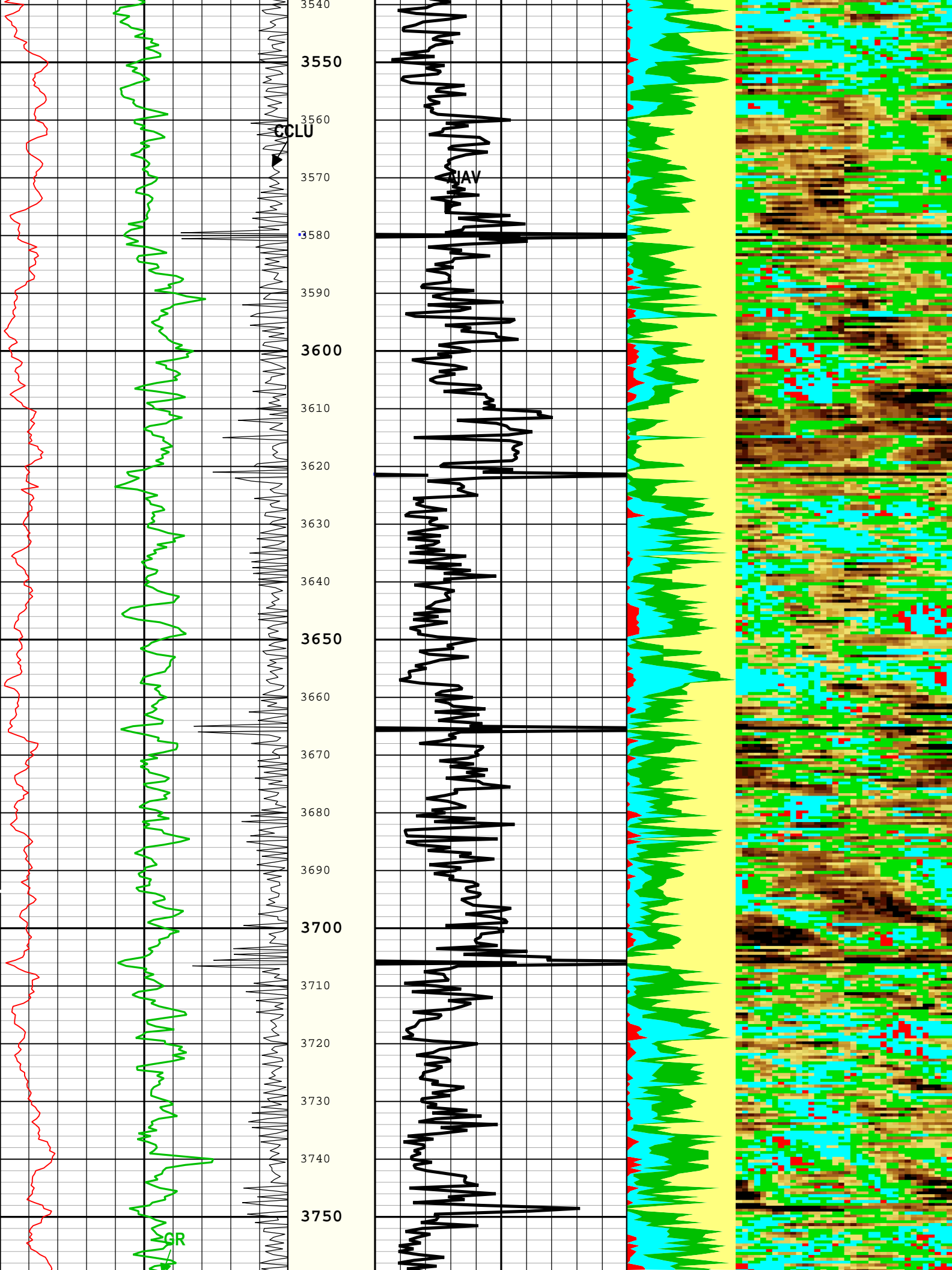


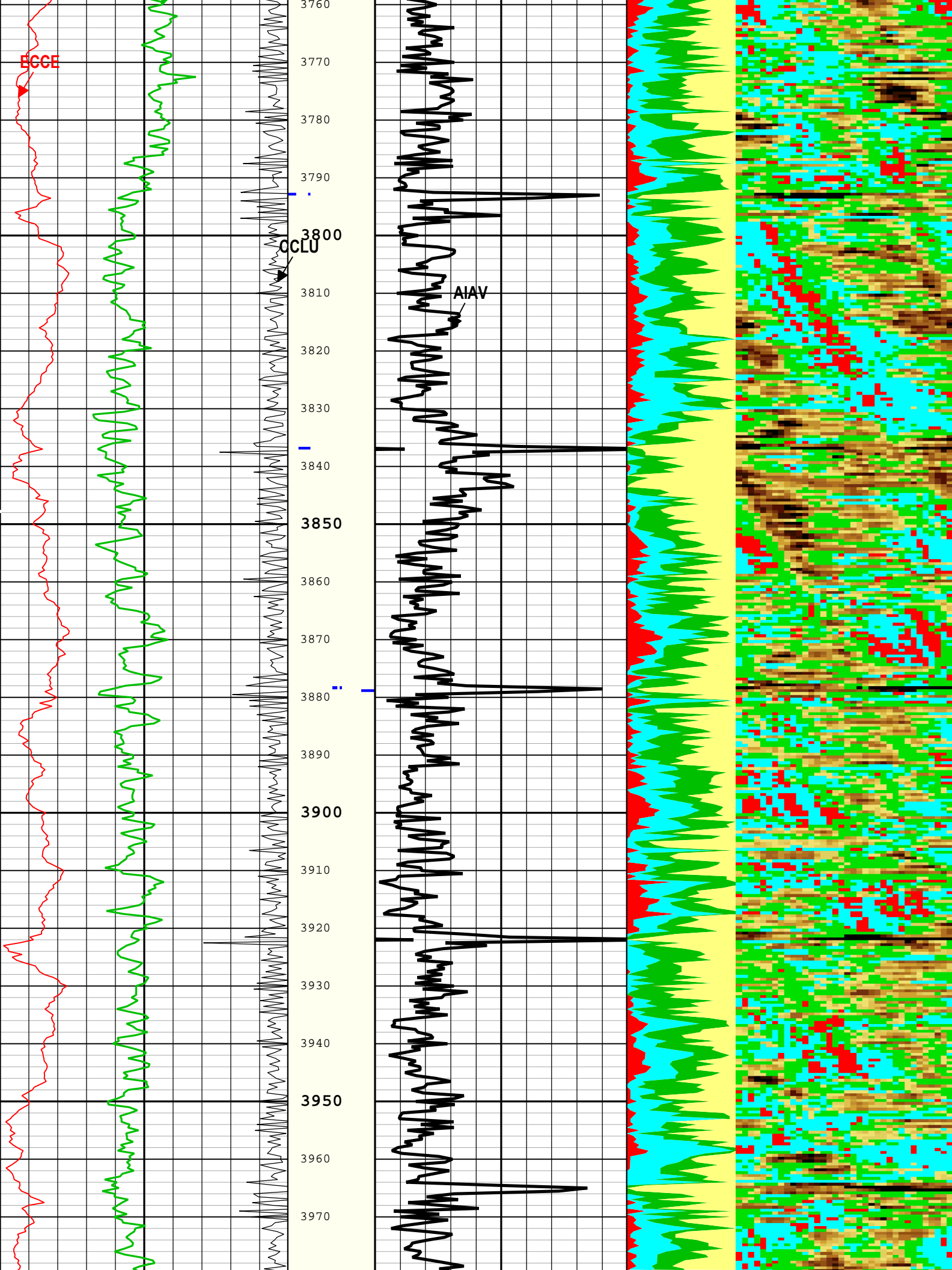


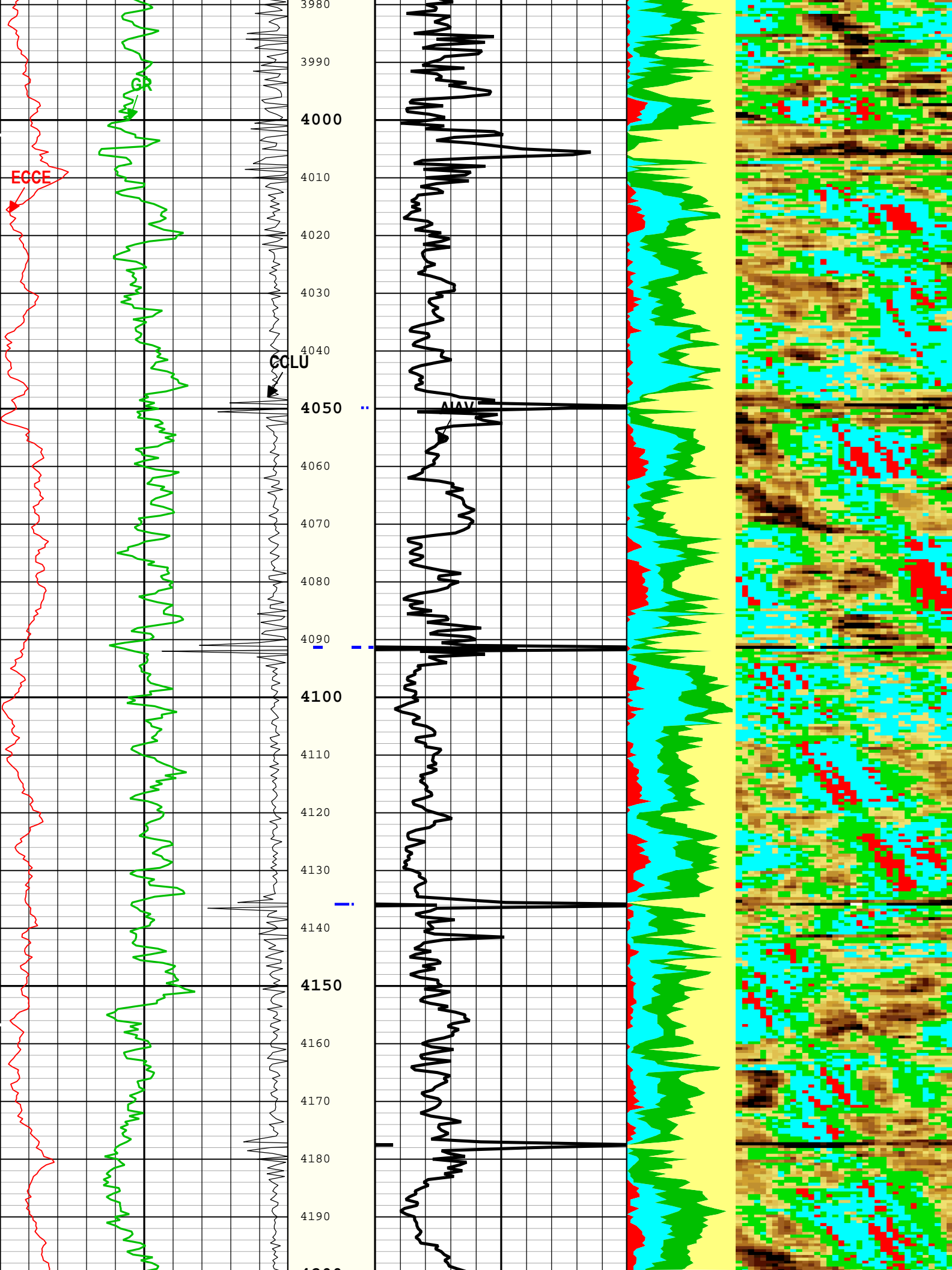


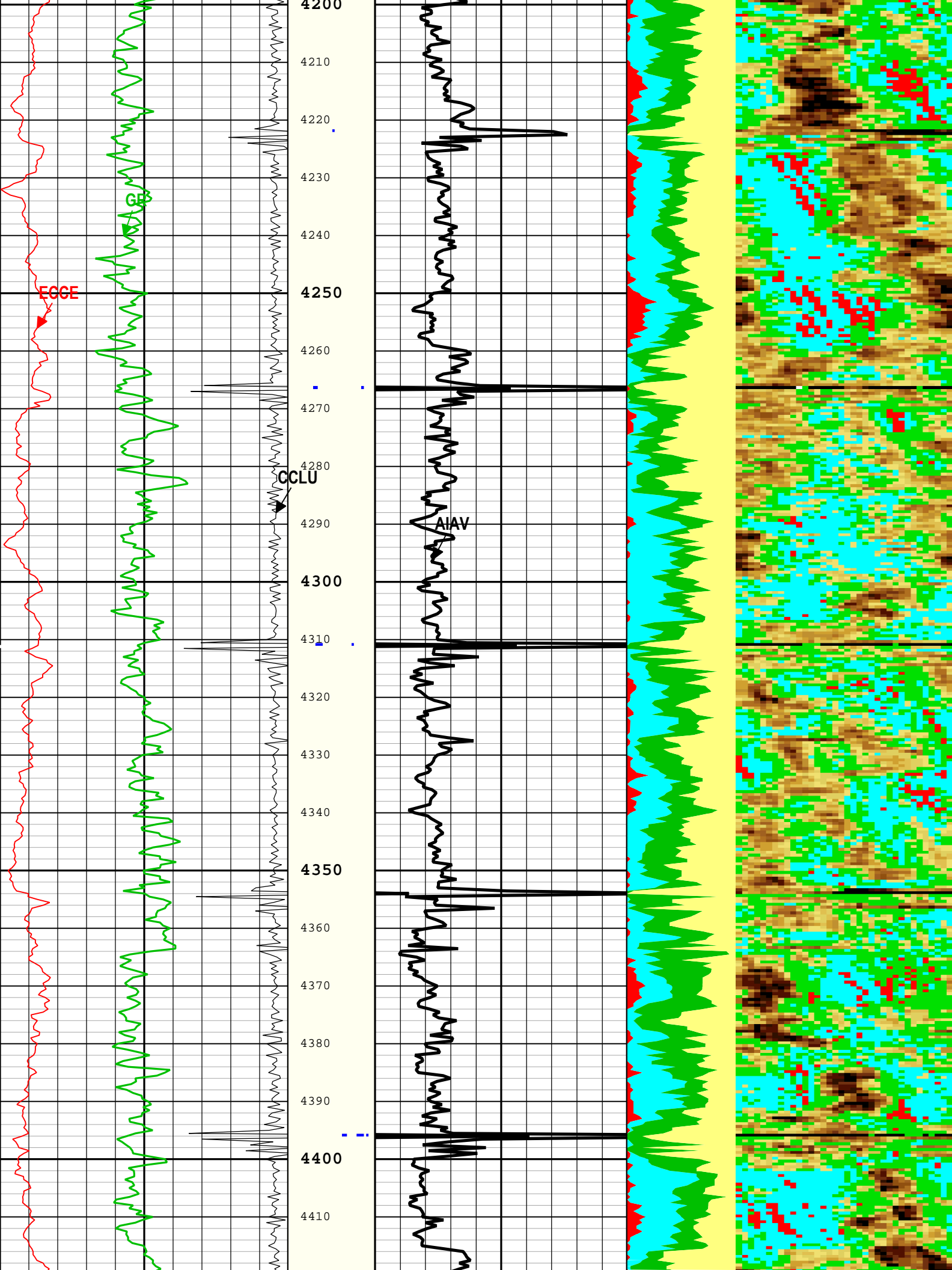


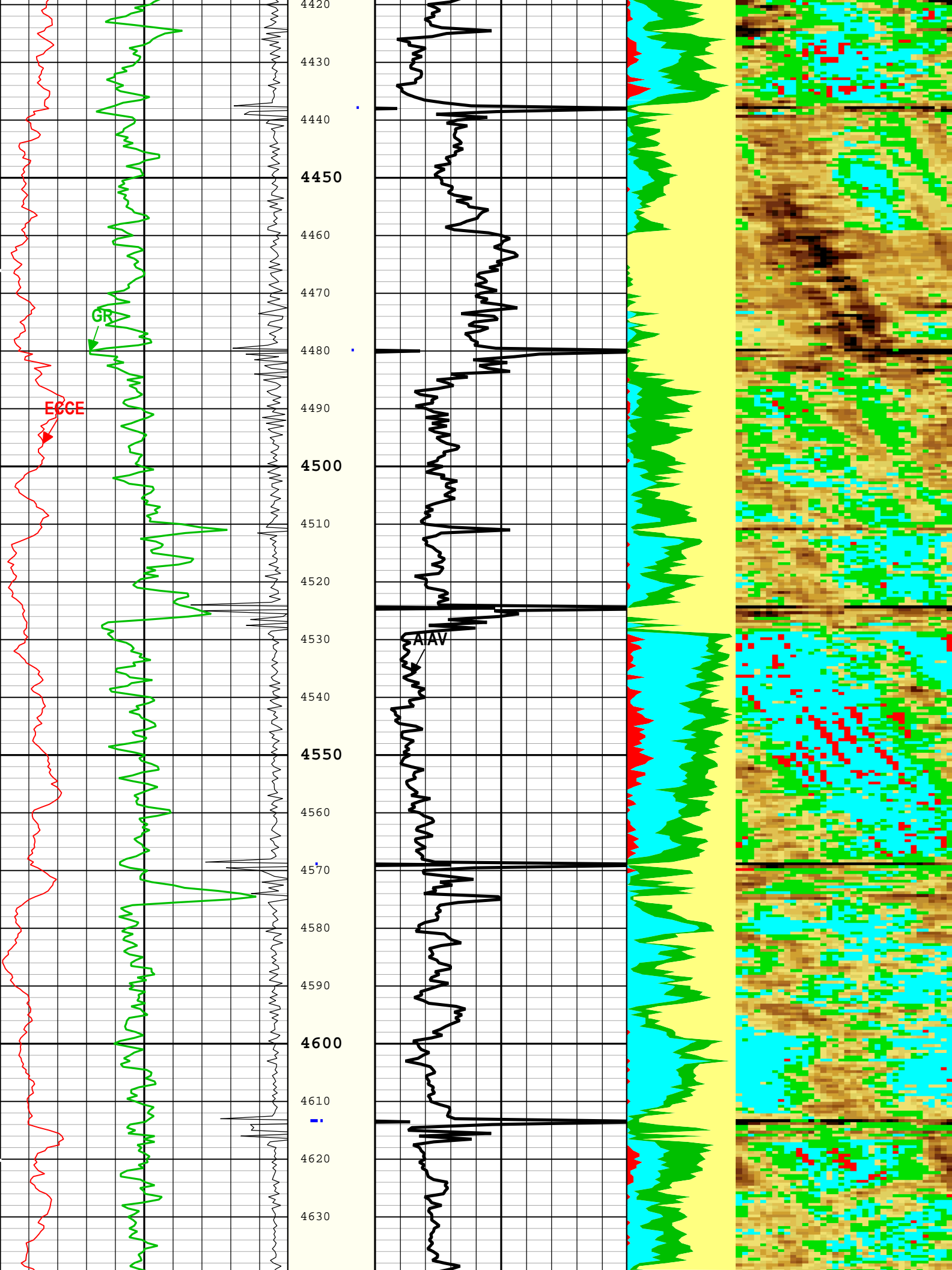


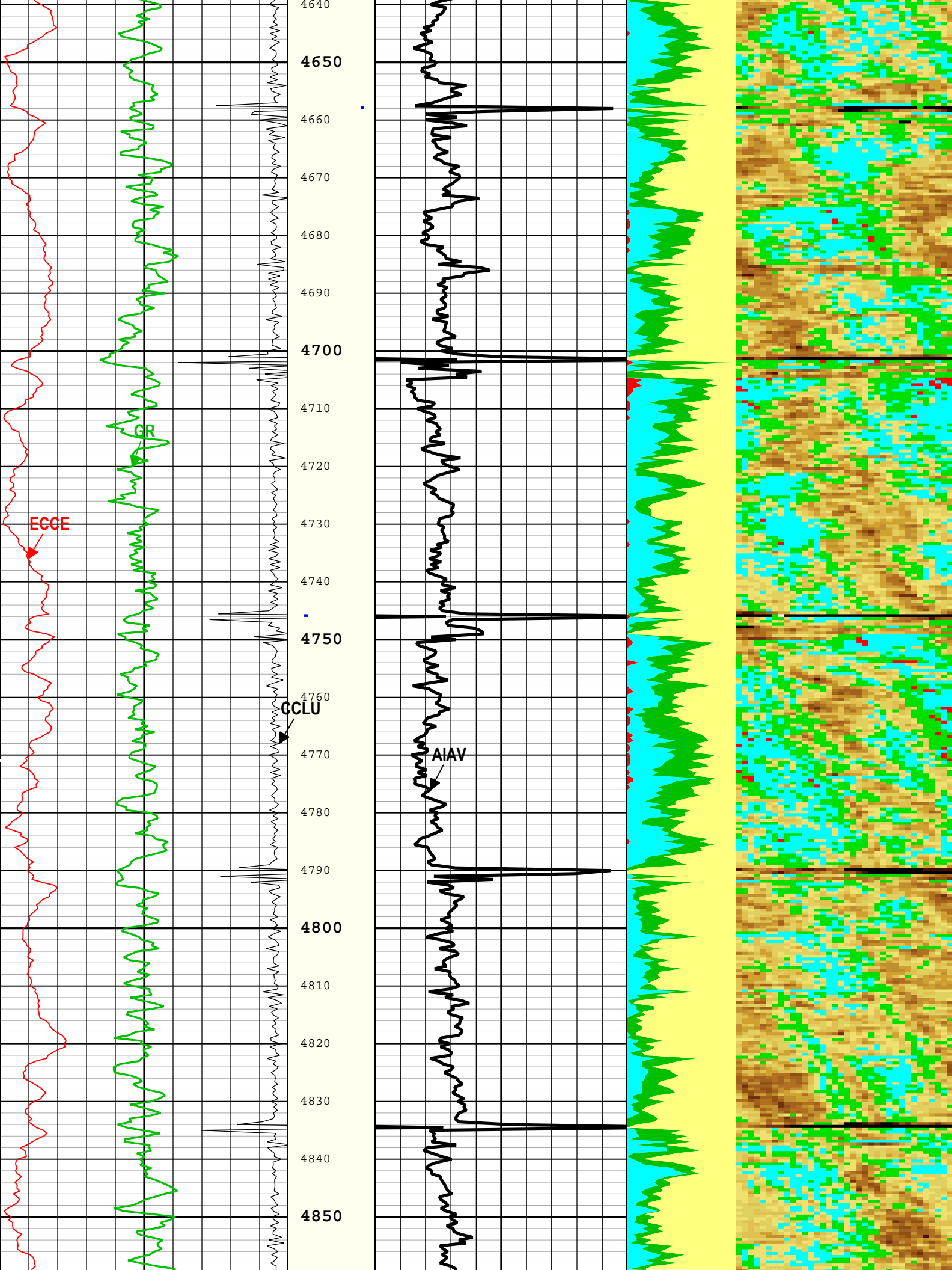


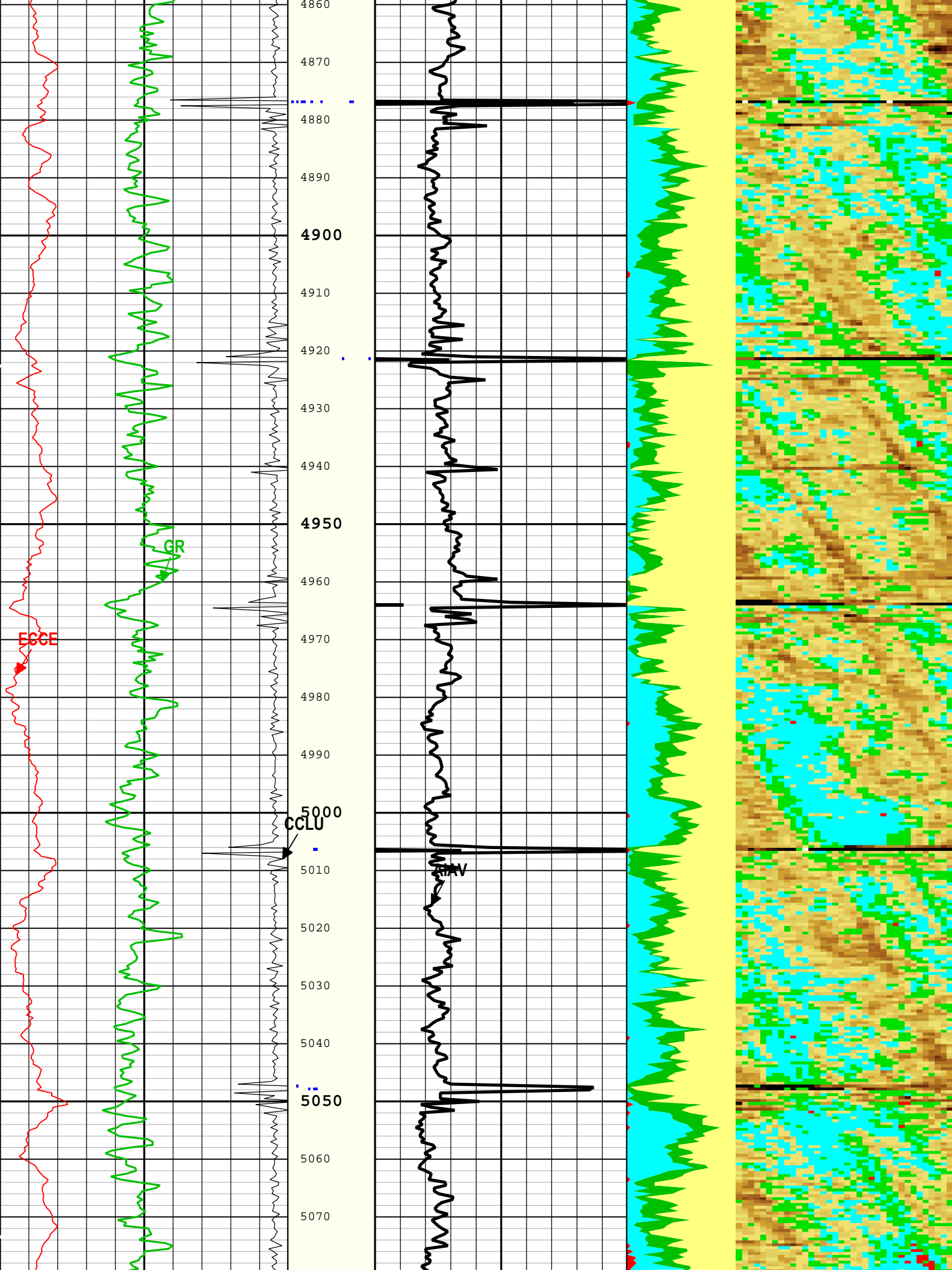


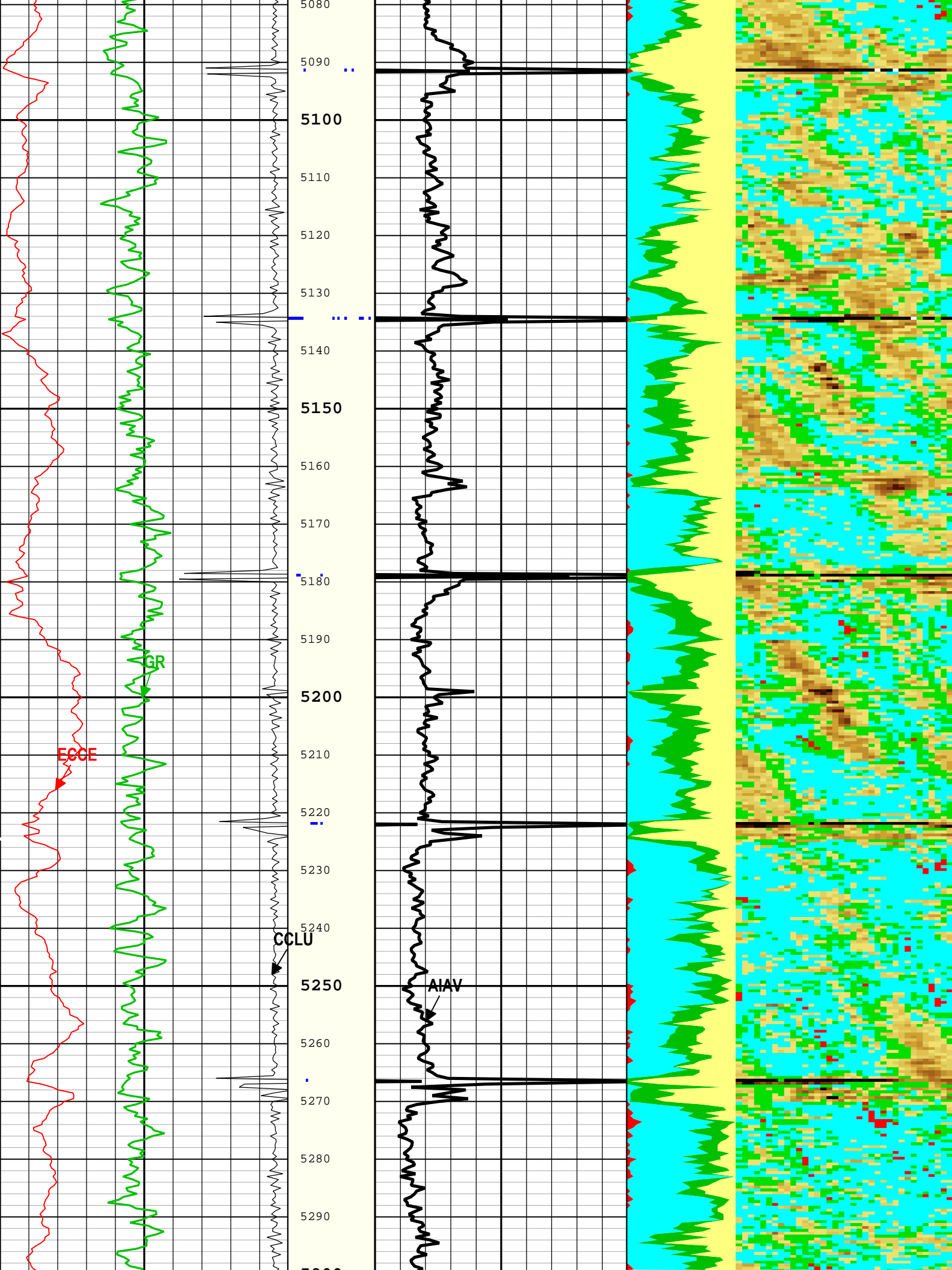


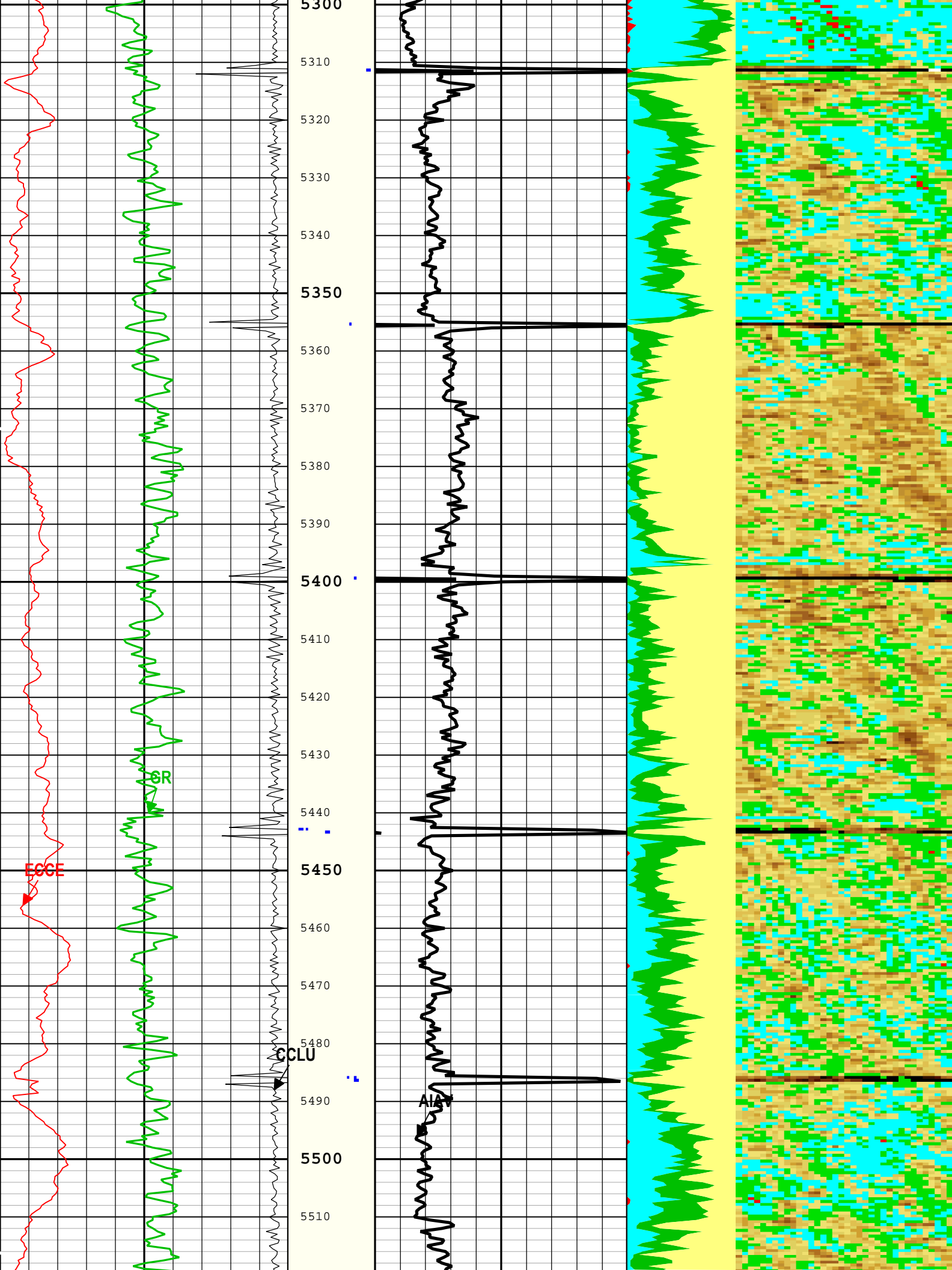


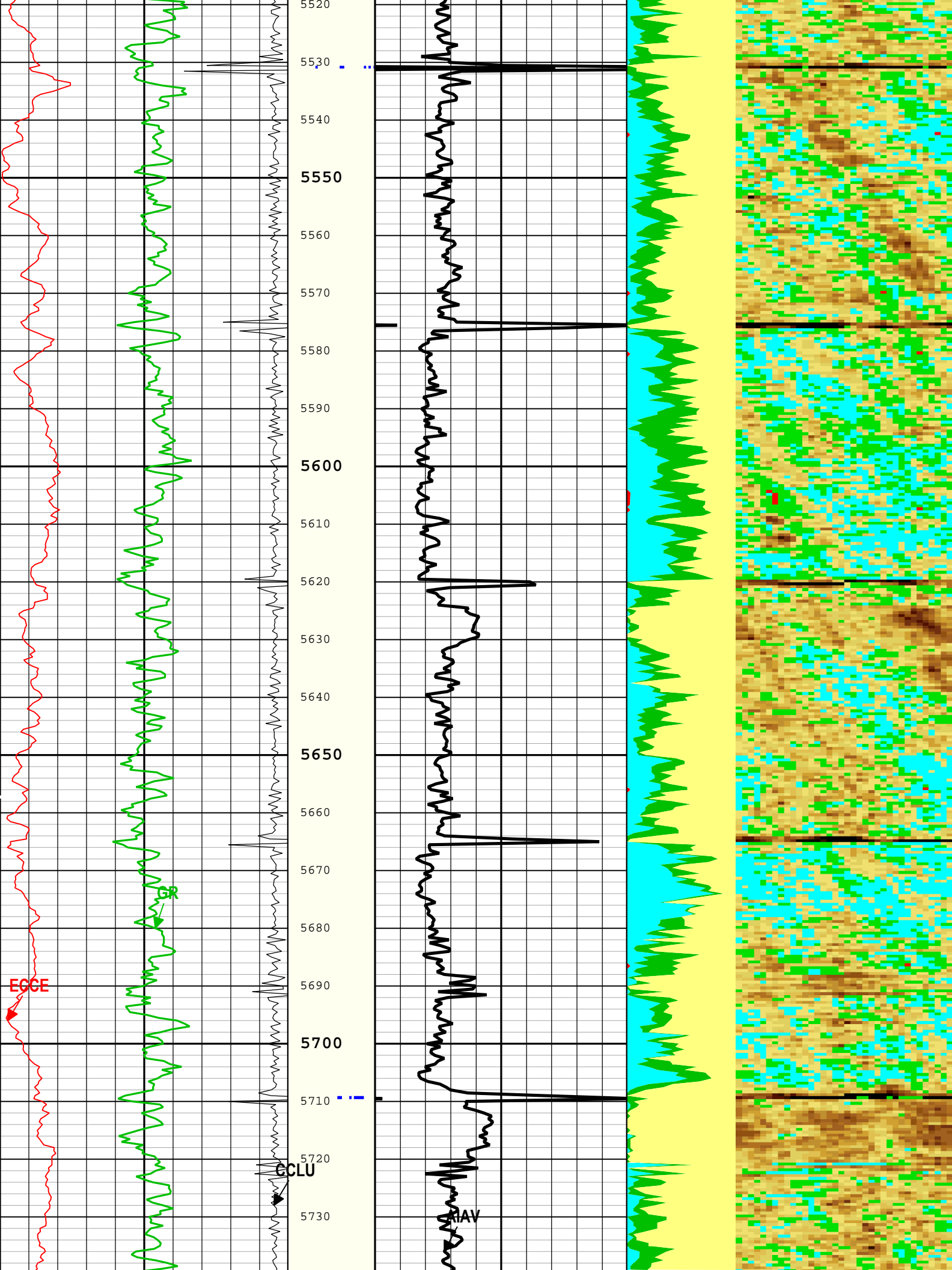


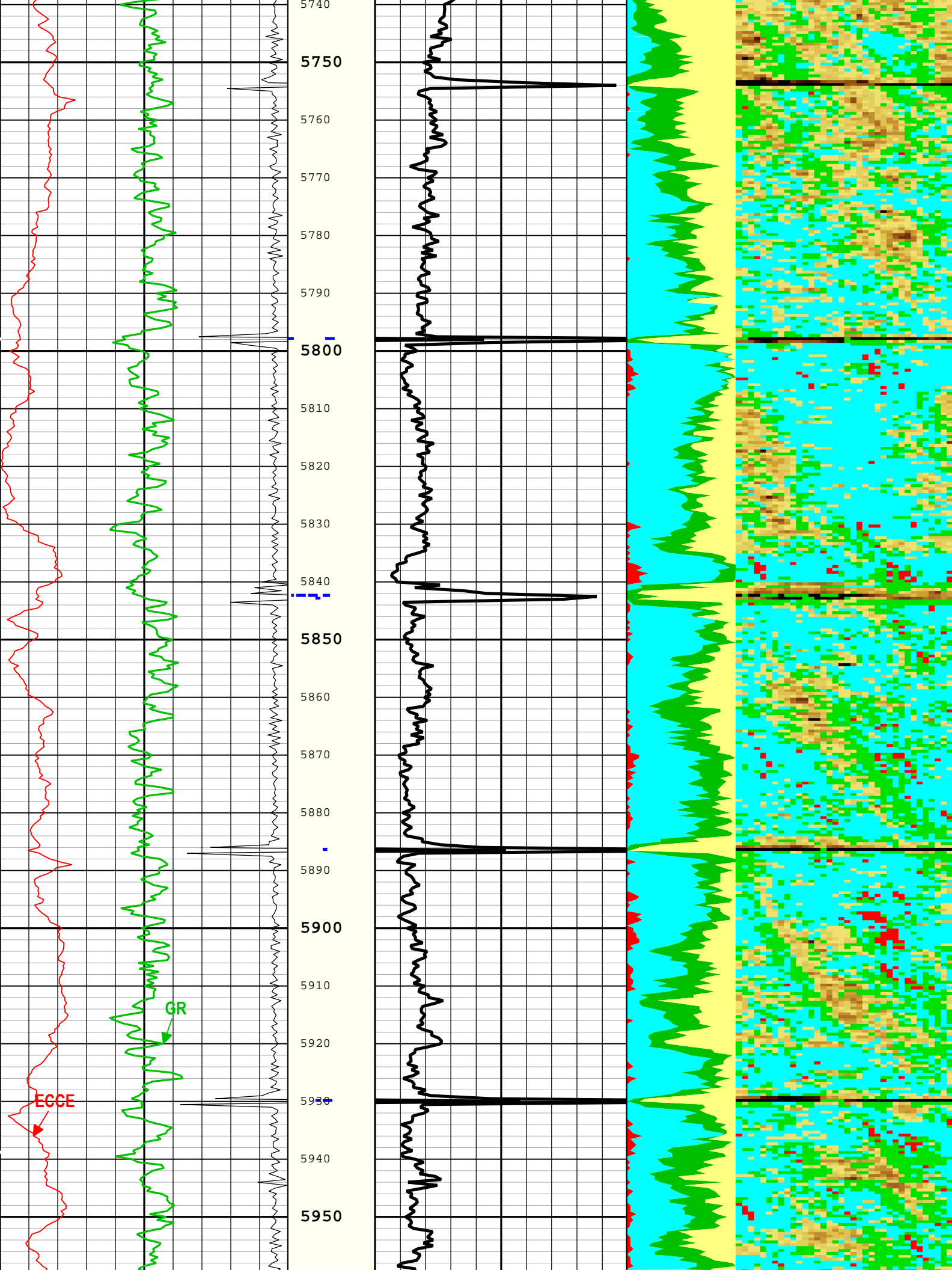


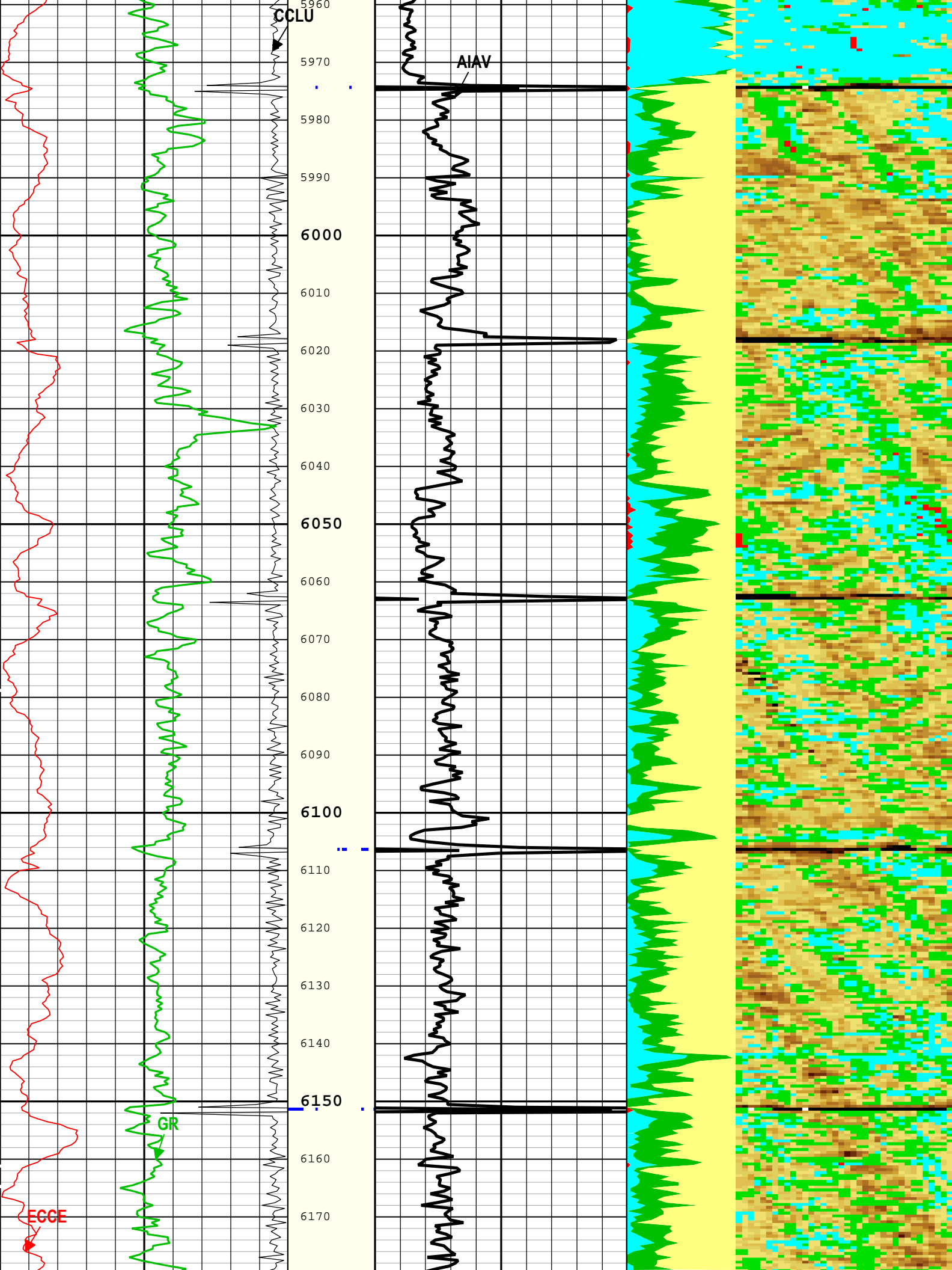


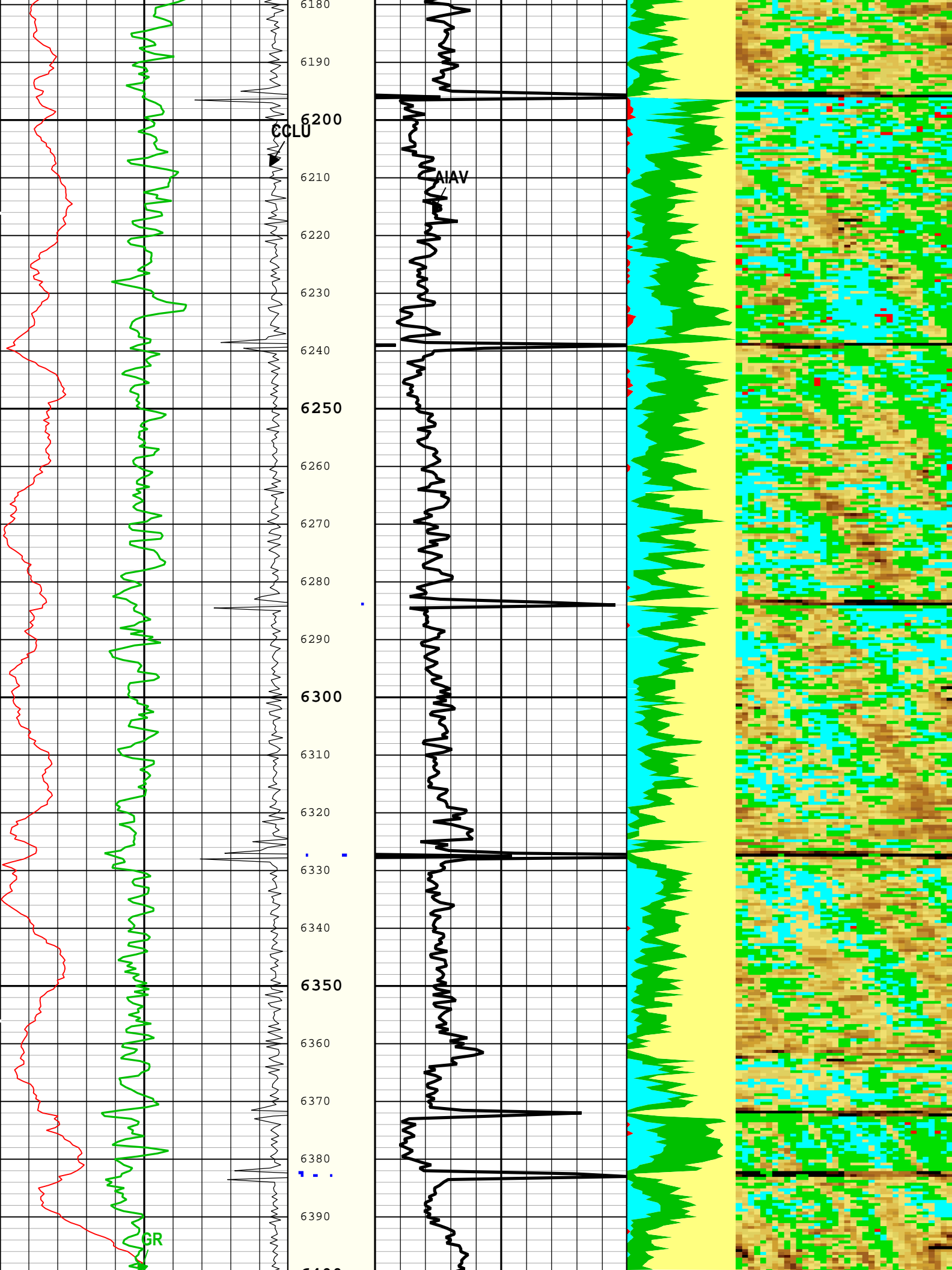


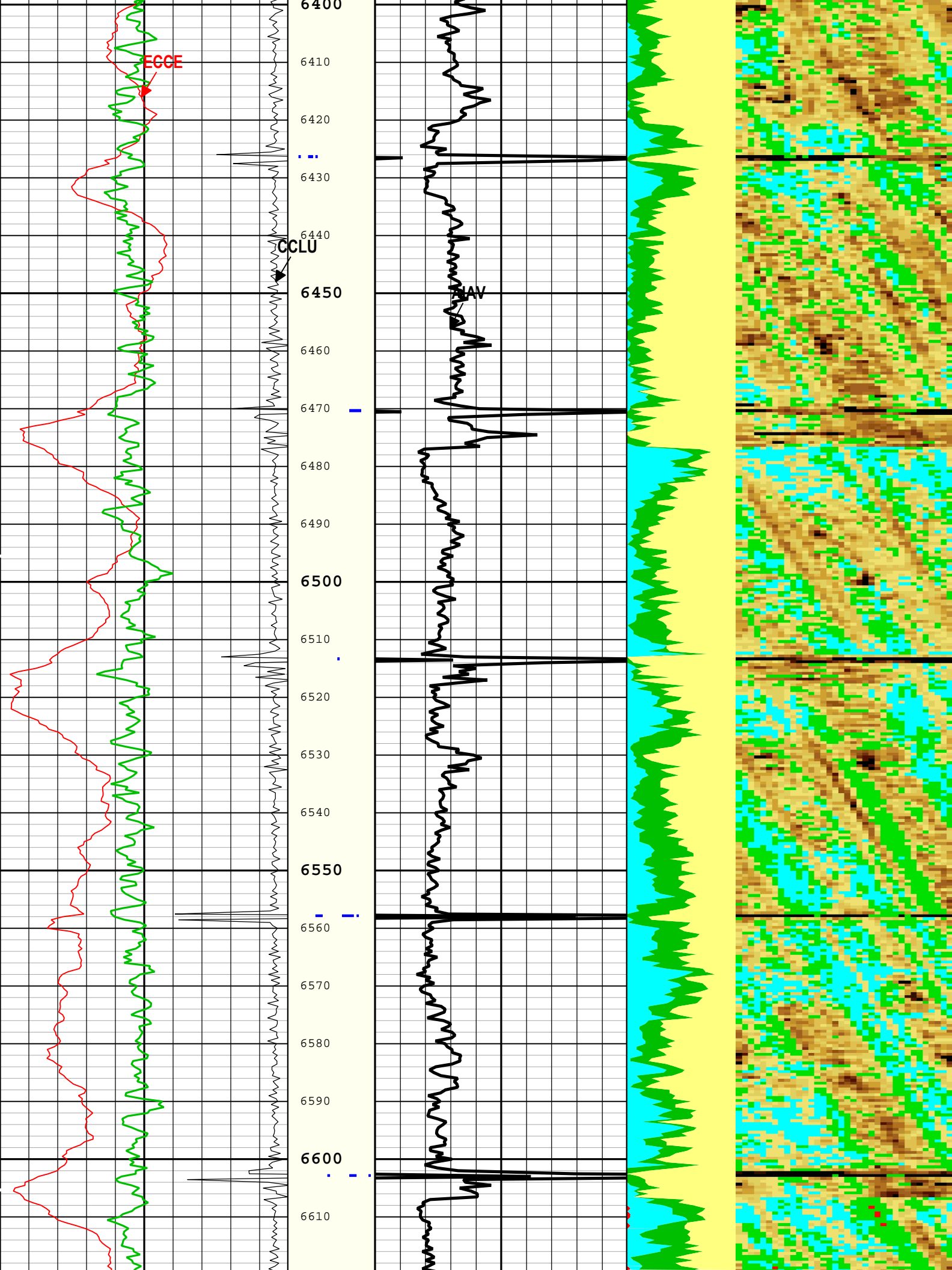


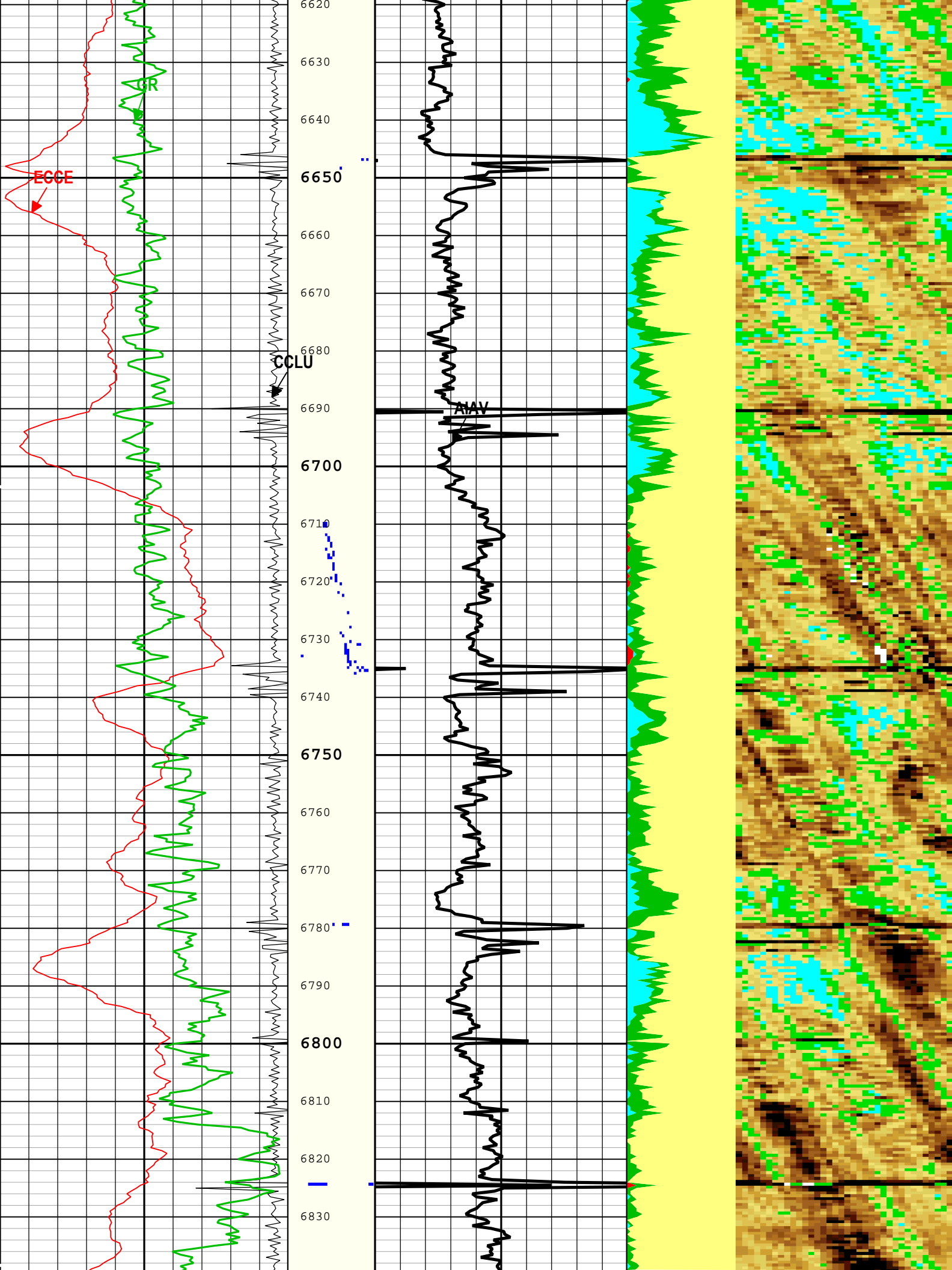


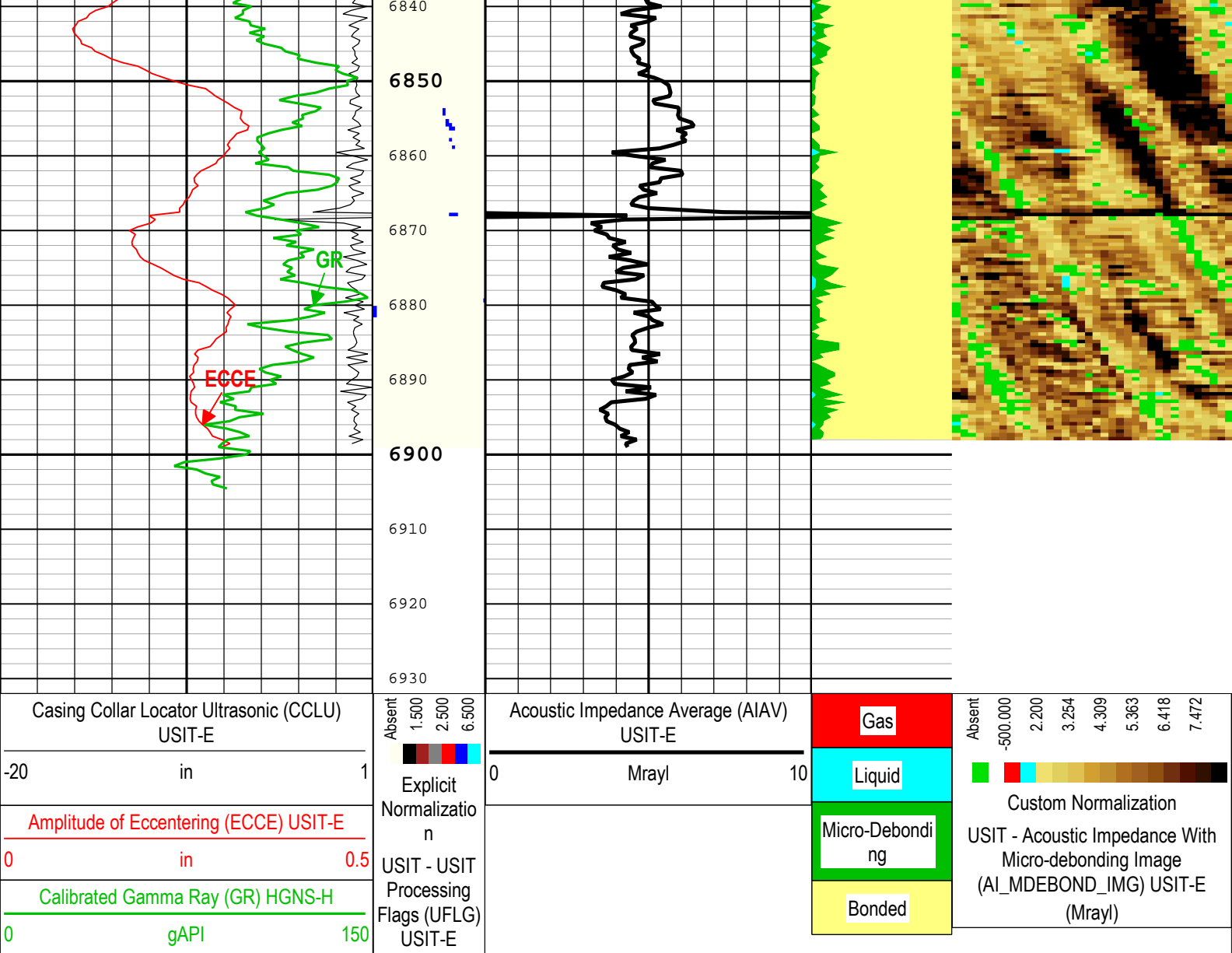












TIME_1900 - Time Marked every 60.00 (s)

Description: Format: Log (DJ Basin Ultrasonic Cement Summary Report) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth

Creation Date: 15-Mar-2018 18:27:24

Channel Processing Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
ISSBAR	Barite Mud Presence Flag	Borehole	No	
BS	Bit Size	WLSESSION	Depth Zoned	in
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DFD	Drilling Fluid Density	Borehole	8.4	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
HEMA	Hematite Presence Flag	Borehole	No	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
IMAR	Image Rotation	USIT-E	Off	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	Depth Zoned	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.2	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	0.1	Mrayl
USI_FVEL_SEL	USI Fluid Velocity Selection	USIT-E	Automatic	
USI_ZMUD_SEL	USI Mud Impedance Selection	USIT-E	FreePipe Norm.	
ZMUD	Acoustic Impedance of Mud	Borehole	1.48	Mrayl

ZMOD	Acoustic Impedance of Mud	Borehole	1.48	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.2	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	26	54	110
BS	13.5	110	1969
BS	8.5	1969	6900
MEAS_WLEN	22.44	54	6900
MEAS_WLEN	20	6900	6932
All depth are actual.			

Tool Control Parameters	
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ONE: Parameters				
Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	18	dB
EMXV	EMEX Voltage	USIT-E	50	V
HRES	Horizontal Resolution	USIT-E	10 deg	
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
ULOG	Logging Objective	USIT-E	MEASUREMENT	
USFR	Ultrasonic Sampling Frequency	USIT-E	666667	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	Uncompressed 10 deg at 6.0 in	
WINB	Window Begin Time	USIT-E	31.88	us
WINE	Window End Time	USIT-E	Time Zoned	us

Time Zone Parameters					
Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
WINE	71.88	15-Mar-2018 10:27:12	15-Mar-2018 10:27:24	6932.87	6914.88
WINE	73.41	15-Mar-2018 10:27:24	15-Mar-2018 10:27:38	6914.88	6887.09
WINE	65.74	15-Mar-2018 10:27:38	15-Mar-2018 10:27:55	6887.09	6848.51
WINE	69.57	15-Mar-2018 10:27:55	15-Mar-2018 10:29:46	6848.51	6610.52
WINE	72.64	15-Mar-2018 10:29:46	15-Mar-2018 10:29:54	6610.52	6607.59
WINE	73.41	15-Mar-2018 10:29:54	15-Mar-2018 11:21:59	6607.59	81.83

All depth are at tool zero.

ONE

0 PSI Repeat Pass

Software Version	
Acquisition System	Version
Maxwell 2018	8.0.95333.3100

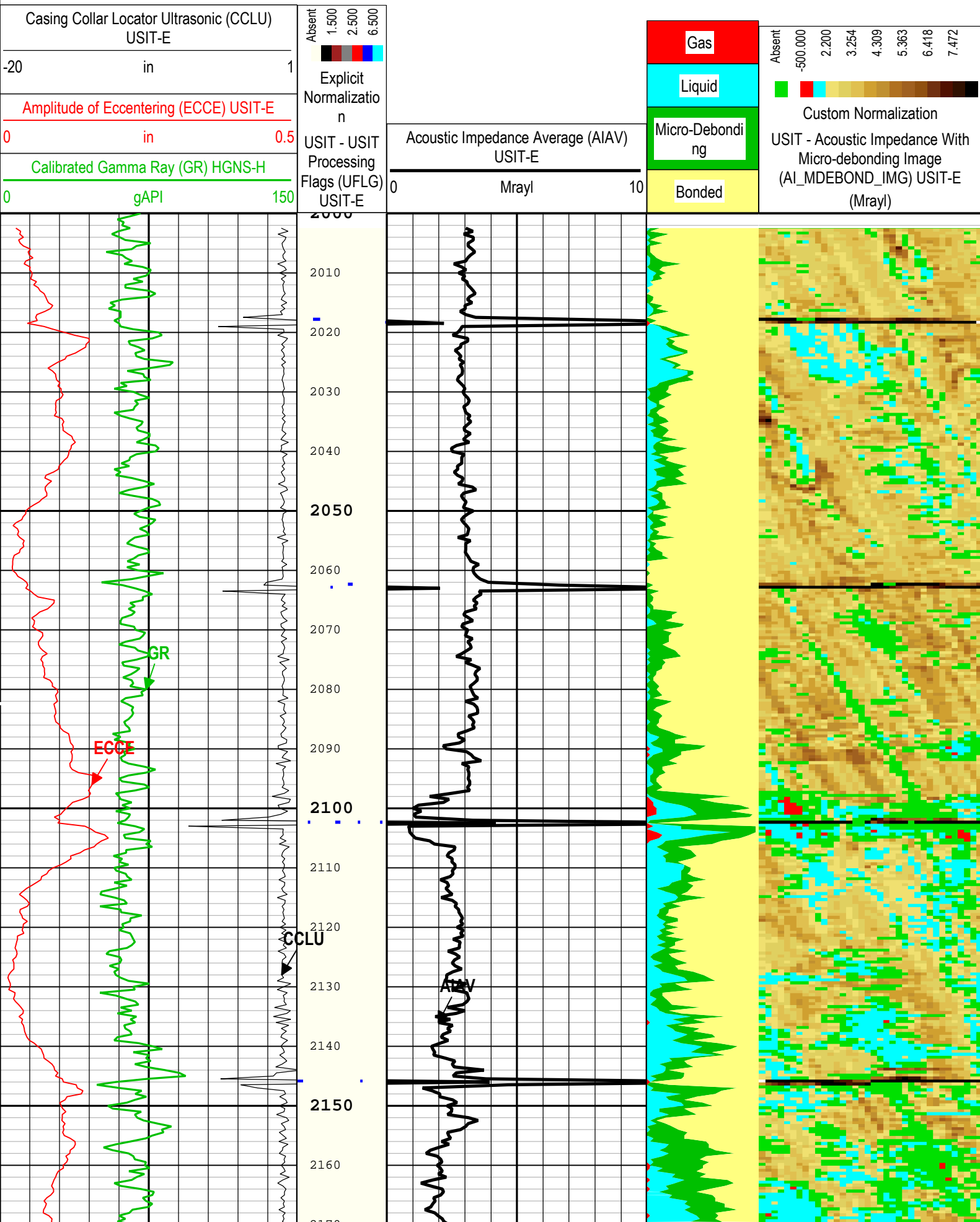
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[2]:Up	Up	2002.50 ft	2502.49 ft	15-Mar-2018 9:52:38 AM	15-Mar-2018 9:55:30 AM	ON	3.04 ft	Yes

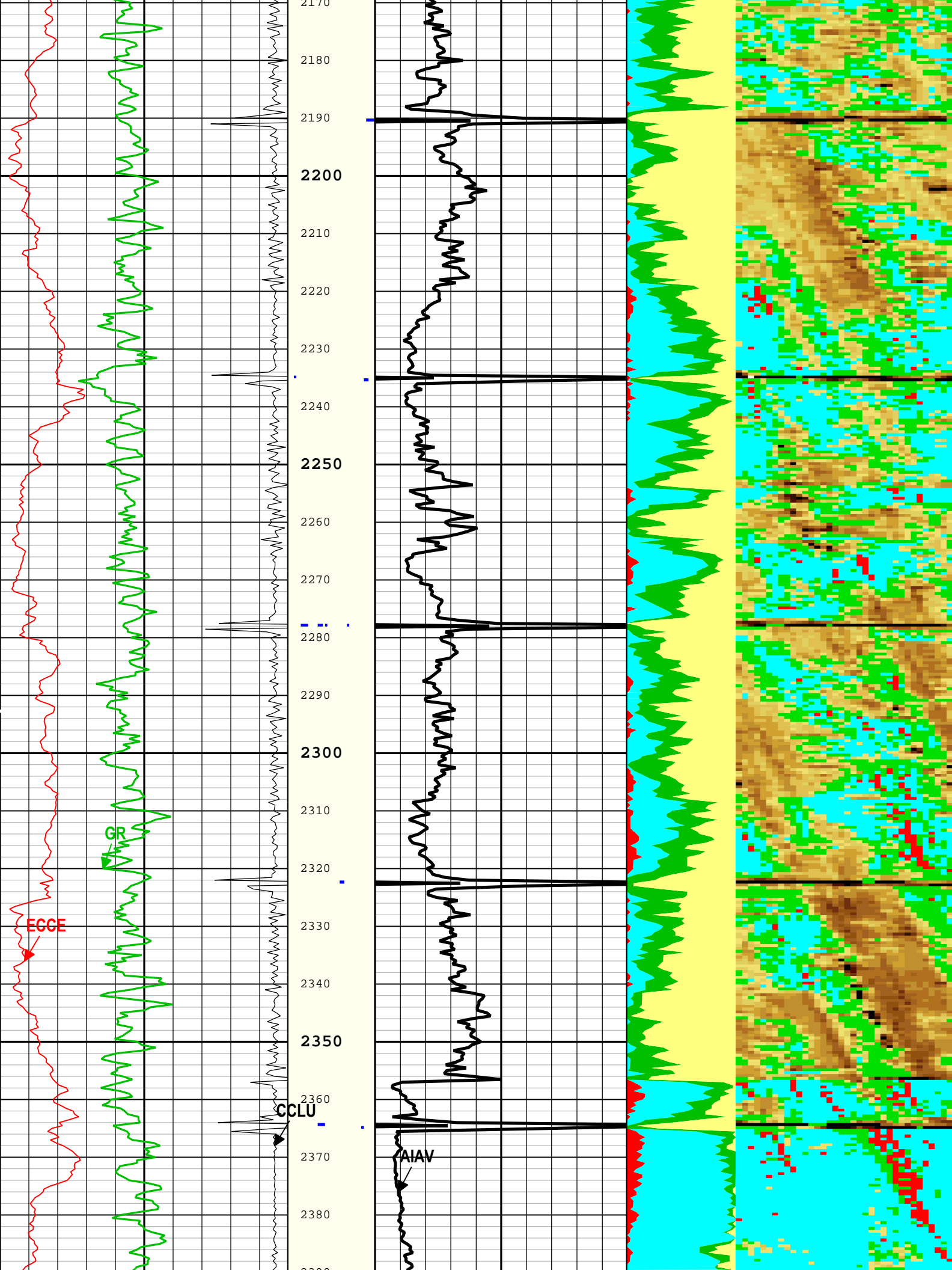
All depths are referenced to toolstring zero

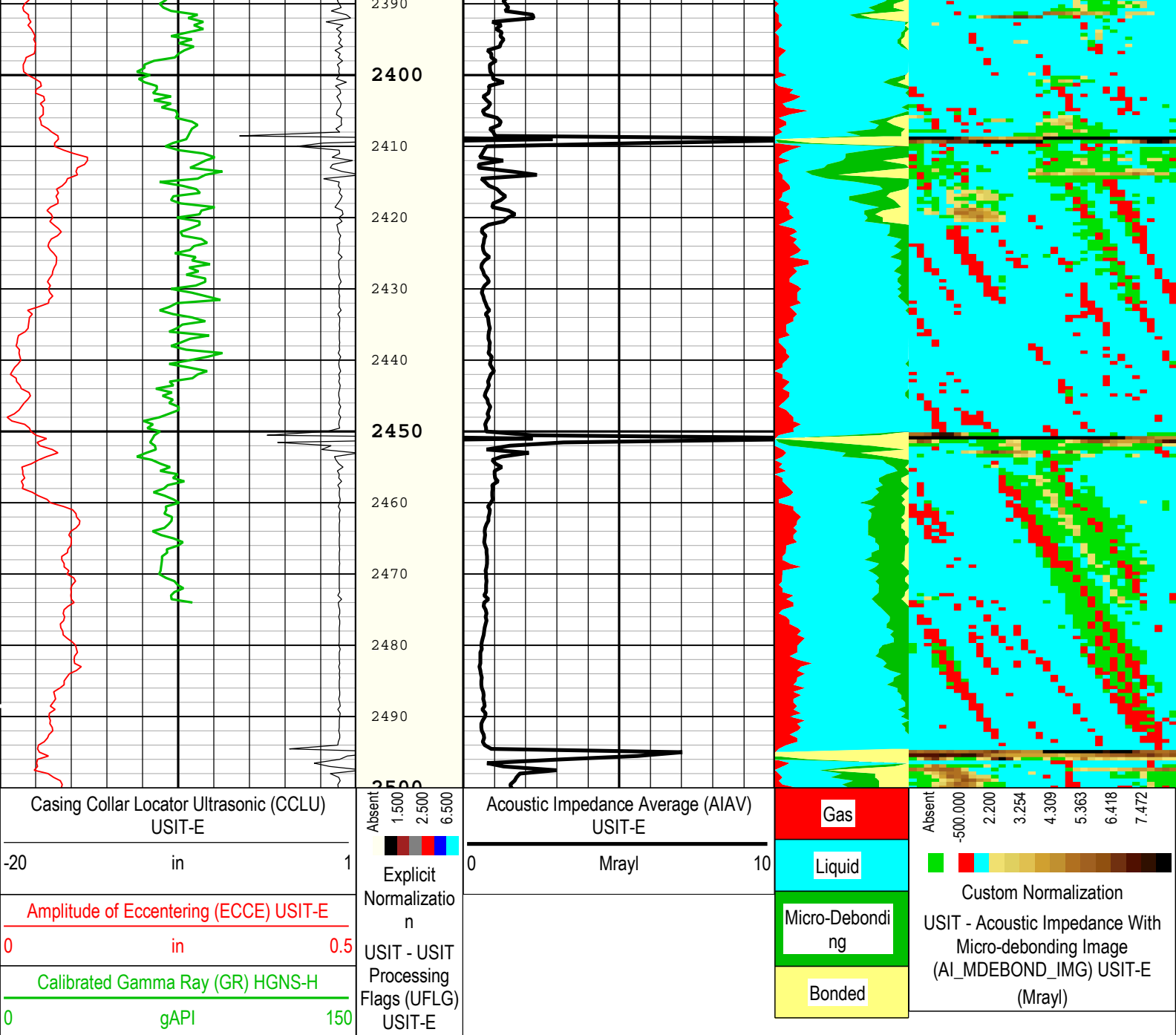
Log	Company:Noble Energy Inc	Well:Centennial State G34-679
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Description: Format: Log (DJ Basin Ultrasonic Cement Summary Report) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth
Creation Date: 15-Mar-2018 18:27:54

TIME_1900 - Time Marked every 60.00 (s)







TIME_1900 - Time Marked every 60.00 (s)

Description: Format: Log (DJ Basin Ultrasonic Cement Summary Report) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth
Creation Date: 15-Mar-2018 18:27:54

Channel Processing Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
ISSBAR	Barite Mud Presence Flag	Borehole	No	
BS	Bit Size	WLSESSION	8.5	in
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
DFD	Drilling Fluid Density	Borehole	8.4	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
HEMA	Hematite Presence Flag	Borehole	No	
ICE_PROCESS	ICE Processing	USIT-E	Yes	
IMAR	Image Rotation	USIT-E	Off	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	22.44	us
MUD_N_FDR	Free Pipe Mud Normalization Factor	USIT-E	1.2	

MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.2	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	0.1	Mrayl
USI_FVEL_SEL	USI Fluid Velocity Selection	USIT-E	Automatic	
USI_ZMUD_SEL	USI Mud Impedance Selection	USIT-E	FreePipe Norm.	
ZMUD	Acoustic Impedance of Mud	Borehole	1.48	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.2	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Tool Control Parameters

ONE: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	18	dB
EMXV	EMEX Voltage	USIT-E	50	V
HRES	Horizontal Resolution	USIT-E	10 deg	
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
ULOG	Logging Objective	USIT-E	MEASUREMENT	
USFR	Ultrasonic Sampling Frequency	USIT-E	666667	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	Uncompressed 10 deg at 6.0 in	
WINB	Window Begin Time	USIT-E	31.88	us
WINE	Window End Time	USIT-E	Time Zoned	us

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
WINE	71.88	15-Mar-2018 09:52:38	15-Mar-2018 09:52:58	2502.49	2490.16
WINE	74.18	15-Mar-2018 09:52:58	15-Mar-2018 09:55:30	2490.16	2002.5

All depth are at tool zero.

XYZ

Company:Noble Energy Inc Well:Centennial State G34-679

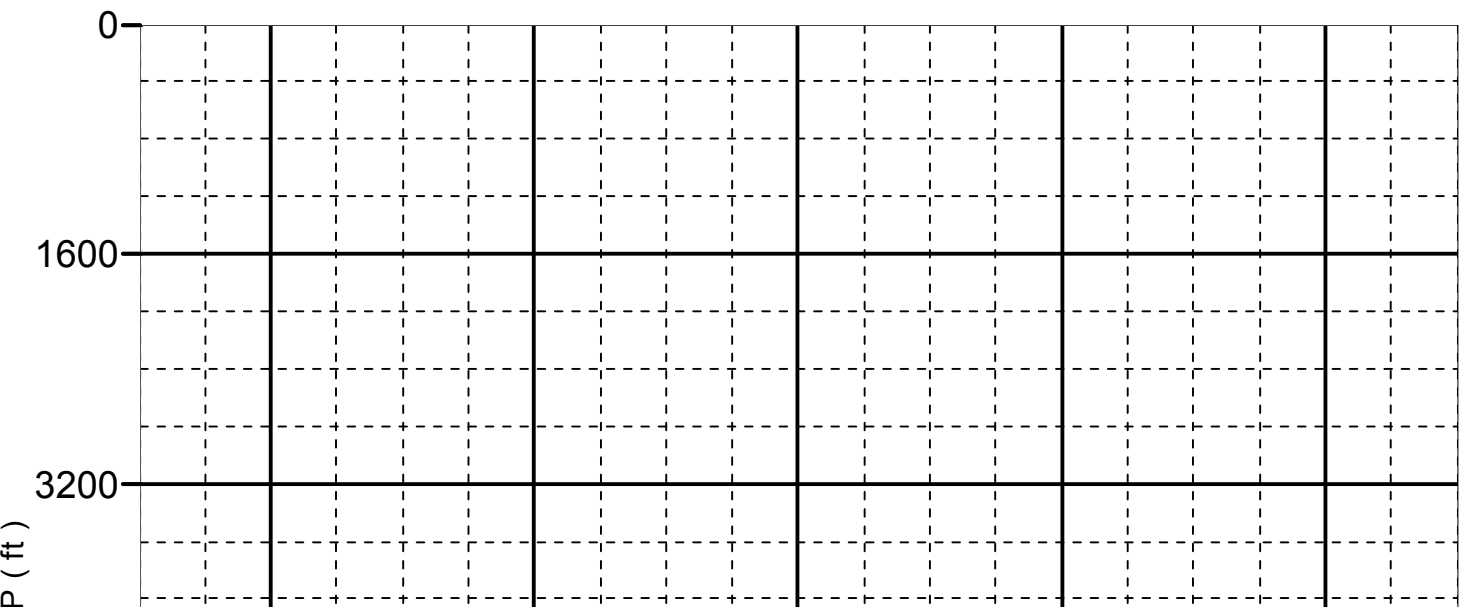
:S006

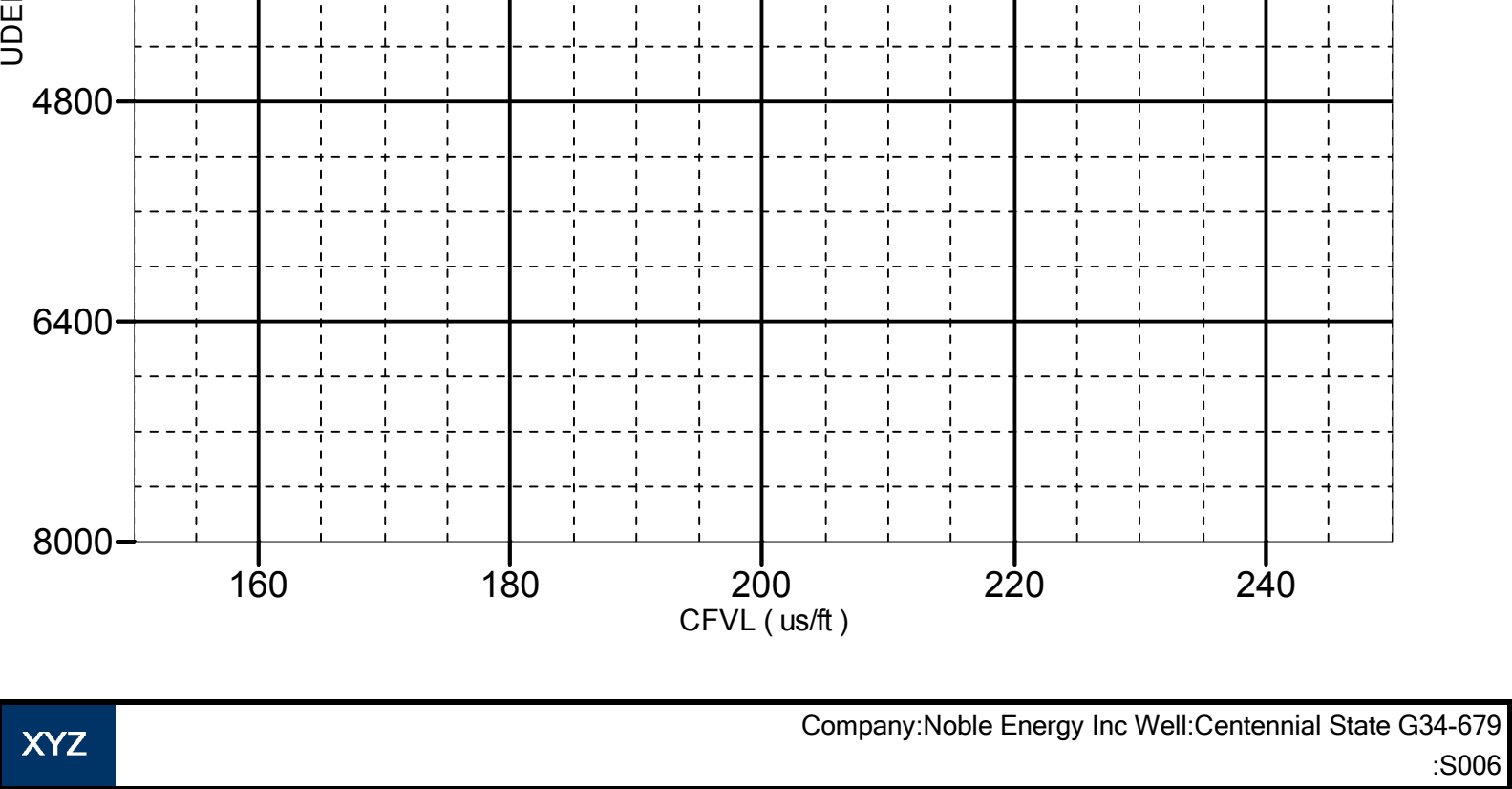
Fluid Acoustic Slowness vs Depth

2D Cross Plot

Index Range: From to ft

● CFVL-UDEP (CFVL,UDEP : Data Not Found)



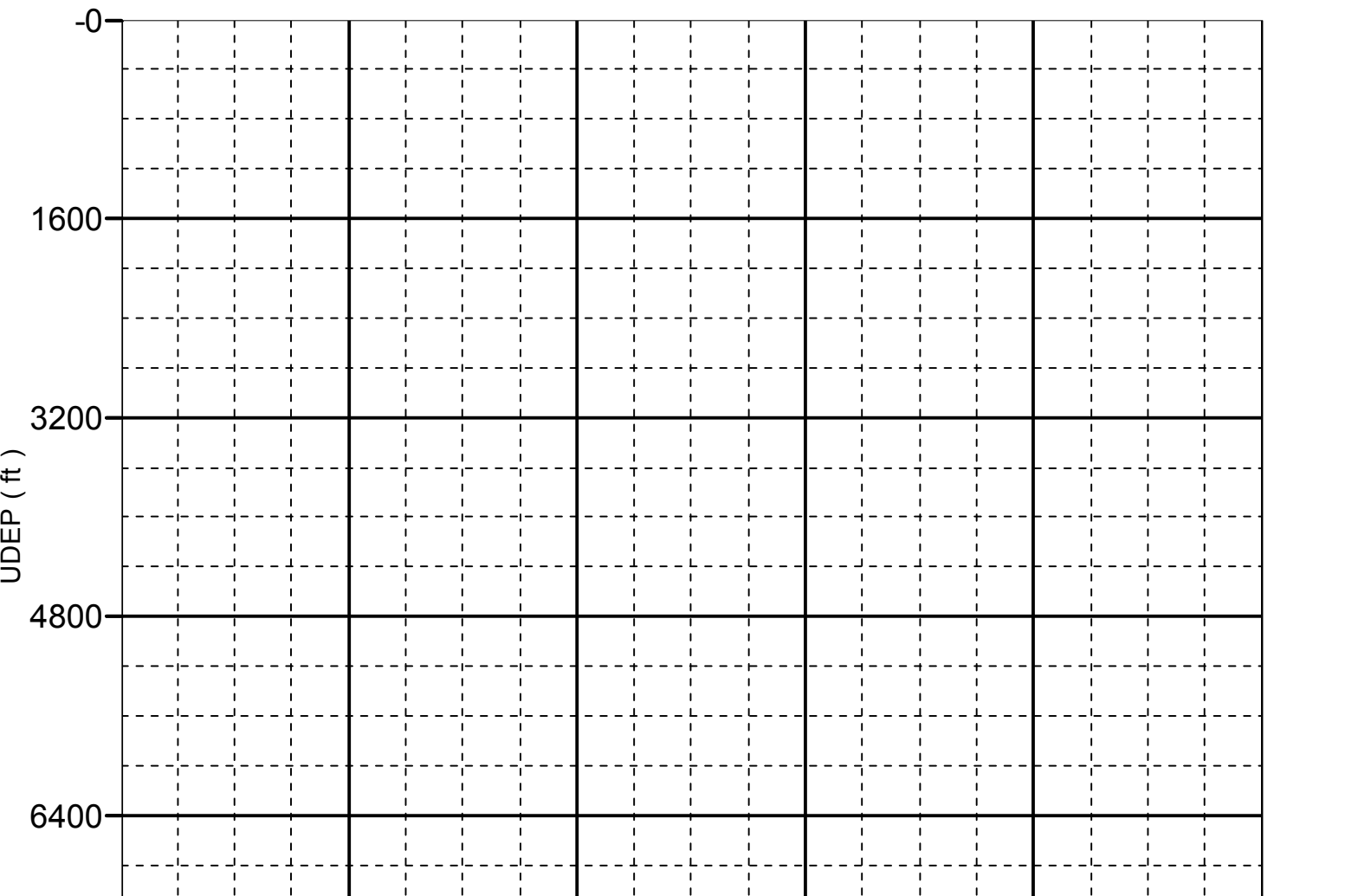


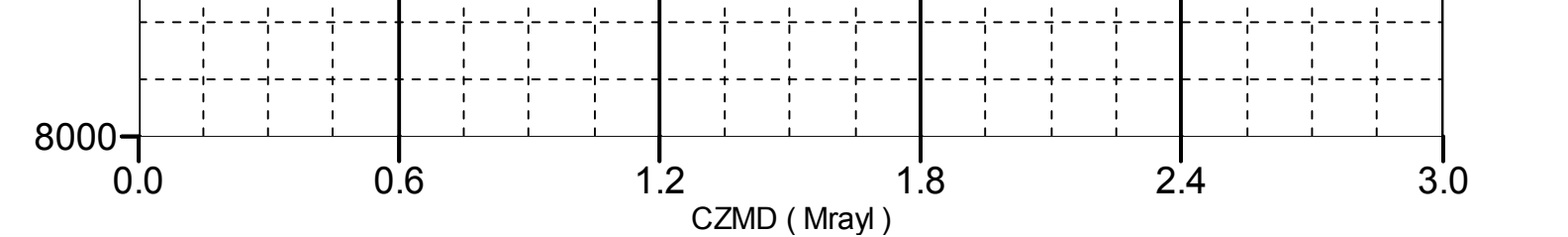
Acoustic Impedance of Mud vs Depth

2D Cross Plot

Index Range: From to ft

● CZMD-UDEP (CZMD,UDEP : Data Not Found)





Calibration Report

HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run ONE

Primary Equipment :

HILT Gamma-Ray and Neutron Sonde, 150 degC	HGNS-H	
HGNS Accelerometer, 150 degC	HACCZ-H	5118
AmBe Neutron Logging Source	NSR-F	5203

Auxiliary Equipment :

Calibration Parameter :

Water Temperature (Calibration Tank Water Temperature)	76.0
Housing Size (Thermal Housing Size)	3.38
JIG-BKG	

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured): 09:36:31 15-Mar-2018

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.1	32.8	

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM): 18:00:00 14-May-2006

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			QAT_160		
Accelerometer Reference Temperature	degF	Master		30.2	77.0	122.0	
Accelerometer Coefficients - 0		Master	----	----	2900.000	----	
Accelerometer Coefficients - 1		Master	----	----	19.000	----	
Accelerometer Coefficients - 2		Master	----	----	0.002	----	
Accelerometer Coefficients - 3		Master	----	----	0.000	----	
Accelerometer Coefficients - 4		Master	----	----	2.747	----	
Accelerometer Coefficients - 5		Master	----	----	0.000	----	
Accelerometer Coefficients - 6		Master	----	----	0.000	----	
Accelerometer Coefficients - 7		Master	----	----	0.000	----	
Accelerometer Coefficients - 8		Master	----	----	299.100	----	
Accelerometer Coefficients - 9		Master	----	----	0.993	----	

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM): 14:39:40 23-Jan-2018 Before: After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	26.8	40.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Zero Measurement	1/s	Master	0	5.0	27.4	40.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Near Plus Measurement	1/s	Master	6031.0	4700.0	5257.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

Far Plus Measurement	1/s	Master Before After Before-Master After-Before	2793.0 ----- ----- ----- -----	1900.0 ----- ----- ----- -----	2143.0 ----- ----- ----- -----	2900.0 ----- ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Near Corrected Plus Measurement	1/s	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	4700.0 ----- ----- ----- -----	5225.0 ----- ----- ----- -----	6900.0 ----- ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>
Far Corrected Plus Measurement	1/s	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	1900.0 ----- ----- ----- -----	2113.0 ----- ----- ----- -----	2900.0 ----- ----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before:		After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement - 0	gAPI	Before After After-Before	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
RGR Plus Measurement	gAPI	Before After After-Before	----- ----- -----	----- ----- -----	NOT DONE NOT DONE -----	----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
GR Calibration Gain		Before After After-Before	----- ----- -----	----- ----- -----	NOT DONE ----- -----	----- ----- -----	<div><div></div></div> <div><div></div></div> <div><div></div></div>

EDTC-B (Enhanced Digital Telemetry Cartridge - Version B) Calibration - Run ONE

Primary Equipment :			
EDTC-B	EDTC-B	8424	
Calibration Parameter :			
Plus Reference			

EDTC-B Accelerometer Calibration - EDTC-B Accelerometer Calibration

Before (Measured):		09:35:41 15-Mar-2018					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.19	31.53	32.14	32.84	<div><div></div></div> <div><div></div></div> <div><div></div></div>

EDTC-B Memory Data - EDTC-B Memory Data

Master (EEPROM):		09:34:54 15-Mar-2018					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Initial PMT HV	V	Master			1575.000		<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Serial Number		Master			487		<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 0		Master	-----	-----	2.942E+000	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 1		Master	-----	-----	2.637E-004	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 2		Master	-----	-----	2.594E-007	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 3		Master	-----	-----	-6.039E-008	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 4		Master	-----	-----	1.465E-009	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 5		Master	-----	-----	-1.108E-011	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 6		Master	-----	-----	2.837E-014	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 7		Master	-----	-----	-3.739E-003	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 8		Master	-----	-----	-8.552E-007	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 9		Master	-----	-----	-4.140E-008	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 10		Master	-----	-----	7.624E-010	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Accelerometer Coefficients - 11		Master	-----	-----	-4.810E-012	-----	<div><div></div></div> <div><div></div></div> <div><div></div></div>
Gamma-Ray Detector Serial Number		Master			7303		<div><div></div></div> <div><div></div></div> <div><div></div></div>

EDTC-B Gamma-Ray Calibration - Gamma Ray Coefficients

Before:		After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Gamma Ray Gain		Before	1.000	0.000	NOT DONE	1.100	<div><div></div></div> <div><div></div></div> <div><div></div></div>

Gamma Ray Gain		Before	1.000	0.900	NOT DONE	1.100		
		After	----	----	----	----		
		After-Before	----	----	----	----		

EDTC-B Gamma-Ray Calibration - Gamma Ray Accumulations

Before:			After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
RGR Zero Measurement - 0	gAPI	Before	----	----	----	----		
		After	----	----	----	----		
		After-Before	----	----	----	----		
RGR Plus Measurement	gAPI	Before			NOT DONE			
		After			NOT DONE			
		After-Before	----	----	----	----		

LEH-QT (Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor) Calibration - Run ONE

Primary Equipment :								
		Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor		LEH-QT		2353		

HTEN Master Calibration - HTEN Master Calibration

Master:								
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500		
HTEN Shop Offset	lbf	Master	0	-1000.000	NOT DONE	1000.000		

HTEN Before Calibration - HTEN Before Calibration

Before:								
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
RHTE Zero Measurement - 0	lbf	Before	----	----	----	----		
RHTE Plus Measurement - 0	lbf	Before	----	----	----	----		
HTEN Gain - 0		Before	----	----	----	----		
HTEN Offset - 0	lbf	Before	----	----	----	----		

Company:	Noble Energy Inc	Schlumberger
Well:	Centennial State G34-679	
Field:	Wattenberg	
County:	Weld	
State:	Colorado	

UltraSonic Summary Print