

Company: Noble Energy Inc

Well: Shadow State A26-618

Field: Wattenberg

County: Weld State: Colorado

UltraSonic Summary Print

County: Weld
Field: Wattenberg
Location: SWSE Sec30, T6N, R63W
Well: Shadow State A26-618
Company: Noble Energy Inc

UltraSonic Summary Print

Location:		SWSE Sec30, T6N, R63W	Elev.:	K.B.	4662.00 ft
		SHL: 462' FSL X 1553' FEL			
		Lat/Long: 40.45152/-104.47582			
Permanent Datum:			Ground Level	Elev.:	4638.00 f
Log Measured From:			Kelly Bushing	24.00 ft	above Perm. Datum
Drilling Measured From:			Kelly Bushing		
API Serial No.	Section:	Township:	Range:		
05-123-42921	30	6N	63W		

Logging Date	24-Jun-2016	
Run Number	One	
Depth Driller	17415.00 ft	
Schlumberger Depth	17415.00 ft	
Bottom Log Interval	6300.00 ft	
Top Log Interval	75.00 ft	
Casing Fluid Type	BRINE	
Salinity		
Density	9.1 lbm/gal	
Fluid Level	0.00 ft	
BIT/CASING/TUBING STRING		
Bit Size	8.50 in	
From	1931.00 ft	
To	17415.00 ft	
Casing/Tubing Size	5.5 in	
Weight	20 lbm/ft	
Grade	P-110	
From	24.00 ft	
To	17376.10 ft	
Max Recorded Temperatures	226 degF	
Logger on Bottom	24-Jun-2016	07:20:00
Unit Number	Location:	Ft Morgan
Recorded By	B Kesek & B Mamon	
Witnessed By	Bill Mansfield	

Disclaimer

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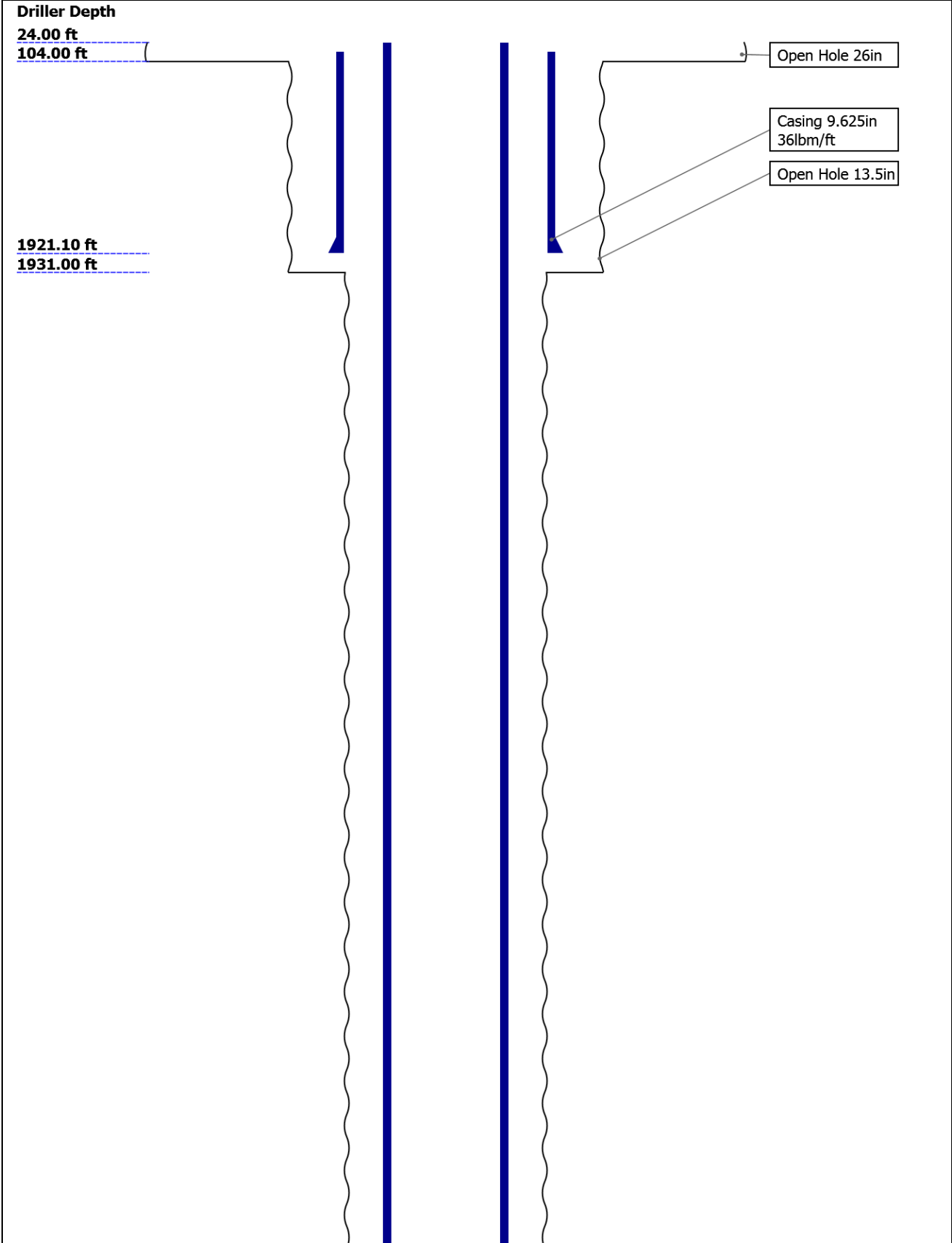
Contents

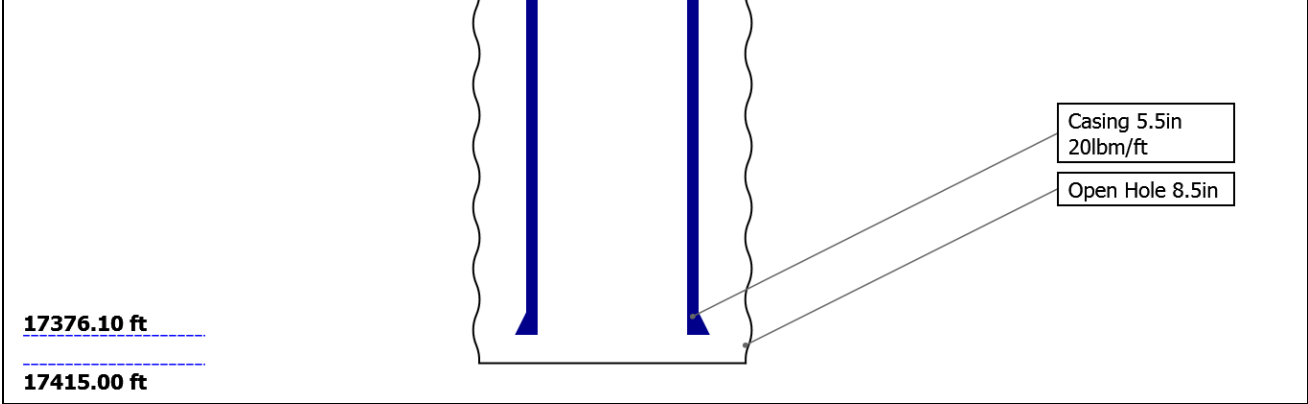
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Well Sketch




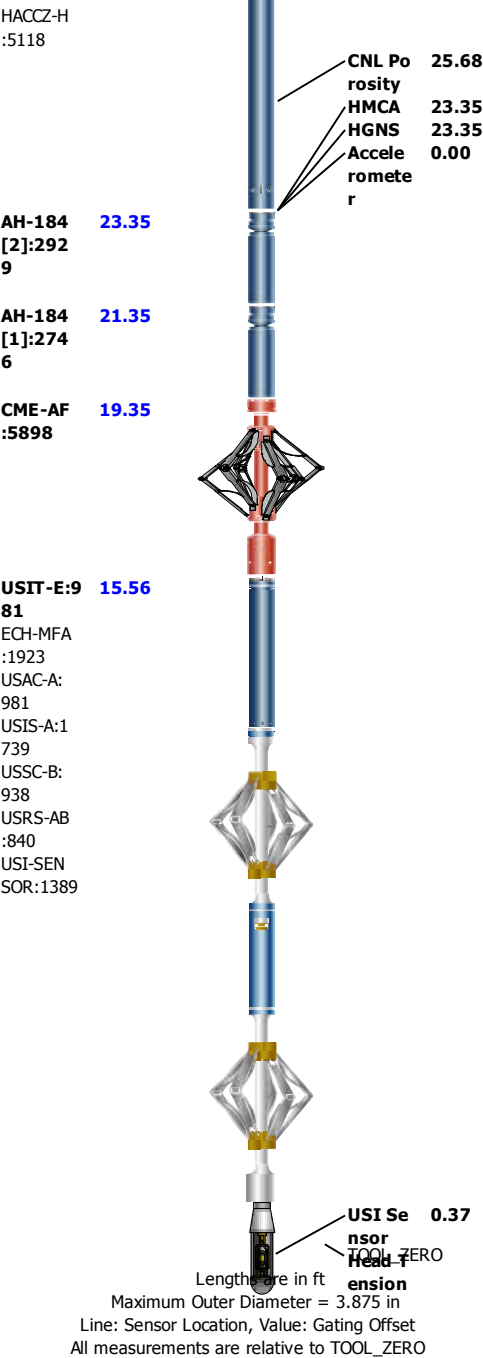


Borehole Size/Casing/Tubing Record

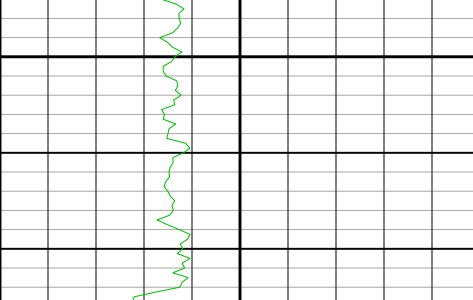
Bit						
Bit Size (in)	26	13.5	8.5			
Top Driller (ft)	24	104	1931			
Top Logger (ft)	24	104	1931			
Bottom Driller (ft)	104	1931	17415			
Bottom Logger (ft)	104	1931	17415			
Casing						
Size (in)	9.625	5.5				
Weight (lbm/ft)	36	20				
Inner Diameter (in)	8.921	4.778				
Grade	N/A	P110				
Top Driller (ft)	24.1	24				
Top Logger (ft)	24.1	24				
Bottom Driller (ft)	1921.1	17376.1				
Bottom Logger (ft)	1921.1	17376.1				

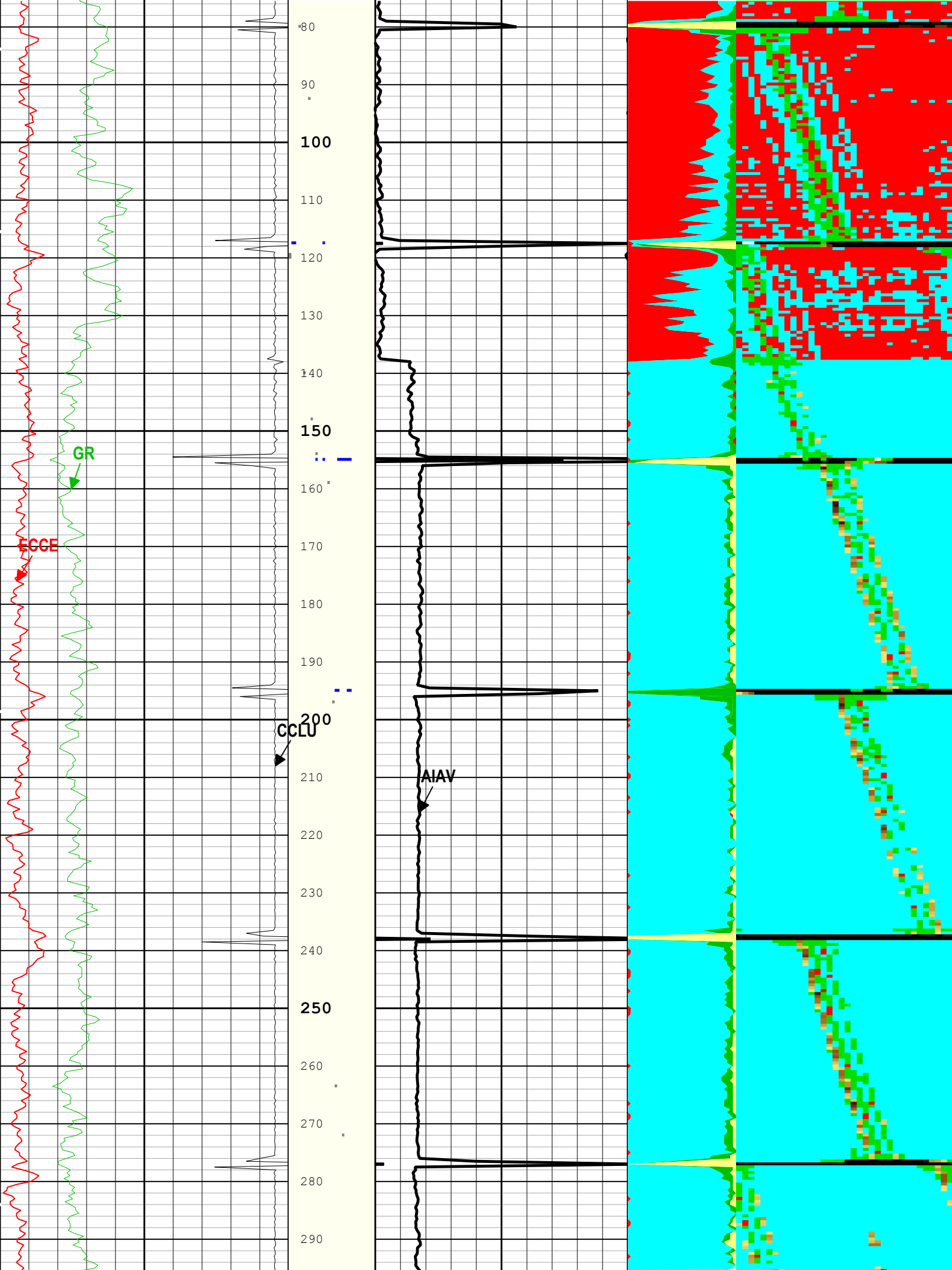
Remarks and Equipment Summary

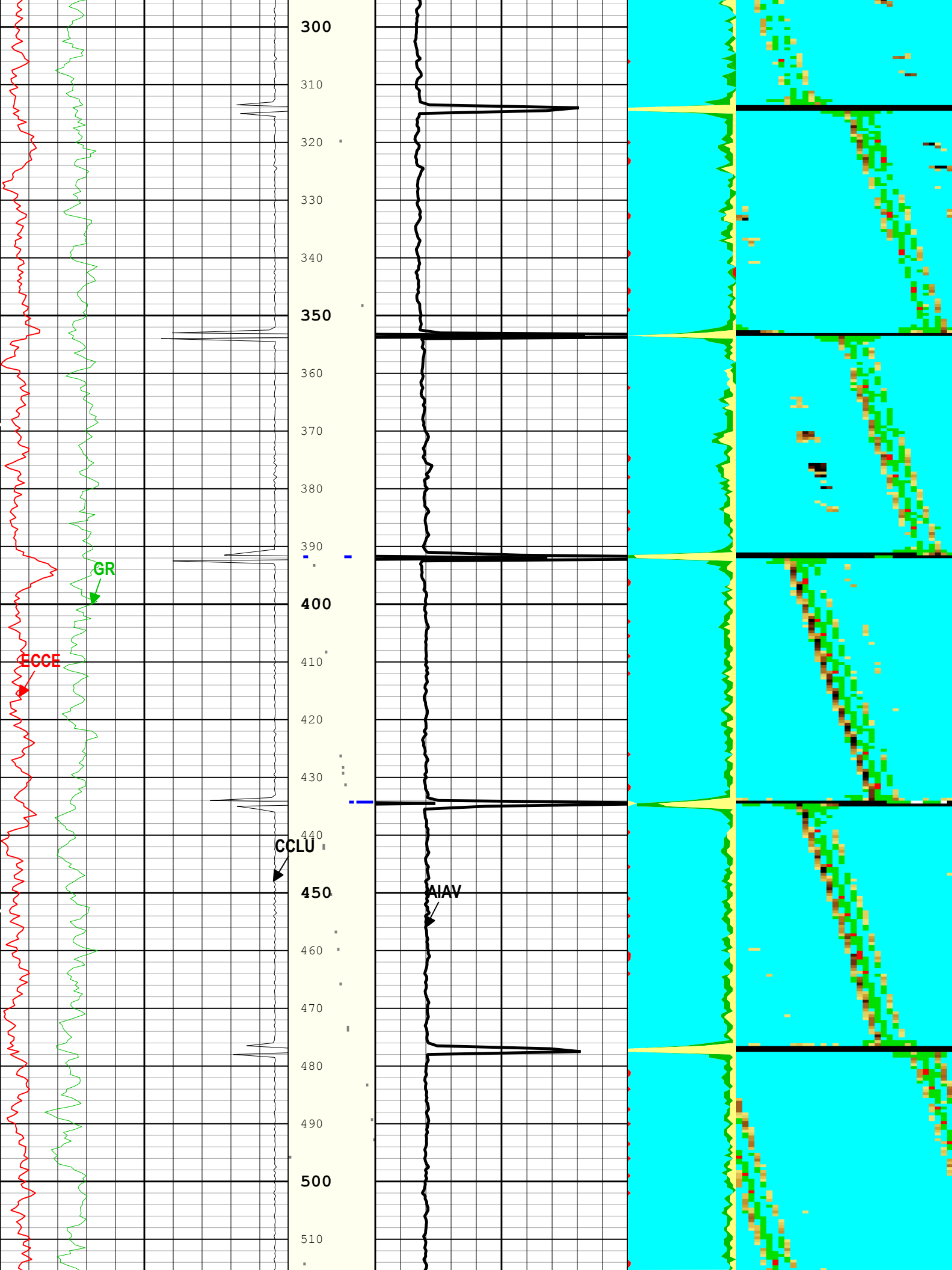
One: Toolstring		One: Remarks	
<div><div><div>Equip nameLengthMP nameOffset</div><div>LEH-QT43.53LEH-QT</div><div>SAH-F:140.61817</div><div>DTC-H:835.76803</div><div>ECH-KC:10354</div><div>DTC-H:8803</div><div>HGNS-H32.762987</div><div>HGNH:4736</div><div>NSR-F:5069</div><div>NPV-N</div><div>HGNS-H:2987</div><div>HMCA-H</div></div><div></div><div><div>CTEM34.86</div><div>HV0.00</div><div>TelSta32.76</div><div>ToolSt32.76</div><div>atus32.73</div><div>Tempeature32.02</div></div></div>		This is the first run in the well.	
		Tool ran as per toolsketch.	
		CSG: 5.5" 20lb/ft.	
		Logs recorded for cement at 10deg 6".	
		Main pass recorded at 2500PSI, repeat pass at 0PSI.	

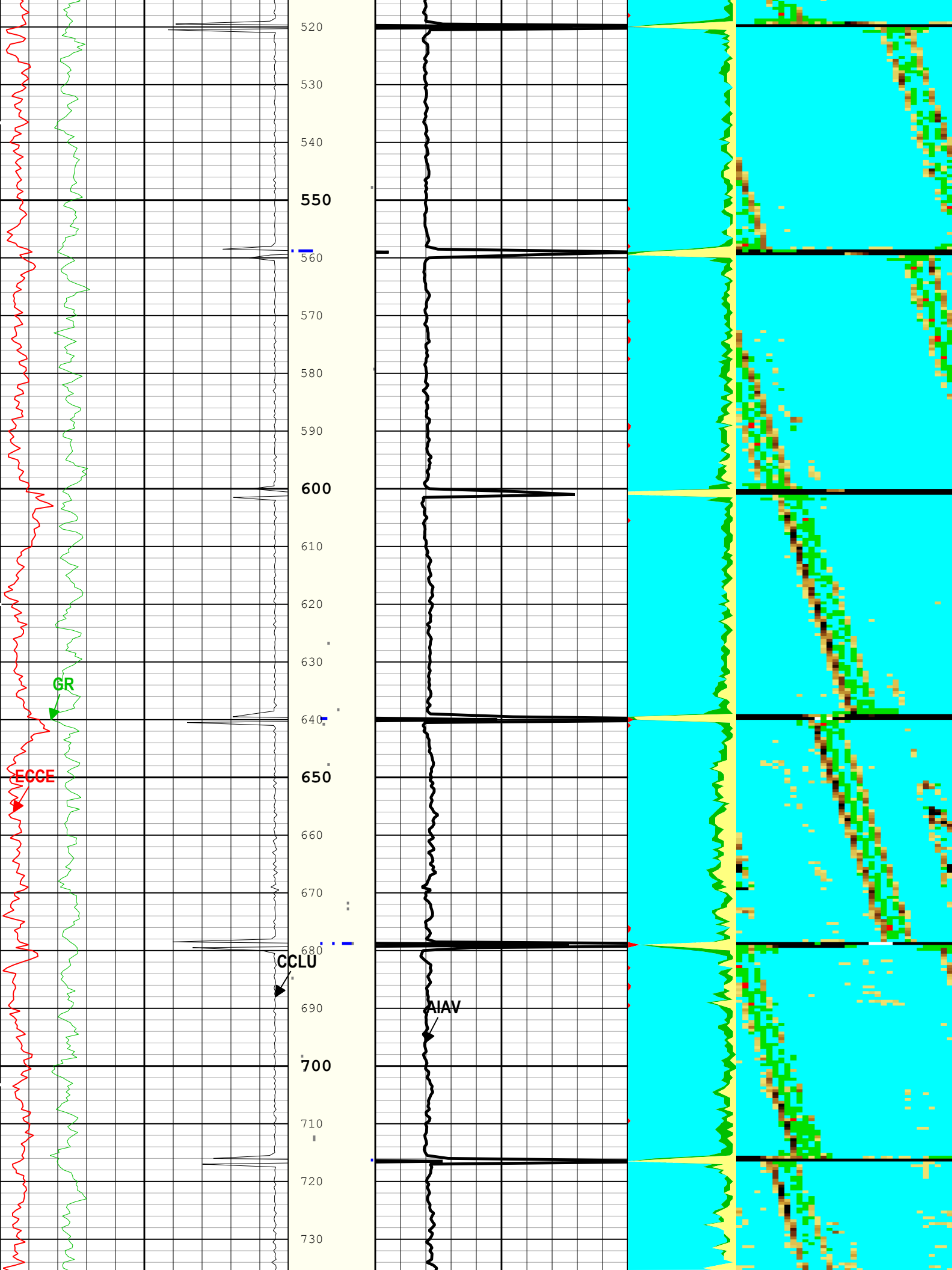


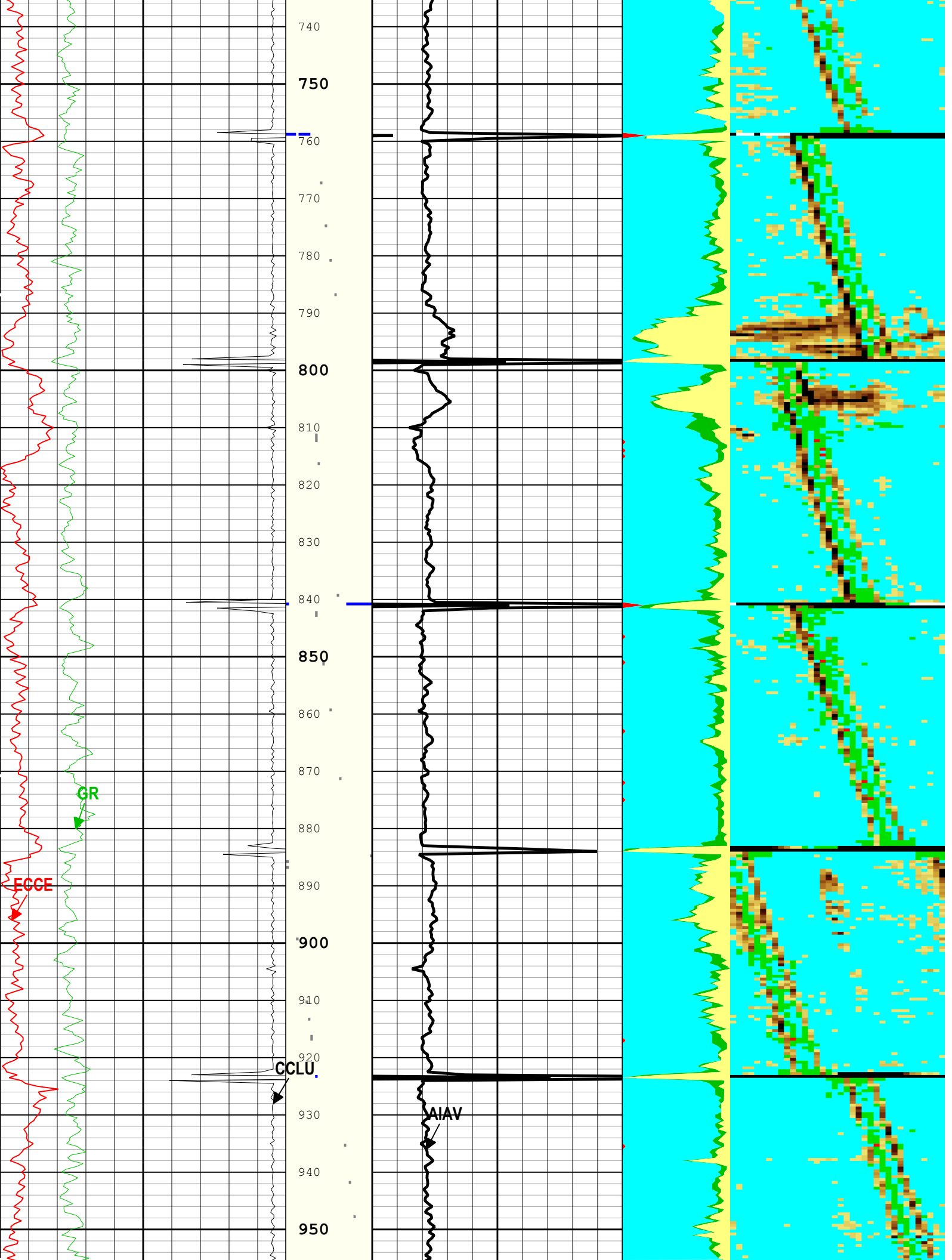
Depth Summary			
		One	
Depth Measuring Device			
Type	IDW-JA		
Serial Number	5896		
Calibration Date			
Calibrator Serial Number	16		
Calibration Cable Type	7-46 PLX		
Wheel Correction 1	-1		
Wheel Correction 2	-3		
Tension Device			
Type	CMTD-B/A		
Serial Number	1109		
Calibration Date	13-Apr-2016		
Calibrator Serial Number	441435A		

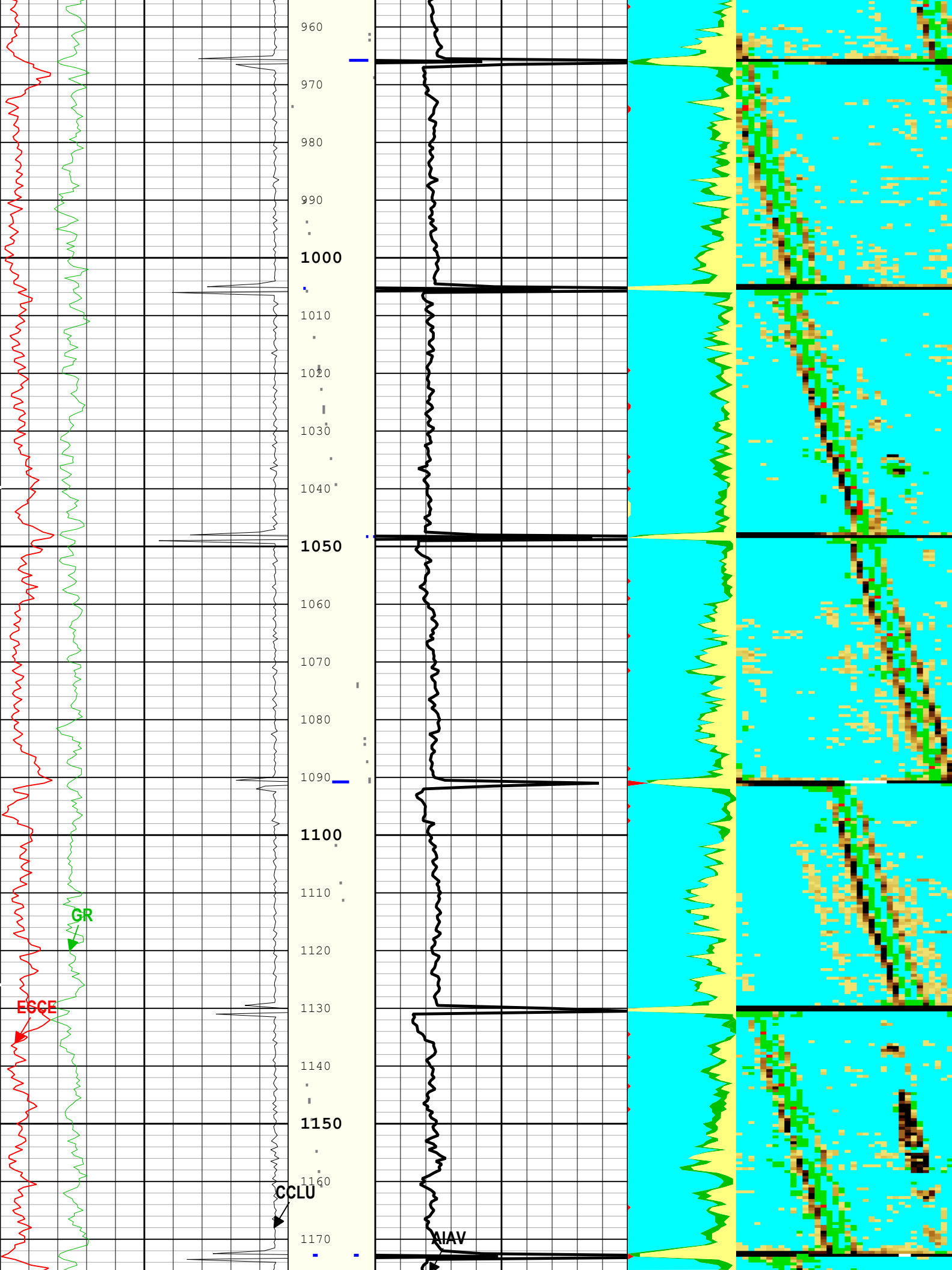
Casing Collar Locator Ultrasonic (CCLU) USIT-E			<div>Absent 1,500 2,500 6,500</div> <div>Explicit Normalization</div> <div>USIT - USIT Processing Flags (UFLG) USIT-E</div>	Acoustic Impedance Average (AIAV) USIT-E		<div>Gas</div> <div>Liquid</div> <div>Micro-Debonding</div> <div>Bonded</div> <div>Absent -500,000 2,599 2,854 3,109 3,363 3,618 3,872</div> <div>Custom Normalization</div> <div>USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E (Mrayl)</div>	
-20	in	1		0	10		
Amplitude of Eccentering (ECCE) USIT-E							
0	in	0.5					
Calibrated Gamma Ray (GR) HGNS-H							
0	gAPI	150					
			50				
			60				
			70				

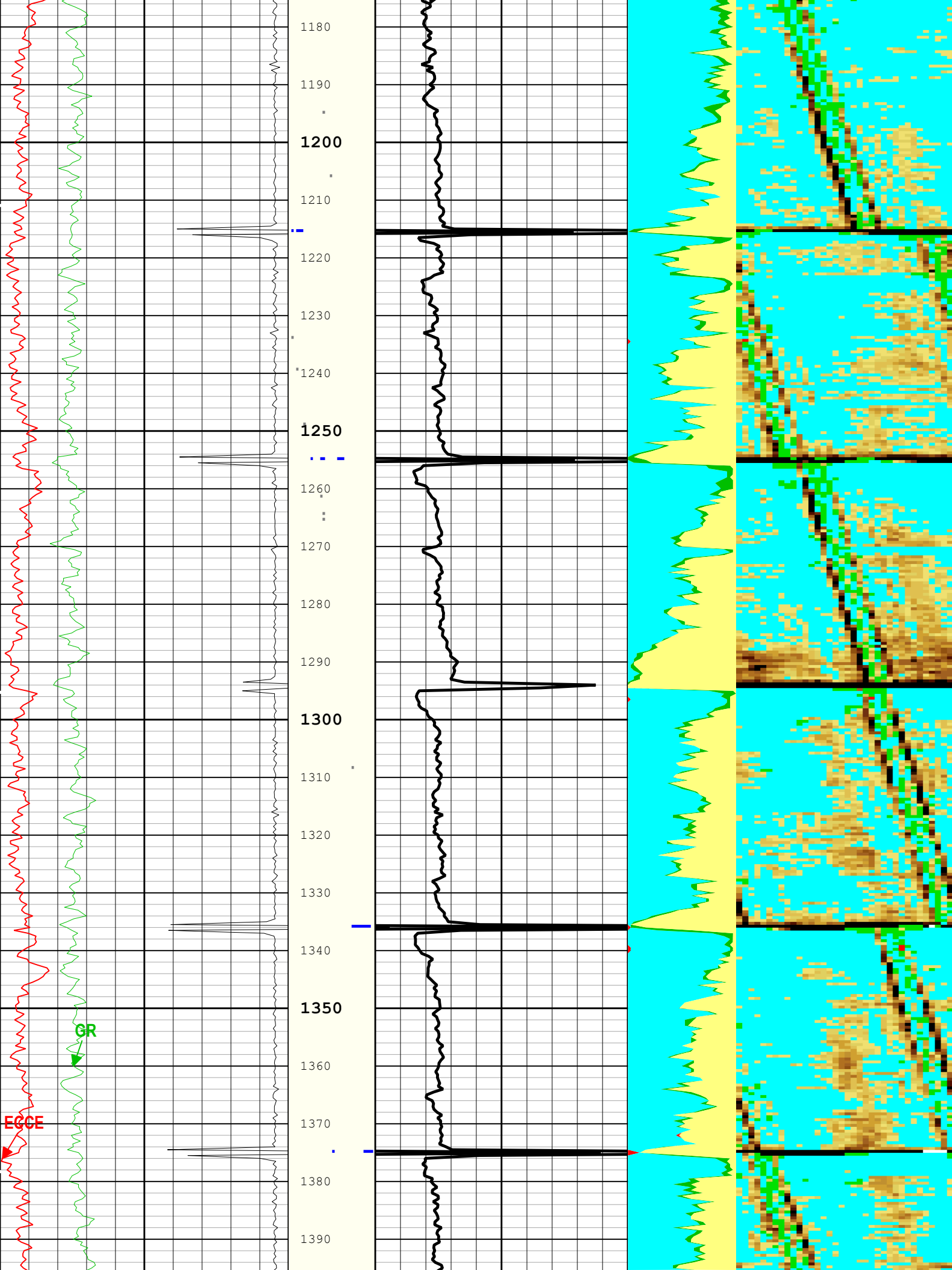


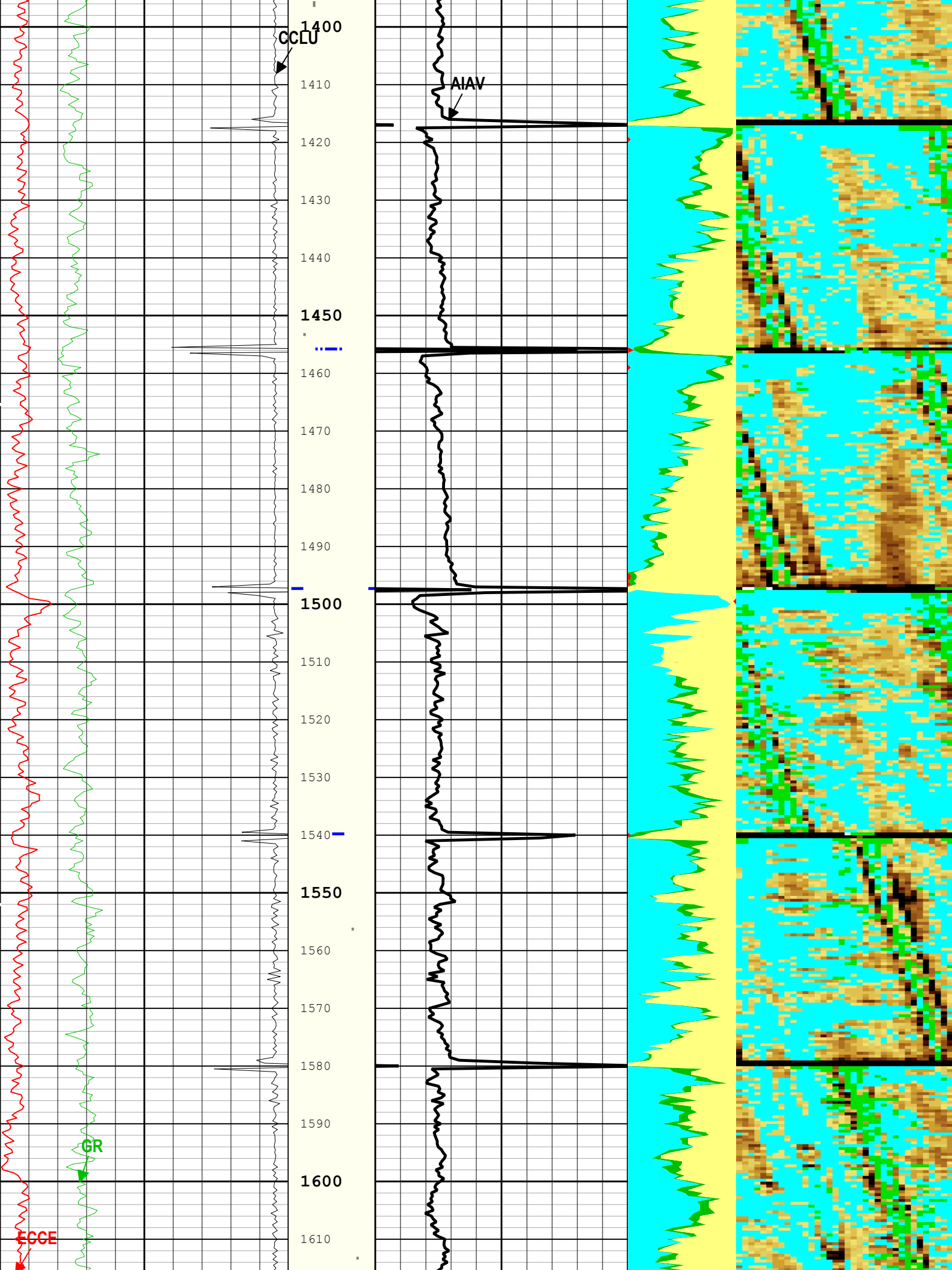


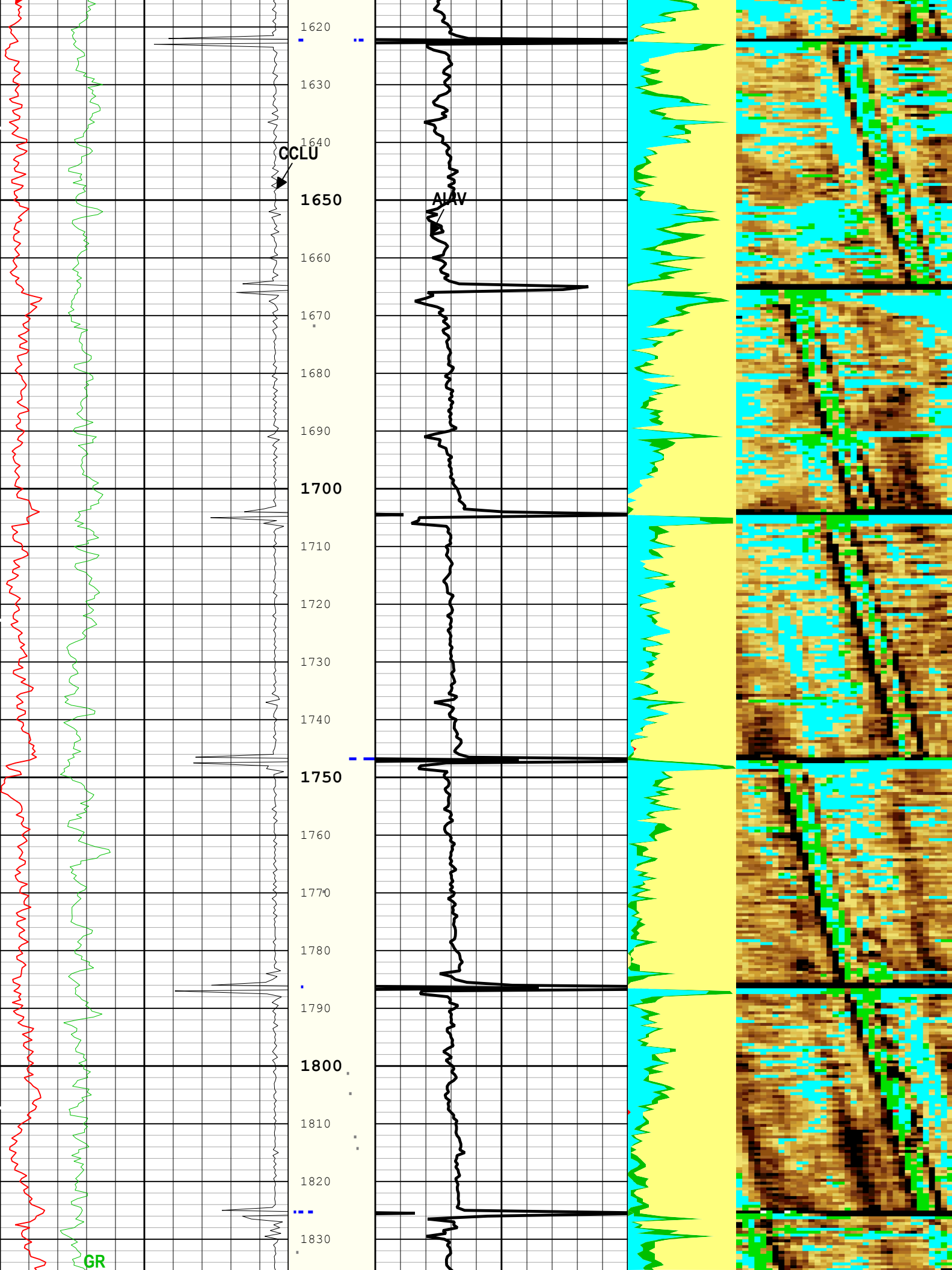


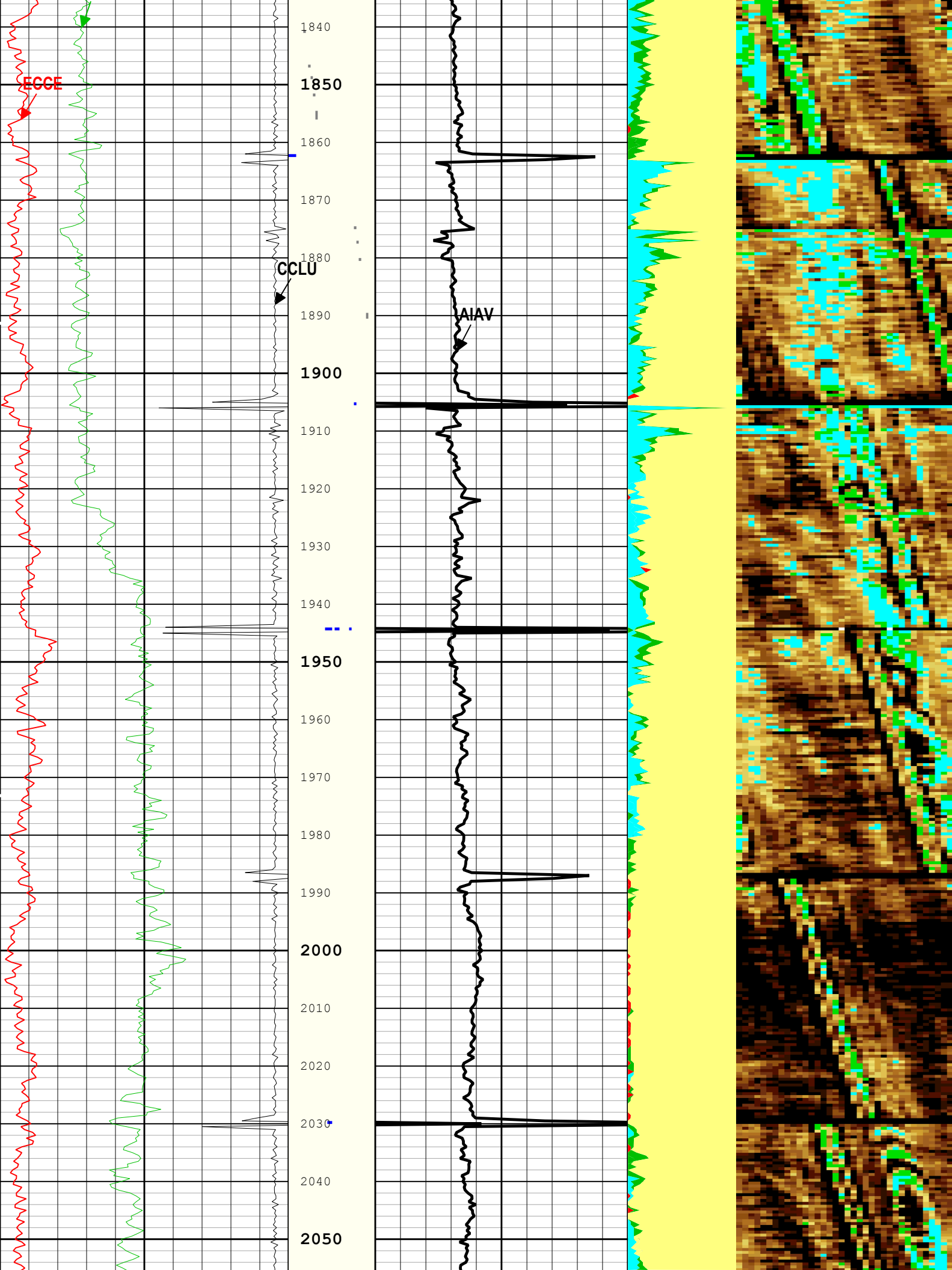


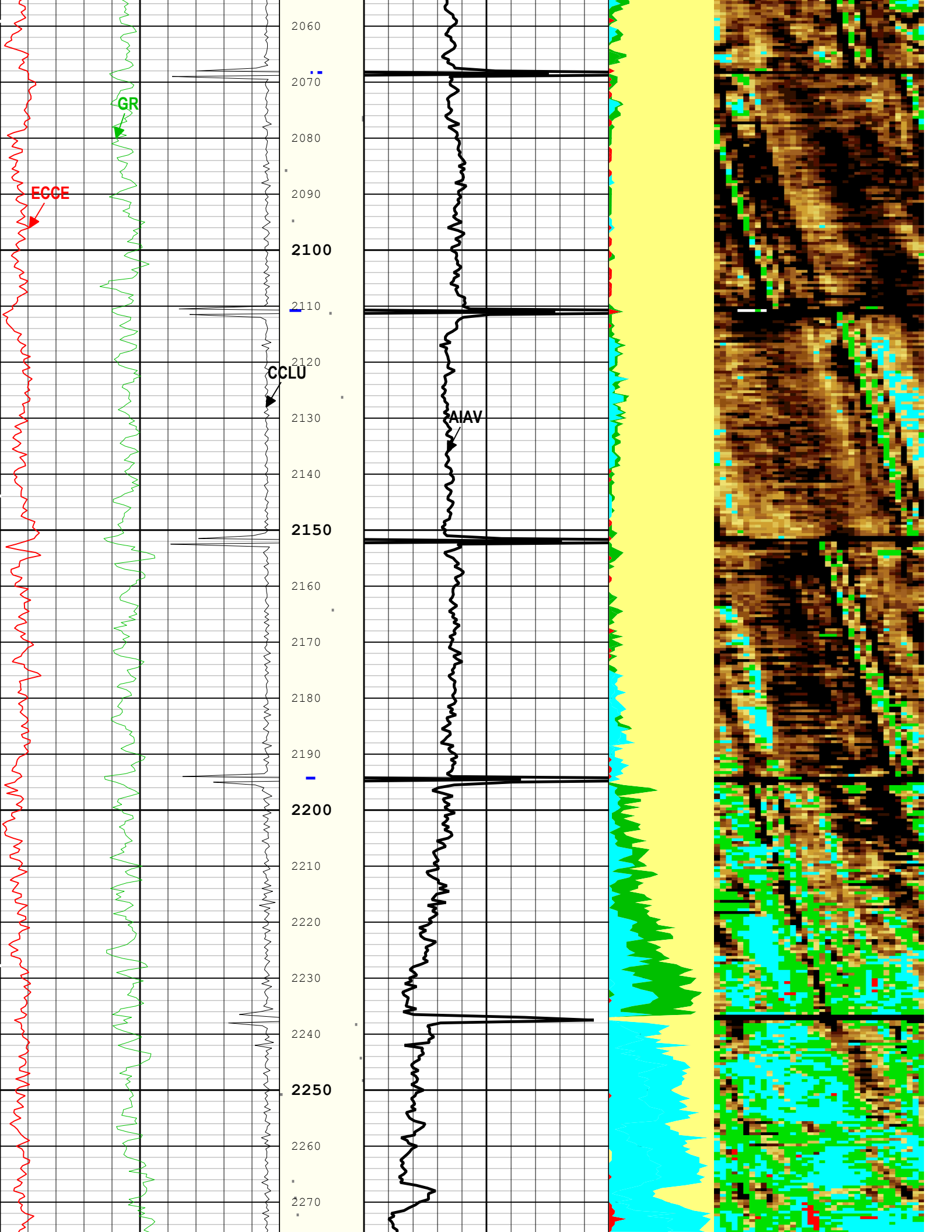


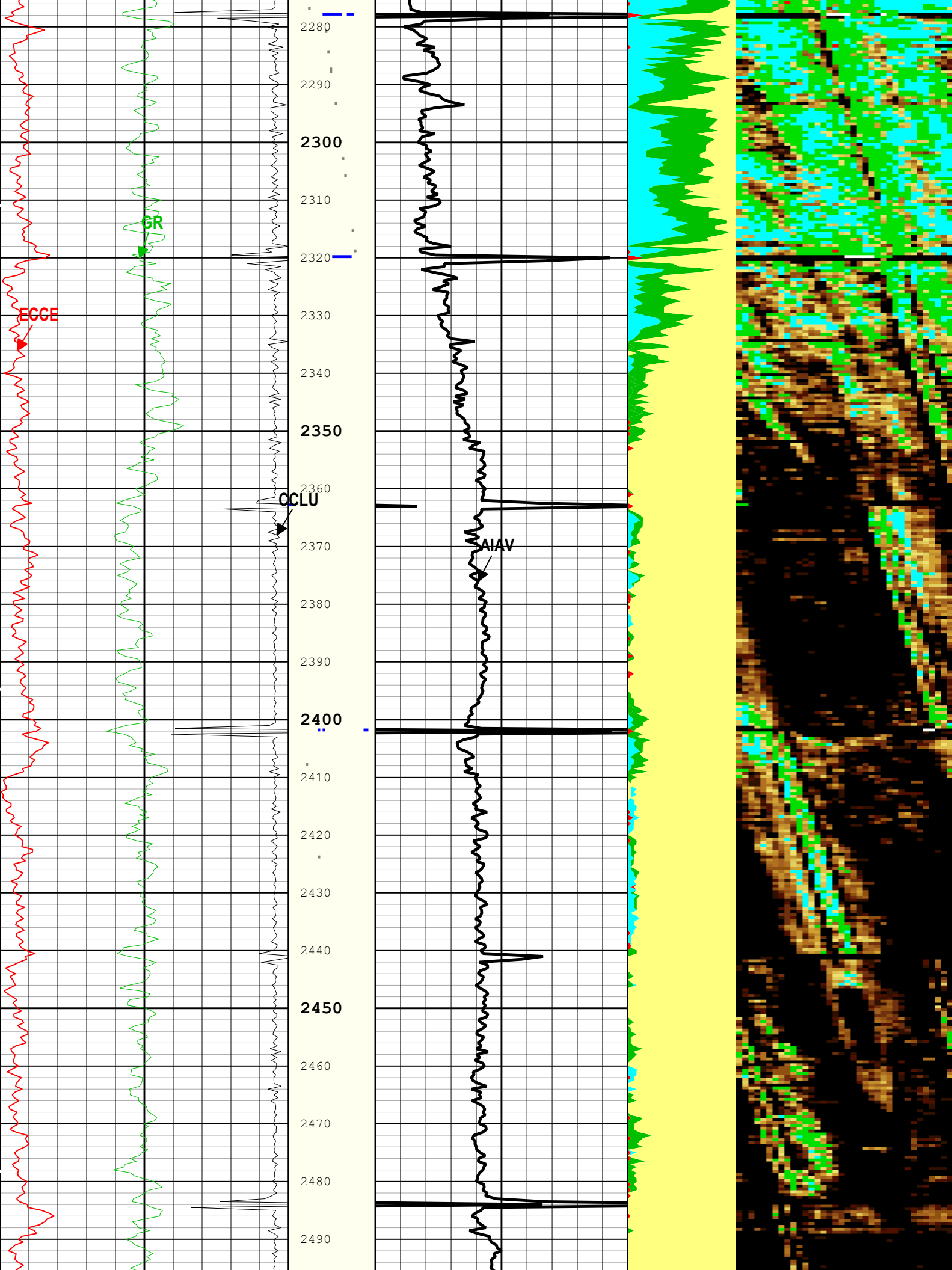


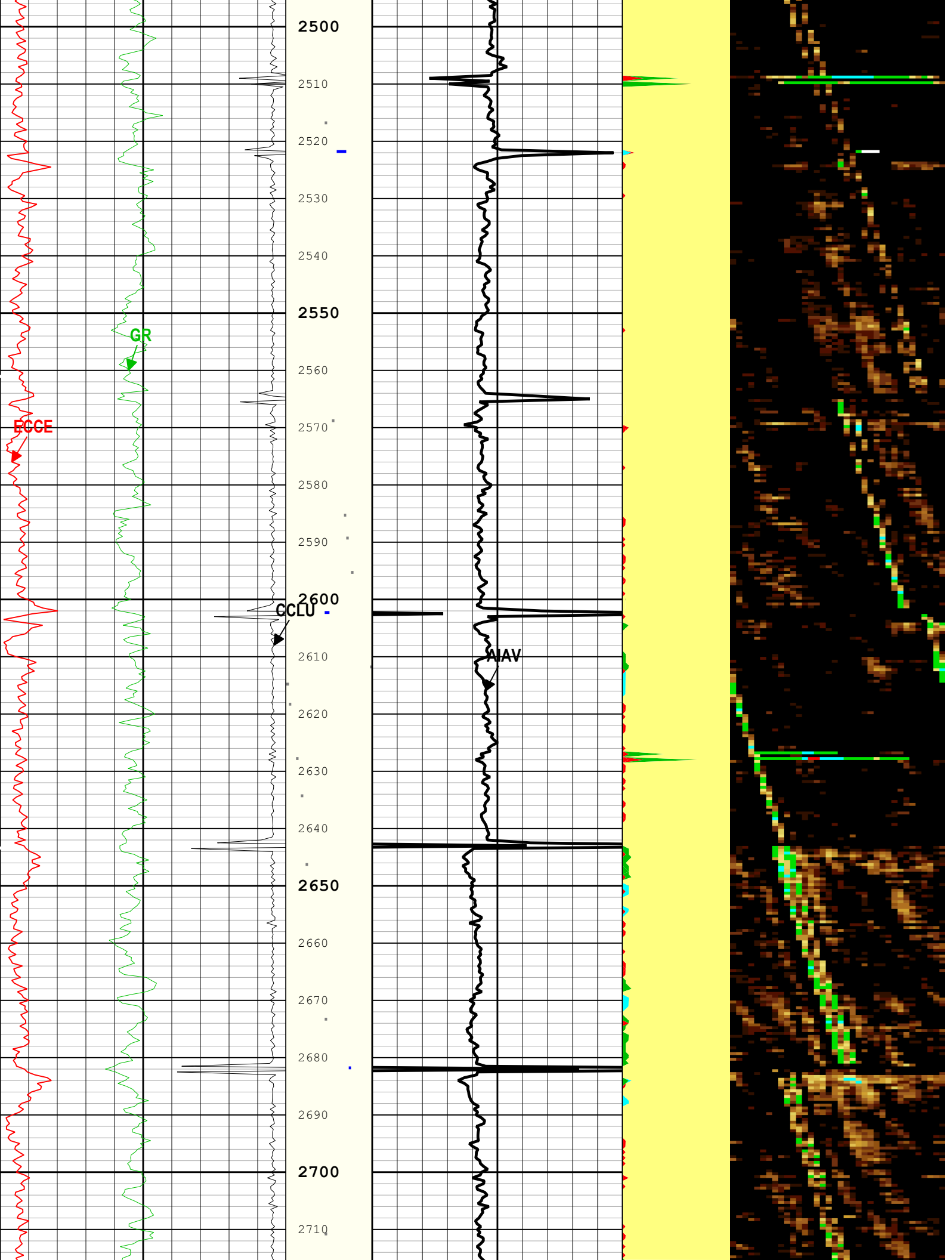


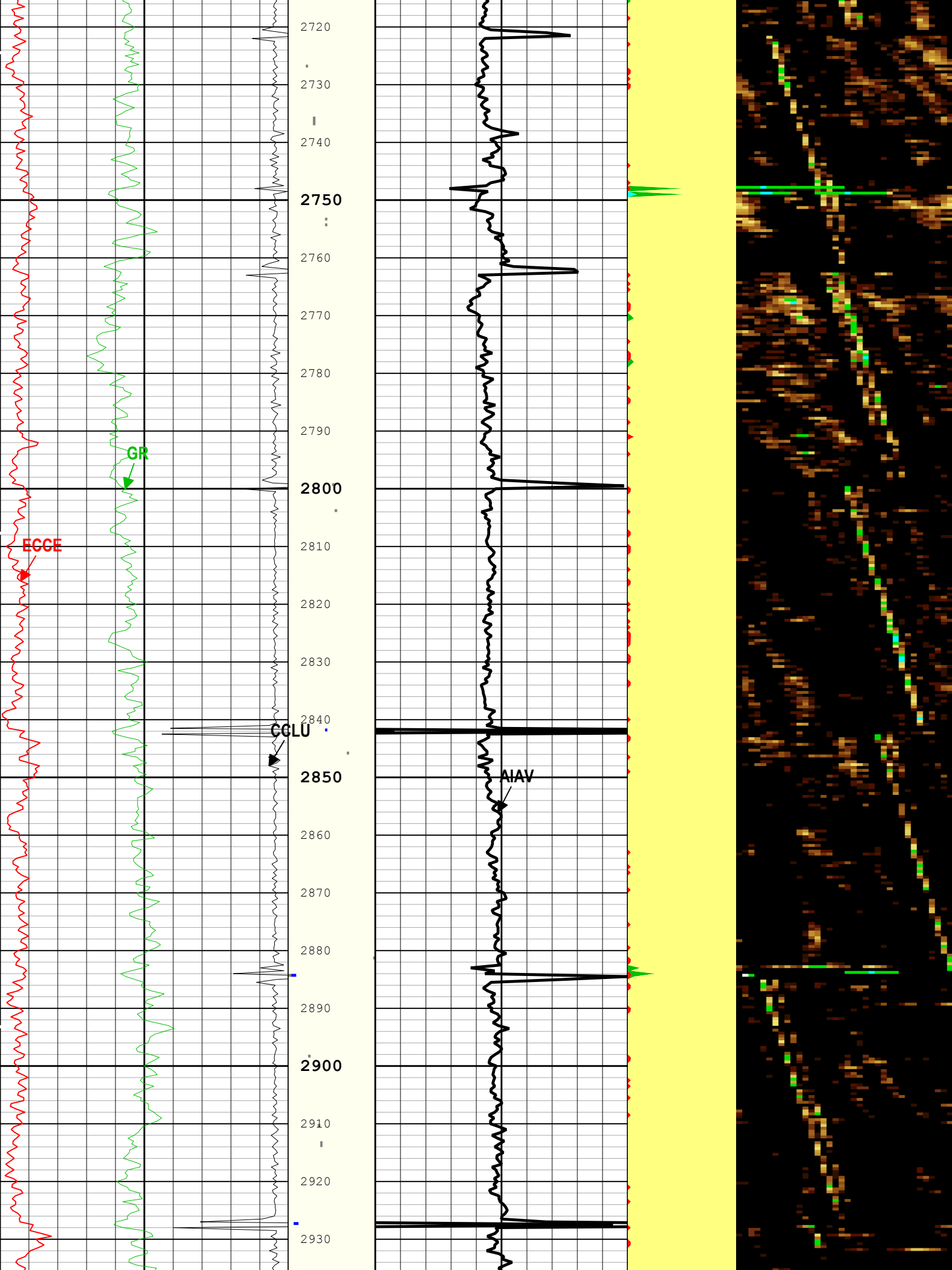


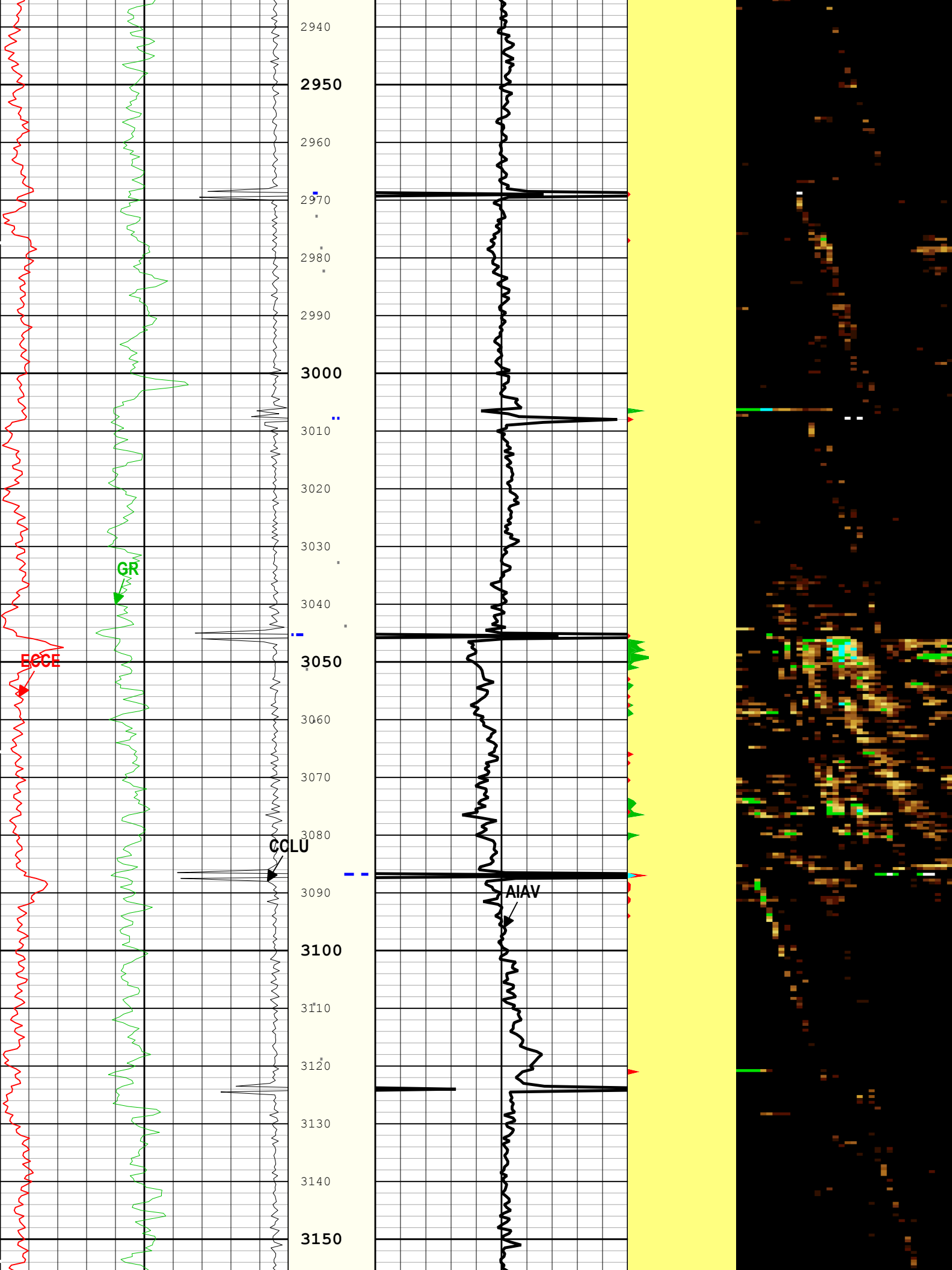


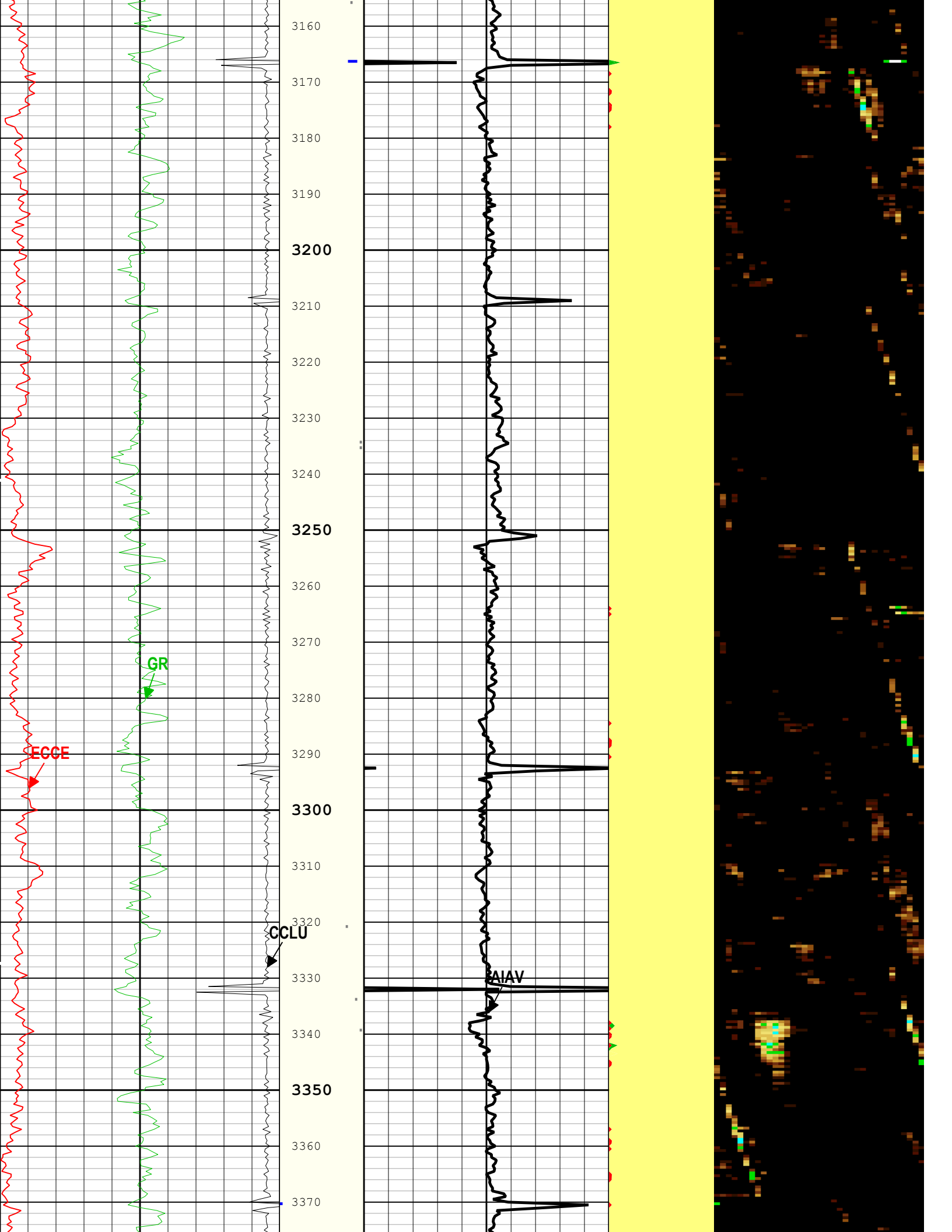


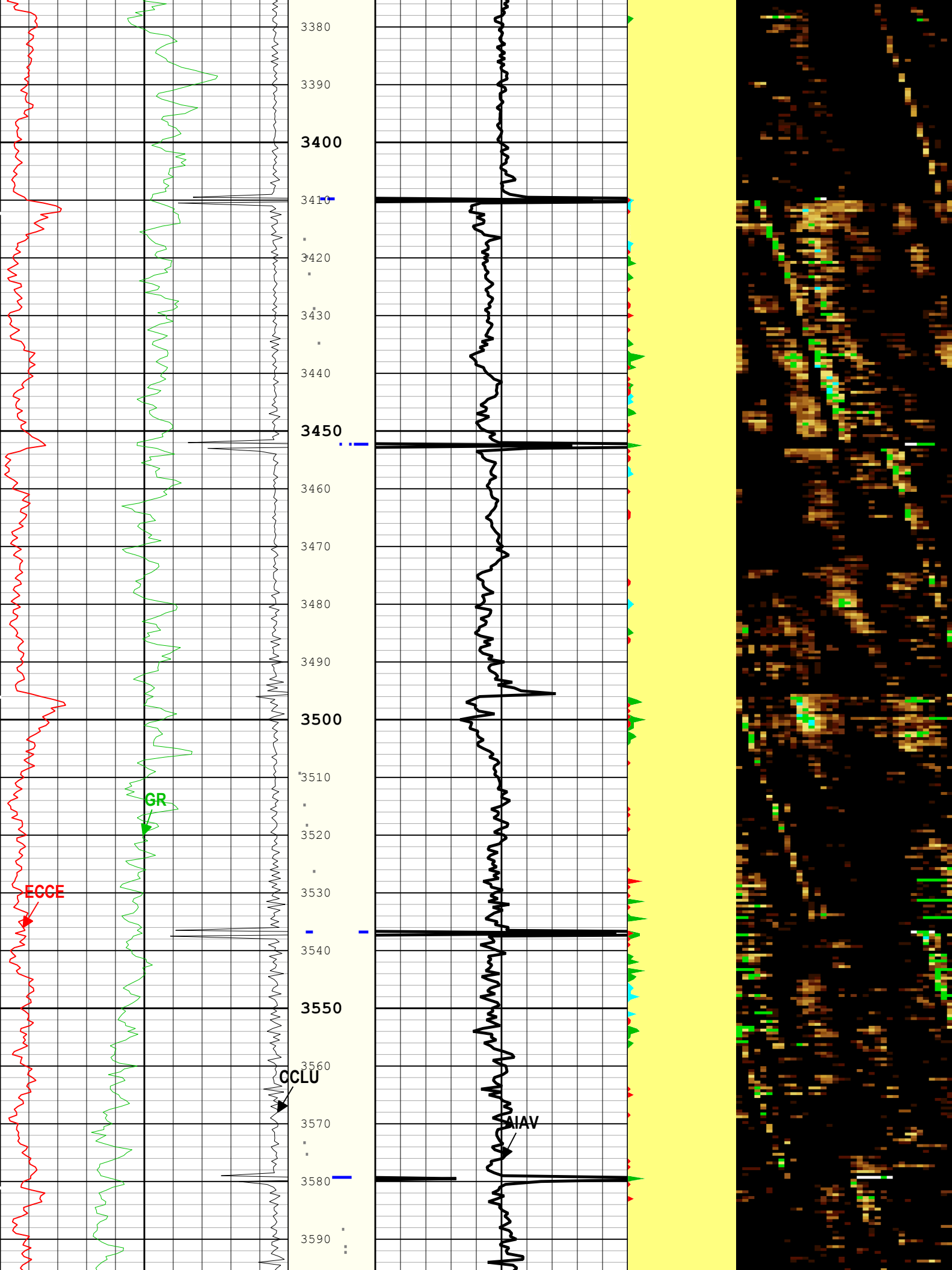


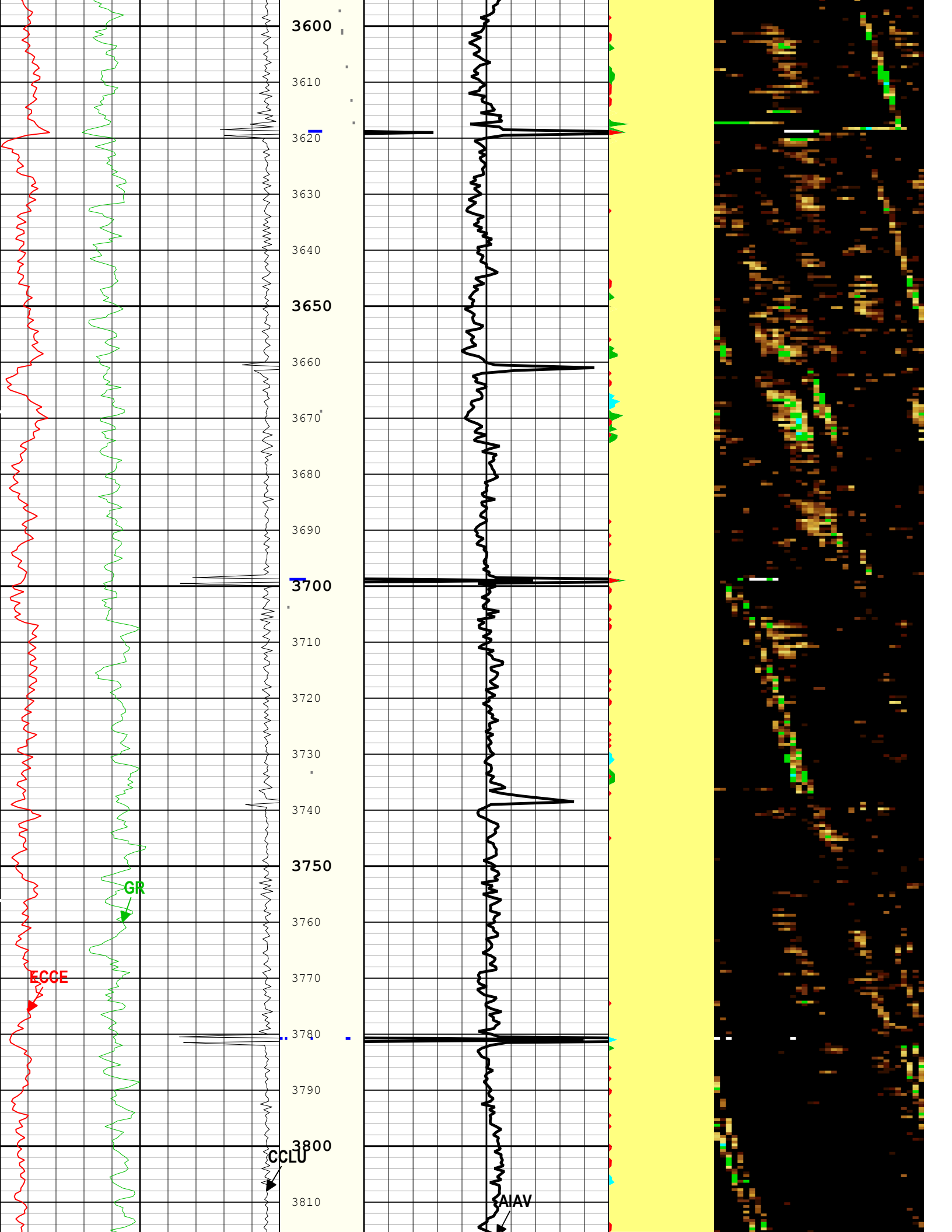


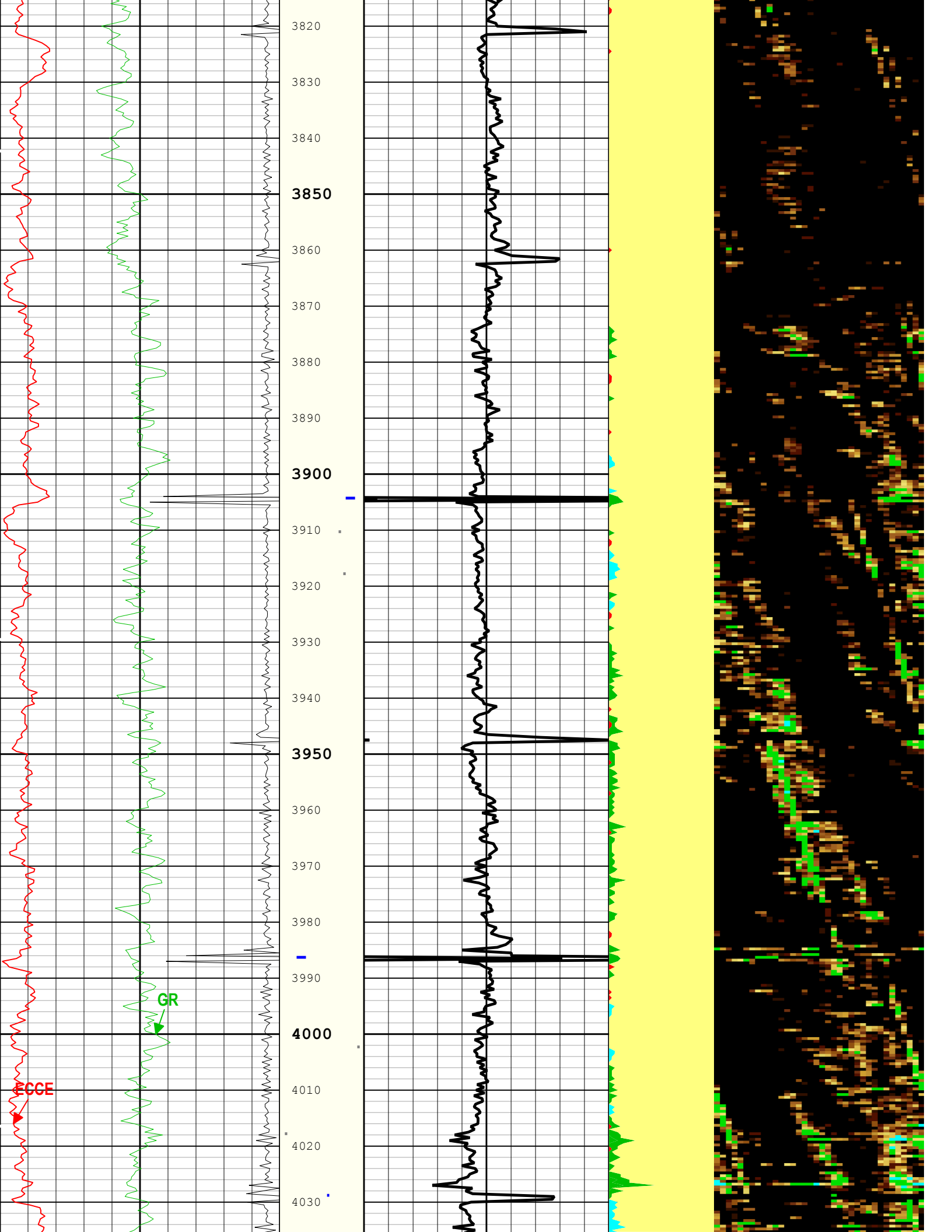


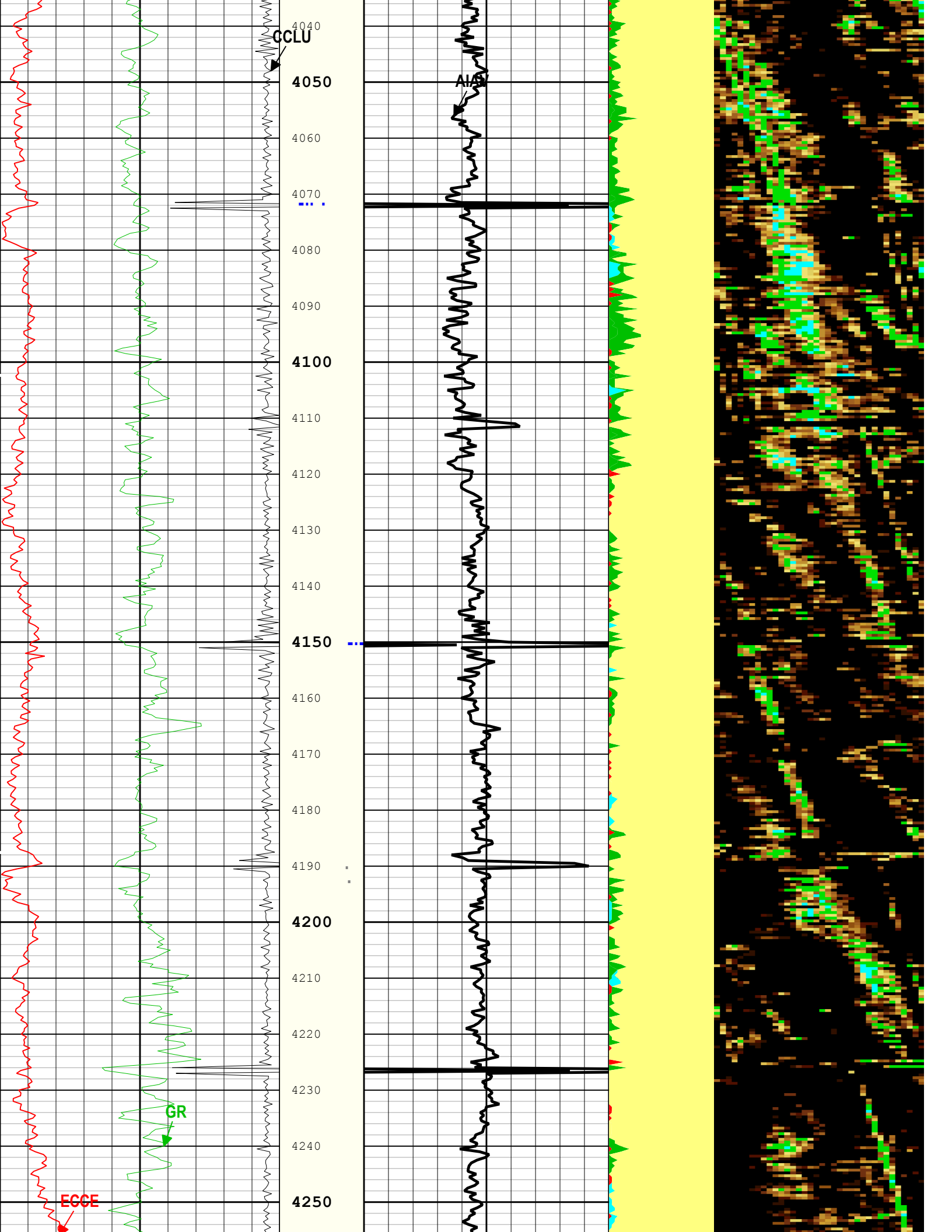


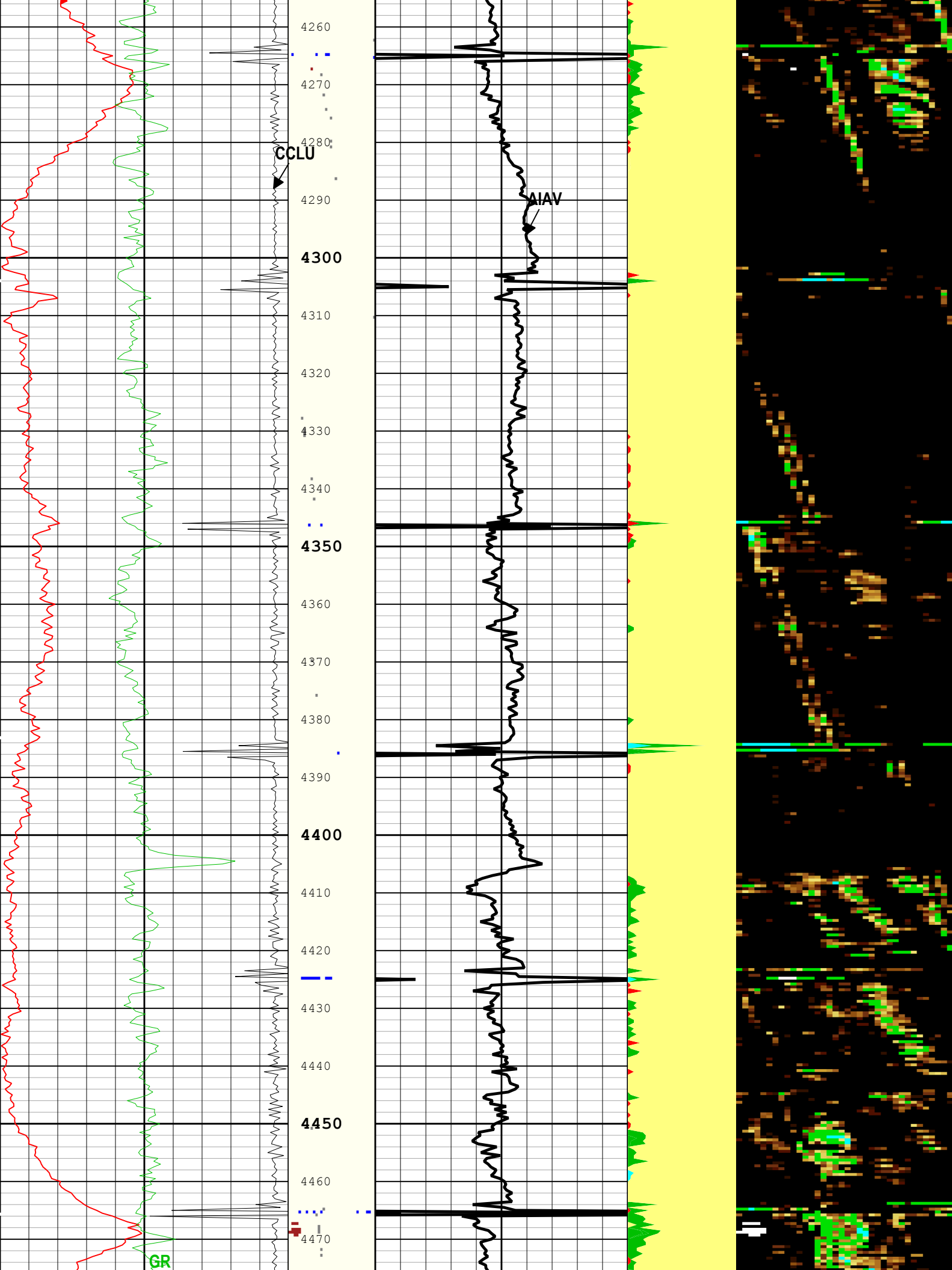


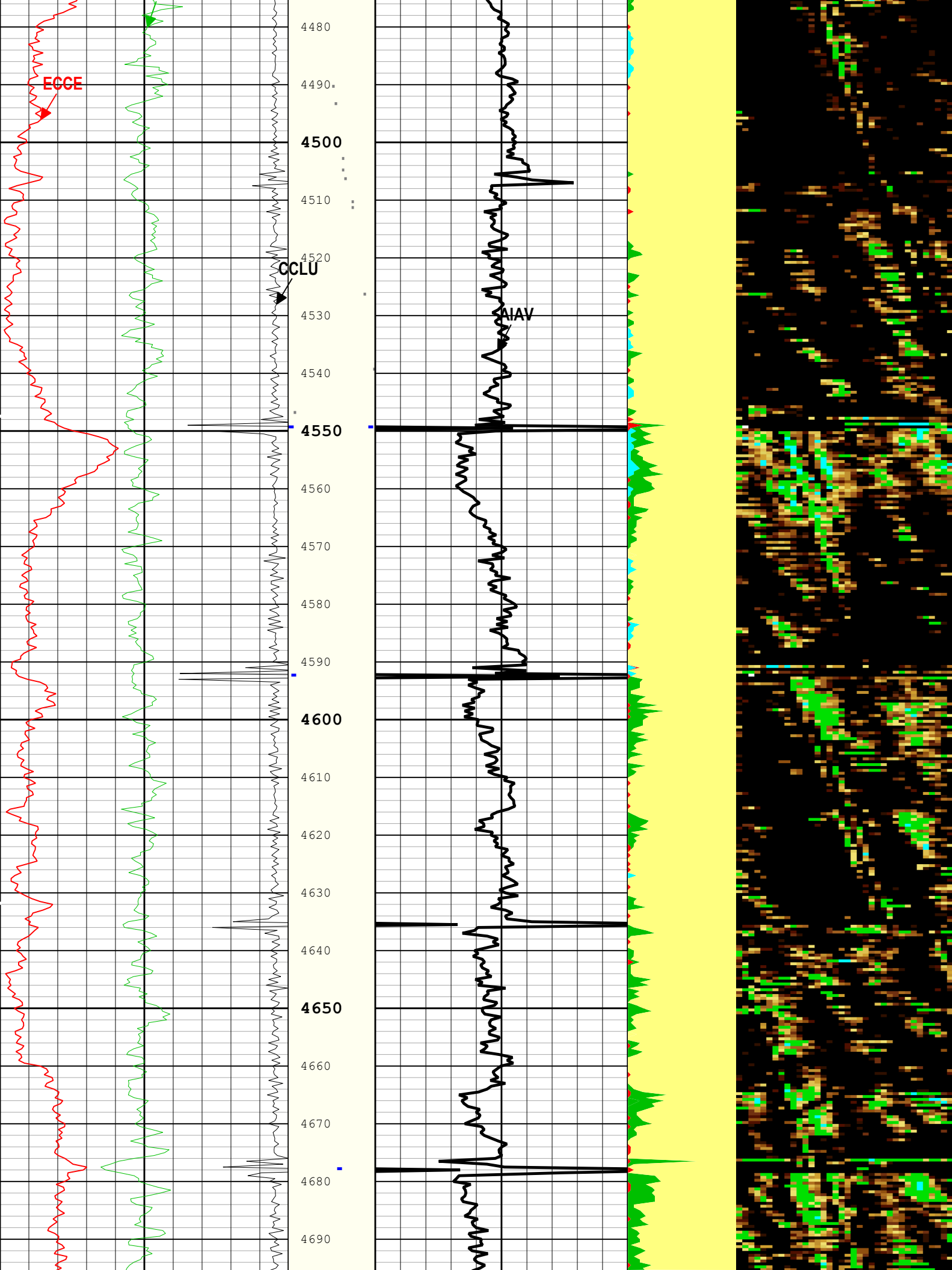


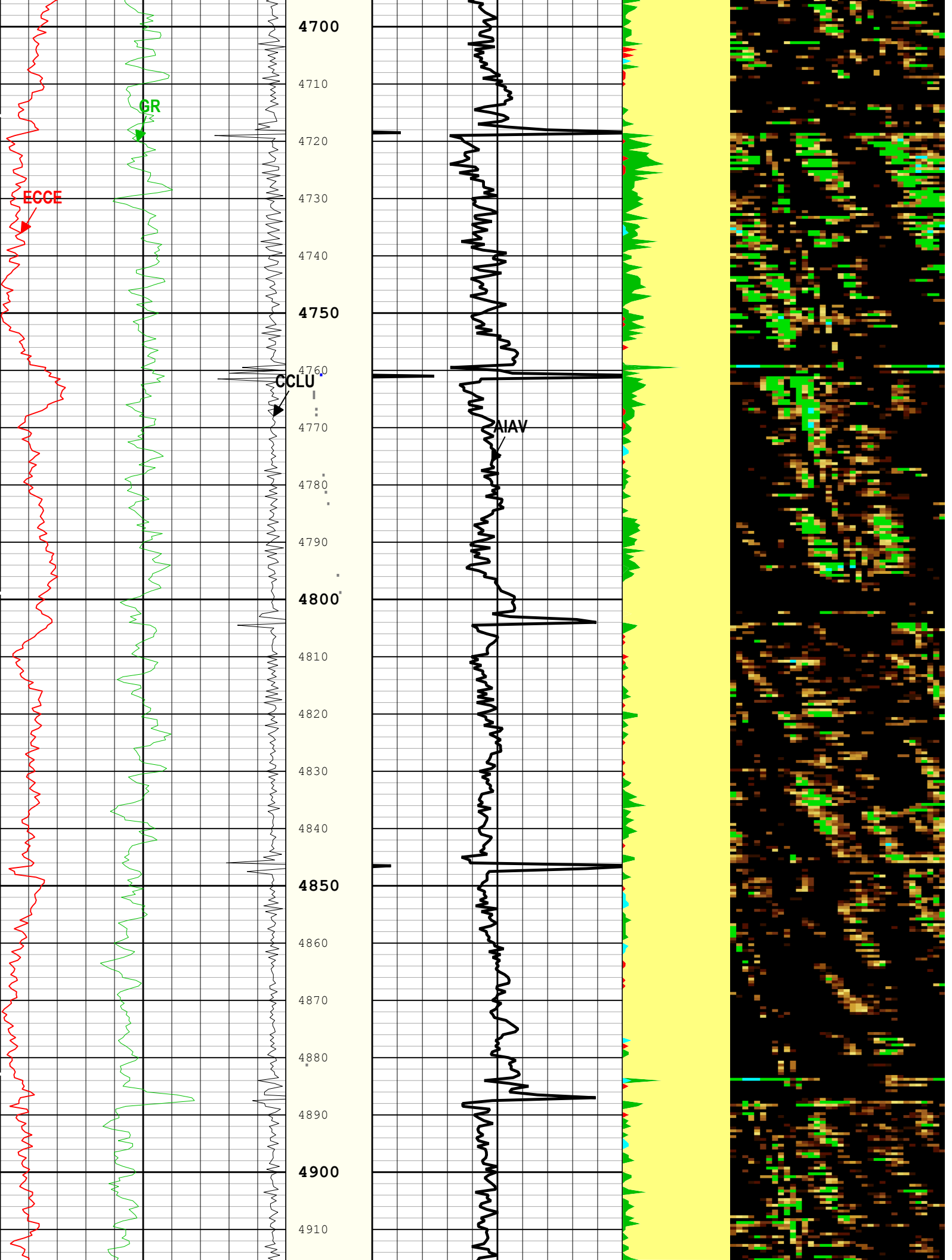


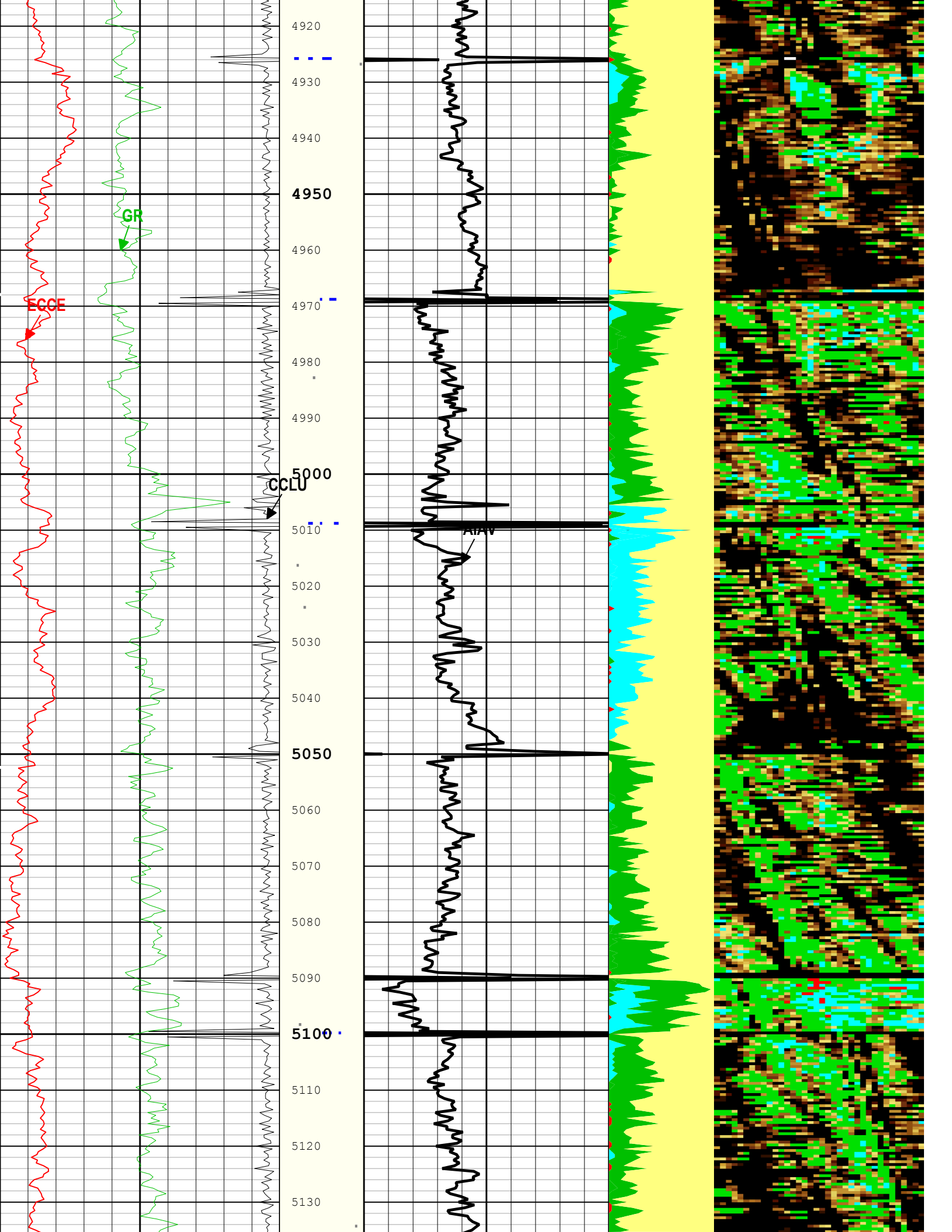


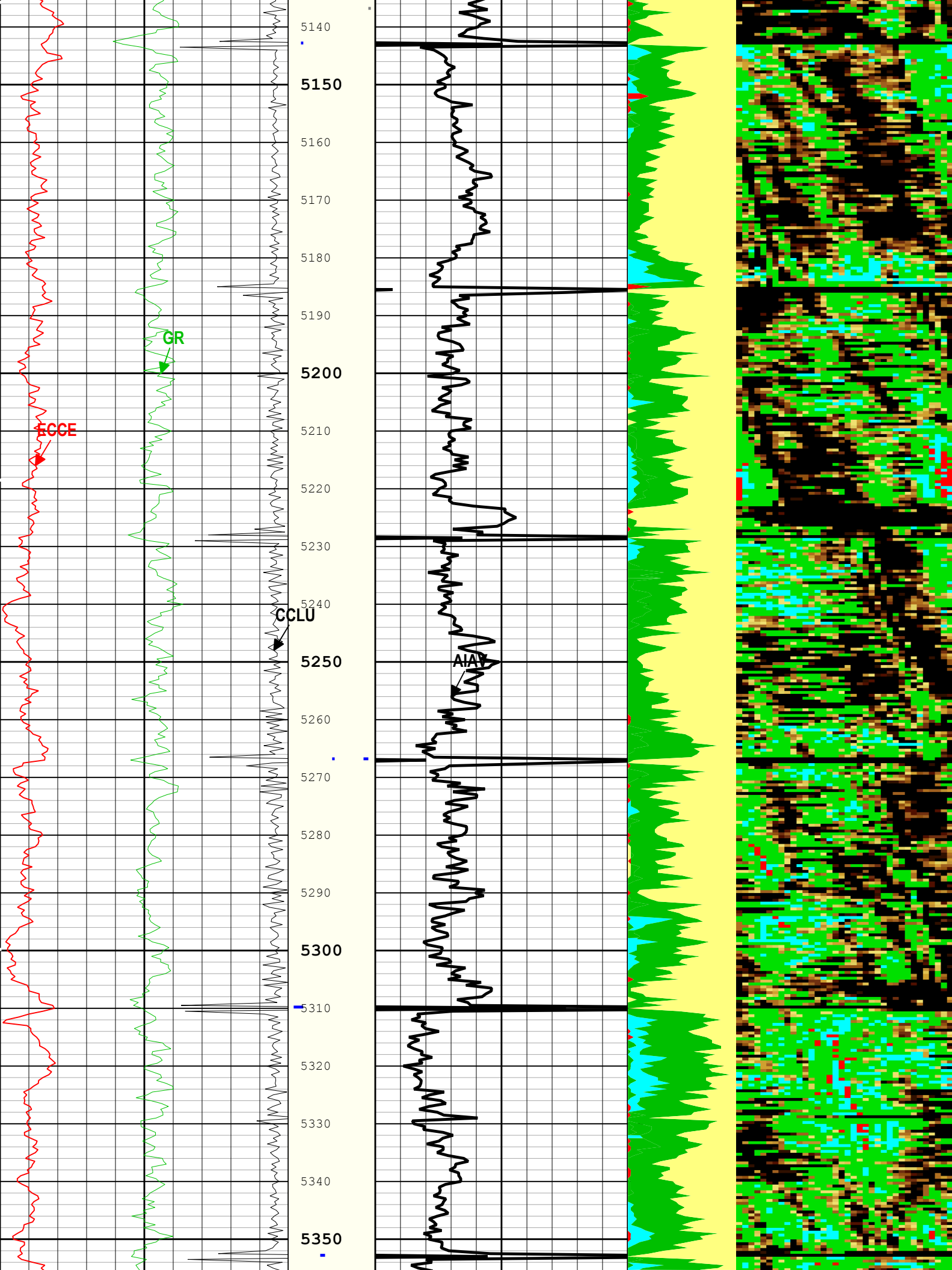


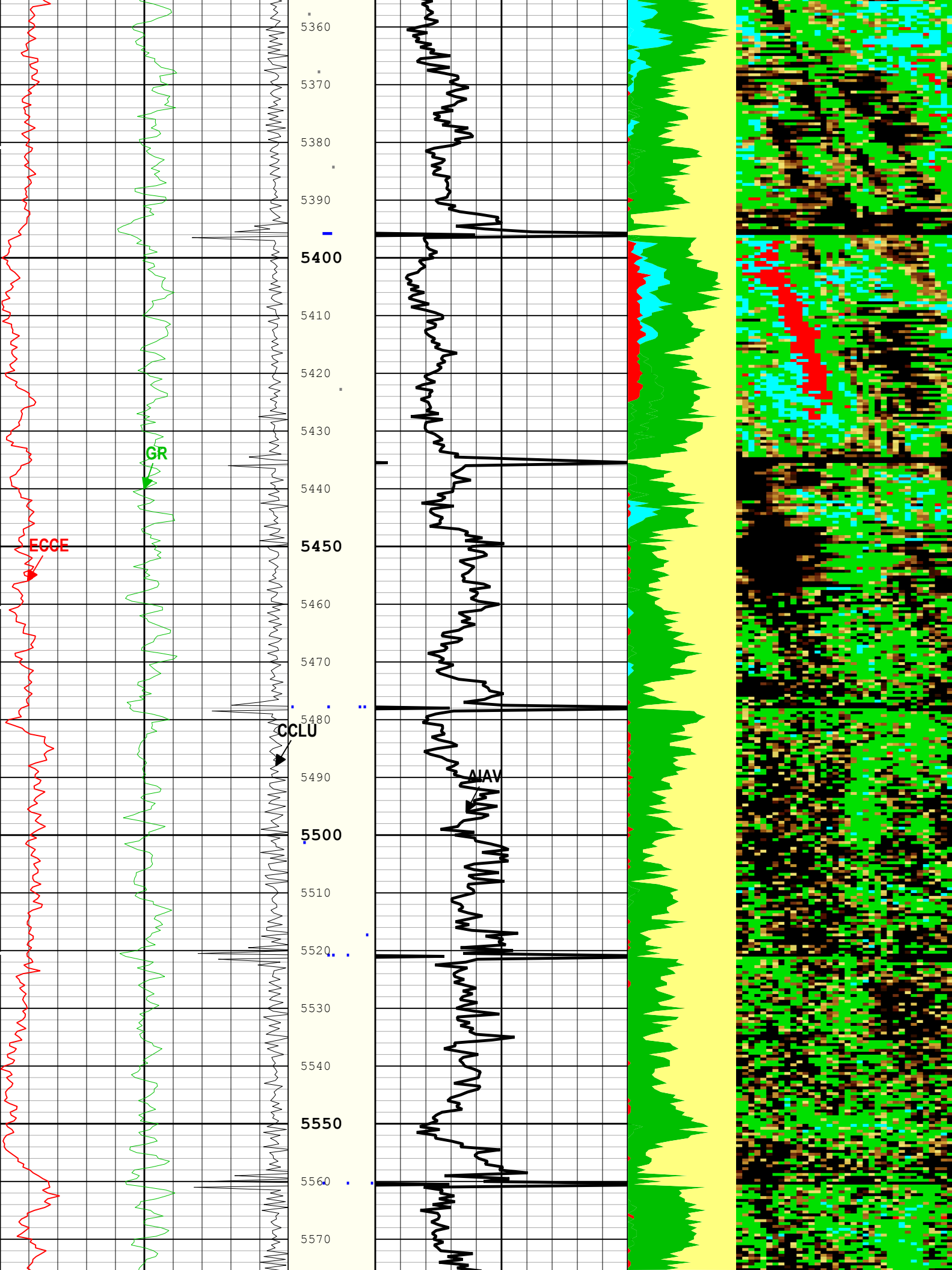


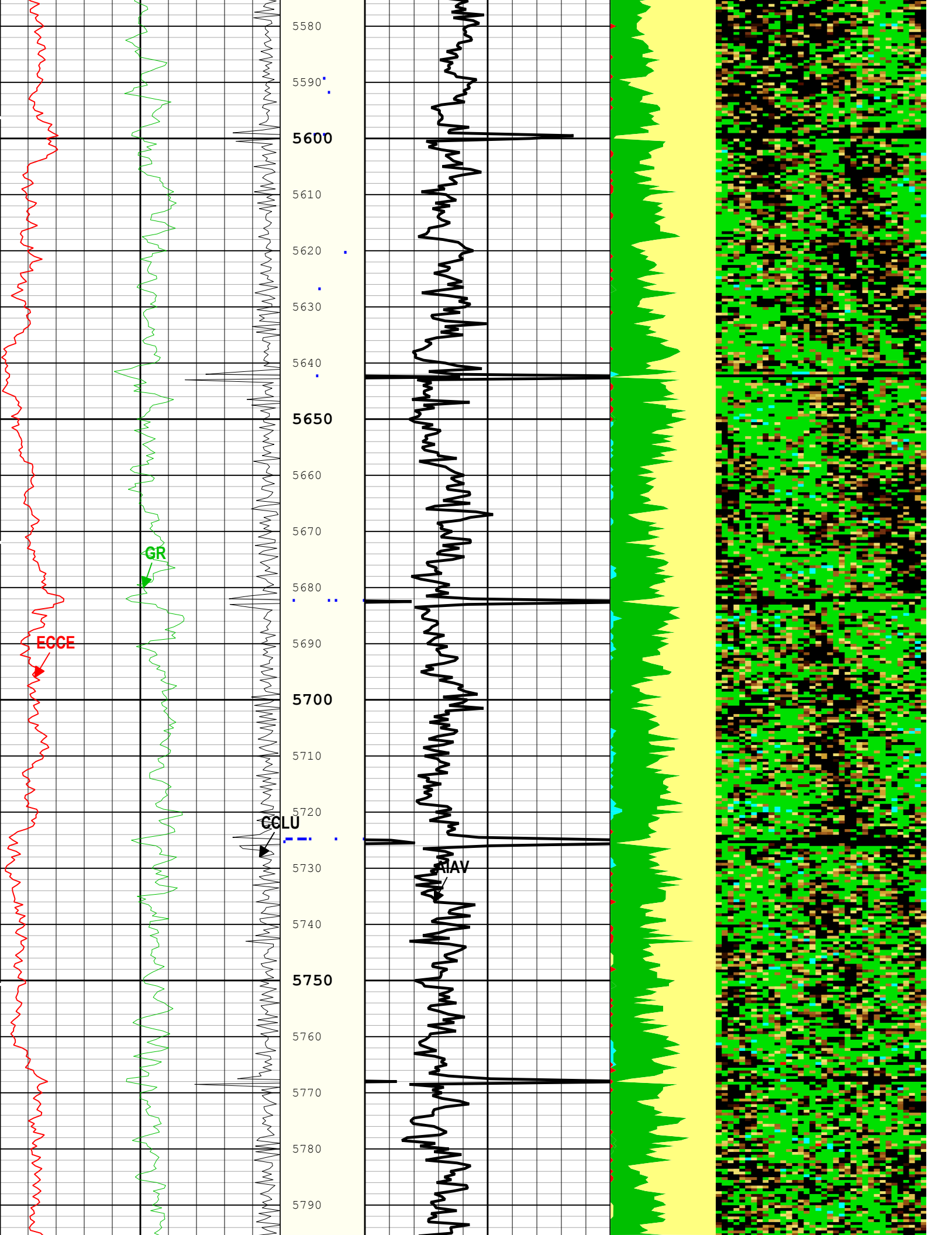


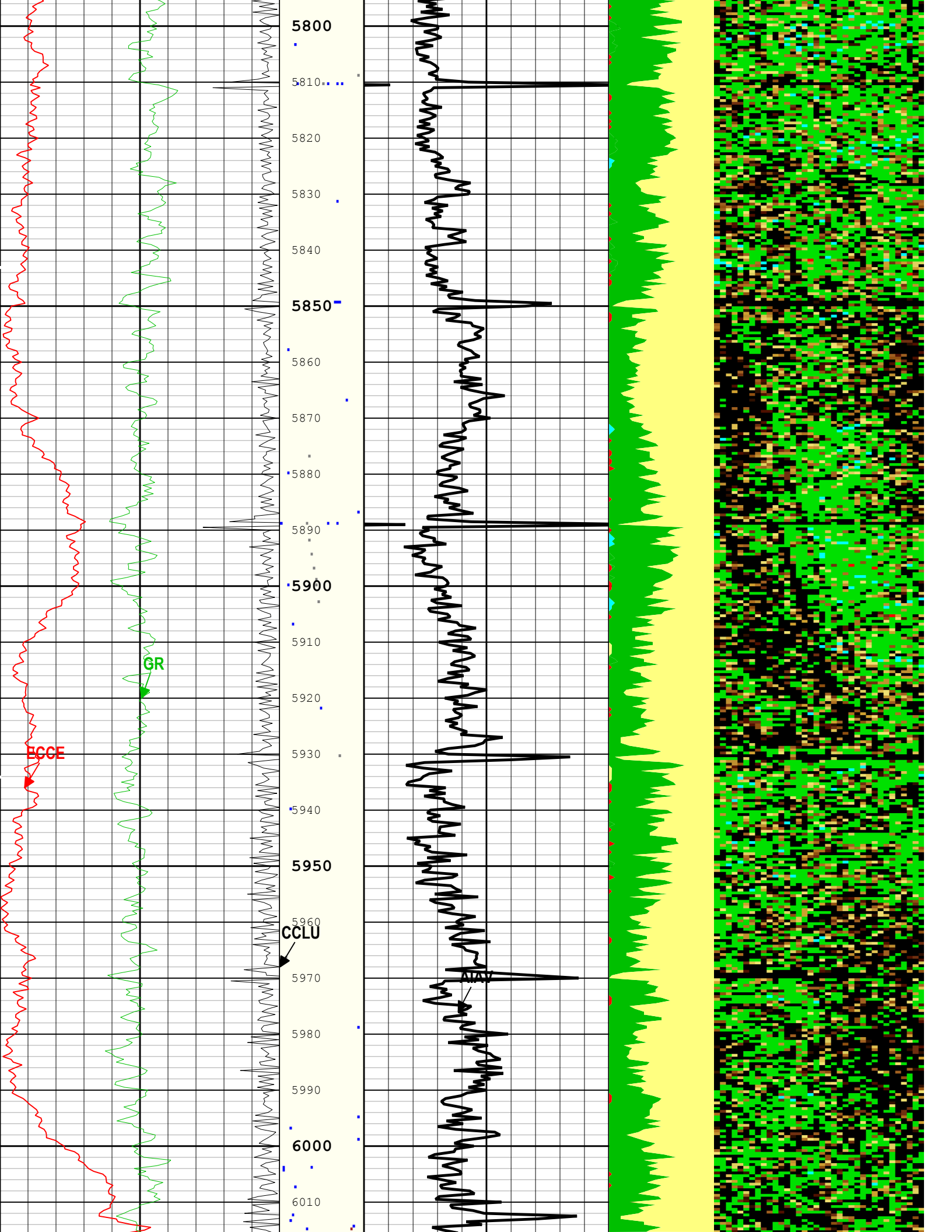


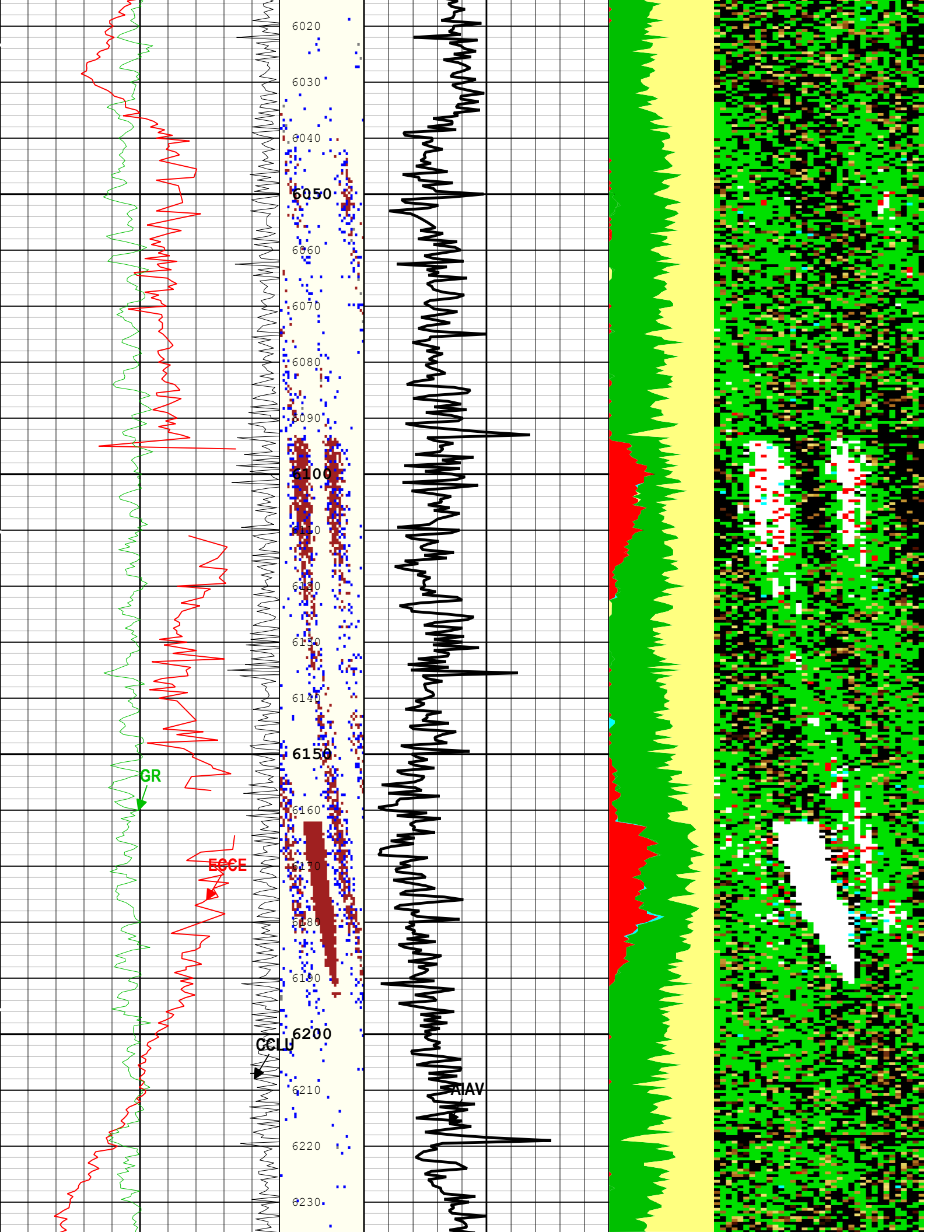


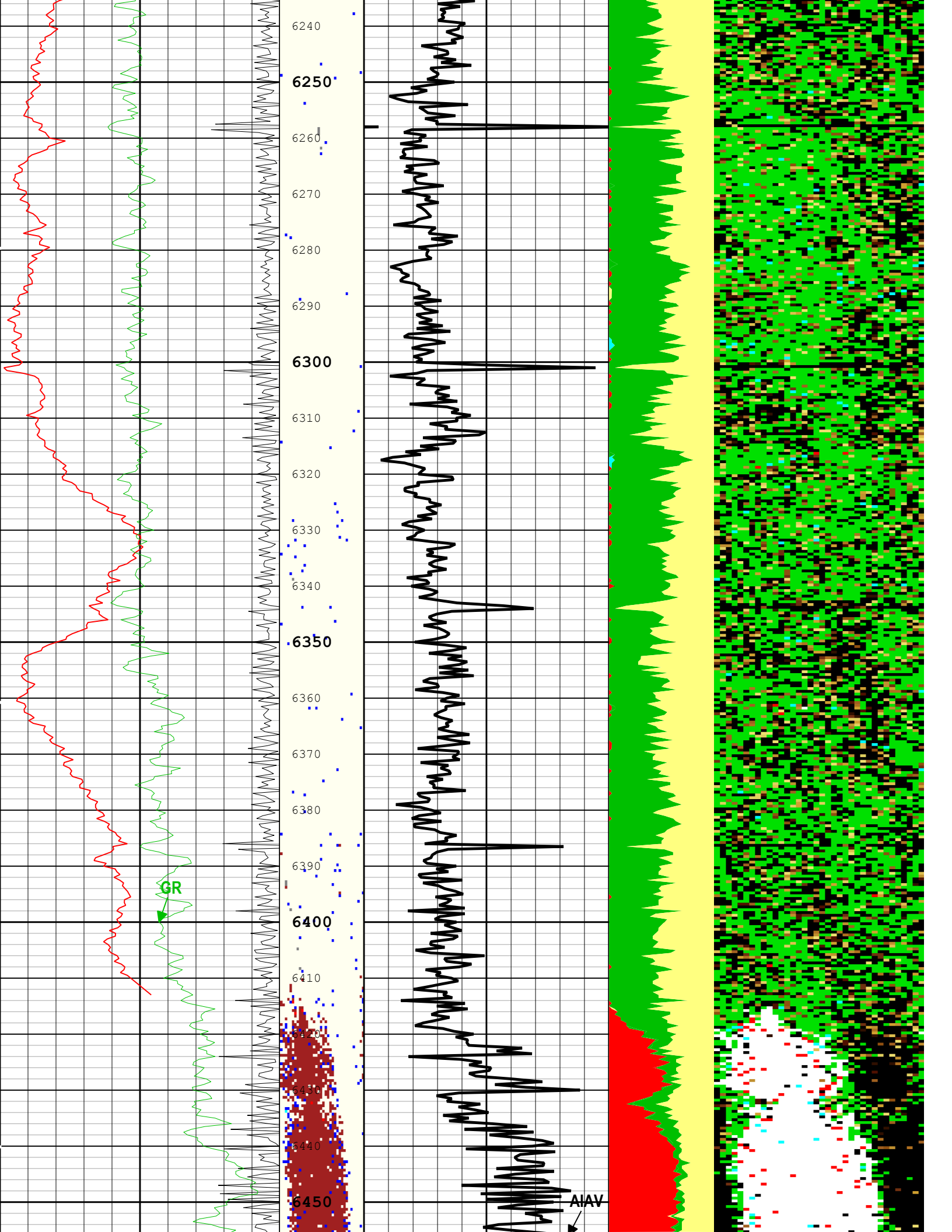


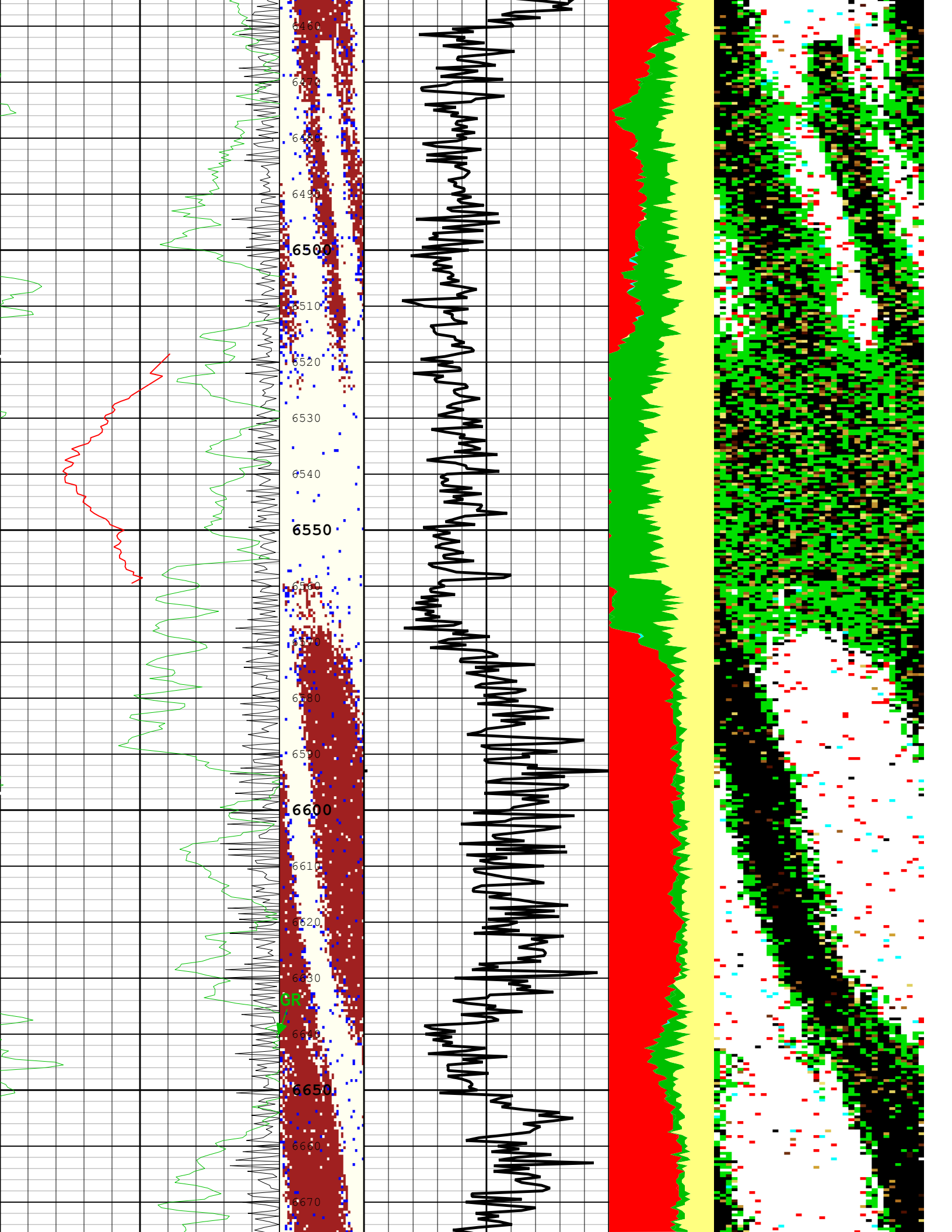


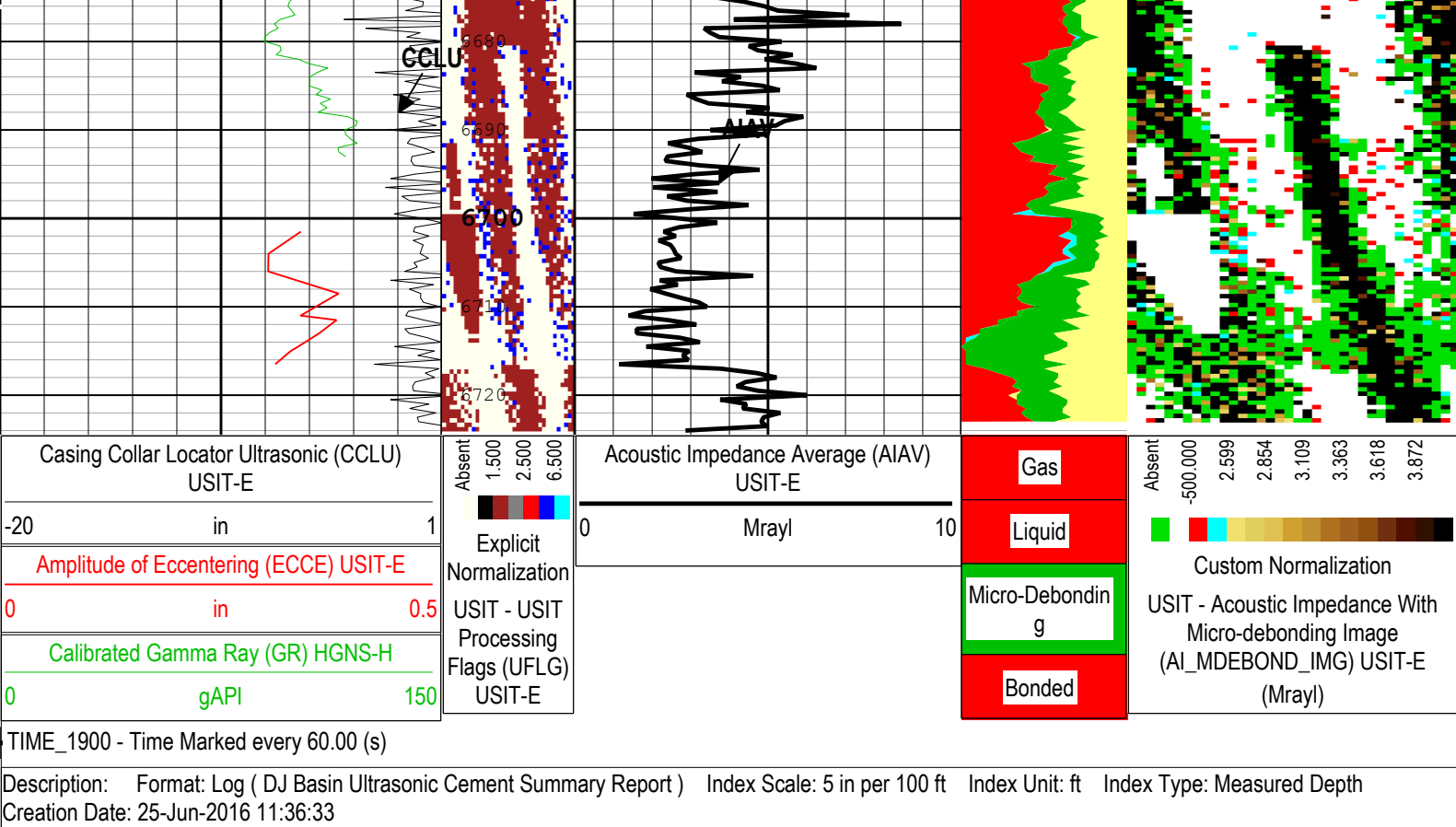












Channel Processing Parameters				
One: Parameters				
Parameter	Description	Tool	Value	Unit
ISSBAR	Barite Mud Presence Flag	Borehole	No	
BS	Bit Size	WLSESSION	Depth Zoned	in
CMTY(U-USIT_CENT)	Cement Type	USIT-E	Light Cement	
DFD	Drilling Fluid Density	Borehole	9.1	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	190	us/ft
FDII	FPM Data Interpolation Interval	USIT-E	0	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_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.03	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	0.1	Mrayl
UFGDE	Fiberglass Density	USIT-E	16.27	lbm/gal
UFGPS	Fiberglass Processing Selection	USIT-E	No	
UFGVL	Fiberglass Velocity	USIT-E	9678.48	ft/s
USI_FSOD	USIT USI Fluid Slowness Fits Casing Outer Diameter	USIT-E	0_OFF	
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	1.78	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	26	44	104

	20	44	104
BS	13.5	104	1931
BS	8.5	1931	6724.5

All depth are actual.

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
U-USIT_DDT5	USIC Downhole Decimation for T5 only	USIT-E	0_NONE	
EMXV	EMEX Voltage	USIT-E	Time Zoned	V
HRES	Horizontal Resolution	USIT-E	10 deg	
TMUC	Type of Mud	USIT-E	BRI	
ULOG	Logging Objective	USIT-E	MEASUREMENT	
UMFR	Modulation Frequency	USIT-E	333333	Hz
USFR	Ultrasonic Sampling Frequency	USIT-E	500000	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	Uncompressed 10 deg at 6.0 in LF	
USIT_DEPTHLOG	Starting Depth Log for Ultrasonics	USIT-E	3000	ft
WINB	Window Begin Time	USIT-E	Time Zoned	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)
EMXV	50	24-Jun-2016 05:43:21	24-Jun-2016 05:46:05	6725.24	6511.77
EMXV	55	24-Jun-2016 05:46:05	24-Jun-2016 05:46:13	6511.77	6501.6
EMXV	60	24-Jun-2016 05:46:13	24-Jun-2016 05:48:04	6501.6	6355.12
EMXV	65	24-Jun-2016 05:48:04	24-Jun-2016 05:51:53	6355.12	6032.82
EMXV	70	24-Jun-2016 05:51:53	24-Jun-2016 05:52:25	6032.82	5985.71
EMXV	85	24-Jun-2016 05:52:25	24-Jun-2016 05:52:49	5985.71	5950.22
EMXV	90	24-Jun-2016 05:52:49	24-Jun-2016 05:53:35	5950.22	5880.12
EMXV	95	24-Jun-2016 05:53:35	24-Jun-2016 05:56:57	5880.12	5599.82
EMXV	100	24-Jun-2016 05:56:57	24-Jun-2016 05:59:01	5599.82	5459
EMXV	95	24-Jun-2016 05:59:01	24-Jun-2016 05:59:07	5459	5451.06
EMXV	100	24-Jun-2016 05:59:07	24-Jun-2016 05:59:09	5451.06	5447.38
EMXV	105	24-Jun-2016 05:59:09	24-Jun-2016 05:59:53	5447.38	5389.62
EMXV	110	24-Jun-2016 05:59:53	24-Jun-2016 06:00:05	5389.62	5373.82
EMXV	115	24-Jun-2016 06:00:05	24-Jun-2016 06:00:25	5373.82	5346.67
EMXV	110	24-Jun-2016 06:00:25	24-Jun-2016 07:04:13	5346.67	75.52
WINB	16	24-Jun-2016 05:43:21	24-Jun-2016 05:43:29	6725.24	6717.79
WINB	34.55	24-Jun-2016 05:43:29	24-Jun-2016 05:43:42	6717.79	6700.05
WINB	29.4	24-Jun-2016 05:43:42	24-Jun-2016 05:43:47	6700.05	6692.35
WINB	21.67	24-Jun-2016 05:43:47	24-Jun-2016 05:47:41	6692.35	6385.5
WINB	30.04	24-Jun-2016 05:47:41	24-Jun-2016 05:49:19	6385.5	6252.34
WINB	35.2	24-Jun-2016 05:49:19	24-Jun-2016 05:50:23	6252.34	6162.6
WINB	31.33	24-Jun-2016 05:50:23	24-Jun-2016 05:50:26	6162.6	6157.88
WINB	28.11	24-Jun-2016 05:50:26	24-Jun-2016 05:51:10	6157.88	6095.76

WINB	26.83	24-Jun-2016 05:51:10	24-Jun-2016 05:52:37	6095.76	5968.34
WINB	33.26	24-Jun-2016 05:52:37	24-Jun-2016 05:53:55	5968.34	5849.75
WINB	34.55	24-Jun-2016 05:53:55	24-Jun-2016 05:54:40	5849.75	5780.48
WINB	38.41	24-Jun-2016 05:54:40	24-Jun-2016 06:40:52	5780.48	1901.22
WINB	41.63	24-Jun-2016 06:40:52	24-Jun-2016 07:04:13	1901.22	75.52
WINE	100	24-Jun-2016 05:43:21	24-Jun-2016 05:43:36	6725.24	6707.66
WINE	91.86	24-Jun-2016 05:43:36	24-Jun-2016 05:43:52	6707.66	6686.82
WINE	73.18	24-Jun-2016 05:43:52	24-Jun-2016 05:43:56	6686.82	6680.97
WINE	59.02	24-Jun-2016 05:43:56	24-Jun-2016 05:45:53	6680.97	6527.01
WINE	70.61	24-Jun-2016 05:45:53	24-Jun-2016 05:46:42	6527.01	6462.96
WINE	58.38	24-Jun-2016 05:46:42	24-Jun-2016 05:47:28	6462.96	6402.45
WINE	67.39	24-Jun-2016 05:47:28	24-Jun-2016 05:47:36	6402.45	6391.31
WINE	69.32	24-Jun-2016 05:47:36	24-Jun-2016 05:48:18	6391.31	6336.82
WINE	67.39	24-Jun-2016 05:48:18	24-Jun-2016 05:49:48	6336.82	6211.36
WINE	71.9	24-Jun-2016 05:49:48	24-Jun-2016 05:51:01	6211.36	6107.63
WINE	75.76	24-Jun-2016 05:51:01	24-Jun-2016 05:52:34	6107.63	5972.61
WINE	67.39	24-Jun-2016 05:52:34	24-Jun-2016 05:53:51	5972.61	5856.4
WINE	64.81	24-Jun-2016 05:53:51	24-Jun-2016 05:54:30	5856.4	5795.77
WINE	62.88	24-Jun-2016 05:54:30	24-Jun-2016 06:22:52	5795.77	3423.03
WINE	61.59	24-Jun-2016 06:22:52	24-Jun-2016 06:22:57	3423.03	3416.02
WINE	60.31	24-Jun-2016 06:22:57	24-Jun-2016 07:04:13	3416.02	75.52

All depth are at tool zero.

One

0 PSI Repeat Pass

Software Version	
Acquisition System	Version
Maxwell 2016	6.0.53731.3100

Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[2]:Up	Up	2482.51 ft	3027.11 ft	24-Jun-2016 5:20:52 AM	24-Jun-2016 5:27:26 AM	ON	3.03 ft	Yes

All depths are referenced to toolstring zero

Log

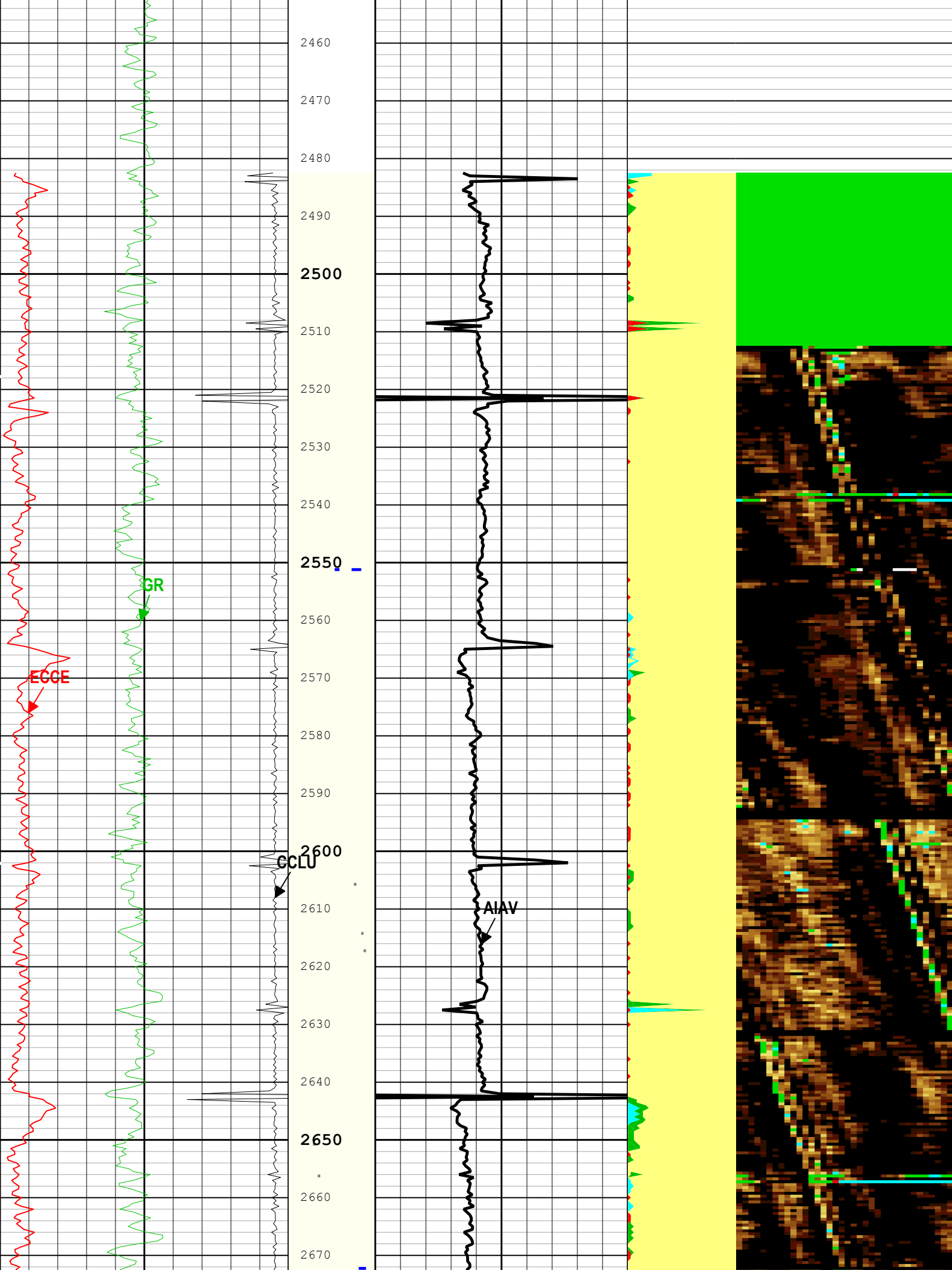
Company:Noble Enegy Inc

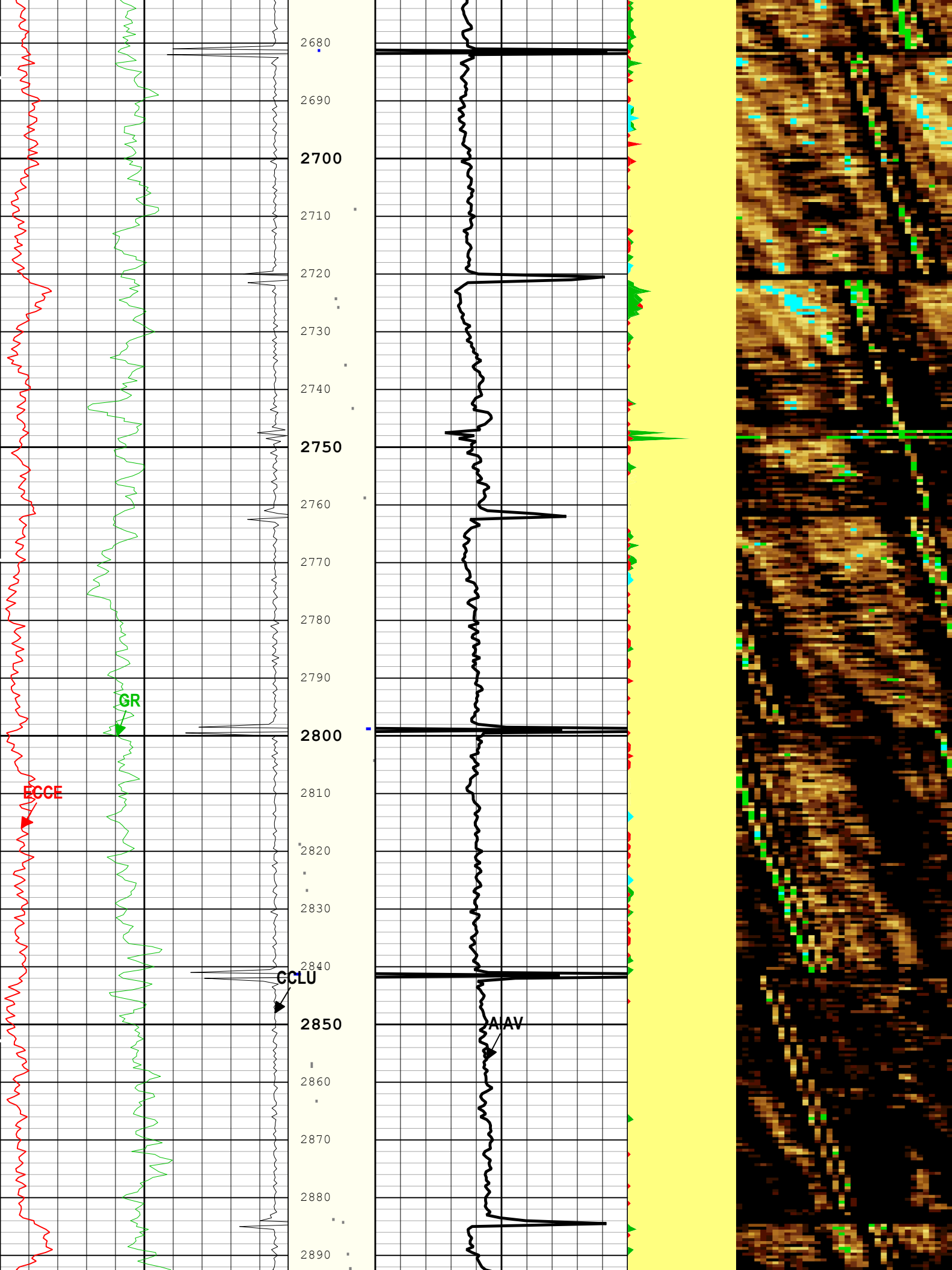
Well:Shadow State A26-618

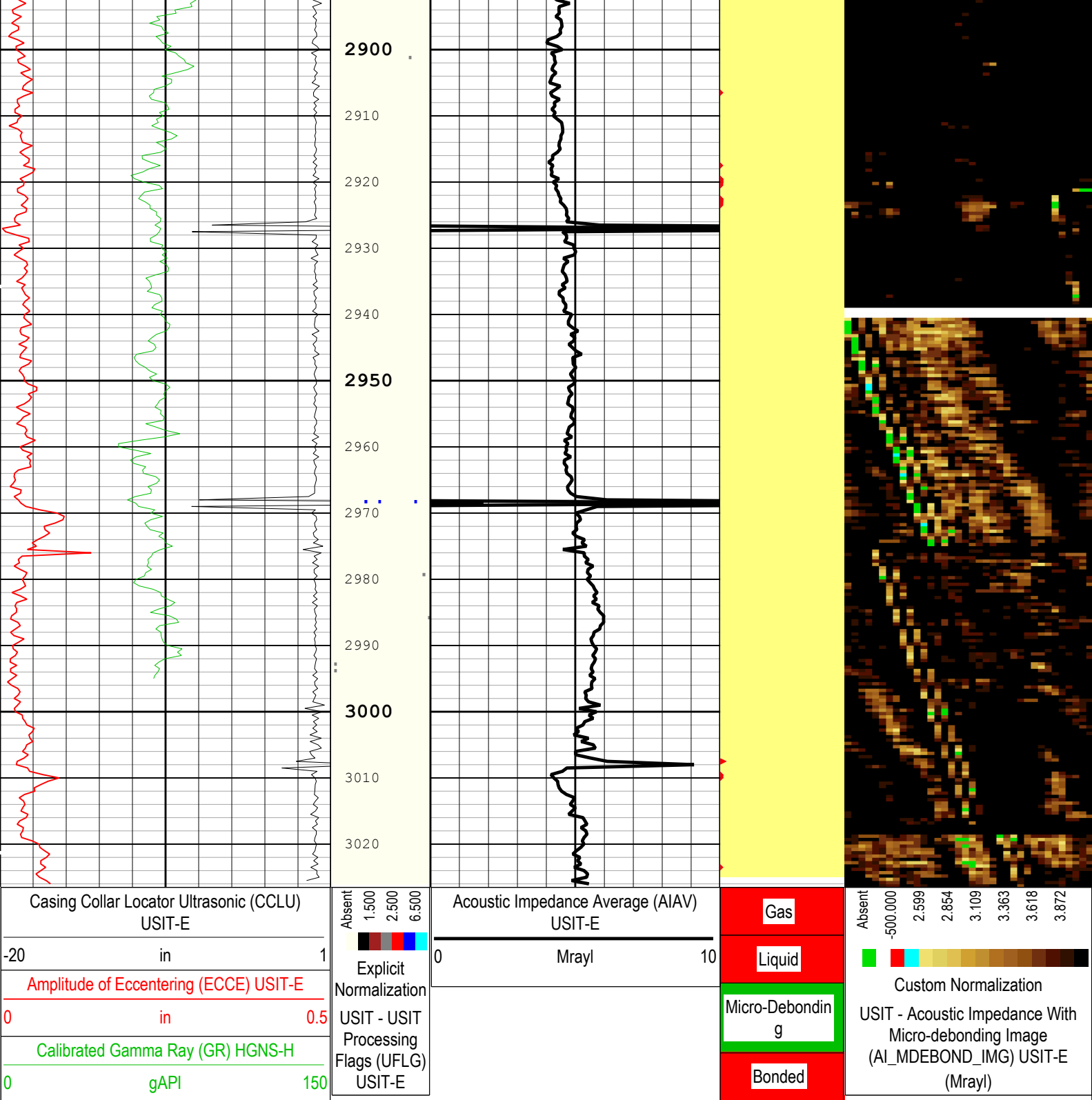
One: Log[2]:Up:S008

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: 25-Jun-2016 11:37:07

TIME_1900 - Time Marked every 60.00 (s)											
Casing Collar Locator Ultrasonic (CCLU) USIT-E			<div>Absent 1.500 2.500 6.500</div> <div>Explicit Normalization</div> <div>USIT - USIT Processing Flags (UFLG) USIT-E</div>	Acoustic Impedance Average (AIAV) USIT-E			<div>Gas</div> <div>Liquid</div> <div>Micro-Debonding</div> <div>Bonded</div>	<div>Absent -500.000 2.599 2.854 3.109 3.363 3.618 3.872</div> <div>Custom Normalization</div> <div>USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E (Mrayl)</div>			
-20	in	1		0							
Amplitude of Eccentering (ECCE) USIT-E				0							
0	in	0.5		0							
Calibrated Gamma Ray (GR) HGNS-H			<div>Absent 1.500 2.500 6.500</div> <div>Explicit Normalization</div> <div>USIT - USIT Processing Flags (UFLG) USIT-E</div>	Acoustic Impedance Average (AIAV) USIT-E			<div>Gas</div> <div>Liquid</div> <div>Micro-Debonding</div> <div>Bonded</div>	<div>Absent -500.000 2.599 2.854 3.109 3.363 3.618 3.872</div> <div>Custom Normalization</div> <div>USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E (Mrayl)</div>			
0	gAPI	150		0							







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: 25-Jun-2016 11:37:07

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	Light Cement	
DFD	Drilling Fluid Density	Borehole	9.1	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	190	us/ft

FDII	FPM Data Interpolation Interval	USIT-E	0	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_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.03	
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	0.1	Mrayl
UFGDE	Fiberglass Density	USIT-E	16.27	lbm/gal
UFGPS	Fiberglass Processing Selection	USIT-E	No	
UFGVL	Fiberglass Velocity	USIT-E	9678.48	ft/s
USI_FSOD	USIT USI Fluid Slowness Fits Casing Outer Diameter	USIT-E	0_OFF	
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	1.78	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Tool Control Parameters

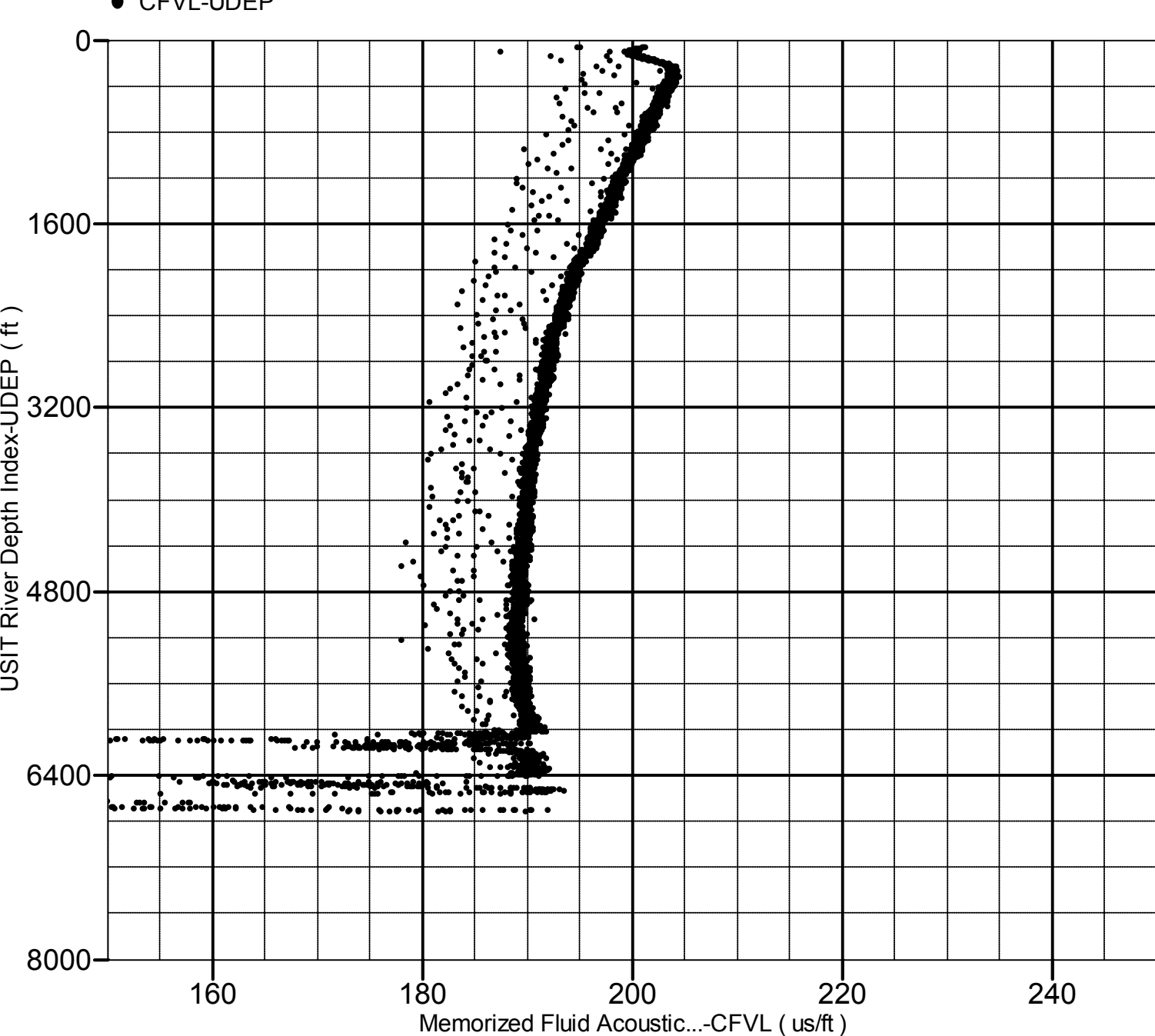
One: Parameters				
Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	18	dB
U-USIT_DDT5	USIC Downhole Decimation for T5 only	USIT-E	0_NONE	
EMXV	EMEX Voltage	USIT-E	50	V
HRES	Horizontal Resolution	USIT-E	10 deg	
TMUC	Type of Mud	USIT-E	BRI	
ULOG	Logging Objective	USIT-E	MEASUREMENT	
UMFR	Modulation Frequency	USIT-E	333333	Hz
USFR	Ultrasonic Sampling Frequency	USIT-E	500000	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 375 KHz	
UWKM	USIT Working Mode	USIT-E	Uncompressed 10 deg at 6.0 in LF	
USIT_DEPTHLOG	Starting Depth Log for Ultrasonics	USIT-E	3000	ft
WINB	Window Begin Time	USIT-E	Time Zoned	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)
WINB	27.85	24-Jun-2016 05:20:52	24-Jun-2016 05:21:30	3027.11	2976.64
WINB	33.91	24-Jun-2016 05:21:30	24-Jun-2016 05:27:26	2976.64	2482.51
WINE	67.85	24-Jun-2016 05:20:52	24-Jun-2016 05:21:35	3027.11	2969.16
WINE	62.88	24-Jun-2016 05:21:35	24-Jun-2016 05:27:26	2969.16	2482.51
All depth are at tool zero.					
XYZ		Company:Noble Enegy Inc Well:Shadow State A26-618 One: Log[4]:Up:S008			

Fluid Acoustic Slowness vs Depth

2D Cross Plot

Index Range: From 6725.00 to 75.50 ft

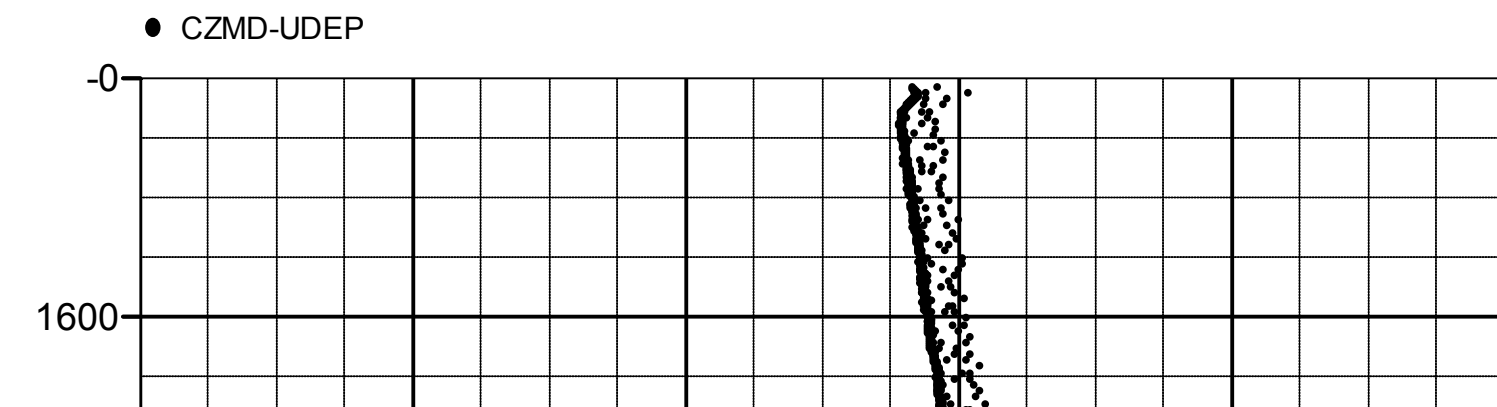


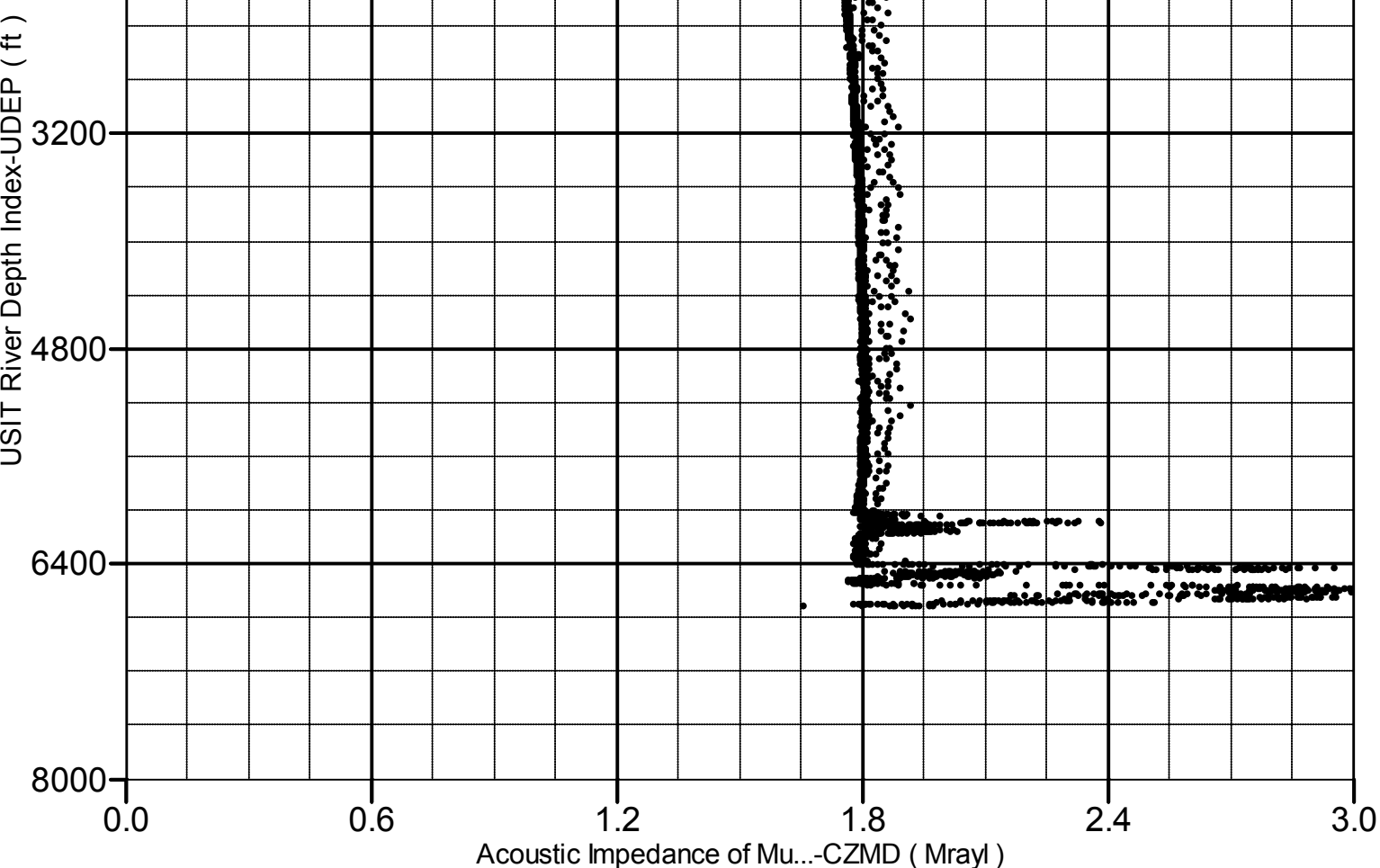
XYZ	Company:Noble Enegy Inc Well:Shadow State A26-618 One: Log[4]:Up:S008
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Acoustic Impedance of Mud vs Depth

2D Cross Plot

Index Range: From 6725.00 to 75.50 ft





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 2987

Auxiliary Equipment :

HGNS Accelerometer, 150 degC HACCZ-H 5118

AmBe Neutron Logging Source NSR-F 5069

Calibration Parameter :

Water Temperature

Housing Size

JIG-BKG (Jig minus background reference) 165

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured): 01:38:14 16-Jun-2016 Expired by 7 days

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 - 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):		08:03:00 19-Apr-2016			Before (Measured):		08:15:53 23-Jun-2016	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Near Zero Measurement	1/s	Master	0	5.0	28.0	40.0		
		Before	0	5.0	28.0	40.0		
		Before-Master	-----	-4.2	0.0	4.2		
Far Zero Measurement	1/s	Master	0	5.0	28.0	40.0		
		Before	0	5.0	27.4	40.0		
		Before-Master	-----	-4.2	-0.6	4.2		
Near Plus Measurement	1/s	Master	6031.0	4700.0	4916.0	6900.0		
		Before	-----	-----	-----	-----		
		Before-Master	-----	-----	-----	-----		
Far Plus Measurement	1/s	Master	2793.0	1900.0	2019.0	2900.0		
		Before	-----	-----	-----	-----		
		Before-Master	-----	-----	-----	-----		
Near Corrected Plus Measurement	1/s	Master		4700.0	5007.0	6900.0		
		Before	-----	-----	-----	-----		
		Before-Master	-----	-----	-----	-----		
Far Corrected Plus Measurement	1/s	Master		1900.0	2066.0	2900.0		
		Before	-----	-----	-----	-----		
		Before-Master	-----	-----	-----	-----		

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured):		08:18:06 23-Jun-2016						
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
RGR Zero Measurement	gAPI	Before	30.0	0	77.8	120.0		
RGR Plus Measurement	gAPI	Before	185.4	157.1	178.8	206.3		
GR Calibration Gain		Before	0.89	0.80	0.92	1.05		

Company:	Noble Enegy Inc	Schlumberger
Well:	Shadow State A26-618	
Field:	Wattenberg	
County:	Weld	
State:	Colorado	
UltraSonic Summary Print		