

Company: Chevron USA Inc.

Well: SKR 598-36-BV-21

Field: Skinner Ridge

County: Garfield State: Colorado

Ultrasonic Imager

Cement Evaluation (Short)

Gamma Ray - CCL Log

County: Garfield  
 Field: Skinner Ridge  
 Location: NWSW 36 5S98W  
 Well: SKR 598-36-BV-21  
 Company: Chevron USA Inc.

|                                  |               |                 |                   |
|----------------------------------|---------------|-----------------|-------------------|
| Location:                        |               | Elev.:          |                   |
| NWSW 36 5S98W                    |               | K.B. 6060.00 ft |                   |
| 1331' FSL 501' FWL               |               | G.L. 6035.00 ft |                   |
| Lat/Long: 39.56656 / -108.346561 |               | D.F. 6059.00 ft |                   |
| Permanent Datum:                 | Ground Level  | Elev.:          | 6035.00 f         |
| Log Measured From:               | Kelly Bushing | 25.00 ft        | above Perm. Datum |
| Drilling Measured From:          | Kelly Bushing |                 |                   |
| API Serial No. 05-045-16934      | Section: 36   | Township: 5S    | Range: 98W        |

|              |             |
|--------------|-------------|
| Logging Date | 11-Aug-2022 |
|--------------|-------------|

|            |    |
|------------|----|
| Run Number | 1B |
|------------|----|

|               |            |
|---------------|------------|
| Depth Driller | 6595.00 ft |
|---------------|------------|

|                    |            |
|--------------------|------------|
| Schlumberger Depth | 6595.00 ft |
|--------------------|------------|

|                     |            |
|---------------------|------------|
| Bottom Log Interval | 6505.00 ft |
|---------------------|------------|

|                  |          |
|------------------|----------|
| Top Log Interval | 25.00 ft |
|------------------|----------|

|                   |       |
|-------------------|-------|
| Casing Fluid Type | Water |
|-------------------|-------|

|          |  |
|----------|--|
| Salinity |  |
|----------|--|

|         |              |
|---------|--------------|
| Density | 8.43 lbm/gal |
|---------|--------------|

|             |         |
|-------------|---------|
| Fluid Level | 8.00 ft |
|-------------|---------|

|                          |  |
|--------------------------|--|
| BIT/CASING/TUBING STRING |  |
|--------------------------|--|

|          |         |
|----------|---------|
| Bit Size | 7.88 in |
|----------|---------|

|      |            |
|------|------------|
| From | 1092.00 ft |
|------|------------|

|    |            |
|----|------------|
| To | 6595.00 ft |
|----|------------|

|                    |        |
|--------------------|--------|
| Casing/Tubing Size | 4.5 in |
|--------------------|--------|

|        |             |
|--------|-------------|
| Weight | 11.6 lbm/ft |
|--------|-------------|

|       |     |
|-------|-----|
| Grade | N80 |
|-------|-----|

|      |         |
|------|---------|
| From | 0.00 ft |
|------|---------|

|    |            |
|----|------------|
| To | 6565.00 ft |
|----|------------|

|                           |             |
|---------------------------|-------------|
| Max Recorded Temperatures | 199.15 degF |
|---------------------------|-------------|

|                  |             |          |
|------------------|-------------|----------|
| Logger on Bottom | 12-Aug-2022 | 11:04:00 |
|------------------|-------------|----------|

|             |     |             |
|-------------|-----|-------------|
| Unit Number | TAM | Fort Morgan |
|-------------|-----|-------------|

|             |                         |
|-------------|-------------------------|
| Recorded By | J. Hahn / S. Strickland |
|-------------|-------------------------|

|              |             |
|--------------|-------------|
| Witnessed By | Jess Jacobs |
|--------------|-------------|

## Disclaimer

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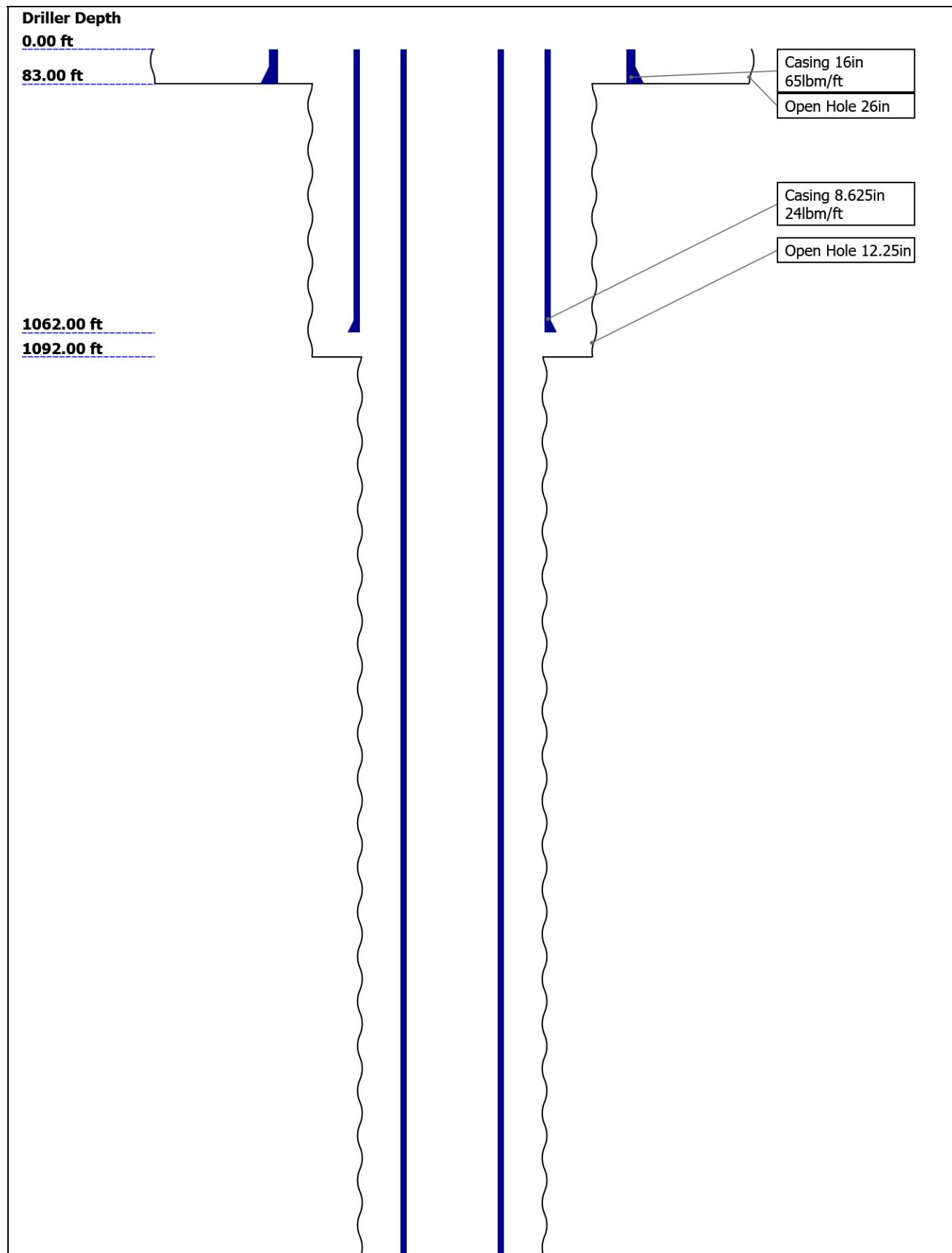
11. Pressure Pass USI Cement 2500 PSI Pass

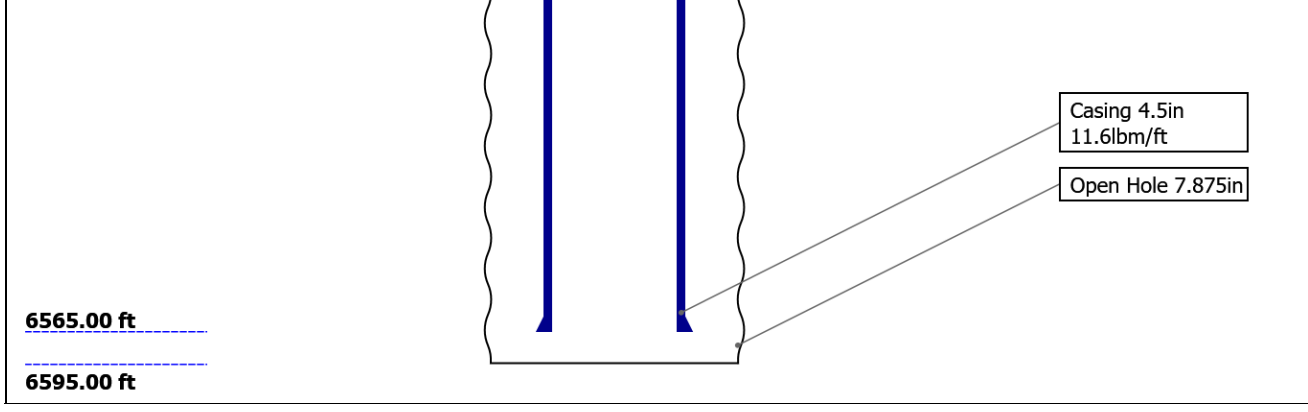
11.1 Integration Summary

11.2 Software Version

11.3 Composite Summary

## Well Sketch





## Borehole Size/Casing/Tubing Record

|                       |       |       |       |  |  |
|-----------------------|-------|-------|-------|--|--|
| Bit                   |       |       |       |  |  |
| Bit Size ( in )       | 26    | 12.25 | 7.875 |  |  |
| Top Driller ( ft )    | 0     | 83    | 1092  |  |  |
| Top Logger ( ft )     | 0     | 83    | 1092  |  |  |
| Bottom Driller ( ft ) | 83    | 1092  | 6595  |  |  |
| Bottom Logger ( ft )  | 83    | 1092  | 6595  |  |  |
| Casing                |       |       |       |  |  |
| Size ( in )           | 16    | 8.625 | 4.5   |  |  |
| Weight ( lbm/ft )     | 65    | 24    | 11.6  |  |  |
| Inner Diameter ( in ) | 15.25 | 8.097 | 4     |  |  |
| Grade                 | N/A   | J55   | N80   |  |  |
| Top Driller ( ft )    | 0     | 0     | 0     |  |  |
| Top Logger ( ft )     | 0     | 0     | 0     |  |  |
| Bottom Driller ( ft ) | 83    | 1062  | 6565  |  |  |
| Bottom Logger ( ft )  | 83    | 1062  | 6565  |  |  |

## Remarks and Equipment Summary

| 1B: Toolstring    |               |                |               | 1B: Remarks  |  |
|-------------------|---------------|----------------|---------------|--|--|
| <b>Equip name</b> | <b>Length</b> | <b>MP name</b> | <b>Offset</b> | <p>Thank you for choosing Schlumberger!</p> <p>Log run for cement and casing evaluation</p> <p>Tool string run as per tool sketch, centralized using Houma/booster kit</p> <p>USRS-AB sub with USI-TX transducer</p> <p>Log correlated to top joint</p> <p>Main pass logged in 10 deg 3"<br/>Repeat passes logged at 10 deg 0.6"</p> <p>Logs done in 0 psi and then 2500 psi surfaced induced pressure</p> |  |
| LEH-MT            | 31.11         |                |               |  |  |
| LEH-MT            |               |                |               |  |  |
| DTC-H             | 27.96         | CTEM           | 27.06         |  |  |
| ECH-KC            |               | HV             | 0.00          |  |  |
| DTC-H             |               | TelStatus      | 24.96         |  |  |
|                   |               | ToolStatus     | 24.96         |  |  |
| SGT-N             | 24.96         | GR             | 24.04         |  |  |
| SGH-K             |               |                |               |  |  |
| SGC-TB            |               |                |               |  |  |
| SGD-TAA           |               |                |               |  |  |
| AH-184[2]         | 19.46         |                |               |  |  |
| AH-184[1]         | 17.46         |                |               |  |  |

**USIT-E** 15.46  
 ECH-MFA  
 USAC-A  
 USIS-A  
 USSC-B  
 USRS-AB  
 USI-SENS  
 OR  
 USI-TX

**USI Sen 0.37**  
**sensor**  
**TOOL\_ZERO**  
**Head Fe**  
**nsion**

Length in ft  
 Maximum Outer Diameter = 3.410 in  
 Line: Sensor Location, Value: Gating Offset  
 All measurements are relative to TOOL\_ZERO

## Depth Summary

|  |    |  |  |
|--|----|--|--|
|  | 1B |  |  |
|--|----|--|--|

### Depth Measuring Device

|                          |       |  |  |
|--------------------------|-------|--|--|
| Type                     | IDW-B |  |  |
| Serial Number            |       |  |  |
| Calibration Date         |       |  |  |
| Calibrator Serial Number |       |  |  |
| Calibration Cable Type   |       |  |  |
| Wheel Correction 1       | 0     |  |  |
| Wheel Correction 2       | 0     |  |  |

### Tension Device

|                              |          |  |  |
|------------------------------|----------|--|--|
| Type                         | CMTD-B/A |  |  |
| Serial Number                |          |  |  |
| Calibration Date             |          |  |  |
| Calibrator Serial Number     |          |  |  |
| Number of Calibration Points | 0        |  |  |

### Logging Cable

|                 |             |  |  |
|-----------------|-------------|--|--|
| Type            | 7-39PI-XS   |  |  |
| Serial Number   | 1234        |  |  |
| Length          | 24000.00 ft |  |  |
| Conveyance Type | Wireline    |  |  |
| Rig Type        | Land        |  |  |

|                                    |                              |
|------------------------------------|------------------------------|
| <b>1B:Depth Control Parameters</b> | <b>Depth Control Remarks</b> |
|------------------------------------|------------------------------|

|                          |  |
|--------------------------|--|
| Log Sequence             | First Log In the Well                          |
| Rig Up Length At Surface | Schlumberger depth control procedures followed |
| Rig Up Length At Bottom  | IDW used as primary depth control system       |
| Rig Up Length Correction | Z-Chart used as secondary depth control system |

# USIT - Fluid Properties Measurement

| Run Name | Pass Name   | Start Depth(ft) | Stop Depth(ft) |
|----------|-------------|-----------------|----------------|
| Run 2    | Log[1]:Down | 3.96            | 6493.69        |

Fluid Velocity = "Automatic".  
 CFVL equals DFSL channel

| Start Depth(ft) | Stop Depth(ft) | Start Value(us/ft) | End Value(us/ft) |
|-----------------|----------------|--------------------|------------------|
|-----------------|----------------|--------------------|------------------|

Mud Impedance = "Theoretical".  
 CZMD uses theoretical results.  
 MUD\_N\_THE=1.07  
 DFD=1.01g/cm3(8.43lbm/gal)

| Start Depth(ft) | Stop Depth(ft) | Start Value(Mrayl) | End Value(Mrayl) |
|-----------------|----------------|--------------------|------------------|
|-----------------|----------------|--------------------|------------------|

## 1B

## USI Cement 0 PSI Pass

### Software Version

| Acquisition System | Version   |
|--------------------|---|
| Maxwell 2022.0     | 12.0.215014.3100  |
| Application Patch  | Wireline_Hotfix-Mandatory-2022.0_12.0.217167<br>Wireline_NPD-ThruBit-2022.0_12.0.217960 |

### Pass Summary

| Run Name | Pass Objective | Direction | Top     | Bottom     | Start                  | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|---------|------------|------------------------|-------------------------|----------|-------------|-----------------------|
| 1B       | Log[1]:Down    | Down      | 3.96 ft | 6493.69 ft | 11-Aug-2022 9:59:07 AM | 11-Aug-2022 11:04:56 AM | ON       | -11.33 ft   | Yes                   |

All depths are referenced to toolstring zero

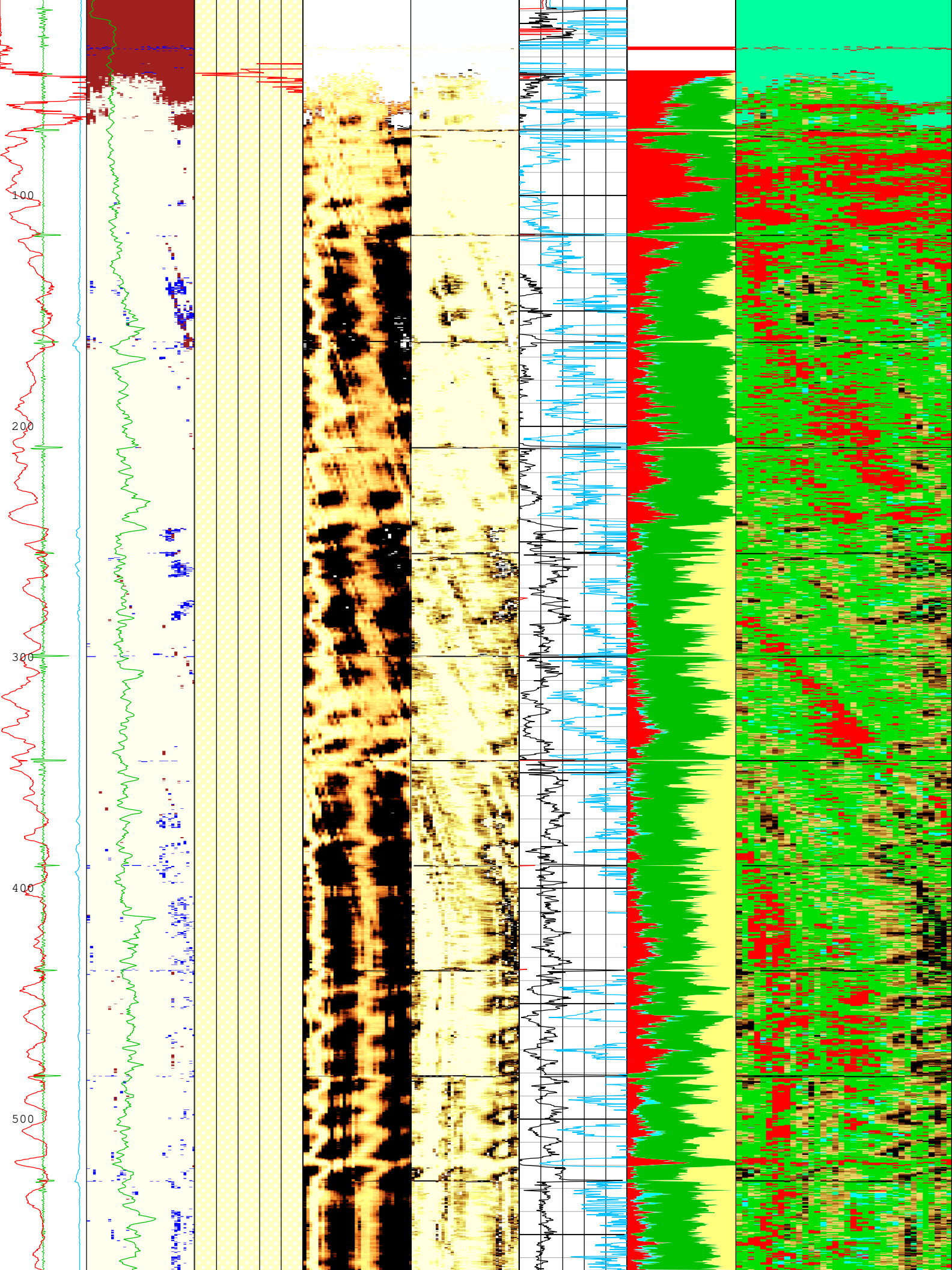
| Log | Company:Chevron USA Inc. | Well:SKR 598-36-BV-21 |
|-----|--------------------------|-----------------------|
|     |                          | 1B: Log[1]:Down:S010  |

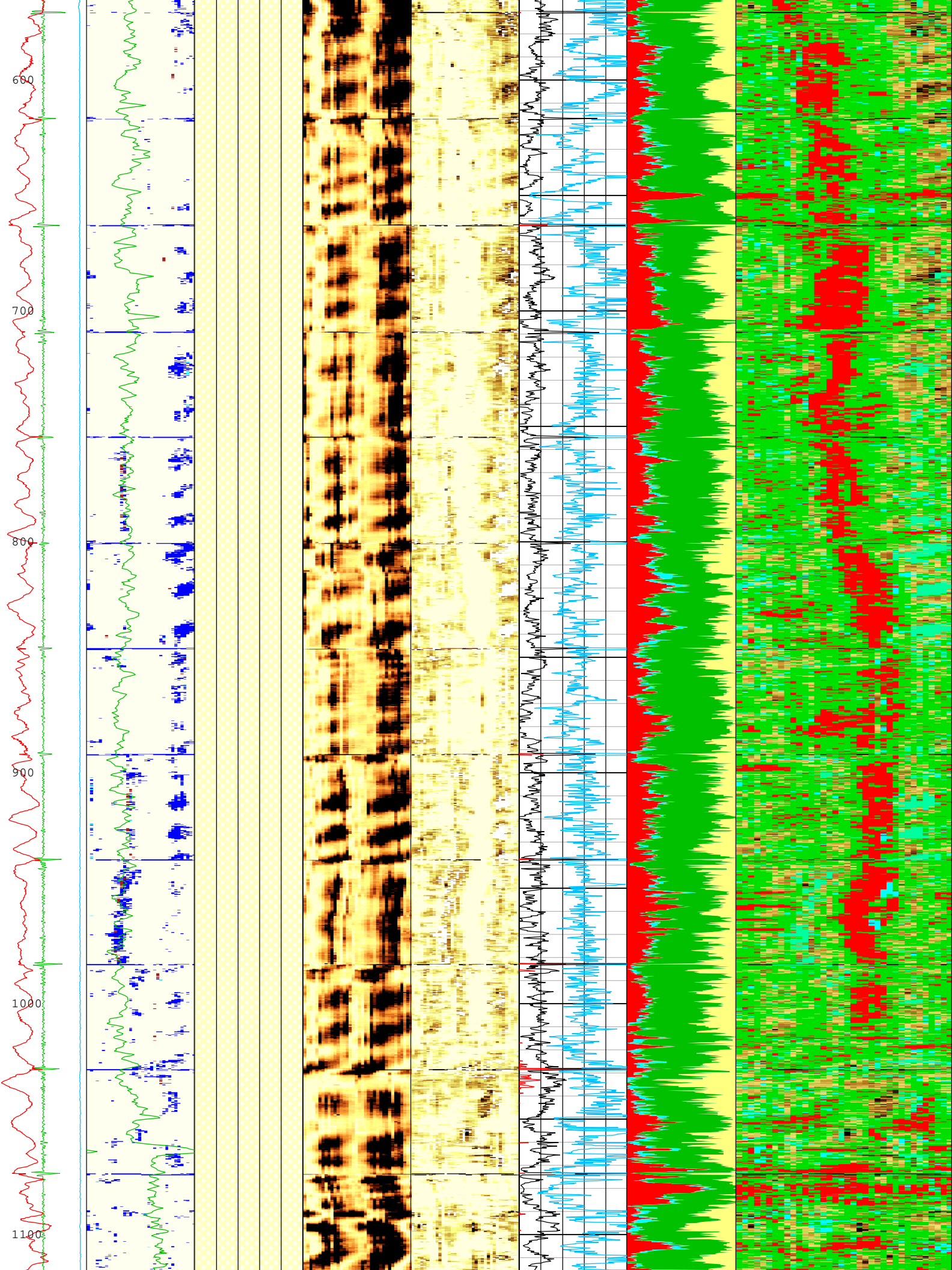
Description: USI Cement Format: Log ( USI Cement 2 inch ) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:30:22

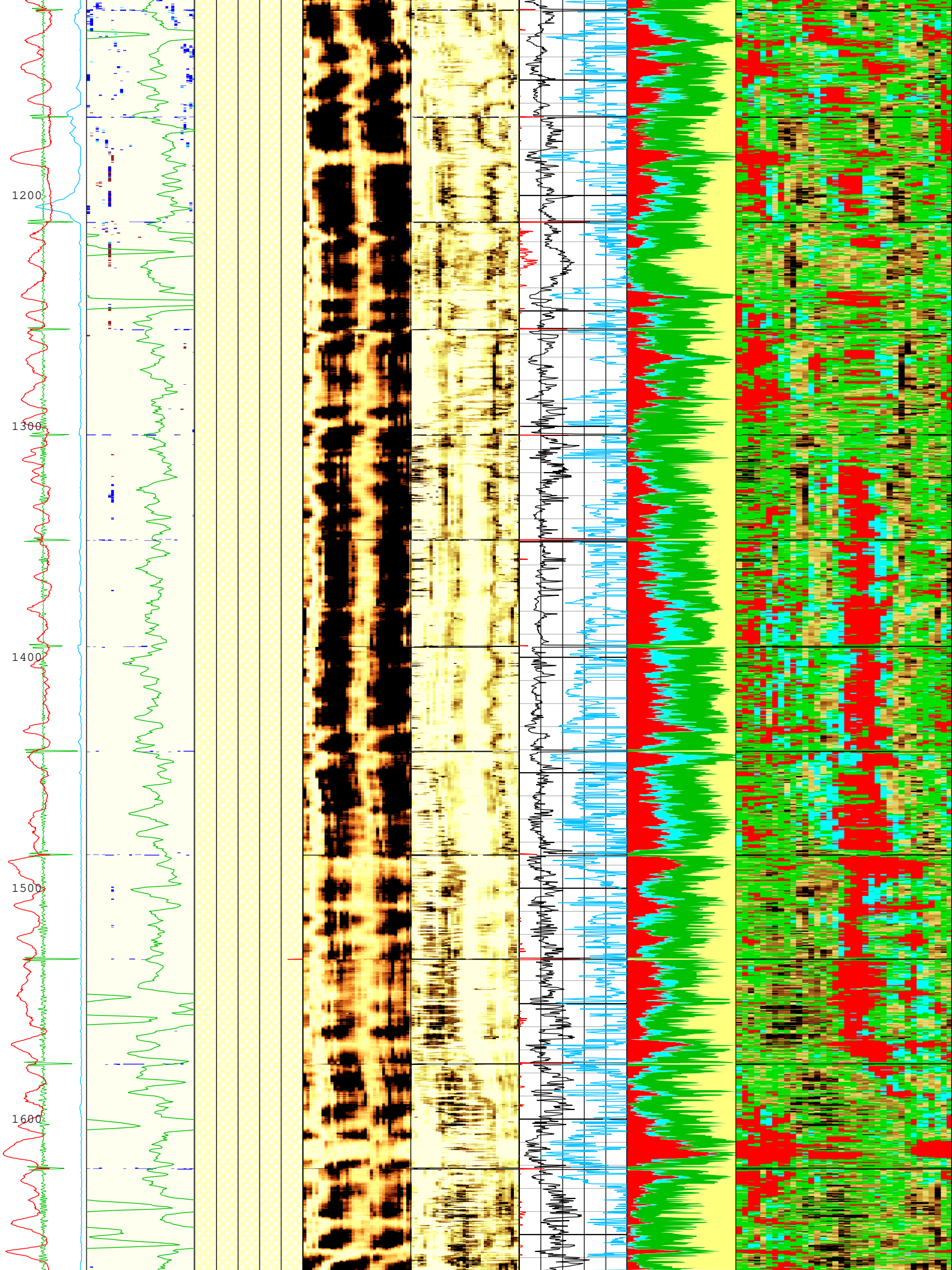
TIME\_1900 - Time Marked every 60.00 (s)

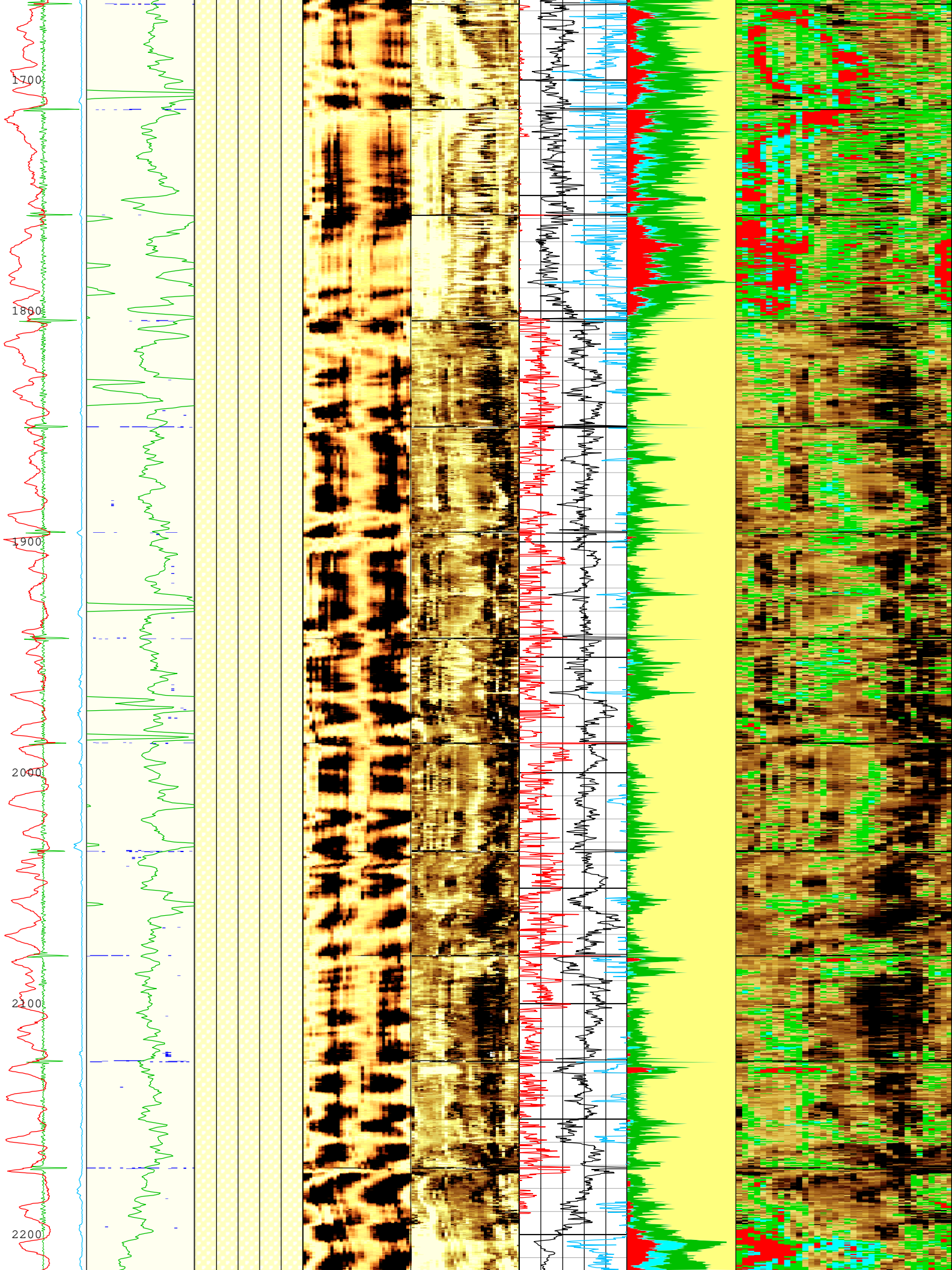
|   |   |  |   |  |   |   |  |  |  |   |
|---|---|--|---|--|---|---|--|--|--|---|
| Casing Collar Locator Ultrasonic (CCLU) USIT-E<br>-20 in 20 | Motor Revolution Speed (RSAV) USIT-E<br>6 c/s 7.5 | Amplitude of Eccentering (ECCE) USIT-E<br>0 in 0.5 | External Radii Average (ERAV) USIT-E<br>3.7 in 2.7                      | Internal Radius Averaged Value (IRAV) USIT-E<br>3.7 in 2.7 | Internal Radius Maximum Value (IRMX) USIT-E<br>3.7 in 2.7 | Internal Radius Minimum Value (IRMN) USIT-E<br>3.7 in 2.7 | Acoustic Impedance Minimum (AIMN) USIT-E<br>-1 Mrayl 9 | Acoustic Impedance Average (AIAV) USIT-E<br>-1 Mrayl 9 | Acoustic Impedance Maximum (AIMX) USIT-E<br>-1 Mrayl 9 | Bonded<br>Gas<br>Liquid<br>Micro-debondin g |
|   |   |  | Explicit Normalization USIT - USIT Processing Flags (UFLG) USIT-E<br>GR |  |   |   |  |  |  |   |

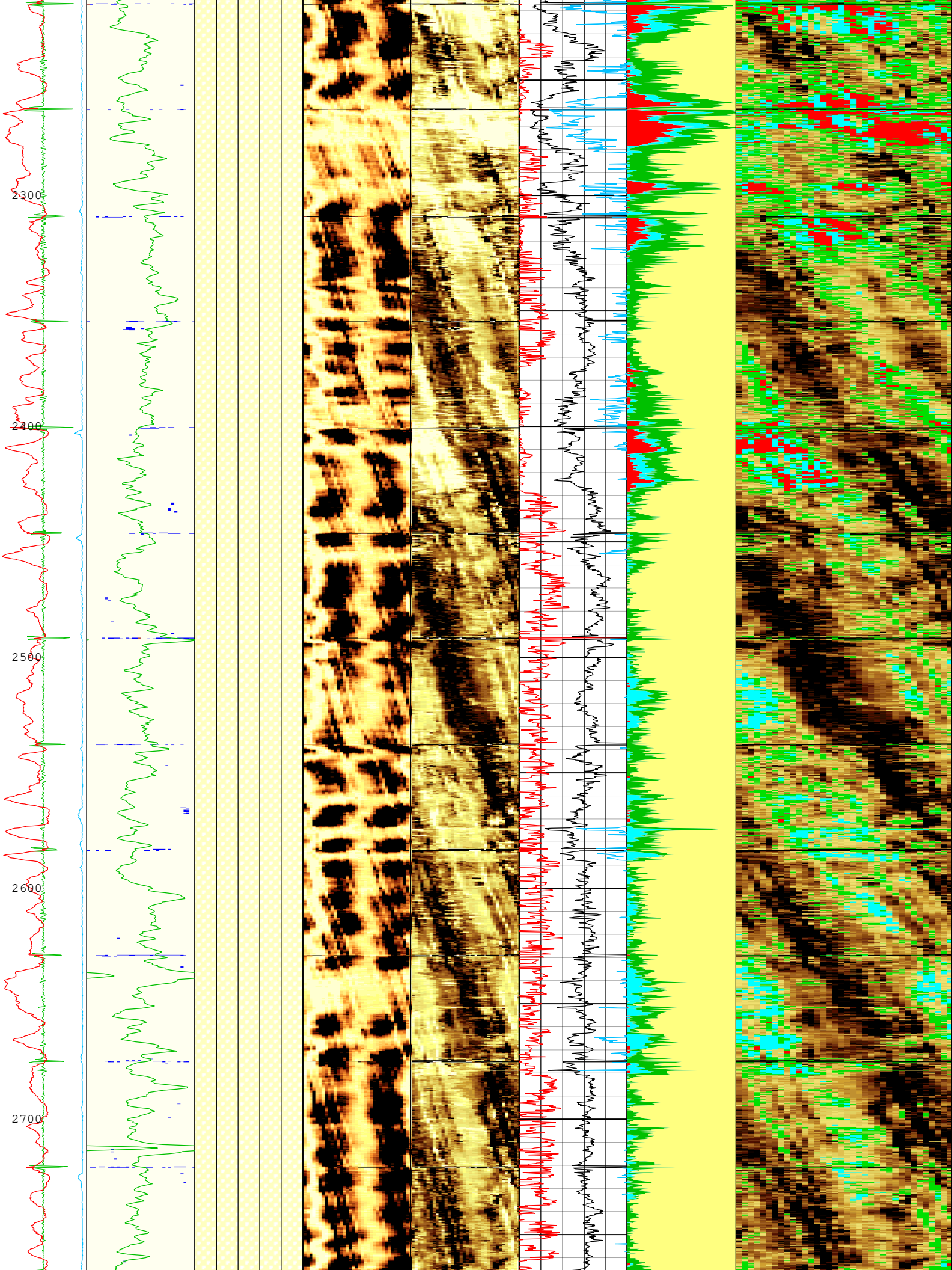


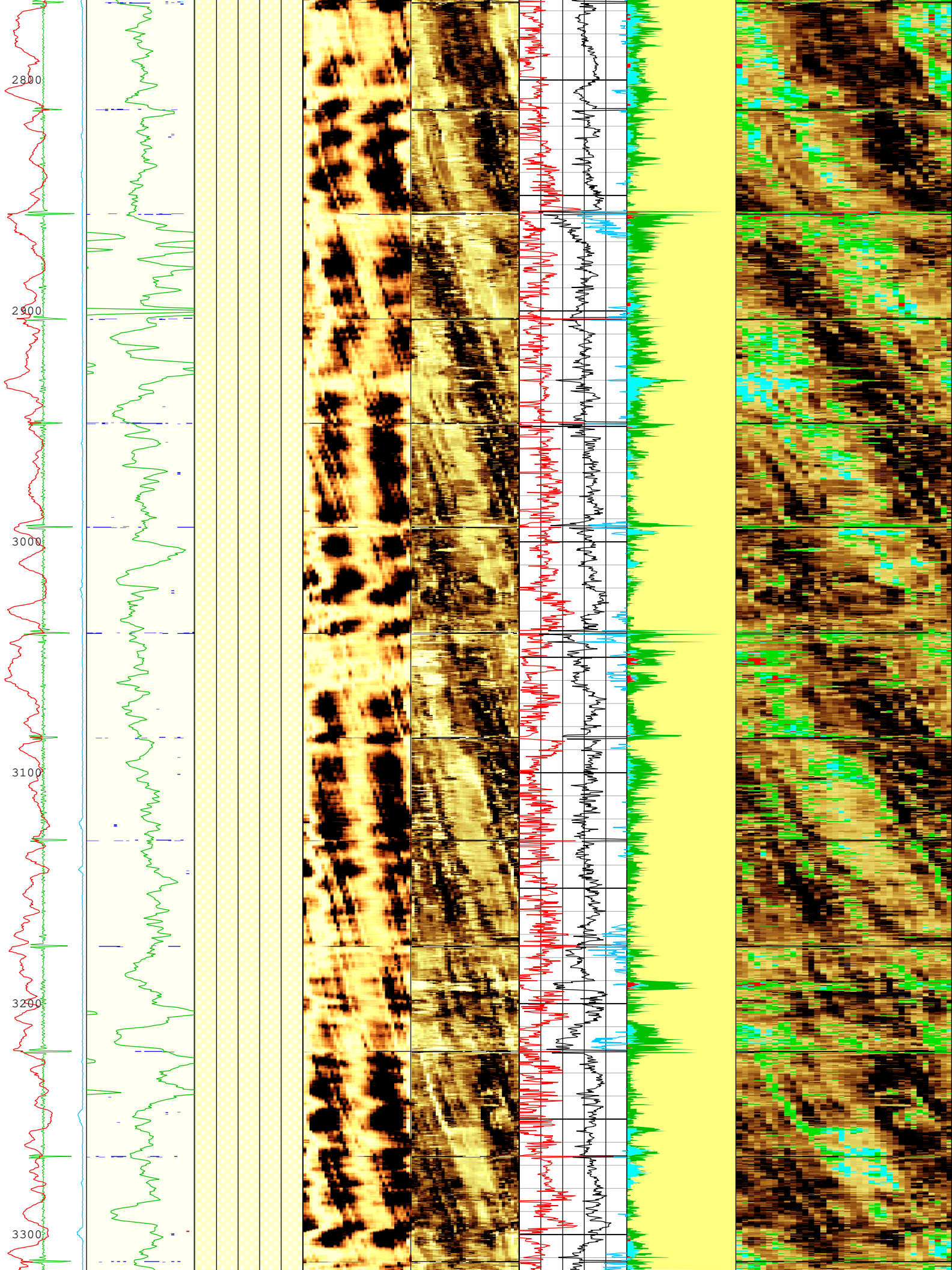


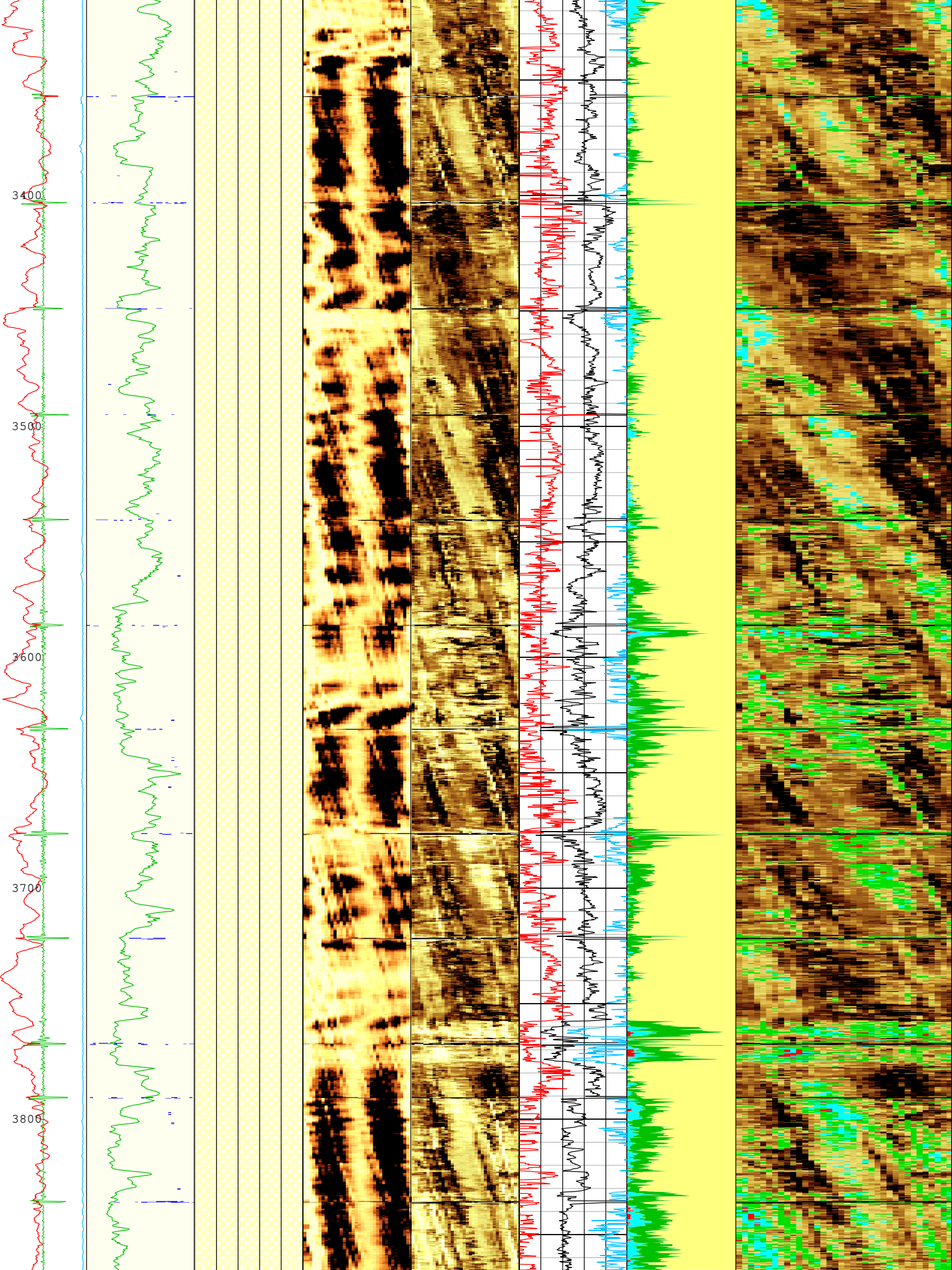


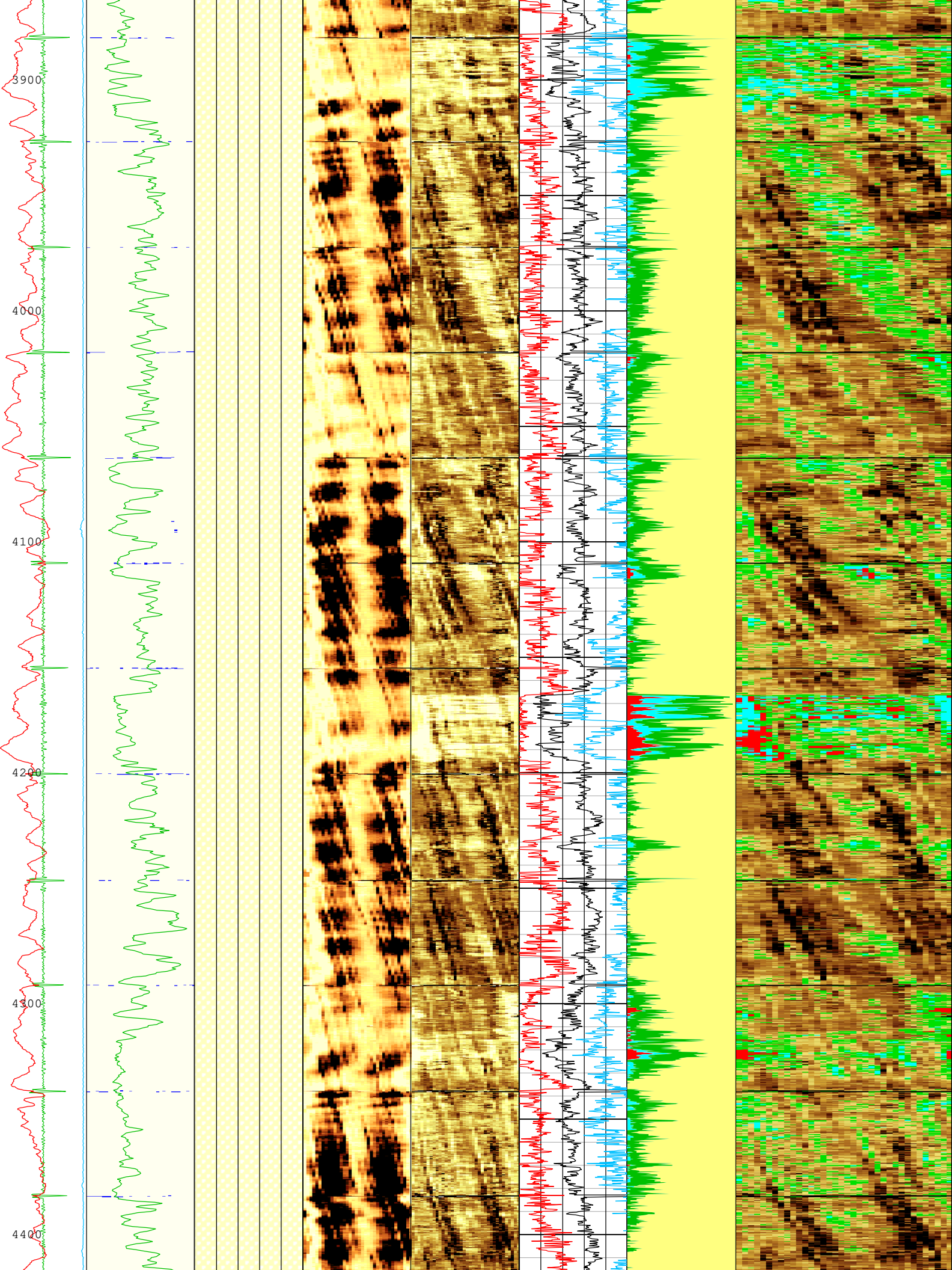


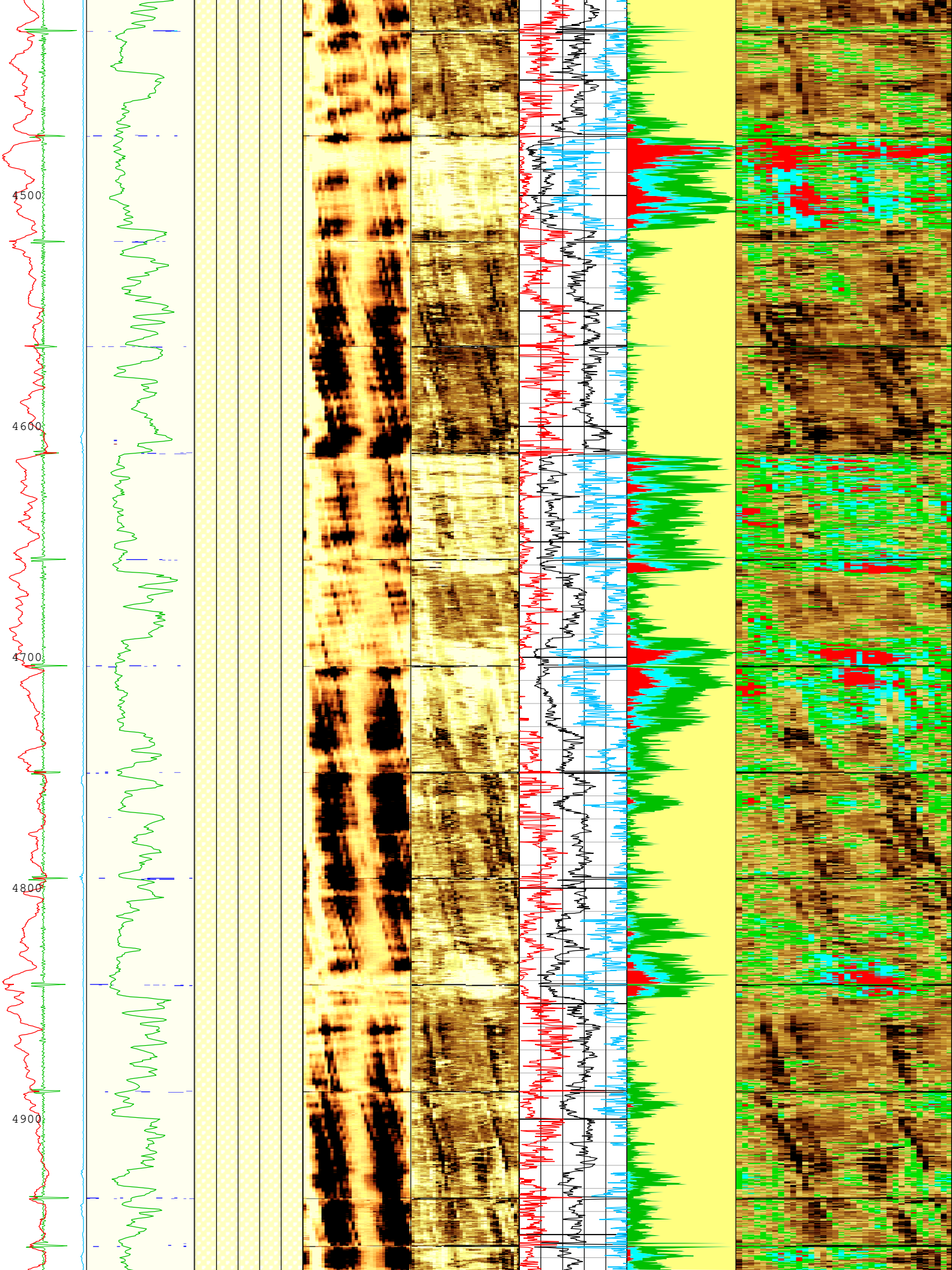


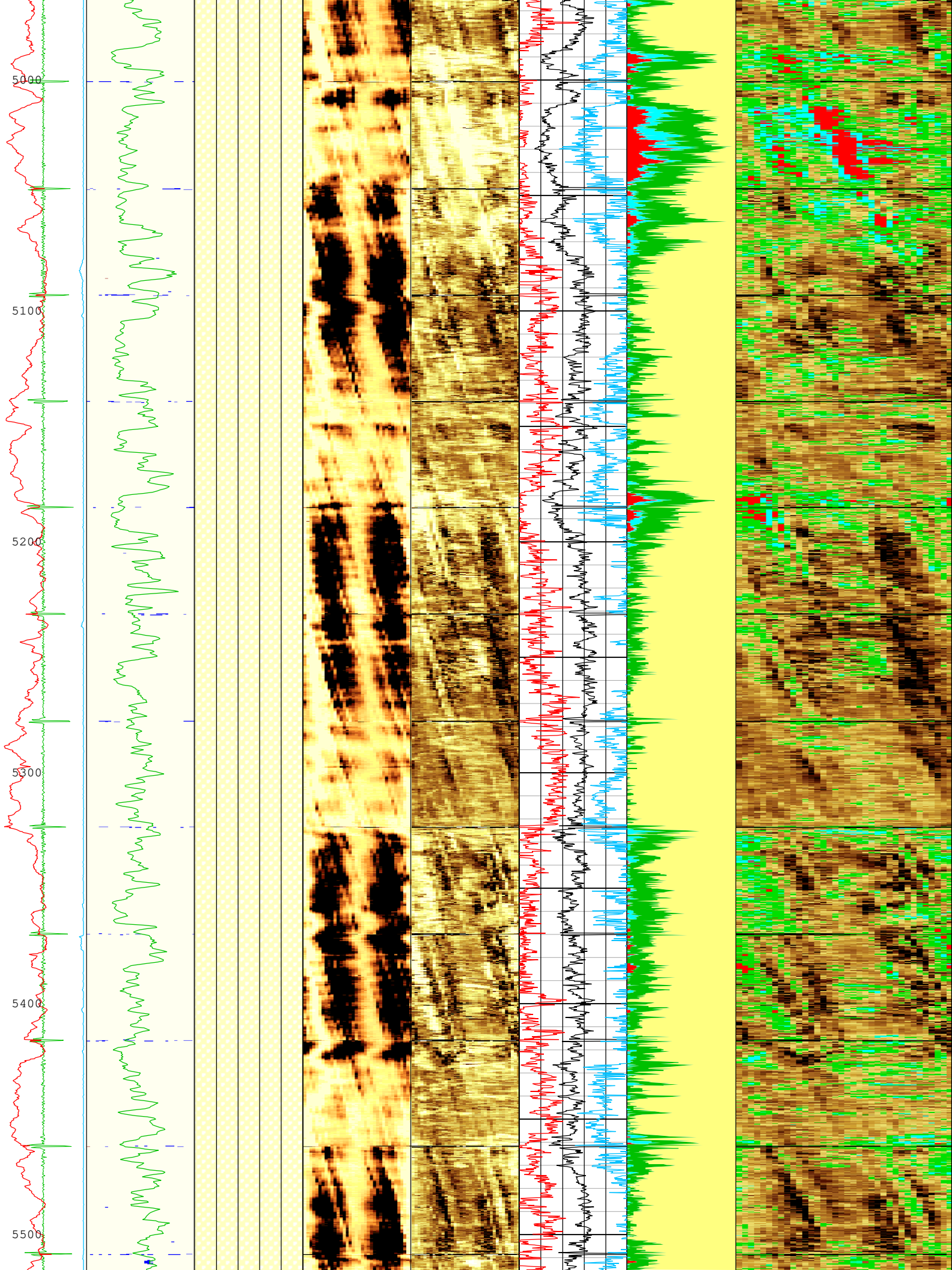


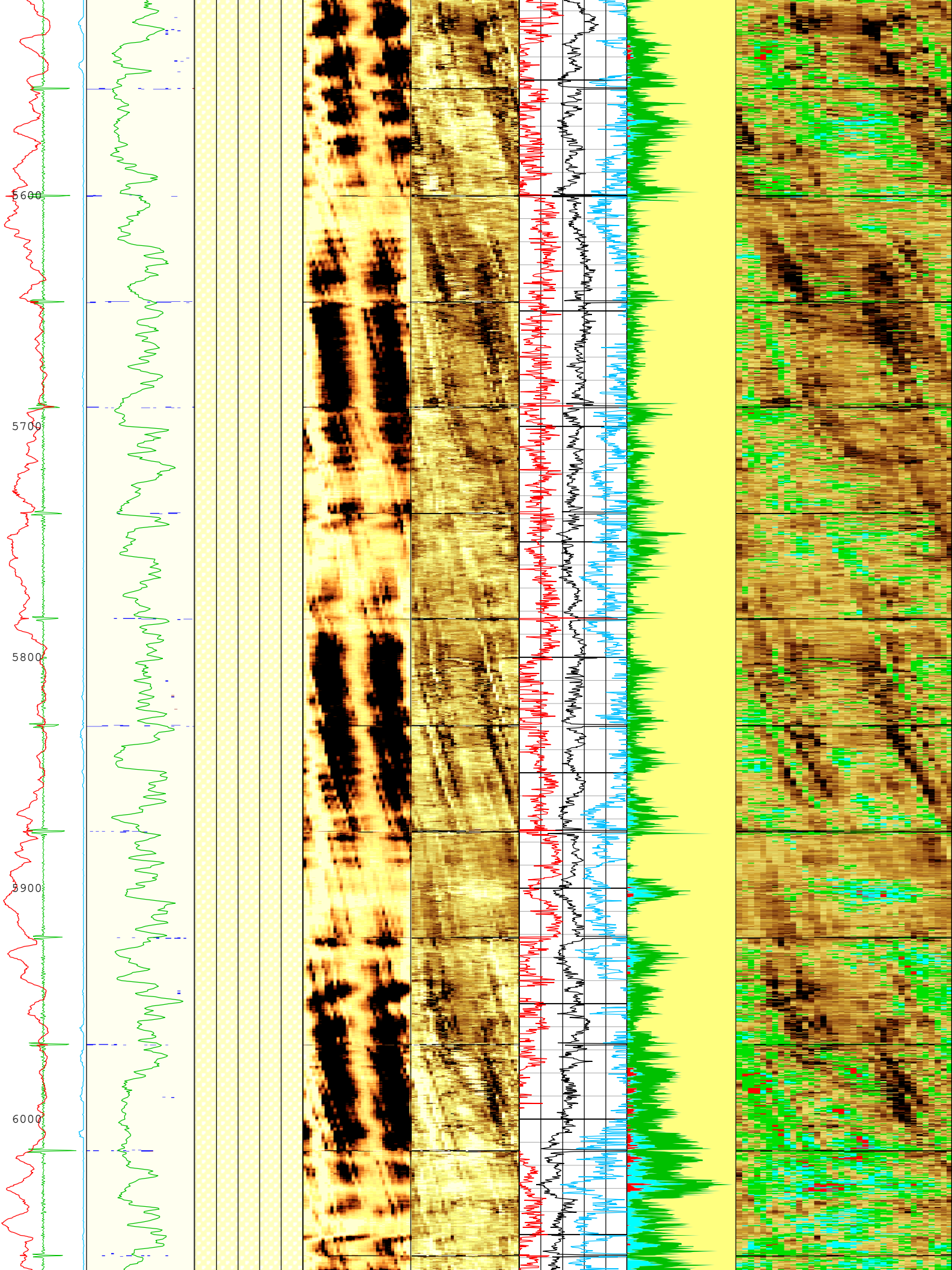


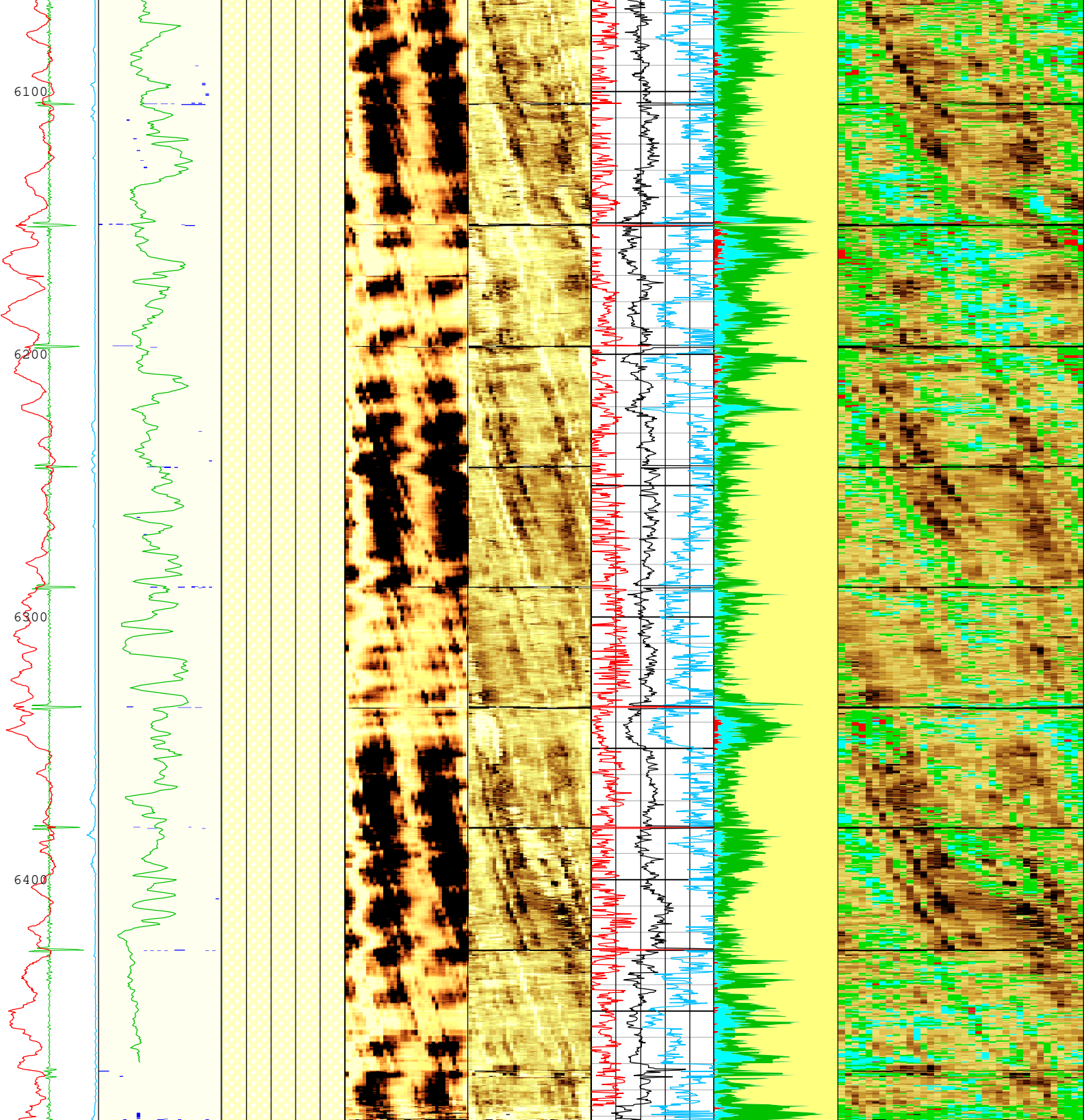












|   |   |  |  |  |   |   |  |
|---|---|--|--|--|---|---|--|
| <p>Casing Collar Locator Ultrasonic (CCLU) USIT-E</p> <p>-20 in 20</p> <p>Motor Revolution Speed (RSAV) USIT-E</p> <p>6 c/s 7.5</p> <p>Amplitude of</p> | <p>Absent 1.500 3.500</p> <p>Explicit Normalization</p> <p>USIT - USIT Processing Flags (UFLG) USIT-E</p> <p>GR</p> <p>0 gAPI 150</p> | <p>External Radii Average (ERAV) USIT-E</p> <p>3.7 in 2.7</p> <p>Internal Radius Averaged Value (IRAV) USIT-E</p> <p>3.7 in 2.7</p> <p>Internal Radius Maximum Value (IRMX) USIT-E</p> <p>3.7 in 2.7</p> | <p>Absent -5.200 -3.600 -2.000 -0.400</p> <p>Explicit Normalization</p> <p>USIT - Amplitude of Wave (AWBK) USIT-E (dB)</p> | <p>-500.000 1.500 3.000 4.500 6.000 7.500</p> <p>Custom Normalization</p> <p>USIT - Acoustic Impedance (AIBK) USIT-E (Mrayl)</p> | <p>Acoustic Impedance Minimum (AIMN) USIT-E</p> <p>-1 Mrayl 9</p> <p>Acoustic Impedance Average (AIAV) USIT-E</p> <p>-1 Mrayl 9</p> <p>Acoustic Impedance Maximum</p> | <p>Bonded</p> <p>Gas</p> <p>Liquid</p> <p>Micro-debonding</p> | <p>Absent -500.000 2.200 3.254 4.309 5.363 6.418 7.472</p> <p>Custom Normalization</p> <p>USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E (Mrayl)</p> |
|---|---|--|--|--|---|---|--|

Eccentering  
(ECCE)  
USIT-E  
0 in 0.5

3.7 in 2.7  
Internal Radius  
Minimum Value  
(IRMN) USIT-E  
3.7 in 2.7

Maximum  
(AIMX) USIT-E  
-1 Mrayl 9

TIME\_1900 - Time Marked every 60.00 (s)

Description: USI Cement Format: Log ( USI Cement 2 inch ) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:30:22

## Channel Processing Parameters

### 1B: Parameters

| Parameter         | Description   | Tool      | Value                  | Unit    |
|-------------------|---|-----------|------------------------|---------|
| BARI(ISSBAR)      | Barite Mud Presence Flag  | Borehole  | No                     |         |
| BERJ              | Bad Echo Rejection  | USIT-E    | On                     |         |
| BS                | Bit Size  | WLSESSION | Depth Zoned            | in      |
| CASING_PRATIO     | Casing Poisson Ratio  | USIT-E    | Standard Poisson Ratio |         |
| CMTY(U-USIT_CEMT) | Cement Type   | USIT-E    | Regular Cement         |         |
| DFD               | Drilling Fluid Density  | Borehole  | 8.43                   | lbm/gal |
| DFT_CATEGORY      | Drilling Fluid Type   | Borehole  | Water                  |         |
| DTMD              | Borehole Fluid Slowness   | Borehole  | 206                    | us/ft   |
| FDII              | FPM Data Interpolation Interval                                 | USIT-E    | 0                      | ft      |
| GR_MULTIPLIER     | Gamma Ray Multiplier  | SGT-N     | 1                      |         |
| HEMA              | Hematite Presence Flag  | Borehole  | No                     |         |
| IMAR              | Image Rotation  | USIT-E    | Off                    |         |
| MEAS_WLEN         | Tcube Processing Window Length in Measurement Mode              | USIT-E    | 15.37                  | us      |
| MUD_N_THE         | Theoretical Mud Normalization Factor                            | USIT-E    | 1.07                   |         |
| RCOD              | Reference Calibrator Outer Diameter                             | USIT-E    | 4.5                    | in      |
| RCSO              | Reference Calibrator Standoff                                   | USIT-E    | 0.842                  | in      |
| RCTH              | Reference Calibrator Thickness                                  | USIT-E    | 0.216                  | in      |
| RPLUS_PROCESS     | Ultrasonic R+ Processing  | USIT-E    | No                     |         |
| SDNV              | Number of Vertical Samples used for Micro-debonding Computation | USIT-E    | 5                      |         |
| SDTHOR            | Acoustic Impedance STD Horizontal Threshold for Micro-debonding | USIT-E    | 0.5                    | Mrayl   |
| SDTVER            | Acoustic Impedance STD Vertical Threshold for Micro-debonding   | USIT-E    | 0.3                    | Mrayl   |
| THDH              | Maximum Search Thickness (percentage of nominal)                | USIT-E    | 120                    | %       |
| THDL              | Minimum Search Thickness (percentage of nominal)                | USIT-E    | 80                     | %       |
| U-USIT_DFSZ       | Drilling Fluid Specific Acoustic Impedance                      | USIT-E    | 1.5                    | Mrayl   |
| USI_FVEL_SEL      | USI Fluid Velocity Selection                                    | USIT-E    | Automatic              |         |
| USI_ZMUD_SEL      | USI Mud Impedance Selection                                     | USIT-E    | Theoretical            |         |
| THDP              | Thickness Detection Policy                                      | USIT-E    | Fundamental            |         |
| VCAS              | Ultrasonic Transversal Velocity in Casing                       | USIT-E    | 51.4                   | us/ft   |
| ZCAS              | Acoustic Impedance of Casing                                    | USIT-E    | 46.25                  | Mrayl   |
| ZINI              | Initial Estimate of Cement Impedance                            | USIT-E    | -1                     | Mrayl   |
| ZMUD              | Acoustic Impedance of Mud                                       | Borehole  | 1.54                   | 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    | 0            | 83          |
| BS        | 12.25 | 83           | 1092        |
| BS        | 7.875 | 1092         | 6402.25     |

All depth are actual.

# Tool Control Parameters

## 1B: Parameters

| Parameter     | Description                                | Tool   | Value                         | Unit |
|---------------|--|--------|-------------------------------|------|
| AGMN          | Minimum Gain of Cartridge                  | USIT-E | -12                           | dB   |
| AGMX          | Maximum Gain of Cartridge                  | USIT-E | 48                            | dB   |
| U-USIT_DDT5   | USIC Downhole Decimation for T5 only       | USIT-E | 0_NONE                        |      |
| DOT(DOS)      | Distance between Opposite Transducer Faces | USIT-E | 1.756                         | in   |
| EMXV          | EMEX Voltage                               | USIT-E | Time Zoned                    | V    |
| HRES          | Horizontal Resolution                      | USIT-E | 10 deg                        |      |
| ICE2_ACQ      | Ultrasonic ICE2 Acquisition                | USIT-E | Yes                           |      |
| MOTOR_PROTECT | Motor Protection                           | USIT-E | On                            |      |
| UACLV_PERM    | Ultrasonic ACLV Permanent                  | USIT-E | Yes                           |      |
| ULOG          | Logging Objective                          | USIT-E | MEASUREMENT                   |      |
| USFR          | Ultrasonic Sampling Frequency              | USIT-E | 666667                        | Hz   |
| UPAT          | USIT Emission Pattern                      | USIT-E | Pattern 750 KHz               |      |
| UWKM          | USIT Working Mode                          | USIT-E | Uncompressed 10 deg at 3.0 in |      |
| USSP          | Ultrasonic Service                         | USIT-E | USI                           |      |
| VRES          | Vertical Resolution                        | USIT-E | 3.0 in                        |      |

## Time Zone Parameters

| Parameter | Value | Start Time           | Stop Time            | Start Depth ( ft ) | Stop Depth ( ft ) |
|-----------|-------|----------------------|----------------------|--------------------|-------------------|
| EMXV      | 60    | 11-Aug-2022 09:59:07 | 11-Aug-2022 10:01:44 | 3.96               | 199.76            |
| EMXV      | 75    | 11-Aug-2022 10:01:44 | 11-Aug-2022 10:03:15 | 199.76             | 355.54            |
| EMXV      | 80    | 11-Aug-2022 10:03:15 | 11-Aug-2022 10:03:52 | 355.54             | 419.62            |
| EMXV      | 90    | 11-Aug-2022 10:03:52 | 11-Aug-2022 10:36:40 | 419.62             | 3778.68           |
| EMXV      | 80    | 11-Aug-2022 10:36:40 | 11-Aug-2022 11:04:56 | 3778.68            | 6493.69           |

All depth are at tool zero.

# 1B

## 0 PSI Pass

## Software Version

| Acquisition System | Version   |
|--------------------|---|
| Maxwell 2022.0     | 12.0.215014.3100  |
| Application Patch  | Wireline_Hotfix-Mandatory-2022.0_12.0.217167<br>Wireline_NPD-ThruBit-2022.0_12.0.217960 |

## Pass Summary

| Run Name | Pass Objective | Direction | Top     | Bottom     | Start                  | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|---------|------------|------------------------|-------------------------|----------|-------------|-----------------------|
| 1B       | Log[1]:Down    | Down      | 3.96 ft | 6493.69 ft | 11-Aug-2022 9:59:07 AM | 11-Aug-2022 11:04:56 AM | ON       | -11.33 ft   | Yes                   |

All depths are referenced to toolstring zero

# Log

Company:Chevron USA Inc. Well:SKR 598-36-BV-21  
1B: Log[1]:Down:S010

Description: USI Goodwin Format: Log ( USI Goodwin ) Index Scale: 0.1 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:30:39

TIME\_1900 - Time Marked every 60.00 (s)

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| Minimum Acoustic | Minimum Acoustic | Minimum Acoustic | Minimum Acoustic |
|------------------|------------------|------------------|------------------|

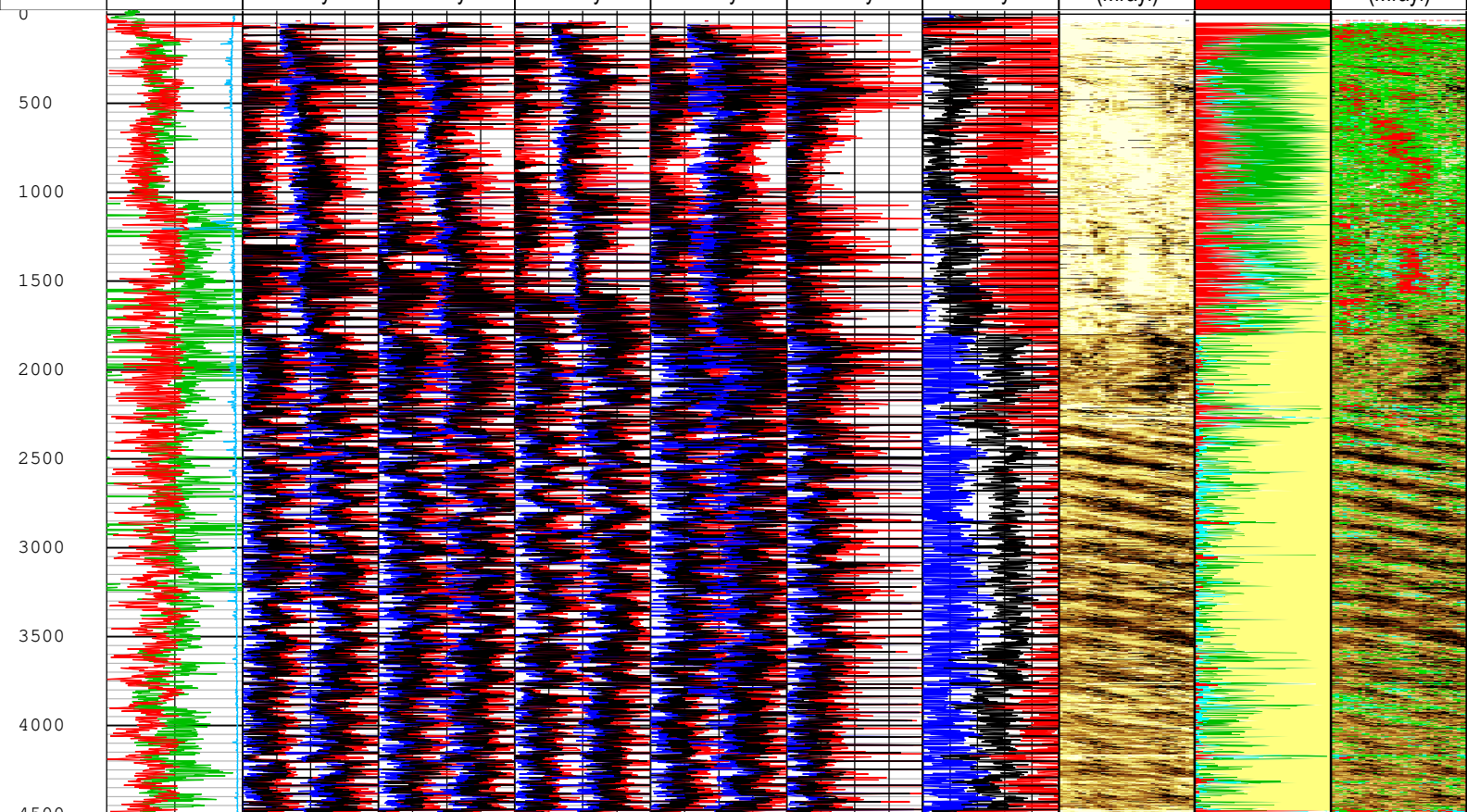
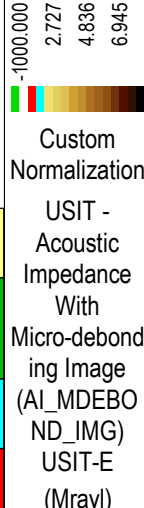
|   |   |   |   |
|---|---|---|---|
| Acoustic Impedance 1 (MIN_AI1) USIT-E         | Acoustic Impedance 3 (MIN_AI3) USIT-E         | Acoustic Impedance 5 (MIN_AI5) USIT-E         | Acoustic Impedance 7 (MIN_AI7) USIT-E         |
| 0 Mrayl 20                                    | 0 Mrayl 20                                    | 0 Mrayl 20                                    | 0 Mrayl 20                                    |
| Maximum Acoustic Impedance 1 (MAX_AI1) USIT-E | Maximum Acoustic Impedance 3 (MAX_AI3) USIT-E | Maximum Acoustic Impedance 5 (MAX_AI5) USIT-E | Maximum Acoustic Impedance 7 (MAX_AI7) USIT-E |
| 0 Mrayl 20                                    | 0 Mrayl 20                                    | 0 Mrayl 20                                    | 0 Mrayl 20                                    |
| Average Acoustic Impedance 1 (AV_AI1) USIT-E  | Average Acoustic Impedance 3 (AV_AI3) USIT-E  | Average Acoustic Impedance 5 (AV_AI5) USIT-E  | Average Acoustic Impedance 7 (AV_AI7) USIT-E  |
| 0 Mrayl 20                                    | 0 Mrayl 20                                    | 0 Mrayl 20                                    | 0 Mrayl 20                                    |

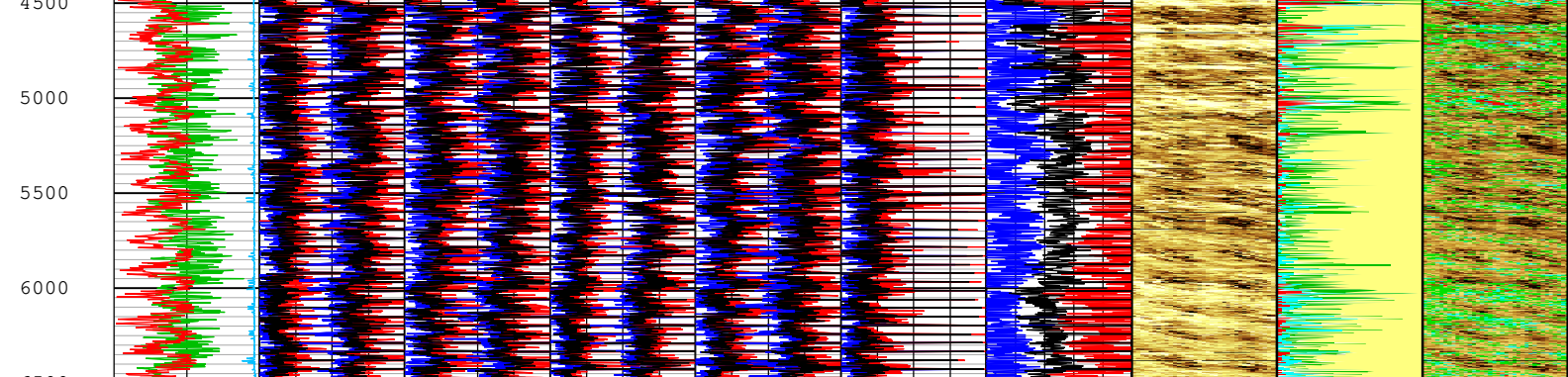
|  |
|--|
| GR                                     |
| 0 gAPI 150                             |
| Motor Revolution Speed (RSAV) USIT-E   |
| 6 c/s 7.5                              |
| Amplitude of Eccentering (ECCE) USIT-E |
| 0 in 0.5                               |

|   |   |   |   |   |  |
|---|---|---|---|---|--|
| Minimum Acoustic Impedance 2 (MIN_AI2) USIT-E | Minimum Acoustic Impedance 4 (MIN_AI4) USIT-E | Minimum Acoustic Impedance 6 (MIN_AI6) USIT-E | Minimum Acoustic Impedance 8 (MIN_AI8) USIT-E | Minimum Acoustic Impedance 9 (MIN_AI9) USIT-E | Acoustic Impedance Minimum (AIMN) USIT-E |
| -10 Mrayl 10                                  | -10 Mrayl 10                                  | -10 Mrayl 10                                  | -10 Mrayl 10                                  | 0 Mrayl 20                                    | -1 Mrayl 9                               |
| Maximum Acoustic Impedance 2 (MAX_AI2) USIT-E | Maximum Acoustic Impedance 4 (MAX_AI4) USIT-E | Maximum Acoustic Impedance 6 (MAX_AI6) USIT-E | Maximum Acoustic Impedance 8 (MAX_AI8) USIT-E | Maximum Acoustic Impedance 9 (MAX_AI9) USIT-E | Acoustic Impedance Maximum (AIMX) USIT-E |
| -10 Mrayl 10                                  | -10 Mrayl 10                                  | -10 Mrayl 10                                  | -10 Mrayl 10                                  | 0 Mrayl 20                                    | -1 Mrayl 9                               |
| Average Acoustic Impedance 2 (AV_AI2) USIT-E  | Average Acoustic Impedance 4 (AV_AI4) USIT-E  | Average Acoustic Impedance 6 (AV_AI6) USIT-E  | Average Acoustic Impedance 8 (AV_AI8) USIT-E  | Average Acoustic Impedance 9 (AV_AI9) USIT-E  | Acoustic Impedance Average (AIAV) USIT-E |
| -10 Mrayl 10                                  | -10 Mrayl 10                                  | -10 Mrayl 10                                  | -10 Mrayl 10                                  | 0 Mrayl 20                                    | -1 Mrayl 9                               |

|   |       |       |       |       |
|---|-------|-------|-------|-------|
| Absent                                  | 1.500 | 3.500 | 5.500 | 7.500 |
| Custom Normalization                    |       |       |       |       |
| USIT - Acoustic Impedance (AIBK) USIT-E |       |       |       |       |

|                 |
|-----------------|
| Bonded          |
| Micro-Debonding |
| Liquid          |
| Gas             |





|  |  |  |  |  |  |   |  |   |   |
|--|--|--|--|--|--|---|--|---|---|
| <p><b>GR</b><br/>0 gAPI 150</p> <p><b>Motor Revolution Speed (RSAV) USIT-E</b><br/>6 c/s 7.5</p> <p><b>Amplitude of Eccentering (ECCE) USIT-E</b><br/>0 in 0.5</p> | <p><b>Minimum Acoustic Impedance 1 (MIN_AI1) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Minimum Acoustic Impedance 3 (MIN_AI3) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Minimum Acoustic Impedance 5 (MIN_AI5) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Minimum Acoustic Impedance 7 (MIN_AI7) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Minimum Acoustic Impedance 9 (MIN_AI9) USIT-E</b><br/>0 Mrayl 20</p> | <p><b>Acoustic Impedance Minimum (AIMN) USIT-E</b><br/>-1 Mrayl 9</p> | <p>Absent 1.500 3.500 5.500 7.500</p> <p>Custom Normalization</p> <p>USIT - Acoustic Impedance (AIBK) USIT-E (Mrayl)</p> | <p>Bonded</p> <p>Micro-Debonding</p> <p>Liquid</p> <p>Gas</p> | <p>Custom Normalization</p> <p>USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E (Mrayl)</p> |
|  | <p><b>Maximum Acoustic Impedance 1 (MAX_AI1) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Maximum Acoustic Impedance 3 (MAX_AI3) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Maximum Acoustic Impedance 5 (MAX_AI5) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Maximum Acoustic Impedance 7 (MAX_AI7) USIT-E</b><br/>0 Mrayl 20</p>   | <p><b>Maximum Acoustic Impedance 9 (MAX_AI9) USIT-E</b><br/>0 Mrayl 20</p> | <p><b>Acoustic Impedance Maximum (AIMX) USIT-E</b><br/>-1 Mrayl 9</p> |  |   |   |
|  | <p><b>Average Acoustic Impedance 1 (AV_AI1) USIT-E</b><br/>0 Mrayl 20</p>    | <p><b>Average Acoustic Impedance 3 (AV_AI3) USIT-E</b><br/>0 Mrayl 20</p>    | <p><b>Average Acoustic Impedance 5 (AV_AI5) USIT-E</b><br/>0 Mrayl 20</p>    | <p><b>Average Acoustic Impedance 7 (AV_AI7) USIT-E</b><br/>0 Mrayl 20</p>    | <p><b>Average Acoustic Impedance 9 (AV_AI9) USIT-E</b><br/>0 Mrayl 20</p>  | <p><b>Acoustic Impedance Average (AIAV) USIT-E</b><br/>-1 Mrayl 9</p> |  |   |   |
|  | <p><b>Minimum Acoustic Impedance 2 (MIN_AI2) USIT-E</b><br/>-10 Mrayl 10</p> | <p><b>Minimum Acoustic Impedance 4 (MIN_AI4) USIT-E</b><br/>-10 Mrayl 10</p> | <p><b>Minimum Acoustic Impedance 6 (MIN_AI6) USIT-E</b><br/>-10 Mrayl 10</p> | <p><b>Minimum Acoustic Impedance 8 (MIN_AI8) USIT-E</b><br/>-10 Mrayl 10</p> |  |   |  |   |   |
|  | <p><b>Maximum Acoustic Impedance 2 (MAX_AI2) USIT-E</b><br/>-10 Mrayl 10</p> | <p><b>Maximum Acoustic Impedance 4 (MAX_AI4) USIT-E</b><br/>-10 Mrayl 10</p> | <p><b>Maximum Acoustic Impedance 6 (MAX_AI6) USIT-E</b><br/>-10 Mrayl 10</p> | <p><b>Maximum Acoustic Impedance 8 (MAX_AI8) USIT-E</b><br/>-10 Mrayl 10</p> |  |   |  |   |   |
|  | <p><b>Average Acoustic Impedance 2 (AV_AI2) USIT-E</b><br/>-10 Mrayl 10</p>  | <p><b>Average Acoustic Impedance 4 (AV_AI4) USIT-E</b><br/>-10 Mrayl 10</p>  | <p><b>Average Acoustic Impedance 6 (AV_AI6) USIT-E</b><br/>-10 Mrayl 10</p>  | <p><b>Average Acoustic Impedance 8 (AV_AI8) USIT-E</b><br/>-10 Mrayl 10</p>  |  |   |  |   |   |

TIME\_1900 - Time Marked every 60.00 (s)

Description: USI Goodwin Format: Log ( USI Goodwin ) Index Scale: 0.1 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:30:39

## Channel Processing Parameters

### 1B: Parameters

| Parameter         | Description              | Tool      | Value          | Unit    |
|-------------------|--------------------------|-----------|----------------|---------|
| BARI(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  | 8.43           | lbm/gal |

|              |  |          |             |       |
|--------------|--|----------|-------------|-------|
| DFT_CATEGORY | Drilling Fluid Type                                | Borehole | Water       |       |
| DTMD         | Borehole Fluid Slowness                            | Borehole | 206         | us/ft |
| HEMA         | Hematite Presence Flag                             | Borehole | No          |       |
| IMAR         | Image Rotation                                     | USIT-E   | Off         |       |
| MEAS_WLEN    | Tcube Processing Window Length in Measurement Mode | USIT-E   | 15.37       | us    |
| MUD_N_THE    | Theoretical Mud Normalization Factor               | USIT-E   | 1.07        |       |
| THDH         | Maximum Search Thickness (percentage of nominal)   | USIT-E   | 120         | %     |
| THDL         | Minimum Search Thickness (percentage of nominal)   | USIT-E   | 80          | %     |
| U-USIT_DFSZ  | Drilling Fluid Specific Acoustic Impedance         | USIT-E   | 1.5         | Mrayl |
| USI_FVEL_SEL | USI Fluid Velocity Selection                       | USIT-E   | Automatic   |       |
| USI_ZMUD_SEL | USI Mud Impedance Selection                        | USIT-E   | Theoretical |       |
| ZMUD         | Acoustic Impedance of Mud                          | Borehole | 1.54        | 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    | 0            | 83          |
| BS        | 12.25 | 83           | 1092        |
| BS        | 7.875 | 1092         | 6493.25     |

All depth are actual.

## Tool Control Parameters

### 1B: Parameters

| Parameter | Description                   | Tool   | Value                         | Unit |
|-----------|-------------------------------|--------|-------------------------------|------|
| AGMN      | Minimum Gain of Cartridge     | USIT-E | -12                           | dB   |
| AGMX      | Maximum Gain of Cartridge     | USIT-E | 48                            | dB   |
| EMXV      | EMEX Voltage                  | USIT-E | Time Zoned                    | 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 750 KHz               |      |
| UWKM      | USIT Working Mode             | USIT-E | Uncompressed 10 deg at 3.0 in |      |
| VRES      | Vertical Resolution           | USIT-E | 3.0 in                        |      |

## Time Zone Parameters

| Parameter | Value | Start Time           | Stop Time            | Start Depth ( ft ) | Stop Depth ( ft ) |
|-----------|-------|----------------------|----------------------|--------------------|-------------------|
| EMXV      | 60    | 11-Aug-2022 09:59:07 | 11-Aug-2022 10:01:44 | 3.96               | 199.76            |
| EMXV      | 75    | 11-Aug-2022 10:01:44 | 11-Aug-2022 10:03:15 | 199.76             | 355.54            |
| EMXV      | 80    | 11-Aug-2022 10:03:15 | 11-Aug-2022 10:03:52 | 355.54             | 419.62            |
| EMXV      | 90    | 11-Aug-2022 10:03:52 | 11-Aug-2022 10:36:40 | 419.62             | 3778.68           |
| EMXV      | 80    | 11-Aug-2022 10:36:40 | 11-Aug-2022 11:04:56 | 3778.68            | 6493.69           |

All depth are at tool zero.

## Pressure Pass

## USI Cement 2500 PSI Pass

## Software Version

|                    |         |
|--------------------|---------|
| Acquisition System | Version |
|--------------------|---------|

## Composite Summary

| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                   | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|-------------------------|-------------------------|----------|-------------|-----------------------|
| 1B       | Log[2]:Up      | Up        | 3956.37 ft | 6500.59 ft | 11-Aug-2022 11:06:07 AM | 11-Aug-2022 11:42:18 AM | ON       | -4.43 ft    | Yes                   |
| 1B       | Log[9]:Up      | Up        | 10.39 ft   | 4206.44 ft | 11-Aug-2022 1:15:45 PM  | 11-Aug-2022 1:58:28 PM  | ON       | 0.50 ft     | Yes                   |

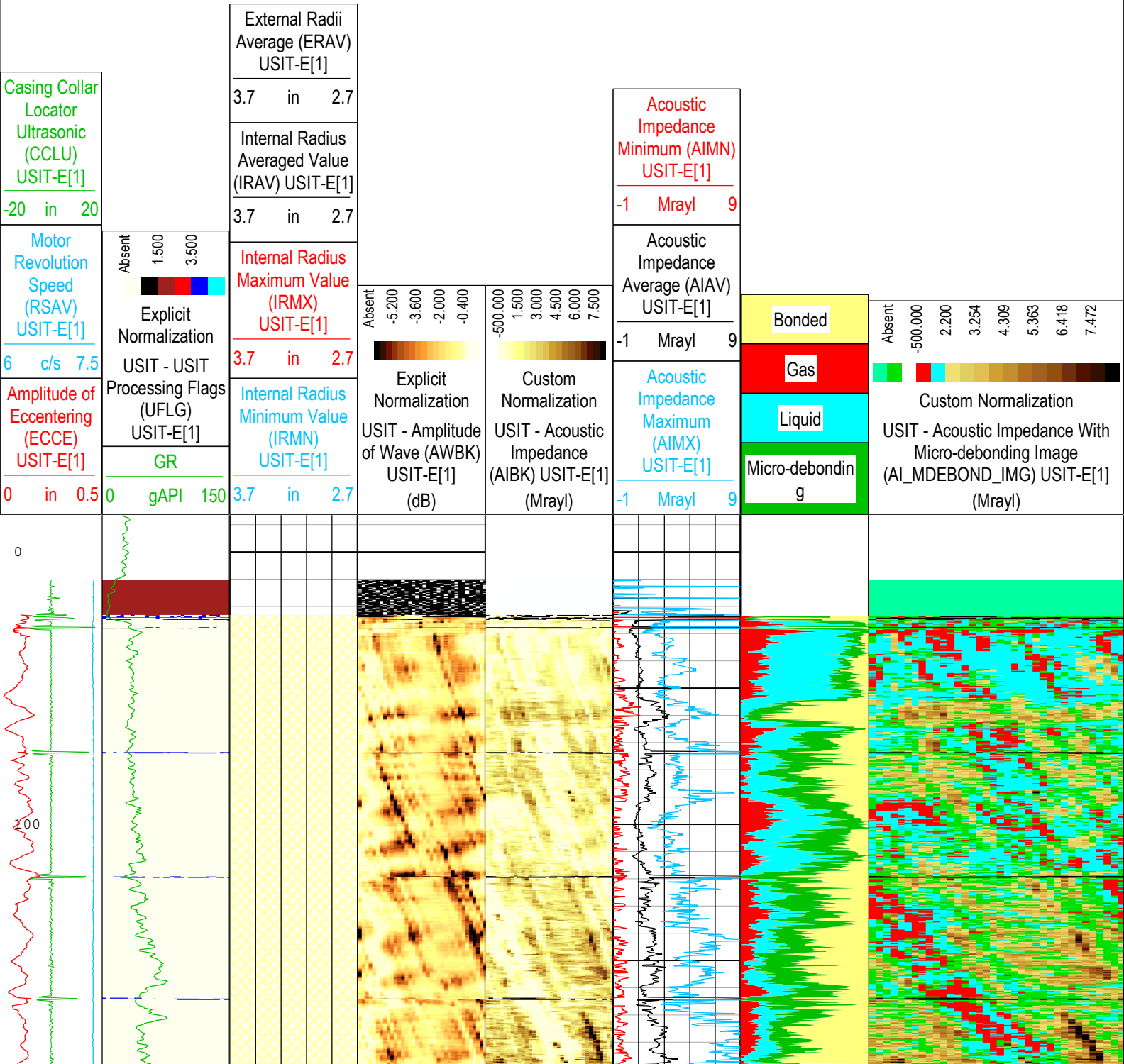
All depths are referenced to toolstring zero

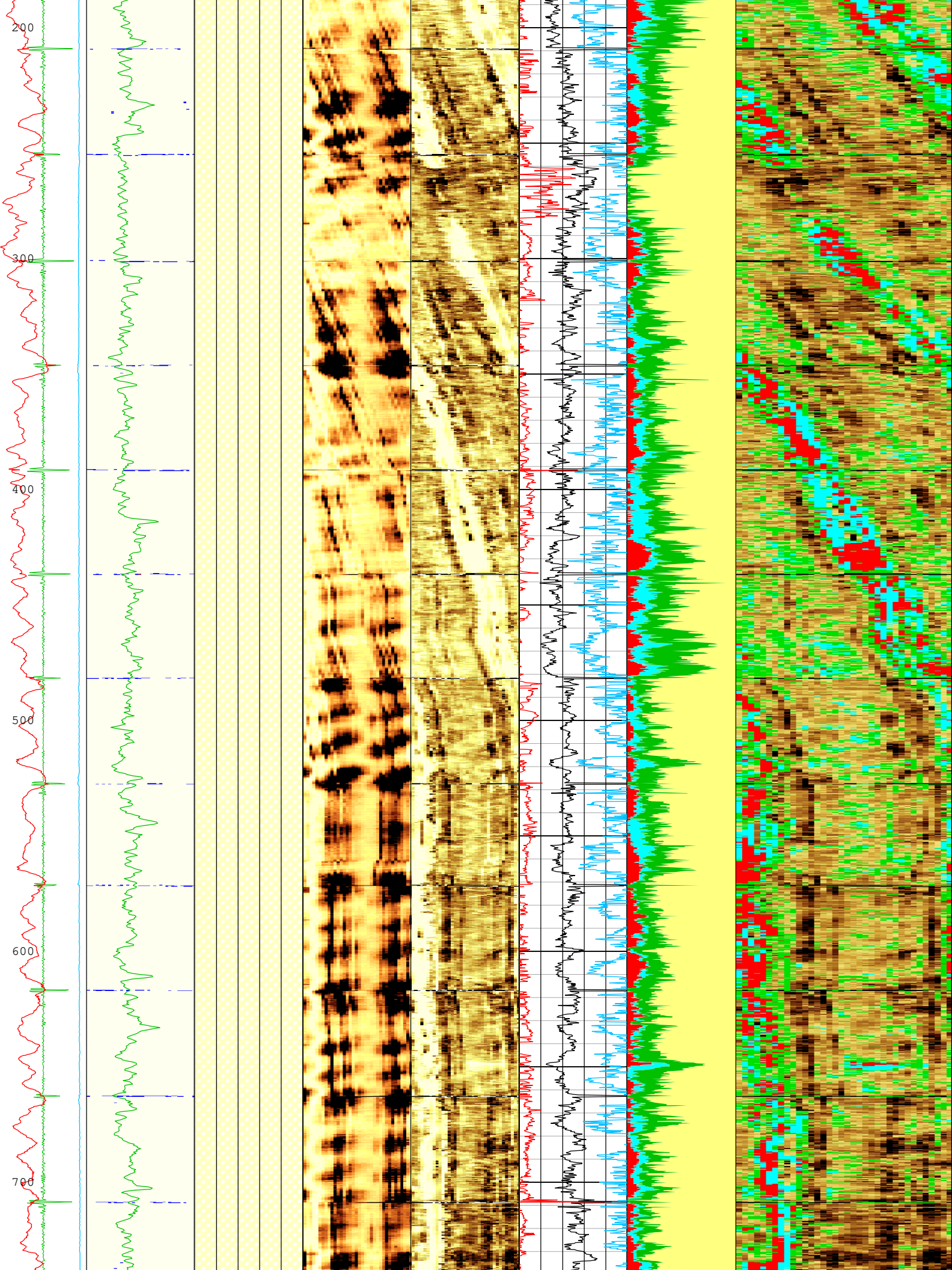
## Log

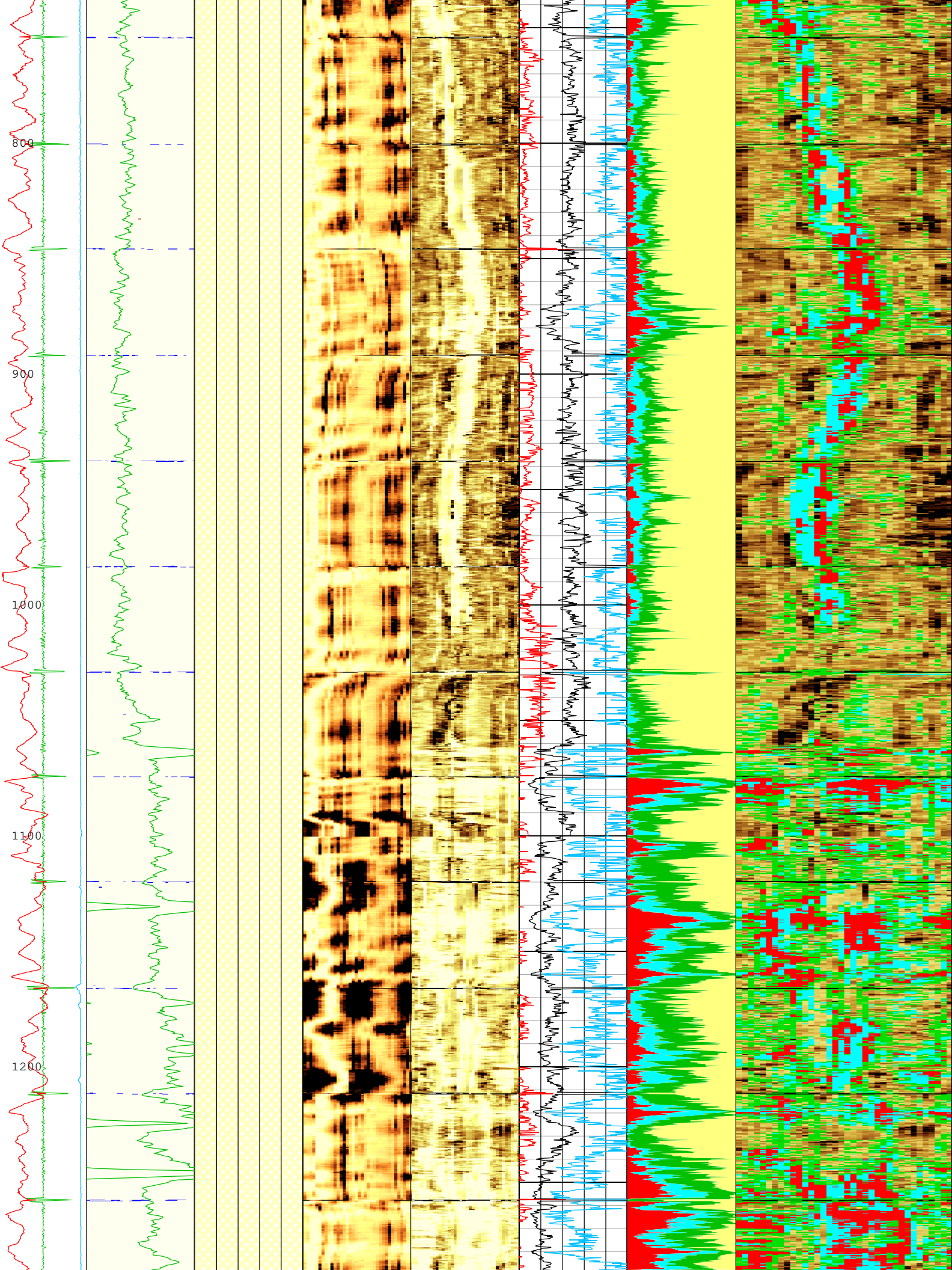
Company:Chevron USA Inc. Well:SKR 598-36-BV-21  
Pressure Pass:S010

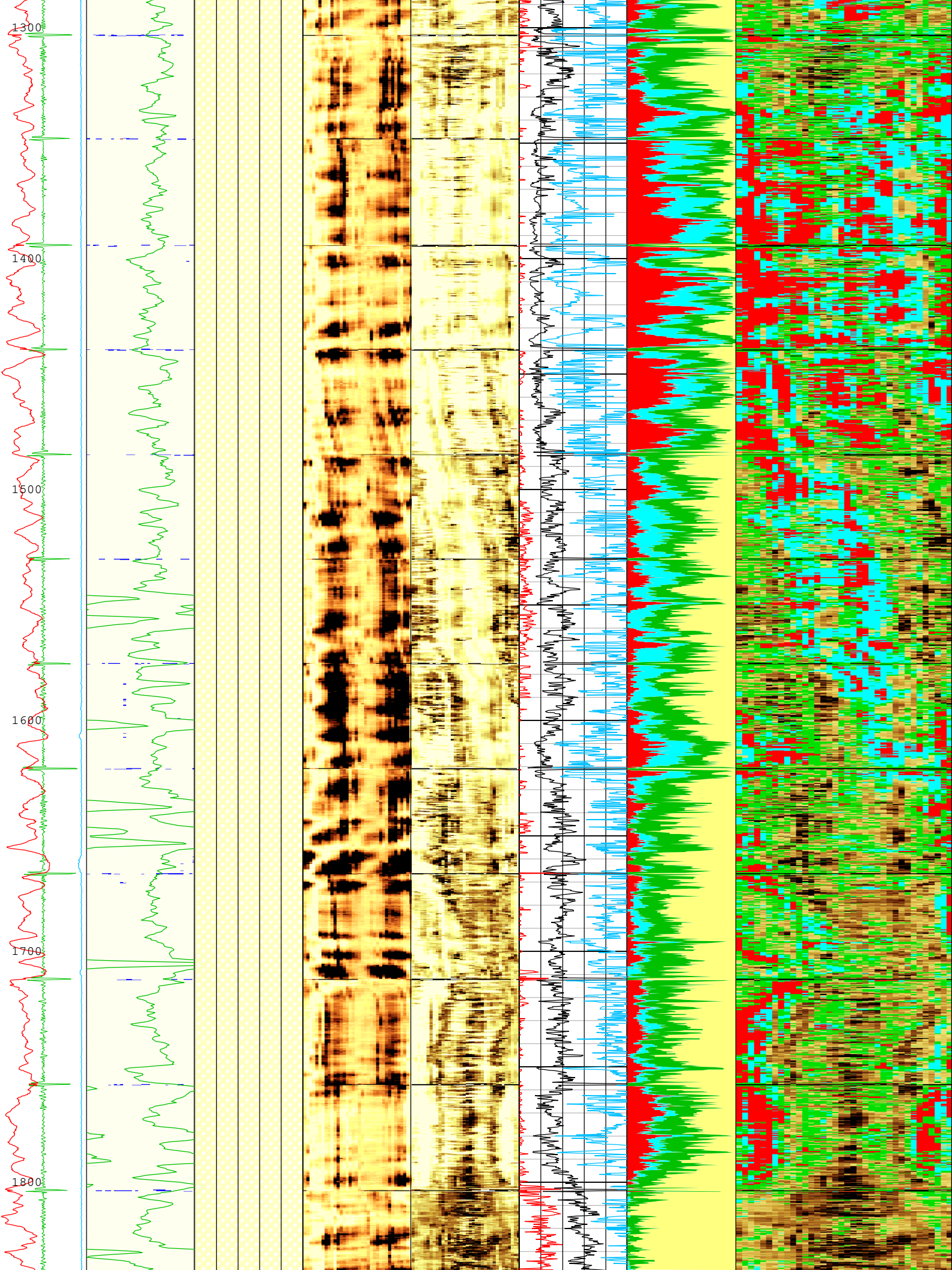
Description: USI Cement Format: Log ( USI Cement 2 inch ) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:30:50

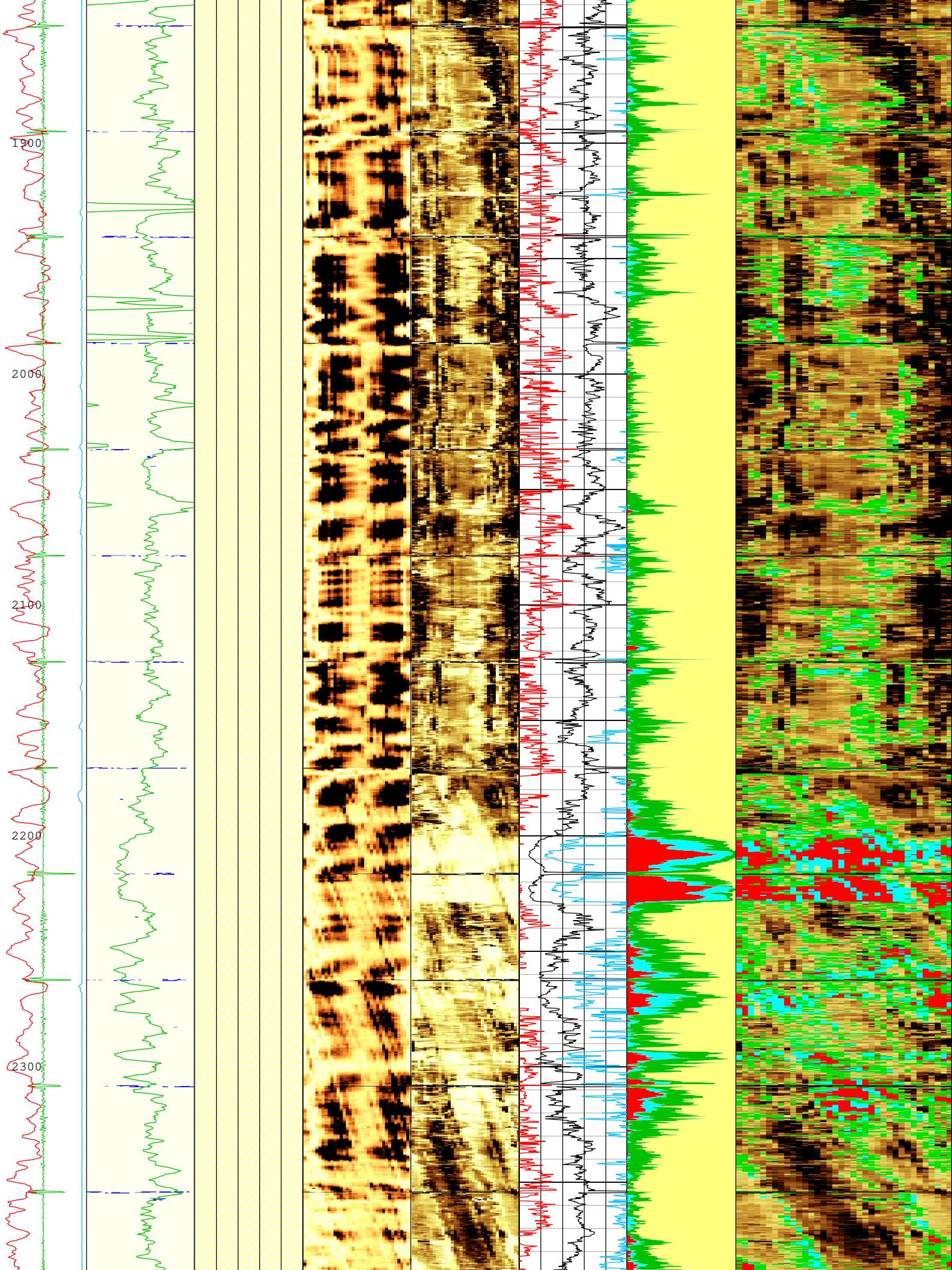
TIME\_1900 - Time Marked every 60.00 (s)

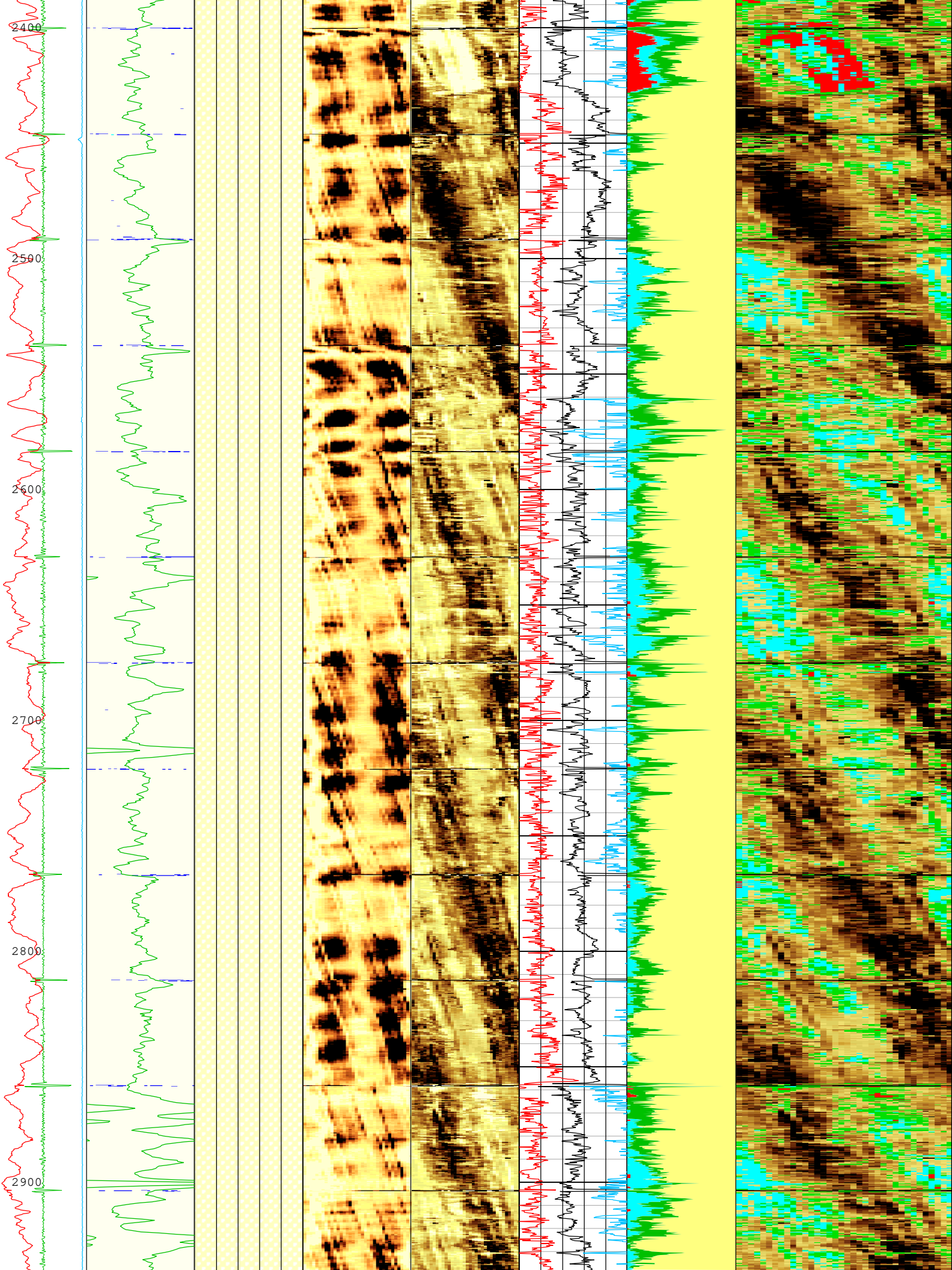


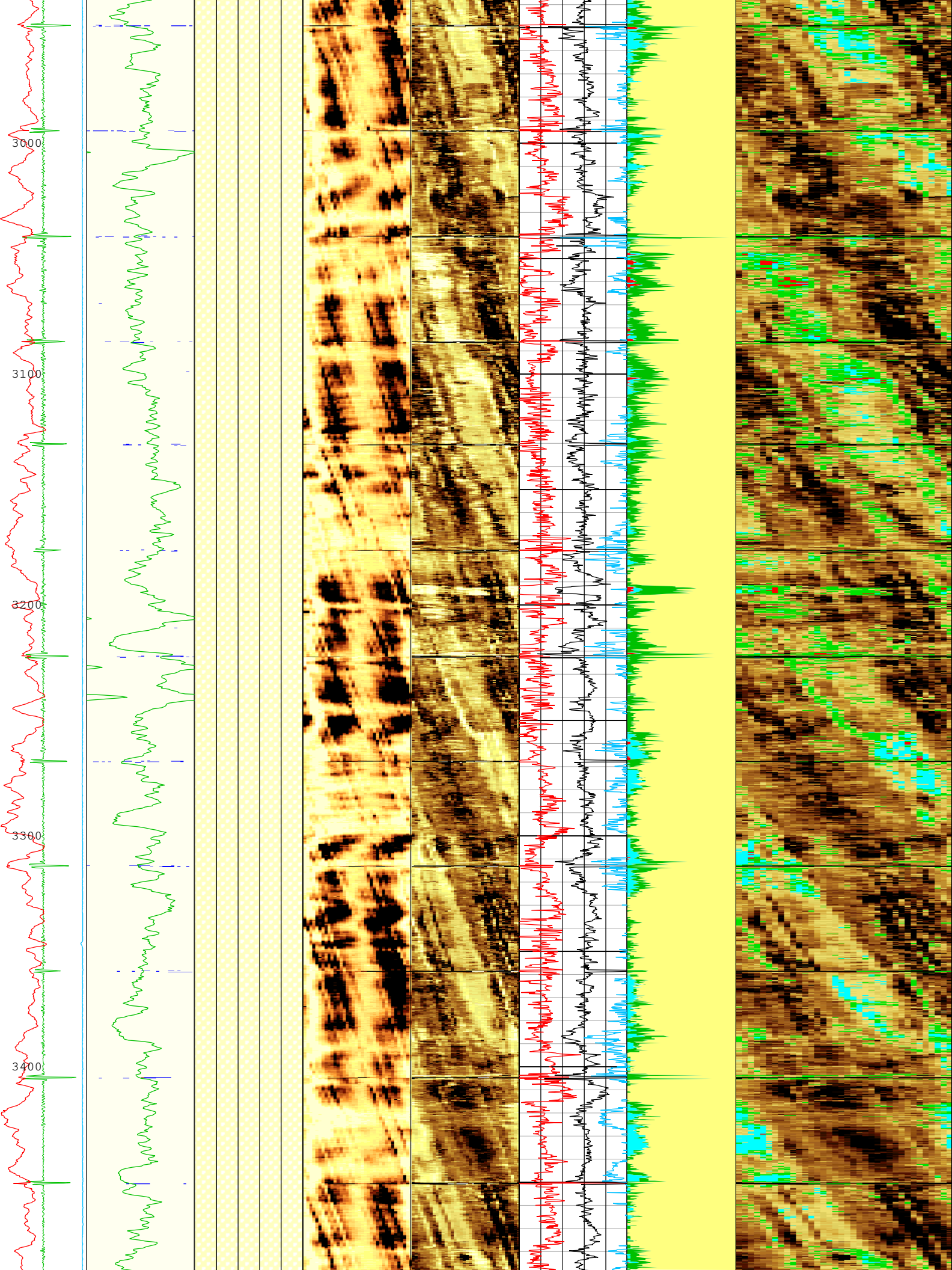


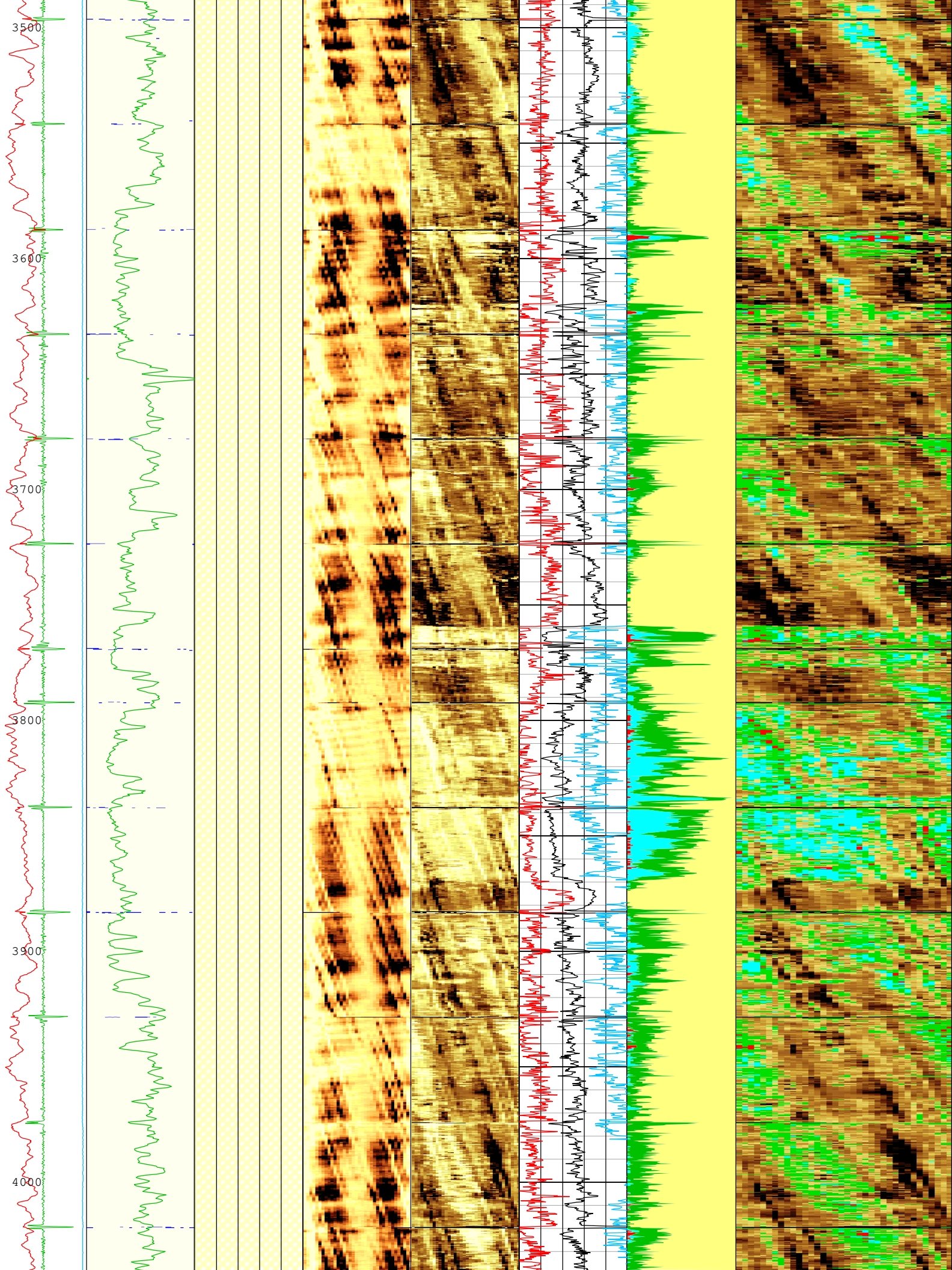


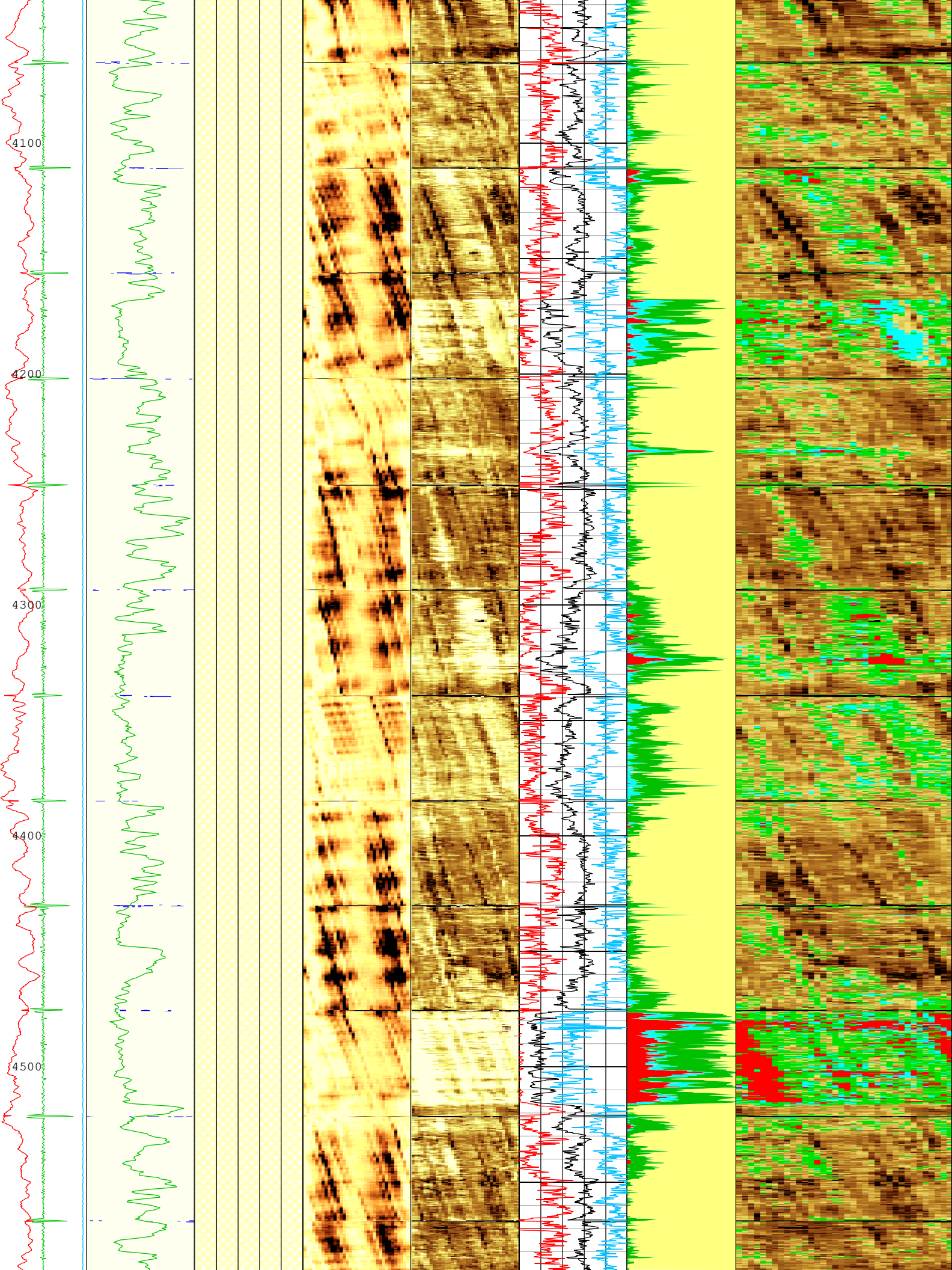


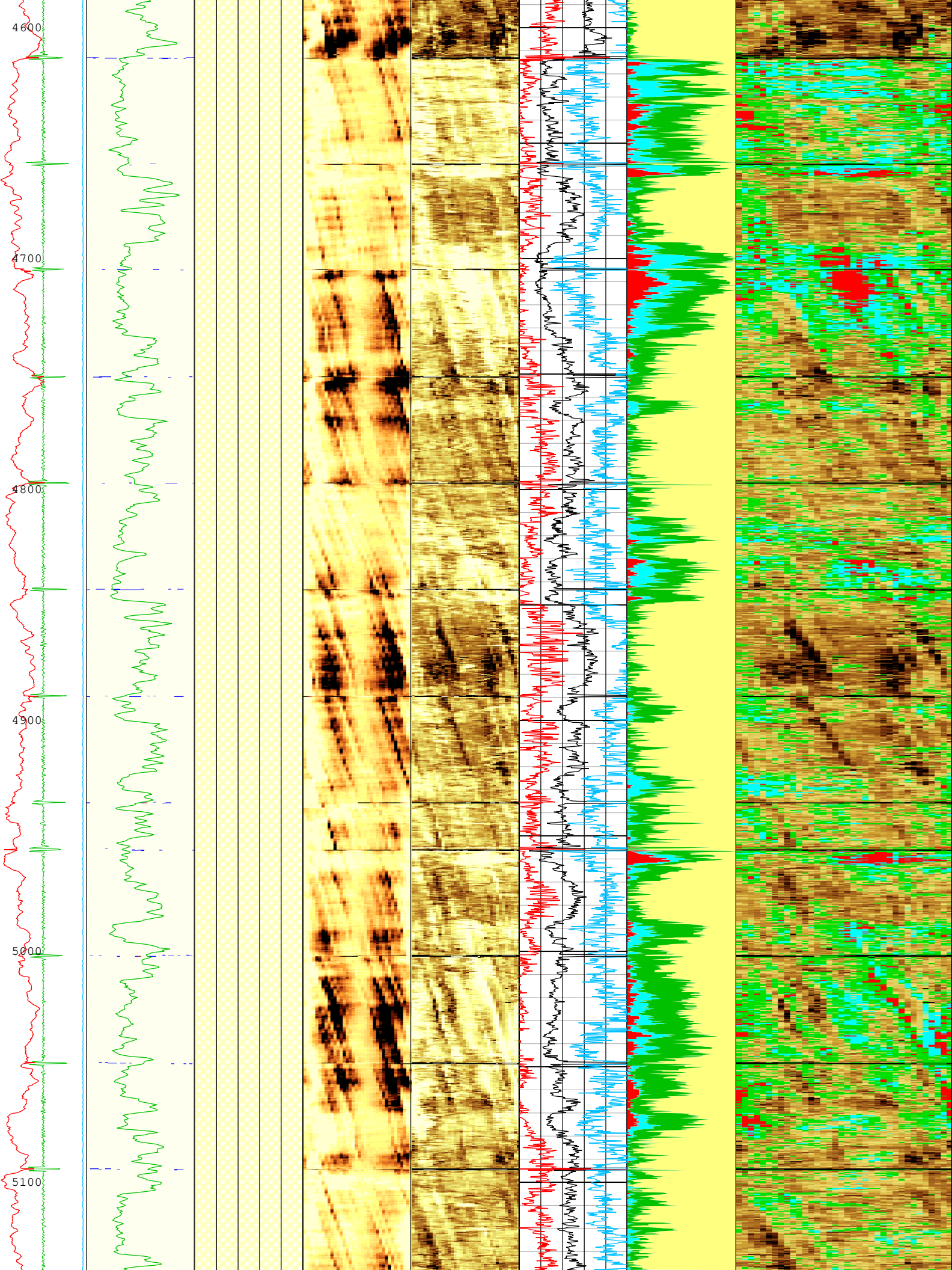


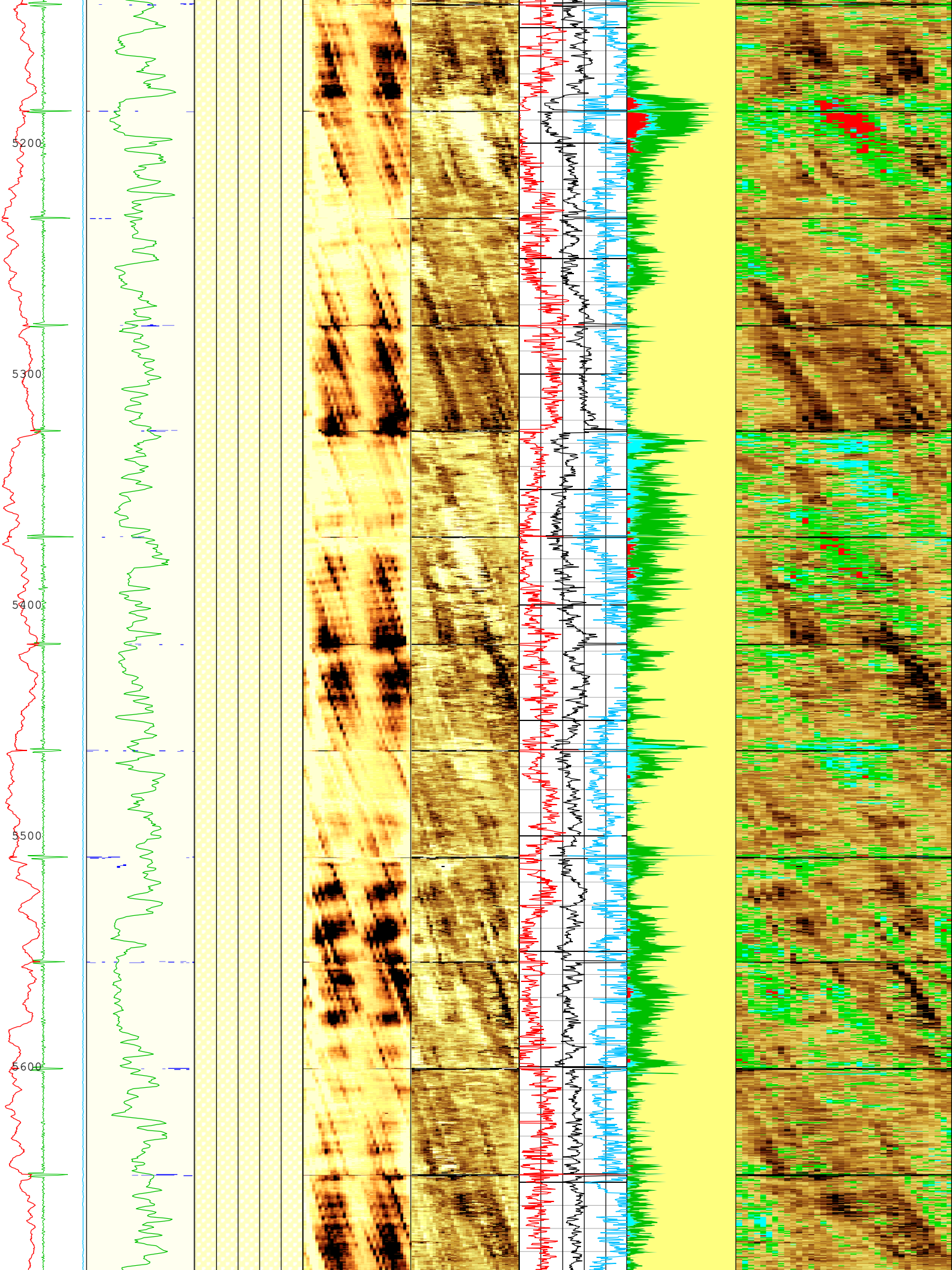


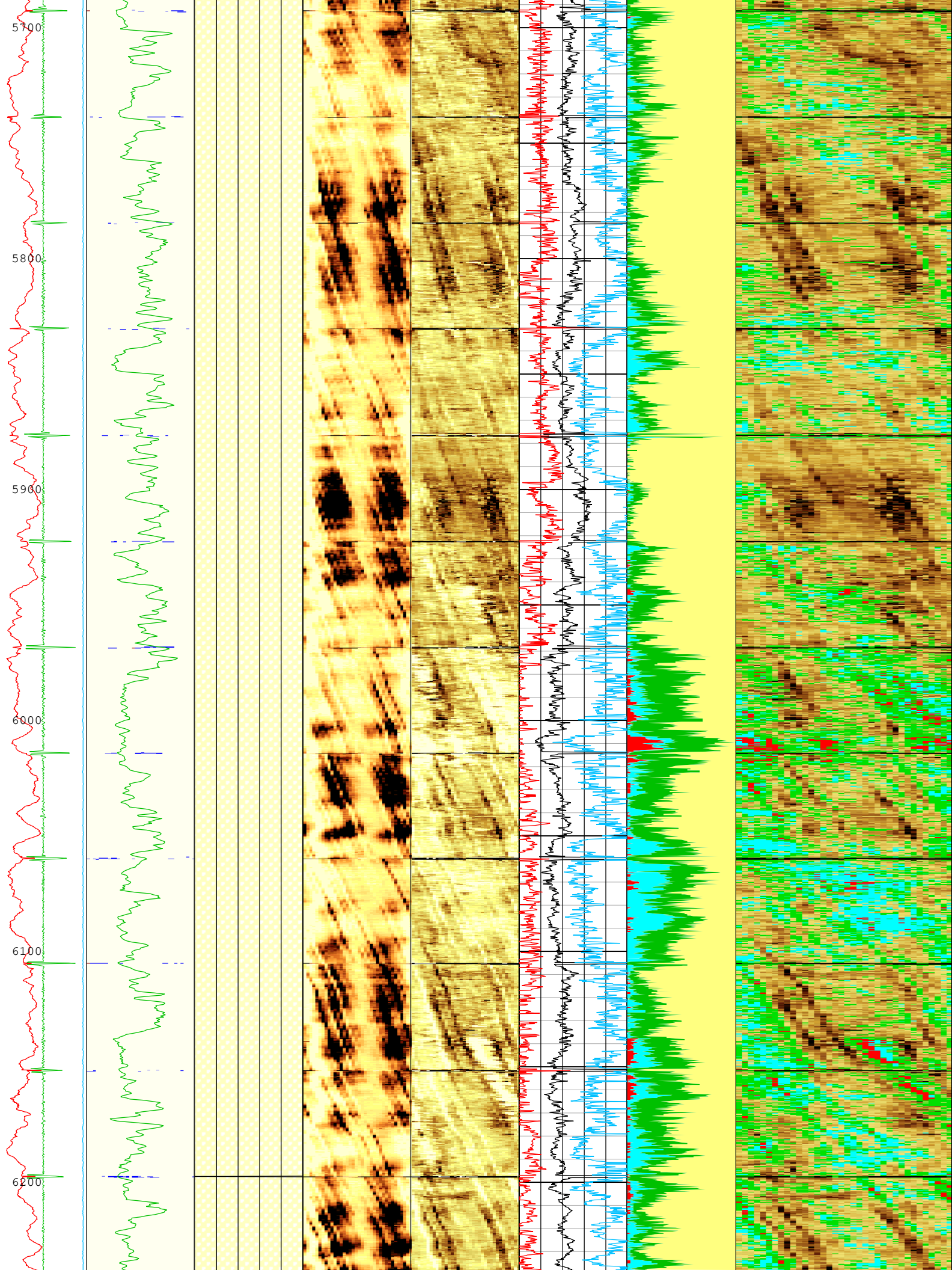


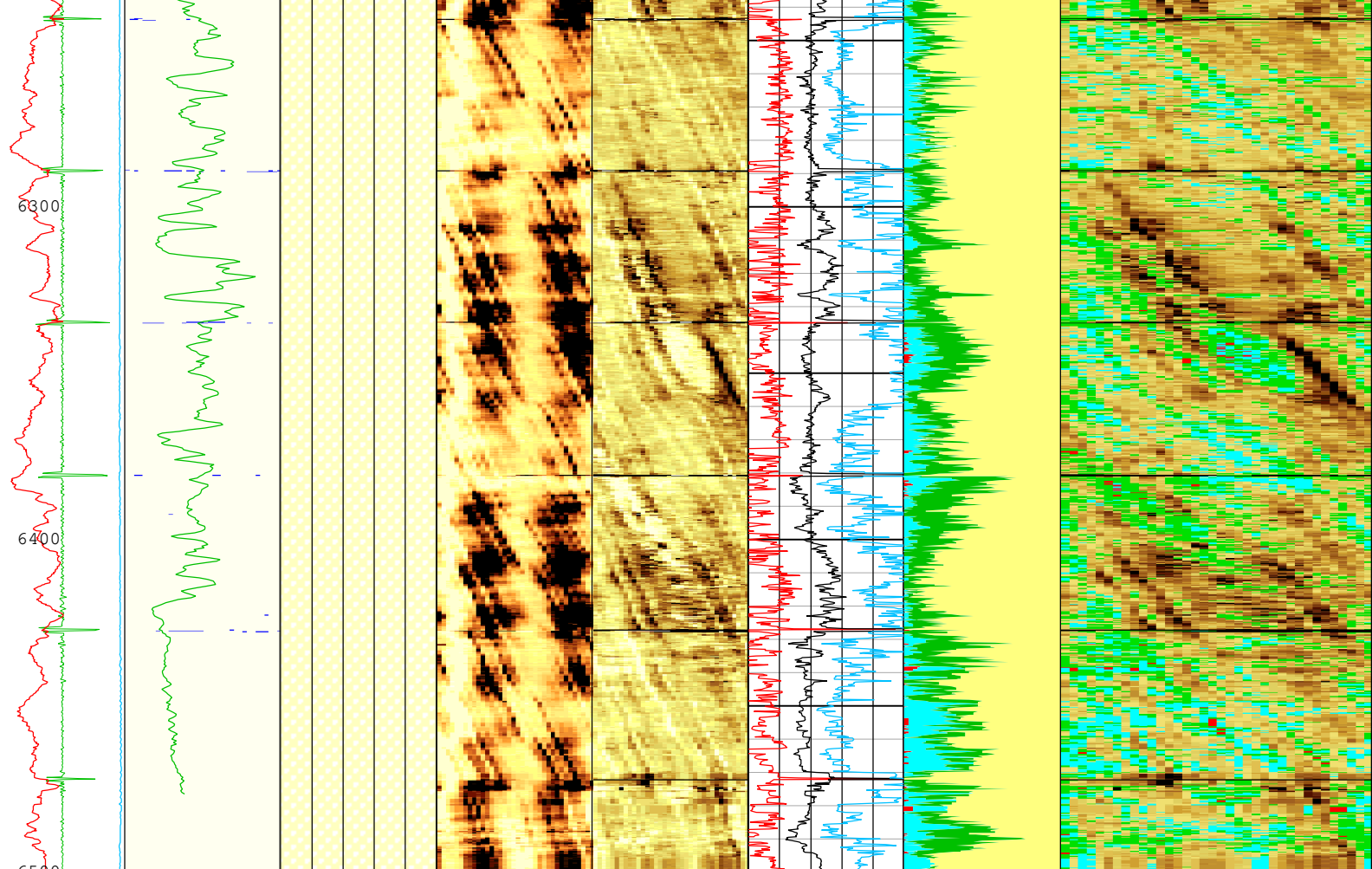












|  |   |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| <b>Casing Collar Locator (CCLU) USIT-E[1]</b><br>-20 in 20 | Absent 1.500 3.500<br>Explicit Normalization<br>USIT - USIT Processing Flags (UFLG) USIT-E[1]<br>GR<br>0 gAPI 150 | <b>External Radii Average (ERAV) USIT-E[1]</b><br>3.7 in 2.7         | Absent -5.200 -3.600 -2.000 -0.400<br>Explicit Normalization<br>USIT - Amplitude of Wave (AWBK) USIT-E[1] (dB) | -500.000 1.500 3.000 4.500 6.000 7.500<br>Custom Normalization<br>USIT - Acoustic Impedance (AIBK) USIT-E[1] (Mrayl) | <b>Acoustic Impedance Minimum (AIMN) USIT-E[1]</b><br>-1 Mrayl 9 | Bonded<br>Gas<br>Liquid<br>Micro-debonding | Absent -500.000 2.200 3.254 4.309 5.363 6.418 7.472<br>Custom Normalization<br>USIT - Acoustic Impedance With Micro-debonding Image (AI_MDEBOND_IMG) USIT-E[1] (Mrayl) |
|  |   | <b>Internal Radius Averaged Value (IRAV) USIT-E[1]</b><br>3.7 in 2.7 |  |  |  |  |  |

|  |   |  |
|--|---|--|
| <b>Motor Revolution Speed (RSAV) USIT-E[1]</b><br>6 c/s 7.5  | <b>Internal Radius Maximum Value (IRMX) USIT-E[1]</b><br>3.7 in 2.7 | <b>Acoustic Impedance Average (AIAV) USIT-E[1]</b><br>-1 Mrayl 9 |
| <b>Amplitude of Eccentering (ECCE) USIT-E[1]</b><br>0 in 0.5 | <b>Internal Radius Minimum Value (IRMN) USIT-E[1]</b><br>3.7 in 2.7 | <b>Acoustic Impedance Maximum (AIMX) USIT-E[1]</b><br>-1 Mrayl 9 |

TIME\_1900 - Time Marked every 60.00 (s)

Description: USI Cement Format: Log ( USI Cement 2 inch ) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:30:50

## Channel Processing Parameters

### 1B: Parameters

| Parameter    | Description              | Tool      | Value       | Unit |
|--------------|--------------------------|-----------|-------------|------|
| BARI(ISSBAR) | Barite Mud Presence Flag | Borehole  | No          |      |
| BERJ         | Bad Echo Rejection       | USIT-E    | On          |      |
| BS           | Bit Size                 | WLSESSION | Depth Zoned | in   |

|                   |   |          |                        |         |
|-------------------|---|----------|------------------------|---------|
| CASING_PRATIO     | Casing Poisson Ratio  | USIT-E   | Standard Poisson Ratio |         |
| CMTY(U-USIT_CEMT) | Cement Type   | USIT-E   | Regular Cement         |         |
| DFD               | Drilling Fluid Density  | Borehole | 8.43                   | lbm/gal |
| DFT_CATEGORY      | Drilling Fluid Type   | Borehole | Water                  |         |
| DTMD              | Borehole Fluid Slowness   | Borehole | 206                    | us/ft   |
| FDII              | FPM Data Interpolation Interval                                 | USIT-E   | 0                      | ft      |
| GR_MULTIPLIER     | Gamma Ray Multiplier  | SGT-N    | 1                      |         |
| HEMA              | Hematite Presence Flag  | Borehole | No                     |         |
| IMAR              | Image Rotation  | USIT-E   | Off                    |         |
| MEAS_WLEN         | Tcube Processing Window Length in Measurement Mode              | USIT-E   | 15.37                  | us      |
| MUD_N_THE         | Theoretical Mud Normalization Factor                            | USIT-E   | 1.07                   |         |
| RCOD              | Reference Calibrator Outer Diameter                             | USIT-E   | 4.5                    | in      |
| RCSO              | Reference Calibrator Standoff                                   | USIT-E   | 0.842                  | in      |
| RCTH              | Reference Calibrator Thickness                                  | USIT-E   | 0.216                  | in      |
| RPLUS_PROCESS     | Ultrasonic R+ Processing  | USIT-E   | No                     |         |
| SDNV              | Number of Vertical Samples used for Micro-debonding Computation | USIT-E   | 5                      |         |
| SDTHOR            | Acoustic Impedance STD Horizontal Threshold for Micro-debonding | USIT-E   | 0.5                    | Mrayl   |
| SdTVER            | Acoustic Impedance STD Vertical Threshold for Micro-debonding   | USIT-E   | 0.3                    | Mrayl   |
| THDH              | Maximum Search Thickness (percentage of nominal)                | USIT-E   | Time Zoned             | %       |
| THDL              | Minimum Search Thickness (percentage of nominal)                | USIT-E   | Time Zoned             | %       |
| U-USIT_DFSZ       | Drilling Fluid Specific Acoustic Impedance                      | USIT-E   | 1.5                    | Mrayl   |
| USI_FVEL_SEL      | USI Fluid Velocity Selection                                    | USIT-E   | Automatic              |         |
| USI_ZMUD_SEL      | USI Mud Impedance Selection                                     | USIT-E   | Theoretical            |         |
| THDP              | Thickness Detection Policy                                      | USIT-E   | Fundamental            |         |
| VCAS              | Ultrasonic Transversal Velocity in Casing                       | USIT-E   | 51.4                   | us/ft   |
| ZCAS              | Acoustic Impedance of Casing                                    | USIT-E   | 46.25                  | Mrayl   |
| ZINI              | Initial Estimate of Cement Impedance                            | USIT-E   | -1                     | Mrayl   |
| ZMUD              | Acoustic Impedance of Mud                                       | Borehole | 1.54                   | Mrayl   |
| ZTCM              | Acoustic Impedance Threshold for Cement                         | USIT-E   | 2.2                    | Mrayl   |
| ZTGS              | Acoustic Impedance Threshold for Gas                            | USIT-E   | 0.3                    | Mrayl   |

## 1BDepth Zoned Parameters

| Parameter | Value | Start ( ft ) | Stop ( ft ) |
|-----------|-------|--------------|-------------|
| BS        | 26    | 0            | 83          |
| BS        | 12.25 | 83           | 1092        |
| BS        | 7.875 | 1092         | 6500        |

All depth are actual.

## 1BTime Zoned Parameters

### Pass Log[2]:Up

| Parameter | Value | Start Time           | Stop Time            | Start Depth ( ft ) | Stop Depth ( ft ) |
|-----------|-------|----------------------|----------------------|--------------------|-------------------|
| THDH      | 120   | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:36:33 | 6500.37            | 4550.72           |
| THDH      | 115   | 11-Aug-2022 11:36:33 | 11-Aug-2022 11:36:35 | 4550.72            | 4547.32           |
| THDH      | 120   | 11-Aug-2022 11:36:35 | 11-Aug-2022 11:42:18 | 4547.32            | 3974.37           |
| THDL      | 80    | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:36:33 | 6500.37            | 4550.72           |
| THDL      | 85    | 11-Aug-2022 11:36:33 | 11-Aug-2022 11:36:35 | 4550.72            | 4547.32           |
| THDL      | 80    | 11-Aug-2022 11:36:35 | 11-Aug-2022 11:42:18 | 4547.32            | 3974.37           |

### Pass Log[9]:Up

|      |     |                      |                      |         |         |
|------|-----|----------------------|----------------------|---------|---------|
| THDH | 120 | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:36:33 | 6500.37 | 4550.72 |
|------|-----|----------------------|----------------------|---------|---------|

|      |     |                      |                      |         |       |
|------|-----|----------------------|----------------------|---------|-------|
| IHDH | 120 | 11-Aug-2022 13:18:29 | 11-Aug-2022 13:58:28 | 3974.37 | 10.62 |
| THDL | 80  | 11-Aug-2022 13:18:29 | 11-Aug-2022 13:58:28 | 3974.37 | 10.62 |

All depth are at tool zero.

## Tool Control Parameters

### 1B: Parameters

| Parameter     | Description                                | Tool   | Value                         | Unit |
|---------------|--|--------|-------------------------------|------|
| AGMN          | Minimum Gain of Cartridge                  | USIT-E | -12                           | dB   |
| AGMX          | Maximum Gain of Cartridge                  | USIT-E | 48                            | dB   |
| U-USIT_DDT5   | USIC Downhole Decimation for T5 only       | USIT-E | 0_NONE                        |      |
| DOT(DOS)      | Distance between Opposite Transducer Faces | USIT-E | 1.756                         | in   |
| EMXV          | EMEX Voltage                               | USIT-E | Time Zoned                    | V    |
| HRES          | Horizontal Resolution                      | USIT-E | 10 deg                        |      |
| ICE2_ACQ      | Ultrasonic ICE2 Acquisition                | USIT-E | Yes                           |      |
| MOTOR_PROTECT | Motor Protection                           | USIT-E | On                            |      |
| UACLV_PERM    | Ultrasonic ACLV Permanent                  | USIT-E | Yes                           |      |
| ULOG          | Logging Objective                          | USIT-E | MEASUREMENT                   |      |
| USFR          | Ultrasonic Sampling Frequency              | USIT-E | 666667                        | Hz   |
| UPAT          | USIT Emission Pattern                      | USIT-E | Pattern 750 KHz               |      |
| UWKM          | USIT Working Mode                          | USIT-E | Uncompressed 10 deg at 3.0 in |      |
| USSP          | Ultrasonic Service                         | USIT-E | USI                           |      |
| VRES          | Vertical Resolution                        | USIT-E | 3.0 in                        |      |

### 1BTime Zoned Parameters

#### Pass Log[2]:Up

| Parameter | Value | Start Time           | Stop Time            | Start Depth ( ft ) | Stop Depth ( ft ) |
|-----------|-------|----------------------|----------------------|--------------------|-------------------|
| EMXV      | 90    | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:19:49 | 6500.37            | 6174.18           |
| EMXV      | 80    | 11-Aug-2022 11:19:49 | 11-Aug-2022 11:42:18 | 6174.18            | 3974.37           |

#### Pass Log[9]:Up

|      |    |                      |                      |         |       |
|------|----|----------------------|----------------------|---------|-------|
| EMXV | 60 | 11-Aug-2022 13:18:29 | 11-Aug-2022 13:58:28 | 3974.37 | 10.62 |
|------|----|----------------------|----------------------|---------|-------|

All depth are at tool zero.

## Pressure Pass

## 2500 PSI Pass

## Software Version

| Acquisition System | Version   |
|--------------------|---|
| Maxwell 2022.0     | 12.0.215014.3100  |
| Application Patch  | Wireline_Hotfix-Mandatory-2022.0_12.0.217167<br>Wireline_NPD-ThruBit-2022.0_12.0.217960 |

## Composite Summary

| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                   | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|-------------------------|-------------------------|----------|-------------|-----------------------|
| 1B       | Log[2]:Up      | Up        | 3956.37 ft | 6500.59 ft | 11-Aug-2022 11:06:07 AM | 11-Aug-2022 11:42:18 AM | ON       | -4.43 ft    | Yes                   |
| 1B       | Log[9]:Up      | Up        | 10.39 ft   | 4206.44 ft | 11-Aug-2022 1:15:45 PM  | 11-Aug-2022 1:58:28 PM  | ON       | 0.50 ft     | Yes                   |

All depths are referenced to toolstring zero

## Log

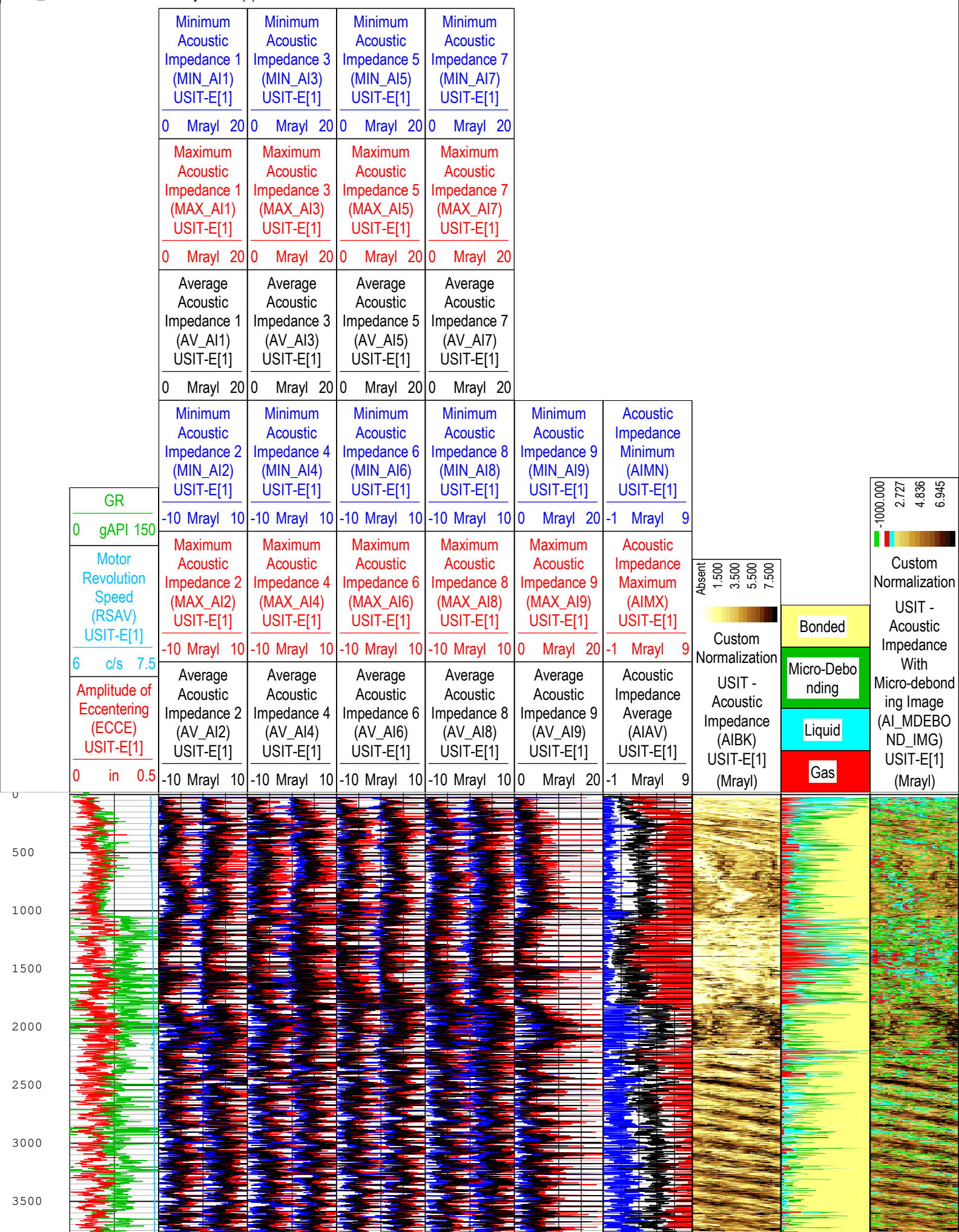
Company:Chevron USA Inc.

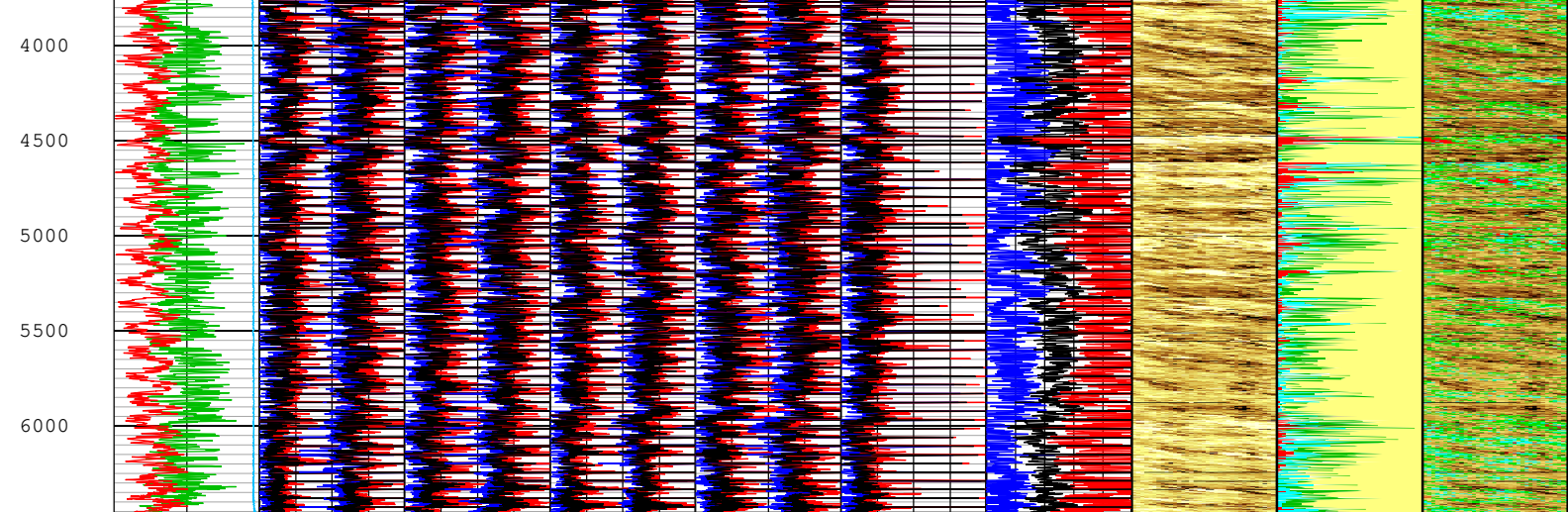
Well:SKR 598-36-BV-21

Pressure Pass:S010

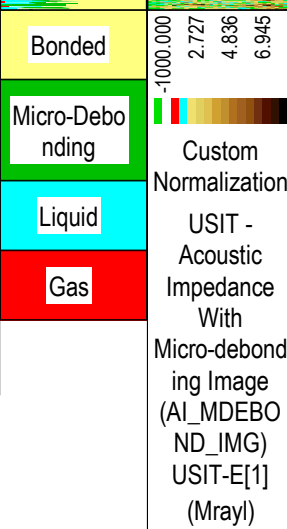
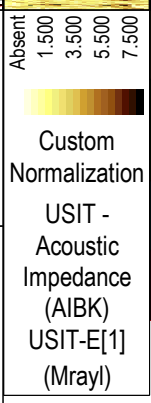
Description: USI Goodwin Format: Log ( USI Goodwin ) Index Scale: 0.1 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date:

TIME\_1900 - Time Marked every 60.00 (s)





|  |  |  |  |  |   |
|--|--|--|--|--|---|
| Minimum Acoustic Impedance 1 (MIN_AI1) USIT-E[1] | Minimum Acoustic Impedance 3 (MIN_AI3) USIT-E[1] | Minimum Acoustic Impedance 5 (MIN_AI5) USIT-E[1] | Minimum Acoustic Impedance 7 (MIN_AI7) USIT-E[1] | Minimum Acoustic Impedance 9 (MIN_AI9) USIT-E[1] | Acoustic Impedance Minimum (AIMN) USIT-E[1] |
| 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | -1 Mrayl 9                                  |
| Maximum Acoustic Impedance 1 (MAX_AI1) USIT-E[1] | Maximum Acoustic Impedance 3 (MAX_AI3) USIT-E[1] | Maximum Acoustic Impedance 5 (MAX_AI5) USIT-E[1] | Maximum Acoustic Impedance 7 (MAX_AI7) USIT-E[1] | Maximum Acoustic Impedance 9 (MAX_AI9) USIT-E[1] | Acoustic Impedance Maximum (AIMX) USIT-E[1] |
| 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | -1 Mrayl 9                                  |
| Average Acoustic Impedance 1 (AV_AI1) USIT-E[1]  | Average Acoustic Impedance 3 (AV_AI3) USIT-E[1]  | Average Acoustic Impedance 5 (AV_AI5) USIT-E[1]  | Average Acoustic Impedance 7 (AV_AI7) USIT-E[1]  | Average Acoustic Impedance 9 (AV_AI9) USIT-E[1]  | Acoustic Impedance Average (AIAV) USIT-E[1] |
| 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | 0 Mrayl 20                                       | -1 Mrayl 9                                  |
| Minimum Acoustic Impedance 2 (MIN_AI2) USIT-E[1] | Minimum Acoustic Impedance 4 (MIN_AI4) USIT-E[1] | Minimum Acoustic Impedance 6 (MIN_AI6) USIT-E[1] | Minimum Acoustic Impedance 8 (MIN_AI8) USIT-E[1] |  |   |
| -10 Mrayl 10                                     | -10 Mrayl 10                                     | -10 Mrayl 10                                     | -10 Mrayl 10                                     |  |   |
| Maximum Acoustic Impedance 2 (MAX_AI2) USIT-E[1] | Maximum Acoustic Impedance 4 (MAX_AI4) USIT-E[1] | Maximum Acoustic Impedance 6 (MAX_AI6) USIT-E[1] | Maximum Acoustic Impedance 8 (MAX_AI8) USIT-E[1] |  |   |
| -10 Mrayl 10                                     | -10 Mrayl 10                                     | -10 Mrayl 10                                     | -10 Mrayl 10                                     |  |   |
| Average Acoustic Impedance 2 (AV_AI2) USIT-E[1]  | Average Acoustic Impedance 4 (AV_AI4) USIT-E[1]  | Average Acoustic Impedance 6 (AV_AI6) USIT-E[1]  | Average Acoustic Impedance 8 (AV_AI8) USIT-E[1]  |  |   |
| -10 Mrayl 10                                     | -10 Mrayl 10                                     | -10 Mrayl 10                                     | -10 Mrayl 10                                     |  |   |



TIME\_1900 - Time Marked every 60.00 (s)

Description: USI Goodwin Format: Log ( USI Goodwin ) Index Scale: 0.1 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 16-Aug-2022 23:31:15

## Channel Processing Parameters

### 1B: Parameters

| Parameter | Description | Tool | Value | Unit |
|-----------|-------------|------|-------|------|
|-----------|-------------|------|-------|------|

|                   |  |           |                |         |
|-------------------|--|-----------|----------------|---------|
| BARI(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  | 8.43           | lbm/gal |
| DFT_CATEGORY      | Drilling Fluid Type                                | Borehole  | Water          |         |
| DTMD              | Borehole Fluid Slowness                            | Borehole  | 206            | us/ft   |
| HEMA              | Hematite Presence Flag                             | Borehole  | No             |         |
| IMAR              | Image Rotation                                     | USIT-E    | Off            |         |
| MEAS_WLEN         | Tcube Processing Window Length in Measurement Mode | USIT-E    | 15.37          | us      |
| MUD_N_THE         | Theoretical Mud Normalization Factor               | USIT-E    | 1.07           |         |
| THDH              | Maximum Search Thickness (percentage of nominal)   | USIT-E    | Time Zoned     | %       |
| THDL              | Minimum Search Thickness (percentage of nominal)   | USIT-E    | Time Zoned     | %       |
| U-USIT_DFSZ       | Drilling Fluid Specific Acoustic Impedance         | USIT-E    | 1.5            | Mrayl   |
| USI_FVEL_SEL      | USI Fluid Velocity Selection                       | USIT-E    | Automatic      |         |
| USI_ZMUD_SEL      | USI Mud Impedance Selection                        | USIT-E    | Theoretical    |         |
| ZMUD              | Acoustic Impedance of Mud                          | Borehole  | 1.54           | Mrayl   |
| ZTCM              | Acoustic Impedance Threshold for Cement            | USIT-E    | 2.2            | Mrayl   |
| ZTGS              | Acoustic Impedance Threshold for Gas               | USIT-E    | 0.3            | Mrayl   |

## 1BDepth Zoned Parameters

| Parameter | Value | Start ( ft ) | Stop ( ft ) |
|-----------|-------|--------------|-------------|
| BS        | 26    | 0            | 83          |
| BS        | 12.25 | 83           | 1092        |
| BS        | 7.875 | 1092         | 6500        |

All depth are actual.

## 1BTime Zoned Parameters

### Pass Log[2]:Up

| Parameter | Value | Start Time           | Stop Time            | Start Depth ( ft ) | Stop Depth ( ft ) |
|-----------|-------|----------------------|----------------------|--------------------|-------------------|
| THDH      | 120   | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:36:33 | 6500.37            | 4550.72           |
| THDH      | 115   | 11-Aug-2022 11:36:33 | 11-Aug-2022 11:36:35 | 4550.72            | 4547.32           |
| THDH      | 120   | 11-Aug-2022 11:36:35 | 11-Aug-2022 11:42:18 | 4547.32            | 3974.37           |
| THDL      | 80    | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:36:33 | 6500.37            | 4550.72           |
| THDL      | 85    | 11-Aug-2022 11:36:33 | 11-Aug-2022 11:36:35 | 4550.72            | 4547.32           |
| THDL      | 80    | 11-Aug-2022 11:36:35 | 11-Aug-2022 11:42:18 | 4547.32            | 3974.37           |

### Pass Log[9]:Up

|      |     |                      |                      |         |       |
|------|-----|----------------------|----------------------|---------|-------|
| THDH | 120 | 11-Aug-2022 13:18:29 | 11-Aug-2022 13:58:28 | 3974.37 | 10.62 |
| THDL | 80  | 11-Aug-2022 13:18:29 | 11-Aug-2022 13:58:28 | 3974.37 | 10.62 |

All depth are at tool zero.

## Tool Control Parameters

### 1B: Parameters

| Parameter | Description                   | Tool   | Value       | Unit |
|-----------|-------------------------------|--------|-------------|------|
| AGMN      | Minimum Gain of Cartridge     | USIT-E | -12         | dB   |
| AGMX      | Maximum Gain of Cartridge     | USIT-E | 48          | dB   |
| EMXV      | EMEX Voltage                  | USIT-E | Time Zoned  | 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 750 KHz               |
| UWKM | USIT Working Mode     | USIT-E | Uncompressed 10 deg at 3.0 in |
| VRES | Vertical Resolution   | USIT-E | 3.0 in                        |

## 1B Time Zoned Parameters

### Pass Log[2]:Up

| Parameter | Value | Start Time           | Stop Time            | Start Depth ( ft ) | Stop Depth ( ft ) |
|-----------|-------|----------------------|----------------------|--------------------|-------------------|
| EMXV      | 90    | 11-Aug-2022 11:06:07 | 11-Aug-2022 11:19:49 | 6500.37            | 6174.18           |
| EMXV      | 80    | 11-Aug-2022 11:19:49 | 11-Aug-2022 11:42:18 | 6174.18            | 3974.37           |

### Pass Log[9]:Up

|      |    |                      |                      |         |       |
|------|----|----------------------|----------------------|---------|-------|
| EMXV | 60 | 11-Aug-2022 13:18:29 | 11-Aug-2022 13:58:28 | 3974.37 | 10.62 |
|------|----|----------------------|----------------------|---------|-------|

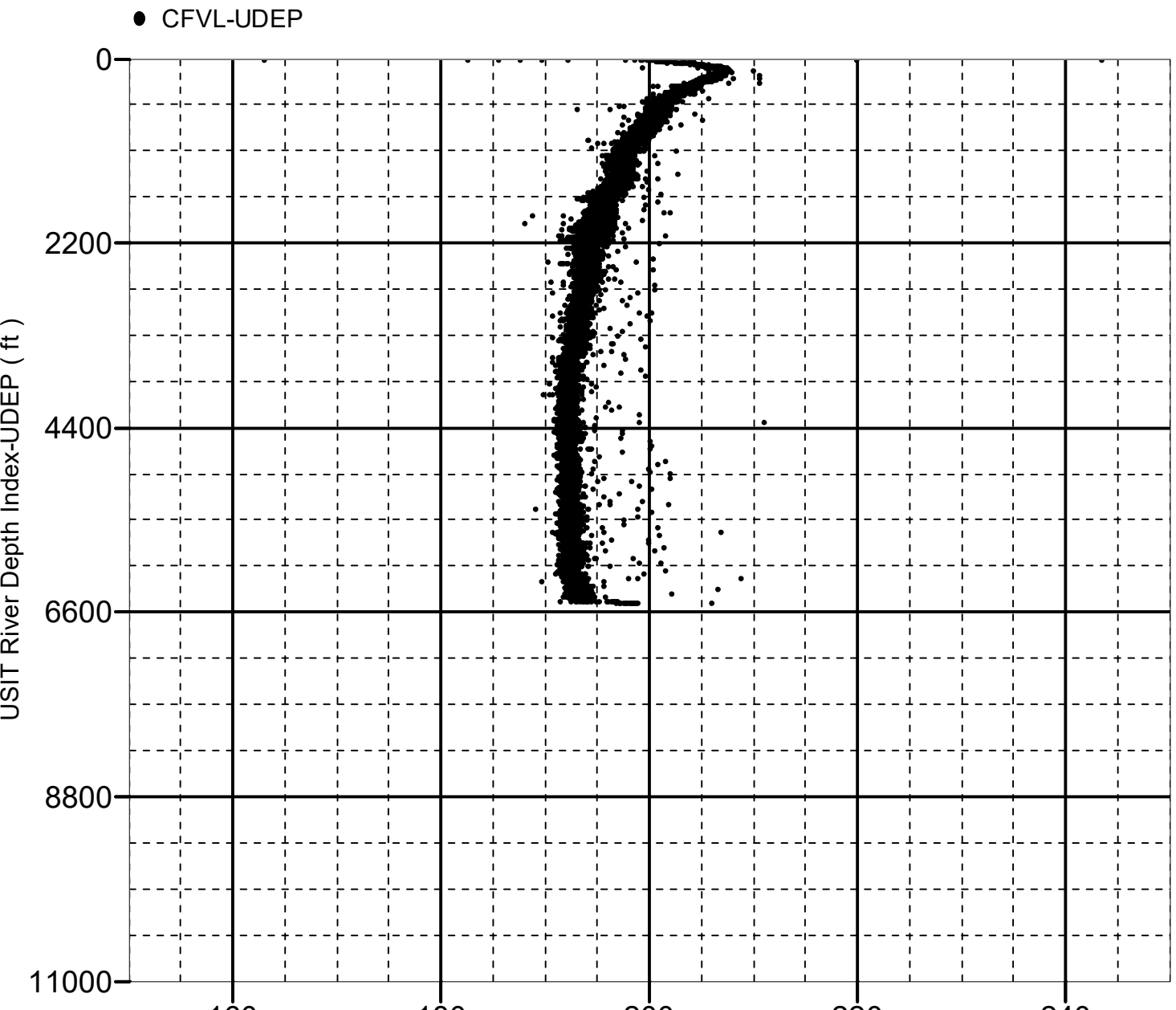
All depth are at tool zero.

|            |  |
|------------|--|
| <b>XYZ</b> | Company:Chevron USA Inc. Well:SKR 598-36-BV-21 |
|            | Pressure Pass:S010                             |

# Fluid Acoustic Slowness vs Depth

## 2D Cross Plot

Index Range: From 10.25 to 6500.00 ft

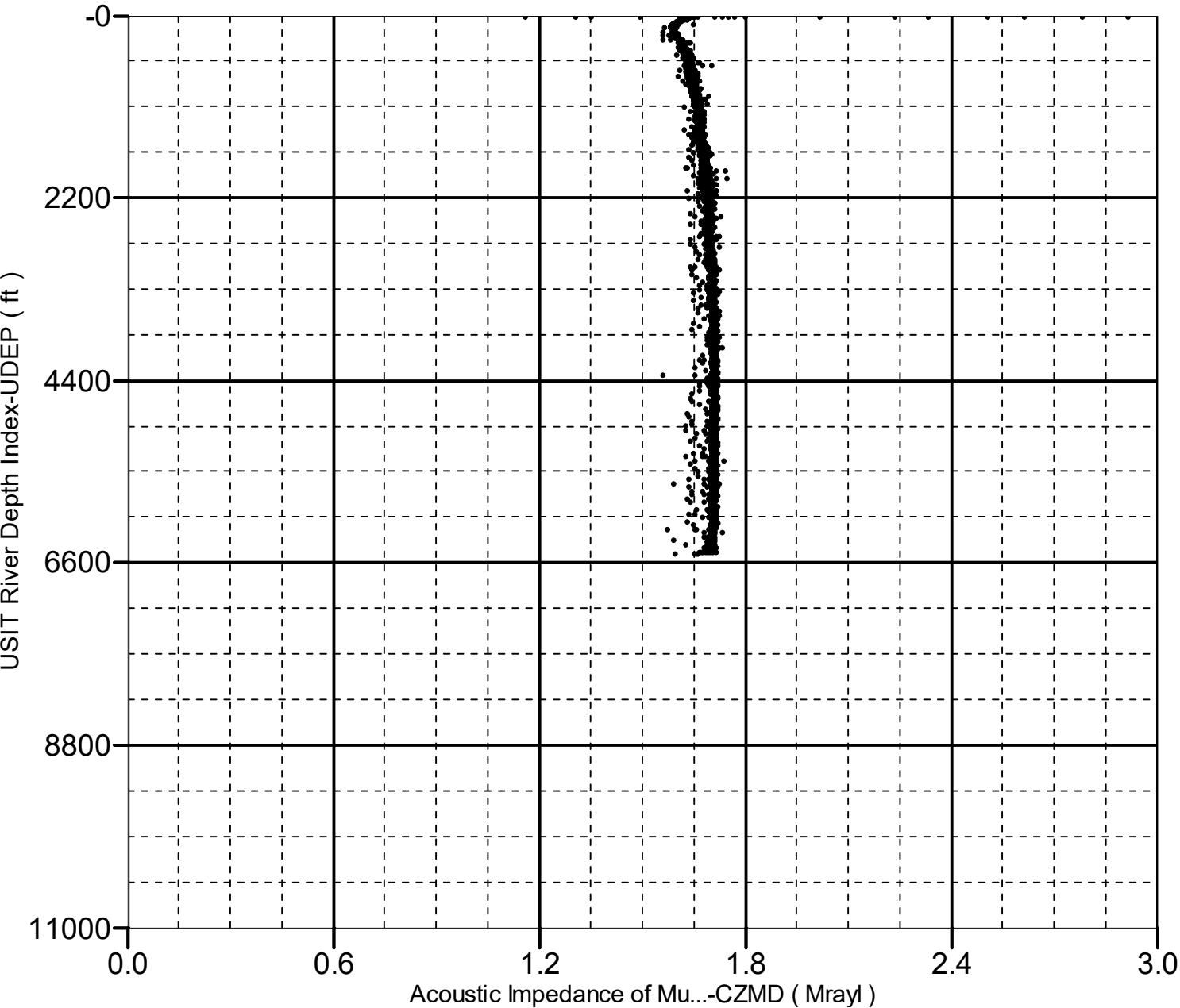


# Acoustic Impedance of Mud vs Depth

## 2D Cross Plot

Index Range: From 10.25 to 6500.00 ft

● CZMD-UDEP



Company: Chevron USA Inc.

**Schlumberger**

Well: SKR 598-36-BV-21

Field: Skinner Ridge

Ultrasonic Imager  
Cement Evaluation (Short)  
Gamma Ray - CCL Log