

Company: Caerus Piceance LLC

Well: Puckett 12D-1

Field: Wildcat

County: Garfield Country:

## Slim Cement Mapping Tool

CBL-VDL

County: Garfield  
Field: Wildcat  
Location: SHL: S2, T7S, R97W  
Well: Puckett 12D-1  
Company: Caerus Piceance LLC

|                         |                           |  |  |
|-------------------------|---------------------------|--|--|
| Location:               |                           | SHL: S2, T7S, R97W<br>2215' FNL & 632' FEL<br>LAT: 39.475711 / LONG: -108.180239 | Elev.: K.B. 8509.00 ft<br>G.L. 8479.00 ft<br>D.F. 8508.00 ft |
| Permanent Datum:        | Ground Level              | Kelly Bushing  | Elev.: 8479.00 f   |
| Log Measured From:      | 30.00 ft above Perm.Datum |  |  |
| Drilling Measured From: | Kelly Bushing             |  |  |
| API Serial No.          | Max.Hole Deviation        | Longitude:   | Latitude:  |
| 05-045-22619            | 0 deg                     | -108.18239 degrees   | 39.475711 degrees  |

Logging Date 24-Jul-2015

Run Number ONE

Depth Driller 8977.00 ft

Schlumberger Depth 8977.00 ft

Bottom Log Interval 8898.00 ft

Top Log Interval 2500.00 ft

Casing Fluid Type 3% KCl

Salinity

Density 9 lbm/gal

Fluid Level 0.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.75 in

From 2532.00 ft

To 8977.00 ft

Casing/Tubing Size 4.5 in

Weight 11.6 lbm/ft

Grade P110

From 0.00 ft

To 8977.00 ft

Max Recorded Temperatures 239 degF

Logger on Bottom 24-Jul-2015 09:44:00

Unit Number 9108 Location: Fort Morgan, CO

Recorded By Brett Dobinsky / Ben Marmion

Witnessed By Natalie Naeve

## 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.

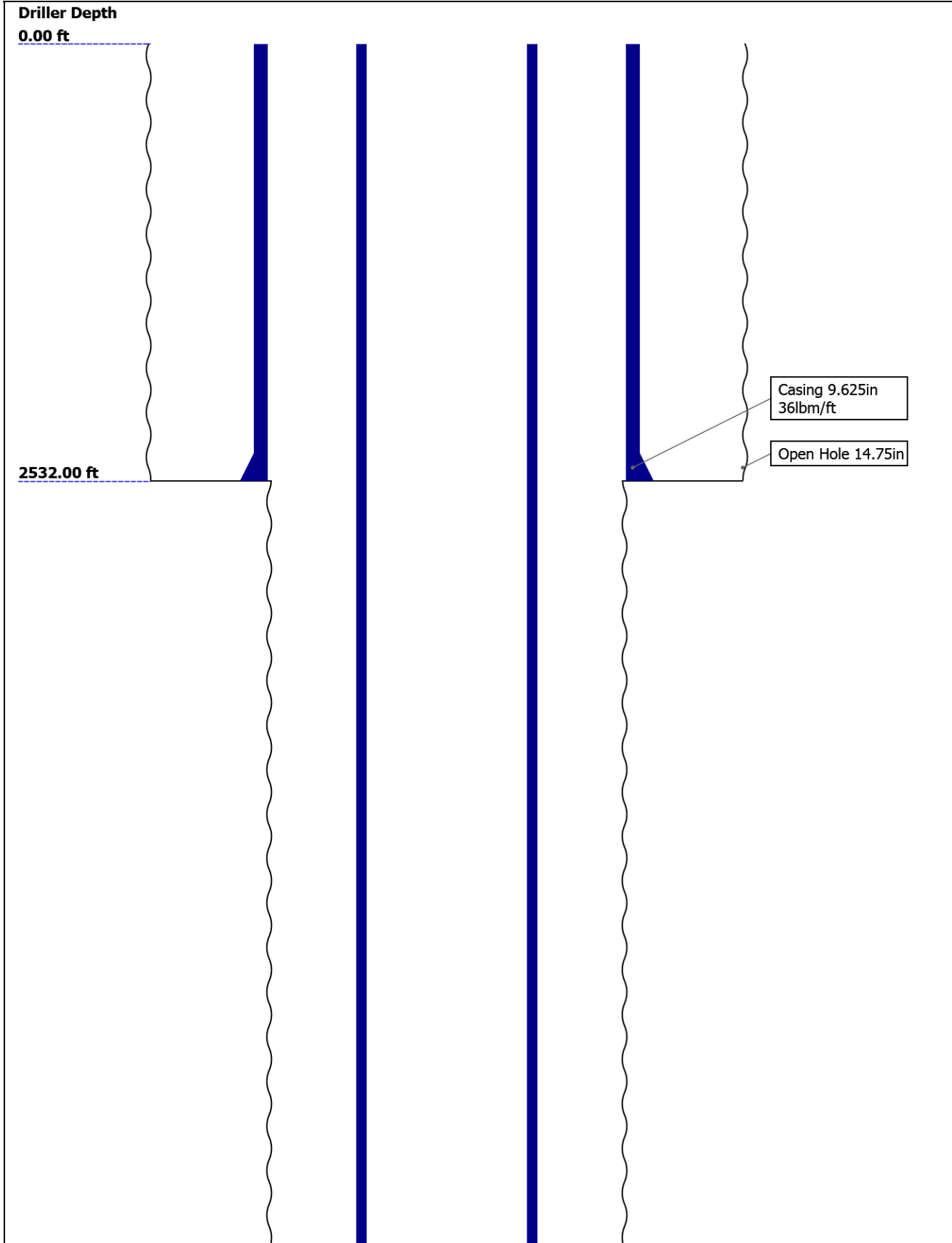
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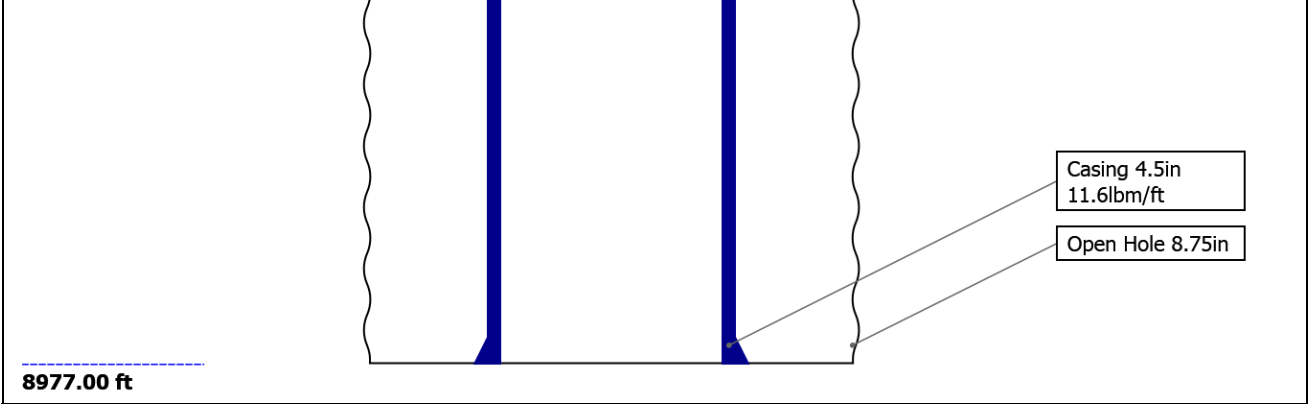
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Well Sketch





Borehole Size/Casing/Tubing Record

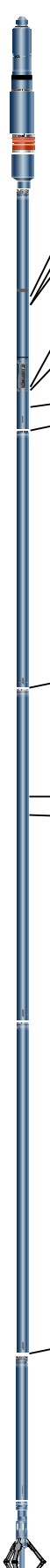
|                       |       |      |  |  |  |  |
|-----------------------|-------|------|--|--|--|--|
| Bit                   |       |      |  |  |  |  |
| Bit Size ( in )       | 14.75 | 8.75 |  |  |  |  |
| Top Driller ( ft )    | 0     | 2532 |  |  |  |  |
| Top Logger ( ft )     | 0     | 2532 |  |  |  |  |
| Bottom Driller ( ft ) | 2532  | 8977 |  |  |  |  |
| Bottom Logger ( ft )  | 2532  | 8977 |  |  |  |  |
| Casing                |       |      |  |  |  |  |
| Size ( in )           | 9.625 | 4.5  |  |  |  |  |
| Weight ( lbm/ft )     | 36    | 11.6 |  |  |  |  |
| Inner Diameter ( in ) | 8.921 | 4    |  |  |  |  |
| Grade                 | J55   | P110 |  |  |  |  |
| Top Driller ( ft )    | 0     | 0    |  |  |  |  |
| Top Logger ( ft )     | 0     | 0    |  |  |  |  |
| Bottom Driller ( ft ) | 2532  | 8977 |  |  |  |  |
| Bottom Logger ( ft )  | 2532  | 8977 |  |  |  |  |

Operational Run Summary

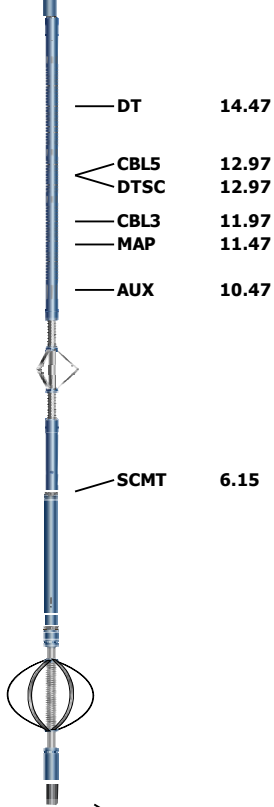
|                                  |                             |  |  |  |  |  |
|----------------------------------|-----------------------------|--|--|--|--|--|
| Parameter ( unit )               | ONE                         |  |  |  |  |  |
| Date Log Started                 | 24-Jul-2015                 |  |  |  |  |  |
| Time Log Started                 | 07:08:46                    |  |  |  |  |  |
| Date Log Finished                | 24-Jul-2015                 |  |  |  |  |  |
| Time Log Finished                | 13:50:50                    |  |  |  |  |  |
|                                  |                             |  |  |  |  |  |
| Top Log Interval ( ft )          | 2500.00                     |  |  |  |  |  |
| Bottom Log Interval ( ft )       | 8898.00                     |  |  |  |  |  |
|                                  |                             |  |  |  |  |  |
| Total Depth ( ft )               | 8898.00                     |  |  |  |  |  |
| Max Hole Deviation ( deg )       | 0.00                        |  |  |  |  |  |
| Azimuth of Max Deviation ( deg ) | 0.00                        |  |  |  |  |  |
| Bit Size ( in )                  | 8.750                       |  |  |  |  |  |
|                                  |                             |  |  |  |  |  |
| Logging Unit Number              | 9108                        |  |  |  |  |  |
| Logging Unit Location            | Fort Morgan, CO             |  |  |  |  |  |
| Recorded By                      | Brett Dobinsky / Ben Marmon |  |  |  |  |  |

|                      |               |  |  |  |  |  |
|----------------------|---------------|--|--|--|--|--|
| Witnessed By         | Natalie Naeve |  |  |  |  |  |
| Service Order Number | D5ND-00074    |  |  |  |  |  |

Remarks and Equipment Summary

| ONE: Toolstring   |  |  |  | ONE: Remarks                                      |  |
|---|--|--|--|---|--|
| <div><div><div>Equip name</div><div>Length</div></div><div>LEH-QT</div><div>58.91</div></div> <div><div><div>MP name</div><div>Offset</div></div><div>LEH-QT</div><div></div></div>   |  |  |  | Tool ran as per tool sketch                       |  |
|   |  |  |  | This is the first run in the hole.                |  |
|   |  |  |  | Main and Repeat passes are correlated to downlog. |  |
|   |  |  |  | RST ran in Sigma mode                             |  |
|   |  |  |  | Matrix: Sandstone, 2.68 g/cc                      |  |
|   |  |  |  | Tagged float collar at 8898'.                     |  |
|   |  |  |  | Reapeat pass is done with 0 psi.                  |  |
|   |  |  |  | Main pass logged with 2500 psi.                   |  |
|   |  |  |  | Logged stopped at 2500' as per client request.    |  |
|   |  |  |  |   |  |
| <div><div><div>Equip name</div><div>Length</div></div><div>AH-63</div><div>56.00</div></div> <div><div><div>MP name</div><div>Offset</div></div><div>AH-79</div><div>55.68</div></div>  |  |  |  |   |  |
| <div><div><div>Equip name</div><div>Length</div></div><div>PSTP-A:18</div><div>54.85</div></div> <div><div><div>MP name</div><div>Offset</div></div><div>14</div><div>0.00</div></div> <div>PSC-A</div> <div>PSTC-A</div> <div>PBMS-A:18</div> <div>14</div> <div>Sapphire 10</div> <div>kPSI</div>                                       |  | <div><div>GR</div><div>PSTC</div><div>PSTC Tool String Bottom</div><div>Temperature</div><div>Sapphire Pressure</div><div>CCL</div><div>PBMS</div></div> | <div><div>51.14</div><div>50.85</div><div>0.00</div><div>48.06</div><div>47.94</div><div>47.33</div><div>46.58</div></div> |   |  |
| <div><div><div>Equip name</div><div>Length</div></div><div>RST-C:178</div><div>46.58</div></div> <div><div><div>MP name</div><div>Offset</div></div><div>7</div><div></div></div> <div>RSCH-A:46</div> <div>9</div> <div>RSC-E:381</div> <div>RSS-A:461</div> <div>MNTR-F:1</div> <div>RSXH-A:27</div> <div>5</div> <div>RSX-E:1787</div> |  |  |  |   |  |
|   |  | <div><div>RSC-E</div></div>  | <div><div>40.22</div></div>  |   |  |
|   |  | <div><div>Far</div><div>Near</div></div>   | <div><div>37.46</div><div>36.96</div></div>  |   |  |
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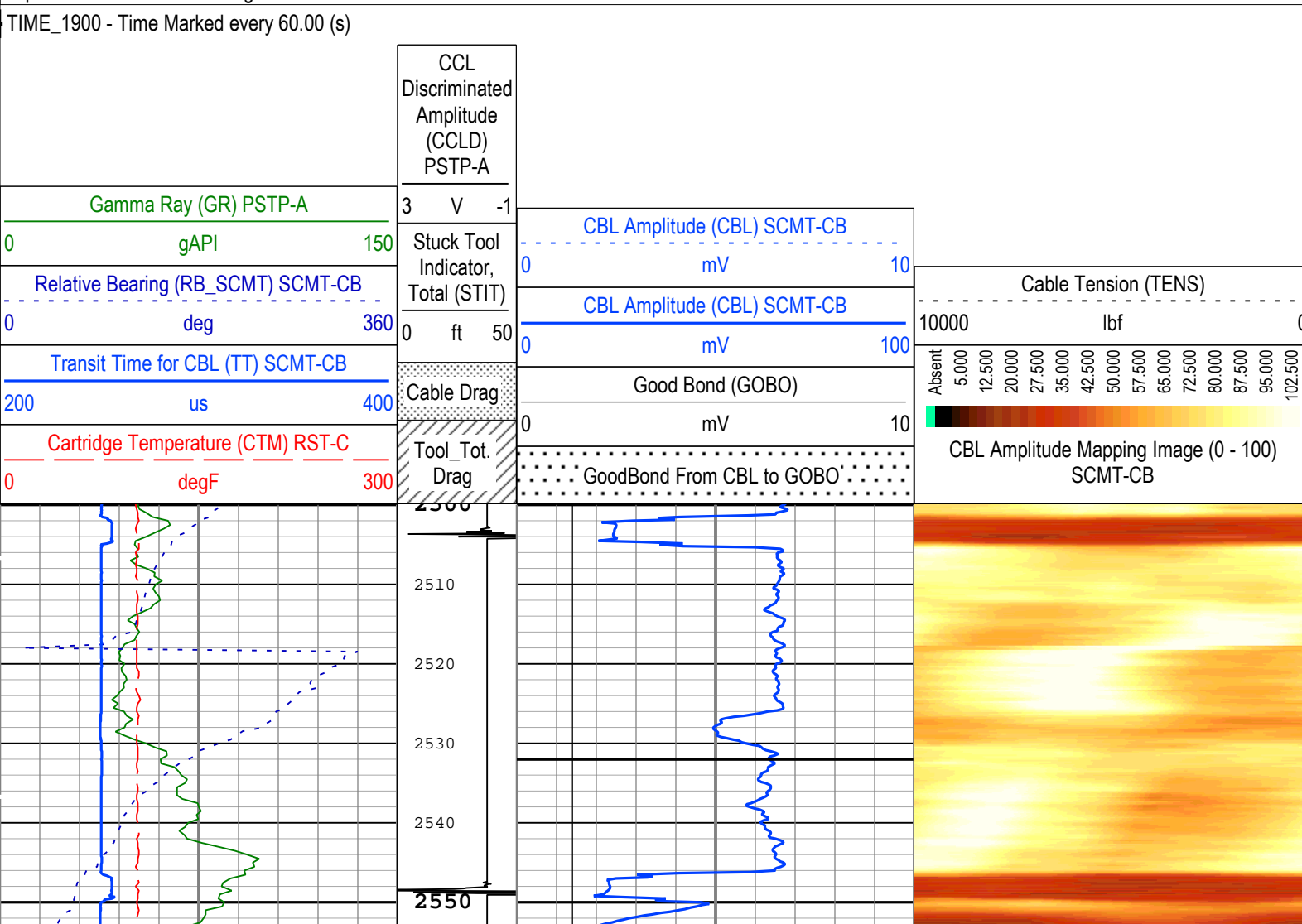


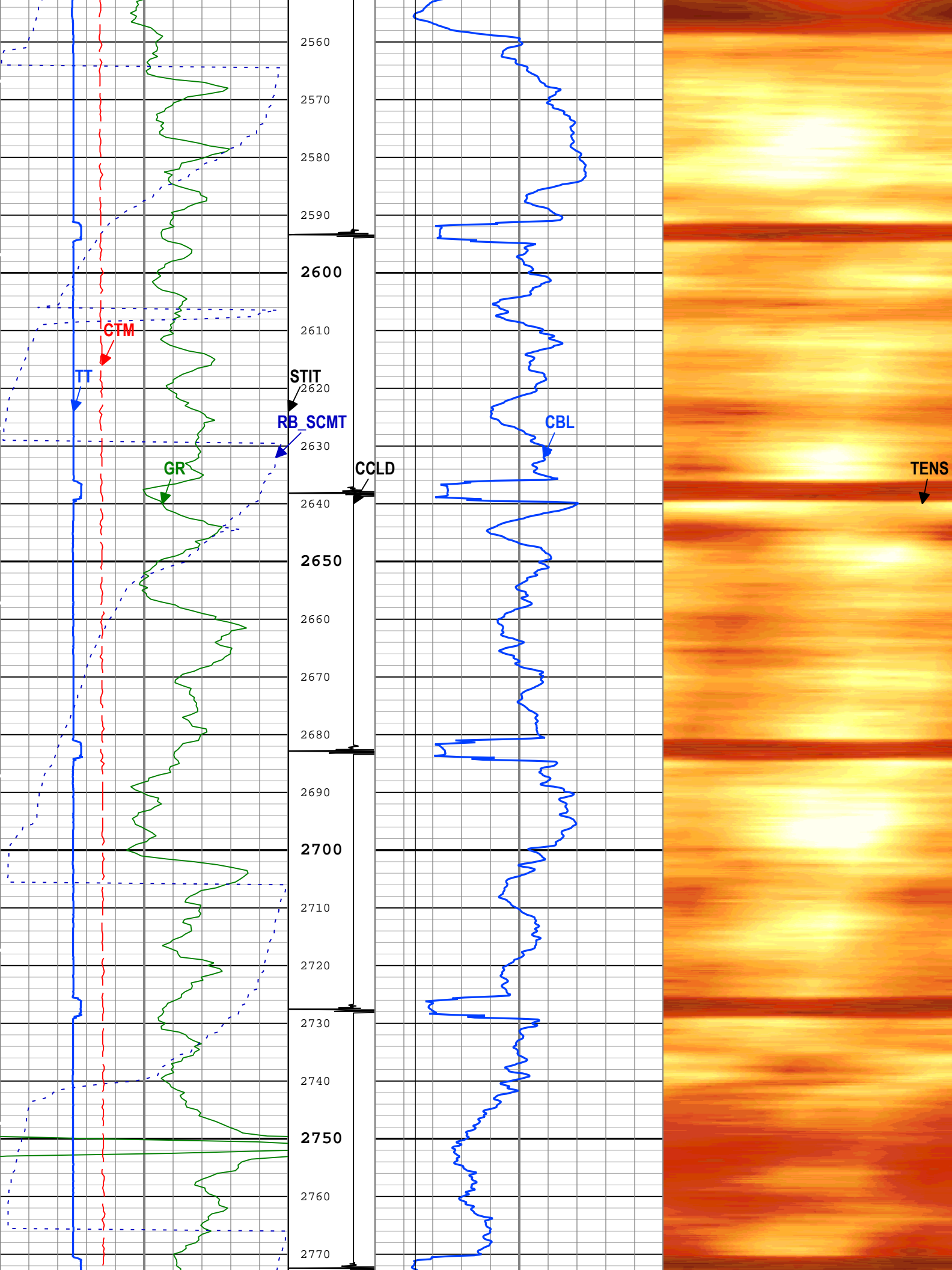


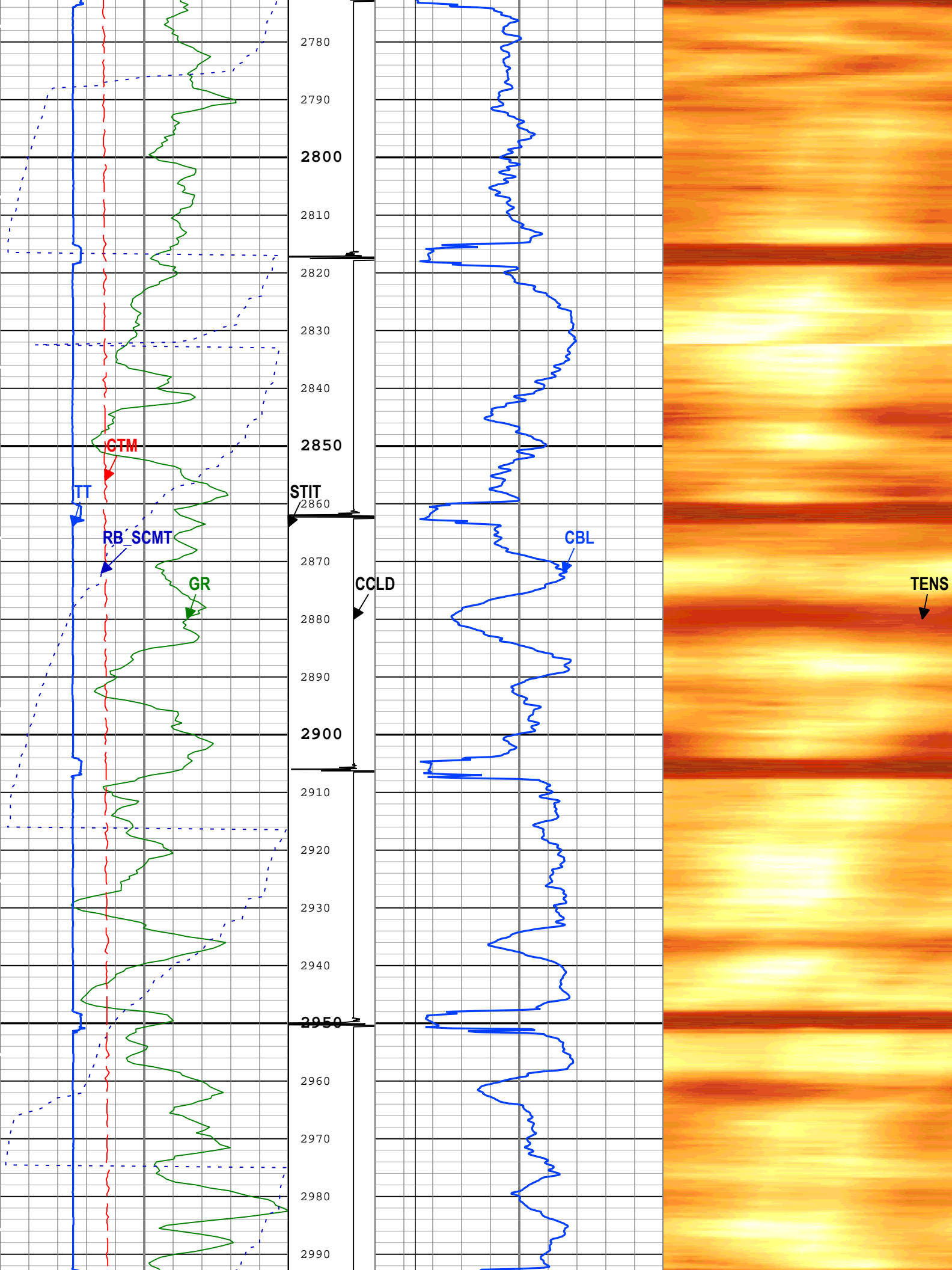
**BNS-P**      **0.14**

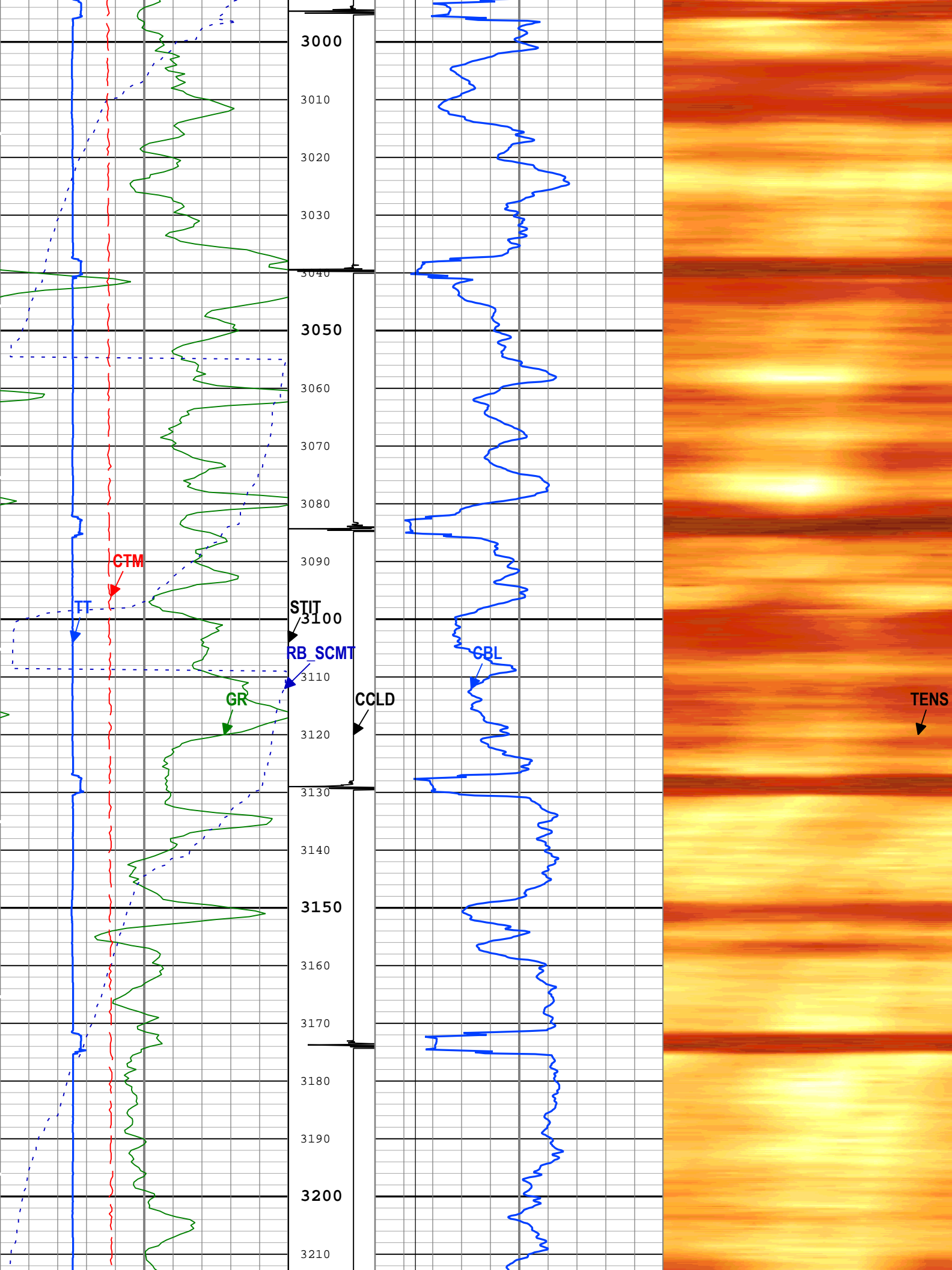
Lengths are in ft  
Maximum Outer Diameter = 3.375 in  
Line: Sensor Location, Value: Gating Offset  
All measurements are relative to TOOL\_ZERO

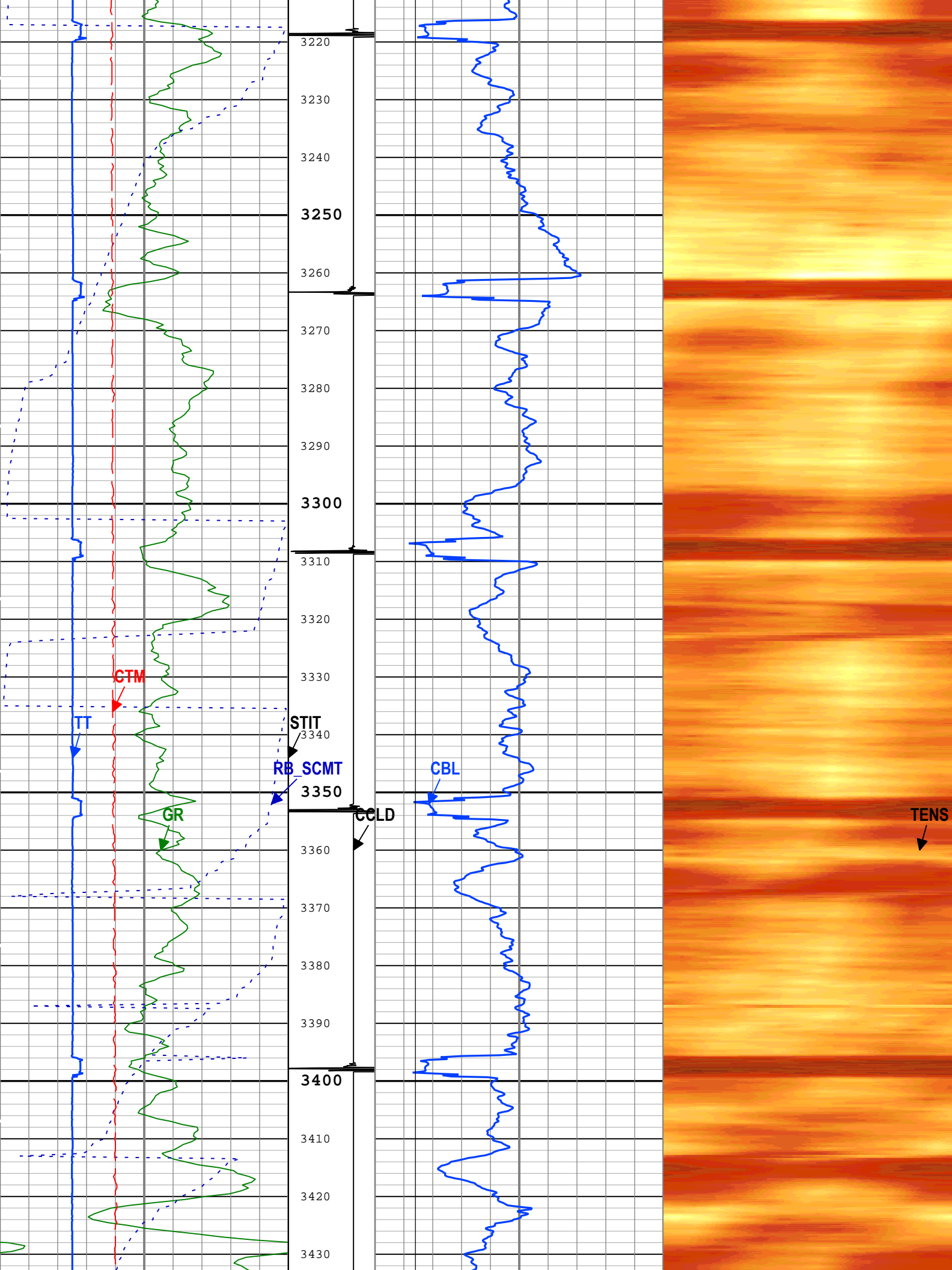
| Depth Summary                      |             |  |  |
|------------------------------------|-------------|--|--|
|                                    | ONE         |  |  |
| Depth Measuring Device             |             |  |  |
| Type                               | IDW-JA      |  |  |
| Serial Number                      | 6510        |  |  |
| Calibration Date                   | 29-Mar-2015 |  |  |
| Calibrator Serial Number           |             |  |  |
| Calibration Cable Type             | 7-46 AXS    |  |  |
| Wheel Correction 1                 | -4          |  |  |
| Wheel Correction 2                 | -2          |  |  |
| Tension Device                     |             |  |  |
| Type                               | CMTD-B/A    |  |  |
| Serial Number                      | 171         |  |  |
| Calibration Date                   | 26-JUN-2015 |  |  |
| Calibrator Serial Number           | 123         |  |  |
| Number of Calibration Points       | 10          |  |  |
| Calibration Root Mean Square Error | 13          |  |  |
| Calibration Peak Error             | 31          |  |  |
| Logging Cable                      |             |  |  |
| Type                               | 7-46A-XS    |  |  |
| Serial Number                      | U714071     |  |  |
| Length                             | 17500.00 ft |  |  |
| Conveyance Type                    | Wireline    |  |  |
| Rig Type                           | MAST        |  |  |

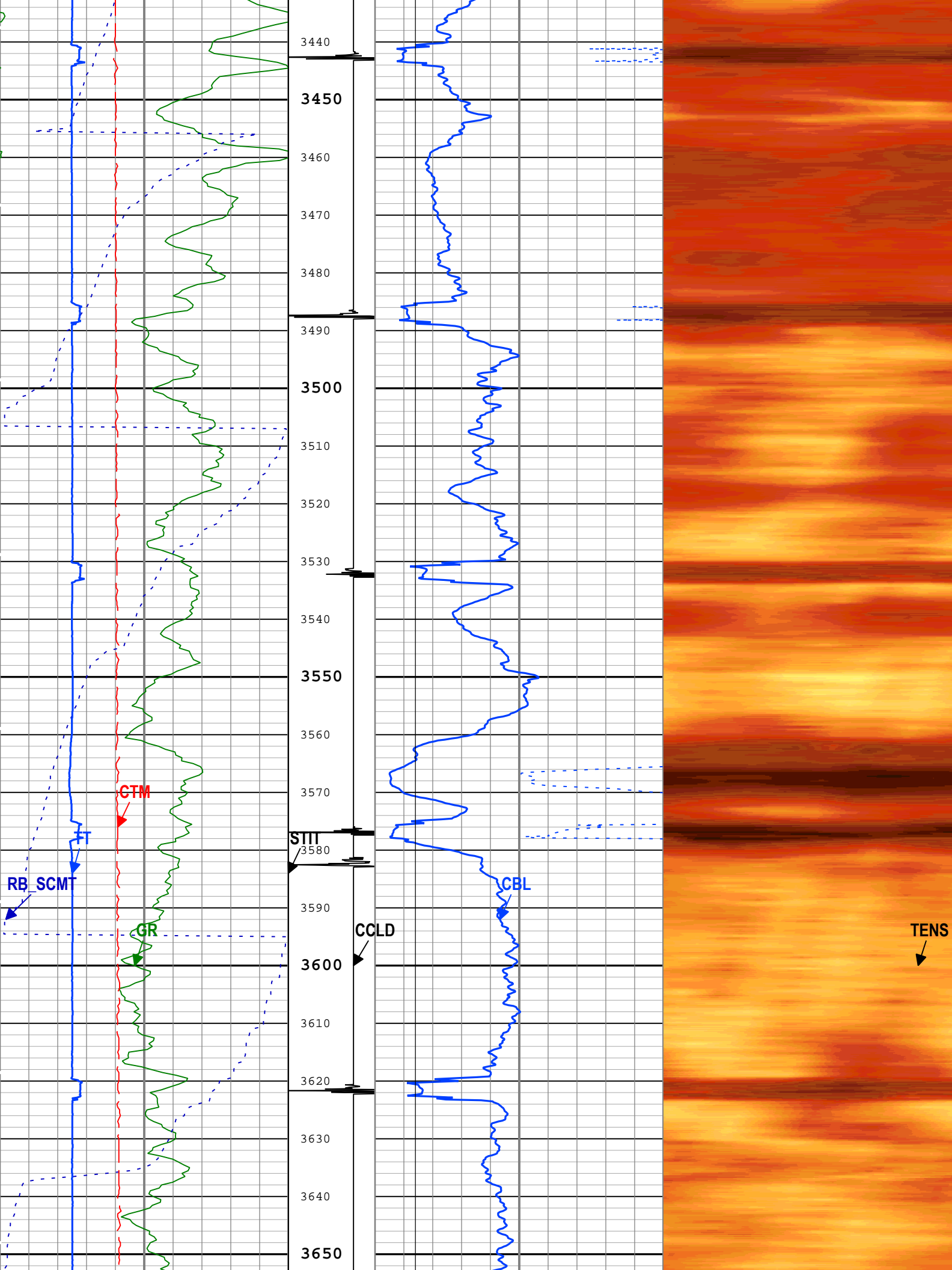


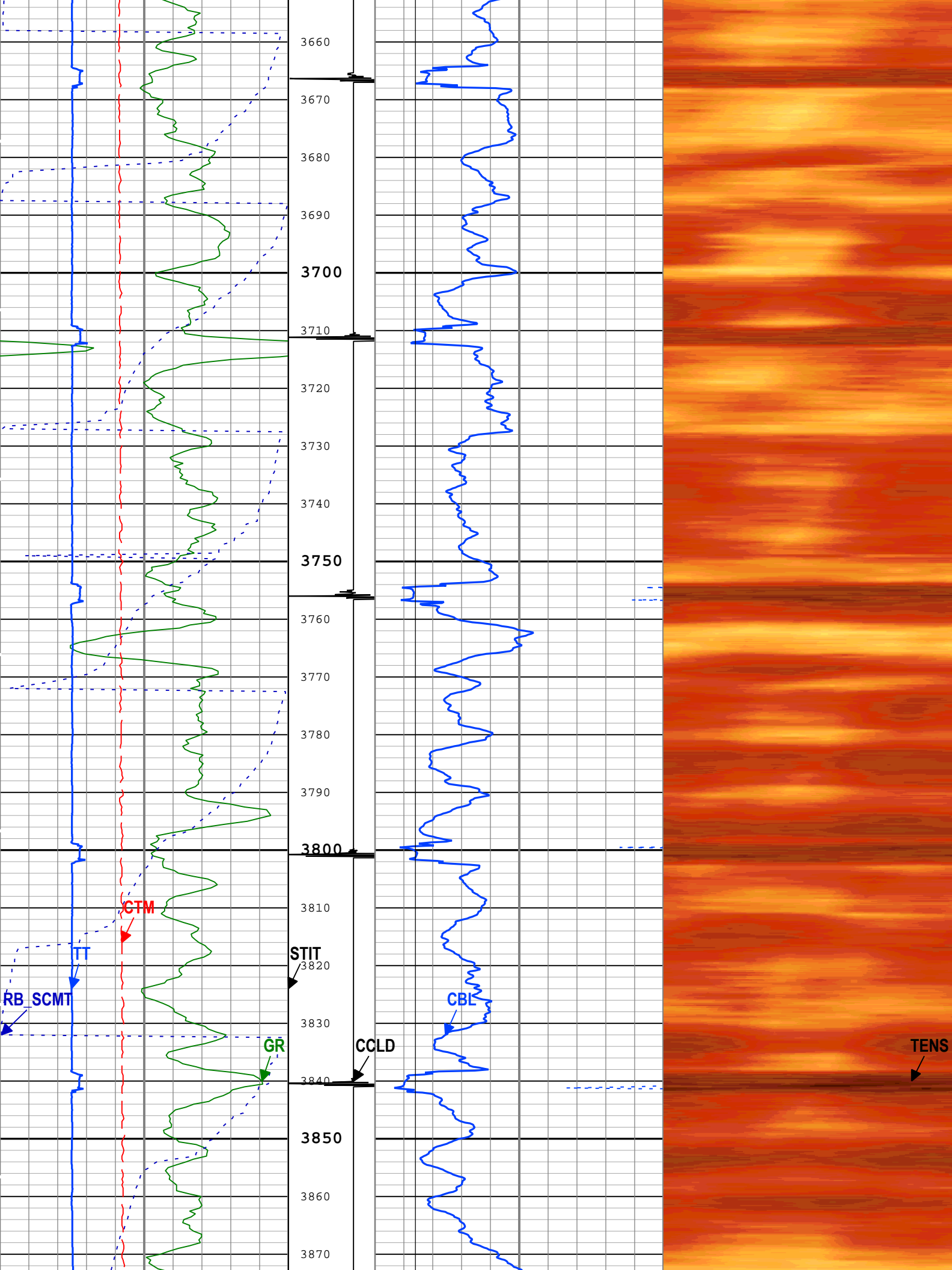


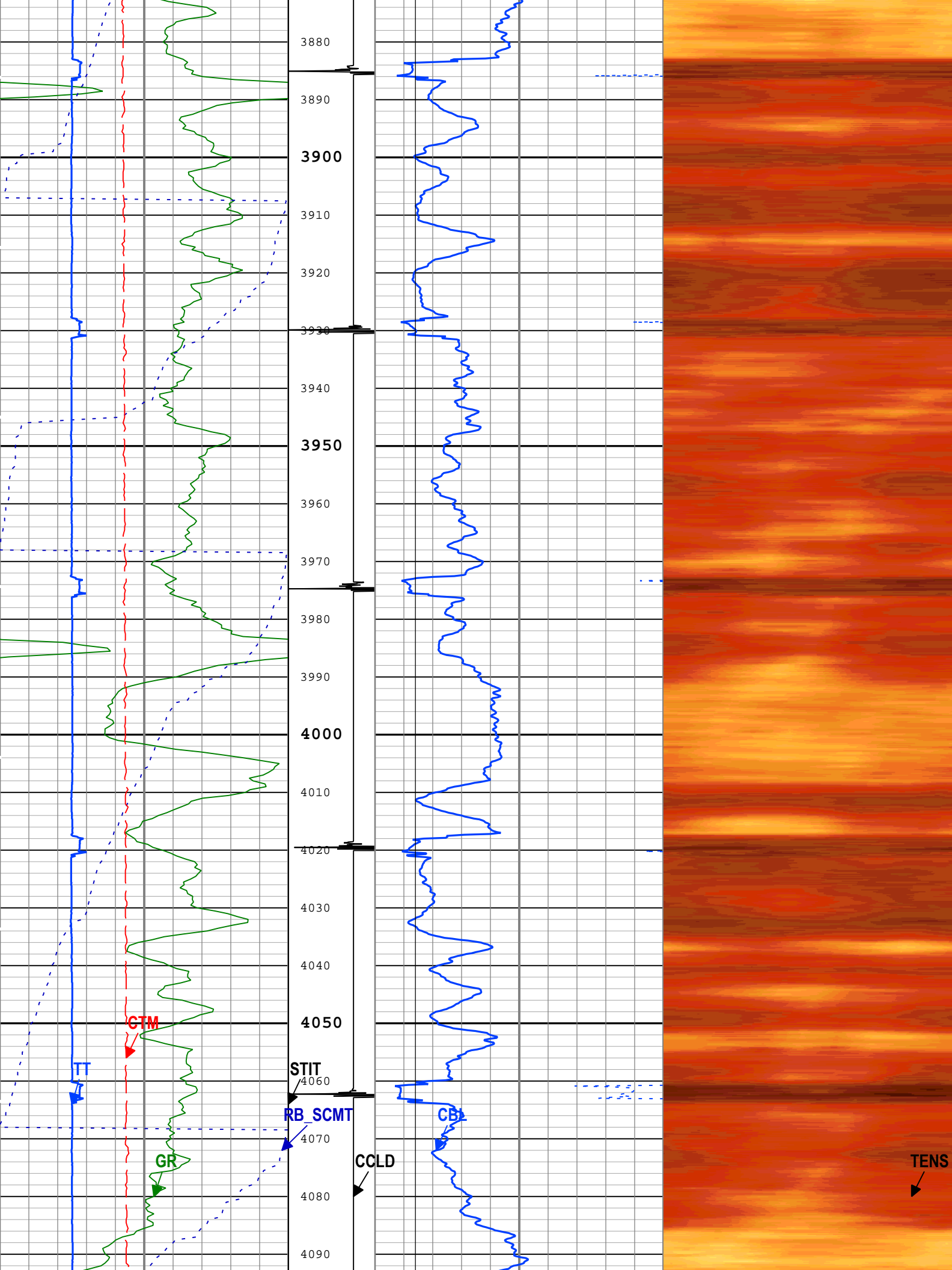


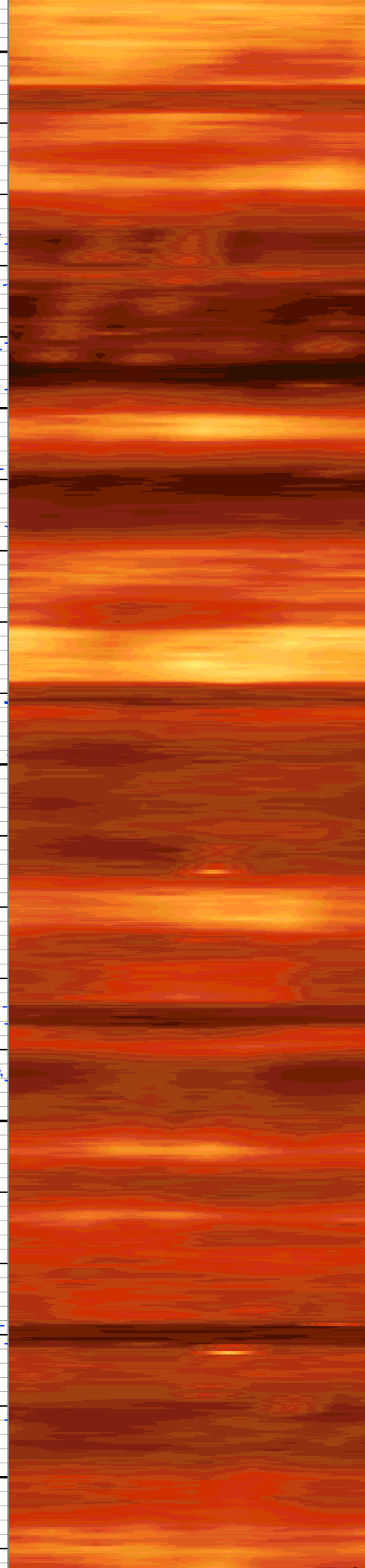
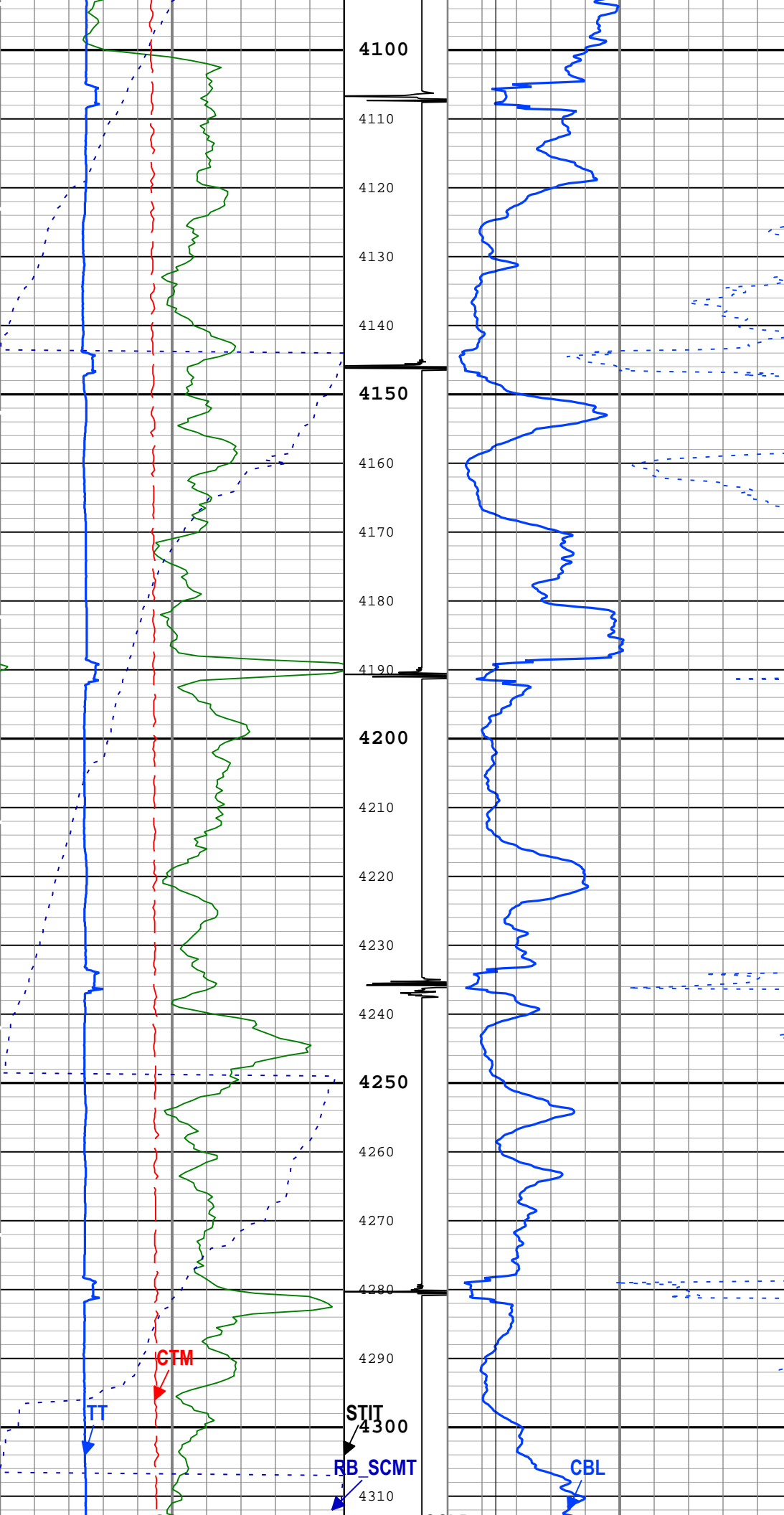


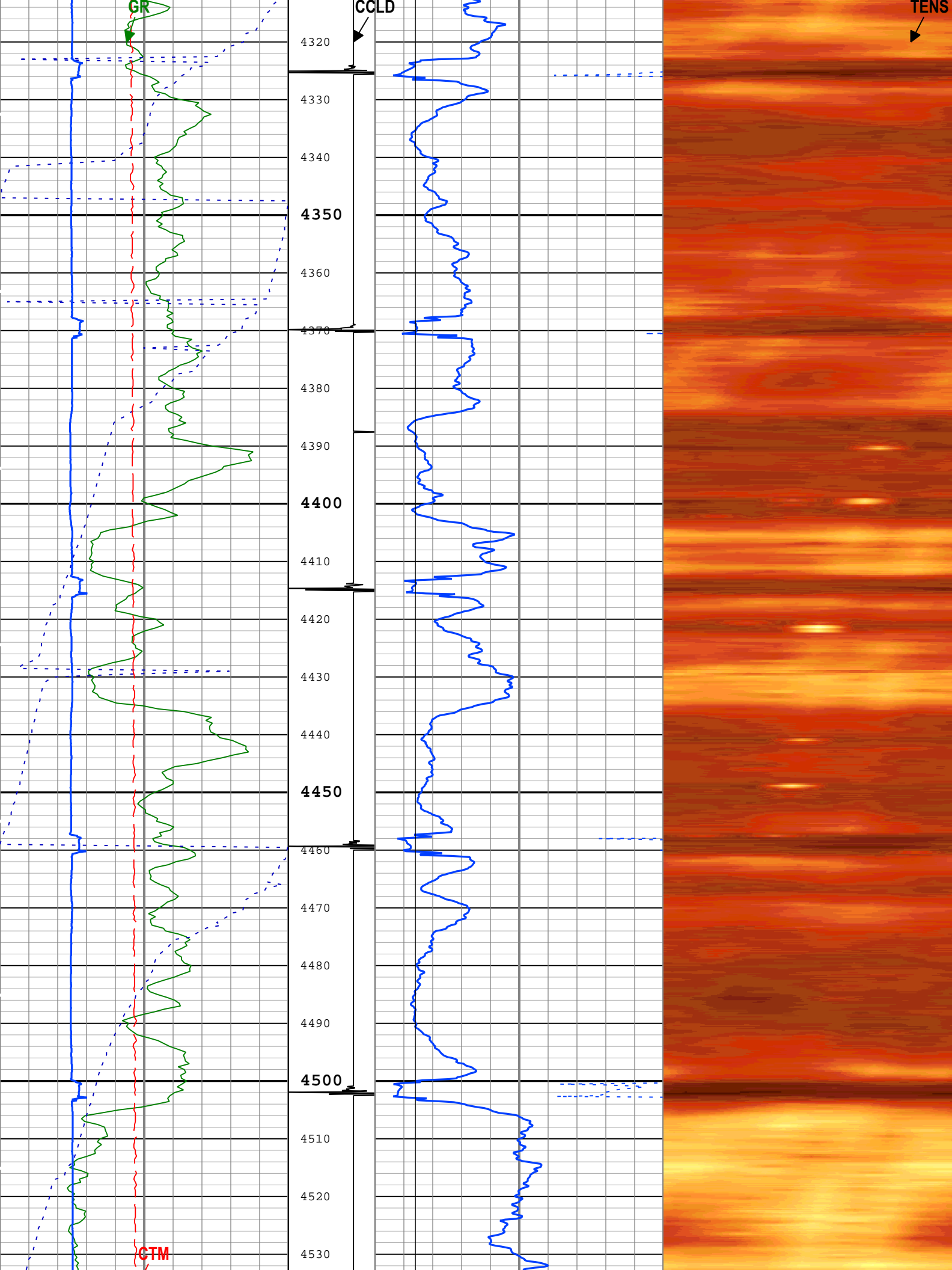


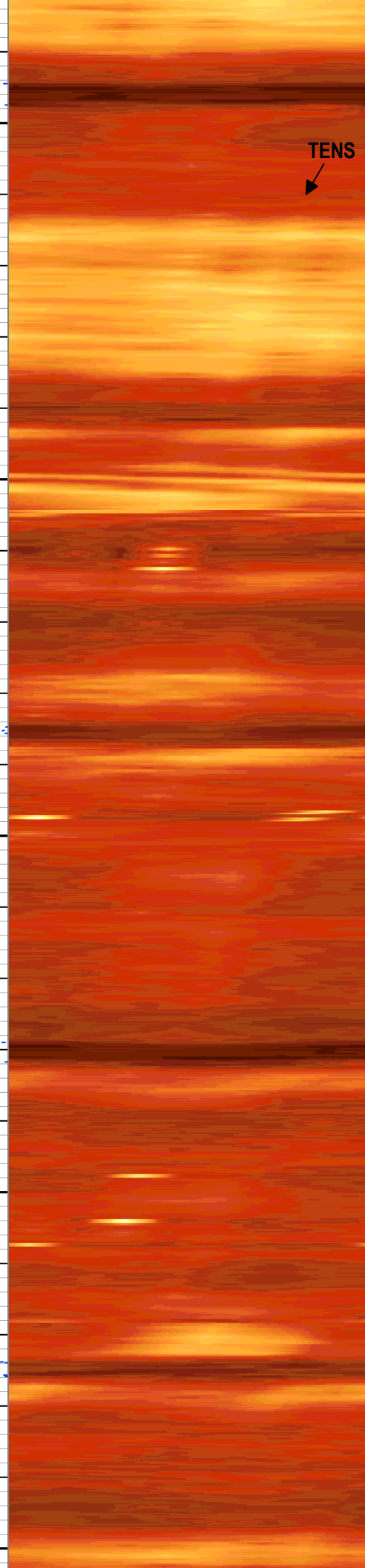
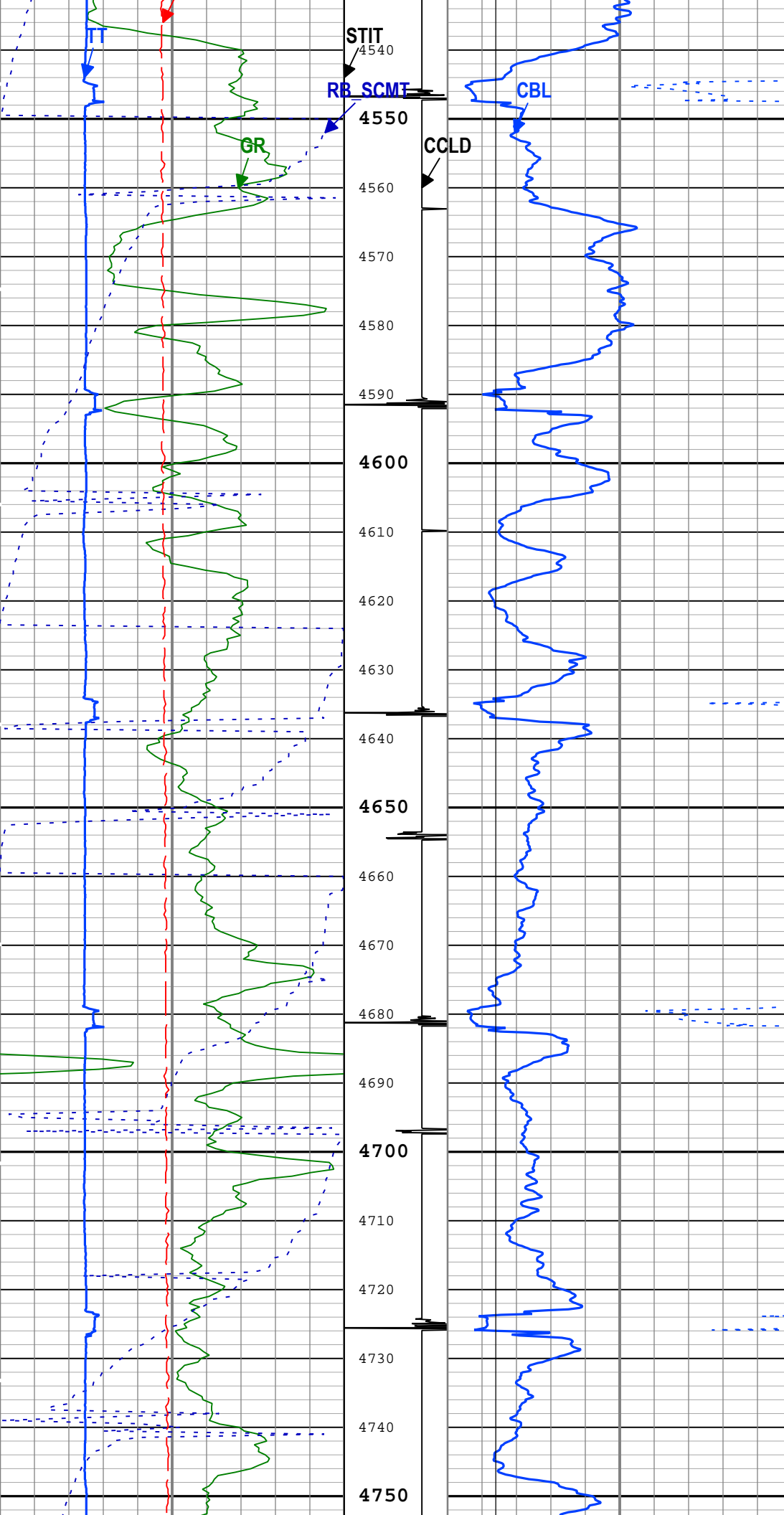


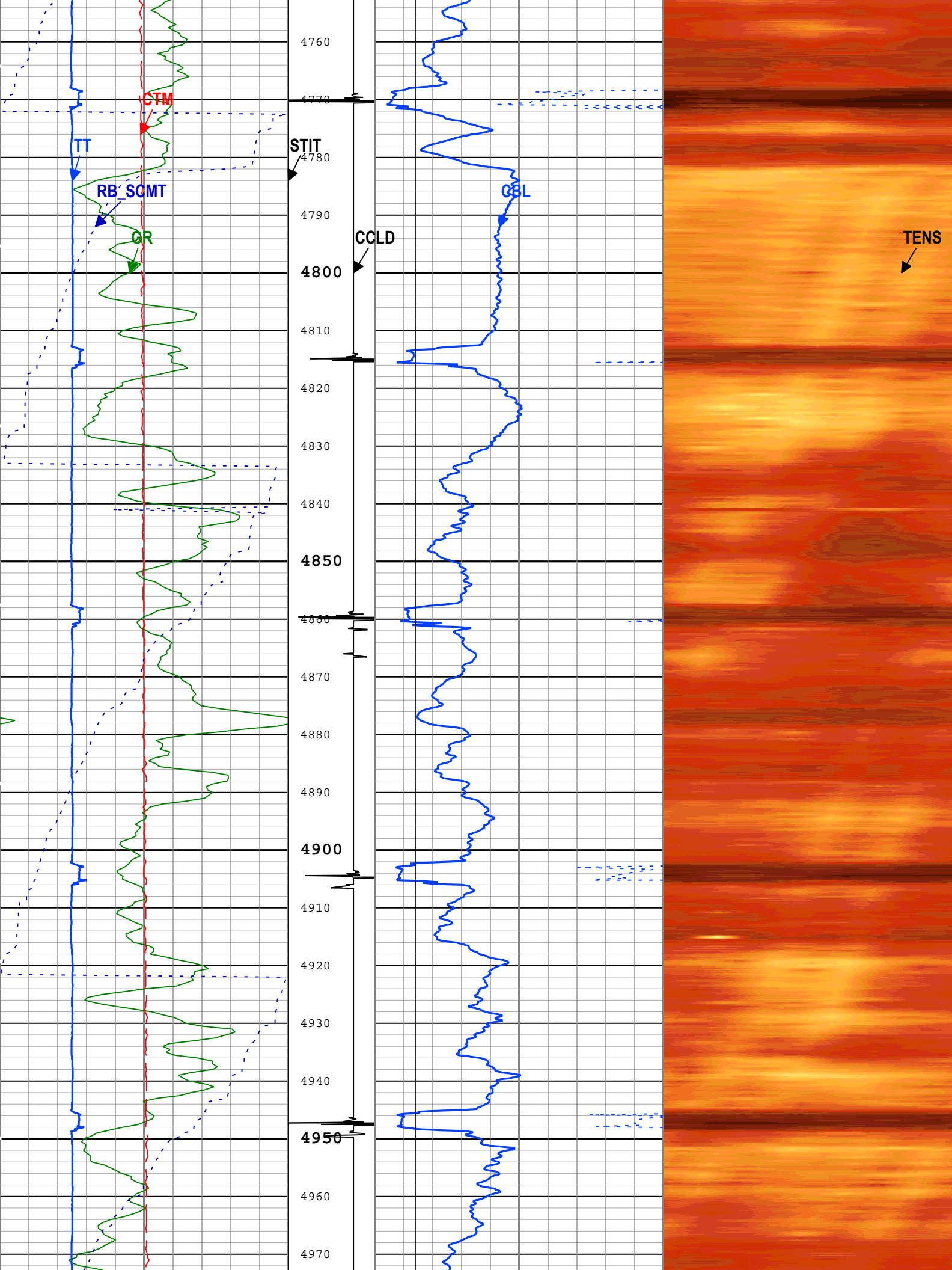


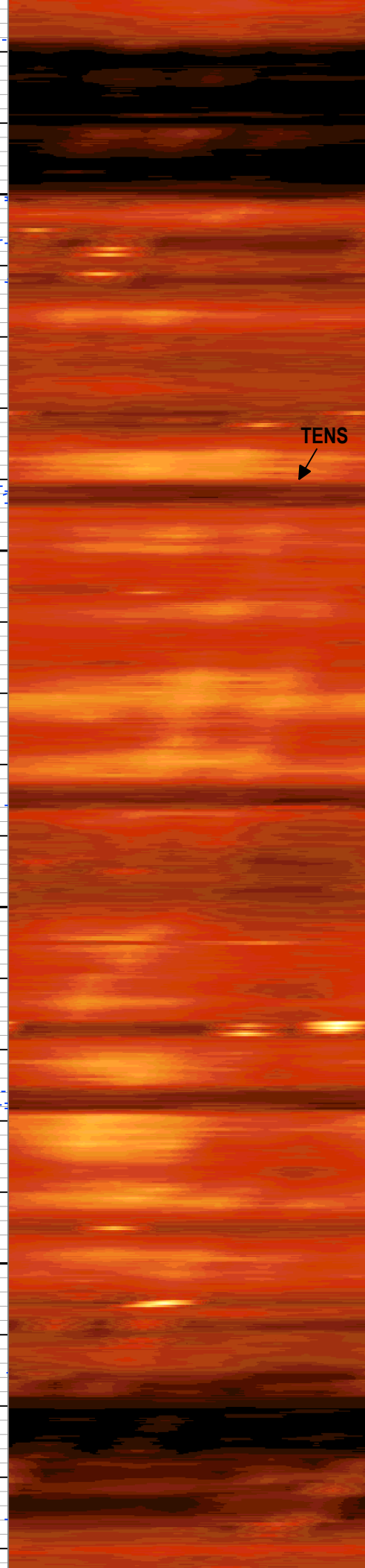
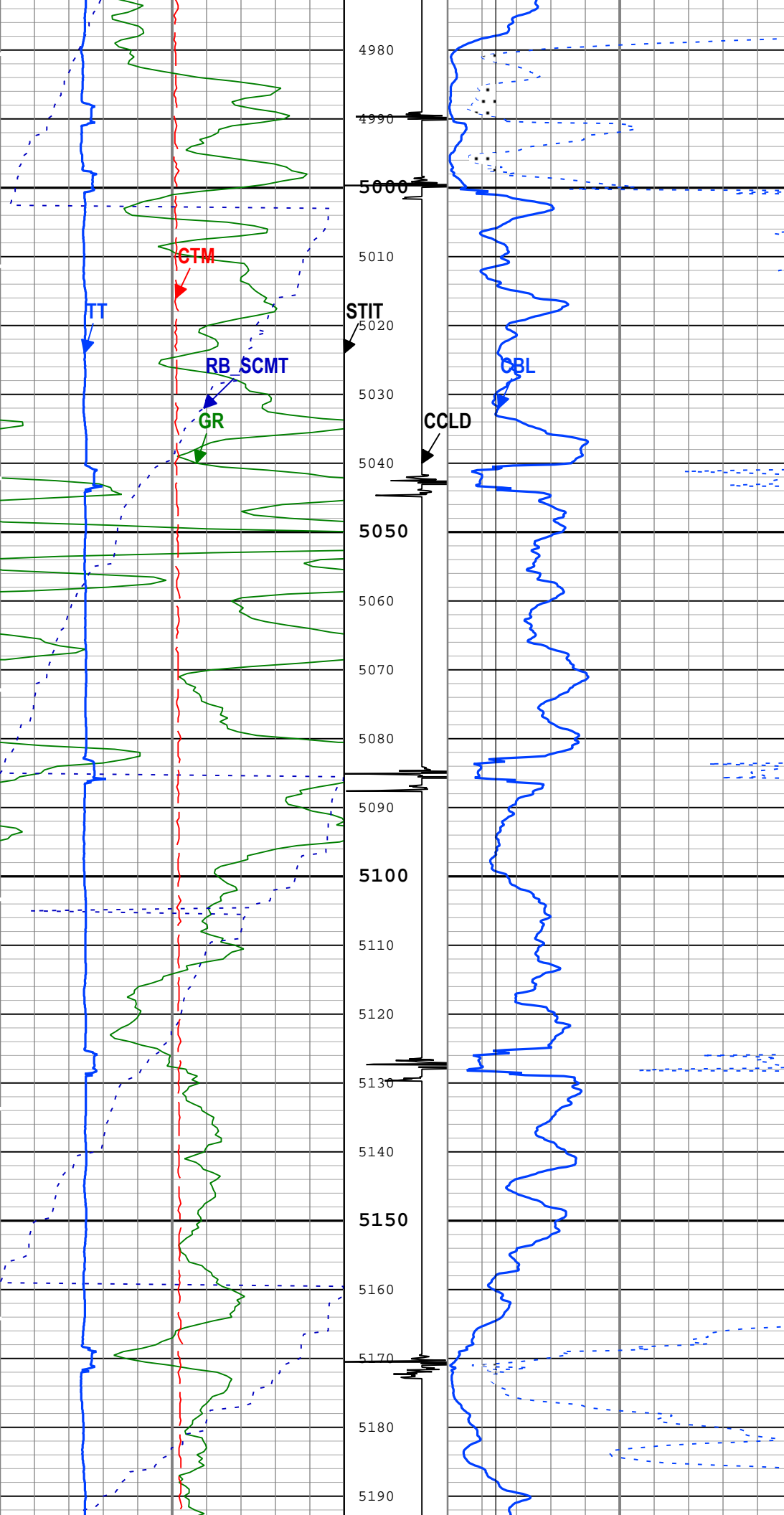




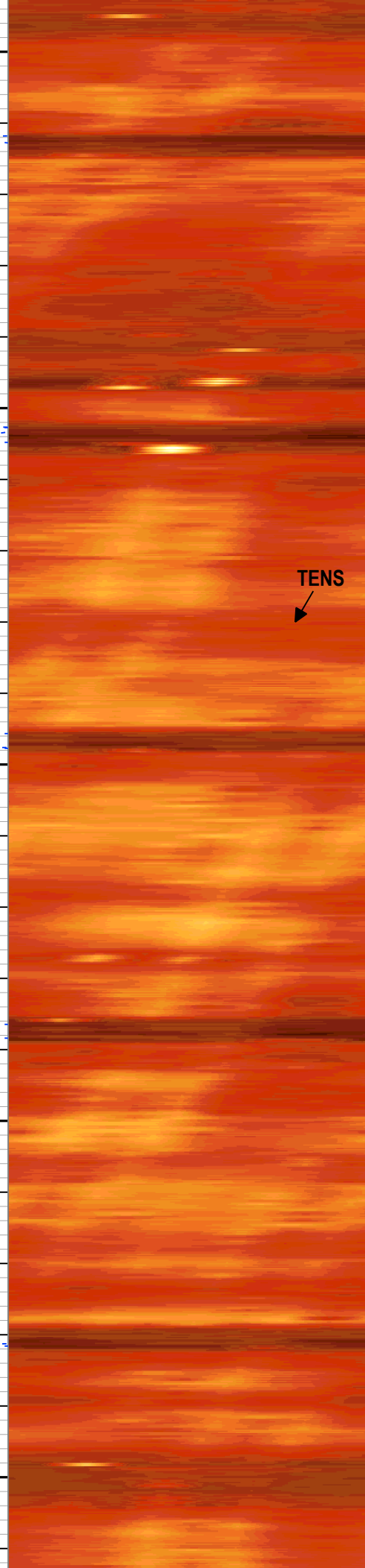
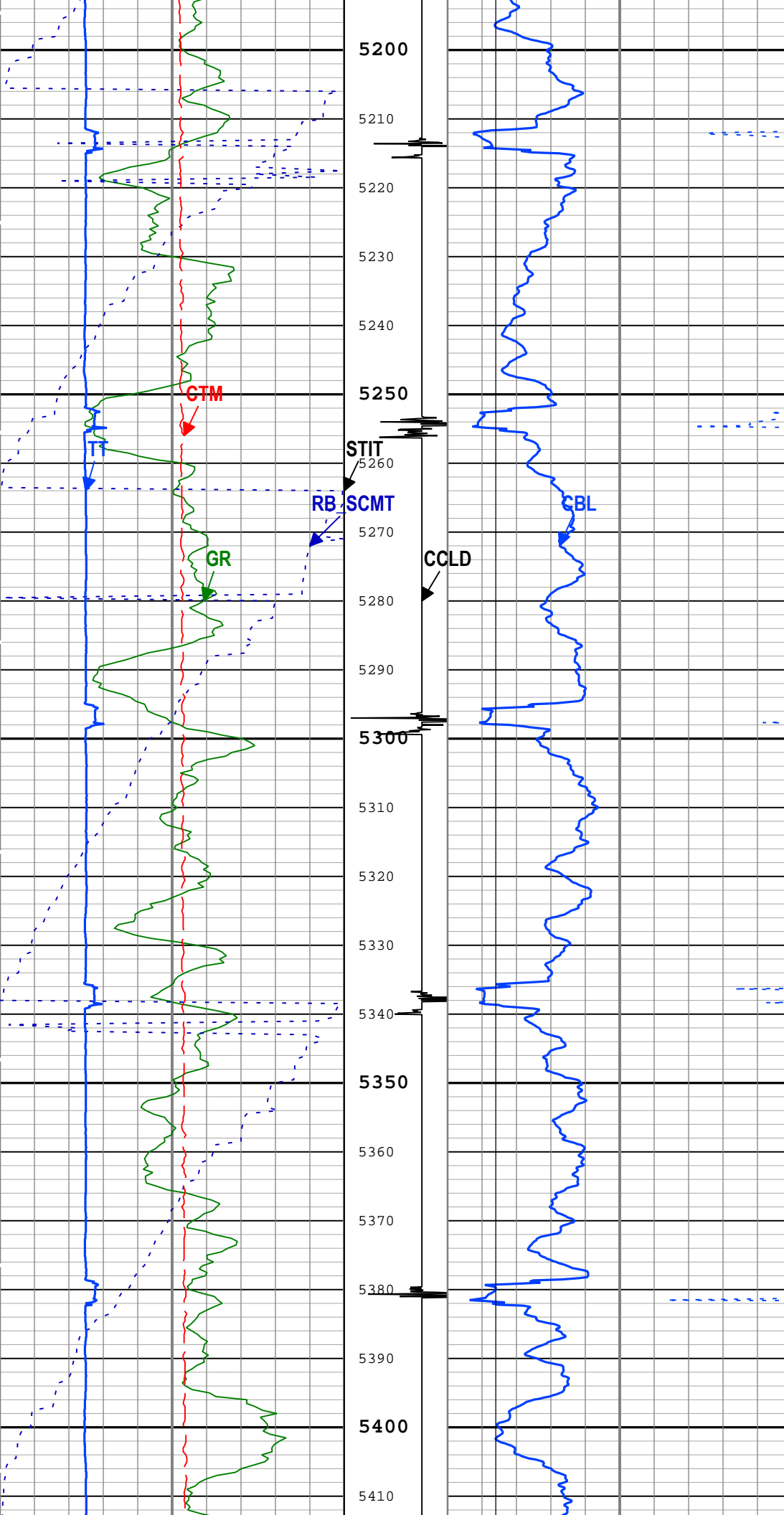


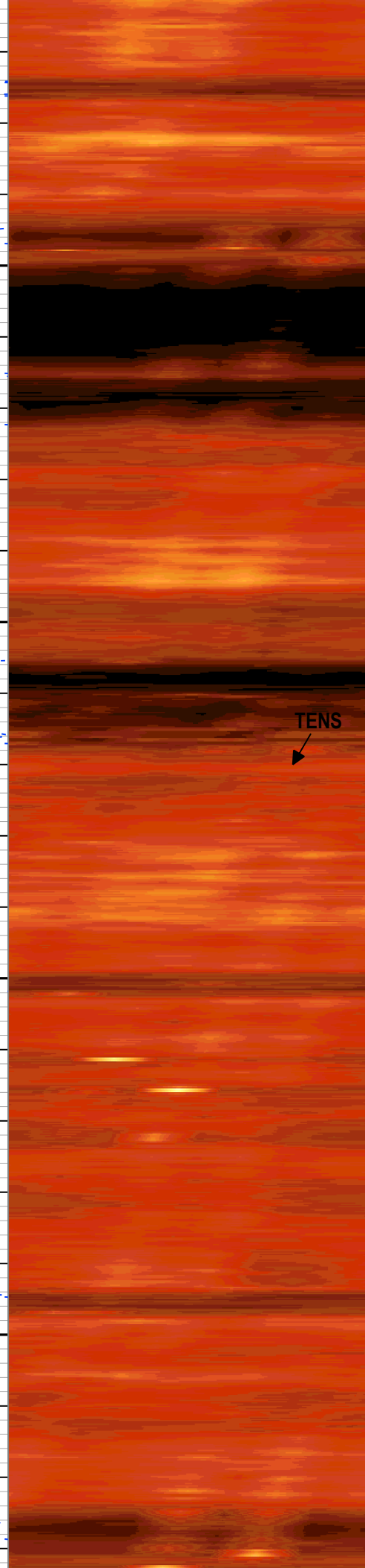
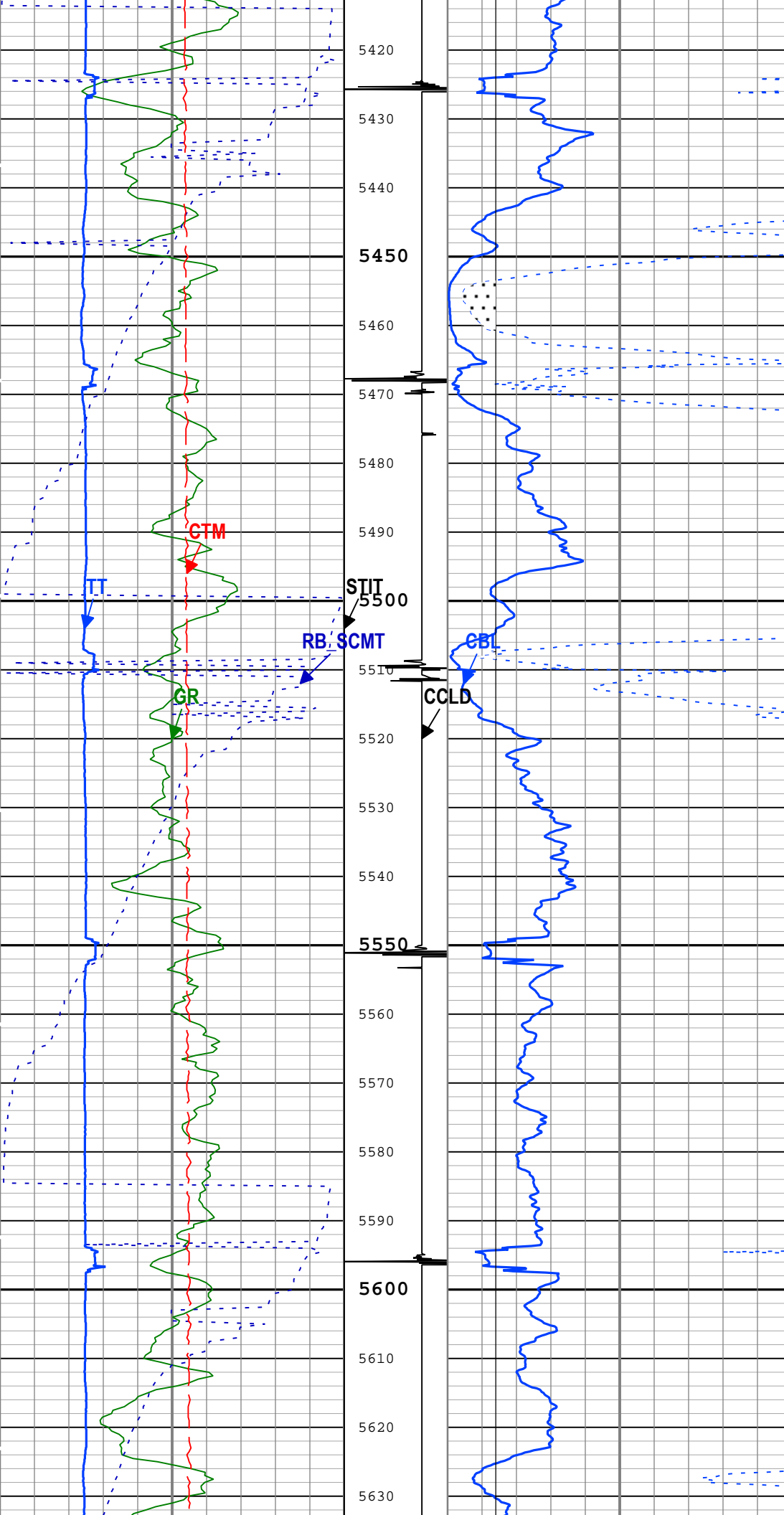


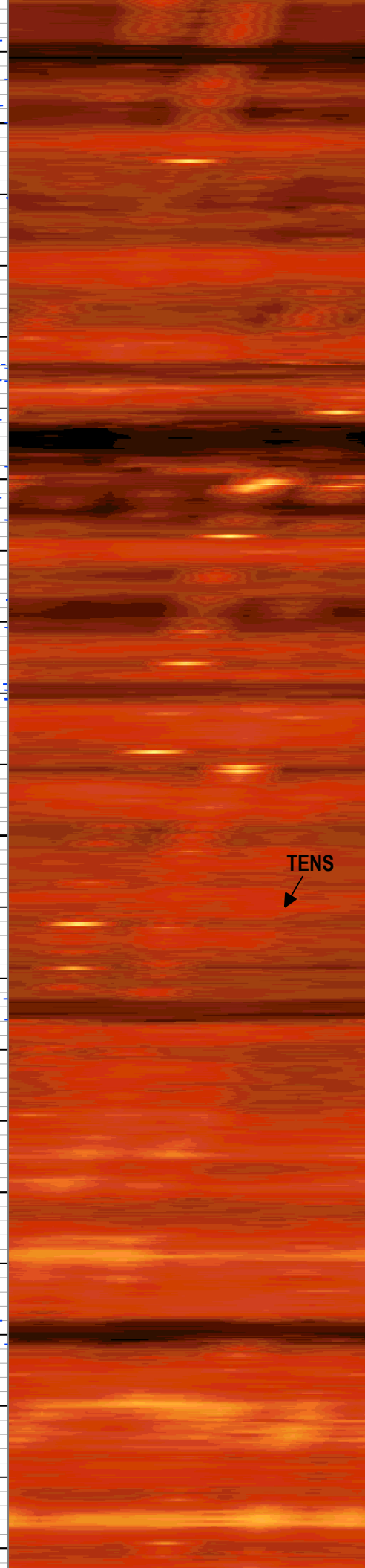
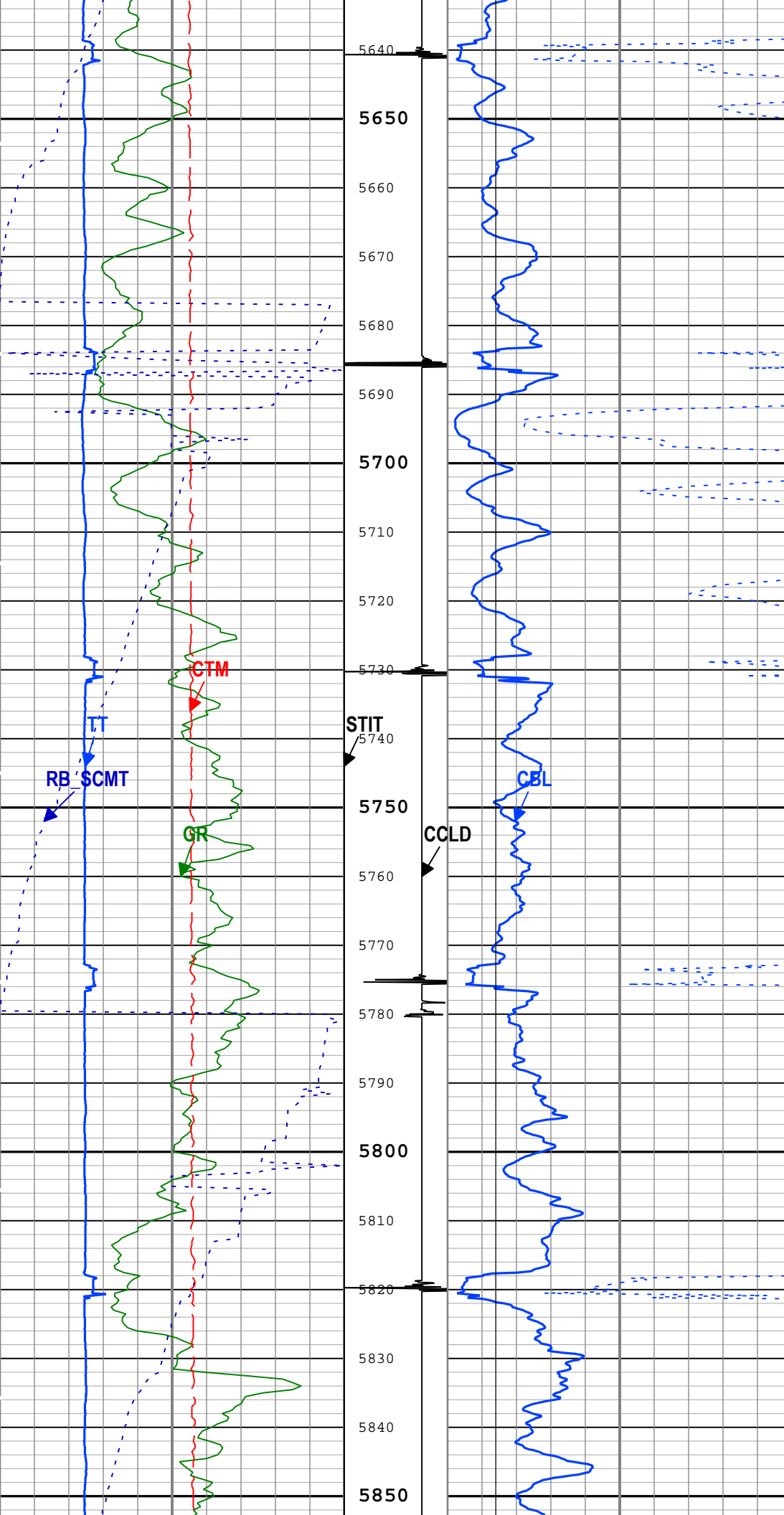


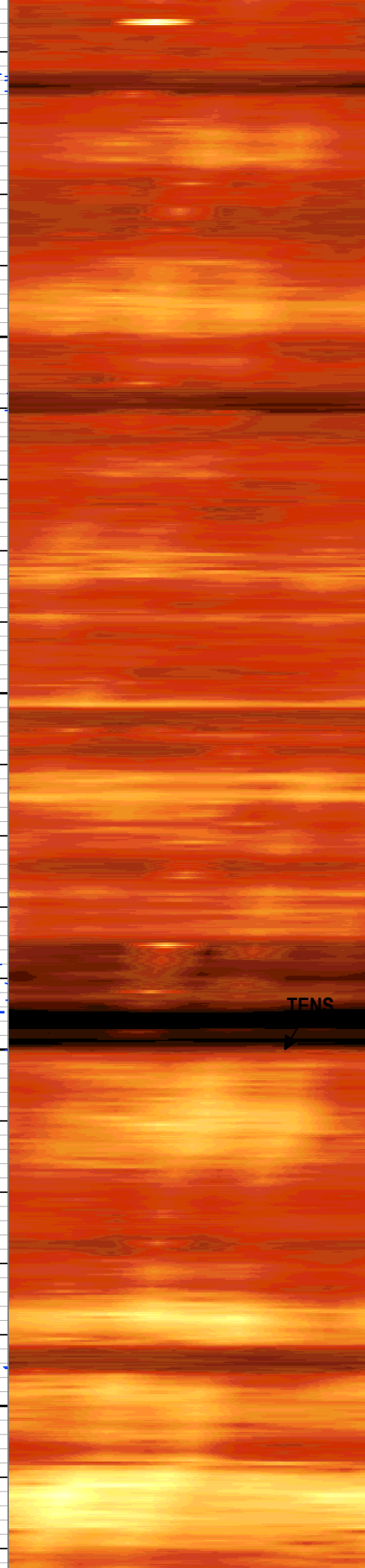
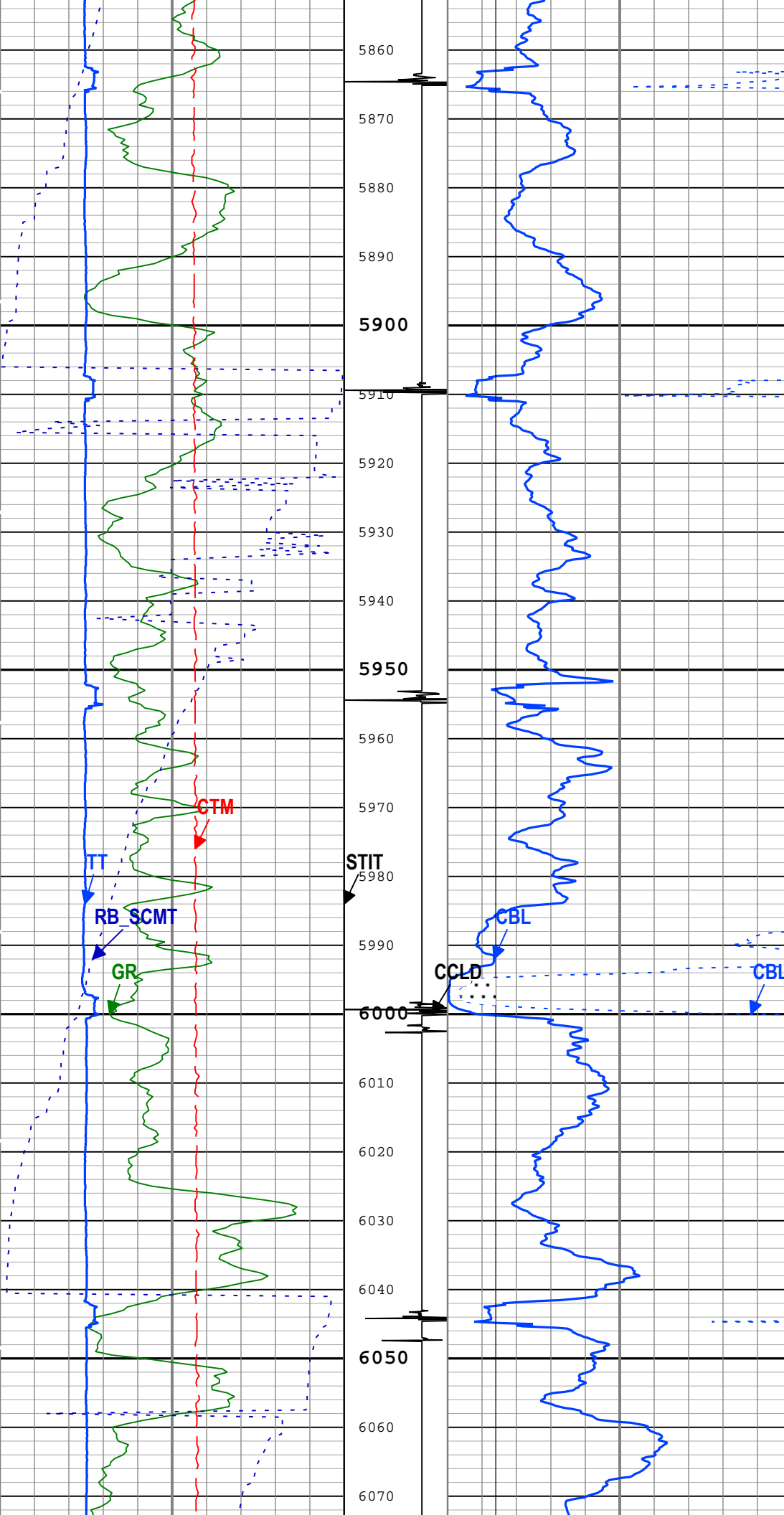


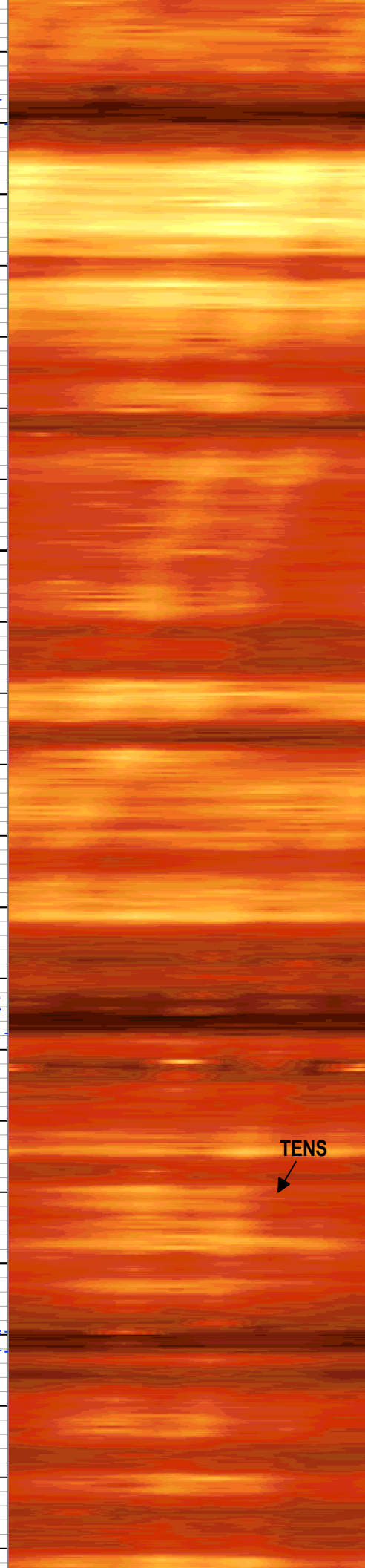
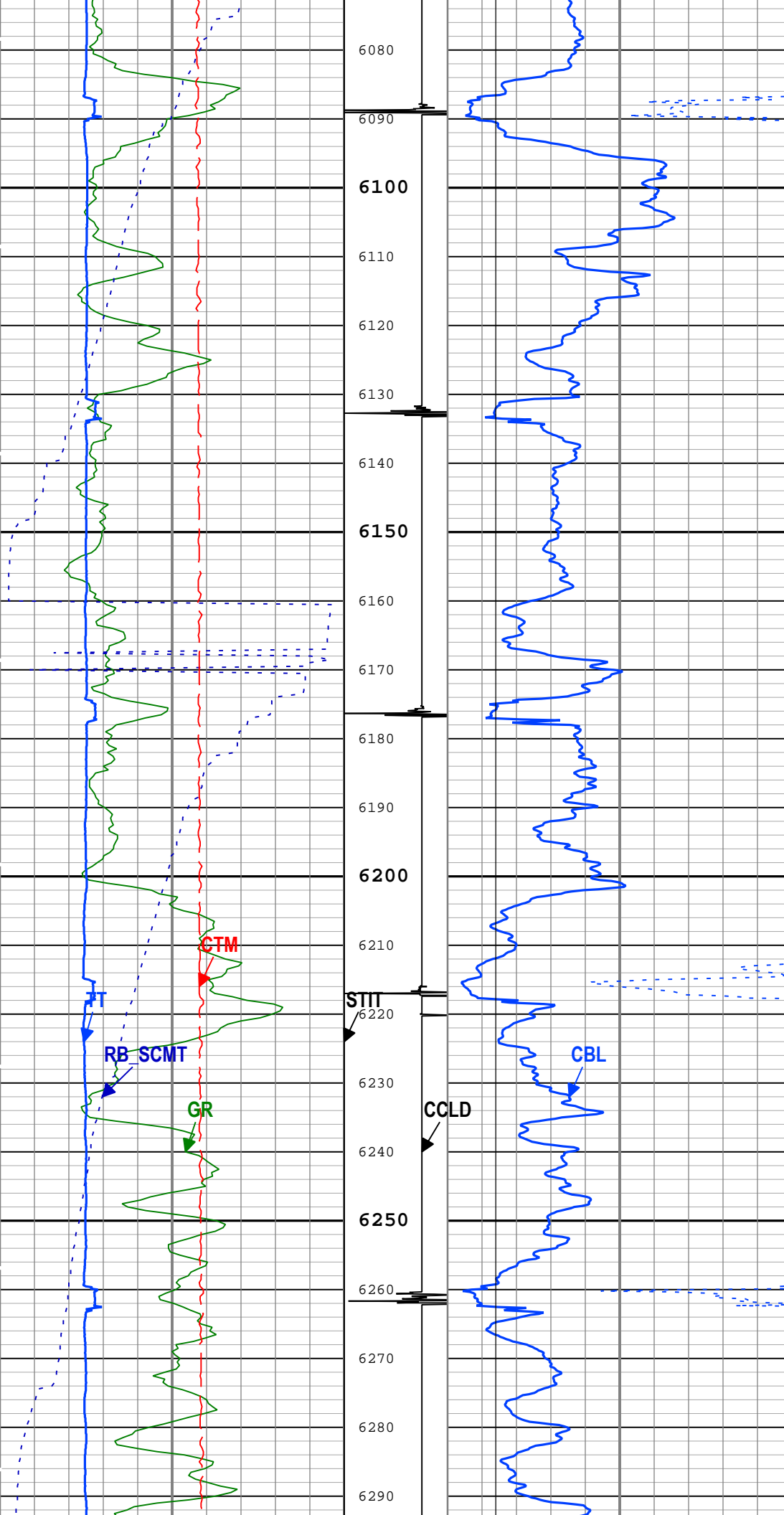
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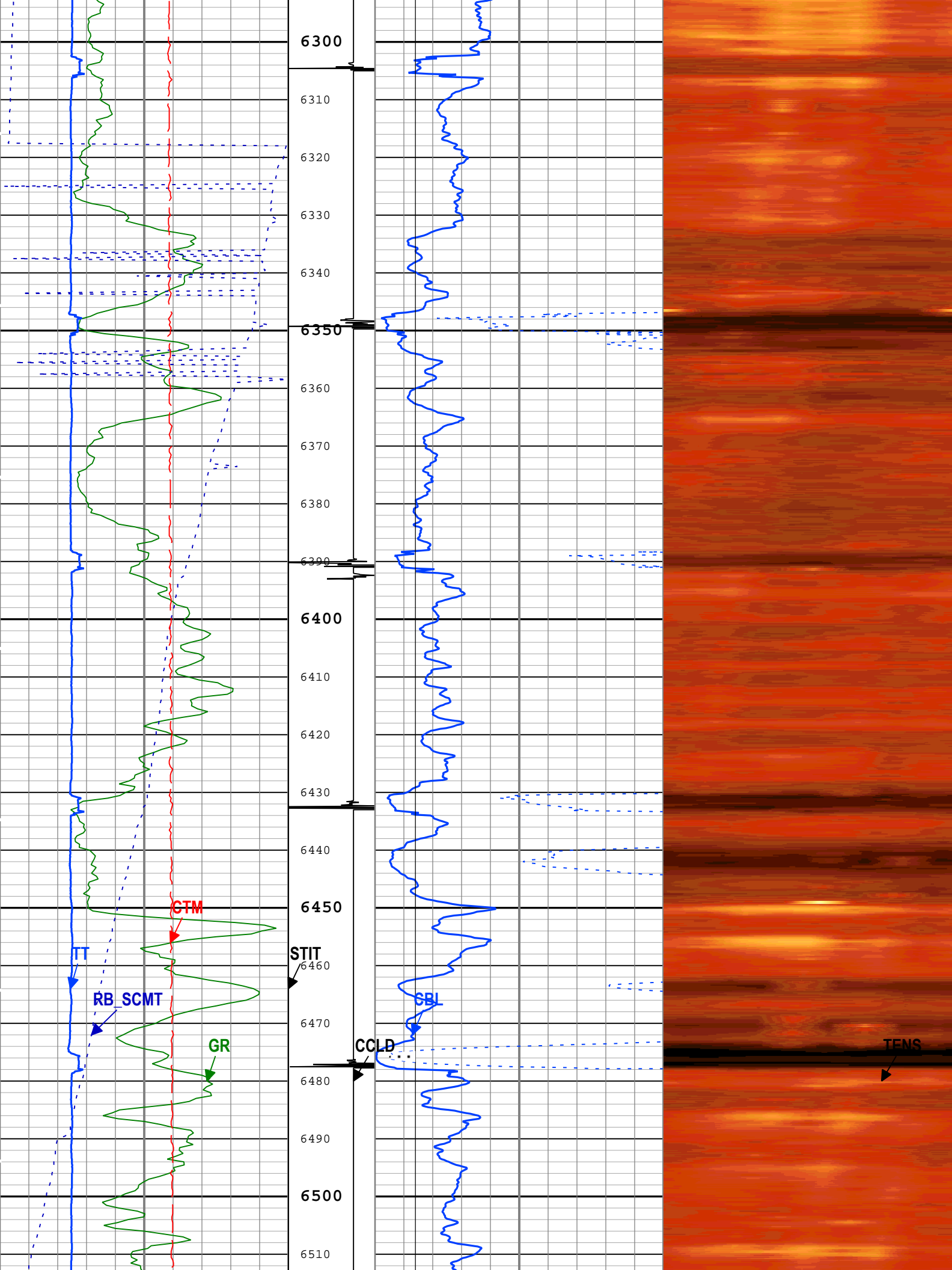


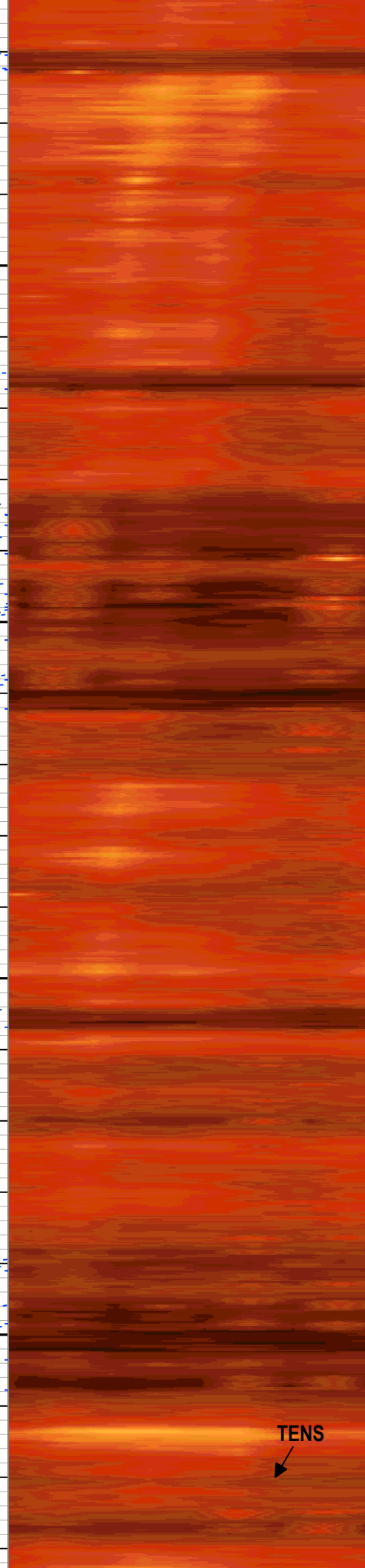
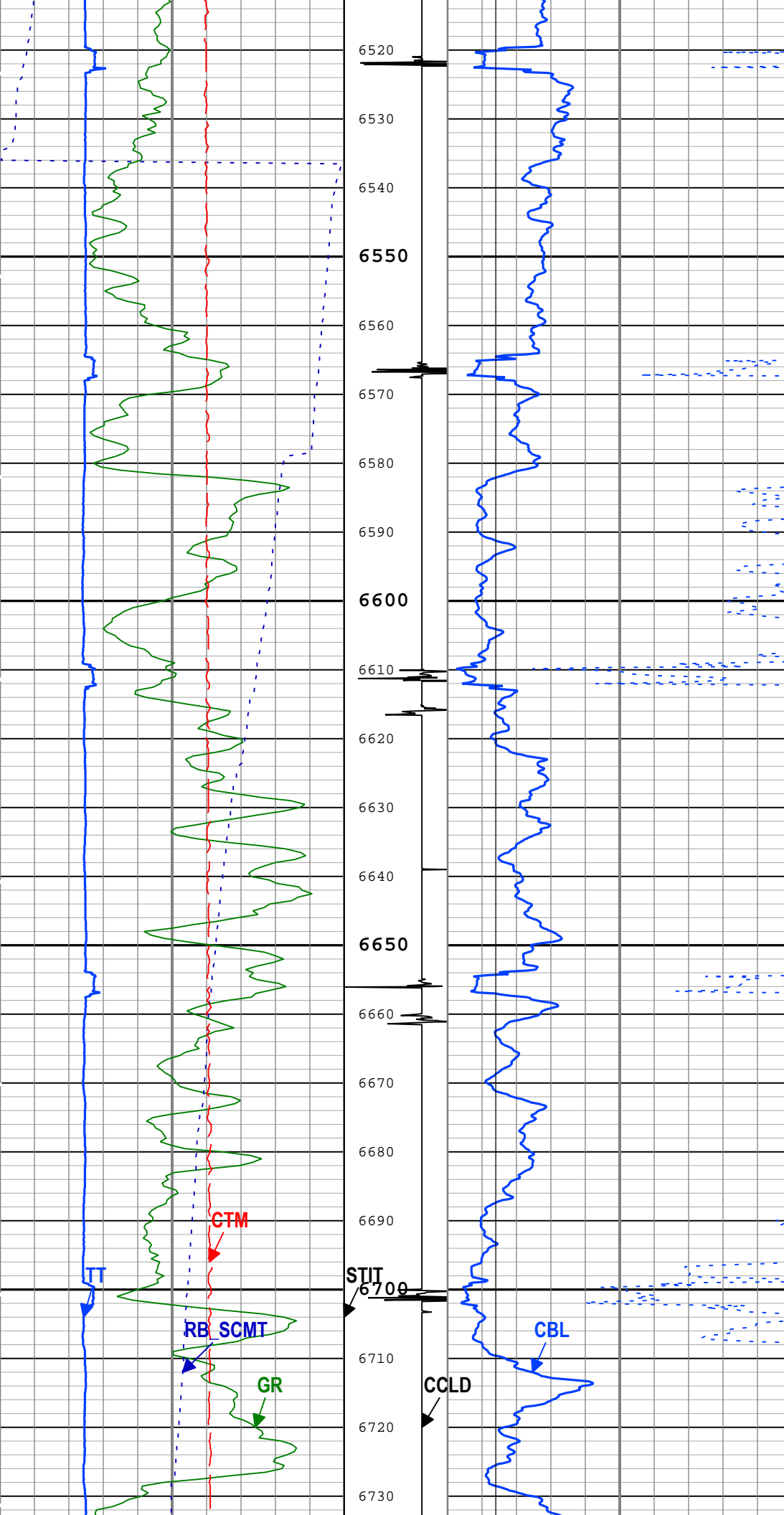




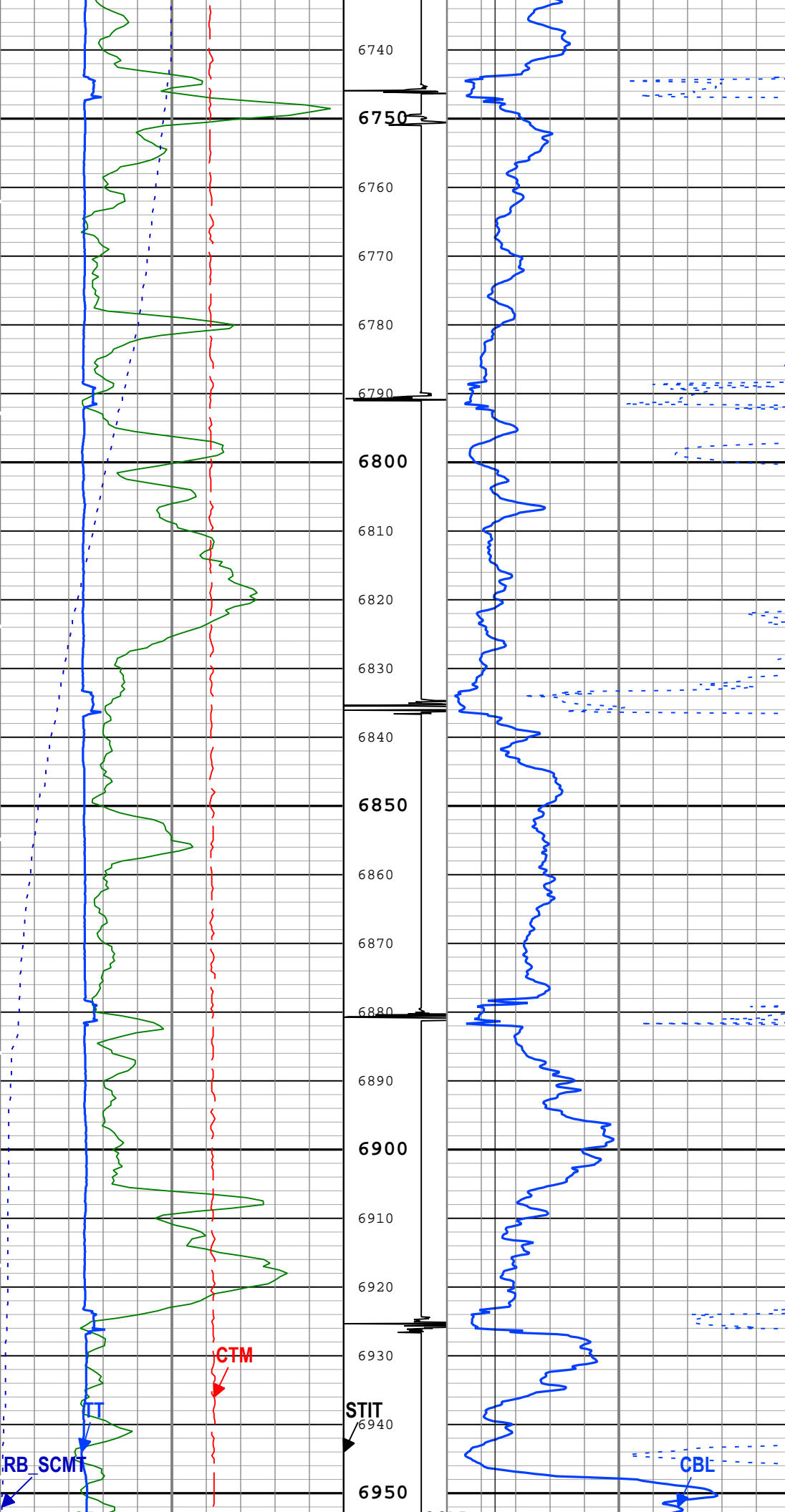


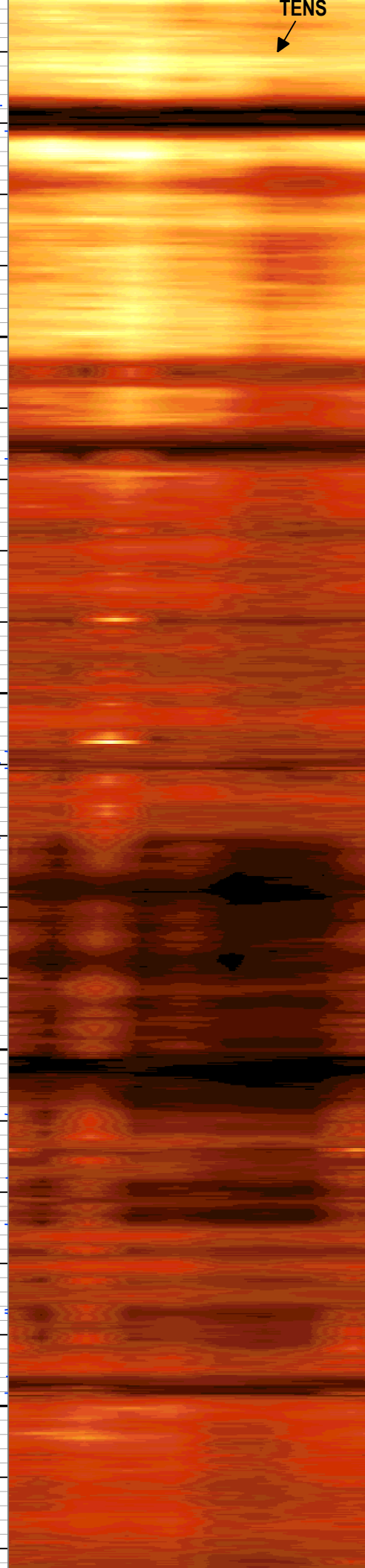
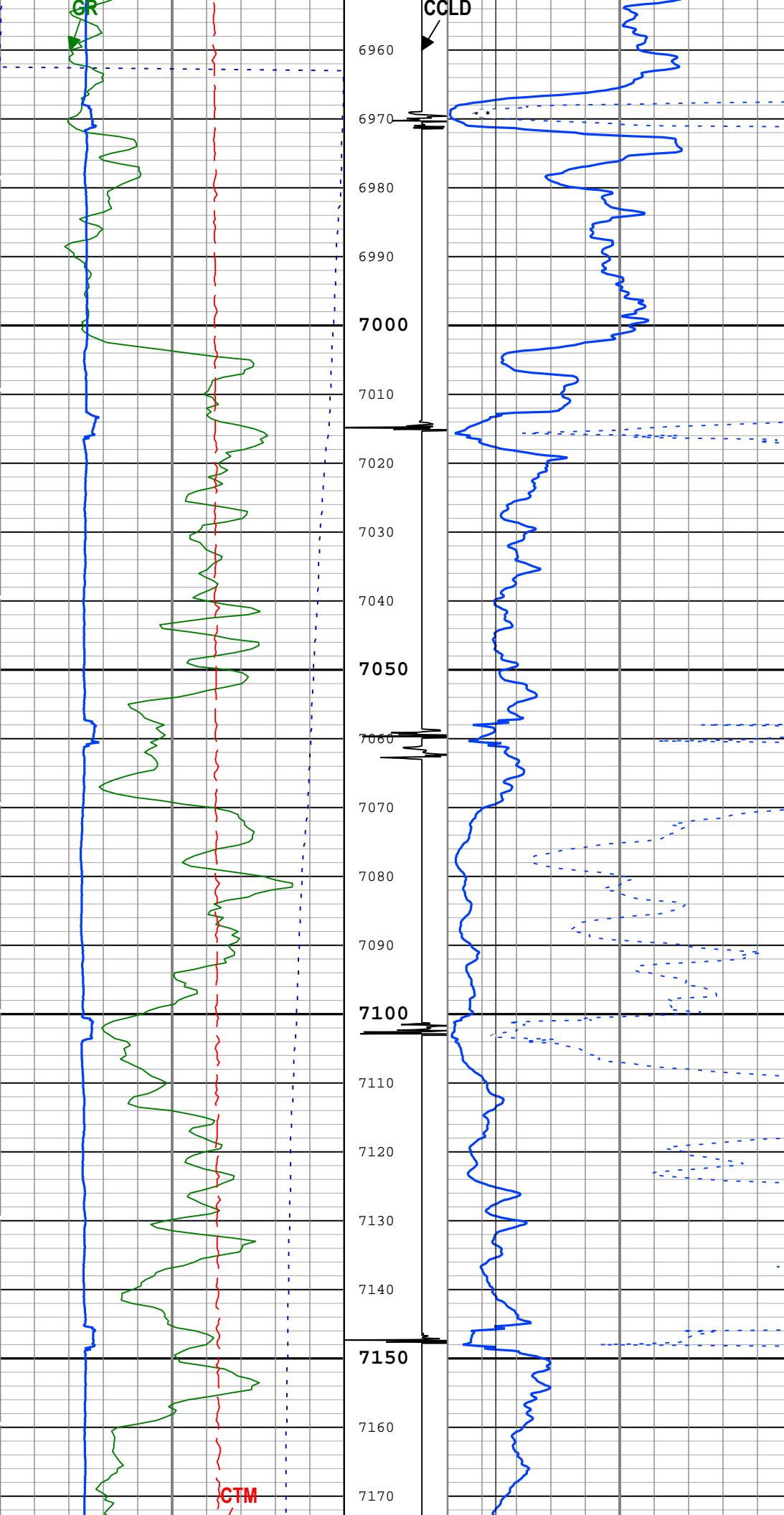


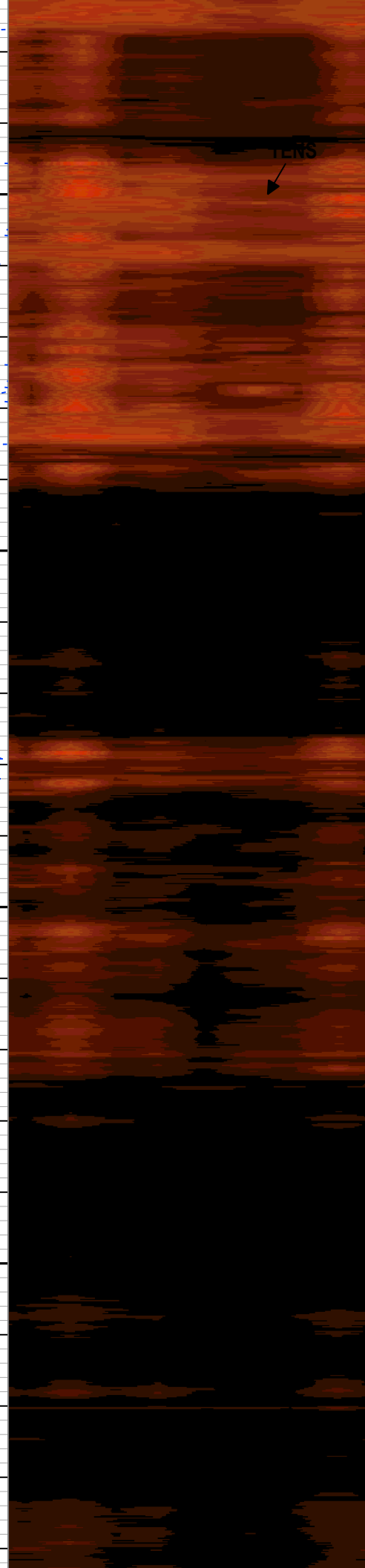
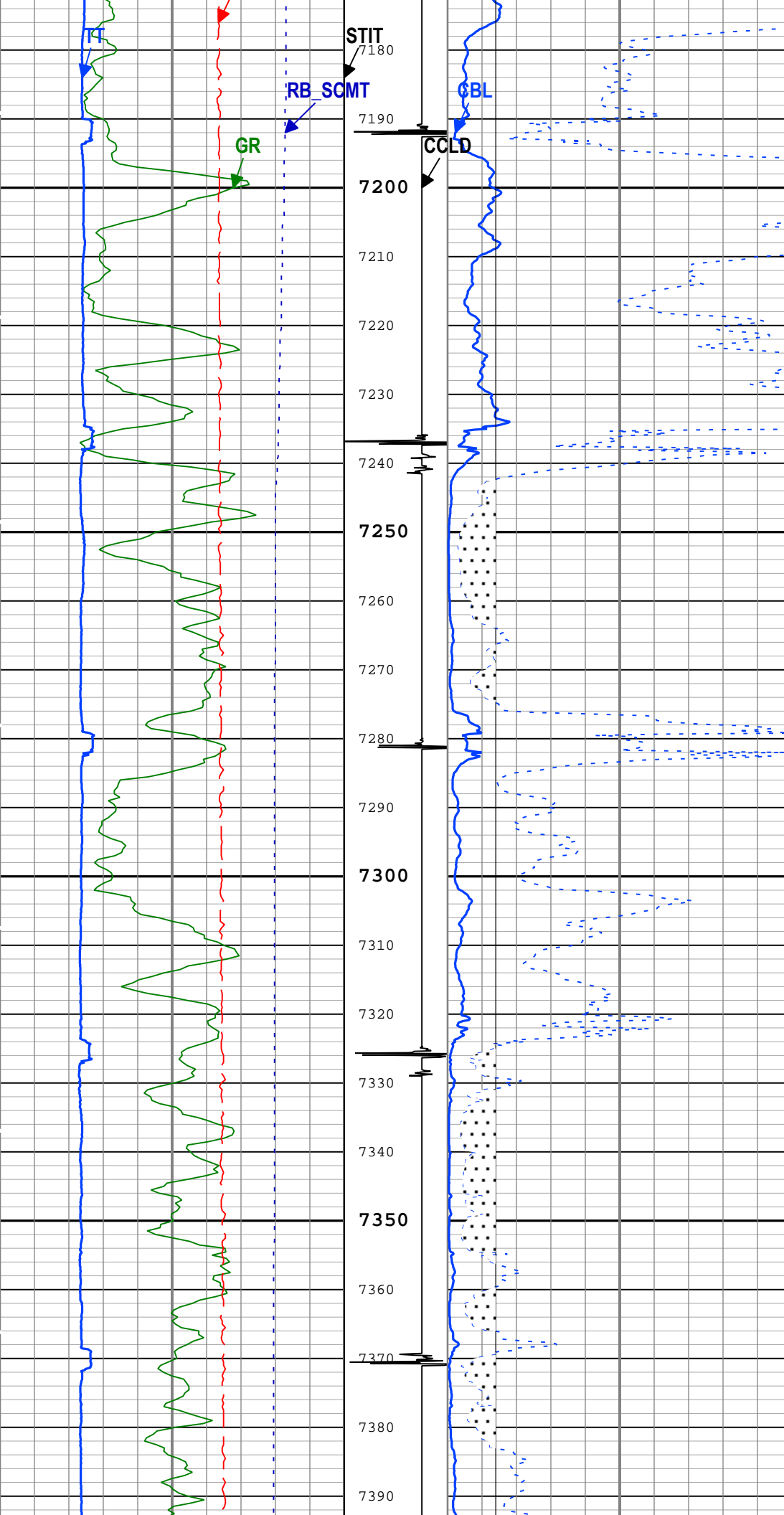


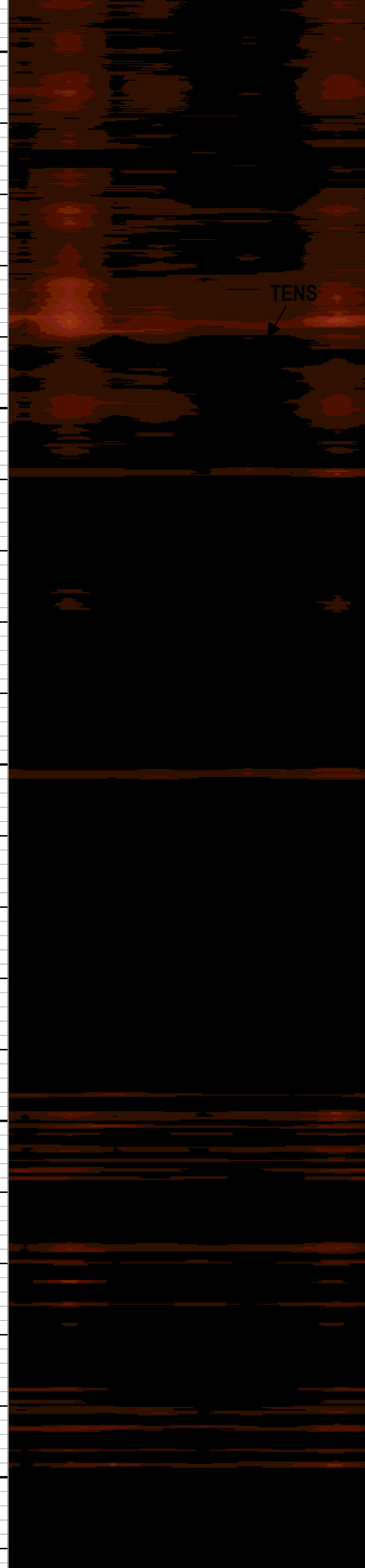
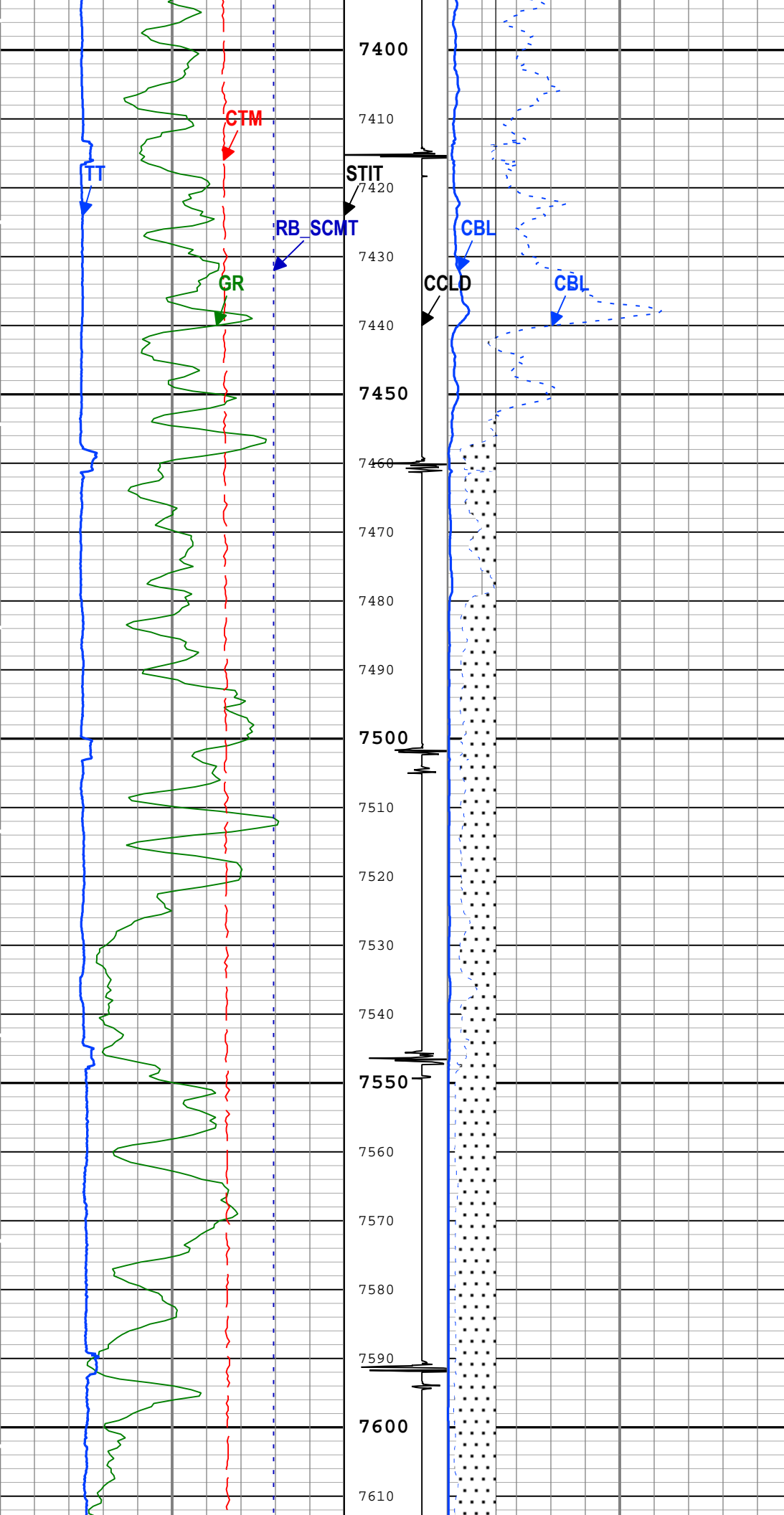


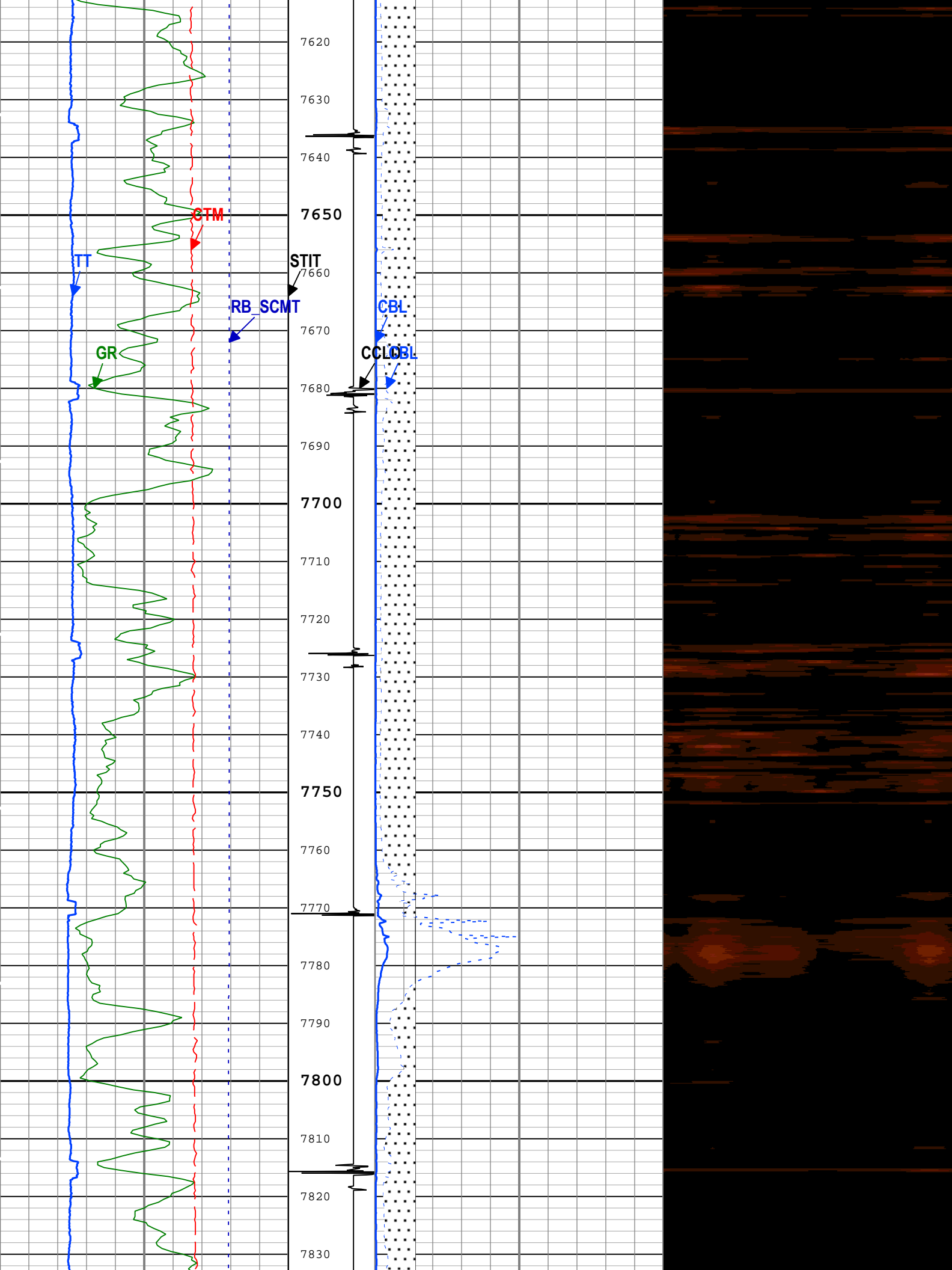
TENS

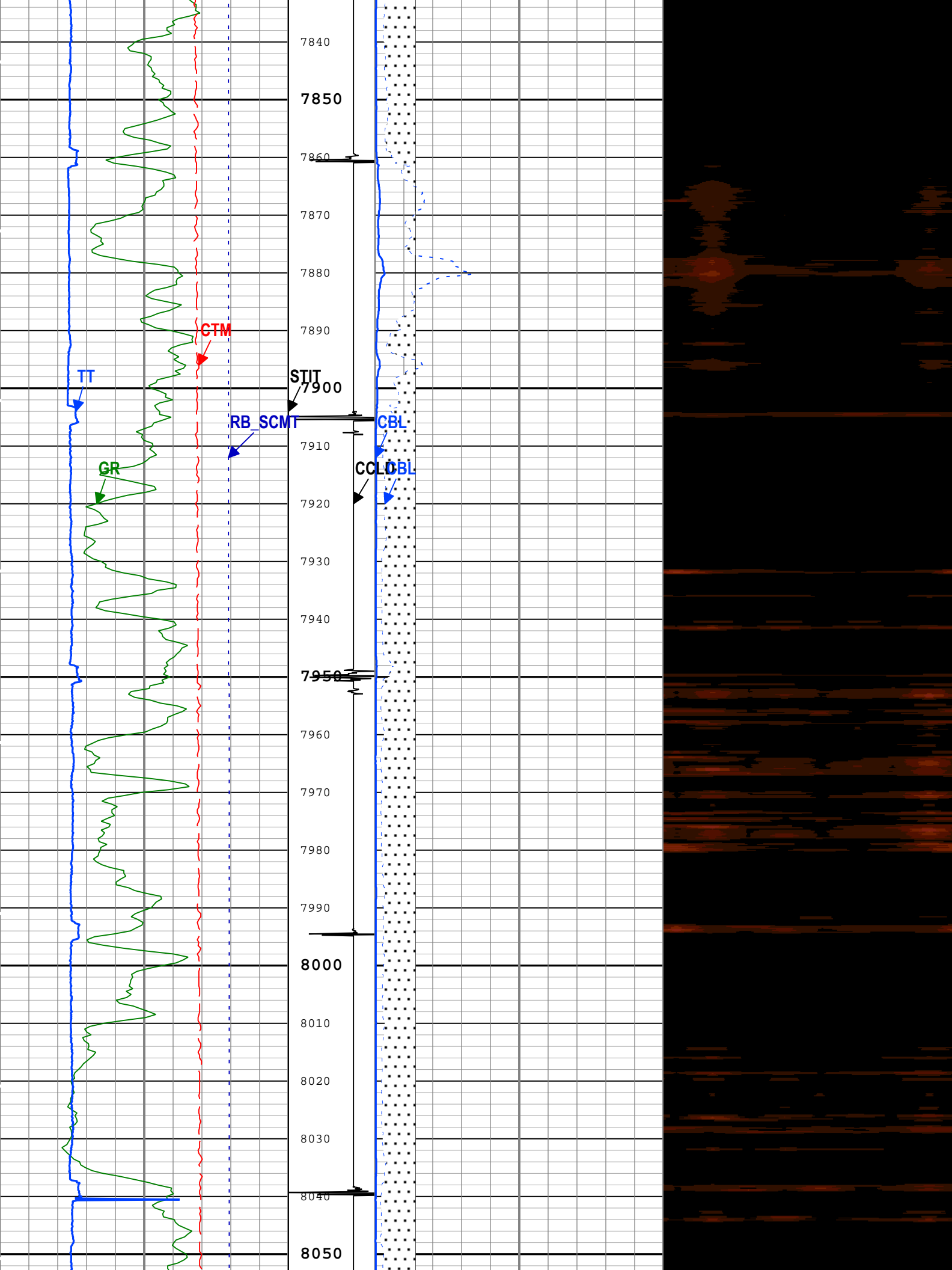


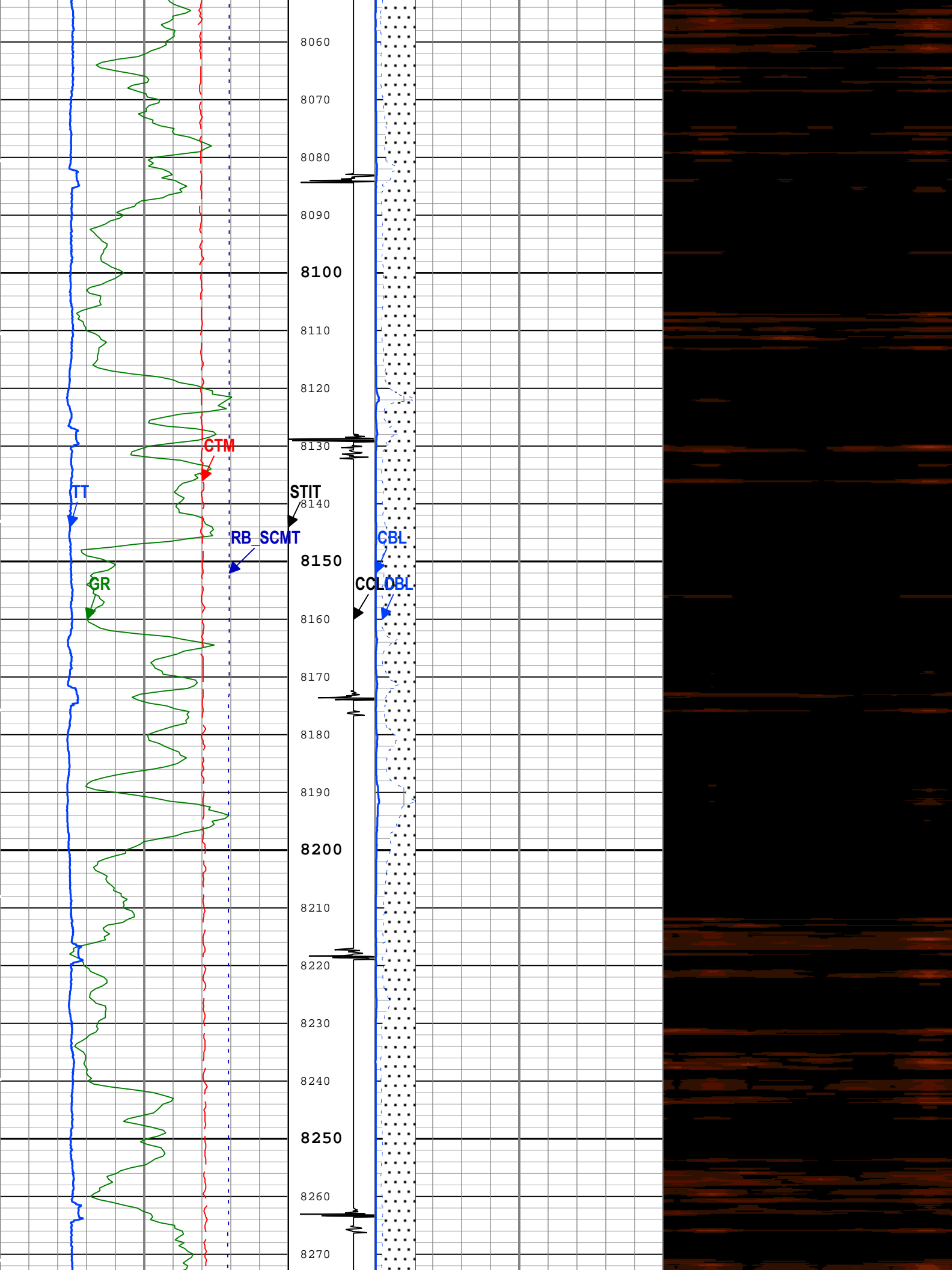


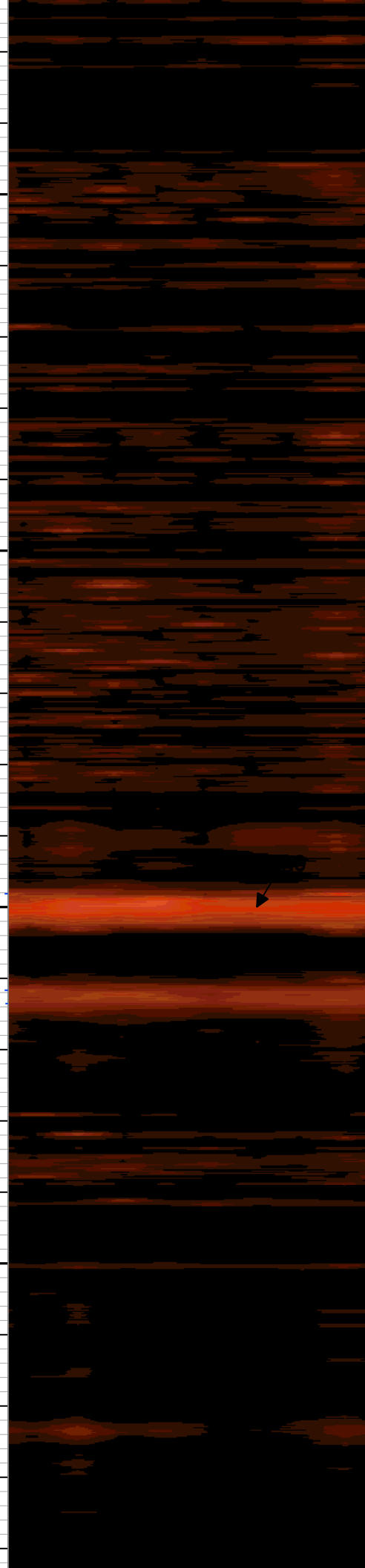
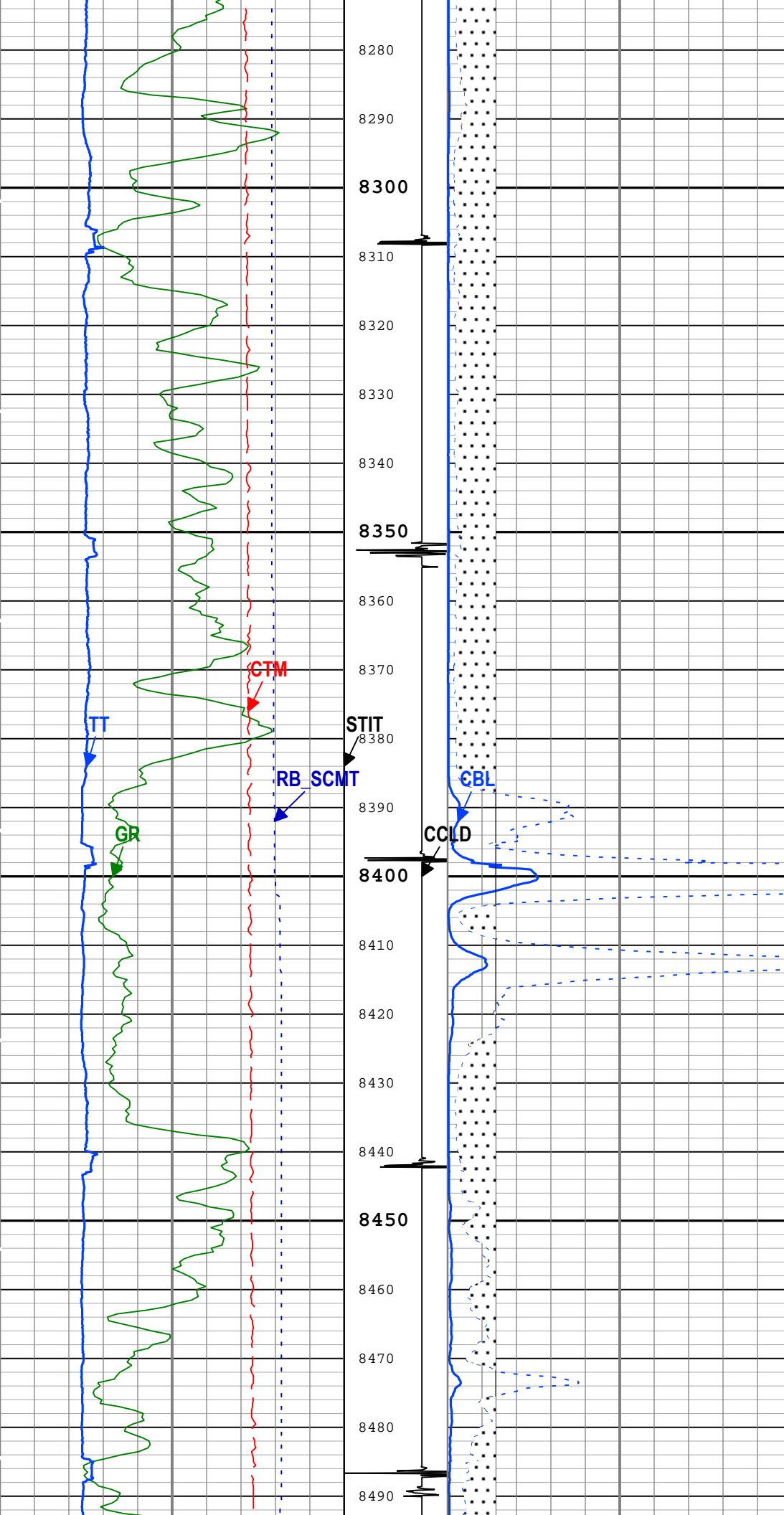


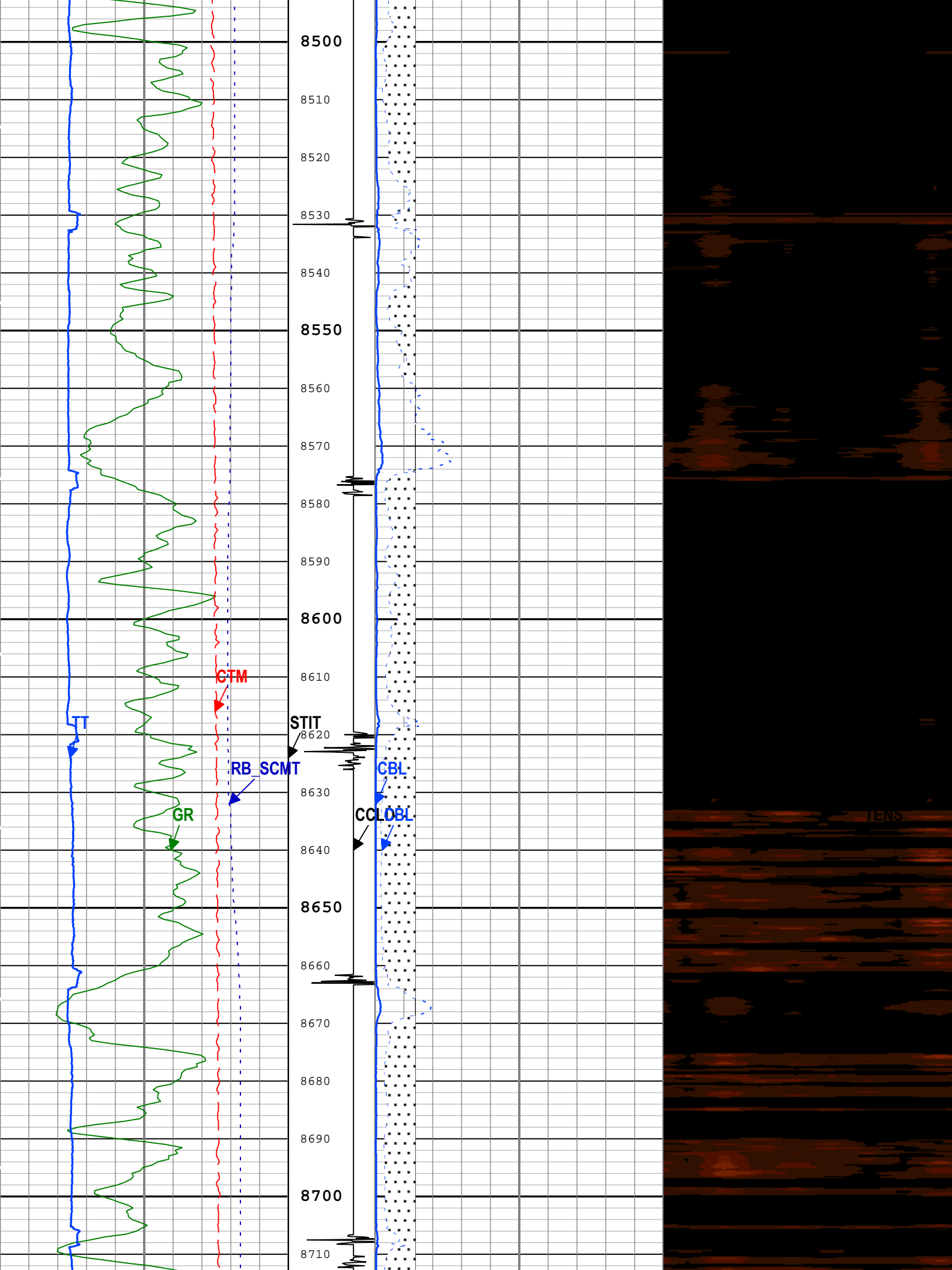


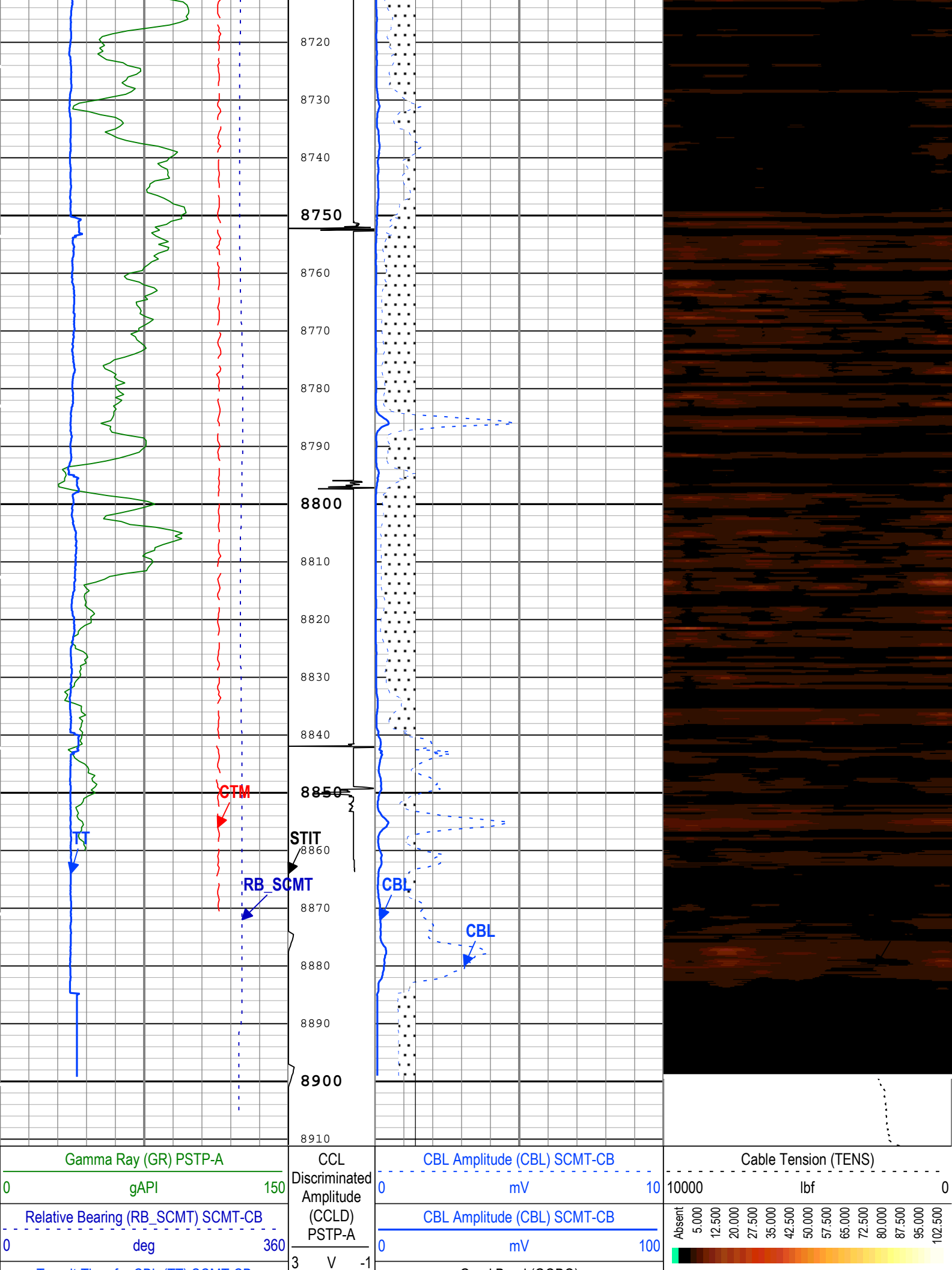












|                                   |      |                           |   |   |    |
|-----------------------------------|------|---------------------------|---|---|----|
| Transit Time for CBL (TT) SCMT-CB |      | Good Bond (GOBO)          |   | CBL Amplitude Mapping Image (0 - 100) SCMT-CB |    |
| 200                               | us   | 400                       | 0 | mV  | 10 |
| Cartridge Temperature (CTM) RST-C |      | GoodBond From CBL to GOBO |   |   |    |
| 0                                 | degF | 300                       | 0 | ft  | 50 |
|                                   |      | Cable Drag                |   |   |    |
|                                   |      | Tool_Tot. Drag            |   |   |    |

TIME\_1900 - Time Marked every 60.00 (s)

Description: SCMT Amplitudes and MAP Image    Format: Log ( SCMT\_Amp\_Image\_1 )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 05-Aug-2015 19:12:57

## Channel Processing Parameters

### ONE: Parameters

| Parameter | Description  | Tool            | Value             | Unit         |
|-----------|--|-----------------|-------------------|--------------|
| BHT       | Bottom Hole Temperature  | Borehole        | 239               | degF         |
| CB3D      | SCMT CBL 3 ft Peak Detection Mode  | SCMT-CB         | Peak              |              |
| CB3G      | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate                     | SCMT-CB         | 241               | us           |
| CB3T      | SCMT CBL 3 ft Fixed Threshold Level                                      | SCMT-CB         | 20                | mV           |
| CBLG      | CBL Gate Width   | SCMT-CB         | 44                | us           |
| CBRA      | CBL LQC Reference Amplitude in Free Pipe                                 | SCMT-CB         | 80                | mV           |
| CMCF      | CBL Cement Type Compensation Factor                                      | SCMT-CB         | 0.12              |              |
| THNO      | Nominal Casing Thickness - Zoned along logger depths                     | WLSESSION       | 0.25              | in           |
| DC_MODE   | Depth Correction Mode  | DepthCorrection | Real-time         |              |
| DFD       | Drilling Fluid Density   | Borehole        | 9                 | lbm/gal      |
| DFT       | Drilling Fluid Type  | Borehole        | Water             |              |
| DTMD      | Borehole Fluid Slowness  | Borehole        | 196               | us/ft        |
| EDF       | Elevation of Derrick Floor Above Permanent Datum                         | WLSESSION       | 29                | ft           |
| EPD       | Elevation of Permanent Datum (PDAT) above Mean Sea Level                 | WLSESSION       | 8479              | ft           |
| ETEM      | HP Estimated Temperature   | PSTP-A          | 212               | degF         |
| FCF       | CBL Fluid Compensation Factor  | SCMT-CB         | 0.89              |              |
| GGRD      | Geothermal Gradient  | Borehole        | 1                 | 0.01 degF/ft |
| GTSE      | Generalized Temperature Selection, from Measured or Computed Temperature | Borehole        | GTEM_LINEST       |              |
| M1EF      | MAP sensitivity equalization factor of receiver 1                        | SCMT-CB         | 1                 |              |
| M2EF      | MAP sensitivity equalization factor of receiver 2                        | SCMT-CB         | 1                 |              |
| M3EF      | MAP sensitivity equalization factor of receiver 3                        | SCMT-CB         | 1                 |              |
| M4EF      | MAP sensitivity equalization factor of receiver 4                        | SCMT-CB         | 1                 |              |
| M5EF      | MAP sensitivity equalization factor of receiver 5                        | SCMT-CB         | 1                 |              |
| M6EF      | MAP sensitivity equalization factor of receiver 6                        | SCMT-CB         | 1                 |              |
| M7EF      | MAP sensitivity equalization factor of receiver 7                        | SCMT-CB         | 1                 |              |
| M8EF      | MAP sensitivity equalization factor of receiver 8                        | SCMT-CB         | 1                 |              |
| MAPD      | SCMT MAP Peak Detection Mode   | SCMT-CB         | Peak              |              |
| MAPG      | SCMT MAP Peak Detection T0_Delay and Noise Gate                          | SCMT-CB         | 176               | us           |
| MAPT      | SCMT MAP Fixed Threshold Level   | SCMT-CB         | 30                | mV           |
| MCCF      | MAP Cement Type Compensation Factor                                      | SCMT-CB         | 0.25              |              |
| MMSA      | MAP Minimum Sonic Amplitude  | SCMT-CB         | 3.98              | mV           |
| MSA       | Minimum Sonic Amplitude  | SCMT-CB         | 0.51              | mV           |
| PTCO      | PBMS Pressure Temperature Correction Option                              | PSTP-A          | Gauge Temperature |              |
| PDAT      | Permanent Datum  | WLSESSION       | GL                |              |
| RBC       | Relative Bearing Correction Allow/Disallow                               | SCMT-CB         | Allow             |              |

|          |                          |          |      |      |
|----------|--------------------------|----------|------|------|
| RUN_SNUM | Run Sequence Number      | WSDRUN   | 1    |      |
| SHT      | Surface Hole Temperature | Borehole | 68   | degF |
| TD       | Total Measured Depth     | Borehole | 8898 | ft   |

Tool Control Parameters

ONE: Parameters

| Parameter     | Description                      | Tool      | Value   | Unit |
|---------------|----------------------------------|-----------|---------|------|
| CMTM          | SCMT Operating Mode              | SCMT-CB   | Log     |      |
| MAX_LOG_SPEED | Toolstring Maximum Logging Speed | WLSESSION | 150     | ft/h |
| PCCG          | PSP Downhole CCL Gain            | PSTP-A    | 36 dB   |      |
| RST_DLM       | Depth Log Mode                   | RST-C     | Sigma   |      |
| RST_SLM       | Station Log Mode                 | RST-C     | Off     |      |
| RST_WDET      | RST WFL Detectors List           | RST-C     | [.....] |      |

ONE

Repeat Pass 0 PSI

Software Version

| Acquisition System | Version        |
|--------------------|----------------|
| Maxwell 2016       | 6.0.47569.3100 |

Pass Summary

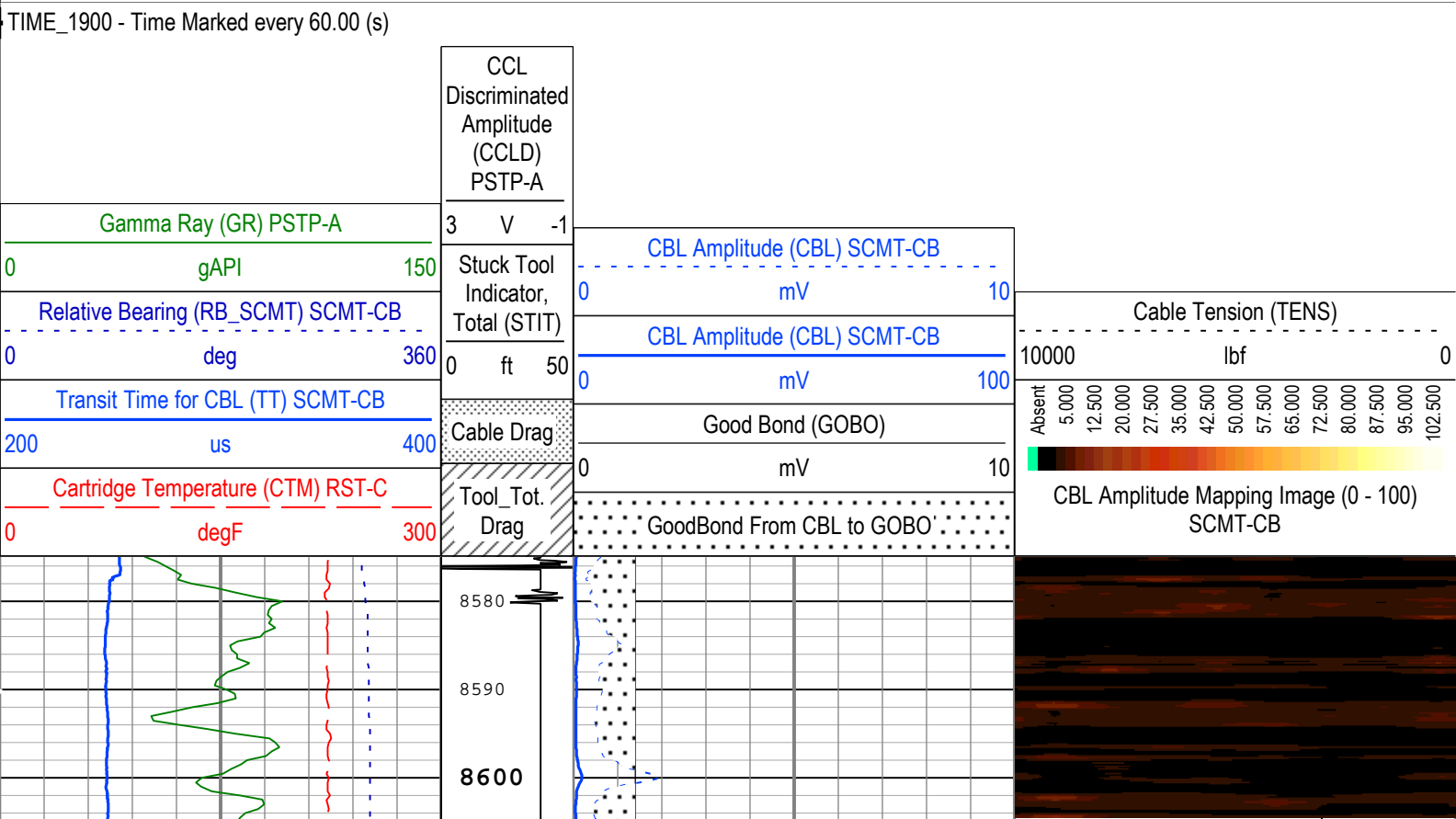
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|----------|----------------|-----------|------------|------------|------------------------|------------------------|----------|-------------|-----------------------|
| ONE      | Repeat[3]:Up   | Up        | 8548.20 ft | 8904.90 ft | 24-Jul-2015 9:11:38 AM | 24-Jul-2015 9:25:23 AM | ON       | 2.60 ft     | Yes                   |

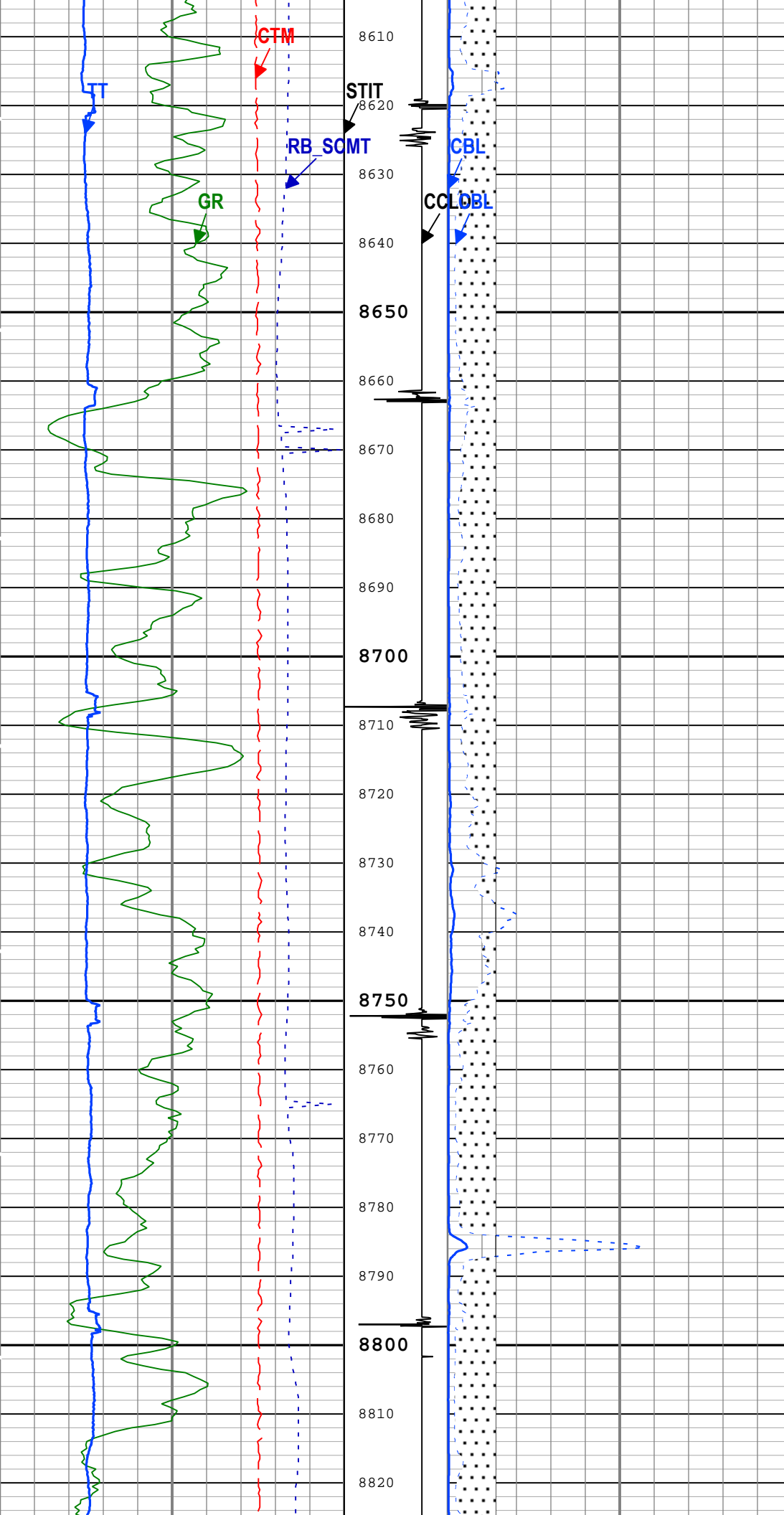
All depths are referenced to toolstring zero

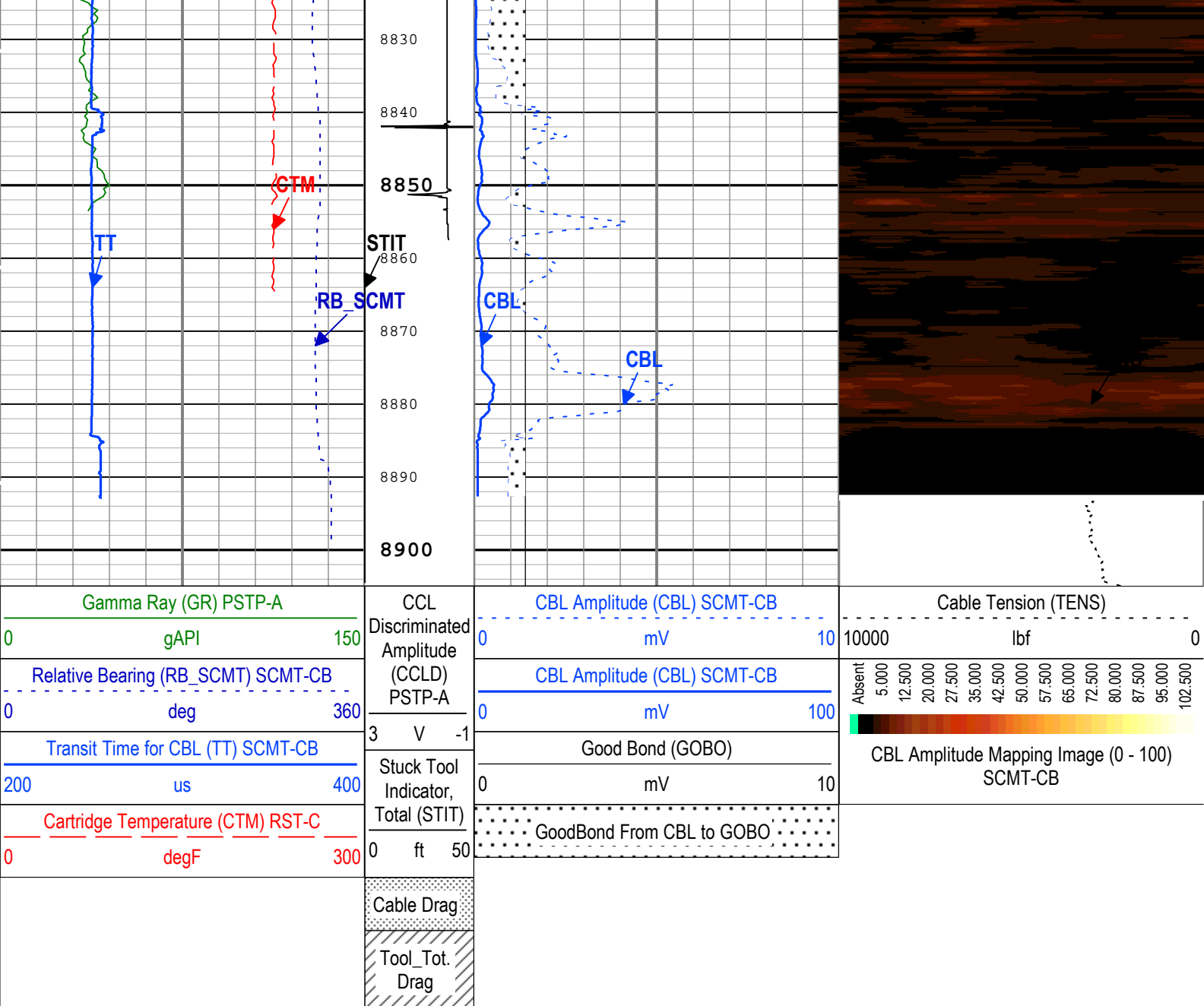
Log

Company:Caerus Piceance LLC      Well:Puckett 12D-1  
ONE: Repeat[3]:Up:S013

Description: SCMT Amplitudes and MAP Image    Format: Log ( SCMT\_Amp\_Image\_1 )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured  
Depth    Creation Date: 05-Aug-2015 19:13:03







TIME\_1900 - Time Marked every 60.00 (s)

Description: SCMT Amplitudes and MAP Image    Format: Log ( SCMT\_Amp\_Image\_1 )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured  
Depth    Creation Date: 05-Aug-2015 19:13:03

| Channel Processing Parameters |  |                 |           |         |
|-------------------------------|--|-----------------|-----------|---------|
| ONE: Parameters               |  |                 |           |         |
| Parameter                     | Description  | Tool            | Value     | Unit    |
| BHT                           | Bottom Hole Temperature                                  | Borehole        | 239       | degF    |
| CB3G                          | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate     | SCMT-CB         | 241       | us      |
| CBLG                          | CBL Gate Width   | SCMT-CB         | 44        | us      |
| CBRA                          | CBL LQC Reference Amplitude in Free Pipe                 | SCMT-CB         | 80        | mV      |
| CMCF                          | CBL Cement Type Compensation Factor                      | SCMT-CB         | 0.12      |         |
| THNO                          | Nominal Casing Thickness - Zoned along logger depths     | WLSESSION       | 0.25      | in      |
| DC_MODE                       | Depth Correction Mode                                    | DepthCorrection | Real-time |         |
| DFD                           | Drilling Fluid Density                                   | Borehole        | 9         | lbm/gal |
| DFT                           | Drilling Fluid Type                                      | Borehole        | Water     |         |
| DTMD                          | Borehole Fluid Slowness                                  | Borehole        | 196       | us/ft   |
| EDF                           | Elevation of Derrick Floor Above Permanent Datum         | WLSESSION       | 29        | ft      |
| EPD                           | Elevation of Permanent Datum (PDAT) above Mean Sea Level | WLSESSION       | 8479      | ft      |

|          |  |           |             |              |
|----------|--|-----------|-------------|--------------|
| FCF      | CBL Fluid Compensation Factor  | SCMT-CB   | 0.89        |              |
| GGRD     | Geothermal Gradient  | Borehole  | 1           | 0.01 degF/ft |
| GTSE     | Generalized Temperature Selection, from Measured or Computed Temperature | Borehole  | GTEM_LINEST |              |
| MAPG     | SCMT MAP Peak Detection T0_Delay and Noise Gate                          | SCMT-CB   | 176         | us           |
| MCCF     | MAP Cement Type Compensation Factor                                      | SCMT-CB   | 0.25        |              |
| MMSA     | MAP Minimum Sonic Amplitude  | SCMT-CB   | 3.98        | mV           |
| MSA      | Minimum Sonic Amplitude  | SCMT-CB   | 0.51        | mV           |
| PDAT     | Permanent Datum  | WLSESSION | GL          |              |
| RUN_SNUM | Run Sequence Number  | WSDRUN    | 1           |              |
| SHT      | Surface Hole Temperature   | Borehole  | 68          | degF         |
| TD       | Total Measured Depth   | Borehole  | 8898        | ft           |

Tool Control Parameters

ONE: Parameters

|               |                                  |           |       |      |
|---------------|----------------------------------|-----------|-------|------|
| Parameter     | Description                      | Tool      | Value | Unit |
| CMTM          | SCMT Operating Mode              | SCMT-CB   | Log   |      |
| MAX_LOG_SPEED | Toolstring Maximum Logging Speed | WLSESSION | 150   | ft/h |
| RST_DLM       | Depth Log Mode                   | RST-C     | Sigma |      |

ONE

Main Pass 2500 PSI

Software Version

|                    |                |
|--------------------|----------------|
| Acquisition System | Version        |
| Maxwell 2016       | 6.0.47569.3100 |

Pass Summary

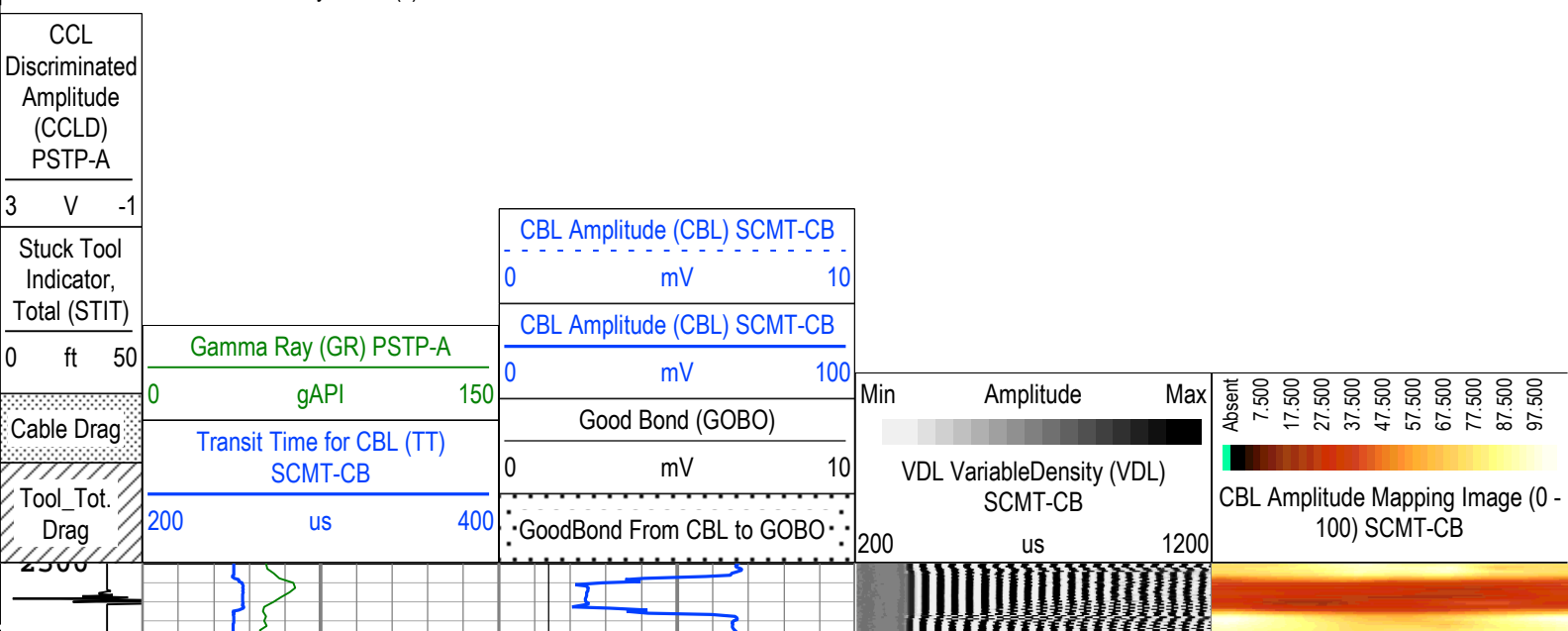
| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                  | Stop                   | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|------------------------|------------------------|----------|-------------|-----------------------|
| ONE      | Log[4]:Up      | Up        | 1993.23 ft | 8911.14 ft | 24-Jul-2015 9:44:41 AM | 24-Jul-2015 1:36:22 PM | ON       | 5.99 ft     | Yes                   |

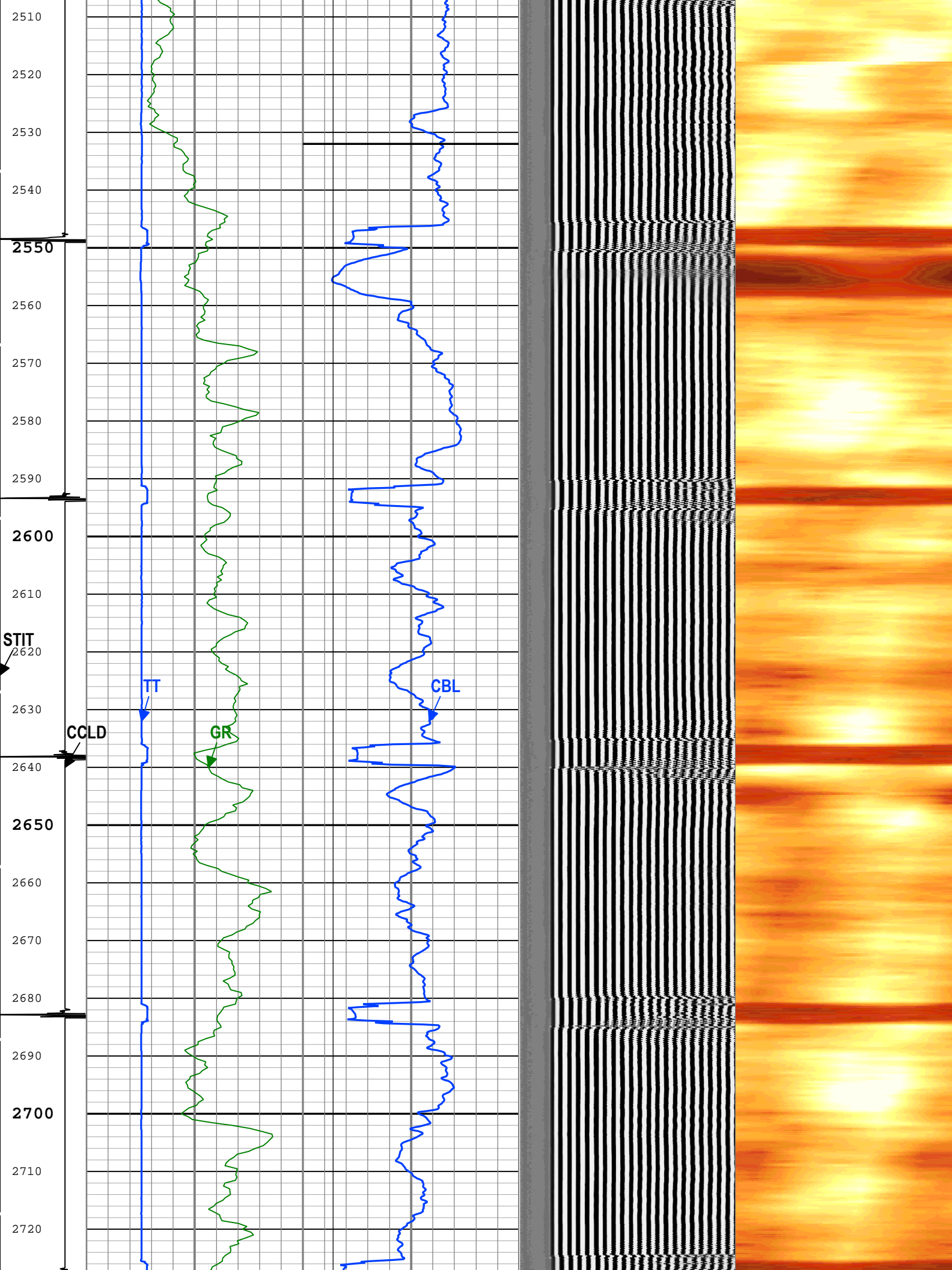
All depths are referenced to toolstring zero

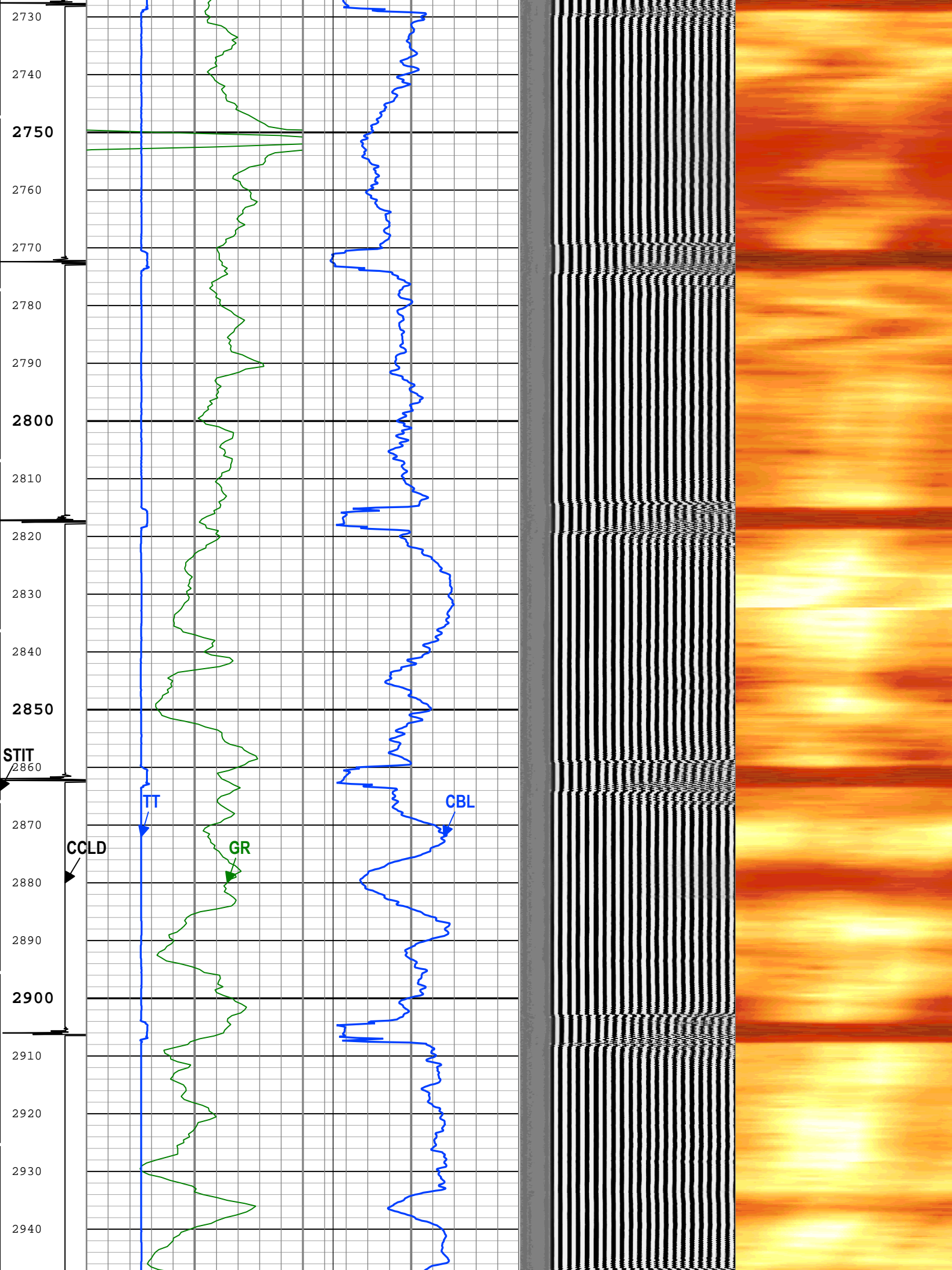
|     |  |
|-----|--|
| Log | Company:Caerus Piceance LLC      Well:Puckett 12D-1<br>ONE: Log[4]:Up:S013 |
|-----|--|

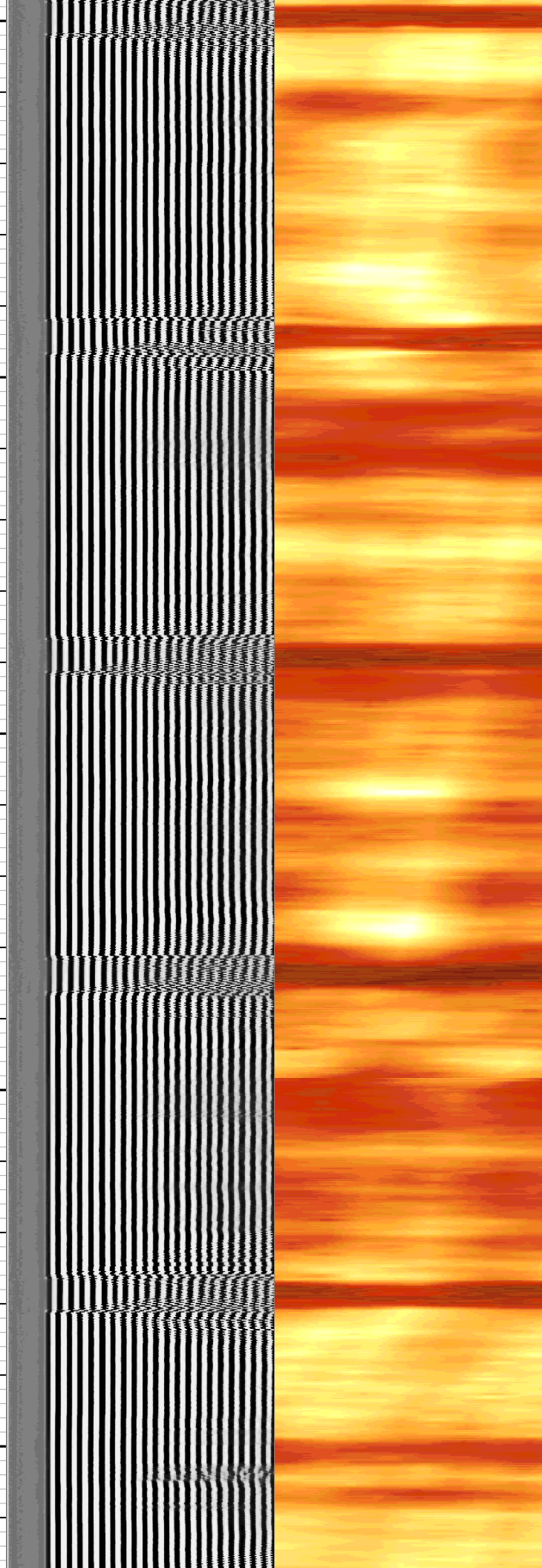
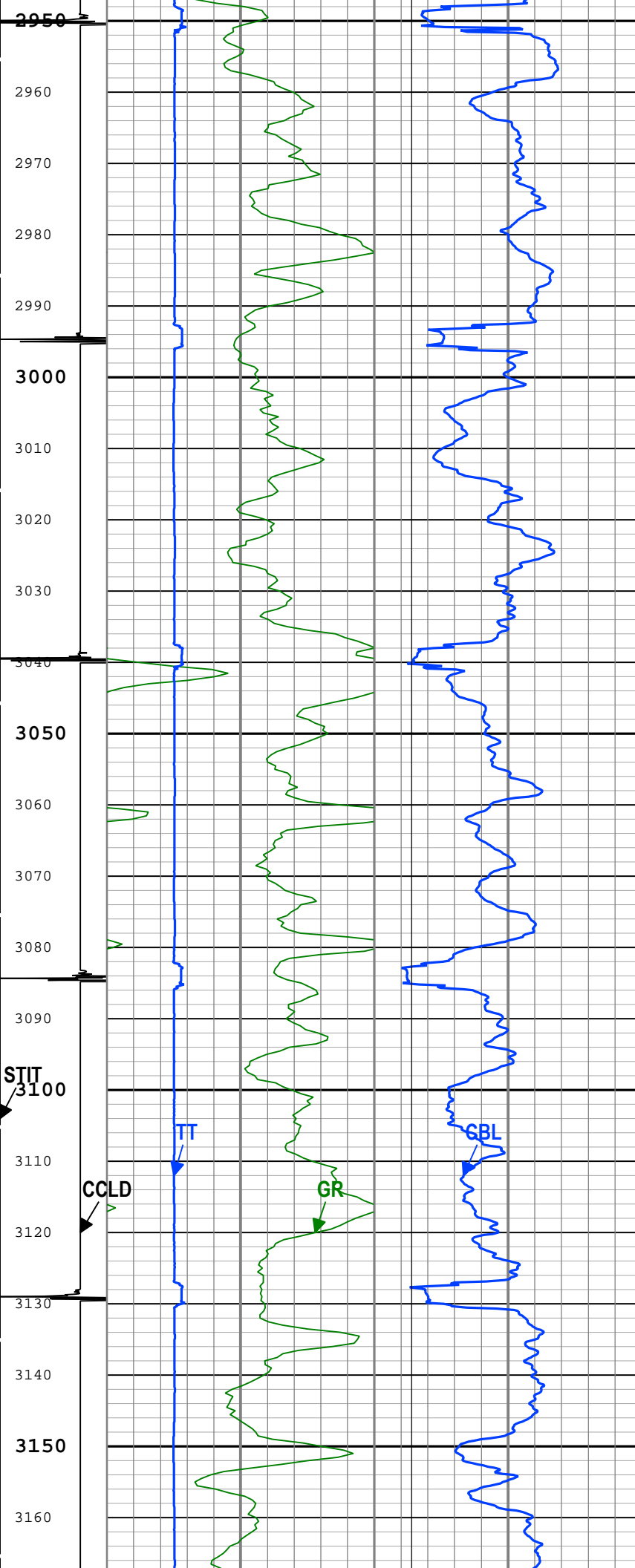
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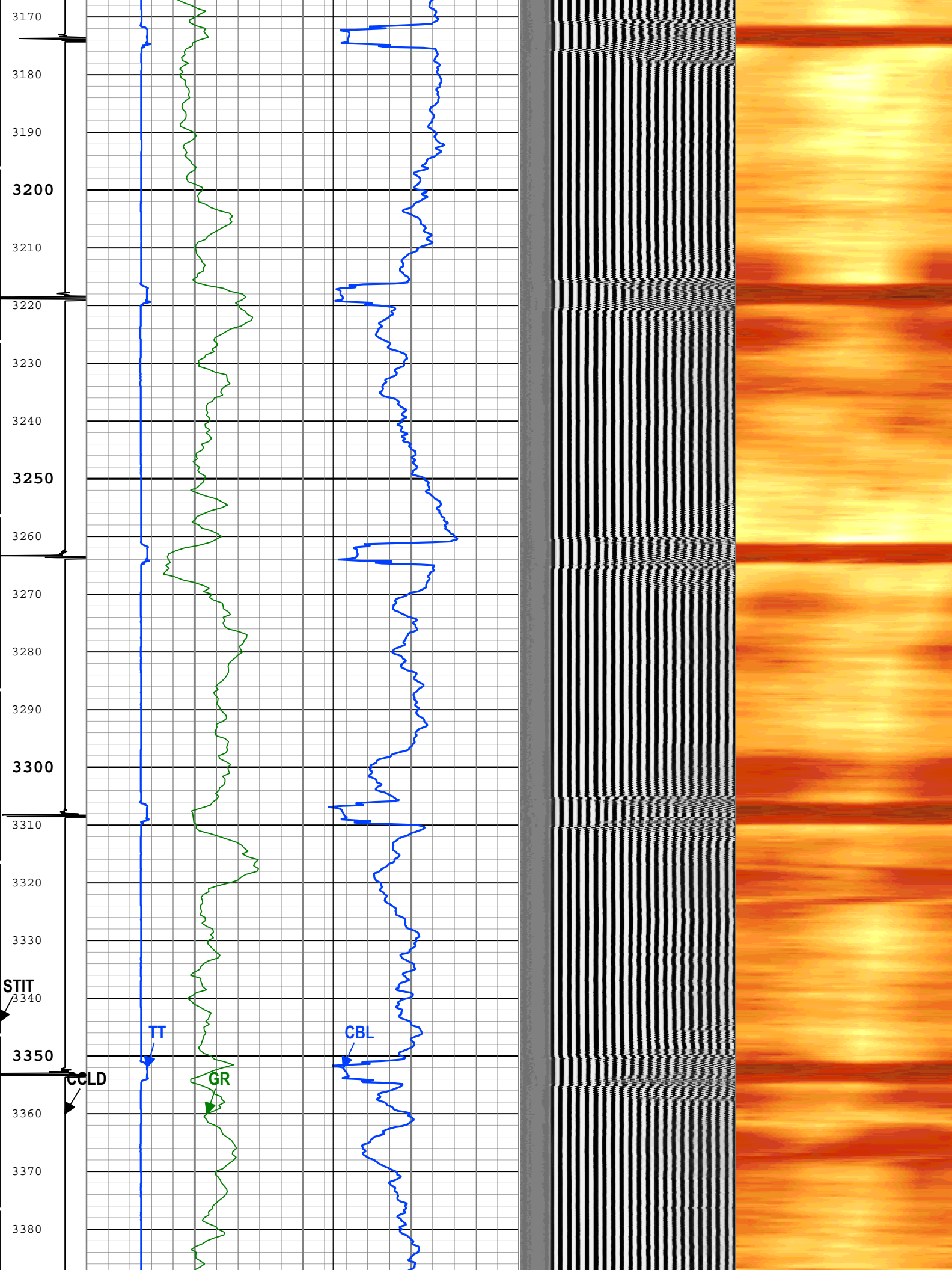
TIME\_1900 - Time Marked every 60.00 (s)

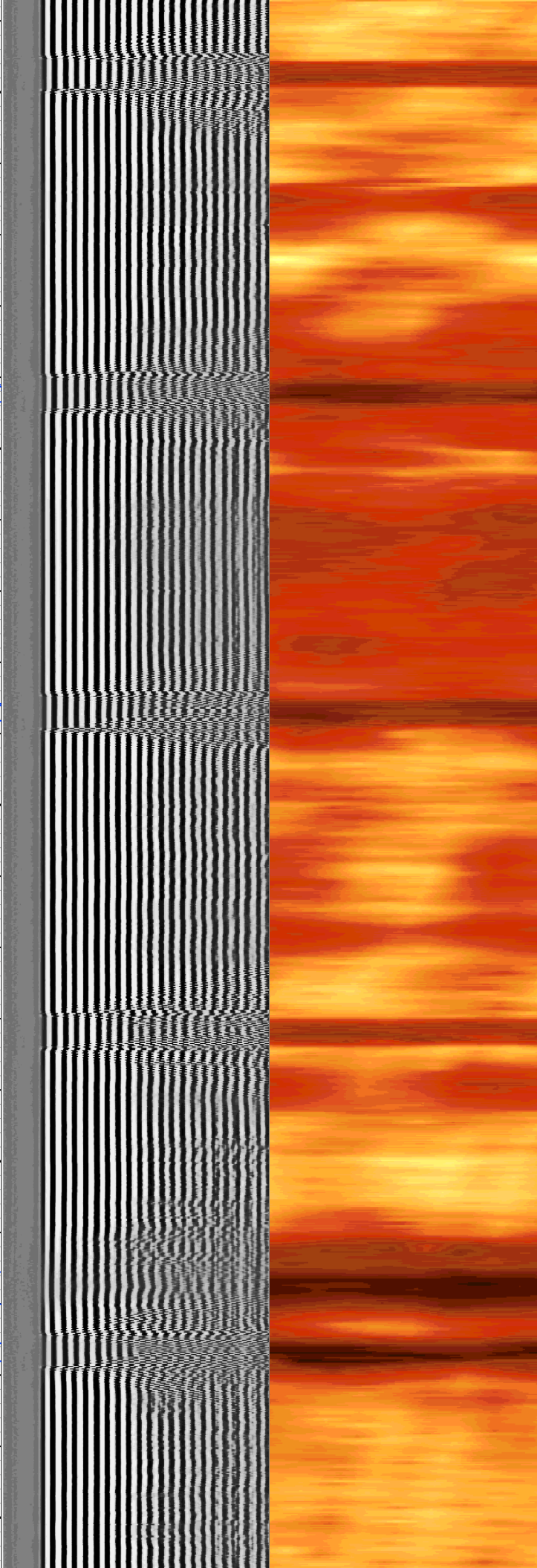
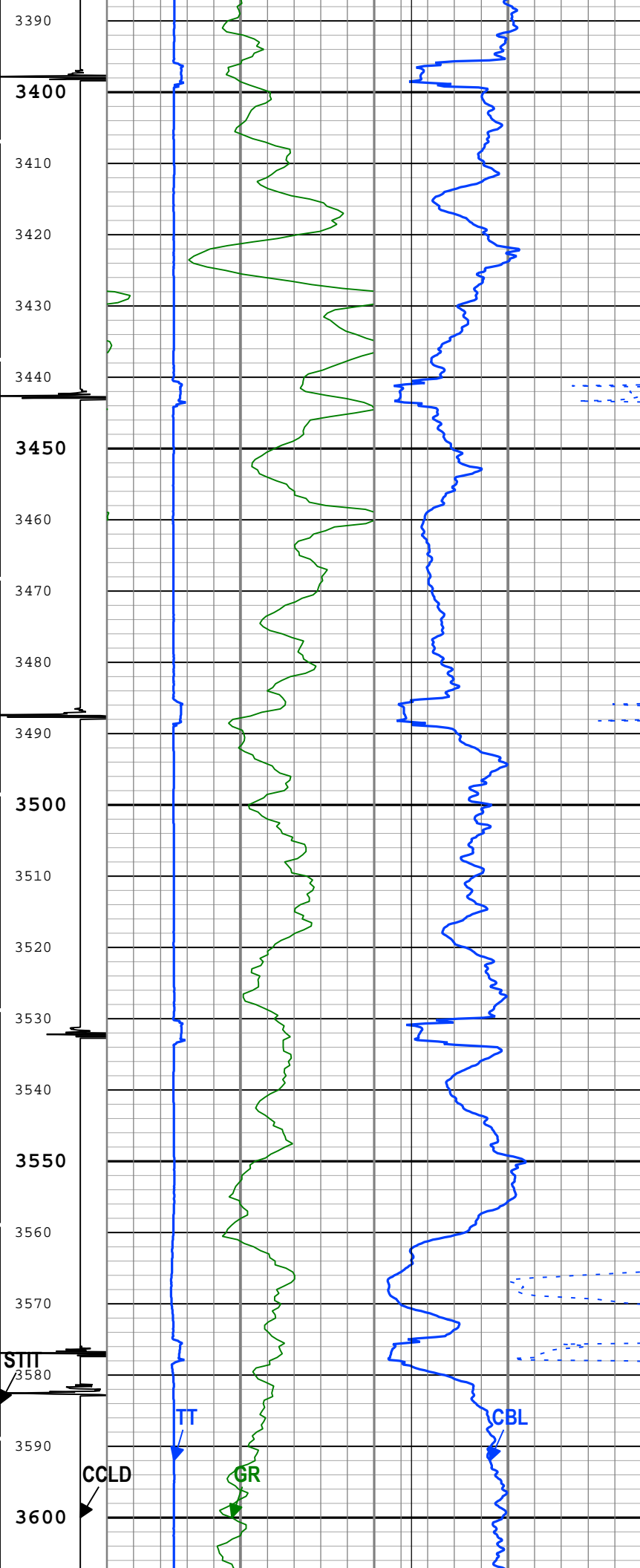


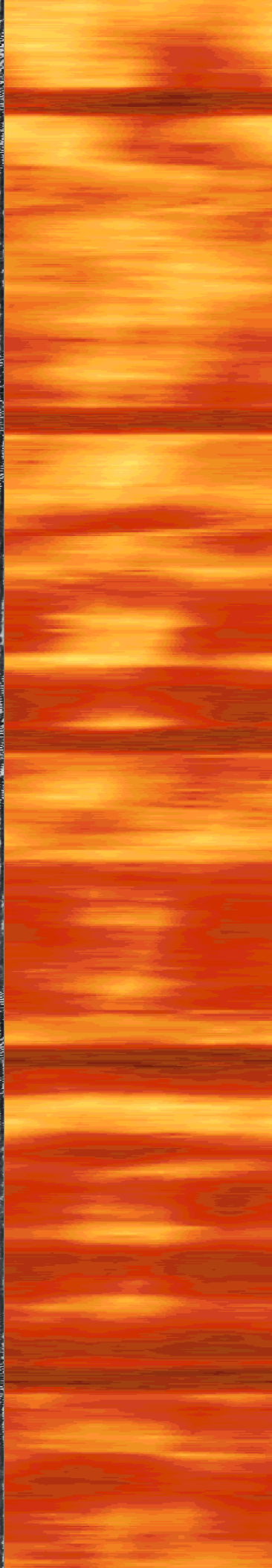
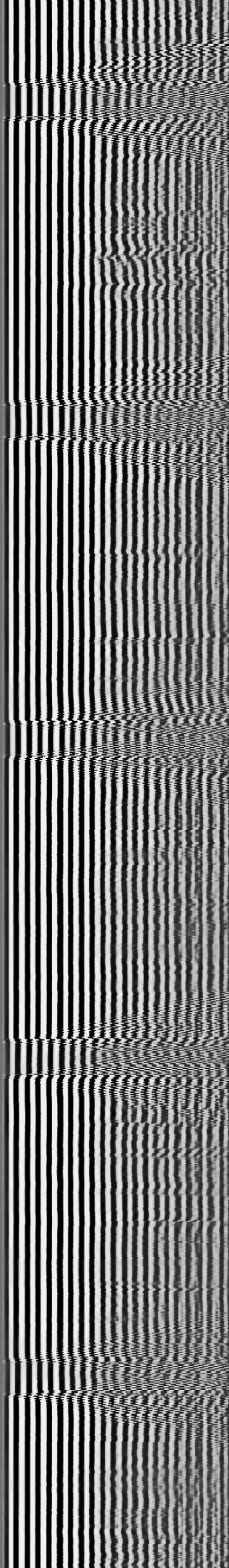
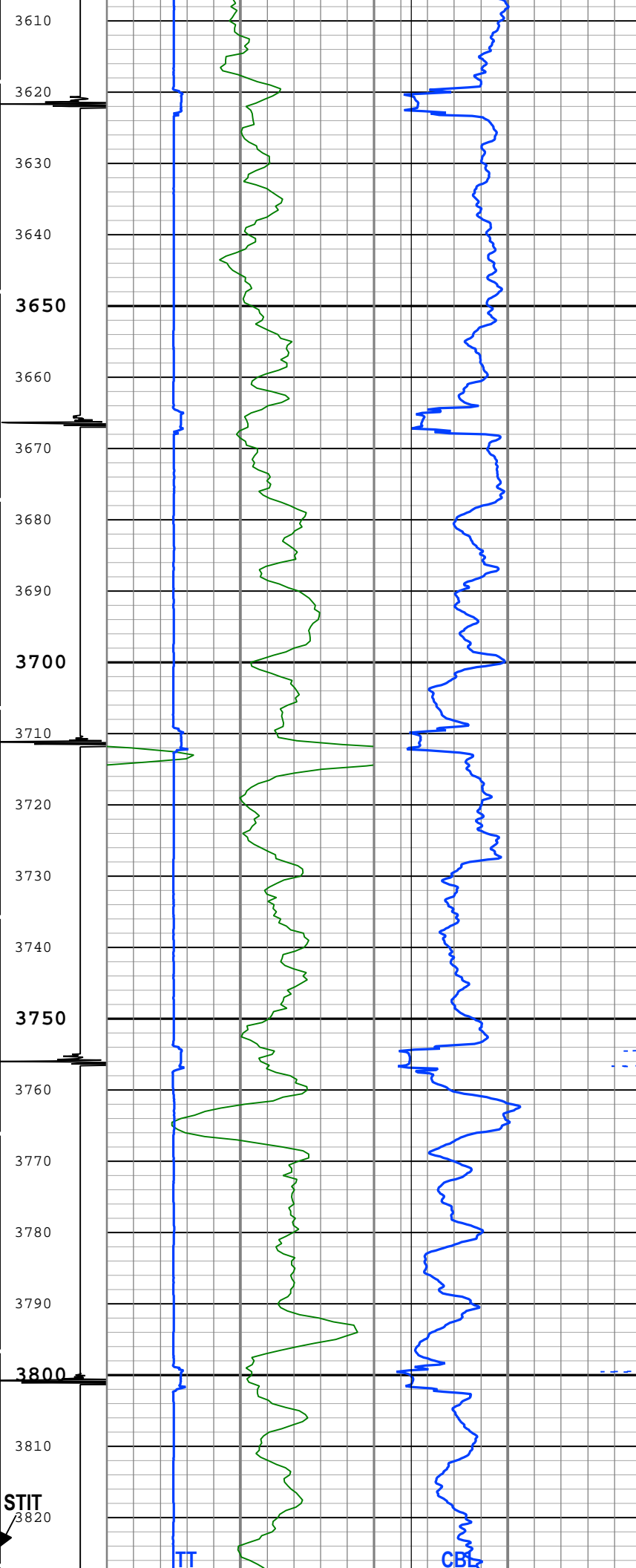


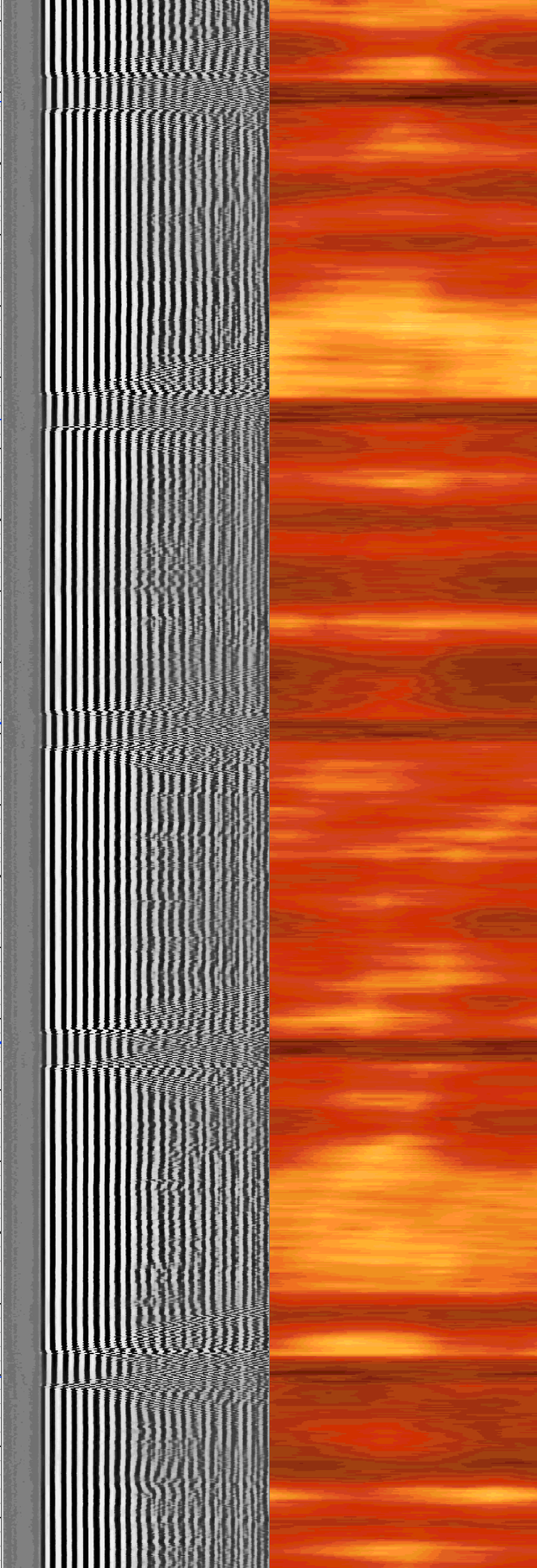
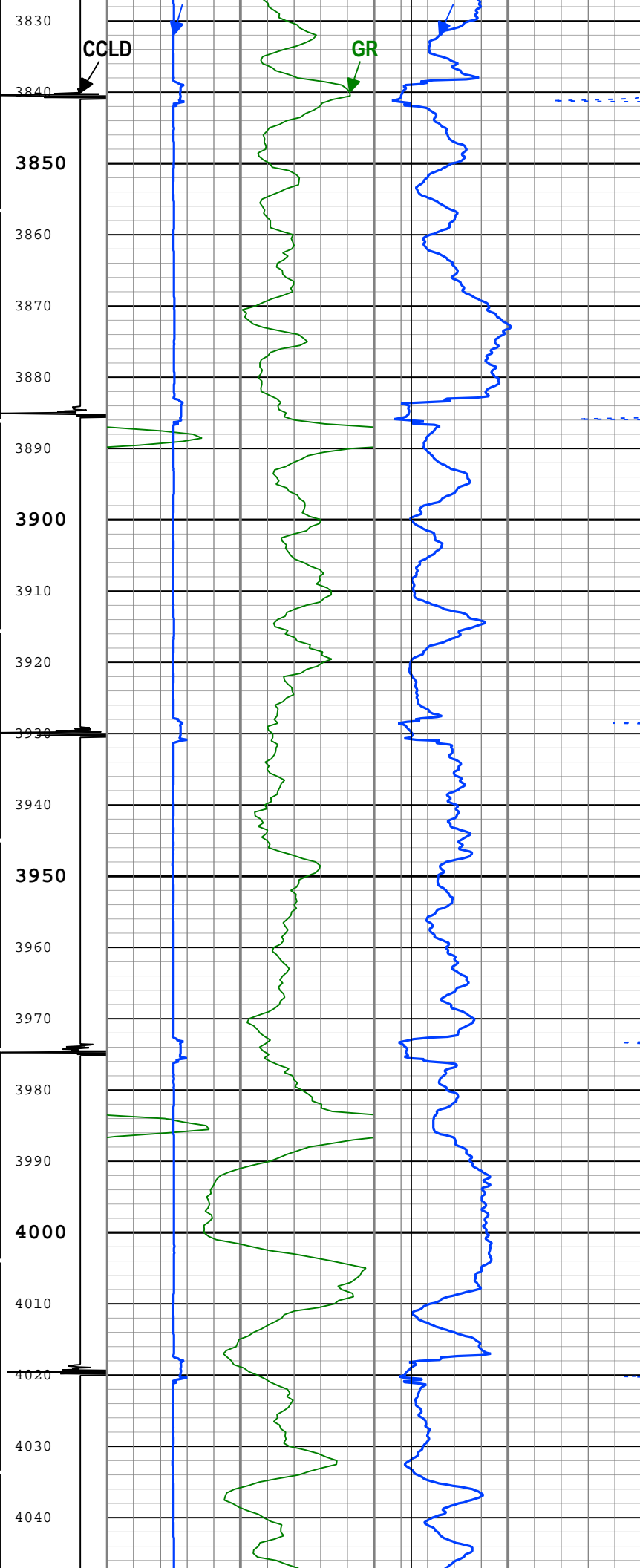


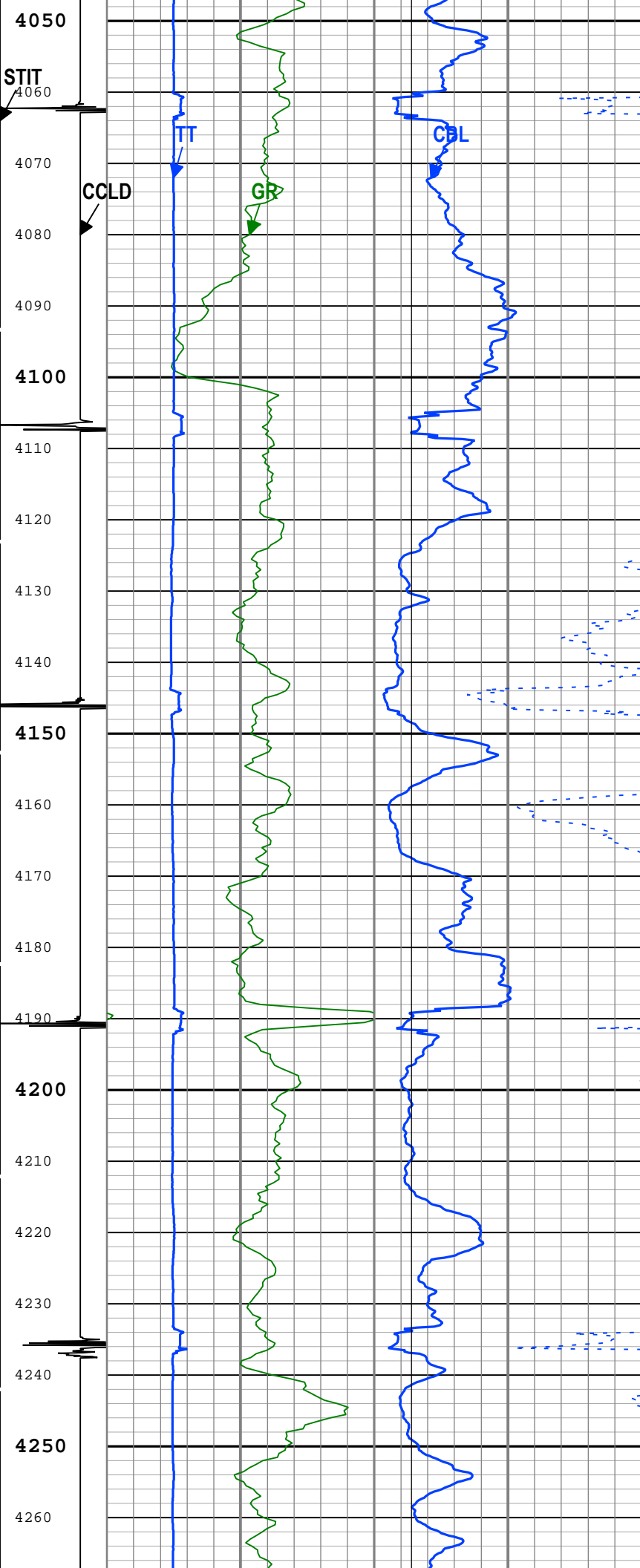


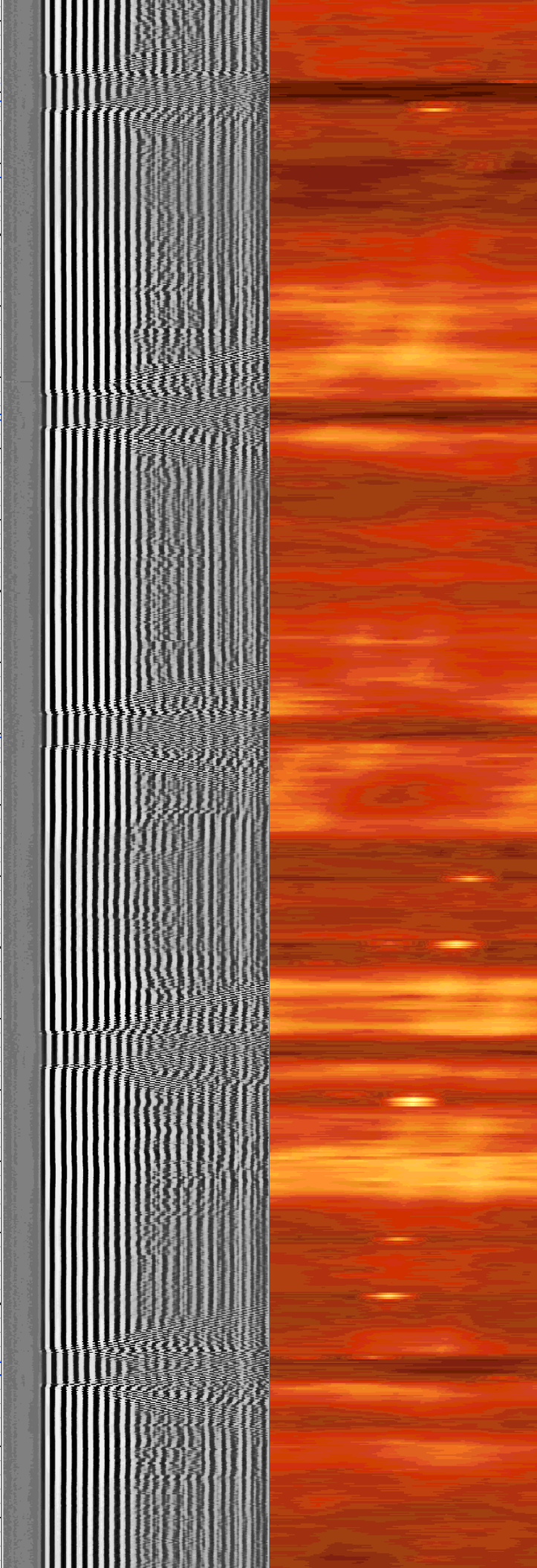
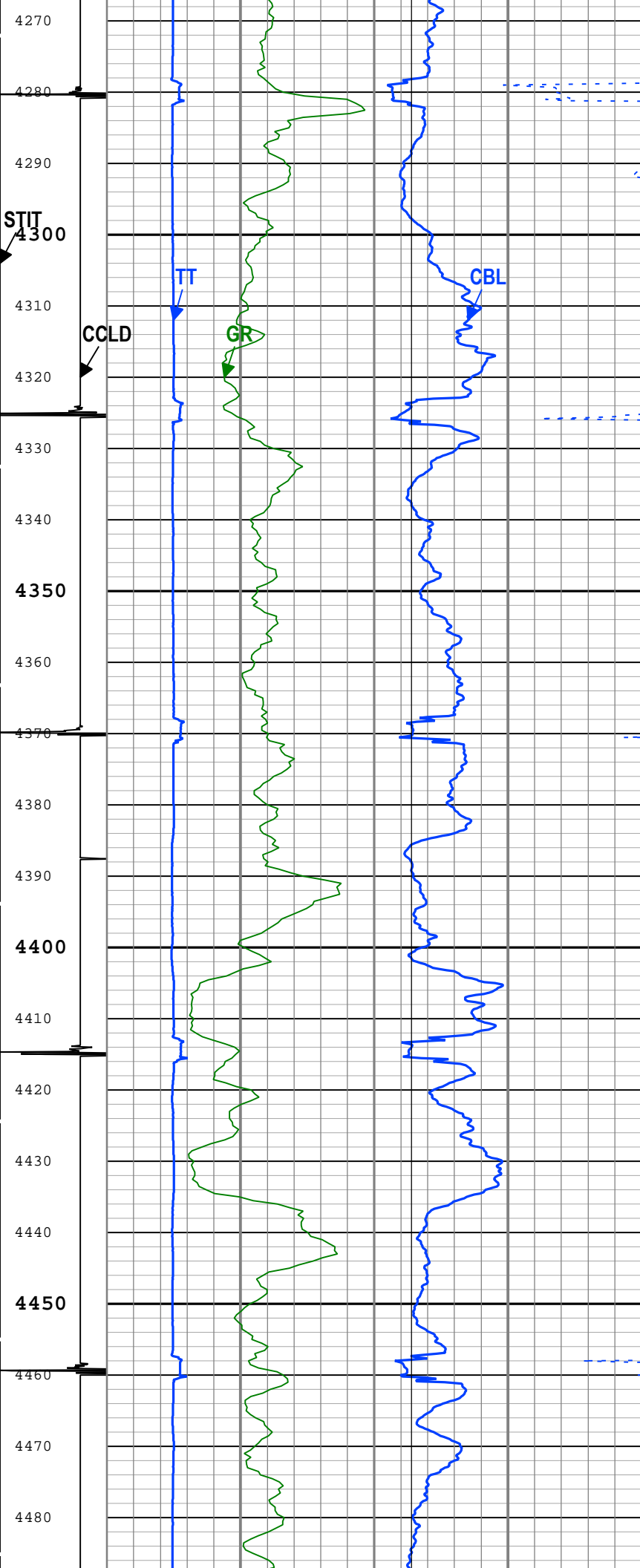


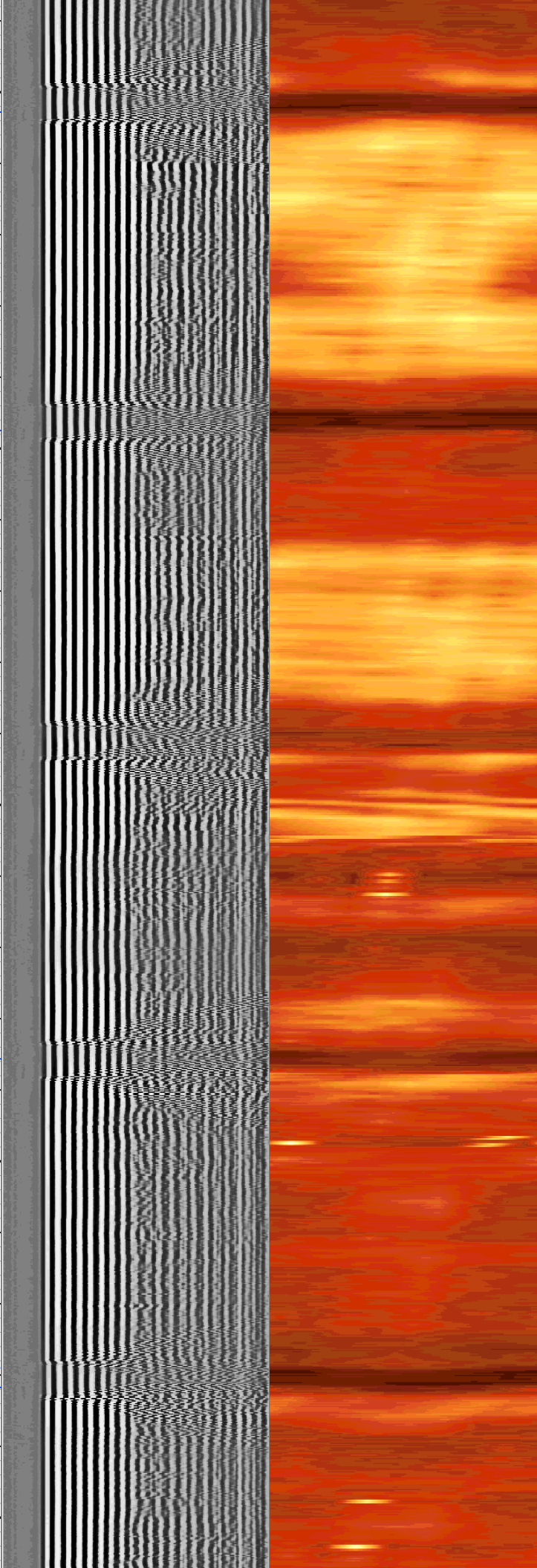
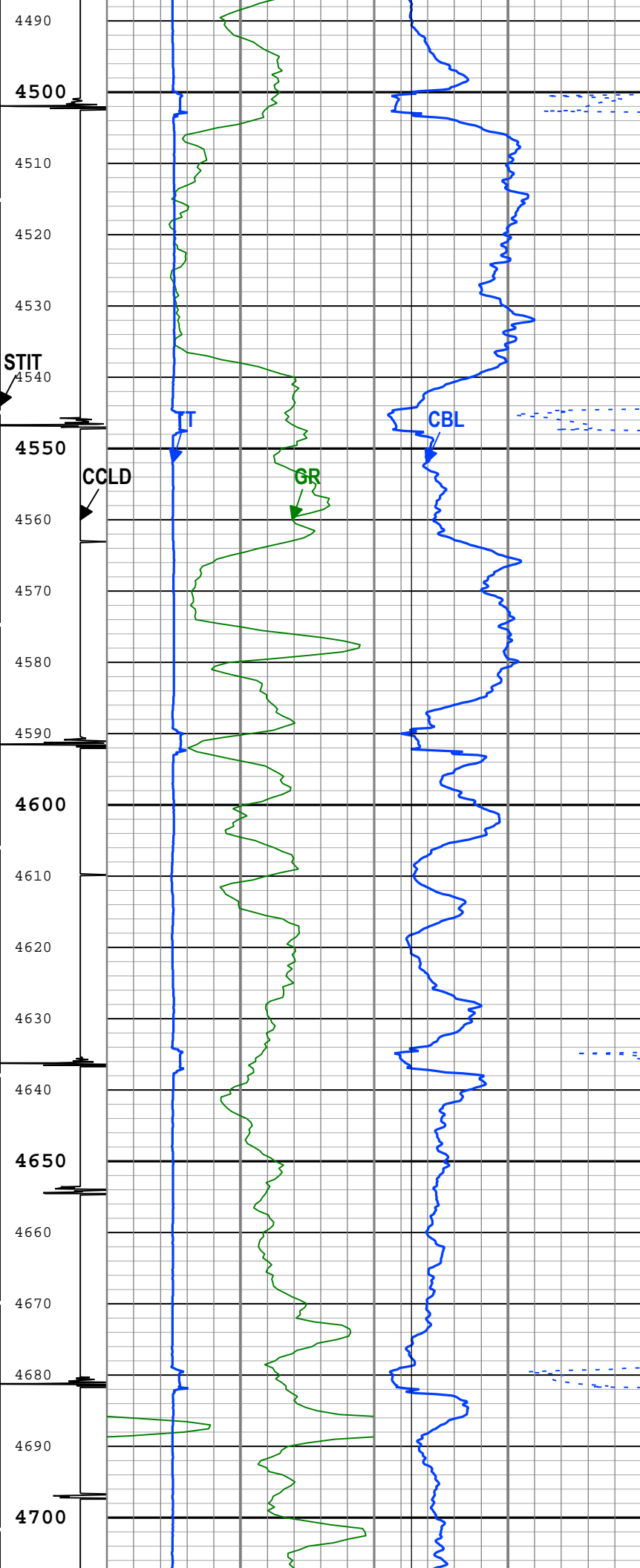


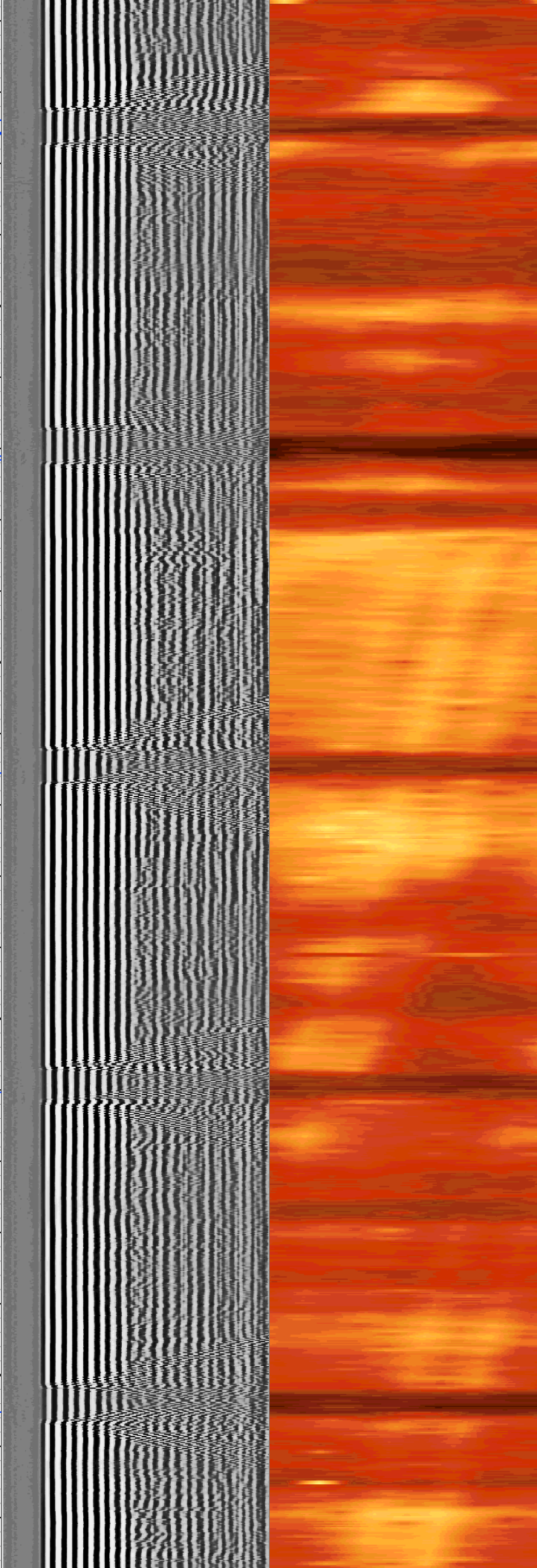
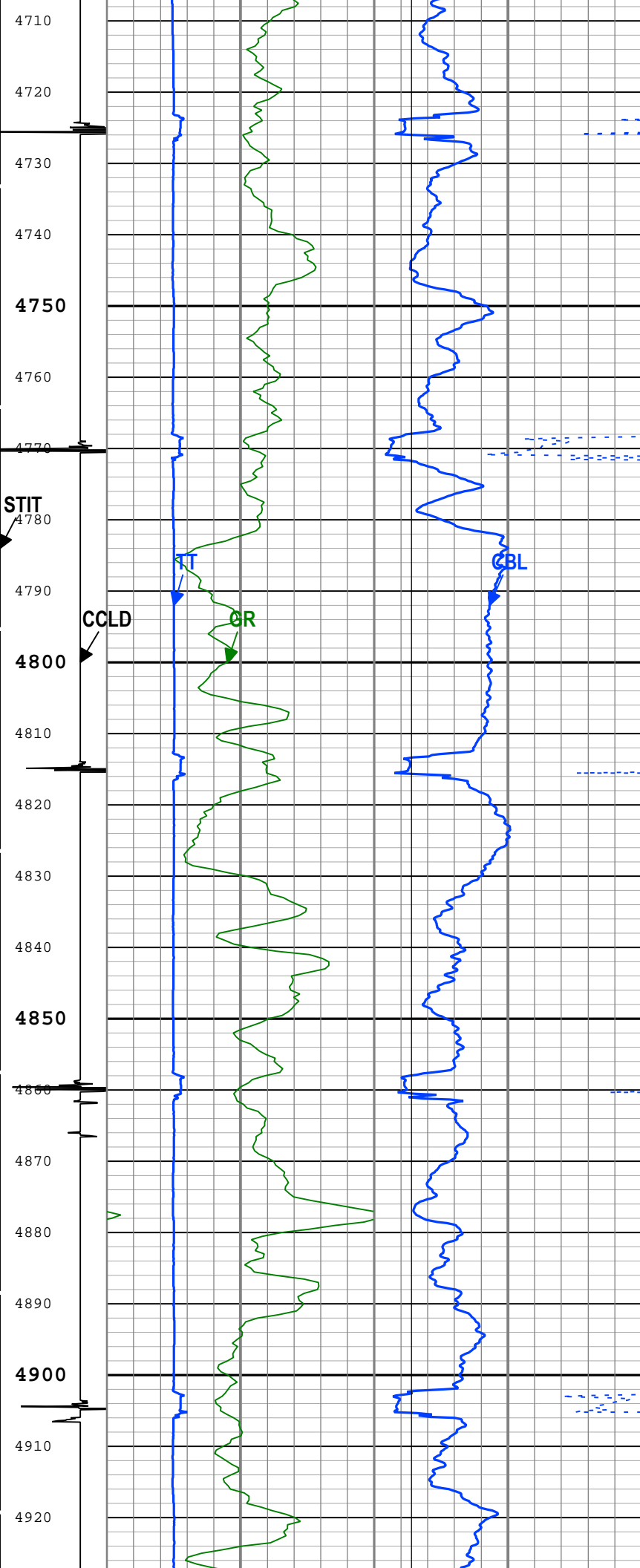


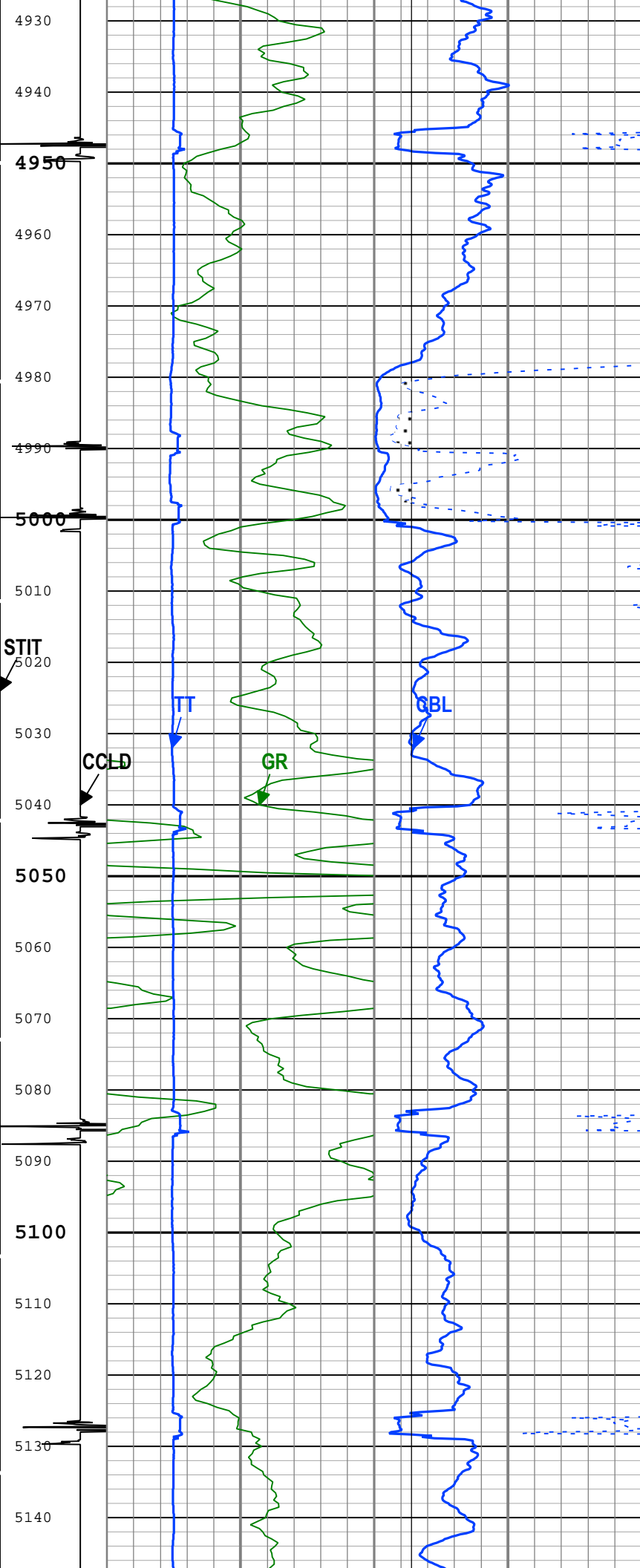


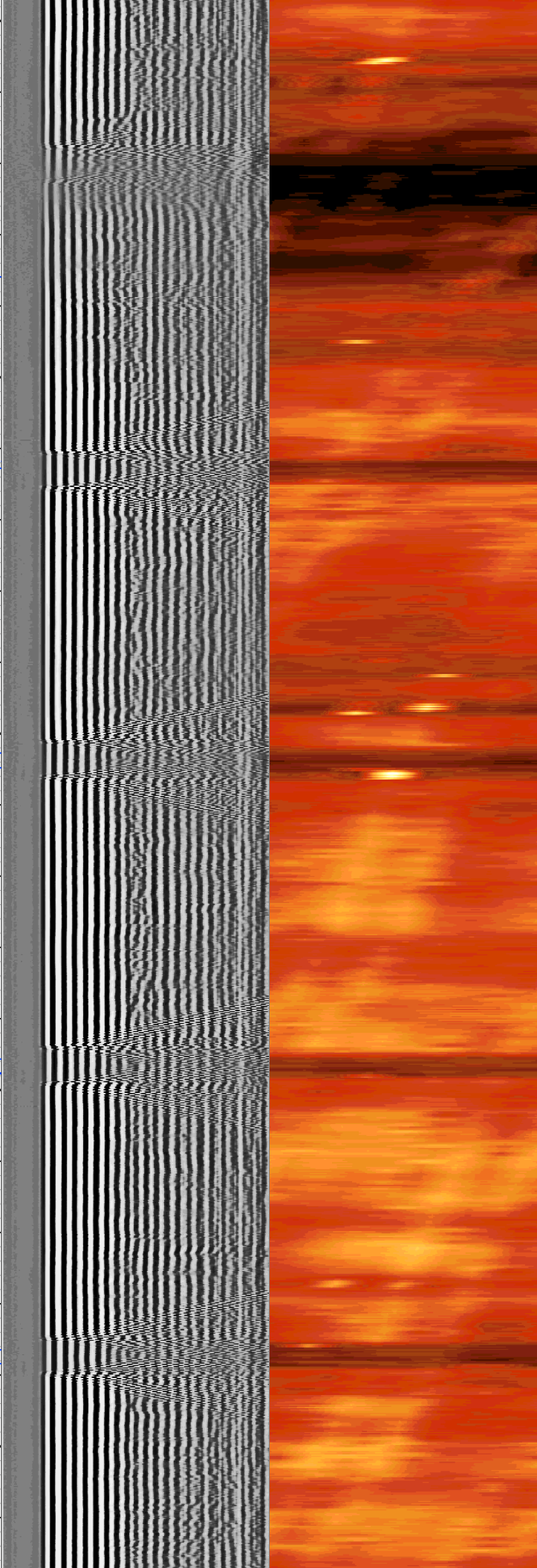
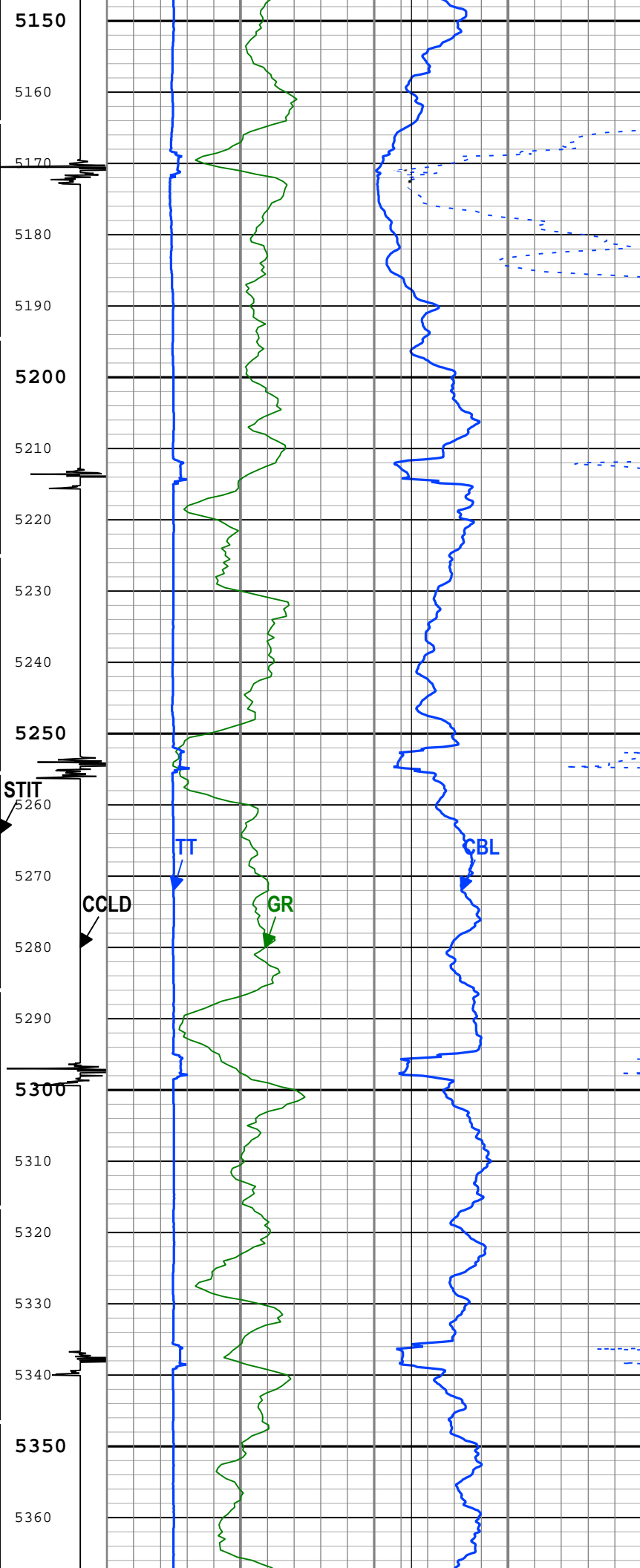


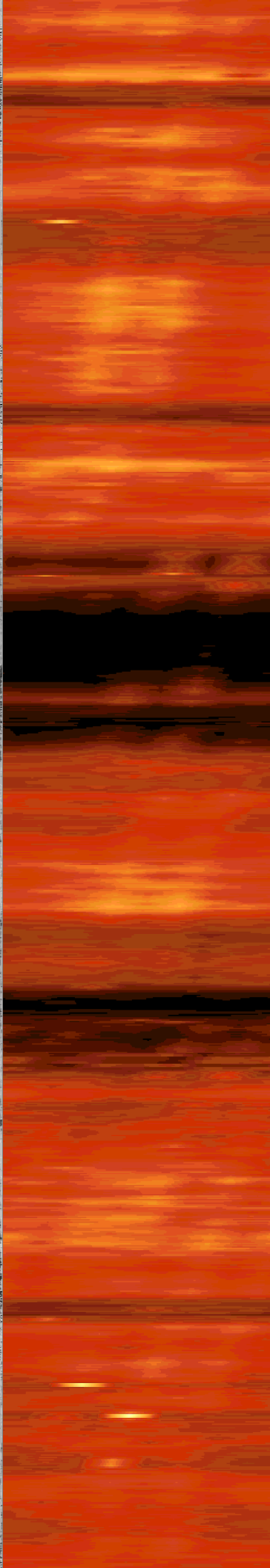
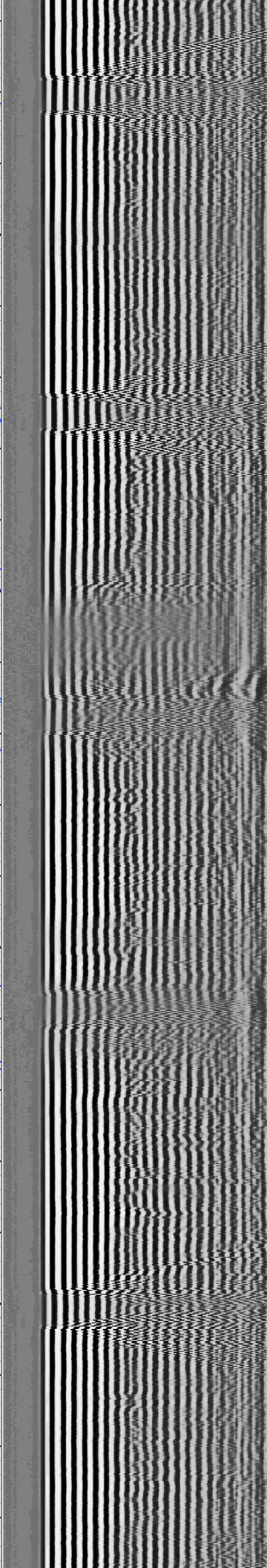
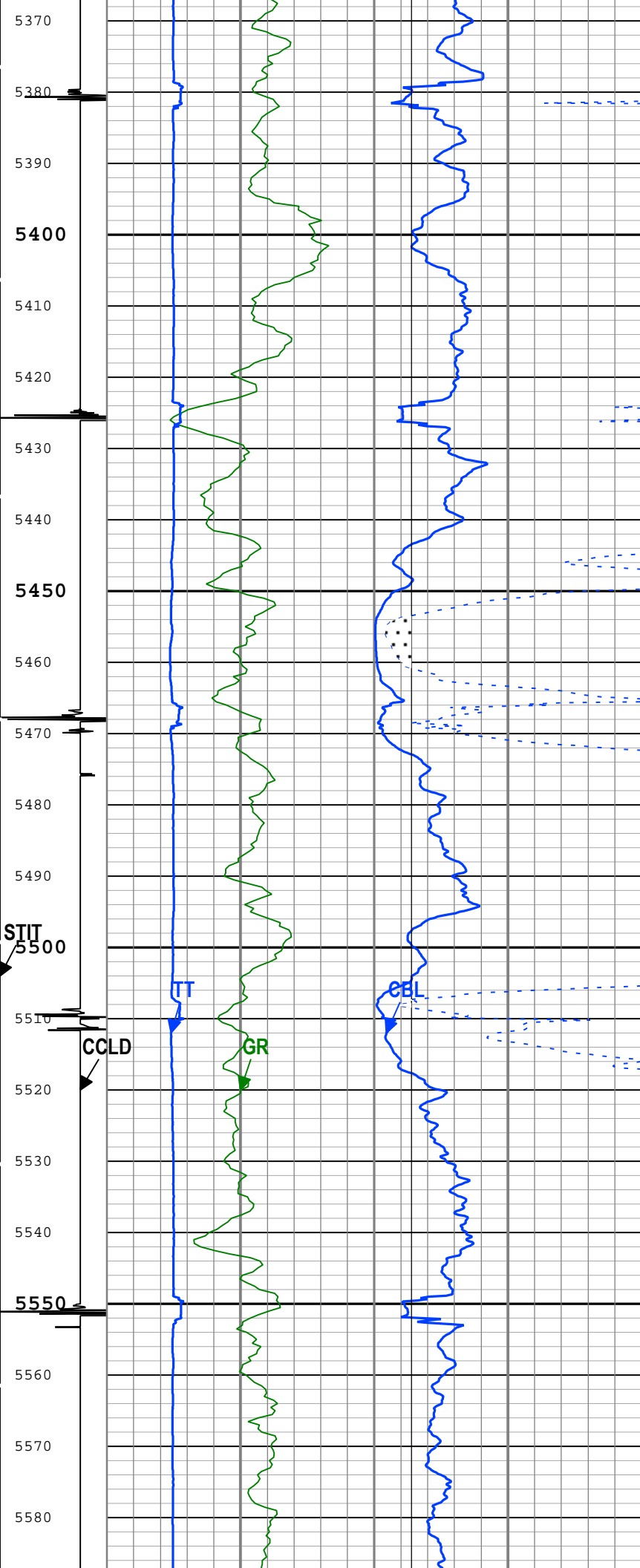


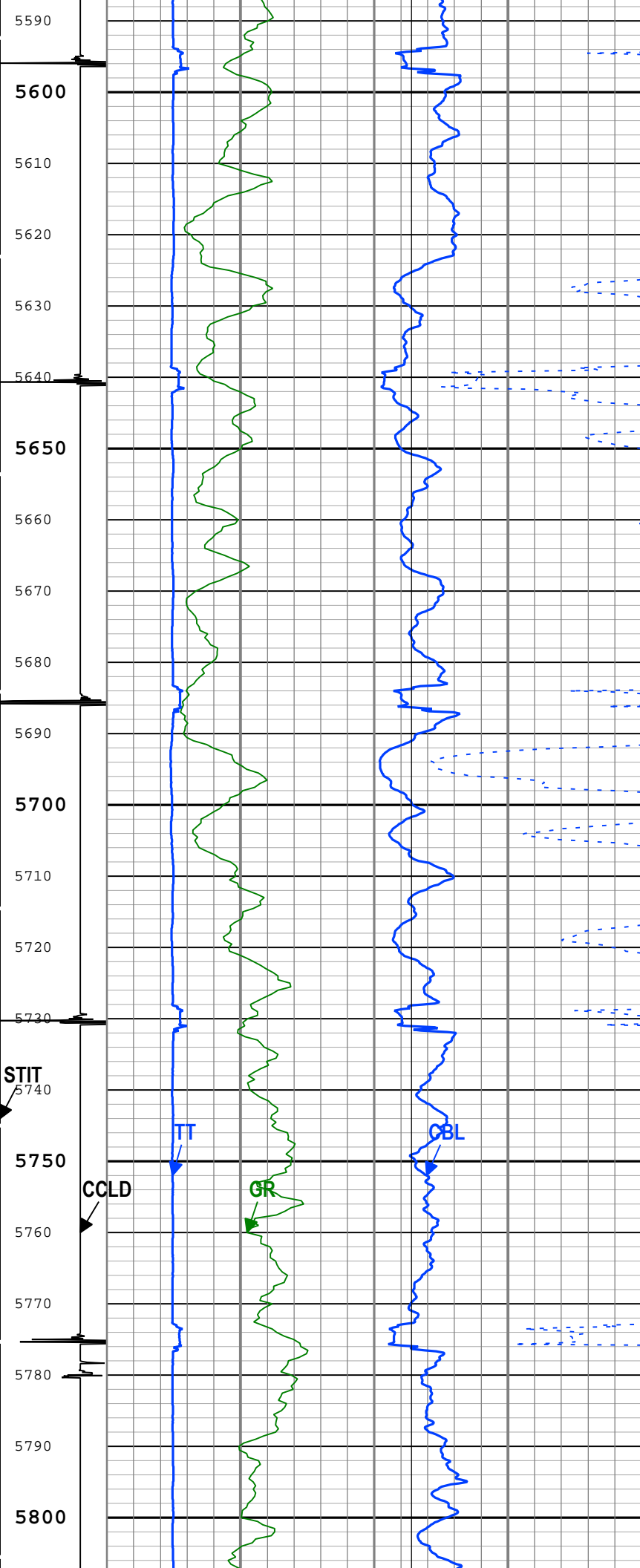


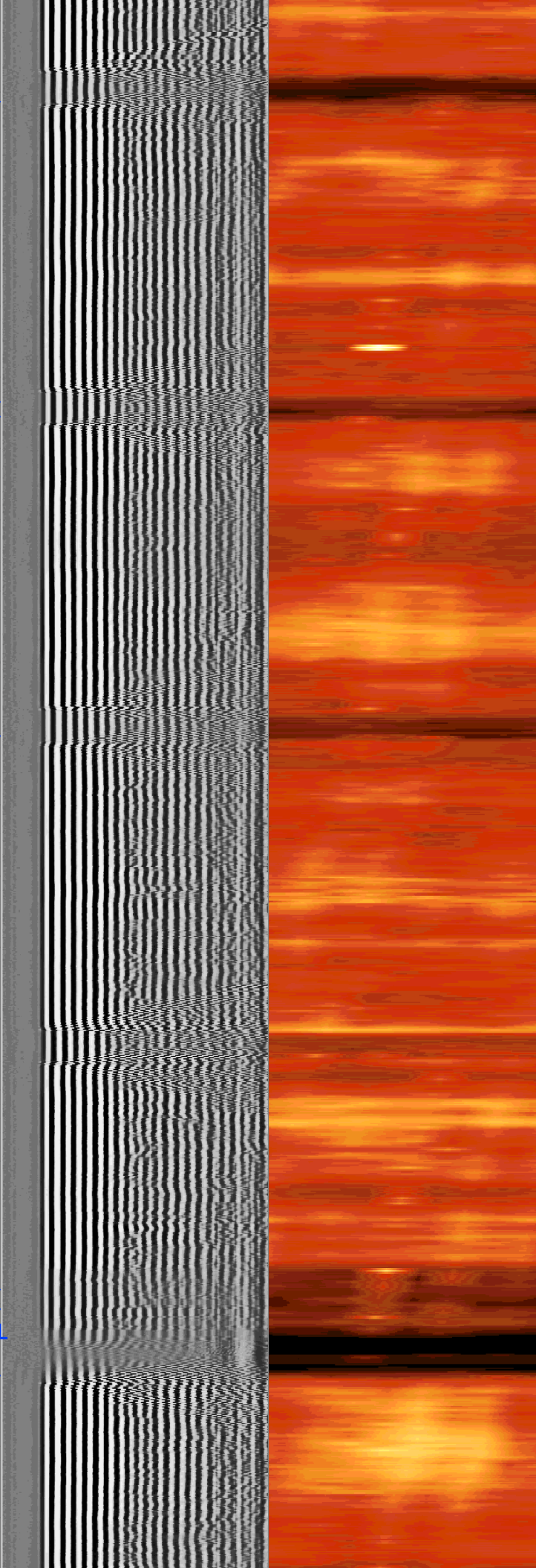
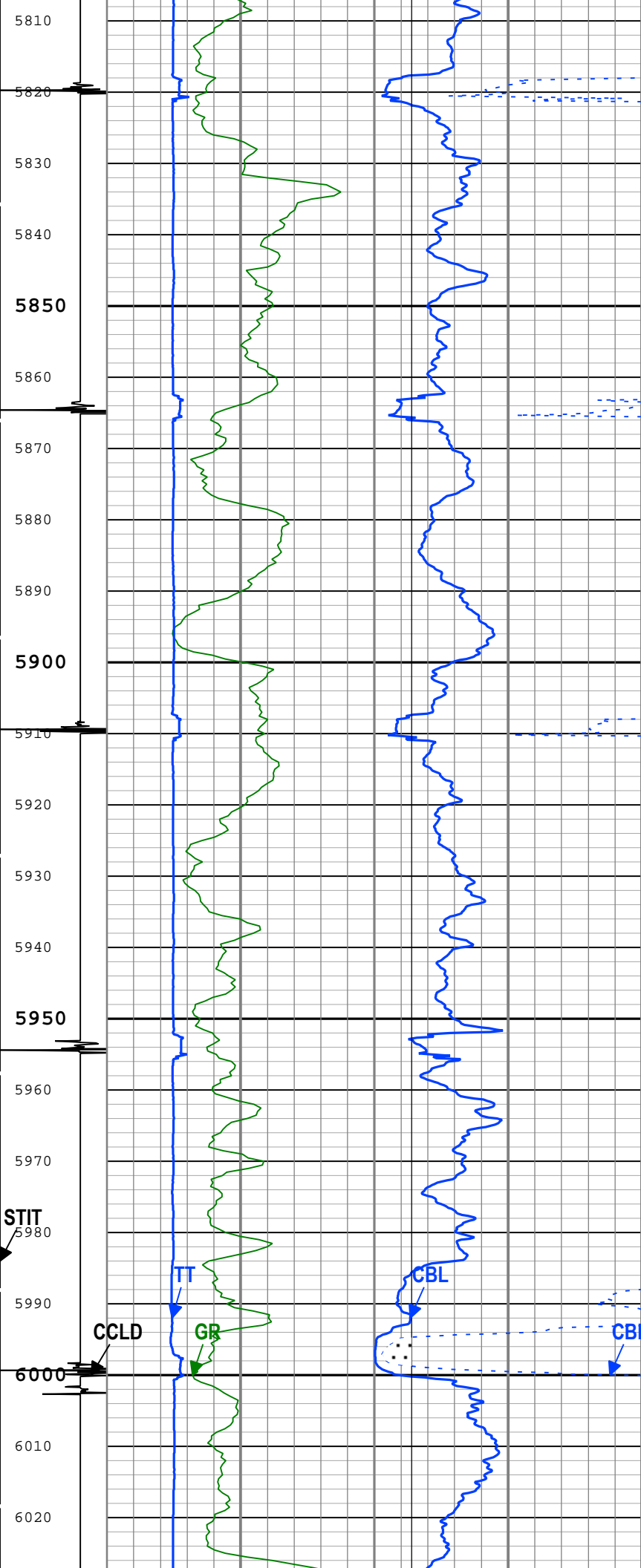


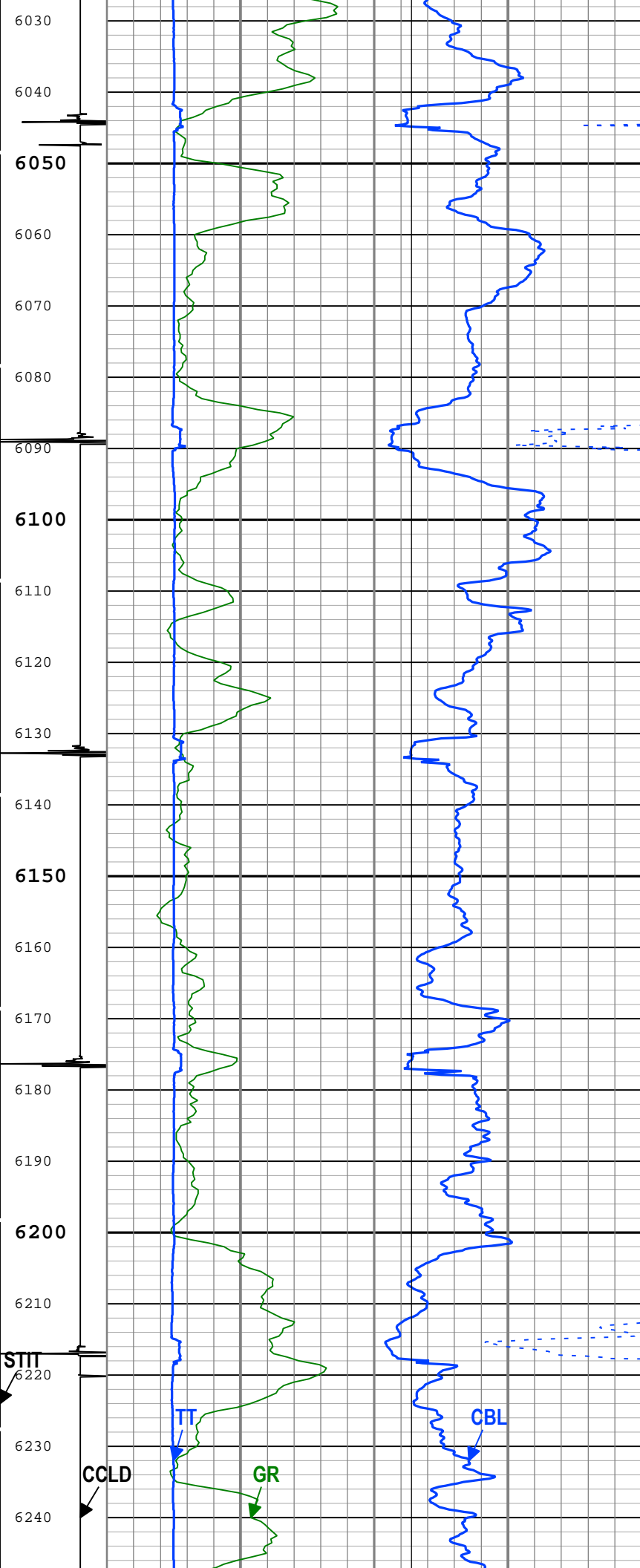


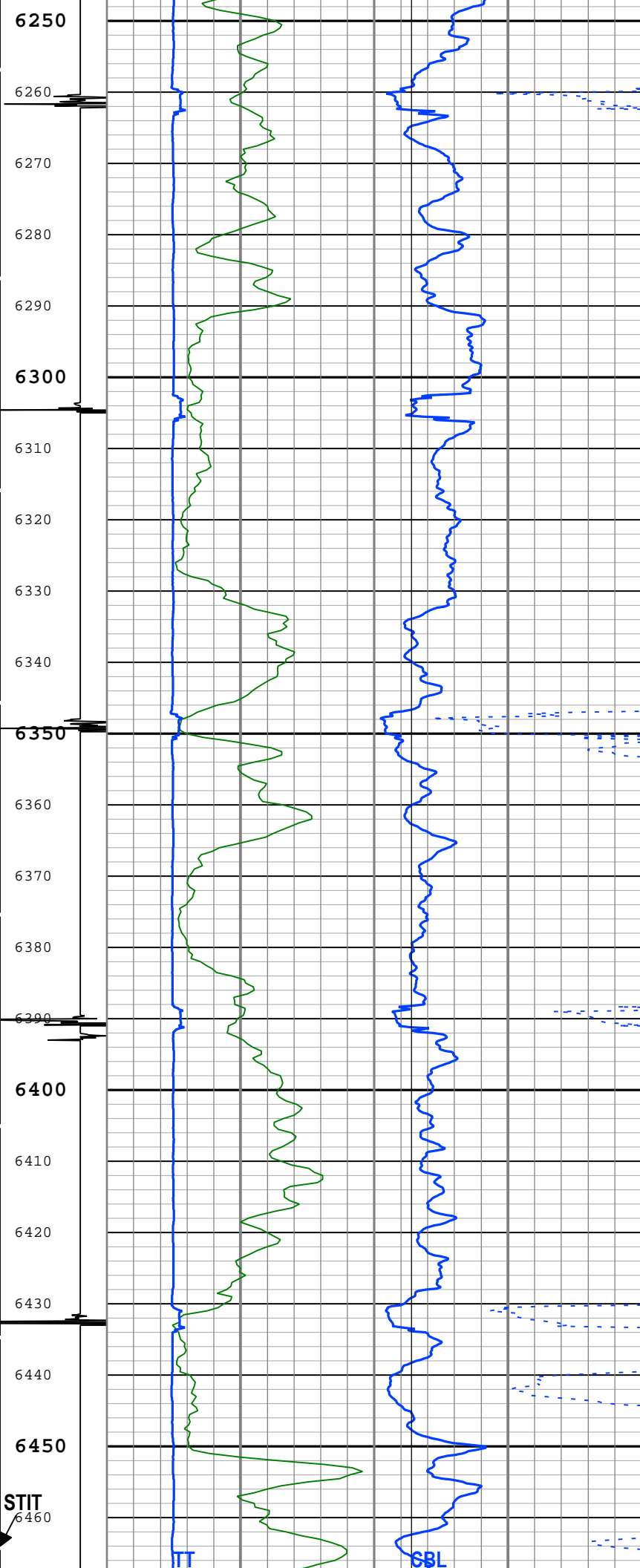








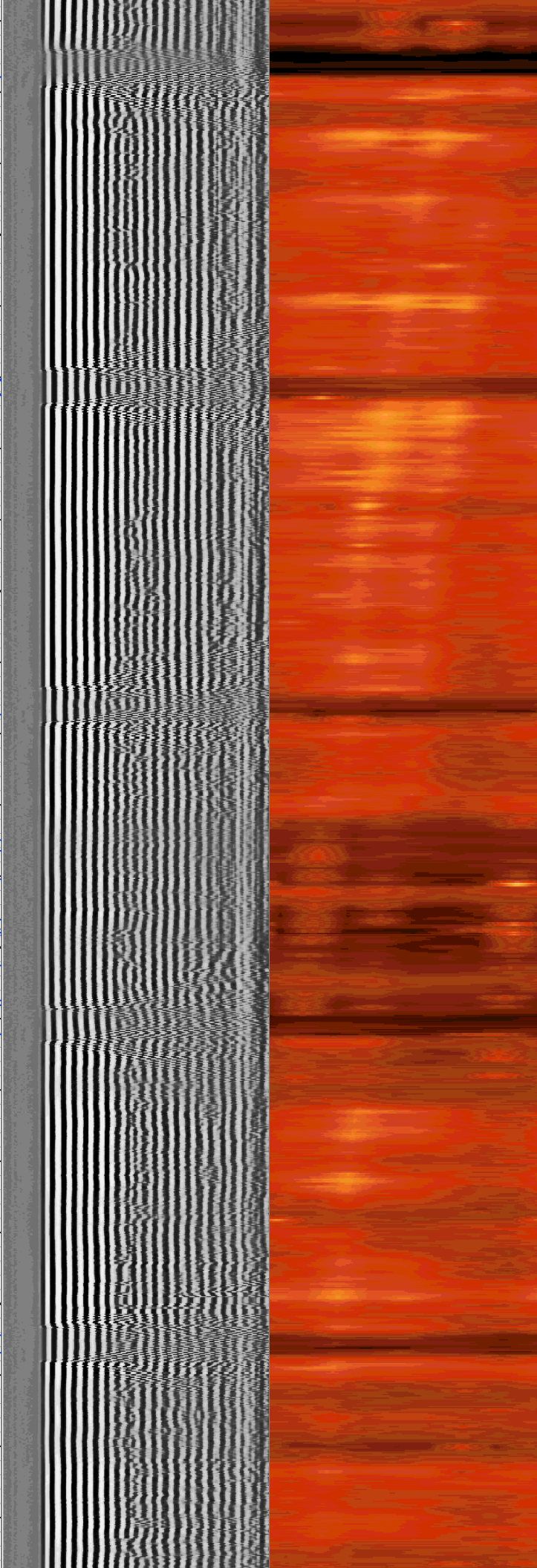
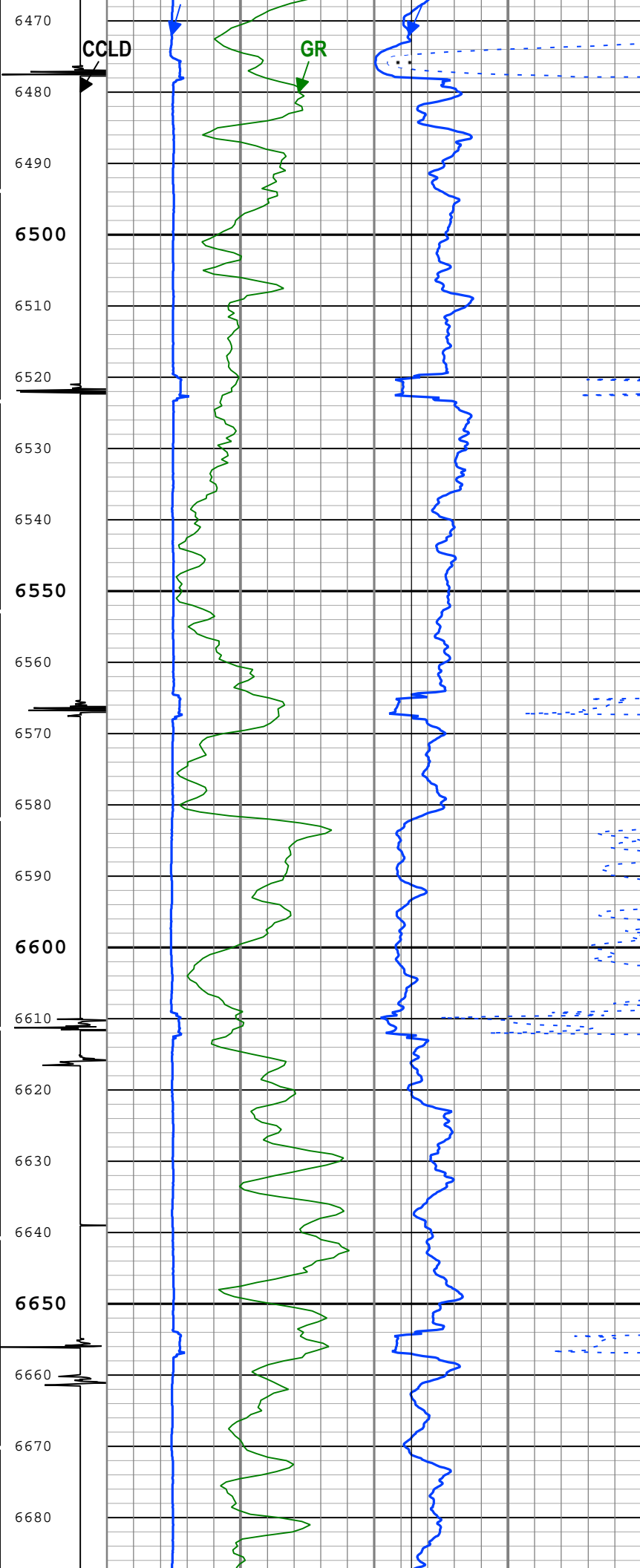


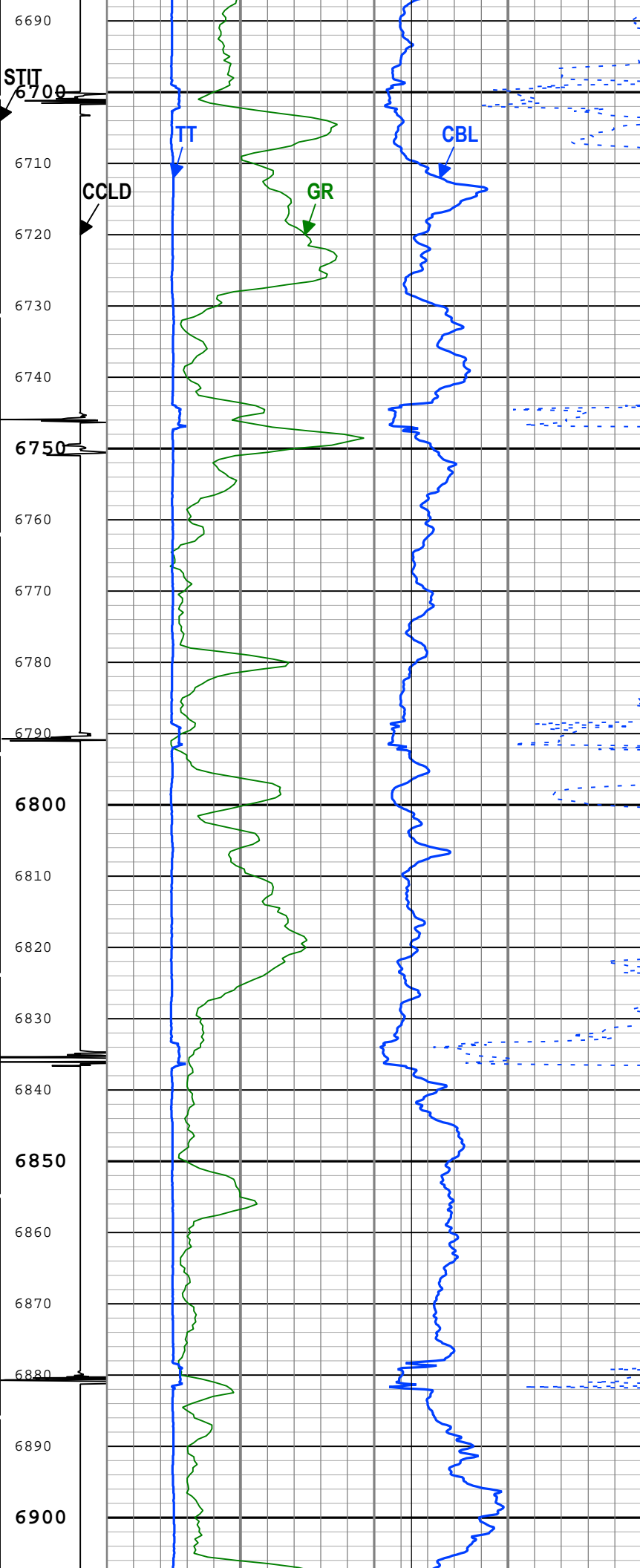


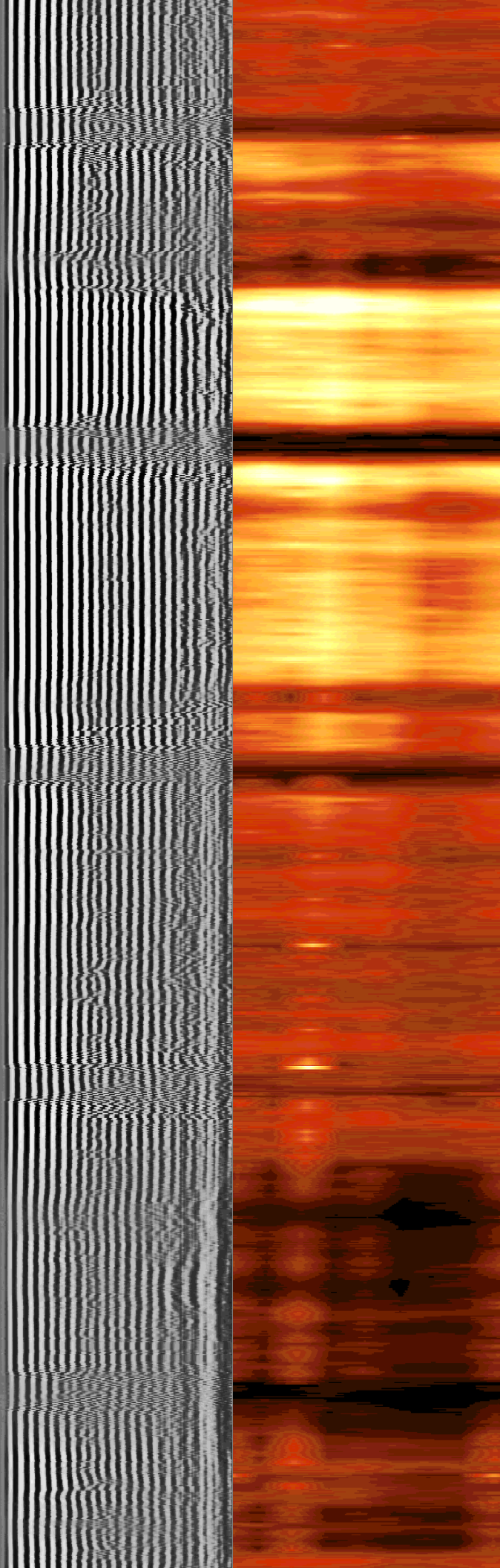
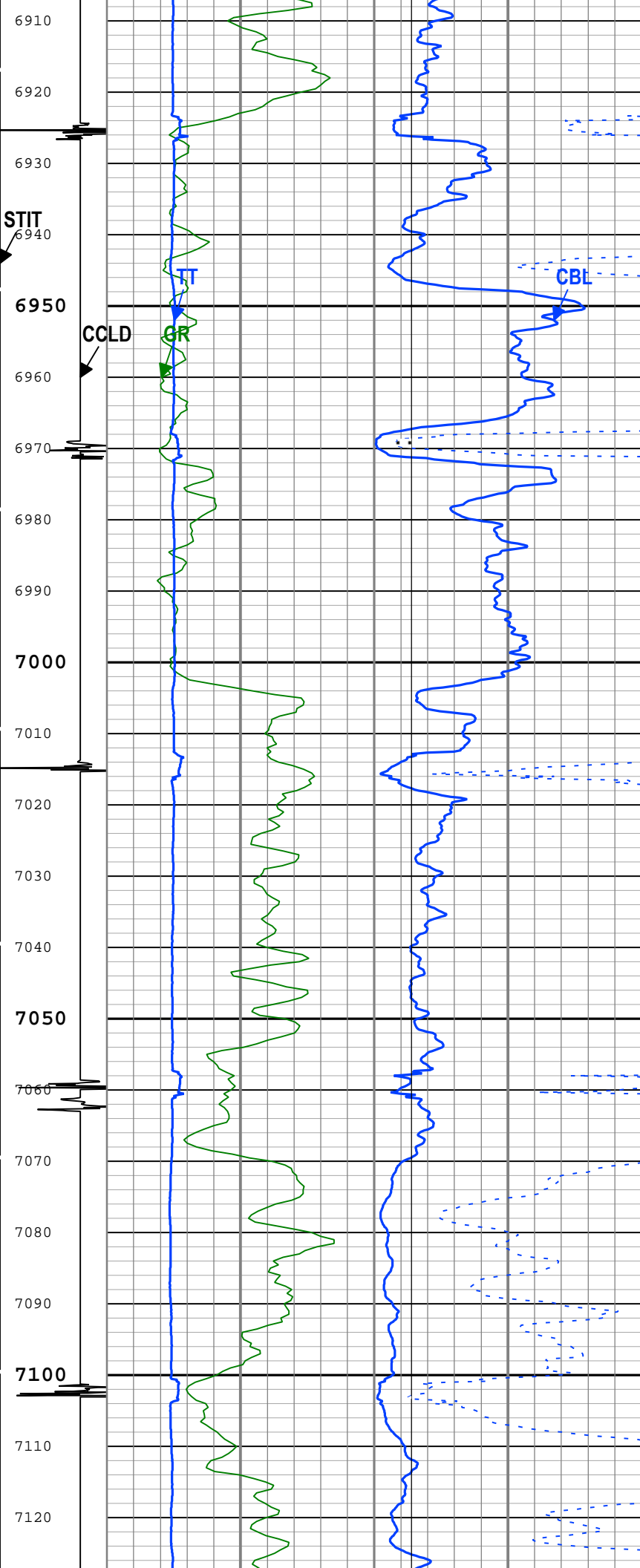
STIT  
6460

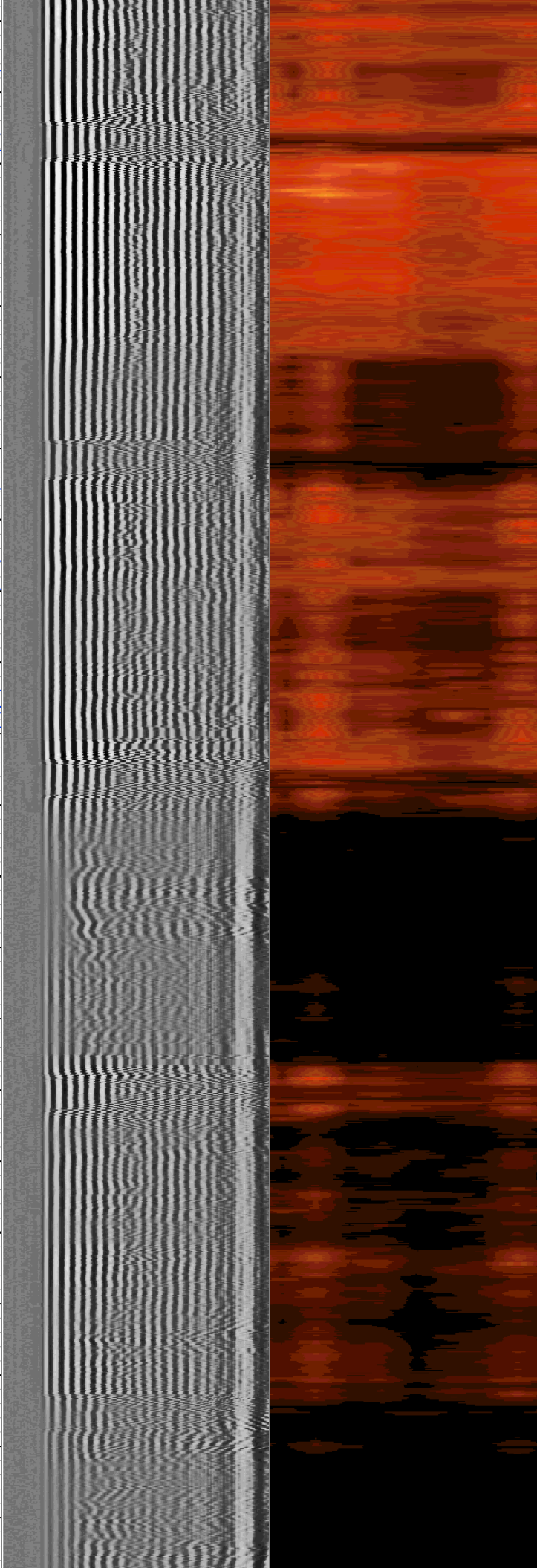
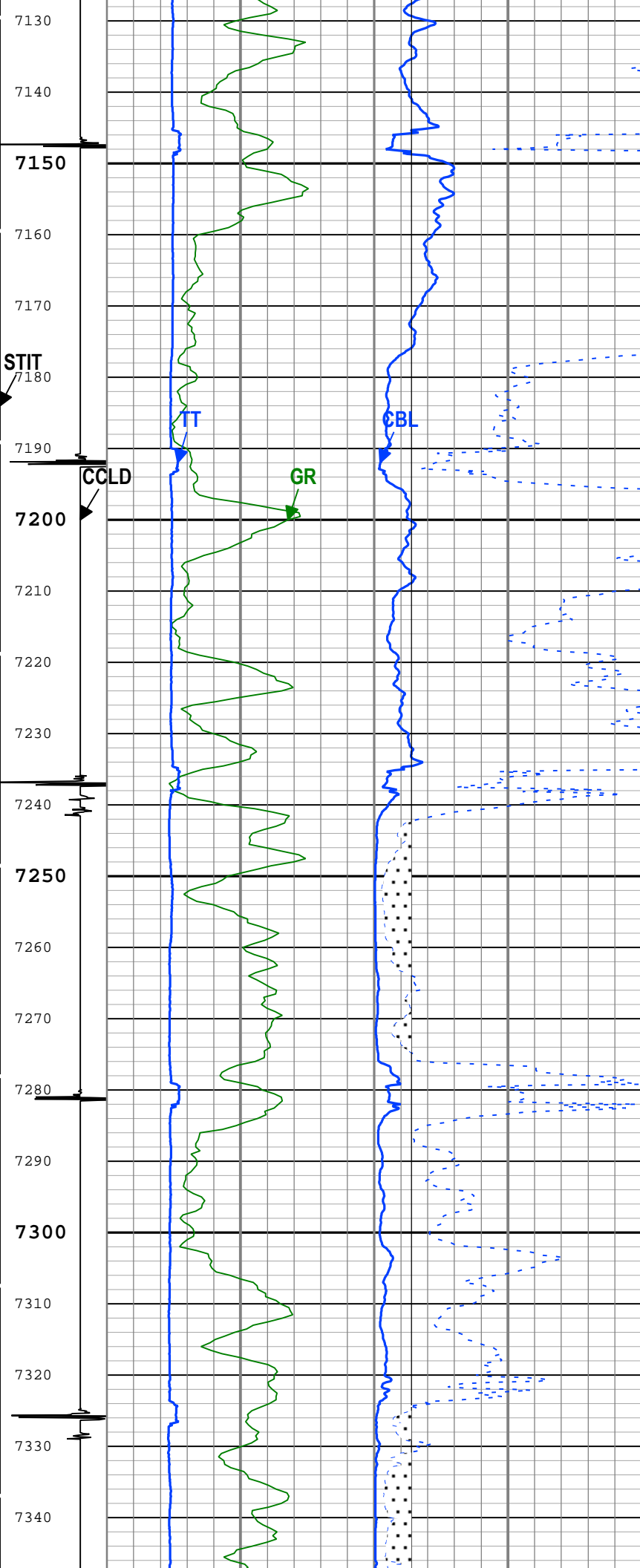
IT

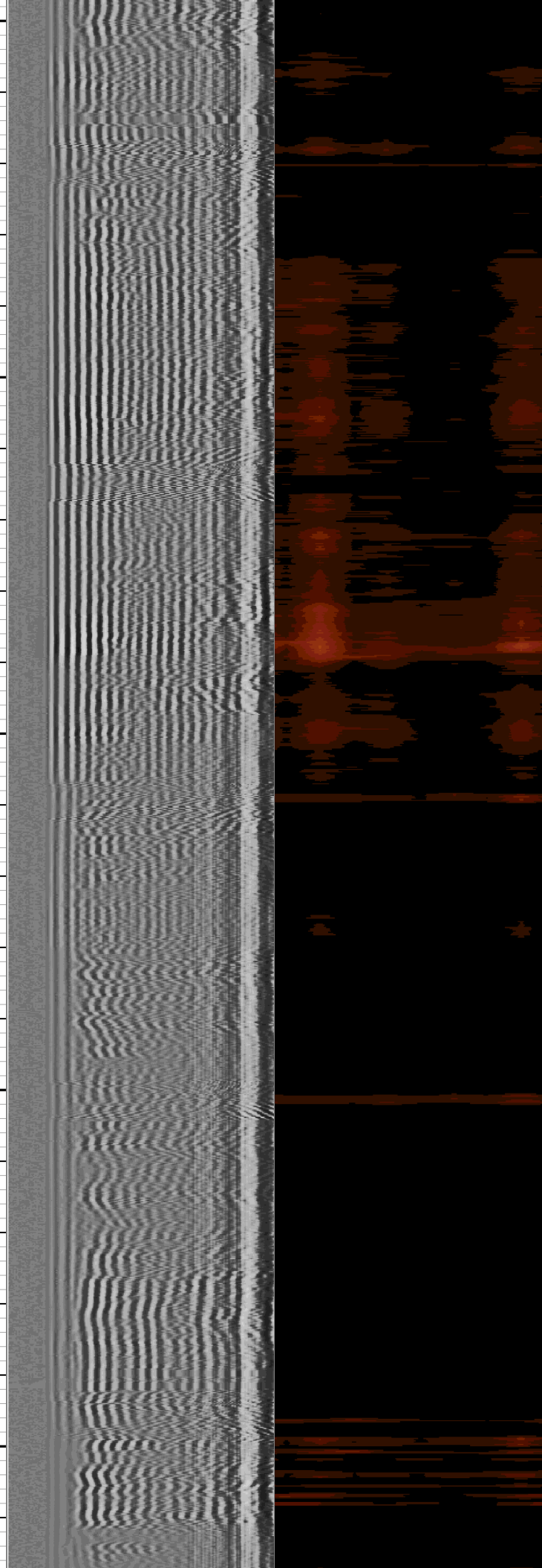
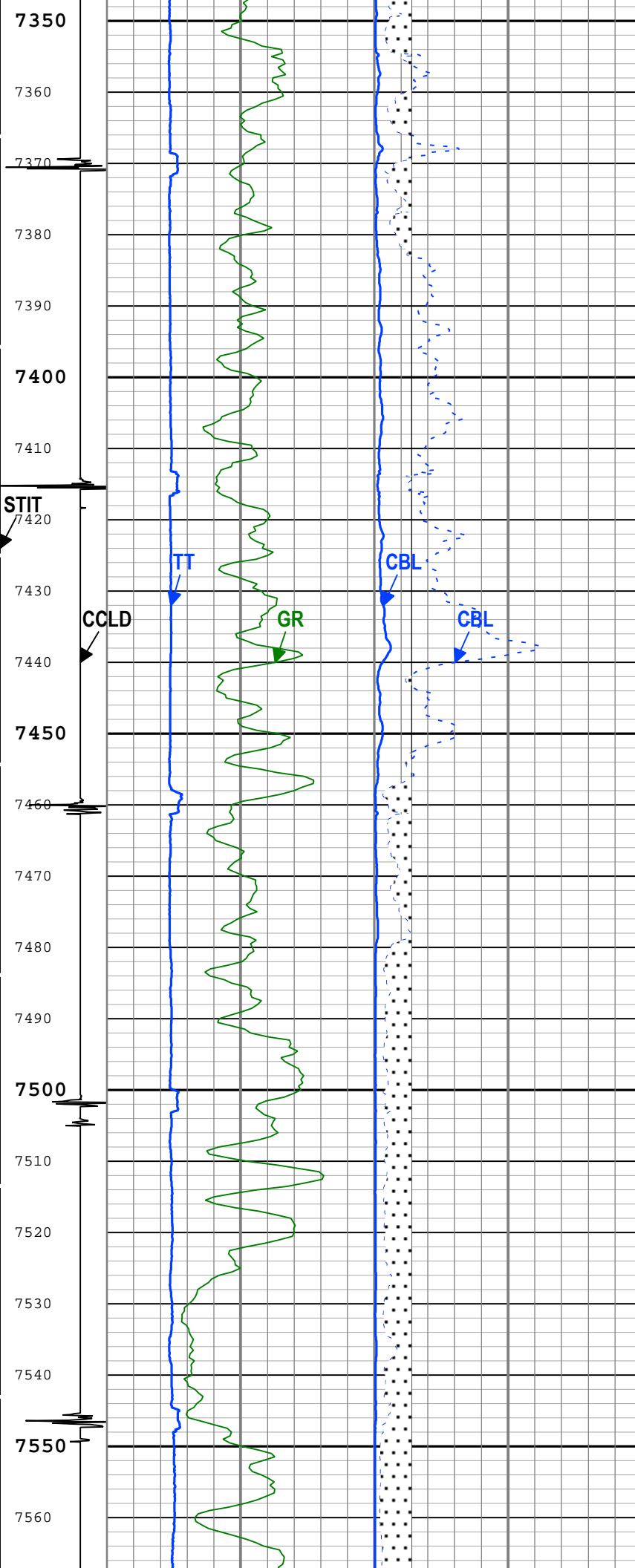
CBL

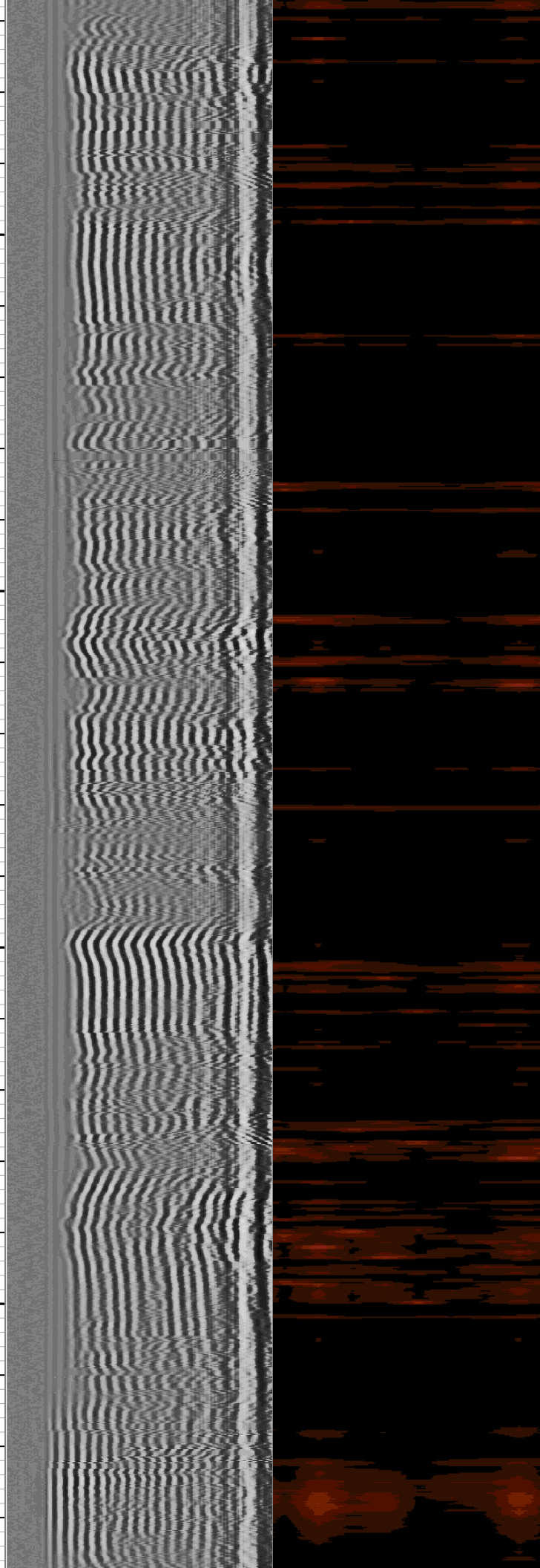
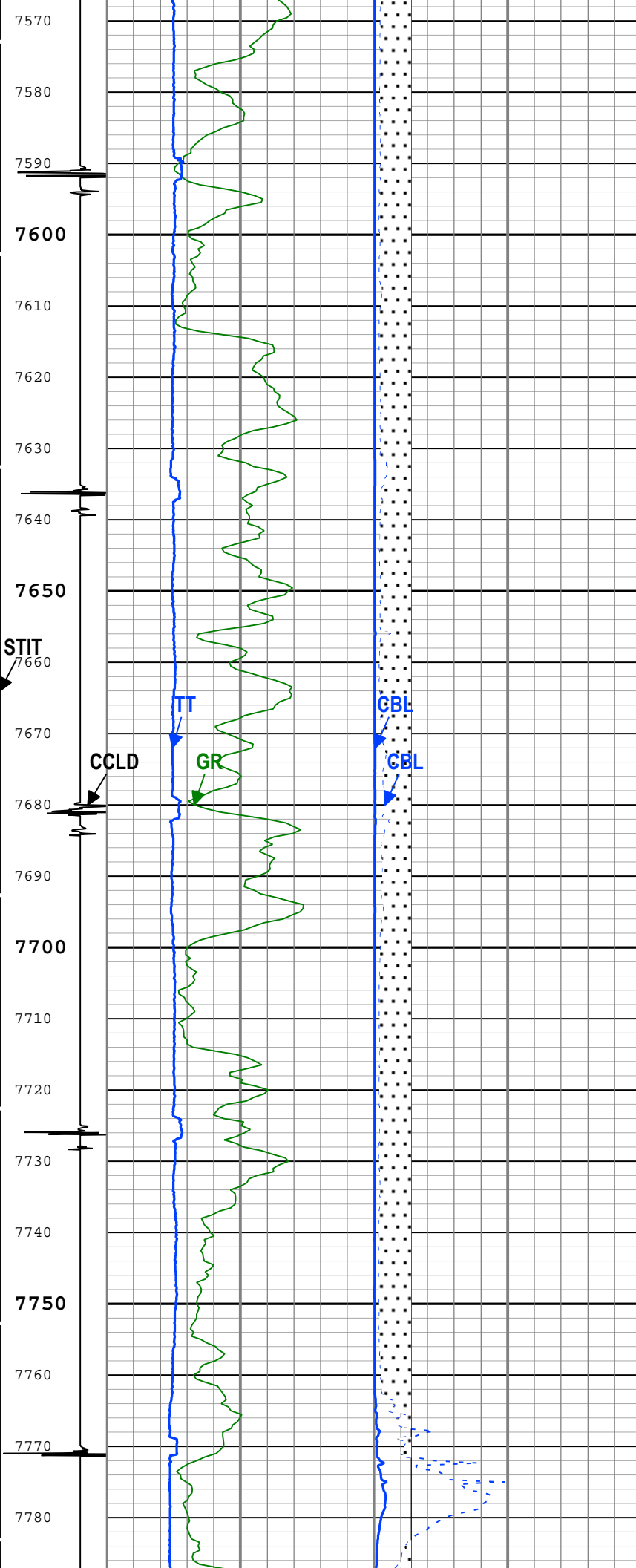


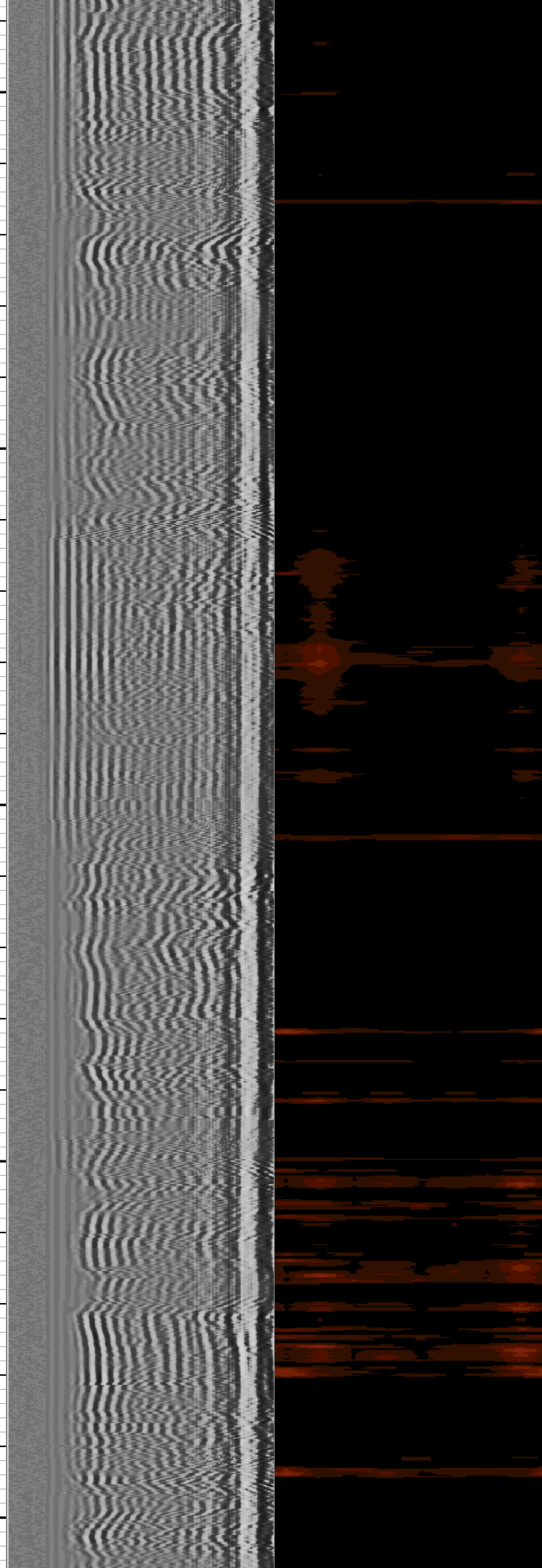
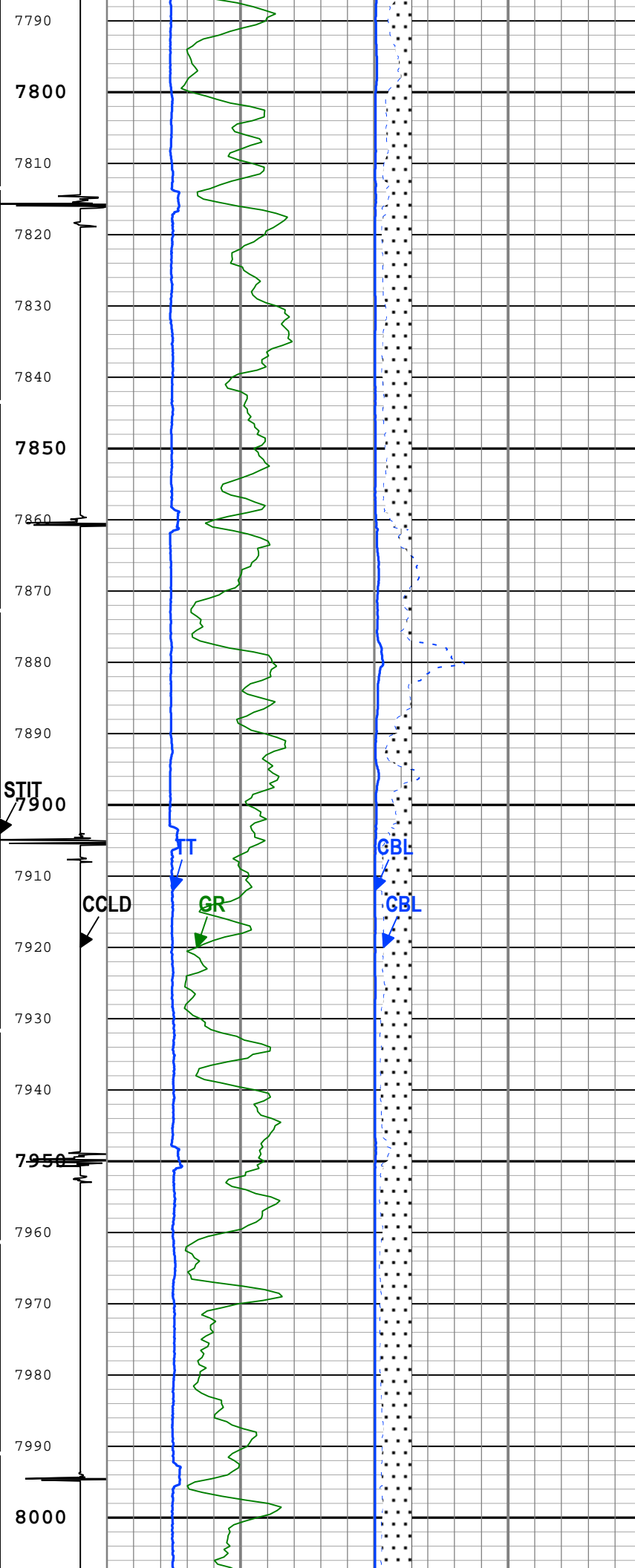


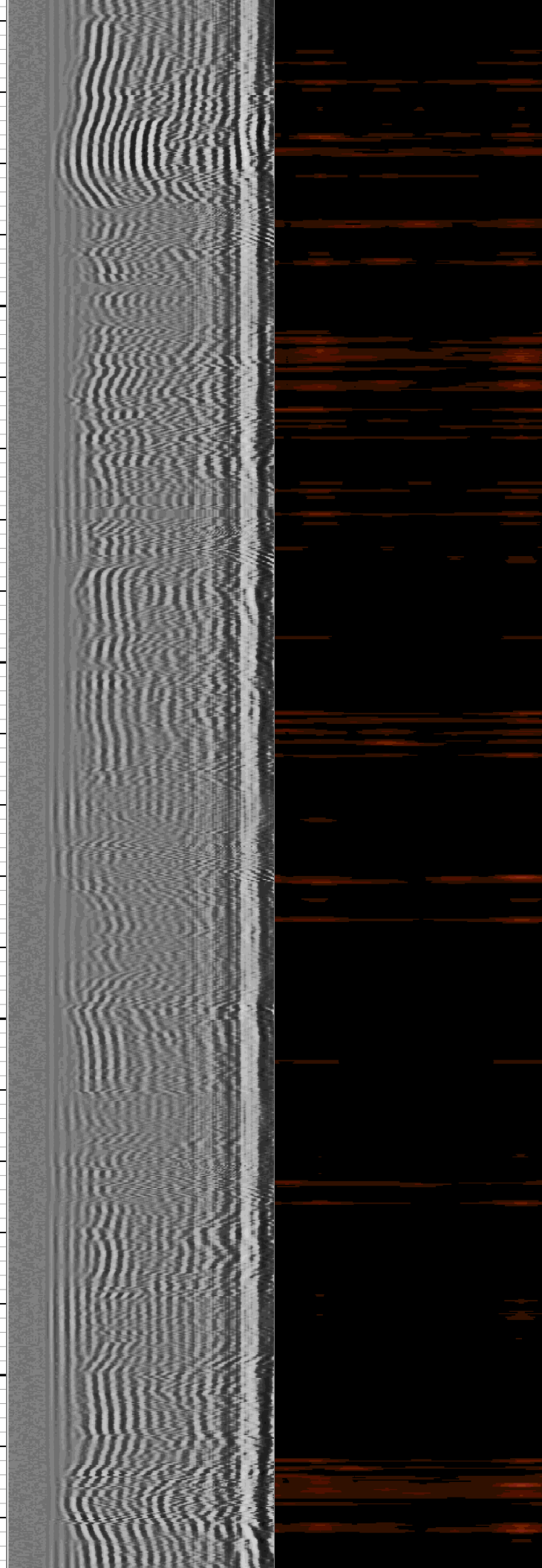
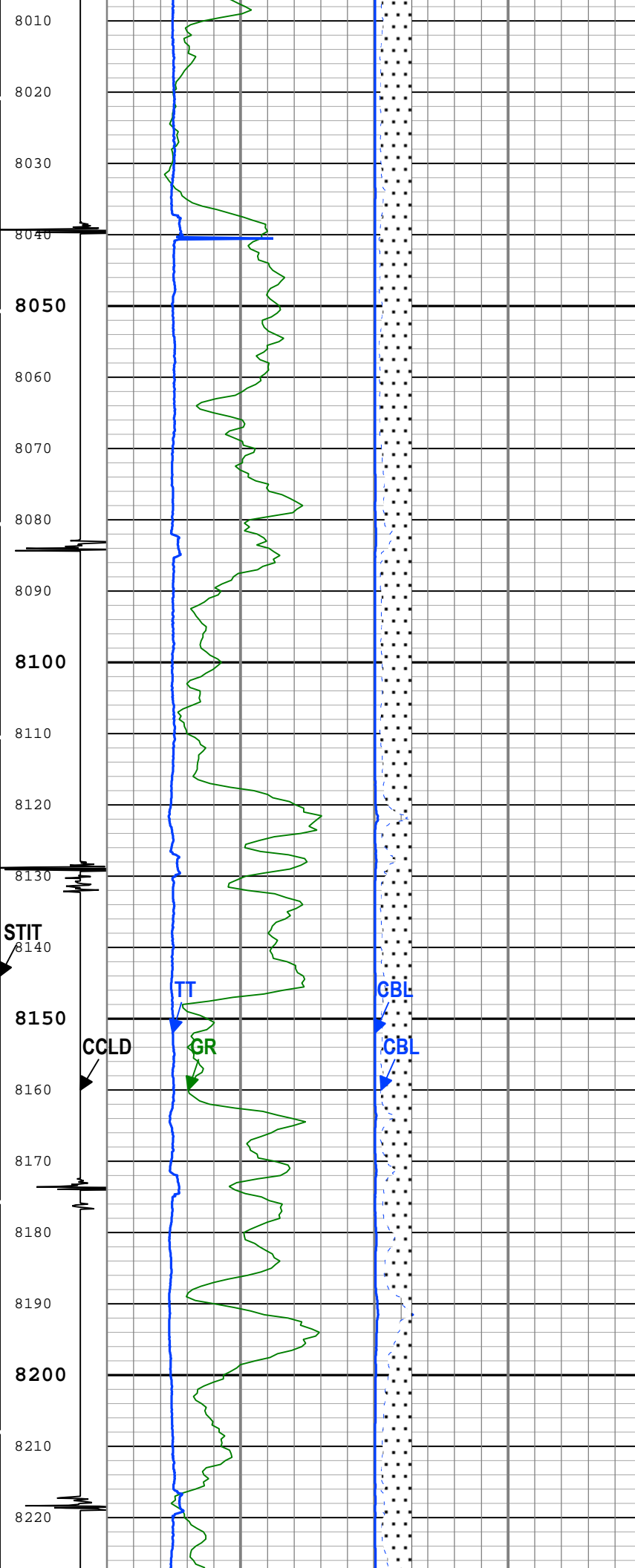


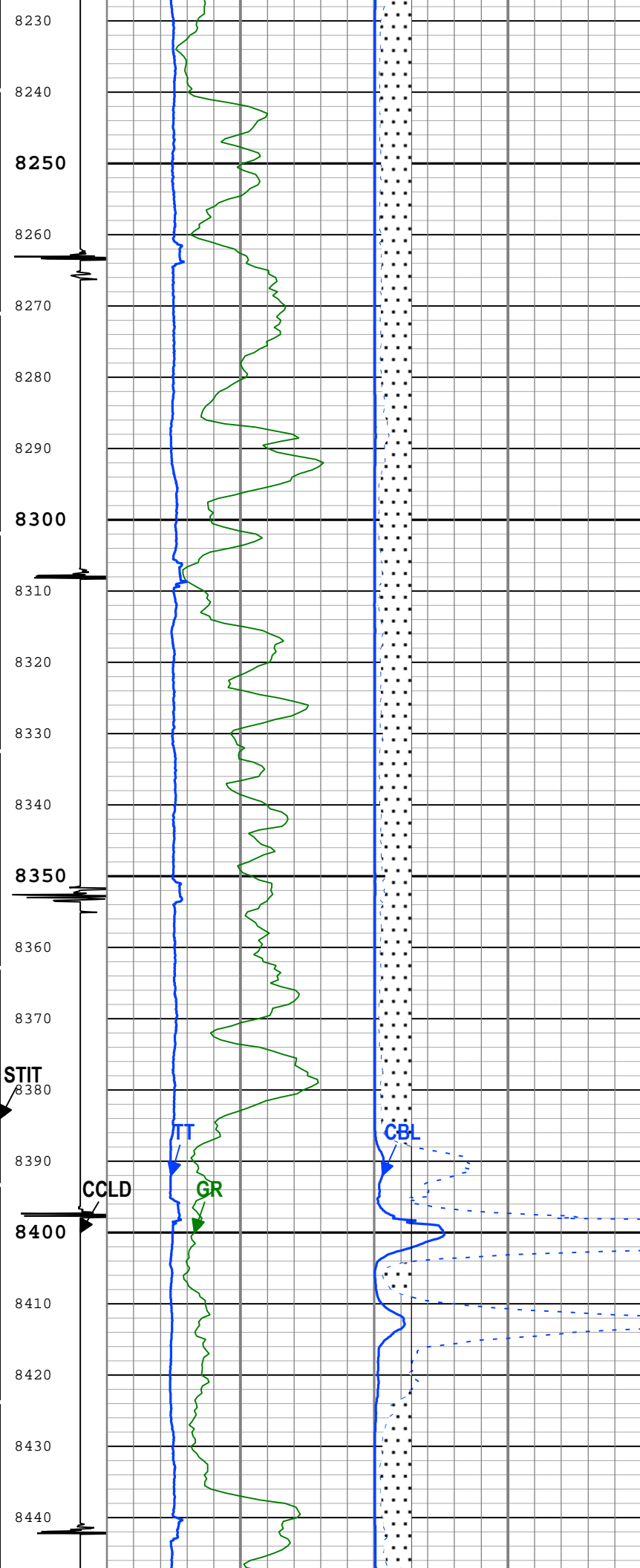


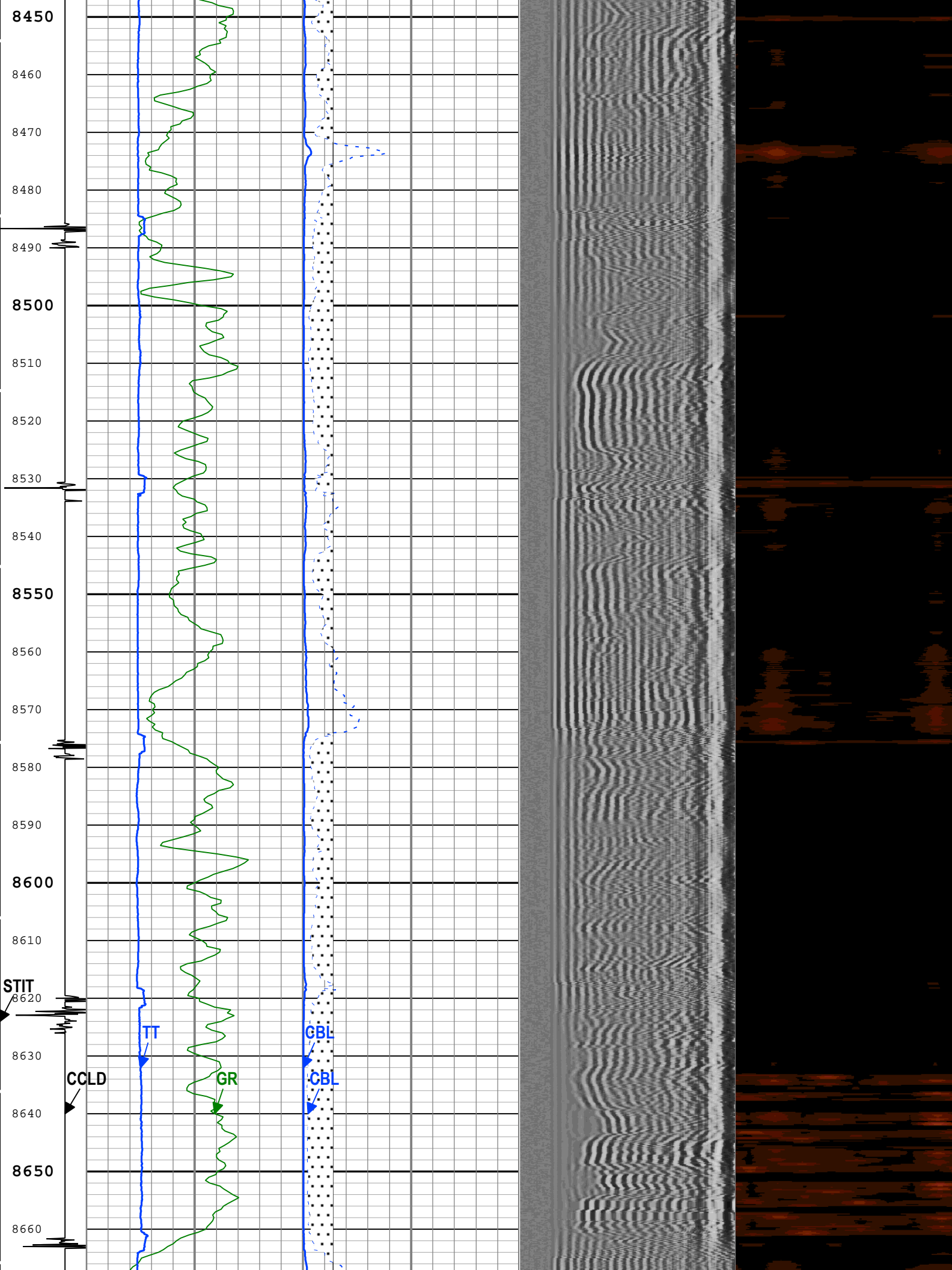


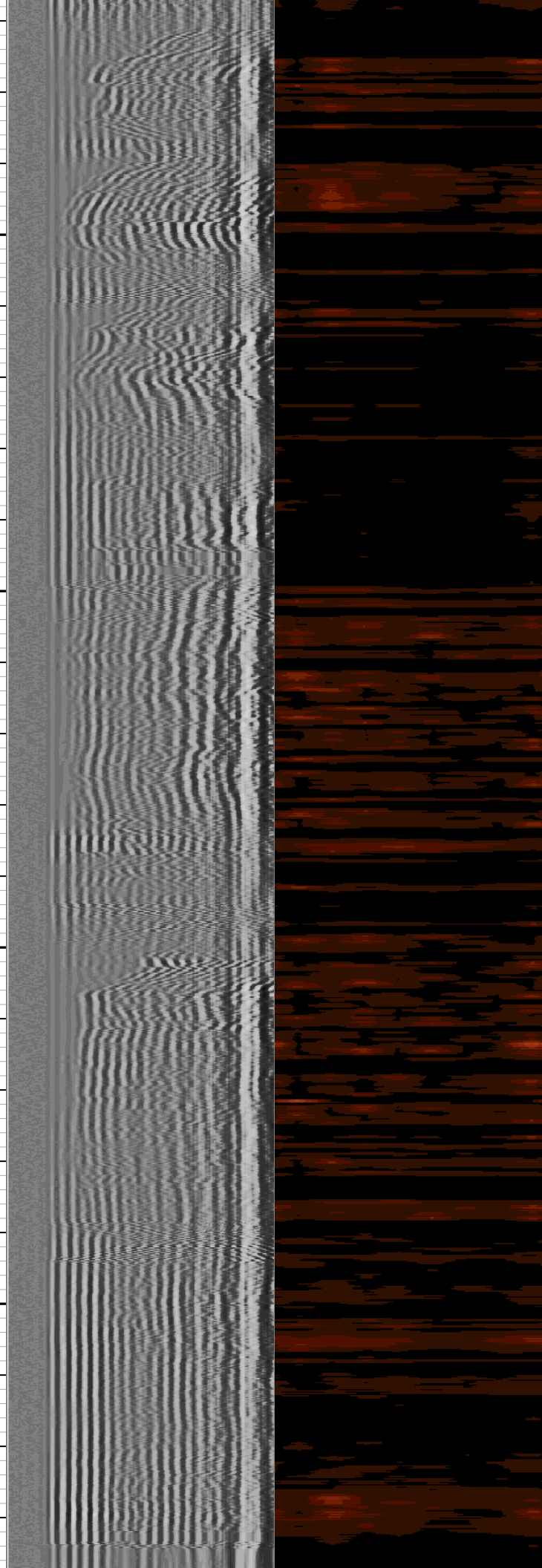
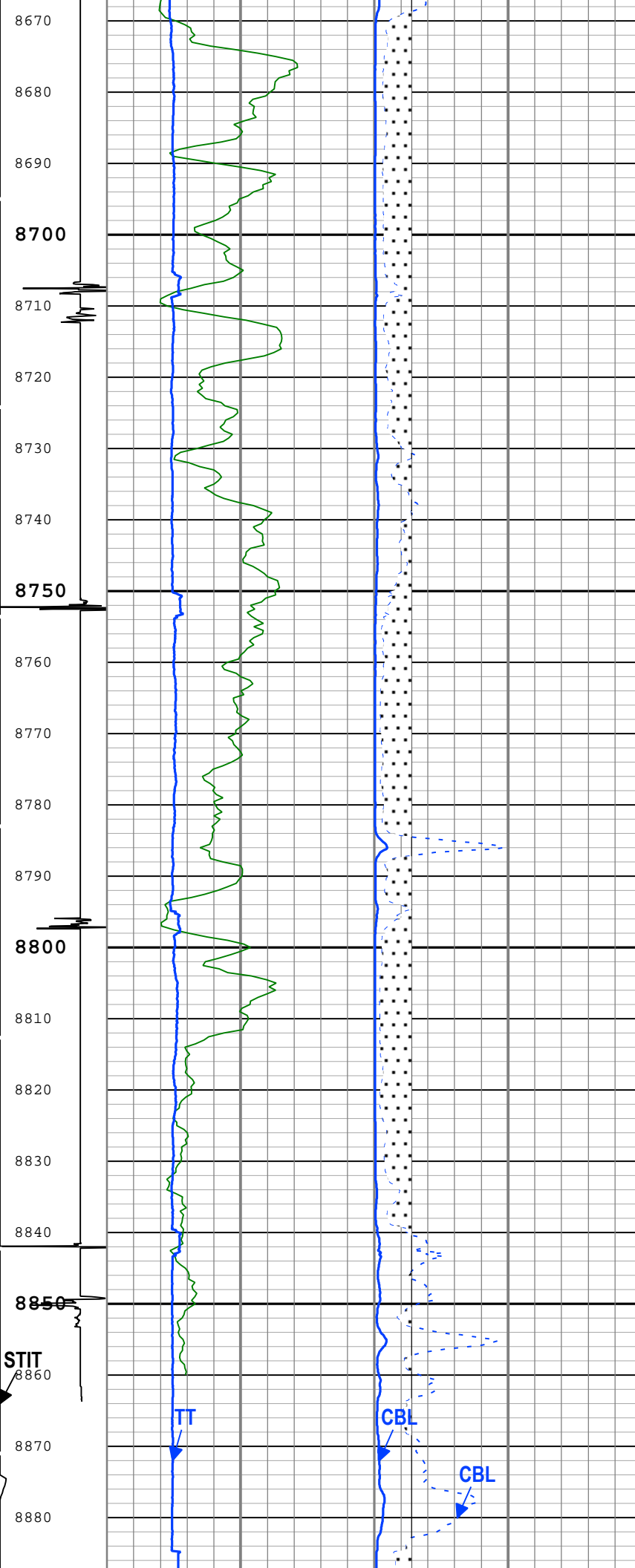


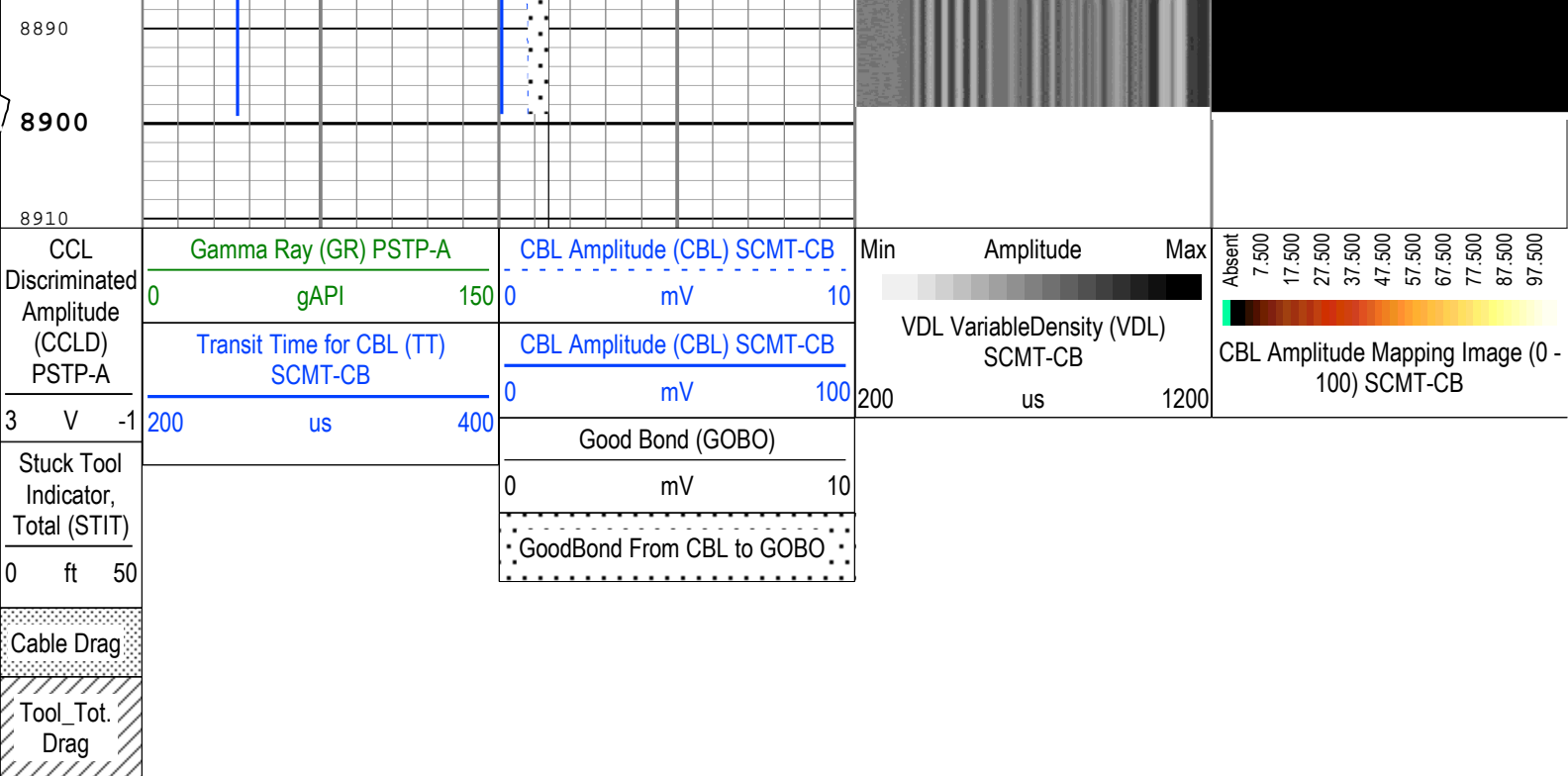


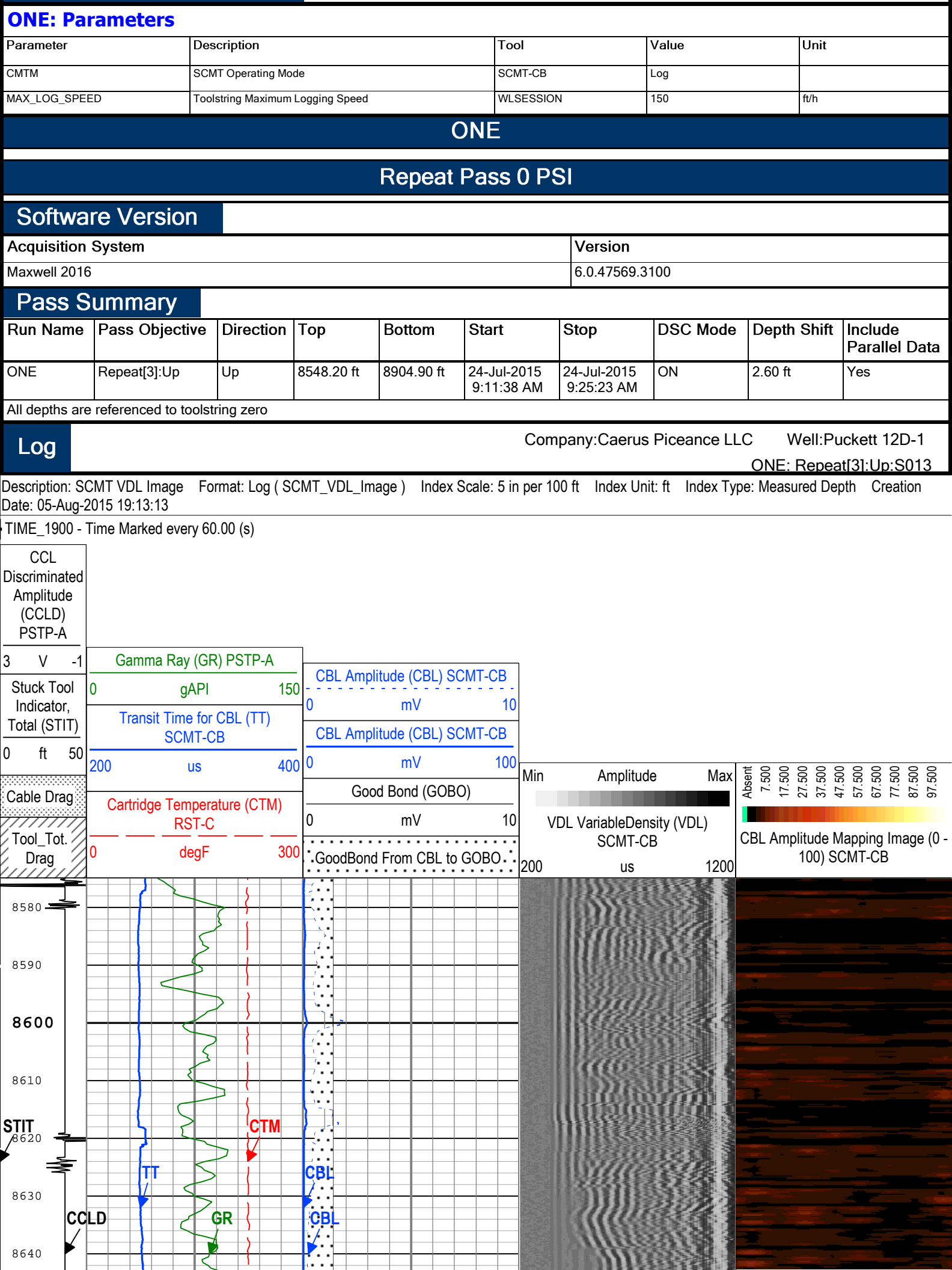


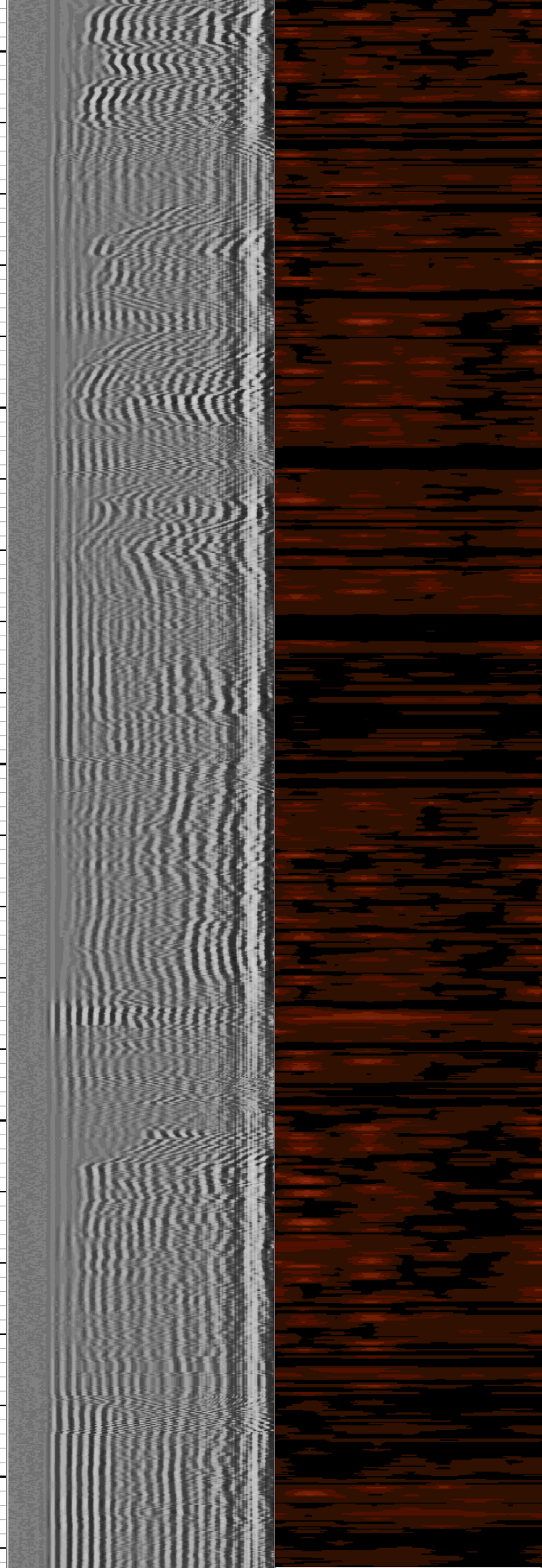
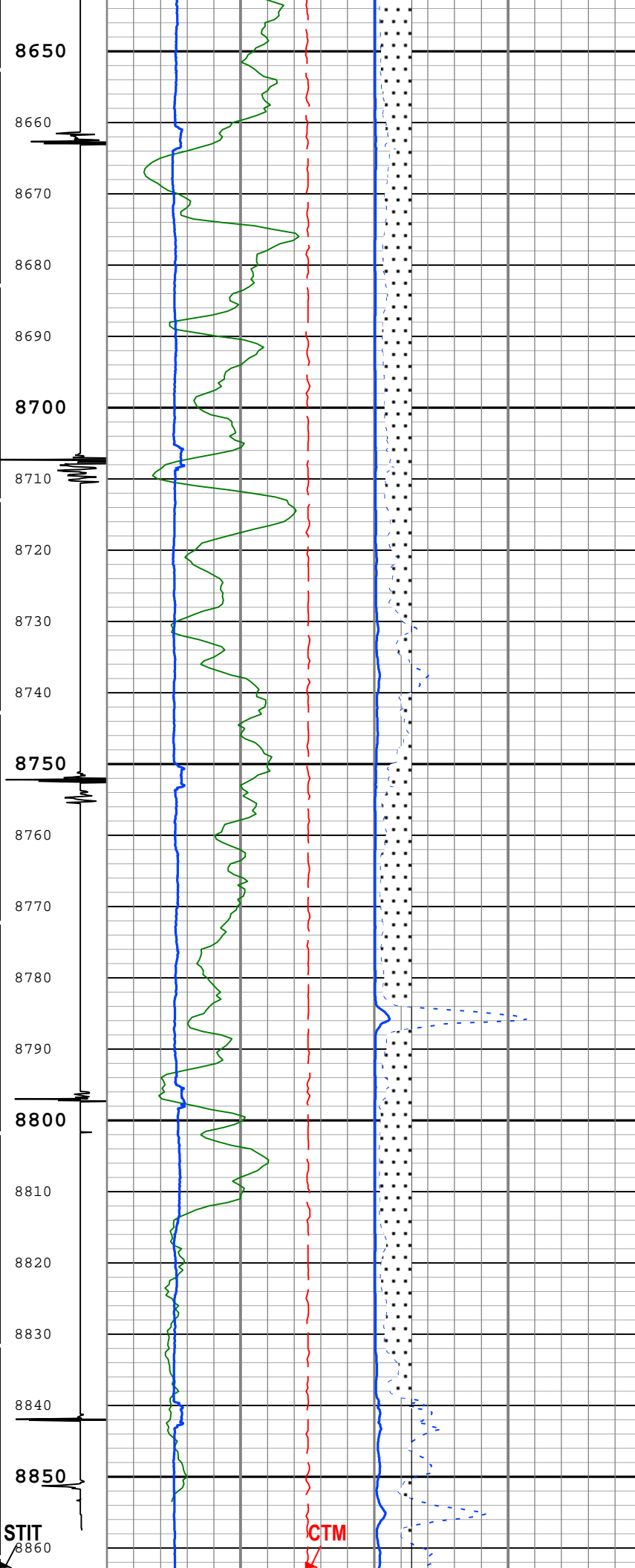


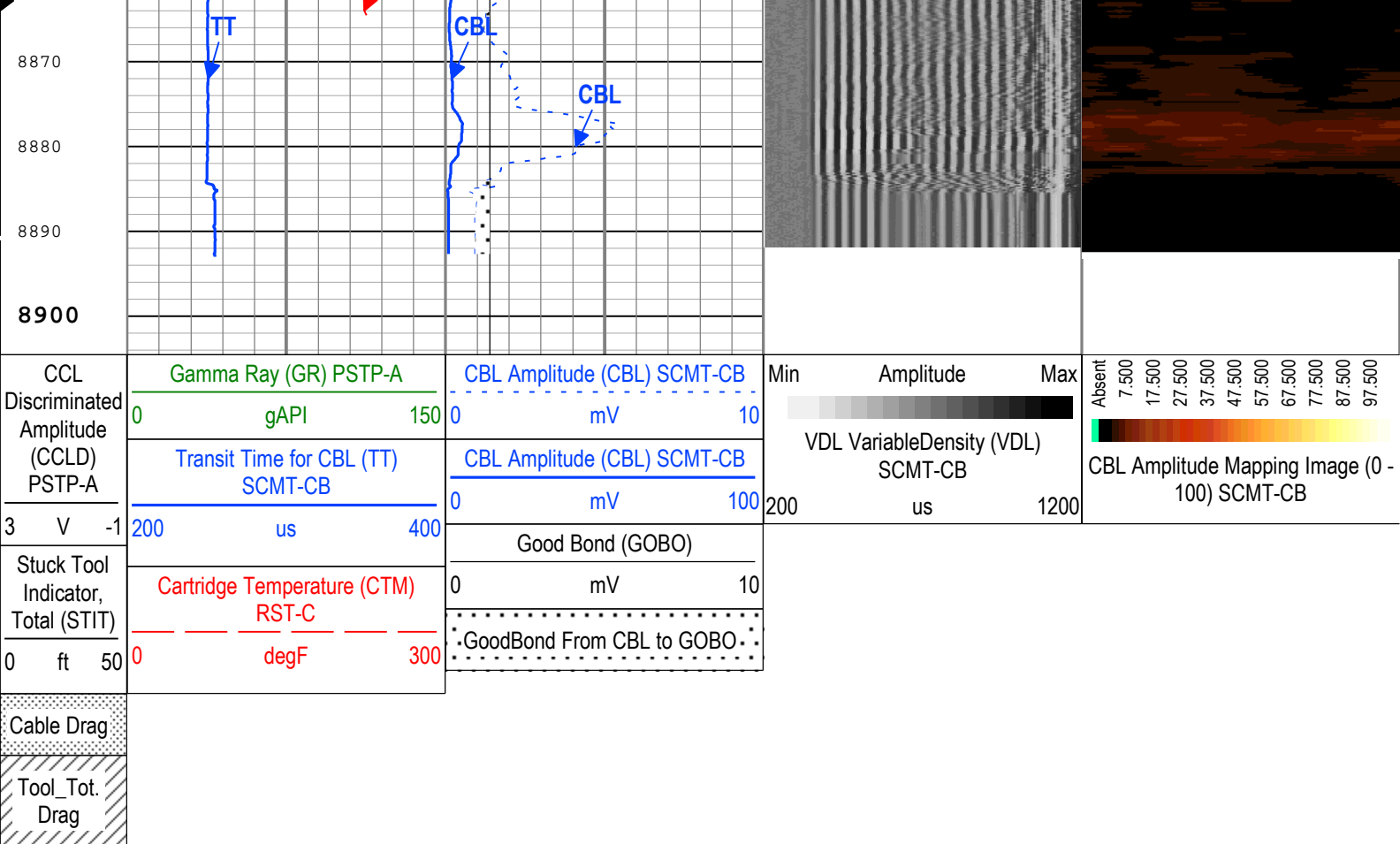












TIME\_1900 - Time Marked every 60.00 (s)

Description: SCMT VDL Image    Format: Log ( SCMT\_VDL\_Image )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 05-Aug-2015 19:13:13

| Channel Processing Parameters |  |                 |             |              |
|-------------------------------|--|-----------------|-------------|--------------|
| ONE: Parameters               |  |                 |             |              |
| Parameter                     | Description  | Tool            | Value       | Unit         |
| BHT                           | Bottom Hole Temperature  | Borehole        | 239         | degF         |
| CB3G                          | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate                     | SCMT-CB         | 241         | us           |
| CBLG                          | CBL Gate Width   | SCMT-CB         | 44          | us           |
| CBRA                          | CBL LQC Reference Amplitude in Free Pipe                                 | SCMT-CB         | 80          | mV           |
| CMCF                          | CBL Cement Type Compensation Factor                                      | SCMT-CB         | 0.12        |              |
| THNO                          | Nominal Casing Thickness - Zoned along logger depths                     | WLSESSION       | 0.25        | in           |
| DC_MODE                       | Depth Correction Mode  | DepthCorrection | Real-time   |              |
| DFD                           | Drilling Fluid Density   | Borehole        | 9           | lbm/gal      |
| DFT                           | Drilling Fluid Type  | Borehole        | Water       |              |
| DTMD                          | Borehole Fluid Slowness  | Borehole        | 196         | us/ft        |
| EDF                           | Elevation of Derrick Floor Above Permanent Datum                         | WLSESSION       | 29          | ft           |
| EPD                           | Elevation of Permanent Datum (PDAT) above Mean Sea Level                 | WLSESSION       | 8479        | ft           |
| FCF                           | CBL Fluid Compensation Factor  | SCMT-CB         | 0.89        |              |
| GGRD                          | Geothermal Gradient  | Borehole        | 1           | 0.01 degF/ft |
| GTSE                          | Generalized Temperature Selection, from Measured or Computed Temperature | Borehole        | GTEM_LINEST |              |
| MAPG                          | SCMT MAP Peak Detection T0_Delay and Noise Gate                          | SCMT-CB         | 176         | us           |
| MCCF                          | MAP Cement Type Compensation Factor                                      | SCMT-CB         | 0.25        |              |
| MMSA                          | MAP Minimum Sonic Amplitude  | SCMT-CB         | 3.98        | mV           |
| MSA                           | Minimum Sonic Amplitude  | SCMT-CB         | 0.51        | mV           |
| PDAT                          | Permanent Datum  | WLSESSION       | GL          |              |
| RUN_COUNT                     | Run Sequence Number  | WOPRUM          | 1           |              |

|          |                          |          |      |      |
|----------|--------------------------|----------|------|------|
| RUN_SNOM | Run Sequence Number      | WSDRUN   | 1    |      |
| SHT      | Surface Hole Temperature | Borehole | 68   | degF |
| TD       | Total Measured Depth     | Borehole | 8898 | ft   |

## Tool Control Parameters

### ONE: Parameters

| Parameter     | Description                      | Tool      | Value | Unit |
|---------------|----------------------------------|-----------|-------|------|
| CMTM          | SCMT Operating Mode              | SCMT-CB   | Log   |      |
| MAX_LOG_SPEED | Toolstring Maximum Logging Speed | WLSESSION | 150   | ft/h |
| RST_DLM       | Depth Log Mode                   | RST-C     | Sigma |      |

## Calibration Report

### SCMT-CB (Slim Cement Mapping Tool, 1-11/16 OD) Calibration - Run ONE

Primary Equipment :

Slim Cement Mapping Sonde

SCMS-CB

8372

### CBL and MAP Amplitude Adjustment - Measurements

Before (Manual Entry):

13:42:41 24-Jul-2015

| Measurement                                   | Unit | Phase  | Nominal | Low Limit | Actual | High Limit |  |
|---|------|--------|---------|-----------|--------|------------|--|
| CBL Amplitude - 0                             | mV   | Before | ----    | ----      | ----   | ----       |  |
| Average MAP Amplitude (Fluid Compensated) - 0 | mV   | Before | ----    | ----      | ----   | ----       |  |
| Measurement Depth - 0                         | ft   | Before | ----    | ----      | ----   | ----       |  |

### CBL and MAP Amplitude Adjustment - Coefficients

Before (Manual Entry):

13:42:41 24-Jul-2015

| Measurement                              | Unit | Phase  | Nominal | Low Limit | Actual  | High Limit |  |
|--|------|--------|---------|-----------|---------|------------|--|
| CBL Adjustment Factor                    |      | Before |         |           | 0.700   |            |  |
| CBL LQC Reference Amplitude in Free Pipe | mV   | Before |         |           | 80.00   |            |  |
| MAP Adjustment Factor                    |      | Before |         |           | 0.759   |            |  |
| Depth of Before Calibration              | ft   | Before |         |           | 2010.58 |            |  |

### PSTP-A (PSP Telemetry Platform A - Sapphire) Calibration - Run ONE

Primary Equipment :

PBMS-A

PBMS-A

1814

Calibration Parameter :

JIG-BKGD (Jig minus background reference)

150

### PBMS Well Temp Master Calibration

Master (EEPROM):

00:00:00 11-Mar-2002

PBMS\_RTD\_THERM  
(Master)

RTD Coefficients

|       | Tt**0    | Tt**1     | Tt**2    | Tt**3    | Tt**4    | Tt**5 |
|-------|----------|-----------|----------|----------|----------|-------|
| Tt**0 | 166.2169 | -442.9836 | 222.5367 | -39.3639 | 2.621679 | 0     |

### PBMS Gamma Ray Master Calibration

Master (EEPROM):

00:00:00 14-Nov-2001

PBMS\_GR\_MODEL  
(Master)

GR Coefficients

|       | Rt**0 | Rt**1 |
|-------|-------|-------|
| Rt**0 | 1500  | 3840  |

### PBMS A Reference Clock Master Calibration

Master (EEPROM):

00:00:00 11-Mar-2002

| PBMS_REF_CLOCK PBMS A Clock Coefficients (Master) |           |          |            |             |               |         |
|---|-----------|----------|------------|-------------|---------------|---------|
|   | Temp**0   | Temp**1  | Temp**2    | Temp**3     | Temp**4       | Temp**5 |
| Temp**0   | -278.6698 | 2.064625 | -0.2005075 | 0.001553137 | -2.817383E-07 | 0       |

| PBMS A Sapphire Master Calibration                                 |           |            |             |             |             |       |
|--|-----------|------------|-------------|-------------|-------------|-------|
| Master (EEPROM): 00:00:00 11-Mar-2002                              |           |            |             |             |             |       |
| PBMS_P_GAUGE_PRES Sapphire Pressure Model Coefficients (Master)    |           |            |             |             |             |       |
|  | Tt**0     | Tt**1      | Tt**2       | Tt**3       | Tt**4       | Tt**5 |
| Tp**0  | -30895.39 | 22304.77   | -7131.54    | 1088.081    | -64.84312   | 0     |
| Tp**1  | 22708.98  | -15815.74  | 5200.516    | -813.7849   | 49.69807    | 0     |
| Tp**2  | -206.2166 | 83.83393   | -9.064614   | 0           | 0           | 0     |
| Tp**3  | 3.194887  | -0.7157836 | 0           | 0           | 0           | 0     |
| Tp**4  | 0         | 0          | 0           | 0           | 0           | 0     |
| Tp**5  | 0         | 0          | 0           | 0           | 0           | 0     |
| PBMS_P_GAUGE_TEMP Sapphire Temperature Model Coefficients (Master) |           |            |             |             |             |       |
|  | Tp**0     | Tp**1      | Tp**2       | Tp**3       | Tp**4       | Tp**5 |
| Tt**0  | 2222.343  | -1.531535  | -1.735451   | 0.3578298   | -0.04106665 | 0     |
| Tt**1  | -1381.82  | 3.050812   | 0.4269152   | -0.03685322 | 0.004793864 | 0     |
| Tt**2  | 302.3562  | -1.086123  | -0.04274265 | 0           | 0           | 0     |
| Tt**3  | -23.36074 | 0.1179722  | 0           | 0           | 0           | 0     |
| Tt**4  | 0         | 0          | 0           | 0           | 0           | 0     |
| Tt**5  | 0         | 0          | 0           | 0           | 0           | 0     |

Company:

Caerus Piceance LLC

Well:

Puckett 12D-1

Field:

Wildcat

County:

Garfield

Country:

Slim Cement Mapping Tool

CBL-VDL

Schlumberger