

Company: Caerus Operating LLC

Well: Puckett 34A-23 697

Field: Grand Valley

County: Garfield State: Colorado

Cement Bond Log  
RST Sigma Log  
Gamma Ray/ Collar LogCounty: Garfield  
Field: Grand Valley  
Location: Lat 39.30°07.76" N Long 108.11° 18.38"W  
Well: Puckett 34A-23 697  
Company: Caerus Operating LLC

|                |   |               |  |  |
|----------------|---|---------------|--|--|
| Location:      | Lat 39.30°07.76" N Long 108.11° 18.38"W |               | Elev.: K.B. 8462.00 ft<br>G.L. 8432.00 ft<br>D.F. 8462.00 ft |  |
|                | Permanent Datum:                        | Ground Level  | Elev.: 8432.00 f   |  |
|                | Log Measured From:                      | Kelly Bushing | 30.00 ft above Perm.Datum                                    |  |
|                | Drilling Measured From:                 | Kelly Bushing |  |  |
| API Serial No. | Section:                                | Township:     | Range:   |  |
| 5045233930000  | 23                                      | 6S            | 97W  |  |

Logging Date 22-Dec-2017

Run Number One

Depth Driller 9358.00 ft

Schlumberger Depth 9326.00 ft

Bottom Log Interval 9326.00 ft

Top Log Interval 2500.00 ft

Casing Fluid Type Water

Salinity

Density 8.6 lbm/gal

Fluid Level 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.50 in

From 30.00 ft

To 9358.00 ft

Casing/Tubing Size 4.5 in

Weight 11.6 lbm/ft

Grade P110

From 30.00 ft

To 9358.00 ft

Max Recorded Temperatures 238 degF

Logger on Bottom 22-Dec-2017 22:27:00

Unit Number 3003 Location: Evanston, Wyoming

Recorded By Beatriz Guaita

Witnessed By Ryan Tompkins

## 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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8.5 Parameter Listing

9. One Free Pipe

9.1 Integration Summary

9.2 Software Version

9.3 Composite Summary

9.4 Log ( SCMT\_Amp\_VDL )

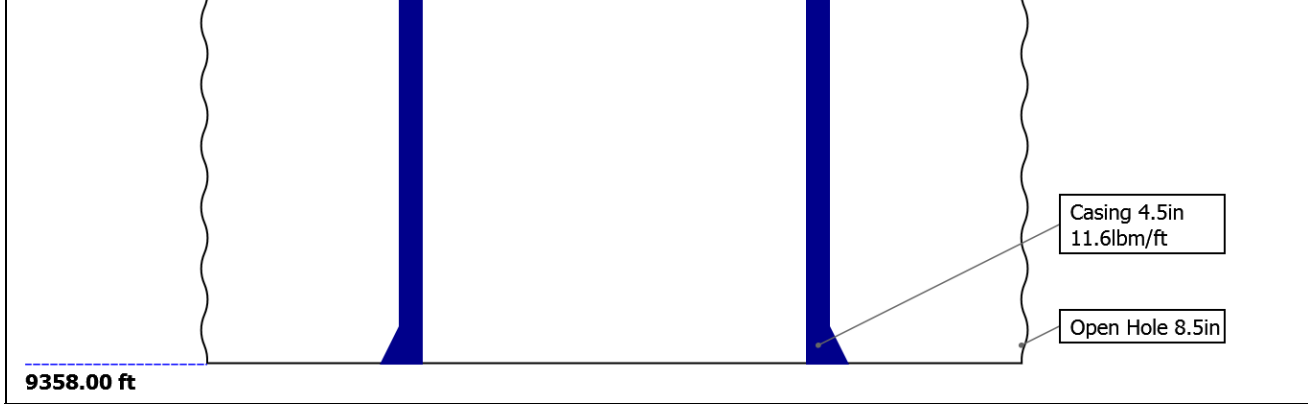
9.5 Parameter Listing

## Well Sketch

**Driller Depth**

**30.00 ft**



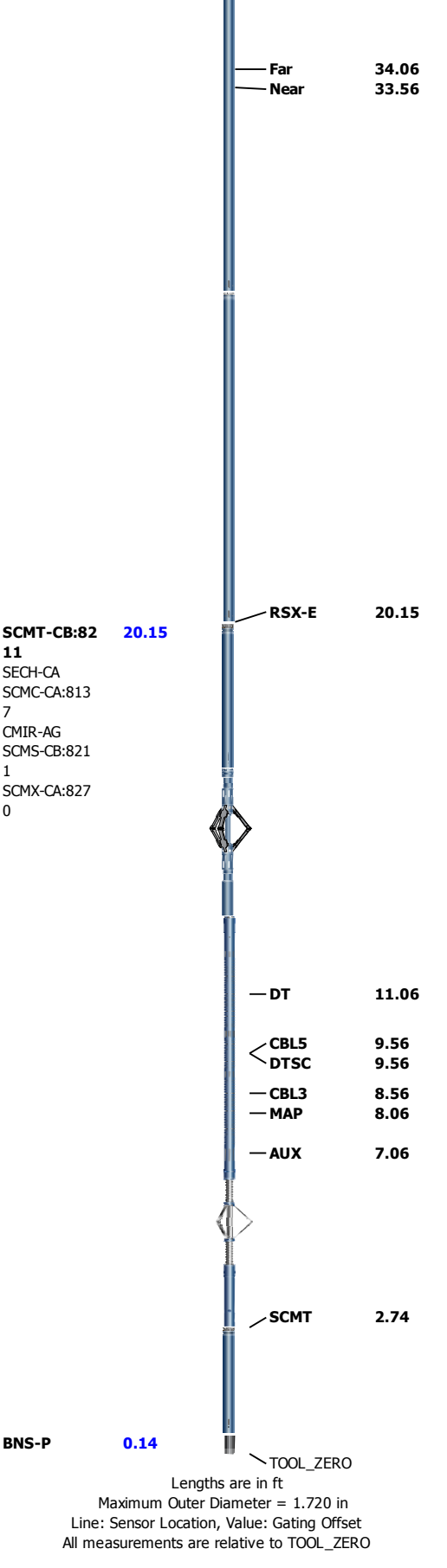


Borehole Size/Casing/Tubing Record

|                       |      |  |  |  |  |  |
|-----------------------|------|--|--|--|--|--|
| Bit                   |      |  |  |  |  |  |
| Bit Size ( in )       | 8.5  |  |  |  |  |  |
| Top Driller ( ft )    | 30   |  |  |  |  |  |
| Top Logger ( ft )     | 30   |  |  |  |  |  |
| Bottom Driller ( ft ) | 9358 |  |  |  |  |  |
| Bottom Logger ( ft )  | 9358 |  |  |  |  |  |
| Casing                |      |  |  |  |  |  |
| Size ( in )           | 4.5  |  |  |  |  |  |
| Weight ( lbm/ft )     | 11.6 |  |  |  |  |  |
| Inner Diameter ( in ) | 4    |  |  |  |  |  |
| Grade                 | P110 |  |  |  |  |  |
| Top Driller ( ft )    | 30   |  |  |  |  |  |
| Top Logger ( ft )     | 30   |  |  |  |  |  |
| Bottom Driller ( ft ) | 9358 |  |  |  |  |  |
| Bottom Logger ( ft )  | 9358 |  |  |  |  |  |

Remarks and Equipment Summary

| One: Toolstring  |        |                         |        | One: Remarks                         |  |  |
|------------------|--------|-------------------------|--------|--------------------------------------|--|--|
| Equip name       | Length | MP name                 | Offset | Tool ran as per Tool Sketch.         |  |  |
| PEH-EF           | 54.08  |                         |        | Max Temp of 238 DegF.                |  |  |
|                  |        |                         |        | Max Pressure of 3893 psi.            |  |  |
| AH-38            | 51.72  |                         |        | Log Correlated with the Down Log.    |  |  |
| PSTP-A:3823      | 51.44  |                         |        | TD Tagged at 9326 ft.                |  |  |
| PSC-A:3733       |        | GR                      | 47.74  | Short Joint at 6723'-6733'           |  |  |
| PSTC-A:3733      |        | PSTC                    | 47.44  | TOC 2886'                            |  |  |
| PBMS-A:3823      |        | PSTC Tool String Bottom | 0.00   | Thank you for choosing Schlumberger. |  |  |
| Sapphire 10kP SI |        | Temperature             | 44.65  |                                      |  |  |
|                  |        | Sapphire Pressure       | 44.54  |                                      |  |  |
|                  |        | CCL                     | 43.92  |                                      |  |  |
|                  |        | PBMS                    | 43.17  |                                      |  |  |
| RST-C:309        | 43.17  |                         |        |                                      |  |  |
| RSCH-A:277       |        |                         |        |                                      |  |  |
| RSC-E:277        |        |                         |        |                                      |  |  |
| RSS-A:373        |        |                         |        |                                      |  |  |
| MNTR-F           |        |                         |        |                                      |  |  |
| RSXH-A:309       |        |                         |        |                                      |  |  |
| RSX-E:309        |        |                         |        |                                      |  |  |
|                  |        | RSC-E                   | 36.82  |                                      |  |  |



|                    |                |
|--------------------|----------------|
| One                |                |
| Main Pass          |                |
| Software Version   |                |
| Acquisition System | Version        |
| Maxwell 2017 SP3   | 7.3.92069.3100 |

# Pass Summary

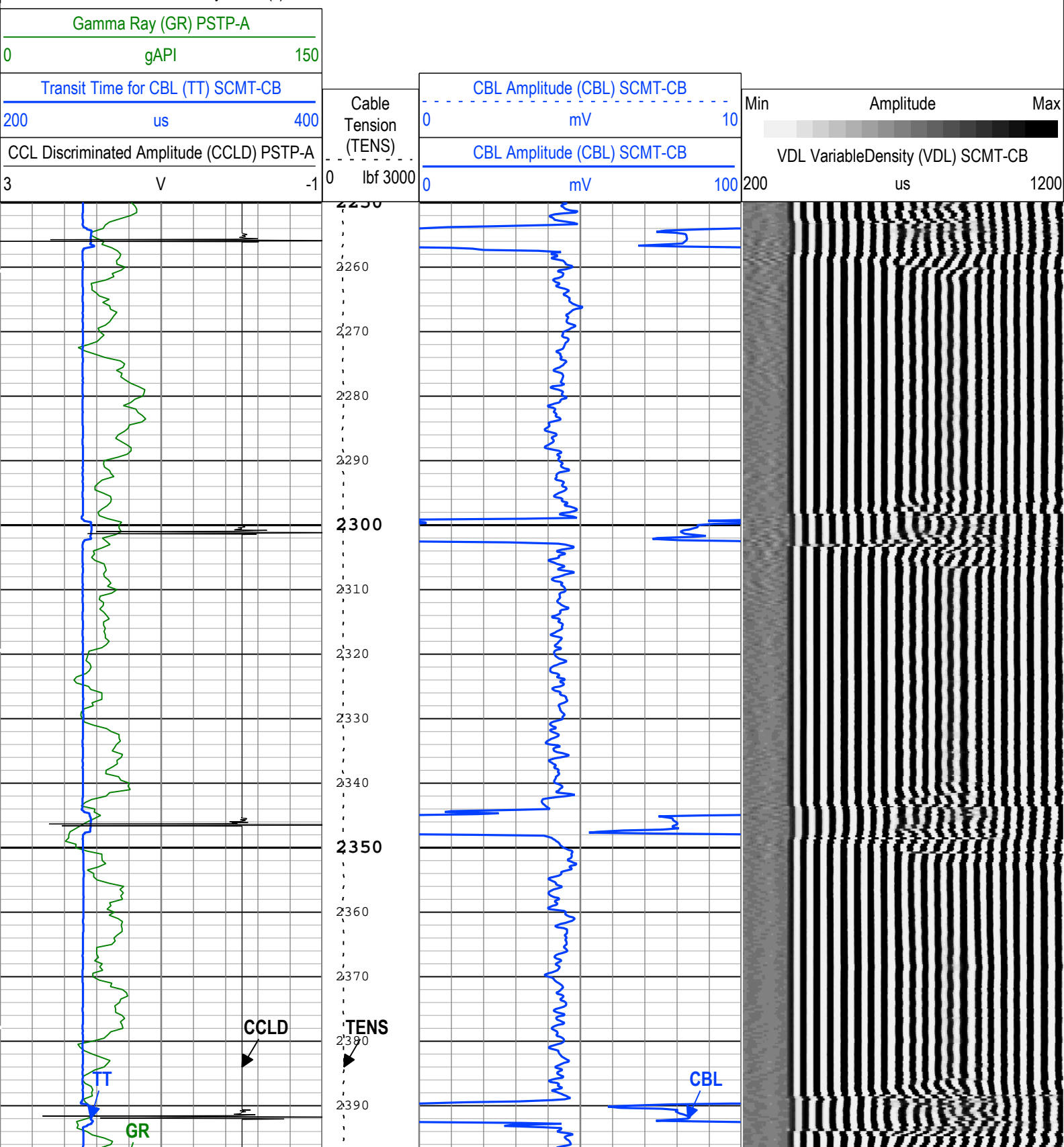
| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                   | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|-------------------------|-------------------------|----------|-------------|-----------------------|
| One      | Log[5]:Up      | Up        | 2249.93 ft | 9342.61 ft | 22-Dec-2017 10:12:06 PM | 23-Dec-2017 12:38:10 AM | ON       | 7.58 ft     | Yes                   |

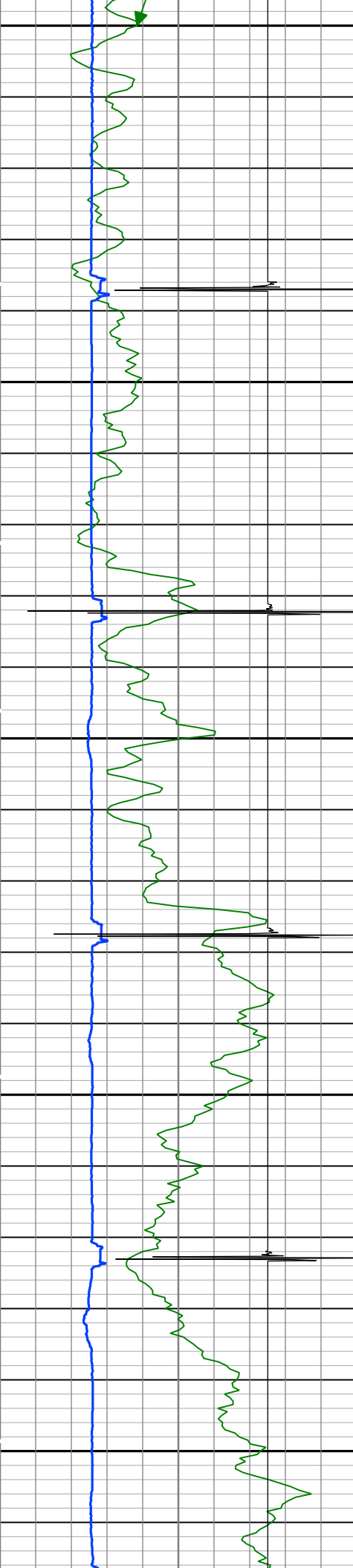
All depths are referenced to toolstring zero

| Log | Company:Caerus Operating LLC | Well:Puckett 34A-23 697 |
|-----|------------------------------|-------------------------|
|     |                              | One: Log[5]:Up:S005     |

Description: SCMT Amplitudes and VDL Format: Log ( SCMT\_Amp\_VDL ) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth  
Creation Date: 23-Dec-2017 01:41:56

TIME\_1900 - Time Marked every 60.00 (s)





2400

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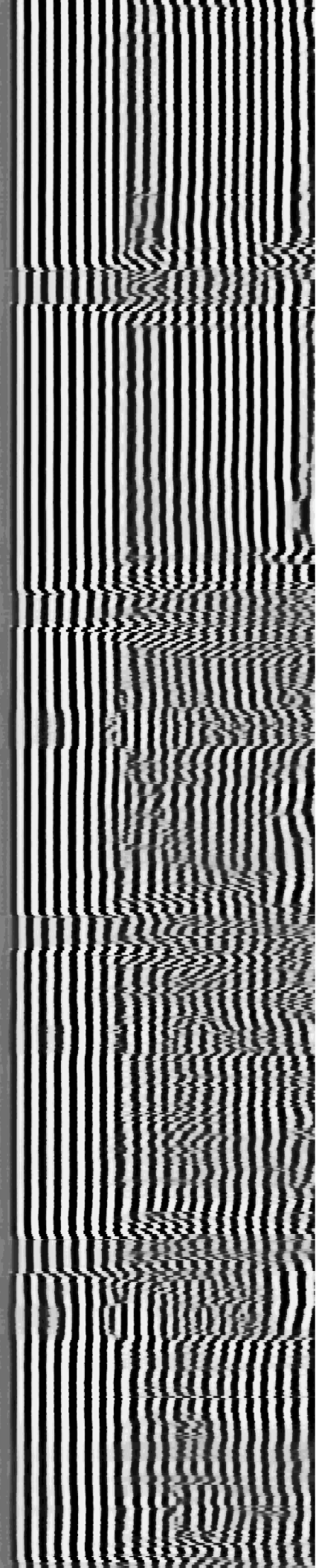
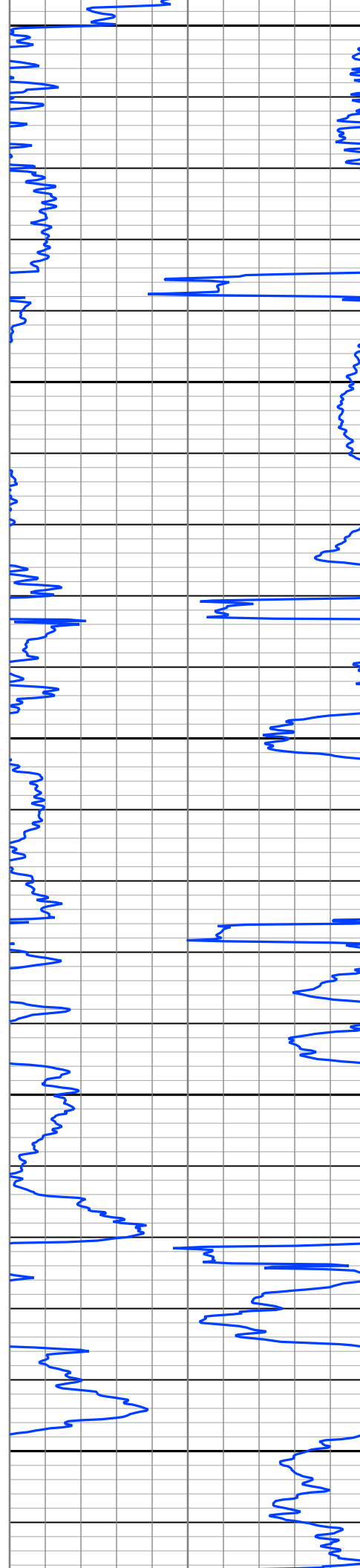
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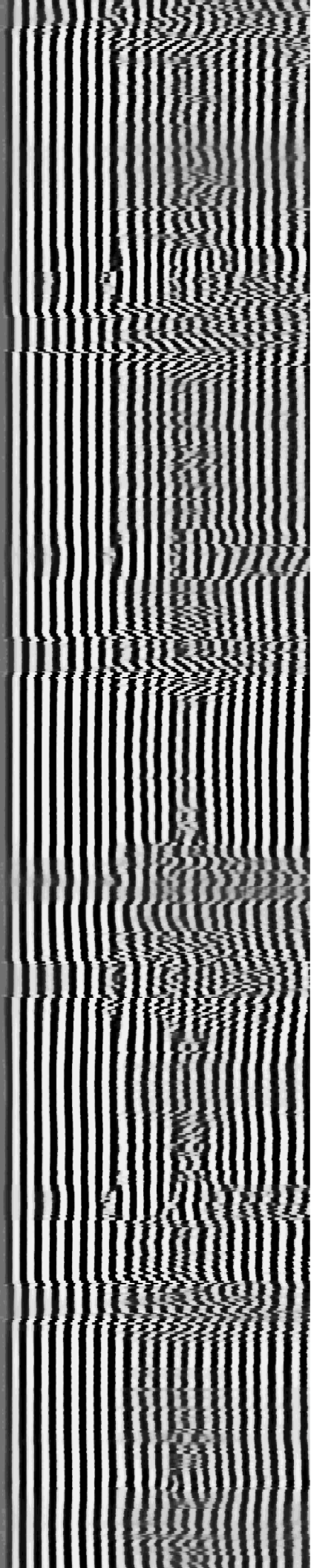
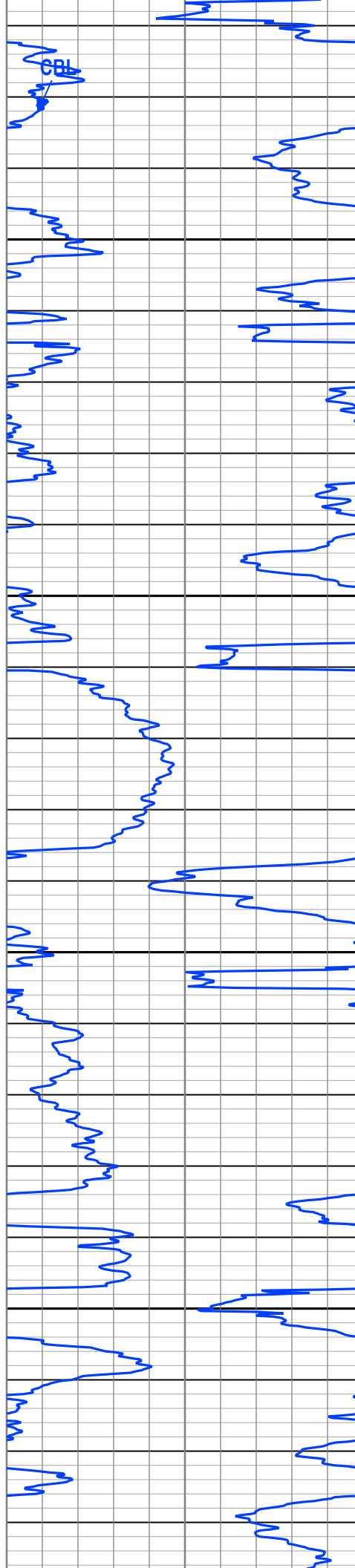
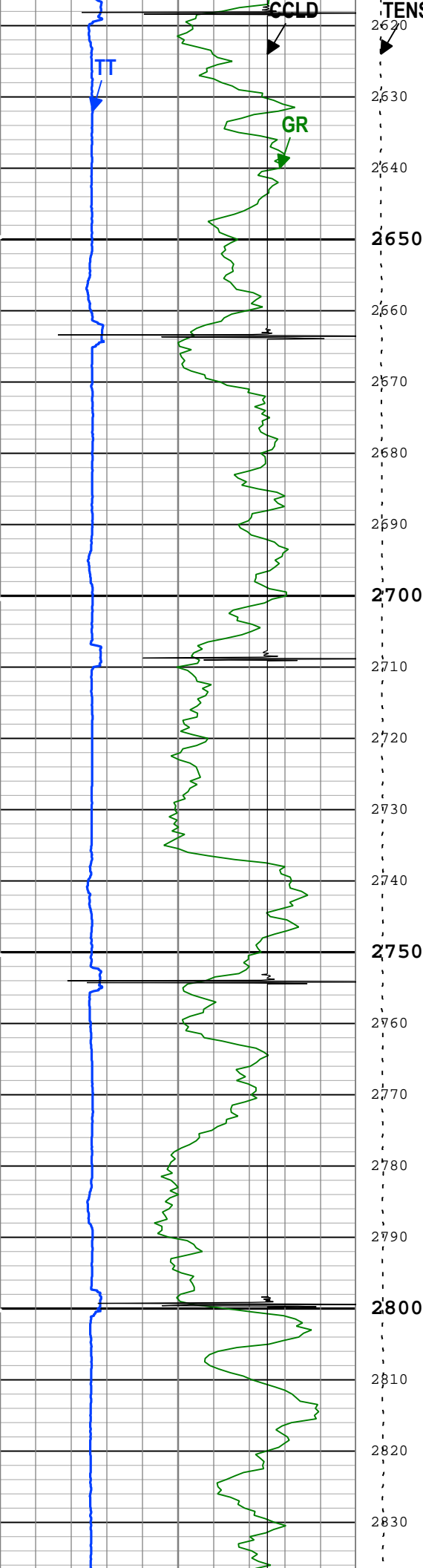
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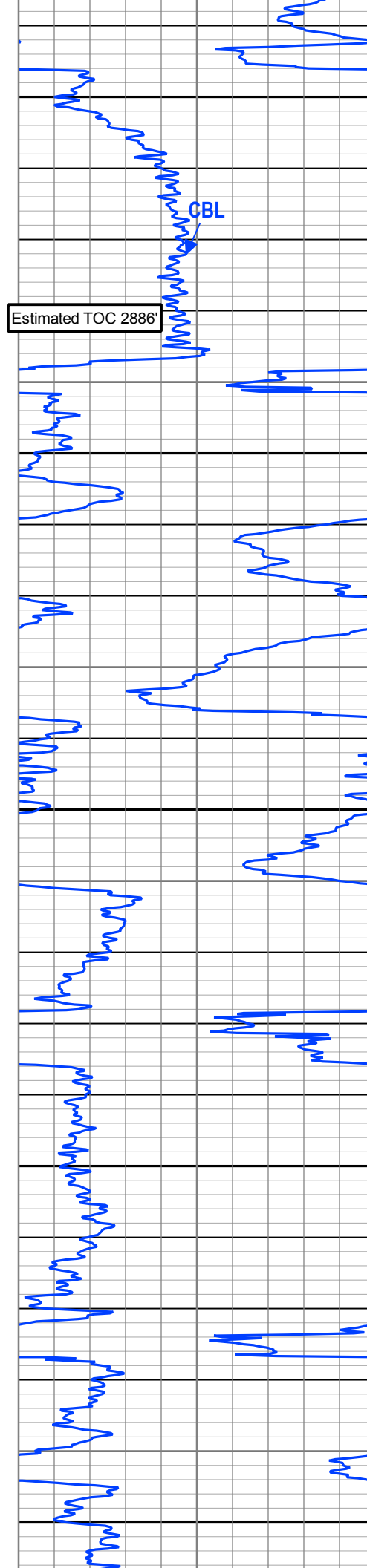
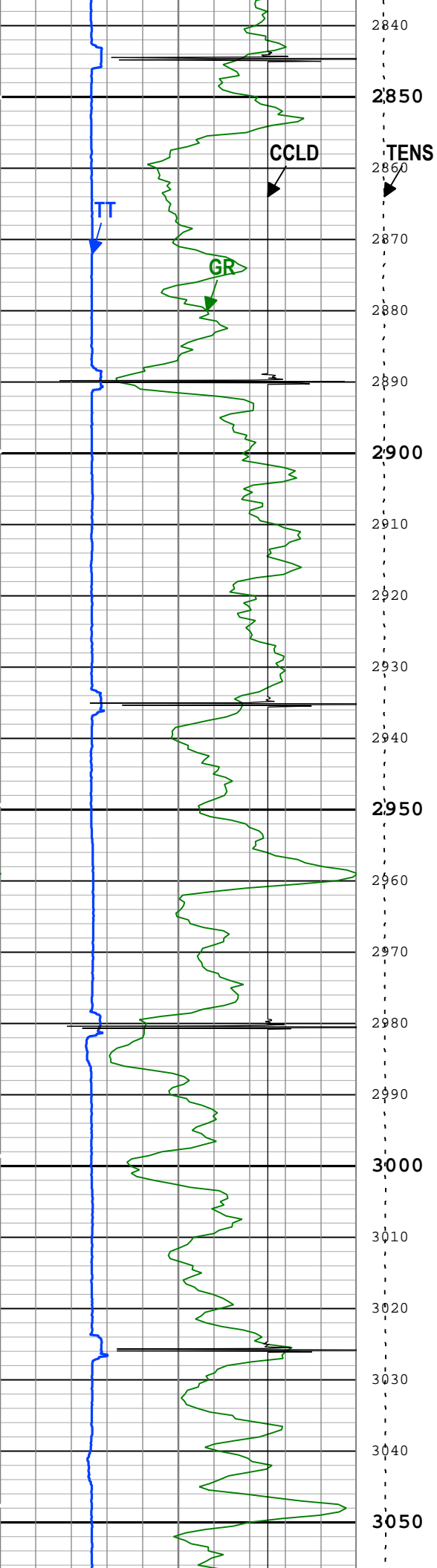
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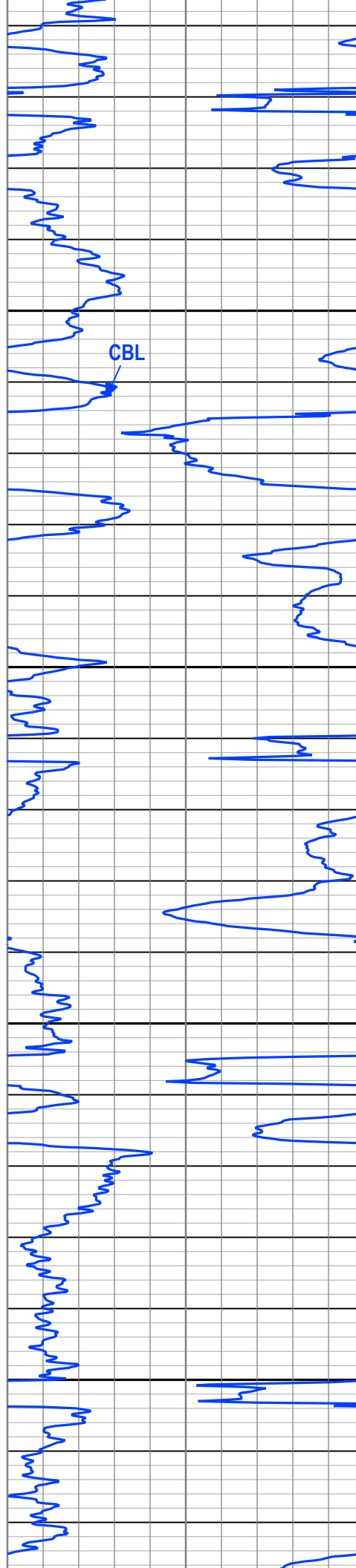
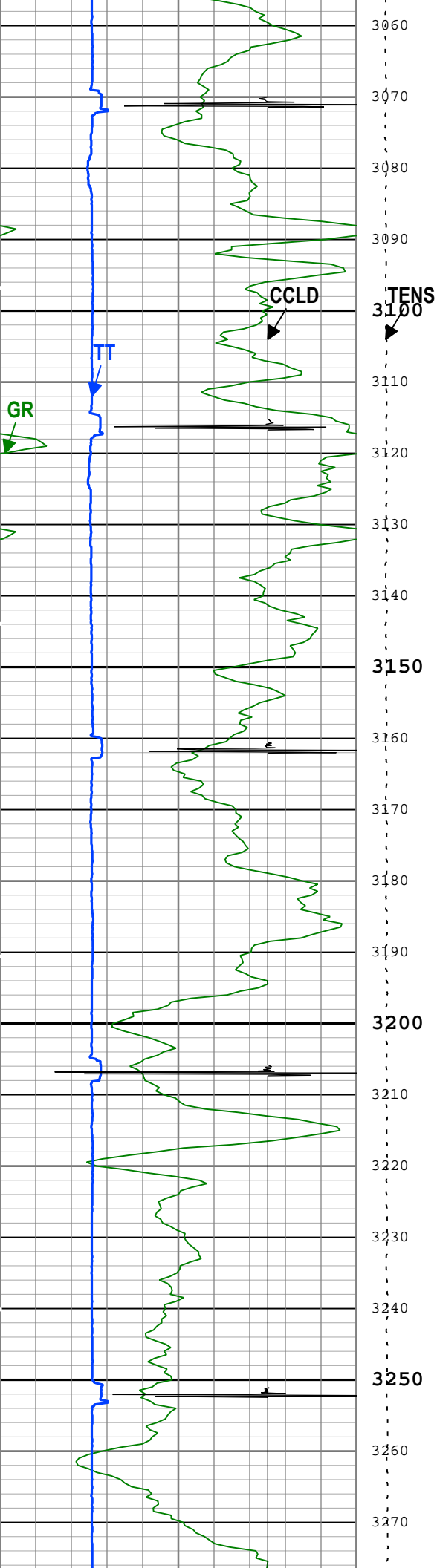


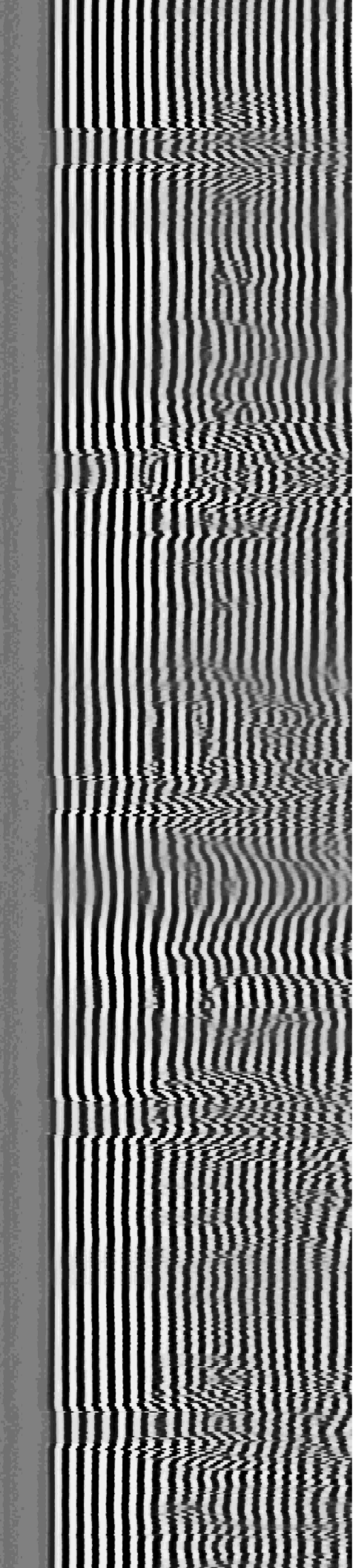
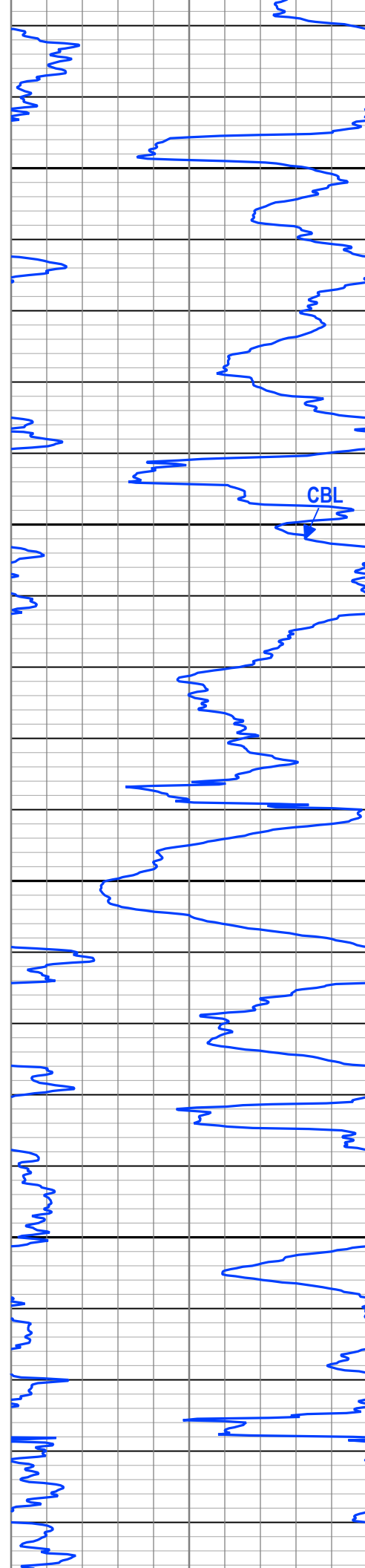
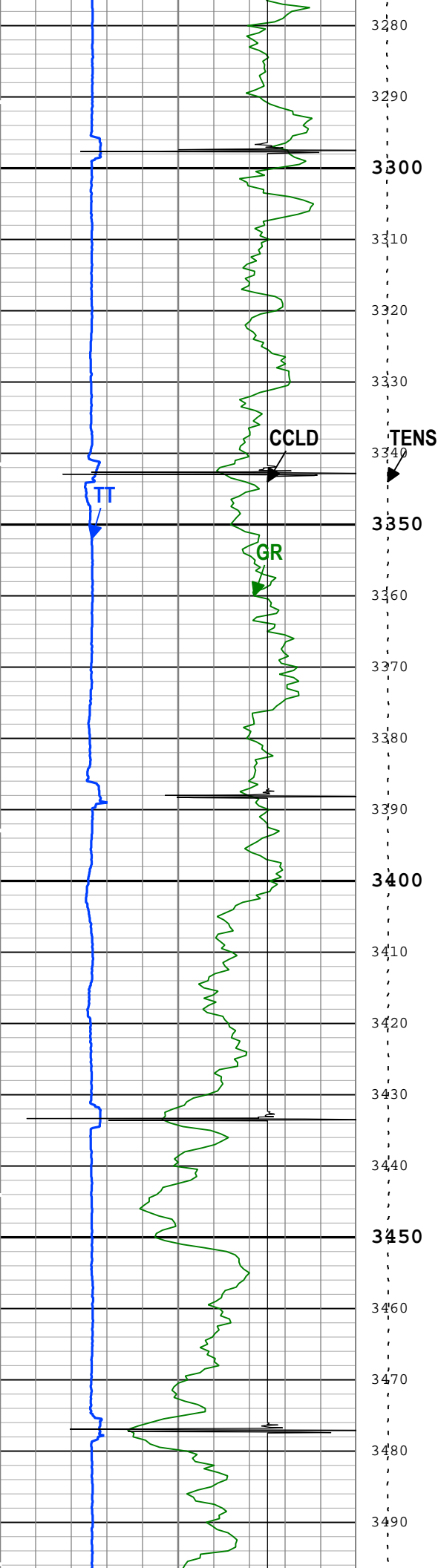


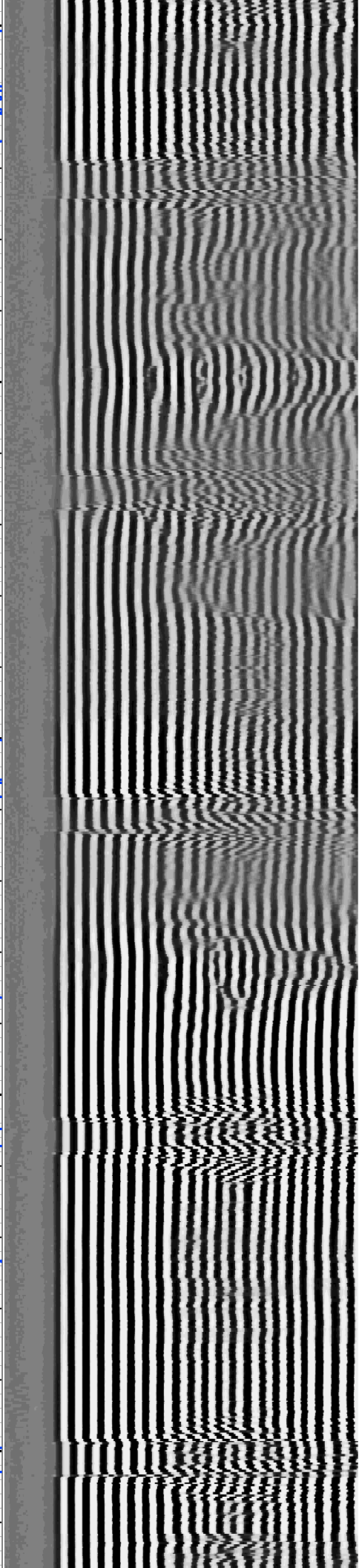
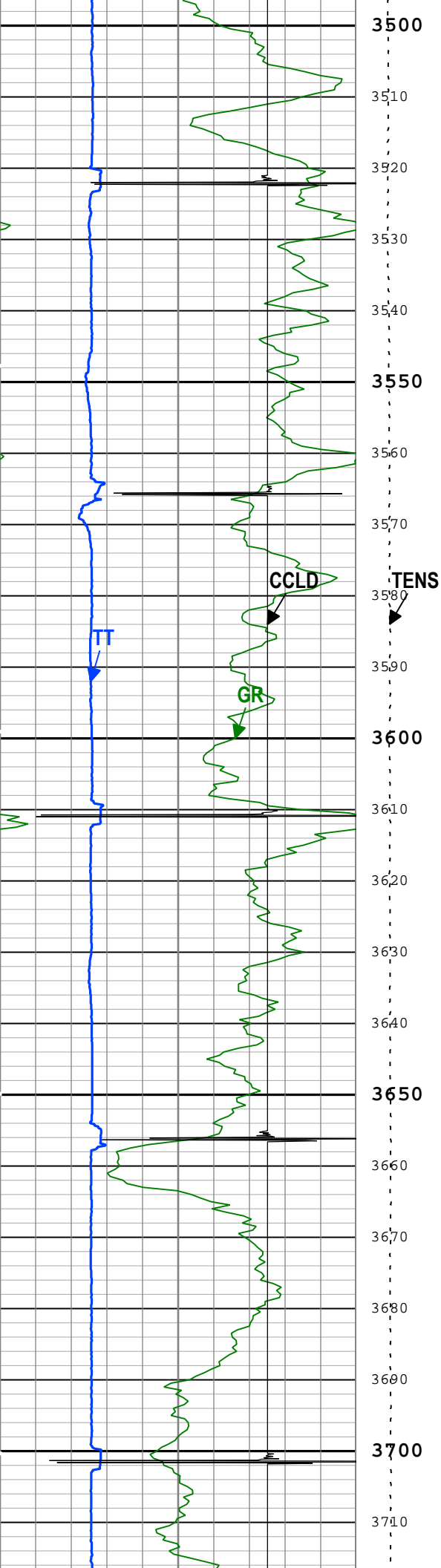


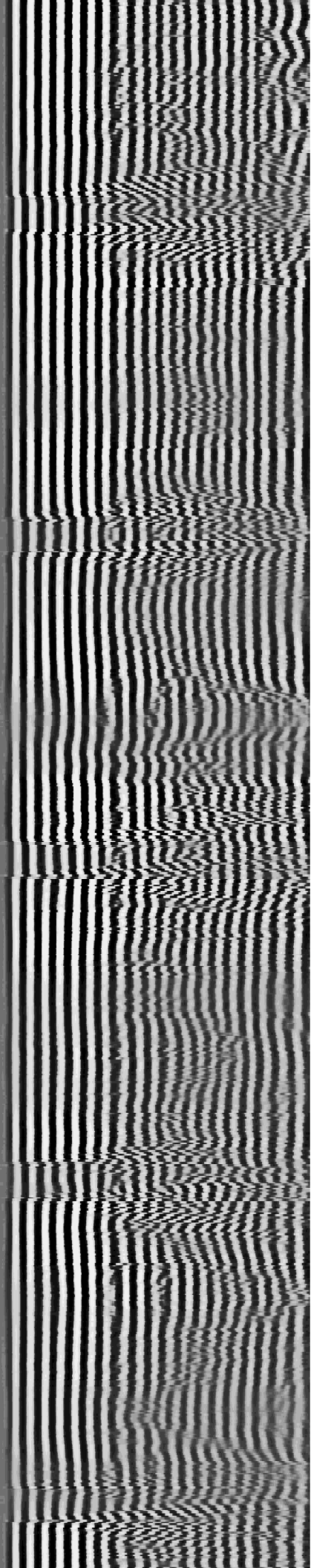
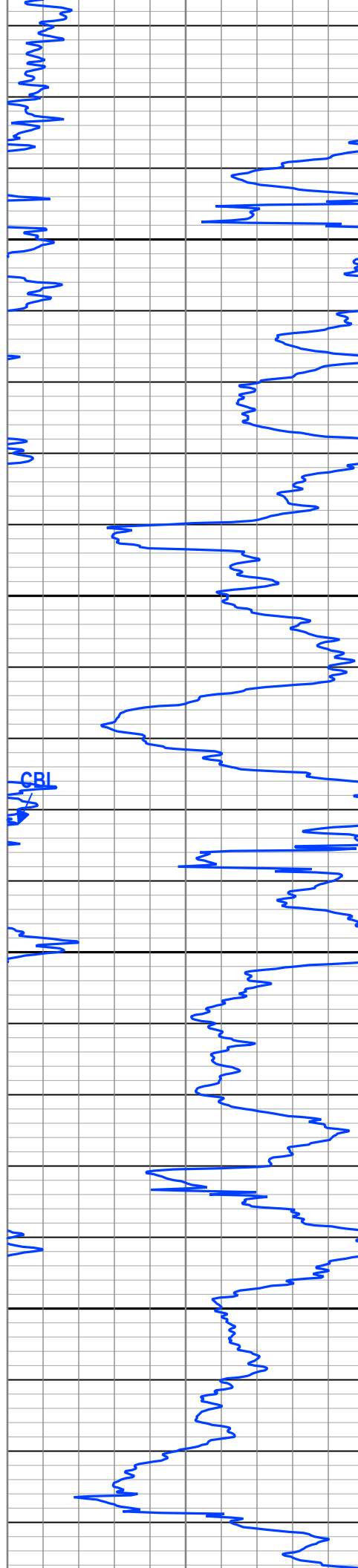
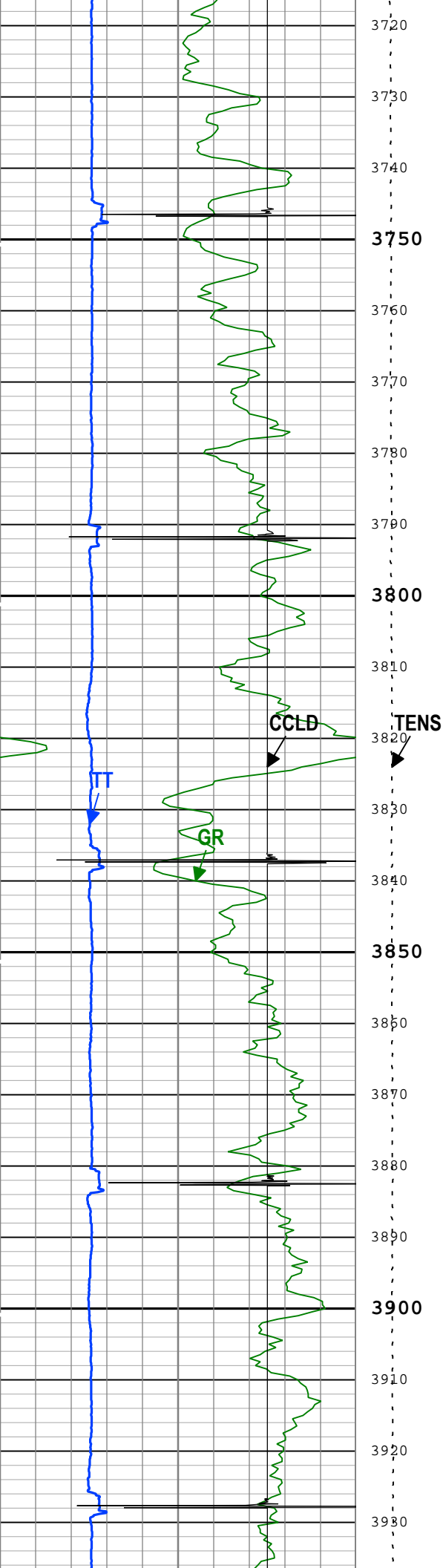




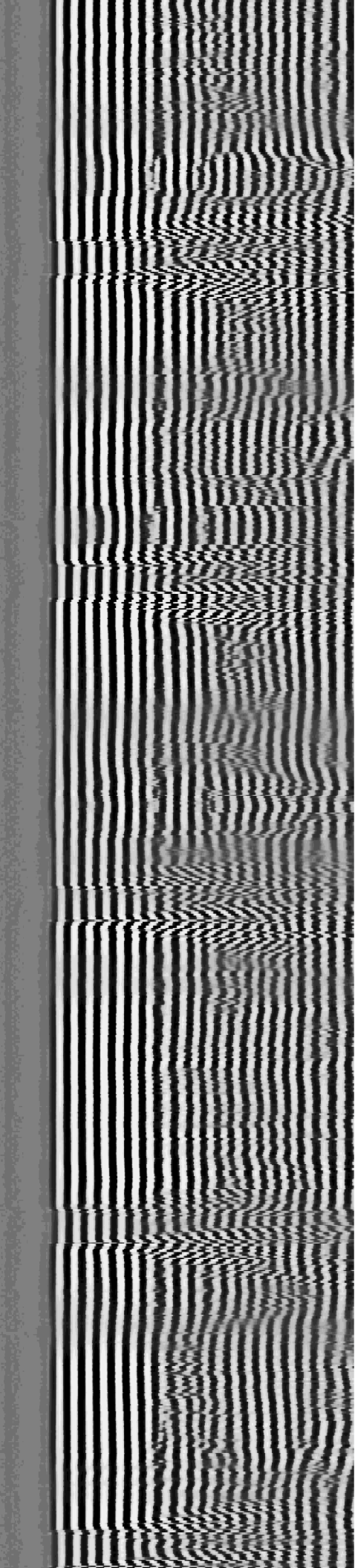
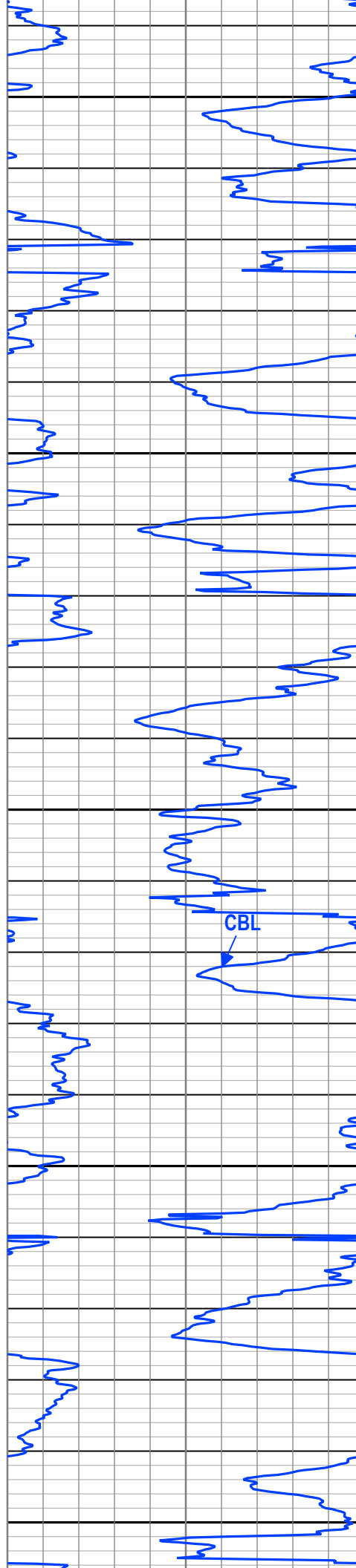
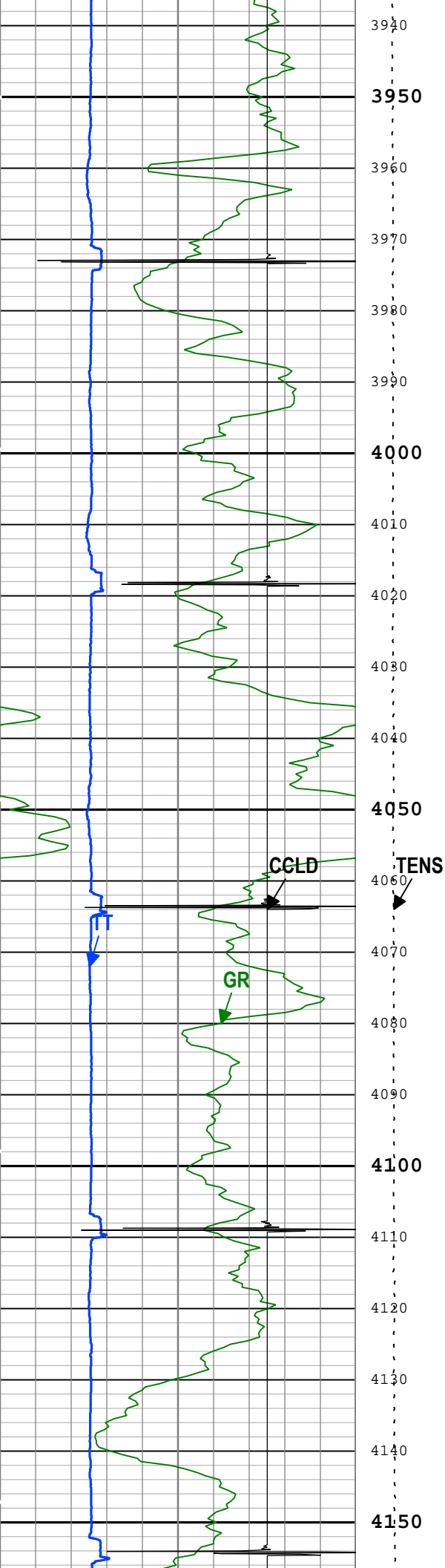


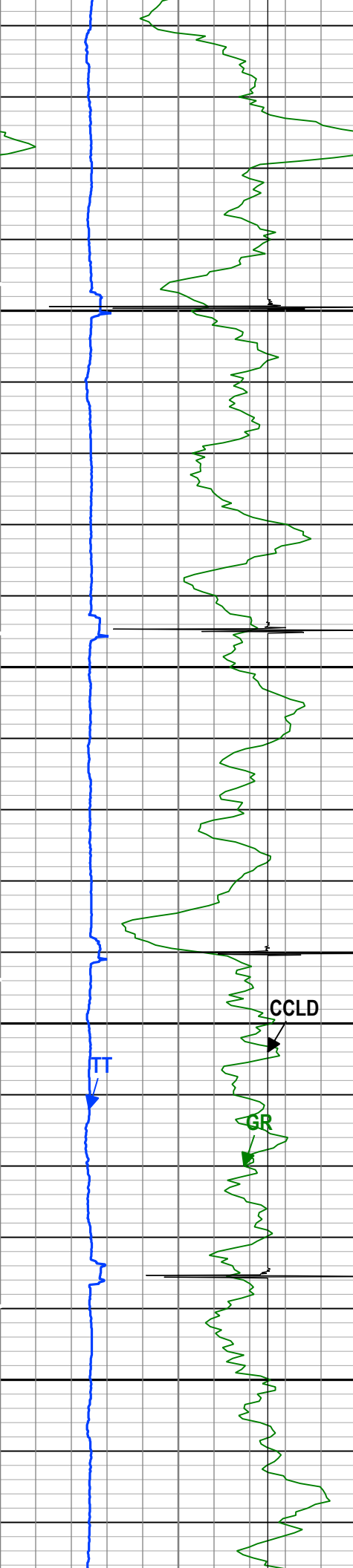




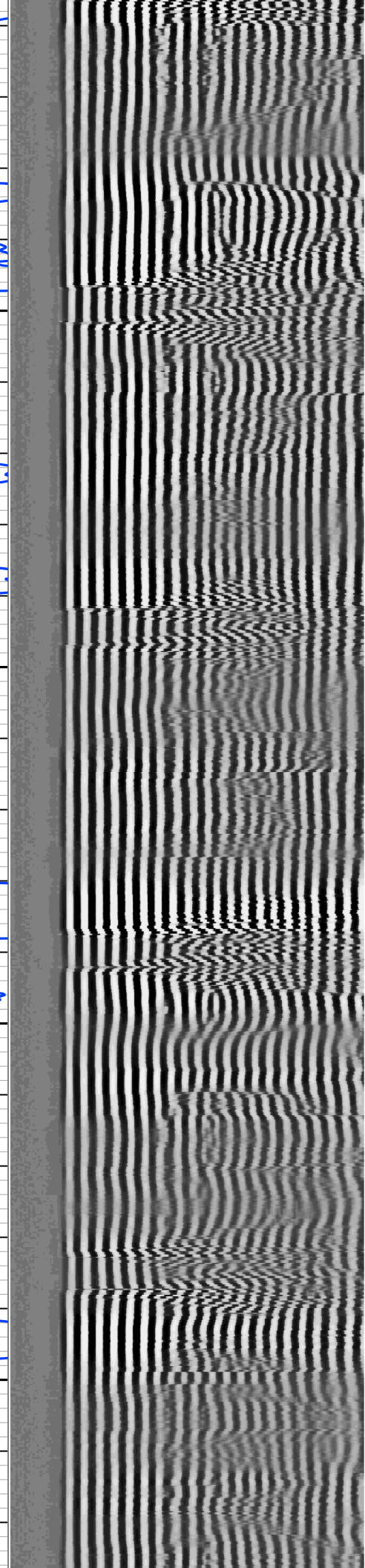
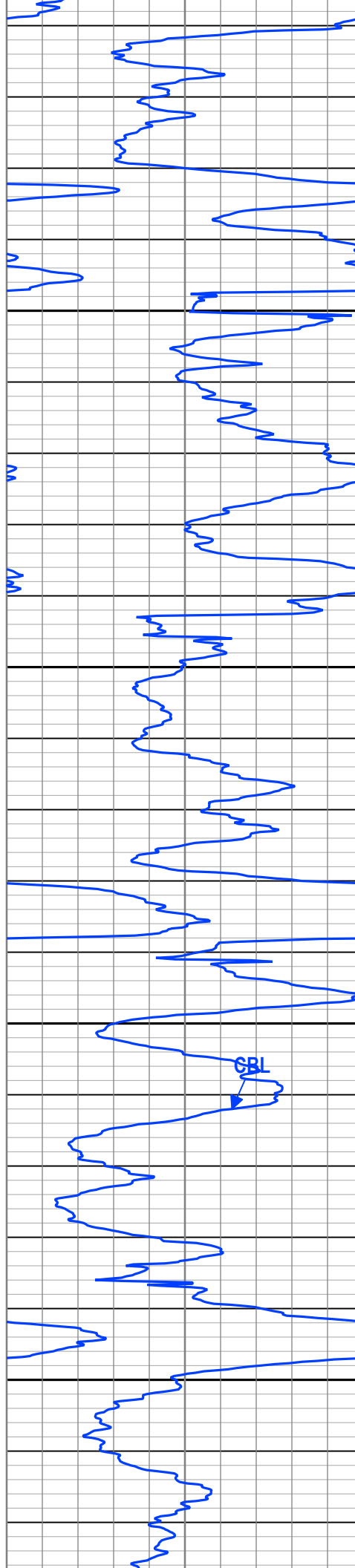




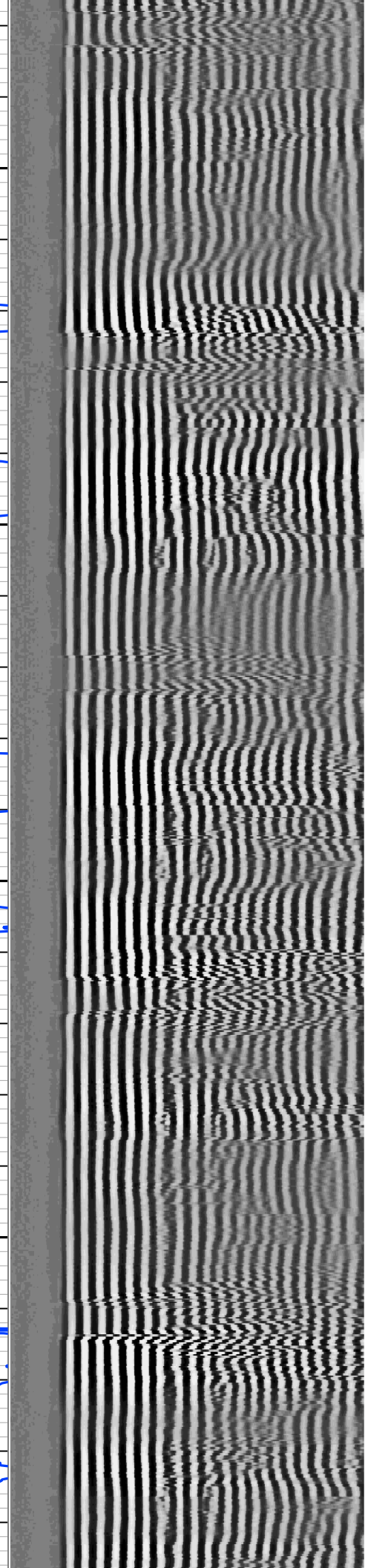
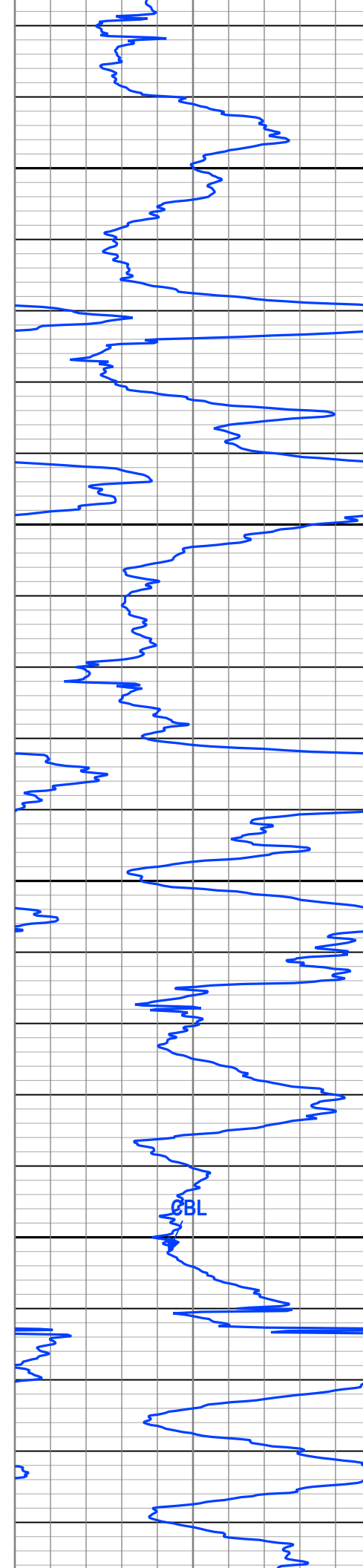
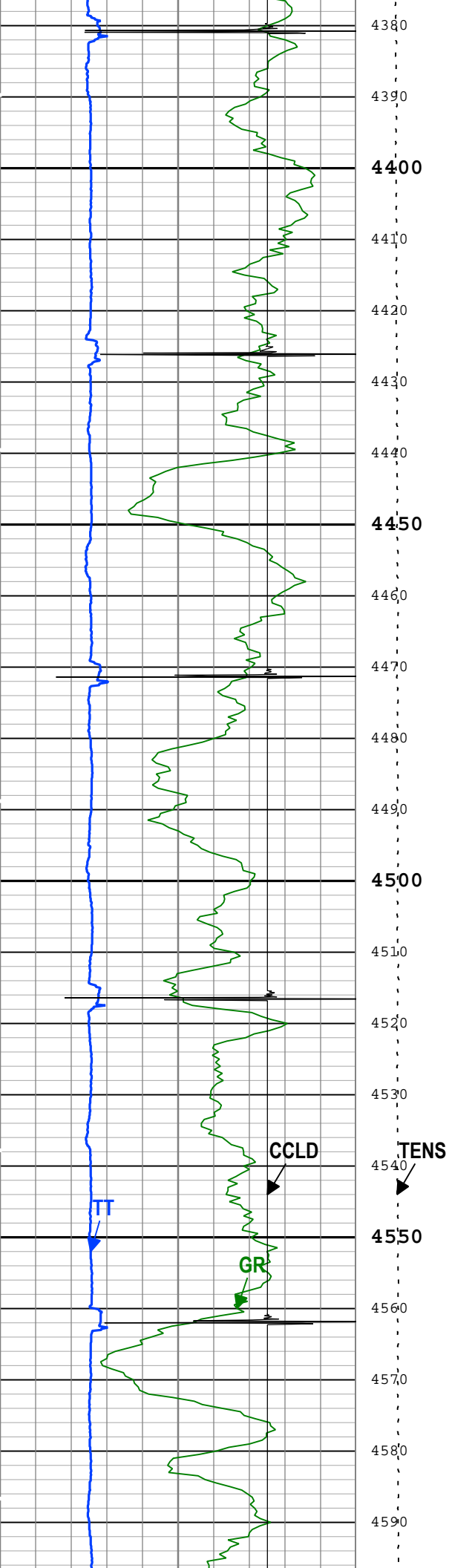


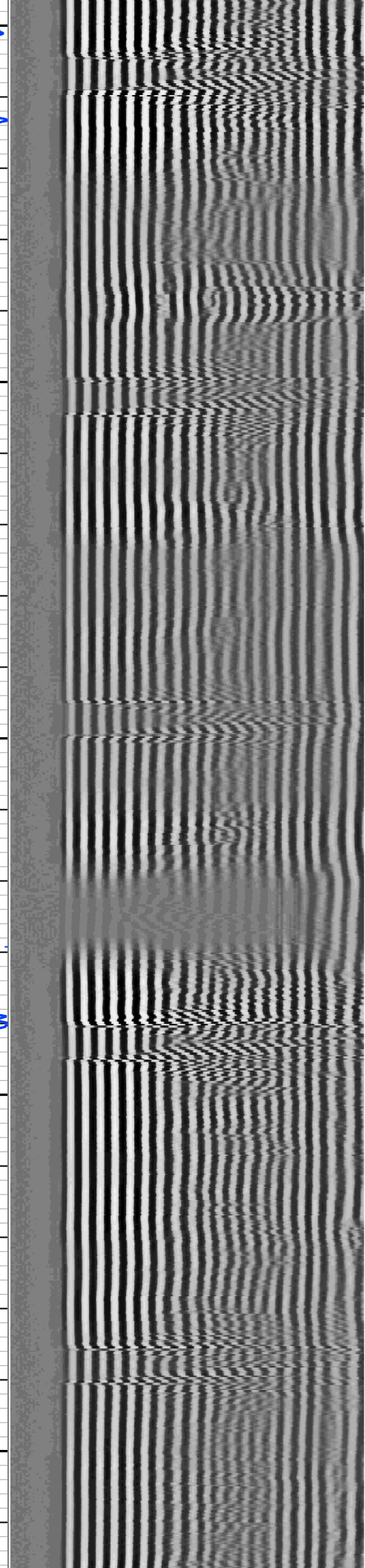
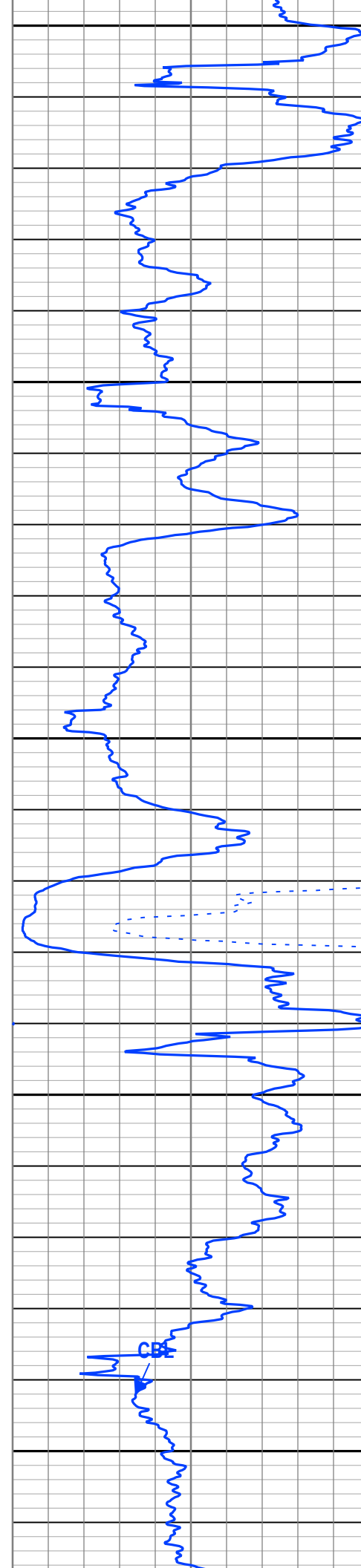
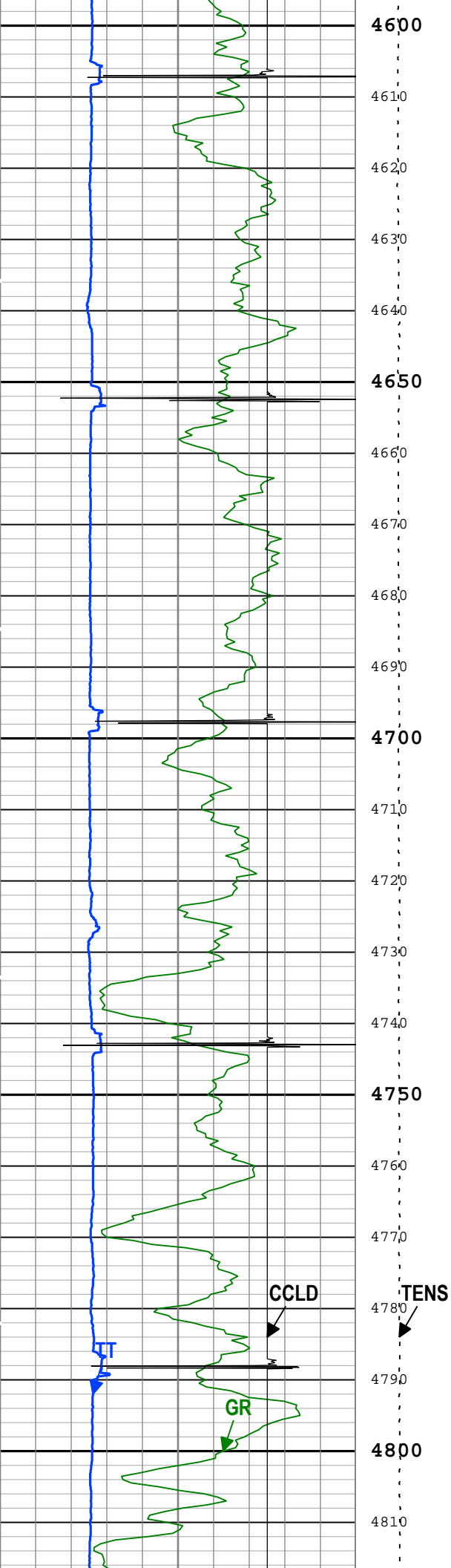


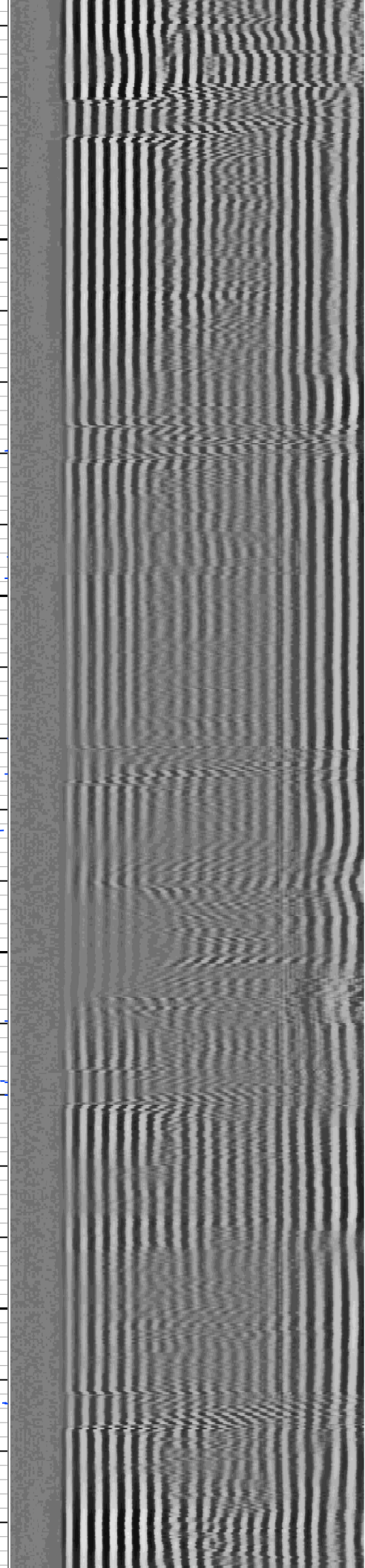
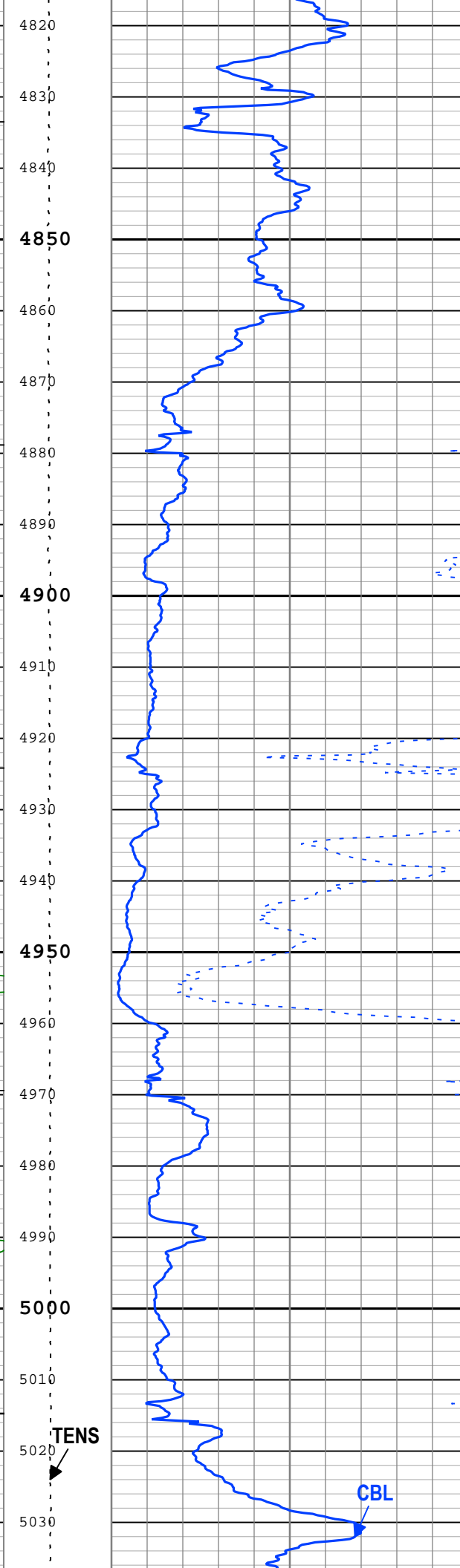
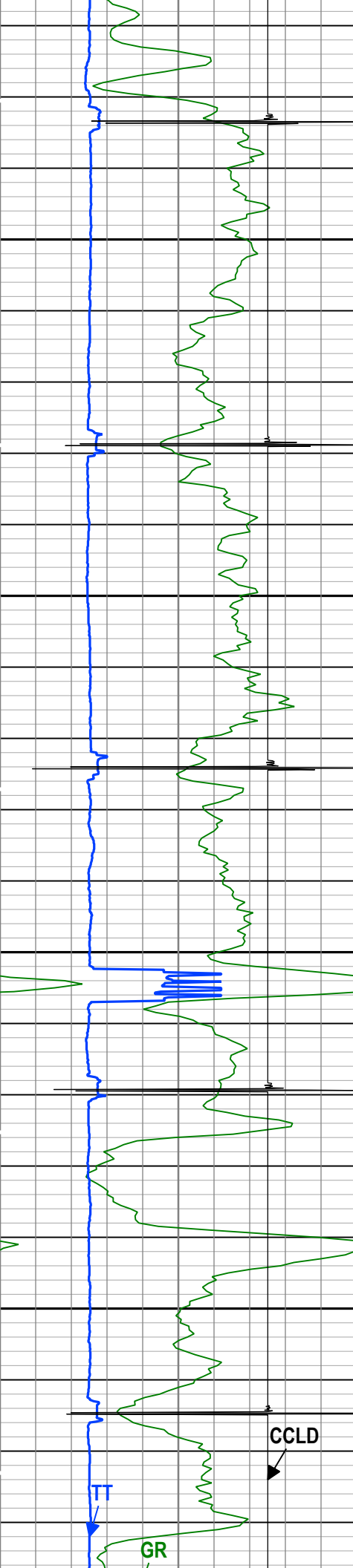
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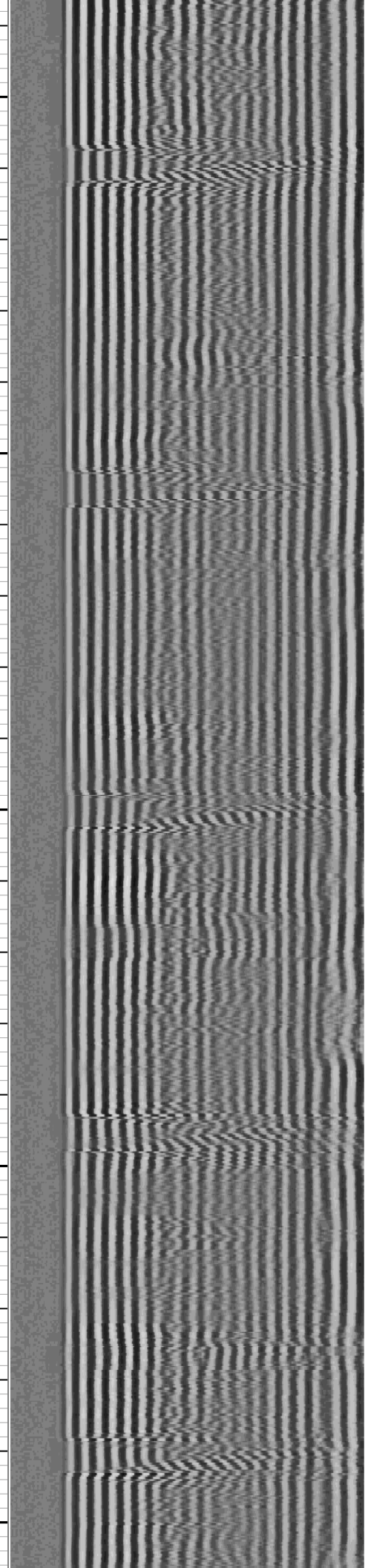
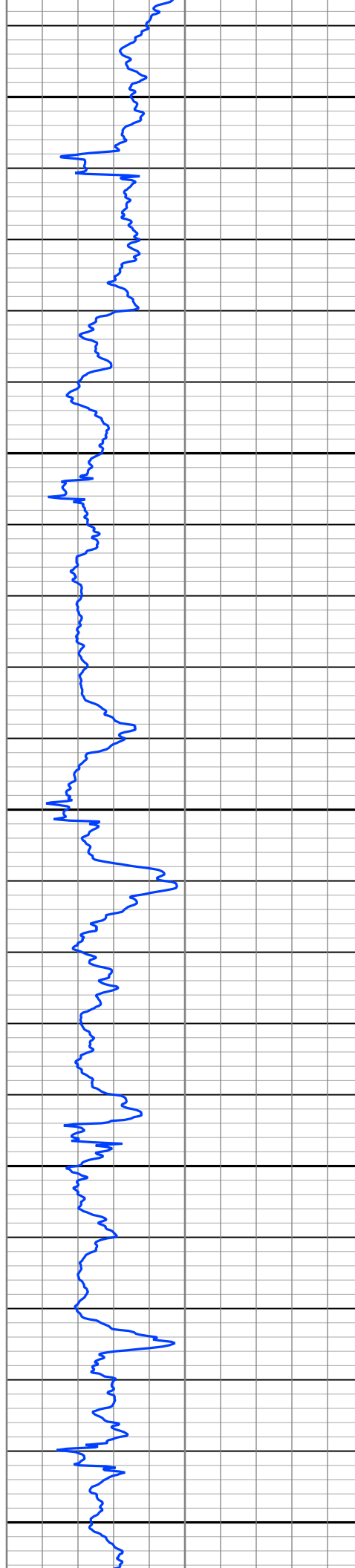
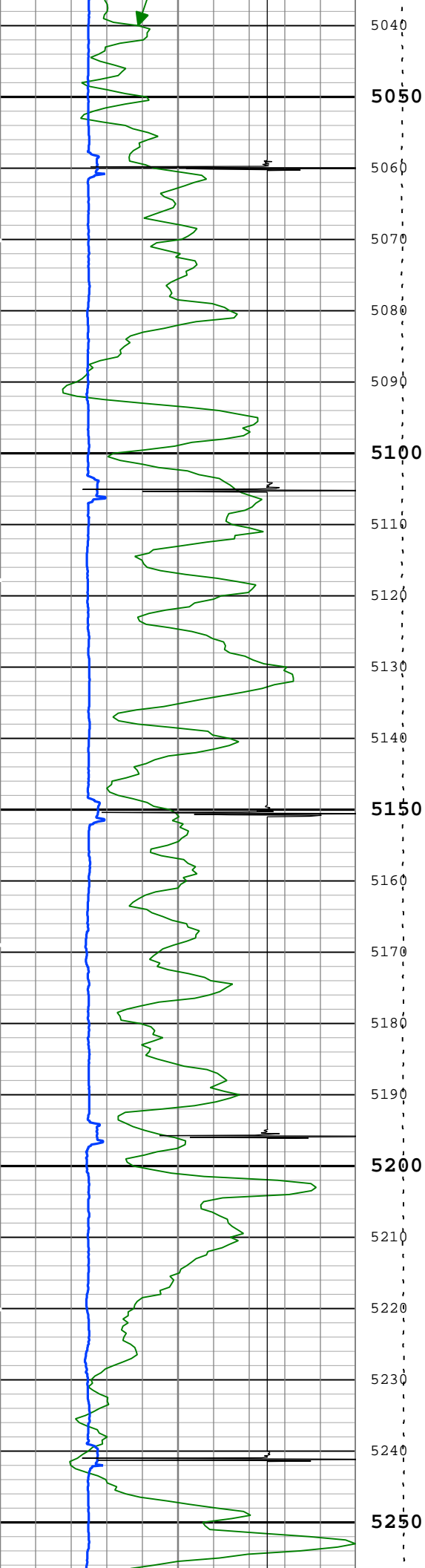




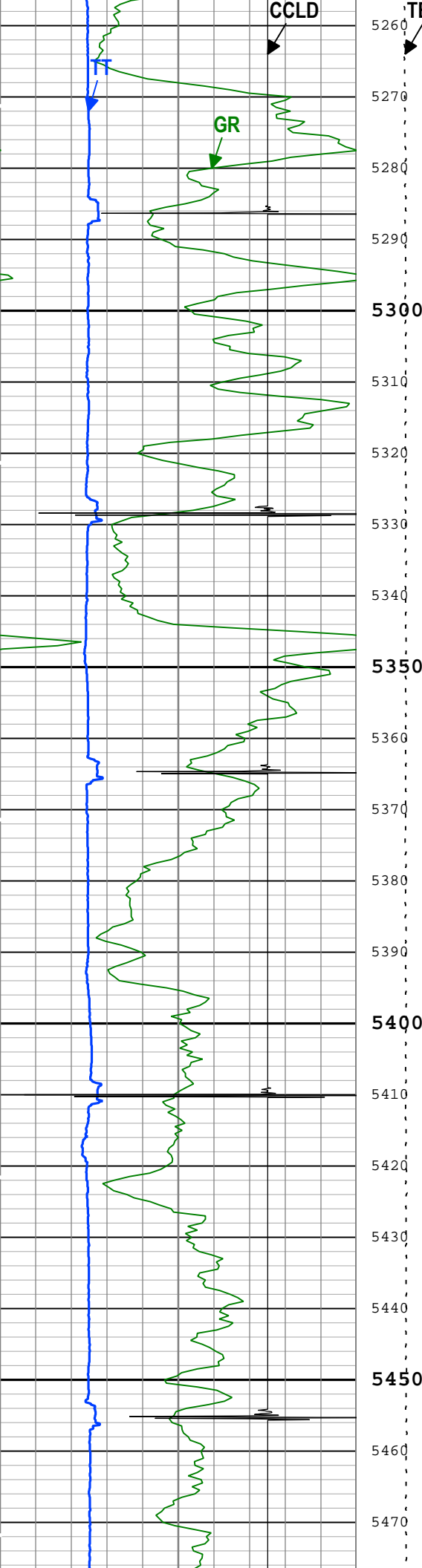












TENS

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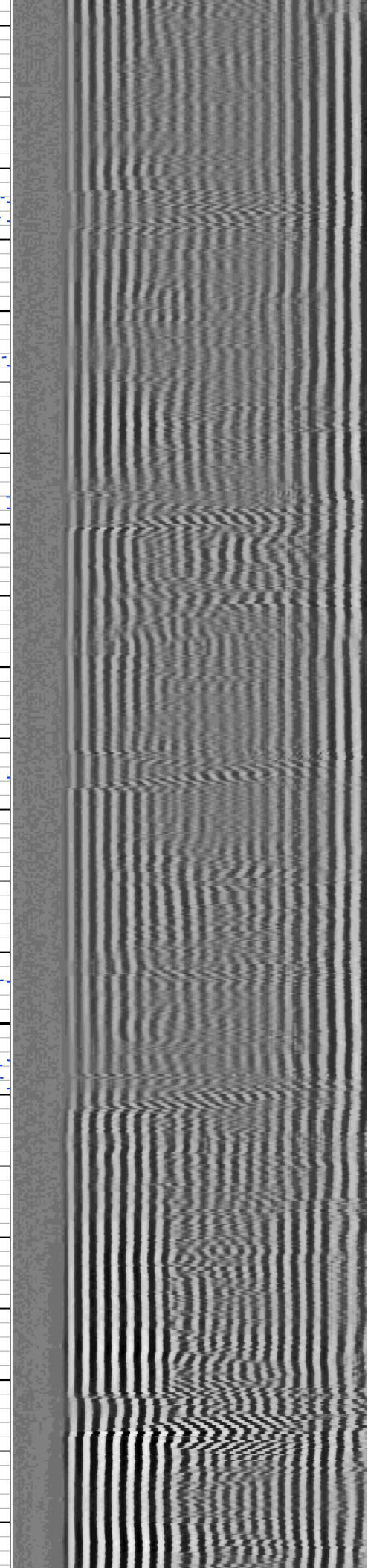
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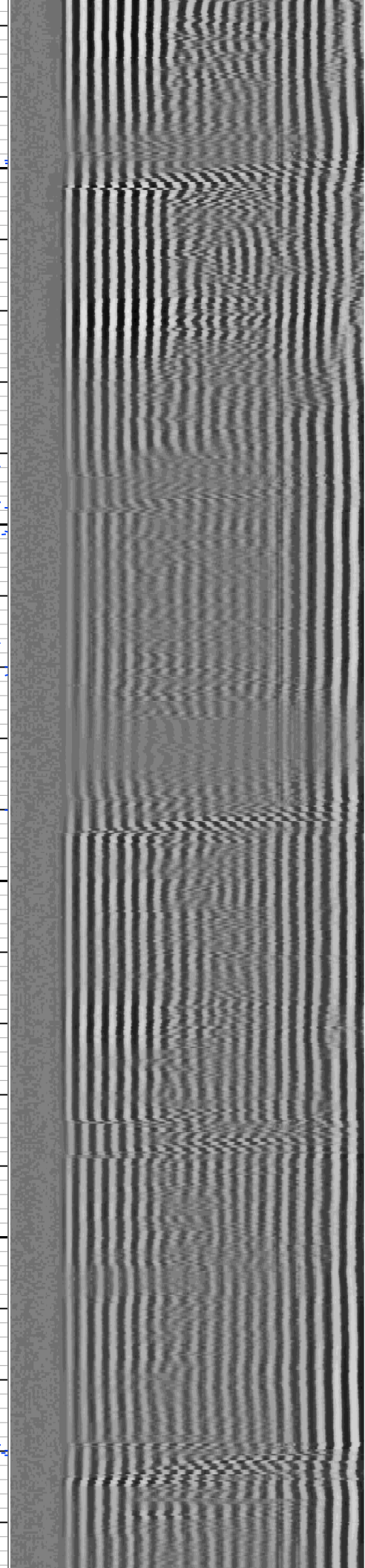
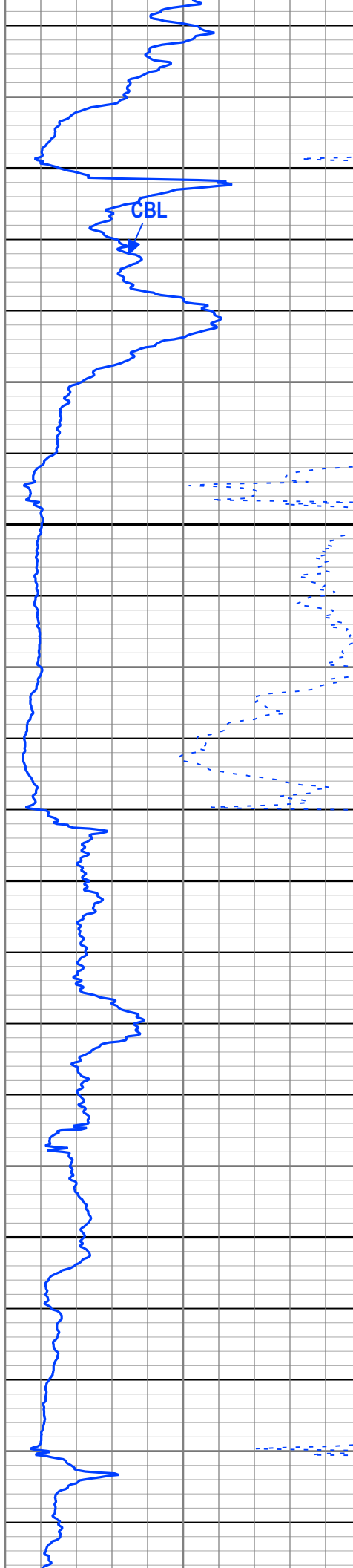
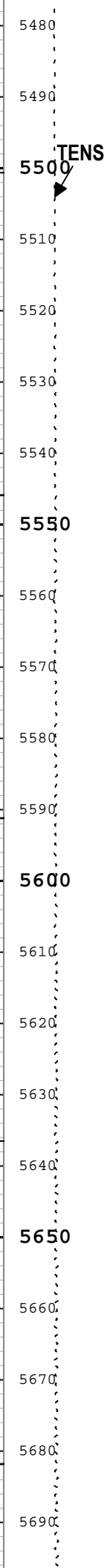
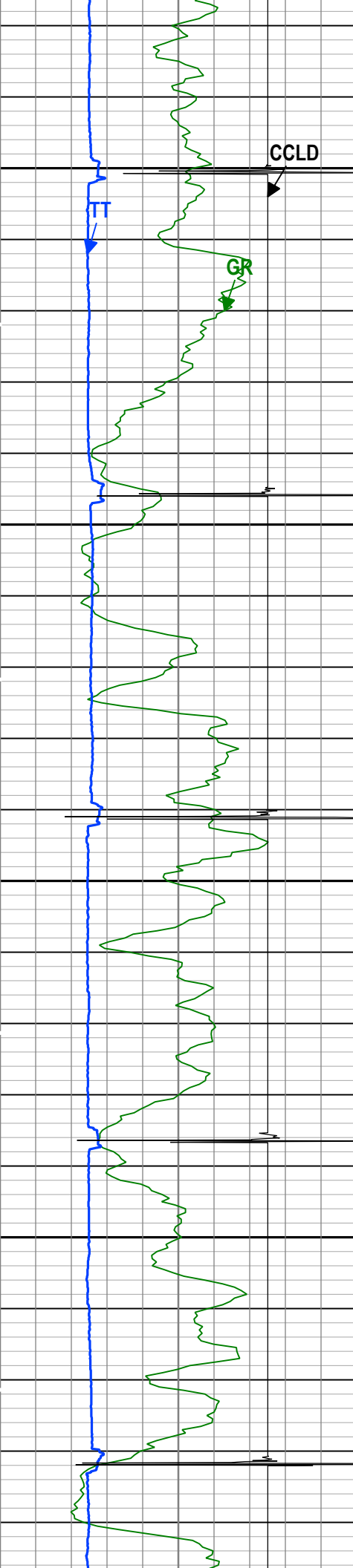
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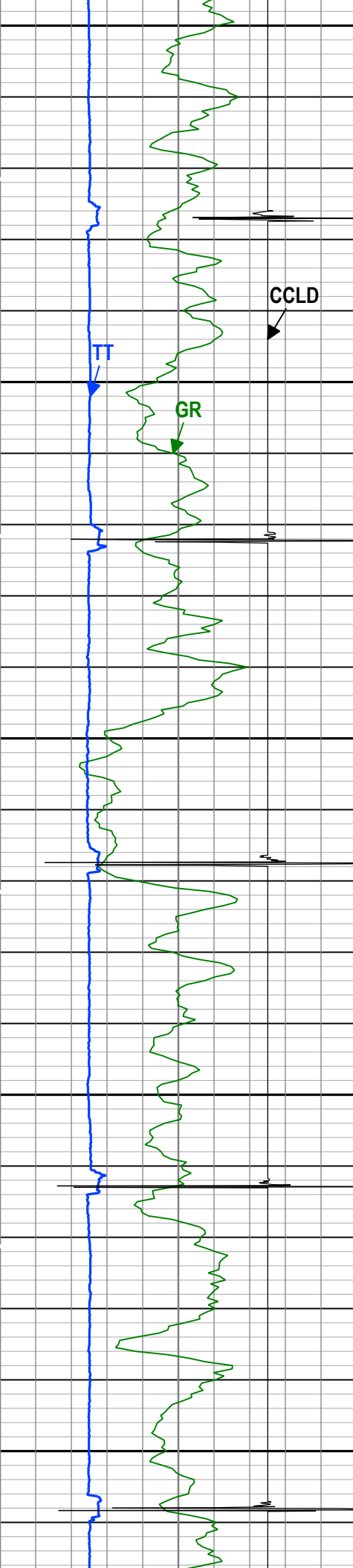
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OBL









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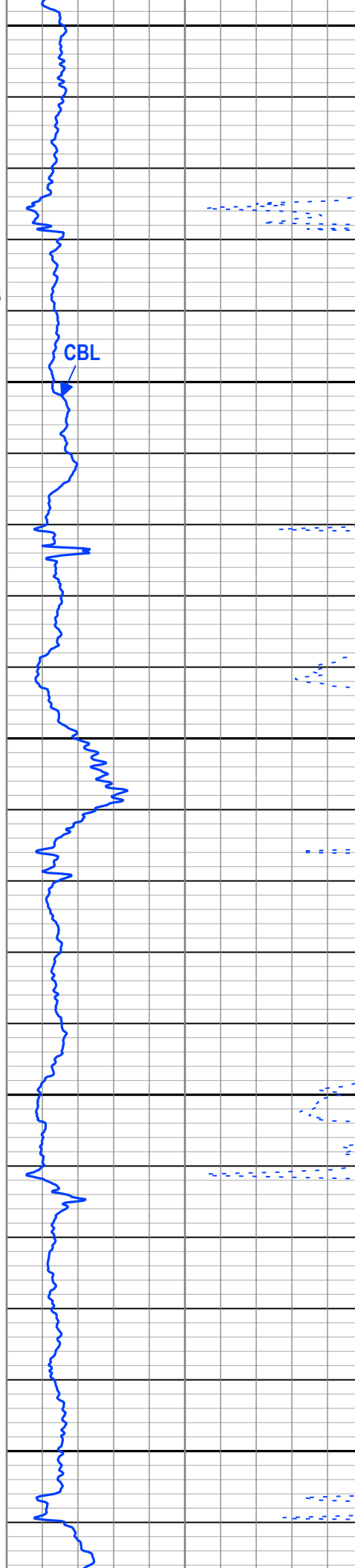
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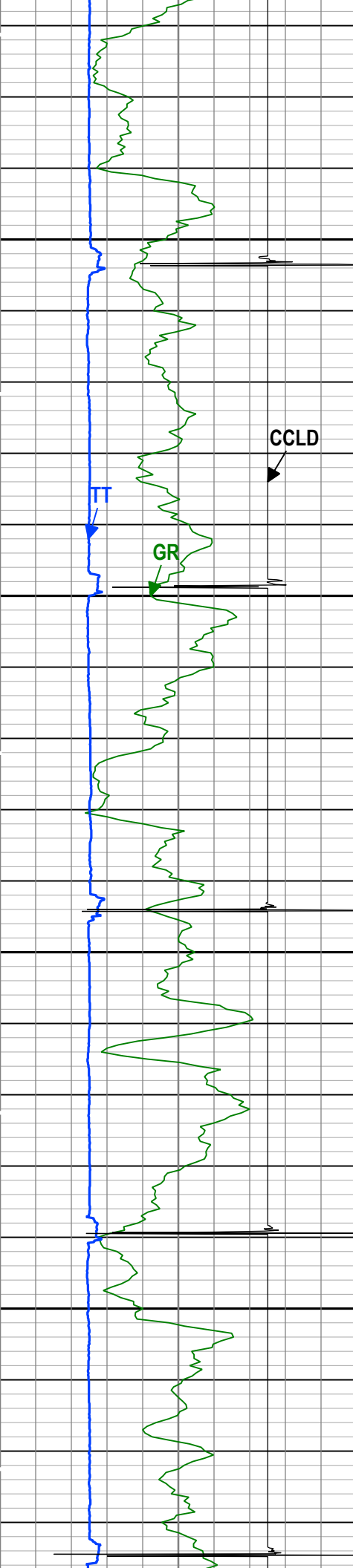
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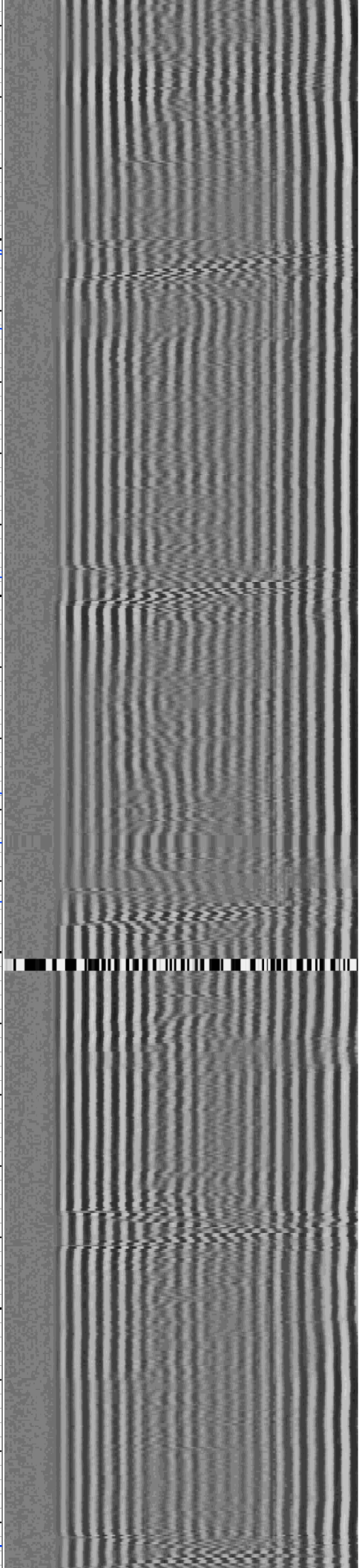
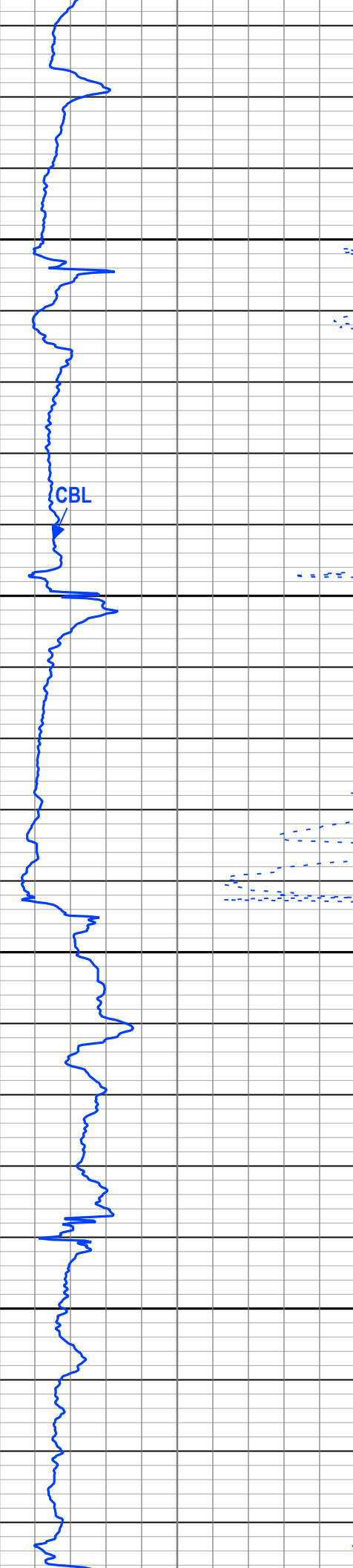
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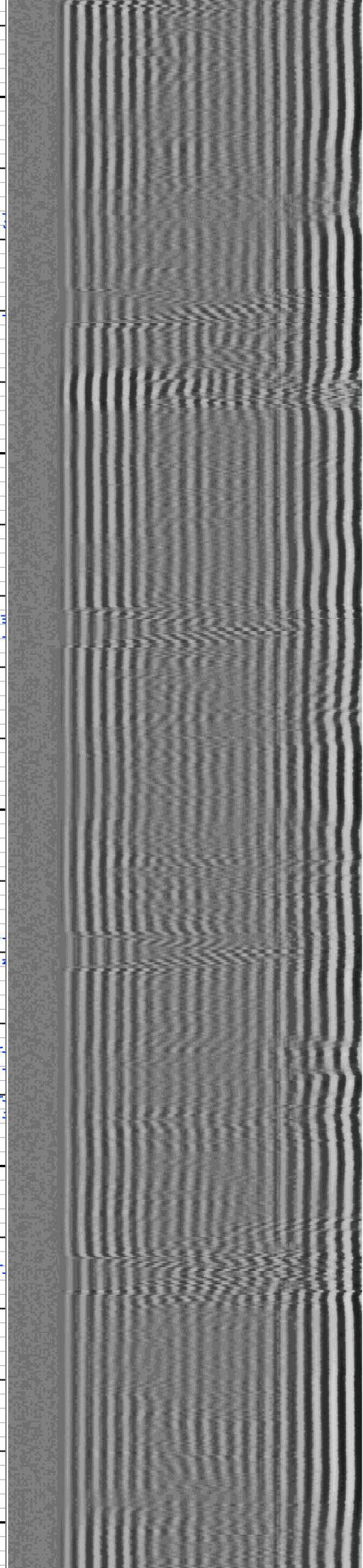
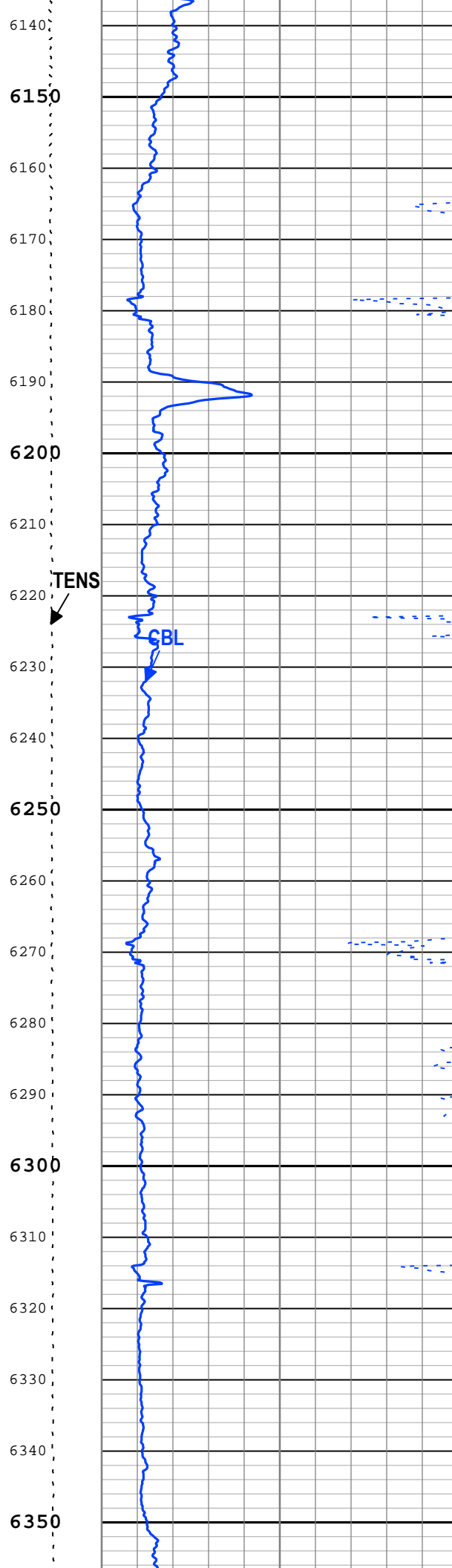
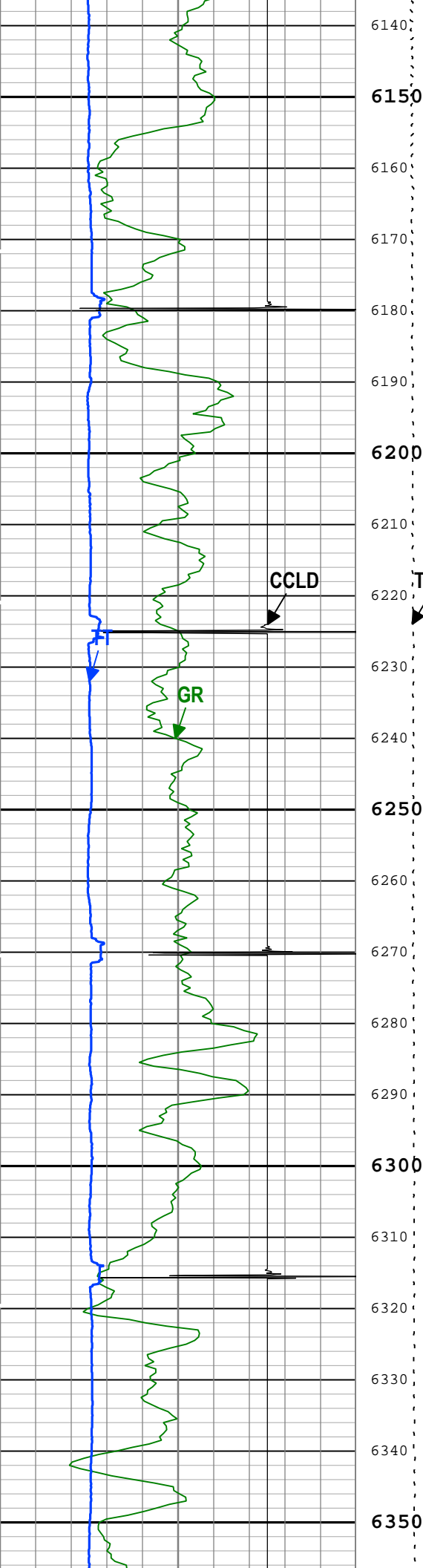
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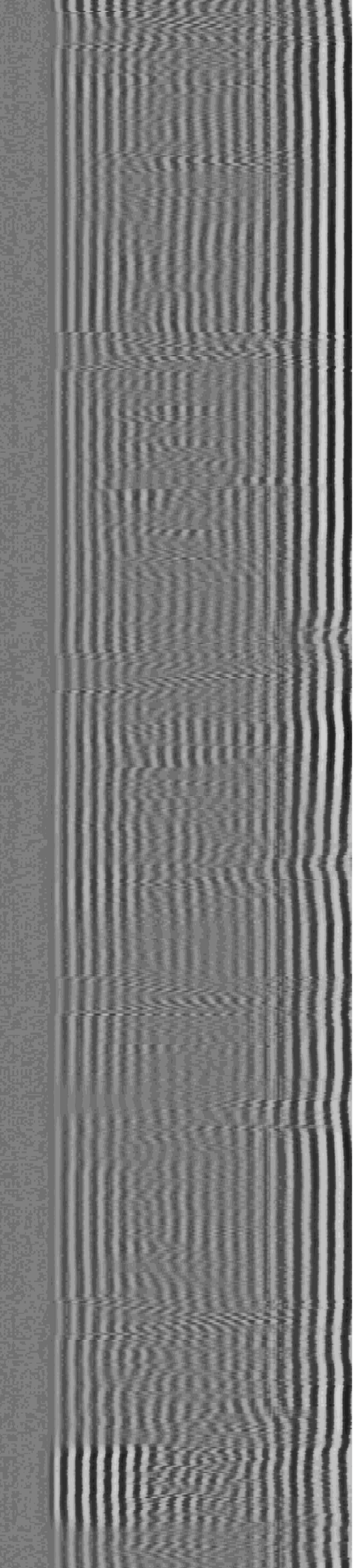
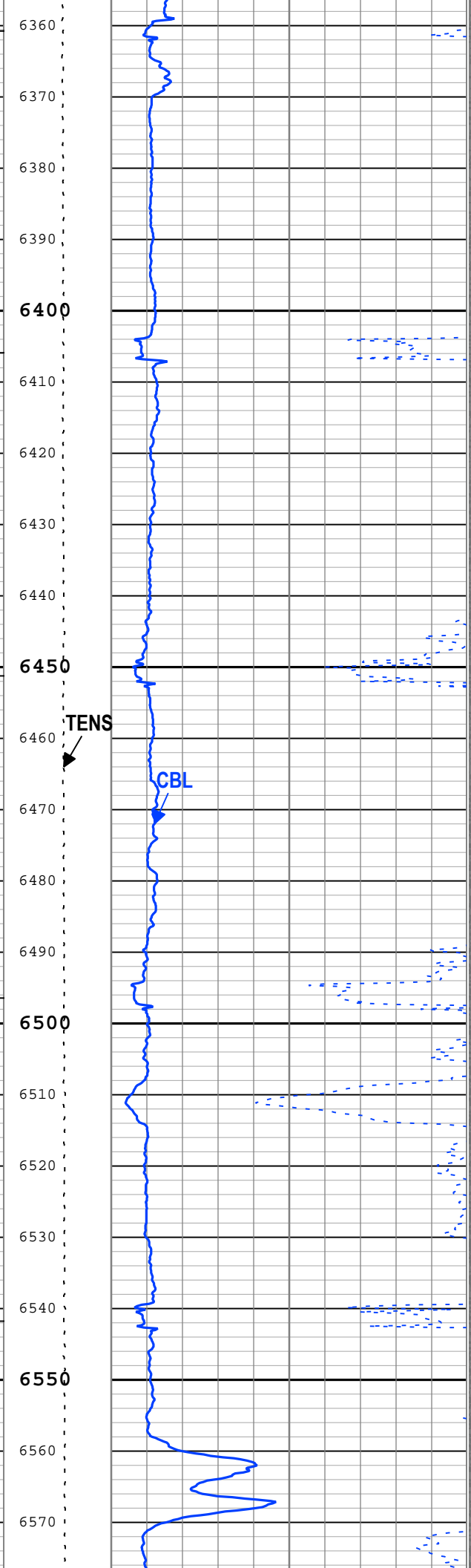
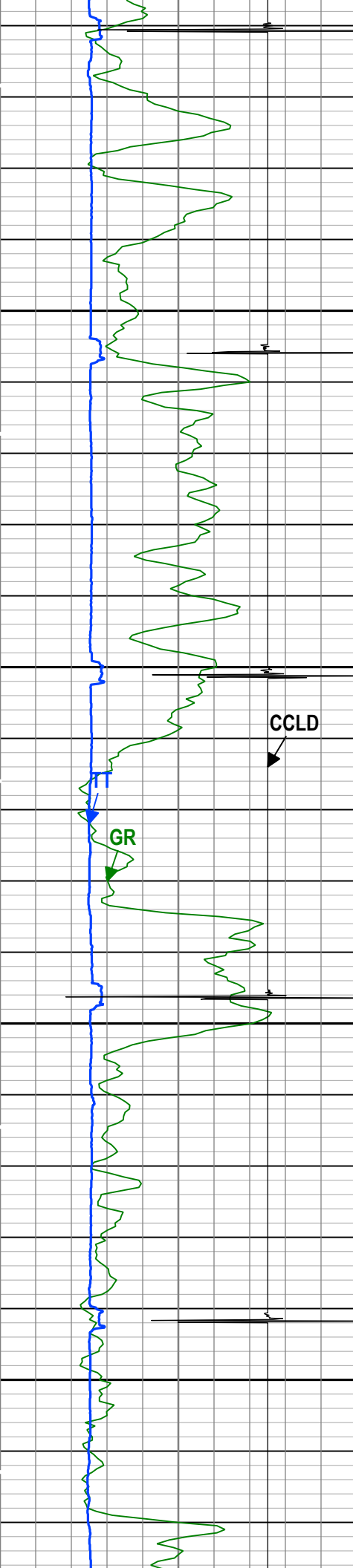




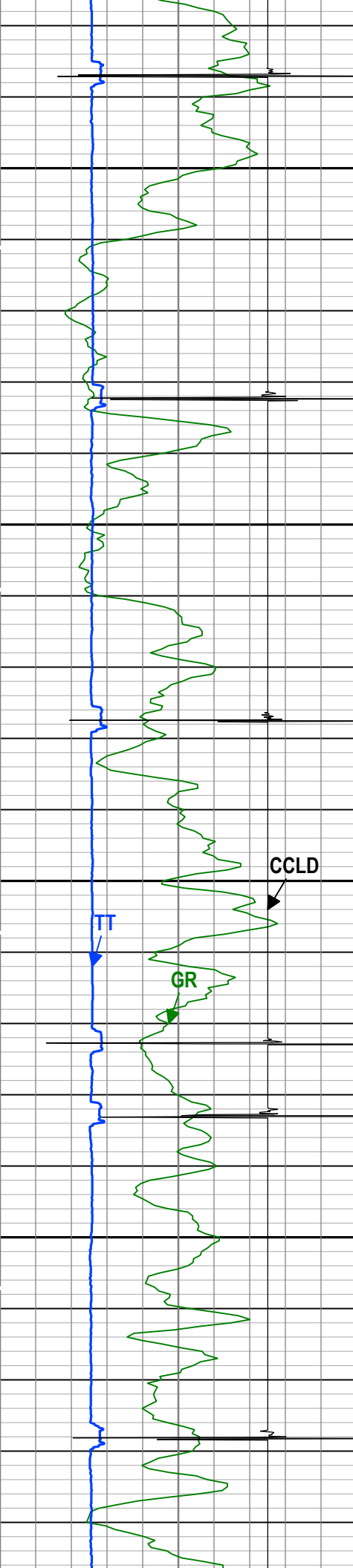
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**5950**  
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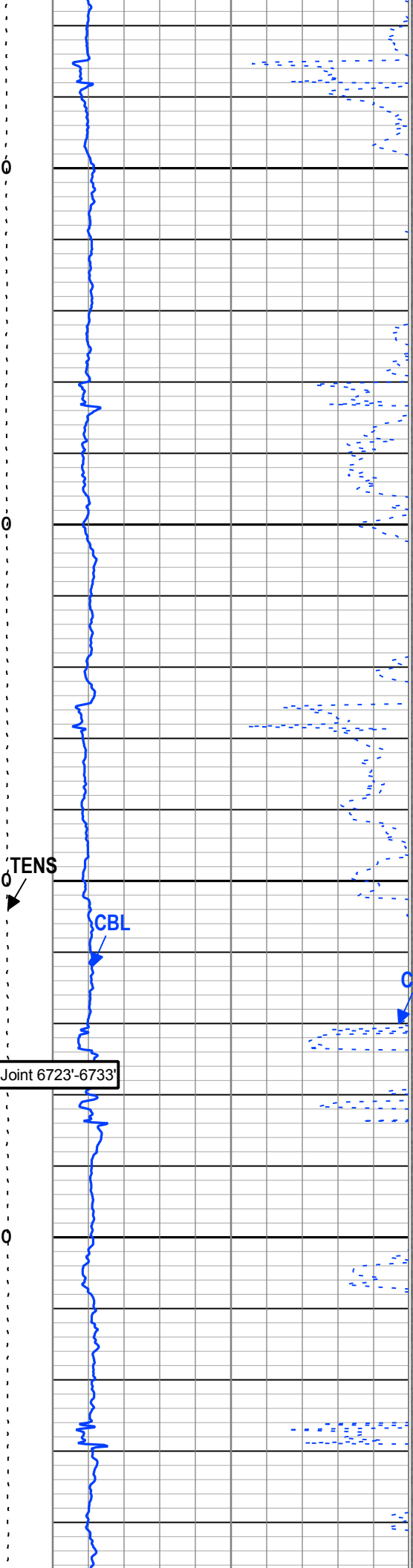




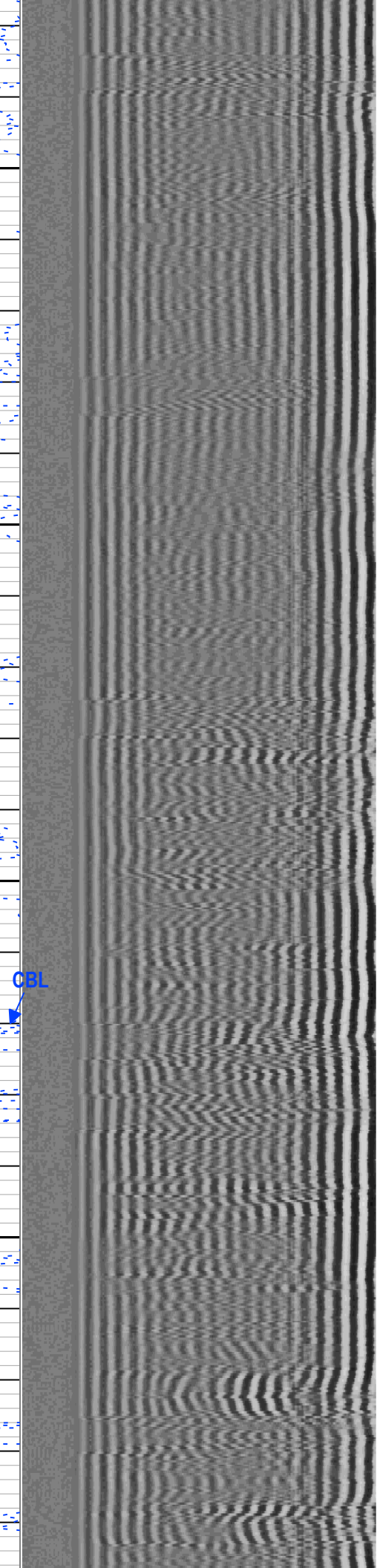


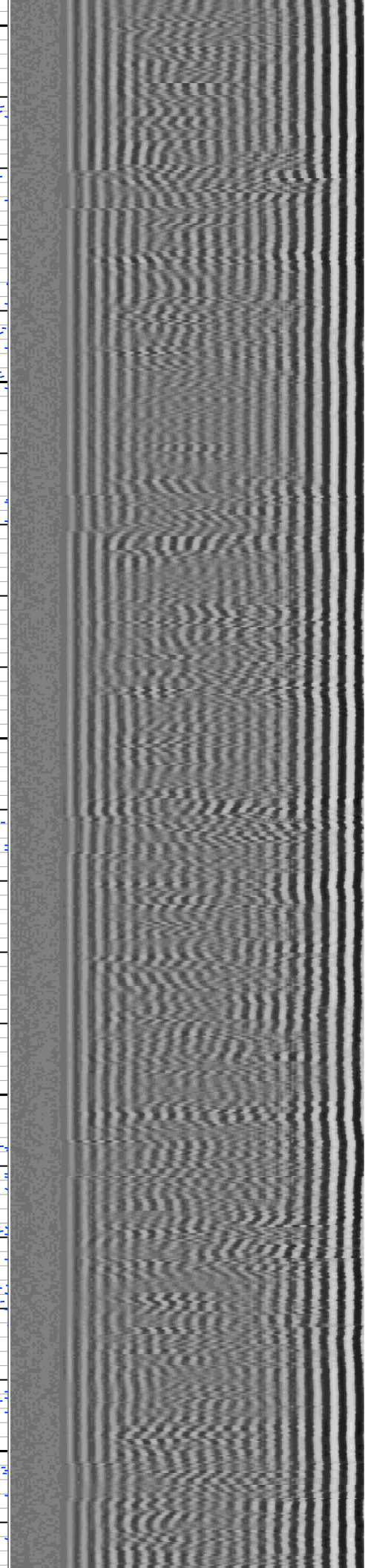
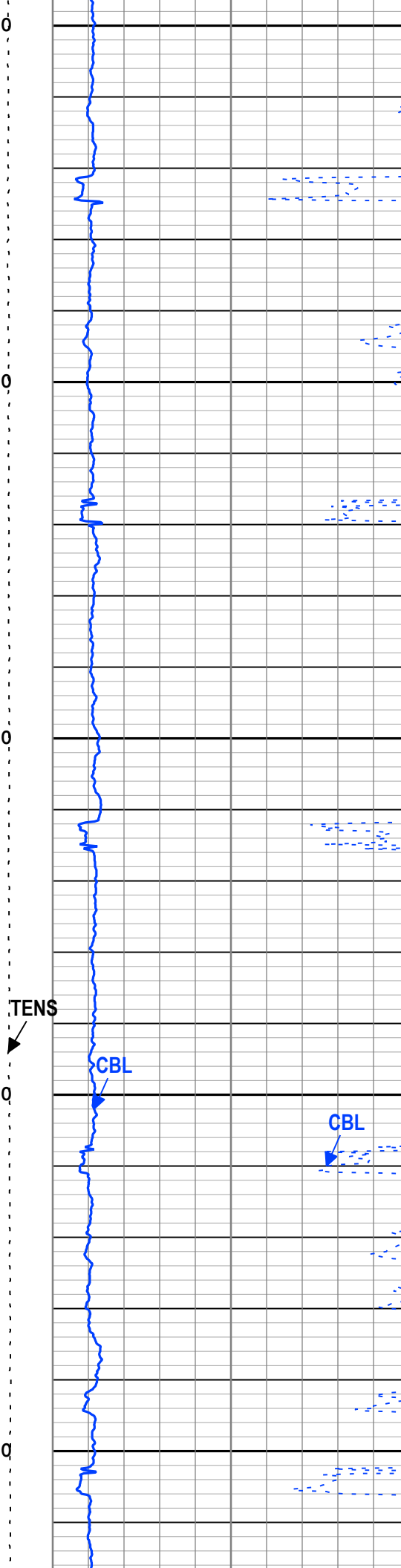
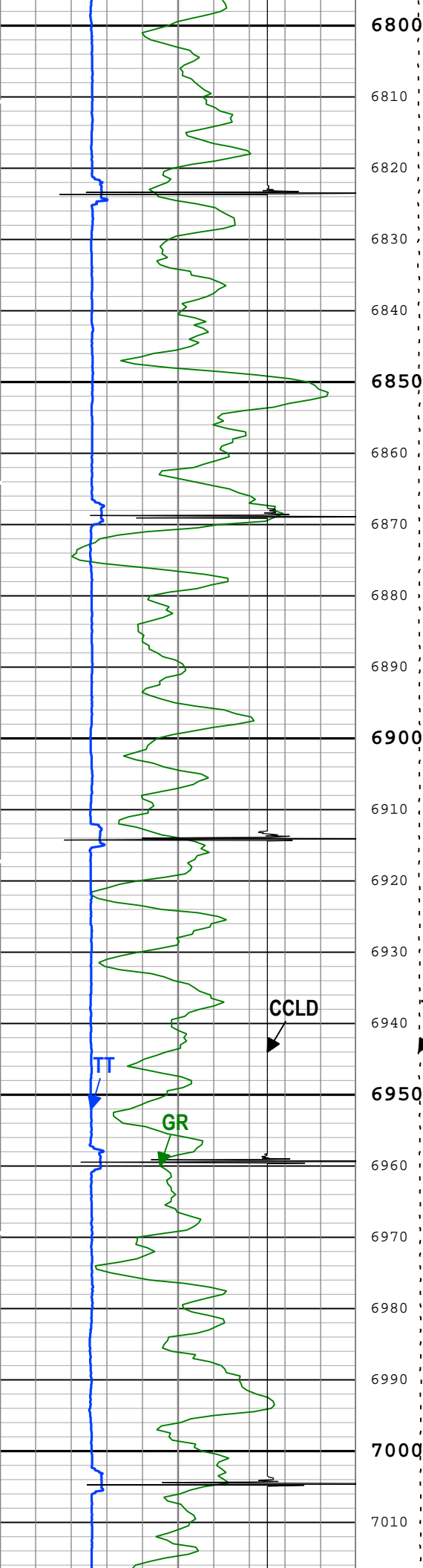


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Short Joint 6723'-6733'

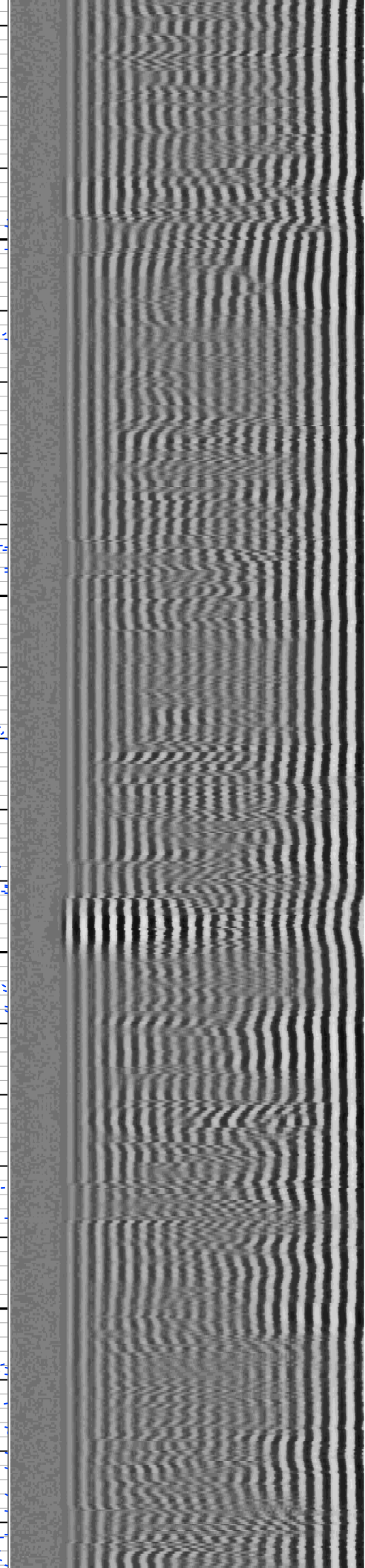
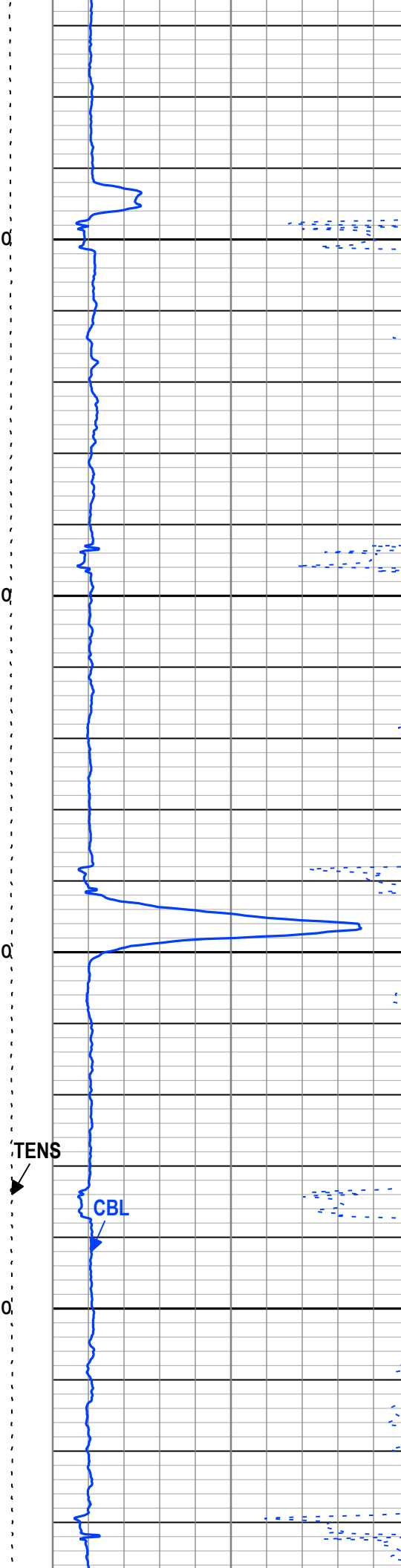


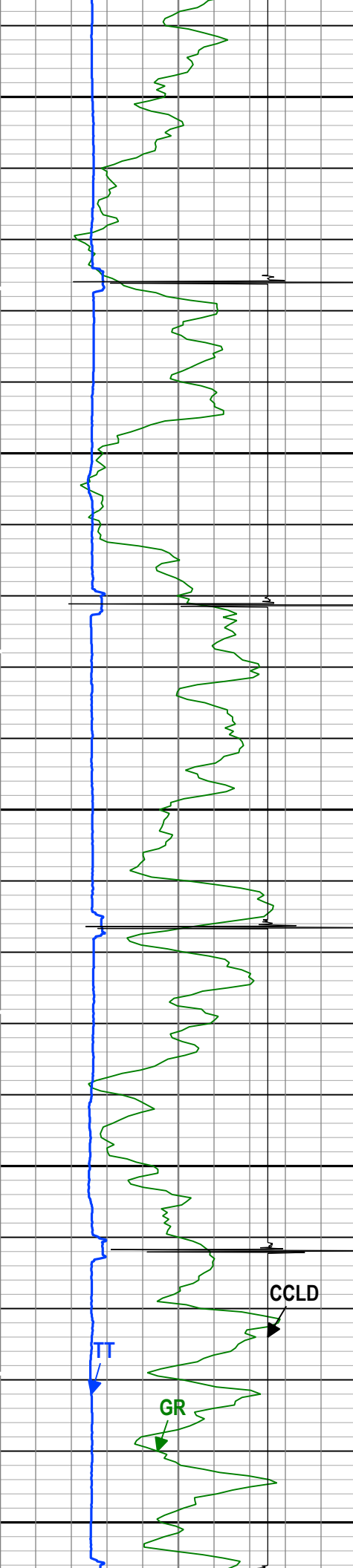




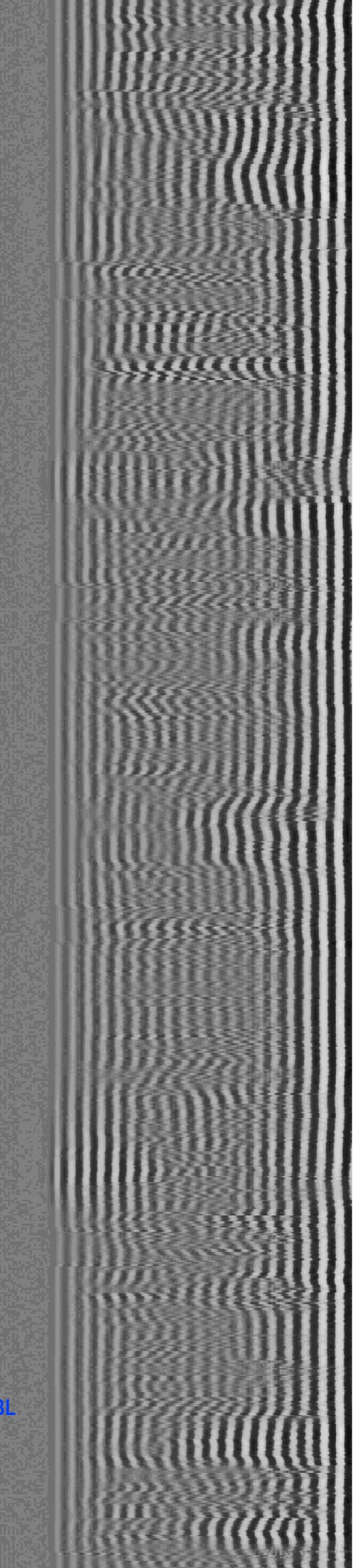
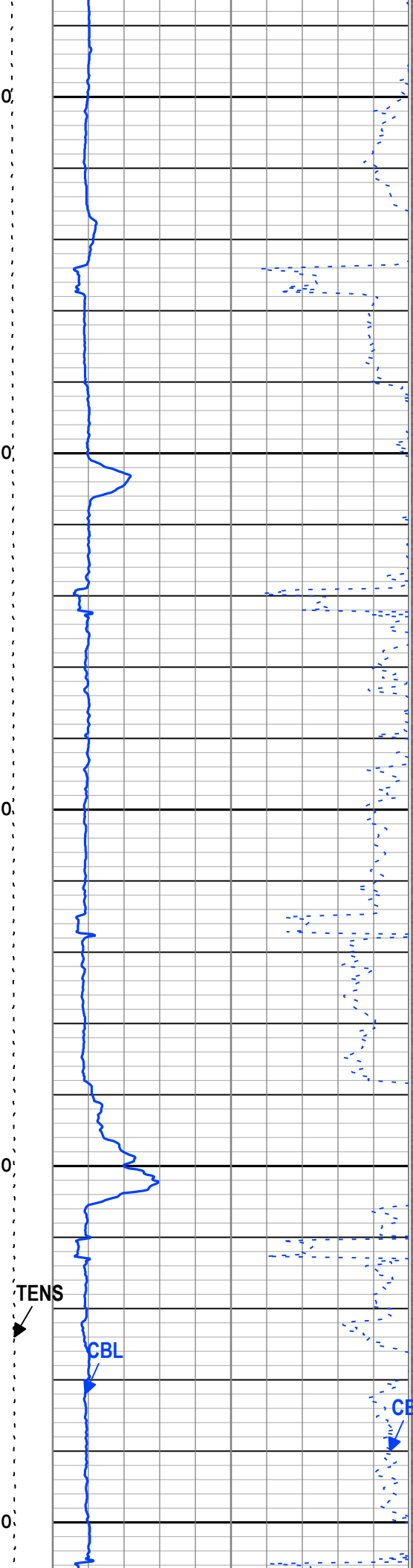


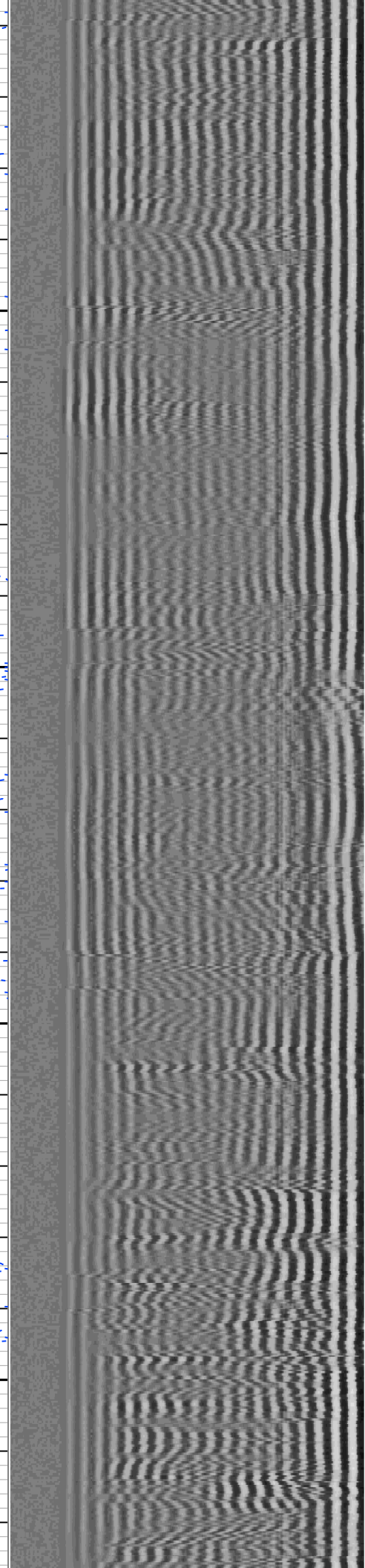
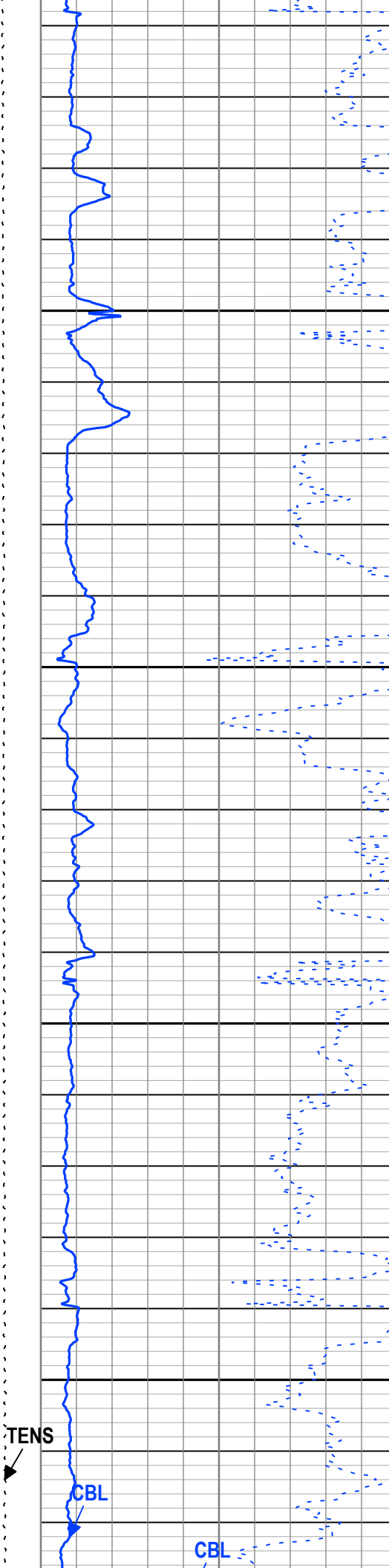
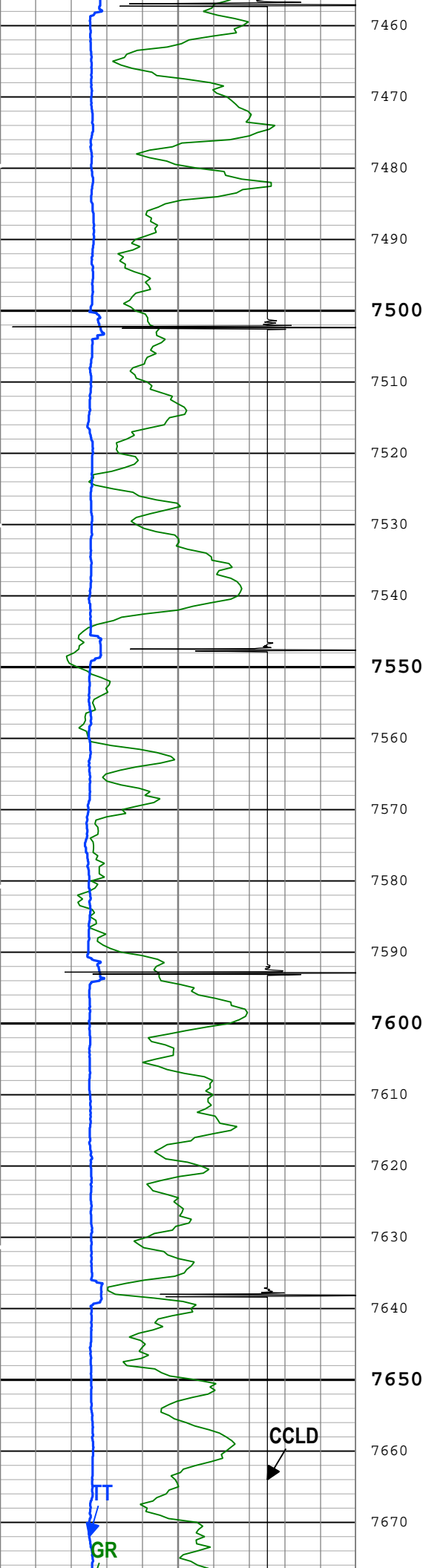
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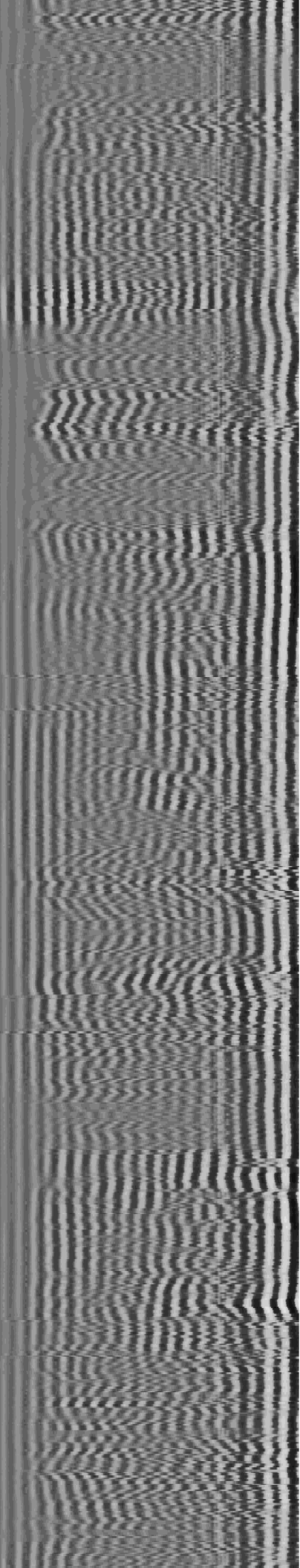
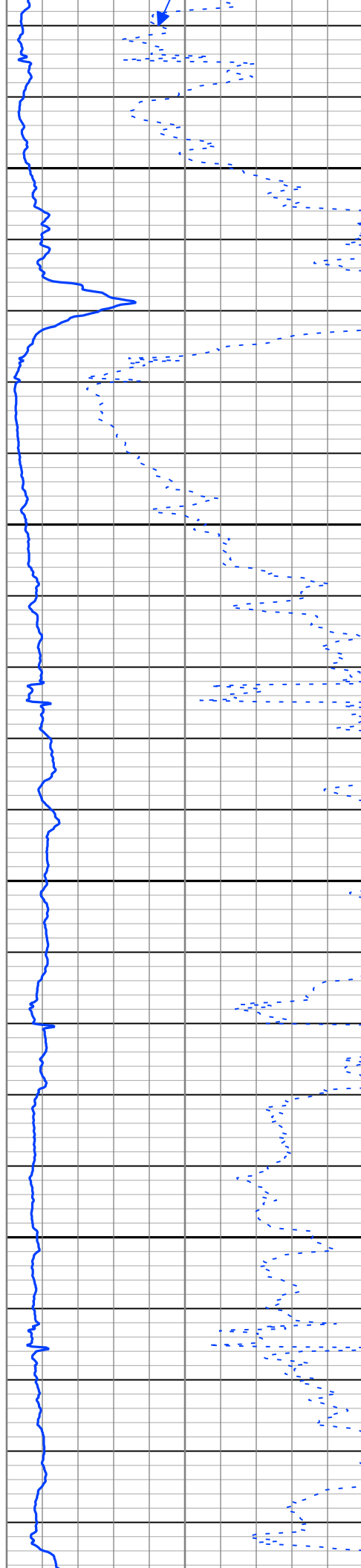
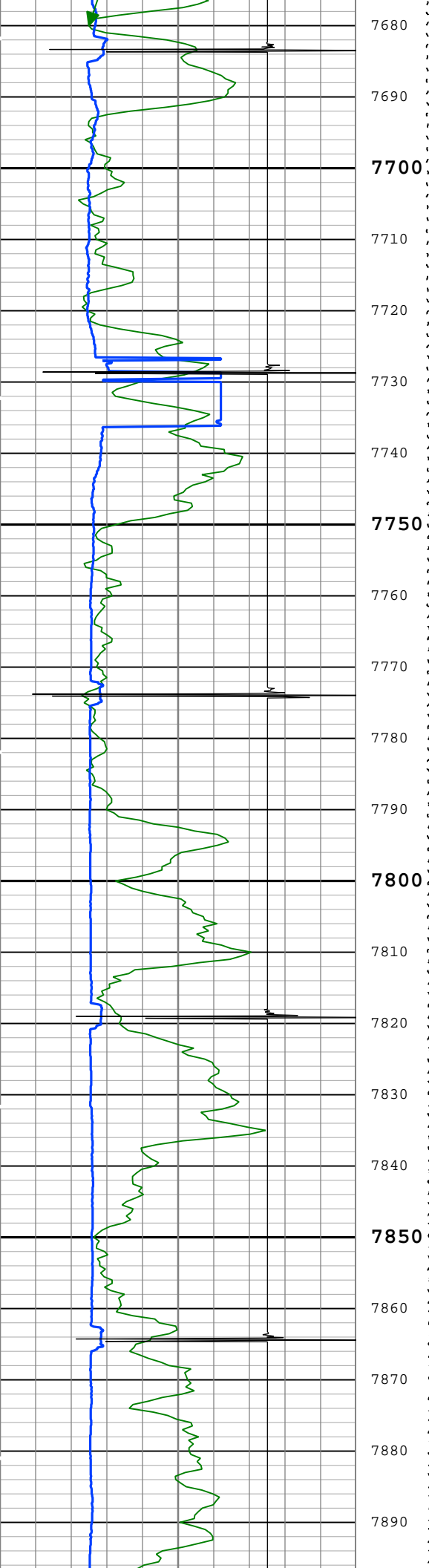




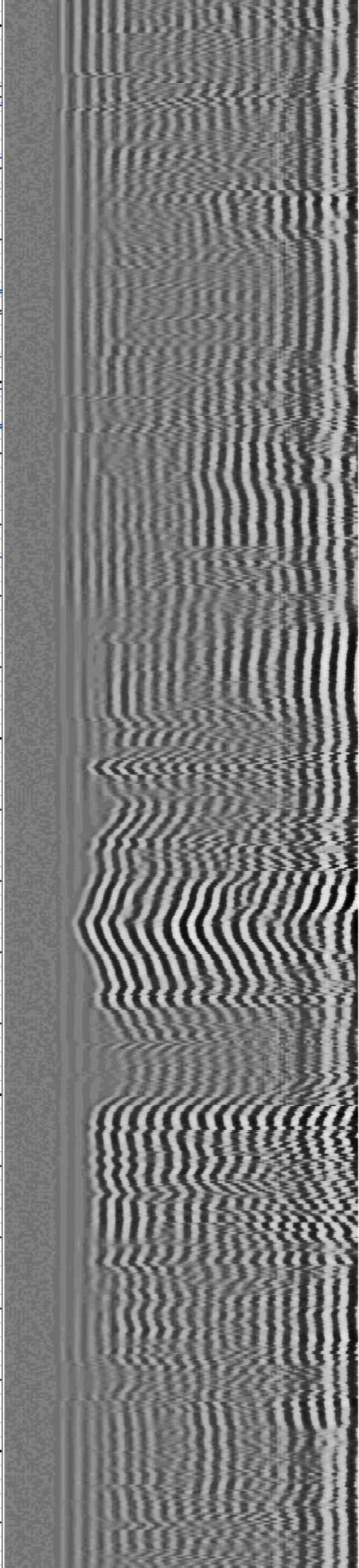
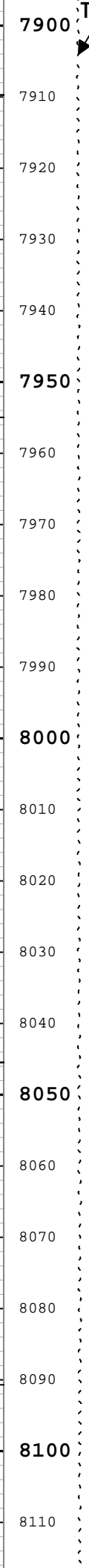
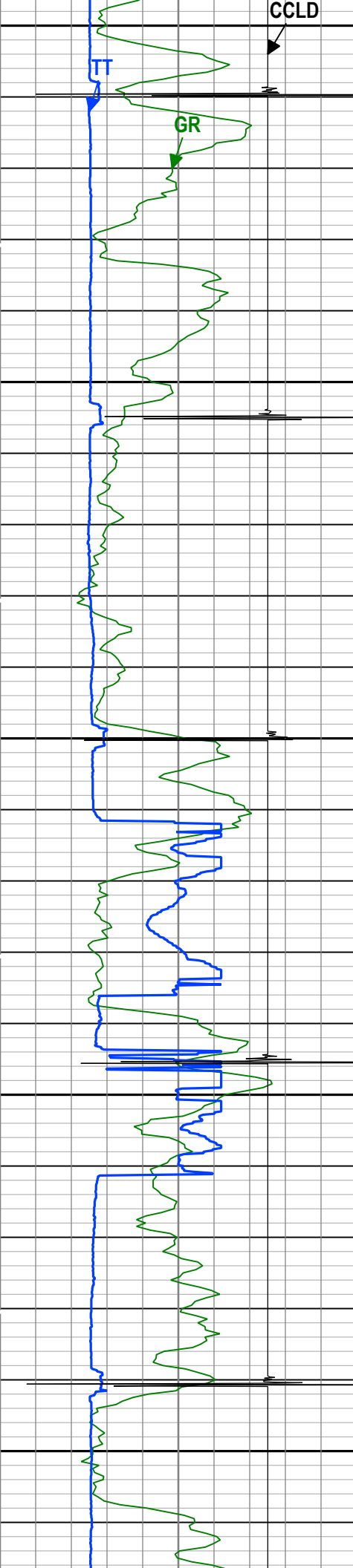
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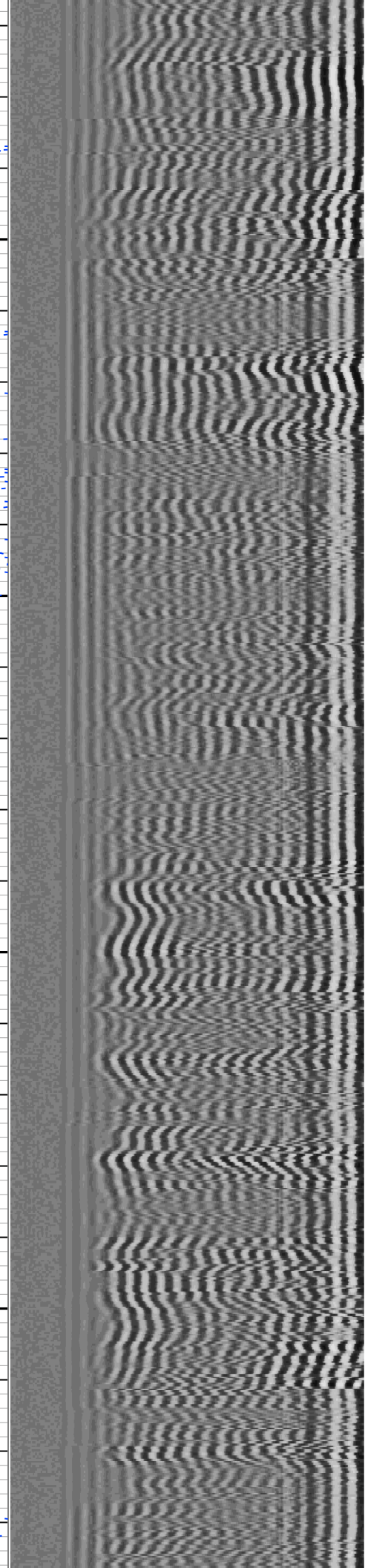
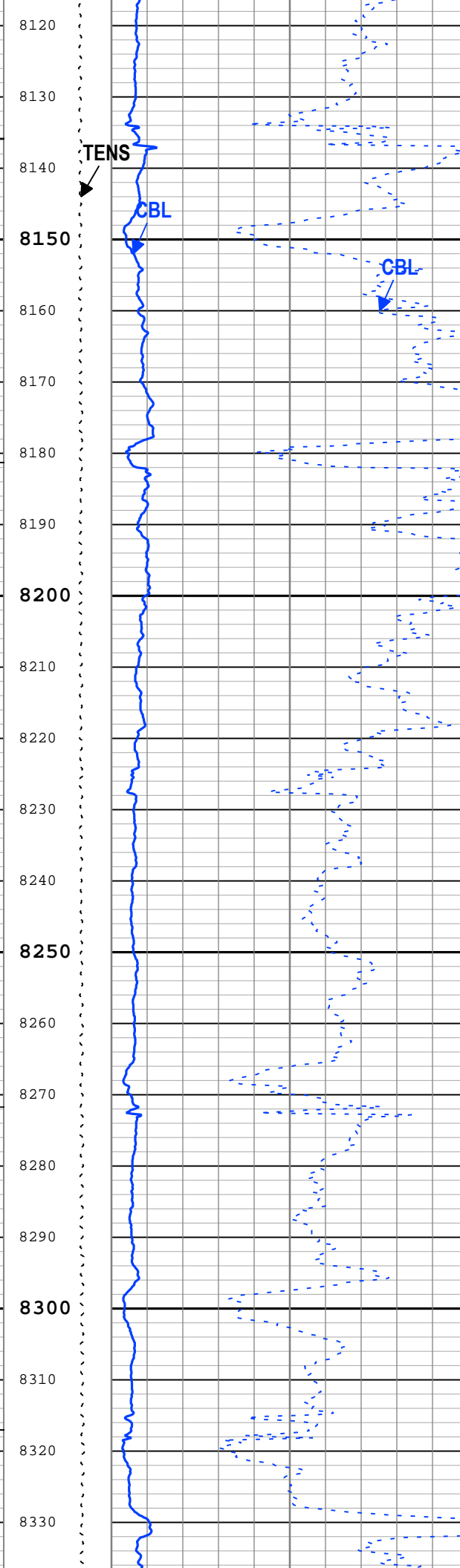
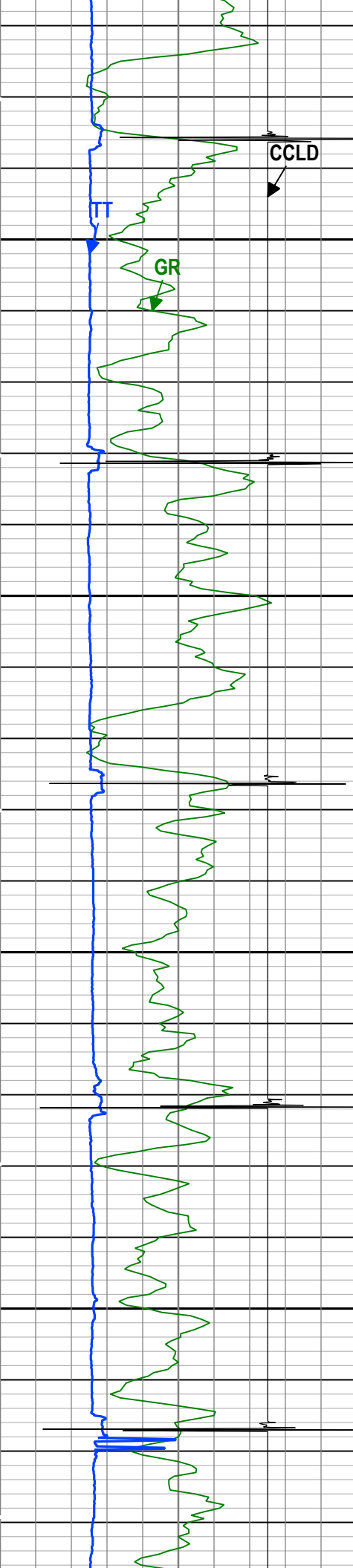




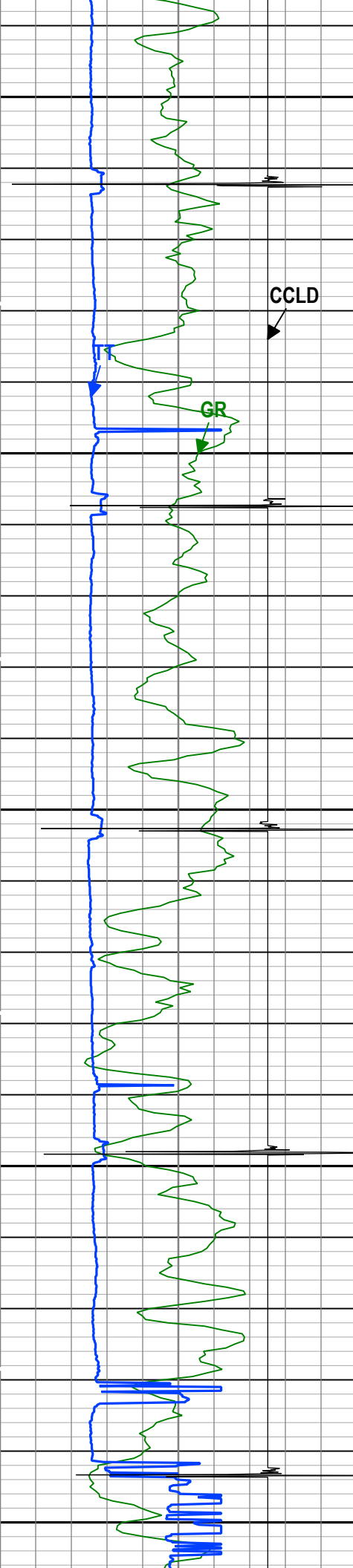




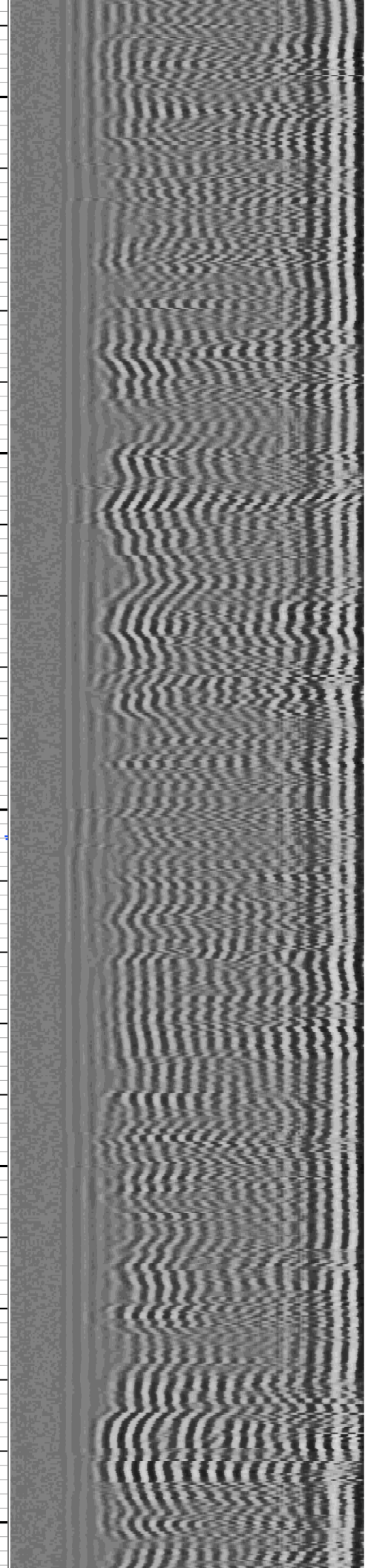
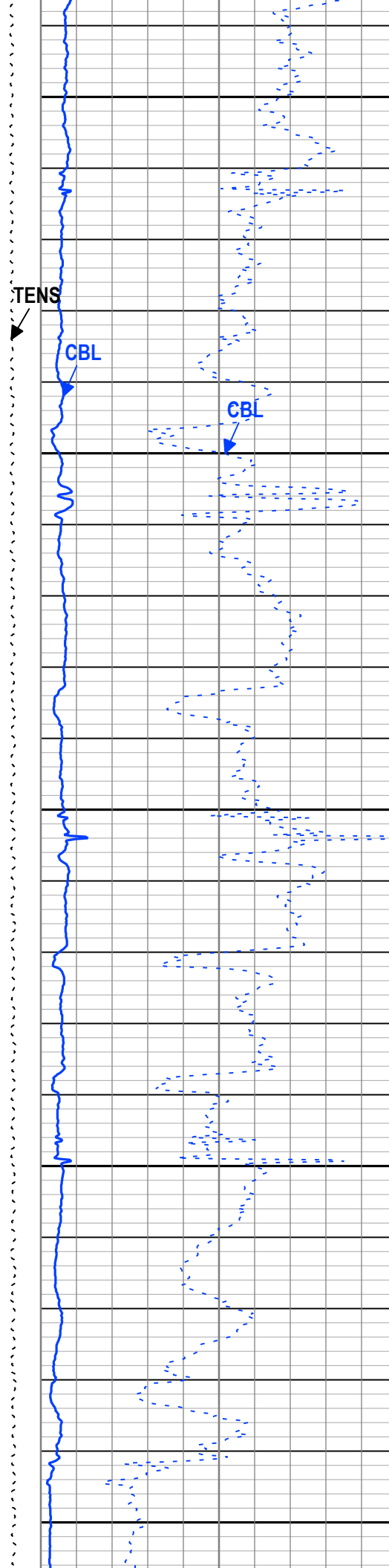


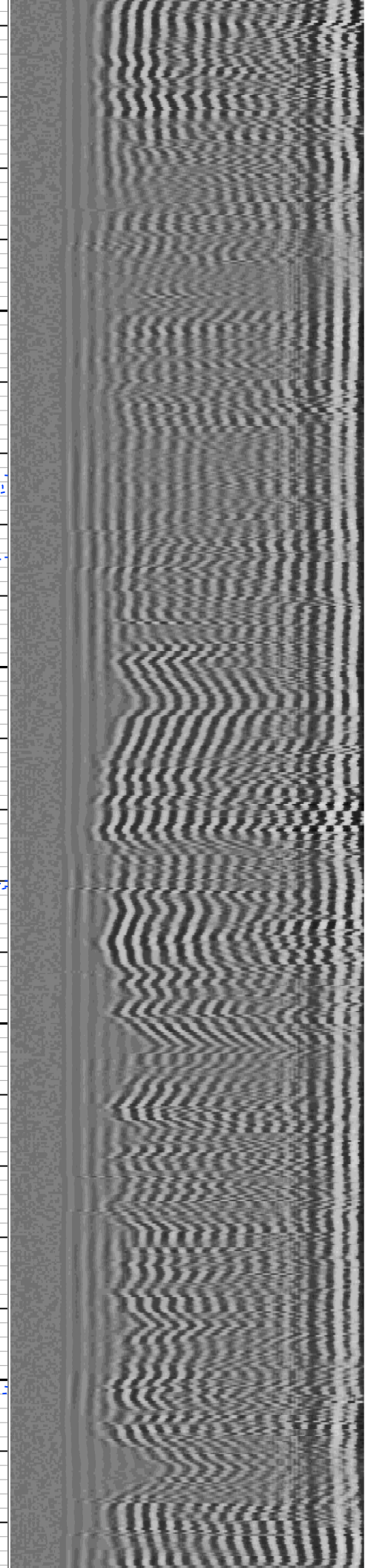
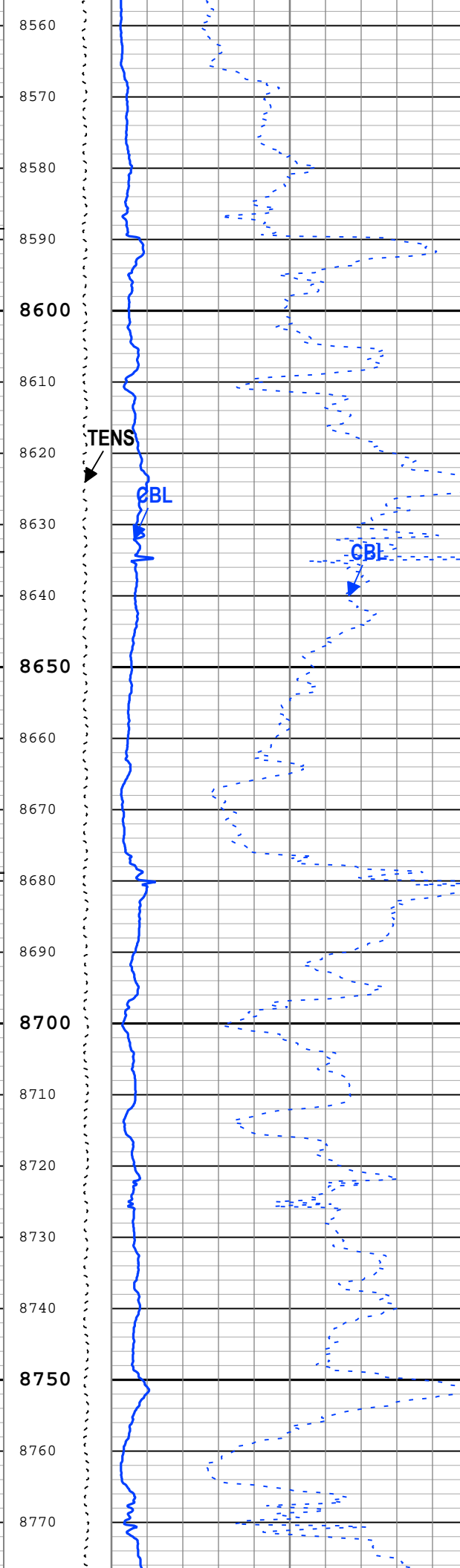
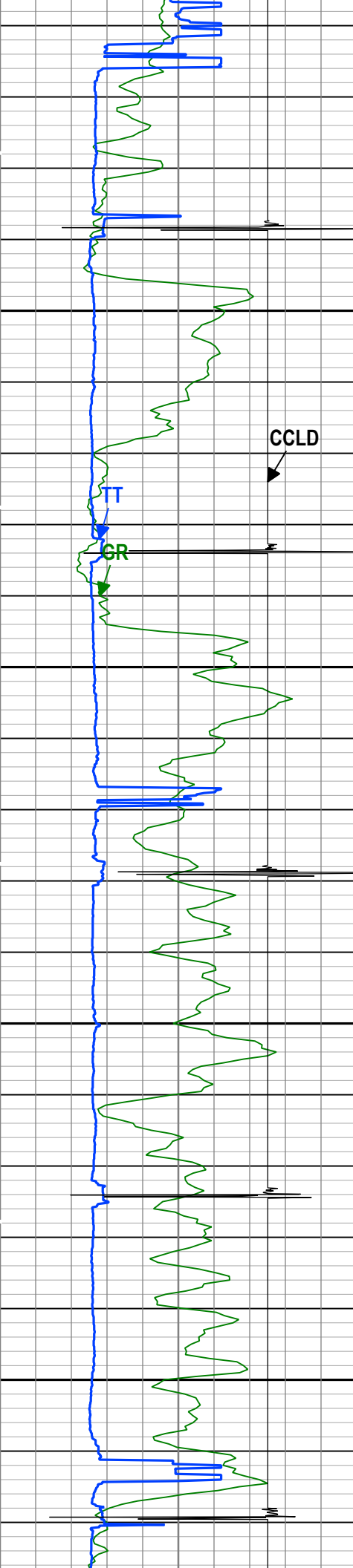


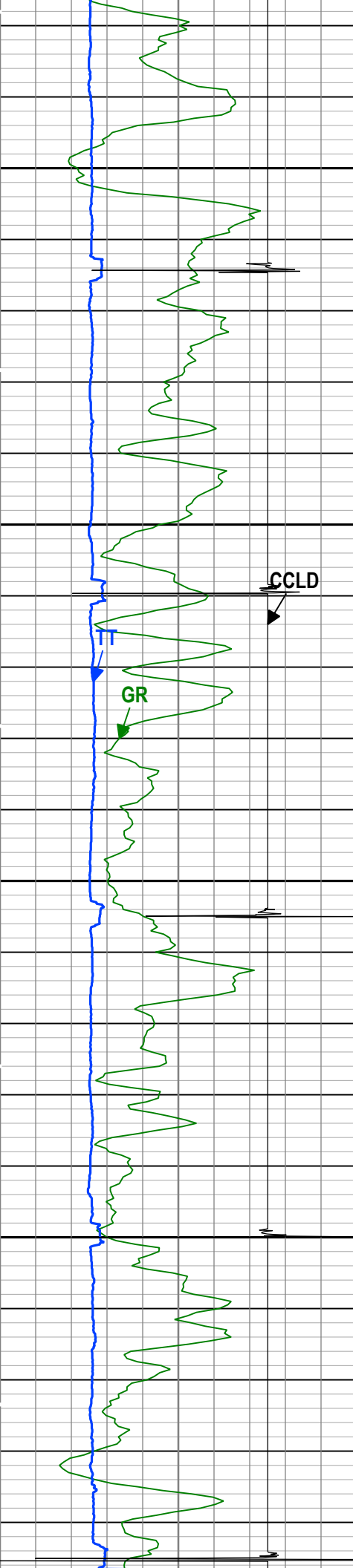




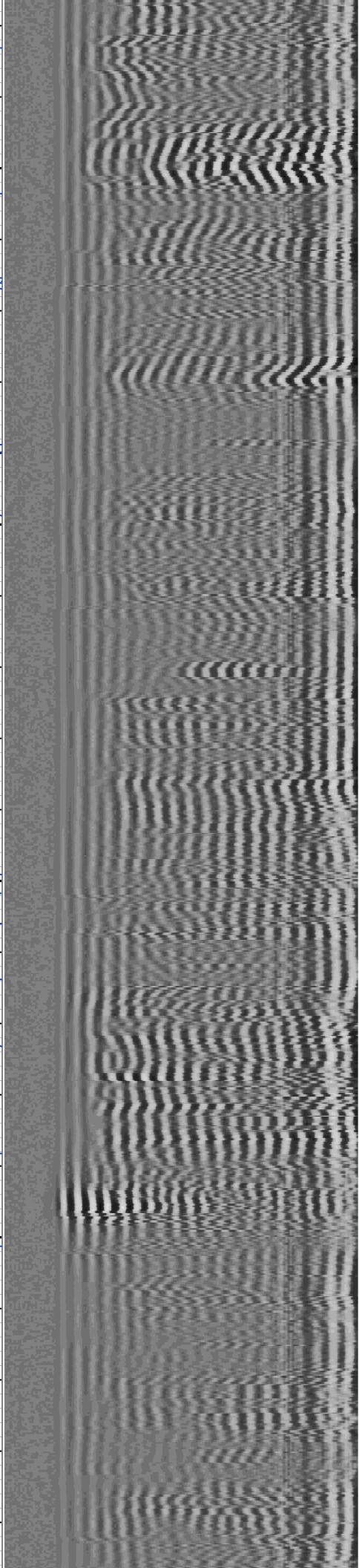
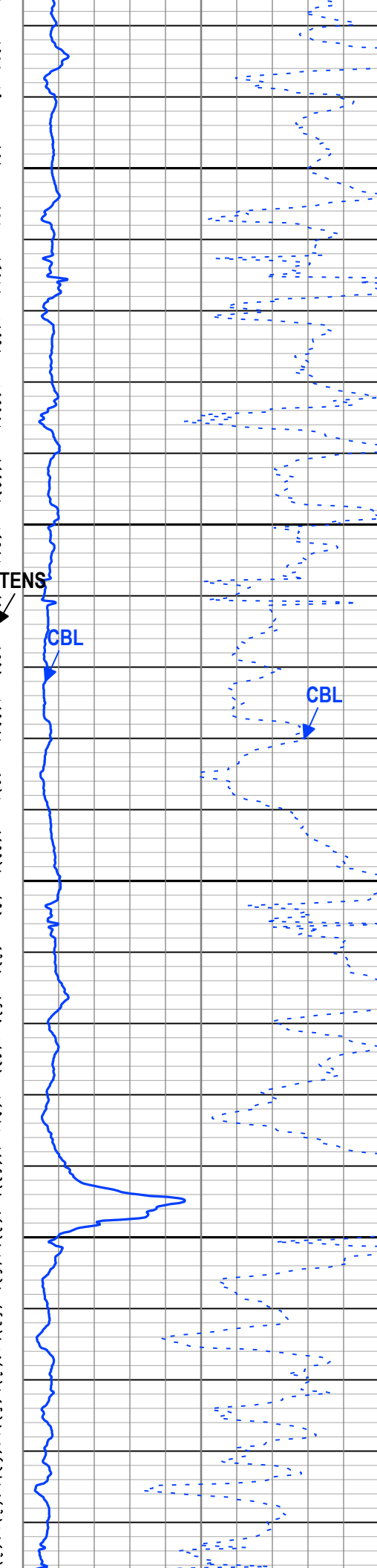
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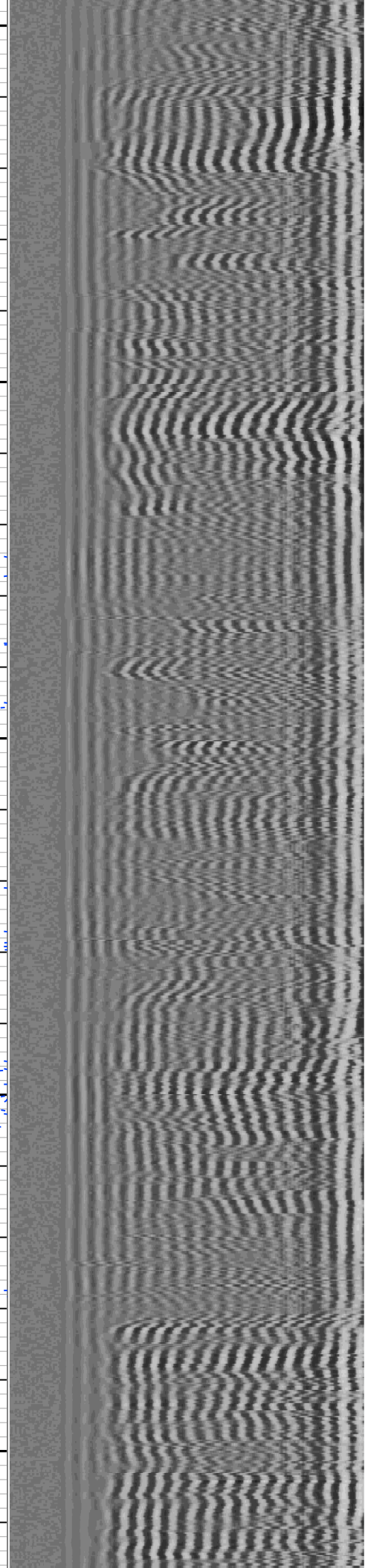
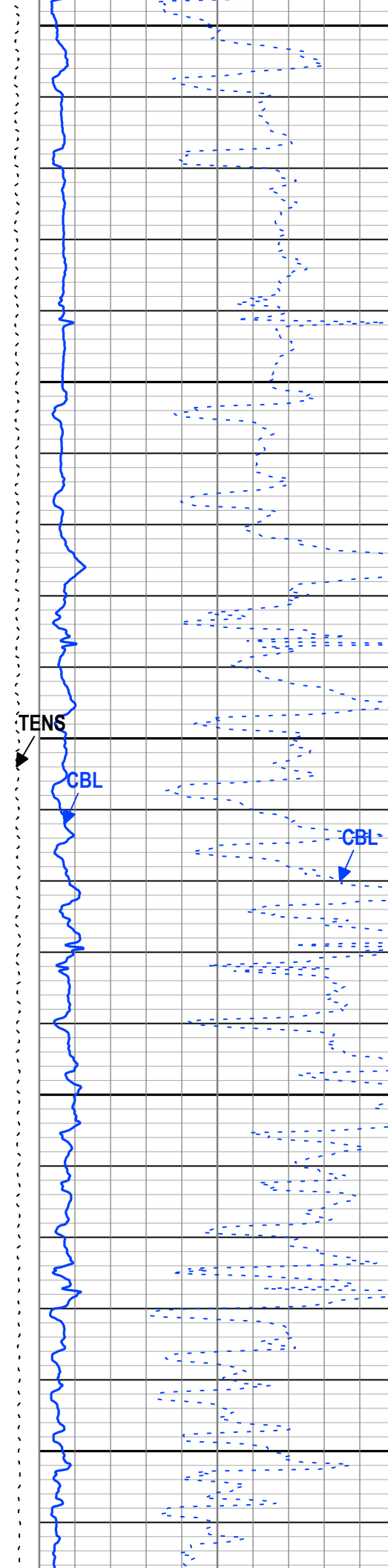
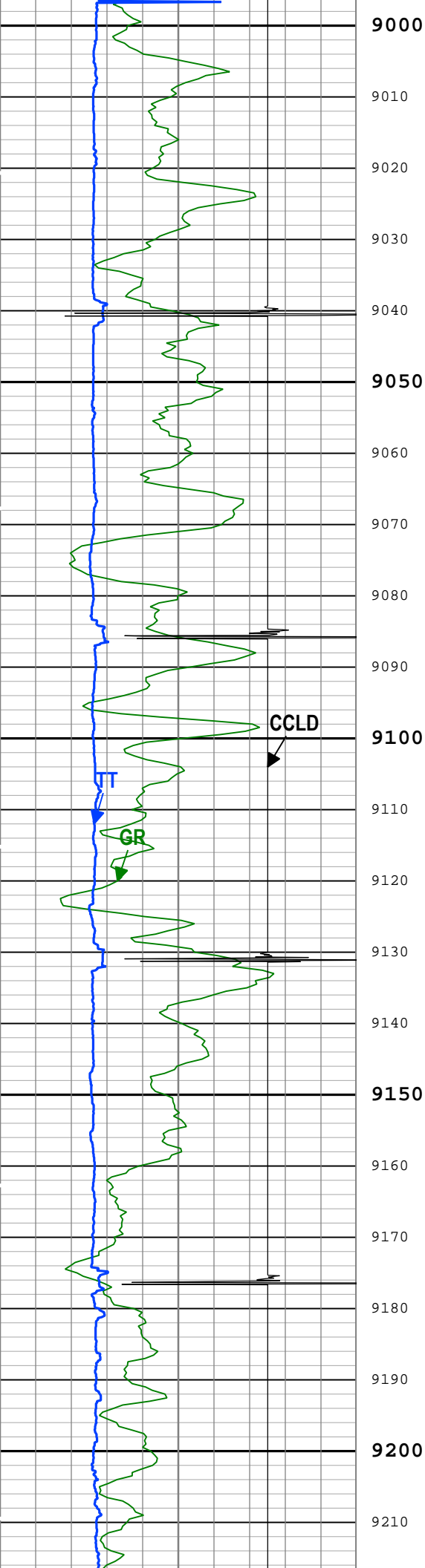




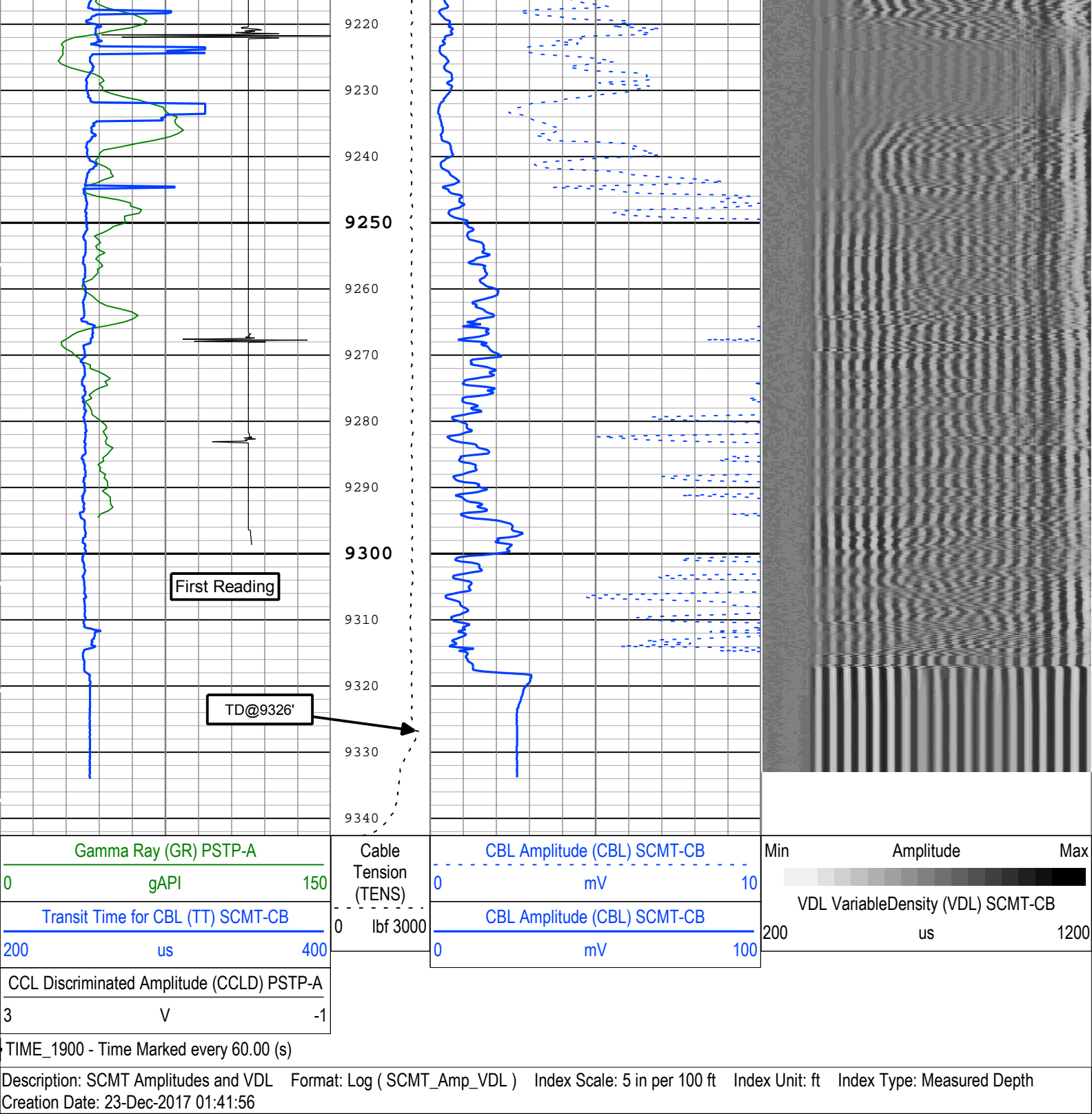


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## Channel Processing Parameters

### One: Parameters

| Parameter    | Description  | Tool      | Value | Unit    |
|--------------|--|-----------|-------|---------|
| BHT          | Bottom Hole Temperature                                  | Borehole  | 212   | degF    |
| CB3G         | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate     | SCMT-CB   | 224   | us      |
| CBLG         | CBL Gate Width   | SCMT-CB   | 40    | us      |
| CBRA         | CBL LQC Reference Amplitude in Free Pipe                 | SCMT-CB   | 80    | mV      |
| DFD          | Drilling Fluid Density                                   | Borehole  | 8.6   | lbm/gal |
| DFT_CATEGORY | Drilling Fluid Type                                      | Borehole  | Water |         |
| EDF          | Elevation of Derrick Floor Above Permanent Datum         | WLSESSION | 30    | ft      |
| EPD          | Elevation of Permanent Datum (PDAT) above Mean Sea Level | WLSESSION | 8432  | ft      |

|           |  |           |                 |              |
|-----------|--|-----------|-----------------|--------------|
| GGRD      | Geothermal Gradient  | Borehole  | 1               | 0.01 degF/ft |
| GOBO_CURR | Good Bond in Arbitrary Cement  | SCMT-CB   | 1.4             | mV           |
| GTSE      | Generalized Temperature Selection, from Measured or Computed Temperature | Borehole  | GTEM_LINEST(RT) |              |
| MATT_CURR | Maximum Attenuation in Arbitrary Cement                                  | SCMT-CB   | 16.92           | dB/ft        |
| MCI       | Minimum Cemented Interval for Isolation                                  | SCMT-CB   | 1.25            | ft           |
| MSA       | Minimum Sonic Amplitude  | SCMT-CB   | 0.51            | mV           |
| MSA_CURR  | Minimum Sonic Amplitude in Arbitrary Cement                              | SCMT-CB   | 0.51            | mV           |
| PDAT      | Permanent Datum  | WLSESSION | GL              |              |
| RUN_SNUM  | Run Sequence Number  | WSDRUN    | 1               |              |
| SHT       | Surface Hole Temperature   | Borehole  | 68              | degF         |

## 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    | 12 dB |      |

One

Repeat Pass

## Software Version

| Acquisition System | Version        |
|--------------------|----------------|
| Maxwell 2017 SP3   | 7.3.92069.3100 |

## Pass Summary

| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                  | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|------------------------|-------------------------|----------|-------------|-----------------------|
| One      | Log[4]:Up      | Up        | 8858.30 ft | 9341.16 ft | 22-Dec-2017 9:54:39 PM | 22-Dec-2017 10:06:31 PM | ON       | 6.74 ft     | Yes                   |

All depths are referenced to toolstring zero

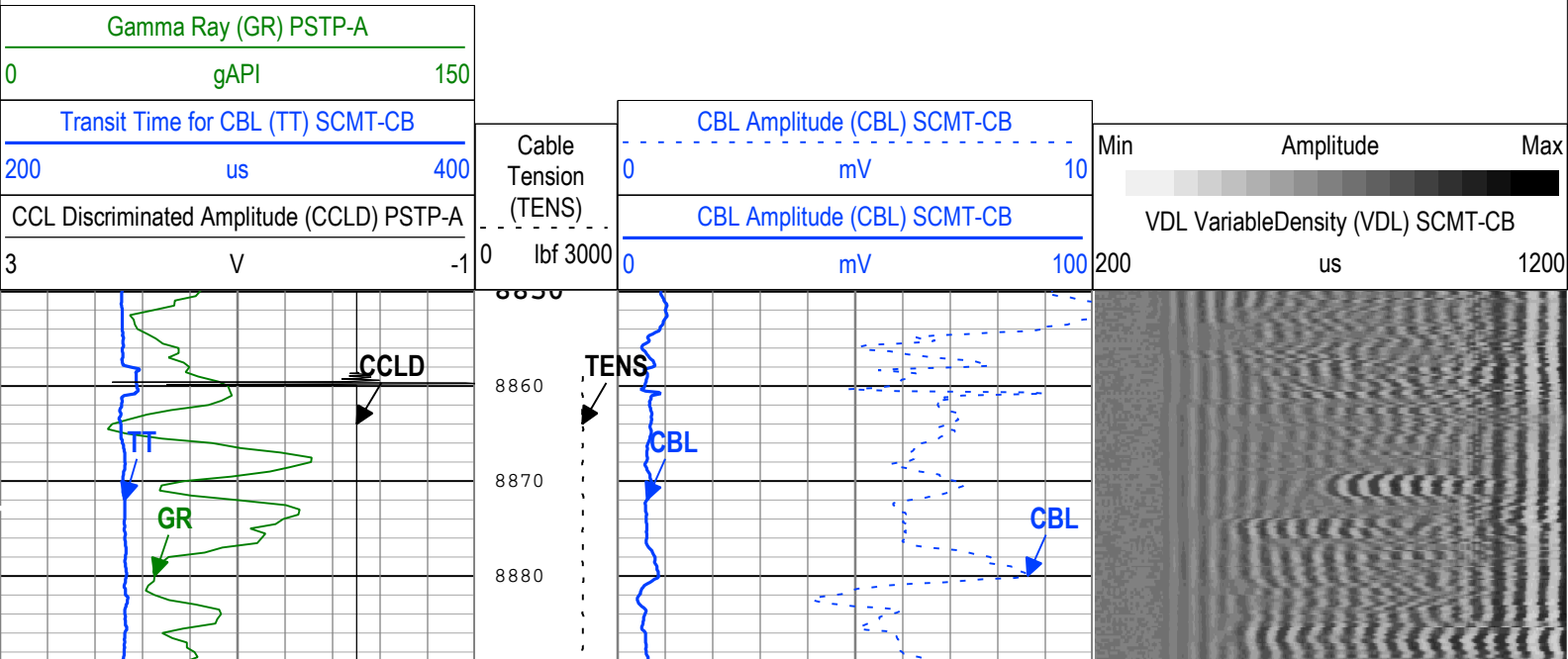
## Log

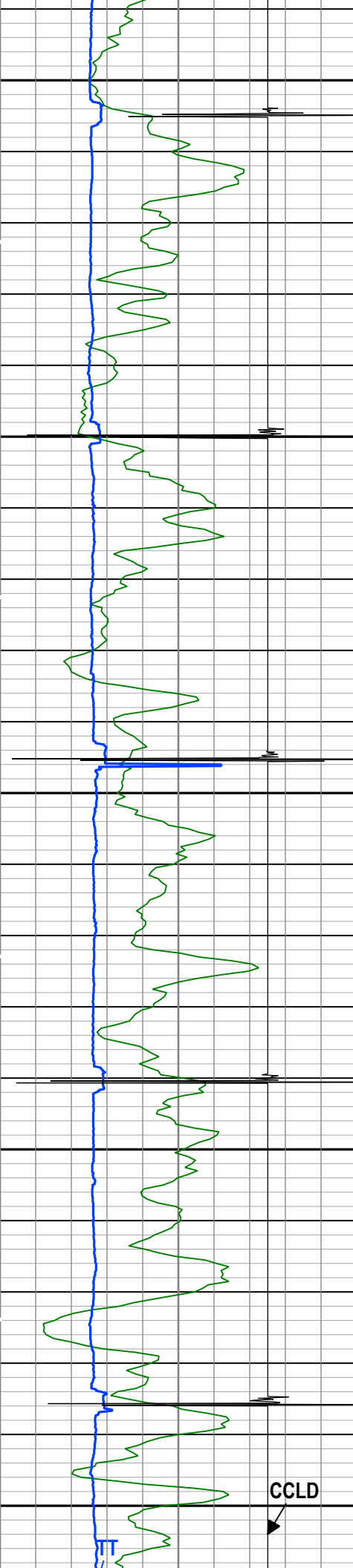
Company:Caerus Operating LLC      Well:Puckett 34A-23 697

One: Log[4]:Up:S005

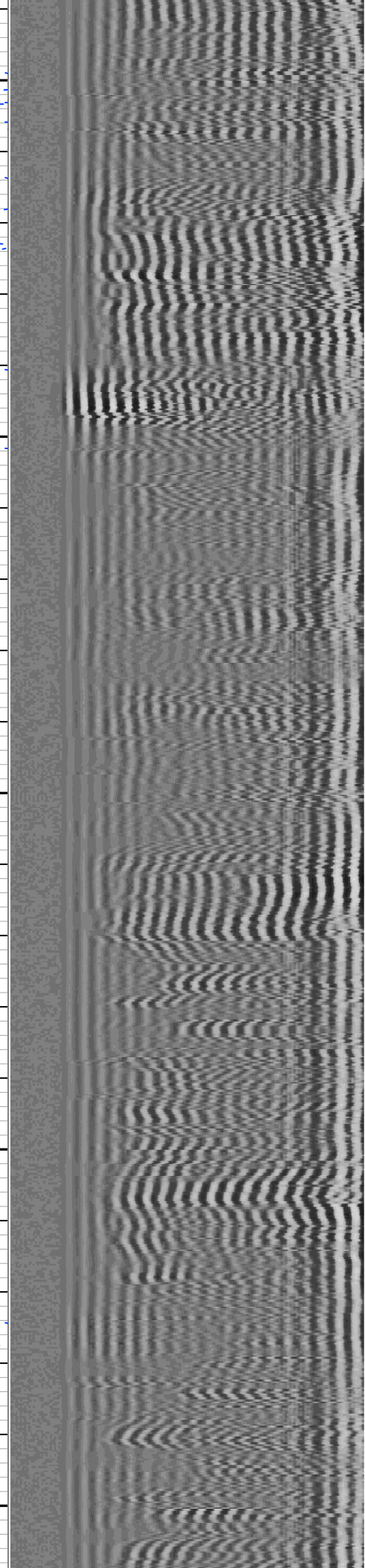
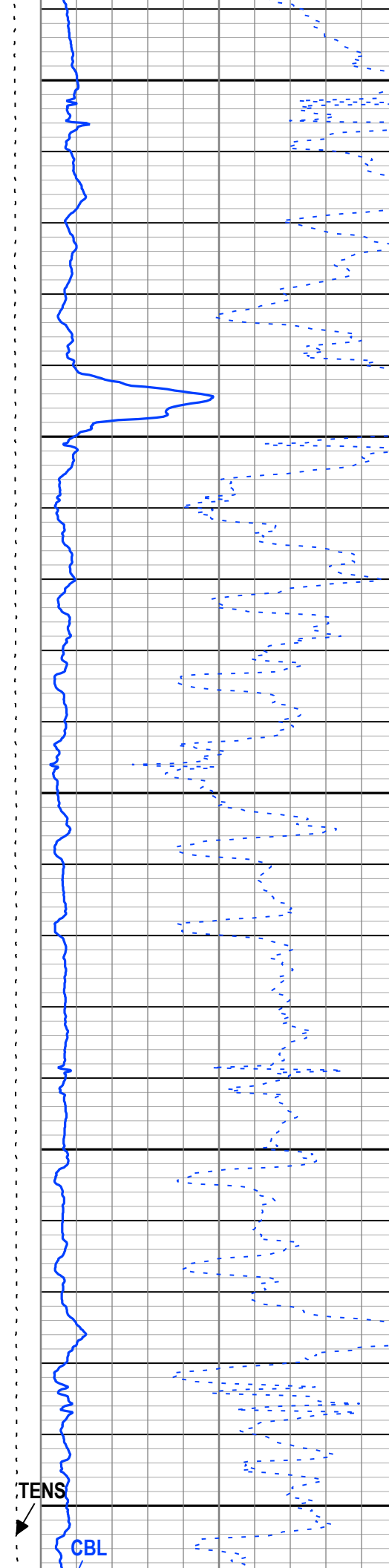
Description: SCMT Amplitudes and VDL    Format: Log ( SCMT\_Amp\_VDL )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth  
Creation Date: 23-Dec-2017 01:42:07

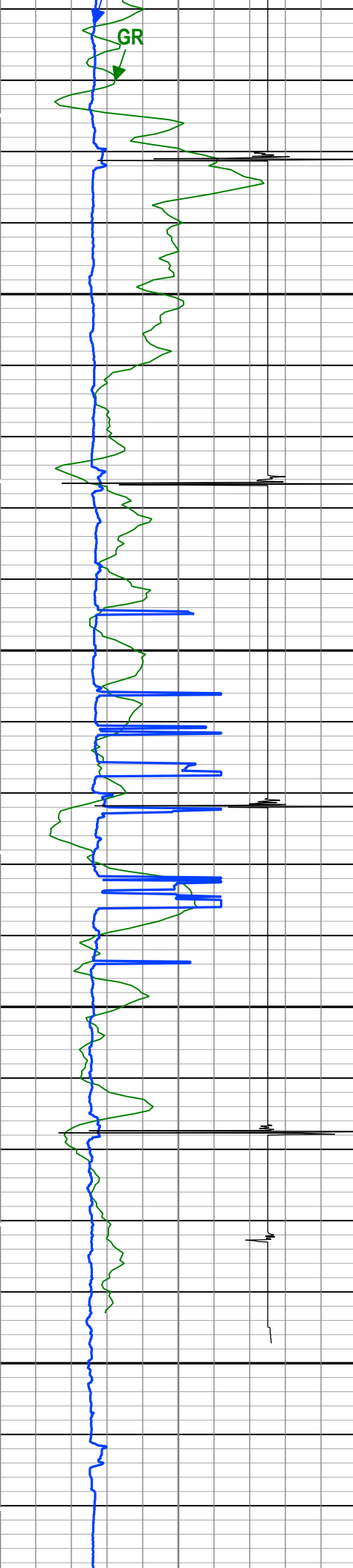
TIME\_1900 - Time Marked every 60.00 (s)



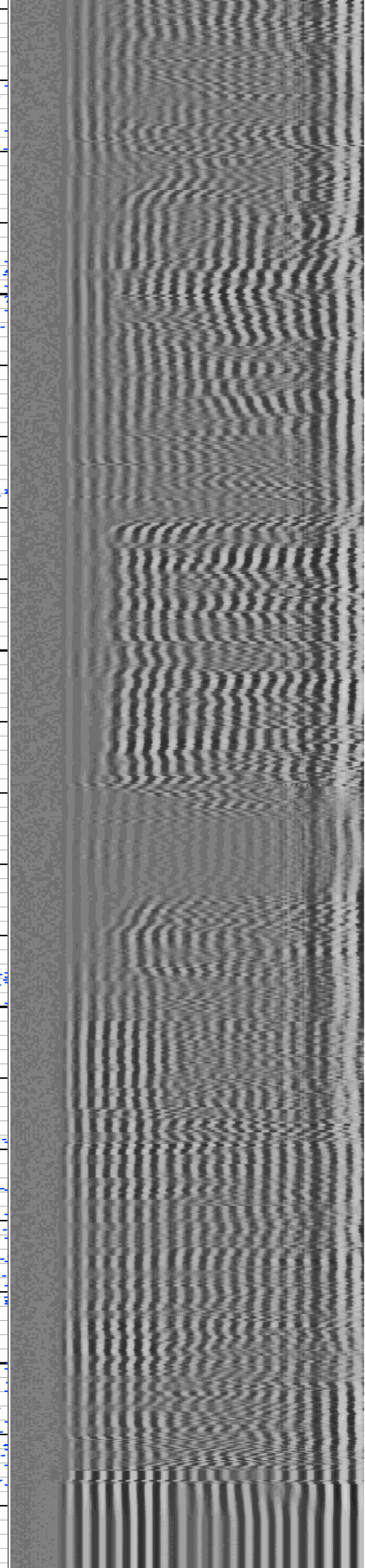
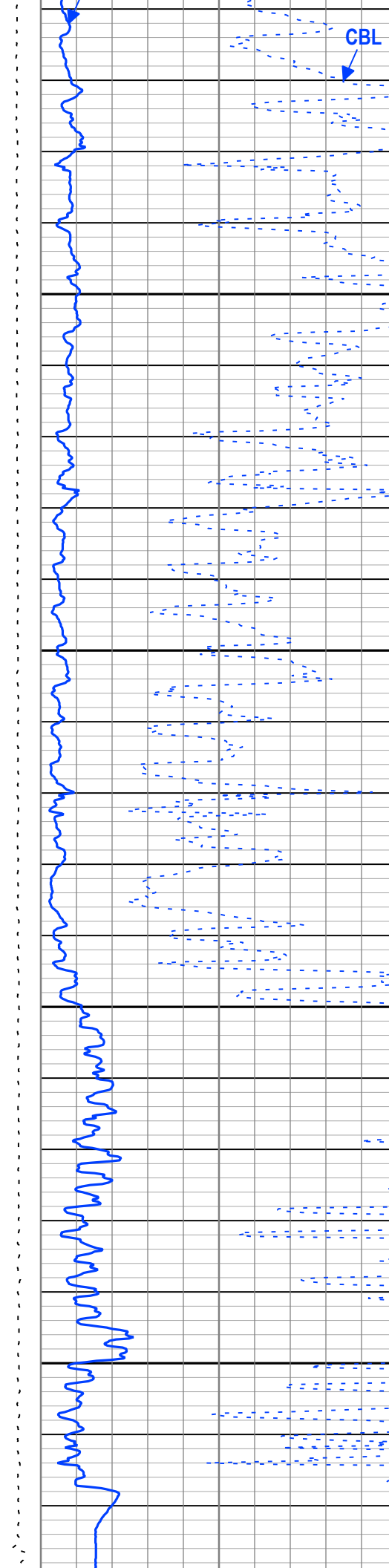


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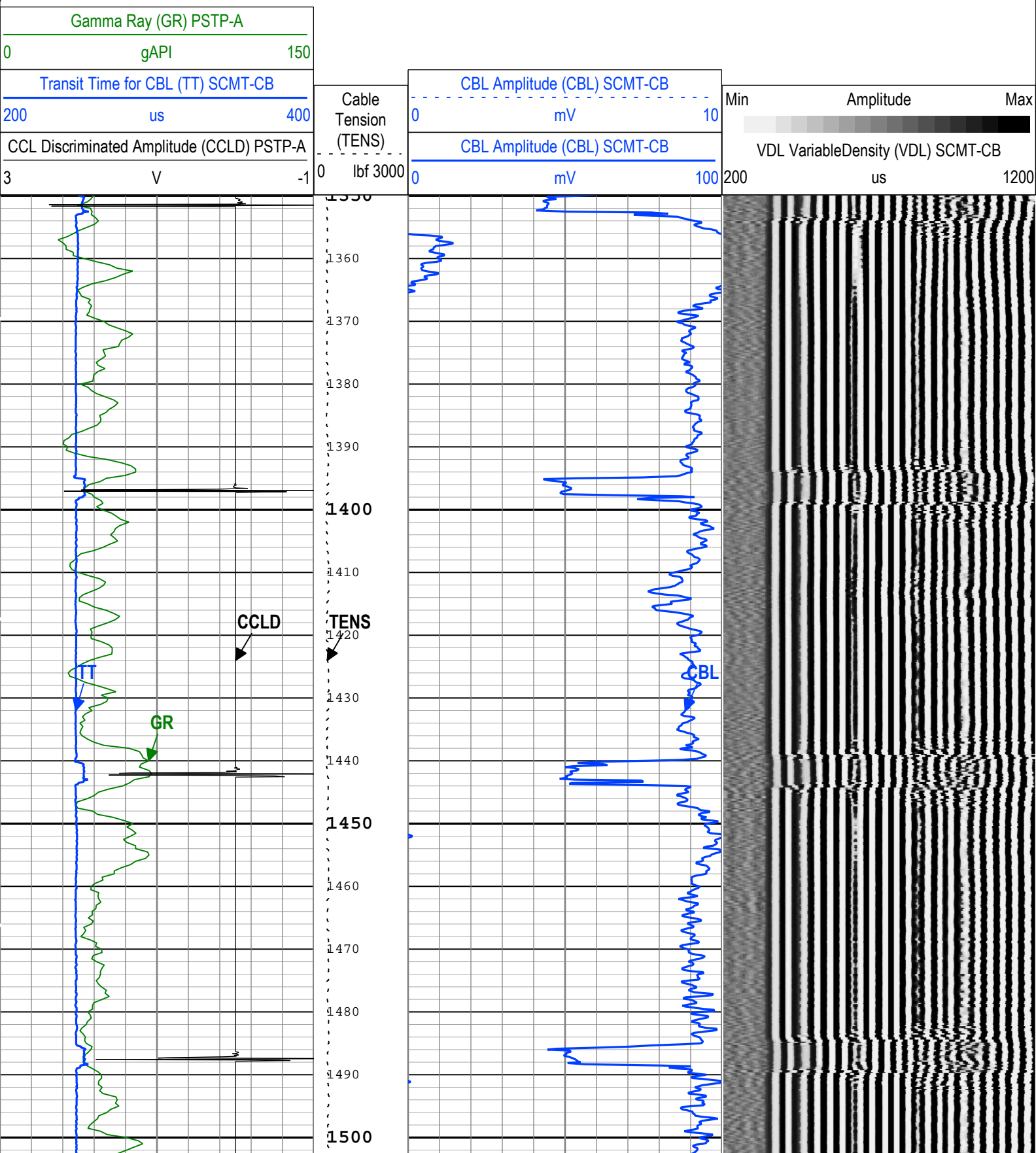
| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                  | Stop                   | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|------------------------|------------------------|----------|-------------|-----------------------|
| One      | Log[2]:Up      | Up        | 1348.75 ft | 1608.26 ft | 22-Dec-2017 9:05:49 PM | 22-Dec-2017 9:11:28 PM | ON       | 0.00 ft     | No                    |

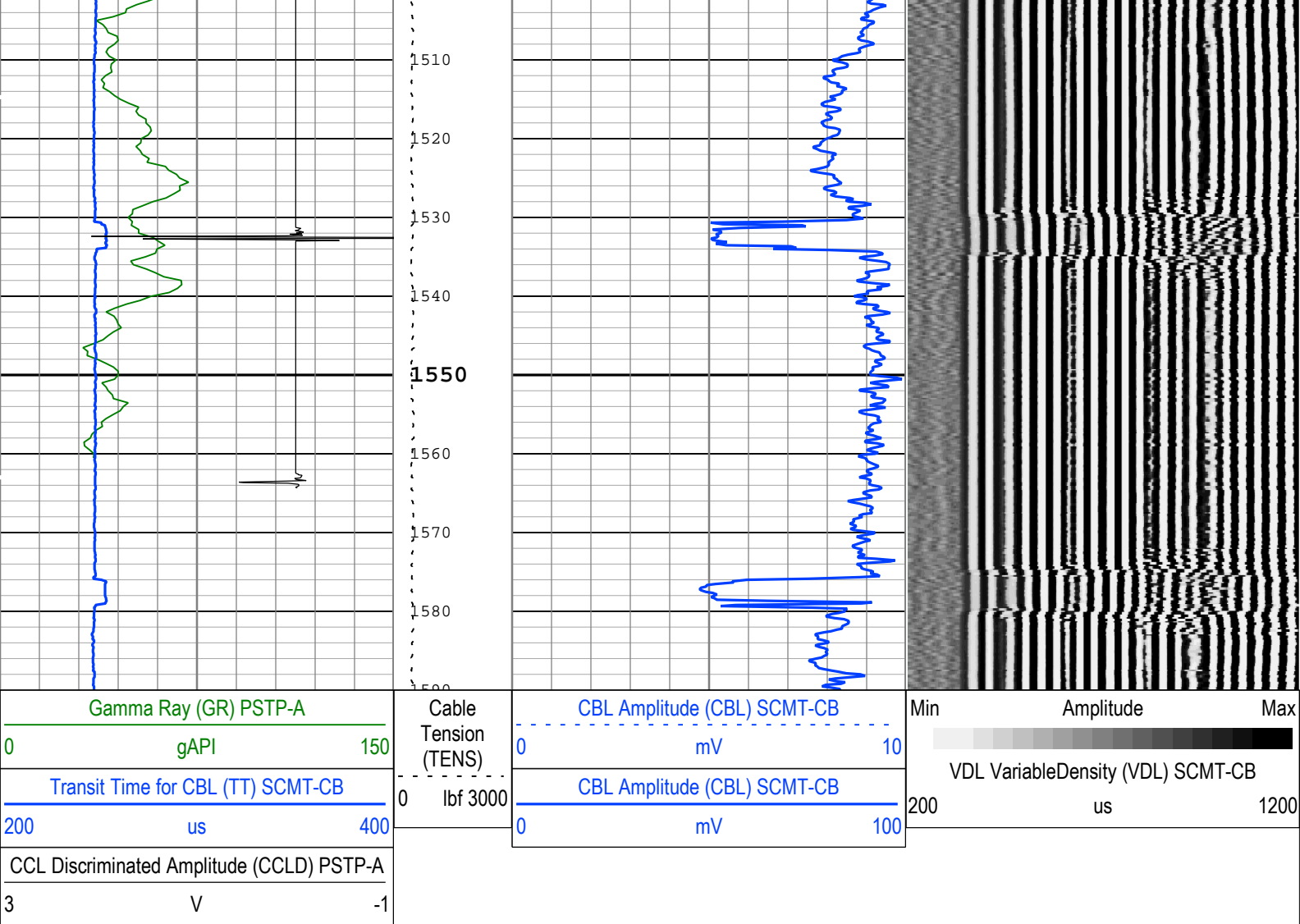
All depths are referenced to toolstring zero

|     |                              |                         |
|-----|------------------------------|-------------------------|
| Log | Company:Caerus Operating LLC | Well:Puckett 34A-23 697 |
|     |                              | One: Log[2]:Up:S005     |

Description: SCMT Amplitudes and VDL    Format: Log ( SCMT\_Amp\_VDL )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth  
Creation Date: 23-Dec-2017 01:42:10

TIME\_1900 - Time Marked every 60.00 (s)





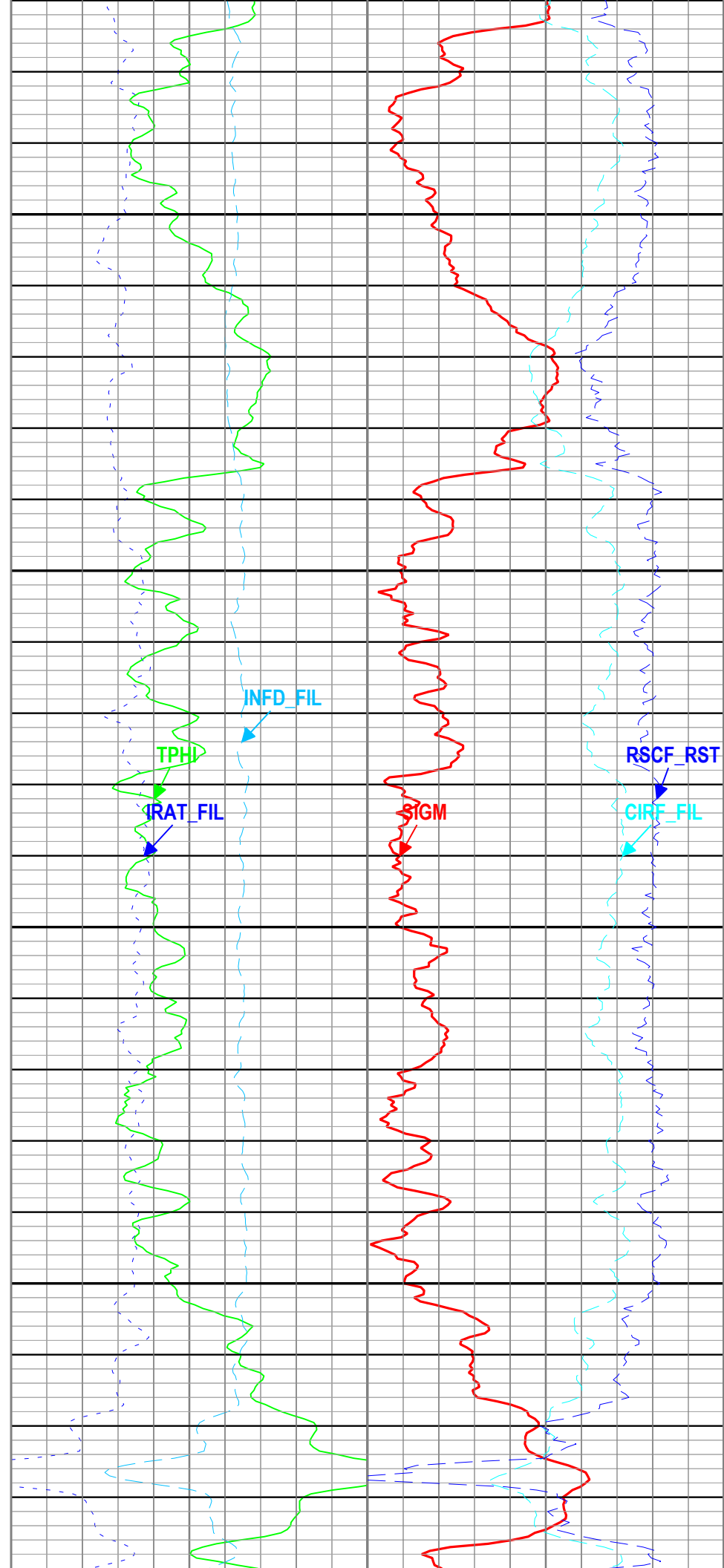
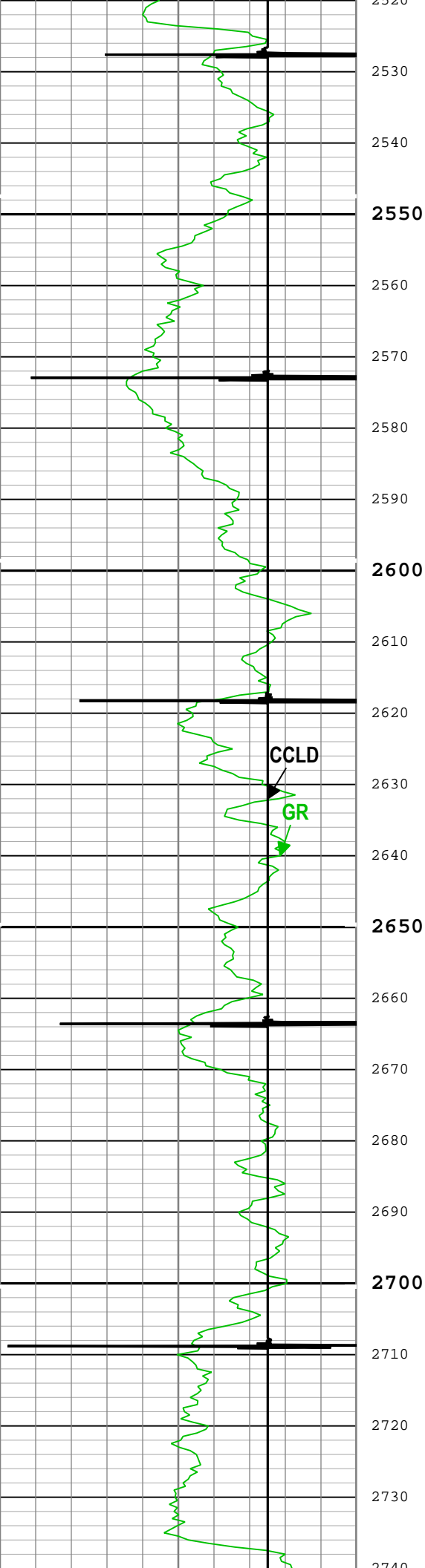
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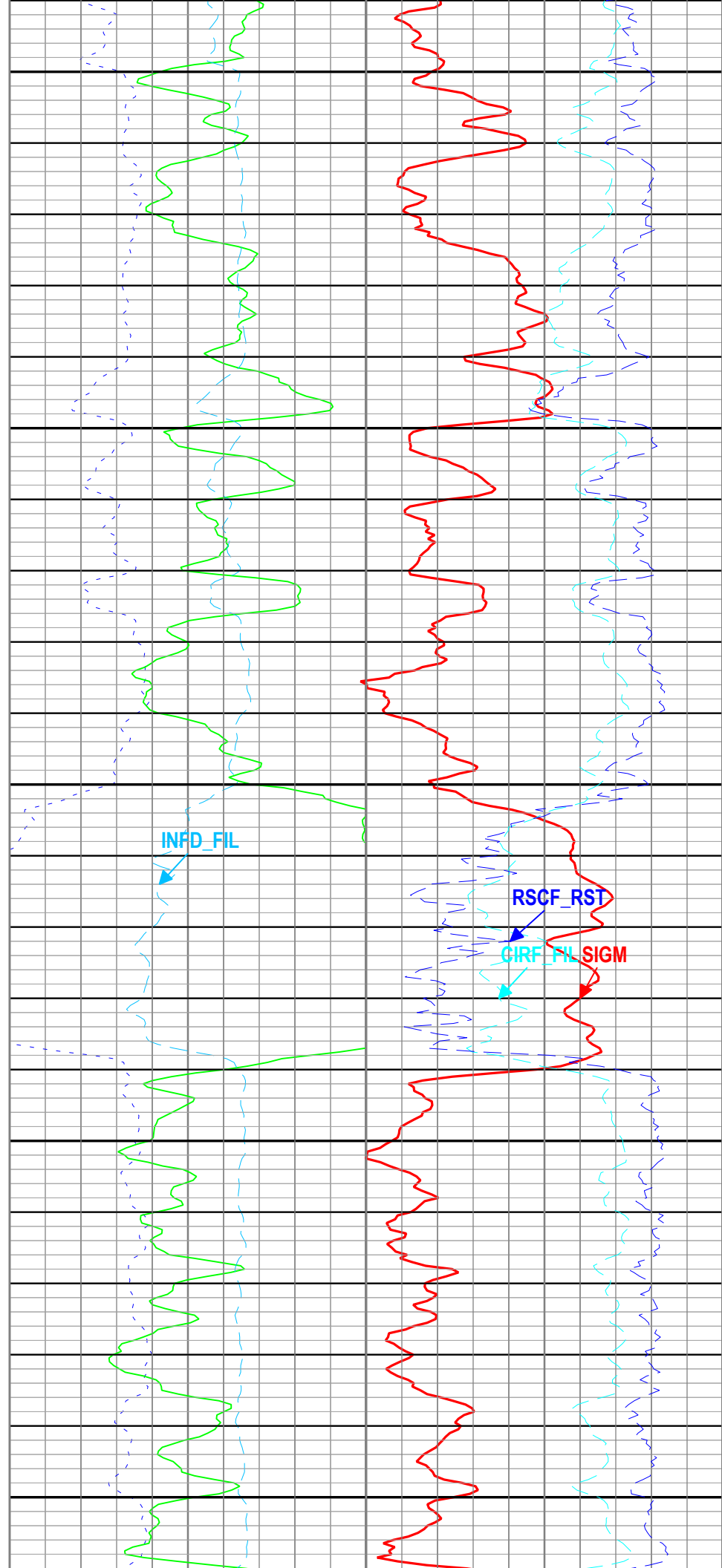
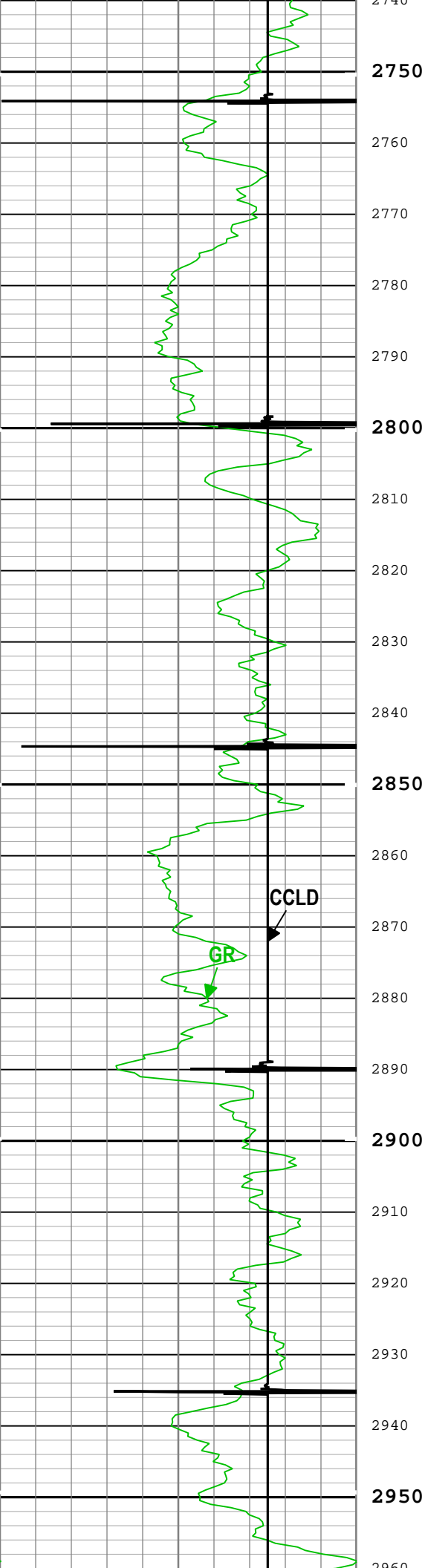
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Creation Date: 23-Dec-2017 01:42:10

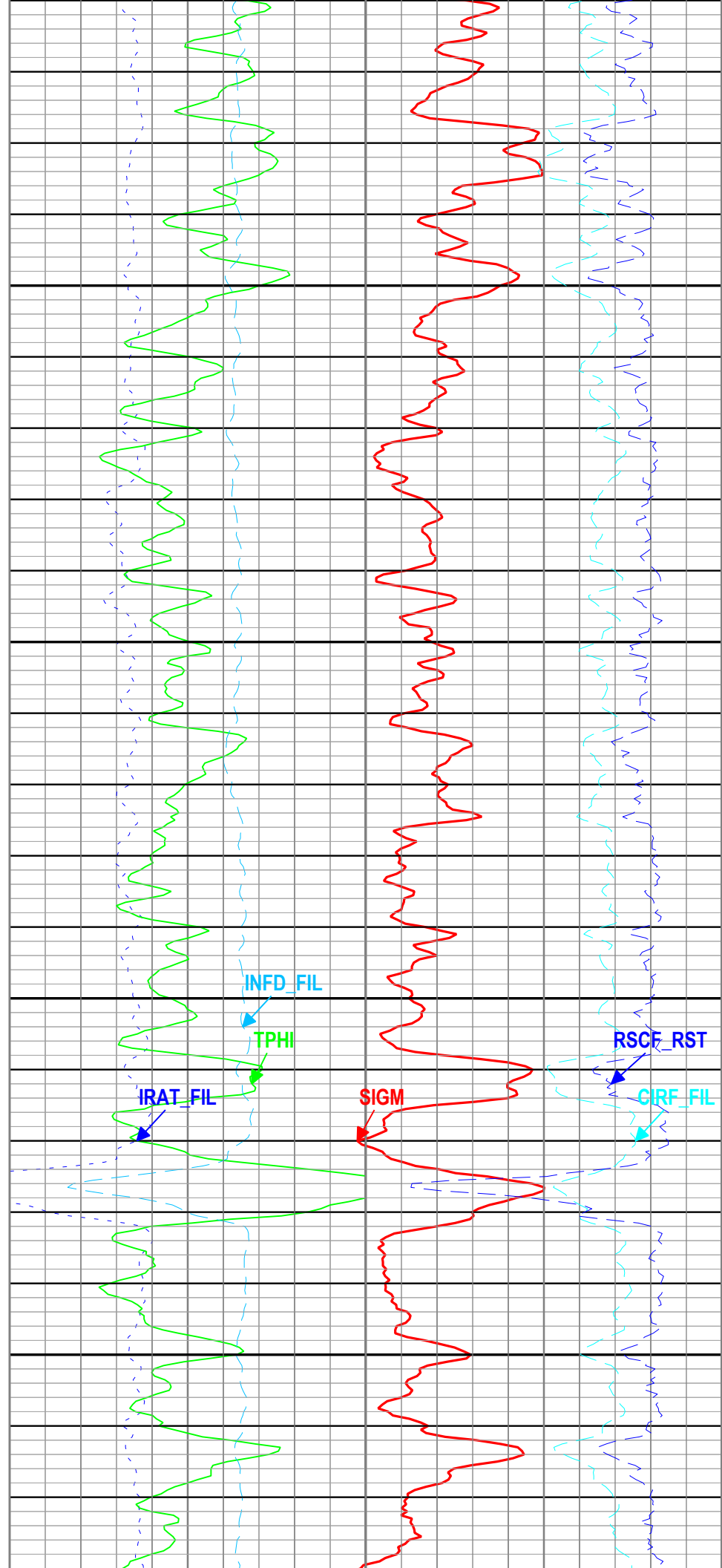
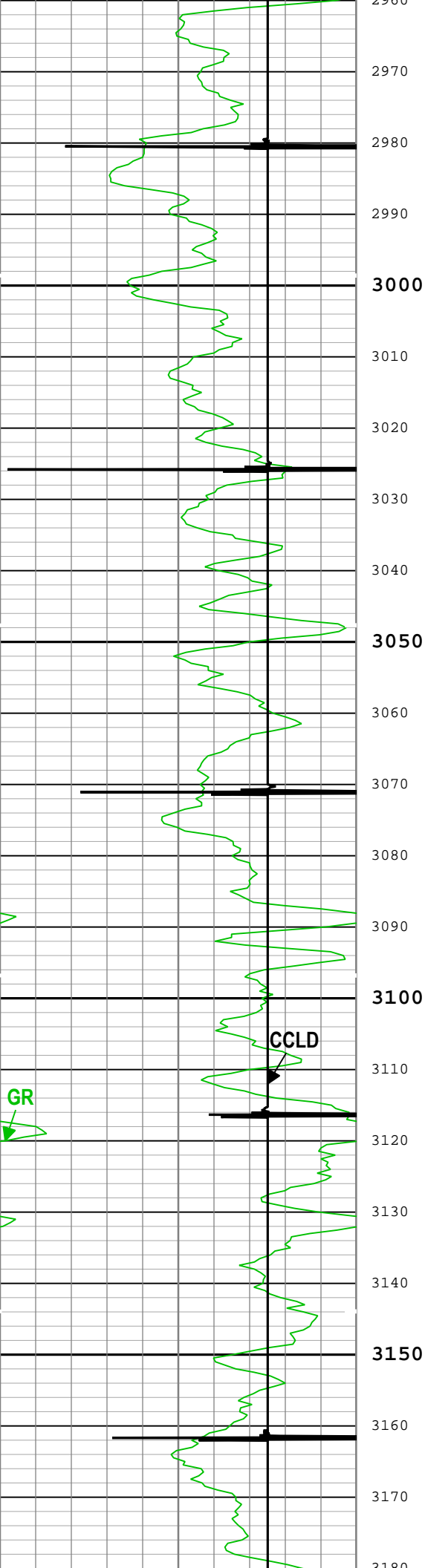
| Channel Processing Parameters |  |           |                 |              |
|-------------------------------|--|-----------|-----------------|--------------|
| One: Parameters               |  |           |                 |              |
| Parameter                     | Description  | Tool      | Value           | Unit         |
| BHT                           | Bottom Hole Temperature  | Borehole  | 212             | degF         |
| CB3G                          | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate                     | SCMT-CB   | 224             | us           |
| CBLG                          | CBL Gate Width   | SCMT-CB   | 40              | us           |
| CBRA                          | CBL LQC Reference Amplitude in Free Pipe                                 | SCMT-CB   | 80              | mV           |
| DFD                           | Drilling Fluid Density   | Borehole  | 8.6             | lbm/gal      |
| DFT_CATEGORY                  | Drilling Fluid Type  | Borehole  | Water           |              |
| EDF                           | Elevation of Derrick Floor Above Permanent Datum                         | WLSESSION | 30              | ft           |
| EPD                           | Elevation of Permanent Datum (PDAT) above Mean Sea Level                 | WLSESSION | 8432            | ft           |
| GGRD                          | Geothermal Gradient  | Borehole  | 1               | 0.01 degF/ft |
| GOBO_CURR                     | Good Bond in Arbitrary Cement  | SCMT-CB   | 1.4             | mV           |
| GTSE                          | Generalized Temperature Selection, from Measured or Computed Temperature | Borehole  | GTEM_LINEST(RT) |              |
| MATT_CURR                     | Maximum Attenuation in Arbitrary Cement                                  | SCMT-CB   | 16.92           | dB/ft        |
| MCI                           | Minimum Cemented Interval for Isolation                                  | SCMT-CB   | 1.25            | ft           |
| MSA                           | Minimum Sonic Amplitude  | SCMT-CB   | 0.51            | mV           |
| MSA_CURR                      | Minimum Sonic Amplitude in Arbitrary Cement                              | SCMT-CB   | 0.51            | mV           |
| PDAT                          | Permanent Datum  | WLSESSION | GL              |              |

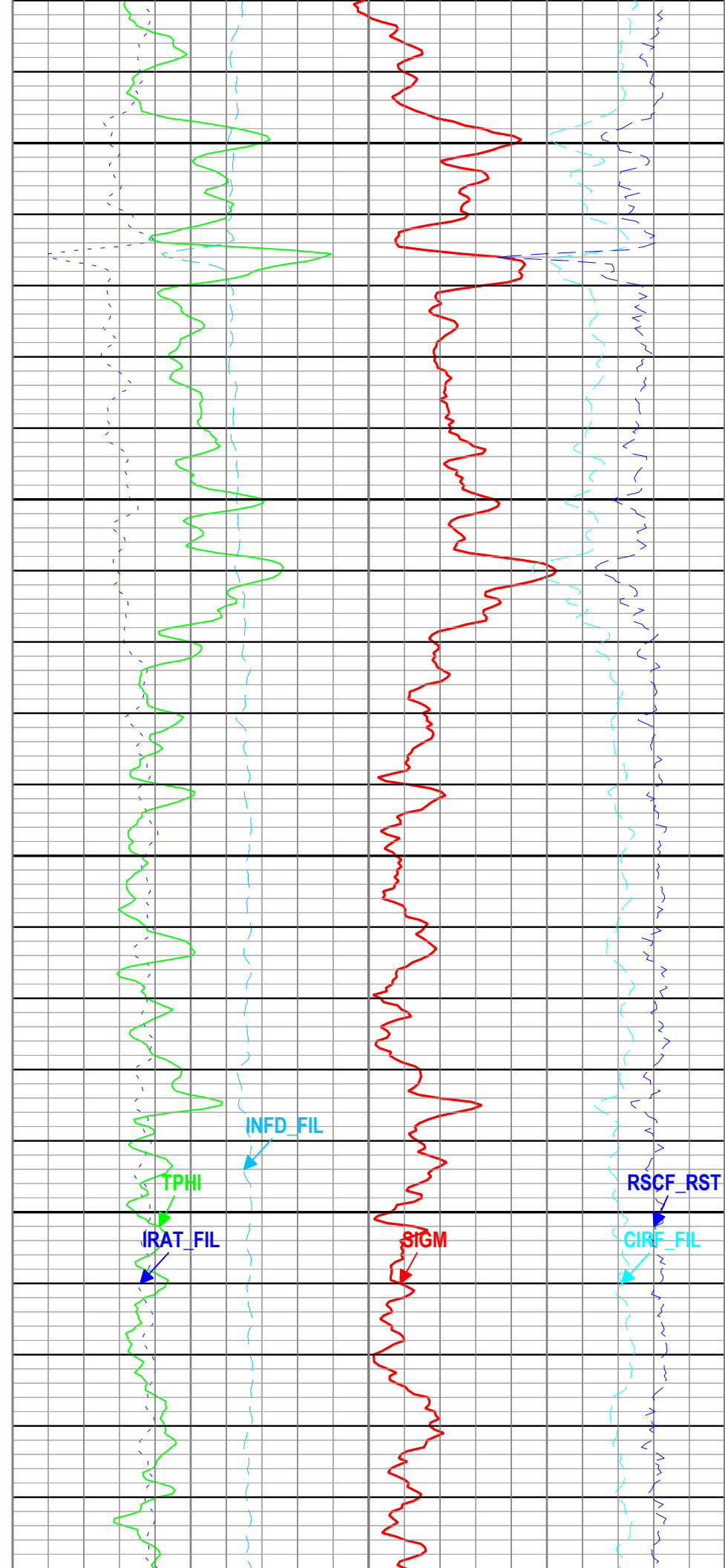
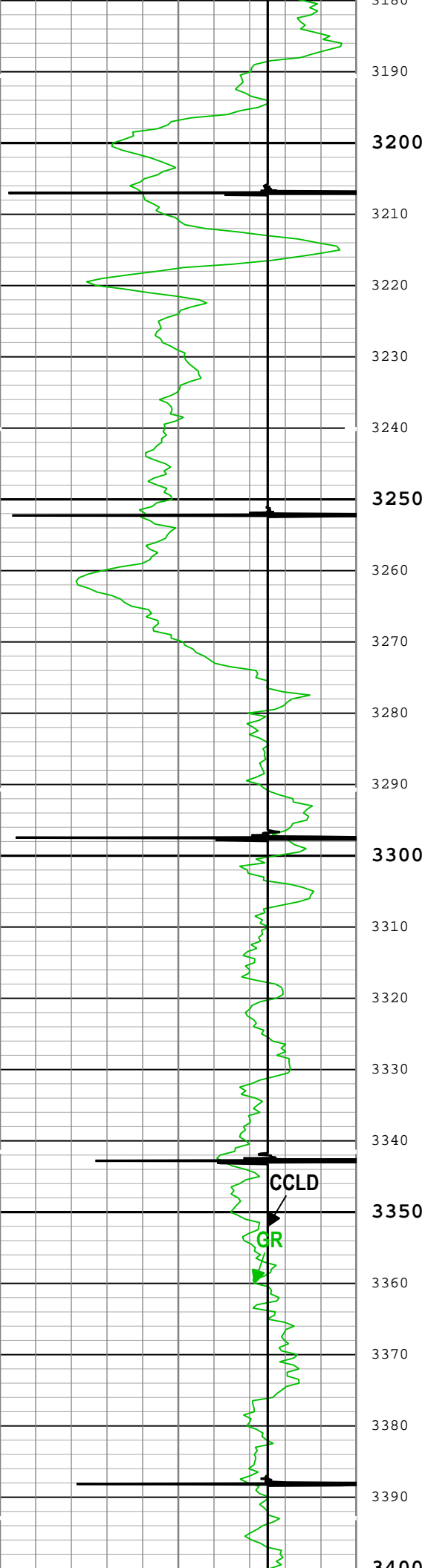
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|---|------|-----|--|---------|---|
| Gamma Ray (GR) PSTP-A                     |      |     | Inelastic Ratio Filtered (IRAT_FIL) RST-C                              |         |   |
| 0   | gAPI | 150 | 0.75   |         | 0 |
| CCL Discriminated Amplitude (CCLD) PSTP-A |      |     | Thermal Decay Porosity (TPHI) RST-C                                    |         |   |
| -3  | V    | 1   | 0.6  | ft3/ft3 | 0 |
|   |      |     | Gross Inelastic Count Rate Far Detector Filtered (INFD_FIL) RST-C      |         |   |
|   |      |     | 10000  | 1/s     | 0 |
|   |      |     | Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C               |         |   |
|   |      |     | 5  |         | 0 |
|   |      |     | Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C |         |   |
|   |      |     | 45   |         | 0 |
|   |      |     | Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C           |         |   |
|   |      |     | 60   | cu      | 0 |
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|   |      |     |  |         |   |
|   |      |     |  |         |   |



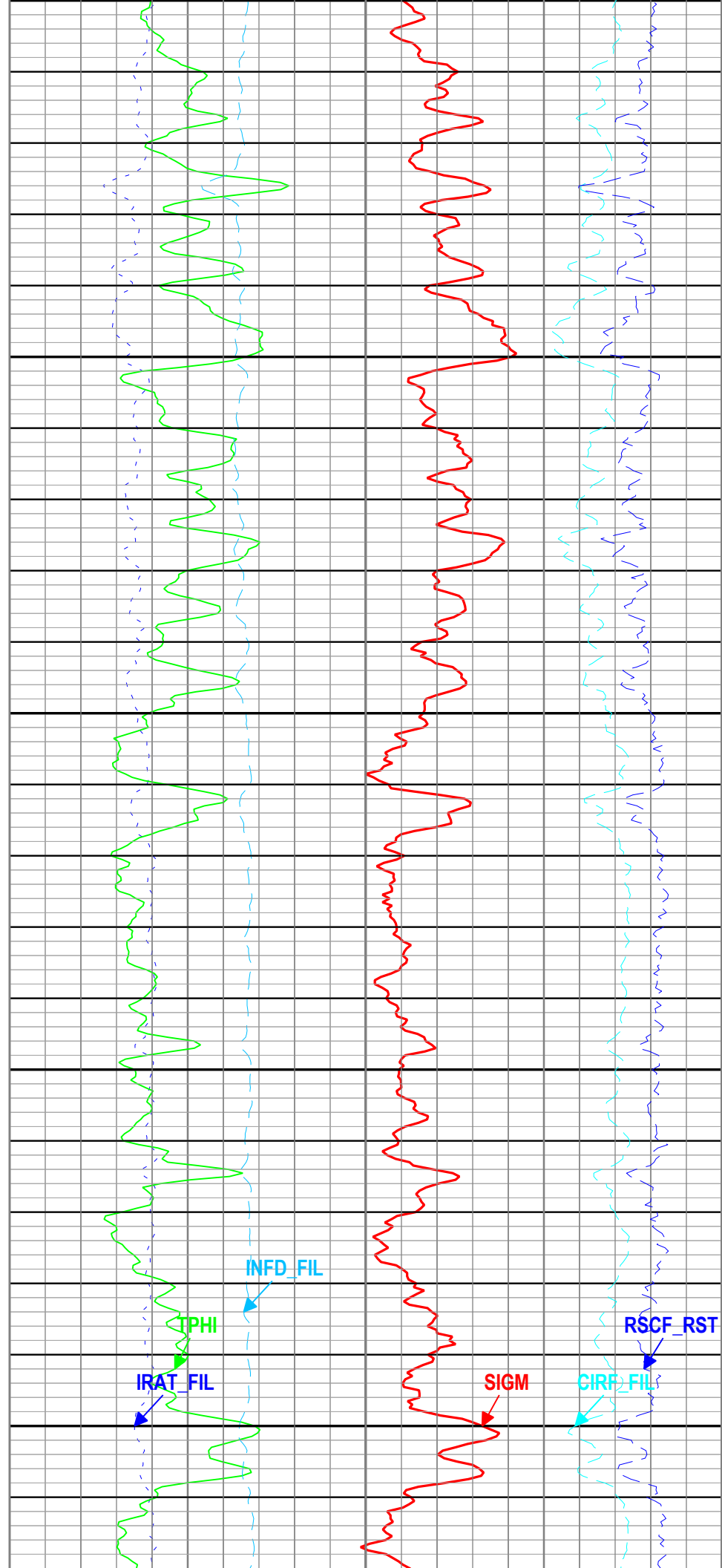
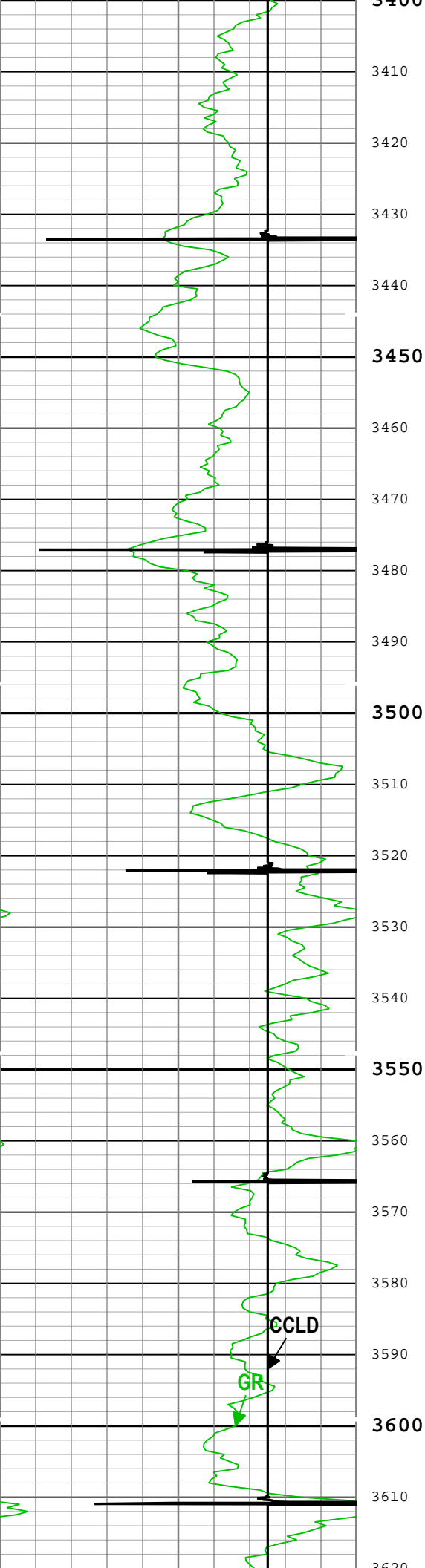


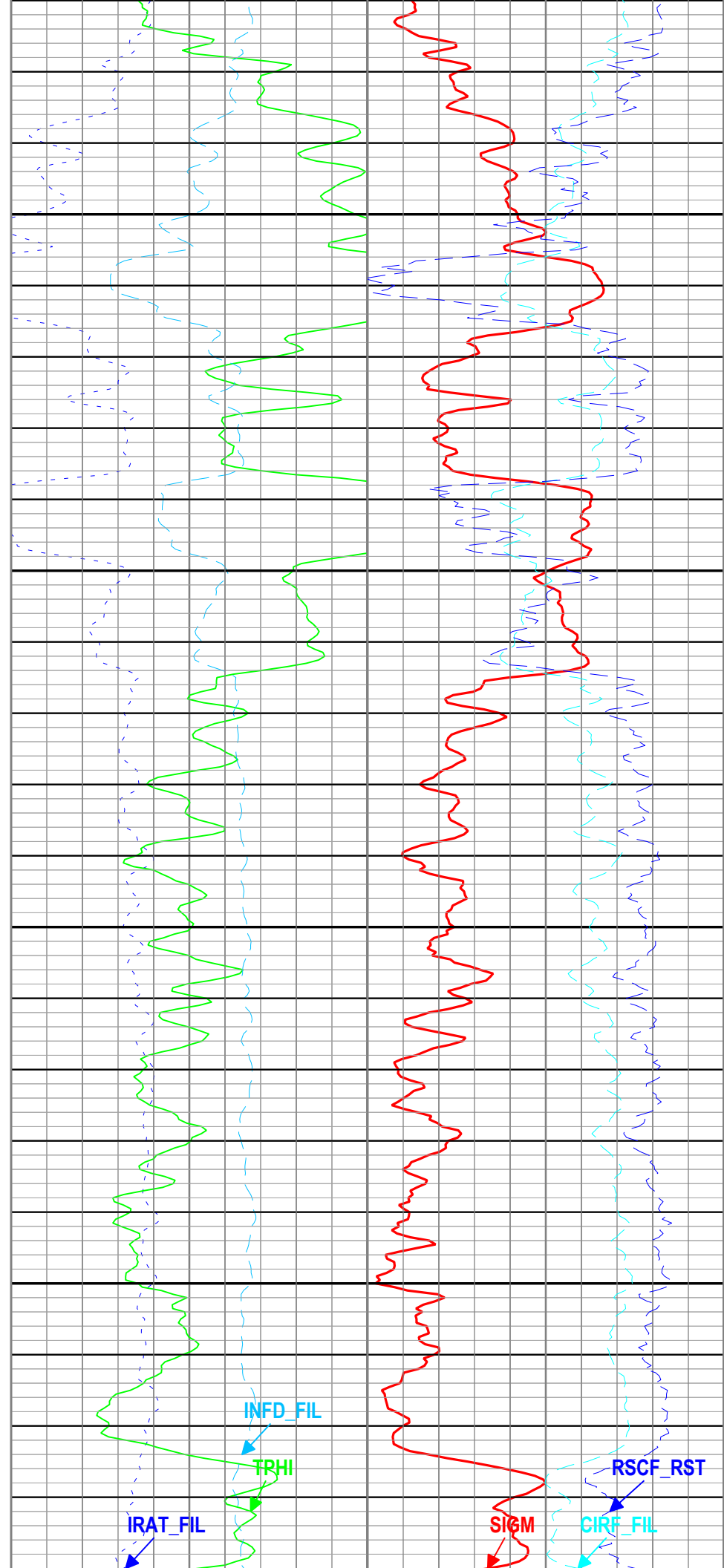
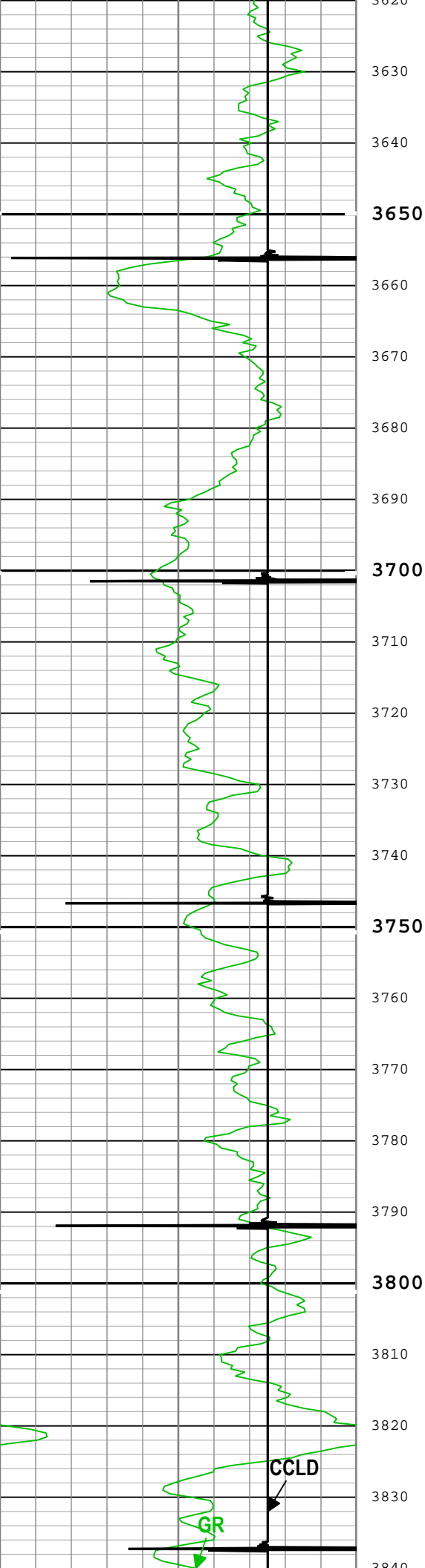


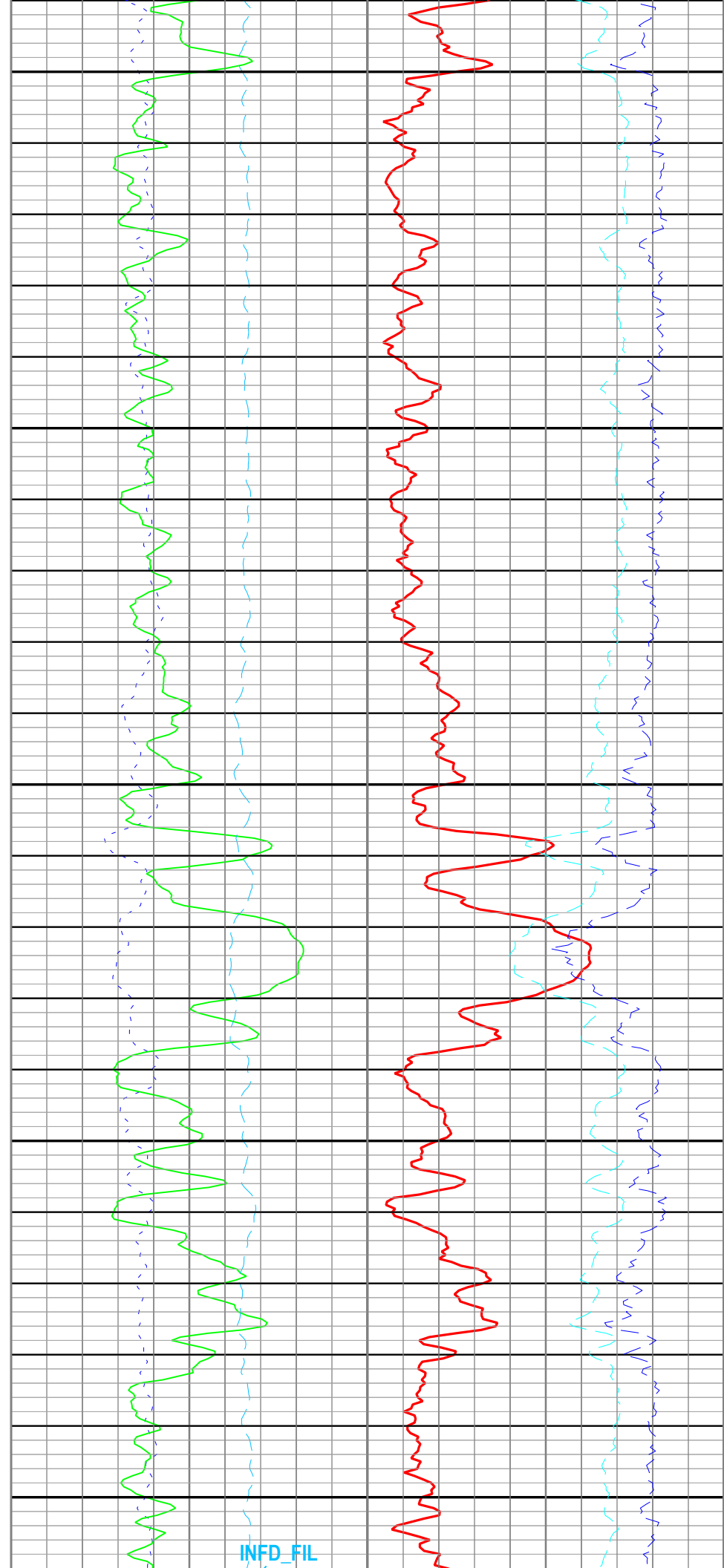
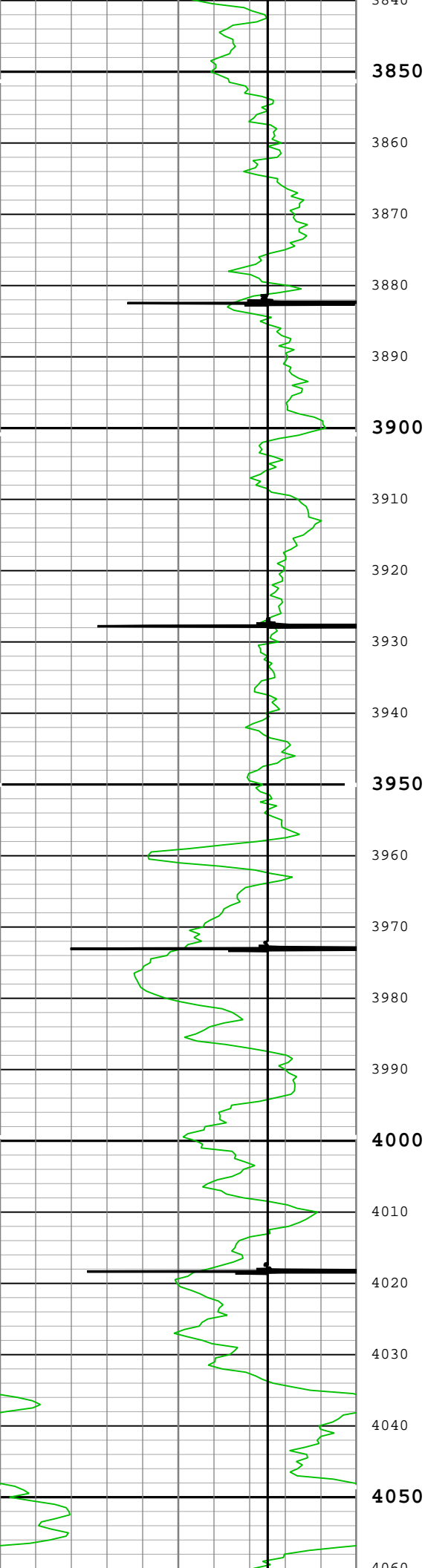




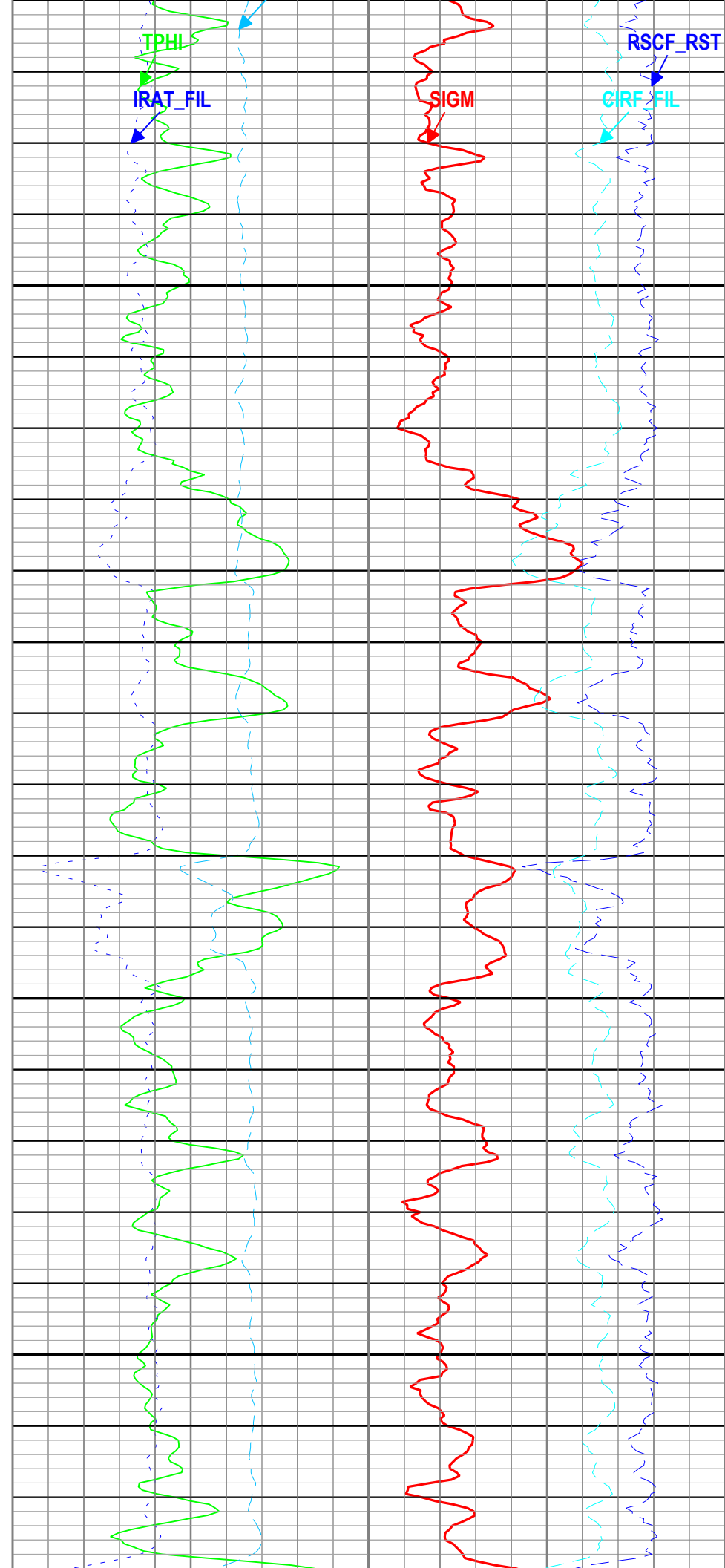
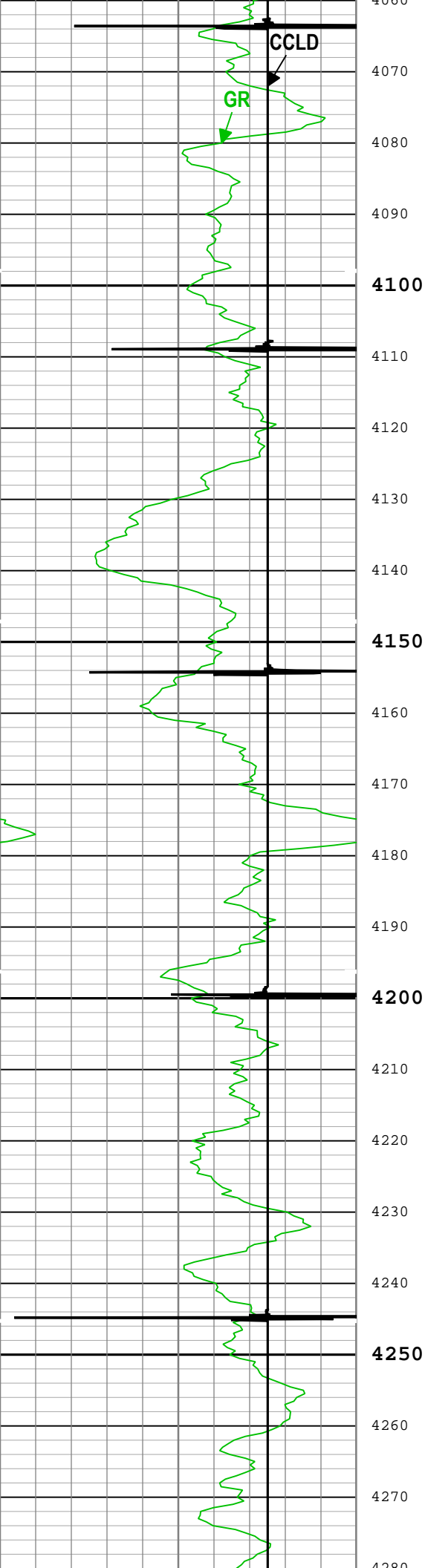




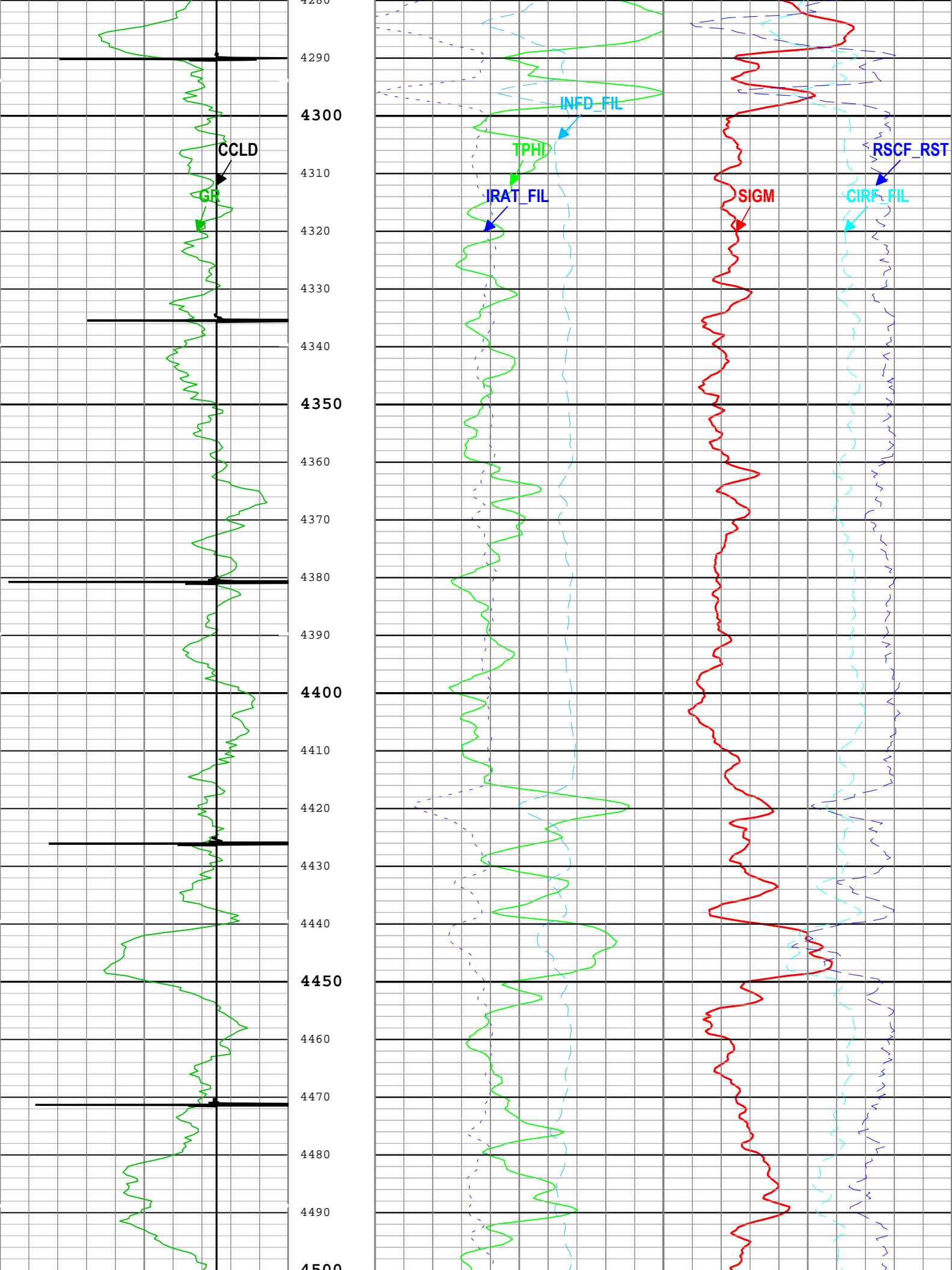


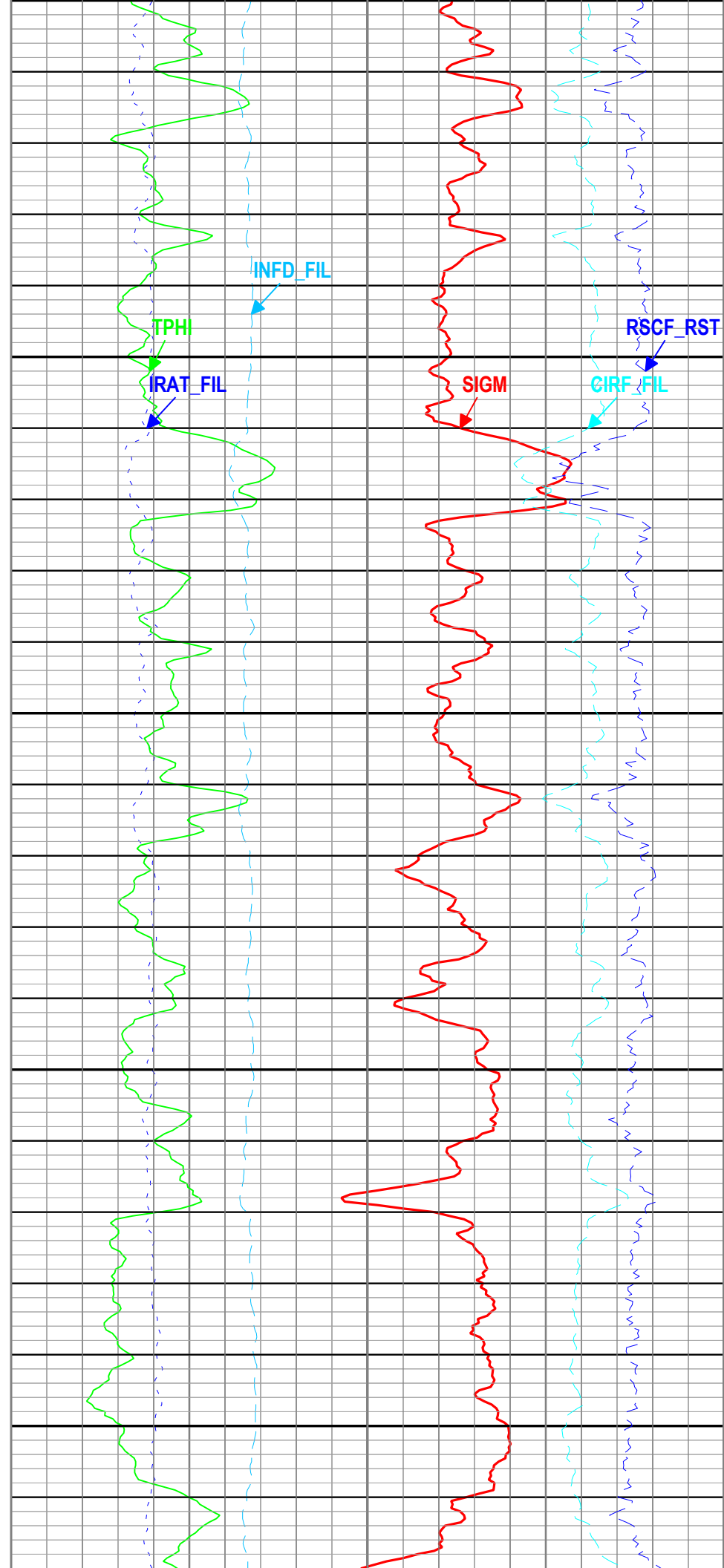
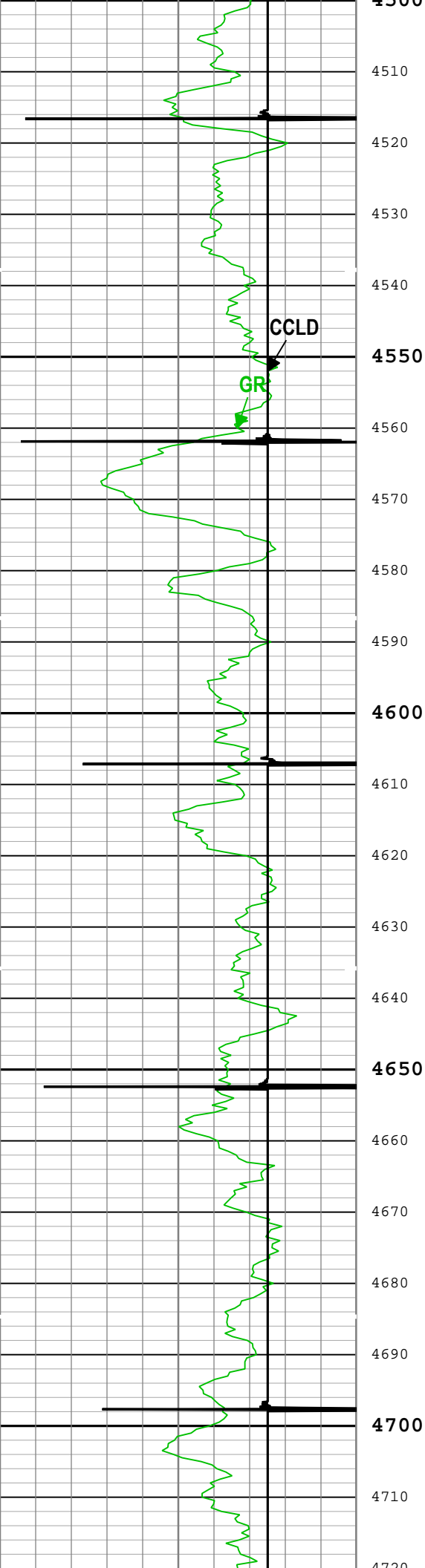


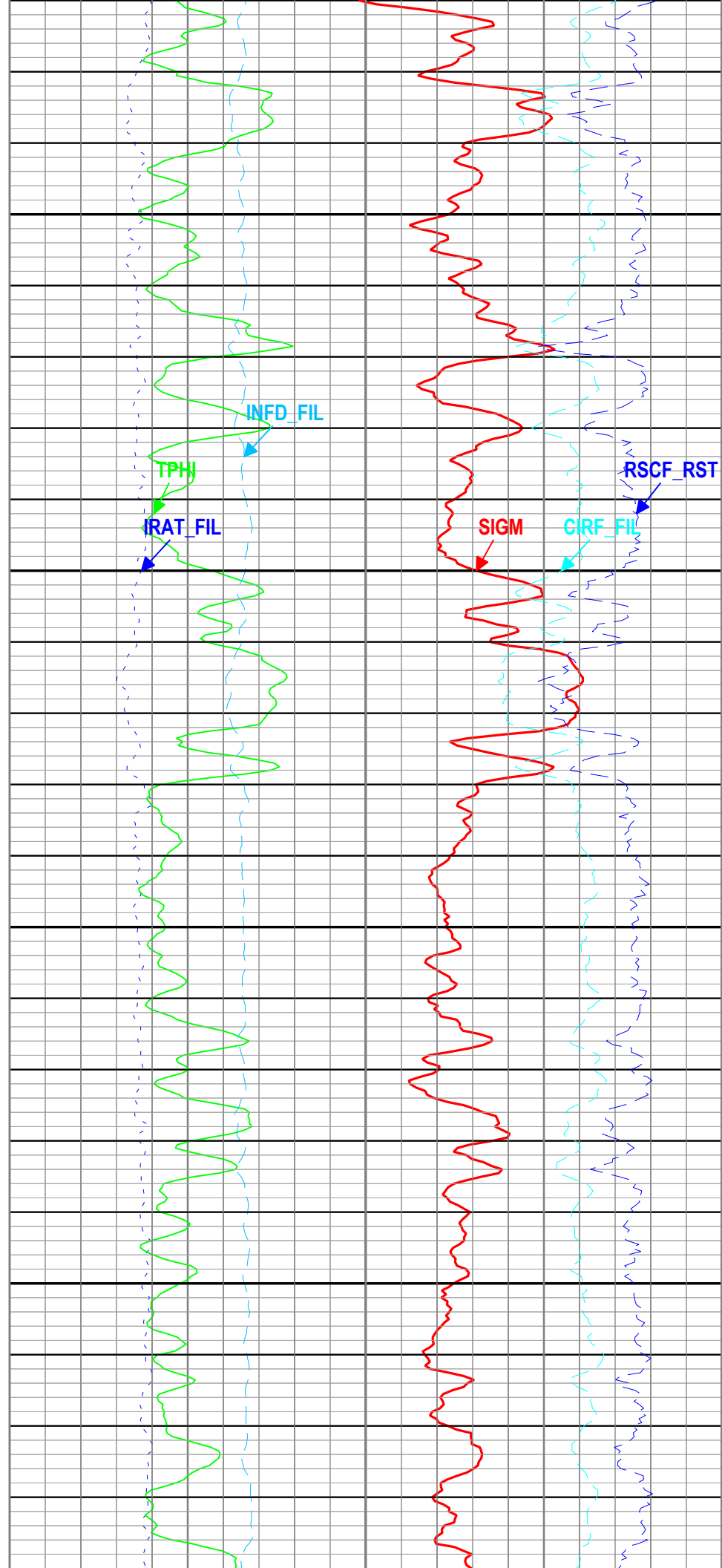
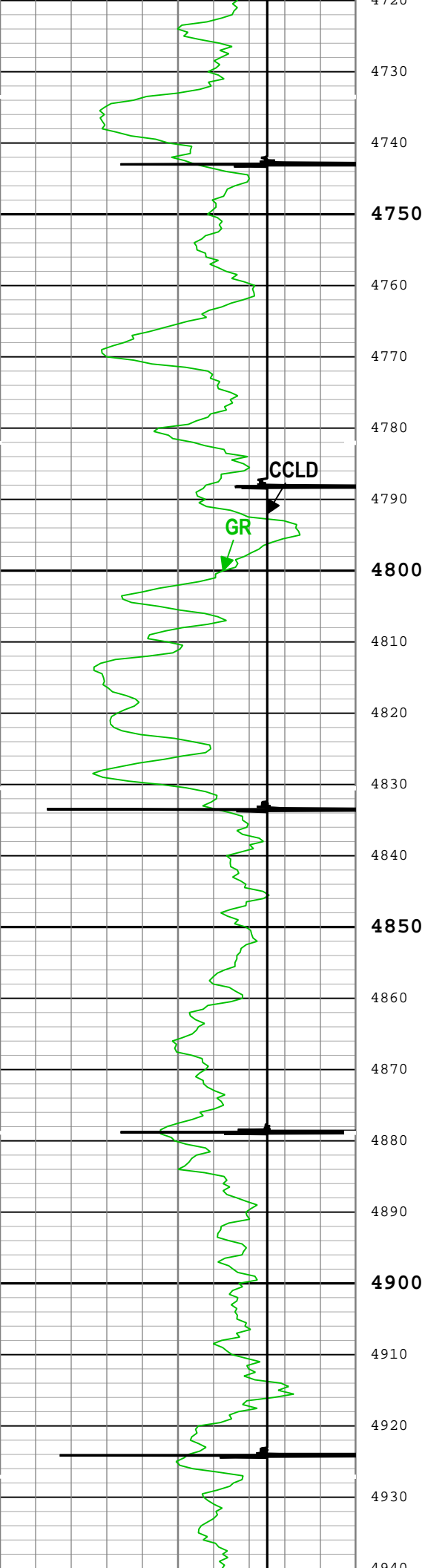
INFD\_FIL

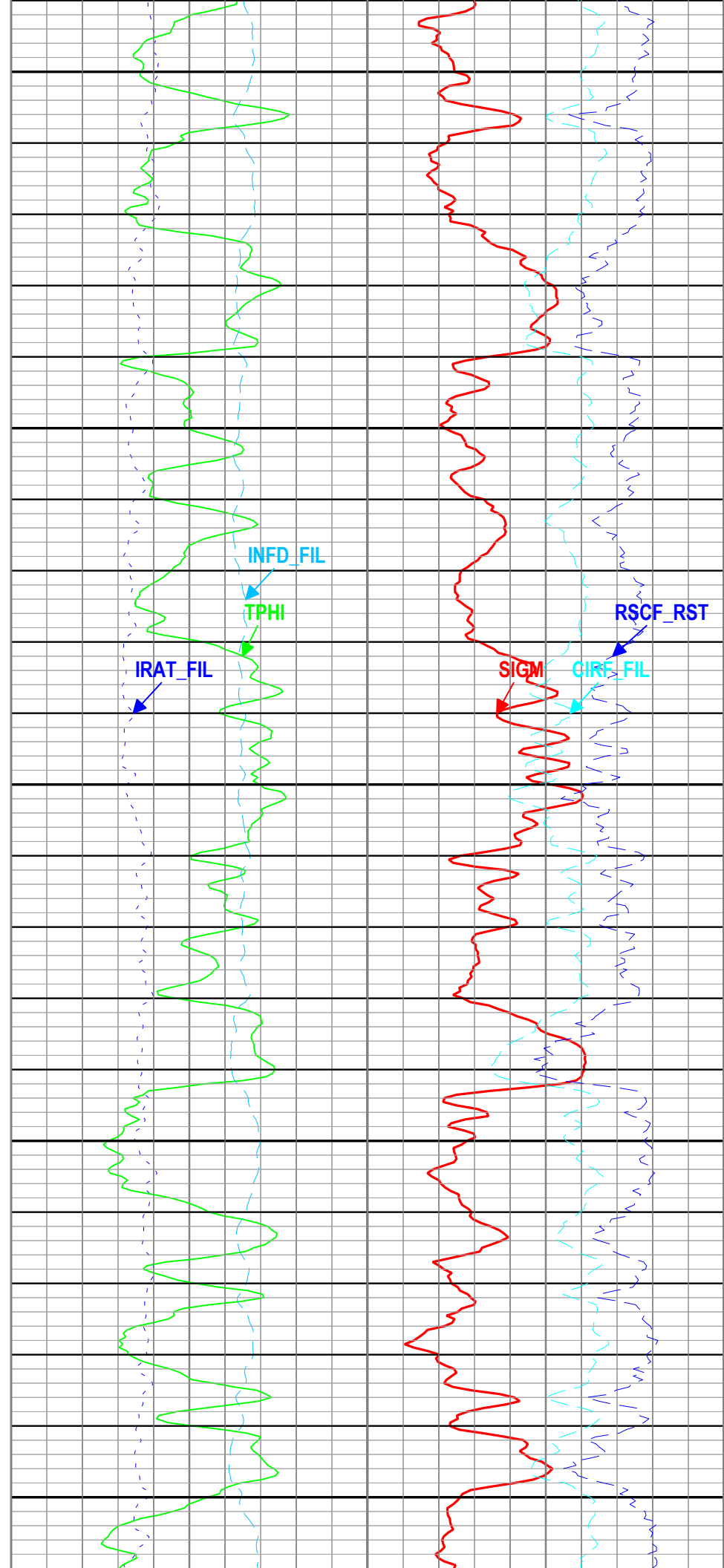
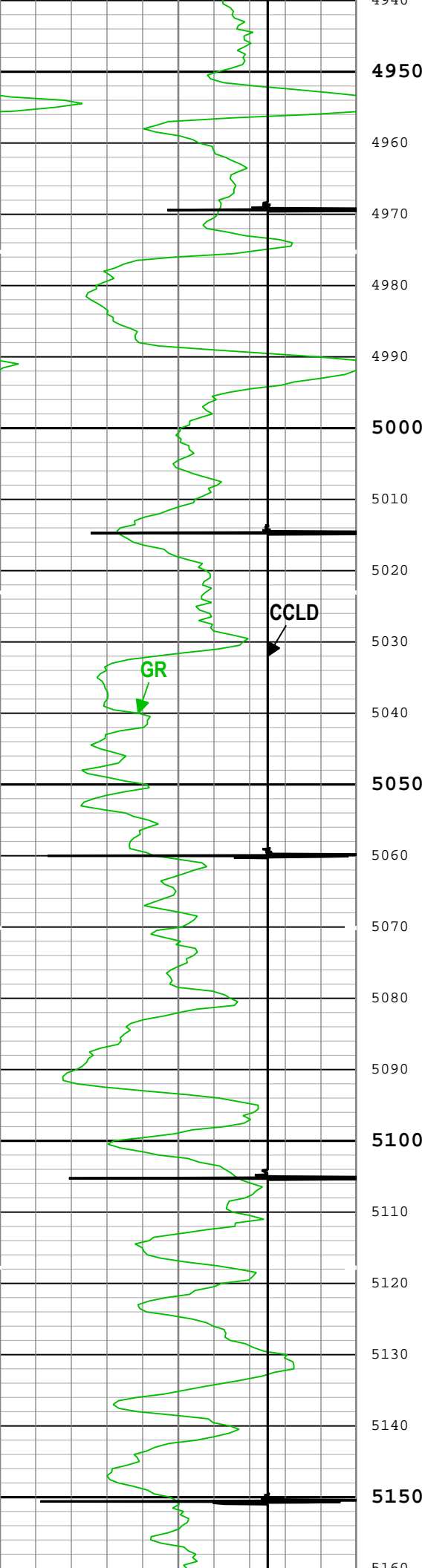




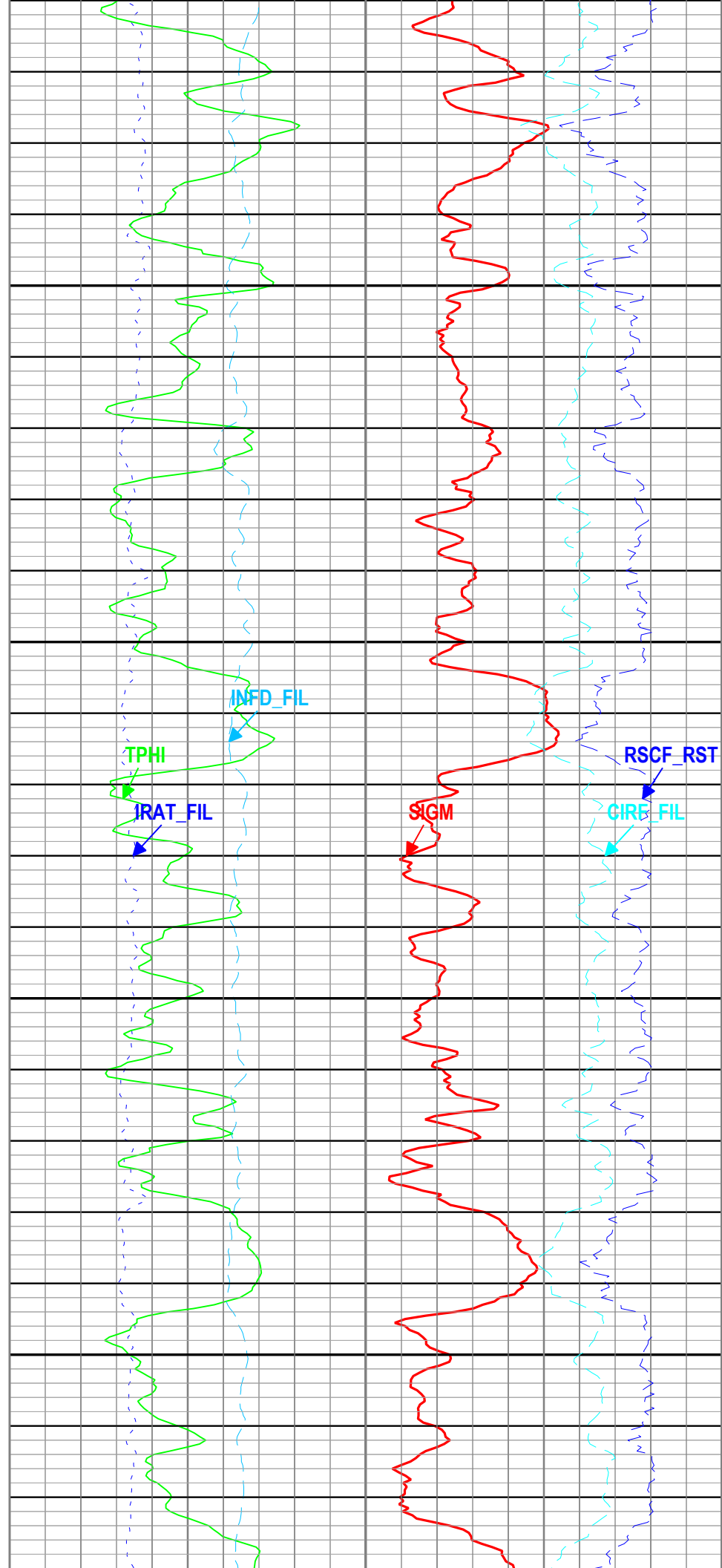
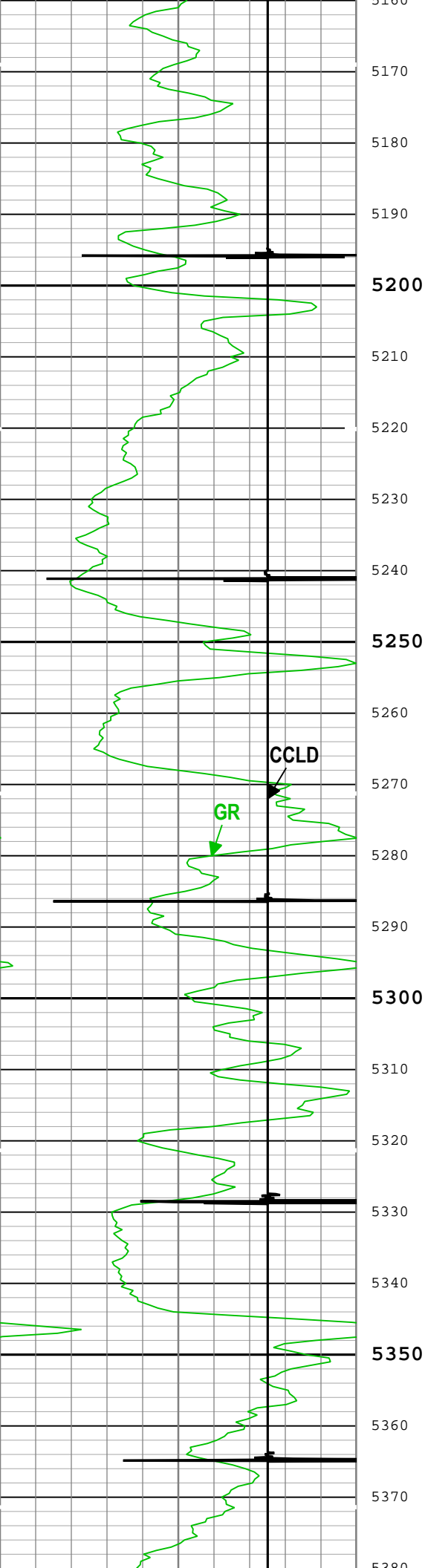


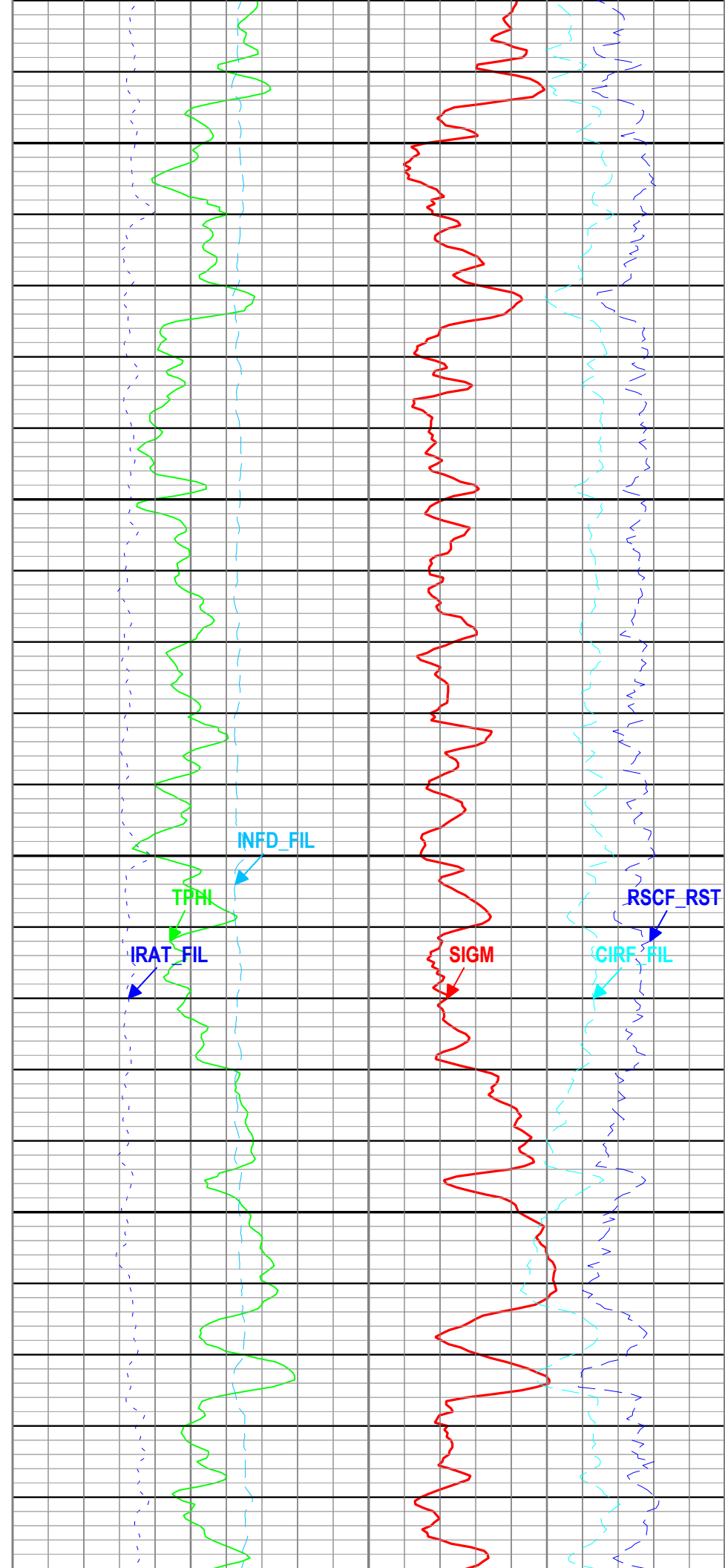
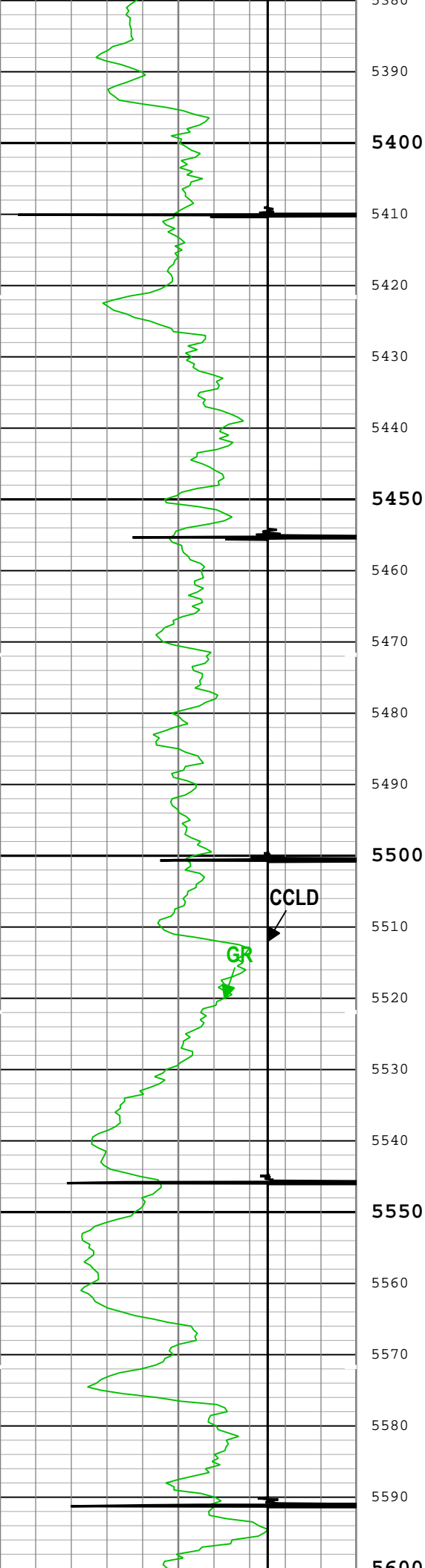


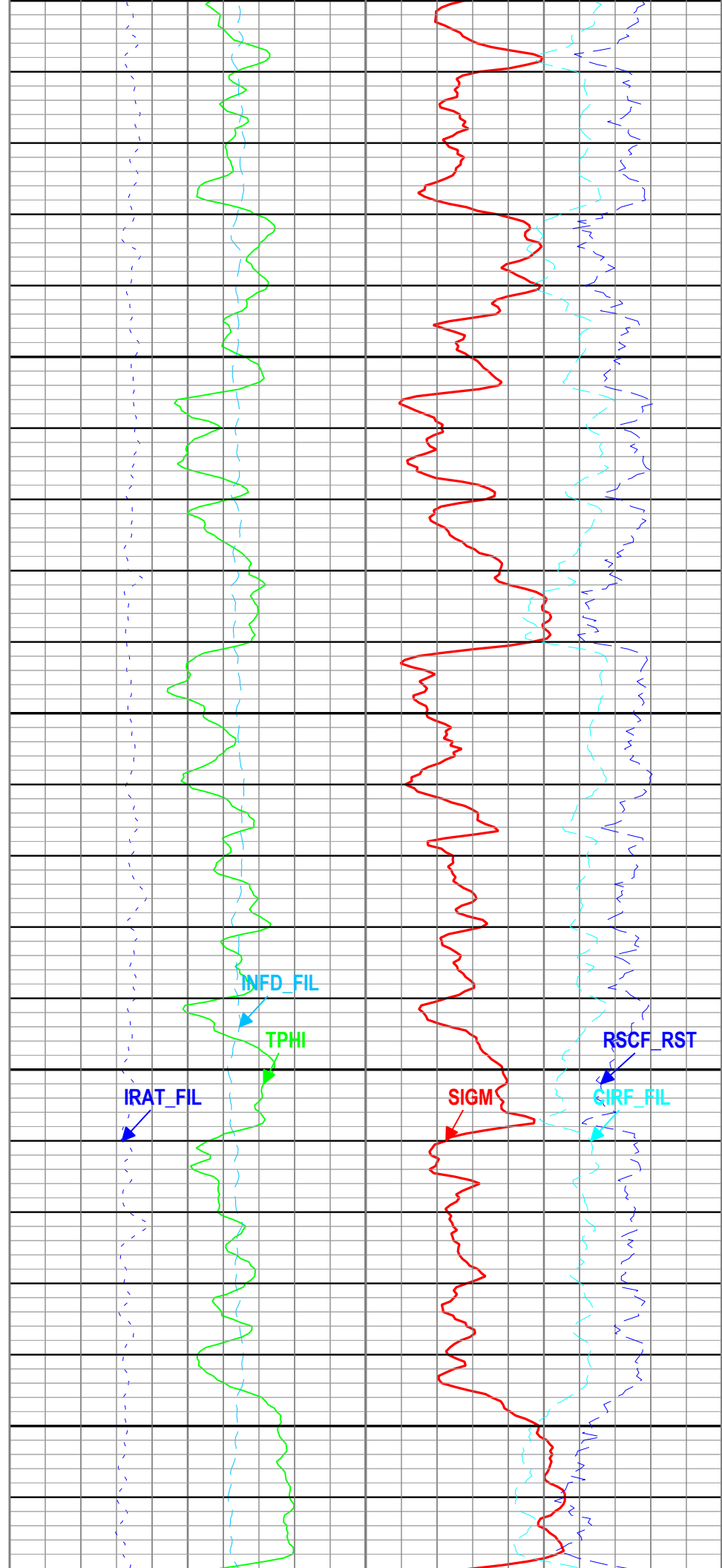
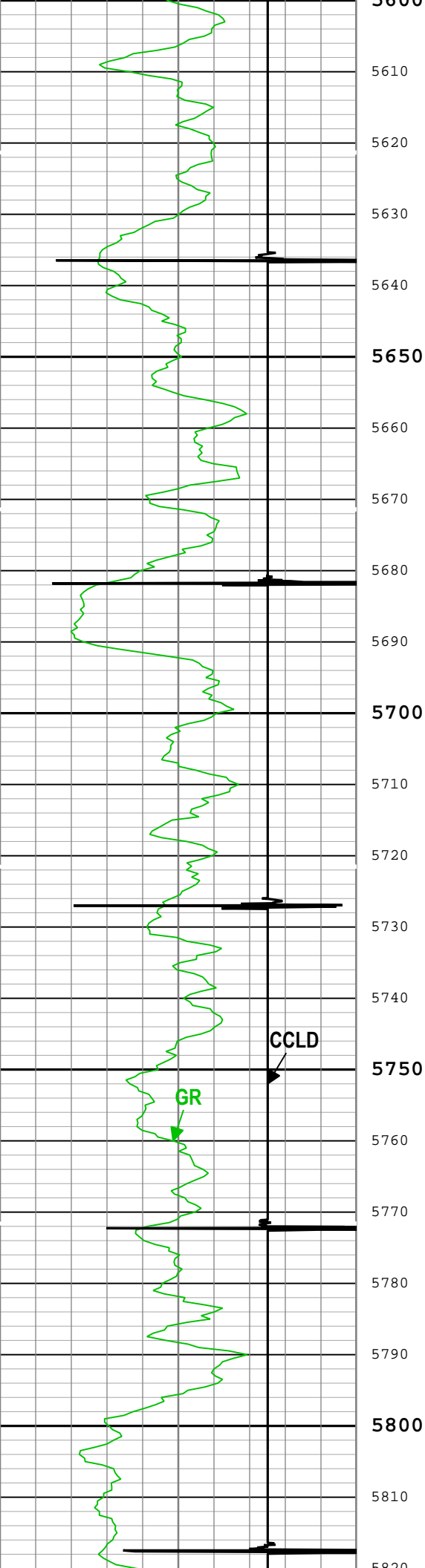


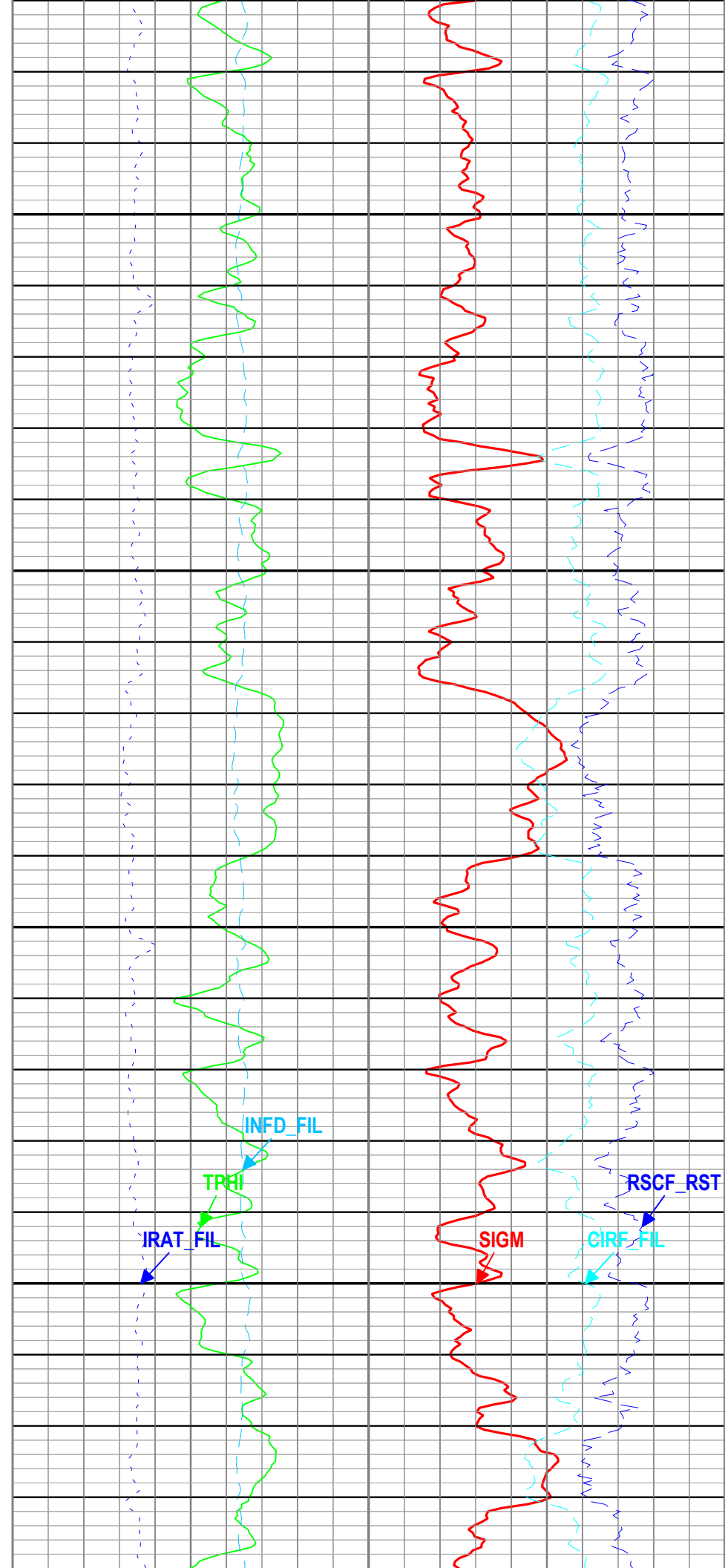
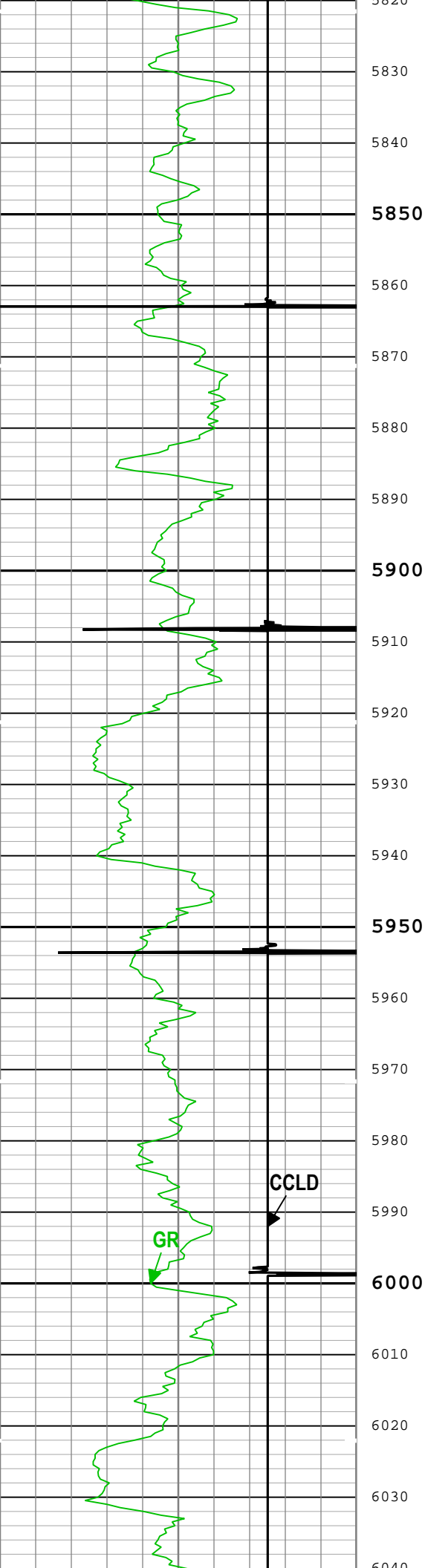




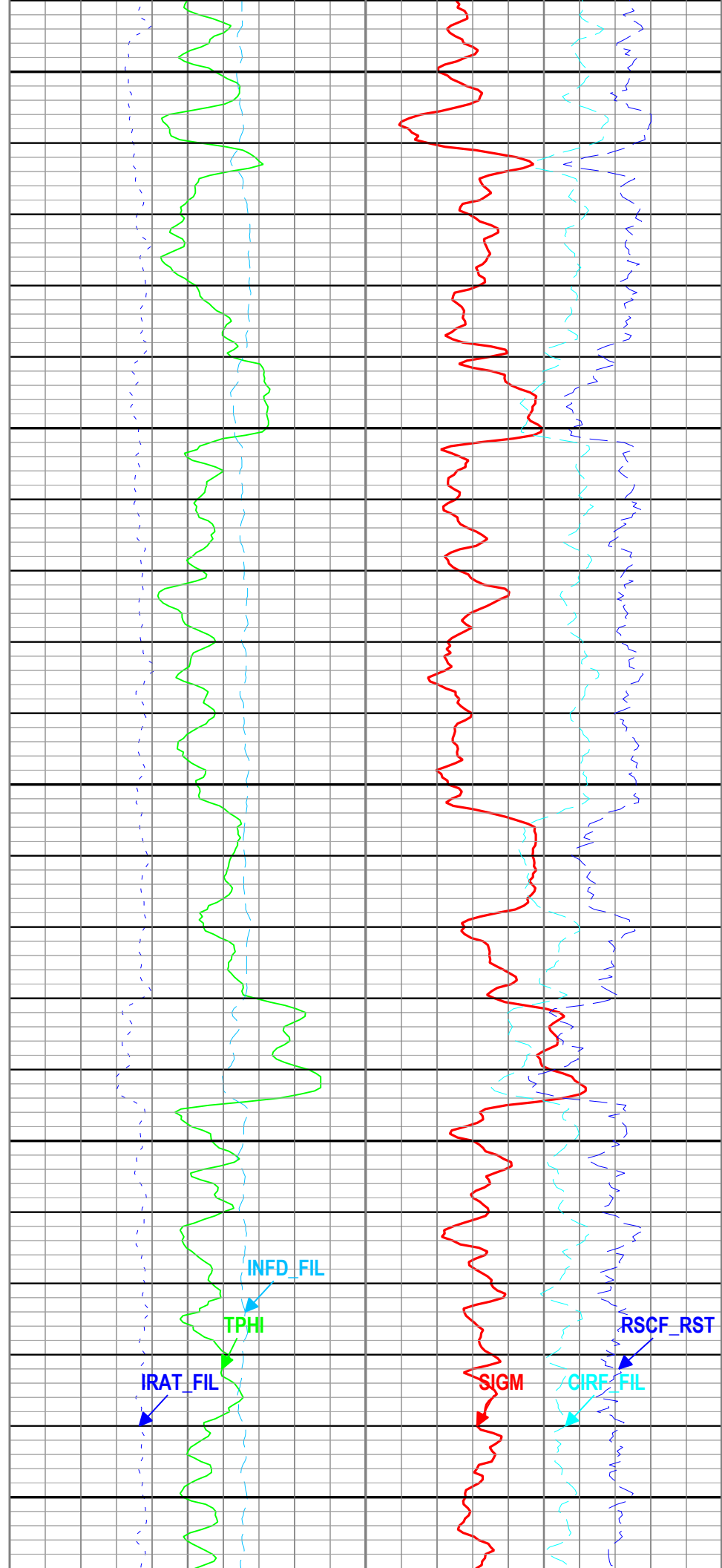
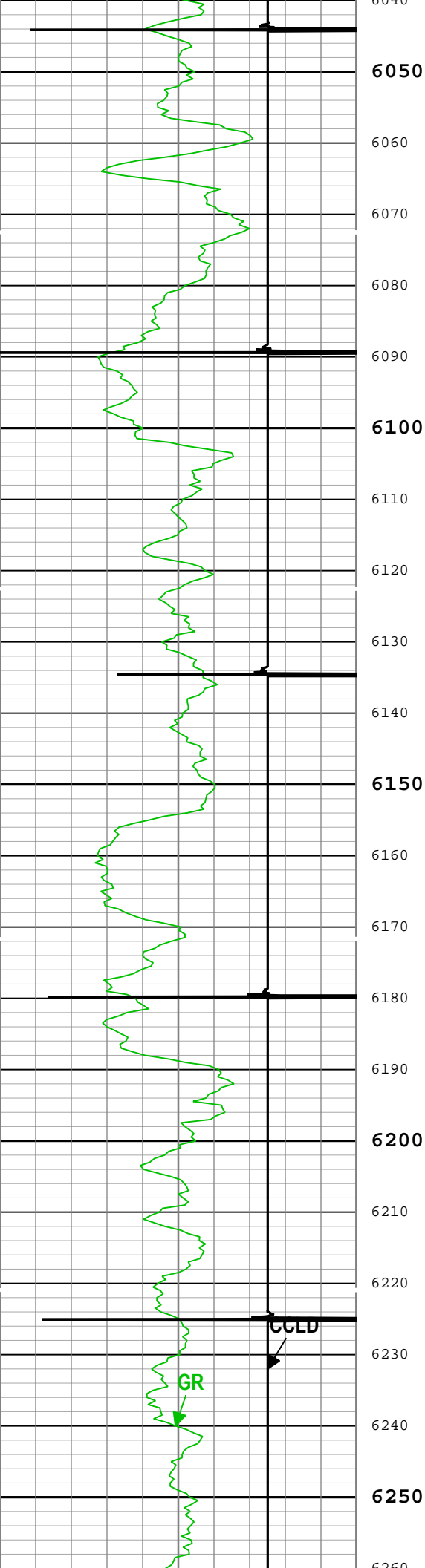


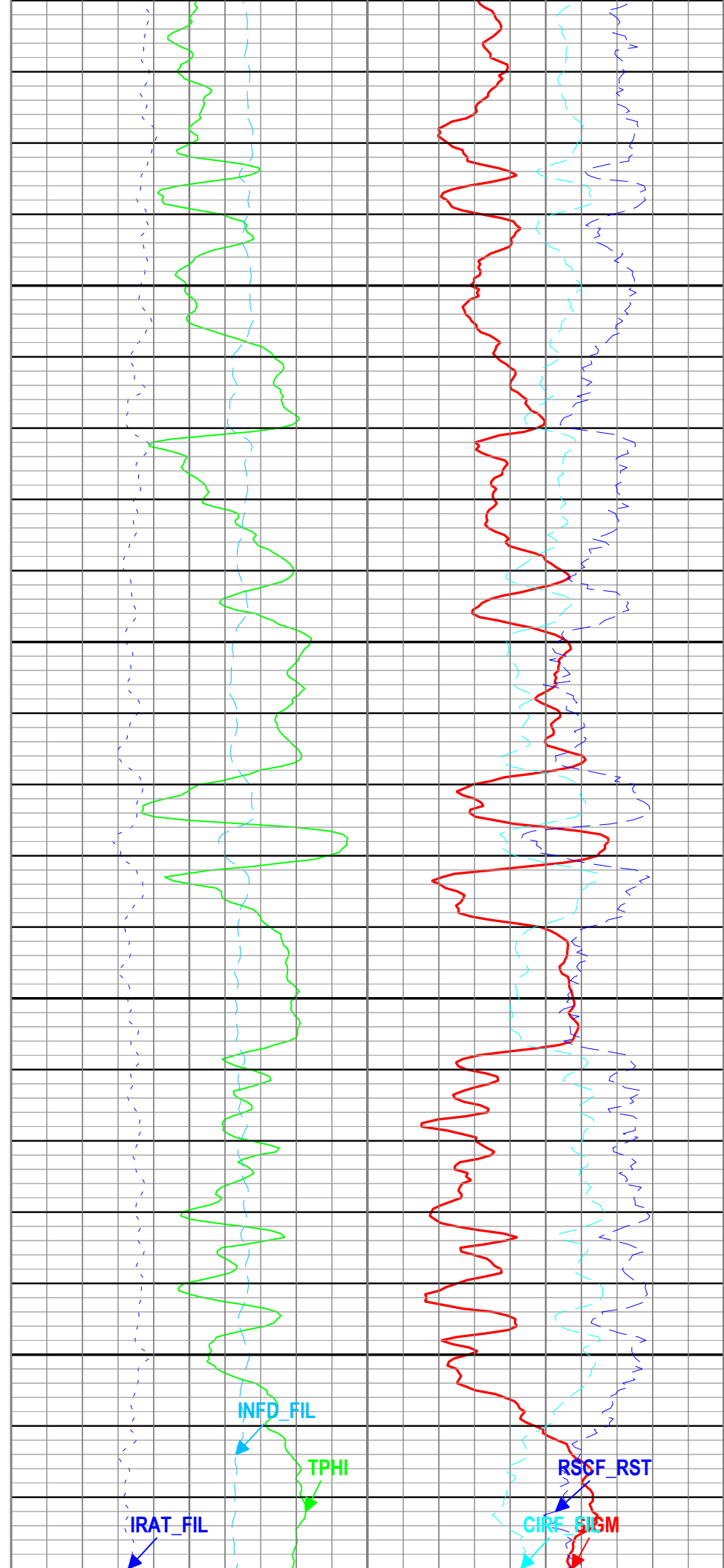
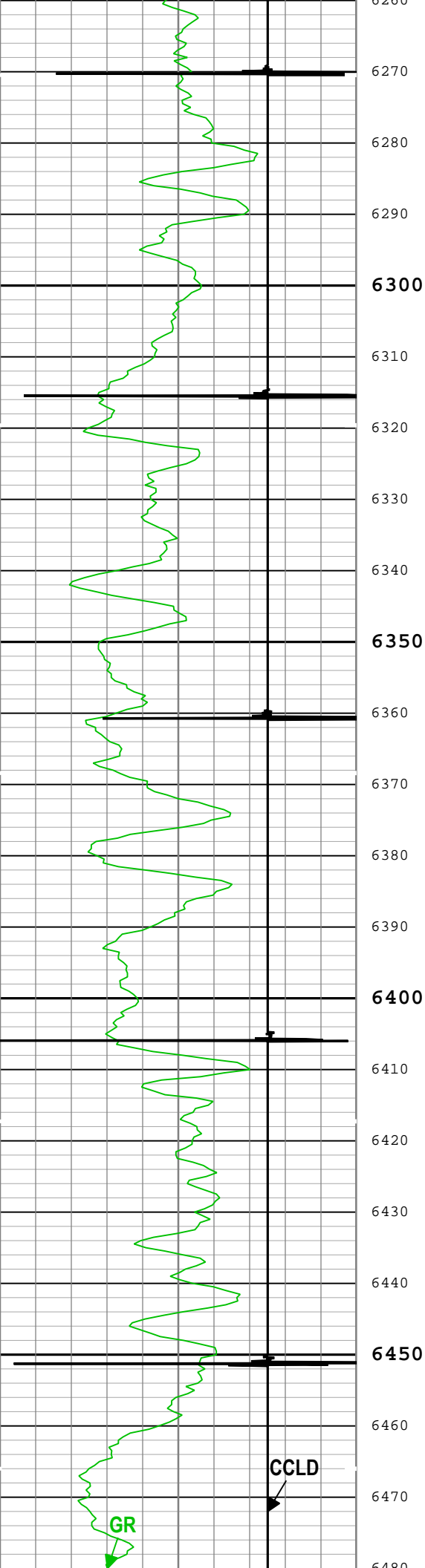


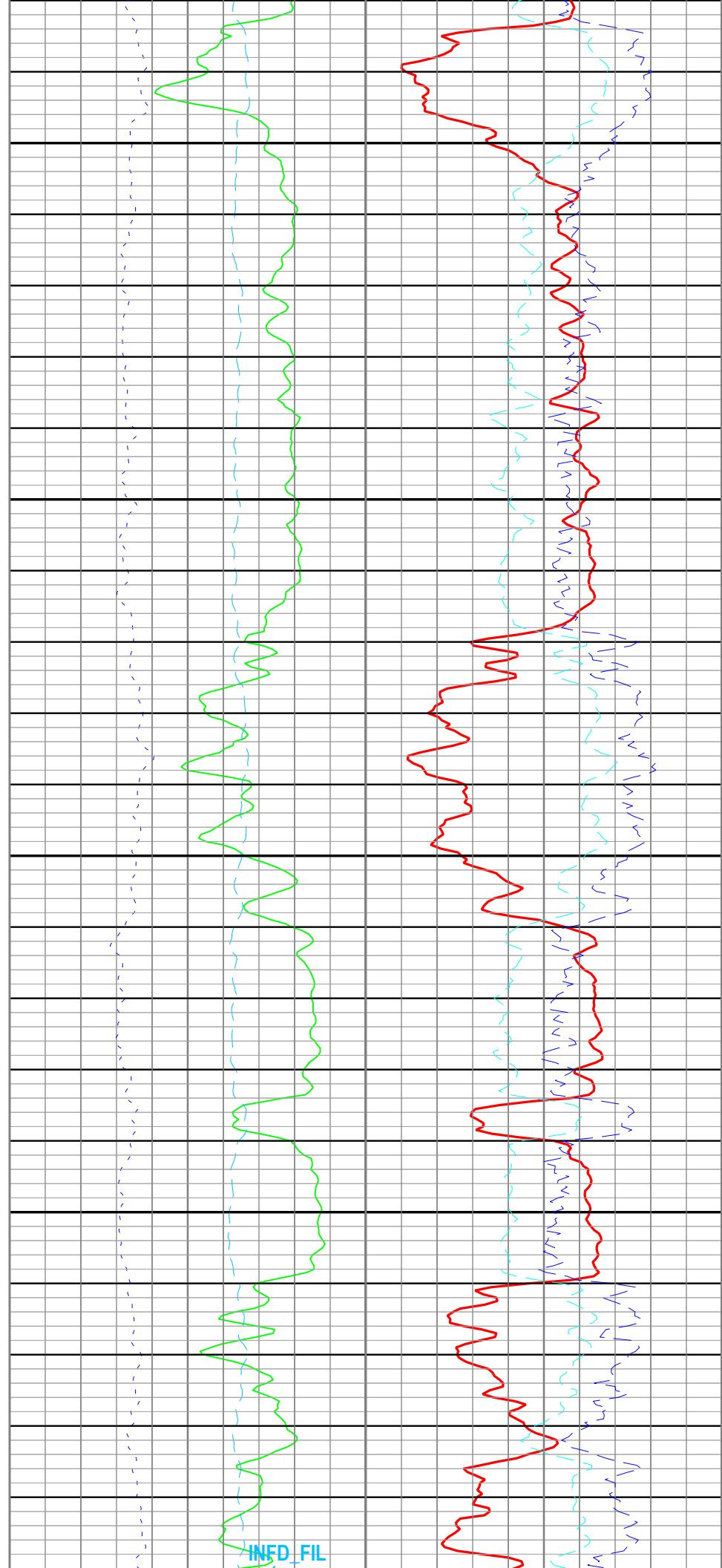
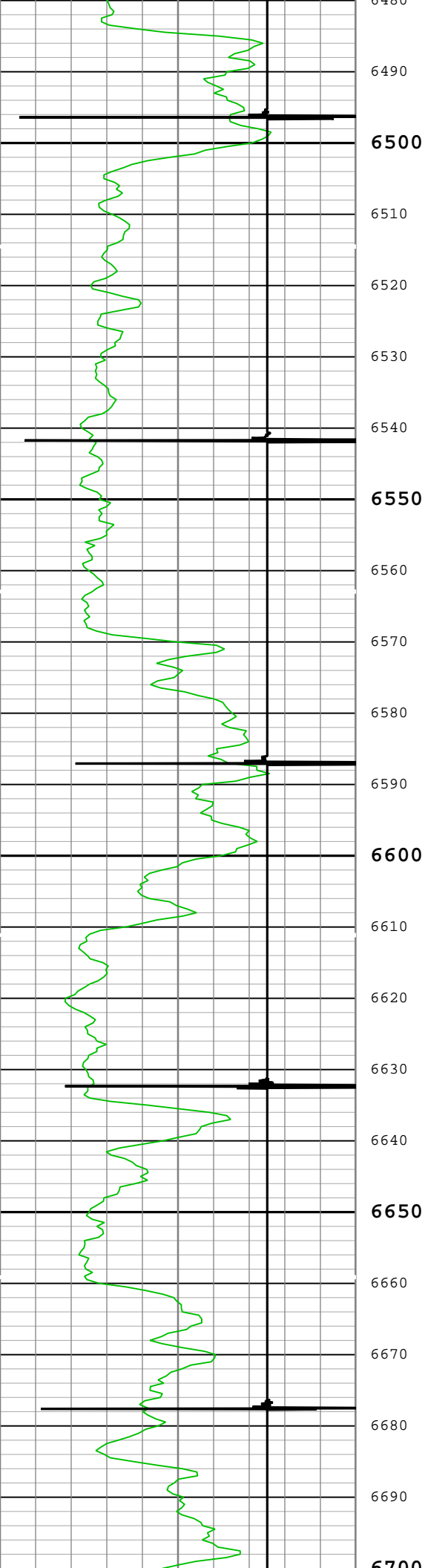


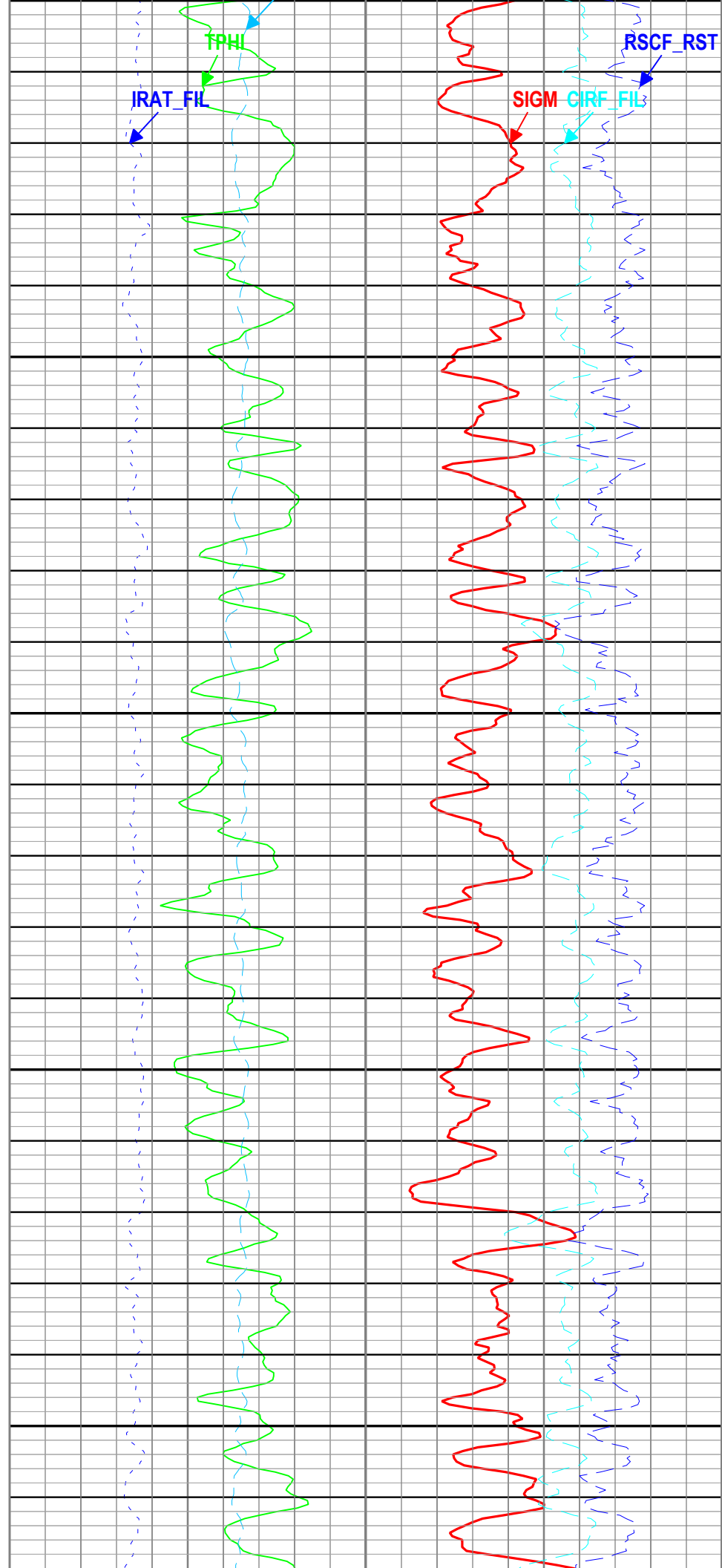
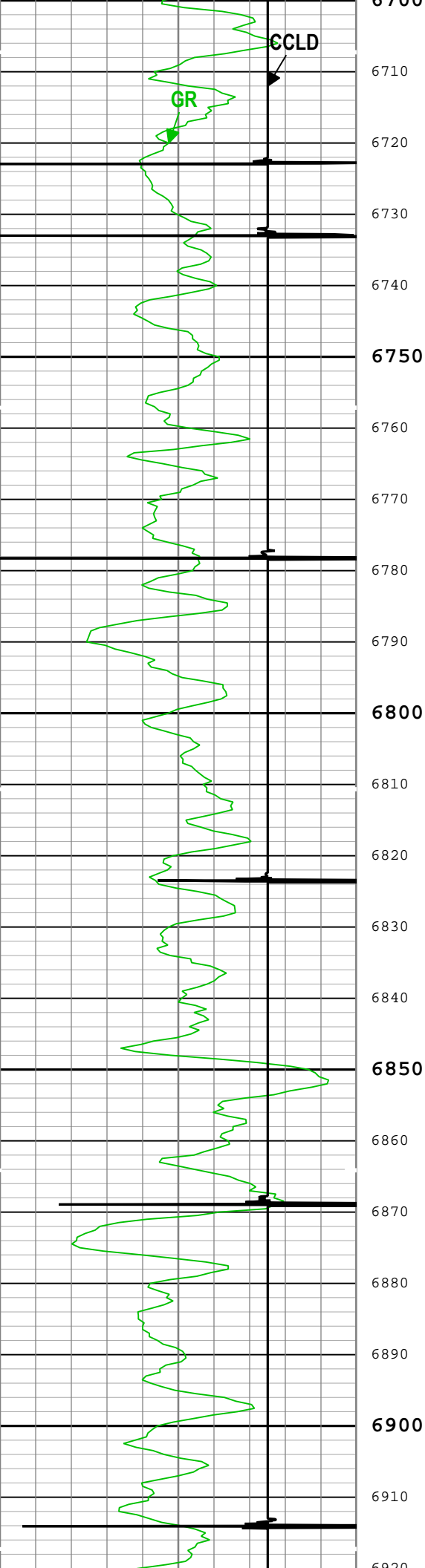


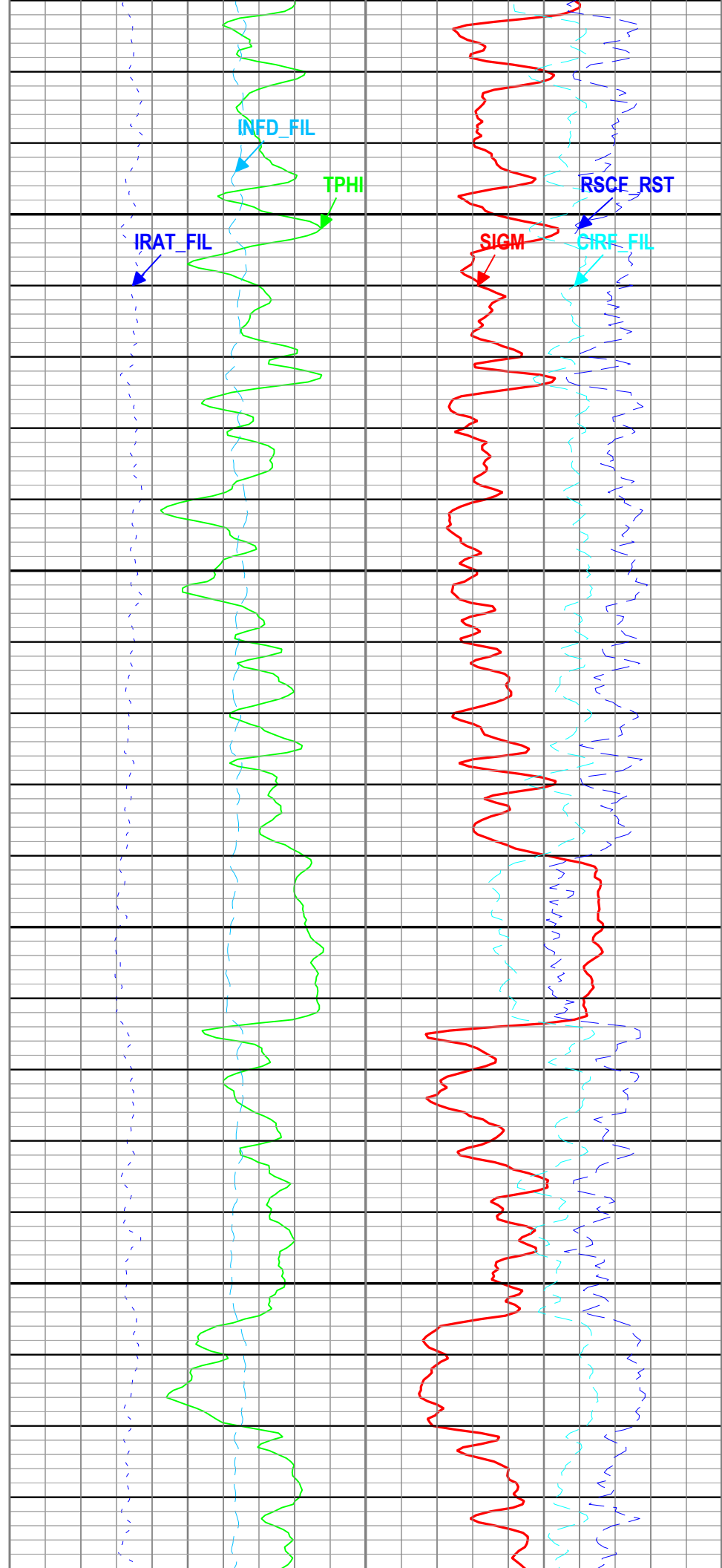
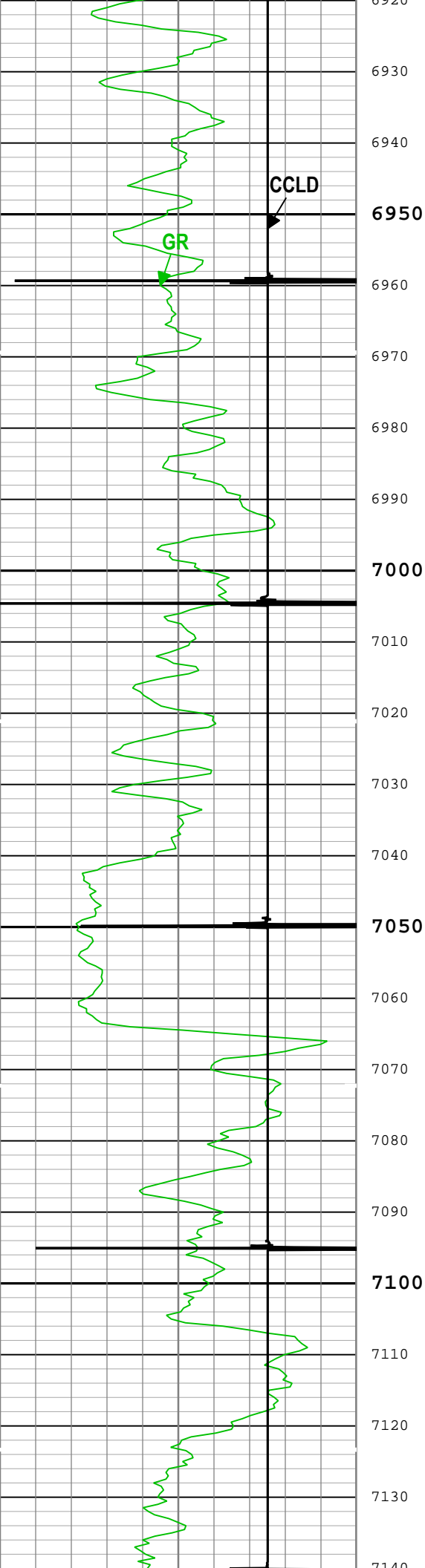




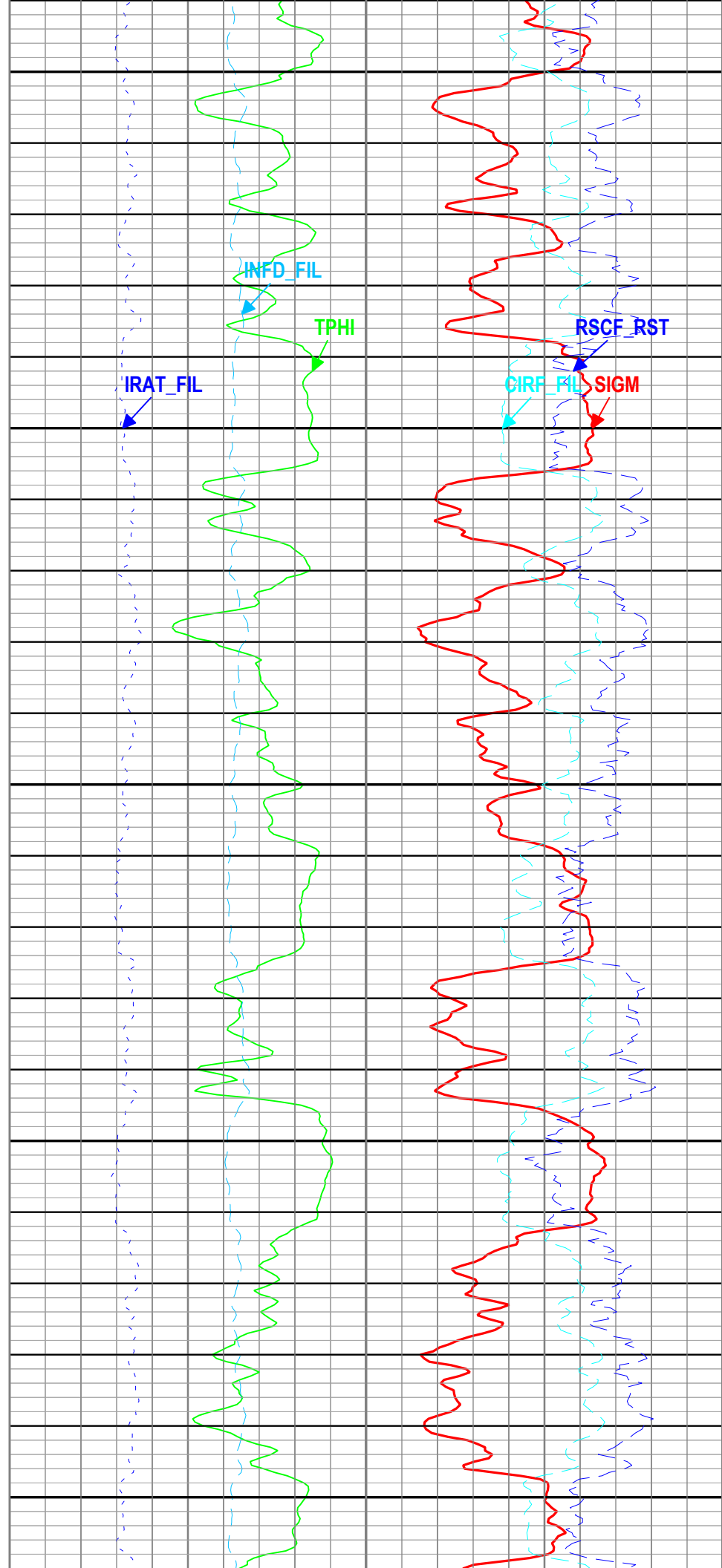
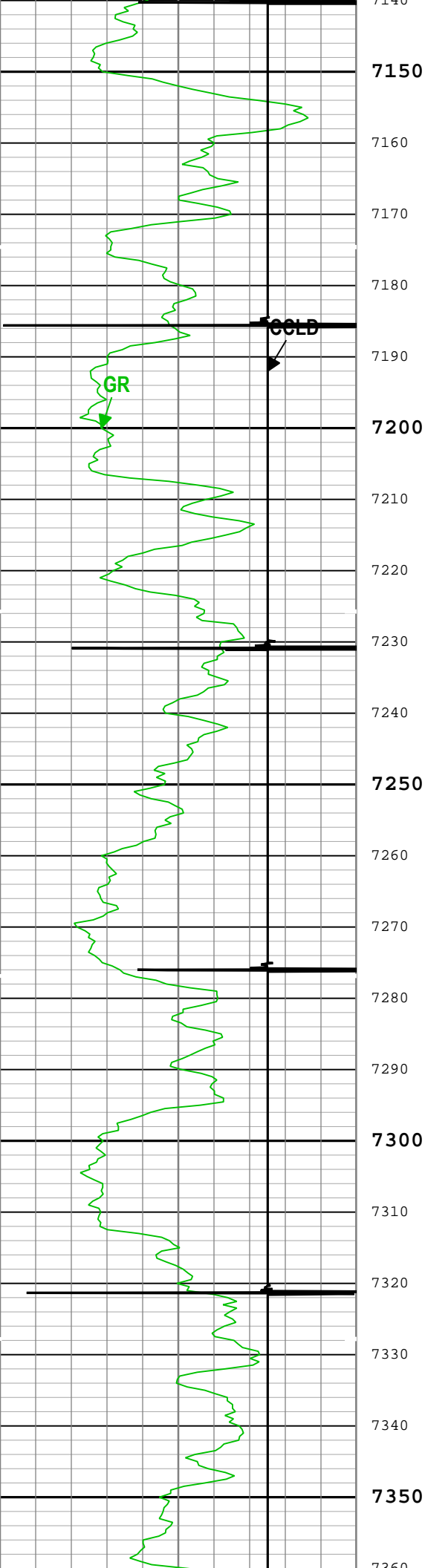


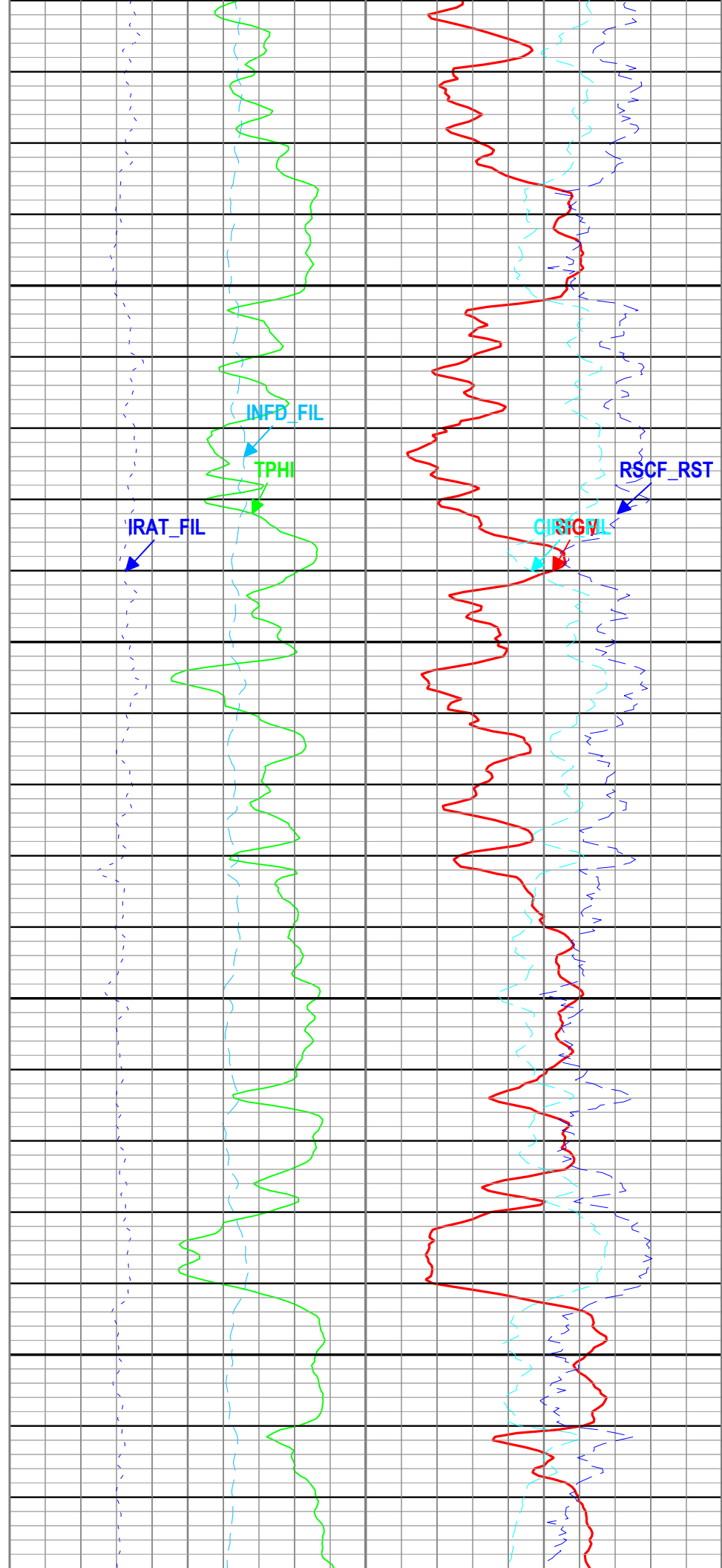
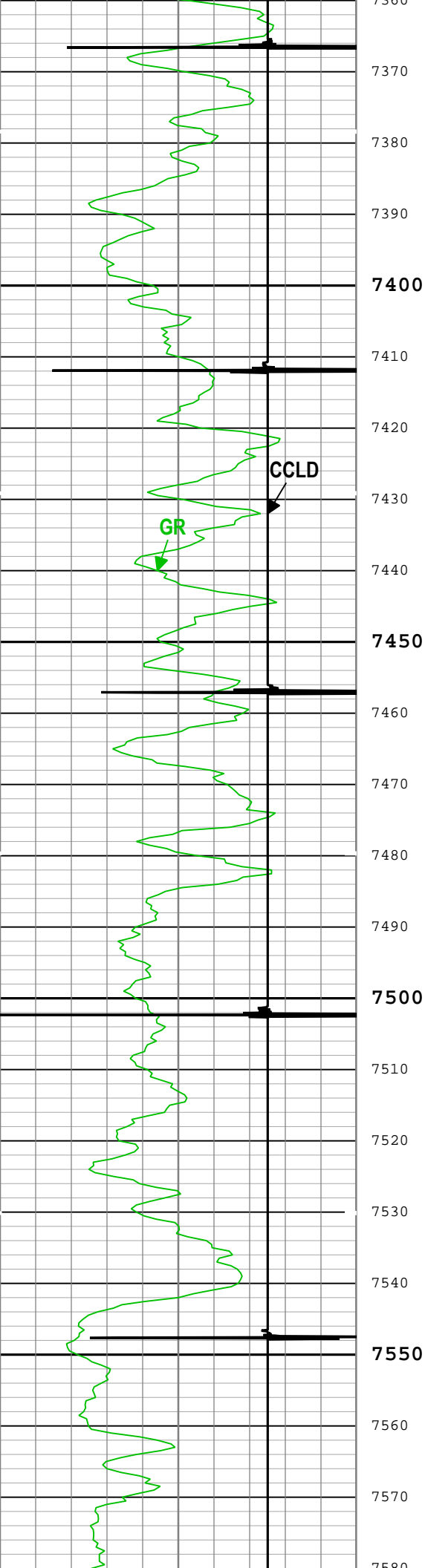


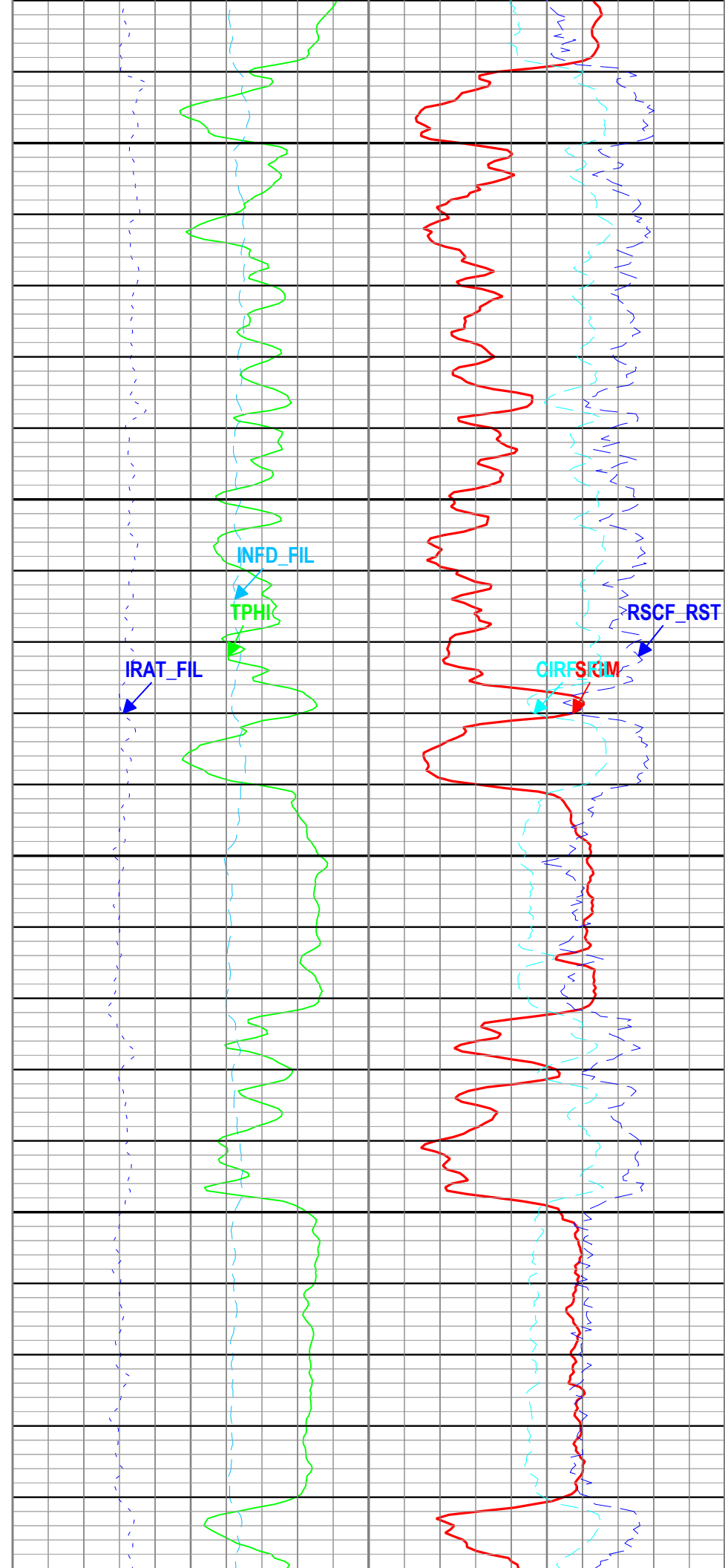
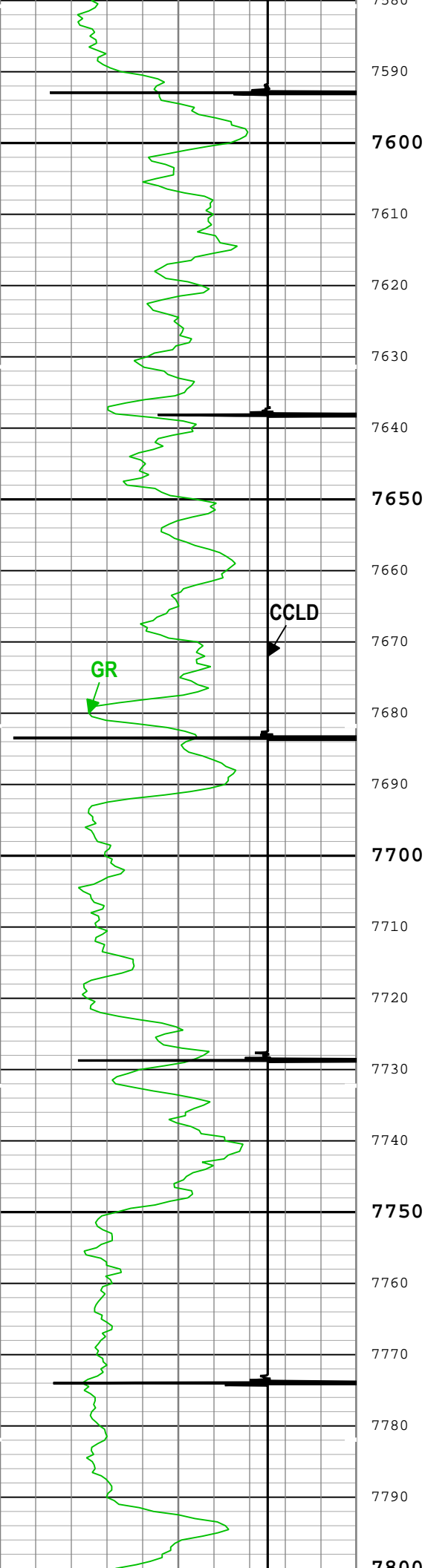


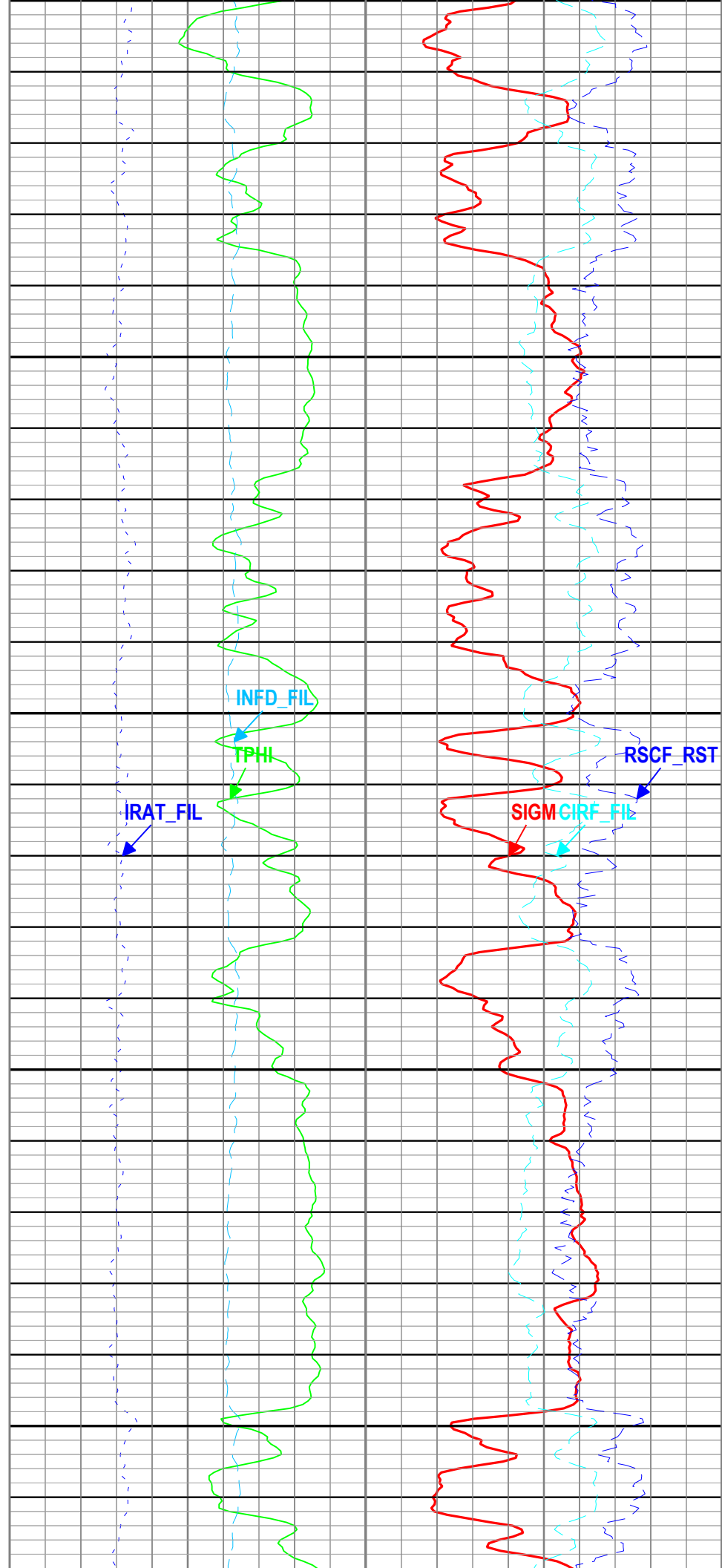
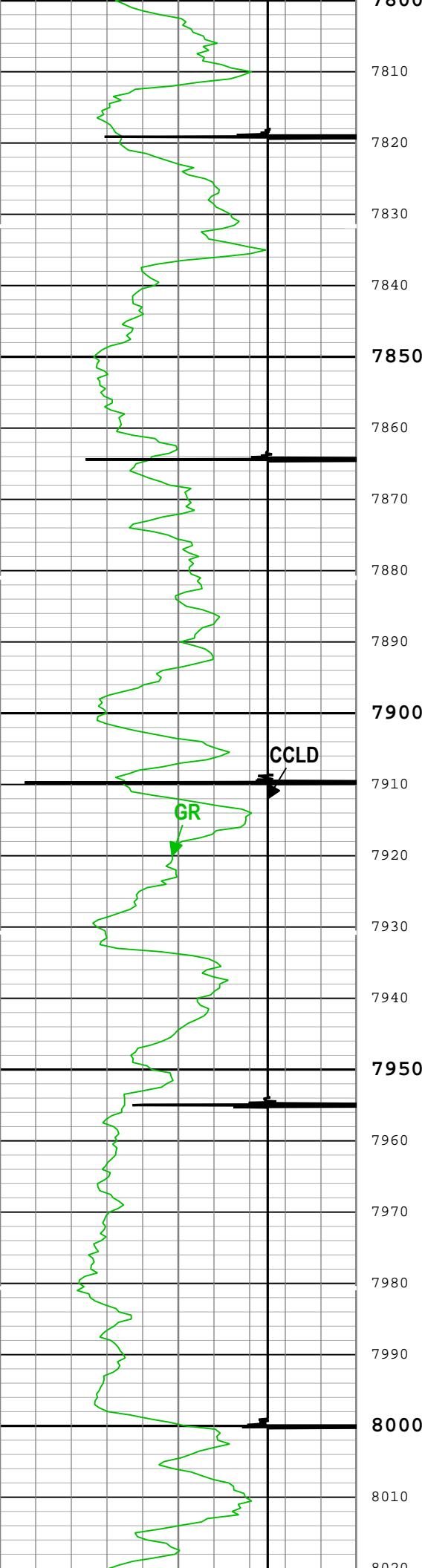


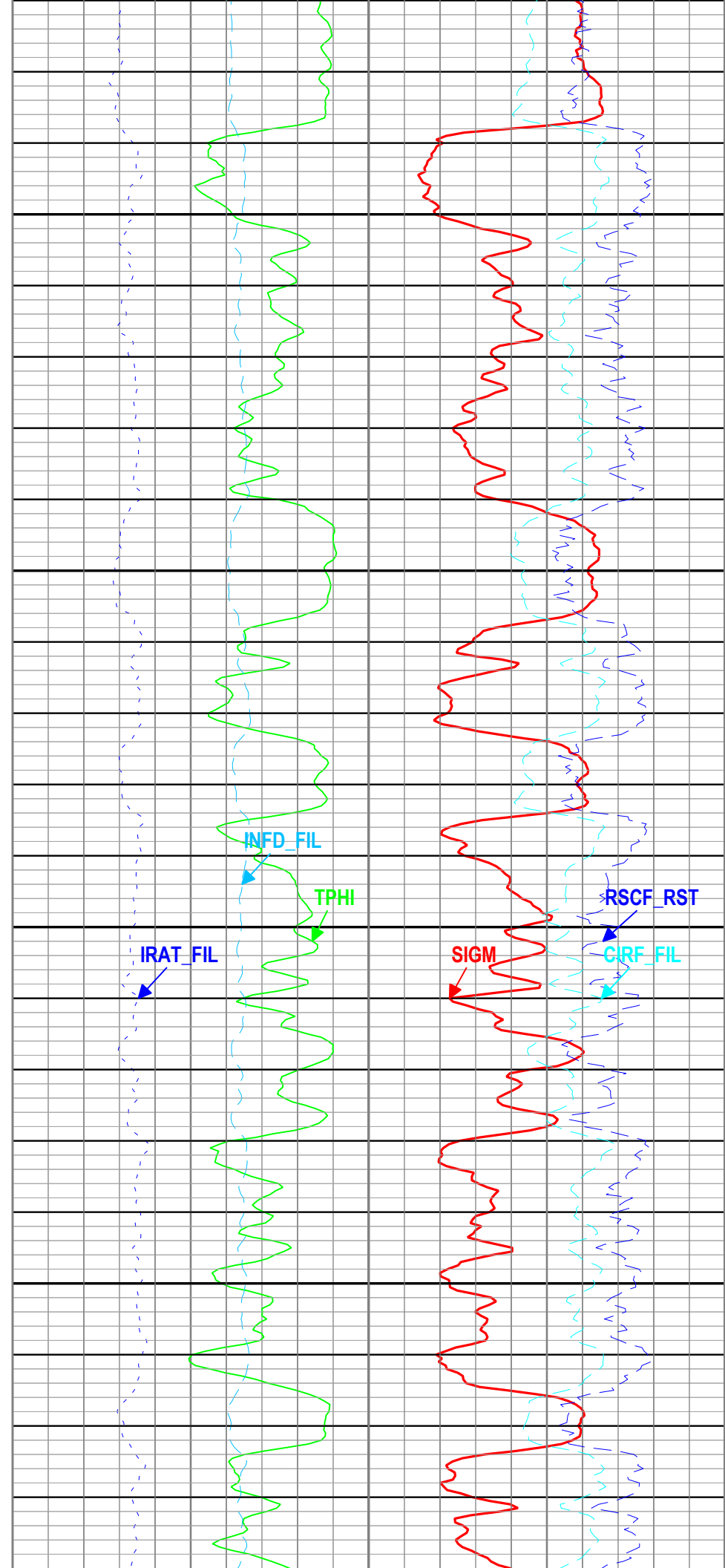
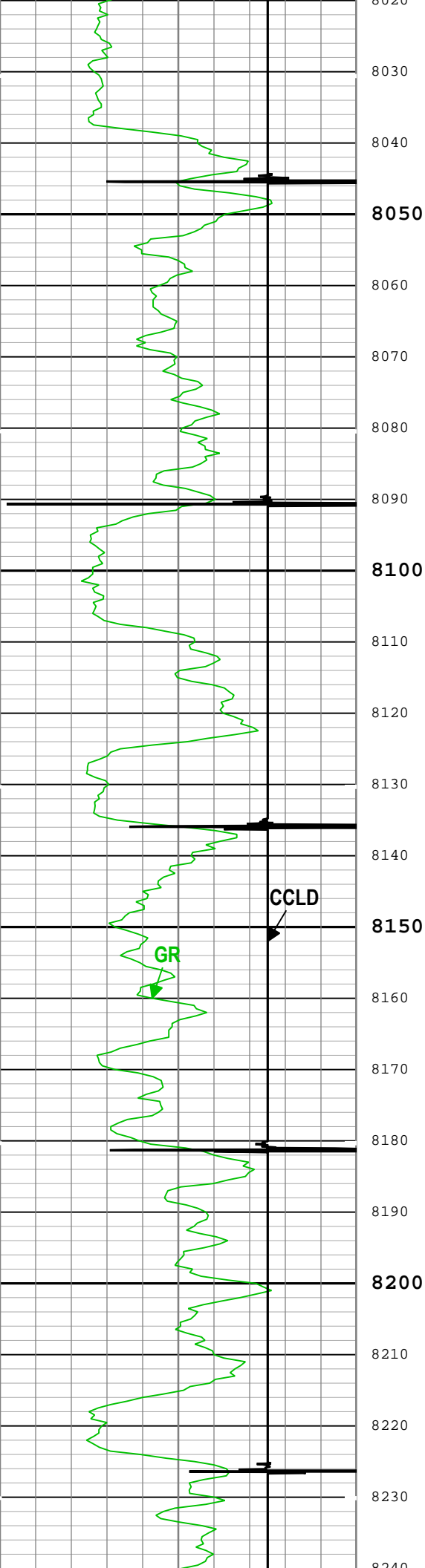




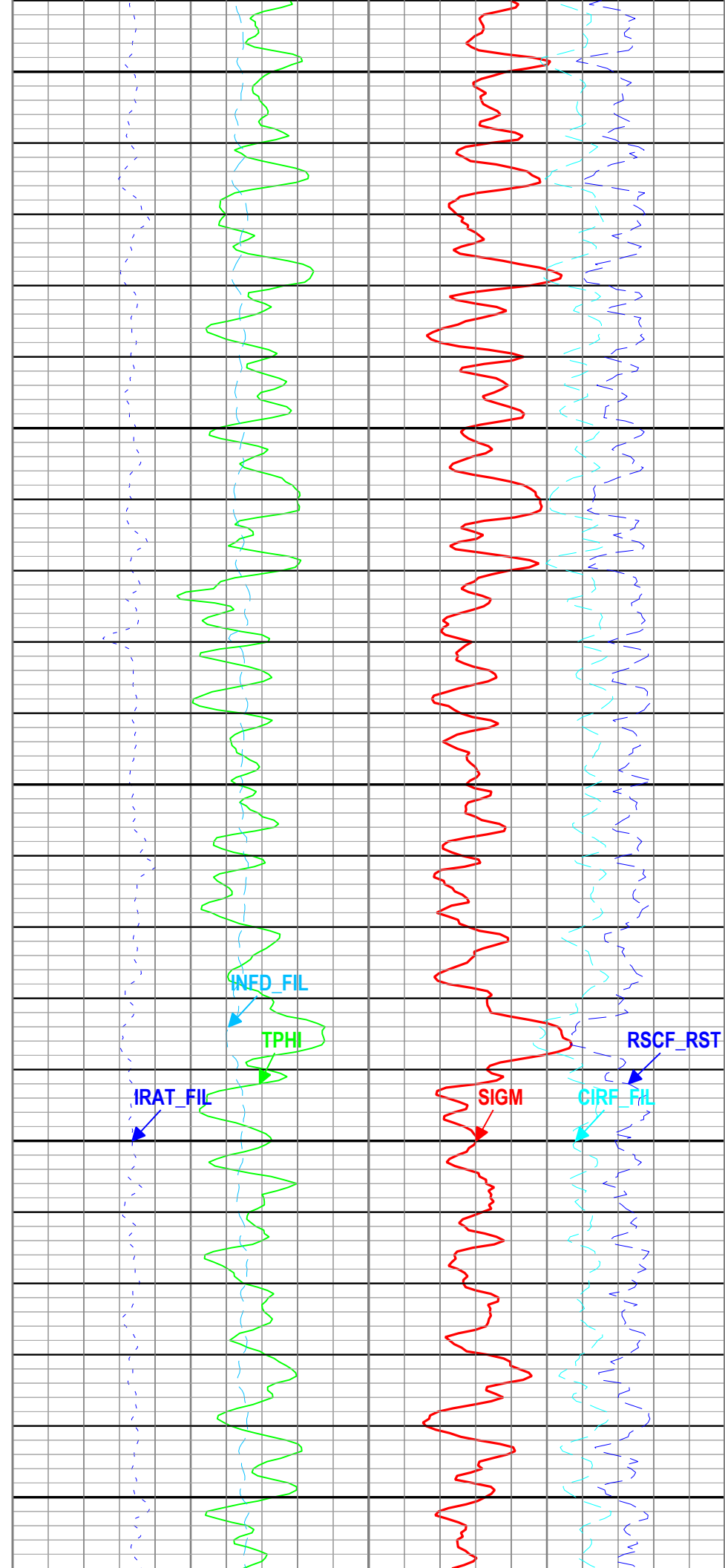
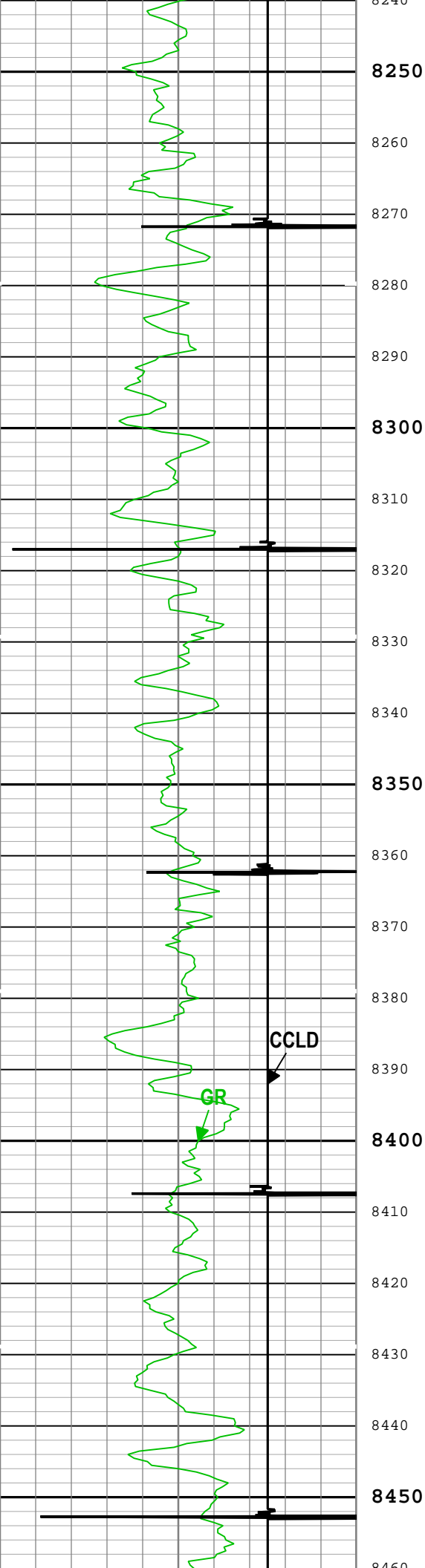


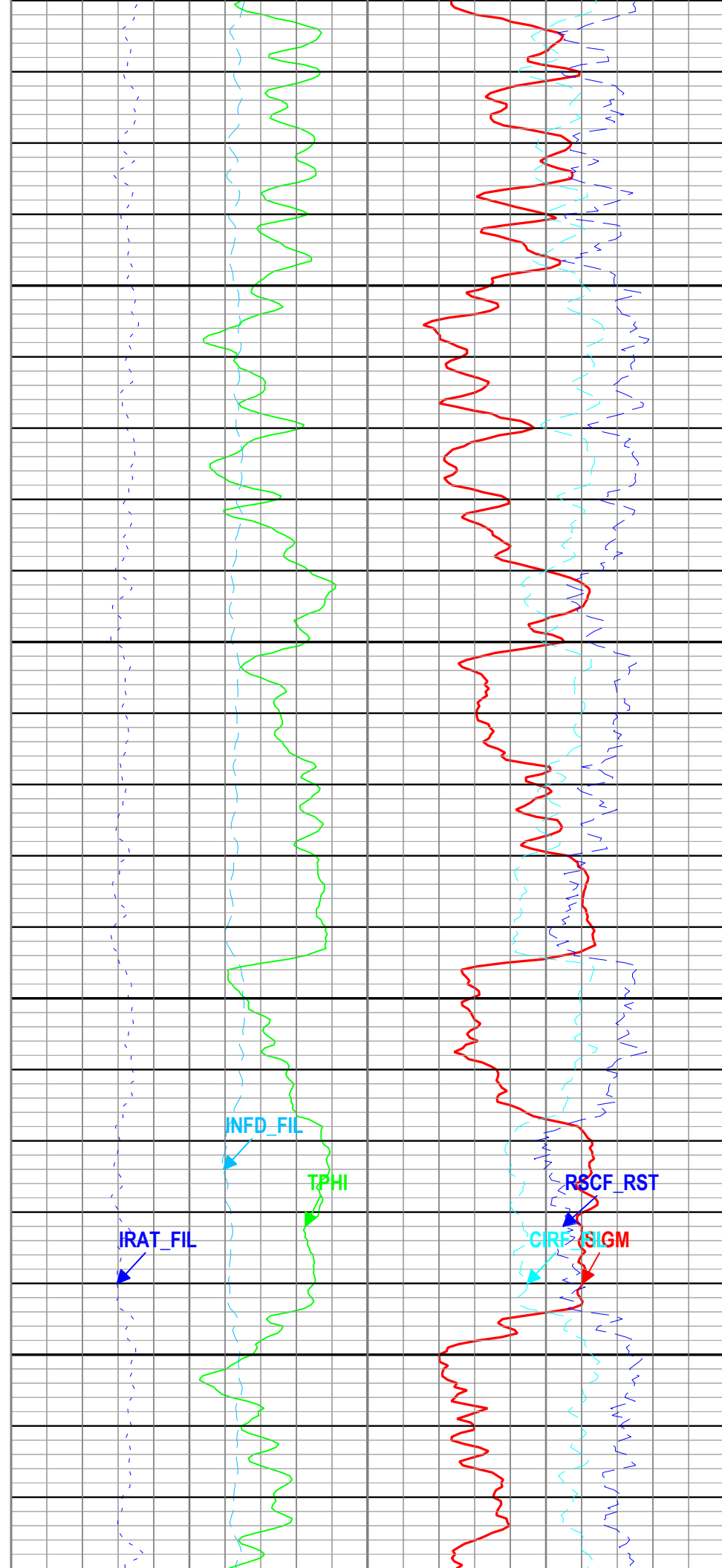
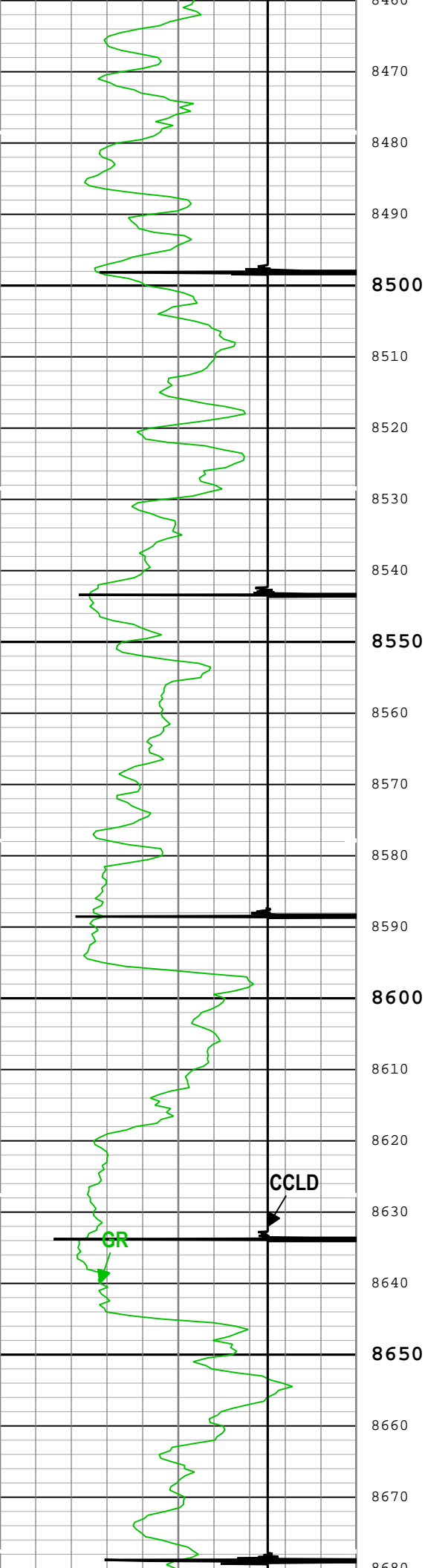


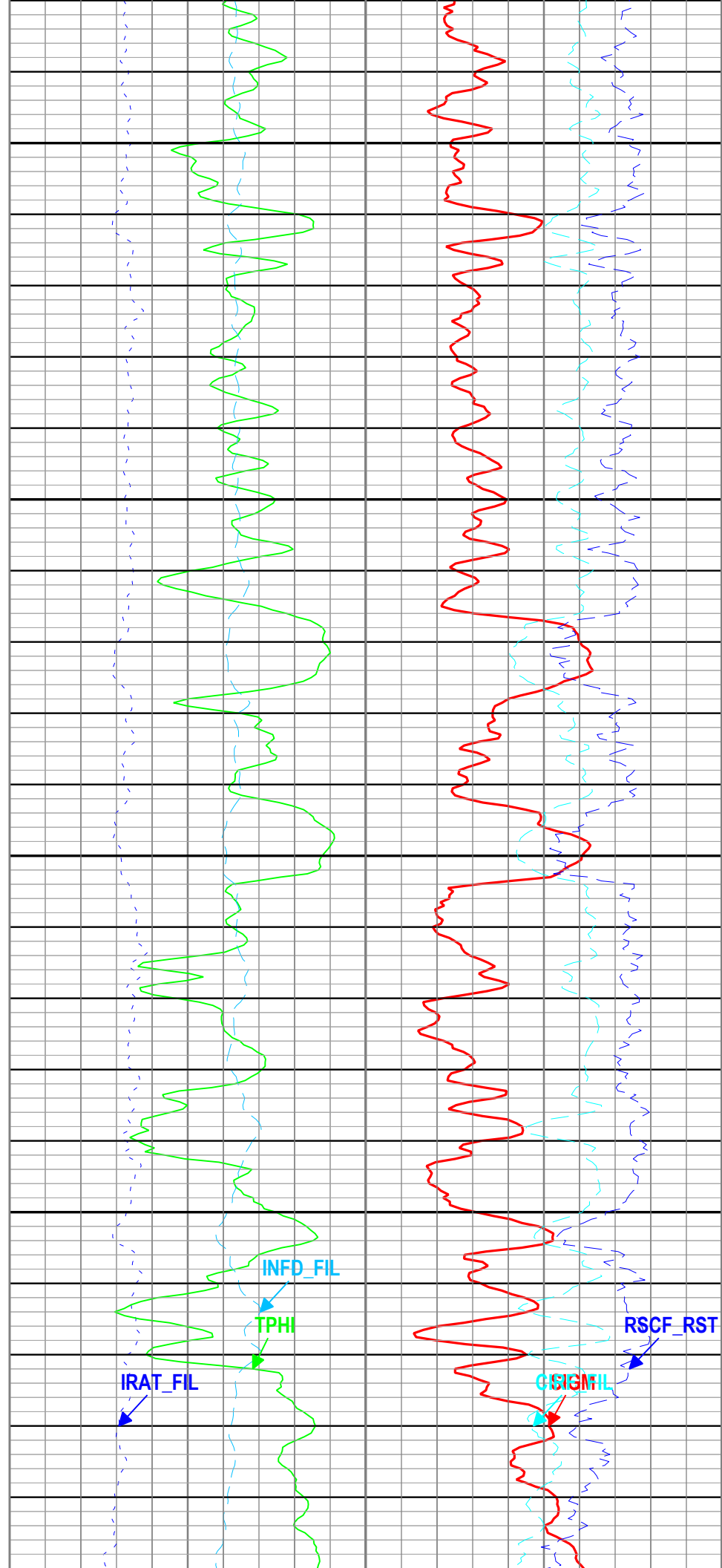
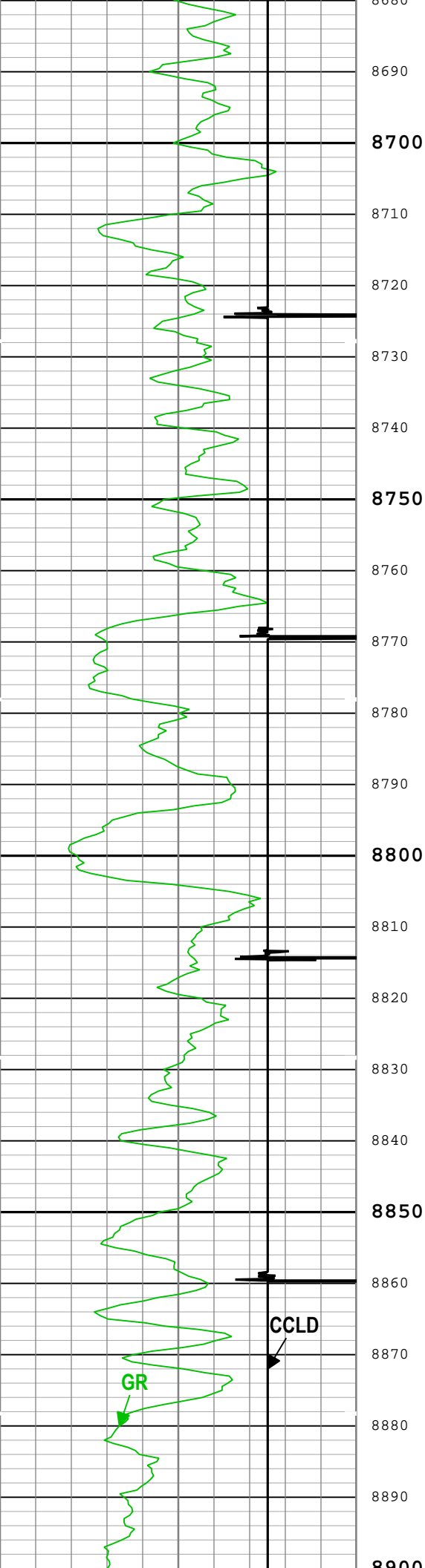


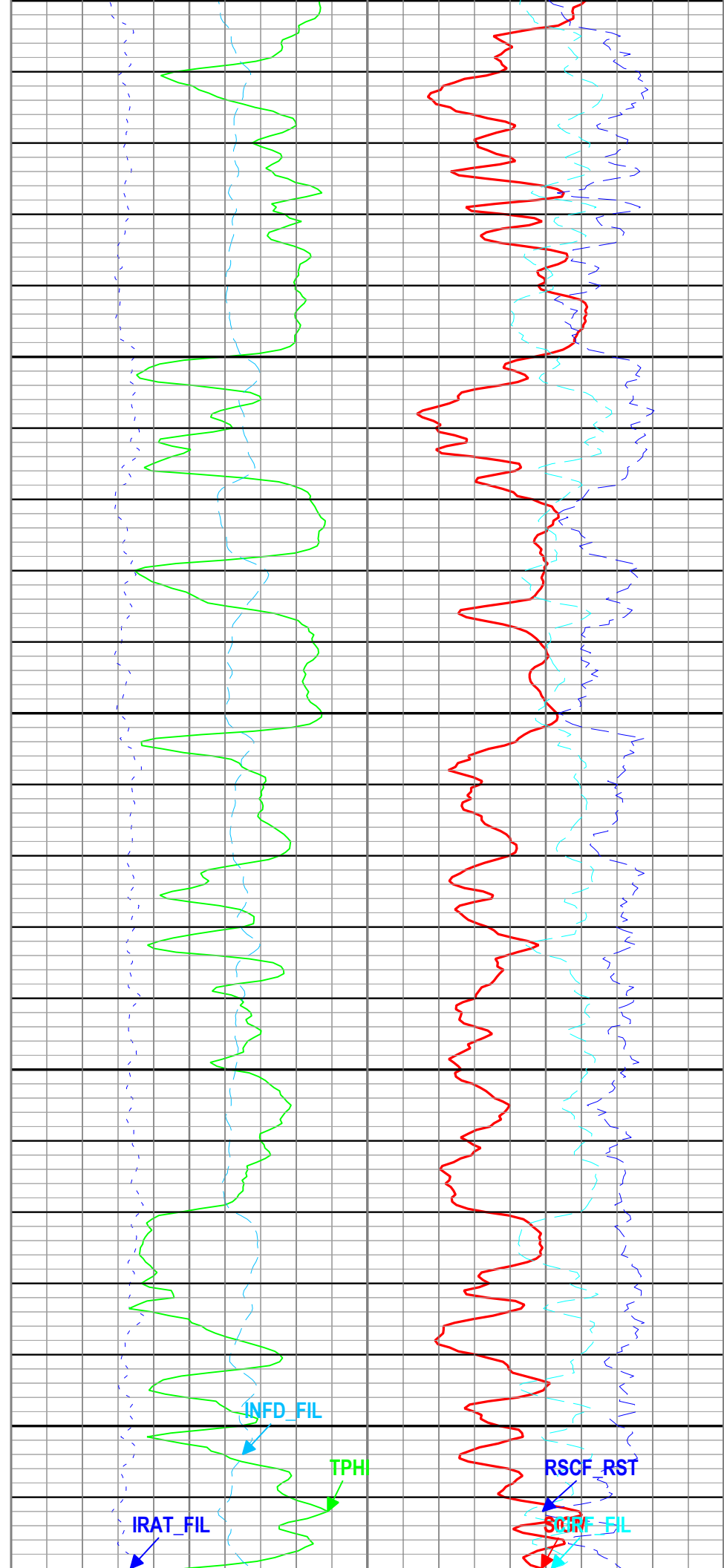
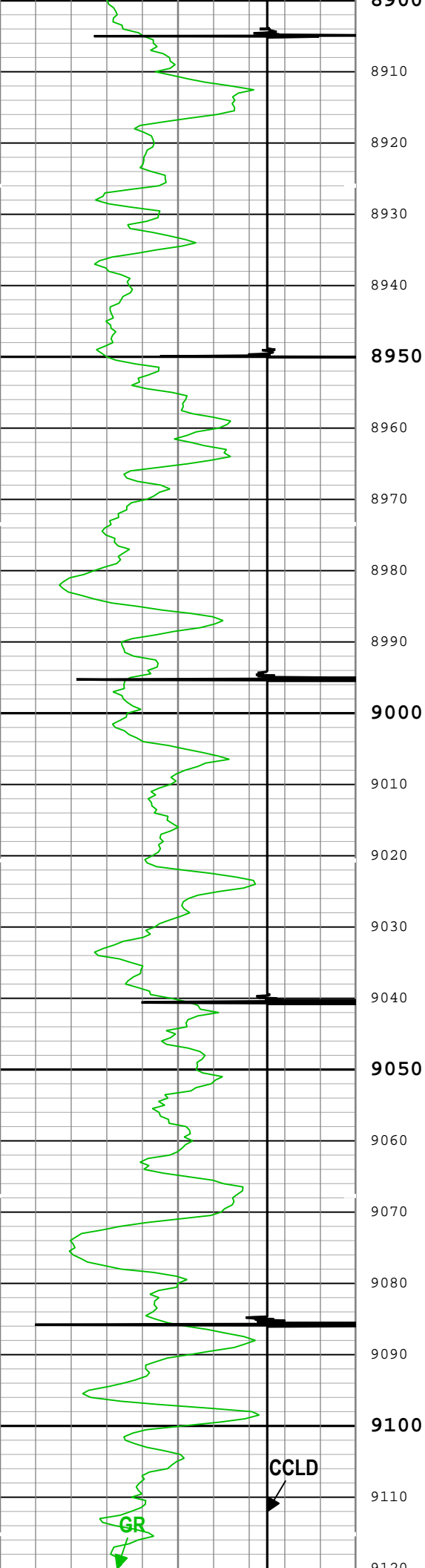


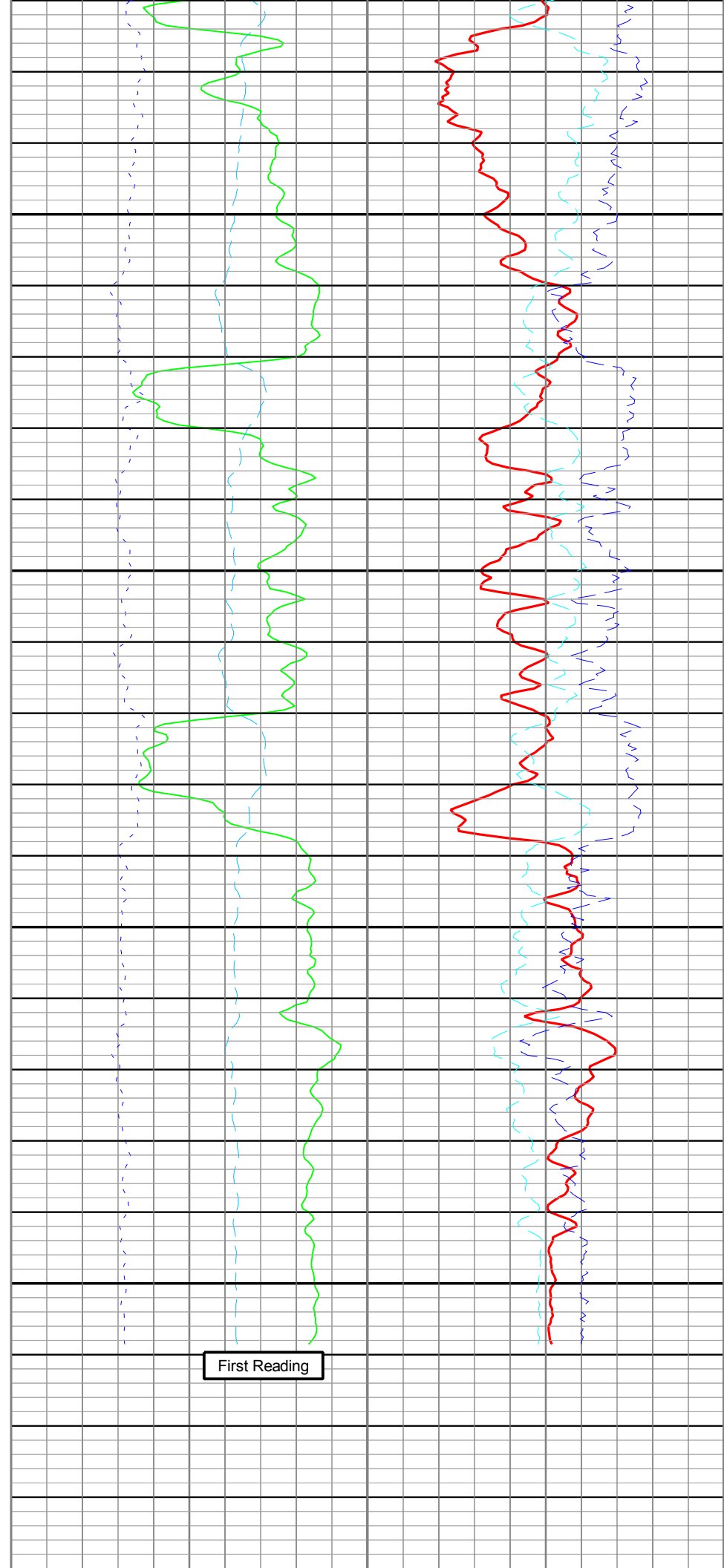
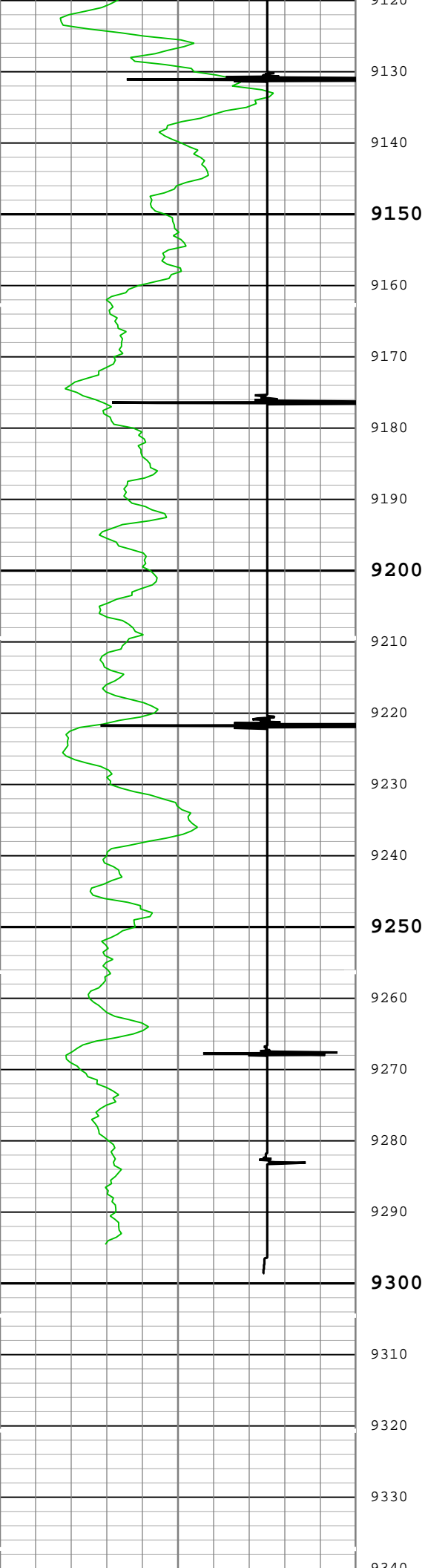














|  |      |  |  |  |  |  |  |   |     |  |  |
|--|------|--|--|--|--|--|--|---|-----|--|--|
|  |      |  |  |  |  |  |  |   |     |  |  |
| <b>Gamma Ray (GR) PSTP-A</b>                     |      |  |  |  |  |  |  |   |     |  |  |
| 0  | gAPI |  |  |  |  |  |  |   | 150 |  |  |
| <b>CCL Discriminated Amplitude (CCLD) PSTP-A</b> |      |  |  |  |  |  |  |   |     |  |  |
| -3   | V    |  |  |  |  |  |  | 1 |     |  |  |

|   |  |   |
|---|--|---|
| Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C      |  |   |
| 60  | cu   | 0 |
| Inelastic Ratio Filtered (IRAT_FIL) RST-C                         | Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C               |   |
| 0.75  | 5  | 0 |
| Thermal Decay Porosity (TPHI) RST-C                               | Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C |   |
| 0.6 ft3/ft3   | 45   | 0 |
| Gross Inelastic Count Rate Far Detector Filtered (INFD_FIL) RST-C |  |   |
| 10000 1/s   |  | 0 |

TIME\_1900 - Time Marked every 60.00 (s)

- | ICV - Integrated Cement Volume every 100.00 (ft3)
- TIME\_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)
- | ICV - Integrated Cement Volume every 10.00 (ft3)
  - | IHV - Integrated Hole Volume every 100.00 (ft3)
  - | IHV - Integrated Hole Volume every 10.00 (ft3)

|                               |                                  |                              |                |                            |                                     |
|-------------------------------|----------------------------------|------------------------------|----------------|----------------------------|-------------------------------------|
| Description: RST SIGMA Answer | Format: Log ( RST SIGMA Answer ) | Index Scale: 5 in per 100 ft | Index Unit: ft | Index Type: Measured Depth | Creation Date: 23-Dec-2017 01:42:13 |
|-------------------------------|----------------------------------|------------------------------|----------------|----------------------------|-------------------------------------|

## Channel Processing Parameters

## One: Parameters

| Parameter    | Description                                  | Tool      | Value     | Unit |
|--------------|--|-----------|-----------|------|
| BHS          | Borehole Status (Open or Cased Hole)         | Borehole  | Cased     |      |
| BS           | Bit Size                                     | WLSESSION | 8.5       | in   |
| BSAL         | Borehole Salinity                            | Borehole  | 0         | ppm  |
| BSALOPT      | Borehole Salinity Option                     | RST-C     | Unknown   |      |
| DFT_CATEGORY | Drilling Fluid Type                          | Borehole  | Water     |      |
| MATR         | Rock Matrix for Neutron Porosity Corrections | Borehole  | SANDSTONE |      |

## Tool Control Parameters

## One: Parameters

| Parameter     | Description                      | Tool      | Value | Unit |
|---------------|----------------------------------|-----------|-------|------|
| MAX_LOG_SPEED | Toolstring Maximum Logging Speed | WLSESSION | 150   | ft/h |
| PCCG          | PSP Downhole CCL Gain            | PSTP-A    | 12 dB |      |
| RST_DLM       | Depth Log Mode                   | RST-C     | Sigma |      |

# One

## Sigma Repeat Pass

## Software Version

| Acquisition System | Version        |
|--------------------|----------------|
| Maxwell 2017 SP3   | 7.3.92069.3100 |

## Pass Summary

| Run Name | Pass Objective | Direction | Top        | Bottom     | Start                  | Stop                    | DSC Mode | Depth Shift | Include Parallel Data |
|----------|----------------|-----------|------------|------------|------------------------|-------------------------|----------|-------------|-----------------------|
| One      | Log[4]:Up      | Up        | 8858.30 ft | 9341.16 ft | 22-Dec-2017 9:54:39 PM | 22-Dec-2017 10:06:31 PM | ON       | 6.74 ft     | Yes                   |

All depths are referenced to toolstring zero

## Log

Company:Caerus Operating LLC

Well:Puckett 34A-23 697

One: Log[4]:Up:S005

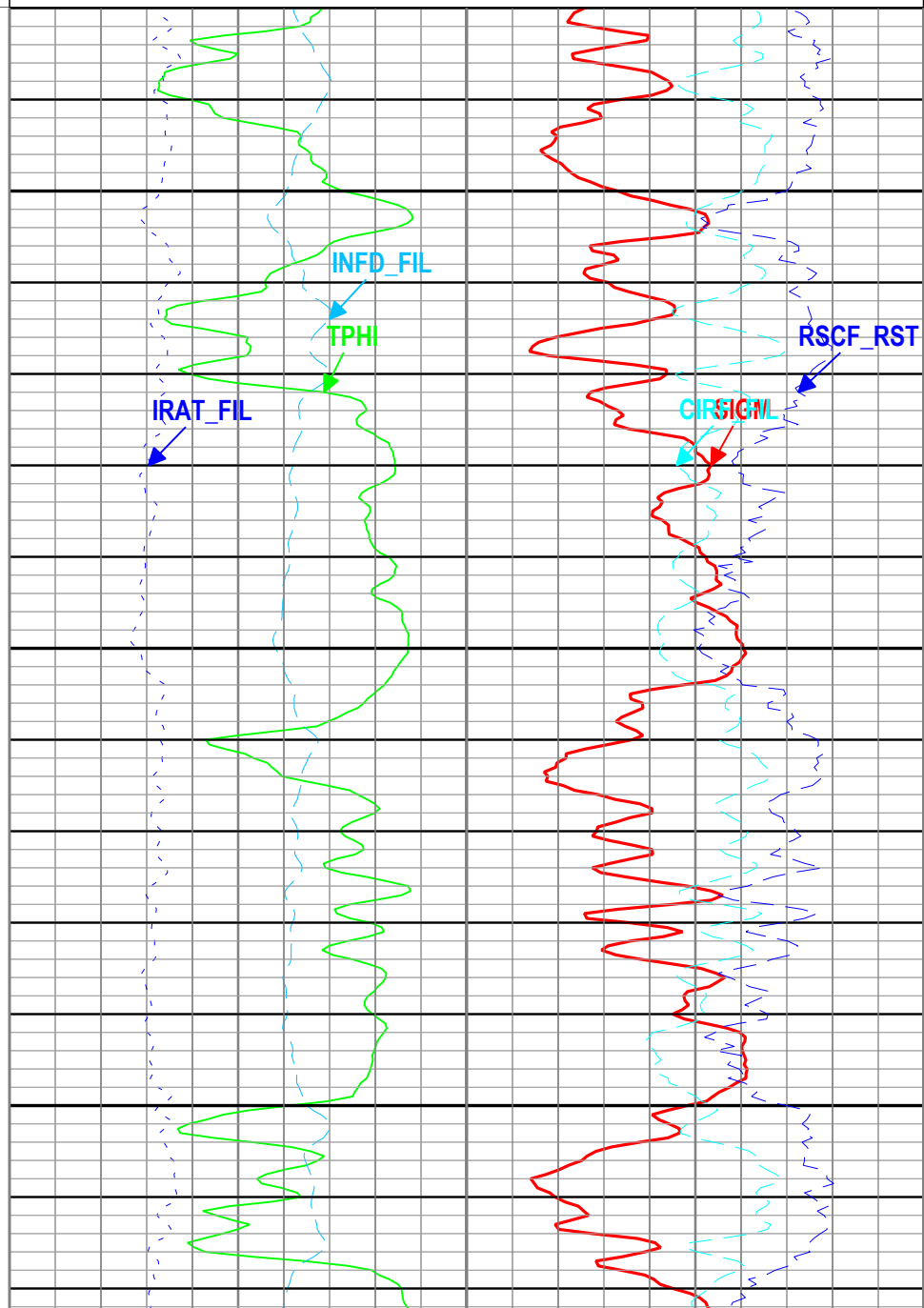
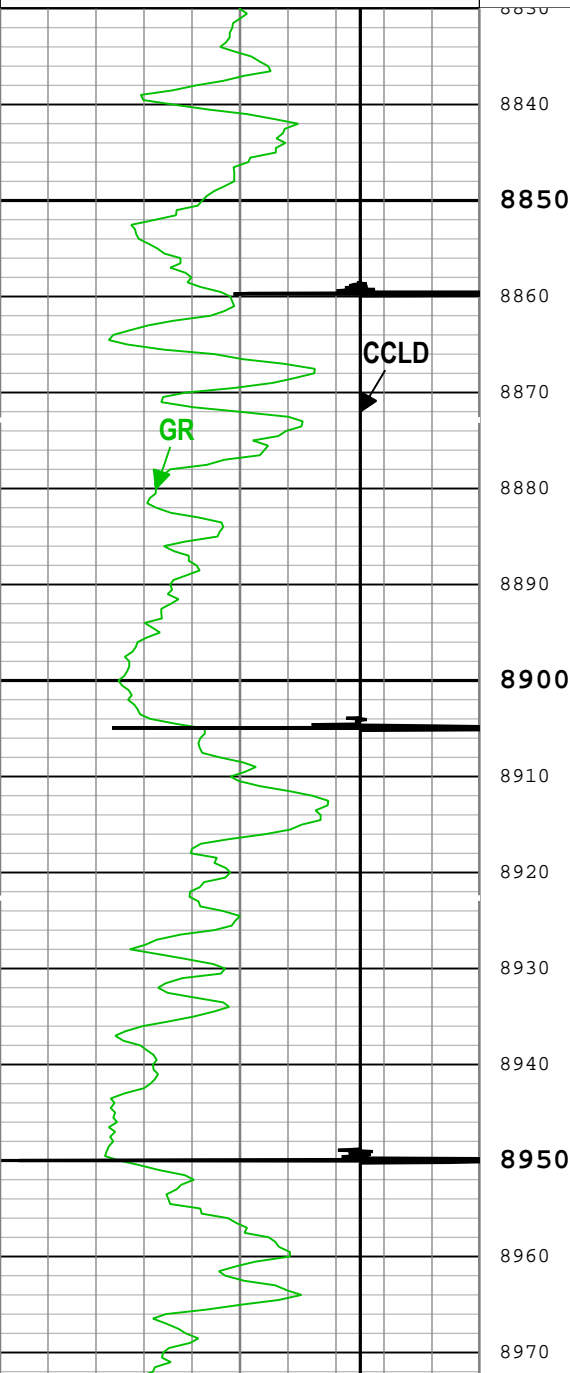
|                              |                                  |                              |                |                            |          |
|------------------------------|----------------------------------|------------------------------|----------------|----------------------------|----------|
| Description: PCT SIGMAAnswer | Format: Log ( PCT SIGMA Answer ) | Index Scale: 5 in per 100 ft | Index Unit: ft | Index Type: Measured Depth | Creation |
|------------------------------|----------------------------------|------------------------------|----------------|----------------------------|----------|

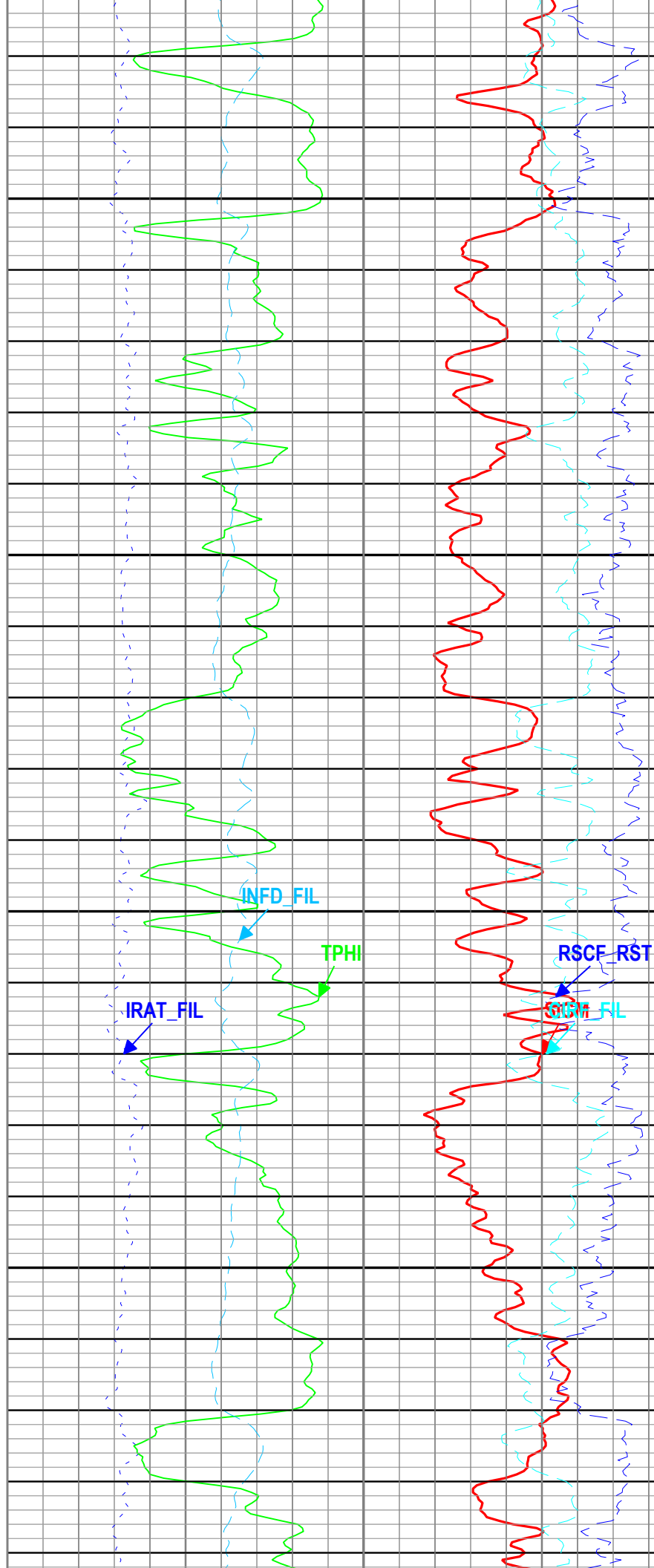
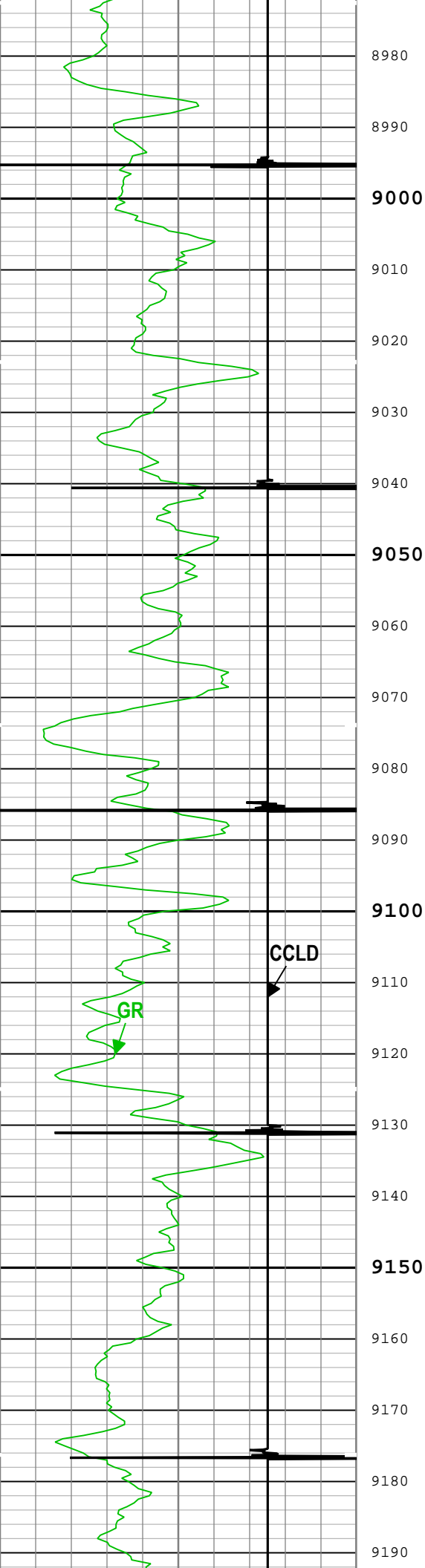
- IHV - Integrated Hole Volume every 10.00 (ft3)
- IHV - Integrated Hole Volume every 100.00 (ft3)
- ICV - Integrated Cement Volume every 10.00 (ft3)
- TIME\_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)
- ICV - Integrated Cement Volume every 100.00 (ft3)

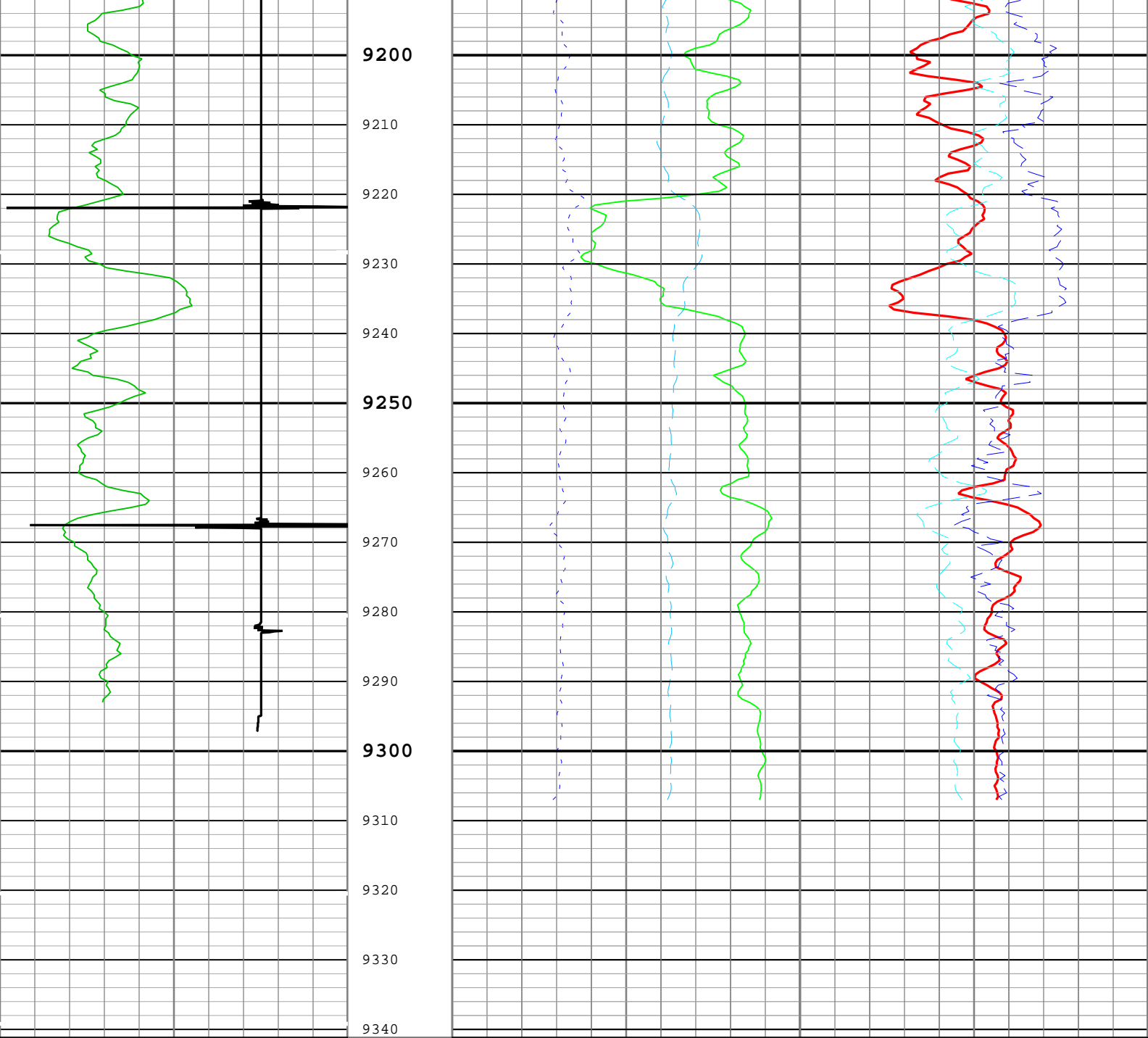
TIME\_1900 - Time Marked every 60.00 (s)

| Gamma Ray (GR) PSTP-A                     |      |     |
|---|------|-----|
| 0   | gAPI | 150 |
| CCL Discriminated Amplitude (CCLD) PSTP-A |      |     |
| -3  | V    | 1   |

| Inelastic Ratio Filtered (IRAT_FIL) RST-C                         |         |   | Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C               |  |   |
|---|---------|---|--|--|---|
| 0.75  |         | 0 |  |  | 0 |
| Thermal Decay Porosity (TPHI) RST-C                               |         |   | Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C |  |   |
| 0.6   | ft3/ft3 | 0 | 5  |  | 0 |
| Gross Inelastic Count Rate Far Detector Filtered (INFD_FIL) RST-C |         |   | Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C           |  |   |
| 10000   | 1/s     | 0 | 45   |  | 0 |
|   |         |   |  |  |   |
| 60  | cu      |   |  |  | 0 |







| Gamma Ray (GR) PSTP-A                     |      |     |
|---|------|-----|
| 0   | gAPI | 150 |
| CCL Discriminated Amplitude (CCLD) PSTP-A |      |     |
| -3  | V    | 1   |

| Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C           |         |   |
|--|---------|---|
| 60   | cu      | 0 |
| Inelastic Ratio Filtered (IRAT_FIL) RST-C                              |         |   |
| 0.75   |         | 0 |
| Thermal Decay Porosity (TPHI) RST-C                                    |         |   |
| 0.6  | ft3/ft3 | 0 |
| Gross Inelastic Count Rate Far Detector Filtered (INFD_FIL) RST-C      |         |   |
| 10000  | 1/s     | 0 |
| Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C               |         |   |
| 5  |         | 0 |
| Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C |         |   |
| 45   |         | 0 |

TIME\_1900 - Time Marked every 60.00 (s)

— ICV - Integrated Cement Volume every 100.00 (ft3)

— TIME\_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)

— ICV - Integrated Cement Volume every 10.00 (ft3)

— IHV - Integrated Hole Volume every 100.00 (ft3)

— IHV - Integrated Hole Volume every 10.00 (ft3)

Channel Processing Parameters

One: Parameters

| Parameter    | Description                                  | Tool      | Value     | Unit |
|--------------|--|-----------|-----------|------|
| BHS          | Borehole Status (Open or Cased Hole)         | Borehole  | Cased     |      |
| BS           | Bit Size                                     | WLSESSION | 8.5       | in   |
| BSAL         | Borehole Salinity                            | Borehole  | 0         | ppm  |
| BSALOPT      | Borehole Salinity Option                     | RST-C     | Unknown   |      |
| DFT_CATEGORY | Drilling Fluid Type                          | Borehole  | Water     |      |
| MATR         | Rock Matrix for Neutron Porosity Corrections | Borehole  | SANDSTONE |      |

Tool Control Parameters

One: Parameters

| Parameter     | Description                      | Tool      | Value | Unit |
|---------------|----------------------------------|-----------|-------|------|
| MAX_LOG_SPEED | Toolstring Maximum Logging Speed | WLSESSION | 150   | ft/h |
| PCCG          | PSP Downhole CCL Gain            | PSTP-A    | 12 dB |      |
| RST_DLM       | Depth Log Mode                   | RST-C     | Sigma |      |



|                       |                      |              |
|-----------------------|----------------------|--------------|
| Company:              | Caerus Operating LLC | Schlumberger |
| Well:                 | Puckett 34A-23 697   |              |
| Field:                | Grand Valley         |              |
| County:               | Garfield             |              |
| State:                | Colorado             |              |
| Cement Bond Log       |                      |              |
| RST Sigma Log         |                      |              |
| Gamma Ray/ Collar Log |                      |              |