



Company: ENCANA OIL & GAS (USA) INC.

Well: NP EF01B-34 P27 595

Field: NORTH PARACHUTE

County: GARFIELD

State: COLORADO

CEMENT BOND LOG
CBL – VDL
GAMMA RAY – CCL

County: GARFIELD
Field: NORTH PARACHUTE
Location: SHL: 634' FSL & 551' FEL
Well: NP EF01B-34 P27 595
Company: ENCANA OIL & GAS (USA) INC.

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|-------------------------------|--|-------------------------|--|--------------------------|--|----------------------------|--|
| County: | | GARFIELD | | SHL: 634' FSL & 551' FEL | | Elev.: K.B. 6677.00 ft | |
| Field: | | NORTH PARACH | | BHL: 246' FNL & 663' FEL | | G.L. 6650.00 ft | |
| Location: | | SHL: 634' FSL & | | | | D.F. 6676.00 ft | |
| Well: | | NP EF01B-34 P2 | | | | | |
| Company: | | ENCANA OIL & C | | | | | |
| Logging Date | | LOCATION | | | | Elev.: 6650.00 ft | |
| | | Permanent Datum: | | GROUND LEVEL | | 27.00 ft above Perm. Datum | |
| Run Number | | Log Measured From: | | KELLY BUSHING | | | |
| Depth Driller | | Drilling Measured From: | | KELLY BUSHING | | | |
| Schlumberger Depth | | API Serial No. | | Section | | Township | |
| Bottom Log Interval | | 05-045-20322-0000 | | 27 | | 5S | |
| Top Log Interval | | | | | | Range | |
| Casing Fluid Type | | | | | | 95W | |
| Salinity | | | | | | | |
| Density | | | | | | | |
| Fluid Level | | | | | | | |
| BIT/CASING/TUBING STRING | | | | | | | |
| Bit Size | | | | | | | |
| From | | | | | | | |
| To | | | | | | | |
| Casing/Tubing Size | | | | | | | |
| Weight | | | | | | | |
| Grade | | | | | | | |
| From | | | | | | | |
| To | | | | | | | |
| Maximum Recorded Temperatures | | | | | | | |
| Logger On Bottom | | Time | | 16:49 | | | |
| Unit Number | | Location | | 391 | | GRAND JUNCTION | |
| Recorded By | | | | DAVID PATE | | | |
| Witnessed By | | UNATTENDED | | | | | |

| PVT DATA | | Run 1 | Run 2 | Run 3 |
|-------------------------------|---------|-------|-------|-------|
| Oil Density | | | | |
| Water Salinity | | | | |
| Gas Gravity | | | | |
| Bo | | | | |
| Bw | | | | |
| 1/Bg | | | | |
| Bubble Point Pressure | | | | |
| Bubble Point Temperature | | | | |
| Solution GOR | | | | |
| Maximum Deviation | | | | |
| CEMENTING DATA | | | | |
| Primary/Squeeze | Primary | | | |
| Casing String No | | | | |
| Lead Cement Type | | | | |
| Volume | | | | |
| Density | | | | |
| Water Loss | | | | |
| Additives | | | | |
| Tail Cement Type | | | | |
| Volume | | | | |
| Density | | | | |
| Water Loss | | | | |
| Additives | | | | |
| Expected Cement Top | | | | |
| Logging Date | | | | |
| Run Number | | | | |
| Depth Driller | | | | |
| Schlumberger Depth | | | | |
| Bottom Log Interval | | | | |
| Top Log Interval | | | | |
| Casing Fluid Type | | | | |
| Salinity | | | | |
| Density | | | | |
| Fluid Level | | | | |
| BIT/CASING/TUBING STRING | | | | |
| Bit Size | | | | |
| From | | | | |
| To | | | | |
| Casing/Tubing Size | | | | |
| Weight | | | | |
| Grade | | | | |
| From | | | | |
| To | | | | |
| Maximum Recorded Temperatures | | | | |
| Logger On Bottom | | | | |
| Unit Number | | | | |
| Recorded By | | | | |
| Witnessed By | | | | |

DEPTH SUMMARY LISTING

Date Created: 26-APR-2012 20:47:37

Depth System Equipment

| Depth Measuring Device | | Tension Device | | Logging Cable | |
|---------------------------|-------------|-------------------------------|-------------|--|----------|
| Type: | IDW-B | Type: | CMTD-C | Type: | 1-25ZT |
| Serial Number: | 5873 | Serial Number: | 5006 | Serial Number: | 391 |
| Calibration Date: | 20-DEC-2011 | Calibration Date: | 31-MAR-2012 | Length: | 19600 FT |
| Calibrator Serial Number: | 33 | Calibrator Serial Number: | 174878 | <div>Conveyance Method: Wireline</div> <div>Rig Type: LAND</div> | |
| Calibration Cable Type: | 1-25ZT | Number of Calibration Points: | 10 | | |
| Wheel Correction 1: | -3 | Calibration RMS: | 5 | | |
| Wheel Correction 2: | -3 | Calibration Peak Error: | 9 | | |

Depth Control Parameters

| | |
|-----------------------------|-----------------------|
| Log Sequence: | First Log In the Well |
| Rig Up Length At Surface: | 267.00 FT |
| Rig Up Length At Bottom: | 266.00 FT |
| Rig Up Length Correction: | 1.00 FT |
| Stretch Correction: | 4.00 FT |
| Tool Zero Check At Surface: | 1.40 FT |

Depth Control Remarks

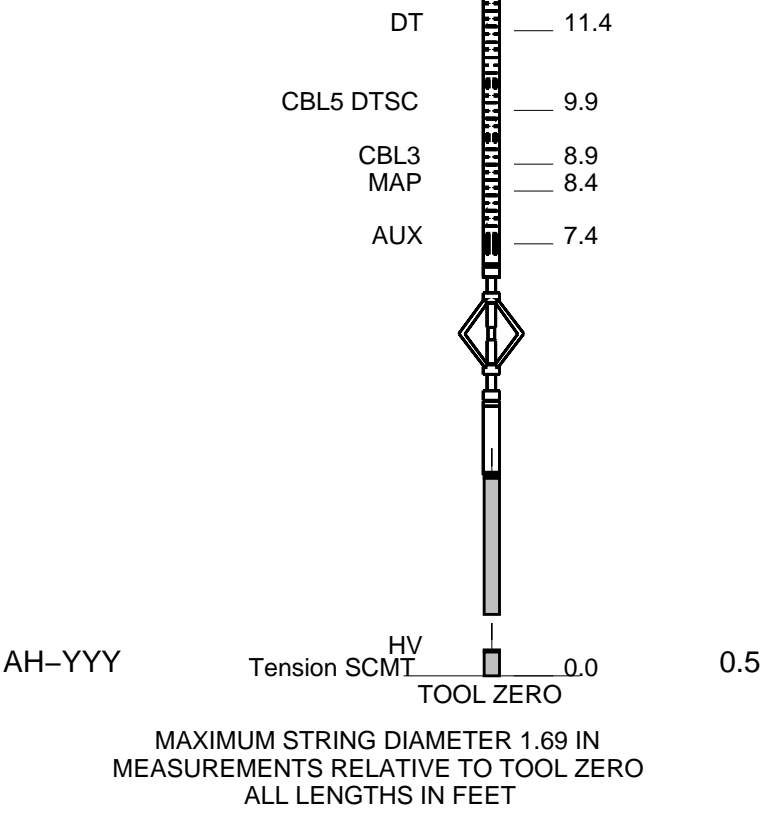
1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED.
2. IDW USED AS PRIMARY DEPTH CONTROL.
3. Z-CHART USED AS SECONDARY DEPTH CONTROL.
- 4.
- 5.
- 6.

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 OF 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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| OTHER SERVICES1 OS1: NONE OS2: OS3: OS4: OS5: | OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5: |
| REMARKS: RUN NUMBER 1 | REMARKS: RUN NUMBER 2 |
| THIS IS THE FIRST RUN IN THE HOLE. | |
| TOOL RAN AS PER TOOL SKETCH. | |
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| TD TAGGED AT: 9951 FT | |
| MAXIMUM RECORDED PRESSURE AT TD: 4155 PSIA | |
| MAXIMUM RECORDED TEMPERATURE AT TD: 269 DEGF | |

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|--|--------------------------------|--------------|------------------|-------|------|
| SHORT JOINTS: 6200 FT & 8460 FT | | | | | |
| | | | | | |
| EXPECTED FREE PIPE AMPLITUDE: 80 mV | | | | | |
| CYCLE SKIPING DUE TO GOOD BOND CAUSING TT TO READ HIGH | | | | | |
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| AFE: 11160563 | | | | | |
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| THANK YOU FOR CHOOSING SCHLUMBERGER. | | | | | |
| CREW: KELLY J. & CHRIS A. | | | | | |
| RUN 1 | | | RUN 2 | | |
| SERVICE ORDER #: | | BIHS-00234 | SERVICE ORDER #: | | |
| PROGRAM VERSION: | | 19C0-187 | PROGRAM VERSION: | | |
| FLUID LEVEL: | | 22 ft | FLUID LEVEL: | | |
| LOGGED INTERVAL | START | STOP | LOGGED INTERVAL | START | STOP |
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| EQUIPMENT DESCRIPTION | | | | | |
| RUN 1 | | | RUN 2 | | |
| SURFACE EQUIPMENT | | | | | |
| WITM-A 3412 PSC_16MHZ 3412 | | | | | |
| DOWNHOLE EQUIPMENT | | | | | |
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| MH-22 MH-22 391 | | 30.6 | | | |
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| AH-38 | Detail MT TelStatus CTEM | 29.1 | | | |
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| PSPT | | 28.8 | | | |
| PSC-A PSPT-A 3779 PSTC-A PBMS-A 3779 10k_Sapphire_Mano 3779 RTD_Thermometer 3779 GR CCL 3779 PBMS 3779 | | | | | |
| | GR | 25.1 | | | |
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| | Well_Temp Manometer | 22.0 21.9 | | | |
| | CCL | 21.3 | | | |
| | PBMS PSTC | 20.5 | | | |
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| SCMT-CB | | 20.5 | | | |
| SCMC-CA SECH-CA CMIR-AG SCMS-CB 8317 SCMX-CA 8132 | | | | | |
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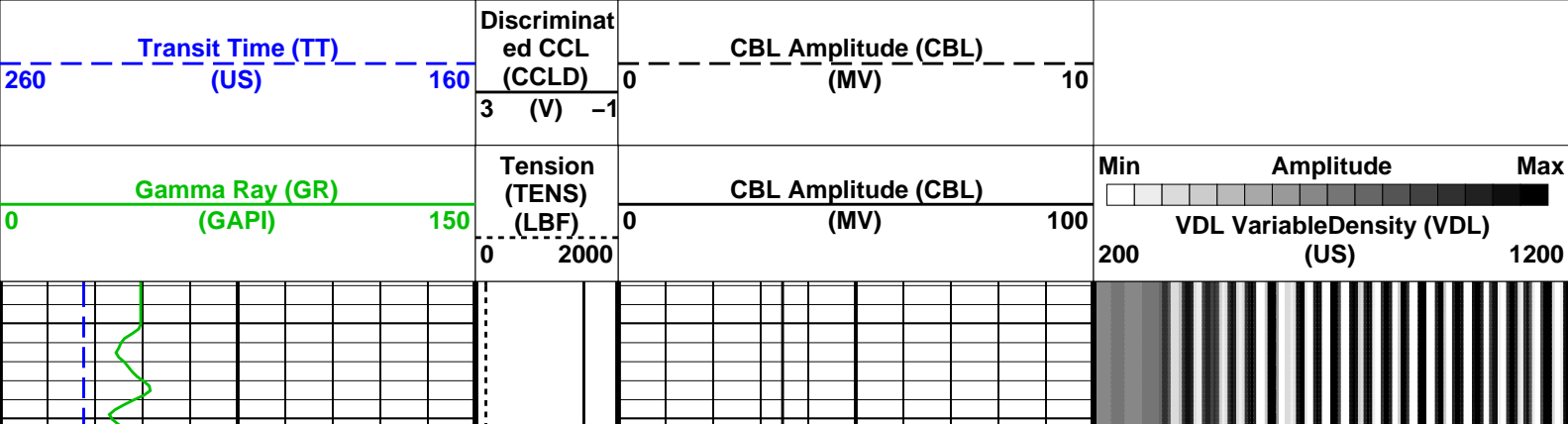
MAXIS Field Log

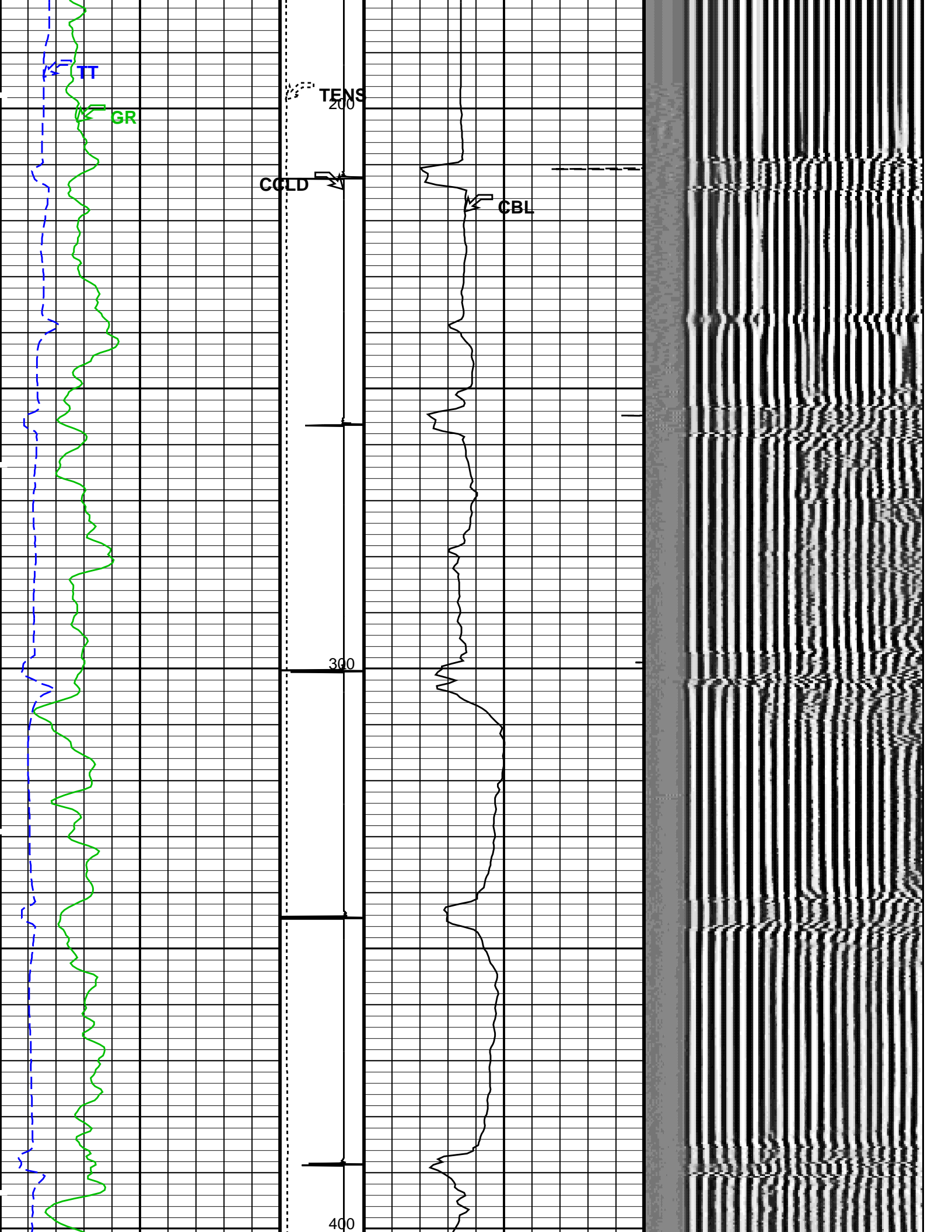
Company: ENCANA OIL & GAS (USA) INC. Well: NP EF01C-34 P27 595

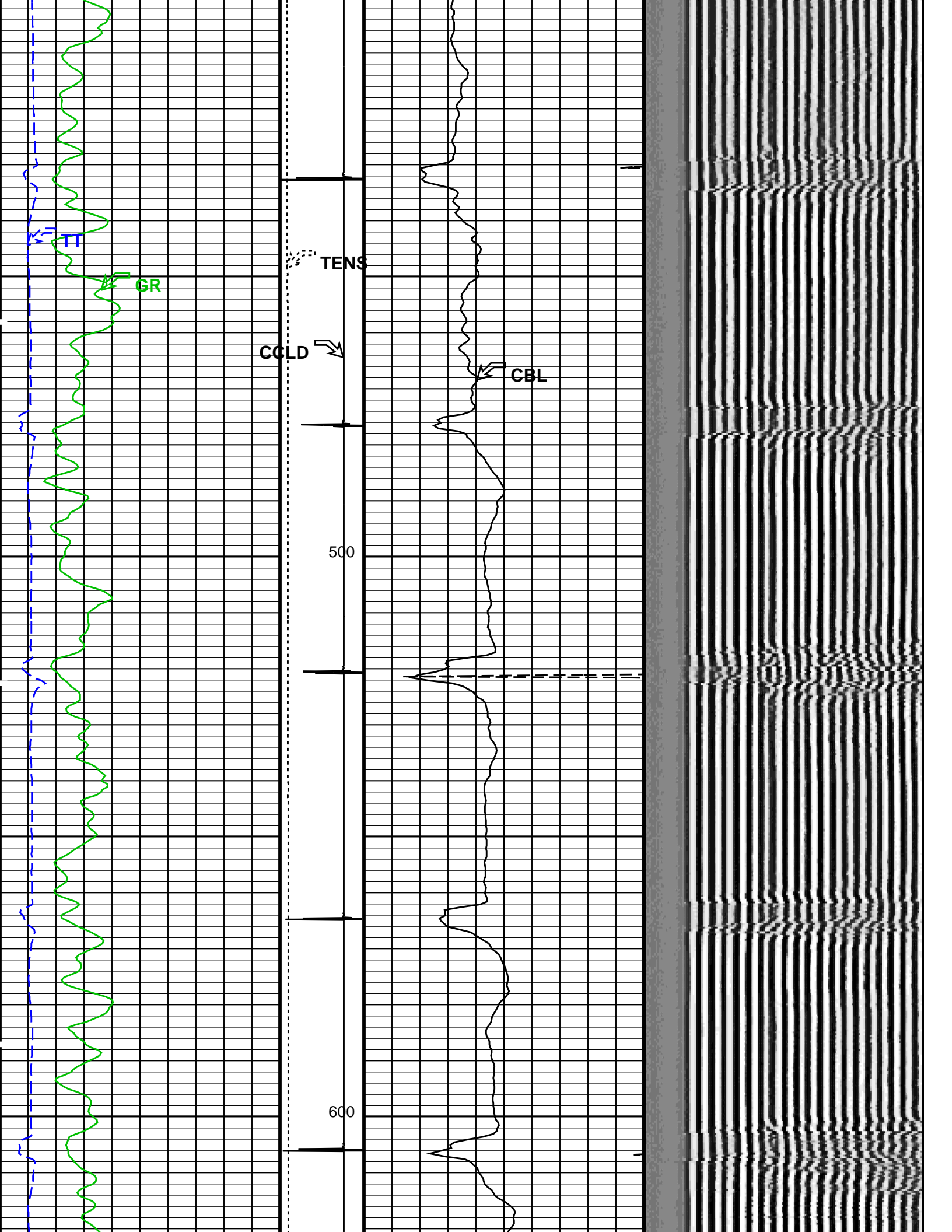
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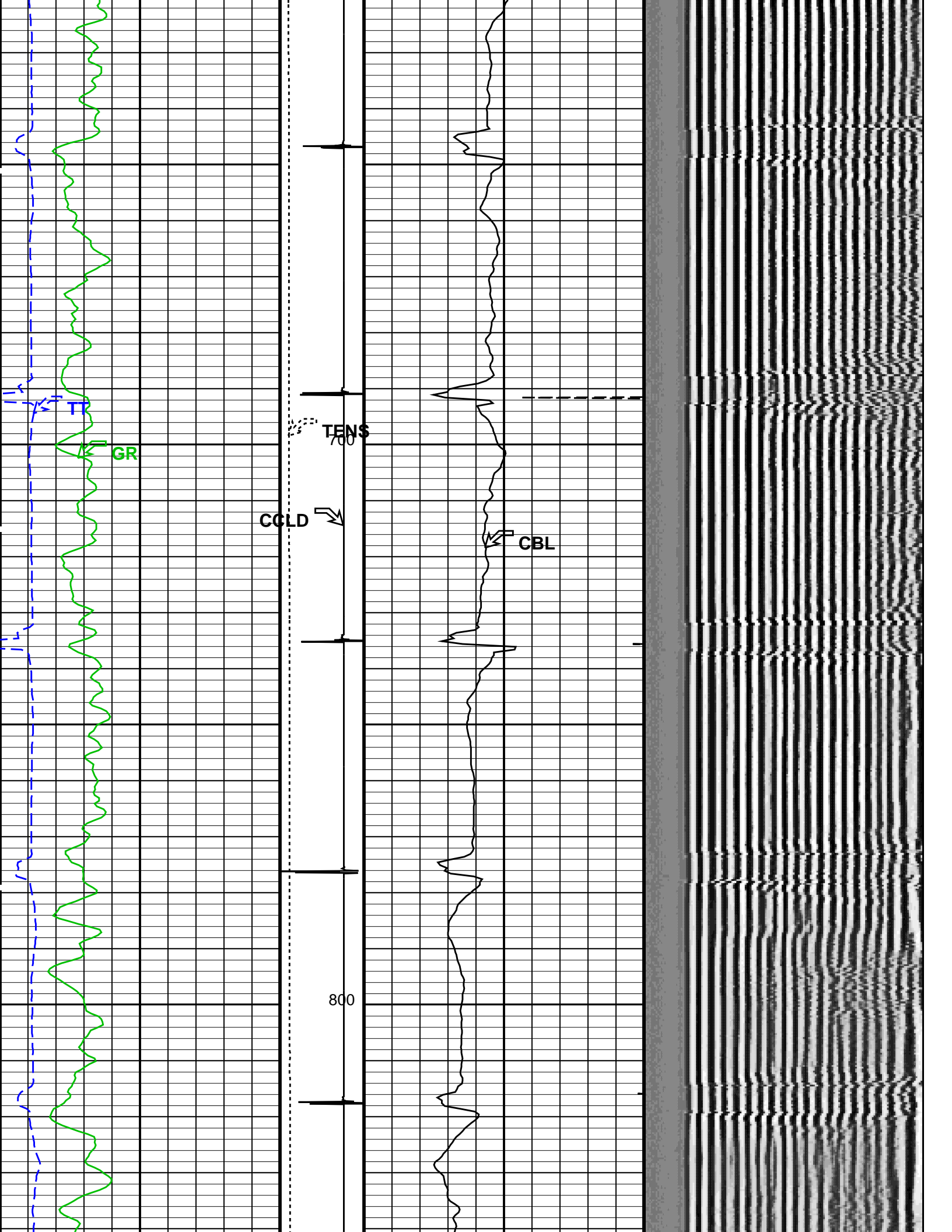
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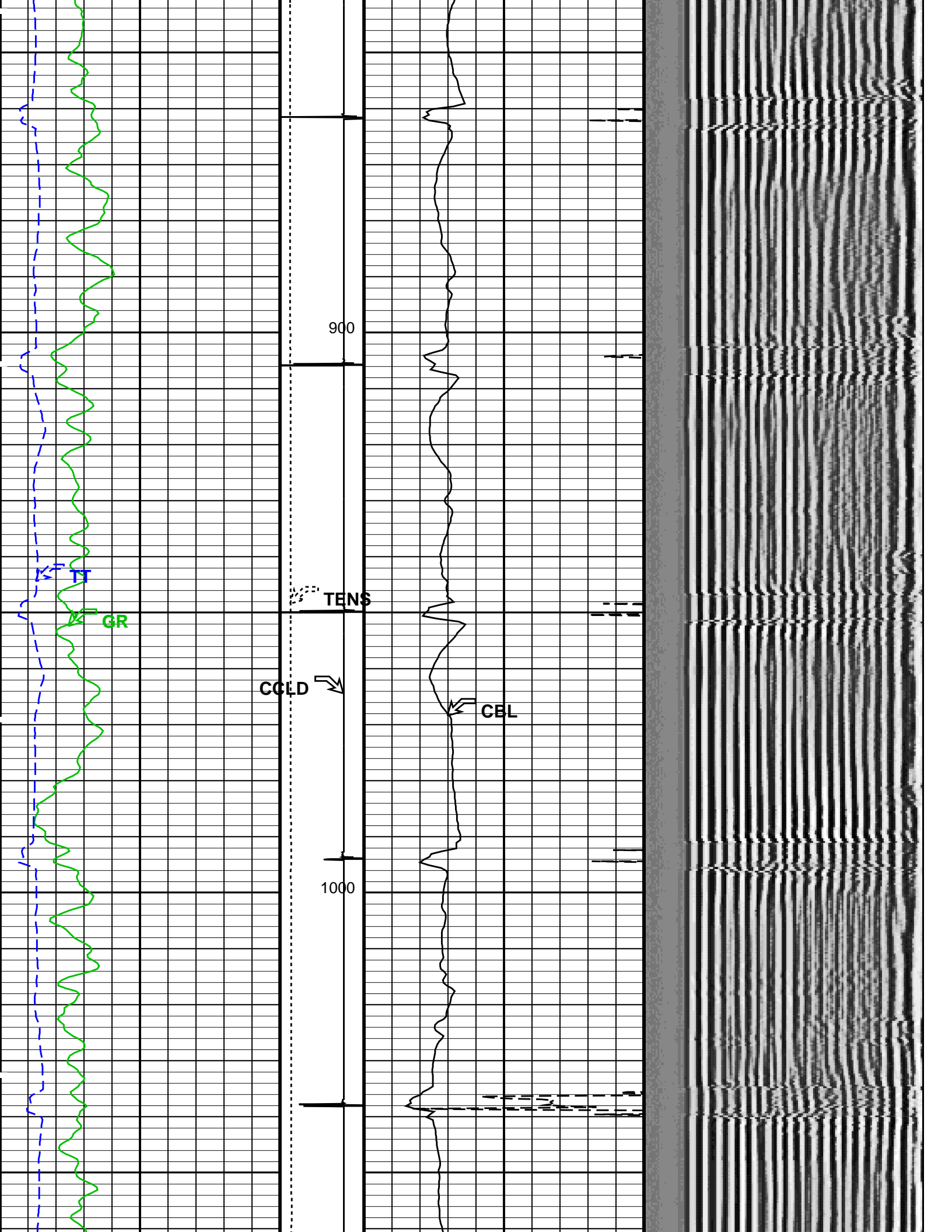
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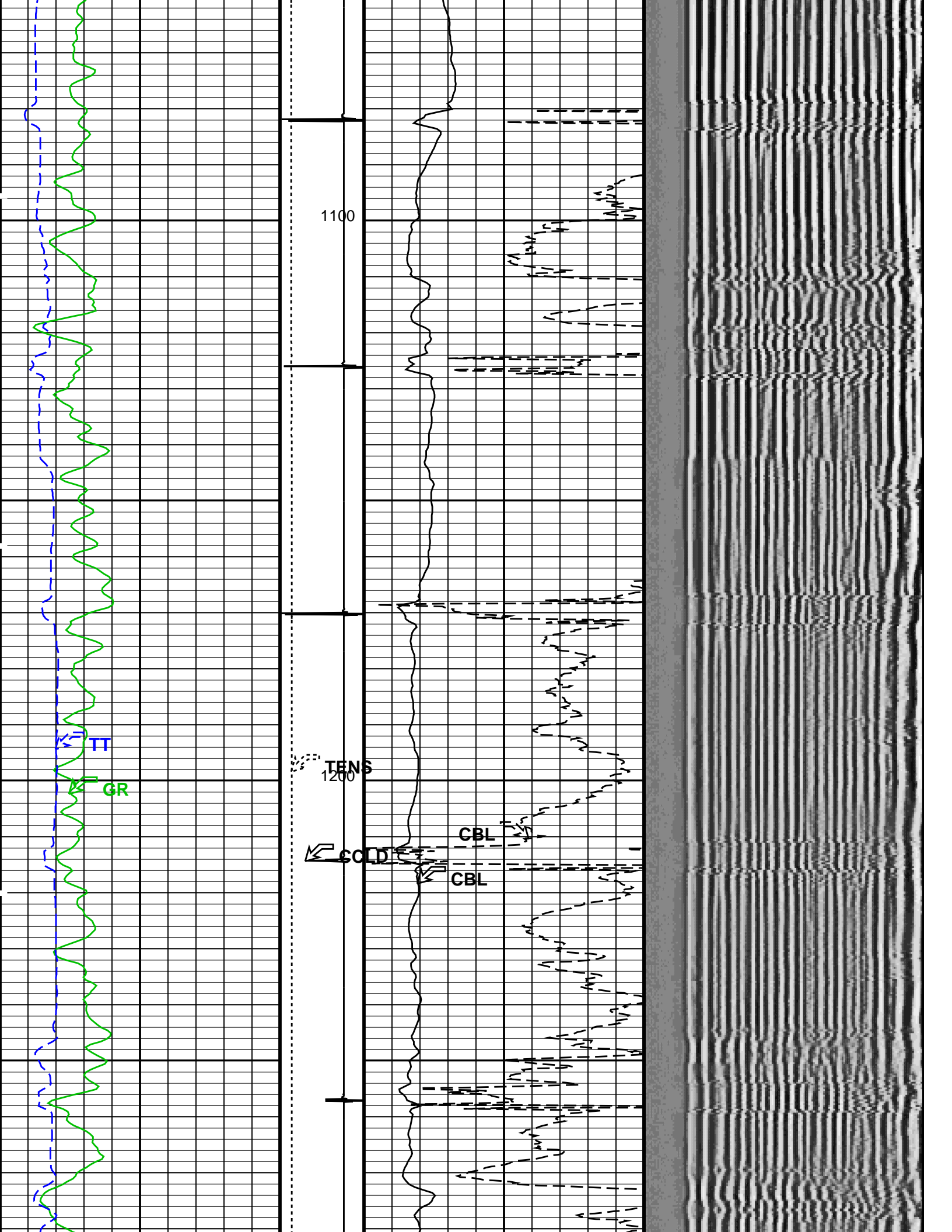


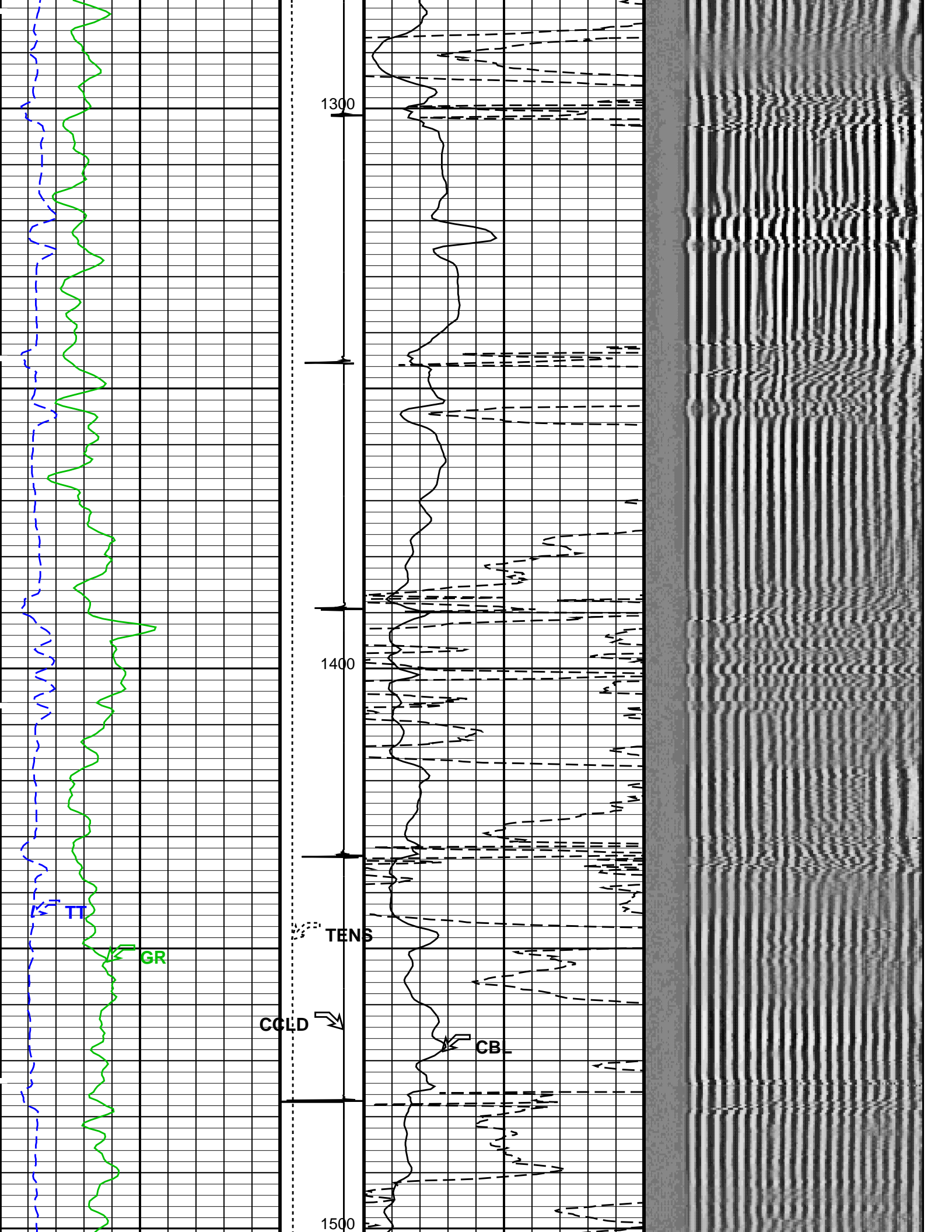


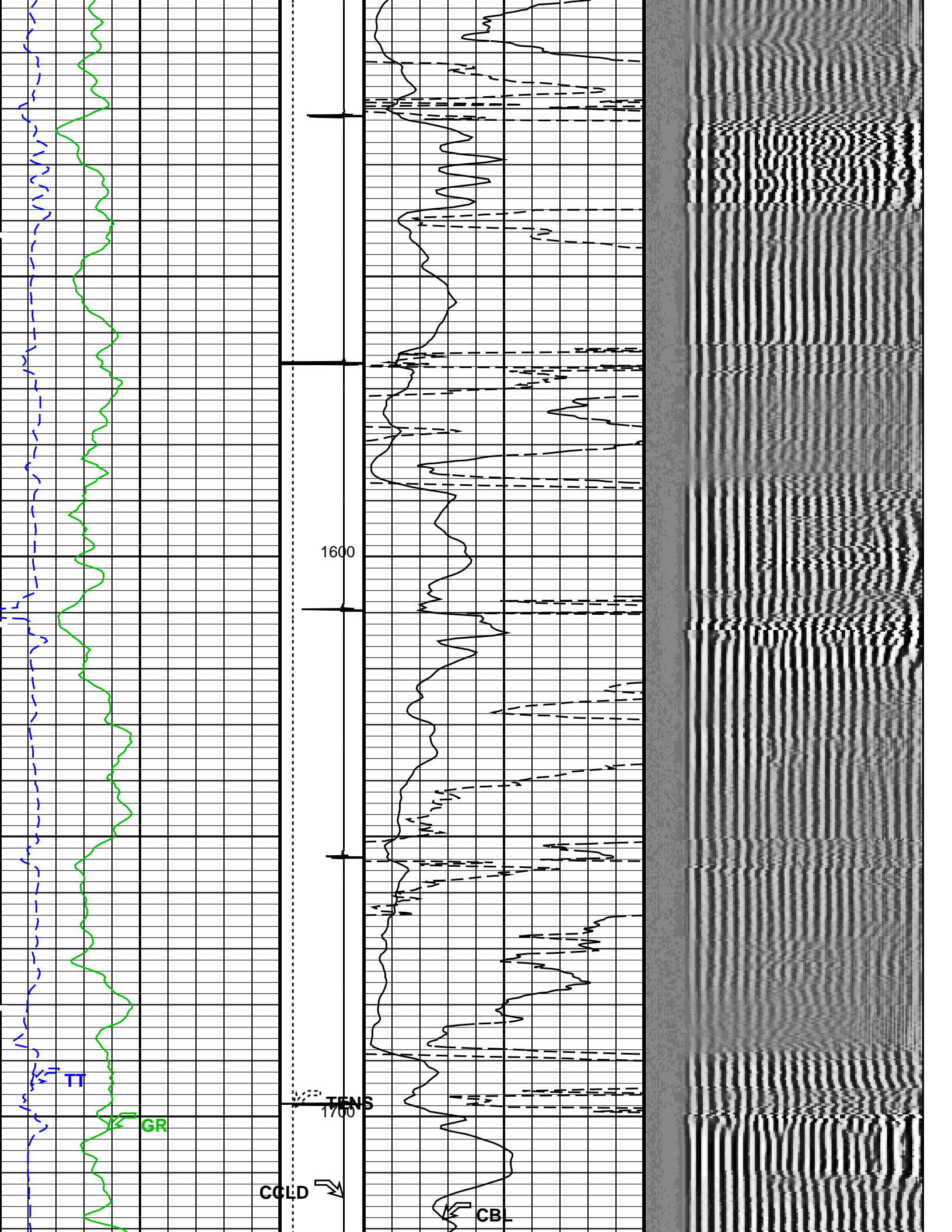


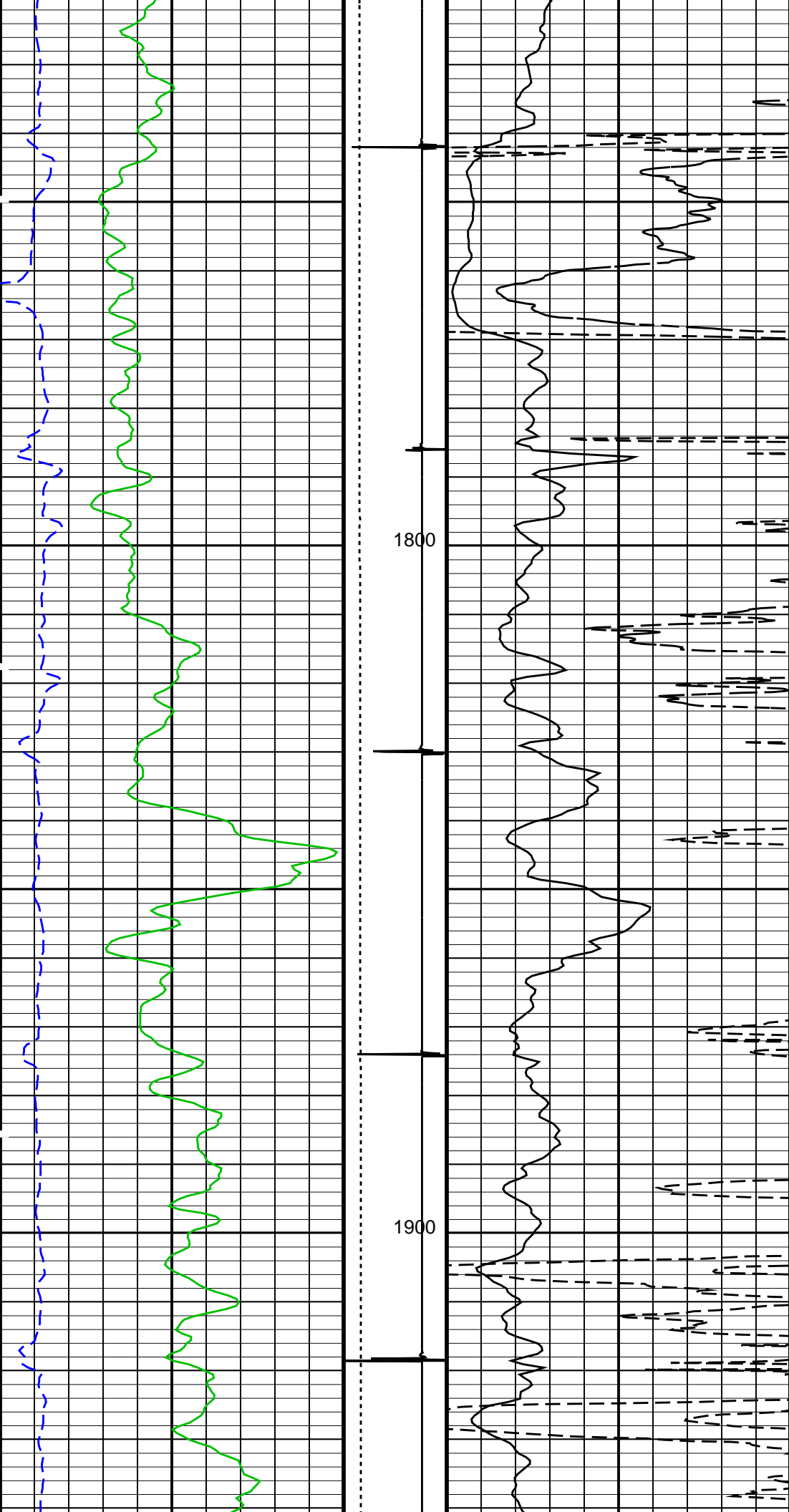


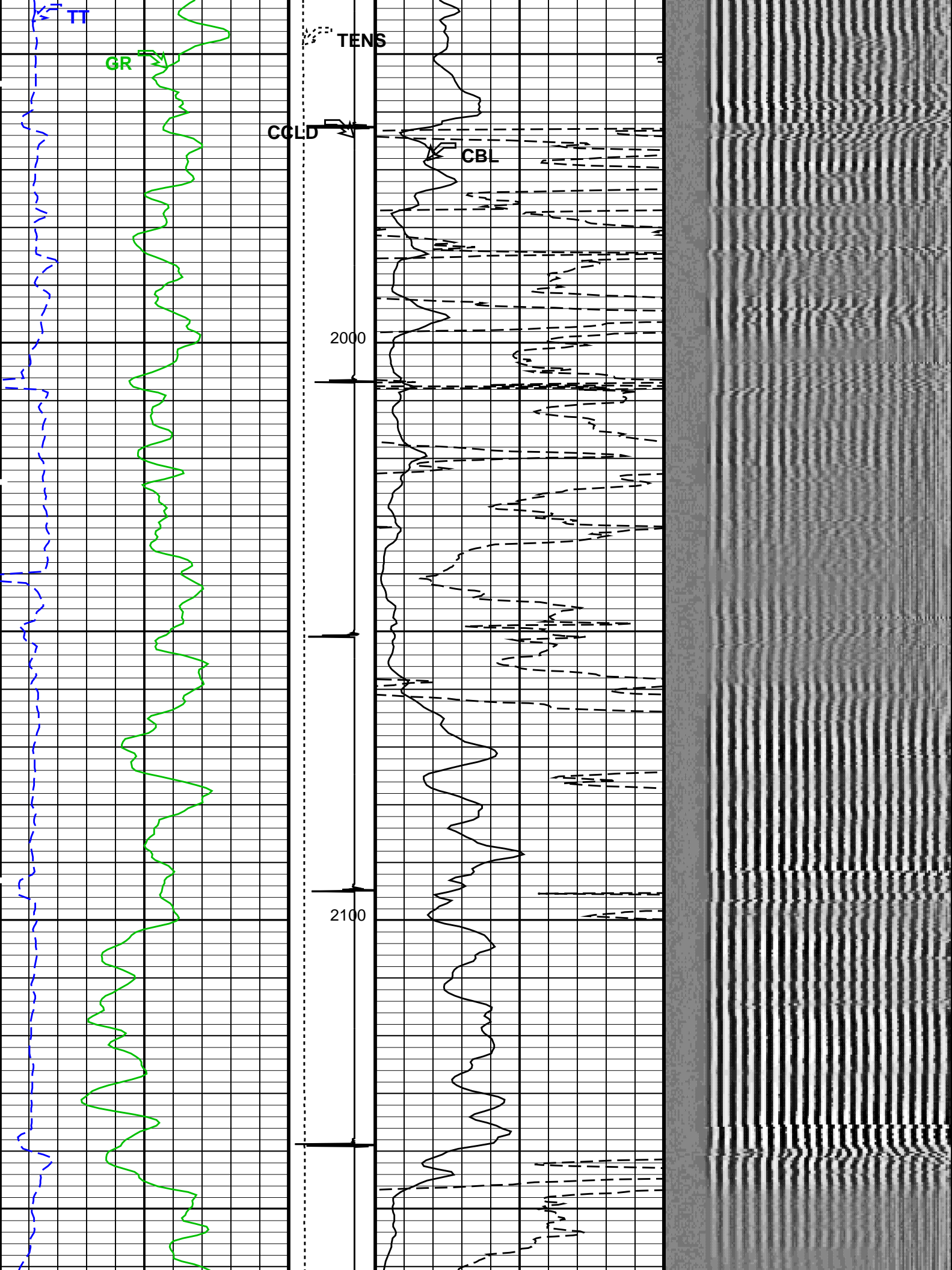


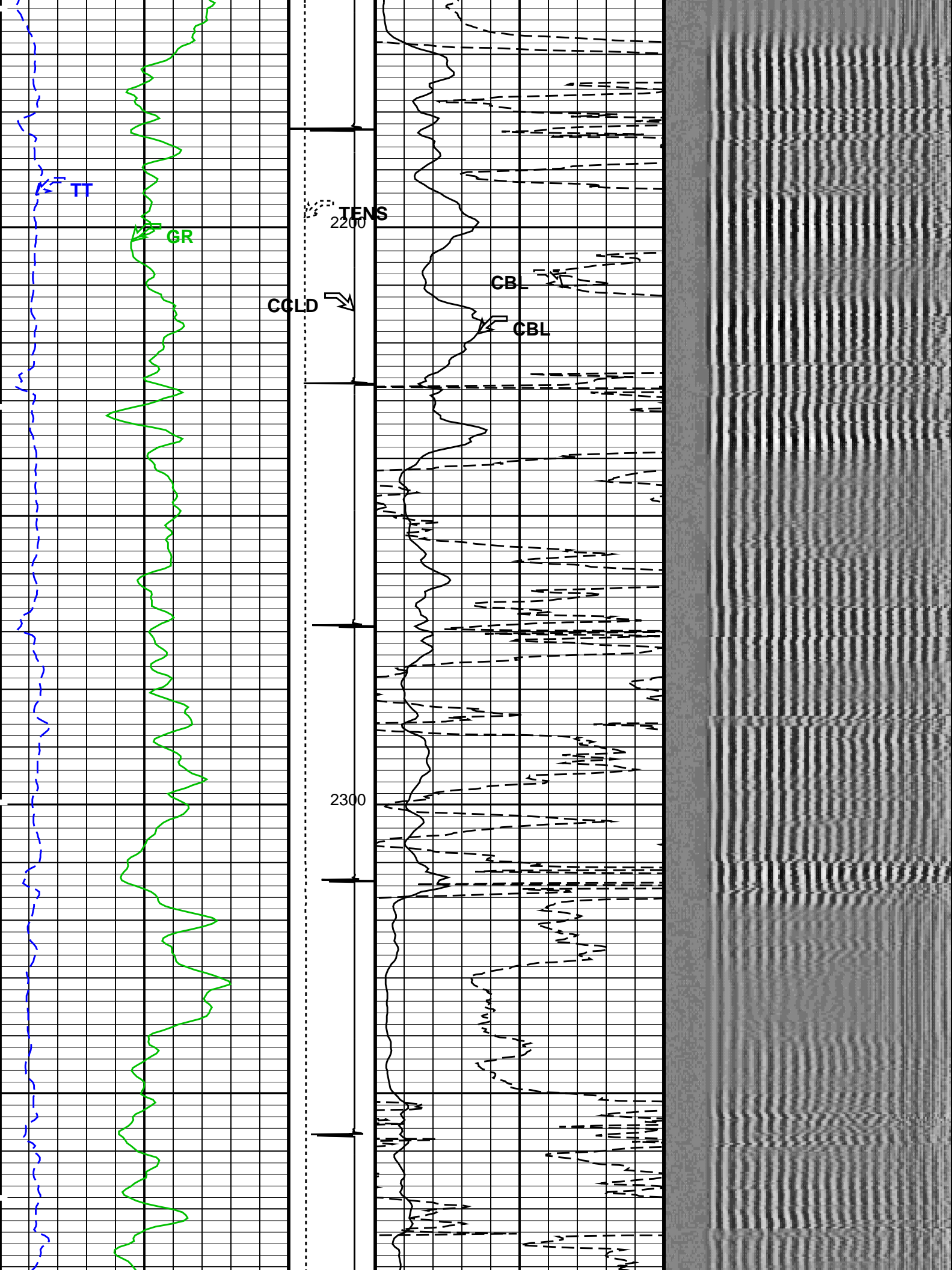


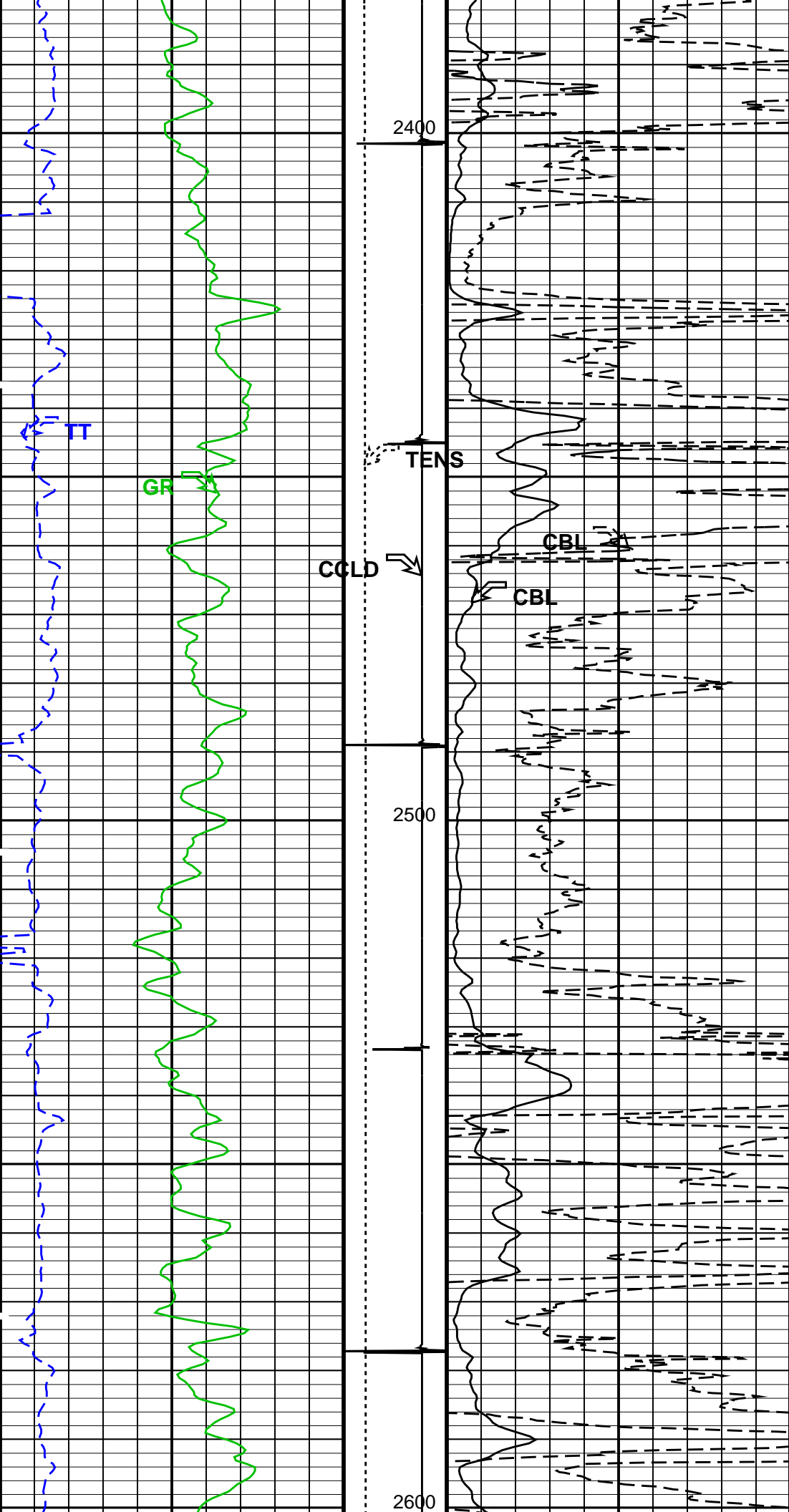


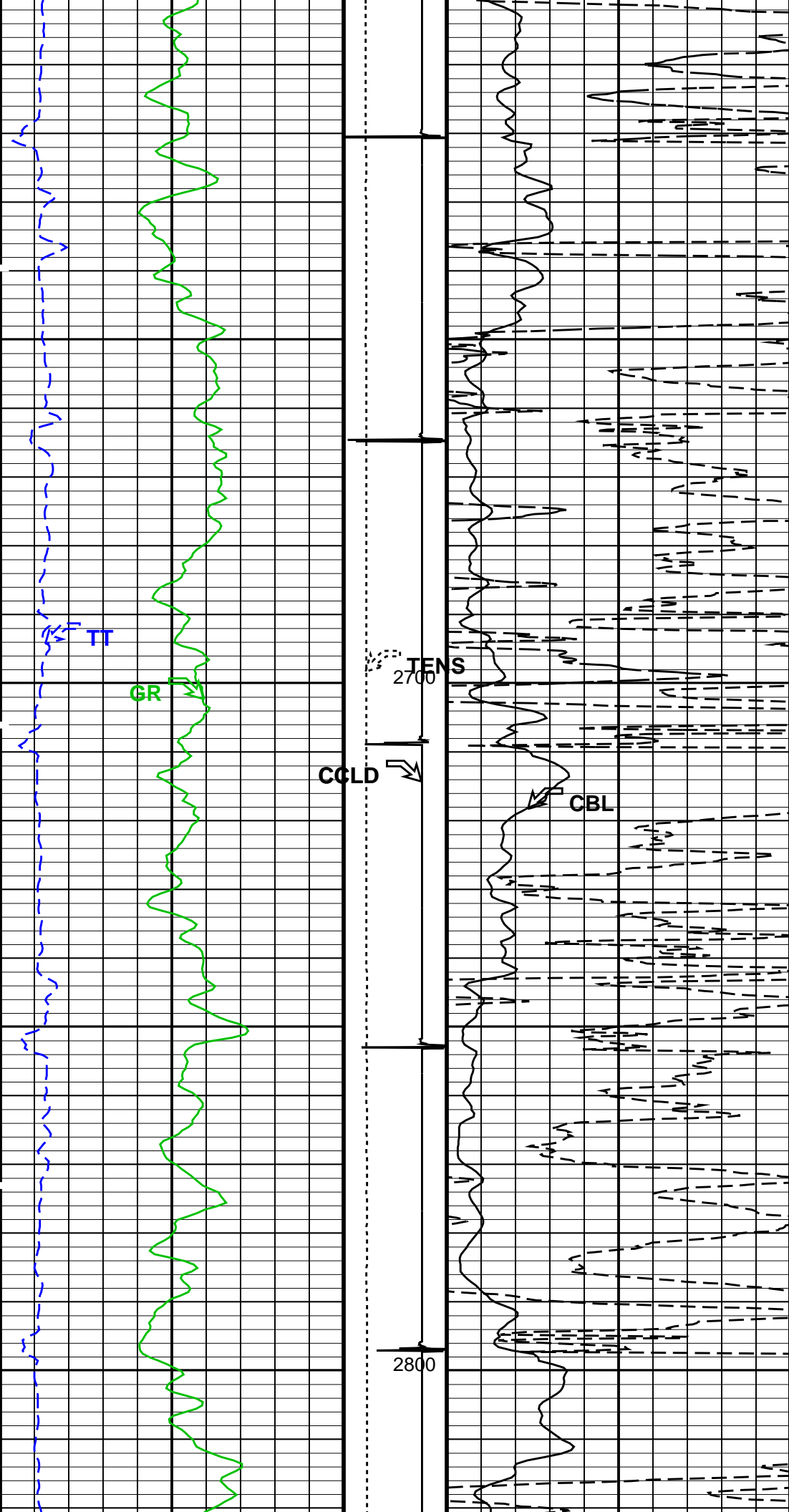


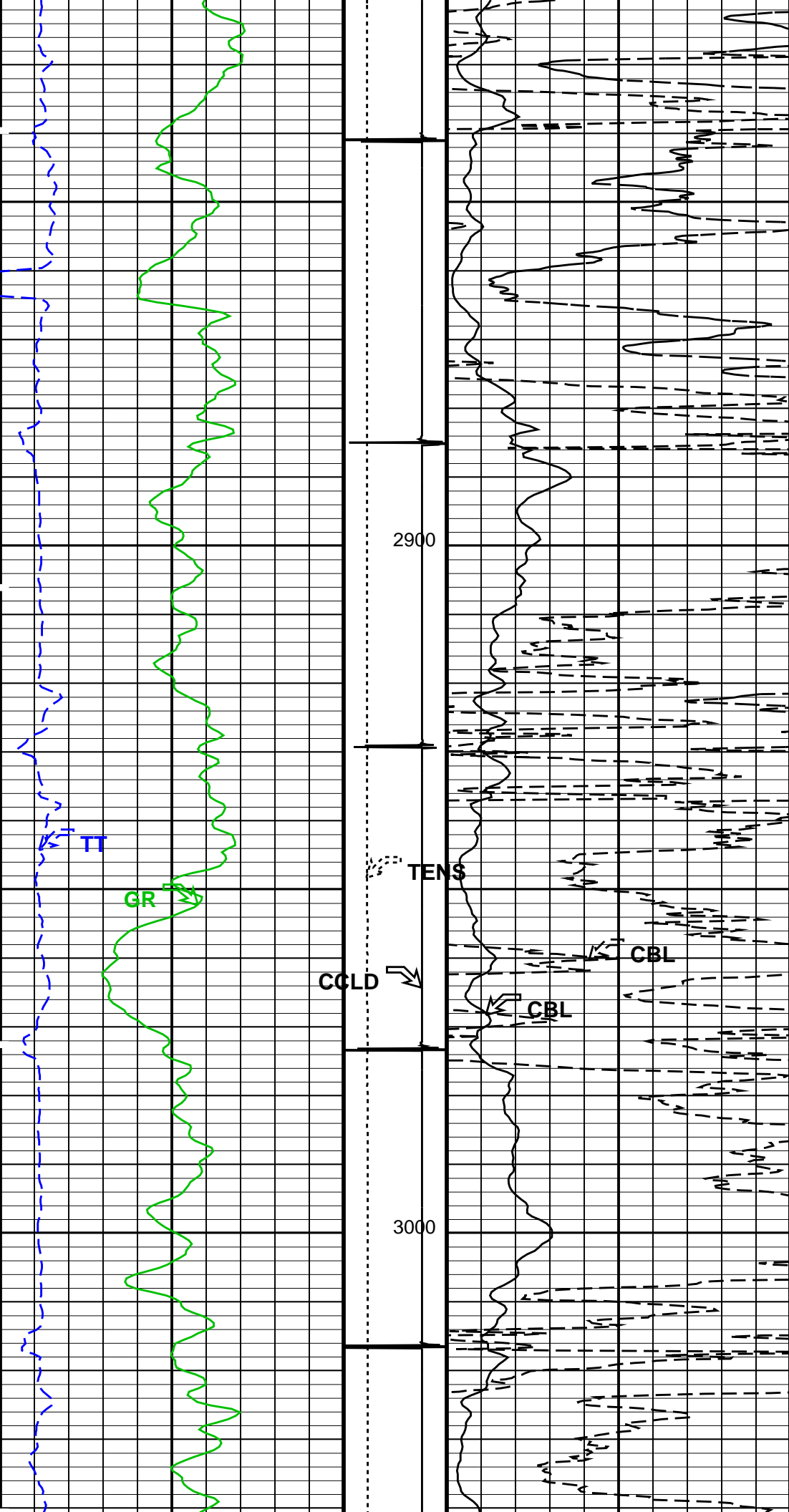


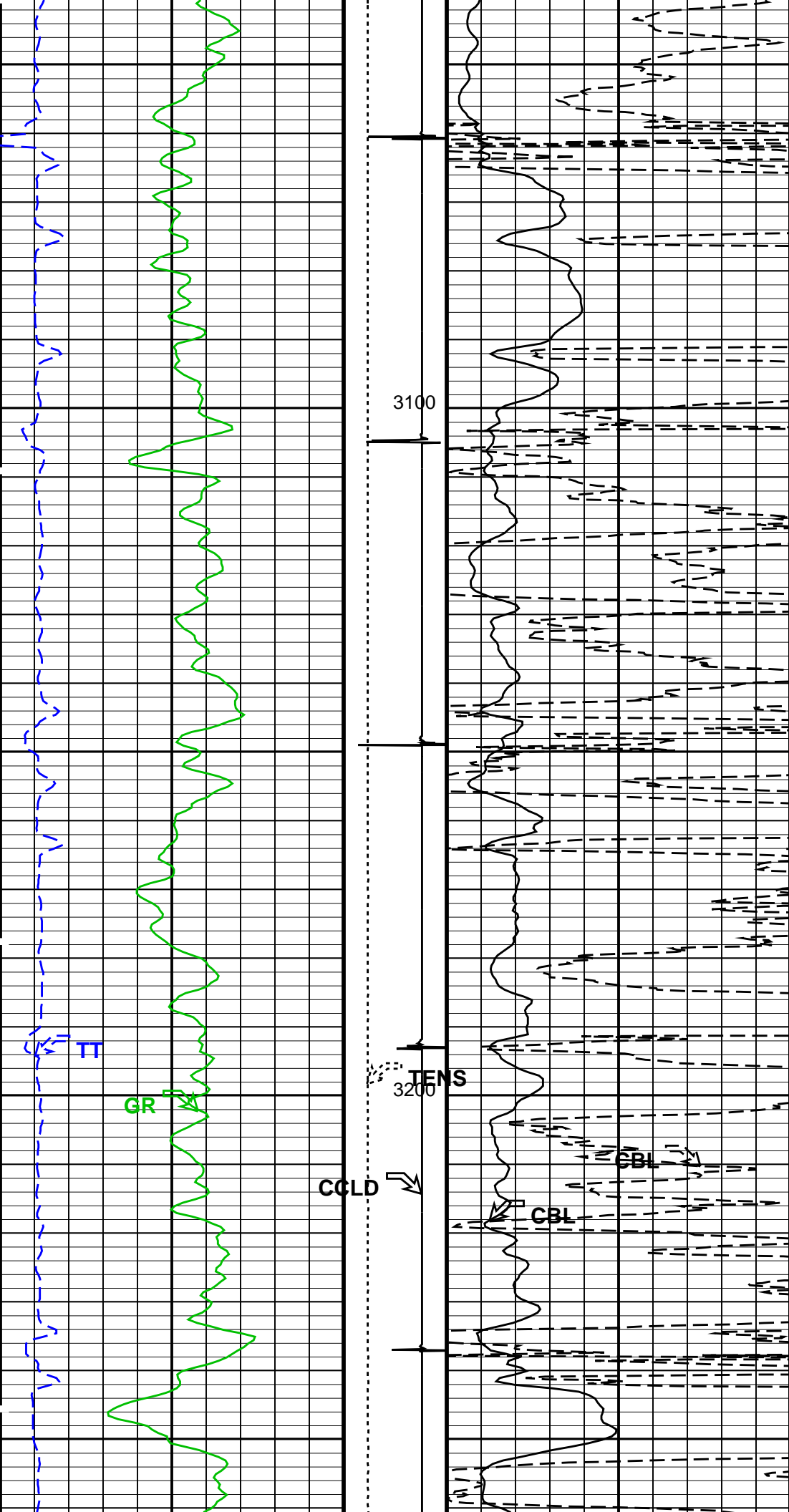


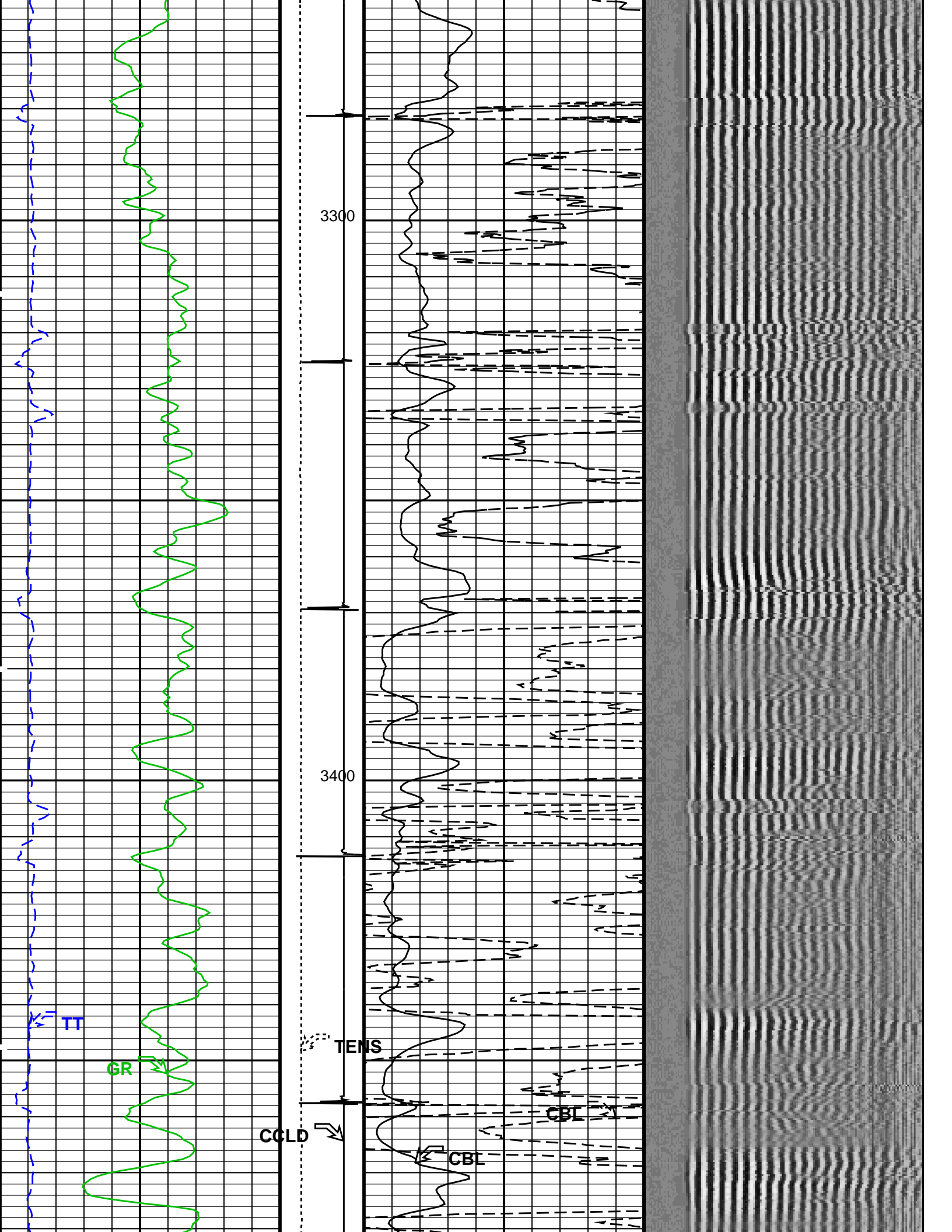


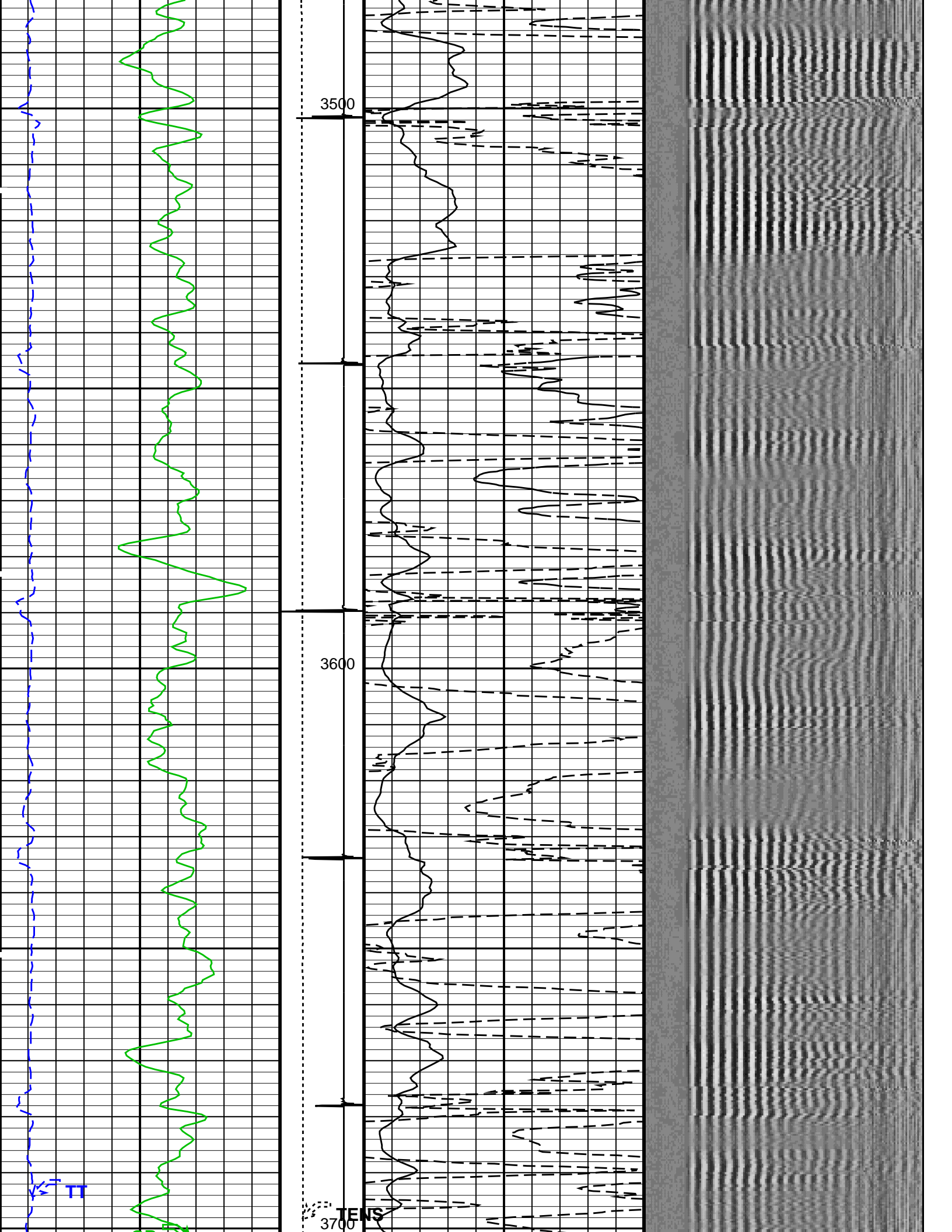


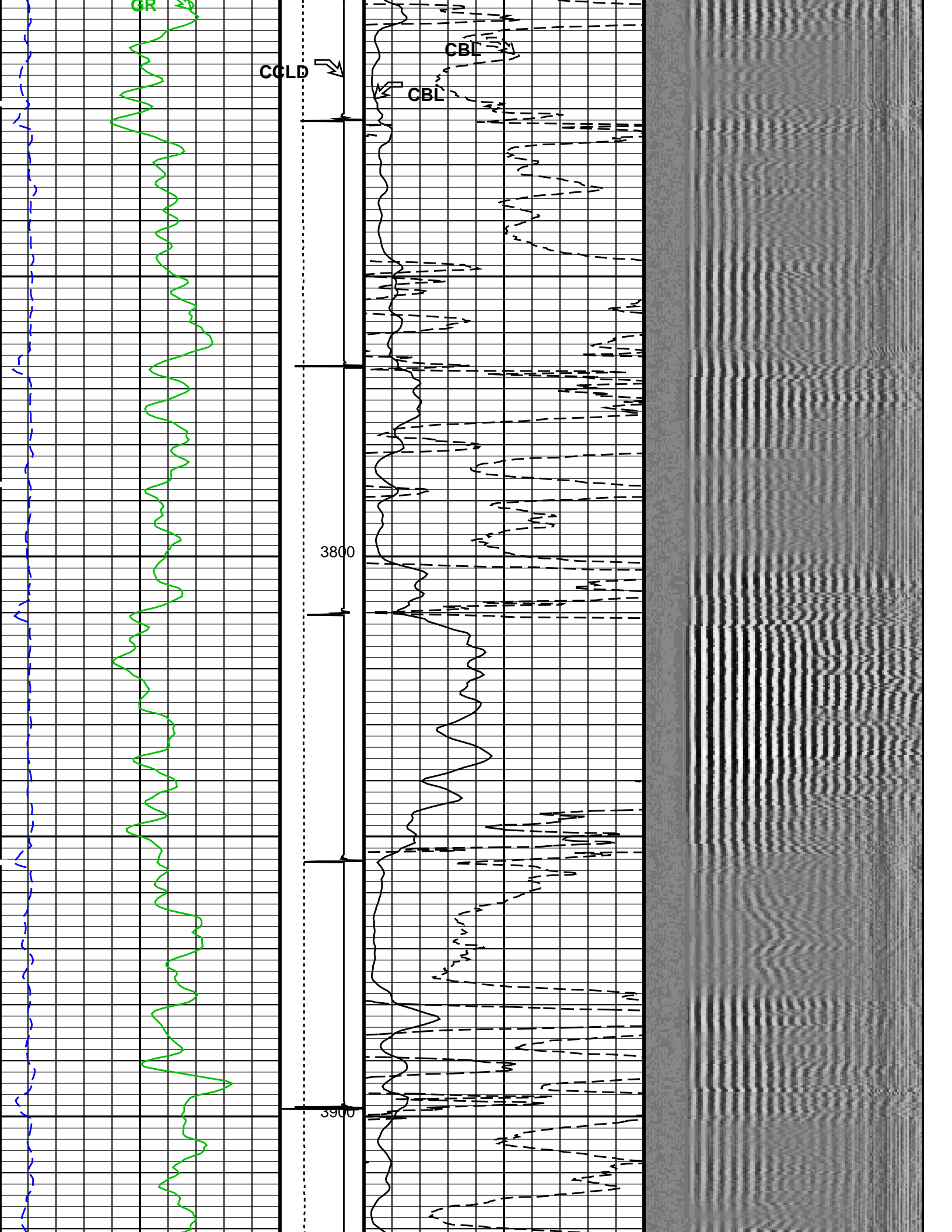


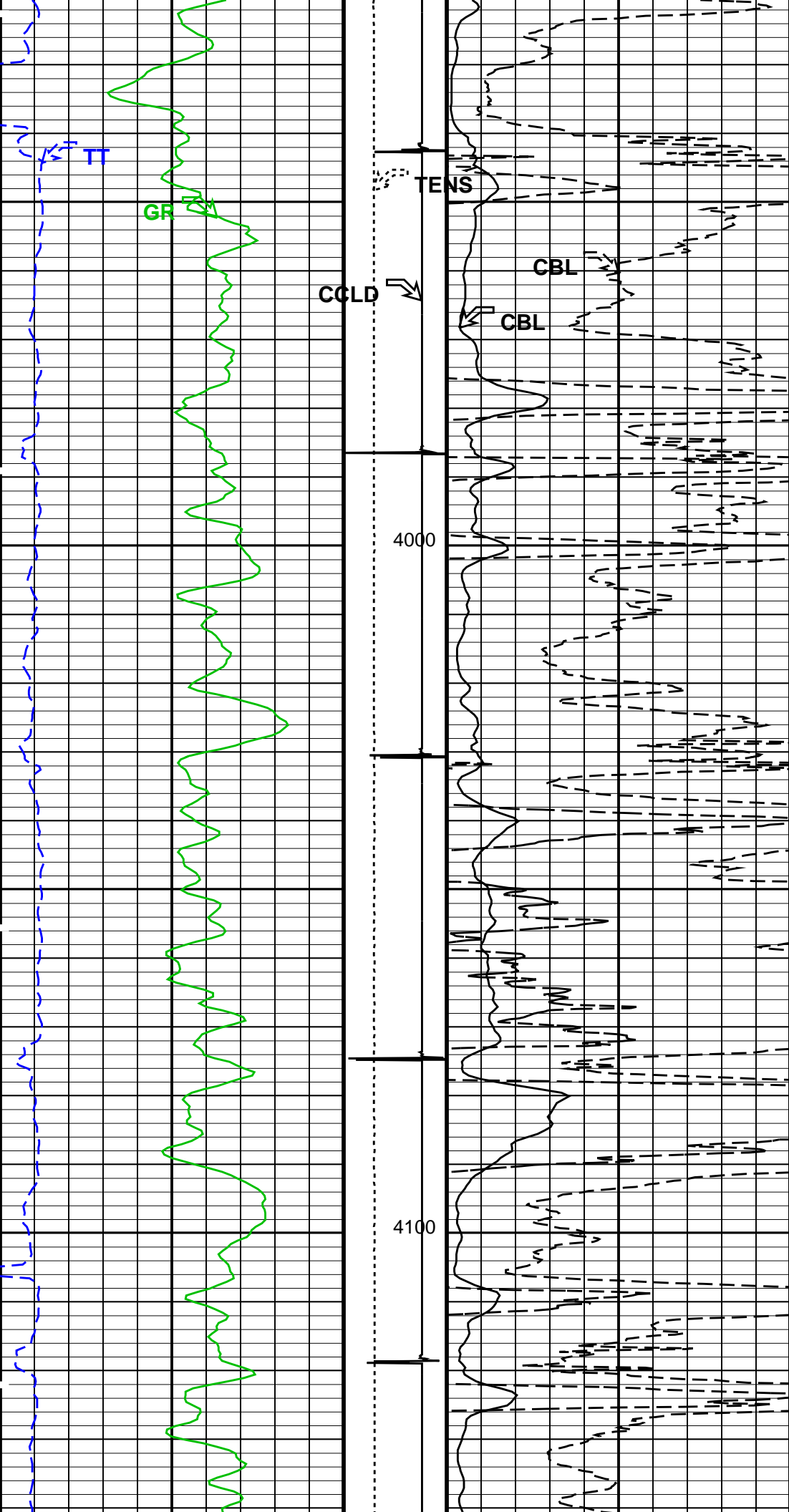


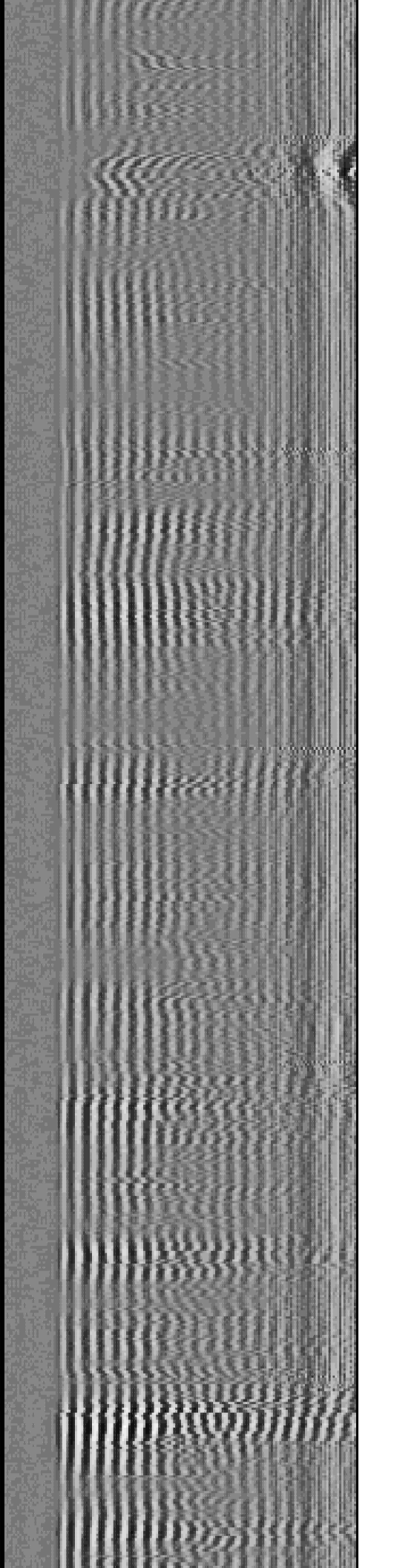
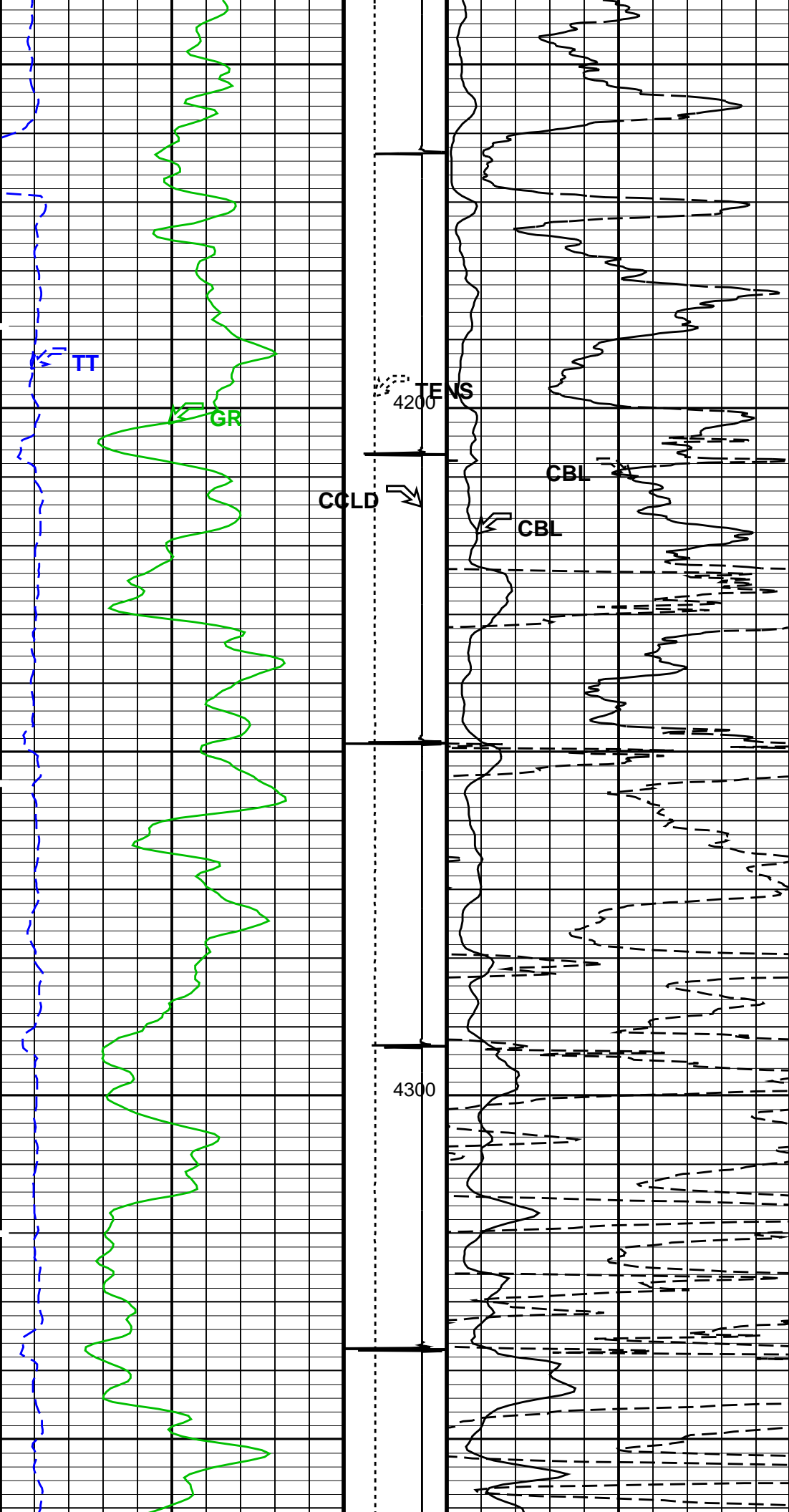


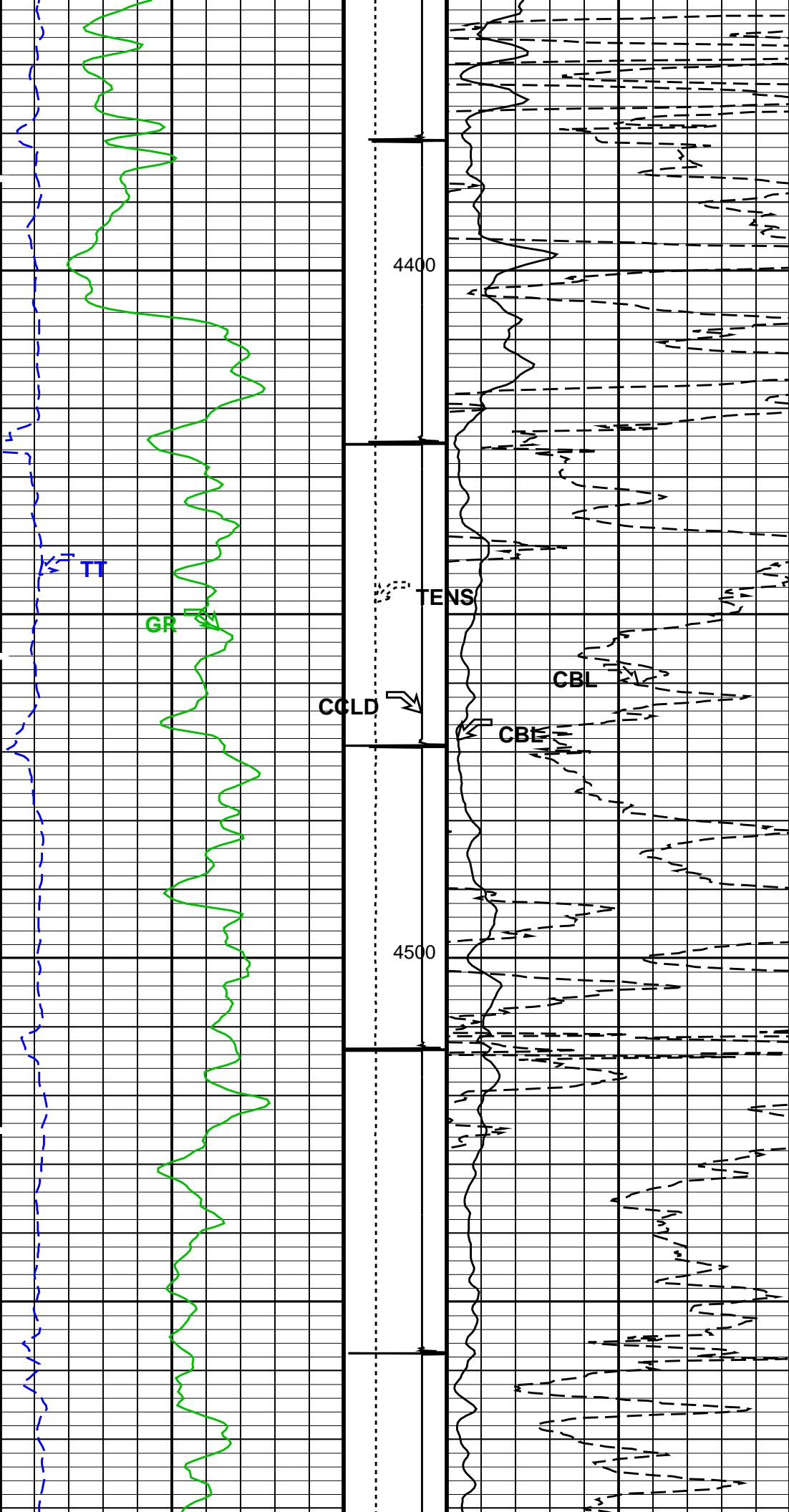


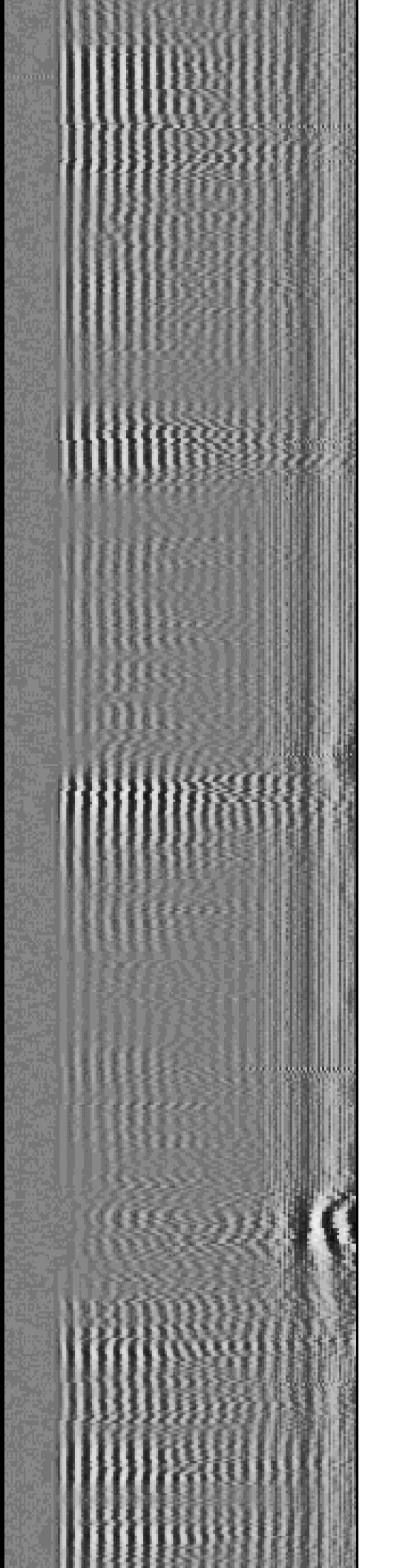
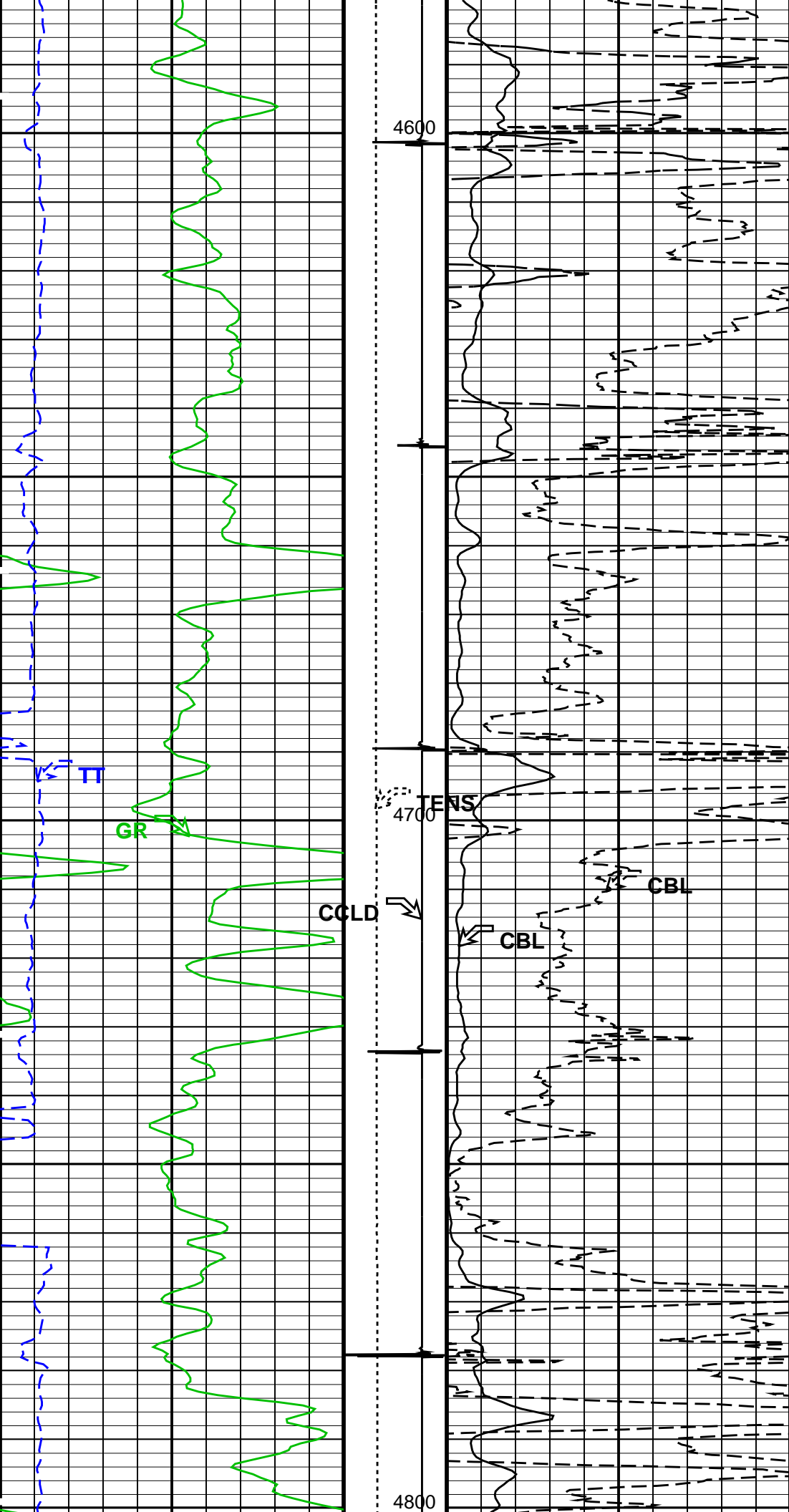


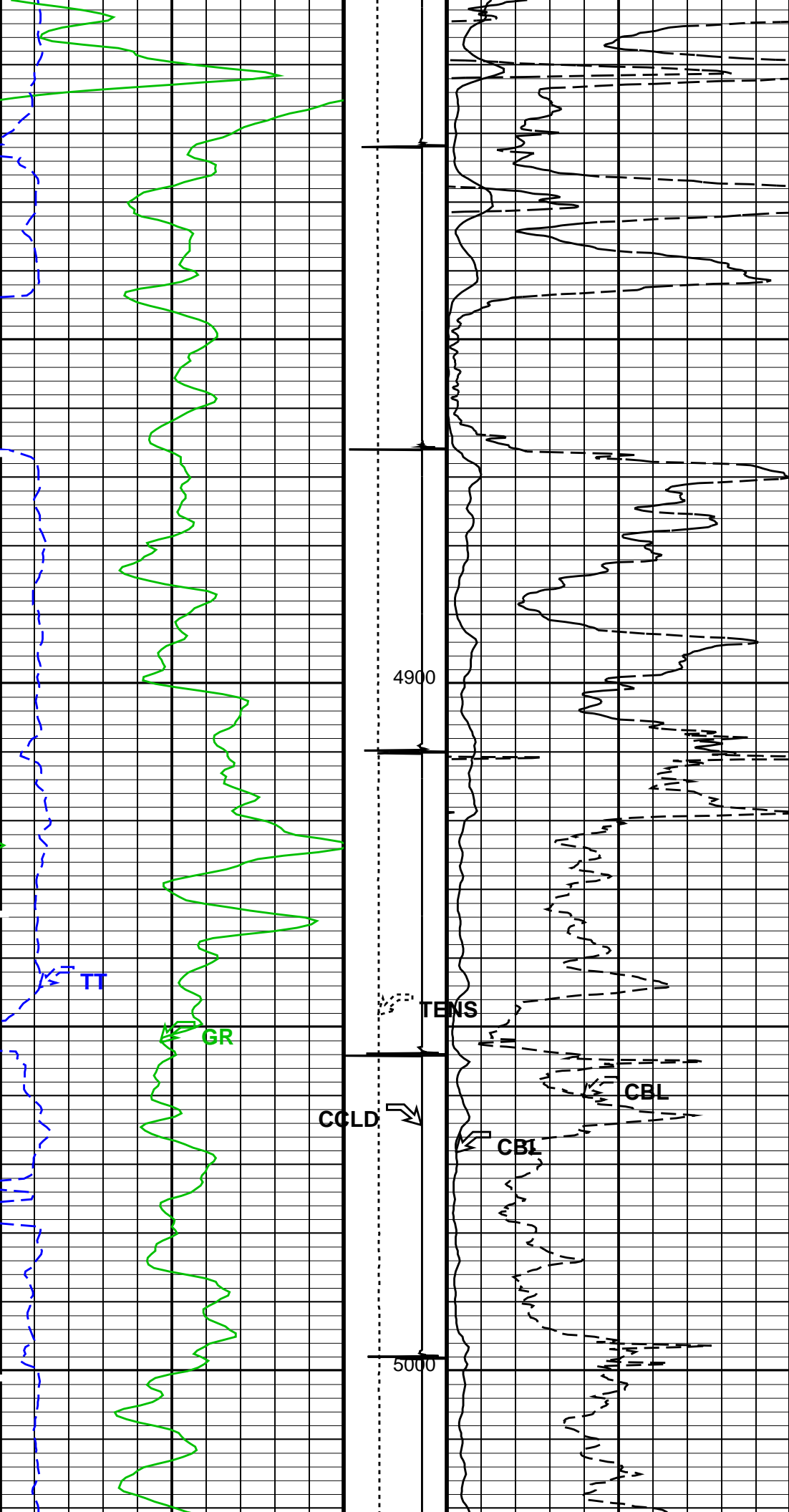


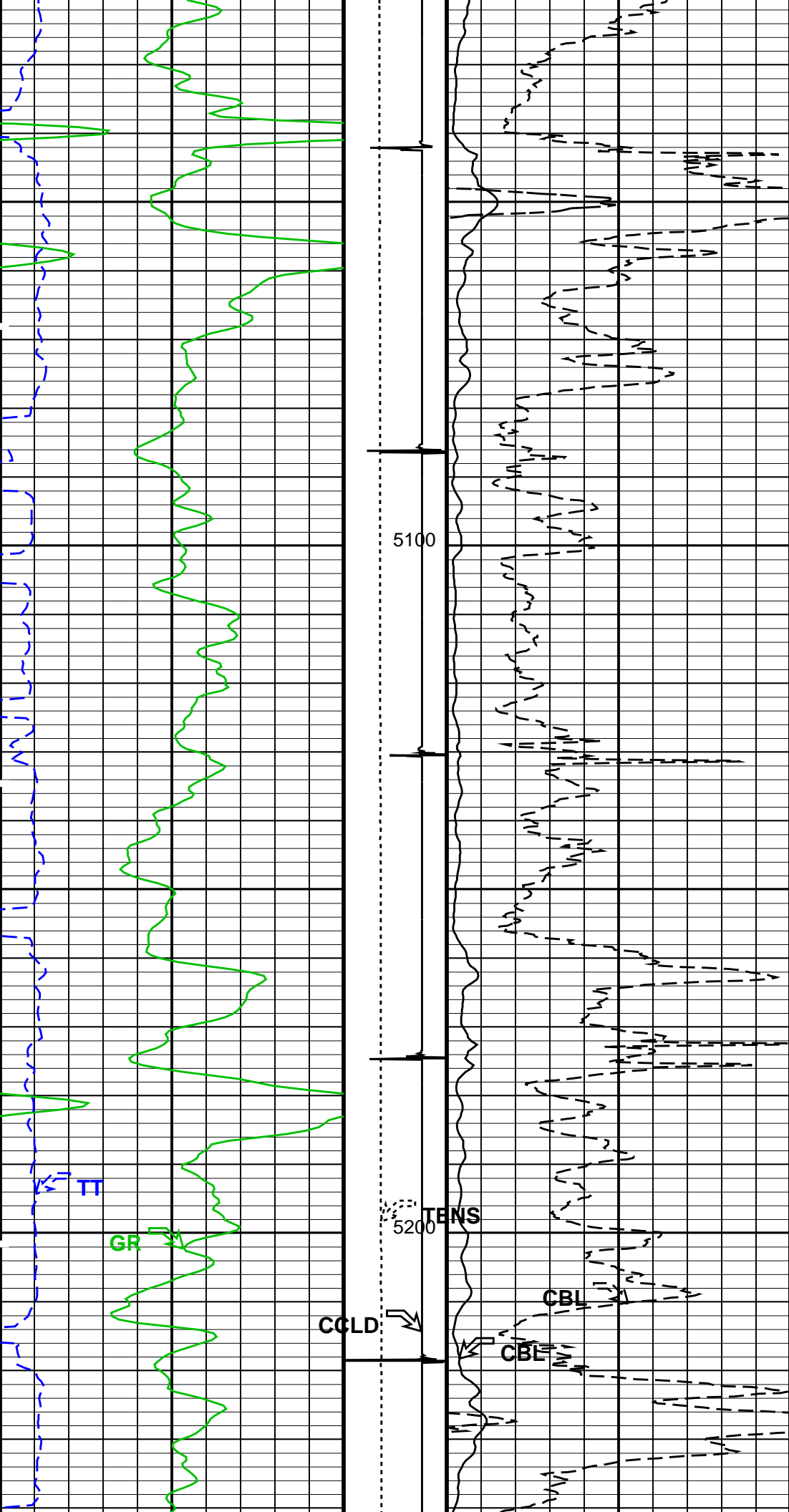


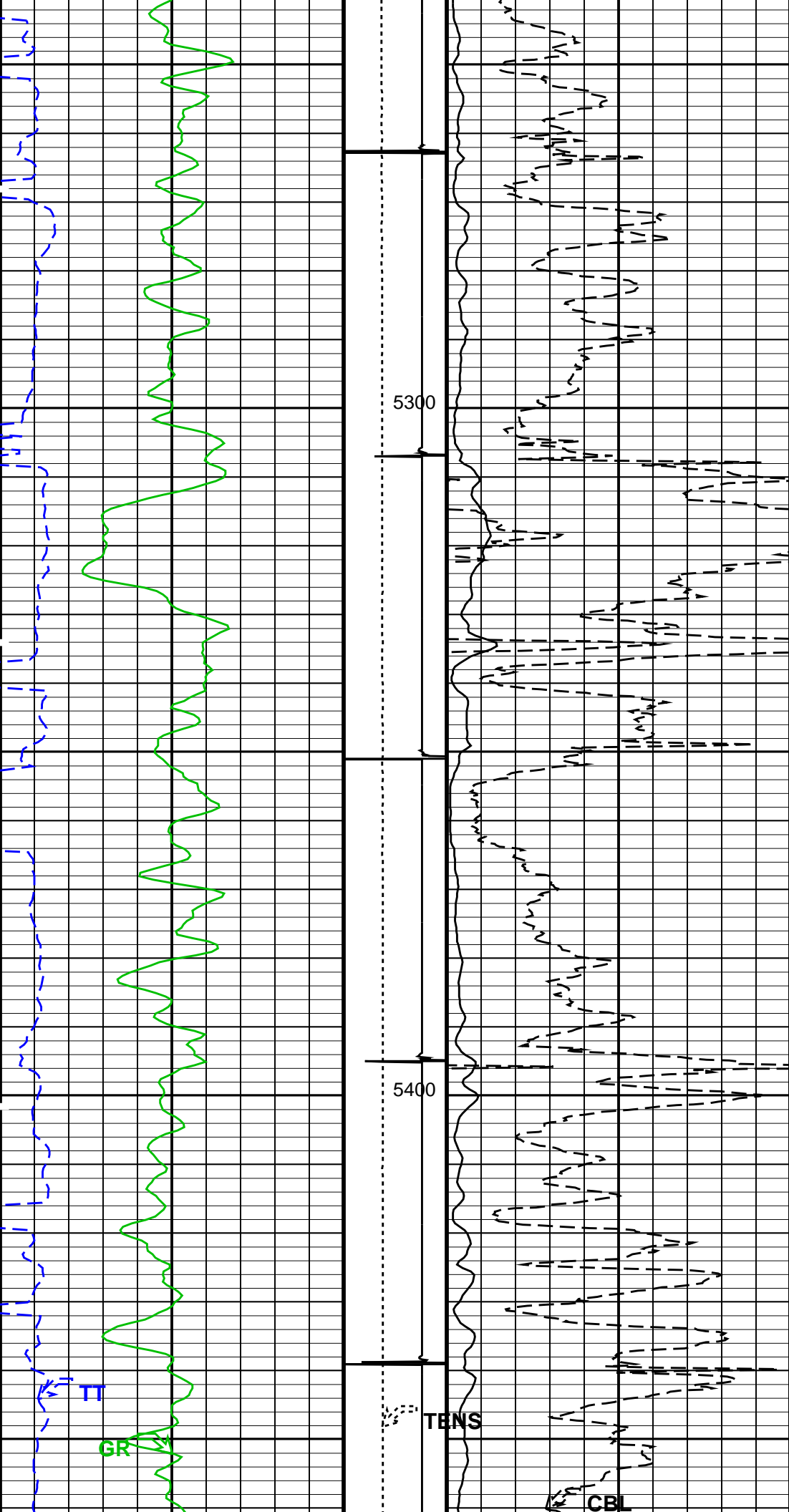


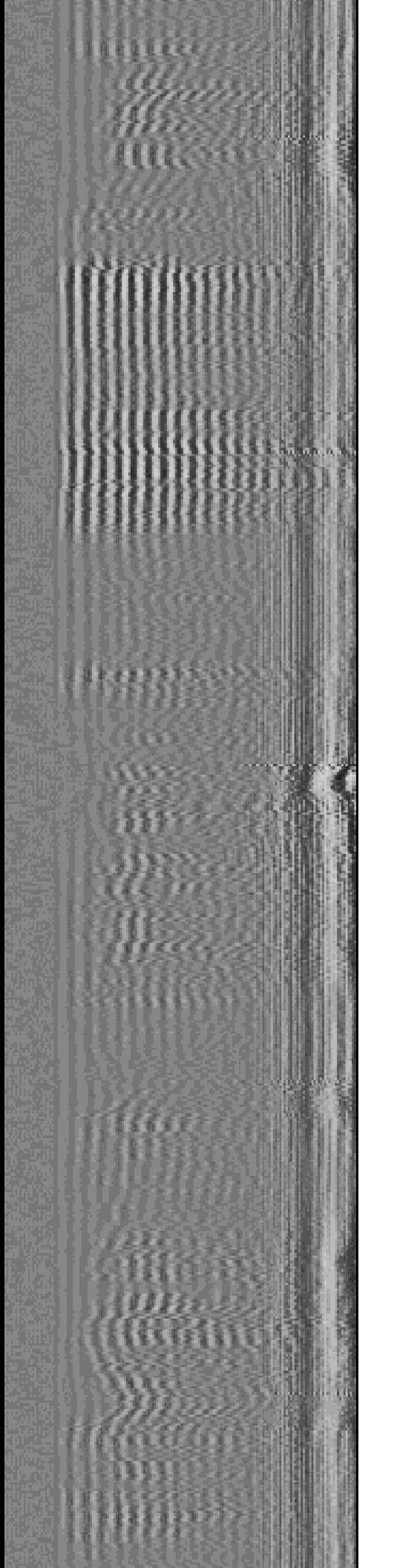
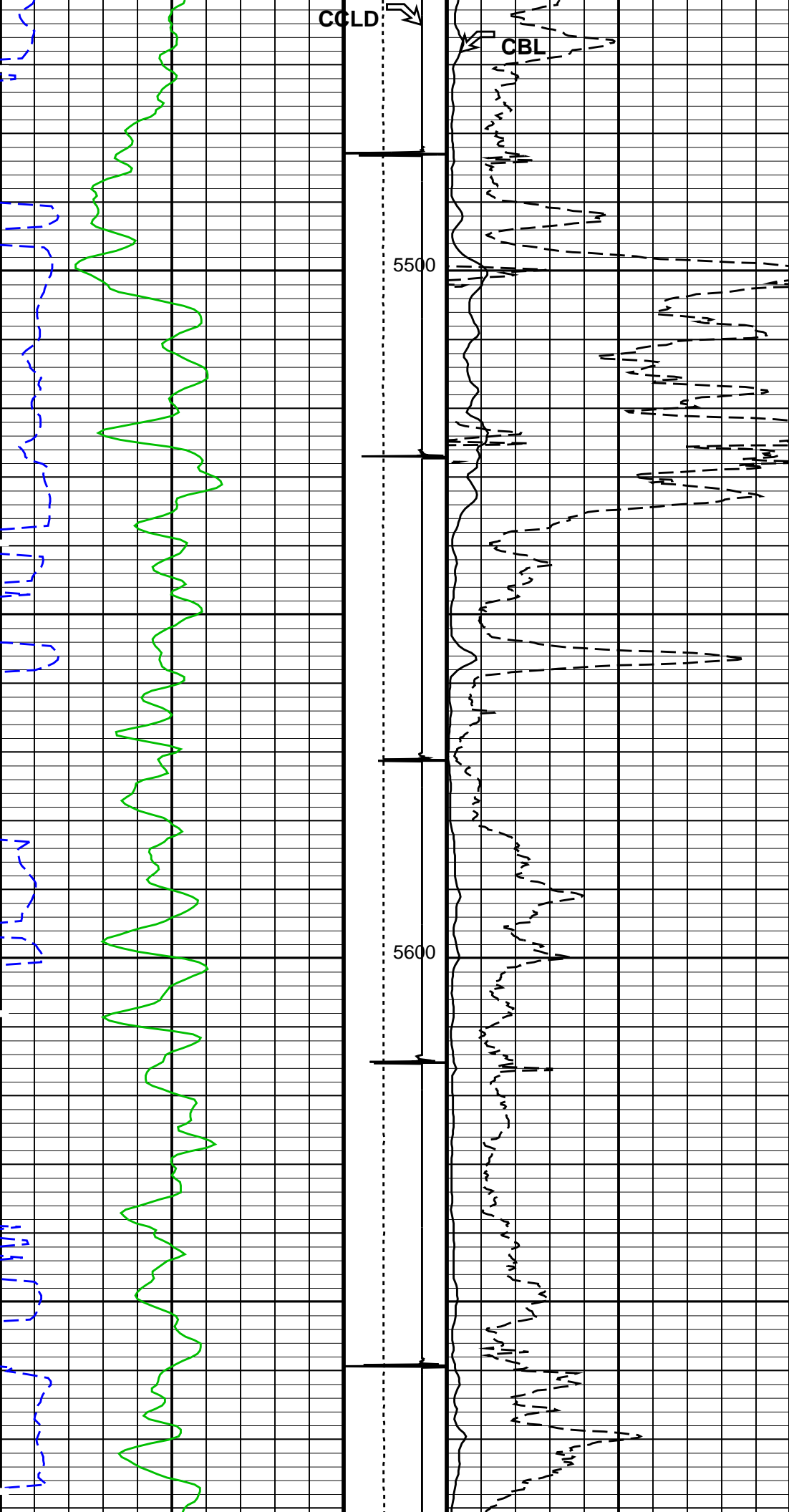


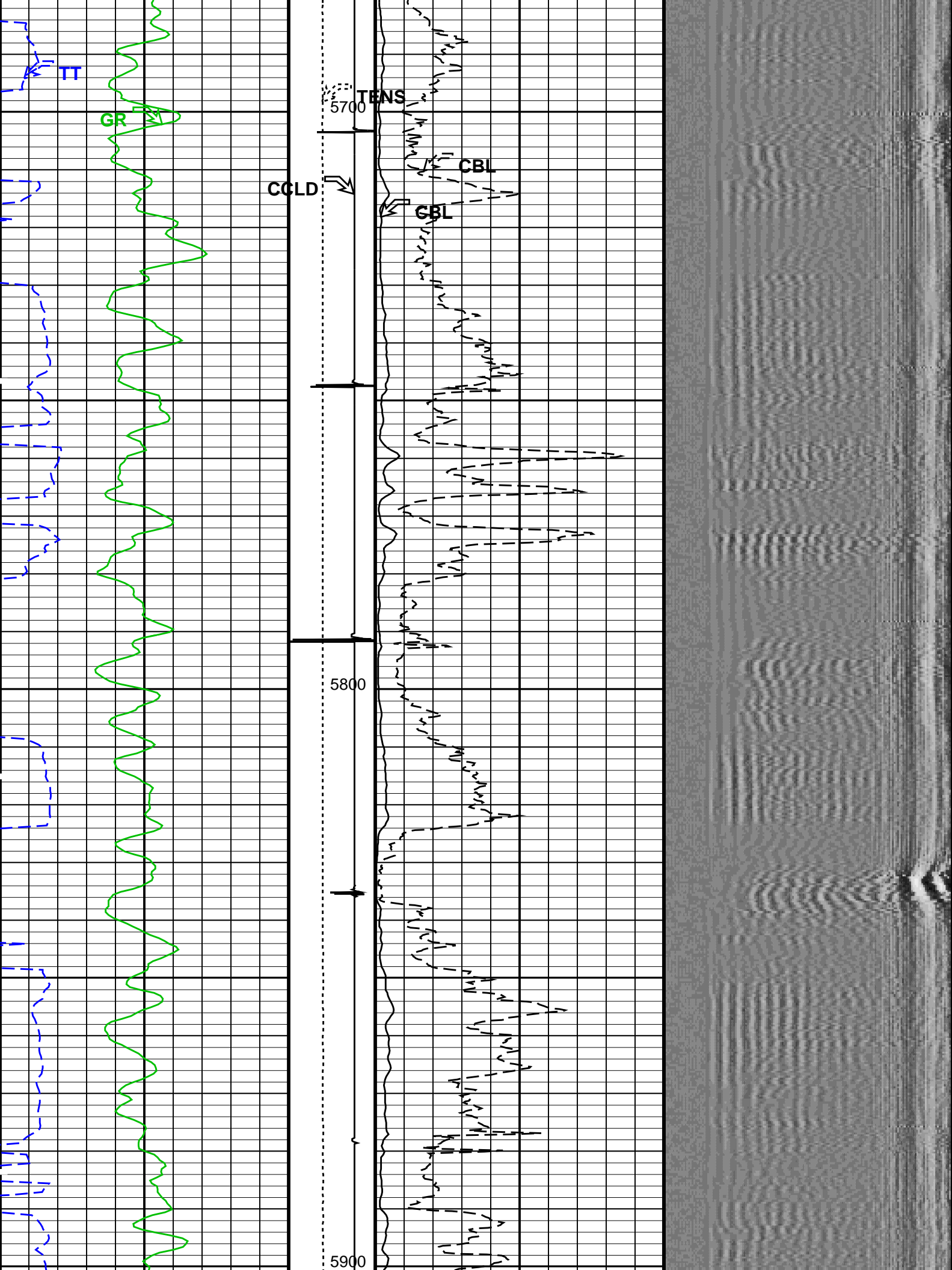


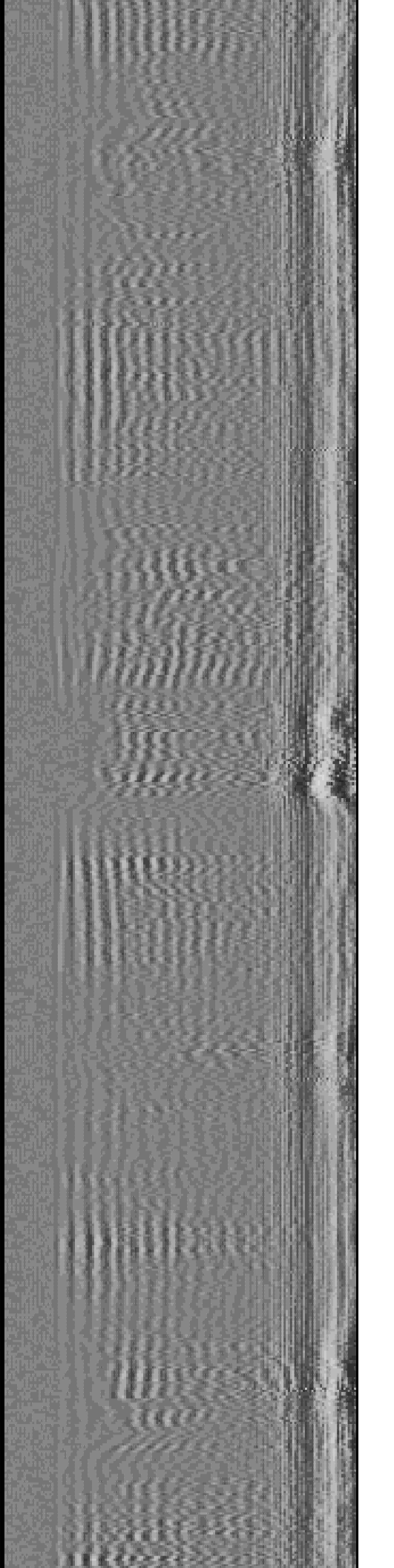
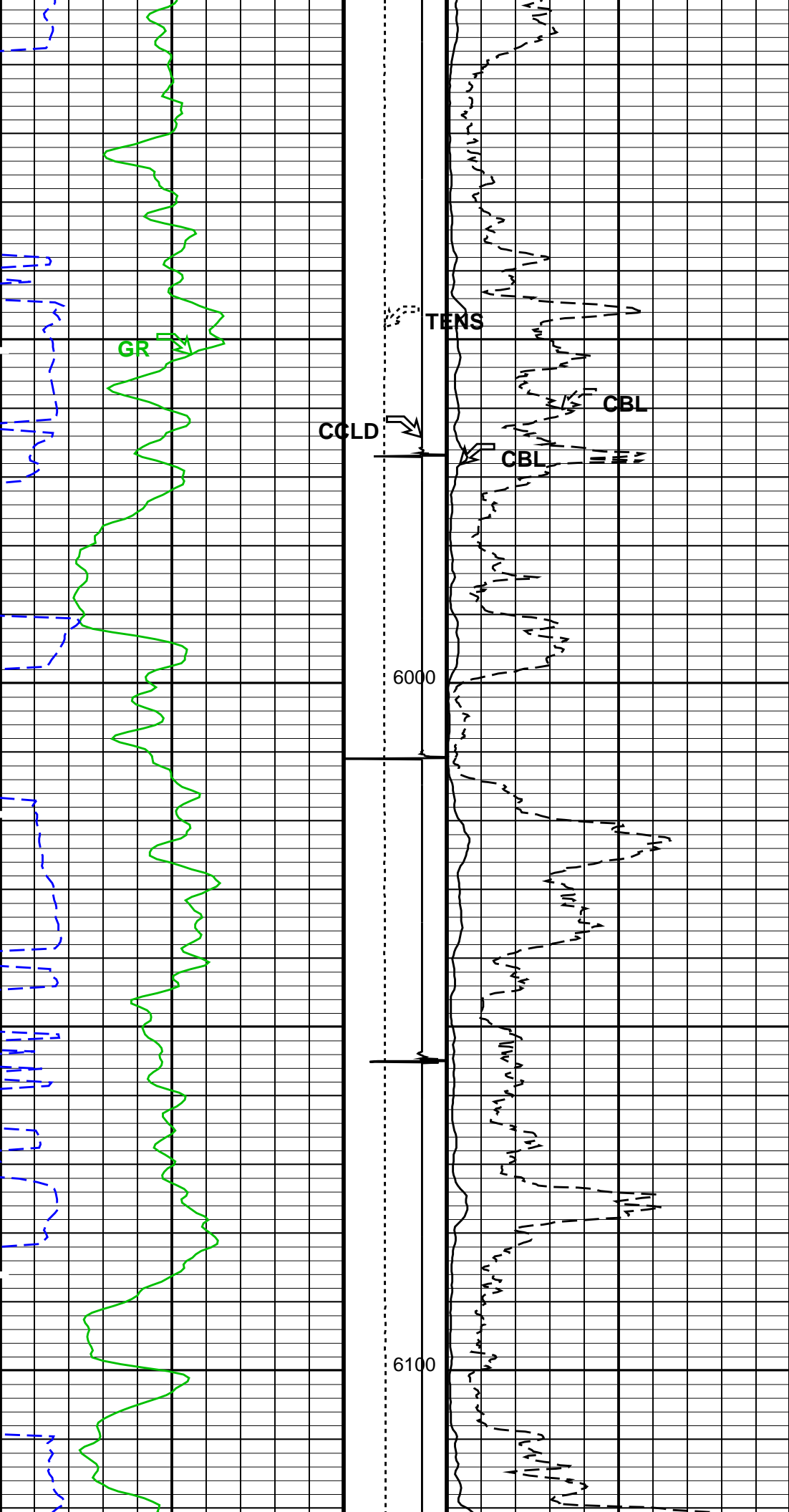


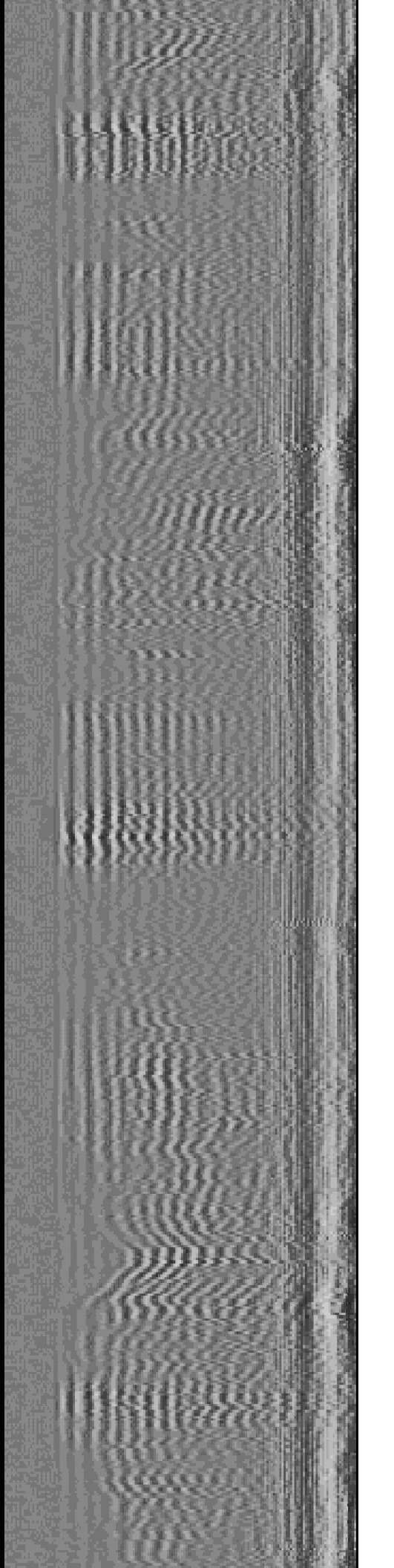
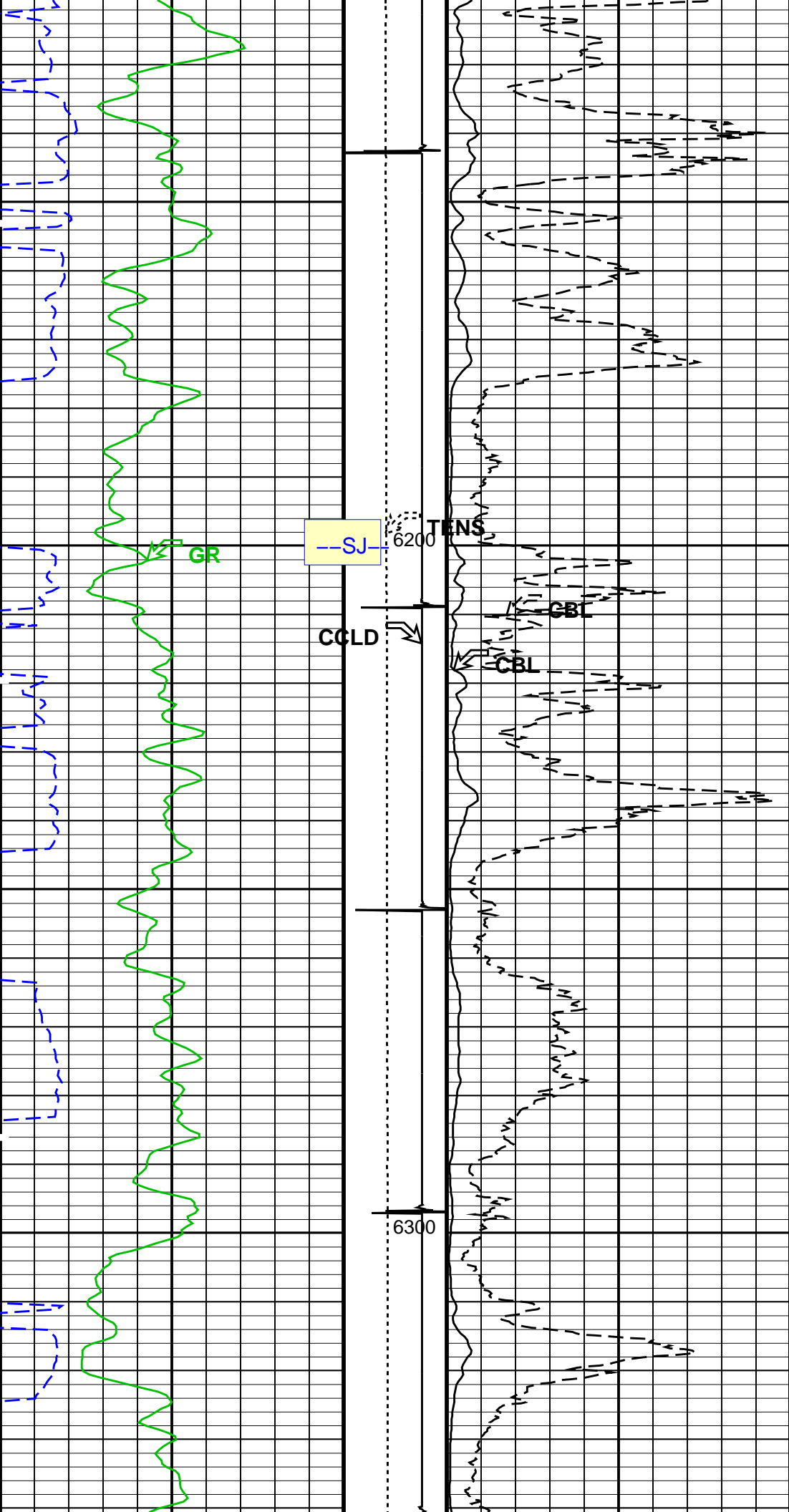


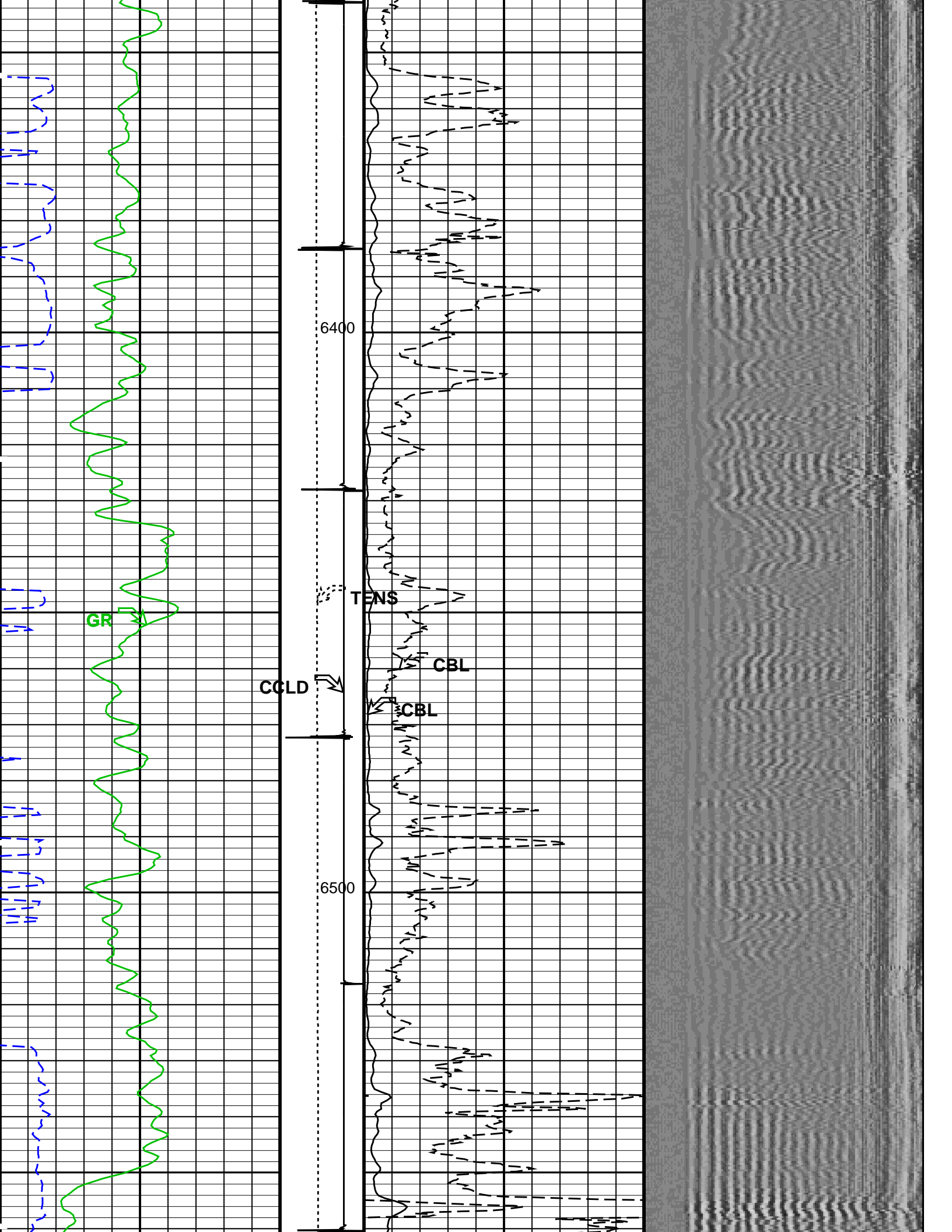


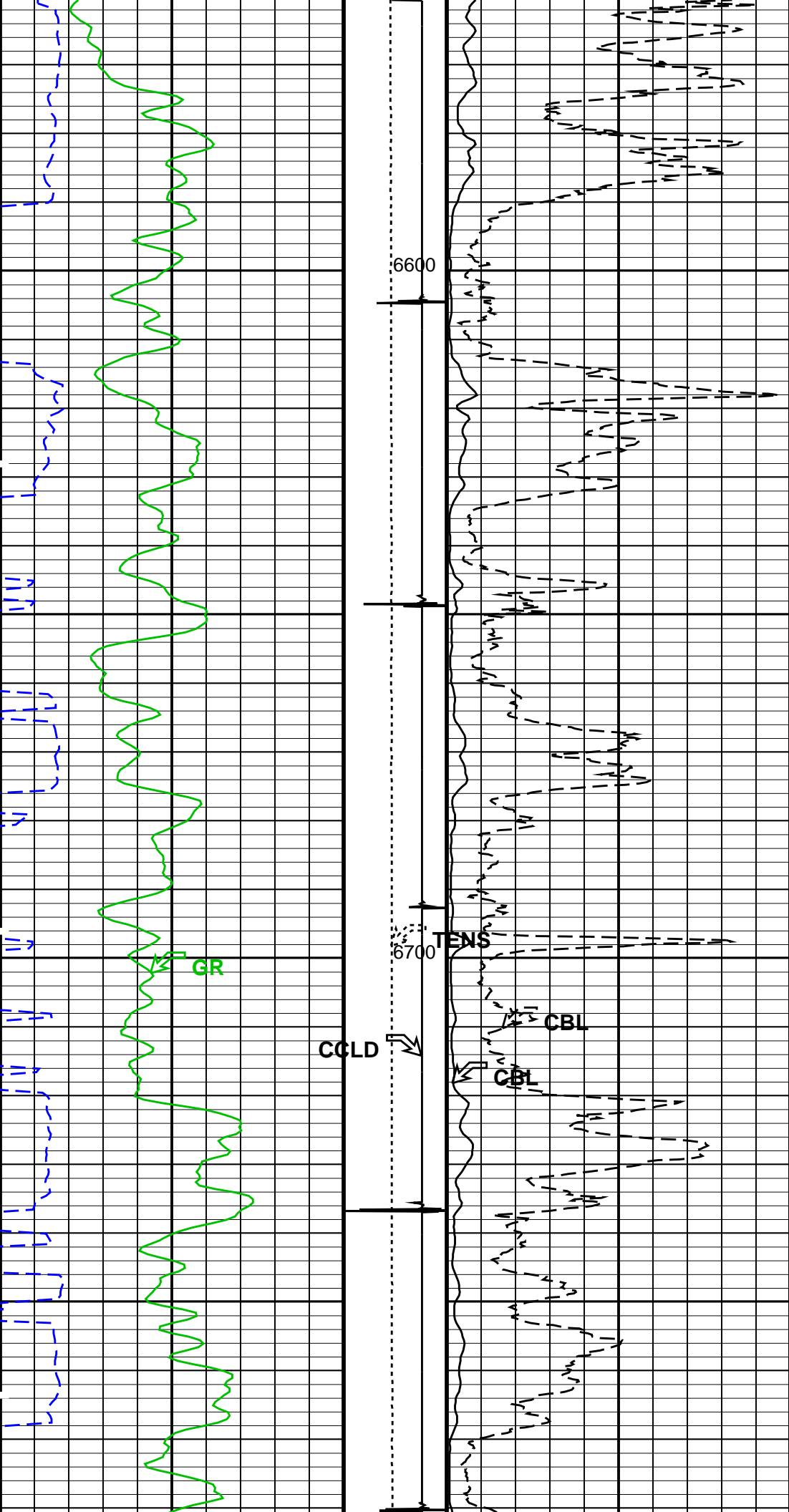


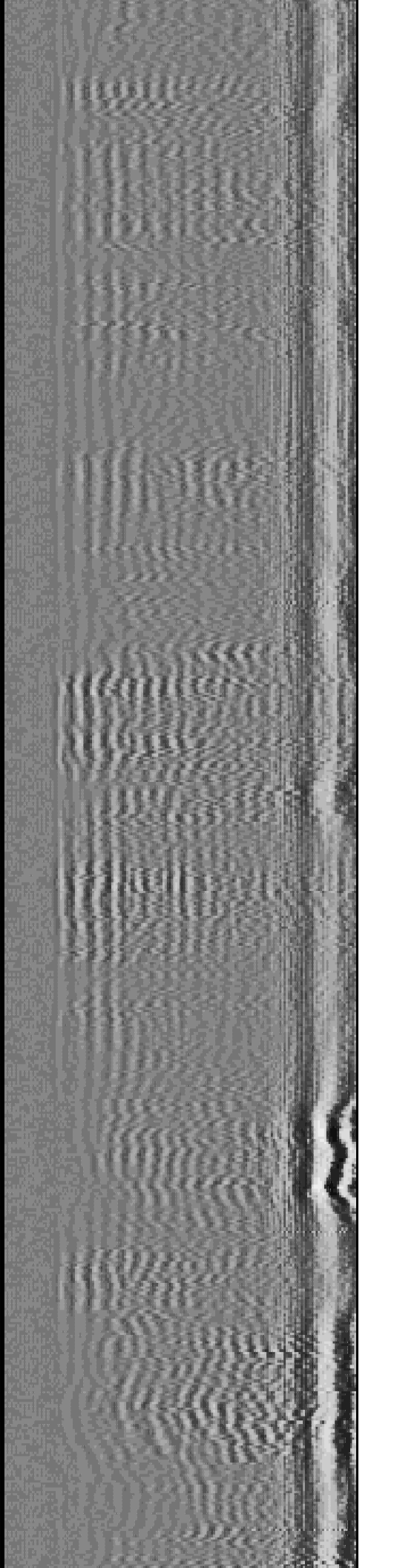
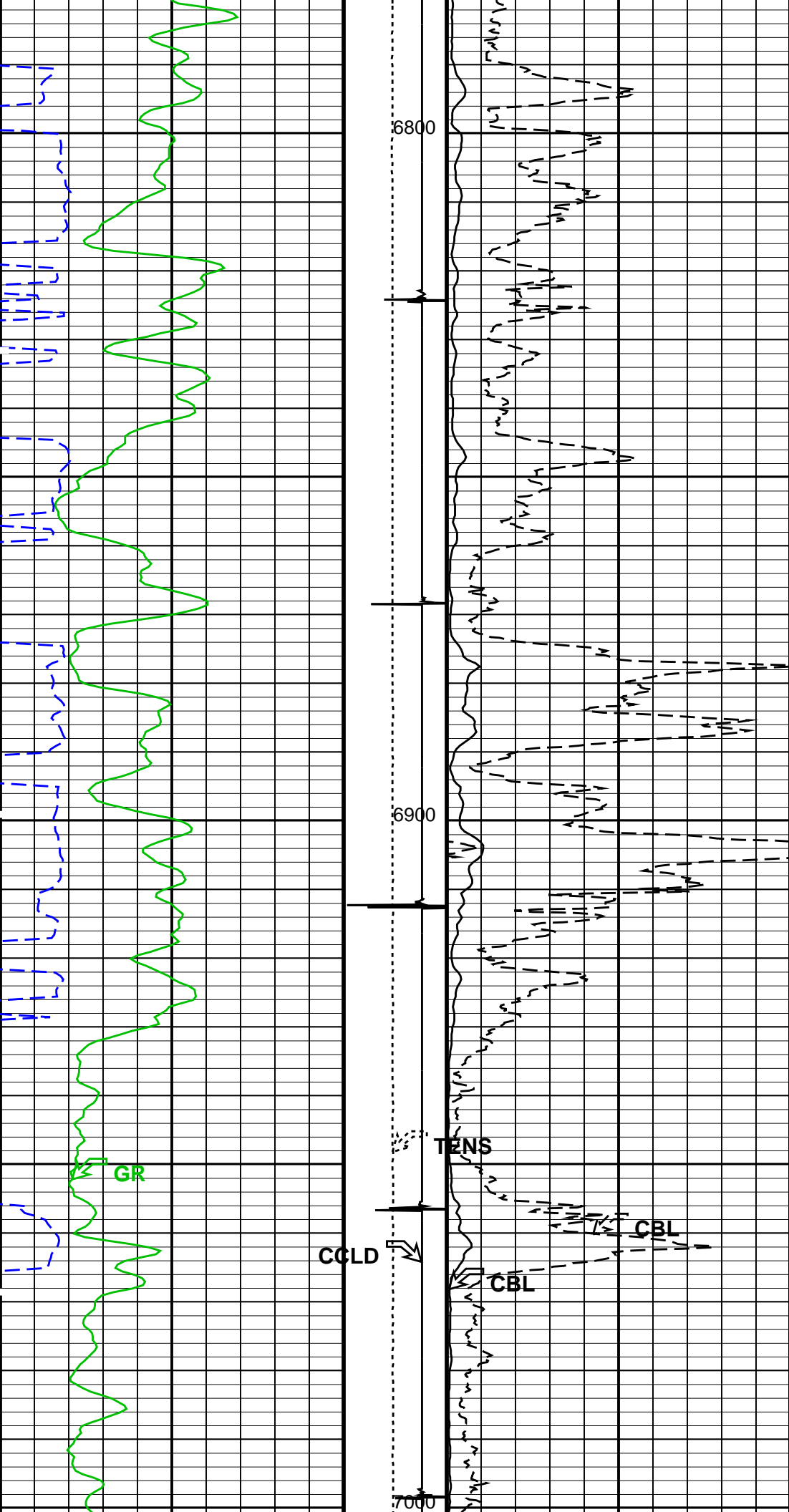


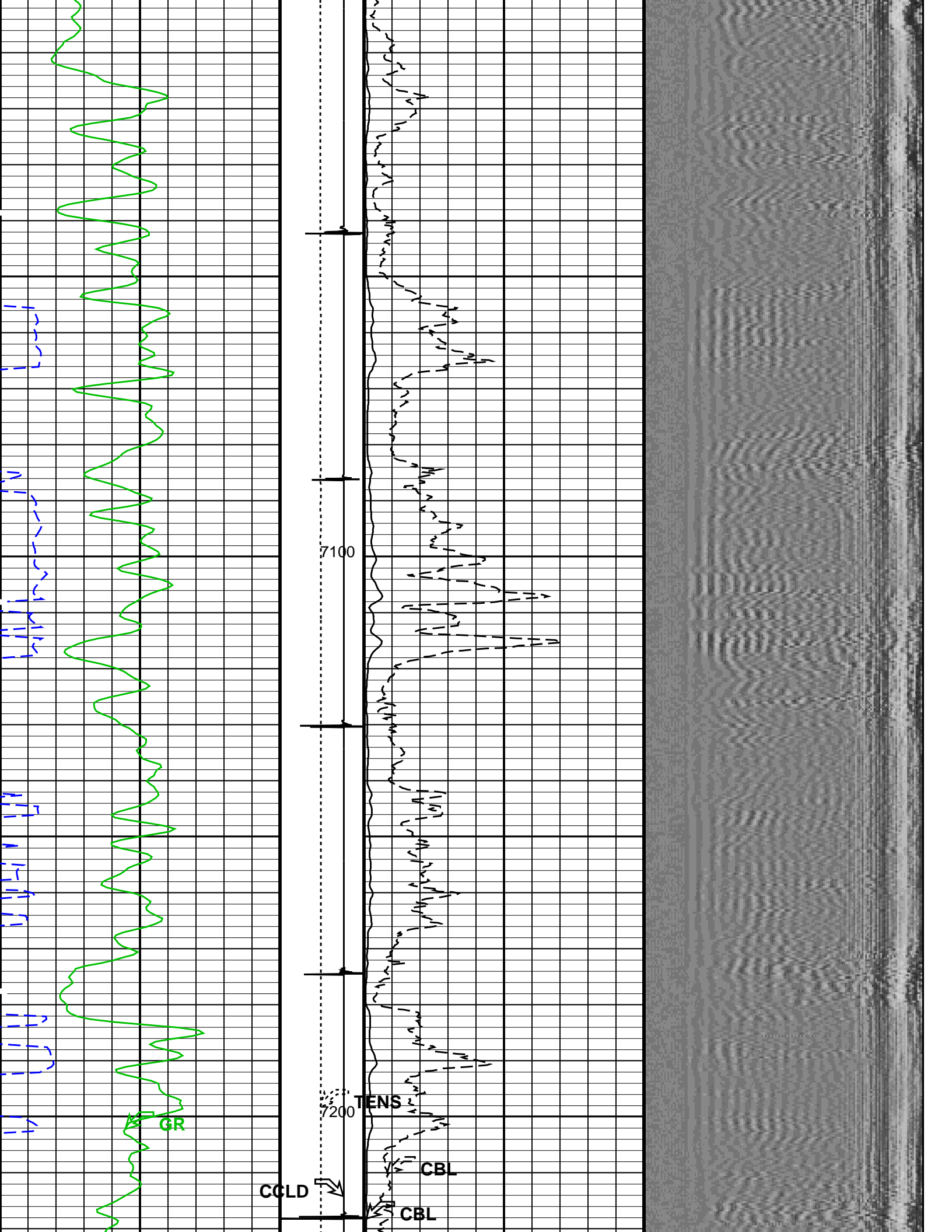


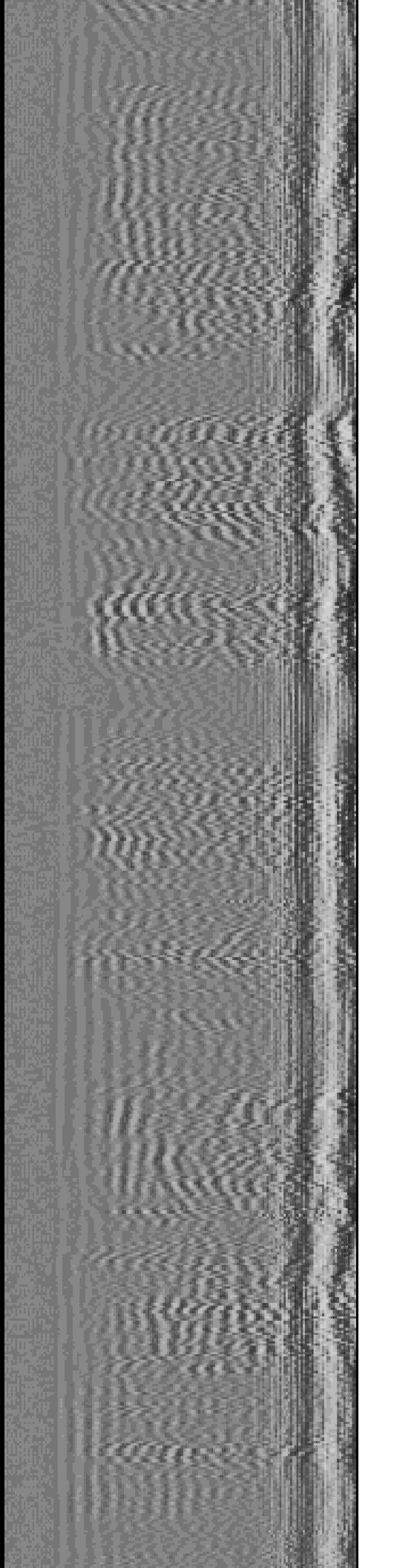
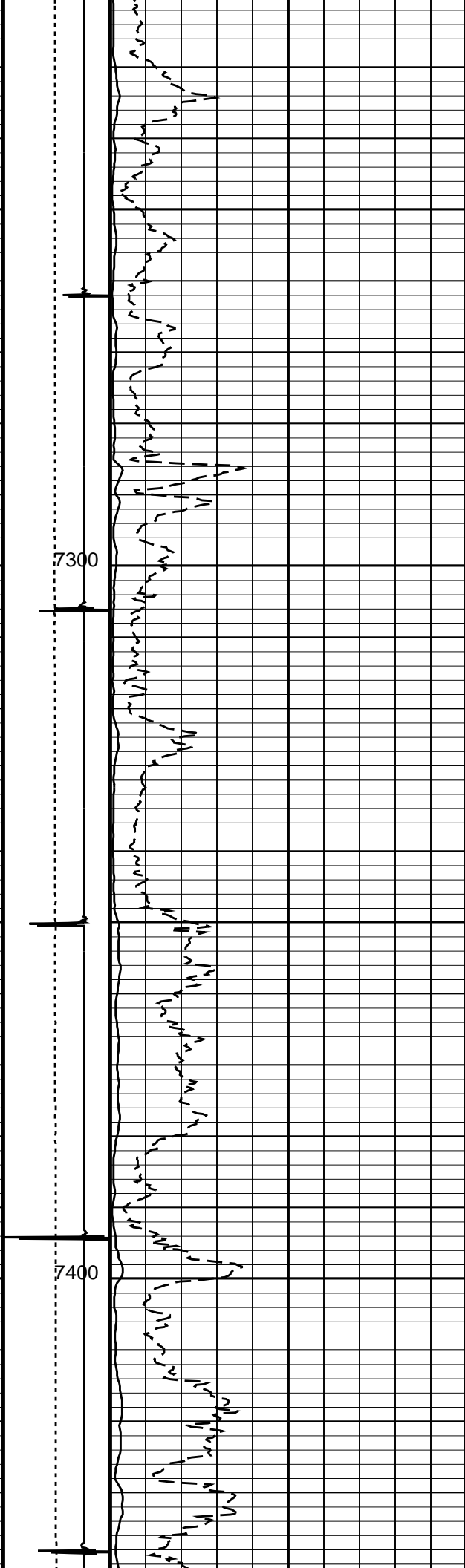
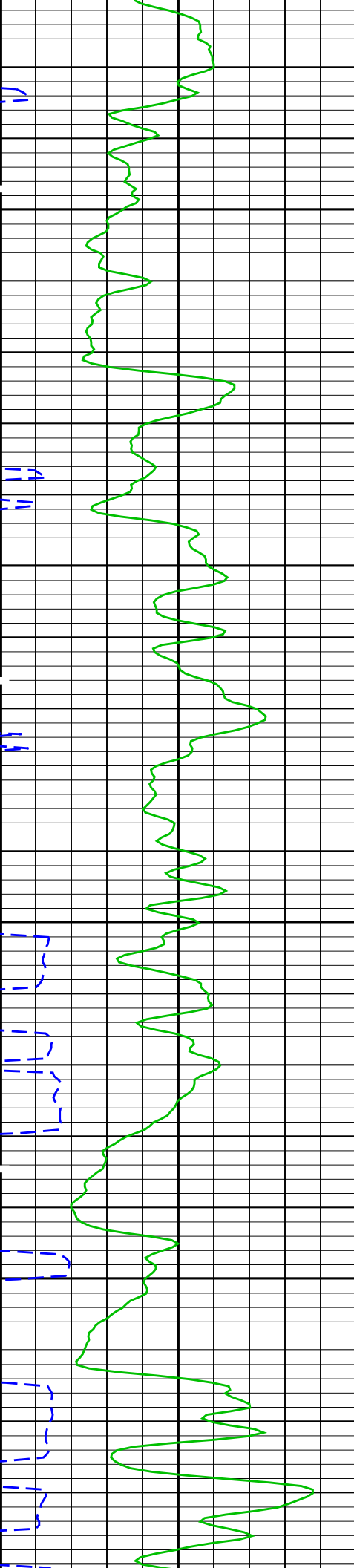


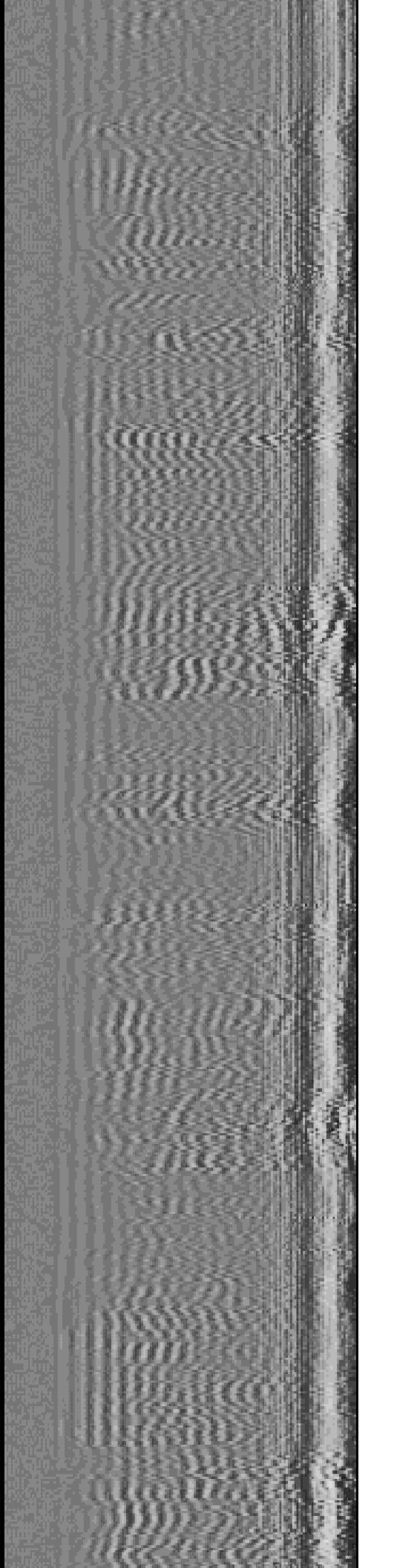
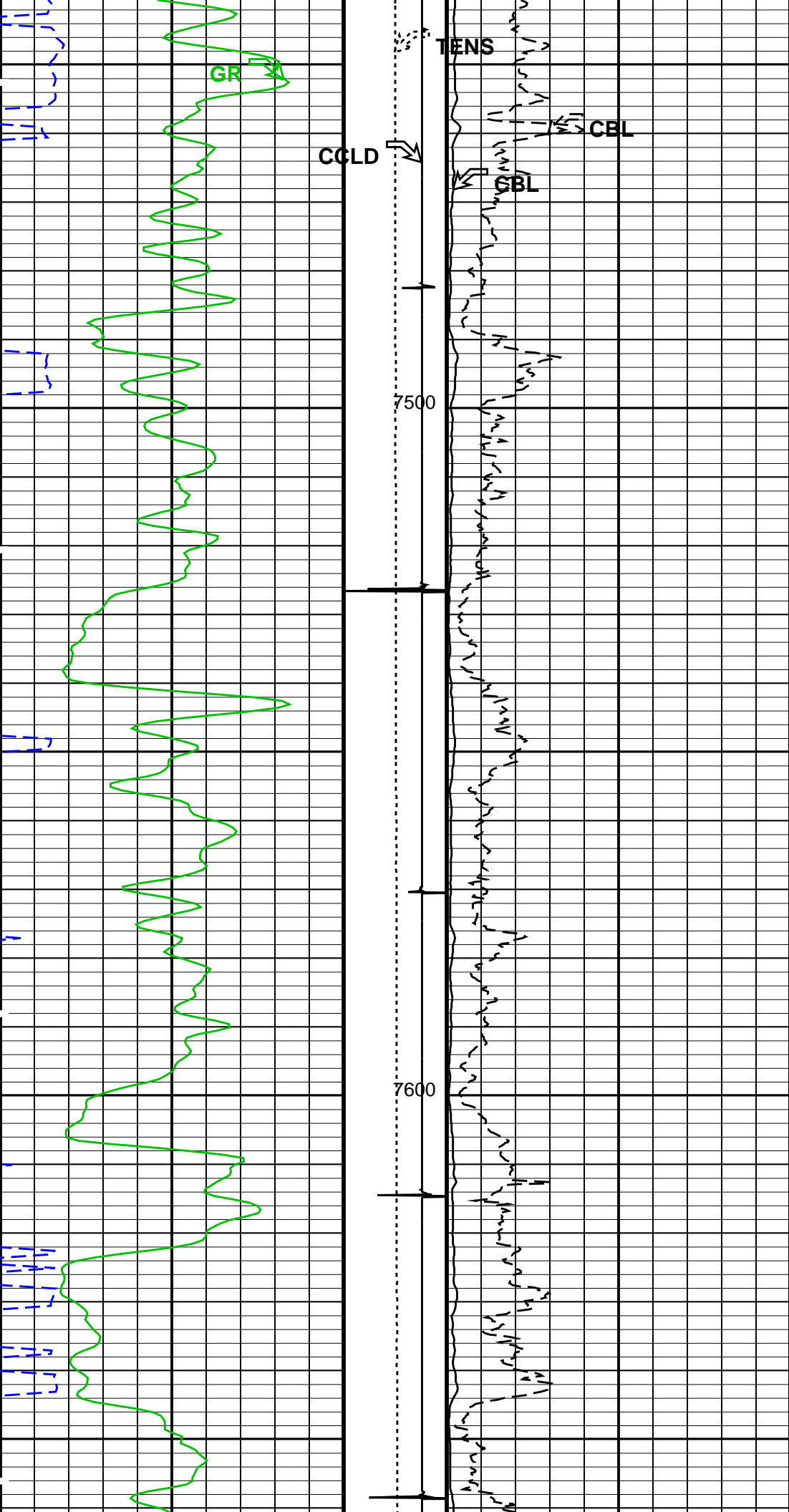


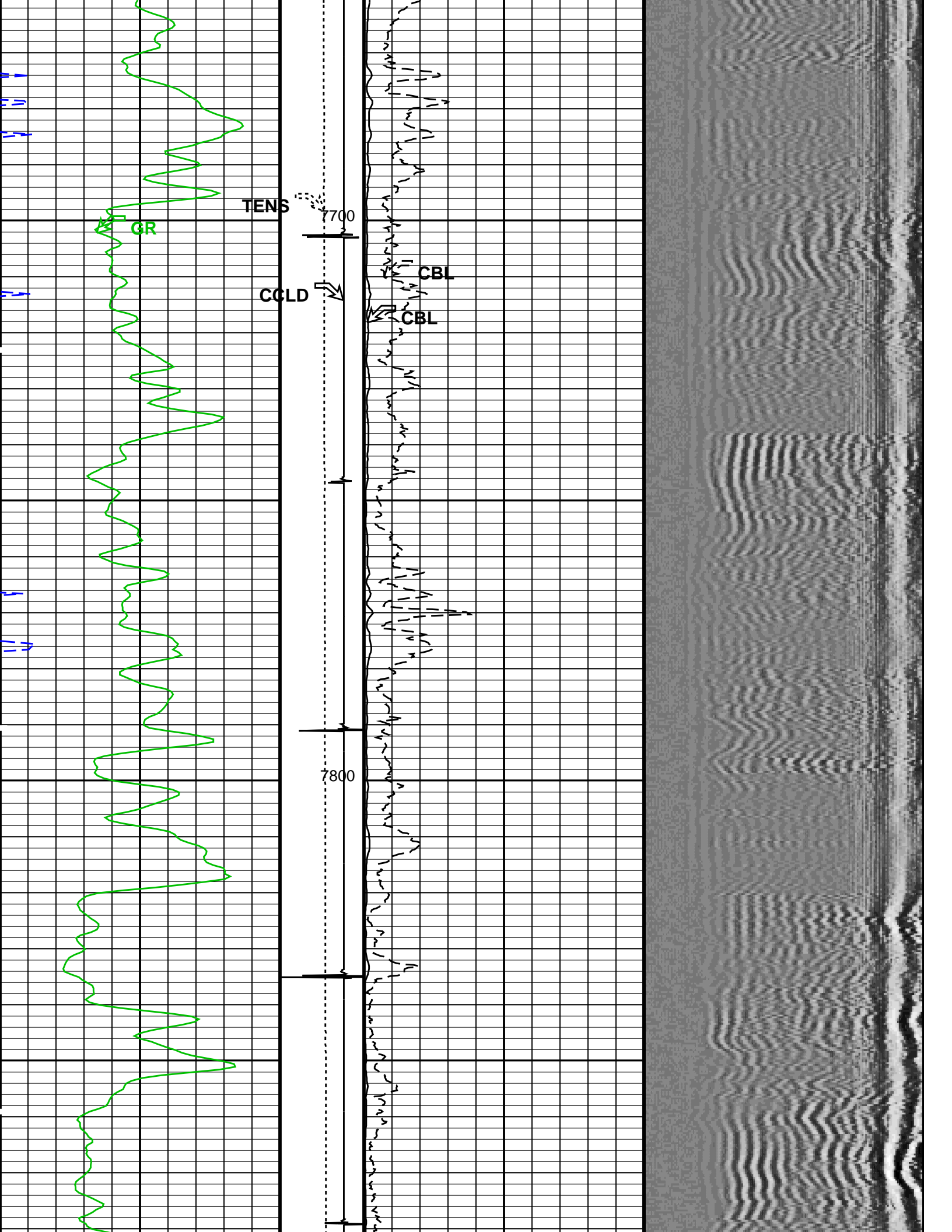


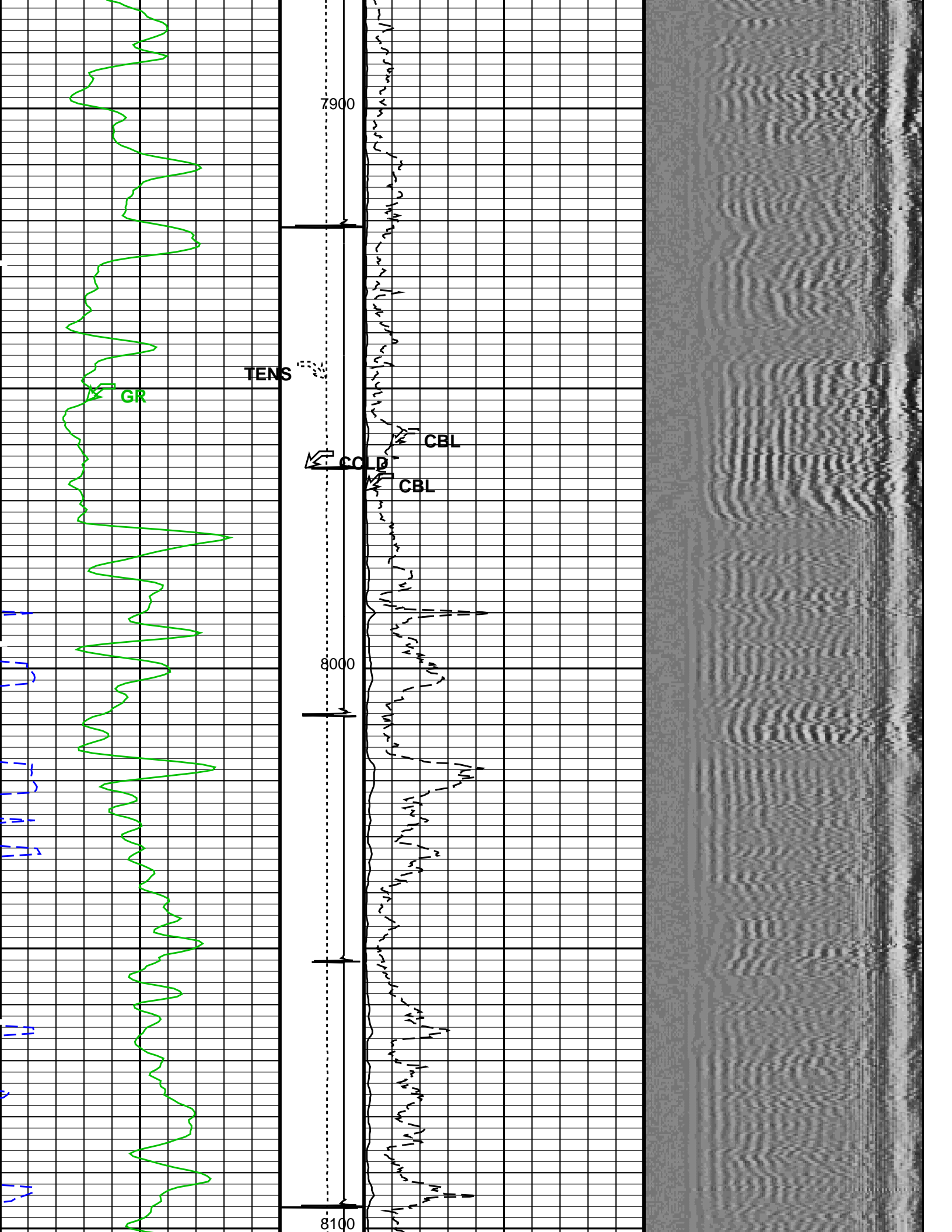


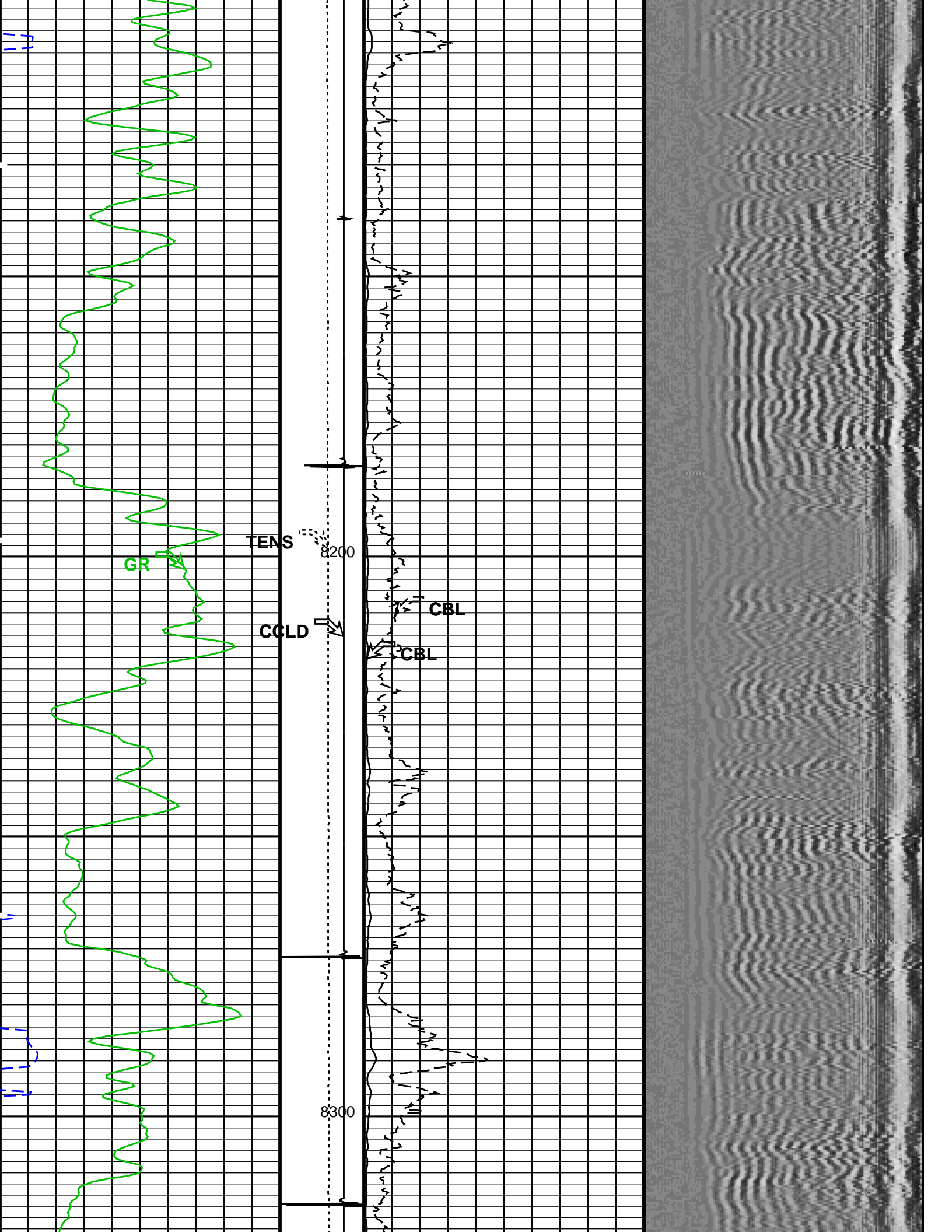


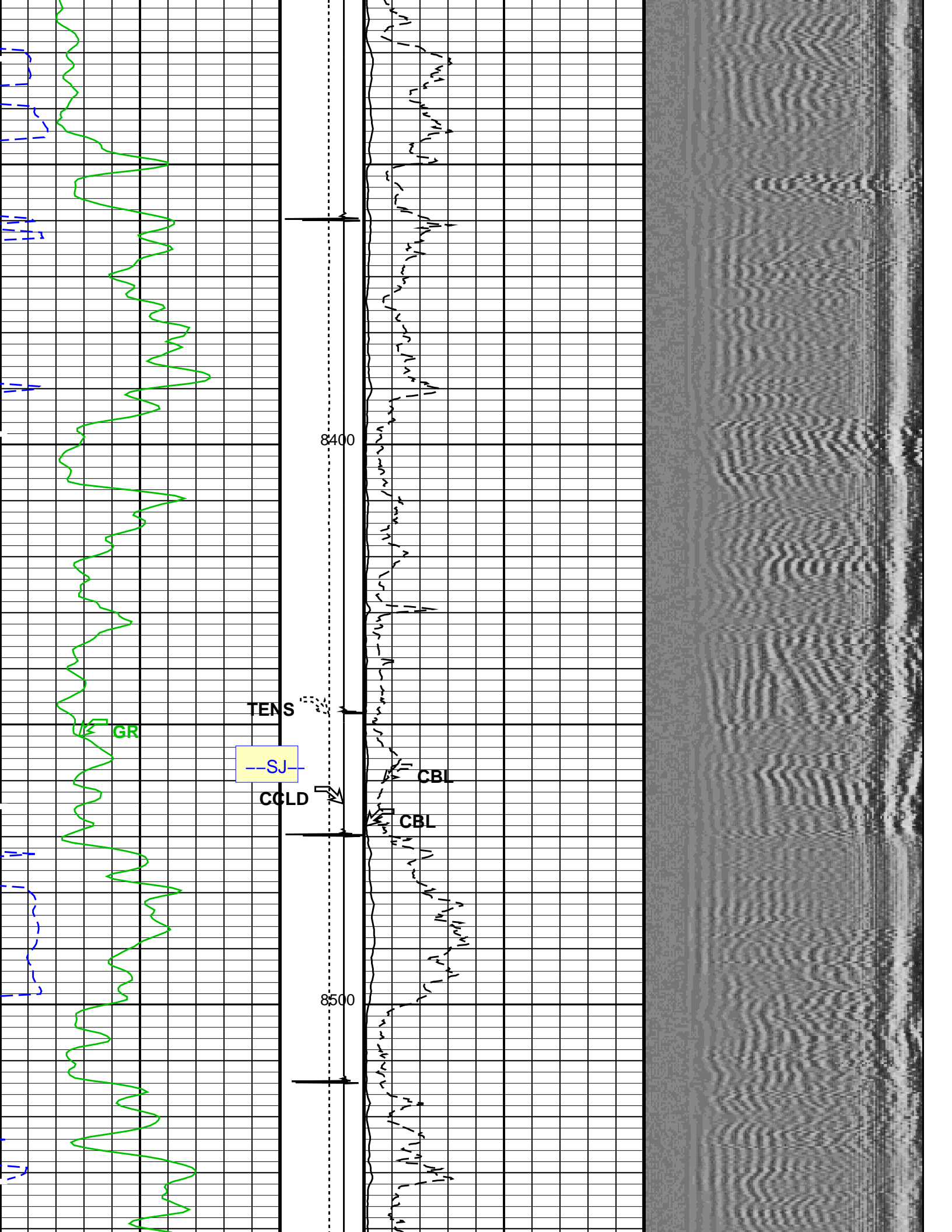


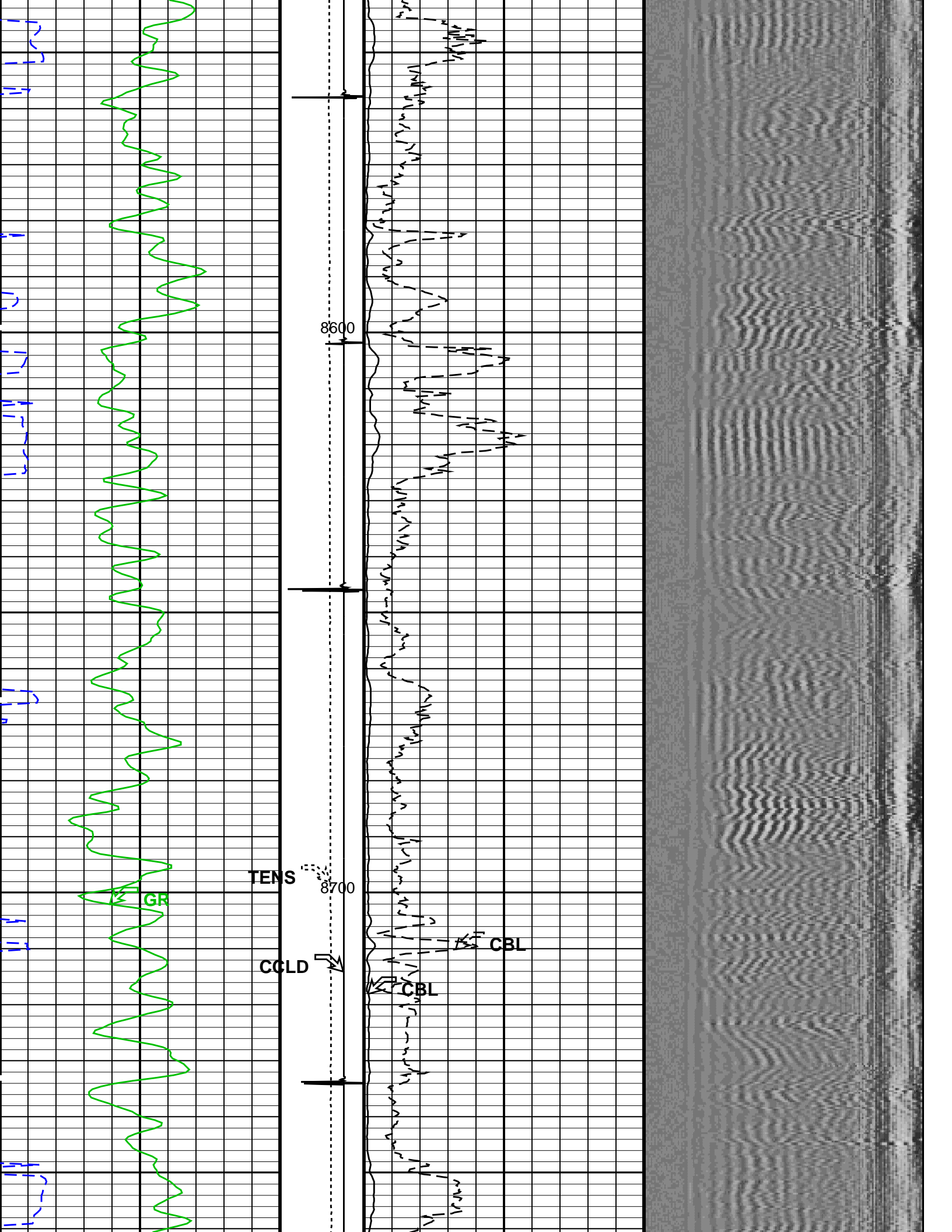


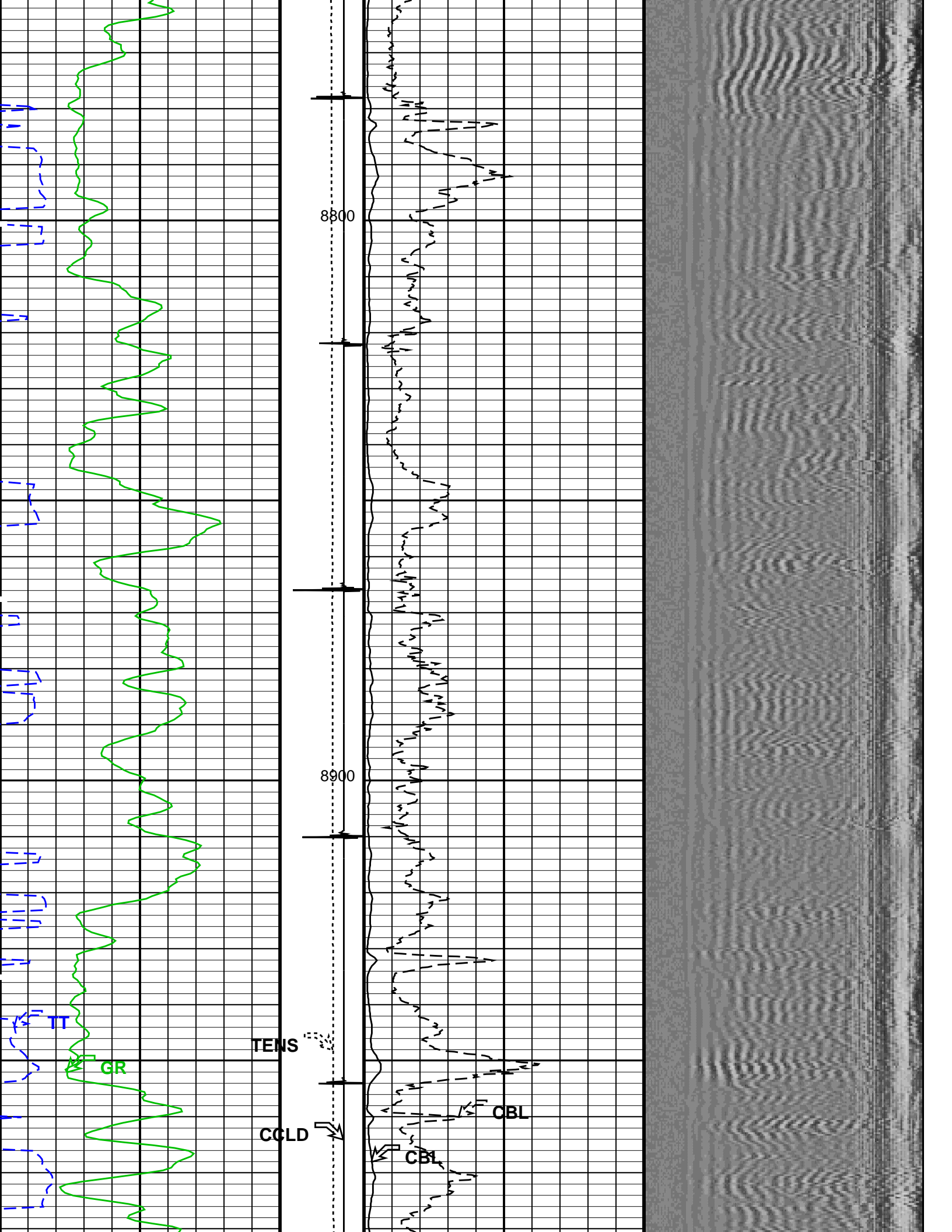


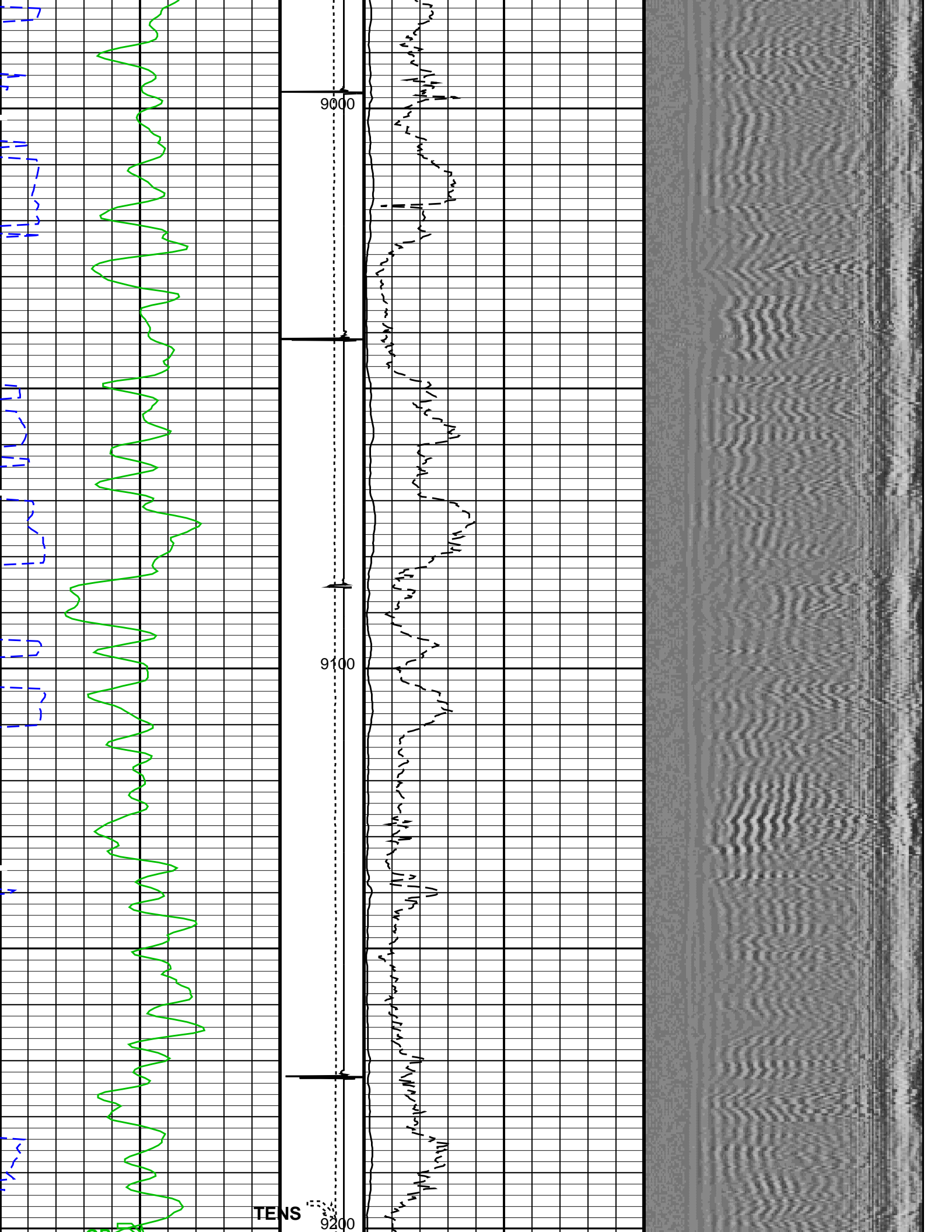


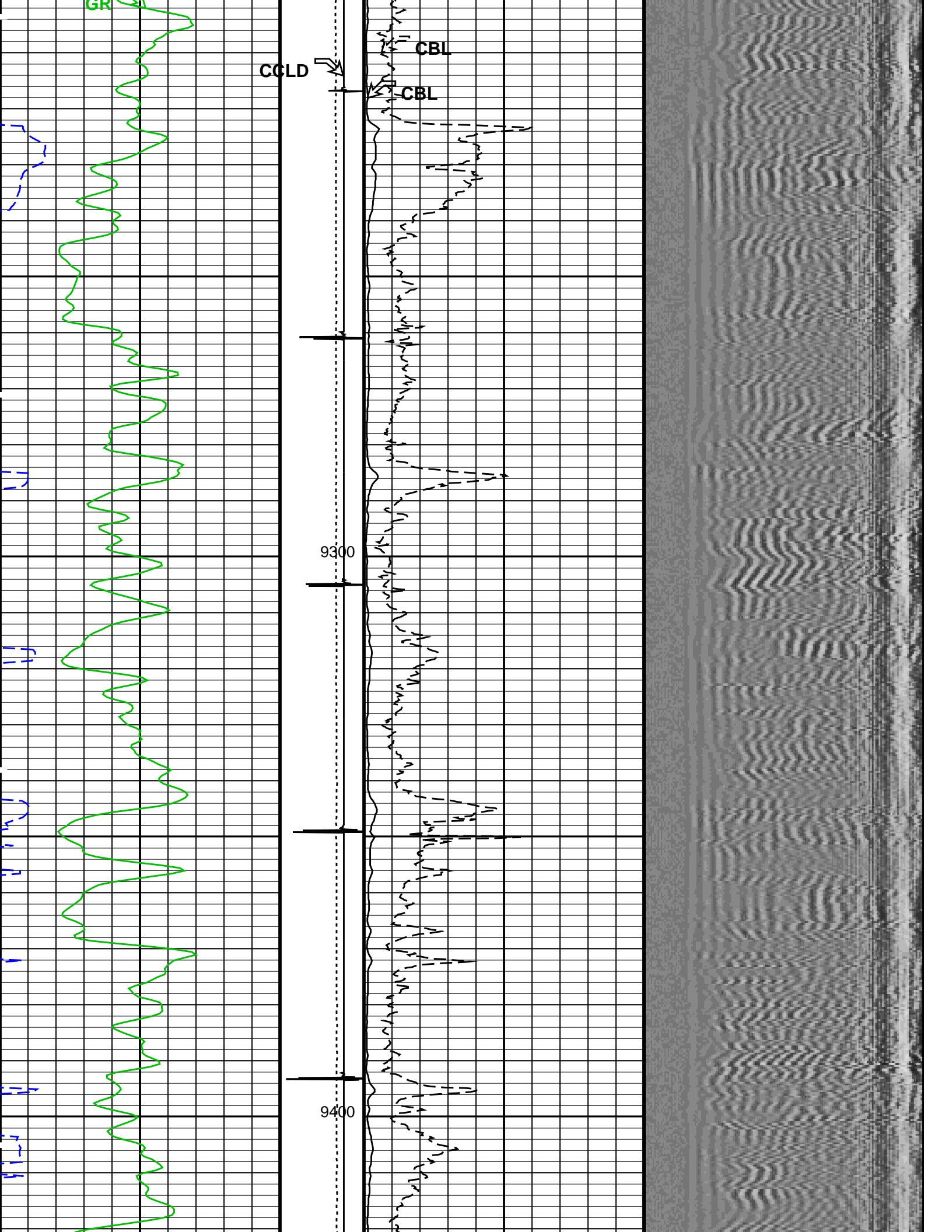


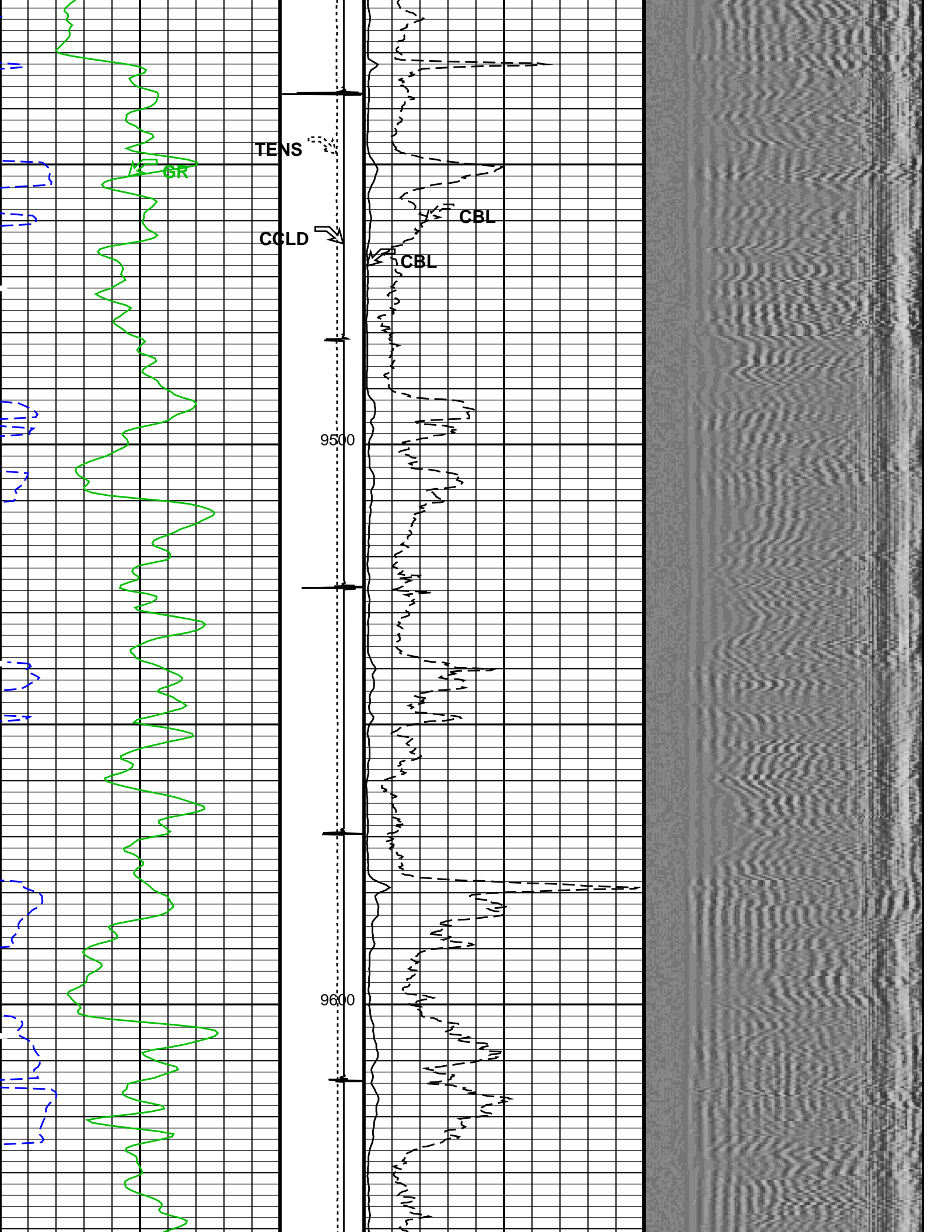


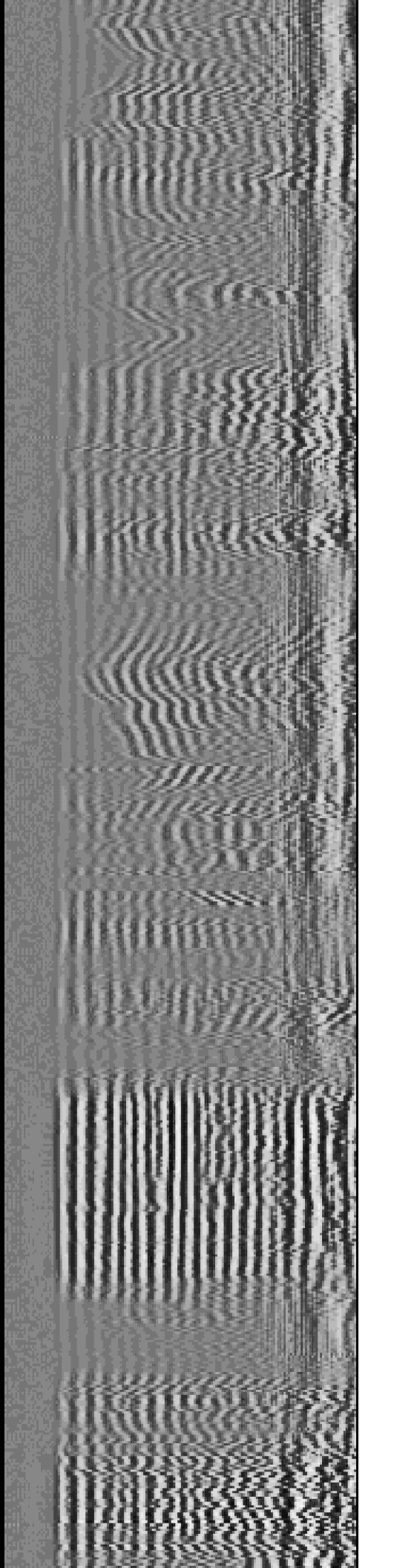
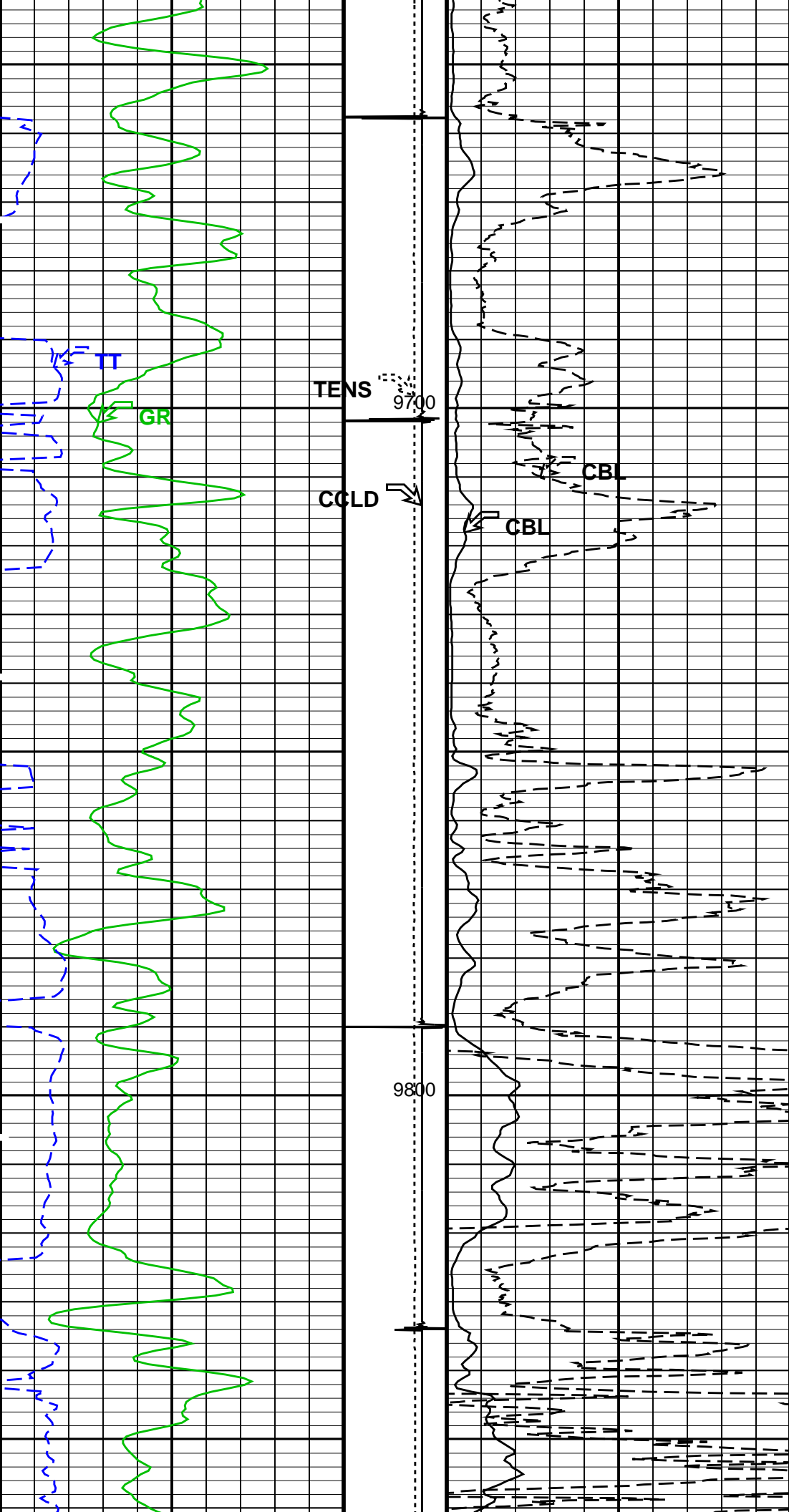


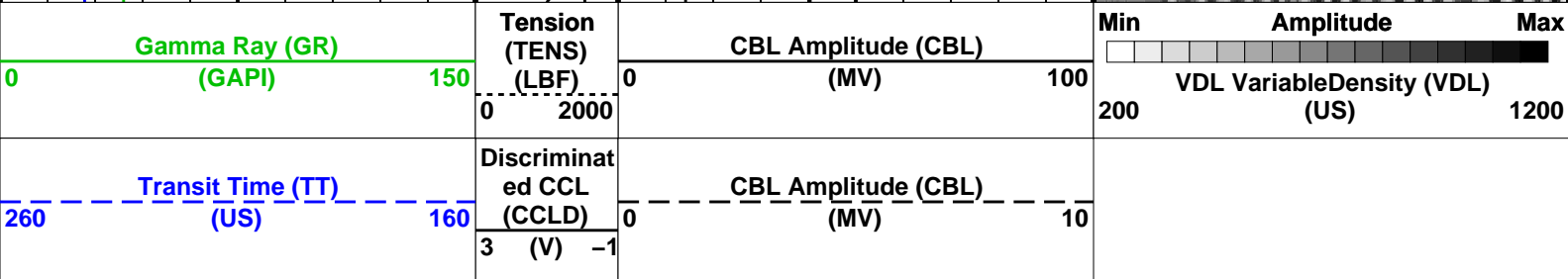
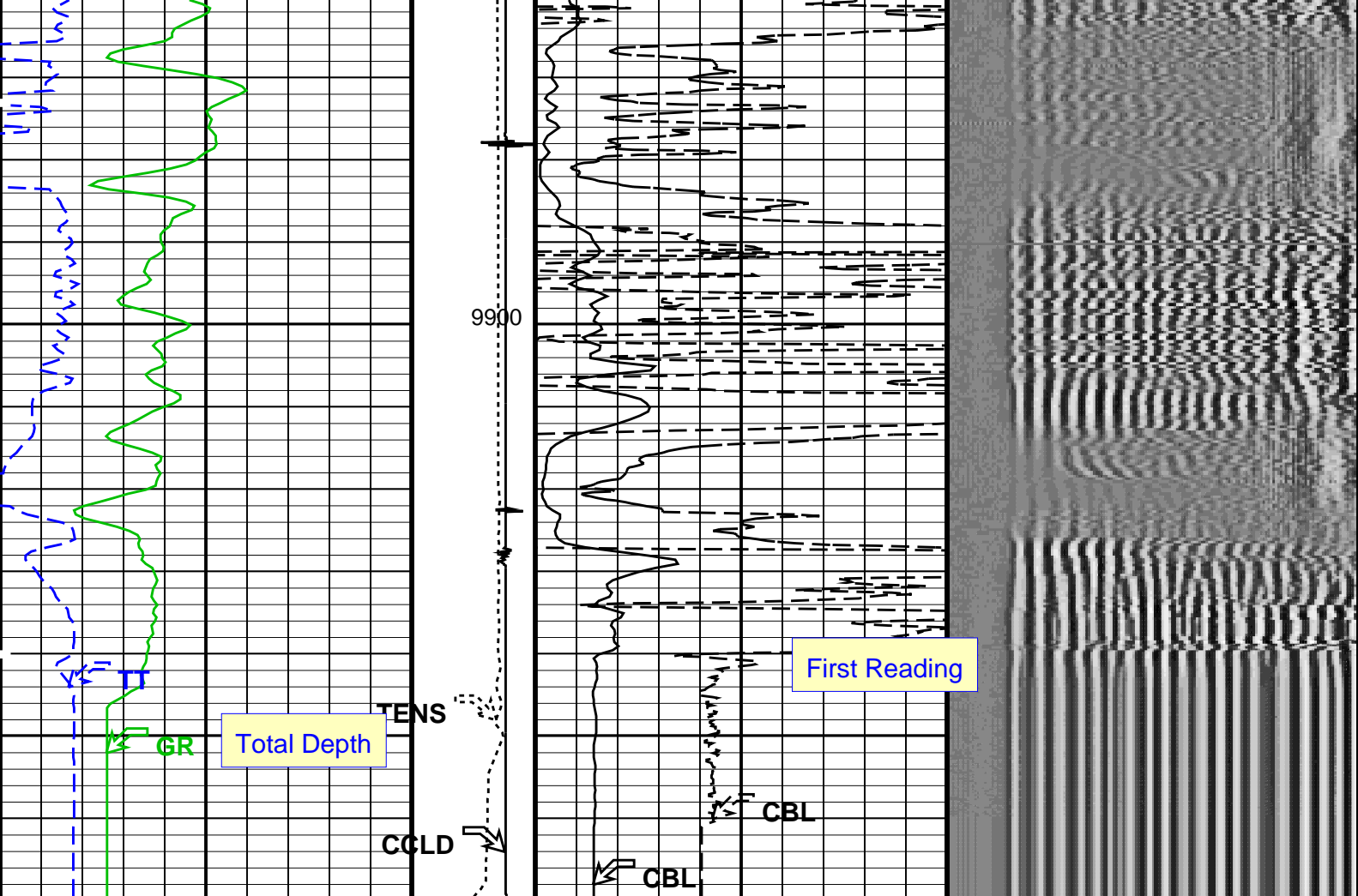












PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 26-Apr-2012 16:54

OP System Version: 19C0-187

SCMT-CB SRPC-5095-H2-2011-OP19_b PSPT 19C0-187

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number SCMS-CB 8317

Current Casing Size 4.5000 IN

Casing Weight 11.6000 LB/F

Expected CBL Amplitude
in Free Pipe Section 80 MV

Minimum Sonic Amplitude 0.573313 MV (100% Cement)
1.53933 MV (80% Cement)
MAP Minimum Sonic Amplitude 4.27928 MV (100% Cement)
8.03705 MV (80% Cement)

Master Calibration (Normalization)

Before Calibration (Adjustment)

Date of Master Calibration 6-MAR-2012

CBL Correction Factor 0.0689824

CBL Adjustment Factor (CBAF) 1.0

| | | | |
|-------------------------|-----------|------------------------------|-----|
| CBL Correction Factor | 0.0003024 | CBL Adjustment Factor (CBAF) | 1.0 |
| MAP 1 Correction Factor | 0.107072 | MAP Adjustment Factor (MPAF) | 1.0 |
| MAP 2 Correction Factor | 0.128400 | | |
| MAP 3 Correction Factor | 0.135634 | | |
| MAP 4 Correction Factor | 0.115019 | | |
| MAP 5 Correction Factor | 0.108562 | | |
| MAP 6 Correction Factor | 0.113017 | | |
| MAP 7 Correction Factor | 0.117769 | | |
| MAP 8 Correction Factor | 0.123422 | | |

Parameters

| DLIS Name | Description | Value | |
|---|--|----------|------|
| SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD | | | |
| BILI | Bond Index Level for Zone Isolation | 0.8 | |
| CB3D | SCMT CBL 3 ft Peak Detection Mode | PEAK | |
| CB3G | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate | 228.052 | US |
| CB3T | SCMT CBL 3 ft Fixed Threshold Level | 20 | MV |
| CB5D | SCMT CBL 5 ft Peak Detection Mode | PEAK | |
| CB5G | SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate | 342.052 | US |
| CB5T | SCMT CBL 5 ft Fixed Threshold Level | 20 | MV |
| CBLG | CBL Gate Width | 40 | US |
| CBRA | CBL LQC Reference Amplitude in Free Pipe | 80 | MV |
| CMCF | CBL Cement Type Compensation Factor | 1 | |
| CMTC | SCMT Slow Channel Multiplexer Mode | SCAN | |
| CMTM | SCMT Operating Mode | LOG | |
| CSCS | SCMT Slow Channel Index | VCC | |
| CTHI | Casing Thickness | 0.255617 | IN |
| DTF | Delta-T Fluid | 203 | US/F |
| FATT | Acoustic Attenuation due to Fluid | 0 | DB/F |
| FCF | CBL Fluid Compensation Factor | 0.992742 | |
| GOBO | Good Bond | 1.53933 | MV |
| MAPD | SCMT MAP Peak Detection Mode | PEAK | |
| MAPG | SCMT MAP Peak Detection T0_Delay and Noise Gate | 171.052 | US |
| MAPT | SCMT MAP Fixed Threshold Level | 30 | MV |
| MATT | Maximum Attenuation | 16.5449 | DB/F |
| MCCF | MAP Cement Type Compensation Factor | 1 | |
| MCI | Minimum Cemented Interval for Isolation | 1.25 | FT |
| MMSA | MAP Minimum Sonic Amplitude | 4.27928 | MV |
| MSA | Minimum Sonic Amplitude | 0.573313 | MV |
| PEDE | Peak Detection On/Off Switch in Playback | OFF | |
| VDLG | VDL Manual Gain | 5 | |
| ZCMT | Acoustic Impedance of Cement | 6.8 | MRAY |
| System and Miscellaneous | | | |
| CWEI | Casing Weight | 11.60 | LB/F |
| DFD | Drilling Fluid Density | 8.40 | LB/G |
| DORL | Depth Offset for Repeat Analysis | 0.0 | FT |
| TD | Total Depth | -50000 | FT |

Output DLIS Files

DEFAULT SCMT_PSP_023LUP FN:21 PRODUCER 26-Apr-2012 16:54

Schlumberger

REPEAT ANALYSIS

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC.

Well: NP EF01C-34 P27 595

Input DLIS Files

DEFAULT SCMT_PSP_022PUP FN:20 PRODUCER 26-Apr-2012 16:53 9966.0 FT 9695.0 FT

OP System Version: 19C0-187

SCMT-CB

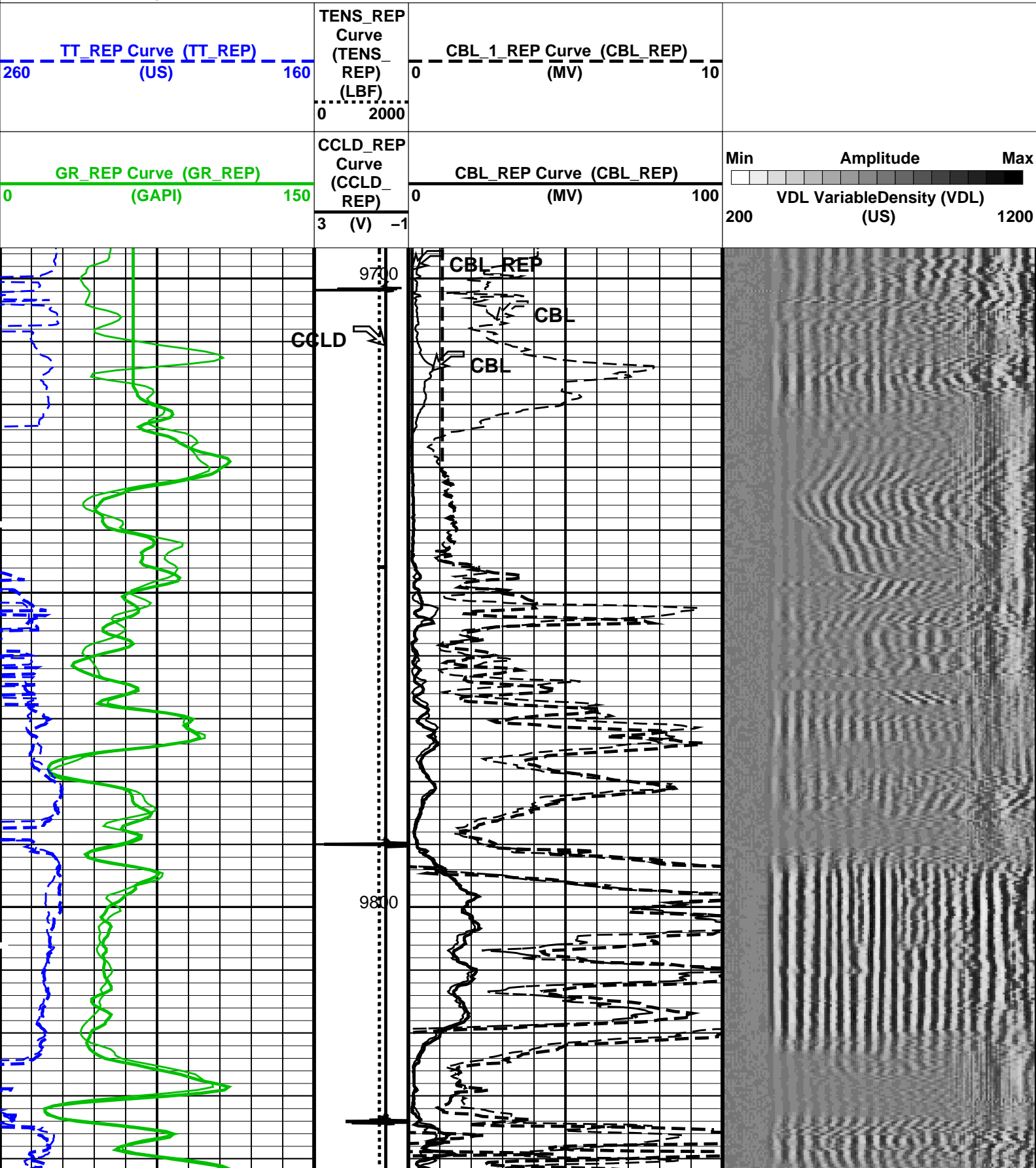
SRPC-5095-H2-2011-OP19_b

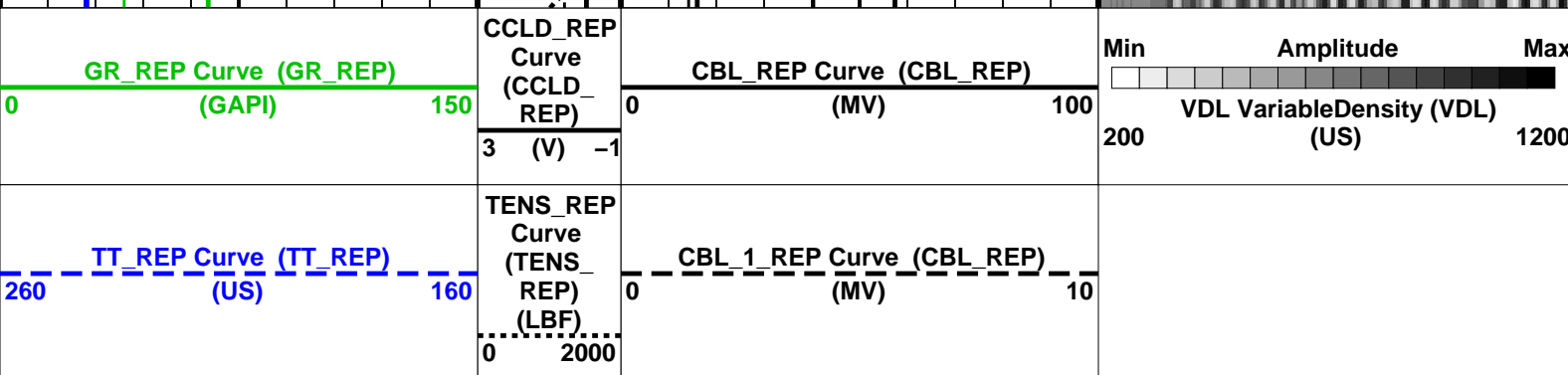
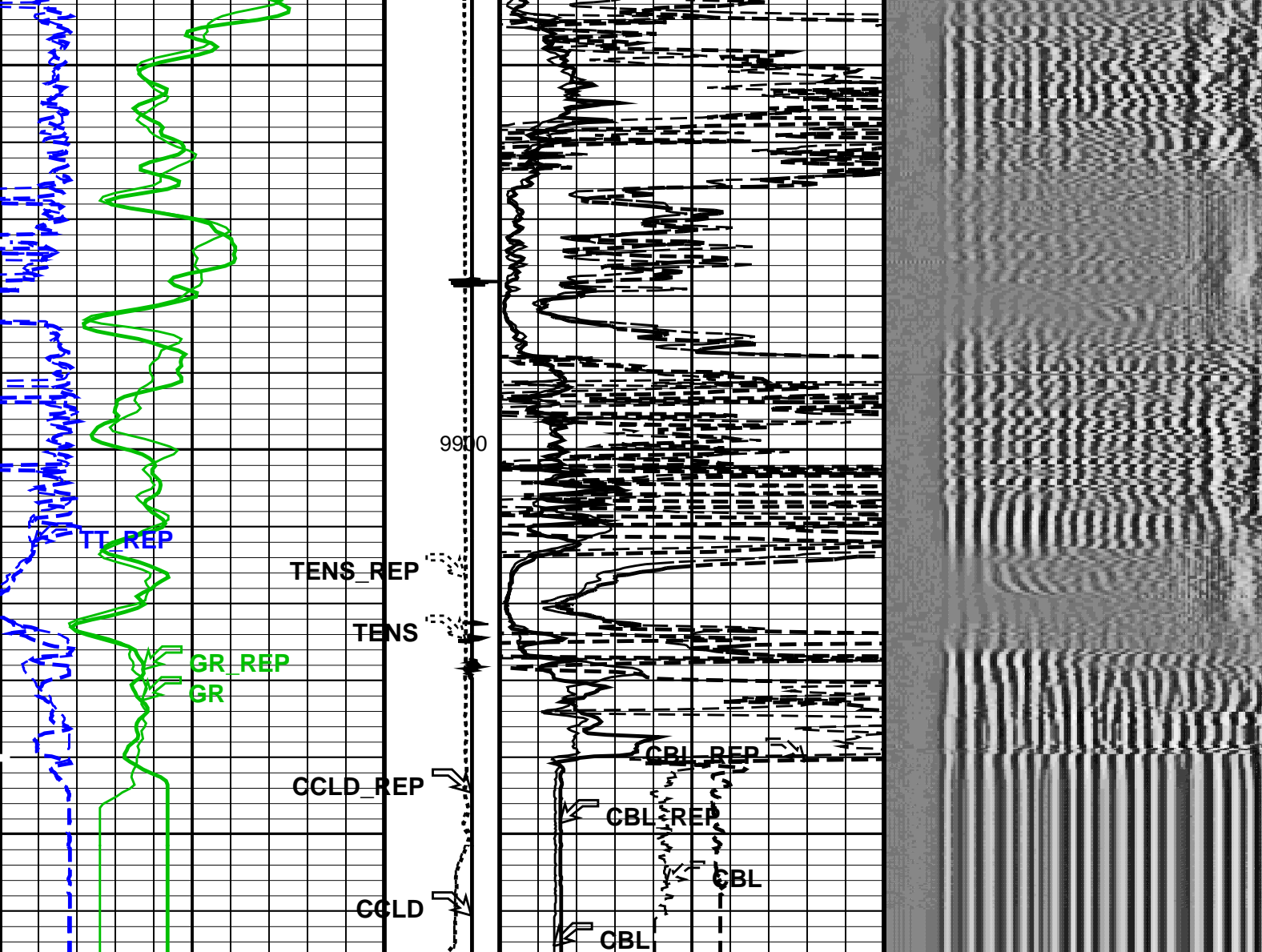
PSPT

19C0-187

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL_REP Vertical Scale: 5" per 100'

Graphics File Created: 26-Apr-2012 16:54

OP System Version: 19C0-187

SCMT-CB SRPC-5095-H2-2011-OP19_b PSPT 19C0-187

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number SCMS-CB 8317

Current Casing Size 4.50000 IN

Casing Weight 11.6000 LB/F

Expected CBL Amplitude 80 MV

Minimum Sonic Amplitude

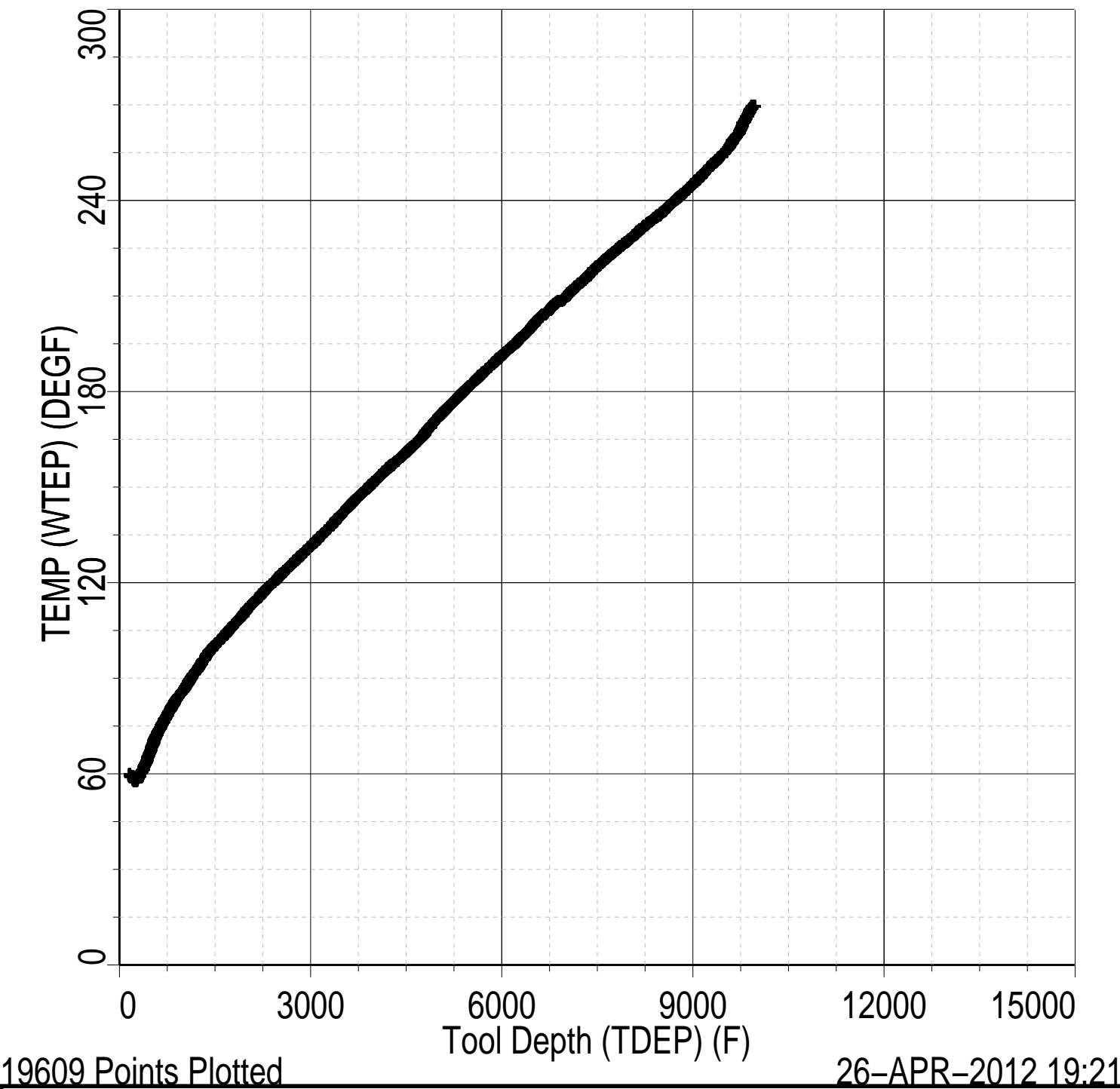
0.573313 MV (100% Cement)

| | | | |
|------------------------------------|------------|---------------------------------|--------------------------|
| In Free Pipe Section | | MAP Minimum Sonic Amplitude | 1.53933 MV (80% Cement) |
| | | | 4.27928 MV (100% Cement) |
| | | | 8.03705 MV (80% Cement) |
| Master Calibration (Normalization) | | Before Calibration (Adjustment) | |
| Date of Master Calibration | 6-MAR-2012 | | |
| CBL Correction Factor | 0.0689824 | CBL Adjustment Factor (CBAF) | 1.0 |
| MAP 1 Correction Factor | 0.107072 | MAP Adjustment Factor (MPAF) | 1.0 |
| MAP 2 Correction Factor | 0.128400 | | |
| MAP 3 Correction Factor | 0.135634 | | |
| MAP 4 Correction Factor | 0.115019 | | |
| MAP 5 Correction Factor | 0.108562 | | |
| MAP 6 Correction Factor | 0.113017 | | |
| MAP 7 Correction Factor | 0.117769 | | |
| MAP 8 Correction Factor | 0.123422 | | |

| Parameters | | | |
|---|--|----------|------|
| DLIS Name | Description | Value | |
| SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD | | | |
| BILI | Bond Index Level for Zone Isolation | 0.8 | |
| CB3D | SCMT CBL 3 ft Peak Detection Mode | PEAK | |
| CB3G | SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate | 228.052 | US |
| CB3T | SCMT CBL 3 ft Fixed Threshold Level | 20 | MV |
| CB5D | SCMT CBL 5 ft Peak Detection Mode | PEAK | |
| CB5G | SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate | 342.052 | US |
| CB5T | SCMT CBL 5 ft Fixed Threshold Level | 20 | MV |
| CBLG | CBL Gate Width | 40 | US |
| CBRA | CBL LQC Reference Amplitude in Free Pipe | 80 | MV |
| CMCF | CBL Cement Type Compensation Factor | 1 | |
| CMTC | SCMT Slow Channel Multiplexer Mode | SCAN | |
| CMTM | SCMT Operating Mode | LOG | |
| CSCS | SCMT Slow Channel Index | VCC | |
| CTHI | Casing Thickness | 0.255617 | IN |
| DTF | Delta-T Fluid | 203 | US/F |
| FATT | Acoustic Attenuation due to Fluid | 0 | DB/F |
| FCF | CBL Fluid Compensation Factor | 0.992742 | |
| GOBO | Good Bond | 1.53933 | MV |
| MAPD | SCMT MAP Peak Detection Mode | PEAK | |
| MAPG | SCMT MAP Peak Detection T0_Delay and Noise Gate | 171.052 | US |
| MAPT | SCMT MAP Fixed Threshold Level | 30 | MV |
| MATT | Maximum Attenuation | 16.5449 | DB/F |
| MCCF | MAP Cement Type Compensation Factor | 1 | |
| MCI | Minimum Cemented Interval for Isolation | 1.25 | FT |
| MMSA | MAP Minimum Sonic Amplitude | 4.27928 | MV |
| MSA | Minimum Sonic Amplitude | 0.573313 | MV |
| PEDE | Peak Detection On/Off Switch in Playback | OFF | |
| VDLG | VDL Manual Gain | 5 | |
| ZCMT | Acoustic Impedance of Cement | 6.8 | MRAY |
| System and Miscellaneous | | | |
| CWEI | Casing Weight | 11.60 | LB/F |
| DFD | Drilling Fluid Density | 8.40 | LB/G |
| DORL | Depth Offset for Repeat Analysis | 0.0 | FT |
| TD | Total Depth | -50000 | FT |

| Input DLIS Files | | | | | | |
|-------------------|-----------------|-------|----------|-------------------|-----------|-----------|
| DEFAULT | SCMT_PSP_022PUP | FN:20 | PRODUCER | 26-Apr-2012 16:53 | 9966.0 FT | 9695.0 FT |
| Output DLIS Files | | | | | | |
| DEFAULT | SCMT_PSP_023LUP | FN:21 | PRODUCER | 26-Apr-2012 16:54 | | |

Index: 9969.5 – 165.5 FT



Schlumberger

COEFFICIENTS

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR SAPPHIRE PBMS–A.3779 S/N:

3779

090107

66

4C82

Pres Coeff

| | Tt**0 | Tt**1 | Tt**2 |
|-------|--------------------|--------------------|--------------------|
| Tp**0 | –.611876617639E+04 | +.471061007964E+04 | –.216447354932E+04 |
| Tp**1 | +.371836126905E+04 | –.234756196935E+04 | +.129149325686E+04 |
| Tp**2 | +.193143980957E+02 | –.189348218853E+01 | –.341812471126E+01 |
| Tp**3 | –.568815065386E+01 | +.200079683569E+01 | 0.0 |
| Tp**4 | 0.0 | 0.0 | 0.0 |
| Tp**5 | 0.0 | 0.0 | 0.0 |

| | Tt**3 | Tt**4 | Tt**5 |
|-------|--------------------|--------------------|-------|
| Tp**0 | +.380249508124E+03 | –.247683004908E+02 | 0.0 |
| Tp**1 | –.227135245080E+03 | +.146352372057E+02 | 0.0 |
| Tp**2 | 0.0 | 0.0 | 0.0 |
| Tp**3 | 0.0 | 0.0 | 0.0 |
| Tp**4 | 0.0 | 0.0 | 0.0 |
| Tp**5 | 0.0 | 0.0 | 0.0 |

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

:

3779

090107

66

C39E

Temp Coeff

| | Tp**0 | Tp**1 | Tp**2 |
|-------|--------------------|--------------------|--------------------|
| Tt**0 | –.278275571347E+03 | +.251216271916E+01 | –.820715649824E+00 |
| Tt**1 | +.598349067015E+02 | –.107326373545E+01 | +.652890183203E–01 |
| Tt**2 | +.109160002120E+02 | +.262812193556E+00 | –.450134240377E–02 |
| | | | |

| | | | |
|-------|--------------------|--------------------|-------|
| Tt**3 | -.673302171285E+00 | -.213772918779E-01 | 0.0 |
| Tt**4 | 0.0 | 0.0 | 0.0 |
| Tt**5 | 0.0 | 0.0 | 0.0 |
| | Tp**3 | Tp**4 | Tp**5 |
| Tt**0 | +.151507143209E+00 | -.592670012996E-02 | 0.0 |
| Tt**1 | +.127486538512E-01 | -.437897076104E-02 | 0.0 |
| Tt**2 | 0.0 | 0.0 | 0.0 |
| Tt**3 | 0.0 | 0.0 | 0.0 |
| Tt**4 | 0.0 | 0.0 | 0.0 |
| Tt**5 | 0.0 | 0.0 | 0.0 |

| | | | |
|-----------|-----------------------------|-----------|--------------|
| Client: | ENCANA OIL & GAS (USA) INC. | Tool: | PSP |
| Field: | NORTH PARACHUTE | Sub Type: | PBMS |
| Well: | ENCANA P27 QUAD 3 | Sensor: | WellTemp RTD |
| Run date: | 26-Apr-2012 | | |

PBMS RTD Well Thermometer

| | |
|-------------------|---|
| Sonde Serial NB | COEFFICIENTS FOR RTD THERMOMETER PBMS-A.3779 S/N: |
| Sensor Serial NB | 3779 |
| Calib Date ddmmyy | 090107 |
| Matrix Size | 16 |
| Coeff CRC | 3846 |

WTemp Coeff

| | | | |
|-------|--------------------|--------------------|--------------------|
| | Tt**0 | Tt**1 | Tt**2 |
| Tt**0 | +.492135102627E+02 | -.278827553804E+03 | +.142867554561E+03 |
| | Tt**3 | Tt**4 | Tt**5 |
| Tt**0 | -.233378392336E+02 | +.145553494493E+01 | 0.0 |

| | | | |
|---------|-----------------------------|-----------|------|
| Client: | ENCANA OIL & GAS (USA) INC. | Tool: | PSP |
| Field: | NORTH PARACHUTE | Sub Type: | PBMS |

PBMS Digitalization Clock

Sonde Serial NB
Sensor Serial NB 3779
Calib Date ddmmyy 090107
Matrix Size 16
Coeff CRC D285

Clock Coeff

| | Temp**0 | Temp**1 | Temp**2 |
|---------|--------------------|--------------------|--------------------|
| Temp**0 | -.210501098404E+03 | -.537713340627E+01 | -.752421519422E-01 |
| | Temp**3 | Temp**4 | Temp**5 |
| Temp**0 | +.630273975887E-03 | +.266728381738E-05 | 0.0 |

Client: ENCANA OIL & GAS (USA) INC.

Field: NORTH PARACHUTE

Well: ENCANA P27 QUAD 3

Run date: 26-Apr-2012

Tool: PSP

Sub Type: PBMS

Sensor: GR

PBMS Gamma Ray

Sonde Serial NB RESISTORS FOR GR SENSOR N.34552,TOOL PBMS-AA3779. SENSOR S/N:
Sensor Serial NB 34552
Calib Date ddmmyy 030606
Matrix Size 12
Coeff CRC 3AE5

GR HV Rt

| | Rt**0 | Rt**1 |
|-------|--------------------|--------------------|
| Rt**0 | +.200000000000e+04 | +.214000000000e+04 |

Company: ENCANA OIL & GAS (USA) INC.



Well: NP EF01B-34 P27 595
Field: NORTH PARACHUTE
County: GARFIELD
State: COLORADO

CEMENT BOND LOG
CBL – VDL
GAMMA RAY – CCL