

Company: Pine Ridge Oil & Gas LLC

Well: Hully Gully 13-54-1-13

Field: Wildcat

County: Lincoln

State: Colorado

County: Lincoln

Field: Wildcat

Location: 660' FSL & 765' FEL

Well: Hully Gully 13-54-1-13

Company: Pine Ridge Oil & Gas LLC

RESERVOIR SATURATION TOOL

GAMMA RAY

CASING COLLAR LOCATOR

660' FSL & 765' FEL

LAT. 38.938 & LONG. 103.401

Elev.: K.B. 4862.00 ft

G.L. 4847.00 ft

D.F.

LOCATION

Permanent Datum: GROUND LEVEL

Elev.: 4847.00 ft

Log Measured From: KELLY BUSHING

15.00 ft above Perm. Datum

Drilling Measured From: KELLY BUSHING

API Serial No. 05-073-0653700

Section 1

Township 13S

Range 54W

PVT DATA			
Oil Density	Run 1	Run 2	Run 3
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 18-Aug-2013

Run Number 1

Depth Driller 5940 ft

Schlumberger Depth 5934 ft

Bottom Log Interval 5925 ft

Top Log Interval 0 ft

Casing Fluid Type WATER

Salinity

Density 8.4 lbm/gal

Fluid Level

BIT/CASING/TUBING STRING

Bit Size 9.250 in

From

To

Casing/Tubing Size 7.000 in

Weight 23 lbm/ft

Grade

From

To

Maximum Recorded Temperatures 151 degF

Logger On Bottom 18-Aug-2013 1:00

Unit Number 354 FORT MORGAN

Recorded By C MARCH

Witnessed By RED BERGE

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: 18-AUG-2013 23:06:23

## Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25P
Serial Number:	6220	Serial Number:	1163	Serial Number:	354
Calibration Date:	27-MAR-2013	Calibration Date:	20-JUL-2013	Length:	17000 FT
Calibrator Serial Number:	1	Calibrator Serial Number:	78135	Conveyance Method:	Wireline
Calibration Cable Type:	1-25P	Number of Calibration Points:	10	Rig Type:	LAND
Wheel Correction 1:	-4	Calibration RMS:	7		
Wheel Correction 2:	-2	Calibration Peak Error:	13		

## Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 FT
Rig Up Length At Bottom:	0.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	
Tool Zero Check At Surface:	1.00 FT





### Depth Control Remarks

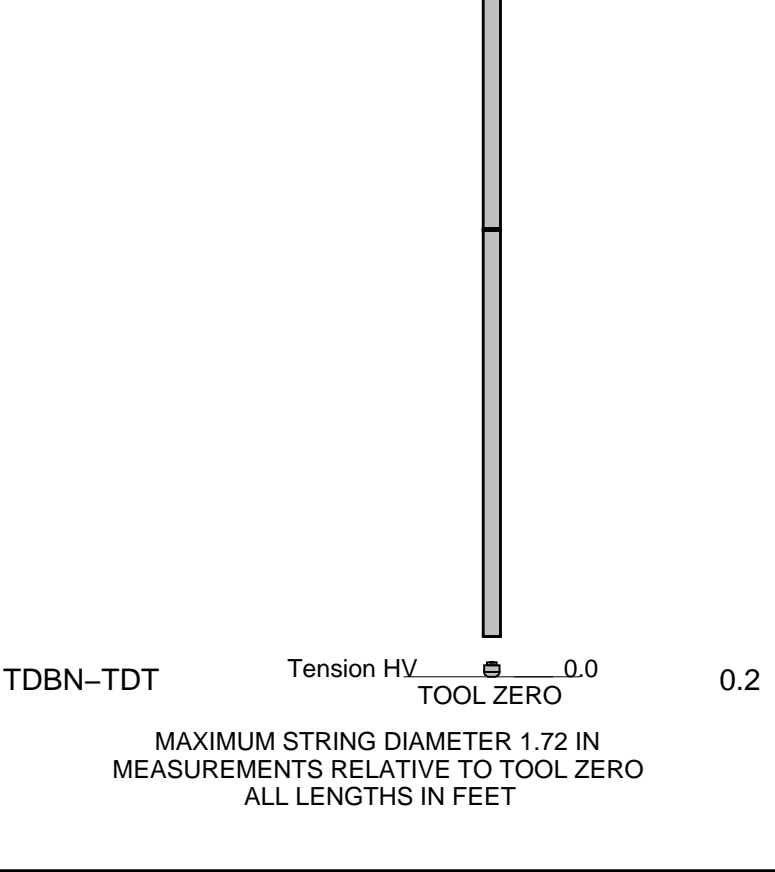
1. IDW WHEELS PRIMARY DEPTH CONTROL
2. DRUM COUNTER USED AS SECONDARY DEPTH CONTROL
- 3.
- 4.
- 5.
- 6.

## 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.

OTHER SERVICES1	OTHER SERVICES2
OS1: NONE	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
FIRST LOG IN WELL	
RAN IN SIGMA MODE	

CREW: KOLMAN					
THANK YOU					
RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
C170-00109			19C2-270		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT					
WITM-A PSC_16MHZ					
DOWNHOLE EQUIPMENT					
MH-22 MH-22			33.3		
AH-38	Detail MT TelStatus CTEM		31.7		
PSPT		— 31.5	31.5		
PSC-A PSPT-A 1765 PSTC-A PBMS-A 10k_Sapphire_Mano RTD_Thermometer GR CCL PBMS		— 27.8			
	Well_Temp Manometer CCL PBMS PSTC	 24.7 24.6 — 23.9 — 23.2			
RST-C RSCH-A RSC-E RSS-A RSXH-A RSX-E			23.2		
	RSC-A Far RSC-A PNG RSC-A Nea RSX-A PNG	 14.1 — 13.6			



# MAIN PASS SIGMA MODE

MAXIS Field Log

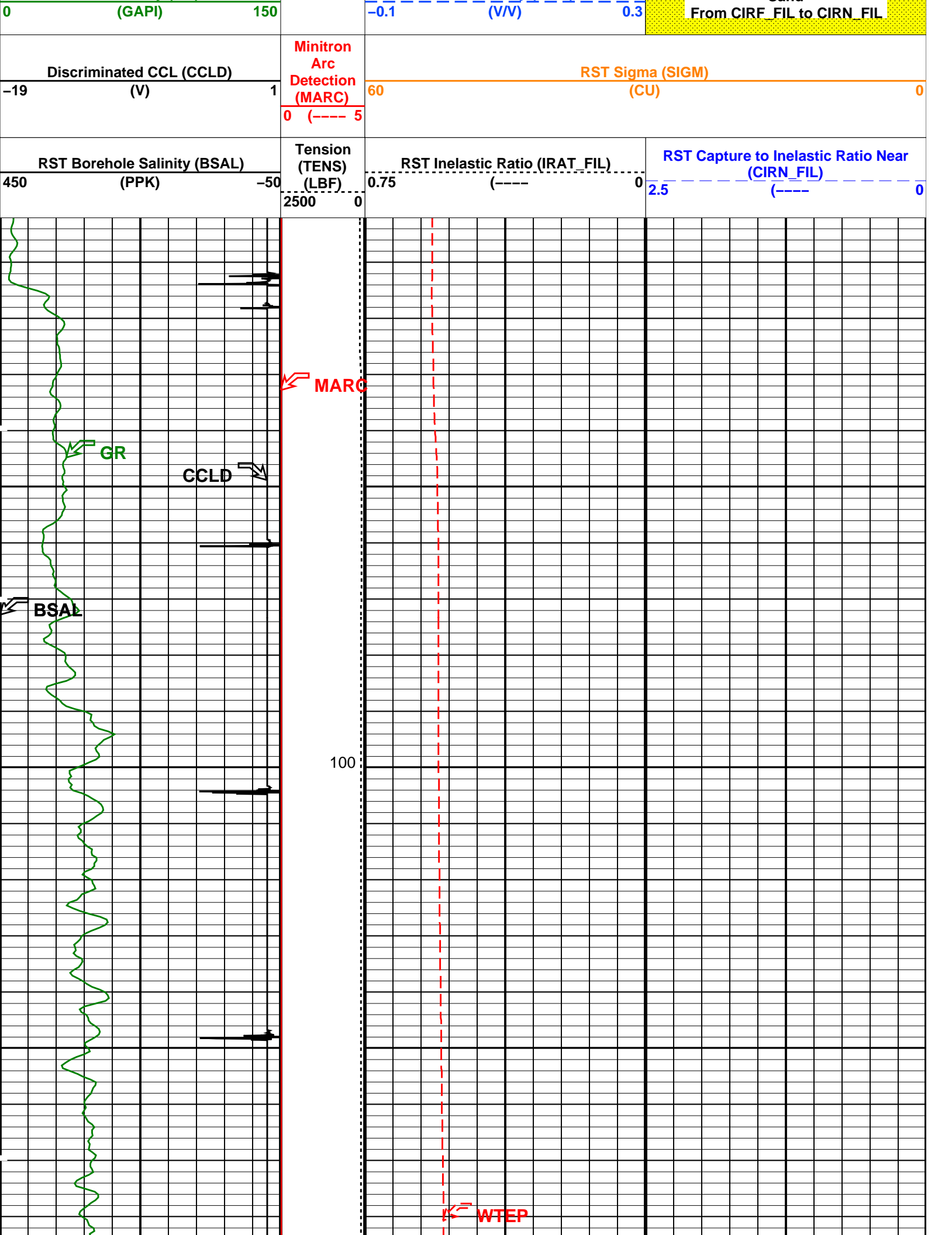
Company: Pine Ridge Oil & Gas LLC Well: Hully Gully 13-54-1-1

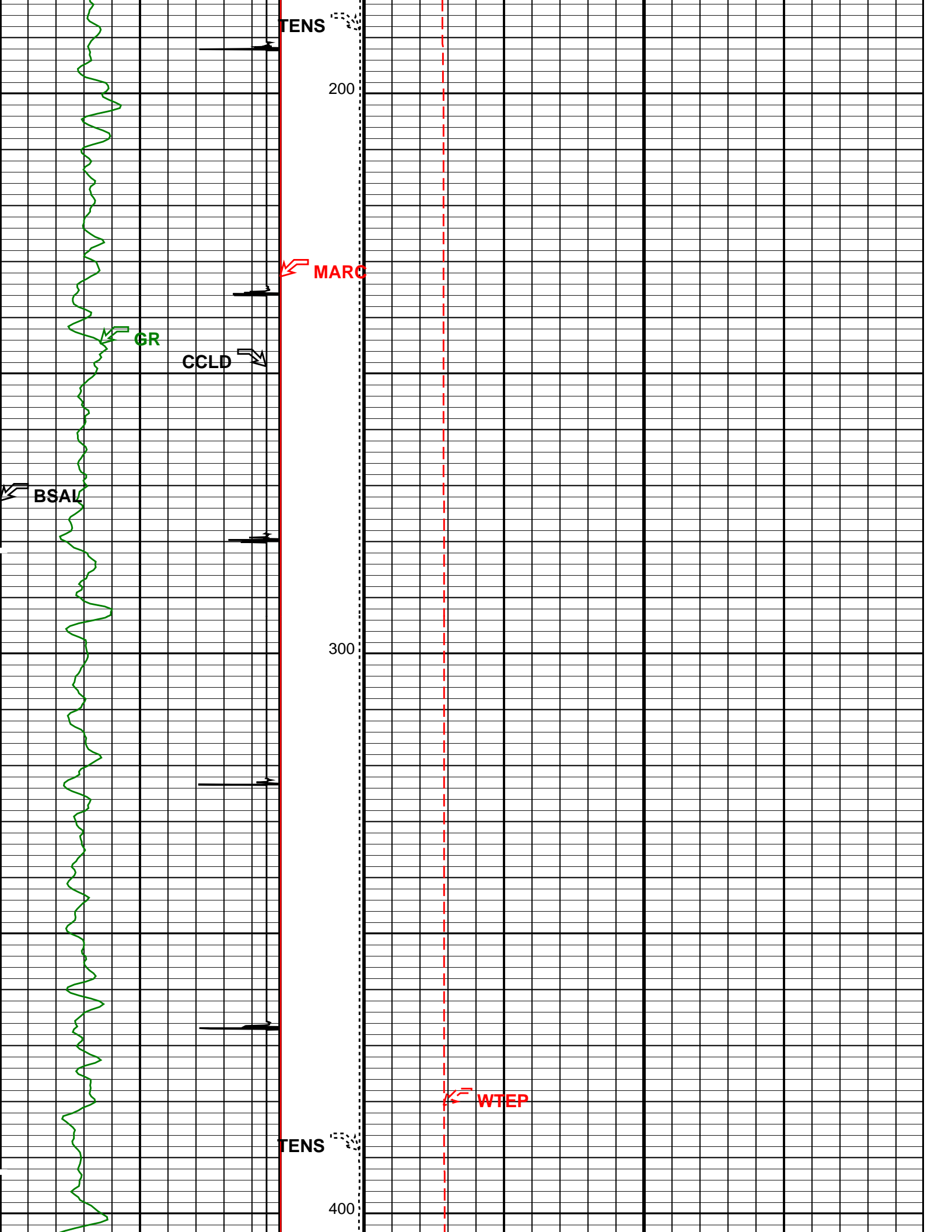
Output DLIS Files				
DEFAULT	RST_PSP_004LUP	FN:3	PRODUCER	19-Aug-2013 00:56

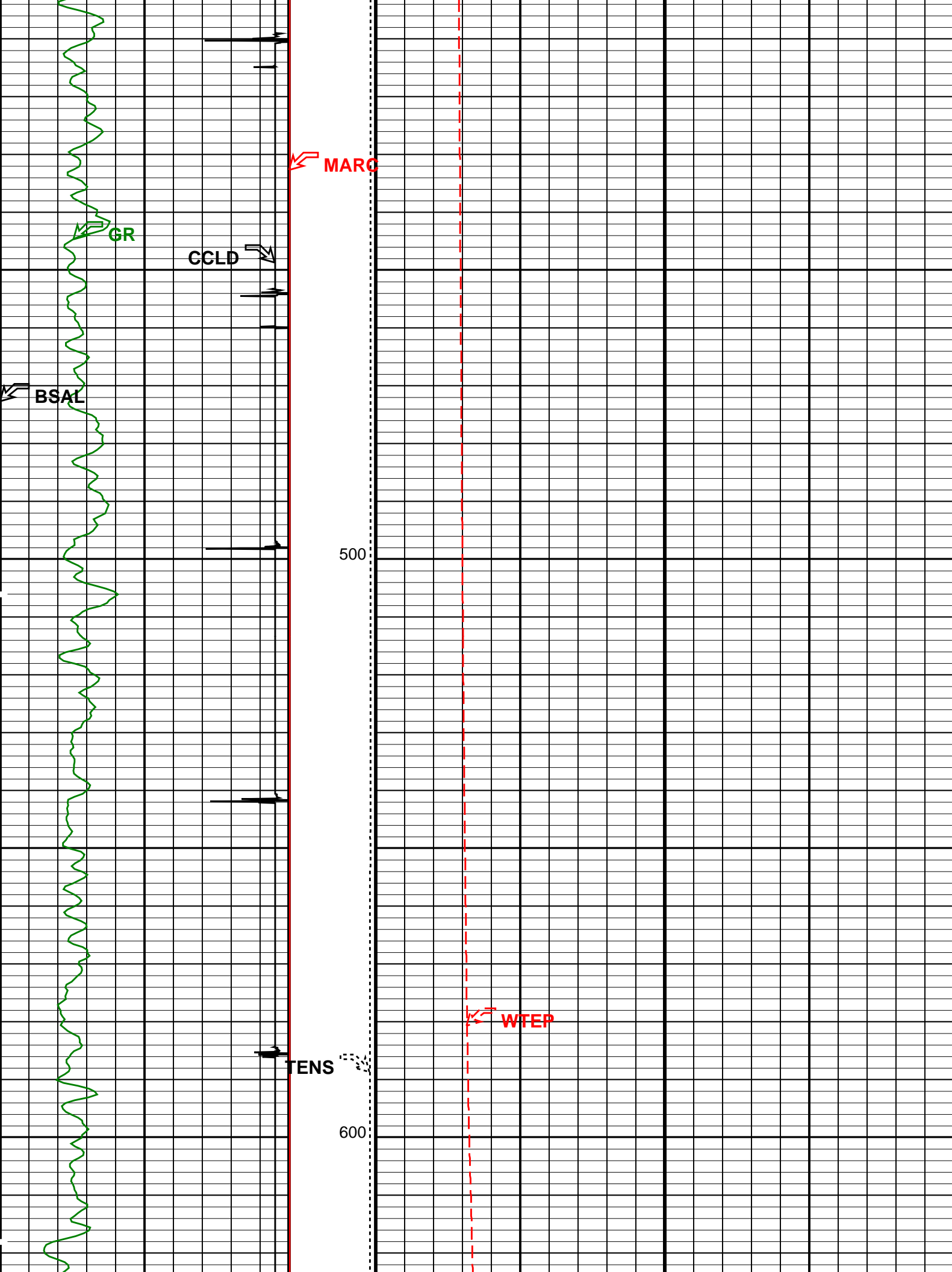
OP System Version: 19C2-270				
RST-C	19C2-270	PSPT	19C2-270	

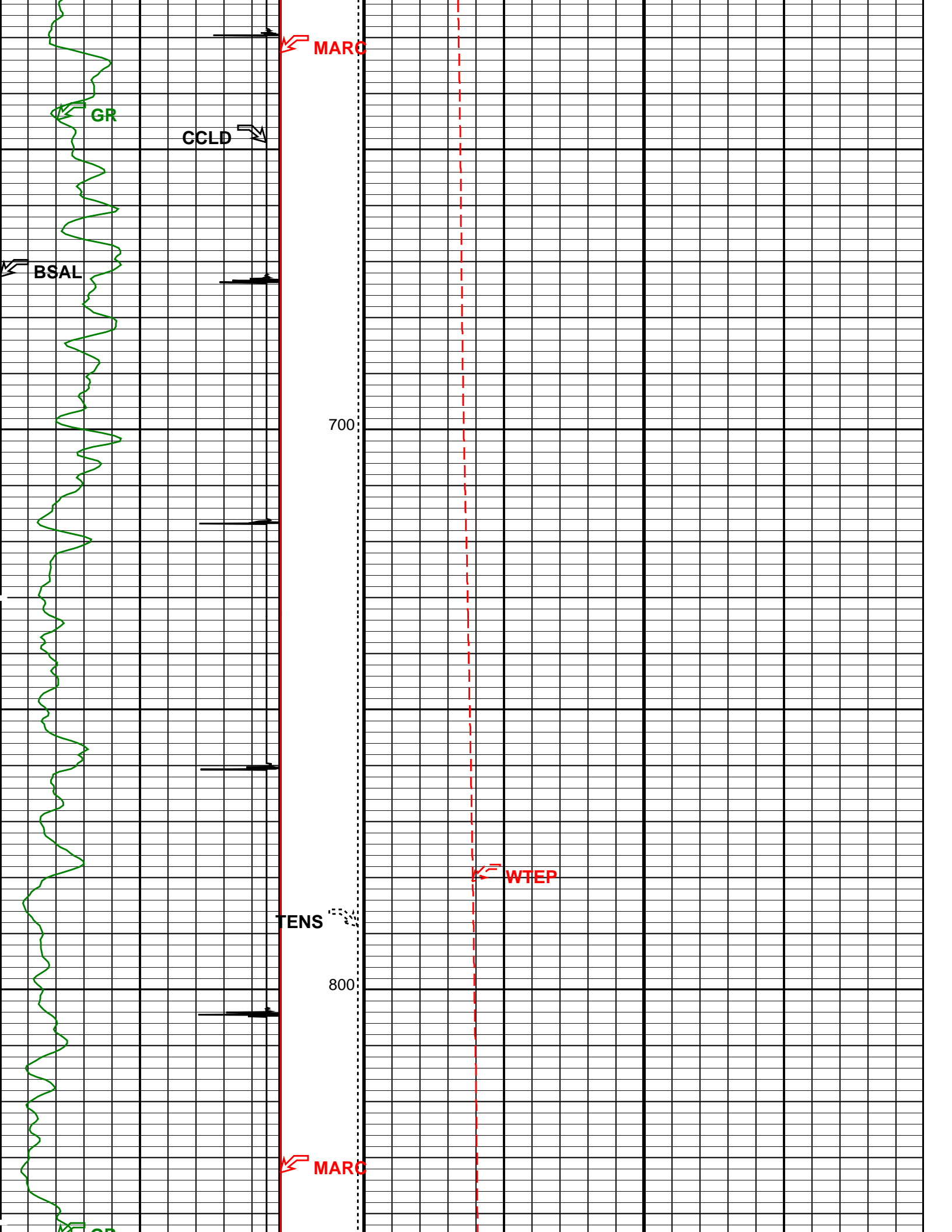
PIP SUMMARY				
Time Mark Every 60 S				

		RST Capture to Inelastic Ratio Far (CIRF_FIL)		
		7 (----) 0		
		Gas Flag From WINR to CIRF_FIL		
		Well Temperature (WTEP) (DEGF)		
		50 (-----) 250		
		RST Weighted Inelastic Ratio (WINR_RST)		
		0.4 (-----) 0		
Gamma Ray (GR)		RST Porosity (TPHI)	Sand	

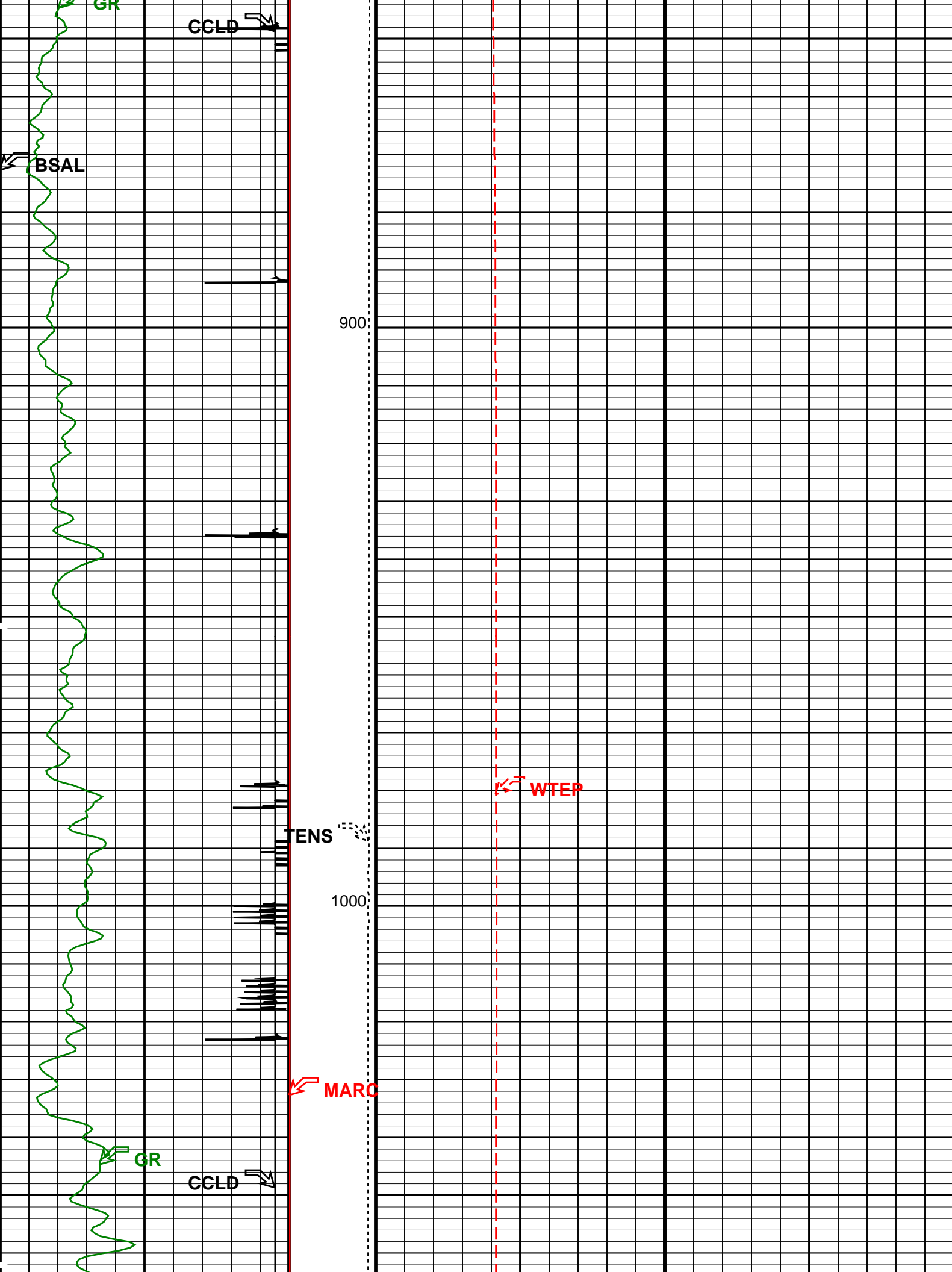


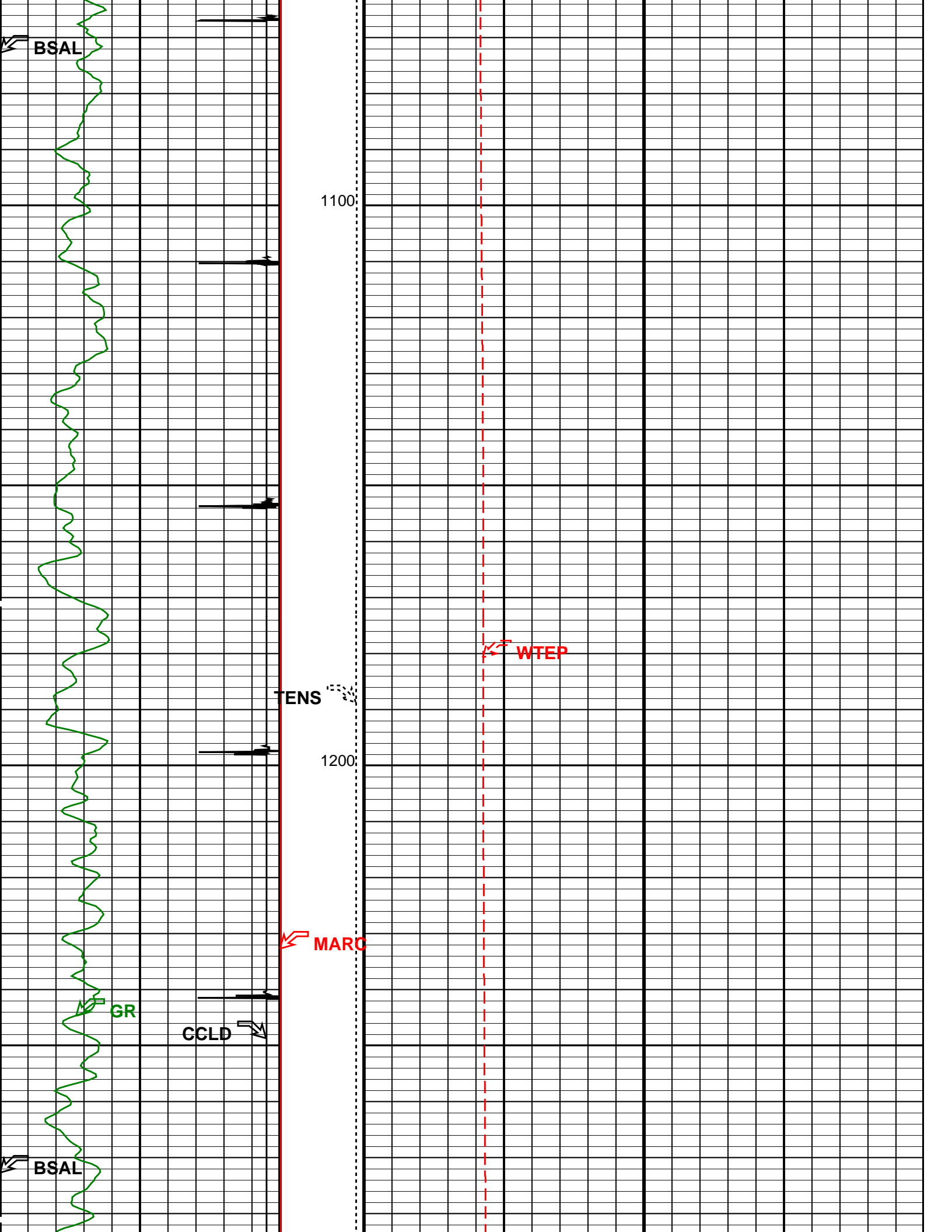


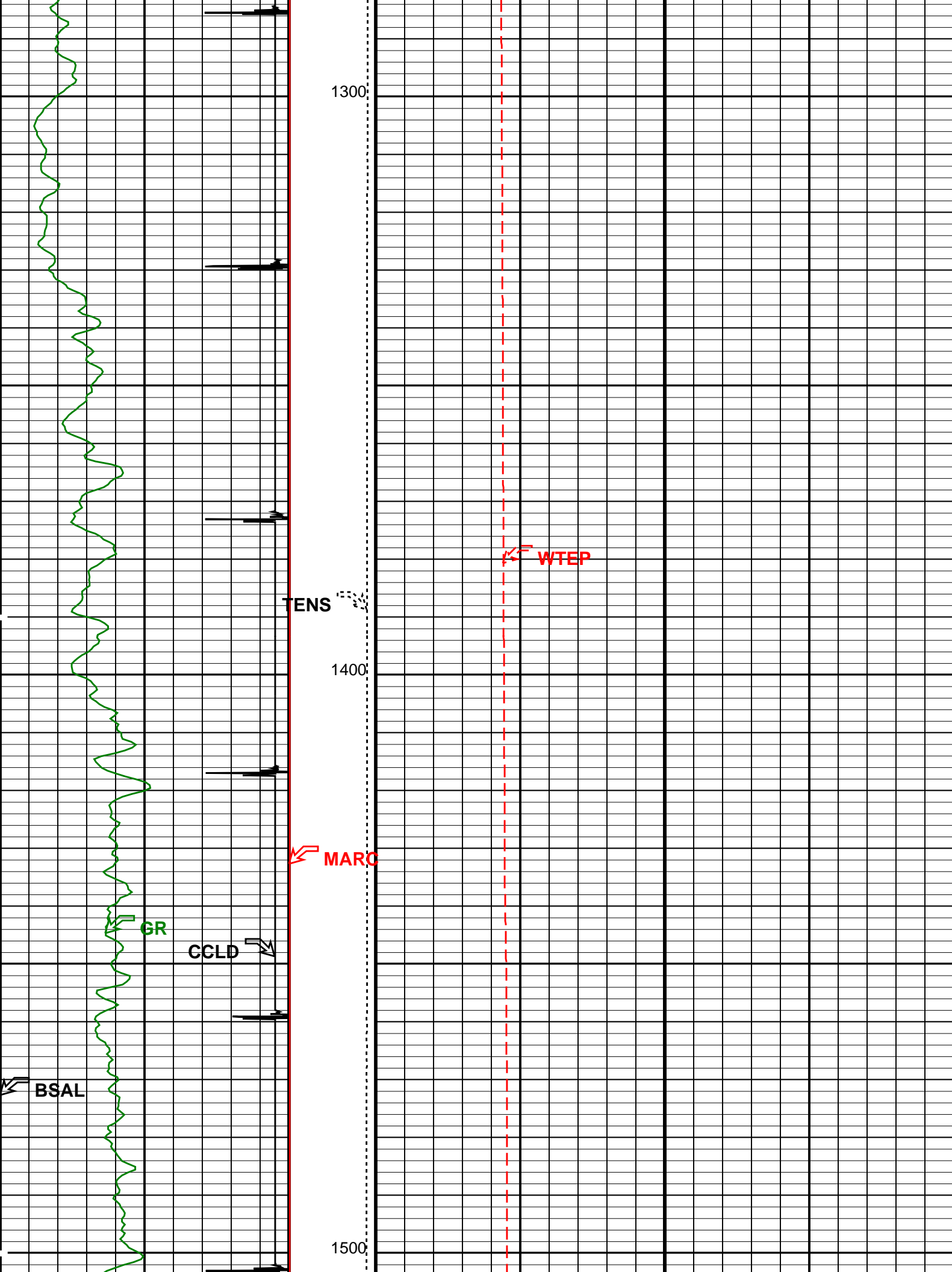


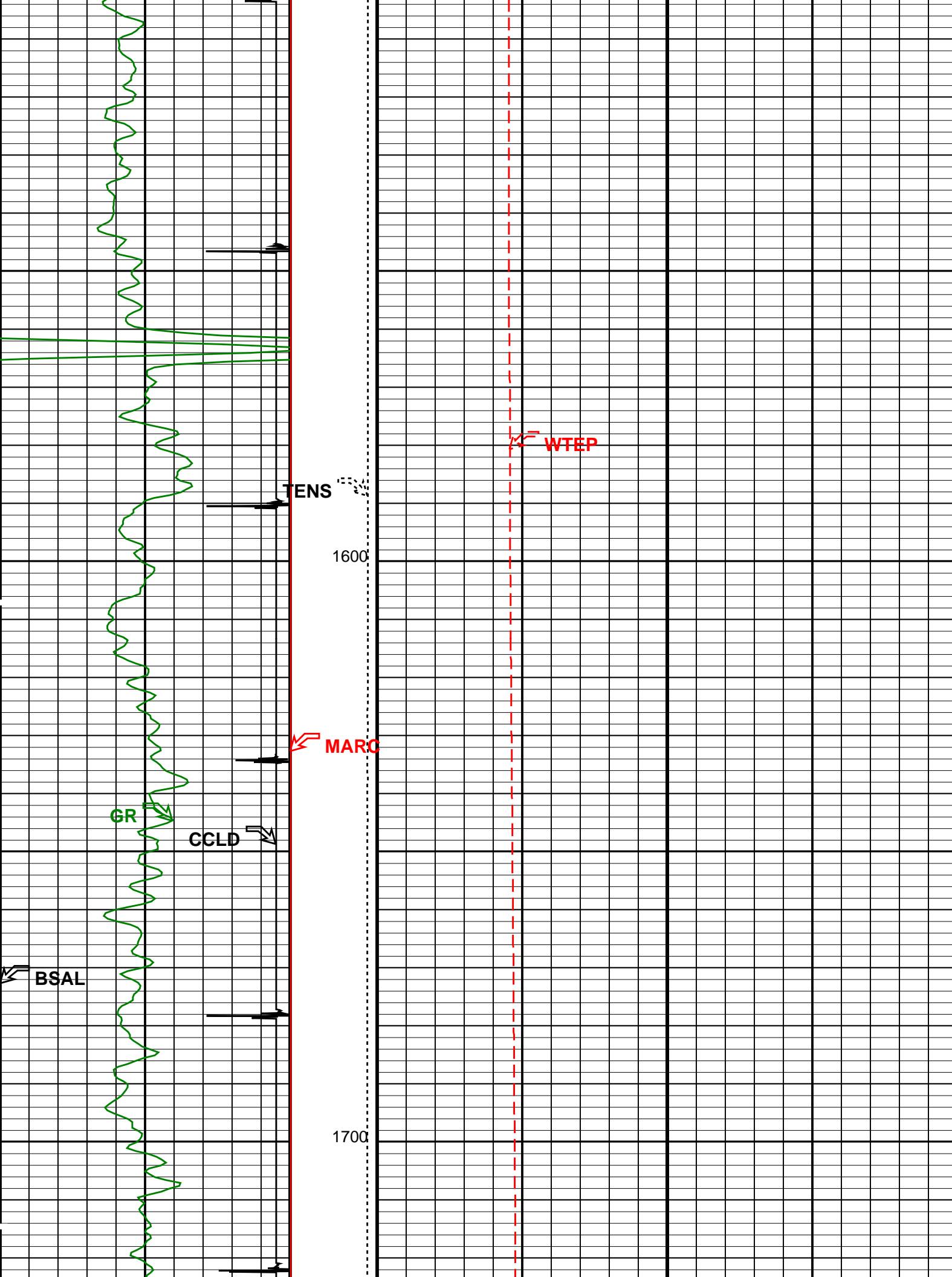


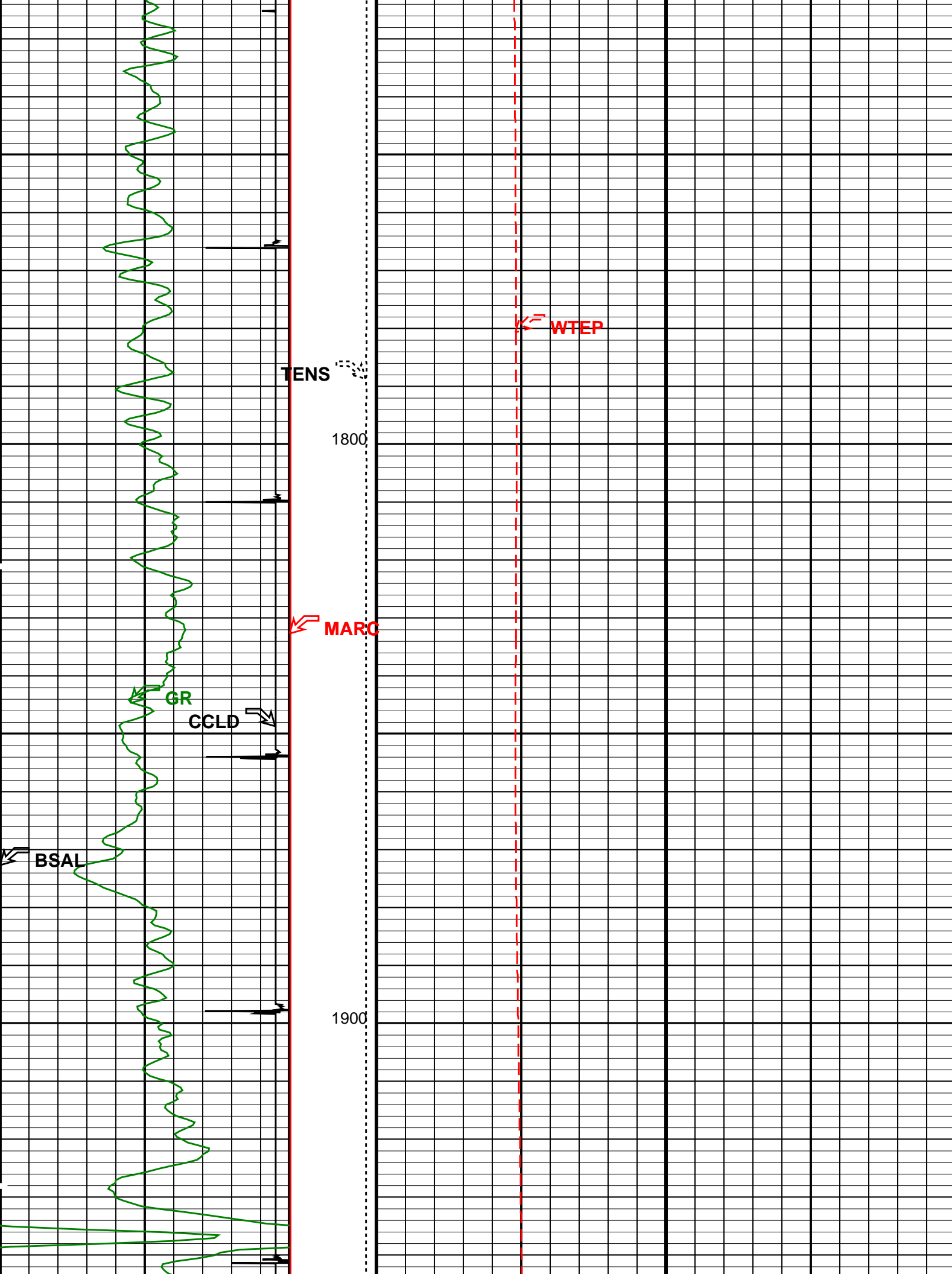


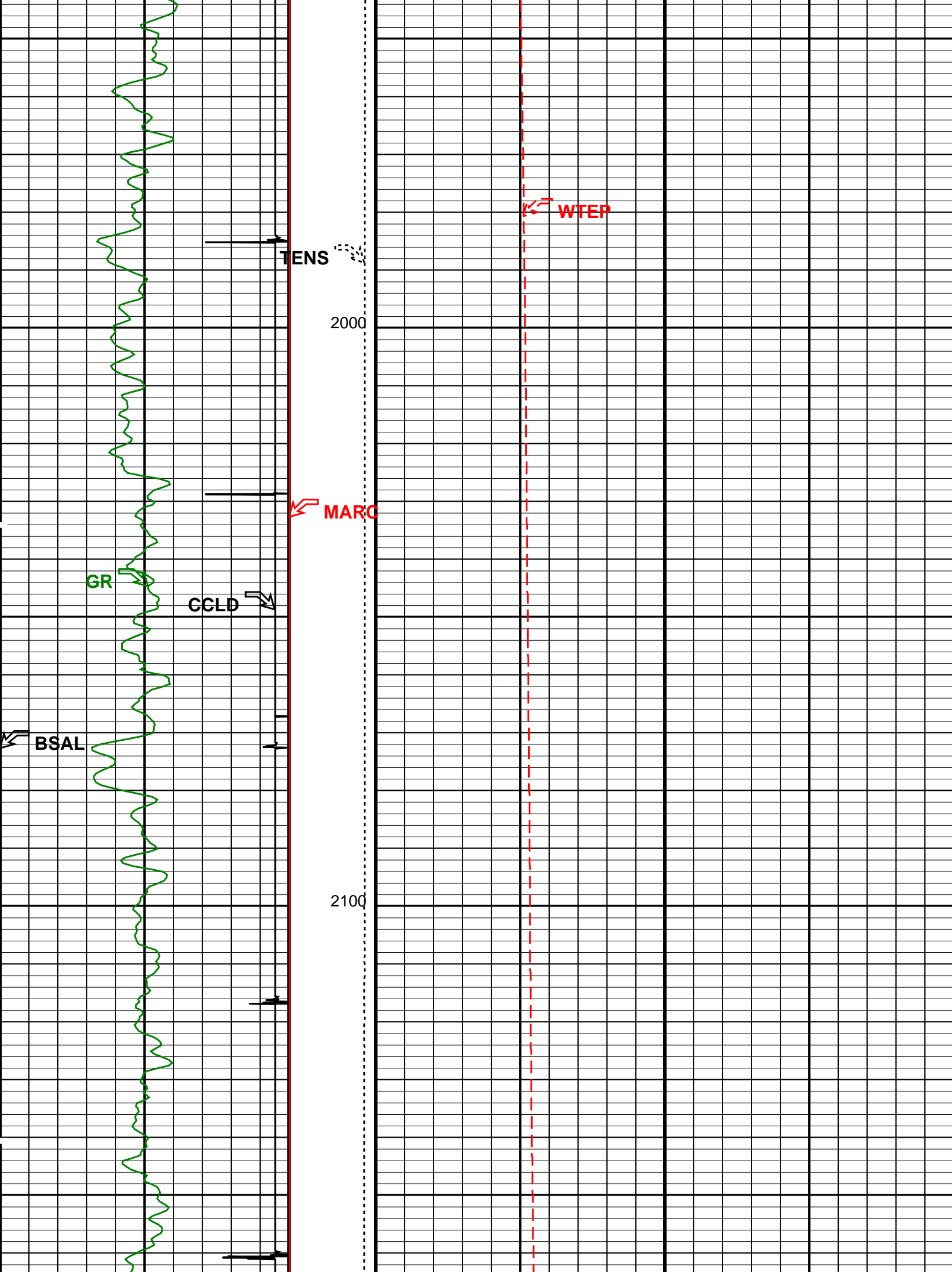


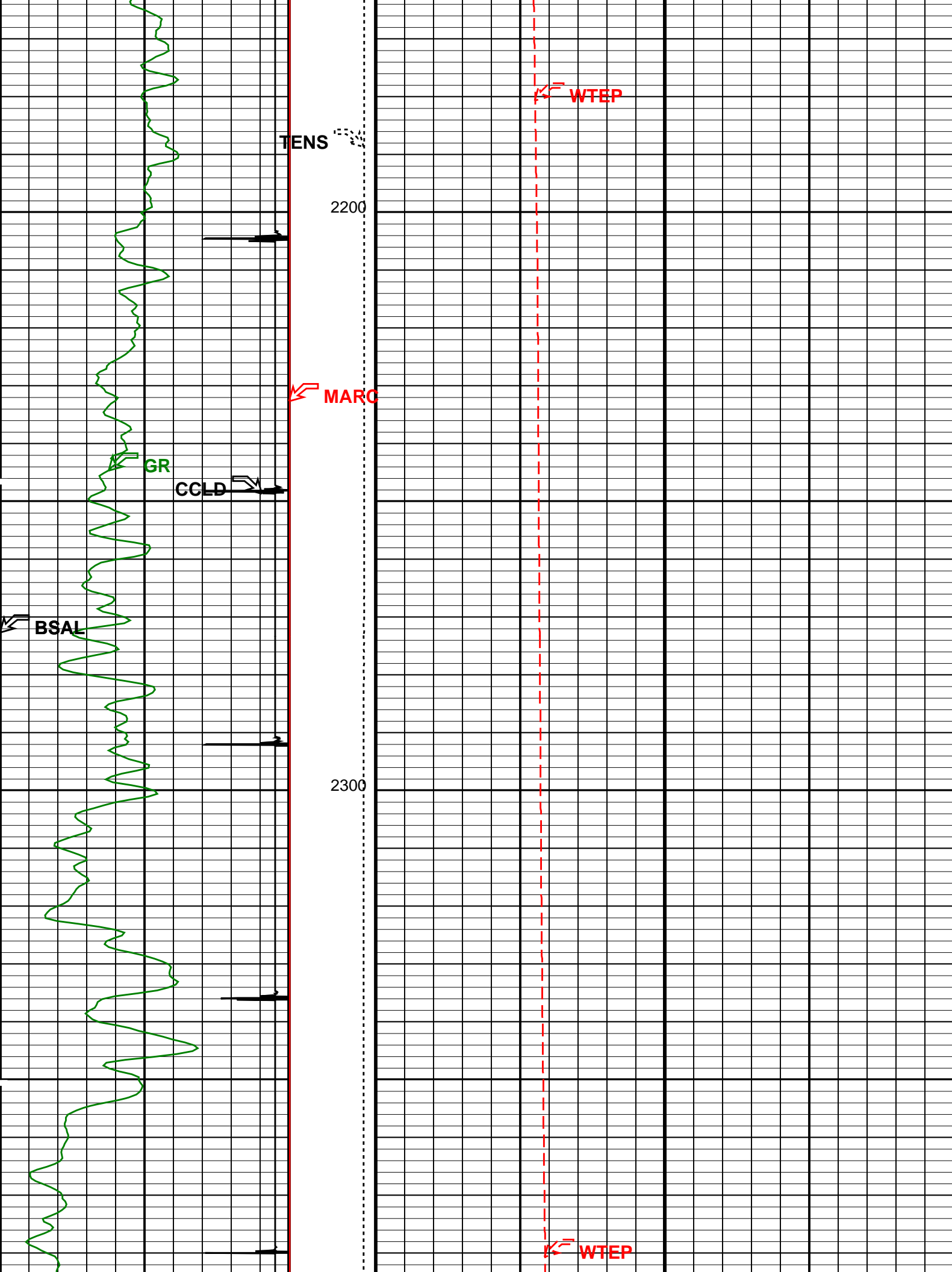


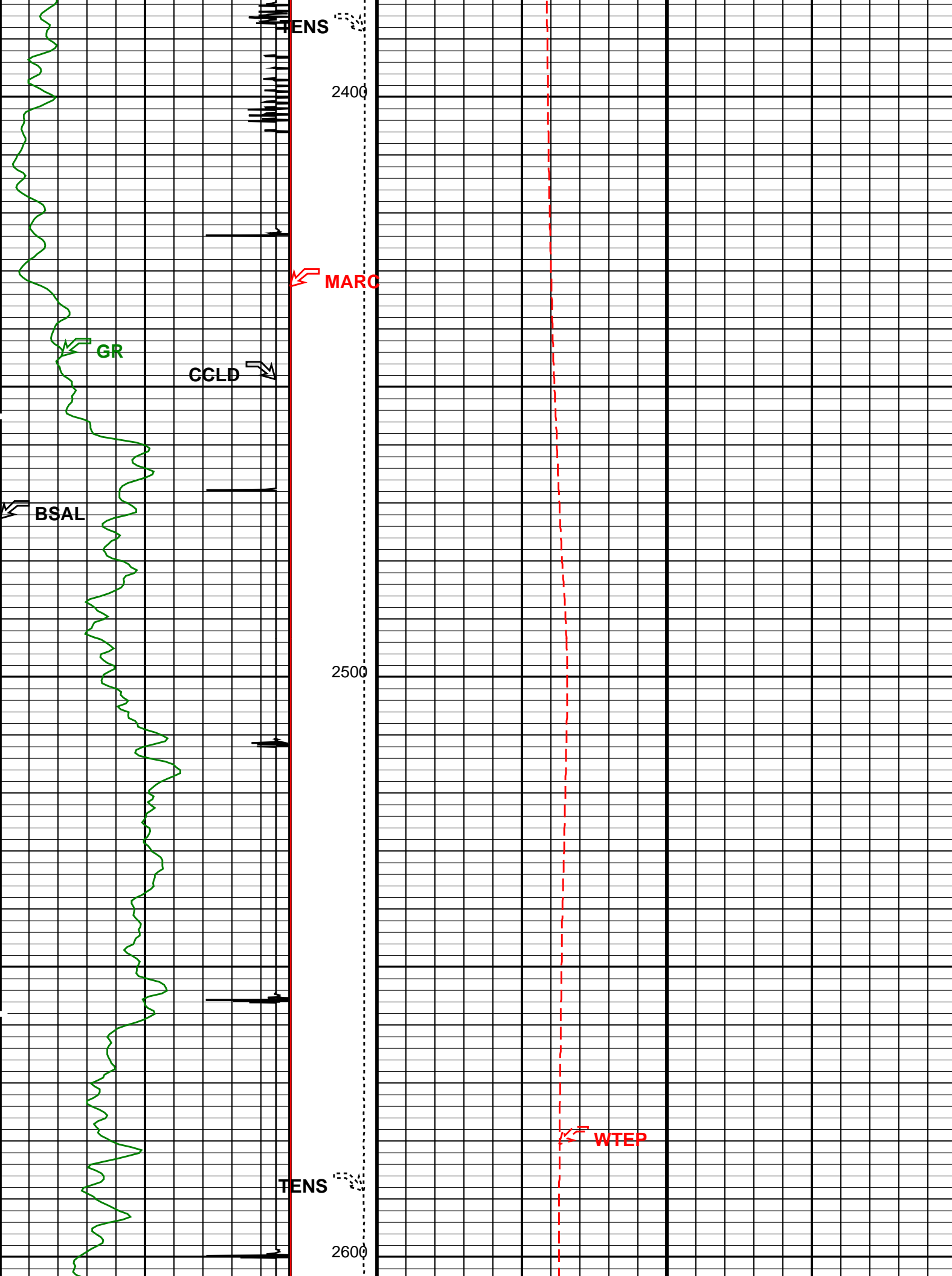




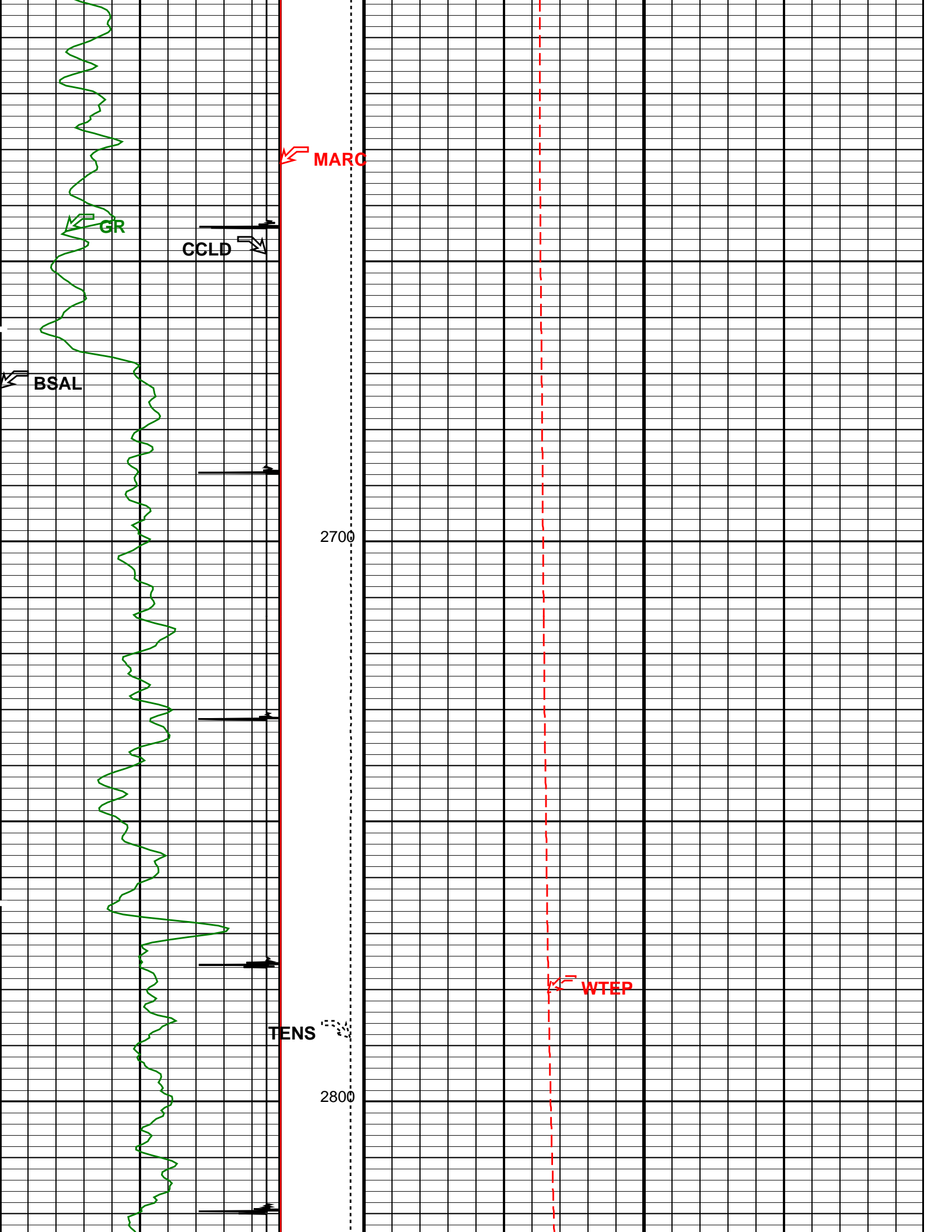


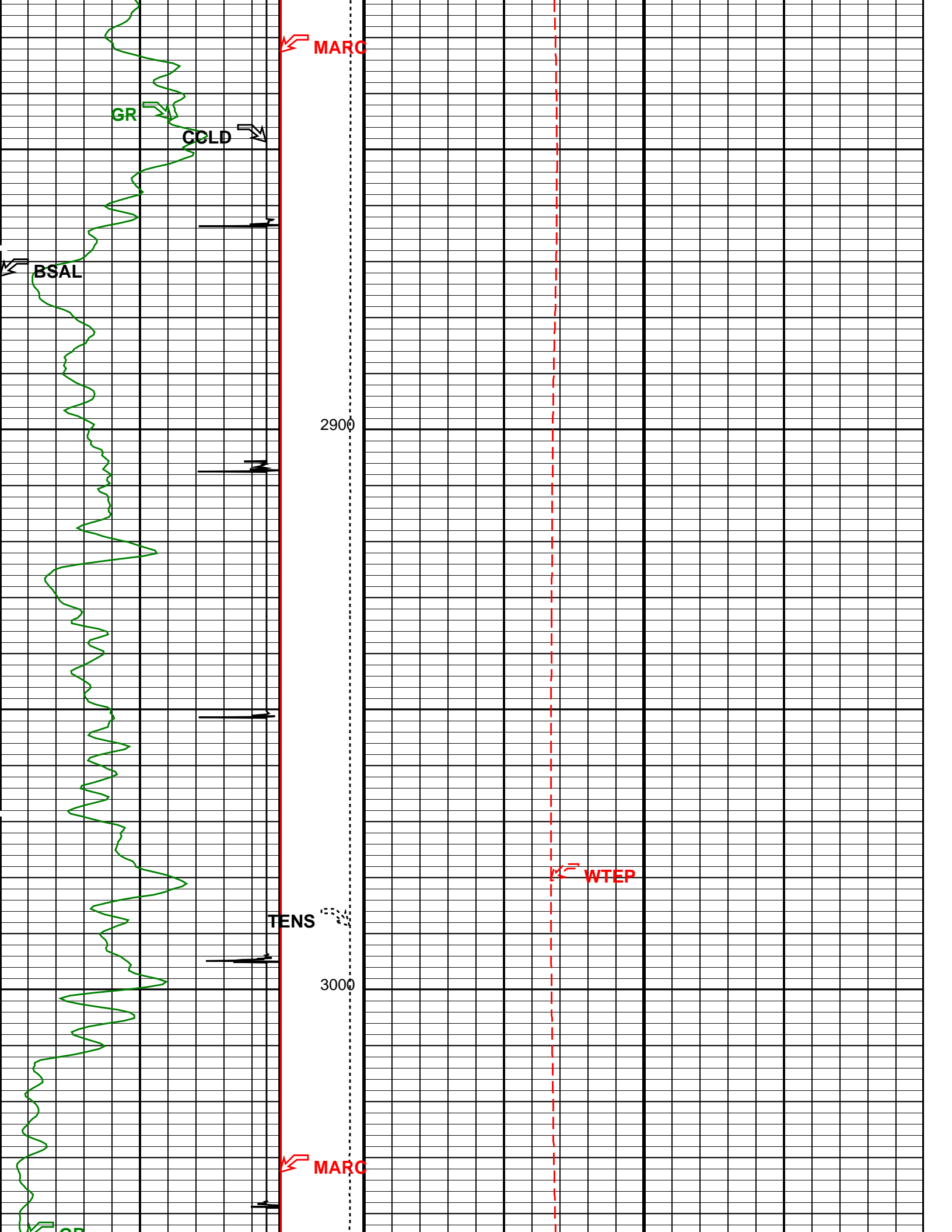


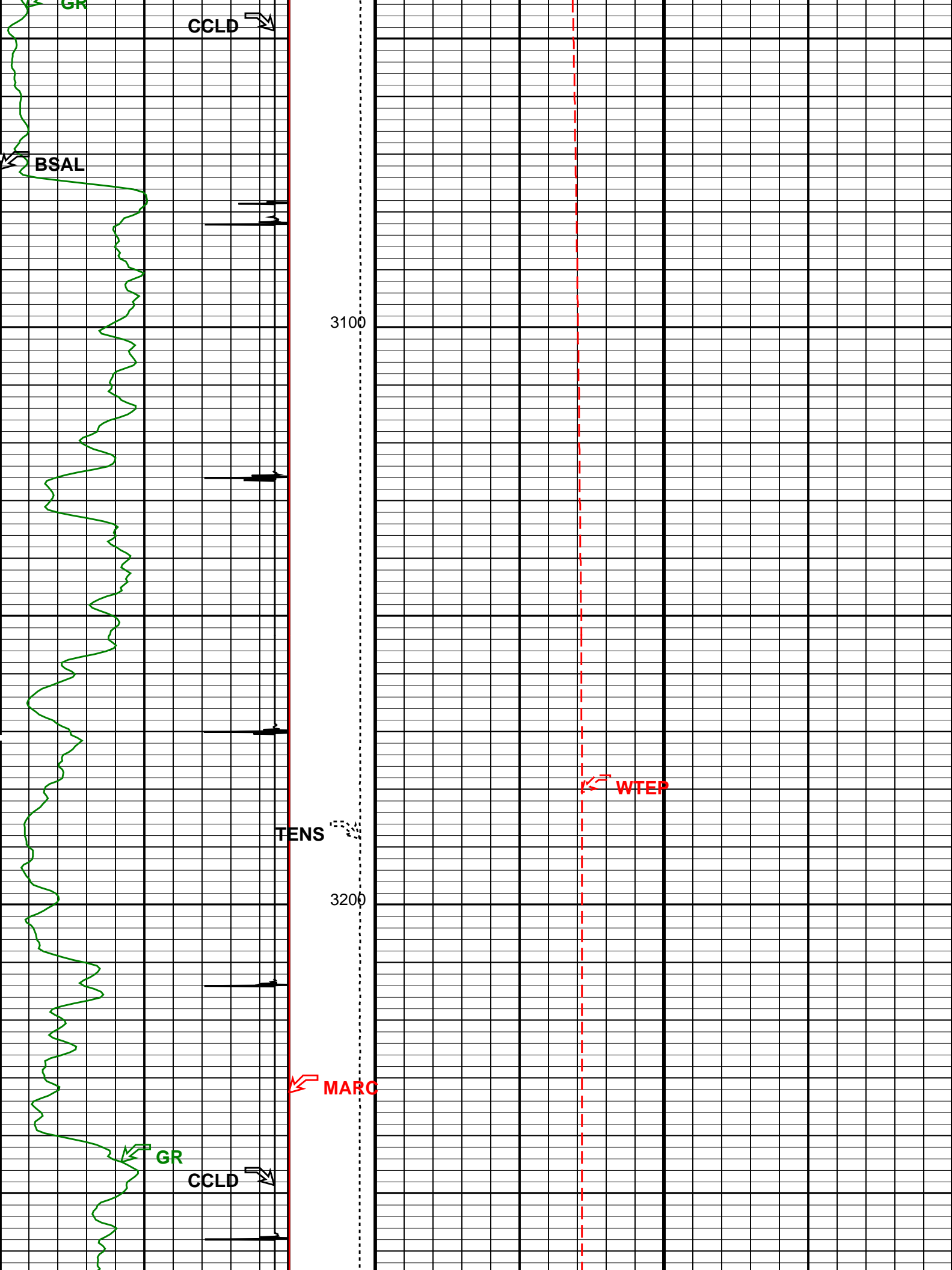


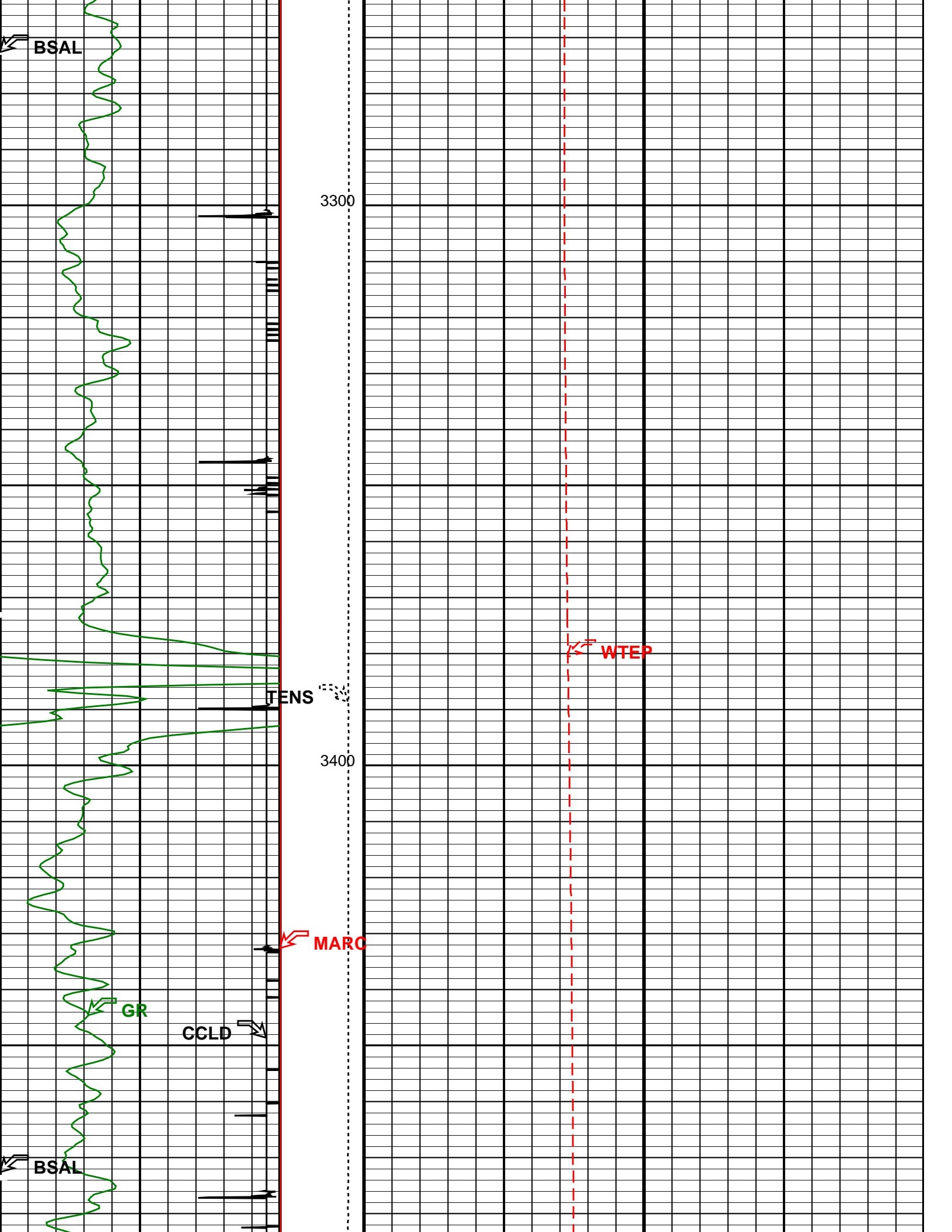


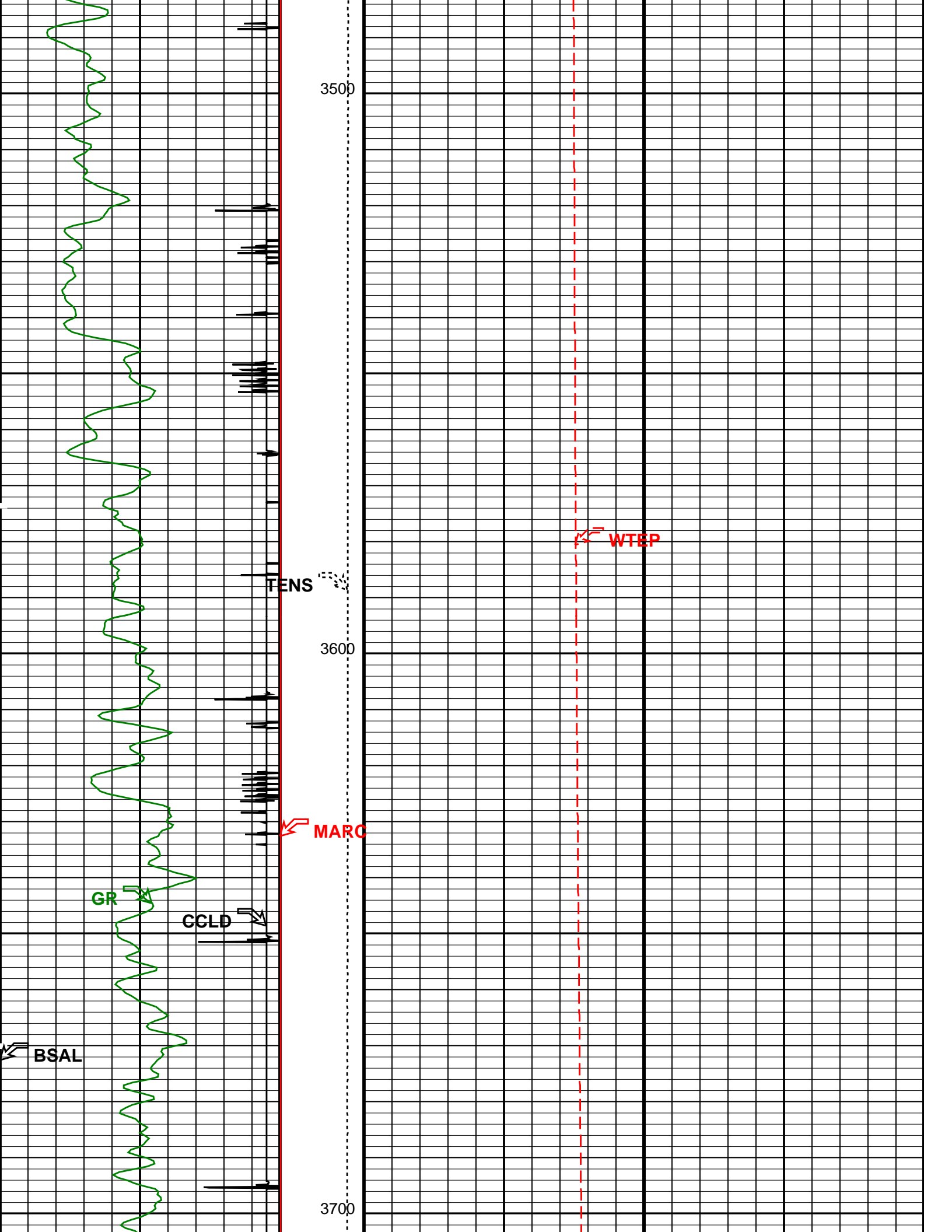


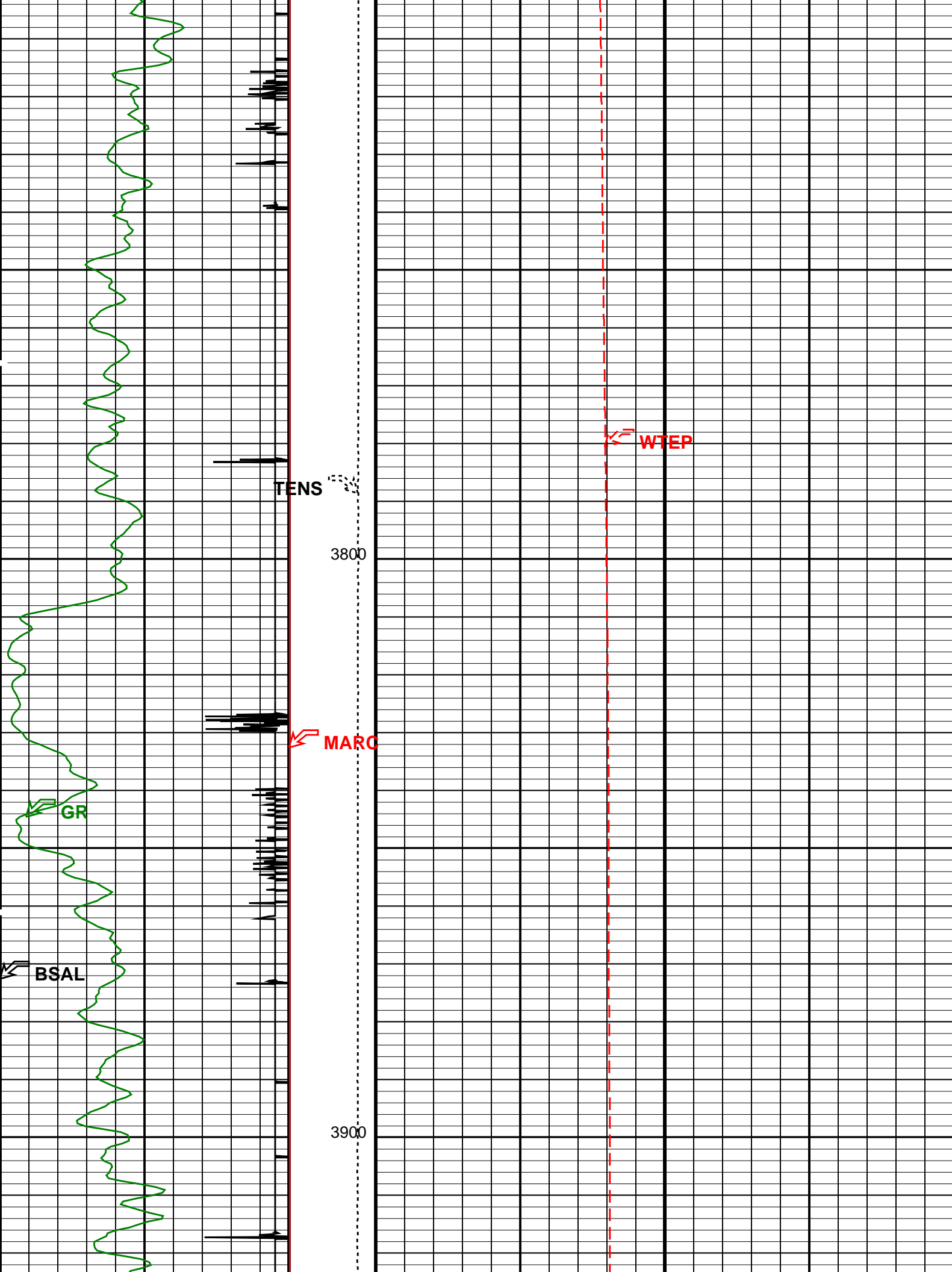


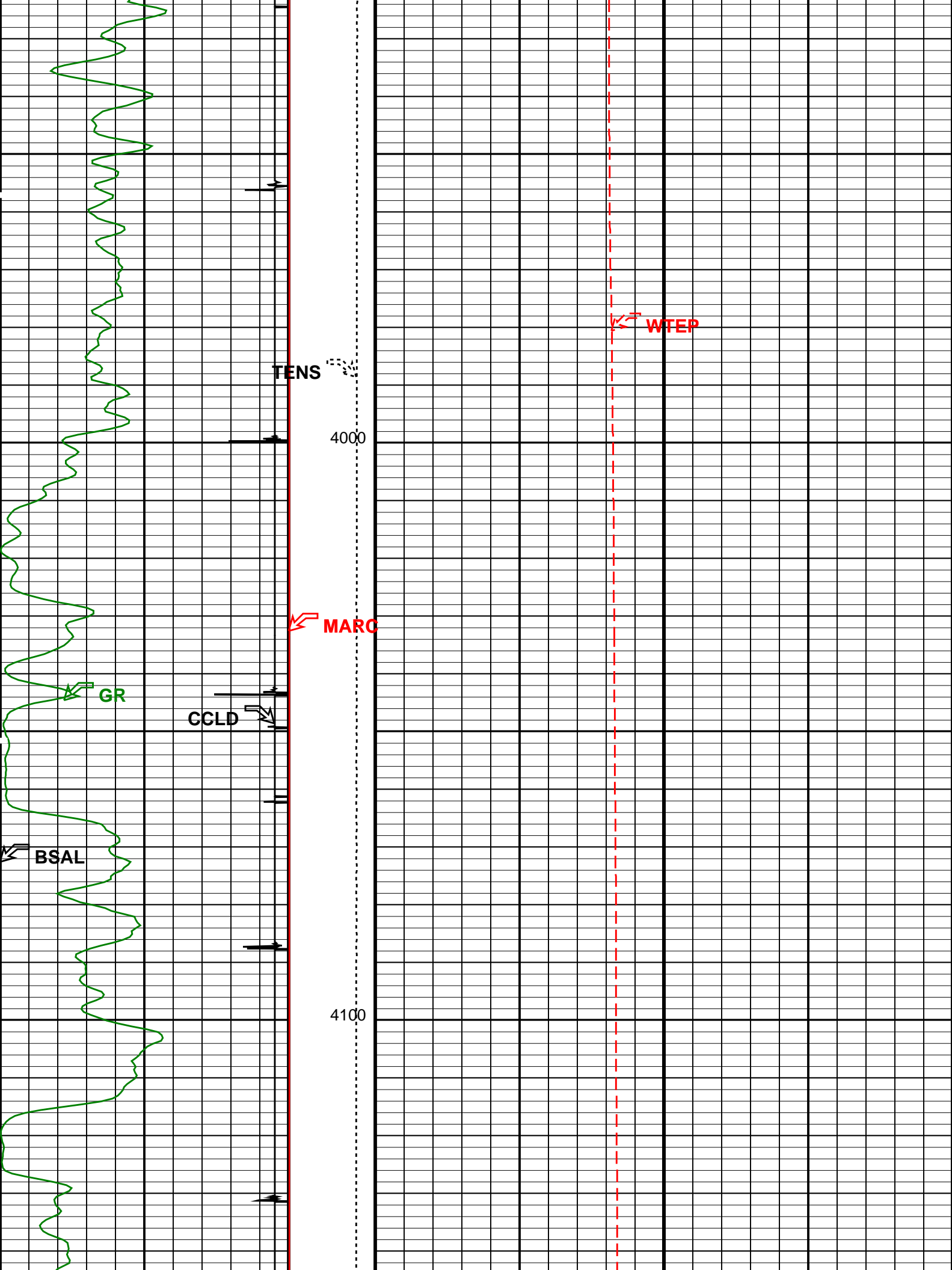


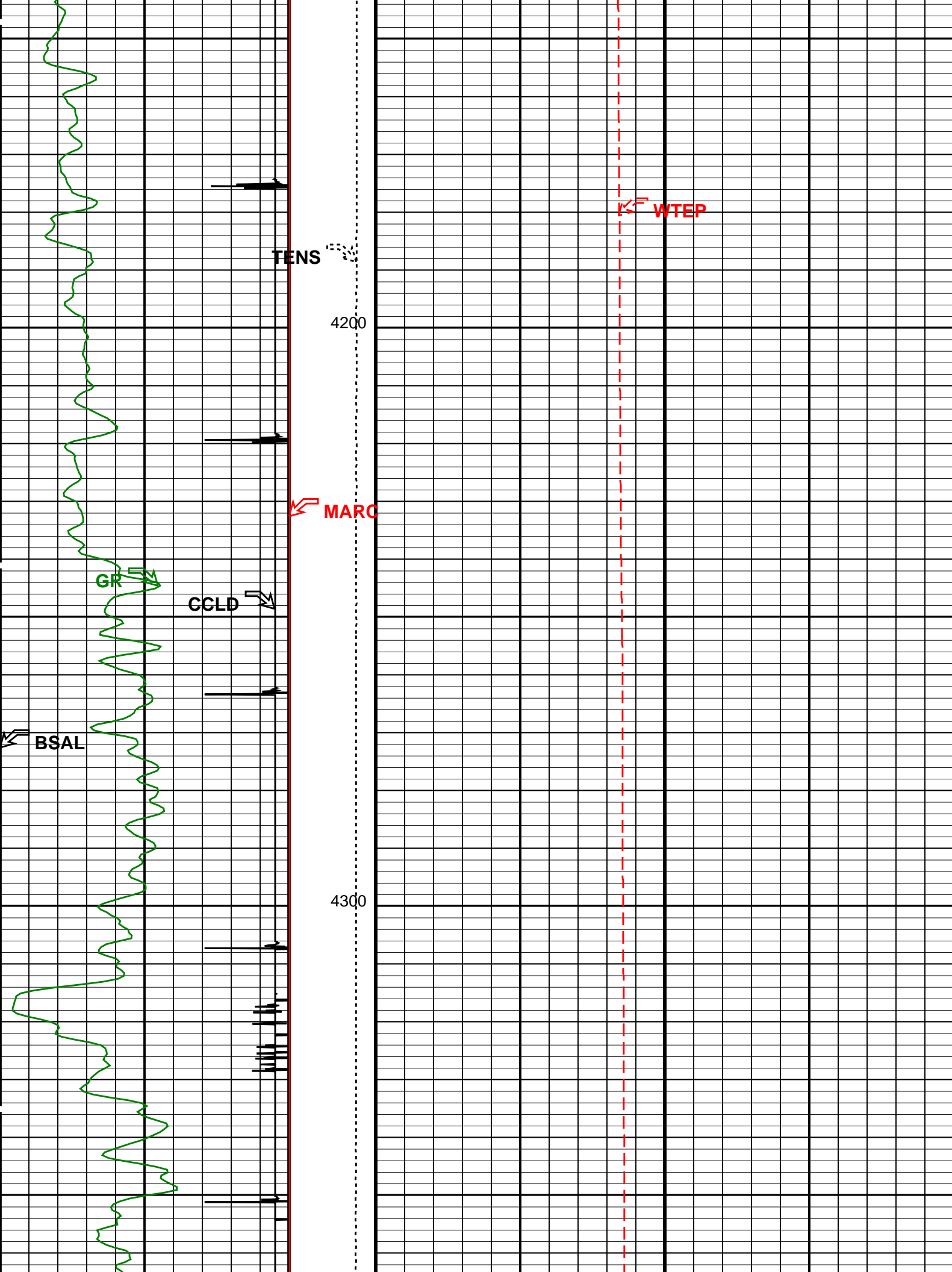




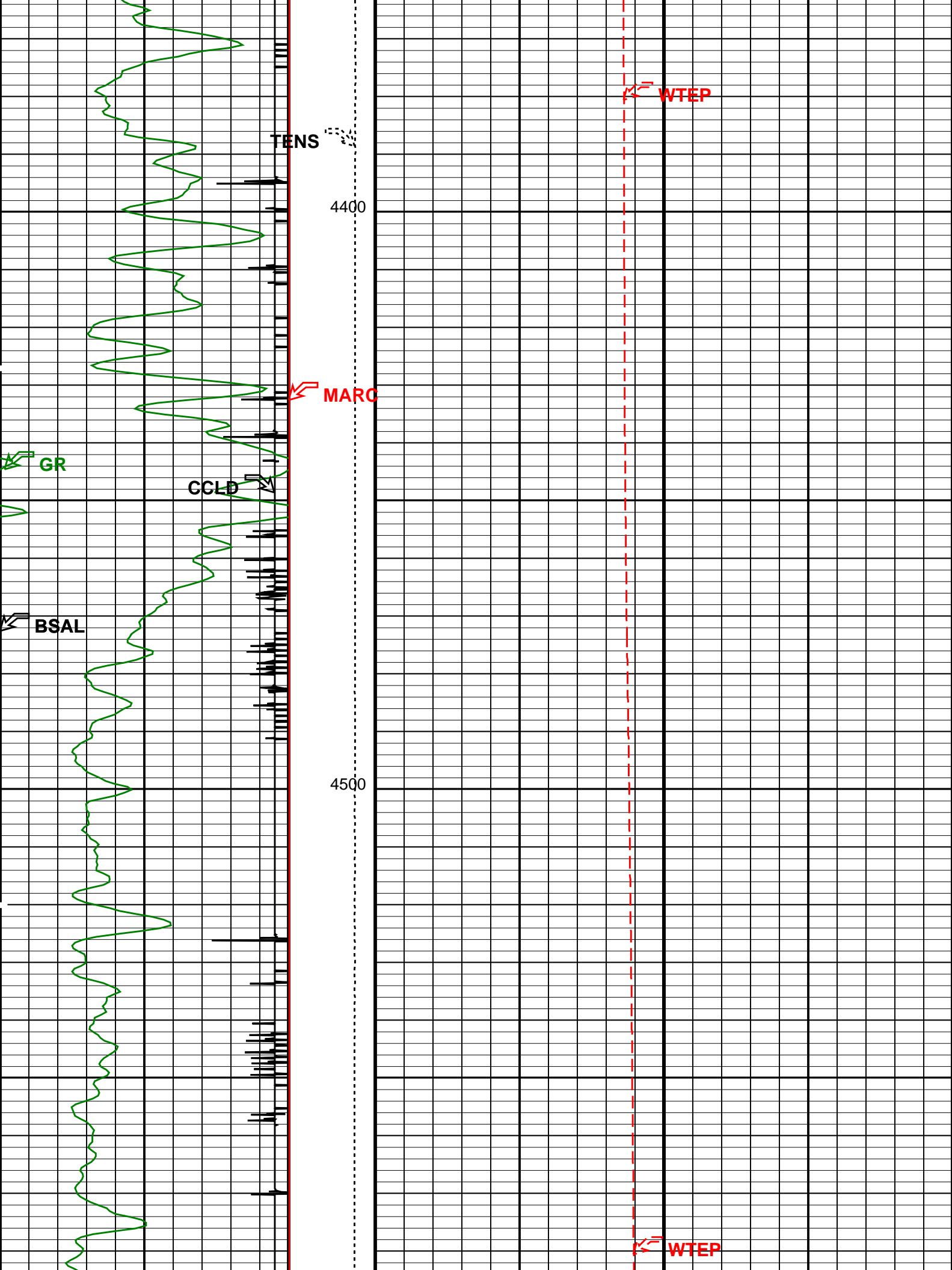


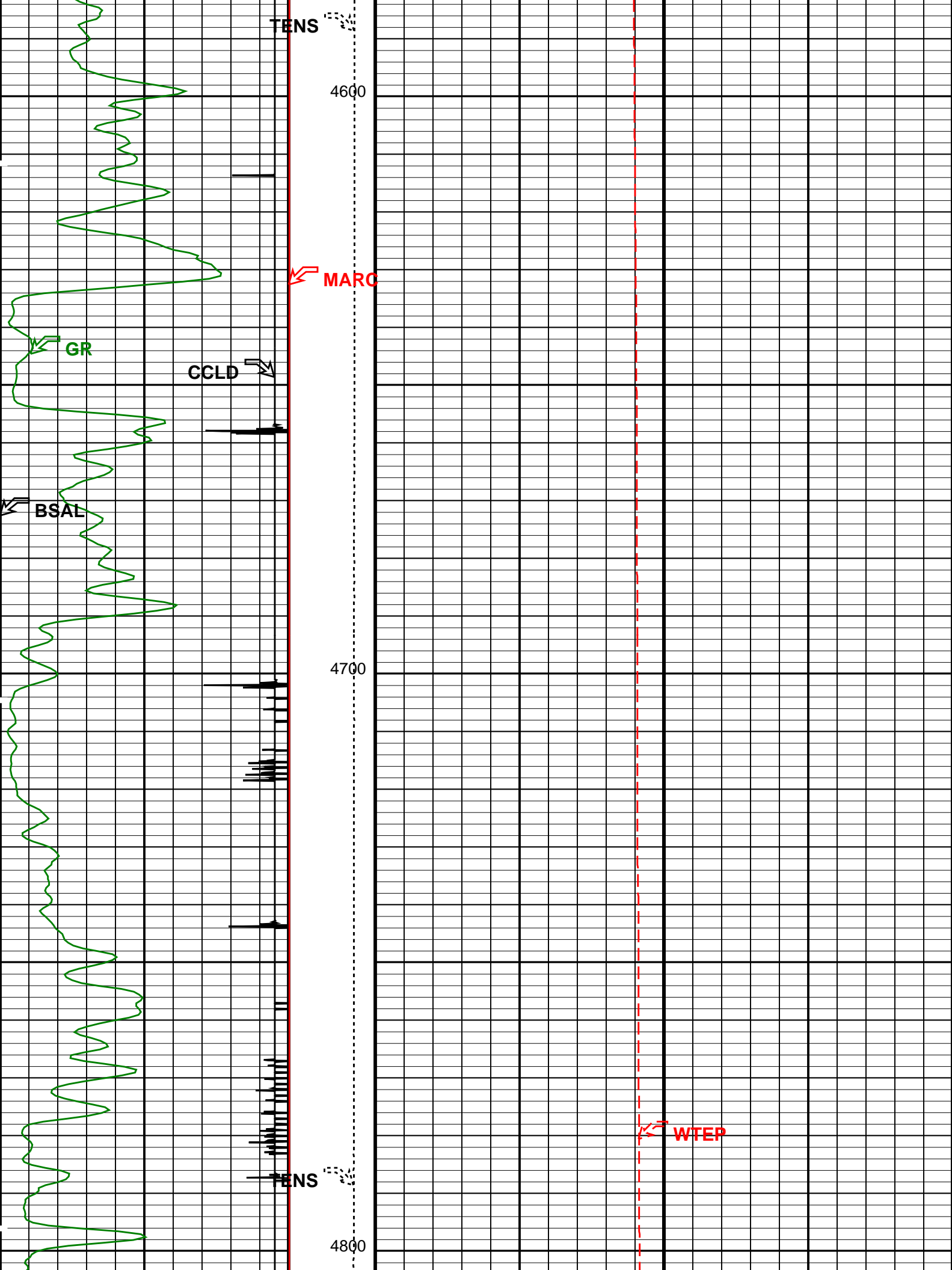


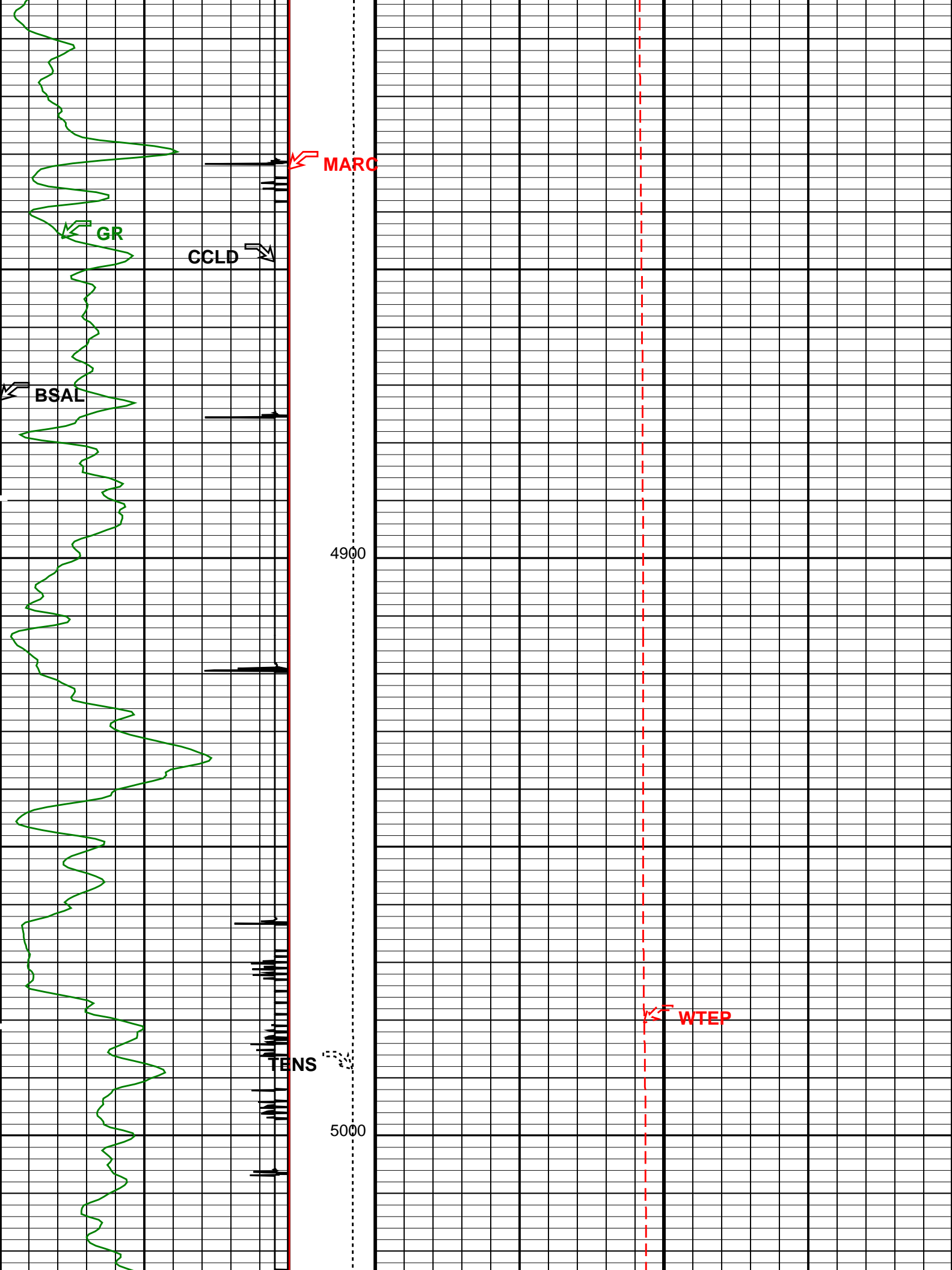


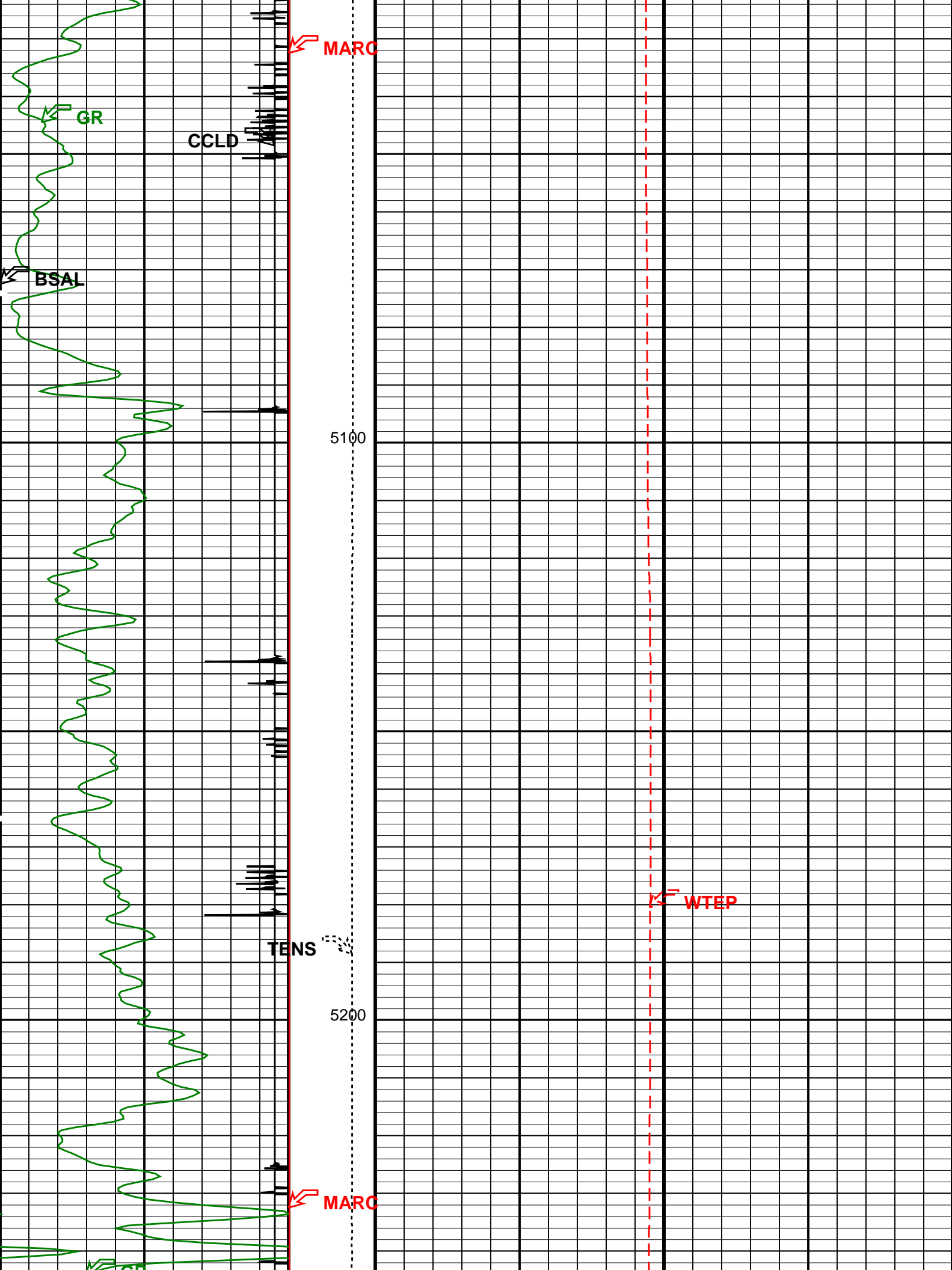


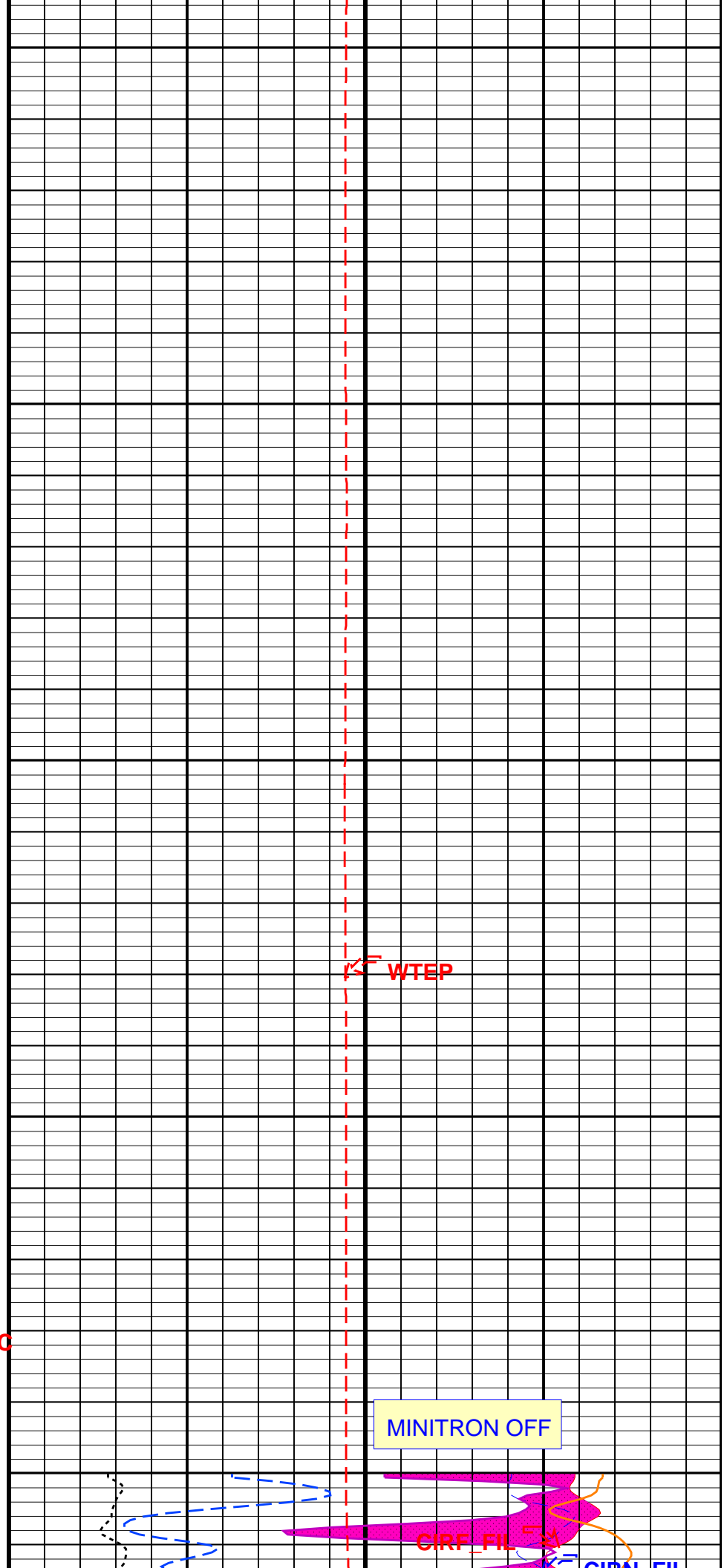
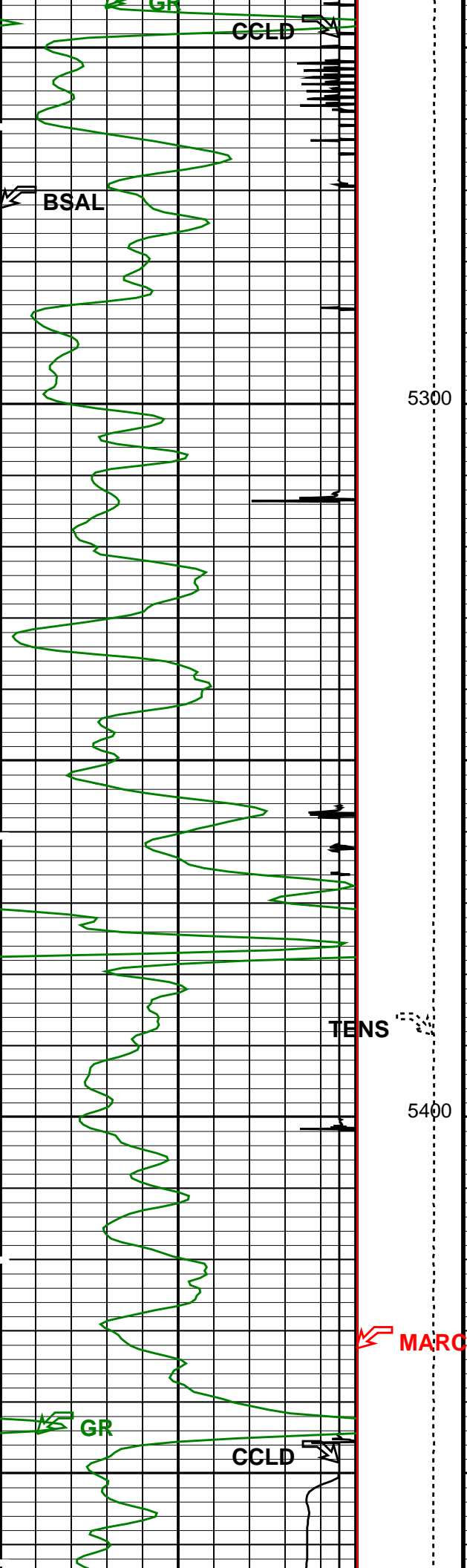


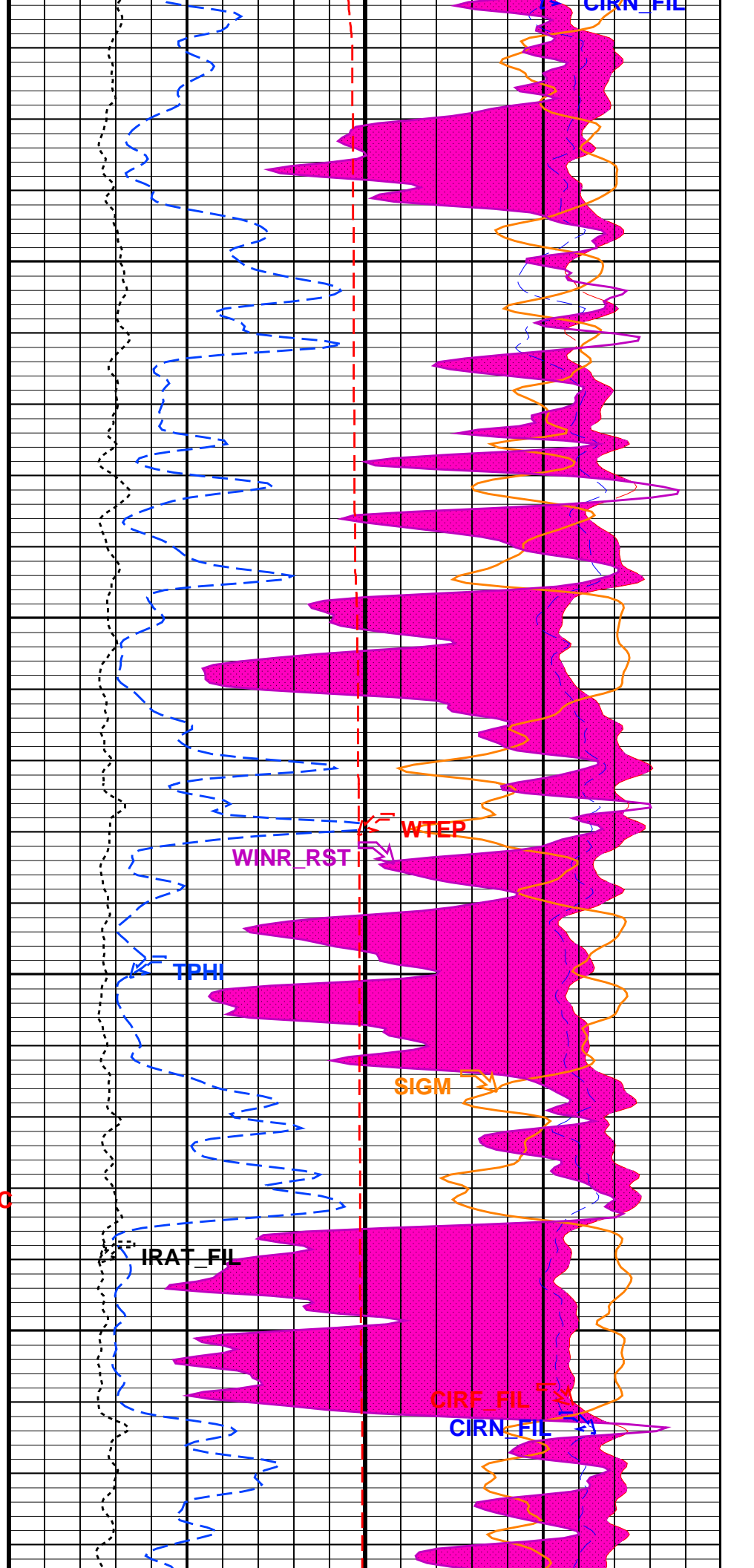
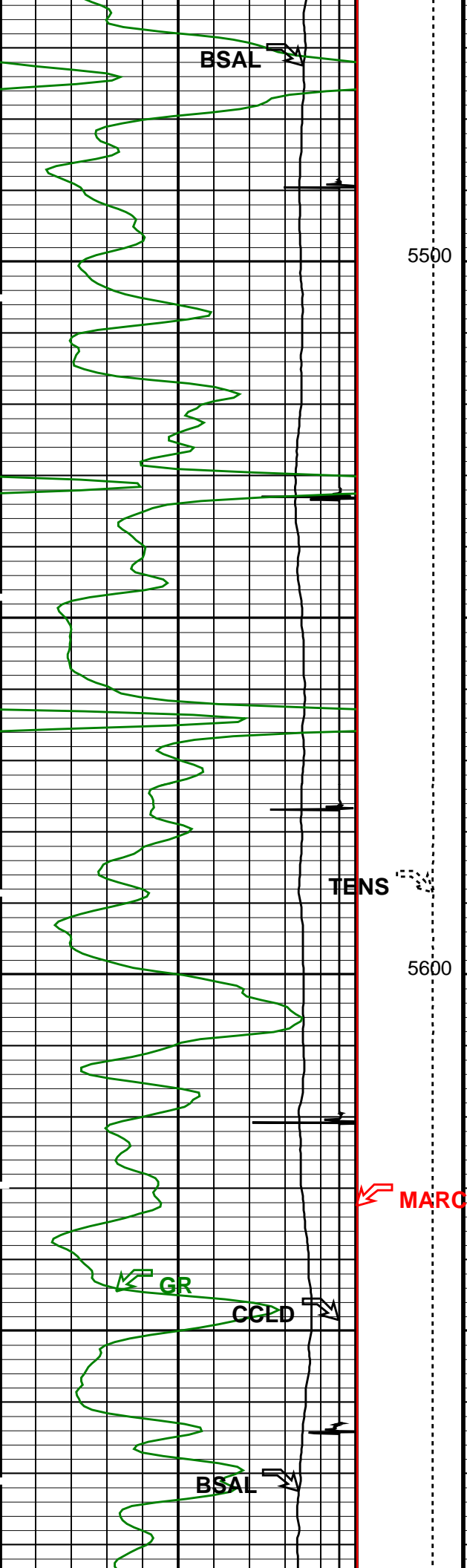


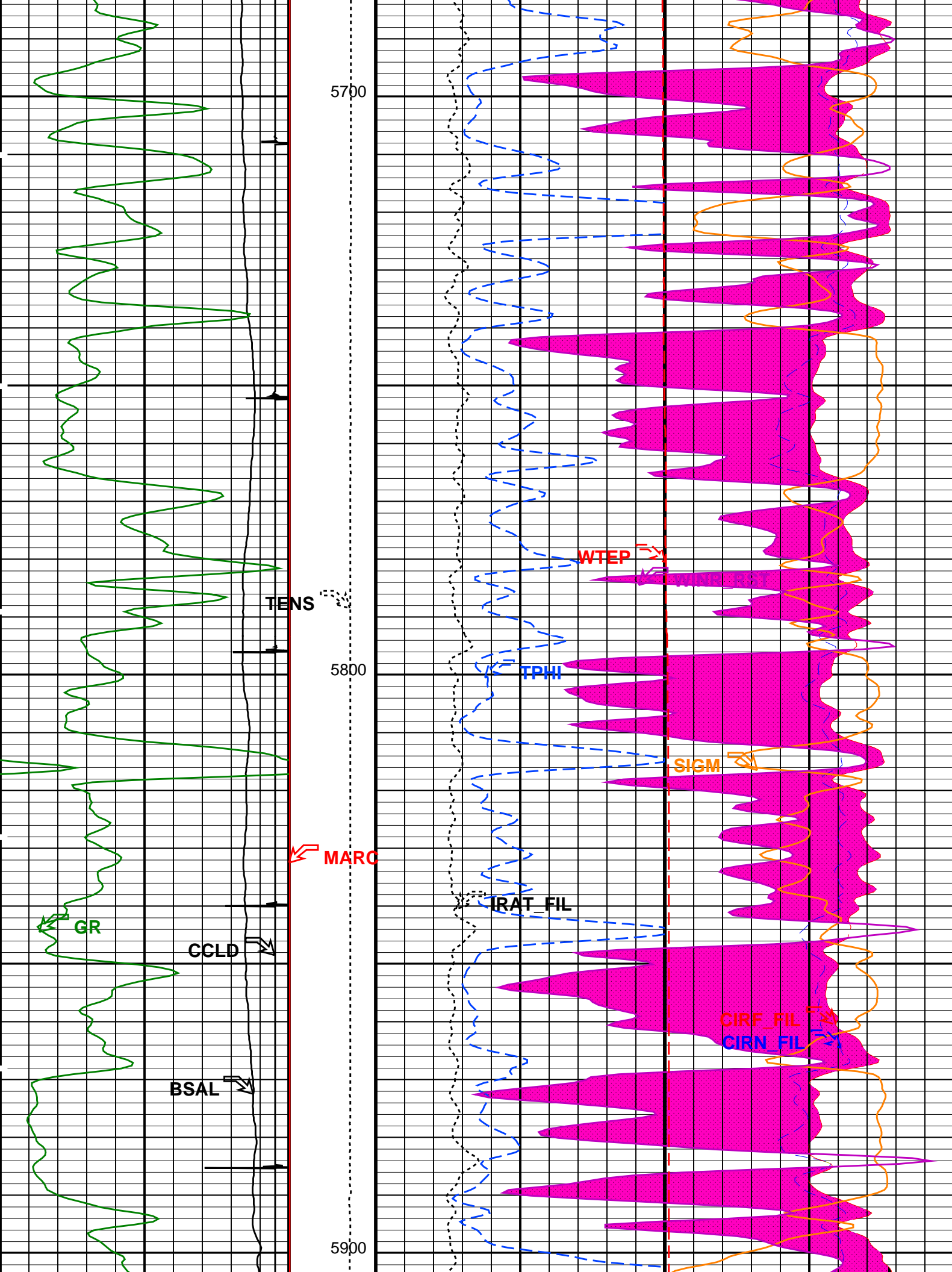


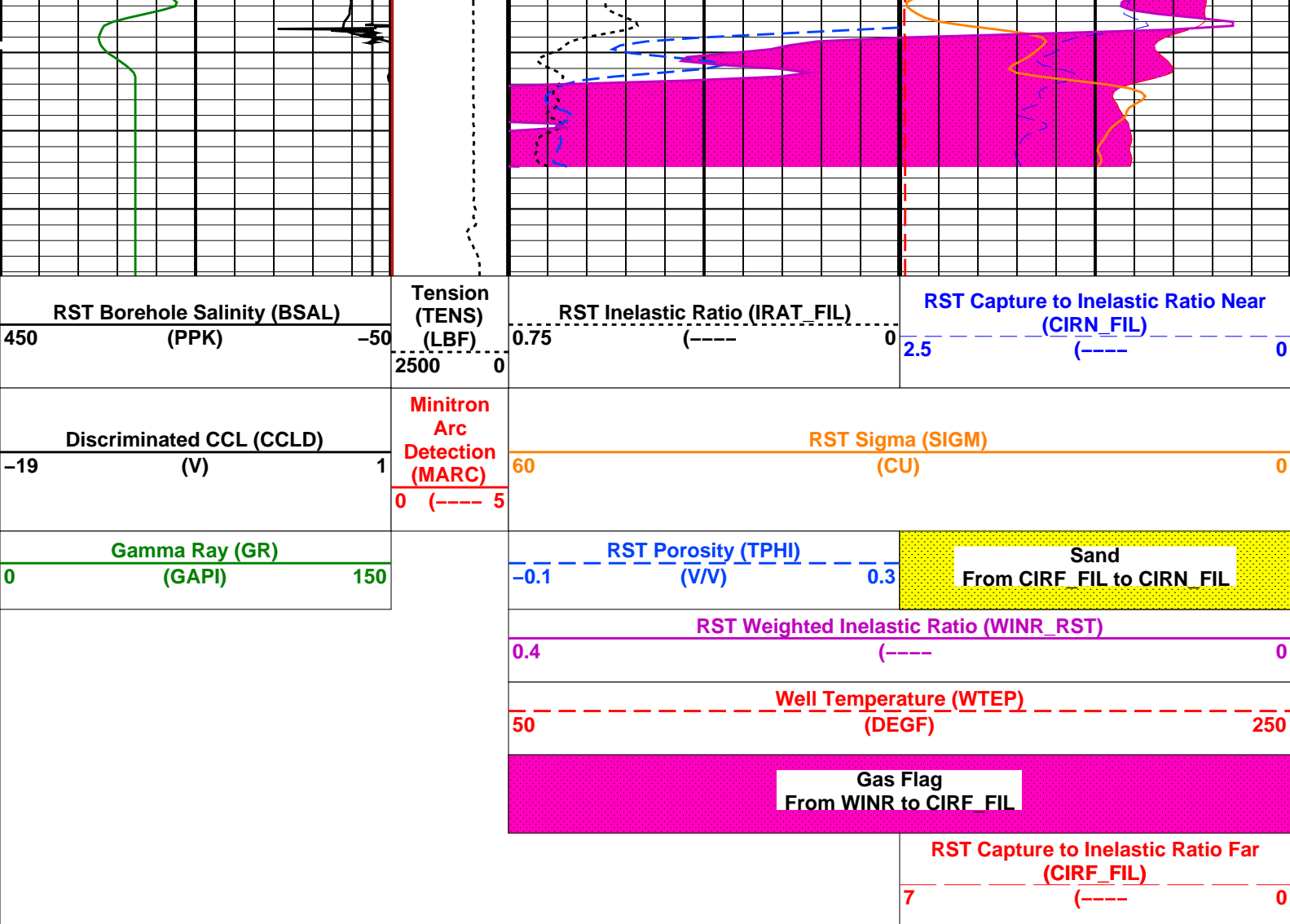












#### PIP SUMMARY

Time Mark Every 60 S

### Parameters

DLIS Name	Description	Value
RST-C: Reservoir Saturation Pro Tool C		
AIRB	RST Air Borehole	No
BHS	Borehole Status	CASED
BSALOPT	RST Borehole Salinity Option	Unknown
BSFL	RST Borehole Salinity Filter Length	51
DFPC	RST Depth Filter Processing Constant	One
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48
NORM_SIGM_RST	RST Normalized Sigma	30
RGAI	Near/Far Gain Calibration Ratio	1
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma
PSPT: Production Services Logging Platform		
BHS	Borehole Status	CASED
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
System and Miscellaneous		
BS	Bit Size	9.250 IN
BSAL	Borehole Salinity	-50000.00 PPM
CSIZ	Current Casing Size	7.000 IN
CWEI	Casing Weight	23.00 LB/F

Format: RST\_SIG\_ANSW Vertical Scale: 5" per 100'

Graphics File Created: 19-Aug-2013 00:56

OP System Version: 19C2-270

RST-C 19C2-270 PSPT 19C2-270

Output DLIS Files



Schlumberger

REPEAT PASS  
SIGMA MODE

MAXIS Field Log

Company: Pine Ridge Oil & Gas LLC

Well: Hully Gully 13-54-1-1

Output DLIS Files

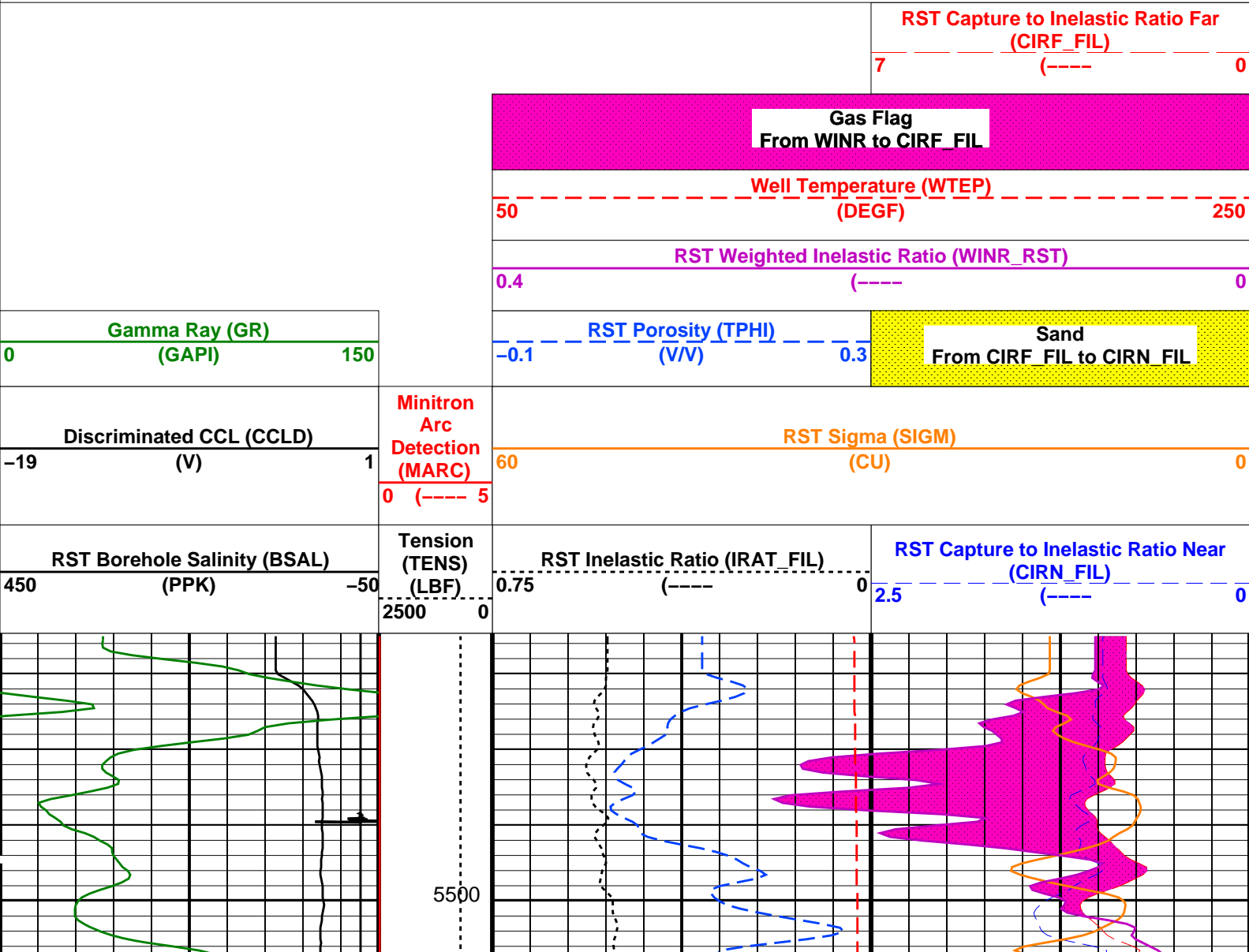
DEFAULTRST\_PSP\_003LUPFN:2PRODUCER19-Aug-2013 00:395751.0 FT5464.5 FT

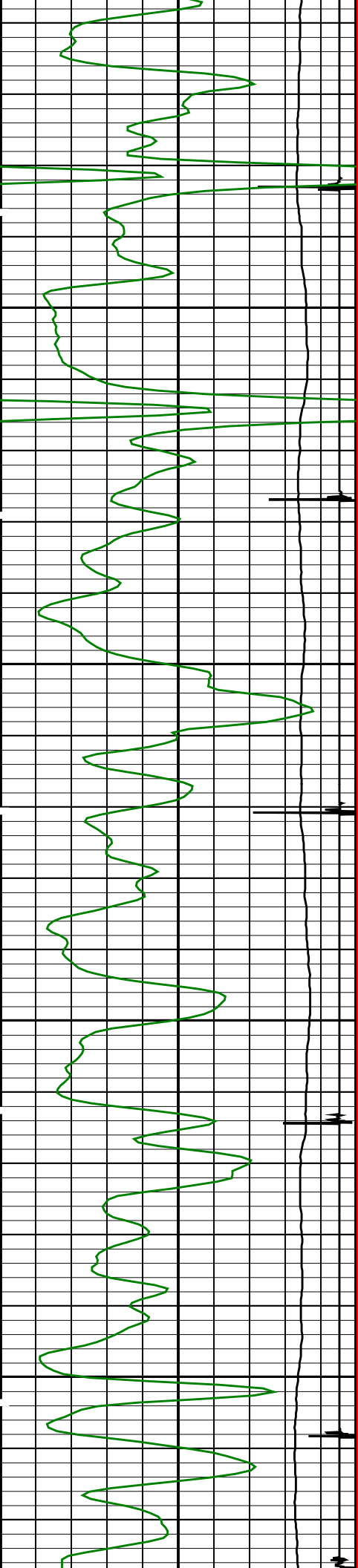
OP System Version: 19C2-270

RST-C19C2-270PSPT19C2-270

PIP SUMMARY

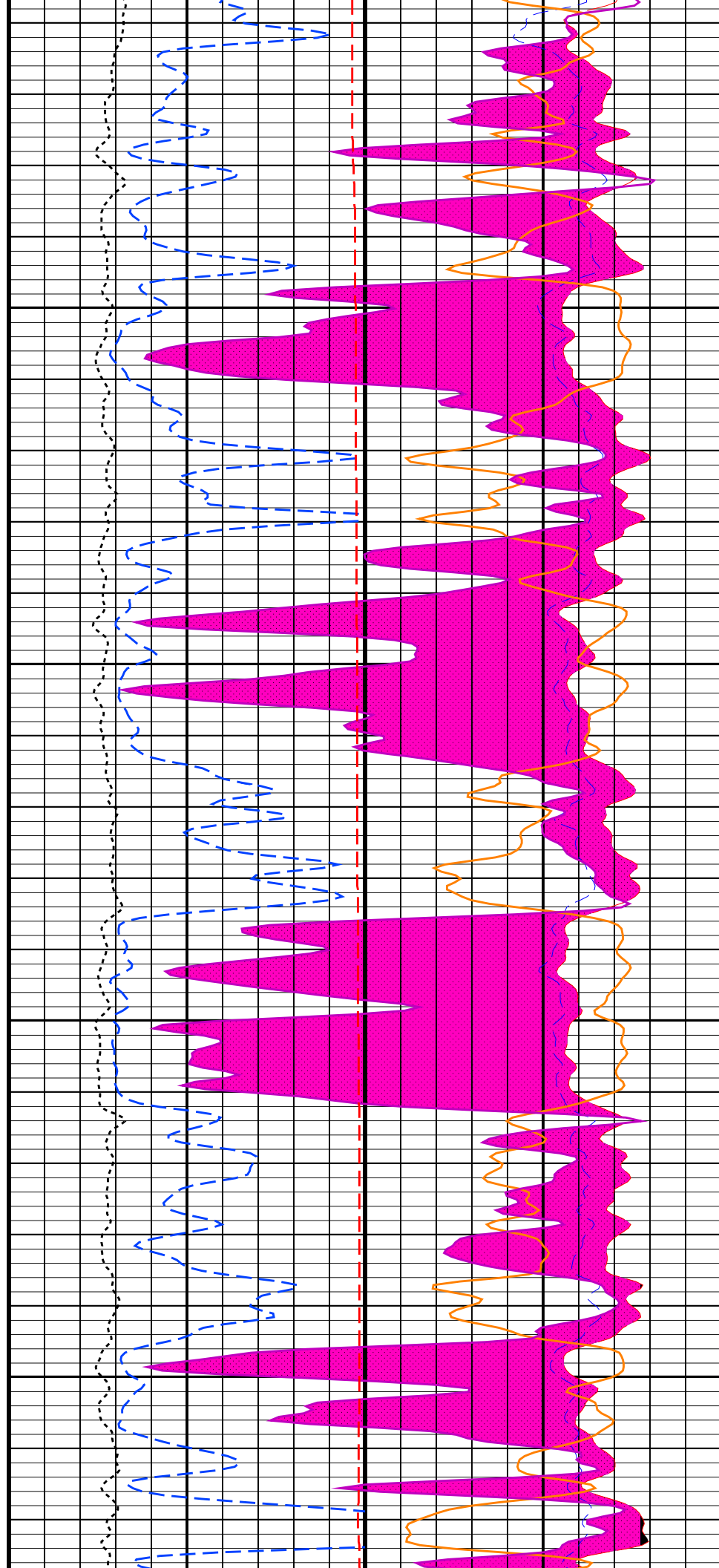
Time Mark Every 60 S

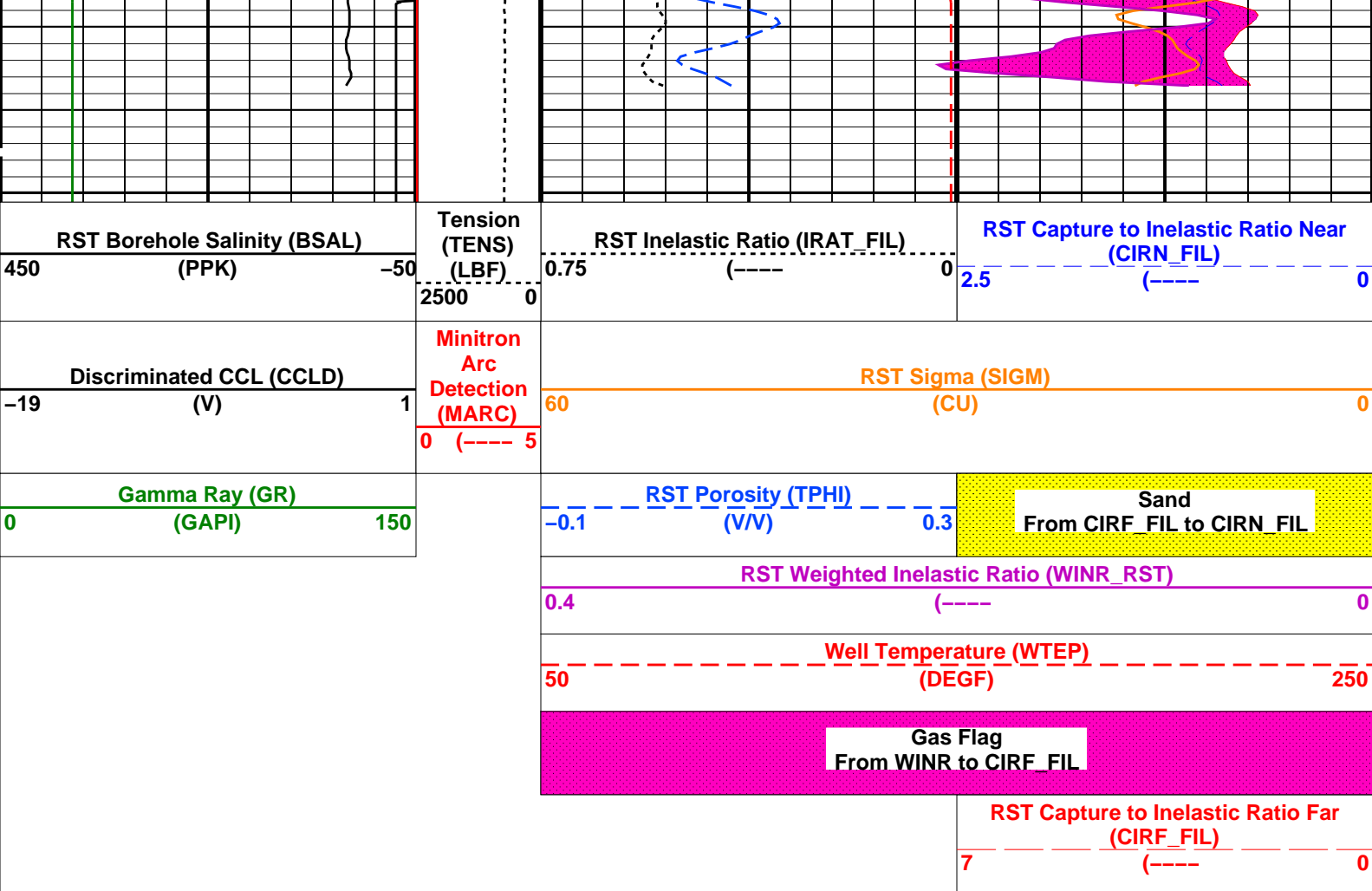




5600

5700





### PIP SUMMARY

Time Mark Every 60 S

## Parameters

DLIS Name	Description	Value
RST-C: Reservoir Saturation Pro Tool C		
AIRB	RST Air Borehole	No
BHS	Borehole Status	CASED
BSALOPT	RST Borehole Salinity Option	Unknown
BSFL	RST Borehole Salinity Filter Length	51
DFPC	RST Depth Filter Processing Constant	One
DFPC_TDTL	RST Depth Filter Processing Constant (TDT-like)	Two
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
NORM_IRAT_RST	RST Normalized Inelastic Ratio	0.48
NORM_SIGM_RST	RST Normalized Sigma	30 CU
RGAI	Near/Far Gain Calibration Ratio	1
TIER_SIGM	RST Sigma Acquisition Mode	0_RST_Sigma
PSPT: Production Services Logging Platform		
BHS	Borehole Status	CASED
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
System and Miscellaneous		
BS	Bit Size	9.250 IN
BSAL	Borehole Salinity	-50000.00 PPM
CSIZ	Current Casing Size	7.000 IN
CWEI	Casing Weight	23.00 LB/F

Format: RST\_SIG\_ANSW Vertical Scale: 5" per 100'

Graphics File Created: 19-Aug-2013 00:39

## OP System Version: 19C2-270

RST-C 19C2-270 PSPT 19C2-270

## Output DLIS Files

DEFAULT RST\_PSP\_003LUP FN:2 PRODUCER 19-Aug-2013 00:39

Company: Pine Ridge Oil & Gas LLC



Well: Hully Gully 13–54–1–13  
Field: Wildcat  
County: Lincoln  
State: Colorado

RESERVOIR SATURATION TOOL  
GAMMA RAY  
CASING COLLAR LOCATOR