

Company: IMPERIAL OIL RESOURCES

Well: IMP 07 T15-10 COLD LK 2-29-64-3

Field: ETHEL LAKE

Province: ALBERTA State: **MD**

PRODUCTION ANALYSIS

TEMP. / PRESSURE

Province: ALBERTA
Field: ETHEL LAKE
Location: 1-29-64-3W4
Well: IMP 07 T15-10 COLD LK 2-29-64-3
Company: IMPERIAL OIL RESOURCES

Location:		1-29-64-3W4 106022906403W400	Elev.: K.B. 606.75 m G.L. 601.70 m D.F.
Permanent Datum:	Ground Level		Elev.: 601.70
Log Measured From:	Kelly Bushing	5.05 m	above Perm.Datum
Drilling Measured From:	Kelly Bushing		
API Serial No.	Section:	Township:	Range:
0395563	01-29	064	03W4

Logging Date 07-Dec-2016

Run Number 1

Depth Driller 621.00 m

Schlumberger Depth 591.50 m

Bottom Log Interval 591.00 m

Top Log Interval 0.00 m

Casing Fluid Type Oil

Salinity

Density 1198.26 kg/m3

Fluid Level 187.50 m

BIT/CASING/TUBING STRING

Bit Size 215.90 mm

From 25.05 m

To 591.50 m

Casing/Tubing Size 73.025 mm

Weight 9.67 kg/m

Grade J55

From 3.98 m

To 591.00 m

Max Recorded Temperatures 204 degC

Logger on Bottom 07-Dec-2016 10:31:00

Unit Number D222 Location: LLOYDMINSTER

Recorded By Y.MUNOZ

Witnessed By GREG GEELEY

Disclaimer

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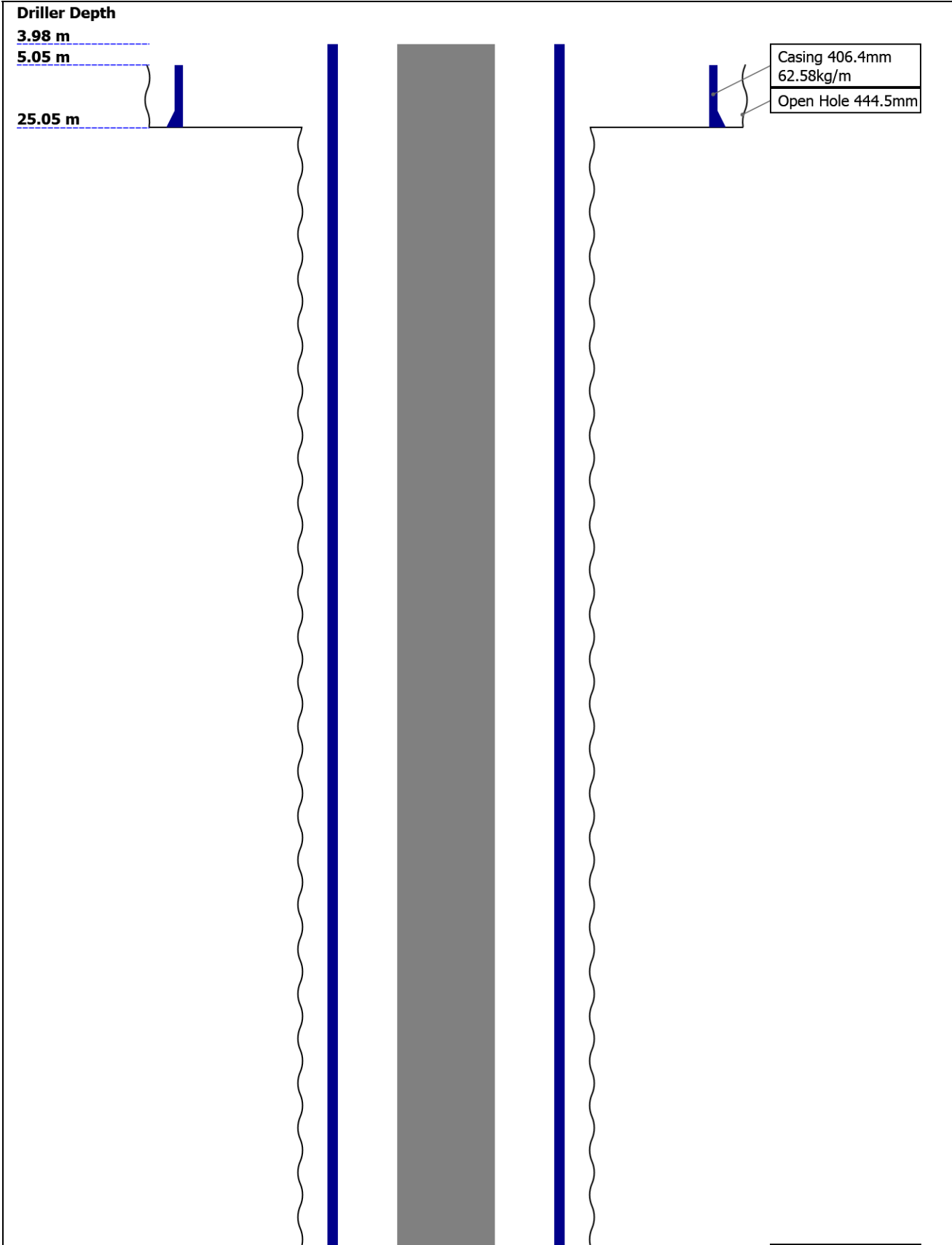
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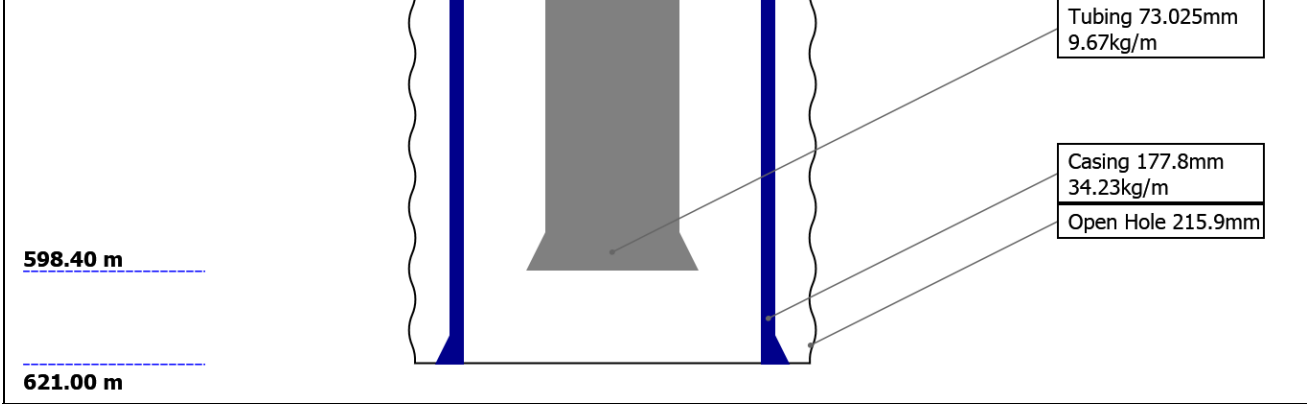
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9.5 Parameter Listing

10. Tail

Well Sketch





Borehole Size/Casing/Tubing Record

Bit						
Bit Size (mm)	444.5	215.9				
Top Driller (m)	5.05	25.05				
Top Logger (m)	5.05	25.05				
Bottom Driller (m)	25.05	621				
Bottom Logger (m)	25.05	591.5				
Casing						
Size (mm)	406.4	177.8				
Weight (kg/m)	62.58	34.23				
Inner Diameter (mm)	393.987	161.797				
Grade	N/A	L80				
Top Driller (m)	5.05	3.98				
Top Logger (m)	5.05	3.98				
Bottom Driller (m)	25.05	621				
Bottom Logger (m)	25.05	591.5				
Tubing						
Size (mm)	73.025					
Weight (kg/m)	9.67					
Inner Diameter (mm)	61.623					
Grade	J55					
Top Driller (m)	3.98					
Top Logger (m)	3.98					
Bottom Driller (m)	598.4					
Bottom Logger (m)	591					

Remarks and Equipment Summary

1: Toolstring				1: Remarks
Equip name	Length	MP name	Offset	LOGGED DOWN AT 10 M/MIN FLUID LEVEL DERIVED FROM LOG AT 187.5 mKB LAST FLUID MOVEMENT: 2 - DEC - 2016 (N2 PURGED) MAX TEMP 204 DEGC AT 590 mKB ENGAGED TRACTOR AT 532 mKB CWT AT 525.5 mKB BURST NIPPLE TOP AT 571.04 mKB PSN TOP AT 590.46 mKB
MH-22	5.79			
AH-38	5.31			
EQF-43	5.22			

HBMS-B:2838 3.39
 HUDH-A:2838
 PSC-A:2838
 HSTC-A:2838
 HBMC-A:2838
 HTPS-A:2838

Sensor Location	Value: Gating Offset
GR	1.87
CCL	1.14
PSTC	0.71
HSTC Tool String Bottom	0.00
CQG Pressure	0.28
Temperature	0.28
TOOL_ZERO	

Lengths are in m
 Maximum Outer Diameter = 52.451 mm
 Line: Sensor Location, Value: Gating Offset
 All measurements are relative to TOOL_ZERO

Depth Summary

	1		
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Depth Measuring Device

Type	IDW-B		
Serial Number	6305		
Calibration Date	16-SEP-2015		
Calibrator Serial Number	4		
Calibration Cable Type	1-33A-SLC		
Wheel Correction 1	1		
Wheel Correction 2	1		

Tension Device

Type	CMTD-B/A		
Serial Number	3094		
Calibration Date	13-OCT-2016		
Calibrator Serial Number	345687		
Number of Calibration Points	10		
Calibration Root Mean Square Error			
Calibration Peak Error	19		

Logging Cable

Type	1-33A-SLC		
Serial Number			
Length	1.00 m		
Conveyance Type	Wireline		
Rig Type			

1:Depth Control Parameters		Depth Control Remarks
Log Sequence	Subsequent Trip To the Well	ALL SCGLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED
Reference Log Name	TUBING TALLY - BURST NIPPLE TOP AT 571.04 mKB	IDW USED AS PRIMARY DEPTH CONTROL
Reference Log Run Number		Z-CHART USED AS SECONDARY DEPTH CONTROL

Reference Log Date
Subsequent Trip Down Log
Correction

1

DOWN PASS

Software Version

Acquisition System	Version
Maxwell 2016	6.0.53731.3100
Application Patch	Wireline_TestKit-EMIT-C-2016RC3_6.0.54288

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1	Log[1]:Down	Down	3.86 m	534.67 m	07-Dec-2016 9:21:15 AM	07-Dec-2016 10:23:50 AM	ON	1.30 m	No

All depths are referenced to toolstring zero

Log

Company:IMPERIAL OIL RESOURCES Well:IMP 07 T15-10 COLD LK 2-29-64-3
1: Log[1]:Down:S006

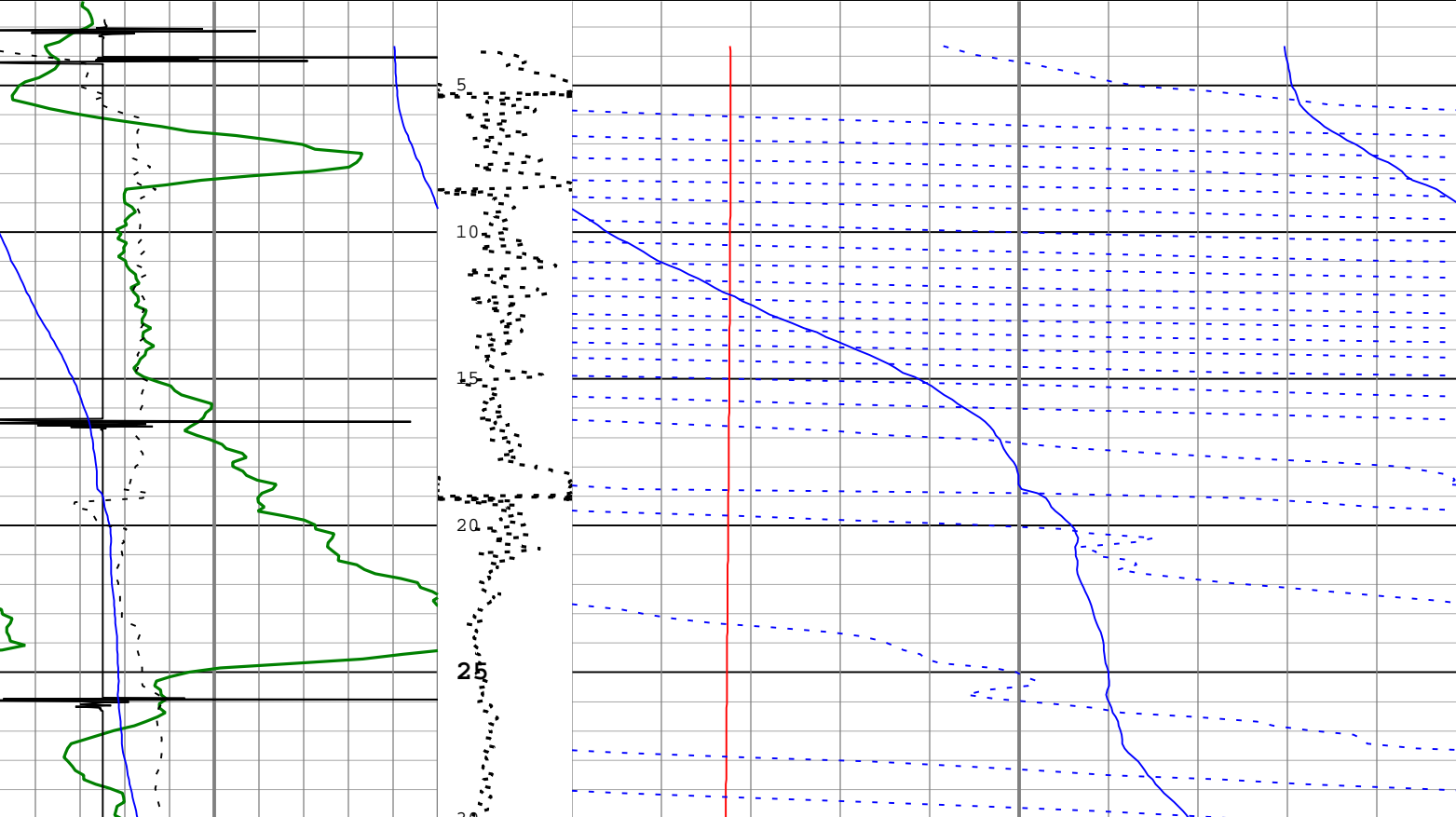
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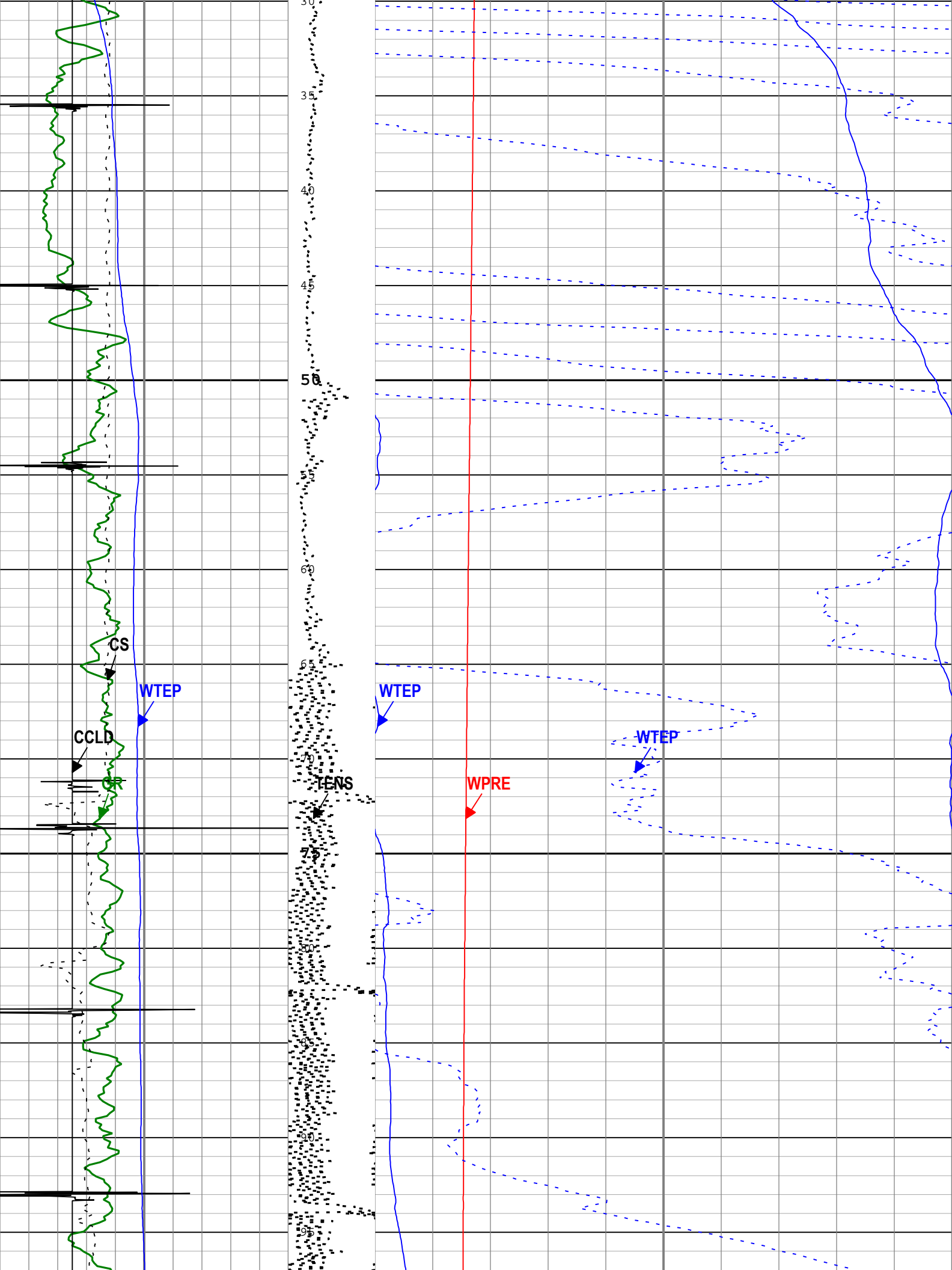
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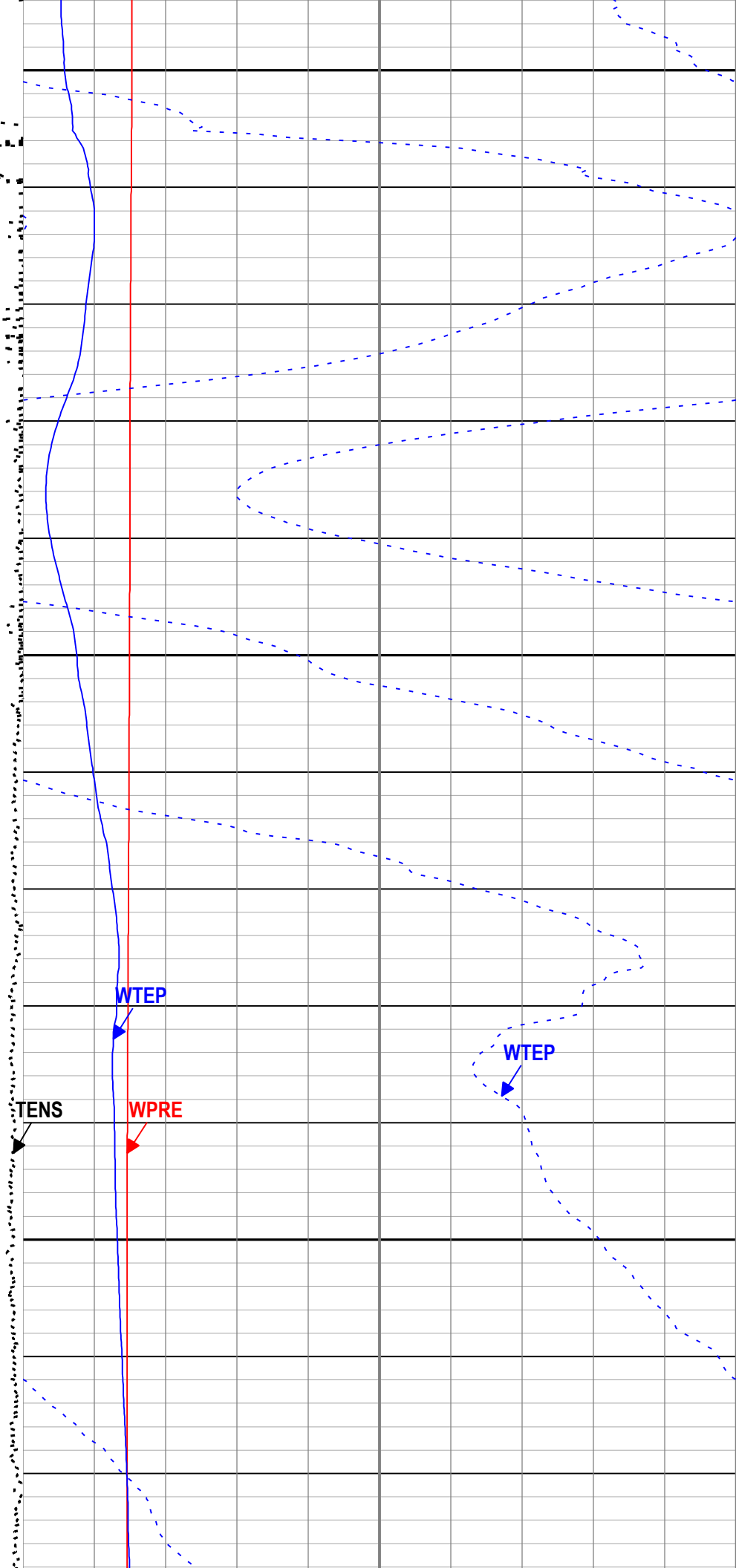
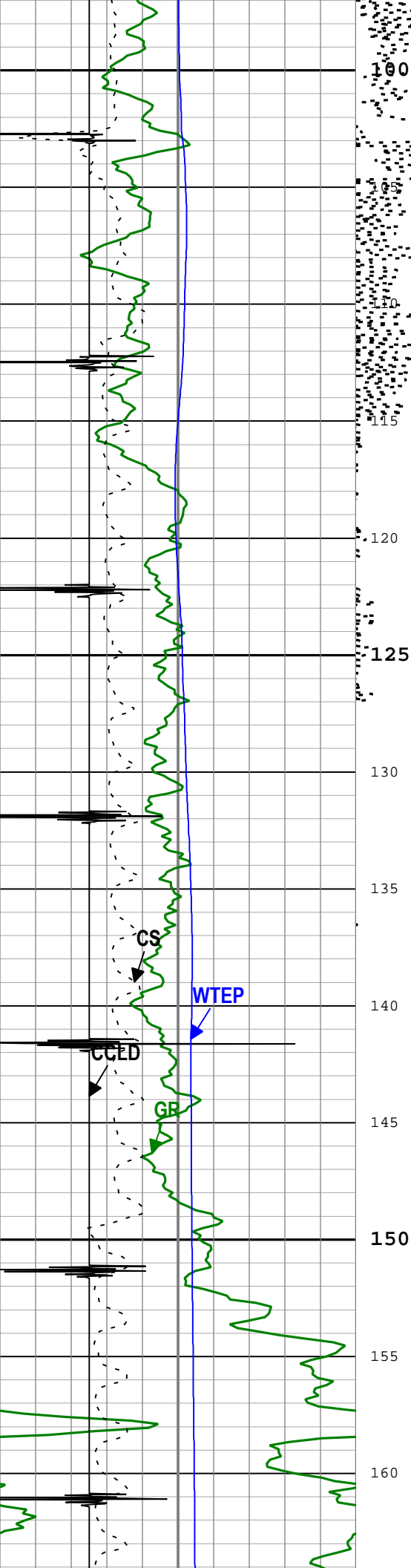
Gamma Ray (GR) HBMS-B		
0	gAPI	100
CCL Discriminated Amplitude (CCLD) HBMS-B		
1	V	-3
Well Temperature (WTEP) HBMS-B		
0	degC	210
Cable Speed (CS)		
0	m/h	1500

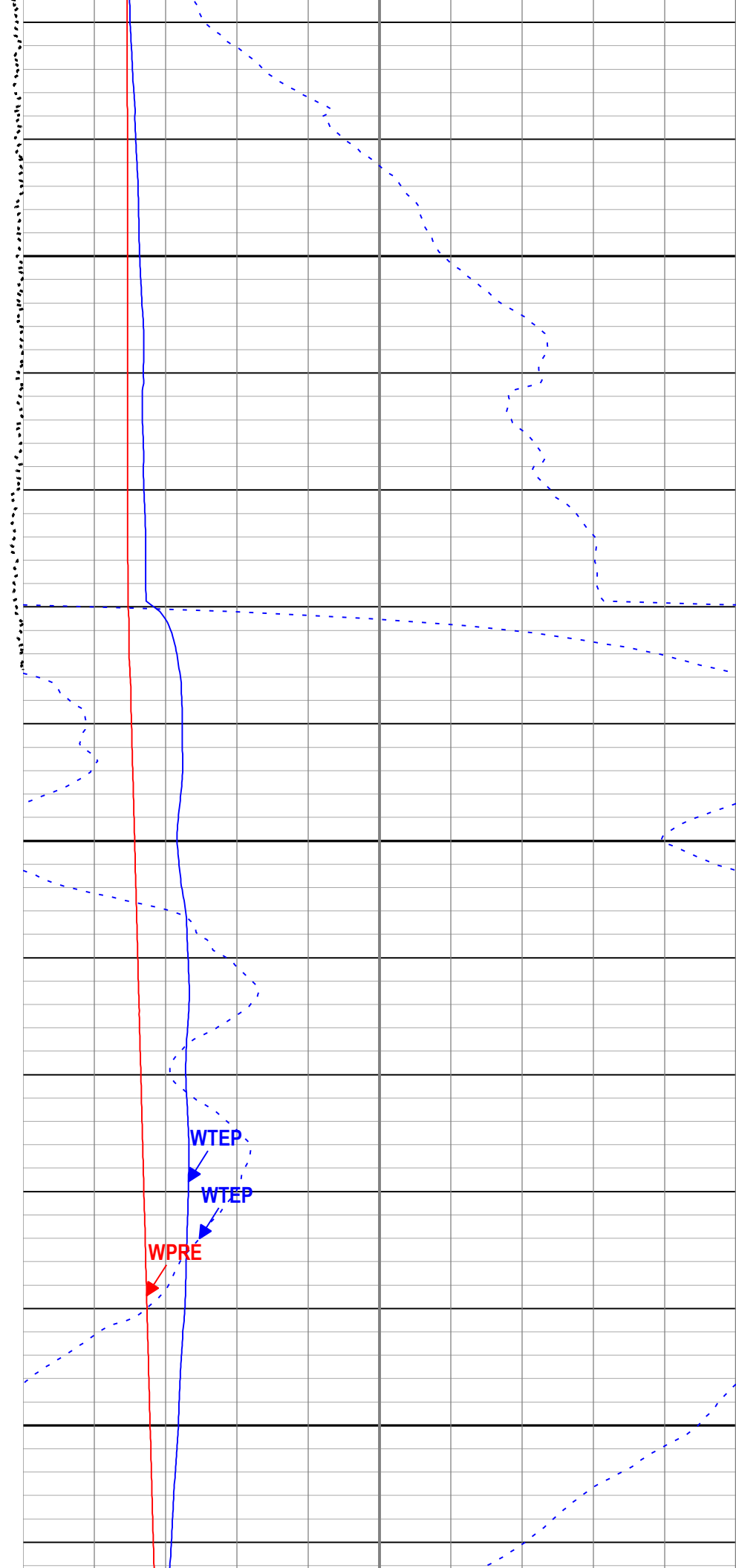
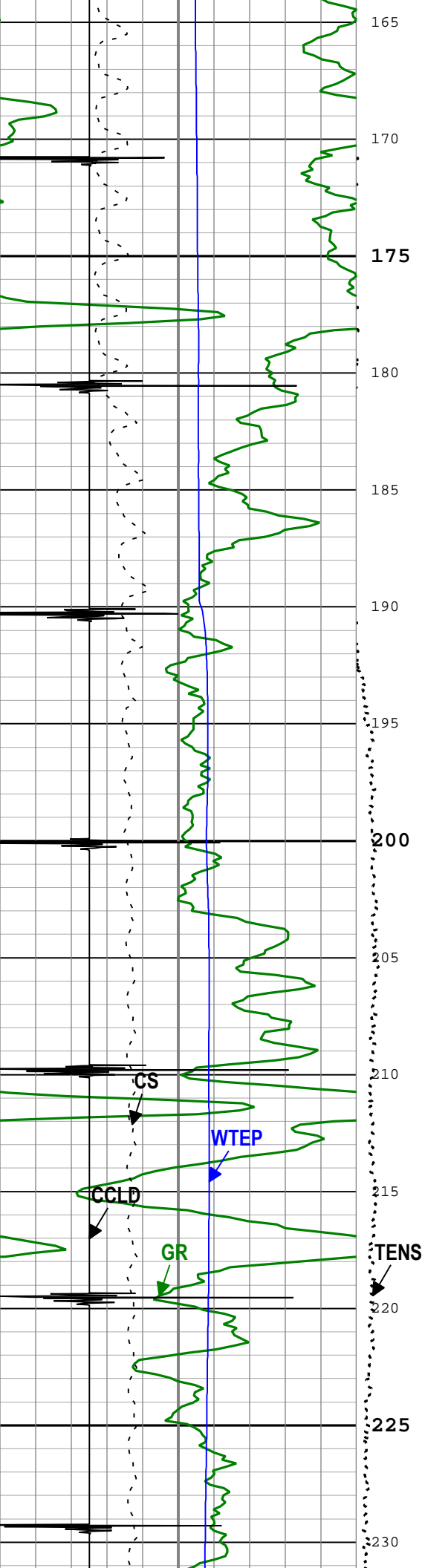
Cable Tension (TENS)
1000 N
0

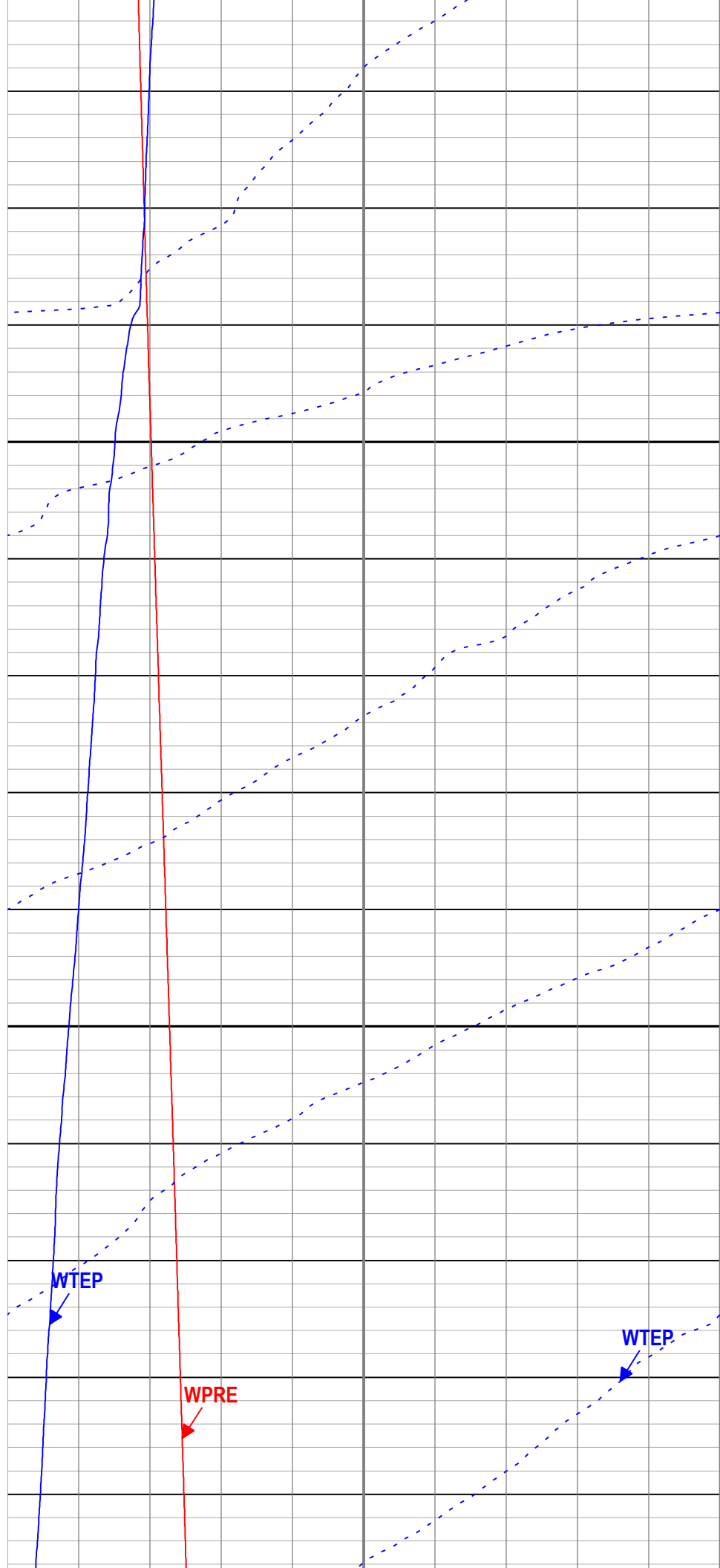
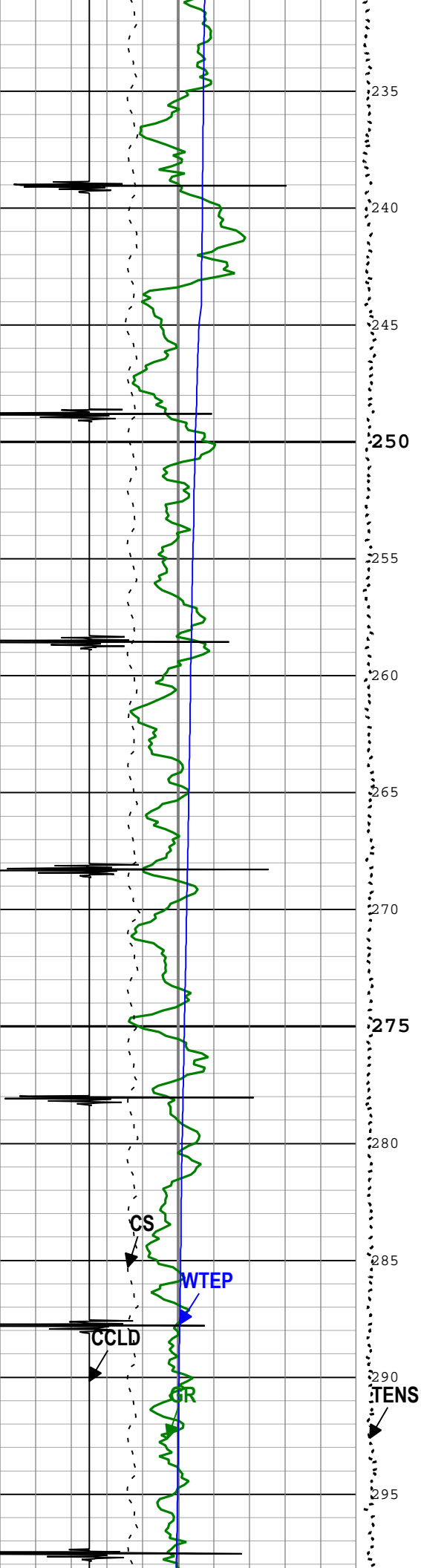
Well Pressure (WPRE) HBMS-B		
0	kPa	10000
Well Temperature (WTEP) HBMS-B		
-2	degC	2
Well Temperature (WTEP) HBMS-B		
0	degC	100

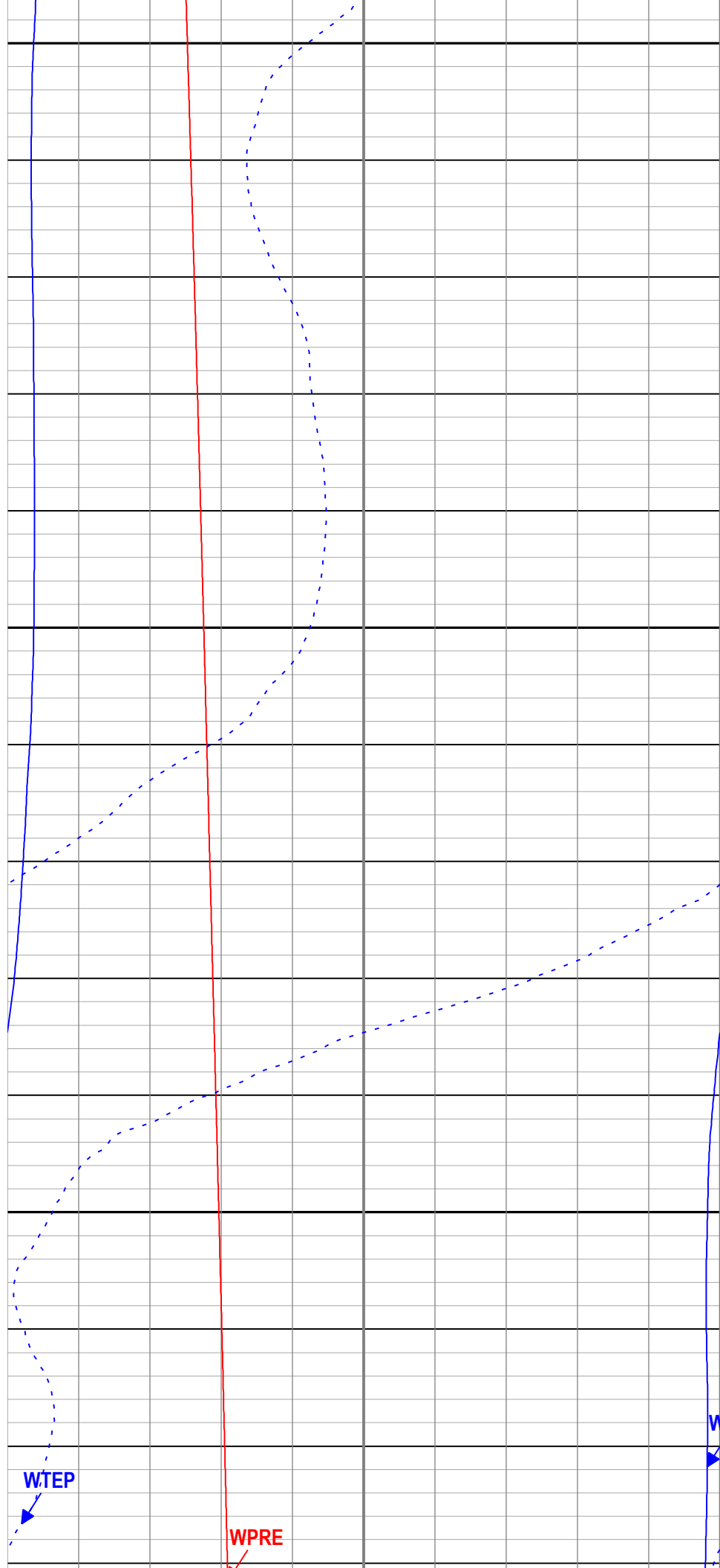
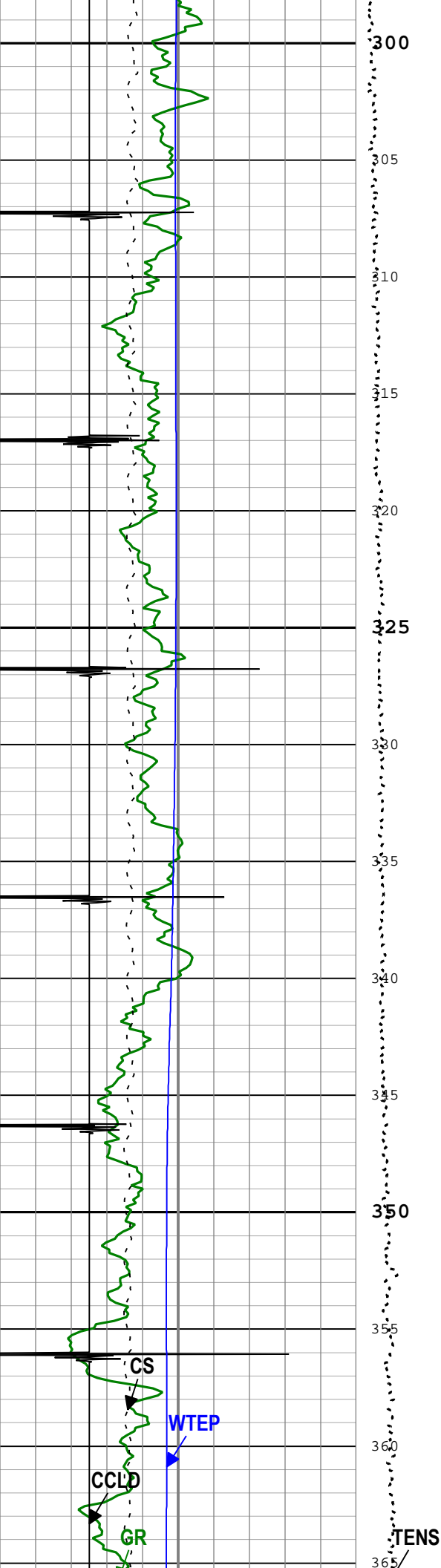


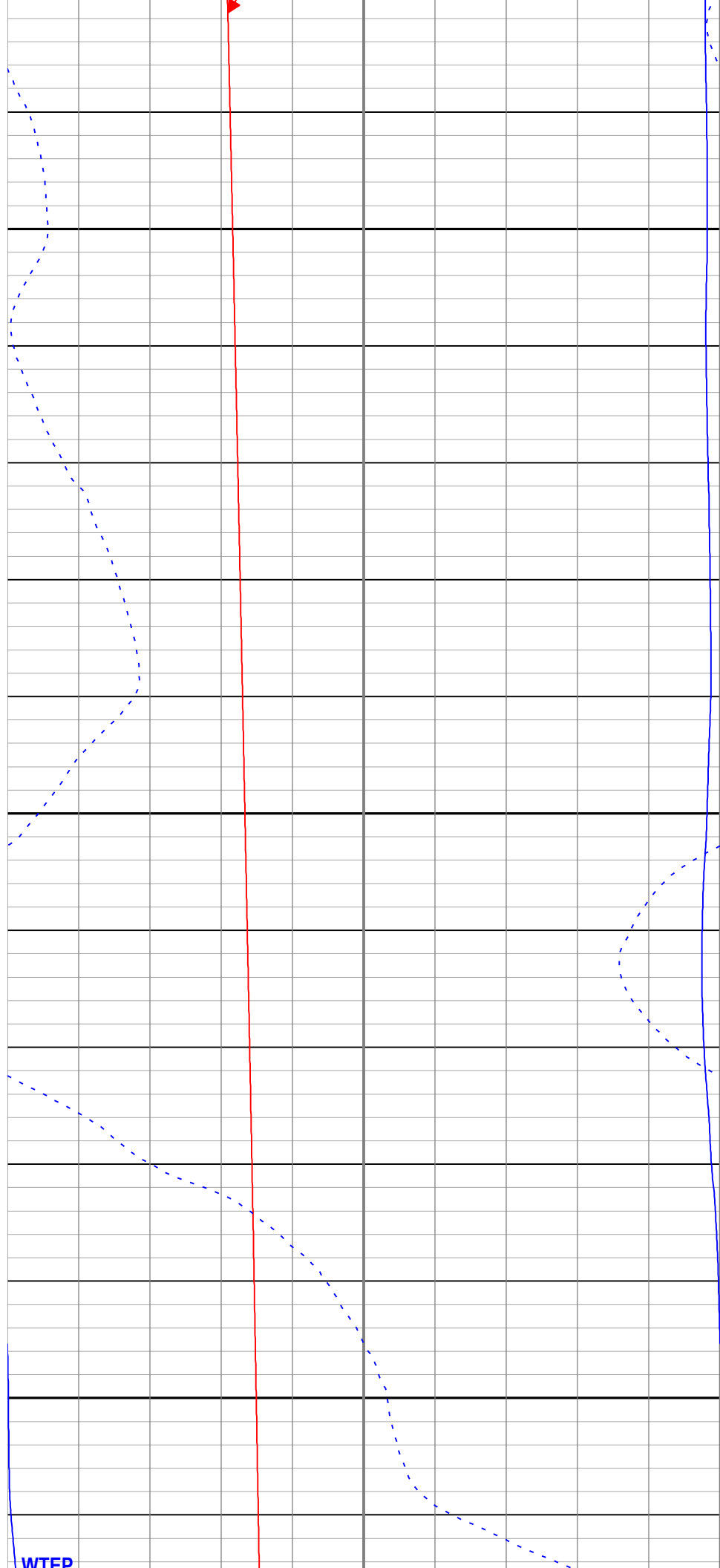
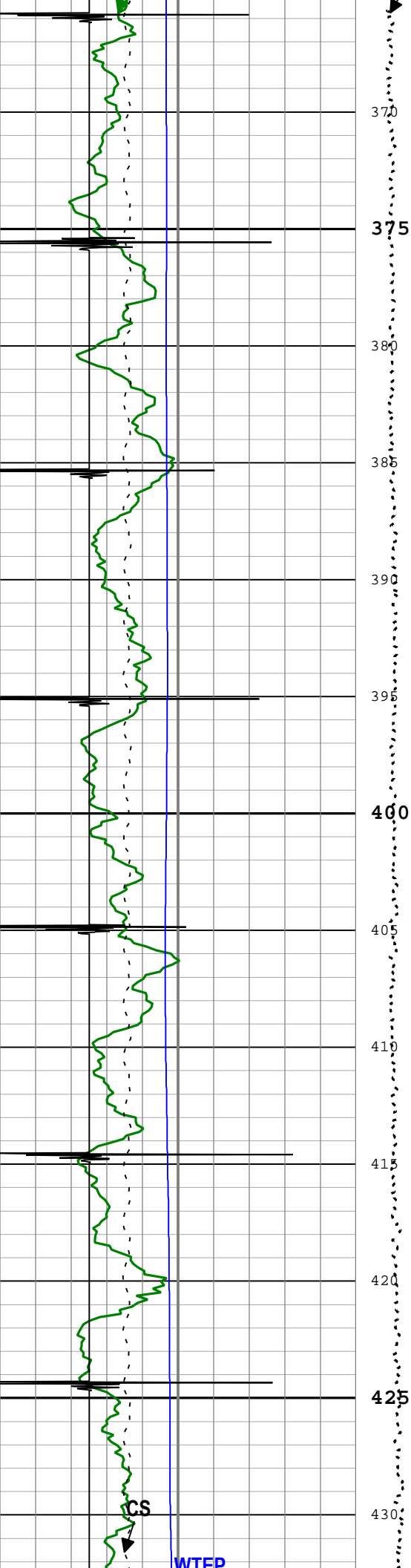


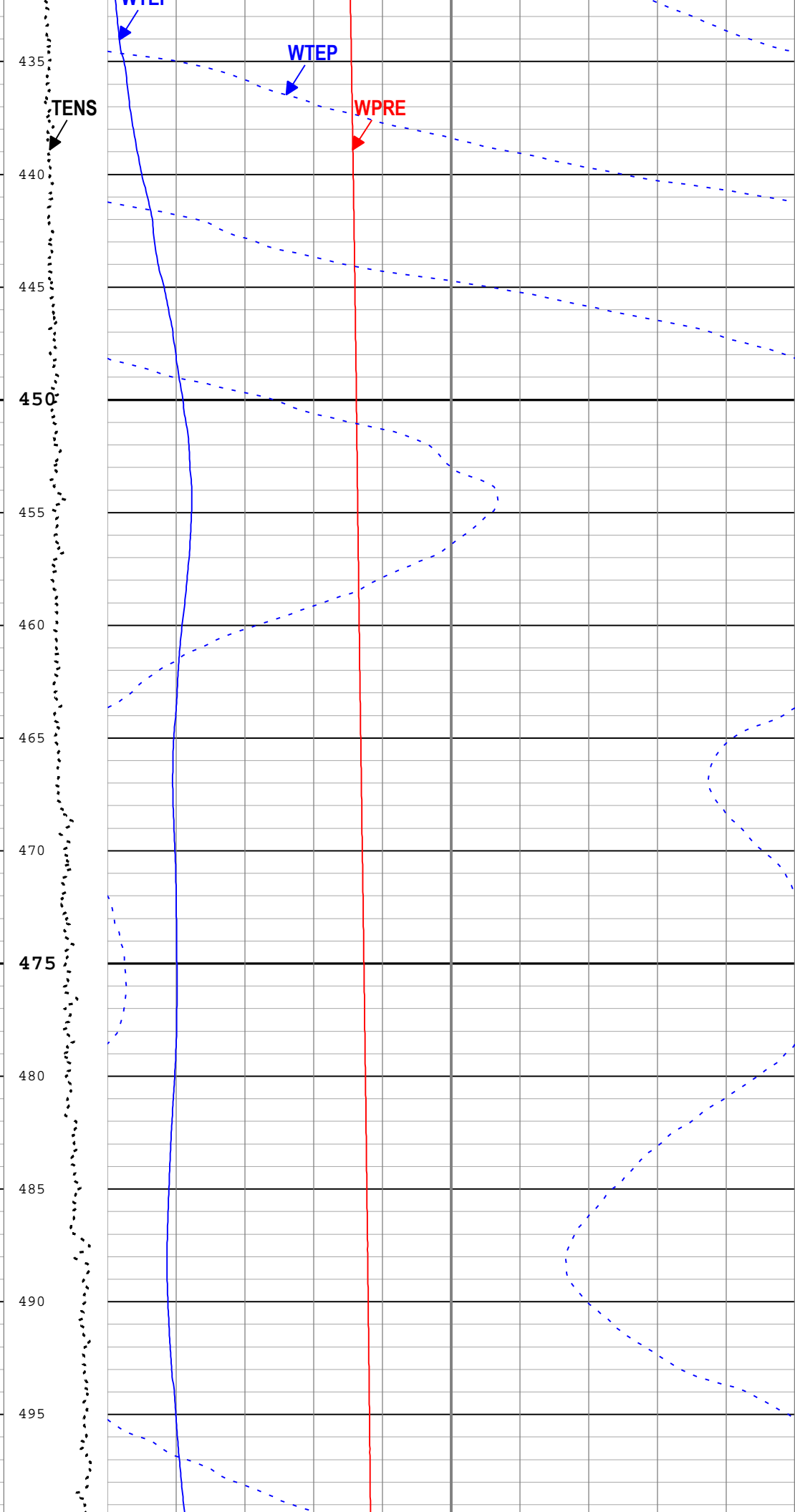
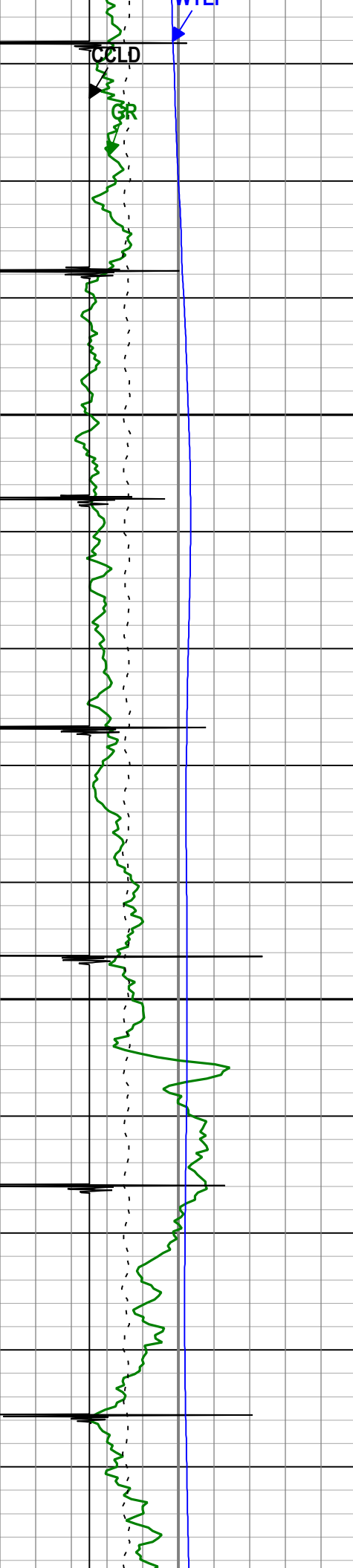


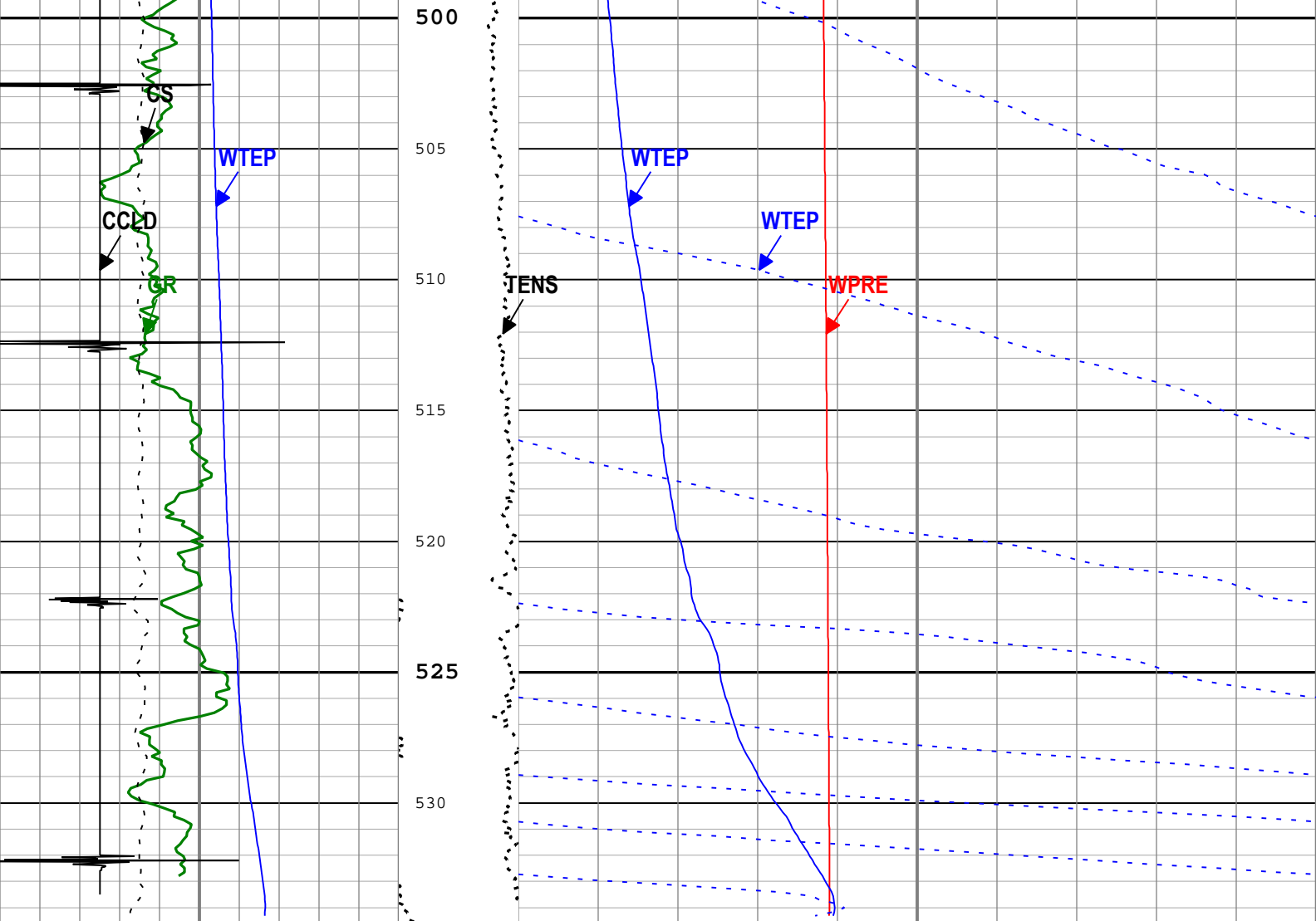












Gamma Ray (GR) HBMS-B			Well Pressure (WPRE) HBMS-B		
0	gAPI	100	0	kPa	10000
CCL Discriminated Amplitude (CCLD) HBMS-B			Well Temperature (WTEP) HBMS-B		
1	V	-3	-2	degC	2
Well Temperature (WTEP) HBMS-B			Well Temperature (WTEP) HBMS-B		
0	degC	210	0	degC	100
Cable Speed (CS)					
0	m/h	1500			

TIME_1900 - Time Marked every 60.00 (s)

Description: PSP Depth Format: Log (TEMP DOWN PASS imperial) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 07-

Channel Processing Parameters				
Tool Control Parameters				
1: Parameters				
Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	5486.4	m/h
PCCG	PSP Downhole CCL Gain	HBMS-B	12 dB	
1				
UP PASS				
Software Version				
Acquisition System		Version		

Maxwell 2016	6.0.53731.3100
Application Patch	Wireline_TestKit-EMIT-C-2016RC3_6.0.54288

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1	Log[2]:Up	Up	0.48 m	592.44 m	07-Dec-2016 10:45:52 AM	07-Dec-2016 12:05:43 PM	ON	2.30 m	No

All depths are referenced to toolstring zero

Log

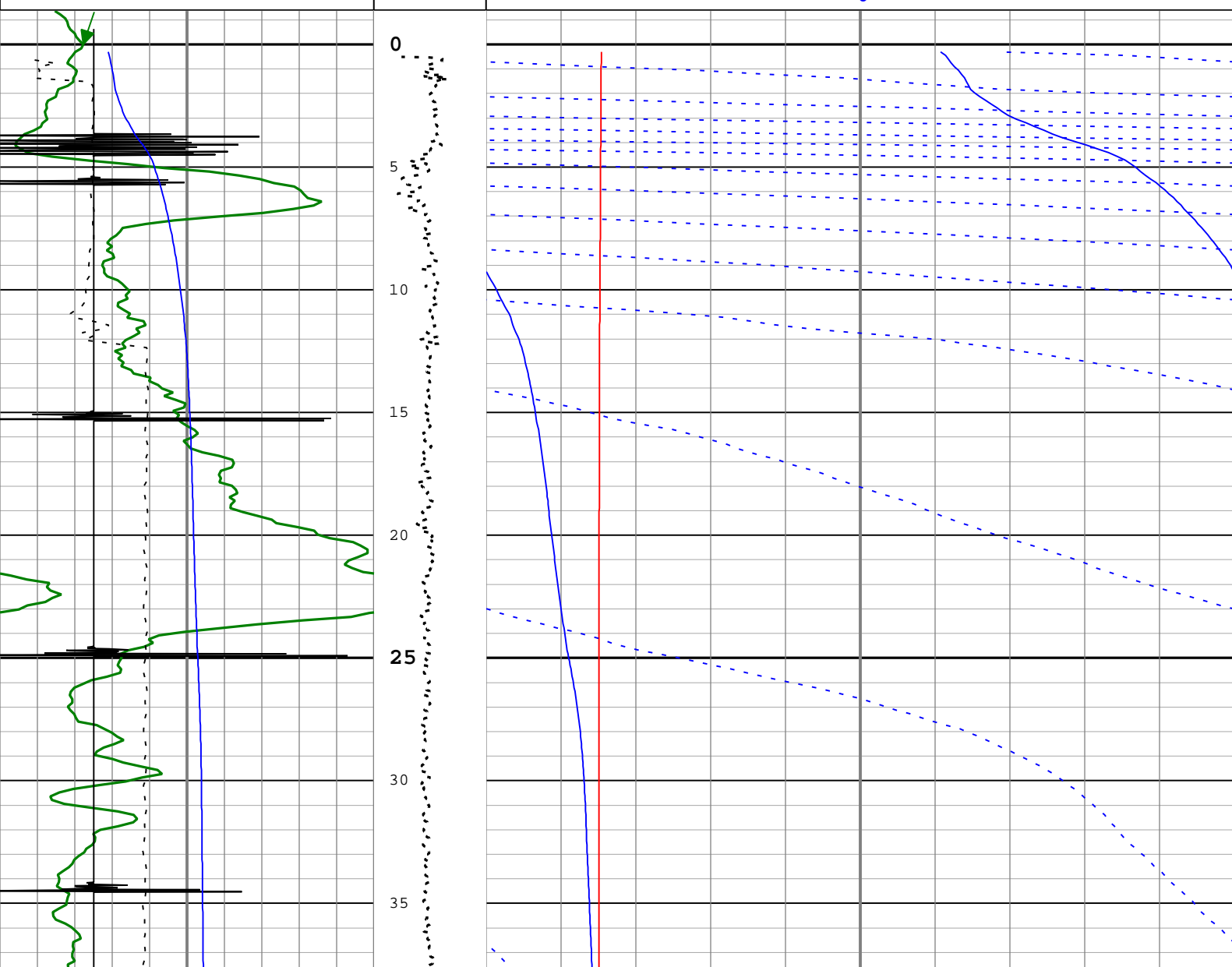
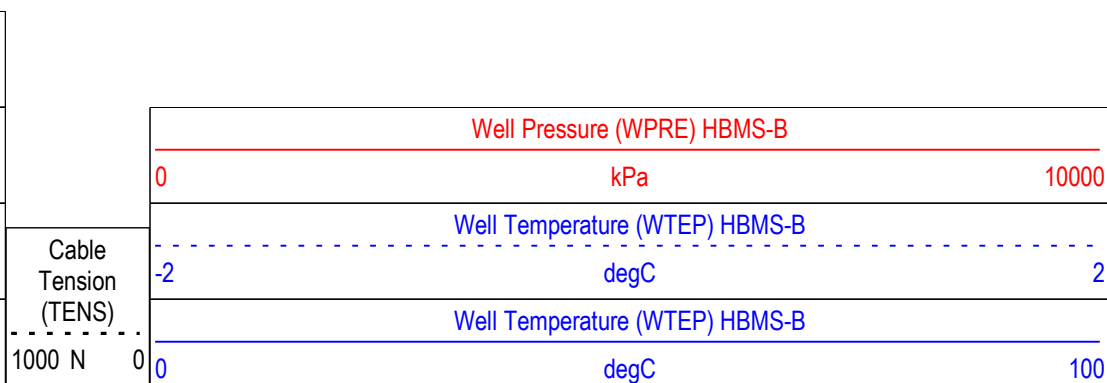
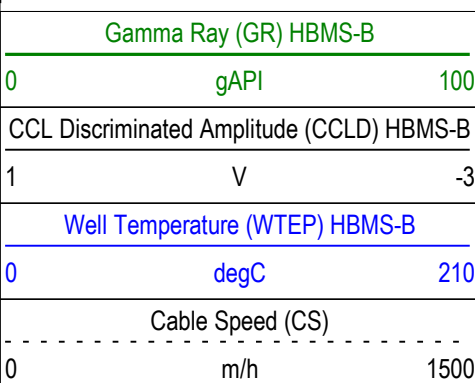
Company:IMPERIAL OIL RESOURCES

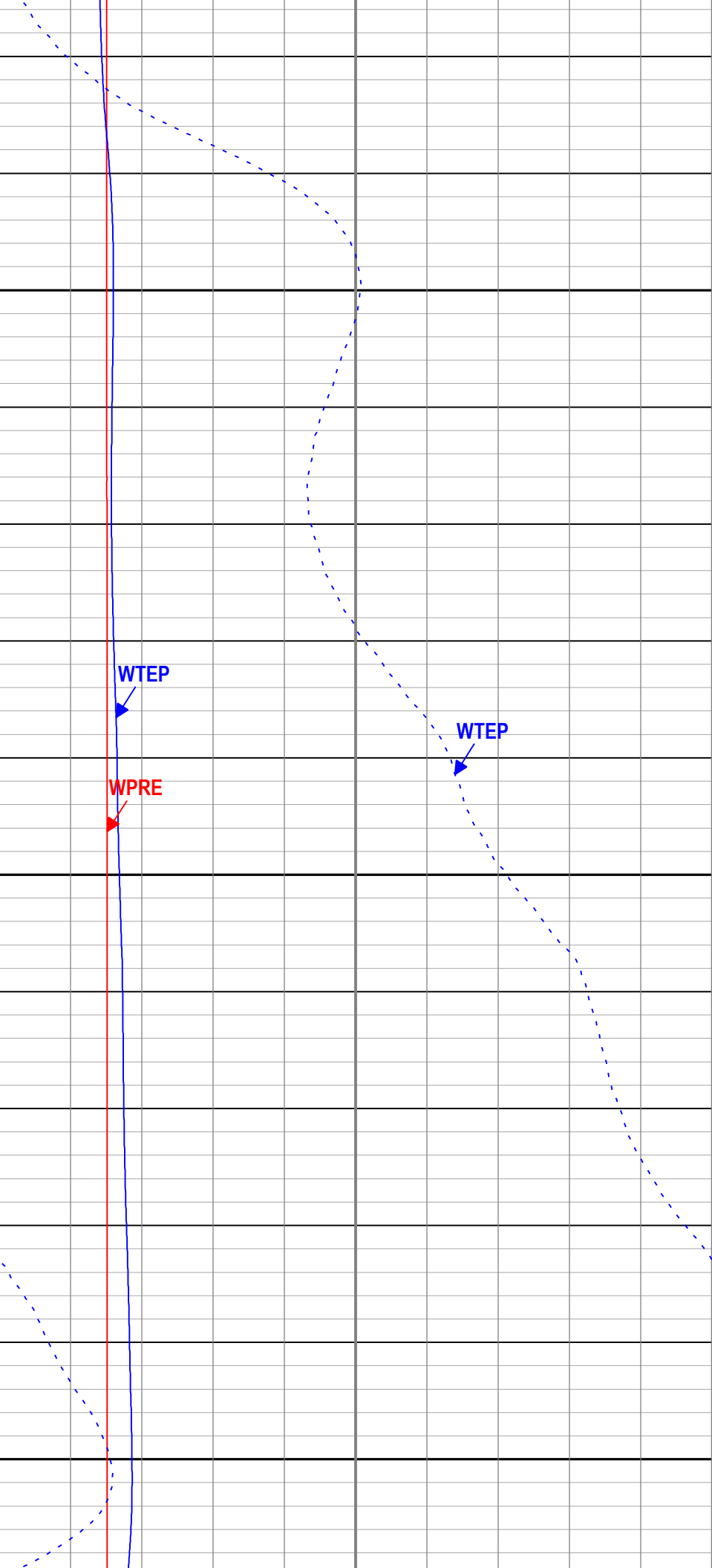
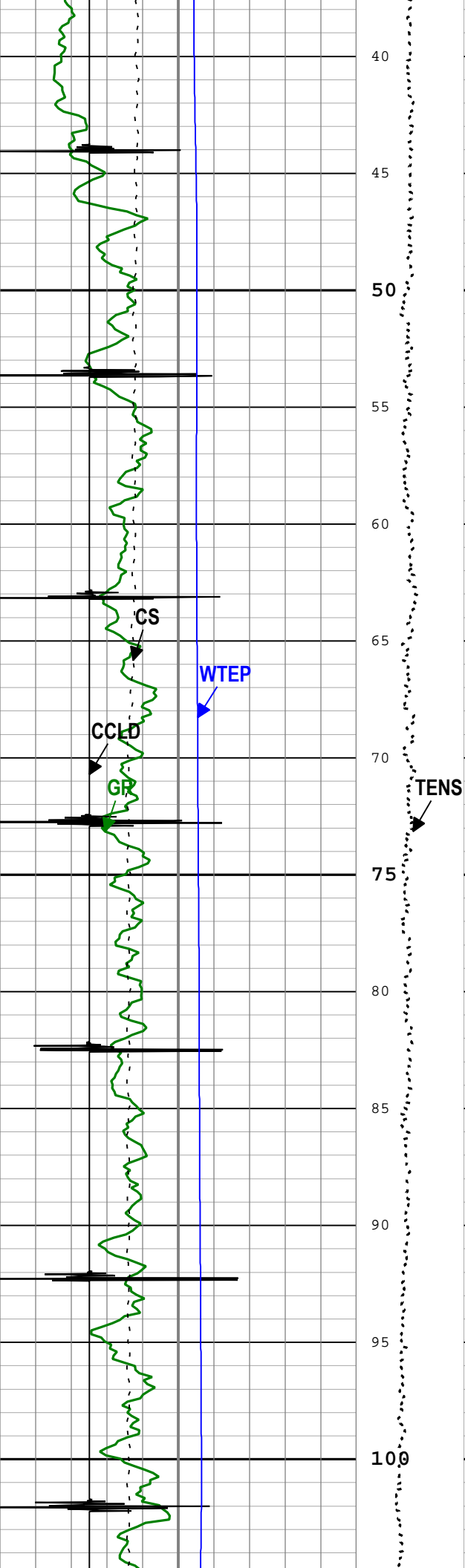
Well:IMP 07 T15-10 COLD LK 2-29-64-3

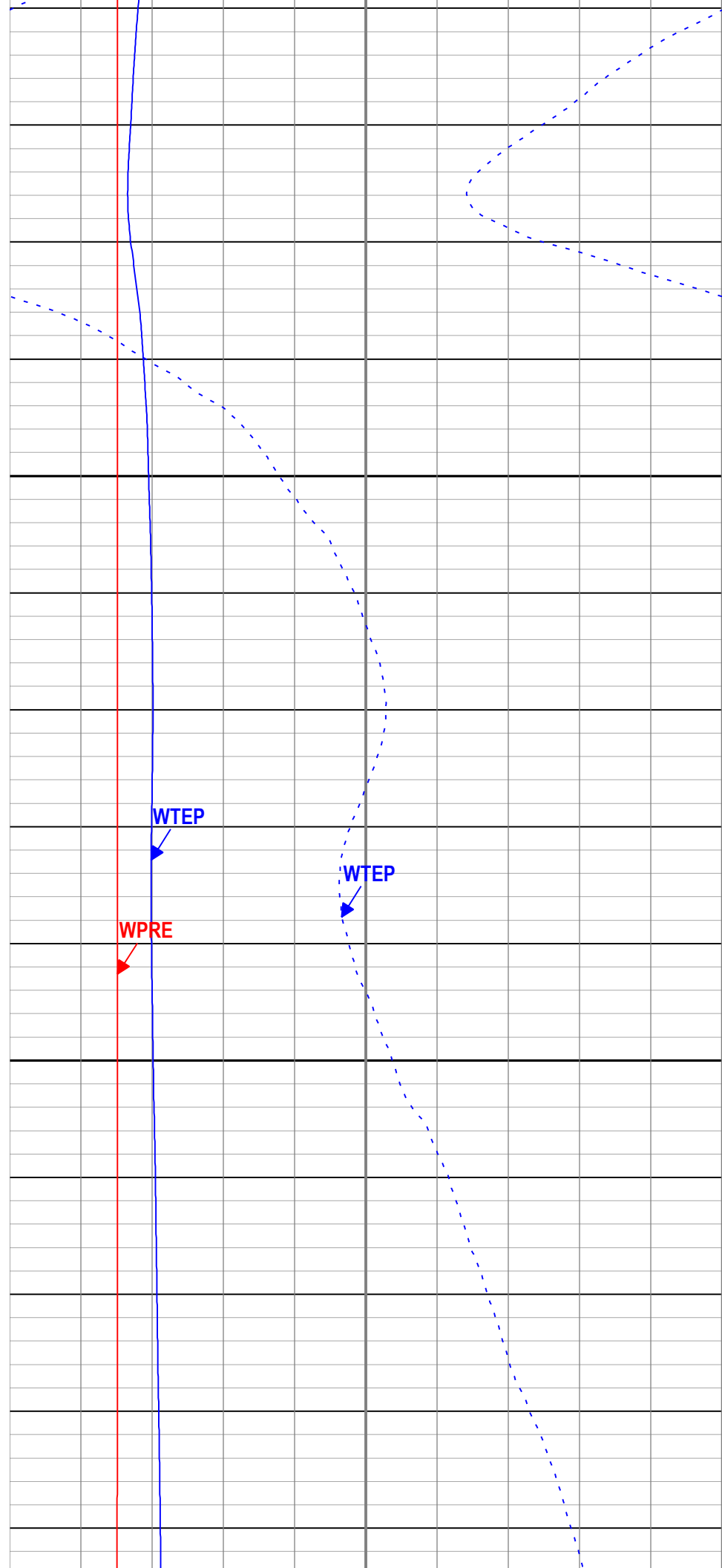
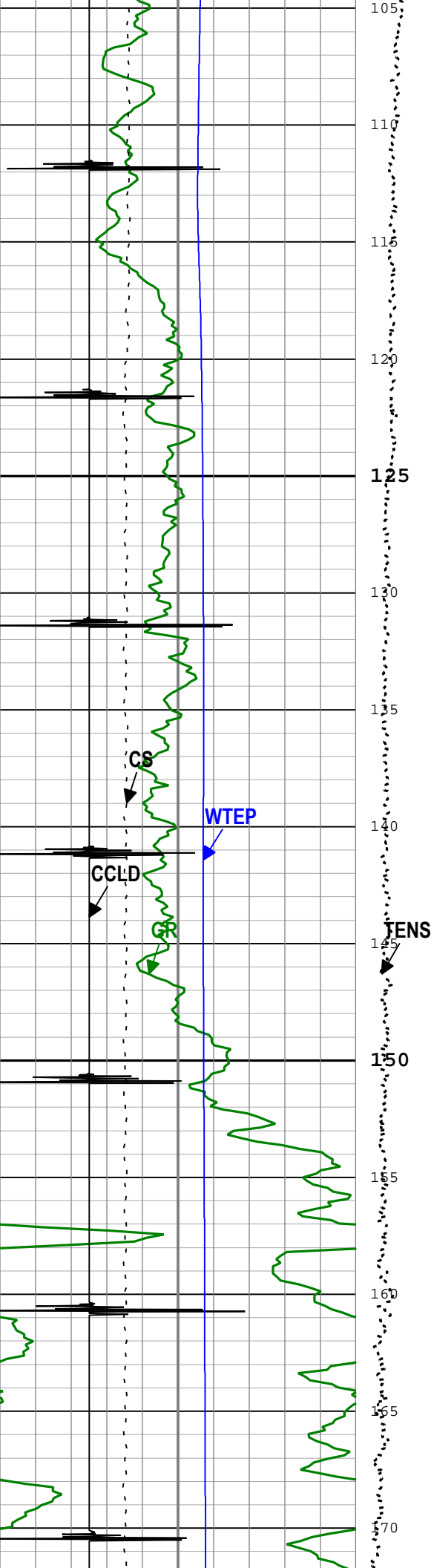
1: Log[2]:Up:S006

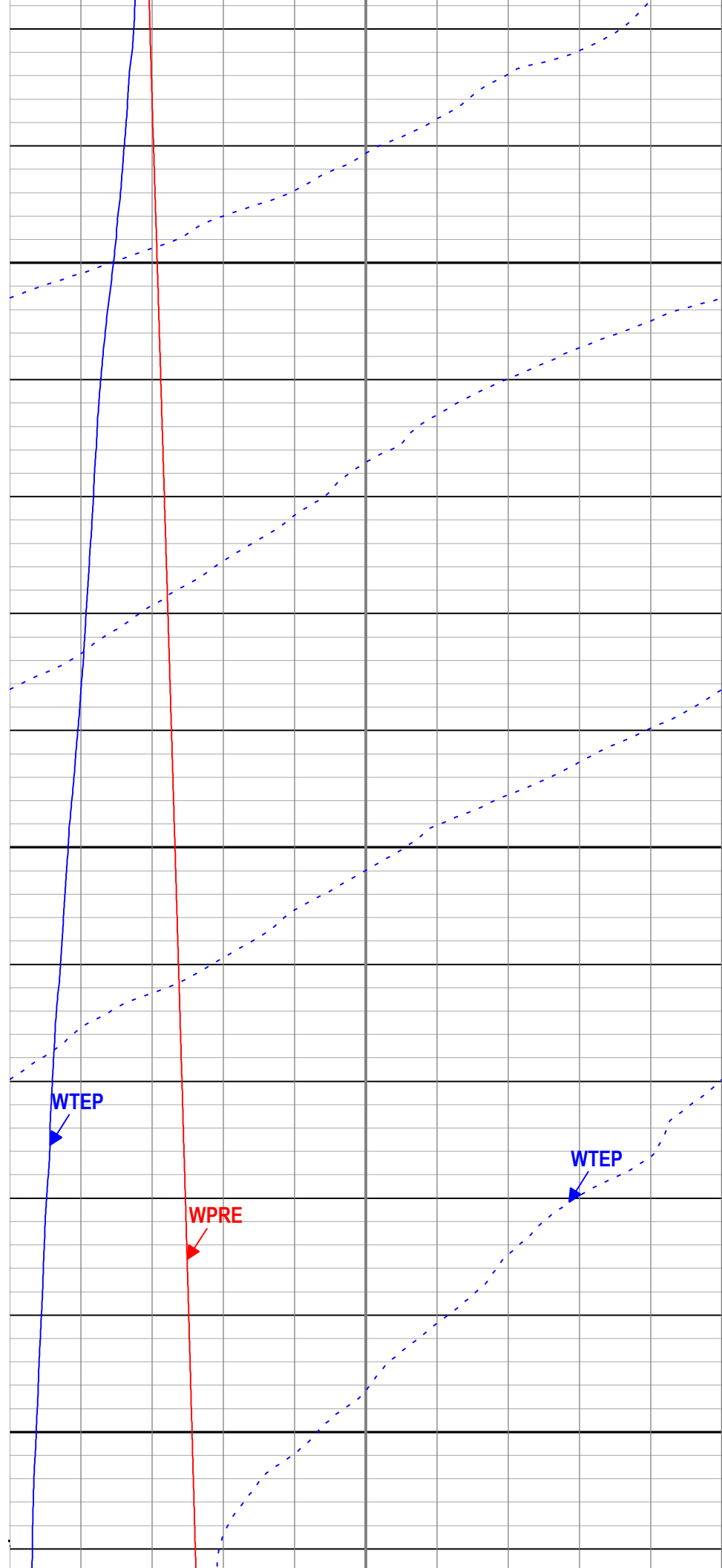
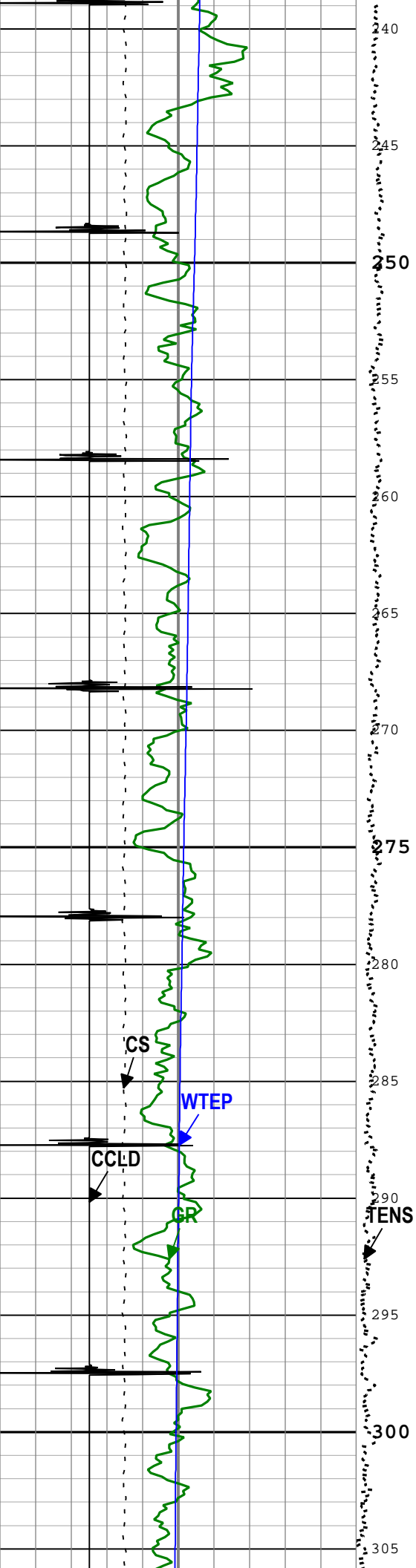
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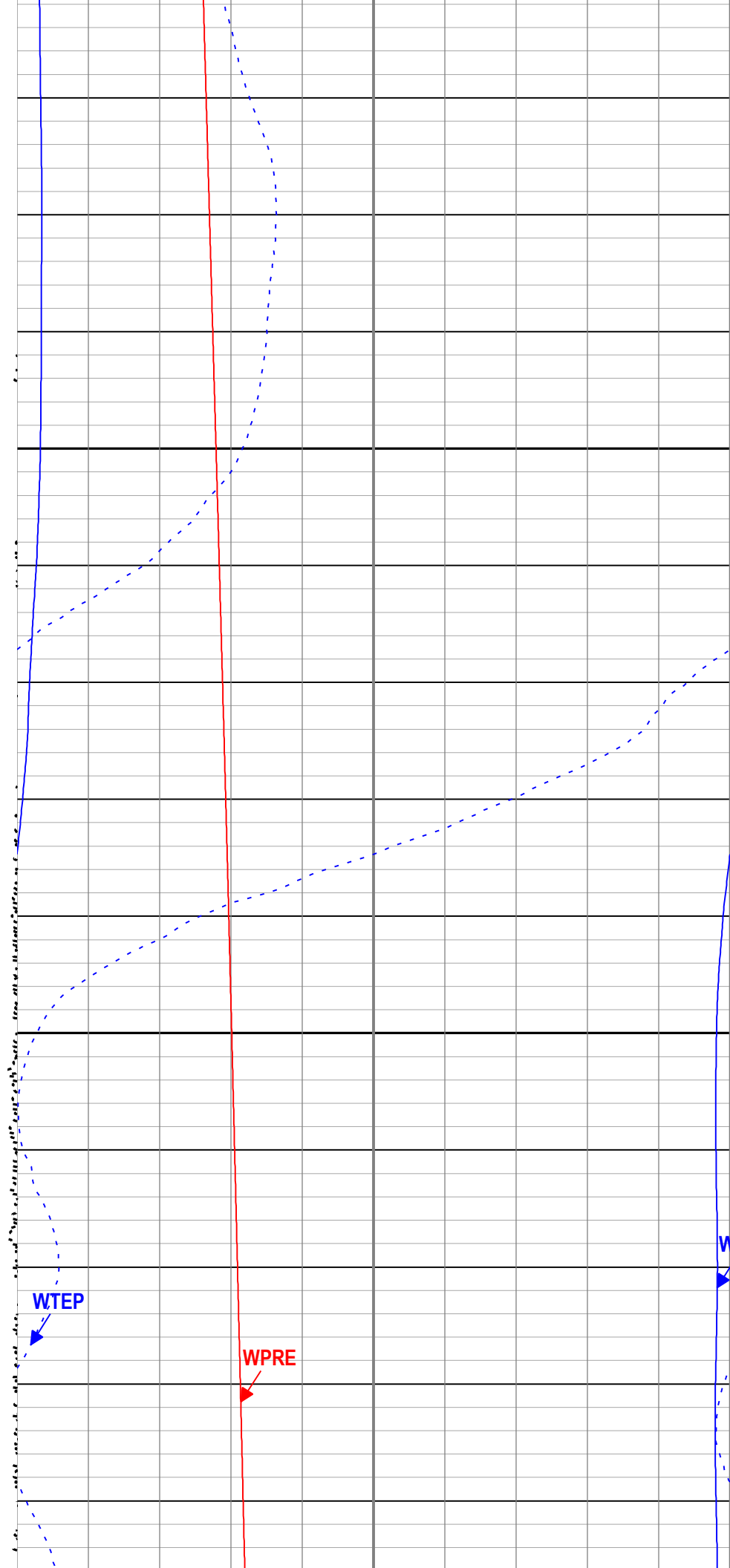
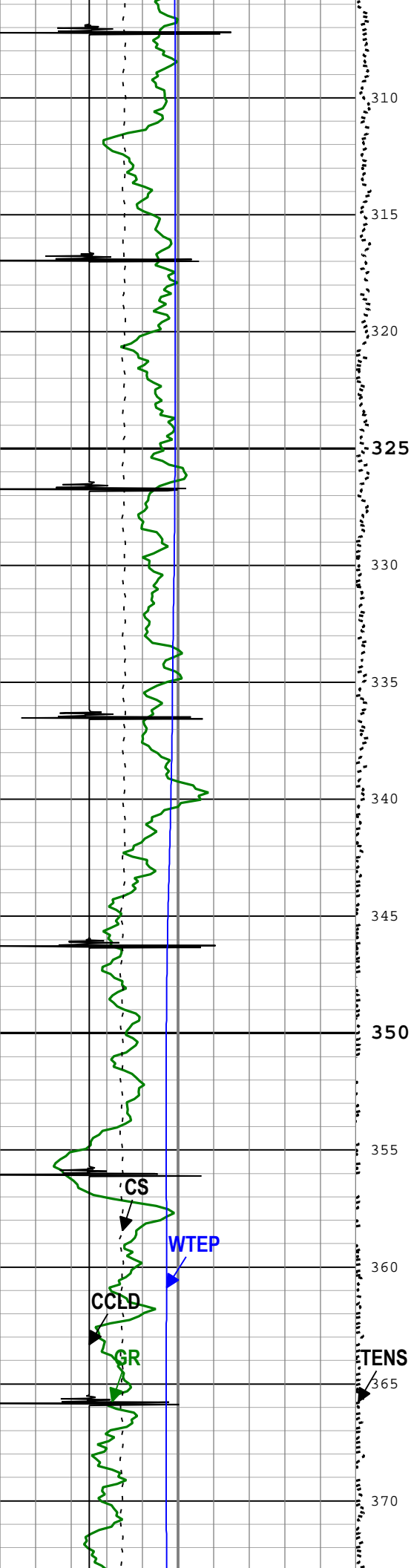
TIME_1900 - Time Marked every 60.00 (s)

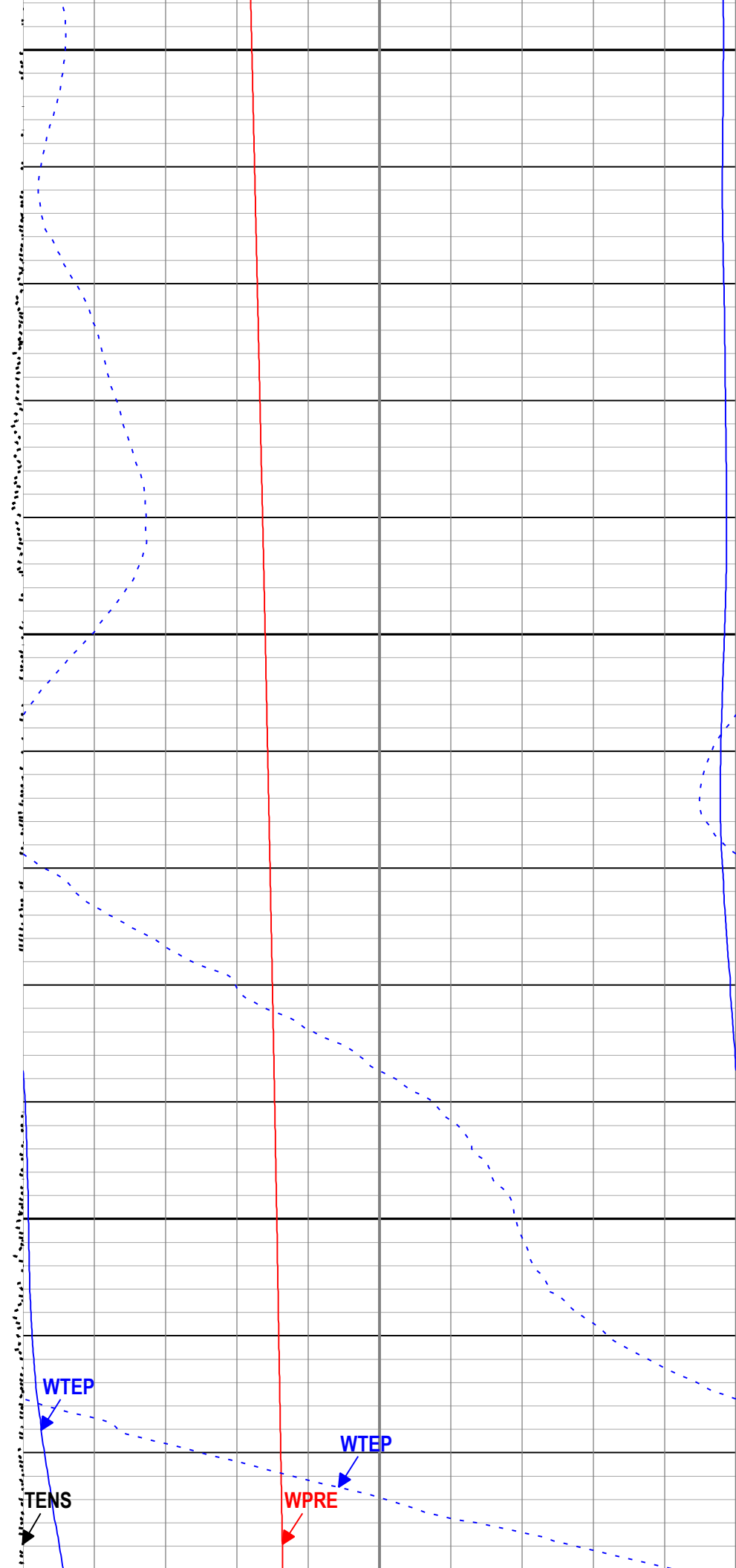
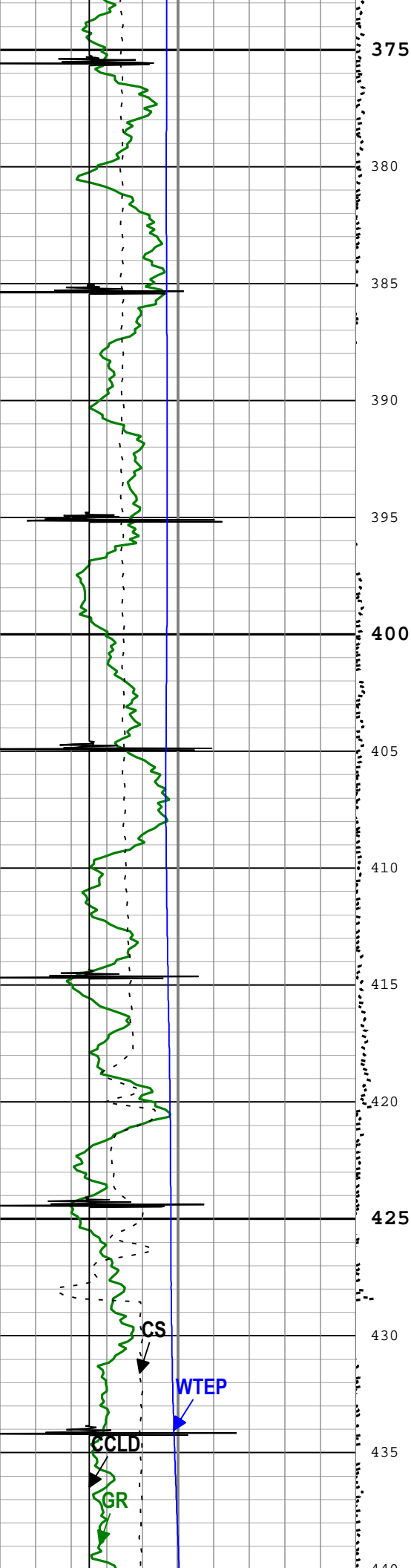


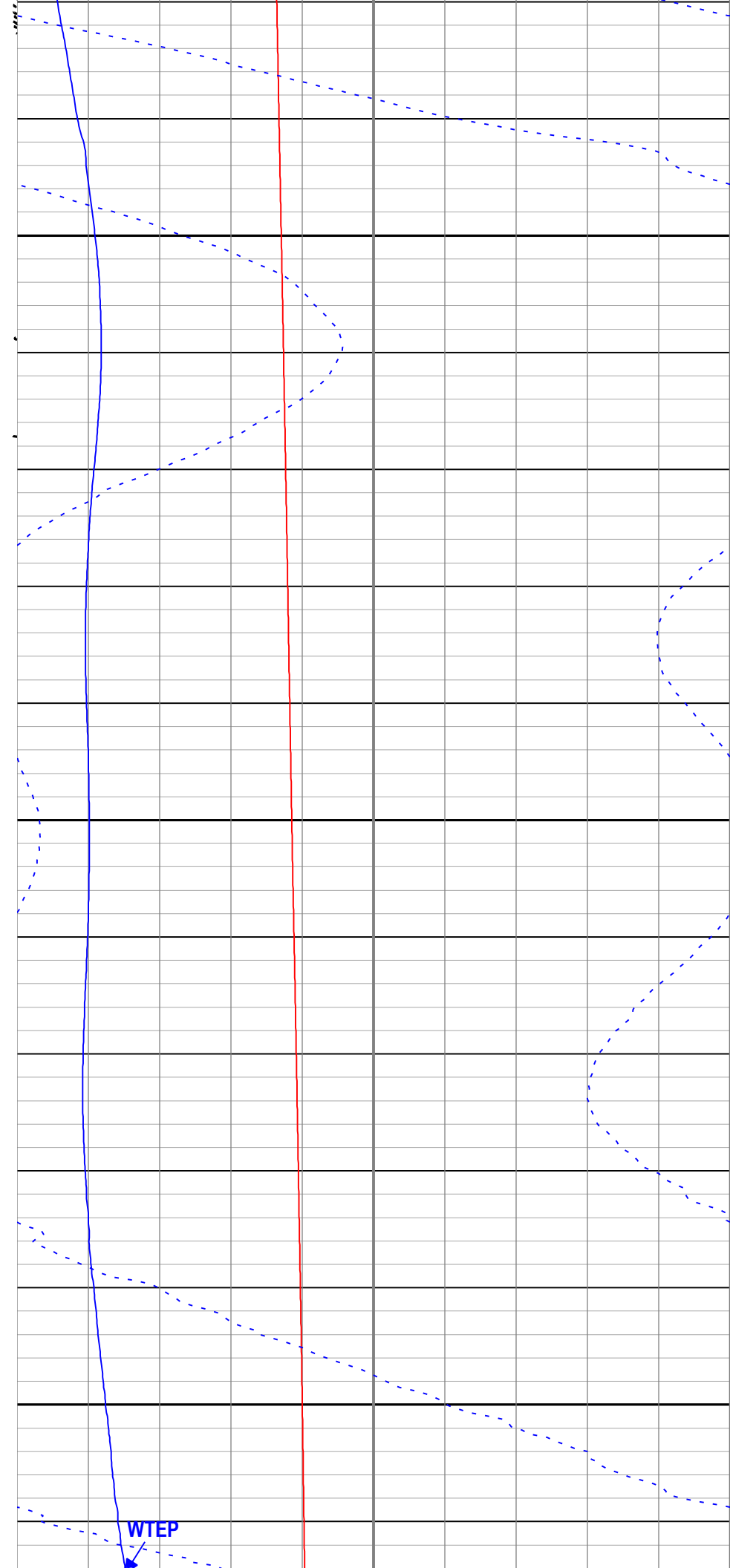
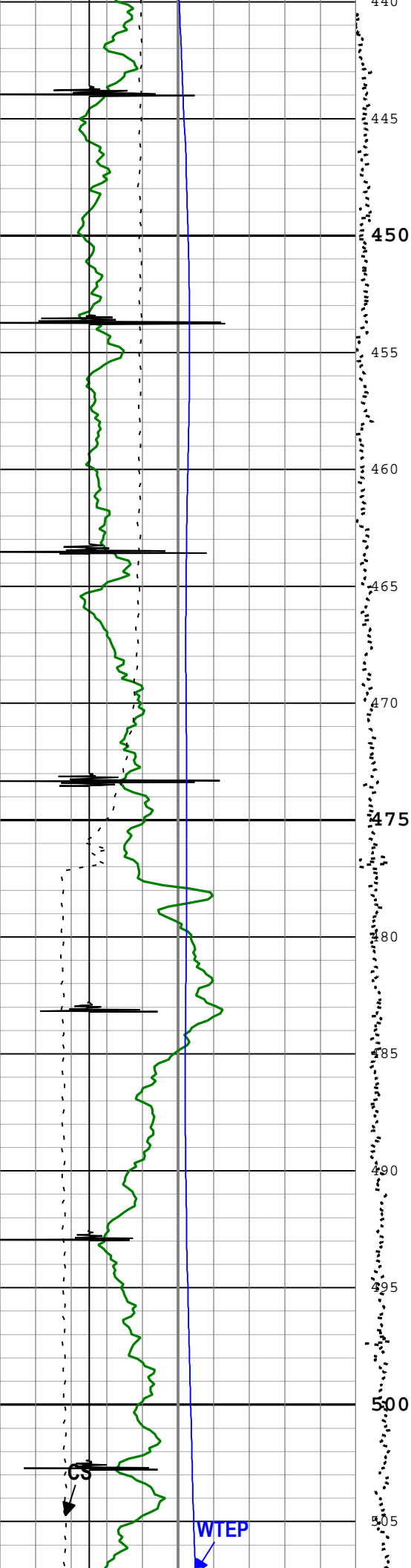


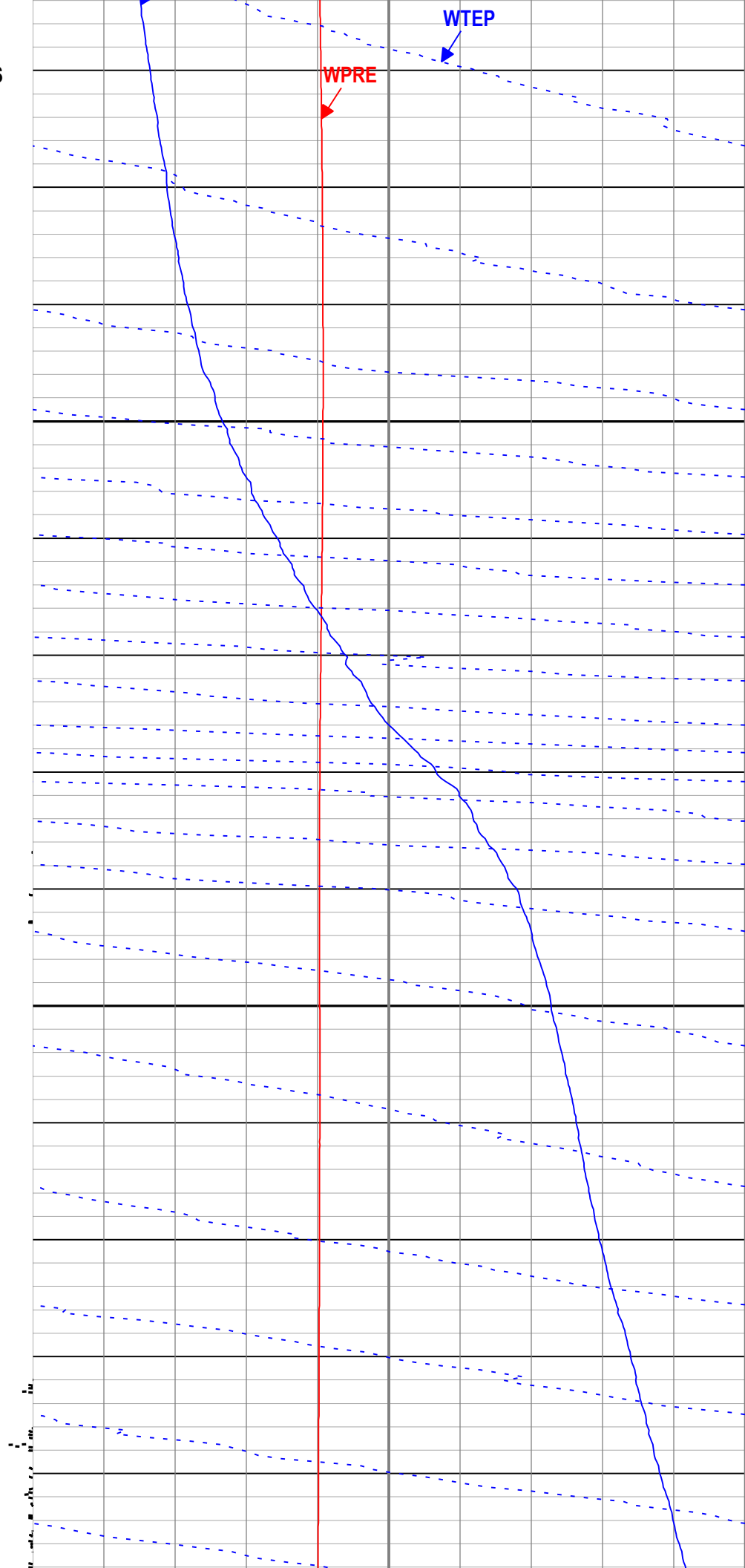
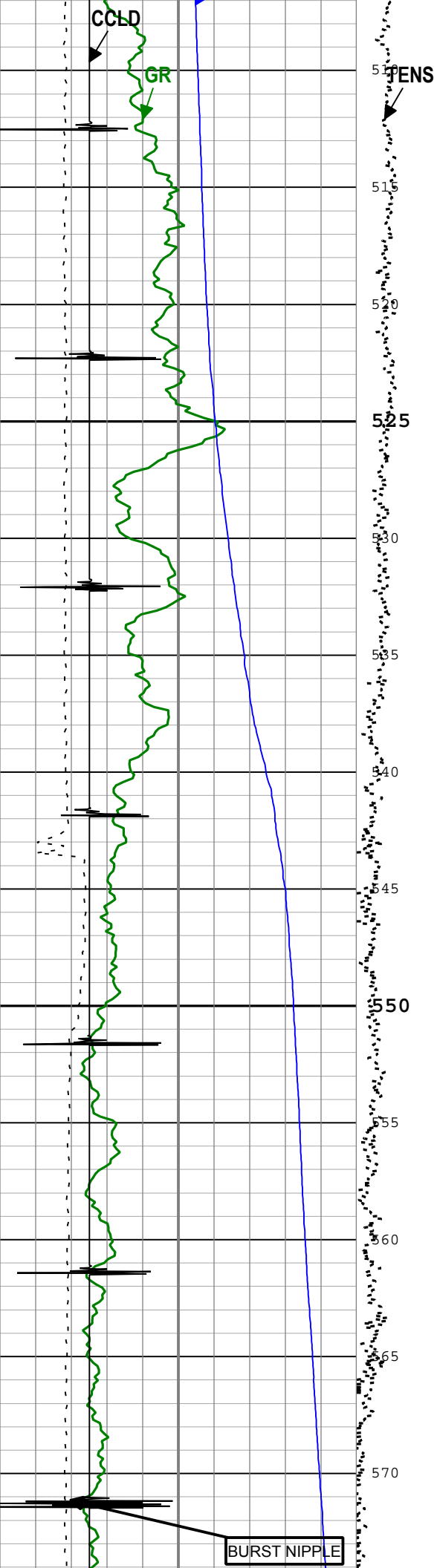


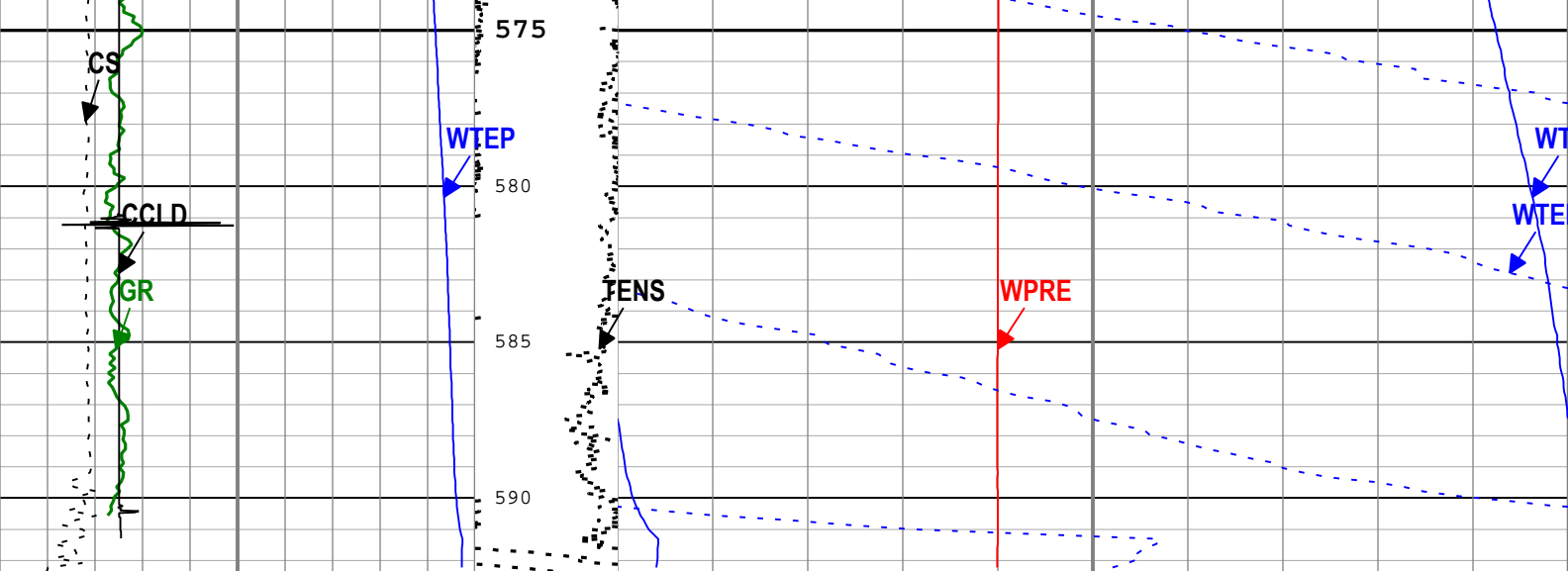












Gamma Ray (GR) HBMS-B		
0	gAPI	100
CCL Discriminated Amplitude (CCLD) HBMS-B		
1	V	-3
Well Temperature (WTEP) HBMS-B		
0	degC	210
Cable Speed (CS)		
0	m/h	1500

Cable Tension (TENS)
1000 N

Well Pressure (WPRE) HBMS-B		
0	kPa	10000
Well Temperature (WTEP) HBMS-B		
-2	degC	2
Well Temperature (WTEP) HBMS-B		
0	degC	100

TIME_1900 - Time Marked every 60.00 (s)

Description: PSP Depth Format: Log (TEMP DOWN PASS imperial) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 07-

Channel Processing Parameters

Tool Control Parameters

1: Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	5486.4	m/h
PCCG	PSP Downhole CCL Gain	HBMS-B	12 dB	

Company:	IMPERIAL OIL RESOURCES	Schlumberger
Well:	IMP 07 T15-10 COLD LK 2-29-64-3	
Field:	ETHEL LAKE	
Province:	ALBERTA	
State:	**MD**	

PRODUCTION ANALYSIS
TEMP. / PRESSURE