

Company: IMPERIAL OIL RESOURCES

Well: IMP 07 T15-20 COLD LK 1-29-64-3

Field: ETHEL LAKE

Province: ALBERTA State: **MD**

Province: ALBERTA
Field: ETHEL LAKE
Location: 01-29-064-03W4M
Well: IMP 07 T15-20 COLD LK 1-29-64-3
Company: IMPERIAL OIL RESOURCES

PRODUCTION ANALYSIS
TEMP/PRESSURE

Location:		01-29-064-03W4M 105012906403W400	Elev.: K.B. 606.75 m G.L. 601.70 m D.F. 606.45 m
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:
0395570	01-29	064	03W4M

Logging Date 05-Dec-2016

Run Number 1

Depth Driller 626.00 m

Schlumberger Depth 561.24 m

Bottom Log Interval 561.24 m

Top Log Interval 0.00 m

Casing Fluid Type Air

Salinity

Density 11.98 kg/m3

Fluid Level

BIT/CASING/TUBING STRING

Bit Size 450.00 mm

From 0.00 m

To 561.24 m

Casing/Tubing Size 73 mm

Weight 9.67 kg/m

Grade

From 4.07 m

To 540.41 m

Max Recorded Temperatures 192.89 degC

Logger on Bottom Time

Unit Number Location: D218 LLOYDMINSTER

Recorded By Y. MUNOZ/LAING

Witnessed By GREG GELETTY

Disclaimer

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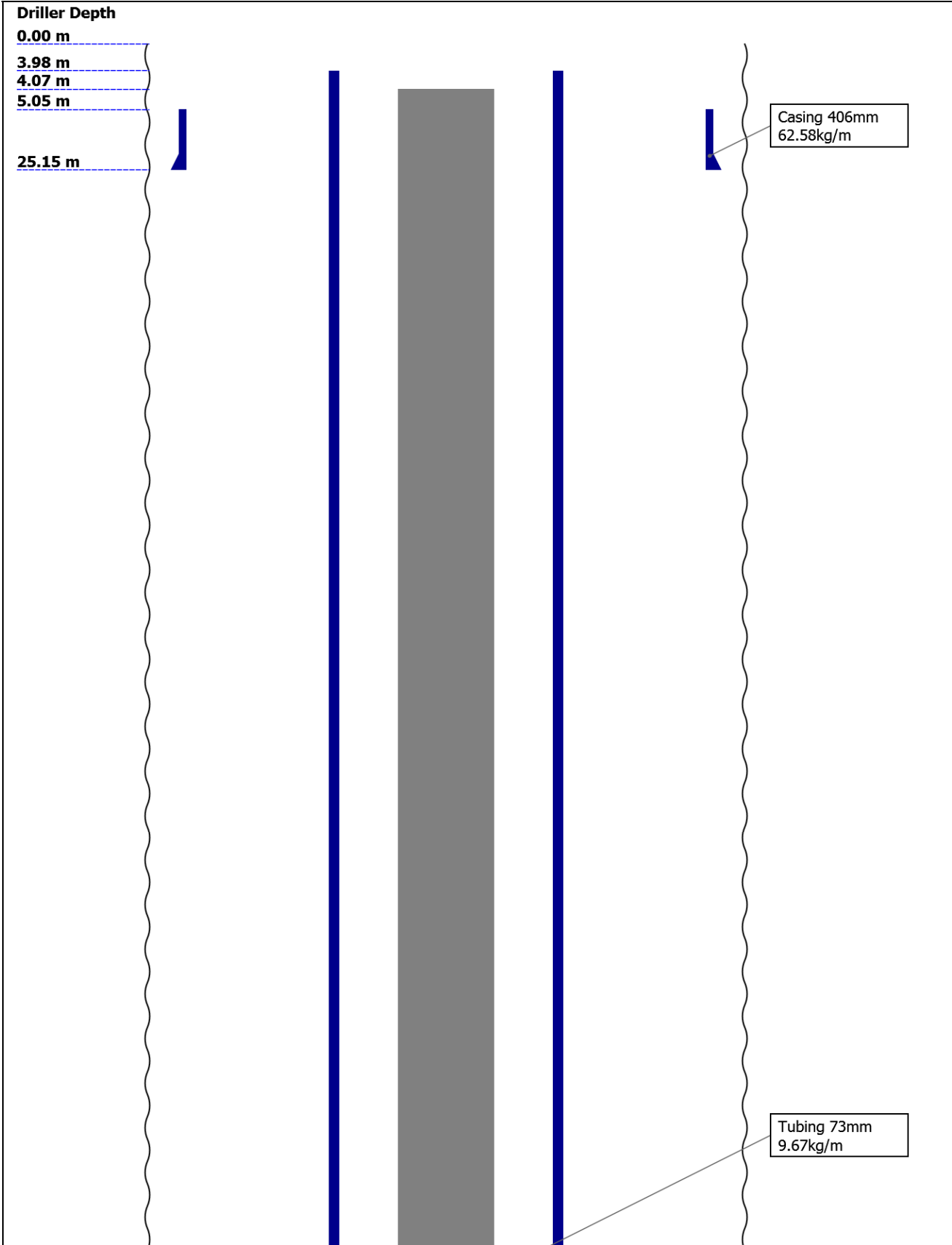
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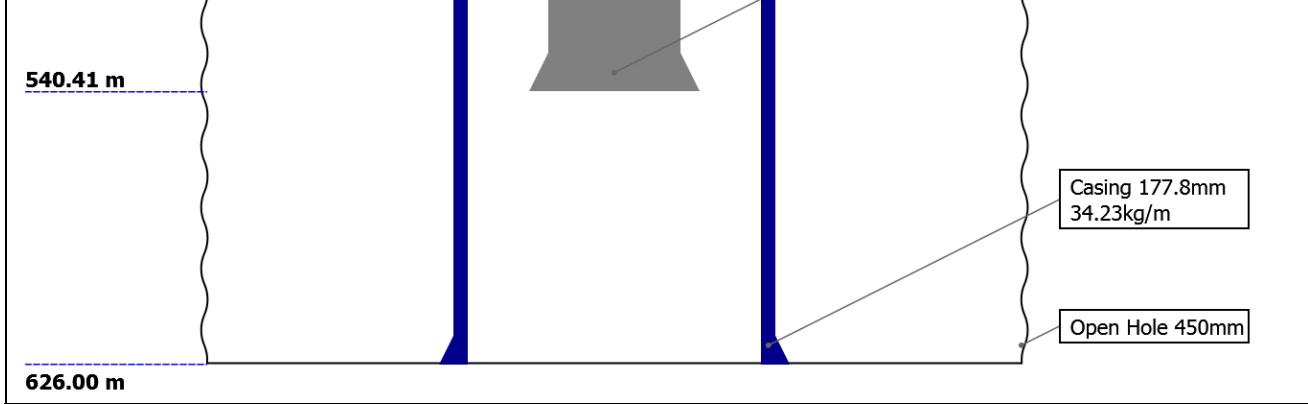
9.4 Log (TEMP DOWN PASS imperial)

9.5 Parameter Listing

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Well Sketch





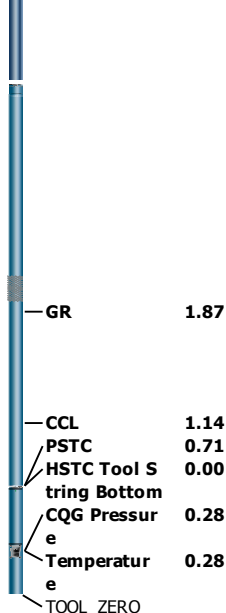
Borehole Size/Casing/Tubing Record

Bit						
Bit Size (mm)	450					
Top Driller (m)	0					
Top Logger (m)	0					
Bottom Driller (m)	626					
Bottom Logger (m)	561.24					
Casing						
Size (mm)	406	177.8				
Weight (kg/m)	62.58	34.23				
Inner Diameter (mm)	393.574	161.797				
Grade	N/A	N/A				
Top Driller (m)	5.05	3.98				
Top Logger (m)	5.05	3.98				
Bottom Driller (m)	25.15	626				
Bottom Logger (m)	25.15	626				
Tubing						
Size (mm)	73					
Weight (kg/m)	9.67					
Inner Diameter (mm)	61.59					
Grade						
Top Driller (m)	4.07					
Top Logger (m)	4.07					
Bottom Driller (m)	540.41					
Bottom Logger (m)	540.41					

Remarks and Equipment Summary

1: Toolstring				1: Remarks
Equip name	Length	MP name	Offset	LOGGED DOWN AT 10 m/min. BOTTOM HOLE TEMPERATURE 192.89 DEGREES. TEMP TOO HOT FOR WIRELINE, HAD TO IMMEDIATELY BEGIN LOGGING UP ONCE TRACTOR HAD MADE BOTTOM. LOGGER HAD TROUBLE MAINTAINING SPEED. WINCH STOPPED UNPROMPTED. NO FLUID TOP DETECTED.
MH-22	5.79			
AH-38	5.31			
EQF-43	5.22			

HUDH-A:2838
 PSC-A:2838
 HSTC-A:2838
 HBMC-A:2838
 HTTPS-A:2838



Lengths are in m

Maximum Outer Diameter = 52.451 mm

Line: Sensor Location, Value: Gating Offset

All measurements are relative to TOOL ZERO

	1		
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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		

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		

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 Log In the Well	ALL SCHLUMBERGER DEPTH PROCEDURES FOLLOWED
Reference Log Name	TUBING TALLY BURST NIPPLE TOP @ 540.41 mKB	IDW USED AS PRIMARY DEPTH REFERENCE
Reference Log Run Number		Z-CHART USED AS SECONDARY DEPTH REFERENCE

DOWN LOG

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	3.54 m	411.67 m	05-Dec-2016 11:23:10 AM	05-Dec-2016 12:16:17 PM	ON	-0.30 m	No

All depths are referenced to toolstring zero

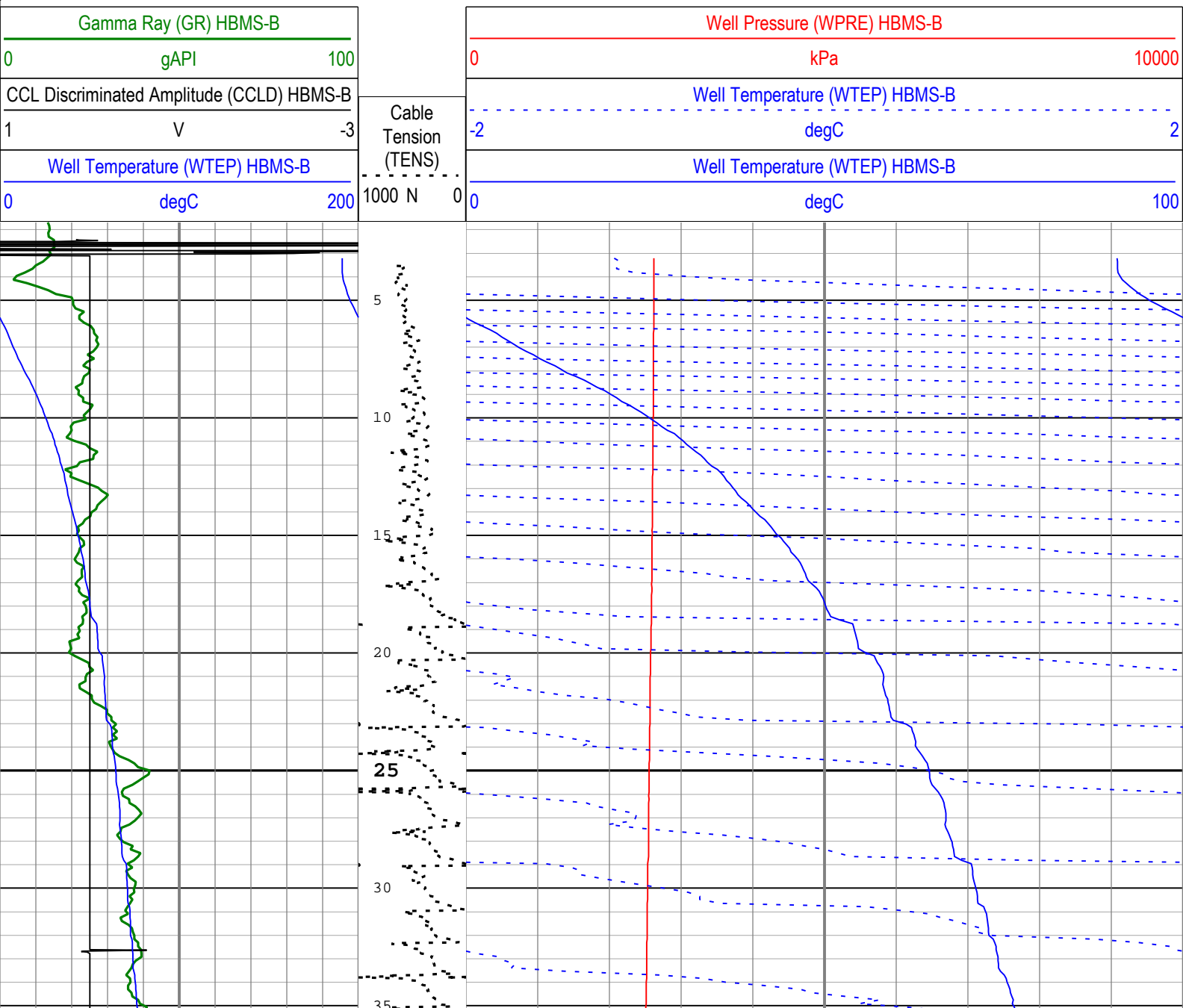
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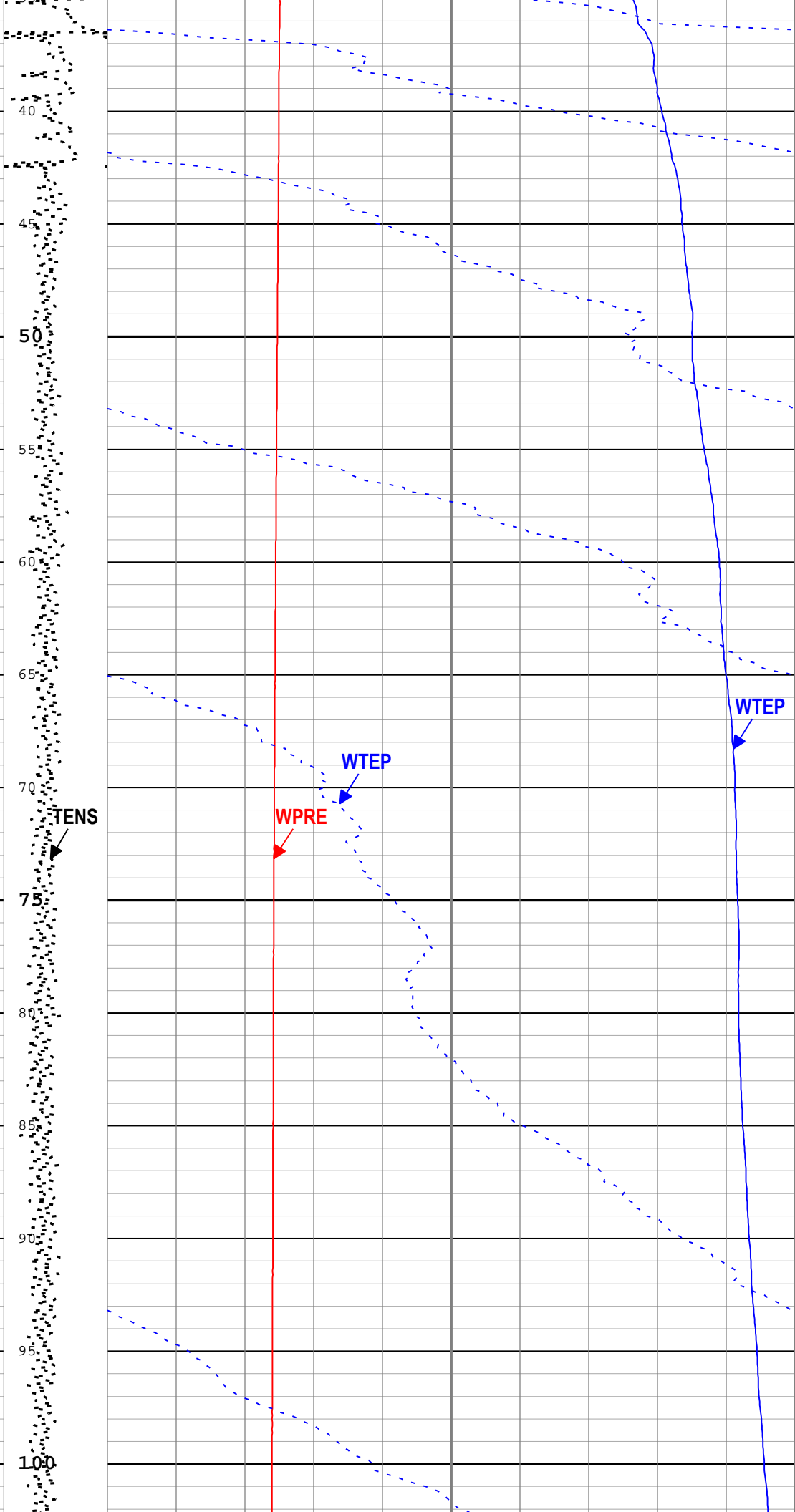
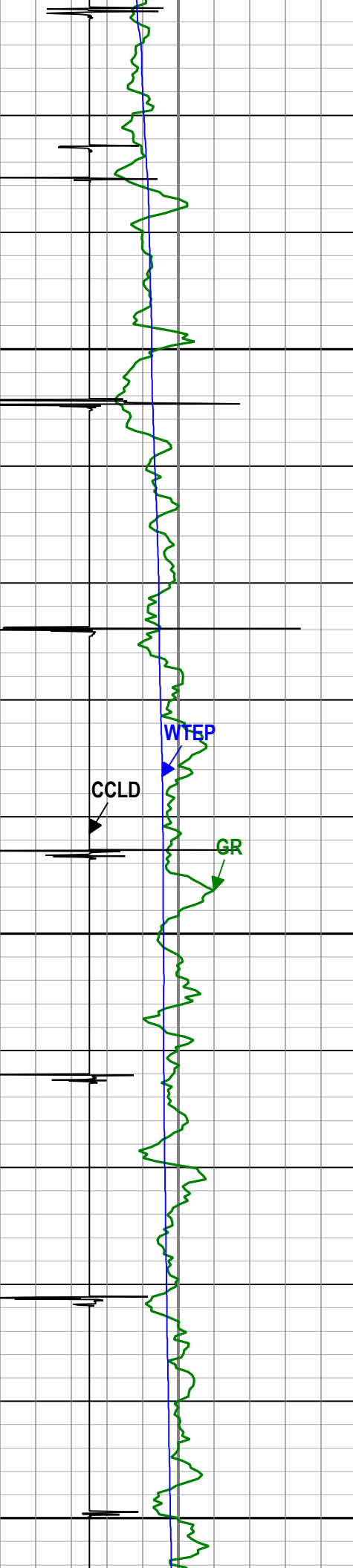
Company:IMPERIAL OIL RESOURCES

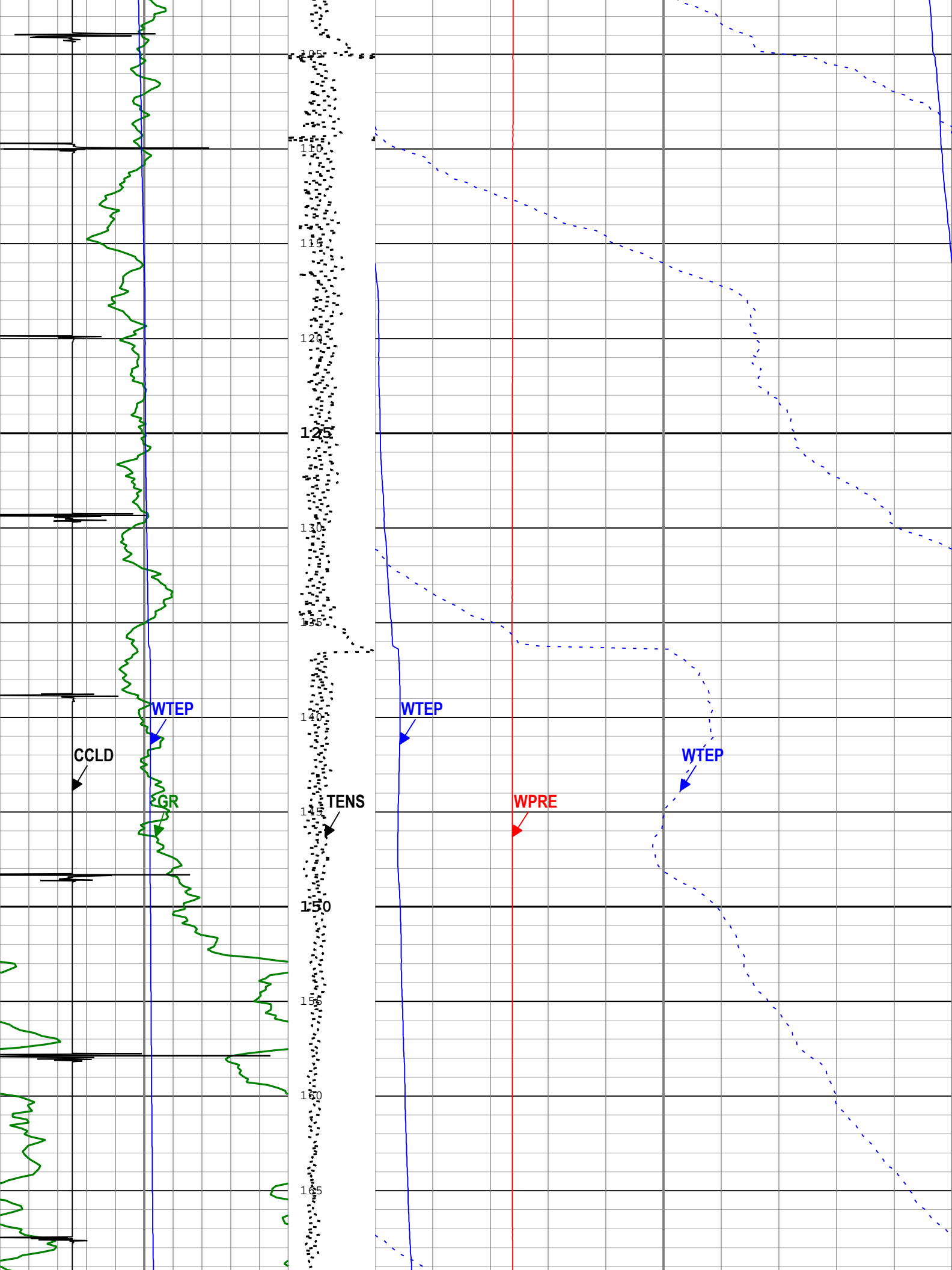
Well:IMP 07 T15-20 COLD LK 1-29-64-3

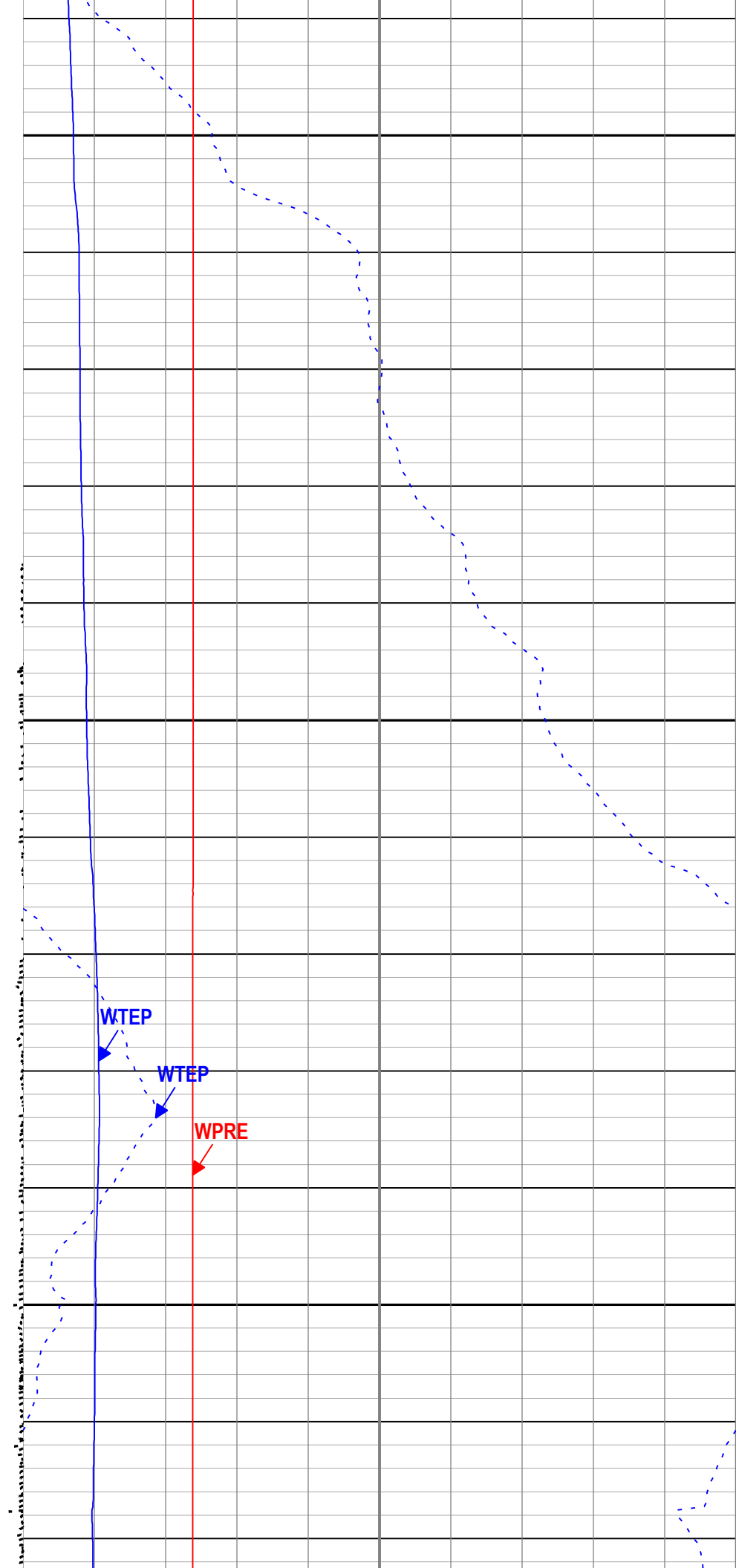
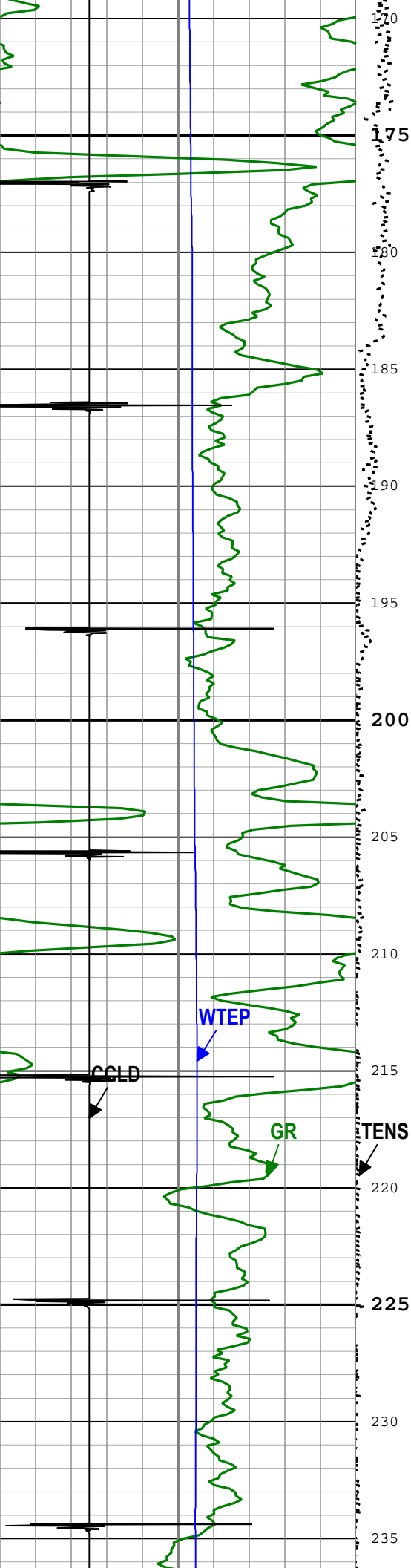
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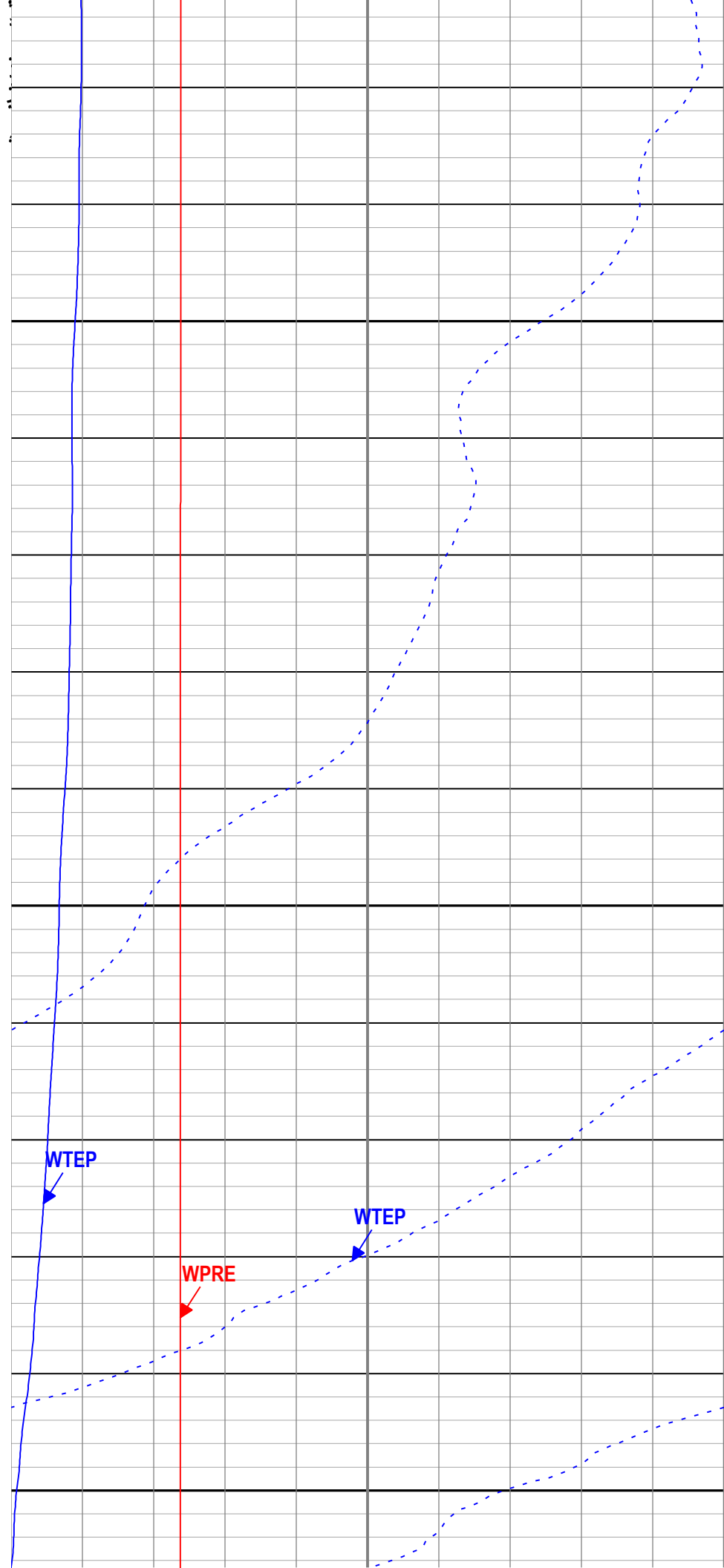
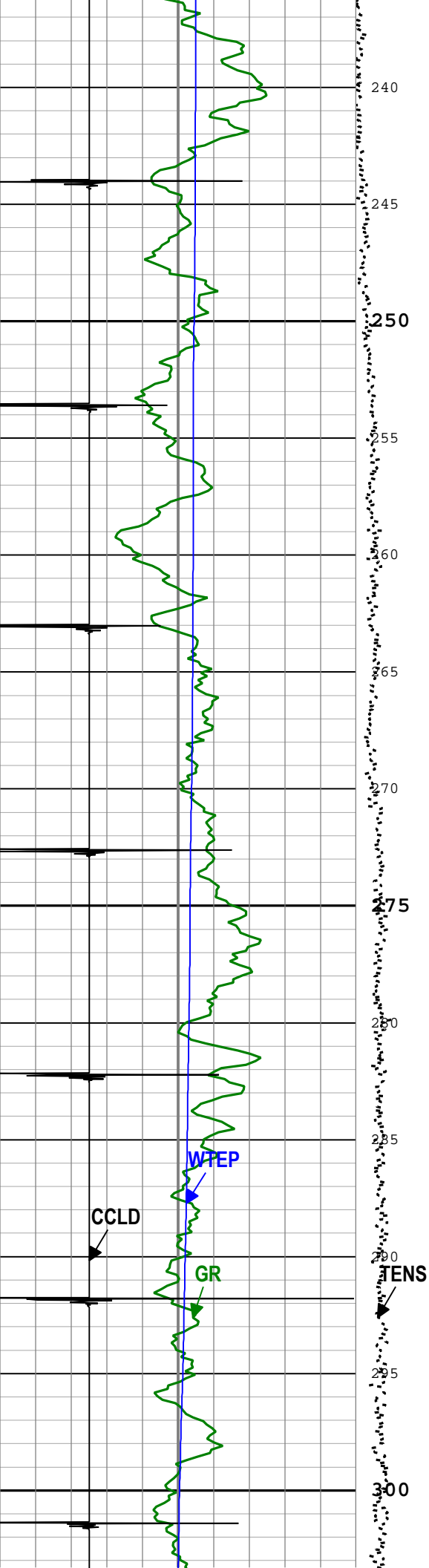
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TIME_1900 - Time Marked every 60.00 (s)

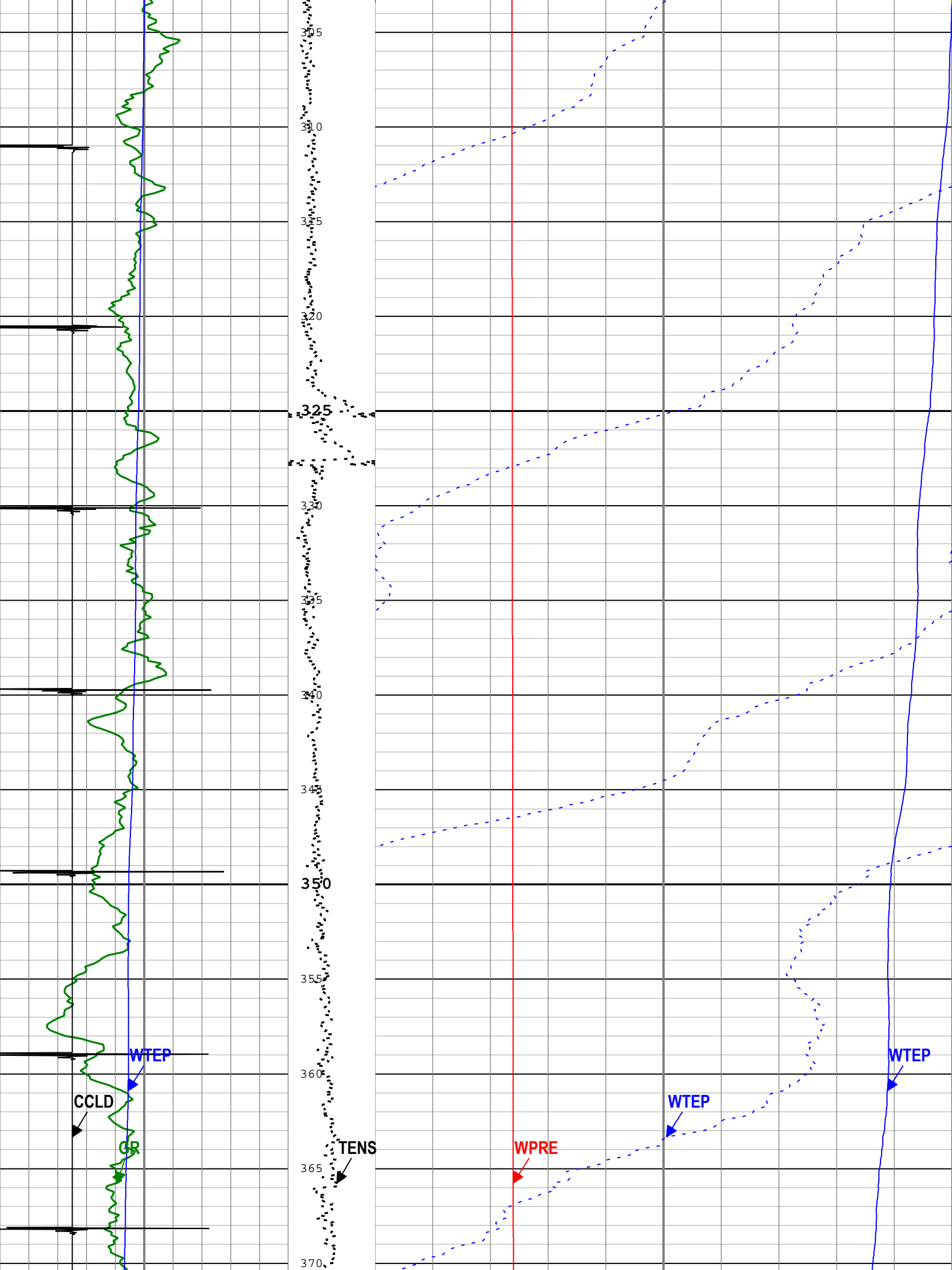


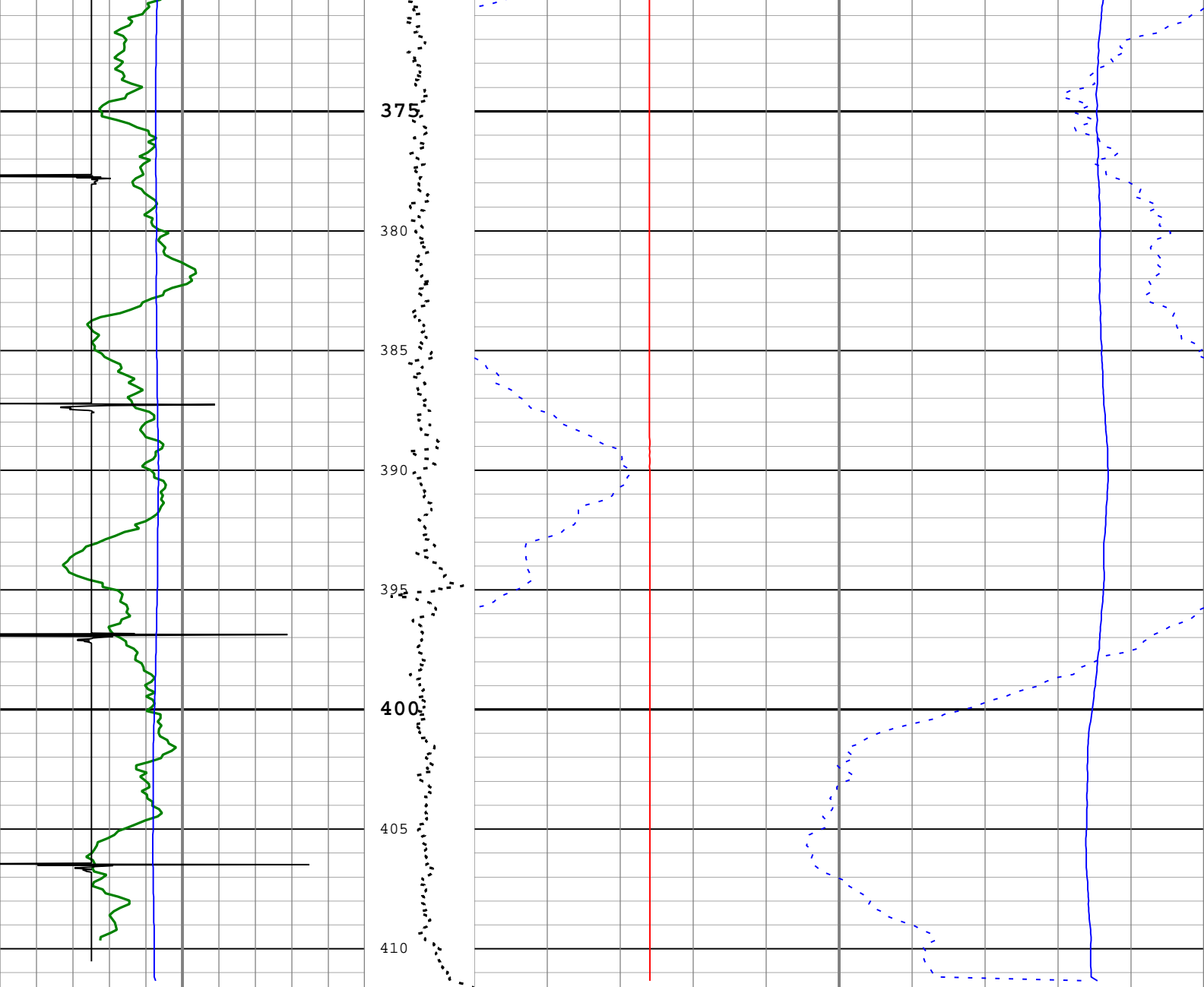












Gamma Ray (GR) HBMS-B			Well Pressure (WPRE) HBMS-B		
0	gAPI	100	0	kPa	10000
CCL Discriminated Amplitude (CCLD) HBMS-B			Well Temperature (WTEP) HBMS-B		
1	V	-3	-2	degC	2
Well Temperature (WTEP) HBMS-B			Well Temperature (WTEP) HBMS-B		
0	degC	200	0	degC	100

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: 05-

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	Time Zoned	

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (m)	Stop Depth (m)
PCCG	36 dB	05-Dec-2016 11:23:10	05-Dec-2016 11:23:47	3.54	5.19

PCCG	12 dB	05-Dec-2016 11:23:47	05-Dec-2016 12:16:17	5.19	411.67
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All depth are at tool zero.

1

UP LOG

Software Version

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

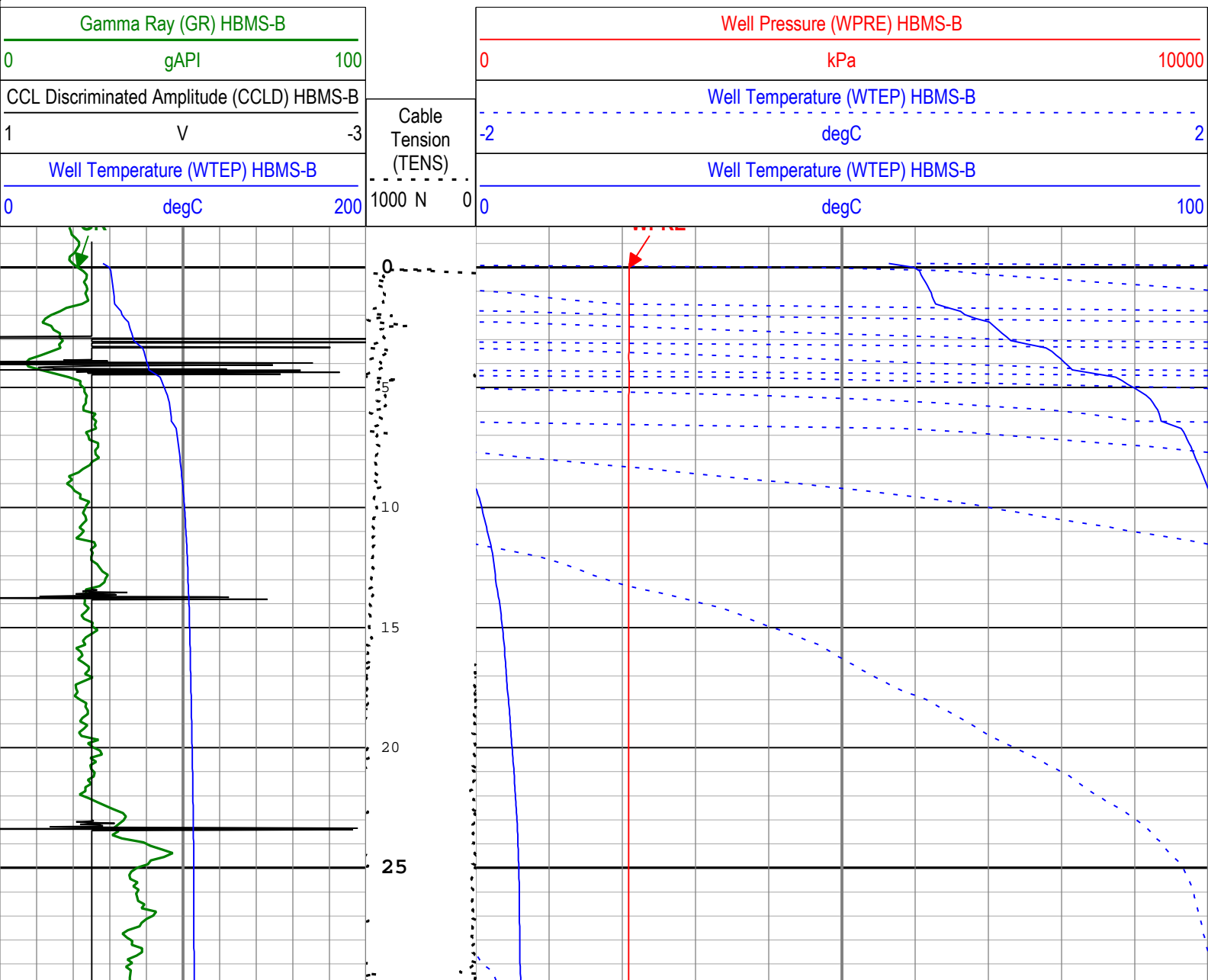
Pass Summary

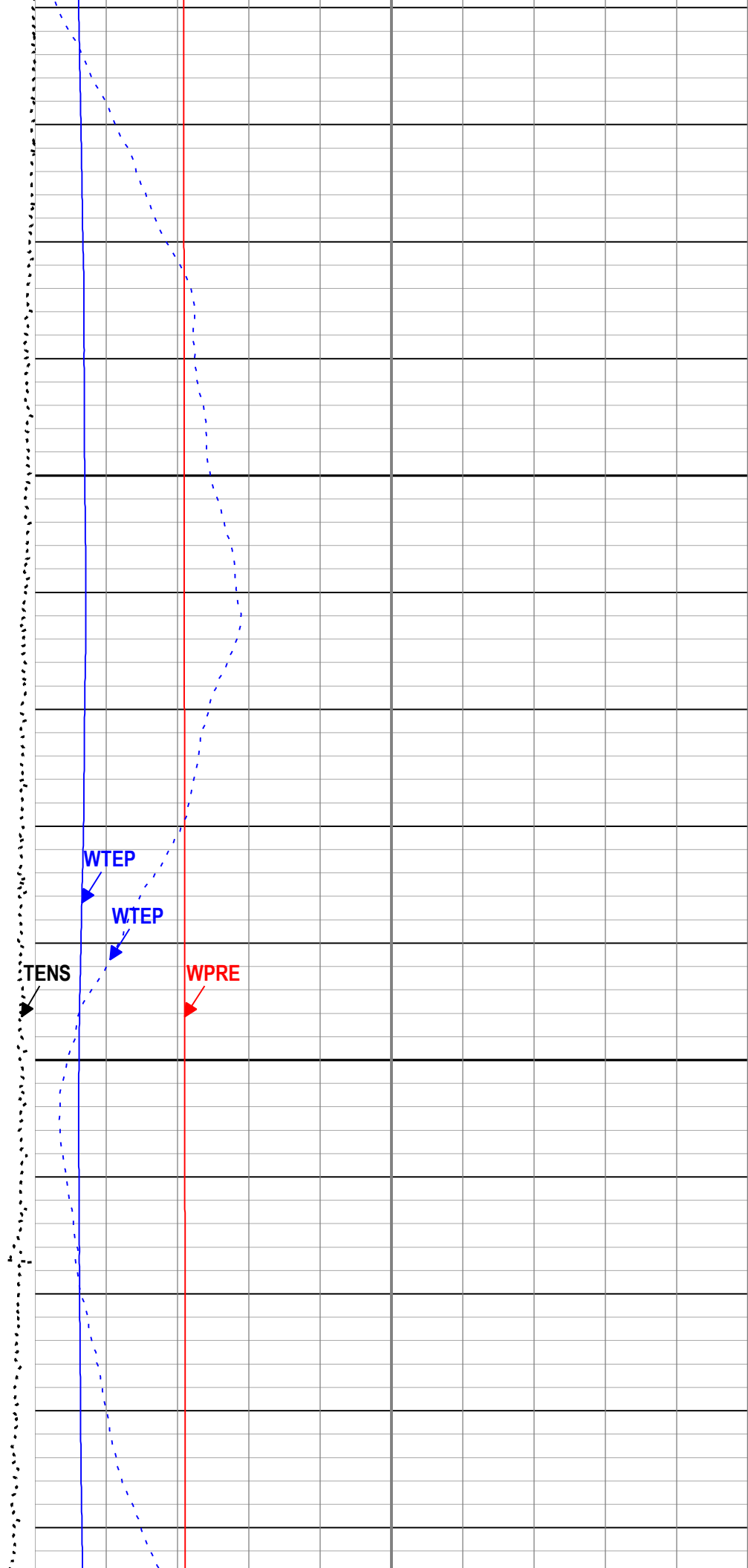
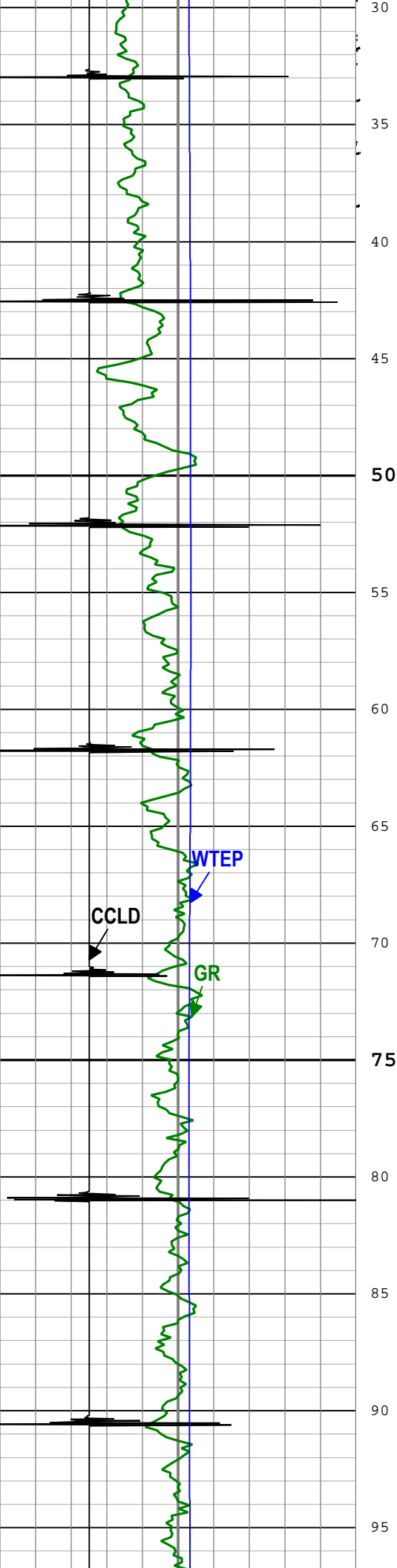
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1	Log[3]:Up	Up	0.06 m	561.40 m	05-Dec-2016 12:36:17 PM	05-Dec-2016 2:00:19 PM	ON	0.40 m	No

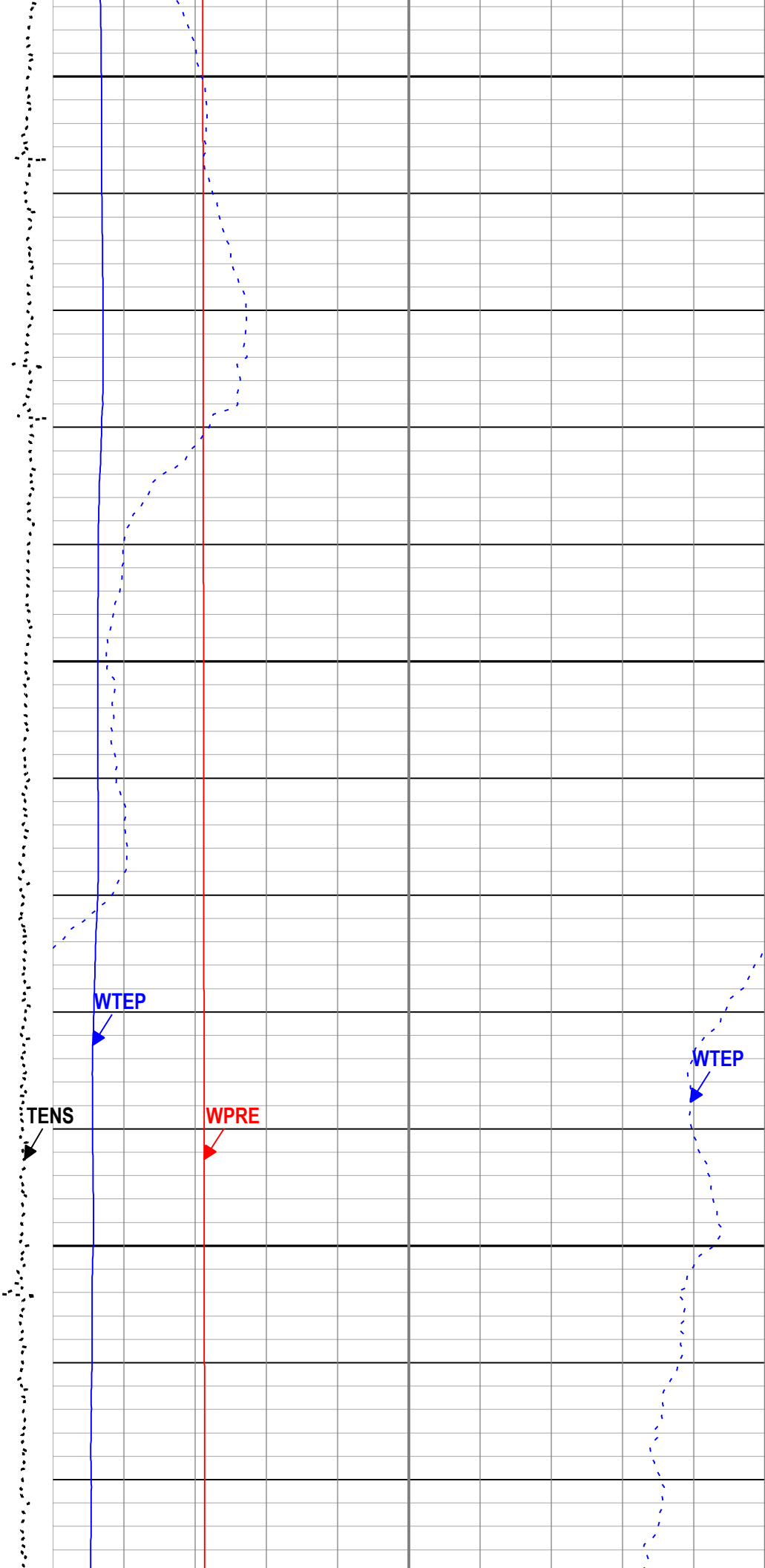
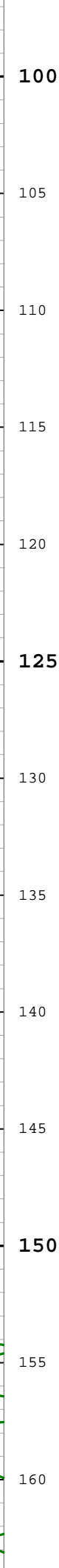
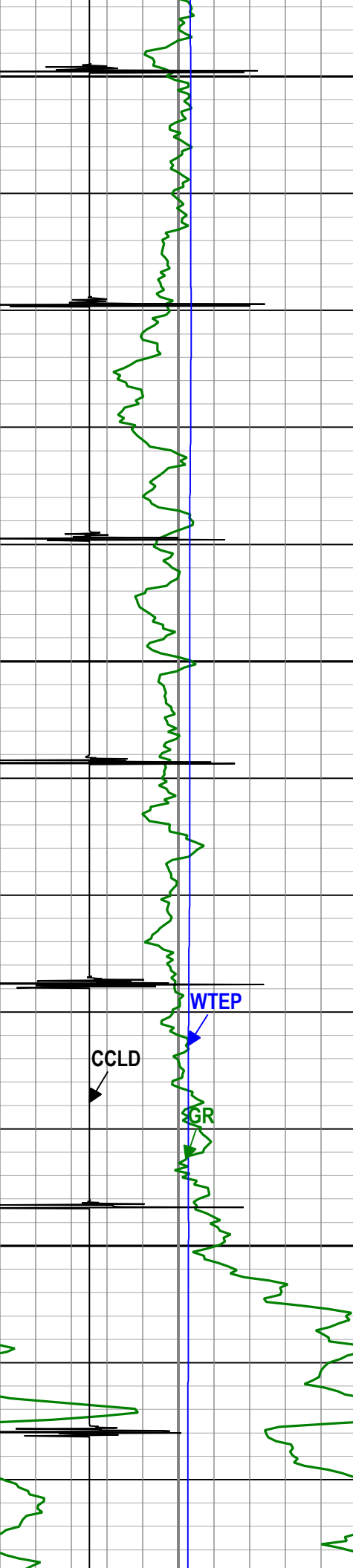
All depths are referenced to toolstring zero

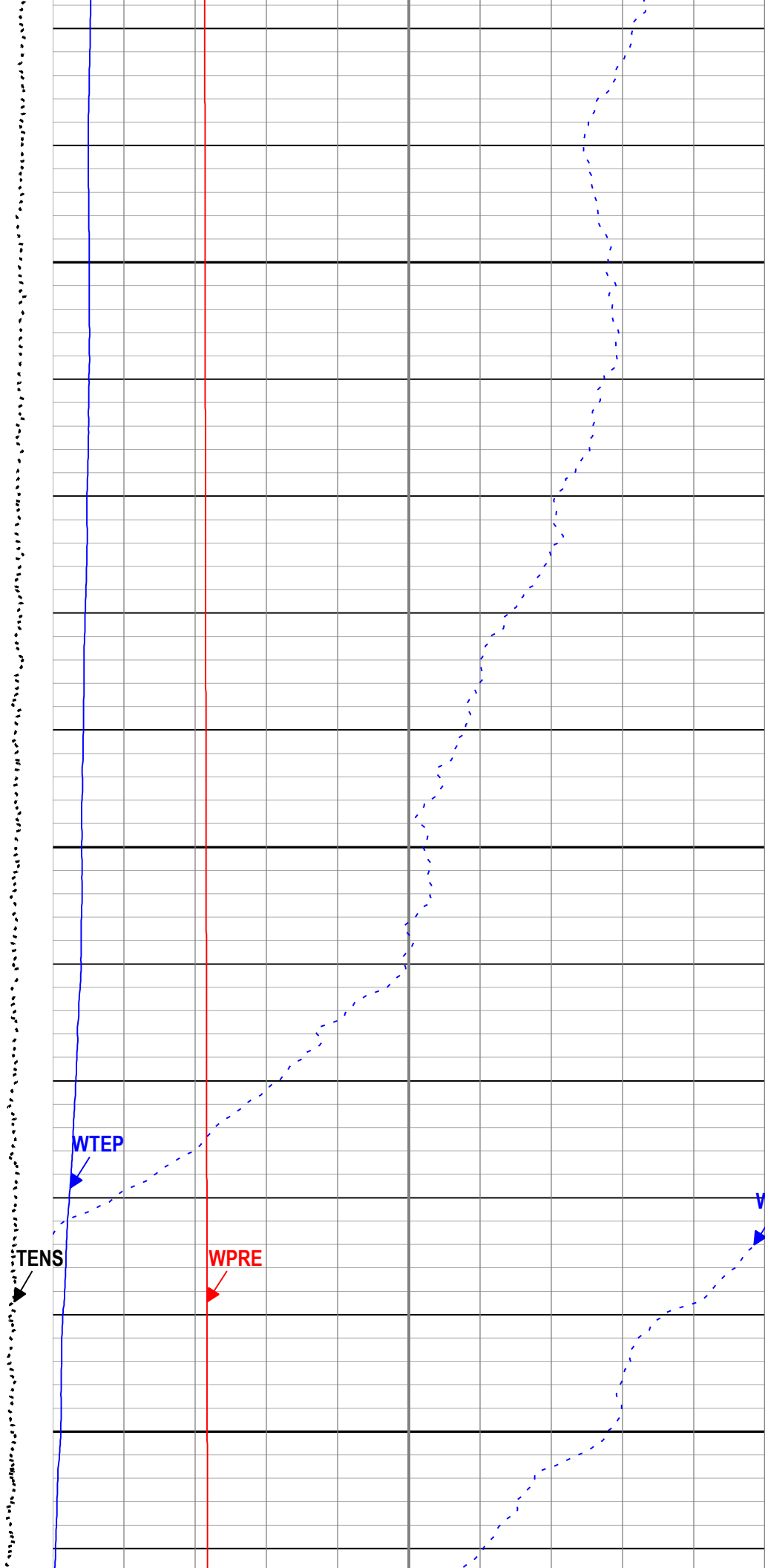
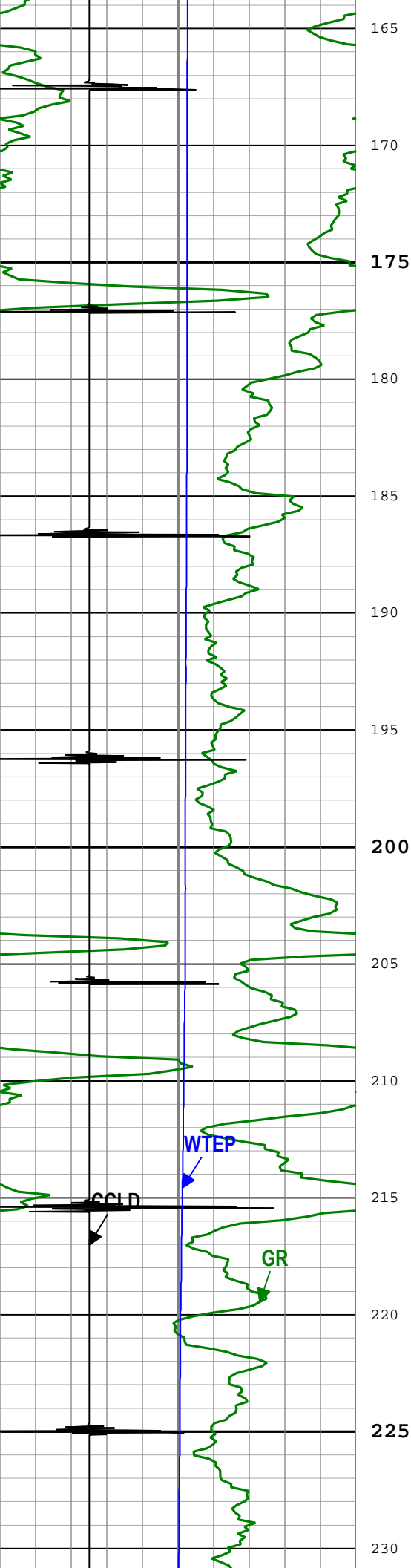
Log	Company:IMPERIAL OIL RESOURCES Well:IMP 07 T15-20 COLD LK 1-29-64-3 1: Log[3]:Up:S003
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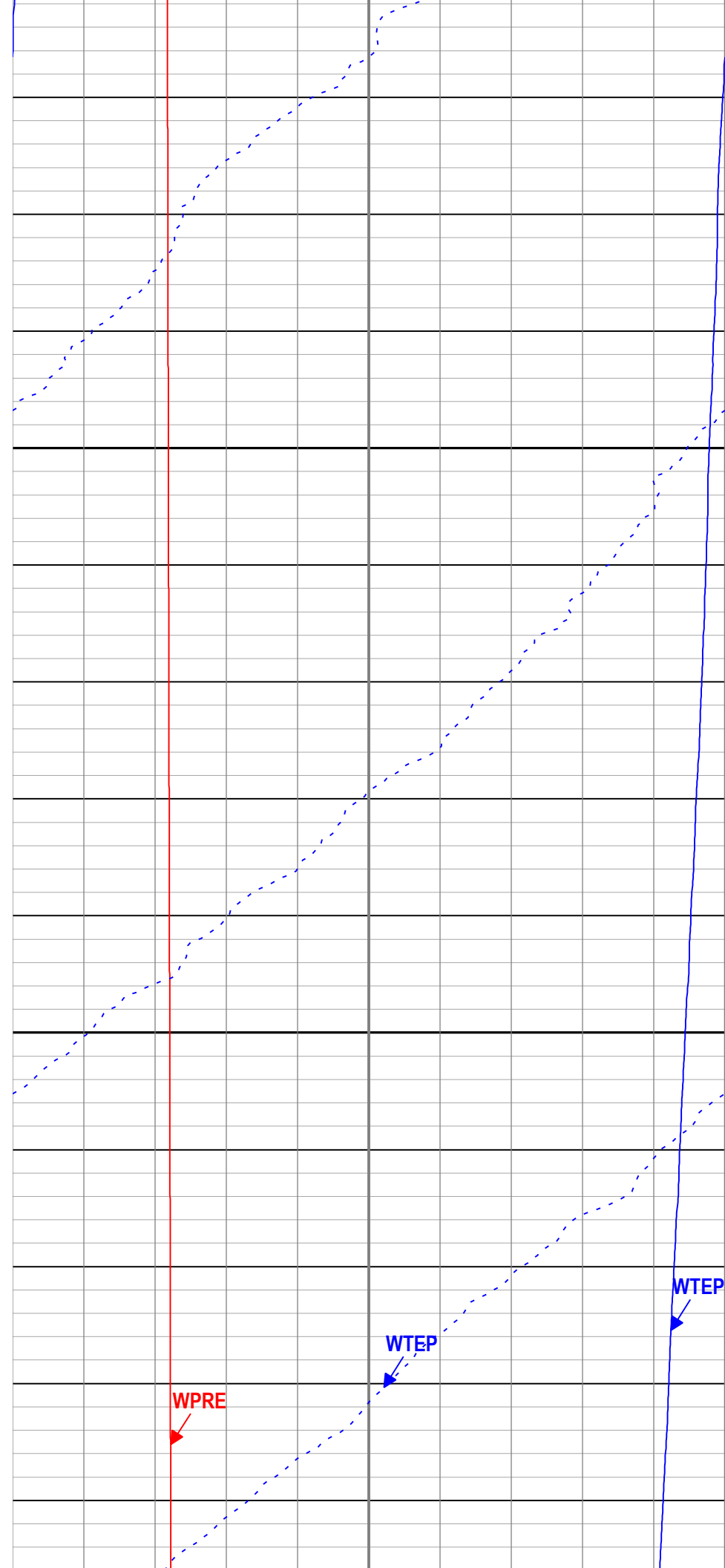
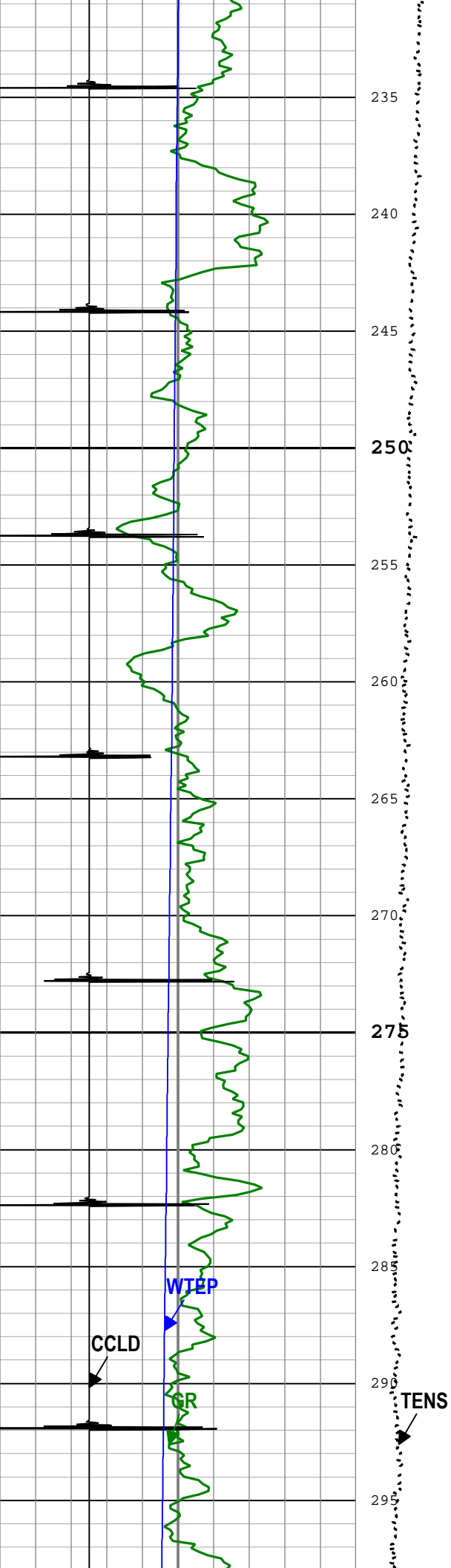
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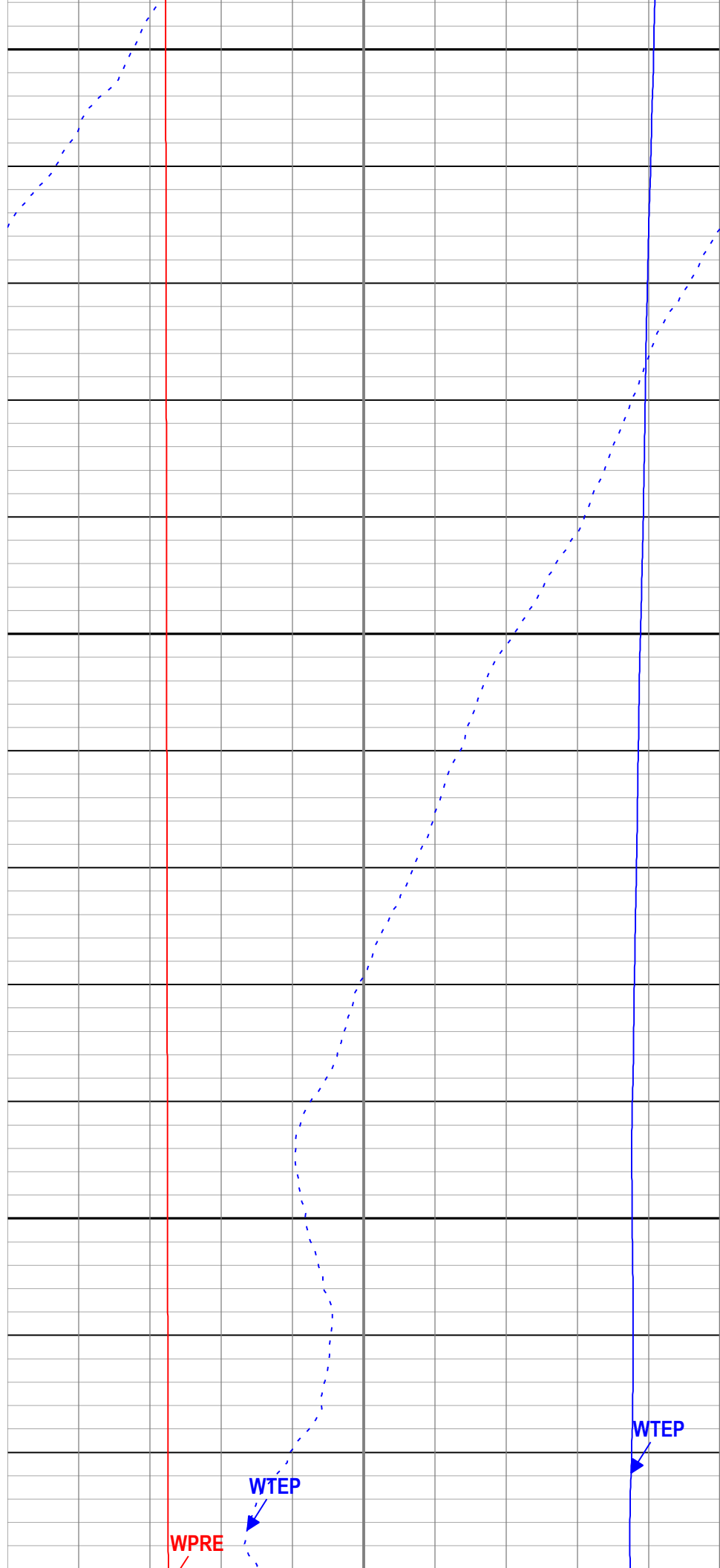
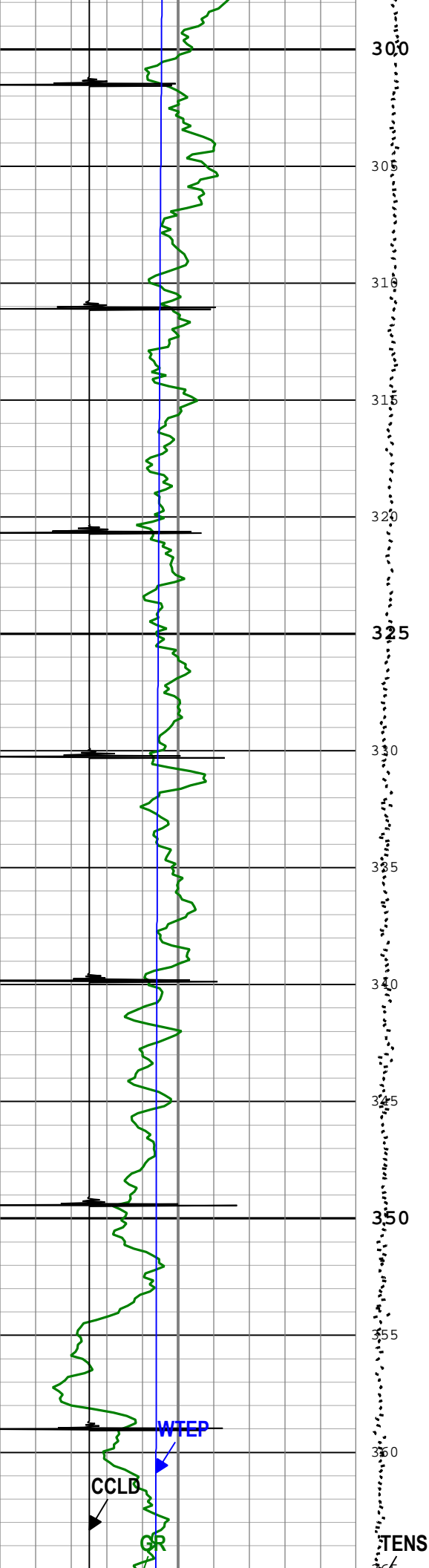


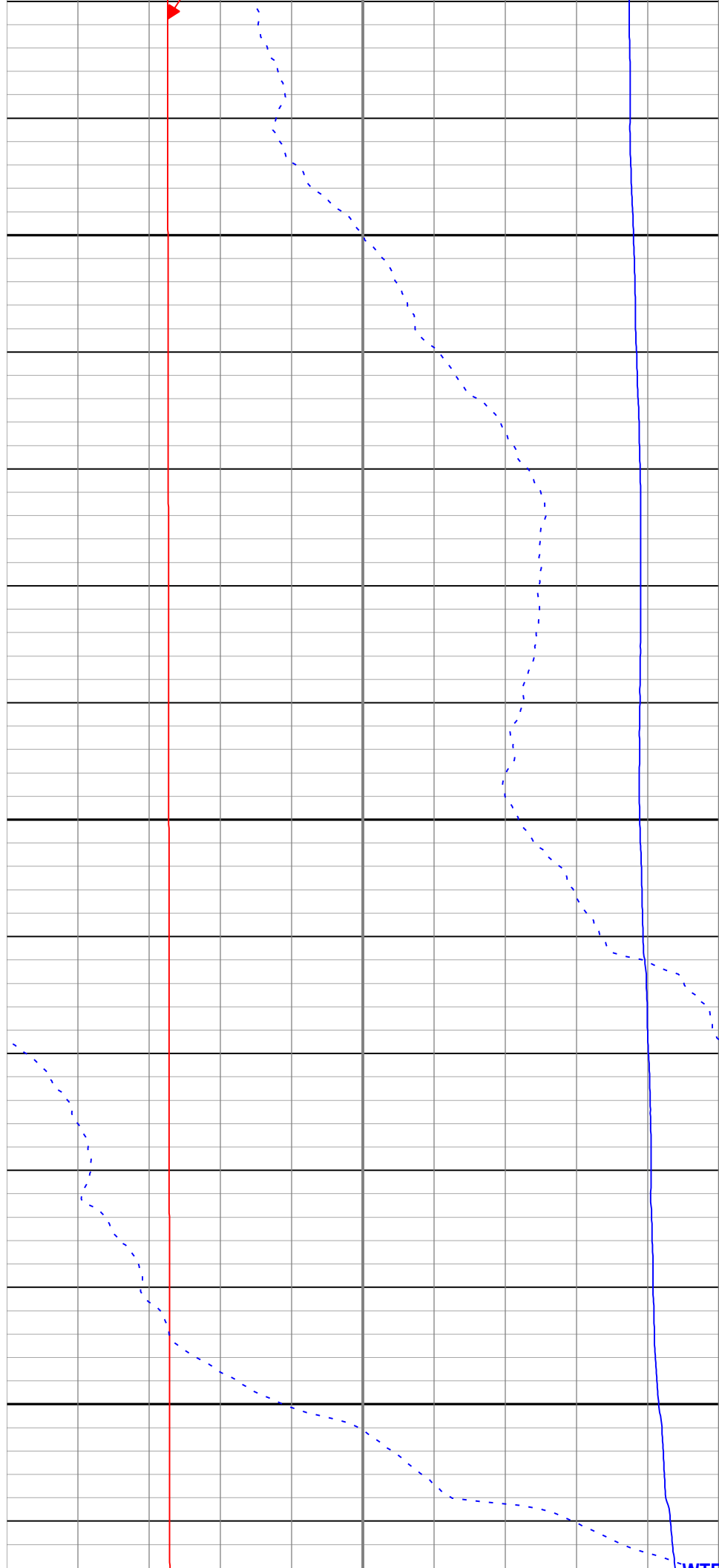
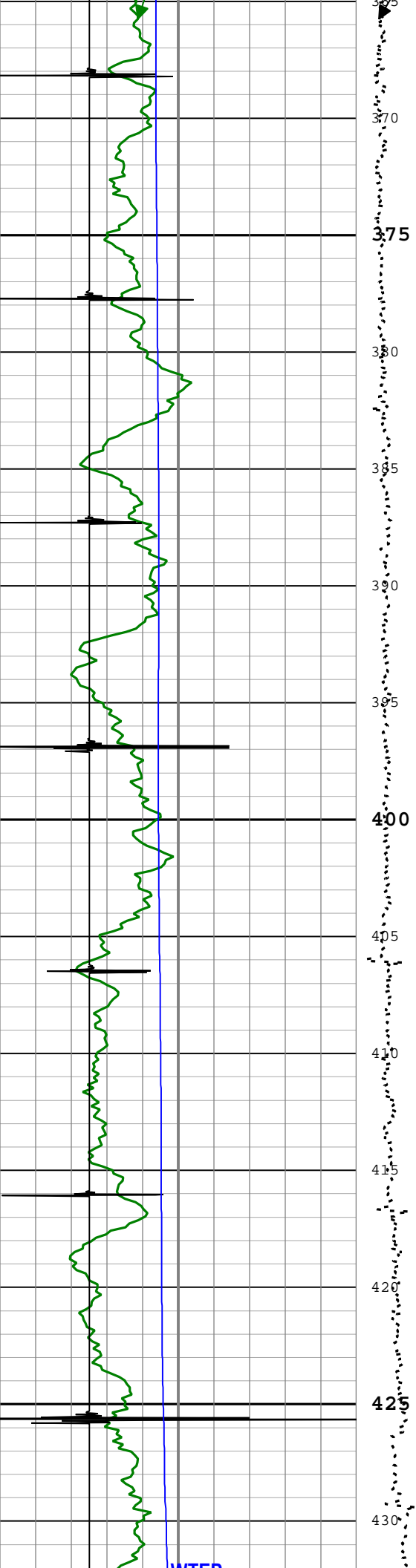


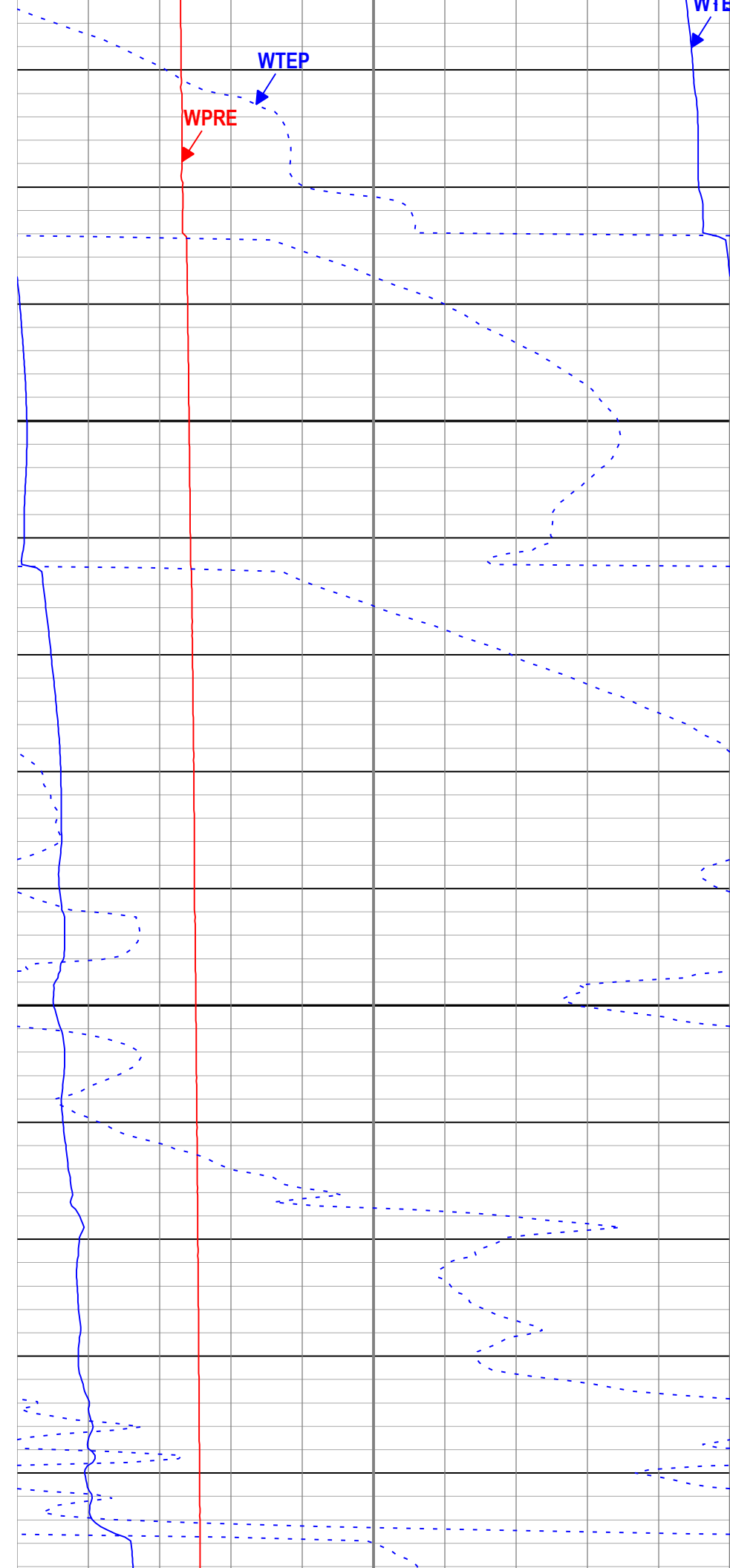
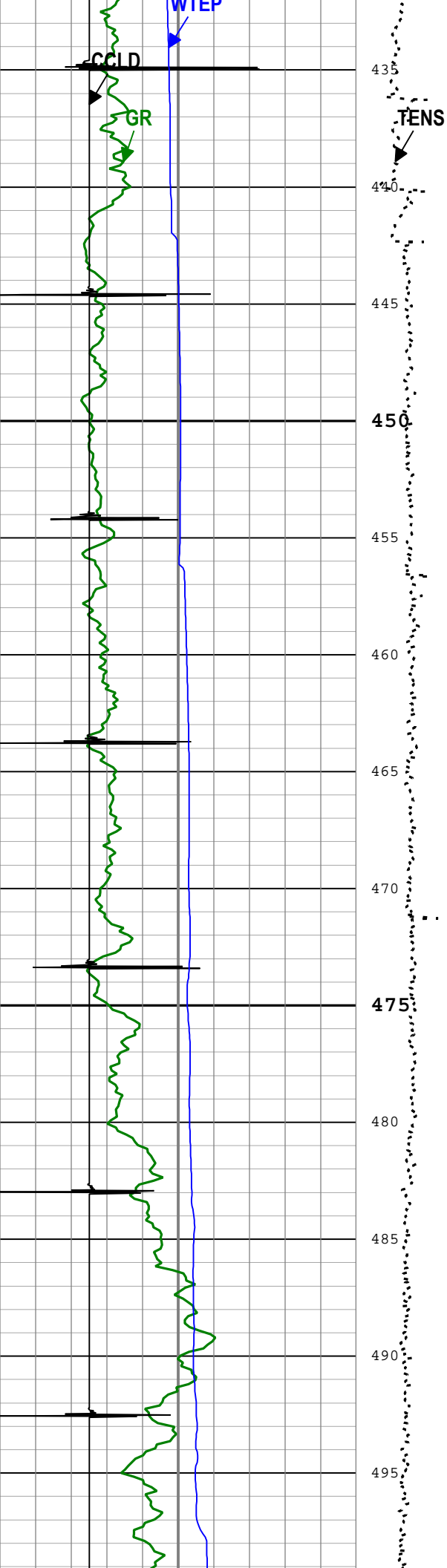


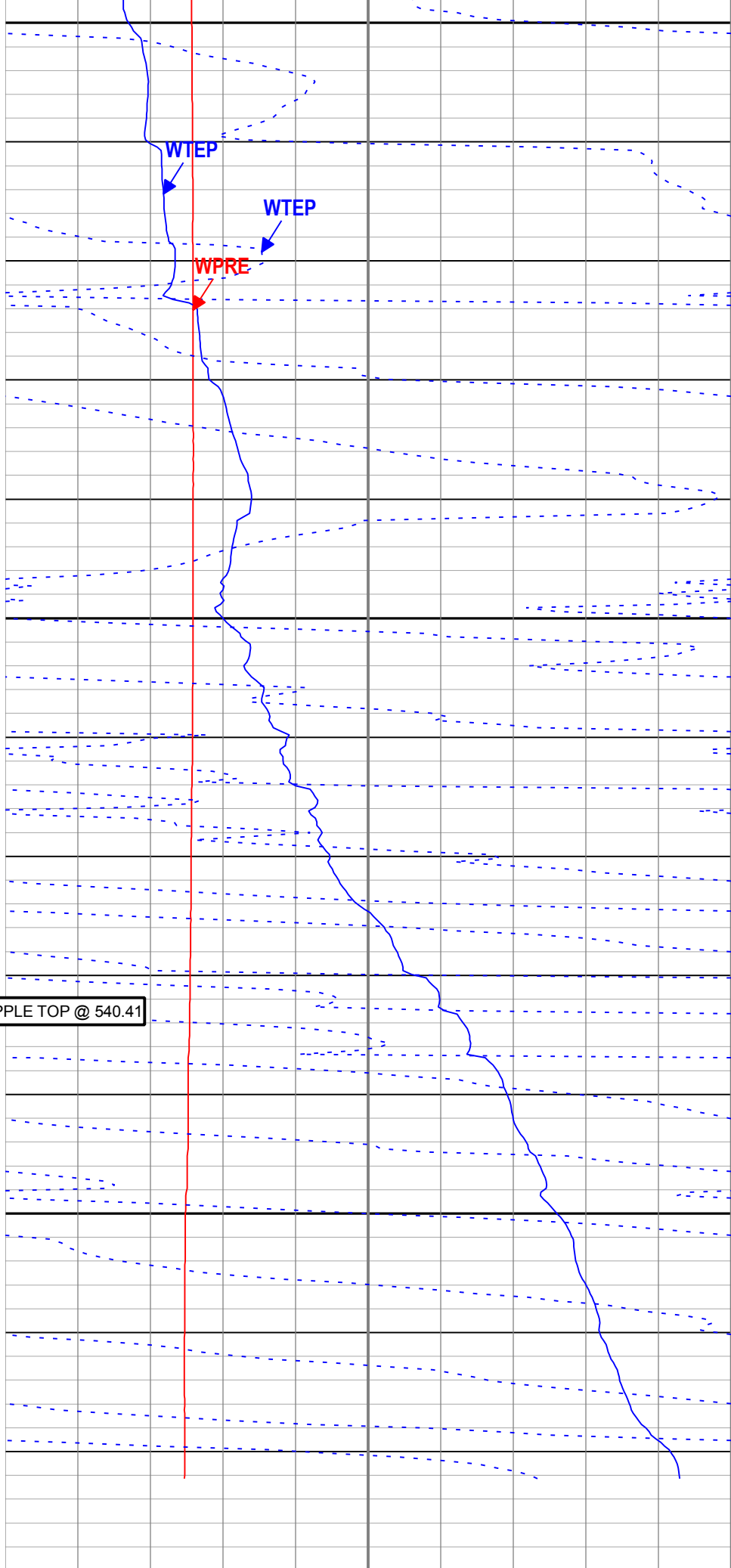
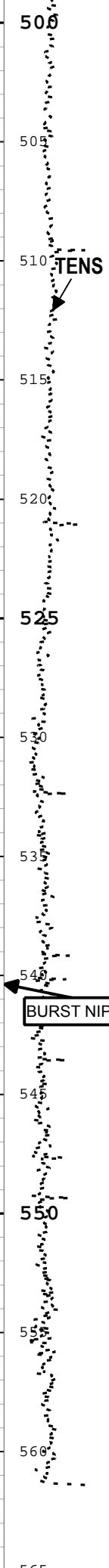
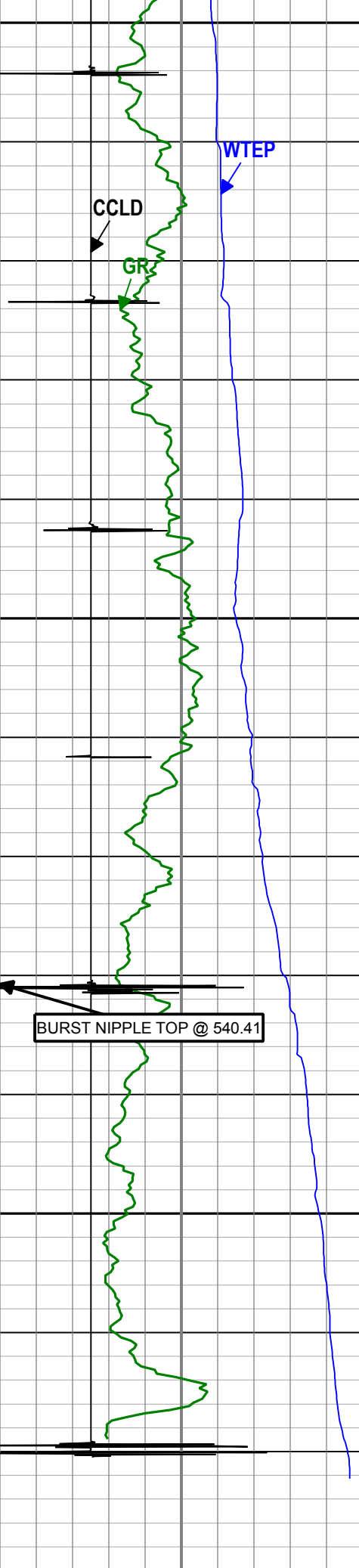












Gamma Ray (GR) HBMS-B

Cable

Well Pressure (WPRE) HBMS-B

<div>0gAPI100</div>			Tension (TENS)	<div>0kPa10000</div>		
CCL Discriminated Amplitude (CCLD) HBMS-B				Well Temperature (WTEP) HBMS-B		
<div>1V-3</div>				<div>-2degC2</div>		
Well Temperature (WTEP) HBMS-B				Well Temperature (WTEP) HBMS-B		
<div>0degC200</div>				<div>0degC100</div>		

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: 05-

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 T15-20 COLD LK 1-29-64-3	
Field:	ETHEL LAKE	
Province:	ALBERTA	
State:	**MD**	

PRODUCTION ANALYSIS
TEMP/PRESSURE