

Company: IMPERIAL OIL RESOURCES

Well: IMP 13 N07-09 COLD LK 7-13-66-3

Field: MARIE

Province: ALBERTA State: \*\*MD\*\*

PRODUCTION ANALYSIS

TEMP./PRESSURE

Province:	ALBERTA		
Field:	MARIE		
Location:	8-13-66-3W4		
Well:	IMP 13 N07-09 COLD LK 7-13-66-3		
Company:	IMPERIAL OIL RESOURCES		
Location:		Elev.:	K.B. 616.00 m
Permanent Datum:			G.L. 609.00 m
Log Measured From:			D.F.
Drilling Measured From:		Ground Level	Elev.: 609.00
		Kelly Bushing	7.00 m above Perm.Datum
		Kelly Bushing	
API Serial No.	0456748	Section:	Township:
		08-13	066
			Range: 03W4
Logging Date	26-Oct-2016		

Run Number	1		
Depth Driller	481.41 m		
Schlumberger Depth	481.00 m		
Bottom Log Interval	481.00 m		
Top Log Interval	7.00 m		
Casing Fluid Type	Water		
Salinity			
Density	1198.26 kg/m3		
Fluid Level	781.00 m		
BIT/CASING/TUBING STRING			
Bit Size	215.90 mm		
From	7.00 m		
To	481.41 m		
Casing/Tubing Size	73.025 mm		
Weight	9.67 kg/m		
Grade	J55		
From	7.00 m		
To	481.00 m		
Max Recorded Temperatures	105 degC		
Logger on Bottom	26-Oct-2016	Time	12-15:00
Unit Number	Location:	D222	LLOYDMINSTER
Recorded By	Y. MUNOZ		
Witnessed By	D. STRANG		

Disclaimer

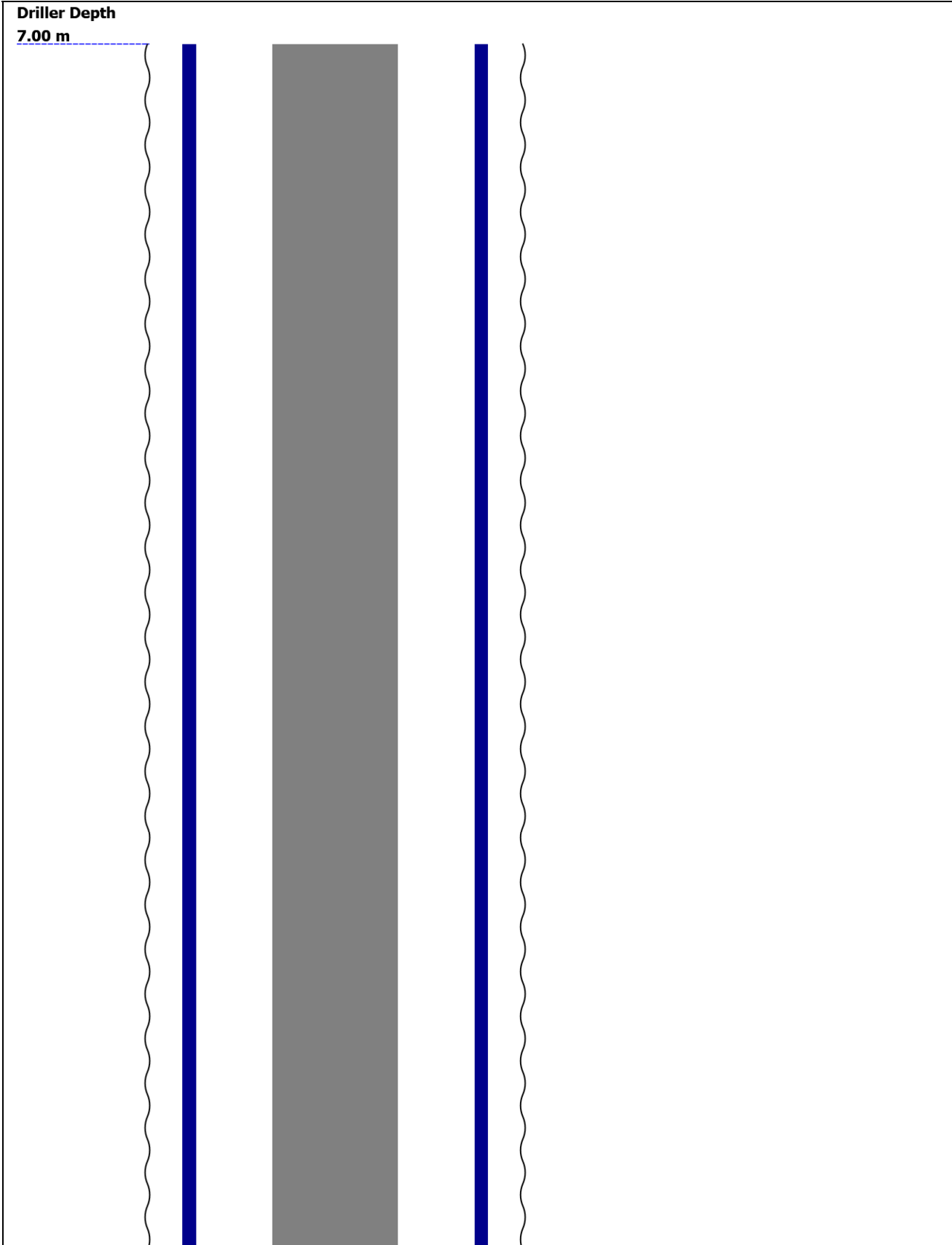
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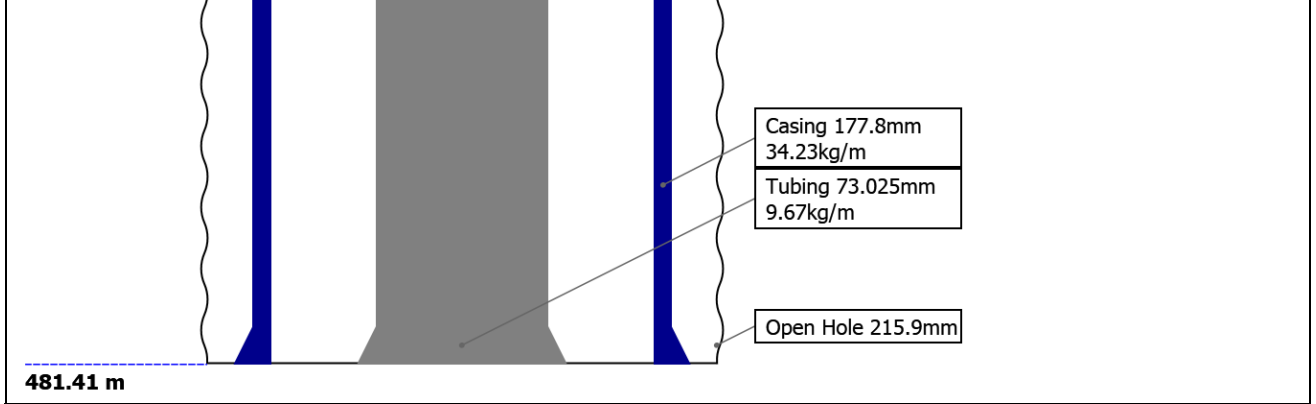
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Well Sketch





## Borehole Size/Casing/Tubing Record

Bit						
Bit Size ( mm )	215.9					
Top Driller ( m )	7					
Top Logger ( m )	7					
Bottom Driller ( m )	481.41					
Bottom Logger ( m )	481.41					
Casing						
Size ( mm )	177.8					
Weight ( kg/m )	34.23					
Inner Diameter ( mm )	161.797					
Grade	J55					
Top Driller ( m )	7					
Top Logger ( m )	7					
Bottom Driller ( m )	481.41					
Bottom Logger ( m )	481.41					
Tubing						
Size ( mm )	73.025					
Weight ( kg/m )	9.67					
Inner Diameter ( mm )	61.623					
Grade	J55					
Top Driller ( m )	7					
Top Logger ( m )	7					
Bottom Driller ( m )	481.41					
Bottom Logger ( m )	481					

## Operational Run Summary

Parameter ( unit )	1					
Date Log Started	26-Oct-2016					
Time Log Started	09:27:50					
Date Log Finished						
Time Log Finished						
Top Log Interval ( m )						
Bottom Log Interval ( m )						

Total Depth ( m )						
Max Hole Deviation ( deg )						
Azimuth of Max Deviation ( deg )						
Bit Size ( mm )	215.900					
Logging Unit Number	D222					
Logging Unit Location	LLOYDMINSTER					
Recorded By	Y. MUNOZ					
Witnessed By	D. STRANG					
Service Order Number	CZ35-00169					

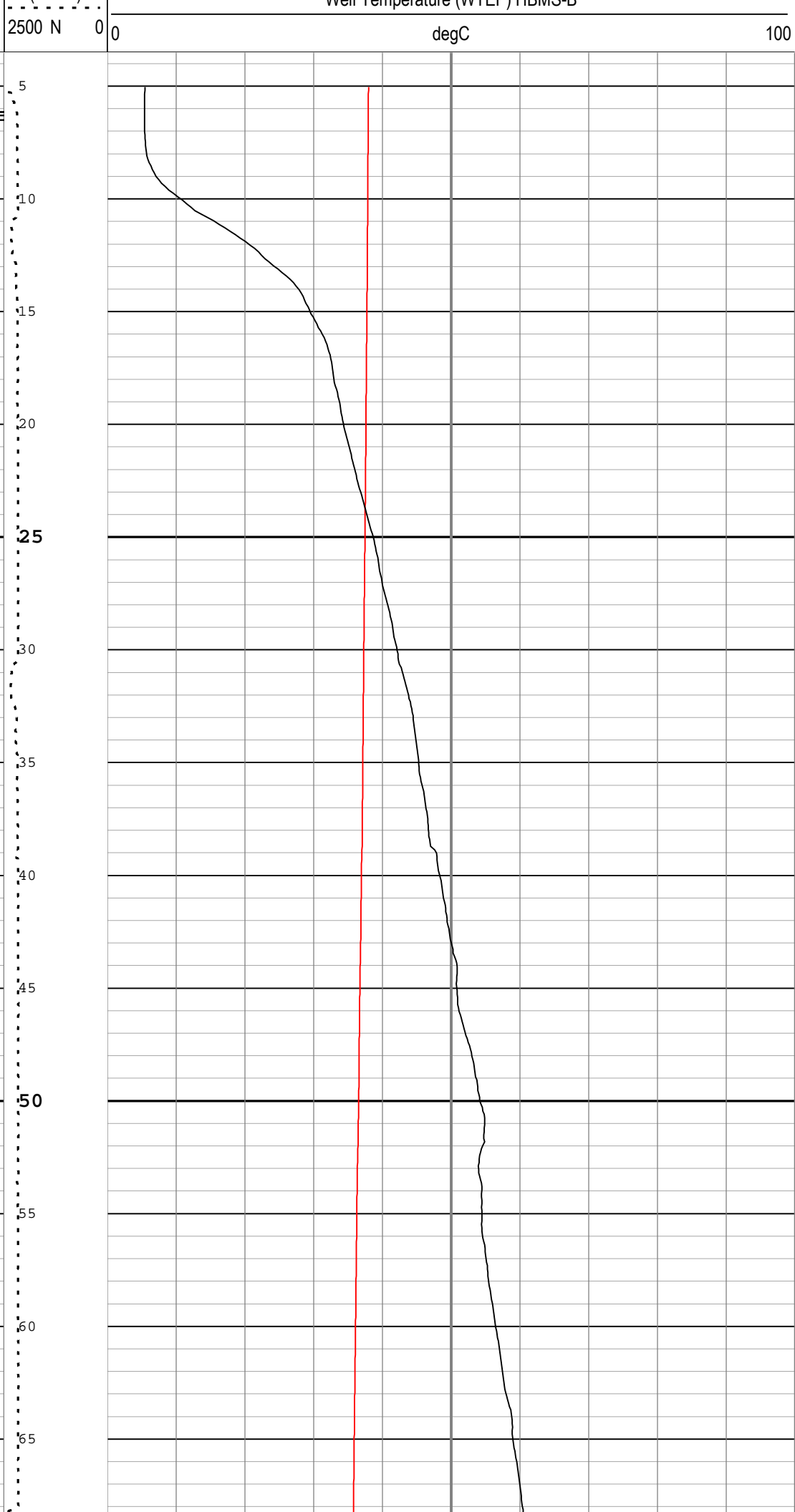
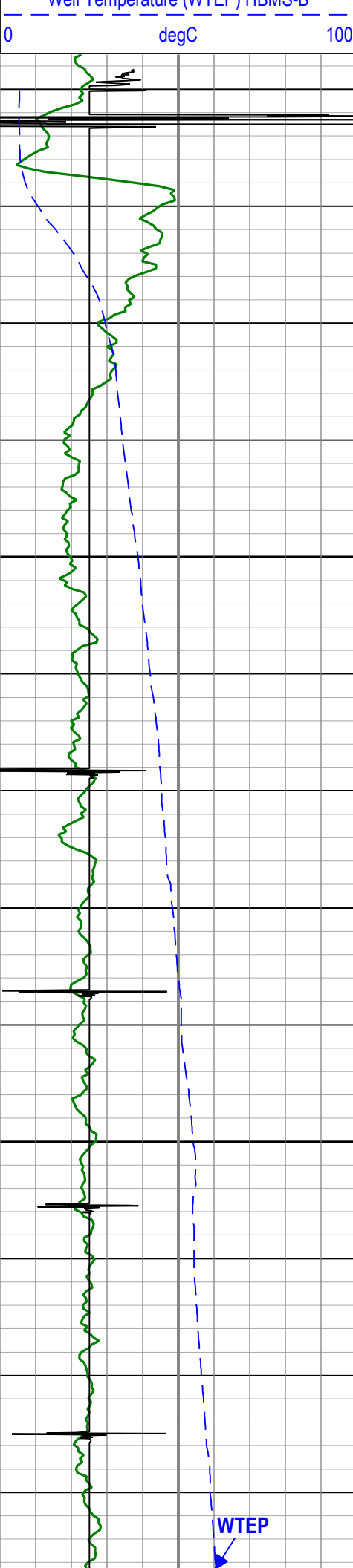
## Remarks and Equipment Summary

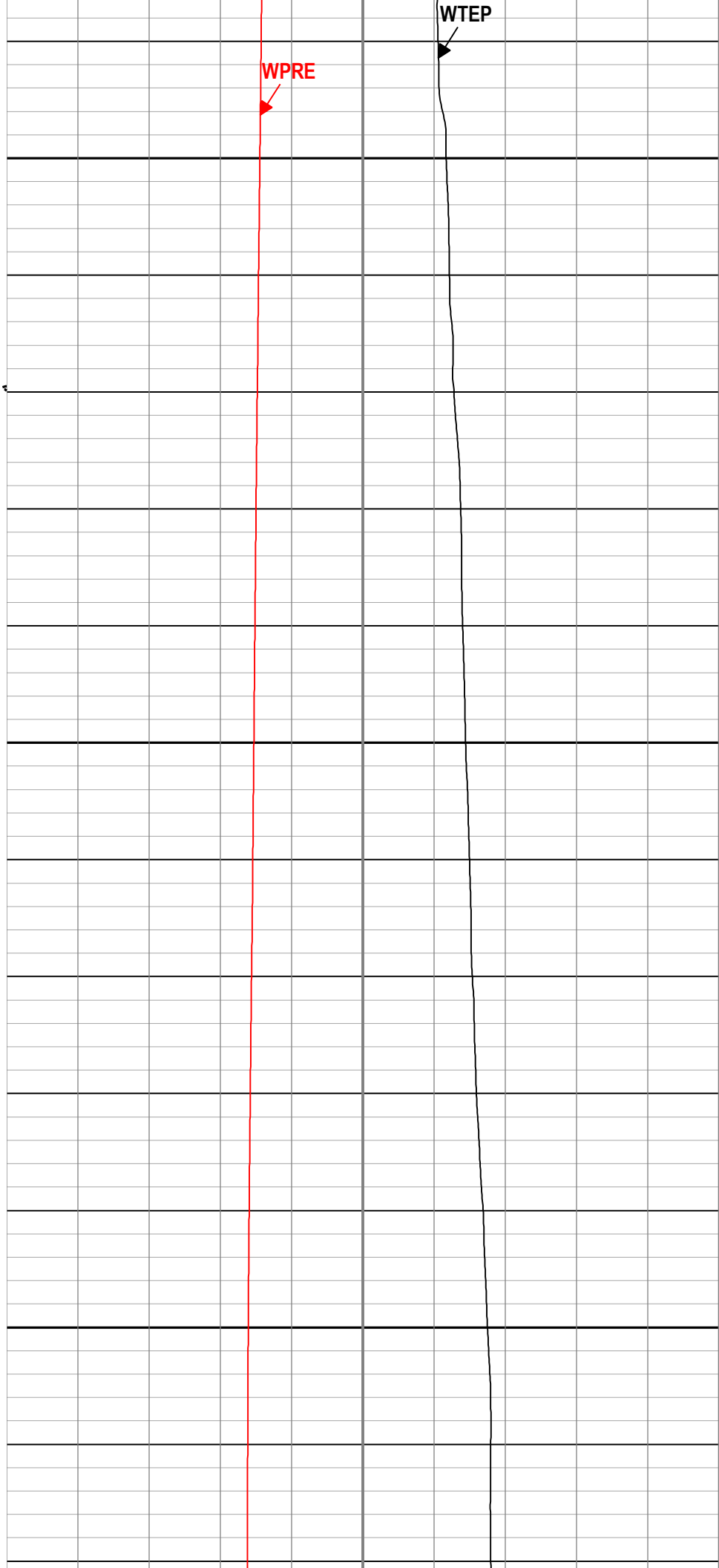
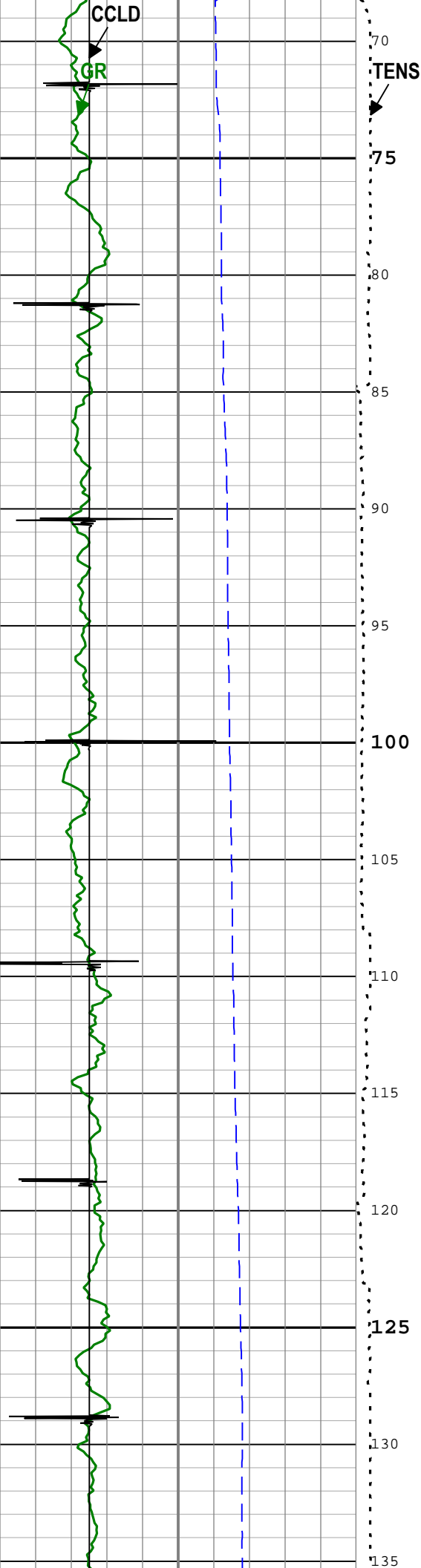
1: Toolstring				1: Remarks	
Equip name	Length	MP name	Offset	TEMP DOWN PASS 10 M/MIN	
PEH-E	5.82			PICKER CREEPING WHILE LOGGING-USE LOG FOR CORRELATION AT YOUR OWN DISCRETION	
AH-38	5.31				
EQF-43	5.22				
HBMS-B:2814	3.39				
HUDH-A:2814					
PSC-A:2814					
HSTC-A:2814					
HBMC-A:2814					
HTPS-A:2814					
		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					

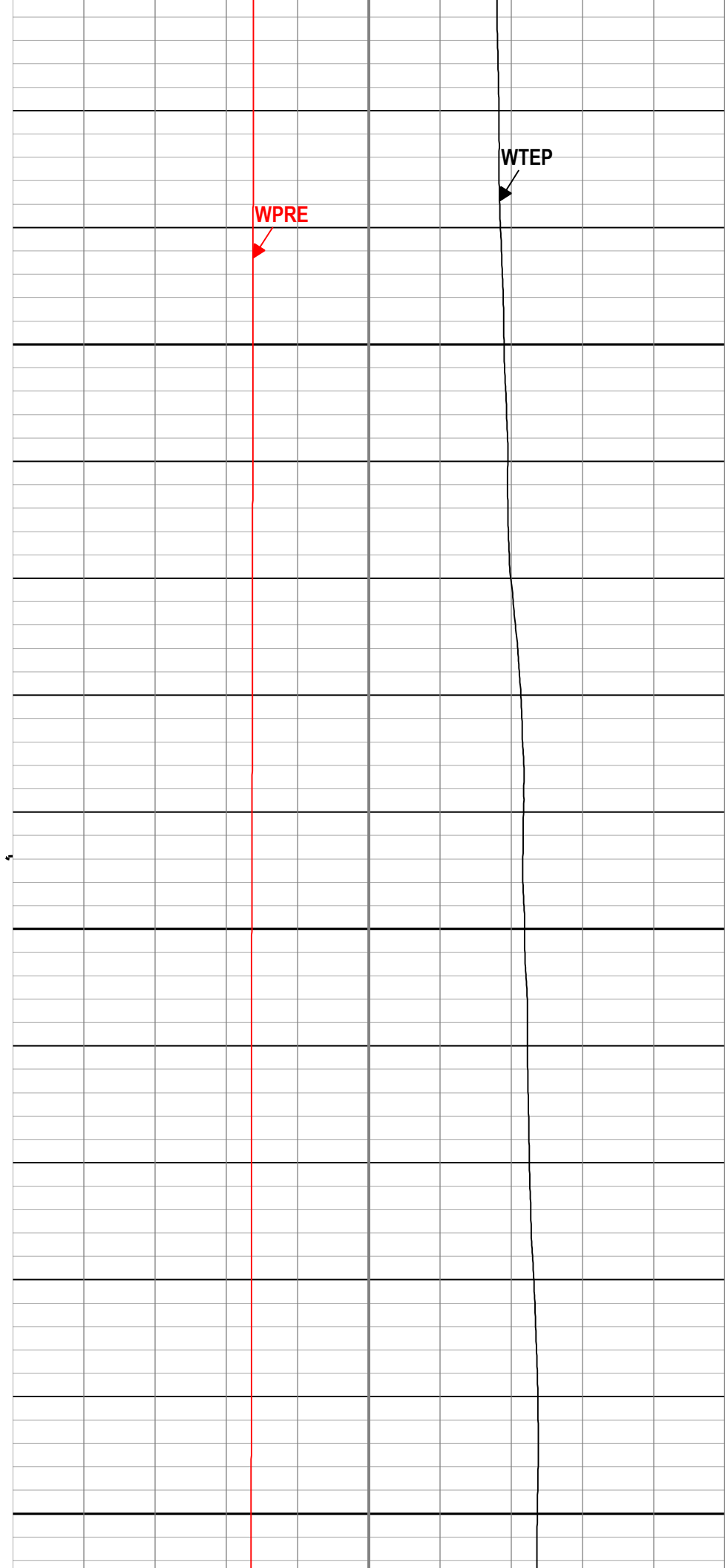
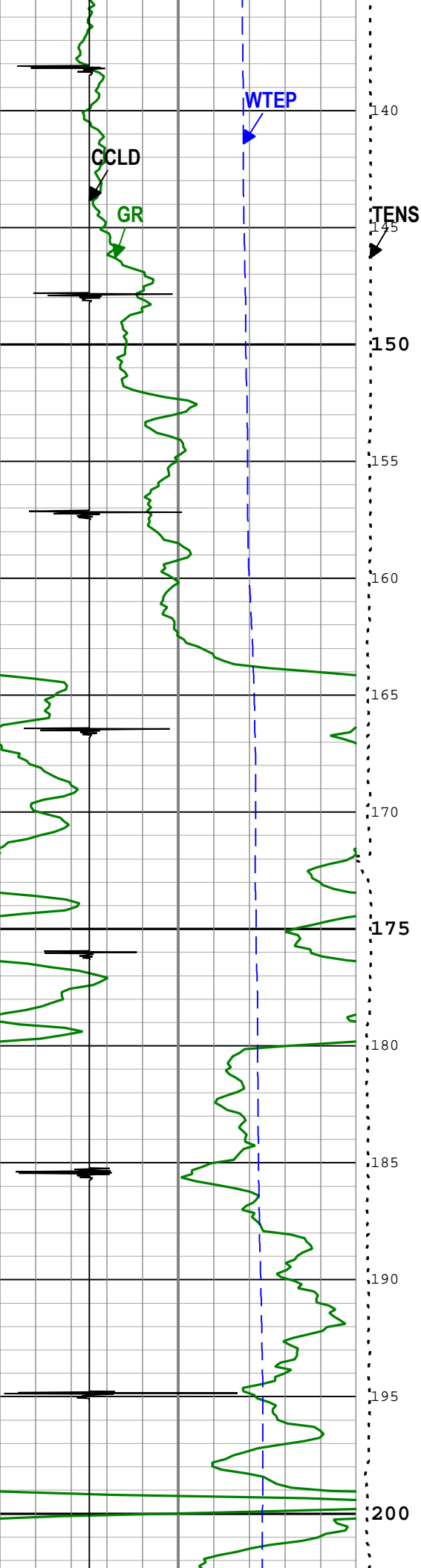
## Depth Summary

	1		
Depth Measuring Device			
Type	IDW-B		
Serial Number	6056		
Calibration Date	19-MAR-2015		
Calibrator Serial Number	004		
Calibration Cable Type	1 33 SLIC		

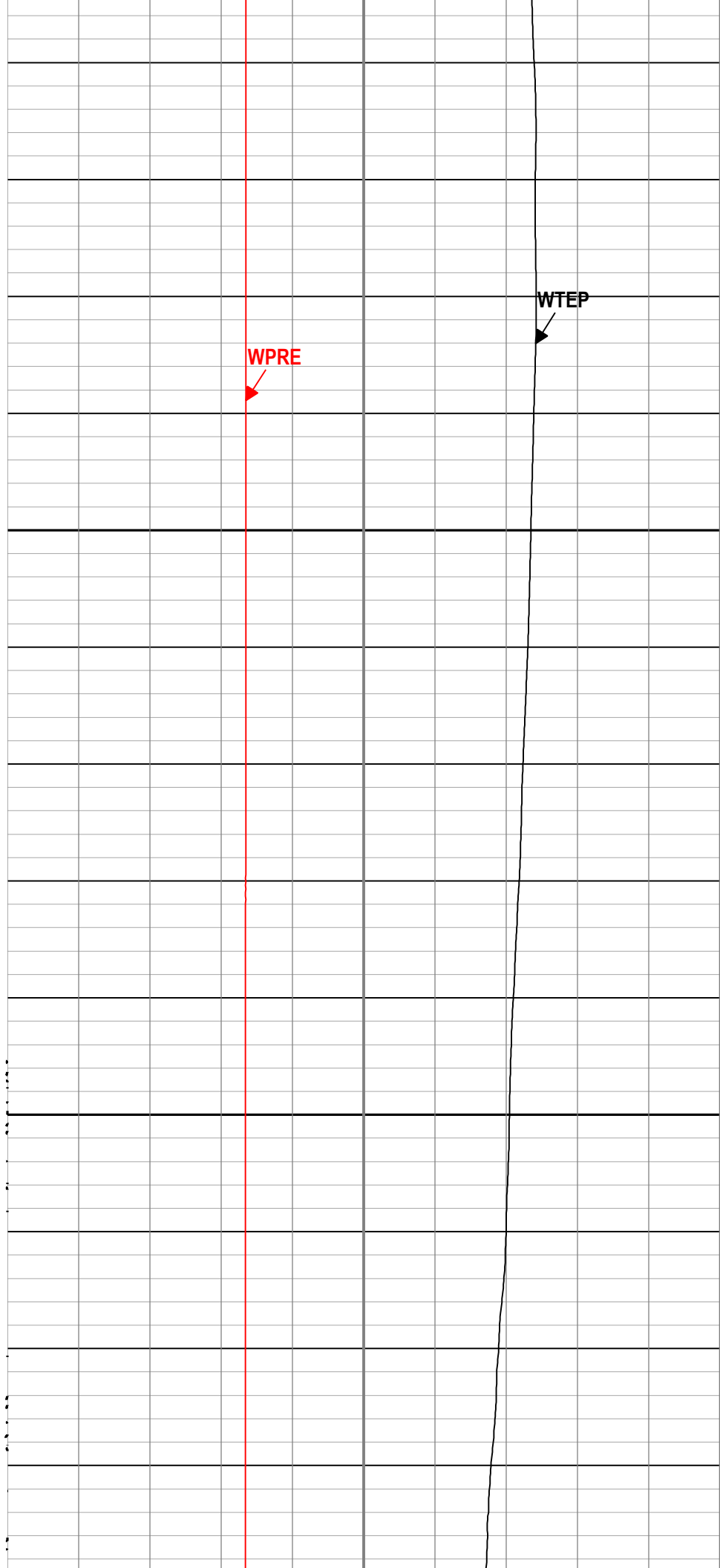
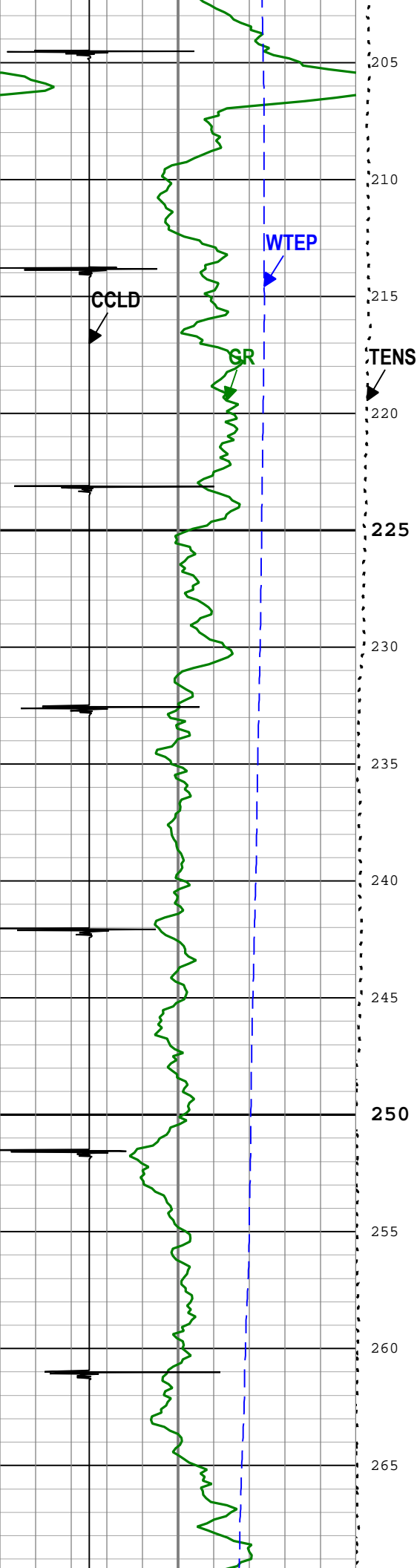
Calibration Cable Type	1-33 SLC								
Wheel Correction 1	1								
Wheel Correction 2	1								
Tension Device									
Type	CMTD-B/A								
Serial Number	1084								
Calibration Date	22-OCT-2016								
Calibrator Serial Number	232970								
Number of Calibration Points	10								
Calibration Root Mean Square Error									
Calibration Peak Error	31								
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 SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED							
Reference Log Name		IDW UASE AS PRIMARY DEPTH CONTROL							
Reference Log Run Number	TUBING TALLY - CORRELATED TO BURST NIPPLE AT 471 MKB	Z-CHART USED AS SECONDARY DEPTH CONTROL							
Reference Log Date									
Subsequent Trip Down Log Correction									
1									
TEMP 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	5.25 m	483.75 m	26-Oct-2016 10:37:14 AM	26-Oct-2016 12:08:29 PM	ON	2.10 m	No
All depths are referenced to toolstring zero									
Log	Company:IMPERIAL OIL RESOURCES      Well:IMP 13 N07-09 COLD LK 7-13-66-3 1: Log[1]:Down:S002								
Description: PSP Depth    Format: Log ( TEMP DOWN PASS imperial )    Index Scale: 1:240    Index Unit: m    Index Type: Measured Depth    Creation Date: 26-Oct-2016 12:19:45									
TIME_1900 - Time Marked every 60.00 (s)									
Gamma Ray (GR) HBMS-B				Cable Tension (TENS)	Well Pressure (WPRE) HBMS-B				
0	gAPI		100		kPa				
CCL Discriminated Amplitude (CCLD) HBMS-B					Well Temperature (WTEP) HBMS-B				
1	V		-3		10000				

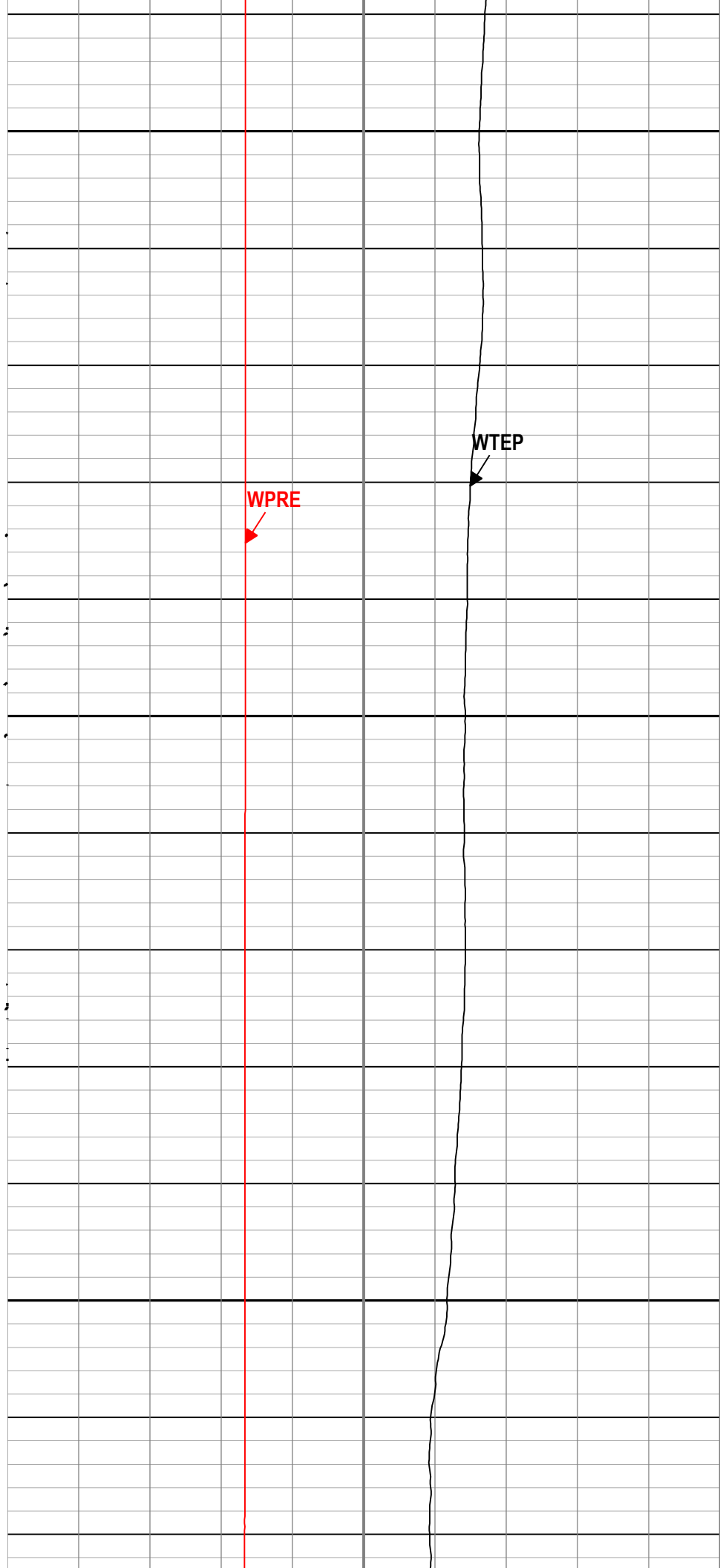
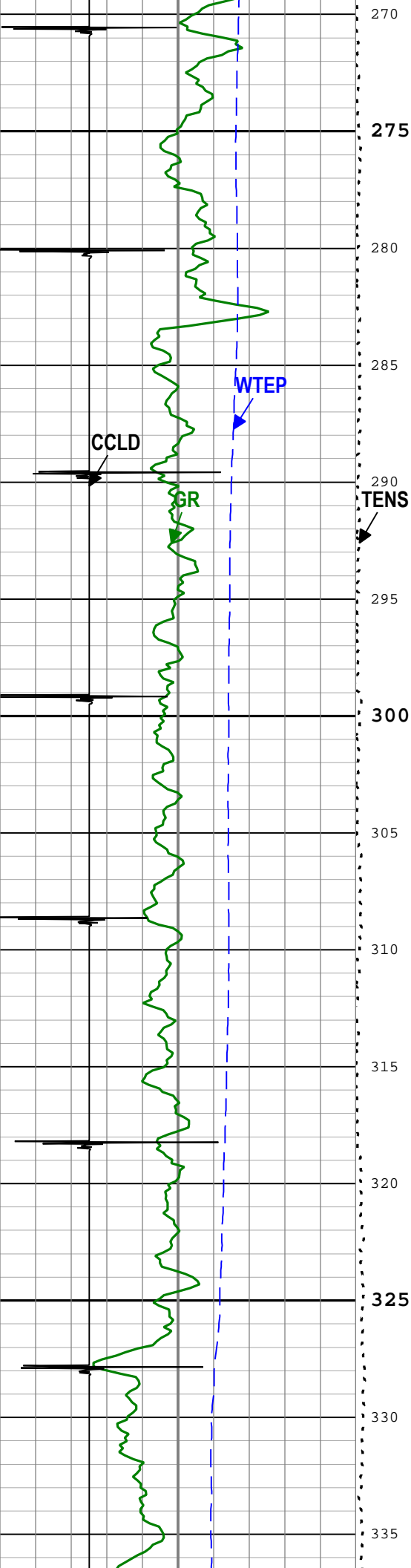


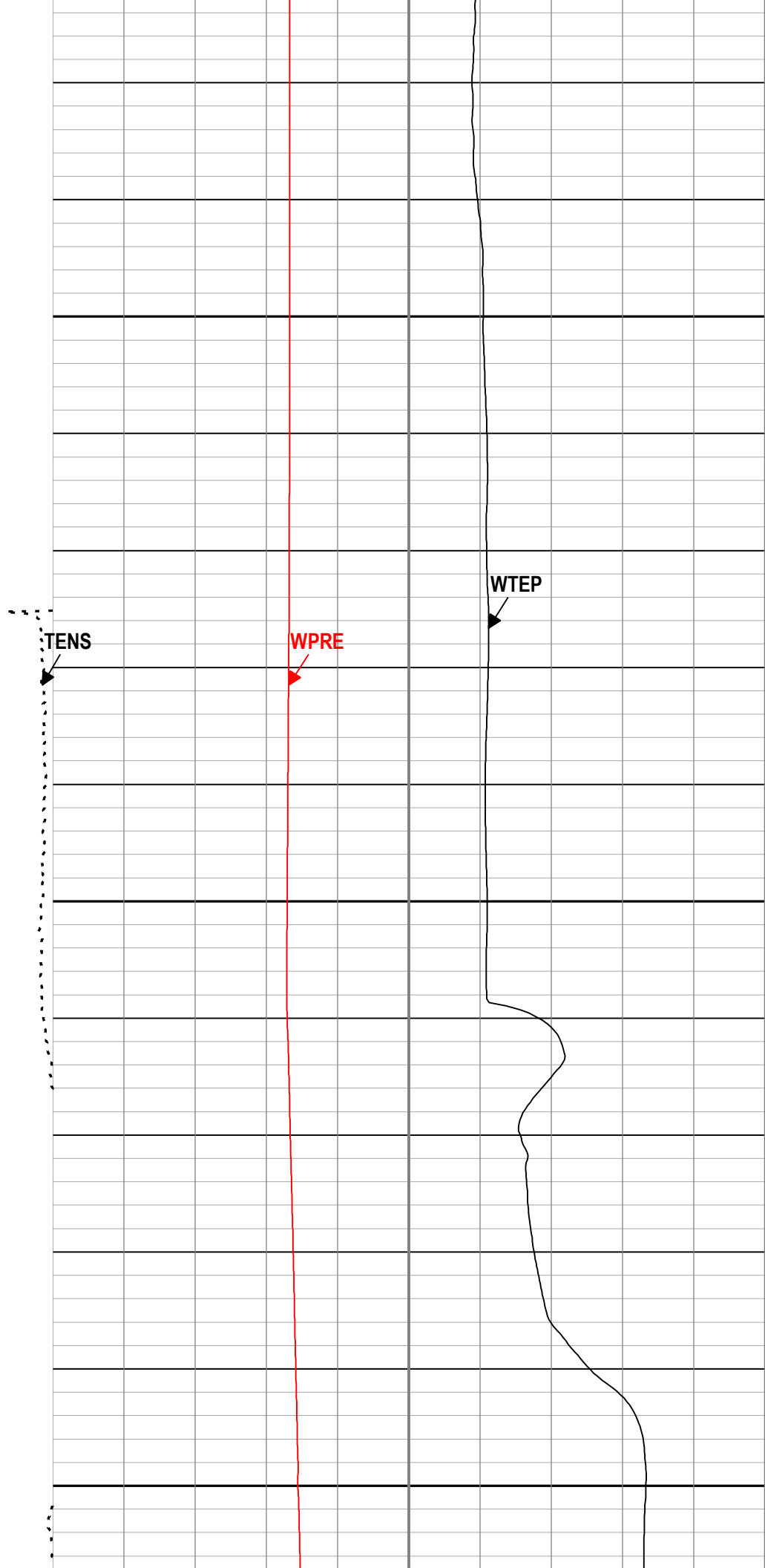
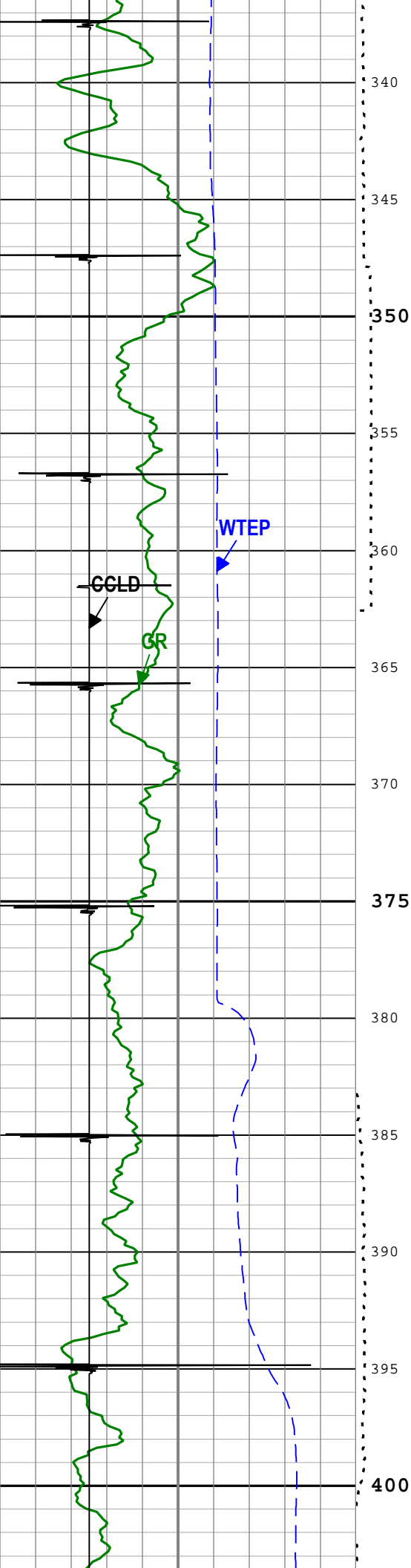


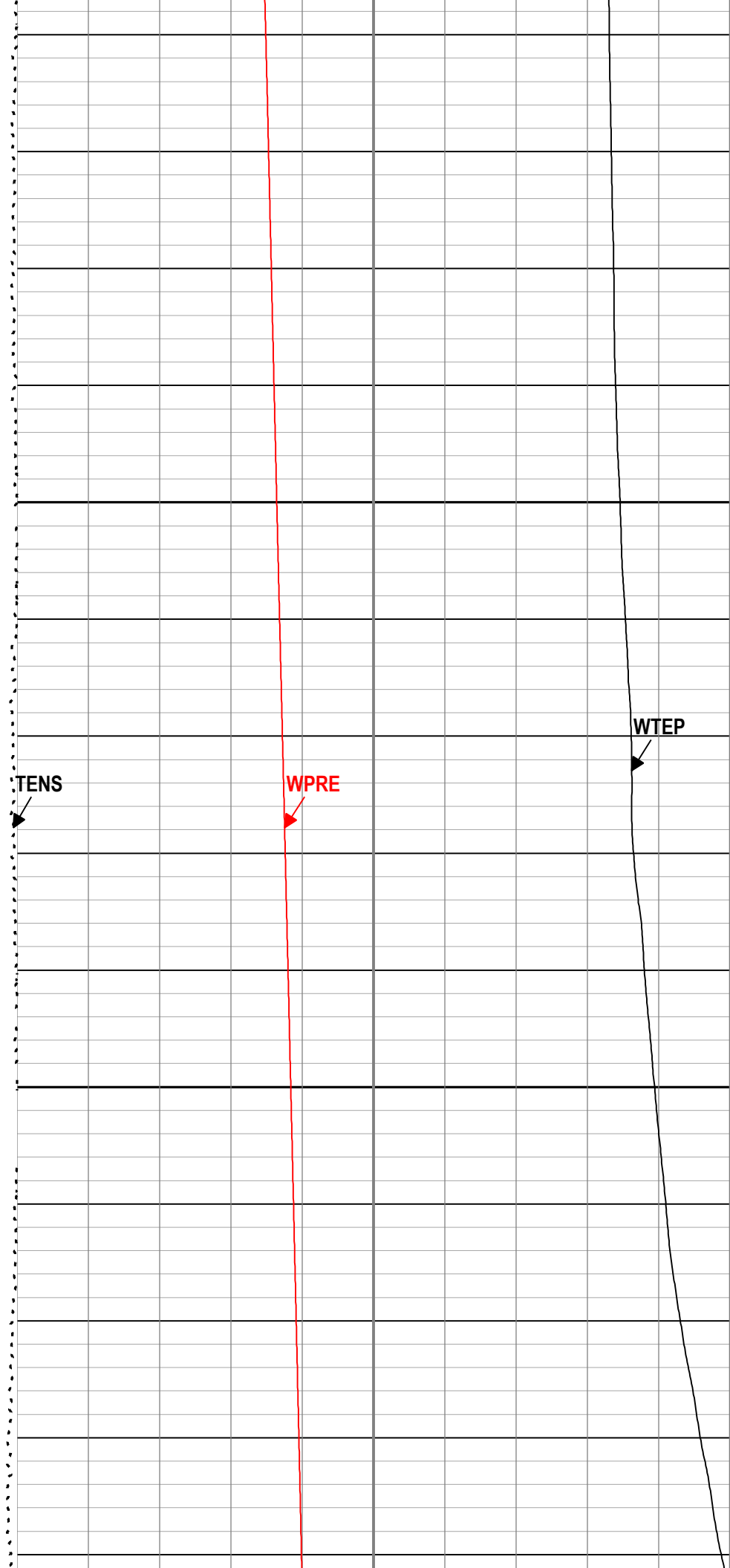
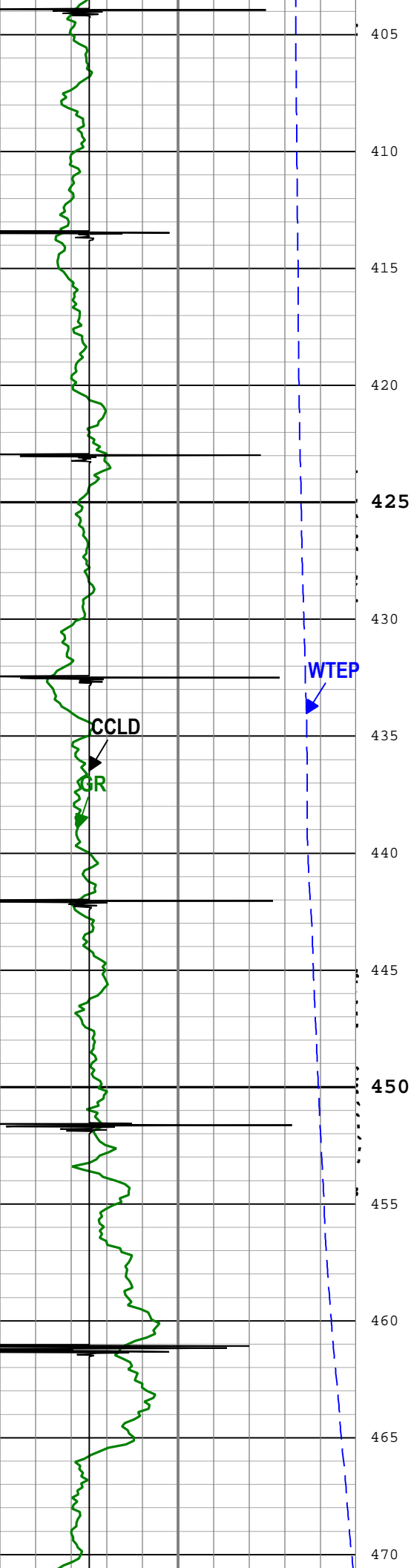


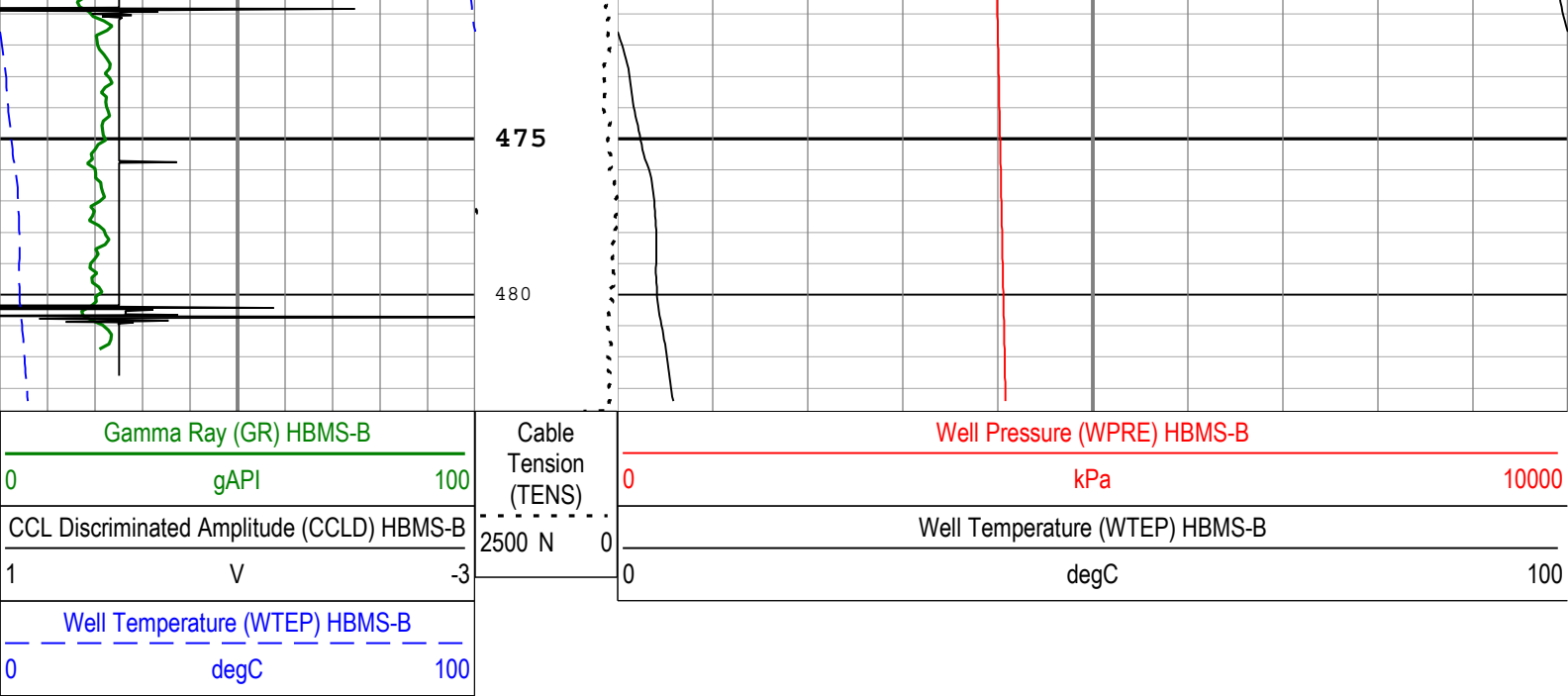












TIME\_1900 - Time Marked every 60.00 (s)

Description: PSP Depth Format: Log ( TEMP DOWN PASS imperial ) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 26-Oct-2016 12:19:45

## 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	26-Oct-2016 10:37:14	26-Oct-2016 10:38:12	5.25	11.96
PCCG	12 dB	26-Oct-2016 10:38:12	26-Oct-2016 12:08:29	11.96	483.75

All depth are at tool zero.

Company:	IMPERIAL OIL RESOURCES	<b>Schlumberger</b>
Well:	IMP 13 N07-09 COLD LK 7-13-66-3	
Field:	MARIE	
Province:	ALBERTA	
State:	**MD**	

PRODUCTION ANALYSIS  
TEMP./ PRESSURE