

Company: IMPERIAL OIL RESOURCES LIMITED
SCHLUMBERGER
Well: ESSO 85 D25-16 COLD LK 8-2-65-4
Field: LEMING
Province: ALBERTA State: **MD**

TEMPERATURE LOG

Province:		ALBERTA	
Field:		LEMING	
Location:		9-2-65-4W5	
Well:		ESSO 85 D25-16 COLD LK 8-2-65-4	
Company:		IMPERIAL OIL RESOURCES LIMITED	
<div>Location:</div> <div>9-2-65-4W5</div> <div>UWI:106080206504W400</div> <div>Permanent Datum:</div> <div>Log Measured From:</div> <div>Drilling Measured From:</div> <div>API Serial No.</div> <div>0115028</div>			
Section:		Township:	
09-02		065	
Range:			
04W4			

Logging Date	26-Jan-2018			
Run Number	1			
Depth Driller	616.00 m			
Schlumberger Depth	77.00 m			
Bottom Log Interval	77.00 m			
Top Log Interval	2.20 m			
Casing Fluid Type	Water			
Salinity				
Density	1198.26 kg/m3			
Fluid Level	2.44 m			
BIT/CASING/TUBING STRING				
Bit Size	215.90 mm			
From	20.00 m			
To	77.00 m			
Casing/Tubing Size	177.8 mm			
Weight	34.23 kg/m			
Grade	L80			
From	0.00 m			
To	77.00 m			
Max Recorded Temperatures				
Logger on Bottom	Time			
Unit Number	Location:			
Recorded By	C. GIESBRECHT		NISKU	
Witnessed By	G. GELETY			

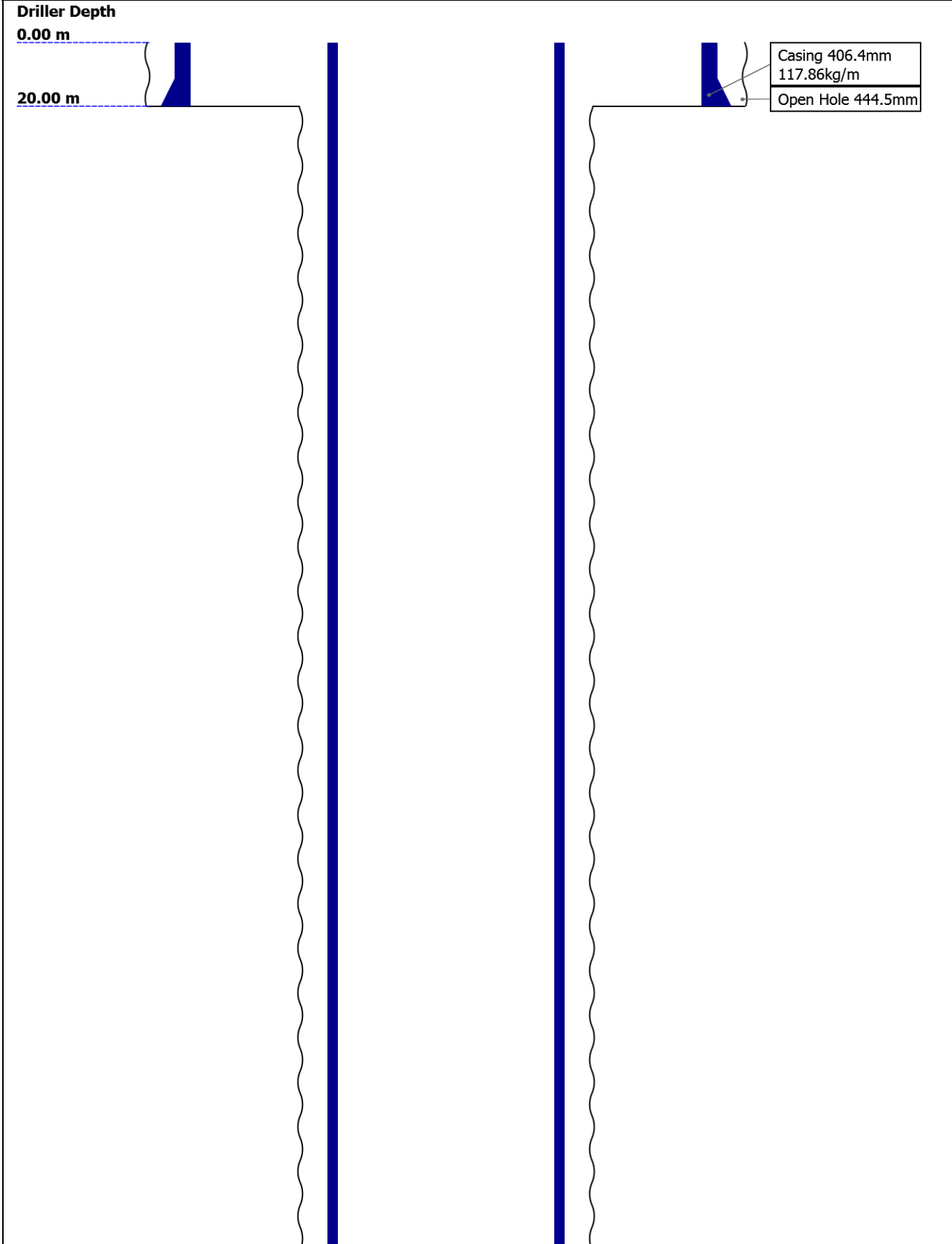
Disclaimer

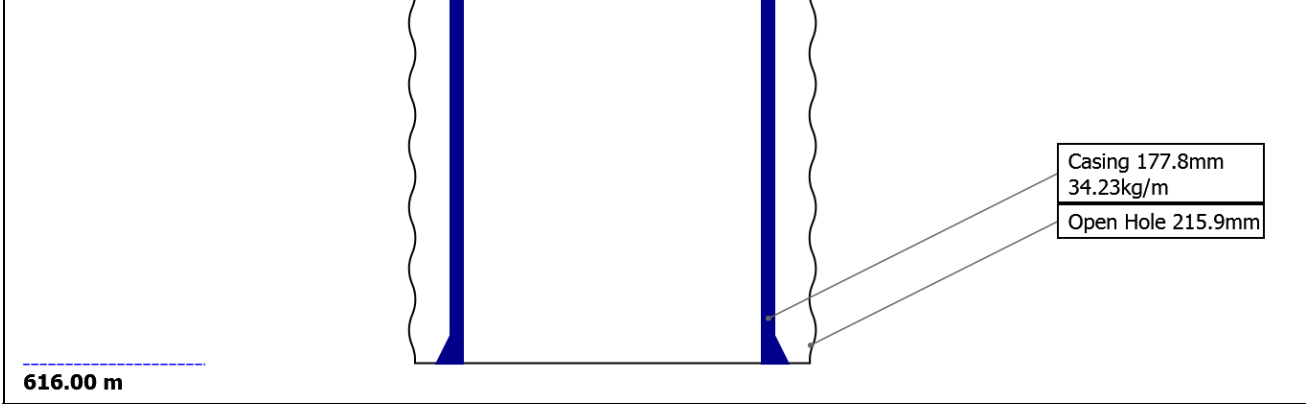
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Well Sketch






Borehole Size/Casing/Tubing Record

Bit						
Bit Size (mm)	444.5	215.9				
Top Driller (m)	0	20				
Top Logger (m)	0	20				
Bottom Driller (m)	20	616				
Bottom Logger (m)	20	77				
Casing						
Size (mm)	406.4	177.8				
Weight (kg/m)	117.86	34.23				
Inner Diameter (mm)	382.687	161.797				
Grade	J55	L80				
Top Driller (m)	0	0				
Top Logger (m)	0	0				
Bottom Driller (m)	20	616				
Bottom Logger (m)	20	77				

Operational Run Summary

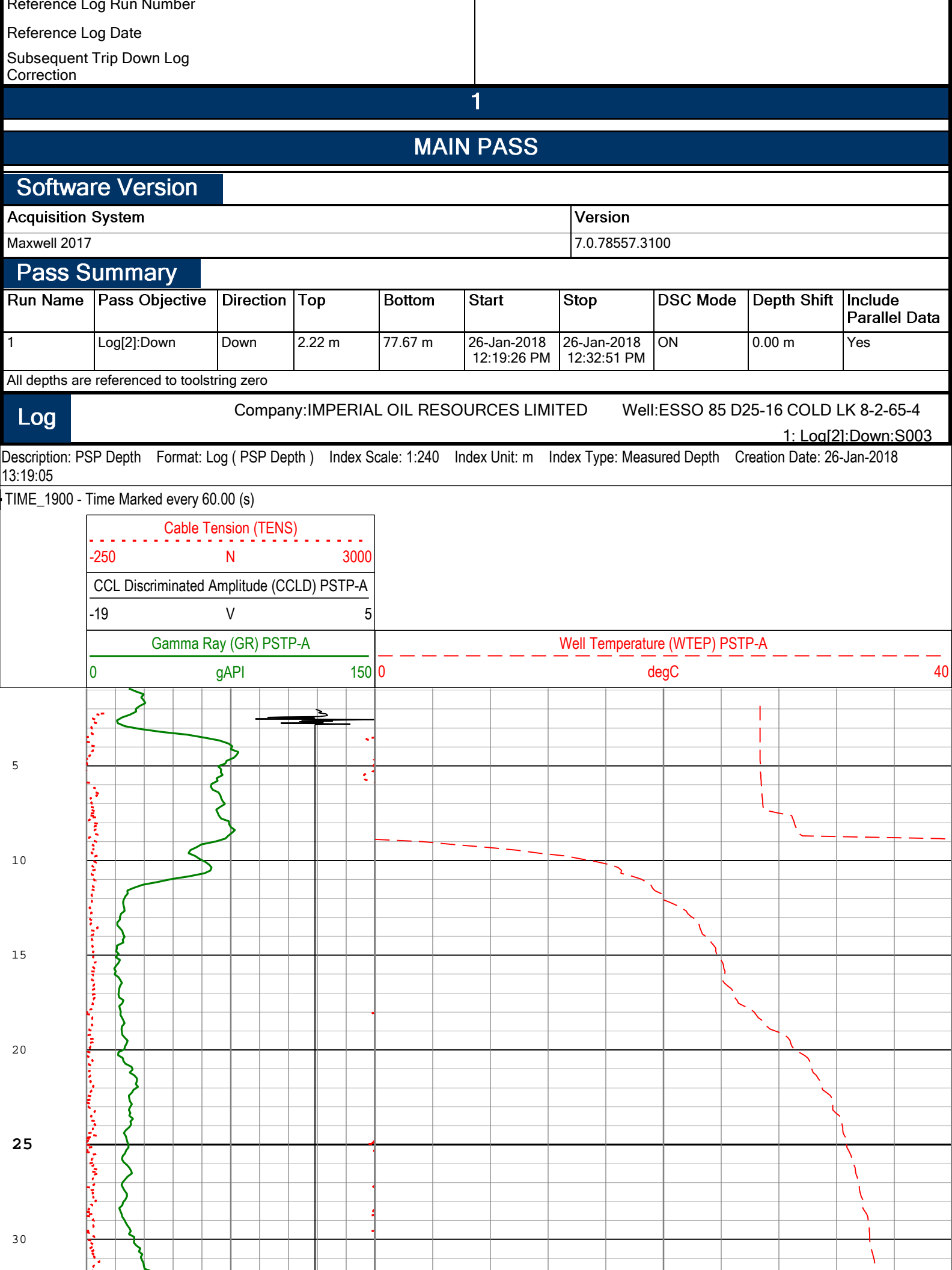
Parameter (unit)	1					
Date Log Started	26-Jan-2018					
Time Log Started	12:15:06					
Date Log Finished	26-Jan-2018					
Time Log Finished	13:03:04					
Top Log Interval (m)	2.20					
Bottom Log Interval (m)	77.00					
Total Depth (m)	77.00					
Max Hole Deviation (deg)	0.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (mm)	215.900					
Logging Unit Number	15116					
Logging Unit Location	NISKU					
Recorded By	C. GIESBRECHT					

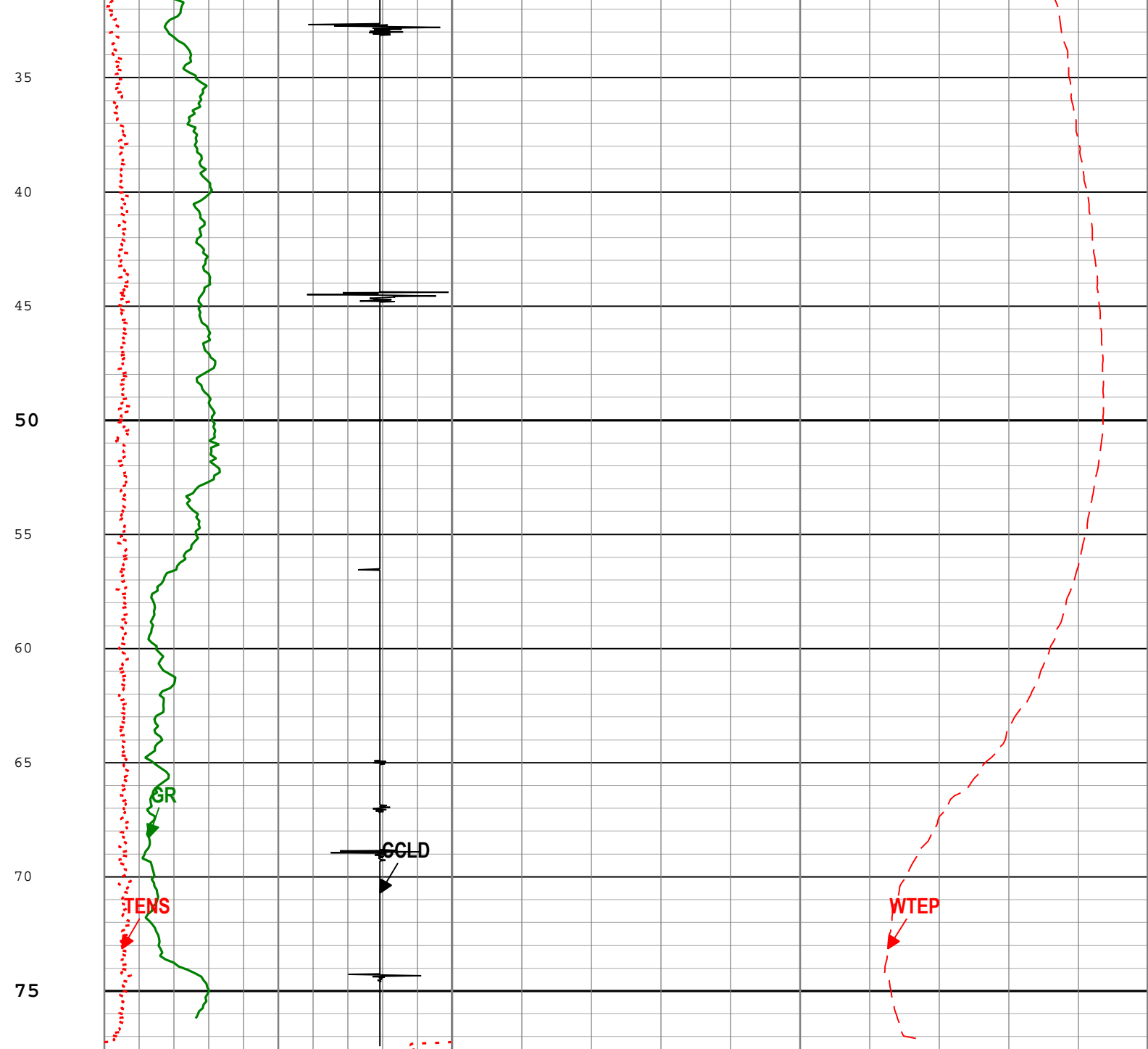
Witnessed By	G. GELETY					
Service Order Number	DZBK-00002					

Remarks and Equipment Summary					
1: Toolstring				1: Remarks	
Equip name	Length		MP name	Offset	IDW USED AS PRIMARY DEPTH
MH-22	4.23				Z CHART USED AS SECONDARY DEPTH
EQF-39	3.75				NO REFERENCE LOG AVAILABLE
PSTP-A:3873	2.52				
PSC-A:3873					
PSTC-A:2964					
PBMS-A:3873					
Sapphire 10kPS					
I:3873					

Depth Summary			
	1		
Depth Measuring Device			
Type	IDW-B		
Serial Number	6306		
Calibration Date			
Calibrator Serial Number			
Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		
Tension Device			
Type	CMTD-B/A		
Serial Number	2817		
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		
Logging Cable			
Type	7-39P-LXS		
Serial Number	F714086		
Length	2500.00 m		
Conveyance Type	Wireline		
Rig Type	MAST		

1:Depth Control Parameters		Depth Control Remarks
Log Sequence	Subsequent Trip To the Well	
Reference Log Name		
Reference Log Date		





Cable Tension (TENS)		Well Temperature (WTEP) PSTP-A	
-250	N	0	degC
CCL Discriminated Amplitude (CCLD) PSTP-A			
-19	V	5	
Gamma Ray (GR) PSTP-A			
0	gAPI	150	

TIME_1900 - Time Marked every 60.00 (s)

Description: PSP Depth Format: Log (PSP Depth) Index Scale: 1:240 Index Unit: m Index Type: Measured Depth Creation Date: 26-Jan-2018 13:19:05

Channel Processing Parameters

1: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	37.43	degC
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	

EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	2.8	m
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	598	m
GGRD	Geothermal Gradient	Borehole	18.23	degC/km
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
PDAT	Permanent Datum	WLSESSION	GL	
SHT	Surface Hole Temperature	Borehole	-10	degC
TD	Total Measured Depth	Borehole	77	m

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	PSTP-A	Time Zoned	

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (m)	Stop Depth (m)
PCCG	36 dB	26-Jan-2018 12:19:26	26-Jan-2018 12:27:43	2.22	52.56
PCCG	12 dB	26-Jan-2018 12:27:43	26-Jan-2018 12:28:32	52.56	58.95
PCCG	24 dB	26-Jan-2018 12:28:32	26-Jan-2018 12:32:51	58.95	77.67

All depth are at tool zero.

Calibration Report

PSTP-A (PSP Telemetry Platform A - Sapphire) Calibration - Run 1

Primary Equipment :

PBMS-A

PBMS-A

3873

Calibration Parameter :

JIG-BKGD

PBMS Well Temp Master Calibration

Master (EEPROM): 00:00:00 25-Aug-2011

PBMS_RTD_THERM (Master) RTD Coefficients

	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tt**0	-633.6849	425.5502	-127.809	22.91848	-1.500443	0

PBMS Gamma Ray Master Calibration

Master (EEPROM): 00:00:00 18-Jan-2007

PBMS_GR_MODEL (Master) GR Coefficients

	Rt**0	Rt**1
Rt**0	2000	2030

PBMS A Reference Clock Master Calibration

Master (EEPROM): 00:00:00 25-Aug-2011

PBMS_REF_CLOCK (Master) PBMS A Clock Coefficients

	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Temp**0	-90.21661	-4.517822	-0.1241814	0.001073629	1.348258E-06	0

PBMS A Sapphire Master Calibration

Master (EEPROM): 00:00:00 25-Aug-2011						
PBMS_P_GAUGE_PRES Sapphire Pressure Model Coefficients (Master)						
	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tp**0	-4372.589	4360.222	-2230.762	399.7337	-26.50987	0
Tp**1	4602.34	-3541.251	1761.871	-312.2014	20.5137	0
Tp**2	12.79123	5.958582	-3.672423	0	0	0
Tp**3	-4.351929	1.239882	0	0	0	0
Tp**4	0	0	0	0	0	0
Tp**5	0	0	0	0	0	0
PBMS_P_GAUGE_TEMP Sapphire Temperature Model Coefficients (Master)						
	Tp**0	Tp**1	Tp**2	Tp**3	Tp**4	Tp**5
Tt**0	-282.5876	-24.73635	3.446694	-0.4253494	0.02929184	0
Tt**1	66.89643	15.15004	-1.126605	0.07386565	-0.004208574	0
Tt**2	9.328937	-3.209244	0.09569365	0	0	0
Tt**3	-0.5060359	0.2340233	0	0	0	0
Tt**4	0	0	0	0	0	0
Tt**5	0	0	0	0	0	0

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SCHLUMBERGER

Well:

ESSO 85 D25-16 COLD LK 8-2-65-4

Field:

LEMING

Province:

ALBERTA

State:

MD

Schlumberger

TEMPERATURE LOG