

Company: Esso Australia Pty Ltd

Well: A-12

Field: Tuna

Rig: Crane/Prod 4

Country: Australia

MWPT 2 1/8" Powerjet Perforation

7" Posiset Plug

Rig: Crane/Prod 4

Field: Tuna

Location: Gippsland

Well: A-12

Company: Esso Australia Pty Ltd

LOCATION

Gippsland

Basin

Bass Strait

Elev.: K.B. 31.4 m

G.L. -59 m

D.F. 31.4 m

Permanent Datum: MSL

Log Measured From: DF

Drilling Measured From: DF

Elev.: 0 m

31.4 m above Perm. Datum

State: Victoria

Max. Well Deviation 41 deg

Longitude 148°25'06.5"E

Latitude 038°10'16.5"S

Logging Date	6-Apr-2007		
Run Number	1 thr 5		
Depth Driller	2345 m		
Schlumberger Depth	2345 m		
Bottom Log Interval	2345 m		
Top Log Interval	2200 m		
Casing Fluid Type	Production Fluids		
Salinity			
Density			
Fluid Level	1125 m		
BIT/CASING/TUBING STRING			
Bit Size	8.500 in		
From			
To			
Casing/Tubing Size	7.000 in		
Weight	23 lbm/ft		
Grade	K-55		
From	1765 m		
To	2515 m		
Maximum Recorded Temperatures	210 degF		
Logger On Bottom	6-Apr-2007	Time	11:00
Unit Number	889	Location	Ausl / Prod 4
Recorded By	G Wright , S Gilbert , M Pratt		
Witnessed By	G Rimmer, B White		

Run 1			
PVT DATA			
K			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation			
CEMENTING DATA			
Primary/Squeeze			
Casing String No			
Lead Cement Type			
Volume			
Density			
Water Loss			
Additives			
Tail Cement Type			
Volume			
Density			
Water Loss			
Additives			
Expected Cement Top			
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

### Depth System Equipment

Date Created: 26-Mar-2007 16:26:31

#### Depth Measuring Device

Type: IDW-EB  
Serial Number: 6373  
Calibration Date: 5-JUL-2006  
Calibrator Serial Number: 9  
Calibration Cable Type: 2-32ZT  
Wheel Correction 1: -2  
Wheel Correction 2: -4

#### Tension Device

Type: CMTD-B/A  
Serial Number: 325357  
Calibration Date: 30-MAR-2007  
Calibrator Serial Number: 1174  
Calibration Gain: 0.90  
Calibration Offset: 197.00

#### Logging Cable

Type: 2-32ZT  
Serial Number: 24426  
Length: 6600.14 M  
Conveyance Method: Wireline  
Rig Type: Offshore\_Fixed

### Depth Control Parameters

Log Sequence: Subsequent Log In the Well  
Reference Log Name: Solar Compersite Log  
Reference Log Run Number:  
Reference Log Date:

### Depth Control Remarks

1. IDW used as primary depth control
2. Z chart used as secondary depth control
- 3.
- 4.
- 5.
- 6.

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#### OTHER SERVICES1

OS1: None  
OS2:  
OS3:  
OS4:  
OS5:

#### REMARKS: RUN NUMBER 1

Log Correlated to Solar composite log provided by client.

Objective: Perforate the interval 2333m to 2339m MDKB using a 2 1/8" 45 deg Phased Powerjet Gun.

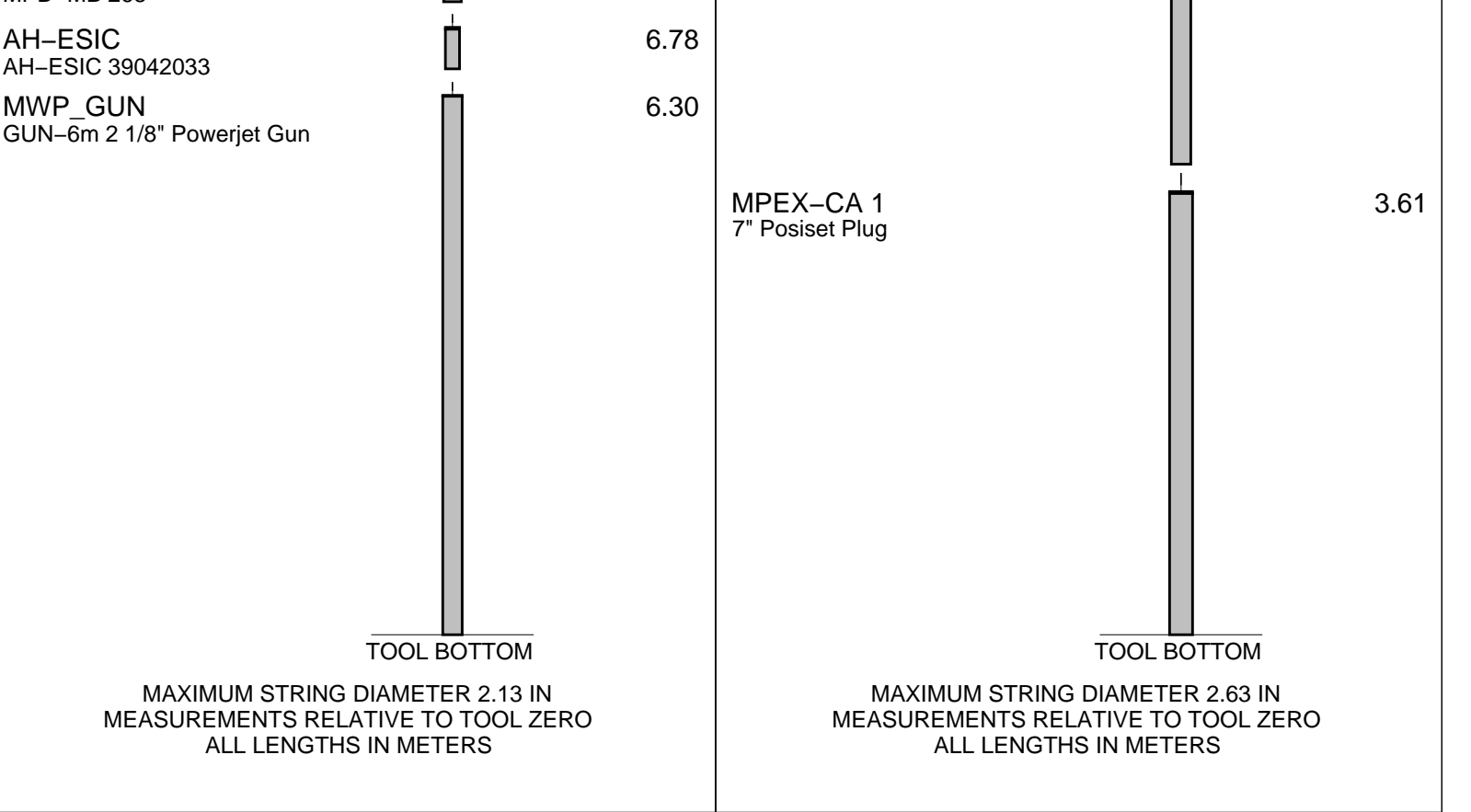
Gun Correlation Pass: Logged down to correlate to prevent Landing Nipple damaging det cord. 1m deep to allow for cable stretch on gun pass.

Set a 7.0" Posiset Plug using MPBT, with top of seal surface at 2342m MDKB.

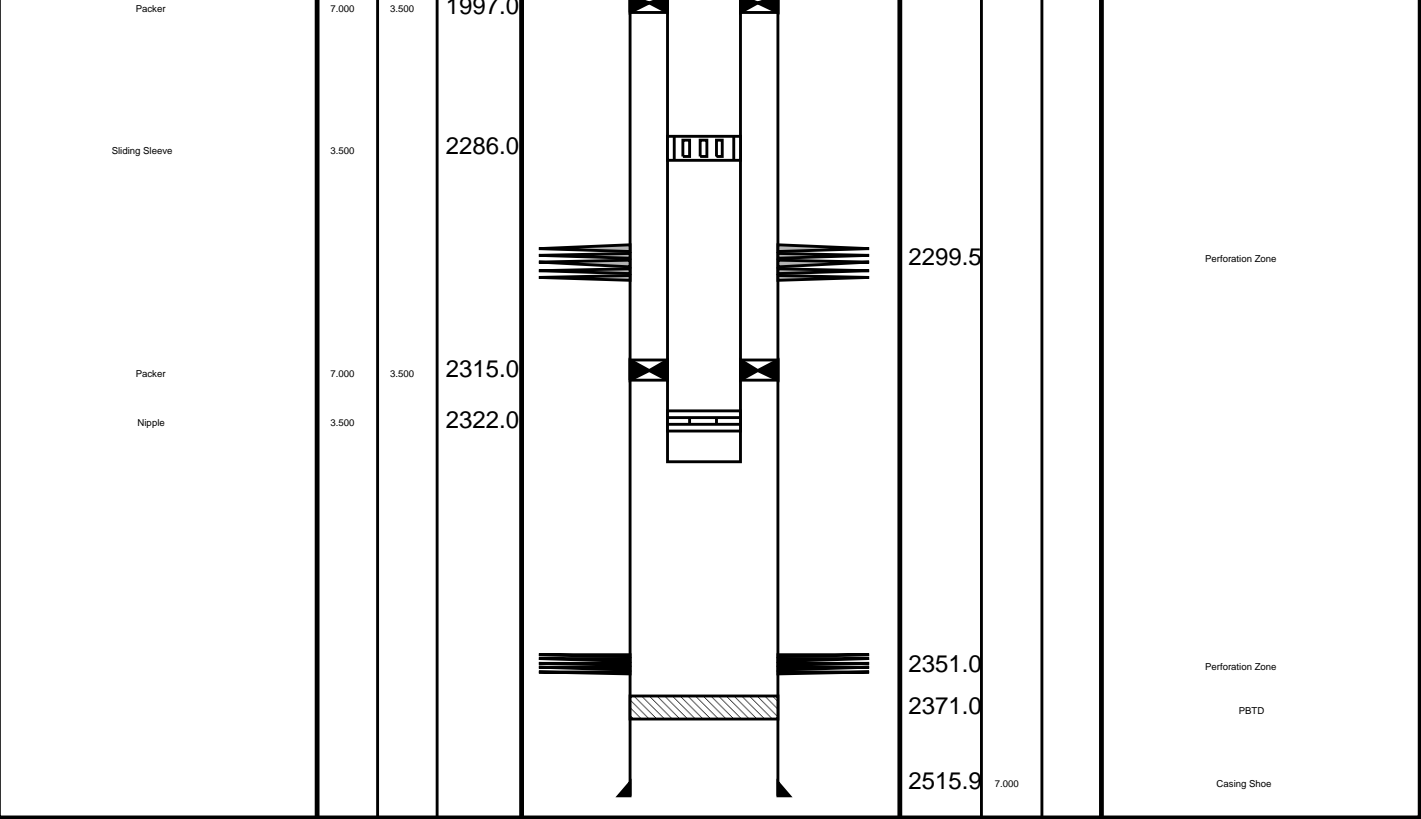
Dump approximately 1m of cement on top of seal.

Maximum deviation : 41 deg @ 1103m MDKB.





Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger	9.625	3.500	10.0		14.6	13.375		Casing String
Tubing	3.500		13.6		14.2	9.625	9.625	Casing String Liner Hanger
Shutin Valve	3.500		459.0		718.2	13.375		Casing Shoe
Gas Lift Mandrel	3.500		1170.0		1661.5	7.000		Casing String
Nipple	3.500		1185.0		1661.5	9.625	7.000	Liner Hanger
Gas Lift Mandrel	3.500		1586.0					
Nipple	3.500		1602.0		1768.5	9.625		Casing Shoe



Schlumberger

Dump Bailer  
Cement Pass

MAXIS Field Log

Output DLIS Files

DEFAULT      PERFO\_045LUP      FN:43      PRODUCER      06-Apr-2007 20:32      2332.5 M      2273.7 M

OP System Version: 14C0-302  
MCM

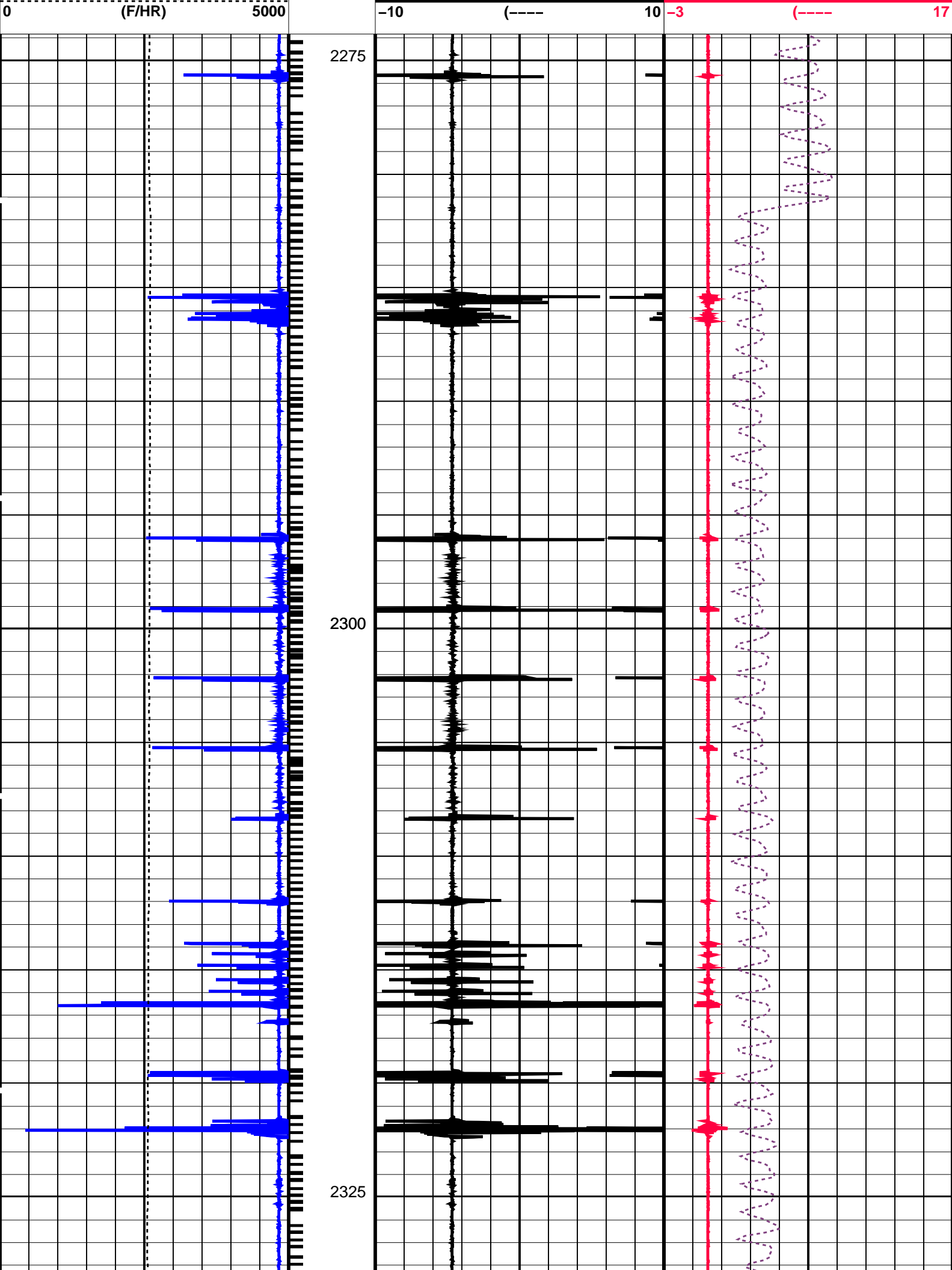
SHM\_GUN      14C0-302      CCL-L      14C0-302

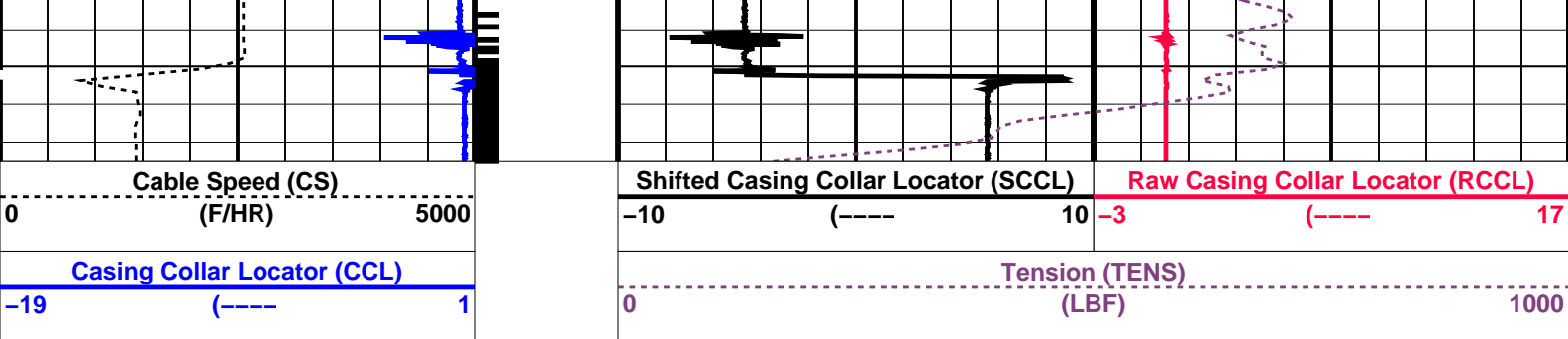
PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S

Casing Collar Locator (CCL)		Tension (TENS)	
-19	(----	0	(LBF) 1000
Cable Speed (CS)		Shifted Casing Collar Locator (SCCL)	Raw Casing Collar Locator (RCCL)





PIP SUMMARY

Time Mark Every 60 S

Casing Collars

Parameters		
DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	12 IN
CCLT	CCL reset delay	0.3 V
	CCL Detection Level	

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 06-Apr-2007 20:32


OP System Version: 14C0-302

MCM

SHM\_GUN 14C0-302 CCL-L 14C0-302

Output DLIS Files

DEFAULT PERFO\_045LUP FN:43 PRODUCER 06-Apr-2007 20:32



Dump Bailer  
Water Pass

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO\_041LUP FN:39 PRODUCER 06-Apr-2007 18:53

OP System Version: 14C0-302

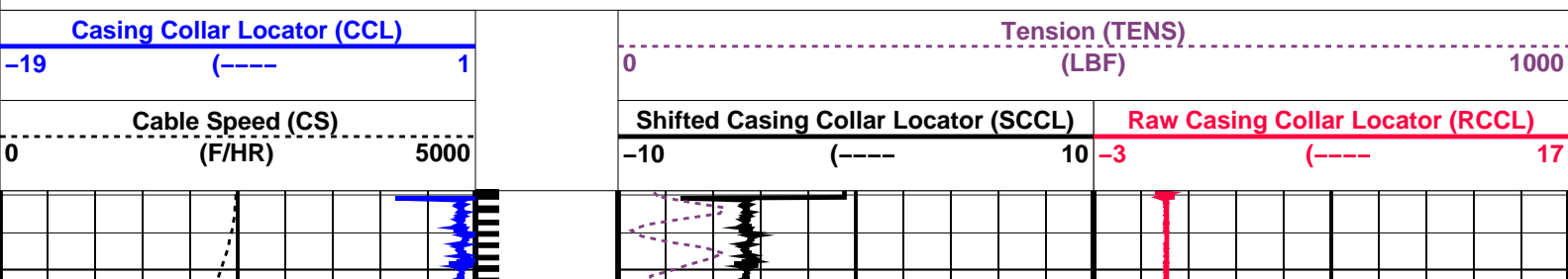
MCM

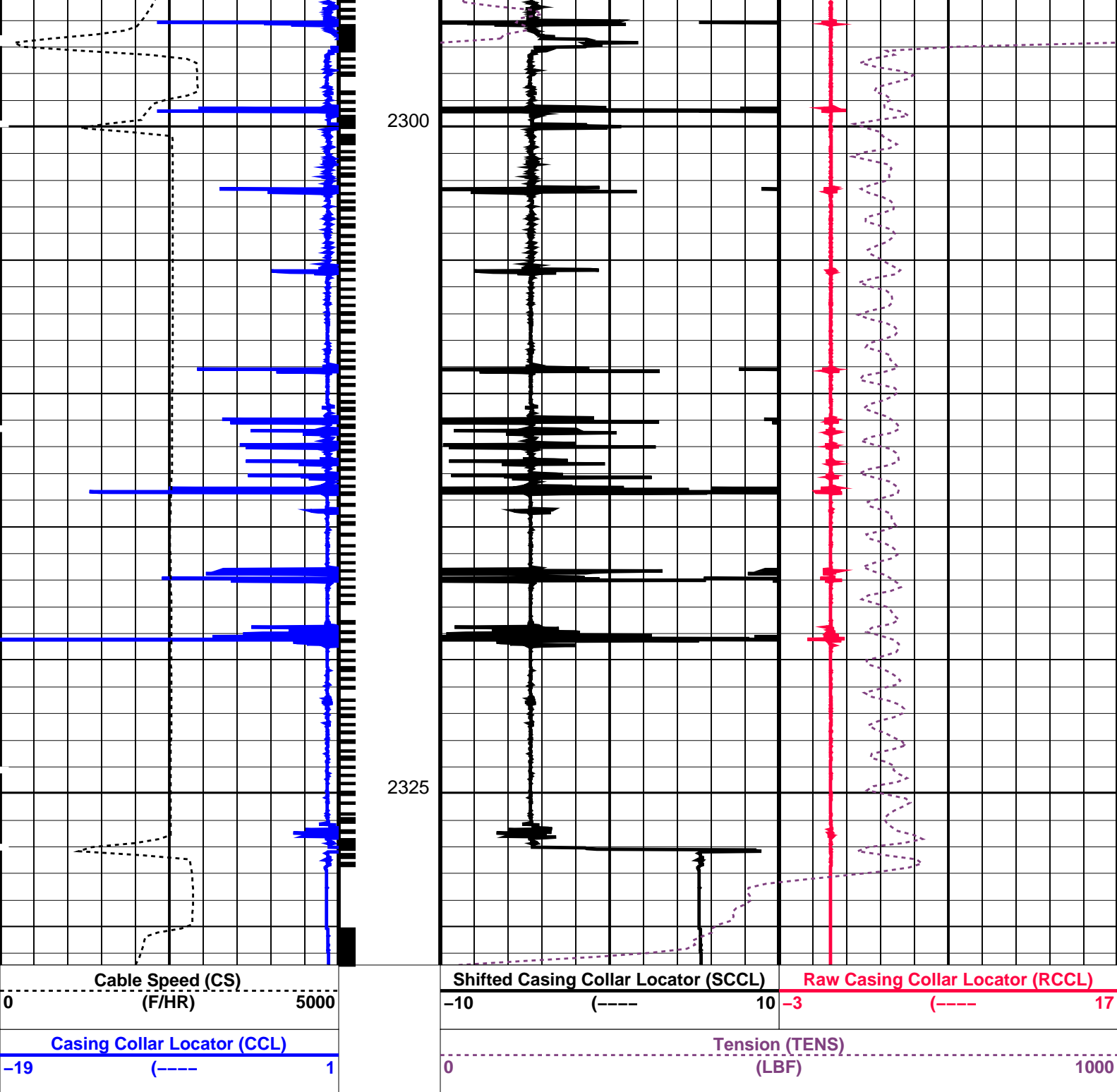
SHM\_GUN 14C0-302 CCL-L 14C0-302

PIP SUMMARY

Time Mark Every 60 S

Casing Collars





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
CCL-L: Casing Collar Locator		
CCLD	CCL reset delay	12 IN
CCLT	CCL Detection Level	0.3 V

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 06-Apr-2007 18:53

OP System Version: 14C0-302  
MCM

SHM\_GUN 14C0-302 CCL-L 14C0-302



# Output DLIS Files

DEFAULT

PERFO\_041LUP

FN:39

PRODUCER

06-Apr-2007 18:53

**Schlumberger**

7" Possiset Plug  
Top of seal @ 2342m MDKB

MAXIS Field Log

## Output DLIS Files

DEFAULT

MPBT\_031LUP

FN:30

PRODUCER

06-Apr-2007 16:25

OP System Version: 14C0-302  
MCM

MPEX-BA  
CCL-L

14C0-302  
14C0-302

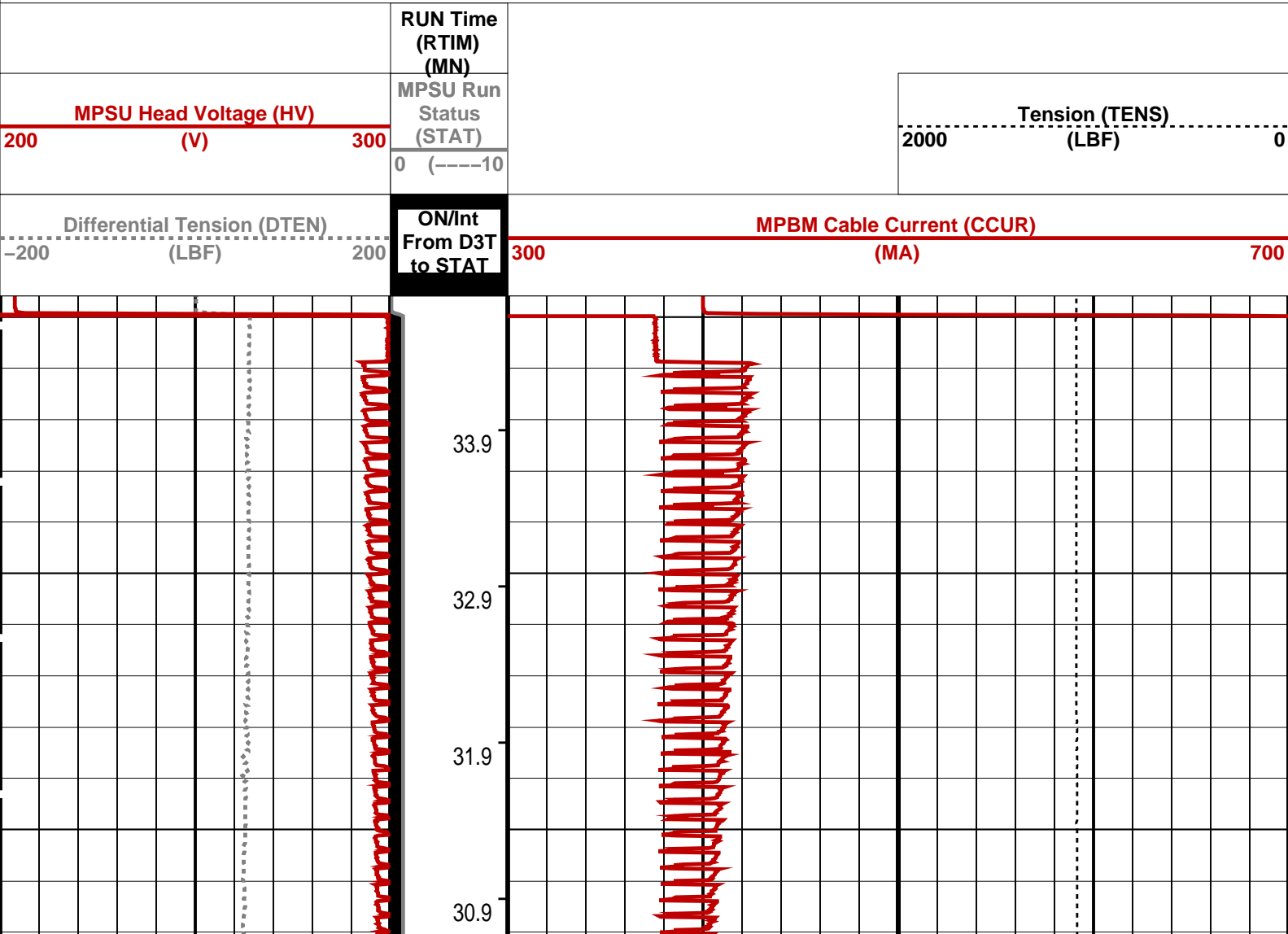
MPSU-CA

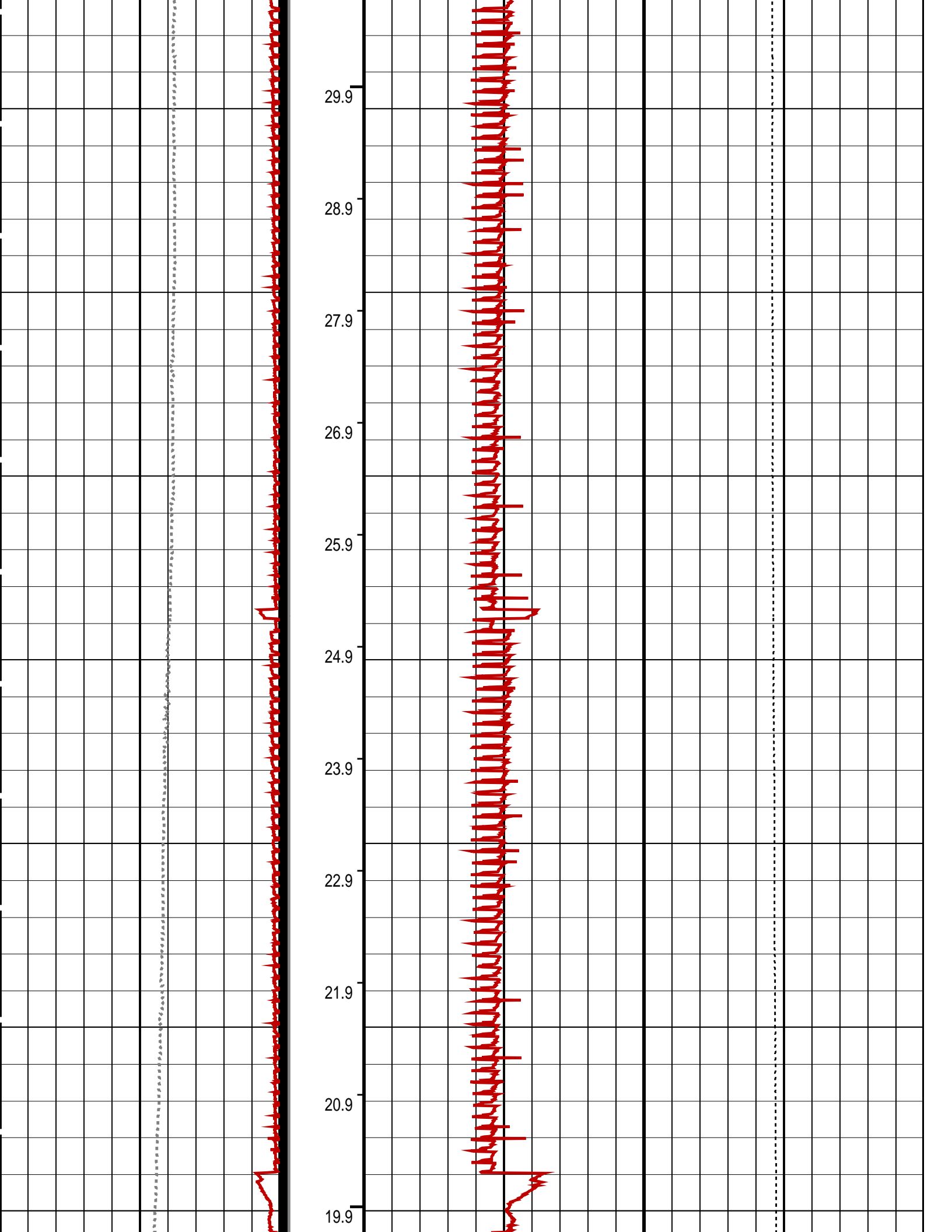
14C0-302

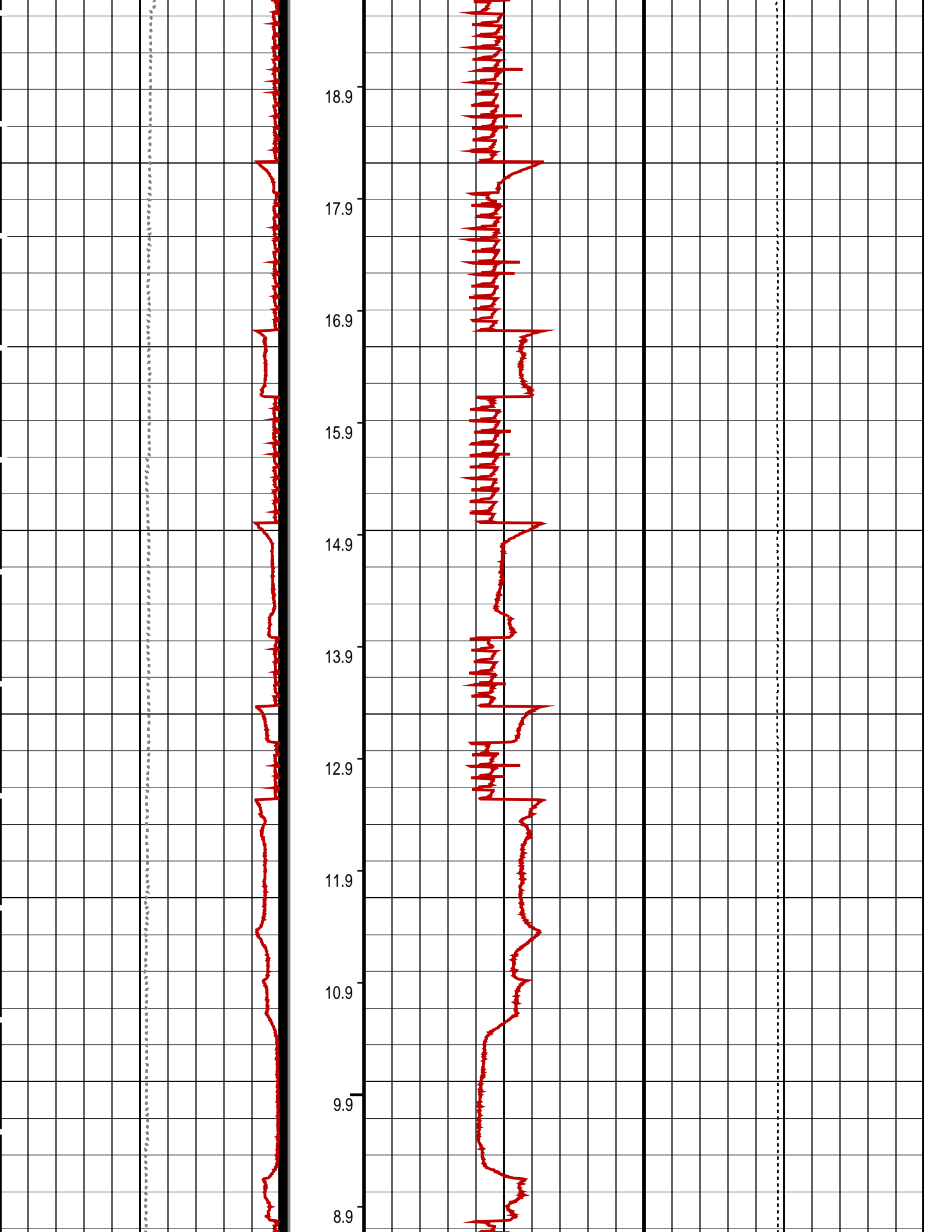
### PIP SUMMARY

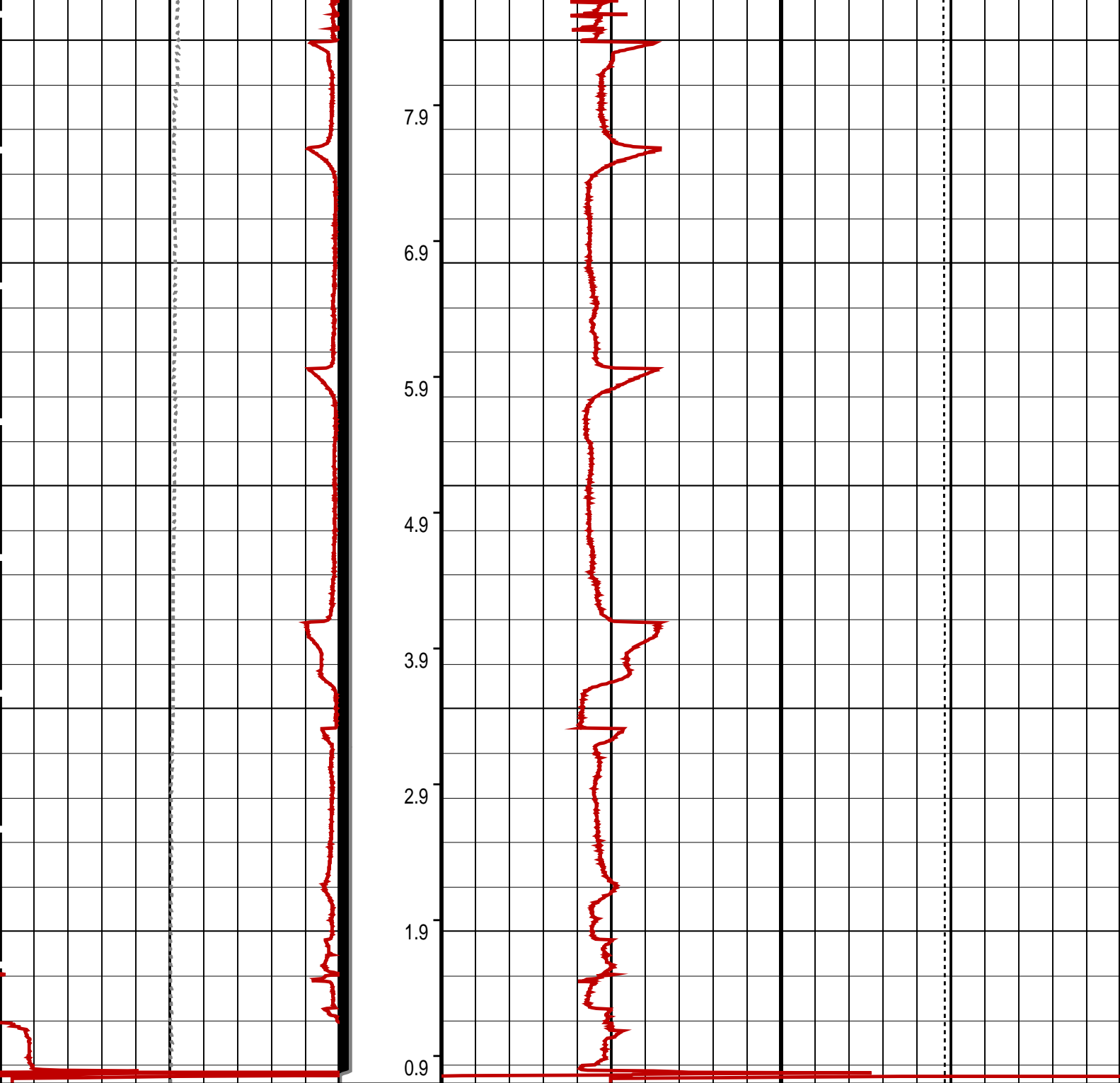
- MPSU Run Time Every 1 MN
- MPSU Run Time Every 10 MN

Time Mark Every 60 S









Differential Tension (DTEN) (LBF)	ON/Int From D3T to STAT	MPBM Cable Current (CCUR) (MA)
-200 200		300 700
MPSU Head Voltage (HV) (V)	MPSU Run Status (STAT)	Tension (TENS) (LBF)
200 300	0 (----10	2000 0
	RUN Time (RTIM) (MN)	

PIP SUMMARY

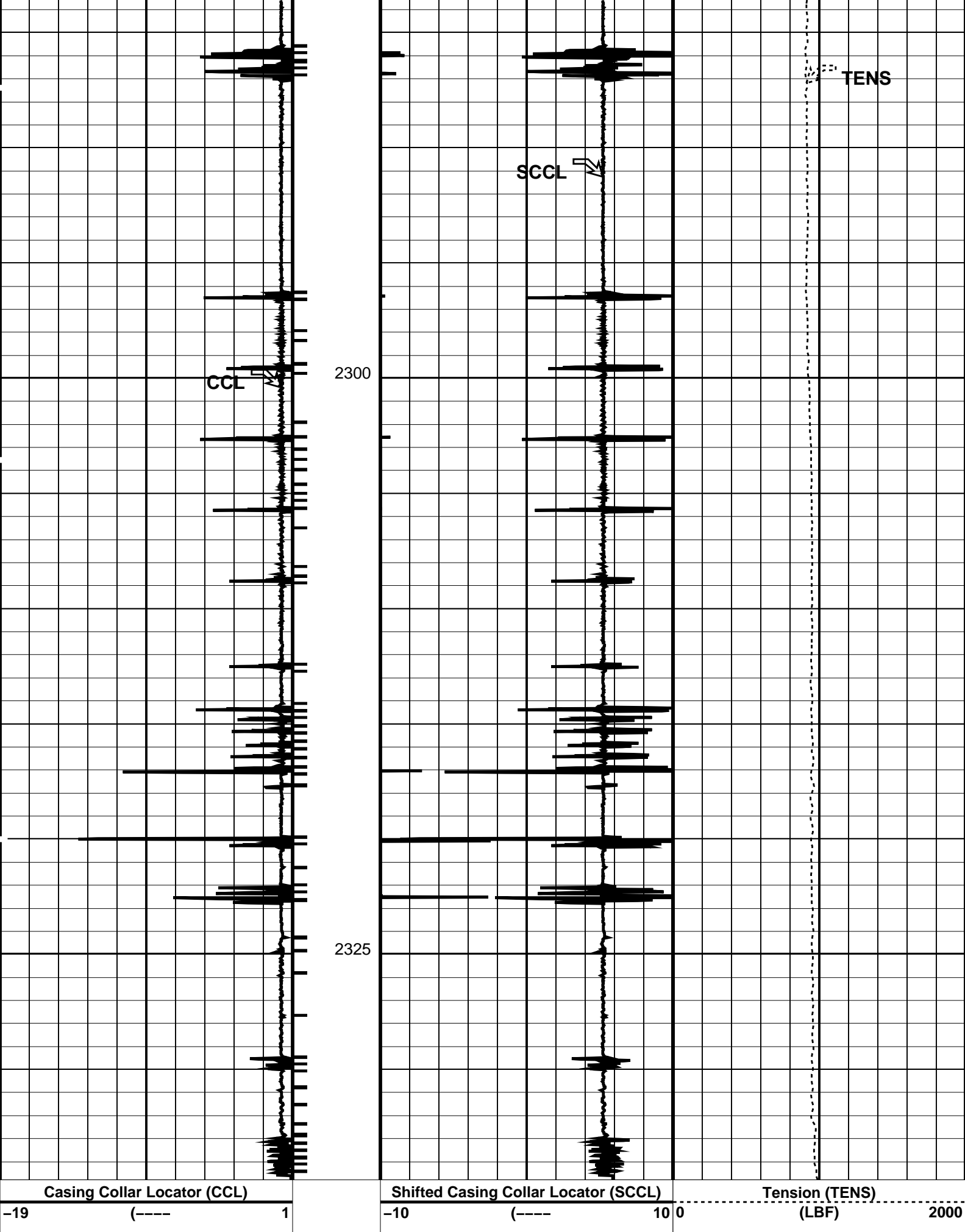
⊣ MPSU Run Time Every 1 MN

→ MPSU Run Time Every 10 MN

Time Mark Every 60 S

Parameters





Time Mark Every 60 S

Time Mark Every 60 S

## Parameters

DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	12 IN
CCLT	CCL reset delay	0.3 V
	CCL Detection Level	
DO	System and Miscellaneous	0.0 M
PP	Depth Offset for Playback	
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 06-Apr-2007 17:11

## OP System Version: 14C0-302

MCM

MPEX-BA	14C0-302	MPSU-CA	14C0-302
CCL-L	14C0-302		

## Input DLIS Files

DEFAULT	Flip_MPBT_033LUP	PRODUCER	06-Apr-2007 17:10	2334.8 M	2267.3 M
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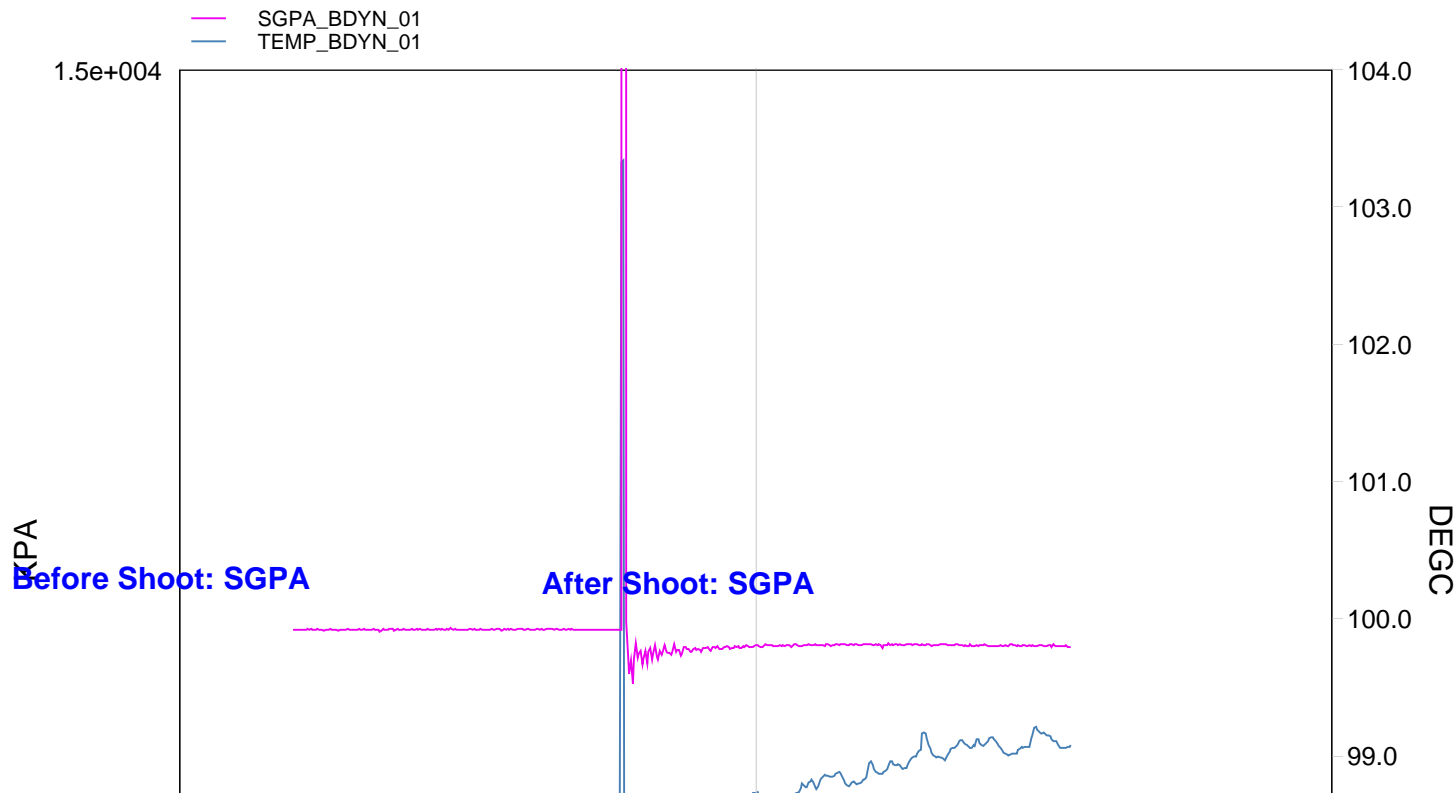
## Output DLIS Files

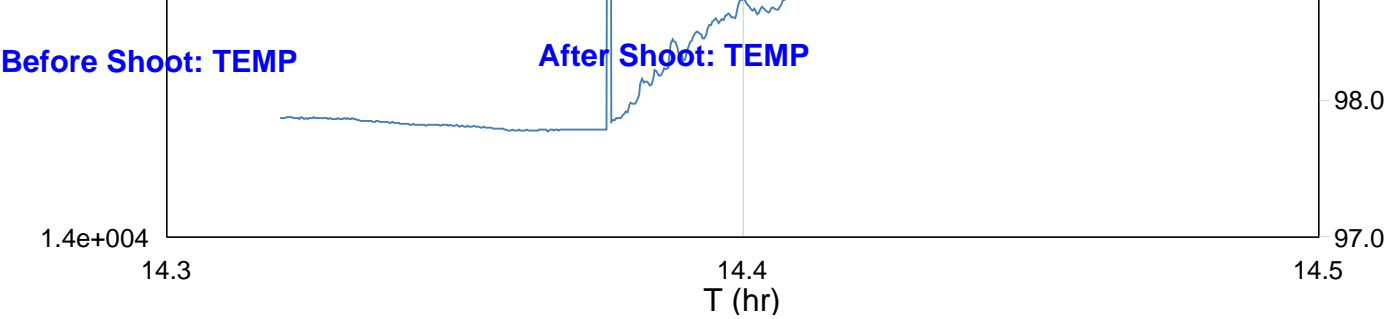
DEFAULT	MPBT_034PUP	FN:32	PRODUCER	06-Apr-2007 17:11
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**Schlumberger**

Gun Shot @ 2333 m MDKB

MAXIS Field Log





TIME	PSIA	TEMP
1420.0	2090.9328	208.1706
1440.0	2091.0441	208.1663
1460.0	2090.9614	208.1548
1480.0	2090.9334	208.1073
1500.0	2091.1499	208.0804
1520.0	2091.1213	208.0624
1540.0	2091.1219	208.0437
1560.0	2091.0719	208.0001
1580.0	2091.1499	208.0043
1600.0	2090.9468	208.0091
1620.0	2090.9468	208.0091
1640.0	2087.1086	208.4428
1660.0	2087.9477	209.0538
1680.0	2088.3978	209.2305
1700.0	2088.4418	209.4720
1720.0	2088.6851	209.5734
1740.0	2088.6930	209.8946
1760.0	2088.8324	209.8871
1780.0	2088.8883	210.0067
1800.0	2088.7629	210.0665
1820.0	2088.6377	210.1832
1840.0	2088.5740	210.3018
1860.0	2088.6155	210.2537
1880.0	2088.5322	210.5798
1900.0	2088.5726	210.3073

Company: Esso Australia Pty Ltd

Well: A-12

Output DLIS Files

DEFAULT

PERFO\_023LUP

FN:22

PRODUCER

06-Apr-2007 14:16

2337.5 M

2312.7 M

OP System Version: 14C0-302

MCM

MWP\_GUN

14C0-302

MWPT-CA

14C0-302

MWGT-AA

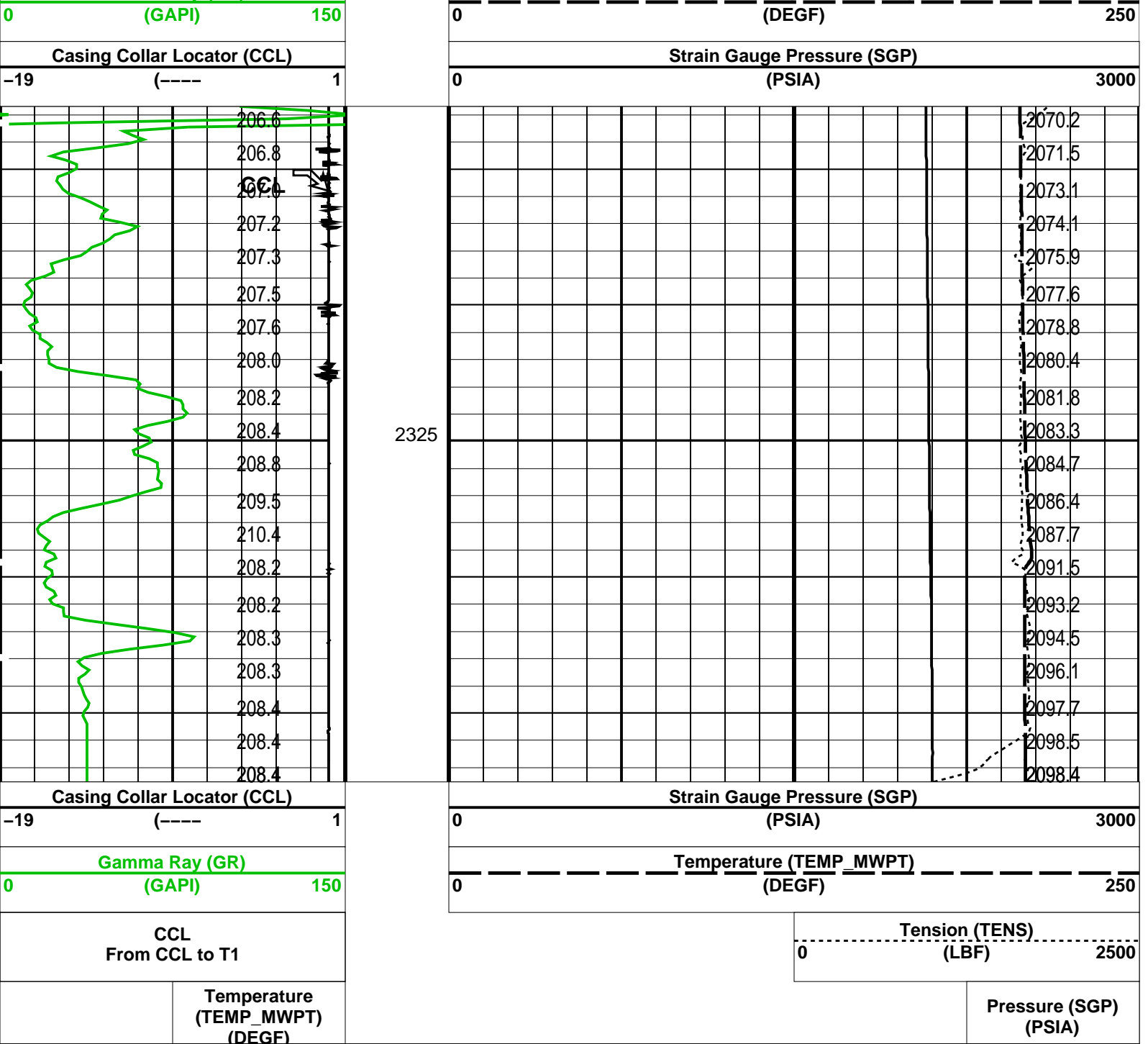
14C0-302

PIP SUMMARY

☐ Time Mark Every 60 S

	Temperature (TEMP_MWPT) (DEGF)		Pressure (SGP) (PSIA)
CCL From CCL to T1			Tension (TENS) (LBF) 02500
Gamma Ray (GR)	Temperature (TEMP_MWPT)		





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL		
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0 DEG
FLD	Flow Line Density	1 G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0 DEGC

Format: MWP Vertical Scale: 1:200 Graphics File Created: 06-Apr-2007 14:16

OP System Version: 14C0-302  
MCM

MWP\_GUN 14C0-302 MWPT-CA 14C0-302  
MWGT-AA 14C0-302

Output DLIS Files

DEFAULT PERFO 023111P EN:22 PRODUCER 06-Apr-2007 14:16



## Gun Correlation Pass

MAXIS Field Log

**Company: Esso Australia Pty Ltd**

Well: A-12

## Input DLIS Files

DEFAULT      Flip\_PERFO\_023LUP

PRODUCER 16-Apr-2007 15:37

## Output DLIS Files

DEFAULT      PERFO 051PUP

**FN:1      PRODUCER      16-Apr-2007 15:40      2337.5 M      2269.4 M**

**OP System Version: 14C0-302**

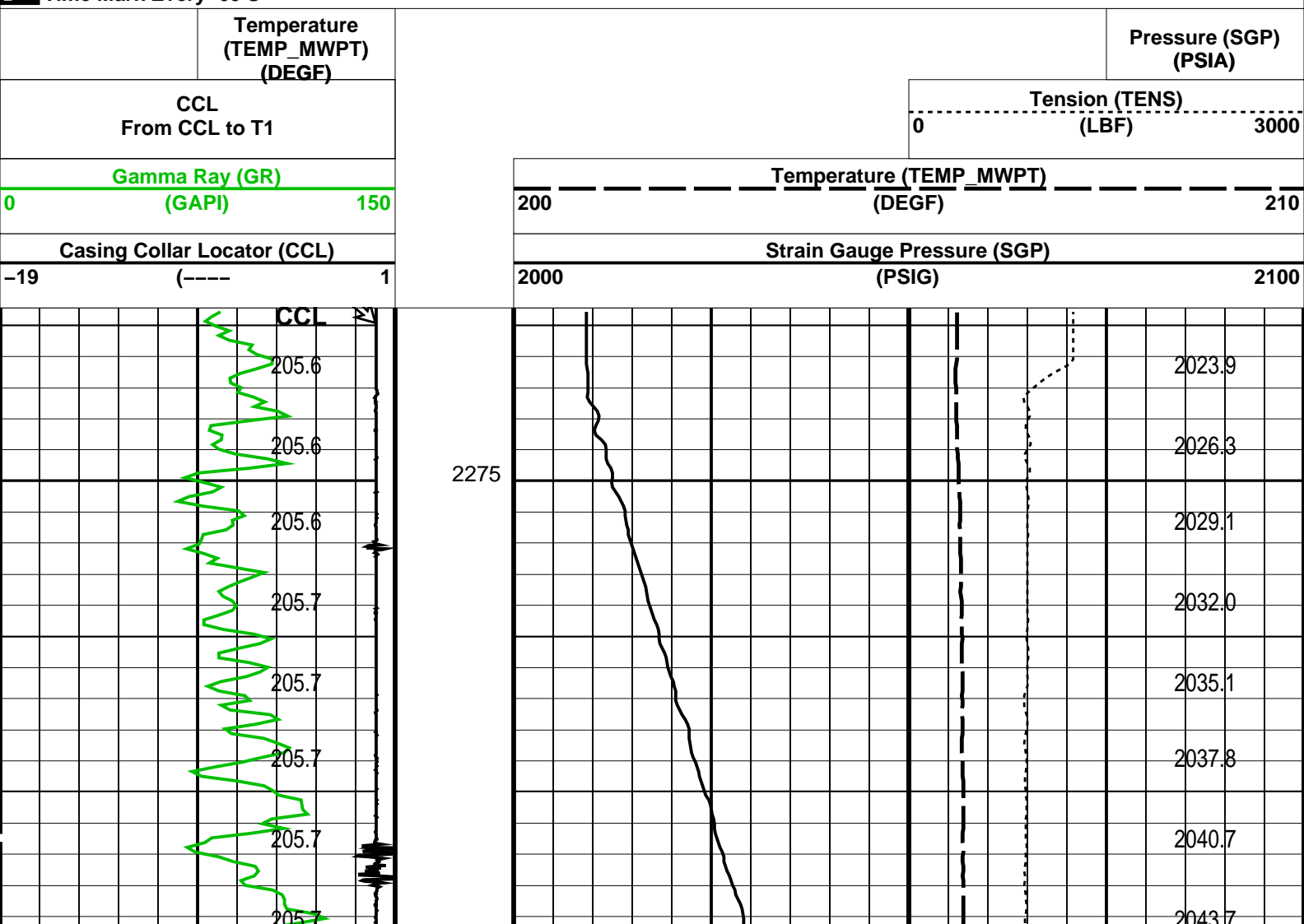
## MCM

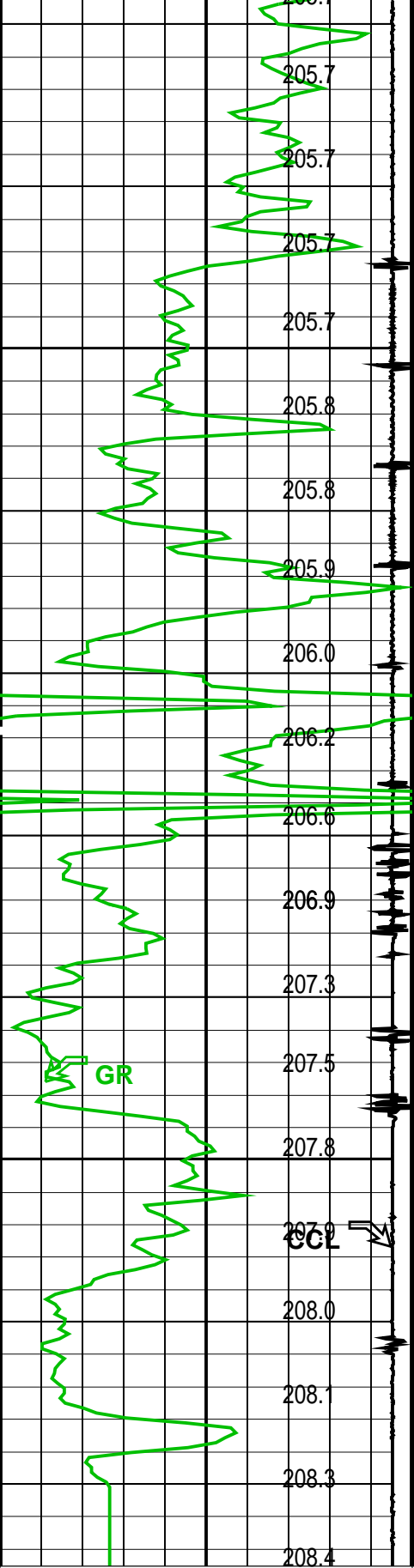
MWP_GUN	14C0-302
MWGT-AA	14C0-302

MWPT-CA 14C0-302

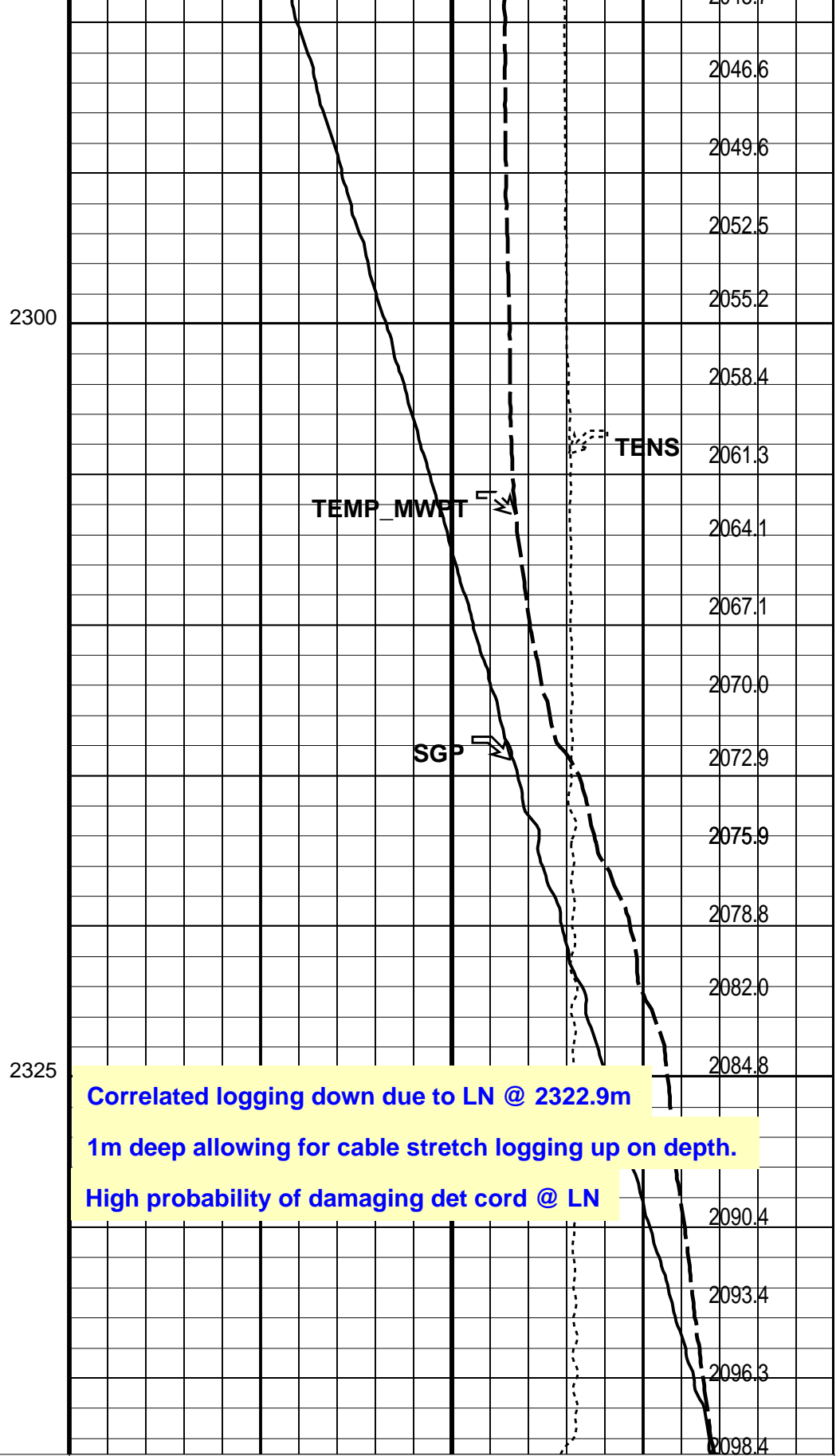
## PIP SUMMARY

**Time Mark Every 60 S**





Casing Collar Locator (CCL)		
-19	(----	1
Gamma Ray (GR)		
0	(GAPI)	150
CCL From CCL to T1		



Correlated logging down due to LN @ 2322.9m		
1m deep allowing for cable stretch logging up on depth.		
High probability of damaging det cord @ LN		
Strain Gauge Pressure (SGP)		
2000	(PSIG)	2100
Temperature (TEMP_MWPT)		
200	(DEGF)	210
Tension (TENS)		
0	(LBF)	3000

	Temperature (TEMP_MWPT) (DEGF)		Pressure (SGP) (PSIA)
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PIP SUMMARY			
Time Mark Every 60 S			

Parameters			
DLIS Name	Description	Value	
MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL			
DEVI_FL_CORR	Deviation Angle for Flow Line Correction	0	DEG
FLD	Flow Line Density	1	G/C3
MWPT_NULL_SOURCE	MWPT NULL Temperature Source	TEMS	
MWPT_NULL_TEMP	MWPT NULL Temperature	0.0	DEGC
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: MWP	Vertical Scale: 1:200	Graphics File Created: 16-Apr-2007 15:40
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OP System Version: 14C0-302			
MCM			
MWP_GUN	14C0-302	MWPT-CA	14C0-302
MWGT-AA	14C0-302		

Input DLIS Files			
DEFAULT	Flip_PERFO_023LUP	PRODUCER	16-Apr-2007 15:37
Output DLIS Files			
DEFAULT	PERFO_051PUP	FN:1	PRODUCER 16-Apr-2007 15:40

		GR– 2 1/8" Dummy Plug Pass 2345m to 2275m MDKB	
MAXIS Field Log			

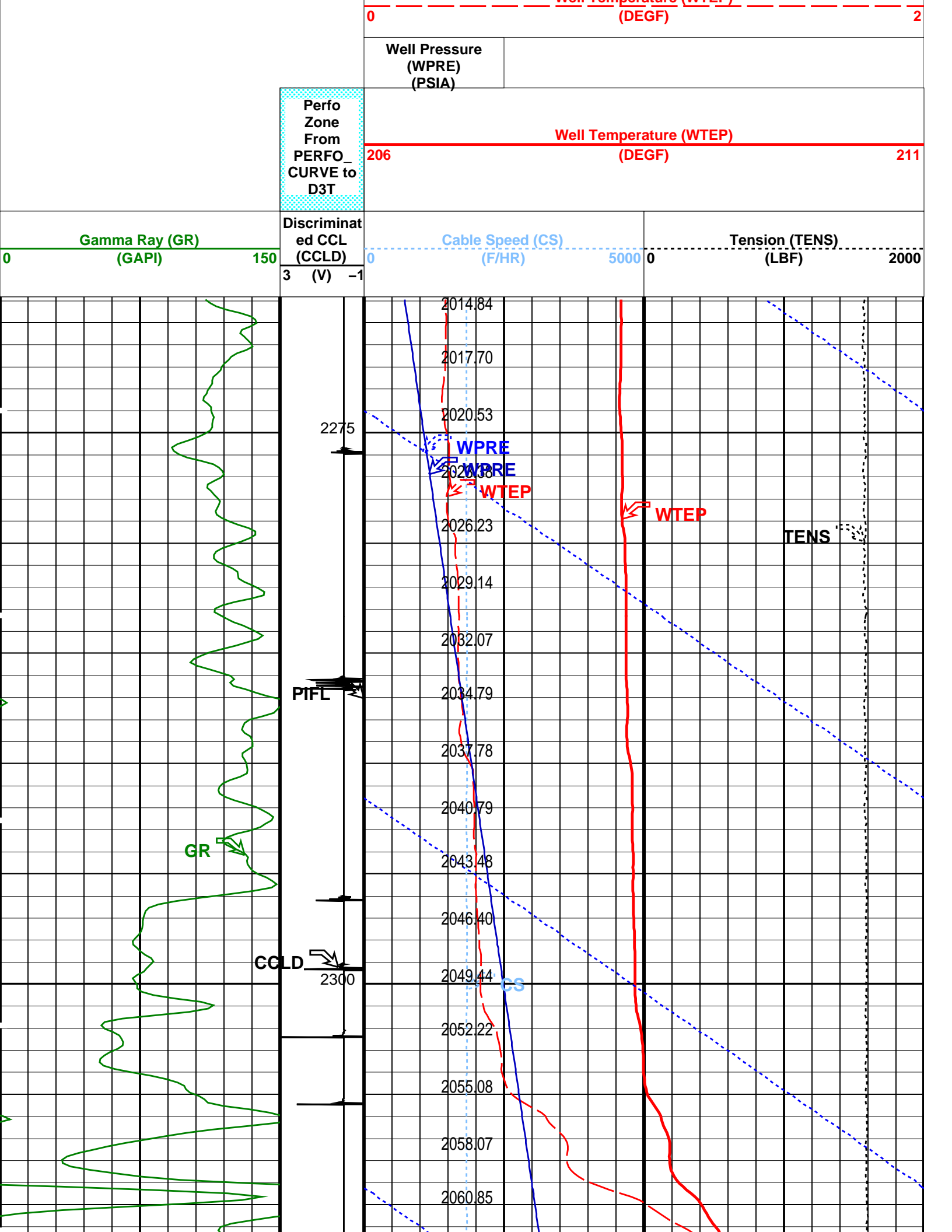
Company:	Well:
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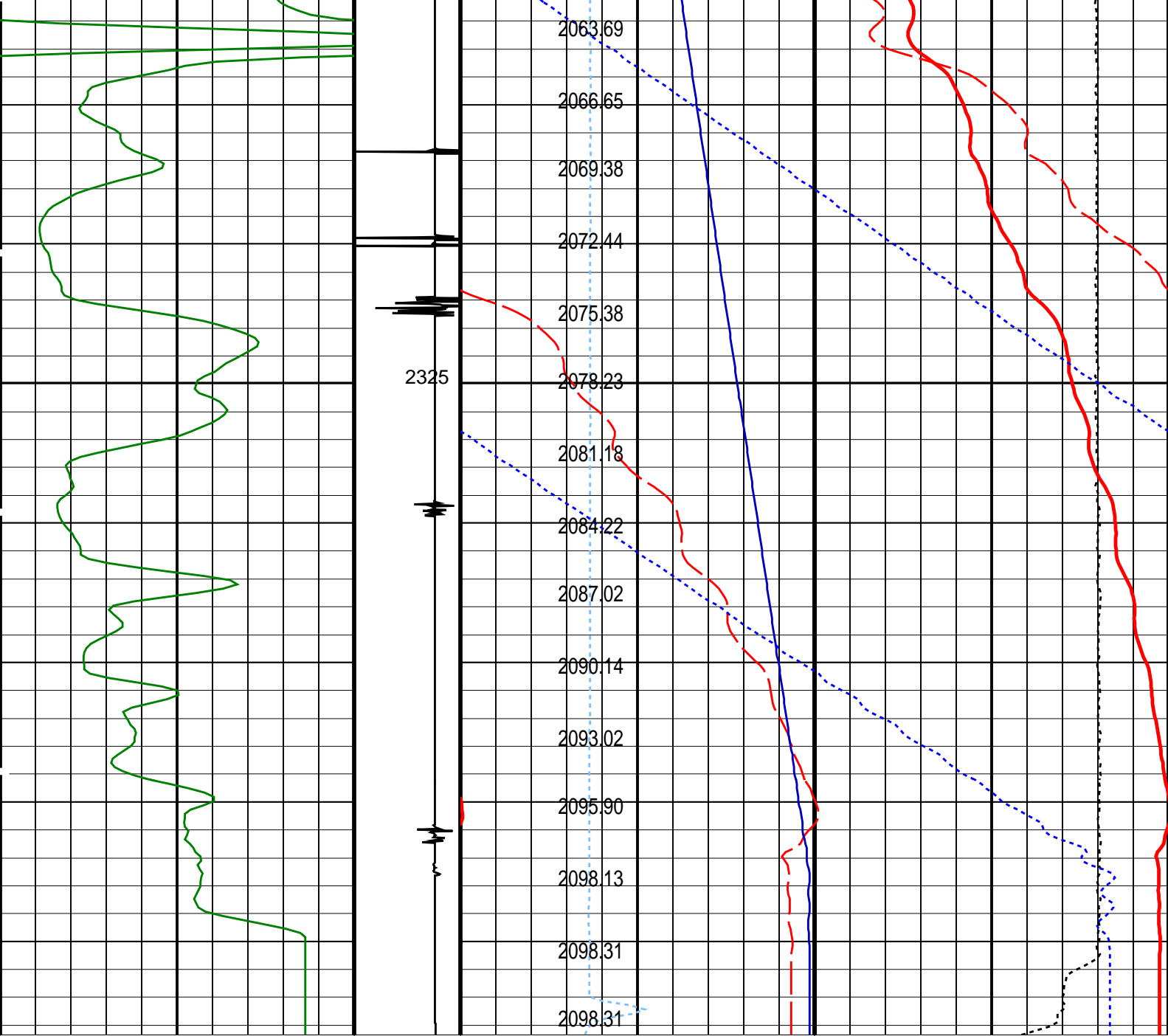
Input DLIS Files					
DEFAULT	PSP_012LUP	FN:11	PRODUCER	06-Apr-2007 11:43	2348.2 M 2268.2 M
Output DLIS Files					
DEFAULT	PSP_013PUP	FN:12	PRODUCER	06-Apr-2007 11:53	2348.3 M 2268.8 M

OP System Version: 14C0-302	
MCM	
PSPT-A/B	14C0-302

PIP SUMMARY	
Time Mark Every 60 S	

	Amplified Well Pressure (WPRES)	
	0	20
	(PSIA)	
	Well Pressure (WPRES)	
	2000	2200
	(PSIA)	
	Well Temperature (WTEP)	





Gamma Ray (GR) (GAPI)	Discriminat ed CCL (CCLD) (V)	Cable Speed (CS) (F/HR)	Tension (TENS) (LBF)
0	3	0	0
150	-1	5000	2000

Perfo Zone From PERFO_ CURVE to D3T	Well Temperature (WTEP) (DEGF)
	206
	211

Well Pressure (WPRE) (PSIA)	Well Temperature (WTEP) (DEGF)	Well Pressure (WPRE) (PSIA)	Amplified Well Pressure (WPRE) (PSIA)
	0		0
			20
2000		2200	

PIP SUMMARY									
Time Mark Every 60 S									
Format: PSP_1				Vertical Scale: 1:200			Graphics File Created: 06-Apr-2007 11:53		
OP System Version: 14C0-302									
MCM									
PSPT-A/B		14C0-302							
Parameters									
DLIS Name		Description					Value		
DO		System and Miscellaneous					0.2 M		
PP		Depth Offset for Playback Playback Processing					NORMAL		
Input DLIS Files									
DEFAULT		PSP_012LUP		FN:11		PRODUCER		06-Apr-2007 11:43 2348.2 M 2268.2 M	
Output DLIS Files									
DEFAULT		PSP_013PUP		FN:12		PRODUCER		06-Apr-2007 11:53	
Company: Esso Australia Pty Ltd									
Well: A-12									
Field: Tuna									
Rig: Crane/Prod 4									
Country: Australia									
MWPT 2 1/8" Powerjet Perforation									
7" Posiset Plug									

Schlumberger