

Company: Esso Australia Pty Ltd

Well: TNA A22

Field: Prod 4 / Crane

Rig: Tuna

Country: Australia

2-1/8" EnerJet with MWPT  
7-5/8" MPBT Plug setting Record  
01-01-2010

Rig: Tuna  
Field: Prod 4 / Crane  
Location: Gippsland  
Well: TNA A22  
Company: Esso Australia Pty Ltd

LOCATION			
Gippsland	Elev.:	K.B.	38.90 m
Basin		G.L.	-59.00 m
Bass Strait		D.F.	38.90 m
Permanent Datum:	Mean Sea Level		
Log Measured From:	Drill floor	0.00 m	above Perm. Datum
Drilling Measured From:	Drill floor		

State: Victoria	Max. Well Deviation 19.3 deg	Longitude 148°25' 05.59"E	Latitude 38°10'16.00"S
-----------------	---------------------------------	------------------------------	---------------------------

Logging Date	1-Jan-2010		
Run Number	1		
Depth Driller	2162 m		
Schlumberger Depth	2094 m		
Bottom Log Interval	2073 m		
Top Log Interval	2065.5 m		
Casing Fluid Type	Production fluids		
Salinity			
Density			
Fluid Level			
BIT/CASING/TUBING STRING			
Bit Size	9.875 in		
From	675 m		
To	2162 m		
Casing/Tubing Size	7.625 in		
Weight	29.7 lbm/ft		
Grade	L-80		
From	21 m		
To	2156.1 m		
Maximum Recorded Temperatures	215 degF		
Logger On Bottom	1-Jan-2010	8:30	
Unit Number	889	AUSL	
Recorded By	Owen Darby		
Witnessed By	Barrie White		

PVT DATA			
Oil Density	Run 1	Run 2	R
Water Salinity			
Gas Gravity			
Bo			
Bw			
1/Bg			
Bubble Point Pressure			
Bubble Point Temperature			
Solution GOR			
Maximum Deviation	19.3 deg		
CEMENTING DATA			
Primary/Squeeze	Primary		
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			

Date Created: 28-DEC-2009 15:43:52

## Logging Cable

Type:	2-32ZT
Serial Number:	208558
Length:	6085 M
<hr/>	
Conveyance Method:	Wireline
Rig Type:	Offshore Fixed

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	
Reference Log Run Number:	Tuna A22
Reference Log Date:	
Subsequent Trip Down Log Correction:	

1. Correlated to ExxonMobil solar composite log provided by client
2. Used IDW as primary depth control
3. Used Z-Chart as secondary depth control
- 4.
- 5.
- 6.

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES2  
OS1:  
OS2:  
OS3:  
OS4:  
OS5:

REMARKS: RUN NUMBER 2



















interval flow well for 15mins after perforation for clean up. Shut in well, POOH

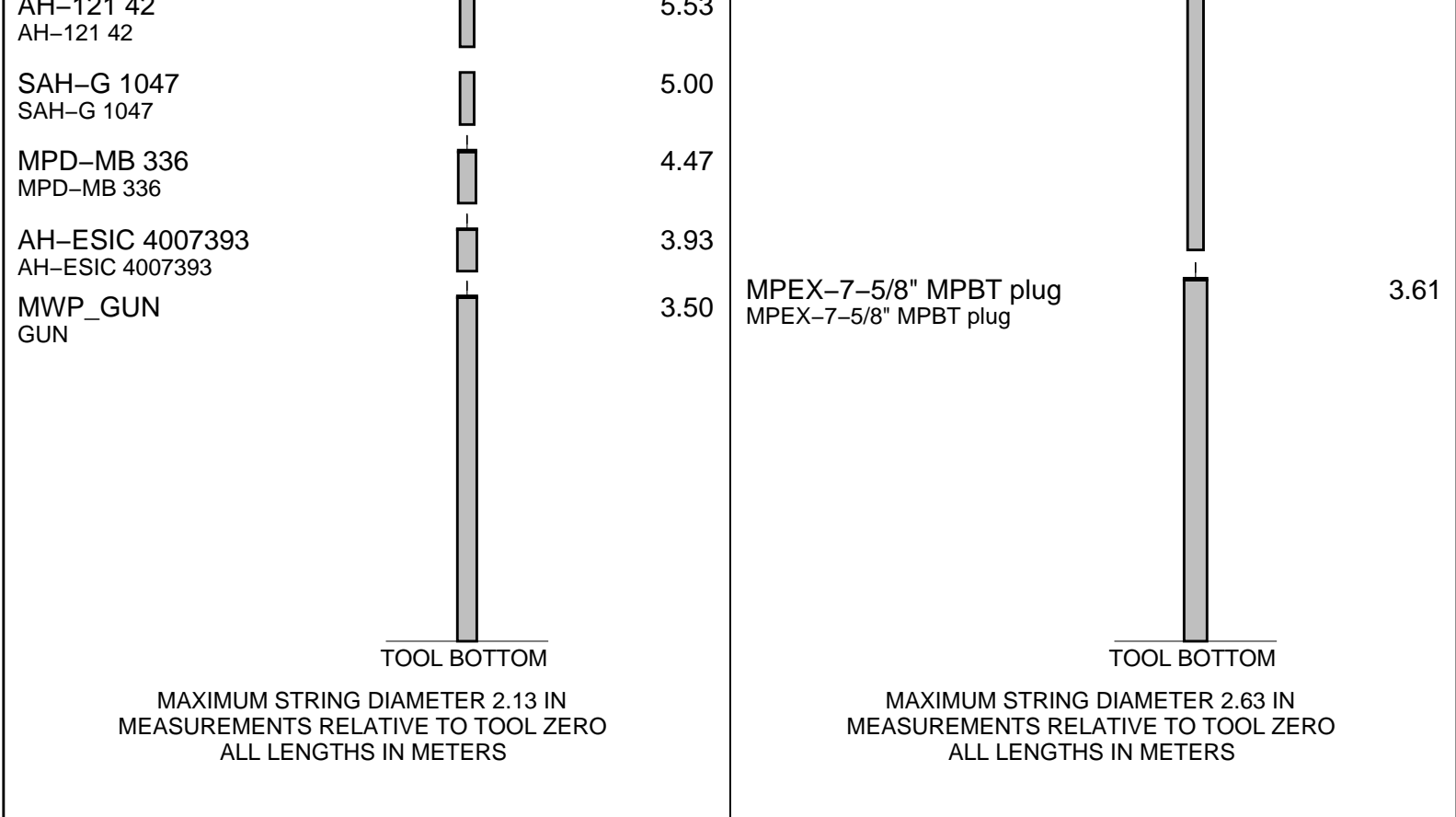
Note: perforation shock damaged MWPT no data available after perforation.

Objective # 2:  
Make up dummy MPBT plug with GR/CCL and RIH to ensure access to 2094m MDKB.  
Prepare MPBT setting tool with 7 5/8" MPBT plug suitable for 29.7lbs casing, RIH  
and set plug with top sealing element positioned @ 2079m MDKB.  
Make up dump bailer toolstring RIH and dump fresh water then approximately 1.0m  
of cement on top of the MPBT plug.  
Note: MPBT plug became stuck while RIH inside SPM located @ 1871m – The Plug was  
fished with slickline and pushed to bottom of the hole, another dummy plug run  
conducted after fishing, another MPBT set on top of the fish.

RUN 1			RUN 2		
SERVICE ORDER #:		B69I-00022	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1			RUN 2		
SURFACE EQUIPMENT			SURFACE EQUIPMENT		
MWPM-AA			WITM (SHM)		
DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
AH-SWBS-B 785 AH-SWBS-B 785		13.27	AH-SWBS-B 785 AH-SWBS-B 785		14.01
AH-SWBS-B 786 AH-SWBS-B 786		12.62	AH-SWBS-B 786 AH-SWBS-B 786		13.37
AH-SWBS-B 787 AH-SWBS-B 787		11.98	AH-SWBS-B 787 AH-SWBS-B 787		12.72
AH-SWBS-B 788 AH-SWBS-B 788		11.33	AH-SWBS-B 788 AH-SWBS-B 788		12.08
AH-SWBS-B 789 AH-SWBS-B 789		10.69	AH-SWBS-B 789 AH-SWBS-B 789		11.43
MH-SWBH 759 MH-SWBH 759		10.04	MH-SWBH 759 MH-SWBH 759		10.78
AH-124		9.56	CCL Cable Cur Head Volt Tension		TOOL ZERO
MWGT-AA MWPG-AA 19 MWGH-AA 19		9.33			
MWPT-CA MWPH-AA 94 MWPS-AA 94		8.35	MPSU-BA 20 MPSU-BA 20		9.85
CCL SMWP Pres SMWP Temp Tension			TOOL ZERO		
AH-124 10		5.50			

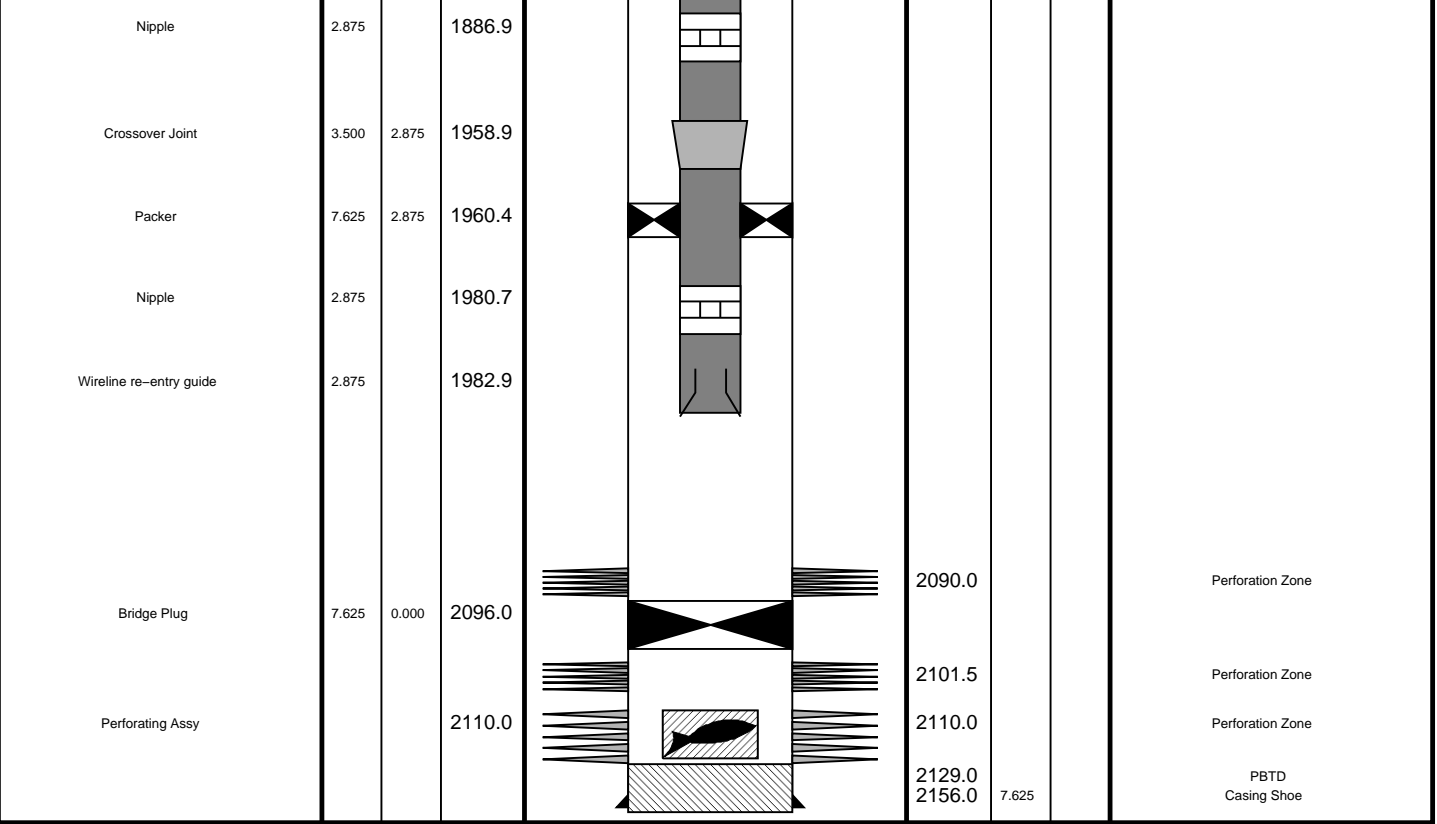


Client: Esso Australia Pty Ltd  
 Well: TNA A22  
 Field: Bass Strait  
 State: Victoria  
 Country: Australia

Rig Name: Tuna  
 Reference Datum: Mean Sea Level  
 Elevation: 38.9 m

Drawing Date: 12/30/2009  
 API #:

Production String	(in)		(m)	Well Schematic	(m)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Tubing Hanger Tubing	7.625 2.875	2.875	20.0 20.5		21.0 21.0	7.625 7.625 13.375	13.375	Casing String Liner Hanger
SSSV	2.875		443.0					
Gas Lift Mandrel	2.875		936.5		658.0	13.375		Casing Shoe
Gas Lift Mandrel	2.875		1534.4					
Gas Lift Mandrel	2.875		1871.4					



# Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary						
	Time	Elapsed Time	Depth (M)			File
Simulated Log	1-Jan-2010 15:02	000:01				PERFO_056LUP
OP checking MWPT						
Log Pass (up)	1-Jan-2010 16:14	000:07	2080.4 - 2014.9			PERFO_064LUP
MWPT - Correlation pass						
Log Pass (up)	1-Jan-2010 16:26	000:23	2075.1 - 2063.6			PERFO_065LUP
MWPT - Shooting pass						
Station Log	1-Jan-2010 16:32	000:15	2066.1			PERFO_066LTP
MWPT - Station log						
Simulated Log	2-Jan-2010 7:44	000:18				PSP_082LUP
OP checking Dummy plug toolstring						
Log Pass (up)	2-Jan-2010 8:31	000:10	2091.2 - 1901.8			PSP_085LUP
Dummy plug - Correlation pass # 1						
Simulated Log	3-Jan-2010 9:14	000:28				MPBT_104LUP
OP checking MPBT toolstring						

Log Pass (down)	3-Jan-2010 11:10	000:08	1970.1 -	2071.0	MPBT_110LDP
MPBT - Correlation pass					
Simulated Log	3-Jan-2010 11:27	000:46			MPBT_111LUP
MPBT - setting record					
Simulated Log	3-Jan-2010 13:34	000:22			PERFO_114LUP
OP checking dump bailer toolstring					
Log Pass (up)	3-Jan-2010 14:52	000:06	2069.1 -	1975.1	PERFO_117LUP
Dump bailer - water dumping record					
Log Pass (up)	3-Jan-2010 16:26	000:06	2067.0 -	1971.3	PERFO_121LUP
Dump bailer - Cement dumping record					



## 2-1/8" Dump Bailer Cement Dump

MAXIS Field Log

## PERF02 Operational Summary Listing

Device	Status	Req Depth ( M)	Obs Depth ( M)	Time Used
GUN1	Used	2065.3	2065.3	Sun Jan 03 16:28:44 201

## Input DLIS Files

DEFAULT	PERFO 121LUP	FN:120	PRODUCER	03-Jan-2010 16:26	2067.0 M	1971.3 M
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## Output DLIS Files

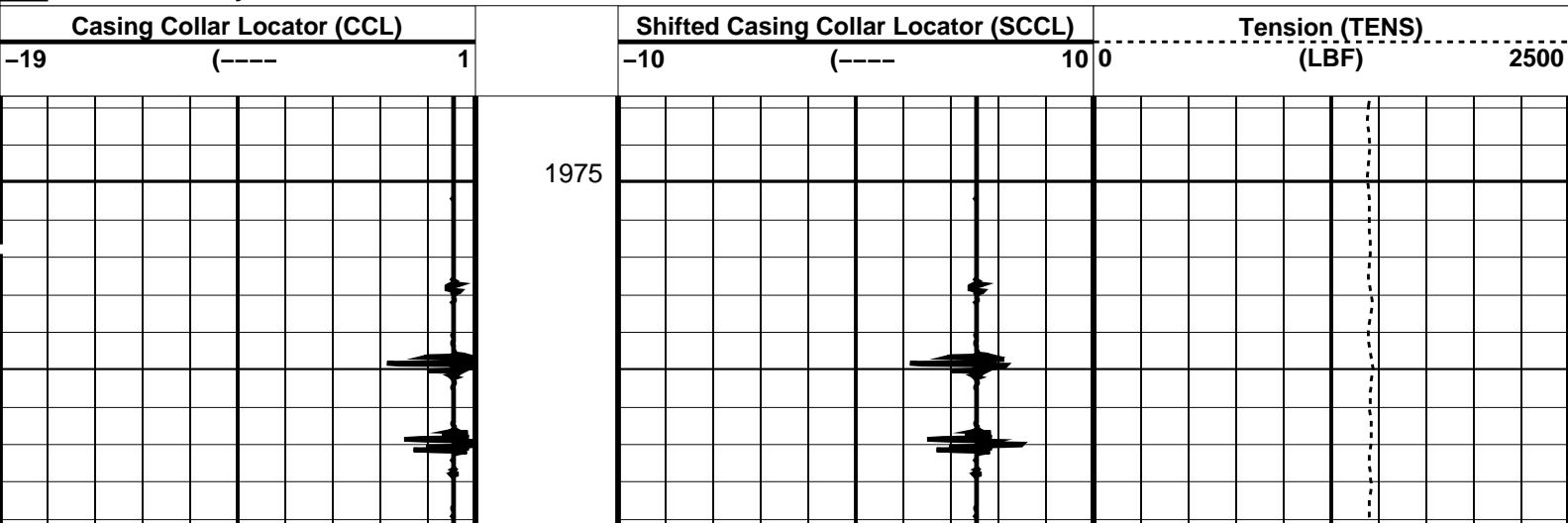
DEFAULT	PERFO 123PUP	FN:122	PRODUCER	03-Jan-2010 16:34	2068.4 M	1972.7 M
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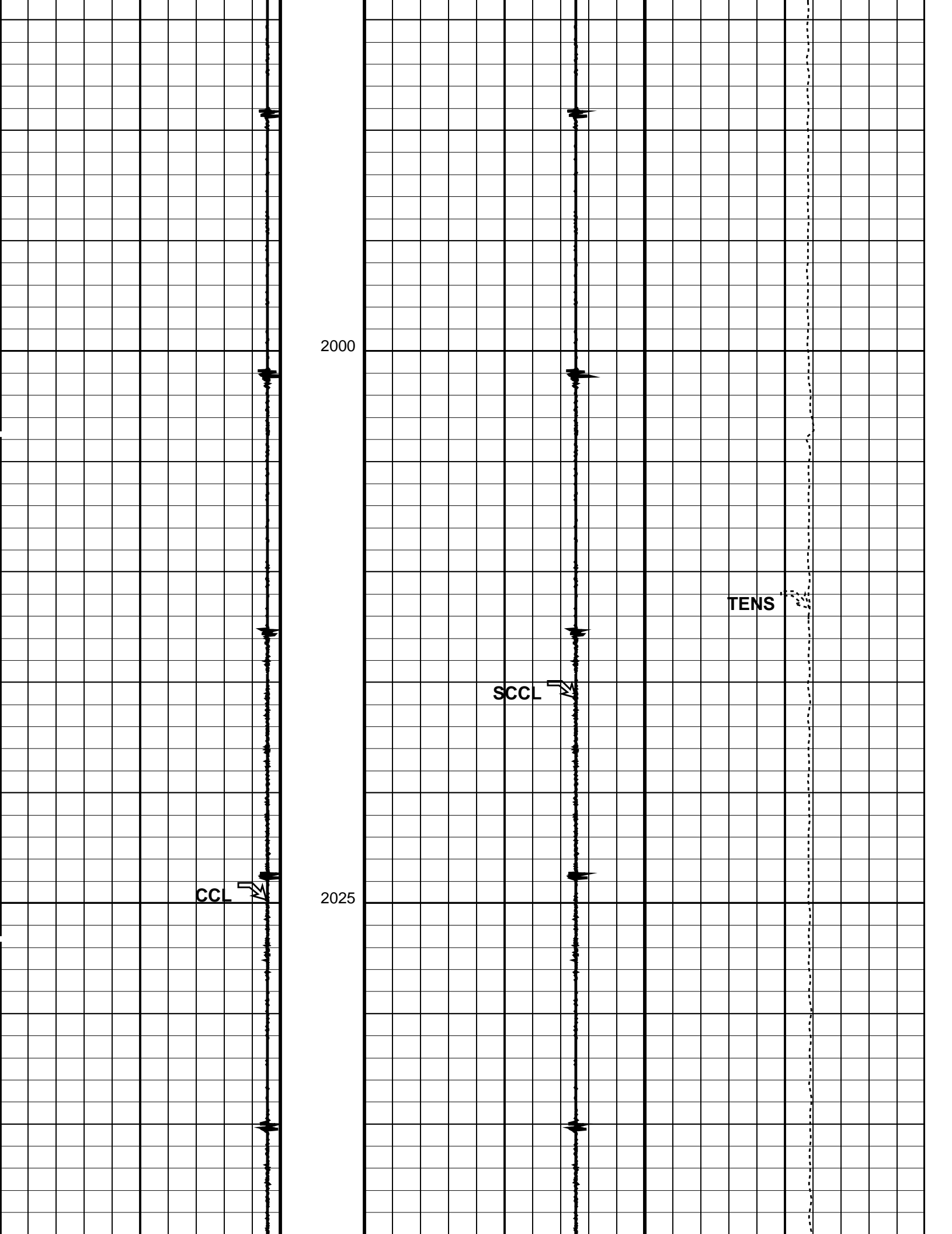
**OP System Version: 17C0-154**

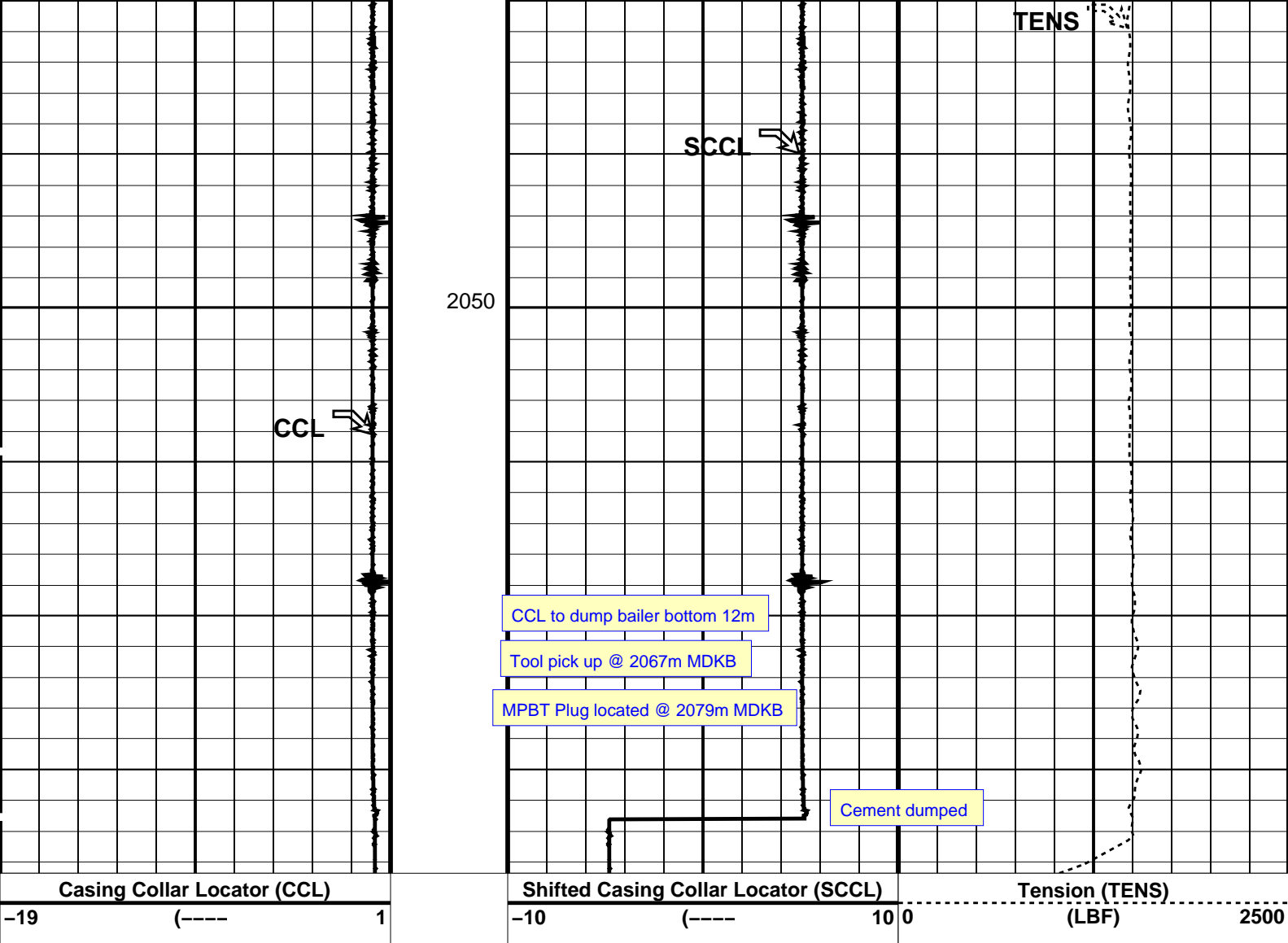
SHM GUN	17C0-154	CCL-L	17C0-154
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## PIP SUMMARY

**Time Mark Every 60 S**







PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
CCLD	CCL-L: Casing Collar Locator	
CCLT	CCL reset delay	12 IN
	CCL Detection Level	0.3 V
DO	System and Miscellaneous	
PP	Depth Offset for Playback	1.3 M
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200 Graphics File Created: 03-Jan-2010 16:34

OP System Version: 17C0-154			
SHM_GUN	17C0-154	CCL-L	17C0-154

Input DLIS Files						
DEFAULT	PERFO_121LUP	FN:120	PRODUCER	03-Jan-2010 16:26	2067.0 M	1971.3 M
Output DLIS Files						
DEFAULT	PERFO_123PUP	FN:122	PRODUCER	03-Jan-2010 16:34		



## PERF02 Operational Summary Listing

Device	Status	Req Depth ( M)	Obs Depth ( M)	Time Used
GUN1	Used	2067.4	2067.4	Sun Jan 03 14:54:42 201

## Input DLIS Files

DEFAULT	PERFO_117LUP	FN:116	PRODUCER	03-Jan-2010 14:52	2069.1 M	1975.1 M
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## Output DLIS Files

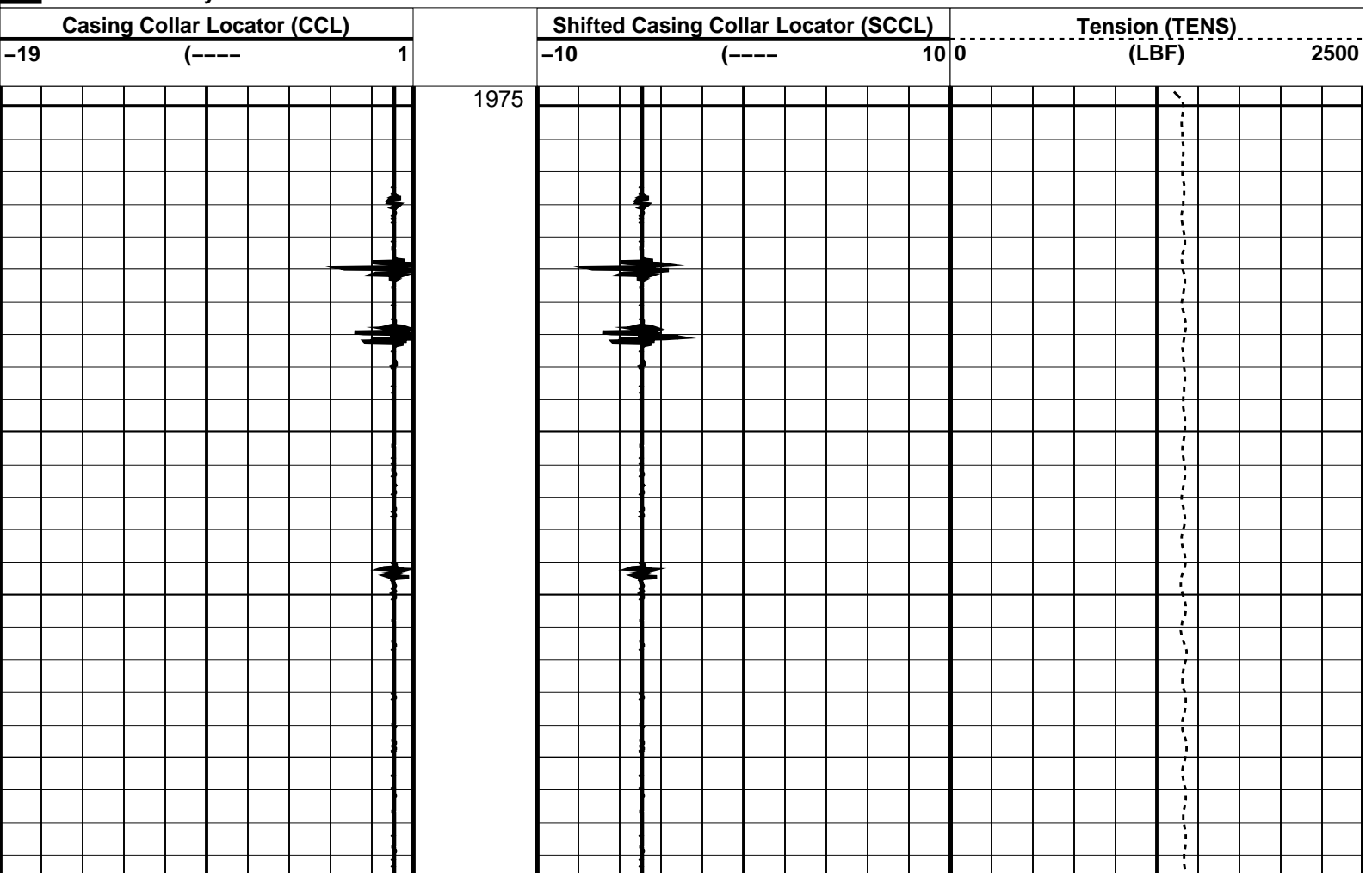
DEFAULT	PERFO_118PUP	FN:117	PRODUCER	03-Jan-2010 14:59	2068.4 M	1974.3 M
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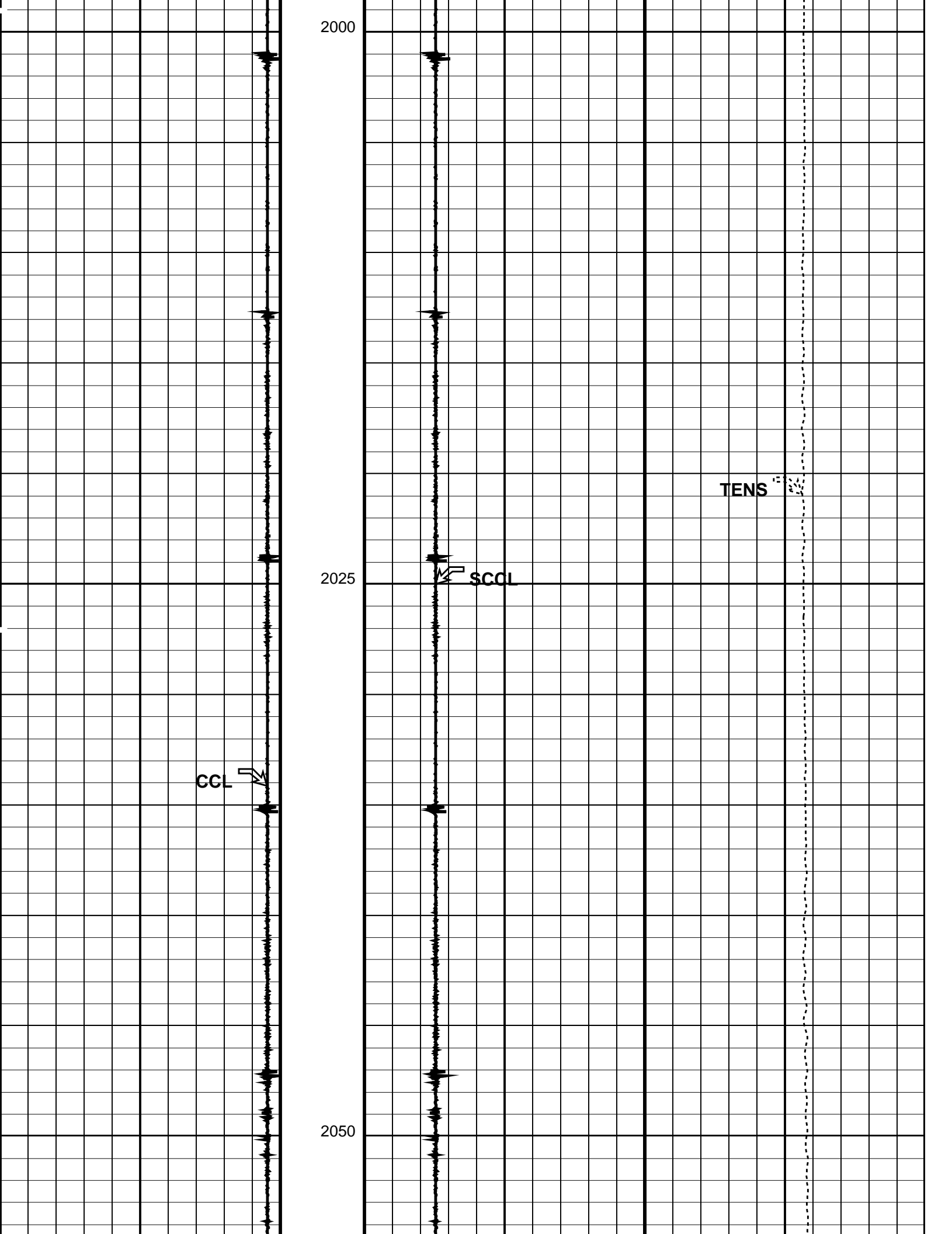
**OP System Version: 17C0-154**

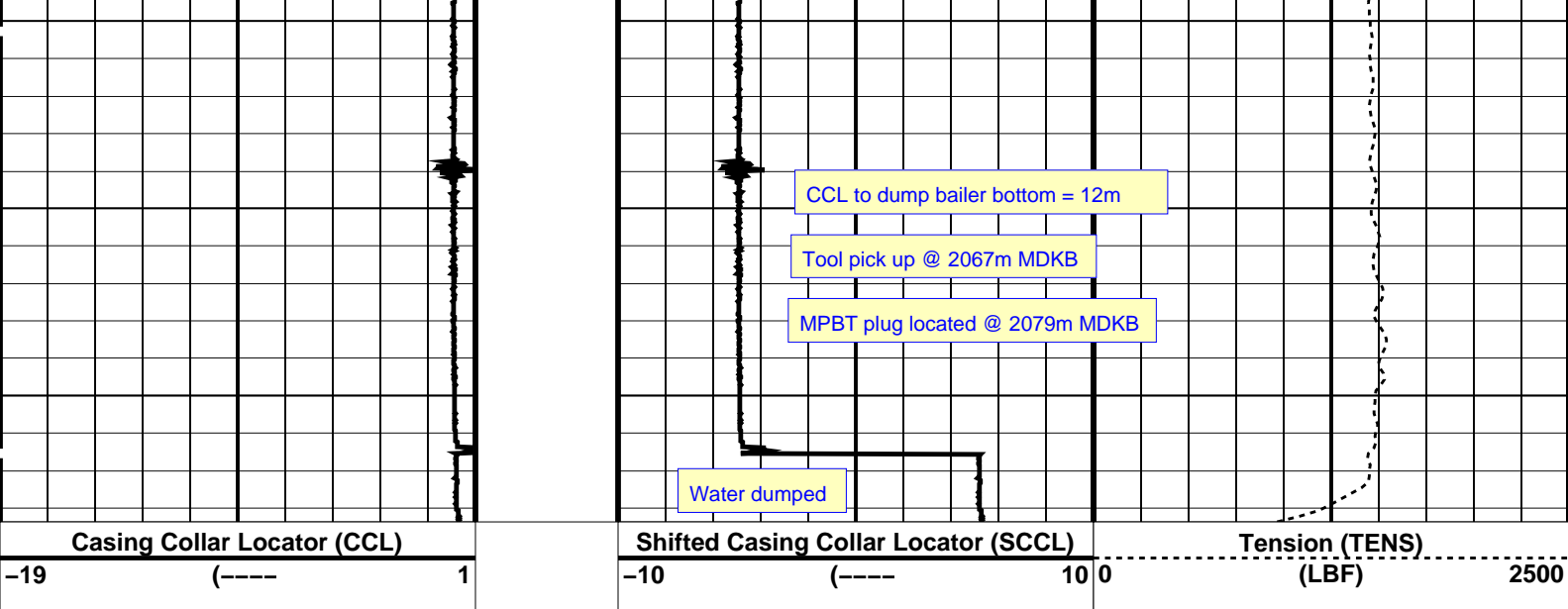
SHM_GUN	17C0-154	CCL-L	17C0-154
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## PIP SUMMARY

**Time Mark Every 60 S**







### 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
System and Miscellaneous		
DO	Depth Offset for Playback	-0.8 M
PP	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 03-Jan-2010 14:59

### OP System Version: 17C0-154

SHM\_GUN 17C0-154 CCL-L 17C0-154

### Input DLIS Files

DEFAULT PERFO\_117LUP FN:116 PRODUCER 03-Jan-2010 14:52 2069.1 M 1975.1 M

### Output DLIS Files

DEFAULT PERFO\_118PUP FN:117 PRODUCER 03-Jan-2010 14:59

**Schlumberger**

## 7-5/8" MPBT Posiset Plug Setting Record

MAXIS Field Log

### PERFO2 Operational Summary Listing

Device	Status	Req Depth ( M )	Obs Depth ( M )	Time Used
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MPEx	Used	2079.0	2079.0	Sun Jan 03 12:13:48 201

Output DLIS Files

DEFAULT MPBT\_111LUP FN:110 PRODUCER 03-Jan-2010 11:27

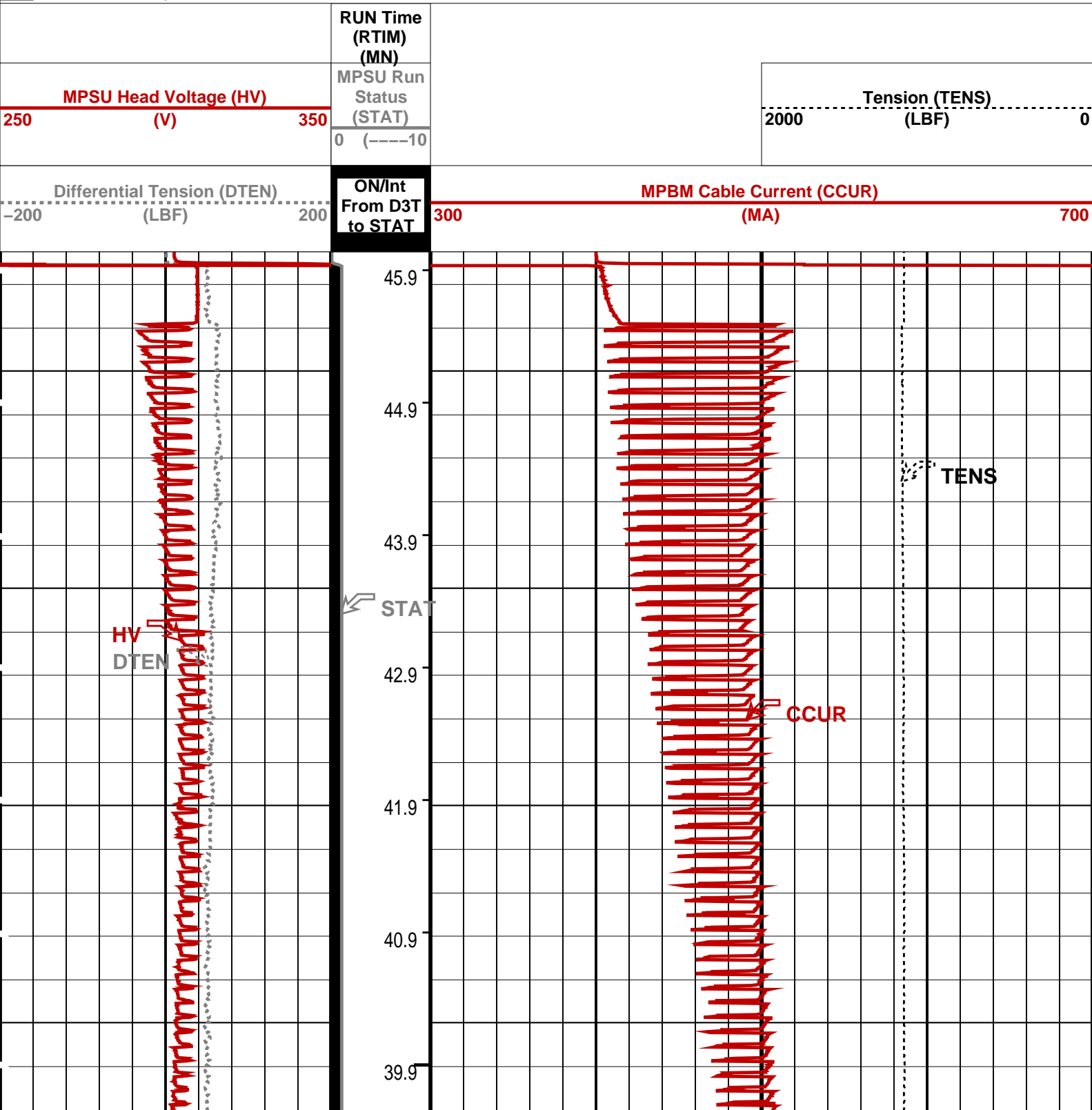
OP System Version: 17C0-154

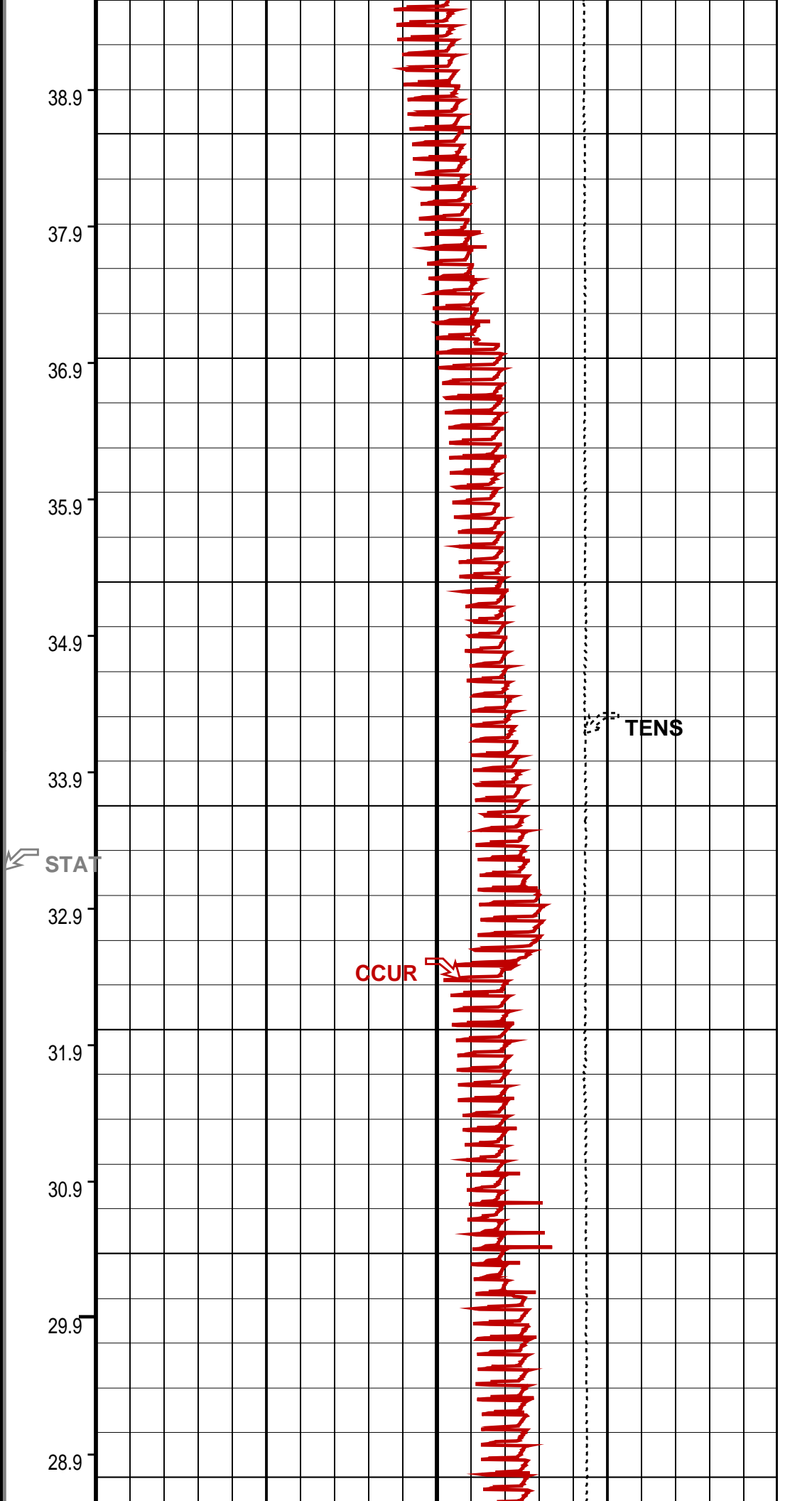
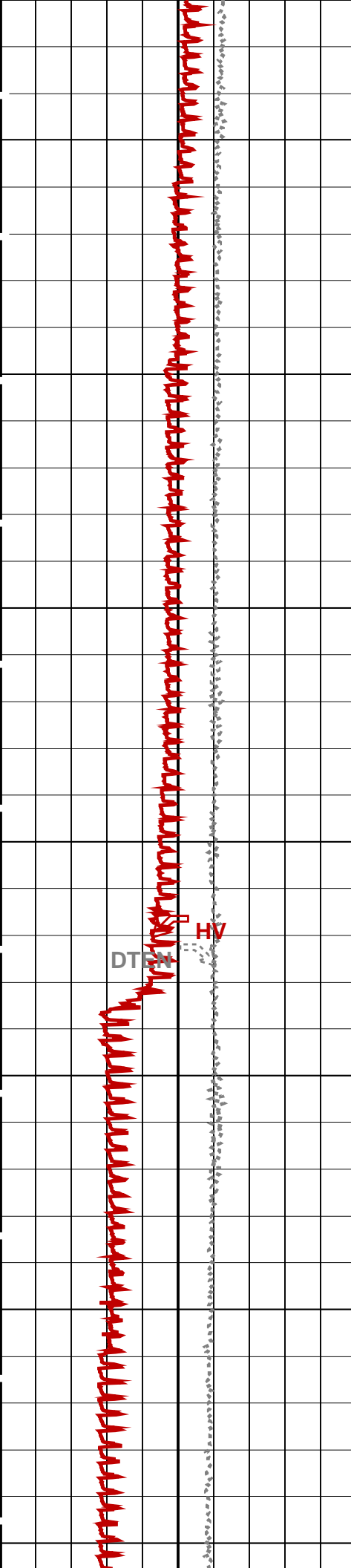
MPEX-BA 17C0-154 MPSU-BA 17C0-154  
CCL-L 17C0-154

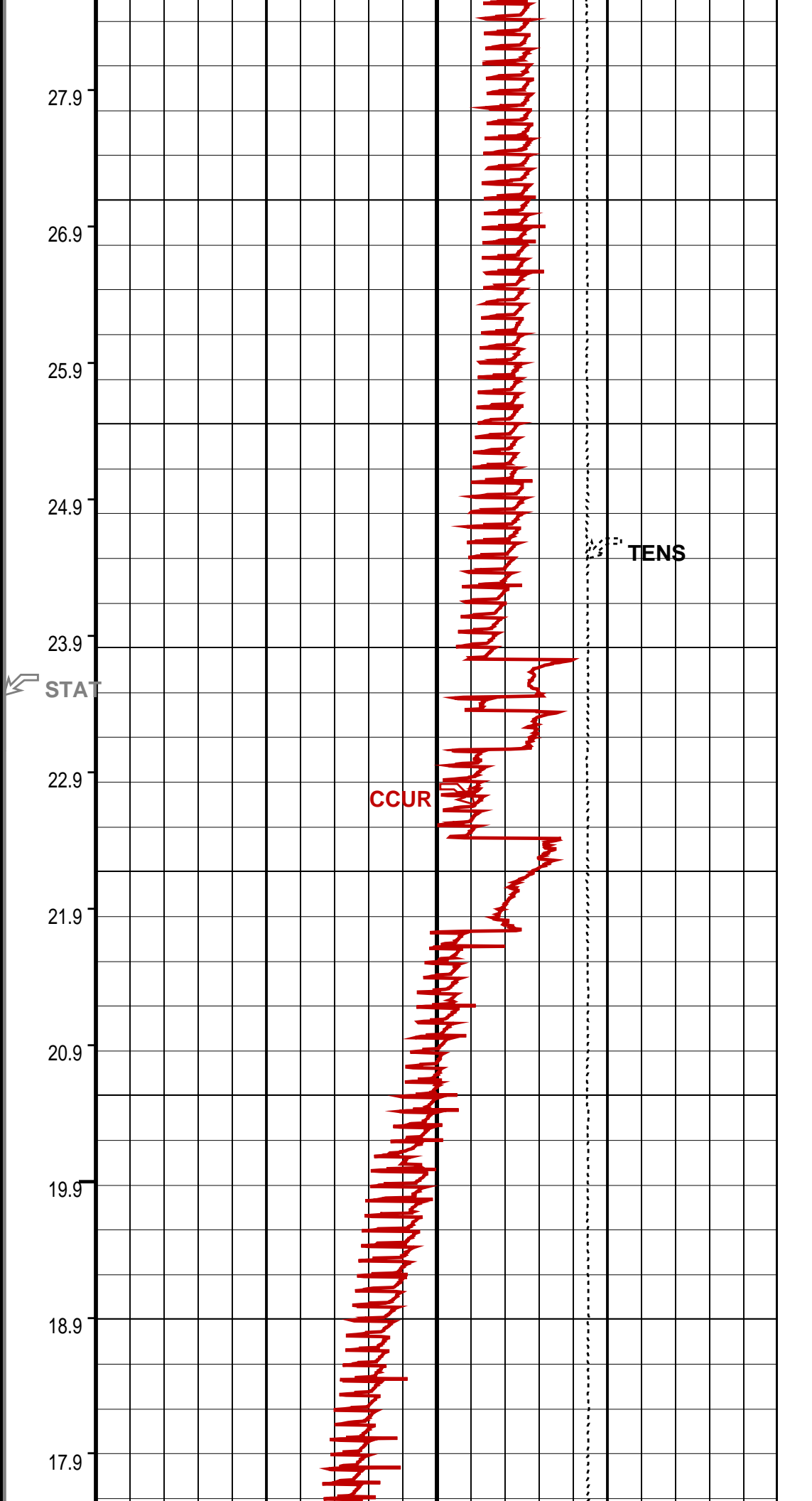
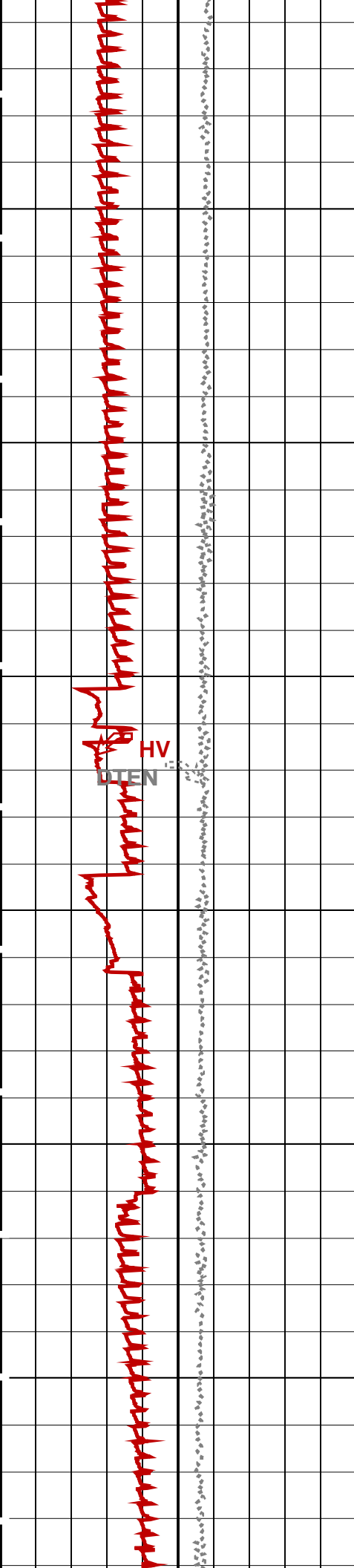
PIP SUMMARY

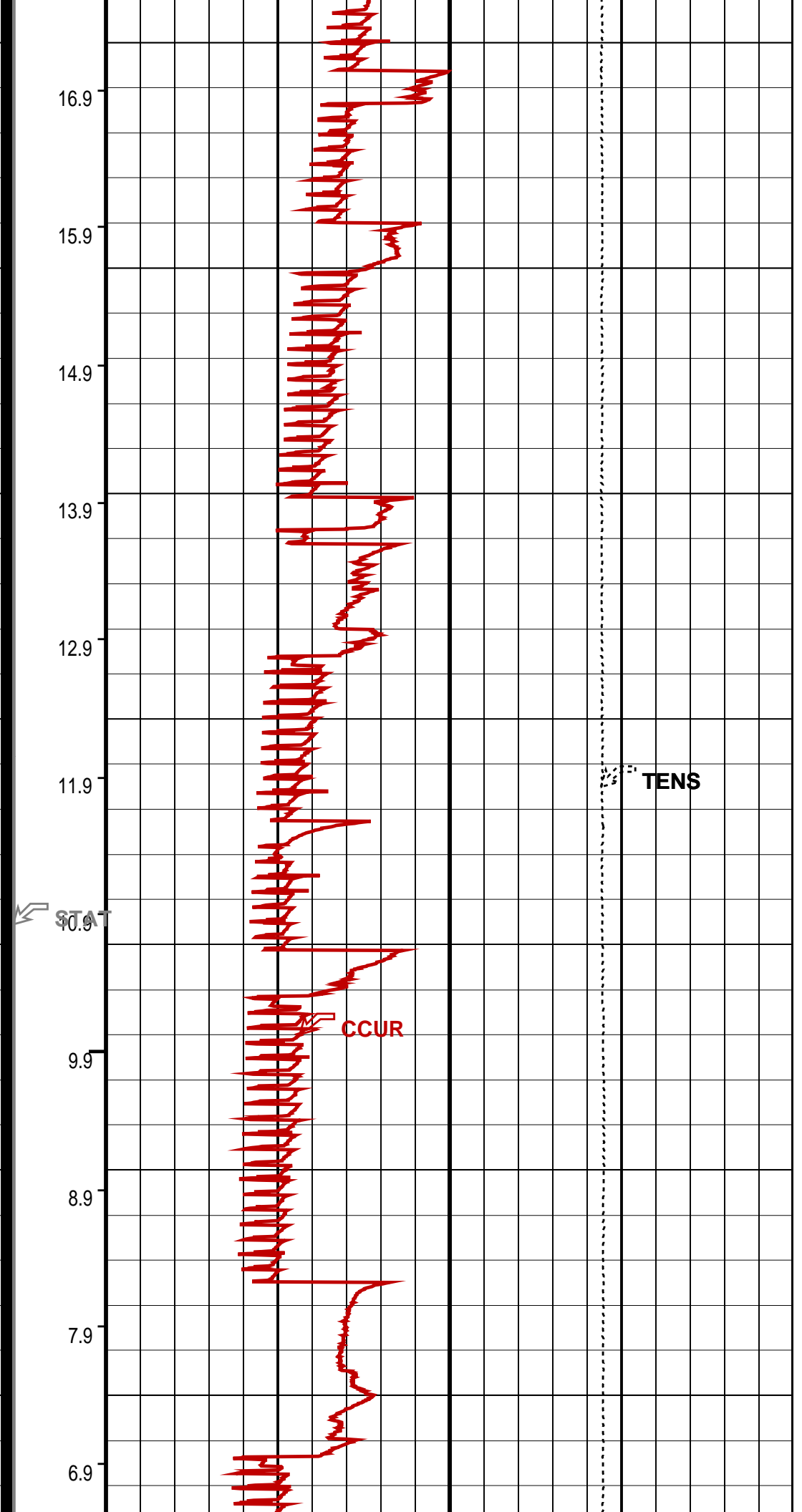
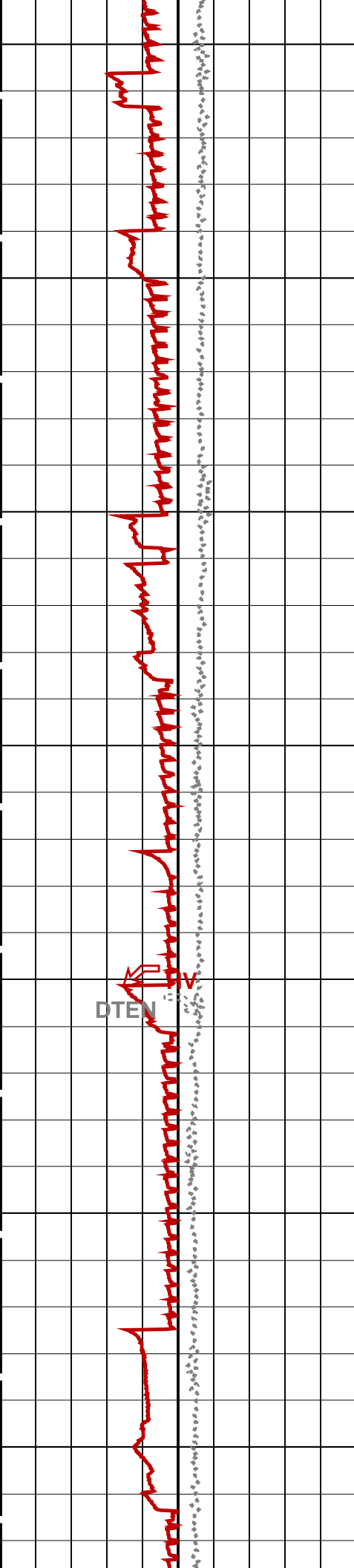
- └ MPSU Run Time Every 1 MN
- └ MPSU Run Time Every 10 MN

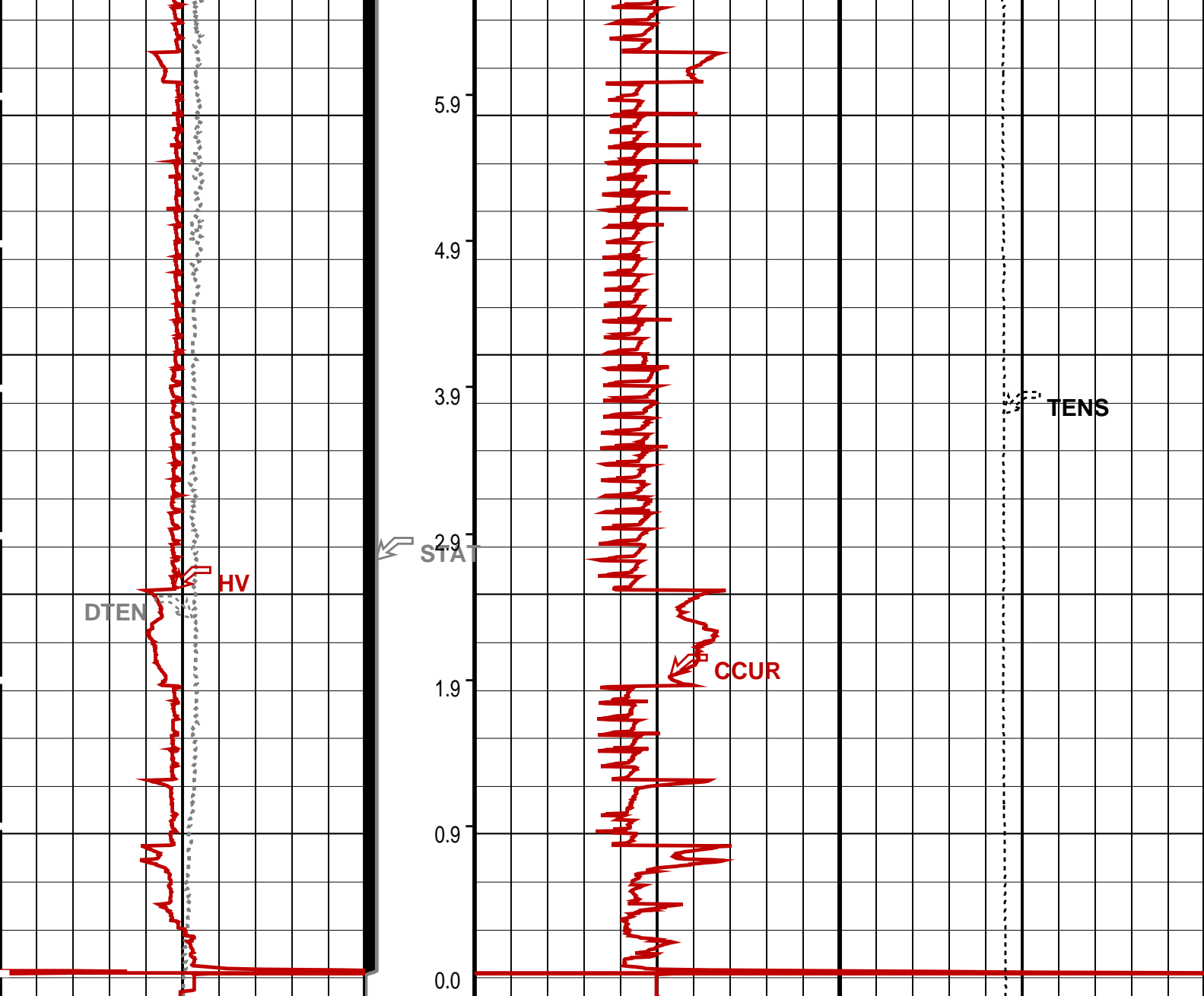
Time Mark Every 60 S











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)
250 350	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

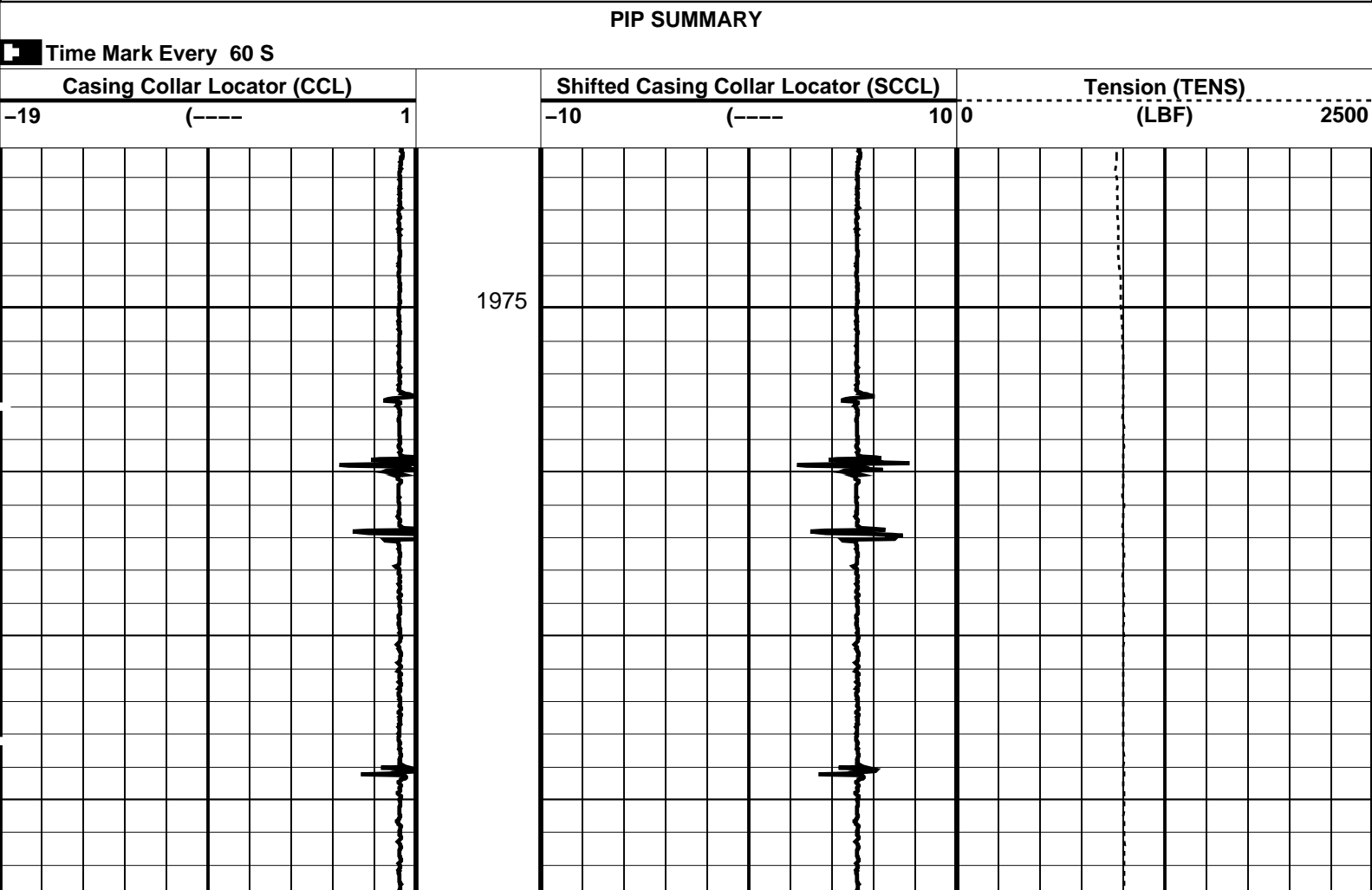
Parameters		
DLIS Name	Description	Value
MPSU-BA: MECHANICAL PLUGBACK SETTING UNIT IPUMP	Intensifier Pump	TRUE

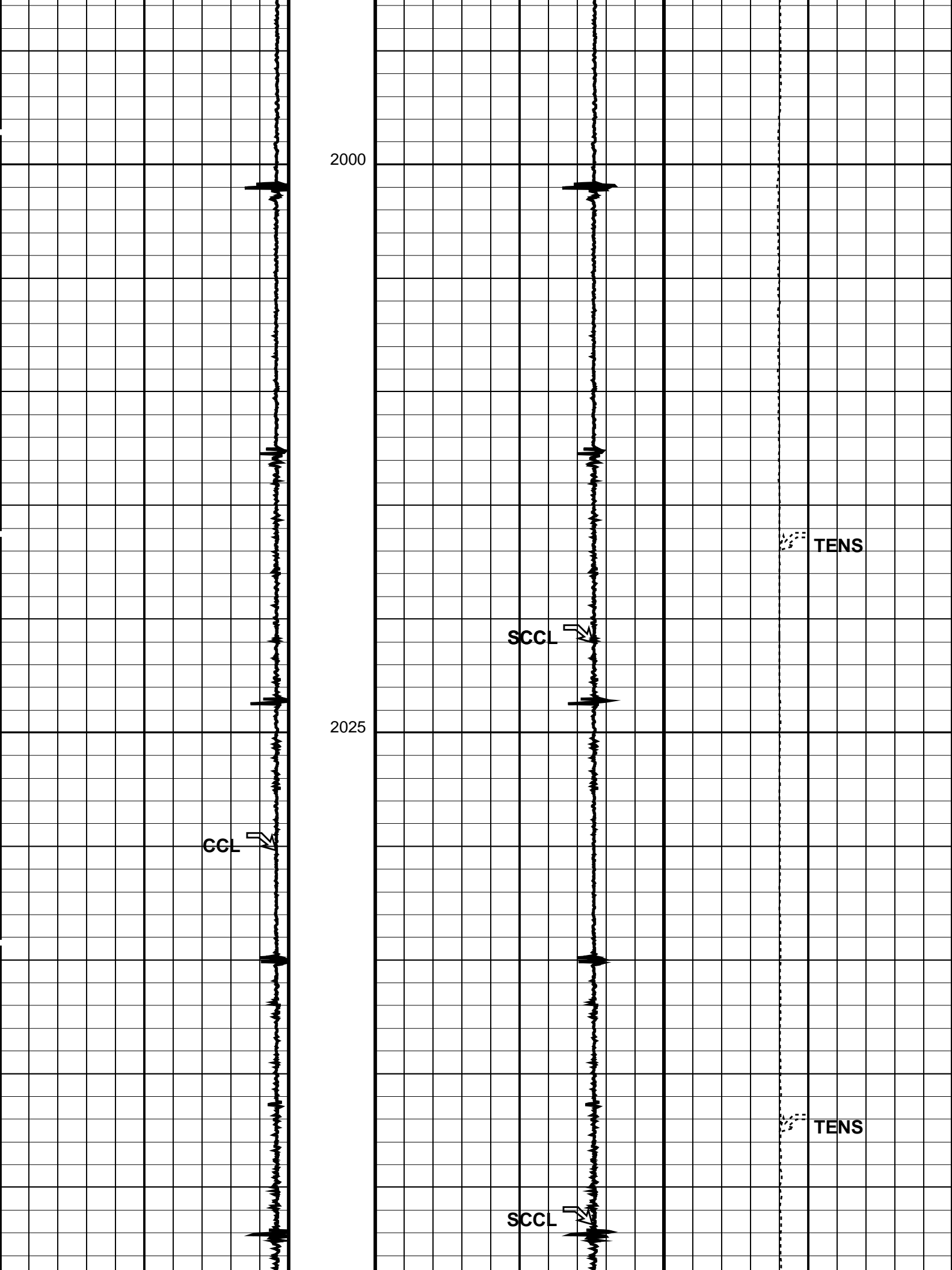


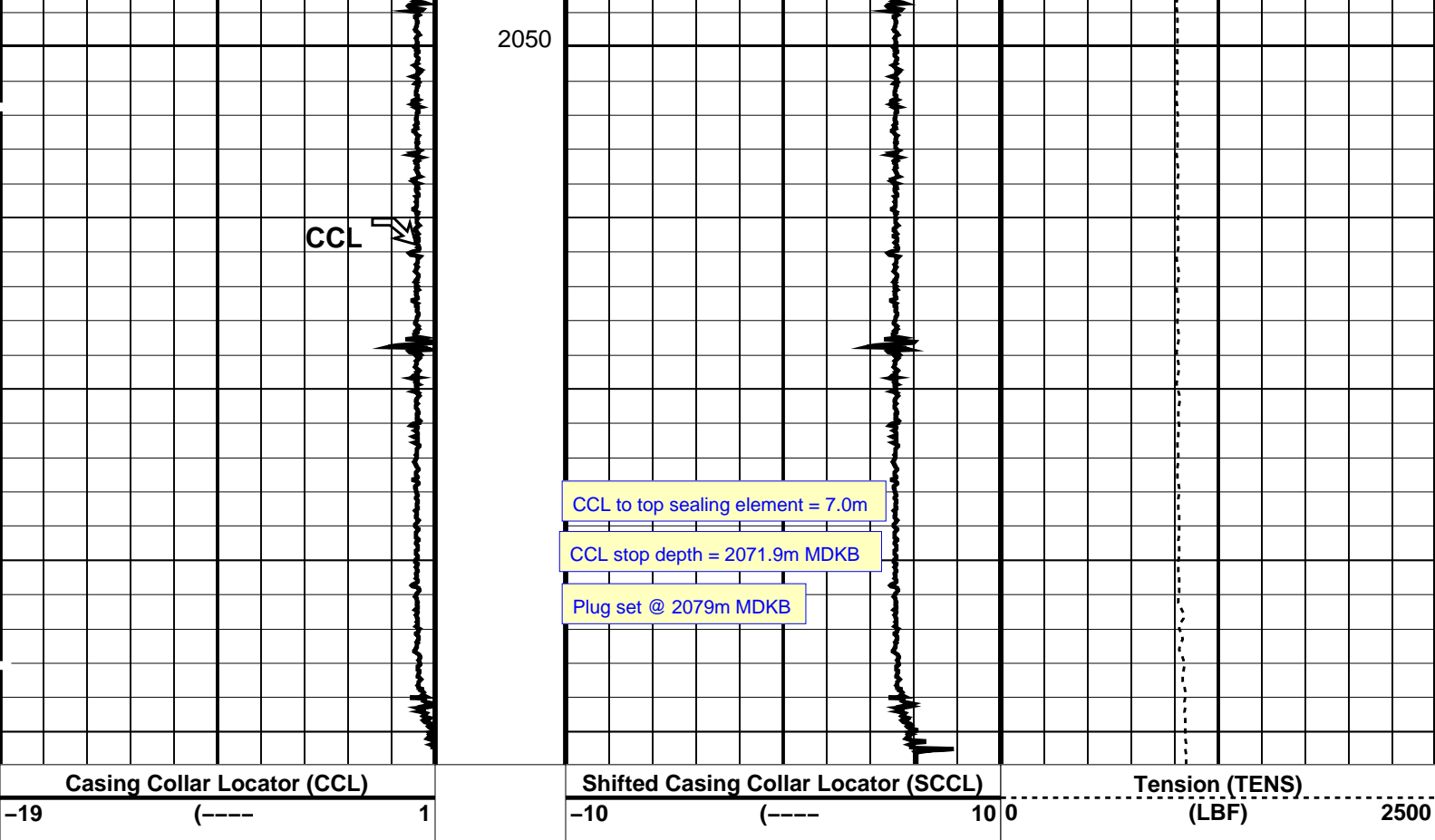
Schlumberger

7-5/8" MPBT Posiset Plug  
Correlation Pass

MAXIS Field Log







#### PIP SUMMARY

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	
PP	Depth Offset for Playback	0.0 M
	Playback Processing	NORMAL

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 03-Jan-2010 19:32

#### OP System Version: 17C0-154

MPEX-BA 17C0-154 MPSU-BA 17C0-154

CCL-L 17C0-154

#### Input DLIS Files

DEFAULT Flip\_MPBT\_129LUP PRODUCER 03-Jan-2010 19:23 2071.0 M 1970.1 M

#### Output DLIS Files

DEFAULT MPBT\_131PUP FN:128 PRODUCER 03-Jan-2010 19:32

**Schlumberger**

**2-1/8" Dummy Plug Run 2  
Correlation Pass**

Input DLIS Files

DEFAULT Flip\_PSP\_125LUP PRODUCER 03-Jan-2010 17:16 2084.8 M 1924.5 M

Output DLIS Files

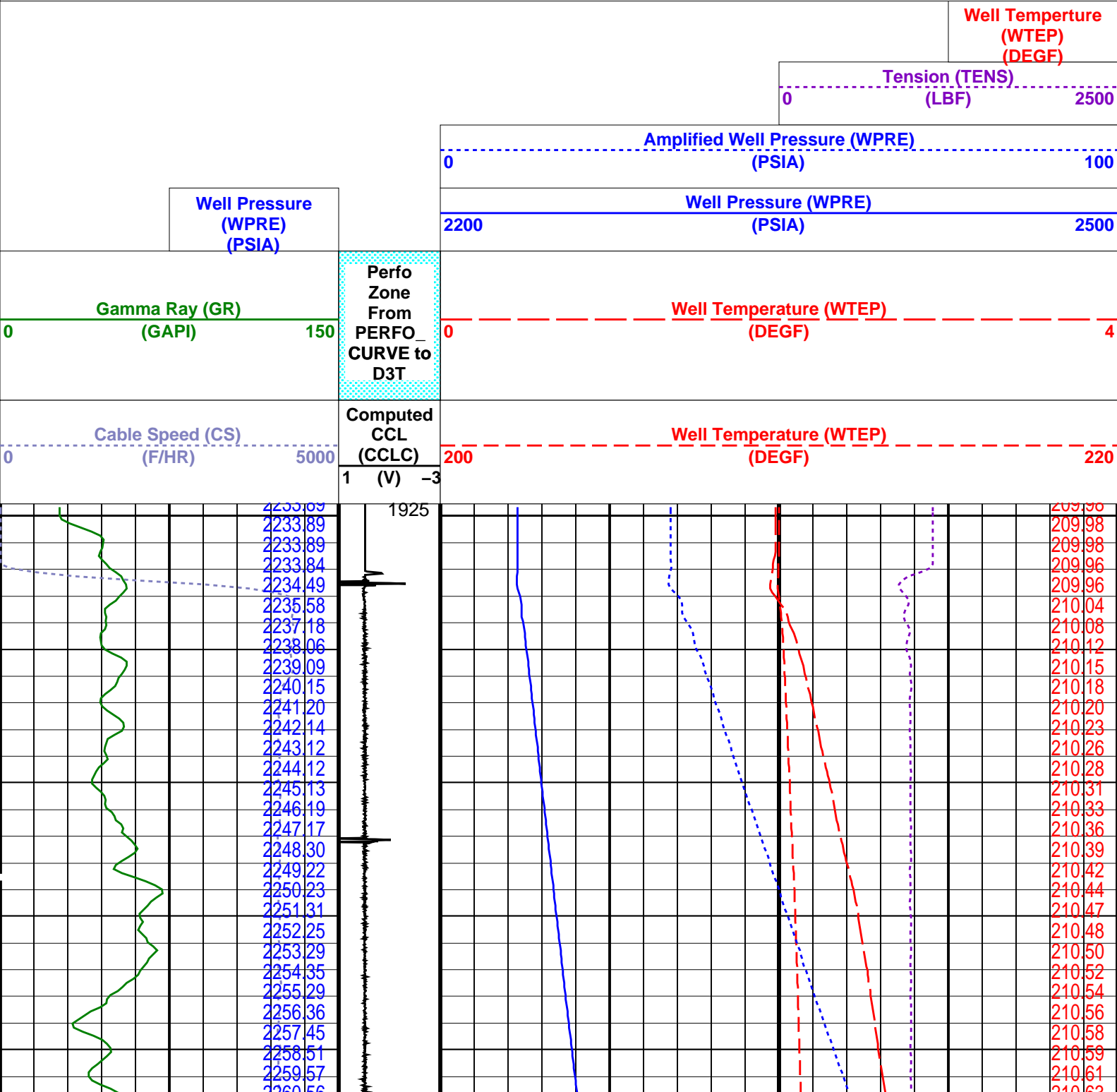
DEFAULT PSP\_128PUP FN:126 PRODUCER 03-Jan-2010 19:18 2084.8 M 1924.5 M

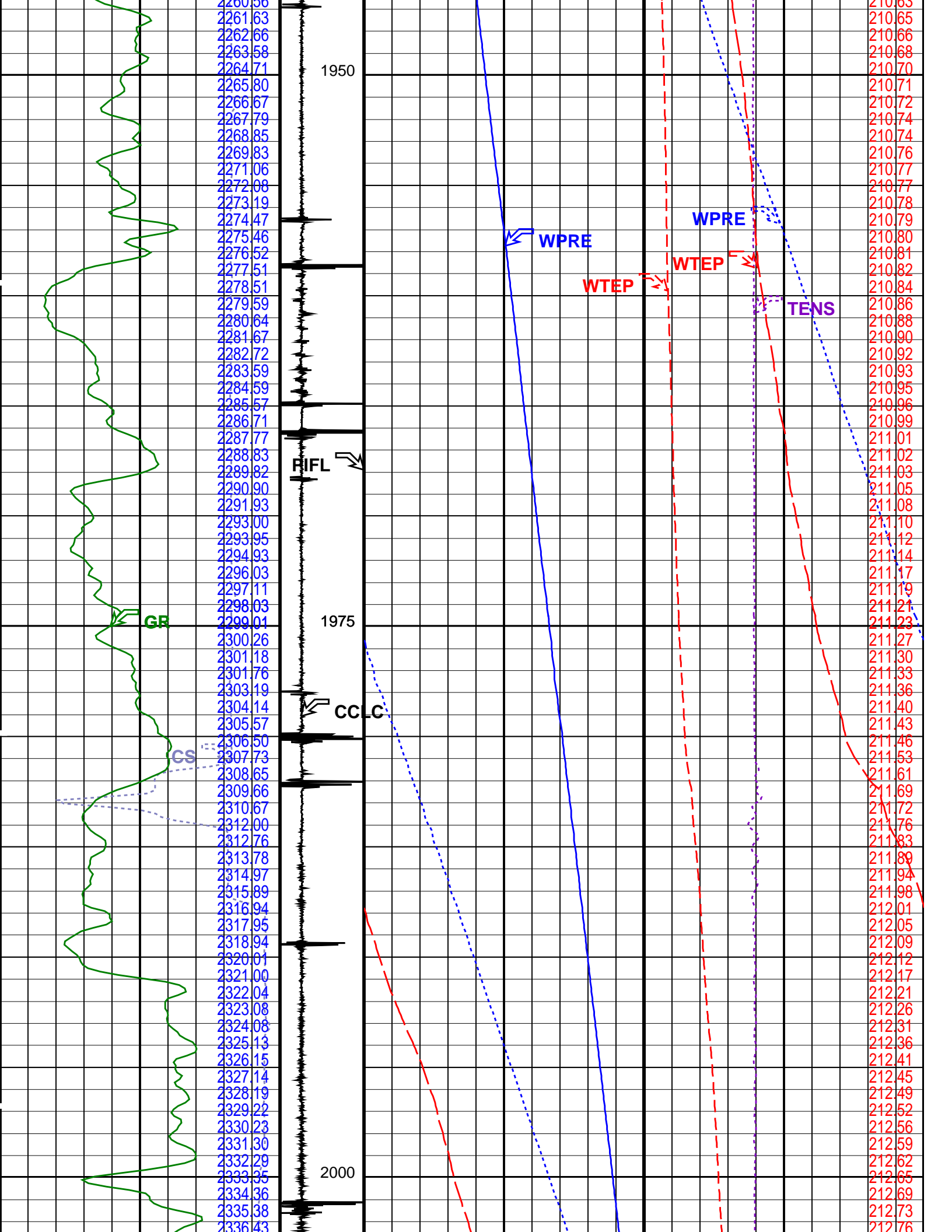
OP System Version: 17C0-154

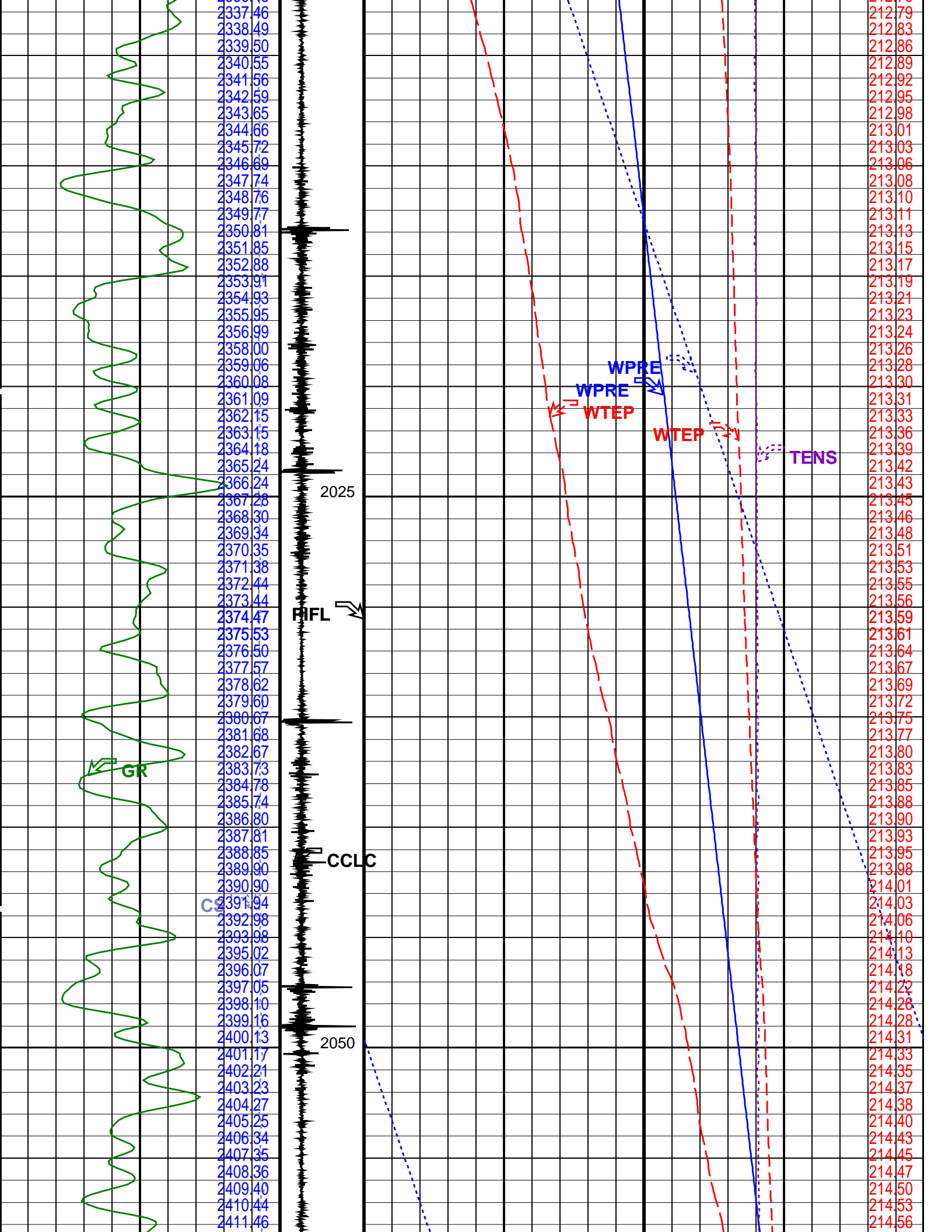
PSPT-A/B 17C0-154

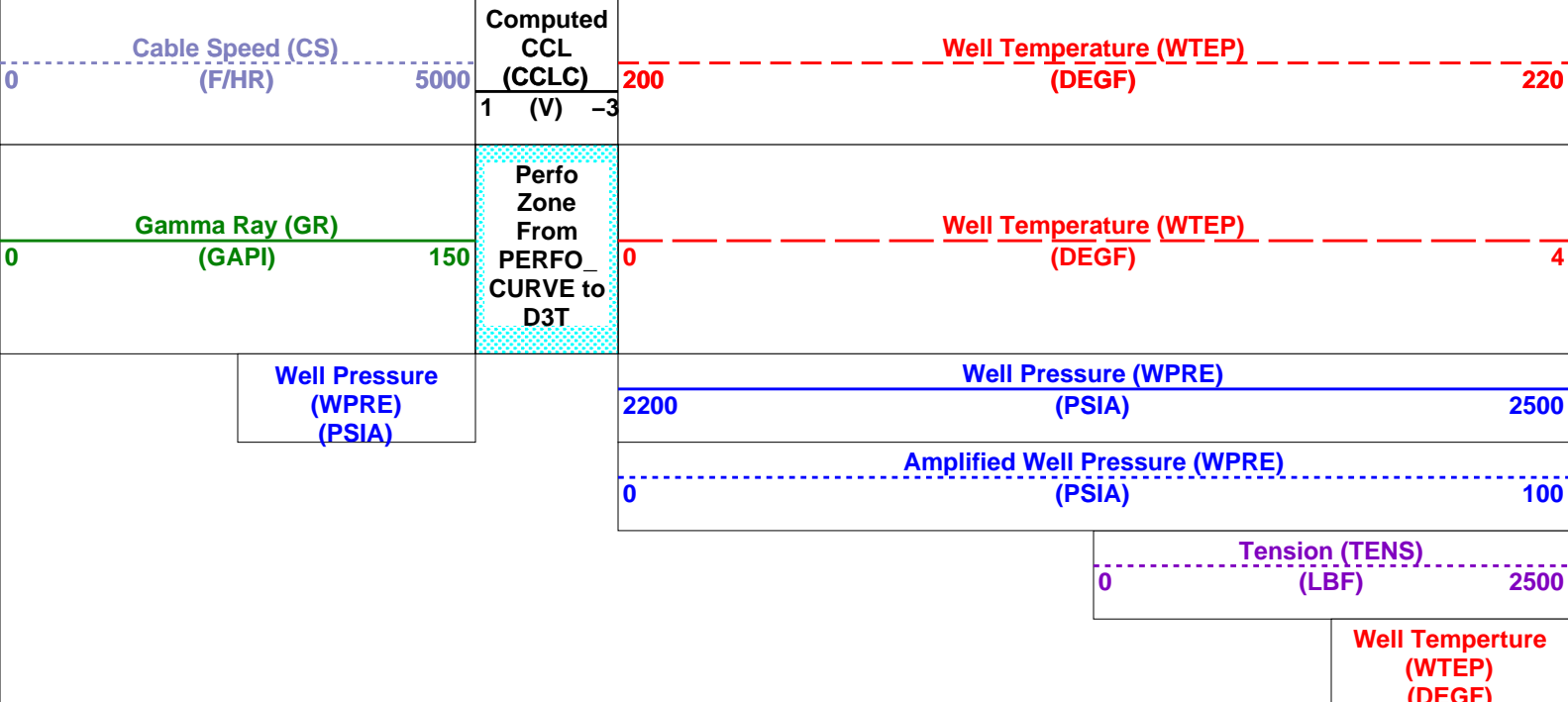
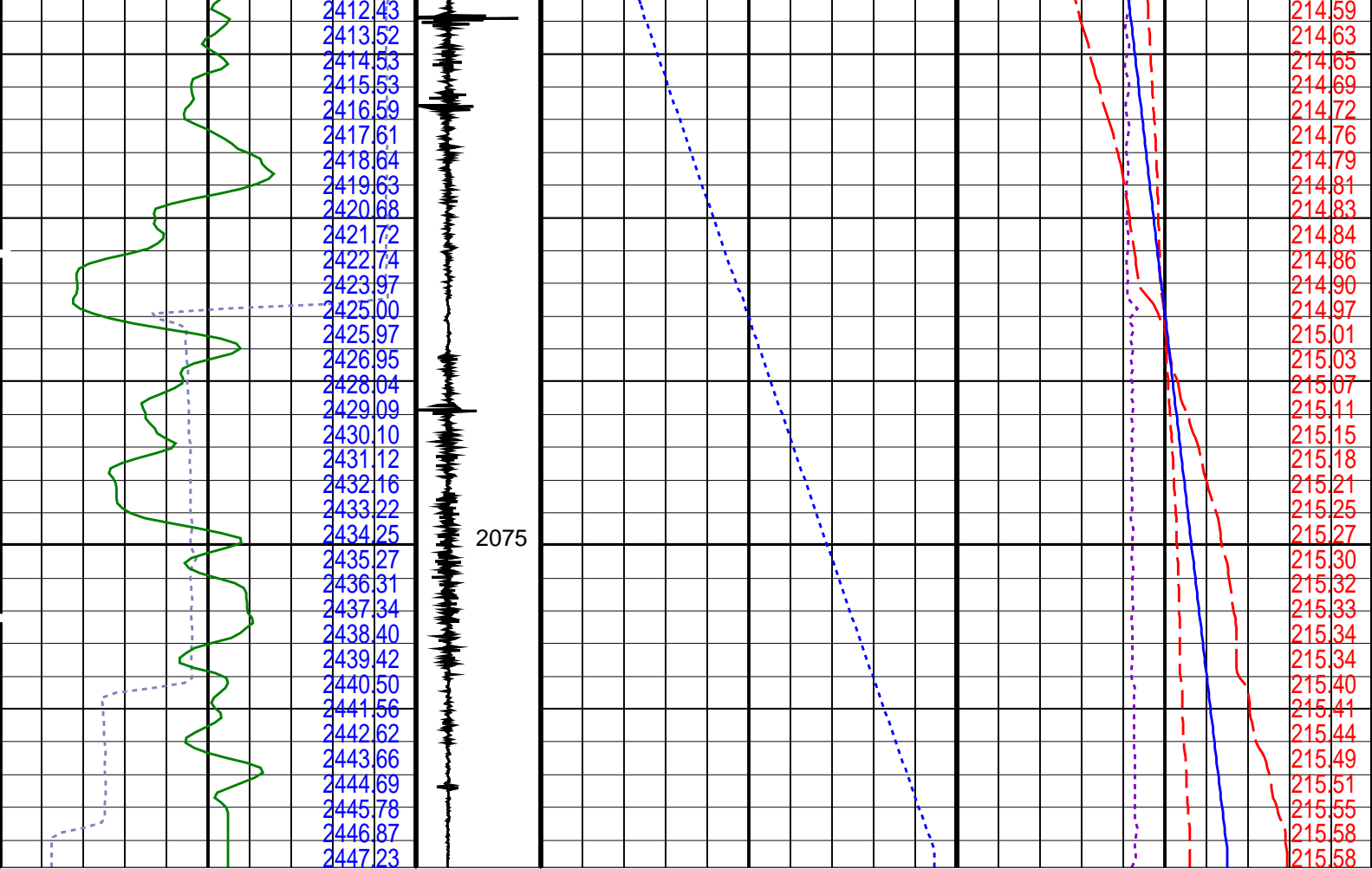
PIP SUMMARY

Time Mark Every 60 S









Time Mark Every 60 S

Format: PSP\_1      Vertical Scale: 1:200      Graphics File Created: 03-Jan-2010 19:18

OP System Version: 17C0-154

PSPT-A/B      17C0-154

Parameters		
DLIS Name	Description	Value

System and Miscellaneous		Depth Offset for Playback		0.0		M
DO		Playback Processing		NORMAL		
PP						
Input DLIS Files						
DEFAULT	Flip_PSP_125LUP	PRODUCER	03-Jan-2010 17:16	2084.8 M	1924.5 M	
Output DLIS Files						
DEFAULT	PSP_128PUP	FN:126	PRODUCER	03-Jan-2010 19:18		



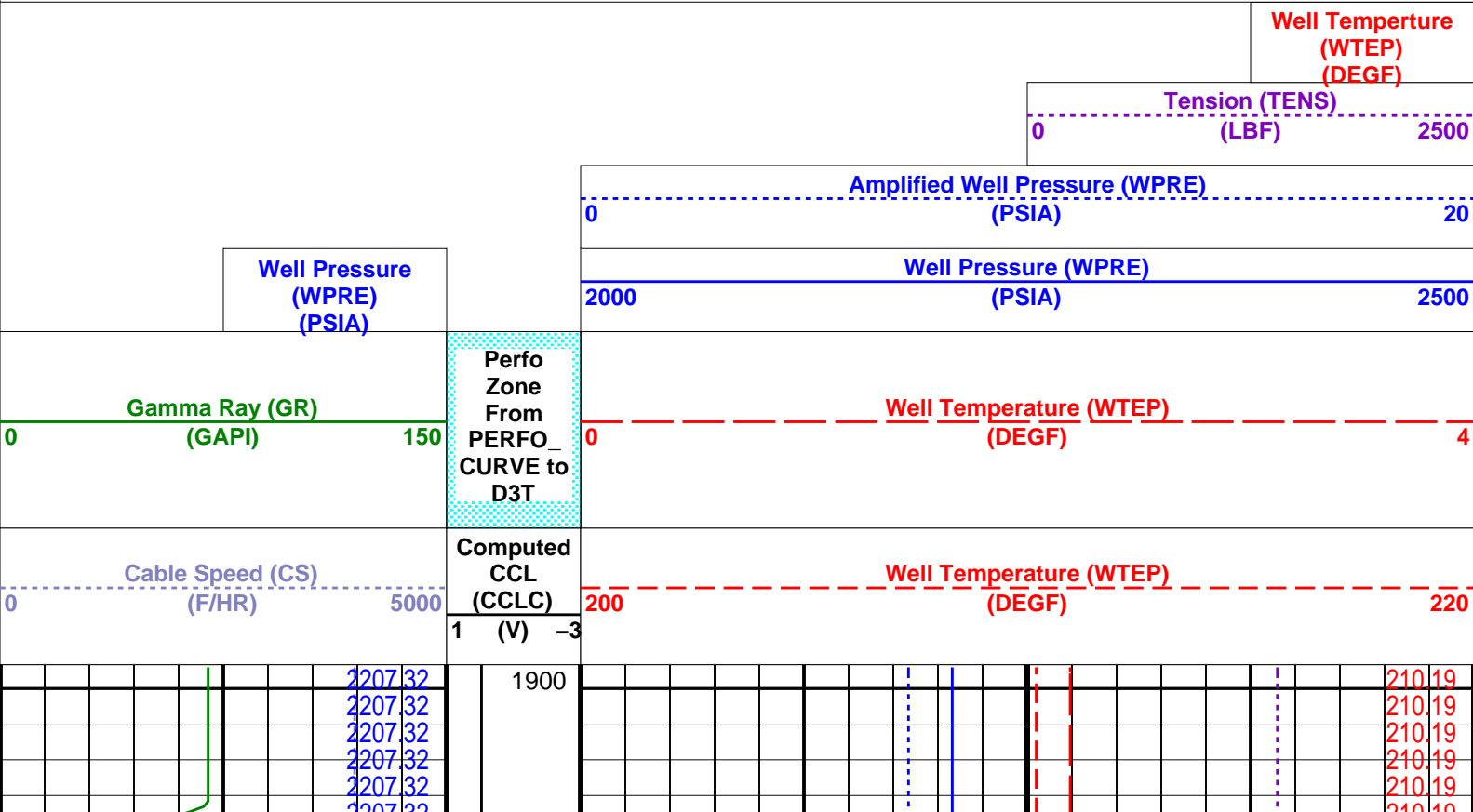
# 2-1/8" Dummy Plug Run 1 Correlation Pass

MAXIS Field Log

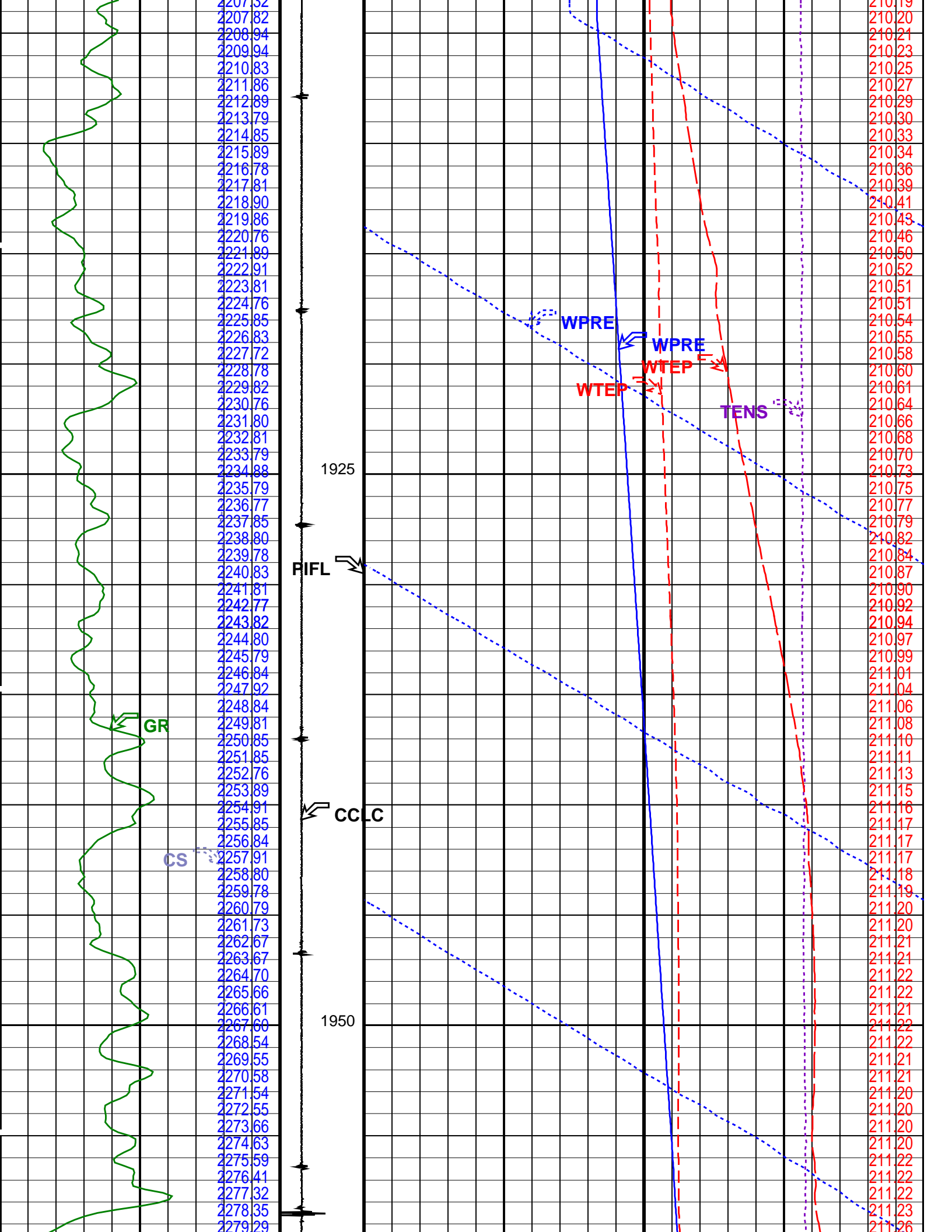
Input DLIS Files							
DEFAULT	PSP_085LUP	FN:84	PRODUCER	02-Jan-2010 08:31	2091.2 M	1901.8 M	
Output DLIS Files							
DEFAULT	PSP_086PUP	FN:85	PRODUCER	02-Jan-2010 08:45	2091.2 M	1899.2 M	

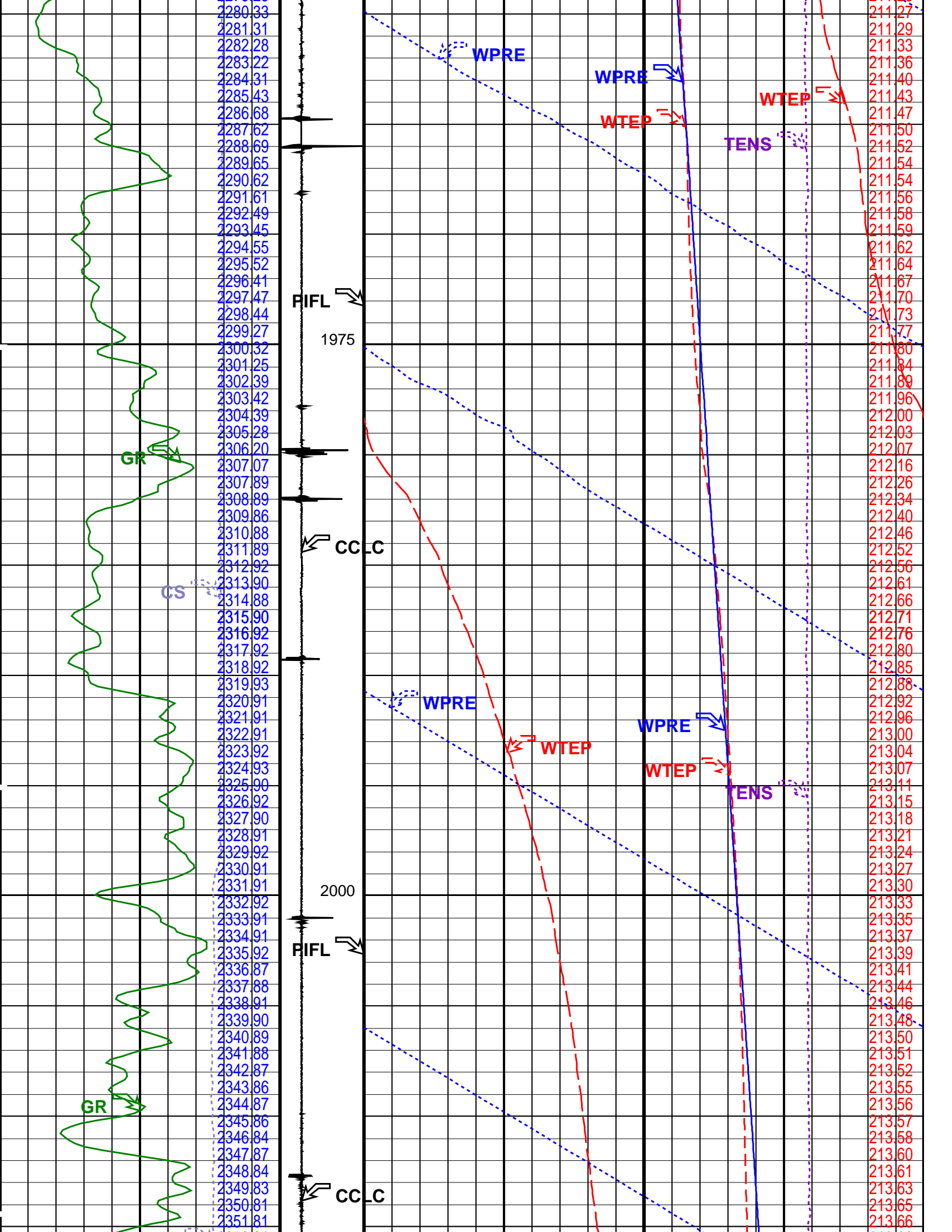
OP System Version: 17C0-154							
PSPT-A/B	17C0-154						

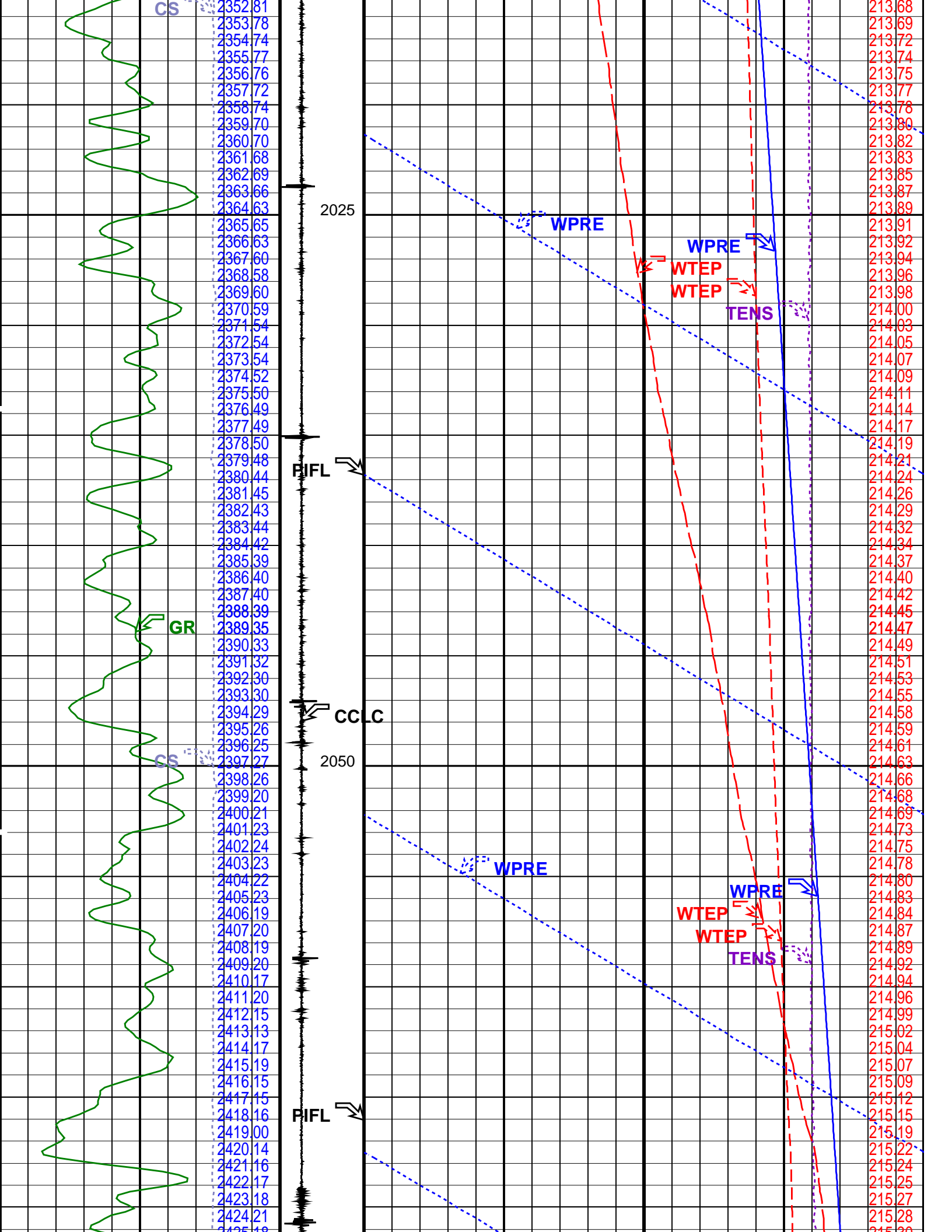
PIP SUMMARY							
Time Mark Every 60 S							

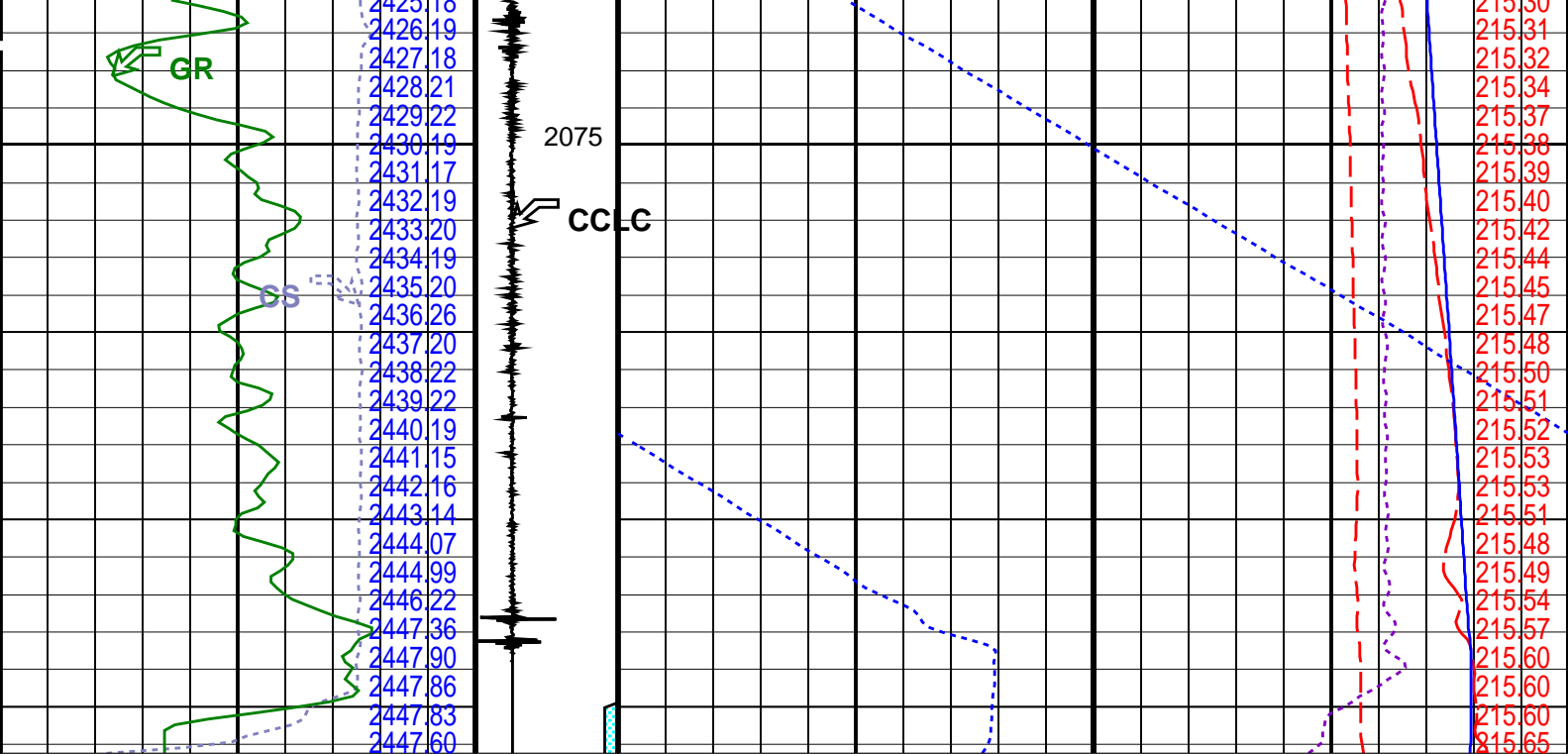












Cable Speed (CS) (F/HR)		0	5000
Gamma Ray (GR) (GAPI)		0	150
Well Pressure (WP) (PSIA)		2000	2500
Amplified Well Pressure (WP) (PSIA)		0	20
Tension (TENS) (LBF)		0	2500
Well Temperature (WTEP) (DEGF)		200	220
Well Temperature (WTEP) (DEGF)		0	4
Well Temperature (WTEP) (DEGF)			

PIP SUMMARY

Time Mark Every 60 S

Format: PSP\_1 Vertical Scale: 1:200 Graphics File Created: 02-Jan-2010 08:45

OP System Version: 17C0-154

PSPT-A/B 17C0-154

Parameters		
DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	0.0 M
	Playback Processing	NORMAL

Input DLIS Files						
DEFAULT	PSP_085LUP	FN:84	PRODUCER	02-Jan-2010 08:31	2091.2 M	1901.8 M

## Output DLIS Files

DEFAULT

PSP\_086PUP

FN:85

PRODUCER

02-Jan-2010 08:45

Schlumberger

2-1/8" PowerJet Gun – MWPT  
Station Log

MAXIS Field Log

Company: Esso Australia Pty Ltd

Well: TNA A22

## Input DLIS Files

DEFAULT

PERFO\_066LTP

FN:65

PRODUCER

01-Jan-2010 16:32

2066.1 M

## Output DLIS Files

DEFAULT

PERFO\_073PTP

FN:72

PRODUCER

01-Jan-2010 17:16

2066.1 M

## OP System Version: 17C0-154

MWP\_GUN

17C0-154

MWPT-CA

17C0-154

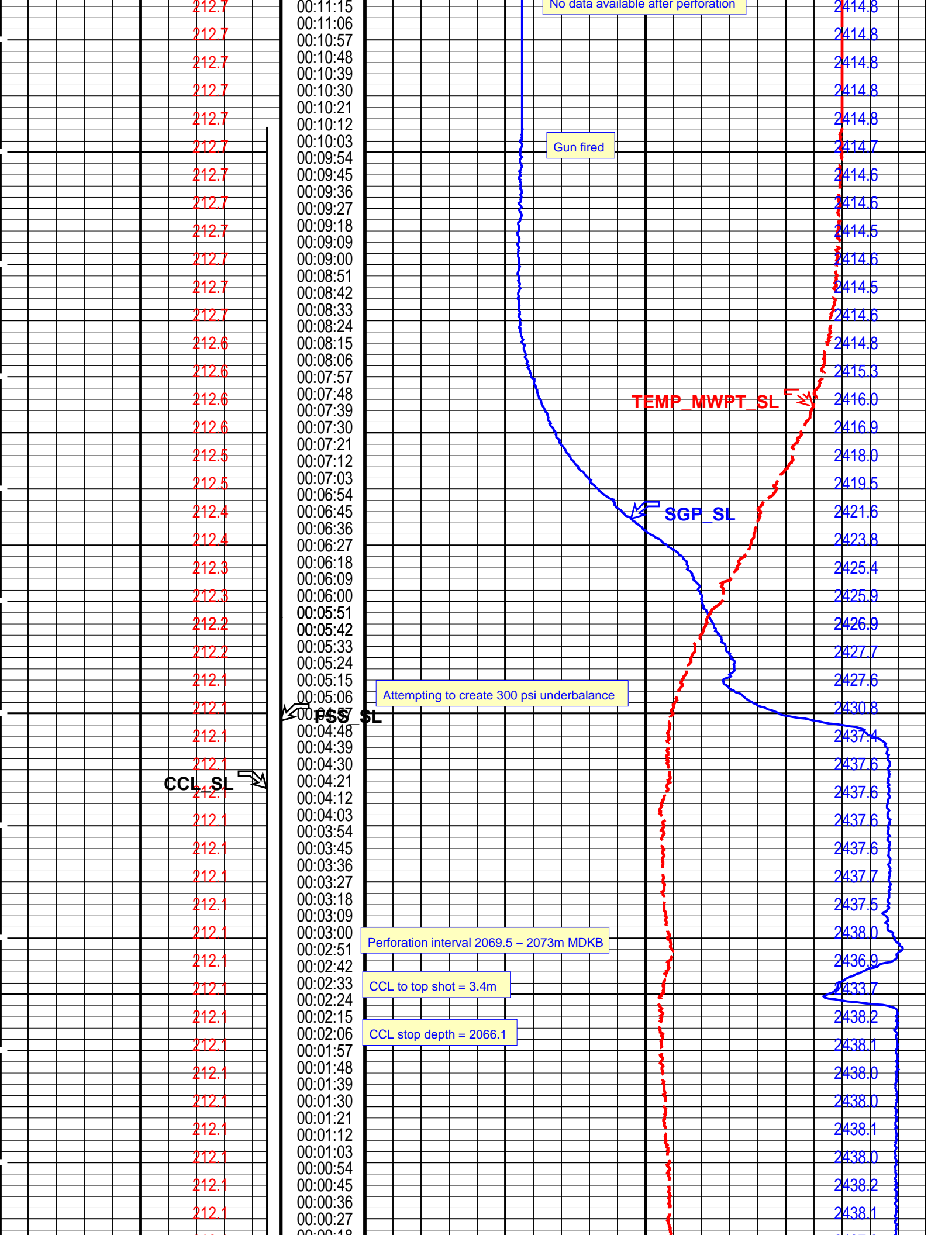
MWGT-AA

17C0-154

## PIP SUMMARY

Time Mark Every 60 S

		Temperature (TEMP_MWPT_SL) (DEGF)					Pressure (SGP_SL) (PSIA)	
CCL From CCL to T1		Firing Sequence State (FSS SL) (----	Temperature (TEMP_MWPT_SL) (DEGF)					
			211				213	
		0 1024						
Casing Collar Locator (CCL_SL)		Elapsed Time (ETIM) (S)	Strain Gauge Pressure (SGP_SL)					
-19	(----		1	2405				2440
		00:14:33						2414.8
	212.7	00:14:24						2414.8
	212.7	00:14:15						2414.8
	212.7	00:14:06						2414.8
	212.7	00:13:57						2414.8
	212.7	00:13:48						2414.8
	212.7	00:13:39						2414.8
	212.7	00:13:30						2414.8
	212.7	00:13:21						2414.8
	212.7	00:13:12						2414.8
	212.7	00:13:03						2414.8
	212.7	00:12:54						2414.8
	212.7	00:12:45						2414.8
	212.7	00:12:36						2414.8
	212.7	00:12:27						2414.8
	212.7	00:12:18						2414.8
	212.7	00:12:09						2414.8
	212.7	00:12:00						2414.8
	212.7	00:11:51						2414.8
	212.7	00:11:42						2414.8
	212.7	00:11:33						2414.8
	212.7	00:11:24						2414.8









DELS 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: 01-Jan-2010 16:26
OP System Version: 17C0-154		
MWP_GUN	17C0-154	MWPT-CA 17C0-154
MWGT-AA	17C0-154	
Output DLIS Files		
DEFAULT	PERFO_065LUP	FN:64 PRODUCER 01-Jan-2010 16:26



# 2-1/8" PowerJet Gun – MWPT Correlation Pass

MAXIS Field Log

Company: Esso Australia Pty Ltd	Well: TNA A22
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Output DLIS Files					
DEFAULT	PERFO_064LUP	FN:63	PRODUCER	01-Jan-2010 16:14	2080.4 M 2014.9 M
OP System Version: 17C0-154					
MWP_GUN	17C0-154	MWPT-CA	17C0-154		
MWGT-AA	17C0-154				

PIP SUMMARY	
Time Mark Every 60 S	

